



International Strategy for Disaster Reduction



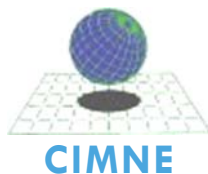
GLOBAL ASSESSMENT REPORT ON DISASTER RISK REDUCTION – GAR 2013

PROBABILISTIC MODELLING OF NATURAL RISKS AT THE GLOBAL LEVEL: GLOBAL RISK MODEL

GLOBAL EARTHQUAKE AND CYCLONE MODELS AND DISASTER RISK ASSESSMENT OF COUNTRIES FOR SEISMIC, CYCLONE AND FLOOD HAZARDS

Prepared by:

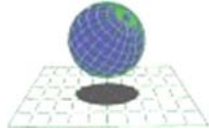
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VULNERABILITY FUNCTIONS **A15-2**

W1 - WOOD, LIGHT FRAME ($\leq 450 \text{ m}^2$) A15-2

W2 - WOOD, COMMERCIAL AND INDUSTRIAL ($> 450 \text{ m}^2$) A15-3

S1L - STEEL MOMENT FRAME A15-4

S1M - STEEL MOMENT FRAME A15-5

S1H - STEEL MOMENT FRAME A15-6

S2L - STEEL BRACED FRAME A15-7

S2M - STEEL BRACED FRAME A15-8

S2H - STEEL BRACED FRAME A15-9

S3 - STEEL LIGHT FRAME A15-10

S4L - STEEL FRAME WITH CAST-IN-PLACE CONCRETE SHEAR WALLS A15-11

S4M - STEEL FRAME WITH CAST-IN-PLACE CONCRETE SHEAR WALLS A15-12

S4H - STEEL FRAME WITH CAST-IN-PLACE CONCRETE SHEAR WALLS A15-13

S5L - STEEL FRAME WITH UNREINFORCED MASONRY INFILL WALLS A15-14

S5M - STEEL FRAME WITH UNREINFORCED MASONRY INFILL WALLS A15-15

S5H - STEEL FRAME WITH UNREINFORCED MASONRY INFILL WALLS A15-16

C1L - CONCRETE MOMENT FRAMES A15-17

C1M - CONCRETE MOMENT FRAMES A15-18

C1H - CONCRETE MOMENT FRAMES A15-19

C2L - CONCRETE SHEAR WALLS A15-20

C2M - CONCRETE SHEAR WALLS A15-21

C2H - CONCRETE SHEAR WALLS A15-22

C3L - CONCRETE FRAME WITH UNREINFORCED MASONRY INFILL WALLS A15-23

C3M - CONCRETE FRAME WITH UNREINFORCED MASONRY INFILL WALLS A15-24



C3H - CONCRETE FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A15-25
C4L - REINFORCED CONCRETE FRAMES AND CONCRETE SHEAR WALLS	A15-26
C4M - REINFORCED CONCRETE FRAMES AND CONCRETE SHEAR WALLS	A15-27
C4H - REINFORCED CONCRETE FRAMES AND CONCRETE SHEAR WALLS	A15-28
C5L - FLAT SLAB STRUCTURE	A15-29
C5M - FLAT SLAB STRUCTURE	A15-30
C5H - FLAT SLAB STRUCTURE	A15-31
PC1L - PRECAST CONCRETE TILT-UP WALLS	A15-32
PC1M - PRECAST CONCRETE TILT-UP WALLS	A15-33
PC1H - PRECAST CONCRETE TILT-UP WALLS	A15-34
PC2L - PRECAST CONCRETE FRAMES WITH CONCRETE SHEAR WALLS	A15-35
PC2M - PRECAST CONCRETE FRAMES WITH CONCRETE SHEAR WALLS	A15-36
PC2H - PRECAST CONCRETE FRAMES WITH CONCRETE SHEAR WALLS	A15-37
SC1L - REINFORCED CONCRETE FRAMES AND STEEL TRUSS GIRDER (WAREHOUSES)	A15-38
RM1L - REINFORCED MASONRY BEARING WALLS WITH WOOD OR METAL DECK DIAPHRAGMS	A15-39
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RM2M - REINFORCED MASONRY BEARING WALLS WITH PRECAST CONCRETE DIAPHRAGMS	A15-42
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URML - UNREINFORCED MASONRY BEARING WALLS	A15-44
URMM - UNREINFORCED MASONRY BEARING WALLS	A15-45
CM1L - CONFINED MASONRY WALLS	A15-46
AD1L - ADOBE	A15-47
TA1L - TAPIA	A15-48

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W1 - WOOD, LIGHT FRAME ($\leq 5,000$ SQ. FT.)	A17-1
W2 - WOOD, COMMERCIAL AND INDUSTRIAL ($> 5,000$ SQ. FT.)	A17-2
S1L - STEEL MOMENT FRAME	A17-3
S1M - STEEL MOMENT FRAME	A17-4
S1H - STEEL MOMENT FRAME	A17-5
S2L - STEEL BRACED FRAME	A17-6
S2M - STEEL BRACED FRAME	A17-7
S2H - STEEL BRACED FRAME	A17-8
S3 - STEEL LIGHT FRAME	A17-9
S4L - STEEL FRAME WITH CAST-IN-PLACE CONCRETE SHEAR WALLS	A17-10
S4M - STEEL FRAME WITH CAST-IN-PLACE CONCRETE SHEAR WALLS	A17-11
S4H - STEEL FRAME WITH CAST-IN-PLACE CONCRETE SHEAR WALLS	A17-12



S5L - STEEL FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A17-13
S5M - STEEL FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A17-14
S5H - STEEL FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A17-15
C1L - CONCRETE MOMENT FRAMES	A17-16
C1M - CONCRETE MOMENT FRAMES	A17-17
C1H - CONCRETE MOMENT FRAMES	A17-18
C2L - CONCRETE SHEAR WALLS	A17-19
C2M - CONCRETE SHEAR WALLS	A17-20
C2H - CONCRETE SHEAR WALLS	A17-21
C3L - CONCRETE FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A17-22
C3M - CONCRETE FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A17-23
C3H - CONCRETE FRAME WITH UNREINFORCED MASONRY INFILL WALLS	A17-24
C4L - REINFORCED CONCRETE FRAMES AND CONCRETE SHEAR WALLS	A17-25
C4M - REINFORCED CONCRETE FRAMES AND CONCRETE SHEAR WALLS	A17-26
C4H - REINFORCED CONCRETE FRAMES AND CONCRETE SHEAR WALLS	A17-27
C5L - FLAT SLAB STRUCTURE	A17-28
C5M - FLAT SLAB STRUCTURE	A17-29
C5H - FLAT SLAB STRUCTURE	A17-30
PC1L - PRECAST CONCRETE TILT-UP WALLS	A17-31
PC1M - PRECAST CONCRETE TILT-UP WALLS	A17-32
PC1H - PRECAST CONCRETE TILT-UP WALLS	A17-33
PC2L - PRECAST CONCRETE FRAMES WITH CONCRETE SHEAR WALLS	A17-34
PC2M - PRECAST CONCRETE FRAMES WITH CONCRETE SHEAR WALLS	A17-35
PC2H - PRECAST CONCRETE FRAMES WITH CONCRETE SHEAR WALLS	A17-36
SC1L - REINFORCED CONCRETE FRAMES AND STEEL TRUSS GIRDER (WAREHOUSES)	A17-37
RM1L - REINFORCED MASONRY BEARING WALLS WITH WOOD OR METAL DECK DIAPHRAGMS	A17-38
RM1M - REINFORCED MASONRY BEARING WALLS WITH WOOD OR METAL DECK DIAPHRAGMS	A17-39
RM2L - REINFORCED MASONRY BEARING WALLS WITH PRECAST CONCRETE DIAPHRAGMS	A17-40
RM2M - REINFORCED MASONRY BEARING WALLS WITH PRECAST CONCRETE DIAPHRAGMS	A17-41
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CM1L - CONFINED MASONRY WALLS	A17-45
AD1L - ADOBE	A17-46
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AAL/GNE FISCAL (EARTHQUAKE)	A20-5
AAL/GFCF NATIONAL (EARTHQUAKE)	A20-7
AAL/GNS FISCAL (EARTHQUAKE)	A20-9
PML/GDP NATIONAL (EARTHQUAKE)	A20-11
PML/GDP FISCAL (EARTHQUAKE)	A20-13
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AAL/GFCF NATIONAL (EARTHQUAKE)	A20-20
AAL/GNS FISCAL (EARTHQUAKE)	A20-20
PML/GDP NATIONAL (EARTHQUAKE)	A20-20
PML/GDP FISCAL (EARTHQUAKE)	A20-21
PML/GNI NATIONAL (EARTHQUAKE)	A20-21
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AAL/GFCF NATIONAL (EARTHQUAKE)	A20-26
AAL/GNS FISCAL (EARTHQUAKE)	A20-28
PML/GDP NATIONAL (EARTHQUAKE)	A20-30
PML/GDP FISCAL (EARTHQUAKE)	A20-32
PML/GNI NATIONAL (EARTHQUAKE)	A20-34
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AAL/GNE FISCAL (EARTHQUAKE)	A20-38
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AAL/GNS FISCAL (EARTHQUAKE)	A20-39
PML/GDP NATIONAL (EARTHQUAKE)	A20-39
PML/GDP FISCAL (EARTHQUAKE)	A20-40
PML/GNI NATIONAL (EARTHQUAKE)	A20-40
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RISK RESULTS BY COUNTRY AND REGION	A21-3
AAL/GNE NATIONAL (CYCLONIC WIND)	A21-3
AAL/GNE FISCAL (CYCLONIC WIND)	A21-4
AAL/GFCF NATIONAL (CYCLONIC WIND)	A21-5
AAL/GNS FISCAL (CYCLONIC WIND)	A21-7
PML/GDP NATIONAL (CYCLONIC WIND)	A21-9
PML/GDP FISCAL (CYCLONIC WIND)	A21-11
PML/GNI NATIONAL (CYCLONIC WIND)	A21-12
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AAL/GNE FISCAL (CYCLONIC WIND)	A21-14
AAL/GFCF NATIONAL (CYCLONIC WIND)	A21-15
AAL/GNS FISCAL (CYCLONIC WIND)	A21-15
PML/GDP NATIONAL (CYCLONIC WIND)	A21-15
PML/GDP FISCAL (CYCLONIC WIND)	A21-16
PML/GNI NATIONAL (CYCLONIC WIND)	A21-16
PML/GNI FISCAL (CYCLONIC WIND)	A21-16
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AAL/GNE NATIONAL (CYCLONIC WIND)	A21-17
AAL/GNE FISCAL (CYCLONIC WIND)	A21-19
AAL/GFCF NATIONAL (CYCLONIC WIND)	A21-21
AAL/GNS FISCAL (CYCLONIC WIND)	A21-23
PML/GDP NATIONAL (CYCLONIC WIND)	A21-25
PML/GDP FISCAL (CYCLONIC WIND)	A21-27
PML/GNI NATIONAL (CYCLONIC WIND)	A21-29
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AAL/GFCF NATIONAL (CYCLONIC WIND)	A21-34
AAL/GNS FISCAL (CYCLONIC WIND)	A21-34
PML/GDP NATIONAL (CYCLONIC WIND)	A21-34
PML/GDP FISCAL (CYCLONIC WIND)	A21-35
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INTRODUCTION

It is generally recognized, with a few exceptions, that there is limited information regarding catastrophic events occurred in the past and even less regarding events that could occur in any given country. In most cases the worst events are still yet to take place. Therefore, it is not possible to predict the future consequences caused by extreme events based on the information available in terms of historically recorded consequences. When considering the possibility of highly destructive events to occur in the future, the risk assessment should be addressed through the use of probabilistic analytical models which allow for the information available to be used in predicting potential catastrophic consequences. The risk evaluation of extreme events should follow a prospective focus, thus anticipating the occurrence of events and the scientifically feasible consequences that may develop in the future, considering the biggest uncertainties associated with estimating the severity and frequency at that they will occur.

Accordingly, for catastrophe risk assessment we must represent the relevant components of the risk: exposed elements or assets, the level of hazard against them and their vulnerability, in such a way that can be consistently added through a robust and approved procedure, in both analytical and conceptual terms. The probabilistic risk assessment is a of the state-of-the-art technique that allows for not only this type of valuation to be carried out, yet also, for this evaluation to be carried out to adequately take into account the uncertainty associated with the hazard calculation and the vulnerability characterization. The main result from this analysis is the loss exceedance curve which represents the annual frequency at that a determined economic loss may be exceeded in the future. In general, it is highly recognized that this curve or the curve deriving from it (the curve of maximum probable losses) is the most robust technique for catastrophe risk assessment.

The hazard associated with a natural event is measured using the frequency of occurrence and the severity of each event, characterized through a certain parameter of intensity of the danger in a specific geographical location. The hazard evaluation is based on the historical frequency of events and the relevant varying intensity levels. The hazard is characterized, thus, in each area of territory by the expected value of the parameter of the intensity that is considered appropriate as well as by the occurrence of said severity value of the disaster. It is important to point out that in regards to studying the disaster risk it is relevant to study those phenomena that may cause a correlation of losses; in other words, simultaneous detriment in an extensive area. Usually, those disasters that tend to lead to this situation are earthquakes and cyclones. Given the interest for evaluating catastrophe risk in each country, the analysis was carried out assessing only the seismic hazard and cyclonic wind hazards, when the hazard posed by these types of phenomena was relevant.

The vulnerability of exposed components, or the susceptibility of each one of suffering detriment caused by a particular dangerous event, is represented through functions of damage or loss. These functions relate to the intensity of the phenomenon with the level of

damage or direct physical effects on each component, expressed as a percentage of physical damage or the relative economic loss. Each vulnerability function is defined by an average value of damage and its variance, from that we are able to estimate its respective probability function. The variance gives an account of the uncertainty associated in this disaster risk calculation process.

Future disasters as sovereign risk for countries

Disasters are implicit contingent liabilities that increase the fiscal vulnerabilities of countries. In other words, a future disaster is an uncertain, hidden public debt that becomes a certain liability when the event occurs. This “contingent debt” that represents the potential losses has to be added to the current, explicit debt. If the total value is greater than the present discounted value of future primary surpluses of the country, there is an imbalance in the equation of the country's fiscal sustainability. Governments should therefore recognize that future disasters need to be considered in the country's balance sheets, as they can generate important macroeconomic imbalances. This is related to the country's fiscal responsibility, which corresponds to losses to public assets as well as those affecting the low income population.

This is why future disasters have to be considered a “sovereign risk” for a country. They, in fact, constitute a risk that has to be handled by all the society, in the similar way that the society complies with the constitution and the legislation. To measure this collective responsibility, it is necessary to employ loss assessment models that embed the intrinsic uncertainties of the phenomenon, as well as allow taking decisions considering the aleatory nature of such losses. It is necessary to produce a quantitative measure of this losses, as “what it is not quantified cannot be managed”. The best way of assessing these potential losses is by using probabilistic models, which allow the governments to measure disaster risk in the context of the fiscal sustainability. In this way it would be possible to identify optimal strategies for financial protections in terms of transferring or retaining this sovereign risk. In particular, this will allow implementing actions to reduce the losses, minimizing the possibility of insolvency as well as the effects on the development and the quality of life of the population.

Intrinsic uncertainties and assessment of risk from disasters

To assess disaster risk it is necessary to consider the aleatory nature of the hazardous events and of the effects of these events on the exposed assets. In general, neither the amount of future losses nor the time between the causing events are known. This is due to the existing uncertainty in the estimation of the hazard: many factors are unknown, such as the timing of the events, the exact magnitude, location, the geographical extent of the effects on respect with where the event originated, as well as the site effects due to local characteristics. At the same time, there is an uncertainty associated to the exact location and characterization of the exposed assets as well as their vulnerability from the possible

hazardous events. In fact, it is not possible to assess precisely how structures will respond, what the structural capacity and quality of the materials are, nor what the damages to the assets and their contents will be. This means that there is an epistemic uncertainty in assessing the phenomenon, due to lack of detailed and precise information, as well as the typical (and unavoidable) inaccuracies of the analytical models. This uncertainty can only be partly reduced, and just to a certain degree, through major technical and scientific efforts. Another inherent uncertainty exists, due to the limited understanding of some aspects related to the complexity of the phenomenon. This uncertainty is impossible to eliminate or even to reduce. However, even if it is not possible to predict exactly the sequence of future events and the consequent losses, it is possible to assess some factors through a well-funded, probabilistic analytical model. The results from one of such models allow taking informed decisions at different scales (global, national or sub-national) and for different aspects of the decision-making process. They enable understanding what aspects can be neglected, which results are more or less sensitive to the input data or to the employed methodology, and, most importantly, how the accuracy and uncertainty in the evaluation is relevant to the type of decision that will be made on the basis of these results.

Questions that need answering to manage disaster risk

To implement risk management interventions, which involve measures of risk reduction, financial protection and preparedness, it is necessary to answer to questions such as: Which events are more or less frequent, and what is their intensity? What are the maximum losses related to recurring (20, 50 years) or rare (100, 500, 1000 years) events? In other words, what is the frequency in which these events can occur? What would the average annual loss for the country, the district or the city be? Where would the losses be concentrated? Which short and long term measures, small and large scale actions, would be justified or meaningful?

Events and their consequences have an aleatory nature. Moreover, each event has a specific frequency of occurrence. Hence, to answer to the above questions, it is necessary to express the potential losses in terms of occurrence rate or return period. For the same reason, the metrics used to express the risk should be associated to the exceedance probability of the losses. In this way it is possible to take into account and manage the intrinsic uncertainty. This allows defining, *ex ante*, risk reduction measures that are economically and socially sustainable, as well as developing optimal strategies for financial protection to cover the residual risk. These strategies include budgeting for emergencies, rehabilitation and recovery of the affected communities, adopting appropriate reserve funds, insurance and reinsurance, contingent loans or other financial instruments available in the capital market.

Probabilistic disaster risk assessment

The calculation of the loss exceedance probability curve constitutes the most appropriated method to assess the risk. From this curve it is possible to derive risk metrics such as the

annual average loss (AAL) and the probable maximum loss (PML), that can be assessed for one or more return periods. The annual average loss is the most robust measure of risk, being a compacted probabilistic metric that is relatively insensitive to uncertainty. This metric is calculated through the sum of the product of the expected losses from each event with the annual frequency of occurrence of the same event, assuming a stationary and exhaustive process of events (i.e. all the possible events are considered). Furthermore, the annual average loss can be expressed as a fraction of the exposed value. This versatile metric is known as the “pure premium”, and can be used to express the risk for a building, for a portfolio of buildings, for a city or for a country. It can be obtained for a single or for multiple hazards, allowing to consider at the same time the aggregated risk from different hazards. At the same time, the probable maximum loss is a compacted measure related to the loss exceedance annual rate and can be considered as a complementary measure to the annual average loss, as benchmark for the magnitude of less frequent losses (i.e. with higher return periods) that can be exceeded in the future.

The global risk model

The aim of this Global Risk Model, of which the technical basis and results will be presented in this report, is to obtain an assessment of the risk for all the countries in the world, taking into account the major hazards that result in catastrophic risk. The assessment of both the hazards and the risk that was carried out for this study is based on a probabilistic analysis, which results in the above mentioned risk metrics. Such metrics are considered the most appropriated form of measuring disaster risk at any scale. On one hand, the aim of this study was to produce a risk assessment at global level, which required a series of simplifications and assumptions coherent with the scale of the analysis. On the other hand, this report wants to underline the necessity for countries to undertake risk assessment with better resolution and details at national and sub-national level, using consistent information appropriated with the scale of analysis, but with the same probabilistic approach and method presented here. In other words, it is possible to use the same “arithmetic” at sub-national and local level. In fact, this approach can be considered to be the “correct” for the catastrophe risk assessment caused by one or more hazards.

Until now, the analysis of risk at global level has been carried out based only on historical events recorded in international databases (e.g. the analysis carried out for GAR 2009). This new global risk model, until now the only one of the kind, takes into account events that haven’t yet occurred, by using a probabilistic predictive method that calculates losses due to possible future events. The calculation is carried out considering the uncertainties related to the hazards, the exposure and the vulnerability. This is the first study that measures the risk in probabilistic terms for all the countries in the world, using the same “arithmetic and measuring ruler”. In some aspects, the analysis is similar to the one used by the insurance and reinsurance industry. The main difference, however, is that the evaluation analysis carried out for insurance and reinsurance purposes only cover limited, insured portfolios. On the other hand, in the case of this study, the risk has been calculated

by using a proxy of the total value of the assets of the country, as well as of the fiscal responsibility of the governments. Such fiscal responsibility was calculated considering both the public assets and those of the low-income private homeowners, as they would require the government's intervention for the rehabilitation and reconstruction. The assessment of future losses on these portfolios allows quantifying the sovereign risk from disasters. As mentioned above, this type of risk has to be taken into account by the ministries of finance, economy or planning, with the aim of reducing the fiscal vulnerability of the countries.

The risk assessment carried out in this study has been done with an open model that can be used by every government or user: the CAPRA (Comprehensive Approach to Probabilistic Risk Assessment) platform. This platform is open access, open source and has a modular architecture, and can be used free of cost. The development of this platform has been supported by the World Bank, the Inter-American Development Bank and the UNISDR. The CAPRA model has been developed by members of the technical team of this consultancy group.

Scope and constraints at global level

A risk assessment at global level can only have a “coarse grain” definition. This means that it has to be done consistently in each phase without excessive details or precision. A high level of precision would be in fact irrelevant for the scale of the analysis. It would not be possible to produce a high resolution global risk assessment, due to the lack of detailed information for all the countries, and because of the time and money that it would require. A global level analysis allows obtaining results that provide an idea of the magnitude of disaster risk at a national scale. It also allows producing general classifications and rankings between the countries based on their risk, using relative indicators. These indicators are particularly useful to identify disaster risk at a global level and for comparative purpose, in order to highlight the need of carrying out measures for risk reduction, finance protection and disaster preparedness. Also, of encouraging countries to undertake risk assessment with improved details at sub-national and urban level, using the same probabilistic approach.

It is important to notice that the resolution and precision are not only associated with the hazard assessment, but also to the representation of the exposure and the characterization of the vulnerability. For this reason, it is necessary to have consistency and compatibility on the level of rigor and details in the different phases of the risk assessment. The choice of the resolution is related to the type of decisions that the risk assessment will inform. For this study, the simplifications and assumptions, appropriate for this work at global level, meant that the precision was sacrificed. It was nevertheless obtained a “common operating picture” of the risk for the countries that allows a comparative, initial view of their economic dimension and capability to recover from disasters. In other words, this analysis provides information on the economic resilience of the countries, in terms of indicators of the countries' economic flow. The model can be nevertheless improved, especially on the



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data that could be used for an evaluation resulting in countries' risk profiles. The use of more detailed information is linked to the need of carrying out cost-benefit analyses on the implementation of disaster risk reduction measures. In other words, it is important to point out that the more the scale goes down into national and sub-national levels, the more detailed the analysis is required, even if the same methodological approach used here is applied. The probabilistic metrics can be used at all territorial scales, and the appropriate precision to be adopted for the study depends on the required scope and use of the results.

Bogota, March 2013
Omar-Dario Cardona
CIMNE, INGENIAR, ITEC, EAI

1. PROBABILISTIC SEISMIC HAZARD ASSESSMENT

1.1 Purpose and scope

The seismic hazard at bedrock level is calculated based on historical information recorded in the seismic catalogues. Using said information which is related to the magnitude and the location of the hypocenter of each earthquake, the intensity of the events is calculated by a set of stochastic scenarios considering in that way the events' intensities of those that have not yet occurred. This is carried out taking into account the attenuation of the seismic energy with the distance, in the surroundings from where each event strikes. This evaluation thus gives us, for example, a curve of the probability of exceeding the acceleration in a point where certain exposed assets may be subjected. Given that said curve is obtained for each one of the points within the calculation grid, it is possible to calculate the seismic hazard maps for various spectral ordinates and return periods; in other words, according to the characteristics of the dynamic structural response from the exposed structures. This input is fundamental for the probabilistic risk assessment on the inventory of exposed elements conducted in countries with seismic hazard.

A seismic hazard assessment can be extremely detailed if it is based on enough information that is appropriate, complete and reliable. This means to be based on a complete catalogue of events, with magnitude measures based on instruments and a very precise location of epicenters and depths. Also a deep knowledge of the geological characteristics and of the source or fault activities that have caused or may cause relevant earthquakes in the area of interest is required. It is also necessary to have well calibrated ground motion prediction equations (GMPE) or attenuation relationships as well as a clear and careful knowledge of the dynamic behavior of the soils in the areas where the hazard assessment is being conducted. This is very difficult to achieve, even at local level, as the uncertainty is always significant and usually it is only possible to calculate estimations rather than real values. The formal use of a probabilistic approach is precisely based on the need to deal with the associated or inherent uncertainties and to give an order of magnitude of the hazard for several purposes.

Recognizing the difficulty in significantly reducing the epistemic and random uncertainty of the phenomenon at a global level, it is possible to make an evaluation of the seismic hazard by carrying out a series of simplifications that allow handling the data in a similar way in all corners of the earth. It is possible to make a gross regionalization of different seismo-tectonic provinces with similar characteristics, to use a global seismic catalogue openly available, a basic group of GMPE, to use a smoothed seismicity approach and not consider the local site effects but to use the same analytical probabilistic assessment model for seismic hazard that is used at a local and a regional level. In other words, different to other efforts made in the past, where other more controversial approximations have been made, this global study on the seismic hazard uses the same probabilistic "arithmetic" that would be used if there were detailed information on a local scale to rely on.

1.2 Methodological approach

There are multiple probabilistic seismic hazard assessment models which in general terms follow the same analytical procedure and use the data in a similar way. One of these models is the OpenQuake program that has been developed within the framework of the Global Earthquake Model project (GEM) that is currently in the testing and debugging stage. The OpenQuake was used within the framework of this project with the aim of obtaining various values of exceedance probability (or return period) and spectral acceleration (seismic hazard for five structural periods) in each point of analysis. These curves, through the undertaking of a special procedure which is explained in the risk analysis section, allows calculating the average annual loss of each component and of the entire inventory of exposed elements in each country. This procedure was carried out for a group of countries with comparative objectives and, in a certain way, for reasons of validating and comparing the results obtained from the CRISIS 2012 program (Ordaz et al, 2012) which is directly compatible with the risk calculation model from the CAPRA platform.

CRISIS 2012, besides allowing us to obtain the same exceedance probability curves for several structural periods in each analysis node (that was undertaken for 23 structural periods), also gives us the curve of loss exceedance probability curve through the CAPRA-GIS. This curve, from where the Probable Maximum Loss (PML) plot derives and the average annual loss is obtained by covering all the possible seismic scenarios (generated and recorded through the CRISIS program in a file with .ame format) and by recording every effect that an event may cause to each component and in the entire inventory of exposed elements. These scenarios of seismic intensity include the average value of the parameter of intensity and its dispersion (expressed through the standard deviation) in each node that constitutes each scenario. This is the possibility that allows for us to carry out a fully probabilistic hazard and risk analysis in the strict sense of the term.

This consultant group received the results obtained from OpenQuake facilitated by GEM but was not aware or informed of the used data and the procedures that were followed in said program. For reasons of technical support for this work in said situation, it was considered inconvenient to use those results because, as has already been explained, it was not possible to obtain the PML curves afterwards for at least a group of countries. No technical description about the use of OpenQuake is made in this report, as there was no access to any supportive information; however, the respective seismic hazard maps were obtained in order to compare them to those obtained with CRISIS. To summarize, the results of the seismic hazard for the whole world were obtained in the CRISIS 2012 program, as an intermediate step in the risk calculation process which was carried out using the CAPRA-GIS software. The analytical procedure used in CRISIS 2012, as well as the data and its adjustments for analysis at a global level are described below.

1.2.1 Analytical Procedure with CRISIS 2012

Figure 1-1 presents a flow diagram with the principal elements of the employed seismic hazard model. The main steps of the method used are the following:

- 1) *Definition and characterisation of tectonic regions:* based on geological and neotectonical information collected, the principal seismic regions and provinces are identified.
- 2) *Calculation of the seismicity parameters for the different grids:* Using the seismic catalogue and the smoothed seismicity technique, the seismicity parameters are assigned to each node for the different grids that have been assigned at different depths in the analysis.
- 3) *Generation of a set of stochastic events compatible with locations, depths, frequencies and magnitudes,* based on the foregoing information, a set of possible seismic events is generated through sampling of the seismicity parameter in each node. For each node, a set of scenarios is generated with different magnitudes, whose probabilities of occurrence are obtained from specific magnitude recurrence curves for that point.
- 4) *Ground motion prediction equations:* the appropriate attenuation functions are defined based on the information collected, previous studies, tectonic environment and the state of current knowledge of the functions.
- 5) *Generation of hazard maps for representative events:* Maps are generated with the spatial distribution of seismic intensity, following maximum spectral values for each stochastic event calculated, through the attenuation model adopted.
- 6) *Application of the probabilistic model of seismic hazard:* seismic hazard maps are obtained for different parameters of intensity (spectral ordinates). The maps are calculated for different return periods in the analysis.

Some of these steps are particularly relevant. They are described in the following paragraphs.

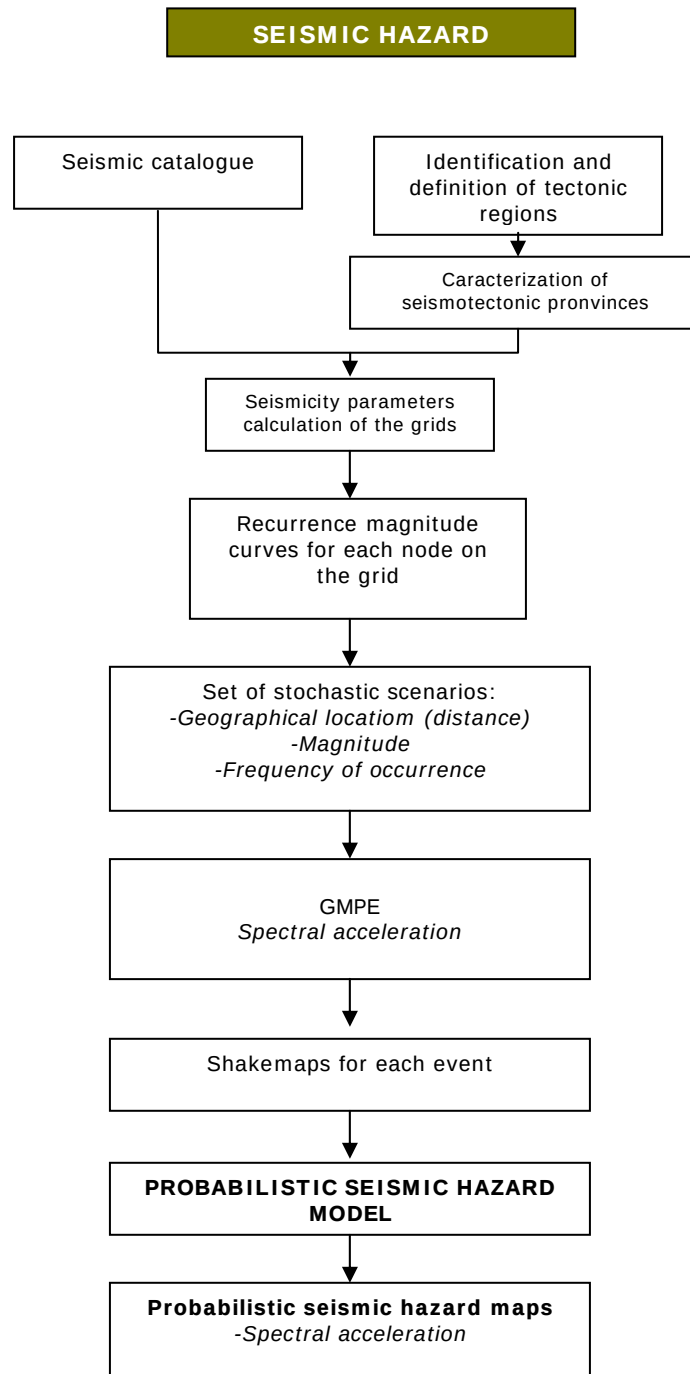


Figure 1-1

Flow diagram with the main steps for a probabilistic seismic hazard assessment

1.2.2 Seismicity parameters for seismogenic sources

The activity of the i -th seismic source is specified in terms of the rate of exceedance of magnitudes, $\lambda_i(M)$, generated by this source. The magnitude exceedance rate measures how often earthquakes are generated with a magnitude equal or higher to a specific level. For each node, the function $\lambda_i(M)$, is a modified version of the Gutenberg and Richter relationship. In these cases, seismicity is described as follows:

$$\lambda(M) = \lambda_0 \frac{e^{-\beta M} - e^{-\beta M_u}}{e^{-\beta M_0} - e^{-\beta M_u}} \quad (\text{Eq. 1-1})$$

where M_0 is the selected threshold magnitude, λ_0 , β , and M_u are parameters that define the rate of exceedance of each of the seismic sources. These parameters are different for each source and are estimated by statistical procedures that include information on regions that are tectonically similar to that studied, together with expert information, particularly on the value of M_u , the maximum expected magnitude that can be generated from each source.

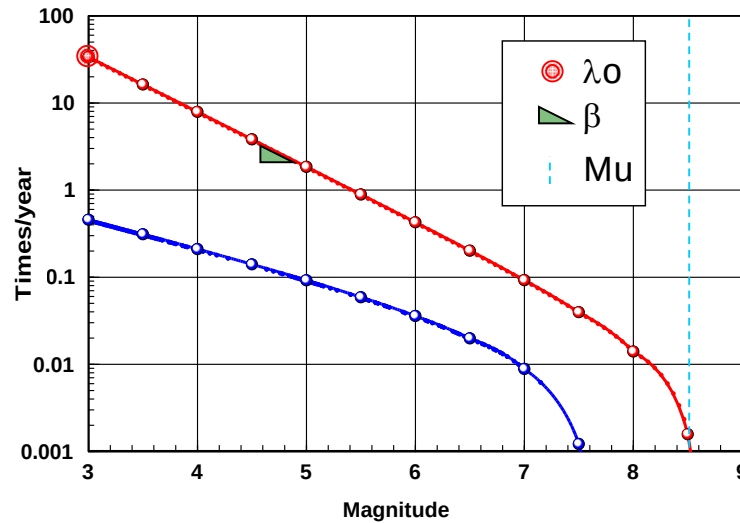


Figure 1-2
Rates of exceedance of sources for the Poisson seismicity model

In this way, each of the seismic sources is characterised by a series of seismicity parameters which are determined on the basis of available seismic information. The parameters define the following:

- *Recurrence rate for earthquakes with a magnitude equal or higher than 4.5 (λ_0):* this corresponds to the average number of events per year of earthquakes with a magnitude equal or higher than 4.5 generated by a source.

- *Beta value*: identified through the β parameter that represents the slope of the initial segment of the magnitude recurrence curve.
- *Maximum magnitude, M_u* : estimated on the basis of the maximum length of rupture possible from each of the sources, and on the other morphotectonic and historical characteristics.

1.2.3 Ground motion prediction equations

Once the rate of activity of each of the seismic sources has been determined, an evaluation of the effects that, in terms of seismic intensity, each of them produces at the site of interest is made. For this purpose, is needed to know what intensity will occur in the case under study, in this case at bedrock level, if an earthquake of a given magnitude from the i -th source should occur. The expressions that provide magnitude, source-site relative position and seismic intensity are known as ground motion prediction equations (GMPE). Usually, the relative source-site position is specified by a focal distance which is, the distance between the seismic focus and the analysis site. It is considered that the relevant seismic intensities are the ordinates in the response spectrum a (in this case the pseudo-accelerations with 5% of critical damping), quantities that are approximately proportional to the lateral inertial force that is generated on structures during earthquakes. Spectral GMPE are used to take account of the fact that attenuation is different for waves with different frequencies, and this also makes it possible to calculate the uniform hazard spectrum for several return periods.

Seismic intensities are not exempt of uncertainties and they cannot be treated as deterministic variables. For this reason, it is assumed that the seismic intensity a is a random variable that follows a lognormal distribution with a median given by the attenuation relationship and a typical deviation of the natural logarithm equal to σ_{lna} .

1.2.4 Seismic hazard assessment

Once the seismicity of the sources is known, along with the patterns of attenuation generated in each of them, the seismic hazard assessment can be conducted considering the sum of the effects of all seismic sources and the distance between each source and the site where the structure is located. The hazard expressed in terms of intensity exceedance rates ν , is calculated with the following expression:

$$\nu(a) = \sum_{n=1}^N \int_{M_o}^{M_u} -\frac{\partial \lambda}{\partial M} \Pr(A > a | M, R_i) dM \quad (\text{Eq. 1-2})$$

where the sum includes the totality of seismic sources N , nodes in this case within the integration distance (300km in this case), and $\Pr(A > a | M, R_i)$ is the probability that intensity

will exceed a certain value, given the magnitude of the earthquake M , and the distance between the i -th source and the site R_i . The functions $\lambda_i(M)$ are the rates of activity of seismic sources. The integral includes the range from M_o to M_u which indicates that the contribution of all magnitudes is taken into account for each seismic source.

Since we suppose that, given the magnitude and the distance, intensity has a lognormal distribution, the probability $Pr(A>a|M, R_i)$ is calculated as follows:

$$Pr(A > a | M, R_o) = \phi \left(\frac{1}{\sigma_{Lna}} \ln \frac{E(A | M, R_i)}{a} \right) \quad (\text{Eq.1-3})$$

where $\phi(.)$ is the normal standard distribution, $E(A|M, R_i)$ is the expected value of the logarithm of intensity (given by the related law of attenuation), and σ_{Lna} is the related standard deviation.

1.3 Information used with CRISIS 2012

In terms of modeling the seismic hazard, specific information regarding different aspects or stages of the evaluation is required. The quality of the modeling depends on the details and accuracy of the gathered information. In general, the following information is required for modeling: a) The seismic catalogue, b) The tectonic zoning, c) The seismicity parameters and d) Ground motion prediction equations.

1.3.1 Seismic catalogue

Using the seismic catalogue, we can calculate the parameters of seismic activity required for the local seismic activity model of Poisson used in said analysis. For this analysis the NEIC catalogue from the United States Geographical Survey (USGS) was used for the period of time between 1973 and January 2012. For this catalogue a depuration process was undertaken for removal of premonitory and aftershock events. From the original catalogue which contains 296,274 events, a total of 151,520 events of magnitude 4.5 or higher were used. The parameters of interest for the analysis in the catalogue are: a) Date, b) Epicenter, c) Depth and d) Magnitude (M_w).

A threshold magnitude (M_o) equal to $M_w=4.5$ was selected and the evaluation for determining whether the catalogue for said magnitude was complete was conducted. Figure 1-3 shows the results from said evaluation from that it was concluded that the catalogue was considered to be completed from 1973 onwards.

Table 1-1 shows the statistics from the number of events found in the catalogue for different magnitudes.

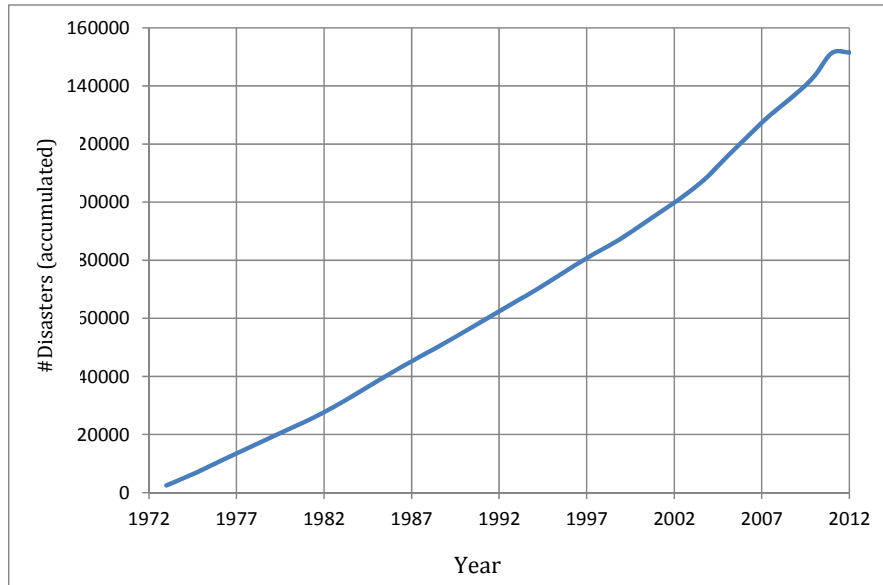


Figure 1-3
Completeness verification for $M_o=4.5$

Table 1-1
Number of events by magnitude ranges in the NEIC catalogue

Magnitude	Number of events
4.5	151,520
5	54,057
5.5	15,572
6	4,697
6.5	1,509
7	488
7.5	166
8	29
8.5	5
9	2
9.1	1

A check of the distribution of depths for the events recorded in the catalogue was also carried out. Figure 1-4 shows some statistics for different ranges of depth in the final catalogue.

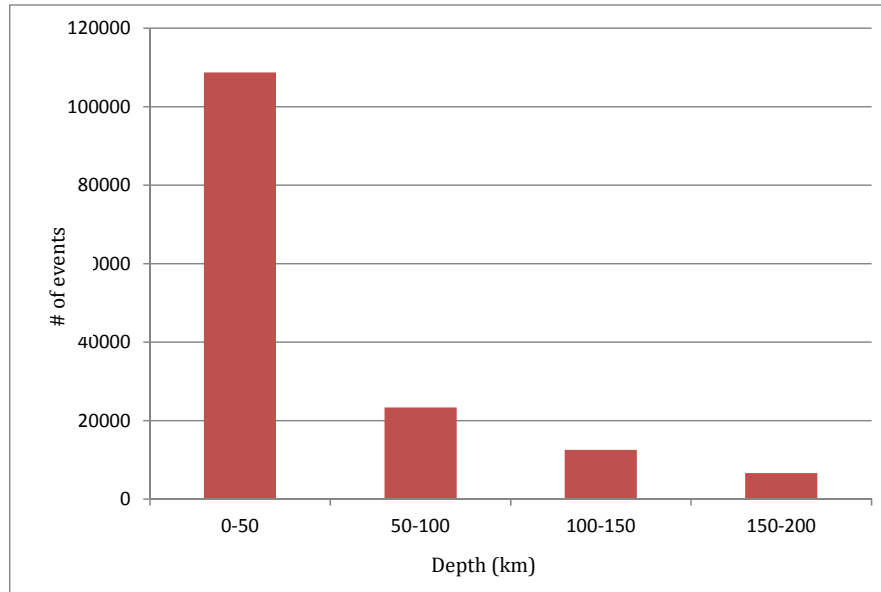


Figure 1-4
Distribution in ranges of depth of the events recorded in the catalogue

1.3.2 Tectonic zoning

The seismic hazard assessment at global level was carried out in a simplified manner using a smoothed seismicity approach which consists on defining a set of grids of seismic activity over the globe. On the other hand, a division of the earth's crust in various tectonic provinces was conducted in order to assign to each one of the nodes within each of the aforementioned areas, the maximum expected magnitudes (M_u) and the corresponding GMPE.

Following the 50 regions defined by Flinn and Engdahl (1965), the different seismo-tectonic provinces were defined as shown in Figure 1-5. The methodology and the provinces are shown in Annex 1.

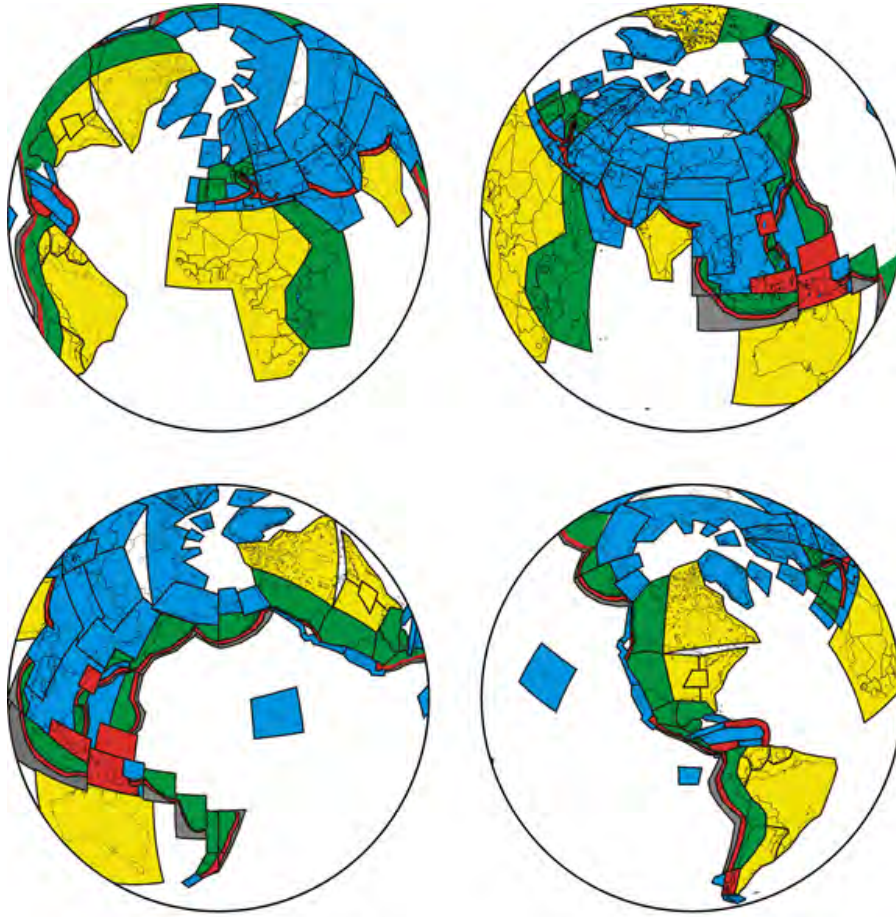


Figure 1-5
Seismo-tectonic provinces used in the analysis

1.3.3 Seismicity parameters

For calculating the parameters of seismic activity, the method of smoothed seismicity proposed by Woo (1996) was used. For this procedure, a 0.3 degrees spaced grids were selected and with this, the whole globe was covered. The following smoothing parameters were selected:

- $R_{min}=0.3$ degrees
- $R_{max}=1.2$ degrees

The weights for the smoothing procedure parameters are calculated in the following way for $K(R)$:

- C/R Min if $R < R_{min}$
- C/R if $R_{min} < R < R_{max}$
- 0 if $R > R_{max}$

Where R is the distance between the seismic focal point (information registered in the catalogue) and the node for that the smoothed seismic activity is calculated.

Due to the variation in the depth of the earthquakes, identified from the catalogue, the classification of three different ranges of depth was undertaken being them 0-30 km 30-60 km and 60+ km. A depth of 15, 45 and 75 km is assigned respectively to each one of these grids when calculating the seismic hazard.

The values of the parameter β are truncated between 1.8 and 3.0 for any node in the grid.

The parameters λ_o and β are calculated for each one of the grid nodes and their values can be found in Annex 2.

1.3.4 Ground motion prediction equations

For this analysis, spectral GMPE have been used given that waves with different frequential content attenuate in a different way. Attenuation relationships known within the framework of the GEM project such as GMPE (Ground Motion Prediction Equations) that are shown below were selected:

- Youngs 1997 Interface
- Youngs 1997 Intraslab
- Atkinson and Boore 2006
- Cauzzi and Faccioli 2008
- Abrahamson and Silva 1997

Those GMPE were chosen from the pre-selected functions within the framework of the GEM1 project. Various functions have been selected and recommended by the GEM-PEER project within the framework of the GEM initiative.

1.4 Seismic hazard assessment

The seismic hazard assessment was carried out for each node, where then the exceedance rates of different intensities are determined for each spectral ordinate that is considered in the analysis with the methodology that was explained above and that corresponds to the employed procedure in the CRISIS 2012 program. In this case, the selected intensity corresponds to the spectral acceleration which is calculated as a random variable with lognormal distribution and two probability moments (the geometric mean and the logarithm's standard deviation).

Based on the parameters of seismic activity assigned to each node, scenarios were generated in each of them for different magnitudes and therefore considering annual occurrence frequencies; this latest parameter shows the time variability of occurrence. It is

evident that in this analysis with the smoothed seismicity approach, the sources are treated as nodes.

From the set of stochastic scenarios (.ame file), the seismic hazard maps were calculated for the following spectral ordinates: 0.0 sec, 0.2 sec, 0.5 sec, 1.0 sec and 2.0 sec and for different return periods – 225, 475, 1000 and 2500 years (see Annex 3). The results indicate the expected values of the intensities of seismic hazard at bedrock level and then, the effect of local site effects, nor the amplification from soft soil deposits or topographical factors which in certain cities, may become important are not considered. Figure 1-6 shows an example of a seismic hazard map calculated through CRISIS 2012 for a return period of 1000 years and a spectral ordinate equal to 0.2 seconds; that corresponds to the seismic demand for reinforced concrete low rise buildings of one or two stories.

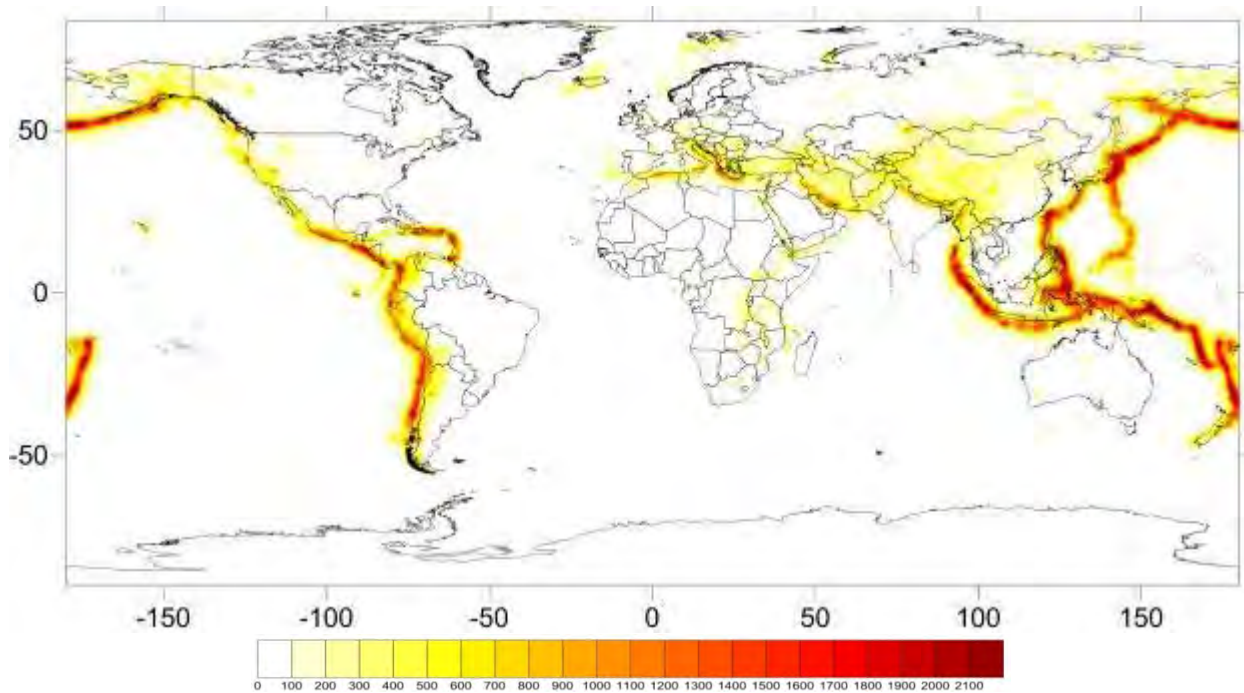


Figure 1-6
Hazard map for 0.2 secs, TR=1,000 years

Using the probability exceedance curves of spectral acceleration calculated through OpenQuake and facilitated by GEM, the seismic hazard maps were calculated for the following spectral ordinates: 0.0 sec, 0.2 sec, 0.5 sec, 1.0 sec and 2.0 sec and for this return periods: 250, 500, 1000 and 2500 years, as shown in Annex 4. The results as this consulting group understands include a factor that considers shear wave speed for the upper 30 m (VS_{30}) and the effect of amplification. Figure 1-7 gives an example, equally, of a seismic hazard map calculated through OpenQuake for a return period of 1000 years and a spectral ordinate equal to 0.2 seconds.

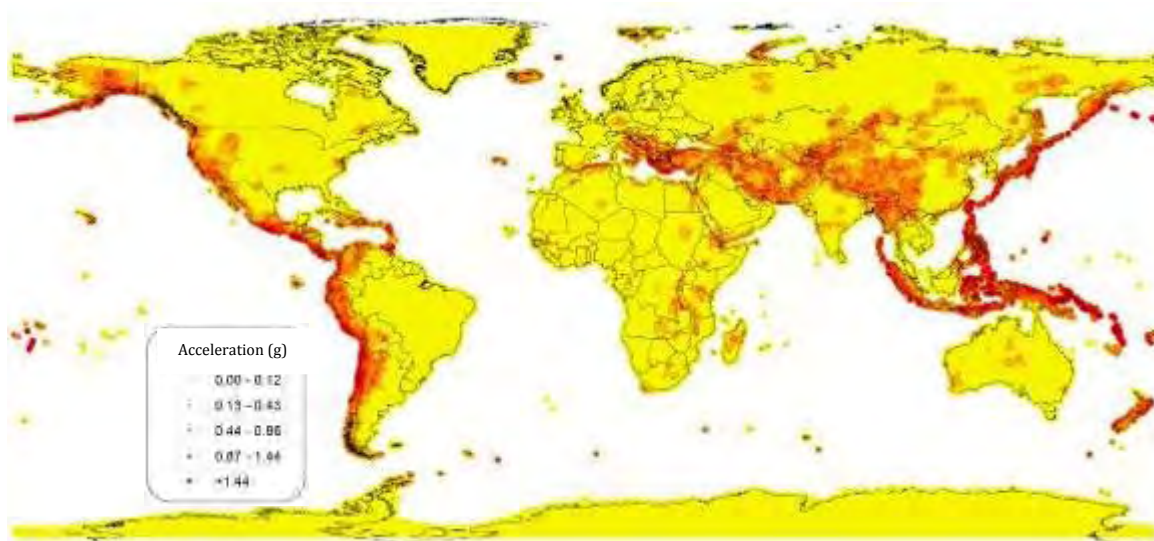


Figure 1-7
Hazard map for 0.2 sec, TR=1000 years

The hazard curves can be calculated for any point in the grid of analysis. Using CRISIS 2012 (CAPRA) and OpenQuake (GEM) the curves of probability of exceeding the peak ground acceleration of a group of cities located in zones of high seismic hazard have been calculated that allow us to see the differences and similarities from the hazard results from both programs. These hazard curves are compared in Annex 5.

Annex 6 shows the uniform hazard spectrums for 475 years of a return period calculated through CRISIS 2012 for the same group of cities from different continents for that the aforementioned exceeding probability curves were obtained.

1.5 Results comparison

One of the differences that apparently exists in the calculation procedure for seismic hazard between CRISIS 2012 and OpenQuake is that the latter included the effects from the V_{s30} parameter. However, the way in that this factor was taken into account is unknown, whether it was included through transfer functions or through certain parameters in the employed GMPE (which are neither known). Nevertheless, these effects do not seem to have a significant impact on the results obtained in terms of orders of magnitude.

Figure 1-8 shows the comparison of results in terms of the subtraction between the model obtained through CRISIS 2012 and the hazard curves sent by GEM calculated through OpenQuake for 475 years of a return period and peak ground acceleration (PGA). At those points where the comparison value is negative (green), the estimated values from OpenQuake are higher than the CRISIS 2012 values and those at that the comparison is positive (red), the results obtained through CRISIS 2012 are higher. From this figure, we can conclude that the seismic hazard results at a global level, calculated through both

programs, in many cases, are similar and generally, the differences are not to be considered significant.

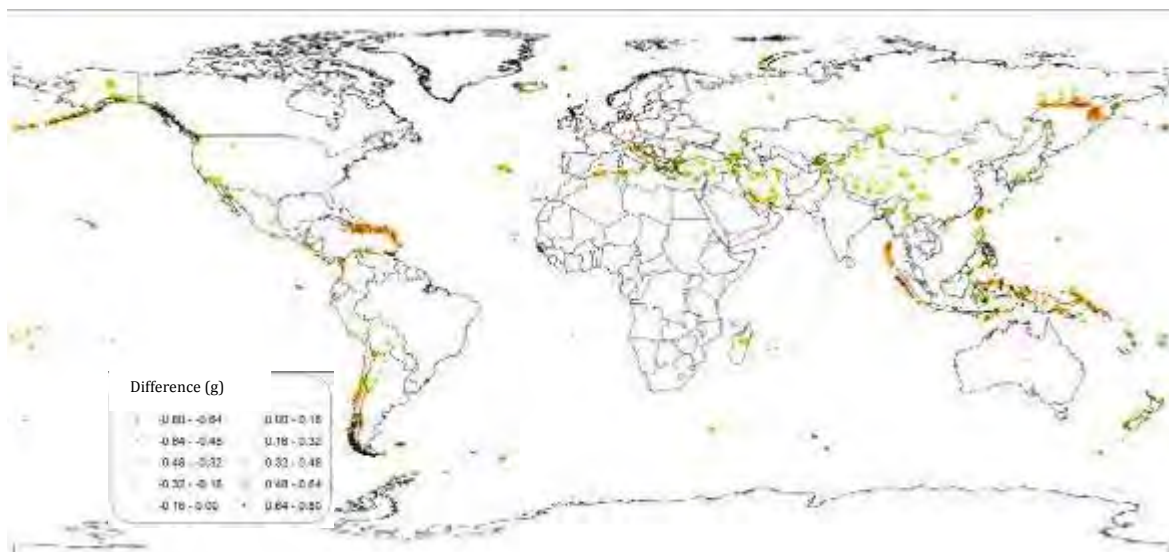


Figure 1-8
Comparison of the seismic hazard results between CRISIS 2012 and OpenQuake for 475 years of a return period and PGA

Anyhow, differences are found in various regions of the earth which is probably due to the type of data used in one case or another. For example, in the case of the model calculated in CRISIS 2012 that is explained in this report, there are higher results in the region of the Caribbean and Central America, as well as in Alaska, the Kamchatka Peninsula, Italy and a few other countries from the North of Africa and South East Asia. On the other hand, in the case of the model calculated in OpenQuake the results obtained show higher hazard levels in the West Coast of the United States of America, New Zealand, Turkey and the central zone of China.

Furthermore, there are some illustrative differences in calculating the seismic risk of various cities. The annual expected loss (or pure risk premium) was obtained through CAPRA-GIS, using an algorithm developed by this consulting group that allows us to work out said loss directly from the hazard curves supplied by GEM and a set of vulnerability functions. Although it was not possible to compare the probable maximum losses for different return periods, as would have been desirable, in most cases, the average annual loss seems to be similar or at least with the same order of magnitude.

2. TROPICAL CYCLONES PROBABILISTIC HAZARD ASSESSMENT

2.1 Purpose and scope

The hazard associated with a natural phenomenon is measured using its frequency of occurrence and its severity, the latter being characterized through a parameter of a physical intensity for each specific geographical location. The hazard assessment is based on the historical frequency of occurrence of the phenomenon and its various degrees of intensity.

Once the parameters that characterize the occurrence of the phenomenon are defined from a physical point of view, it is necessary to carry out a generation of stochastic scenarios – through the simulation of a series of random events– that, analytically speaking define all possible ways in that said phenomenon may affect the region of analysis, in terms of its frequency and severity.

The hazard is thus characterized in each point through the probability distribution of the associated intensity, defined in terms of its mean value and a dispersion measure which takes into account the uncertainty associated with the occurrence of said level of intensity. It is important to point out that in regards to studying the risk of catastrophic disasters it is relevant to study those cases of phenomena that can cause a correlation of loss; in other words, simultaneous damage and detriment in an extensive area.

This report explains the available and employed information for assessing the hazard of tropical cyclonic in terms of wind speed at global level as well as the results obtained. The hazard due to cyclonic winds is calculated based on previous trajectories recorded for the main oceanic basins of the world. This evaluation gives us curves relating the probability of exceeding the peak wind speed in each point of analysis. Given that said curve is obtained for each point in the calculation grid, it is possible to calculate hazard maps for cyclonic winds in terms of wind and for different return periods. This input is fundamental for the probabilistic evaluation of the catastrophic risk in countries affected by tropical cyclones.

2.2 Methodological approach

Tropical cyclones are characterized as highly destructive disasters, with high frequencies of occurrence. The hazard modeling for tropical cyclones takes into account the effects related to the speed of the wind, rainfall intensity and storm surge in terms of wave's height. For this project, the effects are only related to the wind speed at a global level.

The hazard model used here forecasts the maximum intensities associated with the potential occurrence and track of a tropical cyclone in a spatial region. The calculations are done for each of the selected historical tracks and for a set of “children” tracks obtained through the use of a statistical procedure known as *disturbance*, which allows generating random tracks that conserve the main characteristics of the historical ones. With that

approach, the wind fields for each historical cyclone is obtained from the wind's simulations for all the “children” tracks.

For each historical cyclone the associated wind field is calculated. Each calculated wind field is called *scenario* and represents the spatial variation of the wind speed given the occurrence of a tropical cyclone. The wind field is expressed in terms of the geographical distribution of the wind's peak speed measured in 5 seconds gusts. This speed is calculated as a random variable with a Gamma distribution and defined through two probability moments (the expected value and the variance). This analysis is then repeated for all the historical cyclones. The final set of probabilistic wind fields, obtained from the historic cyclones set comprises the final result.

The temporal variability of cyclone's occurrence is denoted as annual frequency and expresses the average number of times per year that an event is expected to occur. Because the analysis is based on a tropical cyclones catalogue that is assumed to be complete and exhaustive, it is possible to assume that each event in said final catalogue is unique and will not be repeated and then, all cyclones will have then the same annual occurrence rate.

It is worth mentioning that all meteorological and climatological characteristics are inputs for the model. This hazard model that is presented here does not correspond to a meteorological or climate model, and then, the main cyclone's characteristics are obtained from the collected data at global level from various meteorological agencies and grouped in the NOAA IBTrACS database. In this way, particular phenomena from the cyclonic dynamics such as the effects of tropical to extra-tropical regions transitions and landfall effects are implicitly included in the input data.

More details can be found in the supporting documents to the model of evaluation of tropical cyclone (hurricane) hazard on the CAPRA platform (see www.ecapra.org).

2.2.1 Wind Hazard Modeling

The computation of the peak gust wind velocity field for each cyclone is based on a parametric formulation that depends on the storm's location, its central pressure, P_0 [mb], and its cyclostrophic radius, R (km). The first two parameters are typically found in weather bulletins. The cyclostrophic radius is computed as:

$$R = 0.4785P_0 - 413.01 \quad (\text{Eq. 2-1})$$

Up to 1979, in some meteorological reports the central pressure is missing. For those storms where central pressure is not reported, the following equations were used for the calculation depending on the basin.

$$P_0 = 1019.08 - 0.182V_v - 0.0007175V_v^2 \quad \text{(Atlantic Ocean)} \quad (\text{Eq. 2-2})$$

$$P_0 = 1017.45 - 0.1437V_v - 0.00088V_v^2 \quad \text{(Pacific Ocean)} \quad (\text{Eq. 2-3})$$

$$P_0 = 1016.3 - 0.2269V_v - 0.0013V_v^2 \quad \text{(Indian Ocean)} \quad (\text{Eq. 2-4})$$

Where, V_v (kph) is the maximum sustained wind velocity, as recorded in weather bulletins. It is important to note that these relationships are only valid for central pressures higher than 888 mb.

The parametric model first computes, for a tropical storm in motion, the sustained wind velocity, averaged every eight minutes V_m (kph) at the site of interest, located at a distance r (km) from the center of the hurricane, and evaluated 10m above the sea level with the following expression:

$$V_m = 0.886(F_v U_R + 0.5V_F \cos(\theta + \beta)) \quad (\text{Eq. 2-5})$$

where V_F (kph) is the displacement speed of the storm, $\theta + \beta$ is the angle formed by its direction of motion and the point of interest to distance r and U_R [kph] is the maximum wind gradient for a storm in a stationary state that is computed as:

$$U_R = 21.8\sqrt{P_N - P_o} - 0.5 fR \quad (\text{Eq. 2-6})$$

Where, P_N is the normal pressure (1013 mb), and f is the Coriolis force parameter given by

$$f = 2\omega \sin \phi \quad (\text{Eq. 2-7})$$

Where, $\omega \approx 0.2618 \text{ rad / hr}$ is the earth's angular velocity, and ϕ is the latitude in equation 2-7.

$$F_v = U_r/U_R \quad (\text{Eq. 2-8})$$

is a damping factor defined as the ratio of wind velocity to the distance r , with a maximum wind gradient (on the wall of the cyclone), and this is approximated using the following polynomial expression:

$$\log_{10}(F_v) = aX + bX^2 + cX^3 + dX^4 \quad (\text{Eq. 2-9})$$

where

$$X = \log_{10}(r/R) \quad (\text{Eq. 2-10})$$

and a , b , c and d are coefficients obtained from Table 2-1 as a function of X and of the Coriolis cyclostrophic number Nc .

$$Nc = \frac{fR}{U_R} \quad (\text{Eq. 2-11})$$

Table 2-1
a, b, c and d parameters for Equation 2-9

	$X \leq 0$	$X > 0$	
		$Nc \leq 0.005$	$Nc > 0.005$
a	-0.233	$0.033 - 16.1Nc + 161.9Nc^2$	$-0.175 - 0.76Nc + 11.7Nc^2 - 28.1Nc^3 + 17Nc^4$
b	-12.91	$-0.43 + 38.9Nc - 316Nc^2$	$0.235 + 2.71Nc - 67.6Nc^2 + 189Nc^3 - 155Nc^4$
c	-19.38	$0.113 - 28.6Nc + 71.1Nc^2$	$-0.468 - 9Nc + 87.8Nc^2 - 224Nc^3 + 183Nc^4$
d	-8.311	$1.818Nc + 80.6Nc^2$	$0.082 + 3.33Nc - 26Nc^2 + 63.8Nc^3 - 51.4Nc^4$

The formulation described allows the computation of wind speed at 10m above the sea's surface level, averaged every eight minutes. Corrections must be made to estimate the wind velocity averaged every minute (V_c [kph]) as is commonly reported in the meteorological bulletins. The following expressions are used:

$$V_c = 0.0012V_m^2 + 1.1114V_m \quad (\text{Atlantic Ocean}) \quad (\text{Eq. 2-12})$$

$$V_c = 0.002V_m^2 + 0.9953V_m \quad (\text{Pacific Ocean}) \quad (\text{Eq. 2-13})$$

$$V_c = 0.002V_m^2 + 0.9953V_m \quad (\text{Indian Ocean}) \quad (\text{Eq. 2-14})$$

With the objective of take into account the variation of wind speed at landfall, an expression was generated to reproduce the registered wind speed at meteorological stations (averaged each 5 seconds) from the wind speed obtained from the parametric model. The obtained expression is as follows:

$$Vv = Vc \exp(-0.0043r) \quad (\text{Eq. 2-15})$$

In order to compute wind velocity for a given in-land site, taking into consideration surface friction and local topography, wind velocity averaged every 5 seconds is modified using the following expression:

$$V = F_T F_\alpha Vv \quad (\text{Eq. 2-16})$$

The local topographical factors are defined with the values shown in Table 2-2. These

factors are calculated for each cell that comprises the Global Exposure Database (GED) taking into account its exposure to wind flow, localized, by its centroid's geographical coordinates. This kind of information allows knowing the topographical factor of each zone to be analyzed by only determining its location.

Table 2-2
Topographical factor

Site	Topography	F_T
Protected	Closed valley	0.8
Flat	Flat terrain, open field, slopes lower than 5%	1.0
Exposed	Hills or mountains, terrain with slope higher than 5%	1.2

The movement of air masses is restricted by the friction with the surface and then, speed is almost zero at the point of contact and gradually increases with height, up to reach the non-disturbed speed, also known as *gradient speed*. For a smooth surface, such as open fields with almost no vegetation, wind has high speeds even close to the surface while in the center of densely constructed cities with high-rise buildings, speed decreases from a height equal to several meters to the surface. The expression that allows obtaining a wind speed variation with height for different surfaces is represented in the following way:

$$Frz = 1.56 \left(\frac{10}{\delta} \right)^{\alpha} \quad si \quad Z \leq 10$$

$$Frz = 1.56 \left(\frac{Z}{\delta} \right)^{\alpha} \quad si \quad 10 < Z < \delta$$

$$Frz = 1.56 \quad si \quad Z \geq \delta \quad (Eq. 2-17)$$

where Z is the height in meters where the speed is being determined. α and δ parameters are defined in Table 2-3.

Table 2-3
Values for α y δ

Type	Description	α	δ (m)
1	Flat open ground (open ground, almost flat without obstructions, for example flat coastal strips, swampland, airfields, pasture, and crops not surrounded by enclosures)	0.099	245
2	Trees or standard construction (crops or farms with two destructions, such as enclosures, trees and scattered constructions)	0.128	315
3	Trees, residential district. (land covered by a number of closely spaced obstructions, for example urban areas, suburbs, woodland. The size of constructions corresponds to housing)	0.156	390
4	Many obstructions, city center (land with a number of large high buildings, closely spaced, such as in the center of major cities and developed industrial complexes)	0.170	455

2.3 Employed information

Regarding modeling the hazard of cyclonic winds, specific information is required that can be found with certain level of detail on open databases. The quality of the modeling will depend on the detail and quality of the gathered information. The following layers of geographical information are required: a) Topography, b) Ground roughness and c) Catalogue of previous tropical cyclones.

2.3.1 Topography

Topography allows defining the wind exposure conditions for different zones, taking into account the ground slope in a determined horizontal distance. A digital elevation model (DEM) is employed with a spatial resolution of 1 minute (1800 meters approximately) obtained from the National Oceanic and Atmospheric Administration, NOAA, from the United States for calculating the factors of exposure to the wind at a global level (see Figure 2-1).



Figure 2-1
Digital Elevation Model (Spatial Resolution 1 minute)
Source: ETOPO 1 GLOBAL RELIEF (NOAA)

2.3.2 Ground roughness

The rate at that the speed of the wind increases with the height is a function of the roughness of the terrain as explained above. Therefore, the gradient speed should be considered using the geo-referenced information on the land uses which allows establishing the conditions of roughness for each zone under analysis. General information related to the roughness of the terrain in terms of coverage was obtained from the GlobCover initiative. On the other hand, information regarding the location of densely populated areas was obtained from the Socioeconomic Data and Applications Centre, SEDAC. By combining these two sources of information, the group of factors for the ground roughness was obtained at global level. In Figure 2-2 the urban centers are shown and for them a specific ground roughness value has been assigned in order to categorize the characteristics of each urban center.

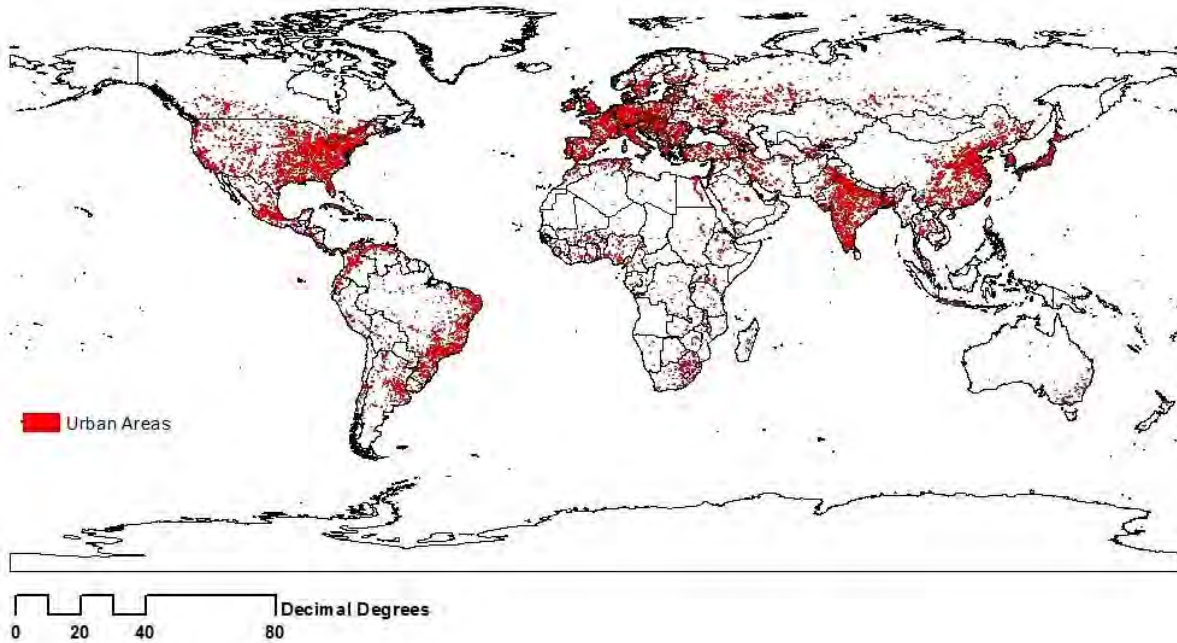


Figure 2-2
Localization for populated centers on a global scale

2.3.3 Catalogue for previous tropical cyclones

The historical tropical cyclone tracks, just as the different associated intensity parameters and its variation with their trajectory, were obtained from the IBTrACS database from NOAA. This database represents the compilation of information associated with tropical cyclones that is most up to date and openly available. It was created through the cooperation between the NOAA and the World Data Centre for Meteorology, together with regional meteorology centers, in order for all the information to be stored in the same place and format thus converting into the best and most complete information on previous cyclones available. This database relies on the following information:

- Bulletin date (time, day, month and year).
- Central pressure (in mb), recorded by various meteorology agencies on a global scale for each storm in each basin.
- Geographical location (latitude, longitude).
- Maximum sustained speed of the wind averaged at 1 min, recorded by various meteorology agencies on a global scale for each storm in each basin.
- Basin and sub-basin to that the recorded cyclone belongs.

The IBTrACS database contains tropical cyclone records from 1842 to 2010. Given the scarce number of records from 1842 to the middle of the 20th century, an analysis of the completeness of the number of cyclones recorded per year was carried out, with the aim of determining the *cut off year* from that the register for tropical cyclones can be considered

adequate and exhaustive. Annex 7 shows the history of the number of tropical cyclones recorded in IBTrACS for the analyzed basins. In Annex 8, the history of the number of tropical cyclones for different maximum categories reached by the cyclone is shown for each one of the oceanic basins under analysis. Following the analysis of the completeness, it is possible to determine the cut off year that is most appropriate for each one of the basins under analysis is the presented in Table 2-4.

Table 2-4
Cut off year for each basin under analysis

Basin Under Analysis	Cut Off Year
East Pacific Ocean [EP]	1950
South Pacific Ocean [SP]	1972
West Pacific Ocean [WP]	1951
North Indian Ocean [NI]	1990
South Indian Ocean [SI]	1964
North Atlantic Ocean [NA]	1851

The hazard analysis was divided by oceanic basins, given that the climatic and meteorological conditions of a particular basin are relevant for the generation of tropical cyclones and supposing that the conditions of a specific basin do not significantly affect the conditions of the others. In Annex 9, the tracks of all the tropical cyclones selected from the IBTrACS catalogue are shown from the cut off year until 2010, for each one of the main oceanic basins. In total 2,534 tropical cyclones were selected at global level; 826 for the Atlantic Ocean, 290 for the Indian Ocean and 1,418 for the Pacific Ocean.

2.4 Tropical cyclone hazard results (wind speed)

Annex 10 illustrates how, from the set of scenarios, hazard maps in terms of wind speed for five seconds gusts are calculated (measured in Km/h) and for return periods of 25, 50, 100, 250, 500 and 1,000 years. The curves in the hazard to selected cities in countries affected by the hazard of tropical cyclones are shown in Annex 11.

3. FLOOD HAZARD ASSESSMENT

This work does not include the calculation of the flooding hazard exactly as was done for the seismic activity and for tropical cyclones in terms of wind speed. Nevertheless, using the CAPRA-GIS software, it was proposed to carry out the calculation of the flooding risk on a limited number of countries, with the aim of establishing a calculation methodology that is aimed to be employed on a global scale for GAR 2015. In this sense, this consulting group was put in charge of evaluating the probable losses based on the work for flooding hazard assessment carried out by CIMA Research Foundation International. The flooding hazard was calculated considering two different approaches: water ponding and river overflow. Following the instructions from this consulting group, CIMA Foundation calculated the hazard and created an .ame file in order to evaluate the flooding risk on the CAPRA-GIS software just as was the case with seismic activity and tropical cyclones.

3.1 Water ponding flooding hazard

CIMA Foundation calculated the flooding hazard due to water ponding for 14 islands in the Caribbean: Anguilla, Barbados, British Virgin Islands, Grenada, Guadeloupe, Mona Island, Marie Galante, Martinique, Montserrat, Puerto Rico, St. Kitts and Nevis, Trinidad and Tobago and Virgin Island.

The analysis of the flooding hazard due to water ponding is based on a water balance between the storms rainfall of a convective type, which occurs in the aforementioned islands, and the final volume of the flood water. This balance distributes the excess rainfall in the territory as a function of topography, in such way that the hydraulic phenomenon of the transport of a volume of water is disregarded. The particular topography conditions on the selected islands allow for the water ponding application model to be implemented with adequate results.

CIMA constructed .ame files for the representation of the hazard in the 14 abovementioned islands. The .ame format is a collection of *raster* grids with georeferenced information which allows for a probabilistic representation of the recorded values. The hazard is thus presented in terms of a set of scenarios, where each one of these is characterized by an annual frequency of occurrence and the intensities are defined in terms of two parameters: the expected value and the standard deviation.

For all the selected islands, eight main scenarios were defined that have an associated annual frequency of occurrence of the magnitude of the convective storm. CIMA carried out a series of simulations for storms of different magnitudes, in a way that each scenario constitutes the results from said simulation and the associated intensity levels correspond to the probability moments obtained from a statistical analysis on the collective of simulations. Eight definitive stochastic scenarios resulted from this process.

The distribution of the probability of the occurrence of the respective storms in time is assumed to be exponential, with the assumption that the generation of storms follows a Poisson process. The intensity measure of the hazard corresponds to the water depth of the flooding in each pixel of the grid under analysis. This intensity measure is defined as a random variable with a Gamma distribution, characterized by an expected value and the standard deviation of the intensity.

As an example, Figure 3-1 shows the grids of the expected value and standard deviation, respectively, of the tie bars for flooding due to water ponding in Granada, for a scenario with an annual frequency of occurrence equal to 0.1 (10 years' return period).

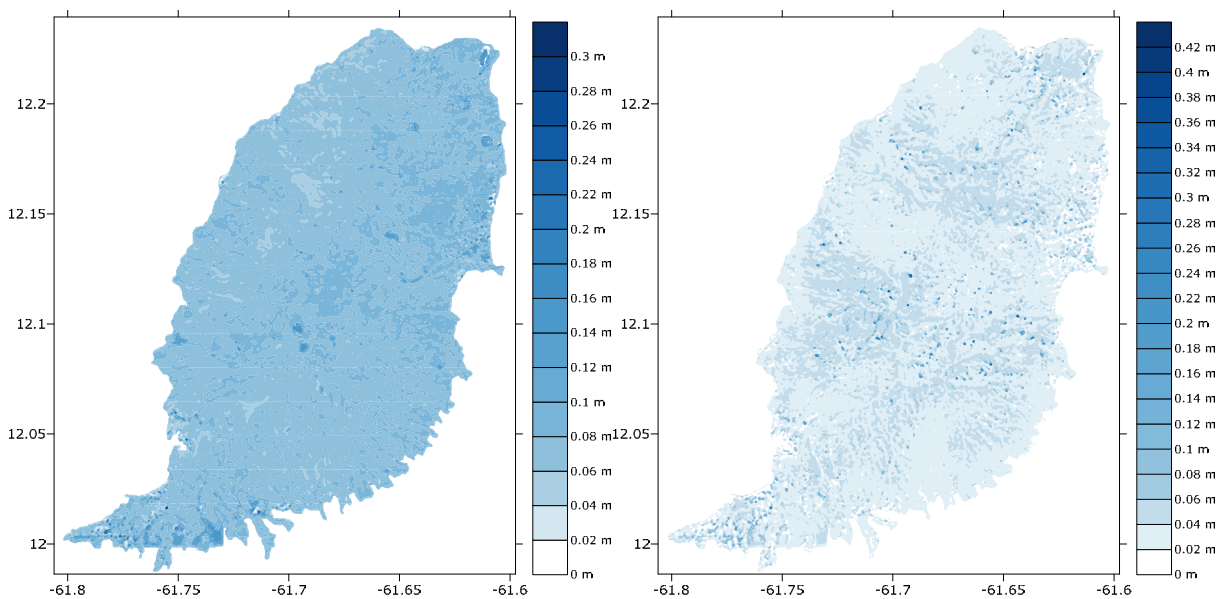


Figure 3-1
Expected value and standard deviation of the water depth in Granada for the scenario of 10 years return period

3.2 River overflow flooding hazard

As an example of the global flooding model implemented by CIMA in GAR 2011, used also for calculating flooding maps for several return periods, the analysis on flooding by river overflow in Thailand was carried out. This case is also implemented as a pilot test for developing the model on a global scale which will be used for GAR 2015.

The overflow model carries out a hydrological and hydraulic analysis with the aim of determining the flooding trace associated to an specific return period. By superimposing the flooding traces to the country's topography information, it is possible to determine the expected floods in terms of water depth.



CIMA calculated seven flooding hazard maps for the following return periods: 25, 50, 100, 200, 500 and 1,000 years. Each map is a *raster* grid where the water depth each node is indicated. Different to the probabilistic representation used for water ponding floods, in this case information on the spatial probability is not taken into account, only the occurrence in the flooding period which is assumed to be a random variable following an exponential distribution.

4. GLOBAL EXPOSURE DATABASE

4.1 Purpose and scope

The description, characterization and appraisal of the physical inventory of the exposed elements for the probabilistic disaster risk assessment have been in every case and at any scale, a step that has presented serious challenges for modeling. In this case, a series of assumptions have been made and they increase the epistemic uncertainty in the risk modeling, even in those cases where a relative amount of detailed information; for example, at urban scale when building by building mapping information and characterization is available. Appealing to the law of large numbers, characterizations and evaluations are carried out assuming that a certain type of excess or decreasing errors are expected, in a way that they compensate in the final results by involving large estimations of exposed assets. In the portfolios for insured buildings or government owned buildings, for example, despite the fact that gathering as much information as possible is intended, there are always doubts regarding the accuracy and reliability of certain data and because of that, it is known and expected that the results from the risk assessment should always be seen as approximations that can give an order of magnitude for potential losses.

This type of situation increases when assessments are done over exposed asset databases at regional or national level for example, when it is tried to create a profile for catastrophe risk assessments, for example. It is usually said that that the exposure is “constructed” by carrying out a proxy; in other words, by using other variables that through correspondence or some type of correlation can give an account of the variable for that the estimation is needed in an indirect way. At these resolution levels, it is not uncommon, for example, for the population figures to be used in order to obtain information on the total constructed area and the public services assets, if there are reasonable indicators available for residential areas, and commercial or industrial areas per inhabitant. The number of students and the number of available hospital beds can also give an insight into the education and health service areas for public and private sectors.

This type of modeling is intended to be validated or calibrated through data obtained in studies carried out in a more detailed approach; however, studies carried out using a proxy, for example, at a national level should be considered relevant in terms of the type of question that is being answered and the type of decisions that may be made with the clear knowledge that there is no a full certainty in the final results. The consistency of the model with the type of results and the corresponding decision making process is fundamental. The low sensitivity of results to changes in particular uncertain or rough data allows for the possibility to be considered robust for certain classifications and decisions. Under this type of premises and with the analysis limitations clear such as the one that is being proposed here at global level, it has been decided to develop this evaluation in order to reveal and in some cases confirm some disaster risk assumptions at a global scale. Overall, we are trying to give a more “appropriate” insight, using the same tools that would be used when access

to more detailed information is granted thus obtaining results that can be used at this resolution level even with some warnings. Anyhow, through an approximation with reasonable criteria and the most suitable procedures, useful information was obtained that could be difficultly gained through another approach and hardly be confronted to any other technique that would inherently have the same limitations.

The objective of this particular stage has been to construct an Global Exposure Database (GED) on a global scale in order to carry out a probabilistic risk assessment at a country level, but with a resolution level at urban areas (5x5km cells) for that records have been assigned representing the building classes' distribution in each location, taking into consideration usage groups (residential, public, commercial, industrial, etc.). In addition to this, the classification allows us to obtain results whilst taking the government's interest into consideration. In other words, not only it establishes a proxy estimation for the entire portfolio of exposed assets, for the public and private sectors, but also for the government's fiscal responsibility portfolio which includes state property such as the low income classes that would require support from the government if a disaster occurs.

This consultant group developed an algorithm that allows constructing the GED (that is described in this section) with the objective of evaluating disaster risk at global level using the CAPRA platform (www.ecapra.org). The GED was constructed by the group from the University of Geneva, UNIGE, using information relative to the population distribution throughout the world and socio-economic indicators along the globe.

4.2 Methodological approach

For physical risk assessment for natural events, an adequate representation of the exposed assets is required; in other words, the inventory of physical infrastructure components that are susceptible to damages and losses because said natural events. The physical loss in each asset is the direct damage that may, in turn, trigger further losses with secondary level effects with medium and long term implications. This study only includes building's infrastructure and does not take into account any indirect effects or collateral losses.

This exposure model for risk assessment on a country level represents the following groups of buildings:

- a) Residential buildings for low, low-middle, middle-high and high socio-economic income populations.
- b) Educational sector buildings (public and private).
- c) Health sector buildings (public and private).
- d) Commercial buildings
- e) Industrial buildings
- f) Central government buildings

For each group or sector a disaggregation of the exposed components is required in accordance with the characteristics that represent their physical vulnerability (through a vulnerability function) for natural events that may affect them. Therefore, the minimum required information for each exposed asset is the following:

- a) Unique identifier
- b) Geographical location (latitude and longitude)
- c) Economic value of the physical component (cadastral, commercial, replacement, etc.)
- d) Occupation (inhabitants)
- e) Building class (vulnerability)

In order to construct an exposed assets database one of the below described approaches is usually employed:

- a) “*Up to bottom*”: Based on national or regional indicators, the quality, characteristics and exposed values are estimated for sectors or groups of exposed assets.
- b) “*Bottom up*”: Based on information regarding the characteristic of each one of the exposed components (usually with a building by building resolution), the other required variables are estimated (the minimum required information) such as the geographical location, economic value of the component, construction class and human occupation. This focus is the more reliable than the previous one but it requires significant economic resources and time in collecting and adapting the information.

The exposure model developed for this study, which has the purpose of carrying out an indicative risk assessment of *coarse grain* type at a global scale, only considers the direct physical damage to urban buildings’ infrastructure through the use of a combined approach, using both national socio-economic information (*up to bottom*) as well as a geographic population distribution model (*bottom up*) as the main sources of information.

A database that includes cadastral type urban information can also be used, but this would imply, for the amount of elements to be assessed, to gather information from particular databases in each populated center such as ortophotos, satellite information, urban maps, etc., which would also require excessive labor in terms of technological, time and economic resources. This may not be justified in terms of the final results for the type of study and the inevitably *coarse grain* results that would be obtained. When this type of information is available, this may be useful for carrying out indicator’s verification extrapolations for the proposed model.

In accordance with that stipulated previously, the GED proposed here is based on the estimation of the number of persons that live in buildings of a particular class from each one of the groups or sectors. The *number of persons by sector and building class* in each geographical location becomes the exposure indicator and is used as a base for distributing the total exposed economic value as described further on. In order to consider and assign the vulnerability of the different exposed elements for each sector when facing natural hazards, each asset is grouped according to the construction class to that they belong. Therefore, the residential group of buildings where lower income populations live in an urban area would be grouped as buildings of various construction classes such as simple stonework buildings and wooden buildings which are predominant for that type of socio-economic strata. A significant limitation of the GED is that it does not consider the differences in terms of geographical locations at a sub-national level of the exposed assets, it does however; consider the differences between one country and the neighboring. In addition to this and with the objective of establishing a reference that allows for a comparison between countries as well as take into account the exposed physical economic values, for the urban stock capital notwithstanding the land value. For this end, the report, “*Where is the wealth of nations*” from the World Bank (2006) is used. This amount represents the value of the infrastructure, machinery and equipment contained within a country. Said value is distributed between the components considered in the GED in a proportional way to the number of persons and other relevant factors, as explained further on in this report.

The GED was fundamentally constructed based on national indicators. The distribution of structural types was carried out in accordance with the population that lives in each country and not in accordance to the number of buildings for each of the construction classes. The labor force, income level, the health and education services were used for estimating the characteristics of the buildings at a sub-national level in accordance with the levels of complexity of each urban area. The total exposed value of each country corresponds to the physical stock capital distributed at a sub-national level in accordance with the population distribution and in accordance with the distribution of the Gross Domestic Product GDP in the country. This indicator presents the value of the infrastructure of public service buildings, transport and others according to its coverage throughout the country. These are not exposed assets that were aimed to be in the exposure model. To summarize, the exposure model has the following assumptions and limitations:

- The total population of each country corresponds to the official information for 2010.
- The exposed value of the country is based on the physical stock capital.
- The geographical distribution of the population corresponds to the coverage offered by LandScan (ORNL, 2007) with a 1 km resolution (30"x 30").
- The exposure is represented as a group of buildings in each point or cell under analysis with a resolution of 5x5km (approximately in the equator).

- The buildings in urban and rural zones are categorized in accordance with the group or sector, estimating the number of persons living in each group of buildings based on national indicators for the number of students, hospital beds and labor force.
- In the disaggregation of the entirety of the exposure information in sectors, classified by their use and building classes, sub-national geographical variations are not considered; in other words, uniform indicators are used for the whole country.
- The building classes in each country and in each group correspond to the classification proposed by the *World Agency of Planetary Monitoring and Earthquake Risk Reduction - WAPMERR*.
- The capital stock is distributed in each point of analysis according to the relative number of persons living in each sector and building class, taking into account other factors such as the occupation density and the unitary cost.
- The exposed economic value includes the entirety of the physical stock capital, although the vulnerability considered is in a series of construction classes and sectors that do not necessarily correspond to all the assets that make up said stock capital.
- With this methodology we can create an indicator for economic appraisal associated with the country's physical capital stock, geographically distributed according to population.

Annex 12 gives a description of the fields of records held by the GED used by this consulting group for calculating disaster risk by using the CAPRA platform.

Annex 13 shows the results in terms of maps of exposed value per country. The risk calculation is carried out with a pixel resolution level of approximately 5x5km and was added to the country level by sectors and groups of relevance for national governments.

4.3 Algorithm steps for constructing the GED

The algorithm steps developed by this consulting group in coordination with UNIGE and UNISDR that were then used by UNIGE to construct the GED are described below. This database includes information from 213 countries for that the probabilistic disaster risk assessment was carried out, as illustrated in a following chapter.

4.3.1 Country classification according to development level (step 1)

Each one of the countries was classified under the criteria proposed in the report, "*How we classify countries*"¹ from the World Bank to organize the countries according to their economy, using the Gross National Income (GNI) per capita in four groups as defined in Table 4-1.

¹ Source: <http://data.worldbank.org/about/country-classifications>

Table 4-1
Population distribution by income level

Income level	Limit GNI per capita *
Low	$\leq 1,025$
Middle-Low	$\leq 4,035$
Middle-High	$\leq 12,475$
High	$> 12,476$

4.3.2 Identifying the urban population count (step 2)

The layer that includes the global population count that is used for creating the GED is LandScan 2005 (ORNL, 2007) updated up to 2010 with the corresponding population increase indicators for each country.

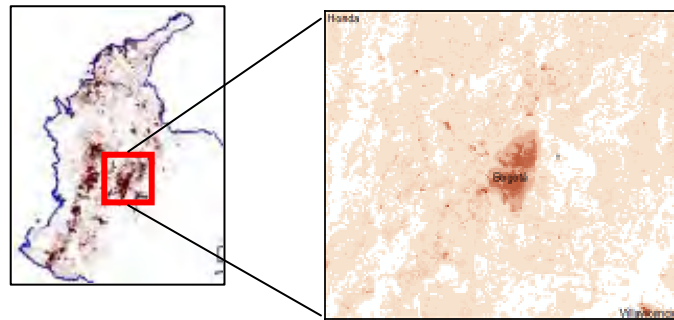


Figure 4-1
Coverage of the population count

The urban population count is extracted from the national population levels intersected with an adjusted mask for the urban areas. Said mask is comprised by the constructed area coverage from the 500m resolution MODIS (A Schneider et al, 2009; 2010) in addition of the neighboring cells from the original population coverage (Landscan) that hold more than 2,000 inhabitants.

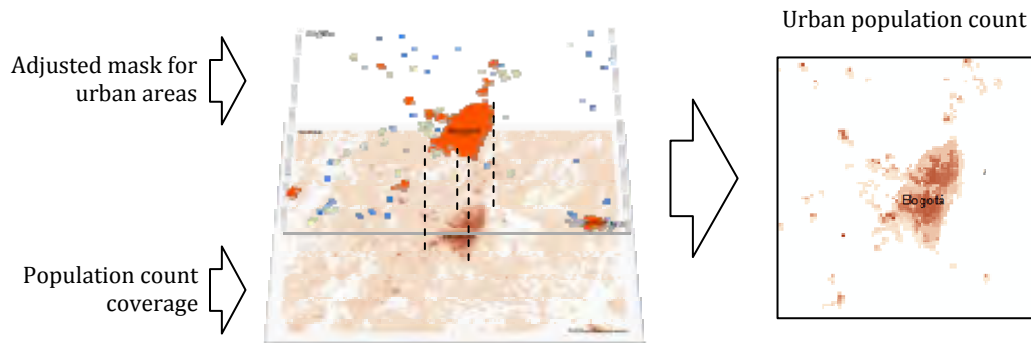


Figure 4-2
Urban population extraction process

4.3.3 Classification of urban areas in terms of their level of complexity (step 3)

Once the **urban population count** is extracted, a classification by **complexity level** is carried out based on the total population count of each urban area as shown below in Table 4-2 (settlement sizes, Satterthwaite (2006)):

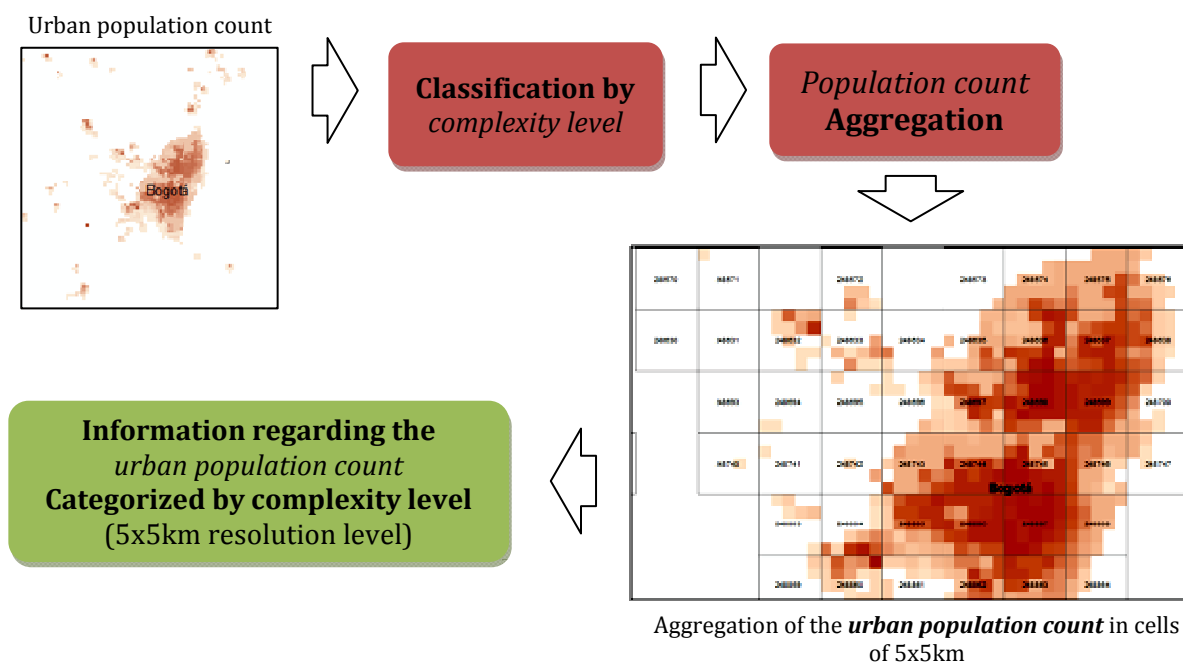


Figure 4-3
Assigning the complexity level and aggregation of the population count process

Table 4-2
Classification criteria according to Satterthwaite (2006)

Complexity level	Index	Description
Major urban	1	$\geq 20,000$ inhabitants
Minor urban	2	$< 20,000$ and $> 2,000$ inhabitants
Rural	3	$\leq 2,000$ inhabitants

When assigning the **complexity level** a population sample is carried out in groups of 5x5km cells, with the aim to reduce the number of records in the database and then reducing the required time in analyzing the information for the exposure and consequently the time needed for obtaining the results from the probabilistic risk assessment. From now on, each 5x5km cell will have assigned a numerical ID in order to continue processing the information in a gross way and not a geographical way.

4.3.4 Population distribution by income level (step 4)

With the objective of estimating the residential assets, it is necessary to estimate the **population by income level**. For this, the GINI curve for income distribution within a population (Lorenz curve) is used, together with the countries classification limits from the World Bank as was shown in Table 4-1.

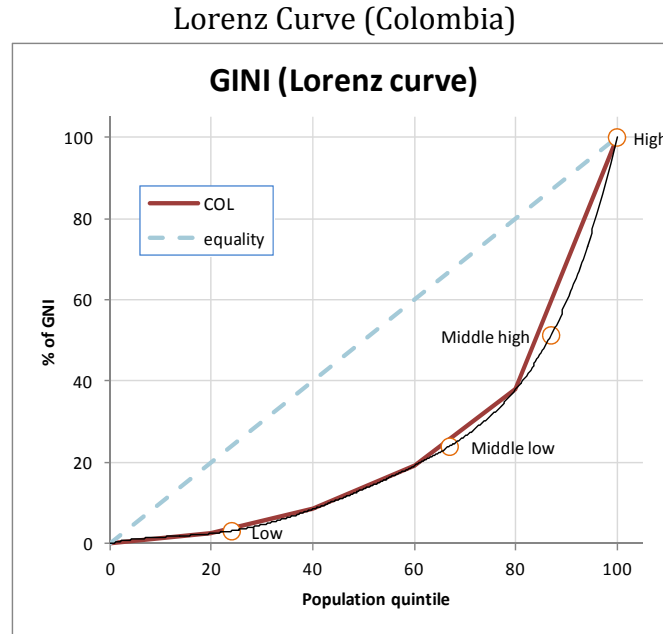


Figure 4-4
Income distribution

With said limits, the population distribution in urban areas by income levels is conducted following this expression:

$$\begin{aligned}
 &population (\%pop_i, pop\ urban\ area_j) \\
 &= \%pop_i * (pop\ urban\ area_j / 1000) \quad [population]
 \end{aligned}$$

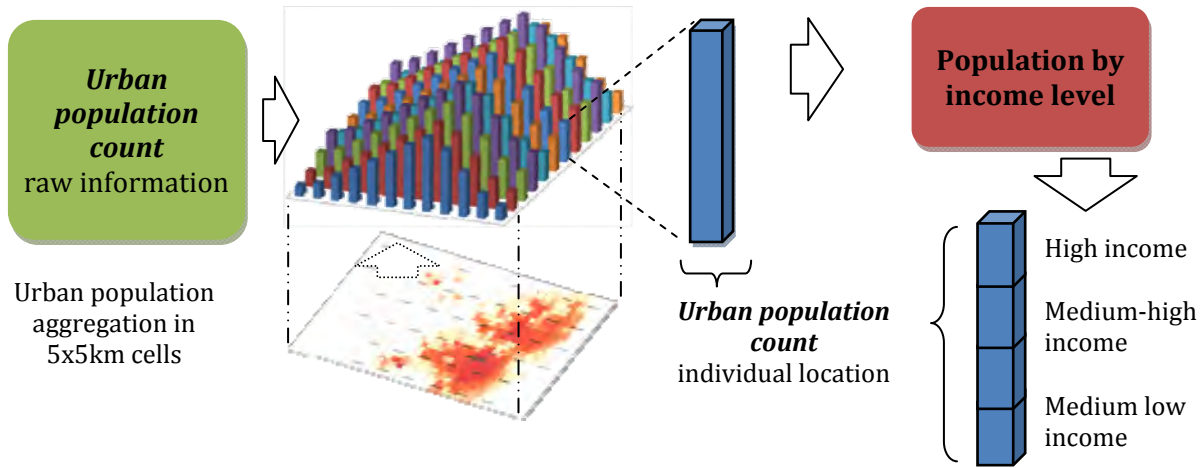


Figure 4-5
Population distribution process for the residential sector by level of income

4.3.5 Population estimation by occupation (step 5)

With the objective of identifying non-residential assets, the labor force by sector must be estimated. Based on national employment indicators by sectors of services and industry it is possible to estimate the **number of employed persons** in each sector using the following equation:

$$\begin{aligned} &employed(\% \text{ empl. sector}_i, \text{pop. urban area}_j) \\ &= \text{employment} \\ &= \% \text{ empl. sector}_i (\text{pop. urban area}_j / 1000) [\text{employed} \times 10^3] \end{aligned}$$

The labor force indicators available in the “World Development Indicators” database- WDI are used (World Bank, 2011).

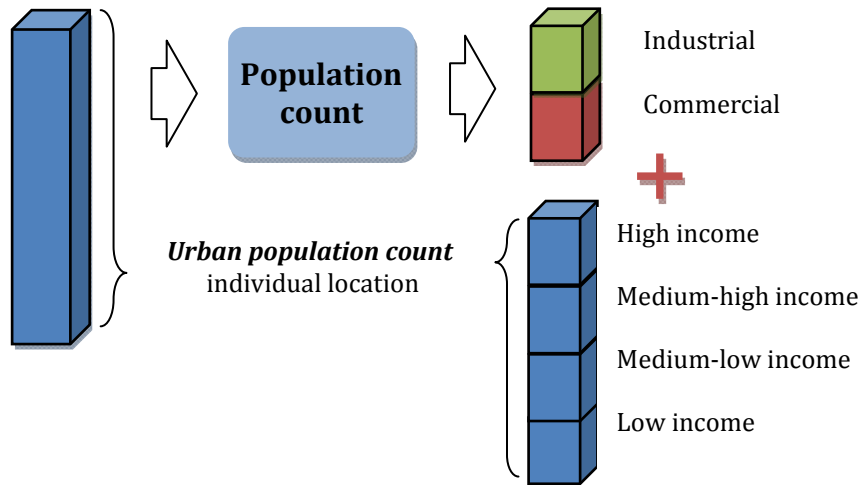


Figure 4-6
Estimation of employed people by sector

4.3.6 Estimation of the number of government employees (step 6)

With the objective of estimating governmental and administrative assets, we must estimate the **number of employed people** by using employment indicators for governments following the same equation as the previous with the adequate indicator.

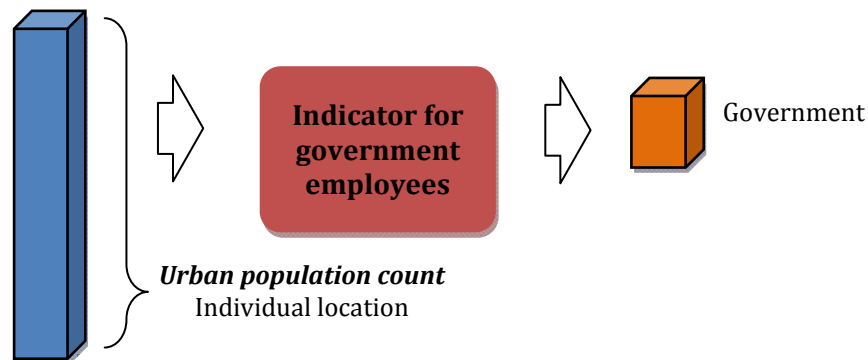


Figure 4-7
Estimation of Government employees

4.3.7 Estimation of the health service capacity (step 7)

In order to estimate the capacity of the health service by administrative categories (public/private), an estimation of the **number of hospital beds/ability to attend to people** is carried out based on national indicators of available beds per 1,000 inhabitants. With this indicator as well as indicators for health service expenditure, according to the source

(Public/Private health expenditure) the *number of hospital beds/ability to attend to people* is estimated for each administrative type using the following equation:

$$\begin{aligned} \text{admin type beds (beds, health expend. source}_i) \\ &= \text{beds} \\ &* (\text{health expend. source}_i / \text{total health expend.}) \quad [\text{beds}/1000\text{Hab}] \end{aligned}$$

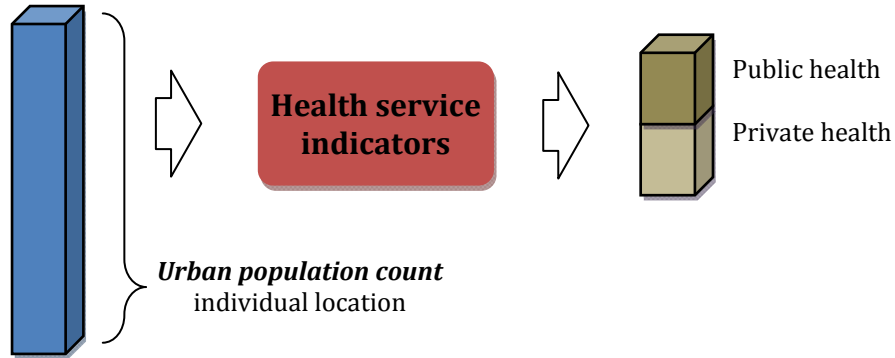


Figure 4-8
Estimation process for the health service capacity

The health service (capacity) by administration type is estimated with the following equation:

$$\begin{aligned} \text{capacity (admin type beds}_i, \text{pop urban area}_j) \\ &= (\text{beds admin type}_i / 1000) * (\text{pop urban area}_j / 1000) \quad [\text{beds} \times 10^3] \end{aligned}$$

4.3.8 Estimation for the installed capacity in education services (step 8)

With the objective of estimating the capacity of the education services, an estimation of the **number of students** by administrative type (public/private) is carried out based on national indicators for the number of students by their educational level and their attendance to educational centers classified by administrative types.

$$\begin{aligned} \text{private school students} \\ &= \text{st.secondary} * (\text{attendance priv.}/100) + \text{st.primary} \\ &* (\text{attendance priv.}/100) \quad [\text{students}] \end{aligned}$$

$$\begin{aligned} \text{public school students} \\ &= \text{st.secondary} * (1 - (\text{attendance priv.}/100)) + \text{st.primary} \\ &* (1 - (\text{attendance priv.}/100)) \quad [\text{students}] \end{aligned}$$

Using the indicators above, it is possible to estimate the number of students in each administrative type in each one of the localizations by using the following equation:

$$\begin{aligned} & \text{students} (students_i, pop \text{ urban area } j) \\ &= (pop \text{ urban area } j / total \text{ urban area}) \\ & * (students_i / 1000) \quad [students \times 10^3] \end{aligned}$$

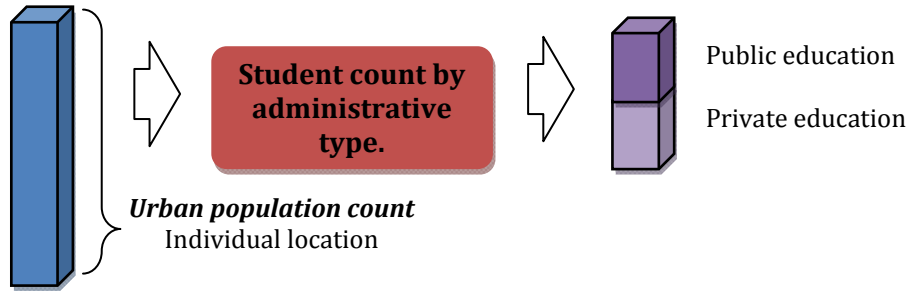


Figure 4-9
Estimation process for the installed capacity of the education services

4.3.9 Population distribution by building classes and income level/sector (step 9)

Once the **population count** is done for residential and non-residential usage, it is necessary to distribute said population in different building classes that exist in the analyzed countries. For this step, information provided by the WAPMERR group was used and contained information regarding population distribution by **complexity level** and **building classes**.

It is also necessary to distribute the information provided by WAPMERR in *residential/non-residential* usage taking into account the complexity level. This is carried out in regards to reasons calculated based on the information found in the building classes' distribution catalogue for *residential/non-residential* usage (Jaiswal et al, 2010).

Using the information gathered and calculated previously, is it possible to re-distribute the population in the various building classes. Special attention must be given to the format of the new information gathered as in the new gross information not only includes a record by location (steps 1 to 7) but records for each location such as the combination of sectors and building classes. Therefore, now each record will correspond to a **building class** based on **income level/sector** specific to a **5x5km cell** on an **urban area** with an associated **complexity level**. This will result in a database that moves from a pure **population** distribution to an **asset type** distribution (*population in building classes*) according to the following equation:

$$\begin{aligned} & \text{population}(\%pop \text{ syst. struct.}_i, pop. \text{ sector}_j) \\ &= pop. \text{ sector}_j * \%pop \text{ syst. estruct.}_i \quad [population] \end{aligned}$$

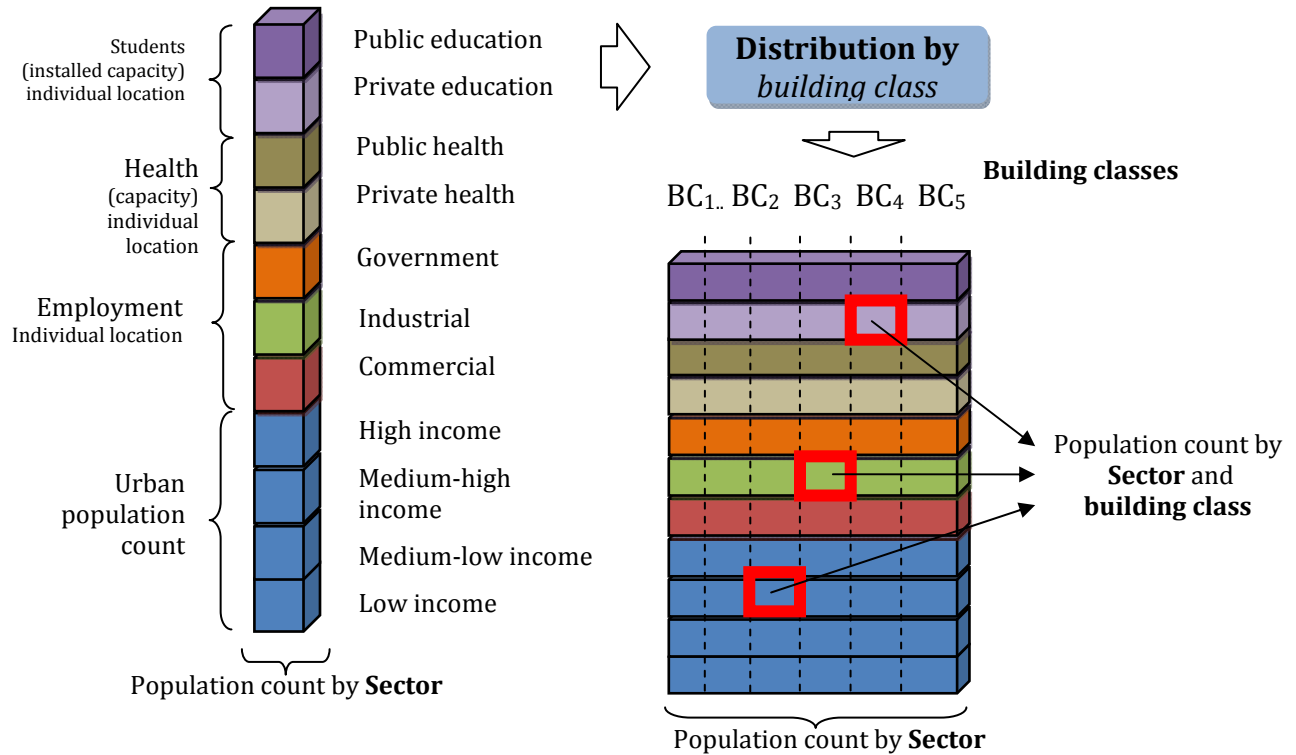


Figure 4-10
Process of distribution by building class

4.3.10 Weighting of the approximate exposed value based on values and unitary areas (step 10)

Once the number of inhabitants for each one of the sectors has been estimated, the constructed area is weighted in regards to the unitary values per inhabitant and, thus, in relation to the constructed square meter value with the objective of carrying out the distribution of the capital stock. With the aforementioned unitary values, the weight of each exposed element is estimated in relation to the **total exposed value of the country** as indicated in the following equations:

$$\text{proxy constructed area}_{abcd}(\text{development level}_a, \text{level of complexity}_b, \text{sector}_c, SE_d) \\ = \text{population}_{bcd} * \text{val. unit. constructed area}_{abc}$$

[factor constructed area by the level of complexity, sector and structural system]

$$\text{proxy exposed value}_{abcd}(\text{level of development}_a, \text{level of complexity}_b, \text{sector}_c, SE_d) \\ = \text{proxy constructed area}_{abcd} * \text{val. unit cost}_{abc}$$

[factor exposed value by the level of complexity, sector and structural system]

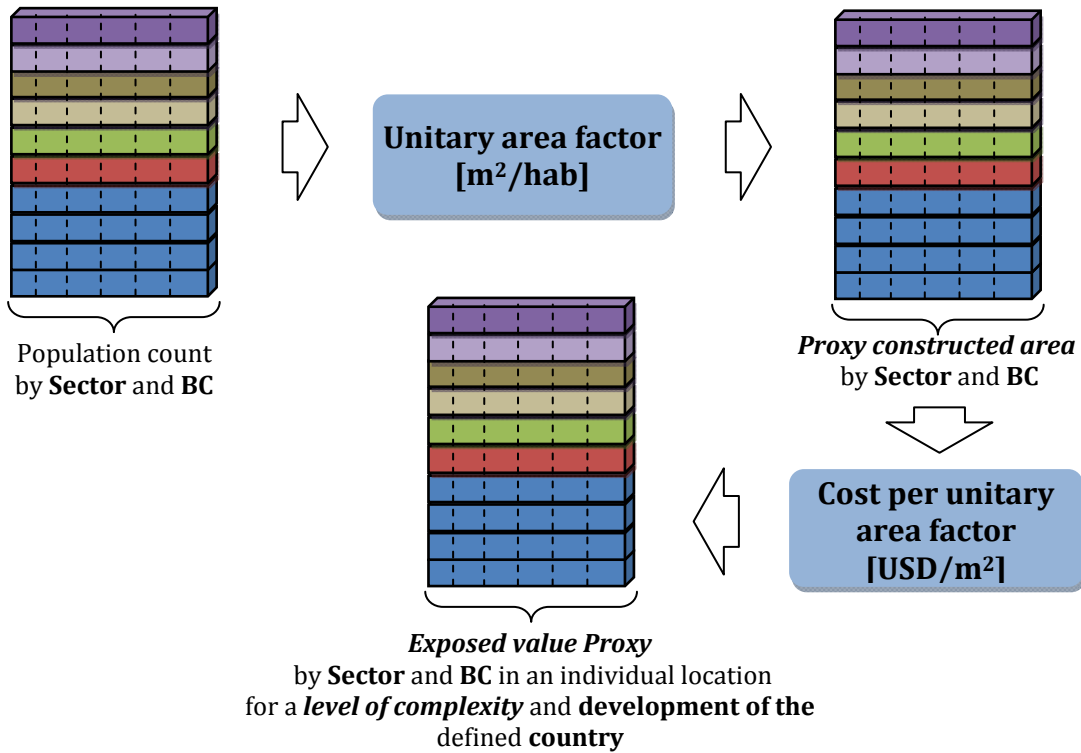


Figure 4-11
Proxy values estimation process

4.3.11 Distribution of the stock capital based on population using a building class and the income level/sector (step 11)

All the aforementioned steps were carried out with the objective of obtaining an indicator (exposed value proxy) based on population in order to distribute the capital stock in each country. The value of the capital stock is distributed at a sub-national level in accordance with the coverage of the Gross Domestic Product (GDP), multiplied by the normalized value of the **exposed value proxy** calculated in the previous step. The total exposed value (VALFIS field for the probabilistic risk analysis) is estimated using the following equation:

$$\begin{aligned}
 &VALFIS(stock\ capital_{lat,long}, exposed\ value\ proxy_i) \\
 &= stock\ capital_{lat,long} \\
 &\quad * (exposed\ value\ proxy_i / national\ proxy\ exposed\ value) \\
 &[exposed\ value, by\ urban\ area, sector\ and\ structural\ system]
 \end{aligned}$$

Each record (exposed value) represents a certain **building class** of the **income level/sector** in an **urban area** with a particular representation in the centroid of the 5x5km cells.

5. PHYSICAL VULNERABILITY FUNCTIONS FACING EACH HAZARD

5.1 Purpose and scope

For probabilistic disaster risk assessment, the vulnerability of exposed elements is assessed using functions that relate the intensity of the phenomenon that the hazard represents to the mean damage ratio or relative direct physical impact. Such functions are called vulnerability functions and they must be estimated for each one of the construction classes, so that a particular vulnerability function can be assigned to each one of the components in the exposure database. Each vulnerability function is characterized by a value known as the mean damage ratio (MDR) and its corresponding variance for each level of hazard intensity. That enables estimating the loss probability function at each level of intensity for the hazards under study.

The general objective of this analysis is to describe the expected behavior (in terms of vulnerability) of the different construction classes at a global level when faced by the different hazards under study as well as to establish a reasonable procedure for assigning the functions to specific countries according to variables such as construction quality and the compliance level of expected design codes. The vulnerability functions should allow differentiating structural behavior by construction class in the different regions of the world as well as the expected behavior for different types of hazard zones on a global level. Aspects such as construction quality and code compliance levels of different structural types were considered in the analysis.

The specific objectives of this chapter are to describe the methodology used in this report for obtaining the vulnerability functions, to present some illustrative results, and to explain how said functions are assigned to the different components of the exposure database for the specific hazard intensity to be used in each case. Vulnerability functions are presented for each one of the hazards under study: earthquake, cyclone winds, and slow-onset flooding. For the earthquake hazard, the parameter used for hazard intensity is the elastic spectral acceleration for 5% damping and the estimated structural vibration period for each representative construction class, to determine the spectral values. For the cyclone winds hazard, the parameter used for hazard intensity is maximum wind velocity in kilometers per hour (kph) sustained for five (5) seconds at ten (10) meters above ground level with a low roughness level. The roughness factor is used to differentiate among the different locations of the particular buildings. For the slow-onset flood hazard, the parameter used for hazard intensity is the maximum inundation depth in meters as of ground level. The vulnerability functions described in this report have been developed solely for the scope of this project and should not be used for purposes other than the ones set forth herein.

The vulnerability functions described in this report are based on the HAZUS methodological approach and on the parameters that it uses. Some modifications have been made to be able to include additional structural systems as well as variables relating to design, construction

code compliance level, and construction quality for different cities and countries considering their corresponding levels of complexity and development.

It is worth mentioning that the modeling is aimed at capturing the general vulnerability characteristics at a regional level compatible with the level of resolution used in the exposure database and that no specific considerations have been made for any particular country or structural system.

5.2 Vulnerability functions for earthquakes

The intensity hazard parameter to be used for earthquakes being the elastic spectral acceleration for 5% damping, earthquake vulnerability functions must establish the relation between that parameter and the mean damage ratio (MDR) for each construction class. To calculate the functions, the proposed methodology follows the main principles adopted by the methodological approach HAZUS-MH MR3 (2003), complemented with some additional considerations proposed by Yamin and Hurtado (2012). The methodology comprises the following main steps:

- Defining the characteristic construction classes, to enable directly assigning the types classified in the exposure database.
- Defining the geometric characteristics, strength, stiffness and dynamic properties of the characteristic construction classes.
- Defining the seismic design level for each construction class. This parameter defines the level of seismic demand and the horizontal deformation capacity for which the structure was designed. The following categories are considered:
 - High (H): fully complies with the earthquake resistance requirements of representative international seismic design building codes in terms of load capacity and horizontal deformation capacity or ductility for high seismic hazard zones.
 - Medium (M): moderately complies with earthquake resistance requirements.
 - Low (L): does not generally comply with minimum earthquake resistance specifications.
 - Poor (P): does not comply with any basic earthquake resistance requirement.
- Estimating the pushover capacity curve for the horizontal roof drift and the total horizontal shear force at the base of the building. Minimum three important behavior points are used to define the curve: the first yielding, the maximum horizontal load capacity of the structure, and the maximum near collapse horizontal deformation.

- Assigning specific points of behavior or “states of damage” to the different roof drift values, with the ranges slight, medium, intense to collapse.
- Simultaneously, each damage state corresponding to a different drift ratio is associated with a mean damage ratio, presented as a percentage. For example, slight damage is usually assigned values from 0% to 5%; medium damage usually those from 5% to 20%; intense damage those from 20% to 60%; and collapse would correspond to damages of above 60%, understanding that the percentages may greatly vary from one construction class to another.
- Assigning mean damage ratio values and their corresponding variances to each one of the characteristic construction classes for each one of the states of damage described above. To do so, different reference value methods are used including laboratory assay results, analytical modeling results, observation of structure behavior in prior events, and expert opinions. It is important to gather all of the information available on a particular system from the literature on the topic, as well as expert opinions, to obtain a consistent distribution of parameters among the different systems.
- Allocating a damage probability distribution function to each state of damage according to the above parameters. A log-normal probability distribution function is assumed for each state of damage considering that, in each one of the above drift levels, there is a mean damage ratio and a determined variance. The damage functions correspond to the fragility functions for each one of the above-mentioned states of damage.
- Using the fragility functions, the vulnerability functions are calculated following the methodology described in Annex 14.
- Modifying each vulnerability function to be able to express it in terms of spectral acceleration as a seismic hazard intensity measure. To do so, the non-linear behavior of the structure when faced with increasing hazard intensity levels must be considered. In this case the methodology proposed by Miranda (1999) was employed.

Table 5-1 shows the predominant construction classes defined for the purpose of generating the corresponding vulnerability functions. The table includes an ID for each construction class, a description of the system, the characteristic rise, and the seismic design level for each case.

Table 5-1
Main Construction classes

No.	Function name	Description	Height				Height to Roof (m)	Period Te (Sec)	SEISMIC DESIGN LEVEL			
			Range		Typical				H	M	L	P
			Name	Stories	Stories	Height (m)						
1	W1	Wood, Light Frame (≤450 m2)	-	1-2	1	4.3	4.3	0.35	X	X	X	X
2	W2	Wood, Commercial and Industrial (>450 m2)	-	All	2	7.3	7.3	0.40	X	X	X	X
3	S1L	Steel Moment Frame	Low-Rise	1-3	2	7.3	7.3	0.50	X	X	X	X
4	S1M		Mid-Rise	4-7	5	18.3	18.3	1.08	X	X	X	X
5	S1H		High-Rise	8+	13	47.5	47.5	2.21	X	X	X	X
6	S2L	Steel Braced Frame	Low-Rise	1-3	2	7.3	7.3	0.40	X	X	X	X
7	S2M		Mid-Rise	4-7	5	18.3	18.3	0.86	X	X	X	X
8	S2H		High-Rise	8+	13	47.5	47.5	1.77	X	X	X	X
9	S3	Steel Light Frame	-	All	1	4.6	4.6	0.40	X	X	X	X
10	S4L	Steel Frame with Cast-in-Place Concrete Shear Walls	Low-Rise	1-3	2	7.3	7.3	0.35	X	X	X	X
11	S4M		Mid-Rise	4-7	5	18.3	18.3	0.65	X	X	X	X
12	S4H		High-Rise	8+	13	47.5	47.5	1.32	X	X	X	X
13	S5L	Steel Frame with Unreinforced Masonry Infill Walls	Low-Rise	1-3	2	7.3	7.3	0.35	X	X	X	X
14	S5M		Mid-Rise	4-7	5	18.3	18.3	0.65	X	X	X	X
15	S5H		High-Rise	8+	13	47.5	47.5	1.32	X	X	X	X
16	C1L	Concrete Moment Frames	Low-Rise	1-3	2	6.1	6.1	0.40	X	X	X	X
17	C1M		Mid-Rise	4-7	5	15.2	15.2	0.75	X	X	X	X
18	C1H		High-Rise	8+	12	36.6	36.6	1.45	X	X	X	X
19	C2L	Concrete Shear Walls	Low-Rise	1-3	2	6.1	6.1	0.35	X	X	X	X
20	C2M		Mid-Rise	4-7	5	15.2	15.2	0.56	X	X	X	X
21	C2H		High-Rise	8+	12	36.6	36.6	1.09	X	X	X	X
22	C3L	Concrete Frame with Unreinforced Masonry Infill Walls	Low-Rise	1-3	2	6.1	6.1	0.35	X	X	X	X
23	C3M		Mid-Rise	4-7	5	15.2	15.2	0.56	X	X	X	X
24	C3H		High-Rise	8+	12	36.6	36.6	1.09	X	X	X	X
39	C4L	Reinforced Concrete Frames and Concrete Shear Walls	Low-Rise	1-3	2	6.1	6.1	0.35	X	X	X	X
40	C4M		Mid-Rise	4-7	5	15.2	15.2	0.56	X	X	X	X
41	C4H		High-Rise	8+	12	36.6	36.6	1.09	X	X	X	X
44	C5L	Flat Slab Structure	Low-Rise	1-3	2	6.1	6.1	0.40	X	X	X	X
45	C5M		Mid-Rise	4-7	5	15.2	15.2	0.75	X	X	X	X
46	C5H		High-Rise	8+	12	36.6	36.6	1.45	X	X	X	X
25	PC1L	Precast Concrete Tilt-Up Walls	Low-Rise	1-3	1	4.6	4.6	0.35	X	X	X	X
42	PC1M		Mid-Rise	4-7	5	15.2	15.2	0.56	X	X	X	X
43	PC1H		High-Rise	8+	12	36.6	36.6	1.09	X	X	X	X
26	PC2L	Precast Concrete Frames with Concrete Shear Walls	Low-Rise	1-3	2	6.1	6.1	0.35	X	X	X	X
27	PC2M		Mid-Rise	4-7	5	15.2	15.2	0.56	X	X	X	X
28	PC2H		High-Rise	8+	12	36.6	36.6	1.09	X	X	X	X
47	SC1L	Reinforced Concrete Frames and Steel Truss Girder (Warehouses)	-	All	1	4.6	4.6	0.32	X	X	X	X
29	RM1L	Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms	Low-Rise	1-3	2	6.1	6.1	0.35	X	X	X	X
30	RM1M		Mid-Rise	4+	5	15.2	15.2	0.56	X	X	X	X
31	RM2L	Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms	Low-Rise	1-3	2	6.1	6.1	0.35	X	X	X	X
32	RM2M		Mid-Rise	4-7	5	15.2	15.2	0.56	X	X	X	X
33	RM2H		High-Rise	8+	12	36.6	36.6	1.09	X	X	X	X
34	URML	Unreinforced Masonry Bearing Walls	Low-Rise	1-2	1	4.6	4.6	0.35	-	X	X	X
35	URMM		Mid-Rise	3+	3	10.7	10.7	0.50	-	X	X	X
38	CM1L	Confined Masonry Walls	Low-Rise	1-3	3	9.1	9.1	0.40	-	X	X	X
36	AD1L	Adobe	Low-Rise	1-2	2	6.1	6.1	0.50	-	X	X	X
37	TA1L	Tapia	Low-Rise	1-2	2	6.1	6.1	0.50	-	X	X	X

Note: H = High, M = Medium, L = Low, P = Poor.

Annex 15 presents the details of the previous characterization and gives a detailed explanation of the main parameters considered in the analysis. The main reference used for selecting the parameters for each one of the construction classes was HAZUS MH 2.1 (2011). Some of the parameters for vernacular construction classes in representative developing countries not included in that reference were assigned based on various case analysis publications, such as Yamin and García (1994), Meli et al (2010), and Yamin et al (2004). Finally, for some particular systems or seismic code levels regarding which no particular information was found, parameters were assigned at the criterion of the consultant specialists so as to maintain overall consistency among different construction classes and design levels.

More specifically, new functions were developed for the following characteristic construction classes: slab-column frame system, tilt-up walls, confined masonry, unreinforced masonry, warehouses with concrete frames and metal roofing, adobe and mud walls. In some cases the systems have no prior reference; in others vulnerability functions are generated for unreported seismic design levels (for example, for unreinforced masonry a medium seismic design level was created). The main parameters to be defined for each one of the cases are the dominant structural period, the seismic resistance coefficient for the design, ductility levels, and damage percentages for the different states of damage defined. As was mentioned above, in many cases the parameters were assigned at the criterion of the specialists, using, whenever possible, available reports and research.

To apply the vulnerability functions on a global scale, the following general considerations were established:

- A different vulnerability function was to be defined for each one of the construction classes at different hazard intensity levels.
- The expected behavior of the various construction classes was to allow for a clear differentiation between construction practices in developing countries and those in developed countries.
- The construction classes were to include types that were representative at a global level, and more specifically, those most commonly used in developing countries. Reference information is available on the PAGER database (Jaiswal, Wald, & Porter, 2010) and on the WHE database (BRZEV et al, 2004).
- Due to the lack of information regarding the behavior parameters for some specific construction classes and for the different design levels, some of the parameters were assigned or modified using data published at the criterion of the consultant specialists.

- More specifically, parameters for special construction classes, in particular those in developing countries, were estimated using expert opinion, considering the general lack of experimental studies or any other kind of publication.

Vulnerability functions are generated using the above-mentioned methodology for the different construction classes and parameters as may be appreciated in Table 5-1. Figures 5-1 and 5-2 illustrate some of the seismic vulnerability functions obtained. Figure 5-1 gives a comparison of the different construction systems (adobe, unreinforced masonry, reinforced masonry, low-rise reinforced concrete frames and low-rise steel frames). Figure 5-2 illustrates the variation in the vulnerability functions considering different seismic design levels for two different representative construction classes: reinforced masonry and reinforced concrete frames. Annex 15 presents the results for all of the other construction classes under study.

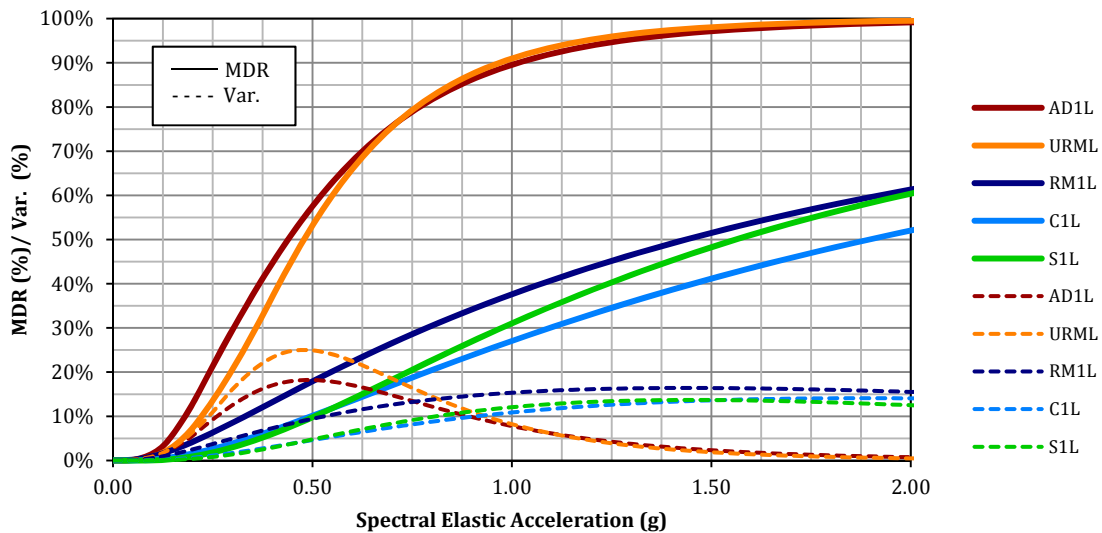


Figure 5-1
Vulnerability functions for different construction classes
(Low-rise system and medium seismic design level)

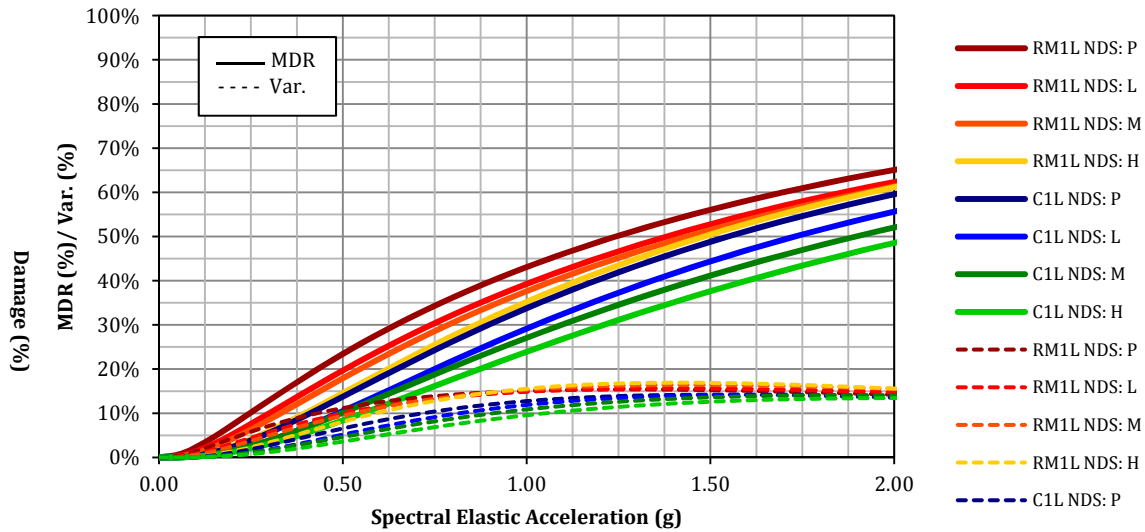


Figure 5-2
Comparative for seismic vulnerability functions among different
seismic design levels and construction classes
Note: NDS = Seismic Design Level.

5.3 Assigning vulnerability functions to the different construction classes from the exposure database

To assign vulnerability functions to the construction classes defined in the exposure model, the following variables were taken into account:

- The construction class assigned, based on the information available in the exposure database
- The seismic design level that defines the construction class load capacity and horizontal ductility capacity.
- The number of floors and the general description of the stiffness of the building. Those parameters define the fundamental vibration period of each system. The fundamental vibration period in turn defines the hazard intensity parameter used in the analysis to assess the elastic spectral acceleration for that specific structural period.

To assign the vulnerability functions on a global scale in different countries and regions around the world and for the purpose of being able to establish a differentiation in terms of the general construction quality, the basic seismic design level required in each area, and the expected seismic design code compliance level, the following parameters were employed:

- Country development level. Compliance with the seismic resistant design code and the construction quality per se define the expected seismic behavior of each construction class. And they greatly depend on the country development level. The classification used in the analysis generally follows the World Bank country classification *“How we classify countries”* (2011) using the following levels: H = High, MH = Medium-High, ML = Medium-Low, L = Low.
- The complexity level of the urban hub (city or town). The size of the urban hub. High complexity cities usually boast more demanding regulatory agencies; therefore, better compliance with design code levels based on different hazards can be expected. The complexity level classification for each urban hub was made according to Satterthwaite (2006) (H = High, M = Medium, L = Low).
- The area hazard level. Areas with high seismic hazard levels where there is a high frequency of events and multiple events with medium or high magnitudes are more likely to have better construction quality and higher seismic design levels. The area hazard level was assigned based on all available hazard information, using maximum ground acceleration, A , obtained in the hazard assessment chapter, with the following conventions:
 - o High Hazard (H): $A > 0.25 \text{ g}$
 - o Medium Hazard (M): $0.1\text{g} < A < 0.25 \text{ g}$
 - o Low Hazard (L): $A \leq 0.1 \text{ g}$
- Construction class and rise. Buildings with engineered construction classes (made of reinforced concrete, steel, reinforced masonry) and tall buildings (with more than five (5) floors) are more likely to have higher seismic design levels than non-engineered buildings (made of wood, adobe, non-reinforced masonry).

Due to the unavailability of detailed information regarding the important aspects mentioned above, an assignment methodology based on the expert opinions of specialists in the consulting group was adopted, which enabled obtaining a consistent, reasonable set of results in terms of vulnerability variations, according to the main variables under study. Table 5-2 illustrates the final classification adopted in terms of seismic design levels for reinforced concrete frame buildings with different numbers of floors or rises. The table is limited to the assignment for this construction class in developed countries. Annex 16 presents the full set of results for the other construction classes and country categories.

Table 5-2
Illustrative seismic design level (H, M, L, P) for different
construction classes

General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GART3	Country Development Level											
				H											
				Complexity City Level											
				H			M			L					
				Hazard Level											
				H	M	L	H	M	L	H	M	L			
Reinforced Concrete	C	Reinforced concrete	C1M	H	M	M	H	M	M	H	M	M			
	C1	Ductile reinforced concrete moment frame with or without infill	C1M	H	M	M	H	M	M	H	M	M			
	C1L	Ductile reinforced concrete moment frame with or without infill low-rise	C1L	H	M	M	H	M	M	H	M	M			
	C1M	Ductile reinforced concrete moment frame with or without infill mid-rise	C1M	H	M	M	H	M	M	H	M	M			
	C1H	Ductile reinforced concrete moment frame with or without infill high-rise	C1H	H	M	M	H	M	M	H	M	M			
	C2	Reinforced concrete shear walls	C2M	H	M	M	H	M	M	H	M	M			
	C2L	Reinforced concrete shear walls low-rise	C2L	H	M	M	H	M	M	H	M	M			
	C2M	Reinforced concrete shear walls mid-rise	C2M	H	M	M	H	M	M	H	M	M			
	C2H	Reinforced concrete shear walls high-rise	C2H	H	M	M	H	M	M	H	M	M			
	C3	Nonductile reinforced concrete frame with masonry infill walls	C3M	M	L	L	M	L	L	M	L	L			
	C3L	Nonductile reinforced concrete frame with masonry infill walls low-rise	C3L	M	L	L	M	L	L	M	L	L			
	C3M	Nonductile reinforced concrete frame with masonry infill walls mid-rise	C3M	M	L	L	M	L	L	M	L	L			
	C3H	Nonductile reinforced concrete frame with masonry infill walls high-rise	C3H	M	L	L	M	L	L	M	L	L			
	C4	Nonductile reinforced concrete frame without masonry infill walls	C1M	M	L	L	M	L	L	M	L	L			
	C4L	Nonductile reinforced concrete frame without masonry infill walls low-rise	C1L	M	L	L	M	L	L	M	L	L			
	C4M	Nonductile reinforced concrete frame without masonry infill walls mid-rise	C1M	M	L	L	M	L	L	M	L	L			
	C4H	Nonductile reinforced concrete frame without masonry infill walls high-rise	C1H	M	L	L	M	L	L	M	L	L			
	C5	Steel reinforced concrete (Steel members encased in reinforced concrete)	C1M	H	M	M	H	M	M	H	M	M			
	C5L	Steel reinforced concrete (Steel members encased in reinforced concrete) low-rise	C1L	H	M	M	H	M	M	H	M	M			
	C5M	Steel reinforced concrete (Steel members encased in reinforced concrete) mid-rise	C1M	H	M	M	H	M	M	H	M	M			
	C5H	Steel reinforced concrete (Steel members encased in reinforced concrete) high-rise	C1H	H	M	M	H	M	M	H	M	M			
	C6	Concrete moment resisting frame with shear wall - dual system	C4M	H	M	M	H	M	M	H	M	M			
	C6L	Concrete moment resisting frame with shear wall - dual system low-rise	C4L	H	M	M	H	M	M	H	M	M			
	C6M	Concrete moment resisting frame with shear wall - dual system mid-rise	C4M	H	M	M	H	M	M	H	M	M			
	C6H	Concrete moment resisting frame with shear wall - dual system high-rise	C4H	H	M	M	H	M	M	H	M	M			
	C7	Flat slab structure	C5H	H	M	M	H	M	M	H	M	M			
	PC1	Precast concrete tilt-up walls	PC1L	H	M	L	H	M	L	H	M	L			
	PC2	Precast concrete frames with concrete shear walls	PC2M	H	M	M	H	M	M	H	M	M			
	PC2L	Precast concrete frames with concrete shear walls low-rise	PC2L	H	M	M	H	M	M	H	M	M			
	PC2M	Precast concrete frames with concrete shear walls mid-rise	PC2M	H	M	M	H	M	M	H	M	M			
	PC2H	Precast concrete frames with concrete shear walls high-rise	PC2H	H	M	M	H	M	M	H	M	M			
	PC3	Precast reinforced concrete moment resisting frame with masonry infill walls	C3L	M	L	L	M	L	L	M	L	L			
	PC3L	Precast reinforced concrete moment resisting frame with masonry infill walls low-rise	C3L	M	L	L	M	L	L	M	L	L			
	PC3M	Precast reinforced concrete moment resisting frame with masonry infill walls mid-rise	C3M	M	L	L	M	L	L	M	L	L			
	PC3H	Precast reinforced concrete moment resisting frame with masonry infill walls high-rise	C3H	M	L	L	M	L	L	M	L	L			
	PC4	Precast panels (wall panel structure)	PC1L	H	M	L	H	M	L	H	M	L			
	TU	PRECAST CONCRETE TILT-UP WALLS (Precast Wall Panel Construction (Mid to high rise, Former Soviet Union style))	PC1M	H	M	L	H	M	L	H	M	L			

Note: refer to Table 5-1 for GAR13 construction classes.

5.4 Vulnerability functions for wind

Vulnerability functions for wind caused by cyclones enable estimating the mean damage ratio (MDR) for different maximum wind velocities sustained for five (5) seconds at a reference height of 10 meters above ground level on a relatively flat terrain. The methodological approach used for calculating wind vulnerability functions included the activities below (see HAZUS MH 2.1 Hurricane Model, 2011).

- Defining the geometry and physical characteristics of each construction class, in terms of roofing, outer walls, windows, and other elements susceptible to damage caused by cyclone winds.
- Estimating the approximate resistance and capacity of the main individual components for each construction class for resisting the pressure or suction forces imposed by the wind. In general, this estimation is made for engineered construction classes with a high design level.
- Determining the distribution of maximum pressure on the different components for each construction class, for varying levels of reference maximum wind velocity (corresponding to the estimated hazard intensity parameter)
- Estimating an expected damage sequence according to the capacity-demand ratios of the critical components.
- Assessing the total damage level for each intensity level, stated in terms of mean damage ratios, taking into account the weighting that the damage represents out of the total value of the building.

Given that, for a global risk model, the exposure data resolution is very limited and does not allow the level of detail required for considering all of the above variables, this study has assigned vulnerability functions that are representative of the construction classes. To do so, the HAZUS MH 2.1 Hurricane Model (2011) information was used as it consolidates all existing information on wind hazard gathered from published research and articles. Furthermore, expert opinions have been used for construction classes predominant in developing countries due to the lack of published information to this regard.

The vulnerability functions for wind caused by cyclones were represented using the following function indicated in ATC-13 (1985):

$$E[\beta] = E \left[1 - 0.5 \left(\frac{V}{V_r} \right)^p \right] \quad (\text{Eq. 5-1})$$

In this function, $E[\beta]$ is the expected mean damage ratio value stated as a percentage, V is the measure of intensity, in this case, corresponding to the sustained wind velocity, γ is the intensity for the mean damage ratio $E[\beta] = 0.50$, ρ is the curvature parameter which is adjusted according to the final shape of published functions for characteristic construction classes.

Table 5-3 presents the basic wind vulnerability functions selected from the HAZUS MH 2.1 *Hurricane Model* (2011), for certain characteristic construction classes.

Table 5-3
Representative wind vulnerability functions
(From HAZUS MH 2.1 Hurricane Model Technical Manual, 2011)

Function	Walls	# Stories	Roof Shape	Sheathing	Roof/Wall	Roof Cover	Roof Deck	Glazing (%)	Structural System	Occupancy	Metal Panel Capacity (%)	Missile Environment
H.72	WFR	1	Hip	8d	Strap	-	-	-	Residential Buildings	-	-	-
K.7	RM	2	-	8d	Strap	BUR	Wood	-	Low-Rise Masonry	-	-	A
K.22	URM	2	-	Weld	-	BUR	Metal	50	Low-Rise Masonry	-	-	A
M.7	-	2	-	-	-	BUR	Metal	33	Engineered Residential and Commercial Buildings	Residential	-	D
N.1	URM	-	-	-	-	-	-	-	Industrial Buildings	-	100	A

For analysis at a global level, the vulnerability functions given by HAZUS are considered to be the set of curves for a high construction quality level, corresponding, in this case, to typical constructions in the United States, which generally include specific design requirements for wind resistance (in United States areas prone to hurricanes).

5.4.1 Terrain roughness

To establish relations between basic wind velocity (in free-field and at a reference height of 10 meters, for example) and the potential damage or impact on a particular construction, it is necessary to consider the effect of terrain roughness that generally tends to reduce effective wind velocity.

For this project, the effects of terrain roughness are considered to be factors that modify basic wind velocity, so they are included in the representation of a particular hazard. Different classifications are used according to the terrain roughness, from conditions of open plan fields to those of areas with a great terrain roughness, which would correspond to the downtown areas of large cities with high-rise buildings. The information regarding the distributions of terrain types was obtained from satellite information or from global sources. In general terms, the reference speeds presented in the hazard report correspond to wind speeds in environments with trees or dispersed buildings before including the

terrain roughness factor (for this category the terrain roughness factor was assigned a value of 1.0).

Also, given that the intention of the study group was to use the information available in HAZUS, it was important to remember that the terrain roughness had been directly taken into account for calculating the vulnerability functions, through modification factors. In that case, a parameter z_0 representing the longitude of the characteristic terrain roughness was used (HAZUS MH 2.1 *Hurricane Model*, 2011). That parameter depends on the rise and distance between the buildings, trees or any other obstruction present in the area under analysis. Although specialists do not agree on the values to be assigned to the parameter in different circumstances or on the procedures for determining them, the HAZUS system has included four (4) different categories for modifying basic vulnerability functions. The categories correspond to z_0 values of 0.03, 0.35, 0.70, and 1.0. Out of those values, the value 0.03 corresponds to open plain fields; in other words, a vulnerability function with that value would solely be applicable to buildings in the countryside only, whereas a vulnerability function with a value of 0.35 would correspond to areas with low construction density.

Given the above discussion and taking into consideration that terrain roughness is one of the variables presenting the highest uncertainty in this type of analysis and that specialists have reached no agreement regarding the best manner to handle it, some of the vulnerability functions proposed in HAZUS corresponding to a z_0 value of 0.35 were selected. They correspond to areas with a low construction density. And that was precisely the reference speed used in the hazard model for this analysis.

5.4.2 Overview for wind vulnerability functions

For the probabilistic risk assessment at a global level and for the purpose of considering possible variations in vulnerability for different construction classes in different countries and regions around the world, additional functions had to be generated for construction classes in developing countries and for low construction quality. To take that aspect into account, the following four levels of construction quality were considered:

- High (H): buildings designed to be wind resistant in high hazard areas, made using good-quality materials and good construction techniques.
- Medium (M): buildings specifically designed to resist wind but built with materials and types of connections not of the best quality and not certified as wind resistant.
- Low (L): buildings not specifically designed to resist strong winds, constructed with average quality materials and types of connections that do not have adequate capacity.
- Poor (P): buildings that do not comply with any basic wind resistance requirement.

The impact of wind on different representative construction classes was characterized as follows:

- For buildings made using non-engineered wood and materials, damage normally begins on the roof and on the outer walls, and, if the connections are not properly anchored, the damage usually leads to the complete collapse of the building.
- For buildings made using engineered materials with greater resistance, damage is normally concentrated on the roof, on the outer walls, and on the windows. When any of those elements suffer damage, the impact extends to the inner elements of the building, such as thin partition walls, ceilings and, naturally, the contents.

According to the above, the actual behavior of any construction class under conditions of strong winds is directly related to the expected behavior of critical individual components, such as the roof, the outer walls, the windows, facades and others. Normally, the structural design procedures that generally control design codes are relevant when analyzing the general structural stability of a construction subjected to strong winds; however, in very few cases worldwide is the expected behavior of such “secondary” elements taken into account.

To study the effect of construction quality, bearing in mind the scarce technical information published on that particular topic, additional vulnerability functions were proposed for other specific conditions. A detrimental factor was applied to the above-mentioned functions in order to obtain new vulnerability functions, to more accurately assess medium, low, and poor construction quality. The HAZUS technical manual gives some state of damage indicators that were applied to the vulnerability functions, to compensate the detrimental quality factors employed in the analyses, for example, taking low quality into account. The following indicators were adopted for the study:

- High Level: 1.0
- Medium Level: 0.90 of the high level
- Low Level: 0.80 of the high level
- Poor level: 0.70 of the high level

To illustrate, Figure 5-3 presents some wind vulnerability functions used in the analyses for different construction classes. Figure 5-4 shows variations in the vulnerability functions obtained using the detrimental quality factors, as described above. Annex 17 presents the complete set of wind vulnerability functions used in the present analysis.

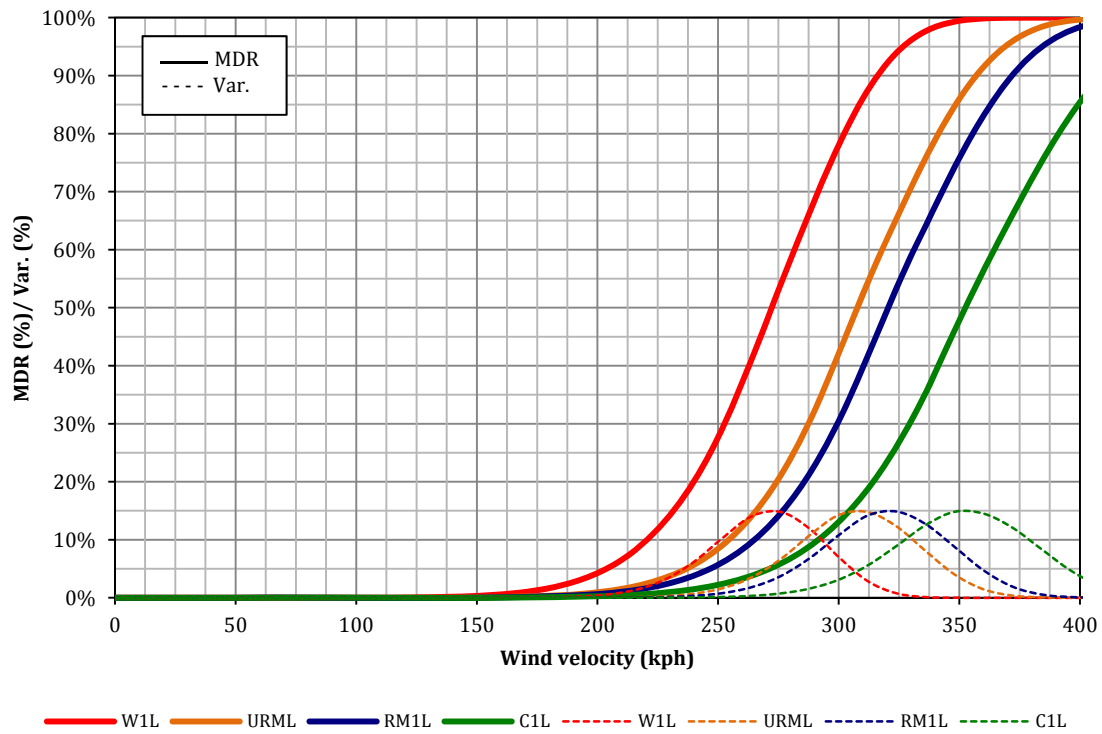


Figure 5-3
Wind Vulnerability functions for different construction classes

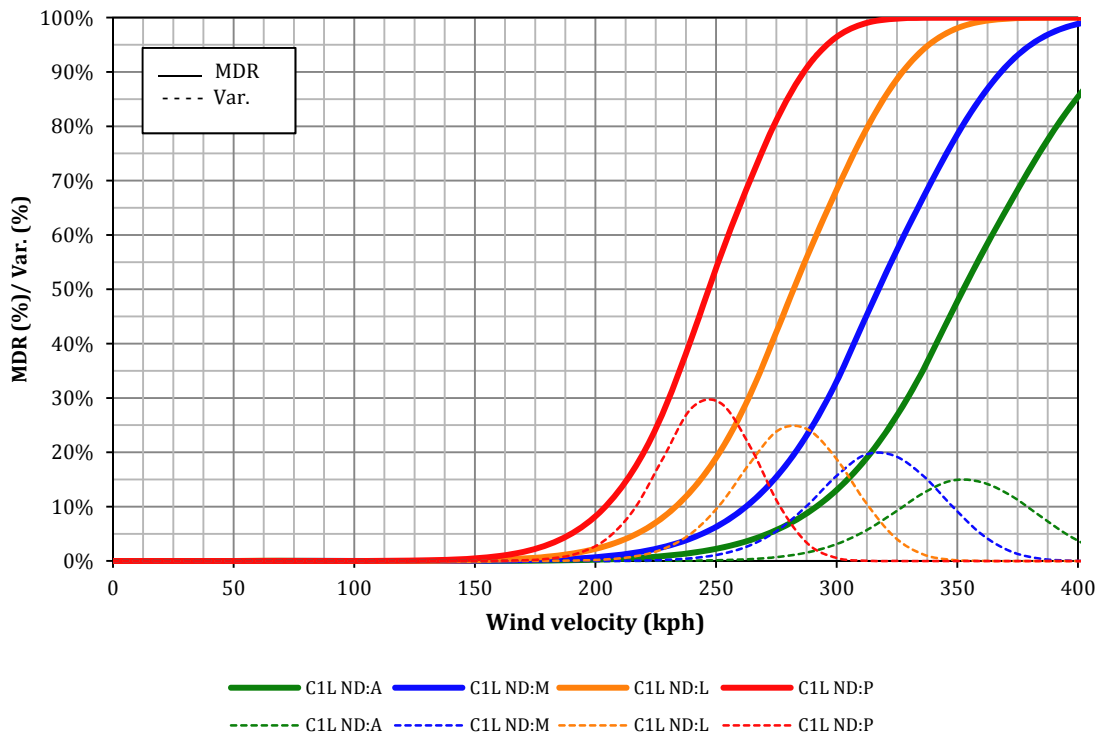


Figure 5-4

Wind vulnerability functions for different construction quality levels for the same system

Note: ND = Quality construction level, these functions are consider a low terrain roughness factor

5.5 Assigning wind vulnerability functions to construction classes in the exposure database

Assigning wind vulnerability functions to predominant construction classes in the exposure model entailed using the following parameters:

- The construction class referenced in the exposure database.
- The country development level. There is a good correlation between the country development level and the degree of compliance with wind resistant design codes and the overall construction quality. The country development level is assigned using the following World Bank classification (2011): H = High, MH = Medium High, ML = Medium low, L = Low.
- The complexity level for an urban hub (city or town). This parameter relates to the size of the urban area. High complexity cities are usually more likely to boast controlling agencies and therefore better compliance with design codes can be expected. The classification of the level of complexity for each area was made according to Satterthwaite (2006) (H = High, M = Medium, L = Low).

- The area hazard level of a particular zone. . High wind hazard areas, in particular those with high frequency of events and multiple events with medium or high magnitudes, are more likely to have better construction quality and higher wind design levels. The area hazard level for each urban hub was assigned based on the maximum wind velocity, V , obtained in the hazard assessment chapter, using the following conventions:
 - o High Hazard (H): $V > 300$ kph
 - o Medium Hazard (M): $150 \text{ kph} < V < 300$ kph
 - o Low Hazard (L): $V \leq 150$ kph

Due to the unavailability of detailed information regarding the important aspects mentioned above, an assignment methodology based on the expert opinions of the specialists in the consulting group was adopted, which enabled obtaining a consistent, reasonable set of results in terms of vulnerability variations, according to the main variables under study.

Table 5-4 illustrates the final classification method adopted in terms of construction quality and the above-mentioned variables. Annex 18 presents the complete set of results for the other construction classes and country categories.

Table 5-4
Illustrative wind construction quality level (H, M, L, P) for different construction types

General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GAR13	Country Development Level																	
				H									L								
				Complexity City Level									Complexity City Level								
				H			M			L			H			M			L		
				Hazard Level									Hazard Level								
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Reinforced Concrete	C	Reinforced concrete	C1M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C1	Ductile reinforced concrete moment frame with or without infill	C1M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C1 L	Ductile reinforced concrete moment frame with or without infill low-rise	C1L	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C1 M	Ductile reinforced concrete moment frame with or without infill mid-rise	C1M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C1 H	Ductile reinforced concrete moment frame with or without infill high-rise	C1H	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C2	Reinforced concrete shear walls	C2M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C2 L	Reinforced concrete shear walls low-rise	C2L	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C2 M	Reinforced concrete shear walls mid-rise	C2M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C2 H	Reinforced concrete shear walls high-rise	C2H	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C3	Nonductile reinforced concrete frame with masonry infill walls	C3M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C3 L	Nonductile reinforced concrete frame with masonry infill walls low-rise	C3L	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C3 M	Nonductile reinforced concrete frame with masonry infill walls mid-rise	C3M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C3 H	Nonductile reinforced concrete frame with masonry infill walls high-rise	C3H	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P

General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GAR13	Country Development Level																	
				H									L								
				Complexity City Level									Complexity City Level								
				H			M			L			H			M			L		
				Hazard Level									Hazard Level								
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
	C4	Nonductile reinforced concrete frame without masonry infill walls	C1M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C4 L	Nonductile reinforced concrete frame without masonry infill walls low-rise	C1L	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C4 M	Nonductile reinforced concrete frame without masonry infill walls mid-rise	C1M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C4 H	Nonductile reinforced concrete frame without masonry infill walls high-rise	C1H	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P
	C5	Steel reinforced concrete (Steel members encased in reinforced concrete)	C1M	H	M	L	H	M	L	H	M	L	L	L	L	L	L	P	L	P	P

5.6 Flood vulnerability functions

Flood vulnerability functions are stated in terms of maximum water inundation depth measured at ground level. In this analysis, a series of simplifications were made in order to obtain consistent flood vulnerability functions. Expert opinions were used to complete the set of curves required for representing the variations associated with different construction classes and construction qualities.

The simplifications adopted for the study were the following:

- The analysis was made solely considering slow flooding.
- The existence of basements/cellars was not taken into account.
- The constructions are all assumed to be at ground level.
- Inundation depths of less than 10cm are assumed to cause no damage.
- Damage occurs mainly in finishings, installations, and plumbing.
- Normally buildings are not totally destroyed except in the case of buildings made of wood, adobe, and mud or those built using other similar materials.
- For buildings with several floors, the first floor usually concentrates the greatest relative exposed economic value.

The methodology consisted of proposing a series of simplified, indicative vulnerability functions aimed at reflecting the most important variables. It considered some indicative flood vulnerability functions using reference information from similar published studies (HAZUS MH 2.1 Flood Model, 2011).

Figure 5-5 illustrates some of the wind vulnerability functions employed.

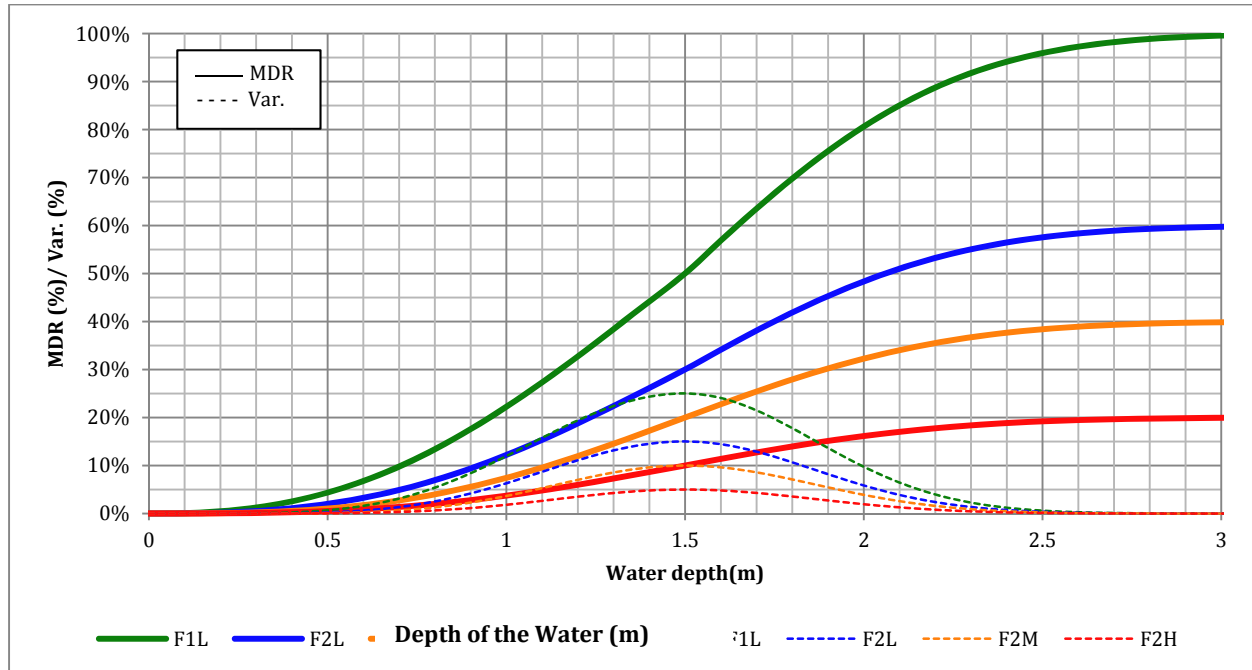


Figure 5-5
Flood vulnerability functions

Assigning vulnerability functions to the construction classes defined in the exposure model was done taking the following variables into account:

- The construction class in the exposure database.
- The representative rise of the construction.

The classification of vulnerability functions was conducted directly in accordance with the information found in the exposure database regarding the construction class and the representative rise for each group. Annex 19 presents the complete set of parameters and flood vulnerability functions used in the analysis.

6. DISASTER RISK ASSESSMENT

6.1 Purpose and scope

The probabilistic risk analysis is based on determining losses' probability density functions for each one of the hazardous events for different levels of intensity, by estimating said losses in each one of the exposed assets, caused by each scenario contained in the stochastic set that exhaustively represents each one of the hazards (earthquakes, cyclonic wind, etc.). The losses in the exposed assets correspond to the level of physical damage that is estimated for different intensity levels; said damage represents the economic loss relative to the total exposed value of the asset. Losses for a particular scenario are calculated as the probabilistic sum of the losses caused in each exposed asset, added together in a way that the randomness of the estimation is guaranteed. Once the losses' probability distribution is obtained for each stochastic scenario, the losses are added with the appropriate algorithm to obtain the different risk metrics that are explained in following sections.

The main output from the probabilistic risk analysis is commonly described as the *Loss exceedance curve* – *LEC* that describes the annual frequency of occurrence for different loss values. The inverse of the annual rate of the loss corresponds to its return period. The LEC contains all the necessary information for describing the process of loss occurrence considering the associated uncertainties in the analysis process. All risk calculations are carried out using the CAPRA platform "*Comprehensive Approach for Probabilistic Risk Assessment*". (www.ecapra.org), (ERN-AL 2009a; Marulanda et al. 2013).

6.2 Methodological approach

A probabilistic risk analysis has the main objective to determine the losses' probability distributions that exposed assets may suffer over a given time period, as a consequence of the occurrence of natural hazards, rationally integrating the uncertainties that exist at different stages of the process. The basic question that a probabilistic analysis attempts to answer is, given that there is a set of assets exposed to the effects of one or more natural hazards, how often will losses exceeding a certain value occur?

Given that the frequency of catastrophic events is particularly low, it is not possible to answer that question by using purely empirical models for the process of occurrence of such events. This then requires probabilistic models for those estimations such as the one that is described here.

The procedure for probabilistic calculation is therefore, an evaluation of losses that will affect a group of exposed assets for each of the scenarios that collectively describe the hazard, and then probabilistically integrate the obtained results using the frequency of occurrence of each scenario as a weighting factor.

The probabilistic analysis of risk involves uncertainties that cannot be ignored, and that

should be correctly propagated throughout the calculation process. This section describes the general basis of calculation that can be used to achieve the objective proposed.

The risk assessment requires three analytical steps, as follows:

- *Hazard assessment:* For each of the natural phenomena considered, a set of events is defined along with their respective frequencies of occurrence which is an exhaustive representation of said hazard. Each scenario contains spatial distribution parameters that will permit the construction of the probability distributions for the intensities produced by their occurrence.
- *Definition of the inventory of exposed assets:* An inventory of the exposed assets must be constructed and this should specify the geographical location for each, and the following main parameters to classify them: a) Replacement value and b) Building class to that the asset belongs.
- *Vulnerability of the exposed assets:* Each building class must be associated to a vulnerability function for each type of hazard. This function characterizes the structural behavior of the asset during the occurrence of the hazard phenomena. The vulnerability functions define the loss probability distribution as a function of the intensity produced during a specific scenario. This is defined through a set of curves that relate the expected value of damage and standard deviation of damage with the intensities for each scenario.

6.2.1 Analytical procedure

Considering the basic objective of the probabilistic risk analysis, a specific methodology must be followed in order to calculate the frequencies of occurrence of specific loss levels in the exposed assets over defined periods of time given the occurrence of natural hazards.

The risk to natural hazards is commonly described through the loss exceedance curve which specifies the frequencies, usually expressed annually, with that events will occur exceeding a specified loss value. This annual loss frequency is also known as the exceedance rate, and it can be calculated using the following equation which is one of the many ways the total probability theorem can adopt:

$$\nu(p) = \sum_{i=1}^{\text{Eventos}} \Pr(P > p | \text{Event } i) F_A(\text{Event } i) \quad (\text{Eq. 6-1})$$

In this equation, $\nu(p)$ is the loss exceedance rate of loss p , and $F_A(\text{Event } i)$ is the annual frequency of occurrence of the *Event i*, while $\Pr(P > p | \text{Event } i)$ is the probability that the loss will be higher than p , given that the i^{th} event occurred. The sum of the equation is made for all potentially damaging events. The inverse of $\nu(p)$ is the return period of loss p , identified as Tr .

As is presented in a following section, the loss curve contains all the information required to describe in a probabilistic way the process of occurrence of events that generate losses.

The loss p referred to in equation 6.1 is the sum of the losses that occur to all the exposed assets. The following issues should be borne in mind:

- The loss p is an uncertain quantity, whose value, given the occurrence of an event, cannot be precisely known. Therefore, it must be seen and treated as a random variable, and methodologies should be constructed to know its probability distribution conditional to the occurrence of a certain event.
- The loss p is calculated as the sum of the losses that occur in each of the exposed assets. Each of the items in the sum is a random variable, and there is a certain level of correlation between them which should be included in the analysis.

A careful approach to equation 6.1 for, the probabilistic loss calculation gives the following sequence:

1. For a scenario, determine the losses probability distributions in each of the exposed assets.
2. Based on the loss probability distribution of each asset, determine the probability distribution for the sum of these losses, taking account the correlation that exists between them.
3. Once the probability distribution for the summed losses is determined for that event, calculate the probability that this will exceed a given value of loss p .
4. The probability determined in (3), multiplied by the annual frequency of occurrence of the event, is the contribution of this event to loss exceedance rate of loss p .

The calculation is repeated for all events, and in this way the result indicated by equation 6.1 is obtained

It is also interesting to note that in equation 6.1 there is no distinction between events that belong to different hazards. In effect, the sum in this equation may include, for example, earthquakes and tropical cyclones or earthquakes and floods. This is so because the assumption is that, events associated with the same hazard and events associated with different hazards do not occur simultaneously. However, some phenomena that are potentially damaging do occur simultaneously, and in such cases special care should be taken in determining the distribution of the probability of loss p .

6.2.2 Uncertainties

As observed in equation 6.1, and as proposed above, the loss in a group of exposed assets during a given scenario is an uncertain quantity which should be treated as a random variable.

Generally, it is not practical to make a direct calculation of the loss probability distribution in the exposed assets, conditional on the occurrence of a given scenario. In other words, for example, it is not practical to determine the probability distribution of the loss in a building, given that, a magnitude 6.0 earthquake occurs at 100km distance.

For methodological reasons, the probability of loss exceedance, given that an event occurs, common is expressed as follows:

$$\Pr(P > p | Event) = \int_I \Pr(P > p | I) f(I | Event) dI \quad (Eq. 6-2)$$

The first term of the items to be integrated, $\Pr(P > p | I)$, P , is the probability that the loss will exceed the value p given that the local intensity was I ; this term, therefore accounts for the uncertainty that are included in the vulnerability functions. Further, the term $f(I | Event)$ is the probability density of the intensity, conditional to the occurrence of the event. This term takes account of the fact that, given that an event occurred, the intensity at the analysis site of interest is uncertain.

6.2.3 Specific Risk Estimators

As indicated above, the curve calculated by applying equation 6.1 contains all the information required to characterize the process of occurrence of events that produce losses. However, it is sometimes not practical to use a complete curve, and therefore it is convenient to use specific estimators of risk that will allow it to be expressed by a single number. The two most commonly used specific estimators are described here described as follows:

- (a) *Average annual loss (AAL)*: this is the expected value of the annual loss. It is an important quantity, since it indicates, for example, assuming that the process of occurrence of the damaging event is stationary from here to eternity, its accumulated cost will be the equivalent of having the AAL paid annually. Therefore, in a simple insurance scheme, the annual average loss would be the pure premium. AAL can be obtained by integrating $v(p)$, or by the following expression:

$$AAL = \sum_{i=1}^{Eventos} E(P | Evento i) F_A(Evento i) \quad (Eq. 6-3)$$

(b) *Probable maximum loss (PML)*: This is a loss that does not occur frequently and then is associated with long return periods (or, alternatively, low exceedance rates). There are no universally accepted standards to define what is meant by "not very frequently". In fact, the choice of certain return period for a decision making process depends on the risk aversion of who are deciding. In the insurance industry, for example, the return periods used to define the PML range from 200 up to 1,500 years.

6.2.4 Probability of loss exceedance values

The loss curve, $v(p)$, calculated with equation 6.1, indicates the frequency with that events will occur to produce losses equal or higher than a given loss p . Assuming that the process of occurrence of events in time follows a Poisson process, then it will be possible to calculate the probability that the loss p will be exceeded in a period of time T which is, in the next T years, with the following expression:

$$Pe(p, T) = 1 - e^{-v(p)T} \quad (\text{Eq. 6-4})$$

where $Pe(p, T)$ is the probability that the loss p will be exceeded in the next T years.

6.3 Results from the disaster risk analysis

Applying the analytical formulation described on the CAPRA-GIS platform, the probabilistic risk analysis was carried out on 205 countries, considering both, seismic and tropical cyclone (in terms of wind speed) hazard. In addition to this, results for flooding risk were obtained for 9 countries.

This report was aimed at obtaining risk results in each country for the entirety of the exposed elements in the country which includes the assets for the public and private sectors (national or total risk). Likewise, it is of interest to know the risk to exposed elements in each country; elements whose reconstruction cost would be the responsibility of the government in the case of a disaster. In other words, assets from the public sector that are property of the central government are fiscal goods, as well as those that, however their private characteristic, would need to be reconstructed using public funds because they belong to low income population. In other words, it is important to evaluate risk that falls under governmental responsibility (sovereign or fiscal risk) which should be a reference for ministries of economy and finance for example, among others. This report contributes useful information from the non-explicit contingent disaster liability for the balance in each nation (Marulanda 2013). Figures 6-1 to 6-26 show some of the results from the seismic activity risk and risk from tropical cyclonic winds. An expansion on said results is shown in Annexes 15 and 16. For this purpose the results are expressed in terms of:

- The Average annual loss (AAL) or mean annual loss in monetary units and also relative to the total exposed value of the asset (also known as pure premium or risk technical premium). In probabilistic terms, the AAL is the mathematical mean value of the annual loss.
- Probable maximum loss (PML) for a return period of 250 years. For some countries the PML curve is shown in a graphical way that accounts for catastrophe risk.

Using the main two risk metrics, a series of indicators are generated allowing categorizing and rank countries in terms of the impact (Marulanda 2013). For this purpose, economic flow variables are used to normalize the risk values:

- AAL/GNE: *Average annual loss with respect to the Gross National Expenditure*
- AAL/GFCF: (National) *Average annual loss with respect to the Gross Fixed Capital Formation.*
- AAL/GNS: (Fiscal) *Average annual loss with respect to the Gross National Savings.*
- PML₂₅₀/GDP: *Probable maximum loss with respect to the Gross Domestic Product*
- PML₂₅₀/GNI: *Probable maximum loss with respect to the Gross National Income*

Annexes 20, 21 and 24 show the results and rankings for countries at global level and Small Island Developing States (SIDS) classified by regions and economic development levels, for total risk (National) and sovereign risk (Fiscal) due to seismic activity and tropical cyclone wind.

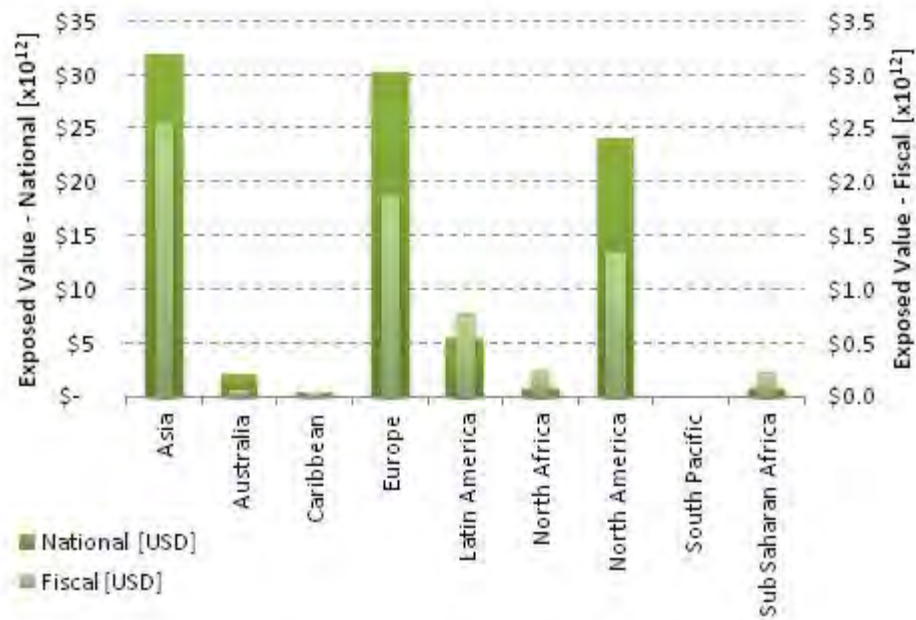


Figure 6-1
Distribution of national and fiscal exposed value by regions

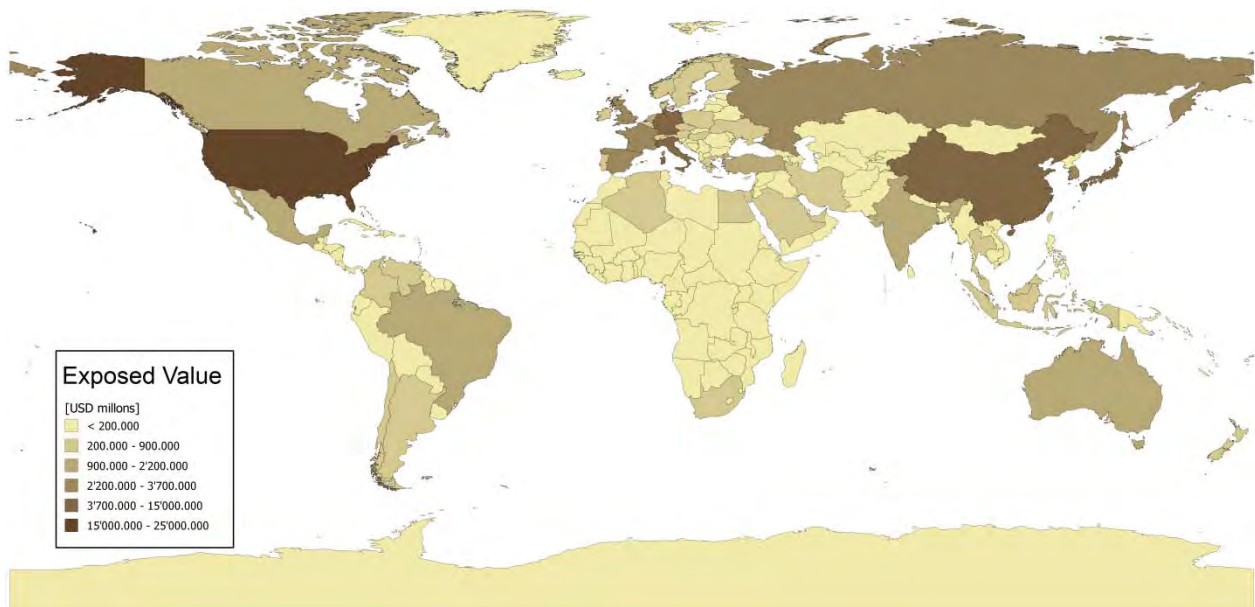


Figure 6-2
 Distribution of national and fiscal exposed value by countries

6.3.1 Seismic risk

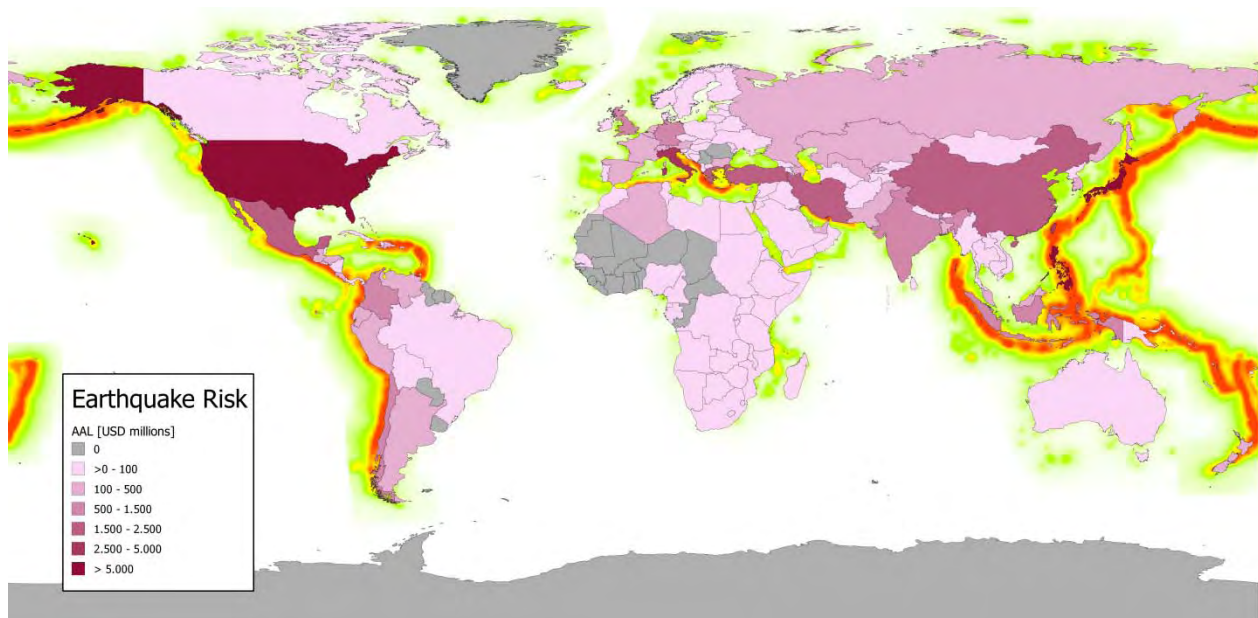


Figure 6-3
 Distribution of AAL from earthquakes by countries

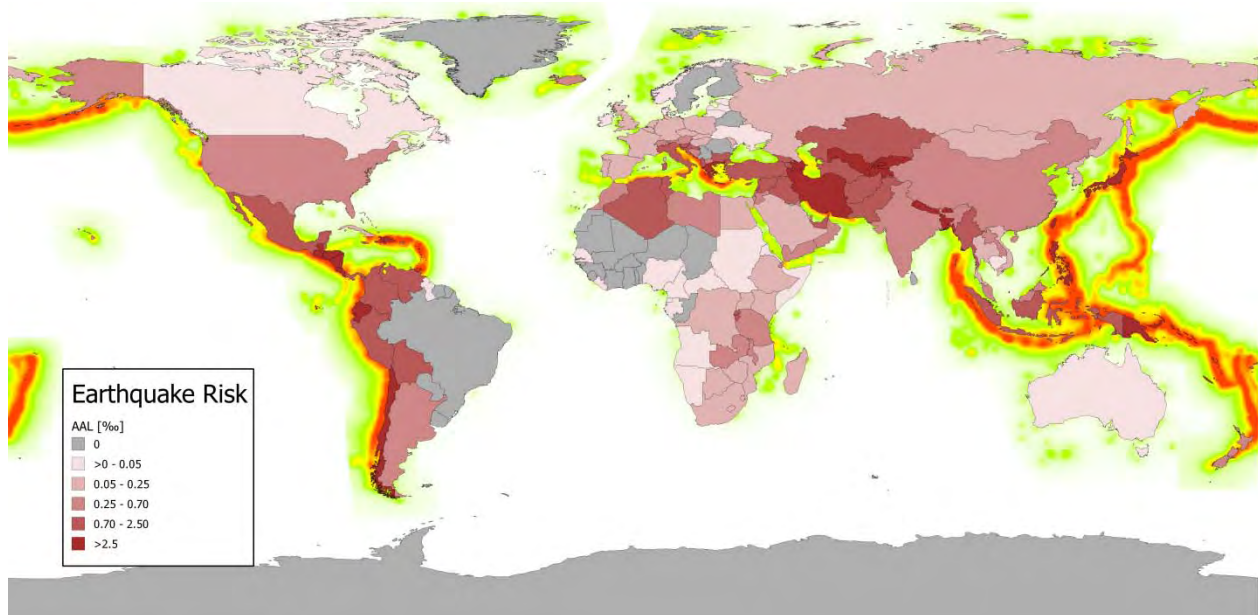


Figure 6-4
 Distribution of AAL from earthquakes relative to the exposed value by countries

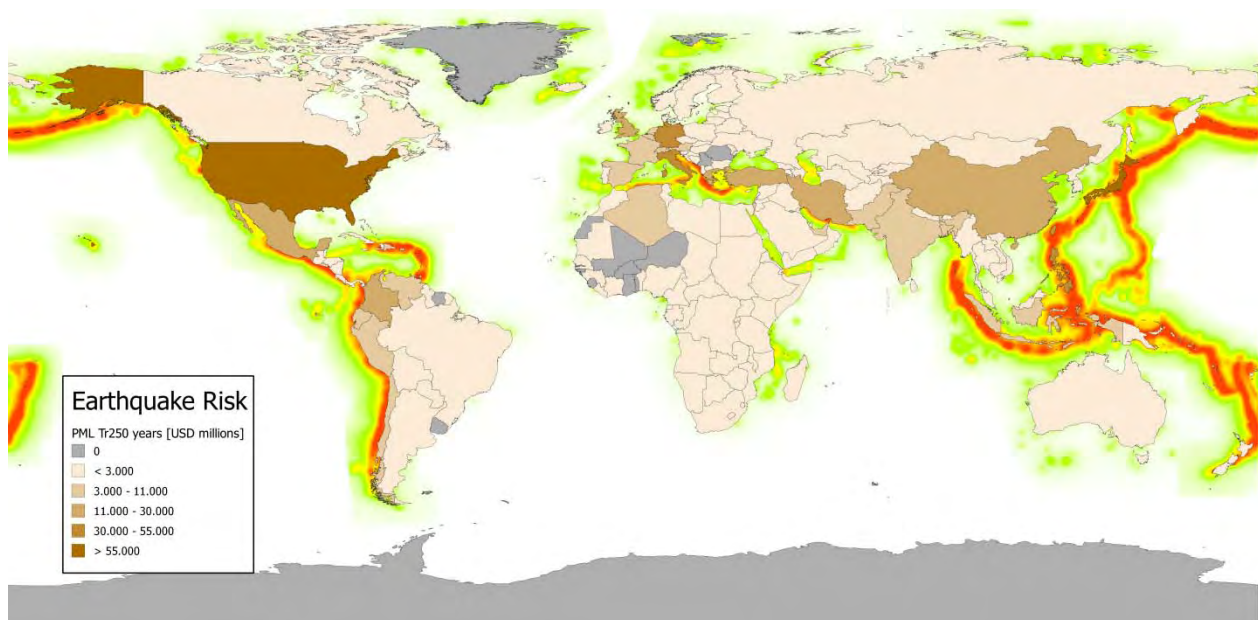


Figure 6-5
 Distribution of PML₂₅₀ from earthquakes by countries

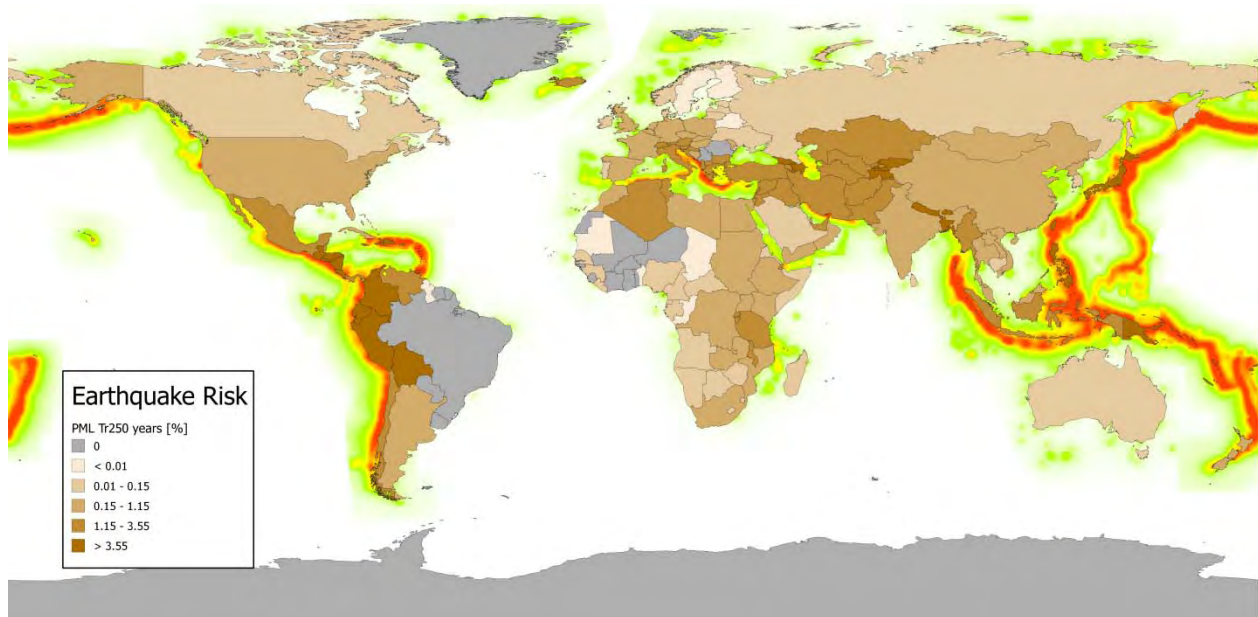


Figure 6-6
 Distribution of PML₂₅₀ from earthquakes relative to the exposed value by countries

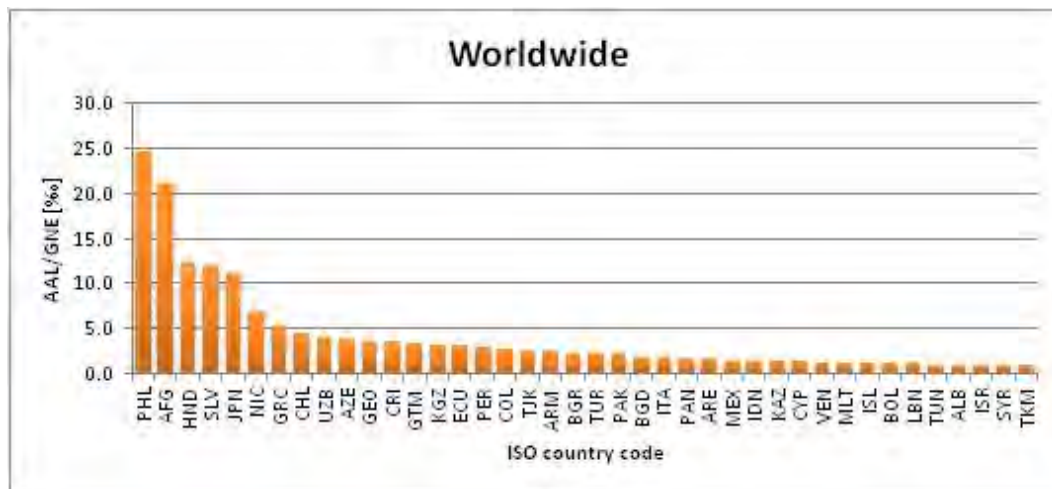


Figure 6-7
 AAL/GNE (National) by countries (Earthquakes)

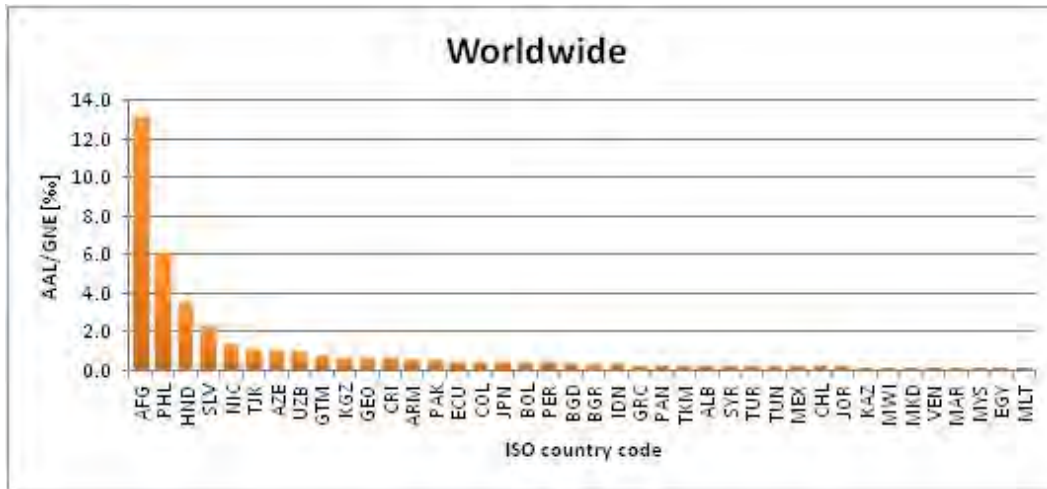


Figure 6-8
AAL/GNE (Fiscal) by countries (Earthquakes)

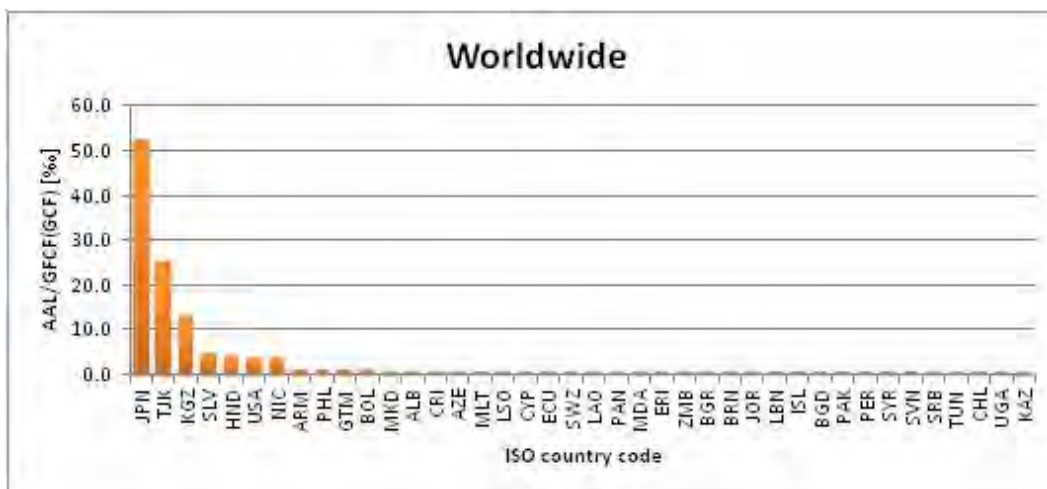


Figure 6-9
AAL/ GFCF (National) by countries (Earthquakes)

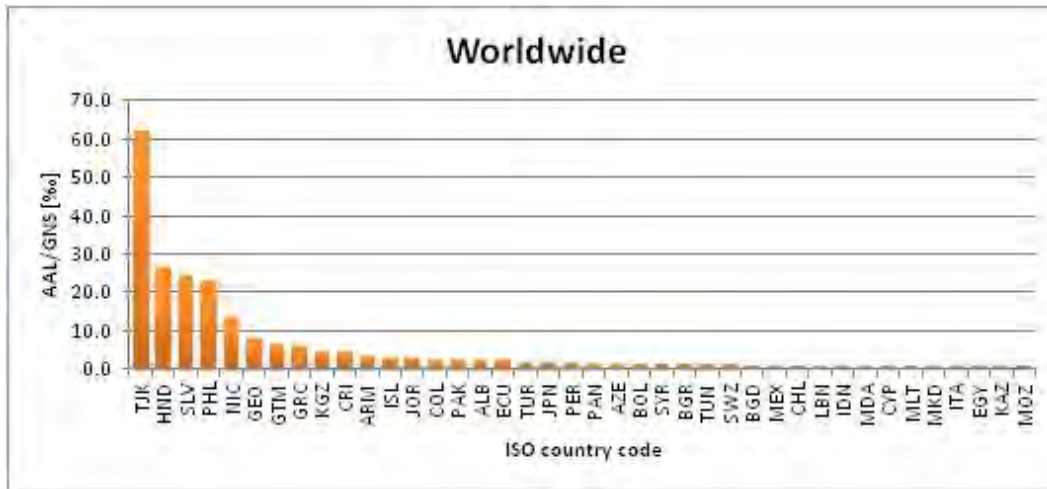


Figure 6-10
AAL/GNS (Fiscal) by countries (Earthquakes)

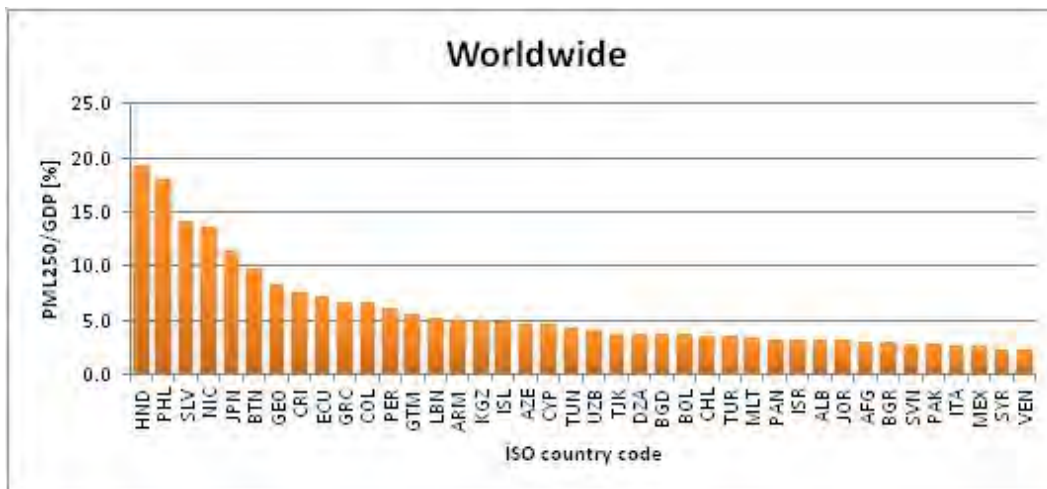


Figure 6-11
PML/ GDP (National) by countries (Earthquakes)

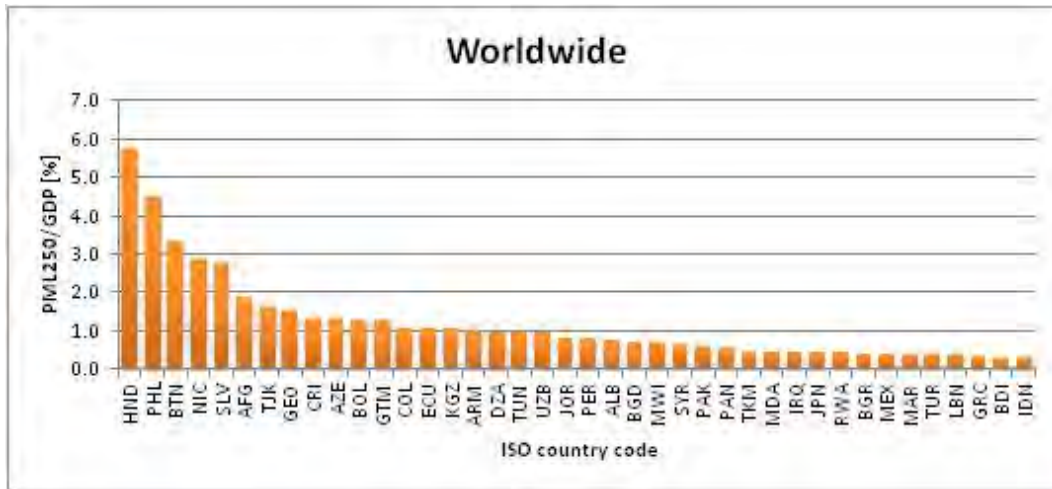


Figure 6-12
PML/ GDP (Fiscal) by countries (Earthquakes)

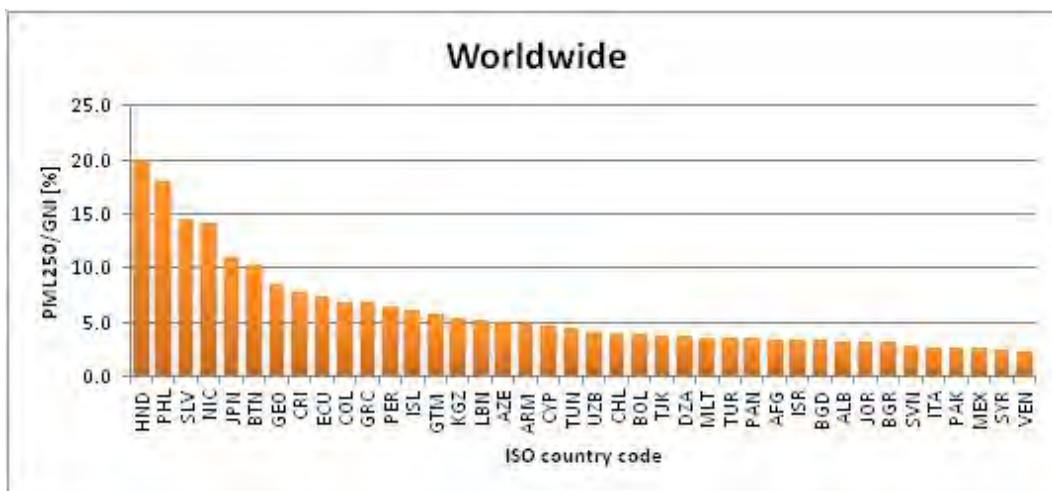


Figure 6-13
PML/ GNI (National) by countries (Earthquakes)

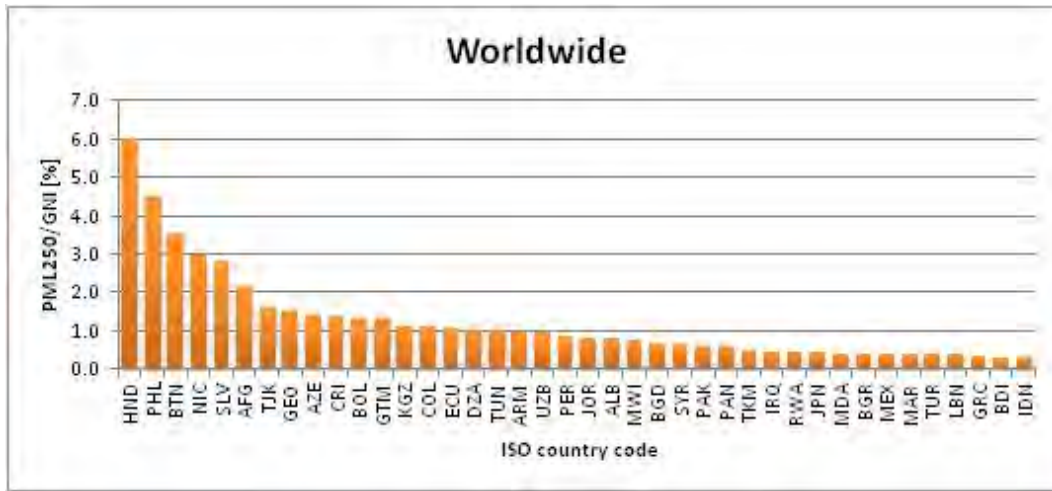


Figure 6-14
PML/ GNI (Fiscal) by countries (Earthquakes)

6.3.2 Tropical cyclone risk (wind speed)

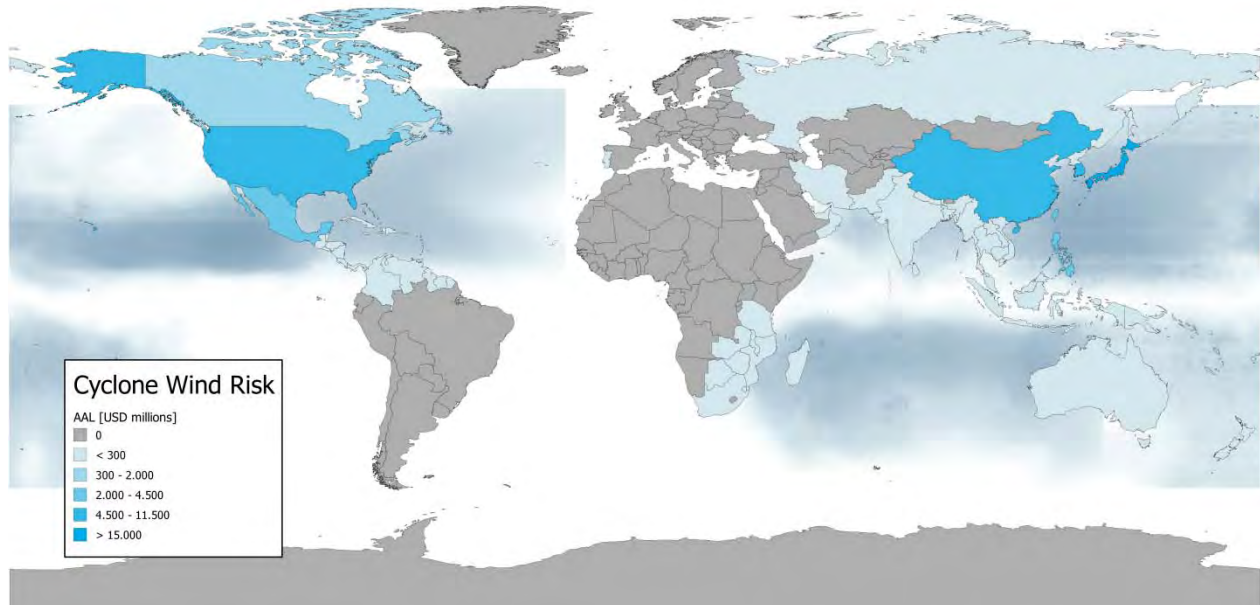


Figure 6-15
 Distribution of national AAL from tropical cyclones (wind) by countries

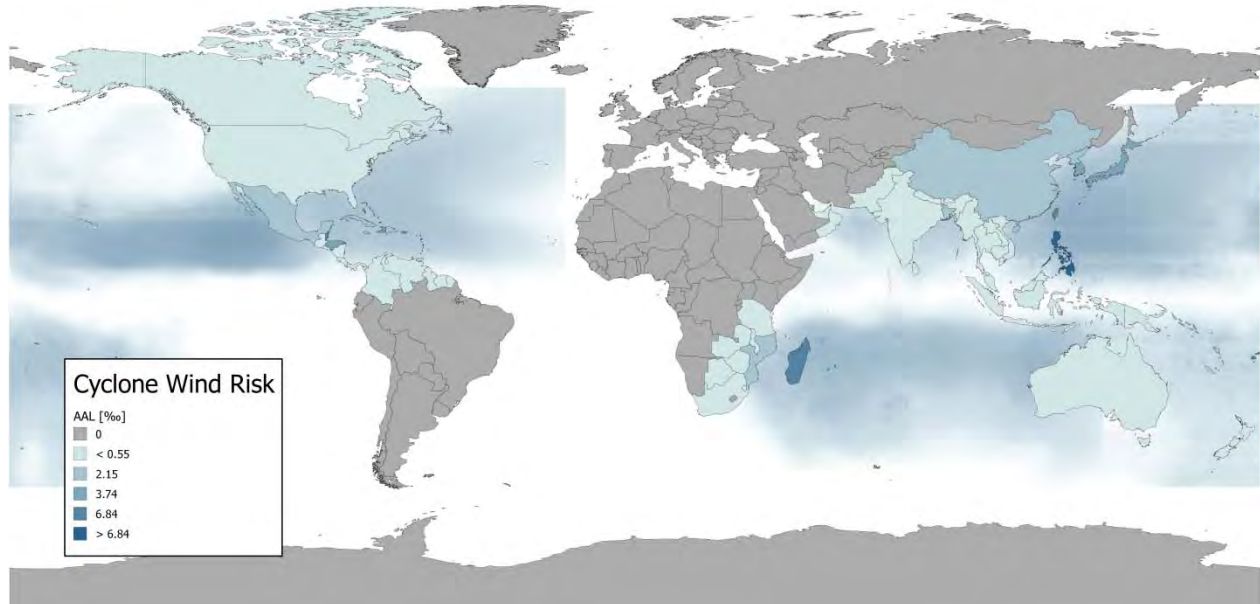


Figure 6-16
 Percentage of national AAL relative to the exposed value to tropical cyclones (wind) by countries

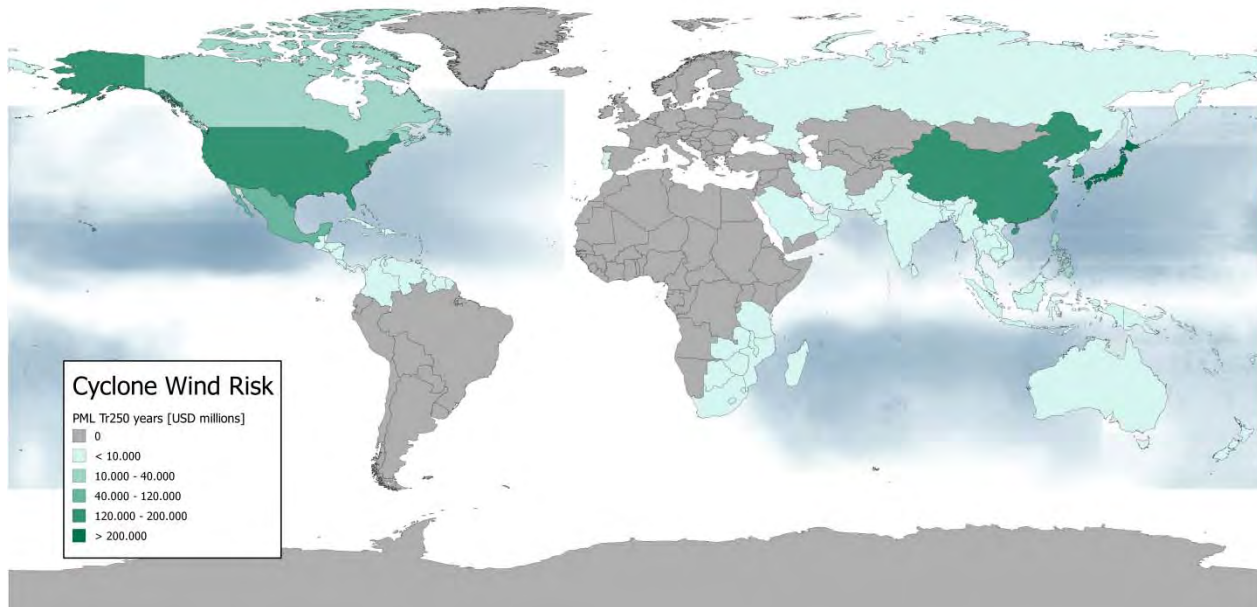


Figure 6-17
Distribution of national PML₂₅₀ from tropical cyclones (wind) by countries

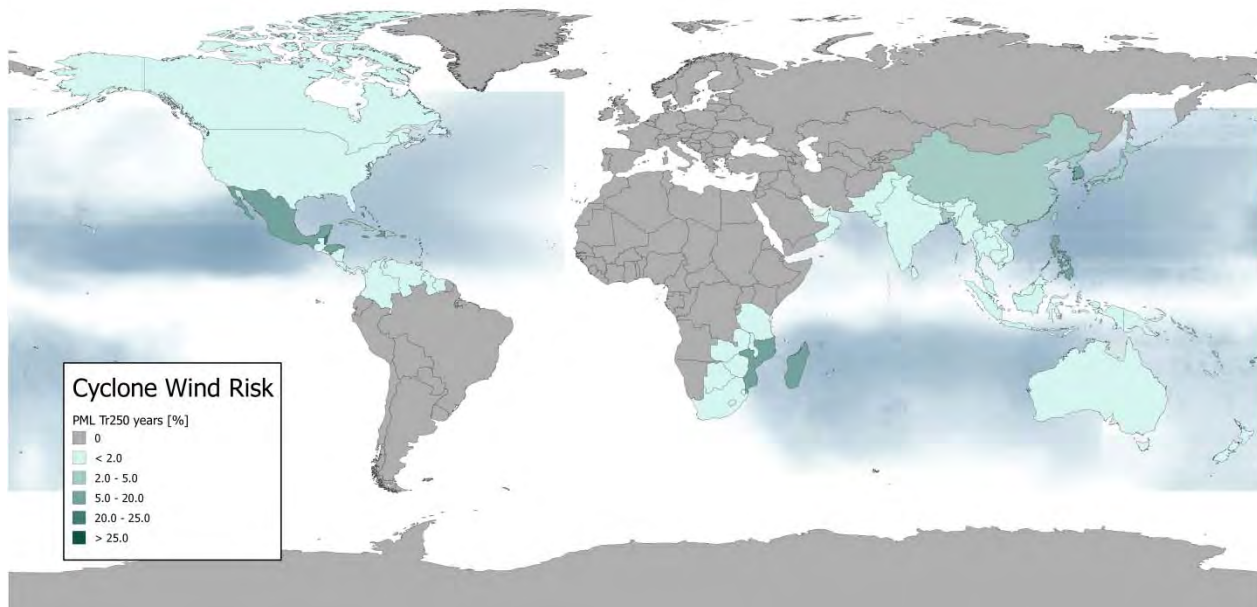


Figure 6-18
Percentage of national PML₂₅₀ relative to the exposed value to tropical cyclones (wind) by countries

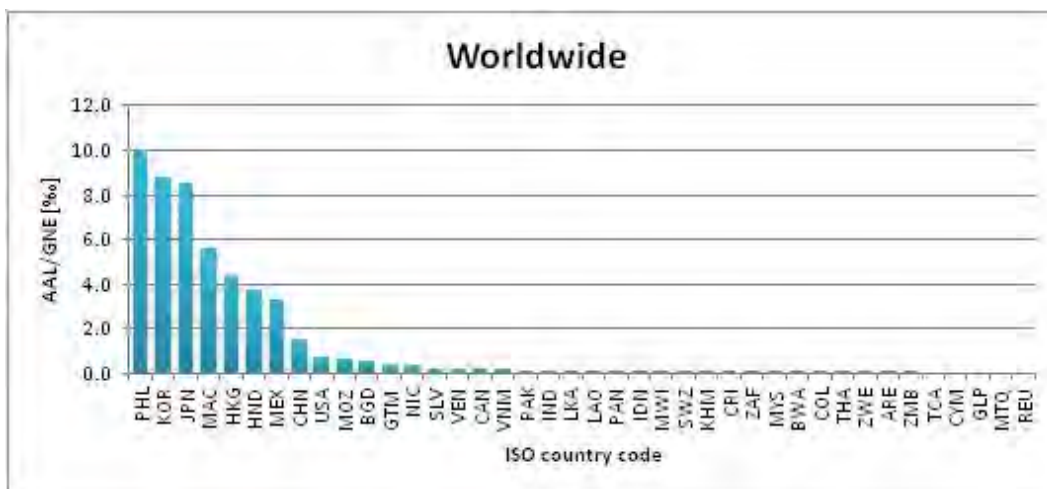


Figure 6-19
AAL/GNE (National) by countries (Cyclonic wind)

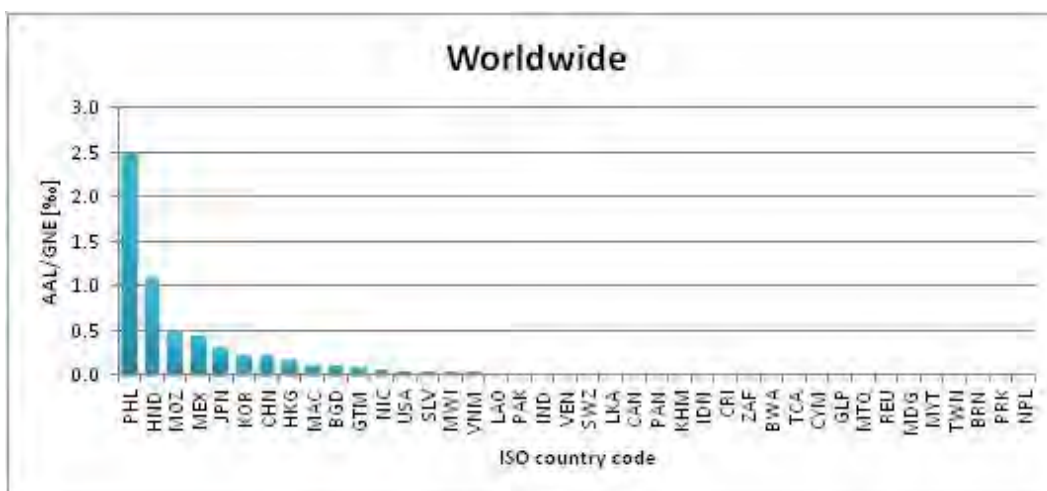


Figure 6-20
AAL/GNE (Fiscal) by countries (Cyclonic wind)

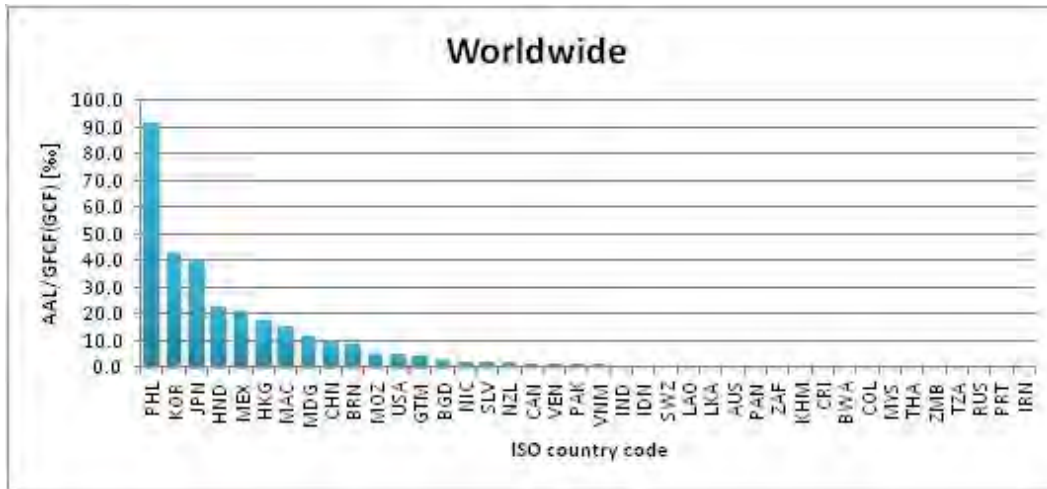


Figure 6-21
 AAL/GFCF (National) by countries (Cyclonic wind)

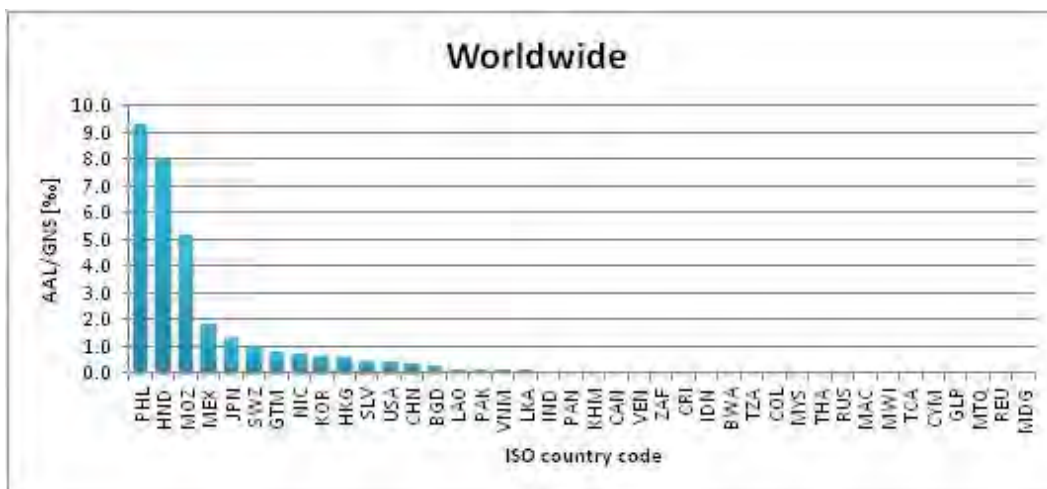


Figure 6-22
 AAL/GNS (Fiscal) by countries (Cyclonic wind)

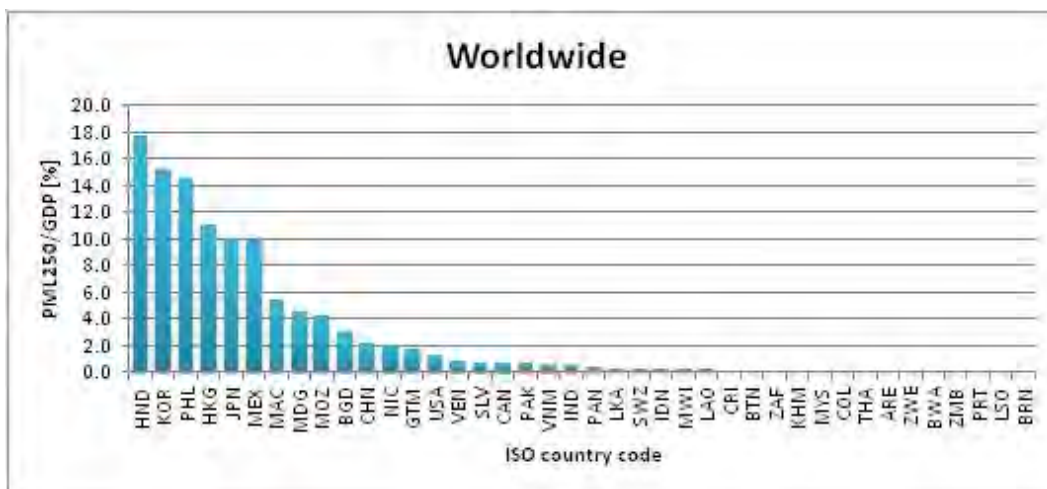


Figure 6-23
 PML/GDP (National) by countries (Cyclonic wind)

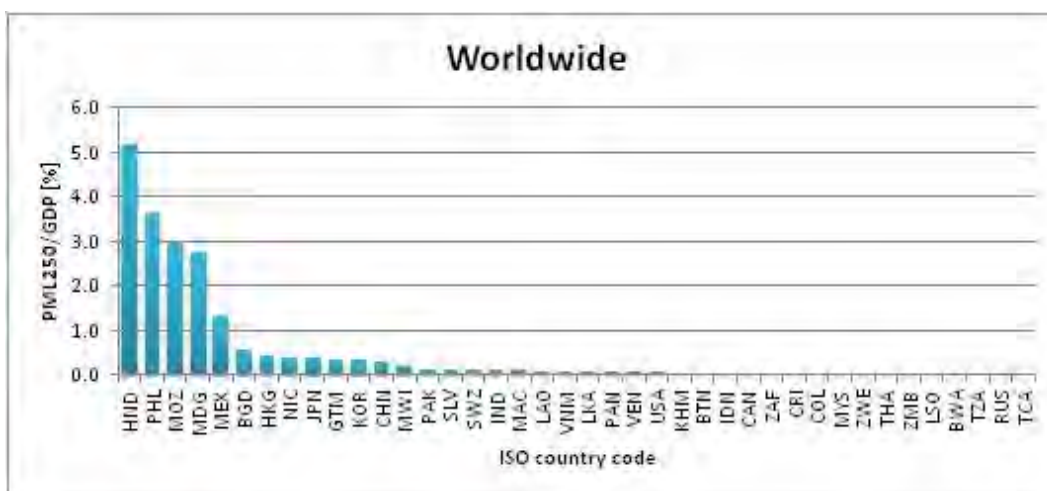


Figure 6-24
 PML/GDP (Fiscal) by countries (Cyclonic wind)

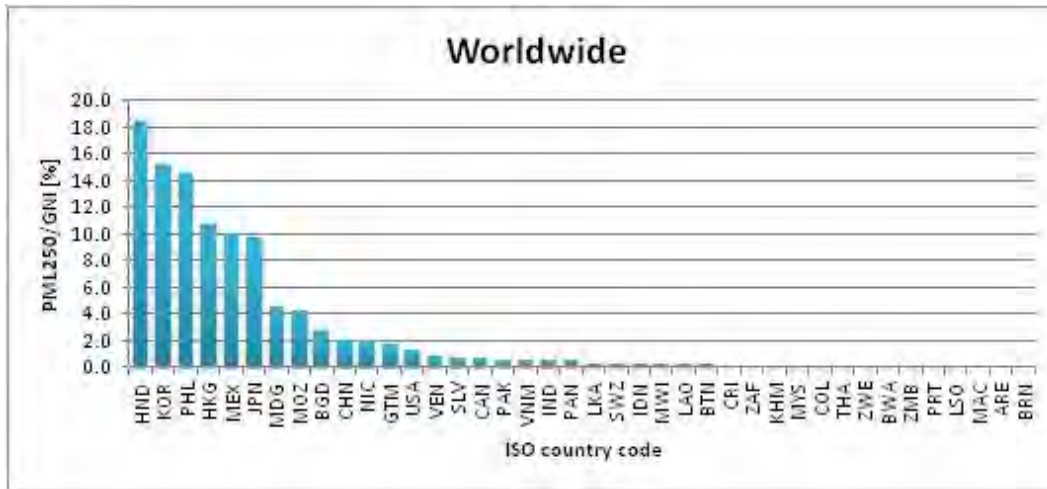


Figure 6-25
 PML/GNI (National) by countries (Cyclonic wind)

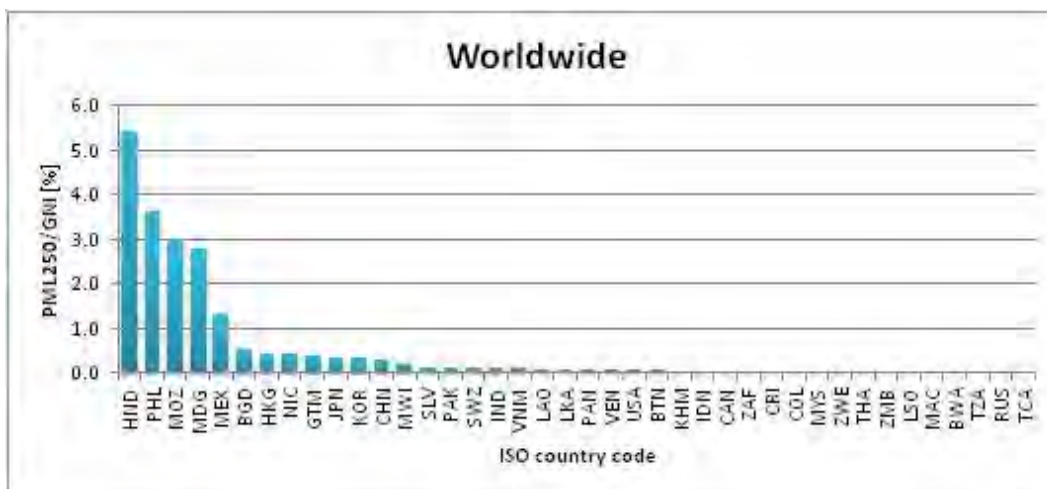


Figure 6-26
 PML/GNI (Fiscal) by countries (Cyclonic wind)

6.3.3 Loss exceedance curves

Figures 6-27 to 6-45 present the loss exceedance curves (LEC) for 19 countries around the globe. These results are presented in a separate way for the seismic and tropical cyclone (wind) hazards as well as the added results for those. With that approach, the contribution to the total risk level of each hazard can be visualized.

In the following figures the loss is presented in absolute terms and also as punctual loss values relative to the total exposed value of each country (produced stock) for 4 different return periods.

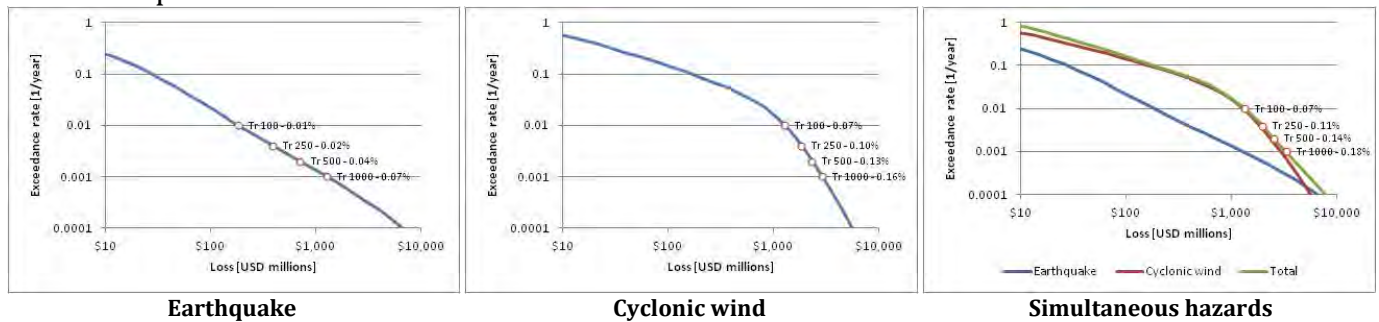


Figure 6-27 Loss exceedance curves for Australia

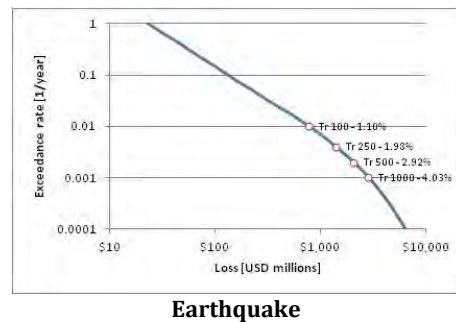


Figure 6-28 Loss exceedance curve for Bulgaria

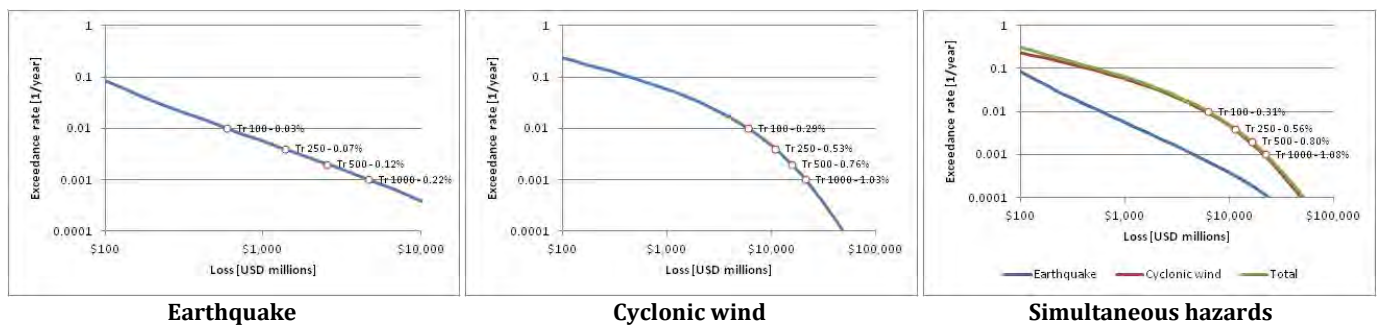
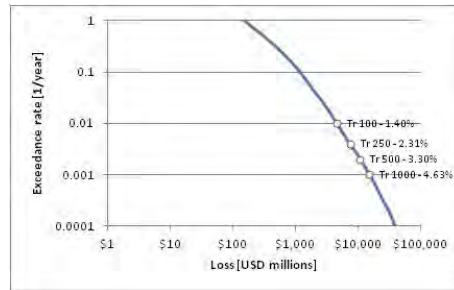
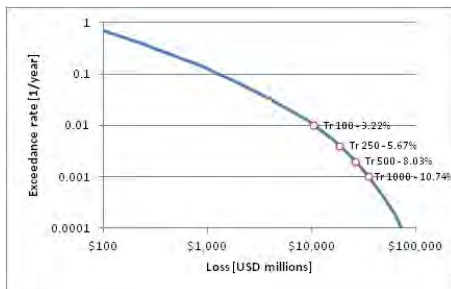


Figure 6-29 Loss exceedance curves for Canada

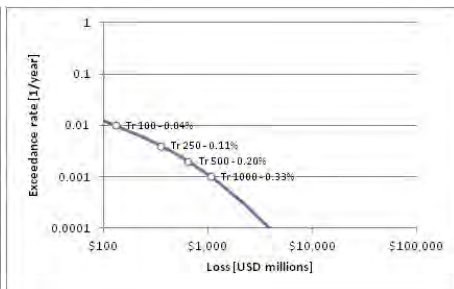


Earthquake

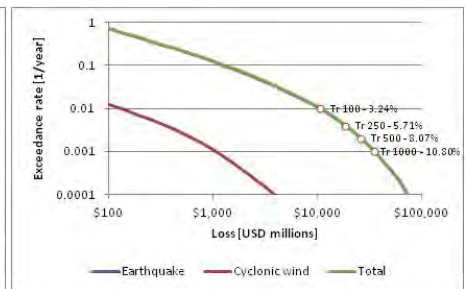
Figure 6-30 Loss exceedance curve for Chile



Earthquake

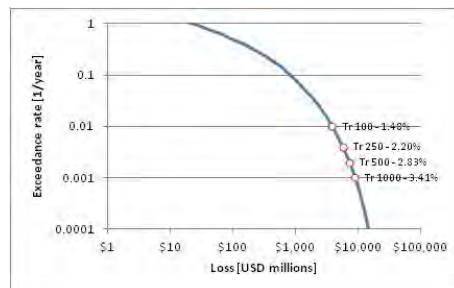


Cyclonic wind



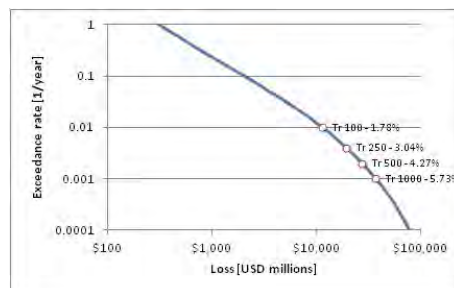
Simultaneous hazards

Figure 6-31 Loss exceedance curves for Colombia



Earthquake

Figure 6-32 Loss exceedance curve for Algeria



Earthquake

Figure 6-33 Loss exceedance curve for Greece

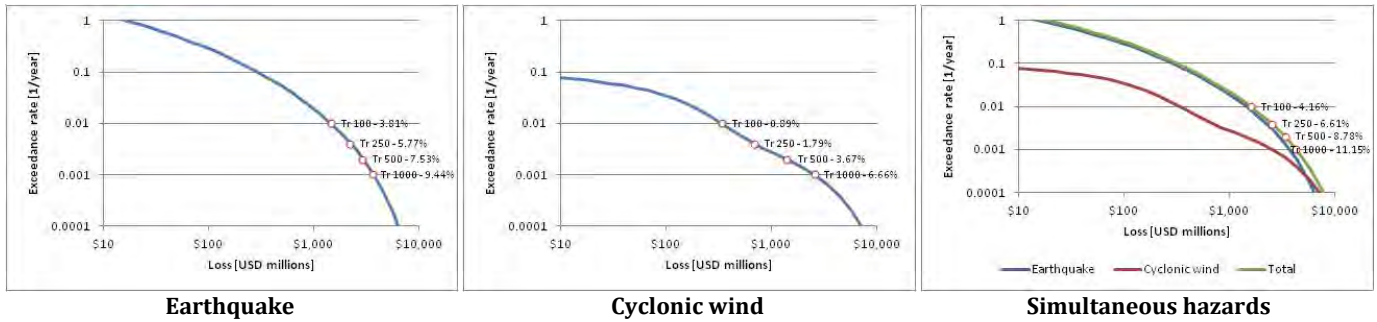


Figure 6-34 Loss exceedance curves for Guatemala

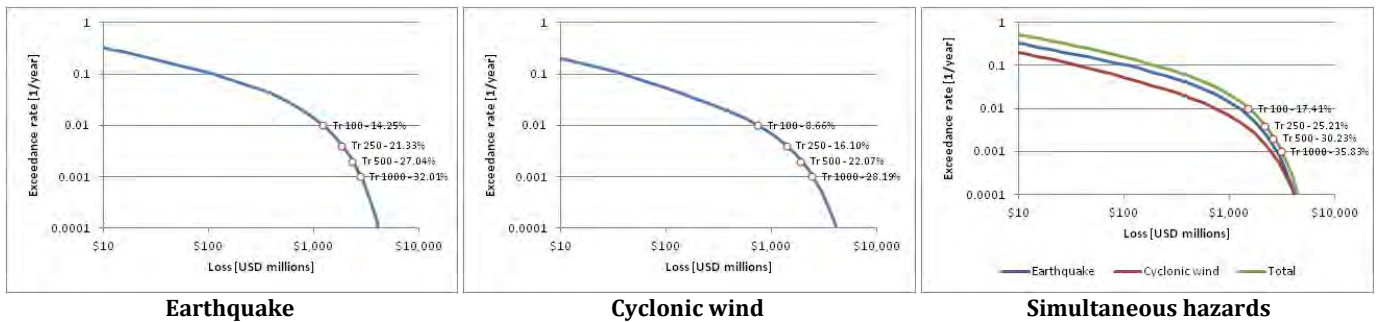


Figure 6-35 Loss exceedance curves for Haiti

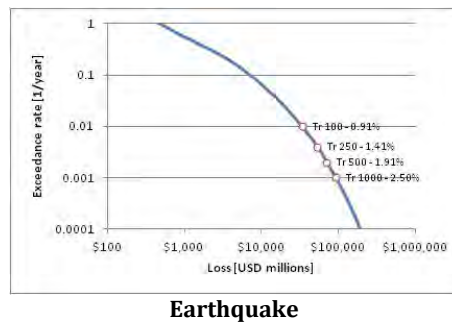


Figure 6-36 Loss exceedance curve for Italy

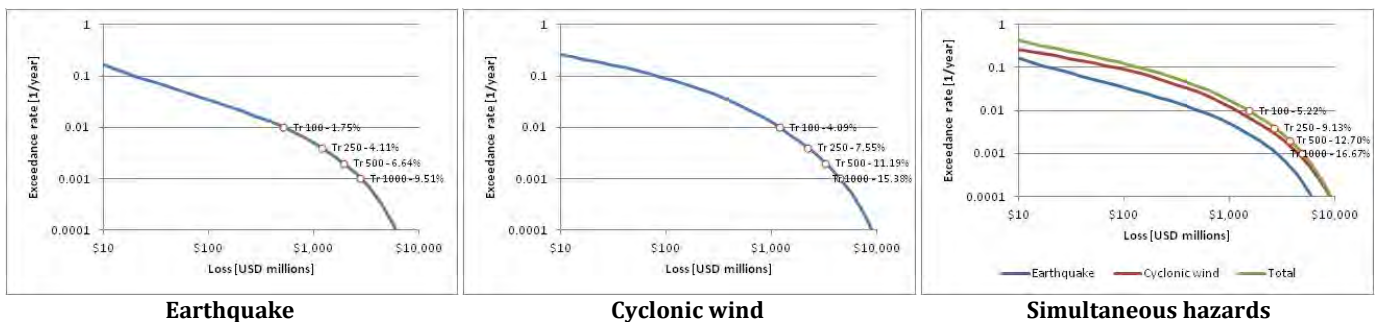
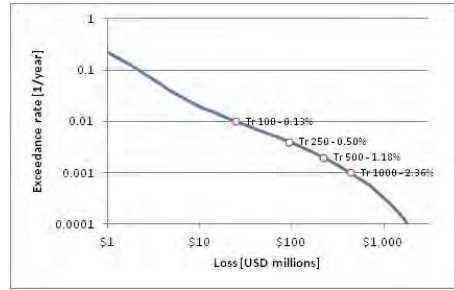
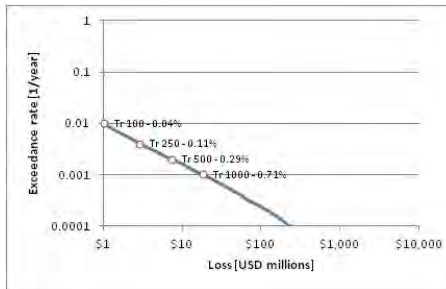


Figure 6-37 Loss exceedance curves for Jamaica



Earthquake

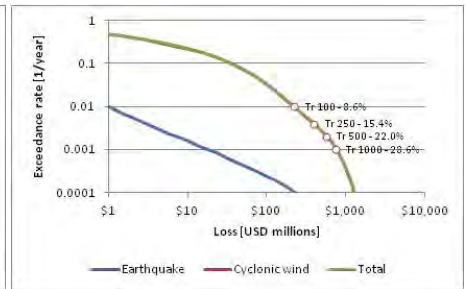
Figure 6-38 Loss exceedance curve for Kenya



Earthquake

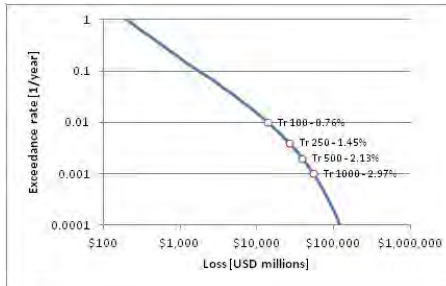


Cyclonic wind

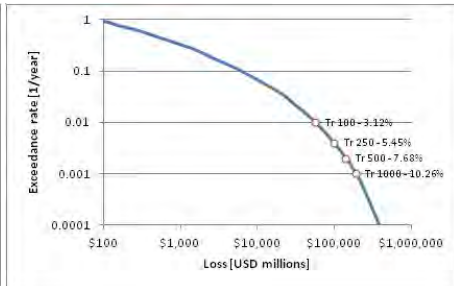


Simultaneous hazards

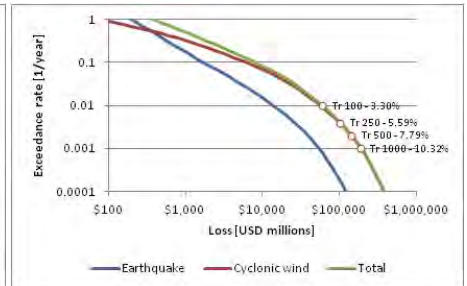
Figure 6-39 Loss exceedance curves for Madagascar



Earthquake

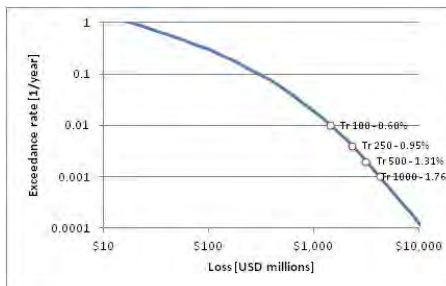


Cyclonic wind

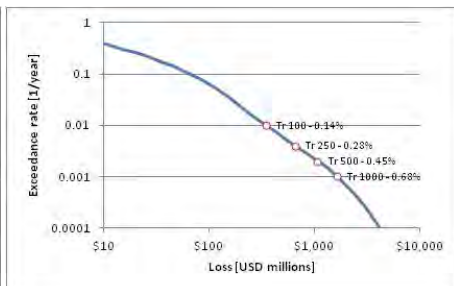


Simultaneous hazards

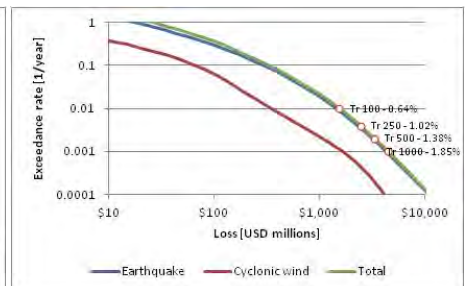
Figure 6-40 Loss exceedance curves for Mexico



Earthquake



Cyclonic wind



Simultaneous hazards

Figure 6-41 Loss exceedance curves for New Zealand

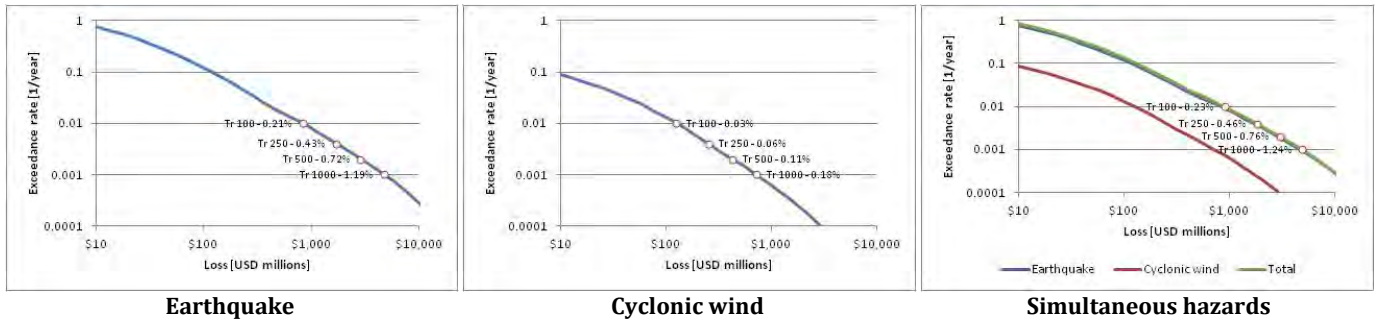


Figure 6-42 Loss exceedance curves for Thailand

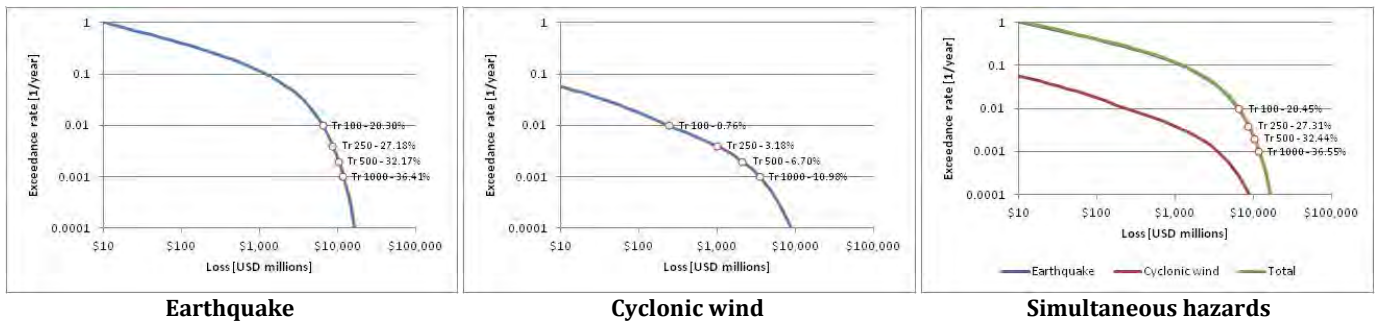


Figure 6-43 Loss exceedance curves for Trinidad & Tobago

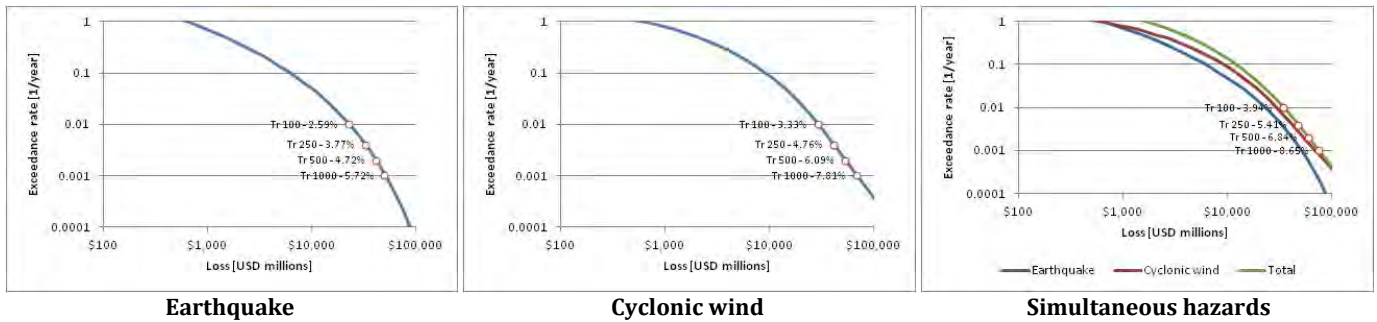


Figure 6-44 Loss exceedance curves for Taiwan

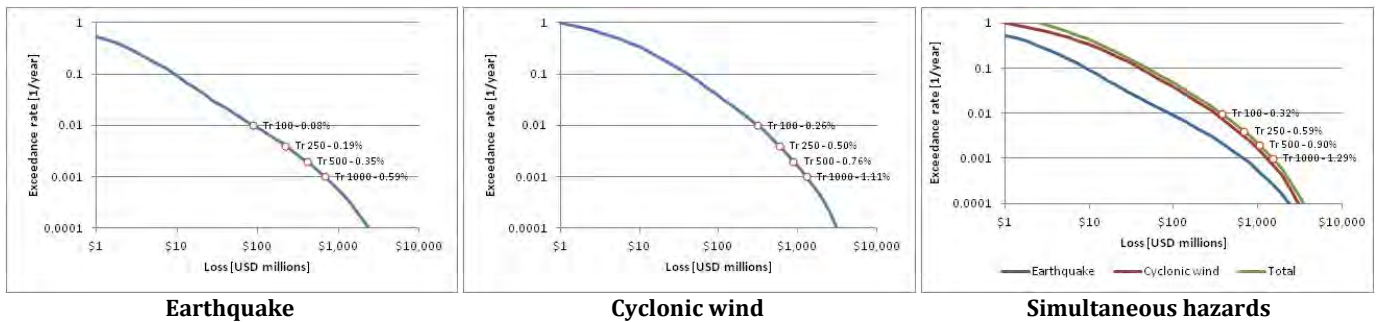


Figure 6-45 Loss exceedance curves for Vietnam

6.3.4 Flooding risk

In Table 6-1 the punctual risk estimators are shown (AAL and PML for 250 years return period) for countries where hazard flooding was calculated. In the case of the ponding hazard modeling, losses for 9 countries in the Caribbean were calculated. Due to the fact that the other islands did not hold enough information to be included in the global exposure database, this study was carried out in a demonstrative way using the CAPRA-GIS and is it hoped that it will be carried out in a more extensive way for GAR 2015.

Table 6-1
Results from the flood risk assessment

Country	Code	Flooding type	Exposed value (\$USD x 10 ⁶)	AAL (\$USD x 10 ⁶)	AAL ‰	PML 250 years (\$USD x 10 ⁶)	PML 250 years %
Anguilla	AIA	Ponding	\$ 20	\$ 0.0	0.00	\$ 0.0	0.00
Barbados	BRB	Ponding	\$ 4,677	\$ 1.9	0.41	\$ 14.0	0.30
Guadeloupe	GLP	Ponding	\$ 19,838	\$ 4.8	0.24	\$ 49.2	0.25
Grenada	GRD	Ponding	\$ 1,229	\$ 0.2	0.16	\$ 1.1	0.09
Martinique	MTQ	Ponding	\$ 21,052	\$ 2.1	0.10	\$ 20.5	0.10
Puerto Rico	PRI	Ponding	\$ 135,818	\$ 21.4	0.16	\$ 214.5	0.16
Trinidad and Tobago	TTO	Ponding	\$ 31,370	\$ 4.1	0.13	\$ 20.9	0.07
British Virgin Islands	VGB	Ponding	\$ 424	\$ 0.0	0.00	\$ 0.3	0.07
US Virgin Islands	VIR	Ponding	\$ 1,755	\$ 0.1	0.06	\$ 1.4	0.08
Thailand	THA	River overflow	\$ 394,598	\$ 3,981.8	10.09	-	-

The risk of flooding for river overflow was assessed for the rivers in Thailand. This study was also used as a test within the framework of this risk analysis on a global scale using the algorithm that allowed obtaining only the average annual loss based on the curve of probability of exceeding certain flooding depth.

Annex 23 describes the analytical process that was carried out for calculating the risk of flooding in the 9 countries of the Caribbean as well as Thailand.

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ANNEX 1. DIVISION OF EARTH'S SURFACE IN SEISMOTECTONIC PROVINCES AND ASSIGNATION OF MAXIMUM MAGNITUDE

Most of the Earth's seismicity is concentrated along plate boundaries. The hypocenters and focal mechanisms of earthquakes define the location and the nature of the plate interfaces. There is also seismicity in the interior of the plates, away from the plate boundaries including events that occur in the interior of the subducting plates. Of special importance in seismic hazard are the crustal earthquakes in continental plates which often occur far away from the plate boundaries.

Clearly, the division of Earth's surface in seismotectonic provinces for the purpose of seismic hazard estimation must be based on the knowledge of the plate boundaries, the seismicity and focal mechanisms, and geological mapping of active faults. In our task of dividing of the Earth's surface in seismotectonic provinces, we made use of the following basic tools:

a) Global Centroid Moment Tensor (GCMT) Catalog

We obtained the digital catalog of Global Centroid Moment Tensor (GCMT) (<http://www.globalcmt.org>) for earthquakes during the period 1976-2010. This is the most complete moment tensor catalog. It consists of ~34,000 earthquakes with magnitudes M_w between 4.3 and 9.0. A simple analysis of the catalog suggests it is probably complete for $M_w \geq 5.3$ (Figure A1-1). The focal mechanisms obtained from the catalog were critical in elucidating the seismotectonics of different regions.

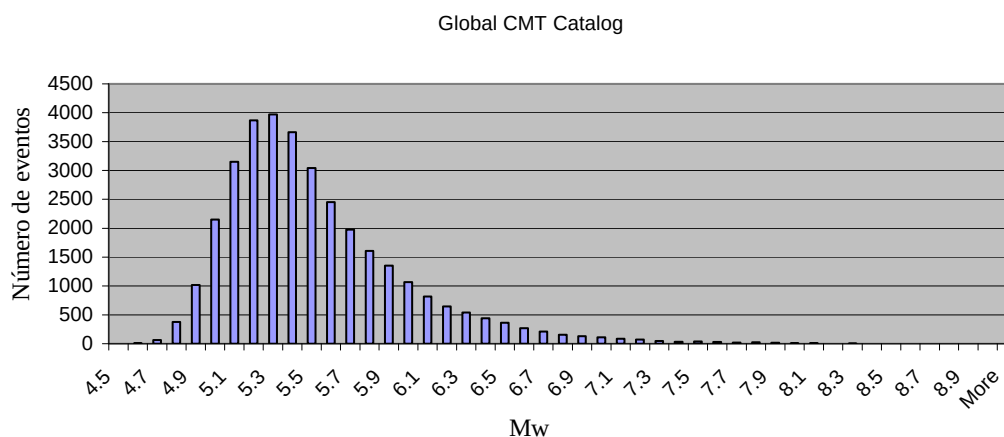


Figure A1-1
Magnitudes distribution of earthquakes in the GCMT catalog

b) Division of the Earth's surface in 50 Flinn and Engdhal seismic regions

We followed Flinn and Engdhal's (1965) division of the globe in 50 regions. This division was proposed on the basis characteristics of the seismicity (see, also, Flinn et al., 1974; Young et al., 1997). Figure A1-2 shows the seismic regions.

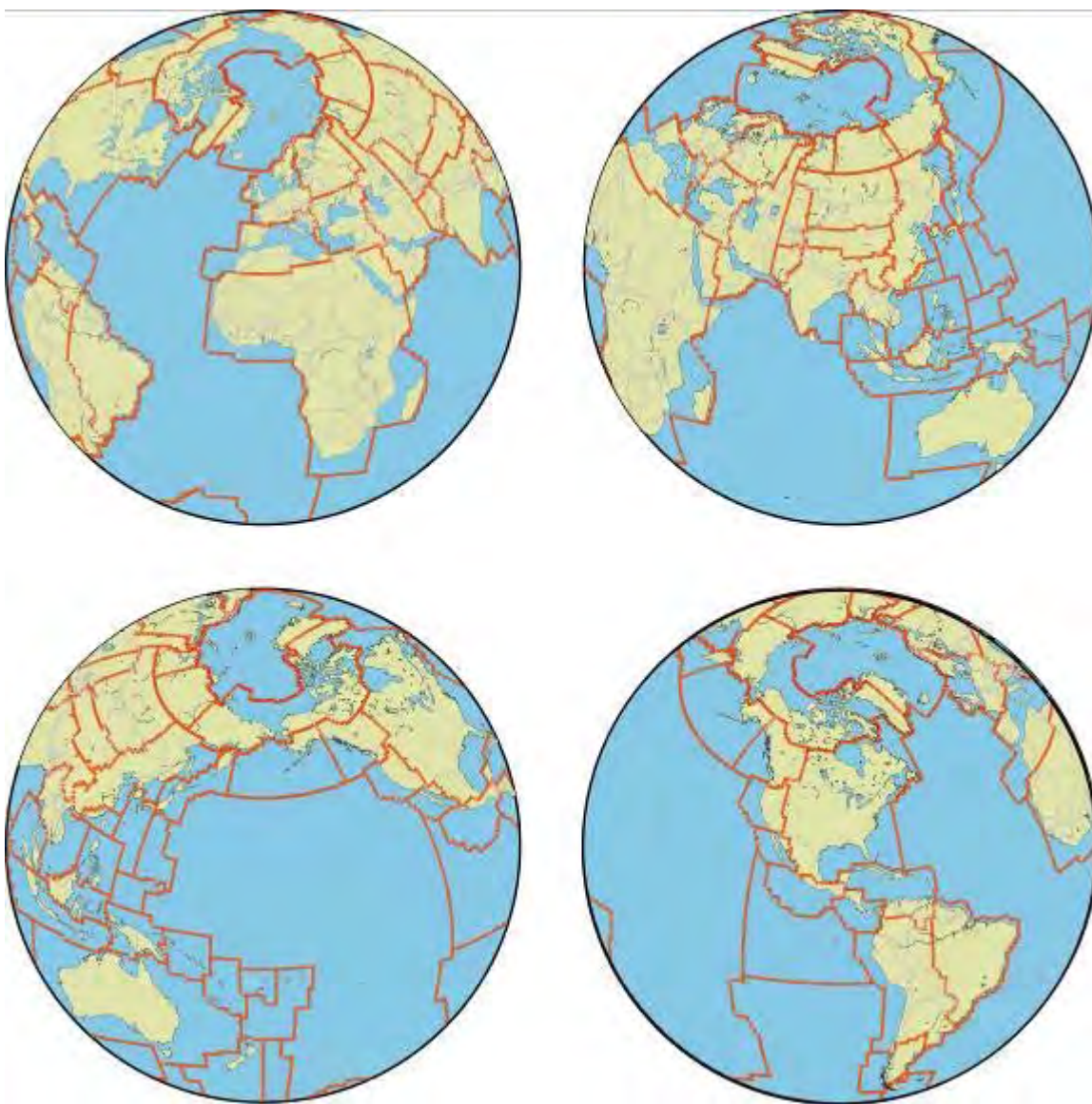


Figure A1-2
Flinn and Engdahl (1965) seismic regions.

(c) National Earthquake Information Center (NEIC), U.S. Geological Survey Catalog

This catalog has more earthquakes (~150,000) than the GCMT catalog (~34,000) since it includes earthquakes of smaller magnitude. This catalog complements the GCMT catalog in delineating the seismotectonic provinces.

A1.1 Procedure

1. We plotted focal mechanisms of all earthquakes reported in Global Centroid Moment Tensor (GCMT) catalog on maps using colors to denote the depth of the events. In this way, we produced 50 maps, each corresponding to one of the Flinn-Engdahl regions. In these maps we include general tectonic features of the region.
2. Maps were carefully analyzed and, based on seismotectonics of the region, and focal mechanisms and depths of the earthquakes, we constructed polygons to delineate the seismotectonic provinces. Based on the same information, we assigned a depth range to each province. Often the same polygon in different depth range defines different provinces. If needed, we modified the area of the polygon so as to accommodate the seismicity reported in both catalogs. X,Y data and its characteristics for each polygon were compiled in a Geographical Information System (GIS) for further processing.
3. Earthquakes in each province volume (prism) were assigned to one of the following types:
 - a) Interplate Subduction Thrust
 - b) Intralab in the Subducting Plate
 - c) Stable Continental
 - d) Active Crustal
 - e) Strike Slip
 - f) Off Shore

This classification of the provinces is essential to apply appropriate ground motion prediction equation in computing seismic hazard.

4. Finally the compiled data was analyzed for consistency and borders were adjusted according to the National Earthquake Information Center (NEIC) catalog.

A1.2 An Example

As an example, we illustrate the procedure followed for Region 5 of Flinn and Engdahl. Figure A1-3 shows focal mechanisms from the GCMT catalog plotted on a map of the region. These mechanisms are color coded to indicate depth. Figure A1-4 is an enlarged view of the region. A working map of the region, used in the delineation of the seismotectonic provinces based GCMT focal mechanisms, NEIC epicenters, and prior knowledge of seismotectonics from publications, is illustrated in Figure A1-5. This step is facilitated and

improved by simultaneously working with the map in Figure A1-6 showing NEIC epicenters. The final division of the region in seismotectonic provinces is illustrated in Figure A1-7.

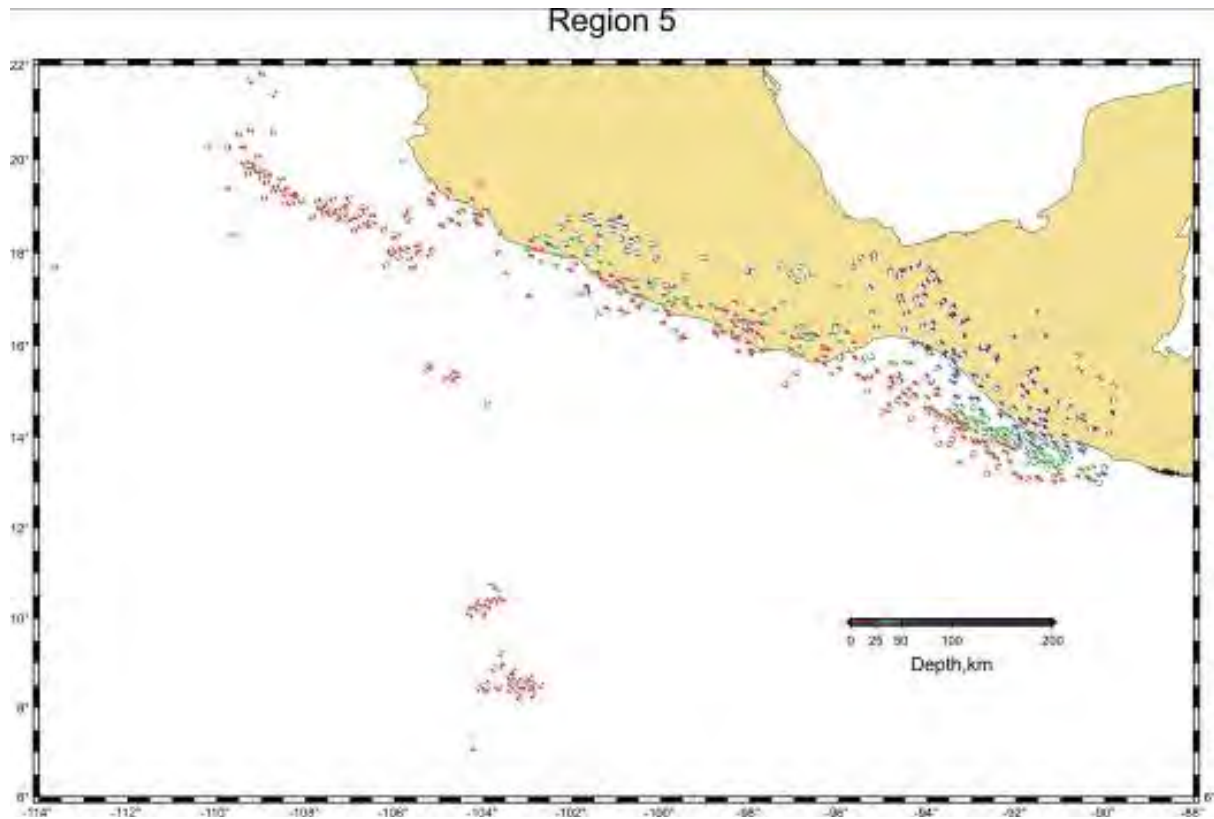


Figure A1-3
 Map which includes Region 5 along with focal mechanisms from GCMT catalog.

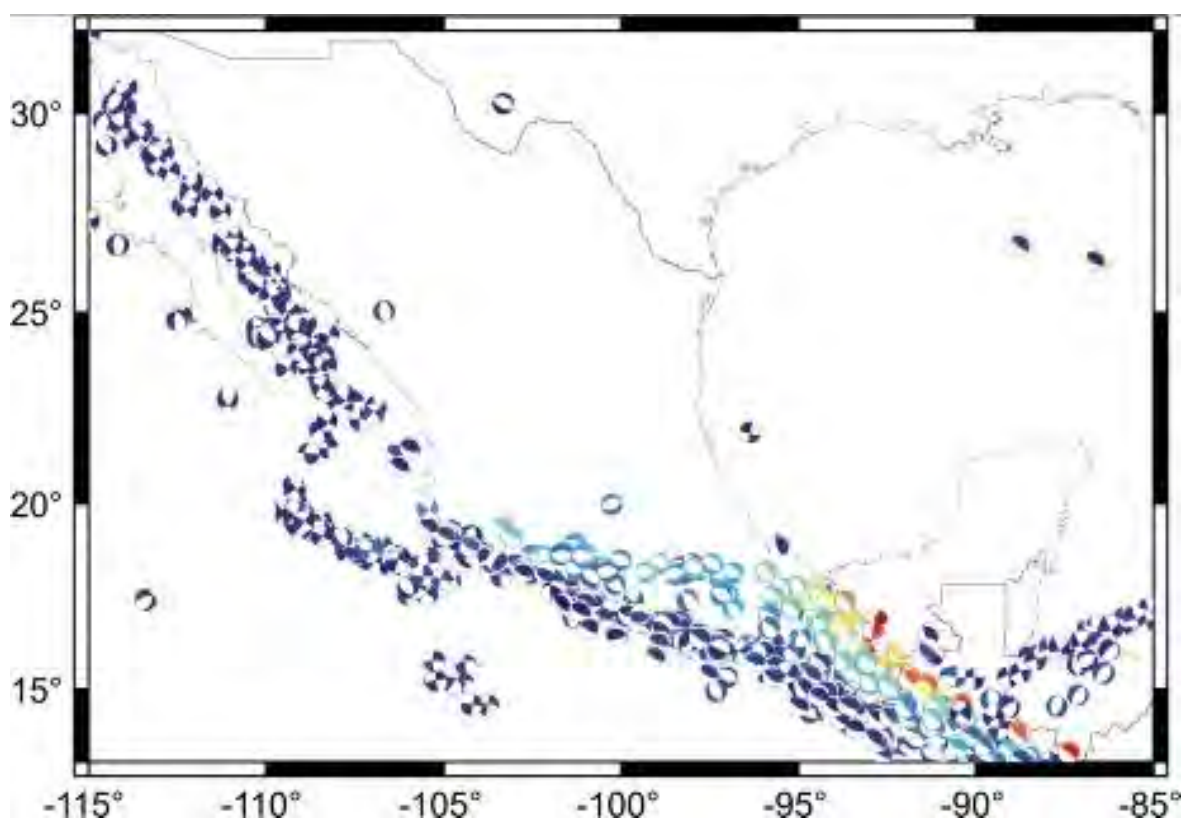


Figure A1-4
A close up of the map shown in Figure 3

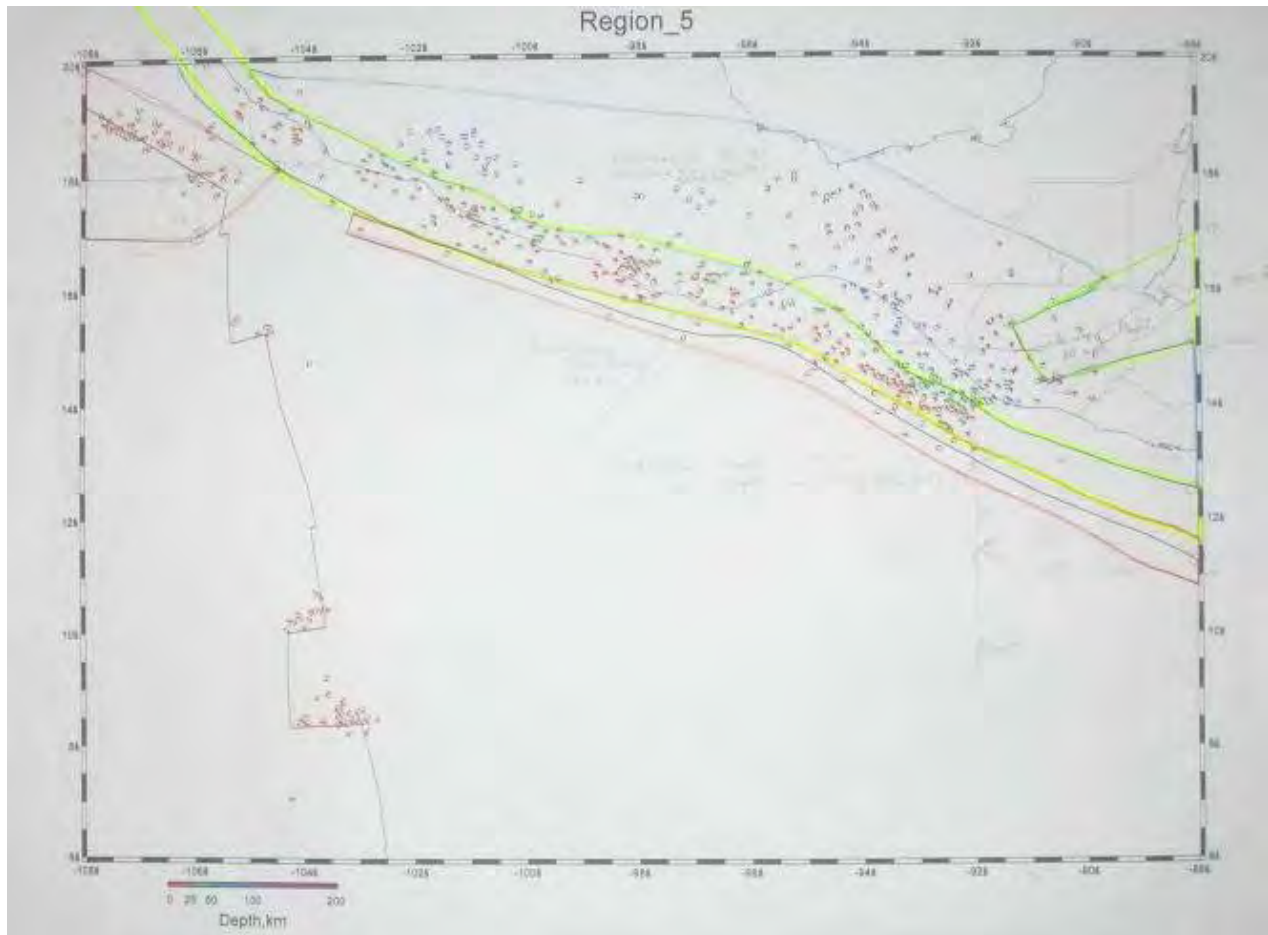


Figure A1-5
A working map Region 5 on which the seismotectonic provinces are marked

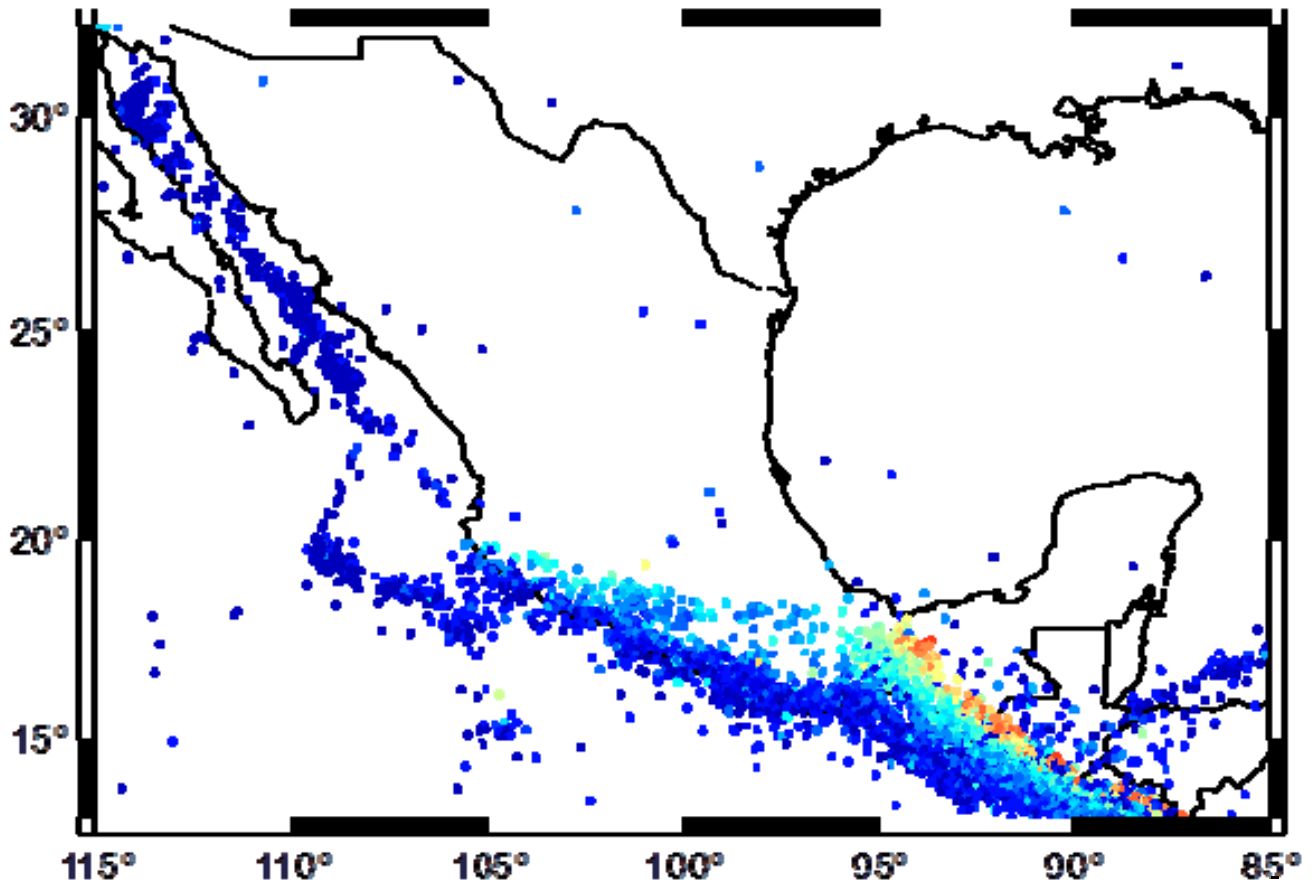
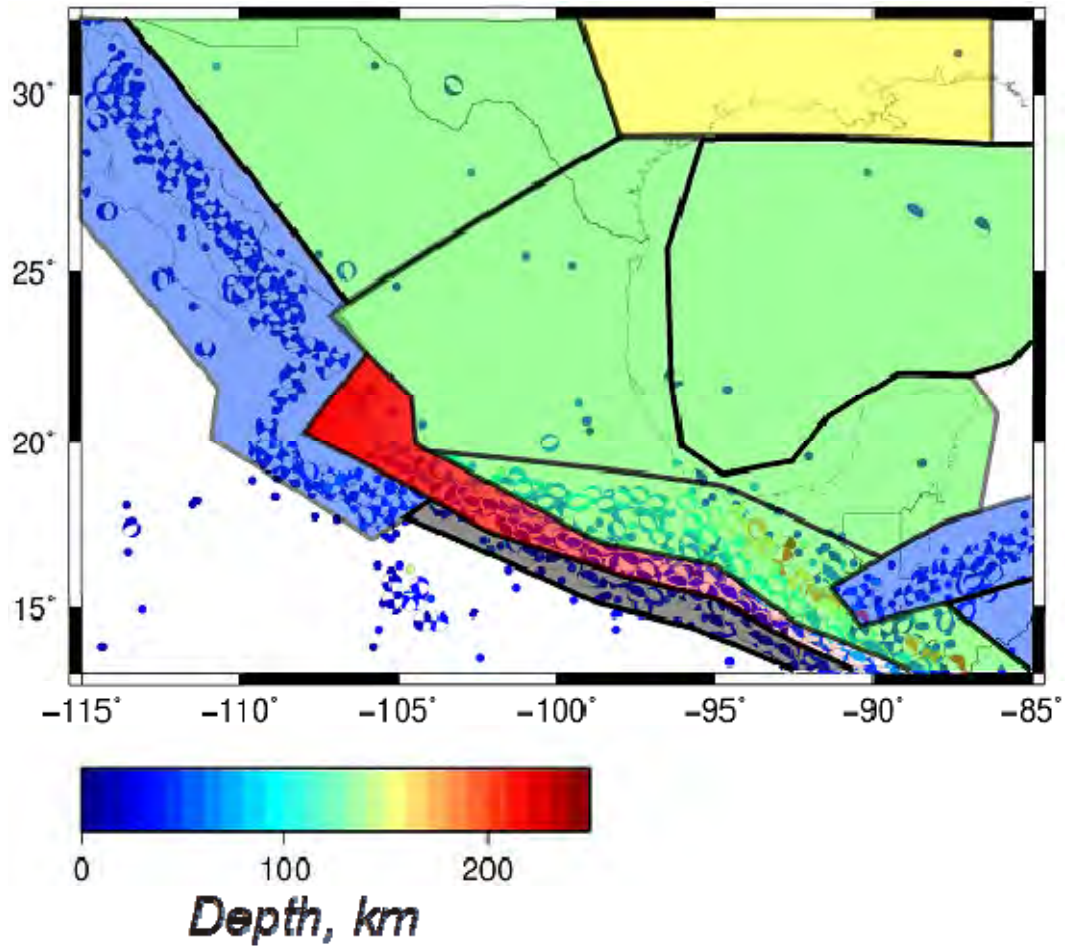


Figure A1-6
Map of Region 5 showing epicenters from NEIC catalog. This map is useful in fine tuning of the boundaries of seismotectonic provinces

This type of figures are useful for the definition of the seismotectonic province limits.



Type:



Figure A1-7

Seismotectonic division of Region 5. Type of province, 1 to 6, is defined in the text.

A1.3 A Glance at the Seismotectonic Provinces

Figure A1-8 provides a glance at the seismotectonic provinces. The total number of provinces is 132.

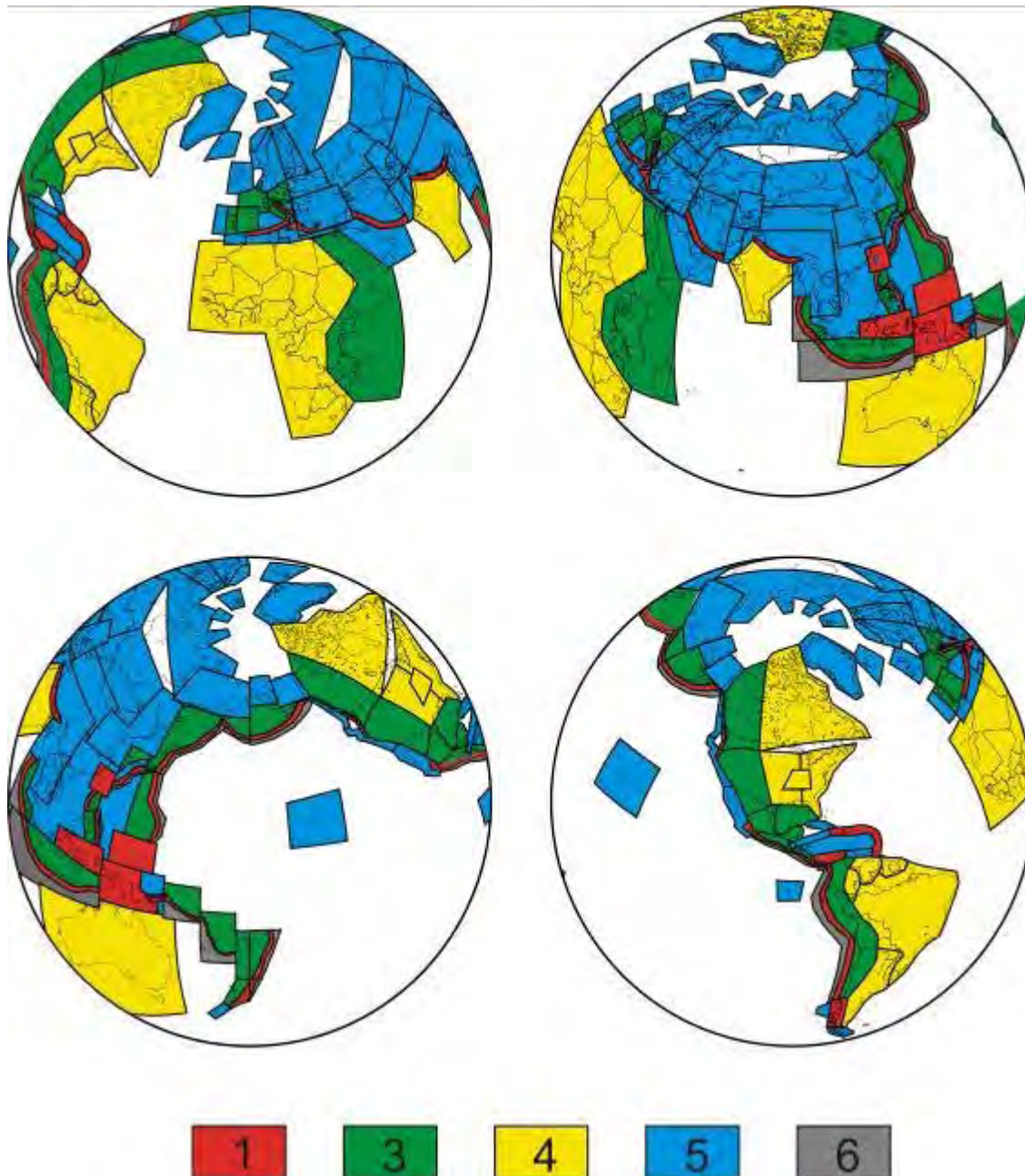


Figure A1-8
 Seismotectonic provinces

A1.4 Some Remarks

1. There are, often, some inconsistent focal mechanisms in any province. These deviations, while of much academic interest, are ignored here. Our assignment of the type is based on the dominant mode of strain release during earthquakes. For example, San Andreas fault in California is offset in some places, giving rise to thrust-faulting events such as the San Fernando earthquake of 1971. We ignored such complications and assigned all seismicity along San Andreas to strike-slip faulting. As another example, the ridge-transform fault system in the Gulf of California is assigned strike-slip type. This is because ridge segments, involving normal-faulting, are relatively short. Mid-oceanic ridges with no island above or nearby were ignored. Care was taken to ensure the continuity of the provinces across the Flinn-Engdahl regions.
2. For the purpose of seismic hazard estimation, a data base was created which includes the geometry (vertices of the polygon) along with the following three attributes: depth range, earthquake type, M_{max} .
3. Each province was assigned a maximum magnitude, M_{max} . The great earthquakes of Sumatra (2004, $M_w 9.2$) and Tohoku-oki, Japan (2011, $M_w 9.0$) far exceeded the previous estimates of M_{max} for these regions ($M_{max} \sim 8.2$). As a result, there is considerable doubt about previous M_{max} estimates, at least along the subduction zones, reflecting a very short observational span. Our estimates for subduction thrust earthquakes are based on (old and new) papers on the subject (e.g., Ruff and Kanamori, 1980; Kanamori, 1983; Utsu, 2002; Engdahl and Villaseñor, 2002; Stein and Okal, 2007; McCaffrey, 2007, 2008; Goldfinger et al., 2012) and innumerable seismological studies of each region. For many provinces with no estimated M_{max} value, we based our choice on the value assigned to a similar seismotectonic province. We checked to make sure that the assigned value for a province was greater or equal to the largest M reported for the province in catalogs based on instrumental data since 1900 (e.g., Engdahl and Villaseñor, 2002; Pacheco et al., 1992; Global CMT catalog; NEIC, U.S. Geological Survey catalog). For some provinces, M for events before 1900 are available from paleoseismology and tsunami data. This information was taken in to account in assigning M_{max} .

Figures A1-9 and A1-10 show assigned and observed M_{max} of each province corresponding to the upper most and second layer, respectively. We note that the assigned M_{max} in all cases is greater than the reported M_{max} .

We note that for most subduction zones, including the collision zone of Himalayas, the assigned M_{max} to thrust earthquakes exceed 9.0 (Figure A1-9). It is possible that the assigned M_{max} values for some provinces are overly conservative. For example,



Mmax of 7.5 is assigned for stable continental regions of Australia, S. America, and Africa. For stable continental regions of India and eastern North America, Mmax has been taken as 8.2. This choice is driven by 2000 Bhuj (Mw7.6) and 1811-1812 New Madrid, Missouri (M 7.7, 7.7, 7.5) earthquakes. It may be argued that the Bhuj earthquake occurred on a plate boundary. If so, then a lower Mmax value for Indian stable continental region may be appropriate. Magnitudes of the New Madrid earthquake sequence may also be overestimated. Clearly, there is great uncertainty in the assigned values of Mmax of different provinces.

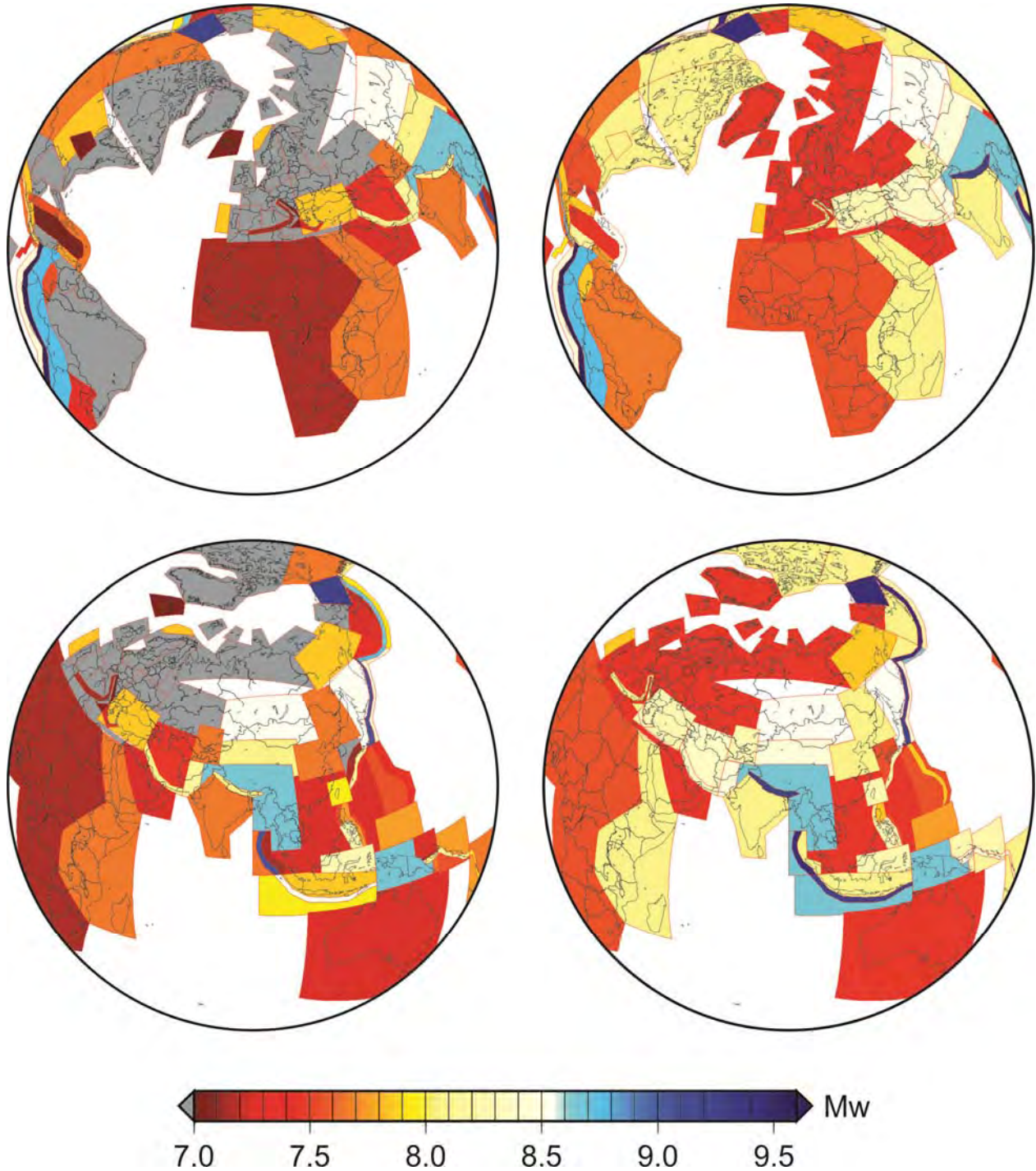


Figure A1-9
 Observed (left column) and assigned (right column) M_{max} of each tectonic province (upper layer).
 Observed M_{max} values are based on GCMT catalog and published papers. Gray indicates observed
 M_{max} is less than 7.0



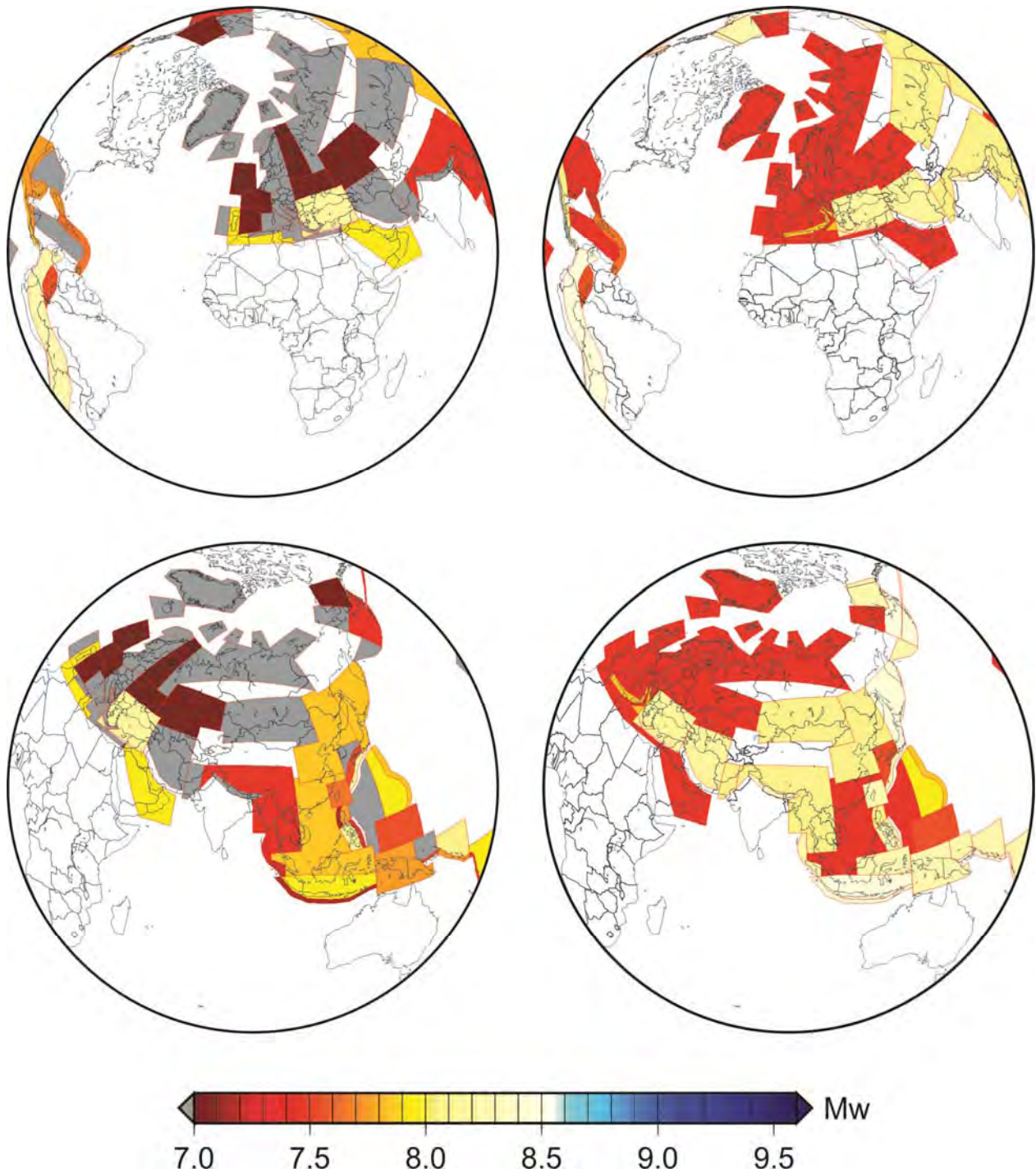
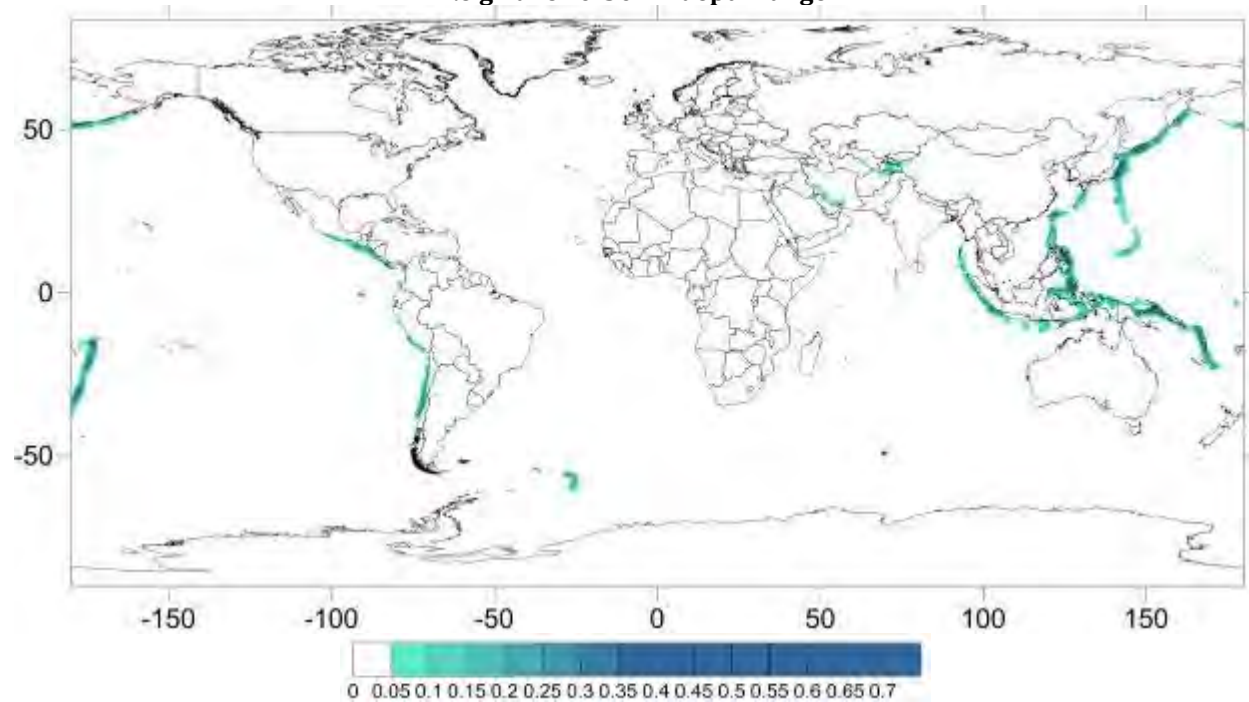
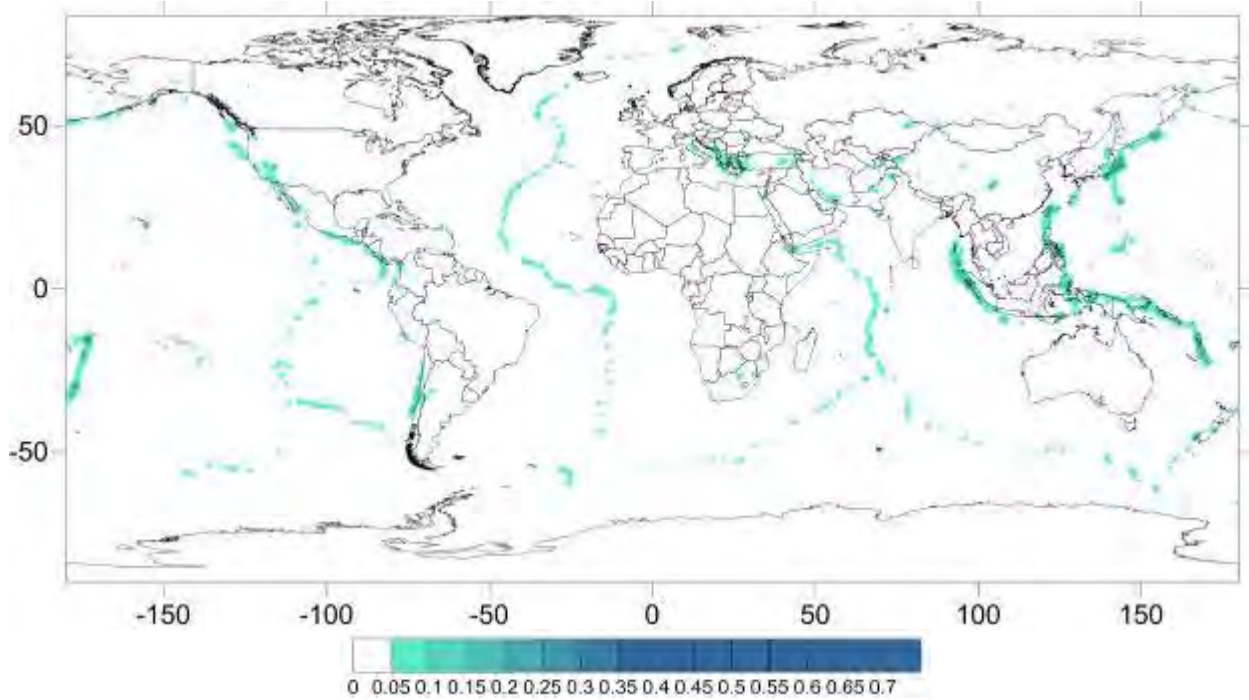


Figure A1-10
 Same as Figure A1-9 but for tectonic provinces corresponding to the deeper second layer



Figure A1-10 (continuation)
 Same as Figure A1-9 but for tectonic provinces corresponding to the deeper second layer

ANNEX 2. MAPS OF THE PARAMETERS FOR ASSESSING THE SEISMIC HAZARD



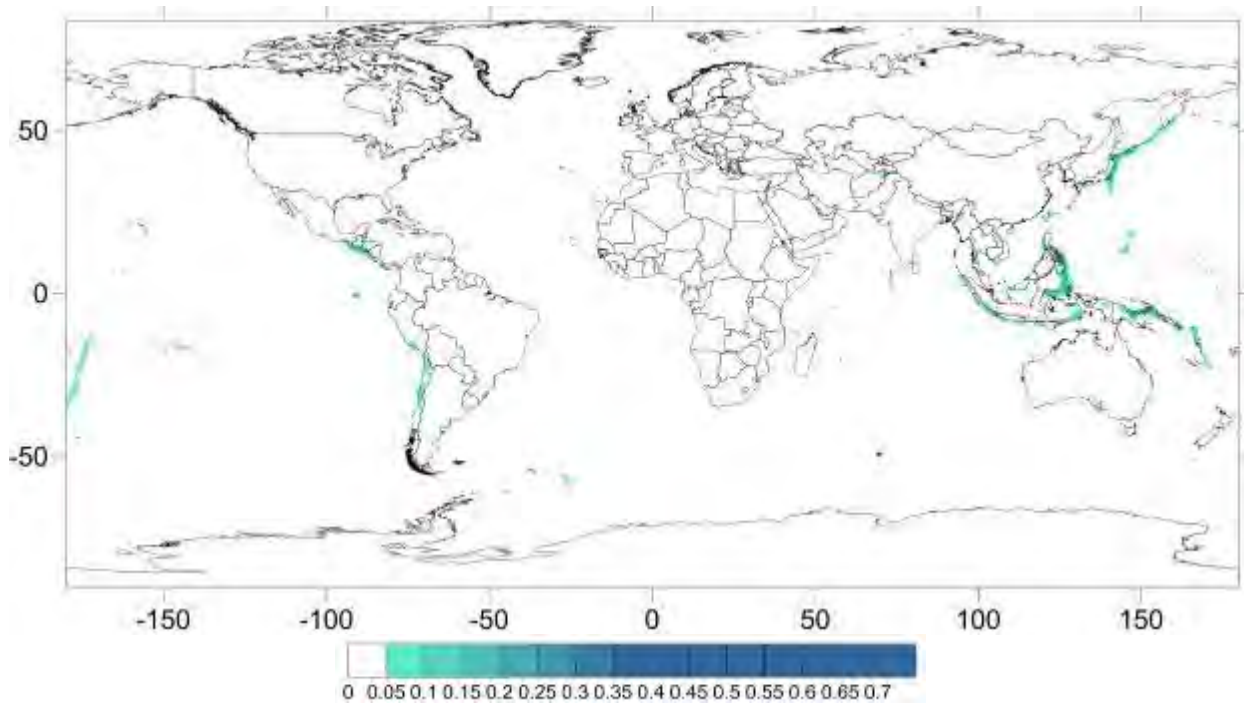


Figure A2-3
 λ_o grid for 60+km depth range

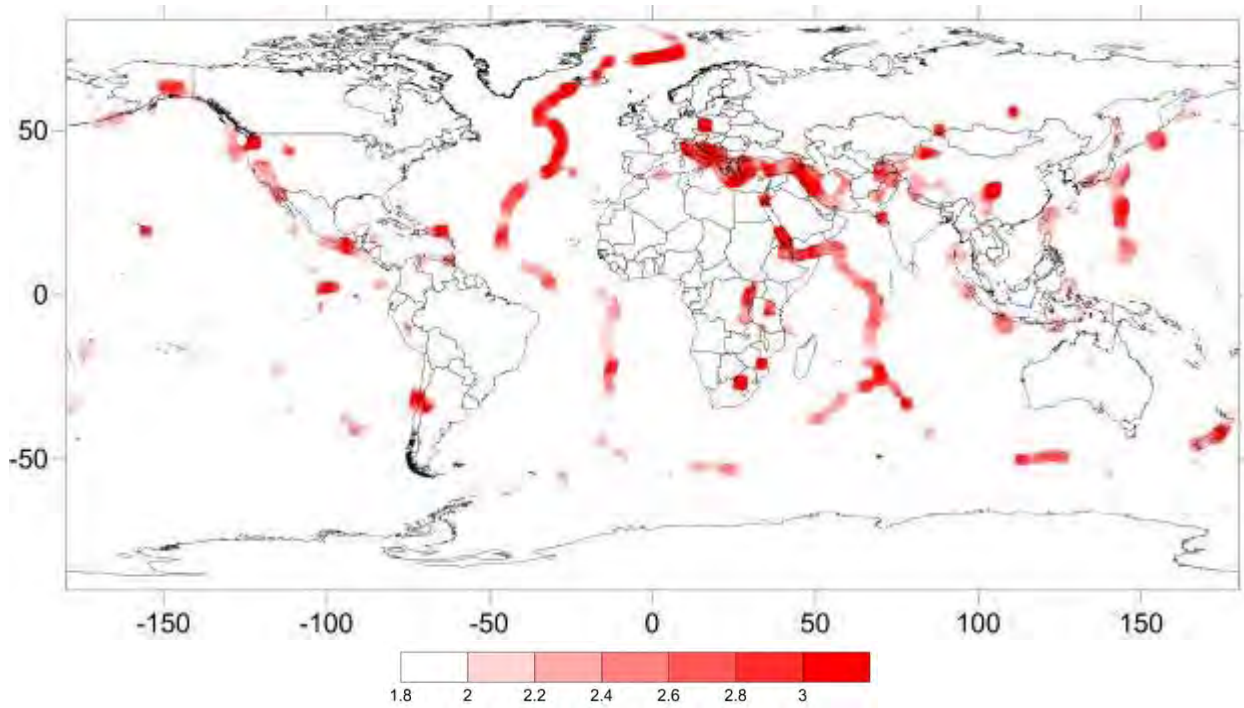
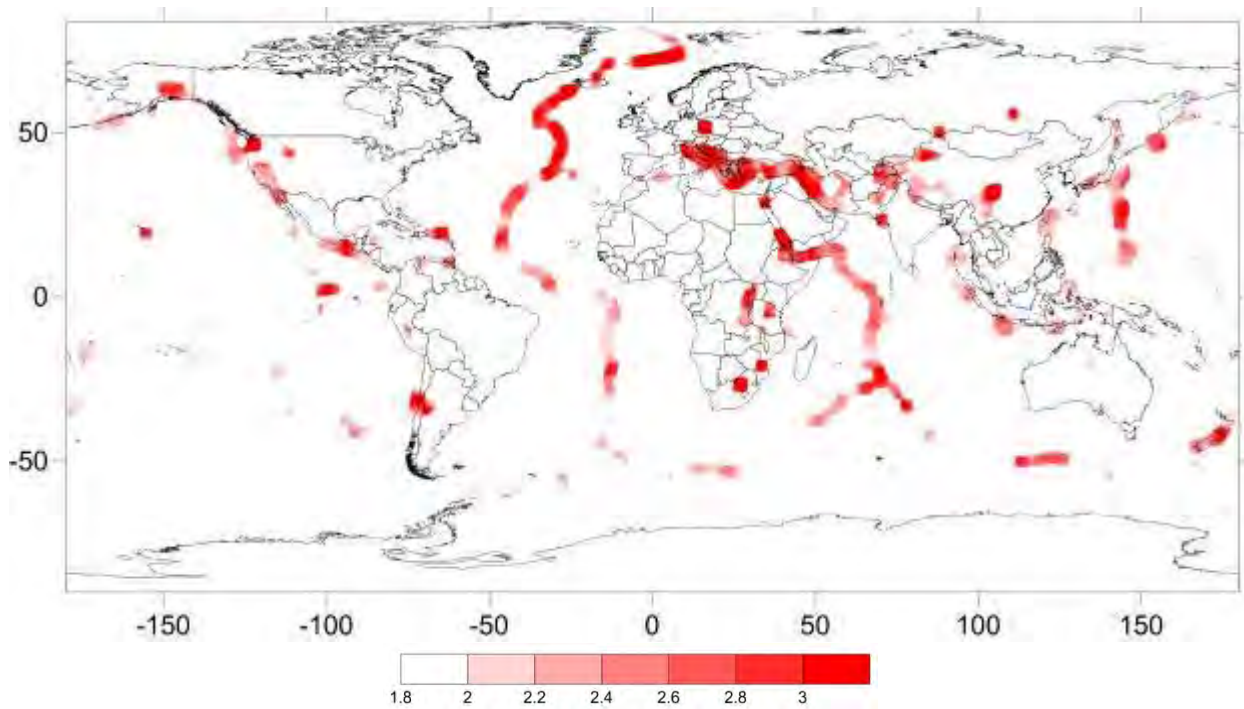
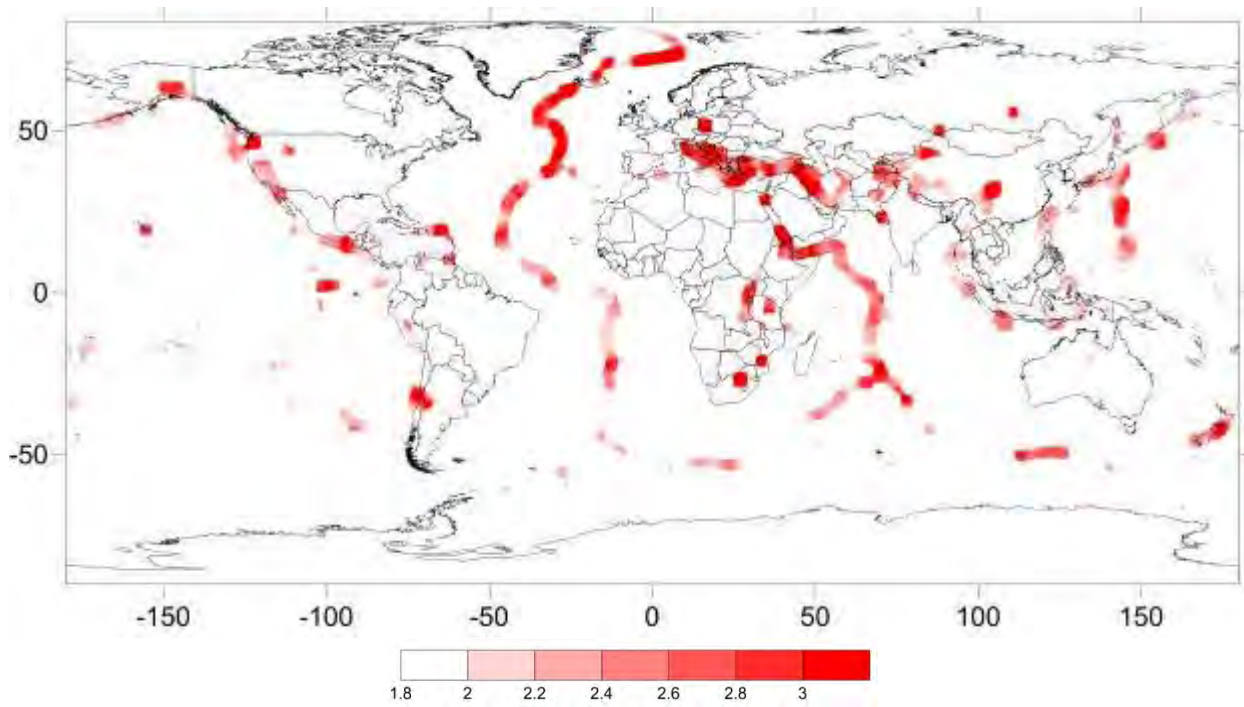
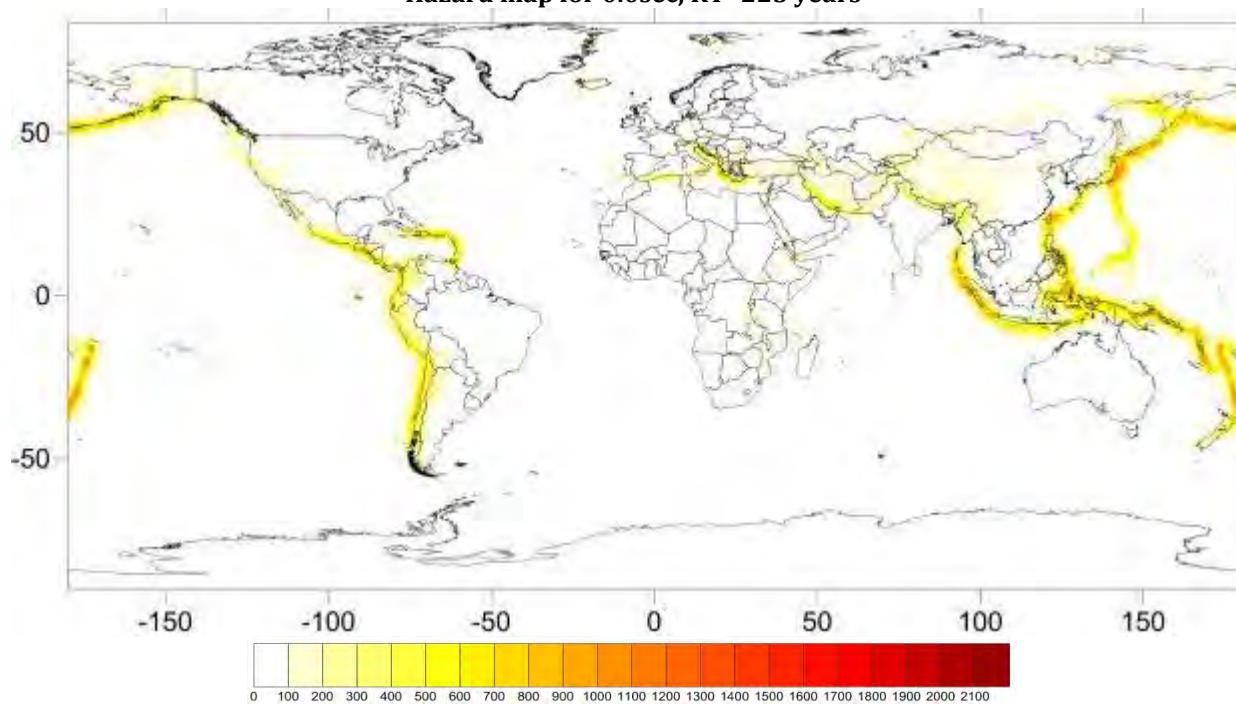
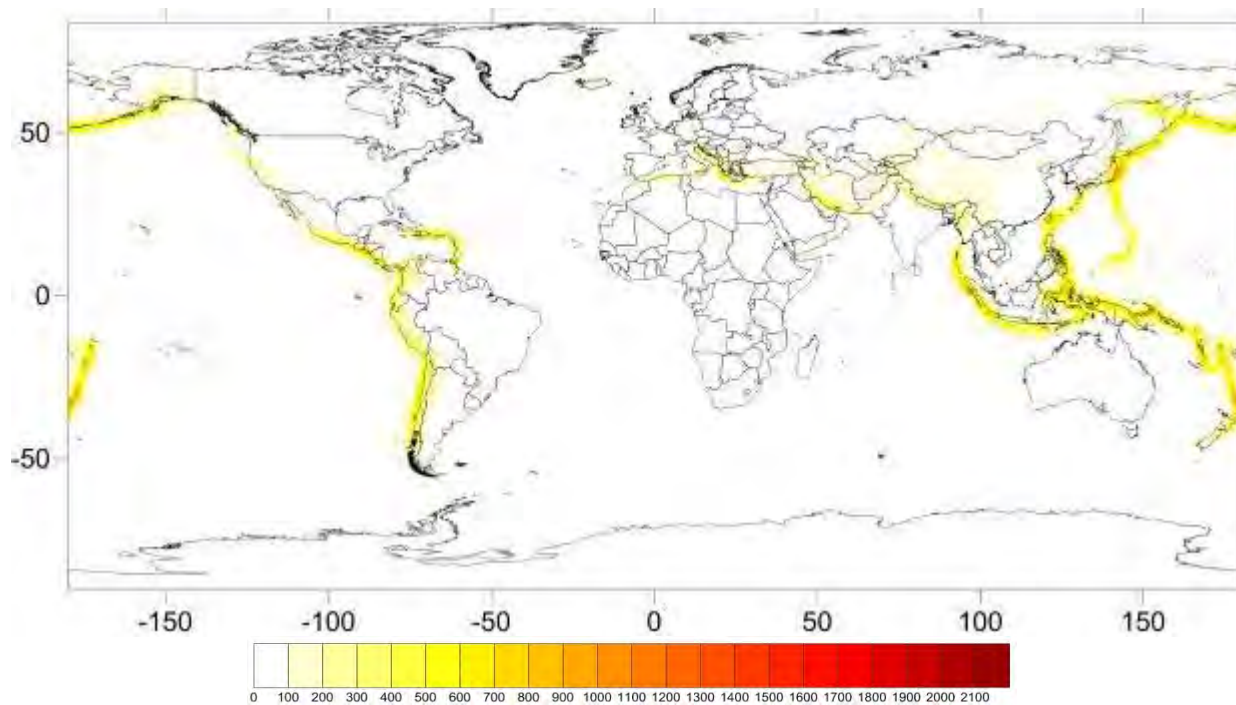
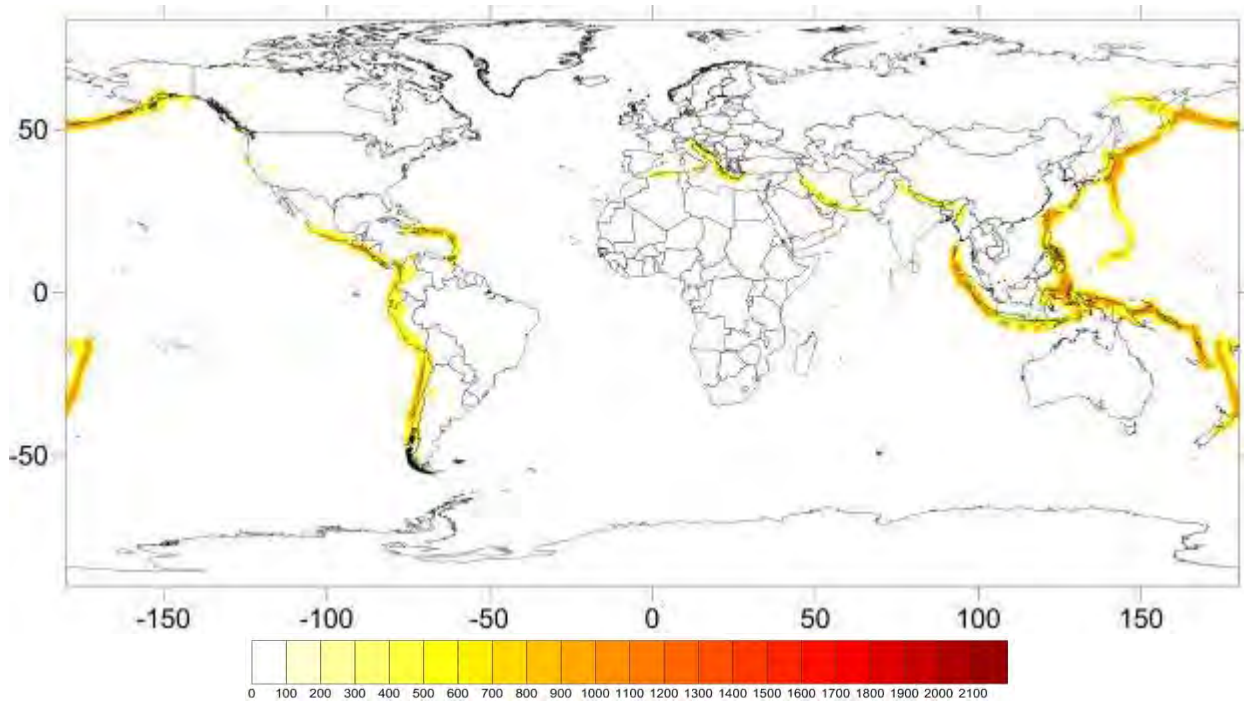
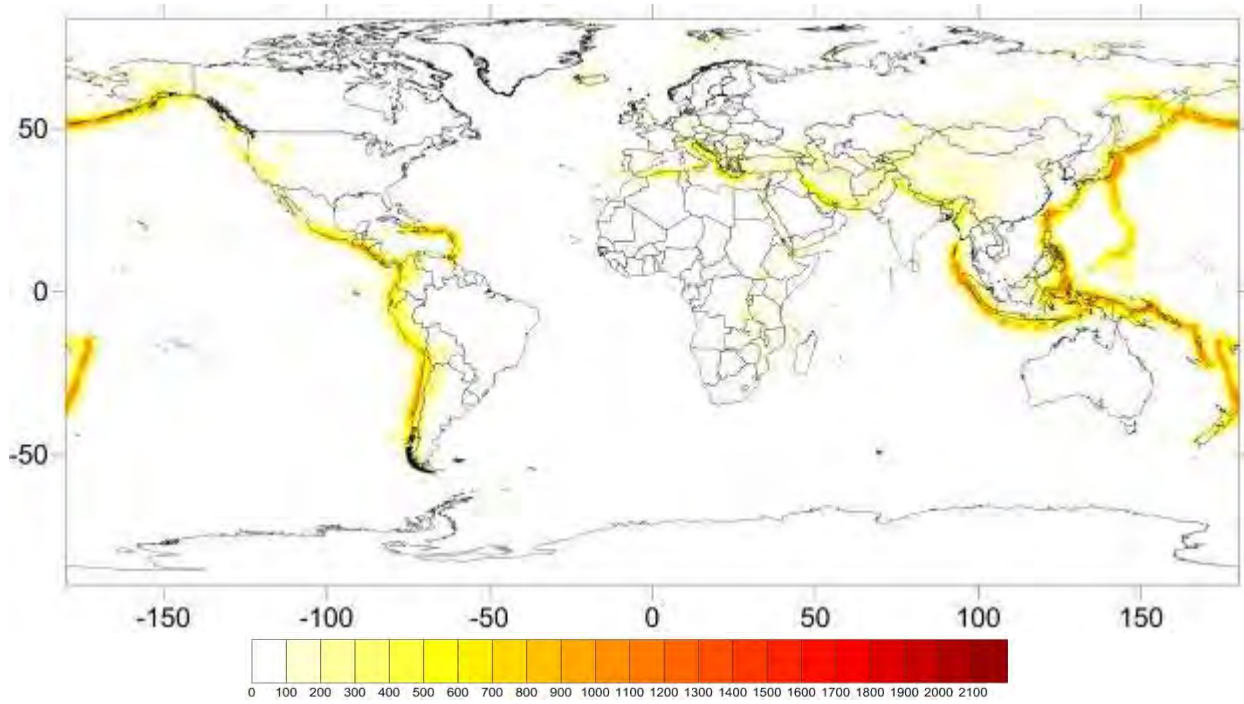


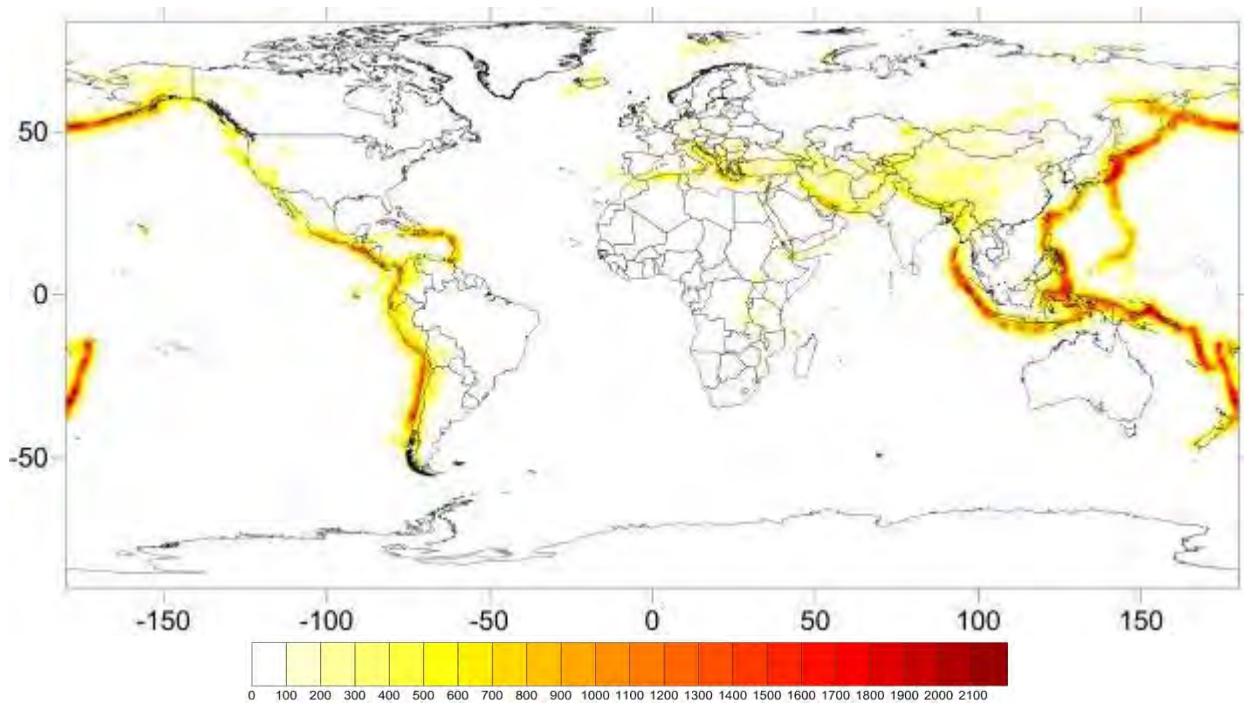
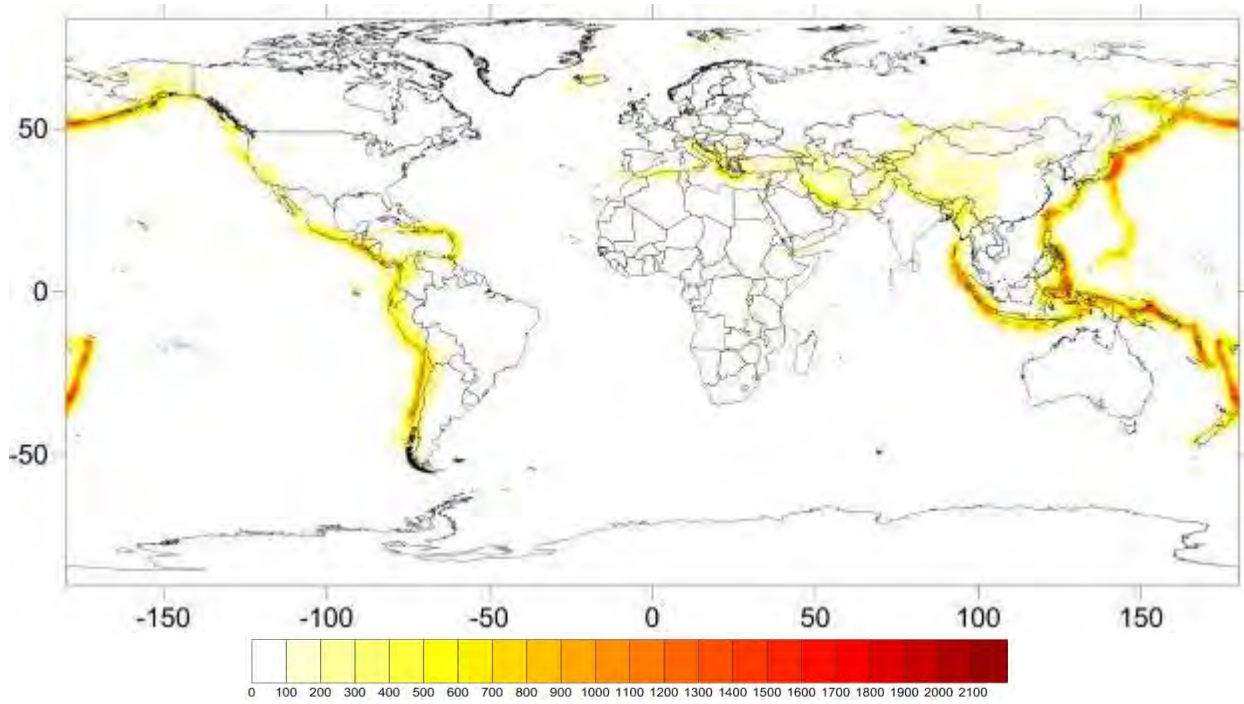
Figure A2-4
 β grid for 0-30km depth range



ANNEX 3. SEISMIC HAZARD MAPS CALCULATED WITH CRISIS 2012 (CAPRA)







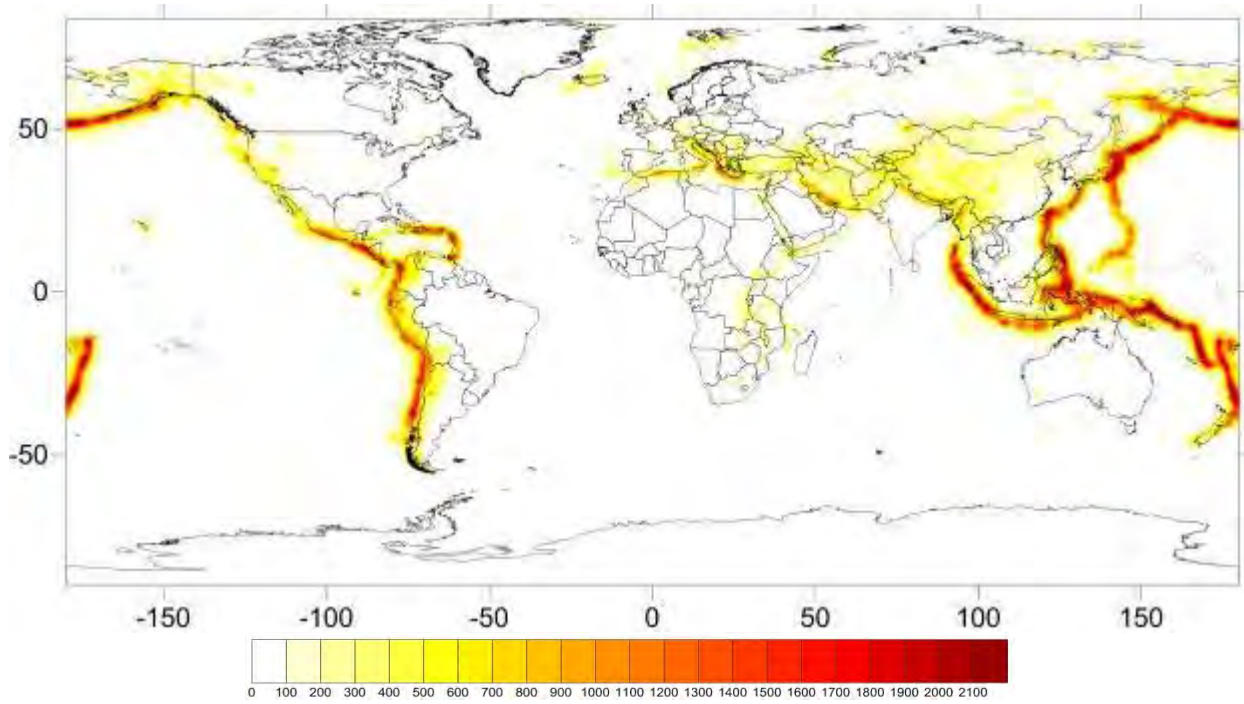


Figure A3-7
 Hazard map for 0.2sec, RT=1,000 years

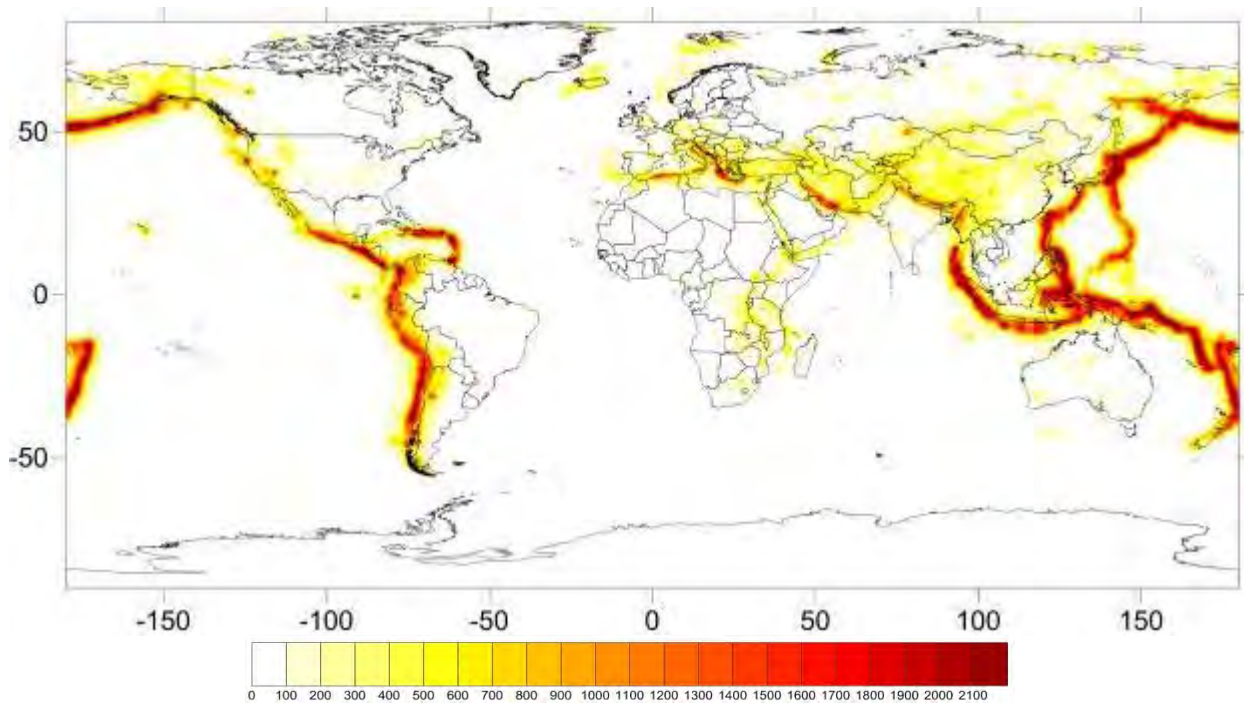
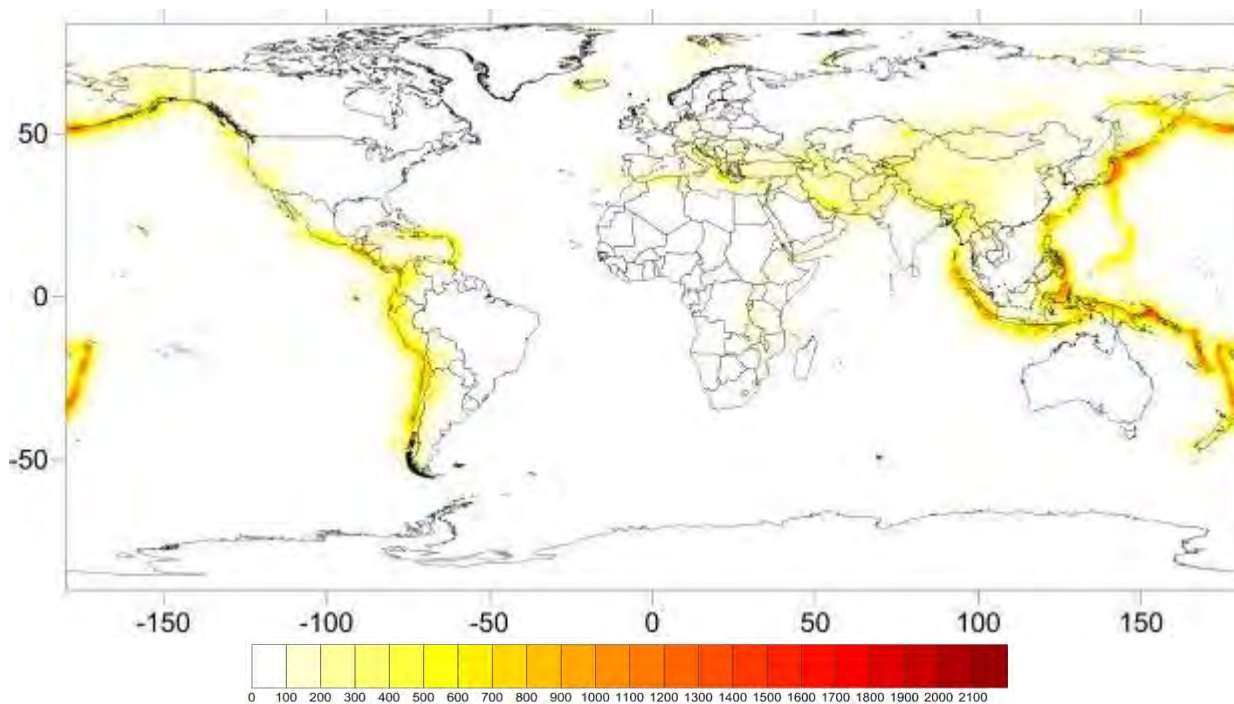
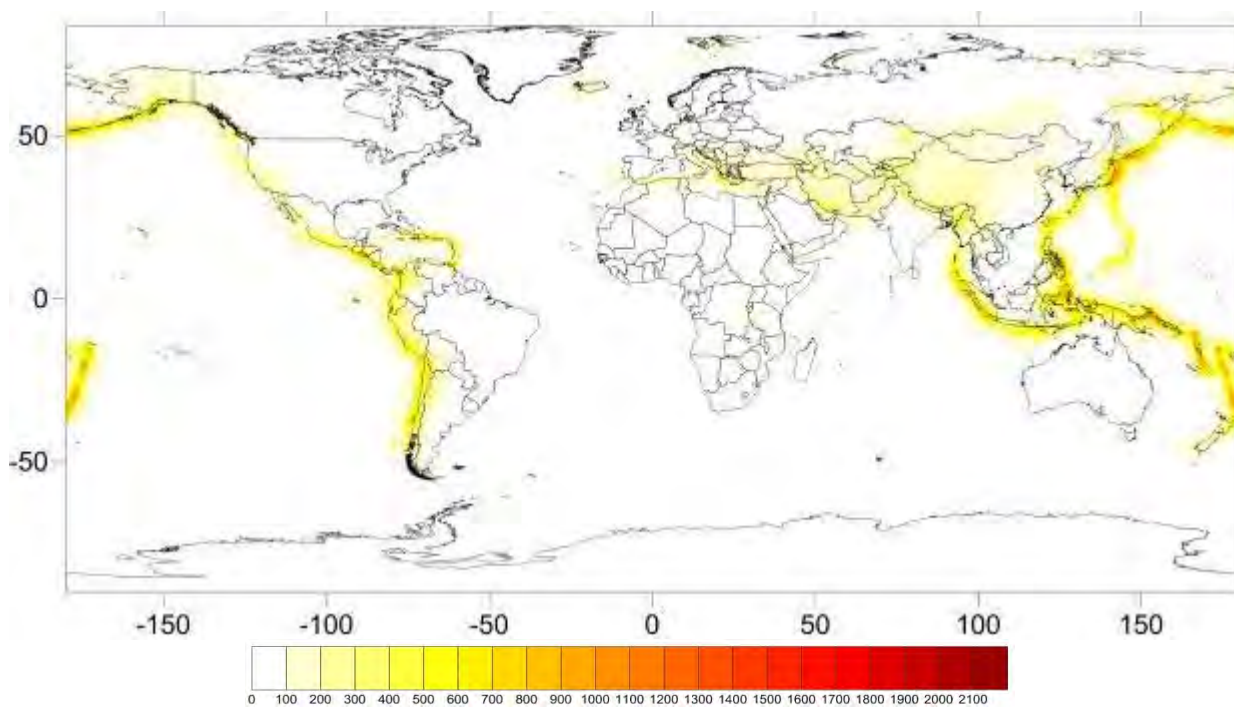


Figure A3-8
 Hazard map for 0.2sec, RT=2,500 years



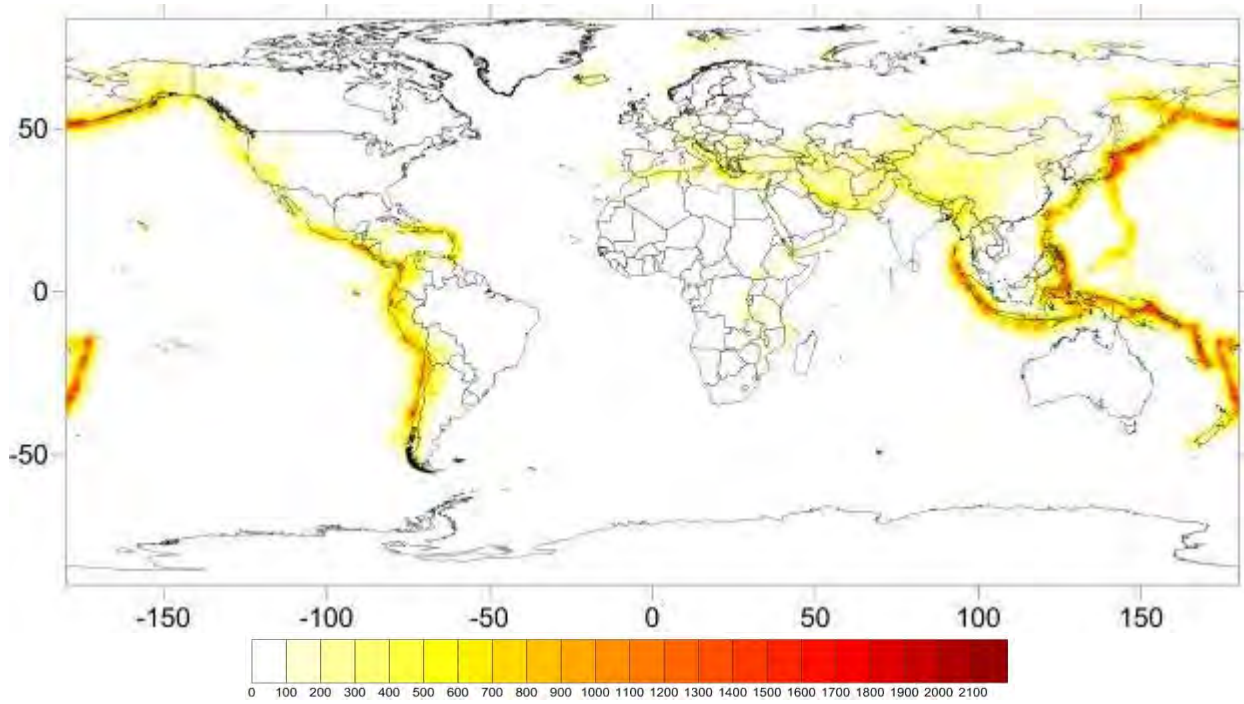


Figure A3-11
 Hazard map for 0.5sec, RT=1,000 years

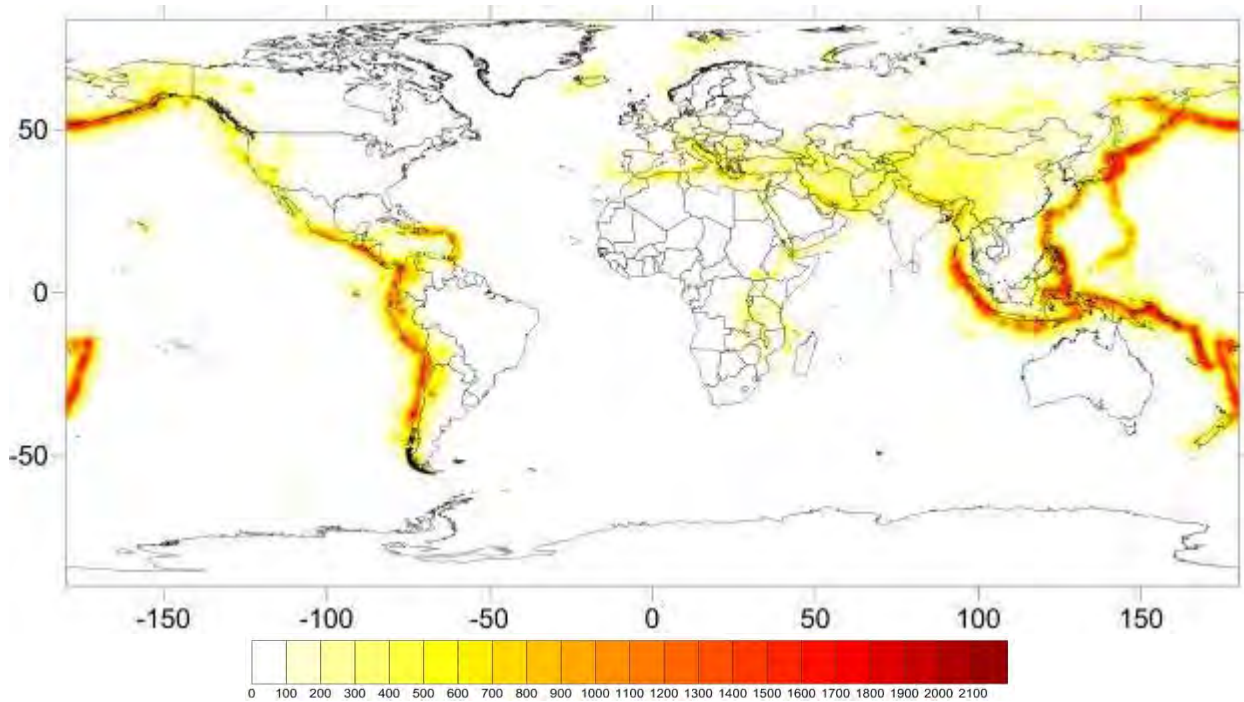


Figure A3-12
 Hazard map for 0.5sec, RT=2,500 years

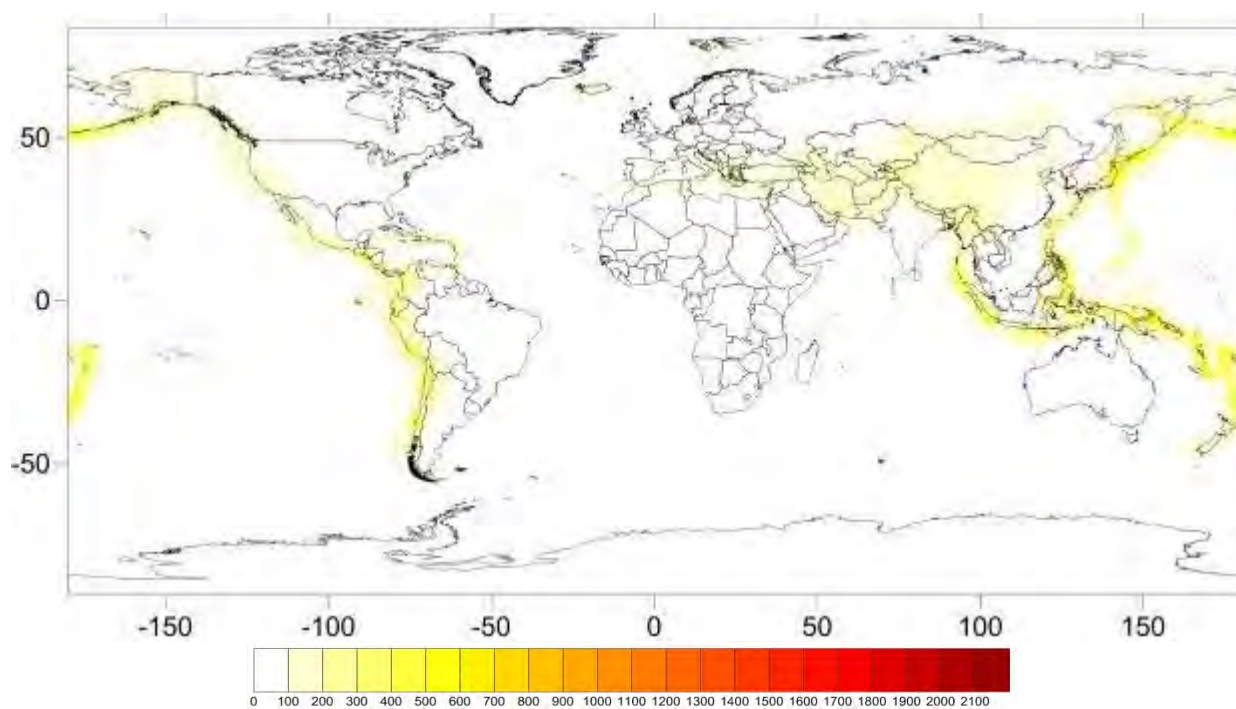


Figure A3-13
Hazard map for 1.0sec, RT=225 years

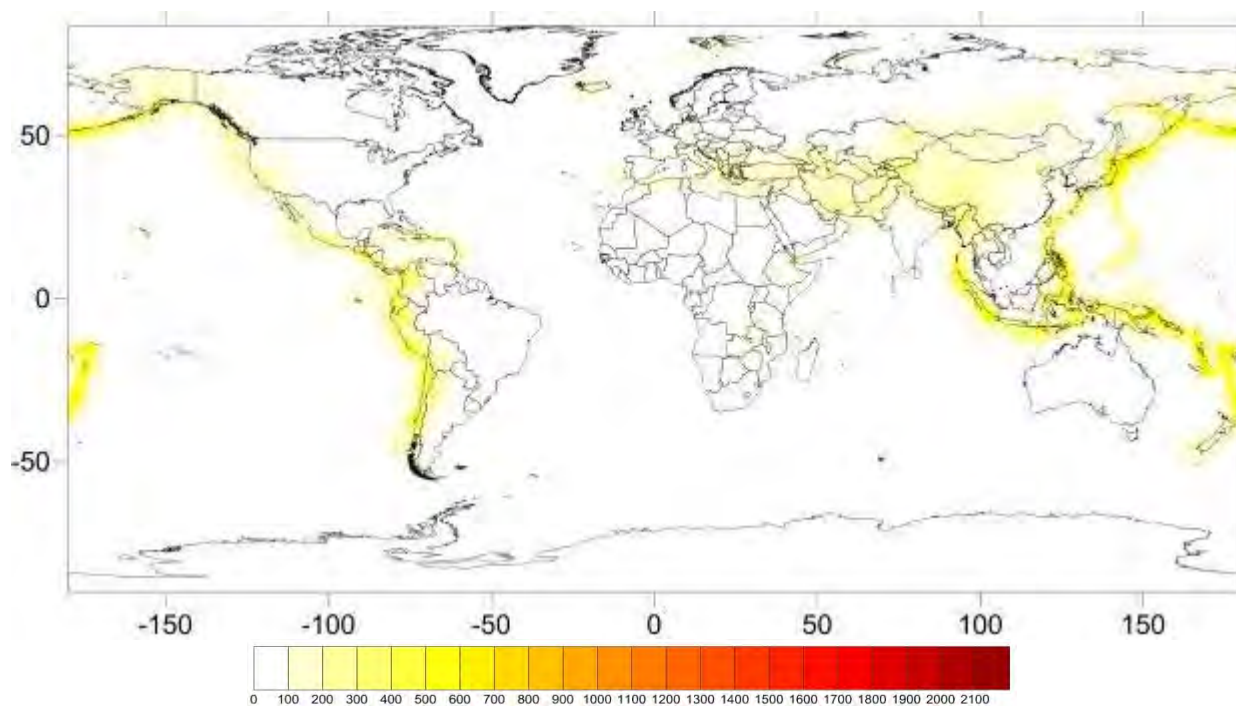


Figure A3-14
Hazard map for 1.0sec, RT=475 years

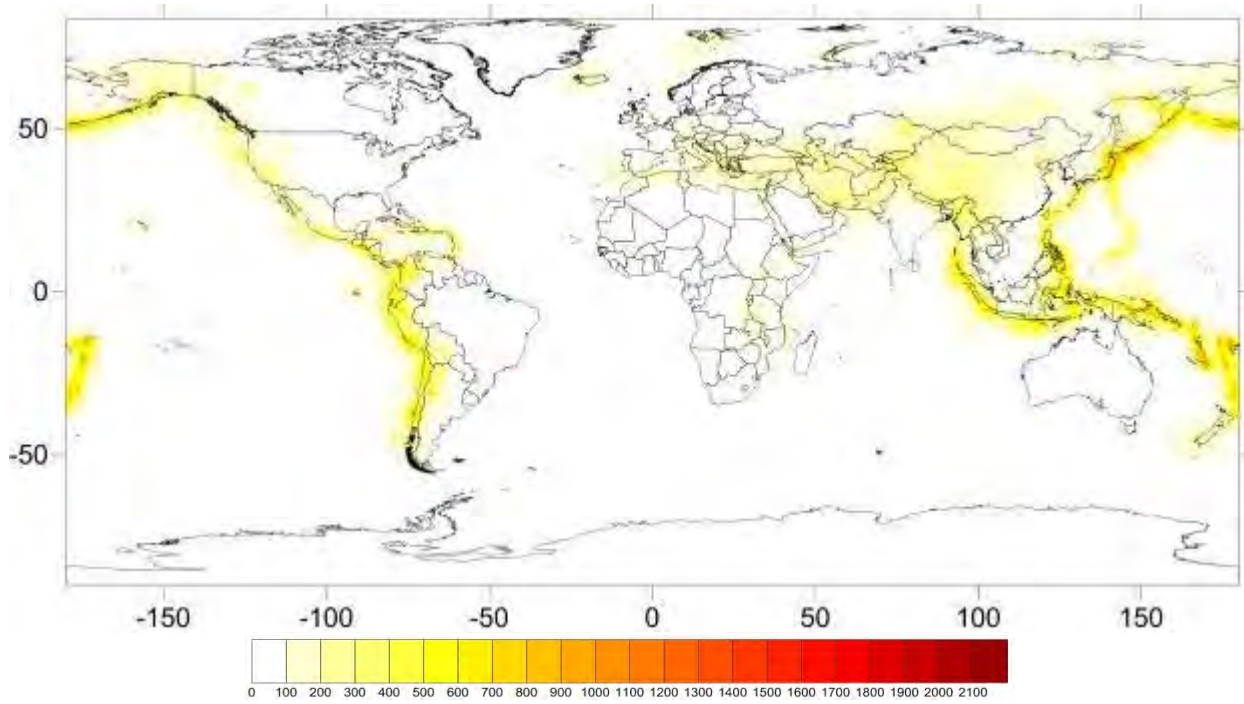


Figure A3-15
 Hazard map for 1.0sec, RT=1,000 years

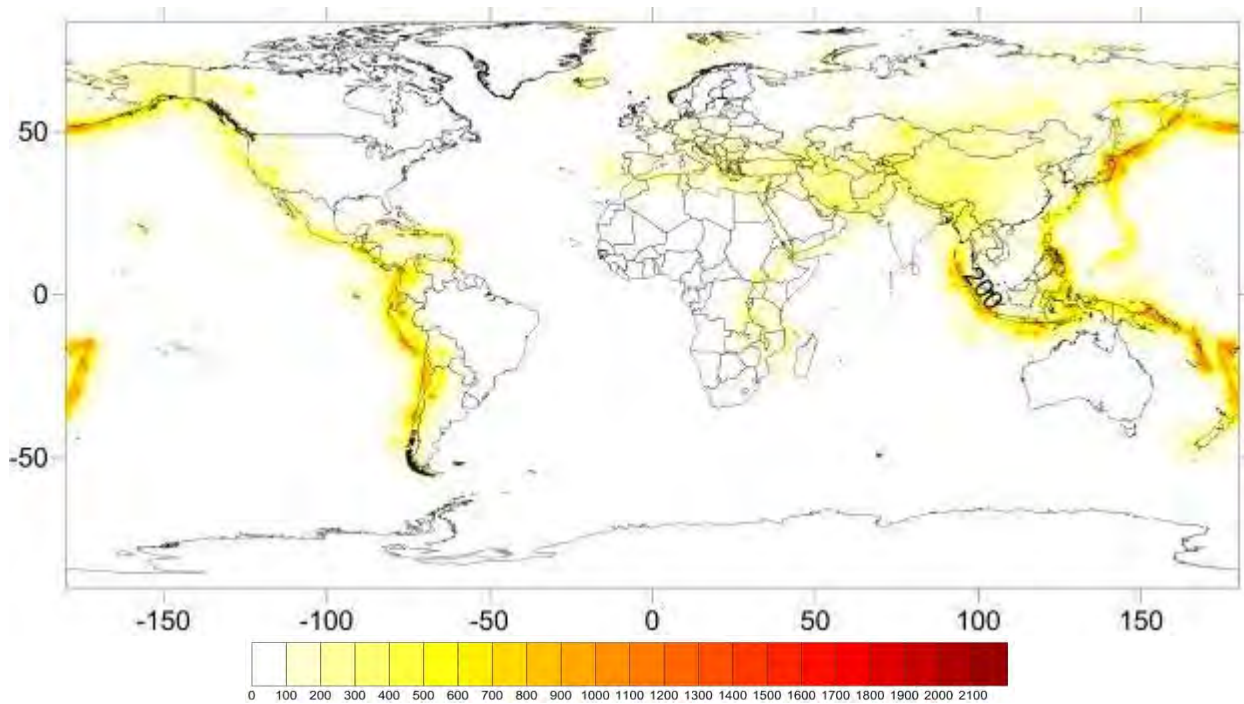


Figure A3-16
 Hazard map for 1.0sec, RT=2,500 years

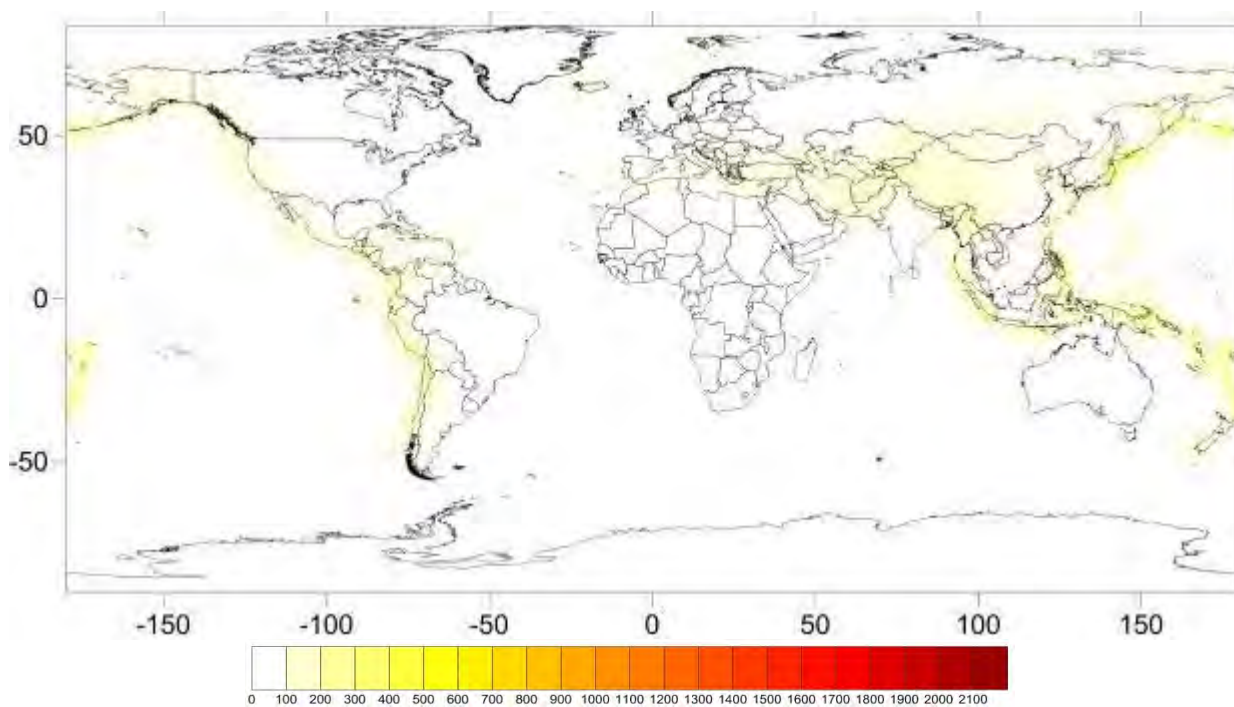


Figure A3-17
Hazard map for 2.0sec, RT=225 years

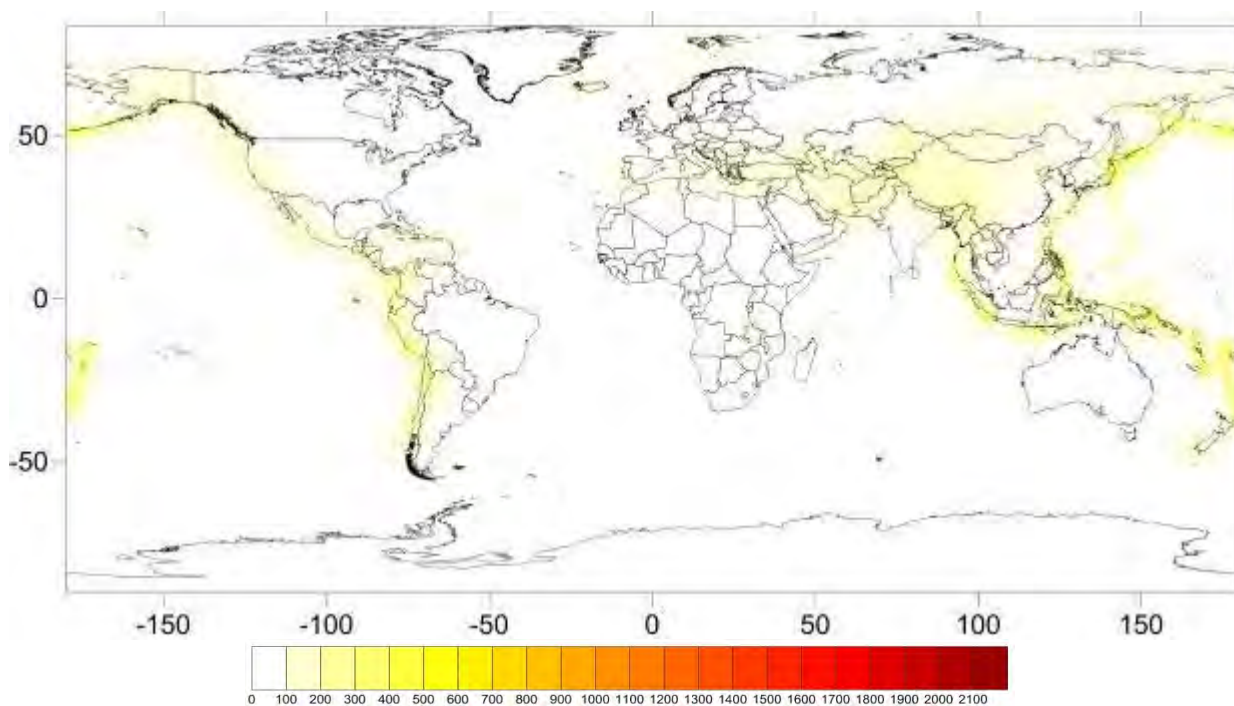


Figure A3-18
Hazard map for 2.0sec, RT=475 years

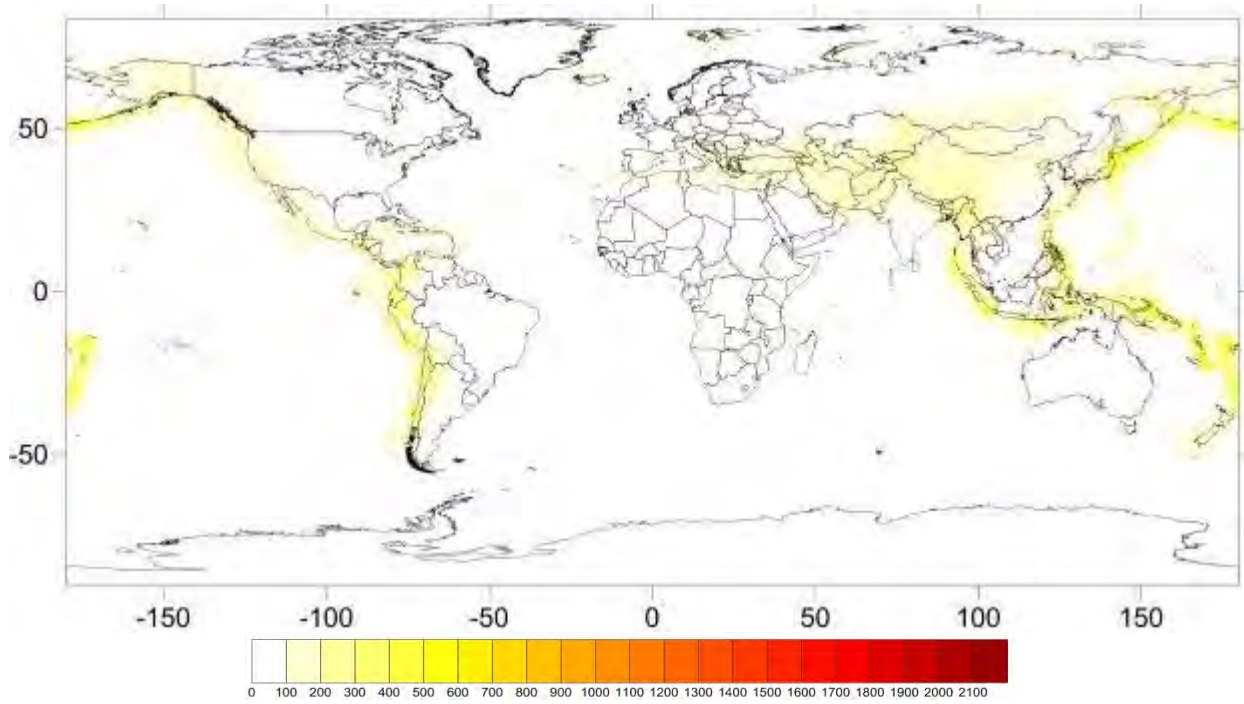


Figure A3-19
Hazard map for 2.0sec, RT=1,000 years

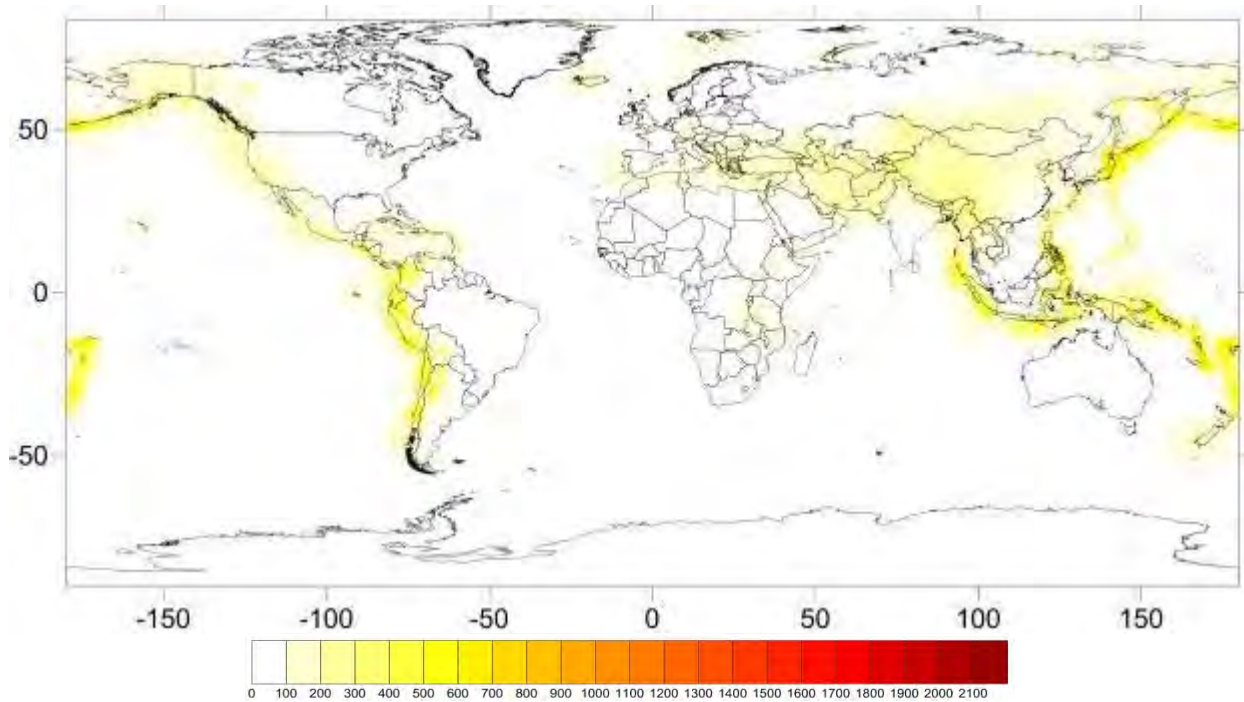


Figure A3-20
Hazard map for 2.0sec, RT=2,500 years

ANNEX 4. SEISMIC HAZARD MAPS CALCULATED WITH OPENQUAKE (GEM)

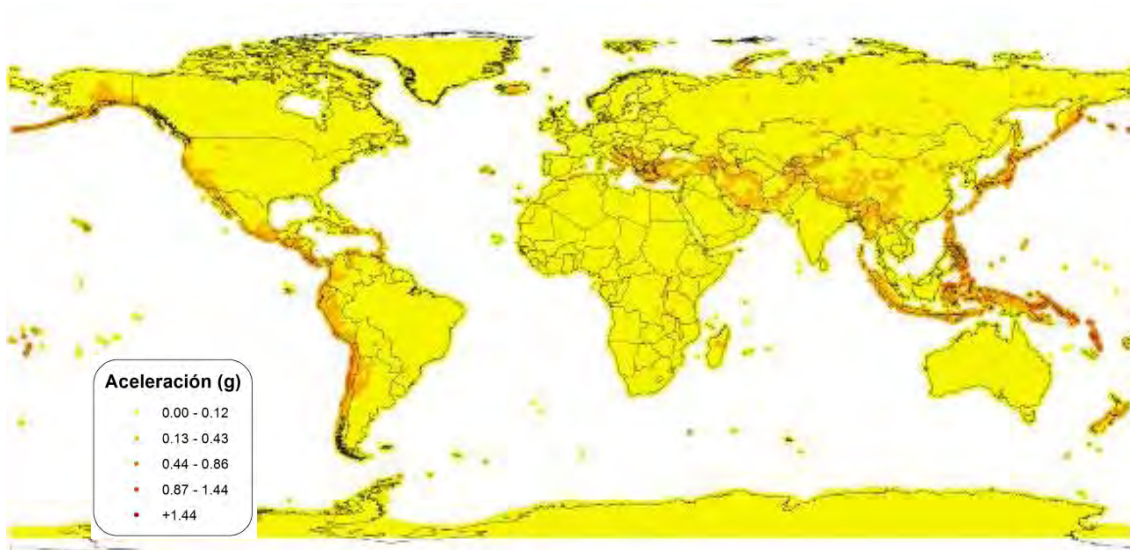


Figure A4-1
Hazard map for 0.0sec, RT=250 years

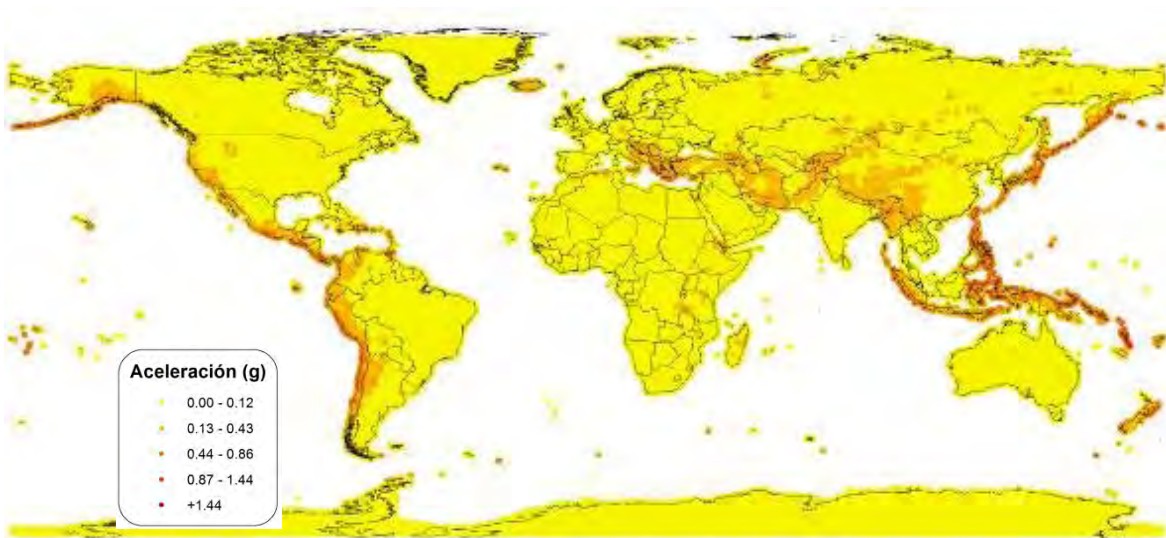


Figure A4-2
Hazard map for 0.0sec, RT=500 years

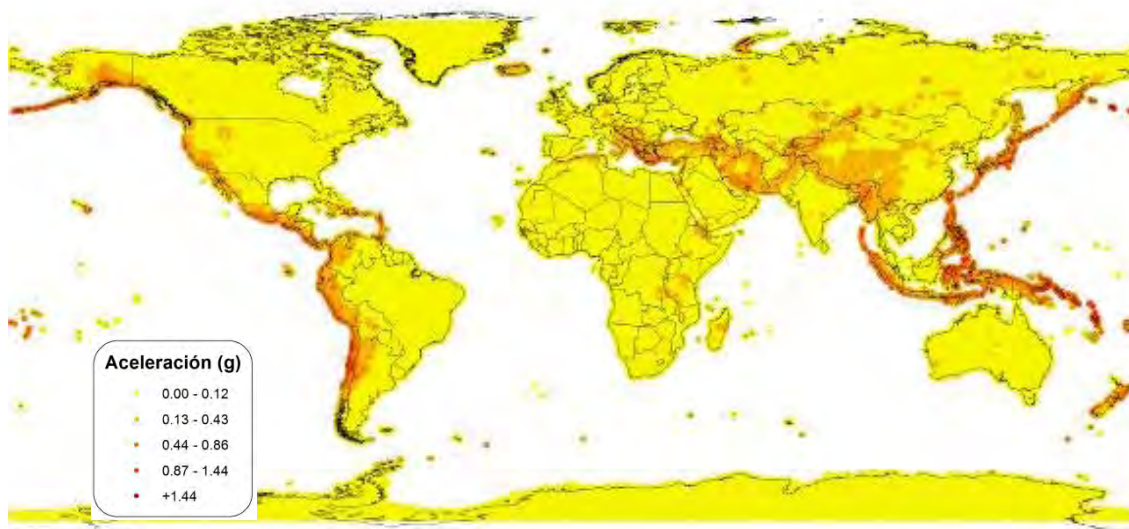


Figure A4-3
Hazard map for 0.0sec, RT=1,000 years

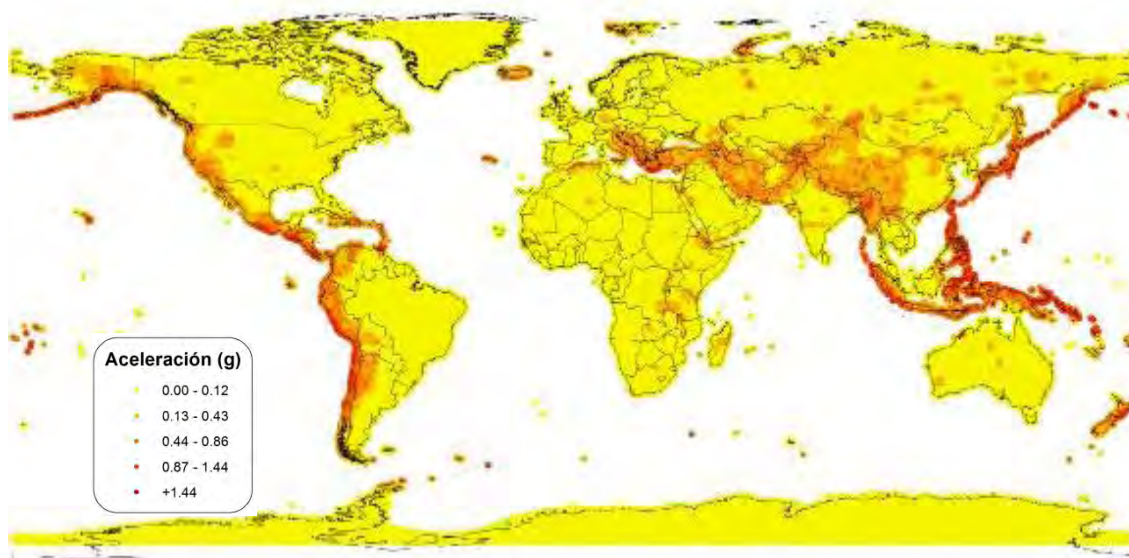


Figure A4-4
Hazard map for 0.0sec, RT=2,500 years

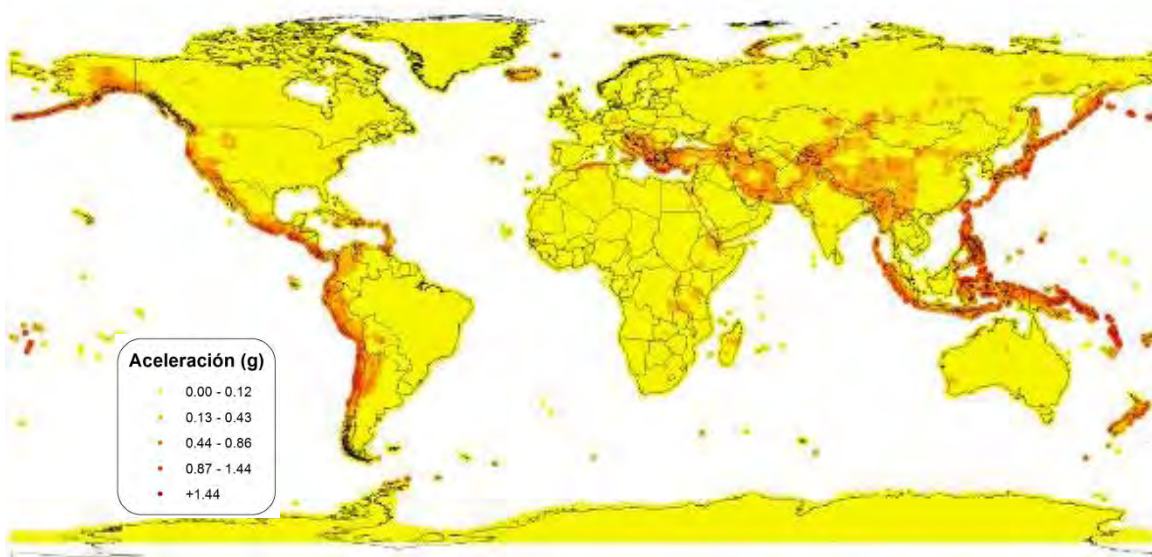


Figure A4-5
Hazard map for 0.2sec, RT=250 years

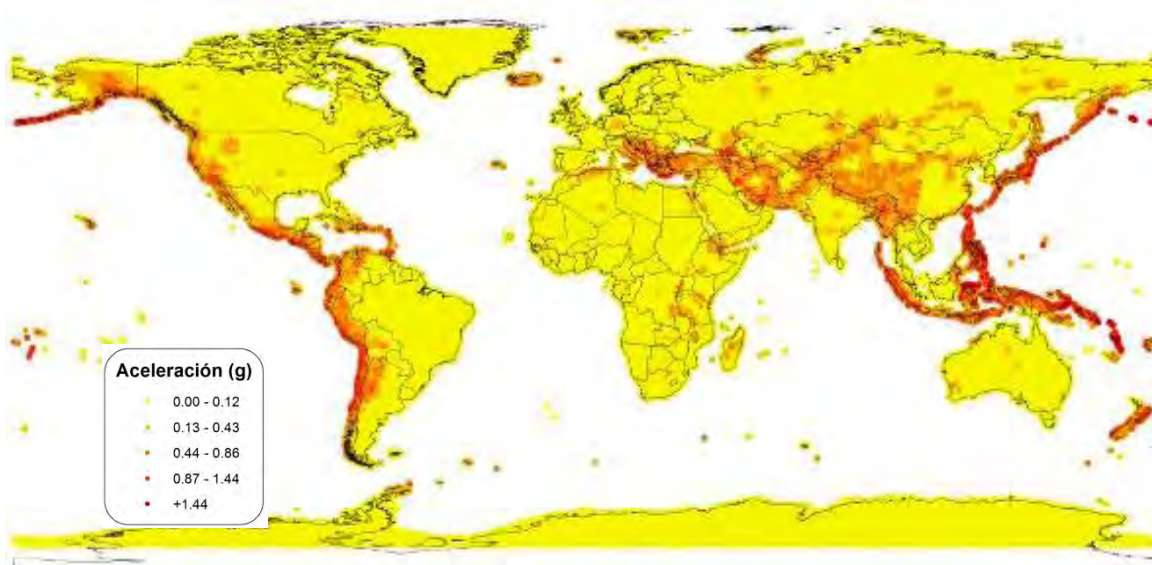


Figure A4-6
Hazard map for 0.2sec, RT=500 years

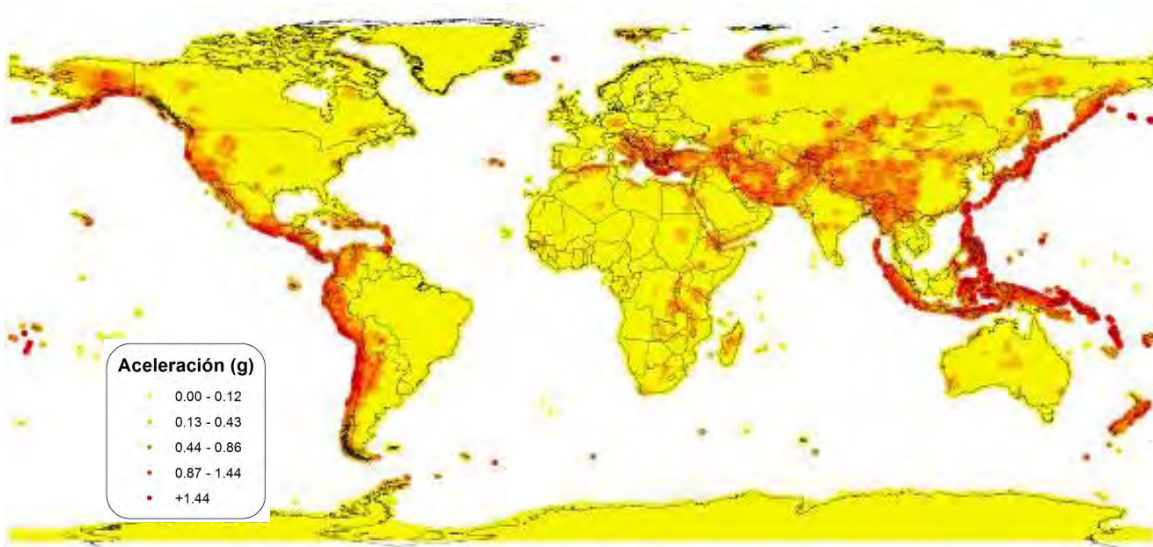


Figure A4-7
 Hazard map for 0.2sec, RT=1,000 years

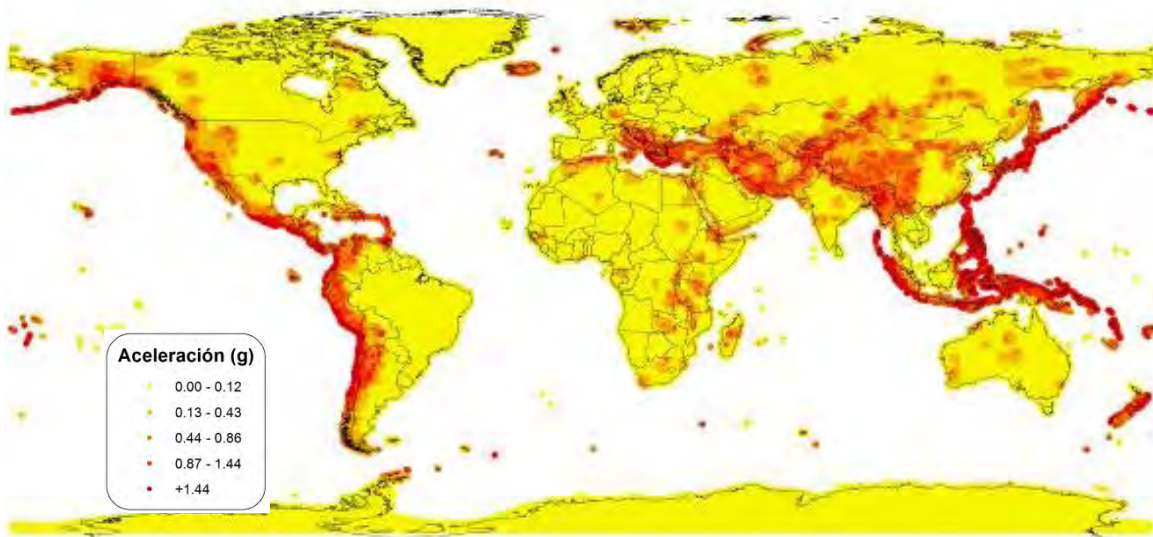


Figure A4-8
 Hazard map for 0.2sec, RT=2,500 years

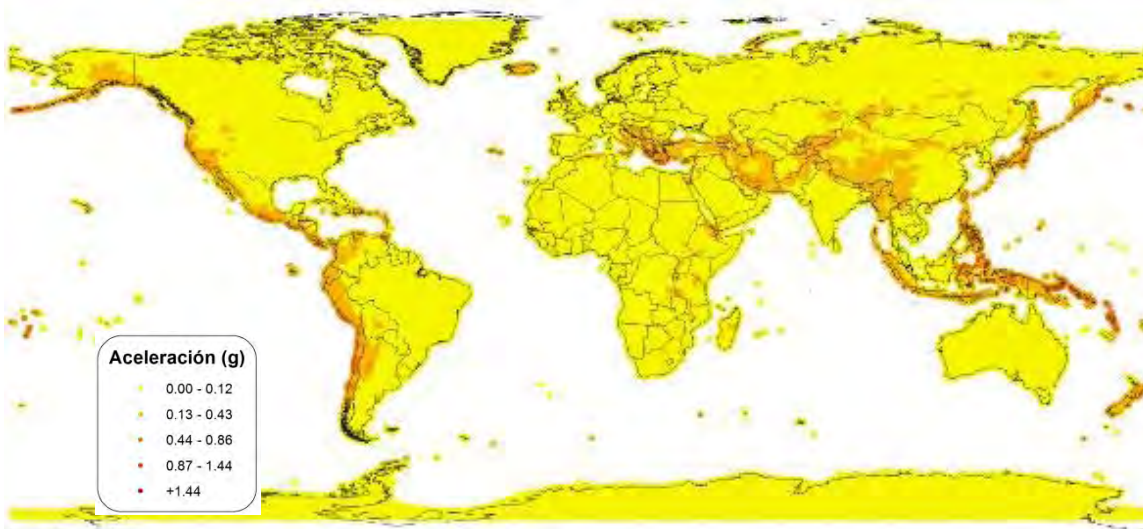


Figure A4-9
Hazard map for 0.5sec, RT=250 years

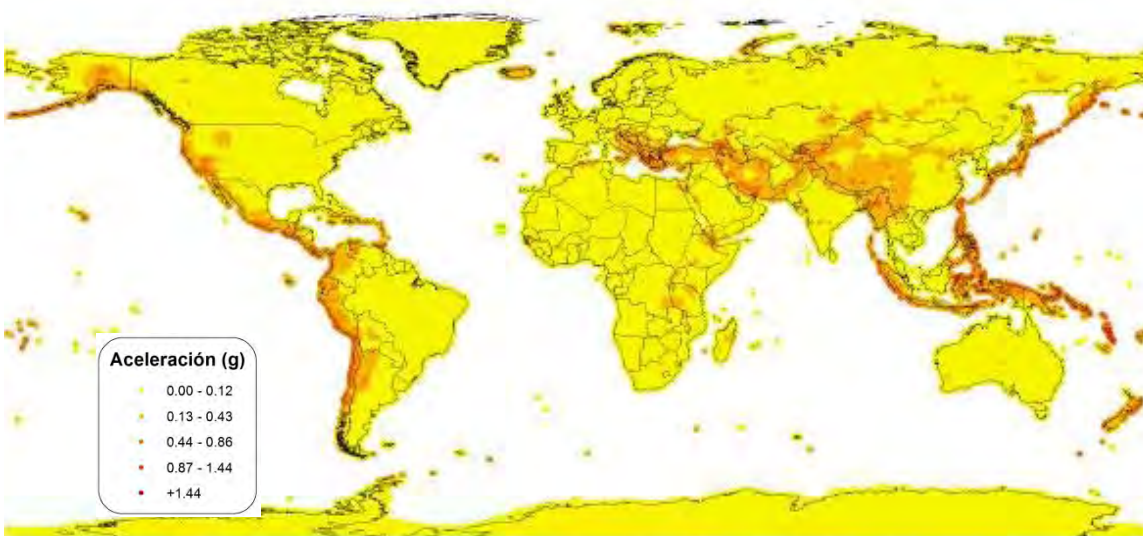


Figure A4-10
Hazard map for 0.5sec, RT=500 years

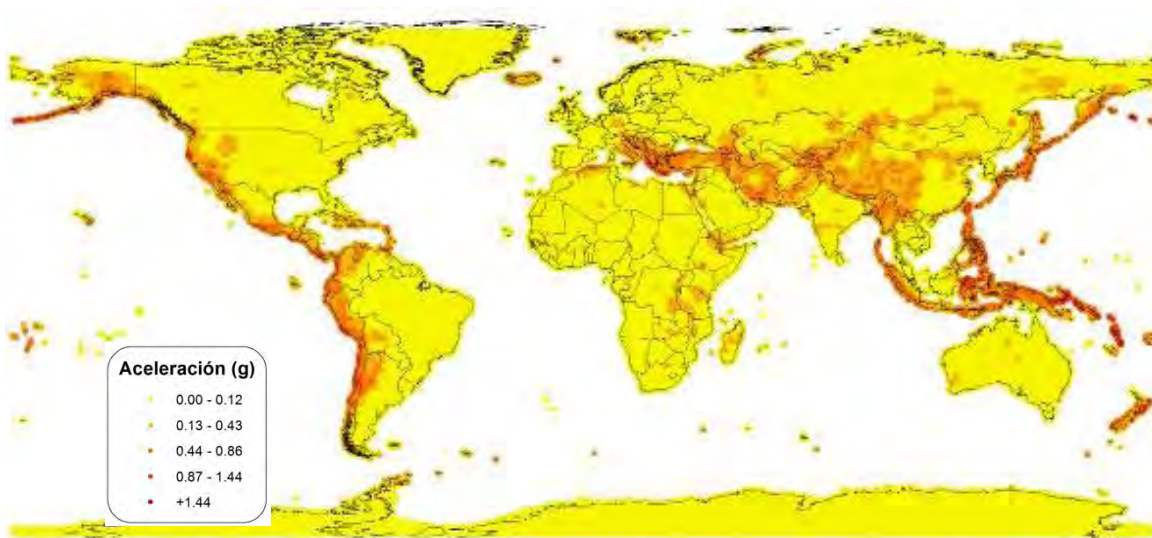


Figure A4-11
Hazard map for 0.5sec, RT=1,000 years

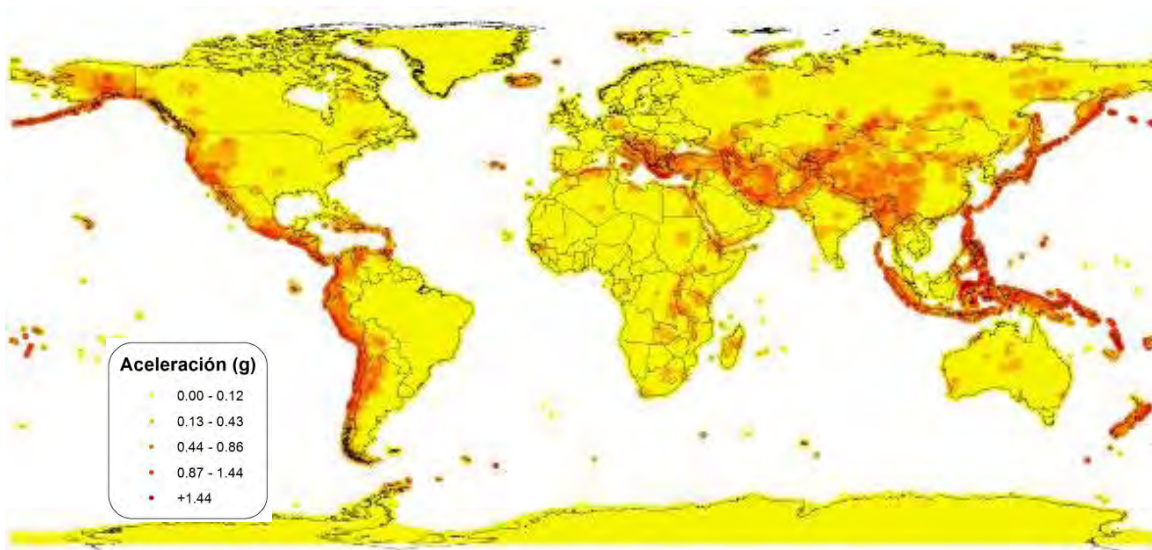


Figure A4-12
Hazard map for 0.5sec, RT=2,500 years

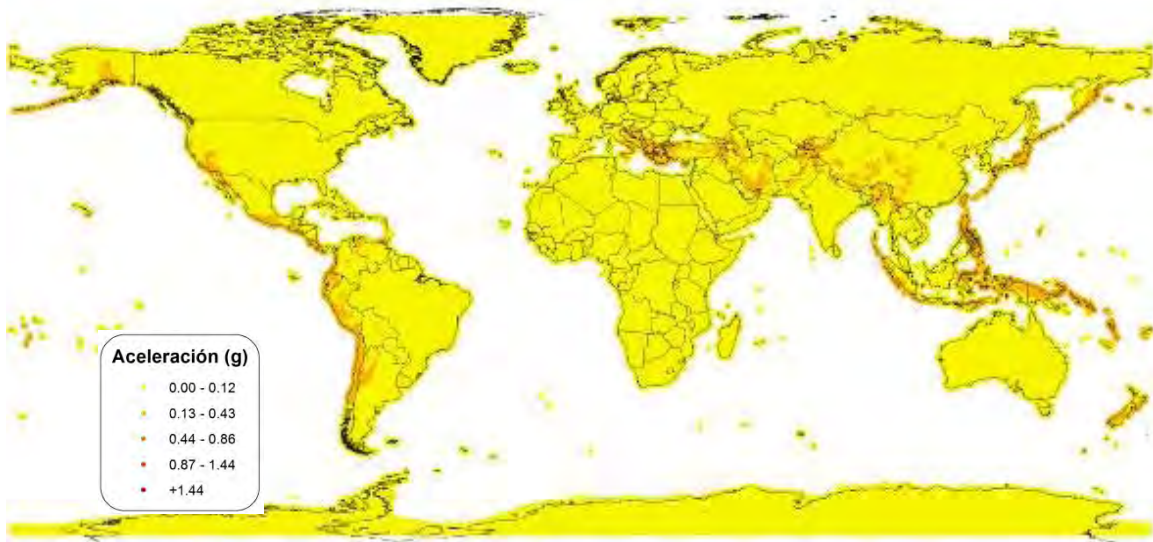


Figure A4-13
Hazard map for 1.0sec, RT=250 years

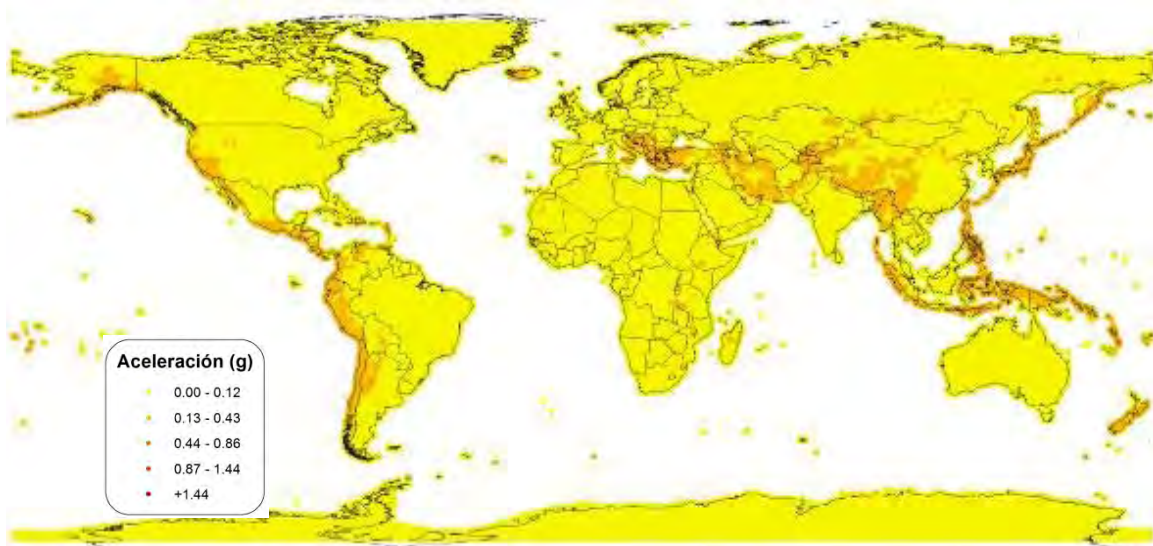


Figure A4-14
Hazard map for 1.0sec, RT=500 years

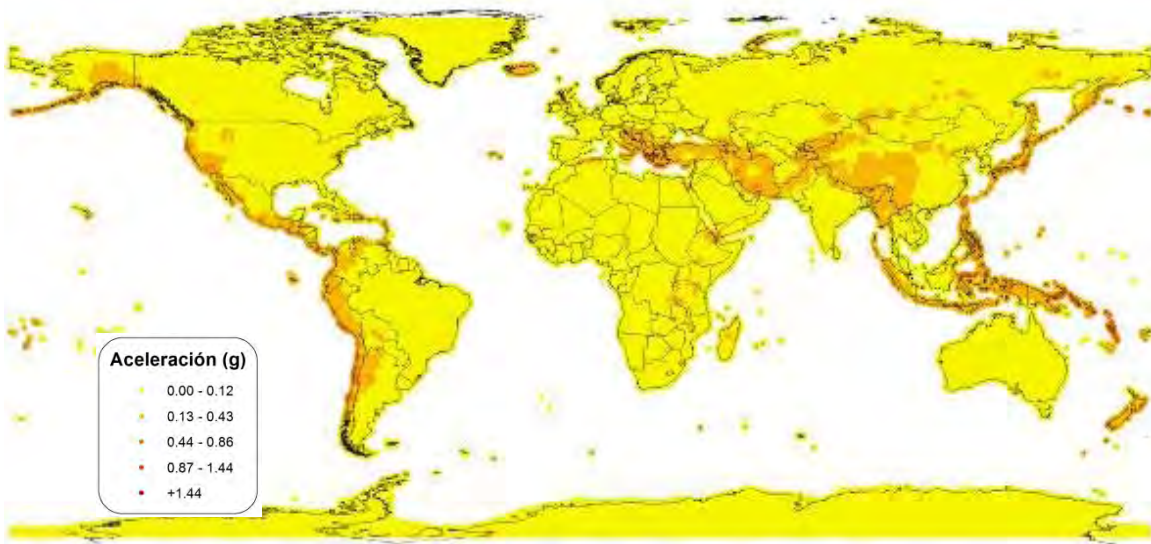


Figure A4-15
 Hazard map for 1.0sec, RT=1,000 years

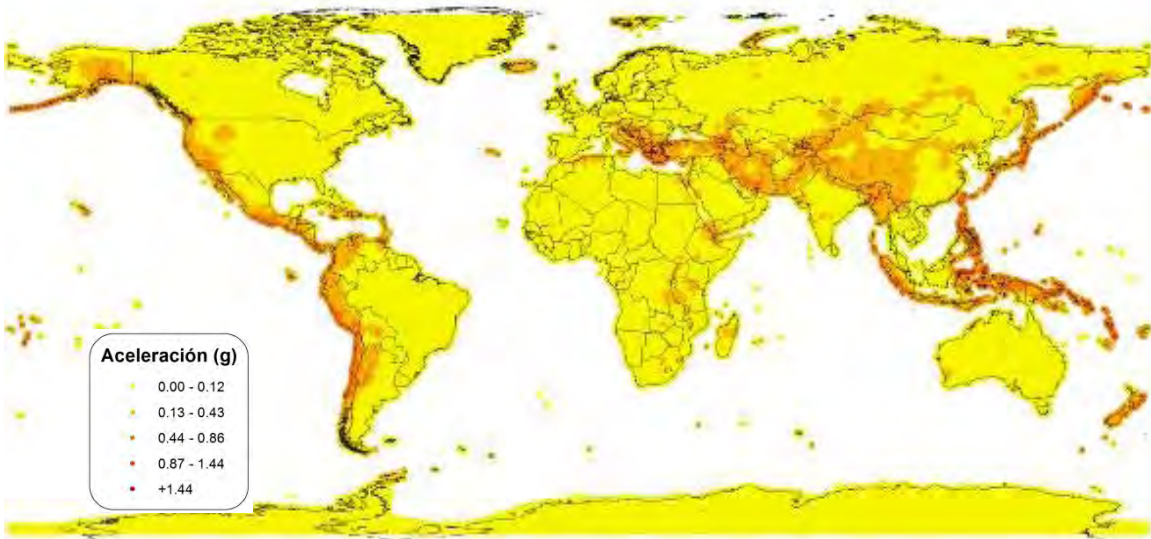


Figure A4-16
 Hazard map for 1.0sec, RT=2,500 years

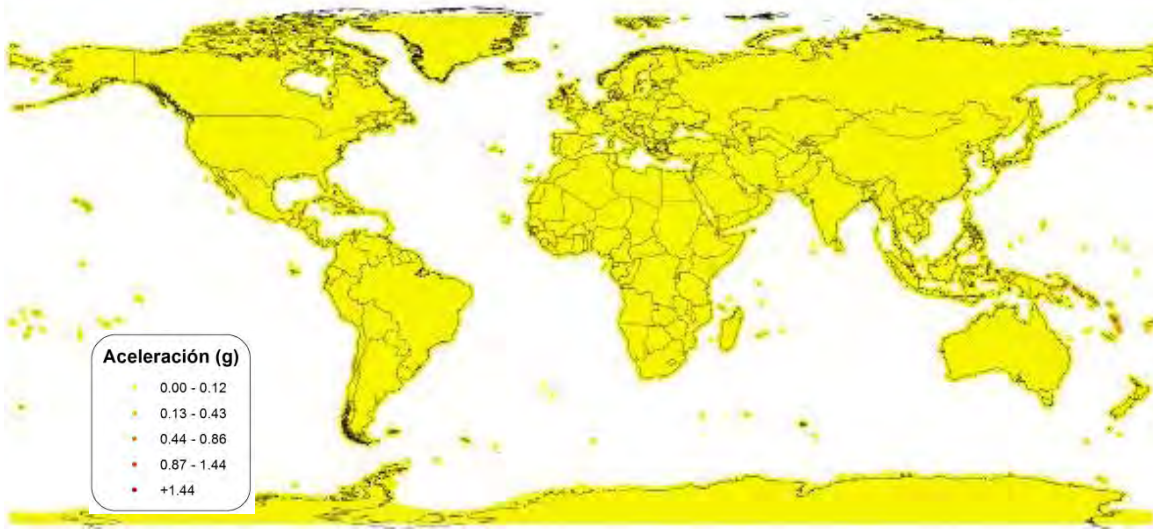


Figure A4-17
Hazard map for 2.0sec, RT=250 years

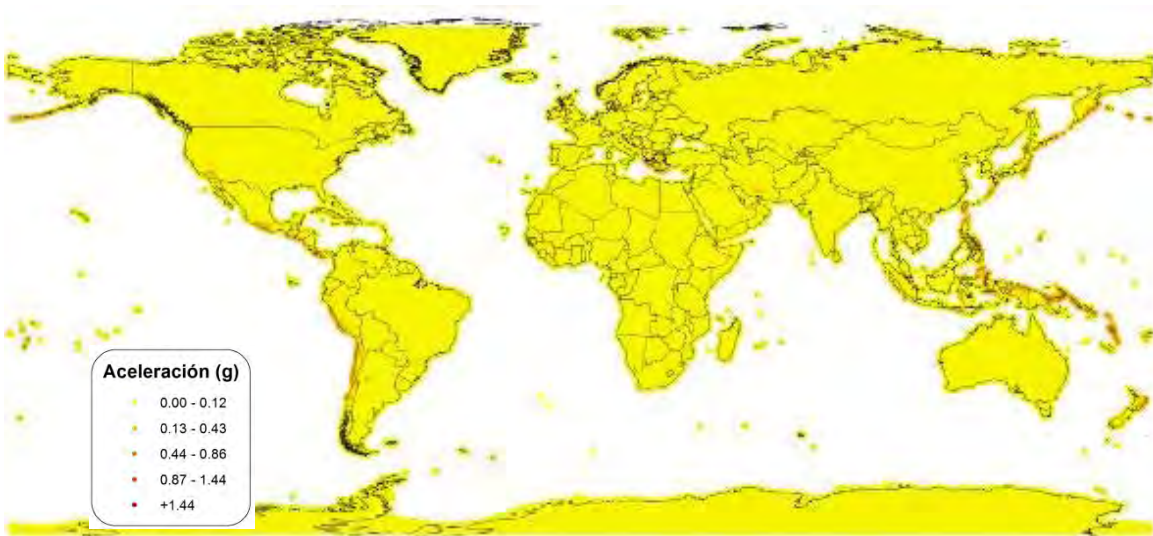


Figure A4-18
Hazard map for 2.0sec, RT=500 years

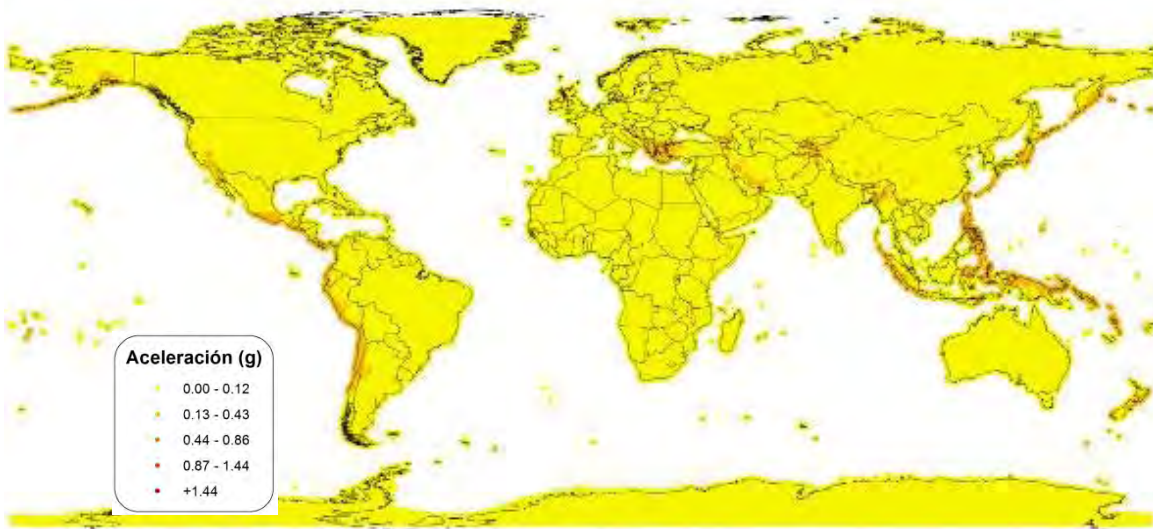


Figure A4-19
Hazard map for 2.0sec, RT=1,000 years

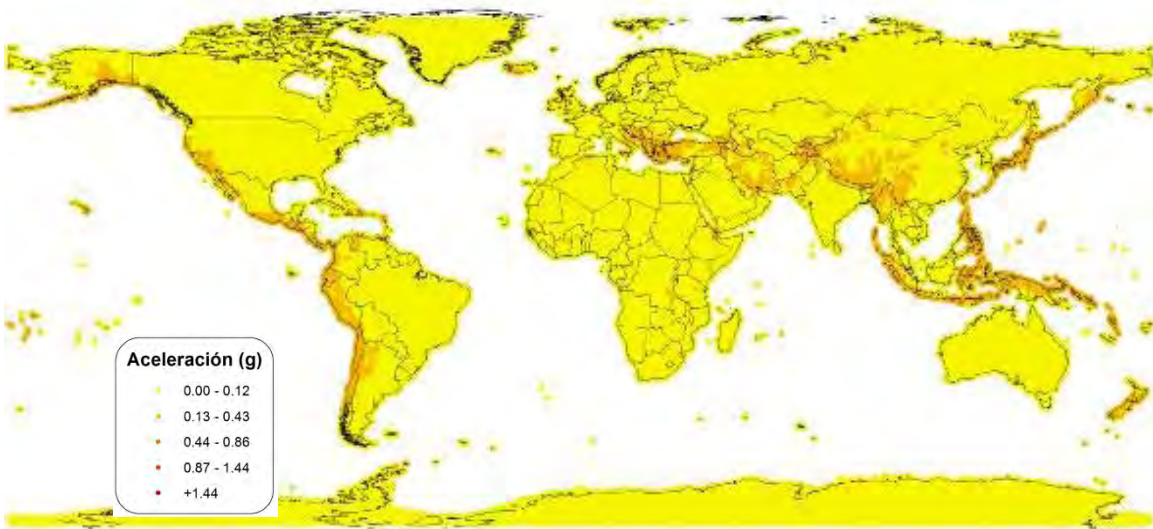


Figure A4-20
Hazard map for 2.0sec, RT=2,500 years

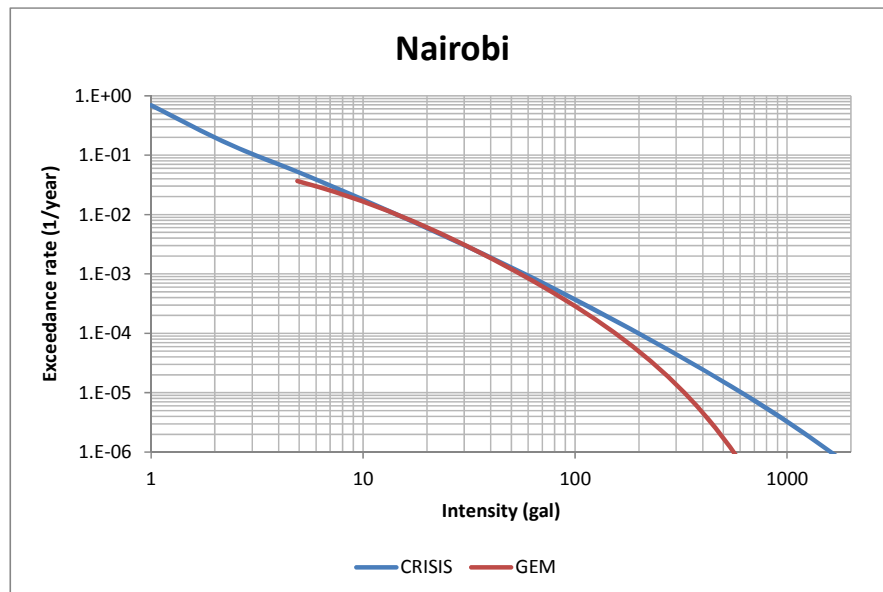
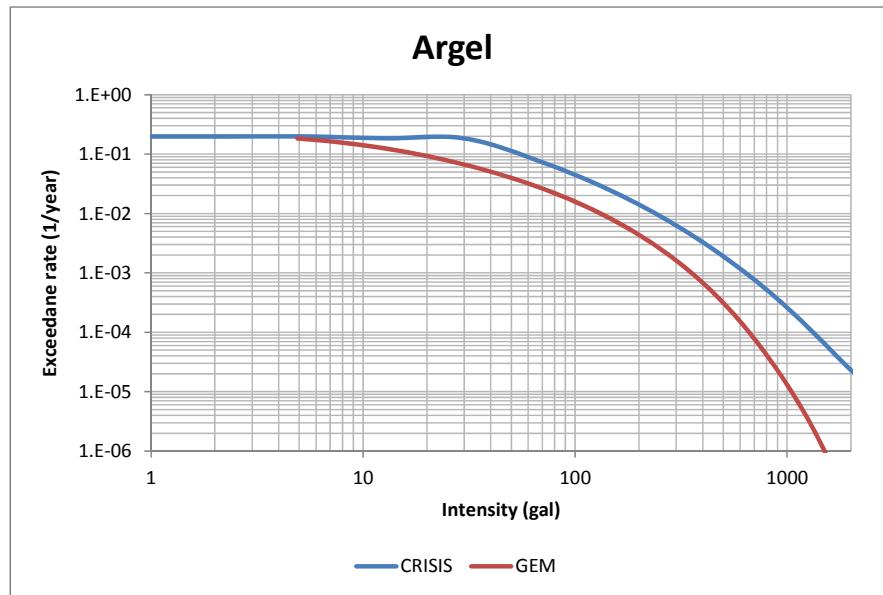
ANNEX 5. SEISMIC HAZARD CURVES FOR SOME CITIES

Seismic hazard curves for 18 cities were calculated along different world regions. The curves are presented in terms of the maximum intensity for several annual exceedance rates. The selected cities are presented in Table A5-1. The comparison in terms of peak ground acceleration (PGA) for the obtained results with CRISIS 2012 (CAPRA) and OpenQuake (GEM) are presented.

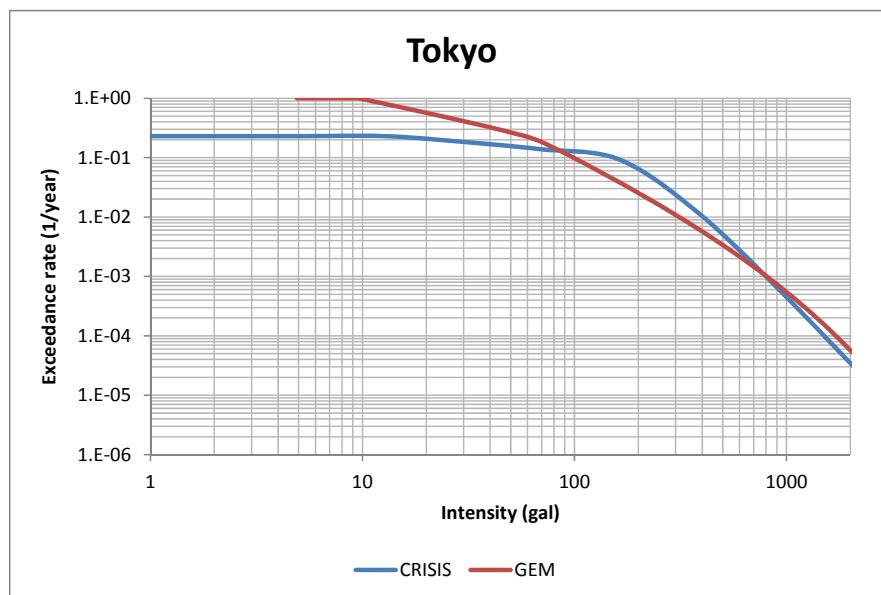
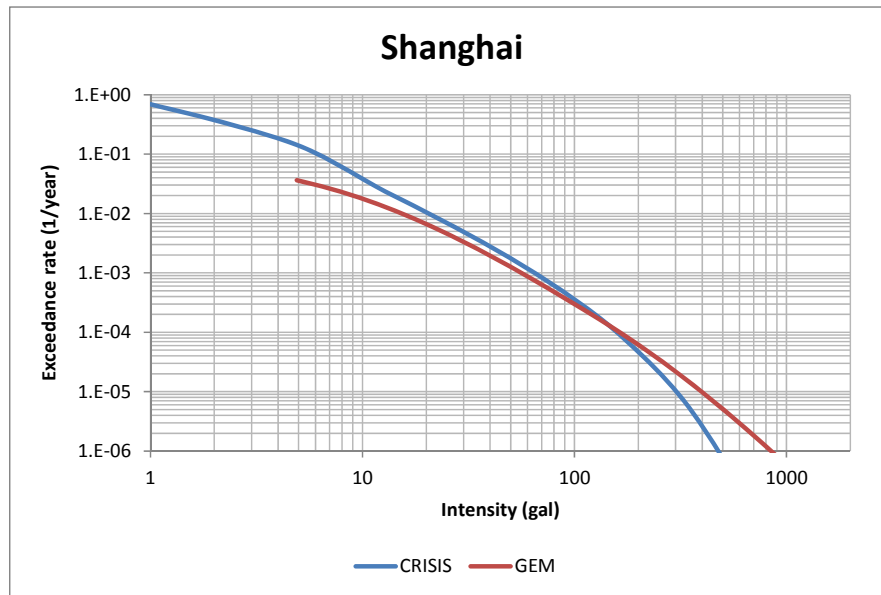
Table A5-1
Selected cities

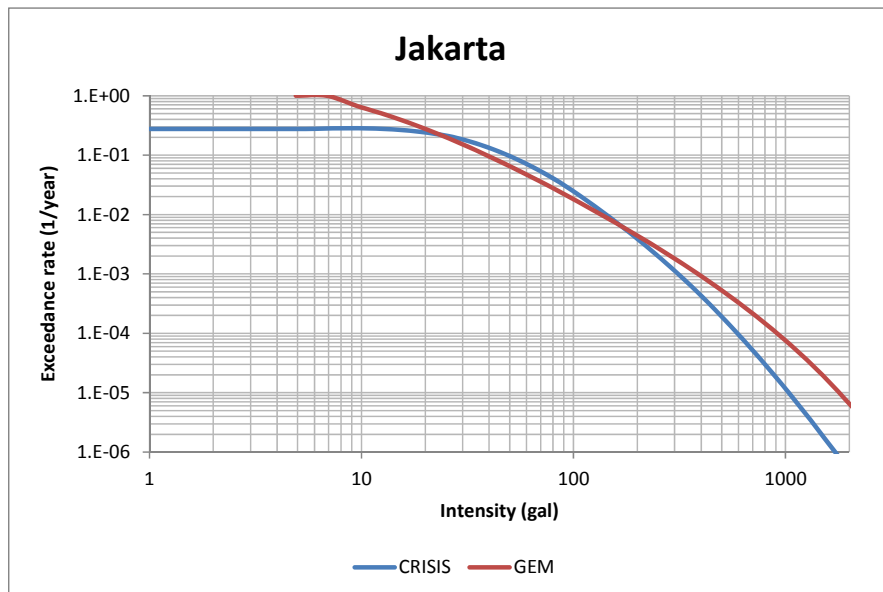
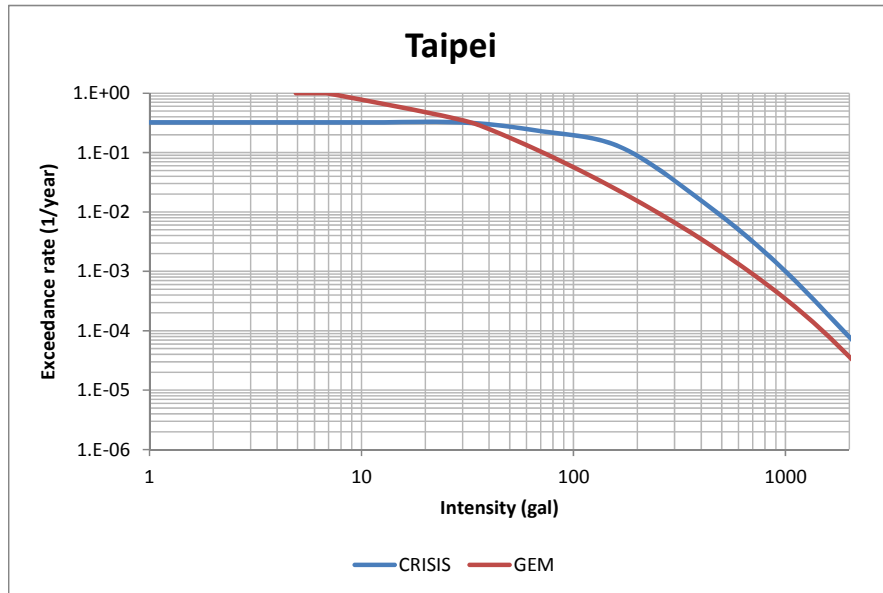
Country	City	Longitude (°)	Latitude (°)	Region
Argelia	Argel	3.05	36.76	Africa
Kenia	Nairobi	36.83	-1.28	Africa
China	Shanghai	121.47	31.25	Asia
Japón	Tokio	139.70	35.69	Asia
Taiwán	Taipei	121.57	25.08	Asia
Indonesia	Yakarta	106.86	-6.19	Asia
Pakistán	Islamabad	73.08	33.70	Asia
Filipinas	Manila	120.98	14.59	Asia
Dominican Republic	Santo Domingo	-69.97	18.49	Caribbean
Jamaica	Kingston	-76.79	17.99	Caribbean
Colombia	Bogota	-74.07	4.59	South America
Perú	Lima	-77.06	-12.03	South America
Nicaragua	Managua	-86.24	12.15	Central America
El Salvador	San Salvador	-89.16	13.73	Central America
Mexico	México D.F	-99.12	19.42	North America
EEUU	Los Angeles	-118.26	33.99	North America
New Zealand	Wellington	174.76	-41.28	Oceania
New Zealand	Christchurch	172.63	-43.53	Oceania

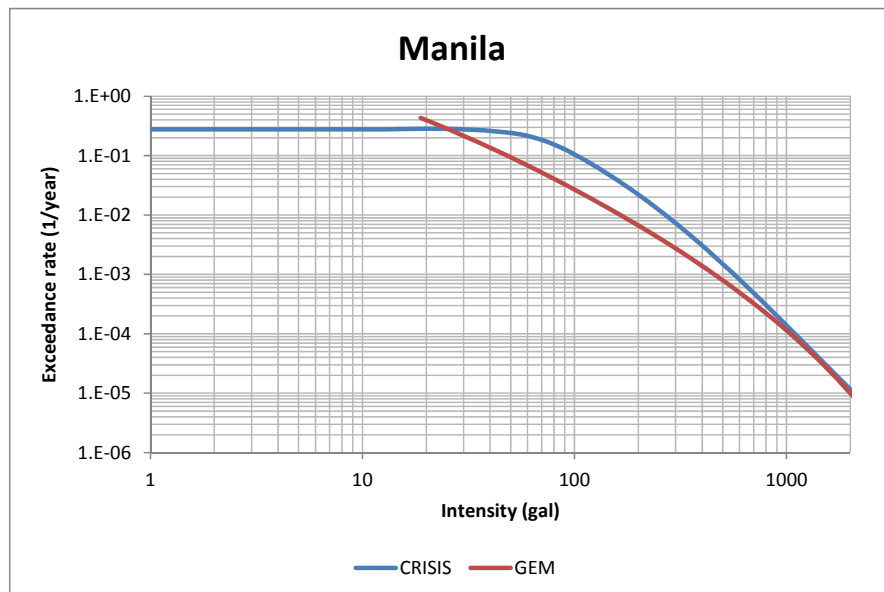
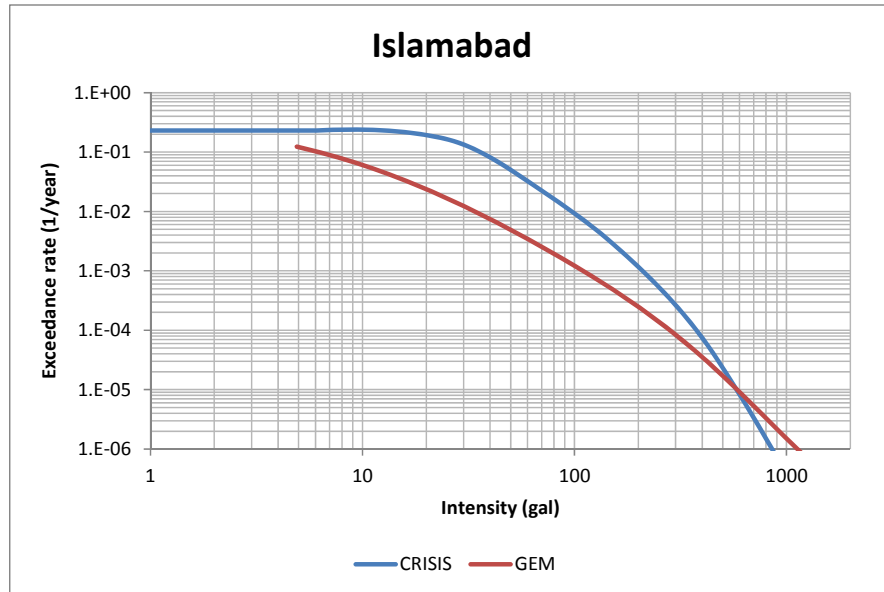
Cities in Africa



Cities in Asia

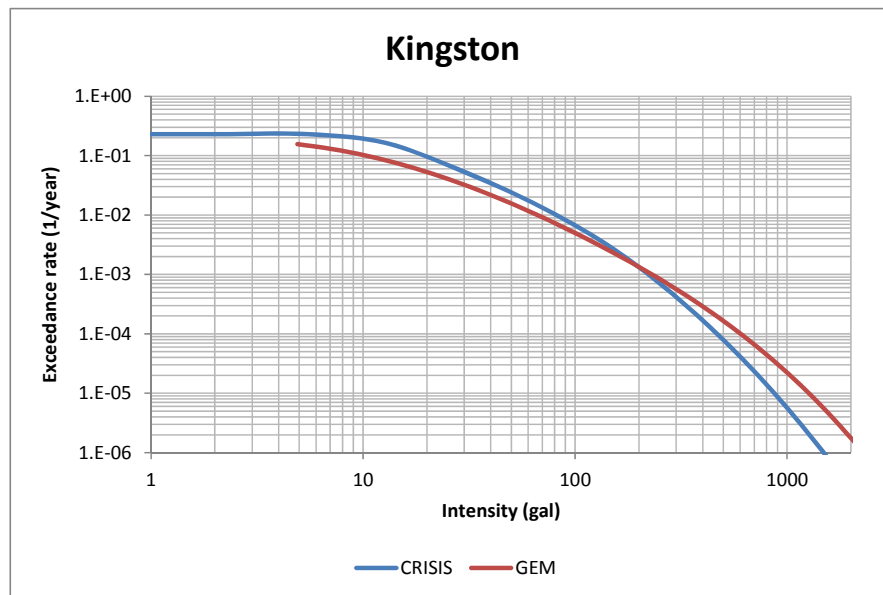
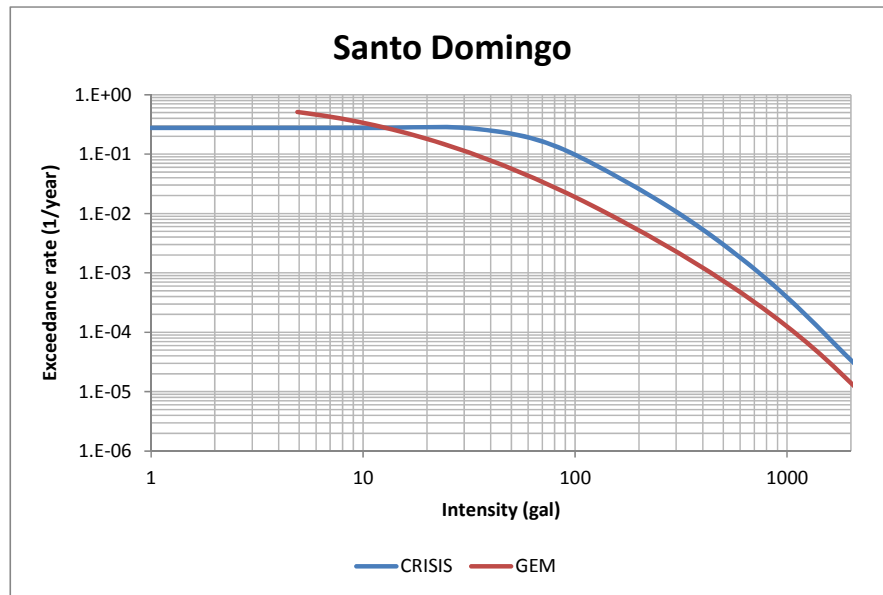




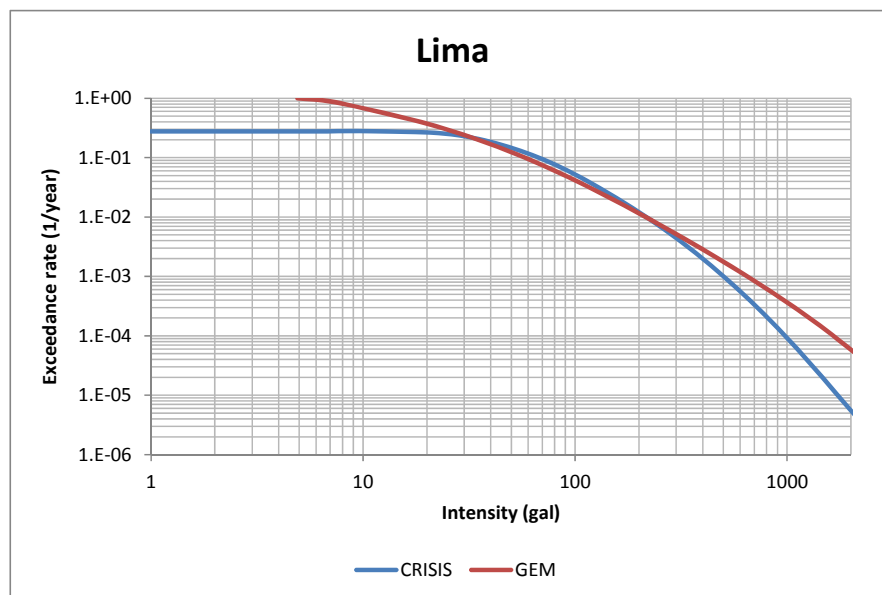
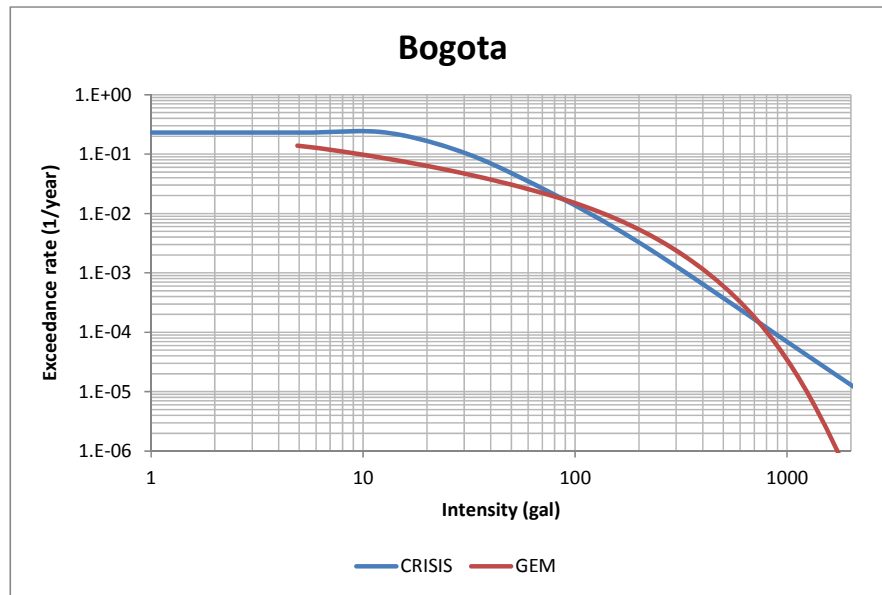




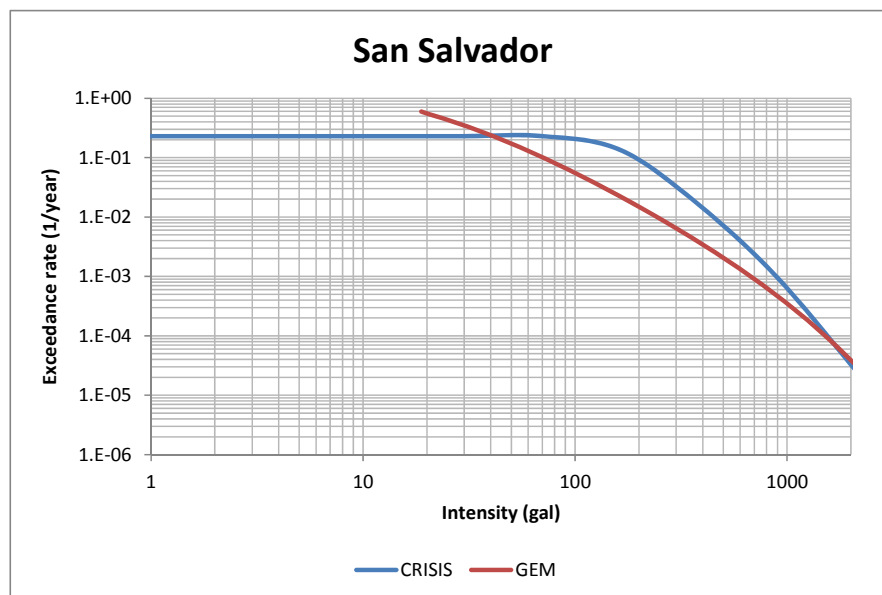
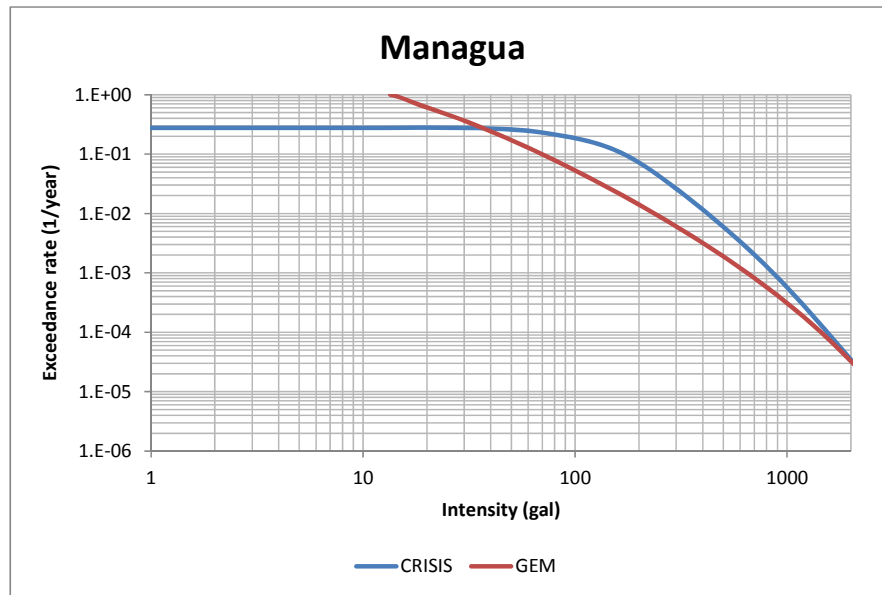
Cities in the Caribbean



Cities in South America

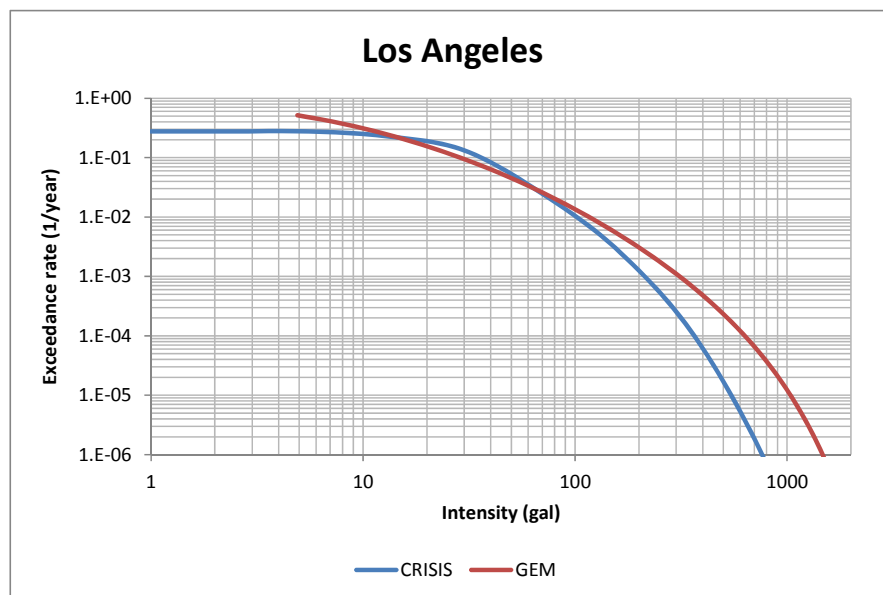
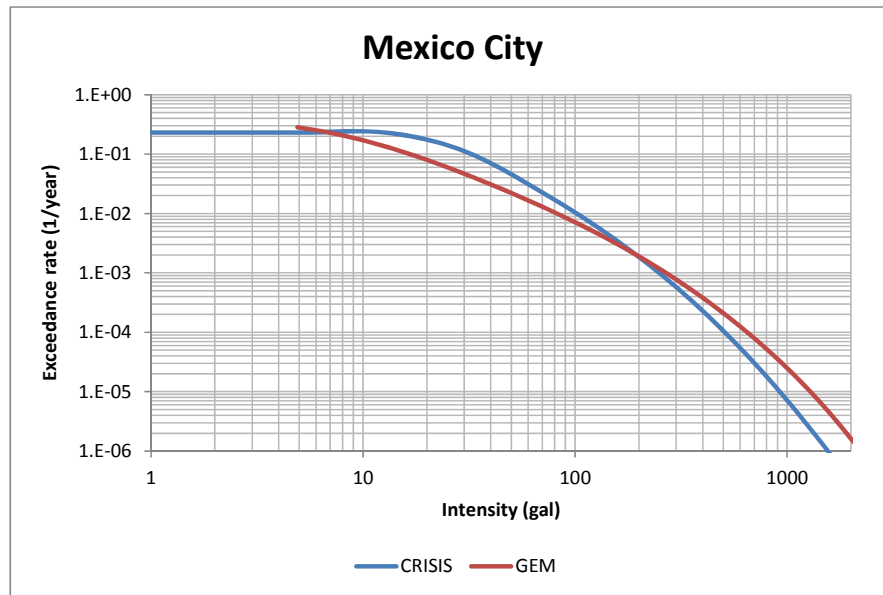


Cities in Central America

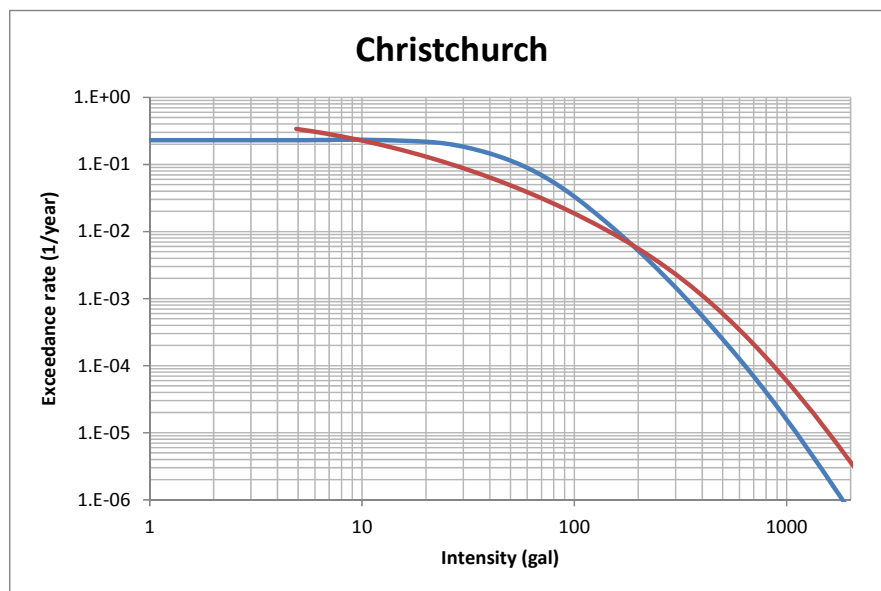
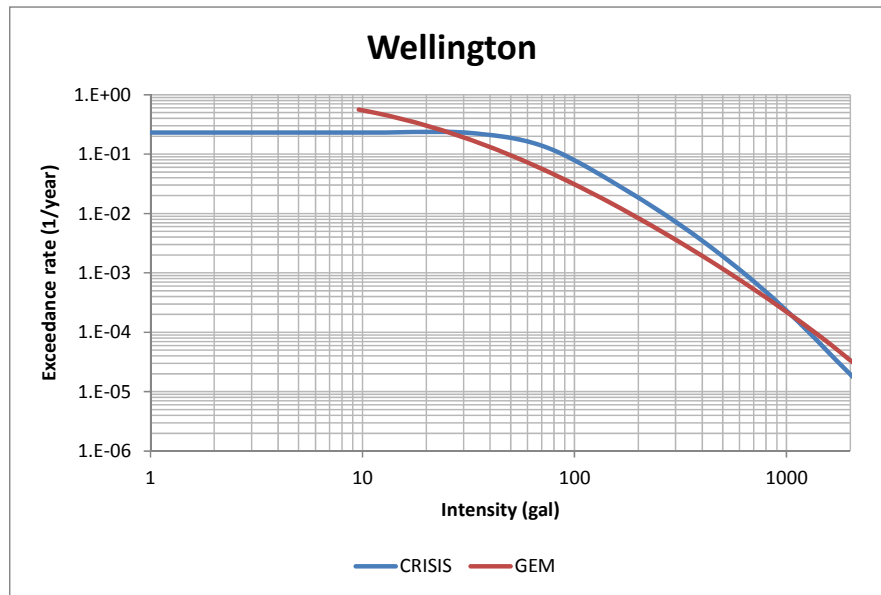




Cities in North America



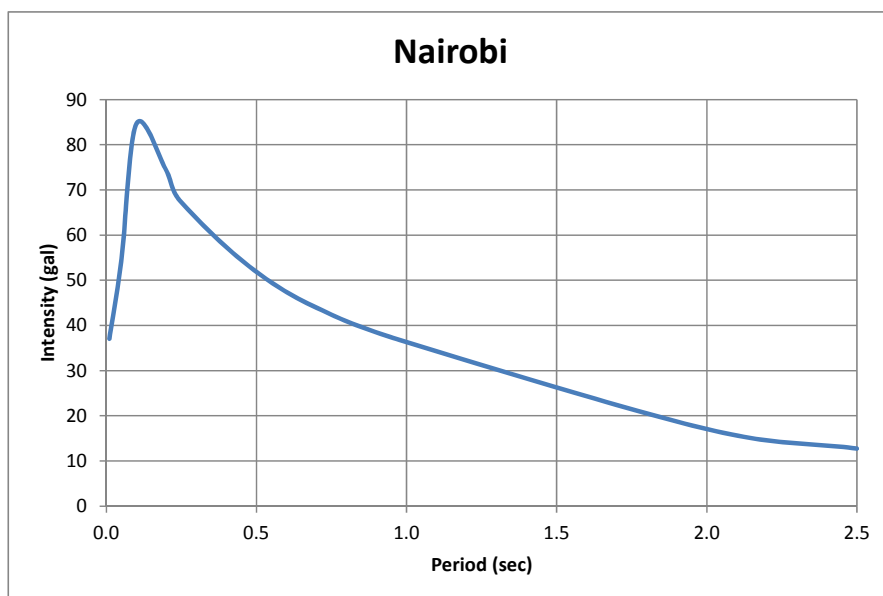
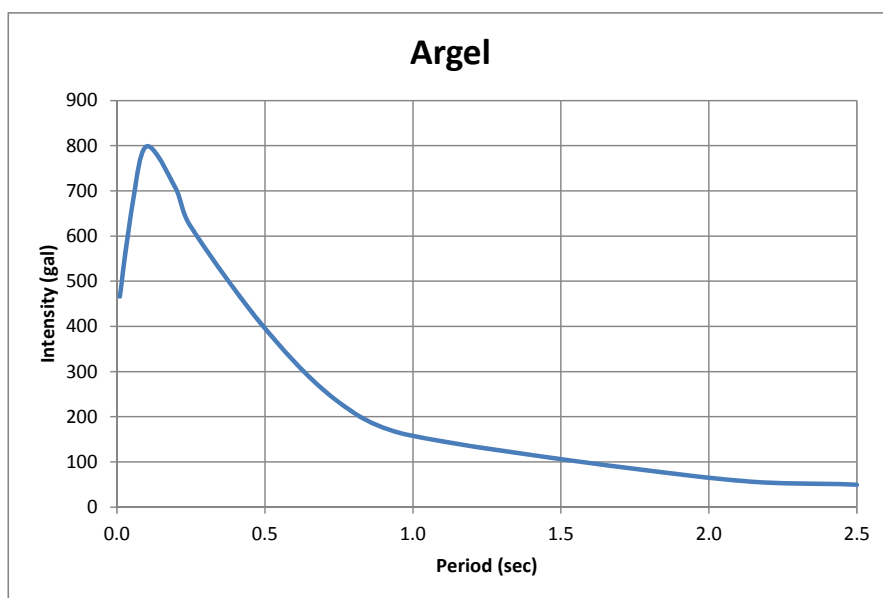
Cities in Oceania



ANNEX 6. UNIFORM HAZARD SPECTRUM FOR SELECTED CITIES

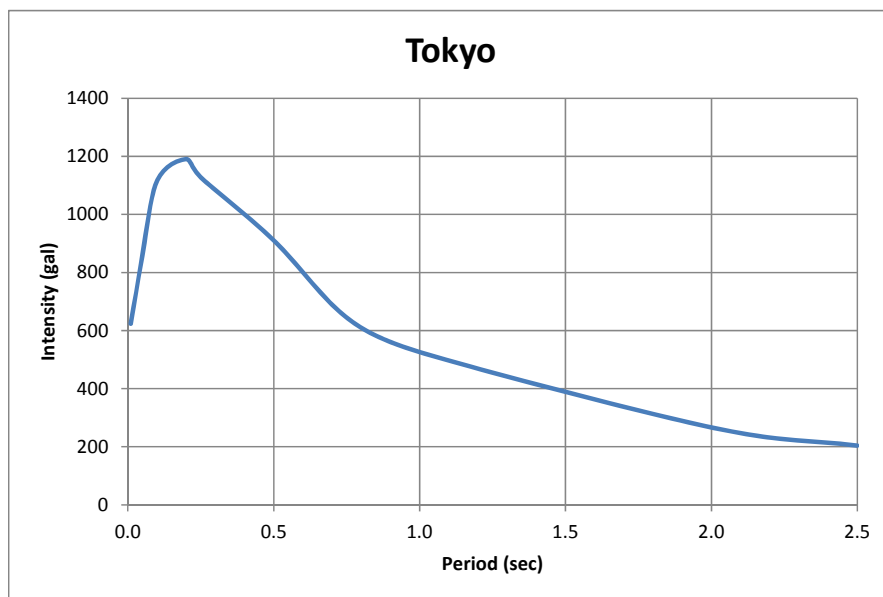
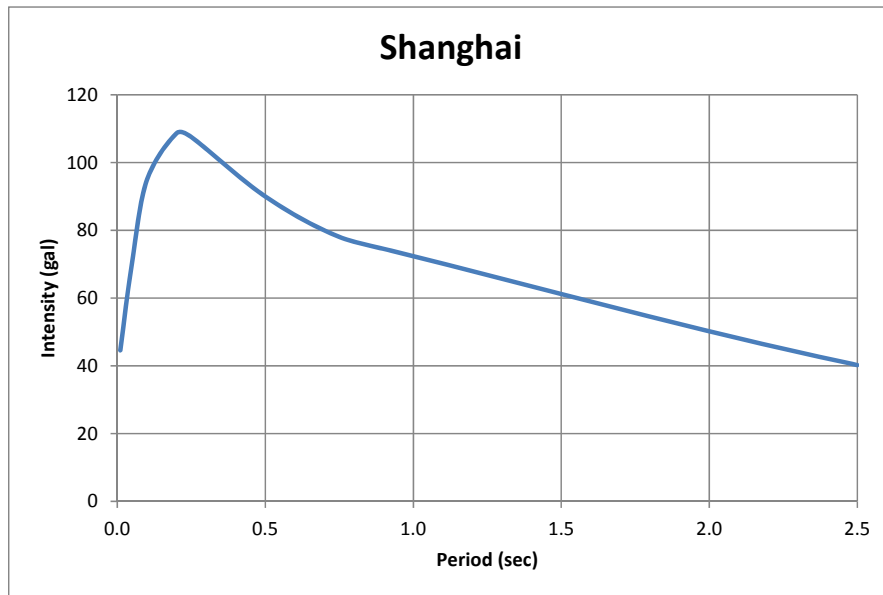
Uniform hazard spectrums for a 475 years return period (probability of exceeding the 10% of the acceleration value in 50 years).

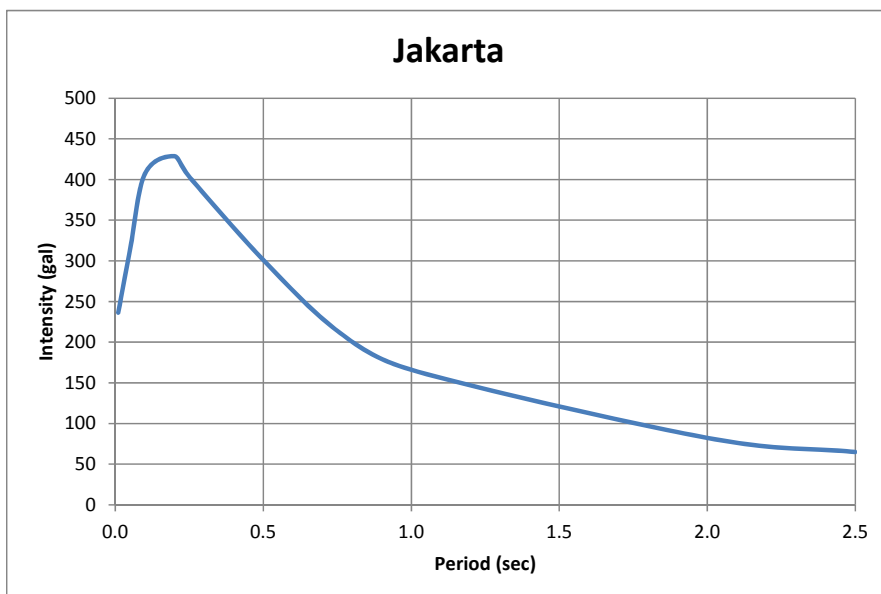
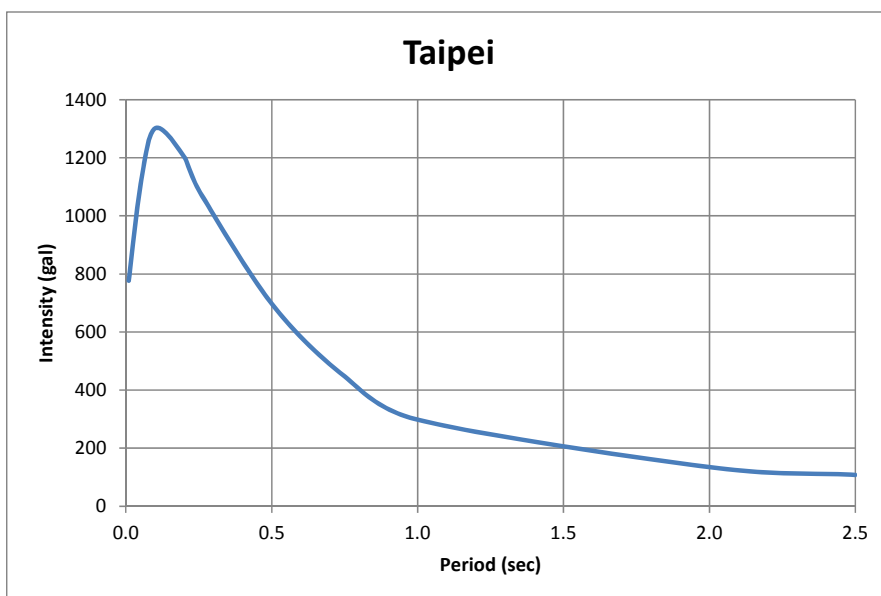
Cities in Africa

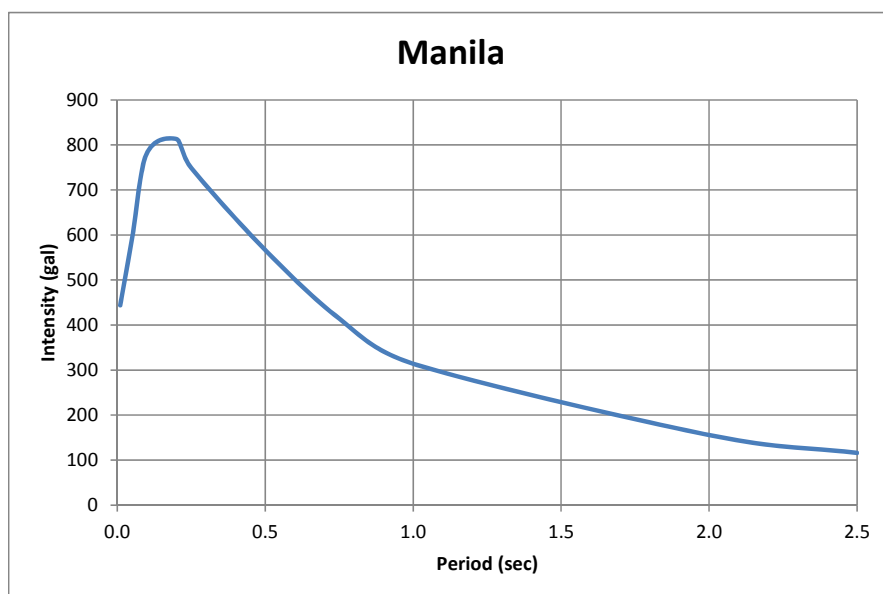
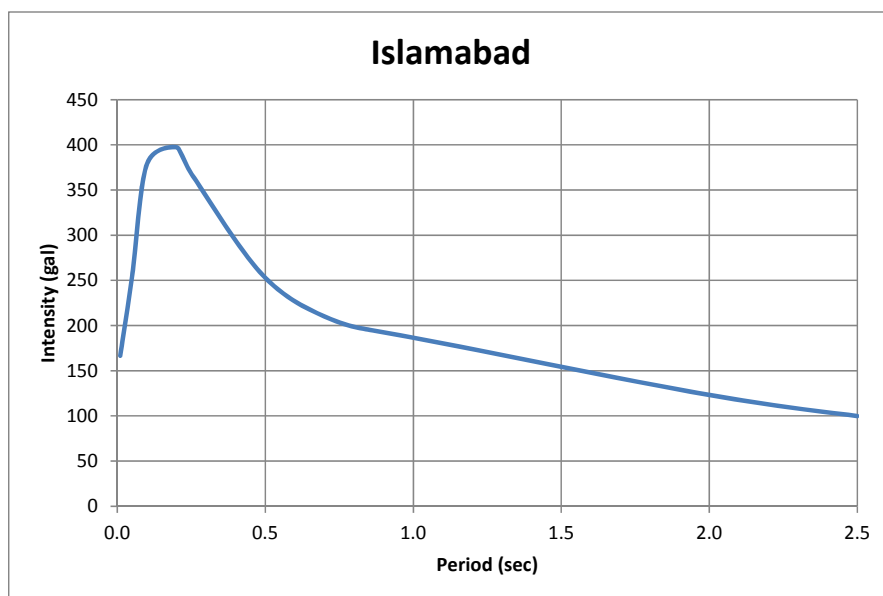




Cities in Asia

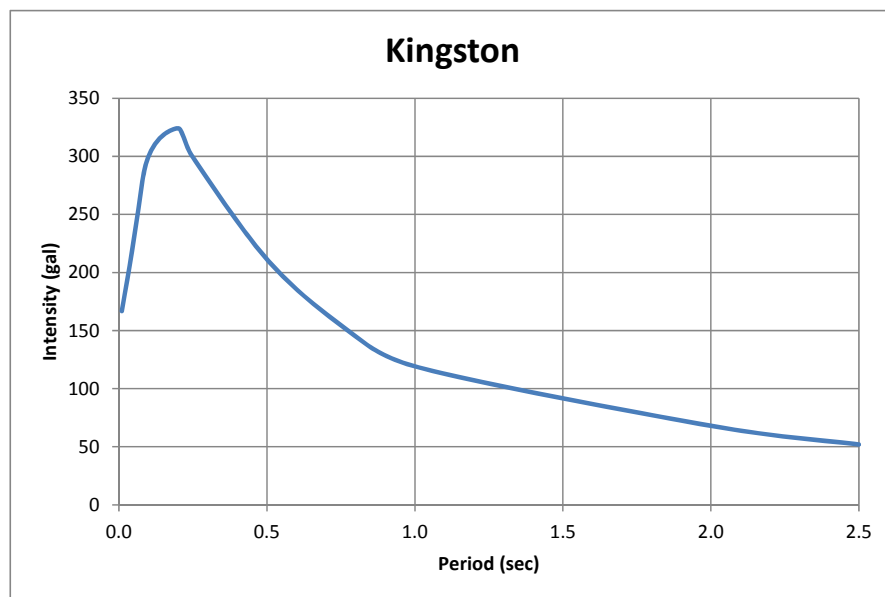
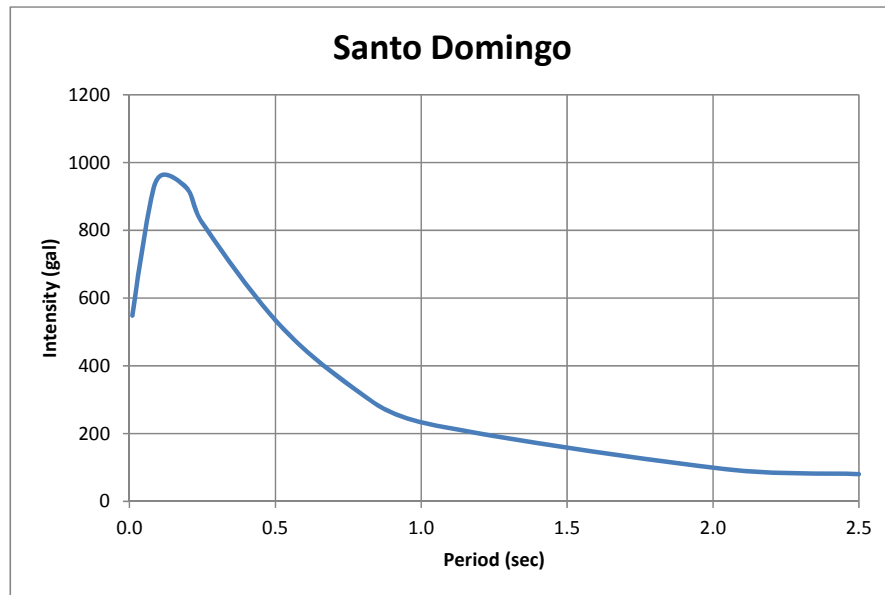






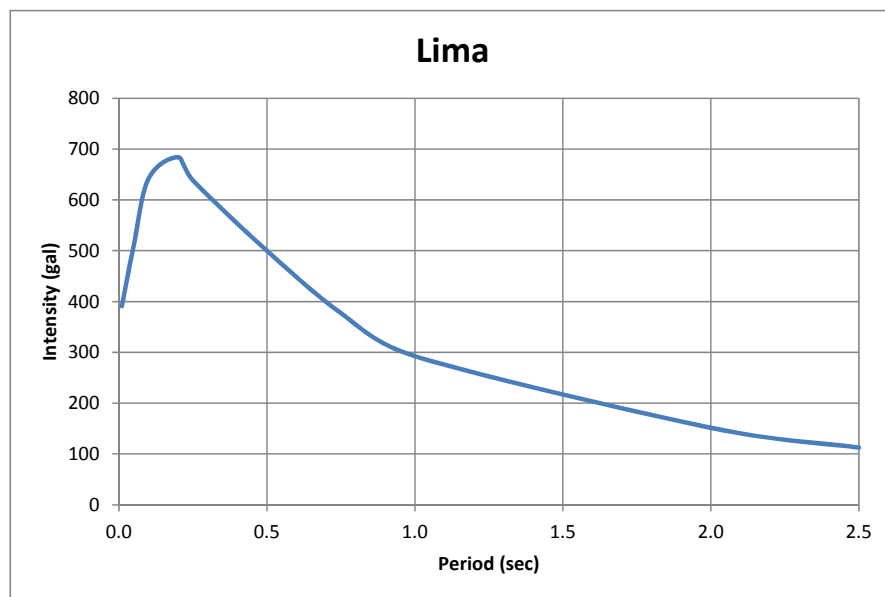
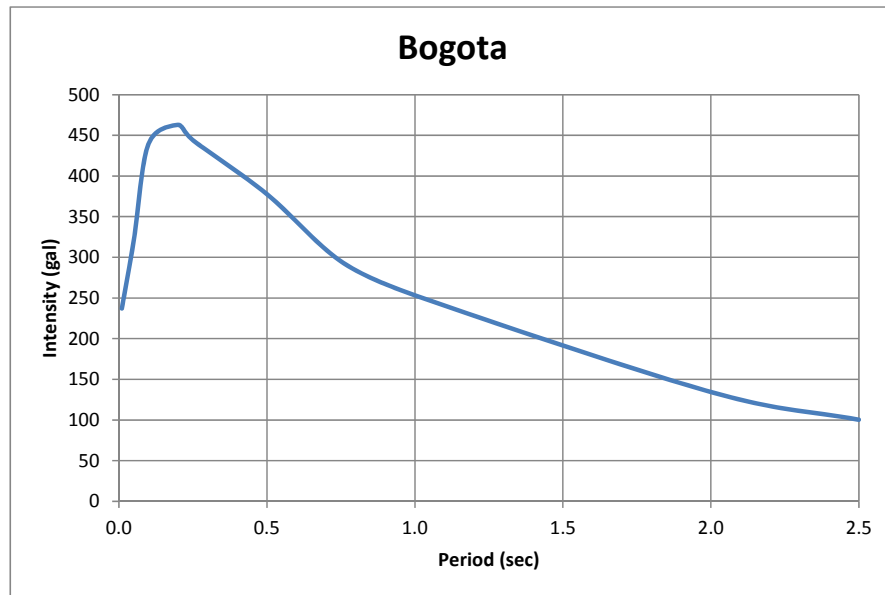


Cities in the Caribbean



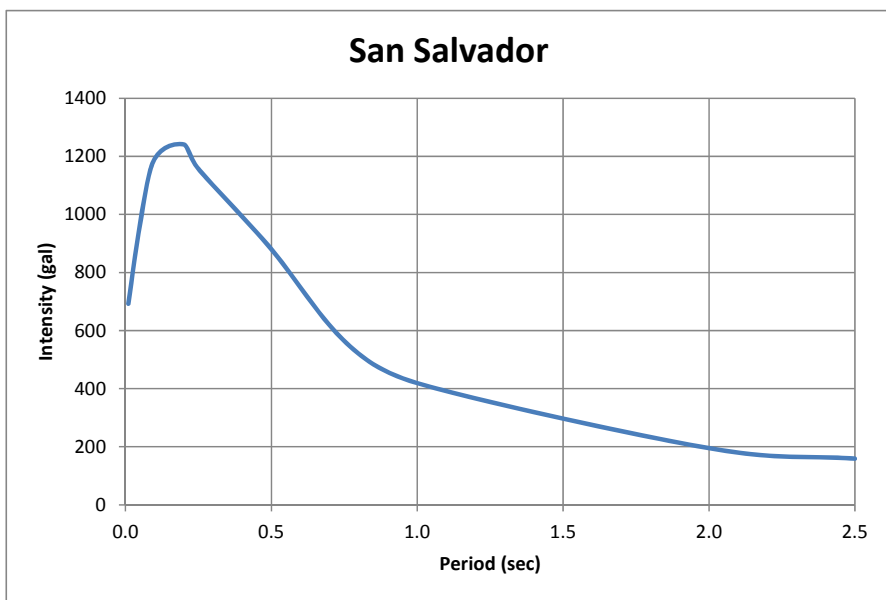
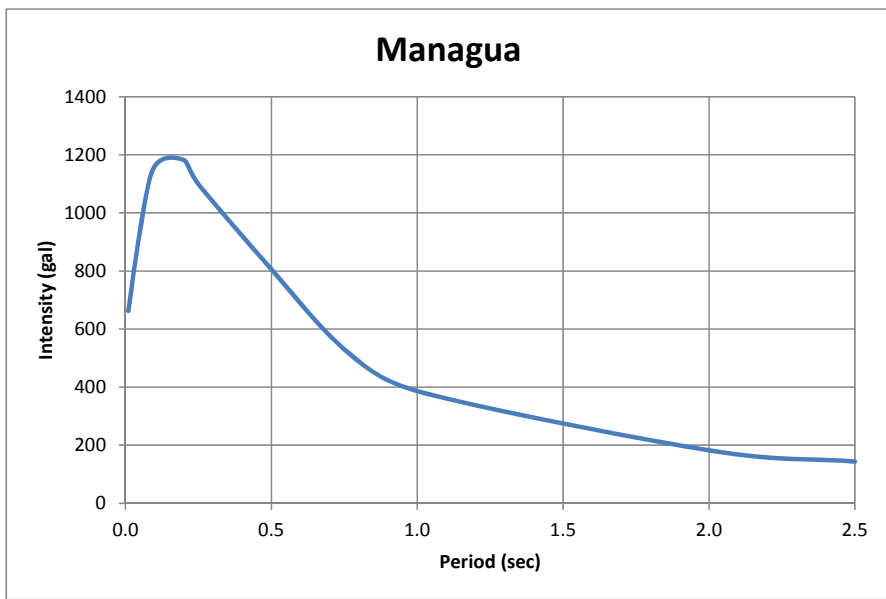


Cities in South America



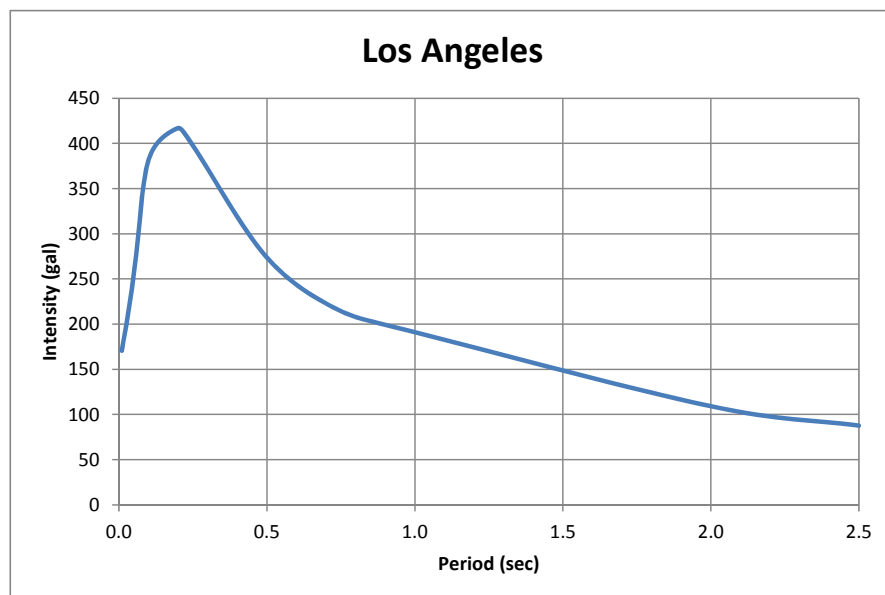
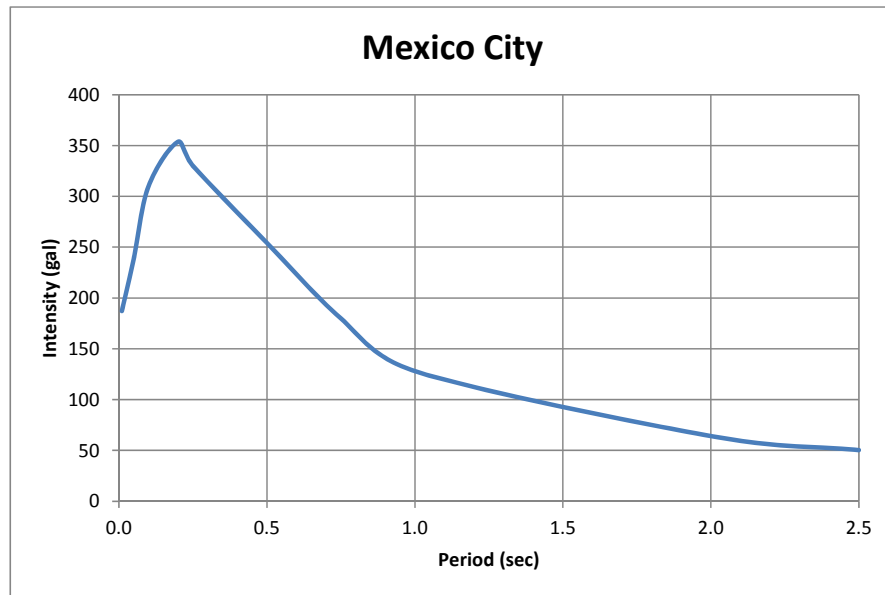


Cities in Central America



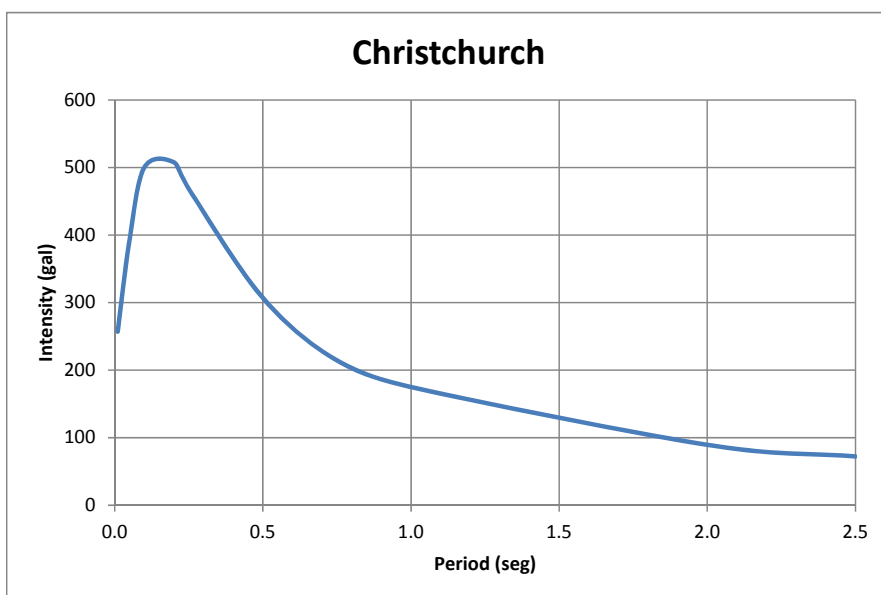
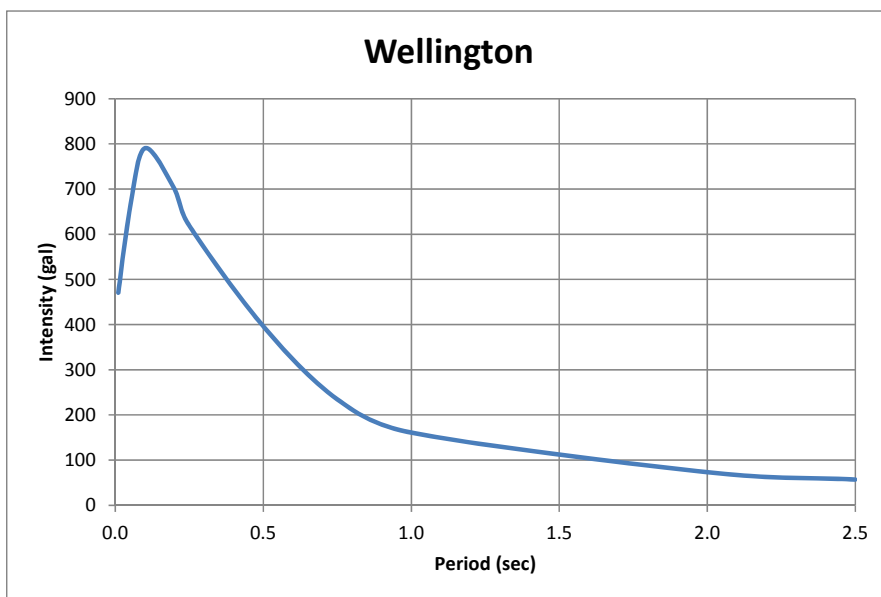


Cities in North America





Cities in Oceania



ANNEX 7. ACCUMULATED NUMBER OF CYCLONES BY BASINS

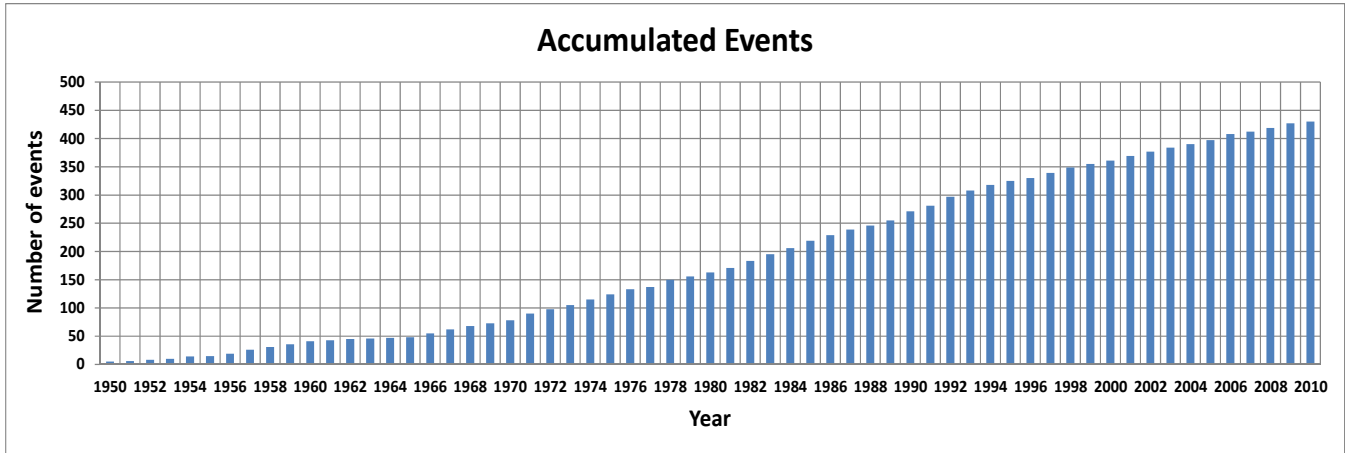


Figure A7-1 Total number of accumulated events for the East Pacific Ocean [EP] basin

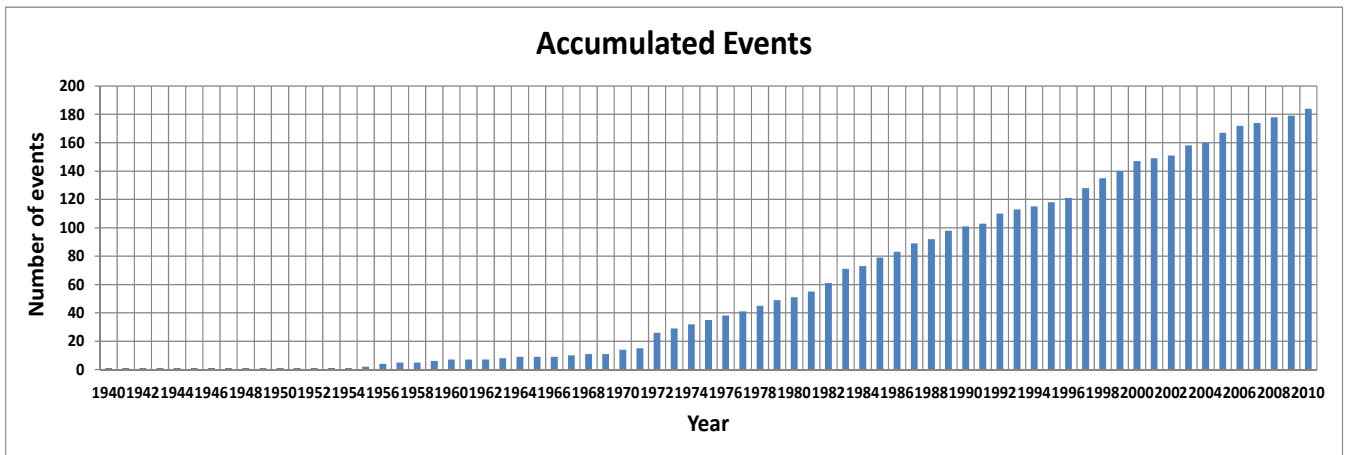


Figure A7-2 Total number of accumulated events for the South Pacific Ocean [SP] basin

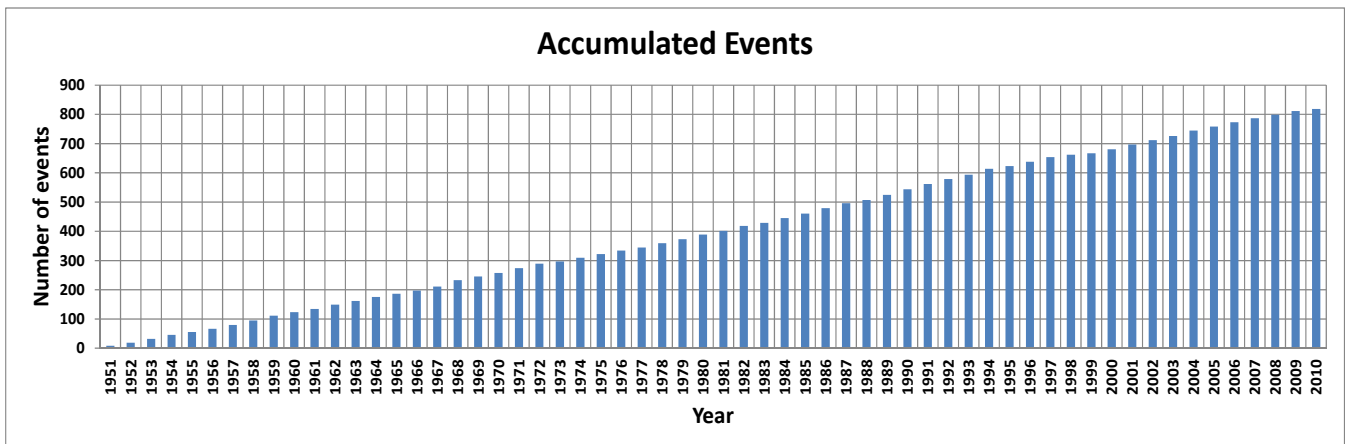


Figure A7-3 Total number of accumulated events for the West Pacific Ocean [WP] basin

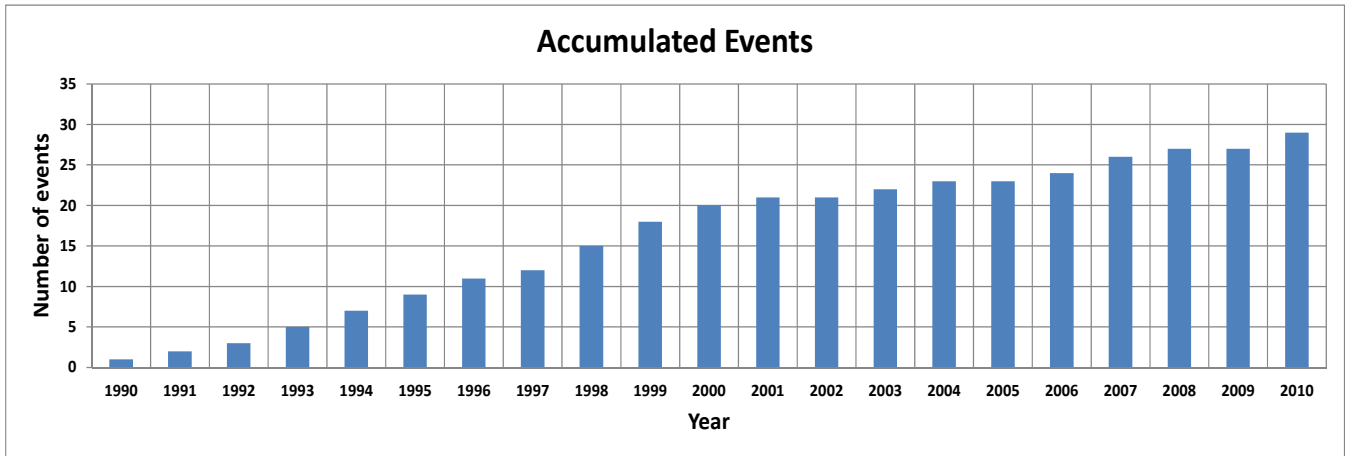


Figure A7-4 Total number of accumulated events for the North Indian Ocean [NI] basin

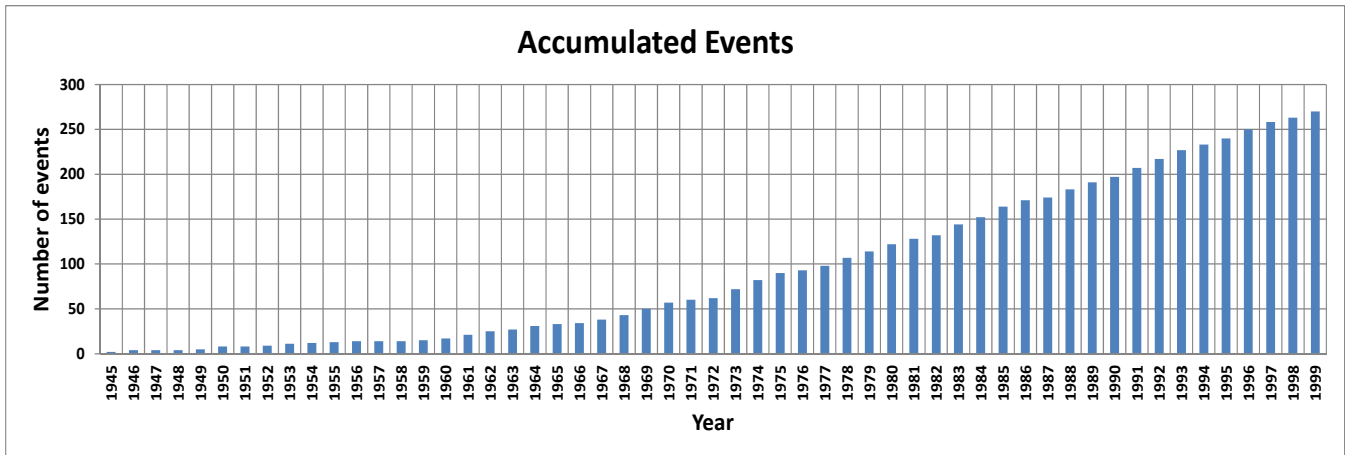


Figure A7-5 Total number of accumulated events for the South Indian Ocean [SI] basin

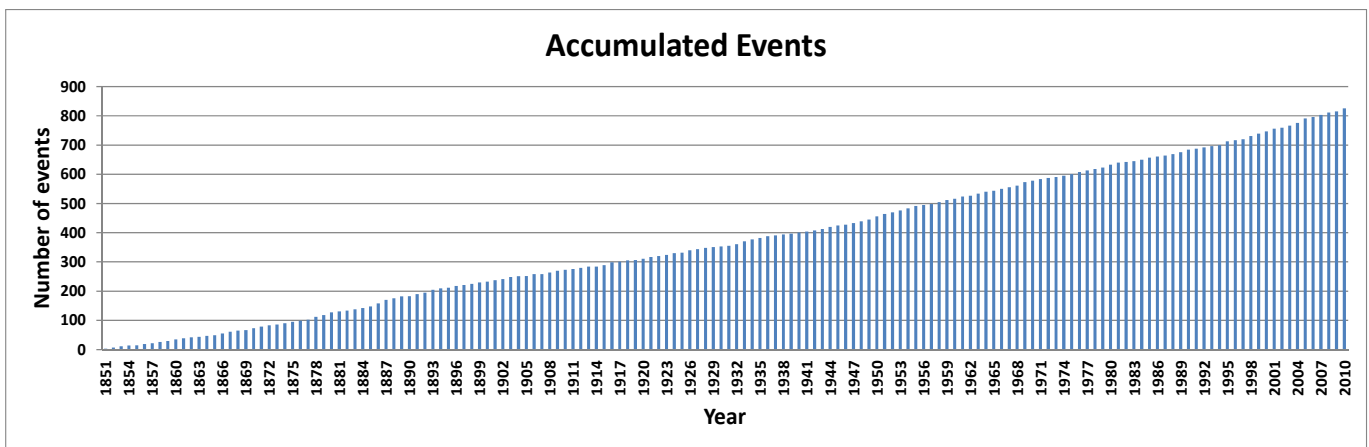


Figure A7-6 Total number of accumulated events for the North Atlantic Ocean [NA] basin

ANNEX 8. COMPLETENESS ANALYSIS FOR DIFFERENT SAFFIR-SIMPSON CATEGORIES

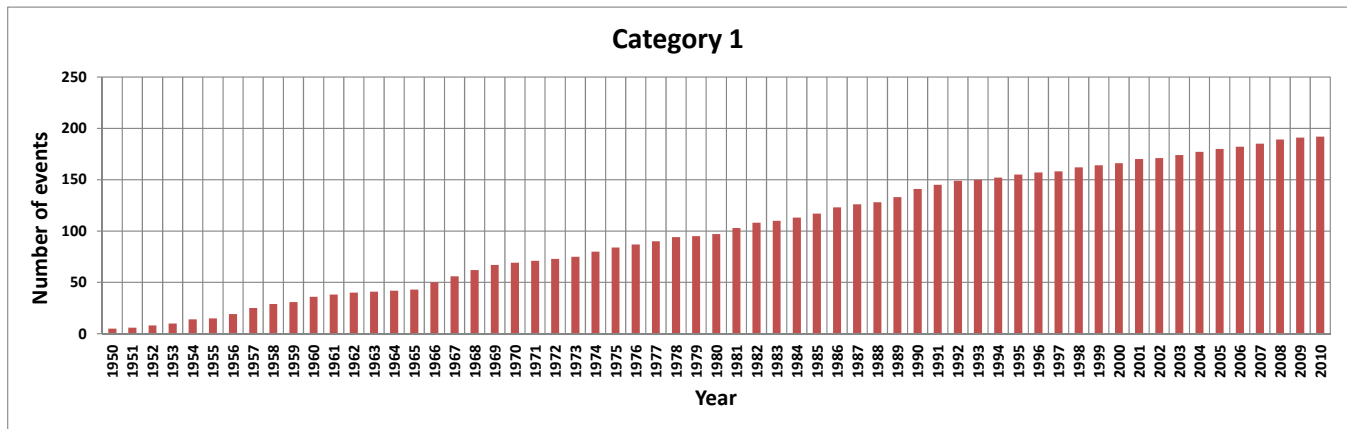
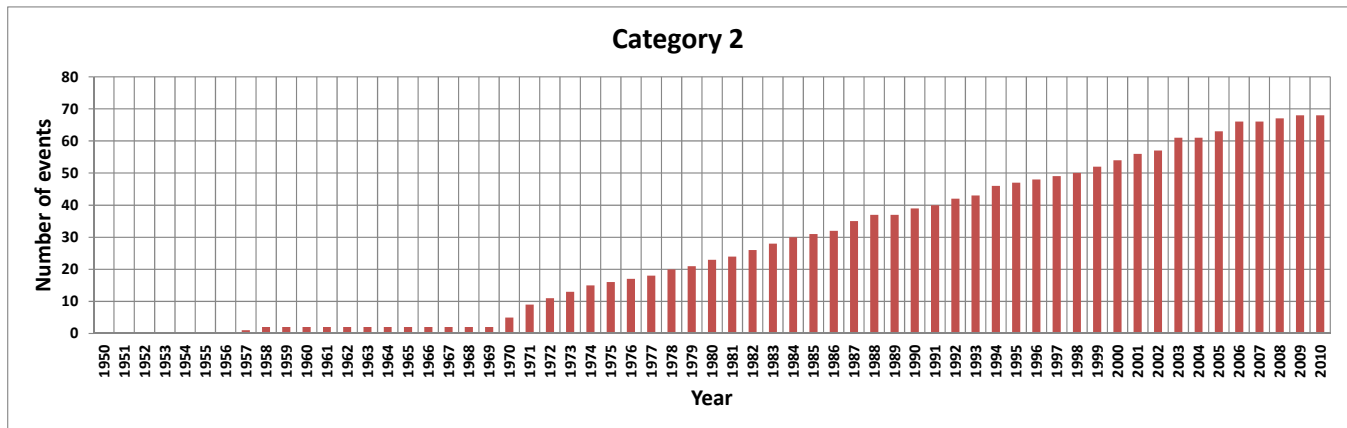
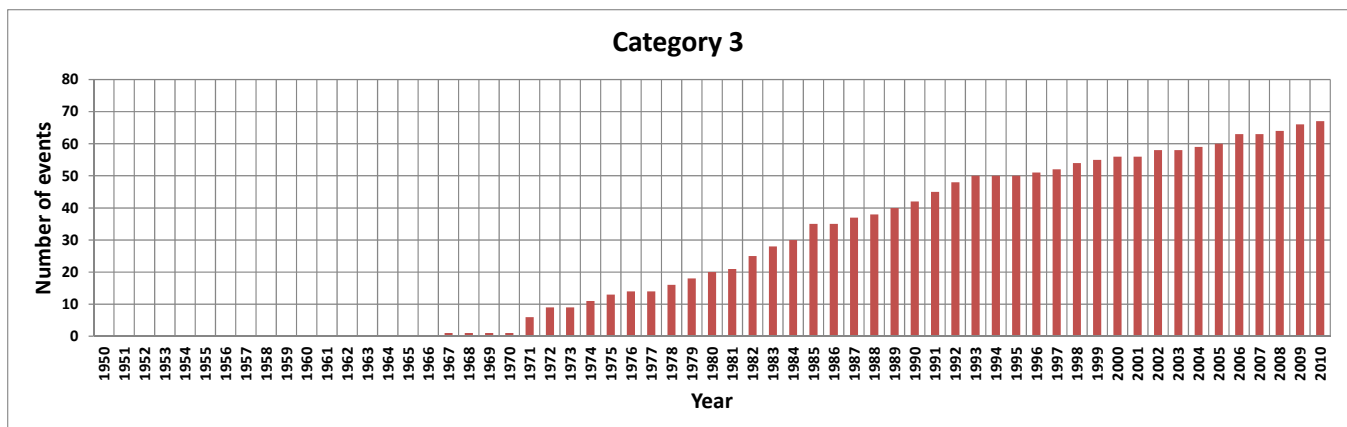


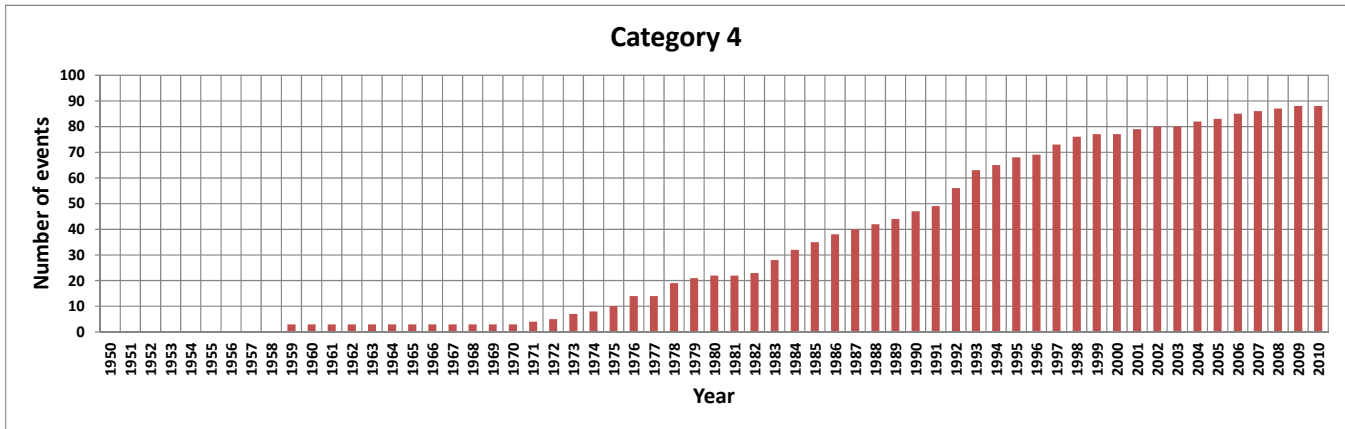
Figure A8-1 Accumulated number of events of SS-1 for the East Pacific basin [EP]



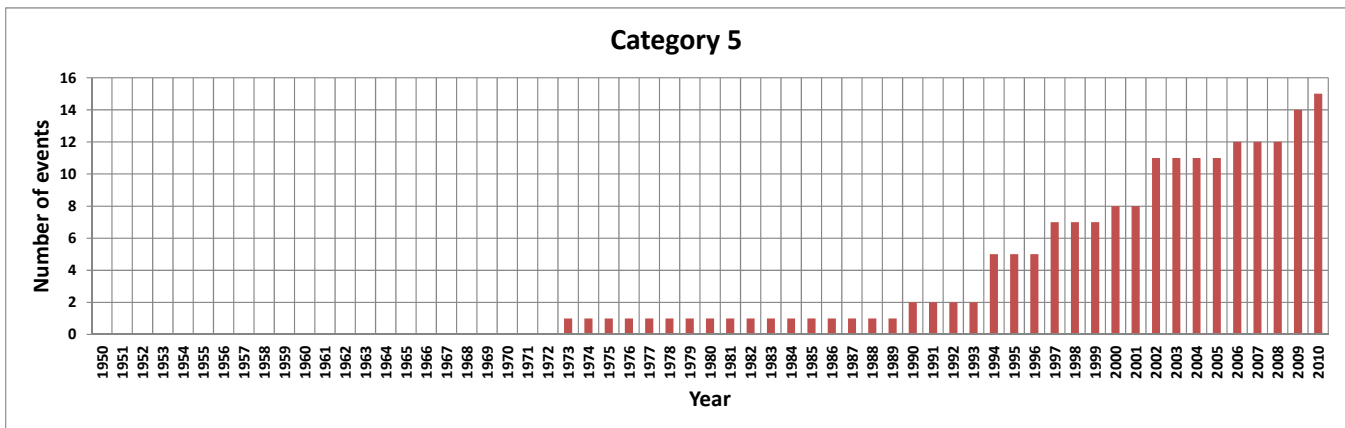
A8-2 Accumulated number of events of SS-2 for the East Pacific basin [EP]



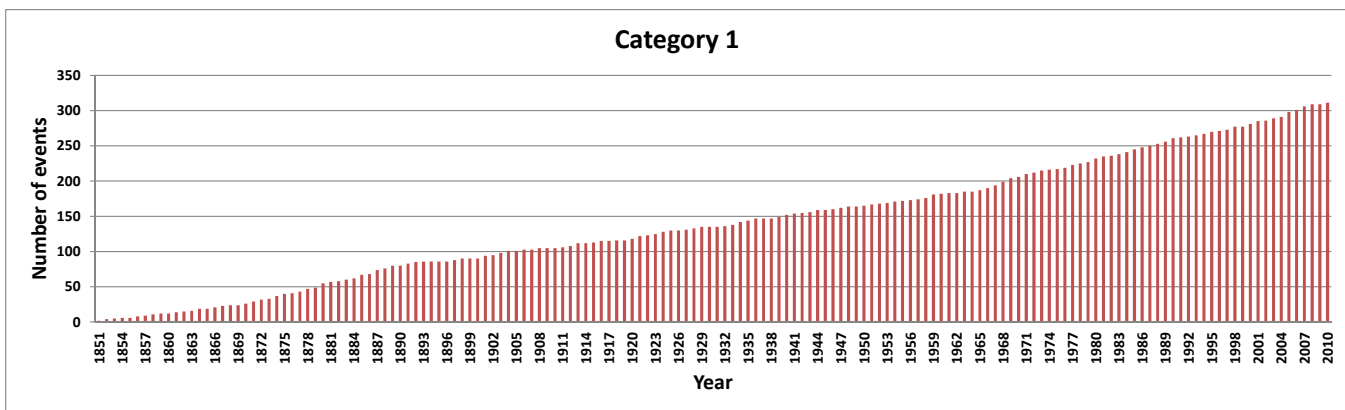
A8-3 Accumulated number of events of SS-3 for the East Pacific basin [EP]



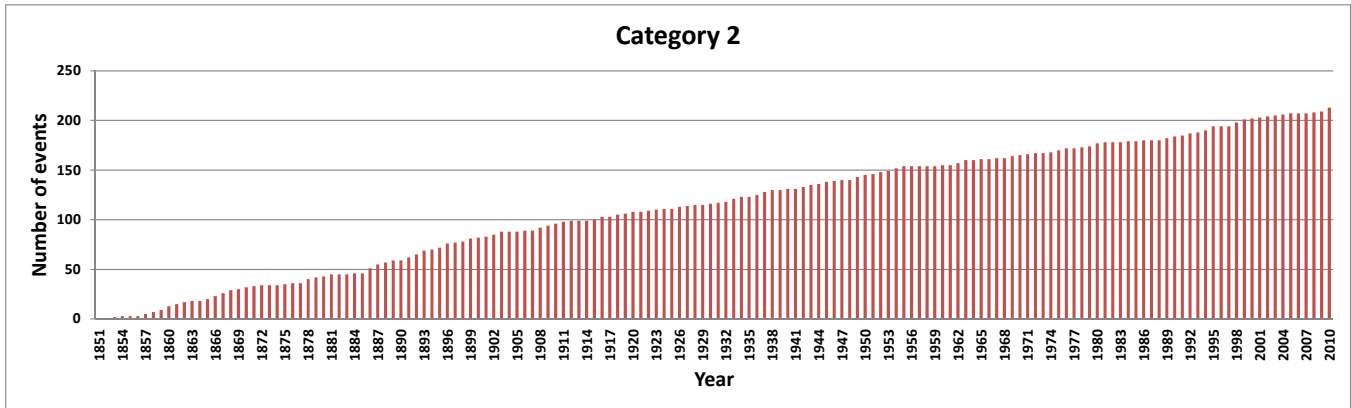
A8-4 Accumulated number of events of SS-4 for the East Pacific basin [EP]



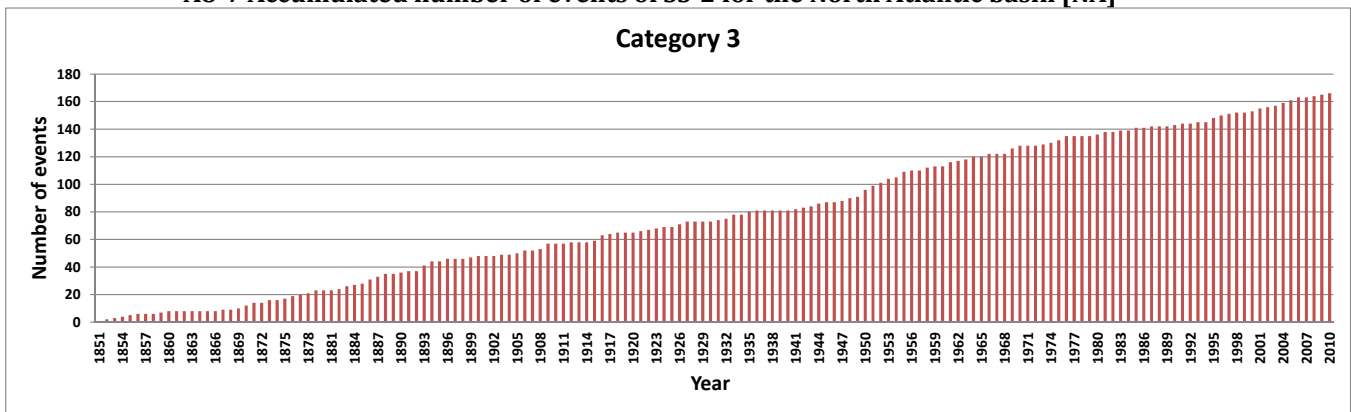
A8-5 Accumulated number of events of SS-5 for the East Pacific basin [EP]



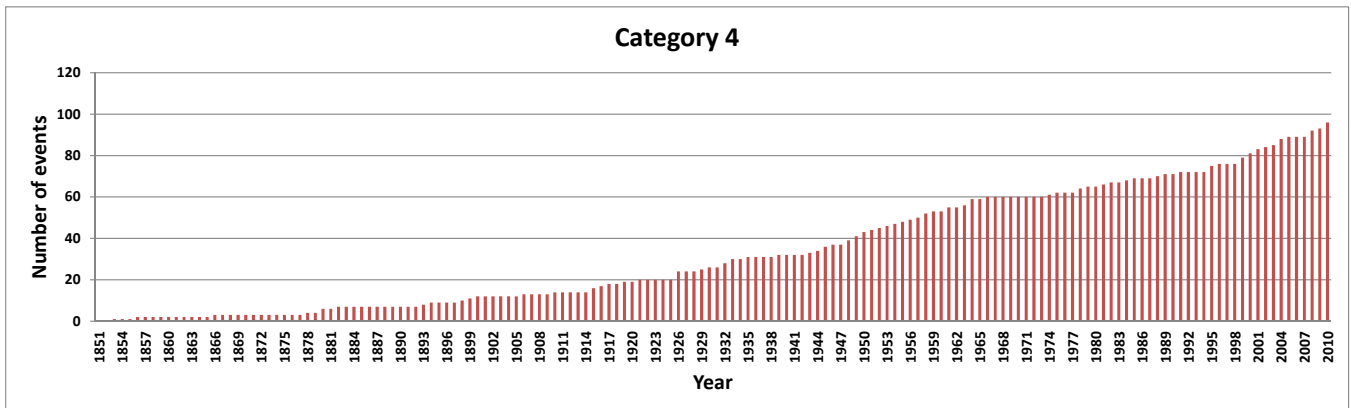
A8-6 Accumulated number of events of SS-1 for the North Atlantic basin [NA]



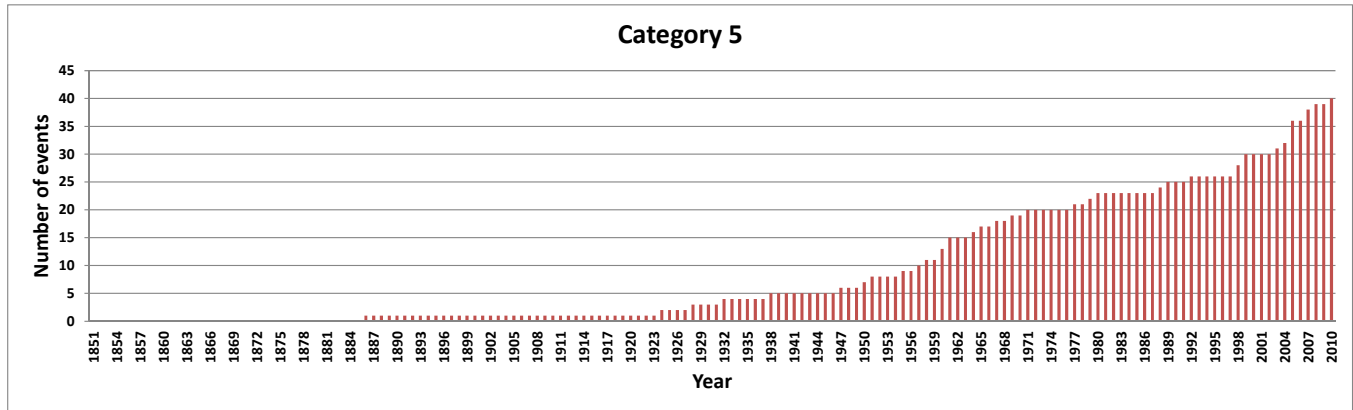
A8-7 Accumulated number of events of SS-2 for the North Atlantic basin [NA]



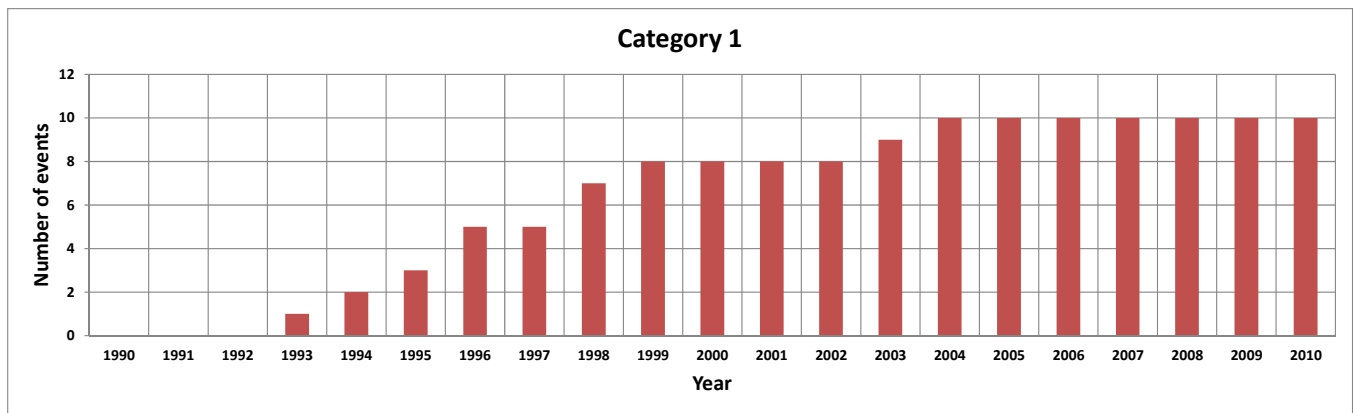
A8-8 Accumulated number of events of SS-3 for the North Atlantic basin [NA]



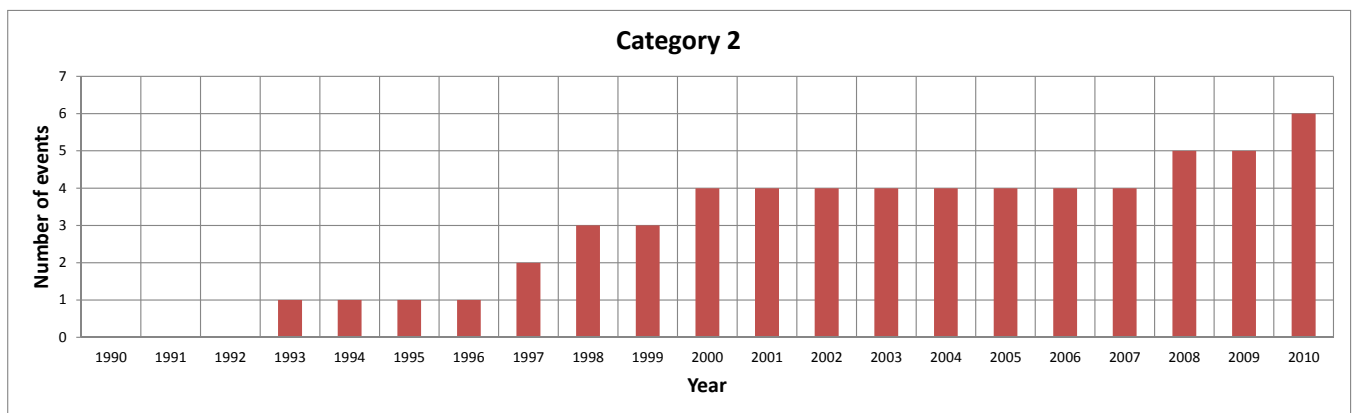
A8-9 Accumulated number of events of SS-4 for the North Atlantic basin [NA]



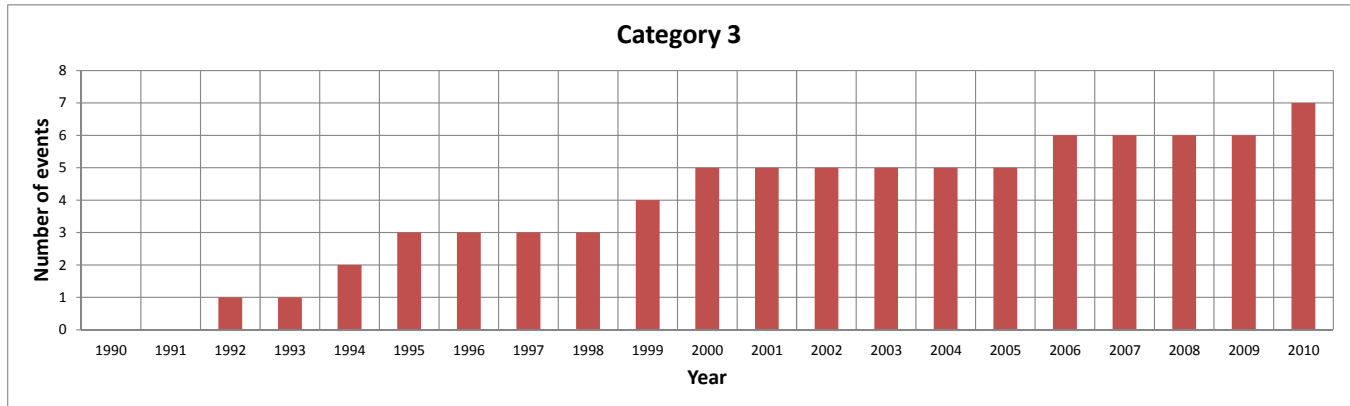
A8-10 Accumulated number of events of SS-5 for the North Atlantic basin [NA]



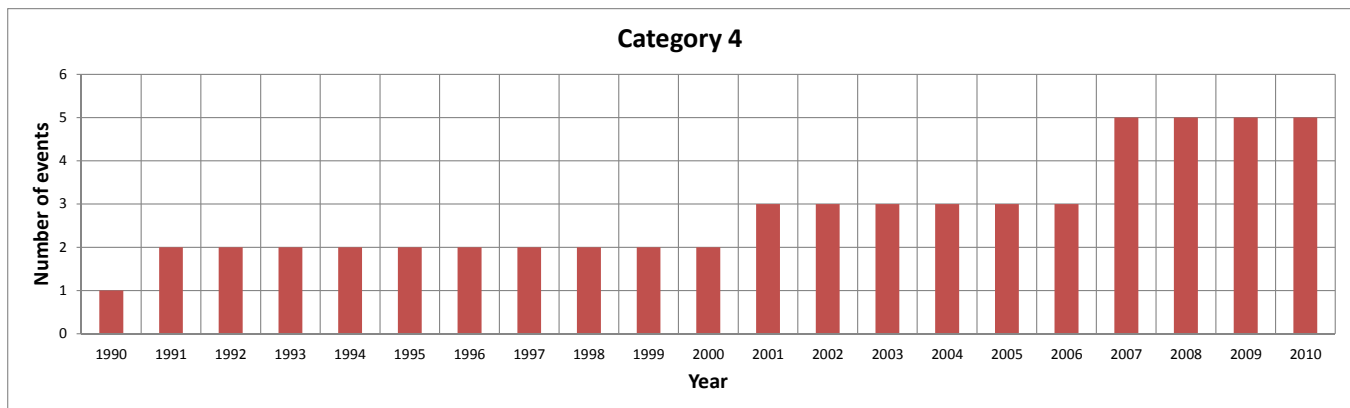
A8-11 Accumulated number of events of SS-1 for the North Indian basin [NI]



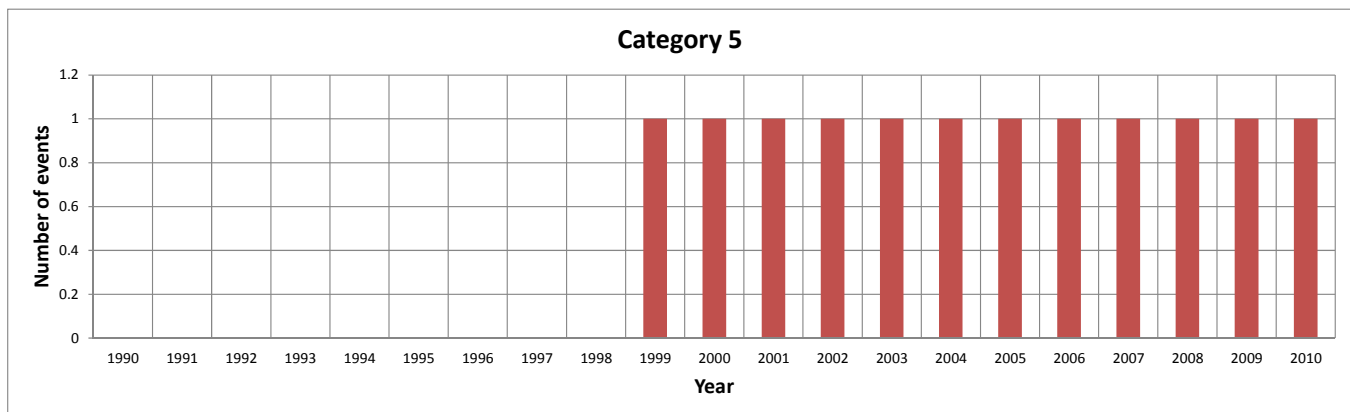
A8-12 Accumulated number of events of SS-2 for the North Indian basin [NI]



A8-13 Accumulated number of events of SS-3 for the North Indian basin [NI]

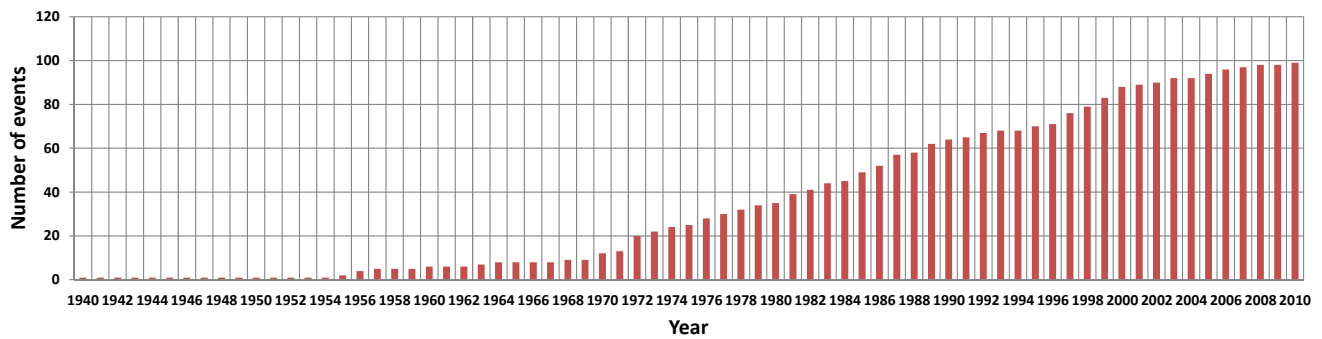


A8-14 Accumulated number of events of SS-4 for the North Indian basin [NI]



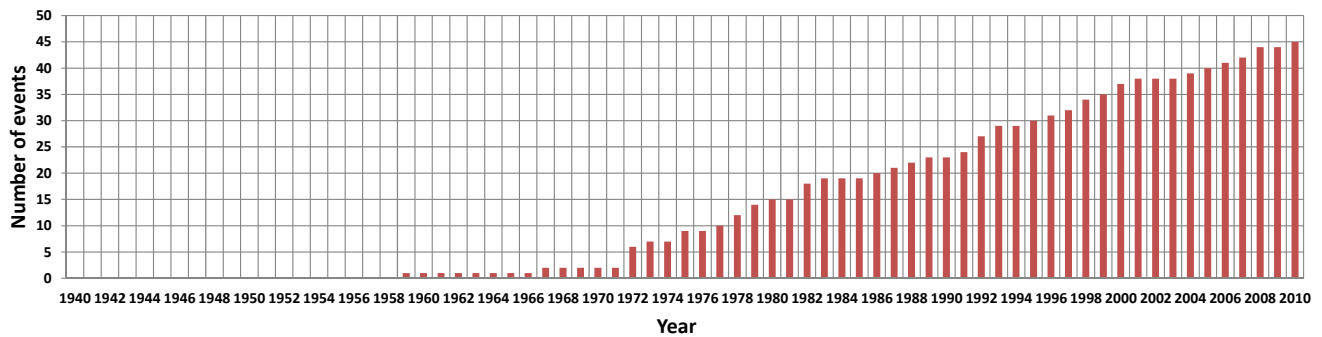
A8-15 Accumulated number of events of SS-5 for the North Indian basin [NI]

Category 1



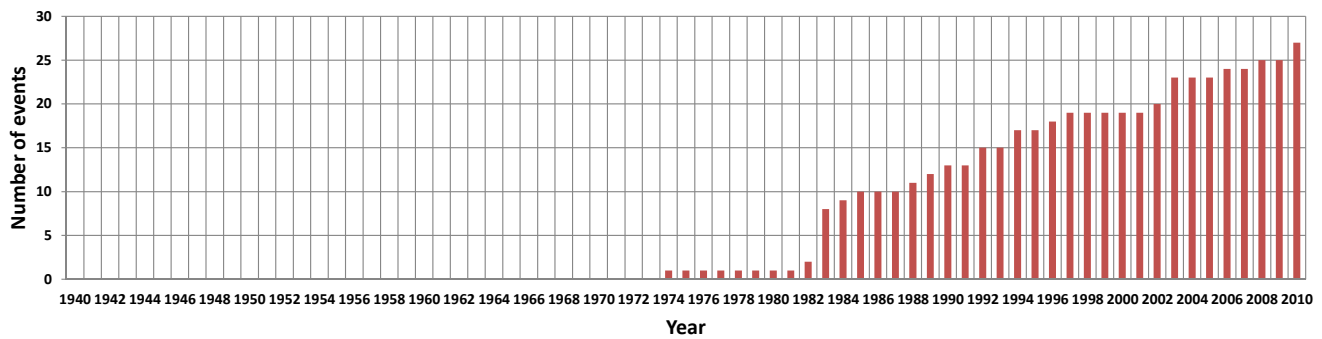
A8-16 Accumulated number of events of SS-1 for the South Pacific basin [SP]

Category 2



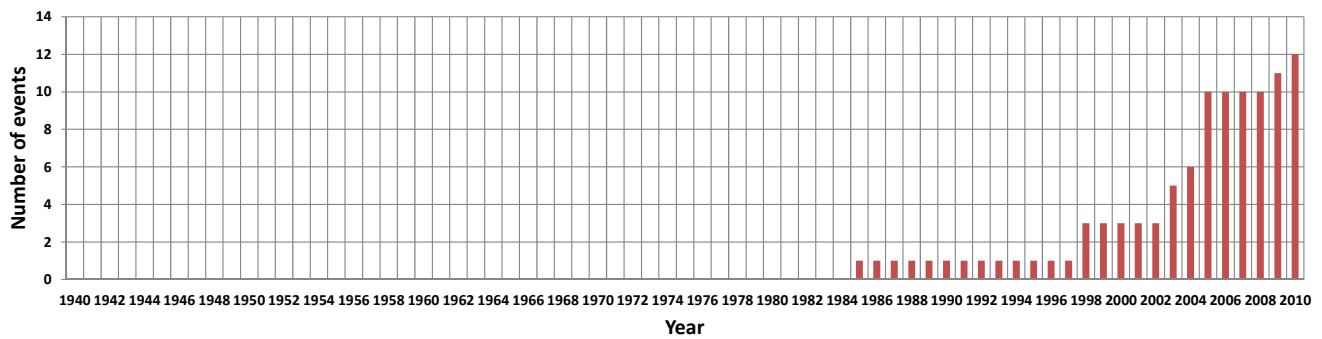
A8-17 Accumulated number of events of SS-2 for the South Pacific basin [SP]

Category 3



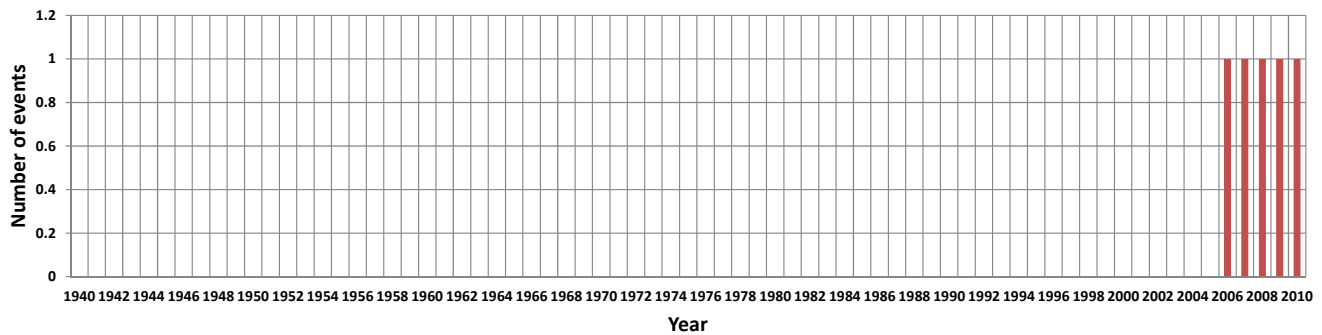
A8-18 Accumulated number of events of SS-3 for the South Pacific basin [SP]

Category 4



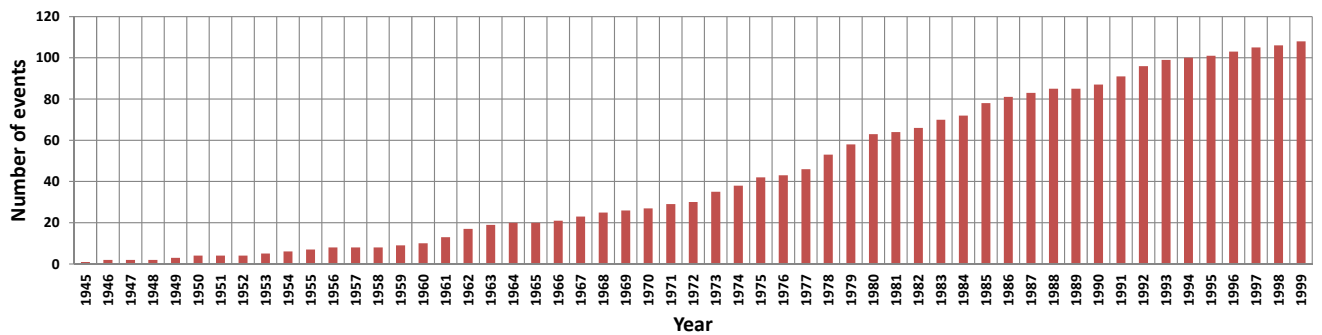
A8-19 Accumulated number of events of SS-4 for the South Pacific basin [SP]

Category 5

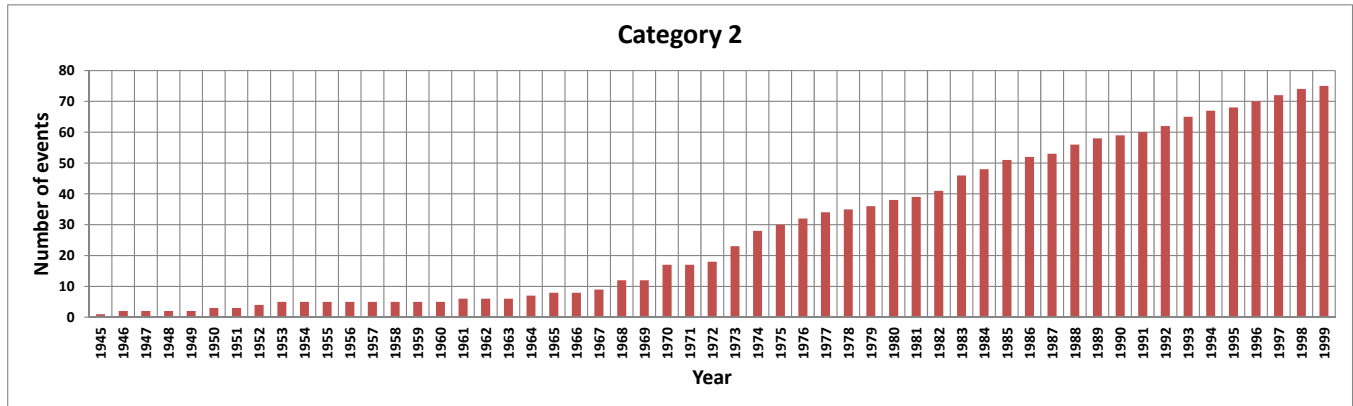


A8-20 Accumulated number of events of SS-5 for the South Pacific basin [SP]

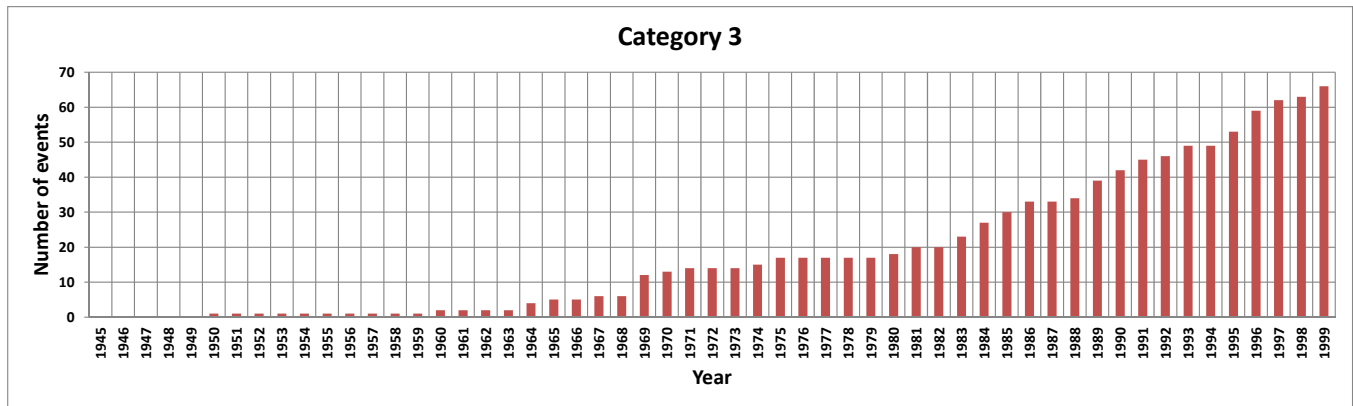
Category 1



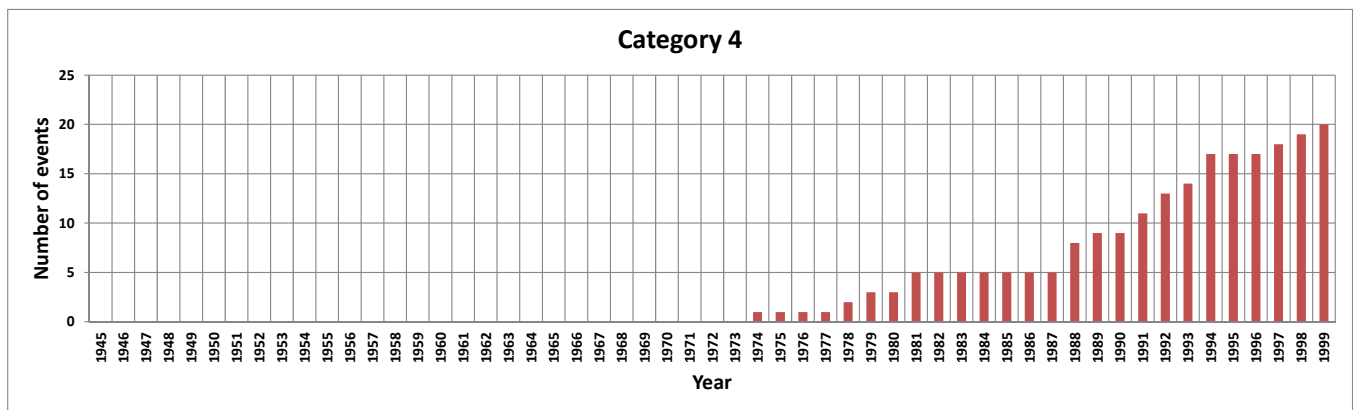
A8-21 Accumulated number of events of SS-1 for the South Indian basin [SI]



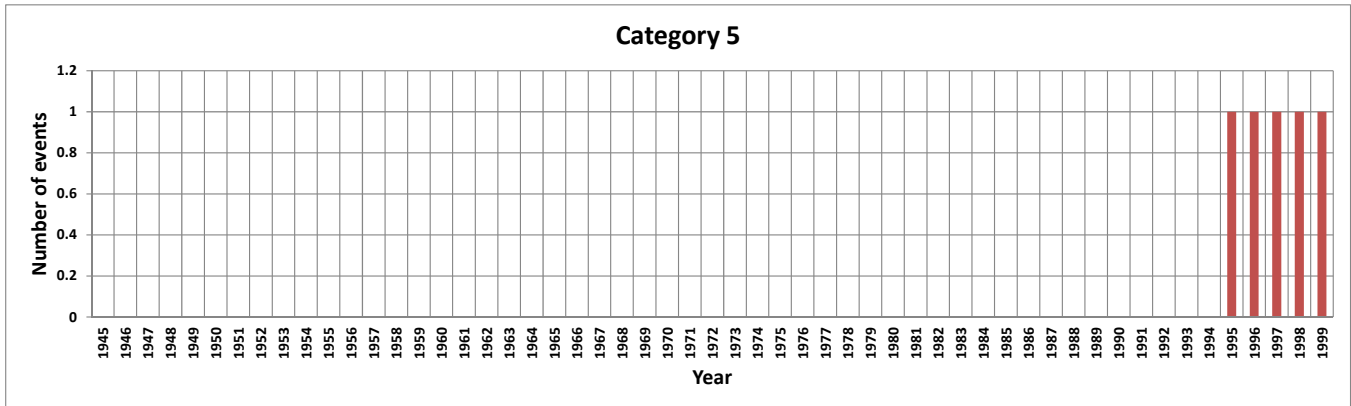
A8-22 Accumulated number of events of SS-2 for the South Indian basin [SI]



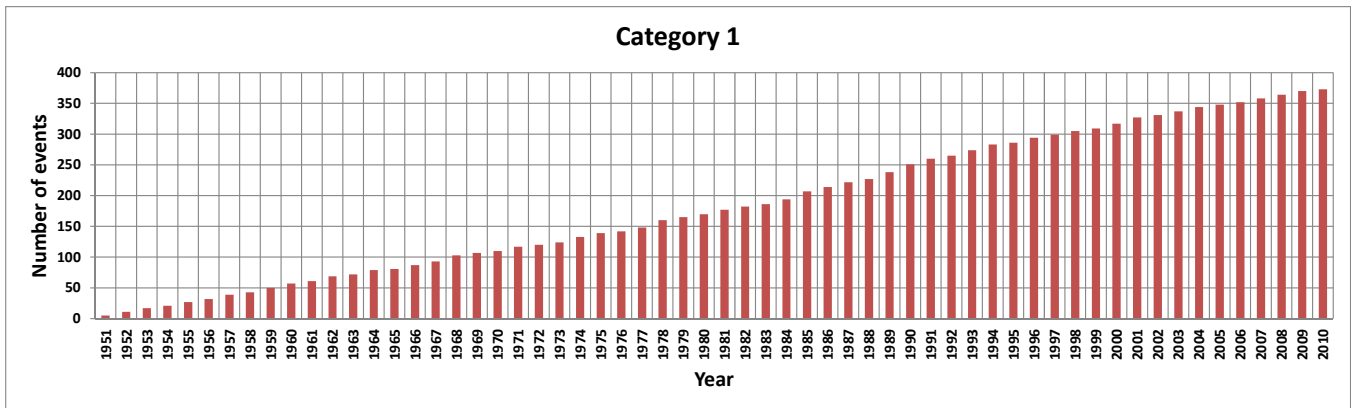
A8-23 Accumulated number of events of SS-3 for the South Indian basin [SI]



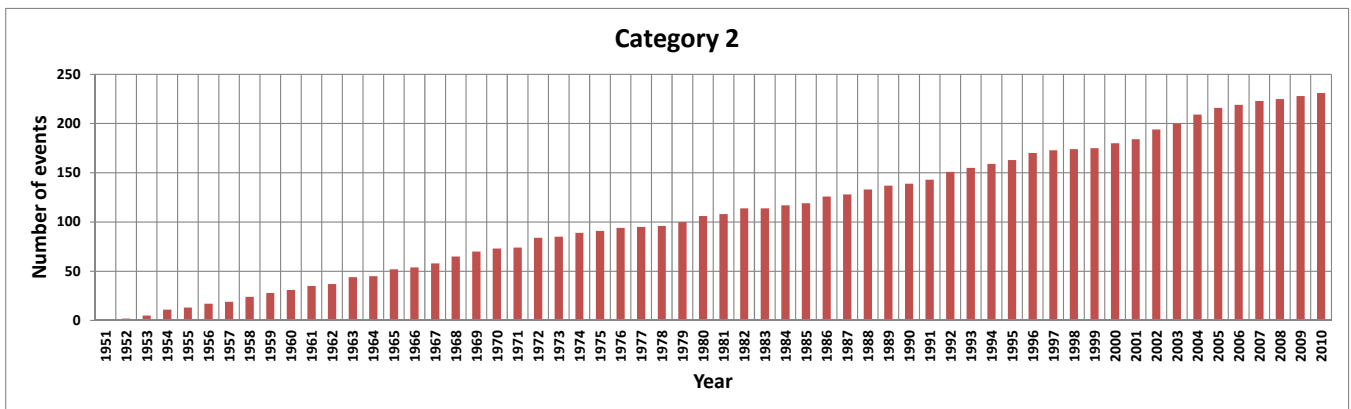
A8-24 Accumulated number of events of SS-4 for the South Indian basin [SI]



A8-25 Accumulated number of events of SS-5 for the South Indian basin [SI]



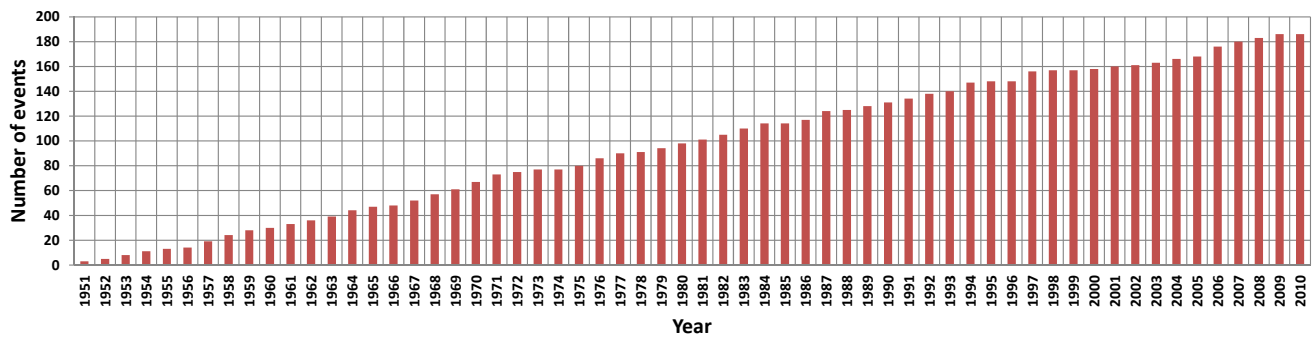
A8-26 Accumulated number of events of SS-1 for the West Pacific basin [WP]



A8-27 Accumulated number of events of SS-2 for the West Pacific basin [WP]

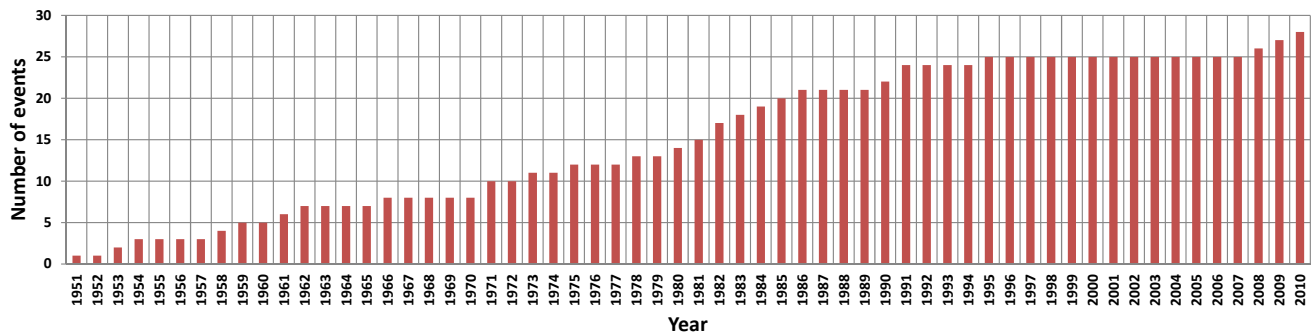


Category 3



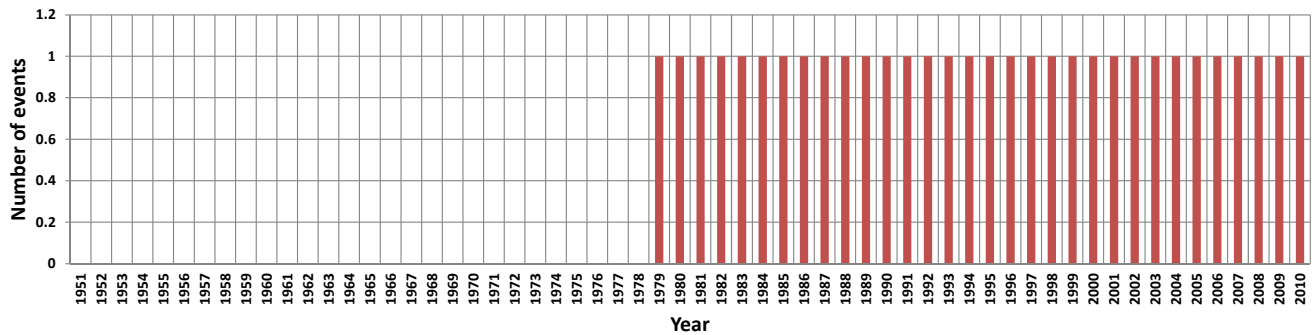
A8-28 Accumulated number of events of SS-3 for the West Pacific basin [WP]

Category 4



A8-29 Accumulated number of events of SS-4 for the West Pacific basin [WP]

Category 5



A8-30 Accumulated number of events of SS-5 for the West Pacific basin [WP]

ANNEX 9. HISTORICAL TRACKS OF CYCLONES FOR DIFFERENT CATEGORIES

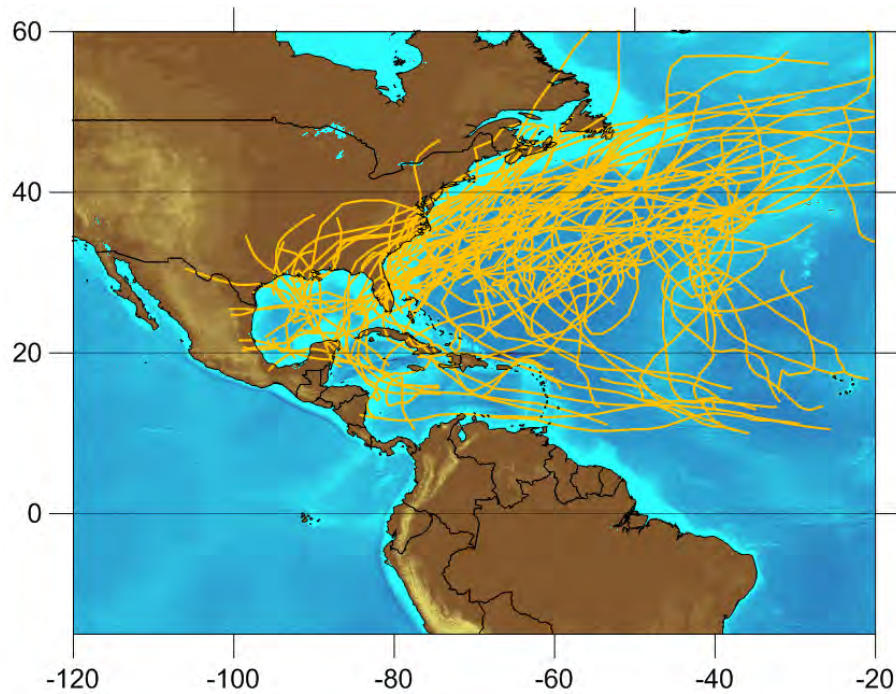


Figure A9-1
Tracks for the North Atlantic basin. Category SS=1

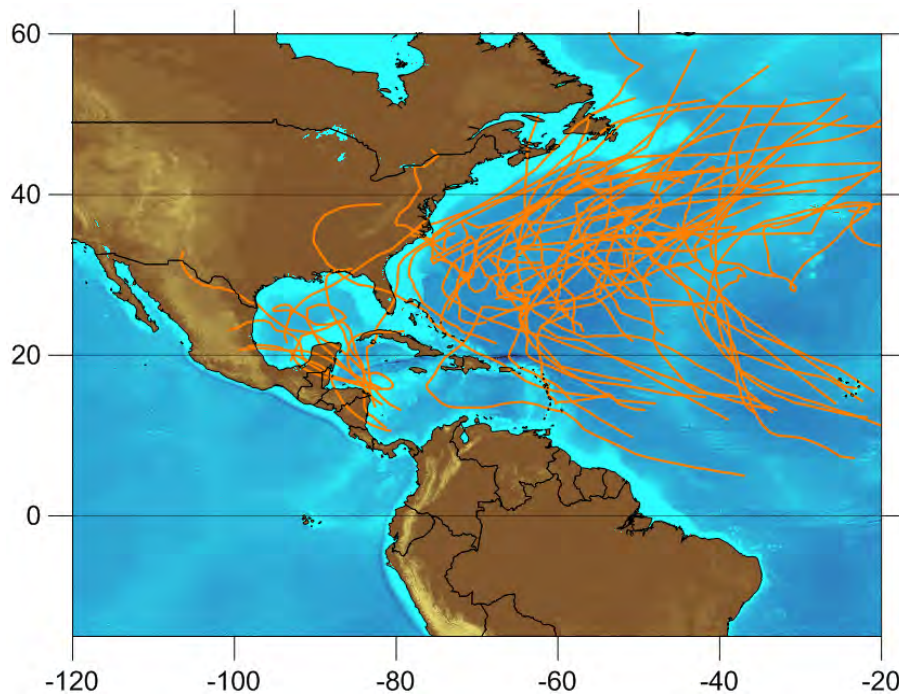


Figure A9-2
Tracks for the North Atlantic basin. Category SS=2

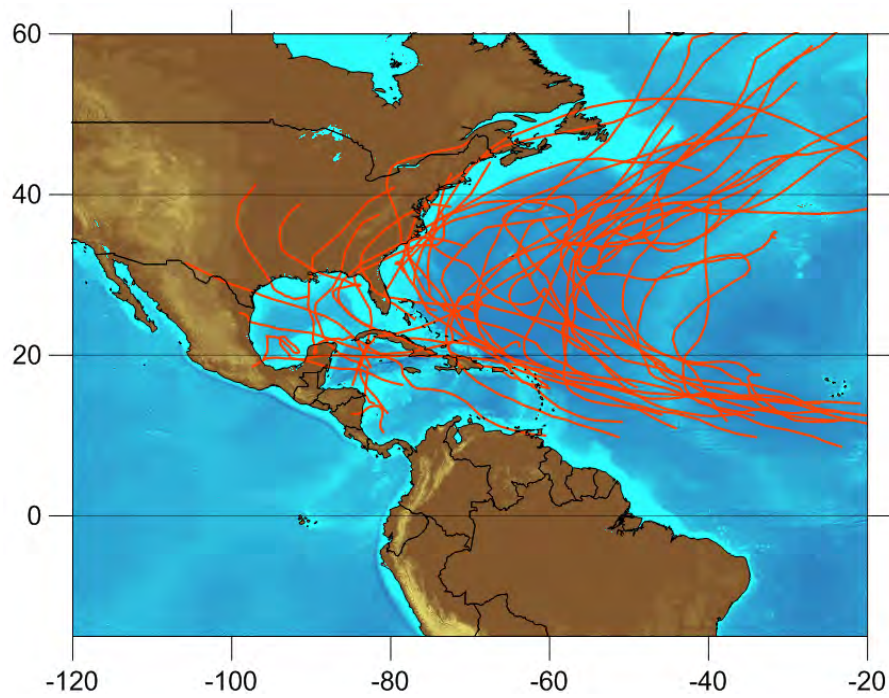


Figure A9-3
 Tracks for the North Atlantic basin. Category SS=3

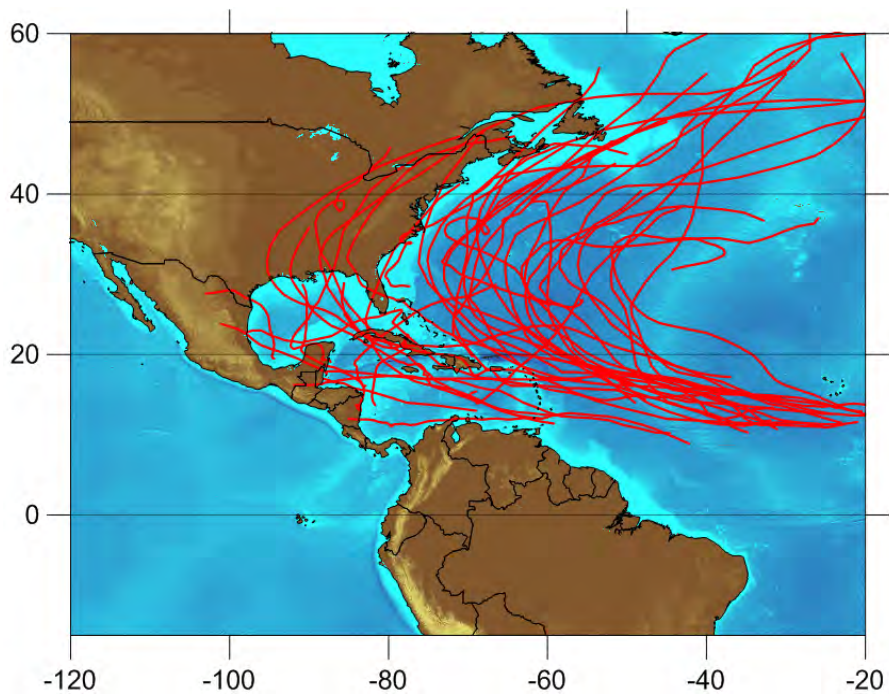


Figure A9-4
 Tracks for the North Atlantic basin. Category SS=4

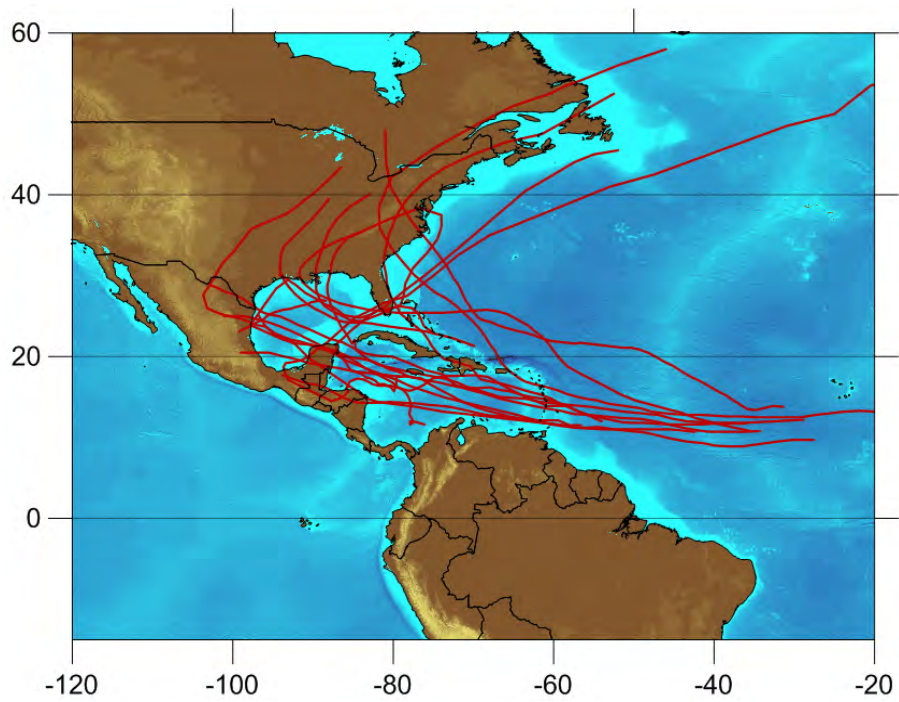


Figure A9-5
Tracks for the North Atlantic basin. Category SS=5

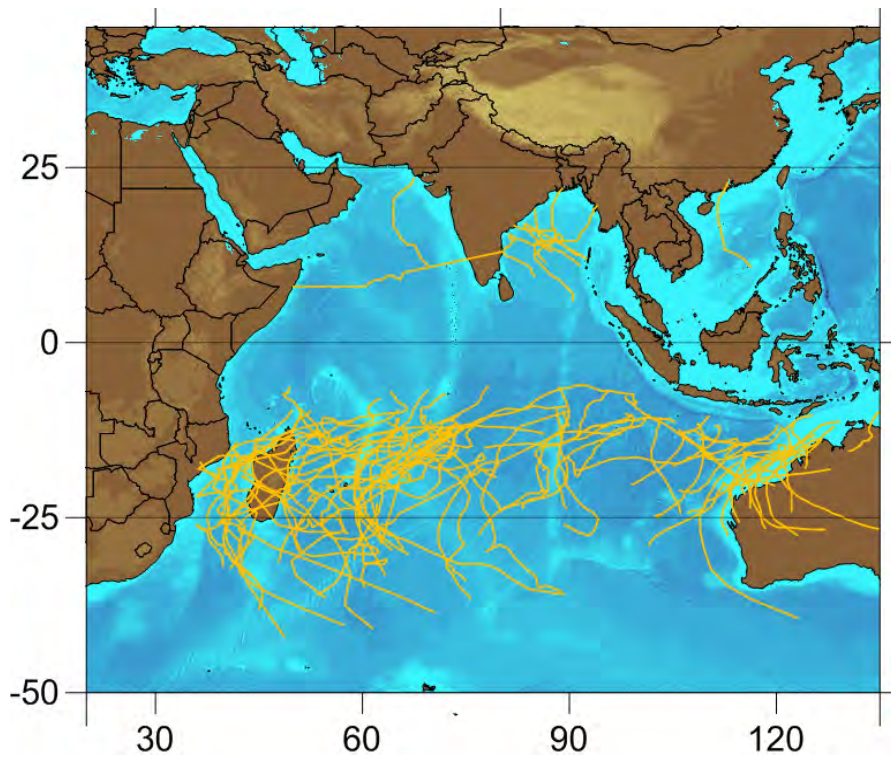


Figure A9-6
Tracks for the Indian Ocean. Category SS=1

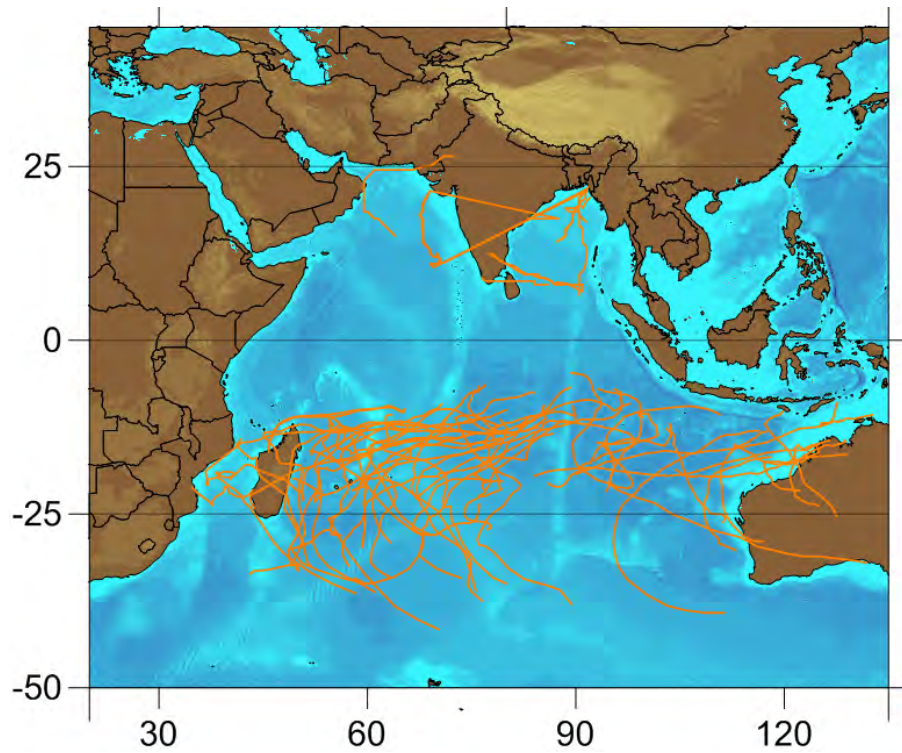


Figure A9-7
Tracks for the Indian Ocean. Category SS=2

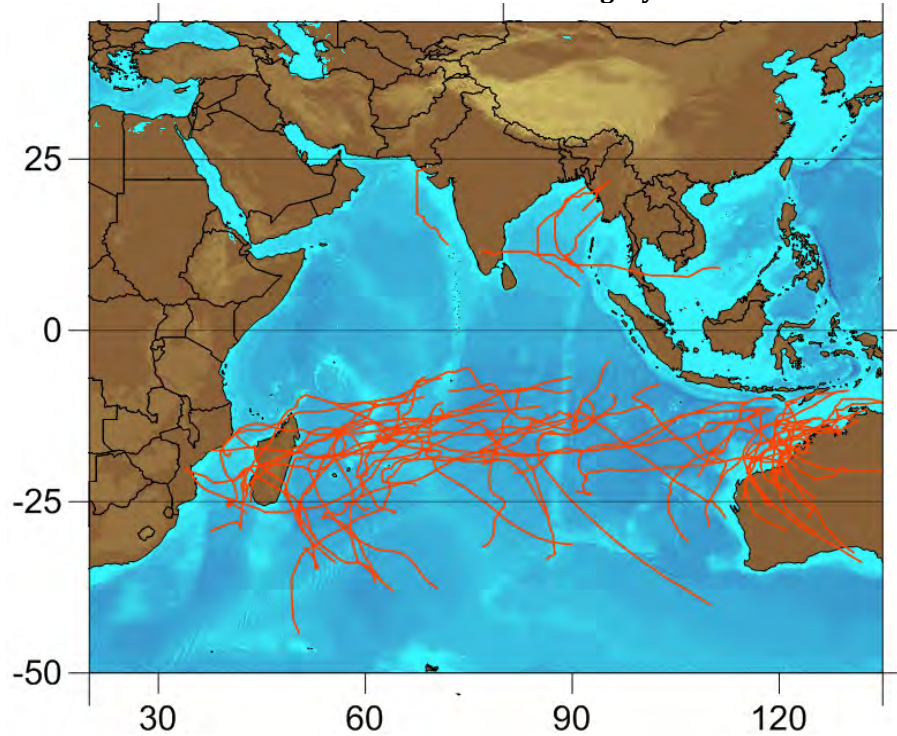


Figure A9-8
Tracks for the Indian Ocean. Category SS=3

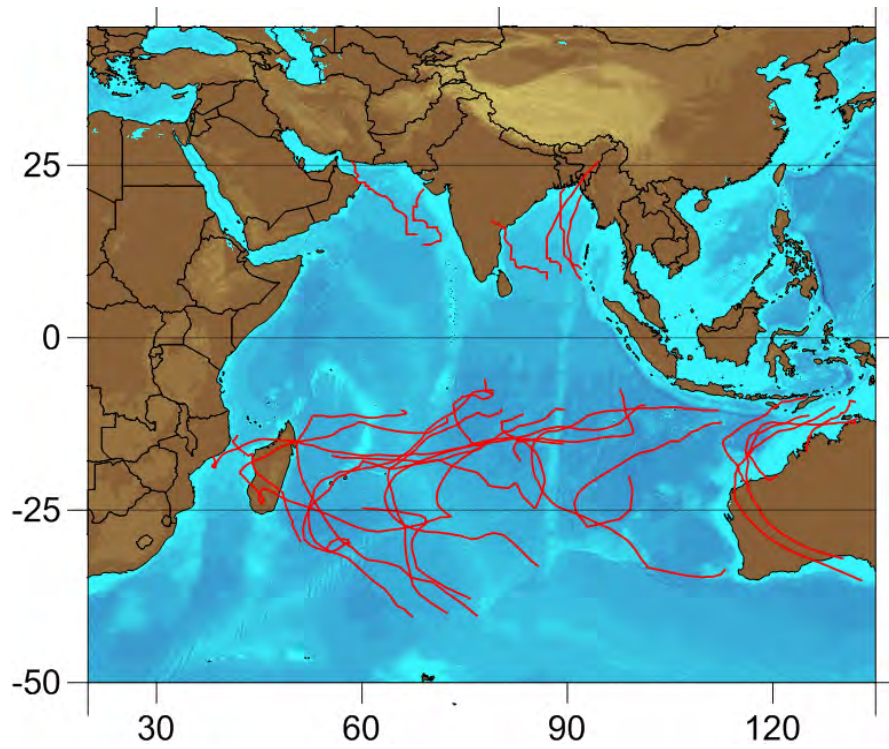


Figure A9-9
Tracks for the Indian Ocean. Category SS=4

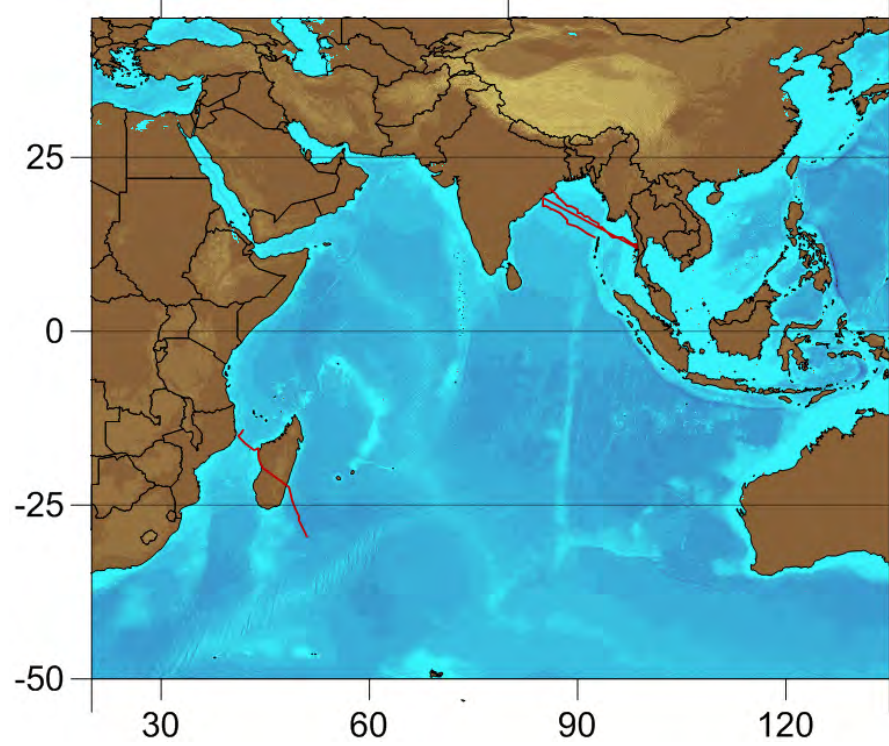


Figure A9-10
Tracks for the Indian Ocean. Category SS=5

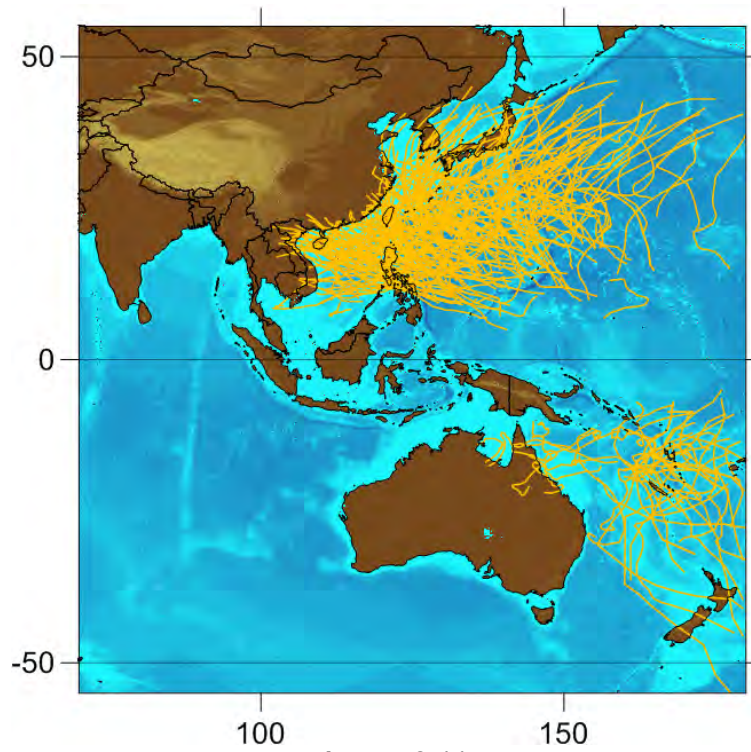


Figure A9-11
 Tracks for the West Pacific basin. Category SS=1

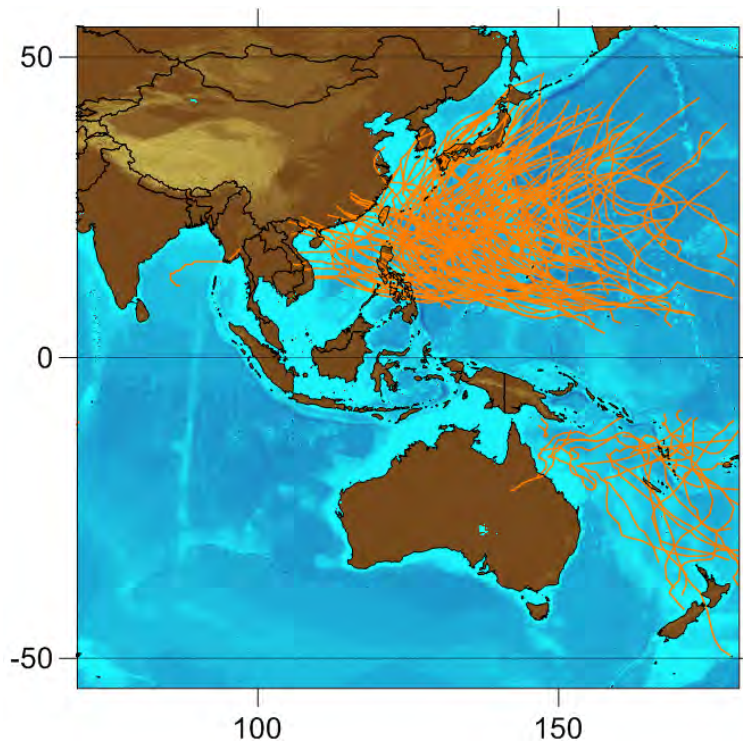


Figure A9-12
 Tracks for the West Pacific basin. Category SS=2

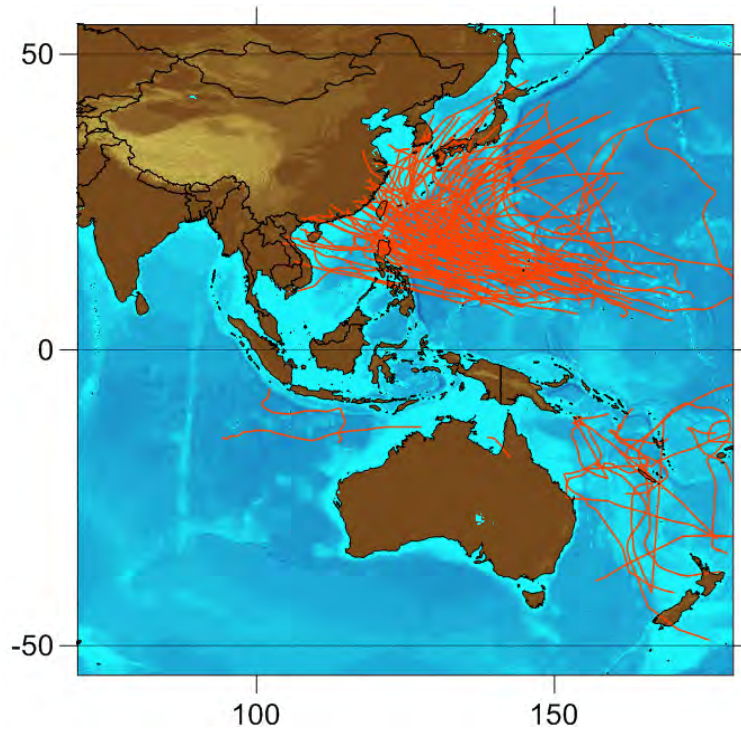


Figure A9-13
Tracks for the West Pacific basin. Category SS=3

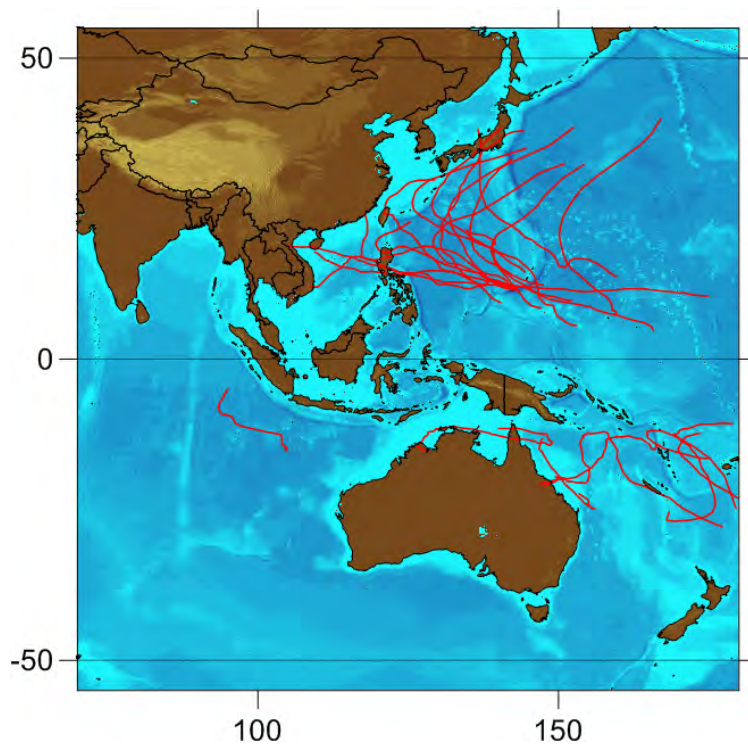


Figure A9-14
Tracks for the West Pacific basin. Category SS=4

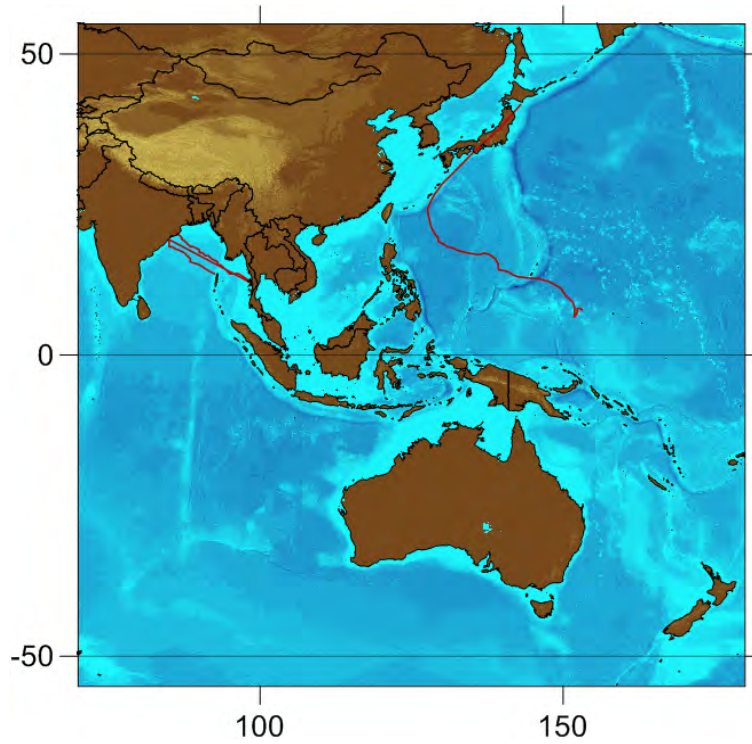


Figure A9-15
 Tracks for the West Pacific basin. Category SS=5

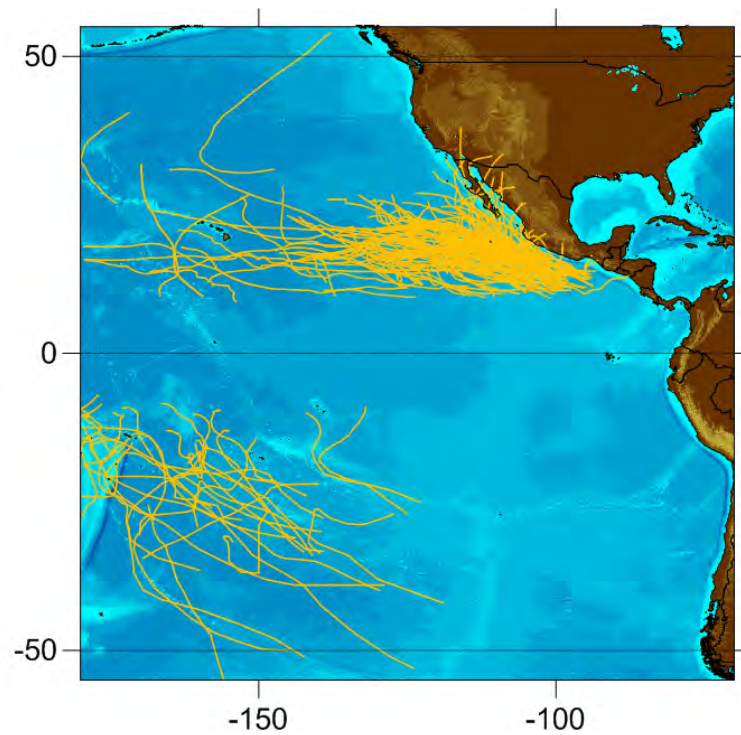


Figure A9-16
 Tracks for the East Pacific basin. Category SS=1

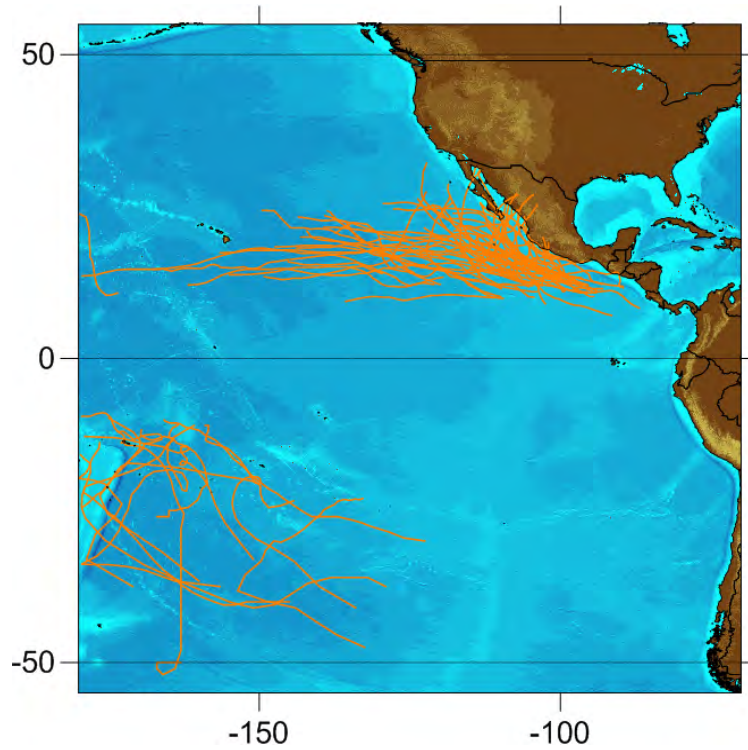


Figure A9-17
Tracks for the East Pacific basin. Category SS=2

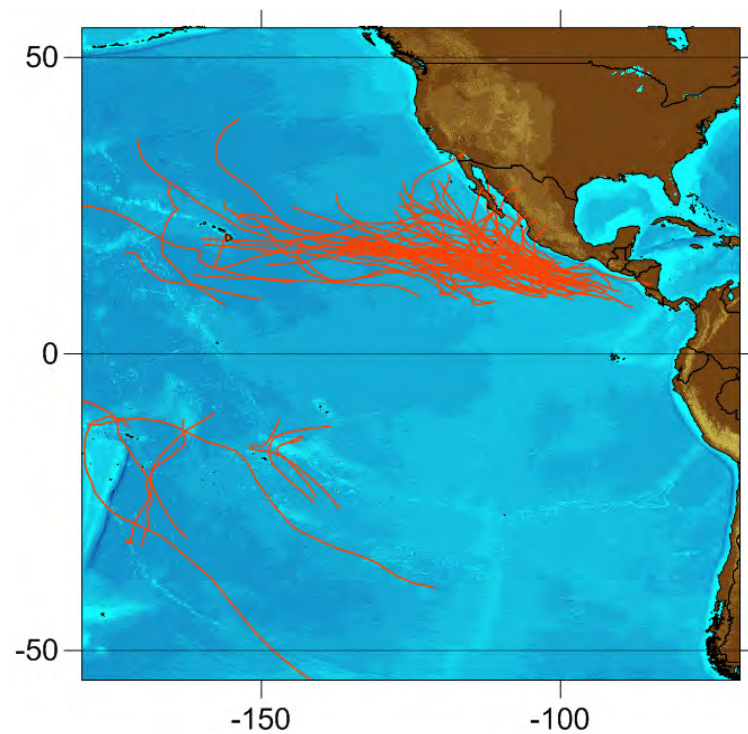


Figure A9-18
Tracks for the East Pacific basin. Category SS=3

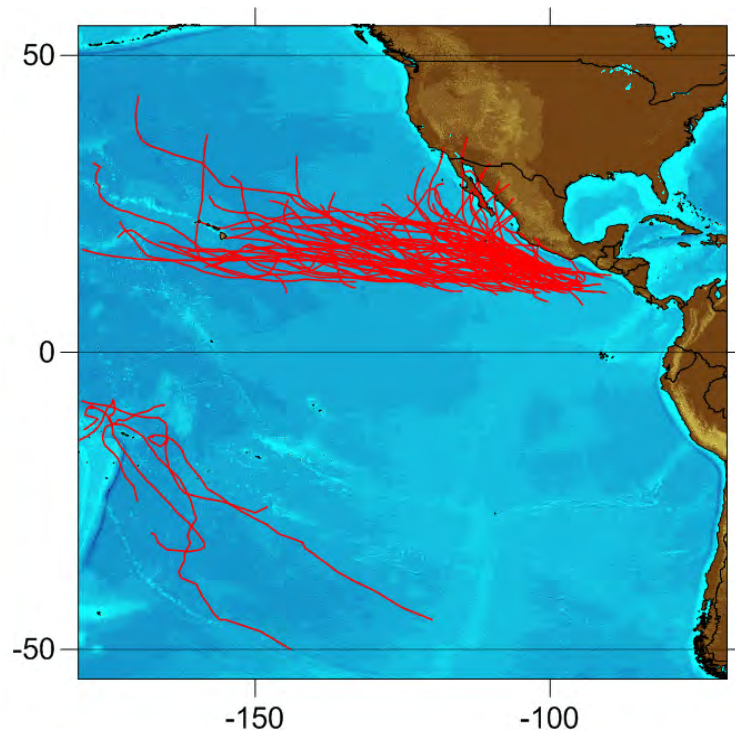


Figure A9-19
 Tracks for the East Pacific basin. Category SS=4

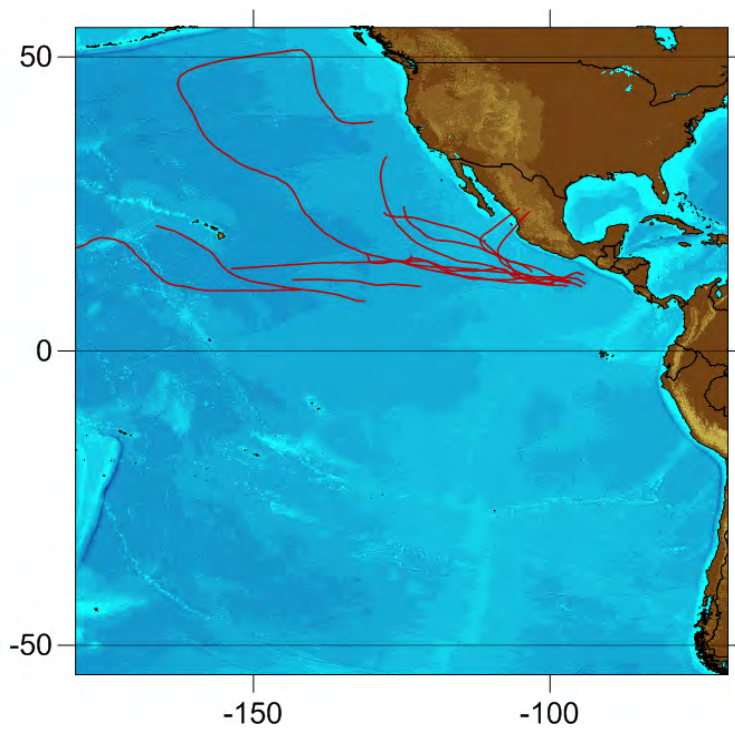


Figure A9-20
 Tracks for the East Pacific basin. Category SS=5

ANNEX 10. TROPICAL CYCLONES WIND HAZARD MAPS

East Pacific Ocean Basin [EP]

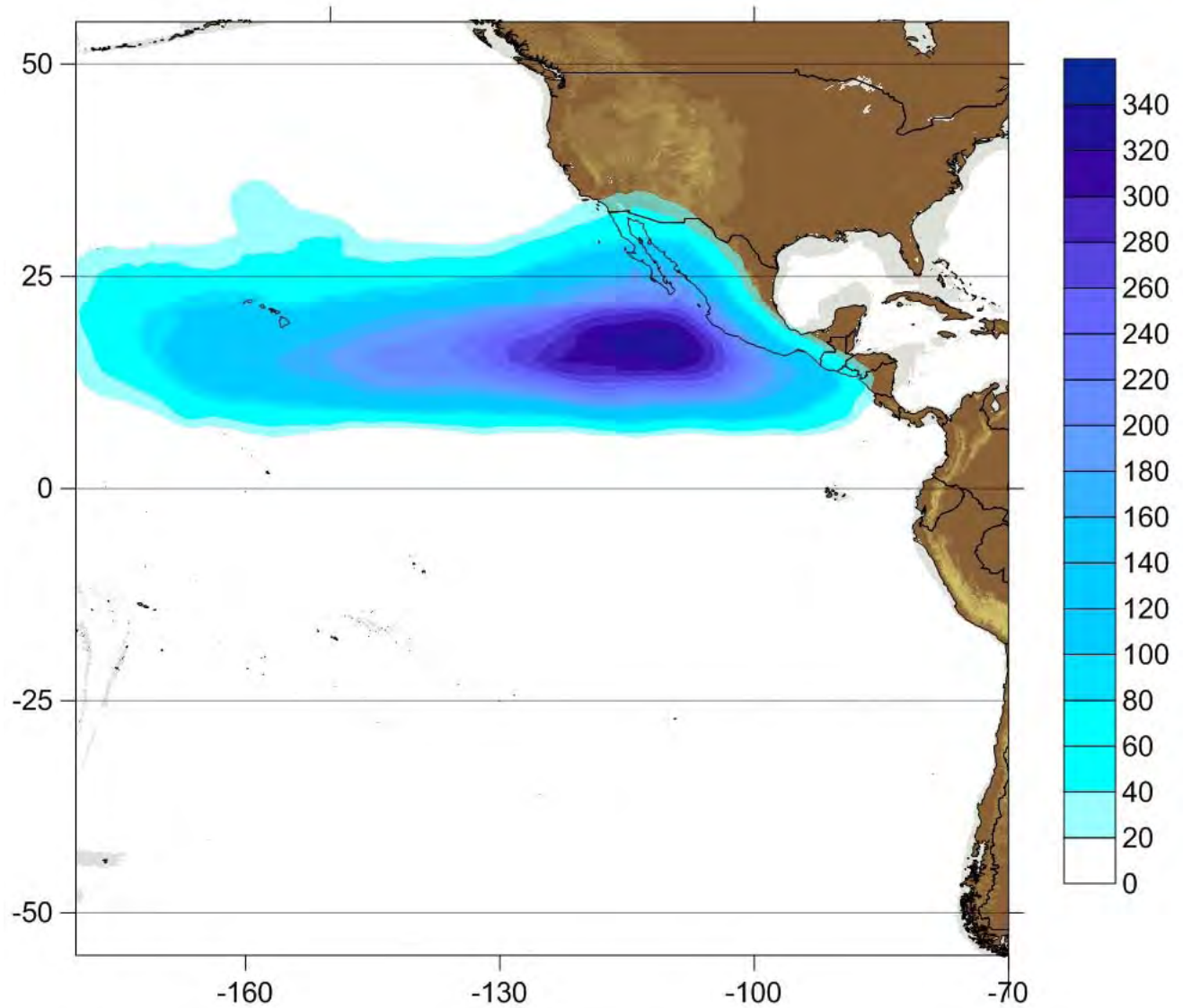


Figure A10-1
Hazard map for strong winds. East Pacific Basin [EP]. Tr: 25 years. (Km/h)

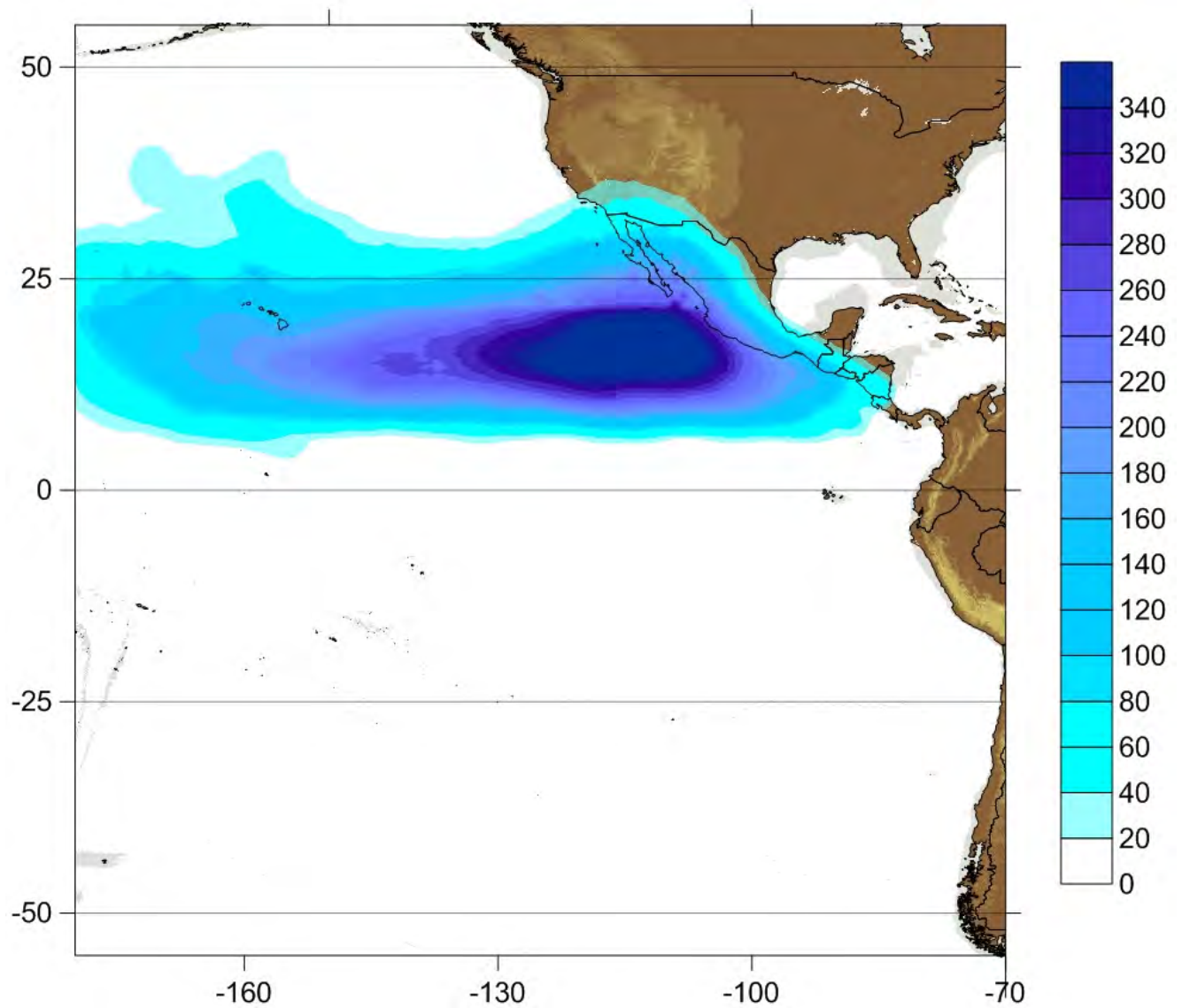


Figure A10-2
Hazard map for strong winds. East Pacific Basin [EP]. Tr: 50 years. (Km/h)

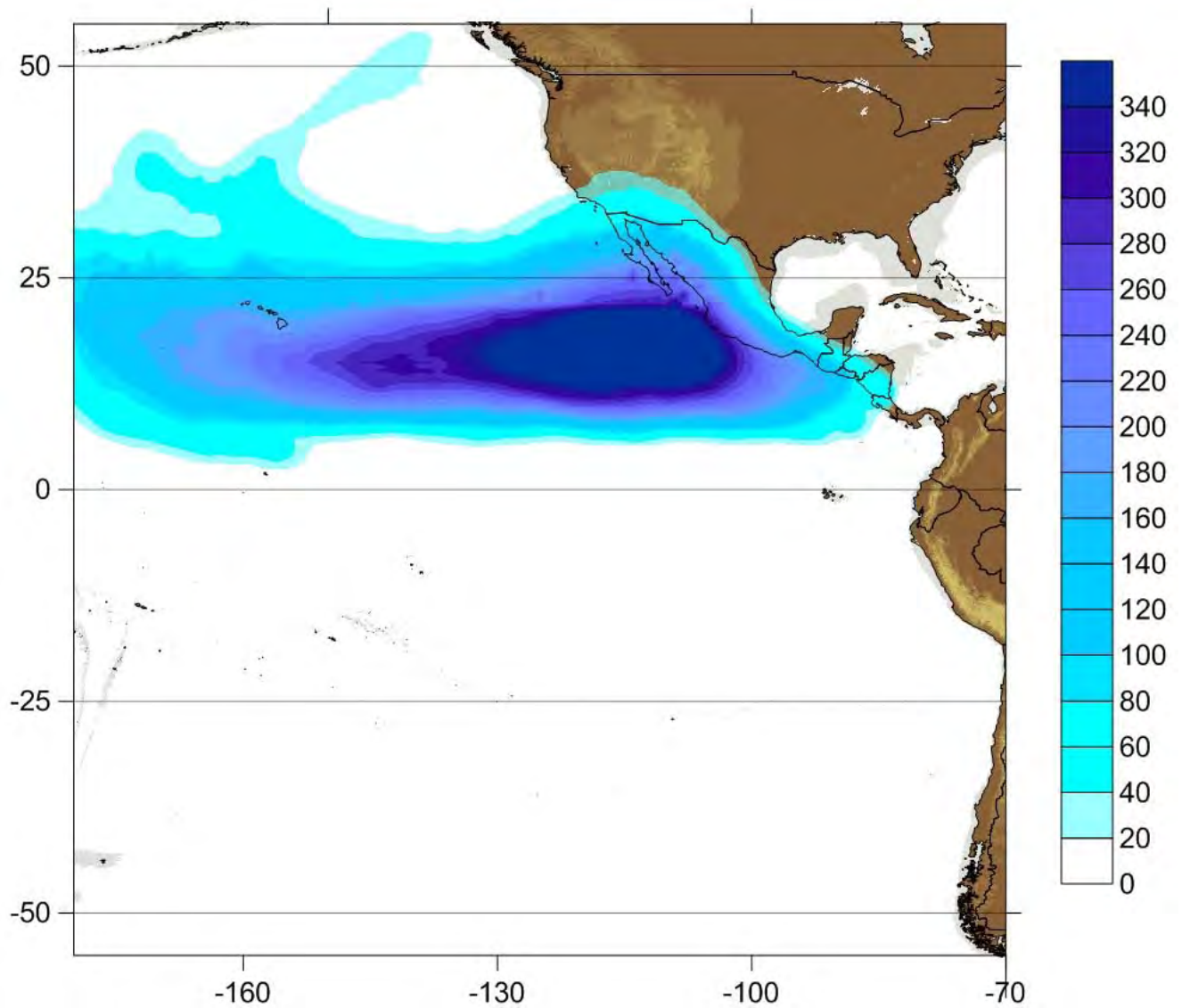


Figure A10-3
Hazard map for strong winds. East Pacific Basin [EP]. Tr: 75 years. (Km/h)

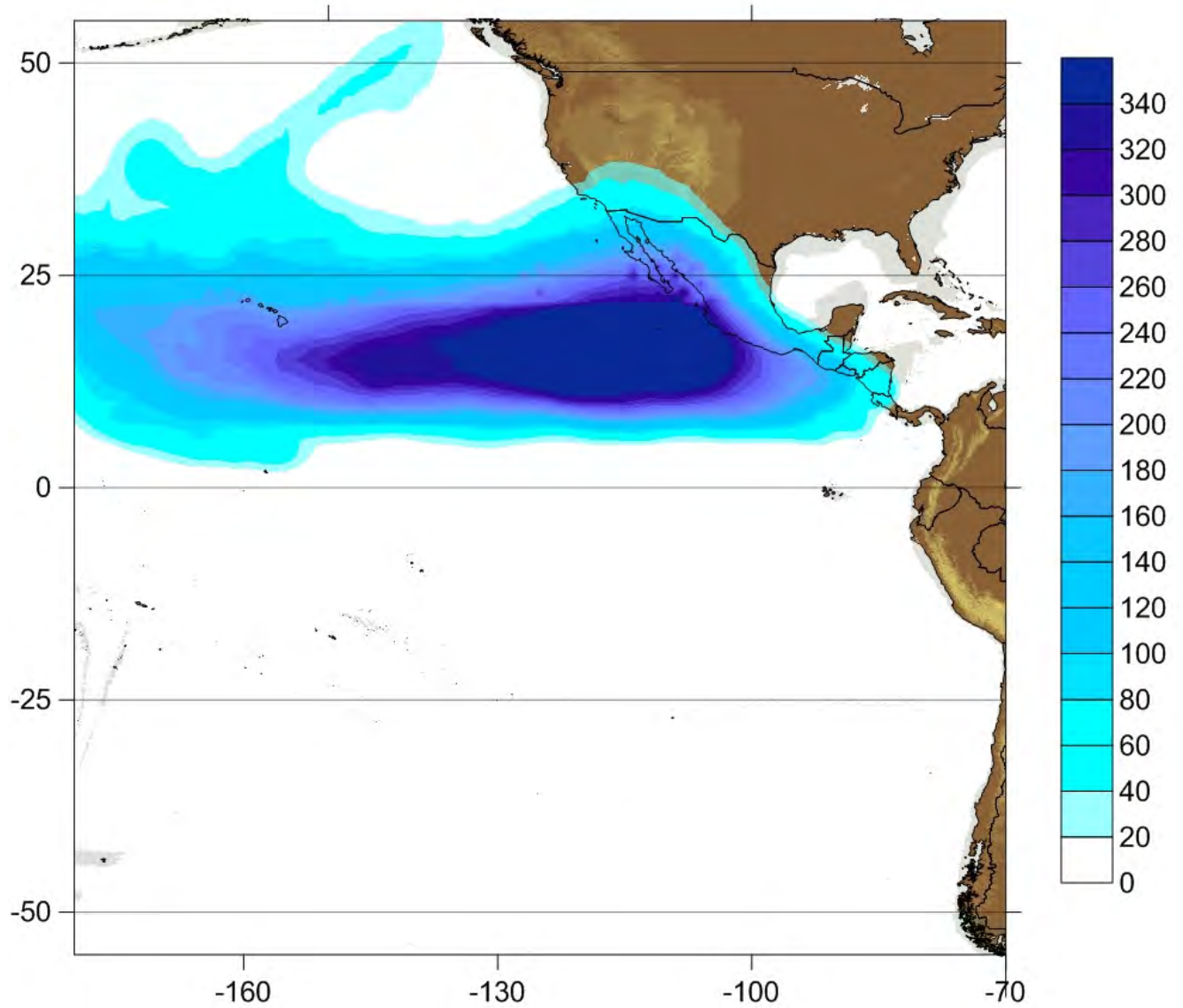


Figure A10-4
Hazard map for strong winds. East Pacific Basin [EP]. Tr: 100 years. (Km/h)

South Pacific Ocean Basin [SP]

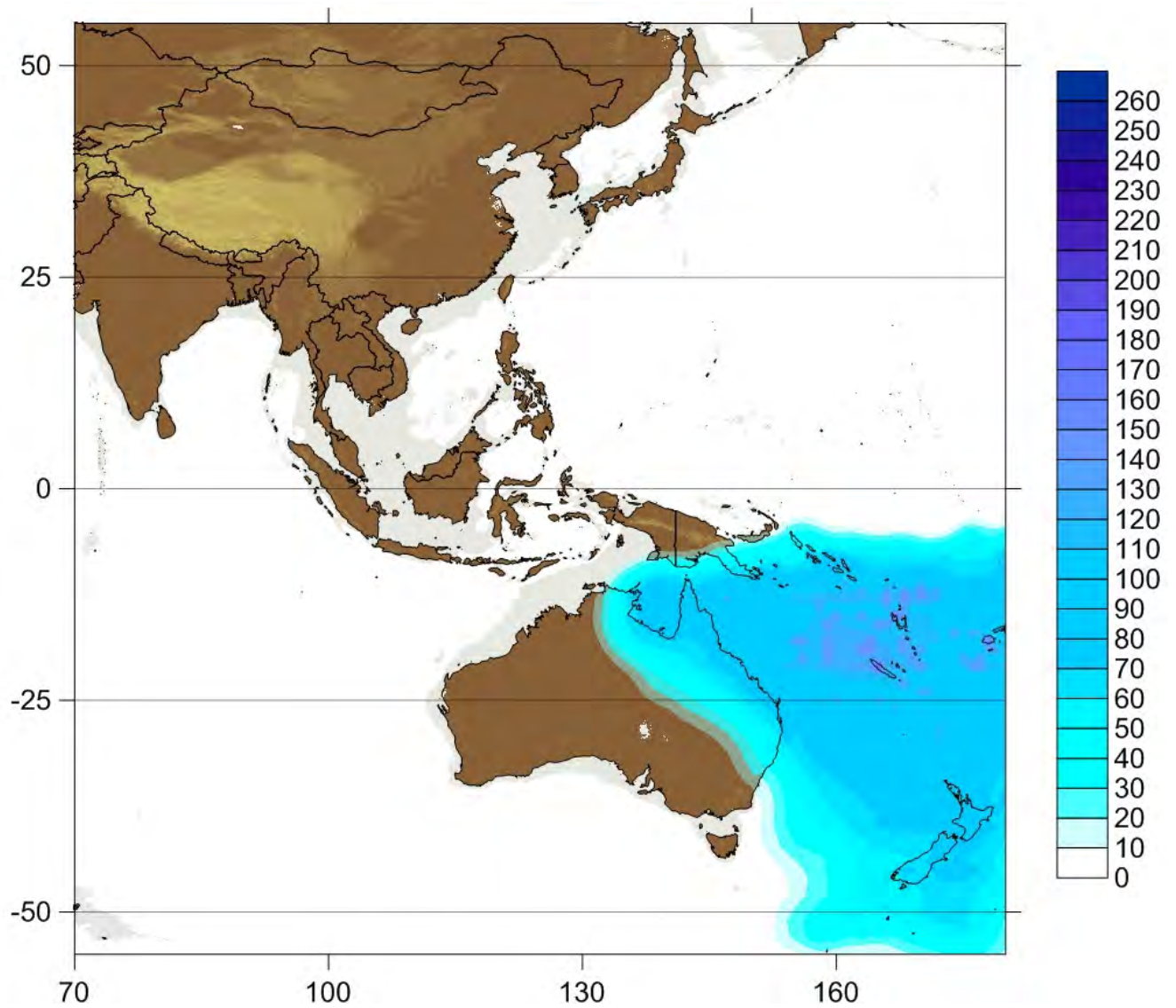


Figure A10-5

Hazard Map for strong winds. South Pacific Ocean basin [SP]. Tr: 25 years. (Km/h) West Region

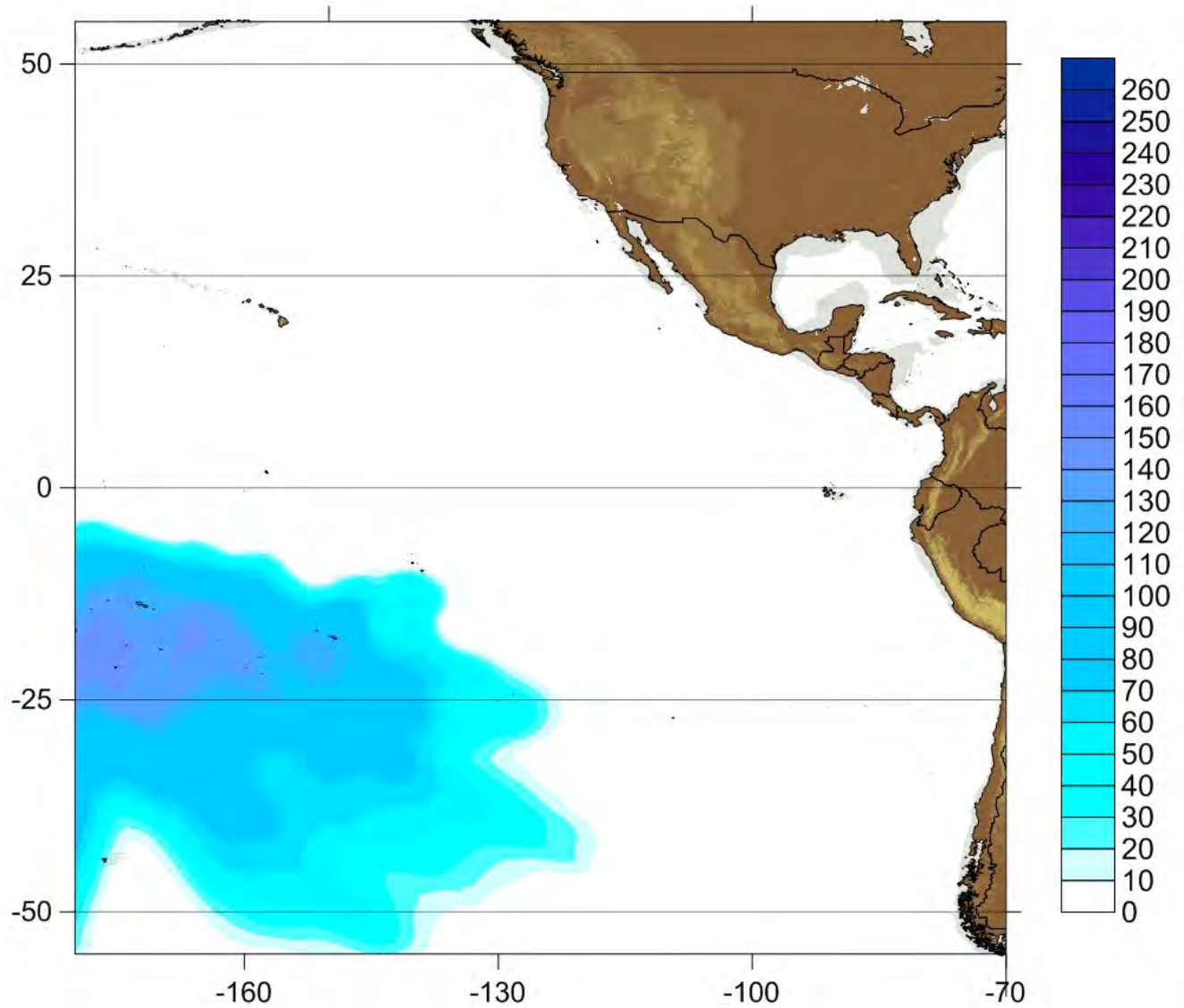
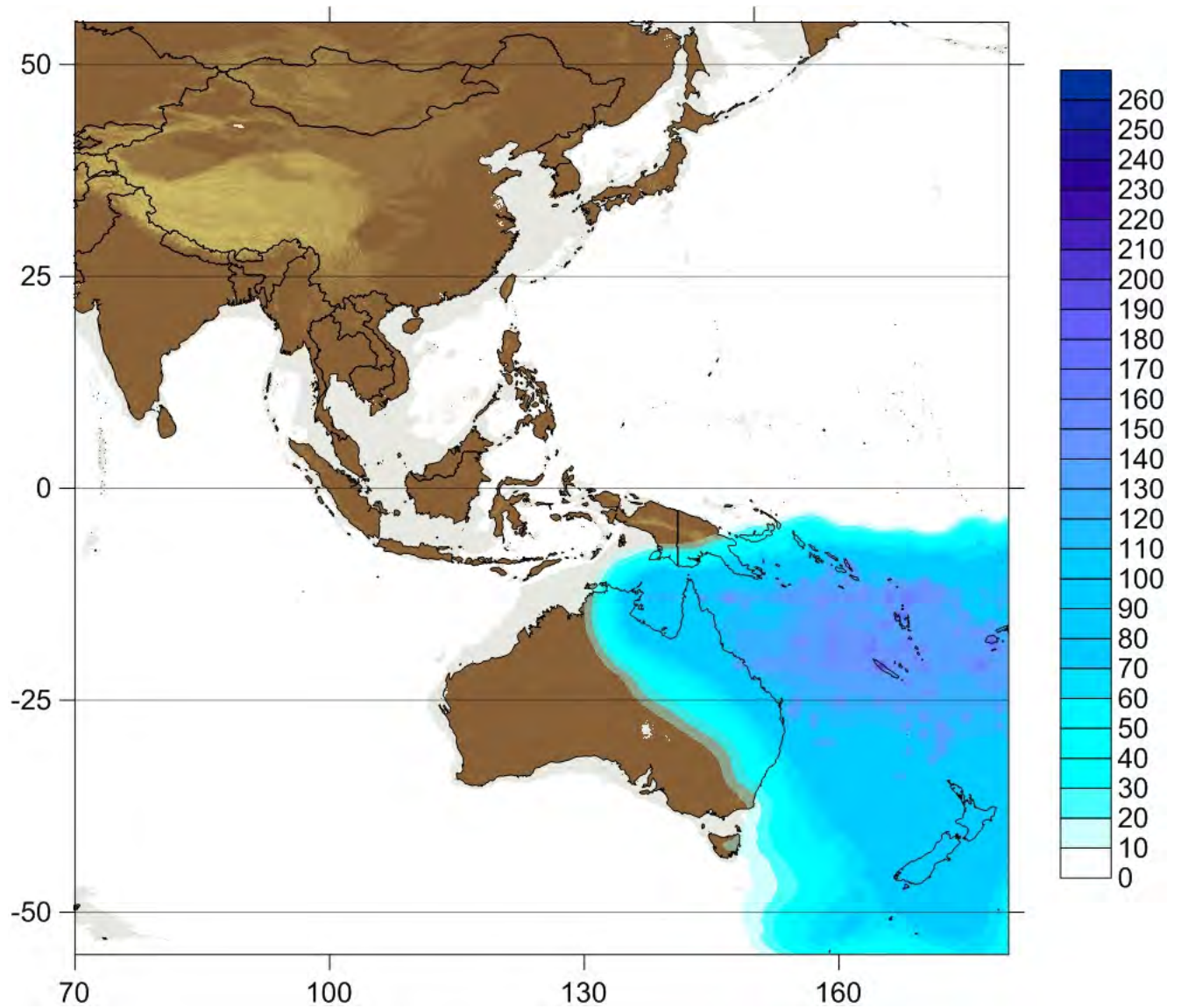


Figure A10-6
Hazard Map for strong winds. South Pacific Ocean basin [SP]. Tr: 25 years. (Km/h) East Region



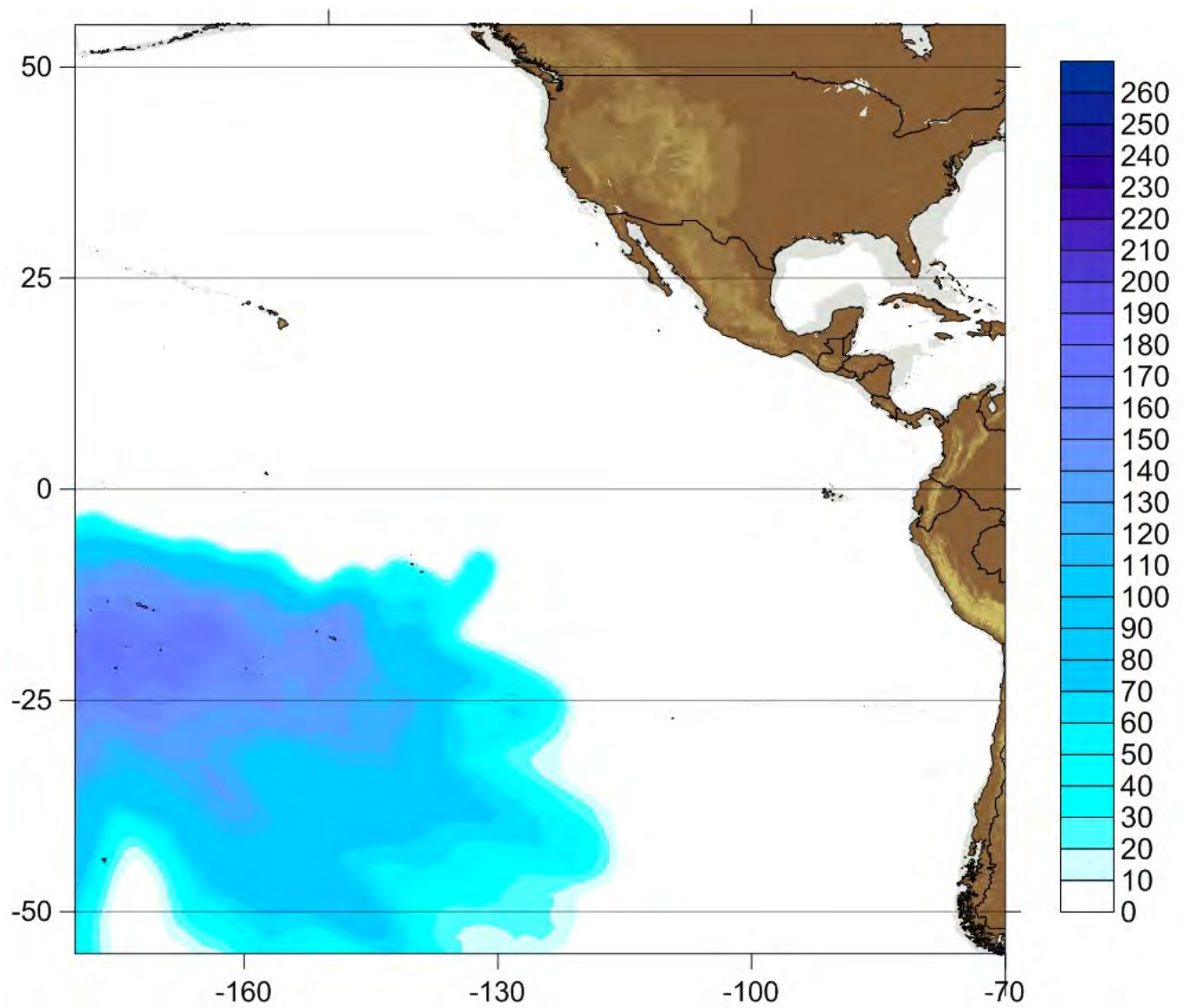
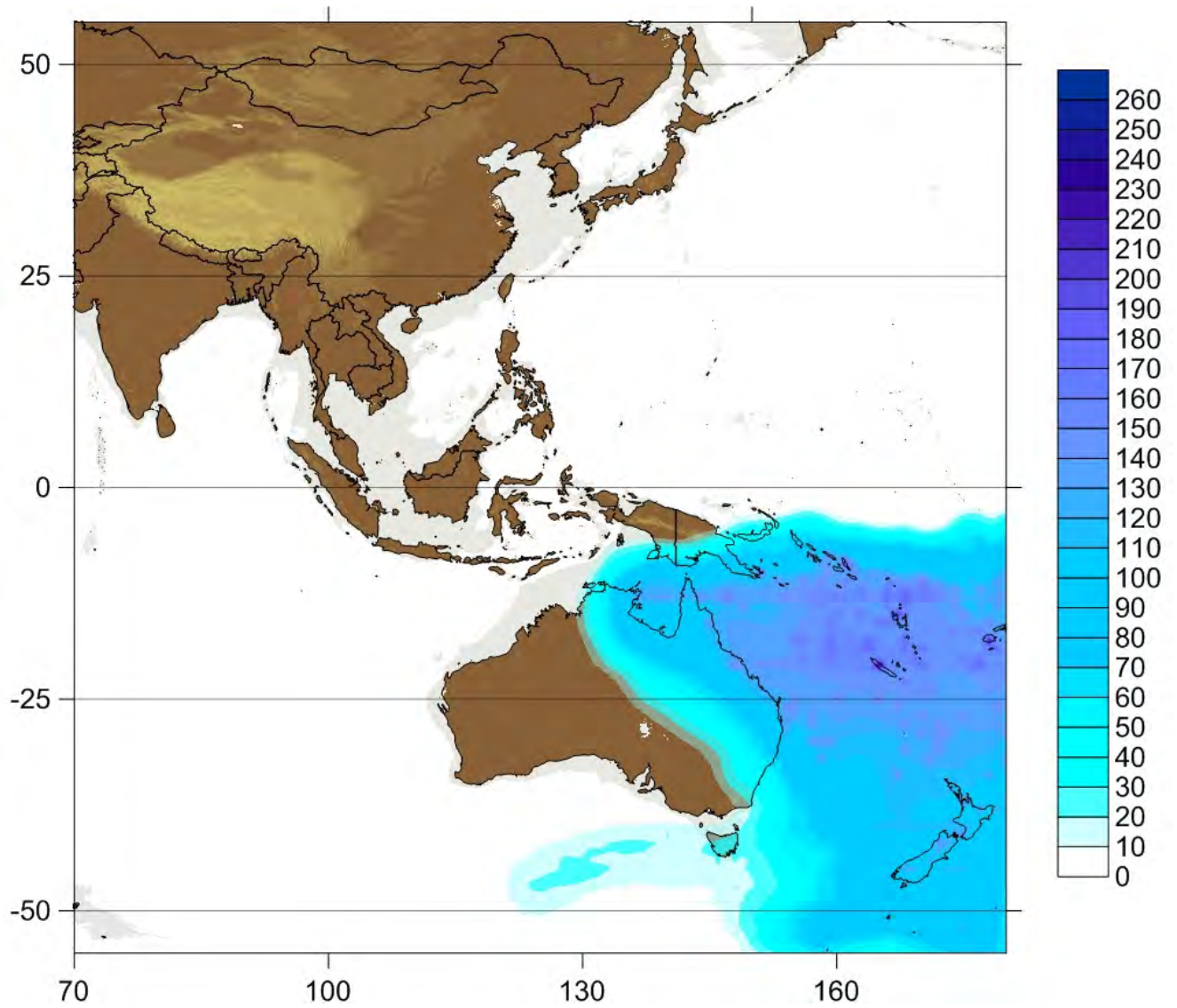


Figure A10-8
Hazard Map for strong winds. South Pacific Ocean basin [SP]. Tr: 50 years. (Km/h) East Region



Hazard Map for strong winds. South Pacific Ocean basin [SP]. Tr: 75 years. (Km/h) West Region

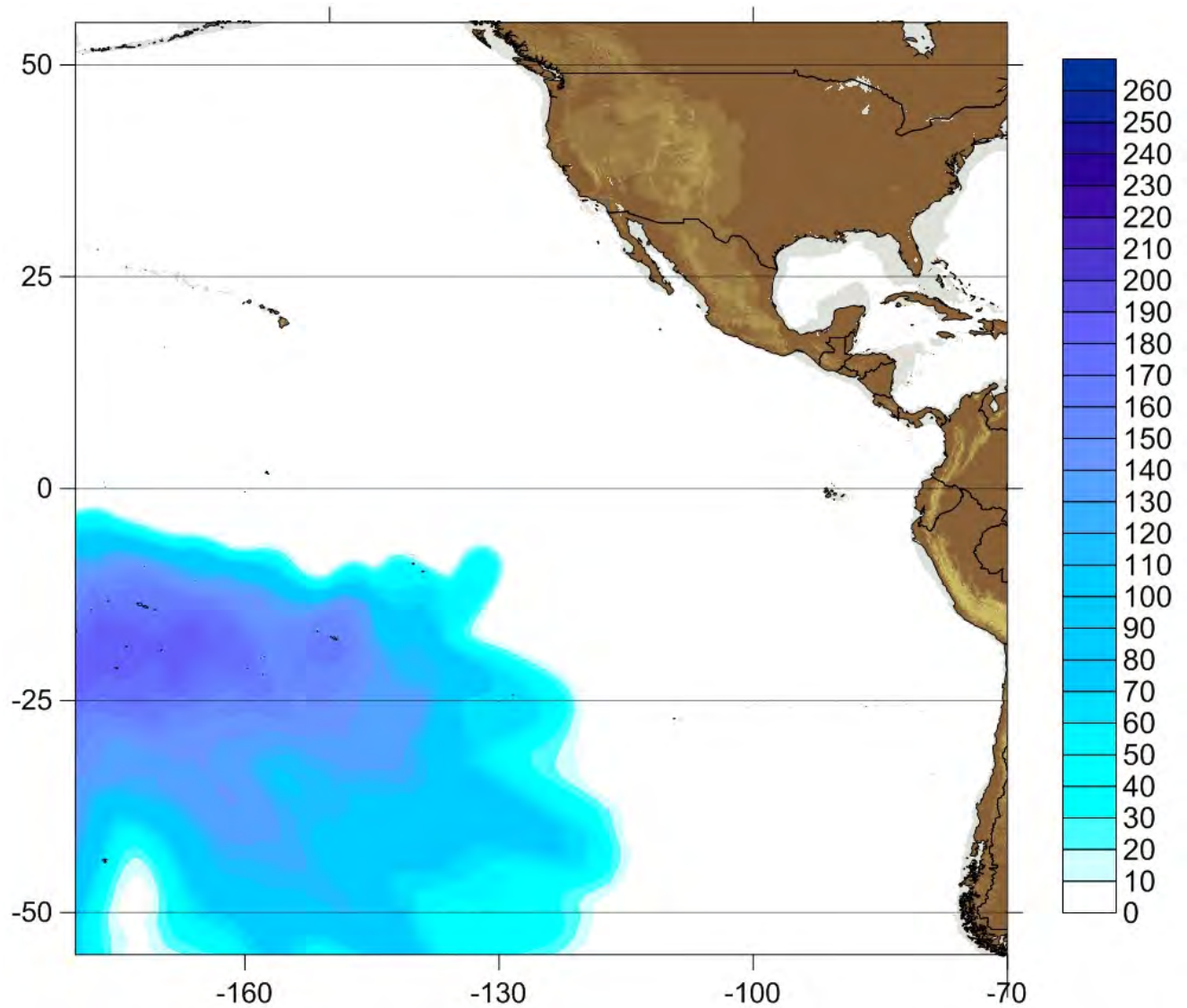
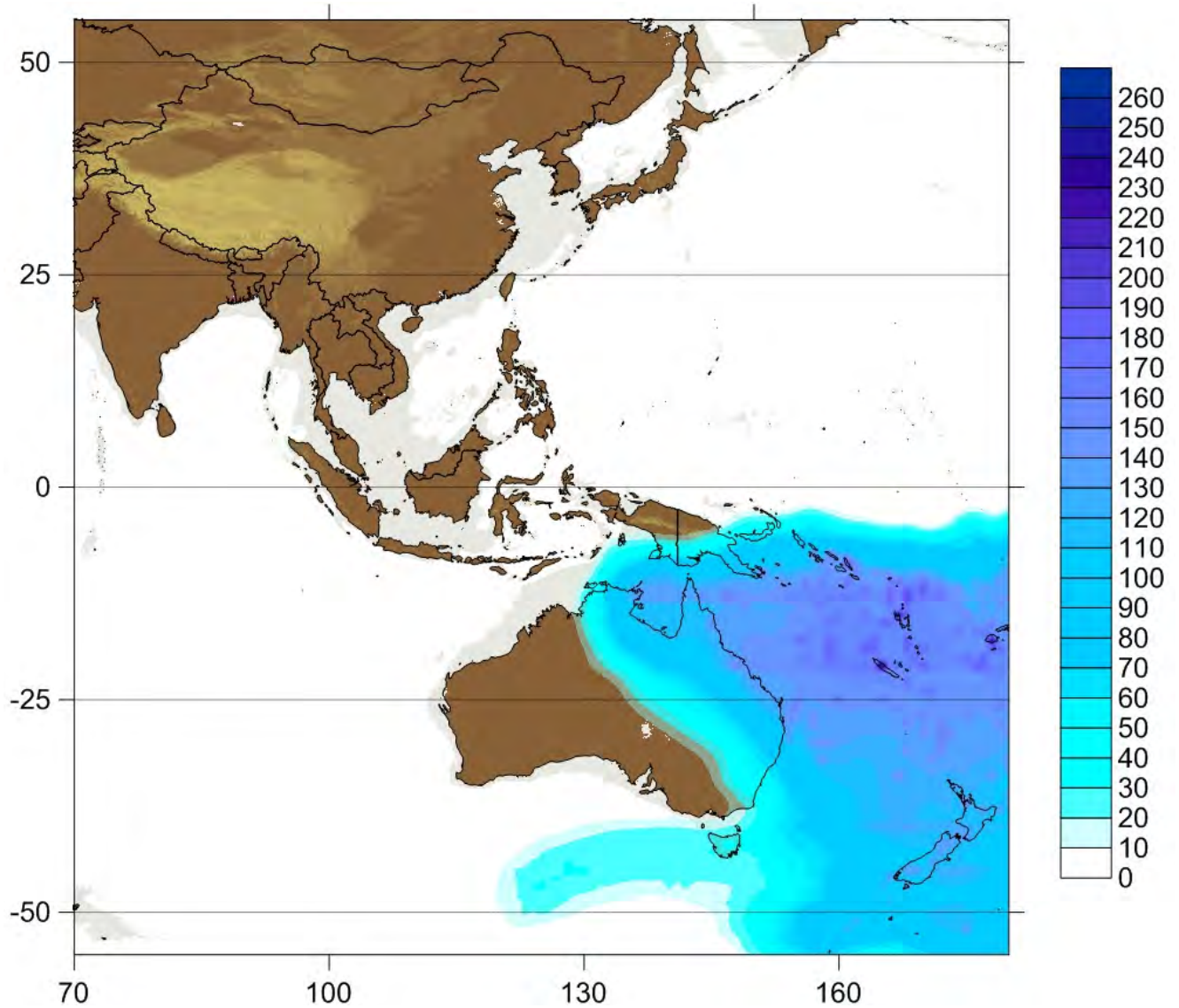


Figure A10-10
Hazard Map for strong winds. South Pacific Ocean basin [SP]. Tr: 75 years. (Km/h) East Region



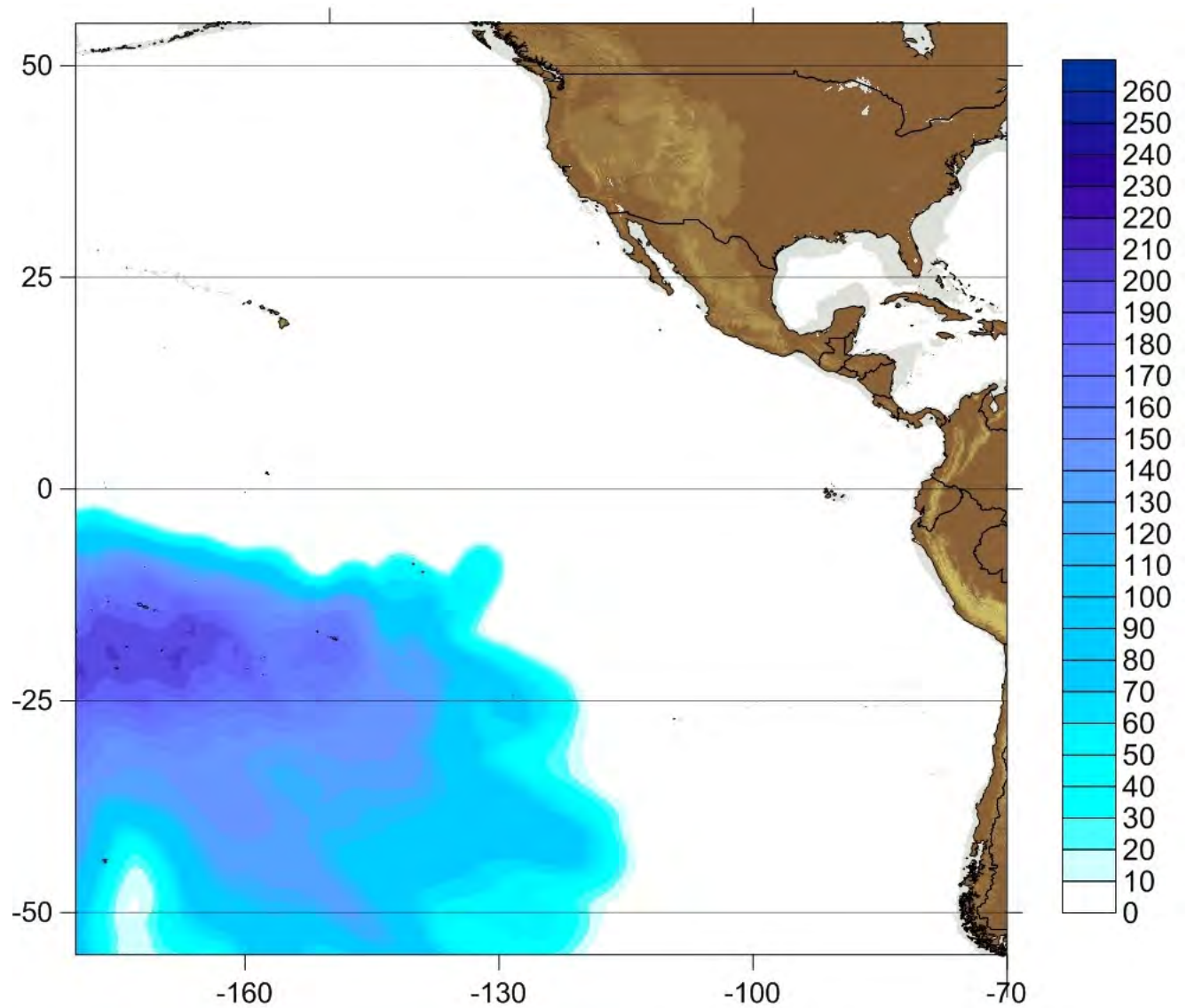


Figure A10-12
Hazard Map for strong winds. South Pacific Ocean basin [SP]. Tr: 100 years. (Km/h) East Region

West Pacific Ocean Basin [WP]

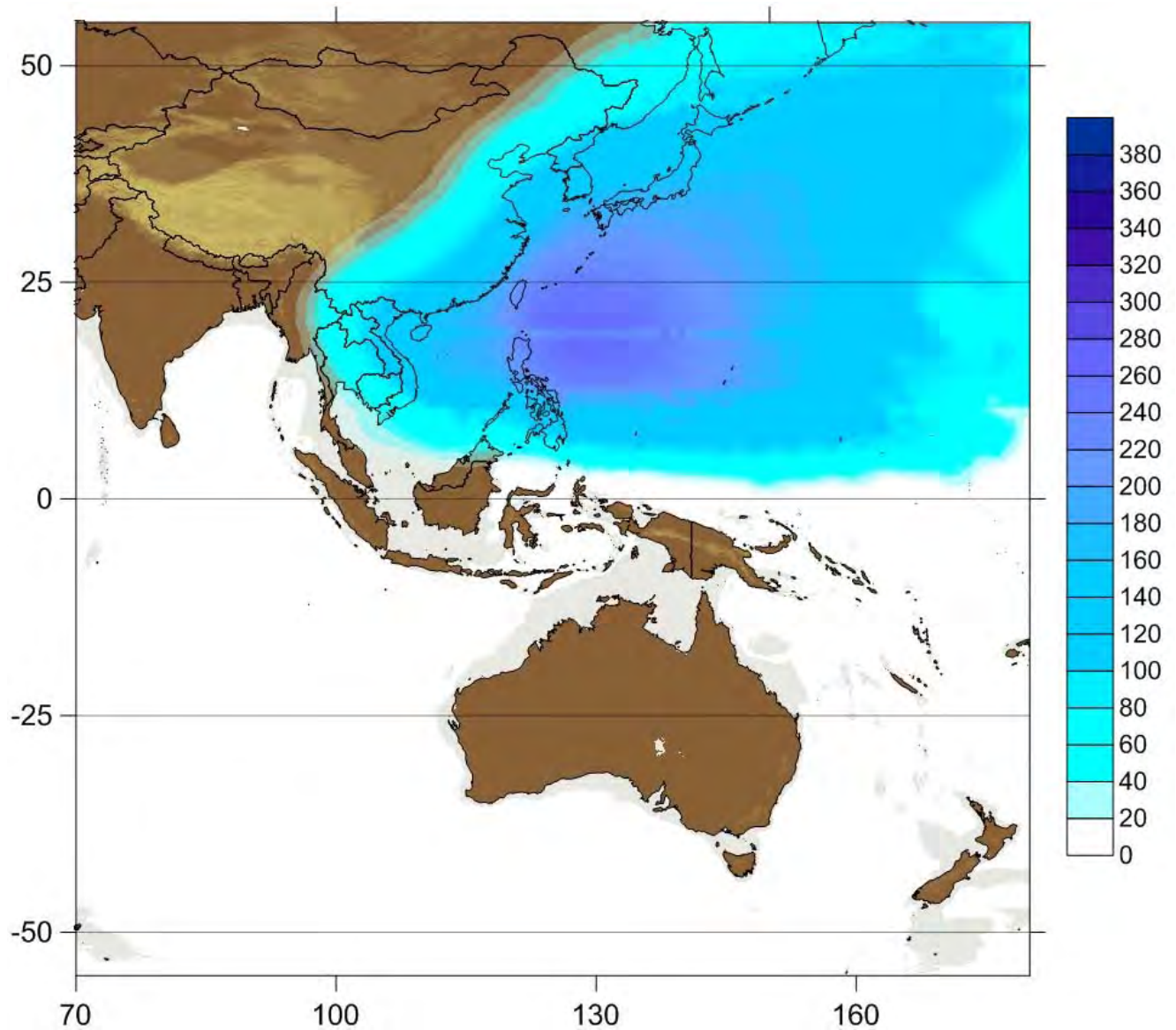


Figure A10-13
Hazard Map for strong winds. West Pacific Ocean basin [WP]. Tr: 25 years. (Km/h)

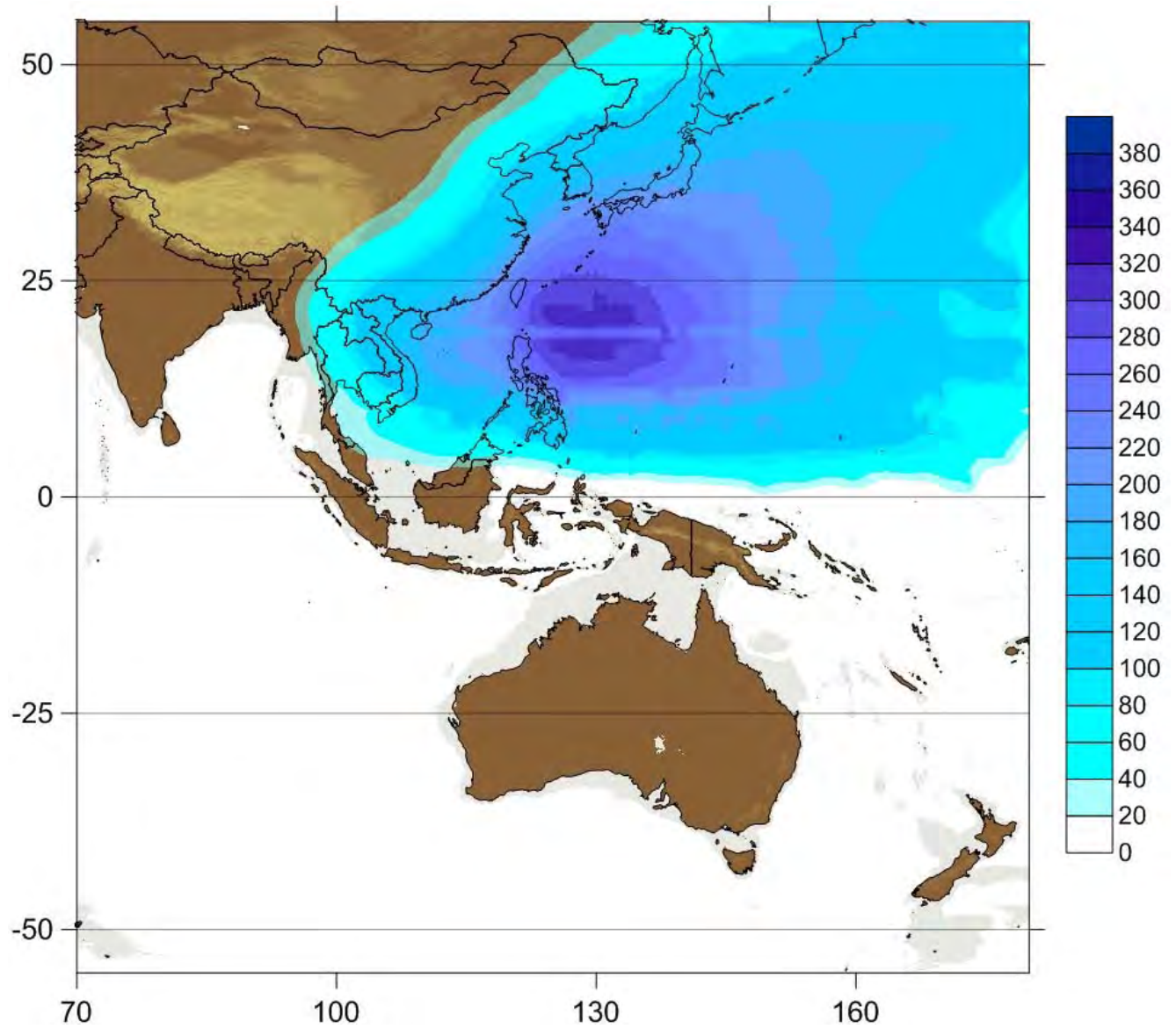
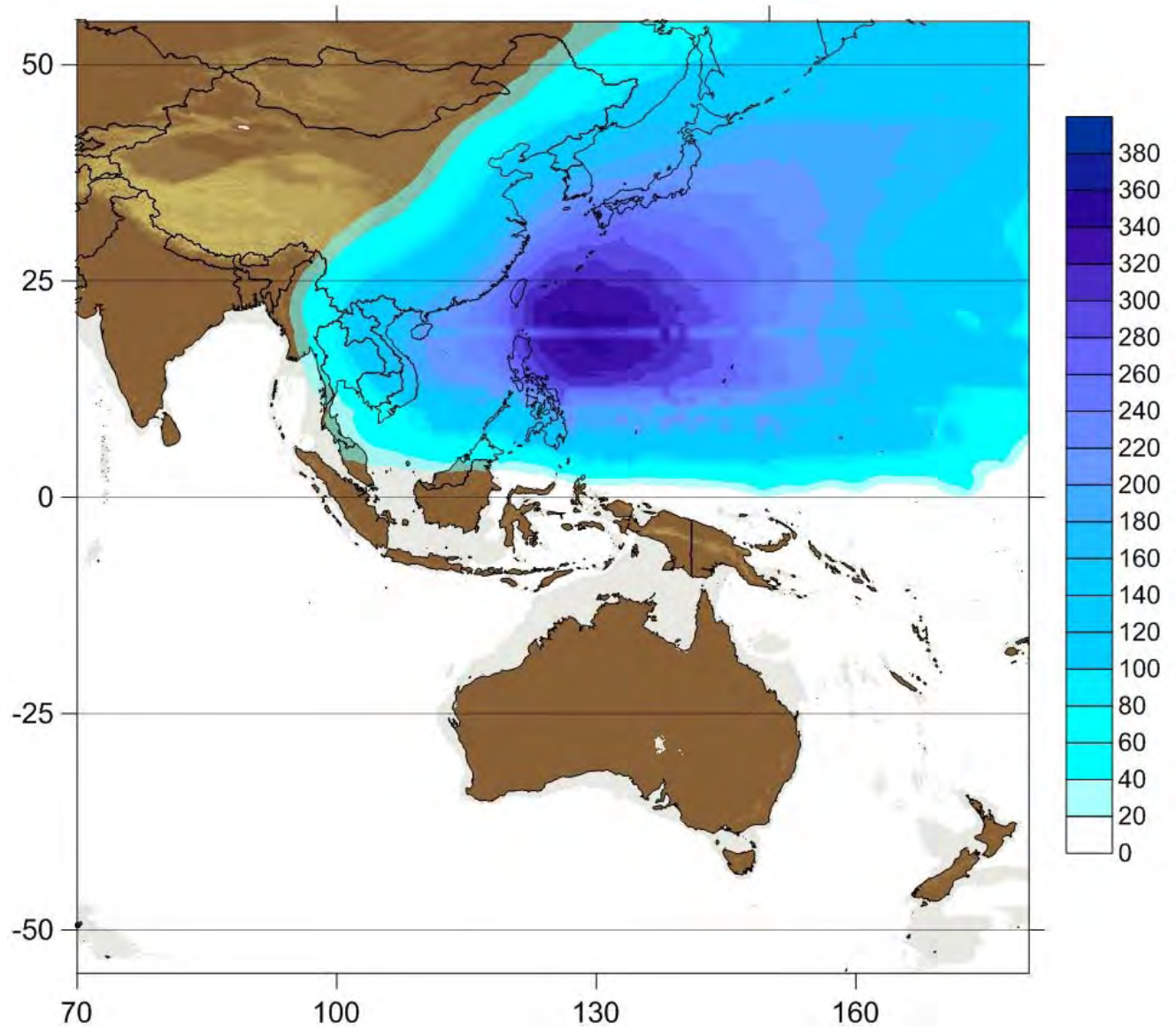


Figure A10-14
Hazard Map for strong winds. West Pacific Ocean basin [WP]. Tr: 50 years. (Km/h)



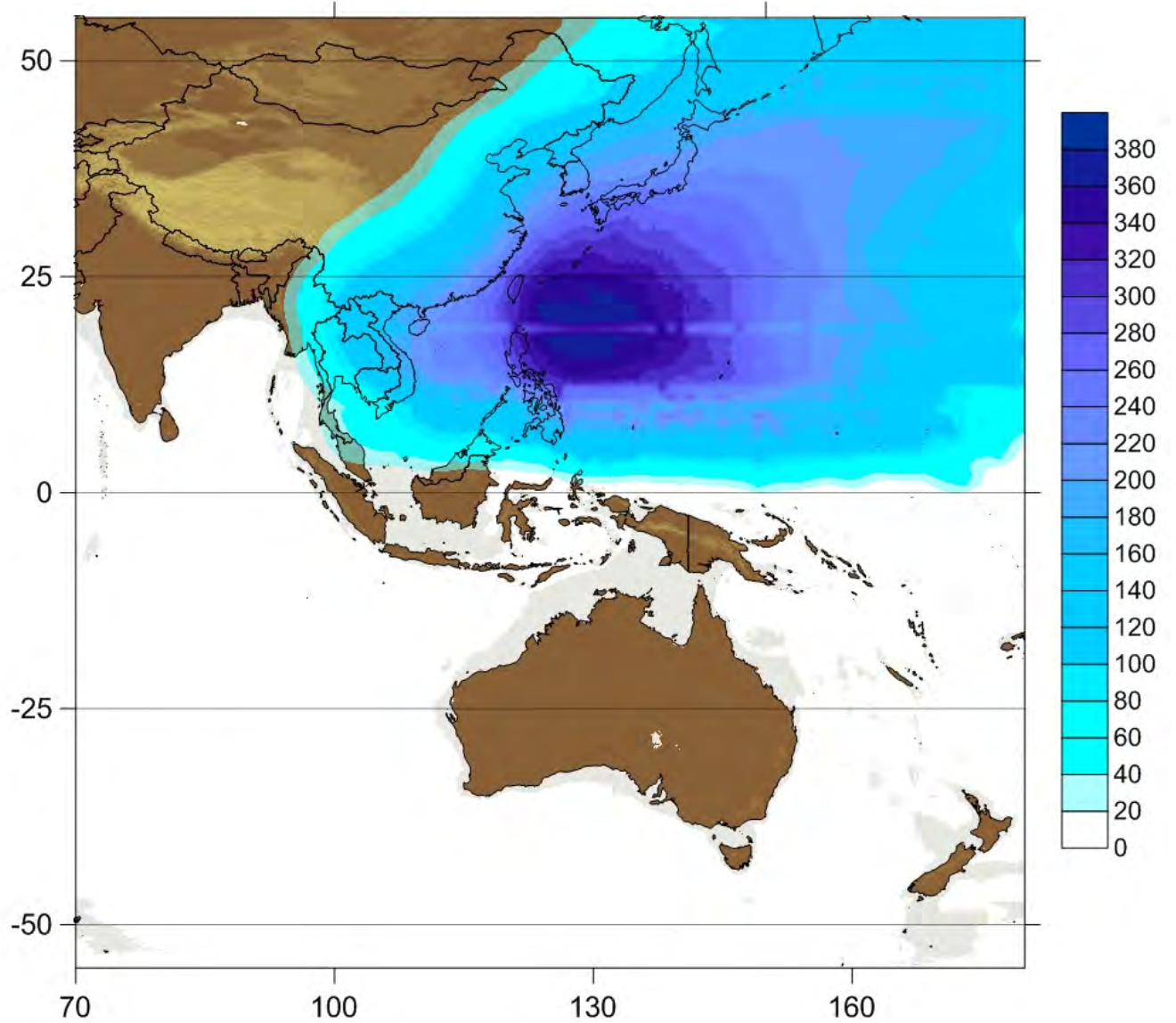


Figure A10-16
 Hazard Map for strong winds. West Pacific Ocean basin [WP]. Tr: 100 years. (Km/h)

North Indian Ocean Basin [NI]

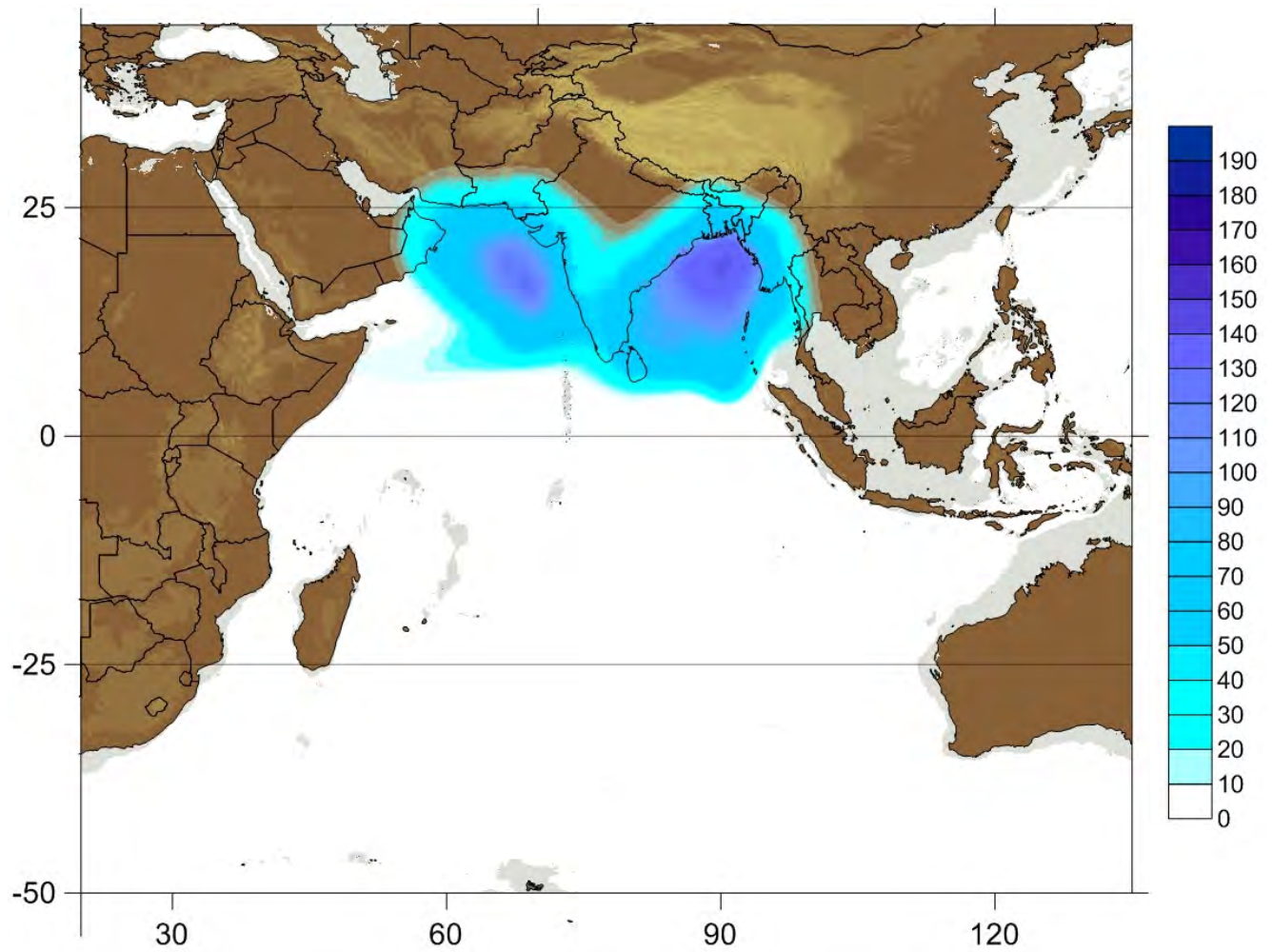


Figure A10-17
Hazard Map for strong winds. North Indian Ocean basin [NI]. Tr: 25 years. (Km/h)

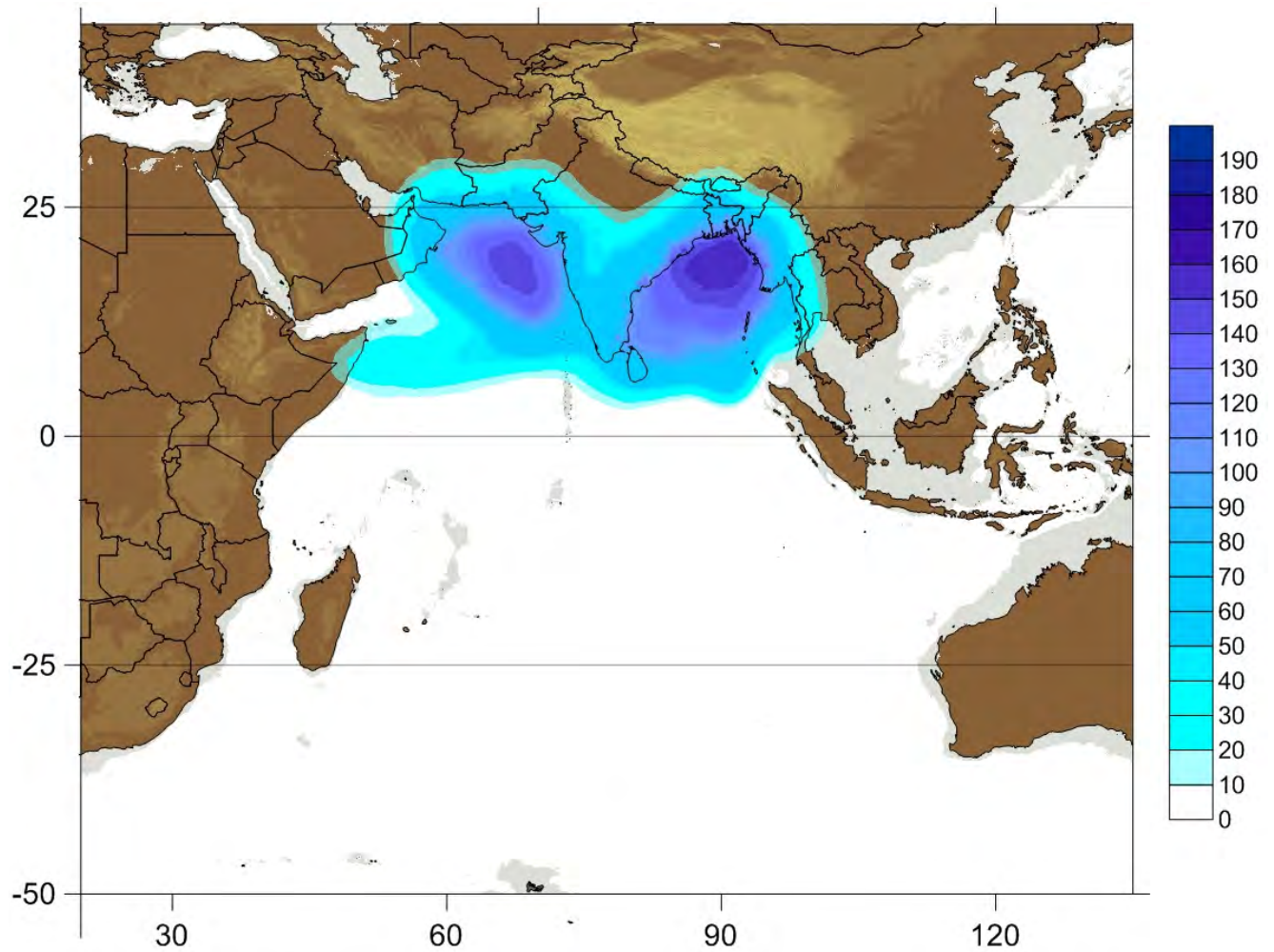


Figure A10-18
Hazard Map for strong winds. North Indian Ocean basin [NI]. Tr: 50 years. (Km/h)

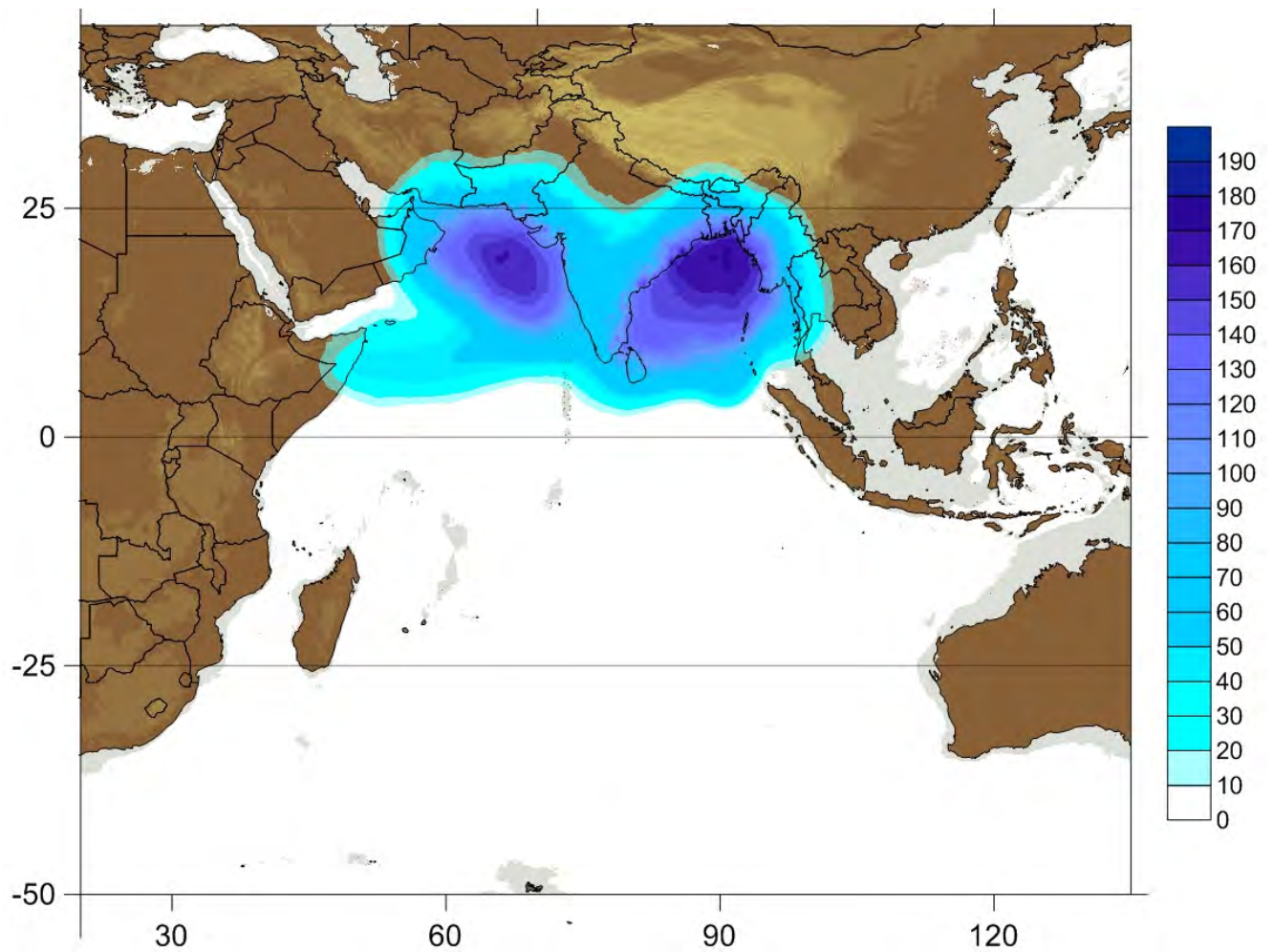


Figure A10-19
Hazard Map for strong winds. North Indian Ocean basin [NI]. Tr: 75 years. (Km/h)

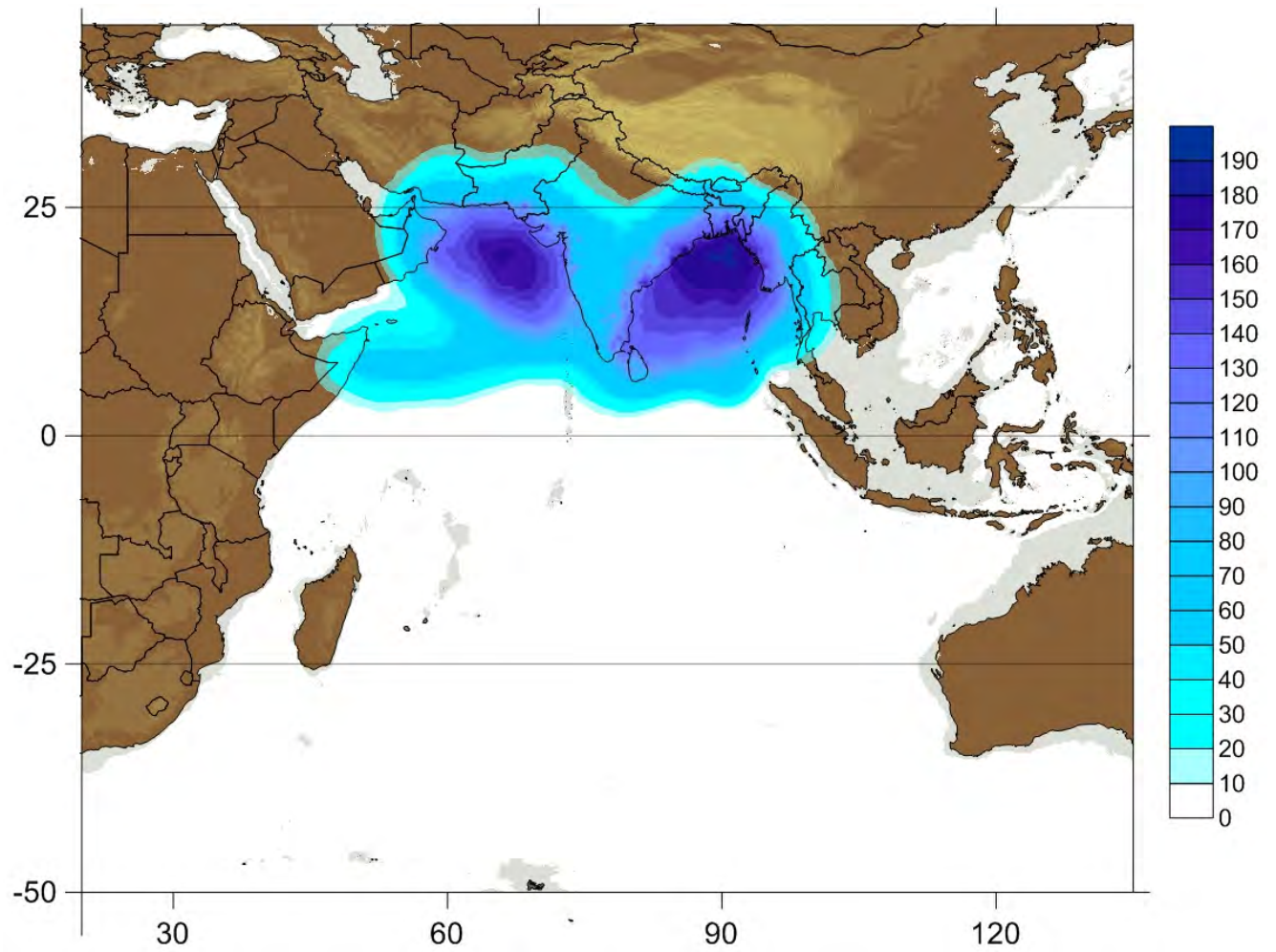


Figure A10-20
Hazard Map for strong winds. North Indian Ocean basin [NI]. Tr: 100 years. (Km/h)

South Indian Ocean Basin [SI]

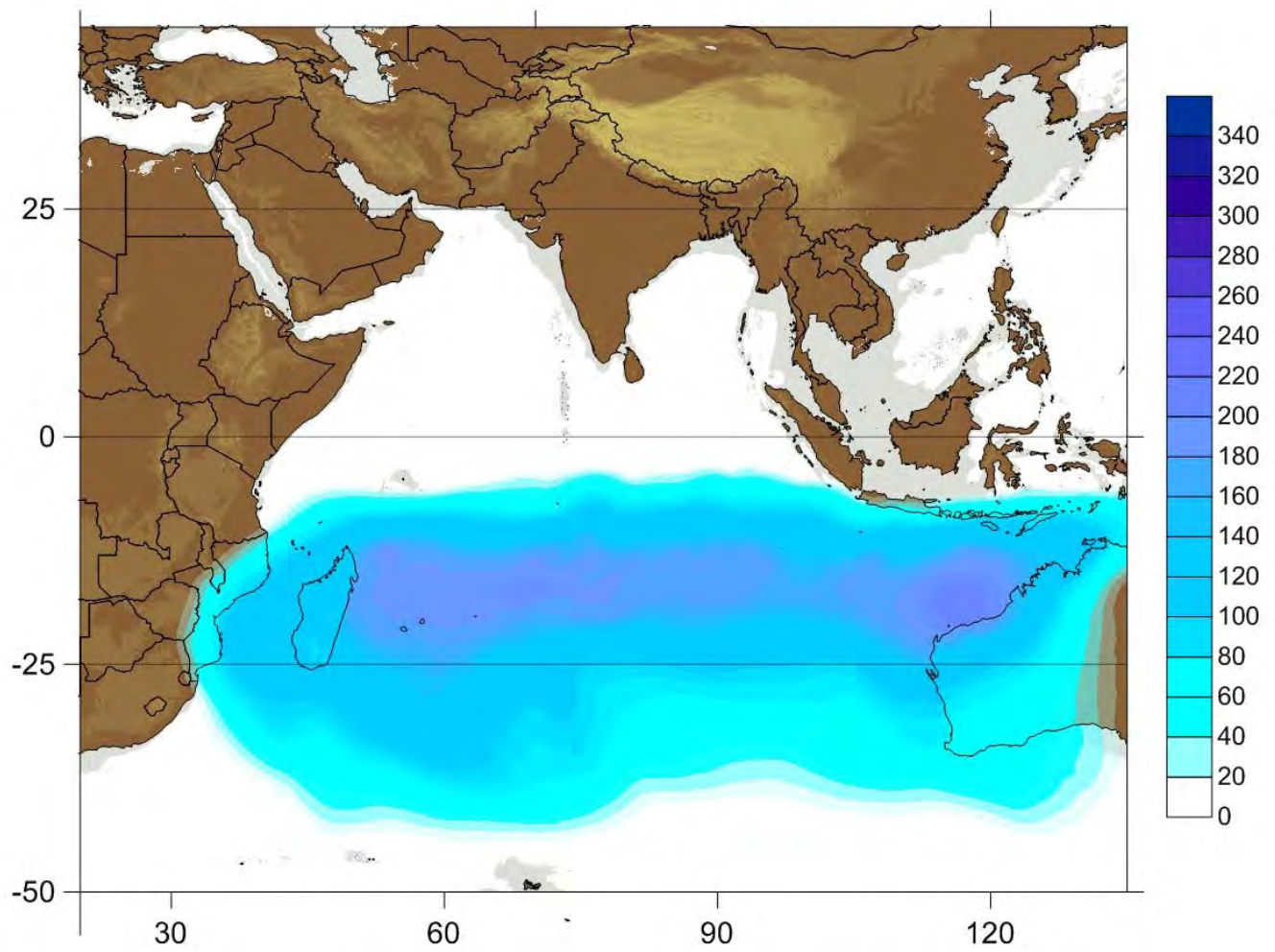


Figure A10-21
Hazard Map for strong winds. South Indian Ocean basin [SI]. Tr: 25 years. (Km/h)

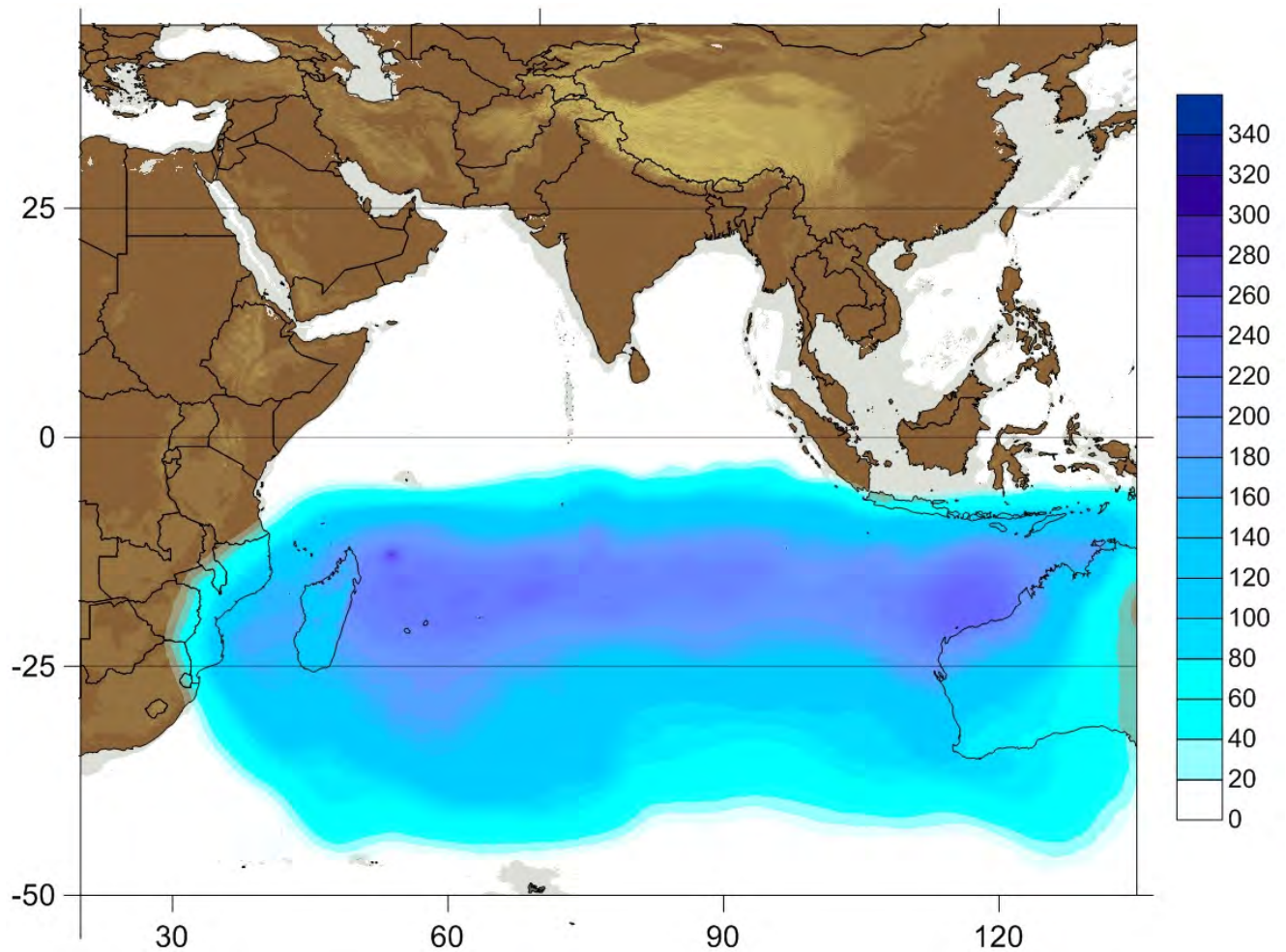


Figure A10-22
Hazard Map for strong winds. South Indian Ocean basin [SI]. Tr: 50 years. (Km/h)

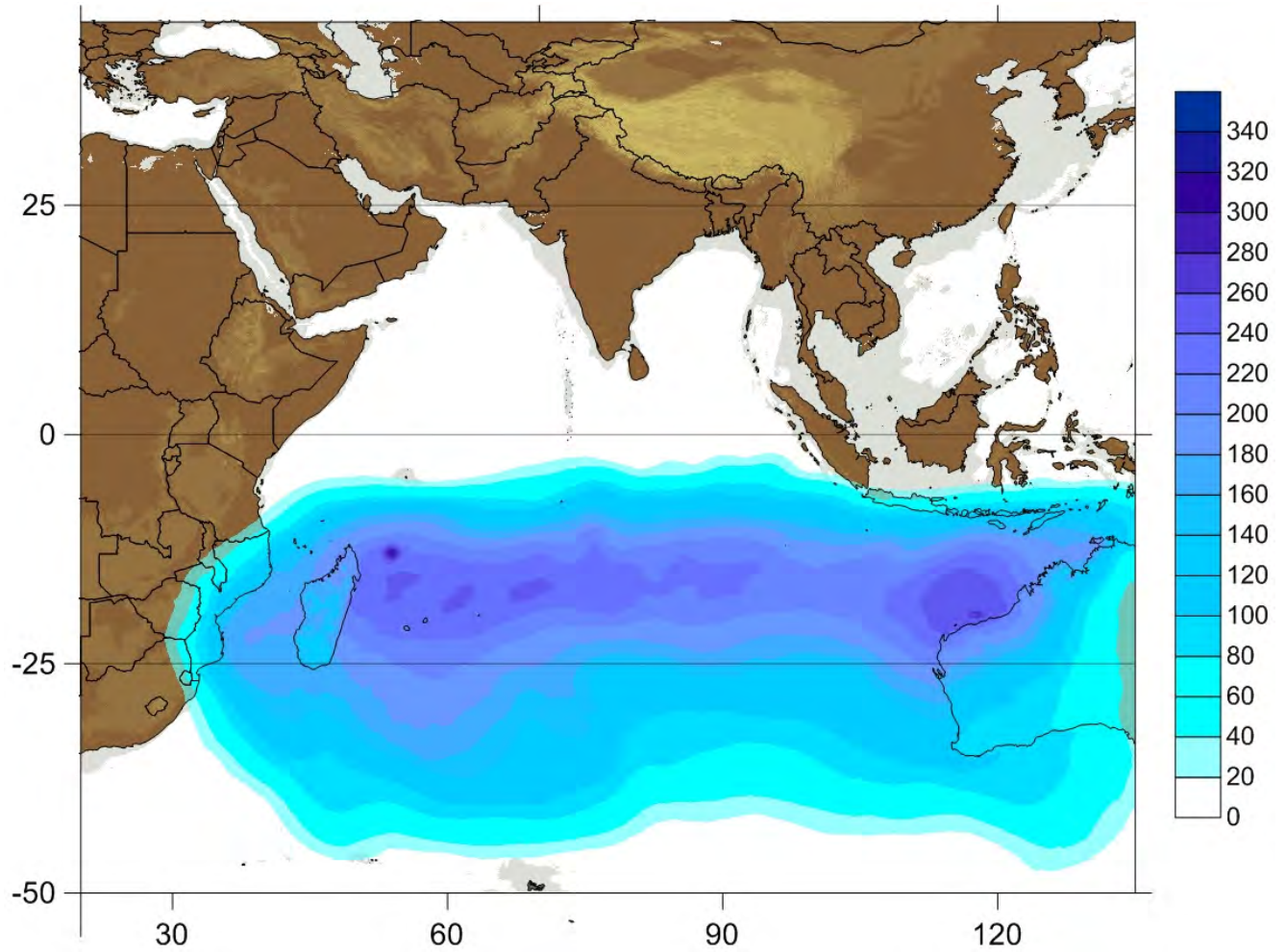


Figure A10-23
Hazard Map for strong winds. South Indian Ocean basin [SI]. Tr: 75 years. (Km/h)

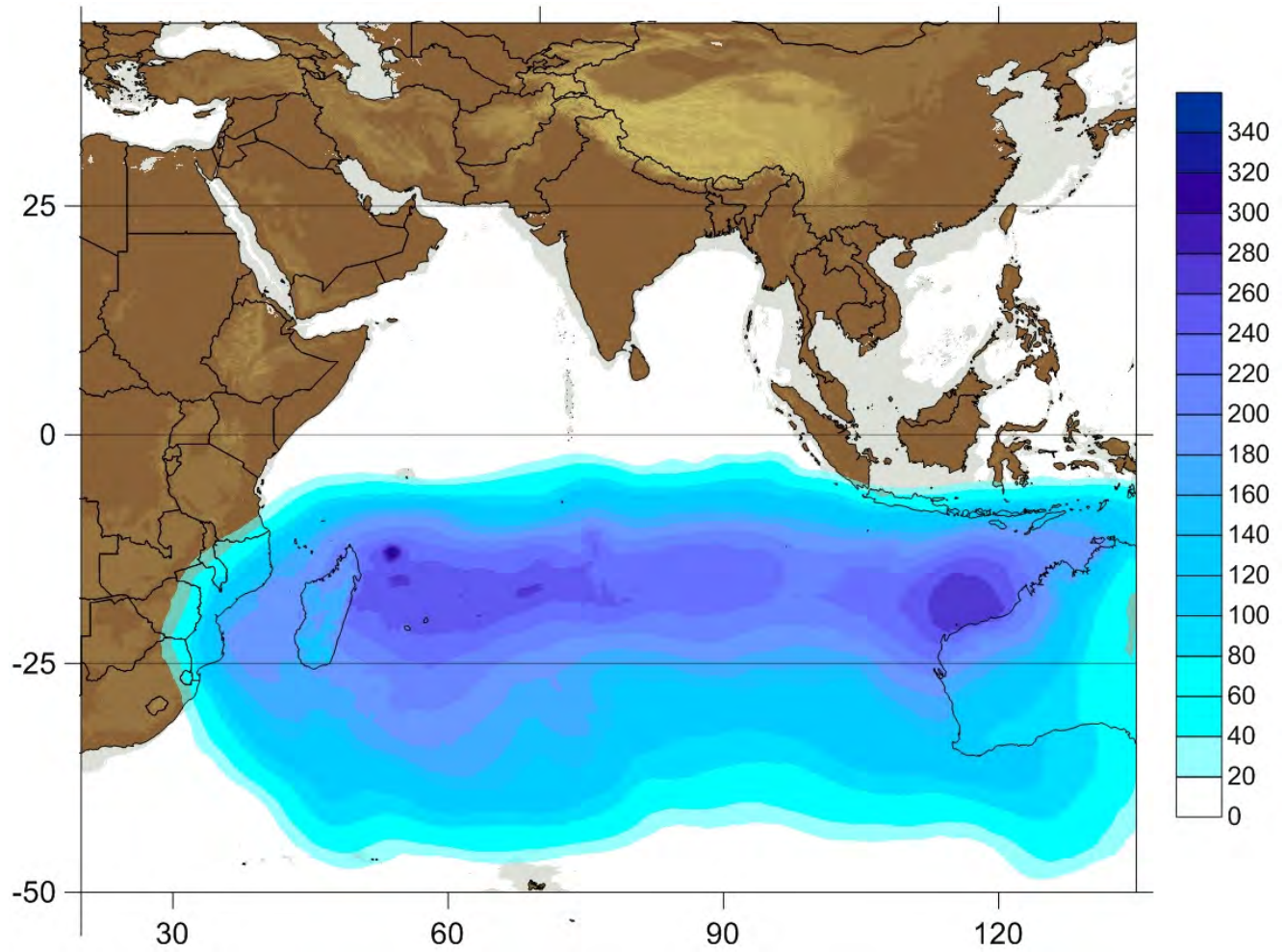


Figure A10-24
Hazard Map for strong winds. South Indian Ocean basin [SI]. Tr: 100 years. (Km/h)

North Atlantic Ocean Basin [NA]

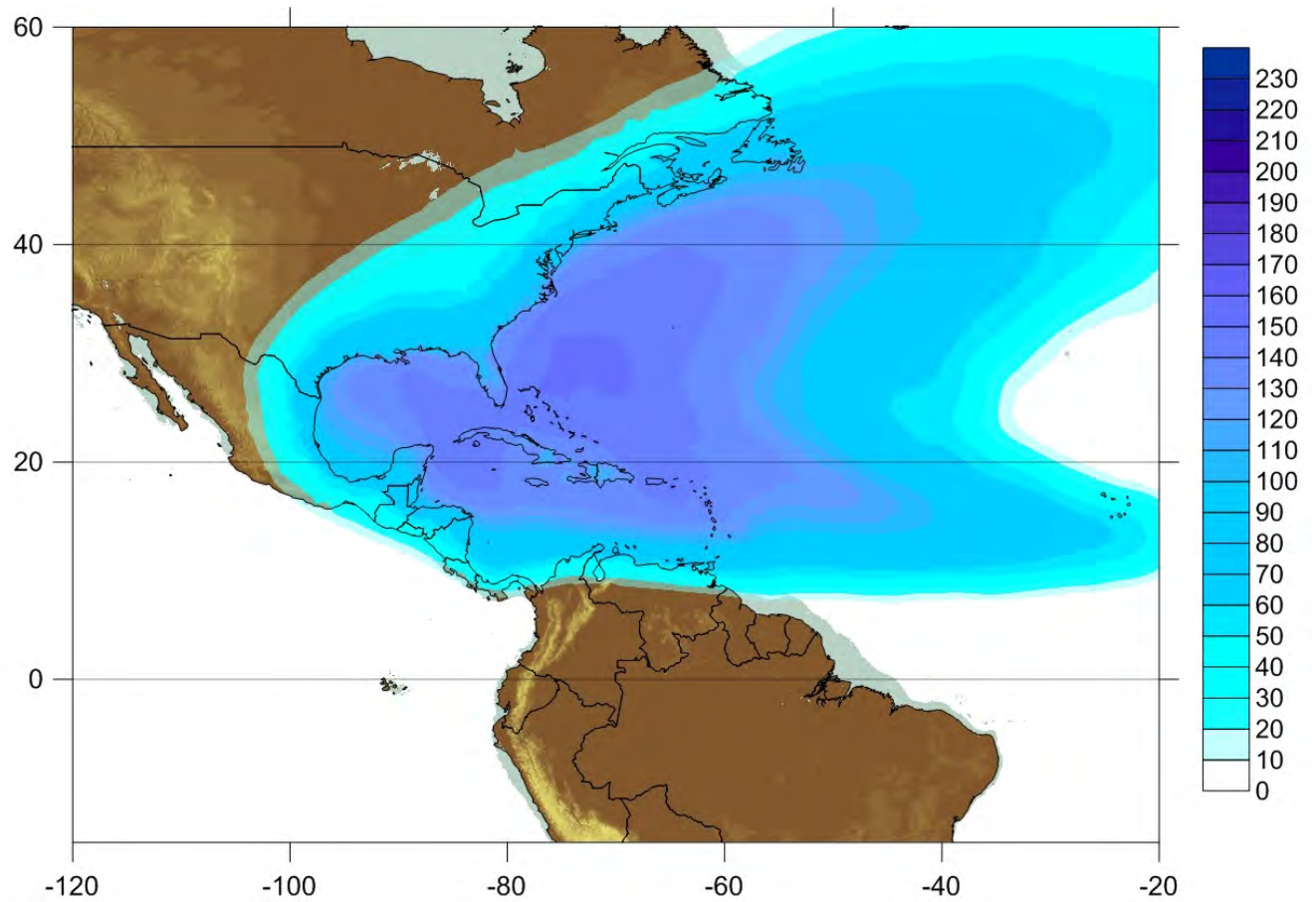


Figure A10-25
 Hazard Map for strong winds. North Atlantic Ocean basin [NA]. Tr: 25 years. (Km/h)

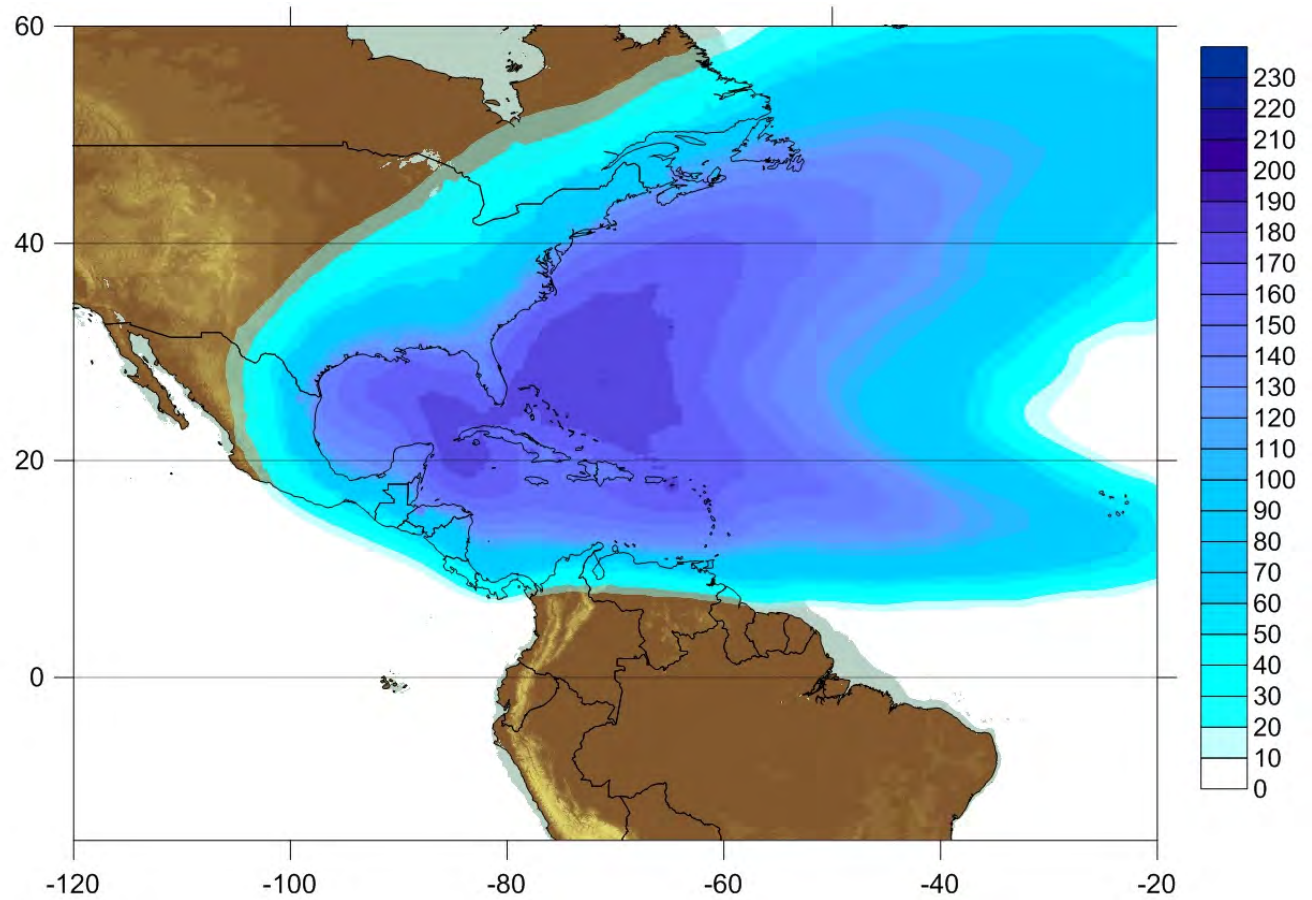


Figure A10-26
Hazard Map for strong winds. North Atlantic Ocean basin [NA]. Tr: 50 years. (Km/h)

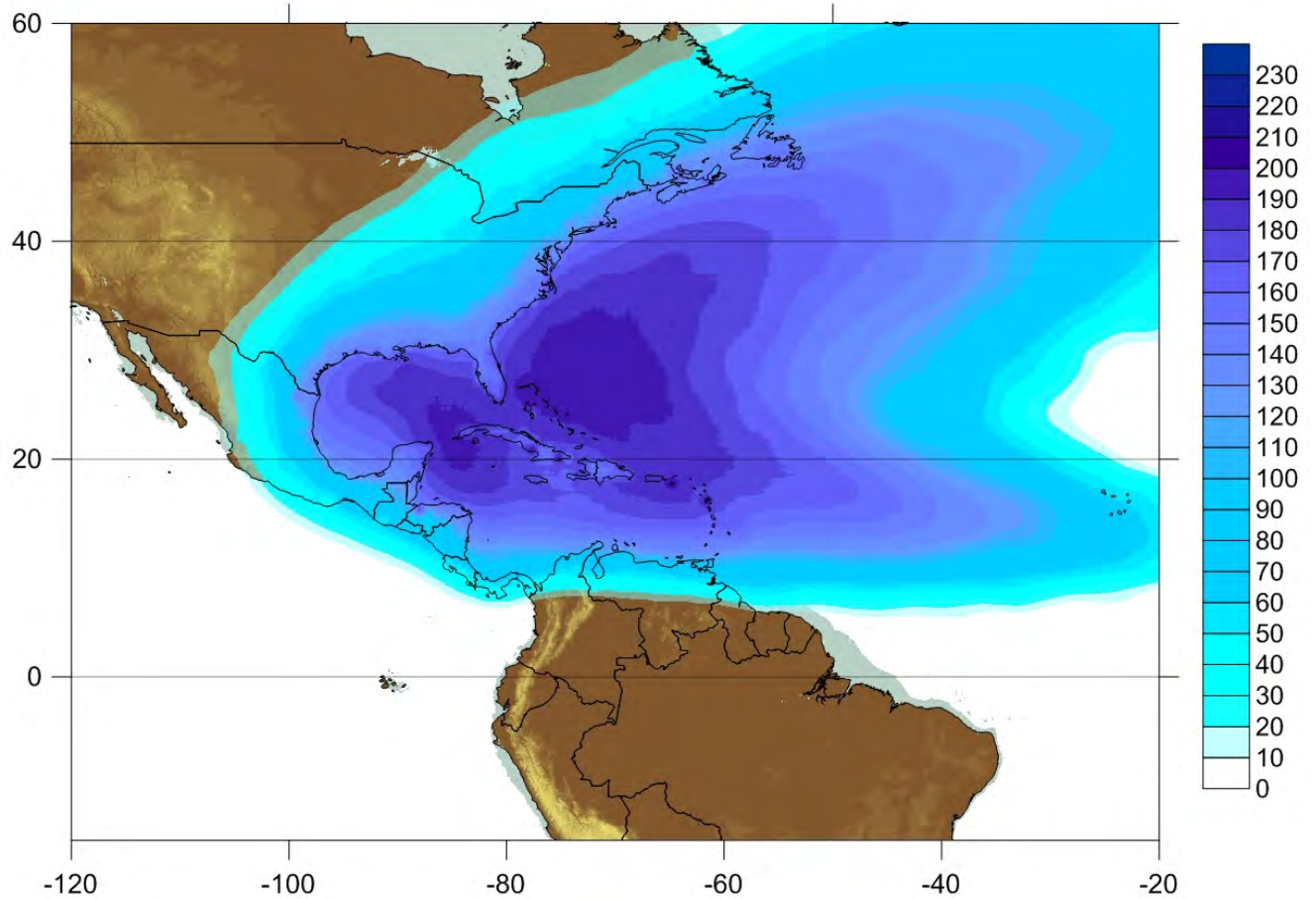


Figure A10-27
Hazard Map for strong winds. North Atlantic Ocean basin [NA]. Tr: 75 years. (Km/h)

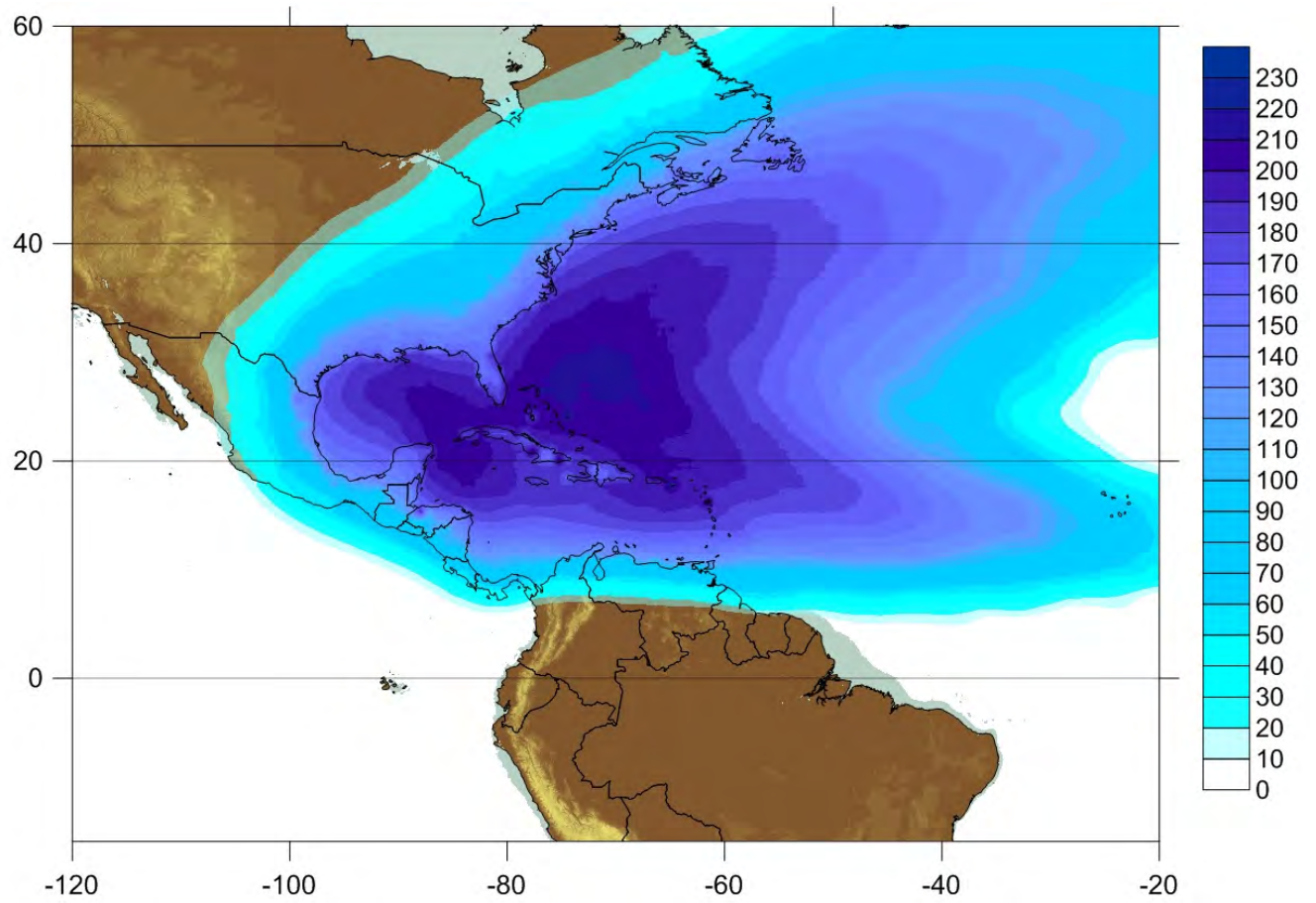


Figure A10-28
Hazard Map for strong winds. North Atlantic Ocean basin [NA]. Tr: 100 years. (Km/h)

ANNEX 11. WIND HAZARD CURVES FOR SOME CITIES

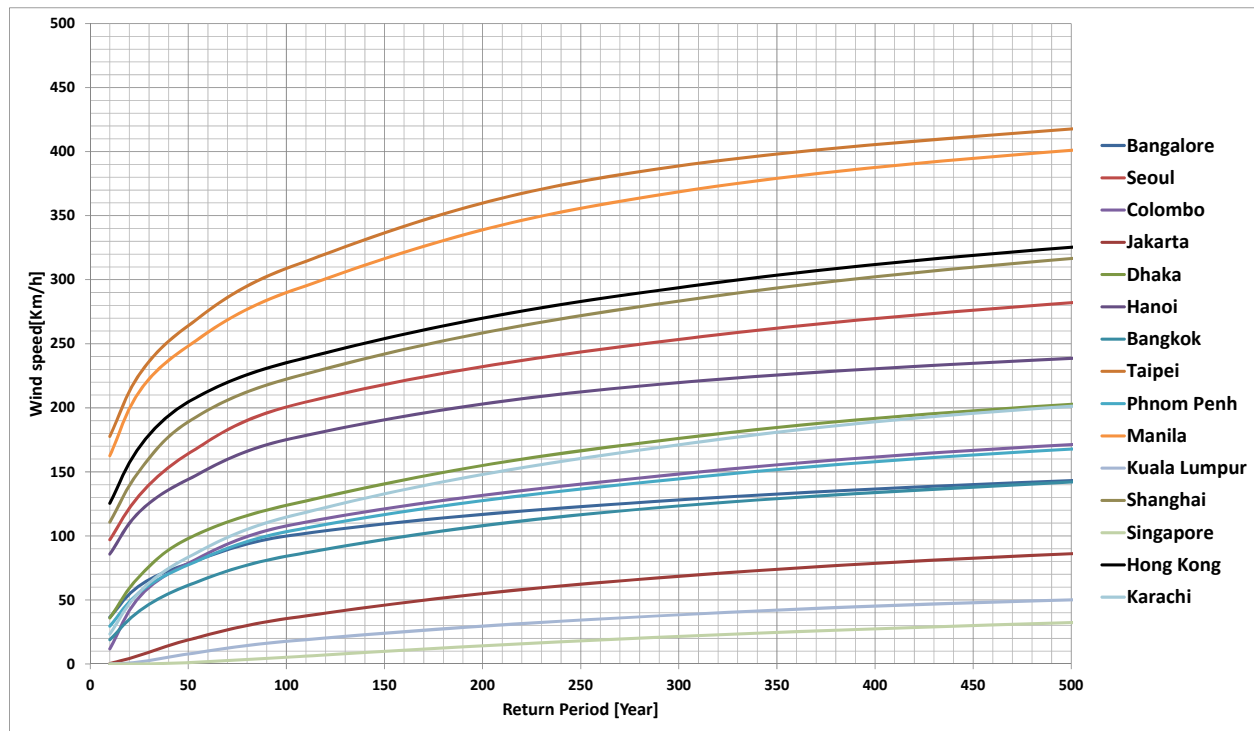
Wind hazard curves were calculated for 37 cities in 30 countries affected by tropical cyclones. The curves are presented in terms of the *maximum probable intensity* of the wind velocity for different return periods. The cities selected are shown in Table A11-1.

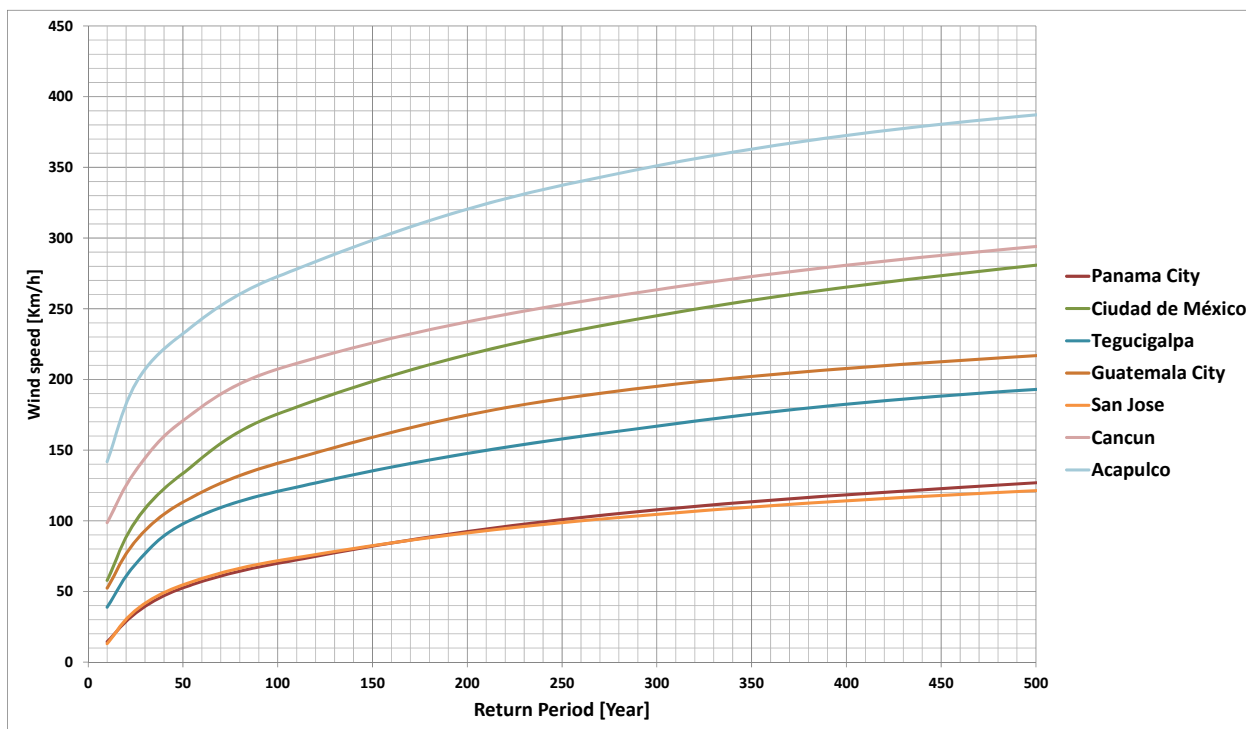
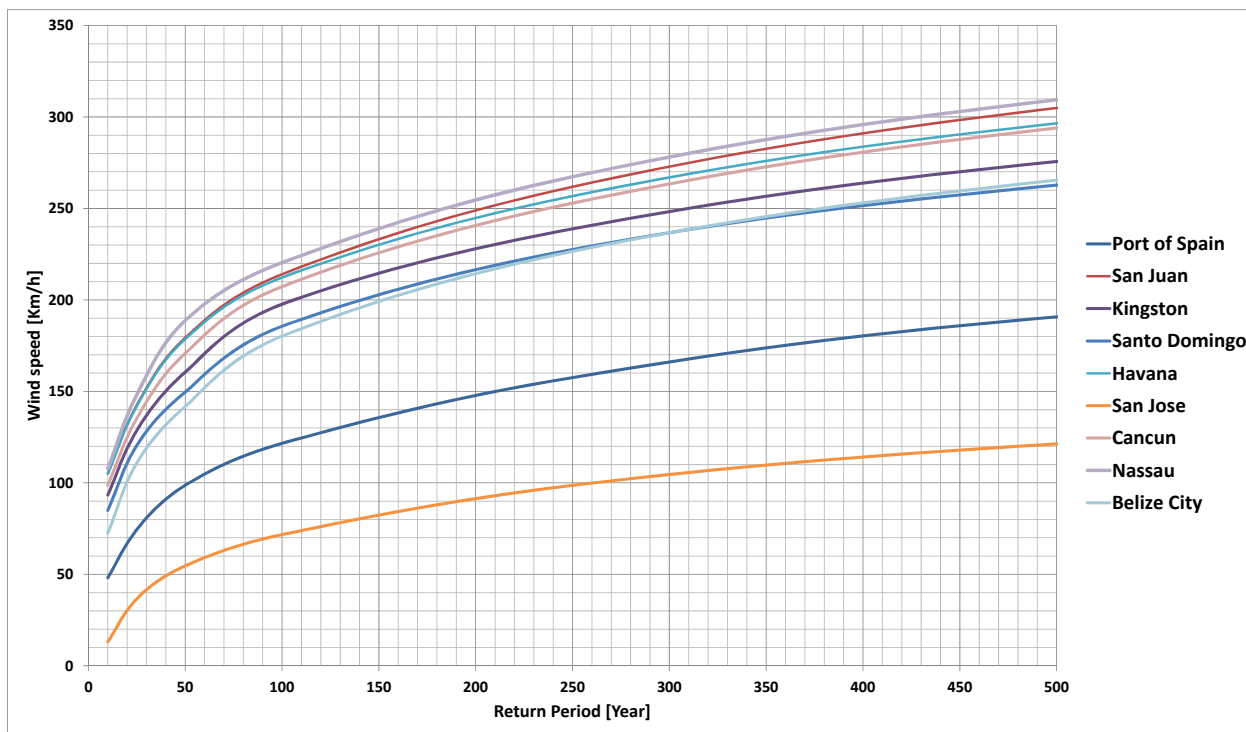
**Table A11-1
Selected Cities**

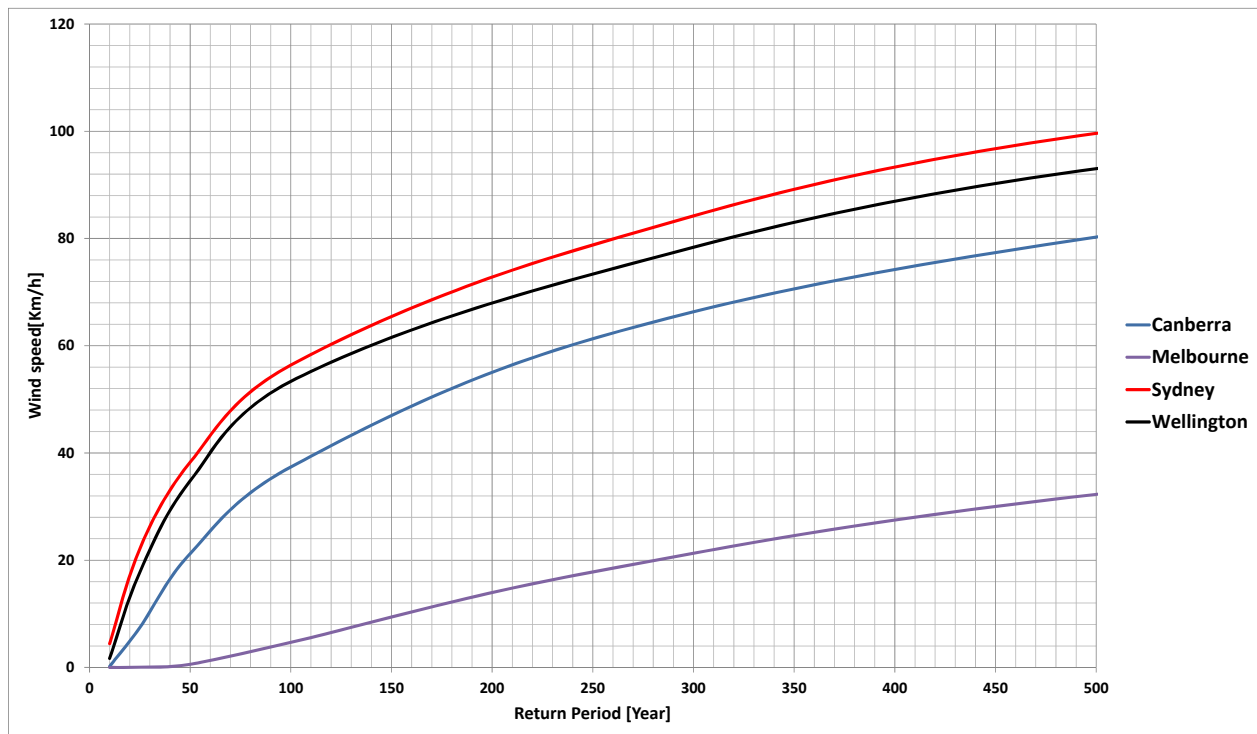
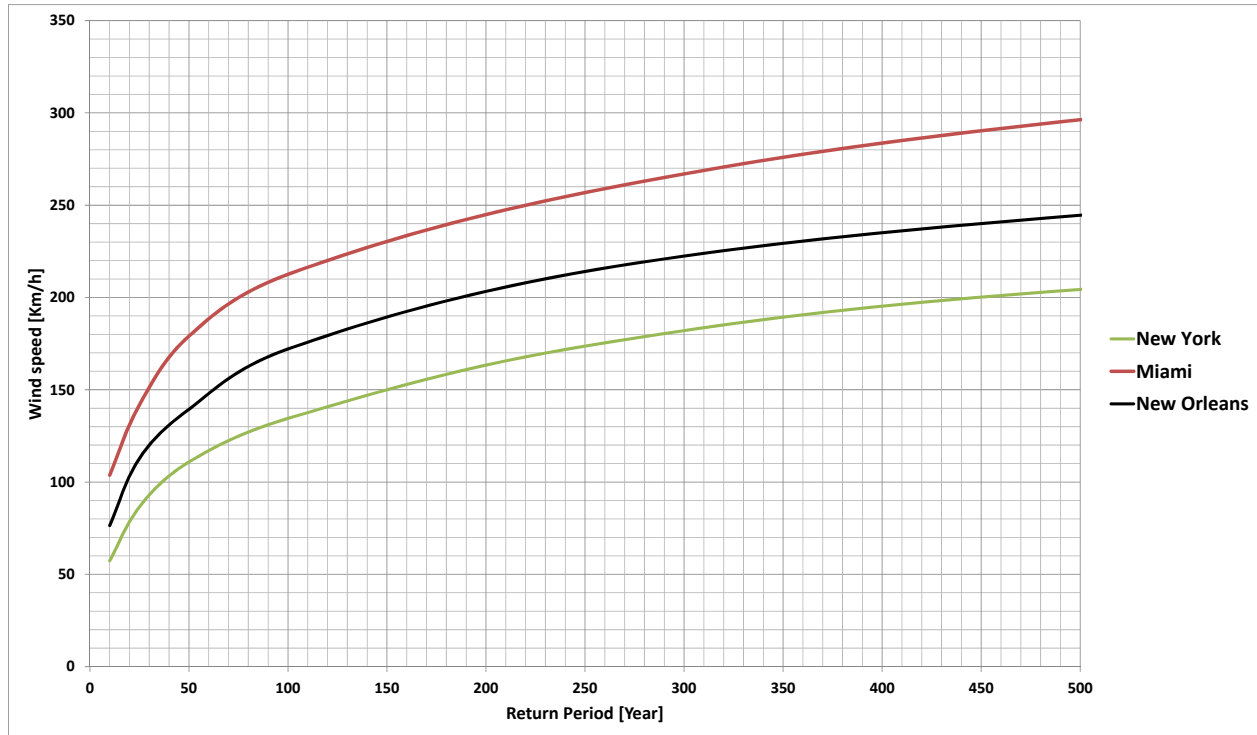
N°	City	Country	Lon (°)	Lat (°)	Region
1	Antananarivo	Madagascar	47.53	-18.91	Africa
2	Jakarta	Indonesia	106.85	-6.22	Asia
3	Bangalore	India	77.60	12.97	Asia
4	Colombo	Sri Lanka	79.86	6.93	Asia
5	Dhaka	Bangladesh	90.41	23.71	Asia
6	Hanoi	Vietnam	105.88	21.04	Asia
7	Bangkok	Thailand	100.49	13.75	Asia
8	Kuala Lumpur	Malaysia	101.84	3.17	Asia
9	Seoul	South Korea	126.98	37.57	Asia
10	Phnom Penh	Cambodia	104.92	11.56	Asia
11	Singapore	Singapore	103.85	1.28	Asia
12	Manila	Philippines	120.98	14.60	Asia
13	Taipei	Taiwan	121.58	25.13	Asia
14	Hong Kong	China	114.11	22.40	Asia
15	Shanghai	China	121.47	31.23	Asia
16	Karachi	Pakistan	67.03	24.89	Asia
17	Port of Spain	Trinidad & Tobago	-61.52	10.67	Caribbean
18	San Juan	Puerto Rico	-66.11	18.47	Caribbean
19	Kingston	Jamaica	-76.79	17.99	Caribbean
20	Santo Domingo	Dominican Republic	-69.98	18.50	Caribbean
21	Havana	Cuba	-82.39	23.12	Caribbean
22	Belize City	Belize	-88.19	17.50	Caribbean
23	Nassau	Bahamas	-77.35	25.06	Caribbean
24	City of Panama	Panama	-79.52	8.99	Central America
25	Mexico City	Mexico	-99.13	19.43	Central America
26	Tegucigalpa	Honduras	-87.22	14.08	Central America
27	Guatemala City	Guatemala	-90.53	14.62	Central America

N°	City	Country	Lon (°)	Lat (°)	Region
28	San Jose	Costa Rica	-84.08	9.93	Central America
29	Cancun	Mexico	-86.84	21.16	North America
30	Acapulco	Mexico	-99.88	16.86	North America
31	New York	USA	-74.01	40.71	North America
32	Miami	USA	-80.23	25.79	North America
33	New Orleans	USA	-90.07	29.95	North America
34	Canberra	Australia	149.12	-35.30	Oceania
35	Melbourne	Australia	144.96	-37.81	Oceania
36	Sydney	Australia	151.20	-33.87	Oceania
37	Wellington	New Zealand	148.93	-32.55	Oceania

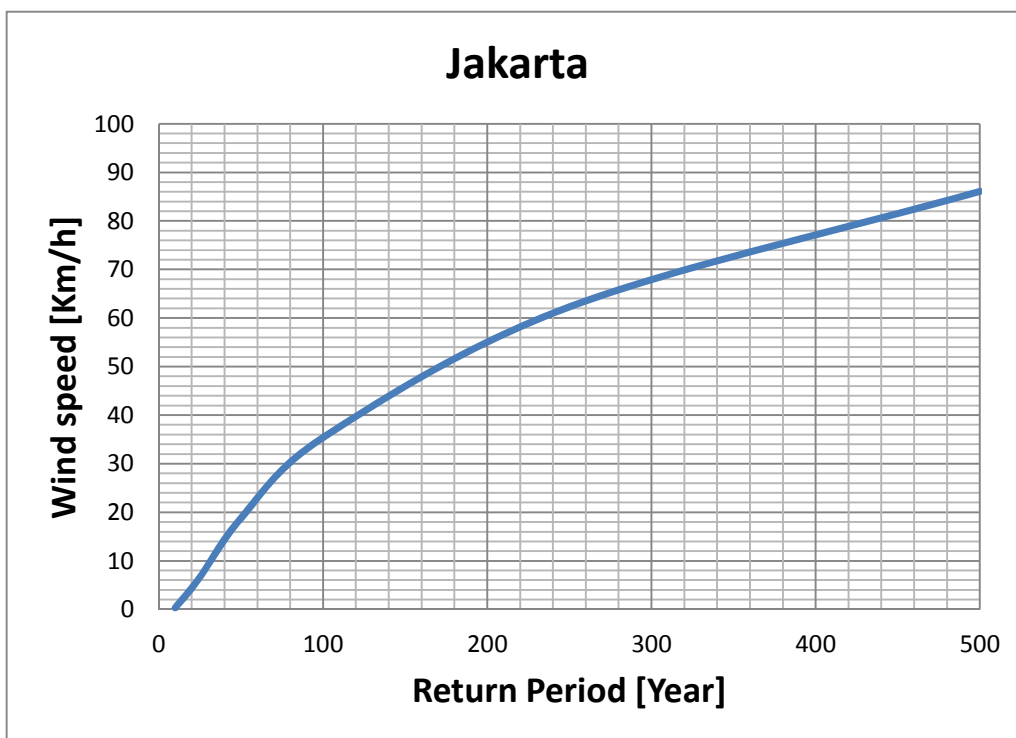
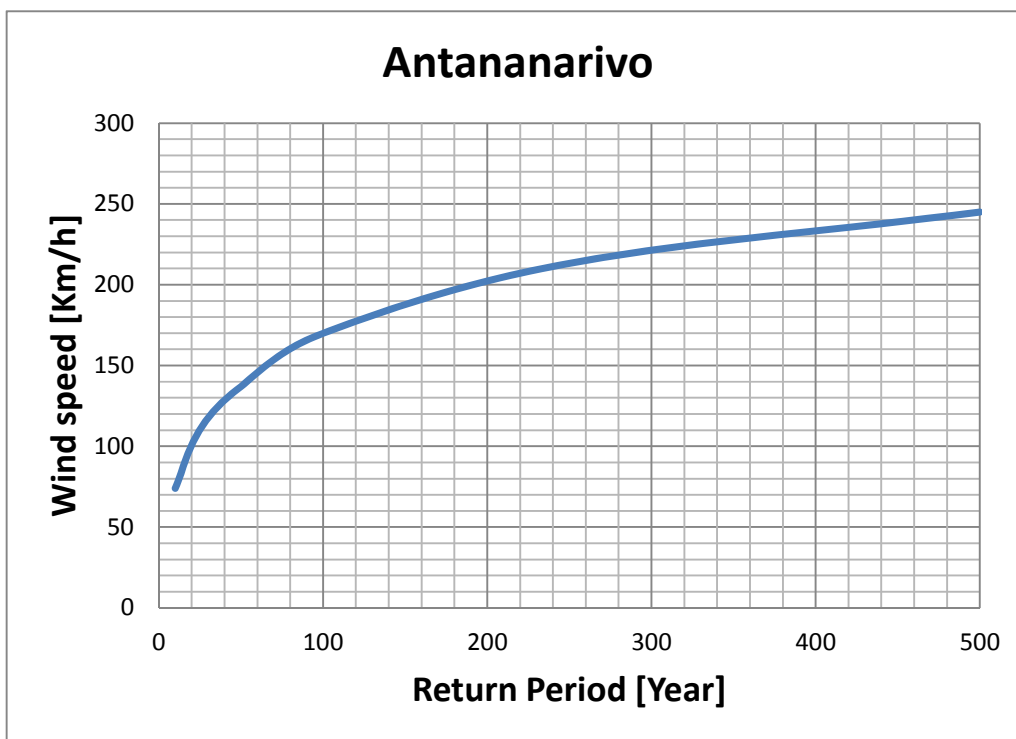
Below there are the curves of maximum probably intensity grouped by each region of the Table A11-1 and city by city.

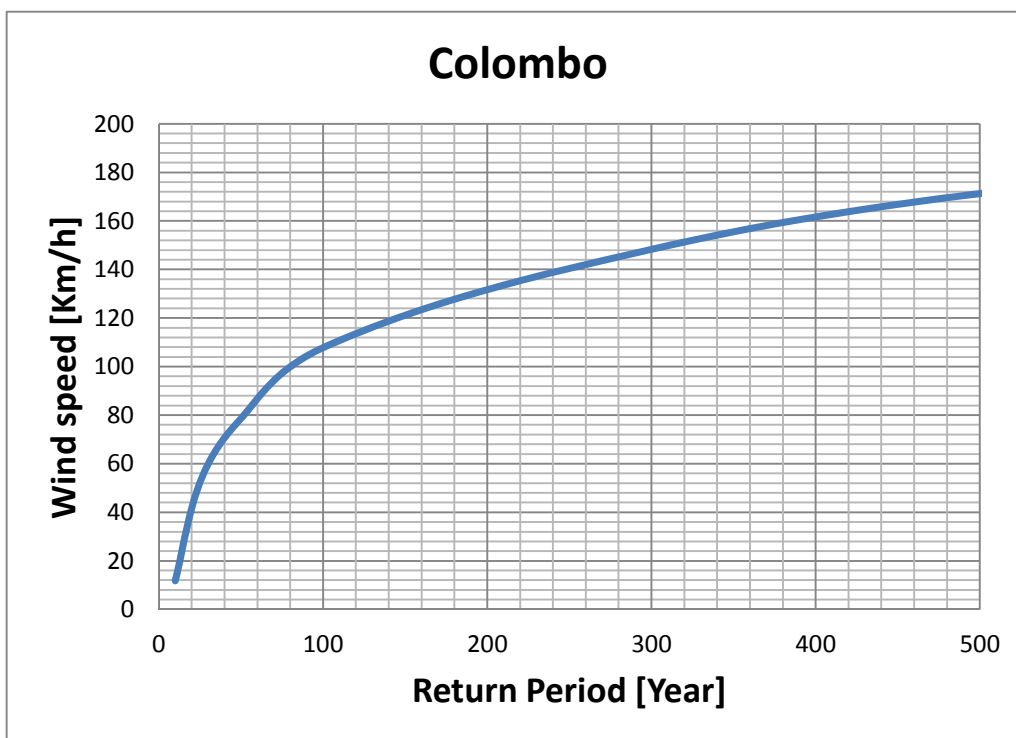
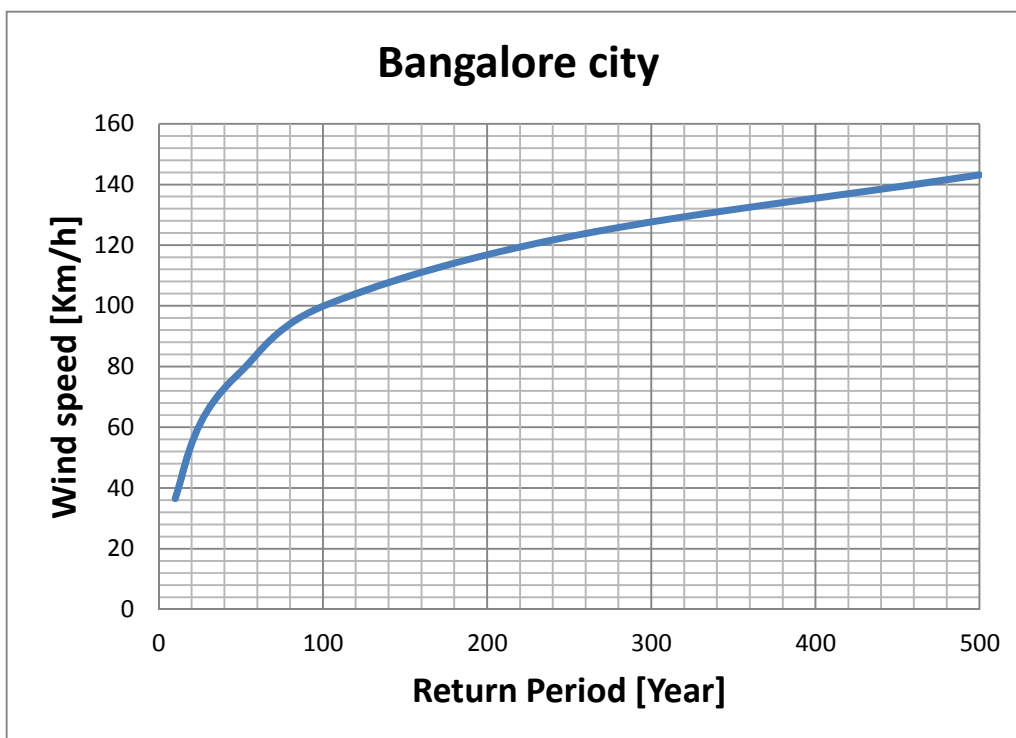


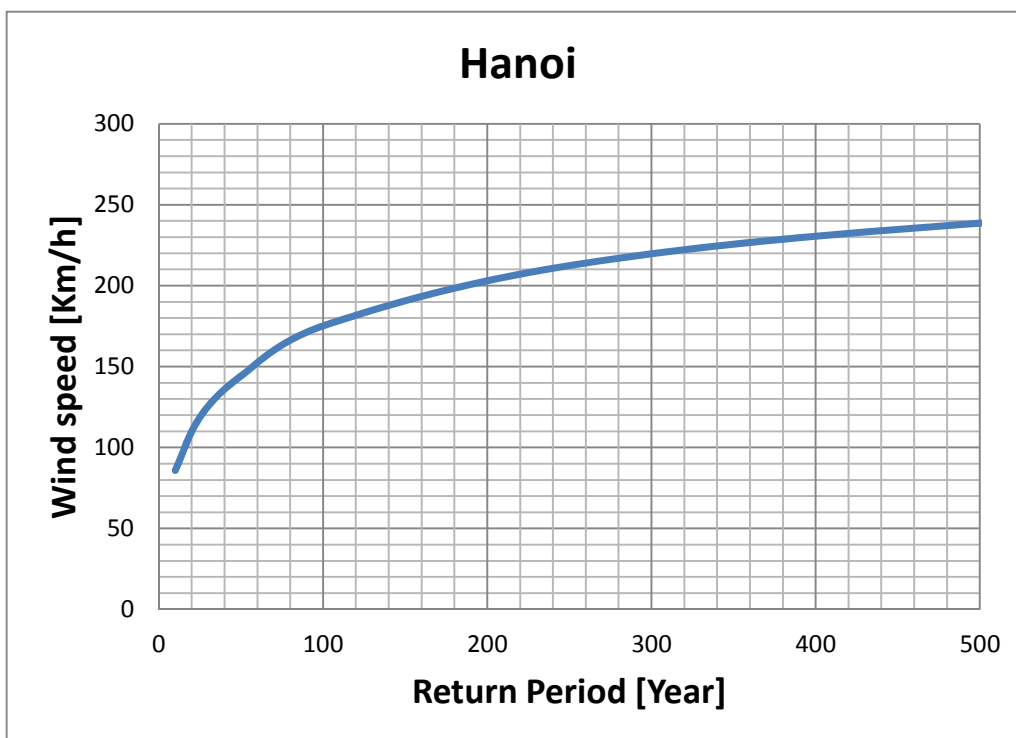
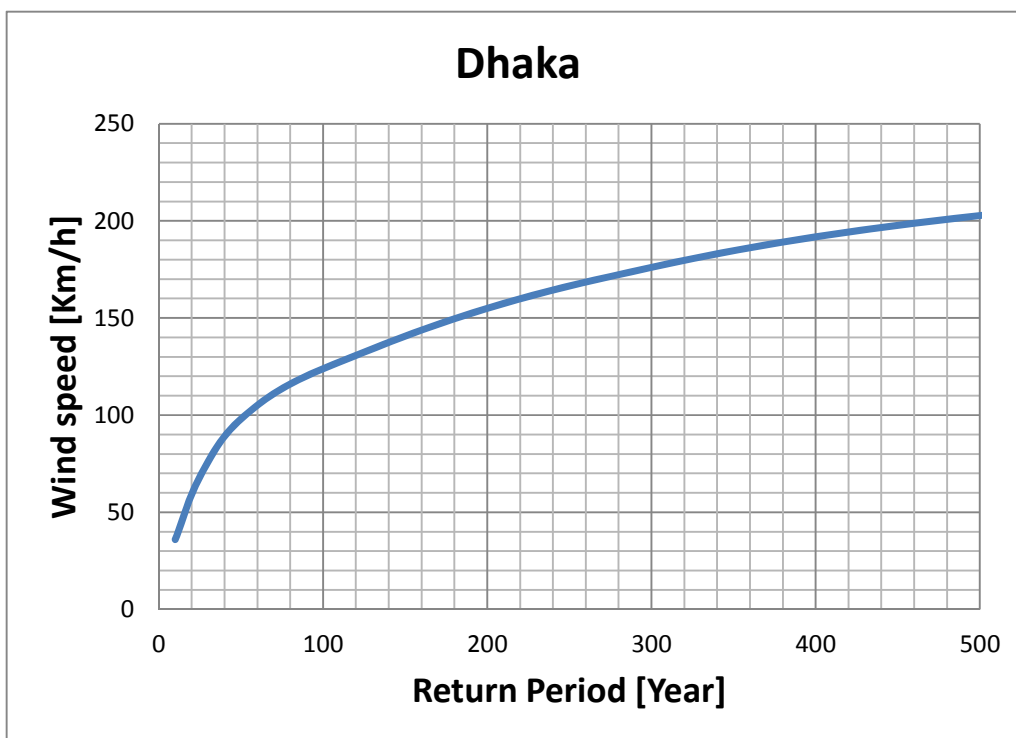


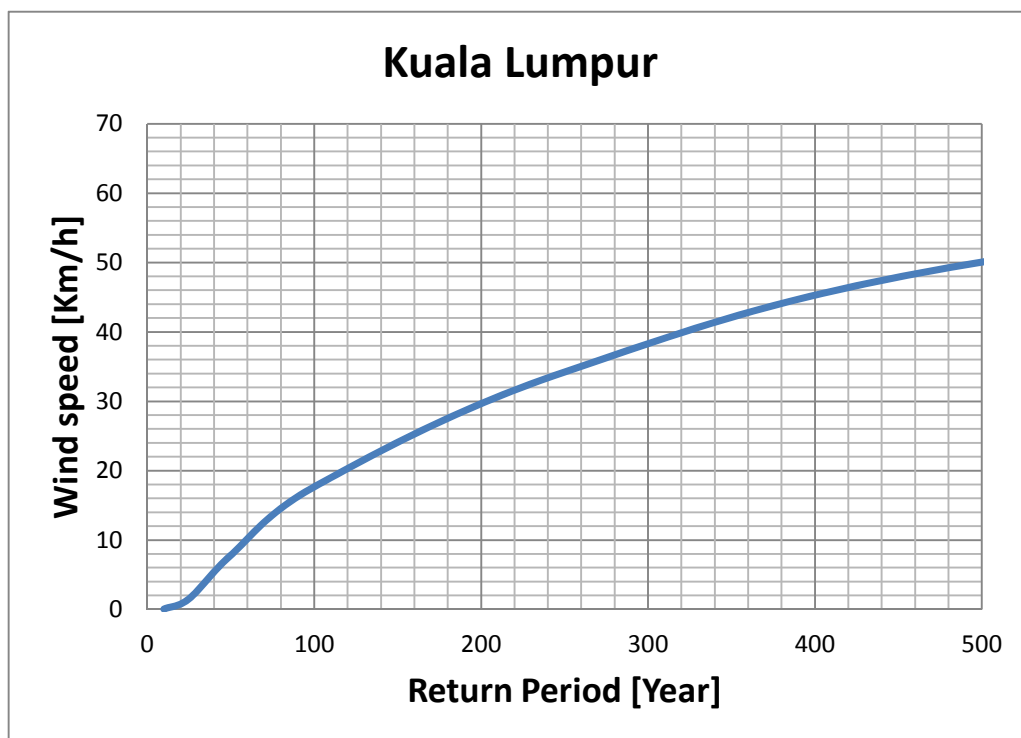
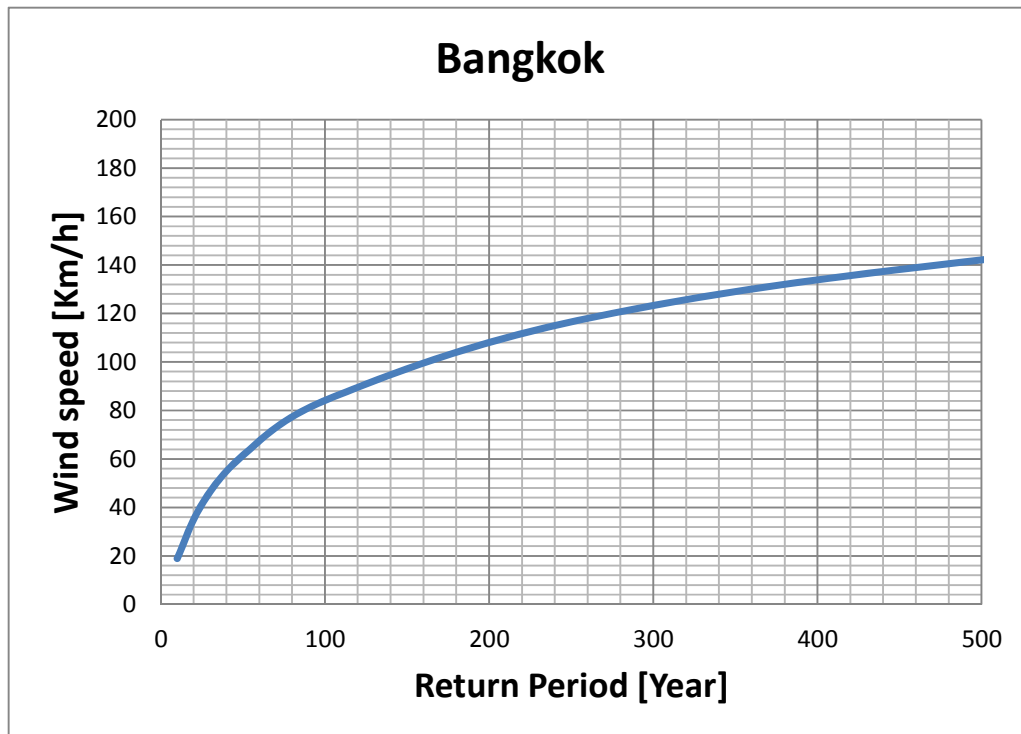


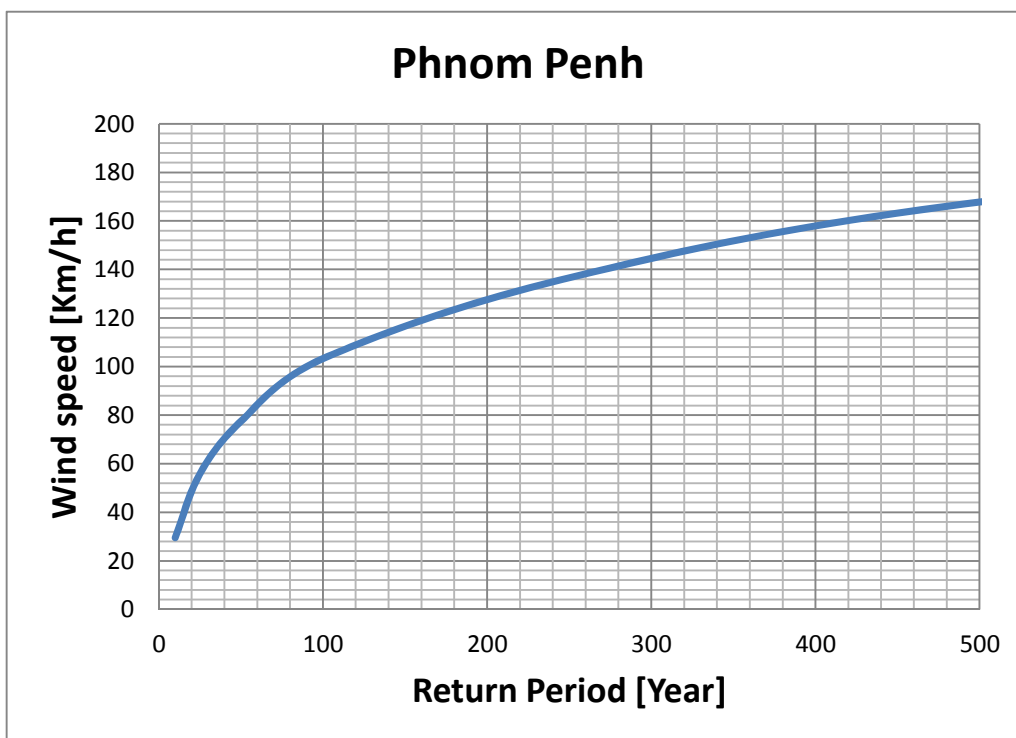
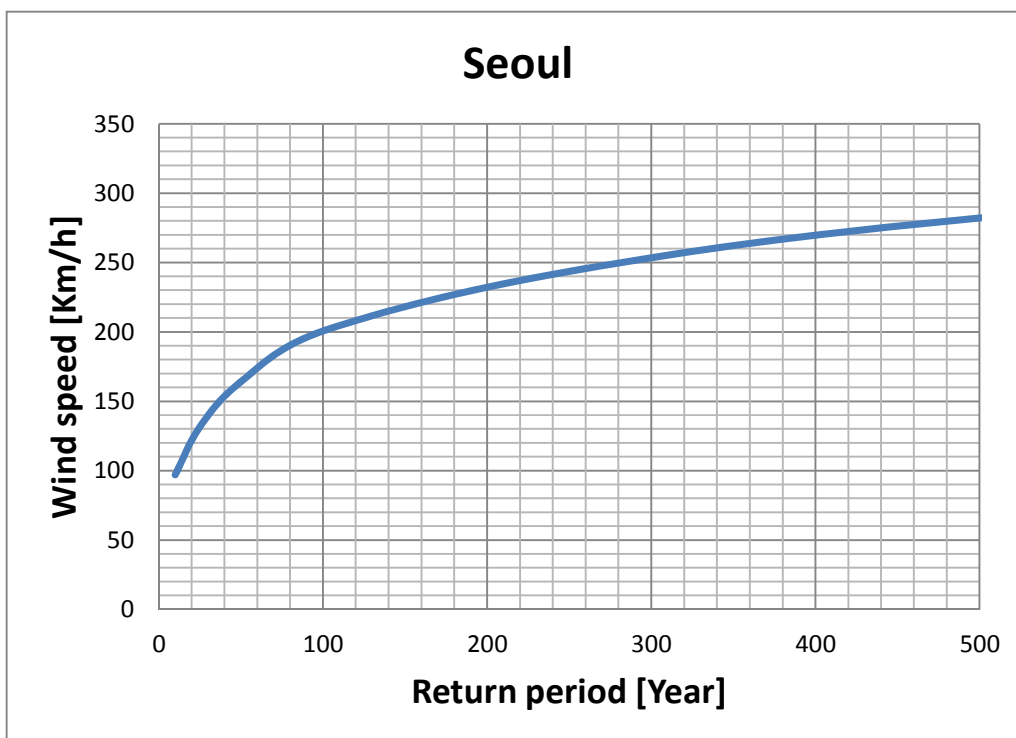
Cities in Africa and Asia

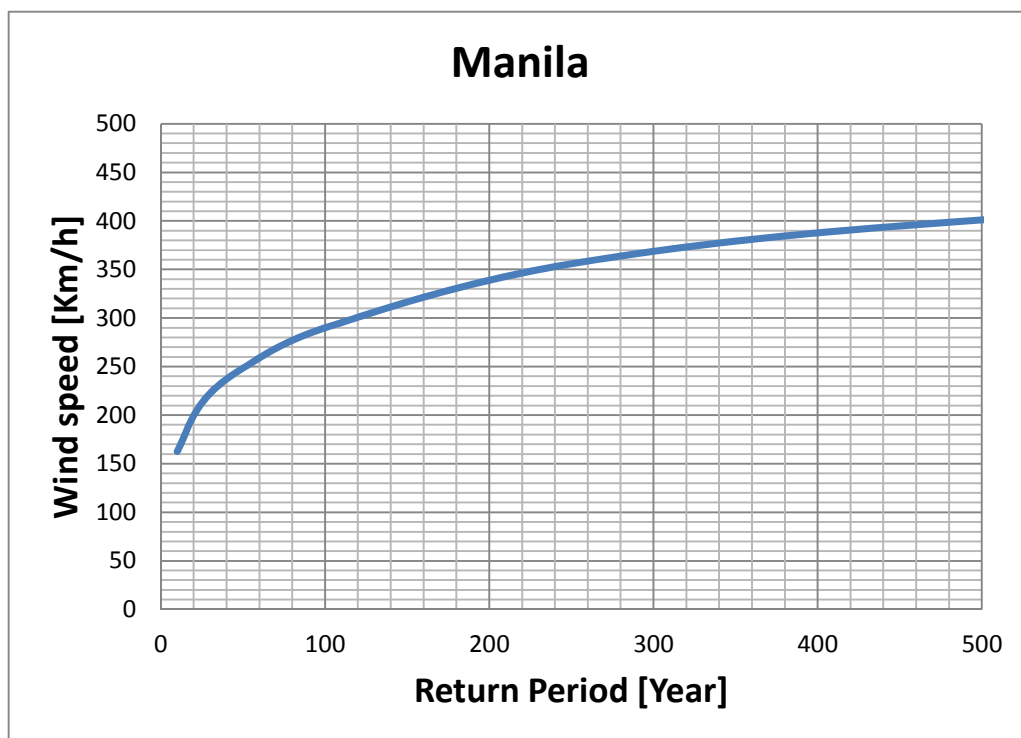
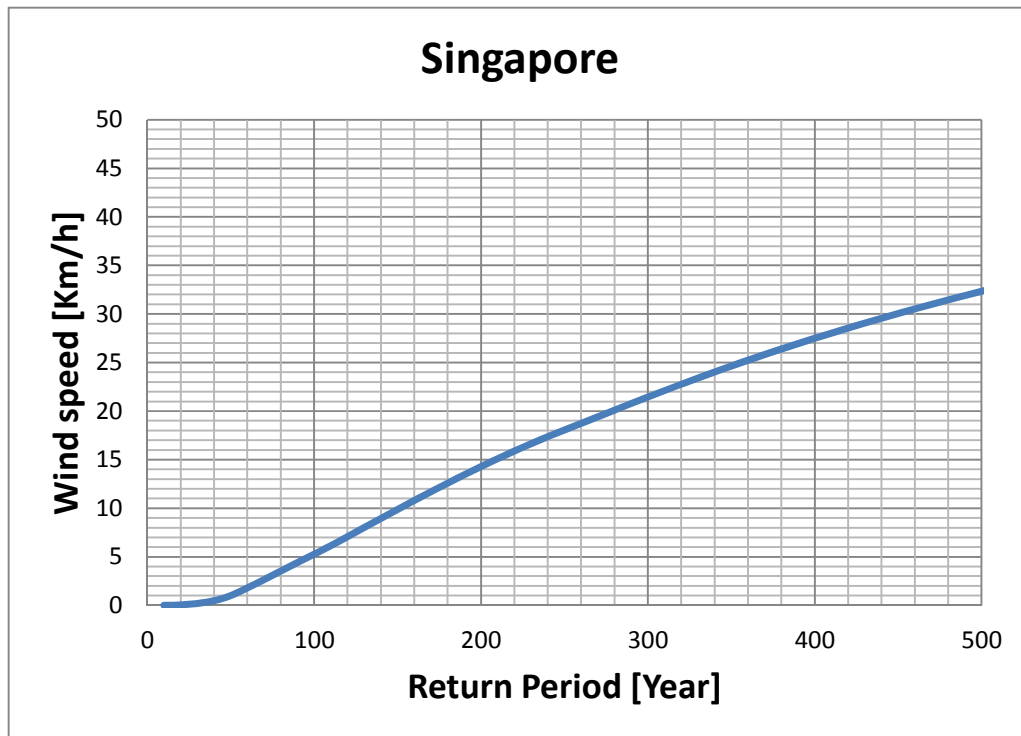


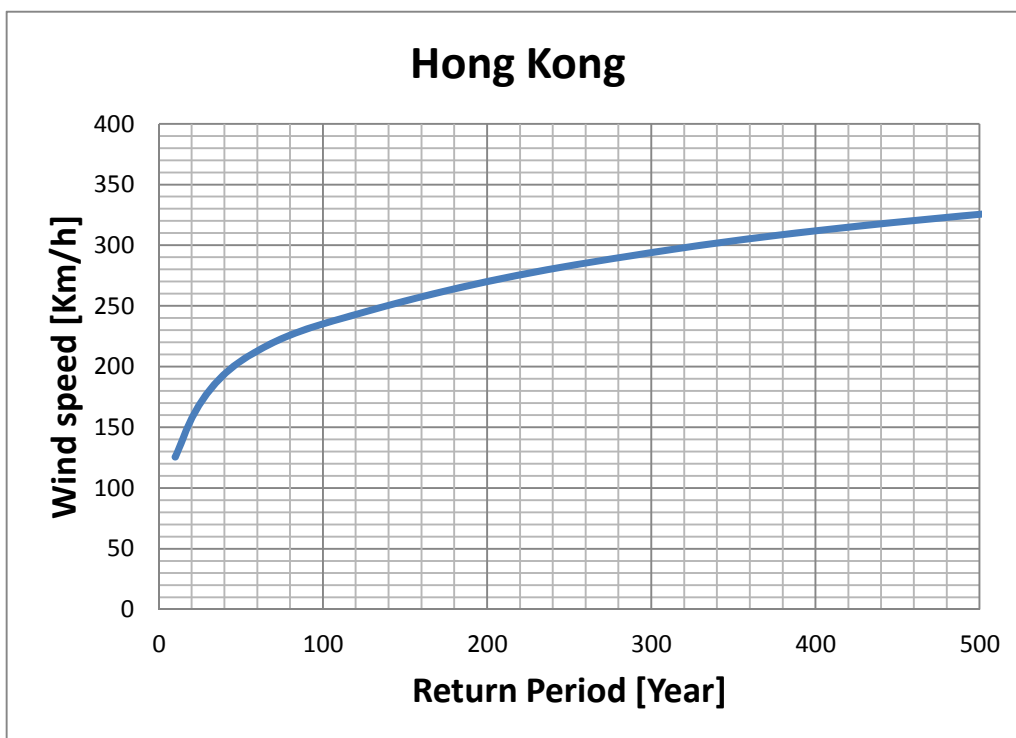
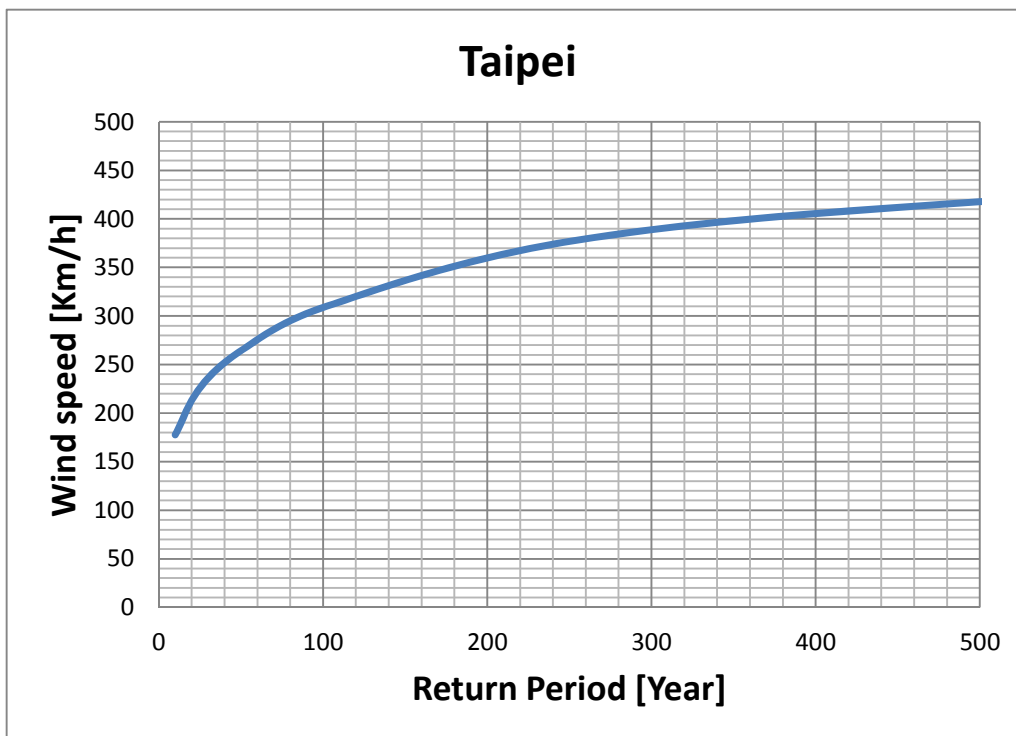


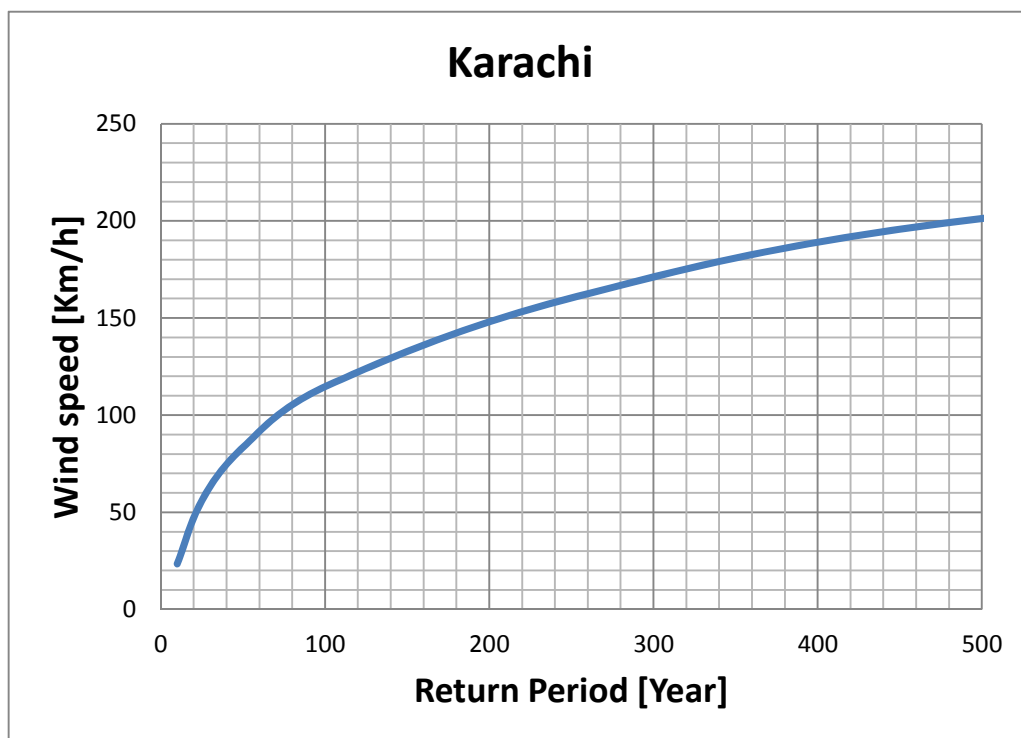
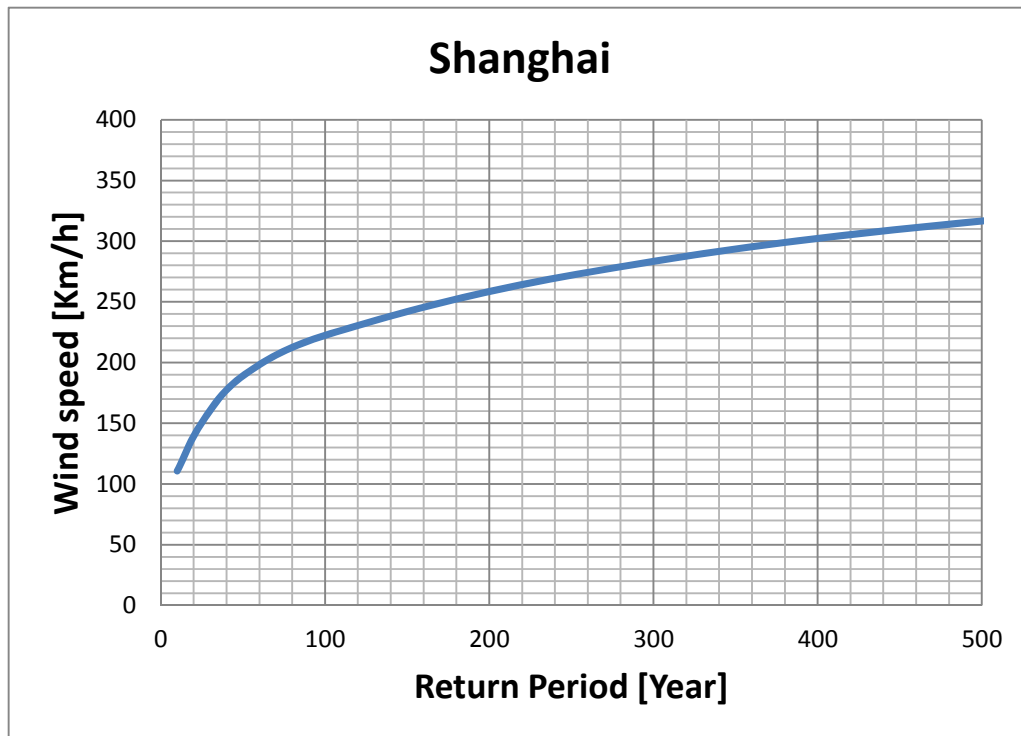




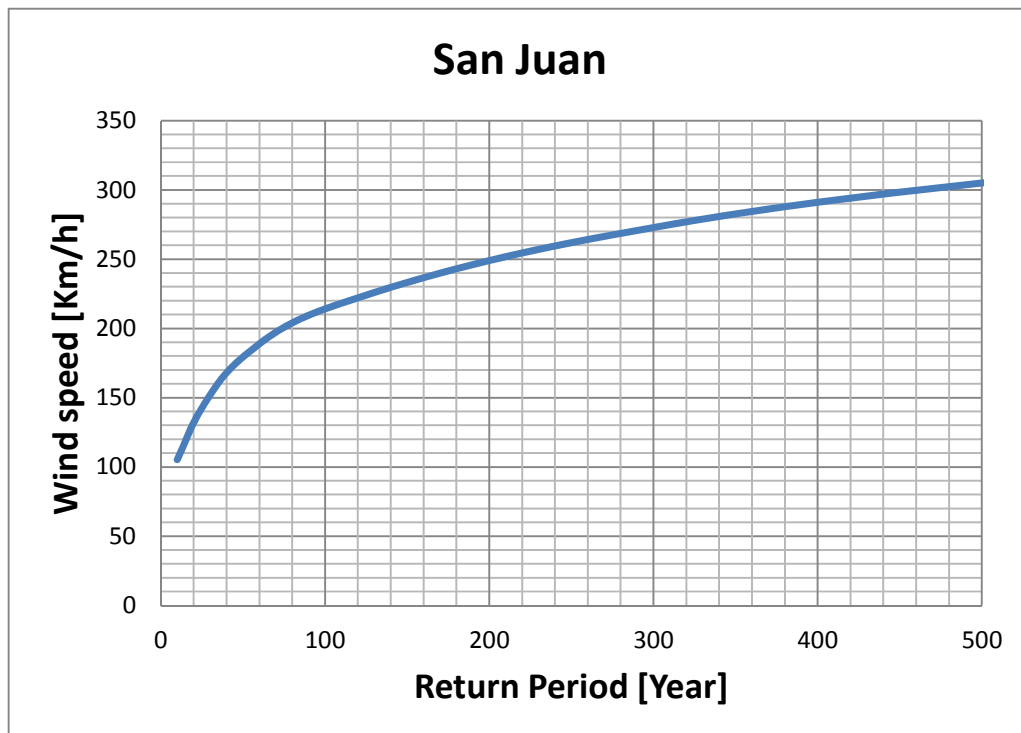
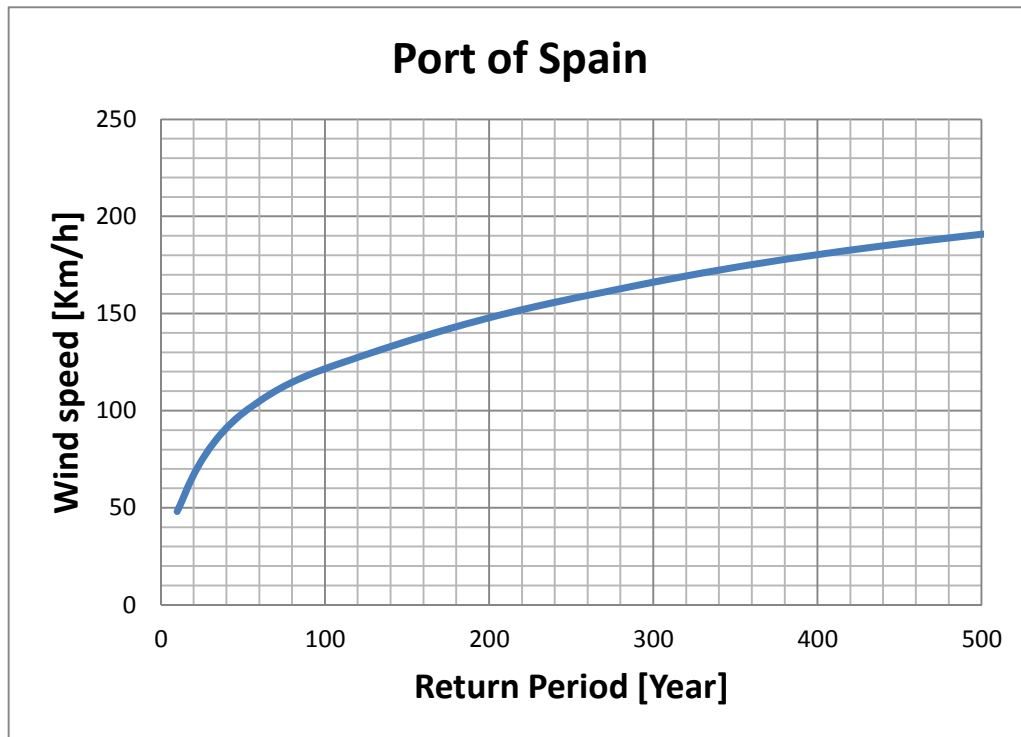


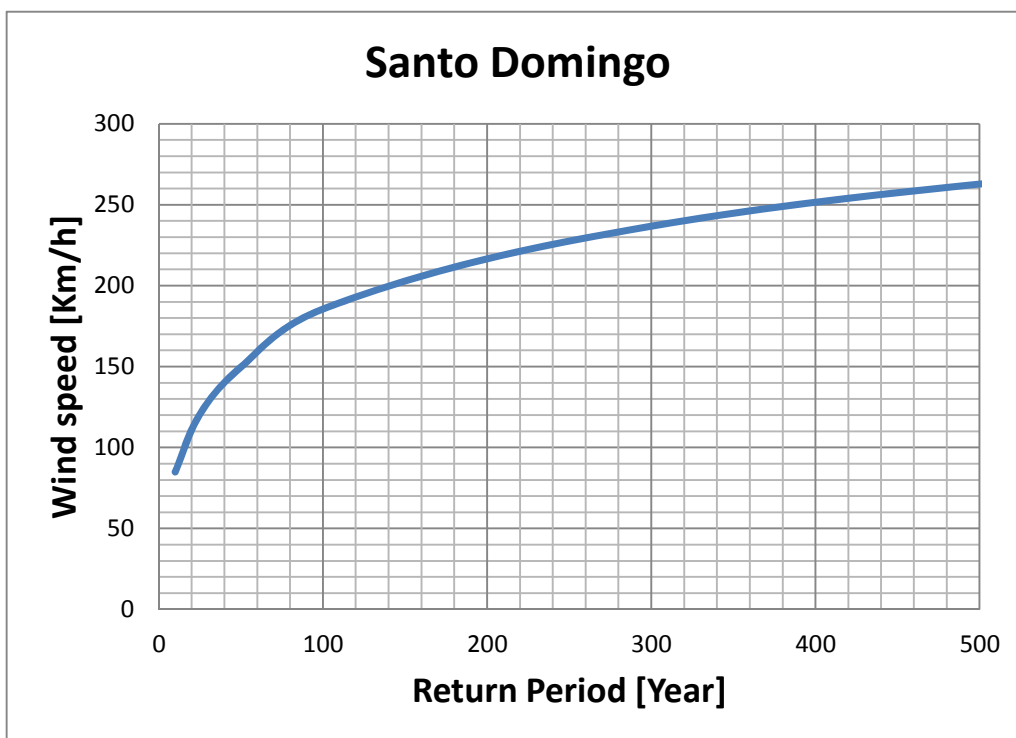
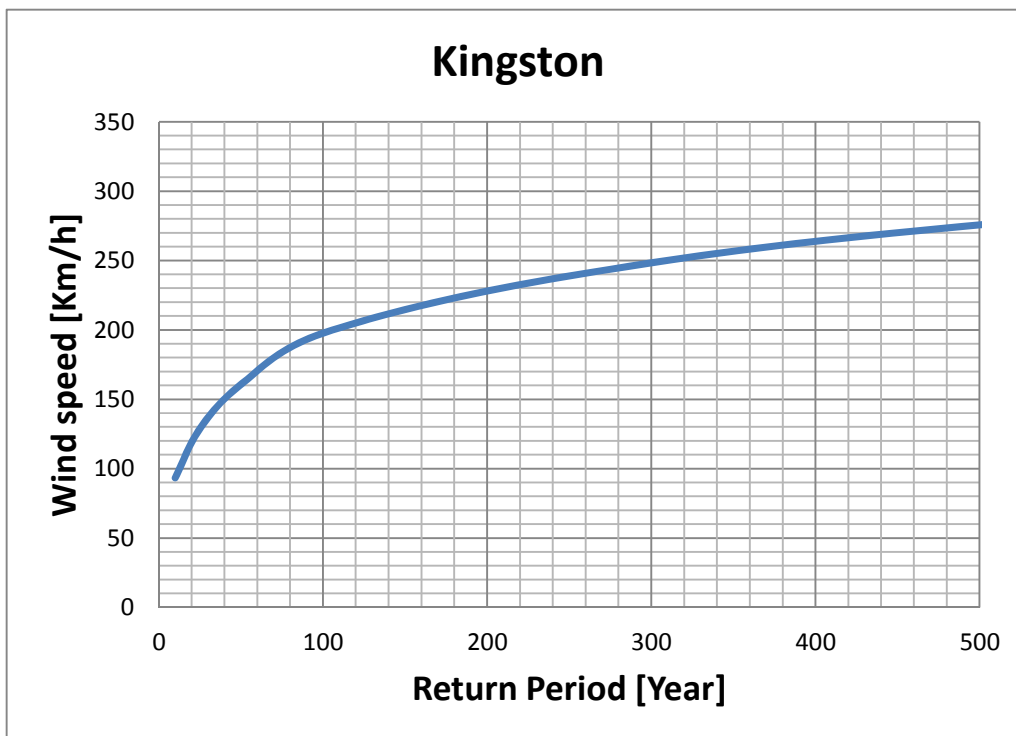


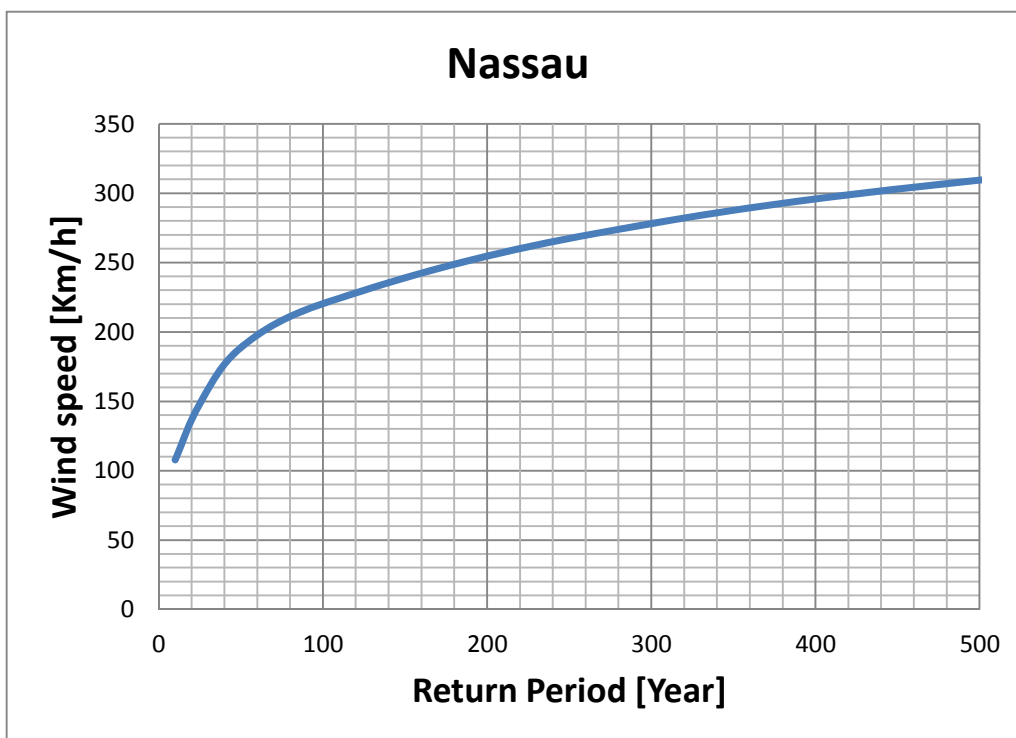
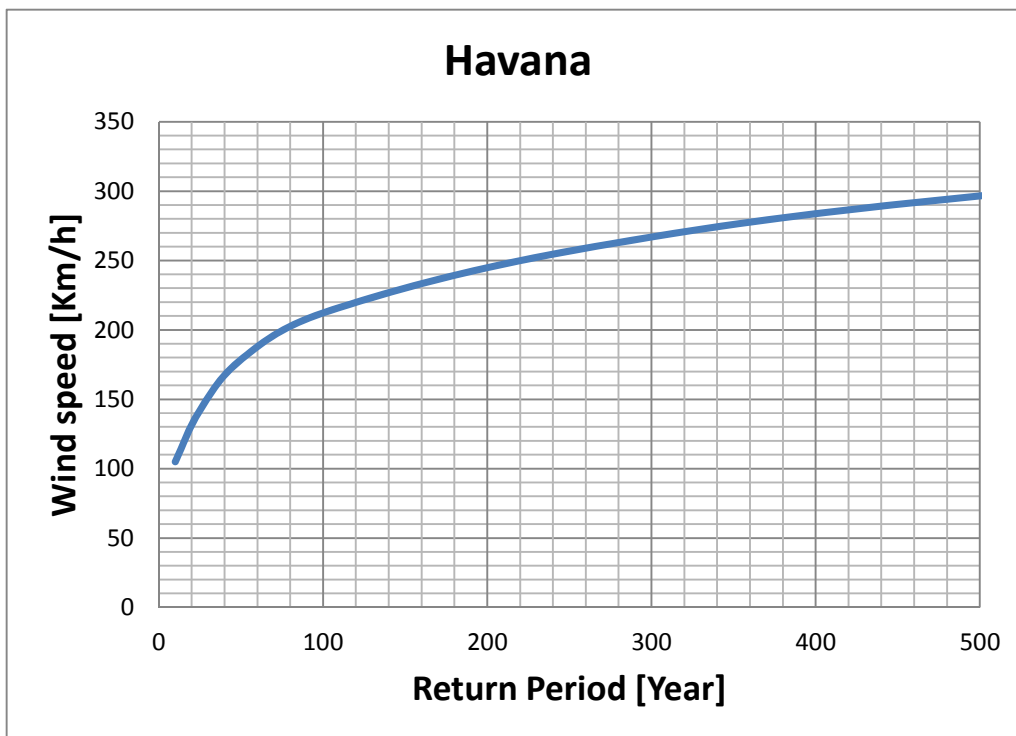




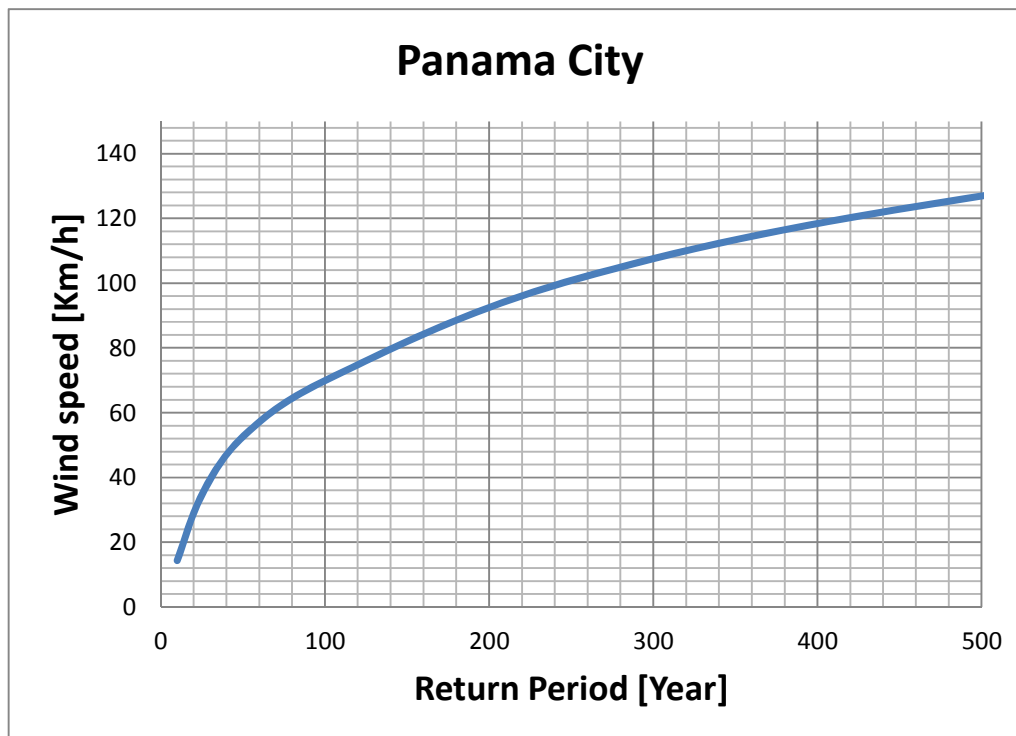
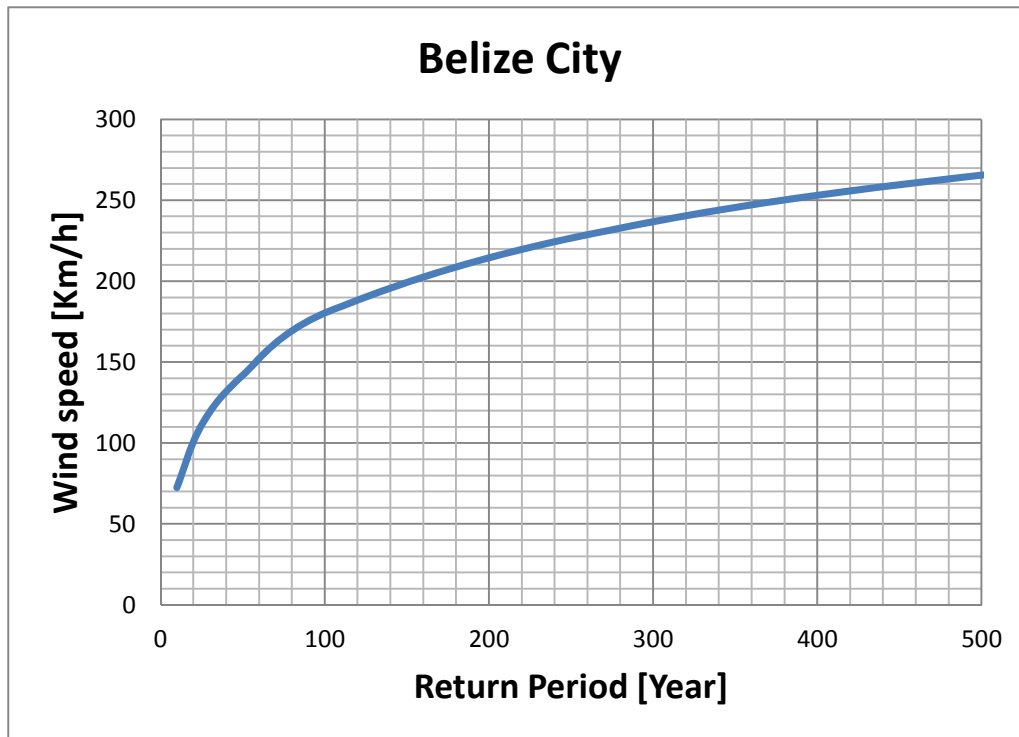
Cities in the Caribbean

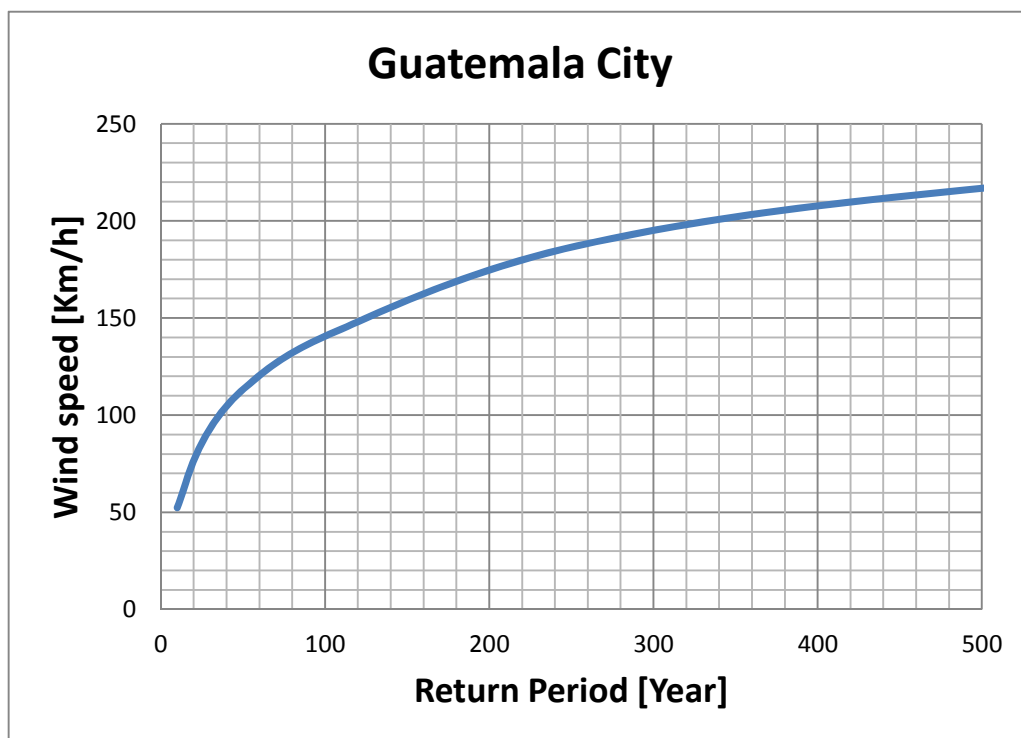
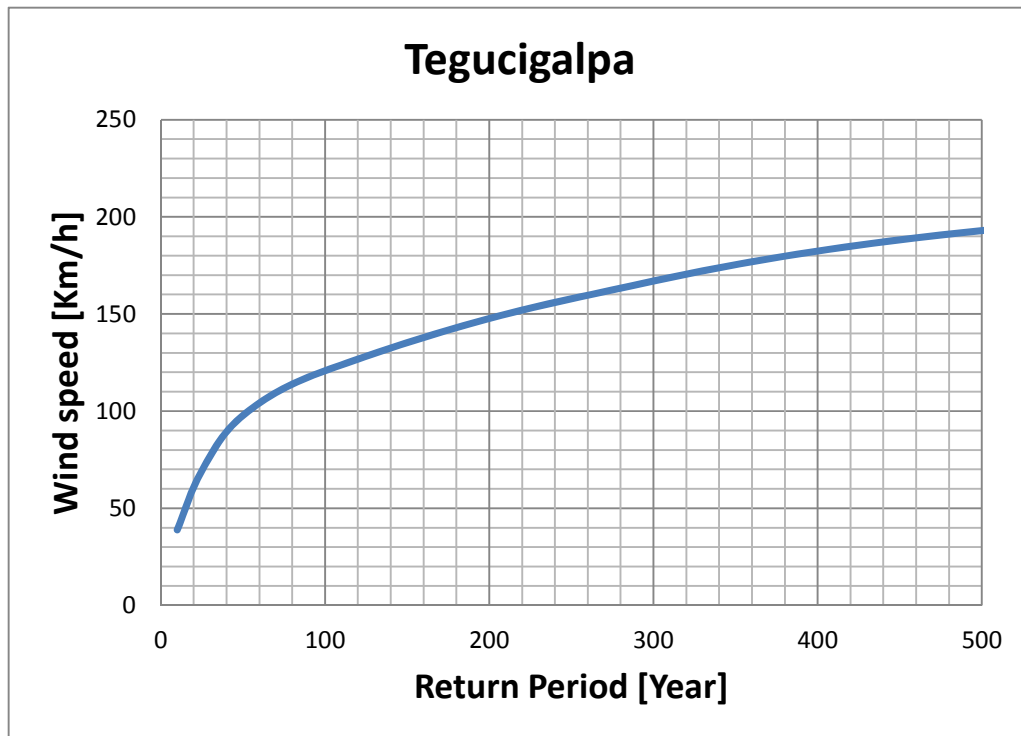


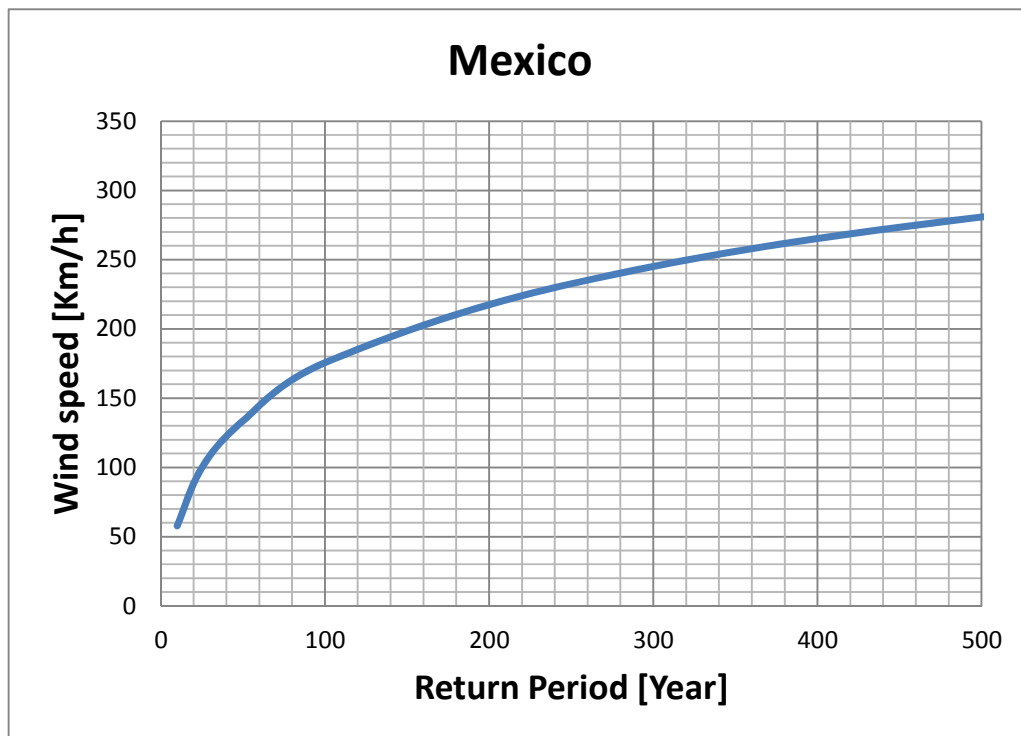
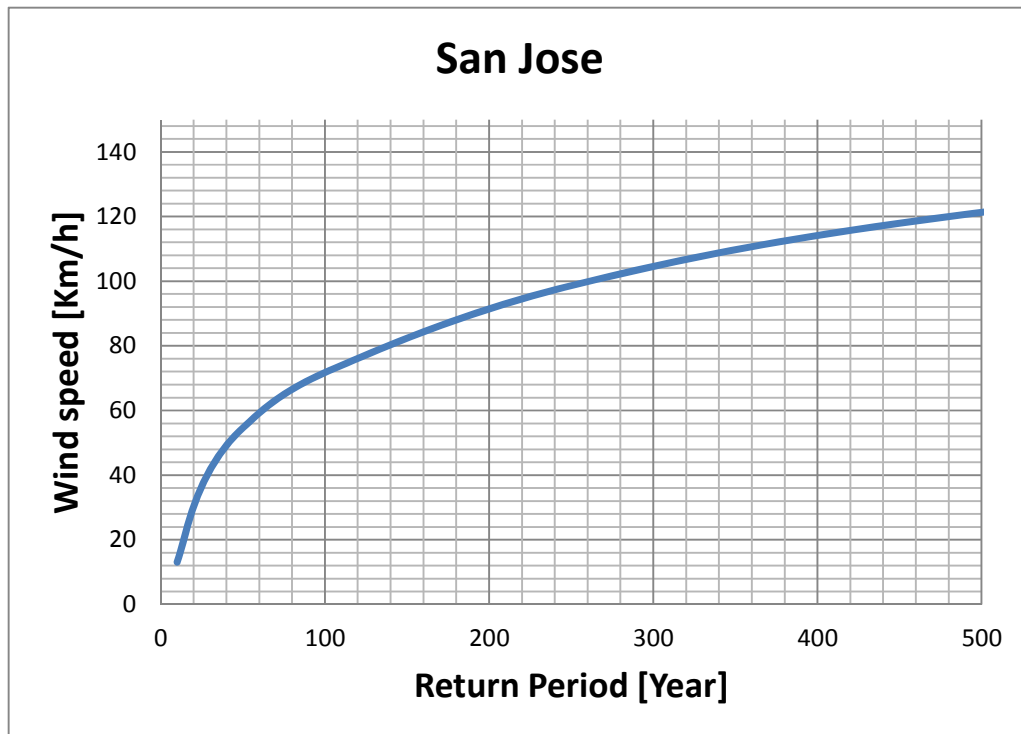


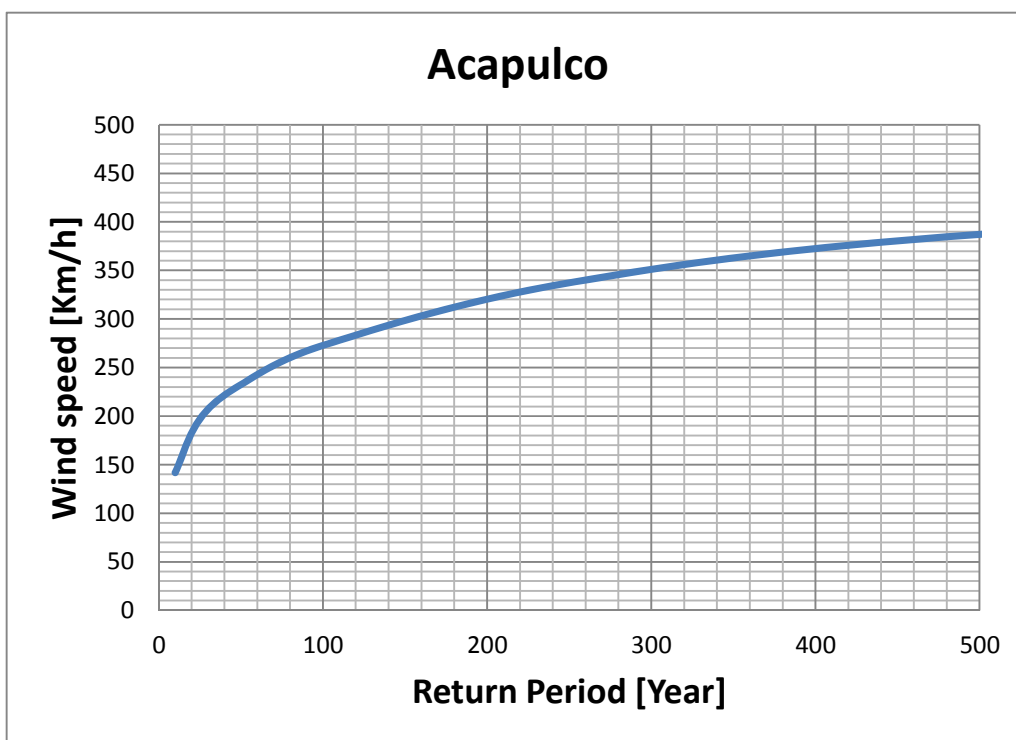
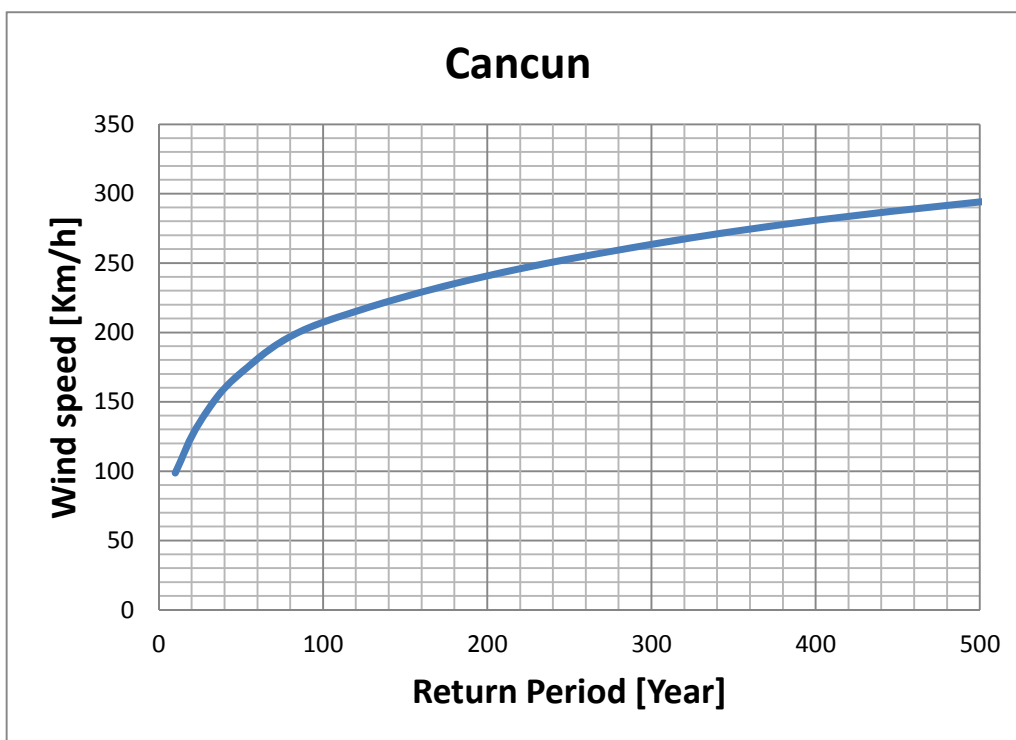


Cities in Central America and Mexico



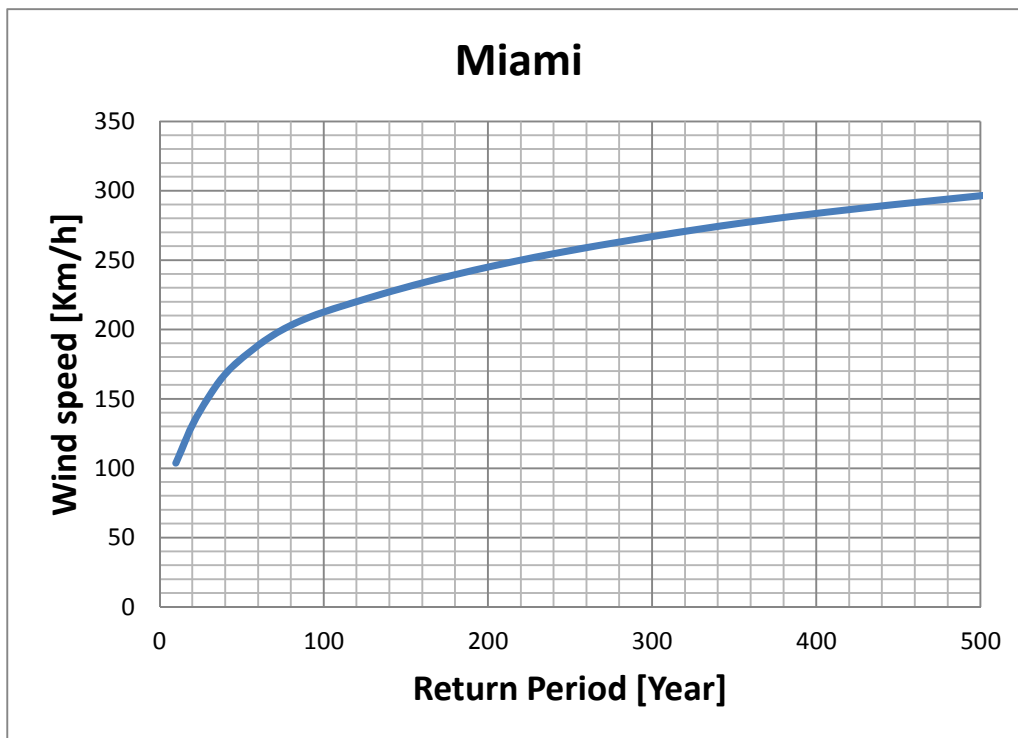
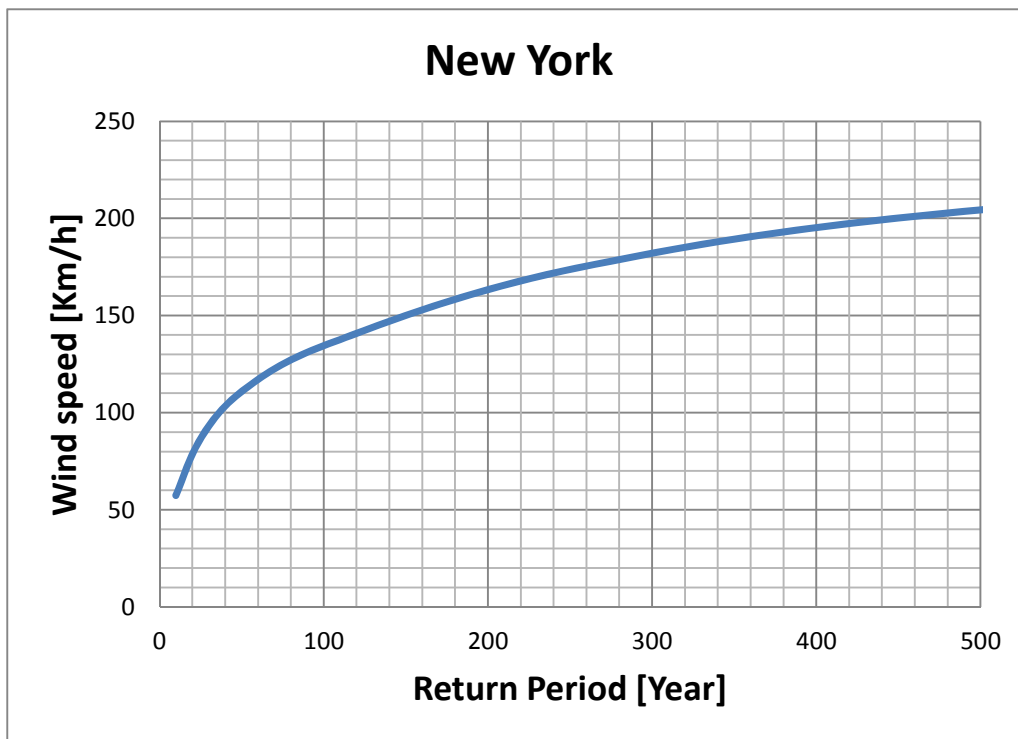


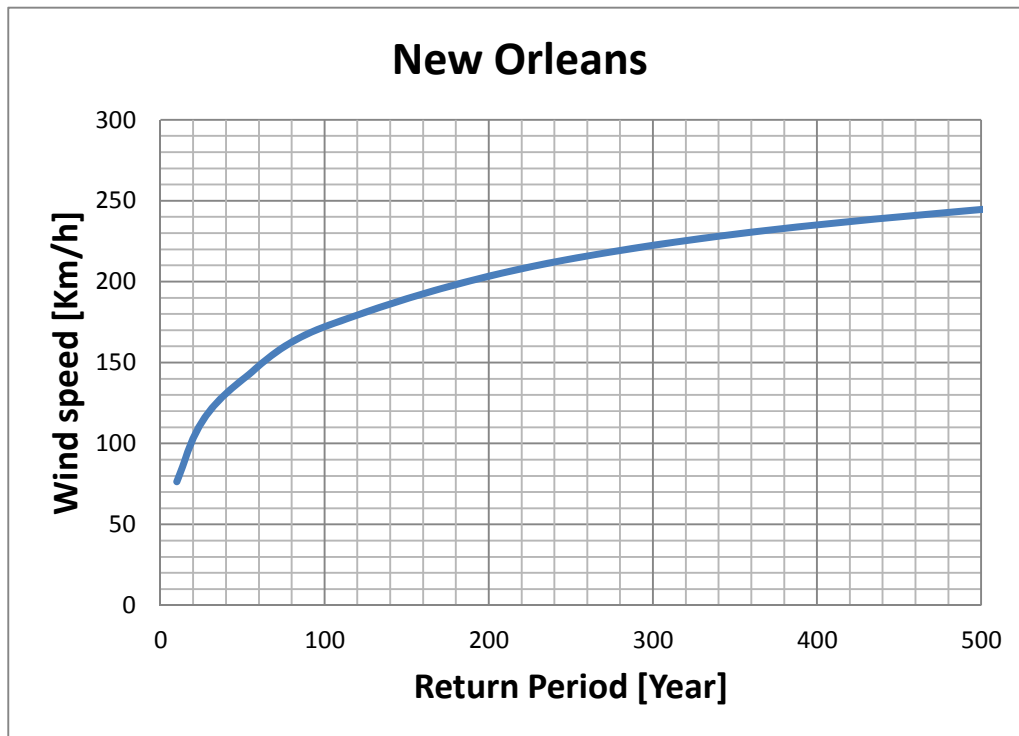




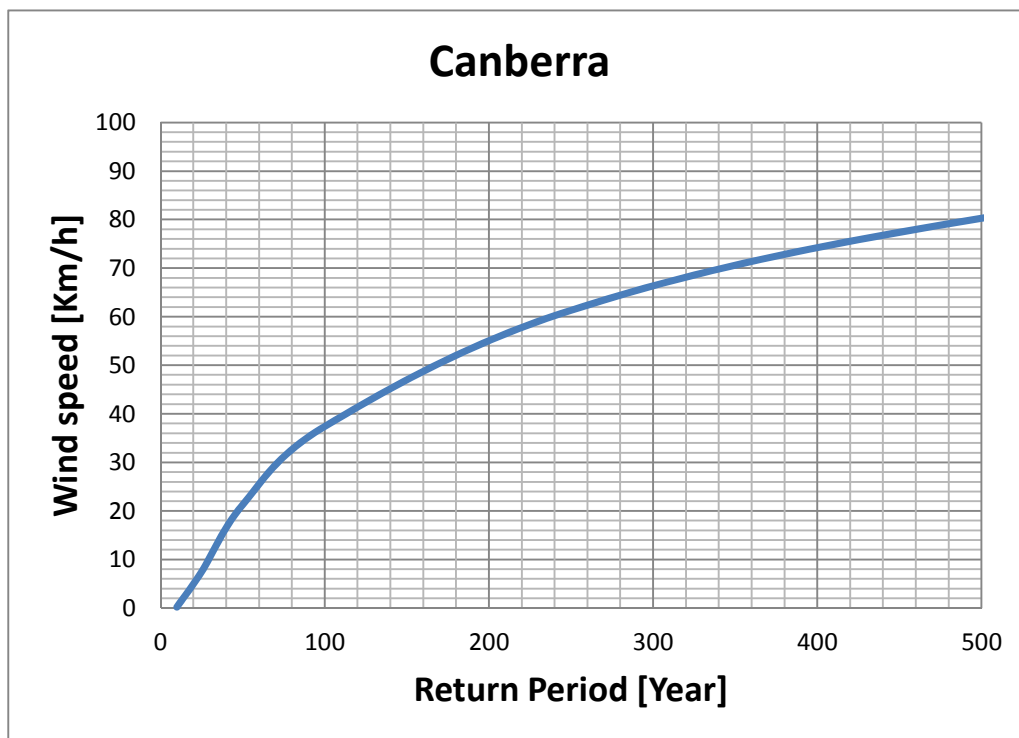


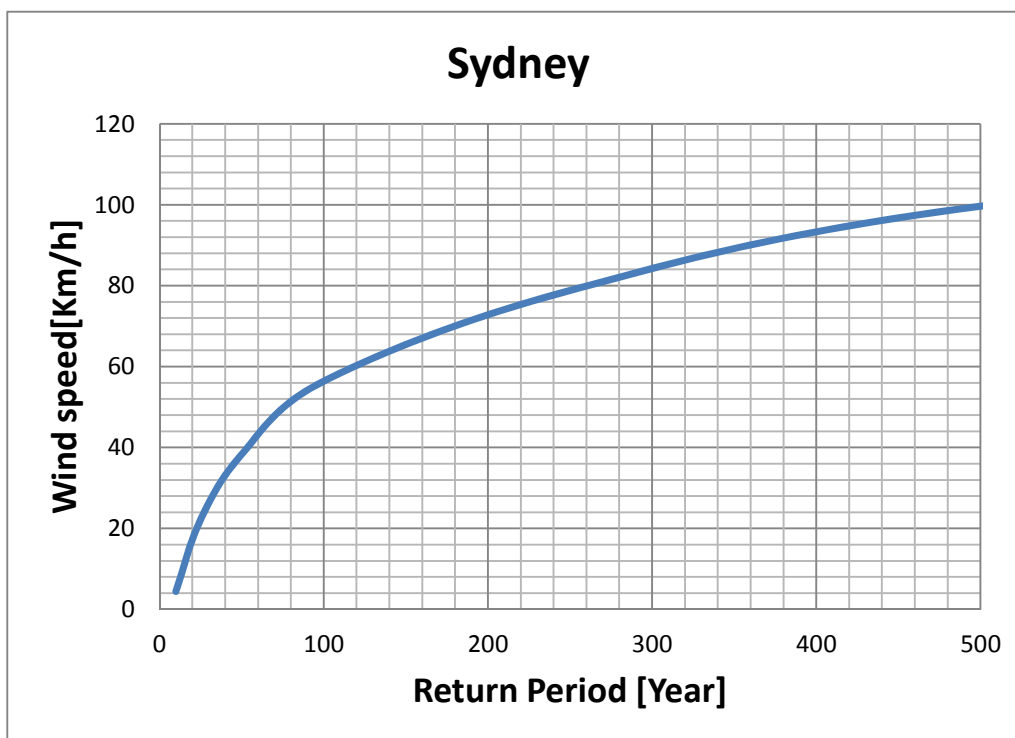
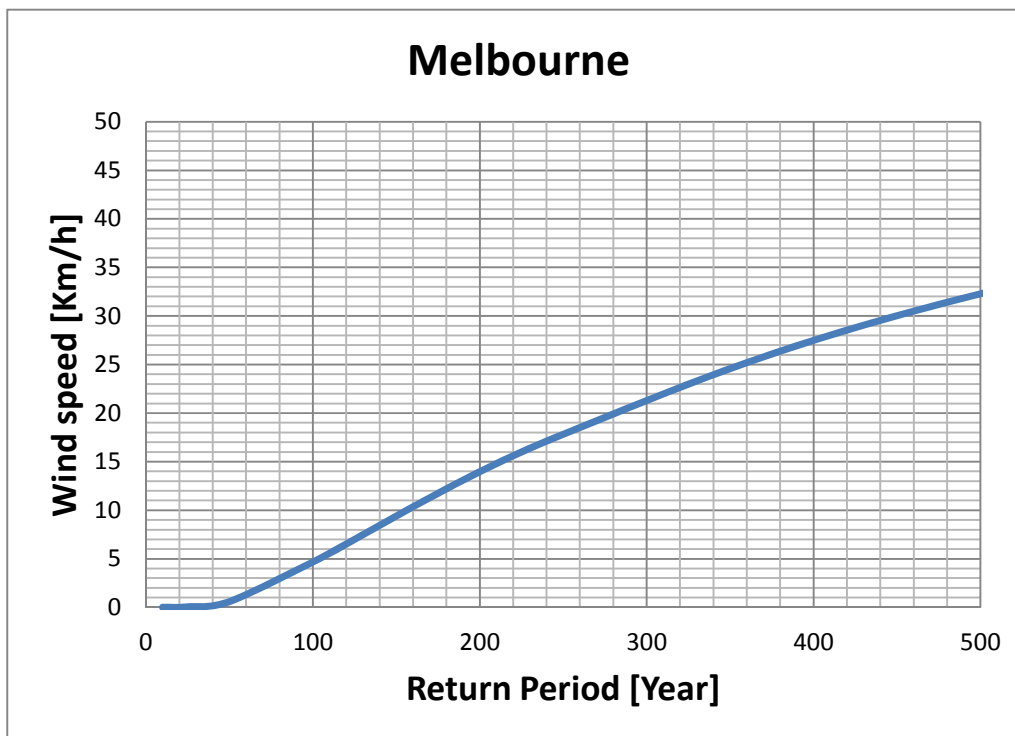
Cities in North America

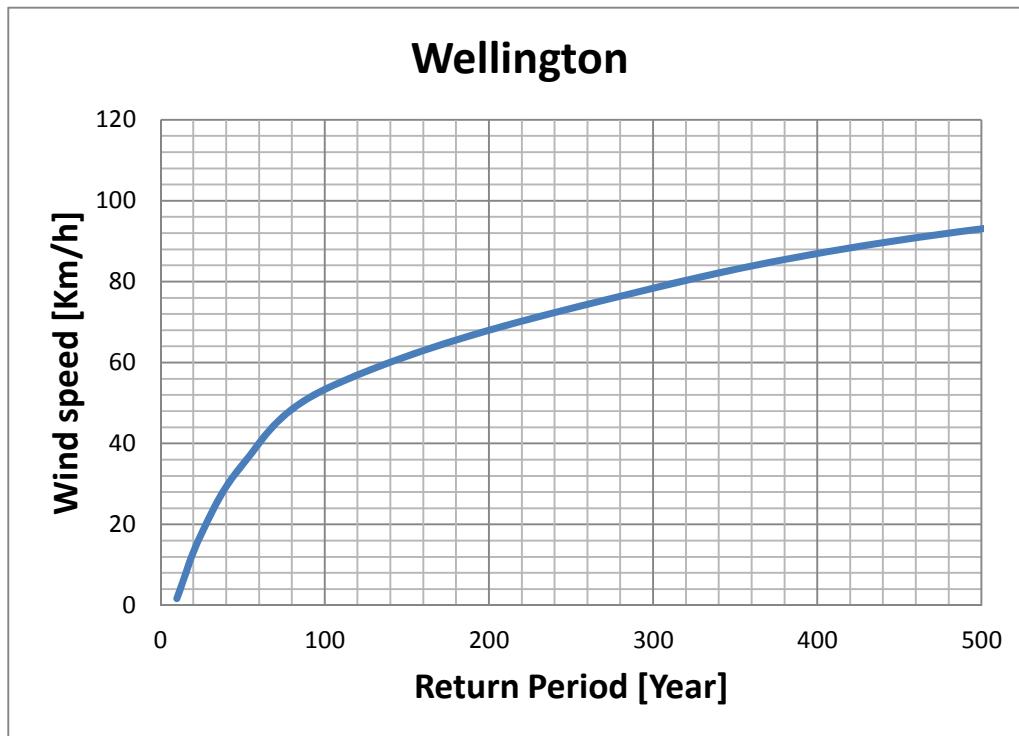




Cities in Oceania







ANNEX 12. FORMAT OF THE RECORDS FROM THE EXPOSURE DATABASE

The BDEM is a geo-referenced database on which each record represents a *groups of buildings* with the following characteristics:

- ID 5X5: unique key which identifies a group of data with respect to the geographical location (latitude, longitude) and which corresponds to an assigned indicator for each record (*group of buildings*) once the population coverage is sampled in order to reduce the resolution (step 3 algorithm).
- COUNTRY: Country ISO code, 3 characters for the identification of the country according to the WDI database.
- CTRYDEVP: *development class* of the country according to the criterion established by the World Bank
- EQHZLEV: *Earthquake Hazard Level* (high, medium and low) within the area of this particular *group of buildings*.
- WDHZLEV: *Cyclonic wind Hazard Level* (high medium, and low) within in the area of this particular *group of buildings*.
- COMPLEX: *Complexity Level* assigned to an urban area in which the *group of buildings* is located.
- BLDGUSE: *Building use sector* in which the *group of buildings* belongs.
- BLDGCLASS: assigned for identifying whether or not the *group of buildings* is part of the *portfolio of governmental responsibility (Fiscal)* of the State (central government).
- BS TYPE: *constructive type* assigned to the *group of buildings* according to that submitted by the WAPMERR group.
- VALFIS: *urban physical exposed value* of the *group of buildings* or a particular *building use sector* and *constructive type*, assigned proportionately to the relative population of each individual location.
- VALHUM: *number of inhabitants* of the *group of buildings* of a particular sector and constructive type, which corresponds approximately to the population of the country in 2010.
- SE SISMO: key to identify the behavior model (*vulnerability function*) assigned to this particular *group of buildings* in the case of seismic demand.
- SE VIENTO: key to identify the behavior model (*vulnerability function*) assigned to this particular *group of buildings* in the case of cyclonic winds demand.

ANNEX 13. PHYSICAL EXPOSED VALUE AT A COUNTRY LEVEL

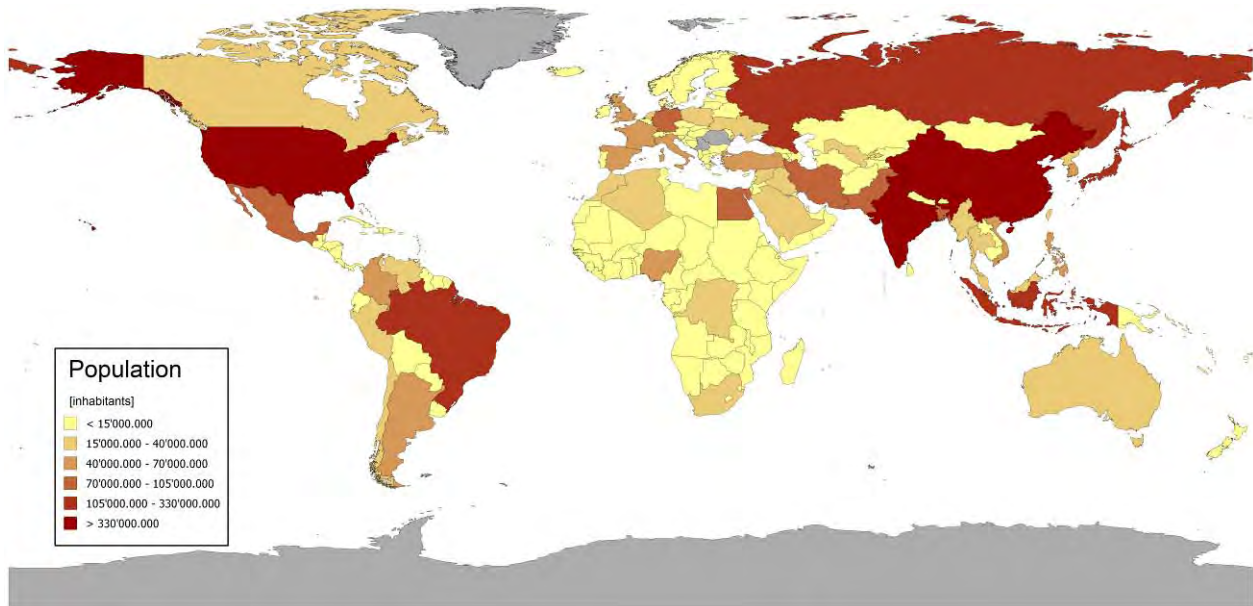


Figure A13-1
 Geographic distribution of population by country

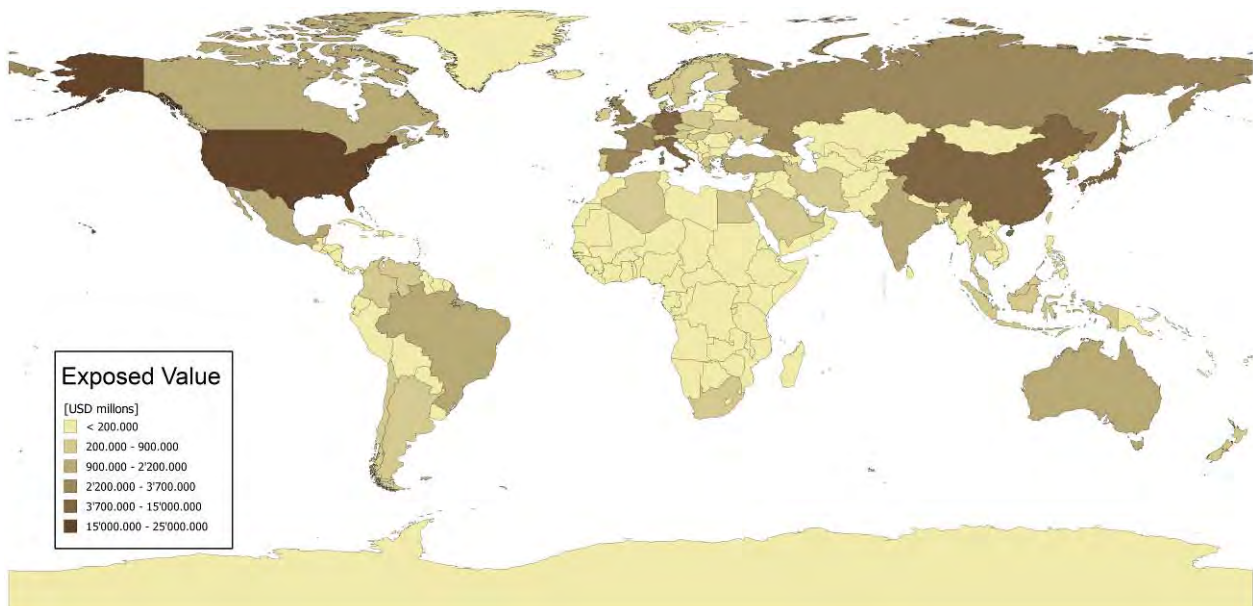


Figure A13-2
 Geographic distribution of total exposed value (stock de capital) by country

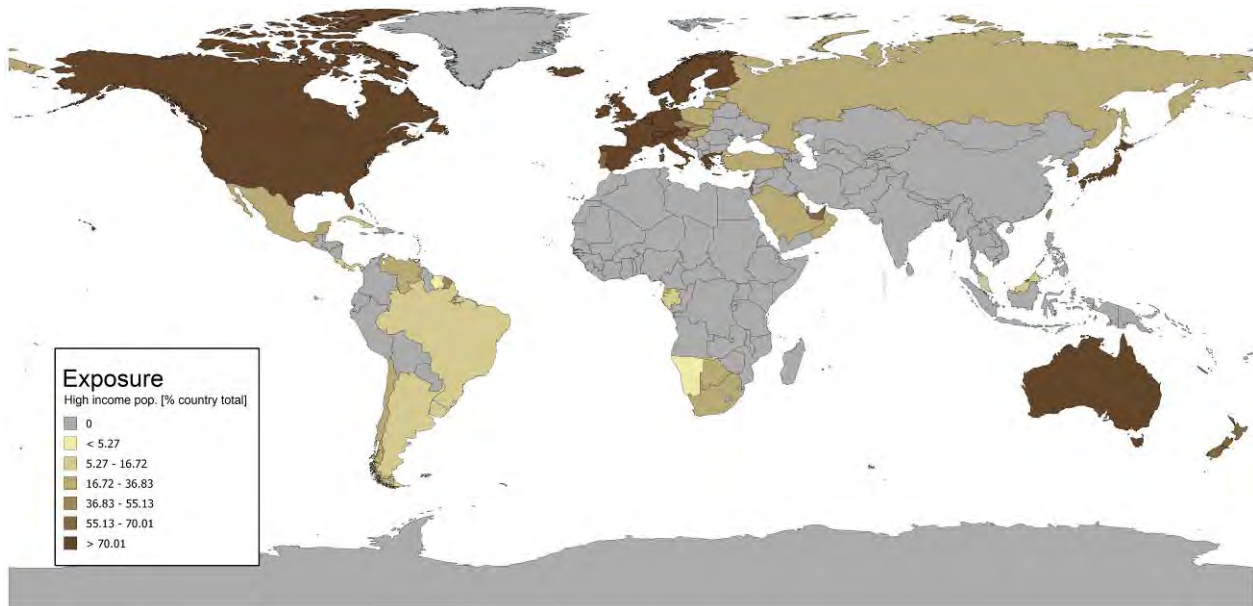


Figure A13-3
 Geographic distribution of buildings exposed value
 for high income population by country

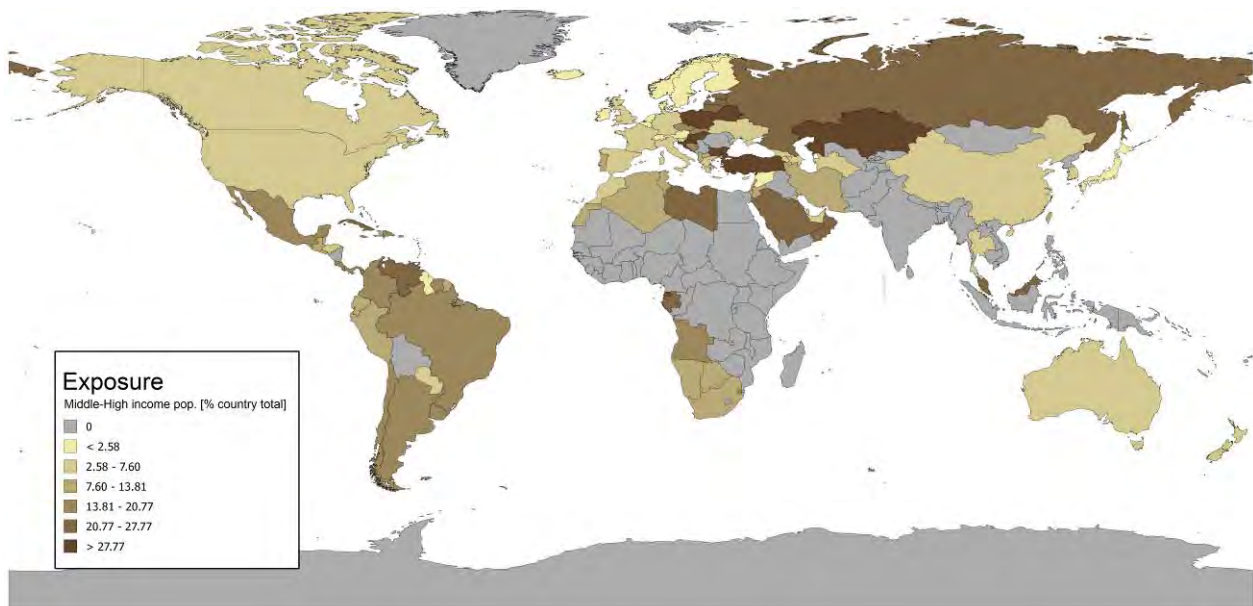


Figure A13-4
 Geographic distribution of building exposed value
 for middle-high income population by country

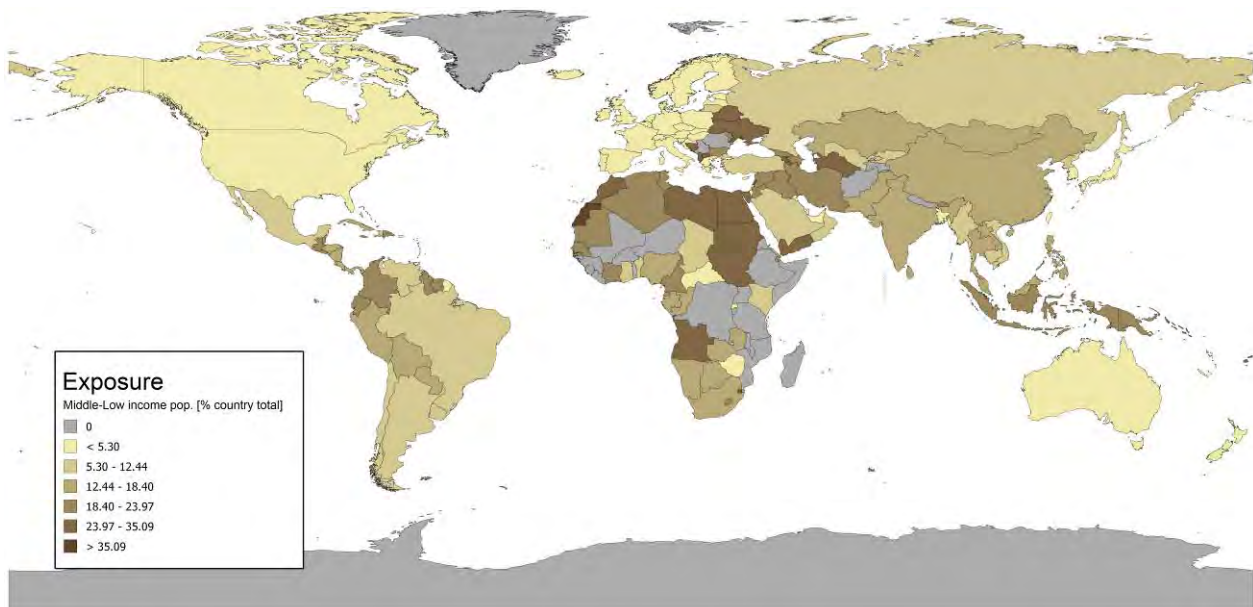


Figure A13-5
 Geographic distribution of buildings exposed value
 for middle-low income population by country

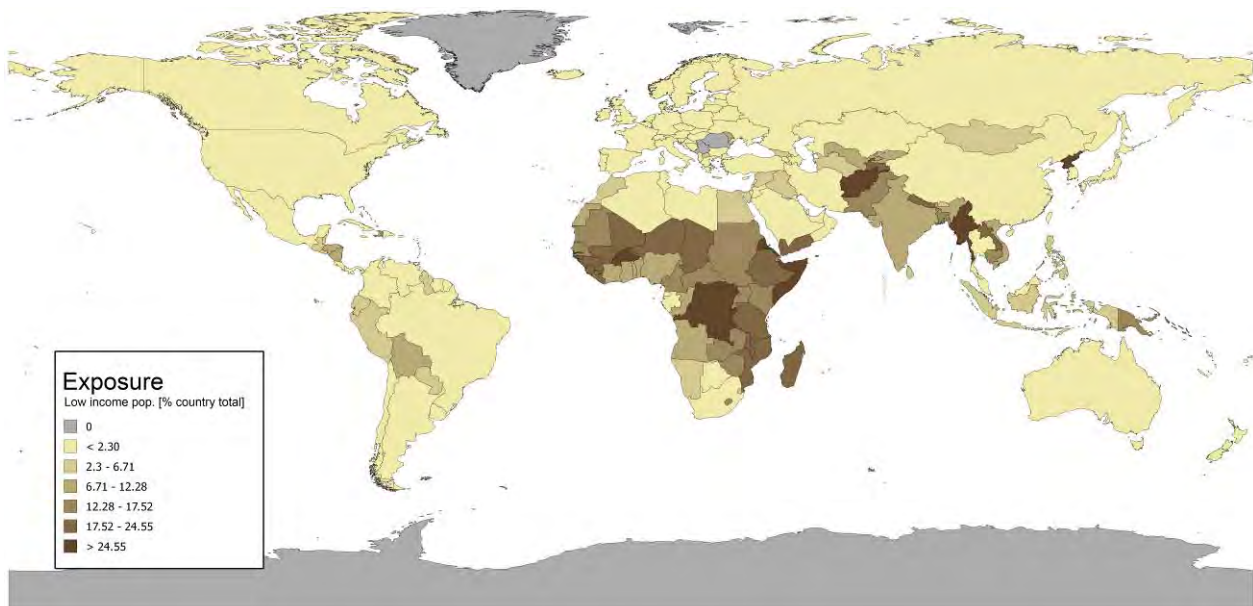


Figure A13-6
 Geographic distribution of buildings exposed value
 for low income population by country

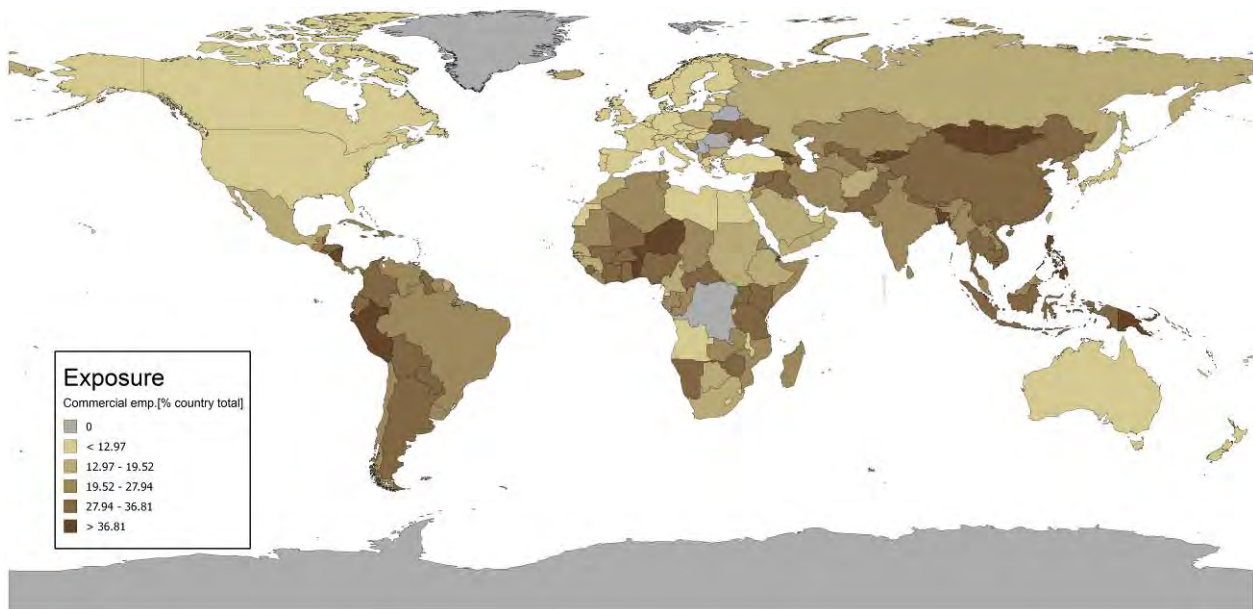


Figure A13-7
 Geographic distribution of buildings exposed value
 for commercial use by country

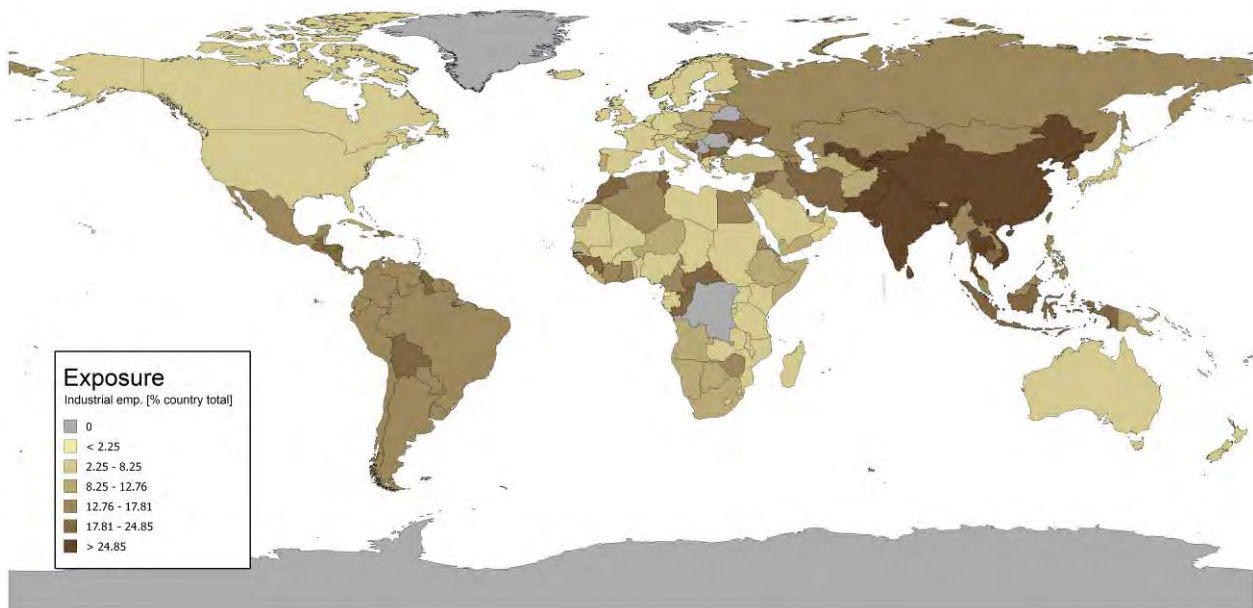


Figure A13-8
 Geographic distribution of buildings exposed value
 for industrial use by country

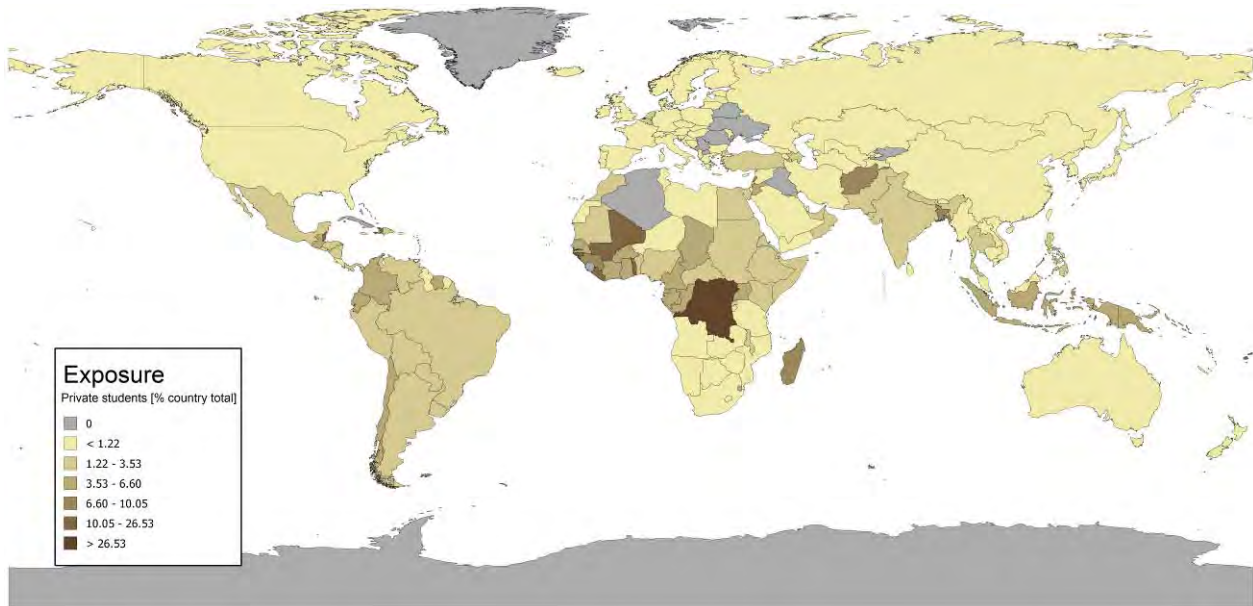


Figure A13-9
 Geographic distribution of buildings exposed value
 for private education use by country

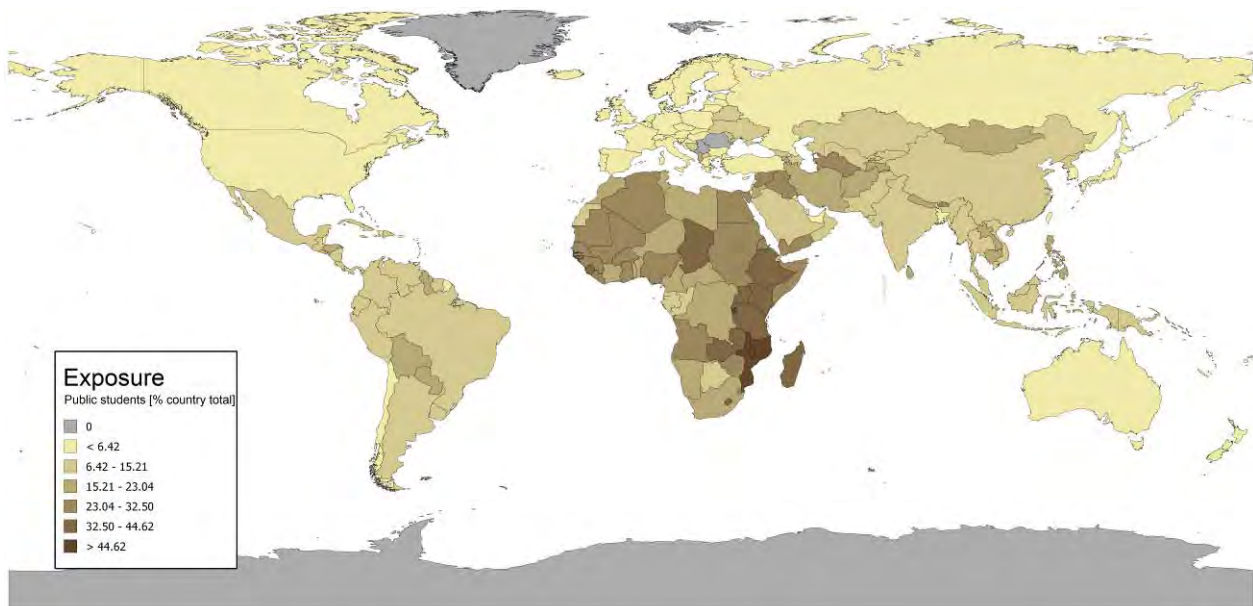


Figure A13-10
 Geographic distribution of buildings exposed value
 for public education use by country

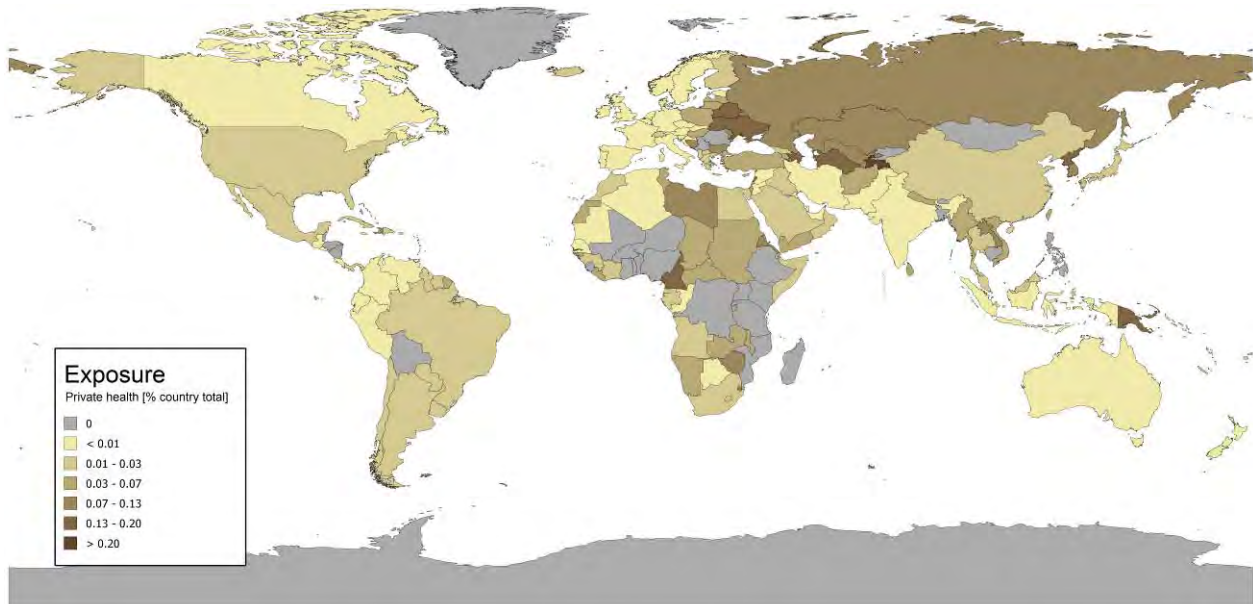


Figure A13-11
 Geographic distribution of exposed value
 for private health services use by country

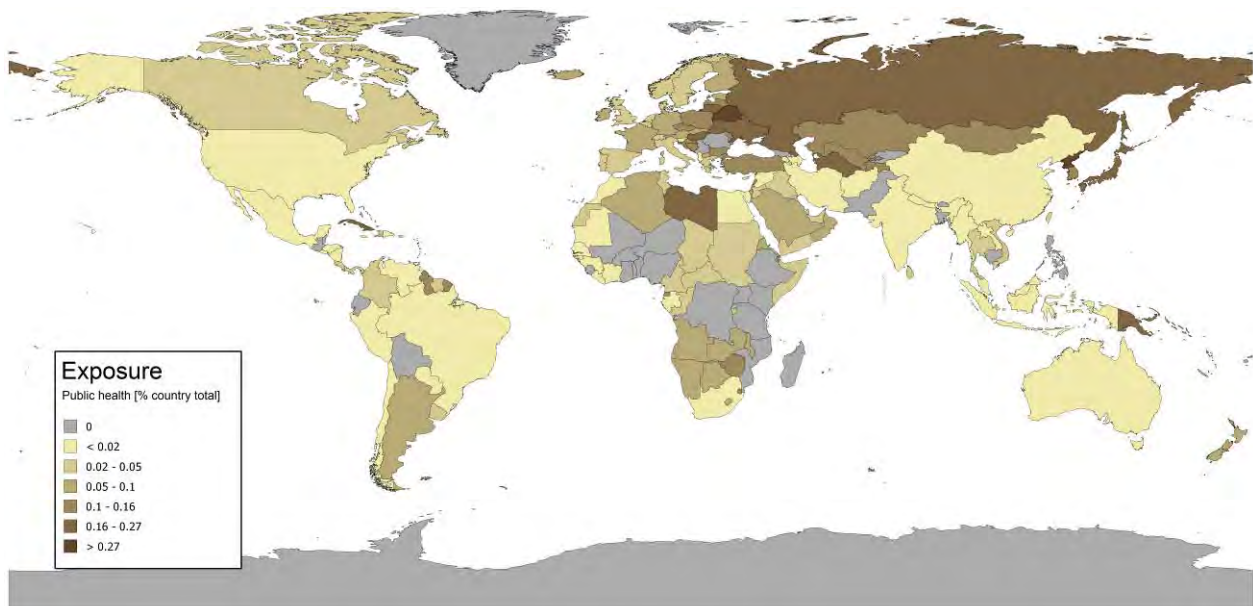


Figure A13-12
 Geographic distribution of buildings exposed value
 for public health services use by country

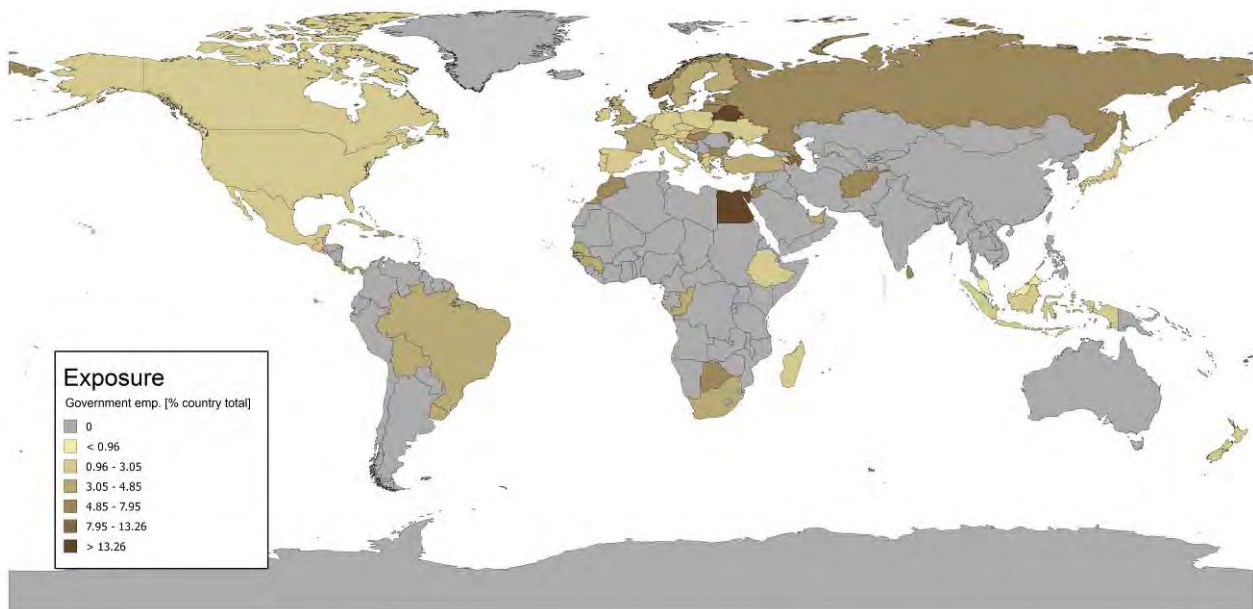


Figure A13-13
Geographic distribution of buildings exposed value
for government administration use by country

ANNEX 14. METHODOLOGY TO CALCULATE VULNERABILITY FUNCTIONS FROM FRAGILITY FUNCTIONS.

STRUCTURAL DAMAGE ASSESSMENT MODELS

Fragility curves

Structural damage on buildings and infrastructure due to earthquakes is often represented using fragility curves, which relate the probability of reaching or exceeding a given damage state, versus the seismic demand in terms of peak or spectral intensities. The development of fragility curves for a given structural system requires the definition of the critical ground motion parameter and the identification of the expected damage states.

Suppose there are N identified damage states (ds) for a structural system. Then the probability of reaching or exceeding the i th damage state (P_i), given ground motion intensity (S) is:

$$P_i = \Pr(DS \geq ds_i | S)$$

Where DS is a damage random variable on the damage state vector $\{ds_0, ds_1, \dots, ds_N\}$. Typical fragility curves are shown in Figure A15-1.

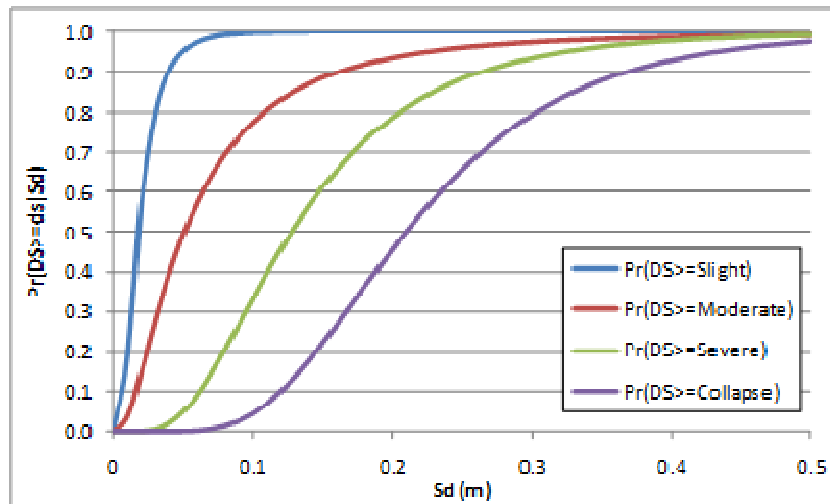


Figure A15-1. Example of fragility curves. Seismic demand specified as spectral displacement. (Reproduced after Vielma et al 2007)

Damage probability matrices (DPMs)

Since damage states are discrete, the probability of exactly reaching the i th damage state, given a ground motion intensity S , can be calculated as follows:

$$\Pr(ds_i | S) = \Pr(DS \geq ds_{i+1} | S) - \Pr(DS \geq ds_i | S)$$

where the term $\Pr(ds_i|S)$ is the discrete probability of reaching the damage state ds_i . DPMs specify the discrete probabilities of reaching a damage state at different ground motion levels. DPMs have the following structure:

DAMAGE STATE	INTENSITY			
	S1	S2	...	SK
ds_0	$\Pr(ds_0 S1)$	$\Pr(ds_0 S2)$	...	$\Pr(ds_0 SK)$
ds_1	$\Pr(ds_1 S1)$	$\Pr(ds_1 S2)$	...	$\Pr(ds_1 SK)$
...	...	...	...	...
ds_N	$\Pr(ds_N S1)$	$\Pr(ds_N S2)$	...	$\Pr(ds_N SK)$

Vulnerability curves

Defining loss (L) as a random variable, vulnerability curves describe the variation of the loss statistical moments for different values of seismic demand. Loss probability distribution is usually assumed Beta, where statistical moments correspond to mean and standard deviation. Beta distribution $p_{L|S}(L)$ is defined as follows:

$$p_{L|S}(L) = \frac{\Gamma(a+b)}{\Gamma(a)\Gamma(b)} L^{a-1} (1-L)^{b-1}$$

where Γ is the Gamma function and parameters a and b are:

$$a = \frac{1 - (1 + c^2(L|S))E(L|S)}{c^2(L|S)}$$

$$b = a \frac{1 - E(L|S)}{E(L|S)}$$

where $E(L|S)$ is the loss mean or expected value and $c(L|S)$ is the loss variation coefficient, given a seismic demand S (note that $c(L|S) = SD(L|S)/E(L|S)$ where $SD(L|S)$ is the loss standard deviation given a seismic demand S).

Vulnerability curves provide all the necessary information to calculate the probability of reaching or exceeding a loss value, given as seismic demand. Loss is defined using numerical scales instead of qualitative scales as for damage states (for example the ratio of repair cost to the asset replacement value), which allows its direct use in probabilistic risk and loss calculations. The probability of reaching or exceeding a loss value is calculated as follows:

$$\Pr (L \geq l|S) = \int_l^{\infty} p_{L|S}(L)dL$$

where l is a loss value in the random variable L dominium, and S is the seismic demand.

Typical vulnerability curves are shown in Figure A15-2.

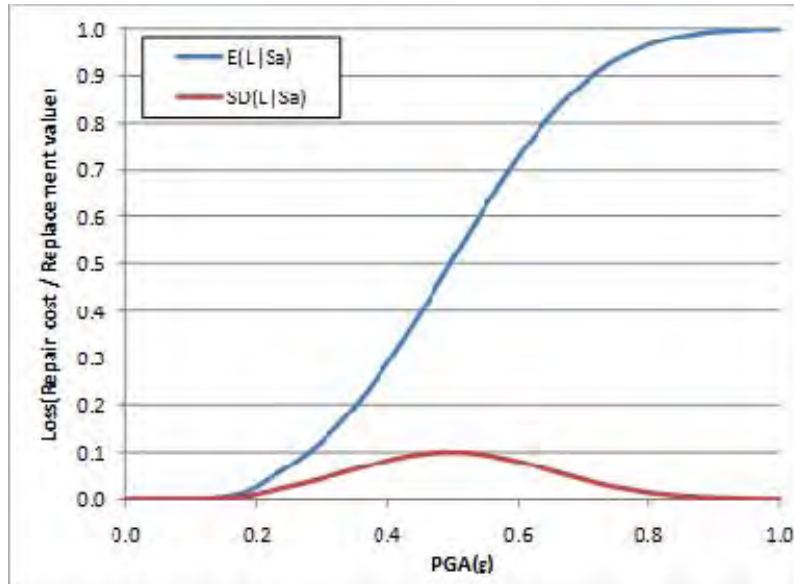


Figure A15-2. Example of vulnerability curves. Seismic demand specified as peak ground acceleration.

Relationship between fragility curves, damage probability matrices and vulnerability curves

Vulnerability curves describe loss in a proper manner for risk calculation. However, fragility curves and DPMs have been extensively used worldwide due to their comprehensive description of structural behavior to seismic demands. Relationships between these damage representations can be addressed.

Damage states in fragility curves and DPMs are often defined to characterize a physical state of the structure. Physical states are qualitative and merely descriptive of the expected damage. For rigorous loss calculations, a numerical damage cost scale, for example in terms of the ratio of repair cost to replacement value, must be related to the defined damage states.

Suppose there are N identified damage states (ds) for a structural system. For each damage state, a loss value (L) is assigned. In other words, when the structure reaches a damage



state ds_i , its owner will have to pay a repair cost L_i . Therefore, the loss statistical moments can be calculated as follows:

$$E(L|S) = \sum_{i=0}^N L_i \Pr(DS = ds_i|S)$$
$$SD^2(L|S) = \sum_{i=0}^N (L_i - E(L|S))^2 \Pr(DS = ds_i|S)$$

where $E(L|S)$ is the loss mean and $SD(L|S)$ is the loss standard deviation given a seismic demand S , and $\Pr(DS=ds_i|S)$ is the discrete probability of reaching a damage state ds_i .



ANNEX 15. SEISMIC PARAMETERS TO CALCULATE VULNERABILITY FUNCTIONS FOR EACH STRUCTURAL SYSTEM AND SEISMIC VULNERABILITY CURVES.

VARIABLES DEFINITION

BUILDING PARAMETERS

H	Total height of the building (m).
N _p	Total number of floors.
T _e	Fundamental-mode period of building (seconds).
α ₁	Fraction of building weight effective in push-over mode.
α ₂	Fraction of building height at location of push-over mode displacement.
γ	“Over strength” factor relating “true” yield strength to design strength.
λ	“Over strength” factor relating ultimate strength to yield strength.
C _s	Design strength coefficient (fraction of building’s weight).
μ	“Ductility” factor relating ultimate displacement to λ times the yield displacement.

MIRANDA PARAMETERS

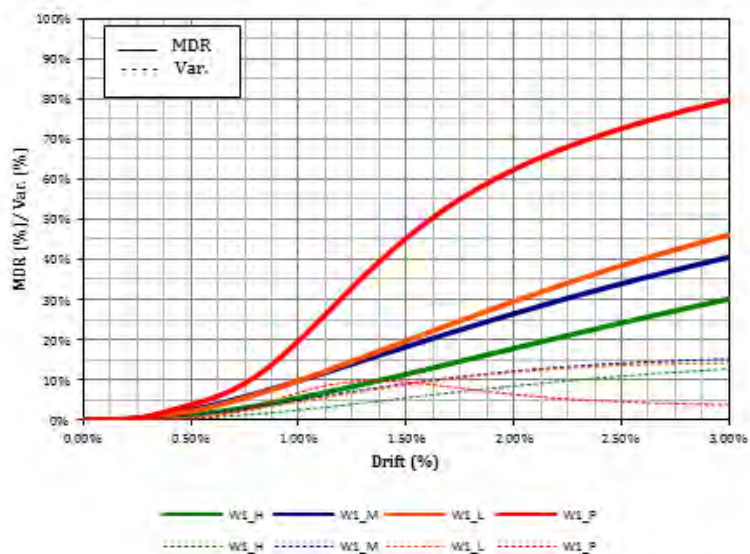
α	Dimensionless parameter of structural behavior (pure flexure or pure shear).
a	Dimensionless parameter to the shape of the lateral load.
β ₁	Elastic displacement ratio.
β ₂	Inter-story drift ratio.
β ₃	Inelastic displacement ratio.
β ₄	Ductility ratio.

VULNERABILITY FUNCTIONS

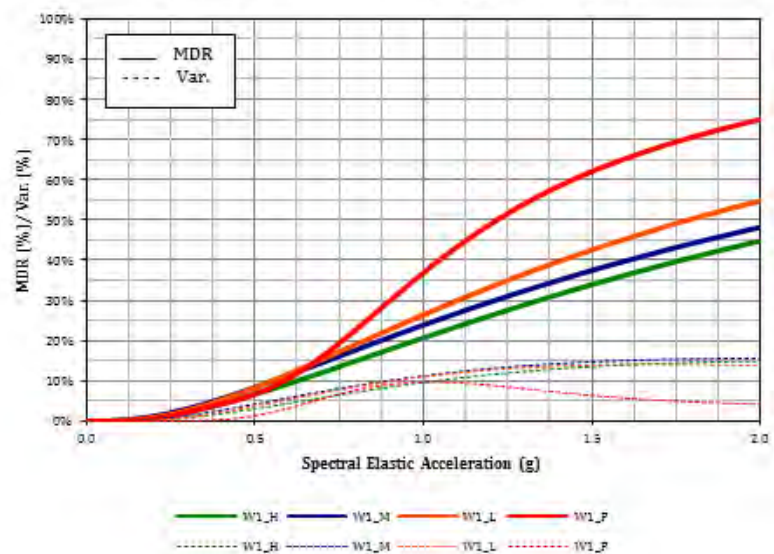
W1 - Wood, Light Frame ($\leq 450 \text{ m}^2$)

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	$\alpha 1$	$\alpha 2$	γ	λ	Cs	μ	α	a	$\beta 1$	$\beta 2$	$\beta 3$	$\beta 4$
W1_H	HIGH	4.27	1	0.35	0.75	0.75	1.5	3	0.200	8.0	10.0	0.10	1.0	1.48	1.7	1.27
W1_M	MEDIUM	4.27	1	0.35	0.75	0.75	1.5	3	0.150	6.0	10.0	0.10	1.0	1.48	1.4	1.21
W1_L	LOW	4.27	1	0.35	0.75	0.75	1.5	3	0.100	6.0	10.0	0.10	1.0	1.48	1.4	1.21
W1_P	POOR	4.27	1	0.35	0.75	0.75	1.5	3	0.050	3.0	10.0	0.10	1.0	1.48	1.1	1.11

Drift (%) vs. MDR (%)



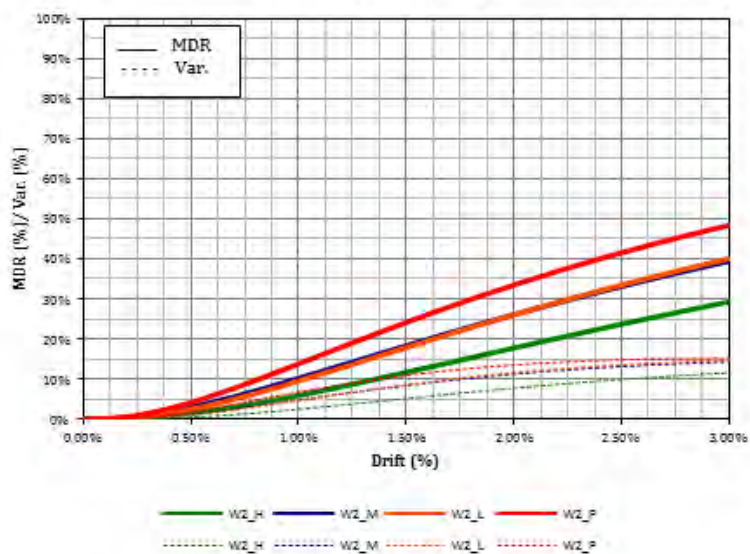
Spectral Elastic Acceleration (g) vs. MDR (%)



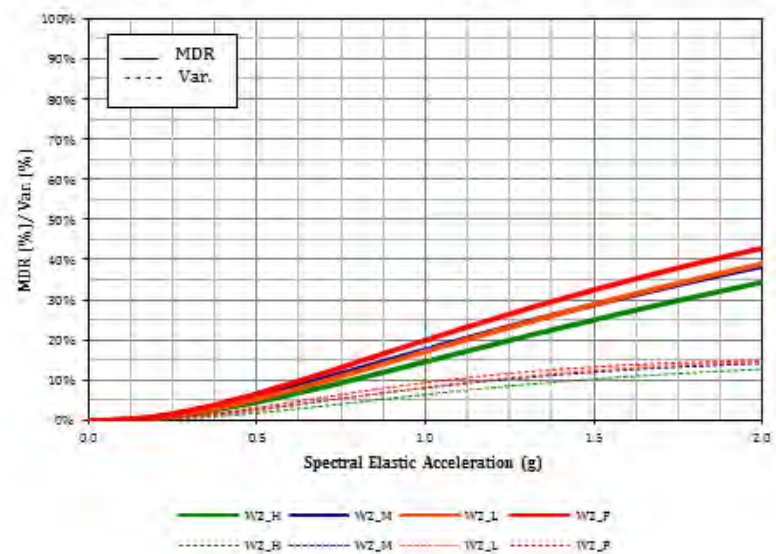
W2 - Wood, Commercial and Industrial (>450 m²)

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
W2_H	HIGH	7.32	2	0.40	0.75	0.75	1.5	2.5	0.200	8.0	5.0	0.10	1.2	1.36	1.5	1.28
W2_M	MEDIUM	7.32	2	0.40	0.75	0.75	1.5	2.5	0.100	6.0	5.0	0.10	1.2	1.36	1.4	1.21
W2_L	LOW	7.32	2	0.40	0.75	0.75	1.5	2.5	0.050	6.0	5.0	0.10	1.2	1.36	1.4	1.21
W2_P	POOR	7.32	2	0.40	0.75	0.75	1.5	2.5	0.040	4.8	5.0	0.10	1.2	1.36	1.3	1.17

Drift (%) vs. MDR (%)



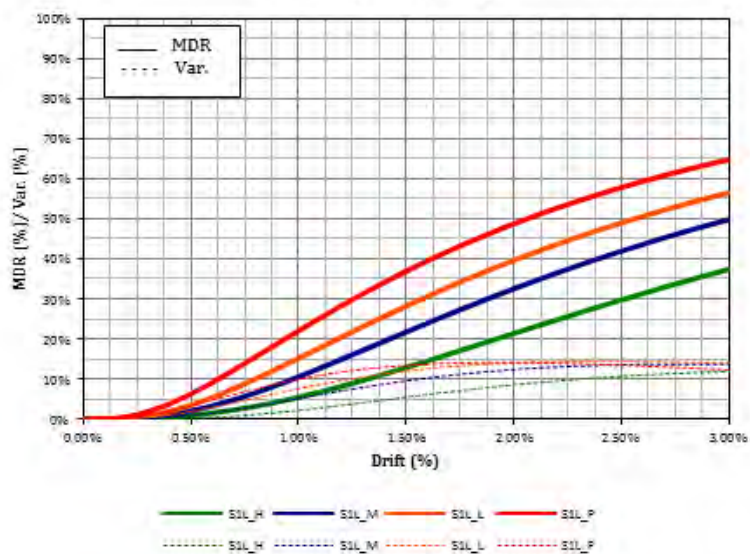
Spectral Elastic Acceleration (g) vs. MDR (%)



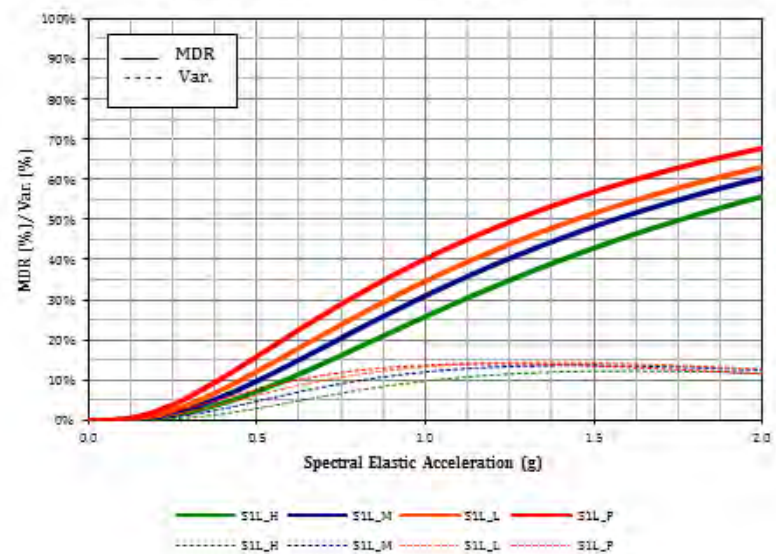
S1L - Steel Moment Frame

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S1L_H	HIGH	7.32	2	0.50	0.80	0.75	1.5	3	0.133	8.0	2.5	0.10	1.2	1.24	1.4	1.28
S1L_M	MEDIUM	7.32	2	0.50	0.80	0.75	1.5	3	0.067	6.0	2.5	0.10	1.2	1.24	1.2	1.21
S1L_L	LOW	7.32	2	0.50	0.80	0.75	1.5	3	0.033	5.0	2.5	0.10	1.2	1.24	1.2	1.18
S1L_P	POOR	7.32	2	0.50	0.80	0.75	1.5	3	0.026	4.0	2.5	0.10	1.2	1.24	1.1	1.14

Drift (%) vs. MDR (%)



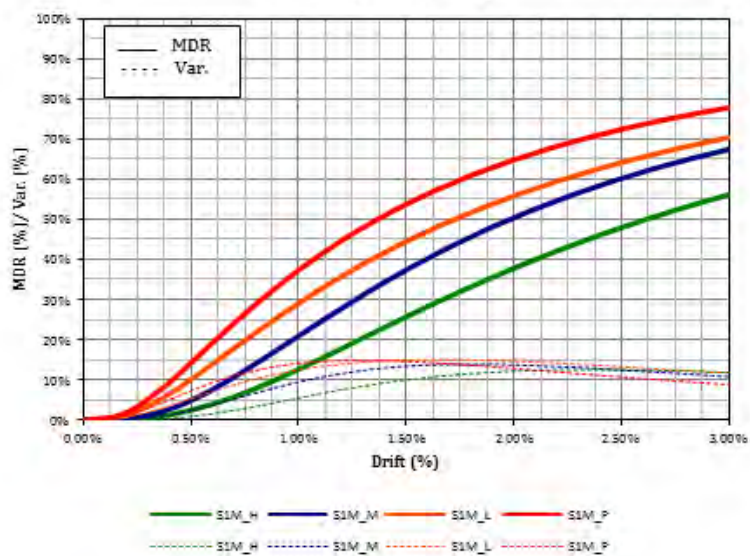
Spectral Elastic Acceleration (g) vs. MDR (%)



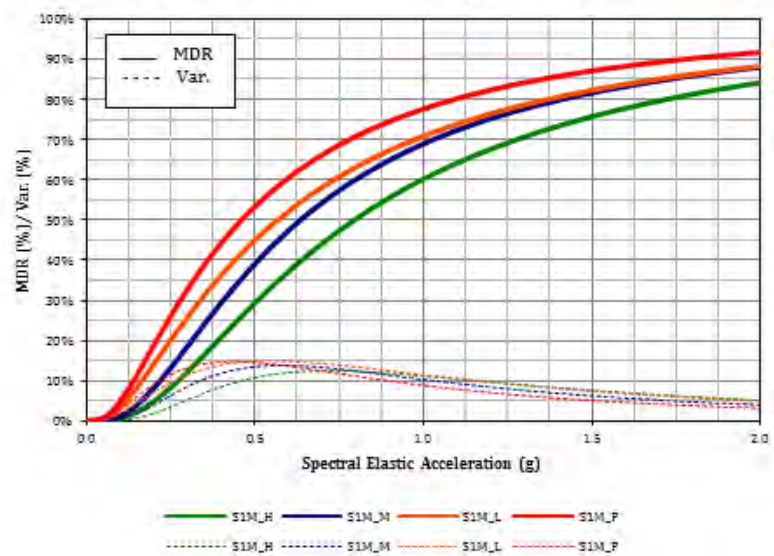
S1M - Steel Moment Frame

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S1M_H	HIGH	18.29	5	1.08	0.80	0.75	1.25	3	0.100	5.3	2.5	0.10	1.4	1.24	1.0	1.20
S1M_M	MEDIUM	18.29	5	1.08	0.80	0.75	1.25	3	0.050	4.0	2.5	0.10	1.4	1.24	1.0	1.16
S1M_L	LOW	18.29	5	1.08	0.80	0.75	1.25	3	0.025	3.3	2.5	0.10	1.4	1.24	1.0	1.14
S1M_P	POOR	18.29	5	1.08	0.80	0.75	1.25	3	0.020	2.6	2.5	0.10	1.4	1.24	1.0	1.11

Drift (%) vs. MDR (%)

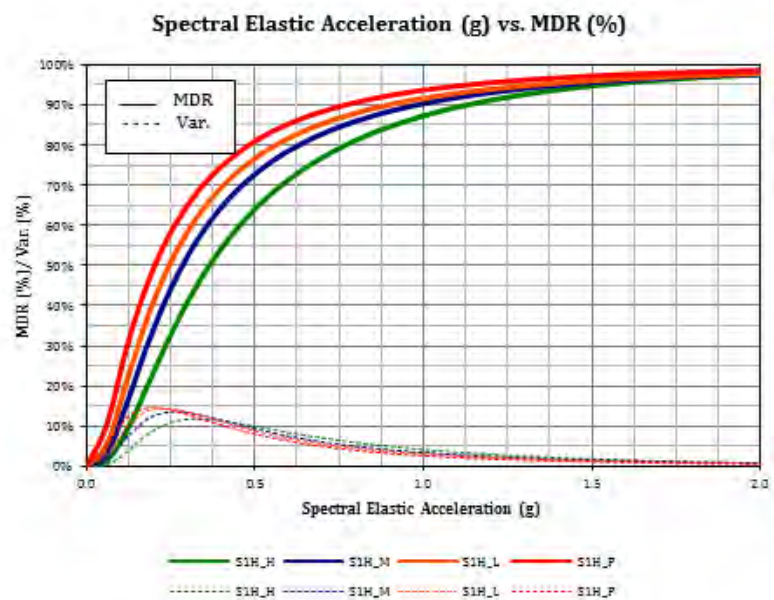
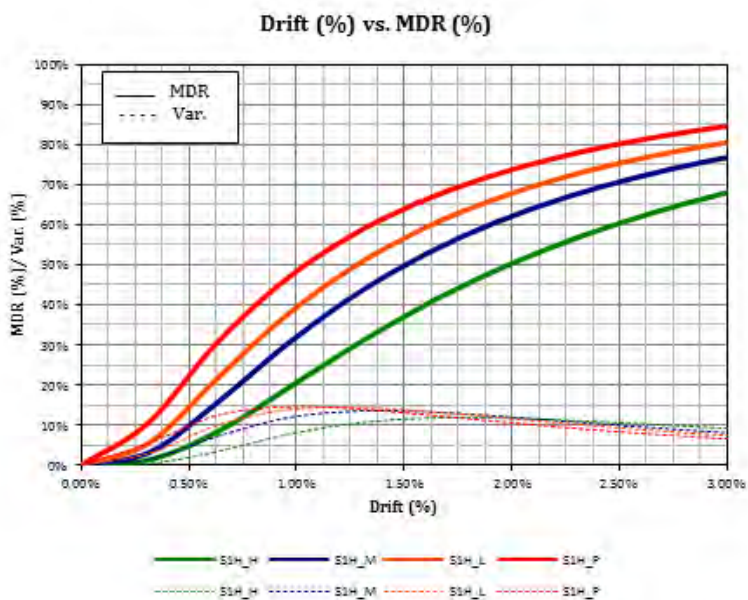


Spectral Elastic Acceleration (g) vs. MDR (%)



S1H - Steel Moment Frame

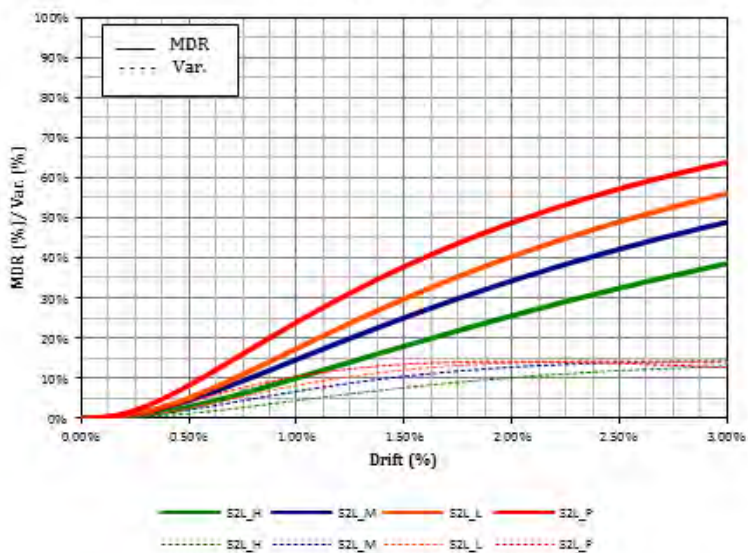
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S1H_H	HIGH	47.55	13	2.21	0.75	0.60	1.1	3	0.067	4.0	2.5	0.10	1.4	1.24	1.0	1.20
S1H_M	MEDIUM	47.55	13	2.21	0.75	0.60	1.1	3	0.033	3.0	2.5	0.10	1.4	1.24	1.0	1.17
S1H_L	LOW	47.55	13	2.21	0.75	0.60	1.1	3	0.017	2.5	2.5	0.10	1.4	1.24	1.0	1.15
S1H_P	POOR	47.55	13	2.21	0.75	0.60	1.1	3	0.014	2.0	2.5	0.10	1.4	1.24	1.0	1.13



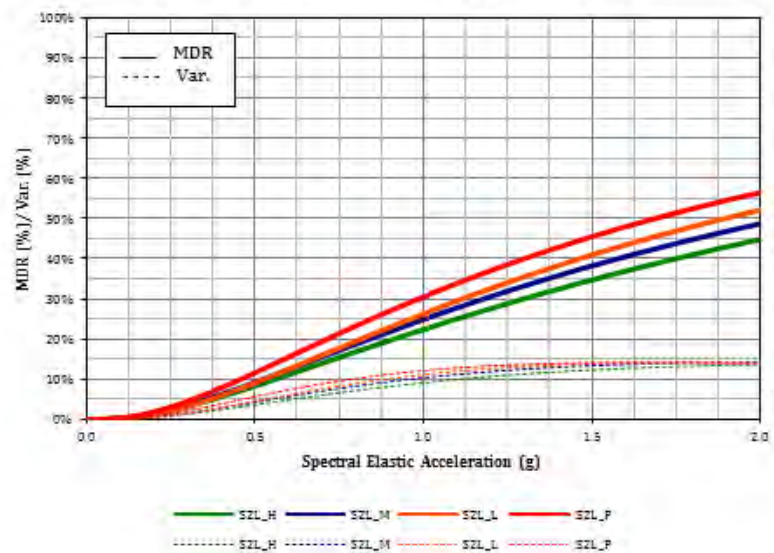
S2L - Steel Braced Frame

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S2L_H	HIGH	7.32	2	0.40	0.75	0.75	1.5	2	0.200	8.0	6.0	0.10	1.2	1.40	1.5	1.28
S2L_M	MEDIUM	7.32	2	0.40	0.75	0.75	1.5	2	0.100	6.0	6.0	0.10	1.2	1.40	1.4	1.21
S2L_L	LOW	7.32	2	0.40	0.75	0.75	1.5	2	0.050	5.0	6.0	0.10	1.2	1.40	1.3	1.18
S2L_P	POOR	7.32	2	0.40	0.75	0.75	1.5	2	0.040	4.0	6.0	0.10	1.2	1.40	1.2	1.14

Drift (%) vs. MDR (%)



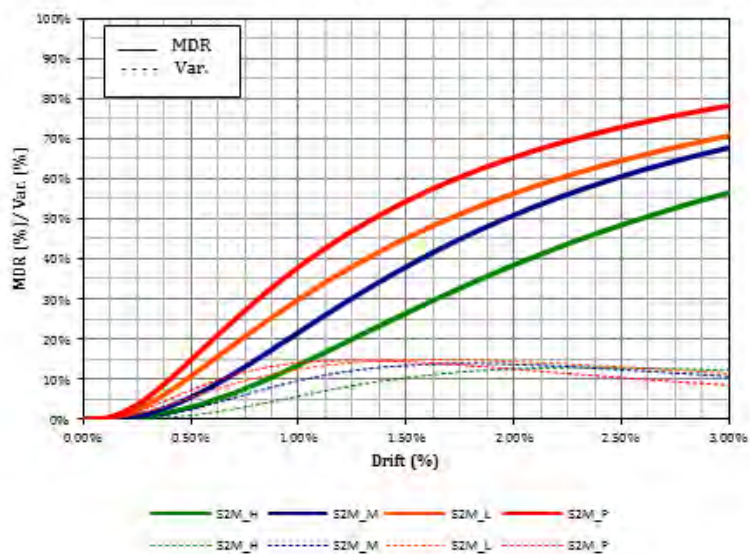
Spectral Elastic Acceleration (g) vs. MDR (%)



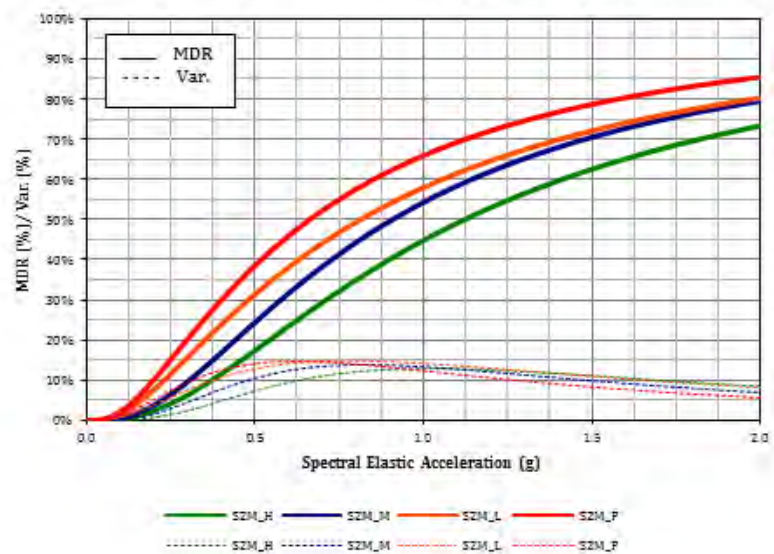
S2M - Steel Braced Frame

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S2M_H	HIGH	18.29	5	0.86	0.75	0.75	1.25	2	0.200	5.3	6.0	0.10	1.3	1.40	1.1	1.20
S2M_M	MEDIUM	18.29	5	0.86	0.75	0.75	1.25	2	0.100	4.0	6.0	0.10	1.3	1.40	1.0	1.16
S2M_L	LOW	18.29	5	0.86	0.75	0.75	1.25	2	0.050	3.3	6.0	0.10	1.3	1.40	1.0	1.14
S2M_P	POOR	18.29	5	0.86	0.75	0.75	1.25	2	0.040	2.6	6.0	0.10	1.3	1.40	1.0	1.11

Drift (%) vs. MDR (%)

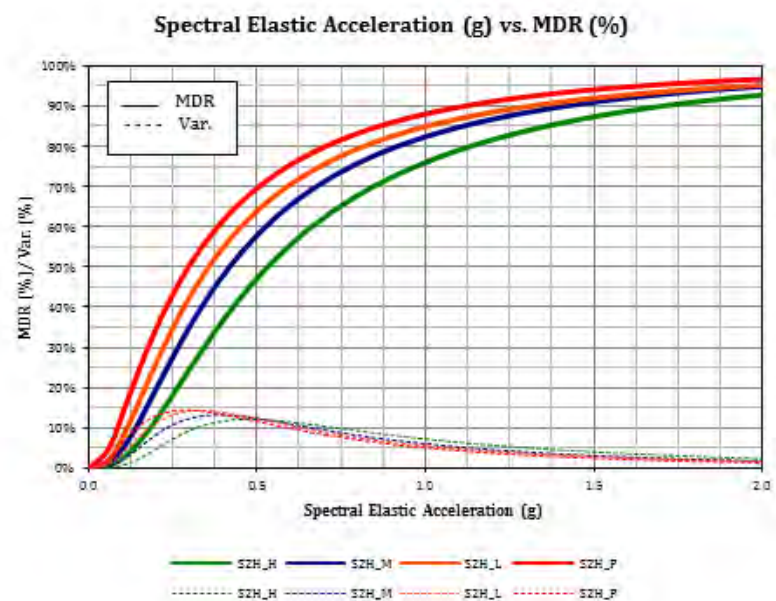
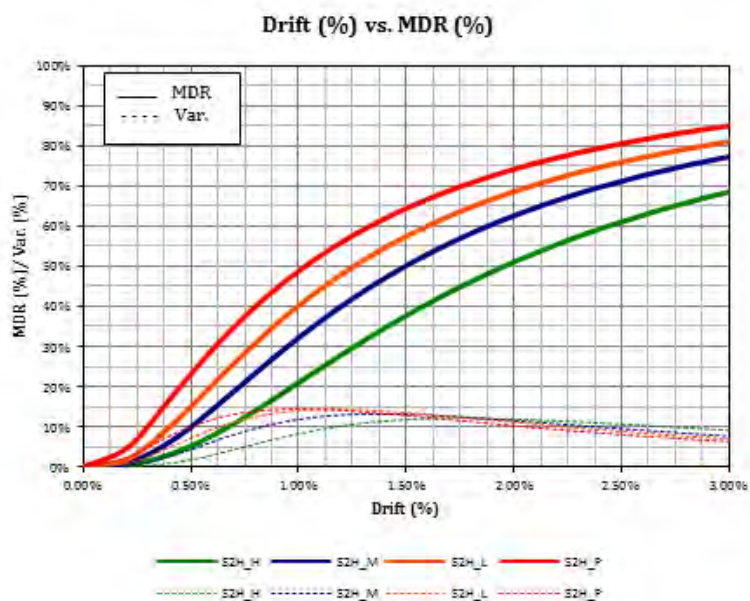


Spectral Elastic Acceleration (g) vs. MDR (%)



S2H - Steel Braced Frame

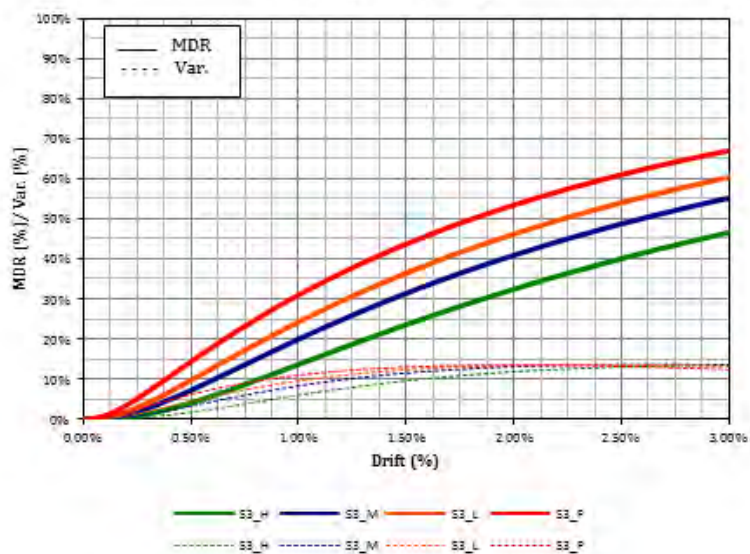
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S2H_H	HIGH	47.55	13	1.77	0.65	0.60	1.1	2	0.150	4.0	6.0	0.10	1.3	1.40	1.0	1.20
S2H_M	MEDIUM	47.55	13	1.77	0.65	0.60	1.1	2	0.075	3.0	6.0	0.10	1.3	1.40	1.0	1.17
S2H_L	LOW	47.55	13	1.77	0.65	0.60	1.1	2	0.038	2.5	6.0	0.10	1.3	1.40	1.0	1.15
S2H_P	POOR	47.55	13	1.77	0.65	0.60	1.1	2	0.030	2.0	6.0	0.10	1.3	1.40	1.0	1.13



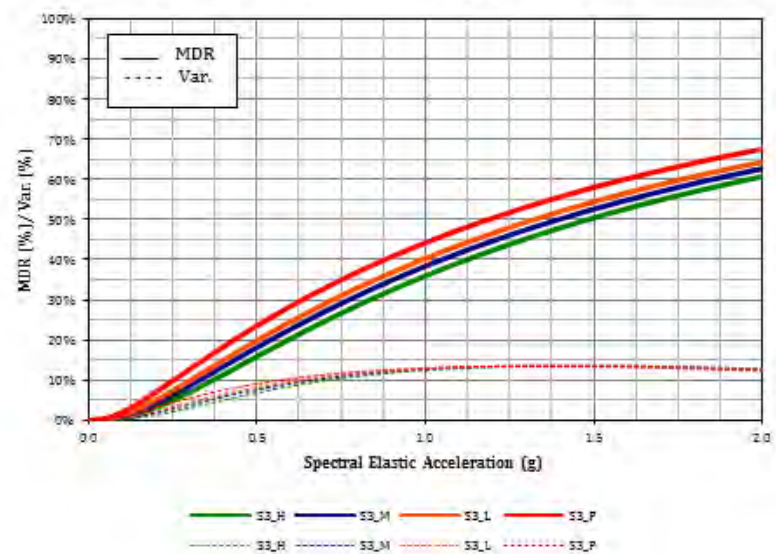
S3 - Steel Light Frame

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S3_H	HIGH	4.57	1	0.40	0.75	0.75	1.5	2	0.200	8.0	1.0	0.10	1.0	1.30	1.5	1.27
S3_M	MEDIUM	4.57	1	0.40	0.75	0.75	1.5	2	0.100	6.0	1.0	0.10	1.0	1.30	1.4	1.21
S3_L	LOW	4.57	1	0.40	0.75	0.75	1.5	2	0.050	5.0	1.0	0.10	1.0	1.30	1.3	1.17
S3_P	POOR	4.57	1	0.40	0.75	0.75	1.5	2	0.040	4.0	1.0	0.10	1.0	1.30	1.2	1.14

Drift (%) vs. MDR (%)



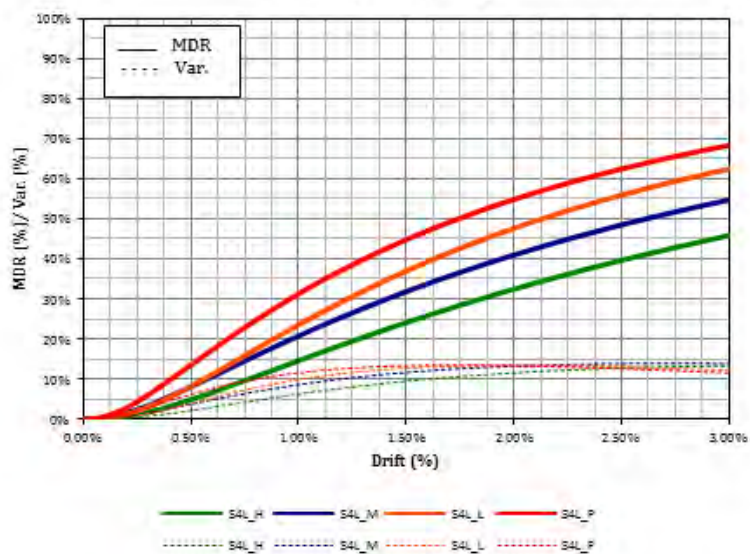
Spectral Elastic Acceleration (g) vs. MDR (%)



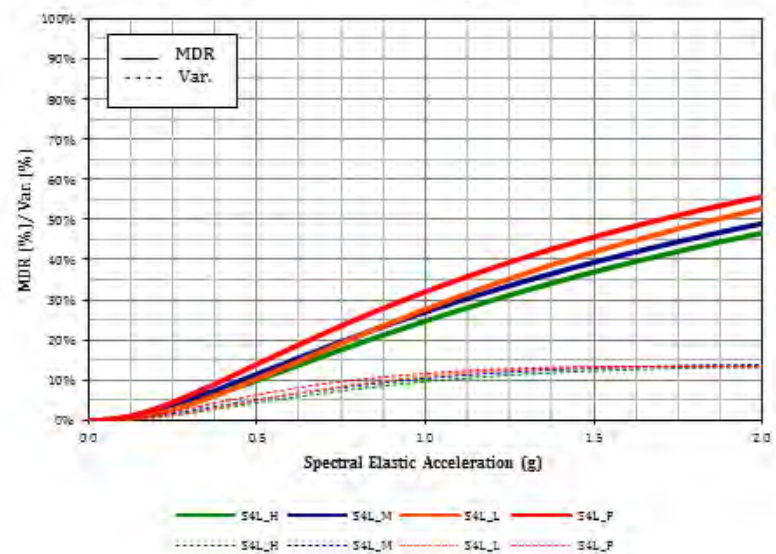
S4L - Steel Frame with Cast-in-Place Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S4L_H	HIGH	7.32	2	0.35	0.75	0.75	1.5	2.25	0.160	8.0	12.0	0.10	1.2	1.50	1.7	1.28
S4L_M	MEDIUM	7.32	2	0.35	0.75	0.75	1.5	2.25	0.080	6.0	12.0	0.10	1.2	1.50	1.4	1.21
S4L_L	LOW	7.32	2	0.35	0.75	0.75	1.5	2.25	0.040	5.0	12.0	0.10	1.2	1.50	1.3	1.18
S4L_P	POOR	7.32	2	0.35	0.75	0.75	1.5	2.25	0.032	4.0	12.0	0.10	1.2	1.50	1.2	1.14

Drift (%) vs. MDR (%)



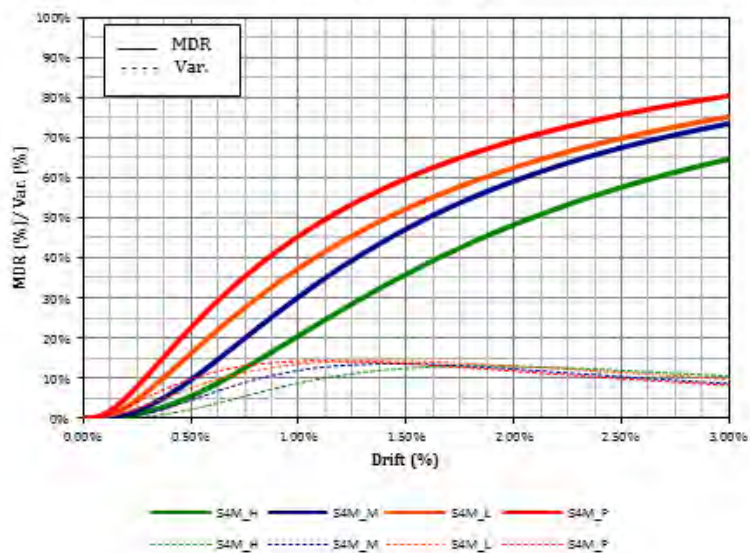
Spectral Elastic Acceleration (g) vs. MDR (%)



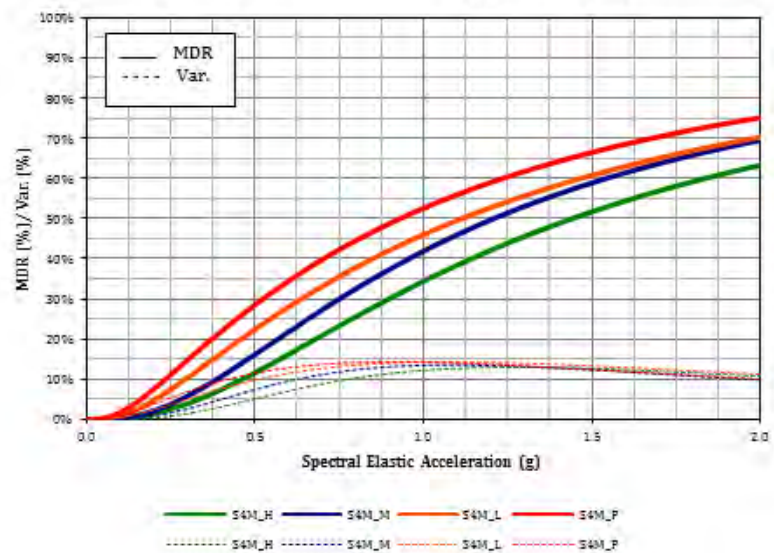
S4M - Steel Frame with Cast-in-Place Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S4M_H	HIGH	18.29	5	0.65	0.75	0.75	1.25	2.25	0.160	5.3	12.0	0.10	1.2	1.50	1.1	1.20
S4M_M	MEDIUM	18.29	5	0.65	0.75	0.75	1.25	2.25	0.080	4.0	12.0	0.10	1.2	1.50	1.1	1.16
S4M_L	LOW	18.29	5	0.65	0.75	0.75	1.25	2.25	0.040	3.3	12.0	0.10	1.2	1.50	1.0	1.14
S4M_P	POOR	18.29	5	0.65	0.75	0.75	1.25	2.25	0.032	2.6	12.0	0.10	1.2	1.50	1.0	1.11

Drift (%) vs. MDR (%)



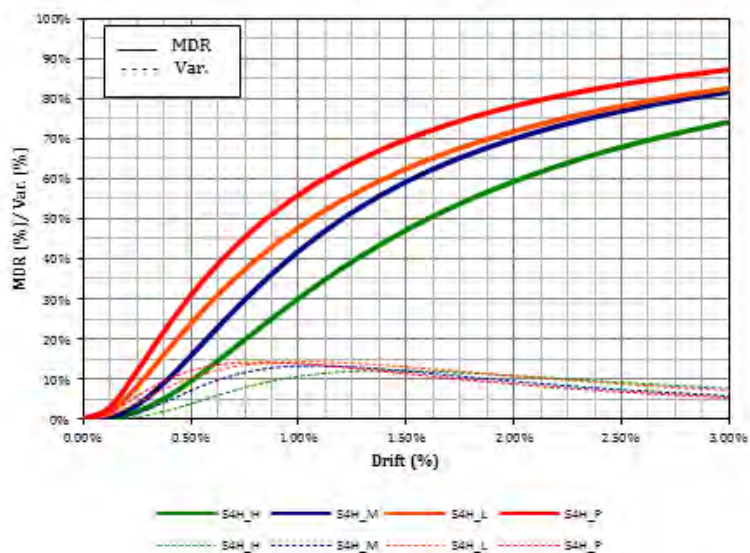
Spectral Elastic Acceleration (g) vs. MDR (%)



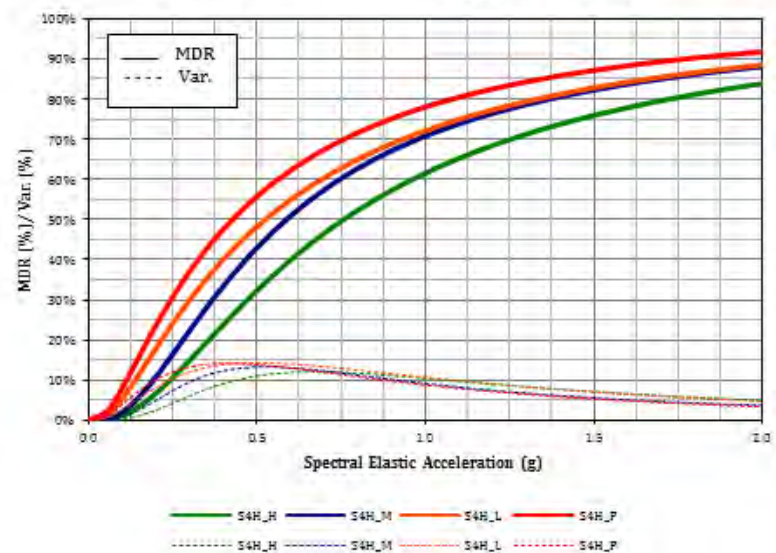
S4H - Steel Frame with Cast-in-Place Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S4H_H	HIGH	47.55	13	1.32	0.65	0.60	1.1	2.25	0.120	4.0	12.0	0.10	1.3	1.50	1.0	1.20
S4H_M	MEDIUM	47.55	13	1.32	0.65	0.60	1.1	2.25	0.060	3.0	12.0	0.10	1.3	1.50	1.0	1.17
S4H_L	LOW	47.55	13	1.32	0.65	0.60	1.1	2.25	0.030	2.5	12.0	0.10	1.3	1.50	1.0	1.15
S4H_P	POOR	47.55	13	1.32	0.65	0.60	1.1	2.25	0.024	2.0	12.0	0.10	1.3	1.50	1.0	1.13

Drift (%) vs. MDR (%)



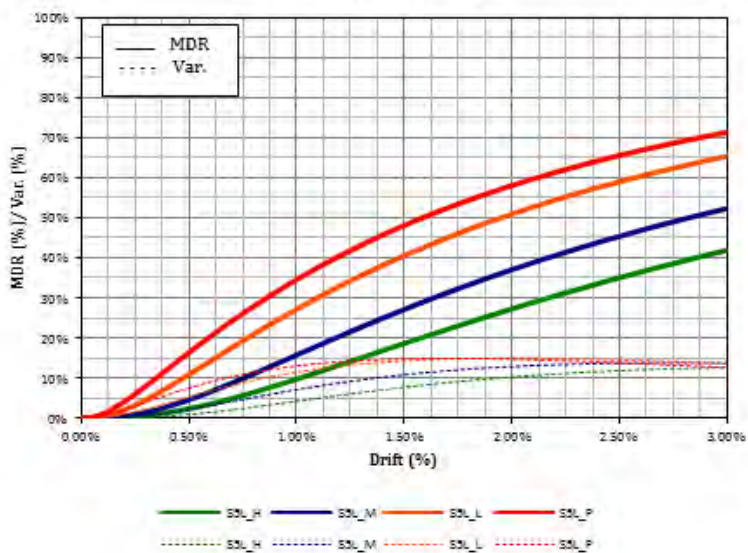
Spectral Elastic Acceleration (g) vs. MDR (%)



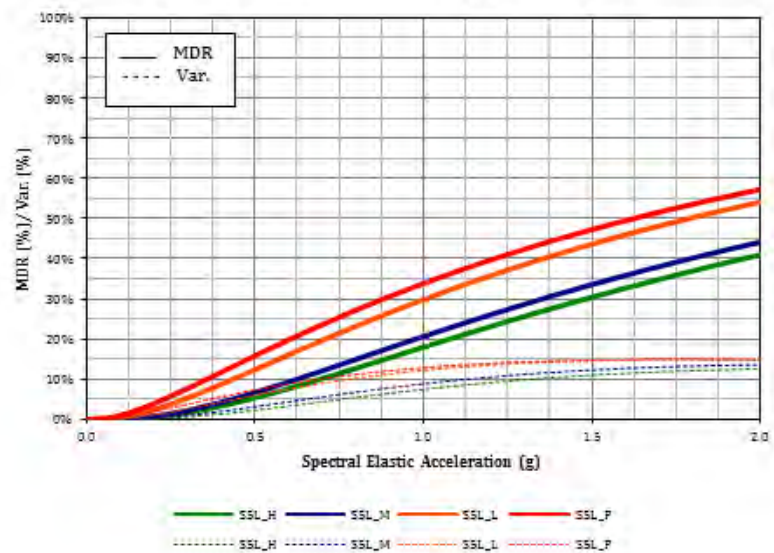
S5L - Steel Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S5L_H	HIGH	7.32	2	0.35	0.75	0.75	1.5	2	0.147	8.0	6.0	0.10	1.2	1.40	1.7	1.28
S5L_M	MEDIUM	7.32	2	0.35	0.75	0.75	1.5	2	0.074	6.0	6.0	0.10	1.2	1.40	1.4	1.21
S5L_L	LOW	7.32	2	0.35	0.75	0.75	1.5	2	0.050	5.0	6.0	0.10	1.2	1.40	1.3	1.18
S5L_P	POOR	7.32	2	0.35	0.75	0.75	1.5	2	0.040	4.0	6.0	0.10	1.2	1.40	1.2	1.14

Drift (%) vs. MDR (%)

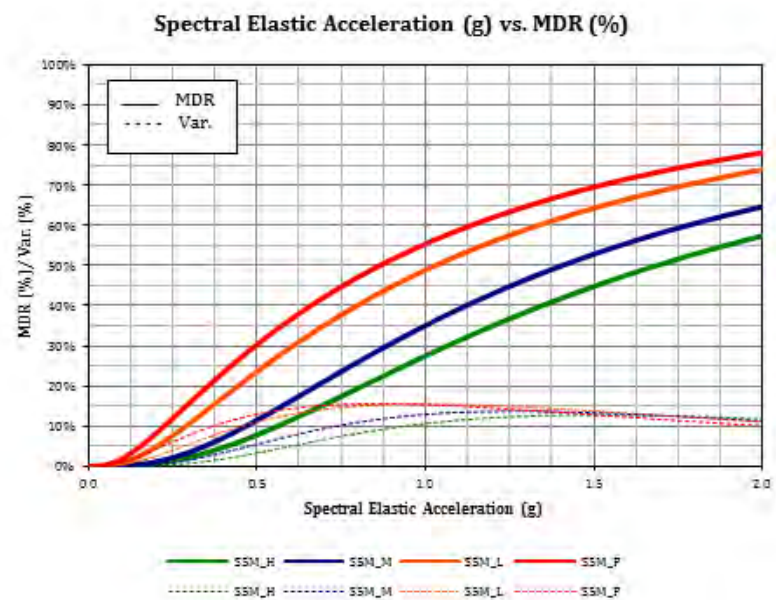
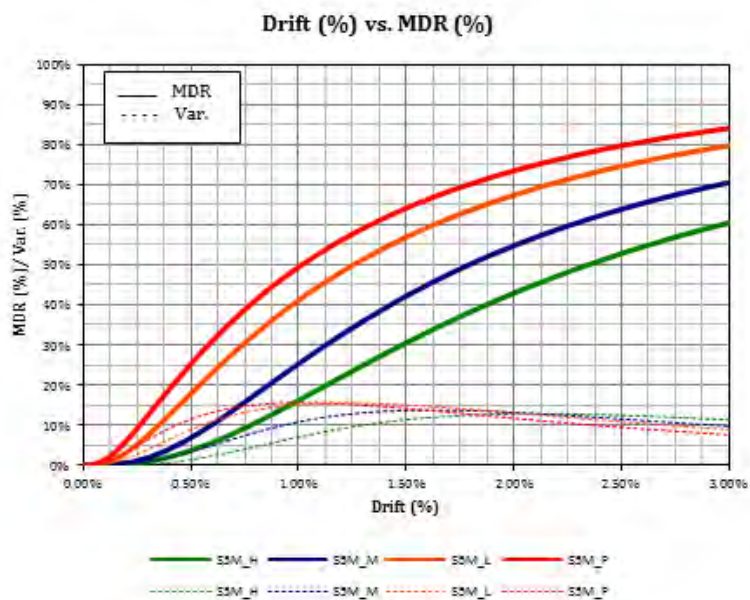


Spectral Elastic Acceleration (g) vs. MDR (%)



S5M - Steel Frame with Unreinforced Masonry Infill Walls

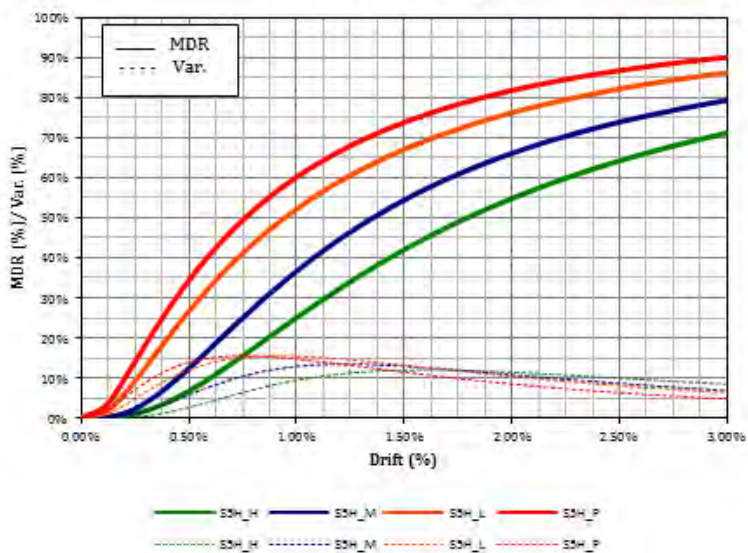
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S5M_H	HIGH	18.29	5	0.65	0.75	0.75	1.25	2	0.130	5.3	6.0	0.10	1.3	1.40	1.1	1.20
S5M_M	MEDIUM	18.29	5	0.65	0.75	0.75	1.25	2	0.065	4.0	6.0	0.10	1.3	1.40	1.1	1.16
S5M_L	LOW	18.29	5	0.65	0.75	0.75	1.25	2	0.050	3.3	6.0	0.10	1.3	1.40	1.0	1.14
S5M_P	POOR	18.29	5	0.65	0.75	0.75	1.25	2	0.040	2.6	6.0	0.10	1.3	1.40	1.0	1.11



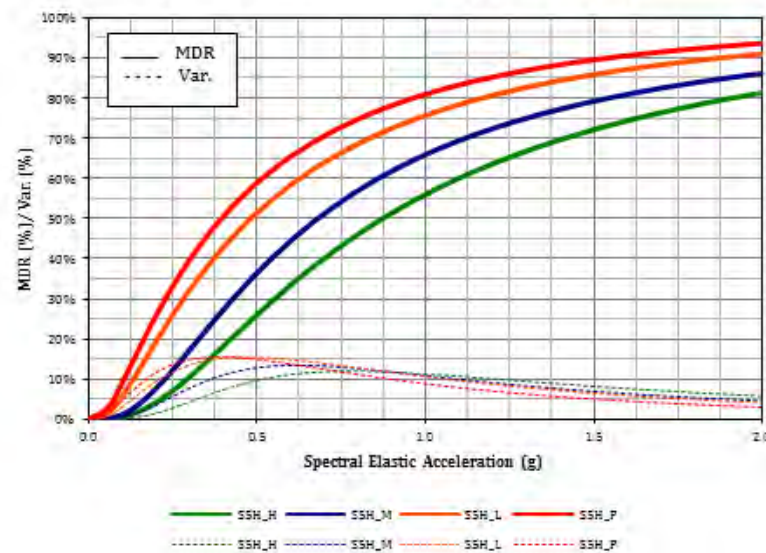
S5H - Steel Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
S5H_H	HIGH	47.55	13	1.32	0.65	0.60	1.1	2	0.094	4.0	6.0	0.10	1.3	1.40	1.0	1.20
S5H_M	MEDIUM	47.55	13	1.32	0.65	0.60	1.1	2	0.047	3.0	6.0	0.10	1.3	1.40	1.0	1.17
S5H_L	LOW	47.55	13	1.32	0.65	0.60	1.1	2	0.038	2.5	6.0	0.10	1.3	1.40	1.0	1.15
S5H_P	POOR	47.55	13	1.32	0.65	0.60	1.1	2	0.030	2.0	6.0	0.10	1.3	1.40	1.0	1.13

Drift (%) vs. MDR (%)



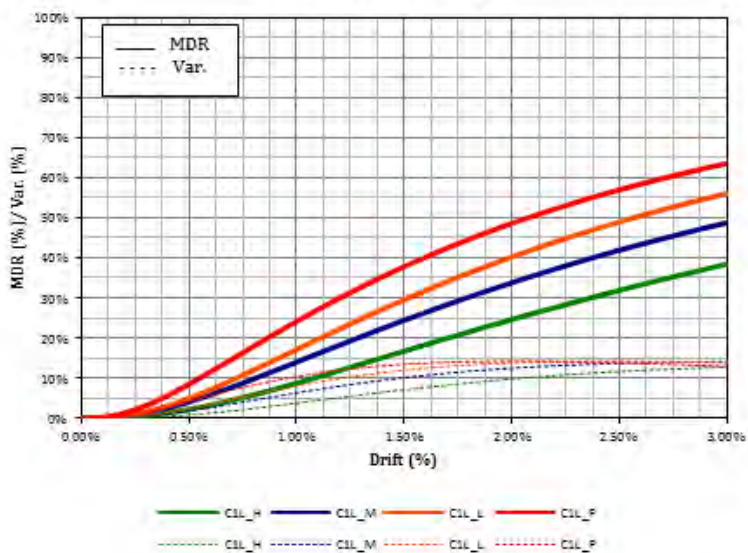
Spectral Elastic Acceleration (g) vs. MDR (%)



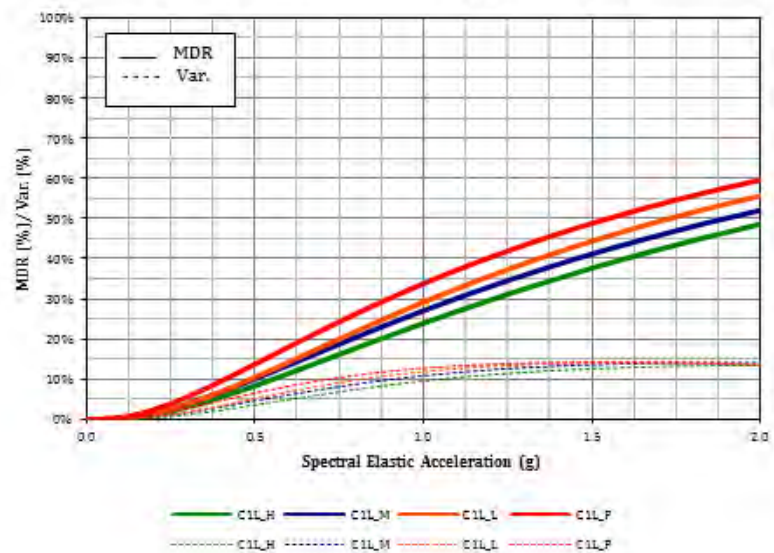
C1L - Concrete Moment Frames

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C1L_H	HIGH	6.10	2	0.40	0.80	0.75	1.5	3	0.133	8.0	3.0	0.10	1.2	1.26	1.5	1.28
C1L_M	MEDIUM	6.10	2	0.40	0.80	0.75	1.5	3	0.067	6.0	3.0	0.10	1.2	1.26	1.4	1.21
C1L_L	LOW	6.10	2	0.40	0.80	0.75	1.5	3	0.033	5.0	3.0	0.10	1.2	1.26	1.3	1.18
C1L_P	POOR	6.10	2	0.40	0.80	0.75	1.5	3	0.026	4.0	3.0	0.10	1.2	1.26	1.2	1.14

Drift (%) vs. MDR (%)

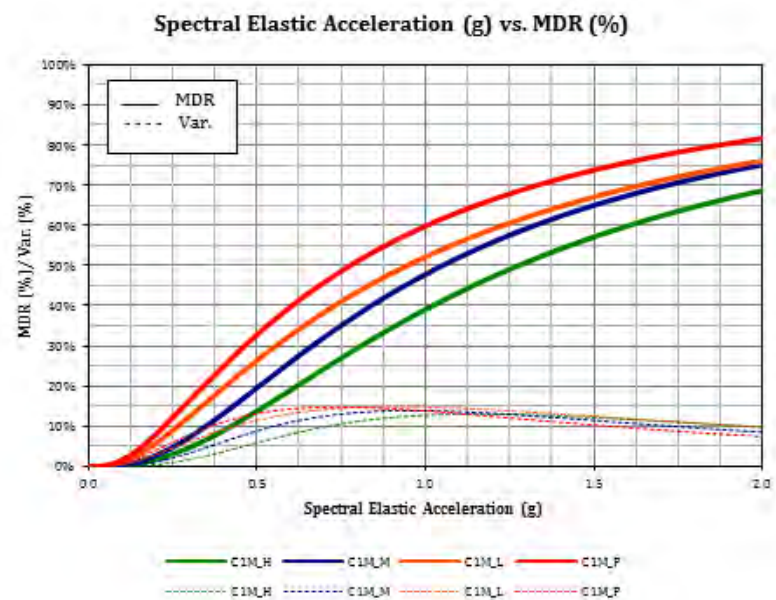
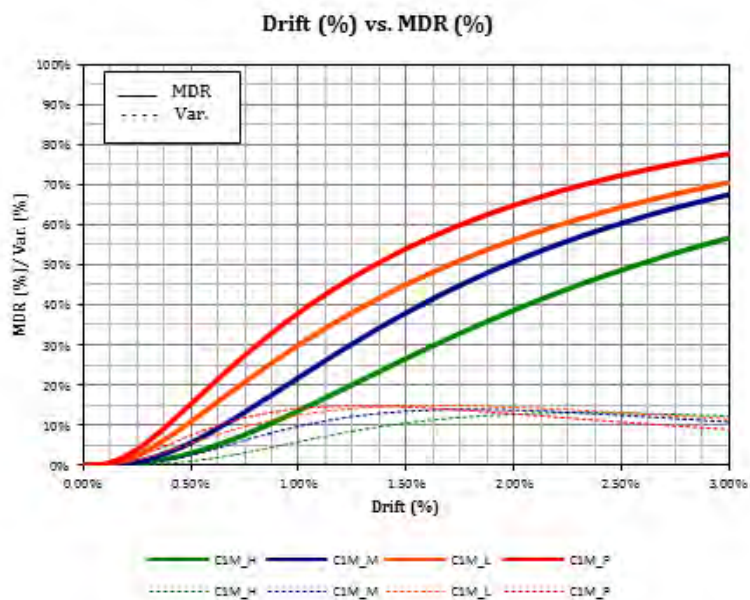


Spectral Elastic Acceleration (g) vs. MDR (%)



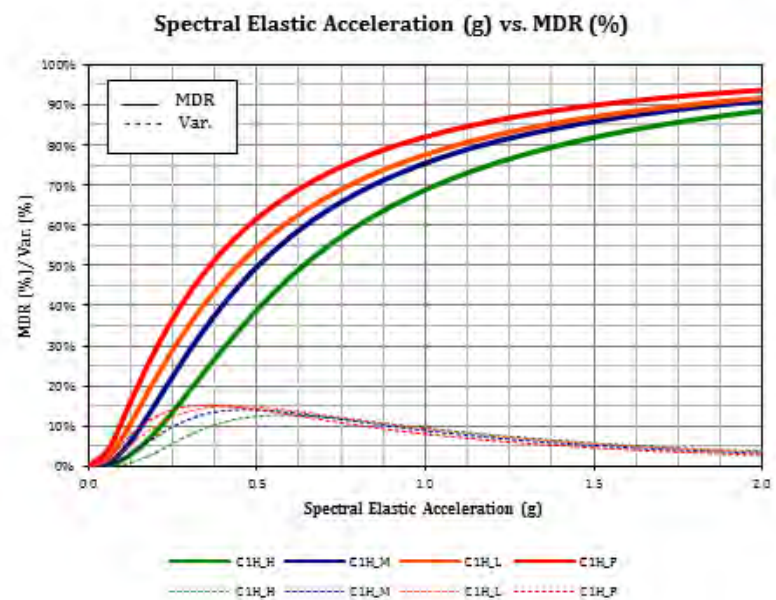
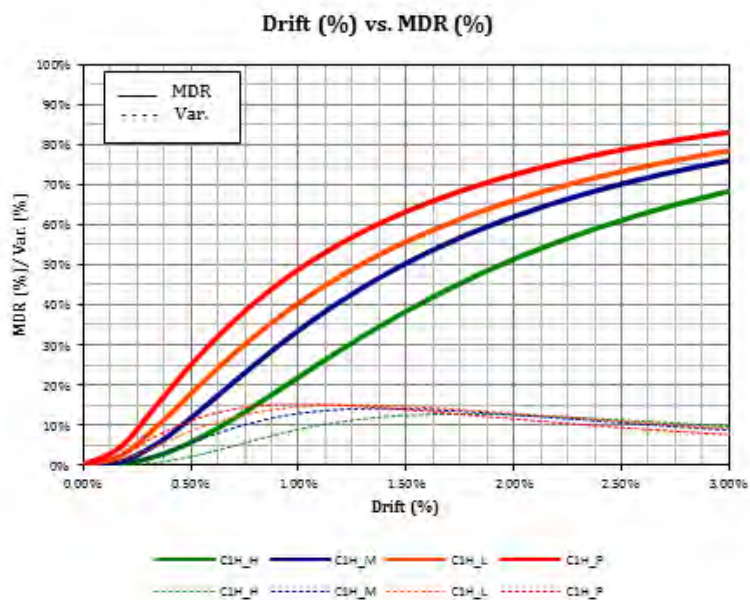
C1M - Concrete Moment Frames

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C1M_H	HIGH	15.24	5	0.75	0.80	0.75	1.25	3	0.133	5.3	3.0	0.10	1.3	1.26	1.1	1.20
C1M_M	MEDIUM	15.24	5	0.75	0.80	0.75	1.25	3	0.067	4.0	3.0	0.10	1.3	1.26	1.0	1.16
C1M_L	LOW	15.24	5	0.75	0.80	0.75	1.25	3	0.033	3.3	3.0	0.10	1.3	1.26	1.0	1.14
C1M_P	POOR	15.24	5	0.75	0.80	0.75	1.25	3	0.026	2.6	3.0	0.10	1.3	1.26	1.0	1.11



C1H - Concrete Moment Frames

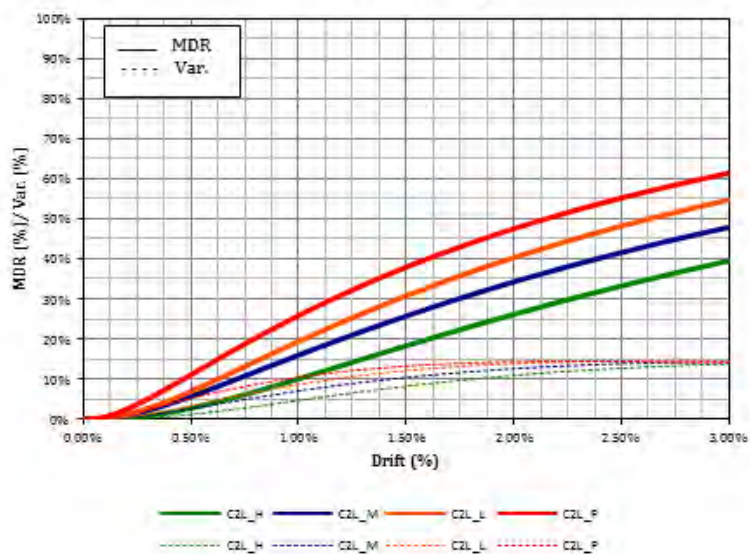
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C1H_H	HIGH	36.58	12	1.45	0.75	0.60	1.1	3	0.067	4.0	3.0	0.10	1.4	1.26	1.0	1.19
C1H_M	MEDIUM	36.58	12	1.45	0.75	0.60	1.1	3	0.033	3.0	3.0	0.10	1.4	1.26	1.0	1.16
C1H_L	LOW	36.58	12	1.45	0.75	0.60	1.1	3	0.017	2.5	3.0	0.10	1.4	1.26	1.0	1.14
C1H_P	POOR	36.58	12	1.45	0.75	0.60	1.1	3	0.014	2.0	3.0	0.10	1.4	1.26	1.0	1.13



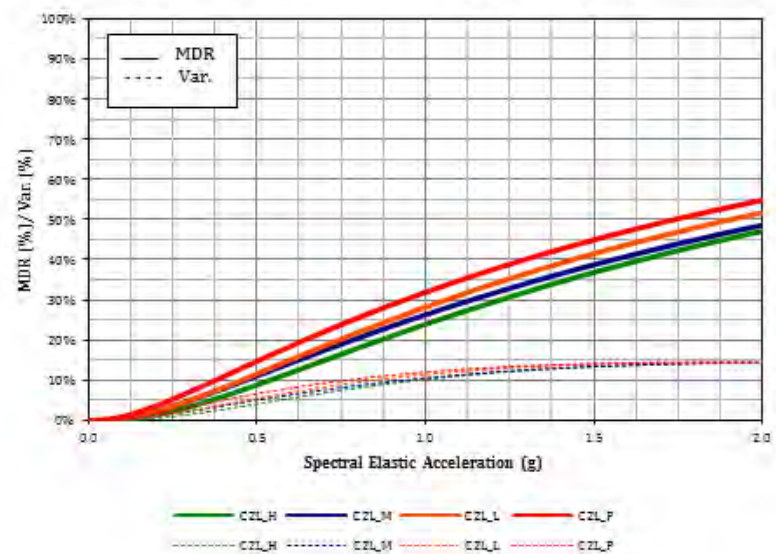
C2L - Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C2L_H	HIGH	6.10	2	0.35	0.75	0.75	1.5	2.5	0.200	8.0	15.0	0.10	1.2	1.51	1.7	1.28
C2L_M	MEDIUM	6.10	2	0.35	0.75	0.75	1.5	2.5	0.100	6.0	15.0	0.10	1.2	1.51	1.4	1.21
C2L_L	LOW	6.10	2	0.35	0.75	0.75	1.5	2.5	0.050	5.0	15.0	0.10	1.2	1.51	1.3	1.18
C2L_P	POOR	6.10	2	0.35	0.75	0.75	1.5	2.5	0.040	4.0	15.0	0.10	1.2	1.51	1.2	1.14

Drift (%) vs. MDR (%)



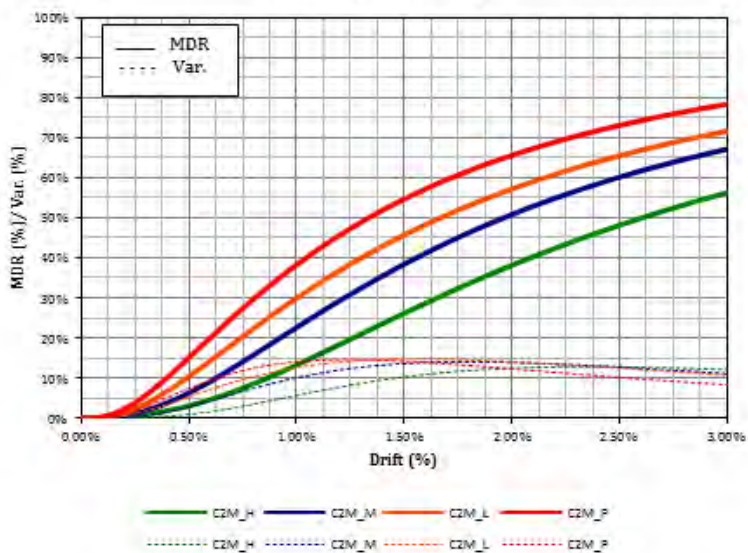
Spectral Elastic Acceleration (g) vs. MDR (%)



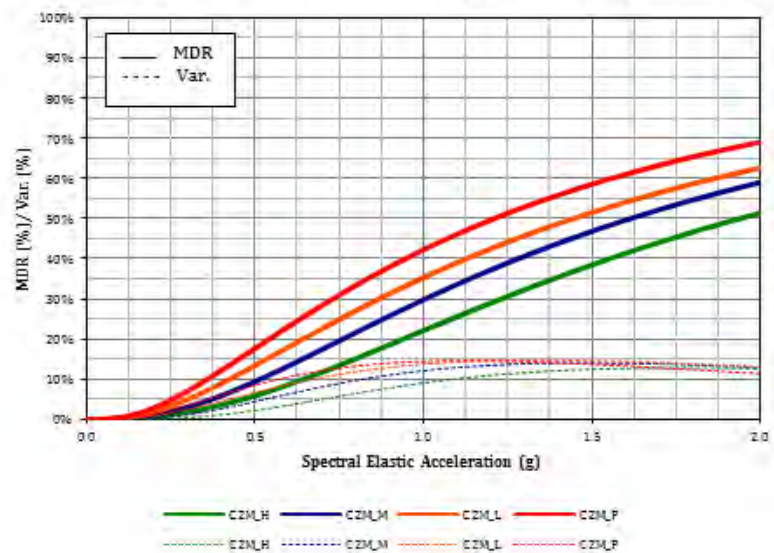
C2M - Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C2M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2.5	0.200	5.3	15.0	0.10	1.2	1.51	1.2	1.20
C2M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2.5	0.100	4.0	15.0	0.10	1.2	1.51	1.1	1.16
C2M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2.5	0.050	3.3	15.0	0.10	1.2	1.51	1.1	1.14
C2M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2.5	0.040	2.6	15.0	0.10	1.2	1.51	1.0	1.11

Drift (%) vs. MDR (%)



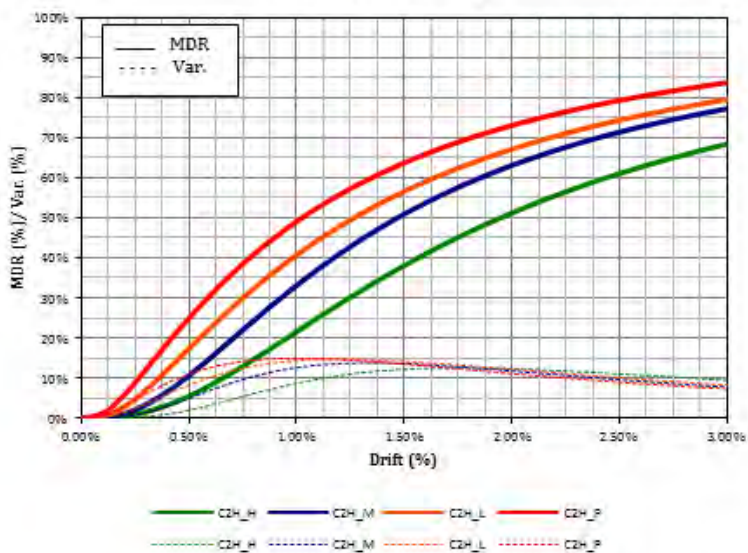
Spectral Elastic Acceleration (g) vs. MDR (%)



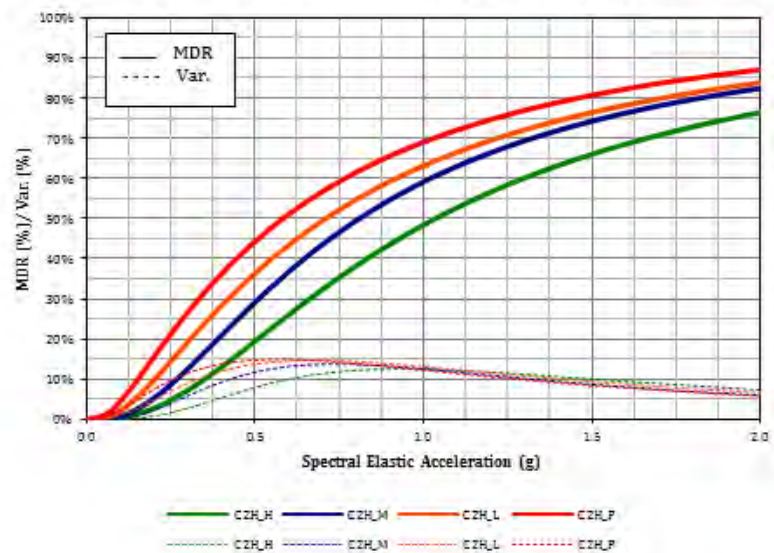
C2H - Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C2H_H	HIGH	36.58	12	1.09	0.65	0.60	1.1	2.5	0.150	4.0	15.0	0.10	1.3	1.51	1.0	1.19
C2H_M	MEDIUM	36.58	12	1.09	0.65	0.60	1.1	2.5	0.075	3.0	15.0	0.10	1.3	1.51	1.0	1.16
C2H_L	LOW	36.58	12	1.09	0.65	0.60	1.1	2.5	0.038	2.5	15.0	0.10	1.3	1.51	1.0	1.14
C2H_P	POOR	36.58	12	1.09	0.65	0.60	1.1	2.5	0.030	2.0	15.0	0.10	1.3	1.51	1.0	1.13

Drift (%) vs. MDR (%)



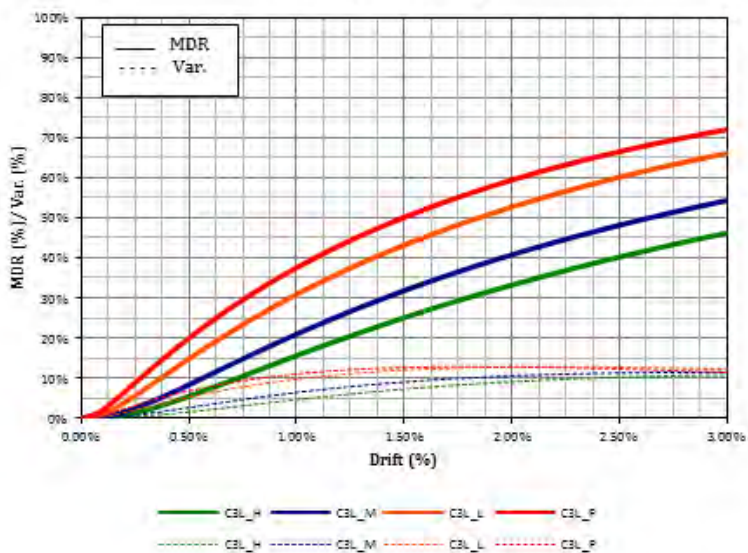
Spectral Elastic Acceleration (g) vs. MDR (%)



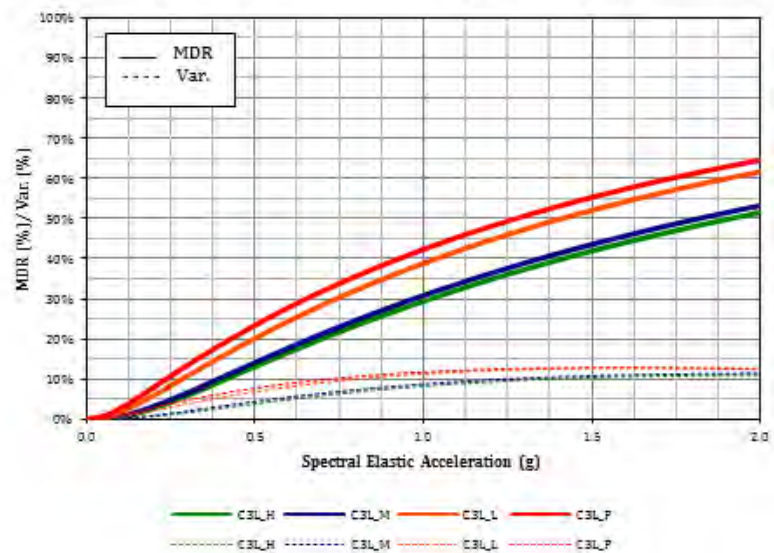
C3L - Concrete Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C3L_H	HIGH	6.10	2	0.35	0.75	0.75	1.5	2.25	0.167	8.0	6.0	0.10	1.2	1.40	1.7	1.28
C3L_M	MEDIUM	6.10	2	0.35	0.75	0.75	1.5	2.25	0.084	6.0	6.0	0.10	1.2	1.40	1.4	1.21
C3L_L	LOW	6.10	2	0.35	0.75	0.75	1.5	2.25	0.050	5.0	6.0	0.10	1.2	1.40	1.3	1.18
C3L_P	POOR	6.10	2	0.35	0.75	0.75	1.5	2.25	0.040	4.0	6.0	0.10	1.2	1.40	1.2	1.14

Drift (%) vs. MDR (%)



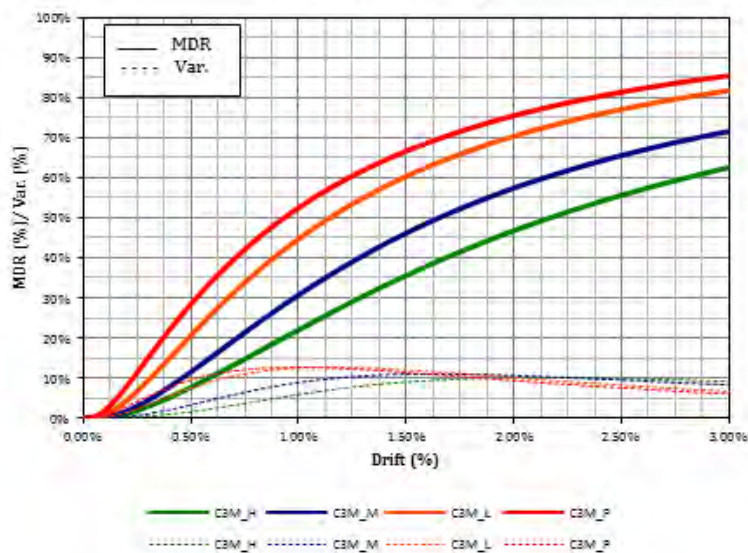
Spectral Elastic Acceleration (g) vs. MDR (%)



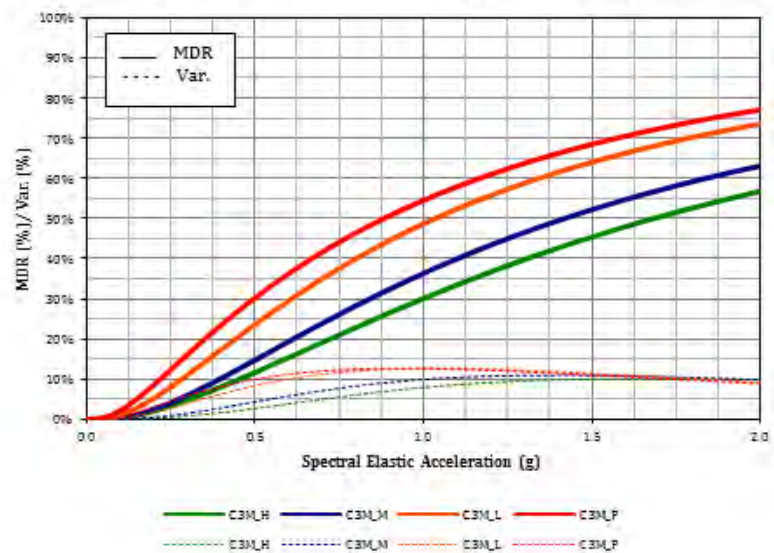
C3M - Concrete Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C3M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2.25	0.167	5.3	6.0	0.10	1.3	1.40	1.2	1.20
C3M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2.25	0.084	4.0	6.0	0.10	1.3	1.40	1.1	1.16
C3M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2.25	0.050	3.3	6.0	0.10	1.3	1.40	1.1	1.14
C3M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2.25	0.040	2.6	6.0	0.10	1.3	1.40	1.0	1.11

Drift (%) vs. MDR (%)

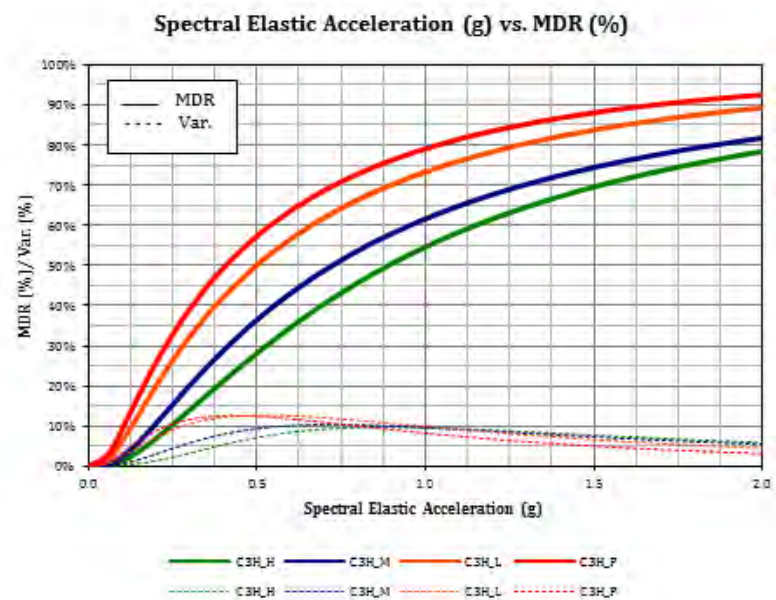
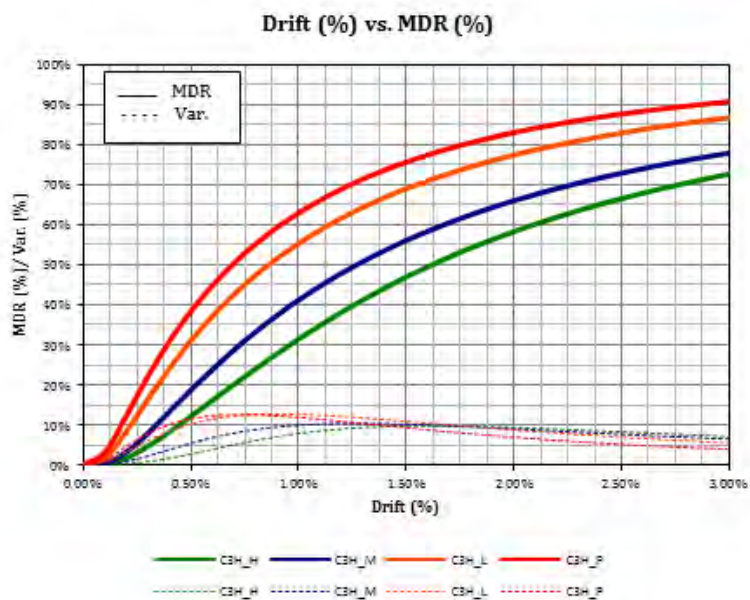


Spectral Elastic Acceleration (g) vs. MDR (%)



C3H - Concrete Frame with Unreinforced Masonry Infill Walls

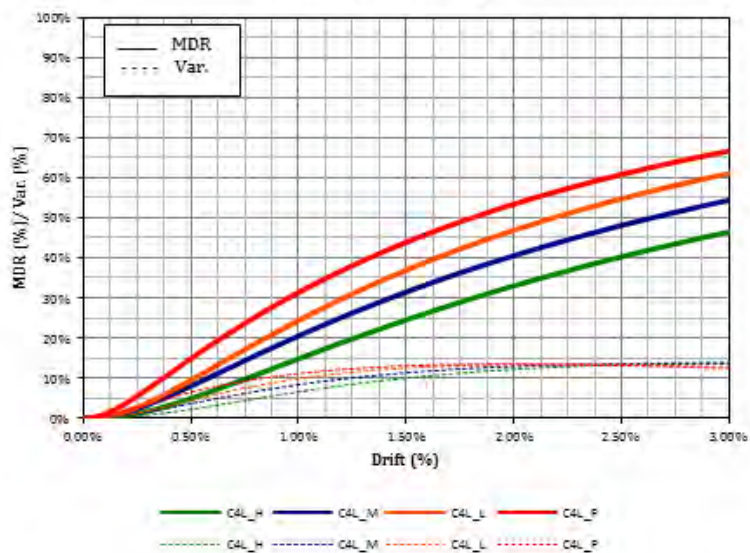
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C3H_H	HIGH	36.58	12	1.09	0.65	0.60	1.1	2.25	0.109	4.0	6.0	0.10	1.3	1.40	1.0	1.19
C3H_M	MEDIUM	36.58	12	1.09	0.65	0.60	1.1	2.25	0.054	3.0	6.0	0.10	1.3	1.40	1.0	1.16
C3H_L	LOW	36.58	12	1.09	0.65	0.60	1.1	2.25	0.038	2.5	6.0	0.10	1.3	1.40	1.0	1.14
C3H_P	POOR	36.58	12	1.09	0.65	0.60	1.1	2.25	0.030	2.0	6.0	0.10	1.3	1.40	1.0	1.13



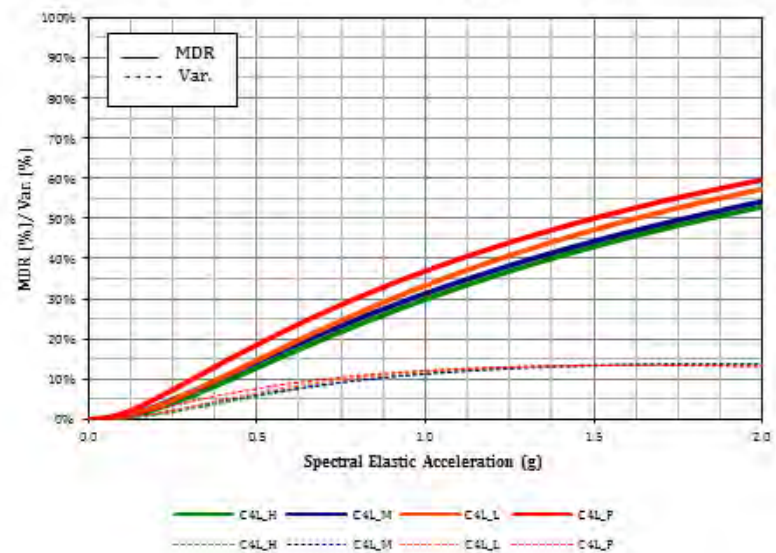
C4L - Reinforced Concrete Frames and Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C4L_H	HIGH	6.10	2	0.35	0.75	0.75	1.5	2	0.200	8.0	8.0	0.10	1.2	1.46	1.7	1.28
C4L_M	MEDIUM	6.10	2	0.35	0.75	0.75	1.5	2	0.100	6.0	8.0	0.10	1.2	1.46	1.4	1.21
C4L_L	LOW	6.10	2	0.35	0.75	0.75	1.5	2	0.050	5.0	8.0	0.10	1.2	1.46	1.3	1.18
C4L_P	POOR	6.10	2	0.35	0.75	0.75	1.5	2	0.040	4.0	8.0	0.10	1.2	1.46	1.2	1.14

Drift (%) vs. MDR (%)

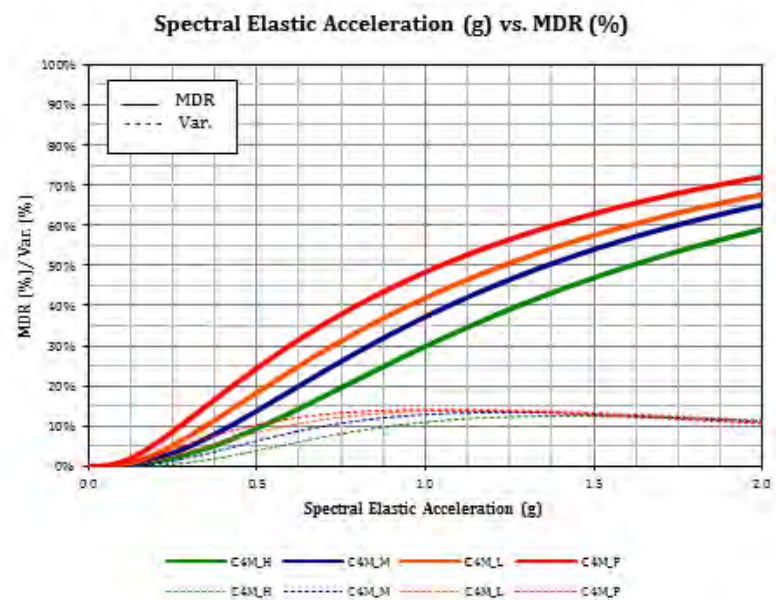
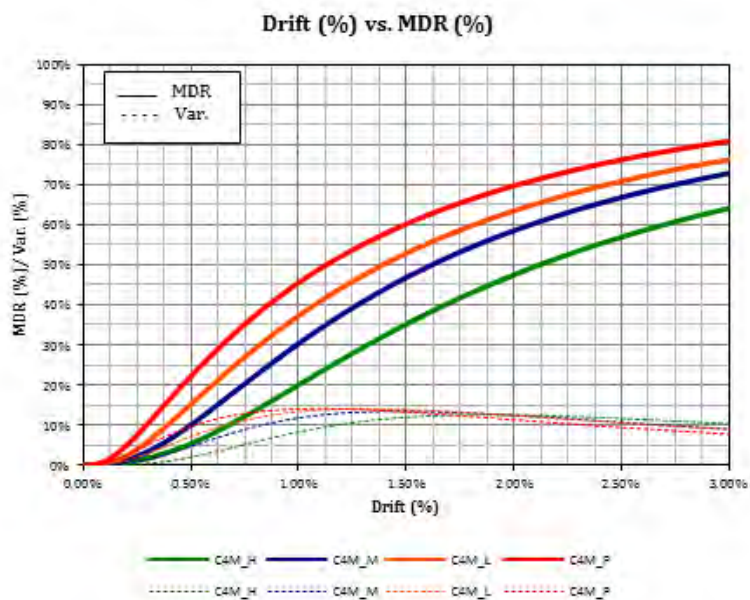


Spectral Elastic Acceleration (g) vs. MDR (%)



C4M - Reinforced Concrete Frames and Concrete Shear Walls

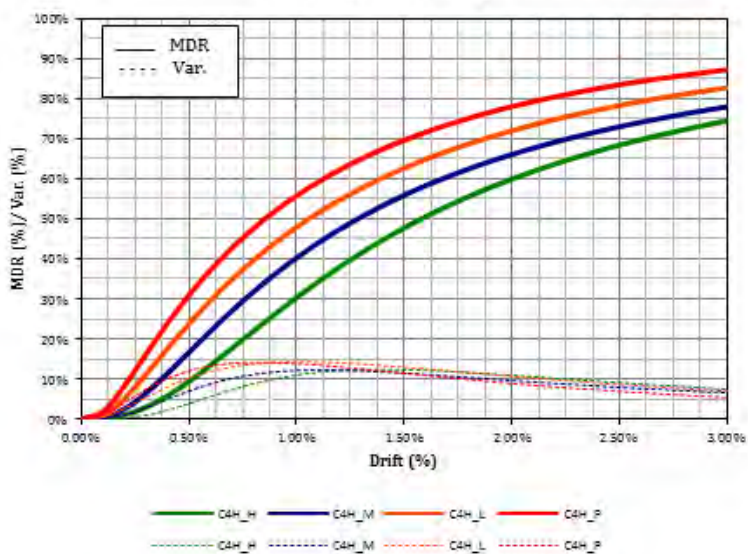
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C4M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2	0.200	5.3	8.0	0.10	1.3	1.46	1.2	1.20
C4M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2	0.100	4.0	8.0	0.10	1.3	1.46	1.1	1.16
C4M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2	0.050	3.3	8.0	0.10	1.3	1.46	1.1	1.14
C4M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2	0.040	2.6	8.0	0.10	1.3	1.46	1.0	1.11



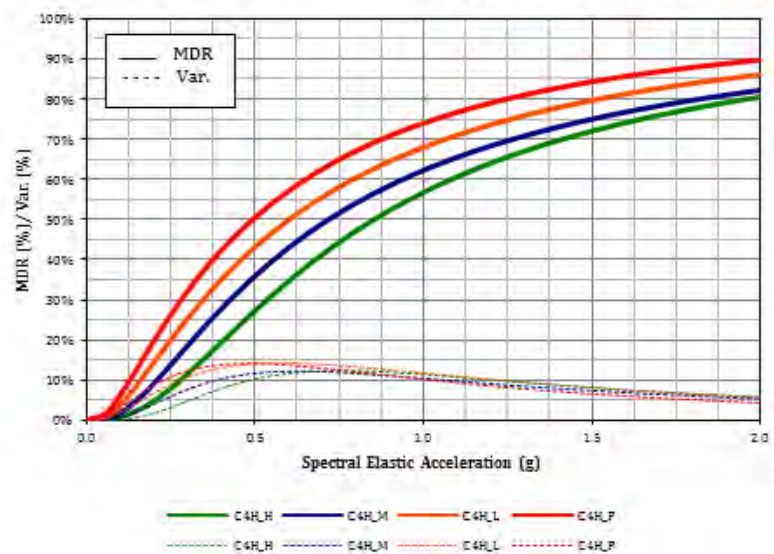
C4H - Reinforced Concrete Frames and Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C4H_H	HIGH	36.58	12	1.09	0.65	0.60	1.1	2	0.150	4.0	8.0	0.10	1.3	1.46	1.0	1.19
C4H_M	MEDIUM	36.58	12	1.09	0.65	0.60	1.1	2	0.075	3.0	8.0	0.10	1.3	1.46	1.0	1.16
C4H_L	LOW	36.58	12	1.09	0.65	0.60	1.1	2	0.038	2.5	8.0	0.10	1.3	1.46	1.0	1.14
C4H_P	POOR	36.58	12	1.09	0.65	0.60	1.1	2	0.030	2.0	8.0	0.10	1.3	1.46	1.0	1.13

Drift (%) vs. MDR (%)



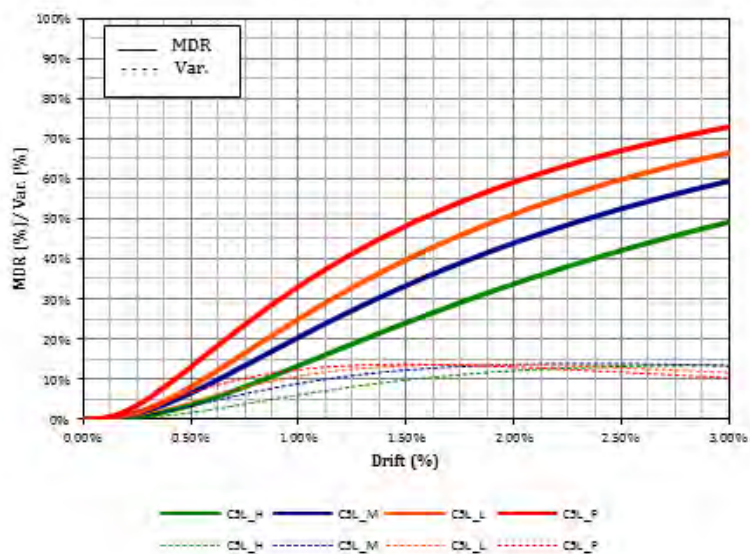
Spectral Elastic Acceleration (g) vs. MDR (%)



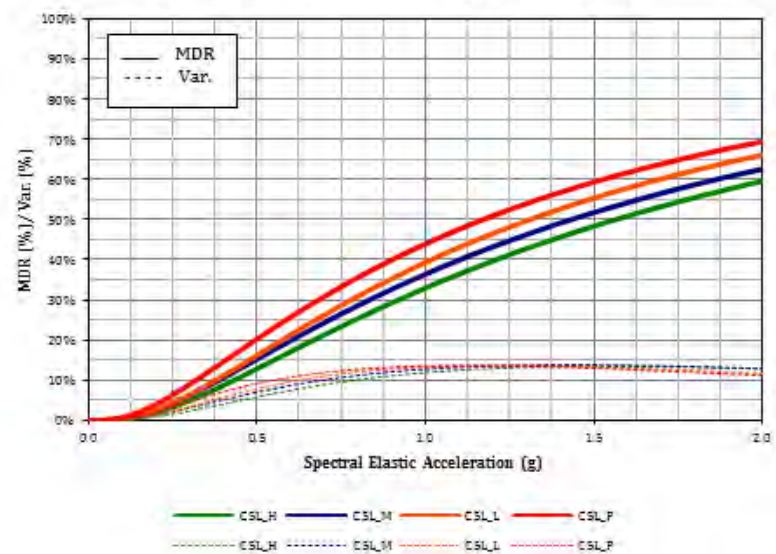
C5L - Flat Slab Structure

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C5L_H	HIGH	6.10	2	0.40	0.80	0.75	1.5	2.7	0.133	8.0	3.0	0.10	1.2	1.26	1.5	1.28
C5L_M	MEDIUM	6.10	2	0.40	0.80	0.75	1.5	2.7	0.067	6.0	3.0	0.10	1.2	1.26	1.4	1.21
C5L_L	LOW	6.10	2	0.40	0.80	0.75	1.5	2.7	0.033	5.0	3.0	0.10	1.2	1.26	1.3	1.18
C5L_P	POOR	6.10	2	0.40	0.80	0.75	1.5	2.7	0.026	4.0	3.0	0.10	1.2	1.26	1.2	1.14

Drift (%) vs. MDR (%)

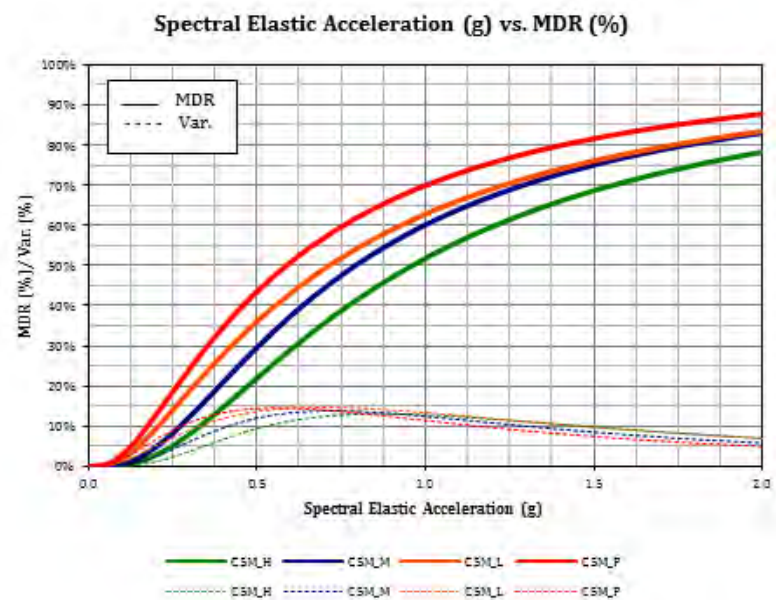
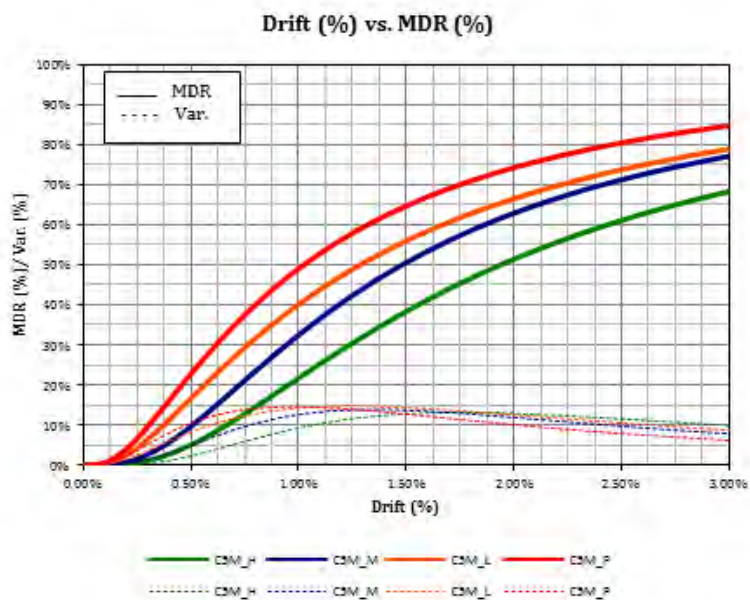


Spectral Elastic Acceleration (g) vs. MDR (%)



C5M - Flat Slab Structure

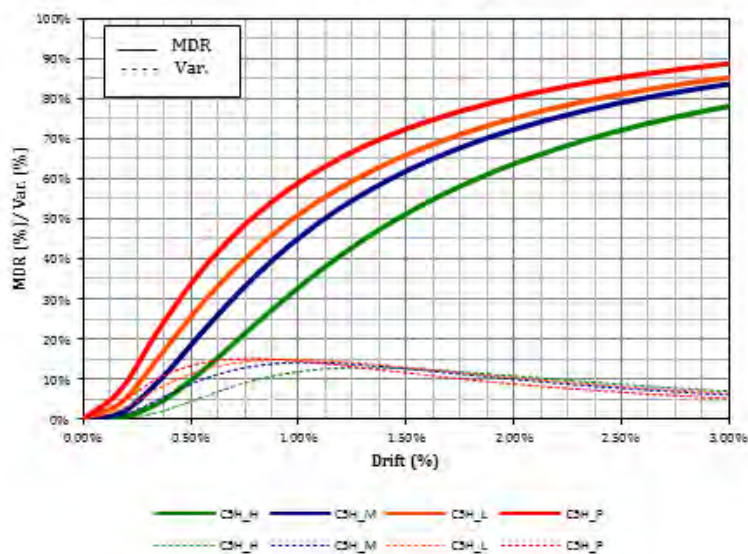
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C5M_H	HIGH	15.24	5	0.75	0.80	0.75	1.25	2.7	0.133	5.3	3.0	0.10	1.3	1.26	1.1	1.20
C5M_M	MEDIUM	15.24	5	0.75	0.80	0.75	1.25	2.7	0.067	4.0	3.0	0.10	1.3	1.26	1.0	1.16
C5M_L	LOW	15.24	5	0.75	0.80	0.75	1.25	2.7	0.033	3.3	3.0	0.10	1.3	1.26	1.0	1.14
C5M_P	POOR	15.24	5	0.75	0.80	0.75	1.25	2.7	0.026	2.6	3.0	0.10	1.3	1.26	1.0	1.11



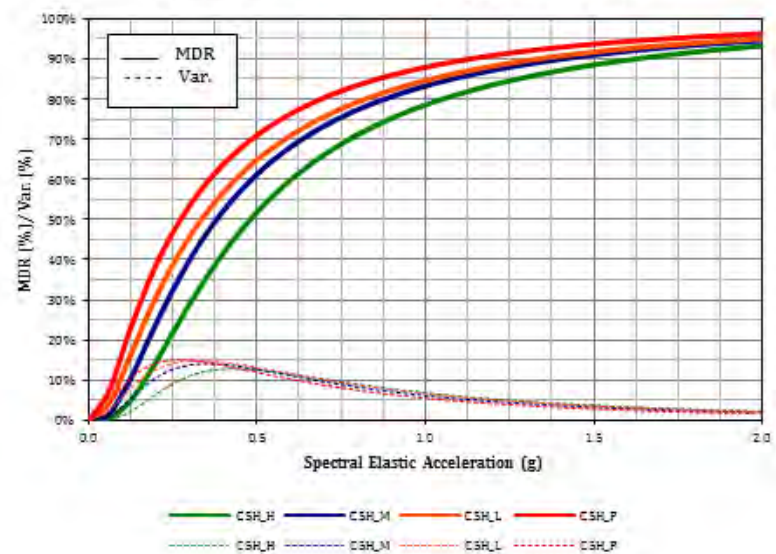
C5H - Flat Slab Structure

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
C5H_H	HIGH	36.58	12	1.45	0.75	0.60	1.1	2.7	0.067	4.0	3.0	0.10	1.4	1.26	1.0	1.19
C5H_M	MEDIUM	36.58	12	1.45	0.75	0.60	1.1	2.7	0.033	3.0	3.0	0.10	1.4	1.26	1.0	1.16
C5H_L	LOW	36.58	12	1.45	0.75	0.60	1.1	2.7	0.017	2.5	3.0	0.10	1.4	1.26	1.0	1.14
C5H_P	POOR	36.58	12	1.45	0.75	0.60	1.1	2.7	0.014	2.0	3.0	0.10	1.4	1.26	1.0	1.13

Drift (%) vs. MDR (%)



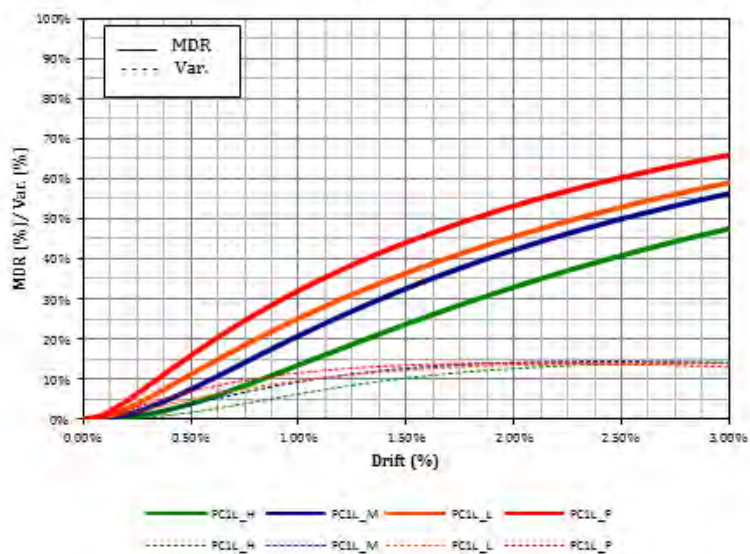
Spectral Elastic Acceleration (g) vs. MDR (%)



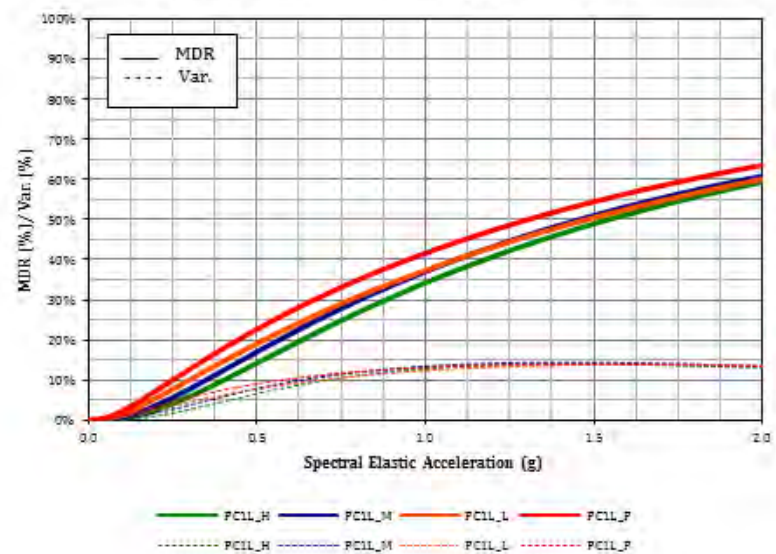
PC1L - Precast Concrete Tilt-Up Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
PC1L_H	HIGH	4.57	1	0.35	0.50	0.75	1.5	2	0.200	8.0	10.0	0.10	1.0	1.48	1.7	1.27
PC1L_M	MEDIUM	4.57	1	0.35	0.50	0.75	1.5	2	0.100	6.0	10.0	0.10	1.0	1.48	1.4	1.21
PC1L_L	LOW	4.57	1	0.35	0.50	0.75	1.5	2	0.050	5.0	10.0	0.10	1.0	1.48	1.3	1.17
PC1L_P	POOR	4.57	1	0.35	0.50	0.75	1.5	2	0.040	4.0	10.0	0.10	1.0	1.48	1.2	1.14

Drift (%) vs. MDR (%)



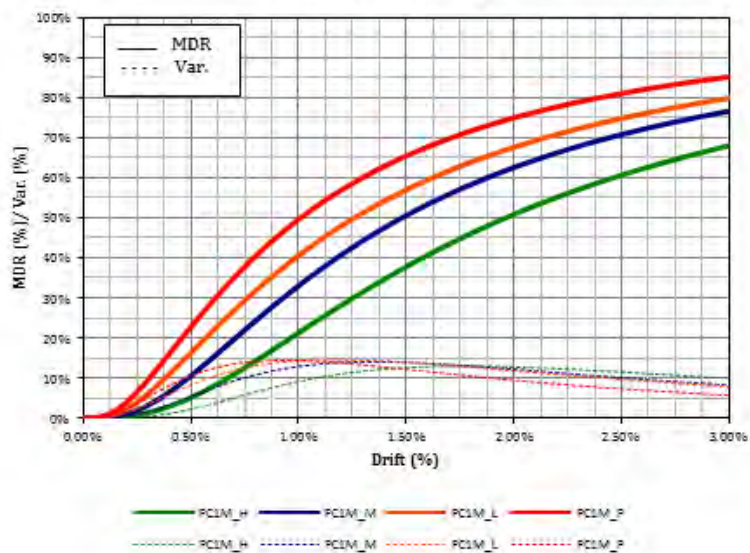
Spectral Elastic Acceleration (g) vs. MDR (%)



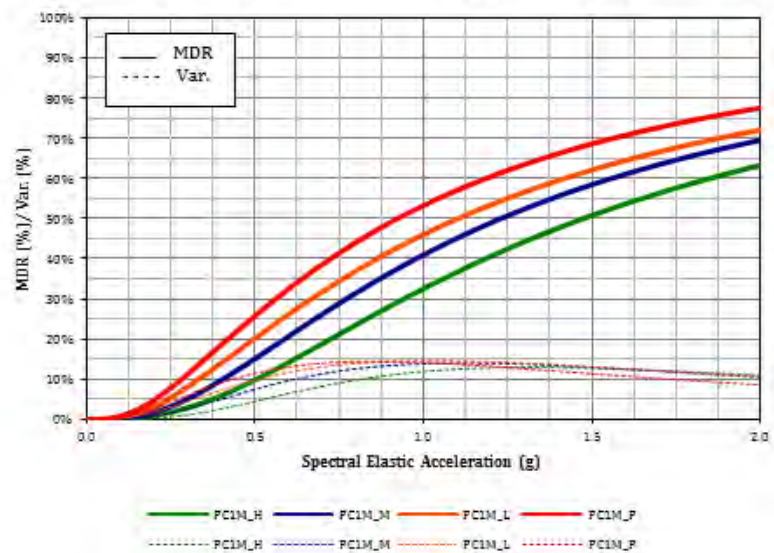
PC1M - Precast Concrete Tilt-Up Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
PC1M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2	0.200	5.3	10.0	0.10	1.3	1.48	1.2	1.20
PC1M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2	0.100	4.0	10.0	0.10	1.3	1.48	1.1	1.16
PC1M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2	0.050	3.3	10.0	0.10	1.3	1.48	1.1	1.14
PC1M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2	0.040	2.6	10.0	0.10	1.3	1.48	1.0	1.11

Drift (%) vs. MDR (%)



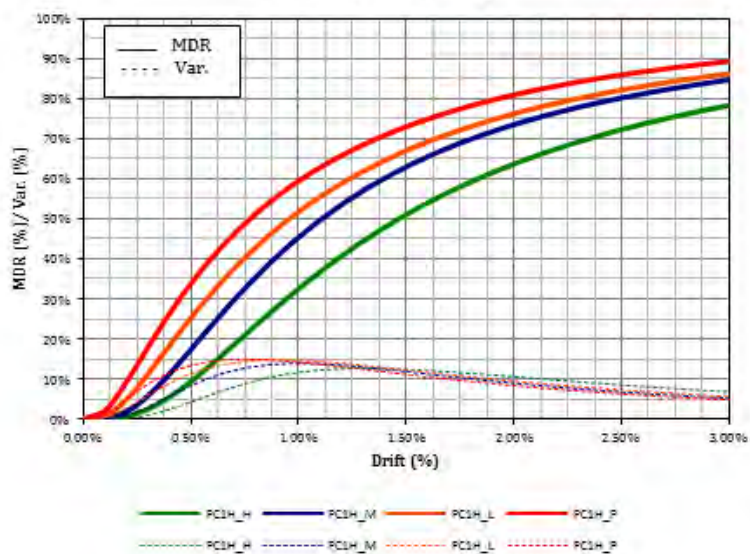
Spectral Elastic Acceleration (g) vs. MDR (%)



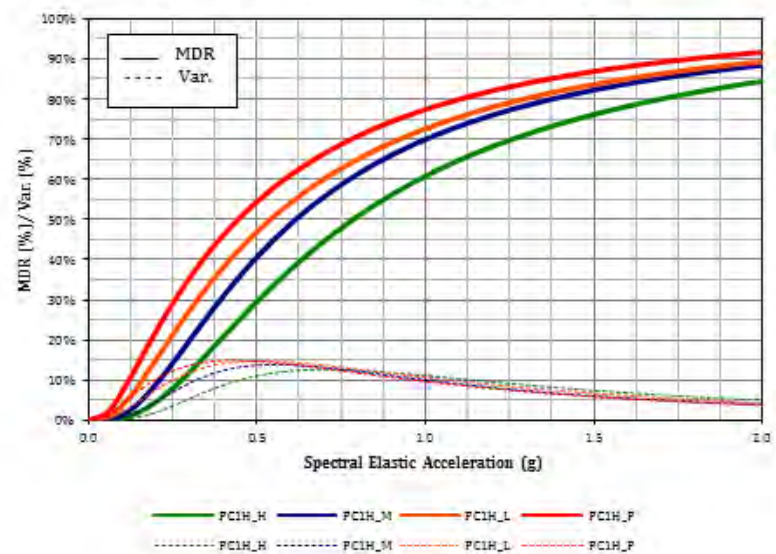
PC1H - Precast Concrete Tilt-Up Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
PC1H_H	HIGH	36.58	12	1.09	0.65	0.60	1.1	2	0.150	4.0	10.0	0.10	1.3	1.48	1.0	1.19
PC1H_M	MEDIUM	36.58	12	1.09	0.65	0.60	1.1	2	0.075	3.0	10.0	0.10	1.3	1.48	1.0	1.16
PC1H_L	LOW	36.58	12	1.09	0.65	0.60	1.1	2	0.038	2.5	10.0	0.10	1.3	1.48	1.0	1.14
PC1H_P	POOR	36.58	12	1.09	0.65	0.60	1.1	2	0.030	2.0	10.0	0.10	1.3	1.48	1.0	1.13

Drift (%) vs. MDR (%)



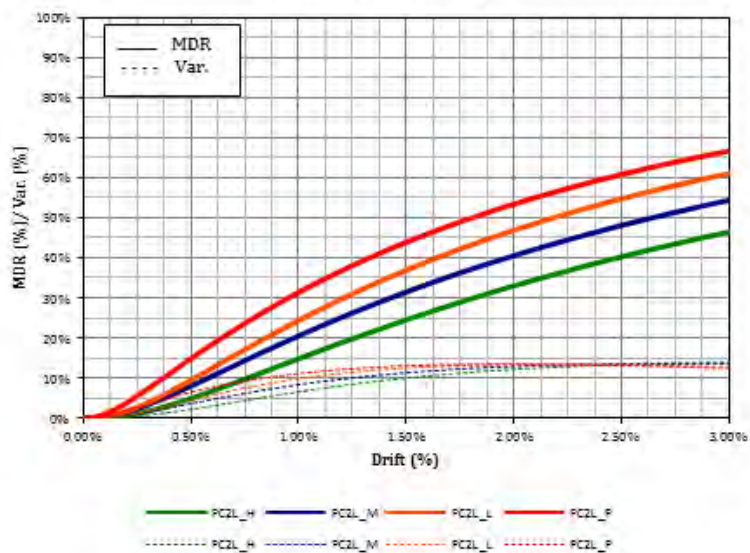
Spectral Elastic Acceleration (g) vs. MDR (%)



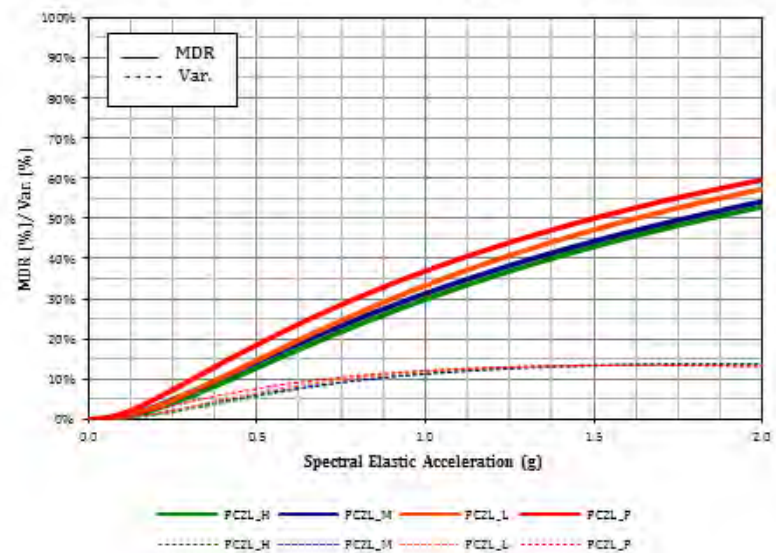
PC2L - Precast Concrete Frames with Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
PC2L_H	HIGH	6.10	2	0.35	0.75	0.75	1.5	2	0.200	8.0	8.0	0.10	1.2	1.46	1.7	1.28
PC2L_M	MEDIUM	6.10	2	0.35	0.75	0.75	1.5	2	0.100	6.0	8.0	0.10	1.2	1.46	1.4	1.21
PC2L_L	LOW	6.10	2	0.35	0.75	0.75	1.5	2	0.050	5.0	8.0	0.10	1.2	1.46	1.3	1.18
PC2L_P	POOR	6.10	2	0.35	0.75	0.75	1.5	2	0.040	4.0	8.0	0.10	1.2	1.46	1.2	1.14

Drift (%) vs. MDR (%)

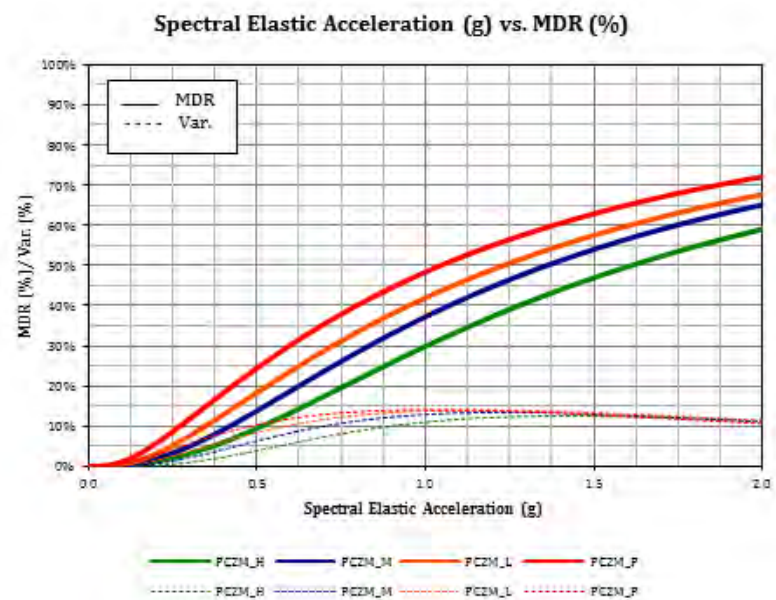
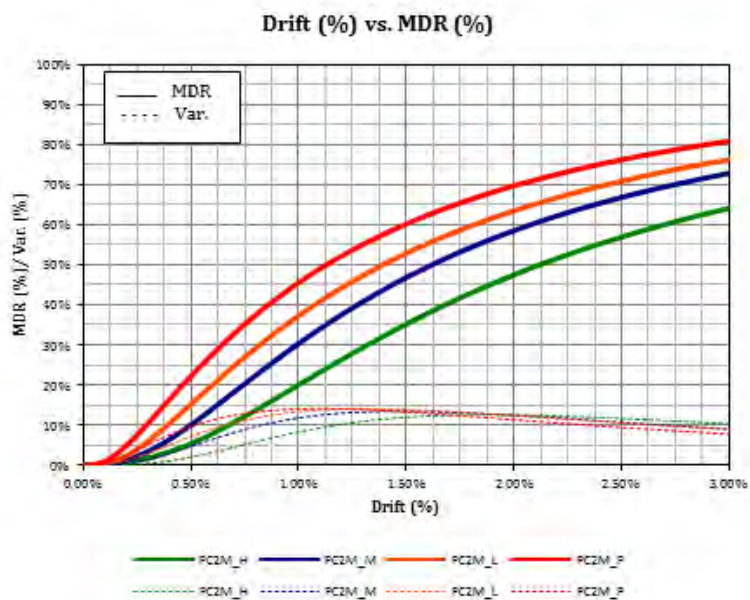


Spectral Elastic Acceleration (g) vs. MDR (%)



PC2M - Precast Concrete Frames with Concrete Shear Walls

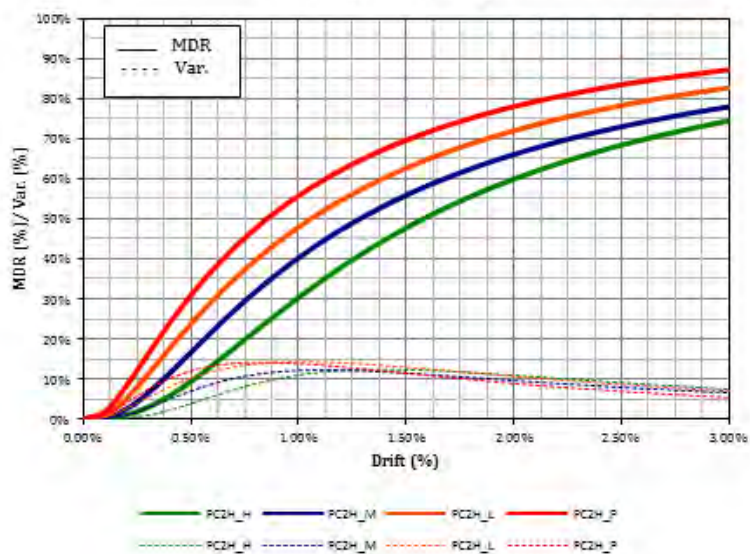
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
PC2M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2	0.200	5.3	8.0	0.10	1.3	1.46	1.2	1.20
PC2M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2	0.100	4.0	8.0	0.10	1.3	1.46	1.1	1.16
PC2M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2	0.050	3.3	8.0	0.10	1.3	1.46	1.1	1.14
PC2M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2	0.040	2.6	8.0	0.10	1.3	1.46	1.0	1.11



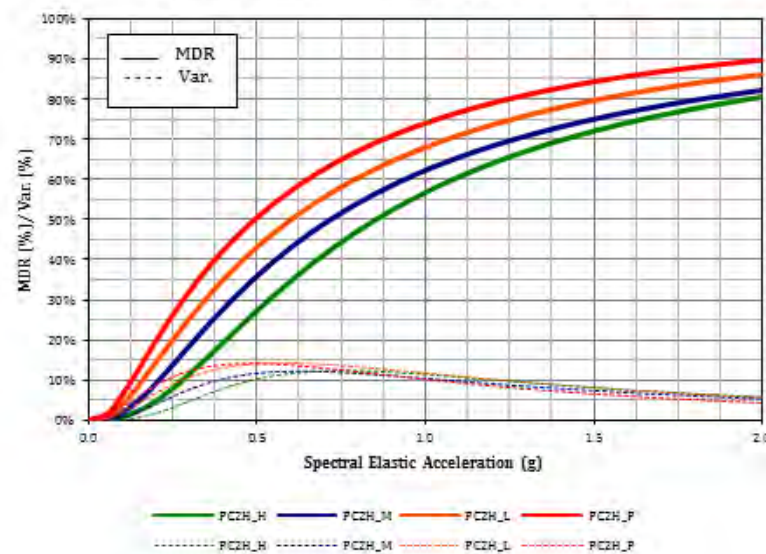
PC2H - Precast Concrete Frames with Concrete Shear Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
PC2H_H	HIGH	36.58	12	1.09	0.65	0.60	1.1	2	0.150	4.0	8.0	0.10	1.3	1.46	1.0	1.19
PC2H_M	MEDIUM	36.58	12	1.09	0.65	0.60	1.1	2	0.075	3.0	8.0	0.10	1.3	1.46	1.0	1.16
PC2H_L	LOW	36.58	12	1.09	0.65	0.60	1.1	2	0.038	2.5	8.0	0.10	1.3	1.46	1.0	1.14
PC2H_P	POOR	36.58	12	1.09	0.65	0.60	1.1	2	0.030	2.0	8.0	0.10	1.3	1.46	1.0	1.13

Drift (%) vs. MDR (%)



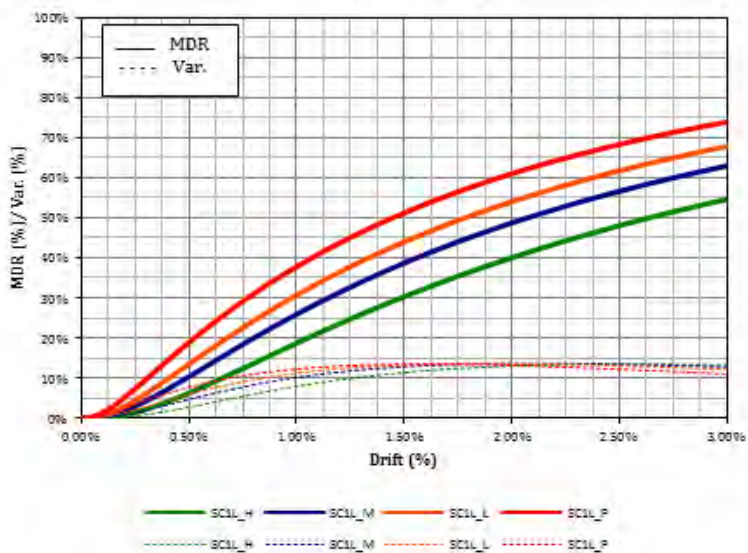
Spectral Elastic Acceleration (g) vs. MDR (%)



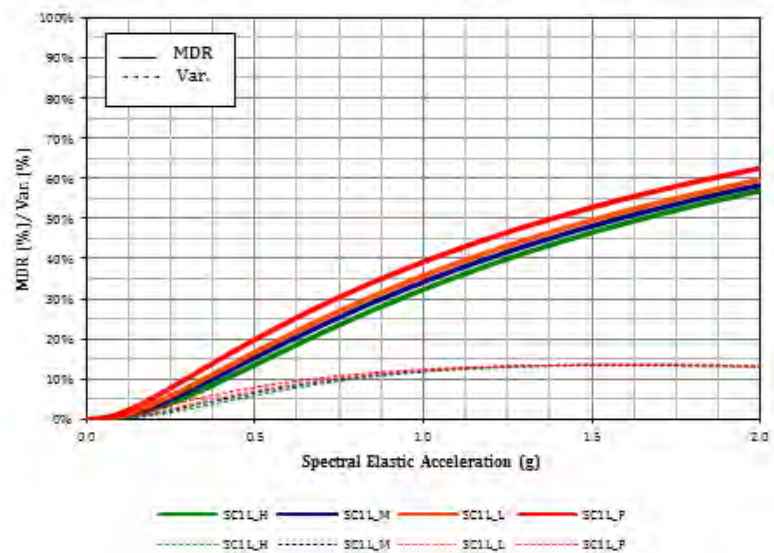
SC1L - Reinforced Concrete Frames and Steel Truss Girder (Warehouses)

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
SC1L_H	HIGH	4.57	1	0.32	0.75	0.75	1.5	2	0.240	8.0	1.0	0.10	1.0	1.30	1.7	1.27
SC1L_M	MEDIUM	4.57	1	0.32	0.75	0.75	1.5	2	0.120	6.0	1.0	0.10	1.0	1.30	1.5	1.21
SC1L_L	LOW	4.57	1	0.32	0.75	0.75	1.5	2	0.060	5.0	1.0	0.10	1.0	1.30	1.4	1.17
SC1L_P	POOR	4.57	1	0.32	0.75	0.75	1.5	2	0.048	4.0	1.0	0.10	1.0	1.30	1.3	1.14

Drift (%) vs. MDR (%)



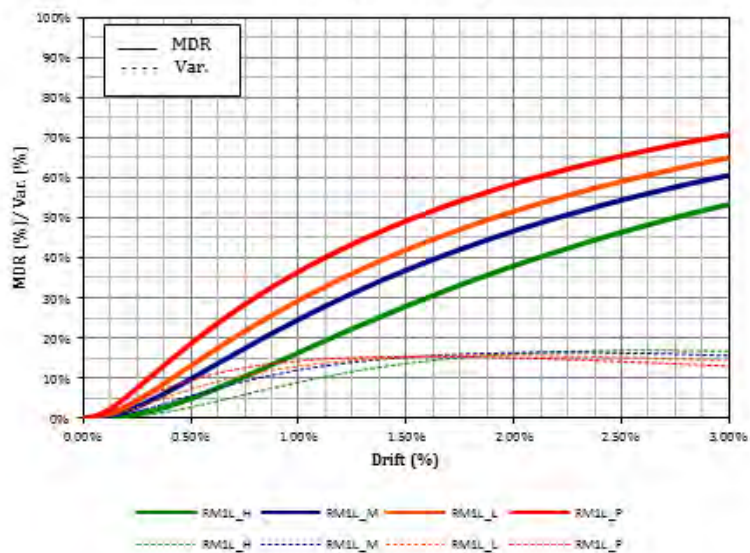
Spectral Elastic Acceleration (g) vs. MDR (%)



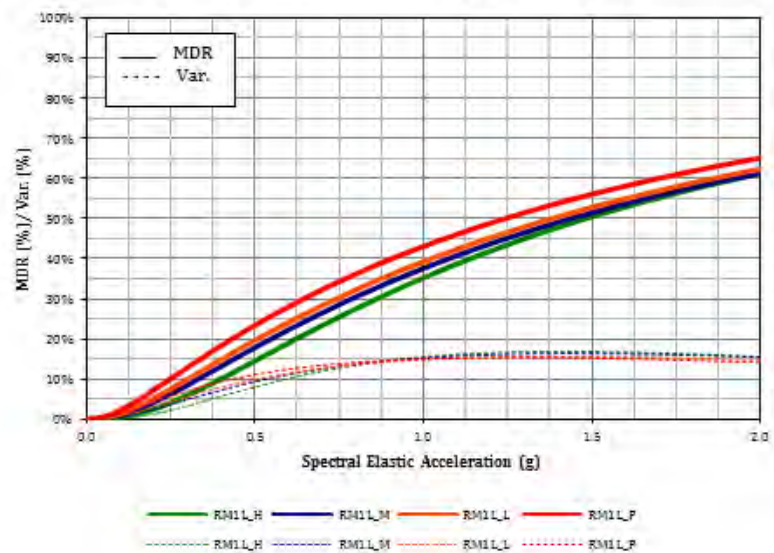
RM1L - Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
RM1L_H	HIGH	6.10	2	0.35	0.75	0.75	1.5	2	0.267	8.0	15.0	0.10	1.2	1.51	1.7	1.28
RM1L_M	MEDIUM	6.10	2	0.35	0.75	0.75	1.5	2	0.133	6.0	15.0	0.10	1.2	1.51	1.4	1.21
RM1L_L	LOW	6.10	2	0.35	0.75	0.75	1.5	2	0.067	5.0	15.0	0.10	1.2	1.51	1.3	1.18
RM1L_P	POOR	6.10	2	0.35	0.75	0.75	1.5	2	0.054	4.0	15.0	0.10	1.2	1.51	1.2	1.14

Drift (%) vs. MDR (%)



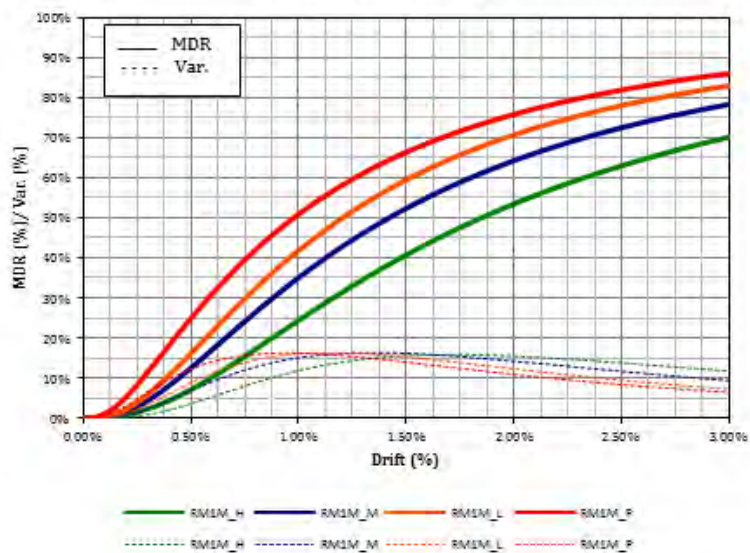
Spectral Elastic Acceleration (g) vs. MDR (%)



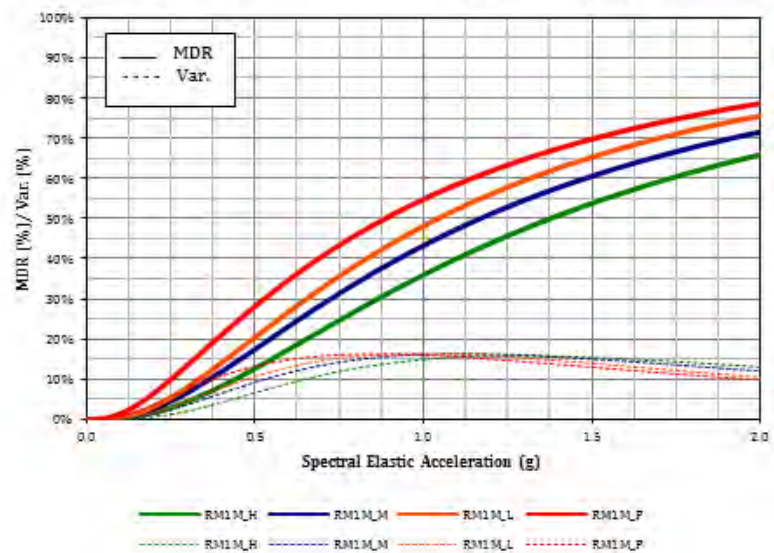
RM1M - Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
RM1M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2	0.267	5.3	15.0	0.10	1.2	1.51	1.2	1.20
RM1M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2	0.133	4.0	15.0	0.10	1.2	1.51	1.1	1.16
RM1M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2	0.067	3.3	15.0	0.10	1.2	1.51	1.1	1.14
RM1M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2	0.054	2.6	15.0	0.10	1.2	1.51	1.0	1.11

Drift (%) vs. MDR (%)



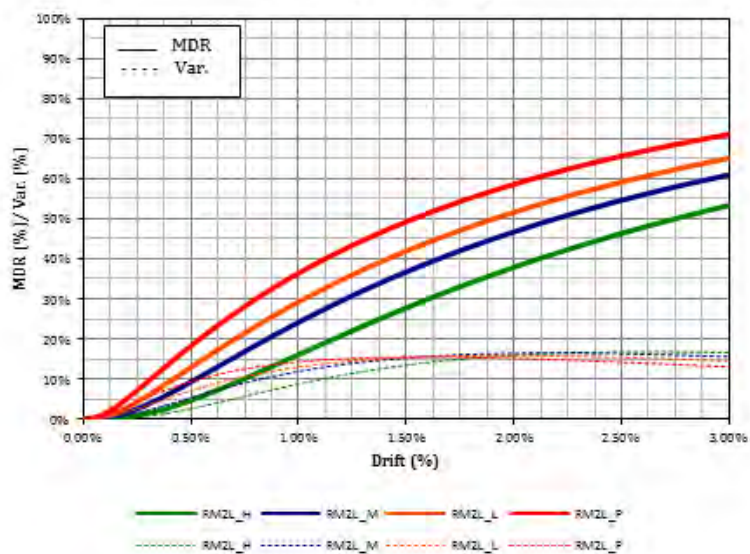
Spectral Elastic Acceleration (g) vs. MDR (%)



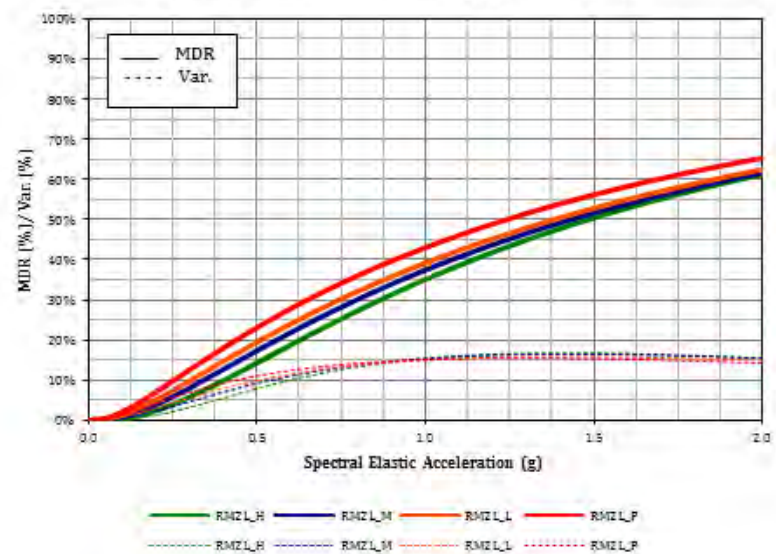
RM2L - Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
RM2L_H	HIGH	6.10	2	0.35	0.75	0.75	1.5	2	0.267	8.0	15.0	0.10	1.2	1.51	1.7	1.28
RM2L_M	MEDIUM	6.10	2	0.35	0.75	0.75	1.5	2	0.133	6.0	15.0	0.10	1.2	1.51	1.4	1.21
RM2L_L	LOW	6.10	2	0.35	0.75	0.75	1.5	2	0.067	5.0	15.0	0.10	1.2	1.51	1.3	1.18
RM2L_P	POOR	6.10	2	0.35	0.75	0.75	1.5	2	0.054	4.0	15.0	0.10	1.2	1.51	1.2	1.14

Drift (%) vs. MDR (%)

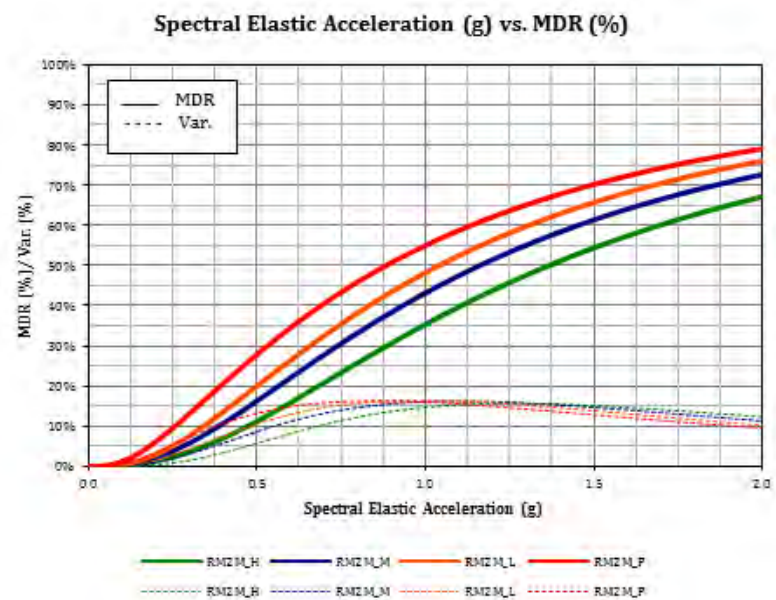
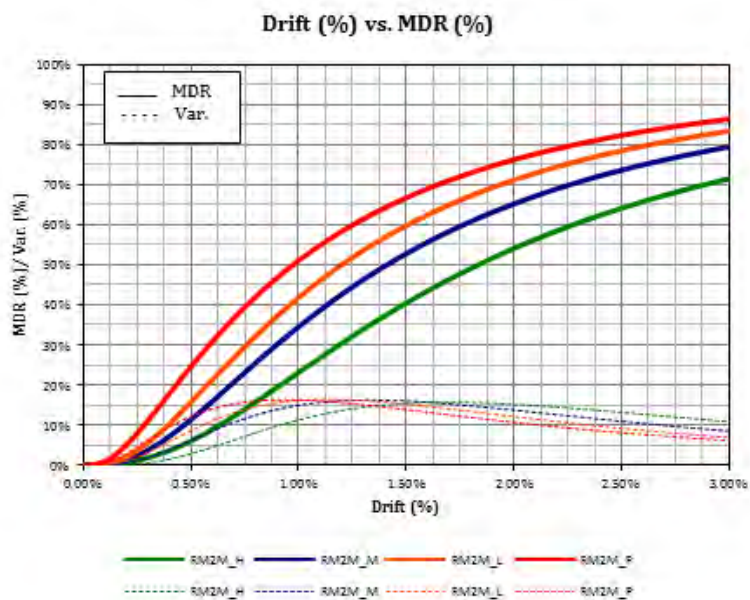


Spectral Elastic Acceleration (g) vs. MDR (%)



RM2M - Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms

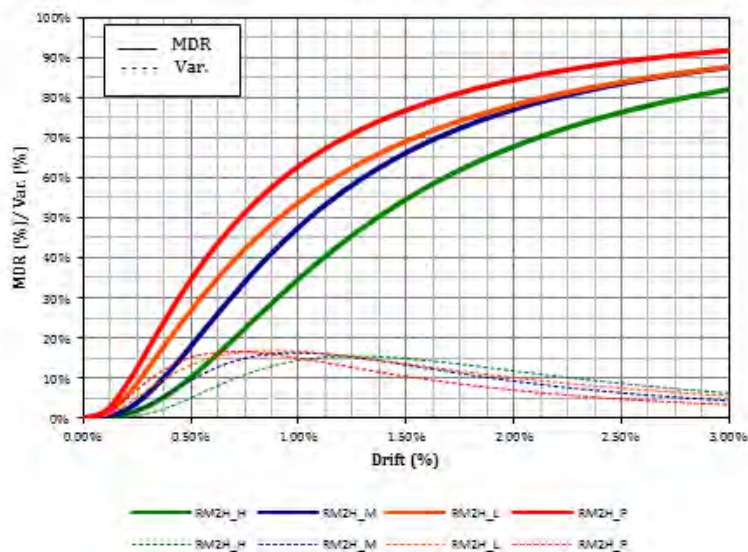
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
RM2M_H	HIGH	15.24	5	0.56	0.75	0.75	1.25	2	0.267	5.3	15.0	0.10	1.2	1.51	1.2	1.20
RM2M_M	MEDIUM	15.24	5	0.56	0.75	0.75	1.25	2	0.133	4.0	15.0	0.10	1.2	1.51	1.1	1.16
RM2M_L	LOW	15.24	5	0.56	0.75	0.75	1.25	2	0.067	3.3	15.0	0.10	1.2	1.51	1.1	1.14
RM2M_P	POOR	15.24	5	0.56	0.75	0.75	1.25	2	0.054	2.6	15.0	0.10	1.2	1.51	1.0	1.11



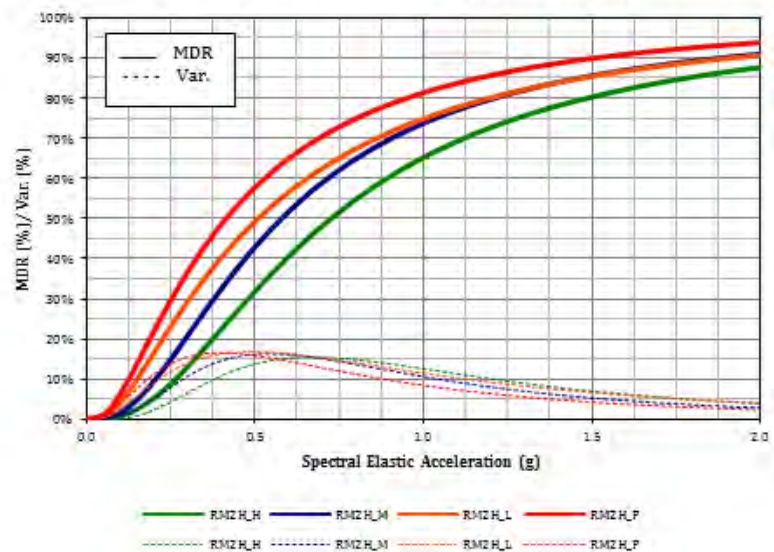
RM2H - Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
RM2H_H	HIGH	36.58	12	1.09	0.65	0.60	1.1	2	0.200	4.0	15.0	0.10	1.3	1.51	1.0	1.19
RM2H_M	MEDIUM	36.58	12	1.09	0.65	0.60	1.1	2	0.100	3.0	15.0	0.10	1.3	1.51	1.0	1.16
RM2H_L	LOW	36.58	12	1.09	0.65	0.60	1.1	2	0.050	2.5	15.0	0.10	1.3	1.51	1.0	1.14
RM2H_P	POOR	36.58	12	1.09	0.65	0.60	1.1	2	0.040	2.0	15.0	0.10	1.3	1.51	1.0	1.13

Drift (%) vs. MDR (%)

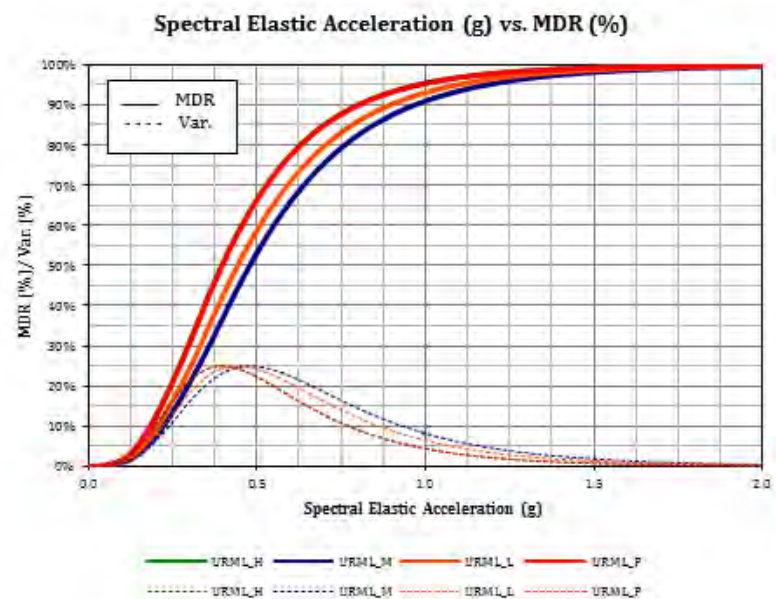
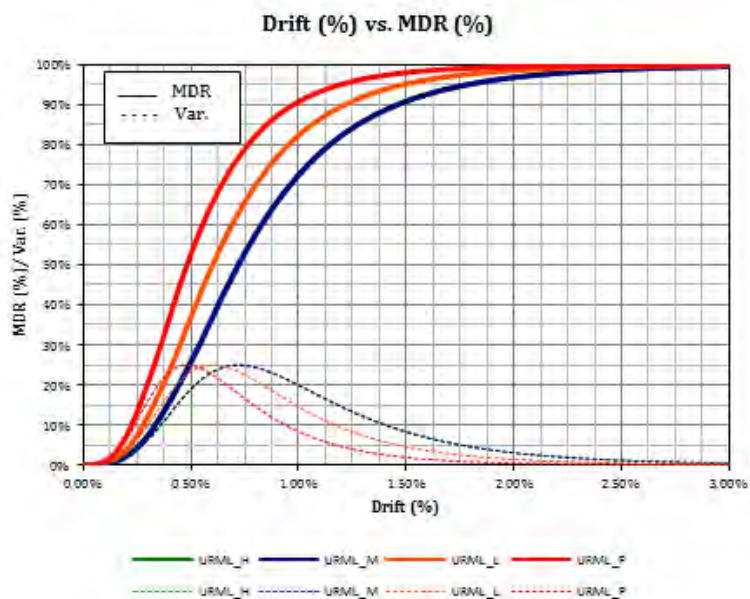


Spectral Elastic Acceleration (g) vs. MDR (%)



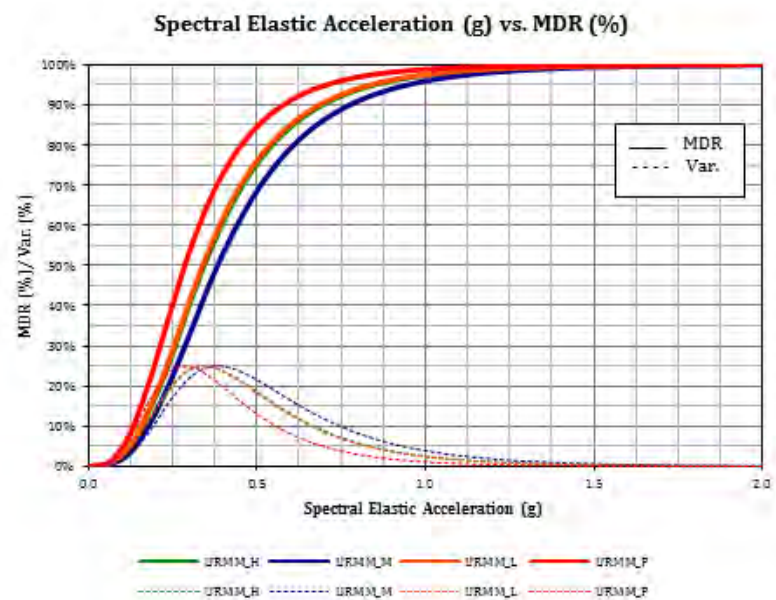
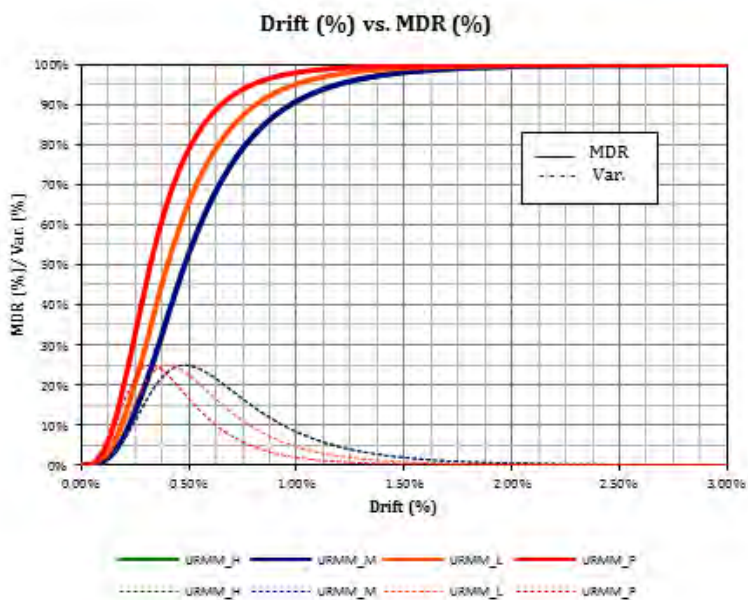
URML - Unreinforced Masonry Bearing Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
URML_H	HIGH	4.57	1	0.35	0.50	0.75	1.5	2	0.080	8.0	1.0	0.10	1.0	1.30	1.7	1.27
URML_M	MEDIUM	4.57	1	0.35	0.50	0.75	1.5	2	0.080	6.0	1.0	0.10	1.0	1.30	1.4	1.21
URML_L	LOW	4.57	1	0.35	0.50	0.75	1.5	2	0.067	5.0	1.0	0.10	1.0	1.30	1.3	1.17
URML_P	POOR	4.57	1	0.35	0.50	0.75	1.5	2	0.054	4.0	1.0	0.10	1.0	1.30	1.2	1.14



URMM - Unreinforced Masonry Bearing Walls

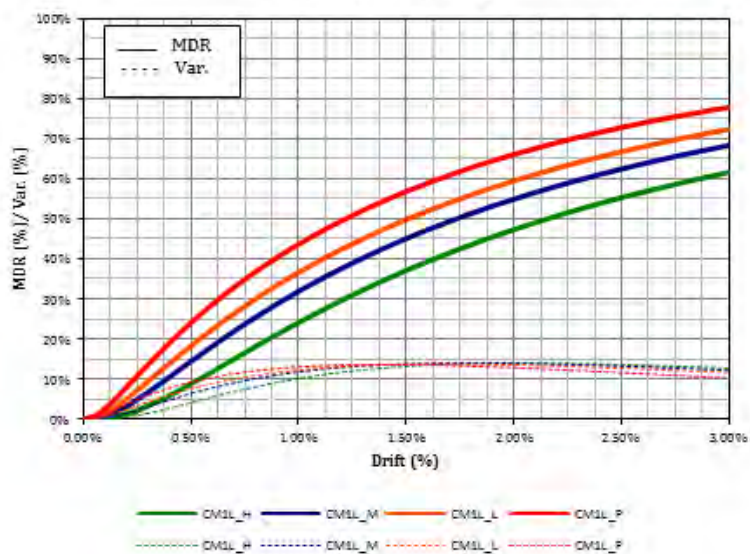
BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
URMM_H	HIGH	10.67	3	0.50	0.75	0.75	1.25	2	0.080	5.3	1.0	0.10	1.3	1.30	1.2	1.19
URMM_M	MEDIUM	10.67	3	0.50	0.75	0.75	1.25	2	0.080	4.0	1.0	0.10	1.3	1.30	1.1	1.15
URMM_L	LOW	10.67	3	0.50	0.75	0.75	1.25	2	0.067	3.3	1.0	0.10	1.3	1.30	1.1	1.13
URMM_P	POOR	10.67	3	0.50	0.75	0.75	1.25	2	0.054	2.6	1.0	0.10	1.3	1.30	1.0	1.10



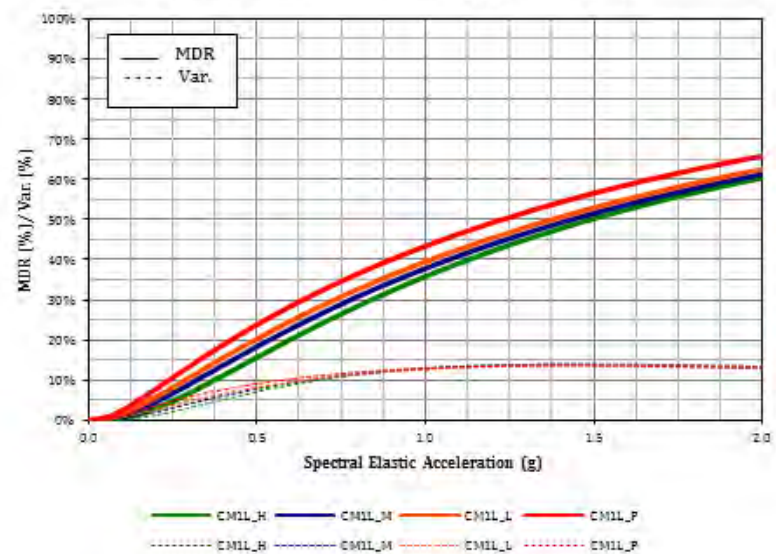
CM1L - Confined Masonry Walls

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
CM1L_H	HIGH	9.14	3	0.40	0.75	0.75	1.5	2	0.267	8.0	1.0	0.10	1.3	1.30	1.5	1.28
CM1L_M	MEDIUM	9.14	3	0.40	0.75	0.75	1.5	2	0.133	6.0	1.0	0.10	1.3	1.30	1.4	1.22
CM1L_L	LOW	9.14	3	0.40	0.75	0.75	1.5	2	0.067	5.0	1.0	0.10	1.3	1.30	1.3	1.18
CM1L_P	POOR	9.14	3	0.40	0.75	0.75	1.5	2	0.054	4.0	1.0	0.10	1.3	1.30	1.2	1.15

Drift (%) vs. MDR (%)

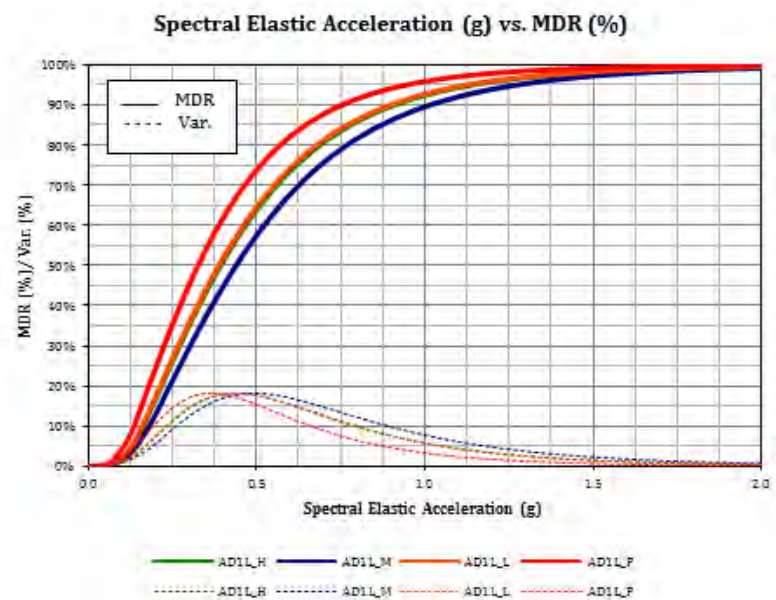
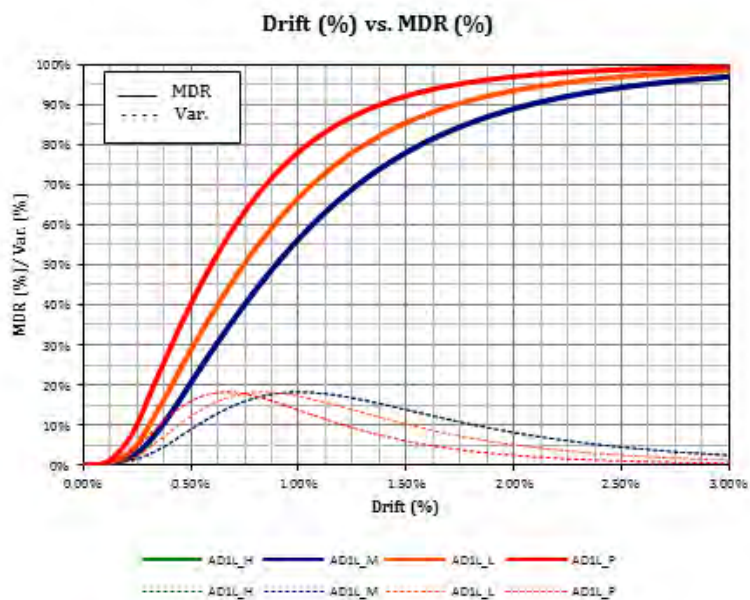


Spectral Elastic Acceleration (g) vs. MDR (%)



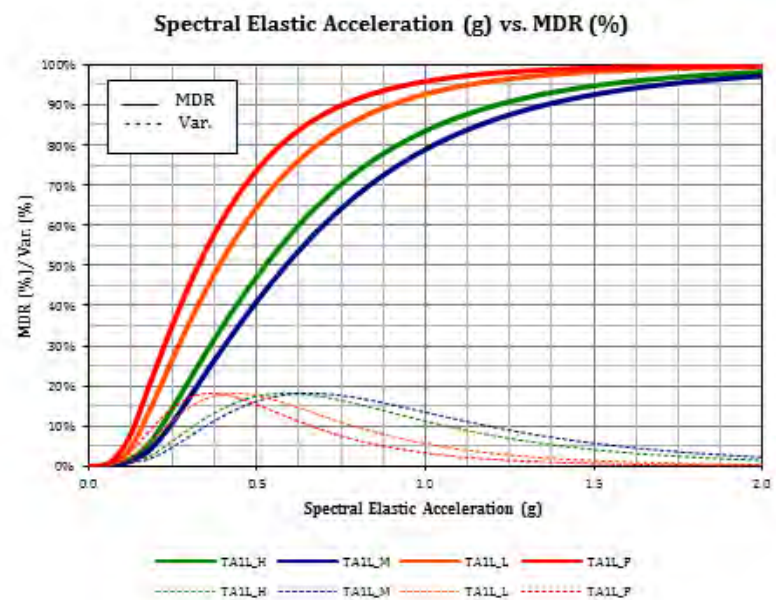
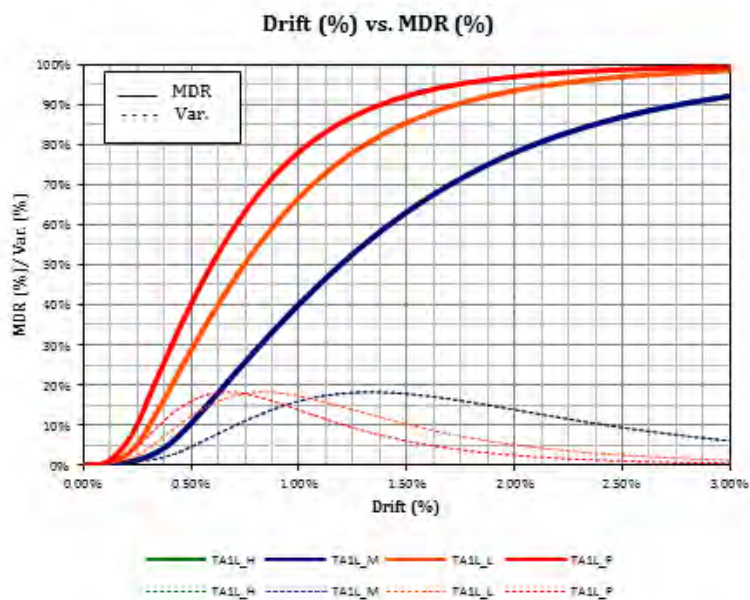
AD1L - Adobe

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α_1	α_2	γ	λ	Cs	μ	α	a	β_1	β_2	β_3	β_4
AD1L_H	HIGH	6.10	2	0.50	0.50	0.75	1.5	1.5	0.060	5.3	1.0	0.10	1.2	1.30	1.2	1.19
AD1L_M	MEDIUM	6.10	2	0.50	0.50	0.75	1.5	1.5	0.060	4.0	1.0	0.10	1.2	1.30	1.1	1.14
AD1L_L	LOW	6.10	2	0.50	0.50	0.75	1.5	1.5	0.050	3.3	1.0	0.10	1.2	1.30	1.1	1.12
AD1L_P	POOR	6.10	2	0.50	0.50	0.75	1.5	1.5	0.040	2.6	1.0	0.10	1.2	1.30	1.0	1.10



TA1L - Tapia

BUILDING PARAMETERS											MIRANDA PARAMETERS					
FUNCTION	SEISMIC DESIGN LEVEL	H (m)	Np	Te (sec)	α1	α2	γ	λ	Cs	μ	α	a	β1	β2	β3	β4
TA1L_H	HIGH	6.10	2	0.50	0.50	0.75	1.5	1.5	0.060	5.3	1.0	0.10	1.2	1.30	1.2	1.19
TA1L_M	MEDIUM	6.10	2	0.50	0.50	0.75	1.5	1.5	0.060	4.0	1.0	0.10	1.2	1.30	1.1	1.14
TA1L_L	LOW	6.10	2	0.50	0.50	0.75	1.5	1.5	0.050	3.3	1.0	0.10	1.2	1.30	1.1	1.12
TA1L_P	POOR	6.10	2	0.50	0.50	0.75	1.5	1.5	0.040	2.6	1.0	0.10	1.2	1.30	1.0	1.10



ANNEX 16. SEISMIC DESIGN LEVEL (H, M, L, P) FOR ALL CONSTRUCTION CLASSES.

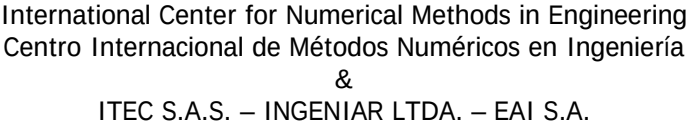
Table A16 - 1
Seismic design level (H, M, L, P) for all construction classes

General Description	PAGER STR	Description	STRUCTURAL SYSTEM CATEGORY	Country Development Level																																			
				H												MH						ML						L											
				Complexity City Level						Complexity City Level						Complexity City Level						Complexity City Level																	
				M			L			H			M			L			H			M			L			H			M			L					
				Hazard Level			Hazard Level			Hazard Level			Hazard Level			Hazard Level			Hazard Level			Hazard Level			Hazard Level			Hazard Level			Hazard Level								
Wood/Timber	W	Wood	W1	H	H	H	H	M	L	H	M	M	H	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P	
	W1	Wood stud-wall frame with plywood/gypsum board sheathing. Absence of masonry infill walls. Shear wall system consists of plywood or manufactured wood panels. Exterior is commonly cement plaster ("stucco"), wood or vinyl planks, or aluminum planks (in lower cost houses). In addition, brick masonry or stone is sometimes applied to the exterior as a non-load-bearing veneer. The roof and floor act as diaphragms to resist lateral loading (US & Canadian single family homes).	W1	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P	
	W2	Wood frame, heavy members (with area > 5000 sq. ft.) (US & Canadian commercial and industrial wood frame).	W2	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	M	L	M	L	L	L	H	M	L	M	L	L	L	L	L	
	W3	Light post and beam wood frame. The floors and roofs do not act as diaphragms. No bracing, poor seismic load resistance path with poor connections. Timber frame may have partial infill walls with or without timber cladding.	W1	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P	
	W4	Wooden panel or log construction. (Typically in central Asia, Russia). Walls are made of timber logs sawn horizontally in a square or circular cross section and assembled with special end joints.	W1	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P	
	W5	Walls with bamboo/light timber log/reed mesh and post (Wattle and Daub). (Wattle and Daub- a woven lattice/sticks of wooden strips called wattle is daubed with a sticky material usually made of some combination of wet soil, clay, sand, animal dung and straw).	W1	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P	
	W6	Unbraced heavy post and beam wood frame with mud or other infill material. Un-braced timber frame with connections meant to resist (gravity) vertical loads only. Floors or roof consists of wood purlins supporting thatched roof, wood planks or rafters supporting clay tiles.	W1	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P	
	W7	Braced wood frame with load-bearing infill wall system. Frame is diagonally braced and infill walls are generally made of brick masonry, adobe, or wooden planks or wattle & daub infill. (European style)	W2	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	
Adobe/Mud Walls	M	Mud walls	TA1L	H	H	H	H	M	H	M	M	M	L	L	L	L	P	L	P	P	M	L	L	L	L	P	L	P	P	L	P	P	P	P	P	P	P	P	P
	M1	Mud walls without horizontal wood elements	TA1L	H	H	H	H	M	H	M	M	M	L	L	L	L	P	L	P	P	M	L	L	L	L	P	L	P	P	L	P	P	P	P	P	P	P	P	
	M2	Mud walls with horizontal wood elements	TA1L	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P
	A	Adobe blocks (unbaked sundried mud block) walls	AD1L	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P
	A1	Adobe block, mud mortar, wood roof and floors	AD1L	H	H	H	H	M	H	M	M	H	M	L	M	M	L	M	L	P	H	M	L	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P
	A2	Adobe block, mud mortar, bamboo, straw, and thatch roof	AD1L	H	H	H	H	M	H	M	M	H	M	L	M	M	L	M	L	P	H	M	L	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P
	A3	Adobe block, straw, and thatch roof cement-sand mortar	AD1L	H	H	H	H	M	H	M	M	H	M	L	M	M	L	M	L	P	H	M	L	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P
	A4	Adobe block, mud mortar, reinforced concrete bond beam, cane and mud roof	AD1L	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P



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General Description	PAGES-STR	Description	STRUCTURAL SYSTEM GAB3	Country Development Level																																															
				H								MH								ML								L																							
				Complexity City Level								Complexity City Level								Complexity City Level								Complexity City Level																							
				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level								Hazard Level								Hazard Level								Hazard Level																							
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L												
A5	Adobe block, mud mortar, with bamboo or rope reinforcement	AD1L	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P													
RE	Rammed Earth/Pneumatically impacted stabilized earth	TA1L	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	P	L	P	P													
RS	Rubble stone (field stone) masonry	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
RS1	Local field stones dry stacked (no mortar) with timber floors, earth, or metal roof.	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
RS2	Local field stones with mud mortar.	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
RS3	Local field stones with lime mortar.	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
RS4	Local field stones with cement mortar, vaulted brick roof and floors	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	L												
RS5	Local field stones with cement mortar and reinforced concrete bond beam.	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	L												
DS	Rectangular cut-stone masonry block	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
DS1	Rectangular cut stone masonry block with mud mortar, timber roof and floors	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
DS2	Rectangular cut stone masonry block with lime mortar	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P												
DS3	Rectangular cut stone masonry block with cement mortar	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	L												
DS4	Rectangular cut stone masonry block with reinforced concrete floors and roof	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	L												
MS	Massive stone masonry in lime or cement mortar	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	L												
Stone/Block Masonry	UCB	Unreinforced concrete block masonry with lime or cement mortar	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L												
	UFB	Unreinforced fired brick masonry	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P											
	UFB1	Unreinforced brick masonry in mud mortar without timber posts	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P											
	UFB2	Unreinforced brick masonry in mud mortar with timber posts	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P											
	UFB3	Unreinforced brick masonry in lime mortar	URML	H	H	H	H	H	M	H	M	M	H	M	M	M	M	L	M	L	P	H	M	M	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P											
	UFB4	Unreinforced fired brick masonry, cement mortar, timber flooring, timber or steel beams and columns, tie courses (bricks aligned perpendicular to the plane of the wall)	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L	L											
Brick Masonry	UFB5	Unreinforced fired brick masonry, cement mortar, but with reinforced concrete floor and roof slabs	URML	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L	L												
	RM	Reinforced masonry	RM1M	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	L	L	L	L	L	P											
	RM1	Reinforced masonry bearing walls with wood or metal deck diaphragms	RM1L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	M	L	P	H	M	L	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P											
	RM1L	Reinforced masonry bearing walls with wood or metal deck diaphragms low-rise	RM1L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	M	L	P	H	M	L	M	M	L	M	L	P	M	L	L	L	L	L	P	L	P	P											
	RM1M	Reinforced masonry bearing walls with wood or metal deck diaphragms mid-rise (4+ stories)	RM1M	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	L	L	L	L	L	P											
	RM2	Reinforced masonry bearing walls with concrete diaphragms	RM2M	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	H	M	L	M	L	L	L	L	L	P											
Reinforced/Confined Masonry	RM2L	Reinforced masonry bearing walls with concrete diaphragms low-rise	RM2L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	L	M	L	P	L	P	P										
	RM2M	Reinforced masonry bearing walls with concrete diaphragms mid-rise	RM2M	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	H	M	L	M	L	L	L	L	P												
	RM2H	Reinforced masonry bearing walls with concrete diaphragms high-rise	RM2H	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	H	H	L	H	M	L	M	L	P												
	RM3	Confined masonry	CM1L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	H	M	L	M	L	L	L	L	L	P											
	C	Reinforced concrete	C1M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	H	M	M	H	M	M	M	M	M	H	M	M	M	M	M	M	M	L	L												
	C1	Ductile reinforced concrete moment frame with or without infill	C1M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	H	M	M	H	M	M	M	M	M	H	M	M	M	M	M	M	M	L	L											
Reinforced Concrete	C1L	Ductile reinforced concrete moment frame with or without infill low-rise	C1L	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	M	M	H	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	L	L	L												
	C1M	Ductile reinforced concrete moment frame with or without infill mid-rise	C1M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	H	M	M	H	M	M	M	M	M	H	M	M	M	M	M	M	M	L	L												
	C1H	Ductile reinforced concrete moment frame with or without infill high-rise	C1H	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M												
	C2	Reinforced concrete shear walls	C2M	H	M	M	H	M	M	H	M	M	H	M	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	H	M	L	M	L	M	L	L												
	C2L	Reinforced concrete shear walls low-rise	C2L	H	M	M	H	M	M	H	M	M	H	M	M	L	H	M	L	M	L	L	H	M	L	H	M	L	M	L	L	M	L	L	M	L	L	L													
	C2M	Reinforced concrete shear walls mid-rise	C2M	H	M	M	H	M	M	H	M	M	H	M	M	L	H	M	L	M	M	L	H	M	L	H	M	L	M	M	L	H	M	L	M	M	L	L													
	C2H	Reinforced concrete shear walls high-rise	C2H	H	M	M	H	M	M	H	M	M	H	M	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	M	H	M	M	M	M	L	L													
	C3	Nonductile reinforced concrete frame with masonry infill walls	C3M	M	L	L	M	L	L	M	L	L	M	L	L	M	L	L	L	L	L	M	L	L	M	L	L	L	L	L	M	L	L	L	L	L	L	L	P												
	C3L	Nonductile reinforced concrete frame with	C3L	M	L	L	M	L	L	M	L	L	M	L	L	L	L	L	L	L	L	M	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	P													

A16-3



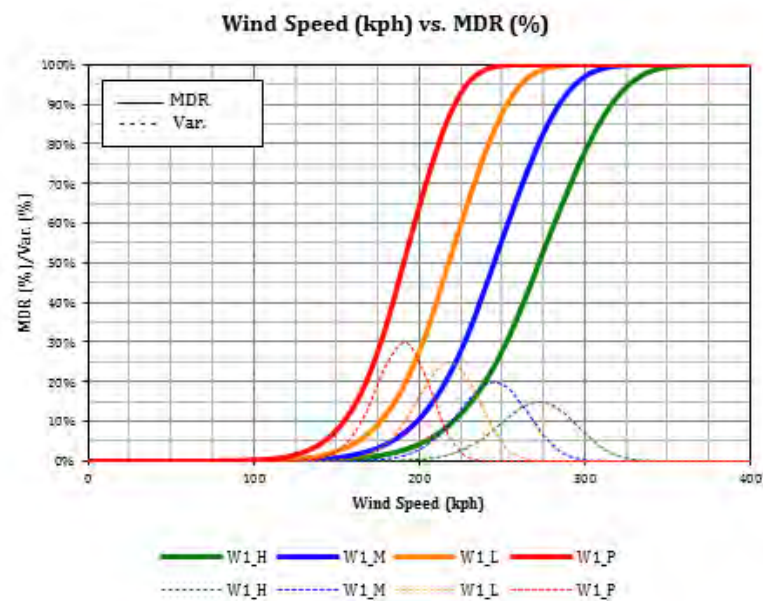
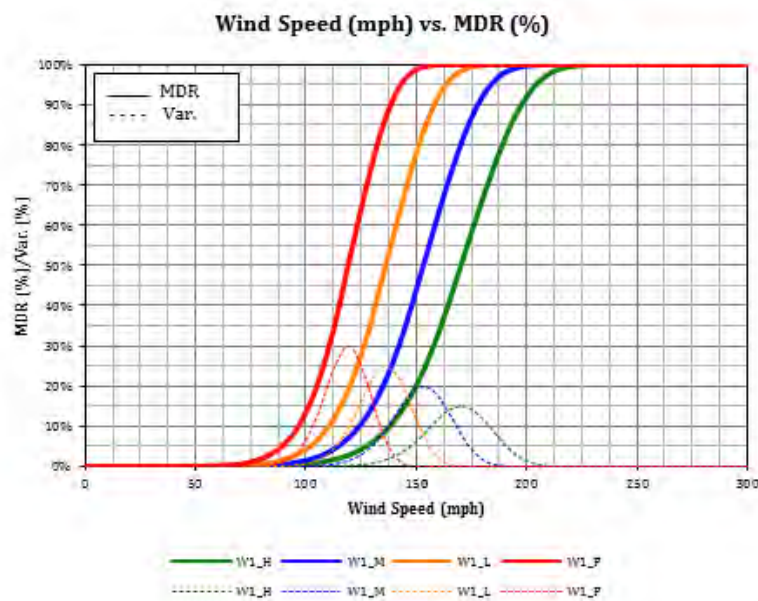
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General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GABE3	Country Development Level																																			
				H								MH								ML								L											
				Complexity City Level								Complexity City Level								Complexity City Level								Complexity City Level											
				H				M				L				H				M				L				H				M				L			
				Hazard Level								Hazard Level								Hazard Level								Hazard Level											
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L			
		walls low-rise																																					
	S4M	Steel frame with cast-in-place concrete shear walls mid-rise	S4M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M				
	S4H	Steel frame with cast-in-place concrete shear walls high-rise	S4H	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M			
	S5	Steel frame with unreinforced masonry infill walls	S5M	L	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	M	H	M	M	H	M	M	M	M	M	M	M	M	M	M	M	L			
	SSL	Steel frame with unreinforced masonry infill walls low-rise	SSL	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	L	L	L	L		
	S5M	Steel frame with unreinforced masonry infill walls mid-rise	S5M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	L	L			
	SSH	Steel frame with unreinforced masonry infill walls high-rise	SSH	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	H	M	M	M	M	M	M		
Other	MH	Mobile homes	MH	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L			
	INF	Informal constructions (generally made of wood/plastic sheets/GI Sheets/light metal or composite etc not conforming to engineering standards. Such constructions are common in slums, squatters).	URML	H	M	L	H	M	L	H	M	L	H	M	L	M	L	L	L	H	M	L	H	M	L	M	L	L	H	M	L	M	L	L	L	L			

ANNEX 17. WIND VULNERABILITY CURVES.

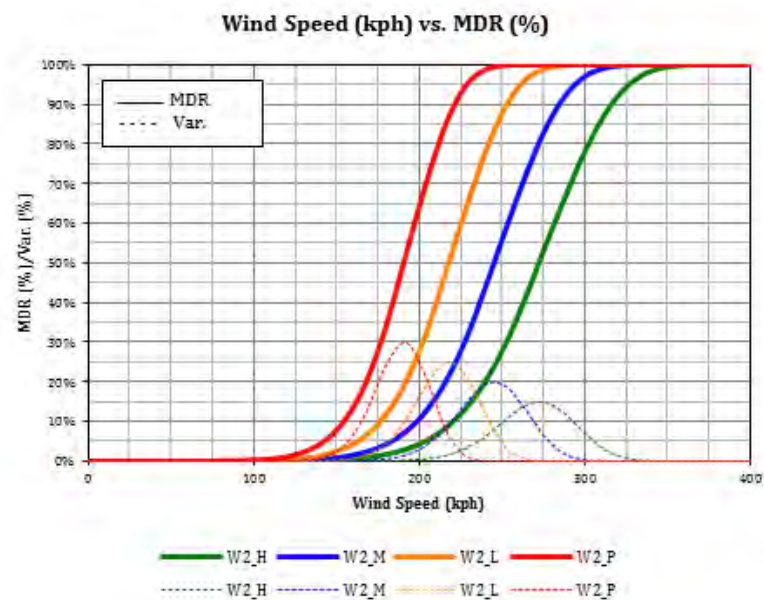
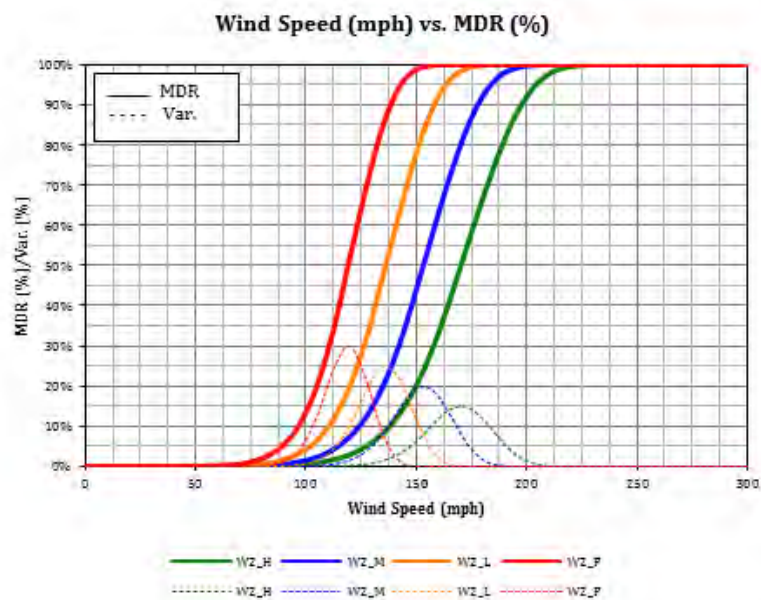
W1 - Wood, Light Frame ($\leq 5,000$ sq. ft.)

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	N _p	Y (mph)	ρ_1	ρ_2
W1_H	HIGH	4.27	1	170.00	9.00	8.00
W1_M	MEDIUM	4.27	1	153.00	9.00	8.00
W1_L	LOW	4.27	1	136.00	9.00	8.00
W1_P	POOR	4.27	1	119.00	9.00	8.00



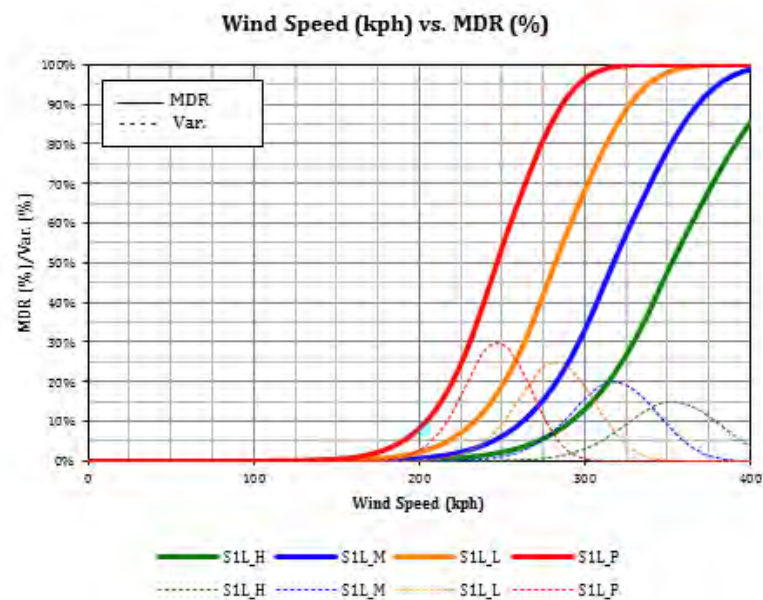
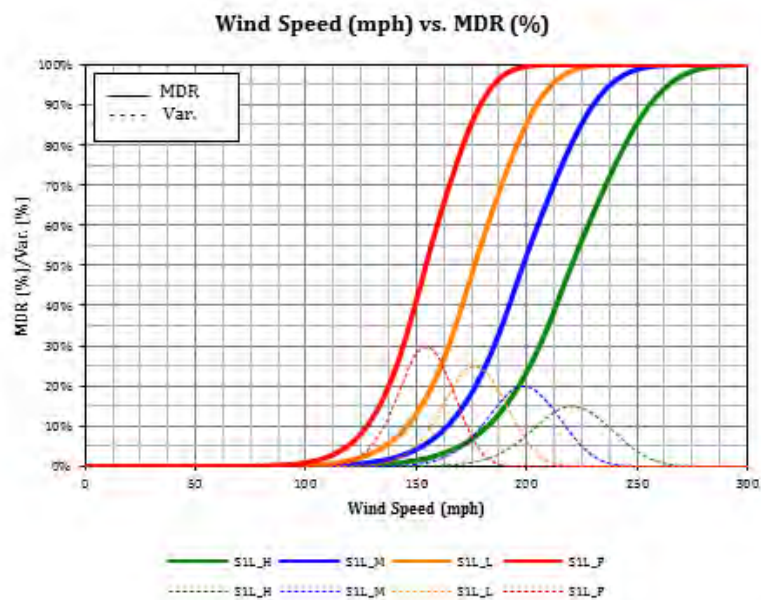
W2 - Wood, Commercial and Industrial (>5,000 sq. ft.)

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
W2_H	HIGH	7.32	2	170.00	9.00	8.00
W2_M	MEDIUM	7.32	2	153.00	9.00	8.00
W2_L	LOW	7.32	2	136.00	9.00	8.00
W2_P	POOR	7.32	2	119.00	9.00	8.00



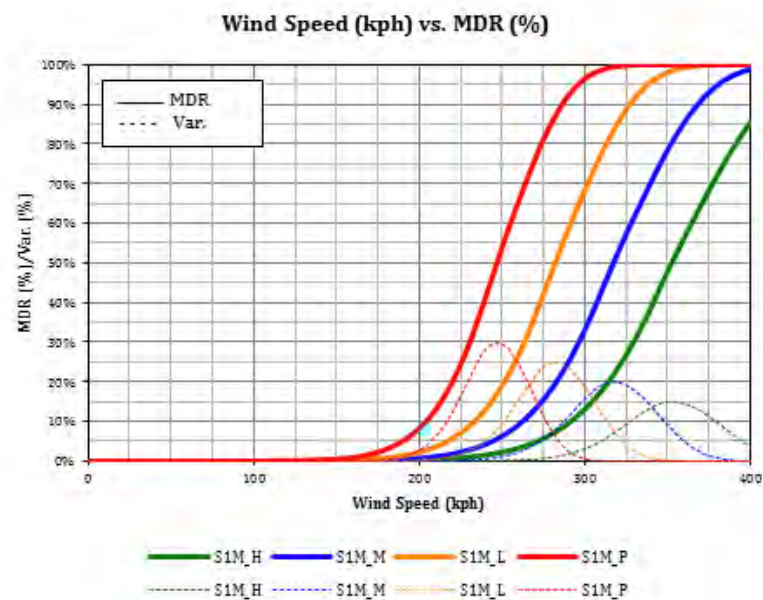
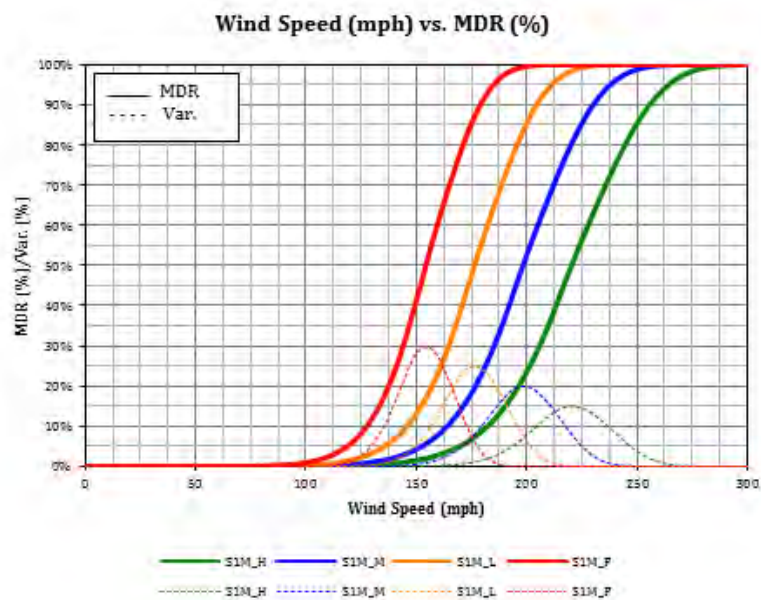
S1L - Steel Moment Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S1L_H	HIGH	7.32	2	220.00	10.00	8.00
S1L_M	MEDIUM	7.32	2	198.00	10.00	8.00
S1L_L	LOW	7.32	2	176.00	10.00	8.00
S1L_P	POOR	7.32	2	154.00	10.00	8.00



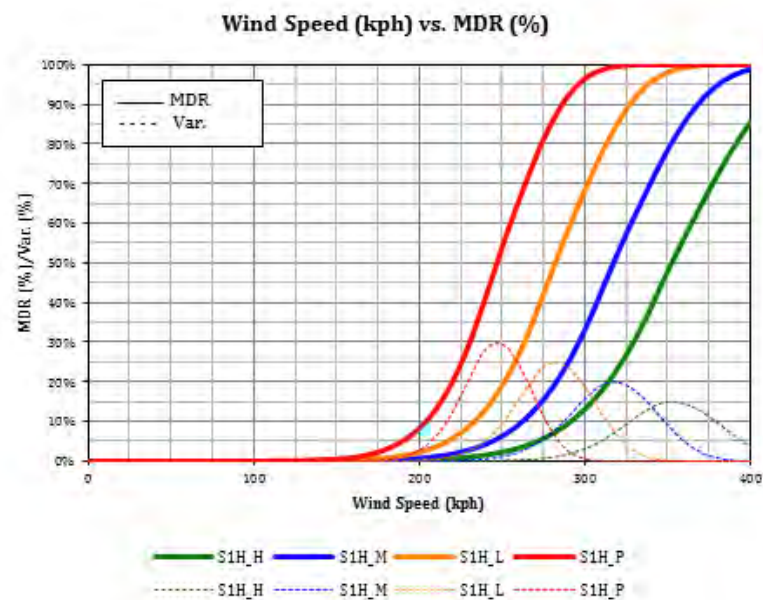
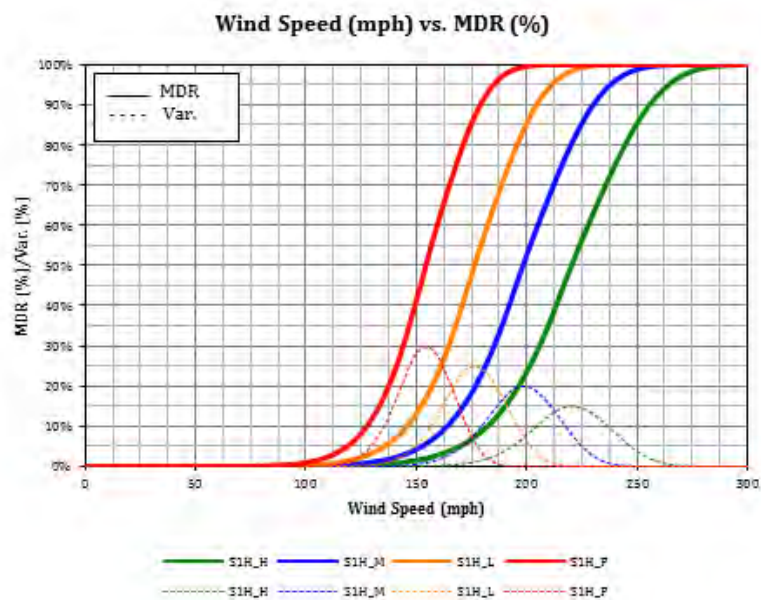
S1M - Steel Moment Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S1M_H	HIGH	18.29	5	220.00	10.00	8.00
S1M_M	MEDIUM	18.29	5	198.00	10.00	8.00
S1M_L	LOW	18.29	5	176.00	10.00	8.00
S1M_P	POOR	18.29	5	154.00	10.00	8.00



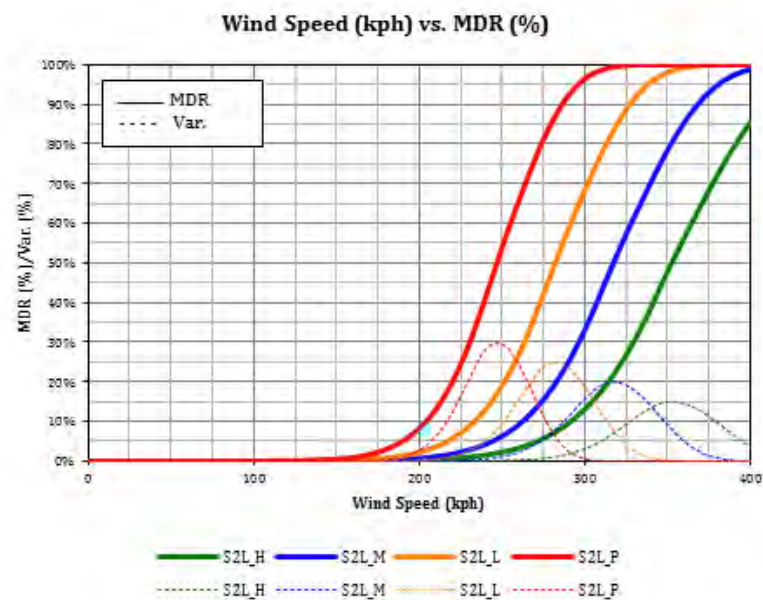
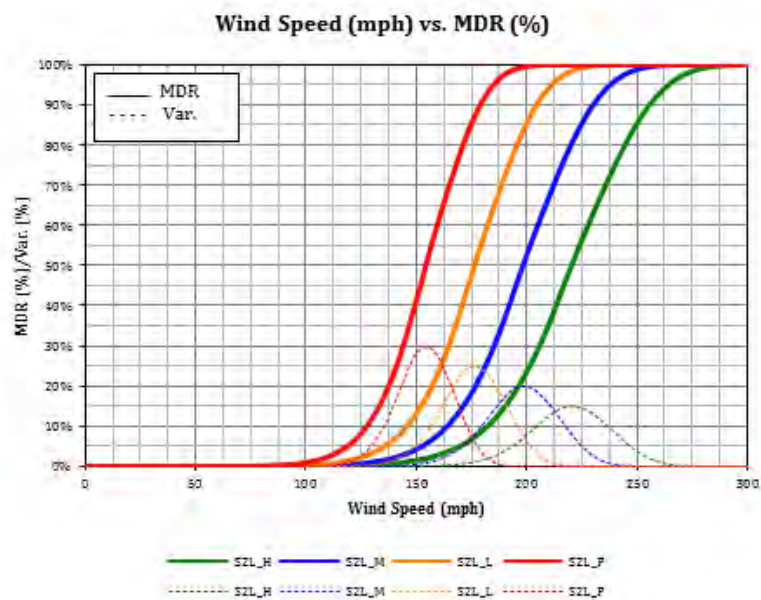
S1H - Steel Moment Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S1H_H	HIGH	47.55	13	220.00	10.00	8.00
S1H_M	MEDIUM	47.55	13	198.00	10.00	8.00
S1H_L	LOW	47.55	13	176.00	10.00	8.00
S1H_P	POOR	47.55	13	154.00	10.00	8.00



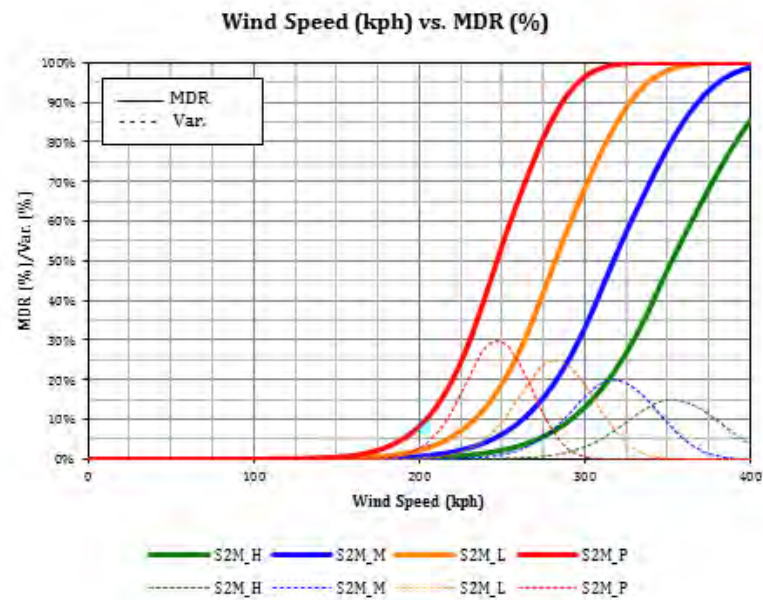
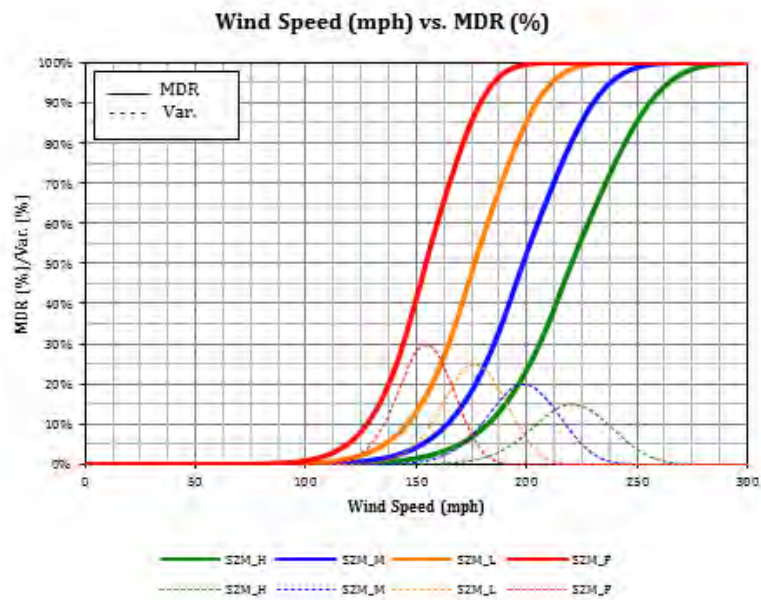
S2L - Steel Braced Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S2L_H	HIGH	7.32	2	220.00	10.00	8.00
S2L_M	MEDIUM	7.32	2	198.00	10.00	8.00
S2L_L	LOW	7.32	2	176.00	10.00	8.00
S2L_P	POOR	7.32	2	154.00	10.00	8.00



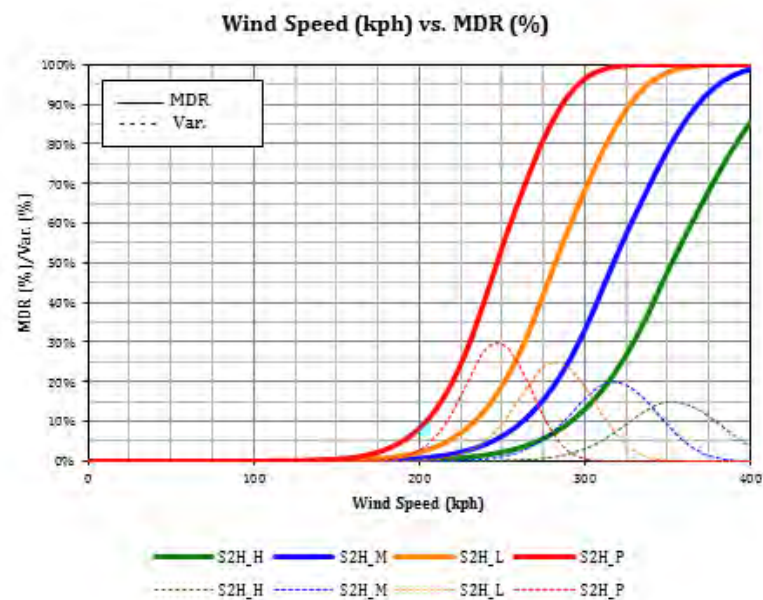
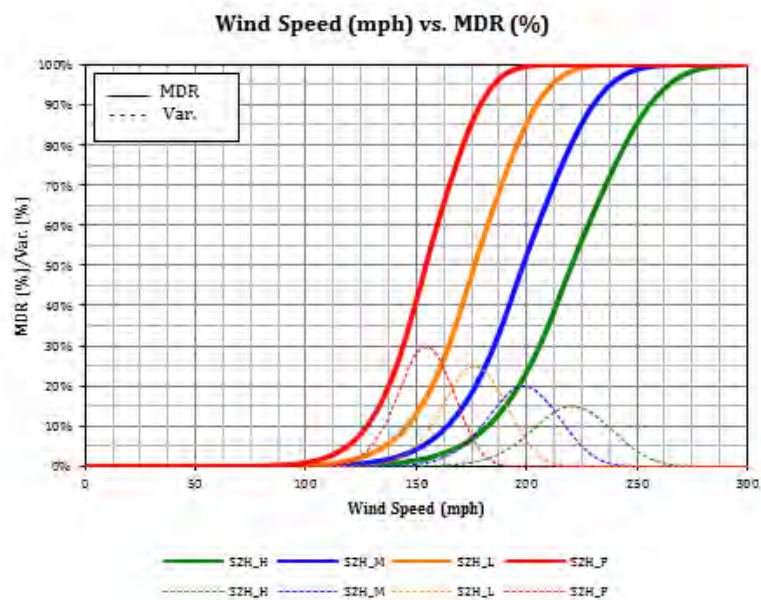
S2M - Steel Braced Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S2M_H	HIGH	18.29	5	220.00	10.00	8.00
S2M_M	MEDIUM	18.29	5	198.00	10.00	8.00
S2M_L	LOW	18.29	5	176.00	10.00	8.00
S2M_P	POOR	18.29	5	154.00	10.00	8.00



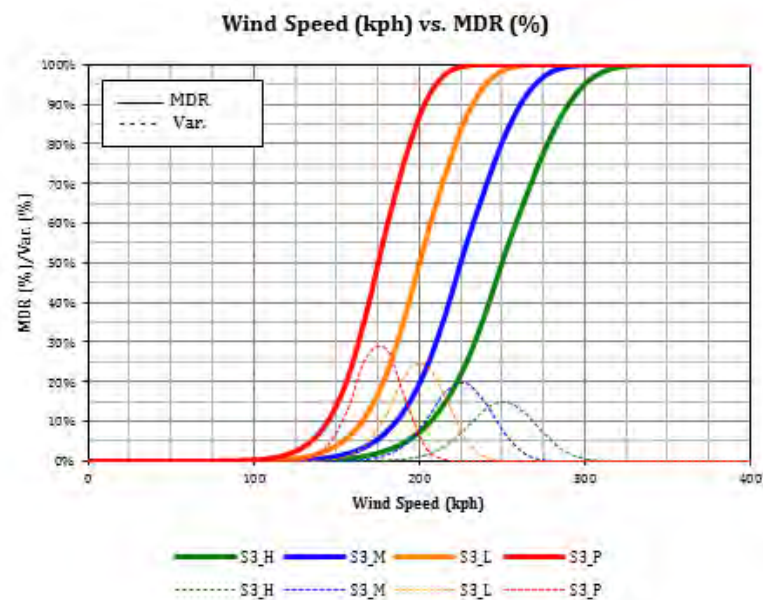
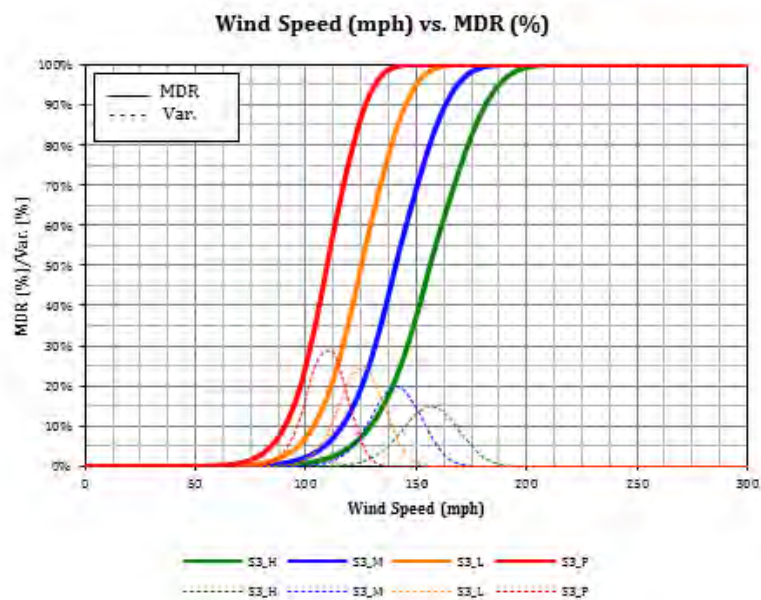
S2H - Steel Braced Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S2H_H	HIGH	47.55	13	220.00	10.00	8.00
S2H_M	MEDIUM	47.55	13	198.00	10.00	8.00
S2H_L	LOW	47.55	13	176.00	10.00	8.00
S2H_P	POOR	47.55	13	154.00	10.00	8.00



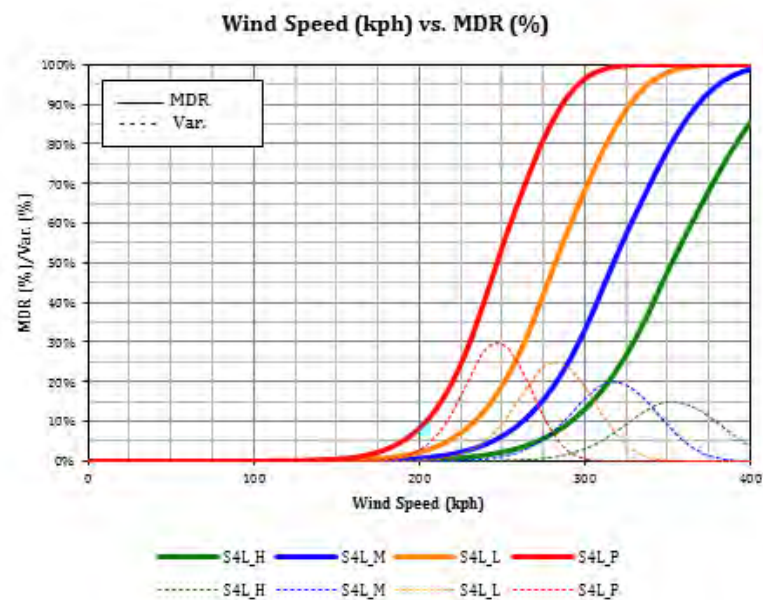
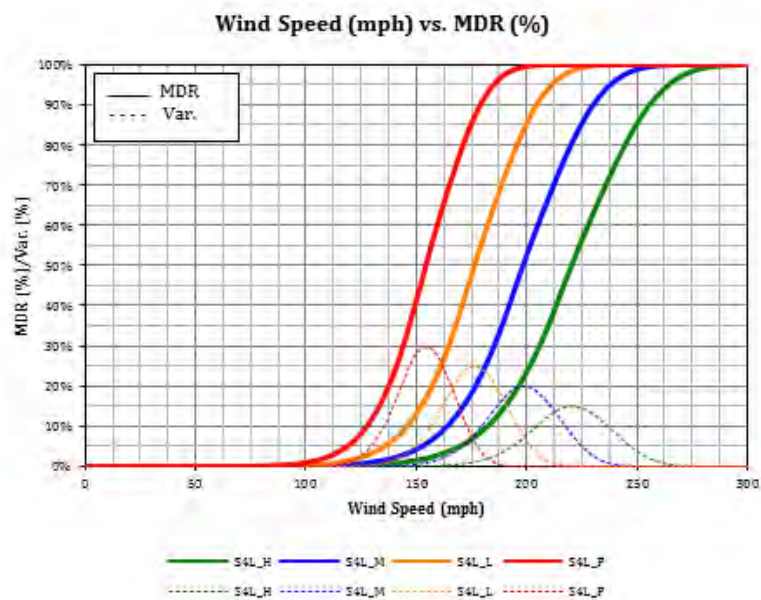
S3 - Steel Light Frame

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S3_H	HIGH	4.57	1	156.00	10.00	8.00
S3_M	MEDIUM	4.57	1	140.40	10.00	8.00
S3_L	LOW	4.57	1	124.80	10.00	8.00
S3_P	POOR	4.57	1	109.20	10.00	8.00



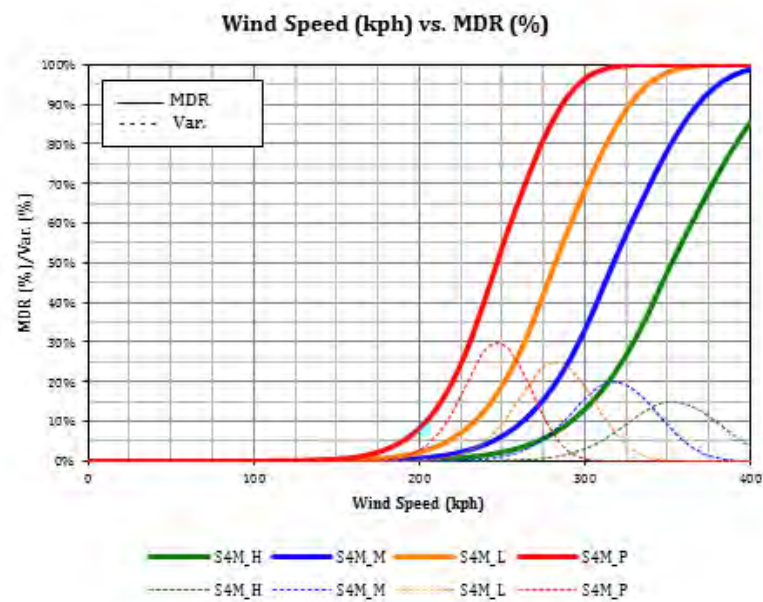
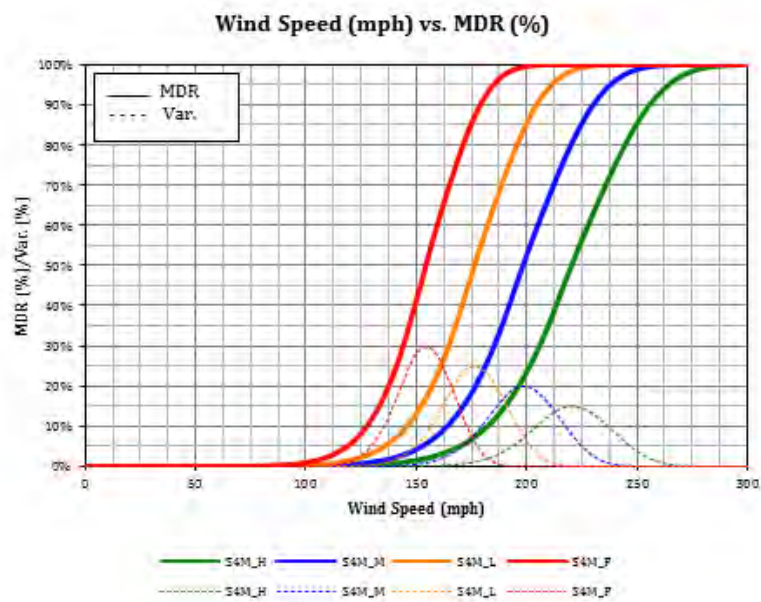
S4L - Steel Frame with Cast-in-Place Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S4L_H	HIGH	7.32	2	220.00	10.00	8.00
S4L_M	MEDIUM	7.32	2	198.00	10.00	8.00
S4L_L	LOW	7.32	2	176.00	10.00	8.00
S4L_P	POOR	7.32	2	154.00	10.00	8.00



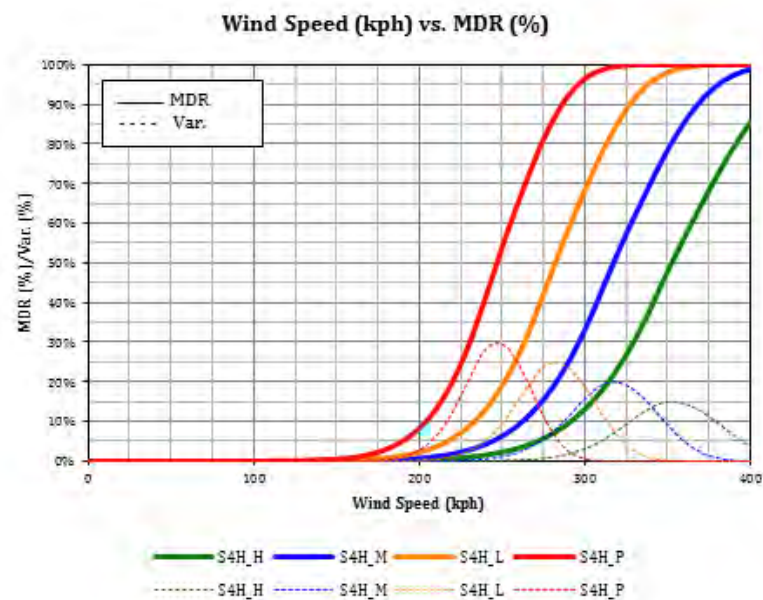
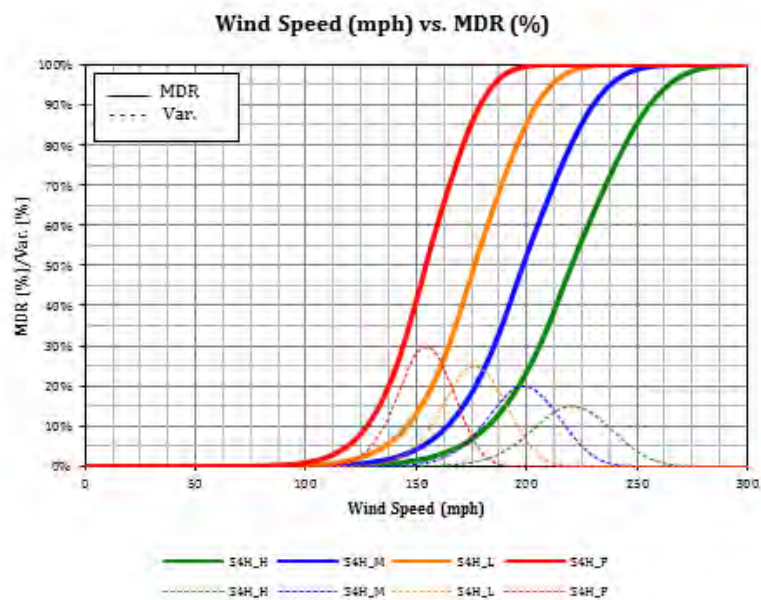
S4M - Steel Frame with Cast-in-Place Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S4M_H	HIGH	18.29	5	220.00	10.00	8.00
S4M_M	MEDIUM	18.29	5	198.00	10.00	8.00
S4M_L	LOW	18.29	5	176.00	10.00	8.00
S4M_P	POOR	18.29	5	154.00	10.00	8.00



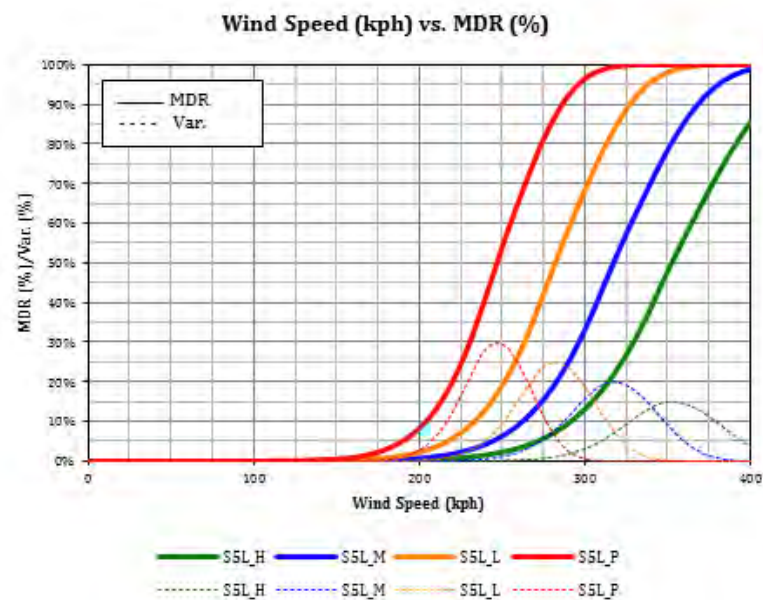
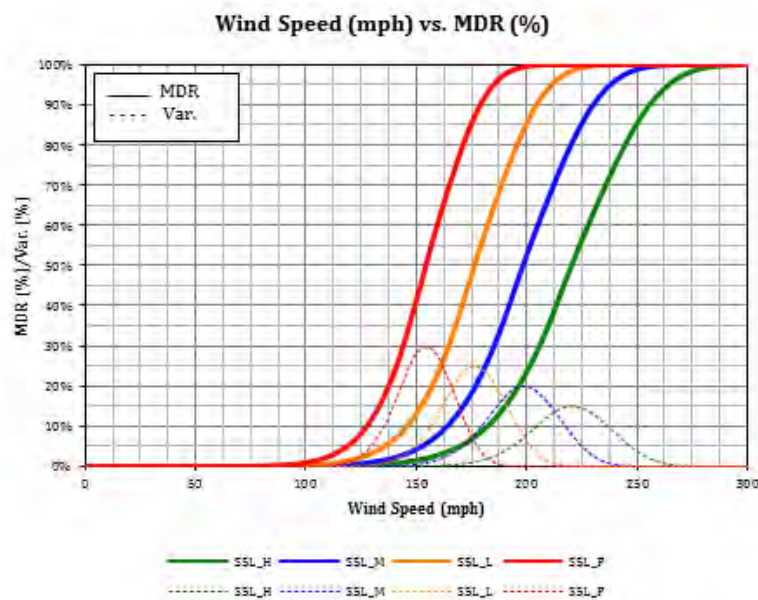
S4H - Steel Frame with Cast-in-Place Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S4H_H	HIGH	47.55	13	220.00	10.00	8.00
S4H_M	MEDIUM	47.55	13	198.00	10.00	8.00
S4H_L	LOW	47.55	13	176.00	10.00	8.00
S4H_P	POOR	47.55	13	154.00	10.00	8.00



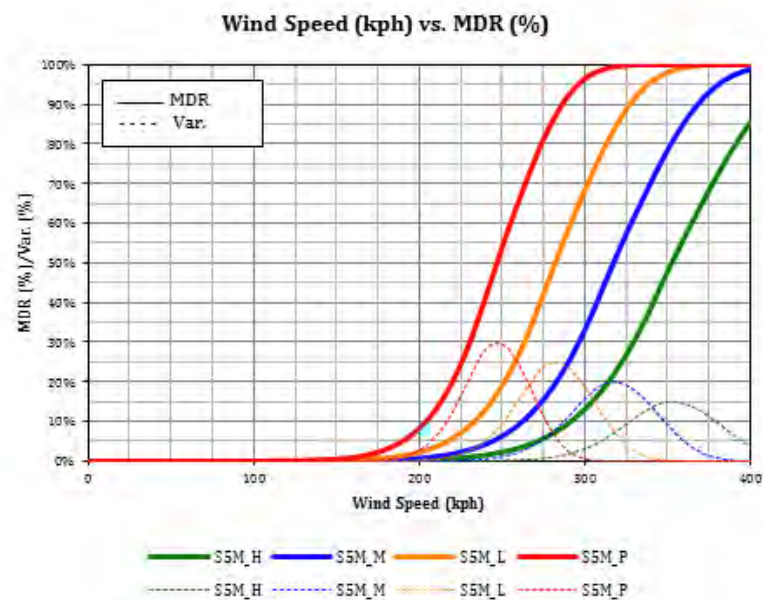
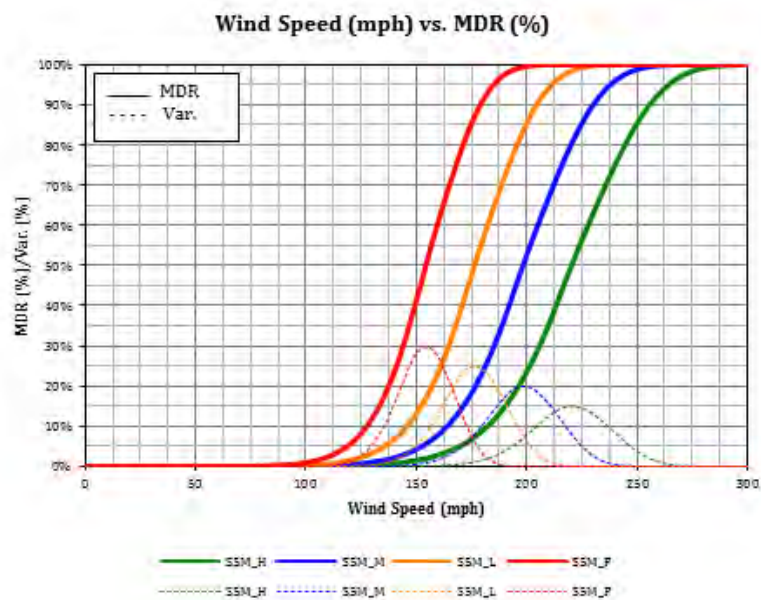
S5L - Steel Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S5L_H	HIGH	7.32	2	220.00	10.00	8.00
S5L_M	MEDIUM	7.32	2	198.00	10.00	8.00
S5L_L	LOW	7.32	2	176.00	10.00	8.00
S5L_P	POOR	7.32	2	154.00	10.00	8.00



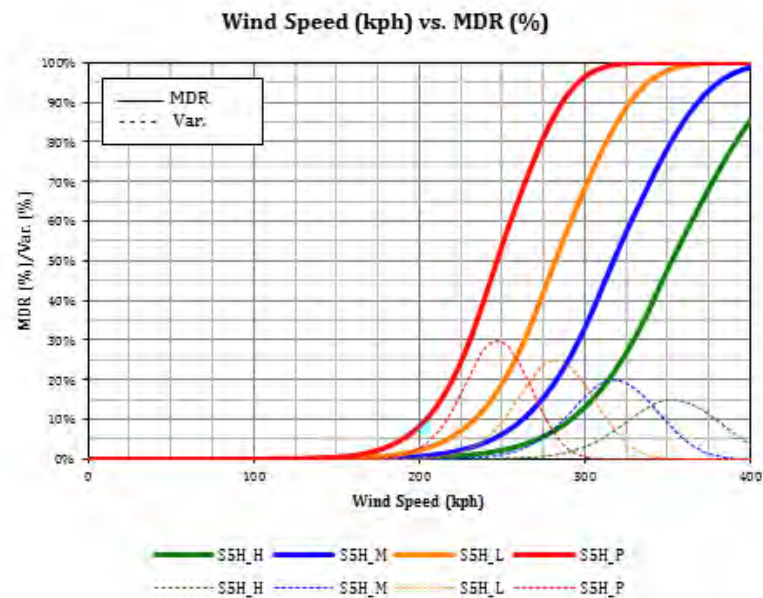
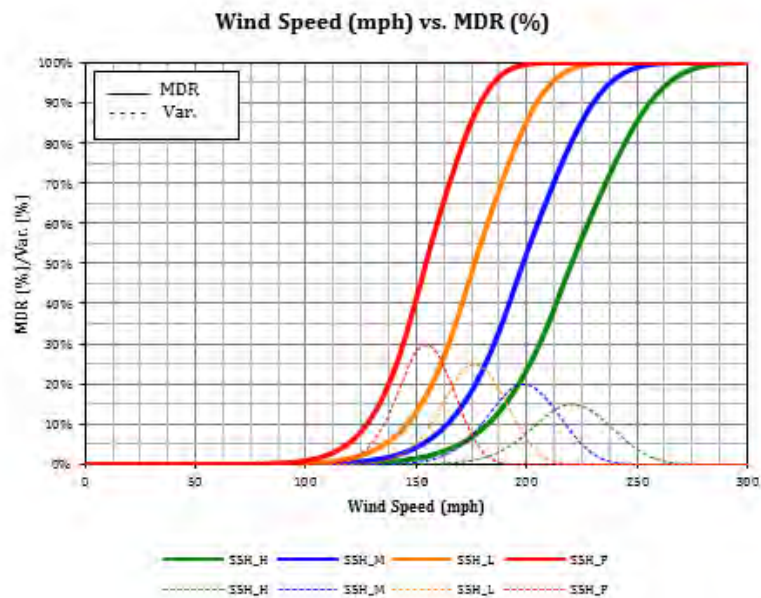
S5M - Steel Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S5M_H	HIGH	18.29	5	220.00	10.00	8.00
S5M_M	MEDIUM	18.29	5	198.00	10.00	8.00
S5M_L	LOW	18.29	5	176.00	10.00	8.00
S5M_P	POOR	18.29	5	154.00	10.00	8.00



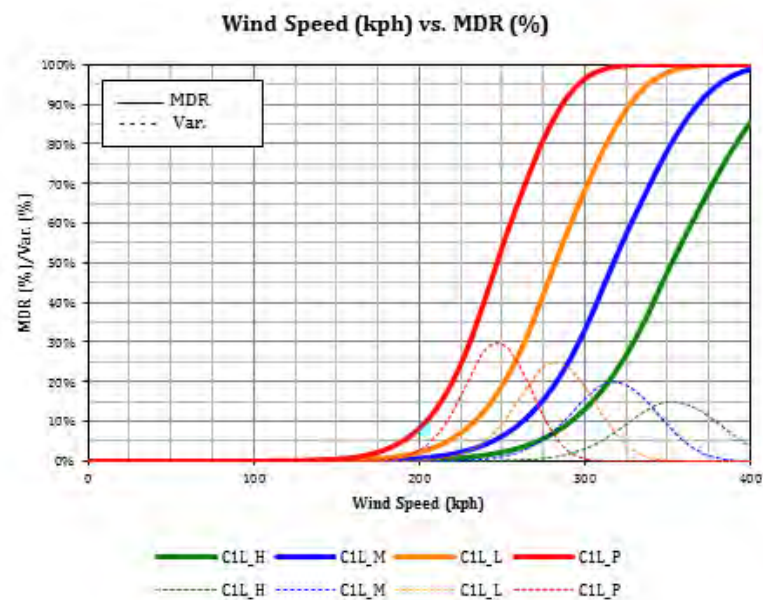
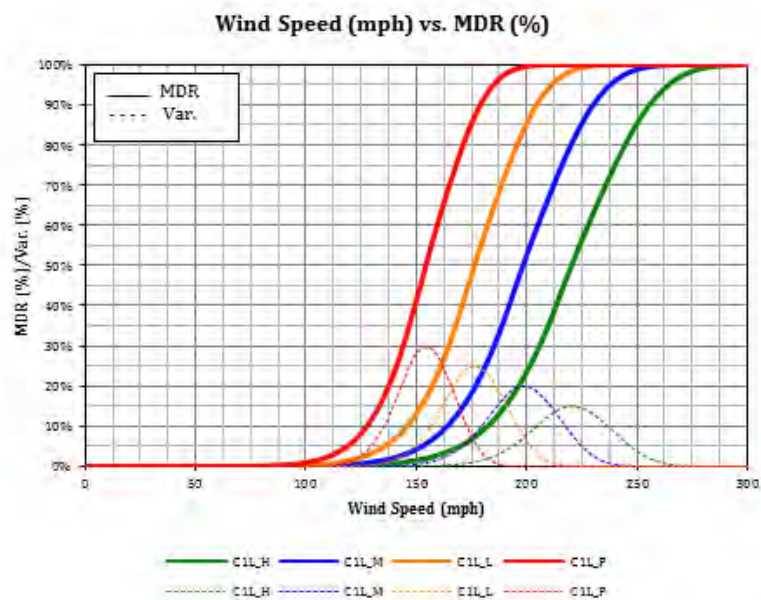
S5H - Steel Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
S5H_H	HIGH	47.55	13	220.00	10.00	8.00
S5H_M	MEDIUM	47.55	13	198.00	10.00	8.00
S5H_L	LOW	47.55	13	176.00	10.00	8.00
S5H_P	POOR	47.55	13	154.00	10.00	8.00



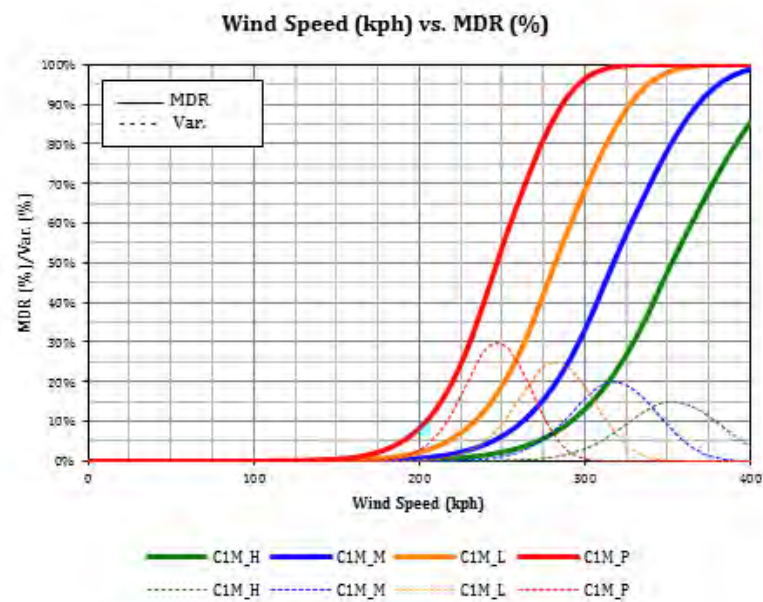
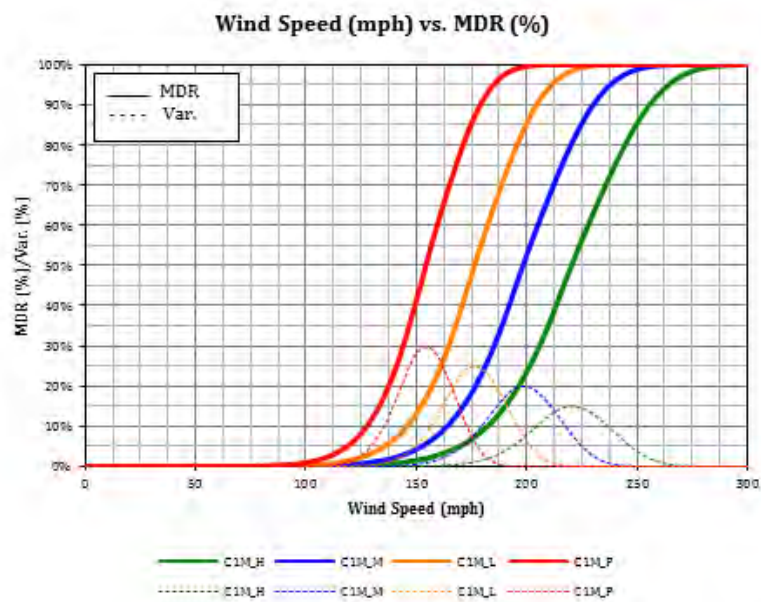
C1L - Concrete Moment Frames

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C1L_H	HIGH	6.10	2	220.00	10.00	8.00
C1L_M	MEDIUM	6.10	2	198.00	10.00	8.00
C1L_L	LOW	6.10	2	176.00	10.00	8.00
C1L_P	POOR	6.10	2	154.00	10.00	8.00



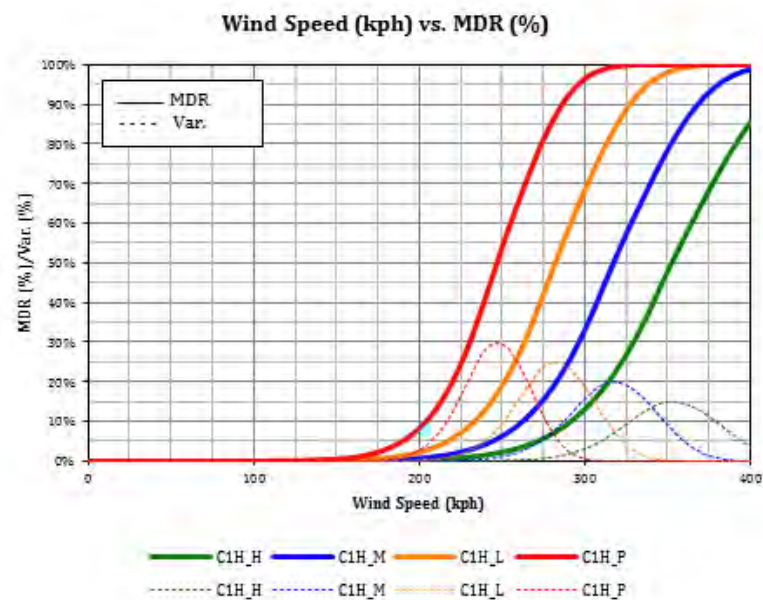
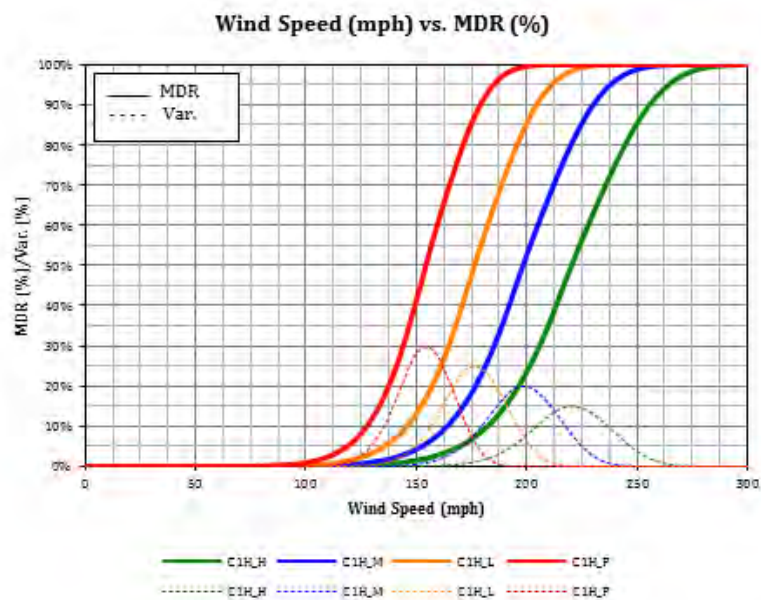
C1M - Concrete Moment Frames

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C1M_H	HIGH	15.24	5	220.00	10.00	8.00
C1M_M	MEDIUM	15.24	5	198.00	10.00	8.00
C1M_L	LOW	15.24	5	176.00	10.00	8.00
C1M_P	POOR	15.24	5	154.00	10.00	8.00



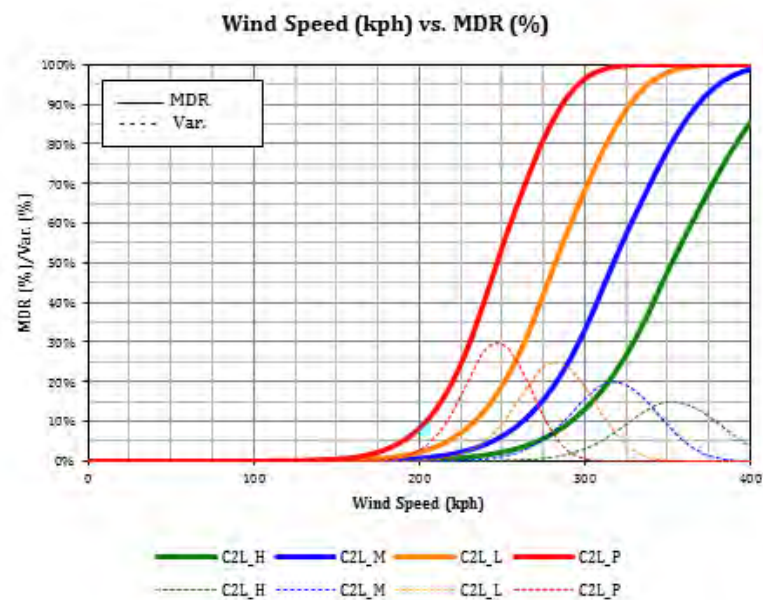
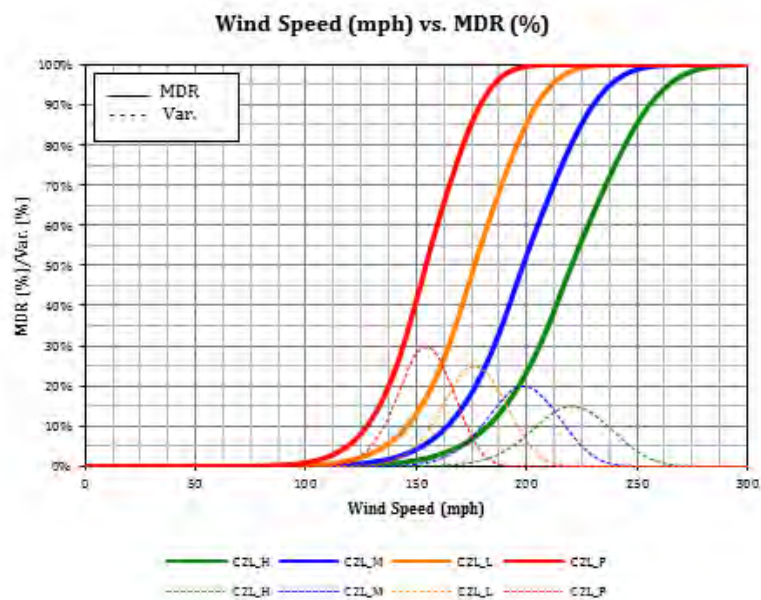
C1H - Concrete Moment Frames

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C1H_H	HIGH	36.58	12	220.00	10.00	8.00
C1H_M	MEDIUM	36.58	12	198.00	10.00	8.00
C1H_L	LOW	36.58	12	176.00	10.00	8.00
C1H_P	POOR	36.58	12	154.00	10.00	8.00



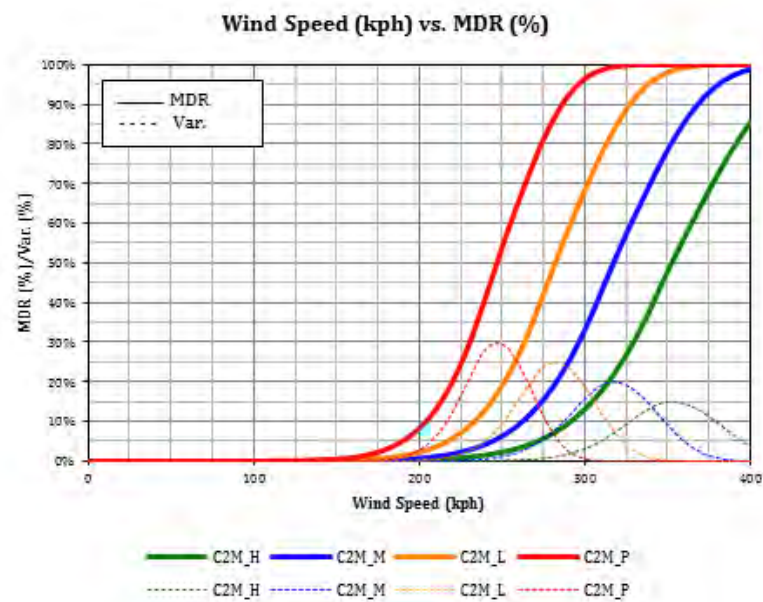
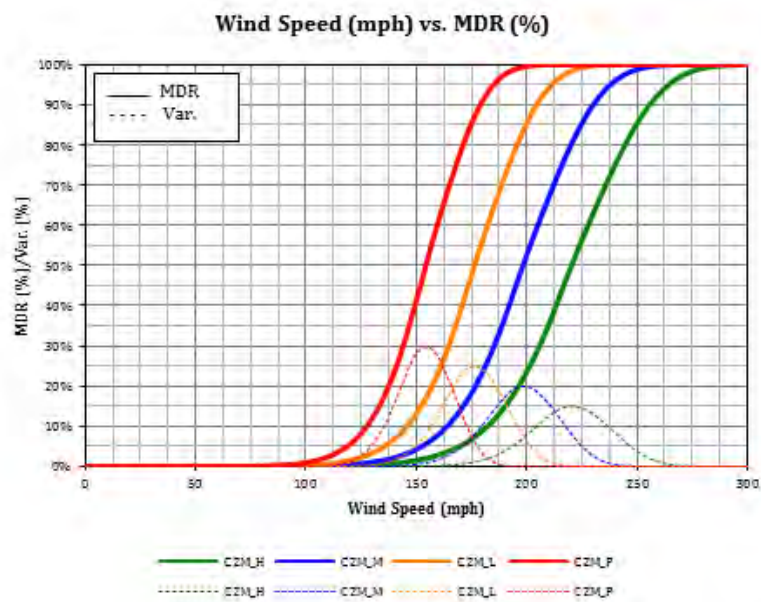
C2L - Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C2L_H	HIGH	6.10	2	220.00	10.00	8.00
C2L_M	MEDIUM	6.10	2	198.00	10.00	8.00
C2L_L	LOW	6.10	2	176.00	10.00	8.00
C2L_P	POOR	6.10	2	154.00	10.00	8.00



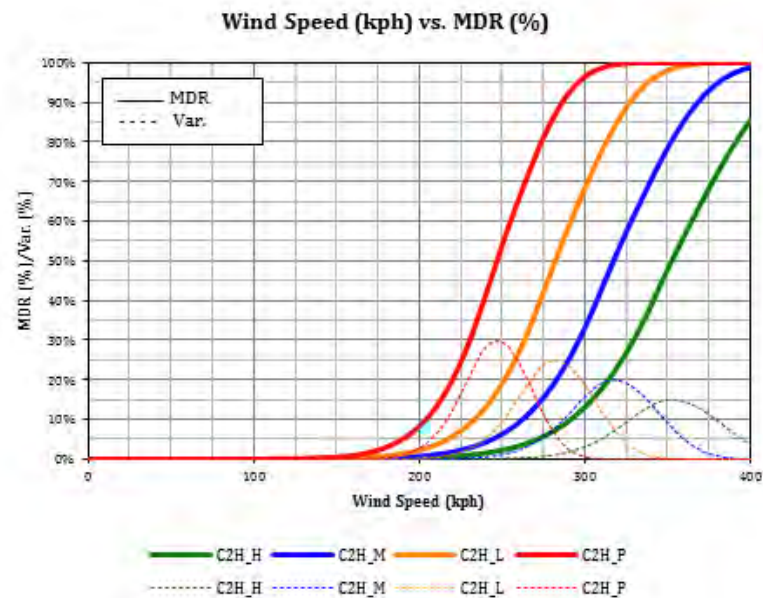
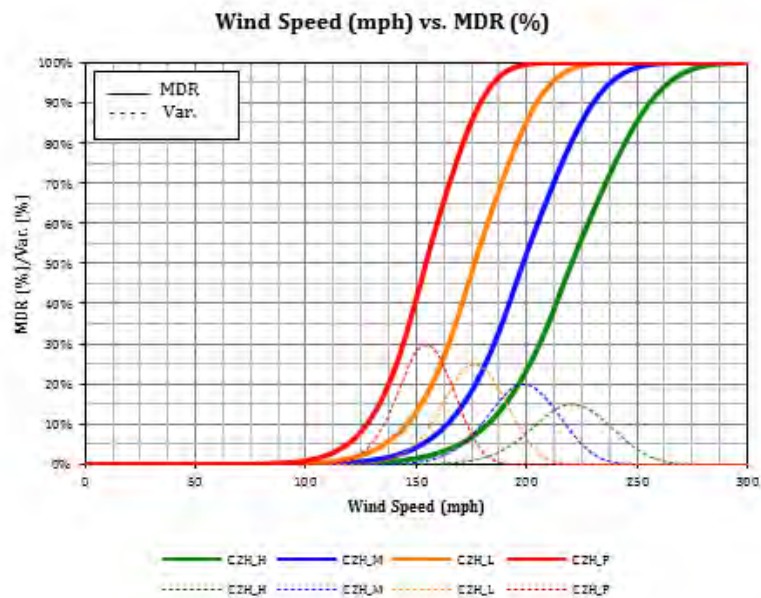
C2M - Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C2M_H	HIGH	15.24	5	220.00	10.00	8.00
C2M_M	MEDIUM	15.24	5	198.00	10.00	8.00
C2M_L	LOW	15.24	5	176.00	10.00	8.00
C2M_P	POOR	15.24	5	154.00	10.00	8.00



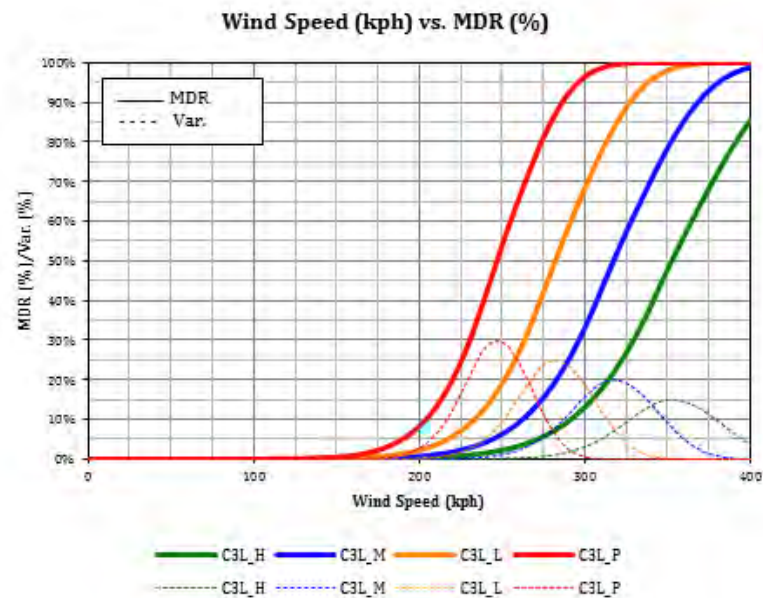
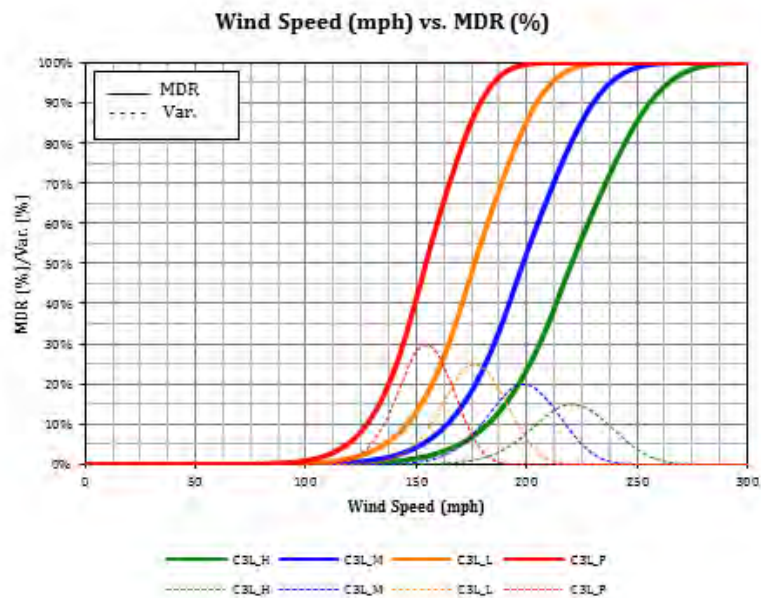
C2H - Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C2H_H	HIGH	36.58	12	220.00	10.00	8.00
C2H_M	MEDIUM	36.58	12	198.00	10.00	8.00
C2H_L	LOW	36.58	12	176.00	10.00	8.00
C2H_P	POOR	36.58	12	154.00	10.00	8.00



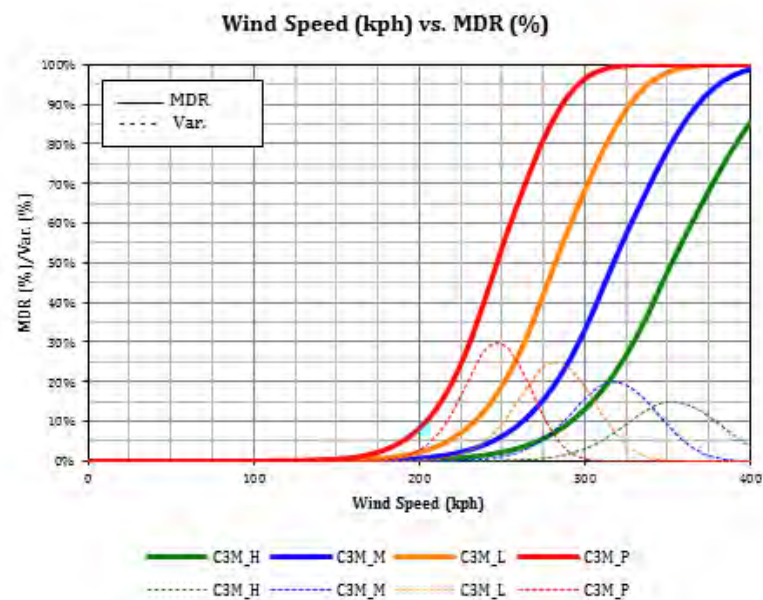
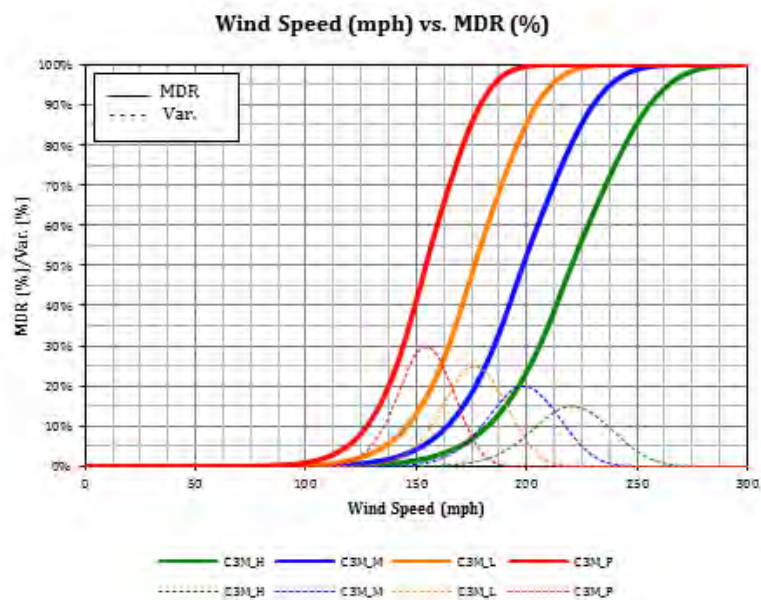
C3L - Concrete Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C3L_H	HIGH	6.10	2	220.00	10.00	8.00
C3L_M	MEDIUM	6.10	2	198.00	10.00	8.00
C3L_L	LOW	6.10	2	176.00	10.00	8.00
C3L_P	POOR	6.10	2	154.00	10.00	8.00



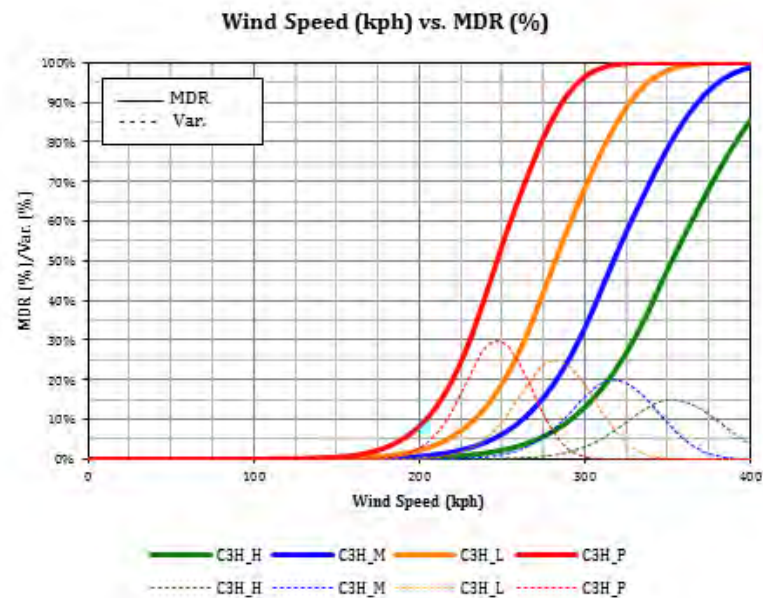
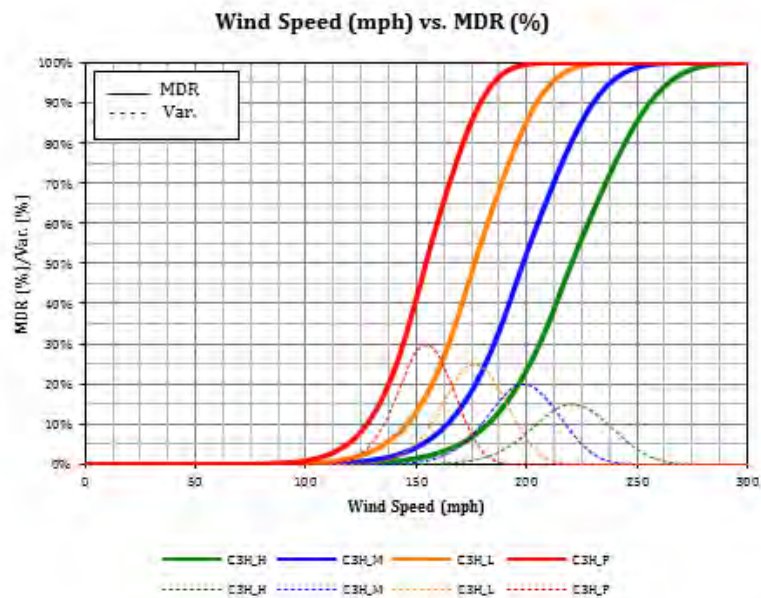
C3M - Concrete Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C3M_H	HIGH	15.24	5	220.00	10.00	8.00
C3M_M	MEDIUM	15.24	5	198.00	10.00	8.00
C3M_L	LOW	15.24	5	176.00	10.00	8.00
C3M_P	POOR	15.24	5	154.00	10.00	8.00



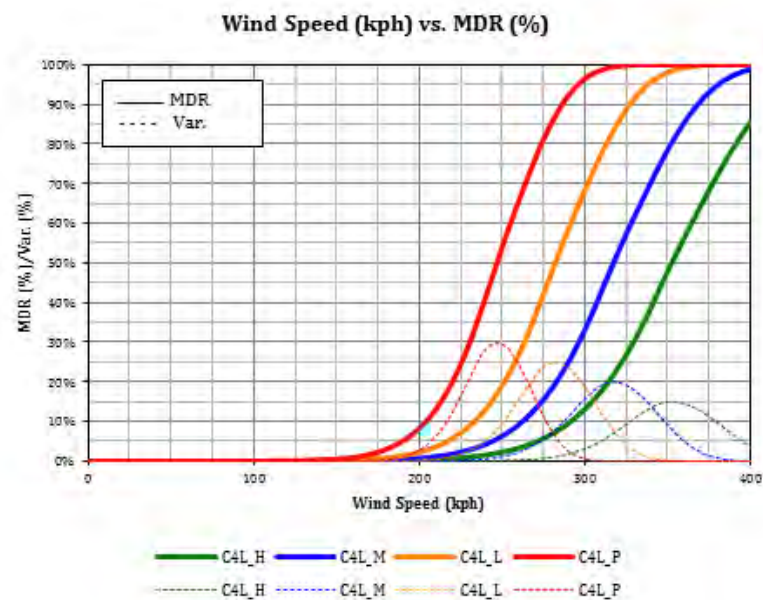
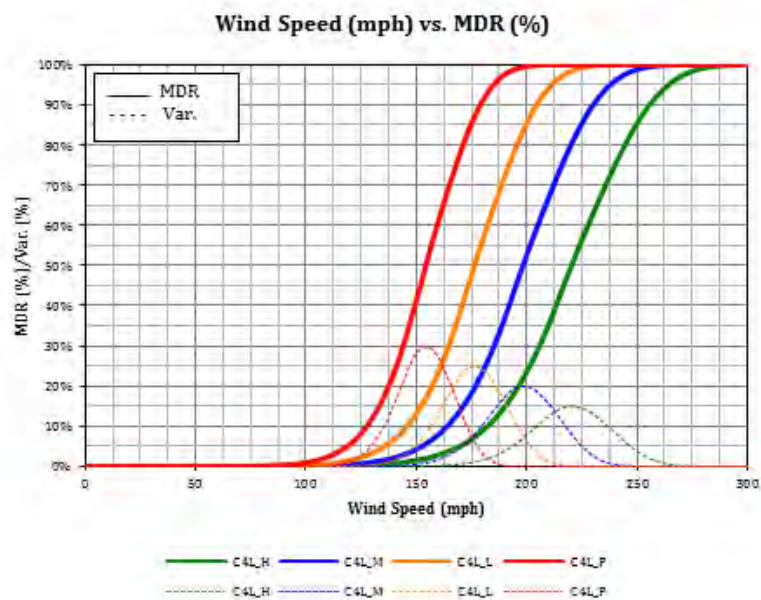
C3H - Concrete Frame with Unreinforced Masonry Infill Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C3H_H	HIGH	36.58	12	220.00	10.00	8.00
C3H_M	MEDIUM	36.58	12	198.00	10.00	8.00
C3H_L	LOW	36.58	12	176.00	10.00	8.00
C3H_P	POOR	36.58	12	154.00	10.00	8.00



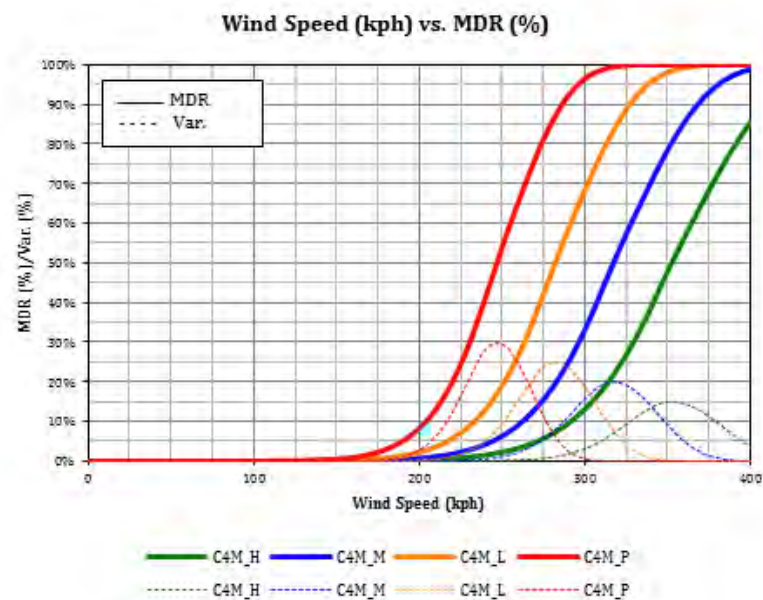
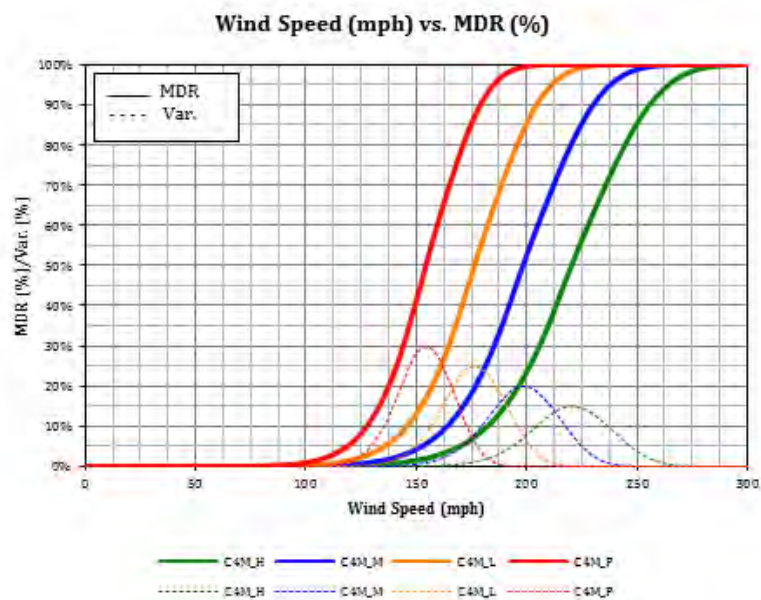
C4L - Reinforced Concrete Frames and Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C4L_H	HIGH	6.10	2	220.00	10.00	8.00
C4L_M	MEDIUM	6.10	2	198.00	10.00	8.00
C4L_L	LOW	6.10	2	176.00	10.00	8.00
C4L_P	POOR	6.10	2	154.00	10.00	8.00



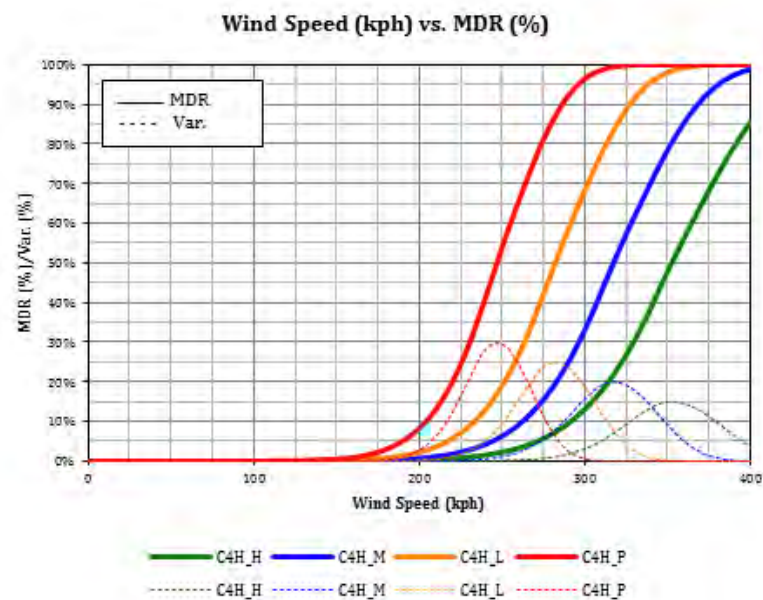
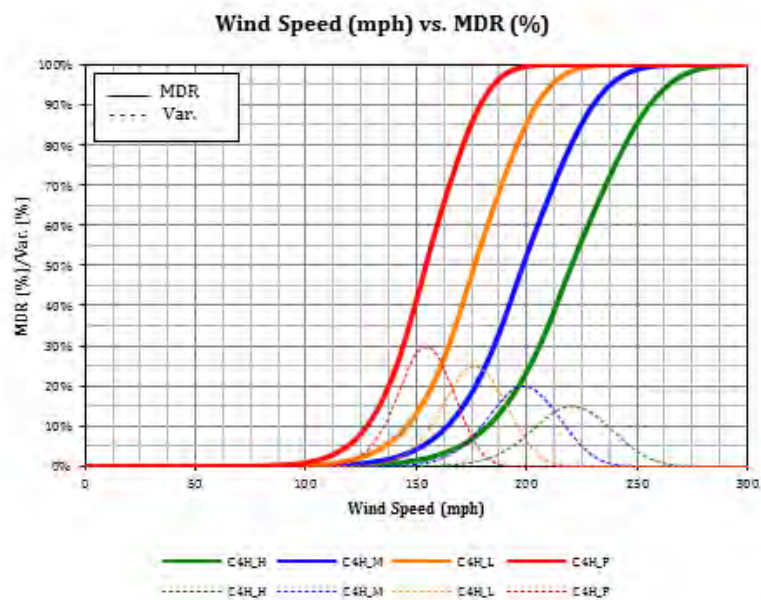
C4M - Reinforced Concrete Frames and Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C4M_H	HIGH	15.24	5	220.00	10.00	8.00
C4M_M	MEDIUM	15.24	5	198.00	10.00	8.00
C4M_L	LOW	15.24	5	176.00	10.00	8.00
C4M_P	POOR	15.24	5	154.00	10.00	8.00



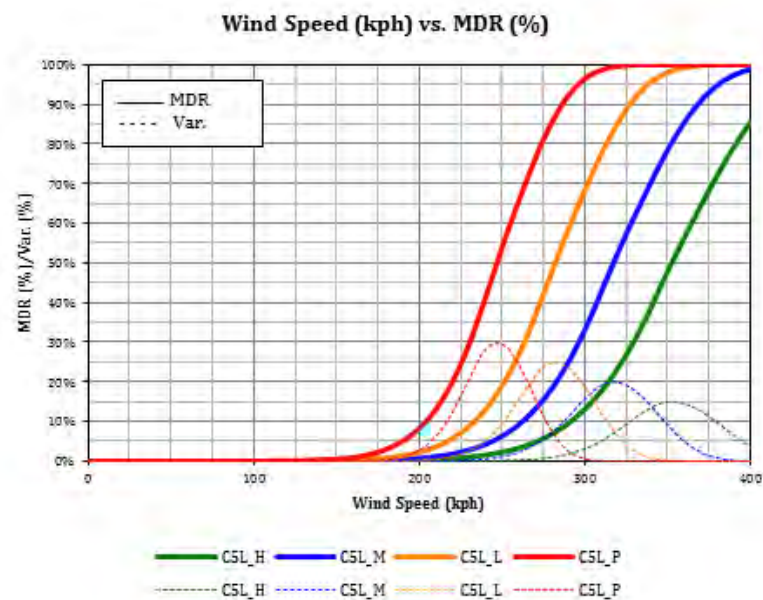
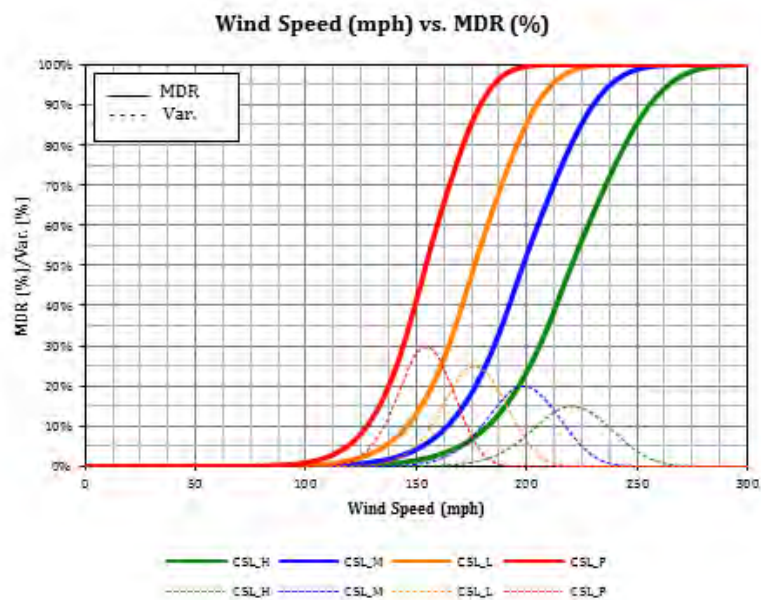
C4H - Reinforced Concrete Frames and Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C4H_H	HIGH	36.58	12	220.00	10.00	8.00
C4H_M	MEDIUM	36.58	12	198.00	10.00	8.00
C4H_L	LOW	36.58	12	176.00	10.00	8.00
C4H_P	POOR	36.58	12	154.00	10.00	8.00



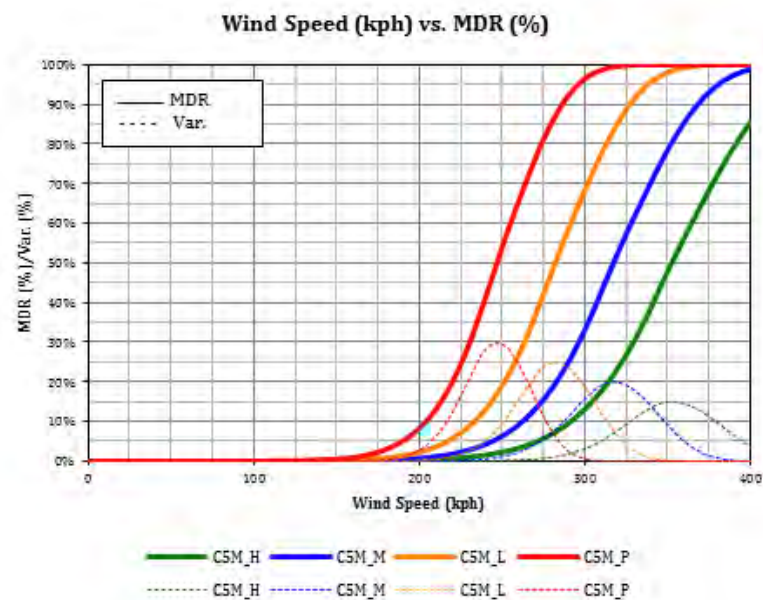
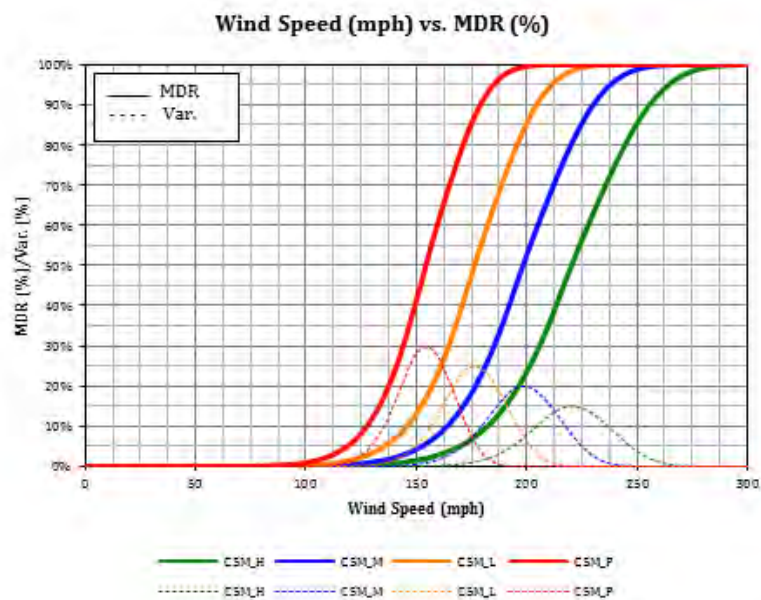
C5L - Flat Slab Structure

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C5L_H	HIGH	6.10	2	220.00	10.00	8.00
C5L_M	MEDIUM	6.10	2	198.00	10.00	8.00
C5L_L	LOW	6.10	2	176.00	10.00	8.00
C5L_P	POOR	6.10	2	154.00	10.00	8.00



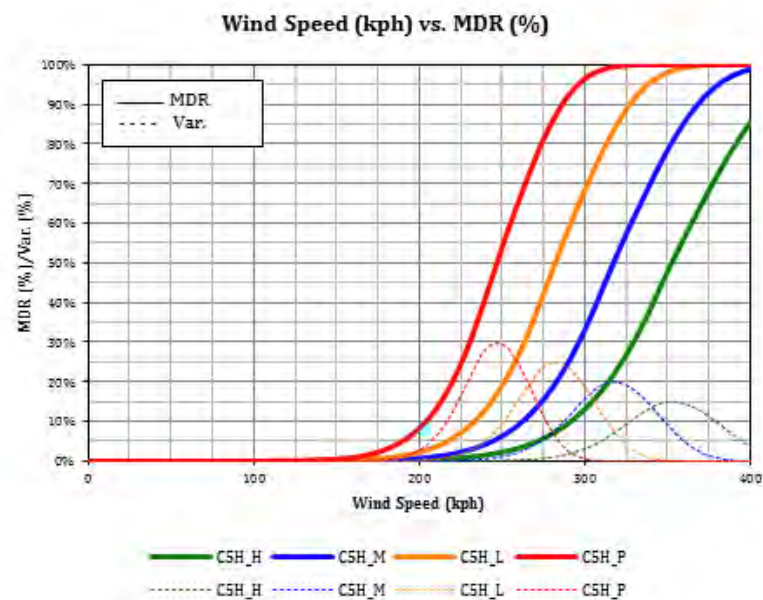
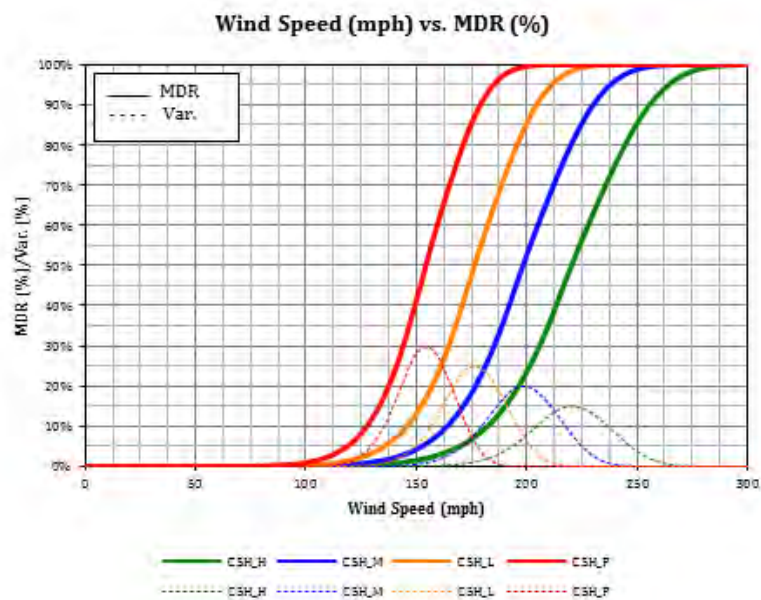
C5M - Flat Slab Structure

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C5M_H	HIGH	15.24	5	220.00	10.00	8.00
C5M_M	MEDIUM	15.24	5	198.00	10.00	8.00
C5M_L	LOW	15.24	5	176.00	10.00	8.00
C5M_P	POOR	15.24	5	154.00	10.00	8.00



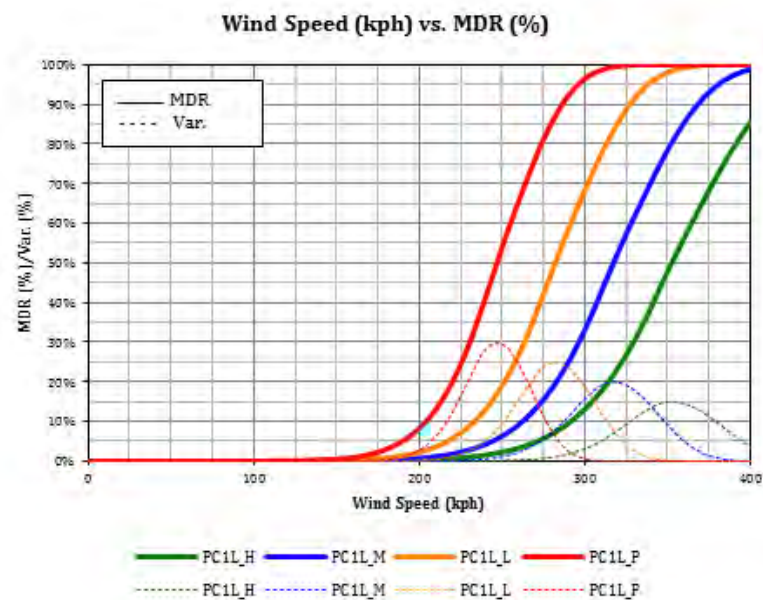
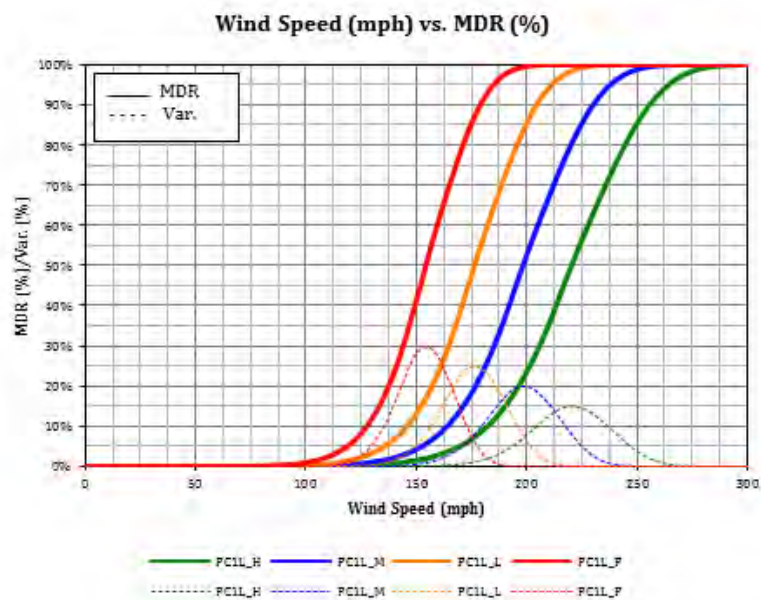
C5H - Flat Slab Structure

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
C5H_H	HIGH	36.58	12	220.00	10.00	8.00
C5H_M	MEDIUM	36.58	12	198.00	10.00	8.00
C5H_L	LOW	36.58	12	176.00	10.00	8.00
C5H_P	POOR	36.58	12	154.00	10.00	8.00



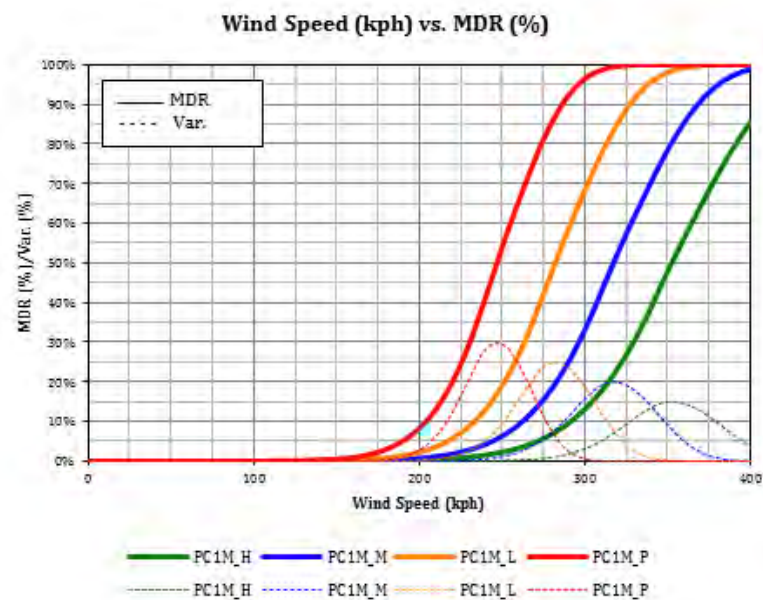
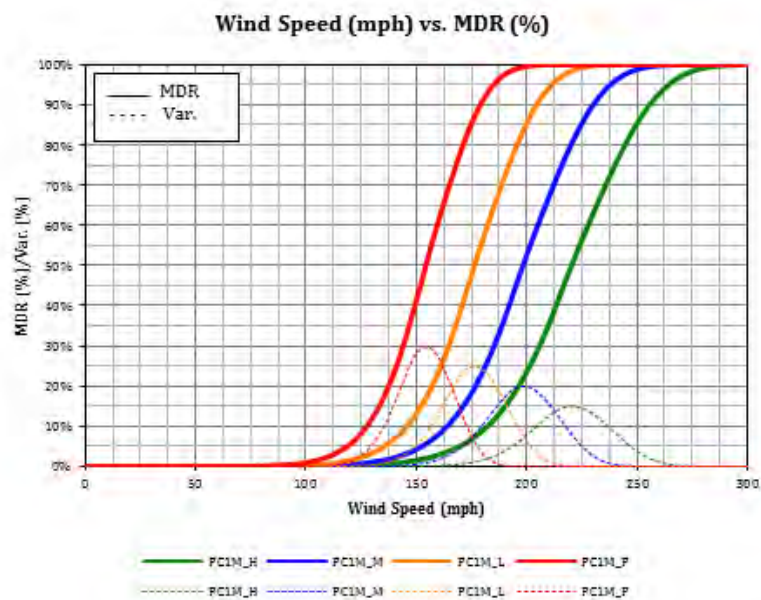
PC1L - Precast Concrete Tilt-Up Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
PC1L_H	HIGH	4.57	1	220.00	10.00	8.00
PC1L_M	MEDIUM	4.57	1	198.00	10.00	8.00
PC1L_L	LOW	4.57	1	176.00	10.00	8.00
PC1L_P	POOR	4.57	1	154.00	10.00	8.00



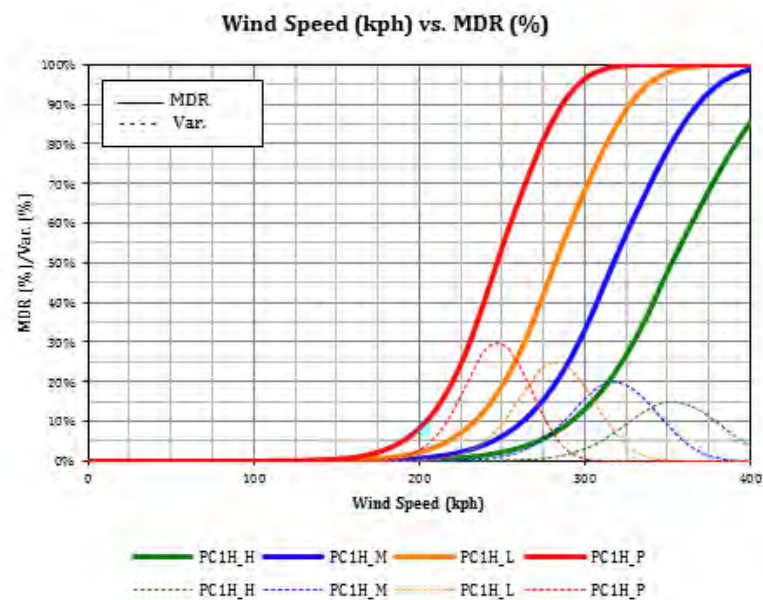
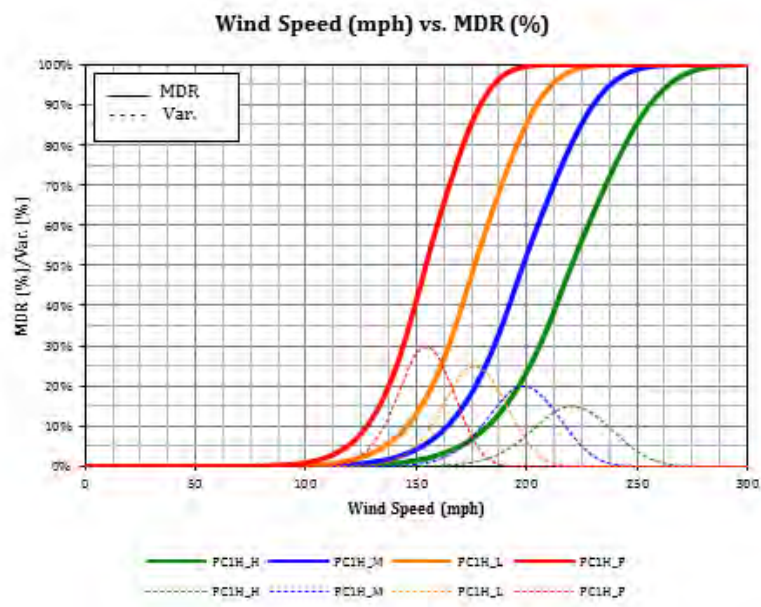
PC1M - Precast Concrete Tilt-Up Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
PC1M_H	HIGH	15.24	5	220.00	10.00	8.00
PC1M_M	MEDIUM	15.24	5	198.00	10.00	8.00
PC1M_L	LOW	15.24	5	176.00	10.00	8.00
PC1M_P	POOR	15.24	5	154.00	10.00	8.00



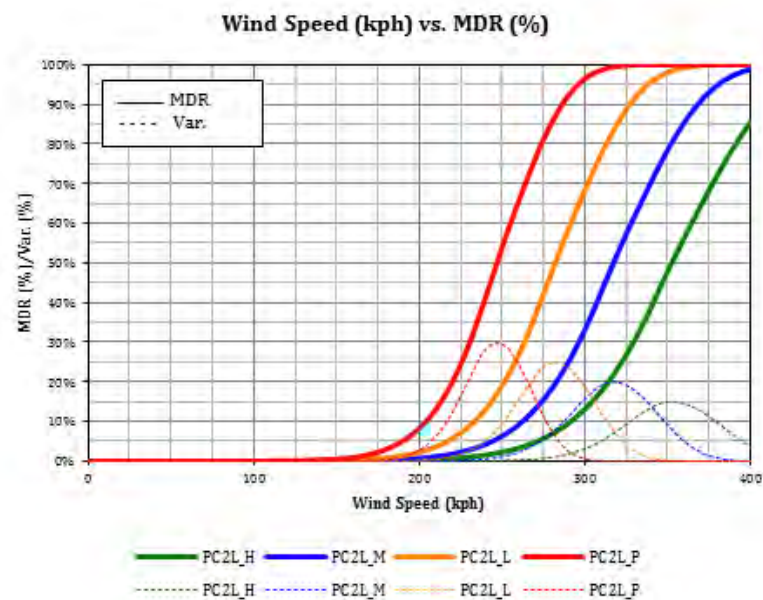
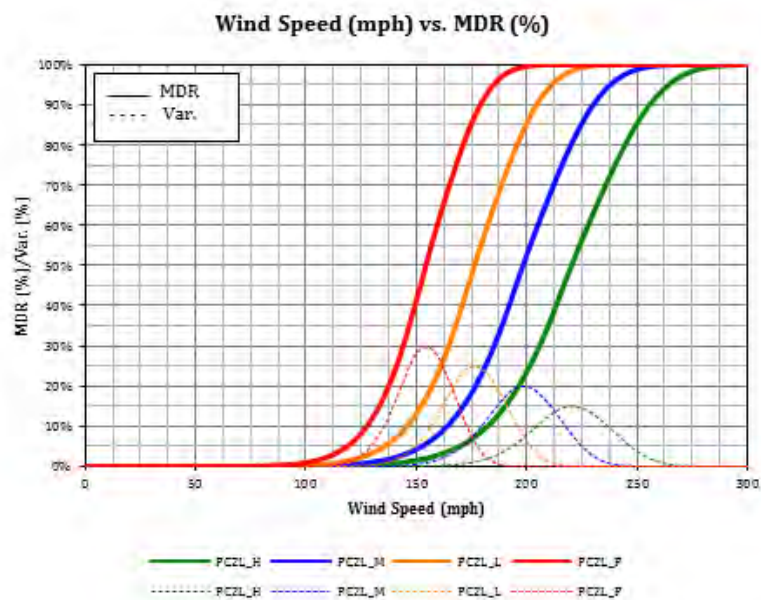
PC1H - Precast Concrete Tilt-Up Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
PC1H_H	HIGH	36.58	12	220.00	10.00	8.00
PC1H_M	MEDIUM	36.58	12	198.00	10.00	8.00
PC1H_L	LOW	36.58	12	176.00	10.00	8.00
PC1H_P	POOR	36.58	12	154.00	10.00	8.00



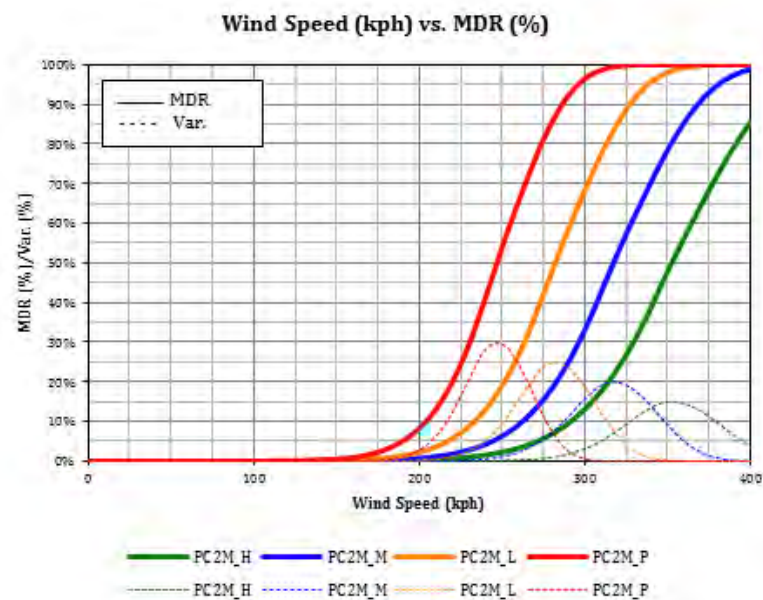
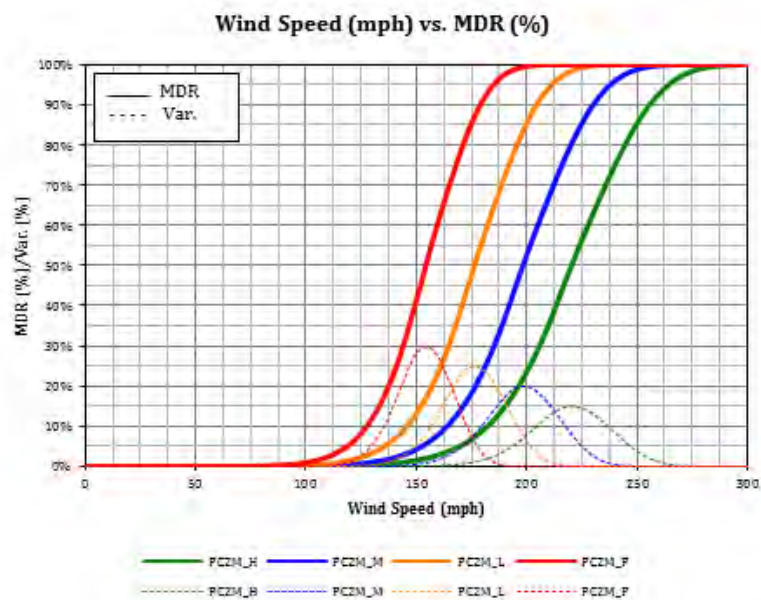
PC2L - Precast Concrete Frames with Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
PC2L_H	HIGH	6.10	2	220.00	10.00	8.00
PC2L_M	MEDIUM	6.10	2	198.00	10.00	8.00
PC2L_L	LOW	6.10	2	176.00	10.00	8.00
PC2L_P	POOR	6.10	2	154.00	10.00	8.00



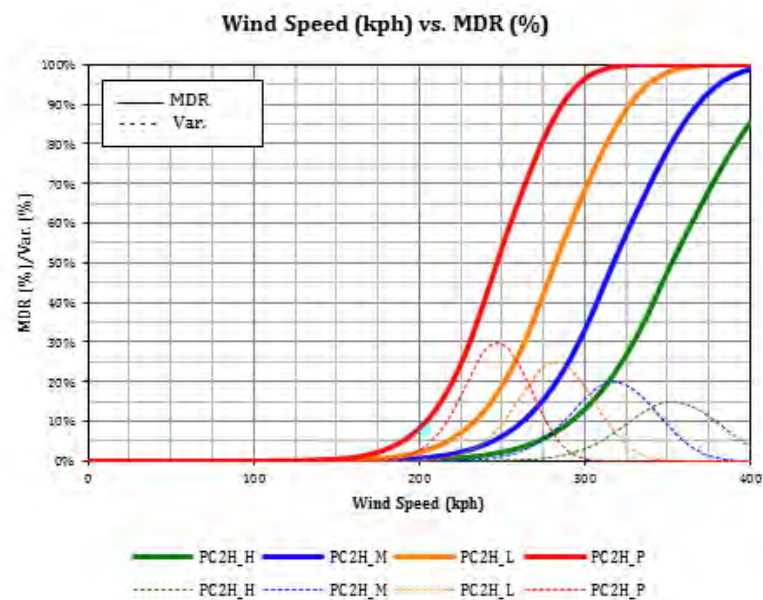
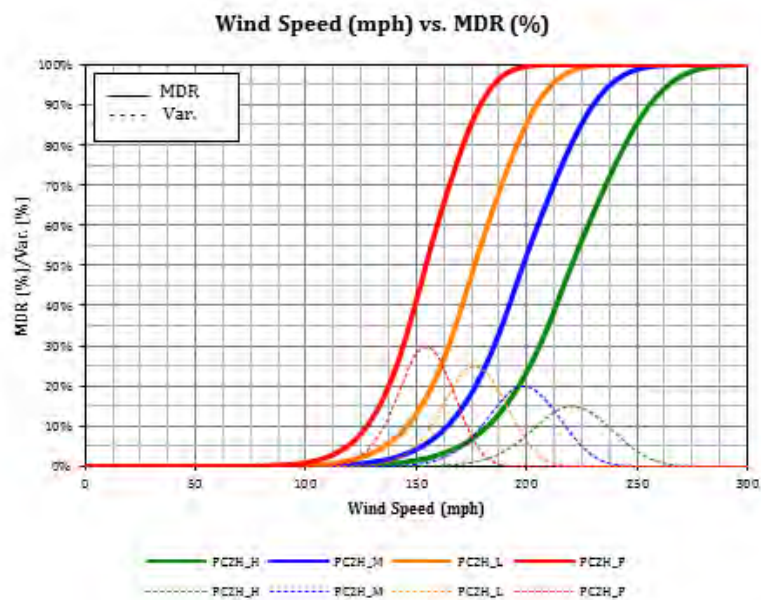
PC2M - Precast Concrete Frames with Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
PC2M_H	HIGH	15.24	5	220.00	10.00	8.00
PC2M_M	MEDIUM	15.24	5	198.00	10.00	8.00
PC2M_L	LOW	15.24	5	176.00	10.00	8.00
PC2M_P	POOR	15.24	5	154.00	10.00	8.00



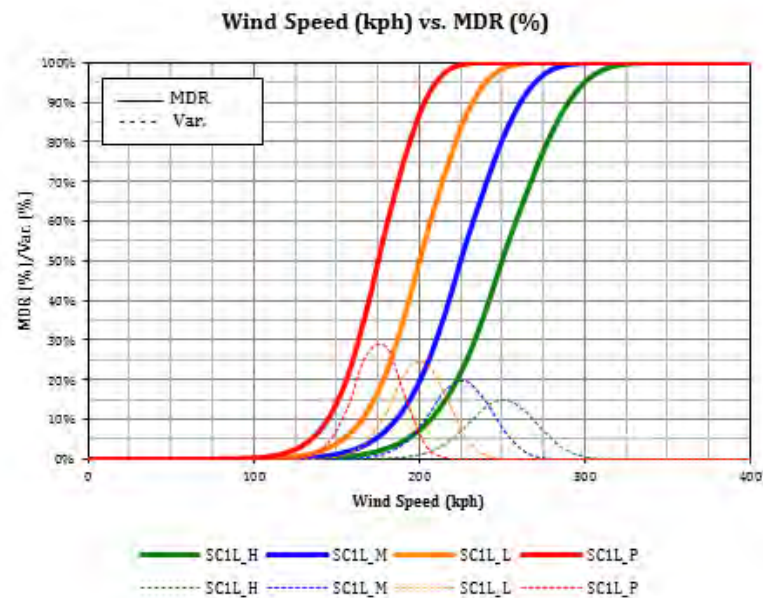
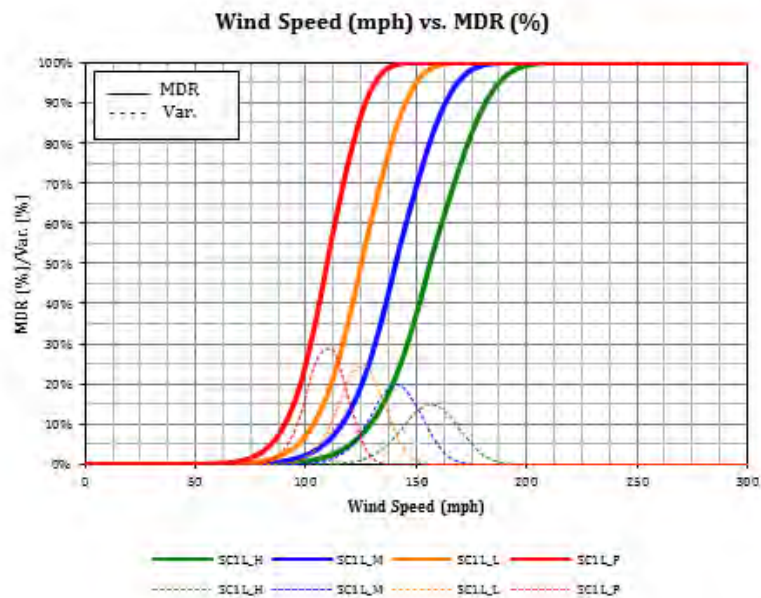
PC2H - Precast Concrete Frames with Concrete Shear Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
PC2H_H	HIGH	36.58	12	220.00	10.00	8.00
PC2H_M	MEDIUM	36.58	12	198.00	10.00	8.00
PC2H_L	LOW	36.58	12	176.00	10.00	8.00
PC2H_P	POOR	36.58	12	154.00	10.00	8.00



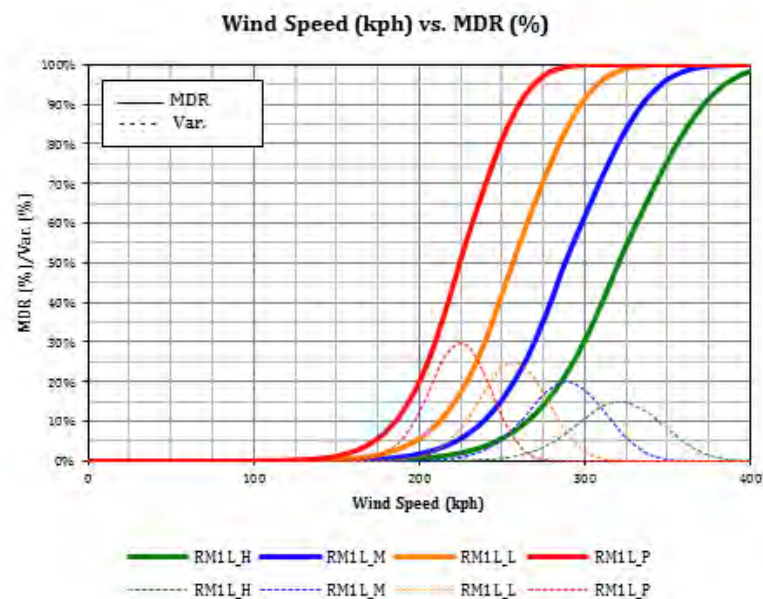
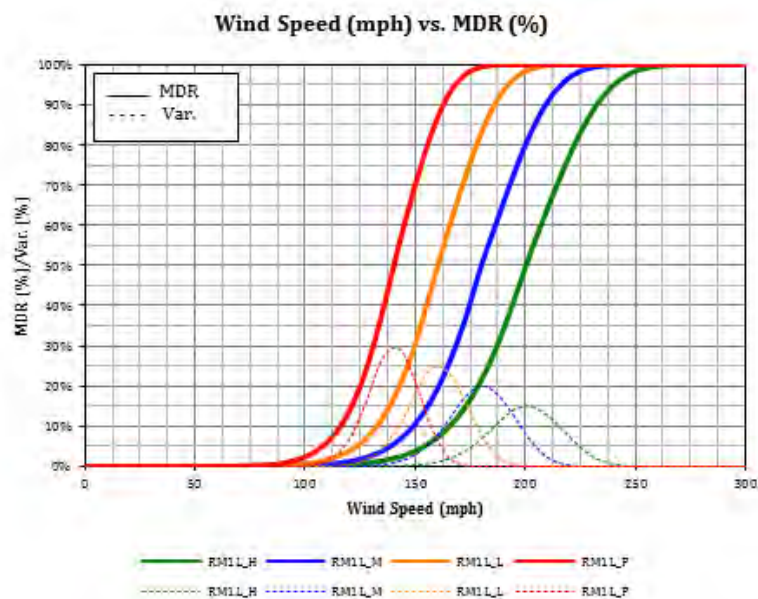
SC1L - Reinforced Concrete Frames and Steel Truss Girder (Warehouses)

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
SC1L_H	HIGH	4.57	1	156.00	10.00	8.00
SC1L_M	MEDIUM	4.57	1	140.40	10.00	8.00
SC1L_L	LOW	4.57	1	124.80	10.00	8.00
SC1L_P	POOR	4.57	1	109.20	10.00	8.00



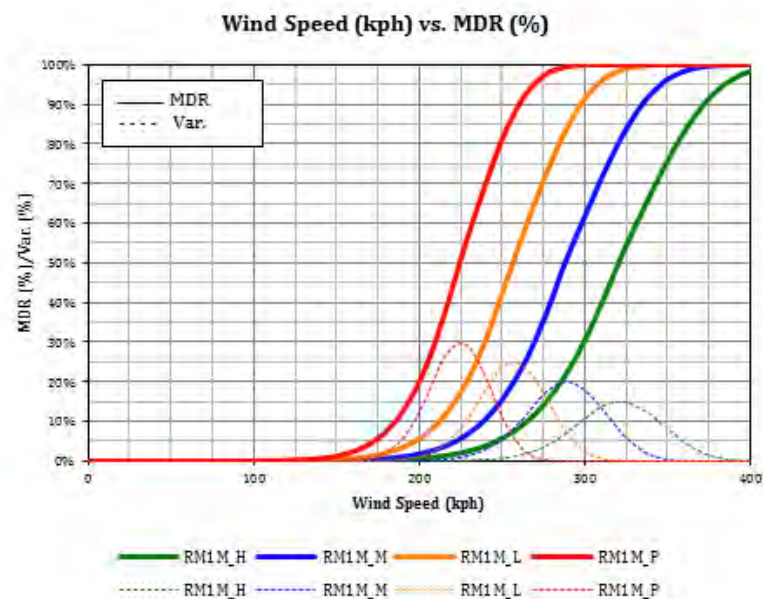
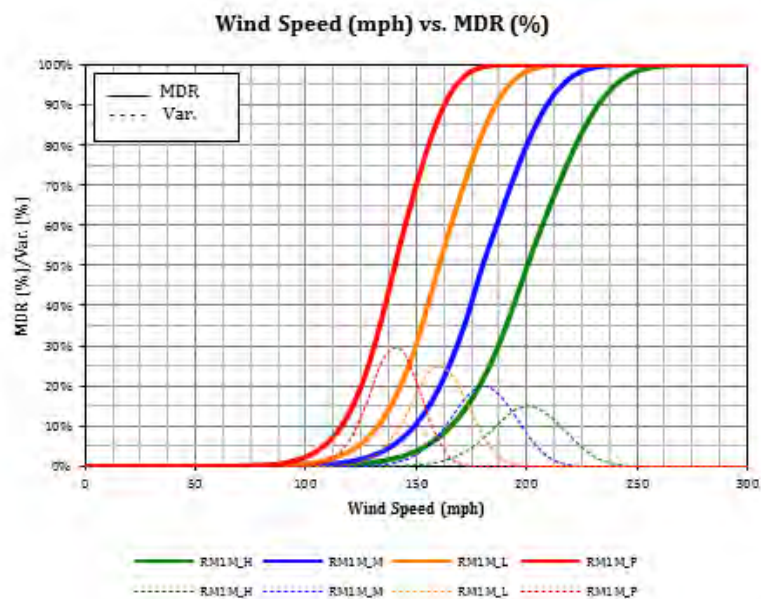
RM1L - Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
RM1L_H	HIGH	6.10	2	200.00	10.00	8.00
RM1L_M	MEDIUM	6.10	2	180.00	10.00	8.00
RM1L_L	LOW	6.10	2	160.00	10.00	8.00
RM1L_P	POOR	6.10	2	140.00	10.00	8.00



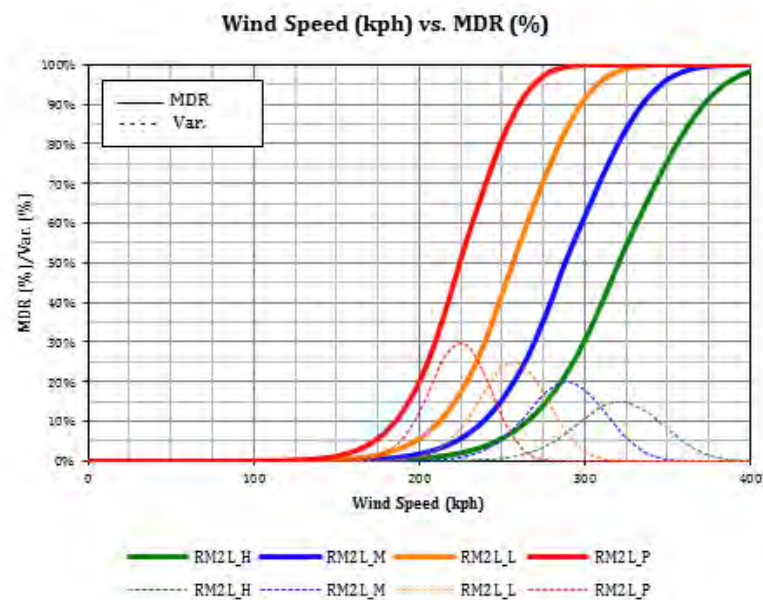
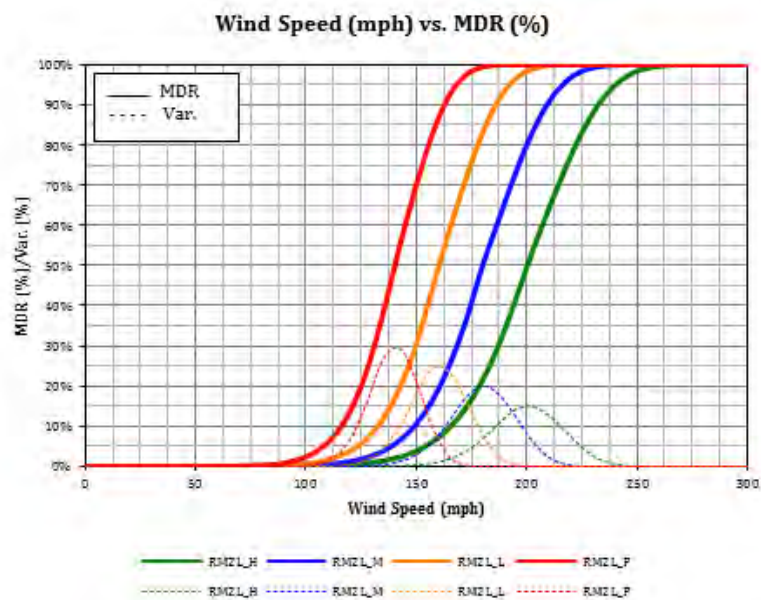
RM1M - Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
RM1M_H	HIGH	15.24	5	200.00	10.00	8.00
RM1M_M	MEDIUM	15.24	5	180.00	10.00	8.00
RM1M_L	LOW	15.24	5	160.00	10.00	8.00
RM1M_P	POOR	15.24	5	140.00	10.00	8.00



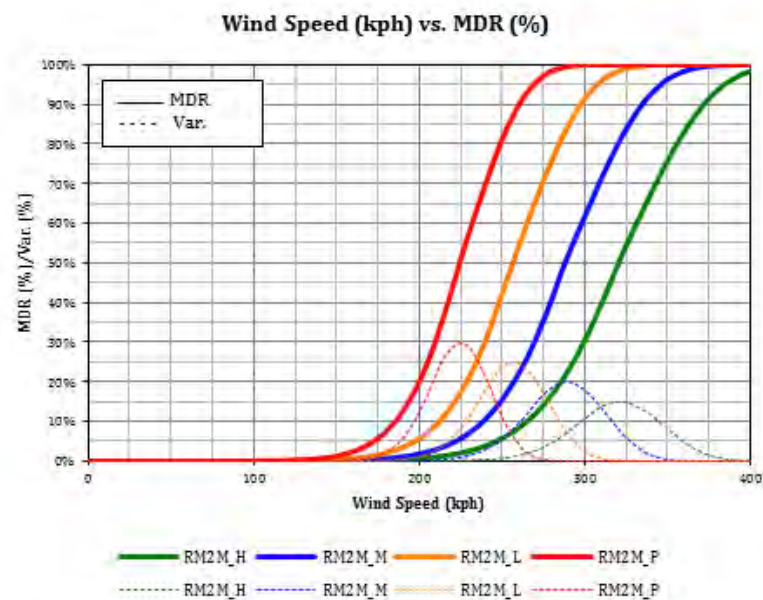
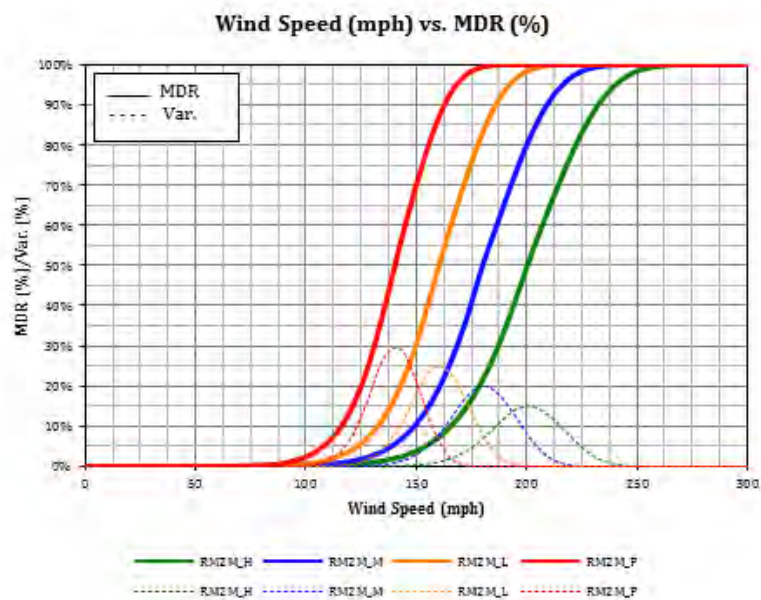
RM2L - Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
RM2L_H	HIGH	6.10	2	200.00	10.00	8.00
RM2L_M	MEDIUM	6.10	2	180.00	10.00	8.00
RM2L_L	LOW	6.10	2	160.00	10.00	8.00
RM2L_P	POOR	6.10	2	140.00	10.00	8.00



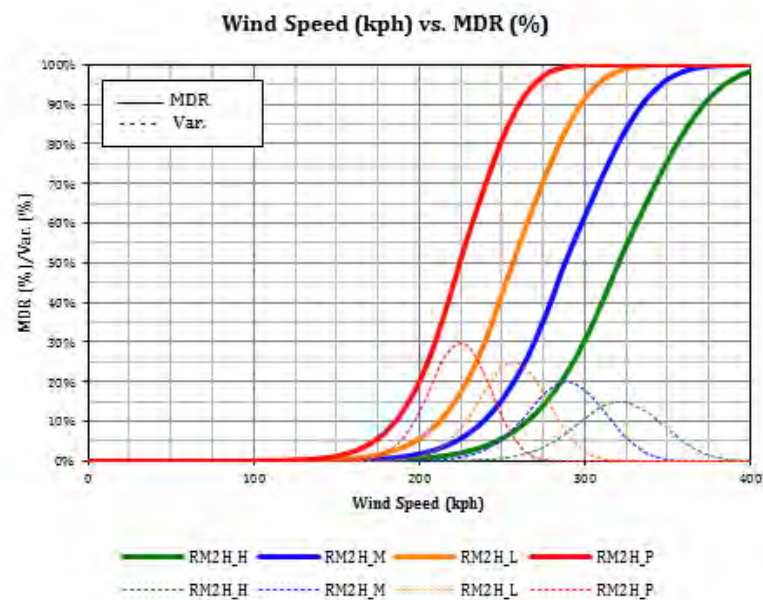
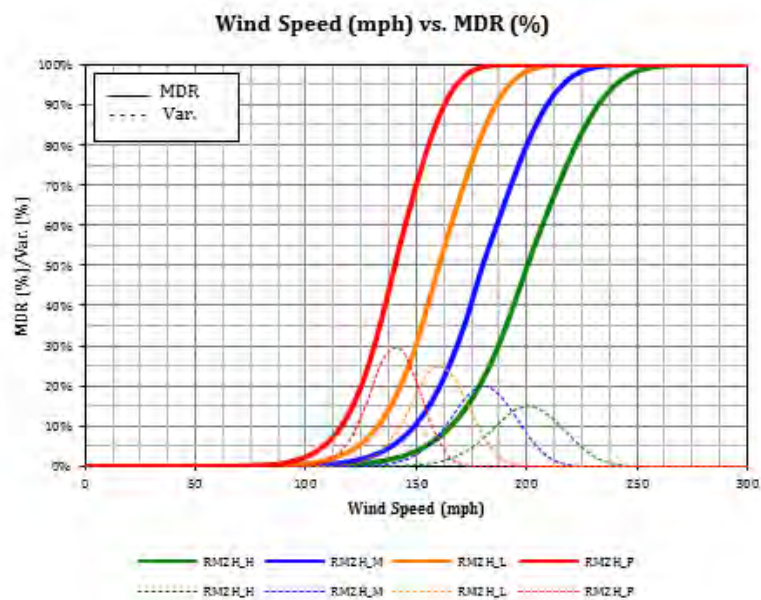
RM2M - Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
RM2M_H	HIGH	15.24	5	200.00	10.00	8.00
RM2M_M	MEDIUM	15.24	5	180.00	10.00	8.00
RM2M_L	LOW	15.24	5	160.00	10.00	8.00
RM2M_P	POOR	15.24	5	140.00	10.00	8.00



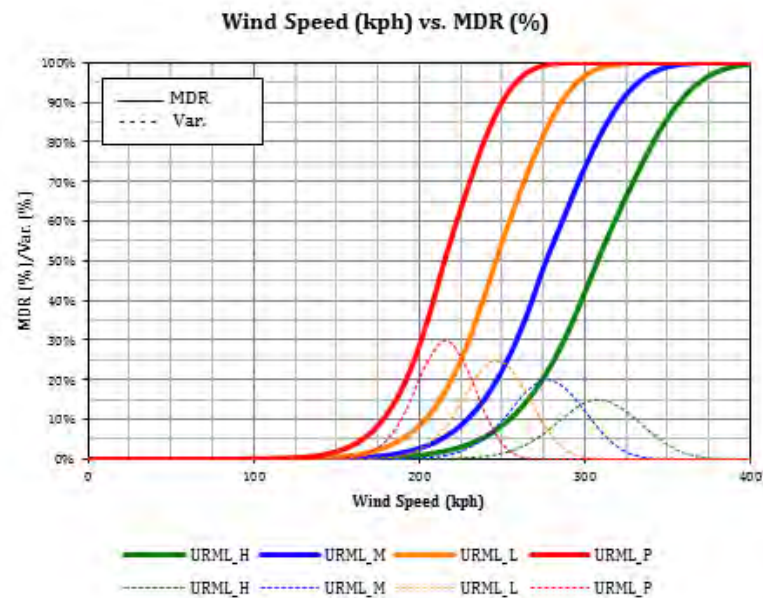
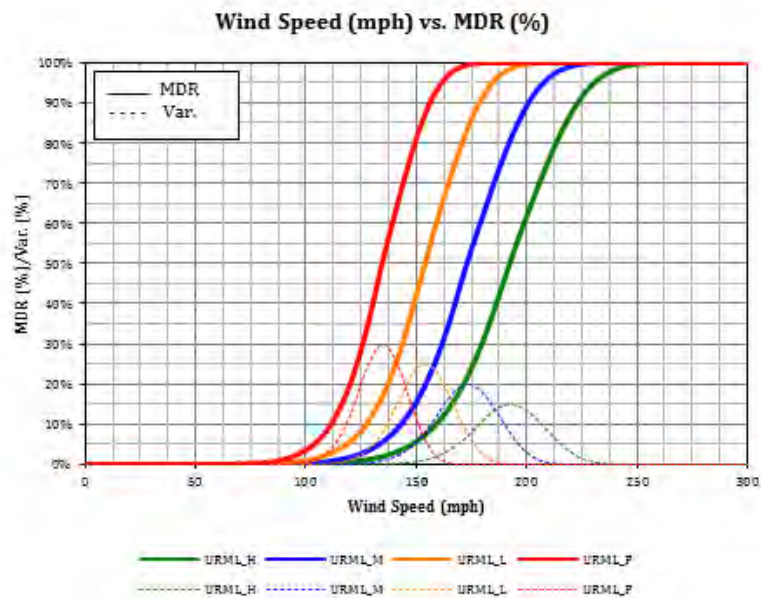
RM2H - Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
RM2H_H	HIGH	36.58	12	200.00	10.00	8.00
RM2H_M	MEDIUM	36.58	12	180.00	10.00	8.00
RM2H_L	LOW	36.58	12	160.00	10.00	8.00
RM2H_P	POOR	36.58	12	140.00	10.00	8.00



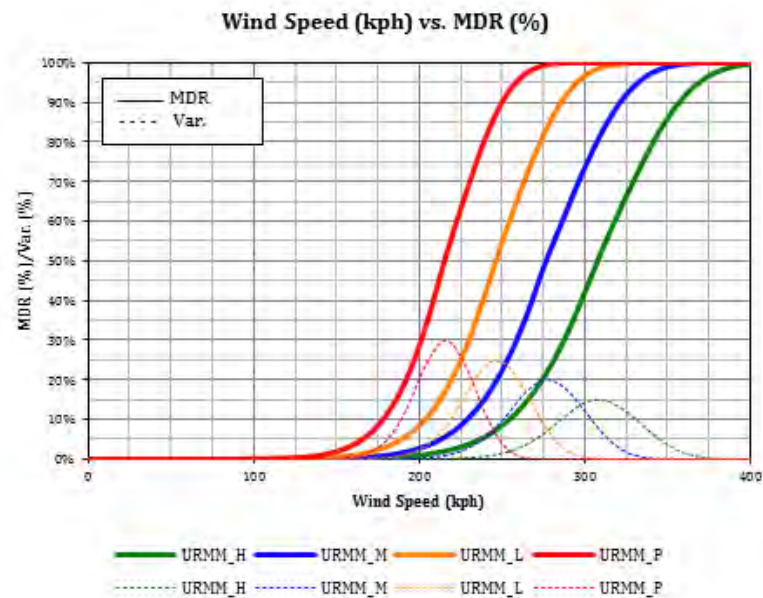
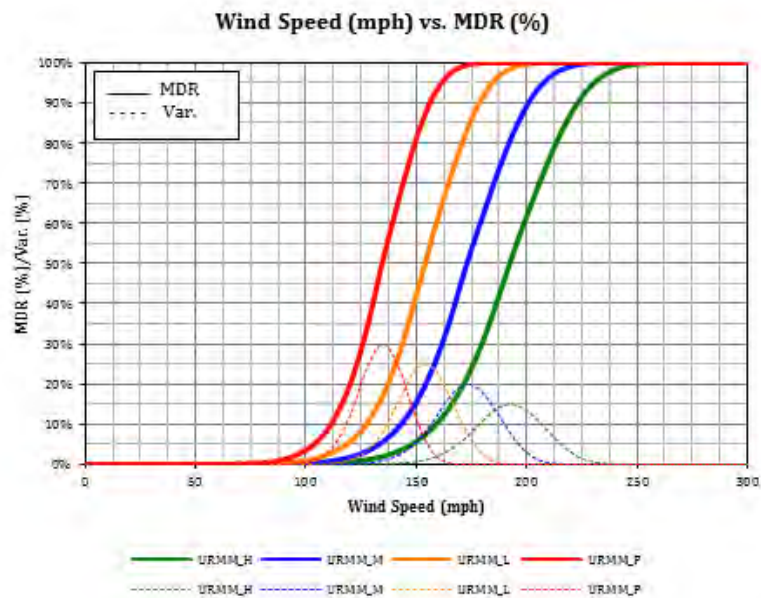
URML - Unreinforced Masonry Bearing Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
URML_H	HIGH	4.57	1	192.00	10.00	8.00
URML_M	MEDIUM	4.57	1	172.80	10.00	8.00
URML_L	LOW	4.57	1	153.60	10.00	8.00
URML_P	POOR	4.57	1	134.40	10.00	8.00



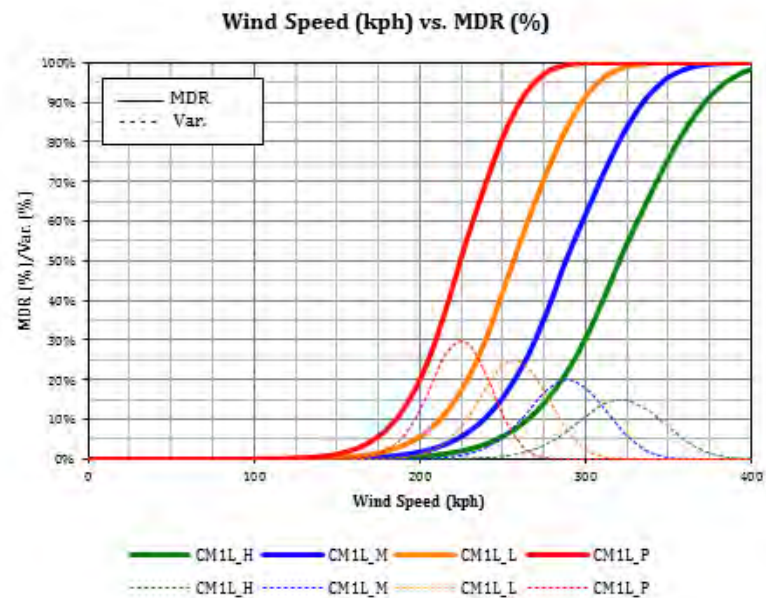
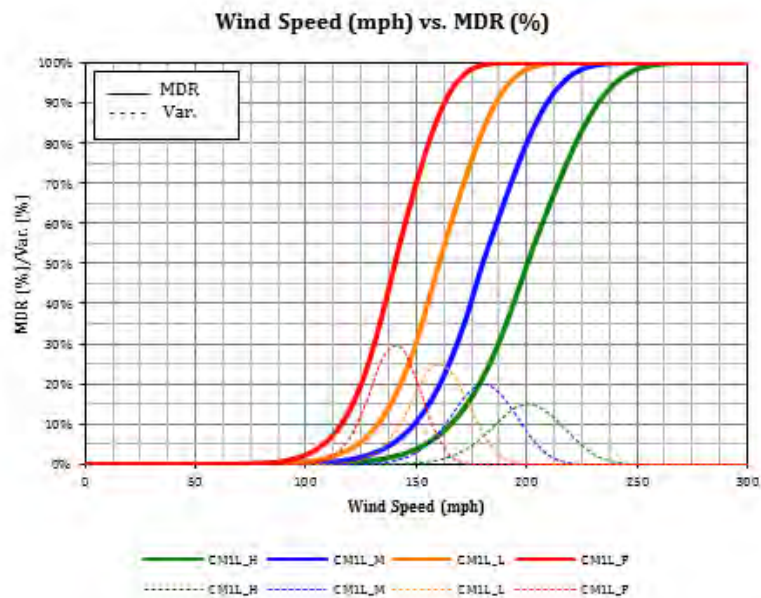
URMM - Unreinforced Masonry Bearing Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
URMM_H	HIGH	10.67	3	192.00	10.00	8.00
URMM_M	MEDIUM	10.67	3	172.80	10.00	8.00
URMM_L	LOW	10.67	3	153.60	10.00	8.00
URMM_P	POOR	10.67	3	134.40	10.00	8.00



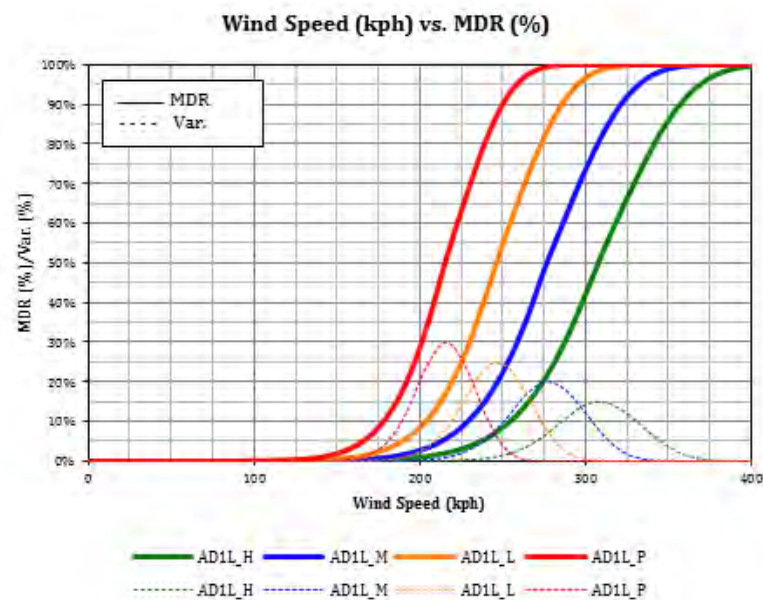
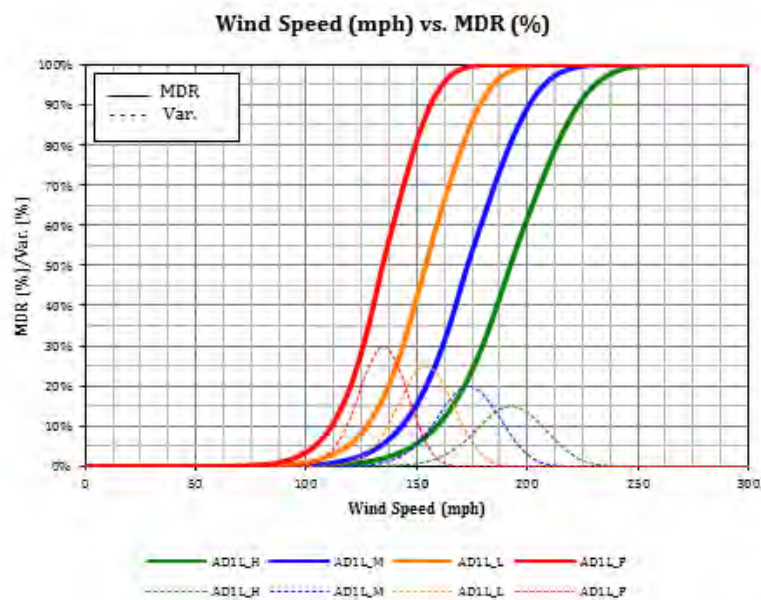
CM1L - Confined Masonry Walls

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
CM1L_H	HIGH	9.14	3	200.00	10.00	8.00
CM1L_M	MEDIUM	9.14	3	180.00	10.00	8.00
CM1L_L	LOW	9.14	3	160.00	10.00	8.00
CM1L_P	POOR	9.14	3	140.00	10.00	8.00



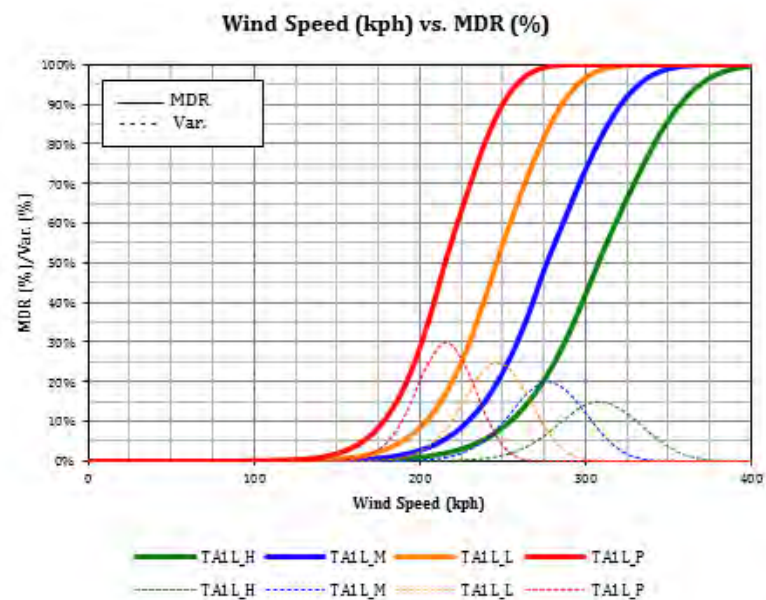
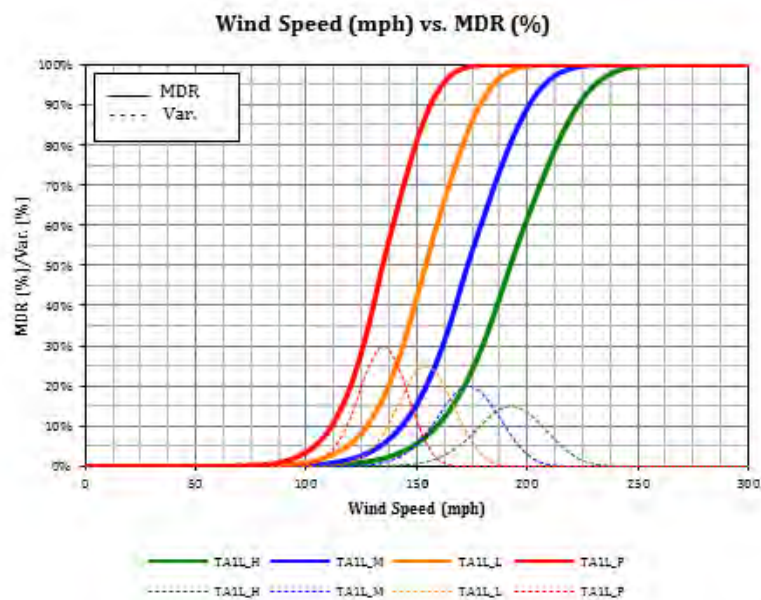
AD1L - Adobe

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
AD1L_H	HIGH	6.10	2	192.00	10.00	8.00
AD1L_M	MEDIUM	6.10	2	172.80	10.00	8.00
AD1L_L	LOW	6.10	2	153.60	10.00	8.00
AD1L_P	POOR	6.10	2	134.40	10.00	8.00



TA1L - Tapia

BUILDING PARAMETERS						
FUNCTION	QUALITY LEVEL	H (m)	Np	Y (mph)	ρ_1	ρ_2
TA1L_H	HIGH	6.10	2	192.00	10.00	8.00
TA1L_M	MEDIUM	6.10	2	172.80	10.00	8.00
TA1L_L	LOW	6.10	2	153.60	10.00	8.00
TA1L_P	POOR	6.10	2	134.40	10.00	8.00



ANNEX 18. WIND CONSTRUCTION QUALITY LEVEL (H, M, L, P) FOR ALL CONSTRUCTION CLASSES.

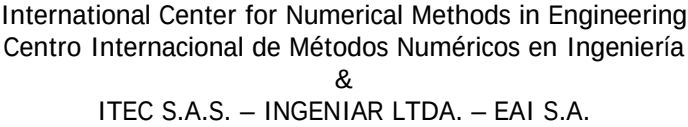
Table A18 – 1
Wind construction quality level (H, M, L, P) for all construction classes

General Description	PAGE-STR	Description	STRUCTURAL SYSTEM CATEGORY	Country Development Level																																																																							
				H																MH																ML																L																							
				Complexity City Level																								Complexity City Level																								Complexity City Level																							
				H						M						L						H						M						L						H						M						L						H						M						L					
				Hazard Level																		Hazard Level																		Hazard Level																		Hazard Level																	
H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L																																					
Wood/Timber	W	Wood	W1	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	W1	Wood stud-wall frame with plywood/gypsum board sheathing. Absence of masonry infill walls. Shear wall system consists of plywood or manufactured wood panels. Exterior is commonly cement plaster ("Stucco"), wood or vinyl planks, or aluminum planks (in lower cost houses). In addition, brick masonry or stone is sometimes applied to the exterior as a non-load-bearing veneer. The roof and floor act as diaphragms to resist lateral loading. (US & Canadian single family homes).	W1	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	W2	Wood frame, heavy members (with area > 5000 sq. ft.) (US & Canadian commercial and industrial wood frame).	W2	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	W3	Light post and beam wood frame. The floors and roofs do not act as diaphragms. No bracing, poor seismic load resistance path with poor connections. Timber frame may have partial infill walls with or without timber cladding.	W1	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	W4	Wooden panel or log construction. Typically in central Asia, Russia). Walls are made of timber logs sawn horizontally in a square or circular cross section and assembled with special end joints.	W1	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	W5	Walls with bamboo/light timber log/reed mesh and post (Wattle and Daub- (Wattle and Daub- a woven lattice/sticks of wooden strips called wattle is daubed with a sticky material usually made of some combination of wet soil, clay, sand, animal dung and straw).	W1	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	W6	Unbraced heavy post and beam wood frame with mud or other infill material. Un-braced timber frame with connections meant to resist (gravity) vertical loads only. Floors or roof consists of wood purlins supporting thatched roof, wood planks or rafters supporting clay tiles.	W1	L	L	L	L	L	L	L	L	L	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																			
W7	Braced wood frame with load-bearing infill wall system. Frame is diagonally braced and infill walls are generally made of brick masonry, adobe, or wooden planks or wattle & daub infill. (European style)	W2	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																					
Adobe/Mud Walls	M	Mud walls	TA1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	M1	Mud walls without horizontal wood elements	TA1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	M2	Mud walls with horizontal wood elements	TA1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	A	Adobe blocks (unbaked sundried mud block) walls	AD1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	A1	Adobe block, mud mortar, wood roof and floors	AD1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	A2	Adobe block, mud mortar, bamboo, straw, and thatch roof	AD1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	A3	Adobe block, straw, and thatch roof cement-sand mortar	AD1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
Stone/Block & Masonry	A4	Adobe block, mud mortar, reinforced concrete bond beam, cane and mud roof	AD1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	A5	Adobe block, mud mortar, with bamboo or rope reinforcement	AD1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	RE	Rammed Earth/Pneumatically impacted stabilized earth	TA1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	RS	Rubble stone (field stone) masonry	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
	RS1	Local field stones dry stacked (no mortar) with timber floors, earth, or metal roof	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																				
RS2	Local field stones with mud mortar.	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L																																					



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General Description	PAGE-STR	Description	STRUCTURAL SYSTEM CARI3	Country Development Level																																															
				H												MH												ML												L											
				Complexity City Level												Complexity City Level												Complexity City Level												Complexity City Level											
				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level												Hazard Level												Hazard Level												Hazard Level											
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L									
RS3	Local field stones with lime mortar.	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
RS4	Local field stones with cement mortar, vaulted brick roof and floors	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
RS5	Local field stones with cement mortar and reinforced concrete bond beam.	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
DS	Rectangular cut-stone masonry block	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
DS1	Rectangular cut stone masonry block with mud mortar, timber roof and floors	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
DS2	Rectangular cut stone masonry block with lime mortar	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
DS3	Rectangular cut stone masonry block with cement mortar	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
DS4	Rectangular cut stone masonry block with reinforced concrete floors and roof	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
MS	Massive stone masonry in lime or cement mortar	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
UCB	Unreinforced concrete block masonry with lime or cement mortar	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
Brick-Masonry	UFB	Unreinforced fired brick masonry	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	UFB1	Unreinforced brick masonry in mud mortar without timber posts	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	UFB2	Unreinforced brick masonry in mud mortar with timber posts	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	UFB3	Unreinforced brick masonry in lime mortar	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	UFB4	Unreinforced fired brick masonry, cement mortar, timber flooring, timber or steel beams and columns, tie courses (bricks aligned perpendicular to the plane of the wall)	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	UFB5	Unreinforced fired brick masonry, cement mortar, but with reinforced concrete floor and roof slabs	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
Reinforced/Confined Masonry	RM	Reinforced masonry	RM1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM1	Reinforced masonry bearing walls with wood or metal deck diaphragms	RM1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM1L	Reinforced masonry bearing walls with wood or metal deck diaphragms low-rise	RM1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM1M	Reinforced masonry bearing walls with wood or metal deck diaphragms mid-rise (4+ stories)	RM1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM2	Reinforced masonry bearing walls with concrete diaphragms	RM2M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM2L	Reinforced masonry bearing walls with concrete diaphragms low-rise	RM2L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM2M	Reinforced masonry bearing walls with concrete diaphragms mid-rise	RM2M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM2H	Reinforced masonry bearing walls with concrete diaphragms high-rise	RM2H	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	RM3	Confined masonry	CM1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C	Reinforced concrete	C1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
Reinforced Concrete	C1	Ductile reinforced concrete moment frame with or without infill.	C1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C1L	Ductile reinforced concrete moment frame with or without infill low-rise	C1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C1M	Ductile reinforced concrete moment frame with or without infill mid-rise	C1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C1H	Ductile reinforced concrete moment frame with or without infill high-rise	C1H	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C2	Reinforced concrete shear walls	C2M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C2L	Reinforced concrete shear walls low-rise	C2L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C2M	Reinforced concrete shear walls mid-rise	C2M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C2H	Reinforced concrete shear walls high-rise	C2H	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C3	Nonductile reinforced concrete frame with masonry infill walls	C3M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C3L	Nonductile reinforced concrete frame with masonry infill walls low-rise	C3L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C3M	Nonductile reinforced concrete frame with masonry infill walls mid-rise	C3M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C3H	Nonductile reinforced concrete frame with masonry infill walls high-rise	C3H	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
	C4	Nonductile reinforced concrete frame without masonry infill walls	C1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L						
C4L	Nonductile reinforced concrete frame without masonry infill walls low-rise	C1L	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
C4M	Nonductile reinforced concrete frame without masonry infill walls mid-rise	C1M	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							
C4H	Nonductile reinforced concrete frame without masonry infill walls high-rise	C1H	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L	M	M	L							

A18-3



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General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GARL3	Country Development Level																																															
				H												MH												ML												L											
				Complexity City Level												Complexity City Level												Complexity City Level												Complexity City Level											
				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level												Hazard Level												Hazard Level												Hazard Level											
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L									
		squatters).																																																	
UNK		Not specified (unknown/default)	URML	H	M	L	H	M	L	H	M	L	M	M	L	M	M	L	M	L	L	M	L	L	M	L	L	M	L	P	M	L	P	L	L	L	L	L	L	P	L	P	P	P	P						



ANNEX 19. FLOOD CONSTRUCTION LEVEL (F1L, F2L, F2M, F2H) FOR ALL CONSTRUCTION CLASSES.

PARAMETERS:

$h_{50\%}$ Height with the 50% of damage.

ρ_1 Initial curvature.

ρ_2 Final curvature.

%DT Maximum Damage.

σ_2 Maximum Variance.

Table A19 – 1
Main construction classes

No.	Function Name	Description	Height		Height to Roof (ft)	Period Te (Sec)	PARAMETERS				
			Range				h50% (m)	ρ1	ρ2	%DT	σ2
			Name	Stories							
1	F1L	Wood, Light Frame (≤5,000 sq. ft.), Wood, Commercial and Industrial (>5,000 sq. ft.), Adobe, Tapia, Mobile Homes	-	1-2	14.0	0.35	1.5	2.5	3	100%	25%
2	F2L	Confined Masonry Walls, Unreinforced Masonry Bearing Walls, Reinforced Masonry Bearing Walls, Concrete Systems and Steel Systems	Low-Rise	1-2	12.0	0.40	1.5	2.75	3	60%	25%
3	F2M		Low-Rise	1-2	24.0	0.40	1.5	3	3	40%	25%
4	F2H		Mid-Rise High-Rise	3 +	36.0	0.40	1.5	3	3	20%	25%



Table A19 - 2
Flood construction level (F1L, F2L, F2M, F2H) for all construction classes

General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GARI3	Country Development Level																																															
				H												MH												ML												L											
				Complexity City Level												Complexity City Level												Complexity City Level												Complexity City Level											
				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level												Hazard Level												Hazard Level												Hazard Level											
H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L																
Wood/Timber	W	Wood	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L																
	W1	Wood stud-wall frame with plywood/gypsum board sheathing. Absence of masonry infill walls. Shear wall system consists of plywood or manufactured wood panels. Exterior is commonly cement plaster ("stucco"), wood or vinyl planks, or aluminum planks (in lower cost houses). In addition, brick masonry or stone is sometimes applied to the exterior as a non-load-bearing veneer. The roof and floor act as diaphragms to resist lateral loading. (US & Canadian single family homes).	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L															
	W2	Wood frame, heavy members (with area > 5000 sq. ft.) (US & Canadian commercial and industrial wood frame).	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L															
	W3	Light post and beam wood frame. The floors and roofs do not act as diaphragms. No bracing, poor seismic load resistance path with poor connections. Timber frame may have partial infill walls with or without timber cladding.	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L															
	W4	Wooden panel or log construction. (Typically in central Asia, Russia). Walls are made of timber logs sawn horizontally in a square or circular cross section and assembled with special end joints.	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L															
	W5	Walls with bamboo/light timber log/reed mesh and post (Wattle and Daub). (Wattle and Daub- a woven lattice/sticks of wooden strips called wattle is daubed with a sticky material usually made of some combination of wet soil, clay, sand, animal dung and straw).	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L															
	W6	Unbraced heavy post and beam wood frame with mud or other infill material. Un-braced timber frame with connections meant to resist (gravity) vertical loads only. Floors or roof consists of wood purlins supporting thatched roof, wood planks or rafters supporting clay tiles.	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L															
W7	Braced wood frame with load-bearing infill wall system. Frame is diagonally braced and infill walls are generally made of brick masonry, adobe, or wooden planks or wattle & daub infill. (European style)	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L																



General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GAB13	Country Development Level																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Adobe /Mud Walls	M	Mud walls	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L	F1L

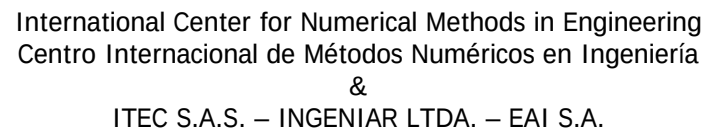


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Centro Internacional de Métodos Numéricos en Ingeniería
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ITEC S.A.S. – INGENIAR LTDA. – EAI S.A.

General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GARI3	Country Development Level																																															
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				Complexity City Level												Complexity City Level												Complexity City Level												Complexity City Level											
				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level												Hazard Level												Hazard Level												Hazard Level											
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L												
DS1	Rectangular cut stone masonry block with mud mortar, timber roof and floors	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L													
DS2	Rectangular cut stone masonry block with lime mortar	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L												
DS3	Rectangular cut stone masonry block with cement mortar	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L												
DS4	Rectangular cut stone masonry block with reinforced concrete floors and roof	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L											
MS	Massive stone masonry in lime or cement mortar	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L											
UCB	Unreinforced concrete block masonry with lime or cement mortar	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L											
Brick Masonry	UFB	Unreinforced fired brick masonry	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L											
	UFB 1	Unreinforced brick masonry in mud mortar without timber posts	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	UFB 2	Unreinforced brick masonry in mud mortar with timber posts	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	UFB 3	Unreinforced brick masonry in lime mortar	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	UFB 4	Unreinforced fired brick masonry, cement mortar, timber flooring, timber or steel beams and columns, tie courses (bricks aligned perpendicular to the plane of the wall)	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	UFB 5	Unreinforced fired brick masonry, cement mortar, but with reinforced concrete floor and roof slabs	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L									
Reinforced/Confined Masonry	RM	Reinforced masonry	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M										
	RM1	Reinforced masonry bearing walls with wood or metal deck diaphragms	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	RM1 L	Reinforced masonry bearing walls with wood or metal deck diaphragms low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	RM1 M	Reinforced masonry bearing walls with wood or metal deck diaphragms mid-rise (4+ stories)	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M										
	RM2	Reinforced masonry bearing walls with concrete diaphragms	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M									



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				H												MH												ML								L															
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				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level												Hazard Level												Hazard Level								Hazard Level															
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L												
RM2 L	Reinforced masonry bearing walls with concrete diaphragms low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L															
RM2 M	Reinforced masonry bearing walls with concrete diaphragms mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
RM2 H	Reinforced masonry bearing walls with concrete diaphragms high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H															
RM3	Confined masonry	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L															
Reinforced Concrete	C	Reinforced concrete	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C1	Ductile reinforced concrete moment frame with or without infill	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C1L	Ductile reinforced concrete moment frame with or without infill low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L															
	C1M	Ductile reinforced concrete moment frame with or without infill mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C1H	Ductile reinforced concrete moment frame with or without infill high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H															
	C2	Reinforced concrete shear walls	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C2L	Reinforced concrete shear walls low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L															
	C2M	Reinforced concrete shear walls mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C2H	Reinforced concrete shear walls high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H															
	C3	Nonductile reinforced concrete frame with masonry infill walls	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C3L	Nonductile reinforced concrete frame with masonry infill walls low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L															
	C3M	Nonductile reinforced concrete frame with masonry infill walls mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M															
	C3H	Nonductile reinforced concrete frame with masonry infill walls high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H															



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				H												MH												ML								L															
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				H				M				L				H				M				L				H				M				L				H				M				L			
				Hazard Level												Hazard Level												Hazard Level								Hazard Level															
				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L												
PC2 H	Precast concrete frames with concrete shear walls high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H													
PC3	Precast reinforced concrete moment resisting frame with masonry infill walls	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L												
PC3 L	Precast reinforced concrete moment resisting frame with masonry infill walls low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L												
PC3 M	Precast reinforced concrete moment resisting frame with masonry infill walls mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M											
PC3 H	Precast reinforced concrete moment resisting frame with masonry infill walls high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H											
PC4	Precast panels (wall panel structure)	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L											
TU	PRECAST CONCRETE TILT-UP WALLS (Precast Wall Panel Construction (Mid to high rise, Former Soviet Union style))	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M											
Steel	S	Steel	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M											
	S1	Steel moment frame of steel columns and beams. With nonstructural walls (curtain walls, brick masonry, or precast concrete panels), ceilings and column furring. Diaphragms of any material.	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M										
	S1L	Steel moment frame low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	S1M	Steel moment frame mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M										
	S1H	Steel moment frame high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H										
	S2	Steel braced frame	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M										
	S2L	Steel braced frame low-rise	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										
	S2M	Steel braced frame mid-rise	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M										
	S2H	Steel braced frame high-rise	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H	F2H										
	S3	Steel light frame, are prefabricated w/ transverse rigid frames. The roof and walls consist of lightweight panels.	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L	F2L										



General Description	PAGER-STR	Description	STRUCTURAL SYSTEM GARI3	Country Development Level																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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S4	Steel frame with cast-in-place concrete shear walls. The shear walls may be bearing walls.	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M	F2M



ANNEX 20. RESULTS FROM EARTHQUAKE RISK

Table A20-1
National and Fiscal AAL results, for earthquake by regions

Region	Exposed value		National		Fiscal	
	National	Fiscal	National		Fiscal	
	[USDx10 ⁶]	[USDx10 ⁶]	[USDx10 ⁶]	[%]	[USDx10 ⁶]	[%]
Asia	\$ 31,984,272	\$ 2,541,198	\$ 94,310	2.9 %	\$ 5,300	2.1 %
Australia	\$ 2,071,569	\$ 60,653	\$ 180	0.1 %	\$ 11	0.2 %
Caribbean	\$ 408,700	\$ 35,140	\$ 1,627	4.0 %	\$ 147	4.2 %
Europe	\$ 30,271,265	\$ 1,877,116	\$ 9,174	0.3 %	\$ 488	0.3 %
Latin America	\$ 5,520,532	\$ 797,297	\$ 5,389	1.0 %	\$ 764	1.0 %
North Africa	\$ 775,538	\$ 243,962	\$ 526	0.7 %	\$ 142	0.6 %
North America	\$ 24,055,738	\$ 1,346,697	\$ 72	0.0 %	\$ 478	0.4 %
Pacific	\$ 554,461	\$ 20,732	\$ 134	0.2 %	\$ 7	0.3 %
Sud Africa	\$ 816,022	\$ 236,809	\$ 66	0.1 %	\$ 20	0.1 %

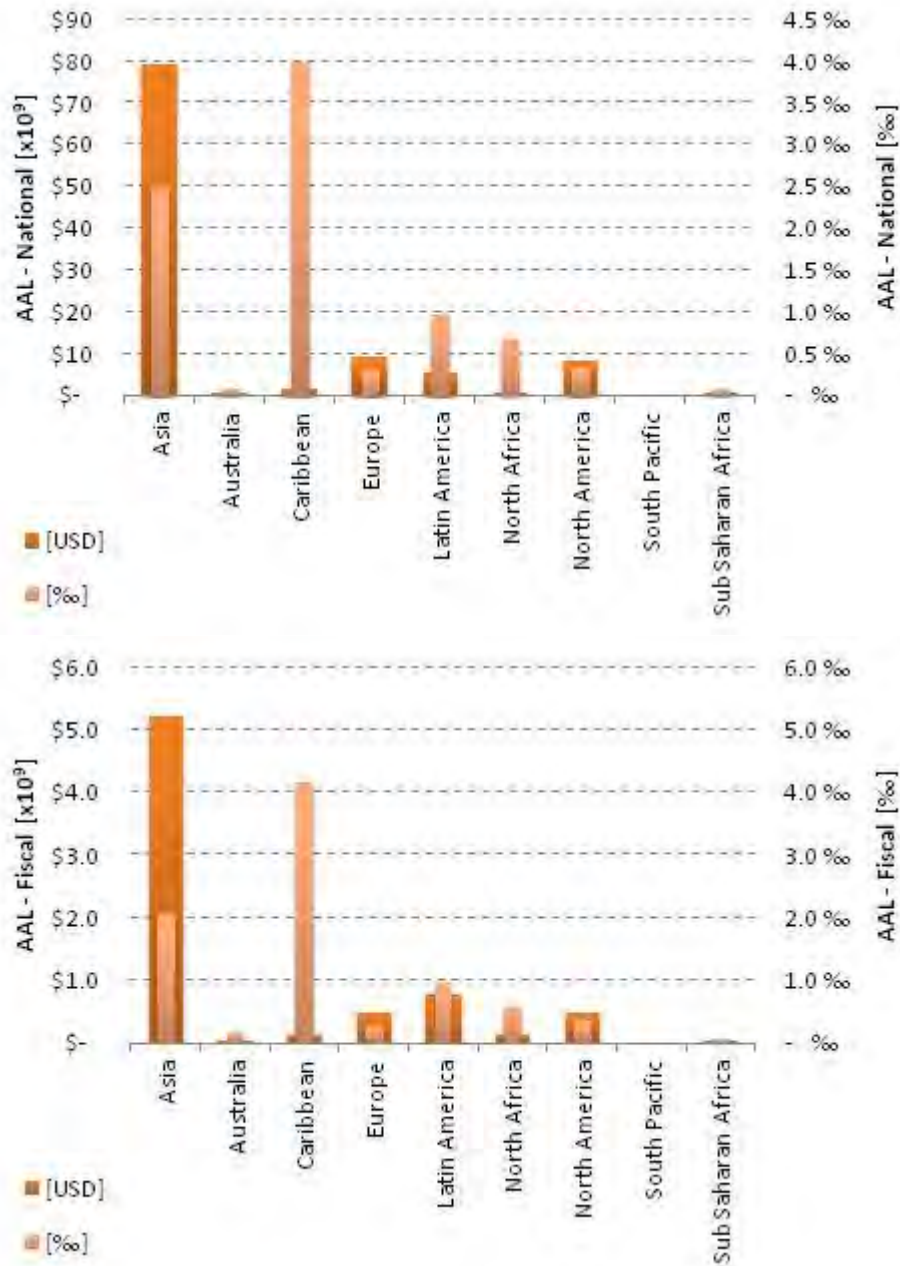
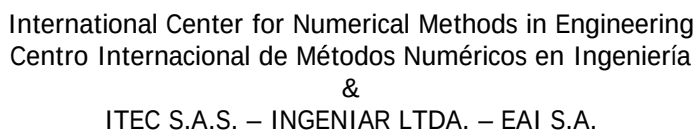
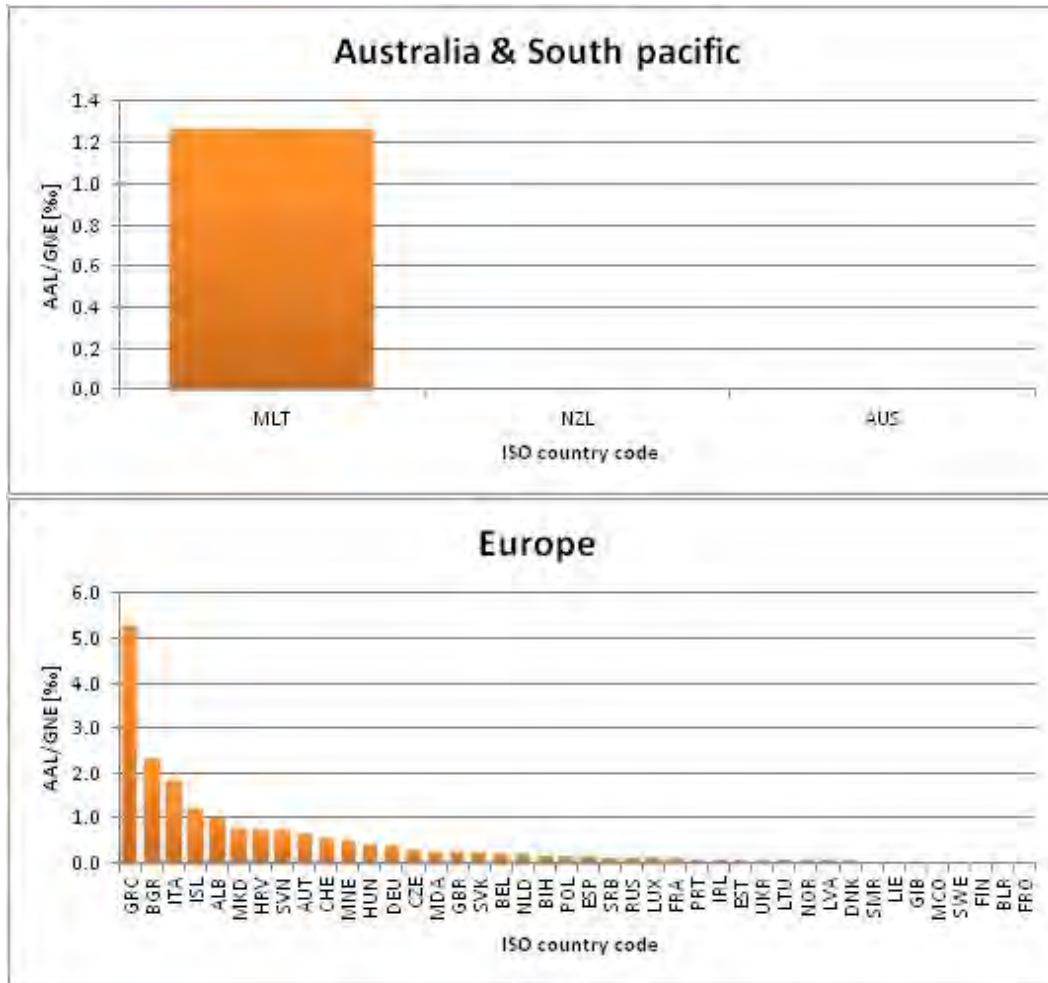


Figure A20-1
 National and Fiscal AAL distribution, for earthquake by regions

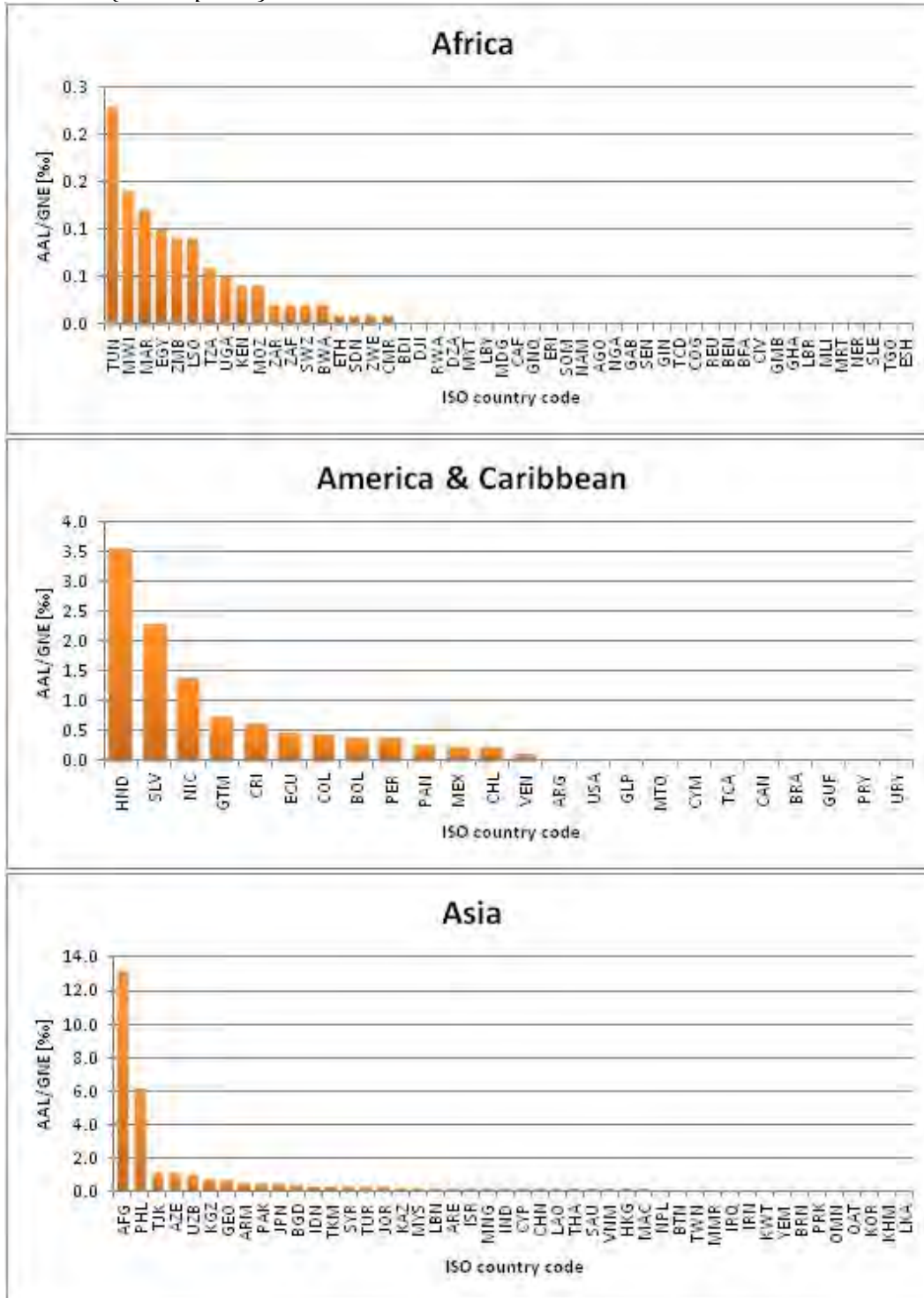


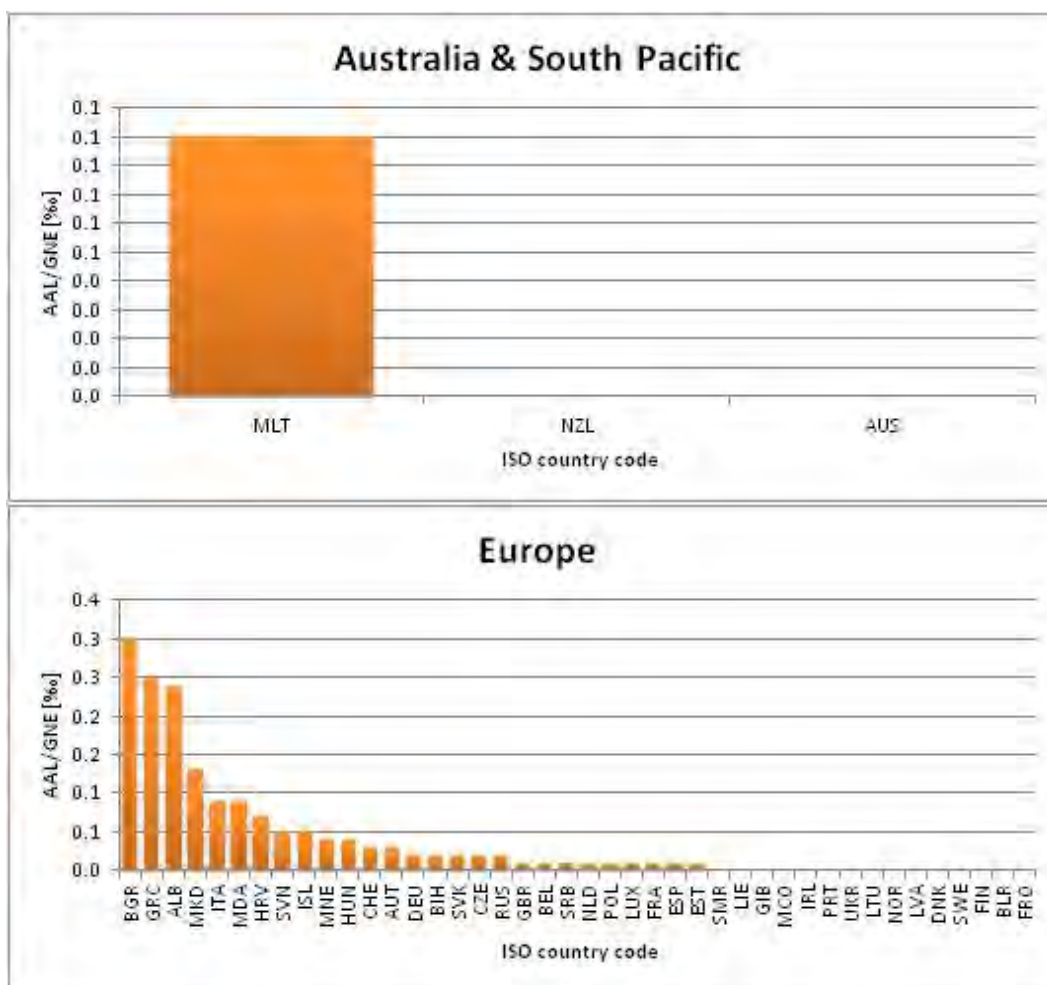
AAL/GNE National (Earthquake)



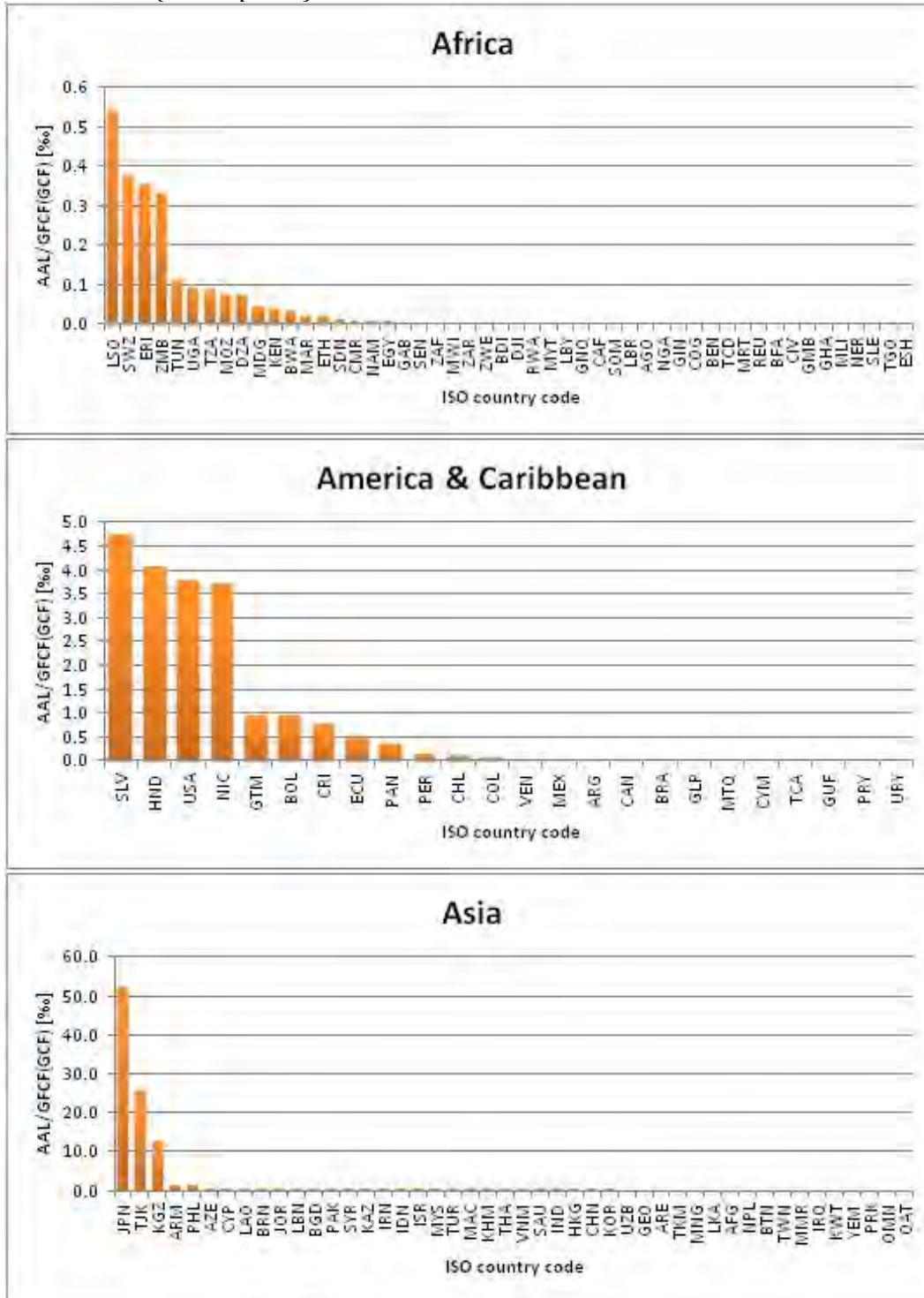


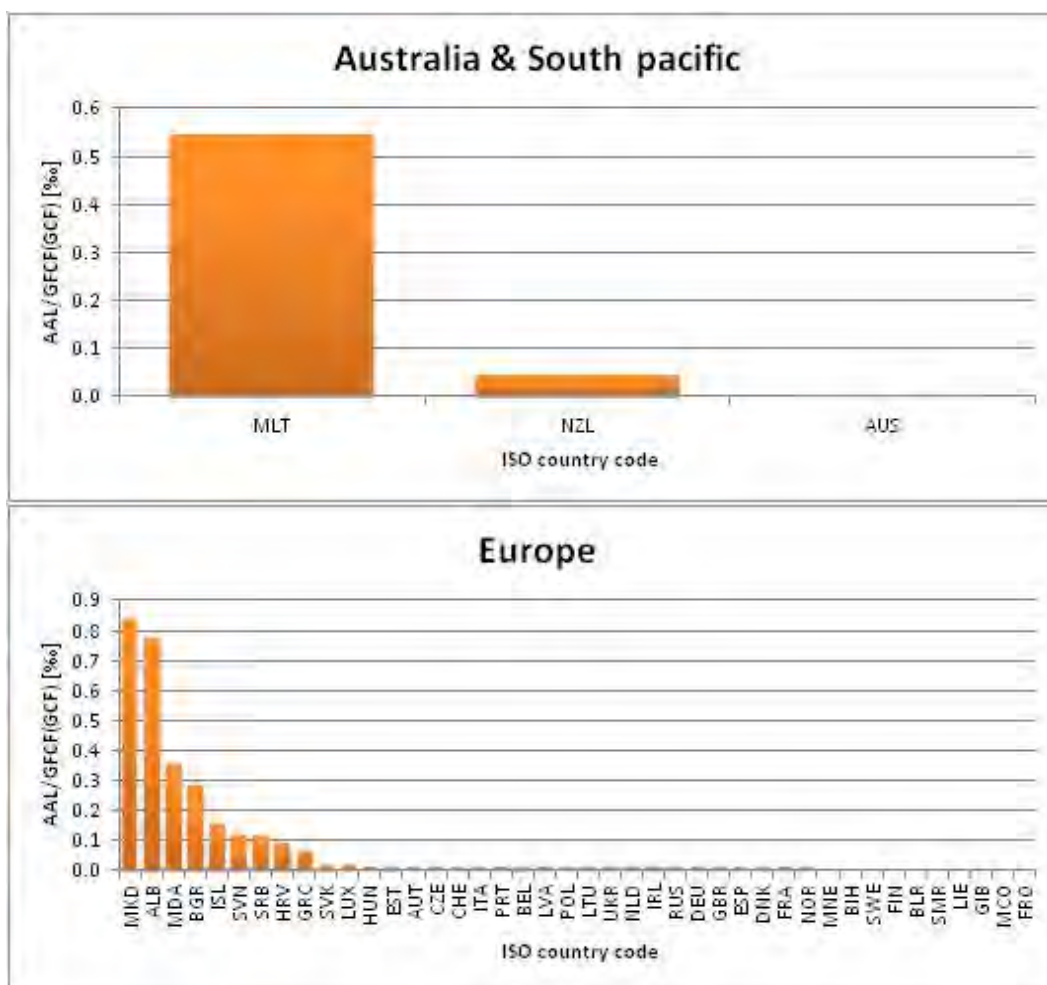
AAL/GNE Fiscal (Earthquake)



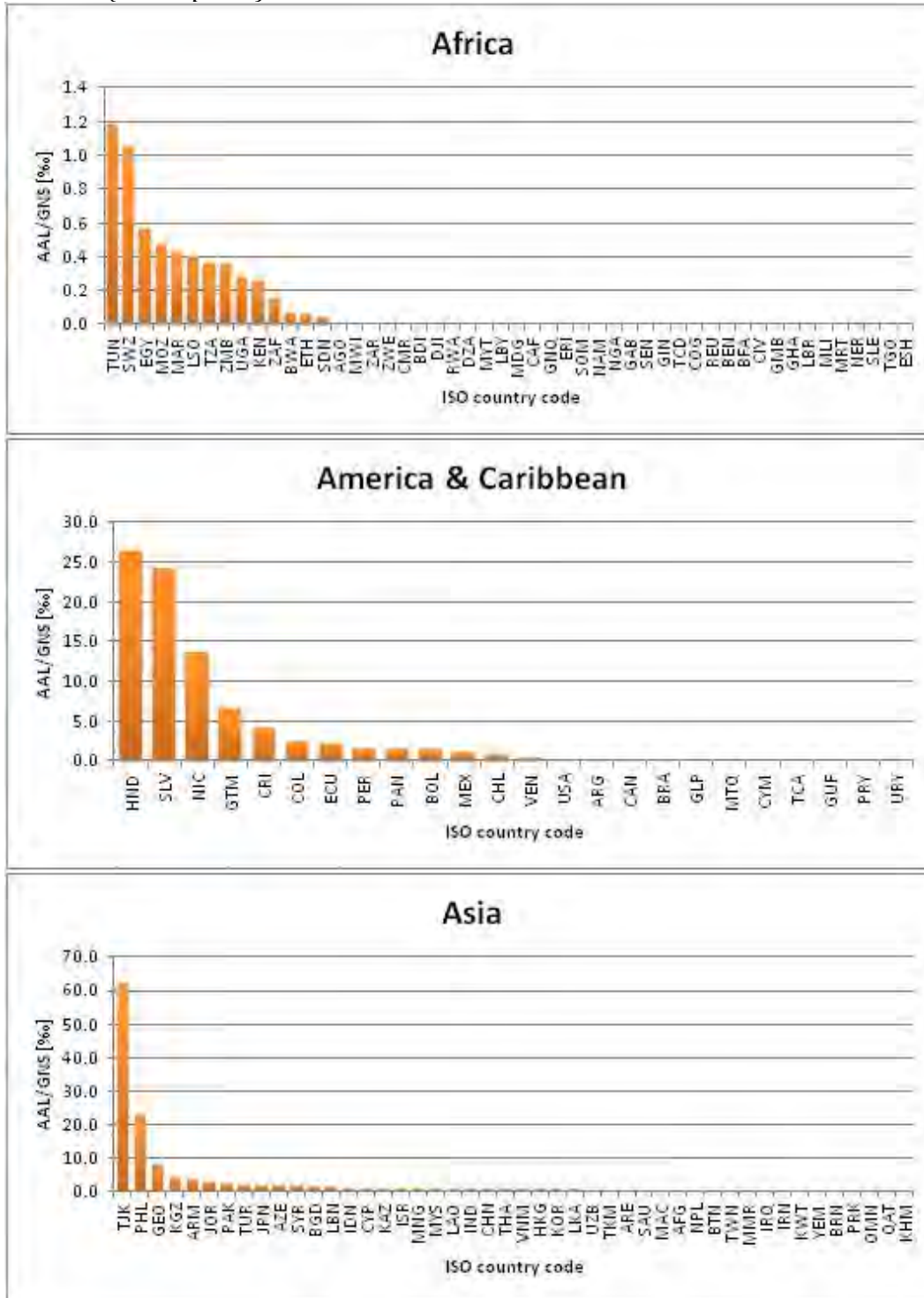


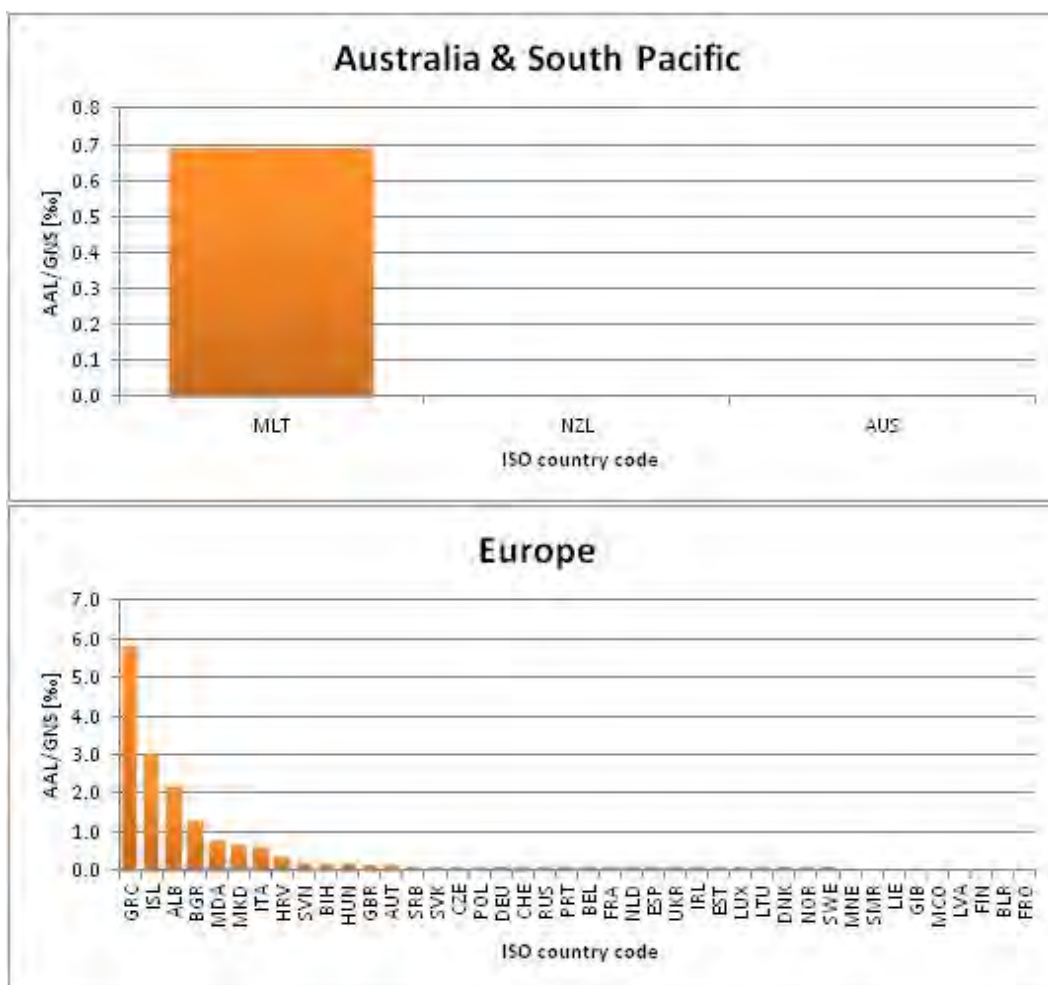
AAL/GFCF National (Earthquake)



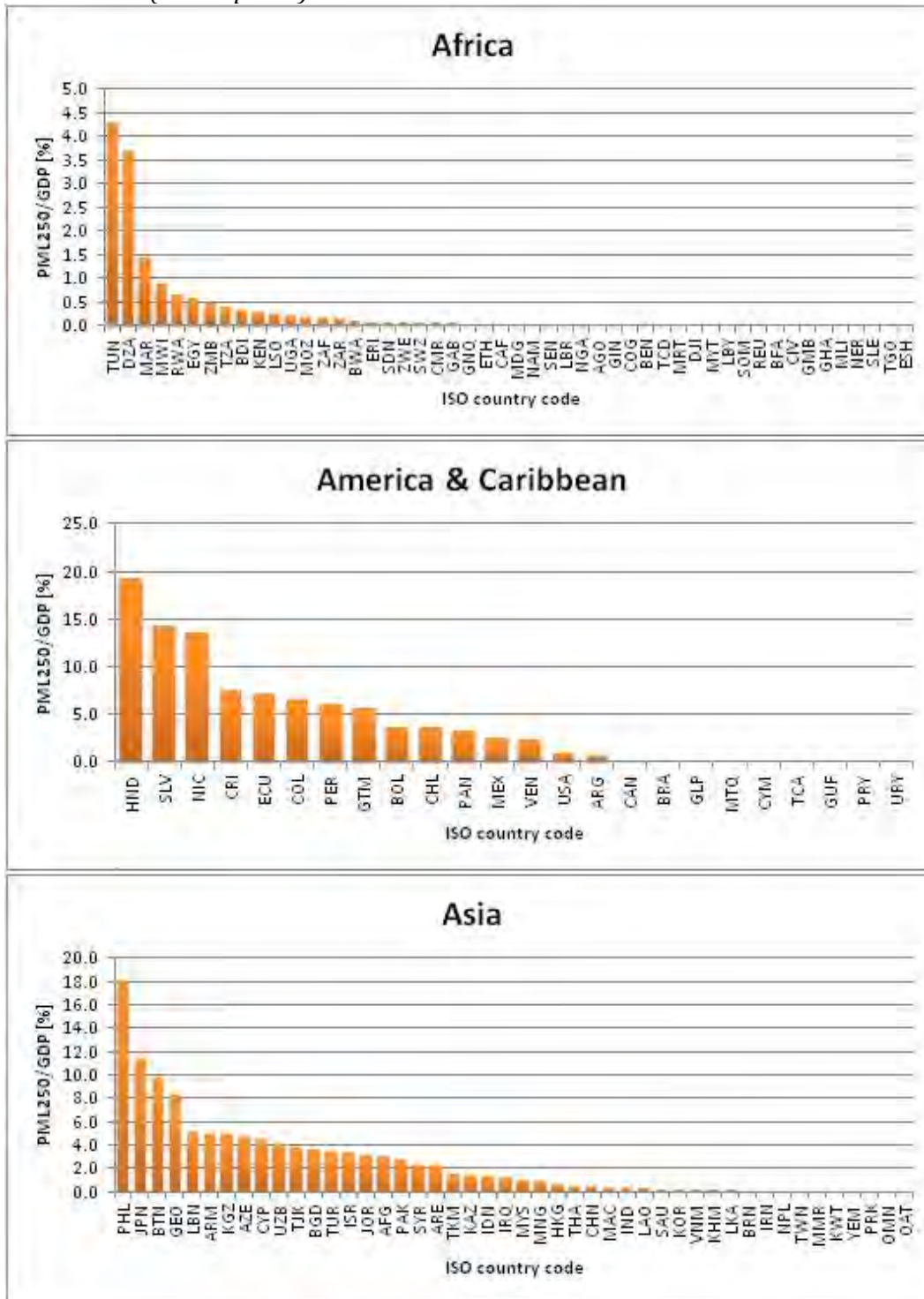


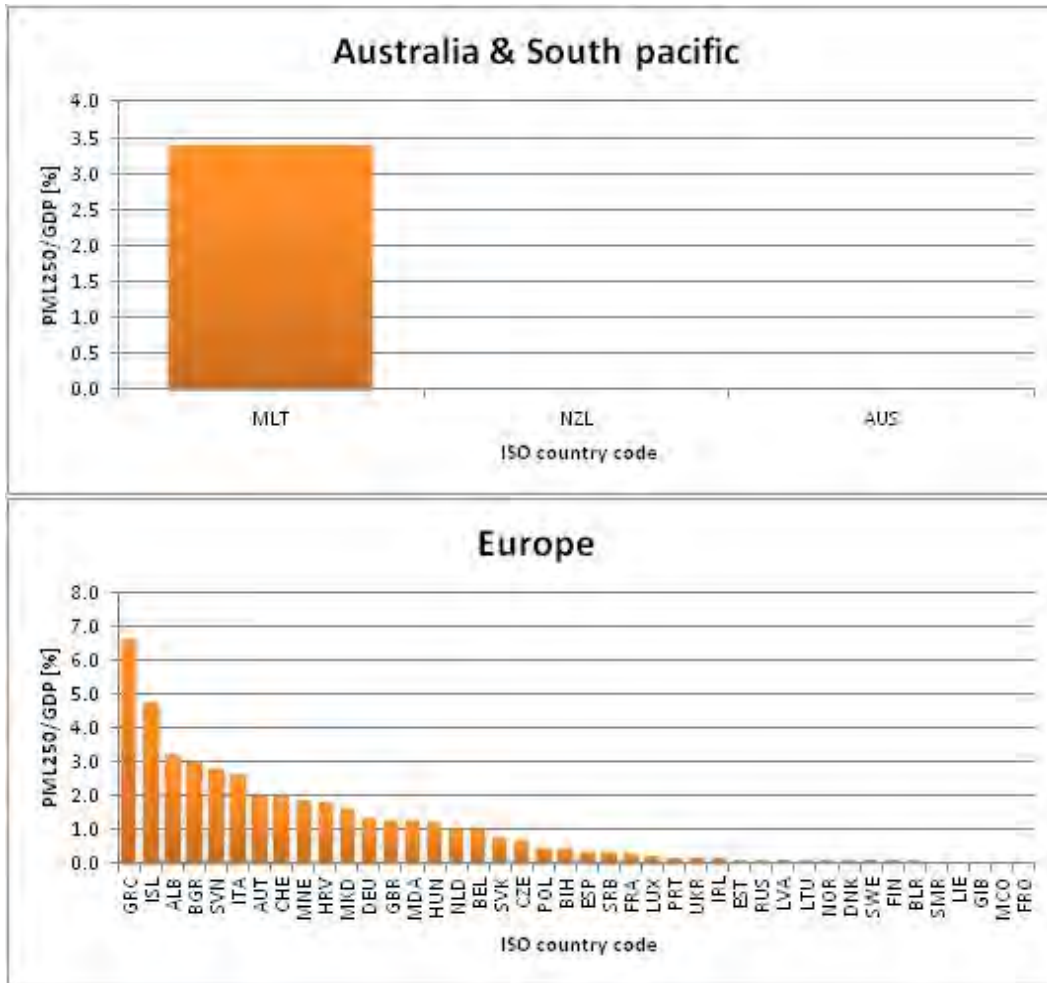
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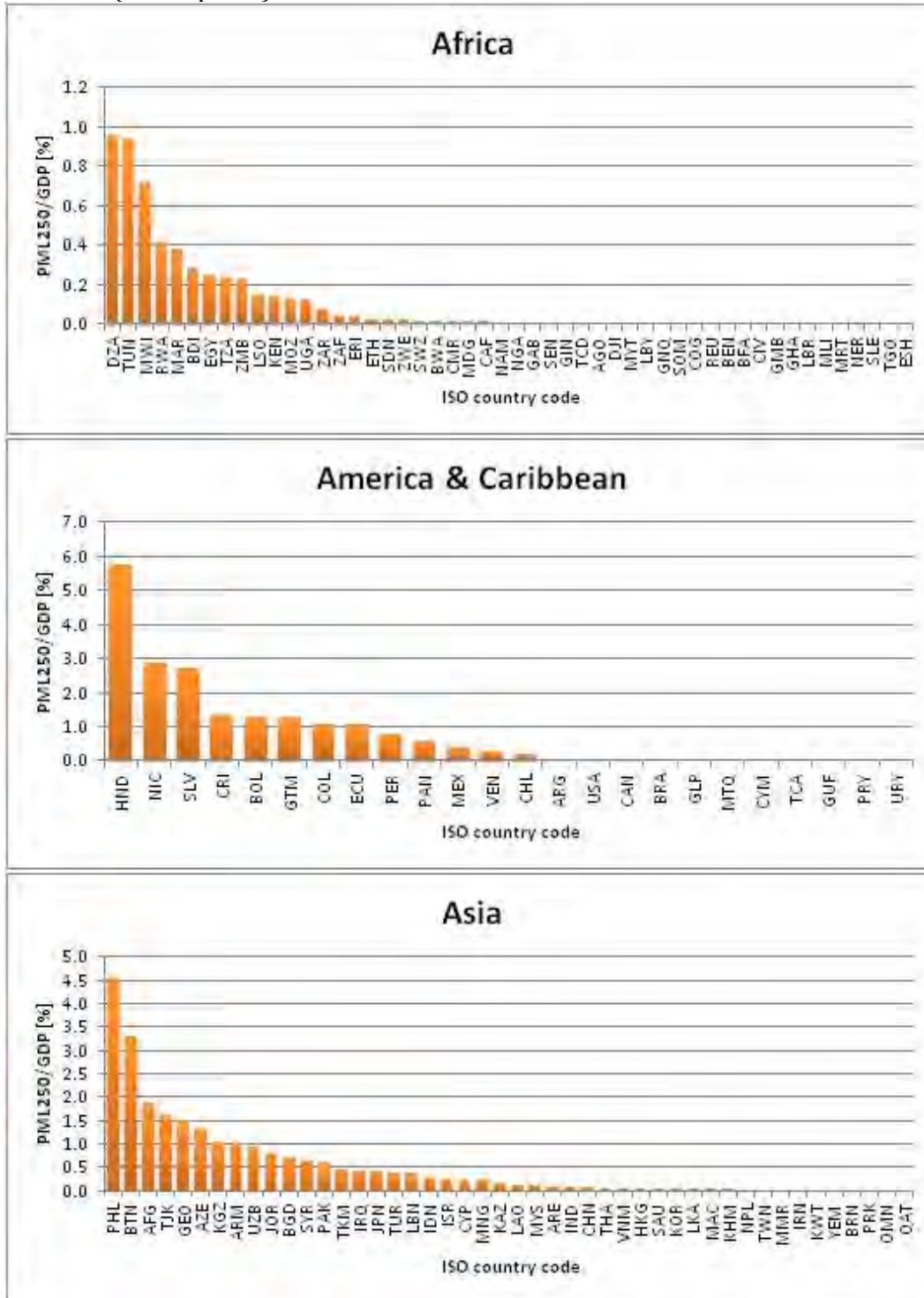


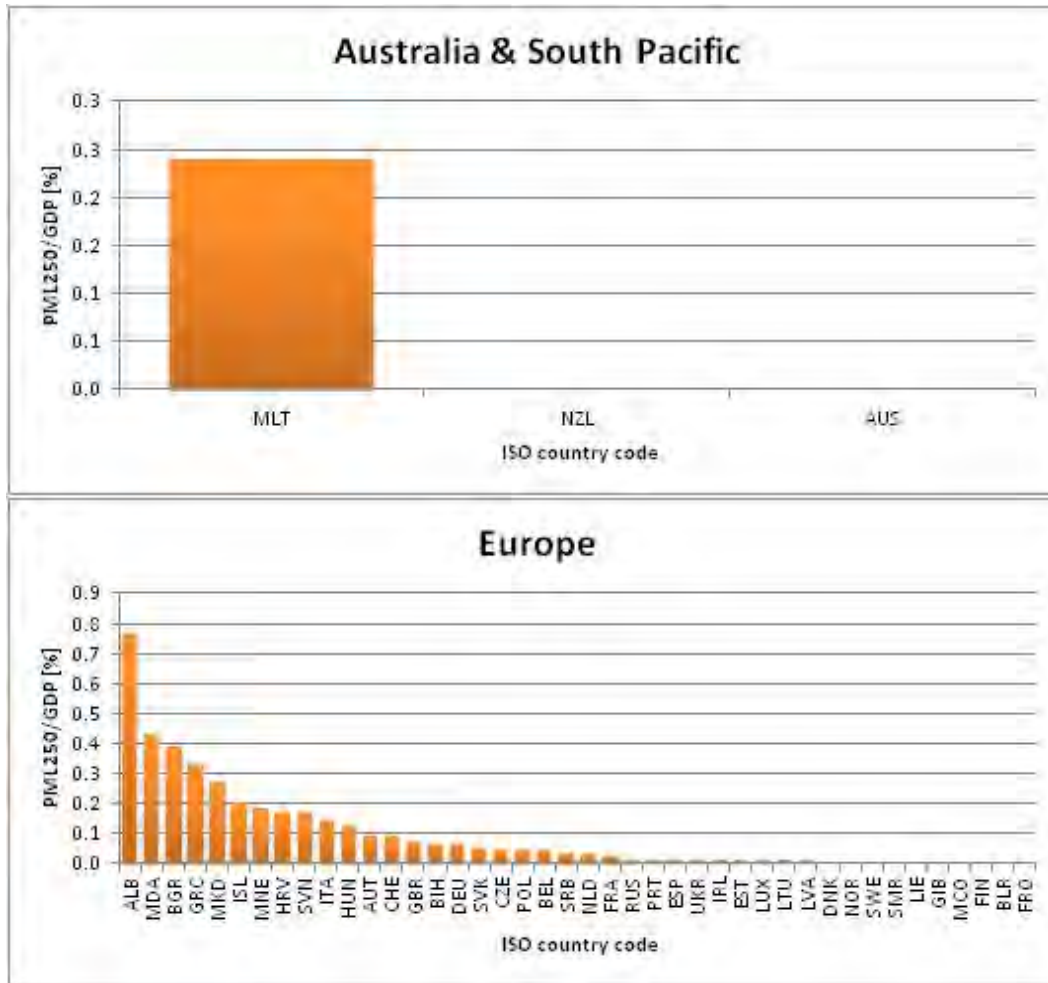
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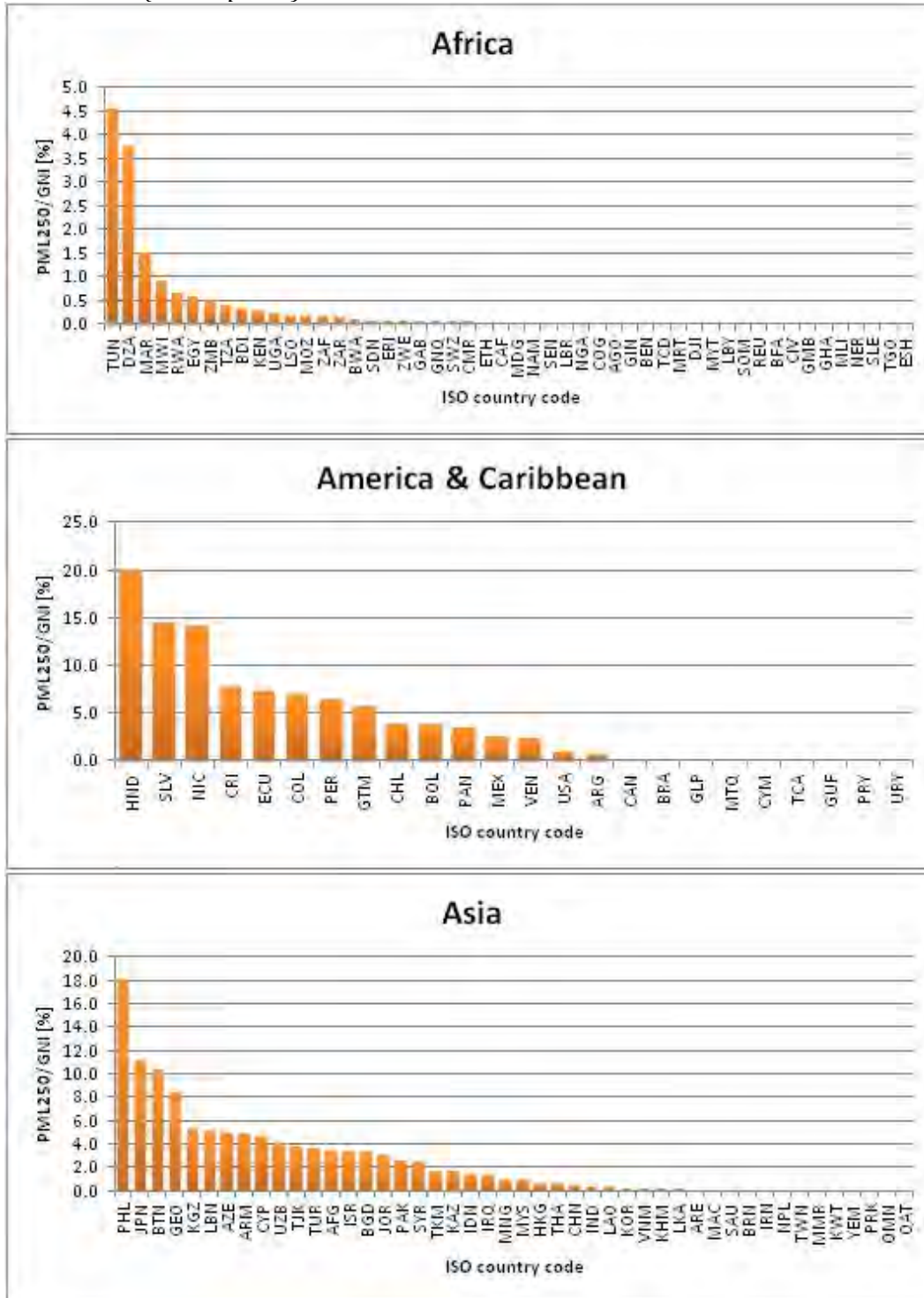


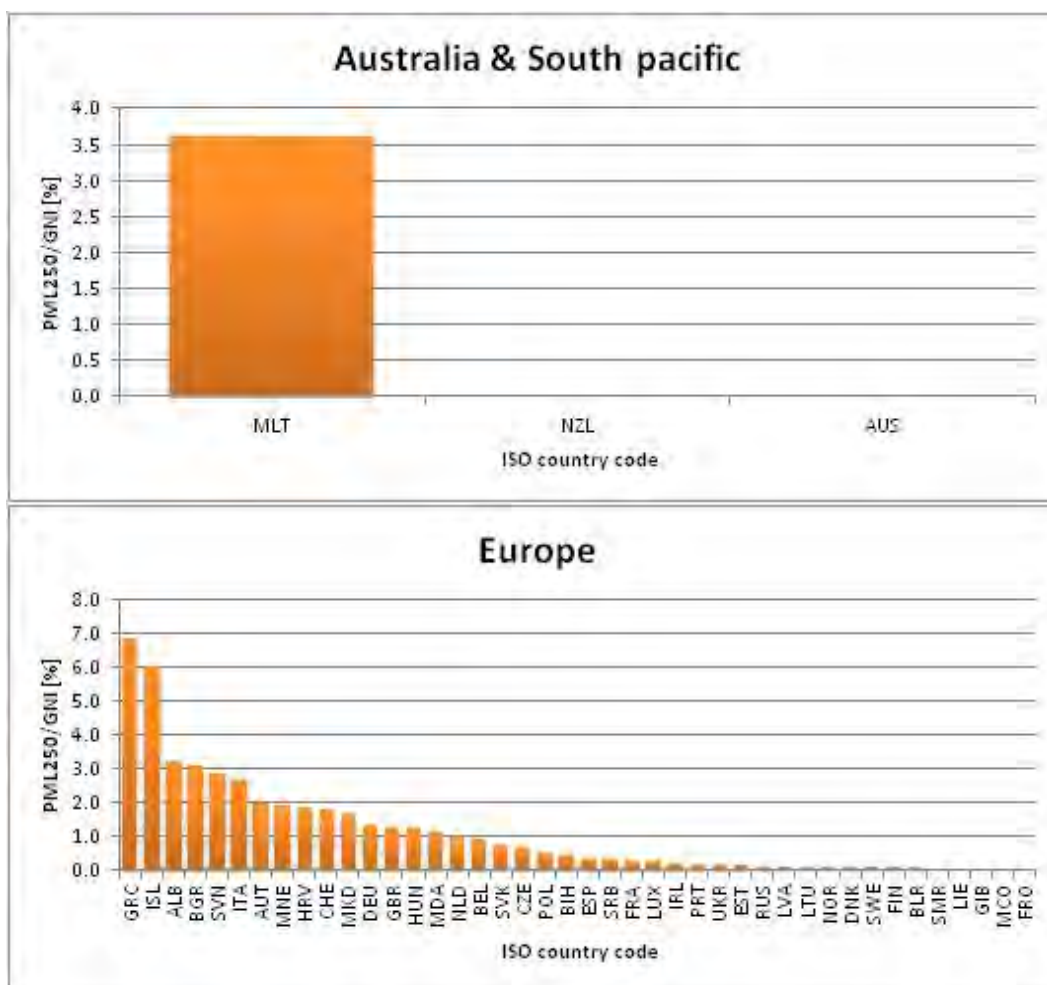
PML/GDP Fiscal (Earthquake)



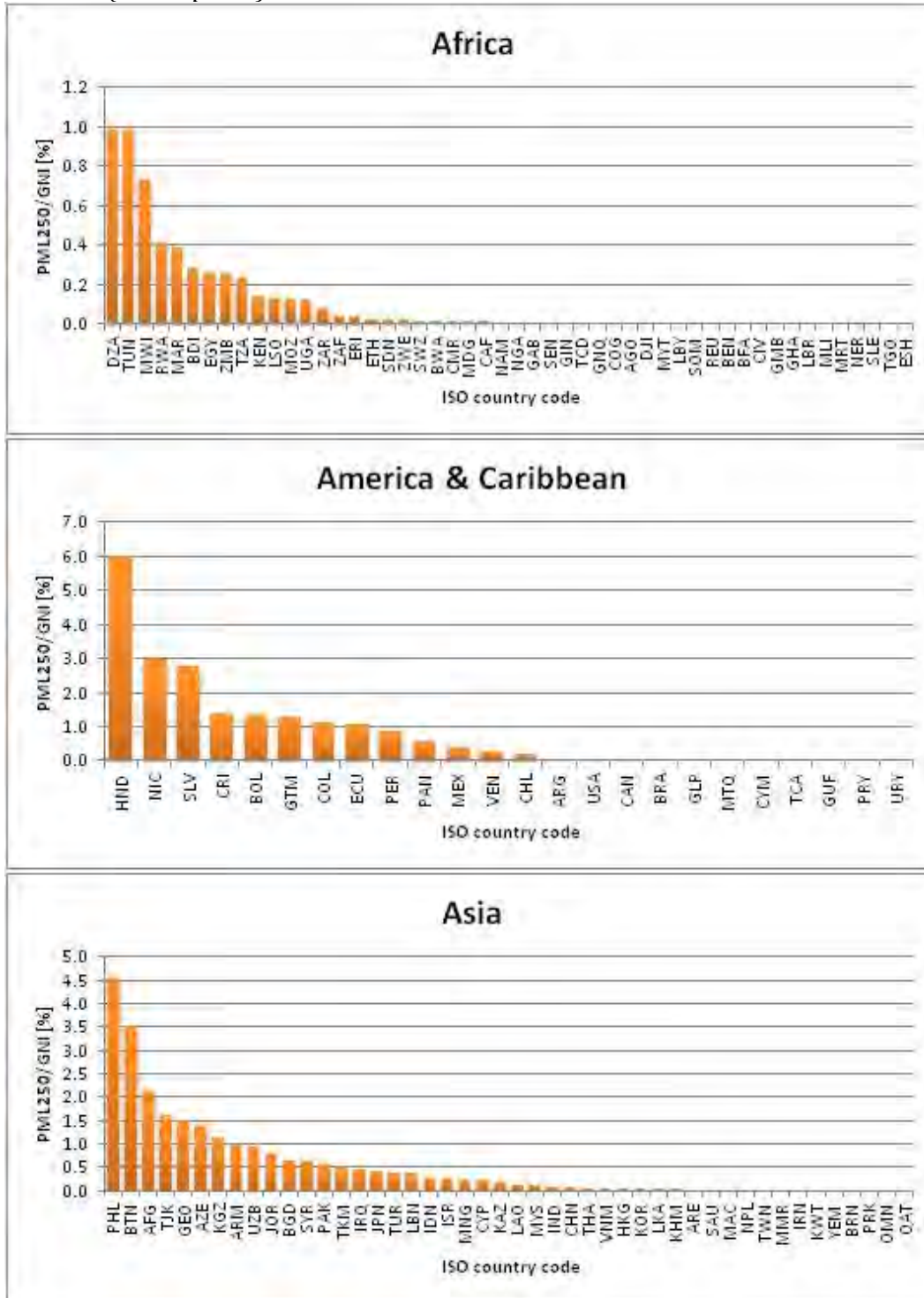


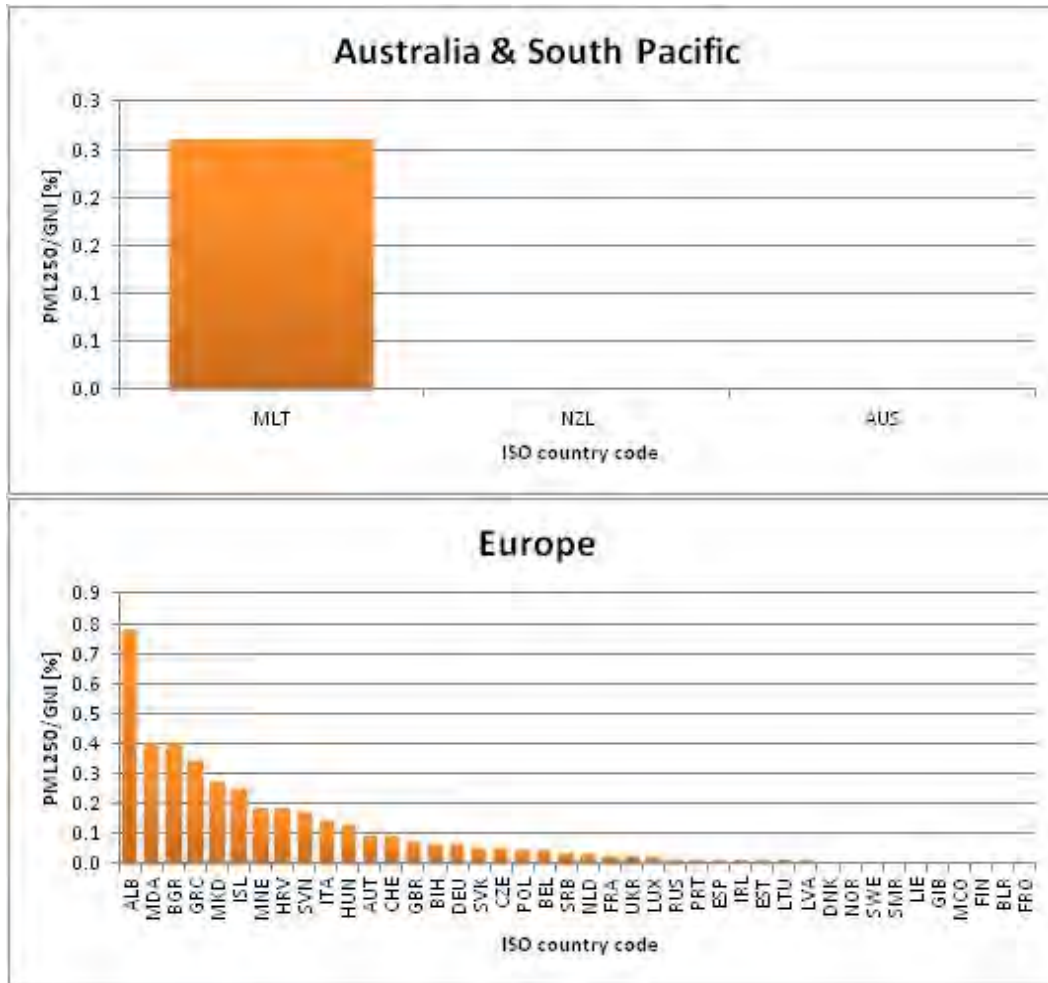
PML/GNI National (Earthquake)





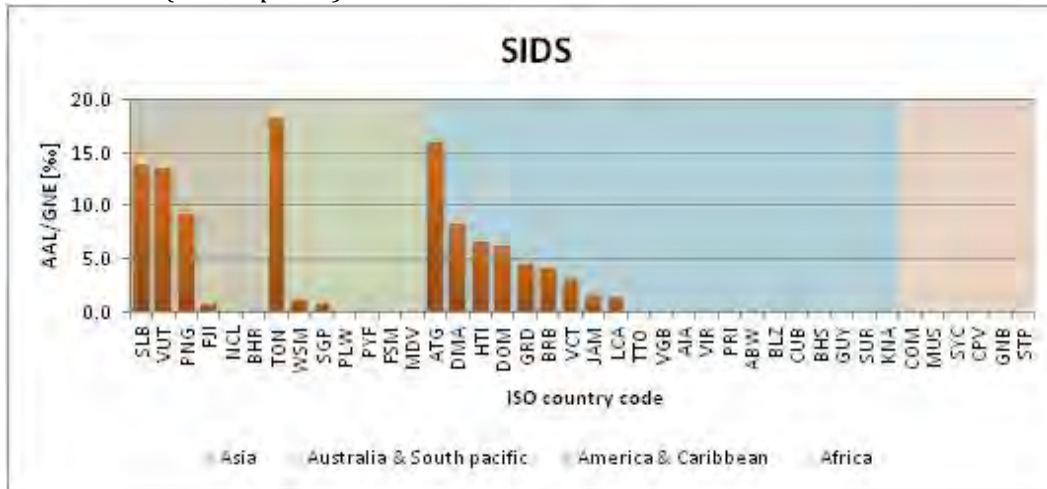
PML/GNI Fiscal (Earthquake)



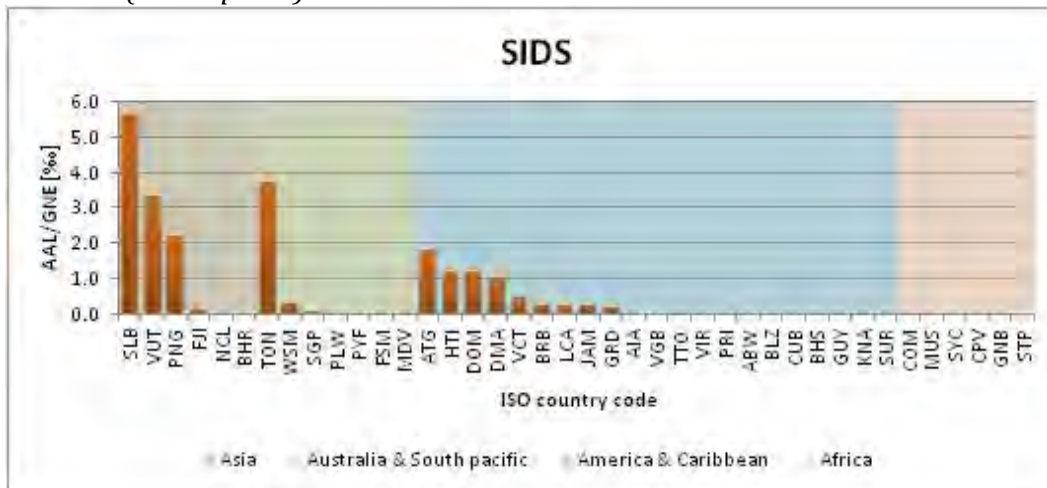


Risk results by country, SIDS and region

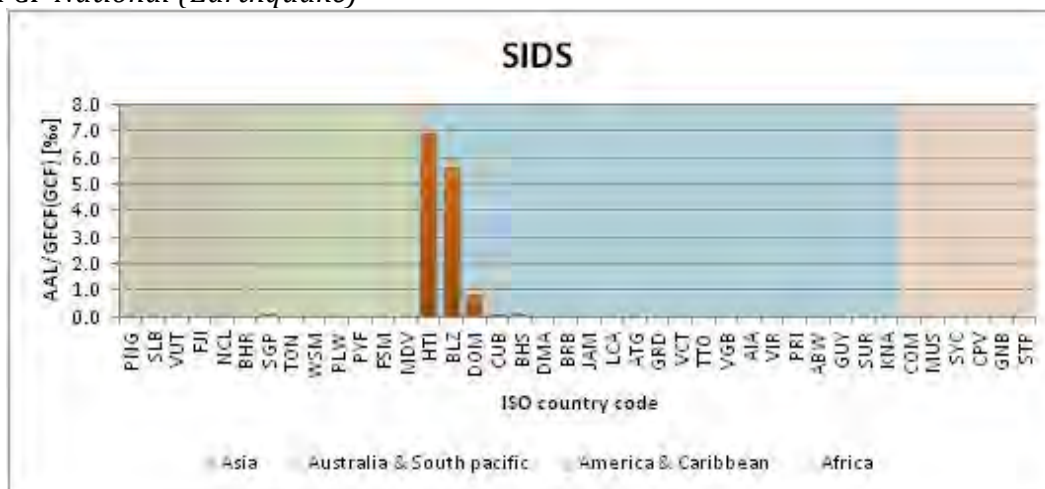
AAL/GNE National (Earthquake)



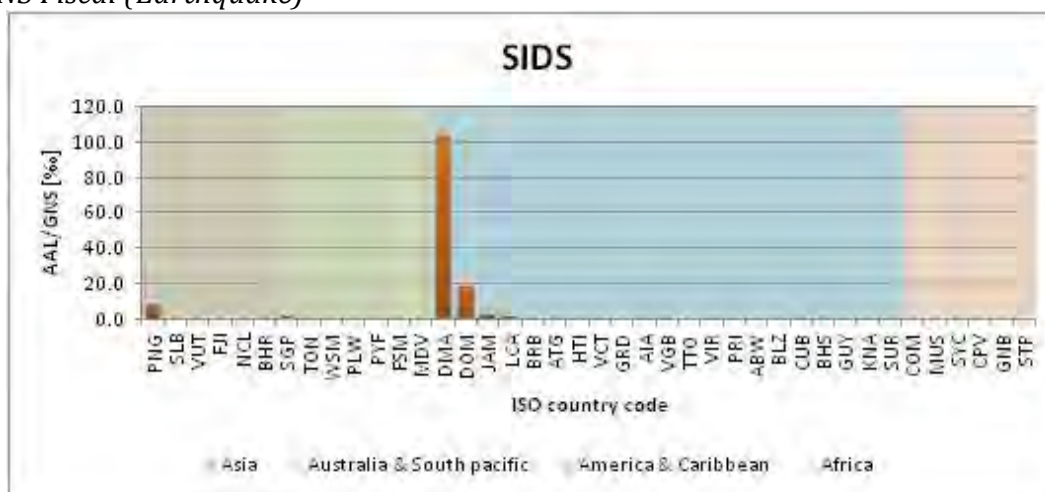
AAL/GNE Fiscal (Earthquake)



AAL/GFCF National (Earthquake)



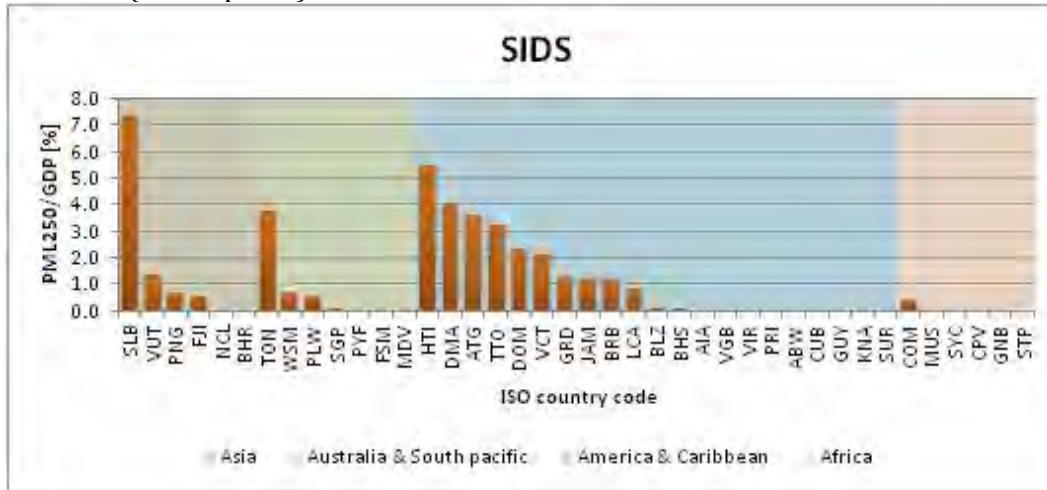
AAL/GNS Fiscal (Earthquake)



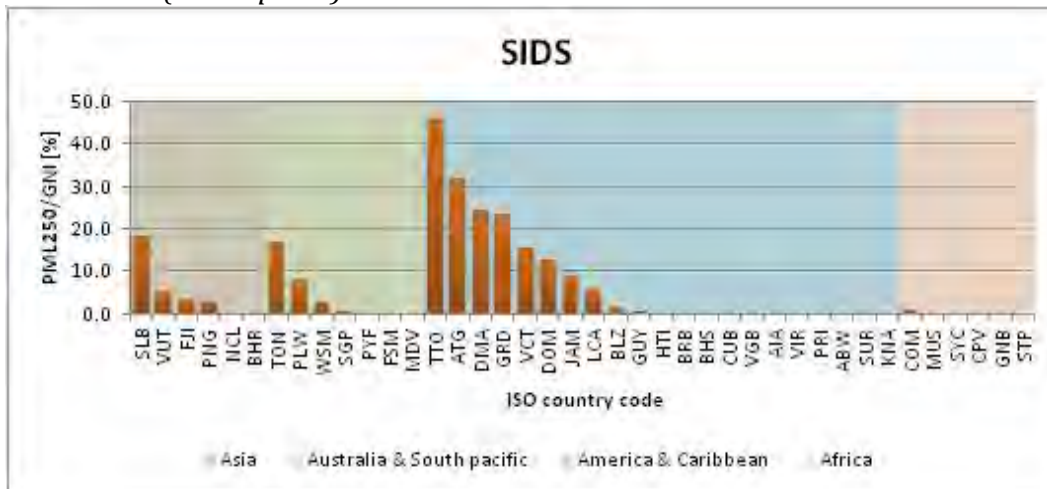
PML/GDP National (Earthquake)



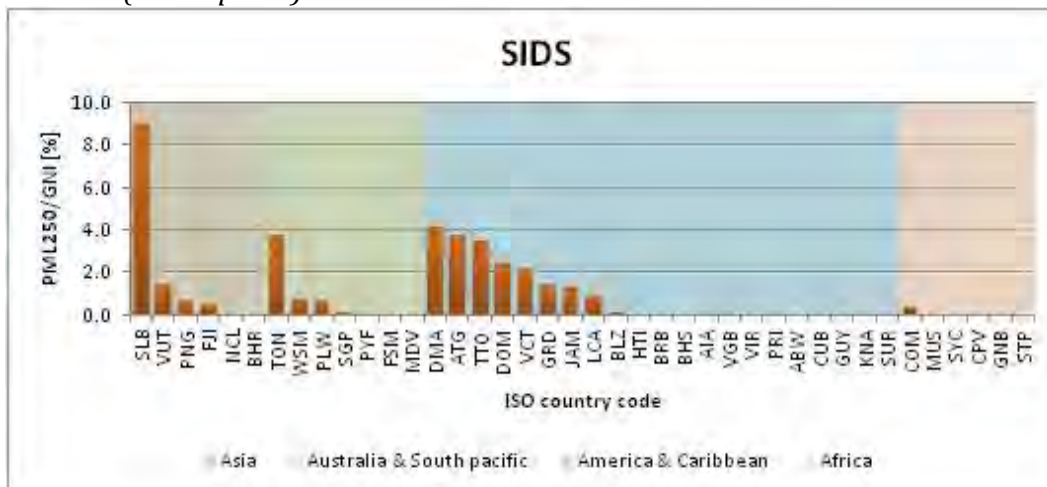
PML/GDP Fiscal (Earthquake)



PML/GNI National (Earthquake)

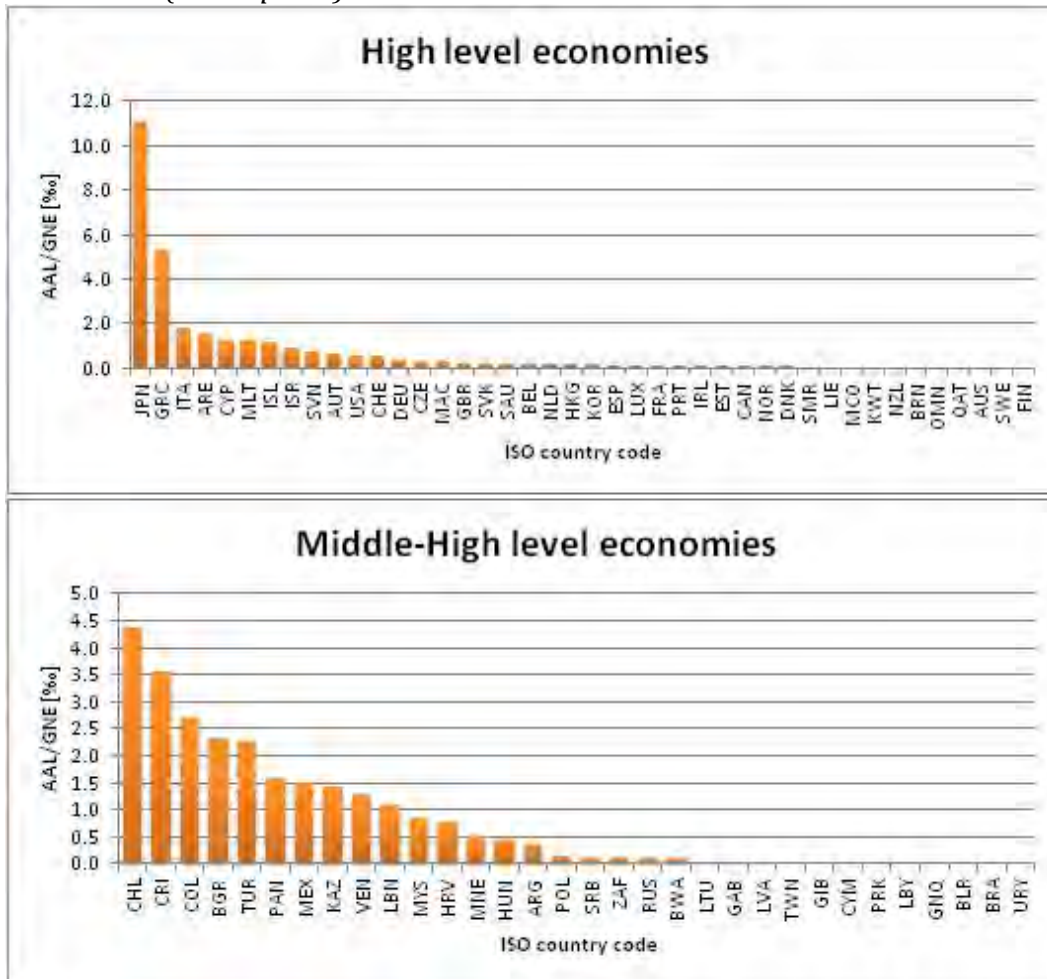


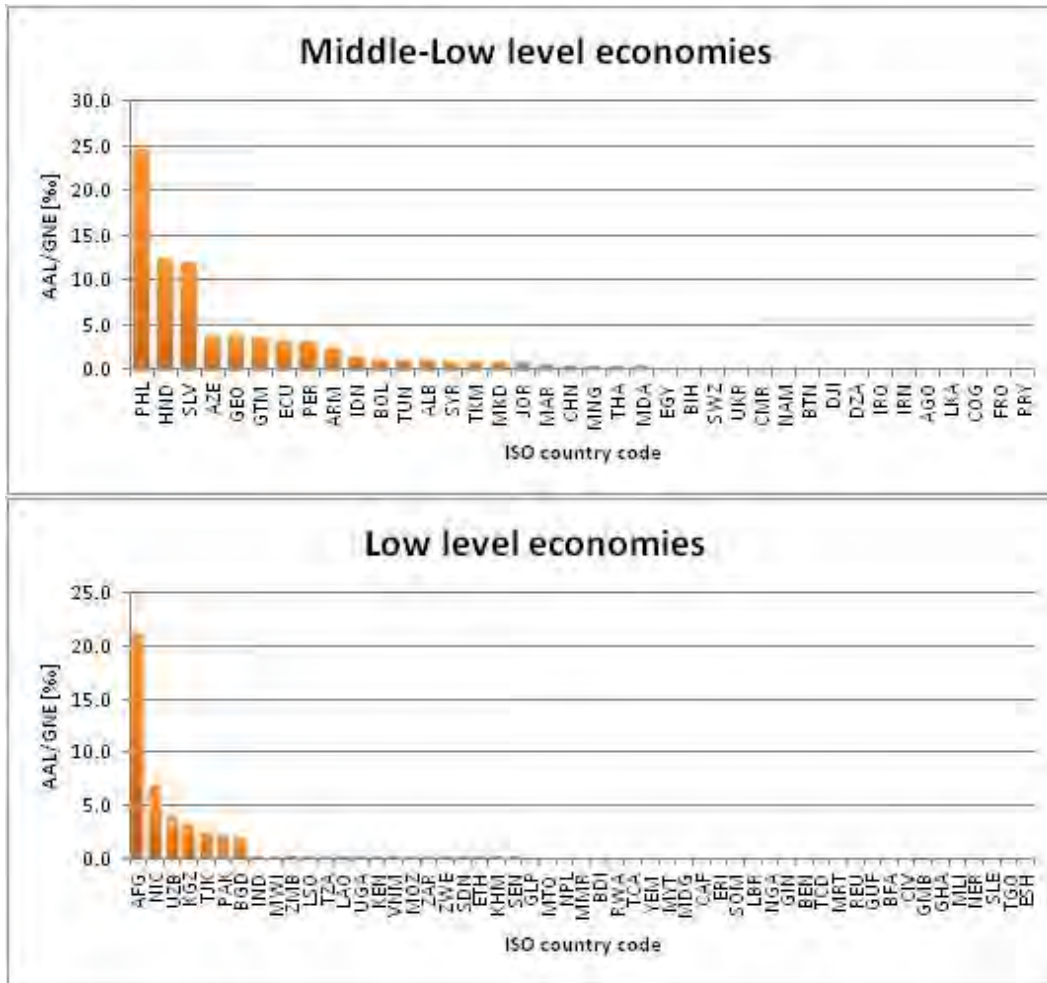
PML/GNI Fiscal (Earthquake)



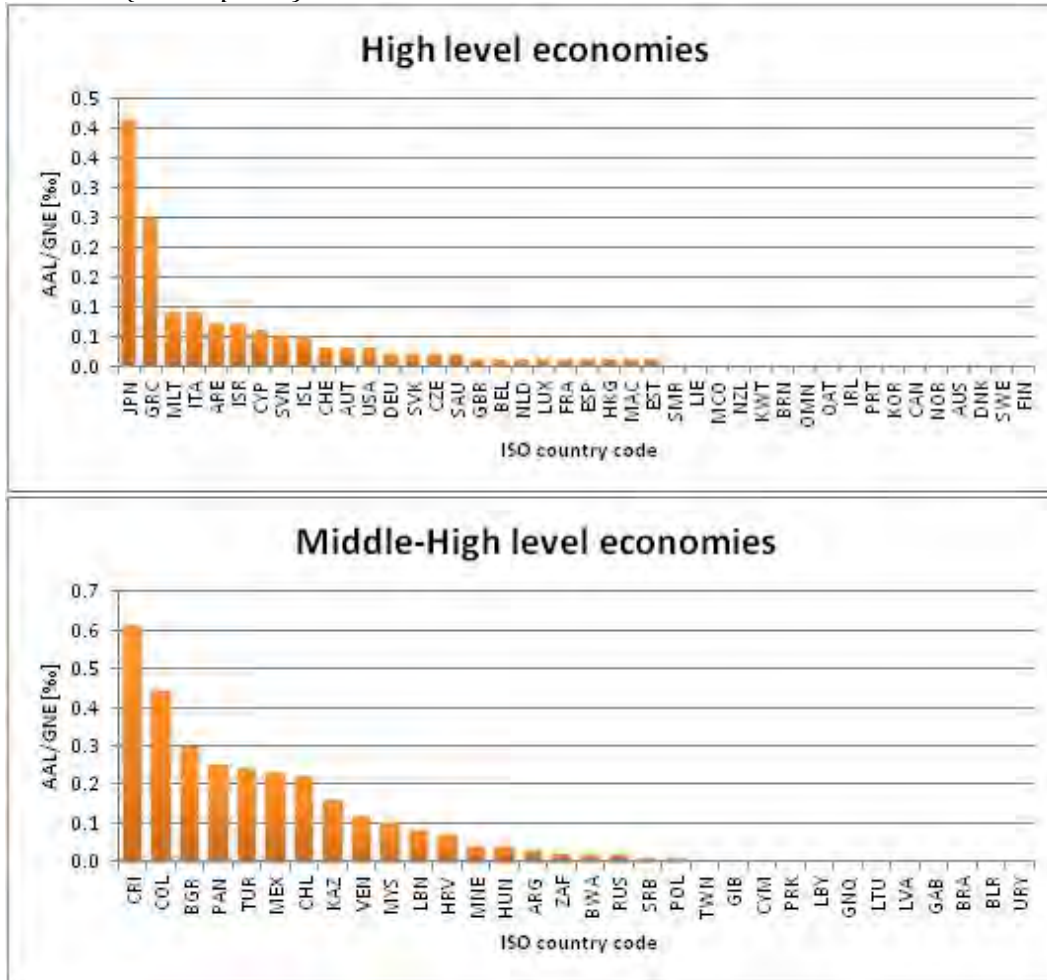
Risk results by country and economy class

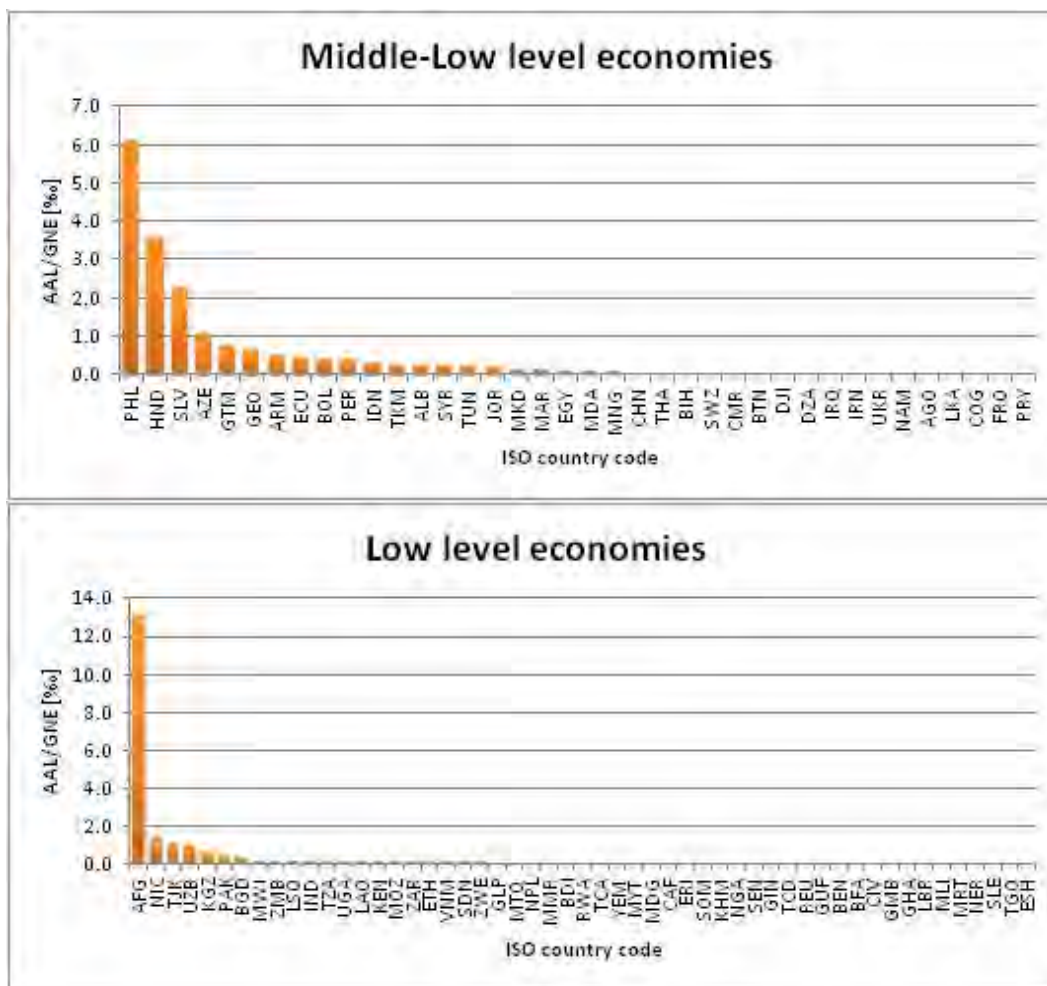
AAL/GNE National (Earthquake)



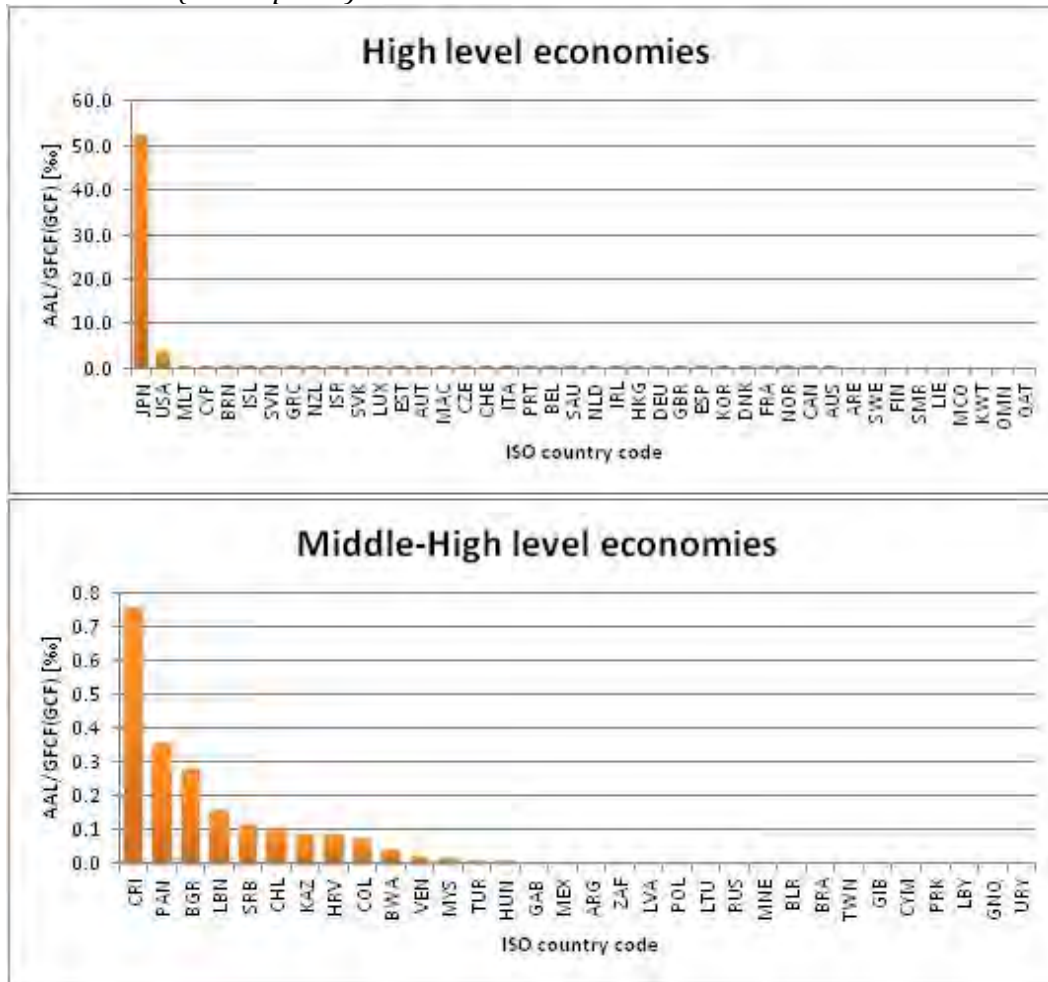


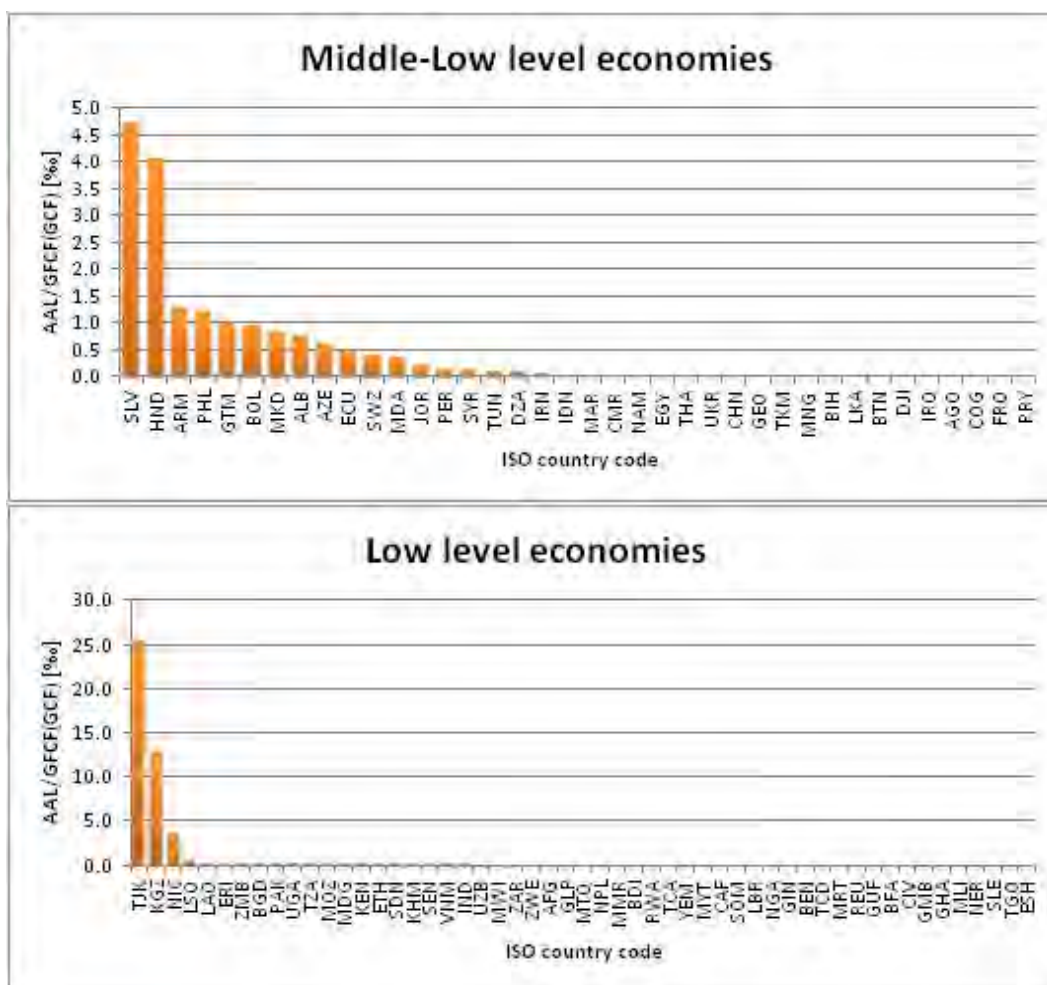
AAL/GNE Fiscal (Earthquake)



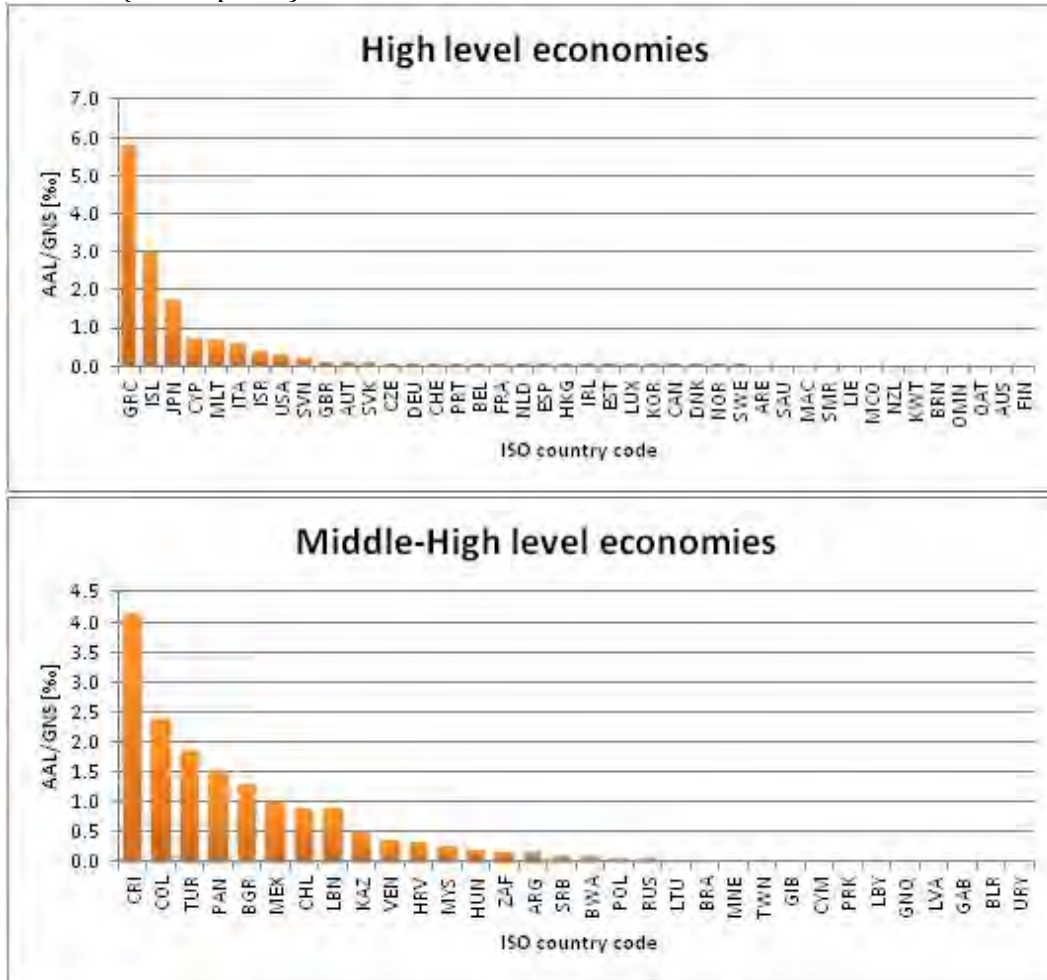


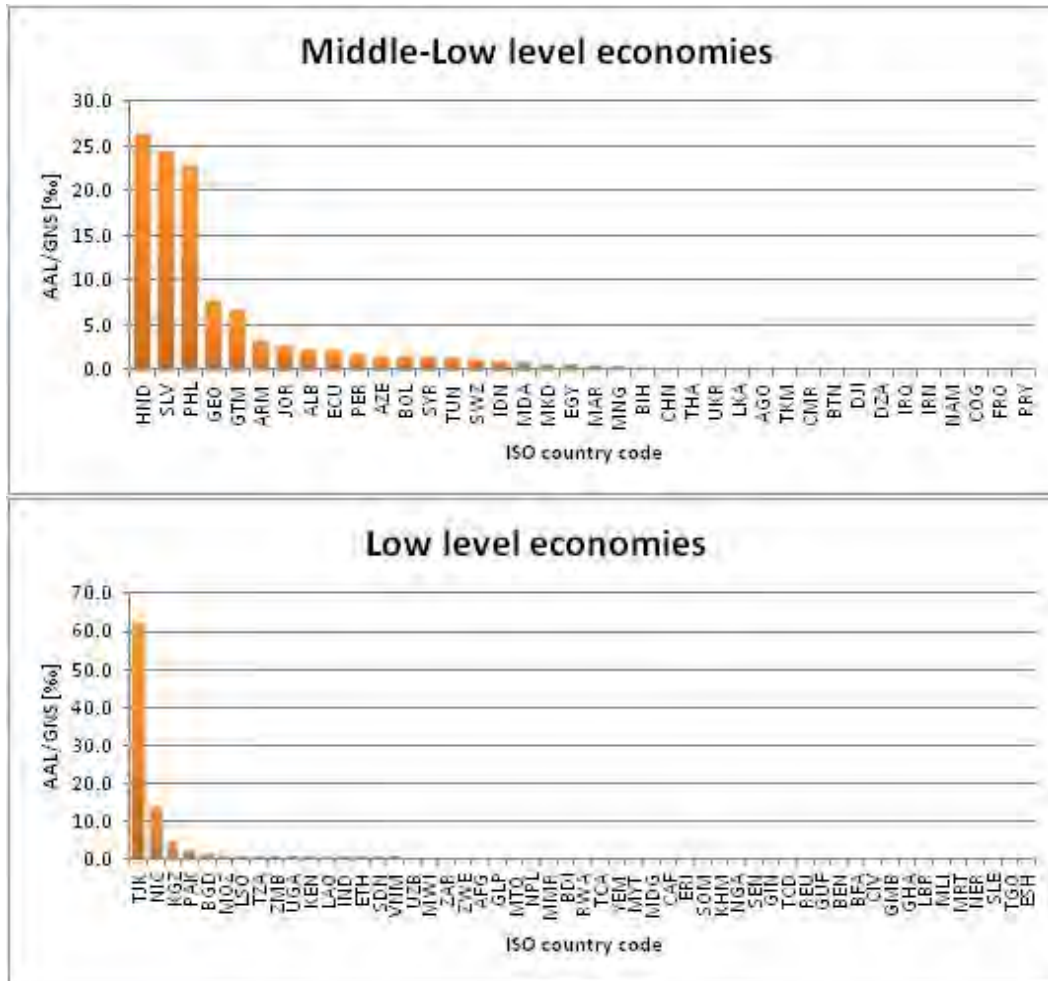
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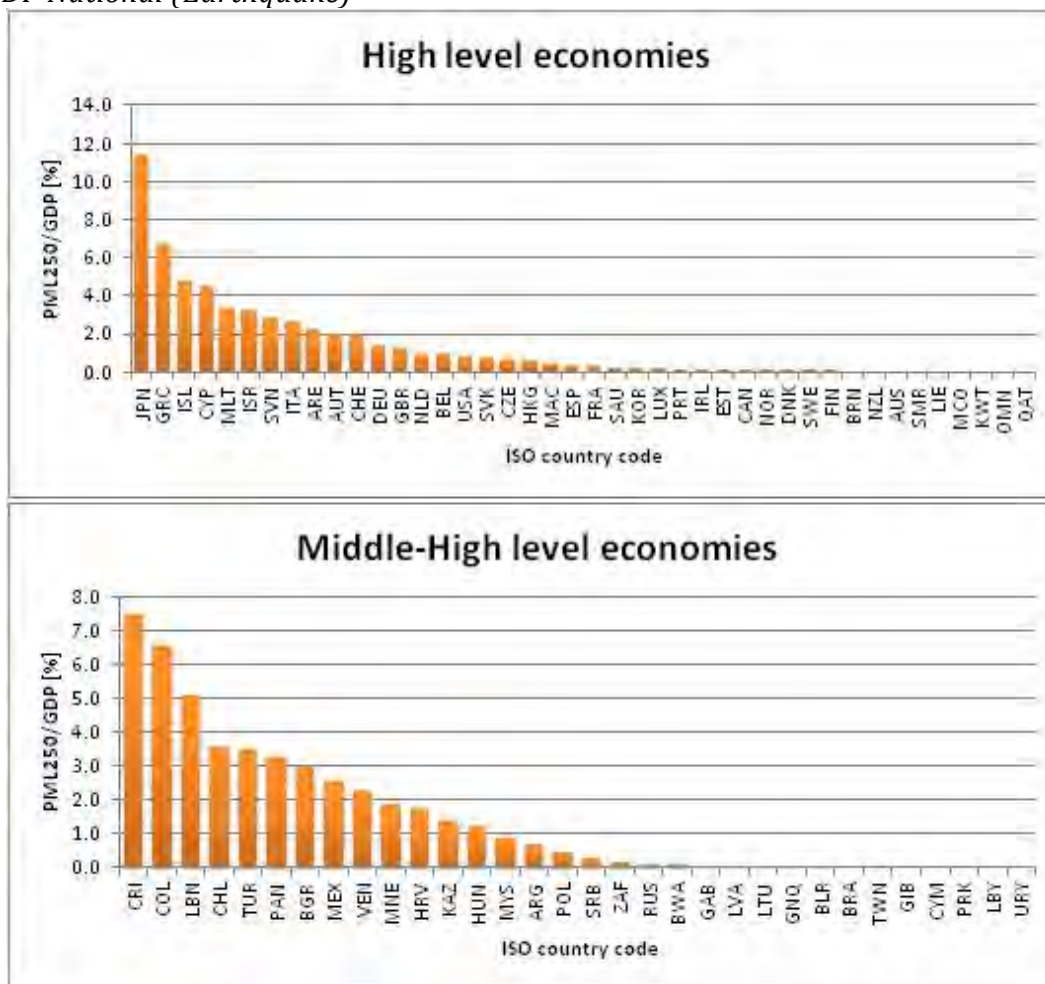


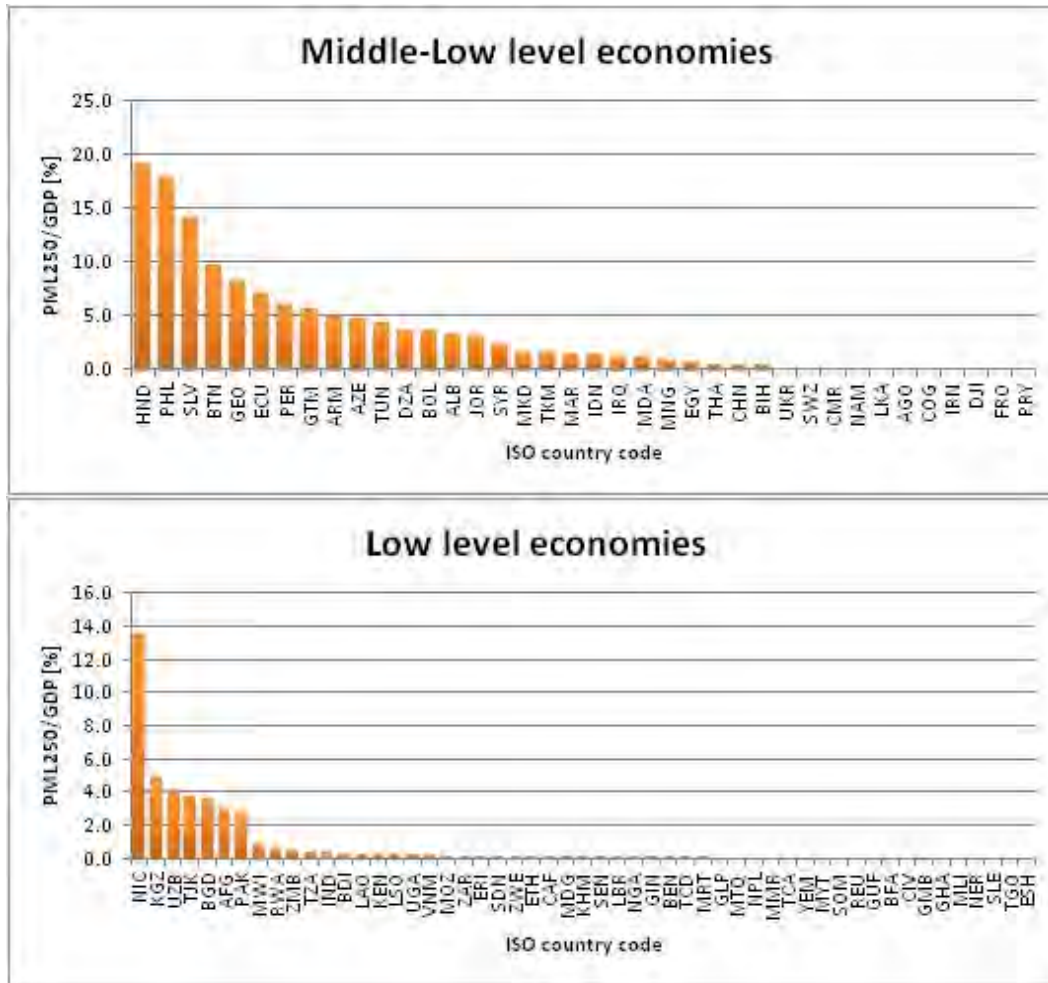
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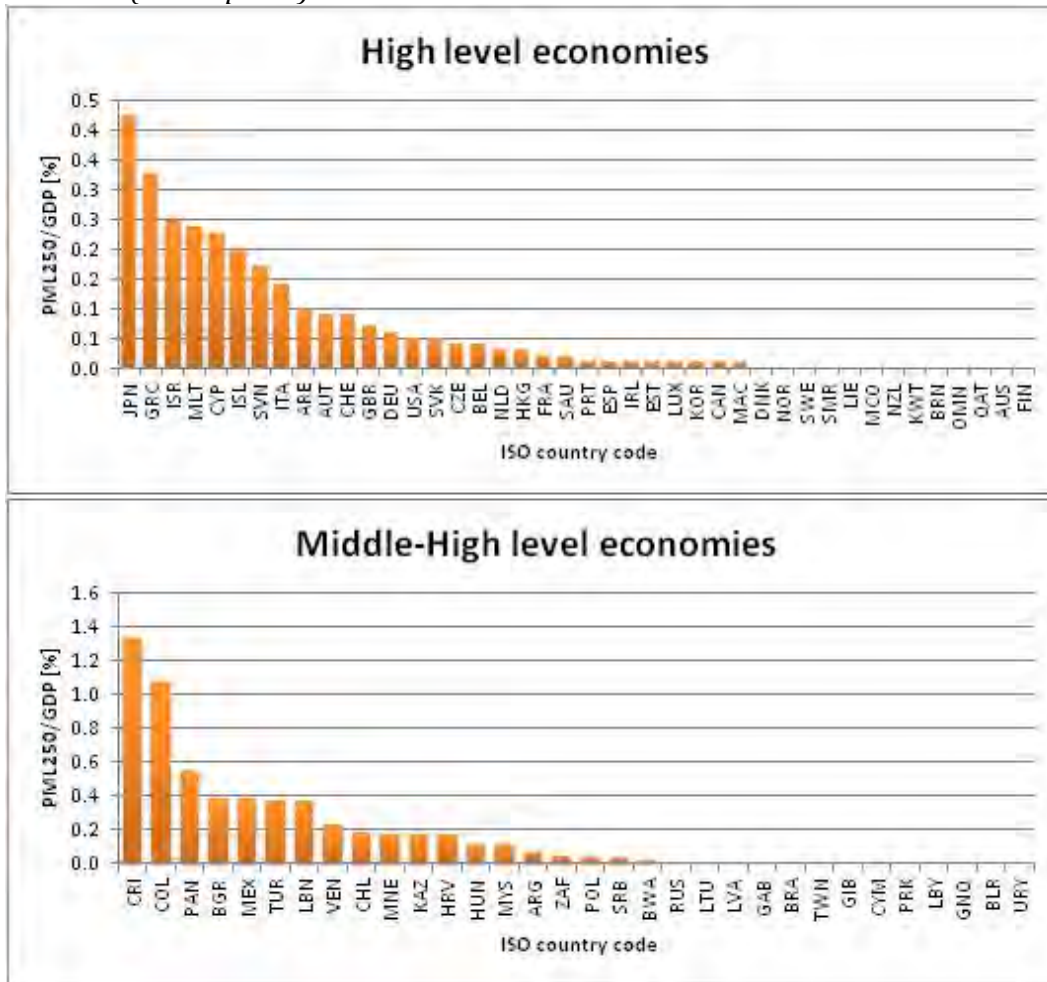


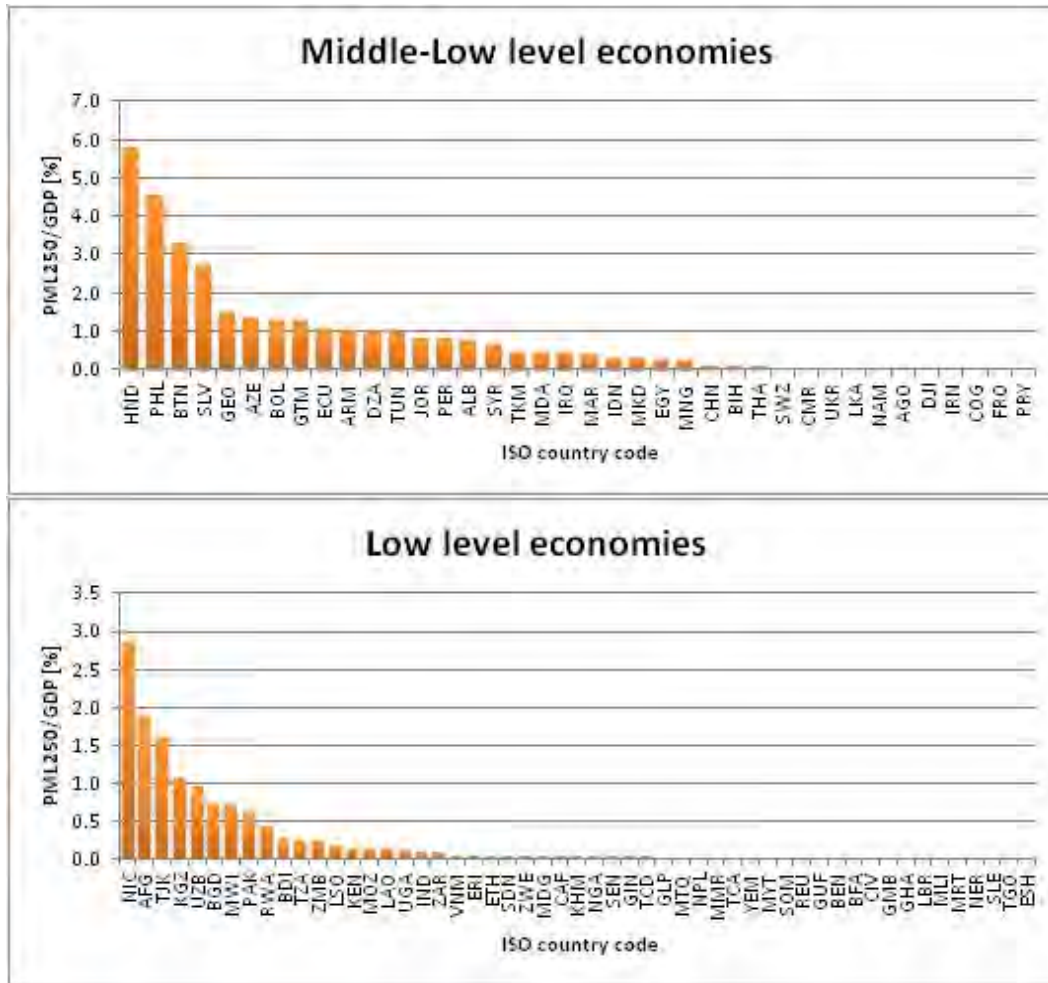
PML/GDP National (Earthquake)



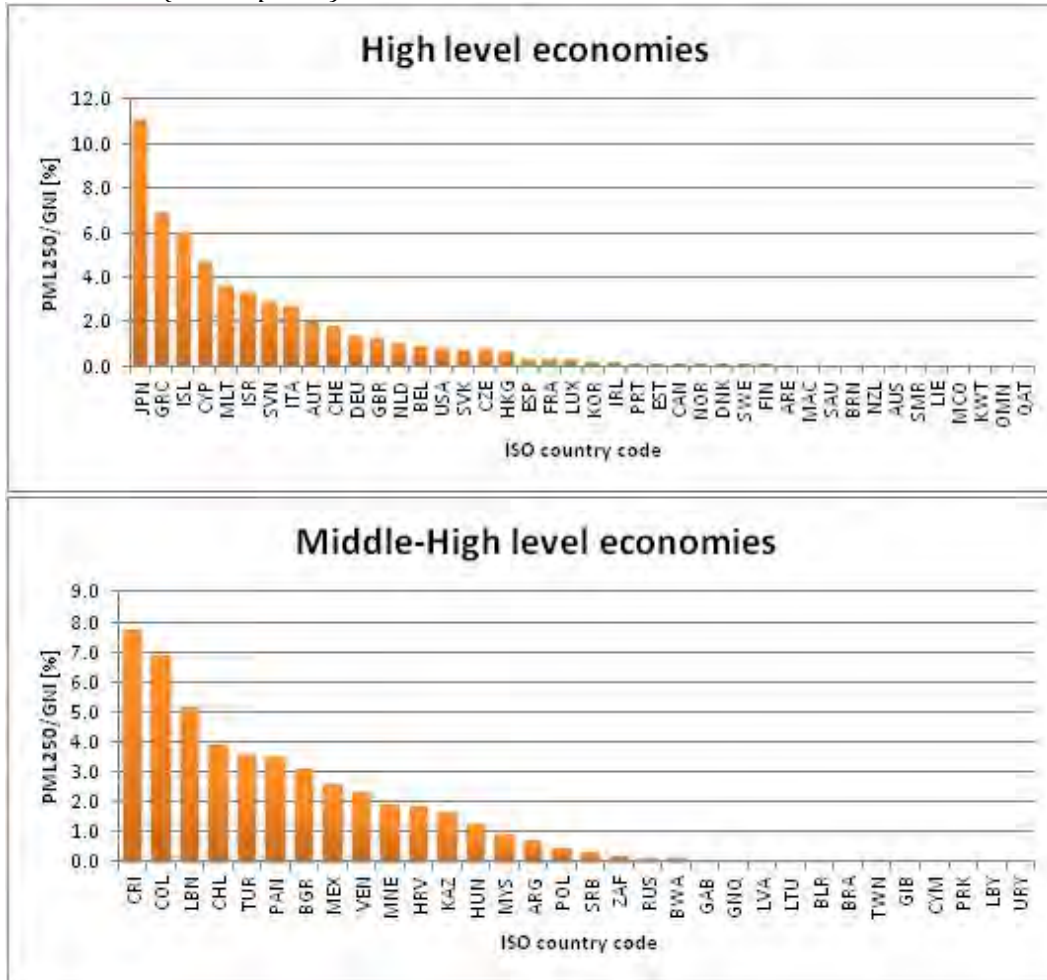


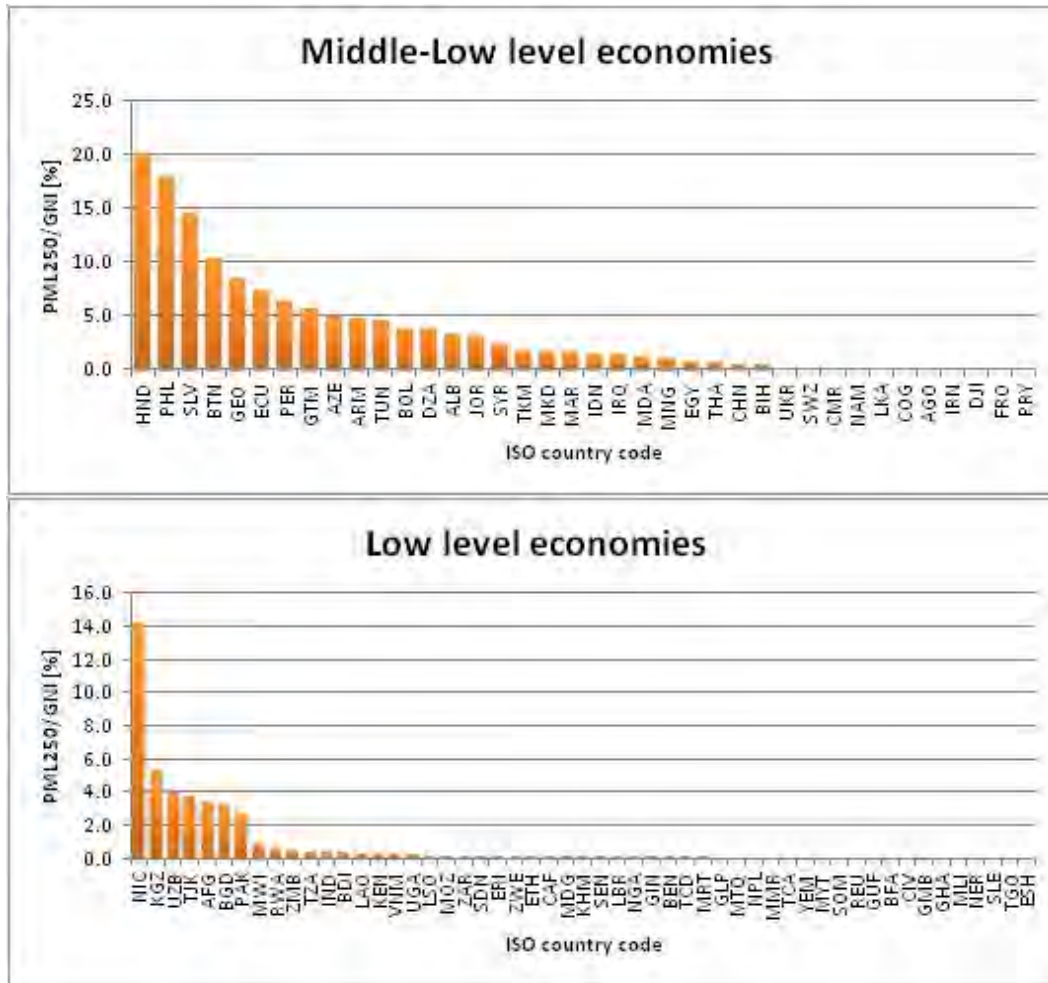
PML/GDP Fiscal (Earthquake)



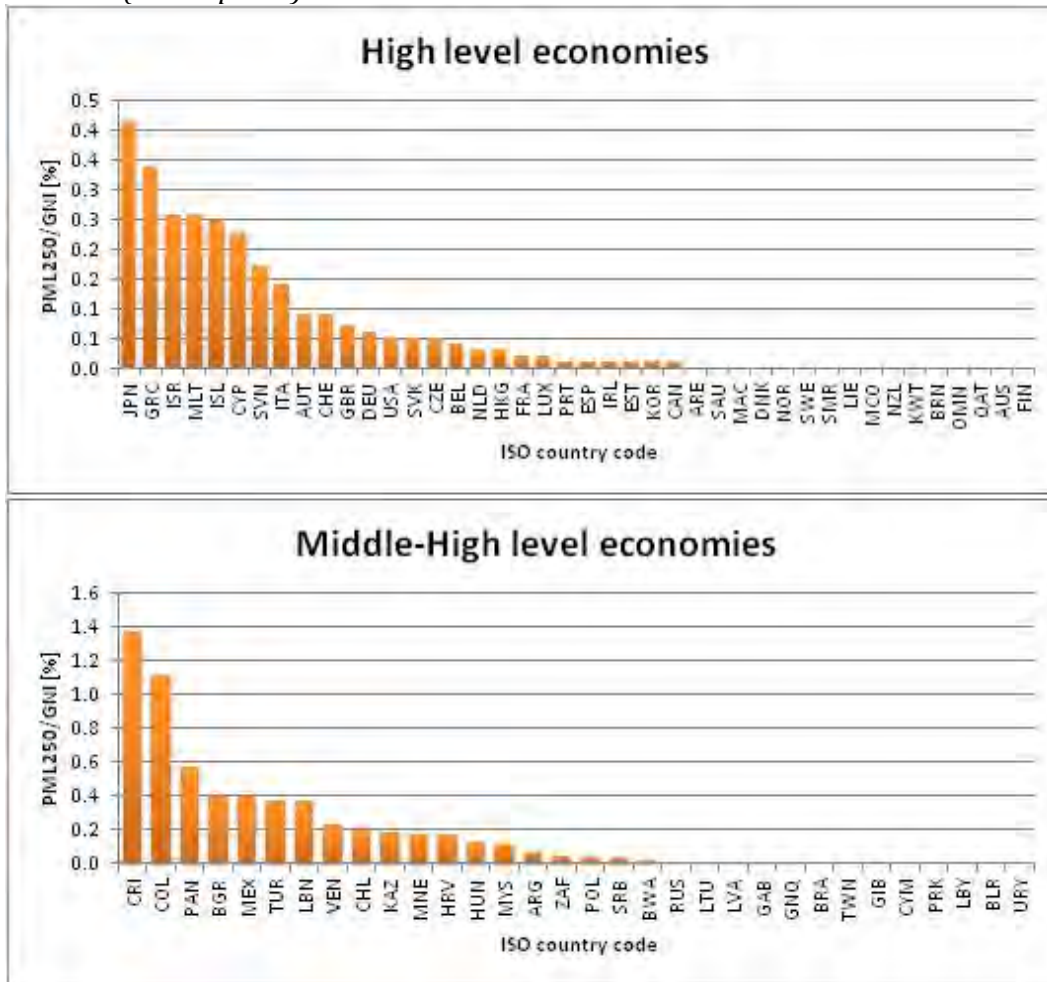


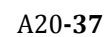
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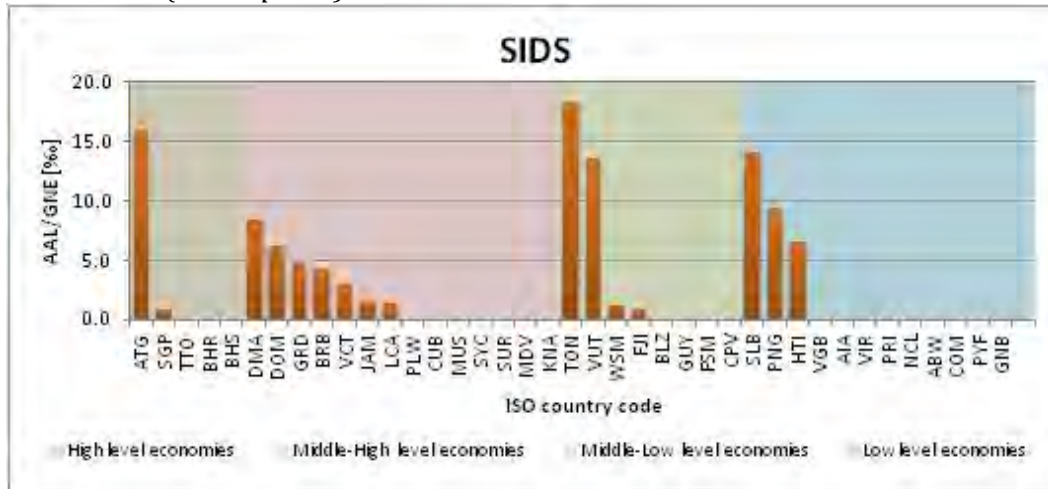
PML/GNI Fiscal (Earthquake)



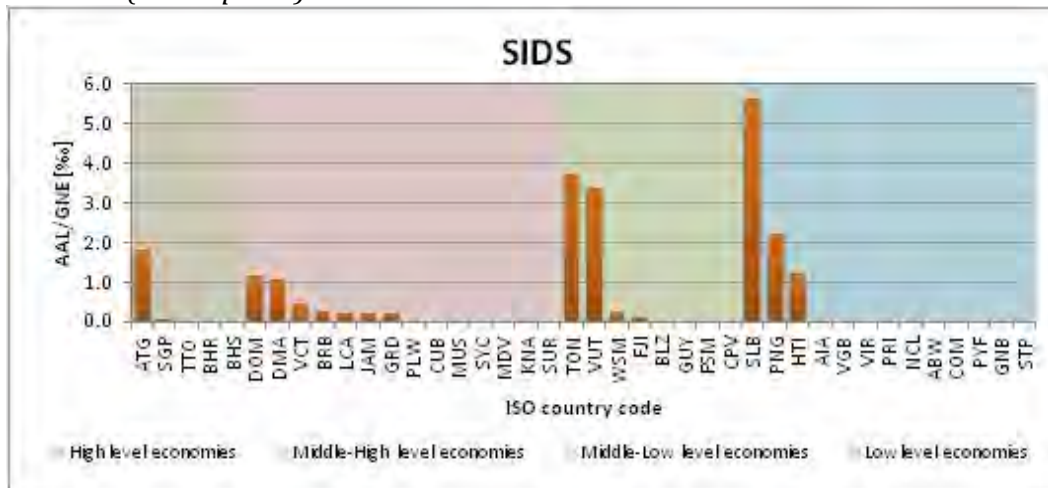


Risk results by country, SIDS y economy class

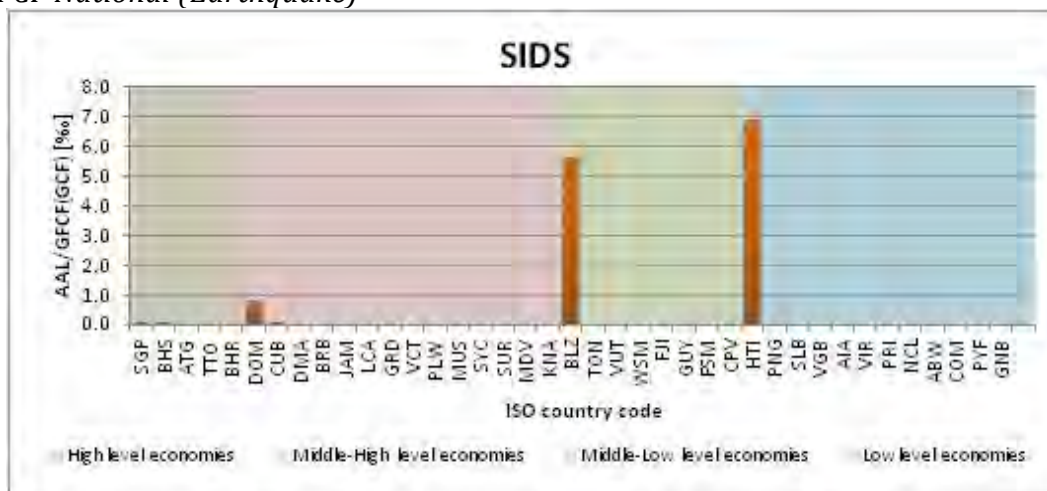
AAL/GNE National (Earthquake)



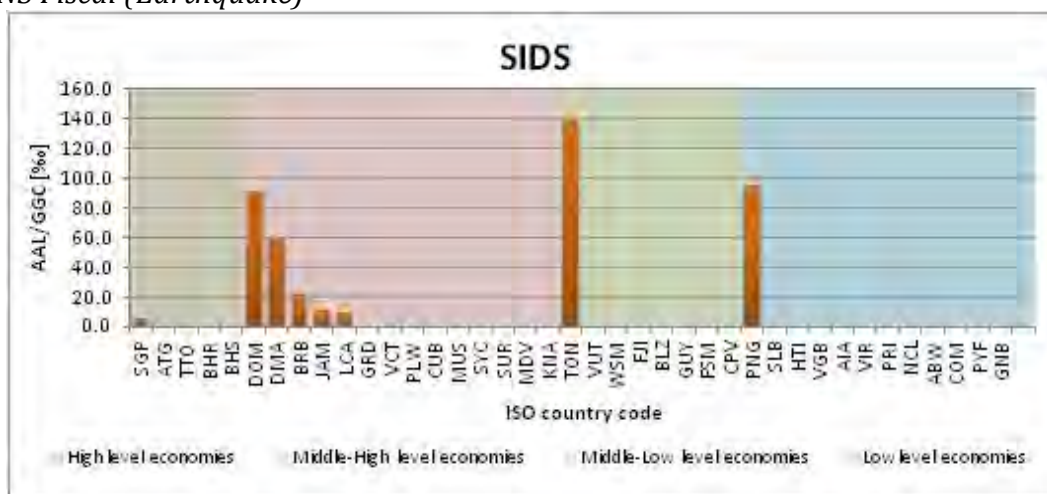
AAL/GNE Fiscal (Earthquake)



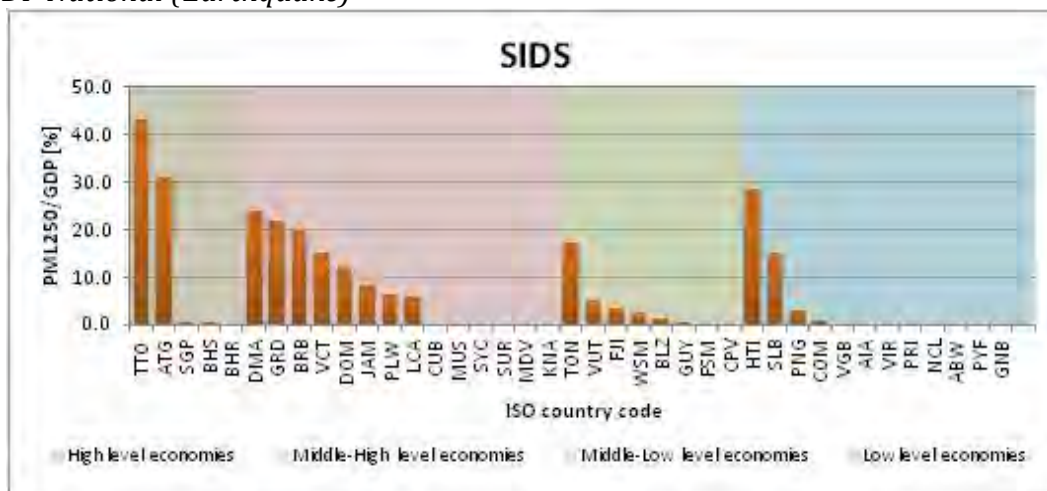
AAL/GCF National (Earthquake)



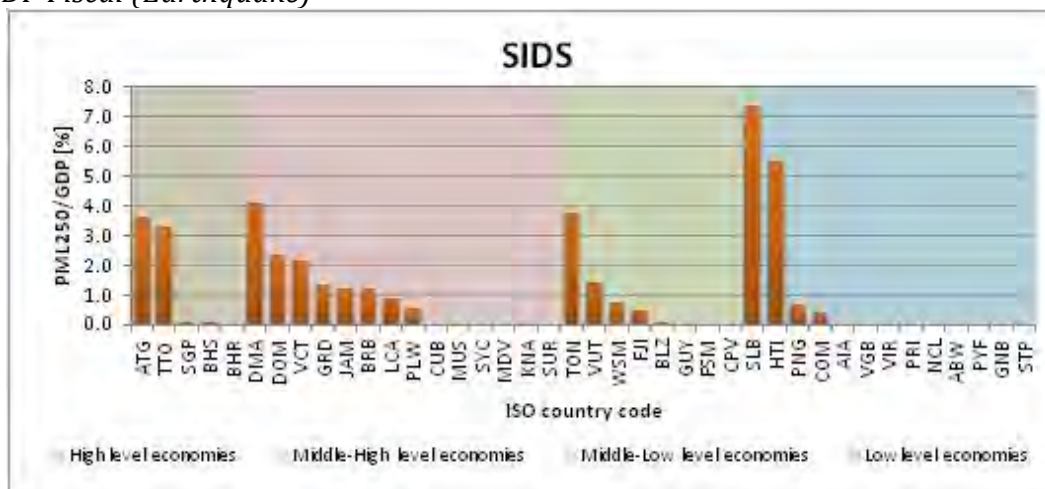
AAL/GNS Fiscal (Earthquake)



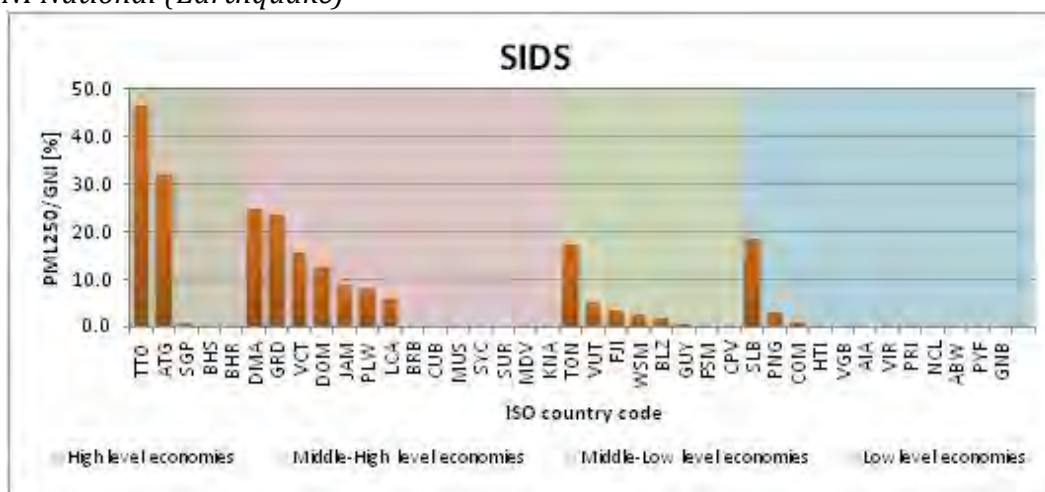
PML/GDP National (Earthquake)



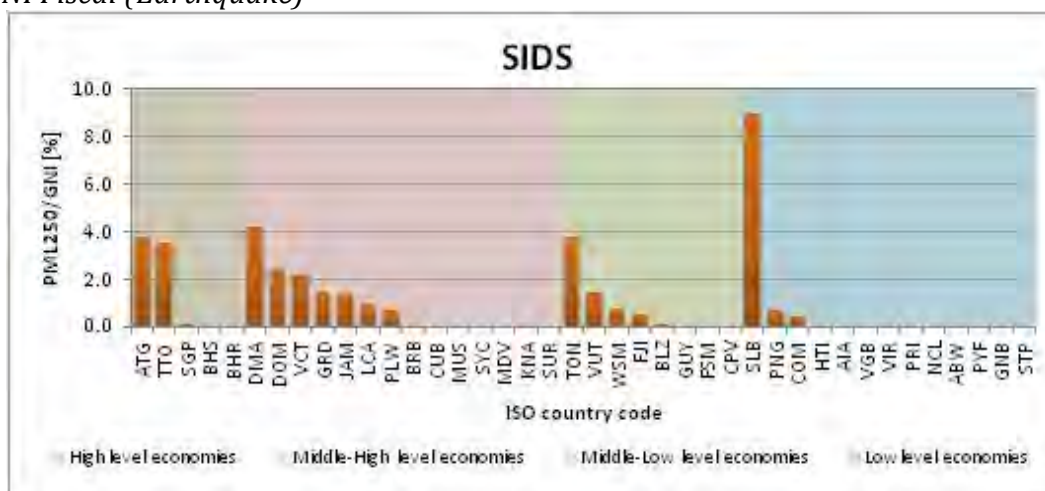
PML/GDP Fiscal (Earthquake)



PML/GNI National (Earthquake)



PML/GNI Fiscal (Earthquake)





ANNEX 21. RESULTS FROM THE RISK OF CYCLONES (WIND)

Table A21-1
National and Fiscal AAL results, for cyclonic wind by regions

Region	Exposed Value		National		Fiscal	
	National	Fiscal	National		Fiscal	
	[USDx10 ⁶]	[USDx10 ⁶]	[USDx10 ⁶]	[%o]	[USDx10 ⁶]	[%o]
Asia	\$ 31,984,272	\$ 2,541,198	\$ 114,680	3.6 %o	\$ 4,425	1.7 %o
Australia	\$ 2,071,569	\$ 60,653	\$ 113	0.1 %o	\$ 3	0.1 %o
Caribbean	\$ 408,700	\$ 35,140	\$ 1,472	3.6 %o	\$ 72	2.1 %o
Europe	\$ 30,271,265	\$ 1,877,116	\$ 2	0.0 %o	\$ 0	0.0 %o
Latin America	\$ 5,520,532	\$ 797,297	\$ 3,650	0.7 %o	\$ 493	0.6 %o
North Africa	\$ 775,538	\$ 243,962	\$ -	- %o	\$ -	- %o
North America	\$ 24,055,738	\$ 1,346,697	\$ 11,770	0.5 %o	\$ 660	0.5 %o
Pacific	\$ 554,461	\$ 20,732	\$ 40	0.1 %o	\$ 3	0.1 %o
Sud Africa	\$ 816,022	\$ 236,809	\$ 374	0.5 %o	\$ 41	0.2 %o

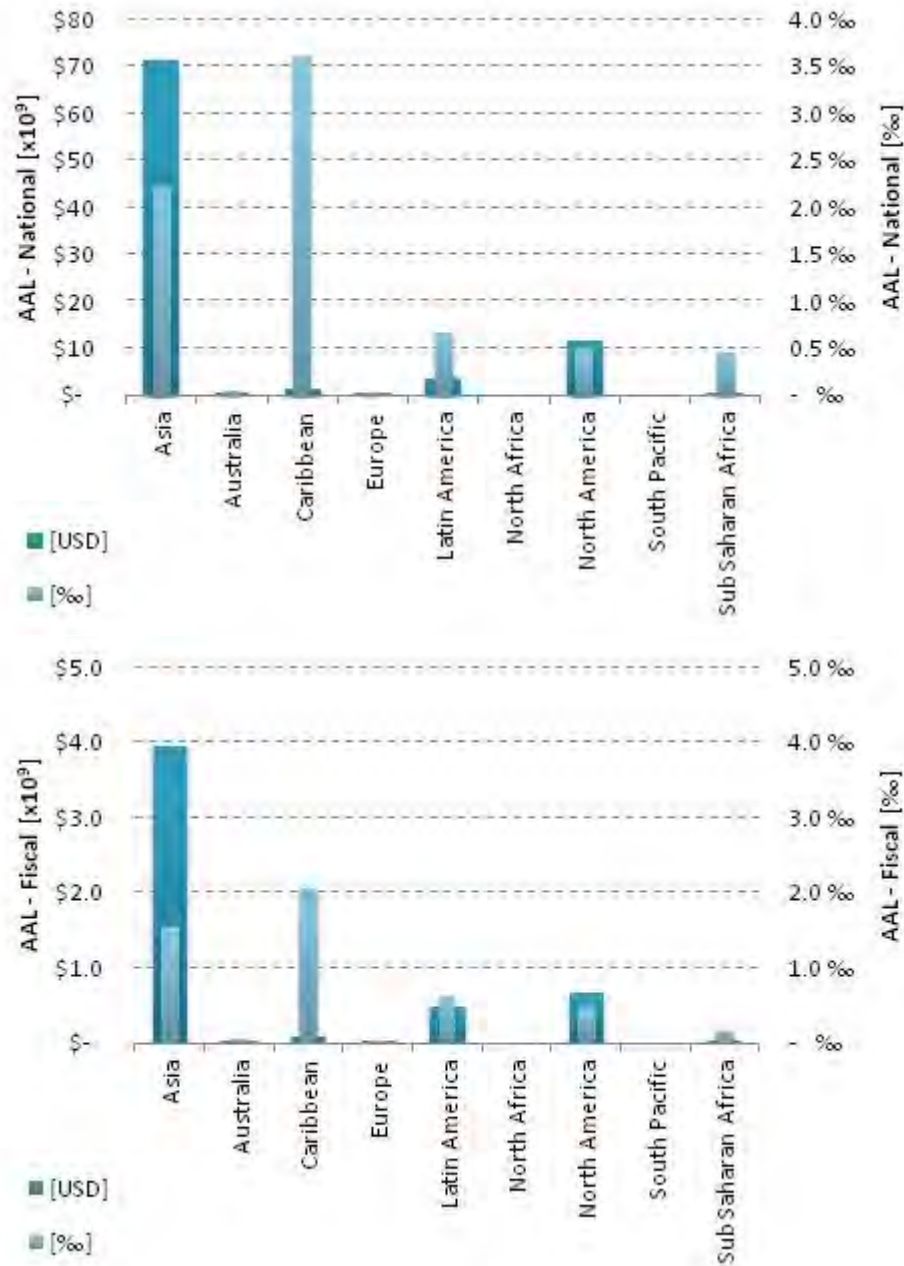
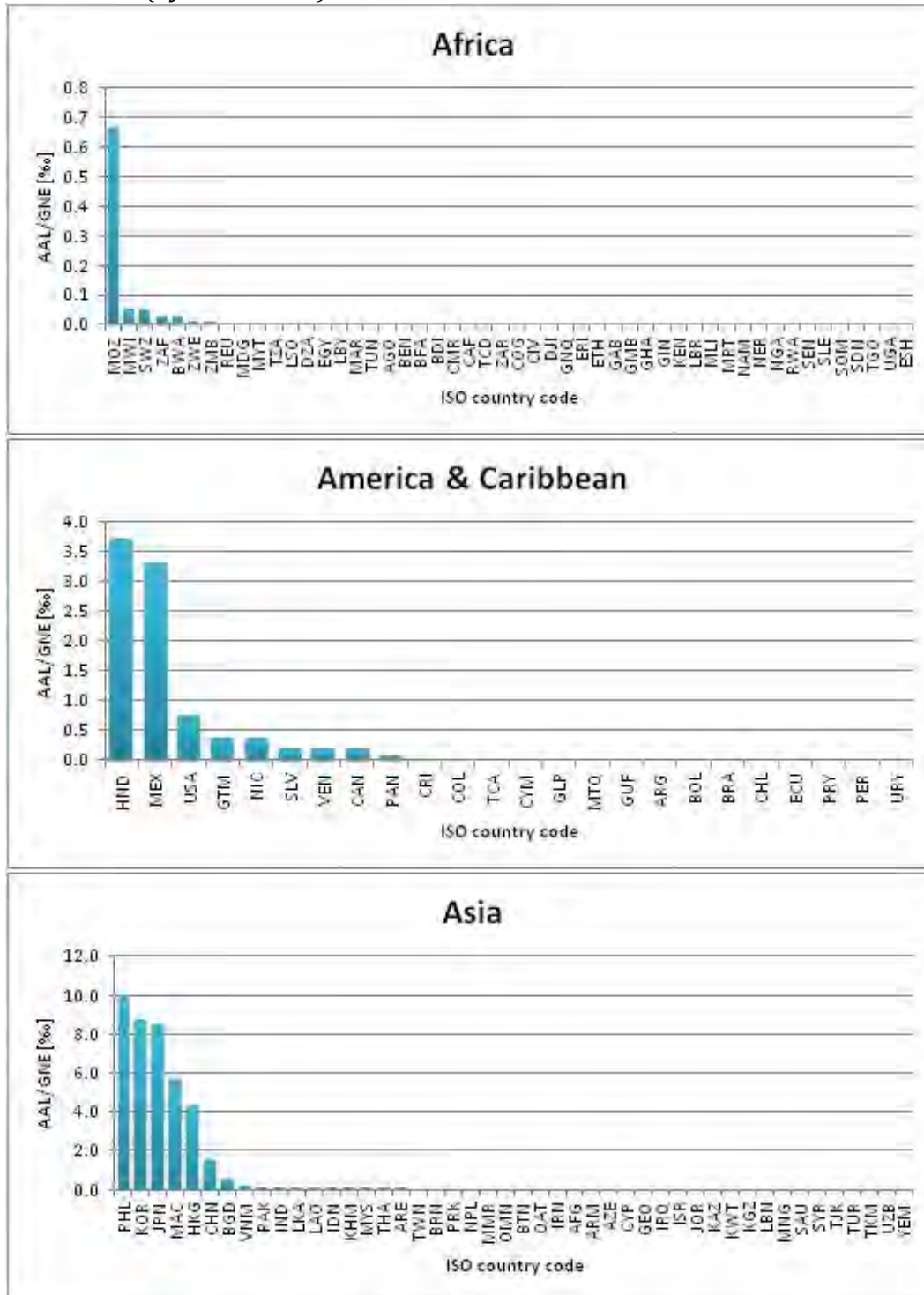


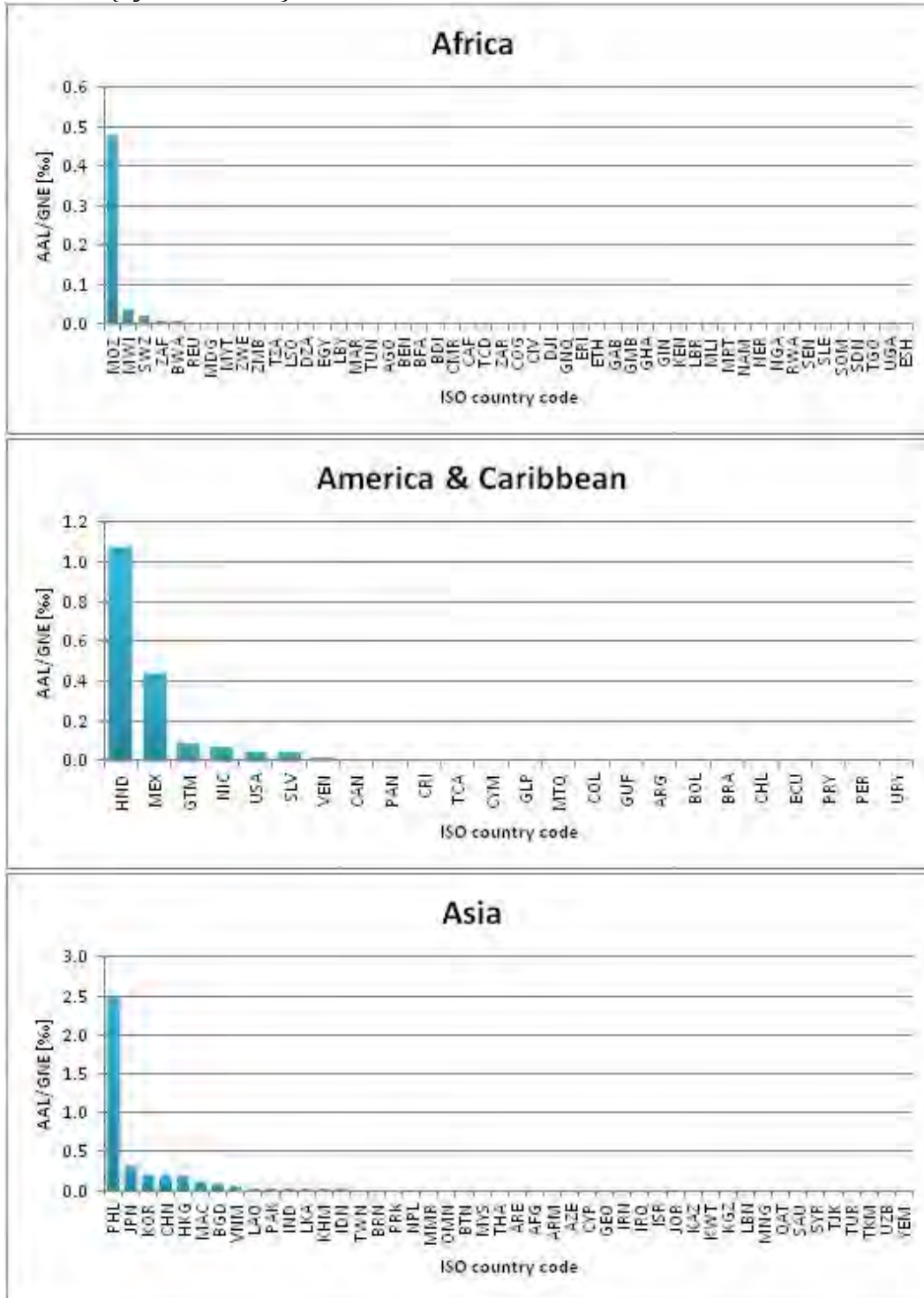
Figure A21-1
 National and Fiscal AAL distribution, for cyclonic wind by regions

Risk results by country and region

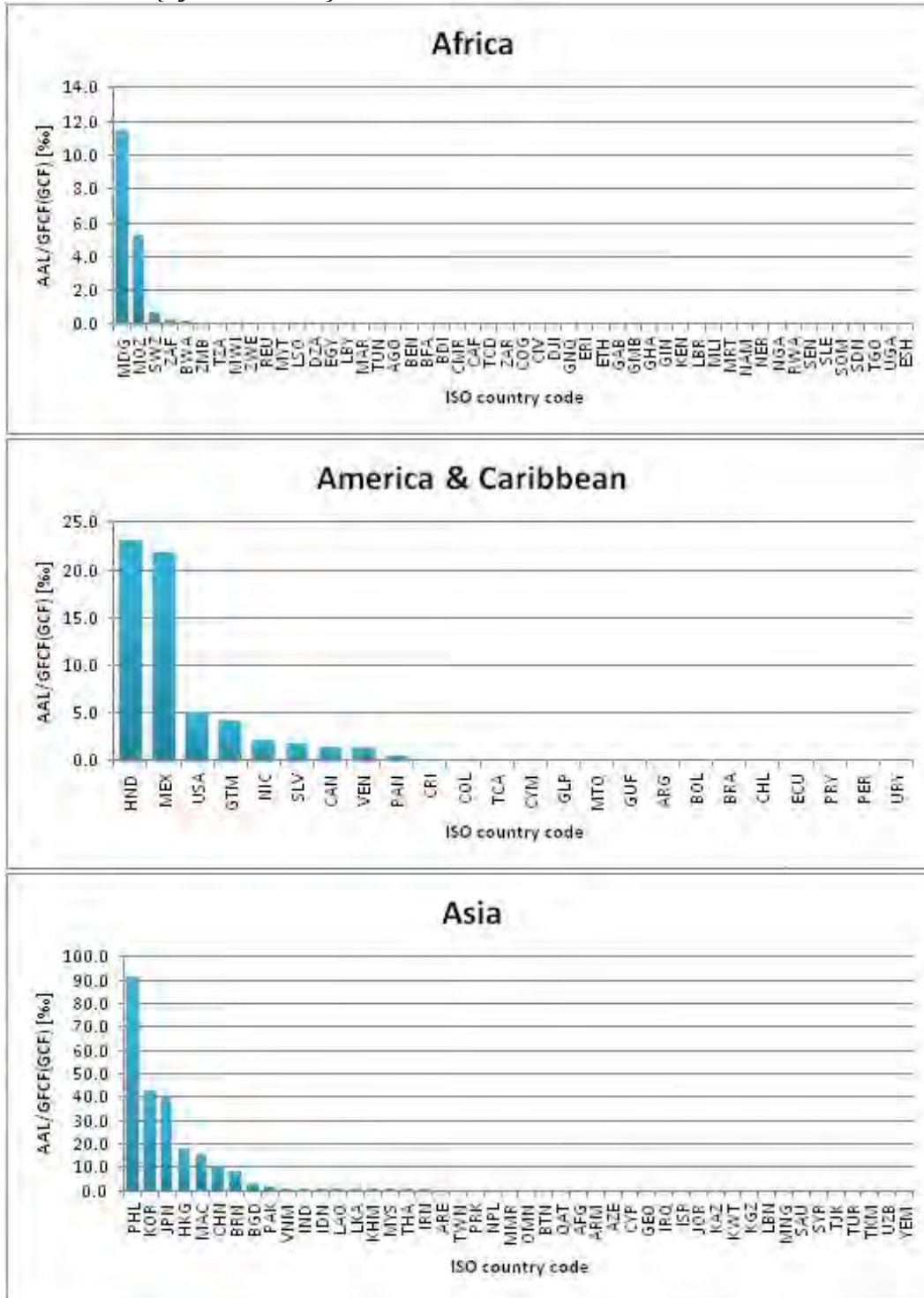
AAL/GNE National (Cyclonic wind)

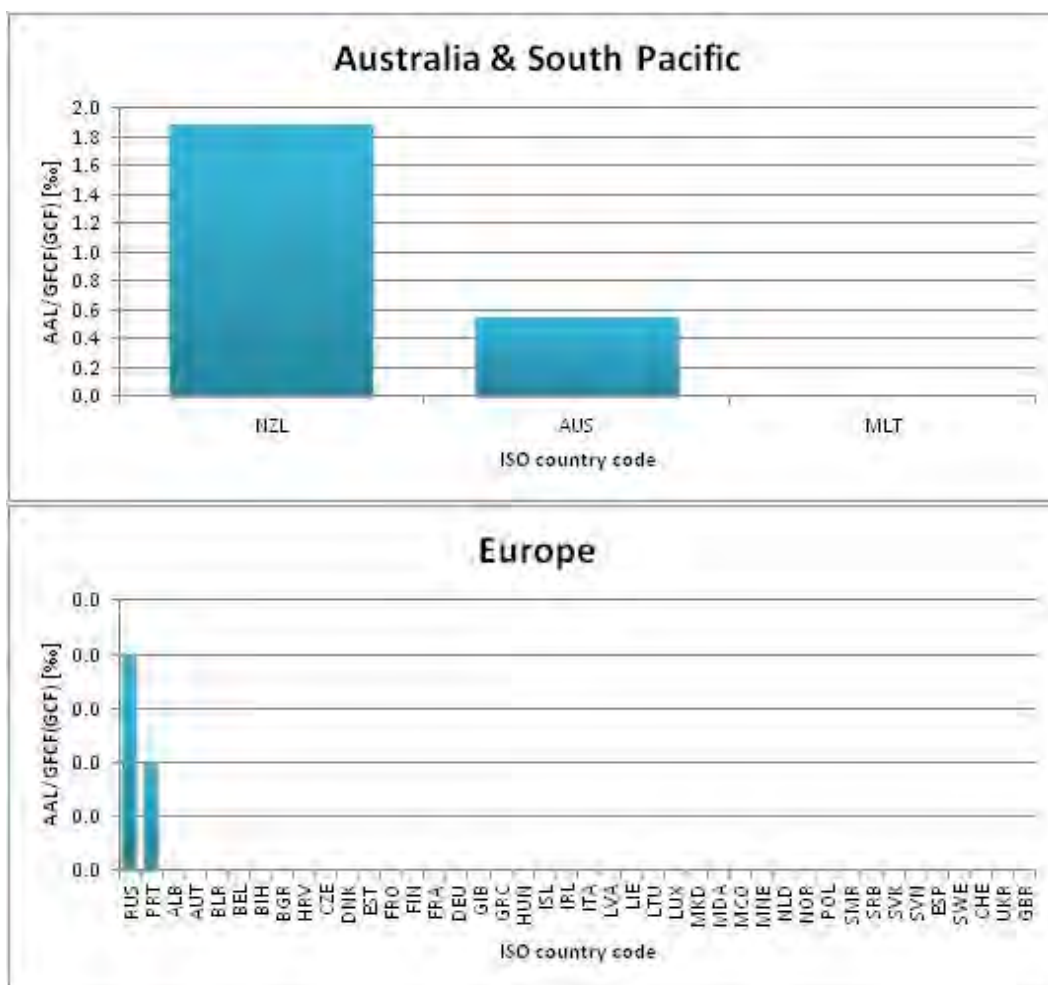


AAL/GNE Fiscal (Cyclonic wind)

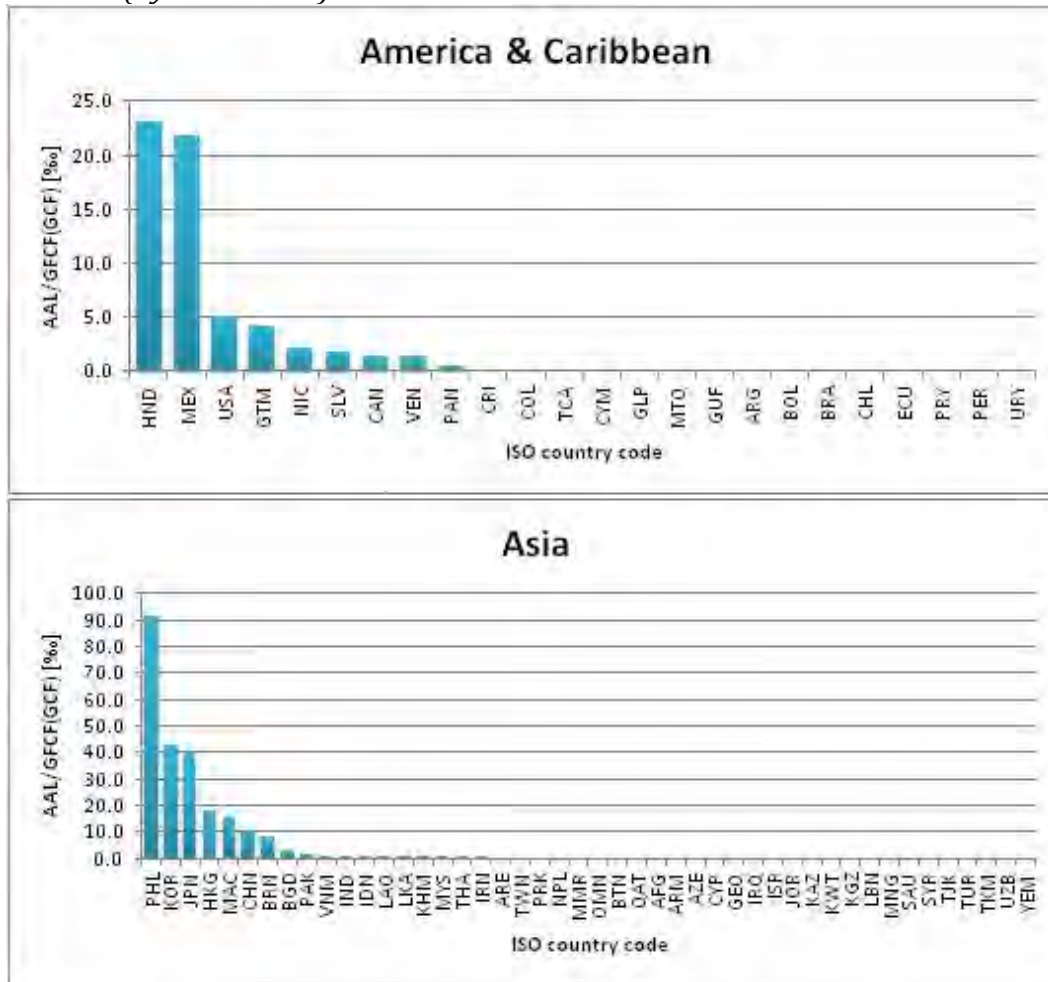


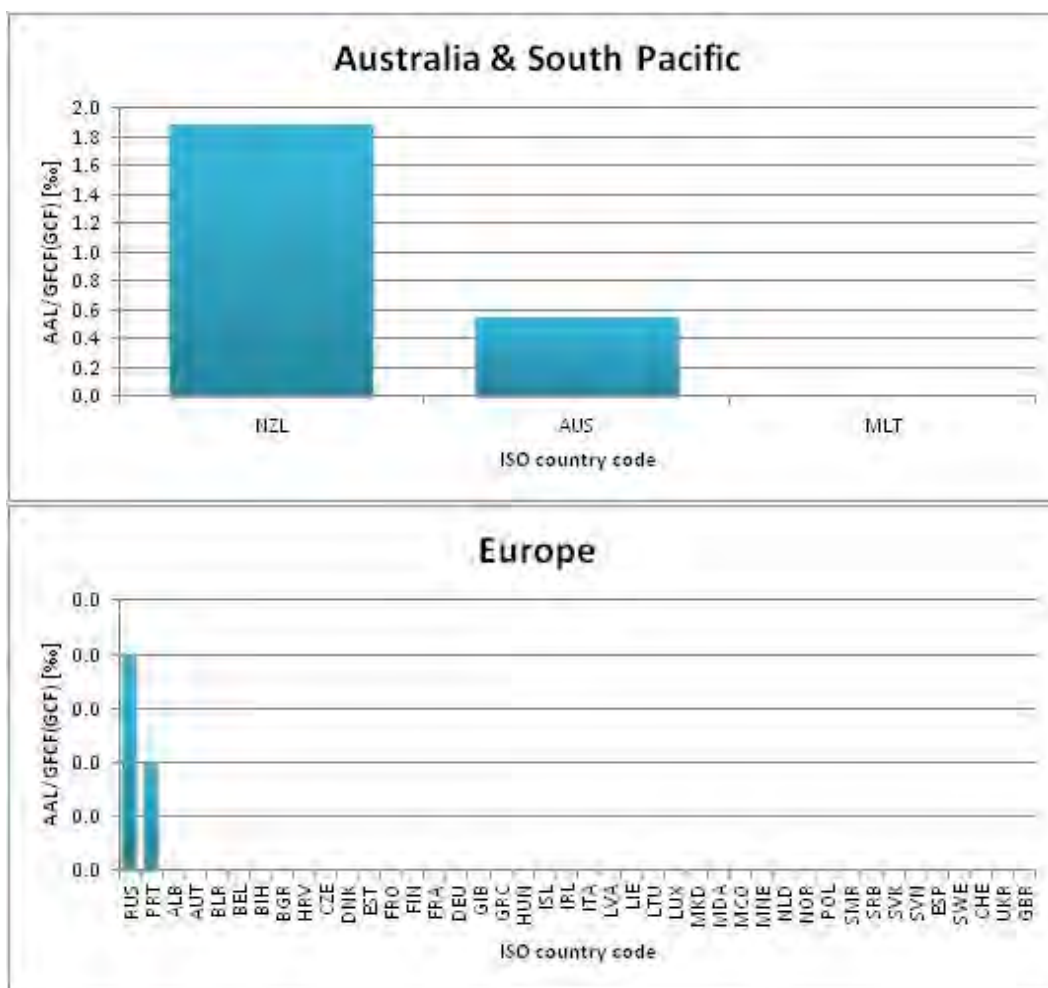
AAL/GFCF National (Cyclonic wind)



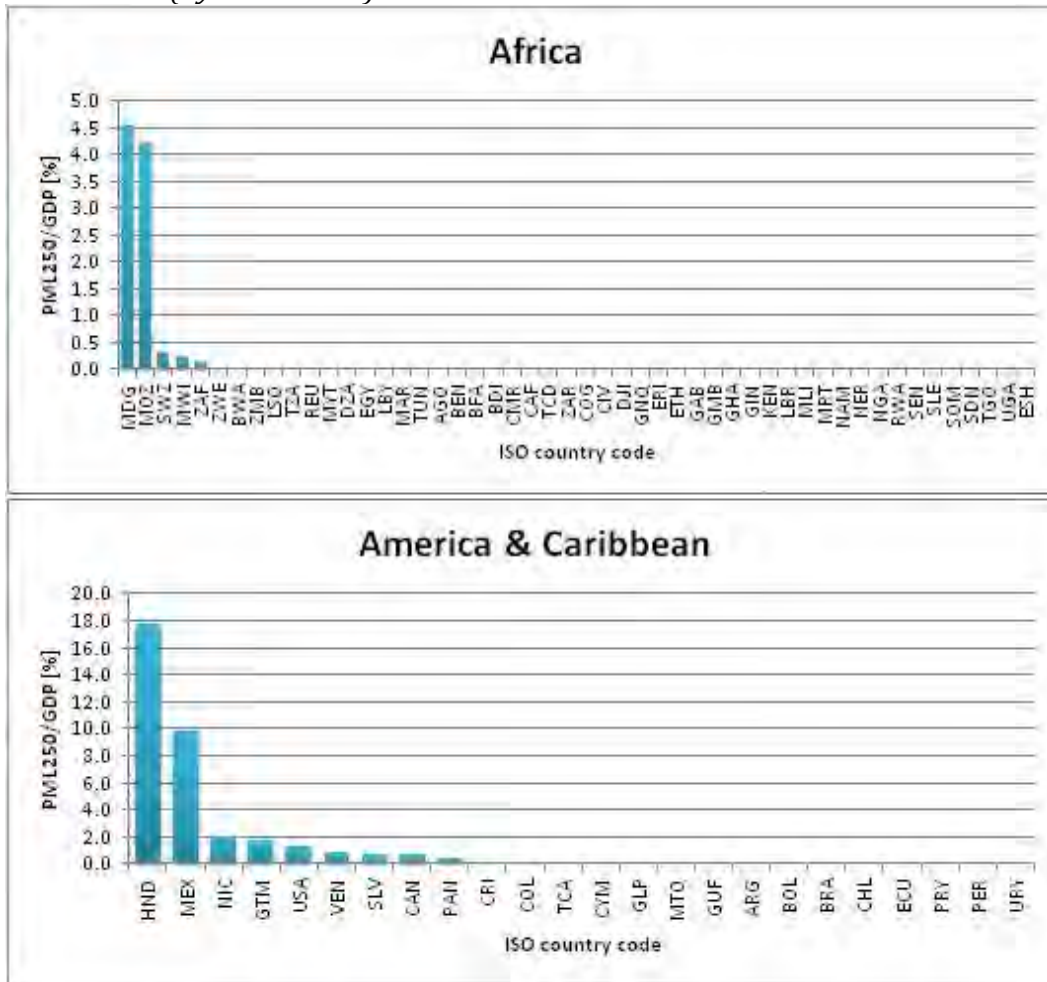


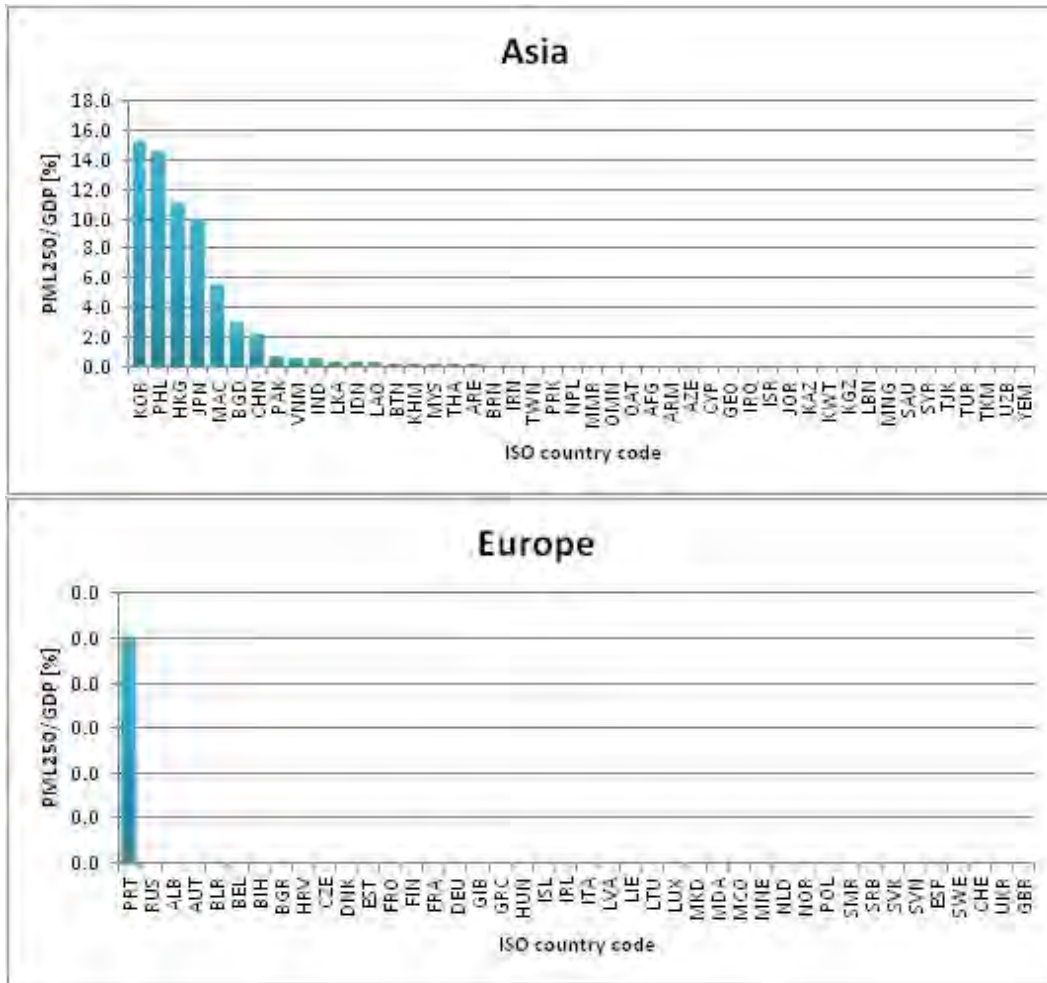
AAL/GNS Fiscal (Cyclonic wind)



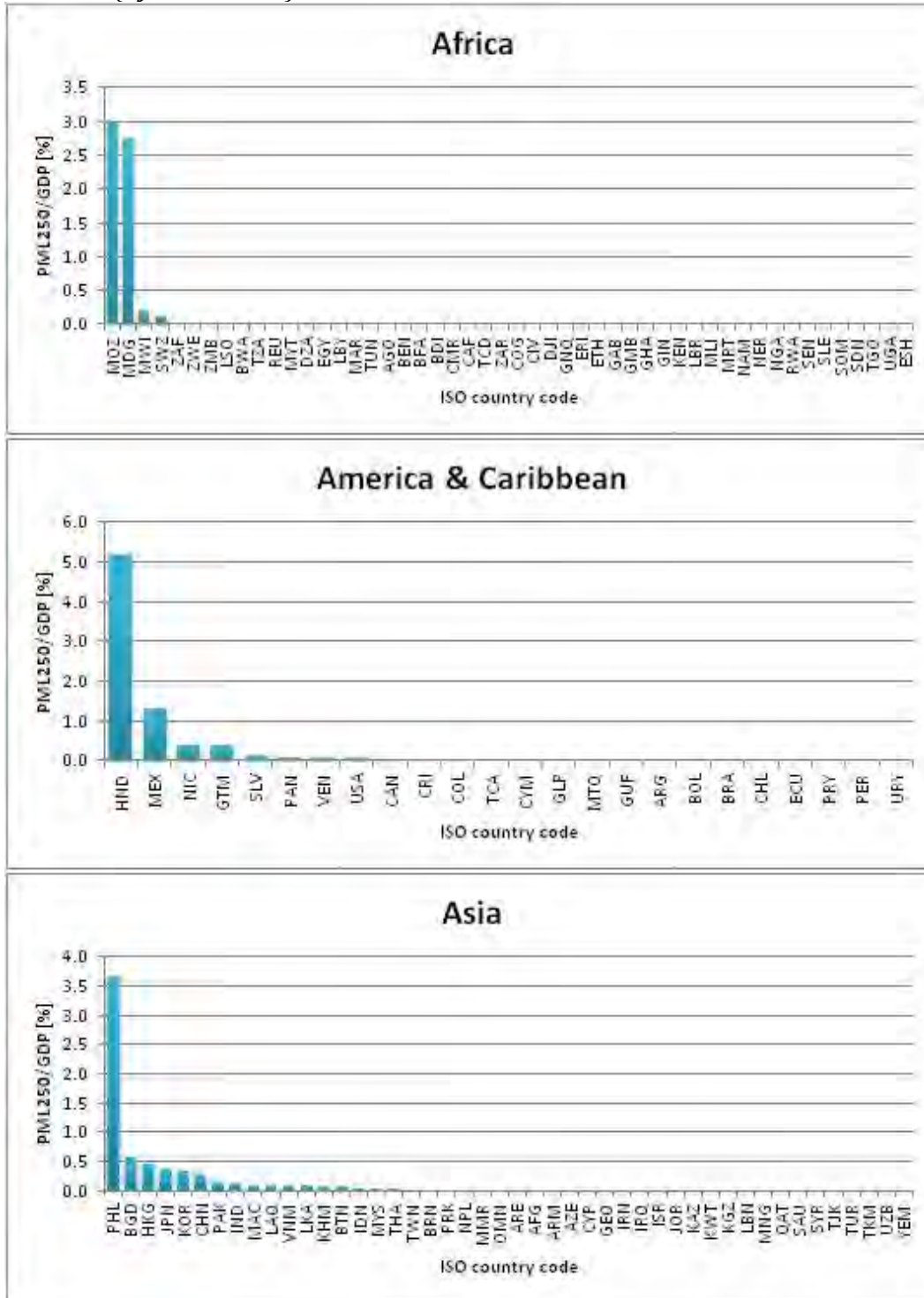


PML/GDP National (Cyclonic wind)

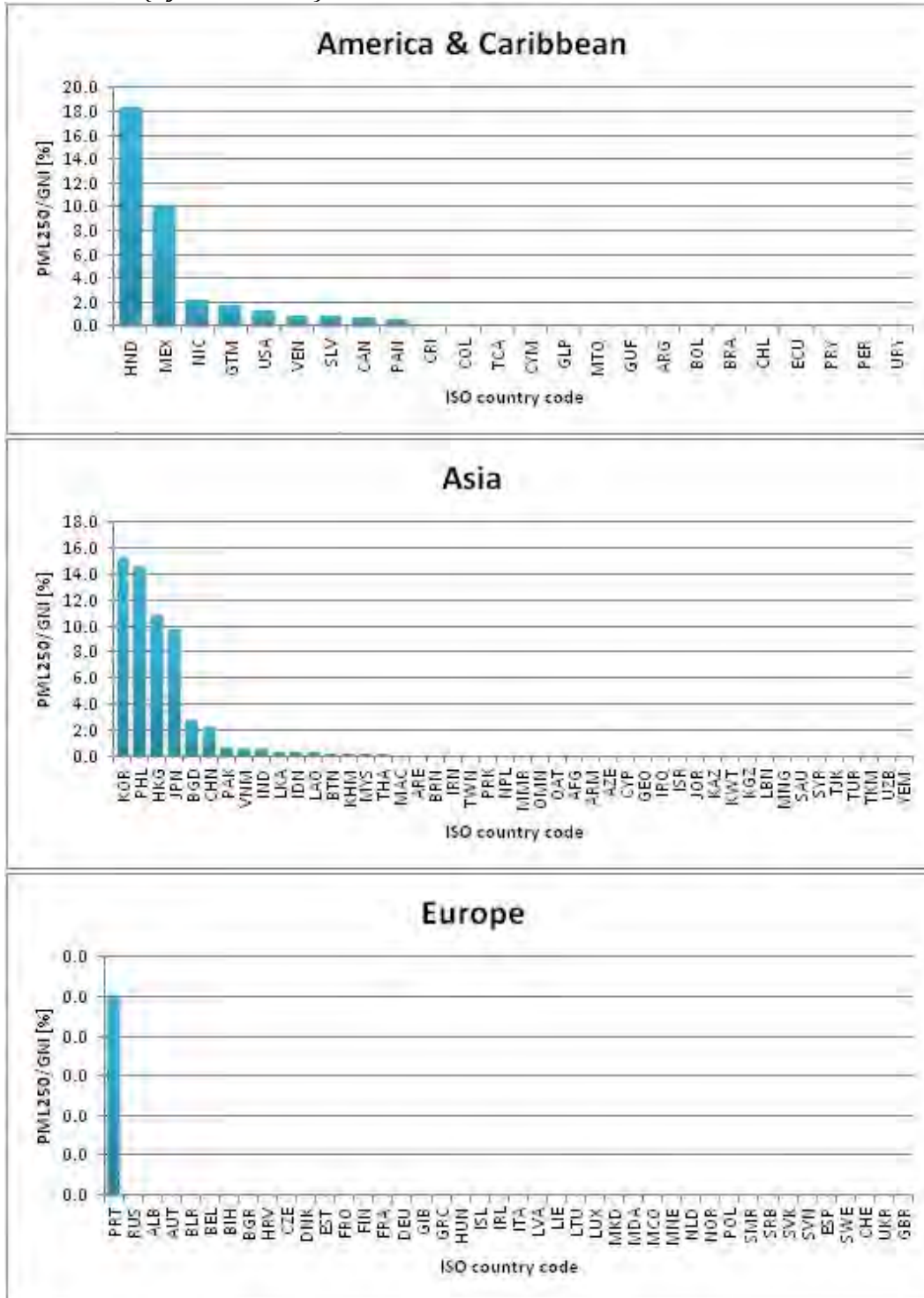




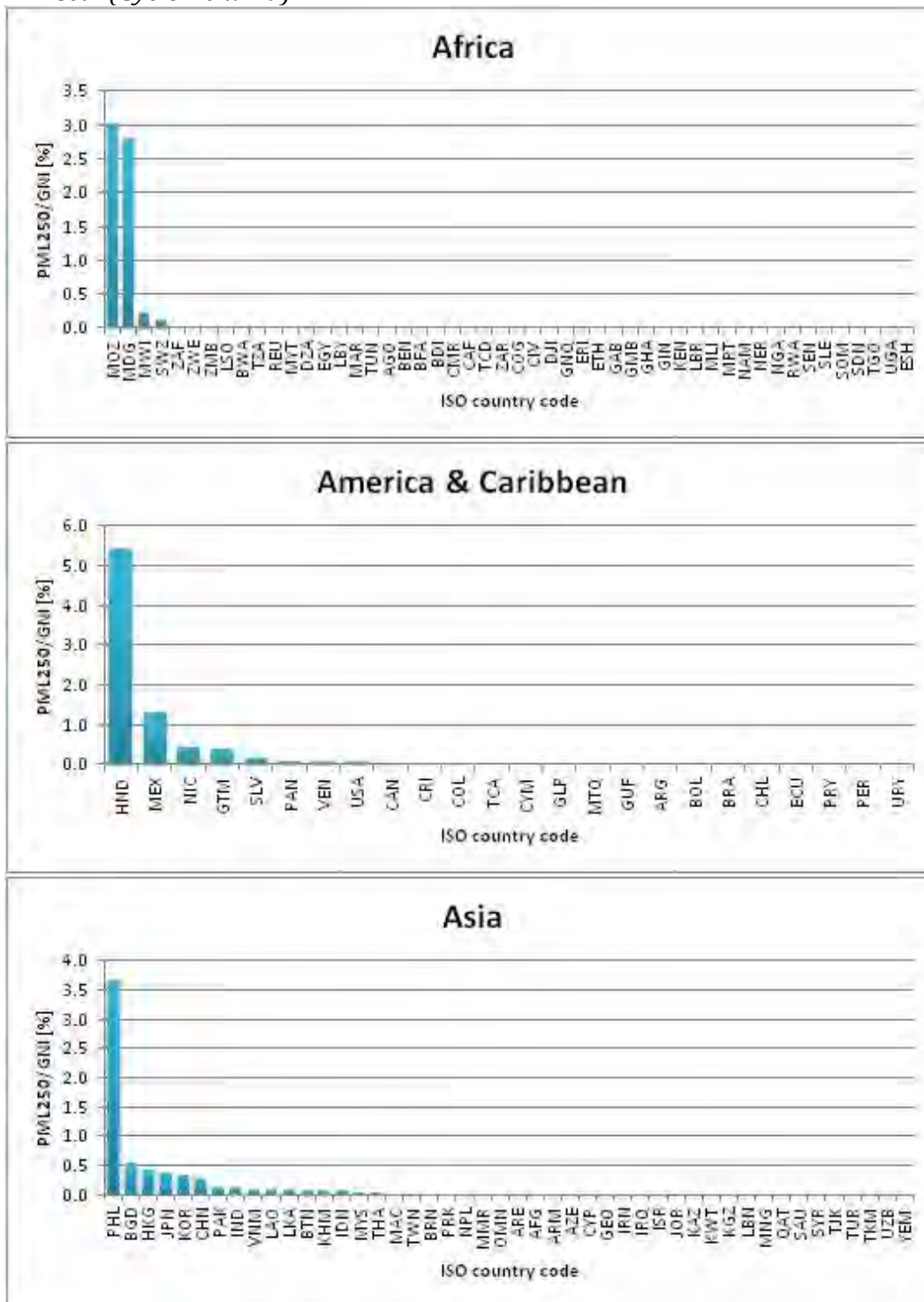
PML/GDP Fiscal (Cyclonic wind)



PML/GNI National (Cyclonic wind)

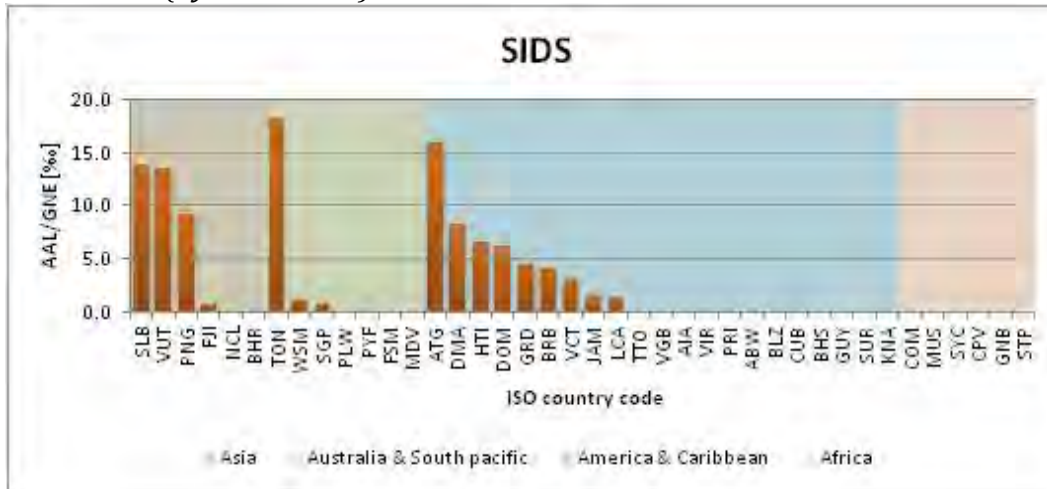


PML/GNI Fiscal (Cyclonic wind)

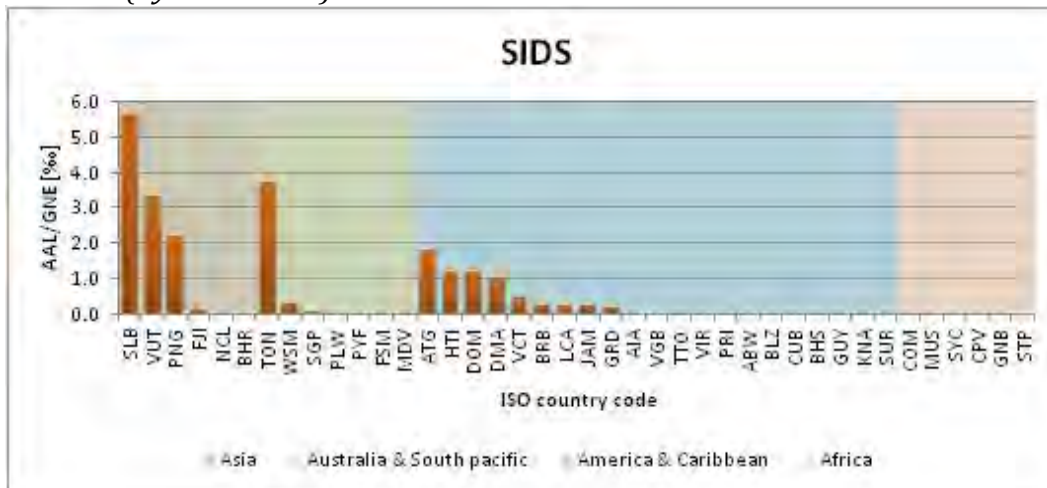


Risk results by country, SIDS and region

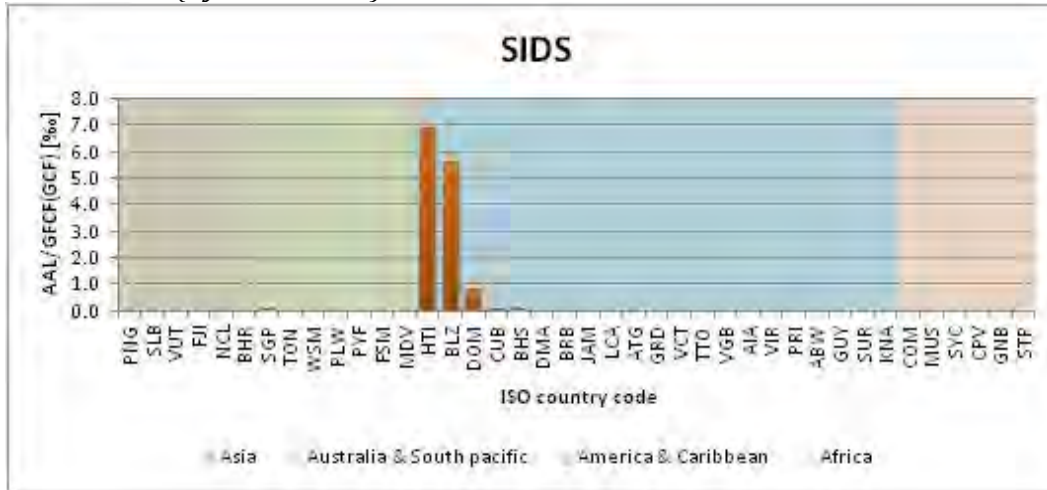
AAL/GNE National (Cyclonic wind)



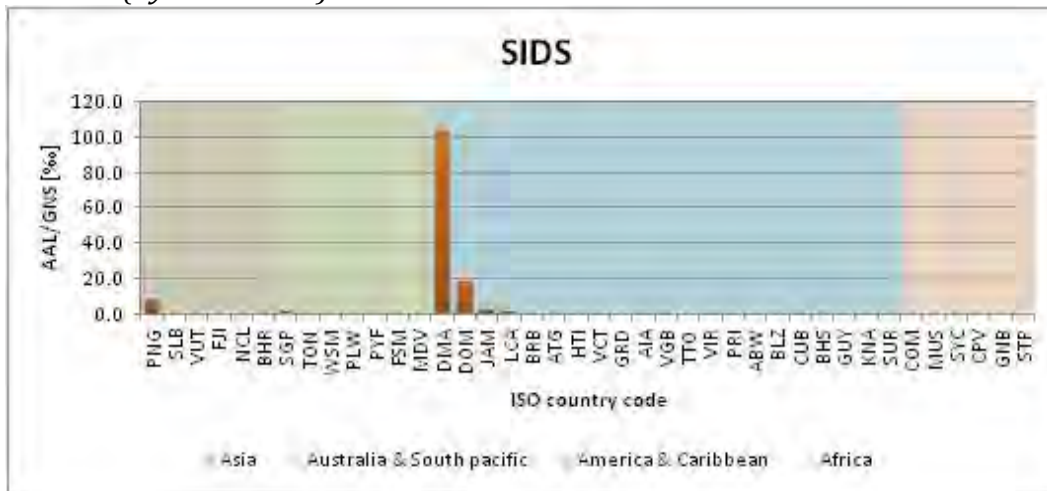
AAL/GNE Fiscal (Cyclonic wind)



AAL/GFCF National (Cyclonic wind)



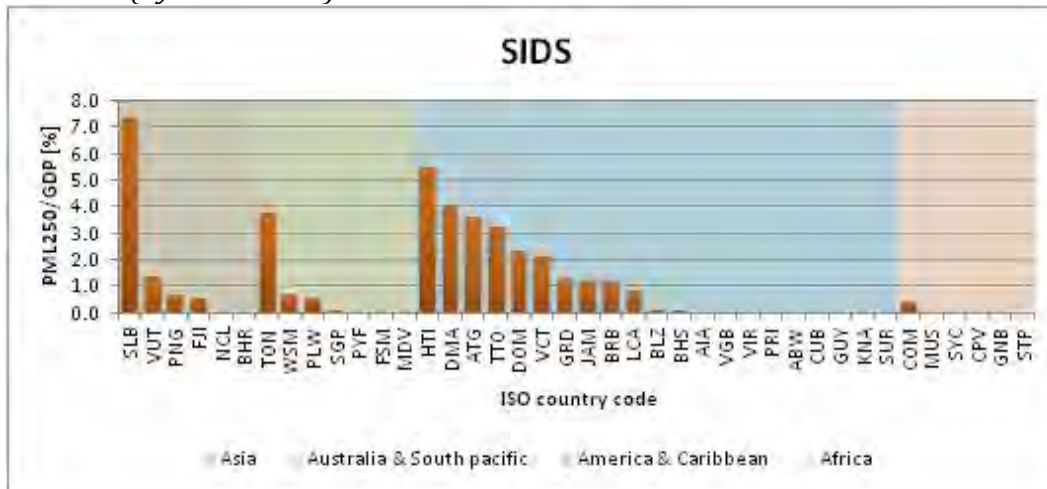
AAL/GNS Fiscal (Cyclonic wind)



PML/GDP National (Cyclonic wind)



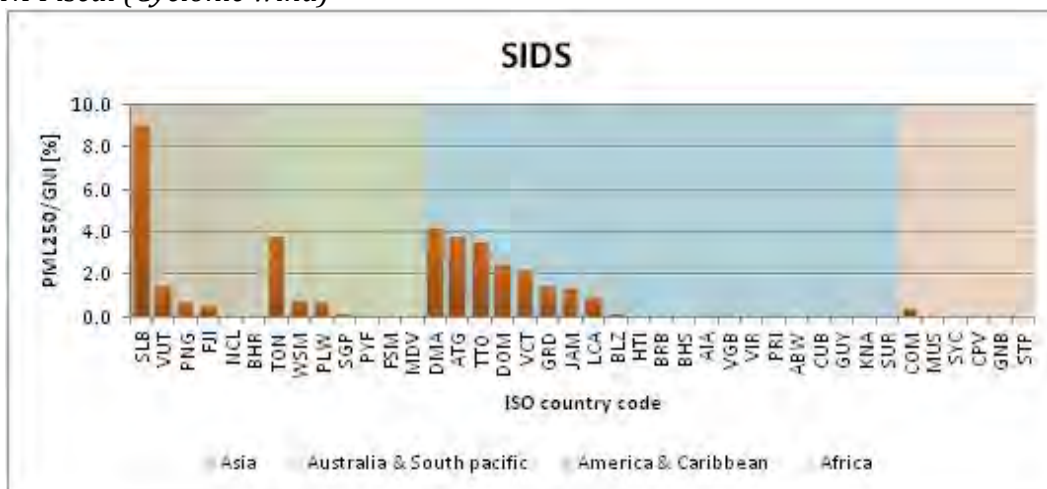
PML/GDP Fiscal (Cyclonic wind)



PML/GNI National (Cyclonic wind)

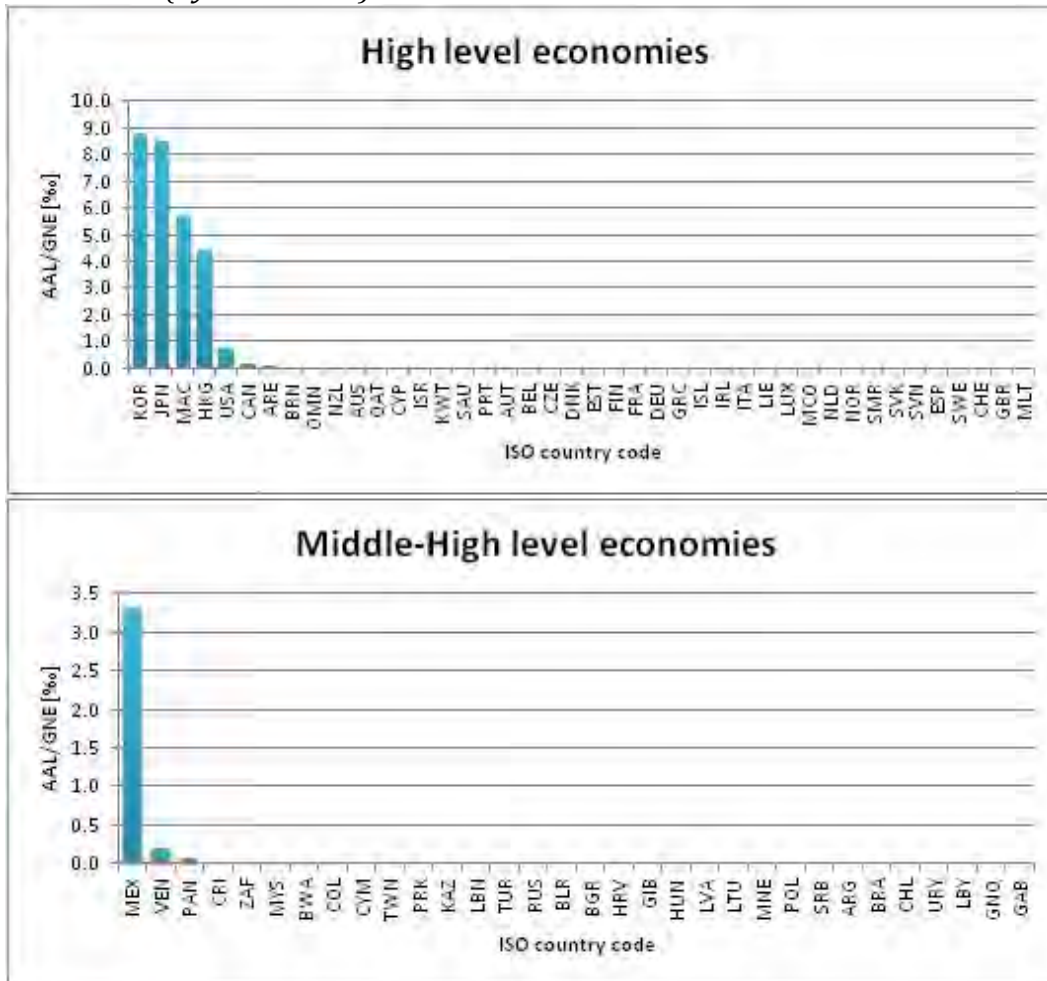


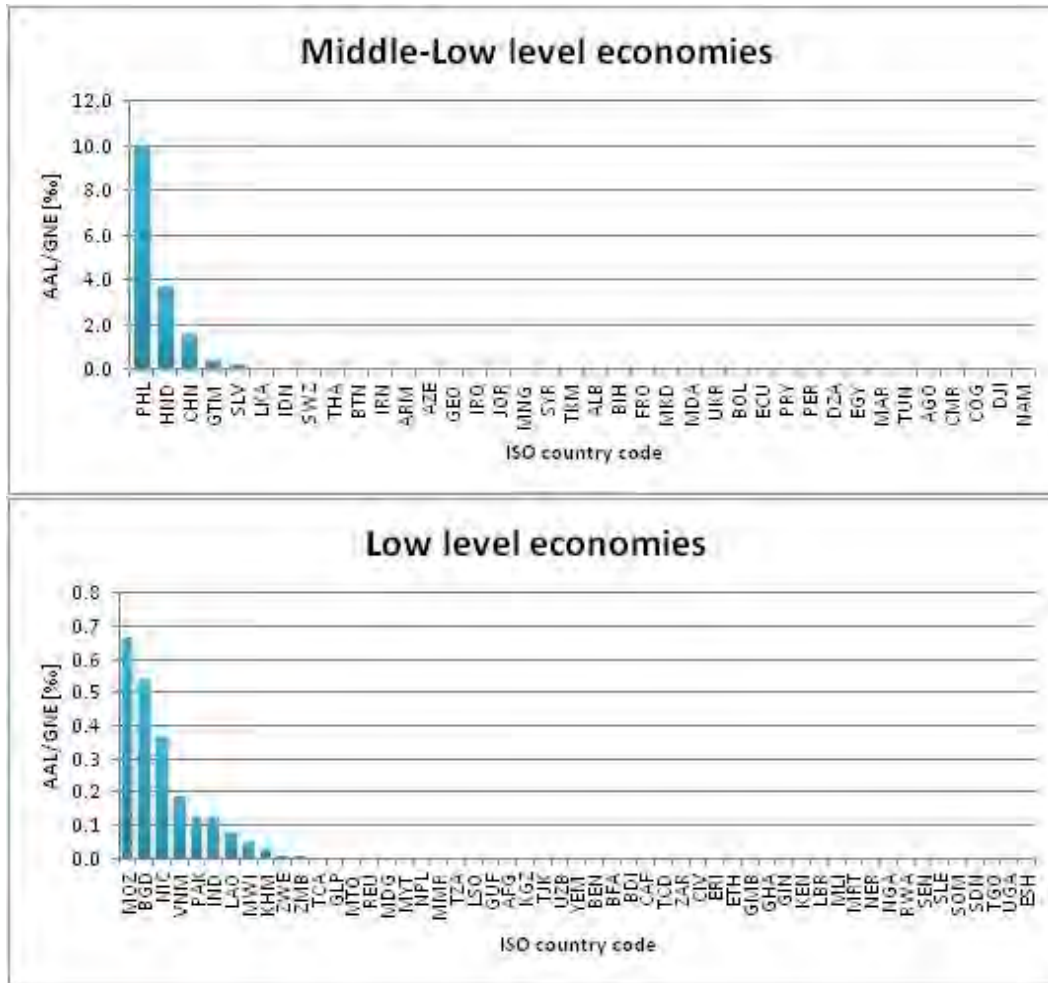
PML/GNI Fiscal (Cyclonic wind)



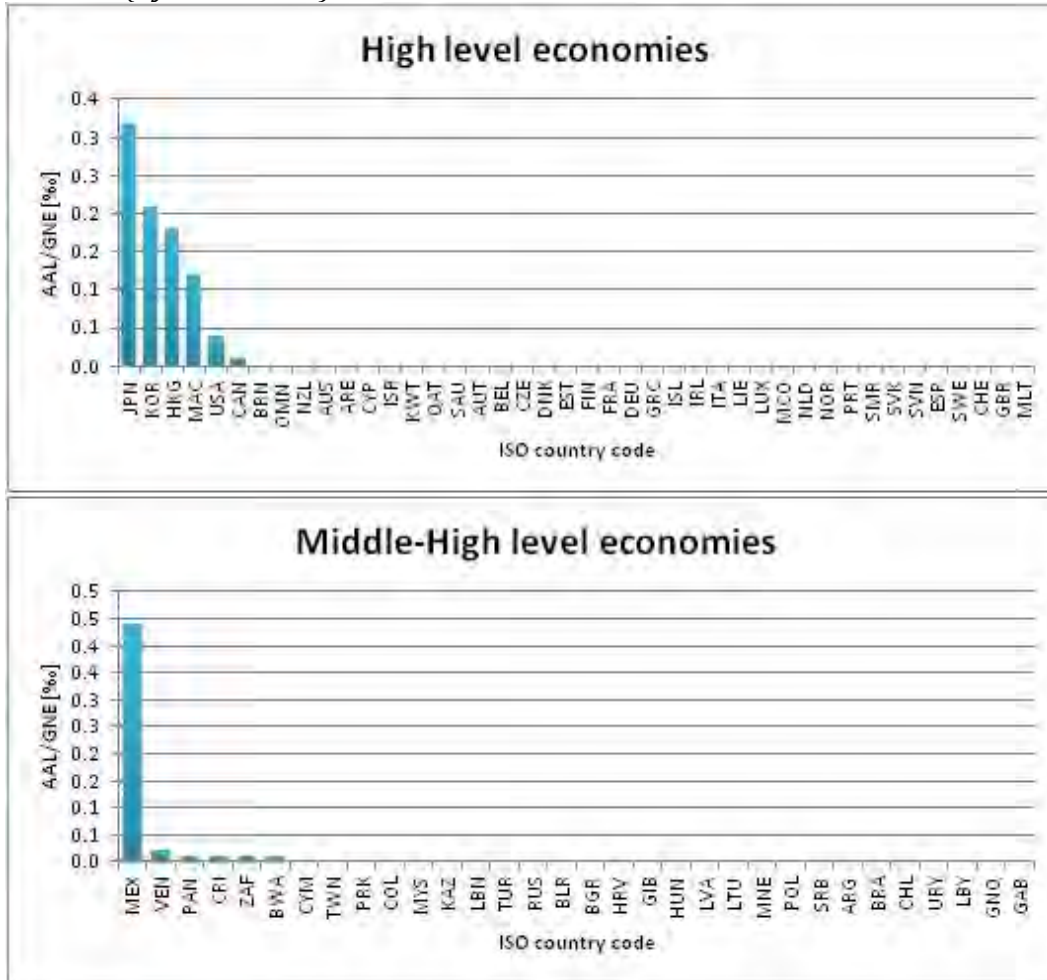
Risk results by country and economy class

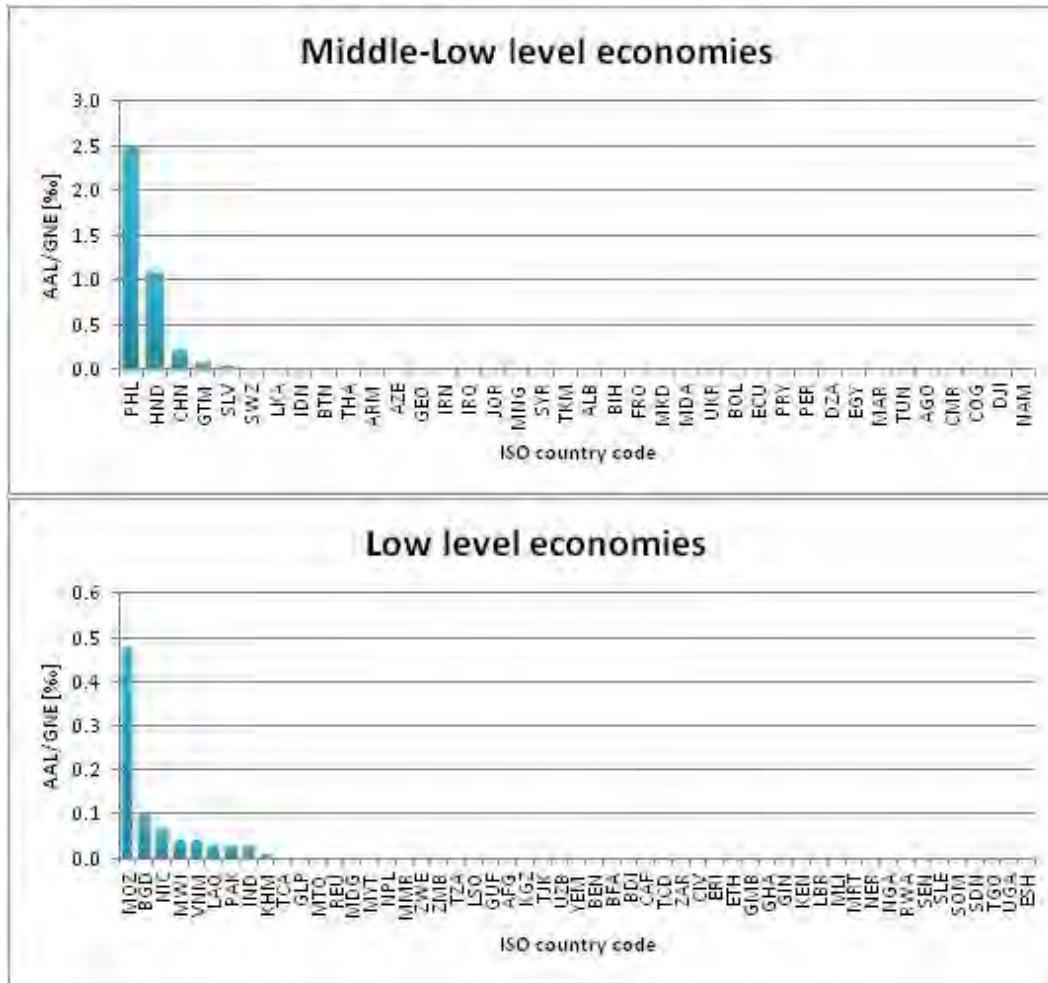
AAL/GNE National (Cyclonic wind)



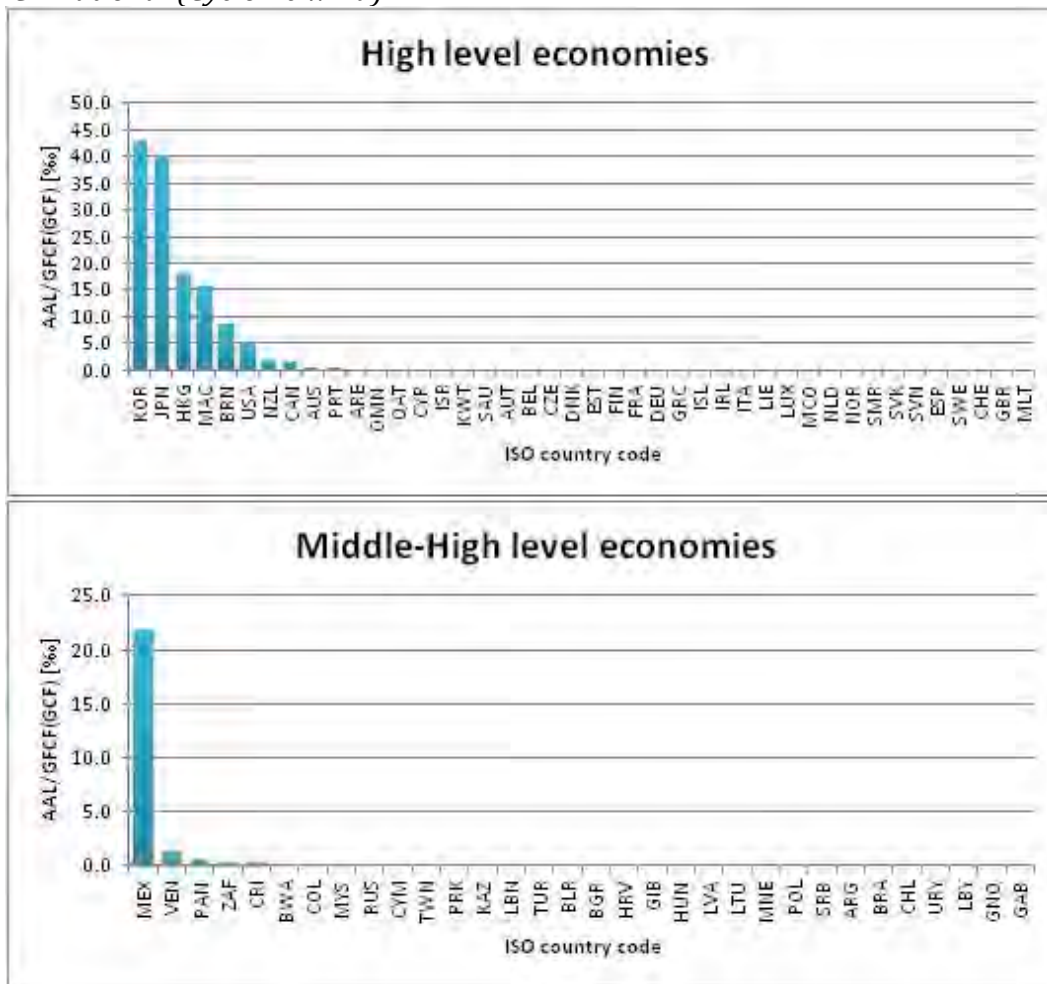


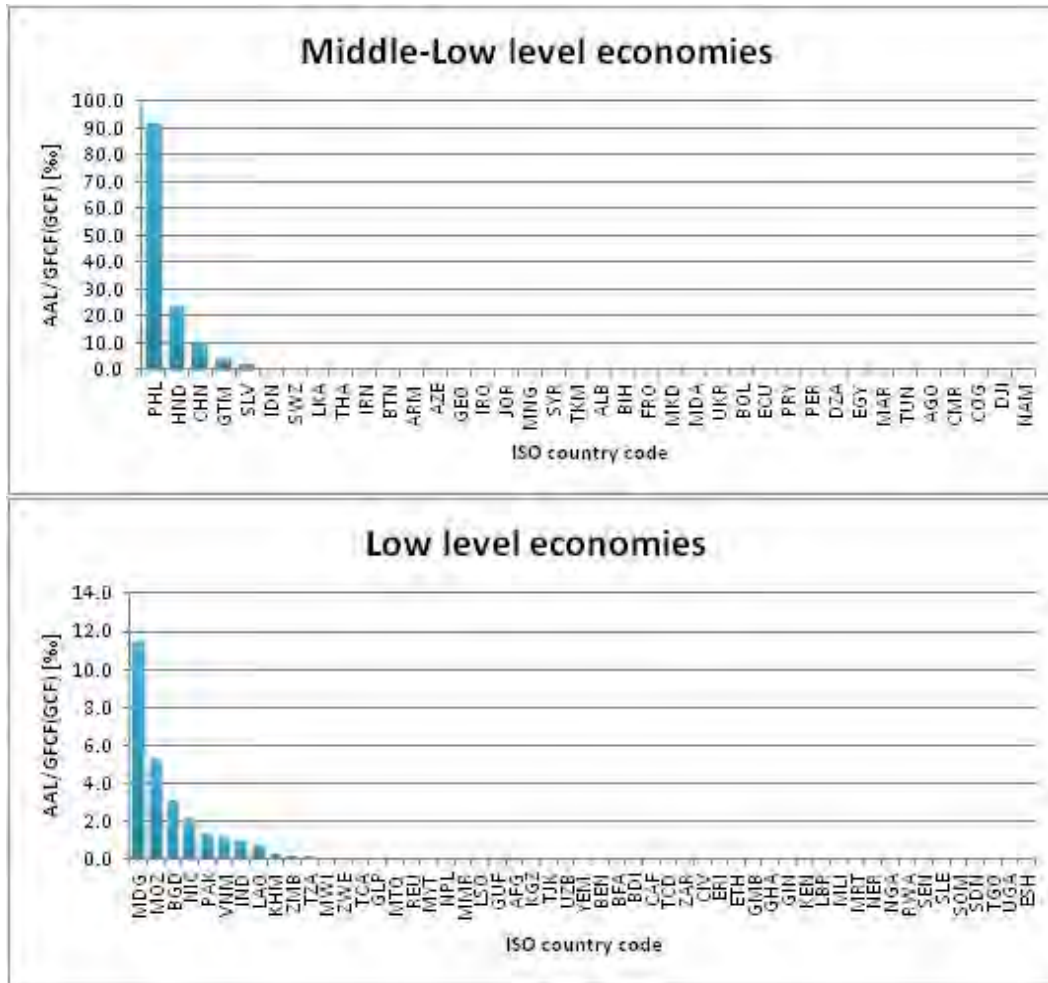
AAL/GNE Fiscal (Cyclonic wind)



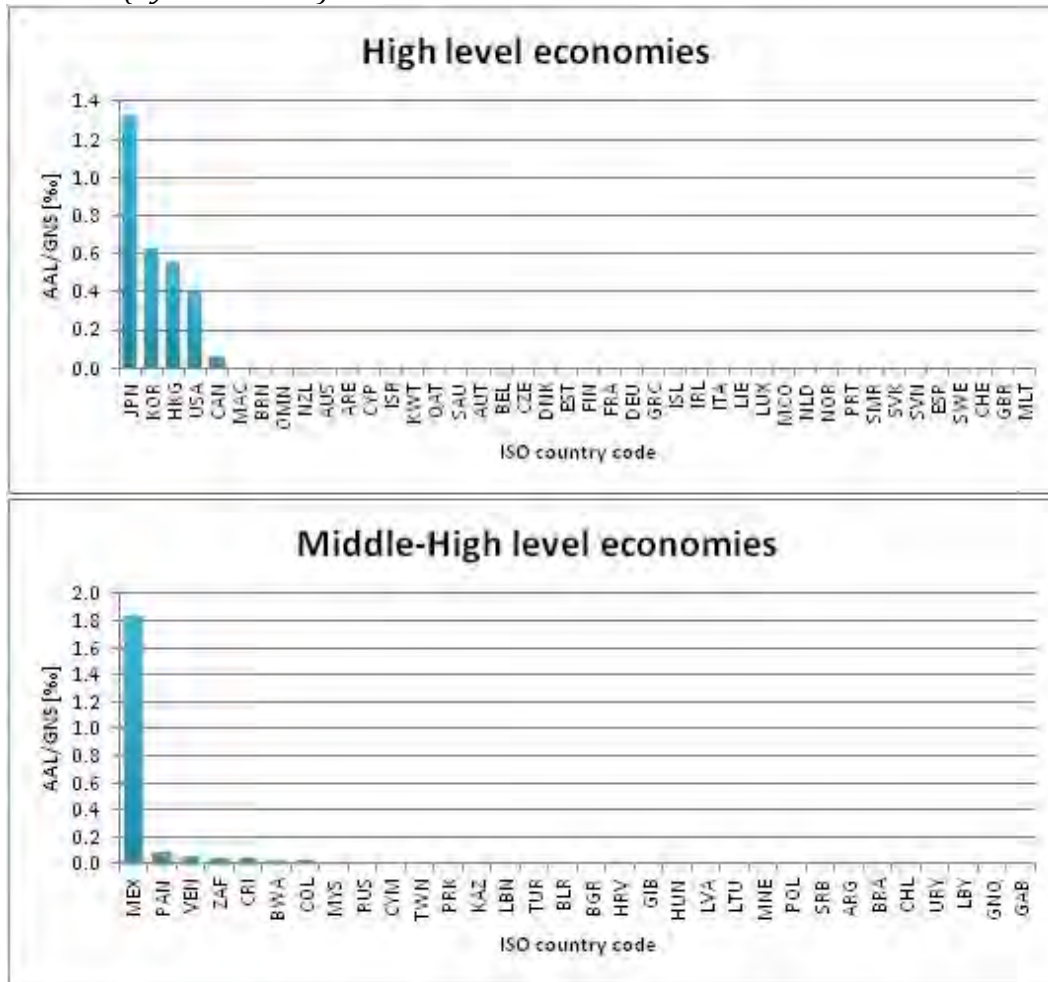


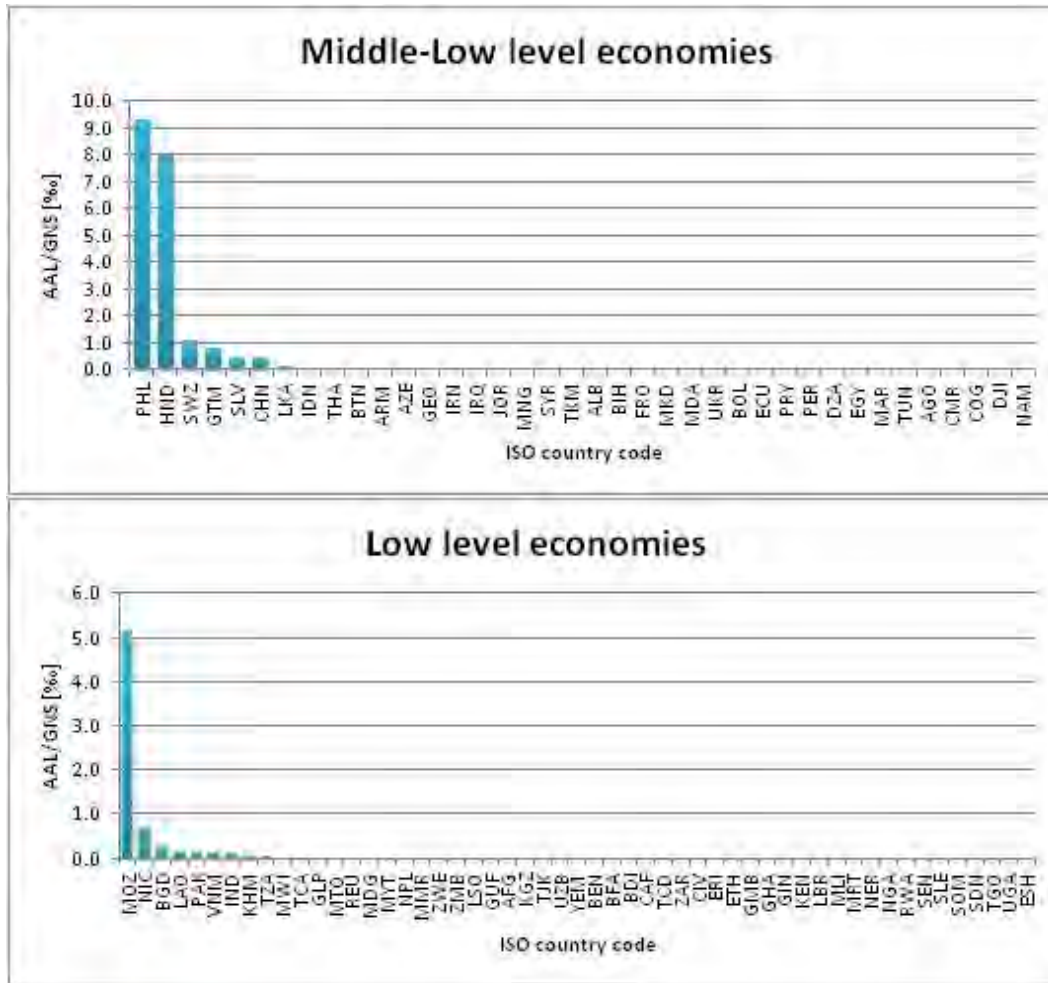
AAL/GFCF National (Cyclonic wind)



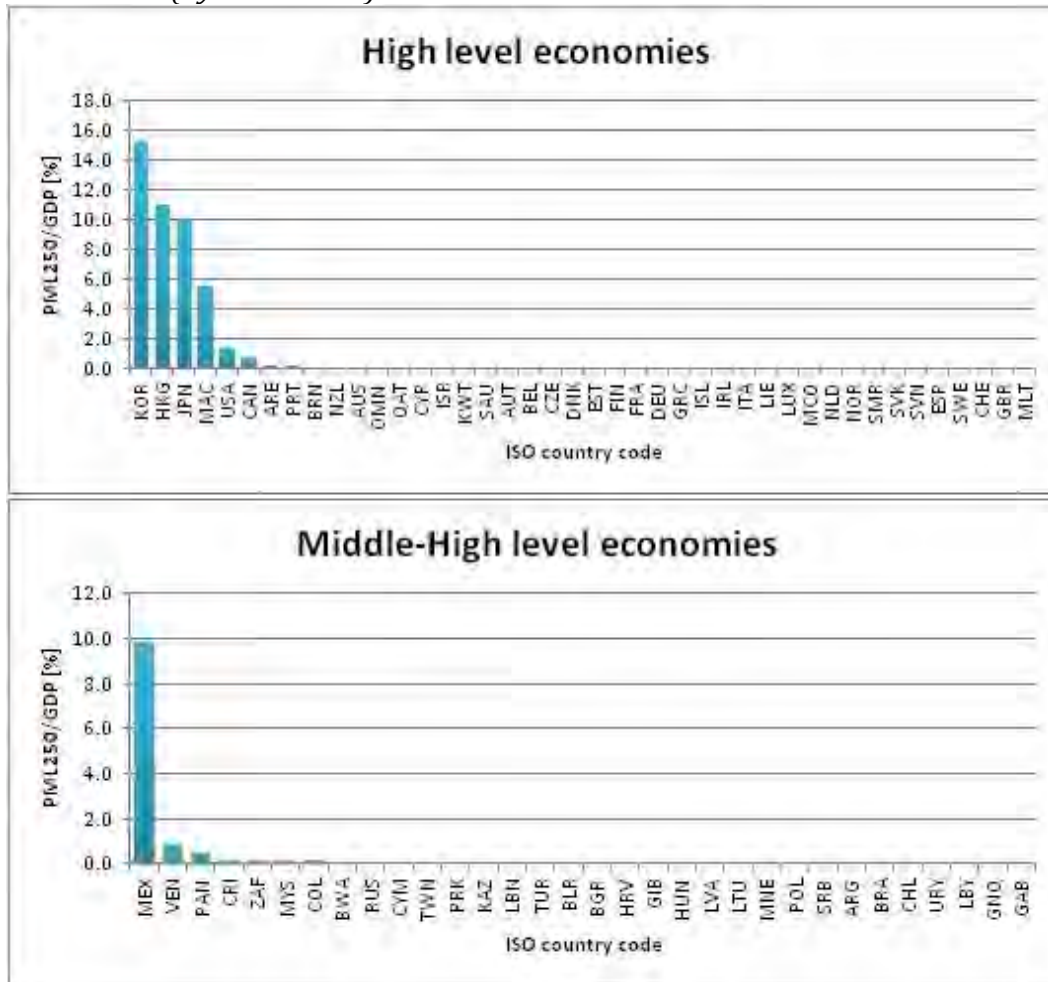


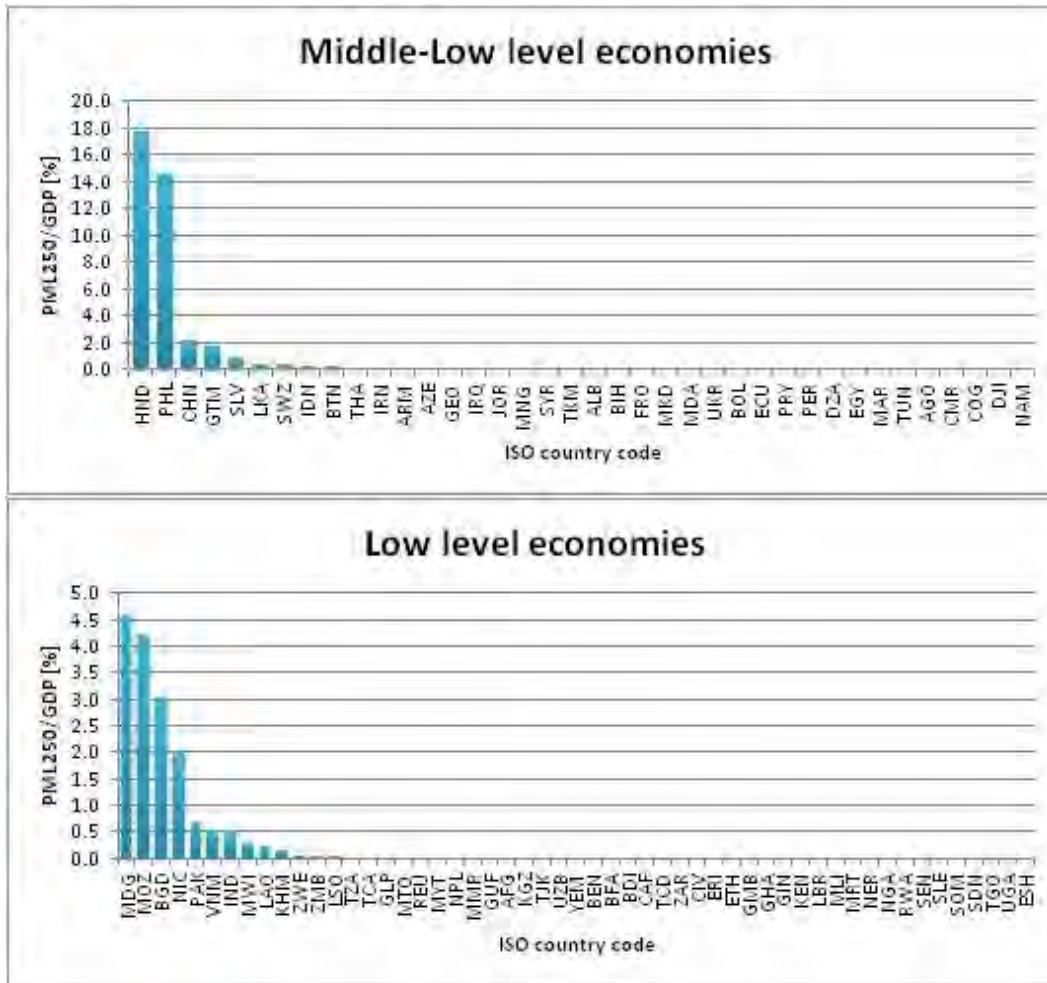
AAL/GNS Fiscal (Cyclonic wind)



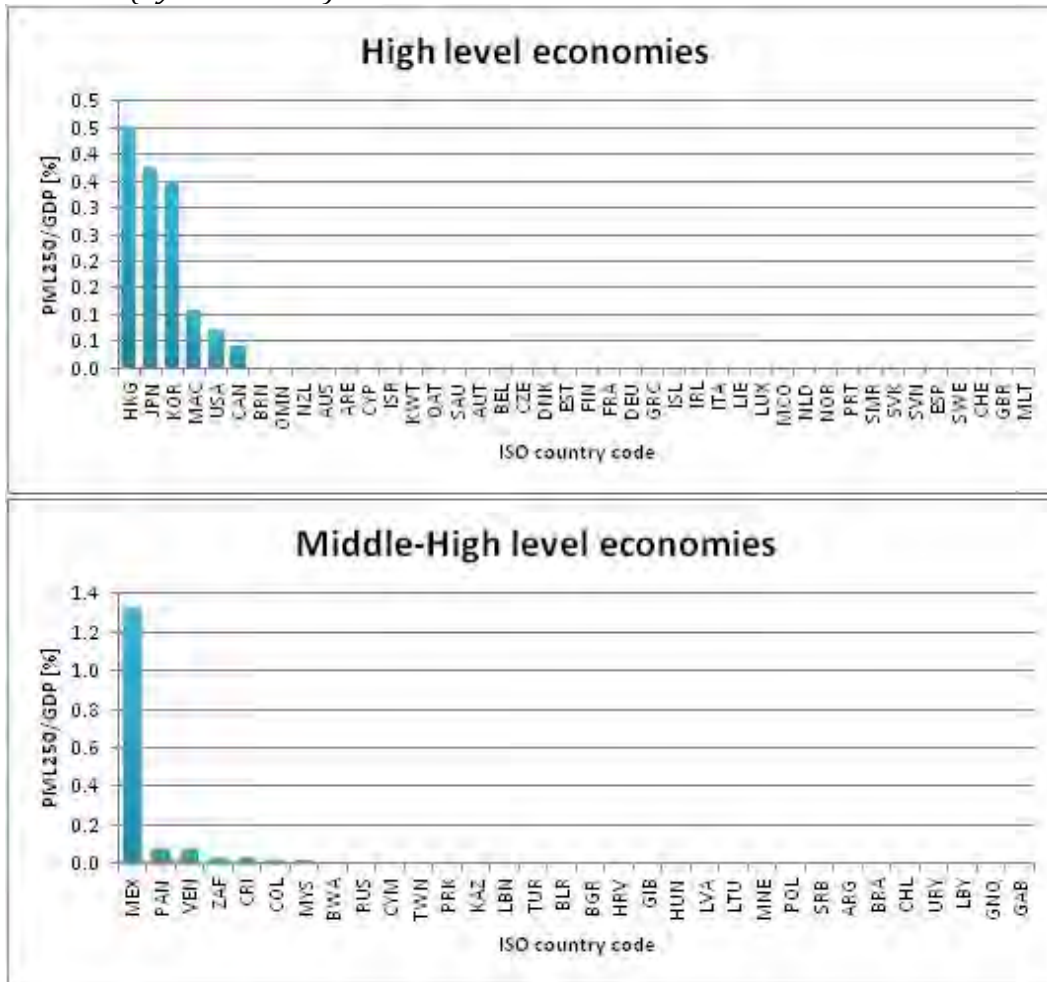


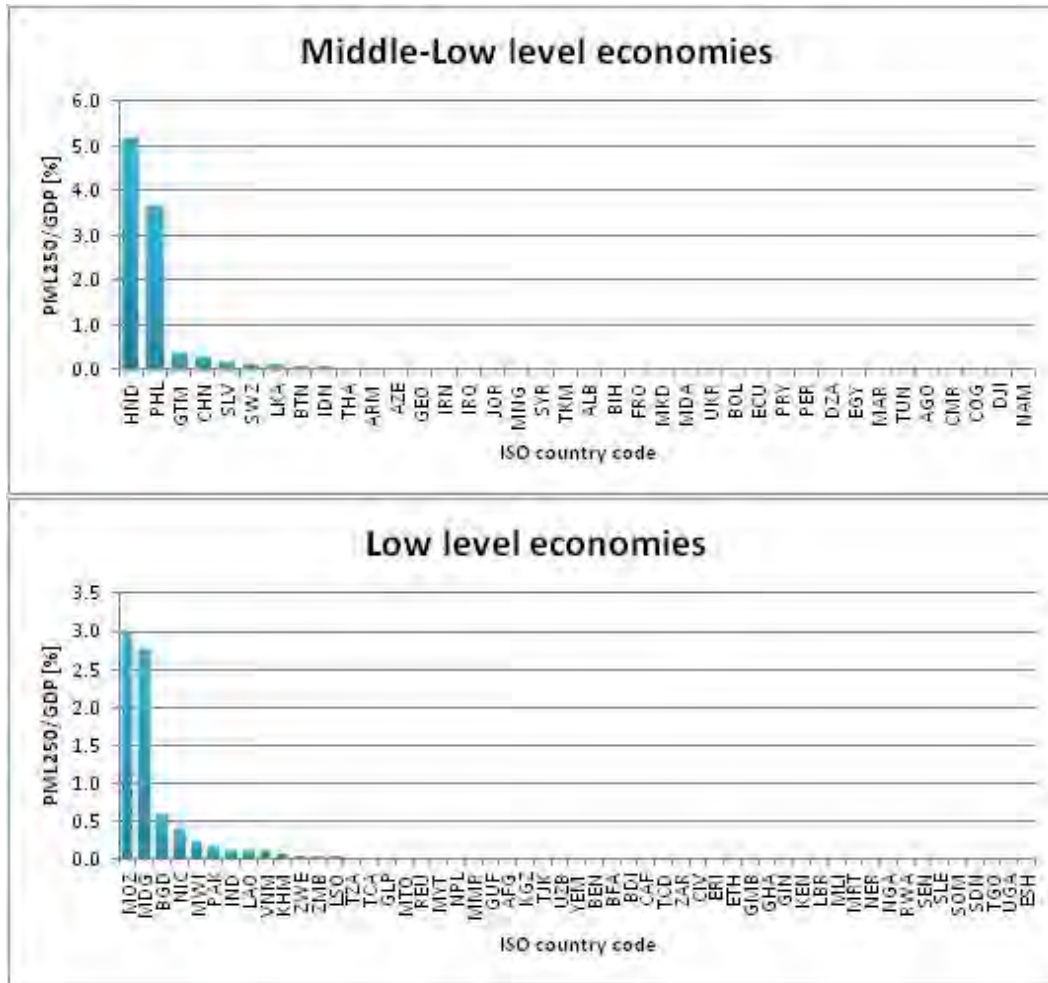
PML/GDP National (Cyclonic wind)

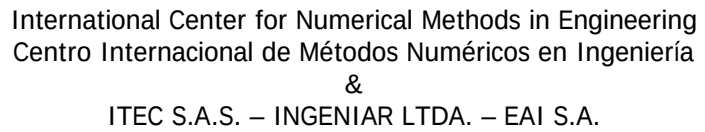




PML/GDP Fiscal (Cyclonic wind)







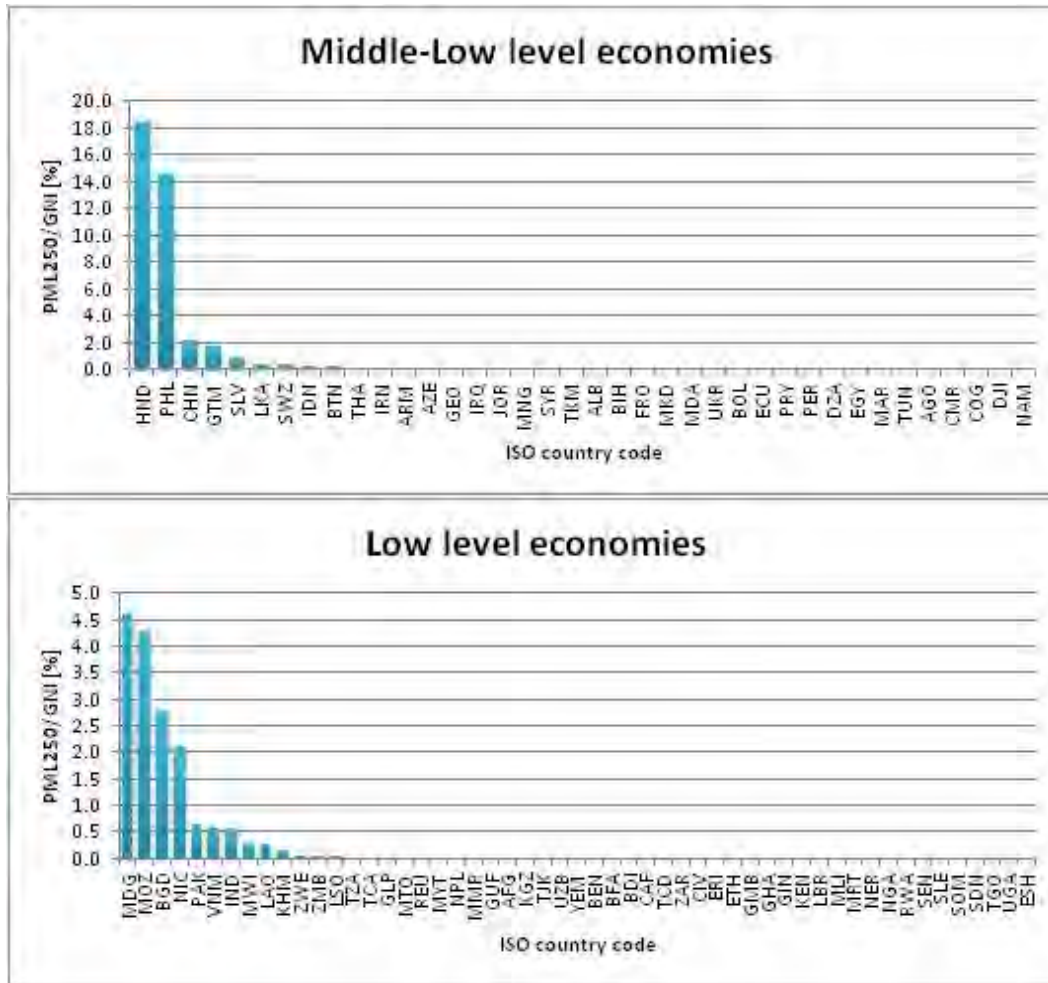
The figure consists of two bar charts. The top chart, titled 'High level economies', shows the PML250/GNI ratio for 48 countries. The y-axis ranges from 0.0 to 18.0. The x-axis lists ISO country codes. The bottom chart, titled 'Middle-High level economies', shows the same ratio for 28 countries. The y-axis ranges from 0.0 to 12.0. The x-axis lists ISO country codes.

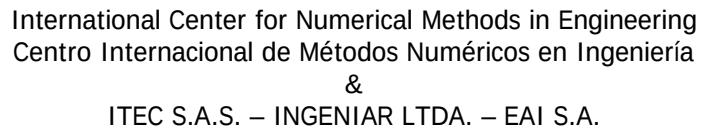
High level economies

ISO country code	PML250/GNI [%]
KOR	15.5
HKG	10.5
JPN	10.0
USA	1.5
CAN	0.8
PRT	0.5
MAC	0.2
ARE	0.1
BRN	0.1
NZL	0.1
AUS	0.1
OMN	0.1
QAT	0.1
CYP	0.1
ISR	0.1
KWT	0.1
SAU	0.1
AUT	0.1
BEL	0.1
CZE	0.1
DNK	0.1
EST	0.1
FIN	0.1
FRA	0.1
DEU	0.1
GRC	0.1
ISL	0.1
IRL	0.1
ITA	0.1
LIE	0.1
LUX	0.1
MCO	0.1
NLD	0.1
NOR	0.1
SMR	0.1
SVK	0.1
SVN	0.1
ESP	0.1
SWE	0.1
CHE	0.1
GBR	0.1
MLT	0.1

Middle-High level economies

ISO country code	PML250/GNI [%]
MEX	10.0
VEN	0.8
PAN	0.5
CRI	0.2
ZAF	0.1
MYS	0.1
COL	0.1
BWA	0.1
RUS	0.1
CYM	0.1
TWN	0.1
PRK	0.1
KAZ	0.1
LBN	0.1
TUR	0.1
BLR	0.1
BGR	0.1
HRV	0.1
GIB	0.1
HUN	0.1
LVA	0.1
LTU	0.1
MLI	0.1
POL	0.1
SRB	0.1
ARG	0.1
BRA	0.1
CHL	0.1
URY	0.1
LBY	0.1
GNO	0.1
G-B	0.1





High level economies

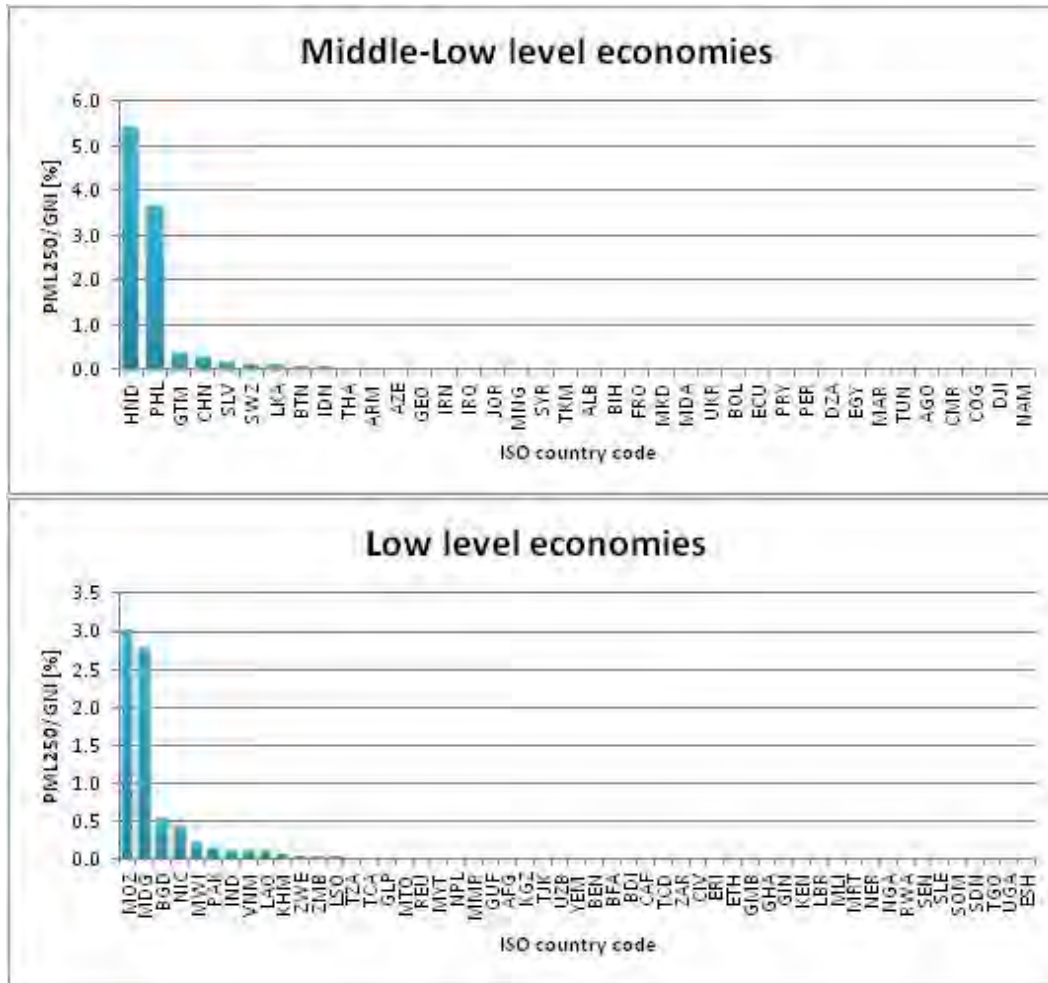
This bar chart displays the ratio of PML250 to GNI as a percentage for various countries categorized as high-level economies. The y-axis ranges from 0.0 to 0.5. The x-axis lists country codes. Japan (JPN) has the highest value at approximately 0.48%, followed by Korea (KOR) at about 0.42%. Most other countries have values below 0.1%.

ISO country code	PML250/GNI [%]
HKG	0.48
JPN	0.42
KOR	0.40
USA	0.15
CAN	0.08
MAC	0.06
BHR	0.02
OMN	0.01
NZL	0.01
AUS	0.01
ARE	0.01
CYP	0.01
ISR	0.01
KWT	0.01
DAT	0.01
SAU	0.01
AUT	0.01
BEL	0.01
CZE	0.01
DNK	0.01
EST	0.01
FIN	0.01
FRA	0.01
DEU	0.01
GRC	0.01
ISL	0.01
IRL	0.01
ITA	0.01
LIE	0.01
LUX	0.01
MCO	0.01
NLD	0.01
NOR	0.01
PRT	0.01
SMR	0.01
SVK	0.01
SVN	0.01
ESP	0.01
SWE	0.01
CHE	0.01
GBR	0.01
MLT	0.01

Middle-High level economies

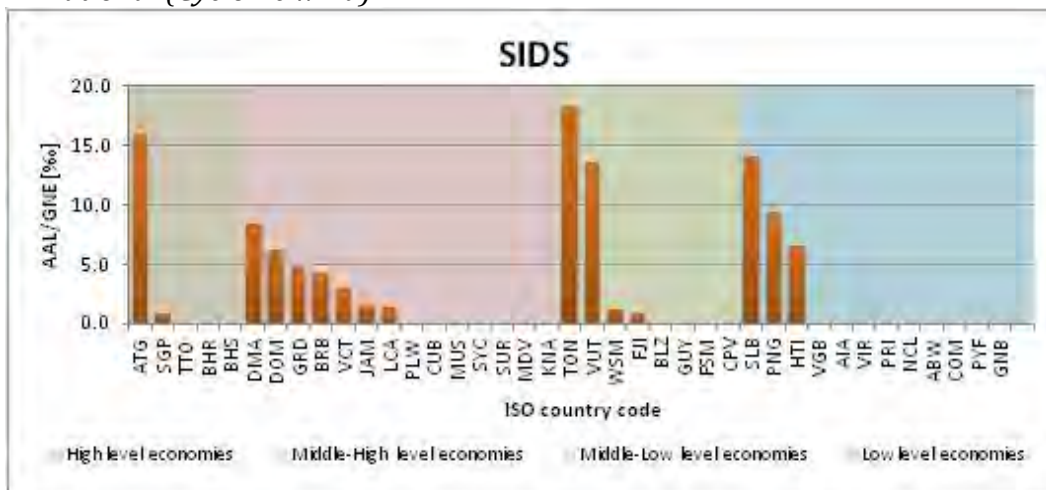
This bar chart shows the ratio of PML250 to GNI as a percentage for middle-high level economies. The y-axis ranges from 0.0 to 1.6. Mexico (MEX) is the dominant outlier with a value of approximately 1.35%. All other countries have values very close to zero, mostly below 0.1%.

ISO country code	PML250/GNI [%]
MEX	1.35
PAN	0.08
VEN	0.07
ZAF	0.04
CRI	0.03
COL	0.02
MYS	0.01
BWA	0.01
RUS	0.01
CYM	0.01
TWN	0.01
PRK	0.01
KAZ	0.01
LBN	0.01
TUR	0.01
BLF	0.01
BGR	0.01
HRV	0.01
GIB	0.01
HUN	0.01
LVA	0.01
LTU	0.01
MNE	0.01
POL	0.01
SRB	0.01
ARG	0.01
BRA	0.01
CHL	0.01
URY	0.01
LBY	0.01
GNO	0.01
GAB	0.01

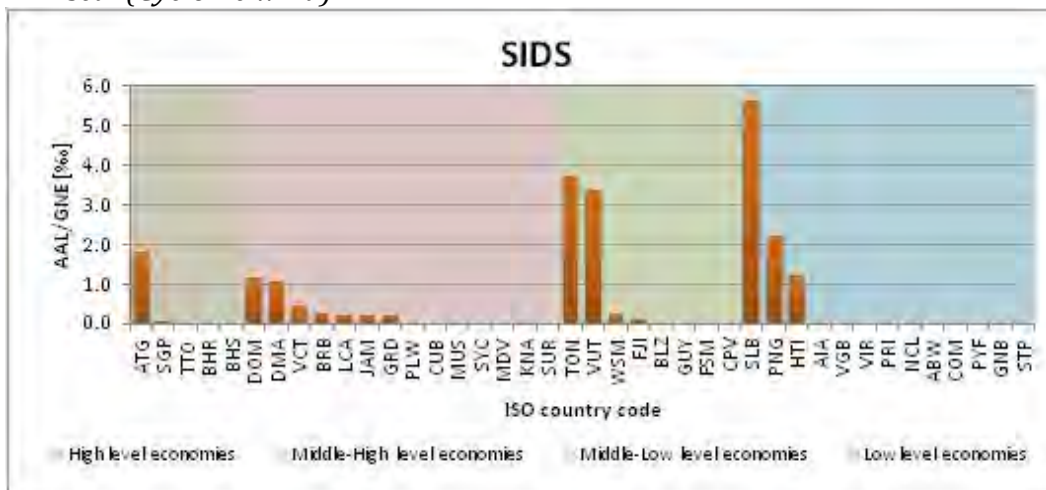


Risk results by country, SIDS y economy class

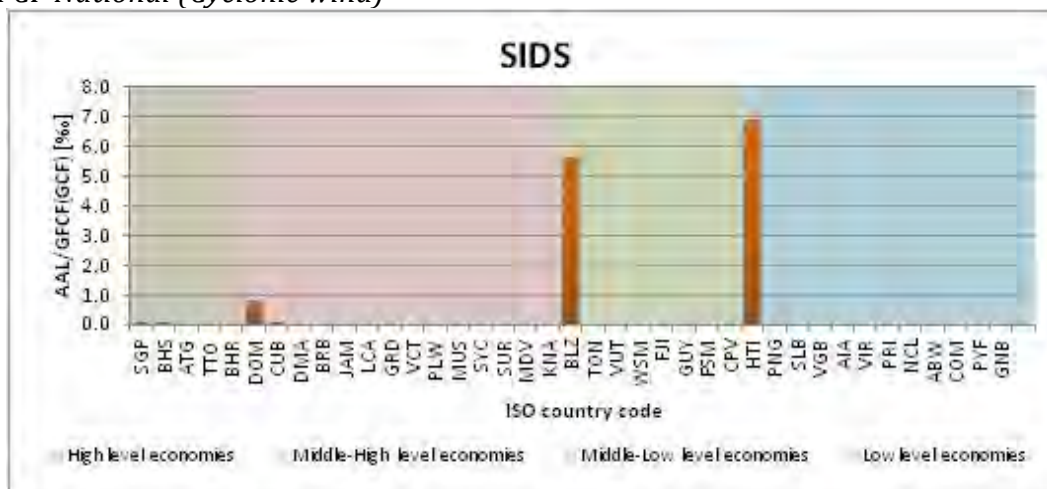
AAL/GNE National (Cyclonic wind)



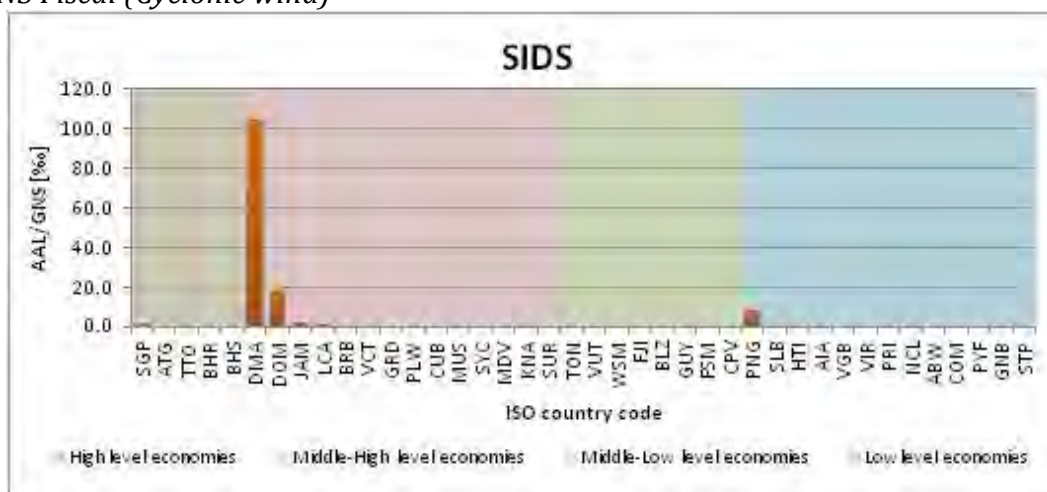
AAL/GNE Fiscal (Cyclonic wind)



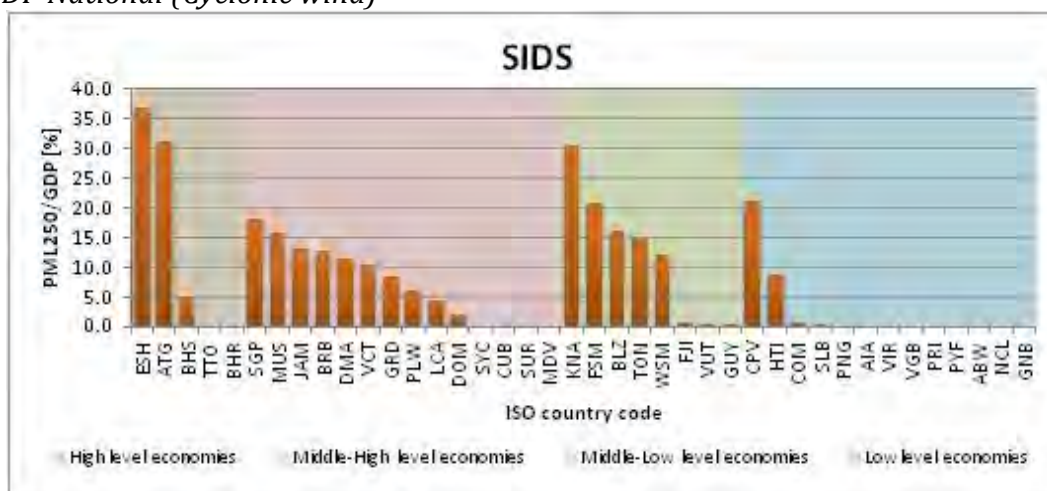
AAL/GCF National (Cyclonic wind)



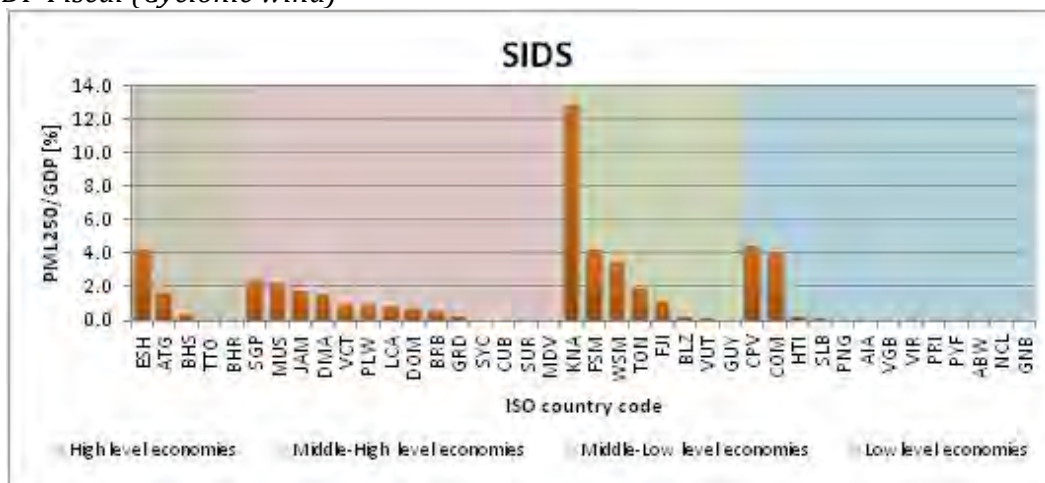
AAL/GNS Fiscal (Cyclonic wind)



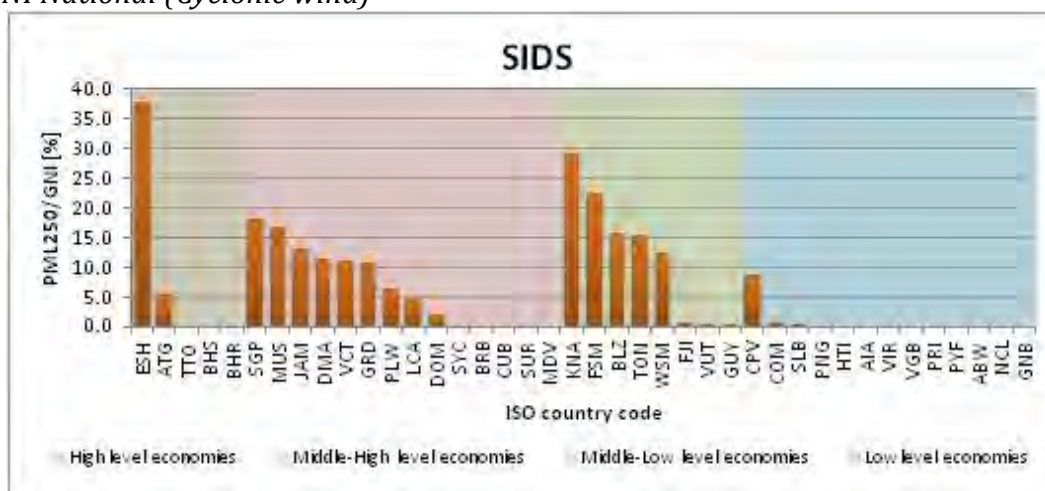
PML/GDP National (Cyclonic wind)



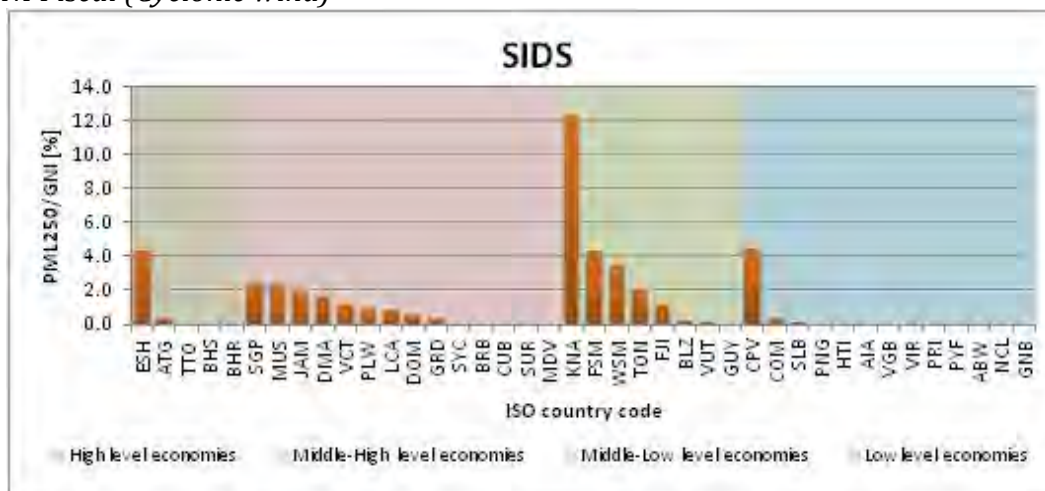
PML/GDP Fiscal (Cyclonic wind)



PML/GNI National (Cyclonic wind)



PML/GNI Fiscal (Cyclonic wind)



ANNEX 22. COMPARISON OF RESULTS FROM CRISIS 2012 AND OPENQUAKE

Seismic hazard assessment

The model for seismic hazard in CRISIS 2012 (CAPRA) is based on the definition of stochastic scenarios which as a set allows representing the seismic hazard at global level. This scenario approach allows the calculation of the loss probability curve which is the main measure of risk as all other metrics which are usually employed can be derived from it, such as the average annual loss and the probable maximum loss plot. The results from this model were calculated for 23 fundamental periods. Said periods of vibration values are (in seconds): 0.00, 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00, 1.50 and 2.00.

The seismic hazard calculated with OpenQuake (GEM) was provided in terms of probability curves of exceeding the values of intensity of strong motion for an exposure period of 50 years. These curves were calculated for a set of nodes which sufficiently cover the continental surface of the globe. The results from this model were calculated for 5 fundamental periods. Said periods of vibration are (in seconds): 0.00, 0.20, 0.50, 1.00 and 2.00.

Due to the lack of knowledge of input information and the modeling parameters used with OpenQuake, it was not possible to carry out an adequate comparison of the results obtained with both programs. Nevertheless, in Annexes 3, 4 and 5 the results of the seismic hazard were shown and similarities and differences that could generally be confirmed as being normal, even more so if we take the input data into account although it may not necessarily seem like the same can be seen. It is very possible that the earthquakes' catalogue, the parameters of seismic activity, the seismo-tectonic regions, the smoothing parameters and the GMPE's used in both cases, differ.

Average annual loss calculation

Despite that stipulated above, it was considered useful to compare the average annual expected calculated with CAPRA-GIS, based on the .ame file (hazard) generated with CRISIS 2012, with the average annual loss obtained using the hazard curves calculated by OpenQuake. This was carried out for a group of countries with the objective of establishing the similarities and the differences in terms of risk with both models.

In the case of CAPRA-GIS and with the obtained seismic hazard results with CRISIS 2012, the average annual loss is calculated using the set of stochastic scenarios, as shown in the equation 16.1:

$$PAE = \sum_{i=1}^N E(p | e_i) \cdot F_i \quad (A22.1)$$

where N is the total number of stochastic scenarios, $E(p|e_i)$ is the expected loss value given the occurrence of the scenario e_i and F_i is the annual occurrence frequency of the scenario.

In an analogical way, the average annual loss can be determined using the hazard curves as those calculated by OpenQuake, using the following equation:

$$PAE = \sum_{i=1}^K \int_0^{\infty} -\frac{dv(a)}{da} \cdot E(p|a)_i \cdot da \quad (A22.2)$$

where K is the total number of exposed assets, $v(a)$ is the annual rate of exceeding the intensity of strong motion and $E(p|a)_i$ is the expected value of loss given the intensity a , for the i^{th} exposed element.

Table A22-1 shows the results obtained for the group of countries for which the AAL was calculated using both aforementioned approaches.

Table A22-1
Comparison of results of the average annual loss

Country	Code	Continent	Exposed value (\$USD x 10 ⁶)	AAL CAPRA (\$USD x 10 ⁶)	AAL CAPRA ‰	AAL GEM (\$USD x 10 ⁶)	AEL GEM ‰
Thailand	THA	Asia	\$ 394,598	\$ 81	0.2	\$ 25	0.1
Nepal	NPL	Asia	\$ 6,537	\$ 31	4.8	\$ 41	6.2
Philippines	PHL	Asia	\$ 186,193	\$ 5,004	26.9	\$ 6,869	36.9
Greece	GRC	Europe	\$ 642,888	\$ 1,732	2.7	\$ 3,269	5.1
Costa Rica	CRI	America	\$ 38,475	\$ 131	3.4	\$ 219	5.7
Guatemala	GTM	America	\$ 38,263	\$ 156	4.1	\$ 187	4.9
Algeria	DZA	Africa	\$ 259,977	\$ 359	1.4	\$ 430	1.7

Similar AAL results (in terms of order of magnitude) were observed using the two seismic hazard models. In this sense, it can be concluded that both models have been built with similar information and criteria, and thus the results are equally acceptable for use. However, given the capacity of the CRISIS 2012/CAPRA-GIS model, for expanding the results in order to calculate the probable maximum losses, this model was employed for calculating the seismic risk for the 205 countries which were evaluated for GAR 2013.

ANNEX 23. RESULTS FROM FLOODING RISK

This consulting group was given the task of evaluating losses (annual expected loss and maximum probable loss) using the CAPRA-GIS platform for a group of countries for which the CIMA Research Foundation International evaluated the threat of flooding. Said threat was calculated taking two different origins into consideration: water logging and flooding from overflowing rivers. The scope of the analysis of the risk of flooding was limited to 9 countries, with the objective of establishing the calculation methodology in a definite way and applying it to the global level for GAR 2015. Further on, the methodological focus used for calculating the risk in both cases is described in a summary.

A23.1 Calculation method for losses due to flooding

For the case of the Caribbean islands for which the threat of flooding from water logging was calculated, given that the probabilistic representation of the threat is complete (spatial and temporal) it was possible to calculate the *curve for loss exceedances*. This risk curve specifies the probability in a determined period of time, usually annually, at which the disasters occur in which a specified value of loss is exceeded. This annual probability of loss exceedance is also known as the rate of loss exceedance and can be calculated through the following equation, which is one of the many ways in which the theorem of total probability can be adopted:

$$\nu(p) = \sum_{i=1}^{Eventos} \Pr(P > p | Eventoi) F_A(Eventoi) \quad (A23. 4)$$

In this equation $\nu(p)$ is the rate of loss exceedance p and $F_A(Evento i)$ is the annual occurrence frequency of the disaster i , whilst $\Pr(P > p | Eventoi)$ is the probability of the loss being higher than p , given that the i^{th} disaster occurred. The sum of the above equation is calculated for all the potentially damaging disasters. The inverse of $\nu(p)$ is the return period of the loss p , identified as Tr .

The calculated curve which the equation A23.1 applies holds all the necessary information for characterizing the process of the occurrence of loss. From this curve it is convenient to extract the point and variance risk estimators. As was the case for other evaluations put forth in this report, the most commonly used estimators are described below.

The annual expected loss (AEL): Corresponds to the expected value of the annual loss. It is an important amount as it indicates whether or not the process of the occurrence of disasters which cause outer-stationary damage and the cost of all the disasters added together long term would exceed the AEL payment. Therefore, the annual expected loss corresponds to the just annual pure premium. This point and variance estimator can be obtained by integrating $\nu(p)$ or by using the following equation:

$$P_{AE} = \sum_{i=1}^{Eventos} E(P|Eventoi)F_A(Eventoi) \quad (A23.2)$$

Probable Maximum Loss: Corresponds to a loss which occurs infrequently; in other words, which is associated with a considerably long return period (or, alternatively, a very low rate of loss exceedance). The choosing of the return period of the PML depends on the person(s) responsible for the loss aversion to said risk. In this case, a return period of 250 years was selected.

A23.2 Calculation method losses due to overflowing rivers

In the case of threats from overflowing rivers, CIMA obtained various points on the curve of probability of exceeding the flood intensity (which corresponds to the strength of the depth of the flooding). The way in which this curve is defined impedes the calculation of the curve of probability of loss exceedances. However, given that the expected values of the strength of the flood in different return periods are known, the function $v(a)$ was built for each mesh node calculation; in other words, the threat curve, which presents the annual rates of exceeding intensity grades. Using the threat curve, we can calculate the AEL in the following way:

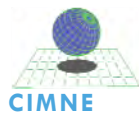
$$PAE = \sum_{i=1}^K \int_0^{\infty} -\frac{dv(a)}{da} \cdot E(p|a)_i \cdot da \quad (A23.3)$$

In which K is the total number of exposed elements, $v(a)$ is the annual rate of exceeding intensity (strength or depth) a and $E(p/a)_i$ is the expected value of the loss given the intensity a , for the i^{th} exposed element. This allowed for the calculation to be carried out in the case of Thailand.



ANNEX 24. RISK INDICATORS FOR THE COUNTRIES USING PROBABILISTIC RISK METRICS

Group	Indicator	Hazard - Portfolio					
		Earthquake		Cyclonic wind		Earthquake & cyclonic wind	
		National	Fiscal	National	Fiscal	National	Fiscal
SIDS - NO SIDS	PAE/PC	Eq_AAL_PC	Eq_AAL_PC_Fiscal	Wd_AAL_PC	Wd_AAL_PC_Fiscal	Eq+Cy_AAL_PC	Eq+Cy_AAL_PC_Fiscal
	PAE/GNE	Eq_AAL_GNE	Eq_AAL_GNE_Fiscal	Wd_AAL_GNE	Wd_AAL_GNE_Fiscal	x	x
	PAE/GGC	Eq_AAL_GGC	Eq_AAL_GGC_Fiscal	Wd_AAL_GGC	Wd_AAL_GGC_Fiscal	x	x
	PAE/GFCF	Eq_AAL_GFCF	Eq_AAL_GFCF_Fiscal	Wd_AAL_GFCF	Wd_AAL_GFCF_Fiscal	x	x
	PML/PC	Eq_PML_PC	Eq_PML_PC_Fiscal	Wd_PML_PC	Wd_PML_PC_Fiscal	x	x
	PML/GDP	Eq_PML_GDP	Eq_PML_GDP_Fiscal	Wd_PML_GDP	Wd_PML_GDP_Fiscal	x	x
	PML/GNI	Eq_PML_GNI	Eq_PML_GNI_Fiscal	Wd_PML_GNI	Wd_PML_GNI_Fiscal	x	x
SIDS - NO SIDS & Region	PAE/PC	Region_Eq_AAL_PC	Region_Eq_AAL_PC_Fiscal	Region_Wd_AAL_PC	Region_Wd_AAL_PC_Fiscal	Region_EqCy_AAL_PC	Region_EqCy_AAL_PC_Fiscal
	PAE/GNE	Region_Eq_AAL_GNE	Region_Eq_AAL_GNE_Fiscal	Region_Wd_AAL_GNE	Region_Wd_AAL_GNE_Fiscal	x	x
	PAE/GGC	Region_Eq_AAL_GGC	Region_Eq_AAL_GGC_Fiscal	Region_Wd_AAL_GGC	Region_Wd_AAL_GGC_Fiscal	x	x
	PAE/GFCF	Region_Eq_AAL_GFCF	Region_Eq_AAL_GFCF_Fiscal	Region_Wd_AAL_GFCF	Region_Wd_AAL_GFCF_Fiscal	x	x
	PML/PC	Region_Eq_PML_PC	Region_Eq_PML_PC_Fiscal	Region_Wd_PML_PC	Region_Wd_PML_PC_Fiscal	x	x
	PML/GDP	Region_Eq_PML_GDP	Region_Eq_PML_GDP_Fiscal	Region_Wd_PML_GDP	Region_Wd_PML_GDP_Fiscal	x	x
	PML/GNI	Region_Eq_PML_GNI	Region_Eq_PML_GNI_Fiscal	Region_Wd_PML_GNI	Region_Wd_PML_GNI_Fiscal	x	x
SIDS - NO SIDS & economy class	PAE/PC	Economy_Eq_AAL_PC	Economy_Eq_AAL_PC_Fiscal	Economy_Wd_AAL_PC	Economy_Wd_AAL_PC_Fiscal	Economy_EqCy_AAL_PC	Economy_EqCy_AAL_PC_Fiscal
	PAE/GNE	Economy_Eq_AAL_GNE	Economy_Eq_AAL_GNE_Fiscal	Economy_Wd_AAL_GNE	Economy_Wd_AAL_GNE_Fiscal	x	x
	PAE/GGC	Economy_Eq_AAL_GGC	Economy_Eq_AAL_GGC_Fiscal	Economy_Wd_AAL_GGC	Economy_Wd_AAL_GGC_Fiscal	x	x
	PAE/GFCF	Economy_Eq_AAL_GFCF	Economy_Eq_AAL_GFCF_Fiscal	Economy_Wd_AAL_GFCF	Economy_Wd_AAL_GFCF_Fiscal	x	x
	PML/PC	Economy_Eq_PML_PC	Economy_Eq_PML_PC_Fiscal	Economy_Wd_PML_PC	Economy_Wd_PML_PC_Fiscal	x	x
	PML/GDP	Economy_Eq_PML_GDP	Economy_Eq_PML_GDP_Fiscal	Economy_Wd_PML_GDP	Economy_Wd_PML_GDP_Fiscal	x	x
	PML/GNI	Economy_Eq_PML_GNI	Economy_Eq_PML_GNI_Fiscal	Economy_Wd_PML_GNI	Economy_Wd_PML_GNI_Fiscal	x	x



**Risk indicators for the countries
by SDIS - no SIDS**



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
PHL	Philippines	Asia	no	186,193	5,004	26.9	1
SLV	El Salvador	Latin America	no	22,582	300	13.3	2
HND	Honduras	Latin America	no	18,844	230	12.2	3
GLP	Guadeloupe	Caribbean	no	19,838	196	9.9	4
KGZ	Kyrgyzstan	Asia	no	3,644	20	5.4	5
NIC	Nicaragua	Latin America	no	10,935	58	5.3	6
NPL	Nepal	Asia	no	6,537	31	4.8	7
TWN	Taiwan	Asia	no	872,409	3,857	4.4	8
MTQ	Martinique	Caribbean	no	21,052	92	4.4	9
JPN	Japan	Asia	no	14,617,394	59,828	4.1	10
GTM	Guatemala	Latin America	no	38,263	156	4.1	11
BTN	Bhutan	Asia	no	1,167	5	3.9	12
TJK	Tajikistan	Asia	no	5,576	21	3.7	13
UZB	Uzbekistan	Asia	no	44,370	154	3.5	14
CRI	Costa Rica	Latin America	no	38,475	131	3.4	15
AZE	Azerbaijan	Asia	no	45,197	128	2.8	16
SMR	San Marino	Europe	no	1,846	5	2.8	17
ECU	Ecuador	Latin America	no	68,550	192	2.8	18
BGD	Bangladesh	Asia	no	72,949	198	2.7	19
GRC	Greece	Europe	no	642,888	1,732	2.7	20
CHL	Chile	Latin America	no	326,640	869	2.7	21
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721	2.5	22
COL	Colombia	Latin America	no	325,385	803	2.5	23
AFG	Afghanistan	Asia	no	16,132	39	2.4	24
PAK	Pakistan	Asia	no	170,444	409	2.4	25
GEO	Georgia	Asia	no	21,157	50	2.4	26
PER	Peru	Latin America	no	189,980	447	2.4	27
ARM	Armenia	Asia	no	14,187	28	2.0	28
MMR	Myanmar	Asia	no	20,572	40	1.9	29
IDN	Indonesia	Asia	no	575,183	1,005	1.8	30
ARE	United Arab Emirates	Asia	no	248,015	421	1.7	31
BGR	Bulgaria	Europe	no	70,023	112	1.6	32
BOL	Bolivia	Latin America	no	13,112	21	1.6	33
PAN	Panama	Latin America	no	30,296	44	1.5	34
TKM	Turkmenistan	Asia	no	12,707	18	1.4	35
DZA	Algeria	North Africa	no	259,977	359	1.4	36
CYP	Cyprus	Asia	no	23,484	32	1.4	37
IRQ	Iraq	Asia	no	47,245	56	1.2	38
TUR	Turkey	Asia	no	1,578,228	1,766	1.1	39
ALB	Albania	Europe	no	13,964	14	1.0	40
ITA	Italy	Europe	no	3,701,619	3,795	1.0	41
VEN	Venezuela	Latin America	no	435,869	439	1.0	42
KAZ	Kazakhstan	Asia	no	180,409	180	1.0	43
MNE	Montenegro	Europe	no	2,738	3	1.0	44
LBN	Lebanon	Asia	no	56,965	53	0.9	45
SVN	Slovenia	Europe	no	36,896	34	0.9	46
BDI	Burundi	Sub Saharan Africa	no	168	0	0.9	47
MEX	Mexico	Latin America	no	1,818,298	1,568	0.9	48
SYR	Syrian Arab Republic	Asia	no	68,489	52	0.8	49
TUN	Tunisia	North Africa	no	65,420	49	0.8	50
GIB	Gibraltar	Europe	no	3,141	2	0.7	51
HRV	Croatia	Europe	no	65,145	46	0.7	52
RWA	Rwanda	Sub Saharan Africa	no	1,558	1	0.7	53
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	0.7	54
KWT	Kuwait	Asia	no	202,236	137	0.7	55
NZL	New Zealand	Australia	no	238,609	163	0.7	56
MCO	Monaco	Europe	no	5,380	4	0.7	57
ISR	Israel	Asia	no	293,550	192	0.7	58
JOR	Jordan	Asia	no	40,997	26	0.6	59
LIE	Liechtenstein	Europe	no	8,070	5	0.6	60
DJI	Djibouti	Sub Saharan Africa	no	2,525	2	0.6	61
QAT	Qatar	Asia	no	113,981	64	0.6	62
MLT	Malta	Pacific	no	18,630	10	0.6	63
OMN	Oman	Asia	no	42,201	23	0.5	64
ISL	Iceland	Europe	no	25,742	14	0.5	65
MWI	Malawi	Sub Saharan Africa	no	1,883	1	0.5	66
CHN	China	Asia	no	4,512,825	2,351	0.5	67
MYS	Malaysia	Asia	no	318,727	162	0.5	68
TCA	Turks and Caicos islands	Caribbean	no	332	0	0.5	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
CYM	Cayman Islands	Caribbean	no	3,603	1	0.4	70
AUT	Austria	Europe	no	615,592	240	0.4	71
USA	United States of America	North America	no	22,004,154	8,400	0.4	72
MYT	Mayotte	Sub Saharan Africa	no	2,341	1	0.4	73
IND	India	Asia	no	1,429,881	524	0.4	74
YEM	Yemen	Asia	no	21,556	8	0.4	75
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	0.4	76
MAR	Morocco	North Africa	no	136,300	46	0.3	77
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.3	78
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	0.3	79
SRB	Serbia	Europe	no	16,907	5	0.3	80
ARG	Argentina	Latin America	no	403,909	128	0.3	81
CHE	Switzerland	Europe	no	839,518	257	0.3	82
BRN	Brunei Darussalam	Asia	no	20,094	6	0.3	83
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21	0.3	84
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	0.3	85
UGA	Uganda	Sub Saharan Africa	no	6,628	2	0.2	86
MNG	Mongolia	Asia	no	9,273	2	0.2	87
EGY	Egypt	North Africa	no	234,939	51	0.2	88
DEU	Germany	Europe	no	5,800,986	1,206	0.2	89
THA	Thailand	Asia	no	394,598	81	0.2	90
MDA	Moldova, Republic of	Europe	no	9,896	2	0.2	91
PRK	Dem People's Rep of Korea	Asia	no	27,936	5	0.2	92
HUN	Hungary	Europe	no	286,209	51	0.2	93
SVK	Slovakia	Europe	no	124,390	22	0.2	94
CZE	Czech Republic	Europe	no	336,714	49	0.2	95
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	0.2	96
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	0.2	97
KEN	Kenya	Sub Saharan Africa	no	18,470	3	0.2	98
BEL	Belgium	Europe	no	739,159	101	0.1	99
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	0.1	100
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	0.1	101
SAU	Saudi Arabia	Asia	no	751,807	83	0.1	102
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	0.1	103
NLD	Netherlands	Europe	no	1,593,735	160	0.1	104
POL	Poland	Europe	no	659,150	66	0.1	105
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.1	106
LUX	Luxembourg	Europe	no	45,036	4	0.1	107
RUS	Russian Federation	Europe	no	2,209,139	168	0.1	108
FRA	France	Europe	no	3,653,264	260	0.1	109
PRT	Portugal	Europe	no	296,296	21	0.1	110
ESP	Spain	Europe	no	2,695,139	198	0.1	111
BWA	Botswana	Sub Saharan Africa	no	18,941	1	0.1	112
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	0.1	113
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.1	114
KOR	Republic of Korea	Asia	no	2,787,207	164	0.1	115
VNM	Viet Nam	Asia	no	115,441	7	0.1	116
MDG	Madagascar	Sub Saharan Africa	no	2,575	0	0.1	117
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	0.1	118
HKG	Hong Kong	Asia	no	1,138,019	41	0.0	119
CAN	Canada	North America	no	2,051,584	72	0.0	120
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0	0.0	121
SDN	Sudan	Sub Saharan Africa	no	26,851	1	0.0	122
MAC	Macau	Asia	no	96,993	3	0.0	123
EST	Estonia	Europe	no	28,069	1	0.0	124
IRL	Ireland	Europe	no	244,117	8	0.0	125
CAF	Central African Republic	Sub Saharan Africa	no	916	-	0.0	126
UKR	Ukraine	Europe	no	278,497	6	0.0	127
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	0.0	128
LBR	Liberia	Sub Saharan Africa	no	515	-	0.0	129
SOM	Somalia	Sub Saharan Africa	no	3,573	0	0.0	130
KHM	Cambodia	Asia	no	4,335	0	0.0	131
DNK	Denmark	Europe	no	381,265	2	0.0	132
LVA	Latvia	Europe	no	39,277	0	0.0	133
LTU	Lithuania	Europe	no	53,397	1	0.0	134
NOR	Norway	Europe	no	386,892	4	0.0	135
AUS	Australia	Australia	no	1,832,960	17	0.0	136
AGO	Angola	Sub Saharan Africa	no	25,225	0	0.0	137
GAB	Gabon	Sub Saharan Africa	no	25,086	0	0.0	138



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NAM	Namibia	Sub Saharan Africa	no	7,239	0	0.0	139
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	0.0	140
SEN	Senegal	Sub Saharan Africa	no	11,619	0	0.0	141
LKA	Sri Lanka	Asia	no	49,967	0	-	142
BLR	Belarus	Europe	no	74,427	0	-	143
FRO	Faroe Islands	Europe	no	1,012	-	-	144
FIN	Finland	Europe	no	209,050	1	-	145
SWE	Sweden	Europe	no	369,792	2	-	146
BRA	Brazil	Latin America	no	1,715,746	3	-	147
GUF	French Guiana	Latin America	no	8,339	-	-	148
PRY	Paraguay	Latin America	no	19,203	-	-	149
URY	Uruguay	Latin America	no	28,590	-	-	150
BEN	Benin	Sub Saharan Africa	no	3,585	-	-	151
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-	-	152
TCD	Chad	Sub Saharan Africa	no	6,664	-	-	153
COG	Congo	Sub Saharan Africa	no	12,566	-	-	154
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	-	155
GMB	Gambia	Sub Saharan Africa	no	680	-	-	156
GHA	Ghana	Sub Saharan Africa	no	12,649	-	-	157
GIN	Guinea	Sub Saharan Africa	no	3,259	-	-	158
MLI	Mali	Sub Saharan Africa	no	3,869	-	-	159
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	-	160
NER	Niger	Sub Saharan Africa	no	2,800	-	-	161
REU	Réunion	Sub Saharan Africa	no	42,937	-	-	162
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	-	163
TGO	Togo	Sub Saharan Africa	no	1,644	-	-	164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-	-	165
VUT	Vanuatu	Asia	yes	102	10	99.2	1
SLB	Solomon islands	Asia	yes	211	12	58.9	2
TON	Tonga	Pacific	yes	230	9	40.4	3
PNG	Papua New Guinea	Asia	yes	5,433	86	15.8	4
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475	15.1	5
DMA	Dominica	Caribbean	yes	356	5	13.3	6
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21	8.7	7
VGB	British Virgin Islands	Caribbean	yes	424	4	8.2	8
AIA	Anguilla	Caribbean	yes	20	0	7.5	9
HTI	Haiti	Caribbean	yes	8,553	64	7.5	10
DOM	Dominican Republic	Caribbean	yes	72,573	363	5.0	11
NCL	New Caledonia	Asia	yes	4,771	19	4.0	12
BRB	Barbados	Caribbean	yes	4,677	18	3.8	13
GRD	Grenada	Caribbean	yes	1,229	5	3.7	14
LCA	Saint Lucia	Caribbean	yes	543	2	3.4	15
VIR	United States Virgin Islands	Caribbean	yes	1,755	6	3.3	16
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3	2.6	17
PRI	Puerto Rico	Caribbean	yes	135,818	330	2.4	18
WSM	Samoa	Pacific	yes	361	1	2.4	19
FJI	Fiji	Asia	yes	2,100	3	1.3	20
ABW	Aruba	Caribbean	yes	6,526	8	1.2	21
BLZ	Belize	Latin America	yes	1,251	1	1.0	22
JAM	Jamaica	Caribbean	yes	28,963	26	0.9	23
PLW	Palau	Pacific	yes	279	0	0.7	24
BHR	Bahrain	Asia	yes	32,575	17	0.5	25
COM	Comoros	Sub Saharan Africa	yes	310	0	0.4	26
SGP	Singapore	Pacific	yes	526,900	114	0.2	27
CUB	Cuba	Caribbean	yes	46,280	10	0.2	28
BHS	Bahamas	Caribbean	yes	21,313	0	0.0	29
GUY	Guyana	Latin America	yes	3,468	-	0.0	30
PYF	French Polynesia	Pacific	yes	6,568	-	-	31
MDV	Maldives	Pacific	yes	907	-	-	32
FSM	Micronesia (Federated States of)	Pacific	yes	585	-	-	33
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	-	34
SUR	Suriname	Latin America	yes	2,797	-	-	35
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	-	36
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-	-	37
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	-	38
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-	-	39
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-	-	40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [%]	
PHL	Philippines	Asia	no	186,193	5,004	203,208	24.6	1
AFG	Afghanistan	Asia	no	16,132	39	1,852	21.3	2
HND	Honduras	Latin America	no	18,844	230	18,594	12.4	3
SLV	El Salvador	Latin America	no	22,582	300	24,921	12.1	4
JPN	Japan	Asia	no	14,617,394	59,828	5,396,265	11.1	5
NIC	Nicaragua	Latin America	no	10,935	58	8,405	7.0	6
GRC	Greece	Europe	no	642,888	1,732	327,811	5.3	7
CHL	Chile	Latin America	no	326,640	869	198,120	4.4	8
UZB	Uzbekistan	Asia	no	44,370	154	38,768	4.0	9
AZE	Azerbaijan	Asia	no	45,197	128	33,777	3.8	10
GEO	Georgia	Asia	no	21,157	50	13,709	3.7	11
CRI	Costa Rica	Latin America	no	38,475	131	36,941	3.6	12
GTM	Guatemala	Latin America	no	38,263	156	45,670	3.4	13
KGZ	Kyrgyzstan	Asia	no	3,644	20	6,067	3.2	14
ECU	Ecuador	Latin America	no	68,550	192	61,265	3.1	15
PER	Peru	Latin America	no	189,980	447	152,561	2.9	16
COL	Colombia	Latin America	no	325,385	803	294,580	2.7	17
TJK	Tajikistan	Asia	no	5,576	21	8,227	2.5	18
ARM	Armenia	Asia	no	14,187	28	11,639	2.4	19
BGR	Bulgaria	Europe	no	70,023	112	48,622	2.3	20
TUR	Turkey	Asia	no	1,578,228	1,766	774,921	2.3	21
PAK	Pakistan	Asia	no	170,444	409	186,087	2.2	22
BGD	Bangladesh	Asia	no	72,949	198	106,991	1.9	23
ITA	Italy	Europe	no	3,701,619	3,795	2,087,749	1.8	24
PAN	Panama	Latin America	no	30,296	44	27,738	1.6	25
ARE	United Arab Emirates	Asia	no	248,015	421	270,334	1.6	26
MEX	Mexico	Latin America	no	1,818,298	1,568	1,049,803	1.5	27
IDN	Indonesia	Asia	no	575,183	1,005	695,009	1.5	28
KAZ	Kazakhstan	Asia	no	180,409	180	127,087	1.4	29
CYP	Cyprus	Asia	no	23,484	32	24,623	1.3	30
VEN	Venezuela	Latin America	no	435,869	439	346,724	1.3	31
MLT	Malta	Pacific	no	18,630	10	8,111	1.3	32
ISL	Iceland	Europe	no	25,742	14	11,313	1.2	33
BOL	Bolivia	Latin America	no	13,112	21	18,301	1.1	34
LBN	Lebanon	Asia	no	56,965	53	47,915	1.1	35
TUN	Tunisia	North Africa	no	65,420	49	46,643	1.1	36
ALB	Albania	Europe	no	13,964	14	14,377	1.0	37
ISR	Israel	Asia	no	293,550	192	212,896	0.9	38
SYR	Syrian Arab Republic	Asia	no	68,489	52	59,401	0.9	39
TKM	Turkmenistan	Asia	no	12,707	18	20,575	0.9	40
MYS	Malaysia	Asia	no	318,727	162	195,443	0.8	41
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	10,902	0.8	42
JOR	Jordan	Asia	no	40,997	26	33,470	0.8	43
HRV	Croatia	Europe	no	65,145	46	61,162	0.8	44
SVN	Slovenia	Europe	no	36,896	34	46,643	0.7	45
AUT	Austria	Europe	no	615,592	240	362,737	0.7	46
USA	United States of America	North America	no	22,004,154	8,400	15,103,640	0.6	47
CHE	Switzerland	Europe	no	839,518	257	468,037	0.6	48
MNE	Montenegro	Europe	no	2,738	3	5,265	0.5	49
MAR	Morocco	North Africa	no	136,300	46	99,808	0.5	50
HUN	Hungary	Europe	no	286,209	51	120,269	0.4	51
CHN	China	Asia	no	4,512,825	2,351	5,694,512	0.4	52
DEU	Germany	Europe	no	5,800,986	1,206	3,101,126	0.4	53
ARG	Argentina	Latin America	no	403,909	128	356,545	0.4	54
MNG	Mongolia	Asia	no	9,273	2	6,675	0.3	55
IND	India	Asia	no	1,429,881	524	1,783,129	0.3	56
THA	Thailand	Asia	no	394,598	81	295,072	0.3	57
CZE	Czech Republic	Europe	no	336,714	49	182,876	0.3	58
MDA	Moldova, Republic of	Europe	no	9,896	2	8,053	0.3	59
MAC	Macau	Asia	no	96,993	3	11,994	0.3	60
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	2,325,009	0.2	61
SVK	Slovakia	Europe	no	124,390	22	88,405	0.2	62
SAU	Saudi Arabia	Asia	no	751,807	83	341,826	0.2	63
BEL	Belgium	Europe	no	739,159	101	456,696	0.2	64
EGY	Egypt	North Africa	no	234,939	51	229,362	0.2	65
NLD	Netherlands	Europe	no	1,593,735	160	721,171	0.2	66
HKG	Hong Kong	Asia	no	1,138,019	41	211,863	0.2	67
MWI	Malawi	Sub Saharan Africa	no	1,883	1	5,605	0.2	68
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	14,723	0.2	69



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [%]	
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	20,030	0.2	70
KOR	Republic of Korea	Asia	no	2,787,207	164	986,184	0.2	71
POL	Poland	Europe	no	659,150	66	475,111	0.1	72
ESP	Spain	Europe	no	2,695,139	198	1,437,861	0.1	73
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	3,511	0.1	74
SRB	Serbia	Europe	no	16,907	5	44,764	0.1	75
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	369,463	0.1	76
RUS	Russian Federation	Europe	no	2,209,139	168	1,356,393	0.1	77
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	26,224	0.1	78
LUX	Luxembourg	Europe	no	45,036	4	36,700	0.1	79
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	7,629	0.1	80
FRA	France	Europe	no	3,653,264	260	2,620,062	0.1	81
UGA	Uganda	Sub Saharan Africa	no	6,628	2	18,757	0.1	82
BWA	Botswana	Sub Saharan Africa	no	18,941	1	15,360	0.1	83
KEN	Kenya	Sub Saharan Africa	no	18,470	3	35,486	0.1	84
PRT	Portugal	Europe	no	296,296	21	245,251	0.1	85
VNM	Viet Nam	Asia	no	115,441	7	117,363	0.1	86
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	11,309	0.1	87
IRL	Ireland	Europe	no	244,117	8	171,957	0.1	88
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	4,329	0.1	89
EST	Estonia	Europe	no	28,069	1	17,933	0.1	90
CAN	Canada	North America	no	2,051,584	72	1,606,667	0.0	91
UKR	Ukraine	Europe	no	278,497	6	141,773	0.0	92
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	15,617	0.0	93
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	8,897	0.0	94
SDN	Sudan	Sub Saharan Africa	no	26,851	1	61,511	0.0	95
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	23,429	0.0	96
LTU	Lithuania	Europe	no	53,397	1	36,811	0.0	97
GAB	Gabon	Sub Saharan Africa	no	25,086	0	10,274	0.0	98
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	35,978	0.0	99
KHM	Cambodia	Asia	no	4,335	0	11,854	0.0	100
NAM	Namibia	Sub Saharan Africa	no	7,239	0	12,035	0.0	101
NOR	Norway	Europe	no	386,892	4	358,009	0.0	102
LVA	Latvia	Europe	no	39,277	0	24,210	0.0	103
SEN	Senegal	Sub Saharan Africa	no	11,619	0	15,485	0.0	104
DNK	Denmark	Europe	no	381,265	2	292,535	0.0	105
GLP	Guadeloupe	Caribbean	no	19,838	196			106
SMR	San Marino	Europe	no	1,846	5			107
MTQ	Martinique	Caribbean	no	21,052	92			108
NPL	Nepal	Asia	no	6,537	31			109
BTN	Bhutan	Asia	no	1,167	5			110
TWN	Taiwan	Asia	no	872,409	3,857			111
MMR	Myanmar	Asia	no	20,572	40			112
BDI	Burundi	Sub Saharan Africa	no	168	0			113
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			114
LIE	Liechtenstein	Europe	no	8,070	5			115
GIB	Gibraltar	Europe	no	3,141	2			116
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			117
MCO	Monaco	Europe	no	5,380	4			118
DZA	Algeria	North Africa	no	259,977	359			119
IRQ	Iraq	Asia	no	47,245	56			120
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721			121
CYM	Cayman Islands	Caribbean	no	3,603	1			122
KWT	Kuwait	Asia	no	202,236	137			123
TCA	Turks and Caicos islands	Caribbean	no	332	0			124
YEM	Yemen	Asia	no	21,556	8			125
NZL	New Zealand	Australia	no	238,609	163			126
BRN	Brunei Darussalam	Asia	no	20,094	6			127
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			128
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			129
OMN	Oman	Asia	no	42,201	23			130
QAT	Qatar	Asia	no	113,981	64			131
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			132
MDG	Madagascar	Sub Saharan Africa	no	2,575	0			133
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			134
CAF	Central African Republic	Sub Saharan Africa	no	916	-			135
ERI	Eritrea	Sub Saharan Africa	no	1,892	0			136
SOM	Somalia	Sub Saharan Africa	no	3,573	0			137
LBR	Liberia	Sub Saharan Africa	no	515	-			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
AGO	Angola	Sub Saharan Africa	no	25,225	0	72,456		139
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	168,996		140
LKA	Sri Lanka	Asia	no	49,967	0	54,079		141
AUS	Australia	Australia	no	1,832,960	17			142
GIN	Guinea	Sub Saharan Africa	no	3,259	-	4,711		143
SWE	Sweden	Europe	no	369,792	2	431,251		144
FIN	Finland	Europe	no	209,050	1	235,640		145
BLR	Belarus	Europe	no	74,427	0	62,212		146
BEN	Benin	Sub Saharan Africa	no	3,585	-	7,536		147
TCO	Chad	Sub Saharan Africa	no	6,664	-	9,469		148
COG	Congo	Sub Saharan Africa	no	12,566	-	8,109		149
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	4,195		150
REU	Réunion	Sub Saharan Africa	no	42,937	-			151
GUF	French Guiana	Latin America	no	8,339	-			152
BRA	Brazil	Latin America	no	1,715,746	3	2,108,637		153
FRO	Faroe Islands	Europe	no	1,012	-			154
PRY	Paraguay	Latin America	no	19,203	-	17,941		155
URY	Uruguay	Latin America	no	28,590	-	39,936		156
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			157
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	21,734		158
GMB	Gambia	Sub Saharan Africa	no	680	-	963		159
GHA	Ghana	Sub Saharan Africa	no	12,649	-	35,414		160
MLI	Mali	Sub Saharan Africa	no	3,869	-			161
NER	Niger	Sub Saharan Africa	no	2,800	-			162
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	2,142		163
TGO	Togo	Sub Saharan Africa	no	1,644	-			164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			165
TON	Tonga	Pacific	yes	230	9	510	18.2	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21	1,329	16.0	2
SLB	Solomon Islands	Asia	yes	211	12	885	14.0	3
VUT	Vanuatu	Asia	yes	102	10	743	13.6	4
PNG	Papua New Guinea	Asia	yes	5,433	86	9,217	9.3	5
DMA	Dominica	Caribbean	yes	356	5	573	8.4	6
HTI	Haiti	Caribbean	yes	8,553	64	9,743	6.6	7
DOM	Dominican Republic	Caribbean	yes	72,573	363	57,847	6.3	8
GRD	Grenada	Caribbean	yes	1,229	5	996	4.6	9
BRB	Barbados	Caribbean	yes	4,677	18	4,317	4.1	10
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3	914	3.1	11
JAM	Jamaica	Caribbean	yes	28,963	26	16,776	1.5	12
LCA	Saint Lucia	Caribbean	yes	543	2	1,355	1.4	13
WSM	Samoa	Pacific	yes	361	1	727	1.2	14
FJI	Fiji	Asia	yes	2,100	3	3,569	0.8	15
SGP	Singapore	Pacific	yes	526,900	114	150,187	0.8	16
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			17
VGB	British Virgin Islands	Caribbean	yes	424	4			18
AIA	Anguilla	Caribbean	yes	20	0			19
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			20
PRI	Puerto Rico	Caribbean	yes	135,818	330			21
NCL	New Caledonia	Asia	yes	4,771	19			22
ABW	Aruba	Caribbean	yes	6,526	8			23
PLW	Palau	Pacific	yes	279	0			24
BLZ	Belize	Latin America	yes	1,251	1			25
COM	Comoros	Sub Saharan Africa	yes	310	0			26
CUB	Cuba	Caribbean	yes	46,280	10			27
BHR	Bahrain	Asia	yes	32,575	17			28
BHS	Bahamas	Caribbean	yes	21,313	0			29
GUY	Guyana	Latin America	yes	3,468	-			30
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	10,934		31
PYF	French Polynesia	Pacific	yes	6,568	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			33
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-			34
SUR	Suriname	Latin America	yes	2,797	-			35
MDV	Maldives	Pacific	yes	907	-	2,244		36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	766		37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			40



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [‰]	
PHL	Philippines	Asia	no	186,193	5,004	19,403	257.9	1
SLV	El Salvador	Latin America	no	22,582	300	2,312	130.0	2
NIC	Nicaragua	Latin America	no	10,935	58	627	93.1	3
HND	Honduras	Latin America	no	18,844	230	2,777	82.8	4
JPN	Japan	Asia	no	14,617,394	59,828	1,094,349	54.7	5
BGD	Bangladesh	Asia	no	72,949	198	5,387	36.7	6
GTM	Guatemala	Latin America	no	38,263	156	4,254	36.6	7
CHL	Chile	Latin America	no	326,640	869	26,588	32.7	8
GRC	Greece	Europe	no	642,888	1,732	54,736	31.7	9
PAK	Pakistan	Asia	no	170,444	409	14,053	29.1	10
PER	Peru	Latin America	no	189,980	447	15,659	28.6	11
ECU	Ecuador	Latin America	no	68,550	192	6,807	28.3	12
PAN	Panama	Latin America	no	30,296	44	1,561	28.1	13
ARM	Armenia	Asia	no	14,187	28	1,231	22.7	14
UZB	Uzbekistan	Asia	no	44,370	154	6,853	22.5	15
KGZ	Kyrgyzstan	Asia	no	3,644	20	877	22.4	16
AZE	Azerbaijan	Asia	no	45,197	128	5,852	21.8	17
CRI	Costa Rica	Latin America	no	38,475	131	6,358	20.6	18
GEO	Georgia	Asia	no	21,157	50	2,453	20.4	19
COL	Colombia	Latin America	no	325,385	803	46,769	17.2	20
ARE	United Arab Emirates	Asia	no	248,015	421	24,545	17.2	21
TUR	Turkey	Asia	no	1,578,228	1,766	104,758	16.9	22
IDN	Indonesia	Asia	no	575,183	1,005	64,015	15.7	23
ALB	Albania	Europe	no	13,964	14	952	15.1	24
BGR	Bulgaria	Europe	no	70,023	112	7,539	14.9	25
MEX	Mexico	Latin America	no	1,818,298	1,568	120,640	13.0	26
TJK	Tajikistan	Asia	no	5,576	21	1,658	12.4	27
LBN	Lebanon	Asia	no	56,965	53	4,711	11.3	28
KAZ	Kazakhstan	Asia	no	180,409	180	16,117	11.2	29
VEN	Venezuela	Latin America	no	435,869	439	42,419	10.3	30
ITA	Italy	Europe	no	3,701,619	3,795	435,241	8.7	31
SYR	Syrian Arab Republic	Asia	no	68,489	52	5,991	8.6	32
TKM	Turkmenistan	Asia	no	12,707	18	2,212	7.9	33
BOL	Bolivia	Latin America	no	13,112	21	2,718	7.5	34
CYP	Cyprus	Asia	no	23,484	32	4,558	7.0	35
TUN	Tunisia	North Africa	no	65,420	49	7,209	6.8	36
MLT	Malta	Pacific	no	18,630	10	1,711	6.0	37
MYS	Malaysia	Asia	no	318,727	162	30,273	5.4	38
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	1,683	5.1	39
JOR	Jordan	Asia	no	40,997	26	5,910	4.4	40
CHE	Switzerland	Europe	no	839,518	257	60,549	4.2	41
ISL	Iceland	Europe	no	25,742	14	3,261	4.2	42
ISR	Israel	Asia	no	293,550	192	52,616	3.6	43
HRV	Croatia	Europe	no	65,145	46	13,084	3.5	44
SVN	Slovenia	Europe	no	36,896	34	9,752	3.5	45
MNE	Montenegro	Europe	no	2,738	3	775	3.4	46
USA	United States of America	North America	no	22,004,154	8,400	2,522,700	3.3	47
AUT	Austria	Europe	no	615,592	240	73,430	3.3	48
CHN	China	Asia	no	4,512,825	2,351	791,999	3.0	49
MAR	Morocco	North Africa	no	136,300	46	15,913	2.9	50
IND	India	Asia	no	1,429,881	524	198,830	2.6	51
MNG	Mongolia	Asia	no	9,273	2	851	2.4	52
ARG	Argentina	Latin America	no	403,909	128	55,024	2.3	53
HKG	Hong Kong	Asia	no	1,138,019	41	18,948	2.2	54
EGY	Egypt	North Africa	no	234,939	51	24,436	2.1	55
THA	Thailand	Asia	no	394,598	81	41,294	2.0	56
DEU	Germany	Europe	no	5,800,986	1,206	647,378	1.9	57
HUN	Hungary	Europe	no	286,209	51	28,084	1.8	58
MDA	Moldova, Republic of	Europe	no	9,896	2	1,377	1.5	59
MAC	Macau	Asia	no	96,993	3	2,186	1.4	60
SVK	Slovakia	Europe	no	124,390	22	17,073	1.3	61
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	2,153	1.2	62
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	672	1.2	63
CZE	Czech Republic	Europe	no	336,714	49	41,897	1.2	64
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	518,869	1.1	65
KOR	Republic of Korea	Asia	no	2,787,207	164	155,748	1.1	66
MWI	Malawi	Sub Saharan Africa	no	1,883	1	976	1.0	67
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	3,498	1.0	68
VNM	Viet Nam	Asia	no	115,441	7	6,947	1.0	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
BEL	Belgium	Europe	no	739,159	101	113,598	0.9	70
SAU	Saudi Arabia	Asia	no	751,807	83	97,875	0.8	71
UGA	Uganda	Sub Saharan Africa	no	6,628	2	2,015	0.8	72
POL	Poland	Europe	no	659,150	66	88,643	0.8	73
SRB	Serbia	Europe	no	16,907	5	7,380	0.7	74
NLD	Netherlands	Europe	no	1,593,735	160	221,964	0.7	75
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	719	0.7	76
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	4,052	0.7	77
ESP	Spain	Europe	no	2,695,139	198	292,417	0.7	78
KEN	Kenya	Sub Saharan Africa	no	18,470	3	4,226	0.7	79
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	71,742	0.6	80
RUS	Russian Federation	Europe	no	2,209,139	168	287,875	0.6	81
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	935	0.5	82
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	1,166	0.5	83
LUX	Luxembourg	Europe	no	45,036	4	8,868	0.5	84
BWA	Botswana	Sub Saharan Africa	no	18,941	1	3,130	0.5	85
PRT	Portugal	Europe	no	296,296	21	49,074	0.4	86
FRA	France	Europe	no	3,653,264	260	635,621	0.4	87
EST	Estonia	Europe	no	28,069	1	3,959	0.2	88
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	1,281	0.2	89
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	913	0.2	90
CAN	Canada	North America	no	2,051,584	72	343,217	0.2	91
UKR	Ukraine	Europe	no	278,497	6	27,731	0.2	92
IRL	Ireland	Europe	no	244,117	8	39,102	0.2	93
GAB	Gabon	Sub Saharan Africa	no	25,086	0	1,267	0.2	94
KHM	Cambodia	Asia	no	4,335	0	713	0.1	95
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	3,029	0.1	96
SDN	Sudan	Sub Saharan Africa	no	26,851	1	9,428	0.1	97
SEN	Senegal	Sub Saharan Africa	no	11,619	0	1,124	0.1	98
LTU	Lithuania	Europe	no	53,397	1	7,241	0.1	99
LVA	Latvia	Europe	no	39,277	0	4,122	0.1	100
NAM	Namibia	Sub Saharan Africa	no	7,239	0	2,692	0.0	101
NOR	Norway	Europe	no	386,892	4	92,372	0.0	102
DNK	Denmark	Europe	no	381,265	2	90,977	0.0	103
LKA	Sri Lanka	Asia	no	49,967	0	7,718	0.0	104
SWE	Sweden	Europe	no	369,792	2	123,918	0.0	105
FIN	Finland	Europe	no	209,050	1	58,644	0.0	106
BLR	Belarus	Europe	no	74,427	0	8,828	0.0	107
BRA	Brazil	Latin America	no	1,715,746	3	442,019	0.0	108
AFG	Afghanistan	Asia	no	16,132	39	-	-	109
CMR	Cameroon	Sub Saharan Africa	no	16,950	0			110
GLP	Guadeloupe	Caribbean	no	19,838	196			111
SMR	San Marino	Europe	no	1,846	5			112
MTQ	Martinique	Caribbean	no	21,052	92			113
NPL	Nepal	Asia	no	6,537	31			114
BTN	Bhutan	Asia	no	1,167	5			115
TWN	Taiwan	Asia	no	872,409	3,857			116
MMR	Myanmar	Asia	no	20,572	40			117
BDI	Burundi	Sub Saharan Africa	no	168	0			118
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			119
LIE	Liechtenstein	Europe	no	8,070	5			120
GIB	Gibraltar	Europe	no	3,141	2			121
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			122
MCO	Monaco	Europe	no	5,380	4			123
DZA	Algeria	North Africa	no	259,977	359			124
IRQ	Iraq	Asia	no	47,245	56			125
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721			126
CYM	Cayman Islands	Caribbean	no	3,603	1			127
KWT	Kuwait	Asia	no	202,236	137			128
TCA	Turks and Caicos islands	Caribbean	no	332	0			129
YEM	Yemen	Asia	no	21,556	8			130
NZL	New Zealand	Australia	no	238,609	163			131
BRN	Brunei Darussalam	Asia	no	20,094	6			132
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			133
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			134
OMN	Oman	Asia	no	42,201	23			135
QAT	Qatar	Asia	no	113,981	64			136
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			137
MDG	Madagascar	Sub Saharan Africa	no	2,575	0			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			139
CAF	Central African Republic	Sub Saharan Africa	no	916	-			140
ERI	Eritrea	Sub Saharan Africa	no	1,892	0			141
SOM	Somalia	Sub Saharan Africa	no	3,573	0			142
LBR	Liberia	Sub Saharan Africa	no	515	-			143
AGO	Angola	Sub Saharan Africa	no	25,225	0			144
NGA	Nigeria	Sub Saharan Africa	no	121,669	1			145
AUS	Australia	Australia	no	1,832,960	17			146
GIN	Guinea	Sub Saharan Africa	no	3,259	-	339		147
BEN	Benin	Sub Saharan Africa	no	3,585	-			148
TCO	Chad	Sub Saharan Africa	no	6,664	-	1,131		149
COG	Congo	Sub Saharan Africa	no	12,566	-	1,186		150
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	646		151
REU	Réunion	Sub Saharan Africa	no	42,937	-			152
GUF	French Guiana	Latin America	no	8,339	-			153
FRO	Faroe Islands	Europe	no	1,012	-			154
PRY	Paraguay	Latin America	no	19,203	-	1,711		155
URY	Uruguay	Latin America	no	28,590	-	5,117		156
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			157
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	1,968		158
GMB	Gambia	Sub Saharan Africa	no	680	-	121		159
GHA	Ghana	Sub Saharan Africa	no	12,649	-	3,511		160
MLI	Mali	Sub Saharan Africa	no	3,869	-			161
NER	Niger	Sub Saharan Africa	no	2,800	-			162
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	233		163
TGO	Togo	Sub Saharan Africa	no	1,644	-			164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			165
TON	Tonga	Pacific	yes	230	9	67	139.5	1
PNG	Papua New Guinea	Asia	yes	5,433	86	897	95.8	2
DOM	Dominican Republic	Caribbean	yes	72,573	363	3,965	91.5	3
DMA	Dominica	Caribbean	yes	356	5	81	59.3	4
BRB	Barbados	Caribbean	yes	4,677	18	835	21.3	5
JAM	Jamaica	Caribbean	yes	28,963	26	2,368	10.8	6
LCA	Saint Lucia	Caribbean	yes	543	2	192	9.9	7
SGP	Singapore	Pacific	yes	526,900	114	22,293	5.1	8
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21			9
SLB	Solomon islands	Asia	yes	211	12			10
VUT	Vanuatu	Asia	yes	102	10			11
HTI	Haiti	Caribbean	yes	8,553	64			12
GRD	Grenada	Caribbean	yes	1,229	5			13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3			14
WSM	Samoa	Pacific	yes	361	1			15
FJI	Fiji	Asia	yes	2,100	3			16
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			17
VGB	British Virgin Islands	Caribbean	yes	424	4			18
AIA	Anguilla	Caribbean	yes	20	0			19
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			20
PRI	Puerto Rico	Caribbean	yes	135,818	330			21
NCL	New Caledonia	Asia	yes	4,771	19			22
ABW	Aruba	Caribbean	yes	6,526	8			23
PLW	Palau	Pacific	yes	279	0			24
BLZ	Belize	Latin America	yes	1,251	1			25
COM	Comoros	Sub Saharan Africa	yes	310	0			26
CUB	Cuba	Caribbean	yes	46,280	10			27
BHR	Bahrain	Asia	yes	32,575	17			28
BHS	Bahamas	Caribbean	yes	21,313	0			29
GUY	Guyana	Latin America	yes	3,468	-	341		30
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	1,393		31
PYF	French Polynesia	Pacific	yes	6,568	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			33
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-			34
SUR	Suriname	Latin America	yes	2,797	-			35
MDV	Maldives	Pacific	yes	907	-			36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			40



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
JPN	Japan	Asia	no	14,617,394	59,828	1,144,171	52.3	1
TJK	Tajikistan	Asia	no	5,576	21	144	25.6	2
KGZ	Kyrgyzstan	Asia	no	3,644	20	419	12.8	3
SLV	El Salvador	Latin America	no	22,582	300	2,799	4.8	4
HND	Honduras	Latin America	no	18,844	230	2,998	4.1	5
USA	United States of America	North America	no	22,004,154	8,400	2,212,313	3.8	6
NIC	Nicaragua	Latin America	no	10,935	58	1,445	3.7	7
ARM	Armenia	Asia	no	14,187	28	1,530	1.3	8
PHL	Philippines	Asia	no	186,193	5,004	22,170	1.2	9
GTM	Guatemala	Latin America	no	38,263	156	4,200	1.0	10
BOL	Bolivia	Latin America	no	13,112	21	1,619	1.0	11
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	823	0.8	12
ALB	Albania	Europe	no	13,964	14	1,329	0.8	13
CRI	Costa Rica	Latin America	no	38,475	131	4,507	0.8	14
AZE	Azerbaijan	Asia	no	45,197	128	4,557	0.6	15
MLT	Malta	Pacific	no	18,630	10	1,008	0.5	16
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	257	0.5	17
CYP	Cyprus	Asia	no	23,484	32	2,630	0.5	18
ECU	Ecuador	Latin America	no	68,550	192	5,925	0.5	19
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	265	0.4	20
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	893	0.4	21
PAN	Panama	Latin America	no	30,296	44	4,074	0.4	22
MDA	Moldova, Republic of	Europe	no	9,896	2	563	0.4	23
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	141	0.4	24
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	815	0.3	25
BGR	Bulgaria	Europe	no	70,023	112	5,626	0.3	26
BRN	Brunei Darussalam	Asia	no	20,094	6	1,279	0.2	27
JOR	Jordan	Asia	no	40,997	26	3,205	0.2	28
LBN	Lebanon	Asia	no	56,965	53	5,937	0.2	29
ISL	Iceland	Europe	no	25,742	14	3,437	0.2	30
BGD	Bangladesh	Asia	no	72,949	198	19,006	0.1	31
PAK	Pakistan	Asia	no	170,444	409	18,461	0.1	32
PER	Peru	Latin America	no	189,980	447	18,553	0.1	33
SYR	Syrian Arab Republic	Asia	no	68,489	52	6,052	0.1	34
SVN	Slovenia	Europe	no	36,896	34	7,746	0.1	35
SRB	Serbia	Europe	no	16,907	5	2,776	0.1	36
TUN	Tunisia	North Africa	no	65,420	49	6,865	0.1	37
CHL	Chile	Latin America	no	326,640	869	27,076	0.1	38
UGA	Uganda	Sub Saharan Africa	no	6,628	2	2,609	0.1	39
KAZ	Kazakhstan	Asia	no	180,409	180	11,258	0.1	40
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	3,995	0.1	41
HRV	Croatia	Europe	no	65,145	46	8,147	0.1	42
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	1,432	0.1	43
DZA	Algeria	North Africa	no	259,977	359	18,029	0.1	44
COL	Colombia	Latin America	no	325,385	803	33,173	0.1	45
GRC	Greece	Europe	no	642,888	1,732	42,781	0.1	46
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721	46,695	0.1	47
MDG	Madagascar	Sub Saharan Africa	no	2,575	0	1,317	0.0	48
NZL	New Zealand	Australia	no	238,609	163	15,614	0.0	49
KEN	Kenya	Sub Saharan Africa	no	18,470	3	3,803	0.0	50
BWA	Botswana	Sub Saharan Africa	no	18,941	1	1,880	0.0	51
IDN	Indonesia	Asia	no	575,183	1,005	52,407	0.0	52
ISR	Israel	Asia	no	293,550	192	30,157	0.0	53
VEN	Venezuela	Latin America	no	435,869	439	48,477	0.0	54
MAR	Morocco	North Africa	no	136,300	46	16,366	0.0	55
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	3,519	0.0	56
MYS	Malaysia	Asia	no	318,727	162	30,724	0.0	57
SVK	Slovakia	Europe	no	124,390	22	11,975	0.0	58
LUX	Luxembourg	Europe	no	45,036	4	6,616	0.0	59
TUR	Turkey	Asia	no	1,578,228	1,766	87,701	0.0	60
HUN	Hungary	Europe	no	286,209	51	14,219	0.0	61
SDN	Sudan	Sub Saharan Africa	no	26,851	1	3,285	0.0	62
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	2,363	0.0	63
EST	Estonia	Europe	no	28,069	1	3,738	0.0	64
AUT	Austria	Europe	no	615,592	240	48,760	0.0	65
NAM	Namibia	Sub Saharan Africa	no	7,239	0	1,324	0.0	66
EGY	Egypt	North Africa	no	234,939	51	30,406	0.0	67
MAC	Macau	Asia	no	96,993	3	4,316	0.0	68
CZE	Czech Republic	Europe	no	336,714	49	22,186	0.0	69



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
KHM	Cambodia	Asia	no	4,335	0	1,494	0.0	70
GAB	Gabon	Sub Saharan Africa	no	25,086	0	1,639	0.0	71
MEX	Mexico	Latin America	no	1,818,298	1,568	159,403	0.0	72
CHE	Switzerland	Europe	no	839,518	257	64,161	0.0	73
THA	Thailand	Asia	no	394,598	81	42,938	0.0	74
SEN	Senegal	Sub Saharan Africa	no	11,619	0	2,278	0.0	75
ARG	Argentina	Latin America	no	403,909	128	75,477	0.0	76
ITA	Italy	Europe	no	3,701,619	3,795	253,228	0.0	77
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	38,298	0.0	78
VNM	Viet Nam	Asia	no	115,441	7	19,932	0.0	79
PRT	Portugal	Europe	no	296,296	21	29,628	0.0	80
BEL	Belgium	Europe	no	739,159	101	59,532	0.0	81
LVA	Latvia	Europe	no	39,277	0	5,143	0.0	82
POL	Poland	Europe	no	659,150	66	52,601	0.0	83
LTU	Lithuania	Europe	no	53,397	1	5,768	0.0	84
SAU	Saudi Arabia	Asia	no	751,807	83	66,377	0.0	85
IND	India	Asia	no	1,429,881	524	248,602	0.0	86
UKR	Ukraine	Europe	no	278,497	6	14,671	0.0	87
NLD	Netherlands	Europe	no	1,593,735	160	92,014	0.0	88
IRL	Ireland	Europe	no	244,117	8	33,055	0.0	89
RUS	Russian Federation	Europe	no	2,209,139	168	100,485	0.0	90
HKG	Hong Kong	Asia	no	1,138,019	41	52,025	0.0	91
CHN	China	Asia	no	4,512,825	2,351	930,625	0.0	92
DEU	Germany	Europe	no	5,800,986	1,206	413,986	0.0	93
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	335,845	0.0	94
ESP	Spain	Europe	no	2,695,139	198	216,748	0.0	95
KOR	Republic of Korea	Asia	no	2,787,207	164	200,936	0.0	96
DNK	Denmark	Europe	no	381,265	2	39,721	0.0	97
FRA	France	Europe	no	3,653,264	260	306,117	0.0	98
NOR	Norway	Europe	no	386,892	4	47,607	0.0	99
CAN	Canada	North America	no	2,051,584	72	203,409	0.0	100
AUS	Australia	Australia	no	1,832,960	17	150,632	0.0	101
UZB	Uzbekistan	Asia	no	44,370	154			102
GEO	Georgia	Asia	no	21,157	50			103
ARE	United Arab Emirates	Asia	no	248,015	421			104
TKM	Turkmenistan	Asia	no	12,707	18			105
MNE	Montenegro	Europe	no	2,738	3			106
MNG	Mongolia	Asia	no	9,273	2			107
MWI	Malawi	Sub Saharan Africa	no	1,883	1			108
BIH	Bosnia and Herzegovina	Europe	no	10,433	4			109
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1			110
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0			111
LKA	Sri Lanka	Asia	no	49,967	0	7,159		112
SWE	Sweden	Europe	no	369,792	2	60,814		113
FIN	Finland	Europe	no	209,050	1	30,495		114
BLR	Belarus	Europe	no	74,427	0	8,860		115
BRA	Brazil	Latin America	no	1,715,746	3	138,995		116
AFG	Afghanistan	Asia	no	16,132	39			117
GLP	Guadeloupe	Caribbean	no	19,838	196			118
SMR	San Marino	Europe	no	1,846	5			119
MTQ	Martinique	Caribbean	no	21,052	92			120
NPL	Nepal	Asia	no	6,537	31			121
BTN	Bhutan	Asia	no	1,167	5			122
TWN	Taiwan	Asia	no	872,409	3,857			123
MMR	Myanmar	Asia	no	20,572	40			124
BDI	Burundi	Sub Saharan Africa	no	168	0			125
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			126
LIE	Liechtenstein	Europe	no	8,070	5			127
GIB	Gibraltar	Europe	no	3,141	2			128
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			129
MCO	Monaco	Europe	no	5,380	4			130
IRQ	Iraq	Asia	no	47,245	56			131
CYM	Cayman Islands	Caribbean	no	3,603	1			132
KWT	Kuwait	Asia	no	202,236	137			133
TCA	Turks and Caicos islands	Caribbean	no	332	0			134
YEM	Yemen	Asia	no	21,556	8			135
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			136
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			137
OMN	Oman	Asia	no	42,201	23			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
QAT	Qatar	Asia	no	113,981	64			139
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			140
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			141
CAF	Central African Republic	Sub Saharan Africa	no	916	-			142
SOM	Somalia	Sub Saharan Africa	no	3,573	0			143
LBR	Liberia	Sub Saharan Africa	no	515	-			144
AGO	Angola	Sub Saharan Africa	no	25,225	0			145
NGA	Nigeria	Sub Saharan Africa	no	121,669	1			146
GIN	Guinea	Sub Saharan Africa	no	3,259	-	391		147
BEN	Benin	Sub Saharan Africa	no	3,585	-	720		148
TCD	Chad	Sub Saharan Africa	no	6,664	-			149
COG	Congo	Sub Saharan Africa	no	12,566	-			150
MRT	Mauritania	Sub Saharan Africa	no	3,622	-			151
REU	Réunion	Sub Saharan Africa	no	42,937	-			152
GUF	French Guiana	Latin America	no	8,339	-			153
FRO	Faroe Islands	Europe	no	1,012	-			154
PRY	Paraguay	Latin America	no	19,203	-	1,552		155
URY	Uruguay	Latin America	no	28,590	-	3,671		156
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			157
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	1,082		158
GMB	Gambia	Sub Saharan Africa	no	680	-			159
GHA	Ghana	Sub Saharan Africa	no	12,649	-			160
MLI	Mali	Sub Saharan Africa	no	3,869	-	1,042		161
NER	Niger	Sub Saharan Africa	no	2,800	-			162
SLE	Sierra Leone	Sub Saharan Africa	no	523	-			163
TGO	Togo	Sub Saharan Africa	no	1,644	-			164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			165
HTI	Haiti	Caribbean	yes	8,553	64	1,081	6.9	1
BLZ	Belize	Latin America	yes	1,251	1	180	5.6	2
DOM	Dominican Republic	Caribbean	yes	72,573	363	5,996	0.8	3
CUB	Cuba	Caribbean	yes	46,280	10	5,742	0.0	4
SGP	Singapore	Pacific	yes	526,900	114	36,452	0.0	5
BHS	Bahamas	Caribbean	yes	21,313	0	2,547	0.0	6
TON	Tonga	Pacific	yes	230	9			7
PNG	Papua New Guinea	Asia	yes	5,433	86			8
DMA	Dominica	Caribbean	yes	356	5			9
BRB	Barbados	Caribbean	yes	4,677	18			10
JAM	Jamaica	Caribbean	yes	28,963	26			11
LCA	Saint Lucia	Caribbean	yes	543	2			12
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21			13
SLB	Solomon islands	Asia	yes	211	12			14
VUT	Vanuatu	Asia	yes	102	10			15
GRD	Grenada	Caribbean	yes	1,229	5			16
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3			17
WSM	Samoa	Pacific	yes	361	1			18
FJI	Fiji	Asia	yes	2,100	3			19
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			20
VGB	British Virgin Islands	Caribbean	yes	424	4			21
AIA	Anguilla	Caribbean	yes	20	0			22
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			23
PRI	Puerto Rico	Caribbean	yes	135,818	330			24
NCL	New Caledonia	Asia	yes	4,771	19			25
ABW	Aruba	Caribbean	yes	6,526	8			26
PLW	Palau	Pacific	yes	279	0			27
COM	Comoros	Sub Saharan Africa	yes	310	0			28
BHR	Bahrain	Asia	yes	32,575	17			29
GUY	Guyana	Latin America	yes	3,468	-			30
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	1,571		31
PYF	French Polynesia	Pacific	yes	6,568	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			33
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-	262		34
SUR	Suriname	Latin America	yes	2,797	-			35
MDV	Maldives	Pacific	yes	907	-			36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	190		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	PML ₂₅₀ /PC	Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	[%]	
PHL	Philippines	Asia	no	186,193	35,940	19.3	1
GLP	Guadeloupe	Caribbean	no	19,838	3,795	19.1	2
HND	Honduras	Latin America	no	18,844	2,976	15.8	3
SMR	San Marino	Europe	no	1,846	268	14.5	4
MTQ	Martinique	Caribbean	no	21,052	3,045	14.5	5
SLV	El Salvador	Latin America	no	22,582	3,022	13.4	6
NPL	Nepal	Asia	no	6,537	865	13.2	7
BTN	Bhutan	Asia	no	1,167	147	12.6	8
NIC	Nicaragua	Latin America	no	10,935	891	8.2	9
CRI	Costa Rica	Latin America	no	38,475	2,701	7.0	10
KGZ	Kyrgyzstan	Asia	no	3,644	229	6.3	11
ECU	Ecuador	Latin America	no	68,550	4,162	6.1	12
GTM	Guatemala	Latin America	no	38,263	2,304	6.0	13
COL	Colombia	Latin America	no	325,385	19,055	5.9	14
BOL	Bolivia	Latin America	no	13,112	721	5.5	15
AZE	Azerbaijan	Asia	no	45,197	2,418	5.4	16
BGD	Bangladesh	Asia	no	72,949	3,688	5.1	17
PER	Peru	Latin America	no	189,980	9,450	5.0	18
GEO	Georgia	Asia	no	21,157	968	4.6	19
CYP	Cyprus	Asia	no	23,484	1,053	4.5	20
JPN	Japan	Asia	no	14,617,394	624,437	4.3	21
TWN	Taiwan	Asia	no	872,409	32,961	3.8	22
TJK	Tajikistan	Asia	no	5,576	210	3.8	23
UZB	Uzbekistan	Asia	no	44,370	1,574	3.6	24
SVN	Slovenia	Europe	no	36,896	1,311	3.6	25
LBN	Lebanon	Asia	no	56,965	2,002	3.5	26
ARM	Armenia	Asia	no	14,187	466	3.3	27
AFG	Afghanistan	Asia	no	16,132	520	3.2	28
MMR	Myanmar	Asia	no	20,572	660	3.2	29
GRC	Greece	Europe	no	642,888	20,095	3.1	30
BDI	Burundi	Sub Saharan Africa	no	168	5	3.1	31
TUN	Tunisia	North Africa	no	65,420	1,906	2.9	32
PAN	Panama	Latin America	no	30,296	869	2.9	33
PAK	Pakistan	Asia	no	170,444	4,857	2.9	34
DJI	Djibouti	Sub Saharan Africa	no	2,525	71	2.8	35
MNE	Montenegro	Europe	no	2,738	77	2.8	36
LIE	Liechtenstein	Europe	no	8,070	225	2.8	37
ALB	Albania	Europe	no	13,964	378	2.7	38
ARE	United Arab Emirates	Asia	no	248,015	6,688	2.7	39
GIB	Gibraltar	Europe	no	3,141	78	2.5	40
TKM	Turkmenistan	Asia	no	12,707	307	2.4	41
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	2.4	42
MWI	Malawi	Sub Saharan Africa	no	1,883	45	2.4	43
MCO	Monaco	Europe	no	5,380	130	2.4	44
ISR	Israel	Asia	no	293,550	7,083	2.4	45
CHL	Chile	Latin America	no	326,640	7,647	2.3	46
ISL	Iceland	Europe	no	25,742	602	2.3	47
DZA	Algeria	North Africa	no	259,977	5,884	2.3	48
IRQ	Iraq	Asia	no	47,245	1,060	2.2	49
JOR	Jordan	Asia	no	40,997	863	2.1	50
VEN	Venezuela	Latin America	no	435,869	9,004	2.1	51
BGR	Bulgaria	Europe	no	70,023	1,426	2.0	52
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	2.0	53
IDN	Indonesia	Asia	no	575,183	9,693	1.7	54
HRV	Croatia	Europe	no	65,145	1,079	1.7	55
TUR	Turkey	Asia	no	1,578,228	26,102	1.7	56
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023	1.6	57
CYM	Cayman Islands	Caribbean	no	3,603	58	1.6	58
MLT	Malta	Pacific	no	18,630	279	1.5	59
ITA	Italy	Europe	no	3,701,619	54,248	1.5	60
MEX	Mexico	Latin America	no	1,818,298	26,503	1.5	61
CHE	Switzerland	Europe	no	839,518	10,275	1.2	62
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	1.2	63
AUT	Austria	Europe	no	615,592	7,442	1.2	64
KAZ	Kazakhstan	Asia	no	180,409	2,124	1.2	65
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	92	1.2	66
KWT	Kuwait	Asia	no	202,236	2,236	1.1	67
TCA	Turks and Caicos islands	Caribbean	no	332	3	1.1	68
YEM	Yemen	Asia	no	21,556	214	1.0	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
NZL	New Zealand	Australia	no	238,609	2,343	1.0	70
LAO	Lao People's Democratic Republic	Asia	no	2,322	23	1.0	71
MAR	Morocco	North Africa	no	136,300	1,325	1.0	72
BRN	Brunei Darussalam	Asia	no	20,094	170	0.9	73
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	28,996	0.8	74
ZMB	Zambia	Sub Saharan Africa	no	9,806	75	0.8	75
DEU	Germany	Europe	no	5,800,986	44,276	0.8	76
MDA	Moldova, Republic of	Europe	no	9,896	73	0.7	77
MYT	Mayotte	Sub Saharan Africa	no	2,341	17	0.7	78
BIH	Bosnia and Herzegovina	Europe	no	10,433	72	0.7	79
SRB	Serbia	Europe	no	16,907	113	0.7	80
MYS	Malaysia	Asia	no	318,727	2,111	0.7	81
PRK	Dem People's Rep of Korea	Asia	no	27,936	180	0.7	82
CHN	China	Asia	no	4,512,825	28,876	0.6	83
OMN	Oman	Asia	no	42,201	271	0.6	84
ARG	Argentina	Latin America	no	403,909	2,558	0.6	85
MNG	Mongolia	Asia	no	9,273	55	0.6	86
BEL	Belgium	Europe	no	739,159	4,460	0.6	87
QAT	Qatar	Asia	no	113,981	661	0.6	88
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	459	0.6	89
USA	United States of America	North America	no	22,004,154	118,733	0.5	90
EGY	Egypt	North Africa	no	234,939	1,280	0.5	91
HUN	Hungary	Europe	no	286,209	1,548	0.5	92
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	18	0.5	93
UGA	Uganda	Sub Saharan Africa	no	6,628	35	0.5	94
KEN	Kenya	Sub Saharan Africa	no	18,470	94	0.5	95
SVK	Slovakia	Europe	no	124,390	623	0.5	96
NLD	Netherlands	Europe	no	1,593,735	7,551	0.5	97
THA	Thailand	Asia	no	394,598	1,739	0.4	98
IND	India	Asia	no	1,429,881	5,862	0.4	99
CZE	Czech Republic	Europe	no	336,714	1,251	0.4	100
POL	Poland	Europe	no	659,150	2,170	0.3	101
MOZ	Mozambique	Sub Saharan Africa	no	5,633	18	0.3	102
ETH	Ethiopia	Sub Saharan Africa	no	5,141	13	0.3	103
LUX	Luxembourg	Europe	no	45,036	102	0.2	104
FRA	France	Europe	no	3,653,264	7,324	0.2	105
VNM	Viet Nam	Asia	no	115,441	223	0.2	106
ZAF	South Africa	Sub Saharan Africa	no	335,148	620	0.2	107
ESP	Spain	Europe	no	2,695,139	4,313	0.2	108
SDN	Sudan	Sub Saharan Africa	no	26,851	42	0.2	109
LSO	Lesotho	Sub Saharan Africa	no	3,522	5	0.2	110
SAU	Saudi Arabia	Asia	no	751,807	1,072	0.1	111
HKG	Hong Kong	Asia	no	1,138,019	1,423	0.1	112
IRL	Ireland	Europe	no	244,117	306	0.1	113
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	5	0.1	114
MDG	Madagascar	Sub Saharan Africa	no	2,575	3	0.1	115
MAC	Macau	Asia	no	96,993	108	0.1	116
PRT	Portugal	Europe	no	296,296	340	0.1	117
SWZ	Swaziland	Sub Saharan Africa	no	2,012	2	0.1	118
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	7	0.1	119
KOR	Republic of Korea	Asia	no	2,787,207	2,440	0.1	120
CAF	Central African Republic	Sub Saharan Africa	no	916	1	0.1	121
EST	Estonia	Europe	no	28,069	22	0.1	122
CMR	Cameroon	Sub Saharan Africa	no	16,950	13	0.1	123
CAN	Canada	North America	no	2,051,584	1,390	0.1	124
BWA	Botswana	Sub Saharan Africa	no	18,941	13	0.1	125
RUS	Russian Federation	Europe	no	2,209,139	1,641	0.1	126
ERI	Eritrea	Sub Saharan Africa	no	1,892	1	0.1	127
UKR	Ukraine	Europe	no	278,497	187	0.1	128
SOM	Somalia	Sub Saharan Africa	no	3,573	2	0.1	129
KHM	Cambodia	Asia	no	4,335	2	0.0	130
NAM	Namibia	Sub Saharan Africa	no	7,239	3	0.0	131
LTU	Lithuania	Europe	no	53,397	20	0.0	132
NOR	Norway	Europe	no	386,892	150	0.0	133
LVA	Latvia	Europe	no	39,277	15	0.0	134
LBR	Liberia	Sub Saharan Africa	no	515	0	0.0	135
SEN	Senegal	Sub Saharan Africa	no	11,619	3	0.0	136
GAB	Gabon	Sub Saharan Africa	no	25,086	8	0.0	137
AGO	Angola	Sub Saharan Africa	no	25,225	8	0.0	138

ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	0.0	139
LKA	Sri Lanka	Asia	no	49,967	\$ 9	0.0	140
AUS	Australia	Australia	no	1,832,960	\$ 397	0.0	141
DNK	Denmark	Europe	no	381,265	\$ 66	0.0	142
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	0.0	143
SWE	Sweden	Europe	no	369,792	\$ 52	0.0	144
FIN	Finland	Europe	no	209,050	\$ 17	0.0	145
BLR	Belarus	Europe	no	74,427	\$ 5	0.0	146
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	0.0	147
TCO	Chad	Sub Saharan Africa	no	6,664	\$ 1	0.0	148
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	0.0	149
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	0.0	150
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -	-	151
GUF	French Guiana	Latin America	no	8,339	\$ 0	-	152
BRA	Brazil	Latin America	no	1,715,746	\$ 77	-	153
FRO	Faroe Islands	Europe	no	1,012	\$ -	-	154
PRY	Paraguay	Latin America	no	19,203	\$ 1	-	155
URY	Uruguay	Latin America	no	28,590	\$ -	-	156
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	-	157
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	-	158
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	-	159
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	-	160
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	-	161
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	-	162
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	-	163
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	-	164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -	-	165
SLB	Solomon islands	Asia	yes	211	\$ 103	49.0	1
VUT	Vanuatu	Asia	yes	102	\$ 35	34.7	2
DMA	Dominica	Caribbean	yes	356	\$ 112	31.5	3
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	28.4	4
TON	Tonga	Pacific	yes	230	\$ 60	26.1	5
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108	25.6	6
AIA	Anguilla	Caribbean	yes	20	\$ 5	24.7	7
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911	22.3	8
BRB	Barbados	Caribbean	yes	4,677	\$ 807	17.3	9
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	15.5	10
GRD	Grenada	Caribbean	yes	1,229	\$ 170	13.8	11
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	12.6	12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	10.3	13
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	8.7	14
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150	8.6	15
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082	6.0	16
NCL	New Caledonia	Asia	yes	4,771	\$ 259	5.4	17
ABW	Aruba	Caribbean	yes	6,526	\$ 327	5.0	18
FJI	Fiji	Asia	yes	2,100	\$ 105	5.0	19
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	4.8	20
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	4.2	21
WSM	Samoa	Pacific	yes	361	\$ 15	4.1	22
PLW	Palau	Pacific	yes	279	\$ 11	3.8	23
BLZ	Belize	Latin America	yes	1,251	\$ 20	1.6	24
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	1.4	25
CUB	Cuba	Caribbean	yes	46,280	\$ 374	0.8	26
BHR	Bahrain	Asia	yes	32,575	\$ 189	0.6	27
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	0.2	28
BHS	Bahamas	Caribbean	yes	21,313	\$ 9	0.0	29
GUY	Guyana	Latin America	yes	3,468	\$ 0	0.0	30
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	-	31
PFY	French Polynesia	Pacific	yes	6,568	\$ -	-	32
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	-	33
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	-	34
SUR	Suriname	Latin America	yes	2,797	\$ -	-	35
MDV	Maldives	Pacific	yes	907	\$ -	-	36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	-	37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	-	38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	-	39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	-	40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
HND	Honduras	Latin America	no	18,844	2,976	15,400	19.3	1
PHL	Philippines	Asia	no	186,193	35,940	199,589	18.0	2
SLV	El Salvador	Latin America	no	22,582	3,022	21,215	14.3	3
NIC	Nicaragua	Latin America	no	10,935	891	6,551	13.6	4
JPN	Japan	Asia	no	14,617,394	624,437	5,458,837	11.4	5
BTN	Bhutan	Asia	no	1,167	147	1,516	9.7	6
GEO	Georgia	Asia	no	21,157	968	11,667	8.3	7
CRI	Costa Rica	Latin America	no	38,475	2,701	35,831	7.5	8
ECU	Ecuador	Latin America	no	68,550	4,162	57,978	7.2	9
GRC	Greece	Europe	no	642,888	20,095	301,083	6.7	10
COL	Colombia	Latin America	no	325,385	19,055	288,189	6.6	11
PER	Peru	Latin America	no	189,980	9,450	157,053	6.0	12
GTM	Guatemala	Latin America	no	38,263	2,304	41,186	5.6	13
LBN	Lebanon	Asia	no	56,965	2,002	39,006	5.1	14
ARM	Armenia	Asia	no	14,187	466	9,371	5.0	15
KGZ	Kyrgyzstan	Asia	no	3,644	229	4,616	5.0	16
ISL	Iceland	Europe	no	25,742	602	12,574	4.8	17
AZE	Azerbaijan	Asia	no	45,197	2,418	51,774	4.7	18
CYP	Cyprus	Asia	no	23,484	1,053	23,132	4.6	19
TUN	Tunisia	North Africa	no	65,420	1,906	44,291	4.3	20
UZB	Uzbekistan	Asia	no	44,370	1,574	38,982	4.0	21
TJK	Tajikistan	Asia	no	5,576	210	5,640	3.7	22
DZA	Algeria	North Africa	no	259,977	5,884	159,426	3.7	23
BGD	Bangladesh	Asia	no	72,949	3,688	100,357	3.7	24
BOL	Bolivia	Latin America	no	13,112	721	19,650	3.7	25
CHL	Chile	Latin America	no	326,640	7,647	212,741	3.6	26
TUR	Turkey	Asia	no	1,578,228	26,102	734,365	3.6	27
MLT	Malta	Pacific	no	18,630	279	8,256	3.4	28
PAN	Panama	Latin America	no	30,296	869	26,689	3.3	29
ISR	Israel	Asia	no	293,550	7,083	217,333	3.3	30
ALB	Albania	Europe	no	13,964	378	11,786	3.2	31
JOR	Jordan	Asia	no	40,997	863	27,574	3.1	32
AFG	Afghanistan	Asia	no	16,132	520	17,243	3.0	33
BGR	Bulgaria	Europe	no	70,023	1,426	47,714	3.0	34
SVN	Slovenia	Europe	no	36,896	1,311	46,908	2.8	35
PAK	Pakistan	Asia	no	170,444	4,857	176,870	2.8	36
ITA	Italy	Europe	no	3,701,619	54,248	2,051,412	2.6	37
MEX	Mexico	Latin America	no	1,818,298	26,503	1,034,804	2.6	38
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	59,147	2.3	39
VEN	Venezuela	Latin America	no	435,869	9,004	391,848	2.3	40
ARE	United Arab Emirates	Asia	no	248,015	6,688	297,649	2.3	41
AUT	Austria	Europe	no	615,592	7,442	379,069	2.0	42
CHE	Switzerland	Europe	no	839,518	\$ 10,275	527,920	2.0	43
MNE	Montenegro	Europe	no	2,738	77	4,111	1.9	44
HRV	Croatia	Europe	no	65,145	1,079	60,852	1.8	45
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	9,189	1.6	46
TKM	Turkmenistan	Asia	no	12,707	307	20,001	1.5	47
MAR	Morocco	North Africa	no	136,300	\$ 1,325	90,805	1.5	48
KAZ	Kazakhstan	Asia	no	180,409	2,124	149,059	1.4	49
IDN	Indonesia	Asia	no	575,183	9,693	706,558	1.4	50
DEU	Germany	Europe	no	5,800,986	\$ 44,276	3,280,530	1.4	51
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	2,248,831	1.3	52
IRQ	Iraq	Asia	no	47,245	1,060	82,150	1.3	53
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	5,809	1.3	54
HUN	Hungary	Europe	no	286,209	\$ 1,548	128,632	1.2	55
NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	779,356	1.0	56
BEL	Belgium	Europe	no	739,159	\$ 4,460	469,374	1.0	57
MYS	Malaysia	Asia	no	318,727	2,111	237,797	0.9	58
MNG	Mongolia	Asia	no	9,273	\$ 55	6,200	0.9	59
MWI	Malawi	Sub Saharan Africa	no	1,883	45	5,106	0.9	60
USA	United States of America	North America	no	22,004,154	\$ 118,733	14,586,740	0.8	61
SVK	Slovakia	Europe	no	124,390	\$ 623	87,268	0.7	62
ARG	Argentina	Latin America	no	403,909	\$ 2,558	368,736	0.7	63
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	5,628	0.7	64
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	192,032	0.7	65
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	224,458	0.6	66
EGY	Egypt	North Africa	no	234,939	\$ 1,280	218,894	0.6	67
THA	Thailand	Asia	no	394,598	\$ 1,739	318,522	0.6	68
CHN	China	Asia	no	4,512,825	28,876	5,926,612	0.5	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	16,193	0.5	70
POL	Poland	Europe	no	659,150	\$ 2,170	469,440	0.5	71
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	16,578	0.4	72
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	23,057	0.4	73
MAC	Macau	Asia	no	96,993	\$ 108	27,960	0.4	74
IND	India	Asia	no	1,429,881	5,862	1,727,111	0.3	75
BDI	Burundi	Sub Saharan Africa	no	168	5	1,611	0.3	76
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	7,296	0.3	77
ESP	Spain	Europe	no	2,695,139	\$ 4,313	1,407,405	0.3	78
SRB	Serbia	Europe	no	16,907	\$ 113	38,423	0.3	79
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	31,409	0.3	80
FRA	France	Europe	no	3,653,264	\$ 7,324	2,560,002	0.3	81
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072	434,666	0.3	82
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	2,132	0.2	83
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	1,014,483	0.2	84
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	17,011	0.2	85
VNM	Viet Nam	Asia	no	115,441	\$ 223	106,427	0.2	86
LUX	Luxembourg	Europe	no	45,036	\$ 102	53,334	0.2	87
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	9,586	0.2	88
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	363,704	0.2	89
PRT	Portugal	Europe	no	296,296	\$ 340	228,872	0.2	90
UKR	Ukraine	Europe	no	278,497	\$ 187	137,929	0.1	91
IRL	Ireland	Europe	no	244,117	\$ 306	211,390	0.1	92
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	13,145	0.1	93
EST	Estonia	Europe	no	28,069	\$ 22	19,217	0.1	94
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	1,479,819	0.1	95
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	14,857	0.1	96
CAN	Canada	North America	no	2,051,584	\$ 1,390	1,577,040	0.1	97
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	2,117	0.1	98
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	62,046	0.1	99
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	7,474	0.1	100
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	3,645	0.1	101
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	22,394	0.1	102
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	13,011	0.1	103
LVA	Latvia	Europe	no	39,277	\$ 15	24,010	0.1	104
LTU	Lithuania	Europe	no	53,397	\$ 20	36,306	0.1	105
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	14,007	0.1	106
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	29,717	0.0	107
NOR	Norway	Europe	no	386,892	\$ 150	412,990	0.0	108
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	2,013	0.0	109
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	8,721	0.0	110
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	12,170	0.0	111
KHM	Cambodia	Asia	no	4,335	\$ 2	11,242	0.0	112
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	12,954	0.0	113
DNK	Denmark	Europe	no	381,265	\$ 66	309,866	0.0	114
LKA	Sri Lanka	Asia	no	49,967	\$ 9	49,552	0.0	115
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	986	0.0	116
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	193,669	0.0	117
SWE	Sweden	Europe	no	369,792	\$ 52	458,973	0.0	118
FIN	Finland	Europe	no	209,050	\$ 17	238,746	0.0	119
BLR	Belarus	Europe	no	74,427	\$ 5	54,713	0.0	120
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	84,391	0.0	121
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	4,511	0.0	122
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	6,633	0.0	123
TCO	Chad	Sub Saharan Africa	no	6,664	\$ 1	7,588	0.0	124
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	11,898	0.0	125
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	3,636	0.0	126
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170			127
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023			128
NZL	New Zealand	Australia	no	238,609	2,343			129
AUS	Australia	Australia	no	1,832,960	\$ 397			130
BRA	Brazil	Latin America	no	1,715,746	\$ 77	2,087,890		131
GLP	Guadeloupe	Caribbean	no	19,838	3,795			132
SMR	San Marino	Europe	no	1,846	268			133
MTQ	Martinique	Caribbean	no	21,052	3,045			134
NPL	Nepal	Asia	no	6,537	865			135
TWN	Taiwan	Asia	no	872,409	32,961			136
MMR	Myanmar	Asia	no	20,572	660			137
DJI	Djibouti	Sub Saharan Africa	no	2,525	71			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
LIE	Liechtenstein	Europe	no	8,070	225			139
GIB	Gibraltar	Europe	no	3,141	78			140
MCO	Monaco	Europe	no	5,380	130			141
CYM	Cayman Islands	Caribbean	no	3,603	58			142
KWT	Kuwait	Asia	no	202,236	2,236			143
TCA	Turks and Caicos islands	Caribbean	no	332	3			144
YEM	Yemen	Asia	no	21,556	214			145
MYT	Mayotte	Sub Saharan Africa	no	2,341	17			146
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180			147
OMN	Oman	Asia	no	42,201	271			148
QAT	Qatar	Asia	no	113,981	661			149
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459			150
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2			151
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -			152
GUF	French Guiana	Latin America	no	8,339	\$ 0			153
FRO	Faroe Islands	Europe	no	1,012	\$ -			154
PRY	Paraguay	Latin America	no	19,203	\$ 1	18,333		155
URY	Uruguay	Latin America	no	28,590	\$ -	40,265		156
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	8,820		157
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	22,780		158
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	807		159
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	31,306		160
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	9,251		161
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	5,549		162
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	1,905		163
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	3,153		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -			165
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	20,604	43.3	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	1,211	31.0	2
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911	6,710	28.5	3
DMA	Dominica	Caribbean	yes	356	\$ 112	466	24.1	4
GRD	Grenada	Caribbean	yes	1,229	\$ 170	773	22.0	5
BRB	Barbados	Caribbean	yes	4,677	\$ 807	4,110	19.6	6
TON	Tonga	Pacific	yes	230	\$ 60	348	17.2	7
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	705	15.2	8
SLB	Solomon Islands	Asia	yes	211	\$ 103	679	15.2	9
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	51,766	12.2	10
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	14,252	8.5	11
PLW	Palau	Pacific	yes	279	\$ 11	171	6.2	12
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	1,198	5.7	13
VUT	Vanuatu	Asia	yes	102	\$ 35	699	5.1	14
FJI	Fiji	Asia	yes	2,100	\$ 105	3,189	3.3	15
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	9,480	2.7	16
WSM	Samoa	Pacific	yes	361	\$ 15	574	2.6	17
BLZ	Belize	Latin America	yes	1,251	\$ 20	1,401	1.4	18
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	541	0.8	19
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	208,765	0.6	20
BHS	Bahamas	Caribbean	yes	21,313	\$ 9	7,538	0.1	21
GUY	Guyana	Latin America	yes	3,468	\$ 0	2,226	0.0	22
CUB	Cuba	Caribbean	yes	46,280	\$ 374			23
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108			24
AIA	Anguilla	Caribbean	yes	20	\$ 5			25
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150			26
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082			27
NCL	New Caledonia	Asia	yes	4,771	\$ 259			28
ABW	Aruba	Caribbean	yes	6,526	\$ 327			29
BHR	Bahrain	Asia	yes	32,575	\$ 189			30
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	9,729		31
PFY	French Polynesia	Pacific	yes	6,568	\$ -			32
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	297		33
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	937		34
SUR	Suriname	Latin America	yes	2,797	\$ -			35
MDV	Maldives	Pacific	yes	907	\$ -	1,908		36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	652		37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	1,648		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	879		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	197		40



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HND	Honduras	Latin America	no	18,844	2,976	14,798	20.1	1
PHL	Philippines	Asia	no	186,193	35,940	199,897	18.0	2
SLV	El Salvador	Latin America	no	22,582	3,022	20,834	14.5	3
NIC	Nicaragua	Latin America	no	10,935	891	6,273	14.2	4
JPN	Japan	Asia	no	14,617,394	624,437	5,601,557	11.1	5
BTN	Bhutan	Asia	no	1,167	147	1,420	10.4	6
GEO	Georgia	Asia	no	21,157	968	11,484	8.4	7
CRI	Costa Rica	Latin America	no	38,475	2,701	34,896	7.7	8
ECU	Ecuador	Latin America	no	68,550	4,162	56,924	7.3	9
COL	Colombia	Latin America	no	325,385	19,055	276,072	6.9	10
GRC	Greece	Europe	no	642,888	20,095	292,874	6.9	11
PER	Peru	Latin America	no	189,980	9,450	147,000	6.4	12
ISL	Iceland	Europe	no	25,742	602	9,975	6.0	13
GTM	Guatemala	Latin America	no	38,263	2,304	39,987	5.8	14
KGZ	Kyrgyzstan	Asia	no	3,644	229	4,273	5.4	15
LBN	Lebanon	Asia	no	56,965	2,002	39,051	5.1	16
AZE	Azerbaijan	Asia	no	45,197	2,418	48,307	5.0	17
ARM	Armenia	Asia	no	14,187	466	9,710	4.8	18
CYP	Cyprus	Asia	no	23,484	1,053	22,539	4.7	19
TUN	Tunisia	North Africa	no	65,420	1,906	42,020	4.5	20
UZB	Uzbekistan	Asia	no	44,370	1,574	39,013	4.0	21
CHL	Chile	Latin America	no	326,640	7,647	197,331	3.9	22
BOL	Bolivia	Latin America	no	13,112	721	18,790	3.8	23
TJK	Tajikistan	Asia	no	5,576	210	5,570	3.8	24
DZA	Algeria	North Africa	no	259,977	5,884	155,538	3.8	25
MLT	Malta	Pacific	no	18,630	279	7,698	3.6	26
TUR	Turkey	Asia	no	1,578,228	26,102	727,056	3.6	27
PAN	Panama	Latin America	no	30,296	869	25,037	3.5	28
AFG	Afghanistan	Asia	no	16,132	520	15,162	3.4	29
ISR	Israel	Asia	no	293,550	7,083	210,353	3.4	30
BGD	Bangladesh	Asia	no	72,949	3,688	109,695	3.4	31
ALB	Albania	Europe	no	13,964	378	11,682	3.2	32
JOR	Jordan	Asia	no	40,997	863	27,820	3.1	33
BGR	Bulgaria	Europe	no	70,023	1,426	46,025	3.1	34
SVN	Slovenia	Europe	no	36,896	1,311	46,217	2.8	35
ITA	Italy	Europe	no	3,701,619	54,248	2,023,916	2.7	36
PAK	Pakistan	Asia	no	170,444	4,857	183,620	2.7	37
MEX	Mexico	Latin America	no	1,818,298	26,503	1,020,288	2.6	38
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	57,266	2.4	39
VEN	Venezuela	Latin America	no	435,869	9,004	389,038	2.3	40
AUT	Austria	Europe	no	615,592	7,442	377,063	2.0	41
MNE	Montenegro	Europe	no	2,738	77	4,083	1.9	42
HRV	Croatia	Europe	no	65,145	1,079	58,806	1.8	43
CHE	Switzerland	Europe	no	839,518	10,275	568,639	1.8	44
TKM	Turkmenistan	Asia	no	12,707	307	18,107	1.7	45
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	8,992	1.7	46
KAZ	Kazakhstan	Asia	no	180,409	2,124	131,868	1.6	47
MAR	Morocco	North Africa	no	136,300	1,325	88,578	1.5	48
IDN	Indonesia	Asia	no	575,183	9,693	686,633	1.4	49
IRQ	Iraq	Asia	no	47,245	1,060	77,842	1.4	50
DEU	Germany	Europe	no	5,800,986	44,276	3,341,391	1.3	51
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	28,996	2,280,719	1.3	52
HUN	Hungary	Europe	no	286,209	1,548	122,372	1.3	53
MDA	Moldova, Republic of	Europe	no	9,896	73	6,280	1.2	54
NLD	Netherlands	Europe	no	1,593,735	7,551	772,747	1.0	55
MNG	Mongolia	Asia	no	9,273	55	5,640	1.0	56
BEL	Belgium	Europe	no	739,159	4,460	477,644	0.9	57
MYS	Malaysia	Asia	no	318,727	2,111	229,566	0.9	58
MWI	Malawi	Sub Saharan Africa	no	1,883	45	4,980	0.9	59
USA	United States of America	North America	no	22,004,154	118,733	14,635,600	0.8	60
SVK	Slovakia	Europe	no	124,390	623	86,077	0.7	61
ARG	Argentina	Latin America	no	403,909	2,558	358,619	0.7	62
CZE	Czech Republic	Europe	no	336,714	1,251	179,432	0.7	63
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	5,582	0.7	64
HKG	Hong Kong	Asia	no	1,138,019	1,423	229,165	0.6	65
EGY	Egypt	North Africa	no	234,939	1,280	214,530	0.6	66
THA	Thailand	Asia	no	394,598	1,739	304,812	0.6	67
ZMB	Zambia	Sub Saharan Africa	no	9,806	75	14,300	0.5	68
CHN	China	Asia	no	4,512,825	28,876	5,957,012	0.5	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
POL	Poland	Europe	no	659,150	\$ 2,170	452,275	0.5	70
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	17,008	0.4	71
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	23,012	0.4	72
IND	India	Asia	no	1,429,881	5,862	1,712,645	0.3	73
BDI	Burundi	Sub Saharan Africa	no	168	5	1,589	0.3	74
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	6,978	0.3	75
ESP	Spain	Europe	no	2,695,139	\$ 4,313	1,388,744	0.3	76
SRB	Serbia	Europe	no	16,907	\$ 113	37,533	0.3	77
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	31,264	0.3	78
FRA	France	Europe	no	3,653,264	\$ 7,324	2,606,780	0.3	79
LUX	Luxembourg	Europe	no	45,036	\$ 102	37,925	0.3	80
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	1,014,760	0.2	81
VNM	Viet Nam	Asia	no	115,441	\$ 223	102,008	0.2	82
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	16,720	0.2	83
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	2,553	0.2	84
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	9,421	0.2	85
IRL	Ireland	Europe	no	244,117	\$ 306	171,260	0.2	86
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	356,475	0.2	87
PRT	Portugal	Europe	no	296,296	\$ 340	221,243	0.2	88
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	12,263	0.2	89
UKR	Ukraine	Europe	no	278,497	\$ 187	135,920	0.1	90
EST	Estonia	Europe	no	28,069	\$ 22	18,420	0.1	91
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	1,431,121	0.1	92
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	14,771	0.1	93
CAN	Canada	North America	no	2,051,584	\$ 1,390	1,549,652	0.1	94
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	55,939	0.1	95
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	2,097	0.1	96
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	6,988	0.1	97
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	11,467	0.1	98
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	9,578	0.1	99
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	3,586	0.1	100
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	22,030	0.1	101
LVA	Latvia	Europe	no	39,277	\$ 15	24,073	0.1	102
LTU	Lithuania	Europe	no	53,397	\$ 20	35,687	0.1	103
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	29,625	0.0	104
NOR	Norway	Europe	no	386,892	\$ 150	413,980	0.0	105
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	2,009	0.0	106
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	8,628	0.0	107
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	12,077	0.0	108
KHM	Cambodia	Asia	no	4,335	\$ 2	10,664	0.0	109
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	12,900	0.0	110
DNK	Denmark	Europe	no	381,265	\$ 66	315,664	0.0	111
LKA	Sri Lanka	Asia	no	49,967	\$ 9	48,916	0.0	112
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	805	0.0	113
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	176,769	0.0	114
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	8,619	0.0	115
SWE	Sweden	Europe	no	369,792	\$ 52	467,254	0.0	116
FIN	Finland	Europe	no	209,050	\$ 17	242,899	0.0	117
BLR	Belarus	Europe	no	74,427	\$ 5	53,379	0.0	118
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	75,516	0.0	119
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	4,231	0.0	120
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	6,633	0.0	121
TCD	Chad	Sub Saharan Africa	no	6,664	\$ 1	6,734	0.0	122
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	3,672	0.0	123
ARE	United Arab Emirates	Asia	no	248,015	6,688			124
MAC	Macau	Asia	no	96,993	\$ 108			125
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072			126
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170			127
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023			128
NZL	New Zealand	Australia	no	238,609	2,343			129
AUS	Australia	Australia	no	1,832,960	\$ 397			130
BRA	Brazil	Latin America	no	1,715,746	\$ 77	2,049,164		131
GLP	Guadeloupe	Caribbean	no	19,838	3,795			132
SMR	San Marino	Europe	no	1,846	268			133
MTQ	Martinique	Caribbean	no	21,052	3,045			134
NPL	Nepal	Asia	no	6,537	865			135
TWN	Taiwan	Asia	no	872,409	32,961			136
MMR	Myanmar	Asia	no	20,572	660			137
DJI	Djibouti	Sub Saharan Africa	no	2,525	71			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
LIE	Liechtenstein	Europe	no	8,070	225			139
GIB	Gibraltar	Europe	no	3,141	78			140
MCO	Monaco	Europe	no	5,380	130			141
CYM	Cayman Islands	Caribbean	no	3,603	58			142
KWT	Kuwait	Asia	no	202,236	2,236			143
TCA	Turks and Caicos islands	Caribbean	no	332	3			144
YEM	Yemen	Asia	no	21,556	214			145
MYT	Mayotte	Sub Saharan Africa	no	2,341	17			146
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180			147
OMN	Oman	Asia	no	42,201	271			148
QAT	Qatar	Asia	no	113,981	661			149
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459			150
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2			151
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -			152
GUF	French Guiana	Latin America	no	8,339	\$ 0			153
FRO	Faroe Islands	Europe	no	1,012	\$ -			154
PRY	Paraguay	Latin America	no	19,203	\$ 1	17,853		155
URY	Uruguay	Latin America	no	28,590	\$ -	39,161		156
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	8,810		157
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	21,729		158
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	743		159
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	30,776		160
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	8,909		161
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	5,493		162
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	1,905		163
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	2,826		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -			165
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	19,255	46.3	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	1,179	31.9	2
DMA	Dominica	Caribbean	yes	356	\$ 112	454	24.7	3
GRD	Grenada	Caribbean	yes	1,229	\$ 170	727	23.4	4
SLB	Solomon islands	Asia	yes	211	\$ 103	555	18.6	5
TON	Tonga	Pacific	yes	230	\$ 60	352	17.0	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	691	15.5	7
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	49,972	12.6	8
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	13,574	9.0	9
PLW	Palau	Pacific	yes	279	\$ 11	135	7.8	10
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	1,163	5.9	11
VUT	Vanuatu	Asia	yes	102	\$ 35	678	5.2	12
FJI	Fiji	Asia	yes	2,100	\$ 105	3,090	3.4	13
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	9,262	2.8	14
WSM	Samoa	Pacific	yes	361	\$ 15	557	2.7	15
BLZ	Belize	Latin America	yes	1,251	\$ 20	1,303	1.5	16
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	539	0.8	17
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	201,050	0.6	18
GUY	Guyana	Latin America	yes	3,468	\$ 0	2,238	0.0	19
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911			20
BRB	Barbados	Caribbean	yes	4,677	\$ 807			21
BHS	Bahamas	Caribbean	yes	21,313	\$ 9			22
CUB	Cuba	Caribbean	yes	46,280	\$ 374			23
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108			24
AIA	Anguilla	Caribbean	yes	20	\$ 5			25
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150			26
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082			27
NCL	New Caledonia	Asia	yes	4,771	\$ 259			28
ABW	Aruba	Caribbean	yes	6,526	\$ 327			29
BHR	Bahrain	Asia	yes	32,575	\$ 189			30
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	9,798		31
PYF	French Polynesia	Pacific	yes	6,568	\$ -			32
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	312		33
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	855		34
SUR	Suriname	Latin America	yes	2,797	\$ -			35
MDV	Maldives	Pacific	yes	907	\$ -	1,817		36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	620		37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	1,579		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	877		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	200		40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
PHL	Philippines	Asia	no	46,143	1,243	26.9	1
SLV	El Salvador	Latin America	no	4,297	57	13.2	2
HND	Honduras	Latin America	no	5,414	66	12.2	3
GLP	Guadeloupe	Caribbean	no	904	9	9.9	4
KGZ	Kyrgyzstan	Asia	no	756	4	5.3	5
NPL	Nepal	Asia	no	2,411	12	5.1	6
NIC	Nicaragua	Latin America	no	2,310	12	5.0	7
MTQ	Martinique	Caribbean	no	889	4	4.4	8
TWN	Taiwan	Asia	no	38,310	163	4.3	9
JPN	Japan	Asia	no	542,290	2,246	4.1	10
BTN	Bhutan	Asia	no	371	1	3.9	11
GTM	Guatemala	Latin America	no	8,748	34	3.9	12
TJK	Tajikistan	Asia	no	2,412	9	3.7	13
UZB	Uzbekistan	Asia	no	10,382	36	3.5	14
CRI	Costa Rica	Latin America	no	6,892	23	3.3	15
GRC	Greece	Europe	no	27,597	81	2.9	16
AZE	Azerbaijan	Asia	no	12,666	36	2.8	17
SMR	San Marino	Europe	no	113	0	2.8	18
ECU	Ecuador	Latin America	no	10,202	28	2.7	19
BGD	Bangladesh	Asia	no	14,034	38	2.7	20
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305	2.5	21
AFG	Afghanistan	Asia	no	9,988	24	2.4	22
COL	Colombia	Latin America	no	53,054	130	2.4	23
CHL	Chile	Latin America	no	18,070	44	2.4	24
PAK	Pakistan	Asia	no	37,562	90	2.4	25
GEO	Georgia	Asia	no	3,815	9	2.4	26
PER	Peru	Latin America	no	24,717	57	2.3	27
ARM	Armenia	Asia	no	2,899	6	2.0	28
MMR	Myanmar	Asia	no	9,829	19	1.9	29
ARE	United Arab Emirates	Asia	no	11,165	19	1.7	30
IDN	Indonesia	Asia	no	113,457	190	1.7	31
BGR	Bulgaria	Europe	no	9,040	15	1.6	32
BOL	Bolivia	Latin America	no	4,521	7	1.6	33
TKM	Turkmenistan	Asia	no	3,779	5	1.4	34
PAN	Panama	Latin America	no	5,115	7	1.4	35
DZA	Algeria	North Africa	no	67,908	92	1.4	36
CYP	Cyprus	Asia	no	1,154	2	1.4	37
IRQ	Iraq	Asia	no	15,555	18	1.2	38
TUR	Turkey	Asia	no	164,353	186	1.1	39
ITA	Italy	Europe	no	188,526	193	1.0	40
ALB	Albania	Europe	no	3,381	3	1.0	41
VEN	Venezuela	Latin America	no	42,697	43	1.0	42
KAZ	Kazakhstan	Asia	no	20,880	21	1.0	43
LBN	Lebanon	Asia	no	4,139	4	0.9	44
MEX	Mexico	Latin America	no	260,866	245	0.9	45
SVN	Slovenia	Europe	no	2,231	2	0.9	46
BDI	Burundi	Sub Saharan Africa	no	145	0	0.9	47
MNE	Montenegro	Europe	no	269	0	0.9	48
NZL	New Zealand	Australia	no	12,682	10	0.8	49
SYR	Syrian Arab Republic	Asia	no	18,783	14	0.8	50
TUN	Tunisia	North Africa	no	14,190	11	0.8	51
GIB	Gibraltar	Europe	no	274	0	0.7	52
RWA	Rwanda	Sub Saharan Africa	no	962	1	0.7	53
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	0.7	54
HRV	Croatia	Europe	no	6,064	4	0.7	55
KWT	Kuwait	Asia	no	6,168	4	0.7	56
LIE	Liechtenstein	Europe	no	198	0	0.7	57
ISR	Israel	Asia	no	22,505	15	0.7	58
MCO	Monaco	Europe	no	123	0	0.7	59
JOR	Jordan	Asia	no	10,652	7	0.6	60
DJI	Djibouti	Sub Saharan Africa	no	656	0	0.6	61
QAT	Qatar	Asia	no	2,116	1	0.6	62
MLT	Malta	Pacific	no	1,330	1	0.6	63
OMN	Oman	Asia	no	4,095	2	0.5	64
MWI	Malawi	Sub Saharan Africa	no	1,519	1	0.5	65
CHN	China	Asia	no	599,699	310	0.5	66
ISL	Iceland	Europe	no	1,071	1	0.5	67
MYS	Malaysia	Asia	no	37,377	19	0.5	68
AUT	Austria	Europe	no	28,002	11	0.4	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
USA	United States of America	North America	no	1,224,802	474	0.4	70
MYT	Mayotte	Sub Saharan Africa	no	154	0	0.4	71
CYM	Cayman Islands	Caribbean	no	81	-	0.4	72
YEM	Yemen	Asia	no	10,133	4	0.4	73
IND	India	Asia	no	320,919	117	0.4	74
TCA	Turks and Caicos islands	Caribbean	no	28	-	0.4	75
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	0.4	76
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	0.3	77
LAO	Lao People's Democratic Republic	Asia	no	938	0	0.3	78
ARG	Argentina	Latin America	no	39,520	12	0.3	79
BRN	Brunei Darussalam	Asia	no	895	0	0.3	80
SRB	Serbia	Europe	no	1,938	1	0.3	81
CHE	Switzerland	Europe	no	40,078	12	0.3	82
MAR	Morocco	North Africa	no	41,389	12	0.3	83
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5	0.3	84
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.3	85
UGA	Uganda	Sub Saharan Africa	no	3,787	1	0.2	86
MNG	Mongolia	Asia	no	2,335	1	0.2	87
EGY	Egypt	North Africa	no	101,974	22	0.2	88
DEU	Germany	Europe	no	262,867	54	0.2	89
THA	Thailand	Asia	no	43,178	9	0.2	90
MDA	Moldova, Republic of	Europe	no	3,416	1	0.2	91
PRK	Dem People's Rep of Korea	Asia	no	10,245	2	0.2	92
HUN	Hungary	Europe	no	30,434	5	0.2	93
SVK	Slovakia	Europe	no	9,245	2	0.2	94
BEL	Belgium	Europe	no	29,496	4	0.2	95
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	0.2	96
KEN	Kenya	Sub Saharan Africa	no	8,730	1	0.2	97
CZE	Czech Republic	Europe	no	23,126	3	0.1	98
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	0.1	99
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.1	100
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	0.1	101
SAU	Saudi Arabia	Asia	no	73,922	8	0.1	102
NLD	Netherlands	Europe	no	49,481	5	0.1	103
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	0.1	104
LUX	Luxembourg	Europe	no	2,462	0	0.1	105
POL	Poland	Europe	no	60,706	6	0.1	106
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.1	107
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	0.1	108
FRA	France	Europe	no	236,236	17	0.1	109
RUS	Russian Federation	Europe	no	288,219	21	0.1	110
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.1	111
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	0.1	112
VNM	Viet Nam	Asia	no	24,066	1	0.1	113
PRT	Portugal	Europe	no	18,087	1	0.1	114
ESP	Spain	Europe	no	122,131	8	0.1	115
MDG	Madagascar	Sub Saharan Africa	no	1,546	0	0.1	116
KOR	Republic of Korea	Asia	no	95,180	5	0.1	117
ERI	Eritrea	Sub Saharan Africa	no	1,076	0	0.1	118
HKG	Hong Kong	Asia	no	47,718	2	0.0	119
SDN	Sudan	Sub Saharan Africa	no	12,166	1	0.0	120
MAC	Macau	Asia	no	1,989	0	0.0	121
EST	Estonia	Europe	no	2,851	0	0.0	122
IRL	Ireland	Europe	no	16,223	1	0.0	123
CAN	Canada	North America	no	121,895	4	0.0	124
CAF	Central African Republic	Sub Saharan Africa	no	351	-	0.0	125
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-	0.0	126
UKR	Ukraine	Europe	no	32,769	1	0.0	127
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	0.0	128
SOM	Somalia	Sub Saharan Africa	no	2,303	0	0.0	129
KHM	Cambodia	Asia	no	1,623	-	0.0	130
DNK	Denmark	Europe	no	31,778	0	0.0	131
LVA	Latvia	Europe	no	4,998	-	0.0	132
LTU	Lithuania	Europe	no	7,227	0	0.0	133
NOR	Norway	Europe	no	33,800	0	0.0	134
AUS	Australia	Australia	no	47,971	1	0.0	135
AGO	Angola	Sub Saharan Africa	no	9,237	0	0.0	136
GAB	Gabon	Sub Saharan Africa	no	2,633	-	0.0	137
GIN	Guinea	Sub Saharan Africa	no	1,643	-	0.0	138



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NAM	Namibia	Sub Saharan Africa	no	1,706	-	0.0	139
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	0.0	140
SEN	Senegal	Sub Saharan Africa	no	5,536	-	0.0	141
LKA	Sri Lanka	Asia	no	14,385	0	-	142
BLR	Belarus	Europe	no	21,160	-	-	143
FRO	Faroe Islands	Europe	no	42	-	-	144
FIN	Finland	Europe	no	14,927	-	-	145
SWE	Sweden	Europe	no	27,971	0	-	146
BRA	Brazil	Latin America	no	300,613	0	-	147
GUF	French Guiana	Latin America	no	378	-	-	148
PRY	Paraguay	Latin America	no	4,301	-	-	149
URY	Uruguay	Latin America	no	4,269	-	-	150
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	151
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	152
TCO	Chad	Sub Saharan Africa	no	4,004	-	-	153
COG	Congo	Sub Saharan Africa	no	3,326	-	-	154
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	155
GMB	Gambia	Sub Saharan Africa	no	334	-	-	156
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	157
LBR	Liberia	Sub Saharan Africa	no	263	-	-	158
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	159
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	160
NER	Niger	Sub Saharan Africa	no	1,230	-	-	161
REU	Réunion	Sub Saharan Africa	no	2,161	-	-	162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	163
TGO	Togo	Sub Saharan Africa	no	529	-	-	164
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	165
VUT	Vanuatu	Asia	yes	25	3	99.6	1
SLB	Solomon islands	Asia	yes	85	5	59.2	2
TON	Tonga	Pacific	yes	47	2	40.9	3
PNG	Papua New Guinea	Asia	yes	1,289	20	15.8	4
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35	15.2	5
DMA	Dominica	Caribbean	yes	43	1	13.5	6
AIA	Anguilla	Caribbean	yes	2	-	10.0	7
VGB	British Virgin Islands	Caribbean	yes	18	0	8.8	8
ATG	Antigua and Barbuda	Caribbean	yes	272	2	8.8	9
HTI	Haiti	Caribbean	yes	1,584	12	7.5	10
DOM	Dominican Republic	Caribbean	yes	13,790	68	5.0	11
NCL	New Caledonia	Asia	yes	107	0	4.1	12
BRB	Barbados	Caribbean	yes	253	1	3.8	13
GRD	Grenada	Caribbean	yes	63	0	3.7	14
LCA	Saint Lucia	Caribbean	yes	73	0	3.5	15
VIR	United States Virgin Islands	Caribbean	yes	82	0	3.3	16
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	2.6	17
PRI	Puerto Rico	Caribbean	yes	3,197	8	2.4	18
WSM	Samoa	Pacific	yes	93	0	2.4	19
FJI	Fiji	Asia	yes	309	0	1.3	20
ABW	Aruba	Caribbean	yes	358	0	1.2	21
BLZ	Belize	Latin America	yes	65	0	1.1	22
JAM	Jamaica	Caribbean	yes	4,148	4	0.9	23
PLW	Palau	Pacific	yes	25	-	0.8	24
BHR	Bahrain	Asia	yes	1,670	1	0.5	25
COM	Comoros	Sub Saharan Africa	yes	156	0	0.4	26
SGP	Singapore	Pacific	yes	18,751	4	0.2	27
CUB	Cuba	Caribbean	yes	5,936	1	0.2	28
BHS	Bahamas	Caribbean	yes	985	-	0.0	29
GUY	Guyana	Latin America	yes	884	-	0.0	30
PYF	French Polynesia	Pacific	yes	116	-	-	31
MDV	Maldives	Pacific	yes	154	-	-	32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	-	33
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	34
SUR	Suriname	Latin America	yes	364	-	-	35
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	36
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	37
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	-	38
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	39
SYC	Seychelles	Sub Saharan Africa	yes	631	-	-	40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	Risk indicator GNE [USD million]	AAL/GNE [‰]	Ranking
AFG	Afghanistan	Asia	no	9,988	24	1,852	13.2	1
PHL	Philippines	Asia	no	46,143	1,243	203,208	6.1	2
HND	Honduras	Latin America	no	5,414	66	18,594	3.6	3
SLV	El Salvador	Latin America	no	4,297	57	24,921	2.3	4
NIC	Nicaragua	Latin America	no	2,310	12	8,405	1.4	5
TJK	Tajikistan	Asia	no	2,412	9	8,227	1.1	6
AZE	Azerbaijan	Asia	no	12,666	36	33,777	1.1	7
UZB	Uzbekistan	Asia	no	10,382	36	38,768	0.9	8
GTM	Guatemala	Latin America	no	8,748	34	45,670	0.7	9
KGZ	Kyrgyzstan	Asia	no	756	4	6,067	0.7	10
GEO	Georgia	Asia	no	3,815	9	13,709	0.7	11
CRI	Costa Rica	Latin America	no	6,892	23	36,941	0.6	12
ARM	Armenia	Asia	no	2,899	6	11,639	0.5	13
PAK	Pakistan	Asia	no	37,562	90	186,087	0.5	14
ECU	Ecuador	Latin America	no	10,202	28	61,265	0.5	15
COL	Colombia	Latin America	no	53,054	130	294,580	0.4	16
JPN	Japan	Asia	no	542,290	2,246	5,396,265	0.4	17
BOL	Bolivia	Latin America	no	4,521	7	18,301	0.4	18
PER	Peru	Latin America	no	24,717	57	152,561	0.4	19
BGD	Bangladesh	Asia	no	14,034	38	106,991	0.4	20
BGR	Bulgaria	Europe	no	9,040	15	48,622	0.3	21
IDN	Indonesia	Asia	no	113,457	190	695,009	0.3	22
GRC	Greece	Europe	no	27,597	81	327,811	0.3	23
PAN	Panama	Latin America	no	5,115	7	27,738	0.3	24
TKM	Turkmenistan	Asia	no	3,779	5	20,575	0.3	25
ALB	Albania	Europe	no	3,381	3	14,377	0.2	26
SYR	Syrian Arab Republic	Asia	no	18,783	14	59,401	0.2	27
TUR	Turkey	Asia	no	164,353	186	774,921	0.2	28
TUN	Tunisia	North Africa	no	14,190	11	46,643	0.2	29
MEX	Mexico	Latin America	no	260,866	245	1,049,803	0.2	30
CHL	Chile	Latin America	no	18,070	44	198,120	0.2	31
JOR	Jordan	Asia	no	10,652	7	33,470	0.2	32
KAZ	Kazakhstan	Asia	no	20,880	21	127,087	0.2	33
MWI	Malawi	Sub Saharan Africa	no	1,519	1	5,605	0.1	34
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	10,902	0.1	35
VEN	Venezuela	Latin America	no	42,697	43	346,724	0.1	36
MAR	Morocco	North Africa	no	41,389	12	99,808	0.1	37
MYS	Malaysia	Asia	no	37,377	19	195,443	0.1	38
EGY	Egypt	North Africa	no	101,974	22	229,362	0.1	39
MLT	Malta	Pacific	no	1,330	1	8,111	0.1	40
ITA	Italy	Europe	no	188,526	193	2,087,749	0.1	41
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	14,723	0.1	42
MDA	Moldova, Republic of	Europe	no	3,416	1	8,053	0.1	43
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	3,511	0.1	44
LBN	Lebanon	Asia	no	4,139	4	47,915	0.1	45
ARE	United Arab Emirates	Asia	no	11,165	19	270,334	0.1	46
ISR	Israel	Asia	no	22,505	15	212,896	0.1	47
HRV	Croatia	Europe	no	6,064	4	61,162	0.1	48
MNG	Mongolia	Asia	no	2,335	1	6,675	0.1	49
IND	India	Asia	no	320,919	117	1,783,129	0.1	50
CYP	Cyprus	Asia	no	1,154	2	24,623	0.1	51
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	26,224	0.1	52
SVN	Slovenia	Europe	no	2,231	2	46,643	0.1	53
ISL	Iceland	Europe	no	1,071	1	11,313	0.1	54
CHN	China	Asia	no	599,699	310	5,694,512	0.1	55
UGA	Uganda	Sub Saharan Africa	no	3,787	1	18,757	0.1	56
MNE	Montenegro	Europe	no	269	0	5,265	0.0	57
LAO	Lao People's Democratic Republic	Asia	no	938	0	7,629	0.0	58
HUN	Hungary	Europe	no	30,434	5	120,269	0.0	59
KEN	Kenya	Sub Saharan Africa	no	8,730	1	35,486	0.0	60
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	11,309	0.0	61
CHE	Switzerland	Europe	no	40,078	12	468,037	0.0	62
AUT	Austria	Europe	no	28,002	11	362,737	0.0	63
ARG	Argentina	Latin America	no	39,520	12	356,545	0.0	64
USA	United States of America	North America	no	1,224,802	474	15,103,640	0.0	65
THA	Thailand	Asia	no	43,178	9	295,072	0.0	66
DEU	Germany	Europe	no	262,867	54	3,101,126	0.0	67
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	20,030	0.0	68
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	15,617	0.0	69



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SVK	Slovakia	Europe	no	9,245	2	88,405	0.0	70
CZE	Czech Republic	Europe	no	23,126	3	182,876	0.0	71
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	369,463	0.0	72
SAU	Saudi Arabia	Asia	no	73,922	8	341,826	0.0	73
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	0.0	74
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	75
RUS	Russian Federation	Europe	no	288,219	21	1,356,393	0.0	76
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	2,325,009	0.0	77
BEL	Belgium	Europe	no	29,496	4	456,696	0.0	78
SRB	Serbia	Europe	no	1,938	1	44,764	0.0	79
NLD	Netherlands	Europe	no	49,481	5	721,171	0.0	80
POL	Poland	Europe	no	60,706	6	475,111	0.0	81
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	35,978	0.0	82
LUX	Luxembourg	Europe	no	2,462	0	36,700	0.0	83
FRA	France	Europe	no	236,236	17	2,620,062	0.0	84
VNM	Viet Nam	Asia	no	24,066	1	117,363	0.0	85
SDN	Sudan	Sub Saharan Africa	no	12,166	1	61,511	0.0	86
ESP	Spain	Europe	no	122,131	8	1,437,861	0.0	87
HKG	Hong Kong	Asia	no	47,718	2	211,863	0.0	88
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	8,897	0.0	89
MAC	Macau	Asia	no	1,989	0	11,994	0.0	90
EST	Estonia	Europe	no	2,851	0	17,933	0.0	91
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	23,429	0.0	92
GLP	Guadeloupe	Caribbean	no	904	9			93
MTQ	Martinique	Caribbean	no	889	4			94
SMR	San Marino	Europe	no	113	0			95
NPL	Nepal	Asia	no	2,411	12			96
BTN	Bhutan	Asia	no	371	1			97
TWN	Taiwan	Asia	no	38,310	163			98
MMR	Myanmar	Asia	no	9,829	19			99
BDI	Burundi	Sub Saharan Africa	no	145	0			100
DJI	Djibouti	Sub Saharan Africa	no	656	0			101
LIE	Liechtenstein	Europe	no	198	0			102
RWA	Rwanda	Sub Saharan Africa	no	962	1			103
GIB	Gibraltar	Europe	no	274	0			104
MCO	Monaco	Europe	no	123	0			105
DZA	Algeria	North Africa	no	67,908	92			106
IRQ	Iraq	Asia	no	15,555	18			107
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			108
CYM	Cayman Islands	Caribbean	no	81	-			109
NZL	New Zealand	Australia	no	12,682	10			110
KWT	Kuwait	Asia	no	6,168	4			111
TCA	Turks and Caicos islands	Caribbean	no	28	-			112
YEM	Yemen	Asia	no	10,133	4			113
BRN	Brunei Darussalam	Asia	no	895	0			114
MYT	Mayotte	Sub Saharan Africa	no	154	0			115
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			116
OMN	Oman	Asia	no	4,095	2			117
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			118
QAT	Qatar	Asia	no	2,116	1			119
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			120
IRL	Ireland	Europe	no	16,223	1	171,957		121
PRT	Portugal	Europe	no	18,087	1	245,251		122
CAF	Central African Republic	Sub Saharan Africa	no	351	-			123
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			124
KOR	Republic of Korea	Asia	no	95,180	5	986,184		125
CAN	Canada	North America	no	121,895	4	1,606,667		126
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			127
UKR	Ukraine	Europe	no	32,769	1	141,773		128
SOM	Somalia	Sub Saharan Africa	no	2,303	0			129
KHM	Cambodia	Asia	no	1,623	-	11,854		130
LTU	Lithuania	Europe	no	7,227	0	36,811		131
NOR	Norway	Europe	no	33,800	0	358,009		132
LVA	Latvia	Europe	no	4,998	-	24,210		133
NAM	Namibia	Sub Saharan Africa	no	1,706	-	12,035		134
AGO	Angola	Sub Saharan Africa	no	9,237	0	72,456		135
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	168,996		136
GAB	Gabon	Sub Saharan Africa	no	2,633	-	10,274		137
SEN	Senegal	Sub Saharan Africa	no	5,536	-	15,485		138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
LKA	Sri Lanka	Asia	no	14,385	0	54,079		139
AUS	Australia	Australia	no	47,971	1			140
DNK	Denmark	Europe	no	31,778	0	292,535		141
GIN	Guinea	Sub Saharan Africa	no	1,643	-	4,711		142
SWE	Sweden	Europe	no	27,971	0	431,251		143
FIN	Finland	Europe	no	14,927	-	235,640		144
TCD	Chad	Sub Saharan Africa	no	4,004	-	9,469		145
COG	Congo	Sub Saharan Africa	no	3,326	-	8,109		146
REU	Réunion	Sub Saharan Africa	no	2,161	-			147
BRA	Brazil	Latin America	no	300,613	0	2,108,637		148
BLR	Belarus	Europe	no	21,160	-	62,212		149
FRO	Faroe Islands	Europe	no	42	-			150
GUF	French Guiana	Latin America	no	378	-			151
PRY	Paraguay	Latin America	no	4,301	-	17,941		152
URY	Uruguay	Latin America	no	4,269	-	39,936		153
BEN	Benin	Sub Saharan Africa	no	1,223	-	7,536		154
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	21,734		156
GMB	Gambia	Sub Saharan Africa	no	334	-	963		157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	35,414		158
LBR	Liberia	Sub Saharan Africa	no	263	-			159
MLI	Mali	Sub Saharan Africa	no	1,887	-			160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	4,195		161
NER	Niger	Sub Saharan Africa	no	1,230	-			162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	2,142		163
TGO	Togo	Sub Saharan Africa	no	529	-			164
ESH	Western Sahara	Sub Saharan Africa	no	418	-			165
SLB	Solomon islands	Asia	yes	85	5	885	5.7	1
TON	Tonga	Pacific	yes	47	2	510	3.7	2
VUT	Vanuatu	Asia	yes	25	3	743	3.4	3
PNG	Papua New Guinea	Asia	yes	1,289	20	9,217	2.2	4
ATG	Antigua and Barbuda	Caribbean	yes	272	2	1,329	1.8	5
HTI	Haiti	Caribbean	yes	1,584	12	9,743	1.2	6
DOM	Dominican Republic	Caribbean	yes	13,790	68	57,847	1.2	7
DMA	Dominica	Caribbean	yes	43	1	573	1.1	8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914	0.4	9
WSM	Samoa	Pacific	yes	93	0	727	0.3	10
BRB	Barbados	Caribbean	yes	253	1	4,317	0.2	11
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.2	12
JAM	Jamaica	Caribbean	yes	4,148	4	16,776	0.2	13
GRD	Grenada	Caribbean	yes	63	0	996	0.2	14
FJI	Fiji	Asia	yes	309	0	3,569	0.1	15
SGP	Singapore	Pacific	yes	18,751	4	150,187	0.0	16
AIA	Anguilla	Caribbean	yes	2	-			17
VGB	British Virgin Islands	Caribbean	yes	18	0			18
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			19
VIR	United States Virgin Islands	Caribbean	yes	82	0			20
PRI	Puerto Rico	Caribbean	yes	3,197	8			21
NCL	New Caledonia	Asia	yes	107	0			22
ABW	Aruba	Caribbean	yes	358	0			23
PLW	Palau	Pacific	yes	25	-			24
BLZ	Belize	Latin America	yes	65	0			25
COM	Comoros	Sub Saharan Africa	yes	156	0			26
CUB	Cuba	Caribbean	yes	5,936	1			27
BHR	Bahrain	Asia	yes	1,670	1			28
BHS	Bahamas	Caribbean	yes	985	-			29
GUY	Guyana	Latin America	yes	884	-			30
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	10,934		31
PYF	French Polynesia	Pacific	yes	116	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			33
SYC	Seychelles	Sub Saharan Africa	yes	631	-			34
MDV	Maldives	Pacific	yes	154	-	2,244		35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	766		36
SUR	Suriname	Latin America	yes	364	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
PHL	Philippines	Asia	no	46,143	1,243	19,403	64.0	1
SLV	El Salvador	Latin America	no	4,297	57	2,312	24.6	2
HND	Honduras	Latin America	no	5,414	66	2,777	23.8	3
NIC	Nicaragua	Latin America	no	2,310	12	627	18.3	4
GTM	Guatemala	Latin America	no	8,748	34	4,254	7.9	5
BGD	Bangladesh	Asia	no	14,034	38	5,387	7.1	6
PAK	Pakistan	Asia	no	37,562	90	14,053	6.4	7
AZE	Azerbaijan	Asia	no	12,666	36	5,852	6.1	8
TJK	Tajikistan	Asia	no	2,412	9	1,658	5.4	9
UZB	Uzbekistan	Asia	no	10,382	36	6,853	5.3	10
ARM	Armenia	Asia	no	2,899	6	1,231	4.6	11
KGZ	Kyrgyzstan	Asia	no	756	4	877	4.6	12
PAN	Panama	Latin America	no	5,115	7	1,561	4.5	13
ECU	Ecuador	Latin America	no	10,202	28	6,807	4.1	14
GEO	Georgia	Asia	no	3,815	9	2,453	3.7	15
PER	Peru	Latin America	no	24,717	57	15,659	3.7	16
CRI	Costa Rica	Latin America	no	6,892	23	6,358	3.6	17
ALB	Albania	Europe	no	3,381	3	952	3.6	18
IDN	Indonesia	Asia	no	113,457	190	64,015	3.0	19
COL	Colombia	Latin America	no	53,054	130	46,769	2.8	20
BOL	Bolivia	Latin America	no	4,521	7	2,718	2.6	21
TKM	Turkmenistan	Asia	no	3,779	5	2,212	2.4	22
SYR	Syrian Arab Republic	Asia	no	18,783	14	5,991	2.4	23
JPN	Japan	Asia	no	542,290	2,246	1,094,349	2.1	24
MEX	Mexico	Latin America	no	260,866	245	120,640	2.0	25
BGR	Bulgaria	Europe	no	9,040	15	7,539	1.9	26
TUR	Turkey	Asia	no	164,353	186	104,758	1.8	27
CHL	Chile	Latin America	no	18,070	44	26,588	1.7	28
GRC	Greece	Europe	no	27,597	81	54,736	1.5	29
TUN	Tunisia	North Africa	no	14,190	11	7,209	1.5	30
KAZ	Kazakhstan	Asia	no	20,880	21	16,117	1.3	31
JOR	Jordan	Asia	no	10,652	7	5,910	1.1	32
VEN	Venezuela	Latin America	no	42,697	43	42,419	1.0	33
EGY	Egypt	North Africa	no	101,974	22	24,436	0.9	34
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	1,683	0.8	35
LBN	Lebanon	Asia	no	4,139	4	4,711	0.8	36
MWI	Malawi	Sub Saharan Africa	no	1,519	1	976	0.8	37
ARE	United Arab Emirates	Asia	no	11,165	19	24,545	0.8	38
MAR	Morocco	North Africa	no	41,389	12	15,913	0.8	39
MYS	Malaysia	Asia	no	37,377	19	30,273	0.6	40
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	2,153	0.6	41
MNG	Mongolia	Asia	no	2,335	1	851	0.6	42
IND	India	Asia	no	320,919	117	198,830	0.6	43
MDA	Moldova, Republic of	Europe	no	3,416	1	1,377	0.5	44
UGA	Uganda	Sub Saharan Africa	no	3,787	1	2,015	0.5	45
LAO	Lao People's Democratic Republic	Asia	no	938	0	672	0.5	46
ITA	Italy	Europe	no	188,526	193	435,241	0.4	47
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	1,166	0.4	48
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	4,052	0.4	49
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	719	0.4	50
MLT	Malta	Pacific	no	1,330	1	1,711	0.4	51
CHN	China	Asia	no	599,699	310	791,999	0.4	52
CYP	Cyprus	Asia	no	1,154	2	4,558	0.4	53
HRV	Croatia	Europe	no	6,064	4	13,084	0.3	54
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	935	0.3	55
KEN	Kenya	Sub Saharan Africa	no	8,730	1	4,226	0.3	56
ISR	Israel	Asia	no	22,505	15	52,616	0.3	57
MNE	Montenegro	Europe	no	269	0	775	0.3	58
SVN	Slovenia	Europe	no	2,231	2	9,752	0.2	59
ARG	Argentina	Latin America	no	39,520	12	55,024	0.2	60
THA	Thailand	Asia	no	43,178	9	41,294	0.2	61
CHE	Switzerland	Europe	no	40,078	12	60,549	0.2	62
VNM	Viet Nam	Asia	no	24,066	1	6,947	0.2	63
HUN	Hungary	Europe	no	30,434	5	28,084	0.2	64
USA	United States of America	North America	no	1,224,802	474	2,522,700	0.2	65
ISL	Iceland	Europe	no	1,071	1	3,261	0.2	66
AUT	Austria	Europe	no	28,002	11	73,430	0.2	67
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	3,498	0.1	68
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	71,742	0.1	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [‰]	
SWZ	Swaziland	Sub Saharan Africa	no	769	0	913	0.1	70
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,130	0.1	71
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	3,029	0.1	72
SVK	Slovakia	Europe	no	9,245	2	17,073	0.1	73
HKG	Hong Kong	Asia	no	47,718	2	18,948	0.1	74
DEU	Germany	Europe	no	262,867	54	647,378	0.1	75
CZE	Czech Republic	Europe	no	23,126	3	41,897	0.1	76
SAU	Saudi Arabia	Asia	no	73,922	8	97,875	0.1	77
SRB	Serbia	Europe	no	1,938	1	7,380	0.1	78
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	1,281	0.1	79
RUS	Russian Federation	Europe	no	288,219	21	287,875	0.1	80
POL	Poland	Europe	no	60,706	6	88,643	0.1	81
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	518,869	0.1	82
SDN	Sudan	Sub Saharan Africa	no	12,166	1	9,428	0.1	83
MAC	Macau	Asia	no	1,989	0	2,186	0.1	84
BEL	Belgium	Europe	no	29,496	4	113,598	0.0	85
FRA	France	Europe	no	236,236	17	635,621	0.0	86
ESP	Spain	Europe	no	122,131	8	292,417	0.0	87
EST	Estonia	Europe	no	2,851	0	3,959	0.0	88
KOR	Republic of Korea	Asia	no	95,180	5	155,748	0.0	89
NLD	Netherlands	Europe	no	49,481	5	221,964	0.0	90
LUX	Luxembourg	Europe	no	2,462	0	8,868	0.0	91
PRT	Portugal	Europe	no	18,087	1	49,074	0.0	92
UKR	Ukraine	Europe	no	32,769	1	27,731	0.0	93
IRL	Ireland	Europe	no	16,223	1	39,102	0.0	94
CAN	Canada	North America	no	121,895	4	343,217	0.0	95
LTU	Lithuania	Europe	no	7,227	0	7,241	0.0	96
LKA	Sri Lanka	Asia	no	14,385	0	7,718	0.0	97
AFG	Afghanistan	Asia	no	9,988	24	-	-	98
CMR	Cameroon	Sub Saharan Africa	no	6,256	0			99
GLP	Guadeloupe	Caribbean	no	904	9			100
MTQ	Martinique	Caribbean	no	889	4			101
SMR	San Marino	Europe	no	113	0			102
NPL	Nepal	Asia	no	2,411	12			103
BTN	Bhutan	Asia	no	371	1			104
TWN	Taiwan	Asia	no	38,310	163			105
MMR	Myanmar	Asia	no	9,829	19			106
BDI	Burundi	Sub Saharan Africa	no	145	0			107
DJI	Djibouti	Sub Saharan Africa	no	656	0			108
LIE	Liechtenstein	Europe	no	198	0			109
RWA	Rwanda	Sub Saharan Africa	no	962	1			110
GIB	Gibraltar	Europe	no	274	0			111
MCO	Monaco	Europe	no	123	0			112
DZA	Algeria	North Africa	no	67,908	92			113
IRQ	Iraq	Asia	no	15,555	18			114
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			115
CYM	Cayman Islands	Caribbean	no	81	-			116
NZL	New Zealand	Australia	no	12,682	10			117
KWT	Kuwait	Asia	no	6,168	4			118
TCA	Turks and Caicos islands	Caribbean	no	28	-			119
YEM	Yemen	Asia	no	10,133	4			120
BRN	Brunei Darussalam	Asia	no	895	0			121
MYT	Mayotte	Sub Saharan Africa	no	154	0			122
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			123
OMN	Oman	Asia	no	4,095	2			124
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			125
QAT	Qatar	Asia	no	2,116	1			126
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			127
CAF	Central African Republic	Sub Saharan Africa	no	351	-			128
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			129
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			130
SOM	Somalia	Sub Saharan Africa	no	2,303	0			131
KHM	Cambodia	Asia	no	1,623	-	713		132
NOR	Norway	Europe	no	33,800	0	92,372		133
LVA	Latvia	Europe	no	4,998	-	4,122		134
NAM	Namibia	Sub Saharan Africa	no	1,706	-	2,692		135
AGO	Angola	Sub Saharan Africa	no	9,237	0			136
NGA	Nigeria	Sub Saharan Africa	no	45,741	0			137
GAB	Gabon	Sub Saharan Africa	no	2,633	-	1,267		138



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
SEN	Senegal	Sub Saharan Africa	no	5,536	-	1,124		139
AUS	Australia	Australia	no	47,971	1			140
DNK	Denmark	Europe	no	31,778	0	90,977		141
GIN	Guinea	Sub Saharan Africa	no	1,643	-	339		142
SWE	Sweden	Europe	no	27,971	0	123,918		143
FIN	Finland	Europe	no	14,927	-	58,644		144
TCD	Chad	Sub Saharan Africa	no	4,004	-	1,131		145
COG	Congo	Sub Saharan Africa	no	3,326	-	1,186		146
REU	Réunion	Sub Saharan Africa	no	2,161	-			147
BRA	Brazil	Latin America	no	300,613	0	442,019		148
BLR	Belarus	Europe	no	21,160	-	8,828		149
FRO	Faroe Islands	Europe	no	42	-			150
GUF	French Guiana	Latin America	no	378	-			151
PRY	Paraguay	Latin America	no	4,301	-	1,711		152
URY	Uruguay	Latin America	no	4,269	-	5,117		153
BEN	Benin	Sub Saharan Africa	no	1,223	-			154
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	1,968		156
GMB	Gambia	Sub Saharan Africa	no	334	-	121		157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	3,511		158
LBR	Liberia	Sub Saharan Africa	no	263	-			159
MLI	Mali	Sub Saharan Africa	no	1,887	-			160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	646		161
NER	Niger	Sub Saharan Africa	no	1,230	-			162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	233		163
TGO	Togo	Sub Saharan Africa	no	529	-			164
ESH	Western Sahara	Sub Saharan Africa	no	418	-			165
TON	Tonga	Pacific	yes	47	2	67	28.5	1
PNG	Papua New Guinea	Asia	yes	1,289	20	897	22.8	2
DOM	Dominican Republic	Caribbean	yes	13,790	68	3,965	17.3	3
DMA	Dominica	Caribbean	yes	43	1	81	7.4	4
LCA	Saint Lucia	Caribbean	yes	73	0	192	1.6	5
JAM	Jamaica	Caribbean	yes	4,148	4	2,368	1.6	6
BRB	Barbados	Caribbean	yes	253	1	835	1.2	7
SGP	Singapore	Pacific	yes	18,751	4	22,293	0.2	8
SLB	Solomon Islands	Asia	yes	85	5			9
VUT	Vanuatu	Asia	yes	25	3			10
ATG	Antigua and Barbuda	Caribbean	yes	272	2			11
HTI	Haiti	Caribbean	yes	1,584	12			12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			13
WSM	Samoa	Pacific	yes	93	0			14
GRD	Grenada	Caribbean	yes	63	0			15
FJI	Fiji	Asia	yes	309	0			16
AIA	Anguilla	Caribbean	yes	2	-			17
VGB	British Virgin Islands	Caribbean	yes	18	0			18
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			19
VIR	United States Virgin Islands	Caribbean	yes	82	0			20
PRI	Puerto Rico	Caribbean	yes	3,197	8			21
NCL	New Caledonia	Asia	yes	107	0			22
ABW	Aruba	Caribbean	yes	358	0			23
PLW	Palau	Pacific	yes	25	-			24
BLZ	Belize	Latin America	yes	65	0			25
COM	Comoros	Sub Saharan Africa	yes	156	0			26
CUB	Cuba	Caribbean	yes	5,936	1			27
BHR	Bahrain	Asia	yes	1,670	1			28
BHS	Bahamas	Caribbean	yes	985	-			29
GUY	Guyana	Latin America	yes	884	-	341		30
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	1,393		31
PYF	French Polynesia	Pacific	yes	116	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			33
SYC	Seychelles	Sub Saharan Africa	yes	631	-			34
MDV	Maldives	Pacific	yes	154	-			35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-			36
SUR	Suriname	Latin America	yes	364	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			40



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [‰]	
TJK	Tajikistan	Asia	no	2,412	9	143	62.1	1
HND	Honduras	Latin America	no	5,414	66	2,499	26.4	2
SLV	El Salvador	Latin America	no	4,297	57	2,332	24.4	3
PHL	Philippines	Asia	no	46,143	1,243	54,291	22.9	4
NIC	Nicaragua	Latin America	no	2,310	12	843	13.6	5
GEO	Georgia	Asia	no	3,815	9	1,152	7.8	6
GTM	Guatemala	Latin America	no	8,748	34	5,176	6.5	7
GRC	Greece	Europe	no	27,597	81	13,935	5.8	8
KGZ	Kyrgyzstan	Asia	no	756	4	908	4.4	9
CRI	Costa Rica	Latin America	no	6,892	23	5,483	4.1	10
ARM	Armenia	Asia	no	2,899	6	1,761	3.2	11
ISL	Iceland	Europe	no	1,071	1	200	3.0	12
JOR	Jordan	Asia	no	10,652	7	2,520	2.7	13
COL	Colombia	Latin America	no	53,054	130	54,533	2.4	14
PAK	Pakistan	Asia	no	37,562	90	38,491	2.3	15
ALB	Albania	Europe	no	3,381	3	1,584	2.1	16
ECU	Ecuador	Latin America	no	10,202	28	13,145	2.1	17
TUR	Turkey	Asia	no	164,353	186	99,948	1.9	18
JPN	Japan	Asia	no	542,290	2,246	1,296,892	1.7	19
PER	Peru	Latin America	no	24,717	57	35,828	1.6	20
PAN	Panama	Latin America	no	5,115	7	4,608	1.5	21
AZE	Azerbaijan	Asia	no	12,666	36	23,913	1.5	22
BOL	Bolivia	Latin America	no	4,521	7	4,912	1.4	23
SYR	Syrian Arab Republic	Asia	no	18,783	14	9,944	1.4	24
BGR	Bulgaria	Europe	no	9,040	15	11,333	1.3	25
TUN	Tunisia	North Africa	no	14,190	11	8,985	1.2	26
SWZ	Swaziland	Sub Saharan Africa	no	769	0	94	1.1	27
BGD	Bangladesh	Asia	no	14,034	38	38,537	1.0	28
MEX	Mexico	Latin America	no	260,866	245	250,619	1.0	29
CHL	Chile	Latin America	no	18,070	44	49,226	0.9	30
LBN	Lebanon	Asia	no	4,139	4	4,428	0.9	31
IDN	Indonesia	Asia	no	113,457	190	225,795	0.8	32
MDA	Moldova, Republic of	Europe	no	3,416	1	920	0.8	33
CYP	Cyprus	Asia	no	1,154	2	2,138	0.7	34
MLT	Malta	Pacific	no	1,330	1	1,012	0.7	35
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	2,228	0.6	36
ITA	Italy	Europe	no	188,526	193	329,250	0.6	37
EGY	Egypt	North Africa	no	101,974	22	38,951	0.6	38
KAZ	Kazakhstan	Asia	no	20,880	21	41,723	0.5	39
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	1,040	0.5	40
MAR	Morocco	North Africa	no	41,389	12	27,932	0.4	41
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	743	0.4	42
ISR	Israel	Asia	no	22,505	15	39,726	0.4	43
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	4,664	0.4	44
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	3,637	0.4	45
VEN	Venezuela	Latin America	no	42,697	43	123,339	0.3	46
HRV	Croatia	Europe	no	6,064	4	13,329	0.3	47
USA	United States of America	North America	no	1,224,802	474	1,591,569	0.3	48
MNG	Mongolia	Asia	no	2,335	1	1,682	0.3	49
UGA	Uganda	Sub Saharan Africa	no	3,787	1	3,193	0.3	50
KEN	Kenya	Sub Saharan Africa	no	8,730	1	5,011	0.3	51
MYS	Malaysia	Asia	no	37,377	19	78,265	0.2	52
LAO	Lao People's Democratic Republic	Asia	no	938	0	1,429	0.2	53
SVN	Slovenia	Europe	no	2,231	2	10,333	0.2	54
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	2,469	0.2	55
HUN	Hungary	Europe	no	30,434	5	26,266	0.2	56
IND	India	Asia	no	320,919	117	582,180	0.2	57
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	59,850	0.2	58
ARG	Argentina	Latin America	no	39,520	12	82,845	0.1	59
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	262,969	0.1	60
AUT	Austria	Europe	no	28,002	11	93,705	0.1	61
SRB	Serbia	Europe	no	1,938	1	5,958	0.1	62
CHN	China	Asia	no	599,699	310	3,137,116	0.1	63
SVK	Slovakia	Europe	no	9,245	2	17,544	0.1	64
THA	Thailand	Asia	no	43,178	9	97,152	0.1	65
CZE	Czech Republic	Europe	no	23,126	3	40,414	0.1	66
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,926	0.1	67
POL	Poland	Europe	no	60,706	6	79,285	0.1	68
DEU	Germany	Europe	no	262,867	54	758,427	0.1	69



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [%]	
CHE	Switzerland	Europe	no	40,078	12	189,918	0.1	70
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	4,934	0.1	71
RUS	Russian Federation	Europe	no	288,219	21	409,148	0.1	72
SDN	Sudan	Sub Saharan Africa	no	12,166	1	11,031	0.0	73
PRT	Portugal	Europe	no	18,087	1	22,310	0.0	74
VNM	Viet Nam	Asia	no	24,066	1	33,911	0.0	75
BEL	Belgium	Europe	no	29,496	4	107,310	0.0	76
FRA	France	Europe	no	236,236	17	447,208	0.0	77
NLD	Netherlands	Europe	no	49,481	5	182,627	0.0	78
ESP	Spain	Europe	no	122,131	8	264,944	0.0	79
HKG	Hong Kong	Asia	no	47,718	2	67,159	0.0	80
UKR	Ukraine	Europe	no	32,769	1	23,811	0.0	81
IRL	Ireland	Europe	no	16,223	1	20,525	0.0	82
EST	Estonia	Europe	no	2,851	0	4,667	0.0	83
LUX	Luxembourg	Europe	no	2,462	0	10,285	0.0	84
KOR	Republic of Korea	Asia	no	95,180	5	321,095	0.0	85
LTU	Lithuania	Europe	no	7,227	0	6,723	0.0	86
CAN	Canada	North America	no	121,895	4	290,588	0.0	87
LKA	Sri Lanka	Asia	no	14,385	0	12,267	0.0	88
AGO	Angola	Sub Saharan Africa	no	9,237	0	13,454	0.0	89
DNK	Denmark	Europe	no	31,778	0	68,142	0.0	90
NOR	Norway	Europe	no	33,800	0	139,329	0.0	91
BRA	Brazil	Latin America	no	300,613	0	345,223	0.0	92
SWE	Sweden	Europe	no	27,971	0	114,466	0.0	93
UZB	Uzbekistan	Asia	no	10,382	36			94
TKM	Turkmenistan	Asia	no	3,779	5			95
MWI	Malawi	Sub Saharan Africa	no	1,519	1			96
ARE	United Arab Emirates	Asia	no	11,165	19			97
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0			98
MNE	Montenegro	Europe	no	269	0			99
SAU	Saudi Arabia	Asia	no	73,922	8			100
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0			101
MAC	Macau	Asia	no	1,989	0			102
AFG	Afghanistan	Asia	no	9,988	24			103
CMR	Cameroon	Sub Saharan Africa	no	6,256	0			104
GLP	Guadeloupe	Caribbean	no	904	9			105
MTQ	Martinique	Caribbean	no	889	4			106
SMR	San Marino	Europe	no	113	0			107
NPL	Nepal	Asia	no	2,411	12			108
BTN	Bhutan	Asia	no	371	1			109
TWN	Taiwan	Asia	no	38,310	163			110
MMR	Myanmar	Asia	no	9,829	19			111
BDI	Burundi	Sub Saharan Africa	no	145	0			112
DJI	Djibouti	Sub Saharan Africa	no	656	0			113
LIE	Liechtenstein	Europe	no	198	0			114
RWA	Rwanda	Sub Saharan Africa	no	962	1			115
GIB	Gibraltar	Europe	no	274	0			116
MCO	Monaco	Europe	no	123	0			117
DZA	Algeria	North Africa	no	67,908	92			118
IRQ	Iraq	Asia	no	15,555	18			119
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			120
CYM	Cayman Islands	Caribbean	no	81	-			121
NZL	New Zealand	Australia	no	12,682	10			122
KWT	Kuwait	Asia	no	6,168	4			123
TCA	Turks and Caicos islands	Caribbean	no	28	-			124
YEM	Yemen	Asia	no	10,133	4			125
BRN	Brunei Darussalam	Asia	no	895	0			126
MYT	Mayotte	Sub Saharan Africa	no	154	0			127
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			128
OMN	Oman	Asia	no	4,095	2			129
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			130
QAT	Qatar	Asia	no	2,116	1			131
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			132
CAF	Central African Republic	Sub Saharan Africa	no	351	-			133
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			134
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			135
SOM	Somalia	Sub Saharan Africa	no	2,303	0			136
KHM	Cambodia	Asia	no	1,623	-	1,408		137
LVA	Latvia	Europe	no	4,998	-	5,696		138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [‰]	
NAM	Namibia	Sub Saharan Africa	no	1,706	-	4,130		139
NGA	Nigeria	Sub Saharan Africa	no	45,741	0			140
GAB	Gabon	Sub Saharan Africa	no	2,633	-			141
SEN	Senegal	Sub Saharan Africa	no	5,536	-			142
AUS	Australia	Australia	no	47,971	1			143
GIN	Guinea	Sub Saharan Africa	no	1,643	-	443		144
FIN	Finland	Europe	no	14,927	-	49,428		145
TCD	Chad	Sub Saharan Africa	no	4,004	-			146
COG	Congo	Sub Saharan Africa	no	3,326	-			147
REU	Réunion	Sub Saharan Africa	no	2,161	-			148
BLR	Belarus	Europe	no	21,160	-	13,701		149
FRO	Faroe Islands	Europe	no	42	-			150
GUF	French Guiana	Latin America	no	378	-			151
PRY	Paraguay	Latin America	no	4,301	-	4,028		152
URY	Uruguay	Latin America	no	4,269	-	6,538		153
BEN	Benin	Sub Saharan Africa	no	1,223	-			154
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-			156
GMB	Gambia	Sub Saharan Africa	no	334	-	102		157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	6,616		158
LBR	Liberia	Sub Saharan Africa	no	263	-			159
MLI	Mali	Sub Saharan Africa	no	1,887	-			160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-			161
NER	Niger	Sub Saharan Africa	no	1,230	-			162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	248		163
TGO	Togo	Sub Saharan Africa	no	529	-			164
ESH	Western Sahara	Sub Saharan Africa	no	418	-			165
DMA	Dominica	Caribbean	yes	43	1	6	104.2	1
DOM	Dominican Republic	Caribbean	yes	13,790	68	3,771	18.1	2
PNG	Papua New Guinea	Asia	yes	1,289	20	2,660	7.7	3
JAM	Jamaica	Caribbean	yes	4,148	4	1,745	2.1	4
LCA	Saint Lucia	Caribbean	yes	73	0	223	1.3	5
SGP	Singapore	Pacific	yes	18,751	4	95,806	0.0	6
TON	Tonga	Pacific	yes	47	2			7
BRB	Barbados	Caribbean	yes	253	1			8
SLB	Solomon Islands	Asia	yes	85	5			9
VUT	Vanuatu	Asia	yes	25	3			10
ATG	Antigua and Barbuda	Caribbean	yes	272	2			11
HTI	Haiti	Caribbean	yes	1,584	12			12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			13
WSM	Samoa	Pacific	yes	93	0			14
GRD	Grenada	Caribbean	yes	63	0			15
FJI	Fiji	Asia	yes	309	0			16
AIA	Anguilla	Caribbean	yes	2	-			17
VGB	British Virgin Islands	Caribbean	yes	18	0			18
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			19
VIR	United States Virgin Islands	Caribbean	yes	82	0			20
PRI	Puerto Rico	Caribbean	yes	3,197	8			21
NCL	New Caledonia	Asia	yes	107	0			22
ABW	Aruba	Caribbean	yes	358	0			23
PLW	Palau	Pacific	yes	25	-			24
BLZ	Belize	Latin America	yes	65	0			25
COM	Comoros	Sub Saharan Africa	yes	156	0			26
CUB	Cuba	Caribbean	yes	5,936	1			27
BHR	Bahrain	Asia	yes	1,670	1			28
BHS	Bahamas	Caribbean	yes	985	-			29
GUY	Guyana	Latin America	yes	884	-	338		30
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	1,603		31
PYF	French Polynesia	Pacific	yes	116	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			33
SYC	Seychelles	Sub Saharan Africa	yes	631	-			34
MDV	Maldives	Pacific	yes	154	-			35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-			36
SUR	Suriname	Latin America	yes	364	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
GLP	Guadeloupe	Caribbean	no	904	178	19.7	1
PHL	Philippines	Asia	no	46,143	9,068	19.7	2
HND	Honduras	Latin America	no	5,414	891	16.5	3
MTQ	Martinique	Caribbean	no	889	134	15.1	4
SMR	San Marino	Europe	no	113	16	14.6	5
NPL	Nepal	Asia	no	2,411	343	14.2	6
SLV	El Salvador	Latin America	no	4,297	582	13.5	7
BTN	Bhutan	Asia	no	371	50	13.5	8
NIC	Nicaragua	Latin America	no	2,310	188	8.1	9
CRI	Costa Rica	Latin America	no	6,892	480	7.0	10
KGZ	Kyrgyzstan	Asia	no	756	48	6.4	11
ECU	Ecuador	Latin America	no	10,202	614	6.0	12
GTM	Guatemala	Latin America	no	8,748	518	5.9	13
COL	Colombia	Latin America	no	53,054	3,103	5.9	14
BOL	Bolivia	Latin America	no	4,521	251	5.6	15
AZE	Azerbaijan	Asia	no	12,666	682	5.4	16
BGD	Bangladesh	Asia	no	14,034	718	5.1	17
PER	Peru	Latin America	no	24,717	1,243	5.0	18
GEO	Georgia	Asia	no	3,815	175	4.6	19
CYP	Cyprus	Asia	no	1,154	52	4.5	20
JPN	Japan	Asia	no	542,290	23,364	4.3	21
TJK	Tajikistan	Asia	no	2,412	91	3.8	22
TWN	Taiwan	Asia	no	38,310	1,422	3.7	23
GRC	Greece	Europe	no	27,597	998	3.6	24
SVN	Slovenia	Europe	no	2,231	80	3.6	25
UZB	Uzbekistan	Asia	no	10,382	368	3.6	26
LBN	Lebanon	Asia	no	4,139	146	3.5	27
ARM	Armenia	Asia	no	2,899	95	3.3	28
AFG	Afghanistan	Asia	no	9,988	323	3.2	29
MMR	Myanmar	Asia	no	9,829	317	3.2	30
BDI	Burundi	Sub Saharan Africa	no	145	4	3.1	31
TUN	Tunisia	North Africa	no	14,190	415	2.9	32
PAK	Pakistan	Asia	no	37,562	1,071	2.9	33
PAN	Panama	Latin America	no	5,115	146	2.9	34
DJI	Djibouti	Sub Saharan Africa	no	656	19	2.8	35
MNE	Montenegro	Europe	no	269	7	2.8	36
LIE	Liechtenstein	Europe	no	198	5	2.8	37
ARE	United Arab Emirates	Asia	no	11,165	302	2.7	38
ALB	Albania	Europe	no	3,381	91	2.7	39
RWA	Rwanda	Sub Saharan Africa	no	962	24	2.5	40
TKM	Turkmenistan	Asia	no	3,779	92	2.4	41
GIB	Gibraltar	Europe	no	274	7	2.4	42
MWI	Malawi	Sub Saharan Africa	no	1,519	37	2.4	43
ISR	Israel	Asia	no	22,505	543	2.4	44
MCO	Monaco	Europe	no	123	3	2.3	45
ISL	Iceland	Europe	no	1,071	25	2.3	46
DZA	Algeria	North Africa	no	67,908	1,535	2.3	47
IRQ	Iraq	Asia	no	15,555	352	2.3	48
CHL	Chile	Latin America	no	18,070	404	2.2	49
JOR	Jordan	Asia	no	10,652	224	2.1	50
VEN	Venezuela	Latin America	no	42,697	885	2.1	51
BGR	Bulgaria	Europe	no	9,040	184	2.0	52
SYR	Syrian Arab Republic	Asia	no	18,783	375	2.0	53
HRV	Croatia	Europe	no	6,064	103	1.7	54
IDN	Indonesia	Asia	no	113,457	1,877	1.7	55
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970	1.6	56
TUR	Turkey	Asia	no	164,353	2,703	1.6	57
CYM	Cayman Islands	Caribbean	no	81	1	1.6	58
MEX	Mexico	Latin America	no	260,866	4,079	1.6	59
MLT	Malta	Pacific	no	1,330	20	1.5	60
ITA	Italy	Europe	no	188,526	2,771	1.5	61
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	1.2	62
CHE	Switzerland	Europe	no	40,078	487	1.2	63
AUT	Austria	Europe	no	28,002	337	1.2	64
KAZ	Kazakhstan	Asia	no	20,880	249	1.2	65
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	1.2	66
NZL	New Zealand	Australia	no	12,682	141	1.1	67
KWT	Kuwait	Asia	no	6,168	68	1.1	68
TCA	Turks and Caicos islands	Caribbean	no	28	0	1.1	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
YEM	Yemen	Asia	no	10,133	101	1.0	70
LAO	Lao People's Democratic Republic	Asia	no	938	9	1.0	71
BRN	Brunei Darussalam	Asia	no	895	8	0.8	72
MAR	Morocco	North Africa	no	41,389	344	0.8	73
DEU	Germany	Europe	no	262,867	2,006	0.8	74
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	0.8	75
MDA	Moldova, Republic of	Europe	no	3,416	25	0.7	76
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	0.7	77
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	0.7	78
MYS	Malaysia	Asia	no	37,377	259	0.7	79
MYT	Mayotte	Sub Saharan Africa	no	154	1	0.7	80
CHN	China	Asia	no	599,699	3,876	0.7	81
PRK	Dem People's Rep of Korea	Asia	no	10,245	66	0.7	82
OMN	Oman	Asia	no	4,095	27	0.7	83
BEL	Belgium	Europe	no	29,496	191	0.7	84
SRB	Serbia	Europe	no	1,938	12	0.6	85
ARG	Argentina	Latin America	no	39,520	247	0.6	86
MNG	Mongolia	Asia	no	2,335	14	0.6	87
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108	0.6	88
QAT	Qatar	Asia	no	2,116	12	0.6	89
USA	United States of America	North America	no	1,224,802	6,768	0.6	90
UGA	Uganda	Sub Saharan Africa	no	3,787	20	0.5	91
EGY	Egypt	North Africa	no	101,974	553	0.5	92
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	0.5	93
HUN	Hungary	Europe	no	30,434	160	0.5	94
KEN	Kenya	Sub Saharan Africa	no	8,730	45	0.5	95
NLD	Netherlands	Europe	no	49,481	251	0.5	96
SVK	Slovakia	Europe	no	9,245	46	0.5	97
THA	Thailand	Asia	no	43,178	190	0.4	98
IND	India	Asia	no	320,919	1,329	0.4	99
CZE	Czech Republic	Europe	no	23,126	85	0.4	100
POL	Poland	Europe	no	60,706	199	0.3	101
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	0.3	102
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	0.3	103
LUX	Luxembourg	Europe	no	2,462	6	0.2	104
FRA	France	Europe	no	236,236	469	0.2	105
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	0.2	106
VNM	Viet Nam	Asia	no	24,066	44	0.2	107
SDN	Sudan	Sub Saharan Africa	no	12,166	19	0.2	108
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	0.2	109
SAU	Saudi Arabia	Asia	no	73,922	106	0.1	110
ESP	Spain	Europe	no	122,131	174	0.1	111
HKG	Hong Kong	Asia	no	47,718	60	0.1	112
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	0.1	113
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	0.1	114
IRL	Ireland	Europe	no	16,223	20	0.1	115
MAC	Macau	Asia	no	1,989	2	0.1	116
SWZ	Swaziland	Sub Saharan Africa	no	769	1	0.1	117
PRT	Portugal	Europe	no	18,087	17	0.1	118
CAF	Central African Republic	Sub Saharan Africa	no	351	0	0.1	119
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	0.1	120
KOR	Republic of Korea	Asia	no	95,180	76	0.1	121
EST	Estonia	Europe	no	2,851	2	0.1	122
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	0.1	123
CAN	Canada	North America	no	121,895	82	0.1	124
BWA	Botswana	Sub Saharan Africa	no	4,287	3	0.1	125
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	0.1	126
RUS	Russian Federation	Europe	no	288,219	206	0.1	127
UKR	Ukraine	Europe	no	32,769	20	0.1	128
SOM	Somalia	Sub Saharan Africa	no	2,303	1	0.1	129
KHM	Cambodia	Asia	no	1,623	1	0.0	130
LTU	Lithuania	Europe	no	7,227	3	0.0	131
NOR	Norway	Europe	no	33,800	13	0.0	132
LVA	Latvia	Europe	no	4,998	2	0.0	133
NAM	Namibia	Sub Saharan Africa	no	1,706	1	0.0	134
AGO	Angola	Sub Saharan Africa	no	9,237	3	0.0	135
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	0.0	136
GAB	Gabon	Sub Saharan Africa	no	2,633	1	0.0	137
SEN	Senegal	Sub Saharan Africa	no	5,536	1	0.0	138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
LKA	Sri Lanka	Asia	no	14,385	3	0.0	139
AUS	Australia	Australia	no	47,971	10	0.0	140
DNK	Denmark	Europe	no	31,778	6	0.0	141
GIN	Guinea	Sub Saharan Africa	no	1,643	0	0.0	142
SWE	Sweden	Europe	no	27,971	4	0.0	143
FIN	Finland	Europe	no	14,927	1	0.0	144
TCD	Chad	Sub Saharan Africa	no	4,004	0	0.0	145
COG	Congo	Sub Saharan Africa	no	3,326	0	0.0	146
REU	Réunion	Sub Saharan Africa	no	2,161	-	-	147
BRA	Brazil	Latin America	no	300,613	13	-	148
BLR	Belarus	Europe	no	21,160	1	-	149
FRO	Faroe Islands	Europe	no	42	-	-	150
GUF	French Guiana	Latin America	no	378	-	-	151
PRY	Paraguay	Latin America	no	4,301	-	-	152
URY	Uruguay	Latin America	no	4,269	-	-	153
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	154
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	156
GMB	Gambia	Sub Saharan Africa	no	334	-	-	157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	158
LBR	Liberia	Sub Saharan Africa	no	263	-	-	159
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	161
NER	Niger	Sub Saharan Africa	no	1,230	-	-	162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	163
TGO	Togo	Sub Saharan Africa	no	529	-	-	164
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	165
SLB	Solomon islands	Asia	yes	85	50	59.4	1
AIA	Anguilla	Caribbean	yes	2	1	52.7	2
DMA	Dominica	Caribbean	yes	43	19	44.2	3
VUT	Vanuatu	Asia	yes	25	10	38.8	4
VGB	British Virgin Islands	Caribbean	yes	18	6	36.7	5
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	29.2	6
TON	Tonga	Pacific	yes	47	13	28.7	7
HTI	Haiti	Caribbean	yes	1,584	371	23.4	8
BRB	Barbados	Caribbean	yes	253	48	19.2	9
ATG	Antigua and Barbuda	Caribbean	yes	272	44	16.3	10
GRD	Grenada	Caribbean	yes	63	10	16.2	11
LCA	Saint Lucia	Caribbean	yes	73	10	14.5	12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	11.1	13
VIR	United States Virgin Islands	Caribbean	yes	82	8	9.6	14
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	8.9	15
PRI	Puerto Rico	Caribbean	yes	3,197	192	6.0	16
NCL	New Caledonia	Asia	yes	107	6	5.8	17
FJI	Fiji	Asia	yes	309	16	5.2	18
ABW	Aruba	Caribbean	yes	358	18	5.0	19
PNG	Papua New Guinea	Asia	yes	1,289	63	4.9	20
WSM	Samoa	Pacific	yes	93	4	4.4	21
JAM	Jamaica	Caribbean	yes	4,148	177	4.3	22
PLW	Palau	Pacific	yes	25	1	3.7	23
BLZ	Belize	Latin America	yes	65	1	1.7	24
COM	Comoros	Sub Saharan Africa	yes	156	2	1.4	25
CUB	Cuba	Caribbean	yes	5,936	49	0.8	26
BHR	Bahrain	Asia	yes	1,670	10	0.6	27
SGP	Singapore	Pacific	yes	18,751	43	0.2	28
BHS	Bahamas	Caribbean	yes	985	0	0.1	29
GUY	Guyana	Latin America	yes	884	0	0.0	30
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	-	31
PYF	French Polynesia	Pacific	yes	116	-	-	32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	-	33
SYC	Seychelles	Sub Saharan Africa	yes	631	-	-	34
MDV	Maldives	Pacific	yes	154	-	-	35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	36
SUR	Suriname	Latin America	yes	364	-	-	37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
HND	Honduras	Latin America	no	5,414	891	15,400	5.8	1
PHL	Philippines	Asia	no	46,143	9,068	199,589	4.5	2
BTN	Bhutan	Asia	no	371	50	1,516	3.3	3
NIC	Nicaragua	Latin America	no	2,310	188	6,551	2.9	4
SLV	El Salvador	Latin America	no	4,297	582	21,215	2.7	5
AFG	Afghanistan	Asia	no	9,988	323	17,243	1.9	6
TJK	Tajikistan	Asia	no	2,412	91	5,640	1.6	7
GEO	Georgia	Asia	no	3,815	175	11,667	1.5	8
CRI	Costa Rica	Latin America	no	6,892	480	35,831	1.3	9
AZE	Azerbaijan	Asia	no	12,666	682	51,774	1.3	10
BOL	Bolivia	Latin America	no	4,521	251	19,650	1.3	11
GTM	Guatemala	Latin America	no	8,748	518	41,186	1.3	12
COL	Colombia	Latin America	no	53,054	3,103	288,189	1.1	13
ECU	Ecuador	Latin America	no	10,202	614	57,978	1.1	14
KGZ	Kyrgyzstan	Asia	no	756	48	4,616	1.1	15
ARM	Armenia	Asia	no	2,899	95	9,371	1.0	16
DZA	Algeria	North Africa	no	67,908	1,535	159,426	1.0	17
TUN	Tunisia	North Africa	no	14,190	415	44,291	0.9	18
UZB	Uzbekistan	Asia	no	10,382	368	38,982	0.9	19
JOR	Jordan	Asia	no	10,652	224	27,574	0.8	20
PER	Peru	Latin America	no	24,717	1,243	157,053	0.8	21
ALB	Albania	Europe	no	3,381	91	11,786	0.8	22
BGD	Bangladesh	Asia	no	14,034	718	100,357	0.7	23
MWI	Malawi	Sub Saharan Africa	no	1,519	37	5,106	0.7	24
SYR	Syrian Arab Republic	Asia	no	18,783	375	59,147	0.6	25
PAK	Pakistan	Asia	no	37,562	1,071	176,870	0.6	26
PAN	Panama	Latin America	no	5,115	146	26,689	0.6	27
TKM	Turkmenistan	Asia	no	3,779	92	20,001	0.5	28
MDA	Moldova, Republic of	Europe	no	3,416	25	5,809	0.4	29
IRQ	Iraq	Asia	no	15,555	352	82,150	0.4	30
JPN	Japan	Asia	no	542,290	23,364	5,458,837	0.4	31
RWA	Rwanda	Sub Saharan Africa	no	962	24	5,628	0.4	32
BGR	Bulgaria	Europe	no	9,040	184	47,714	0.4	33
MEX	Mexico	Latin America	no	260,866	4,079	1,034,804	0.4	34
MAR	Morocco	North Africa	no	41,389	344	90,805	0.4	35
TUR	Turkey	Asia	no	164,353	2,703	734,365	0.4	36
LBN	Lebanon	Asia	no	4,139	146	39,006	0.4	37
GRC	Greece	Europe	no	27,597	998	301,083	0.3	38
BDI	Burundi	Sub Saharan Africa	no	145	4	1,611	0.3	39
IDN	Indonesia	Asia	no	113,457	1,877	706,558	0.3	40
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	9,189	0.3	41
EGY	Egypt	North Africa	no	101,974	553	218,894	0.3	42
ISR	Israel	Asia	no	22,505	543	217,333	0.3	43
MLT	Malta	Pacific	no	1,330	20	8,256	0.2	44
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	23,057	0.2	45
CYP	Cyprus	Asia	no	1,154	52	23,132	0.2	46
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	16,193	0.2	47
VEN	Venezuela	Latin America	no	42,697	885	391,848	0.2	48
MNG	Mongolia	Asia	no	2,335	14	6,200	0.2	49
ISL	Iceland	Europe	no	1,071	25	12,574	0.2	50
CHL	Chile	Latin America	no	18,070	404	212,741	0.2	51
MNE	Montenegro	Europe	no	269	7	4,111	0.2	52
KAZ	Kazakhstan	Asia	no	20,880	249	149,059	0.2	53
HRV	Croatia	Europe	no	6,064	103	60,852	0.2	54
SVN	Slovenia	Europe	no	2,231	80	46,908	0.2	55
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	2,132	0.2	56
ITA	Italy	Europe	no	188,526	2,771	2,051,412	0.1	57
KEN	Kenya	Sub Saharan Africa	no	8,730	45	31,409	0.1	58
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	9,586	0.1	59
LAO	Lao People's Democratic Republic	Asia	no	938	9	7,296	0.1	60
UGA	Uganda	Sub Saharan Africa	no	3,787	20	17,011	0.1	61
HUN	Hungary	Europe	no	30,434	160	128,632	0.1	62
MYS	Malaysia	Asia	no	37,377	259	237,797	0.1	63
ARE	United Arab Emirates	Asia	no	11,165	302	297,649	0.1	64
AUT	Austria	Europe	no	28,002	337	379,069	0.1	65
CHE	Switzerland	Europe	no	40,078	487	527,920	0.1	66
IND	India	Asia	no	320,919	1,329	1,727,111	0.1	67
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	13,145	0.1	68
ARG	Argentina	Latin America	no	39,520	247	368,736	0.1	69



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GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	2,248,831	0.1	70
CHN	China	Asia	no	599,699	3,876	5,926,612	0.1	71
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	16,578	0.1	72
THA	Thailand	Asia	no	43,178	190	318,522	0.1	73
DEU	Germany	Europe	no	262,867	2,006	3,280,530	0.1	74
USA	United States of America	North America	no	1,224,802	6,768	14,586,740	0.1	75
SVK	Slovakia	Europe	no	9,245	46	87,268	0.1	76
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	363,704	0.0	77
CZE	Czech Republic	Europe	no	23,126	85	192,032	0.0	78
POL	Poland	Europe	no	60,706	199	469,440	0.0	79
VNM	Viet Nam	Asia	no	24,066	44	106,427	0.0	80
BEL	Belgium	Europe	no	29,496	191	469,374	0.0	81
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	2,117	0.0	82
SRB	Serbia	Europe	no	1,938	12	38,423	0.0	83
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	29,717	0.0	84
SDN	Sudan	Sub Saharan Africa	no	12,166	19	62,046	0.0	85
NLD	Netherlands	Europe	no	49,481	251	779,356	0.0	86
HKG	Hong Kong	Asia	no	47,718	60	224,458	0.0	87
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	7,474	0.0	88
SWZ	Swaziland	Sub Saharan Africa	no	769	1	3,645	0.0	89
BWA	Botswana	Sub Saharan Africa	no	4,287	3	14,857	0.0	90
FRA	France	Europe	no	236,236	469	2,560,002	0.0	91
SAU	Saudi Arabia	Asia	no	73,922	106	434,666	0.0	92
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	22,394	0.0	93
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	8,721	0.0	94
CAF	Central African Republic	Sub Saharan Africa	no	351	0	2,013	0.0	95
RUS	Russian Federation	Europe	no	288,219	206	1,479,819	0.0	96
PRT	Portugal	Europe	no	18,087	17	228,872	0.0	97
ESP	Spain	Europe	no	122,131	174	1,407,405	0.0	98
UKR	Ukraine	Europe	no	32,769	20	137,929	0.0	99
IRL	Ireland	Europe	no	16,223	20	211,390	0.0	100
EST	Estonia	Europe	no	2,851	2	19,217	0.0	101
LUX	Luxembourg	Europe	no	2,462	6	53,334	0.0	102
KOR	Republic of Korea	Asia	no	95,180	76	1,014,483	0.0	103
LTU	Lithuania	Europe	no	7,227	3	36,306	0.0	104
CAN	Canada	North America	no	121,895	82	1,577,040	0.0	105
LKA	Sri Lanka	Asia	no	14,385	3	49,552	0.0	106
MAC	Macau	Asia	no	1,989	2	27,960	0.0	107
KHM	Cambodia	Asia	no	1,623	1	11,242	0.0	108
LVA	Latvia	Europe	no	4,998	2	24,010	0.0	109
NAM	Namibia	Sub Saharan Africa	no	1,706	1	12,170	0.0	110
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	193,669	0.0	111
GAB	Gabon	Sub Saharan Africa	no	2,633	1	13,011	0.0	112
SEN	Senegal	Sub Saharan Africa	no	5,536	1	12,954	0.0	113
GIN	Guinea	Sub Saharan Africa	no	1,643	0	4,511	0.0	114
TCD	Chad	Sub Saharan Africa	no	4,004	0	7,588	0.0	115
AGO	Angola	Sub Saharan Africa	no	9,237	3	84,391		116
DNK	Denmark	Europe	no	31,778	6	309,866		117
NOR	Norway	Europe	no	33,800	13	412,990		118
BRA	Brazil	Latin America	no	300,613	13	2,087,890		119
SWE	Sweden	Europe	no	27,971	4	458,973		120
GLP	Guadeloupe	Caribbean	no	904	178			121
MTQ	Martinique	Caribbean	no	889	134			122
SMR	San Marino	Europe	no	113	16			123
NPL	Nepal	Asia	no	2,411	343			124
TWN	Taiwan	Asia	no	38,310	1,422			125
MMR	Myanmar	Asia	no	9,829	317			126
DJI	Djibouti	Sub Saharan Africa	no	656	19			127
LIE	Liechtenstein	Europe	no	198	5			128
GIB	Gibraltar	Europe	no	274	7			129
MCO	Monaco	Europe	no	123	3			130
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970			131
CYM	Cayman Islands	Caribbean	no	81	1			132
NZL	New Zealand	Australia	no	12,682	141			133
KWT	Kuwait	Asia	no	6,168	68			134
TCA	Turks and Caicos islands	Caribbean	no	28	0			135
YEM	Yemen	Asia	no	10,133	101			136
BRN	Brunei Darussalam	Asia	no	895	8			137
MYT	Mayotte	Sub Saharan Africa	no	154	1			138



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PRK	Dem People's Rep of Korea	Asia	no	10,245	66			139
OMN	Oman	Asia	no	4,095	27			140
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108			141
QAT	Qatar	Asia	no	2,116	12			142
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	14,007		143
SOM	Somalia	Sub Saharan Africa	no	2,303	1			144
AUS	Australia	Australia	no	47,971	10			145
FIN	Finland	Europe	no	14,927	1	238,746		146
COG	Congo	Sub Saharan Africa	no	3,326	0	11,898		147
REU	Réunion	Sub Saharan Africa	no	2,161	-			148
BLR	Belarus	Europe	no	21,160	1	54,713		149
FRO	Faroe Islands	Europe	no	42	-			150
GUF	French Guiana	Latin America	no	378	-			151
PRY	Paraguay	Latin America	no	4,301	-	18,333		152
URY	Uruguay	Latin America	no	4,269	-	40,265		153
BEN	Benin	Sub Saharan Africa	no	1,223	-	6,633		154
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	8,820		155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	22,780		156
GMB	Gambia	Sub Saharan Africa	no	334	-	807		157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	31,306		158
LBR	Liberia	Sub Saharan Africa	no	263	-	986		159
MLI	Mali	Sub Saharan Africa	no	1,887	-	9,251		160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	3,636		161
NER	Niger	Sub Saharan Africa	no	1,230	-	5,549		162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	1,905		163
TGO	Togo	Sub Saharan Africa	no	529	-	3,153		164
ESH	Western Sahara	Sub Saharan Africa	no	418	-			165
SLB	Solomon islands	Asia	yes	85	50	679	7.4	1
HTI	Haiti	Caribbean	yes	1,584	371	6,710	5.5	2
DMA	Dominica	Caribbean	yes	43	19	466	4.1	3
TON	Tonga	Pacific	yes	47	13	348	3.8	4
ATG	Antigua and Barbuda	Caribbean	yes	272	44	1,211	3.6	5
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	20,604	3.3	6
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	51,766	2.4	7
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	705	2.1	8
VUT	Vanuatu	Asia	yes	25	10	699	1.4	9
GRD	Grenada	Caribbean	yes	63	10	773	1.3	10
JAM	Jamaica	Caribbean	yes	4,148	177	14,252	1.2	11
BRB	Barbados	Caribbean	yes	253	48	4,110	1.2	12
LCA	Saint Lucia	Caribbean	yes	73	10	1,198	0.9	13
WSM	Samoa	Pacific	yes	93	4	574	0.7	14
PNG	Papua New Guinea	Asia	yes	1,289	63	9,480	0.7	15
PLW	Palau	Pacific	yes	25	1	171	0.5	16
FJI	Fiji	Asia	yes	309	16	3,189	0.5	17
COM	Comoros	Sub Saharan Africa	yes	156	2	541	0.4	18
BLZ	Belize	Latin America	yes	65	1	1,401	0.1	19
SGP	Singapore	Pacific	yes	18,751	43	208,765	0.0	20
BHS	Bahamas	Caribbean	yes	985	0	7,538	0.0	21
AIA	Anguilla	Caribbean	yes	2	1			22
VGB	British Virgin Islands	Caribbean	yes	18	6			23
VIR	United States Virgin Islands	Caribbean	yes	82	8			24
PRI	Puerto Rico	Caribbean	yes	3,197	192			25
NCL	New Caledonia	Asia	yes	107	6			26
ABW	Aruba	Caribbean	yes	358	18			27
CUB	Cuba	Caribbean	yes	5,936	49			28
BHR	Bahrain	Asia	yes	1,670	10			29
GUY	Guyana	Latin America	yes	884	0	2,226		30
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	9,729		31
PYF	French Polynesia	Pacific	yes	116	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	297		33
SYC	Seychelles	Sub Saharan Africa	yes	631	-	937		34
MDV	Maldives	Pacific	yes	154	-	1,908		35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	652		36
SUR	Suriname	Latin America	yes	364	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	1,648		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	879		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	197		40



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
HND	Honduras	Latin America	no	5,414	891	14,798	6.0	1
PHL	Philippines	Asia	no	46,143	9,068	199,897	4.5	2
BTN	Bhutan	Asia	no	371	50	1,420	3.5	3
NIC	Nicaragua	Latin America	no	2,310	188	6,273	3.0	4
SLV	El Salvador	Latin America	no	4,297	582	20,834	2.8	5
AFG	Afghanistan	Asia	no	9,988	323	15,162	2.1	6
TJK	Tajikistan	Asia	no	2,412	91	5,570	1.6	7
GEO	Georgia	Asia	no	3,815	175	11,484	1.5	8
AZE	Azerbaijan	Asia	no	12,666	682	48,307	1.4	9
CRI	Costa Rica	Latin America	no	6,892	480	34,896	1.4	10
BOL	Bolivia	Latin America	no	4,521	251	18,790	1.3	11
GTM	Guatemala	Latin America	no	8,748	518	39,987	1.3	12
KGZ	Kyrgyzstan	Asia	no	756	48	4,273	1.1	13
COL	Colombia	Latin America	no	53,054	3,103	276,072	1.1	14
ECU	Ecuador	Latin America	no	10,202	614	56,924	1.1	15
DZA	Algeria	North Africa	no	67,908	1,535	155,538	1.0	16
TUN	Tunisia	North Africa	no	14,190	415	42,020	1.0	17
ARM	Armenia	Asia	no	2,899	95	9,710	1.0	18
UZB	Uzbekistan	Asia	no	10,382	368	39,013	0.9	19
PER	Peru	Latin America	no	24,717	1,243	147,000	0.9	20
JOR	Jordan	Asia	no	10,652	224	27,820	0.8	21
ALB	Albania	Europe	no	3,381	91	11,682	0.8	22
MWI	Malawi	Sub Saharan Africa	no	1,519	37	4,980	0.7	23
BGD	Bangladesh	Asia	no	14,034	718	109,695	0.7	24
SYR	Syrian Arab Republic	Asia	no	18,783	375	57,266	0.7	25
PAK	Pakistan	Asia	no	37,562	1,071	183,620	0.6	26
PAN	Panama	Latin America	no	5,115	146	25,037	0.6	27
TKM	Turkmenistan	Asia	no	3,779	92	18,107	0.5	28
IRQ	Iraq	Asia	no	15,555	352	77,842	0.5	29
RWA	Rwanda	Sub Saharan Africa	no	962	24	5,582	0.4	30
JPN	Japan	Asia	no	542,290	23,364	5,601,557	0.4	31
MDA	Moldova, Republic of	Europe	no	3,416	25	6,280	0.4	32
BGR	Bulgaria	Europe	no	9,040	184	46,025	0.4	33
MEX	Mexico	Latin America	no	260,866	4,079	1,020,288	0.4	34
MAR	Morocco	North Africa	no	41,389	344	88,578	0.4	35
TUR	Turkey	Asia	no	164,353	2,703	727,056	0.4	36
LBN	Lebanon	Asia	no	4,139	146	39,051	0.4	37
GRC	Greece	Europe	no	27,597	998	292,874	0.3	38
BDI	Burundi	Sub Saharan Africa	no	145	4	1,589	0.3	39
IDN	Indonesia	Asia	no	113,457	1,877	686,633	0.3	40
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	8,992	0.3	41
EGY	Egypt	North Africa	no	101,974	553	214,530	0.3	42
ISR	Israel	Asia	no	22,505	543	210,353	0.3	43
MLT	Malta	Pacific	no	1,330	20	7,698	0.3	44
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	14,300	0.3	45
MNG	Mongolia	Asia	no	2,335	14	5,640	0.3	46
ISL	Iceland	Europe	no	1,071	25	9,975	0.3	47
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	23,012	0.2	48
CYP	Cyprus	Asia	no	1,154	52	22,539	0.2	49
VEN	Venezuela	Latin America	no	42,697	885	389,038	0.2	50
CHL	Chile	Latin America	no	18,070	404	197,331	0.2	51
KAZ	Kazakhstan	Asia	no	20,880	249	131,868	0.2	52
MNE	Montenegro	Europe	no	269	7	4,083	0.2	53
HRV	Croatia	Europe	no	6,064	103	58,806	0.2	54
SVN	Slovenia	Europe	no	2,231	80	46,217	0.2	55
ITA	Italy	Europe	no	188,526	2,771	2,023,916	0.1	56
KEN	Kenya	Sub Saharan Africa	no	8,730	45	31,264	0.1	57
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	2,553	0.1	58
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	9,421	0.1	59
LAO	Lao People's Democratic Republic	Asia	no	938	9	6,978	0.1	60
HUN	Hungary	Europe	no	30,434	160	122,372	0.1	61
UGA	Uganda	Sub Saharan Africa	no	3,787	20	16,720	0.1	62
MYS	Malaysia	Asia	no	37,377	259	229,566	0.1	63
AUT	Austria	Europe	no	28,002	337	377,063	0.1	64
CHE	Switzerland	Europe	no	40,078	487	568,639	0.1	65
IND	India	Asia	no	320,919	1,329	1,712,645	0.1	66
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	12,263	0.1	67
ARG	Argentina	Latin America	no	39,520	247	358,619	0.1	68
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	2,280,719	0.1	69



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CHN	China	Asia	no	599,699	3,876	5,957,012	0.1	70
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	17,008	0.1	71
THA	Thailand	Asia	no	43,178	190	304,812	0.1	72
DEU	Germany	Europe	no	262,867	2,006	3,341,391	0.1	73
USA	United States of America	North America	no	1,224,802	6,768	14,635,600	0.1	74
SVK	Slovakia	Europe	no	9,245	46	86,077	0.1	75
CZE	Czech Republic	Europe	no	23,126	85	179,432	0.1	76
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	356,475	0.0	77
POL	Poland	Europe	no	60,706	199	452,275	0.0	78
VNM	Viet Nam	Asia	no	24,066	44	102,008	0.0	79
BEL	Belgium	Europe	no	29,496	191	477,644	0.0	80
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	2,097	0.0	81
SRB	Serbia	Europe	no	1,938	12	37,533	0.0	82
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	29,625	0.0	83
SDN	Sudan	Sub Saharan Africa	no	12,166	19	55,939	0.0	84
NLD	Netherlands	Europe	no	49,481	251	772,747	0.0	85
HKG	Hong Kong	Asia	no	47,718	60	229,165	0.0	86
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	6,988	0.0	87
SWZ	Swaziland	Sub Saharan Africa	no	769	1	3,586	0.0	88
BWA	Botswana	Sub Saharan Africa	no	4,287	3	14,771	0.0	89
FRA	France	Europe	no	236,236	469	2,606,780	0.0	90
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	22,030	0.0	91
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	8,628	0.0	92
CAF	Central African Republic	Sub Saharan Africa	no	351	0	2,009	0.0	93
UKR	Ukraine	Europe	no	32,769	20	135,920	0.0	94
LUX	Luxembourg	Europe	no	2,462	6	37,925	0.0	95
RUS	Russian Federation	Europe	no	288,219	206	1,431,121	0.0	96
PRT	Portugal	Europe	no	18,087	17	221,243	0.0	97
ESP	Spain	Europe	no	122,131	174	1,388,744	0.0	98
IRL	Ireland	Europe	no	16,223	20	171,260	0.0	99
EST	Estonia	Europe	no	2,851	2	18,420	0.0	100
KOR	Republic of Korea	Asia	no	95,180	76	1,014,760	0.0	101
LTU	Lithuania	Europe	no	7,227	3	35,687	0.0	102
CAN	Canada	North America	no	121,895	82	1,549,652	0.0	103
LKA	Sri Lanka	Asia	no	14,385	3	48,916	0.0	104
KHM	Cambodia	Asia	no	1,623	1	10,664	0.0	105
LVA	Latvia	Europe	no	4,998	2	24,073	0.0	106
NAM	Namibia	Sub Saharan Africa	no	1,706	1	12,077	0.0	107
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	176,769	0.0	108
GAB	Gabon	Sub Saharan Africa	no	2,633	1	11,467	0.0	109
SEN	Senegal	Sub Saharan Africa	no	5,536	1	12,900	0.0	110
GIN	Guinea	Sub Saharan Africa	no	1,643	0	4,231	0.0	111
TCD	Chad	Sub Saharan Africa	no	4,004	0	6,734	0.0	112
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	9,578	0.0	113
COG	Congo	Sub Saharan Africa	no	3,326	0	8,619	0.0	114
ARE	United Arab Emirates	Asia	no	11,165	302			115
SAU	Saudi Arabia	Asia	no	73,922	106			116
MAC	Macau	Asia	no	1,989	2			117
AGO	Angola	Sub Saharan Africa	no	9,237	3	75,516		118
DNK	Denmark	Europe	no	31,778	6	315,664		119
NOR	Norway	Europe	no	33,800	13	413,980		120
BRA	Brazil	Latin America	no	300,613	13	2,049,164		121
SWE	Sweden	Europe	no	27,971	4	467,254		122
GLP	Guadeloupe	Caribbean	no	904	178			123
MTQ	Martinique	Caribbean	no	889	134			124
SMR	San Marino	Europe	no	113	16			125
NPL	Nepal	Asia	no	2,411	343			126
TWN	Taiwan	Asia	no	38,310	1,422			127
MMR	Myanmar	Asia	no	9,829	317			128
DJI	Djibouti	Sub Saharan Africa	no	656	19			129
LIE	Liechtenstein	Europe	no	198	5			130
GIB	Gibraltar	Europe	no	274	7			131
MCO	Monaco	Europe	no	123	3			132
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970			133
CYM	Cayman Islands	Caribbean	no	81	1			134
NZL	New Zealand	Australia	no	12,682	141			135
KWT	Kuwait	Asia	no	6,168	68			136
TCA	Turks and Caicos islands	Caribbean	no	28	0			137
YEM	Yemen	Asia	no	10,133	101			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
BRN	Brunei Darussalam	Asia	no	895	8			139
MYT	Mayotte	Sub Saharan Africa	no	154	1			140
PRK	Dem People's Rep of Korea	Asia	no	10,245	66			141
OMN	Oman	Asia	no	4,095	27			142
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108			143
QAT	Qatar	Asia	no	2,116	12			144
SOM	Somalia	Sub Saharan Africa	no	2,303	1			145
AUS	Australia	Australia	no	47,971	10			146
FIN	Finland	Europe	no	14,927	1	242,899		147
REU	Réunion	Sub Saharan Africa	no	2,161	-			148
BLR	Belarus	Europe	no	21,160	1	53,379		149
FRO	Faroe Islands	Europe	no	42	-			150
GUF	French Guiana	Latin America	no	378	-			151
PRY	Paraguay	Latin America	no	4,301	-	17,853		152
URY	Uruguay	Latin America	no	4,269	-	39,161		153
BEN	Benin	Sub Saharan Africa	no	1,223	-	6,633		154
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	8,810		155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	21,729		156
GMB	Gambia	Sub Saharan Africa	no	334	-	743		157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	30,776		158
LBR	Liberia	Sub Saharan Africa	no	263	-	805		159
MLI	Mali	Sub Saharan Africa	no	1,887	-	8,909		160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	3,672		161
NER	Niger	Sub Saharan Africa	no	1,230	-	5,493		162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	1,905		163
TGO	Togo	Sub Saharan Africa	no	529	-	2,826		164
ESH	Western Sahara	Sub Saharan Africa	no	418	-			165
SLB	Solomon islands	Asia	yes	85	50	555	9.0	1
DMA	Dominica	Caribbean	yes	43	19	454	4.2	2
TON	Tonga	Pacific	yes	47	13	352	3.7	3
ATG	Antigua and Barbuda	Caribbean	yes	272	44	1,179	3.7	4
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	19,255	3.5	5
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	49,972	2.4	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	691	2.2	7
VUT	Vanuatu	Asia	yes	25	10	678	1.4	8
GRD	Grenada	Caribbean	yes	63	10	727	1.4	9
JAM	Jamaica	Caribbean	yes	4,148	177	13,574	1.3	10
LCA	Saint Lucia	Caribbean	yes	73	10	1,163	0.9	11
WSM	Samoa	Pacific	yes	93	4	557	0.7	12
PLW	Palau	Pacific	yes	25	1	135	0.7	13
PNG	Papua New Guinea	Asia	yes	1,289	63	9,262	0.7	14
FJI	Fiji	Asia	yes	309	16	3,090	0.5	15
COM	Comoros	Sub Saharan Africa	yes	156	2	539	0.4	16
BLZ	Belize	Latin America	yes	65	1	1,303	0.1	17
SGP	Singapore	Pacific	yes	18,751	43	201,050	0.0	18
HTI	Haiti	Caribbean	yes	1,584	371			19
BRB	Barbados	Caribbean	yes	253	48			20
BHS	Bahamas	Caribbean	yes	985	0			21
AIA	Anguilla	Caribbean	yes	2	1			22
VGB	British Virgin Islands	Caribbean	yes	18	6			23
VIR	United States Virgin Islands	Caribbean	yes	82	8			24
PRI	Puerto Rico	Caribbean	yes	3,197	192			25
NCL	New Caledonia	Asia	yes	107	6			26
ABW	Aruba	Caribbean	yes	358	18			27
CUB	Cuba	Caribbean	yes	5,936	49			28
BHR	Bahrain	Asia	yes	1,670	10			29
GUY	Guyana	Latin America	yes	884	0	2,238		30
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	9,798		31
PYF	French Polynesia	Pacific	yes	116	-			32
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	312		33
SYC	Seychelles	Sub Saharan Africa	yes	631	-	855		34
MDV	Maldives	Pacific	yes	154	-	1,817		35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	620		36
SUR	Suriname	Latin America	yes	364	-			37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	1,579		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	877		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	200		40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
CYM	Cayman Islands	Caribbean	no	3,603	42	11.5	1
PHL	Philippines	Asia	no	186,193	2,039	11.0	2
TCA	Turks and Caicos islands	Caribbean	no	332	4	10.5	3
GLP	Guadeloupe	Caribbean	no	19,838	192	9.7	4
REU	Réunion	Sub Saharan Africa	no	42,937	261	6.1	5
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	5.8	6
TWN	Taiwan	Asia	no	872,409	4,441	5.1	7
MTQ	Martinique	Caribbean	no	21,052	103	4.9	8
HND	Honduras	Latin America	no	18,844	70	3.7	9
MYT	Mayotte	Sub Saharan Africa	no	2,341	8	3.3	10
JPN	Japan	Asia	no	14,617,394	45,933	3.1	11
KOR	Republic of Korea	Asia	no	2,787,207	8,652	3.1	12
CHN	China	Asia	no	4,512,825	8,954	2.0	13
MEX	Mexico	Latin America	no	1,818,298	3,472	1.9	14
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1.4	15
HKG	Hong Kong	Asia	no	1,138,019	927	0.8	16
BGD	Bangladesh	Asia	no	72,949	58	0.8	17
PRK	Dem People's Rep of Korea	Asia	no	27,936	20	0.7	18
MAC	Macau	Asia	no	96,993	68	0.7	19
BRN	Brunei Darussalam	Asia	no	20,094	11	0.6	20
USA	United States of America	North America	no	22,004,154	11,460	0.5	21
GTM	Guatemala	Latin America	no	38,263	18	0.5	22
NPL	Nepal	Asia	no	6,537	2	0.3	23
NIC	Nicaragua	Latin America	no	10,935	3	0.3	24
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.3	25
SLV	El Salvador	Latin America	no	22,582	5	0.2	26
VNM	Viet Nam	Asia	no	115,441	23	0.2	27
IND	India	Asia	no	1,429,881	230	0.2	28
CAN	Canada	North America	no	2,051,584	310	0.2	29
VEN	Venezuela	Latin America	no	435,869	66	0.2	30
MMR	Myanmar	Asia	no	20,572	3	0.1	31
PAK	Pakistan	Asia	no	170,444	24	0.1	32
MWI	Malawi	Sub Saharan Africa	no	1,883	0	0.1	33
NZL	New Zealand	Australia	no	238,609	30	0.1	34
LKA	Sri Lanka	Asia	no	49,967	5	0.1	35
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.1	36
KHM	Cambodia	Asia	no	4,335	0	0.1	37
IDN	Indonesia	Asia	no	575,183	41	0.1	38
PAN	Panama	Latin America	no	30,296	2	0.1	39
OMN	Oman	Asia	no	42,201	2	0.1	40
AUS	Australia	Australia	no	1,832,960	84	0.1	41
BTN	Bhutan	Asia	no	1,167		0.0	42
CRI	Costa Rica	Latin America	no	38,475	1	0.0	43
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	0.0	44
MYS	Malaysia	Asia	no	318,727	6	0.0	45
THA	Thailand	Asia	no	394,598	7	0.0	46
COL	Colombia	Latin America	no	325,385	7	0.0	47
BWA	Botswana	Sub Saharan Africa	no	18,941	0	0.0	48
ARE	United Arab Emirates	Asia	no	248,015	2	0.0	49
GUF	French Guiana	Latin America	no	8,339	0	0.0	50
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	0.0	51
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	0.0	52
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.0	53
AFG	Afghanistan	Asia	no	16,132			54
ARM	Armenia	Asia	no	14,187			55
AZE	Azerbaijan	Asia	no	45,197			56
CYP	Cyprus	Asia	no	23,484			57
GEO	Georgia	Asia	no	21,157			58
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0		59
IRQ	Iraq	Asia	no	47,245			60
ISR	Israel	Asia	no	293,550			61
JOR	Jordan	Asia	no	40,997			62
KAZ	Kazakhstan	Asia	no	180,409			63
KWT	Kuwait	Asia	no	202,236			64
KGZ	Kyrgyzstan	Asia	no	3,644			65
LBN	Lebanon	Asia	no	56,965			66
MNG	Mongolia	Asia	no	9,273			67
QAT	Qatar	Asia	no	113,981	0		68
SAU	Saudi Arabia	Asia	no	751,807			69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
SYR	Syrian Arab Republic	Asia	no	68,489			70
TJK	Tajikistan	Asia	no	5,576			71
TUR	Turkey	Asia	no	1,578,228			72
TKM	Turkmenistan	Asia	no	12,707			73
UZB	Uzbekistan	Asia	no	44,370			74
YEM	Yemen	Asia	no	21,556			75
ALB	Albania	Europe	no	13,964			76
AUT	Austria	Europe	no	615,592			77
BLR	Belarus	Europe	no	74,427			78
BEL	Belgium	Europe	no	739,159			79
BIH	Bosnia and Herzegovina	Europe	no	10,433			80
BGR	Bulgaria	Europe	no	70,023			81
HRV	Croatia	Europe	no	65,145			82
CZE	Czech Republic	Europe	no	336,714			83
DNK	Denmark	Europe	no	381,265			84
EST	Estonia	Europe	no	28,069			85
FRO	Faroe Islands	Europe	no	1,012			86
FIN	Finland	Europe	no	209,050			87
FRA	France	Europe	no	3,653,264			88
DEU	Germany	Europe	no	5,800,986			89
GIB	Gibraltar	Europe	no	3,141			90
GRC	Greece	Europe	no	642,888			91
HUN	Hungary	Europe	no	286,209			92
ISL	Iceland	Europe	no	25,742			93
IRL	Ireland	Europe	no	244,117			94
ITA	Italy	Europe	no	3,701,619			95
LVA	Latvia	Europe	no	39,277			96
LIE	Liechtenstein	Europe	no	8,070			97
LTU	Lithuania	Europe	no	53,397			98
LUX	Luxembourg	Europe	no	45,036			99
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			100
MDA	Moldova, Republic of	Europe	no	9,896			101
MCO	Monaco	Europe	no	5,380			102
MNE	Montenegro	Europe	no	2,738			103
NLD	Netherlands	Europe	no	1,593,735			104
NOR	Norway	Europe	no	386,892			105
POL	Poland	Europe	no	659,150			106
PRT	Portugal	Europe	no	296,296	0		107
RUS	Russian Federation	Europe	no	2,209,139	2		108
SMR	San Marino	Europe	no	1,846			109
SRB	Serbia	Europe	no	16,907			110
SVK	Slovakia	Europe	no	124,390			111
SVN	Slovenia	Europe	no	36,896			112
ESP	Spain	Europe	no	2,695,139			113
SWE	Sweden	Europe	no	369,792			114
CHE	Switzerland	Europe	no	839,518			115
UKR	Ukraine	Europe	no	278,497			116
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			117
MLT	Malta	Pacific	no	18,630			118
ARG	Argentina	Latin America	no	403,909			119
BOL	Bolivia	Latin America	no	13,112			120
BRA	Brazil	Latin America	no	1,715,746			121
CHL	Chile	Latin America	no	326,640			122
ECU	Ecuador	Latin America	no	68,550			123
PRY	Paraguay	Latin America	no	19,203			124
PER	Peru	Latin America	no	189,980			125
URY	Uruguay	Latin America	no	28,590			126
DZA	Algeria	North Africa	no	259,977			127
EGY	Egypt	North Africa	no	234,939			128
LYB	Libyan Arab Jamahiriya	North Africa	no	78,903			129
MAR	Morocco	North Africa	no	136,300			130
TUN	Tunisia	North Africa	no	65,420			131
AGO	Angola	Sub Saharan Africa	no	25,225			132
BEN	Benin	Sub Saharan Africa	no	3,585			133
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			134
BDI	Burundi	Sub Saharan Africa	no	168			135
CMR	Cameroon	Sub Saharan Africa	no	16,950			136
CAF	Central African Republic	Sub Saharan Africa	no	916			137
TCD	Chad	Sub Saharan Africa	no	6,664			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			139
COG	Congo	Sub Saharan Africa	no	12,566			140
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			141
DJI	Djibouti	Sub Saharan Africa	no	2,525			142
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			143
ERI	Eritrea	Sub Saharan Africa	no	1,892			144
ETH	Ethiopia	Sub Saharan Africa	no	5,141			145
GAB	Gabon	Sub Saharan Africa	no	25,086			146
GMB	Gambia	Sub Saharan Africa	no	680			147
GHA	Ghana	Sub Saharan Africa	no	12,649			148
GIN	Guinea	Sub Saharan Africa	no	3,259			149
KEN	Kenya	Sub Saharan Africa	no	18,470			150
LSO	Lesotho	Sub Saharan Africa	no	3,522			151
LBR	Liberia	Sub Saharan Africa	no	515			152
MLI	Mali	Sub Saharan Africa	no	3,869			153
MRT	Mauritania	Sub Saharan Africa	no	3,622			154
NAM	Namibia	Sub Saharan Africa	no	7,239			155
NER	Niger	Sub Saharan Africa	no	2,800			156
NGA	Nigeria	Sub Saharan Africa	no	121,669			157
RWA	Rwanda	Sub Saharan Africa	no	1,558			158
SEN	Senegal	Sub Saharan Africa	no	11,619			159
SLE	Sierra Leone	Sub Saharan Africa	no	523			160
SOM	Somalia	Sub Saharan Africa	no	3,573			161
SDN	Sudan	Sub Saharan Africa	no	26,851			162
TGO	Togo	Sub Saharan Africa	no	1,644			163
UGA	Uganda	Sub Saharan Africa	no	6,628			164
ESH	Western Sahara	Sub Saharan Africa	no	2,173			165
AIA	Anguilla	Caribbean	yes	20	0	15.0	1
TON	Tonga	Pacific	yes	230	2	10.1	2
VIR	United States Virgin Islands	Caribbean	yes	1,755	16	9.2	3
VGB	British Virgin Islands	Caribbean	yes	424	3	6.9	4
WSM	Samoa	Pacific	yes	361	3	6.8	5
FJI	Fiji	Asia	yes	2,100	13	6.0	6
PRI	Puerto Rico	Caribbean	yes	135,818	795	5.9	7
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	5.3	8
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12	4.9	9
PYF	French Polynesia	Pacific	yes	6,568	32	4.9	10
BLZ	Belize	Latin America	yes	1,251	6	4.7	11
FSM	Micronesia (Federated States of)	Pacific	yes	585	3	4.4	12
DMA	Dominica	Caribbean	yes	356	1	3.7	13
HTI	Haiti	Caribbean	yes	8,553	32	3.7	14
BHS	Bahamas	Caribbean	yes	21,313	70	3.3	15
COM	Comoros	Sub Saharan Africa	yes	310	1	3.1	16
LCA	Saint Lucia	Caribbean	yes	543	2	2.7	17
BRB	Barbados	Caribbean	yes	4,677	10	2.2	18
JAM	Jamaica	Caribbean	yes	28,963	59	2.0	19
PLW	Palau	Pacific	yes	279	1	1.8	20
ABW	Aruba	Caribbean	yes	6,526	11	1.7	21
VUT	Vanuatu	Asia	yes	102	0	1.6	22
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2	1.5	23
GRD	Grenada	Caribbean	yes	1,229	1	1.2	24
CUB	Cuba	Caribbean	yes	46,280	40	0.9	25
DOM	Dominican Republic	Caribbean	yes	72,573	61	0.8	26
SLB	Solomon islands	Asia	yes	211	0	0.7	27
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17	0.5	28
NCL	New Caledonia	Asia	yes	4,771	2	0.3	29
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	0.2	30
PNG	Papua New Guinea	Asia	yes	5,433	0	0.1	31
GUY	Guyana	Latin America	yes	3,468	0	0.1	32
SUR	Suriname	Latin America	yes	2,797	0	0.0	33
CPV	Cape Verde	Sub Saharan Africa	yes	1,949		0.0	34
BHR	Bahrain	Asia	yes	32,575			35
MDV	Maldives	Pacific	yes	907			36
SGP	Singapore	Pacific	yes	526,900			37
KNA	Saint Kitts and Nevis	Caribbean	yes	2			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311			40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNE [USD million]	AAL/GNE [%]	Ranking
PHL	Philippines	Asia	no	186,193	2,039	203,208	10.0	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	986,184	8.8	2
JPN	Japan	Asia	no	14,617,394	45,933	5,396,265	8.5	3
MAC	Macau	Asia	no	96,993	68	11,994	5.7	4
HKG	Hong Kong	Asia	no	1,138,019	927	211,863	4.4	5
HND	Honduras	Latin America	no	18,844	70	18,594	3.7	6
MEX	Mexico	Latin America	no	1,818,298	3,472	1,049,803	3.3	7
CHN	China	Asia	no	4,512,825	8,954	5,694,512	1.6	8
USA	United States of America	North America	no	22,004,154	11,460	15,103,640	0.8	9
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	11,309	0.7	10
BGD	Bangladesh	Asia	no	72,949	58	106,991	0.5	11
GTM	Guatemala	Latin America	no	38,263	18	45,670	0.4	12
NIC	Nicaragua	Latin America	no	10,935	3	8,405	0.4	13
SLV	El Salvador	Latin America	no	22,582	5	24,921	0.2	14
VEN	Venezuela	Latin America	no	435,869	66	346,724	0.2	15
CAN	Canada	North America	no	2,051,584	310	1,606,667	0.2	16
VNM	Viet Nam	Asia	no	115,441	23	117,363	0.2	17
PAK	Pakistan	Asia	no	170,444	24	186,087	0.1	18
IND	India	Asia	no	1,429,881	230	1,783,129	0.1	19
LKA	Sri Lanka	Asia	no	49,967	5	54,079	0.1	20
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	7,629	0.1	21
PAN	Panama	Latin America	no	30,296	2	27,738	0.1	22
IDN	Indonesia	Asia	no	575,183	41	695,009	0.1	23
MWI	Malawi	Sub Saharan Africa	no	1,883	0	5,605	0.1	24
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	4,329	0.1	25
KHM	Cambodia	Asia	no	4,335	0	11,854	0.0	26
CRI	Costa Rica	Latin America	no	38,475	1	36,941	0.0	27
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	369,463	0.0	28
MYS	Malaysia	Asia	no	318,727	6	195,443	0.0	29
BWA	Botswana	Sub Saharan Africa	no	18,941	0	15,360	0.0	30
COL	Colombia	Latin America	no	325,385	7	294,580	0.0	31
THA	Thailand	Asia	no	394,598	7	295,072	0.0	32
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	8,897	0.0	33
ARE	United Arab Emirates	Asia	no	248,015	2	270,334	0.0	34
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	14,723	0.0	35
TCA	Turks and Caicos islands	Caribbean	no	332	4			36
CYM	Cayman Islands	Caribbean	no	3,603	42			37
GLP	Guadeloupe	Caribbean	no	19,838	192			38
MTQ	Martinique	Caribbean	no	21,052	103			39
REU	Réunion	Sub Saharan Africa	no	42,937	261			40
MDG	Madagascar	Sub Saharan Africa	no	2,575	15			41
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			42
TWN	Taiwan	Asia	no	872,409	4,441			43
BRN	Brunei Darussalam	Asia	no	20,094	11			44
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			45
NPL	Nepal	Asia	no	6,537	2			46
MMR	Myanmar	Asia	no	20,572	3			47
OMN	Oman	Asia	no	42,201	2			48
NZL	New Zealand	Australia	no	238,609	30			49
BTN	Bhutan	Asia	no	1,167				50
AUS	Australia	Australia	no	1,832,960	84			51
QAT	Qatar	Asia	no	113,981	0			52
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	26,224		53
LSO	Lesotho	Sub Saharan Africa	no	3,522		3,511		54
GUF	French Guiana	Latin America	no	8,339	0			55
AFG	Afghanistan	Asia	no	16,132		1,852		56
ARM	Armenia	Asia	no	14,187		11,639		57
AZE	Azerbaijan	Asia	no	45,197		33,777		58
CYP	Cyprus	Asia	no	23,484		24,623		59
GEO	Georgia	Asia	no	21,157		13,709		60
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0			61
IRQ	Iraq	Asia	no	47,245				62
ISR	Israel	Asia	no	293,550		212,896		63
JOR	Jordan	Asia	no	40,997		33,470		64
KAZ	Kazakhstan	Asia	no	180,409		127,087		65
KWT	Kuwait	Asia	no	202,236				66
KGZ	Kyrgyzstan	Asia	no	3,644		6,067		67
LBN	Lebanon	Asia	no	56,965		47,915		68
MNG	Mongolia	Asia	no	9,273		6,675		69



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SAU	Saudi Arabia	Asia	no	751,807		341,826		70
SYR	Syrian Arab Republic	Asia	no	68,489		59,401		71
TJK	Tajikistan	Asia	no	5,576		8,227		72
TUR	Turkey	Asia	no	1,578,228		774,921		73
TKM	Turkmenistan	Asia	no	12,707		20,575		74
UZB	Uzbekistan	Asia	no	44,370		38,768		75
YEM	Yemen	Asia	no	21,556				76
ALB	Albania	Europe	no	13,964		14,377		77
AUT	Austria	Europe	no	615,592		362,737		78
BLR	Belarus	Europe	no	74,427		62,212		79
BEL	Belgium	Europe	no	739,159		456,696		80
BIH	Bosnia and Herzegovina	Europe	no	10,433		20,030		81
BGR	Bulgaria	Europe	no	70,023		48,622		82
HRV	Croatia	Europe	no	65,145		61,162		83
CZE	Czech Republic	Europe	no	336,714		182,876		84
DNK	Denmark	Europe	no	381,265		292,535		85
EST	Estonia	Europe	no	28,069		17,933		86
FRO	Faroe Islands	Europe	no	1,012				87
FIN	Finland	Europe	no	209,050		235,640		88
FRA	France	Europe	no	3,653,264		2,620,062		89
DEU	Germany	Europe	no	5,800,986		3,101,126		90
GIB	Gibraltar	Europe	no	3,141				91
GRC	Greece	Europe	no	642,888		327,811		92
HUN	Hungary	Europe	no	286,209		120,269		93
ISL	Iceland	Europe	no	25,742		11,313		94
IRL	Ireland	Europe	no	244,117		171,957		95
ITA	Italy	Europe	no	3,701,619		2,087,749		96
LVA	Latvia	Europe	no	39,277		24,210		97
LIE	Liechtenstein	Europe	no	8,070				98
LTU	Lithuania	Europe	no	53,397		36,811		99
LUX	Luxembourg	Europe	no	45,036		36,700		100
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		10,902		101
MDA	Moldova, Republic of	Europe	no	9,896		8,053		102
MCO	Monaco	Europe	no	5,380				103
MNE	Montenegro	Europe	no	2,738		5,265		104
NLD	Netherlands	Europe	no	1,593,735		721,171		105
NOR	Norway	Europe	no	386,892		358,009		106
POL	Poland	Europe	no	659,150		475,111		107
PRT	Portugal	Europe	no	296,296	0	245,251		108
RUS	Russian Federation	Europe	no	2,209,139	2	1,356,393		109
SMR	San Marino	Europe	no	1,846				110
SRB	Serbia	Europe	no	16,907		44,764		111
SVK	Slovakia	Europe	no	124,390		88,405		112
SVN	Slovenia	Europe	no	36,896		46,643		113
ESP	Spain	Europe	no	2,695,139		1,437,861		114
SWE	Sweden	Europe	no	369,792		431,251		115
CHE	Switzerland	Europe	no	839,518		468,037		116
UKR	Ukraine	Europe	no	278,497		141,773		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,325,009		118
MLT	Malta	Pacific	no	18,630		8,111		119
ARG	Argentina	Latin America	no	403,909		356,545		120
BOL	Bolivia	Latin America	no	13,112		18,301		121
BRA	Brazil	Latin America	no	1,715,746		2,108,637		122
CHL	Chile	Latin America	no	326,640		198,120		123
ECU	Ecuador	Latin America	no	68,550		61,265		124
PRY	Paraguay	Latin America	no	19,203		17,941		125
PER	Peru	Latin America	no	189,980		152,561		126
URY	Uruguay	Latin America	no	28,590		39,936		127
DZA	Algeria	North Africa	no	259,977				128
EGY	Egypt	North Africa	no	234,939		229,362		129
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				130
MAR	Morocco	North Africa	no	136,300		99,808		131
TUN	Tunisia	North Africa	no	65,420		46,643		132
AGO	Angola	Sub Saharan Africa	no	25,225		72,456		133
BEN	Benin	Sub Saharan Africa	no	3,585		7,536		134
BFA	Burkina Faso	Sub Saharan Africa	no	3,120				135
BDI	Burundi	Sub Saharan Africa	no	168				136
CMR	Cameroon	Sub Saharan Africa	no	16,950		23,429		137
CAF	Central African Republic	Sub Saharan Africa	no	916				138



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TCD	Chad	Sub Saharan Africa	no	6,664			9,469		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			15,617		140
COG	Congo	Sub Saharan Africa	no	12,566			8,109		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			21,734		142
DJI	Djibouti	Sub Saharan Africa	no	2,525					143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765					144
ERI	Eritrea	Sub Saharan Africa	no	1,892					145
ETH	Ethiopia	Sub Saharan Africa	no	5,141			35,978		146
GAB	Gabon	Sub Saharan Africa	no	25,086			10,274		147
GMB	Gambia	Sub Saharan Africa	no	680			963		148
GHA	Ghana	Sub Saharan Africa	no	12,649			35,414		149
GIN	Guinea	Sub Saharan Africa	no	3,259			4,711		150
KEN	Kenya	Sub Saharan Africa	no	18,470			35,486		151
LBR	Liberia	Sub Saharan Africa	no	515					152
MLI	Mali	Sub Saharan Africa	no	3,869					153
MRT	Mauritania	Sub Saharan Africa	no	3,622			4,195		154
NAM	Namibia	Sub Saharan Africa	no	7,239			12,035		155
NER	Niger	Sub Saharan Africa	no	2,800					156
NGA	Nigeria	Sub Saharan Africa	no	121,669			168,996		157
RWA	Rwanda	Sub Saharan Africa	no	1,558					158
SEN	Senegal	Sub Saharan Africa	no	11,619			15,485		159
SLE	Sierra Leone	Sub Saharan Africa	no	523			2,142		160
SOM	Somalia	Sub Saharan Africa	no	3,573					161
SDN	Sudan	Sub Saharan Africa	no	26,851			61,511		162
TGO	Togo	Sub Saharan Africa	no	1,644					163
UGA	Uganda	Sub Saharan Africa	no	6,628			18,757		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173					165
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12	1,329	9.0		1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	10,934	6.3		2
TON	Tonga	Pacific	yes	230	2	510	4.5		3
FJI	Fiji	Asia	yes	2,100	13	3,569	3.6		4
JAM	Jamaica	Caribbean	yes	28,963	59	16,776	3.5		5
WSM	Samoa	Pacific	yes	361	3	727	3.4		6
HTI	Haiti	Caribbean	yes	8,553	32	9,743	3.3		7
BRB	Barbados	Caribbean	yes	4,677	10	4,317	2.3		8
DMA	Dominica	Caribbean	yes	356	1	573	2.3		9
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2	914	1.6		10
GRD	Grenada	Caribbean	yes	1,229	1	996	1.4		11
LCA	Saint Lucia	Caribbean	yes	543	2	1,355	1.1		12
DOM	Dominican Republic	Caribbean	yes	72,573	61	57,847	1.1		13
VUT	Vanuatu	Asia	yes	102	0	743	0.3		14
SLB	Solomon islands	Asia	yes	211	0	885	0.2		15
PNG	Papua New Guinea	Asia	yes	5,433	0	9,217	0.0		16
AIA	Anguilla	Caribbean	yes	20	0				17
VIR	United States Virgin Islands	Caribbean	yes	1,755	16				18
VGB	British Virgin Islands	Caribbean	yes	424	3				19
BLZ	Belize	Latin America	yes	1,251	6				20
PRI	Puerto Rico	Caribbean	yes	135,818	795				21
FSM	Micronesia (Federated States of)	Pacific	yes	585	3				22
COM	Comoros	Sub Saharan Africa	yes	310	1				23
PYF	French Polynesia	Pacific	yes	6,568	32				24
BHS	Bahamas	Caribbean	yes	21,313	70				25
ABW	Aruba	Caribbean	yes	6,526	11				26
PLW	Palau	Pacific	yes	279	1				27
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17				28
CUB	Cuba	Caribbean	yes	46,280	40				29
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1				30
NCL	New Caledonia	Asia	yes	4,771	2				31
GUY	Guyana	Latin America	yes	3,468	0				32
CPV	Cape Verde	Sub Saharan Africa	yes	1,949					33
SUR	Suriname	Latin America	yes	2,797	0				34
BHR	Bahrain	Asia	yes	32,575					35
MDV	Maldives	Pacific	yes	907		2,244			36
SGP	Singapore	Pacific	yes	526,900		150,187			37
KNA	Saint Kitts and Nevis	Caribbean	yes	2		766			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466					39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311					40



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PHL	Philippines	Asia	no	186,193	2,039	19,403	105.1	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	155,748	55.6	2
HKG	Hong Kong	Asia	no	1,138,019	927	18,948	48.9	3
JPN	Japan	Asia	no	14,617,394	45,933	1,094,349	42.0	4
MAC	Macau	Asia	no	96,993	68	2,186	31.0	5
MEX	Mexico	Latin America	no	1,818,298	3,472	120,640	28.8	6
HND	Honduras	Latin America	no	18,844	70	2,777	25.0	7
CHN	China	Asia	no	4,512,825	8,954	791,999	11.3	8
BGD	Bangladesh	Asia	no	72,949	58	5,387	10.8	9
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1,166	6.5	10
NIC	Nicaragua	Latin America	no	10,935	3	627	4.9	11
USA	United States of America	North America	no	22,004,154	11,460	2,522,700	4.5	12
GTM	Guatemala	Latin America	no	38,263	18	4,254	4.2	13
VNM	Viet Nam	Asia	no	115,441	23	6,947	3.3	14
SLV	El Salvador	Latin America	no	22,582	5	2,312	2.3	15
PAK	Pakistan	Asia	no	170,444	24	14,053	1.7	16
VEN	Venezuela	Latin America	no	435,869	66	42,419	1.6	17
PAN	Panama	Latin America	no	30,296	2	1,561	1.4	18
IND	India	Asia	no	1,429,881	230	198,830	1.2	19
CAN	Canada	North America	no	2,051,584	310	343,217	0.9	20
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	672	0.9	21
IDN	Indonesia	Asia	no	575,183	41	64,015	0.6	22
LKA	Sri Lanka	Asia	no	49,967	5	7,718	0.6	23
KHM	Cambodia	Asia	no	4,335	0	713	0.6	24
MWI	Malawi	Sub Saharan Africa	no	1,883	0	976	0.3	25
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	913	0.2	26
MYS	Malaysia	Asia	no	318,727	6	30,273	0.2	27
THA	Thailand	Asia	no	394,598	7	41,294	0.2	28
CRI	Costa Rica	Latin America	no	38,475	1	6,358	0.2	29
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	71,742	0.2	30
COL	Colombia	Latin America	no	325,385	7	46,769	0.2	31
BWA	Botswana	Sub Saharan Africa	no	18,941	0	3,130	0.1	32
ARE	United Arab Emirates	Asia	no	248,015	2	24,545	0.1	33
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	1,281	0.1	34
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	2,153	0.1	35
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	4,052	0.0	36
PRT	Portugal	Europe	no	296,296	0	49,074	0.0	37
RUS	Russian Federation	Europe	no	2,209,139	2	287,875	0.0	38
TCA	Turks and Caicos islands	Caribbean	no	332	4			39
CYM	Cayman Islands	Caribbean	no	3,603	42			40
GLP	Guadeloupe	Caribbean	no	19,838	192			41
MTQ	Martinique	Caribbean	no	21,052	103			42
REU	Réunion	Sub Saharan Africa	no	42,937	261			43
MDG	Madagascar	Sub Saharan Africa	no	2,575	15			44
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			45
TWN	Taiwan	Asia	no	872,409	4,441			46
BRN	Brunei Darussalam	Asia	no	20,094	11			47
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			48
NPL	Nepal	Asia	no	6,537	2			49
MMR	Myanmar	Asia	no	20,572	3			50
OMN	Oman	Asia	no	42,201	2			51
NZL	New Zealand	Australia	no	238,609	30			52
BTN	Bhutan	Asia	no	1,167				53
AUS	Australia	Australia	no	1,832,960	84			54
QAT	Qatar	Asia	no	113,981	0			55
LSO	Lesotho	Sub Saharan Africa	no	3,522		935		56
GUF	French Guiana	Latin America	no	8,339	0			57
AFG	Afghanistan	Asia	no	16,132				58
ARM	Armenia	Asia	no	14,187		1,231		59
AZE	Azerbaijan	Asia	no	45,197		5,852		60
CYP	Cyprus	Asia	no	23,484		4,558		61
GEO	Georgia	Asia	no	21,157		2,453		62
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0			63
IRQ	Iraq	Asia	no	47,245				64
ISR	Israel	Asia	no	293,550		52,616		65
JOR	Jordan	Asia	no	40,997		5,910		66
KAZ	Kazakhstan	Asia	no	180,409		16,117		67
KWT	Kuwait	Asia	no	202,236				68
KGZ	Kyrgyzstan	Asia	no	3,644		877		69



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LBN	Lebanon	Asia	no	56,965		4,711		70
MNG	Mongolia	Asia	no	9,273		851		71
SAU	Saudi Arabia	Asia	no	751,807		97,875		72
SYR	Syrian Arab Republic	Asia	no	68,489		5,991		73
TJK	Tajikistan	Asia	no	5,576		1,658		74
TUR	Turkey	Asia	no	1,578,228		104,758		75
TKM	Turkmenistan	Asia	no	12,707		2,212		76
UZB	Uzbekistan	Asia	no	44,370		6,853		77
YEM	Yemen	Asia	no	21,556				78
ALB	Albania	Europe	no	13,964		952		79
AUT	Austria	Europe	no	615,592		73,430		80
BLR	Belarus	Europe	no	74,427		8,828		81
BEL	Belgium	Europe	no	739,159		113,598		82
BIH	Bosnia and Herzegovina	Europe	no	10,433		3,498		83
BGR	Bulgaria	Europe	no	70,023		7,539		84
HRV	Croatia	Europe	no	65,145		13,084		85
CZE	Czech Republic	Europe	no	336,714		41,897		86
DNK	Denmark	Europe	no	381,265		90,977		87
EST	Estonia	Europe	no	28,069		3,959		88
FRO	Faroe Islands	Europe	no	1,012				89
FIN	Finland	Europe	no	209,050		58,644		90
FRA	France	Europe	no	3,653,264		635,621		91
DEU	Germany	Europe	no	5,800,986		647,378		92
GIB	Gibraltar	Europe	no	3,141				93
GRC	Greece	Europe	no	642,888		54,736		94
HUN	Hungary	Europe	no	286,209		28,084		95
ISL	Iceland	Europe	no	25,742		3,261		96
IRL	Ireland	Europe	no	244,117		39,102		97
ITA	Italy	Europe	no	3,701,619		435,241		98
LVA	Latvia	Europe	no	39,277		4,122		99
LIE	Liechtenstein	Europe	no	8,070				100
LTU	Lithuania	Europe	no	53,397		7,241		101
LUX	Luxembourg	Europe	no	45,036		8,868		102
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		1,683		103
MDA	Moldova, Republic of	Europe	no	9,896		1,377		104
MCO	Monaco	Europe	no	5,380				105
MNE	Montenegro	Europe	no	2,738		775		106
NLD	Netherlands	Europe	no	1,593,735		221,964		107
NOR	Norway	Europe	no	386,892		92,372		108
POL	Poland	Europe	no	659,150		88,643		109
SMR	San Marino	Europe	no	1,846				110
SRB	Serbia	Europe	no	16,907		7,380		111
SVK	Slovakia	Europe	no	124,390		17,073		112
SVN	Slovenia	Europe	no	36,896		9,752		113
ESP	Spain	Europe	no	2,695,139		292,417		114
SWE	Sweden	Europe	no	369,792		123,918		115
CHE	Switzerland	Europe	no	839,518		60,549		116
UKR	Ukraine	Europe	no	278,497		27,731		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		518,869		118
MLT	Malta	Pacific	no	18,630		1,711		119
ARG	Argentina	Latin America	no	403,909		55,024		120
BOL	Bolivia	Latin America	no	13,112		2,718		121
BRA	Brazil	Latin America	no	1,715,746		442,019		122
CHL	Chile	Latin America	no	326,640		26,588		123
ECU	Ecuador	Latin America	no	68,550		6,807		124
PRY	Paraguay	Latin America	no	19,203		1,711		125
PER	Peru	Latin America	no	189,980		15,659		126
URY	Uruguay	Latin America	no	28,590		5,117		127
DZA	Algeria	North Africa	no	259,977				128
EGY	Egypt	North Africa	no	234,939		24,436		129
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				130
MAR	Morocco	North Africa	no	136,300		15,913		131
TUN	Tunisia	North Africa	no	65,420		7,209		132
AGO	Angola	Sub Saharan Africa	no	25,225				133
BEN	Benin	Sub Saharan Africa	no	3,585				134
BFA	Burkina Faso	Sub Saharan Africa	no	3,120				135
BDI	Burundi	Sub Saharan Africa	no	168				136
CMR	Cameroon	Sub Saharan Africa	no	16,950				137
CAF	Central African Republic	Sub Saharan Africa	no	916				138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GGC [USD million]		AAL/GGC [‰]	Ranking
TCD	Chad	Sub Saharan Africa	no	6,664			1,131		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			719		140
COG	Congo	Sub Saharan Africa	no	12,566			1,186		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			1,968		142
DJI	Djibouti	Sub Saharan Africa	no	2,525					143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765					144
ERI	Eritrea	Sub Saharan Africa	no	1,892					145
ETH	Ethiopia	Sub Saharan Africa	no	5,141			3,029		146
GAB	Gabon	Sub Saharan Africa	no	25,086			1,267		147
GMB	Gambia	Sub Saharan Africa	no	680			121		148
GHA	Ghana	Sub Saharan Africa	no	12,649			3,511		149
GIN	Guinea	Sub Saharan Africa	no	3,259			339		150
KEN	Kenya	Sub Saharan Africa	no	18,470			4,226		151
LBR	Liberia	Sub Saharan Africa	no	515					152
MLI	Mali	Sub Saharan Africa	no	3,869					153
MRT	Mauritania	Sub Saharan Africa	no	3,622			646		154
NAM	Namibia	Sub Saharan Africa	no	7,239			2,692		155
NER	Niger	Sub Saharan Africa	no	2,800					156
NGA	Nigeria	Sub Saharan Africa	no	121,669					157
RWA	Rwanda	Sub Saharan Africa	no	1,558					158
SEN	Senegal	Sub Saharan Africa	no	11,619			1,124		159
SLE	Sierra Leone	Sub Saharan Africa	no	523			233		160
SOM	Somalia	Sub Saharan Africa	no	3,573					161
SDN	Sudan	Sub Saharan Africa	no	26,851			9,428		162
TGO	Togo	Sub Saharan Africa	no	1,644					163
UGA	Uganda	Sub Saharan Africa	no	6,628			2,015		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173					165
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	1,393	49.5		1
TON	Tonga	Pacific	yes	230	2	67	34.5		2
JAM	Jamaica	Caribbean	yes	28,963	59	2,368	24.9		3
DMA	Dominica	Caribbean	yes	356	1	81	16.1		4
DOM	Dominican Republic	Caribbean	yes	72,573	61	3,965	15.3		5
BRB	Barbados	Caribbean	yes	4,677	10	835	12.1		6
LCA	Saint Lucia	Caribbean	yes	543	2	192	7.8		7
GUY	Guyana	Latin America	yes	3,468	0	341	0.6		8
PNG	Papua New Guinea	Asia	yes	5,433	0	897	0.3		9
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12				10
FJI	Fiji	Asia	yes	2,100	13				11
WSM	Samoa	Pacific	yes	361	3				12
HTI	Haiti	Caribbean	yes	8,553	32				13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2				14
GRD	Grenada	Caribbean	yes	1,229	1				15
VUT	Vanuatu	Asia	yes	102	0				16
SLB	Solomon Islands	Asia	yes	211	0				17
AIA	Anguilla	Caribbean	yes	20	0				18
VIR	United States Virgin Islands	Caribbean	yes	1,755	16				19
VGB	British Virgin Islands	Caribbean	yes	424	3				20
BLZ	Belize	Latin America	yes	1,251	6				21
PRI	Puerto Rico	Caribbean	yes	135,818	795				22
FSM	Micronesia (Federated States of)	Pacific	yes	585	3				23
COM	Comoros	Sub Saharan Africa	yes	310	1				24
PYF	French Polynesia	Pacific	yes	6,568	32				25
BHS	Bahamas	Caribbean	yes	21,313	70				26
ABW	Aruba	Caribbean	yes	6,526	11				27
PLW	Palau	Pacific	yes	279	1				28
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17				29
CUB	Cuba	Caribbean	yes	46,280	40				30
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1				31
NCL	New Caledonia	Asia	yes	4,771	2				32
CPV	Cape Verde	Sub Saharan Africa	yes	1,949					33
SUR	Suriname	Latin America	yes	2,797	0				34
BHR	Bahrain	Asia	yes	32,575					35
MDV	Maldives	Pacific	yes	907					36
SGP	Singapore	Pacific	yes	526,900		22,293			37
KNA	Saint Kitts and Nevis	Caribbean	yes	2					38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466					39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311					40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value)	(Cyclones)	GFCF(GCF)	AAL/GFCF(GCF)	
				[USD million]	[USD million]	[USD million]	[%]	
PHL	Philippines	Asia	no	186,193	2,039	22,170	92.0	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	200,936	43.1	2
JPN	Japan	Asia	no	14,617,394	45,933	1,144,171	40.1	3
HND	Honduras	Latin America	no	18,844	70	2,998	23.2	4
MEX	Mexico	Latin America	no	1,818,298	3,472	159,403	21.8	5
HKG	Hong Kong	Asia	no	1,138,019	927	52,025	17.8	6
MAC	Macau	Asia	no	96,993	68	4,316	15.7	7
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	1,317	11.5	8
CHN	China	Asia	no	4,512,825	8,954	930,625	9.6	9
BRN	Brunei Darussalam	Asia	no	20,094	11	1,279	8.7	10
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1,432	5.3	11
USA	United States of America	North America	no	22,004,154	11,460	2,212,313	5.2	12
GTM	Guatemala	Latin America	no	38,263	18	4,200	4.2	13
BGD	Bangladesh	Asia	no	72,949	58	19,006	3.1	14
NIC	Nicaragua	Latin America	no	10,935	3	1,445	2.1	15
SLV	El Salvador	Latin America	no	22,582	5	2,799	1.9	16
NZL	New Zealand	Australia	no	238,609	30	15,614	1.9	17
CAN	Canada	North America	no	2,051,584	310	203,409	1.5	18
VEN	Venezuela	Latin America	no	435,869	66	48,477	1.4	19
PAK	Pakistan	Asia	no	170,444	24	18,461	1.3	20
VNM	Viet Nam	Asia	no	115,441	23	19,932	1.1	21
IND	India	Asia	no	1,429,881	230	248,602	0.9	22
IDN	Indonesia	Asia	no	575,183	41	52,407	0.8	23
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	265	0.8	24
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	893	0.7	25
LKA	Sri Lanka	Asia	no	49,967	5	7,159	0.7	26
AUS	Australia	Australia	no	1,832,960	84	150,632	0.6	27
PAN	Panama	Latin America	no	30,296	2	4,074	0.5	28
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	38,298	0.3	29
KHM	Cambodia	Asia	no	4,335	0	1,494	0.3	30
CRI	Costa Rica	Latin America	no	38,475	1	4,507	0.2	31
BWA	Botswana	Sub Saharan Africa	no	18,941	0	1,880	0.2	32
COL	Colombia	Latin America	no	325,385	7	33,173	0.2	33
MYS	Malaysia	Asia	no	318,727	6	30,724	0.2	34
THA	Thailand	Asia	no	394,598	7	42,938	0.2	35
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	815	0.1	36
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	3,995	0.0	37
RUS	Russian Federation	Europe	no	2,209,139	2	100,485	0.0	38
PRT	Portugal	Europe	no	296,296	0	29,628	0.0	39
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0	46,695	0.0	40
MWI	Malawi	Sub Saharan Africa	no	1,883	0			41
ARE	United Arab Emirates	Asia	no	248,015	2			42
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0			43
TCA	Turks and Caicos islands	Caribbean	no	332	4			44
CYM	Cayman Islands	Caribbean	no	3,603	42			45
GLP	Guadeloupe	Caribbean	no	19,838	192			46
MTQ	Martinique	Caribbean	no	21,052	103			47
REU	Réunion	Sub Saharan Africa	no	42,937	261			48
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			49
TWN	Taiwan	Asia	no	872,409	4,441			50
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			51
NPL	Nepal	Asia	no	6,537	2			52
MMR	Myanmar	Asia	no	20,572	3			53
OMN	Oman	Asia	no	42,201	2			54
BTN	Bhutan	Asia	no	1,167				55
QAT	Qatar	Asia	no	113,981	0			56
LSO	Lesotho	Sub Saharan Africa	no	3,522		257		57
GUF	French Guiana	Latin America	no	8,339	0			58
AFG	Afghanistan	Asia	no	16,132				59
ARM	Armenia	Asia	no	14,187		1,530		60
AZE	Azerbaijan	Asia	no	45,197		4,557		61
CYP	Cyprus	Asia	no	23,484		2,630		62
GEO	Georgia	Asia	no	21,157				63
IRQ	Iraq	Asia	no	47,245				64
ISR	Israel	Asia	no	293,550		30,157		65
JOR	Jordan	Asia	no	40,997		3,205		66
KAZ	Kazakhstan	Asia	no	180,409		11,258		67
KWT	Kuwait	Asia	no	202,236				68
KGZ	Kyrgyzstan	Asia	no	3,644		419		69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	Ranking
LBN	Lebanon	Asia	no	56,965		5,937		70
MNG	Mongolia	Asia	no	9,273				71
SAU	Saudi Arabia	Asia	no	751,807		66,377		72
SYR	Syrian Arab Republic	Asia	no	68,489		6,052		73
TJK	Tajikistan	Asia	no	5,576		144		74
TUR	Turkey	Asia	no	1,578,228		87,701		75
TKM	Turkmenistan	Asia	no	12,707				76
UZB	Uzbekistan	Asia	no	44,370				77
YEM	Yemen	Asia	no	21,556				78
ALB	Albania	Europe	no	13,964		1,329		79
AUT	Austria	Europe	no	615,592		48,760		80
BLR	Belarus	Europe	no	74,427		8,860		81
BEL	Belgium	Europe	no	739,159		59,532		82
BIH	Bosnia and Herzegovina	Europe	no	10,433				83
BGR	Bulgaria	Europe	no	70,023		5,626		84
HRV	Croatia	Europe	no	65,145		8,147		85
CZE	Czech Republic	Europe	no	336,714		22,186		86
DNK	Denmark	Europe	no	381,265		39,721		87
EST	Estonia	Europe	no	28,069		3,738		88
FRO	Faroe Islands	Europe	no	1,012				89
FIN	Finland	Europe	no	209,050		30,495		90
FRA	France	Europe	no	3,653,264		306,117		91
DEU	Germany	Europe	no	5,800,986		413,986		92
GIB	Gibraltar	Europe	no	3,141				93
GRC	Greece	Europe	no	642,888		42,781		94
HUN	Hungary	Europe	no	286,209		14,219		95
ISL	Iceland	Europe	no	25,742		3,437		96
IRL	Ireland	Europe	no	244,117		33,055		97
ITA	Italy	Europe	no	3,701,619		253,228		98
LVA	Latvia	Europe	no	39,277		5,143		99
LIE	Liechtenstein	Europe	no	8,070				100
LTU	Lithuania	Europe	no	53,397		5,768		101
LUX	Luxembourg	Europe	no	45,036		6,616		102
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		823		103
MDA	Moldova, Republic of	Europe	no	9,896		563		104
MCO	Monaco	Europe	no	5,380				105
MNE	Montenegro	Europe	no	2,738				106
NLD	Netherlands	Europe	no	1,593,735		92,014		107
NOR	Norway	Europe	no	386,892		47,607		108
POL	Poland	Europe	no	659,150		52,601		109
SMR	San Marino	Europe	no	1,846				110
SRB	Serbia	Europe	no	16,907		2,776		111
SVK	Slovakia	Europe	no	124,390		11,975		112
SVN	Slovenia	Europe	no	36,896		7,746		113
ESP	Spain	Europe	no	2,695,139		216,748		114
SWE	Sweden	Europe	no	369,792		60,814		115
CHE	Switzerland	Europe	no	839,518		64,161		116
UKR	Ukraine	Europe	no	278,497		14,671		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		335,845		118
MLT	Malta	Pacific	no	18,630		1,008		119
ARG	Argentina	Latin America	no	403,909		75,477		120
BOL	Bolivia	Latin America	no	13,112		1,619		121
BRA	Brazil	Latin America	no	1,715,746		138,995		122
CHL	Chile	Latin America	no	326,640		27,076		123
ECU	Ecuador	Latin America	no	68,550		5,925		124
PRY	Paraguay	Latin America	no	19,203		1,552		125
PER	Peru	Latin America	no	189,980		18,553		126
URY	Uruguay	Latin America	no	28,590		3,671		127
DZA	Algeria	North Africa	no	259,977		18,029		128
EGY	Egypt	North Africa	no	234,939		30,406		129
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				130
MAR	Morocco	North Africa	no	136,300		16,366		131
TUN	Tunisia	North Africa	no	65,420		6,865		132
AGO	Angola	Sub Saharan Africa	no	25,225				133
BEN	Benin	Sub Saharan Africa	no	3,585		720		134
BFA	Burkina Faso	Sub Saharan Africa	no	3,120				135
BDI	Burundi	Sub Saharan Africa	no	168				136
CMR	Cameroon	Sub Saharan Africa	no	16,950		2,363		137
CAF	Central African Republic	Sub Saharan Africa	no	916				138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GFCF(GCF) AAL/GFCF(GCF) [USD million] [%]		Ranking
TCD	Chad	Sub Saharan Africa	no	6,664				139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433				140
COG	Congo	Sub Saharan Africa	no	12,566				141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		1,082		142
DJI	Djibouti	Sub Saharan Africa	no	2,525				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765				144
ERI	Eritrea	Sub Saharan Africa	no	1,892		141		145
ETH	Ethiopia	Sub Saharan Africa	no	5,141		3,519		146
GAB	Gabon	Sub Saharan Africa	no	25,086		1,639		147
GMB	Gambia	Sub Saharan Africa	no	680				148
GHA	Ghana	Sub Saharan Africa	no	12,649				149
GIN	Guinea	Sub Saharan Africa	no	3,259		391		150
KEN	Kenya	Sub Saharan Africa	no	18,470		3,803		151
LBR	Liberia	Sub Saharan Africa	no	515				152
MLI	Mali	Sub Saharan Africa	no	3,869		1,042		153
MRT	Mauritania	Sub Saharan Africa	no	3,622				154
NAM	Namibia	Sub Saharan Africa	no	7,239		1,324		155
NER	Niger	Sub Saharan Africa	no	2,800				156
NGA	Nigeria	Sub Saharan Africa	no	121,669				157
RWA	Rwanda	Sub Saharan Africa	no	1,558				158
SEN	Senegal	Sub Saharan Africa	no	11,619		2,278		159
SLE	Sierra Leone	Sub Saharan Africa	no	523				160
SOM	Somalia	Sub Saharan Africa	no	3,573				161
SDN	Sudan	Sub Saharan Africa	no	26,851		3,285		162
TGO	Togo	Sub Saharan Africa	no	1,644				163
UGA	Uganda	Sub Saharan Africa	no	6,628		2,609		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173				165
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	1,571	43.9	1
BLZ	Belize	Latin America	yes	1,251	6	180	32.8	2
HTI	Haiti	Caribbean	yes	8,553	32	1,081	29.5	3
BHS	Bahamas	Caribbean	yes	21,313	70	2,547	27.6	4
DOM	Dominican Republic	Caribbean	yes	72,573	61	5,996	10.1	5
CUB	Cuba	Caribbean	yes	46,280	40	5,742	7.0	6
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	262	2.3	7
TON	Tonga	Pacific	yes	230	2			8
JAM	Jamaica	Caribbean	yes	28,963	59			9
DMA	Dominica	Caribbean	yes	356	1			10
BRB	Barbados	Caribbean	yes	4,677	10			11
LCA	Saint Lucia	Caribbean	yes	543	2			12
GUY	Guyana	Latin America	yes	3,468	0			13
PNG	Papua New Guinea	Asia	yes	5,433	0			14
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12			15
FJI	Fiji	Asia	yes	2,100	13			16
WSM	Samoa	Pacific	yes	361	3			17
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2			18
GRD	Grenada	Caribbean	yes	1,229	1			19
VUT	Vanuatu	Asia	yes	102	0			20
SLB	Solomon islands	Asia	yes	211	0			21
AIA	Anguilla	Caribbean	yes	20	0			22
VIR	United States Virgin Islands	Caribbean	yes	1,755	16			23
VGB	British Virgin Islands	Caribbean	yes	424	3			24
PRI	Puerto Rico	Caribbean	yes	135,818	795			25
FSM	Micronesia (Federated States of)	Pacific	yes	585	3			26
COM	Comoros	Sub Saharan Africa	yes	310	1			27
PYF	French Polynesia	Pacific	yes	6,568	32			28
ABW	Aruba	Caribbean	yes	6,526	11			29
PLW	Palau	Pacific	yes	279	1			30
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17			31
NCL	New Caledonia	Asia	yes	4,771	2			32
CPV	Cape Verde	Sub Saharan Africa	yes	1,949		190		33
SUR	Suriname	Latin America	yes	2,797	0			34
BHR	Bahrain	Asia	yes	32,575				35
MDV	Maldives	Pacific	yes	907				36
SGP	Singapore	Pacific	yes	526,900		36,452		37
KNA	Saint Kitts and Nevis	Caribbean	yes	2				38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466				39
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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
TCA	Turks and Caicos islands	Caribbean	no	332	121	36.7	1
CYM	Cayman Islands	Caribbean	no	3,603	1,195	33.2	2
GLP	Guadeloupe	Caribbean	no	19,838	6,191	31.2	3
MTQ	Martinique	Caribbean	no	21,052	4,820	22.9	4
REU	Réunion	Sub Saharan Africa	no	42,937	7,386	17.2	5
PHL	Philippines	Asia	no	186,193	29,234	15.7	6
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	15.5	7
HND	Honduras	Latin America	no	18,844	2,730	14.5	8
MYT	Mayotte	Sub Saharan Africa	no	2,341	310	13.3	9
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	7.2	10
MEX	Mexico	Latin America	no	1,818,298	102,450	5.6	11
KOR	Republic of Korea	Asia	no	2,787,207	155,099	5.6	12
TWN	Taiwan	Asia	no	872,409	42,503	4.9	13
BGD	Bangladesh	Asia	no	72,949	3,058	4.2	14
JPN	Japan	Asia	no	14,617,394	547,820	3.8	15
CHN	China	Asia	no	4,512,825	126,734	2.8	16
BRN	Brunei Darussalam	Asia	no	20,094	555	2.8	17
HKG	Hong Kong	Asia	no	1,138,019	24,805	2.2	18
PRK	Dem People's Rep of Korea	Asia	no	27,936	587	2.1	19
GTM	Guatemala	Latin America	no	38,263	698	1.8	20
NPL	Nepal	Asia	no	6,537	112	1.7	21
MAC	Macau	Asia	no	96,993	1,550	1.6	22
NIC	Nicaragua	Latin America	no	10,935	133	1.2	23
USA	United States of America	North America	no	22,004,154	194,597	0.9	24
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	0.8	25
VEN	Venezuela	Latin America	no	435,869	3,263	0.8	26
SLV	El Salvador	Latin America	no	22,582	165	0.7	27
MWI	Malawi	Sub Saharan Africa	no	1,883	13	0.7	28
PAK	Pakistan	Asia	no	170,444	1,188	0.7	29
IND	India	Asia	no	1,429,881	9,531	0.7	30
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	0.6	31
CAN	Canada	North America	no	2,051,584	10,965	0.5	32
VNM	Viet Nam	Asia	no	115,441	587	0.5	33
MMR	Myanmar	Asia	no	20,572	101	0.5	34
PAN	Panama	Latin America	no	30,296	129	0.4	35
IDN	Indonesia	Asia	no	575,183	2,060	0.4	36
KHM	Cambodia	Asia	no	4,335	15	0.4	37
LKA	Sri Lanka	Asia	no	49,967	172	0.3	38
OMN	Oman	Asia	no	42,201	131	0.3	39
NZL	New Zealand	Australia	no	238,609	677	0.3	40
BTN	Bhutan	Asia	no	1,167	3	0.3	41
CRI	Costa Rica	Latin America	no	38,475	71	0.2	42
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	0.2	43
COL	Colombia	Latin America	no	325,385	354	0.1	44
AUS	Australia	Australia	no	1,832,960	1,857	0.1	45
MYS	Malaysia	Asia	no	318,727	328	0.1	46
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	0.1	47
THA	Thailand	Asia	no	394,598	259	0.1	48
ARE	United Arab Emirates	Asia	no	248,015	150	0.1	49
BWA	Botswana	Sub Saharan Africa	no	18,941	4	0.0	50
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	0.0	51
QAT	Qatar	Asia	no	113,981	18	0.0	52
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	0.0	53
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	0.0	54
GUF	French Guiana	Latin America	no	8,339	0		55
AFG	Afghanistan	Asia	no	16,132			56
ARM	Armenia	Asia	no	14,187			57
AZE	Azerbaijan	Asia	no	45,197			58
CYP	Cyprus	Asia	no	23,484			59
GEO	Georgia	Asia	no	21,157			60
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21		61
IRQ	Iraq	Asia	no	47,245			62
ISR	Israel	Asia	no	293,550			63
JOR	Jordan	Asia	no	40,997			64
KAZ	Kazakhstan	Asia	no	180,409			65
KWT	Kuwait	Asia	no	202,236			66
KGZ	Kyrgyzstan	Asia	no	3,644			67
LBN	Lebanon	Asia	no	56,965			68
MNG	Mongolia	Asia	no	9,273			69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
SAU	Saudi Arabia	Asia	no	751,807	1		70
SYR	Syrian Arab Republic	Asia	no	68,489			71
TJK	Tajikistan	Asia	no	5,576			72
TUR	Turkey	Asia	no	1,578,228			73
TKM	Turkmenistan	Asia	no	12,707			74
UZB	Uzbekistan	Asia	no	44,370			75
YEM	Yemen	Asia	no	21,556			76
ALB	Albania	Europe	no	13,964			77
AUT	Austria	Europe	no	615,592			78
BLR	Belarus	Europe	no	74,427			79
BEL	Belgium	Europe	no	739,159			80
BIH	Bosnia and Herzegovina	Europe	no	10,433			81
BGR	Bulgaria	Europe	no	70,023			82
HRV	Croatia	Europe	no	65,145			83
CZE	Czech Republic	Europe	no	336,714			84
DNK	Denmark	Europe	no	381,265			85
EST	Estonia	Europe	no	28,069			86
FRO	Faroe Islands	Europe	no	1,012			87
FIN	Finland	Europe	no	209,050			88
FRA	France	Europe	no	3,653,264			89
DEU	Germany	Europe	no	5,800,986			90
GIB	Gibraltar	Europe	no	3,141			91
GRC	Greece	Europe	no	642,888			92
HUN	Hungary	Europe	no	286,209			93
ISL	Iceland	Europe	no	25,742			94
IRL	Ireland	Europe	no	244,117			95
ITA	Italy	Europe	no	3,701,619			96
LVA	Latvia	Europe	no	39,277			97
LIE	Liechtenstein	Europe	no	8,070			98
LTU	Lithuania	Europe	no	53,397			99
LUX	Luxembourg	Europe	no	45,036			100
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			101
MDA	Moldova, Republic of	Europe	no	9,896			102
MCO	Monaco	Europe	no	5,380			103
MNE	Montenegro	Europe	no	2,738			104
NLD	Netherlands	Europe	no	1,593,735			105
NOR	Norway	Europe	no	386,892			106
POL	Poland	Europe	no	659,150			107
PRT	Portugal	Europe	no	296,296	13		108
RUS	Russian Federation	Europe	no	2,209,139	58		109
SMR	San Marino	Europe	no	1,846			110
SRB	Serbia	Europe	no	16,907			111
SVK	Slovakia	Europe	no	124,390			112
SVN	Slovenia	Europe	no	36,896			113
ESP	Spain	Europe	no	2,695,139			114
SWE	Sweden	Europe	no	369,792			115
CHE	Switzerland	Europe	no	839,518			116
UKR	Ukraine	Europe	no	278,497			117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			118
MLT	Malta	Pacific	no	18,630			119
ARG	Argentina	Latin America	no	403,909			120
BOL	Bolivia	Latin America	no	13,112			121
BRA	Brazil	Latin America	no	1,715,746			122
CHL	Chile	Latin America	no	326,640			123
ECU	Ecuador	Latin America	no	68,550			124
PRY	Paraguay	Latin America	no	19,203			125
PER	Peru	Latin America	no	189,980			126
URY	Uruguay	Latin America	no	28,590			127
DZA	Algeria	North Africa	no	259,977			128
EGY	Egypt	North Africa	no	234,939			129
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903			130
MAR	Morocco	North Africa	no	136,300			131
TUN	Tunisia	North Africa	no	65,420			132
AGO	Angola	Sub Saharan Africa	no	25,225			133
BEN	Benin	Sub Saharan Africa	no	3,585			134
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			135
BDI	Burundi	Sub Saharan Africa	no	168			136
CMR	Cameroon	Sub Saharan Africa	no	16,950			137
CAF	Central African Republic	Sub Saharan Africa	no	916			138



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TCD	Chad	Sub Saharan Africa	no	6,664			139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			140
COG	Congo	Sub Saharan Africa	no	12,566			141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			142
DJI	Djibouti	Sub Saharan Africa	no	2,525			143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			144
ERI	Eritrea	Sub Saharan Africa	no	1,892			145
ETH	Ethiopia	Sub Saharan Africa	no	5,141			146
GAB	Gabon	Sub Saharan Africa	no	25,086			147
GMB	Gambia	Sub Saharan Africa	no	680			148
GHA	Ghana	Sub Saharan Africa	no	12,649			149
GIN	Guinea	Sub Saharan Africa	no	3,259			150
KEN	Kenya	Sub Saharan Africa	no	18,470			151
LBR	Liberia	Sub Saharan Africa	no	515			152
MLI	Mali	Sub Saharan Africa	no	3,869			153
MRT	Mauritania	Sub Saharan Africa	no	3,622			154
NAM	Namibia	Sub Saharan Africa	no	7,239			155
NER	Niger	Sub Saharan Africa	no	2,800			156
NGA	Nigeria	Sub Saharan Africa	no	121,669			157
RWA	Rwanda	Sub Saharan Africa	no	1,558			158
SEN	Senegal	Sub Saharan Africa	no	11,619			159
SLE	Sierra Leone	Sub Saharan Africa	no	523			160
SOM	Somalia	Sub Saharan Africa	no	3,573			161
SDN	Sudan	Sub Saharan Africa	no	26,851			162
TGO	Togo	Sub Saharan Africa	no	1,644			163
UGA	Uganda	Sub Saharan Africa	no	6,628			164
ESH	Western Sahara	Sub Saharan Africa	no	2,173			165
AIA	Anguilla	Caribbean	yes	20	9	43.6	1
VIR	United States Virgin Islands	Caribbean	yes	1,755	439	25.0	2
TON	Tonga	Pacific	yes	230	56	24.3	3
VGB	British Virgin Islands	Caribbean	yes	424	103	24.3	4
WSM	Samoa	Pacific	yes	361	85	23.6	5
BLZ	Belize	Latin America	yes	1,251	291	23.3	6
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	18.4	7
FJI	Fiji	Asia	yes	2,100	385	18.3	8
PRI	Puerto Rico	Caribbean	yes	135,818	24,190	17.8	9
DMA	Dominica	Caribbean	yes	356	60	16.8	10
HTI	Haiti	Caribbean	yes	8,553	1,416	16.6	11
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	15.5	12
COM	Comoros	Sub Saharan Africa	yes	310	47	15.1	13
PYF	French Polynesia	Pacific	yes	6,568	973	14.8	14
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	13.6	15
LCA	Saint Lucia	Caribbean	yes	543	73	13.5	16
BRB	Barbados	Caribbean	yes	4,677	534	11.4	17
BHS	Bahamas	Caribbean	yes	21,313	2,355	11.1	18
ABW	Aruba	Caribbean	yes	6,526	562	8.6	19
JAM	Jamaica	Caribbean	yes	28,963	2,255	7.8	20
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	7.6	21
GRD	Grenada	Caribbean	yes	1,229	81	6.6	22
PLW	Palau	Pacific	yes	279	14	5.2	23
VUT	Vanuatu	Asia	yes	102	5	4.8	24
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	3.2	25
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	3.1	26
CUB	Cuba	Caribbean	yes	46,280	1,229	2.7	27
SLB	Solomon islands	Asia	yes	211	5	2.2	28
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	0.7	29
NCL	New Caledonia	Asia	yes	4,771	35	0.7	30
PNG	Papua New Guinea	Asia	yes	5,433	9	0.2	31
GUY	Guyana	Latin America	yes	3,468	4	0.1	32
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	0.0	33
SUR	Suriname	Latin America	yes	2,797	1	0.0	34
BHR	Bahrain	Asia	yes	32,575	0		35
MDV	Maldives	Pacific	yes	907			36
SGP	Singapore	Pacific	yes	526,900	1		37
KNA	Saint Kitts and Nevis	Caribbean	yes	2			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311			40



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HND	Honduras	Latin America	no	18,844	2,730	15,400	17.7	1
KOR	Republic of Korea	Asia	no	2,787,207	155,099	1,014,483	15.3	2
PHL	Philippines	Asia	no	186,193	29,234	199,589	14.7	3
HKG	Hong Kong	Asia	no	1,138,019	24,805	224,458	11.1	4
JPN	Japan	Asia	no	14,617,394	547,820	5,458,837	10.0	5
MEX	Mexico	Latin America	no	1,818,298	102,450	1,034,804	9.9	6
MAC	Macau	Asia	no	96,993	1,550	27,960	5.5	7
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	8,721	4.6	8
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	9,586	4.2	9
BGD	Bangladesh	Asia	no	72,949	3,058	100,357	3.1	10
CHN	China	Asia	no	4,512,825	126,734	5,926,612	2.1	11
NIC	Nicaragua	Latin America	no	10,935	133	6,551	2.0	12
GTM	Guatemala	Latin America	no	38,263	698	41,186	1.7	13
USA	United States of America	North America	no	22,004,154	194,597	14,586,740	1.3	14
VEN	Venezuela	Latin America	no	435,869	3,263	391,848	0.8	15
SLV	El Salvador	Latin America	no	22,582	165	21,215	0.8	16
CAN	Canada	North America	no	2,051,584	10,965	1,577,040	0.7	17
PAK	Pakistan	Asia	no	170,444	1,188	176,870	0.7	18
VNM	Viet Nam	Asia	no	115,441	587	106,427	0.6	19
IND	India	Asia	no	1,429,881	9,531	1,727,111	0.6	20
PAN	Panama	Latin America	no	30,296	129	26,689	0.5	21
LKA	Sri Lanka	Asia	no	49,967	172	49,552	0.4	22
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	3,645	0.3	23
IDN	Indonesia	Asia	no	575,183	2,060	706,558	0.3	24
MWI	Malawi	Sub Saharan Africa	no	1,883	13	5,106	0.3	25
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	7,296	0.3	26
CRI	Costa Rica	Latin America	no	38,475	71	35,831	0.2	27
BTN	Bhutan	Asia	no	1,167	3	1,516	0.2	28
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	363,704	0.2	29
KHM	Cambodia	Asia	no	4,335	15	11,242	0.1	30
MYS	Malaysia	Asia	no	318,727	328	237,797	0.1	31
COL	Colombia	Latin America	no	325,385	354	288,189	0.1	32
THA	Thailand	Asia	no	394,598	259	318,522	0.1	33
ARE	United Arab Emirates	Asia	no	248,015	150	297,649	0.1	34
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	7,474	0.1	35
BWA	Botswana	Sub Saharan Africa	no	18,941	4	14,857	0.0	36
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	16,193	0.0	37
PRT	Portugal	Europe	no	296,296	13	228,872	0.0	38
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	2,132	0.0	39
BRN	Brunei Darussalam	Asia	no	20,094	555			40
NZL	New Zealand	Australia	no	238,609	677			41
AUS	Australia	Australia	no	1,832,960	1,857			42
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	23,057		43
RUS	Russian Federation	Europe	no	2,209,139	58	1,479,819		44
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21			45
TCA	Turks and Caicos islands	Caribbean	no	332	121			46
CYM	Cayman Islands	Caribbean	no	3,603	1,195			47
GLP	Guadeloupe	Caribbean	no	19,838	6,191			48
MTQ	Martinique	Caribbean	no	21,052	4,820			49
REU	Réunion	Sub Saharan Africa	no	42,937	7,386			50
MYT	Mayotte	Sub Saharan Africa	no	2,341	310			51
TWN	Taiwan	Asia	no	872,409	42,503			52
PRK	Dem People's Rep of Korea	Asia	no	27,936	587			53
NPL	Nepal	Asia	no	6,537	112			54
MMR	Myanmar	Asia	no	20,572	101			55
OMN	Oman	Asia	no	42,201	131			56
QAT	Qatar	Asia	no	113,981	18			57
GUF	French Guiana	Latin America	no	8,339	0			58
AFG	Afghanistan	Asia	no	16,132		17,243		59
ARM	Armenia	Asia	no	14,187		9,371		60
AZE	Azerbaijan	Asia	no	45,197		51,774		61
CYP	Cyprus	Asia	no	23,484		23,132		62
GEO	Georgia	Asia	no	21,157		11,667		63
IRQ	Iraq	Asia	no	47,245		82,150		64
ISR	Israel	Asia	no	293,550		217,333		65
JOR	Jordan	Asia	no	40,997		27,574		66
KAZ	Kazakhstan	Asia	no	180,409		149,059		67
KWT	Kuwait	Asia	no	202,236				68
KGZ	Kyrgyzstan	Asia	no	3,644		4,616		69



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LBN	Lebanon	Asia	no	56,965		39,006		70
MNG	Mongolia	Asia	no	9,273		6,200		71
SAU	Saudi Arabia	Asia	no	751,807	1	434,666		72
SYR	Syrian Arab Republic	Asia	no	68,489		59,147		73
TJK	Tajikistan	Asia	no	5,576		5,640		74
TUR	Turkey	Asia	no	1,578,228		734,365		75
TKM	Turkmenistan	Asia	no	12,707		20,001		76
UZB	Uzbekistan	Asia	no	44,370		38,982		77
YEM	Yemen	Asia	no	21,556				78
ALB	Albania	Europe	no	13,964		11,786		79
AUT	Austria	Europe	no	615,592		379,069		80
BLR	Belarus	Europe	no	74,427		54,713		81
BEL	Belgium	Europe	no	739,159		469,374		82
BIH	Bosnia and Herzegovina	Europe	no	10,433		16,578		83
BGR	Bulgaria	Europe	no	70,023		47,714		84
HRV	Croatia	Europe	no	65,145		60,852		85
CZE	Czech Republic	Europe	no	336,714		192,032		86
DNK	Denmark	Europe	no	381,265		309,866		87
EST	Estonia	Europe	no	28,069		19,217		88
FRO	Faroe Islands	Europe	no	1,012				89
FIN	Finland	Europe	no	209,050		238,746		90
FRA	France	Europe	no	3,653,264		2,560,002		91
DEU	Germany	Europe	no	5,800,986		3,280,530		92
GIB	Gibraltar	Europe	no	3,141				93
GRC	Greece	Europe	no	642,888		301,083		94
HUN	Hungary	Europe	no	286,209		128,632		95
ISL	Iceland	Europe	no	25,742		12,574		96
IRL	Ireland	Europe	no	244,117		211,390		97
ITA	Italy	Europe	no	3,701,619		2,051,412		98
LVA	Latvia	Europe	no	39,277		24,010		99
LIE	Liechtenstein	Europe	no	8,070				100
LTU	Lithuania	Europe	no	53,397		36,306		101
LUX	Luxembourg	Europe	no	45,036		53,334		102
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		9,189		103
MDA	Moldova, Republic of	Europe	no	9,896		5,809		104
MCO	Monaco	Europe	no	5,380				105
MNE	Montenegro	Europe	no	2,738		4,111		106
NLD	Netherlands	Europe	no	1,593,735		779,356		107
NOR	Norway	Europe	no	386,892		412,990		108
POL	Poland	Europe	no	659,150		469,440		109
SMR	San Marino	Europe	no	1,846				110
SRB	Serbia	Europe	no	16,907		38,423		111
SVK	Slovakia	Europe	no	124,390		87,268		112
SVN	Slovenia	Europe	no	36,896		46,908		113
ESP	Spain	Europe	no	2,695,139		1,407,405		114
SWE	Sweden	Europe	no	369,792		458,973		115
CHE	Switzerland	Europe	no	839,518		527,920		116
UKR	Ukraine	Europe	no	278,497		137,929		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,248,831		118
MLT	Malta	Pacific	no	18,630		8,256		119
ARG	Argentina	Latin America	no	403,909		368,736		120
BOL	Bolivia	Latin America	no	13,112		19,650		121
BRA	Brazil	Latin America	no	1,715,746		2,087,890		122
CHL	Chile	Latin America	no	326,640		212,741		123
ECU	Ecuador	Latin America	no	68,550		57,978		124
PRY	Paraguay	Latin America	no	19,203		18,333		125
PER	Peru	Latin America	no	189,980		157,053		126
URY	Uruguay	Latin America	no	28,590		40,265		127
DZA	Algeria	North Africa	no	259,977		159,426		128
EGY	Egypt	North Africa	no	234,939		218,894		129
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				130
MAR	Morocco	North Africa	no	136,300		90,805		131
TUN	Tunisia	North Africa	no	65,420		44,291		132
AGO	Angola	Sub Saharan Africa	no	25,225		84,391		133
BEN	Benin	Sub Saharan Africa	no	3,585		6,633		134
BFA	Burkina Faso	Sub Saharan Africa	no	3,120		8,820		135
BDI	Burundi	Sub Saharan Africa	no	168		1,611		136
CMR	Cameroon	Sub Saharan Africa	no	16,950		22,394		137
CAF	Central African Republic	Sub Saharan Africa	no	916		2,013		138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
TCD	Chad	Sub Saharan Africa	no	6,664		7,588		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		13,145		140
COG	Congo	Sub Saharan Africa	no	12,566		11,898		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		22,780		142
DJI	Djibouti	Sub Saharan Africa	no	2,525				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765		14,007		144
ERI	Eritrea	Sub Saharan Africa	no	1,892		2,117		145
ETH	Ethiopia	Sub Saharan Africa	no	5,141		29,717		146
GAB	Gabon	Sub Saharan Africa	no	25,086		13,011		147
GMB	Gambia	Sub Saharan Africa	no	680		807		148
GHA	Ghana	Sub Saharan Africa	no	12,649		31,306		149
GIN	Guinea	Sub Saharan Africa	no	3,259		4,511		150
KEN	Kenya	Sub Saharan Africa	no	18,470		31,409		151
LBR	Liberia	Sub Saharan Africa	no	515		986		152
MLI	Mali	Sub Saharan Africa	no	3,869		9,251		153
MRT	Mauritania	Sub Saharan Africa	no	3,622		3,636		154
NAM	Namibia	Sub Saharan Africa	no	7,239		12,170		155
NER	Niger	Sub Saharan Africa	no	2,800		5,549		156
NGA	Nigeria	Sub Saharan Africa	no	121,669		193,669		157
RWA	Rwanda	Sub Saharan Africa	no	1,558		5,628		158
SEN	Senegal	Sub Saharan Africa	no	11,619		12,954		159
SLE	Sierra Leone	Sub Saharan Africa	no	523		1,905		160
SOM	Somalia	Sub Saharan Africa	no	3,573				161
SDN	Sudan	Sub Saharan Africa	no	26,851		62,046		162
TGO	Togo	Sub Saharan Africa	no	1,644		3,153		163
UGA	Uganda	Sub Saharan Africa	no	6,628		17,011		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173				165
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	1,211	36.8	1
BHS	Bahamas	Caribbean	yes	21,313	2,355	7,538	31.2	2
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	297	30.4	3
HTI	Haiti	Caribbean	yes	8,553	1,416	6,710	21.1	4
BLZ	Belize	Latin America	yes	1,251	291	1,401	20.8	5
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	9,729	18.3	6
TON	Tonga	Pacific	yes	230	56	348	16.1	7
JAM	Jamaica	Caribbean	yes	28,963	2,255	14,252	15.8	8
WSM	Samoa	Pacific	yes	361	85	574	14.9	9
BRB	Barbados	Caribbean	yes	4,677	534	4,110	13.0	10
DMA	Dominica	Caribbean	yes	356	60	466	12.9	11
FJI	Fiji	Asia	yes	2,100	385	3,189	12.1	12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	705	11.3	13
GRD	Grenada	Caribbean	yes	1,229	81	773	10.4	14
COM	Comoros	Sub Saharan Africa	yes	310	47	541	8.6	15
PLW	Palau	Pacific	yes	279	14	171	8.4	16
LCA	Saint Lucia	Caribbean	yes	543	73	1,198	6.1	17
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	20,604	4.9	18
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	51,766	4.4	19
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	937	2.0	20
VUT	Vanuatu	Asia	yes	102	5	699	0.7	21
SLB	Solomon islands	Asia	yes	211	5	679	0.7	22
GUY	Guyana	Latin America	yes	3,468	4	2,226	0.2	23
PNG	Papua New Guinea	Asia	yes	5,433	9	9,480	0.1	24
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	1,648	0.0	25
CUB	Cuba	Caribbean	yes	46,280	1,229			26
AIA	Anguilla	Caribbean	yes	20	9			27
VIR	United States Virgin Islands	Caribbean	yes	1,755	439			28
VGB	British Virgin Islands	Caribbean	yes	424	103			29
PRI	Puerto Rico	Caribbean	yes	135,818	24,190			30
PYF	French Polynesia	Pacific	yes	6,568	973			31
ABW	Aruba	Caribbean	yes	6,526	562			32
NCL	New Caledonia	Asia	yes	4,771	35			33
SUR	Suriname	Latin America	yes	2,797	1			34
BHR	Bahrain	Asia	yes	32,575	0			35
MDV	Maldives	Pacific	yes	907		1,908		36
SGP	Singapore	Pacific	yes	526,900	1	208,765		37
KNA	Saint Kitts and Nevis	Caribbean	yes	2		652		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466		879		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311		197		40



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HND	Honduras	Latin America	no	18,844	2,730	14,798		18.5	1
KOR	Republic of Korea	Asia	no	2,787,207	155,099	1,014,760		15.3	2
PHL	Philippines	Asia	no	186,193	29,234	199,897		14.6	3
HKG	Hong Kong	Asia	no	1,138,019	24,805	229,165		10.8	4
MEX	Mexico	Latin America	no	1,818,298	102,450	1,020,288		10.0	5
JPN	Japan	Asia	no	14,617,394	547,820	5,601,557		9.8	6
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	8,628		4.6	7
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	9,421		4.3	8
BGD	Bangladesh	Asia	no	72,949	3,058	109,695		2.8	9
CHN	China	Asia	no	4,512,825	126,734	5,957,012		2.1	10
NIC	Nicaragua	Latin America	no	10,935	133	6,273		2.1	11
GTM	Guatemala	Latin America	no	38,263	698	39,987		1.8	12
USA	United States of America	North America	no	22,004,154	194,597	14,635,600		1.3	13
VEN	Venezuela	Latin America	no	435,869	3,263	389,038		0.8	14
SLV	El Salvador	Latin America	no	22,582	165	20,834		0.8	15
CAN	Canada	North America	no	2,051,584	10,965	1,549,652		0.7	16
PAK	Pakistan	Asia	no	170,444	1,188	183,620		0.7	17
VNM	Viet Nam	Asia	no	115,441	587	102,008		0.6	18
IND	India	Asia	no	1,429,881	9,531	1,712,645		0.6	19
PAN	Panama	Latin America	no	30,296	129	25,037		0.5	20
LKA	Sri Lanka	Asia	no	49,967	172	48,916		0.4	21
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	3,586		0.4	22
IDN	Indonesia	Asia	no	575,183	2,060	686,633		0.3	23
MWI	Malawi	Sub Saharan Africa	no	1,883	13	4,980		0.3	24
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	6,978		0.3	25
BTN	Bhutan	Asia	no	1,167	3	1,420		0.2	26
CRI	Costa Rica	Latin America	no	38,475	71	34,896		0.2	27
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	356,475		0.2	28
KHM	Cambodia	Asia	no	4,335	15	10,664		0.1	29
MYS	Malaysia	Asia	no	318,727	328	229,566		0.1	30
COL	Colombia	Latin America	no	325,385	354	276,072		0.1	31
THA	Thailand	Asia	no	394,598	259	304,812		0.1	32
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	6,988		0.1	33
BWA	Botswana	Sub Saharan Africa	no	18,941	4	14,771		0.0	34
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	14,300		0.0	35
PRT	Portugal	Europe	no	296,296	13	221,243		0.0	36
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	2,553		0.0	37
MAC	Macau	Asia	no	96,993	1,550				38
ARE	United Arab Emirates	Asia	no	248,015	150				39
BRN	Brunei Darussalam	Asia	no	20,094	555				40
NZL	New Zealand	Australia	no	238,609	677				41
AUS	Australia	Australia	no	1,832,960	1,857				42
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	23,012			43
RUS	Russian Federation	Europe	no	2,209,139	58	1,431,121			44
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21				45
TCA	Turks and Caicos islands	Caribbean	no	332	121				46
CYM	Cayman Islands	Caribbean	no	3,603	1,195				47
GLP	Guadeloupe	Caribbean	no	19,838	6,191				48
MTQ	Martinique	Caribbean	no	21,052	4,820				49
REU	Réunion	Sub Saharan Africa	no	42,937	7,386				50
MYT	Mayotte	Sub Saharan Africa	no	2,341	310				51
TWN	Taiwan	Asia	no	872,409	42,503				52
PRK	Dem People's Rep of Korea	Asia	no	27,936	587				53
NPL	Nepal	Asia	no	6,537	112				54
MMR	Myanmar	Asia	no	20,572	101				55
OMN	Oman	Asia	no	42,201	131				56
QAT	Qatar	Asia	no	113,981	18				57
GUF	French Guiana	Latin America	no	8,339	0				58
AFG	Afghanistan	Asia	no	16,132		15,162			59
ARM	Armenia	Asia	no	14,187		9,710			60
AZE	Azerbaijan	Asia	no	45,197		48,307			61
CYP	Cyprus	Asia	no	23,484		22,539			62
GEO	Georgia	Asia	no	21,157		11,484			63
IRQ	Iraq	Asia	no	47,245		77,842			64
ISR	Israel	Asia	no	293,550		210,353			65
JOR	Jordan	Asia	no	40,997		27,820			66
KAZ	Kazakhstan	Asia	no	180,409		131,868			67
KWT	Kuwait	Asia	no	202,236					68
KGZ	Kyrgyzstan	Asia	no	3,644		4,273			69



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LBN	Lebanon	Asia	no	56,965		39,051		70
MNG	Mongolia	Asia	no	9,273		5,640		71
SAU	Saudi Arabia	Asia	no	751,807	1			72
SYR	Syrian Arab Republic	Asia	no	68,489		57,266		73
TJK	Tajikistan	Asia	no	5,576		5,570		74
TUR	Turkey	Asia	no	1,578,228		727,056		75
TKM	Turkmenistan	Asia	no	12,707		18,107		76
UZB	Uzbekistan	Asia	no	44,370		39,013		77
YEM	Yemen	Asia	no	21,556				78
ALB	Albania	Europe	no	13,964		11,682		79
AUT	Austria	Europe	no	615,592		377,063		80
BLR	Belarus	Europe	no	74,427		53,379		81
BEL	Belgium	Europe	no	739,159		477,644		82
BIH	Bosnia and Herzegovina	Europe	no	10,433		17,008		83
BGR	Bulgaria	Europe	no	70,023		46,025		84
HRV	Croatia	Europe	no	65,145		58,806		85
CZE	Czech Republic	Europe	no	336,714		179,432		86
DNK	Denmark	Europe	no	381,265		315,664		87
EST	Estonia	Europe	no	28,069		18,420		88
FRO	Faroe Islands	Europe	no	1,012				89
FIN	Finland	Europe	no	209,050		242,899		90
FRA	France	Europe	no	3,653,264		2,606,780		91
DEU	Germany	Europe	no	5,800,986		3,341,391		92
GIB	Gibraltar	Europe	no	3,141				93
GRC	Greece	Europe	no	642,888		292,874		94
HUN	Hungary	Europe	no	286,209		122,372		95
ISL	Iceland	Europe	no	25,742		9,975		96
IRL	Ireland	Europe	no	244,117		171,260		97
ITA	Italy	Europe	no	3,701,619		2,023,916		98
LVA	Latvia	Europe	no	39,277		24,073		99
LIE	Liechtenstein	Europe	no	8,070				100
LTU	Lithuania	Europe	no	53,397		35,687		101
LUX	Luxembourg	Europe	no	45,036		37,925		102
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		8,992		103
MDA	Moldova, Republic of	Europe	no	9,896		6,280		104
MCO	Monaco	Europe	no	5,380				105
MNE	Montenegro	Europe	no	2,738		4,083		106
NLD	Netherlands	Europe	no	1,593,735		772,747		107
NOR	Norway	Europe	no	386,892		413,980		108
POL	Poland	Europe	no	659,150		452,275		109
SMR	San Marino	Europe	no	1,846				110
SRB	Serbia	Europe	no	16,907		37,533		111
SVK	Slovakia	Europe	no	124,390		86,077		112
SVN	Slovenia	Europe	no	36,896		46,217		113
ESP	Spain	Europe	no	2,695,139		1,388,744		114
SWE	Sweden	Europe	no	369,792		467,254		115
CHE	Switzerland	Europe	no	839,518		568,639		116
UKR	Ukraine	Europe	no	278,497		135,920		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,280,719		118
MLT	Malta	Pacific	no	18,630		7,698		119
ARG	Argentina	Latin America	no	403,909		358,619		120
BOL	Bolivia	Latin America	no	13,112		18,790		121
BRA	Brazil	Latin America	no	1,715,746		2,049,164		122
CHL	Chile	Latin America	no	326,640		197,331		123
ECU	Ecuador	Latin America	no	68,550		56,924		124
PRY	Paraguay	Latin America	no	19,203		17,853		125
PER	Peru	Latin America	no	189,980		147,000		126
URY	Uruguay	Latin America	no	28,590		39,161		127
DZA	Algeria	North Africa	no	259,977		155,538		128
EGY	Egypt	North Africa	no	234,939		214,530		129
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				130
MAR	Morocco	North Africa	no	136,300		88,578		131
TUN	Tunisia	North Africa	no	65,420		42,020		132
AGO	Angola	Sub Saharan Africa	no	25,225		75,516		133
BEN	Benin	Sub Saharan Africa	no	3,585		6,633		134
BFA	Burkina Faso	Sub Saharan Africa	no	3,120		8,810		135
BDI	Burundi	Sub Saharan Africa	no	168		1,589		136
CMR	Cameroon	Sub Saharan Africa	no	16,950		22,030		137
CAF	Central African Republic	Sub Saharan Africa	no	916		2,009		138



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TCD	Chad	Sub Saharan Africa	no	6,664			6,734		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			12,263		140
COG	Congo	Sub Saharan Africa	no	12,566			8,619		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			21,729		142
DJI	Djibouti	Sub Saharan Africa	no	2,525					143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			9,578		144
ERI	Eritrea	Sub Saharan Africa	no	1,892			2,097		145
ETH	Ethiopia	Sub Saharan Africa	no	5,141			29,625		146
GAB	Gabon	Sub Saharan Africa	no	25,086			11,467		147
GMB	Gambia	Sub Saharan Africa	no	680			743		148
GHA	Ghana	Sub Saharan Africa	no	12,649			30,776		149
GIN	Guinea	Sub Saharan Africa	no	3,259			4,231		150
KEN	Kenya	Sub Saharan Africa	no	18,470			31,264		151
LBR	Liberia	Sub Saharan Africa	no	515			805		152
MLI	Mali	Sub Saharan Africa	no	3,869			8,909		153
MRT	Mauritania	Sub Saharan Africa	no	3,622			3,672		154
NAM	Namibia	Sub Saharan Africa	no	7,239			12,077		155
NER	Niger	Sub Saharan Africa	no	2,800			5,493		156
NGA	Nigeria	Sub Saharan Africa	no	121,669			176,769		157
RWA	Rwanda	Sub Saharan Africa	no	1,558			5,582		158
SEN	Senegal	Sub Saharan Africa	no	11,619			12,900		159
SLE	Sierra Leone	Sub Saharan Africa	no	523			1,905		160
SOM	Somalia	Sub Saharan Africa	no	3,573					161
SDN	Sudan	Sub Saharan Africa	no	26,851			55,939		162
TGO	Togo	Sub Saharan Africa	no	1,644			2,826		163
UGA	Uganda	Sub Saharan Africa	no	6,628			16,720		164
ESH	Western Sahara	Sub Saharan Africa	no	2,173					165
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	1,179	37.8		1
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	312	29.0		2
BLZ	Belize	Latin America	yes	1,251	291	1,303	22.4		3
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	9,798	18.1		4
JAM	Jamaica	Caribbean	yes	28,963	2,255	13,574	16.6		5
TON	Tonga	Pacific	yes	230	56	352	15.9		6
WSM	Samoa	Pacific	yes	361	85	557	15.3		7
DMA	Dominica	Caribbean	yes	356	60	454	13.2		8
FJI	Fiji	Asia	yes	2,100	385	3,090	12.5		9
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	691	11.6		10
GRD	Grenada	Caribbean	yes	1,229	81	727	11.1		11
PLW	Palau	Pacific	yes	279	14	135	10.7		12
COM	Comoros	Sub Saharan Africa	yes	310	47	539	8.7		13
LCA	Saint Lucia	Caribbean	yes	543	73	1,163	6.3		14
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	19,255	5.3		15
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	49,972	4.5		16
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	855	2.2		17
SLB	Solomon islands	Asia	yes	211	5	555	0.8		18
VUT	Vanuatu	Asia	yes	102	5	678	0.7		19
GUY	Guyana	Latin America	yes	3,468	4	2,238	0.2		20
PNG	Papua New Guinea	Asia	yes	5,433	9	9,262	0.1		21
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	1,579	0.0		22
BHS	Bahamas	Caribbean	yes	21,313	2,355				23
HTI	Haiti	Caribbean	yes	8,553	1,416				24
BRB	Barbados	Caribbean	yes	4,677	534				25
CUB	Cuba	Caribbean	yes	46,280	1,229				26
AIA	Anguilla	Caribbean	yes	20	9				27
VIR	United States Virgin Islands	Caribbean	yes	1,755	439				28
VGB	British Virgin Islands	Caribbean	yes	424	103				29
PRI	Puerto Rico	Caribbean	yes	135,818	24,190				30
PYF	French Polynesia	Pacific	yes	6,568	973				31
ABW	Aruba	Caribbean	yes	6,526	562				32
NCL	New Caledonia	Asia	yes	4,771	35				33
SUR	Suriname	Latin America	yes	2,797	1				34
BHR	Bahrain	Asia	yes	32,575	0				35
MDV	Maldives	Pacific	yes	907		1,817			36
SGP	Singapore	Pacific	yes	526,900	1	201,050			37
KNA	Saint Kitts and Nevis	Caribbean	yes	2		620			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466		877			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311		200			40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
CYM	Cayman Islands	Caribbean	no	81	1	11.6	1
PHL	Philippines	Asia	no	46,143	505	10.9	2
TCA	Turks and Caicos islands	Caribbean	no	28	0	10.7	3
GLP	Guadeloupe	Caribbean	no	904	9	9.7	4
REU	Réunion	Sub Saharan Africa	no	2,161	13	6.1	5
MDG	Madagascar	Sub Saharan Africa	no	1,546	9	5.8	6
TWN	Taiwan	Asia	no	38,310	188	4.9	7
MTQ	Martinique	Caribbean	no	889	4	4.9	8
HND	Honduras	Latin America	no	5,414	20	3.7	9
MYT	Mayotte	Sub Saharan Africa	no	154	1	3.3	10
JPN	Japan	Asia	no	542,290	1,724	3.2	11
KOR	Republic of Korea	Asia	no	95,180	202	2.1	12
CHN	China	Asia	no	599,699	1,195	2.0	13
MEX	Mexico	Latin America	no	260,866	459	1.8	14
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	1.3	15
BGD	Bangladesh	Asia	no	14,034	11	0.8	16
HKG	Hong Kong	Asia	no	47,718	37	0.8	17
PRK	Dem People's Rep of Korea	Asia	no	10,245	7	0.7	18
MAC	Macau	Asia	no	1,989	1	0.7	19
BRN	Brunei Darussalam	Asia	no	895	1	0.6	20
USA	United States of America	North America	no	1,224,802	642	0.5	21
GTM	Guatemala	Latin America	no	8,748	4	0.5	22
NPL	Nepal	Asia	no	2,411	1	0.3	23
NIC	Nicaragua	Latin America	no	2,310	1	0.3	24
LAO	Lao People's Democratic Republic	Asia	no	938	0	0.3	25
SLV	El Salvador	Latin America	no	4,297	1	0.2	26
VNM	Viet Nam	Asia	no	24,066	4	0.2	27
IND	India	Asia	no	320,919	51	0.2	28
CAN	Canada	North America	no	121,895	18	0.2	29
VEN	Venezuela	Latin America	no	42,697	7	0.2	30
MMR	Myanmar	Asia	no	9,829	1	0.1	31
PAK	Pakistan	Asia	no	37,562	5	0.1	32
MWI	Malawi	Sub Saharan Africa	no	1,519	0	0.1	33
NZL	New Zealand	Australia	no	12,682	1	0.1	34
KHM	Cambodia	Asia	no	1,623	0	0.1	35
LKA	Sri Lanka	Asia	no	14,385	1	0.1	36
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.1	37
IDN	Indonesia	Asia	no	113,457	8	0.1	38
PAN	Panama	Latin America	no	5,115	0	0.1	39
OMN	Oman	Asia	no	4,095	0	0.1	40
AUS	Australia	Australia	no	47,971	2	0.1	41
BTN	Bhutan	Asia	no	371		0.0	42
CRI	Costa Rica	Latin America	no	6,892	0	0.0	43
GUF	French Guiana	Latin America	no	378		0.0	44
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	0.0	45
MYS	Malaysia	Asia	no	37,377	1	0.0	46
THA	Thailand	Asia	no	43,178	1	0.0	47
COL	Colombia	Latin America	no	53,054	1	0.0	48
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.0	49
ARE	United Arab Emirates	Asia	no	11,165	0	0.0	50
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	0.0	51
ZMB	Zambia	Sub Saharan Africa	no	4,976		0.0	52
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		0.0	53
AFG	Afghanistan	Asia	no	9,988			54
ARM	Armenia	Asia	no	2,899			55
AZE	Azerbaijan	Asia	no	12,666			56
CYP	Cyprus	Asia	no	1,154			57
GEO	Georgia	Asia	no	3,815			58
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0		59
IRQ	Iraq	Asia	no	15,555			60
ISR	Israel	Asia	no	22,505			61
JOR	Jordan	Asia	no	10,652			62
KAZ	Kazakhstan	Asia	no	20,880			63
KWT	Kuwait	Asia	no	6,168			64
KGZ	Kyrgyzstan	Asia	no	756			65
LBN	Lebanon	Asia	no	4,139			66
MNG	Mongolia	Asia	no	2,335			67
QAT	Qatar	Asia	no	2,116			68
SAU	Saudi Arabia	Asia	no	73,922			69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
SYR	Syrian Arab Republic	Asia	no	18,783			70
TJK	Tajikistan	Asia	no	2,412			71
TUR	Turkey	Asia	no	164,353			72
TKM	Turkmenistan	Asia	no	3,779			73
UZB	Uzbekistan	Asia	no	10,382			74
YEM	Yemen	Asia	no	10,133			75
ALB	Albania	Europe	no	3,381			76
AUT	Austria	Europe	no	28,002			77
BLR	Belarus	Europe	no	21,160			78
BEL	Belgium	Europe	no	29,496			79
BIH	Bosnia and Herzegovina	Europe	no	1,424			80
BGR	Bulgaria	Europe	no	9,040			81
HRV	Croatia	Europe	no	6,064			82
CZE	Czech Republic	Europe	no	23,126			83
DNK	Denmark	Europe	no	31,778			84
EST	Estonia	Europe	no	2,851			85
FRO	Faroe Islands	Europe	no	42			86
FIN	Finland	Europe	no	14,927			87
FRA	France	Europe	no	236,236			88
DEU	Germany	Europe	no	262,867			89
GIB	Gibraltar	Europe	no	274			90
GRC	Greece	Europe	no	27,597			91
HUN	Hungary	Europe	no	30,434			92
ISL	Iceland	Europe	no	1,071			93
IRL	Ireland	Europe	no	16,223			94
ITA	Italy	Europe	no	188,526			95
LVA	Latvia	Europe	no	4,998			96
LIE	Liechtenstein	Europe	no	198			97
LTU	Lithuania	Europe	no	7,227			98
LUX	Luxembourg	Europe	no	2,462			99
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000			100
MDA	Moldova, Republic of	Europe	no	3,416			101
MCO	Monaco	Europe	no	123			102
MNE	Montenegro	Europe	no	269			103
NLD	Netherlands	Europe	no	49,481			104
NOR	Norway	Europe	no	33,800			105
POL	Poland	Europe	no	60,706			106
PRT	Portugal	Europe	no	18,087			107
RUS	Russian Federation	Europe	no	288,219	0		108
SMR	San Marino	Europe	no	113			109
SRB	Serbia	Europe	no	1,938			110
SVK	Slovakia	Europe	no	9,245			111
SVN	Slovenia	Europe	no	2,231			112
ESP	Spain	Europe	no	122,131			113
SWE	Sweden	Europe	no	27,971			114
CHE	Switzerland	Europe	no	40,078			115
UKR	Ukraine	Europe	no	32,769			116
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134			117
MLT	Malta	Pacific	no	1,330			118
ARG	Argentina	Latin America	no	39,520			119
BOL	Bolivia	Latin America	no	4,521			120
BRA	Brazil	Latin America	no	300,613			121
CHL	Chile	Latin America	no	18,070			122
ECU	Ecuador	Latin America	no	10,202			123
PRY	Paraguay	Latin America	no	4,301			124
PER	Peru	Latin America	no	24,717			125
URY	Uruguay	Latin America	no	4,269			126
DZA	Algeria	North Africa	no	67,908			127
EGY	Egypt	North Africa	no	101,974			128
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501			129
MAR	Morocco	North Africa	no	41,389			130
TUN	Tunisia	North Africa	no	14,190			131
AGO	Angola	Sub Saharan Africa	no	9,237			132
BEN	Benin	Sub Saharan Africa	no	1,223			133
BFA	Burkina Faso	Sub Saharan Africa	no	1,847			134
BDI	Burundi	Sub Saharan Africa	no	145			135
CMR	Cameroon	Sub Saharan Africa	no	6,256			136
CAF	Central African Republic	Sub Saharan Africa	no	351			137
TCD	Chad	Sub Saharan Africa	no	4,004			138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914			139
COG	Congo	Sub Saharan Africa	no	3,326			140
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304			141
DJI	Djibouti	Sub Saharan Africa	no	656			142
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626			143
ERI	Eritrea	Sub Saharan Africa	no	1,076			144
ETH	Ethiopia	Sub Saharan Africa	no	3,583			145
GAB	Gabon	Sub Saharan Africa	no	2,633			146
GMB	Gambia	Sub Saharan Africa	no	334			147
GHA	Ghana	Sub Saharan Africa	no	4,753			148
GIN	Guinea	Sub Saharan Africa	no	1,643			149
KEN	Kenya	Sub Saharan Africa	no	8,730			150
LSO	Lesotho	Sub Saharan Africa	no	2,124			151
LBR	Liberia	Sub Saharan Africa	no	263			152
MLI	Mali	Sub Saharan Africa	no	1,887			153
MRT	Mauritania	Sub Saharan Africa	no	1,470			154
NAM	Namibia	Sub Saharan Africa	no	1,706			155
NER	Niger	Sub Saharan Africa	no	1,230			156
NGA	Nigeria	Sub Saharan Africa	no	45,741			157
RWA	Rwanda	Sub Saharan Africa	no	962			158
SEN	Senegal	Sub Saharan Africa	no	5,536			159
SLE	Sierra Leone	Sub Saharan Africa	no	302			160
SOM	Somalia	Sub Saharan Africa	no	2,303			161
SDN	Sudan	Sub Saharan Africa	no	12,166			162
TGO	Togo	Sub Saharan Africa	no	529			163
UGA	Uganda	Sub Saharan Africa	no	3,787			164
ESH	Western Sahara	Sub Saharan Africa	no	418			165
AIA	Anguilla	Caribbean	yes	2		30.0	1
TON	Tonga	Pacific	yes	47	1	10.2	2
VIR	United States Virgin Islands	Caribbean	yes	82	1	9.3	3
VGB	British Virgin Islands	Caribbean	yes	18	0	7.1	4
WSM	Samoa	Pacific	yes	93	1	6.9	5
FJI	Fiji	Asia	yes	309	2	6.0	6
PRI	Puerto Rico	Caribbean	yes	3,197	19	5.9	7
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	5.3	8
ATG	Antigua and Barbuda	Caribbean	yes	272	1	4.9	9
PYF	French Polynesia	Pacific	yes	116	1	4.9	10
BLZ	Belize	Latin America	yes	65	0	4.8	11
FSM	Micronesia (Federated States of)	Pacific	yes	216	1	4.4	12
HTI	Haiti	Caribbean	yes	1,584	6	3.7	13
DMA	Dominica	Caribbean	yes	43	0	3.7	14
BHS	Bahamas	Caribbean	yes	985	3	3.3	15
COM	Comoros	Sub Saharan Africa	yes	156	1	3.1	16
LCA	Saint Lucia	Caribbean	yes	73	0	2.8	17
BRB	Barbados	Caribbean	yes	253	1	2.1	18
JAM	Jamaica	Caribbean	yes	4,148	8	2.0	19
PLW	Palau	Pacific	yes	25	0	2.0	20
ABW	Aruba	Caribbean	yes	358	1	1.7	21
VUT	Vanuatu	Asia	yes	25		1.6	22
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	1.5	23
GRD	Grenada	Caribbean	yes	63	0	1.1	24
CUB	Cuba	Caribbean	yes	5,936	5	0.9	25
DOM	Dominican Republic	Caribbean	yes	13,790	11	0.8	26
SLB	Solomon islands	Asia	yes	85	0	0.7	27
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1	0.5	28
NCL	New Caledonia	Asia	yes	107		0.3	29
SYC	Seychelles	Sub Saharan Africa	yes	631	0	0.2	30
GUY	Guyana	Latin America	yes	884	0	0.1	31
PNG	Papua New Guinea	Asia	yes	1,289	0	0.1	32
SUR	Suriname	Latin America	yes	364		0.0	33
BHR	Bahrain	Asia	yes	1,670			34
MDV	Maldives	Pacific	yes	154			35
SGP	Singapore	Pacific	yes	18,751			36
KNA	Saint Kitts and Nevis	Caribbean	yes	0			37
CPV	Cape Verde	Sub Saharan Africa	yes	446			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114			40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [‰]	
PHL	Philippines	Asia	no	46,143	505	203,208	2.5	1
HND	Honduras	Latin America	no	5,414	20	18,594	1.1	2
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	11,309	0.5	3
MEX	Mexico	Latin America	no	260,866	459	1,049,803	0.4	4
JPN	Japan	Asia	no	542,290	1,724	5,396,265	0.3	5
KOR	Republic of Korea	Asia	no	95,180	202	986,184	0.2	6
CHN	China	Asia	no	599,699	1,195	5,694,512	0.2	7
HKG	Hong Kong	Asia	no	47,718	37	211,863	0.2	8
MAC	Macau	Asia	no	1,989	1	11,994	0.1	9
BGD	Bangladesh	Asia	no	14,034	11	106,991	0.1	10
GTM	Guatemala	Latin America	no	8,748	4	45,670	0.1	11
NIC	Nicaragua	Latin America	no	2,310	1	8,405	0.1	12
USA	United States of America	North America	no	1,224,802	642	15,103,640	0.0	13
SLV	El Salvador	Latin America	no	4,297	1	24,921	0.0	14
MWI	Malawi	Sub Saharan Africa	no	1,519	0	5,605	0.0	15
VNM	Viet Nam	Asia	no	24,066	4	117,363	0.0	16
LAO	Lao People's Democratic Republic	Asia	no	938	0	7,629	0.0	17
PAK	Pakistan	Asia	no	37,562	5	186,087	0.0	18
IND	India	Asia	no	320,919	51	1,783,129	0.0	19
VEN	Venezuela	Latin America	no	42,697	7	346,724	0.0	20
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	0.0	21
LKA	Sri Lanka	Asia	no	14,385	1	54,079	0.0	22
CAN	Canada	North America	no	121,895	18	1,606,667	0.0	23
PAN	Panama	Latin America	no	5,115	0	27,738	0.0	24
KHM	Cambodia	Asia	no	1,623	0	11,854	0.0	25
IDN	Indonesia	Asia	no	113,457	8	695,009	0.0	26
CRI	Costa Rica	Latin America	no	6,892	0	36,941	0.0	27
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	369,463	0.0	28
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	29
TCA	Turks and Caicos islands	Caribbean	no	28	0			30
CYM	Cayman Islands	Caribbean	no	81	1			31
GLP	Guadeloupe	Caribbean	no	904	9			32
MTQ	Martinique	Caribbean	no	889	4			33
REU	Réunion	Sub Saharan Africa	no	2,161	13			34
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			35
MYT	Mayotte	Sub Saharan Africa	no	154	1			36
TWN	Taiwan	Asia	no	38,310	188			37
BRN	Brunei Darussalam	Asia	no	895	1			38
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			39
NPL	Nepal	Asia	no	2,411	1			40
MMR	Myanmar	Asia	no	9,829	1			41
OMN	Oman	Asia	no	4,095	0			42
BTN	Bhutan	Asia	no	371				43
NZL	New Zealand	Australia	no	12,682	1			44
COL	Colombia	Latin America	no	53,054	1	294,580		45
AUS	Australia	Australia	no	47,971	2			46
MYS	Malaysia	Asia	no	37,377	1	195,443		47
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		8,897		48
THA	Thailand	Asia	no	43,178	1	295,072		49
ARE	United Arab Emirates	Asia	no	11,165	0	270,334		50
ZMB	Zambia	Sub Saharan Africa	no	4,976		14,723		51
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	26,224		52
LSO	Lesotho	Sub Saharan Africa	no	2,124		3,511		53
GUF	French Guiana	Latin America	no	378				54
AFG	Afghanistan	Asia	no	9,988		1,852		55
ARM	Armenia	Asia	no	2,899		11,639		56
AZE	Azerbaijan	Asia	no	12,666		33,777		57
CYP	Cyprus	Asia	no	1,154		24,623		58
GEO	Georgia	Asia	no	3,815		13,709		59
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			60
IRQ	Iraq	Asia	no	15,555				61
ISR	Israel	Asia	no	22,505		212,896		62
JOR	Jordan	Asia	no	10,652		33,470		63
KAZ	Kazakhstan	Asia	no	20,880		127,087		64
KWT	Kuwait	Asia	no	6,168				65
KGZ	Kyrgyzstan	Asia	no	756		6,067		66
LBN	Lebanon	Asia	no	4,139		47,915		67
MNG	Mongolia	Asia	no	2,335		6,675		68
QAT	Qatar	Asia	no	2,116				69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNE [USD million]	AAL/GNE [%]	Ranking
SAU	Saudi Arabia	Asia	no	73,922		341,826		70
SYR	Syrian Arab Republic	Asia	no	18,783		59,401		71
TJK	Tajikistan	Asia	no	2,412		8,227		72
TUR	Turkey	Asia	no	164,353		774,921		73
TKM	Turkmenistan	Asia	no	3,779		20,575		74
UZB	Uzbekistan	Asia	no	10,382		38,768		75
YEM	Yemen	Asia	no	10,133				76
ALB	Albania	Europe	no	3,381		14,377		77
AUT	Austria	Europe	no	28,002		362,737		78
BLR	Belarus	Europe	no	21,160		62,212		79
BEL	Belgium	Europe	no	29,496		456,696		80
BIH	Bosnia and Herzegovina	Europe	no	1,424		20,030		81
BGR	Bulgaria	Europe	no	9,040		48,622		82
HRV	Croatia	Europe	no	6,064		61,162		83
CZE	Czech Republic	Europe	no	23,126		182,876		84
DNK	Denmark	Europe	no	31,778		292,535		85
EST	Estonia	Europe	no	2,851		17,933		86
FRO	Faroe Islands	Europe	no	42				87
FIN	Finland	Europe	no	14,927		235,640		88
FRA	France	Europe	no	236,236		2,620,062		89
DEU	Germany	Europe	no	262,867		3,101,126		90
GIB	Gibraltar	Europe	no	274				91
GRC	Greece	Europe	no	27,597		327,811		92
HUN	Hungary	Europe	no	30,434		120,269		93
ISL	Iceland	Europe	no	1,071		11,313		94
IRL	Ireland	Europe	no	16,223		171,957		95
ITA	Italy	Europe	no	188,526		2,087,749		96
LVA	Latvia	Europe	no	4,998		24,210		97
LIE	Liechtenstein	Europe	no	198				98
LTU	Lithuania	Europe	no	7,227		36,811		99
LUX	Luxembourg	Europe	no	2,462		36,700		100
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		10,902		101
MDA	Moldova, Republic of	Europe	no	3,416		8,053		102
MCO	Monaco	Europe	no	123				103
MNE	Montenegro	Europe	no	269		5,265		104
NLD	Netherlands	Europe	no	49,481		721,171		105
NOR	Norway	Europe	no	33,800		358,009		106
POL	Poland	Europe	no	60,706		475,111		107
PRT	Portugal	Europe	no	18,087		245,251		108
RUS	Russian Federation	Europe	no	288,219	0	1,356,393		109
SMR	San Marino	Europe	no	113				110
SRB	Serbia	Europe	no	1,938		44,764		111
SVK	Slovakia	Europe	no	9,245		88,405		112
SVN	Slovenia	Europe	no	2,231		46,643		113
ESP	Spain	Europe	no	122,131		1,437,861		114
SWE	Sweden	Europe	no	27,971		431,251		115
CHE	Switzerland	Europe	no	40,078		468,037		116
UKR	Ukraine	Europe	no	32,769		141,773		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,325,009		118
MLT	Malta	Pacific	no	1,330		8,111		119
ARG	Argentina	Latin America	no	39,520		356,545		120
BOL	Bolivia	Latin America	no	4,521		18,301		121
BRA	Brazil	Latin America	no	300,613		2,108,637		122
CHL	Chile	Latin America	no	18,070		198,120		123
ECU	Ecuador	Latin America	no	10,202		61,265		124
PRY	Paraguay	Latin America	no	4,301		17,941		125
PER	Peru	Latin America	no	24,717		152,561		126
URY	Uruguay	Latin America	no	4,269		39,936		127
DZA	Algeria	North Africa	no	67,908				128
EGY	Egypt	North Africa	no	101,974		229,362		129
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				130
MAR	Morocco	North Africa	no	41,389		99,808		131
TUN	Tunisia	North Africa	no	14,190		46,643		132
AGO	Angola	Sub Saharan Africa	no	9,237		72,456		133
BEN	Benin	Sub Saharan Africa	no	1,223		7,536		134
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				135
BDI	Burundi	Sub Saharan Africa	no	145				136
CMR	Cameroon	Sub Saharan Africa	no	6,256		23,429		137
CAF	Central African Republic	Sub Saharan Africa	no	351				138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [‰]	
TCD	Chad	Sub Saharan Africa	no	4,004		9,469		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		15,617		140
COG	Congo	Sub Saharan Africa	no	3,326		8,109		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,734		142
DJI	Djibouti	Sub Saharan Africa	no	656				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				144
ERI	Eritrea	Sub Saharan Africa	no	1,076				145
ETH	Ethiopia	Sub Saharan Africa	no	3,583		35,978		146
GAB	Gabon	Sub Saharan Africa	no	2,633		10,274		147
GMB	Gambia	Sub Saharan Africa	no	334		963		148
GHA	Ghana	Sub Saharan Africa	no	4,753		35,414		149
GIN	Guinea	Sub Saharan Africa	no	1,643		4,711		150
KEN	Kenya	Sub Saharan Africa	no	8,730		35,486		151
LBR	Liberia	Sub Saharan Africa	no	263				152
MLI	Mali	Sub Saharan Africa	no	1,887				153
MRT	Mauritania	Sub Saharan Africa	no	1,470		4,195		154
NAM	Namibia	Sub Saharan Africa	no	1,706		12,035		155
NER	Niger	Sub Saharan Africa	no	1,230				156
NGA	Nigeria	Sub Saharan Africa	no	45,741		168,996		157
RWA	Rwanda	Sub Saharan Africa	no	962				158
SEN	Senegal	Sub Saharan Africa	no	5,536		15,485		159
SLE	Sierra Leone	Sub Saharan Africa	no	302		2,142		160
SOM	Somalia	Sub Saharan Africa	no	2,303				161
SDN	Sudan	Sub Saharan Africa	no	12,166		61,511		162
TGO	Togo	Sub Saharan Africa	no	529				163
UGA	Uganda	Sub Saharan Africa	no	3,787		18,757		164
ESH	Western Sahara	Sub Saharan Africa	no	418				165
TON	Tonga	Pacific	yes	47	1	510	1.0	1
ATG	Antigua and Barbuda	Caribbean	yes	272	1	1,329	1.0	2
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	10,934	0.8	3
WSM	Samoa	Pacific	yes	93	1	727	0.8	4
HTI	Haiti	Caribbean	yes	1,584	6	9,743	0.6	5
FJI	Fiji	Asia	yes	309	2	3,569	0.5	6
JAM	Jamaica	Caribbean	yes	4,148	8	16,776	0.5	7
DMA	Dominica	Caribbean	yes	43	0	573	0.4	8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914	0.2	9
DOM	Dominican Republic	Caribbean	yes	13,790	11	57,847	0.2	10
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.2	11
BRB	Barbados	Caribbean	yes	253	1	4,317	0.1	12
SLB	Solomon islands	Asia	yes	85	0	885	0.1	13
GRD	Grenada	Caribbean	yes	63	0	996	0.1	14
PNG	Papua New Guinea	Asia	yes	1,289	0	9,217	0.0	15
AIA	Anguilla	Caribbean	yes	2				16
VGB	British Virgin Islands	Caribbean	yes	18	0			17
VIR	United States Virgin Islands	Caribbean	yes	82	1			18
BLZ	Belize	Latin America	yes	65	0			19
PRI	Puerto Rico	Caribbean	yes	3,197	19			20
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			21
PYF	French Polynesia	Pacific	yes	116	1			22
COM	Comoros	Sub Saharan Africa	yes	156	1			23
BHS	Bahamas	Caribbean	yes	985	3			24
ABW	Aruba	Caribbean	yes	358	1			25
PLW	Palau	Pacific	yes	25	0			26
VUT	Vanuatu	Asia	yes	25		743		27
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			28
CUB	Cuba	Caribbean	yes	5,936	5			29
NCL	New Caledonia	Asia	yes	107				30
SYC	Seychelles	Sub Saharan Africa	yes	631	0			31
GUY	Guyana	Latin America	yes	884	0			32
SUR	Suriname	Latin America	yes	364				33
BHR	Bahrain	Asia	yes	1,670				34
MDV	Maldives	Pacific	yes	154		2,244		35
SGP	Singapore	Pacific	yes	18,751		150,187		36
KNA	Saint Kitts and Nevis	Caribbean	yes	0		766		37
CPV	Cape Verde	Sub Saharan Africa	yes	446				38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GGC [USD million]	AAL/GGC [‰]	
PHL	Philippines	Asia	no	46,143	505	19,403	26.0	1
HND	Honduras	Latin America	no	5,414	20	2,777	7.2	2
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	1,166	4.6	3
MEX	Mexico	Latin America	no	260,866	459	120,640	3.8	4
BGD	Bangladesh	Asia	no	14,034	11	5,387	2.1	5
HKG	Hong Kong	Asia	no	47,718	37	18,948	2.0	6
JPN	Japan	Asia	no	542,290	1,724	1,094,349	1.6	7
CHN	China	Asia	no	599,699	1,195	791,999	1.5	8
KOR	Republic of Korea	Asia	no	95,180	202	155,748	1.3	9
NIC	Nicaragua	Latin America	no	2,310	1	627	1.0	10
GTM	Guatemala	Latin America	no	8,748	4	4,254	0.9	11
MAC	Macau	Asia	no	1,989	1	2,186	0.6	12
VNM	Viet Nam	Asia	no	24,066	4	6,947	0.6	13
SLV	El Salvador	Latin America	no	4,297	1	2,312	0.4	14
PAK	Pakistan	Asia	no	37,562	5	14,053	0.4	15
LAO	Lao People's Democratic Republic	Asia	no	938	0	672	0.3	16
IND	India	Asia	no	320,919	51	198,830	0.3	17
PAN	Panama	Latin America	no	5,115	0	1,561	0.3	18
USA	United States of America	North America	no	1,224,802	642	2,522,700	0.3	19
MWI	Malawi	Sub Saharan Africa	no	1,519	0	976	0.2	20
LKA	Sri Lanka	Asia	no	14,385	1	7,718	0.2	21
VEN	Venezuela	Latin America	no	42,697	7	42,419	0.2	22
KHM	Cambodia	Asia	no	1,623	0	713	0.1	23
IDN	Indonesia	Asia	no	113,457	8	64,015	0.1	24
SWZ	Swaziland	Sub Saharan Africa	no	769	0	913	0.1	25
CAN	Canada	North America	no	121,895	18	343,217	0.1	26
CRI	Costa Rica	Latin America	no	6,892	0	6,358	0.0	27
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	71,742	0.0	28
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,130	0.0	29
MYS	Malaysia	Asia	no	37,377	1	30,273	0.0	30
COL	Colombia	Latin America	no	53,054	1	46,769	0.0	31
THA	Thailand	Asia	no	43,178	1	41,294	0.0	32
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	4,052	0.0	33
TCA	Turks and Caicos islands	Caribbean	no	28	0			34
CYM	Cayman Islands	Caribbean	no	81	1			35
GLP	Guadeloupe	Caribbean	no	904	9			36
MTQ	Martinique	Caribbean	no	889	4			37
REU	Réunion	Sub Saharan Africa	no	2,161	13			38
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			39
MYT	Mayotte	Sub Saharan Africa	no	154	1			40
TWN	Taiwan	Asia	no	38,310	188			41
BRN	Brunei Darussalam	Asia	no	895	1			42
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			43
NPL	Nepal	Asia	no	2,411	1			44
MMR	Myanmar	Asia	no	9,829	1			45
OMN	Oman	Asia	no	4,095	0			46
BTN	Bhutan	Asia	no	371				47
NZL	New Zealand	Australia	no	12,682	1			48
AUS	Australia	Australia	no	47,971	2			49
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		1,281		50
ARE	United Arab Emirates	Asia	no	11,165	0	24,545		51
ZMB	Zambia	Sub Saharan Africa	no	4,976		2,153		52
LSO	Lesotho	Sub Saharan Africa	no	2,124		935		53
GUF	French Guiana	Latin America	no	378				54
AFG	Afghanistan	Asia	no	9,988				55
ARM	Armenia	Asia	no	2,899		1,231		56
AZE	Azerbaijan	Asia	no	12,666		5,852		57
CYP	Cyprus	Asia	no	1,154		4,558		58
GEO	Georgia	Asia	no	3,815		2,453		59
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			60
IRQ	Iraq	Asia	no	15,555				61
ISR	Israel	Asia	no	22,505		52,616		62
JOR	Jordan	Asia	no	10,652		5,910		63
KAZ	Kazakhstan	Asia	no	20,880		16,117		64
KWT	Kuwait	Asia	no	6,168				65
KGZ	Kyrgyzstan	Asia	no	756		877		66
LBN	Lebanon	Asia	no	4,139		4,711		67
MNG	Mongolia	Asia	no	2,335		851		68
QAT	Qatar	Asia	no	2,116				69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GGC [USD million]	AAL/GGC [‰]	Ranking
SAU	Saudi Arabia	Asia	no	73,922		97,875		70
SYR	Syrian Arab Republic	Asia	no	18,783		5,991		71
TJK	Tajikistan	Asia	no	2,412		1,658		72
TUR	Turkey	Asia	no	164,353		104,758		73
TKM	Turkmenistan	Asia	no	3,779		2,212		74
UZB	Uzbekistan	Asia	no	10,382		6,853		75
YEM	Yemen	Asia	no	10,133				76
ALB	Albania	Europe	no	3,381		952		77
AUT	Austria	Europe	no	28,002		73,430		78
BLR	Belarus	Europe	no	21,160		8,828		79
BEL	Belgium	Europe	no	29,496		113,598		80
BIH	Bosnia and Herzegovina	Europe	no	1,424		3,498		81
BGR	Bulgaria	Europe	no	9,040		7,539		82
HRV	Croatia	Europe	no	6,064		13,084		83
CZE	Czech Republic	Europe	no	23,126		41,897		84
DNK	Denmark	Europe	no	31,778		90,977		85
EST	Estonia	Europe	no	2,851		3,959		86
FRO	Faroe Islands	Europe	no	42				87
FIN	Finland	Europe	no	14,927		58,644		88
FRA	France	Europe	no	236,236		635,621		89
DEU	Germany	Europe	no	262,867		647,378		90
GIB	Gibraltar	Europe	no	274				91
GRC	Greece	Europe	no	27,597		54,736		92
HUN	Hungary	Europe	no	30,434		28,084		93
ISL	Iceland	Europe	no	1,071		3,261		94
IRL	Ireland	Europe	no	16,223		39,102		95
ITA	Italy	Europe	no	188,526		435,241		96
LVA	Latvia	Europe	no	4,998		4,122		97
LIE	Liechtenstein	Europe	no	198				98
LTU	Lithuania	Europe	no	7,227		7,241		99
LUX	Luxembourg	Europe	no	2,462		8,868		100
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		1,683		101
MDA	Moldova, Republic of	Europe	no	3,416		1,377		102
MCO	Monaco	Europe	no	123				103
MNE	Montenegro	Europe	no	269		775		104
NLD	Netherlands	Europe	no	49,481		221,964		105
NOR	Norway	Europe	no	33,800		92,372		106
POL	Poland	Europe	no	60,706		88,643		107
PRT	Portugal	Europe	no	18,087		49,074		108
RUS	Russian Federation	Europe	no	288,219	0	287,875		109
SMR	San Marino	Europe	no	113				110
SRB	Serbia	Europe	no	1,938		7,380		111
SVK	Slovakia	Europe	no	9,245		17,073		112
SVN	Slovenia	Europe	no	2,231		9,752		113
ESP	Spain	Europe	no	122,131		292,417		114
SWE	Sweden	Europe	no	27,971		123,918		115
CHE	Switzerland	Europe	no	40,078		60,549		116
UKR	Ukraine	Europe	no	32,769		27,731		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		518,869		118
MLT	Malta	Pacific	no	1,330		1,711		119
ARG	Argentina	Latin America	no	39,520		55,024		120
BOL	Bolivia	Latin America	no	4,521		2,718		121
BRA	Brazil	Latin America	no	300,613		442,019		122
CHL	Chile	Latin America	no	18,070		26,588		123
ECU	Ecuador	Latin America	no	10,202		6,807		124
PRY	Paraguay	Latin America	no	4,301		1,711		125
PER	Peru	Latin America	no	24,717		15,659		126
URY	Uruguay	Latin America	no	4,269		5,117		127
DZA	Algeria	North Africa	no	67,908				128
EGY	Egypt	North Africa	no	101,974		24,436		129
LYB	Libyan Arab Jamahiriya	North Africa	no	18,501				130
MAR	Morocco	North Africa	no	41,389		15,913		131
TUN	Tunisia	North Africa	no	14,190		7,209		132
AGO	Angola	Sub Saharan Africa	no	9,237				133
BEN	Benin	Sub Saharan Africa	no	1,223				134
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				135
BDI	Burundi	Sub Saharan Africa	no	145				136
CMR	Cameroon	Sub Saharan Africa	no	6,256				137
CAF	Central African Republic	Sub Saharan Africa	no	351				138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GGC [USD million]	AAL/GGC [‰]	
TCD	Chad	Sub Saharan Africa	no	4,004		1,131		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		719		140
COG	Congo	Sub Saharan Africa	no	3,326		1,186		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		1,968		142
DJI	Djibouti	Sub Saharan Africa	no	656				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				144
ERI	Eritrea	Sub Saharan Africa	no	1,076				145
ETH	Ethiopia	Sub Saharan Africa	no	3,583		3,029		146
GAB	Gabon	Sub Saharan Africa	no	2,633		1,267		147
GMB	Gambia	Sub Saharan Africa	no	334		121		148
GHA	Ghana	Sub Saharan Africa	no	4,753		3,511		149
GIN	Guinea	Sub Saharan Africa	no	1,643		339		150
KEN	Kenya	Sub Saharan Africa	no	8,730		4,226		151
LBR	Liberia	Sub Saharan Africa	no	263				152
MLI	Mali	Sub Saharan Africa	no	1,887				153
MRT	Mauritania	Sub Saharan Africa	no	1,470		646		154
NAM	Namibia	Sub Saharan Africa	no	1,706		2,692		155
NER	Niger	Sub Saharan Africa	no	1,230				156
NGA	Nigeria	Sub Saharan Africa	no	45,741				157
RWA	Rwanda	Sub Saharan Africa	no	962				158
SEN	Senegal	Sub Saharan Africa	no	5,536		1,124		159
SLE	Sierra Leone	Sub Saharan Africa	no	302		233		160
SOM	Somalia	Sub Saharan Africa	no	2,303				161
SDN	Sudan	Sub Saharan Africa	no	12,166		9,428		162
TGO	Togo	Sub Saharan Africa	no	529				163
UGA	Uganda	Sub Saharan Africa	no	3,787		2,015		164
ESH	Western Sahara	Sub Saharan Africa	no	418				165
TON	Tonga	Pacific	yes	47	1	67	7.5	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	1,393	6.6	2
JAM	Jamaica	Caribbean	yes	4,148	8	2,368	3.6	3
DOM	Dominican Republic	Caribbean	yes	13,790	11	3,965	2.9	4
DMA	Dominica	Caribbean	yes	43	0	81	2.5	5
LCA	Saint Lucia	Caribbean	yes	73	0	192	1.0	6
BRB	Barbados	Caribbean	yes	253	1	835	0.6	7
GUY	Guyana	Latin America	yes	884	0	341	0.3	8
PNG	Papua New Guinea	Asia	yes	1,289	0	897	0.1	9
ATG	Antigua and Barbuda	Caribbean	yes	272	1			10
WSM	Samoa	Pacific	yes	93	1			11
HTI	Haiti	Caribbean	yes	1,584	6			12
FJI	Fiji	Asia	yes	309	2			13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			14
SLB	Solomon islands	Asia	yes	85	0			15
GRD	Grenada	Caribbean	yes	63	0			16
AIA	Anguilla	Caribbean	yes	2				17
VGB	British Virgin Islands	Caribbean	yes	18	0			18
VIR	United States Virgin Islands	Caribbean	yes	82	1			19
BLZ	Belize	Latin America	yes	65	0			20
PRI	Puerto Rico	Caribbean	yes	3,197	19			21
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			22
PYF	French Polynesia	Pacific	yes	116	1			23
COM	Comoros	Sub Saharan Africa	yes	156	1			24
BHS	Bahamas	Caribbean	yes	985	3			25
ABW	Aruba	Caribbean	yes	358	1			26
PLW	Palau	Pacific	yes	25	0			27
VUT	Vanuatu	Asia	yes	25				28
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			29
CUB	Cuba	Caribbean	yes	5,936	5			30
NCL	New Caledonia	Asia	yes	107				31
SYC	Seychelles	Sub Saharan Africa	yes	631	0			32
SUR	Suriname	Latin America	yes	364				33
BHR	Bahrain	Asia	yes	1,670				34
MDV	Maldives	Pacific	yes	154				35
SGP	Singapore	Pacific	yes	18,751		22,293		36
KNA	Saint Kitts and Nevis	Caribbean	yes	0				37
CPV	Cape Verde	Sub Saharan Africa	yes	446				38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value)	(Cyclones)	GS	AAL/GS	
				[USD million]	[USD million]	[USD million]	[‰]	
PHL	Philippines	Asia	no	46,143	505	54,291	9.3	1
HND	Honduras	Latin America	no	5,414	20	18,594	8.0	2
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	11,309	5.2	3
MEX	Mexico	Latin America	no	260,866	459	1,049,803	1.8	4
JPN	Japan	Asia	no	542,290	1,724	1,296,892	1.3	5
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	1.1	6
GTM	Guatemala	Latin America	no	8,748	4	45,670	0.8	7
NIC	Nicaragua	Latin America	no	2,310	1	8,405	0.7	8
KOR	Republic of Korea	Asia	no	95,180	202	321,095	0.6	9
HKG	Hong Kong	Asia	no	47,718	37	67,159	0.6	10
SLV	El Salvador	Latin America	no	4,297	1	24,921	0.4	11
USA	United States of America	North America	no	1,224,802	642	15,103,640	0.4	12
CHN	China	Asia	no	599,699	1,195	3,137,116	0.4	13
BGD	Bangladesh	Asia	no	14,034	11	38,537	0.3	14
LAO	Lao People's Democratic Republic	Asia	no	938	0	1,429	0.1	15
PAK	Pakistan	Asia	no	37,562	5	38,491	0.1	16
VNM	Viet Nam	Asia	no	24,066	4	33,911	0.1	17
LKA	Sri Lanka	Asia	no	14,385	1	12,267	0.1	18
IND	India	Asia	no	320,919	51	582,180	0.1	19
PAN	Panama	Latin America	no	5,115	0	27,738	0.1	20
KHM	Cambodia	Asia	no	1,623	0	1,408	0.1	21
CAN	Canada	North America	no	121,895	18	1,606,667	0.1	22
VEN	Venezuela	Latin America	no	42,697	7	346,724	0.1	23
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	369,463	0.0	24
CRI	Costa Rica	Latin America	no	6,892	0	36,941	0.0	25
IDN	Indonesia	Asia	no	113,457	8	225,795	0.0	26
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	27
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	26,224	0.0	28
COL	Colombia	Latin America	no	53,054	1	294,580	0.0	29
MYS	Malaysia	Asia	no	37,377	1	78,265	0.0	30
THA	Thailand	Asia	no	43,178	1	97,152	0.0	31
RUS	Russian Federation	Europe	no	288,219	0	1,356,393	0.0	32
MAC	Macau	Asia	no	1,989	1			33
MWI	Malawi	Sub Saharan Africa	no	1,519	0	5,605		34
TCA	Turks and Caicos islands	Caribbean	no	28	0			35
CYM	Cayman Islands	Caribbean	no	81	1			36
GLP	Guadeloupe	Caribbean	no	904	9			37
MTQ	Martinique	Caribbean	no	889	4			38
REU	Réunion	Sub Saharan Africa	no	2,161	13			39
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			40
MYT	Mayotte	Sub Saharan Africa	no	154	1			41
TWN	Taiwan	Asia	no	38,310	188			42
BRN	Brunei Darussalam	Asia	no	895	1			43
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			44
NPL	Nepal	Asia	no	2,411	1			45
MMR	Myanmar	Asia	no	9,829	1			46
OMN	Oman	Asia	no	4,095	0			47
BTN	Bhutan	Asia	no	371				48
NZL	New Zealand	Australia	no	12,682	1			49
AUS	Australia	Australia	no	47,971	2			50
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		8,897		51
ARE	United Arab Emirates	Asia	no	11,165	0			52
ZMB	Zambia	Sub Saharan Africa	no	4,976		14,723		53
LSO	Lesotho	Sub Saharan Africa	no	2,124		3,511		54
GUF	French Guiana	Latin America	no	378				55
AFG	Afghanistan	Asia	no	9,988				56
ARM	Armenia	Asia	no	2,899		1,761		57
AZE	Azerbaijan	Asia	no	12,666		23,913		58
CYP	Cyprus	Asia	no	1,154		2,138		59
GEO	Georgia	Asia	no	3,815		1,152		60
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			61
IRQ	Iraq	Asia	no	15,555				62
ISR	Israel	Asia	no	22,505		39,726		63
JOR	Jordan	Asia	no	10,652		2,520		64
KAZ	Kazakhstan	Asia	no	20,880		41,723		65
KWT	Kuwait	Asia	no	6,168				66
KGZ	Kyrgyzstan	Asia	no	756		908		67
LBN	Lebanon	Asia	no	4,139		4,428		68
MNG	Mongolia	Asia	no	2,335		1,682		69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GS [USD million]	AAL/GS [%]	Ranking
QAT	Qatar	Asia	no	2,116				70
SAU	Saudi Arabia	Asia	no	73,922				71
SYR	Syrian Arab Republic	Asia	no	18,783		9,944		72
TJK	Tajikistan	Asia	no	2,412		143		73
TUR	Turkey	Asia	no	164,353		99,948		74
TKM	Turkmenistan	Asia	no	3,779				75
UZB	Uzbekistan	Asia	no	10,382				76
YEM	Yemen	Asia	no	10,133				77
ALB	Albania	Europe	no	3,381		14,377		78
AUT	Austria	Europe	no	28,002		362,737		79
BLR	Belarus	Europe	no	21,160		62,212		80
BEL	Belgium	Europe	no	29,496		456,696		81
BIH	Bosnia and Herzegovina	Europe	no	1,424		20,030		82
BGR	Bulgaria	Europe	no	9,040		48,622		83
HRV	Croatia	Europe	no	6,064		61,162		84
CZE	Czech Republic	Europe	no	23,126		182,876		85
DNK	Denmark	Europe	no	31,778		292,535		86
EST	Estonia	Europe	no	2,851		17,933		87
FRO	Faroe Islands	Europe	no	42				88
FIN	Finland	Europe	no	14,927		235,640		89
FRA	France	Europe	no	236,236		2,620,062		90
DEU	Germany	Europe	no	262,867		3,101,126		91
GIB	Gibraltar	Europe	no	274				92
GRC	Greece	Europe	no	27,597		327,811		93
HUN	Hungary	Europe	no	30,434		120,269		94
ISL	Iceland	Europe	no	1,071		11,313		95
IRL	Ireland	Europe	no	16,223		171,957		96
ITA	Italy	Europe	no	188,526		2,087,749		97
LVA	Latvia	Europe	no	4,998		24,210		98
LIE	Liechtenstein	Europe	no	198				99
LTU	Lithuania	Europe	no	7,227		36,811		100
LUX	Luxembourg	Europe	no	2,462		36,700		101
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		10,902		102
MDA	Moldova, Republic of	Europe	no	3,416		8,053		103
MCO	Monaco	Europe	no	123				104
MNE	Montenegro	Europe	no	269		5,265		105
NLD	Netherlands	Europe	no	49,481		721,171		106
NOR	Norway	Europe	no	33,800		358,009		107
POL	Poland	Europe	no	60,706		475,111		108
PRT	Portugal	Europe	no	18,087		245,251		109
SMR	San Marino	Europe	no	113				110
SRB	Serbia	Europe	no	1,938		44,764		111
SVK	Slovakia	Europe	no	9,245		88,405		112
SVN	Slovenia	Europe	no	2,231		46,643		113
ESP	Spain	Europe	no	122,131		1,437,861		114
SWE	Sweden	Europe	no	27,971		431,251		115
CHE	Switzerland	Europe	no	40,078		468,037		116
UKR	Ukraine	Europe	no	32,769		141,773		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,325,009		118
MLT	Malta	Pacific	no	1,330		8,111		119
ARG	Argentina	Latin America	no	39,520		356,545		120
BOL	Bolivia	Latin America	no	4,521		18,301		121
BRA	Brazil	Latin America	no	300,613		2,108,637		122
CHL	Chile	Latin America	no	18,070		198,120		123
ECU	Ecuador	Latin America	no	10,202		61,265		124
PRY	Paraguay	Latin America	no	4,301		17,941		125
PER	Peru	Latin America	no	24,717		152,561		126
URY	Uruguay	Latin America	no	4,269		39,936		127
DZA	Algeria	North Africa	no	67,908				128
EGY	Egypt	North Africa	no	101,974		229,362		129
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				130
MAR	Morocco	North Africa	no	41,389		99,808		131
TUN	Tunisia	North Africa	no	14,190		46,643		132
AGO	Angola	Sub Saharan Africa	no	9,237		72,456		133
BEN	Benin	Sub Saharan Africa	no	1,223		7,536		134
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				135
BDI	Burundi	Sub Saharan Africa	no	145				136
CMR	Cameroon	Sub Saharan Africa	no	6,256		23,429		137
CAF	Central African Republic	Sub Saharan Africa	no	351				138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GS [USD million]	AAL/GS [%]	
TCD	Chad	Sub Saharan Africa	no	4,004		9,469		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		15,617		140
COG	Congo	Sub Saharan Africa	no	3,326		8,109		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,734		142
DJI	Djibouti	Sub Saharan Africa	no	656				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				144
ERI	Eritrea	Sub Saharan Africa	no	1,076				145
ETH	Ethiopia	Sub Saharan Africa	no	3,583		35,978		146
GAB	Gabon	Sub Saharan Africa	no	2,633		10,274		147
GMB	Gambia	Sub Saharan Africa	no	334		963		148
GHA	Ghana	Sub Saharan Africa	no	4,753		35,414		149
GIN	Guinea	Sub Saharan Africa	no	1,643		4,711		150
KEN	Kenya	Sub Saharan Africa	no	8,730		35,486		151
LBR	Liberia	Sub Saharan Africa	no	263				152
MLI	Mali	Sub Saharan Africa	no	1,887				153
MRT	Mauritania	Sub Saharan Africa	no	1,470		4,195		154
NAM	Namibia	Sub Saharan Africa	no	1,706		12,035		155
NER	Niger	Sub Saharan Africa	no	1,230				156
NGA	Nigeria	Sub Saharan Africa	no	45,741		168,996		157
RWA	Rwanda	Sub Saharan Africa	no	962				158
SEN	Senegal	Sub Saharan Africa	no	5,536		15,485		159
SLE	Sierra Leone	Sub Saharan Africa	no	302		2,142		160
SOM	Somalia	Sub Saharan Africa	no	2,303				161
SDN	Sudan	Sub Saharan Africa	no	12,166		61,511		162
TGO	Togo	Sub Saharan Africa	no	529				163
UGA	Uganda	Sub Saharan Africa	no	3,787		18,757		164
ESH	Western Sahara	Sub Saharan Africa	no	418				165
DMA	Dominica	Caribbean	yes	43	0	573	34.7	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	10,934	5.7	2
JAM	Jamaica	Caribbean	yes	4,148	8	16,776	4.8	3
DOM	Dominican Republic	Caribbean	yes	13,790	11	57,847	3.0	4
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.9	5
GUY	Guyana	Latin America	yes	884	0		0.3	6
PNG	Papua New Guinea	Asia	yes	1,289	0	2,660	0.0	7
TON	Tonga	Pacific	yes	47	1	510		8
BRB	Barbados	Caribbean	yes	253	1	4,317		9
ATG	Antigua and Barbuda	Caribbean	yes	272	1	1,329		10
WSM	Samoa	Pacific	yes	93	1	727		11
HTI	Haiti	Caribbean	yes	1,584	6	9,743		12
FJI	Fiji	Asia	yes	309	2			13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914		14
SLB	Solomon islands	Asia	yes	85	0			15
GRD	Grenada	Caribbean	yes	63	0	996		16
AIA	Anguilla	Caribbean	yes	2				17
VGB	British Virgin Islands	Caribbean	yes	18	0			18
VIR	United States Virgin Islands	Caribbean	yes	82	1			19
BLZ	Belize	Latin America	yes	65	0			20
PRI	Puerto Rico	Caribbean	yes	3,197	19			21
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			22
PYF	French Polynesia	Pacific	yes	116	1			23
COM	Comoros	Sub Saharan Africa	yes	156	1			24
BHS	Bahamas	Caribbean	yes	985	3			25
ABW	Aruba	Caribbean	yes	358	1			26
PLW	Palau	Pacific	yes	25	0			27
VUT	Vanuatu	Asia	yes	25				28
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			29
CUB	Cuba	Caribbean	yes	5,936	5			30
NCL	New Caledonia	Asia	yes	107				31
SYC	Seychelles	Sub Saharan Africa	yes	631	0			32
SUR	Suriname	Latin America	yes	364				33
BHR	Bahrain	Asia	yes	1,670				34
MDV	Maldives	Pacific	yes	154		2,244		35
SGP	Singapore	Pacific	yes	18,751		150,187		36
KNA	Saint Kitts and Nevis	Caribbean	yes	0		766		37
CPV	Cape Verde	Sub Saharan Africa	yes	446				38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
TCA	Turks and Caicos islands	Caribbean	no	28	12	42.6	1
CYM	Cayman Islands	Caribbean	no	81	29	35.9	2
GLP	Guadeloupe	Caribbean	no	904	290	32.0	3
MTQ	Martinique	Caribbean	no	889	210	23.6	4
REU	Réunion	Sub Saharan Africa	no	2,161	384	17.8	5
PHL	Philippines	Asia	no	46,143	7,309	15.8	6
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	15.6	7
HND	Honduras	Latin America	no	5,414	800	14.8	8
MYT	Mayotte	Sub Saharan Africa	no	154	22	14.1	9
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	7.2	10
MEX	Mexico	Latin America	no	260,866	13,716	5.3	11
TWN	Taiwan	Asia	no	38,310	1,821	4.8	12
BGD	Bangladesh	Asia	no	14,034	589	4.2	13
JPN	Japan	Asia	no	542,290	20,590	3.8	14
KOR	Republic of Korea	Asia	no	95,180	3,600	3.8	15
CHN	China	Asia	no	599,699	17,031	2.8	16
BRN	Brunei Darussalam	Asia	no	895	25	2.7	17
PRK	Dem People's Rep of Korea	Asia	no	10,245	216	2.1	18
HKG	Hong Kong	Asia	no	47,718	1,003	2.1	19
GTM	Guatemala	Latin America	no	8,748	154	1.8	20
NPL	Nepal	Asia	no	2,411	42	1.7	21
MAC	Macau	Asia	no	1,989	32	1.6	22
NIC	Nicaragua	Latin America	no	2,310	27	1.2	23
USA	United States of America	North America	no	1,224,802	10,909	0.9	24
LAO	Lao People's Democratic Republic	Asia	no	938	7	0.8	25
VEN	Venezuela	Latin America	no	42,697	319	0.8	26
SLV	El Salvador	Latin America	no	4,297	31	0.7	27
MWI	Malawi	Sub Saharan Africa	no	1,519	11	0.7	28
PAK	Pakistan	Asia	no	37,562	263	0.7	29
IND	India	Asia	no	320,919	2,109	0.7	30
SWZ	Swaziland	Sub Saharan Africa	no	769	5	0.6	31
CAN	Canada	North America	no	121,895	653	0.5	32
MMR	Myanmar	Asia	no	9,829	48	0.5	33
VNM	Viet Nam	Asia	no	24,066	111	0.5	34
PAN	Panama	Latin America	no	5,115	21	0.4	35
KHM	Cambodia	Asia	no	1,623	6	0.4	36
LKA	Sri Lanka	Asia	no	14,385	49	0.3	37
IDN	Indonesia	Asia	no	113,457	387	0.3	38
OMN	Oman	Asia	no	4,095	13	0.3	39
BTN	Bhutan	Asia	no	371	1	0.3	40
NZL	New Zealand	Australia	no	12,682	28	0.2	41
CRI	Costa Rica	Latin America	no	6,892	12	0.2	42
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	0.2	43
COL	Colombia	Latin America	no	53,054	56	0.1	44
AUS	Australia	Australia	no	47,971	49	0.1	45
MYS	Malaysia	Asia	no	37,377	39	0.1	46
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	0.1	47
THA	Thailand	Asia	no	43,178	24	0.1	48
ARE	United Arab Emirates	Asia	no	11,165	7	0.1	49
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.0	50
BWA	Botswana	Sub Saharan Africa	no	4,287	1	0.0	51
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	0.0	52
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.0	53
GUF	French Guiana	Latin America	no	378			54
AFG	Afghanistan	Asia	no	9,988			55
ARM	Armenia	Asia	no	2,899			56
AZE	Azerbaijan	Asia	no	12,666			57
CYP	Cyprus	Asia	no	1,154			58
GEO	Georgia	Asia	no	3,815			59
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4		60
IRQ	Iraq	Asia	no	15,555			61
ISR	Israel	Asia	no	22,505			62
JOR	Jordan	Asia	no	10,652			63
KAZ	Kazakhstan	Asia	no	20,880			64
KWT	Kuwait	Asia	no	6,168			65
KGZ	Kyrgyzstan	Asia	no	756			66
LBN	Lebanon	Asia	no	4,139			67
MNG	Mongolia	Asia	no	2,335			68
QAT	Qatar	Asia	no	2,116			69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
SAU	Saudi Arabia	Asia	no	73,922			70
SYR	Syrian Arab Republic	Asia	no	18,783			71
TJK	Tajikistan	Asia	no	2,412			72
TUR	Turkey	Asia	no	164,353			73
TKM	Turkmenistan	Asia	no	3,779			74
UZB	Uzbekistan	Asia	no	10,382			75
YEM	Yemen	Asia	no	10,133			76
ALB	Albania	Europe	no	3,381			77
AUT	Austria	Europe	no	28,002			78
BLR	Belarus	Europe	no	21,160			79
BEL	Belgium	Europe	no	29,496			80
BIH	Bosnia and Herzegovina	Europe	no	1,424			81
BGR	Bulgaria	Europe	no	9,040			82
HRV	Croatia	Europe	no	6,064			83
CZE	Czech Republic	Europe	no	23,126			84
DNK	Denmark	Europe	no	31,778			85
EST	Estonia	Europe	no	2,851			86
FRO	Faroe Islands	Europe	no	42			87
FIN	Finland	Europe	no	14,927			88
FRA	France	Europe	no	236,236			89
DEU	Germany	Europe	no	262,867			90
GIB	Gibraltar	Europe	no	274			91
GRC	Greece	Europe	no	27,597			92
HUN	Hungary	Europe	no	30,434			93
ISL	Iceland	Europe	no	1,071			94
IRL	Ireland	Europe	no	16,223			95
ITA	Italy	Europe	no	188,526			96
LVA	Latvia	Europe	no	4,998			97
LIE	Liechtenstein	Europe	no	198			98
LTU	Lithuania	Europe	no	7,227			99
LUX	Luxembourg	Europe	no	2,462			100
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000			101
MDA	Moldova, Republic of	Europe	no	3,416			102
MCO	Monaco	Europe	no	123			103
MNE	Montenegro	Europe	no	269			104
NLD	Netherlands	Europe	no	49,481			105
NOR	Norway	Europe	no	33,800			106
POL	Poland	Europe	no	60,706			107
PRT	Portugal	Europe	no	18,087	0		108
RUS	Russian Federation	Europe	no	288,219	7		109
SMR	San Marino	Europe	no	113			110
SRB	Serbia	Europe	no	1,938			111
SVK	Slovakia	Europe	no	9,245			112
SVN	Slovenia	Europe	no	2,231			113
ESP	Spain	Europe	no	122,131			114
SWE	Sweden	Europe	no	27,971			115
CHE	Switzerland	Europe	no	40,078			116
UKR	Ukraine	Europe	no	32,769			117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134			118
MLT	Malta	Pacific	no	1,330			119
ARG	Argentina	Latin America	no	39,520			120
BOL	Bolivia	Latin America	no	4,521			121
BRA	Brazil	Latin America	no	300,613			122
CHL	Chile	Latin America	no	18,070			123
ECU	Ecuador	Latin America	no	10,202			124
PRY	Paraguay	Latin America	no	4,301			125
PER	Peru	Latin America	no	24,717			126
URY	Uruguay	Latin America	no	4,269			127
DZA	Algeria	North Africa	no	67,908			128
EGY	Egypt	North Africa	no	101,974			129
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501			130
MAR	Morocco	North Africa	no	41,389			131
TUN	Tunisia	North Africa	no	14,190			132
AGO	Angola	Sub Saharan Africa	no	9,237			133
BEN	Benin	Sub Saharan Africa	no	1,223			134
BFA	Burkina Faso	Sub Saharan Africa	no	1,847			135
BDI	Burundi	Sub Saharan Africa	no	145			136
CMR	Cameroon	Sub Saharan Africa	no	6,256			137
CAF	Central African Republic	Sub Saharan Africa	no	351			138



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TCD	Chad	Sub Saharan Africa	no	4,004			139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914			140
COG	Congo	Sub Saharan Africa	no	3,326			141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304			142
DJI	Djibouti	Sub Saharan Africa	no	656			143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626			144
ERI	Eritrea	Sub Saharan Africa	no	1,076			145
ETH	Ethiopia	Sub Saharan Africa	no	3,583			146
GAB	Gabon	Sub Saharan Africa	no	2,633			147
GMB	Gambia	Sub Saharan Africa	no	334			148
GHA	Ghana	Sub Saharan Africa	no	4,753			149
GIN	Guinea	Sub Saharan Africa	no	1,643			150
KEN	Kenya	Sub Saharan Africa	no	8,730			151
LBR	Liberia	Sub Saharan Africa	no	263			152
MLI	Mali	Sub Saharan Africa	no	1,887			153
MRT	Mauritania	Sub Saharan Africa	no	1,470			154
NAM	Namibia	Sub Saharan Africa	no	1,706			155
NER	Niger	Sub Saharan Africa	no	1,230			156
NGA	Nigeria	Sub Saharan Africa	no	45,741			157
RWA	Rwanda	Sub Saharan Africa	no	962			158
SEN	Senegal	Sub Saharan Africa	no	5,536			159
SLE	Sierra Leone	Sub Saharan Africa	no	302			160
SOM	Somalia	Sub Saharan Africa	no	2,303			161
SDN	Sudan	Sub Saharan Africa	no	12,166			162
TGO	Togo	Sub Saharan Africa	no	529			163
UGA	Uganda	Sub Saharan Africa	no	3,787			164
ESH	Western Sahara	Sub Saharan Africa	no	418			165
AIA	Anguilla	Caribbean	yes	2	1	94.3	1
VGB	British Virgin Islands	Caribbean	yes	18	5	32.1	2
TON	Tonga	Pacific	yes	47	12	26.6	3
VIR	United States Virgin Islands	Caribbean	yes	82	21	26.4	4
WSM	Samoa	Pacific	yes	93	24	26.1	5
BLZ	Belize	Latin America	yes	65	16	24.7	6
DMA	Dominica	Caribbean	yes	43	8	19.6	7
FJI	Fiji	Asia	yes	309	60	19.5	8
ATG	Antigua and Barbuda	Caribbean	yes	272	52	19.1	9
PRI	Puerto Rico	Caribbean	yes	3,197	572	17.9	10
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	17.8	11
HTI	Haiti	Caribbean	yes	1,584	269	17.0	12
PYF	French Polynesia	Pacific	yes	116	18	15.6	13
COM	Comoros	Sub Saharan Africa	yes	156	24	15.5	14
LCA	Saint Lucia	Caribbean	yes	73	11	14.7	15
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	13.8	16
BHS	Bahamas	Caribbean	yes	985	121	12.3	17
BRB	Barbados	Caribbean	yes	253	31	12.1	18
ABW	Aruba	Caribbean	yes	358	30	8.5	19
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	8.2	20
JAM	Jamaica	Caribbean	yes	4,148	325	7.8	21
GRD	Grenada	Caribbean	yes	63	4	6.9	22
PLW	Palau	Pacific	yes	25	2	6.3	23
VUT	Vanuatu	Asia	yes	25	1	5.1	24
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	3.2	25
DOM	Dominican Republic	Caribbean	yes	13,790	430	3.1	26
CUB	Cuba	Caribbean	yes	5,936	158	2.7	27
SLB	Solomon islands	Asia	yes	85	2	2.3	28
NCL	New Caledonia	Asia	yes	107	1	0.8	29
SYC	Seychelles	Sub Saharan Africa	yes	631	3	0.4	30
PNG	Papua New Guinea	Asia	yes	1,289	2	0.2	31
GUY	Guyana	Latin America	yes	884	1	0.1	32
SUR	Suriname	Latin America	yes	364	0	0.0	33
BHR	Bahrain	Asia	yes	1,670			34
MDV	Maldives	Pacific	yes	154			35
SGP	Singapore	Pacific	yes	18,751			36
KNA	Saint Kitts and Nevis	Caribbean	yes	0			37
CPV	Cape Verde	Sub Saharan Africa	yes	446			38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258			39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114			40



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HND	Honduras	Latin America	no	5,414	800	15,400	5.2	1
PHL	Philippines	Asia	no	46,143	7,309	199,589	3.7	2
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	9,586	3.0	3
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	8,721	2.8	4
MEX	Mexico	Latin America	no	260,866	13,716	1,034,804	1.3	5
BGD	Bangladesh	Asia	no	14,034	589	100,357	0.6	6
HKG	Hong Kong	Asia	no	47,718	1,003	224,458	0.5	7
NIC	Nicaragua	Latin America	no	2,310	27	6,551	0.4	8
JPN	Japan	Asia	no	542,290	20,590	5,458,837	0.4	9
GTM	Guatemala	Latin America	no	8,748	154	41,186	0.4	10
KOR	Republic of Korea	Asia	no	95,180	3,600	1,014,483	0.4	11
CHN	China	Asia	no	599,699	17,031	5,926,612	0.3	12
MWI	Malawi	Sub Saharan Africa	no	1,519	11	5,106	0.2	13
PAK	Pakistan	Asia	no	37,562	263	176,870	0.2	14
SLV	El Salvador	Latin America	no	4,297	31	21,215	0.1	15
SWZ	Swaziland	Sub Saharan Africa	no	769	5	3,645	0.1	16
IND	India	Asia	no	320,919	2,109	1,727,111	0.1	17
MAC	Macau	Asia	no	1,989	32	27,960	0.1	18
LAO	Lao People's Democratic Republic	Asia	no	938	7	7,296	0.1	19
VNM	Viet Nam	Asia	no	24,066	111	106,427	0.1	20
LKA	Sri Lanka	Asia	no	14,385	49	49,552	0.1	21
PAN	Panama	Latin America	no	5,115	21	26,689	0.1	22
VEN	Venezuela	Latin America	no	42,697	319	391,848	0.1	23
USA	United States of America	North America	no	1,224,802	10,909	14,586,740	0.1	24
KHM	Cambodia	Asia	no	1,623	6	11,242	0.1	25
BTN	Bhutan	Asia	no	371	1	1,516	0.1	26
IDN	Indonesia	Asia	no	113,457	387	706,558	0.1	27
CAN	Canada	North America	no	121,895	653	1,577,040	0.0	28
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	363,704	0.0	29
CRI	Costa Rica	Latin America	no	6,892	12	35,831	0.0	30
COL	Colombia	Latin America	no	53,054	56	288,189	0.0	31
MYS	Malaysia	Asia	no	37,377	39	237,797	0.0	32
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	7,474	0.0	33
THA	Thailand	Asia	no	43,178	24	318,522	0.0	34
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	16,193	0.0	35
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	2,132	0.0	36
BWA	Botswana	Sub Saharan Africa	no	4,287	1	14,857		37
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	23,057		38
RUS	Russian Federation	Europe	no	288,219	7	1,479,819		39
TCA	Turks and Caicos islands	Caribbean	no	28	12			40
CYM	Cayman Islands	Caribbean	no	81	29			41
GLP	Guadeloupe	Caribbean	no	904	290			42
MTQ	Martinique	Caribbean	no	889	210			43
REU	Réunion	Sub Saharan Africa	no	2,161	384			44
MYT	Mayotte	Sub Saharan Africa	no	154	22			45
TWN	Taiwan	Asia	no	38,310	1,821			46
BRN	Brunei Darussalam	Asia	no	895	25			47
PRK	Dem People's Rep of Korea	Asia	no	10,245	216			48
NPL	Nepal	Asia	no	2,411	42			49
MMR	Myanmar	Asia	no	9,829	48			50
OMN	Oman	Asia	no	4,095	13			51
NZL	New Zealand	Australia	no	12,682	28			52
AUS	Australia	Australia	no	47,971	49			53
ARE	United Arab Emirates	Asia	no	11,165	7	297,649		54
GUF	French Guiana	Latin America	no	378				55
AFG	Afghanistan	Asia	no	9,988		17,243		56
ARM	Armenia	Asia	no	2,899		9,371		57
AZE	Azerbaijan	Asia	no	12,666		51,774		58
CYP	Cyprus	Asia	no	1,154		23,132		59
GEO	Georgia	Asia	no	3,815		11,667		60
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4			61
IRQ	Iraq	Asia	no	15,555		82,150		62
ISR	Israel	Asia	no	22,505		217,333		63
JOR	Jordan	Asia	no	10,652		27,574		64
KAZ	Kazakhstan	Asia	no	20,880		149,059		65
KWT	Kuwait	Asia	no	6,168				66
KGZ	Kyrgyzstan	Asia	no	756		4,616		67
LBN	Lebanon	Asia	no	4,139		39,006		68
MNG	Mongolia	Asia	no	2,335		6,200		69



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QAT	Qatar	Asia	no	2,116				70
SAU	Saudi Arabia	Asia	no	73,922		434,666		71
SYR	Syrian Arab Republic	Asia	no	18,783		59,147		72
TJK	Tajikistan	Asia	no	2,412		5,640		73
TUR	Turkey	Asia	no	164,353		734,365		74
TKM	Turkmenistan	Asia	no	3,779		20,001		75
UZB	Uzbekistan	Asia	no	10,382		38,982		76
YEM	Yemen	Asia	no	10,133				77
ALB	Albania	Europe	no	3,381		11,786		78
AUT	Austria	Europe	no	28,002		379,069		79
BLR	Belarus	Europe	no	21,160		54,713		80
BEL	Belgium	Europe	no	29,496		469,374		81
BIH	Bosnia and Herzegovina	Europe	no	1,424		16,578		82
BGR	Bulgaria	Europe	no	9,040		47,714		83
HRV	Croatia	Europe	no	6,064		60,852		84
CZE	Czech Republic	Europe	no	23,126		192,032		85
DNK	Denmark	Europe	no	31,778		309,866		86
EST	Estonia	Europe	no	2,851		19,217		87
FRO	Faroe Islands	Europe	no	42				88
FIN	Finland	Europe	no	14,927		238,746		89
FRA	France	Europe	no	236,236		2,560,002		90
DEU	Germany	Europe	no	262,867		3,280,530		91
GIB	Gibraltar	Europe	no	274				92
GRC	Greece	Europe	no	27,597		301,083		93
HUN	Hungary	Europe	no	30,434		128,632		94
ISL	Iceland	Europe	no	1,071		12,574		95
IRL	Ireland	Europe	no	16,223		211,390		96
ITA	Italy	Europe	no	188,526		2,051,412		97
LVA	Latvia	Europe	no	4,998		24,010		98
LIE	Liechtenstein	Europe	no	198				99
LTU	Lithuania	Europe	no	7,227		36,306		100
LUX	Luxembourg	Europe	no	2,462		53,334		101
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		9,189		102
MDA	Moldova, Republic of	Europe	no	3,416		5,809		103
MCO	Monaco	Europe	no	123				104
MNE	Montenegro	Europe	no	269		4,111		105
NLD	Netherlands	Europe	no	49,481		779,356		106
NOR	Norway	Europe	no	33,800		412,990		107
POL	Poland	Europe	no	60,706		469,440		108
PRT	Portugal	Europe	no	18,087	0	228,872		109
SMR	San Marino	Europe	no	113				110
SRB	Serbia	Europe	no	1,938		38,423		111
SVK	Slovakia	Europe	no	9,245		87,268		112
SVN	Slovenia	Europe	no	2,231		46,908		113
ESP	Spain	Europe	no	122,131		1,407,405		114
SWE	Sweden	Europe	no	27,971		458,973		115
CHE	Switzerland	Europe	no	40,078		527,920		116
UKR	Ukraine	Europe	no	32,769		137,929		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,248,831		118
MLT	Malta	Pacific	no	1,330		8,256		119
ARG	Argentina	Latin America	no	39,520		368,736		120
BOL	Bolivia	Latin America	no	4,521		19,650		121
BRA	Brazil	Latin America	no	300,613		2,087,890		122
CHL	Chile	Latin America	no	18,070		212,741		123
ECU	Ecuador	Latin America	no	10,202		57,978		124
PRY	Paraguay	Latin America	no	4,301		18,333		125
PER	Peru	Latin America	no	24,717		157,053		126
URY	Uruguay	Latin America	no	4,269		40,265		127
DZA	Algeria	North Africa	no	67,908		159,426		128
EGY	Egypt	North Africa	no	101,974		218,894		129
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				130
MAR	Morocco	North Africa	no	41,389		90,805		131
TUN	Tunisia	North Africa	no	14,190		44,291		132
AGO	Angola	Sub Saharan Africa	no	9,237		84,391		133
BEN	Benin	Sub Saharan Africa	no	1,223		6,633		134
BFA	Burkina Faso	Sub Saharan Africa	no	1,847		8,820		135
BDI	Burundi	Sub Saharan Africa	no	145		1,611		136
CMR	Cameroon	Sub Saharan Africa	no	6,256		22,394		137
CAF	Central African Republic	Sub Saharan Africa	no	351		2,013		138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
TCD	Chad	Sub Saharan Africa	no	4,004		7,588		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		13,145		140
COG	Congo	Sub Saharan Africa	no	3,326		11,898		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		22,780		142
DJI	Djibouti	Sub Saharan Africa	no	656				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626		14,007		144
ERI	Eritrea	Sub Saharan Africa	no	1,076		2,117		145
ETH	Ethiopia	Sub Saharan Africa	no	3,583		29,717		146
GAB	Gabon	Sub Saharan Africa	no	2,633		13,011		147
GMB	Gambia	Sub Saharan Africa	no	334		807		148
GHA	Ghana	Sub Saharan Africa	no	4,753		31,306		149
GIN	Guinea	Sub Saharan Africa	no	1,643		4,511		150
KEN	Kenya	Sub Saharan Africa	no	8,730		31,409		151
LBR	Liberia	Sub Saharan Africa	no	263		986		152
MLI	Mali	Sub Saharan Africa	no	1,887		9,251		153
MRT	Mauritania	Sub Saharan Africa	no	1,470		3,636		154
NAM	Namibia	Sub Saharan Africa	no	1,706		12,170		155
NER	Niger	Sub Saharan Africa	no	1,230		5,549		156
NGA	Nigeria	Sub Saharan Africa	no	45,741		193,669		157
RWA	Rwanda	Sub Saharan Africa	no	962		5,628		158
SEN	Senegal	Sub Saharan Africa	no	5,536		12,954		159
SLE	Sierra Leone	Sub Saharan Africa	no	302		1,905		160
SOM	Somalia	Sub Saharan Africa	no	2,303				161
SDN	Sudan	Sub Saharan Africa	no	12,166		62,046		162
TGO	Togo	Sub Saharan Africa	no	529		3,153		163
UGA	Uganda	Sub Saharan Africa	no	3,787		17,011		164
ESH	Western Sahara	Sub Saharan Africa	no	418				165
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	297	12.9	1
COM	Comoros	Sub Saharan Africa	yes	156	24	541	4.5	2
ATG	Antigua and Barbuda	Caribbean	yes	272	52	1,211	4.3	3
WSM	Samoa	Pacific	yes	93	24	574	4.2	4
HTI	Haiti	Caribbean	yes	1,584	269	6,710	4.0	5
TON	Tonga	Pacific	yes	47	12	348	3.5	6
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	9,729	2.5	7
JAM	Jamaica	Caribbean	yes	4,148	325	14,252	2.3	8
FJI	Fiji	Asia	yes	309	60	3,189	1.9	9
DMA	Dominica	Caribbean	yes	43	8	466	1.8	10
BHS	Bahamas	Caribbean	yes	985	121	7,538	1.6	11
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	705	1.6	12
BLZ	Belize	Latin America	yes	65	16	1,401	1.2	13
PLW	Palau	Pacific	yes	25	2	171	0.9	14
LCA	Saint Lucia	Caribbean	yes	73	11	1,198	0.9	15
DOM	Dominican Republic	Caribbean	yes	13,790	430	51,766	0.8	16
BRB	Barbados	Caribbean	yes	253	31	4,110	0.8	17
GRD	Grenada	Caribbean	yes	63	4	773	0.6	18
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	20,604	0.4	19
SLB	Solomon islands	Asia	yes	85	2	679	0.3	20
SYC	Seychelles	Sub Saharan Africa	yes	631	3	937	0.3	21
VUT	Vanuatu	Asia	yes	25	1	699	0.2	22
GUY	Guyana	Latin America	yes	884	1	2,226	0.0	23
PNG	Papua New Guinea	Asia	yes	1,289	2	9,480	0.0	24
AIA	Anguilla	Caribbean	yes	2	1			25
VGB	British Virgin Islands	Caribbean	yes	18	5			26
VIR	United States Virgin Islands	Caribbean	yes	82	21			27
PRI	Puerto Rico	Caribbean	yes	3,197	572			28
PYF	French Polynesia	Pacific	yes	116	18			29
ABW	Aruba	Caribbean	yes	358	30			30
CUB	Cuba	Caribbean	yes	5,936	158			31
NCL	New Caledonia	Asia	yes	107	1			32
SUR	Suriname	Latin America	yes	364	0			33
BHR	Bahrain	Asia	yes	1,670				34
MDV	Maldives	Pacific	yes	154		1,908		35
SGP	Singapore	Pacific	yes	18,751		208,765		36
KNA	Saint Kitts and Nevis	Caribbean	yes	0		652		37
CPV	Cape Verde	Sub Saharan Africa	yes	446		1,648		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258		879		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114		197		40



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HND	Honduras	Latin America	no	5,414	800	14,798	5.4	1
PHL	Philippines	Asia	no	46,143	7,309	199,897	3.7	2
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	9,421	3.0	3
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	8,628	2.8	4
MEX	Mexico	Latin America	no	260,866	13,716	1,020,288	1.3	5
BGD	Bangladesh	Asia	no	14,034	589	109,695	0.5	6
HKG	Hong Kong	Asia	no	47,718	1,003	229,165	0.4	7
NIC	Nicaragua	Latin America	no	2,310	27	6,273	0.4	8
GTM	Guatemala	Latin America	no	8,748	154	39,987	0.4	9
JPN	Japan	Asia	no	542,290	20,590	5,601,557	0.4	10
KOR	Republic of Korea	Asia	no	95,180	3,600	1,014,760	0.4	11
CHN	China	Asia	no	599,699	17,031	5,957,012	0.3	12
MWI	Malawi	Sub Saharan Africa	no	1,519	11	4,980	0.2	13
SLV	El Salvador	Latin America	no	4,297	31	20,834	0.2	14
PAK	Pakistan	Asia	no	37,562	263	183,620	0.1	15
SWZ	Swaziland	Sub Saharan Africa	no	769	5	3,586	0.1	16
IND	India	Asia	no	320,919	2,109	1,712,645	0.1	17
VNM	Viet Nam	Asia	no	24,066	111	102,008	0.1	18
LAO	Lao People's Democratic Republic	Asia	no	938	7	6,978	0.1	19
LKA	Sri Lanka	Asia	no	14,385	49	48,916	0.1	20
PAN	Panama	Latin America	no	5,115	21	25,037	0.1	21
VEN	Venezuela	Latin America	no	42,697	319	389,038	0.1	22
USA	United States of America	North America	no	1,224,802	10,909	14,635,600	0.1	23
BTN	Bhutan	Asia	no	371	1	1,420	0.1	24
KHM	Cambodia	Asia	no	1,623	6	10,664	0.1	25
IDN	Indonesia	Asia	no	113,457	387	686,633	0.1	26
CAN	Canada	North America	no	121,895	653	1,549,652	0.0	27
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	356,475	0.0	28
CRI	Costa Rica	Latin America	no	6,892	12	34,896	0.0	29
COL	Colombia	Latin America	no	53,054	56	276,072	0.0	30
MYS	Malaysia	Asia	no	37,377	39	229,566	0.0	31
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	6,988	0.0	32
THA	Thailand	Asia	no	43,178	24	304,812	0.0	33
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	14,300	0.0	34
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	2,553	0.0	35
MAC	Macau	Asia	no	1,989	32			36
BWA	Botswana	Sub Saharan Africa	no	4,287	1	14,771		37
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	23,012		38
RUS	Russian Federation	Europe	no	288,219	7	1,431,121		39
TCA	Turks and Caicos islands	Caribbean	no	28	12			40
CYM	Cayman Islands	Caribbean	no	81	29			41
GLP	Guadeloupe	Caribbean	no	904	290			42
MTQ	Martinique	Caribbean	no	889	210			43
REU	Réunion	Sub Saharan Africa	no	2,161	384			44
MYT	Mayotte	Sub Saharan Africa	no	154	22			45
TWN	Taiwan	Asia	no	38,310	1,821			46
BRN	Brunei Darussalam	Asia	no	895	25			47
PRK	Dem People's Rep of Korea	Asia	no	10,245	216			48
NPL	Nepal	Asia	no	2,411	42			49
MMR	Myanmar	Asia	no	9,829	48			50
OMN	Oman	Asia	no	4,095	13			51
NZL	New Zealand	Australia	no	12,682	28			52
AUS	Australia	Australia	no	47,971	49			53
ARE	United Arab Emirates	Asia	no	11,165	7			54
GUF	French Guiana	Latin America	no	378				55
AFG	Afghanistan	Asia	no	9,988		15,162		56
ARM	Armenia	Asia	no	2,899		9,710		57
AZE	Azerbaijan	Asia	no	12,666		48,307		58
CYP	Cyprus	Asia	no	1,154		22,539		59
GEO	Georgia	Asia	no	3,815		11,484		60
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4			61
IRQ	Iraq	Asia	no	15,555		77,842		62
ISR	Israel	Asia	no	22,505		210,353		63
JOR	Jordan	Asia	no	10,652		27,820		64
KAZ	Kazakhstan	Asia	no	20,880		131,868		65
KWT	Kuwait	Asia	no	6,168				66
KGZ	Kyrgyzstan	Asia	no	756		4,273		67
LBN	Lebanon	Asia	no	4,139		39,051		68
MNG	Mongolia	Asia	no	2,335		5,640		69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GNI [USD million]	PML ₂₅₀ /GNI [%]	Ranking
QAT	Qatar	Asia	no	2,116				70
SAU	Saudi Arabia	Asia	no	73,922				71
SYR	Syrian Arab Republic	Asia	no	18,783		57,266		72
TJK	Tajikistan	Asia	no	2,412		5,570		73
TUR	Turkey	Asia	no	164,353		727,056		74
TKM	Turkmenistan	Asia	no	3,779		18,107		75
UZB	Uzbekistan	Asia	no	10,382		39,013		76
YEM	Yemen	Asia	no	10,133				77
ALB	Albania	Europe	no	3,381		11,682		78
AUT	Austria	Europe	no	28,002		377,063		79
BLR	Belarus	Europe	no	21,160		53,379		80
BEL	Belgium	Europe	no	29,496		477,644		81
BIH	Bosnia and Herzegovina	Europe	no	1,424		17,008		82
BGR	Bulgaria	Europe	no	9,040		46,025		83
HRV	Croatia	Europe	no	6,064		58,806		84
CZE	Czech Republic	Europe	no	23,126		179,432		85
DNK	Denmark	Europe	no	31,778		315,664		86
EST	Estonia	Europe	no	2,851		18,420		87
FRO	Faroe Islands	Europe	no	42				88
FIN	Finland	Europe	no	14,927		242,899		89
FRA	France	Europe	no	236,236		2,606,780		90
DEU	Germany	Europe	no	262,867		3,341,391		91
GIB	Gibraltar	Europe	no	274				92
GRC	Greece	Europe	no	27,597		292,874		93
HUN	Hungary	Europe	no	30,434		122,372		94
ISL	Iceland	Europe	no	1,071		9,975		95
IRL	Ireland	Europe	no	16,223		171,260		96
ITA	Italy	Europe	no	188,526		2,023,916		97
LVA	Latvia	Europe	no	4,998		24,073		98
LIE	Liechtenstein	Europe	no	198				99
LTU	Lithuania	Europe	no	7,227		35,687		100
LUX	Luxembourg	Europe	no	2,462		37,925		101
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		8,992		102
MDA	Moldova, Republic of	Europe	no	3,416		6,280		103
MCO	Monaco	Europe	no	123				104
MNE	Montenegro	Europe	no	269		4,083		105
NLD	Netherlands	Europe	no	49,481		772,747		106
NOR	Norway	Europe	no	33,800		413,980		107
POL	Poland	Europe	no	60,706		452,275		108
PRT	Portugal	Europe	no	18,087	0	221,243		109
SMR	San Marino	Europe	no	113				110
SRB	Serbia	Europe	no	1,938		37,533		111
SVK	Slovakia	Europe	no	9,245		86,077		112
SVN	Slovenia	Europe	no	2,231		46,217		113
ESP	Spain	Europe	no	122,131		1,388,744		114
SWE	Sweden	Europe	no	27,971		467,254		115
CHE	Switzerland	Europe	no	40,078		568,639		116
UKR	Ukraine	Europe	no	32,769		135,920		117
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,280,719		118
MLT	Malta	Pacific	no	1,330		7,698		119
ARG	Argentina	Latin America	no	39,520		358,619		120
BOL	Bolivia	Latin America	no	4,521		18,790		121
BRA	Brazil	Latin America	no	300,613		2,049,164		122
CHL	Chile	Latin America	no	18,070		197,331		123
ECU	Ecuador	Latin America	no	10,202		56,924		124
PRY	Paraguay	Latin America	no	4,301		17,853		125
PER	Peru	Latin America	no	24,717		147,000		126
URY	Uruguay	Latin America	no	4,269		39,161		127
DZA	Algeria	North Africa	no	67,908		155,538		128
EGY	Egypt	North Africa	no	101,974		214,530		129
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				130
MAR	Morocco	North Africa	no	41,389		88,578		131
TUN	Tunisia	North Africa	no	14,190		42,020		132
AGO	Angola	Sub Saharan Africa	no	9,237		75,516		133
BEN	Benin	Sub Saharan Africa	no	1,223		6,633		134
BFA	Burkina Faso	Sub Saharan Africa	no	1,847		8,810		135
BDI	Burundi	Sub Saharan Africa	no	145		1,589		136
CMR	Cameroon	Sub Saharan Africa	no	6,256		22,030		137
CAF	Central African Republic	Sub Saharan Africa	no	351		2,009		138



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				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
TCD	Chad	Sub Saharan Africa	no	4,004		6,734		139
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		12,263		140
COG	Congo	Sub Saharan Africa	no	3,326		8,619		141
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,729		142
DJI	Djibouti	Sub Saharan Africa	no	656				143
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626		9,578		144
ERI	Eritrea	Sub Saharan Africa	no	1,076		2,097		145
ETH	Ethiopia	Sub Saharan Africa	no	3,583		29,625		146
GAB	Gabon	Sub Saharan Africa	no	2,633		11,467		147
GMB	Gambia	Sub Saharan Africa	no	334		743		148
GHA	Ghana	Sub Saharan Africa	no	4,753		30,776		149
GIN	Guinea	Sub Saharan Africa	no	1,643		4,231		150
KEN	Kenya	Sub Saharan Africa	no	8,730		31,264		151
LBR	Liberia	Sub Saharan Africa	no	263		805		152
MLI	Mali	Sub Saharan Africa	no	1,887		8,909		153
MRT	Mauritania	Sub Saharan Africa	no	1,470		3,672		154
NAM	Namibia	Sub Saharan Africa	no	1,706		12,077		155
NER	Niger	Sub Saharan Africa	no	1,230		5,493		156
NGA	Nigeria	Sub Saharan Africa	no	45,741		176,769		157
RWA	Rwanda	Sub Saharan Africa	no	962		5,582		158
SEN	Senegal	Sub Saharan Africa	no	5,536		12,900		159
SLE	Sierra Leone	Sub Saharan Africa	no	302		1,905		160
SOM	Somalia	Sub Saharan Africa	no	2,303				161
SDN	Sudan	Sub Saharan Africa	no	12,166		55,939		162
TGO	Togo	Sub Saharan Africa	no	529		2,826		163
UGA	Uganda	Sub Saharan Africa	no	3,787		16,720		164
ESH	Western Sahara	Sub Saharan Africa	no	418				165
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	312	12.4	1
COM	Comoros	Sub Saharan Africa	yes	156	24	539	4.5	2
ATG	Antigua and Barbuda	Caribbean	yes	272	52	1,179	4.4	3
WSM	Samoa	Pacific	yes	93	24	557	4.4	4
TON	Tonga	Pacific	yes	47	12	352	3.5	5
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	9,798	2.5	6
JAM	Jamaica	Caribbean	yes	4,148	325	13,574	2.4	7
FJI	Fiji	Asia	yes	309	60	3,090	1.9	8
DMA	Dominica	Caribbean	yes	43	8	454	1.9	9
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	691	1.6	10
BLZ	Belize	Latin America	yes	65	16	1,303	1.2	11
PLW	Palau	Pacific	yes	25	2	135	1.2	12
LCA	Saint Lucia	Caribbean	yes	73	11	1,163	0.9	13
DOM	Dominican Republic	Caribbean	yes	13,790	430	49,972	0.9	14
GRD	Grenada	Caribbean	yes	63	4	727	0.6	15
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	19,255	0.4	16
SLB	Solomon islands	Asia	yes	85	2	555	0.4	17
SYC	Seychelles	Sub Saharan Africa	yes	631	3	855	0.3	18
VUT	Vanuatu	Asia	yes	25	1	678	0.2	19
GUY	Guyana	Latin America	yes	884	1	2,238	0.0	20
PNG	Papua New Guinea	Asia	yes	1,289	2	9,262	0.0	21
HTI	Haiti	Caribbean	yes	1,584	269			22
BHS	Bahamas	Caribbean	yes	985	121			23
BRB	Barbados	Caribbean	yes	253	31			24
AIA	Anguilla	Caribbean	yes	2	1			25
VGB	British Virgin Islands	Caribbean	yes	18	5			26
VIR	United States Virgin Islands	Caribbean	yes	82	21			27
PRI	Puerto Rico	Caribbean	yes	3,197	572			28
PYF	French Polynesia	Pacific	yes	116	18			29
ABW	Aruba	Caribbean	yes	358	30			30
CUB	Cuba	Caribbean	yes	5,936	158			31
NCL	New Caledonia	Asia	yes	107	1			32
SUR	Suriname	Latin America	yes	364	0			33
BHR	Bahrain	Asia	yes	1,670				34
MDV	Maldives	Pacific	yes	154		1,817		35
SGP	Singapore	Pacific	yes	18,751		201,050		36
KNA	Saint Kitts and Nevis	Caribbean	yes	0		620		37
CPV	Cape Verde	Sub Saharan Africa	yes	446		1,579		38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258		877		39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114		200		40



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PHL	Philippines	Asia	no	186,193	7,043	37.8	1
GLP	Guadeloupe	Caribbean	no	19,838	388	19.6	2
HND	Honduras	Latin America	no	18,844	300	15.9	3
SLV	El Salvador	Latin America	no	22,582	306	13.5	4
CYM	Cayman Islands	Caribbean	no	3,603	43	11.9	5
TCA	Turks and Caicos islands	Caribbean	no	332	4	11.1	6
TWN	Taiwan	Asia	no	872,409	8,297	9.5	7
MTQ	Martinique	Caribbean	no	21,052	195	9.2	8
JPN	Japan	Asia	no	14,617,394	105,761	7.2	9
REU	Réunion	Sub Saharan Africa	no	42,937	261	6.1	10
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	5.9	11
NIC	Nicaragua	Latin America	no	10,935	62	5.6	12
KGZ	Kyrgyzstan	Asia	no	3,644	20	5.4	13
NPL	Nepal	Asia	no	6,537	33	5.1	14
GTM	Guatemala	Latin America	no	38,263	174	4.5	15
BTN	Bhutan	Asia	no	1,167	5	3.9	16
TJK	Tajikistan	Asia	no	5,576	21	3.7	17
MYT	Mayotte	Sub Saharan Africa	no	2,341	9	3.7	18
BGD	Bangladesh	Asia	no	72,949	256	3.5	19
UZB	Uzbekistan	Asia	no	44,370	154	3.5	20
CRI	Costa Rica	Latin America	no	38,475	132	3.4	21
KOR	Republic of Korea	Asia	no	2,787,207	8,816	3.2	22
AZE	Azerbaijan	Asia	no	45,197	128	2.8	23
SMR	San Marino	Europe	no	1,846	5	2.8	24
ECU	Ecuador	Latin America	no	68,550	192	2.8	25
MEX	Mexico	Latin America	no	1,818,298	5,040	2.8	26
GRC	Greece	Europe	no	642,888	1,732	2.7	27
CHL	Chile	Latin America	no	326,640	869	2.7	28
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,722	2.5	29
PAK	Pakistan	Asia	no	170,444	433	2.5	30
CHN	China	Asia	no	4,512,825	11,305	2.5	31
COL	Colombia	Latin America	no	325,385	810	2.5	32
AFG	Afghanistan	Asia	no	16,132	39	2.4	33
GEO	Georgia	Asia	no	21,157	50	2.4	34
PER	Peru	Latin America	no	189,980	447	2.4	35
MMR	Myanmar	Asia	no	20,572	43	2.1	36
ARM	Armenia	Asia	no	14,187	28	2.0	37
IDN	Indonesia	Asia	no	575,183	1,046	1.8	38
ARE	United Arab Emirates	Asia	no	248,015	423	1.7	39
BGR	Bulgaria	Europe	no	70,023	112	1.6	40
BOL	Bolivia	Latin America	no	13,112	21	1.6	41
PAN	Panama	Latin America	no	30,296	46	1.5	42
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1.5	43
DZA	Algeria	North Africa	no	259,977	359	1.4	44
TKM	Turkmenistan	Asia	no	12,707	18	1.4	45
CYP	Cyprus	Asia	no	23,484	32	1.4	46
BDI	Burundi	Sub Saharan Africa	no	168	0	1.2	47
IRQ	Iraq	Asia	no	47,245	56	1.2	48
VEN	Venezuela	Latin America	no	435,869	505	1.2	49
TUR	Turkey	Asia	no	1,578,228	1,766	1.1	50
ALB	Albania	Europe	no	13,964	14	1.0	51
ITA	Italy	Europe	no	3,701,619	3,795	1.0	52
KAZ	Kazakhstan	Asia	no	180,409	180	1.0	53
MNE	Montenegro	Europe	no	2,738	3	0.9	54
LBN	Lebanon	Asia	no	56,965	53	0.9	55
SVN	Slovenia	Europe	no	36,896	34	0.9	56
PRK	Dem People's Rep of Korea	Asia	no	27,936	25	0.9	57
USA	United States of America	North America	no	22,004,154	19,301	0.9	58
BRN	Brunei Darussalam	Asia	no	20,094	17	0.9	59
HKG	Hong Kong	Asia	no	1,138,019	968	0.9	60
NZL	New Zealand	Australia	no	238,609	192	0.8	61
SYR	Syrian Arab Republic	Asia	no	68,489	52	0.8	62
TUN	Tunisia	North Africa	no	65,420	49	0.7	63
GIB	Gibraltar	Europe	no	3,141	2	0.7	64
MAC	Macau	Asia	no	96,993	71	0.7	65
RWA	Rwanda	Sub Saharan Africa	no	1,558	1	0.7	66
HRV	Croatia	Europe	no	65,145	46	0.7	67
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	0.7	68
MWI	Malawi	Sub Saharan Africa	no	1,883	1	0.7	69



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
KWT	Kuwait	Asia	no	202,236	137	0.7	70
MCO	Monaco	Europe	no	5,380	4	0.7	71
ISR	Israel	Asia	no	293,550	192	0.7	72
LIE	Liechtenstein	Europe	no	8,070	5	0.6	73
JOR	Jordan	Asia	no	40,997	26	0.6	74
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.6	75
DJI	Djibouti	Sub Saharan Africa	no	2,525	2	0.6	76
OMN	Oman	Asia	no	42,201	25	0.6	77
QAT	Qatar	Asia	no	113,981	64	0.6	78
MLT	Malta	Pacific	no	18,630	10	0.5	79
ISL	Iceland	Europe	no	25,742	14	0.5	80
MYS	Malaysia	Asia	no	318,727	169	0.5	81
IND	India	Asia	no	1,429,881	754	0.5	82
AUT	Austria	Europe	no	615,592	240	0.4	83
YEM	Yemen	Asia	no	21,556	8	0.4	84
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	0.4	85
MAR	Morocco	North Africa	no	136,300	46	0.3	86
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	0.3	87
SRB	Serbia	Europe	no	16,907	5	0.3	88
ARG	Argentina	Latin America	no	403,909	128	0.3	89
CHE	Switzerland	Europe	no	839,518	257	0.3	90
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	0.3	91
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21	0.3	92
VNM	Viet Nam	Asia	no	115,441	30	0.3	93
UGA	Uganda	Sub Saharan Africa	no	6,628	2	0.2	94
THA	Thailand	Asia	no	394,598	88	0.2	95
EGY	Egypt	North Africa	no	234,939	51	0.2	96
MNG	Mongolia	Asia	no	9,273	2	0.2	97
DEU	Germany	Europe	no	5,800,986	1,206	0.2	98
MDA	Moldova, Republic of	Europe	no	9,896	2	0.2	99
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.2	100
CAN	Canada	North America	no	2,051,584	382	0.2	101
HUN	Hungary	Europe	no	286,209	51	0.2	102
SVK	Slovakia	Europe	no	124,390	22	0.2	103
ZAF	South Africa	Sub Saharan Africa	no	335,148	55	0.2	104
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	0.2	105
KEN	Kenya	Sub Saharan Africa	no	18,470	3	0.2	106
CZE	Czech Republic	Europe	no	336,714	49	0.1	107
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	0.1	108
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	0.1	109
BEL	Belgium	Europe	no	739,159	101	0.1	110
KHM	Cambodia	Asia	no	4,335	1	0.1	111
SAU	Saudi Arabia	Asia	no	751,807	83	0.1	112
POL	Poland	Europe	no	659,150	66	0.1	113
NLD	Netherlands	Europe	no	1,593,735	160	0.1	114
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.1	115
LKA	Sri Lanka	Asia	no	49,967	5	0.1	116
BWA	Botswana	Sub Saharan Africa	no	18,941	2	0.1	117
LUX	Luxembourg	Europe	no	45,036	4	0.1	118
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	0.1	119
RUS	Russian Federation	Europe	no	2,209,139	170	0.1	120
ESP	Spain	Europe	no	2,695,139	198	0.1	121
FRA	France	Europe	no	3,653,264	260	0.1	122
PRT	Portugal	Europe	no	296,296	21	0.1	123
AUS	Australia	Australia	no	1,832,960	101	0.1	124
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	0.1	125
SDN	Sudan	Sub Saharan Africa	no	26,851	1	0.0	126
EST	Estonia	Europe	no	28,069	1	0.0	127
IRL	Ireland	Europe	no	244,117	8	0.0	128
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0	0.0	129
SOM	Somalia	Sub Saharan Africa	no	3,573	0	0.0	130
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	0.0	131
UKR	Ukraine	Europe	no	278,497	6	0.0	132
NAM	Namibia	Sub Saharan Africa	no	7,239	0	0.0	133
GUF	French Guiana	Latin America	no	8,339	0	0.0	134
LTU	Lithuania	Europe	no	53,397	1	0.0	135
NOR	Norway	Europe	no	386,892	4	0.0	136
SEN	Senegal	Sub Saharan Africa	no	11,619	0	0.0	137
GAB	Gabon	Sub Saharan Africa	no	25,086	0	0.0	138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
AGO	Angola	Sub Saharan Africa	no	25,225	0	0.0	139
LVA	Latvia	Europe	no	39,277	0	0.0	140
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	0.0	141
DNK	Denmark	Europe	no	381,265	2	0.0	142
SWE	Sweden	Europe	no	369,792	2	0.0	143
FIN	Finland	Europe	no	209,050	1	0.0	144
BRA	Brazil	Latin America	no	1,715,746	3	0.0	145
BLR	Belarus	Europe	no	74,427	0	0.0	146
CAF	Central African Republic	Sub Saharan Africa	no	916	-	-	147
LBR	Liberia	Sub Saharan Africa	no	515	-	-	148
FRO	Faroe Islands	Europe	no	1,012	-	-	149
PRY	Paraguay	Latin America	no	19,203	-	-	150
URY	Uruguay	Latin America	no	28,590	-	-	151
BEN	Benin	Sub Saharan Africa	no	3,585	-	-	152
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-	-	153
TCD	Chad	Sub Saharan Africa	no	6,664	-	-	154
COG	Congo	Sub Saharan Africa	no	12,566	-	-	155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	-	156
GMB	Gambia	Sub Saharan Africa	no	680	-	-	157
GHA	Ghana	Sub Saharan Africa	no	12,649	-	-	158
GIN	Guinea	Sub Saharan Africa	no	3,259	-	-	159
MLI	Mali	Sub Saharan Africa	no	3,869	-	-	160
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	-	161
NER	Niger	Sub Saharan Africa	no	2,800	-	-	162
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	-	163
TGO	Togo	Sub Saharan Africa	no	1,644	-	-	164
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-	-	165
VUT	Vanuatu	Asia	yes	102	10	100.8	1
SLB	Solomon islands	Asia	yes	211	13	59.7	2
TON	Tonga	Pacific	yes	230	12	50.4	3
AIA	Anguilla	Caribbean	yes	20	1	24.7	4
DMA	Dominica	Caribbean	yes	356	6	17.1	5
PNG	Papua New Guinea	Asia	yes	5,433	86	15.9	6
TTO	Trinidad and Tobago	Caribbean	yes	31,370	492	15.7	7
VGB	British Virgin Islands	Caribbean	yes	424	6	15.1	8
ATG	Antigua and Barbuda	Caribbean	yes	2,428	33	13.7	9
VIR	United States Virgin Islands	Caribbean	yes	1,755	22	12.5	10
HTI	Haiti	Caribbean	yes	8,553	96	11.2	11
WSM	Samoa	Pacific	yes	361	3	9.4	12
PRI	Puerto Rico	Caribbean	yes	135,818	1,125	8.3	13
FJI	Fiji	Asia	yes	2,100	15	7.3	14
LCA	Saint Lucia	Caribbean	yes	543	3	6.3	15
BRB	Barbados	Caribbean	yes	4,677	28	6.0	16
DOM	Dominican Republic	Caribbean	yes	72,573	423	5.8	17
BLZ	Belize	Latin America	yes	1,251	7	5.8	18
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	5.3	19
GRD	Grenada	Caribbean	yes	1,229	6	4.9	20
PYF	French Polynesia	Pacific	yes	6,568	32	4.9	21
FSM	Micronesia (Federated States of)	Pacific	yes	585	3	4.4	22
NCL	New Caledonia	Asia	yes	4,771	21	4.4	23
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	4	4.1	24
COM	Comoros	Sub Saharan Africa	yes	310	1	3.6	25
BHS	Bahamas	Caribbean	yes	21,313	71	3.3	26
JAM	Jamaica	Caribbean	yes	28,963	85	2.9	27
ABW	Aruba	Caribbean	yes	6,526	19	2.9	28
PLW	Palau	Pacific	yes	279	1	2.5	29
CUB	Cuba	Caribbean	yes	46,280	50	1.1	30
BHR	Bahrain	Asia	yes	32,575	17	0.5	31
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	0.2	32
SGP	Singapore	Pacific	yes	526,900	114	0.2	33
GUY	Guyana	Latin America	yes	3,468	0	0.1	34
SUR	Suriname	Latin America	yes	2,797	0	0.0	35
MDV	Maldives	Pacific	yes	907	-	-	36
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	-	37
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	-	38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-	-	39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-	-	40



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
PHL	Philippines	Asia	no	46,143	1,747	37.9	1
GLP	Guadeloupe	Caribbean	no	904	18	19.6	2
HND	Honduras	Latin America	no	5,414	86	15.9	3
SLV	El Salvador	Latin America	no	4,297	58	13.5	4
CYM	Cayman Islands	Caribbean	no	81	1	11.1	5
TCA	Turks and Caicos islands	Caribbean	no	28	0	10.6	6
MTQ	Martinique	Caribbean	no	889	8	9.2	7
TWN	Taiwan	Asia	no	38,310	351	9.2	8
JPN	Japan	Asia	no	542,290	3,969	7.3	9
REU	Réunion	Sub Saharan Africa	no	2,161	13	6.1	10
MDG	Madagascar	Sub Saharan Africa	no	1,546	9	5.9	11
NPL	Nepal	Asia	no	2,411	13	5.4	12
KGZ	Kyrgyzstan	Asia	no	756	4	5.3	13
NIC	Nicaragua	Latin America	no	2,310	12	5.2	14
GTM	Guatemala	Latin America	no	8,748	38	4.3	15
MYT	Mayotte	Sub Saharan Africa	no	154	1	3.9	16
BTN	Bhutan	Asia	no	371	1	3.8	17
TJK	Tajikistan	Asia	no	2,412	9	3.7	18
BGD	Bangladesh	Asia	no	14,034	49	3.5	19
UZB	Uzbekistan	Asia	no	10,382	36	3.5	20
CRI	Costa Rica	Latin America	no	6,892	23	3.3	21
GRC	Greece	Europe	no	27,597	81	2.9	22
AZE	Azerbaijan	Asia	no	12,666	36	2.8	23
ECU	Ecuador	Latin America	no	10,202	28	2.7	24
MEX	Mexico	Latin America	no	260,866	704	2.7	25
SMR	San Marino	Europe	no	113	0	2.7	26
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305	2.5	27
PAK	Pakistan	Asia	no	37,562	95	2.5	28
CHN	China	Asia	no	599,699	1,505	2.5	29
COL	Colombia	Latin America	no	53,054	131	2.5	30
AFG	Afghanistan	Asia	no	9,988	24	2.4	31
CHL	Chile	Latin America	no	18,070	44	2.4	32
GEO	Georgia	Asia	no	3,815	9	2.4	33
PER	Peru	Latin America	no	24,717	57	2.3	34
KOR	Republic of Korea	Asia	no	95,180	207	2.2	35
MMR	Myanmar	Asia	no	9,829	20	2.1	36
ARM	Armenia	Asia	no	2,899	6	2.0	37
IDN	Indonesia	Asia	no	113,457	198	1.7	38
ARE	United Arab Emirates	Asia	no	11,165	19	1.7	39
BGR	Bulgaria	Europe	no	9,040	15	1.6	40
BOL	Bolivia	Latin America	no	4,521	7	1.6	41
MOZ	Mozambique	Sub Saharan Africa	no	3,991	6	1.5	42
PAN	Panama	Latin America	no	5,115	7	1.4	43
CYP	Cyprus	Asia	no	1,154	2	1.4	44
TKM	Turkmenistan	Asia	no	3,779	5	1.4	45
DZA	Algeria	North Africa	no	67,908	92	1.4	46
IRQ	Iraq	Asia	no	15,555	18	1.2	47
VEN	Venezuela	Latin America	no	42,697	49	1.2	48
TUR	Turkey	Asia	no	164,353	186	1.1	49
ITA	Italy	Europe	no	188,526	193	1.0	50
ALB	Albania	Europe	no	3,381	3	1.0	51
KAZ	Kazakhstan	Asia	no	20,880	21	1.0	52
LBN	Lebanon	Asia	no	4,139	4	0.9	53
SVN	Slovenia	Europe	no	2,231	2	0.9	54
USA	United States of America	North America	no	1,224,802	1,115	0.9	55
NZL	New Zealand	Australia	no	12,682	12	0.9	56
PRK	Dem People's Rep of Korea	Asia	no	10,245	9	0.9	57
BRN	Brunei Darussalam	Asia	no	895	1	0.9	58
HKG	Hong Kong	Asia	no	47,718	39	0.8	59
MCO	Monaco	Europe	no	123	0	0.8	60
MAC	Macau	Asia	no	1,989	2	0.8	61
SYR	Syrian Arab Republic	Asia	no	18,783	14	0.8	62
TUN	Tunisia	North Africa	no	14,190	11	0.7	63
MNE	Montenegro	Europe	no	269	0	0.7	64
GIB	Gibraltar	Europe	no	274	0	0.7	65
RWA	Rwanda	Sub Saharan Africa	no	962	1	0.7	66
HRV	Croatia	Europe	no	6,064	4	0.7	67
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	0.7	68
BDI	Burundi	Sub Saharan Africa	no	145	0	0.7	69



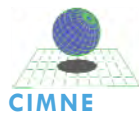
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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
KWT	Kuwait	Asia	no	6,168	4	0.7	70
MWI	Malawi	Sub Saharan Africa	no	1,519	1	0.7	71
ISR	Israel	Asia	no	22,505	15	0.7	72
JOR	Jordan	Asia	no	10,652	7	0.6	73
DJI	Djibouti	Sub Saharan Africa	no	656	0	0.6	74
OMN	Oman	Asia	no	4,095	2	0.6	75
QAT	Qatar	Asia	no	2,116	1	0.6	76
ISL	Iceland	Europe	no	1,071	1	0.6	77
LAO	Lao People's Democratic Republic	Asia	no	938	1	0.5	78
MYS	Malaysia	Asia	no	37,377	20	0.5	79
MLT	Malta	Pacific	no	1,330	1	0.5	80
IND	India	Asia	no	320,919	168	0.5	81
LIE	Liechtenstein	Europe	no	198	0	0.5	82
AUT	Austria	Europe	no	28,002	11	0.4	83
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	0.4	84
YEM	Yemen	Asia	no	10,133	4	0.4	85
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	0.4	86
SRB	Serbia	Europe	no	1,938	1	0.3	87
ARG	Argentina	Latin America	no	39,520	12	0.3	88
CHE	Switzerland	Europe	no	40,078	12	0.3	89
MAR	Morocco	North Africa	no	41,389	12	0.3	90
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5	0.3	91
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.3	92
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.3	93
UGA	Uganda	Sub Saharan Africa	no	3,787	1	0.2	94
VNM	Viet Nam	Asia	no	24,066	6	0.2	95
THA	Thailand	Asia	no	43,178	10	0.2	96
EGY	Egypt	North Africa	no	101,974	22	0.2	97
MNG	Mongolia	Asia	no	2,335	1	0.2	98
DEU	Germany	Europe	no	262,867	54	0.2	99
MDA	Moldova, Republic of	Europe	no	3,416	1	0.2	100
CAN	Canada	North America	no	121,895	22	0.2	101
HUN	Hungary	Europe	no	30,434	5	0.2	102
SVK	Slovakia	Europe	no	9,245	2	0.2	103
ZAF	South Africa	Sub Saharan Africa	no	69,420	11	0.2	104
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	0.2	105
KEN	Kenya	Sub Saharan Africa	no	8,730	1	0.1	106
CZE	Czech Republic	Europe	no	23,126	3	0.1	107
BEL	Belgium	Europe	no	29,496	4	0.1	108
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	0.1	109
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.1	110
SAU	Saudi Arabia	Asia	no	73,922	8	0.1	111
NLD	Netherlands	Europe	no	49,481	5	0.1	112
POL	Poland	Europe	no	60,706	6	0.1	113
LKA	Sri Lanka	Asia	no	14,385	1	0.1	114
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.1	115
ERI	Eritrea	Sub Saharan Africa	no	1,076	0	0.1	116
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	0.1	117
LUX	Luxembourg	Europe	no	2,462	0	0.1	118
RUS	Russian Federation	Europe	no	288,219	21	0.1	119
FRA	France	Europe	no	236,236	17	0.1	120
KHM	Cambodia	Asia	no	1,623	0	0.1	121
ESP	Spain	Europe	no	122,131	8	0.1	122
AUS	Australia	Australia	no	47,971	3	0.1	123
PRT	Portugal	Europe	no	18,087	1	0.1	124
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	0.1	125
SOM	Somalia	Sub Saharan Africa	no	2,303	0	0.0	126
SDN	Sudan	Sub Saharan Africa	no	12,166	1	0.0	127
EST	Estonia	Europe	no	2,851	0	0.0	128
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	0.0	129
IRL	Ireland	Europe	no	16,223	1	0.0	130
UKR	Ukraine	Europe	no	32,769	1	0.0	131
LTU	Lithuania	Europe	no	7,227	0	0.0	132
NOR	Norway	Europe	no	33,800	0	0.0	133
AGO	Angola	Sub Saharan Africa	no	9,237	0	0.0	134
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	0.0	135
DNK	Denmark	Europe	no	31,778	0	0.0	136
SWE	Sweden	Europe	no	27,971	0	0.0	137
BRA	Brazil	Latin America	no	300,613	0	0.0	138



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
CAF	Central African Republic	Sub Saharan Africa	no	351	-	-	139
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-	-	140
LVA	Latvia	Europe	no	4,998	-	-	141
GAB	Gabon	Sub Saharan Africa	no	2,633	-	-	142
GIN	Guinea	Sub Saharan Africa	no	1,643	-	-	143
NAM	Namibia	Sub Saharan Africa	no	1,706	-	-	144
SEN	Senegal	Sub Saharan Africa	no	5,536	-	-	145
BLR	Belarus	Europe	no	21,160	-	-	146
FRO	Faroe Islands	Europe	no	42	-	-	147
FIN	Finland	Europe	no	14,927	-	-	148
GUF	French Guiana	Latin America	no	378	-	-	149
PRY	Paraguay	Latin America	no	4,301	-	-	150
URY	Uruguay	Latin America	no	4,269	-	-	151
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	152
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	153
TCO	Chad	Sub Saharan Africa	no	4,004	-	-	154
COG	Congo	Sub Saharan Africa	no	3,326	-	-	155
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	156
GMB	Gambia	Sub Saharan Africa	no	334	-	-	157
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	158
LBR	Liberia	Sub Saharan Africa	no	263	-	-	159
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	160
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	161
NER	Niger	Sub Saharan Africa	no	1,230	-	-	162
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	163
TGO	Togo	Sub Saharan Africa	no	529	-	-	164
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	165
VUT	Vanuatu	Asia	yes	25	3	99.7	1
SLB	Solomon Islands	Asia	yes	85	5	60.2	2
TON	Tonga	Pacific	yes	47	2	51.5	3
DMA	Dominica	Caribbean	yes	43	1	18.5	4
VGB	British Virgin Islands	Caribbean	yes	18	0	16.8	5
PNG	Papua New Guinea	Asia	yes	1,289	21	15.9	6
TTO	Trinidad and Tobago	Caribbean	yes	2,299	36	15.8	7
ATG	Antigua and Barbuda	Caribbean	yes	272	4	13.6	8
VIR	United States Virgin Islands	Caribbean	yes	82	1	13.4	9
HTI	Haiti	Caribbean	yes	1,584	18	11.2	10
WSM	Samoa	Pacific	yes	93	1	8.6	11
PRI	Puerto Rico	Caribbean	yes	3,197	27	8.3	12
FJI	Fiji	Asia	yes	309	2	7.4	13
LCA	Saint Lucia	Caribbean	yes	73	1	6.9	14
BLZ	Belize	Latin America	yes	65	0	6.2	15
BRB	Barbados	Caribbean	yes	253	2	5.9	16
DOM	Dominican Republic	Caribbean	yes	13,790	80	5.8	17
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	5.3	18
PYF	French Polynesia	Pacific	yes	116	1	5.2	19
GRD	Grenada	Caribbean	yes	63	0	4.7	20
FSM	Micronesia (Federated States of)	Pacific	yes	216	1	4.6	21
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	1	4.5	22
PLW	Palau	Pacific	yes	25	0	4.0	23
COM	Comoros	Sub Saharan Africa	yes	156	1	3.8	24
NCL	New Caledonia	Asia	yes	107	0	3.7	25
BHS	Bahamas	Caribbean	yes	985	3	3.3	26
JAM	Jamaica	Caribbean	yes	4,148	12	2.9	27
ABW	Aruba	Caribbean	yes	358	1	2.8	28
CUB	Cuba	Caribbean	yes	5,936	7	1.1	29
BHR	Bahrain	Asia	yes	1,670	1	0.5	30
SYC	Seychelles	Sub Saharan Africa	yes	631	0	0.3	31
SGP	Singapore	Pacific	yes	18,751	4	0.2	32
GUY	Guyana	Latin America	yes	884	0	0.1	33
AIA	Anguilla	Caribbean	yes	2	-	-	34
MDV	Maldives	Pacific	yes	154	-	-	35
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	36
SUR	Suriname	Latin America	yes	364	-	-	37
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	38
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	39
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	40



**Risk indicators for the countries
by region
and SDIS – no SIDS**



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
PHL	Philippines	Asia	no	186,193	5,004	26.9	1
KGZ	Kyrgyzstan	Asia	no	3,644	20	5.4	2
NPL	Nepal	Asia	no	6,537	31	4.8	3
TWN	Taiwan	Asia	no	872,409	3,857	4.4	4
JPN	Japan	Asia	no	14,617,394	59,828	4.1	5
BTN	Bhutan	Asia	no	1,167	5	3.9	6
TJK	Tajikistan	Asia	no	5,576	21	3.7	7
UZB	Uzbekistan	Asia	no	44,370	154	3.5	8
AZE	Azerbaijan	Asia	no	45,197	128	2.8	9
BGD	Bangladesh	Asia	no	72,949	198	2.7	10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721	2.5	11
AFG	Afghanistan	Asia	no	16,132	39	2.4	12
PAK	Pakistan	Asia	no	170,444	409	2.4	13
GEO	Georgia	Asia	no	21,157	50	2.4	14
ARM	Armenia	Asia	no	14,187	28	2.0	15
MMR	Myanmar	Asia	no	20,572	40	1.9	16
IDN	Indonesia	Asia	no	575,183	1,005	1.8	17
ARE	United Arab Emirates	Asia	no	248,015	421	1.7	18
TKM	Turkmenistan	Asia	no	12,707	18	1.4	19
CYP	Cyprus	Asia	no	23,484	32	1.4	20
IRQ	Iraq	Asia	no	47,245	56	1.2	21
TUR	Turkey	Asia	no	1,578,228	1,766	1.1	22
KAZ	Kazakhstan	Asia	no	180,409	180	1.0	23
LBN	Lebanon	Asia	no	56,965	53	0.9	24
SYR	Syrian Arab Republic	Asia	no	68,489	52	0.8	25
KWT	Kuwait	Asia	no	202,236	137	0.7	26
ISR	Israel	Asia	no	293,550	192	0.7	27
JOR	Jordan	Asia	no	40,997	26	0.6	28
QAT	Qatar	Asia	no	113,981	64	0.6	29
OMN	Oman	Asia	no	42,201	23	0.5	30
CHN	China	Asia	no	4,512,825	2,351	0.5	31
MYS	Malaysia	Asia	no	318,727	162	0.5	32
IND	India	Asia	no	1,429,881	524	0.4	33
YEM	Yemen	Asia	no	21,556	8	0.4	34
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.3	35
BRN	Brunei Darussalam	Asia	no	20,094	6	0.3	36
MNG	Mongolia	Asia	no	9,273	2	0.2	37
THA	Thailand	Asia	no	394,598	81	0.2	38
PRK	Dem People's Rep of Korea	Asia	no	27,936	5	0.2	39
SAU	Saudi Arabia	Asia	no	751,807	83	0.1	40
KOR	Republic of Korea	Asia	no	2,787,207	164	0.1	41
VNM	Viet Nam	Asia	no	115,441	7	0.1	42
HKG	Hong Kong	Asia	no	1,138,019	41	0.0	43
MAC	Macau	Asia	no	96,993	3	0.0	44
KHM	Cambodia	Asia	no	4,335	0	0.0	45
LKA	Sri Lanka	Asia	no	49,967	0	-	46
SMR	San Marino	Europe	no	1,846	5	2.8	1
GRC	Greece	Europe	no	642,888	1,732	2.7	2
BGR	Bulgaria	Europe	no	70,023	112	1.6	3
ALB	Albania	Europe	no	13,964	14	1.0	4
ITA	Italy	Europe	no	3,701,619	3,795	1.0	5
MNE	Montenegro	Europe	no	2,738	3	1.0	6
SVN	Slovenia	Europe	no	36,896	34	0.9	7
GIB	Gibraltar	Europe	no	3,141	2	0.7	8
HRV	Croatia	Europe	no	65,145	46	0.7	9
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	0.7	10
MCO	Monaco	Europe	no	5,380	4	0.7	11
LIE	Liechtenstein	Europe	no	8,070	5	0.6	12
ISL	Iceland	Europe	no	25,742	14	0.5	13
AUT	Austria	Europe	no	615,592	240	0.4	14
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	0.3	15
SRB	Serbia	Europe	no	16,907	5	0.3	16
CHE	Switzerland	Europe	no	839,518	257	0.3	17
DEU	Germany	Europe	no	5,800,986	1,206	0.2	18
MDA	Moldova, Republic of	Europe	no	9,896	2	0.2	19
HUN	Hungary	Europe	no	286,209	51	0.2	20
SVK	Slovakia	Europe	no	124,390	22	0.2	21
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	0.2	22
CZE	Czech Republic	Europe	no	336,714	49	0.2	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
BEL	Belgium	Europe	no	739,159	101	0.1	24
NLD	Netherlands	Europe	no	1,593,735	160	0.1	25
POL	Poland	Europe	no	659,150	66	0.1	26
LUX	Luxembourg	Europe	no	45,036	4	0.1	27
RUS	Russian Federation	Europe	no	2,209,139	168	0.1	28
ESP	Spain	Europe	no	2,695,139	198	0.1	29
FRA	France	Europe	no	3,653,264	260	0.1	30
PRT	Portugal	Europe	no	296,296	21	0.1	31
IRL	Ireland	Europe	no	244,117	8	0.0	32
EST	Estonia	Europe	no	28,069	1	0.0	33
UKR	Ukraine	Europe	no	278,497	6	0.0	34
LVA	Latvia	Europe	no	39,277	0	0.0	35
LTU	Lithuania	Europe	no	53,397	1	0.0	36
NOR	Norway	Europe	no	386,892	4	0.0	37
DNK	Denmark	Europe	no	381,265	2	0.0	38
SWE	Sweden	Europe	no	369,792	2	-	39
FIN	Finland	Europe	no	209,050	1	-	40
BLR	Belarus	Europe	no	74,427	0	-	41
FRO	Faroe Islands	Europe	no	1,012	-	-	42
NZL	New Zealand	Australia	no	238,609	163	0.7	1
MLT	Malta	Pacific	no	18,630	10	0.6	2
AUS	Australia	Australia	no	1,832,960	17	0.0	3
SLV	El Salvador	Latin America	no	22,582	300	13.3	1
HND	Honduras	Latin America	no	18,844	230	12.2	2
GLP	Guadeloupe	Caribbean	no	19,838	196	9.9	3
NIC	Nicaragua	Latin America	no	10,935	58	5.3	4
MTQ	Martinique	Caribbean	no	21,052	92	4.4	5
GTM	Guatemala	Latin America	no	38,263	156	4.1	6
CRI	Costa Rica	Latin America	no	38,475	131	3.4	7
ECU	Ecuador	Latin America	no	68,550	192	2.8	8
CHL	Chile	Latin America	no	326,640	869	2.7	9
COL	Colombia	Latin America	no	325,385	803	2.5	10
PER	Peru	Latin America	no	189,980	447	2.4	11
BOL	Bolivia	Latin America	no	13,112	21	1.6	12
PAN	Panama	Latin America	no	30,296	44	1.5	13
VEN	Venezuela	Latin America	no	435,869	439	1.0	14
MEX	Mexico	Latin America	no	1,818,298	1,568	0.9	15
TCA	Turks and Caicos islands	Caribbean	no	332	0	0.5	16
CYM	Cayman Islands	Caribbean	no	3,603	1	0.4	17
USA	United States of America	North America	no	22,004,154	8,400	0.4	18
ARG	Argentina	Latin America	no	403,909	128	0.3	19
CAN	Canada	North America	no	2,051,584	72	0.0	20
BRA	Brazil	Latin America	no	1,715,746	3	-	21
GUF	French Guiana	Latin America	no	8,339	-	-	22
PRY	Paraguay	Latin America	no	19,203	-	-	23
URY	Uruguay	Latin America	no	28,590	-	-	24
DZA	Algeria	North Africa	no	259,977	359	1.4	1
BDI	Burundi	Sub Saharan Africa	no	168	0	0.9	2
TUN	Tunisia	North Africa	no	65,420	49	0.8	3
RWA	Rwanda	Sub Saharan Africa	no	1,558	1	0.7	4
DJI	Djibouti	Sub Saharan Africa	no	2,525	2	0.6	5
MWI	Malawi	Sub Saharan Africa	no	1,883	1	0.5	6
MYT	Mayotte	Sub Saharan Africa	no	2,341	1	0.4	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	0.4	8
MAR	Morocco	North Africa	no	136,300	46	0.3	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	0.3	10
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21	0.3	11
UGA	Uganda	Sub Saharan Africa	no	6,628	2	0.2	12
EGY	Egypt	North Africa	no	234,939	51	0.2	13
KEN	Kenya	Sub Saharan Africa	no	18,470	3	0.2	14
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	0.2	15
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	0.1	16
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	0.1	17
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	0.1	18
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.1	19
BWA	Botswana	Sub Saharan Africa	no	18,941	1	0.1	20
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.1	21
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	0.1	22
MDG	Madagascar	Sub Saharan Africa	no	2,575	0	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	0.1	24
SDN	Sudan	Sub Saharan Africa	no	26,851	1	0.0	25
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0	0.0	26
CAF	Central African Republic	Sub Saharan Africa	no	916	-	0.0	27
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	0.0	28
LBR	Liberia	Sub Saharan Africa	no	515	-	0.0	29
SOM	Somalia	Sub Saharan Africa	no	3,573	0	0.0	30
GAB	Gabon	Sub Saharan Africa	no	25,086	0	0.0	31
NAM	Namibia	Sub Saharan Africa	no	7,239	0	0.0	32
SEN	Senegal	Sub Saharan Africa	no	11,619	0	0.0	33
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	0.0	34
AGO	Angola	Sub Saharan Africa	no	25,225	0	0.0	35
COG	Congo	Sub Saharan Africa	no	12,566	-	-	36
GIN	Guinea	Sub Saharan Africa	no	3,259	-	-	37
BEN	Benin	Sub Saharan Africa	no	3,585	-	-	38
TCD	Chad	Sub Saharan Africa	no	6,664	-	-	39
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	-	40
REU	Réunion	Sub Saharan Africa	no	42,937	-	-	41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-	-	42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	-	43
GMB	Gambia	Sub Saharan Africa	no	680	-	-	44
GHA	Ghana	Sub Saharan Africa	no	12,649	-	-	45
MLI	Mali	Sub Saharan Africa	no	3,869	-	-	46
NER	Niger	Sub Saharan Africa	no	2,800	-	-	47
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	-	48
TGO	Togo	Sub Saharan Africa	no	1,644	-	-	49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-	-	50
VUT	Vanuatu	Asia	yes	102	10	99.2	1
SLB	Solomon islands	Asia	yes	211	12	58.9	2
PNG	Papua New Guinea	Asia	yes	5,433	86	15.8	3
NCL	New Caledonia	Asia	yes	4,771	19	4.0	4
FJI	Fiji	Asia	yes	2,100	3	1.3	5
BHR	Bahrain	Asia	yes	32,575	17	0.5	6
TON	Tonga	Pacific	yes	230	9	40.4	1
WSM	Samoa	Pacific	yes	361	1	2.4	2
PLW	Palau	Pacific	yes	279	0	0.7	3
SGP	Singapore	Pacific	yes	526,900	114	0.2	4
PYF	French Polynesia	Pacific	yes	6,568	-	-	5
FSM	Micronesia (Federated States of)	Pacific	yes	585	-	-	6
MDV	Maldives	Pacific	yes	907	-	-	7
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475	15.1	1
DMA	Dominica	Caribbean	yes	356	5	13.3	2
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21	8.7	3
VGB	British Virgin Islands	Caribbean	yes	424	4	8.2	4
AIA	Anguilla	Caribbean	yes	20	0	7.5	5
HTI	Haiti	Caribbean	yes	8,553	64	7.5	6
DOM	Dominican Republic	Caribbean	yes	72,573	363	5.0	7
BRB	Barbados	Caribbean	yes	4,677	18	3.8	8
GRD	Grenada	Caribbean	yes	1,229	5	3.7	9
LCA	Saint Lucia	Caribbean	yes	543	2	3.4	10
VIR	United States Virgin Islands	Caribbean	yes	1,755	6	3.3	11
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3	2.6	12
PRI	Puerto Rico	Caribbean	yes	135,818	330	2.4	13
ABW	Aruba	Caribbean	yes	6,526	8	1.2	14
BLZ	Belize	Latin America	yes	1,251	1	1.0	15
JAM	Jamaica	Caribbean	yes	28,963	26	0.9	16
CUB	Cuba	Caribbean	yes	46,280	10	0.2	17
GUY	Guyana	Latin America	yes	3,468	-	0.0	18
BHS	Bahamas	Caribbean	yes	21,313	0	0.0	19
SUR	Suriname	Latin America	yes	2,797	-	-	20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	-	21
COM	Comoros	Sub Saharan Africa	yes	310	0	0.4	1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	-	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-	-	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	-	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-	-	5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-	-	6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [%]	
PHL	Philippines	Asia	no	186,193	5,004	203,208	24.6	1
AFG	Afghanistan	Asia	no	16,132	39	1,852	21.3	2
JPN	Japan	Asia	no	14,617,394	59,828	5,396,265	11.1	3
UZB	Uzbekistan	Asia	no	44,370	154	38,768	4.0	4
AZE	Azerbaijan	Asia	no	45,197	128	33,777	3.8	5
GEO	Georgia	Asia	no	21,157	50	13,709	3.7	6
KGZ	Kyrgyzstan	Asia	no	3,644	20	6,067	3.2	7
TJK	Tajikistan	Asia	no	5,576	21	8,227	2.5	8
ARM	Armenia	Asia	no	14,187	28	11,639	2.4	9
TUR	Turkey	Asia	no	1,578,228	1,766	774,921	2.3	10
PAK	Pakistan	Asia	no	170,444	409	186,087	2.2	11
BGD	Bangladesh	Asia	no	72,949	198	106,991	1.9	12
ARE	United Arab Emirates	Asia	no	248,015	421	270,334	1.6	13
IDN	Indonesia	Asia	no	575,183	1,005	695,009	1.5	14
KAZ	Kazakhstan	Asia	no	180,409	180	127,087	1.4	15
CYP	Cyprus	Asia	no	23,484	32	24,623	1.3	16
LBN	Lebanon	Asia	no	56,965	53	47,915	1.1	17
ISR	Israel	Asia	no	293,550	192	212,896	0.9	18
SYR	Syrian Arab Republic	Asia	no	68,489	52	59,401	0.9	19
TKM	Turkmenistan	Asia	no	12,707	18	20,575	0.9	20
MYS	Malaysia	Asia	no	318,727	162	195,443	0.8	21
JOR	Jordan	Asia	no	40,997	26	33,470	0.8	22
CHN	China	Asia	no	4,512,825	2,351	5,694,512	0.4	23
MNG	Mongolia	Asia	no	9,273	2	6,675	0.3	24
IND	India	Asia	no	1,429,881	524	1,783,129	0.3	25
THA	Thailand	Asia	no	394,598	81	295,072	0.3	26
MAC	Macau	Asia	no	96,993	3	11,994	0.3	27
SAU	Saudi Arabia	Asia	no	751,807	83	341,826	0.2	28
HKG	Hong Kong	Asia	no	1,138,019	41	211,863	0.2	29
KOR	Republic of Korea	Asia	no	2,787,207	164	986,184	0.2	30
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	7,629	0.1	31
VNM	Viet Nam	Asia	no	115,441	7	117,363	0.1	32
KHM	Cambodia	Asia	no	4,335	0	11,854	0.0	33
NPL	Nepal	Asia	no	6,537	31			34
BTN	Bhutan	Asia	no	1,167	5			35
TWN	Taiwan	Asia	no	872,409	3,857			36
MMR	Myanmar	Asia	no	20,572	40			37
IRQ	Iraq	Asia	no	47,245	56			38
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721			39
KWT	Kuwait	Asia	no	202,236	137			40
YEM	Yemen	Asia	no	21,556	8			41
BRN	Brunei Darussalam	Asia	no	20,094	6			42
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			43
OMN	Oman	Asia	no	42,201	23			44
QAT	Qatar	Asia	no	113,981	64			45
LKA	Sri Lanka	Asia	no	49,967	0	54,079		46
GRC	Greece	Europe	no	642,888	1,732	327,811	5.3	1
BGR	Bulgaria	Europe	no	70,023	112	48,622	2.3	2
ITA	Italy	Europe	no	3,701,619	3,795	2,087,749	1.8	3
ISL	Iceland	Europe	no	25,742	14	11,313	1.2	4
ALB	Albania	Europe	no	13,964	14	14,377	1.0	5
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	10,902	0.8	6
HRV	Croatia	Europe	no	65,145	46	61,162	0.8	7
SVN	Slovenia	Europe	no	36,896	34	46,643	0.7	8
AUT	Austria	Europe	no	615,592	240	362,737	0.7	9
CHE	Switzerland	Europe	no	839,518	257	468,037	0.6	10
MNE	Montenegro	Europe	no	2,738	3	5,265	0.5	11
HUN	Hungary	Europe	no	286,209	51	120,269	0.4	12
DEU	Germany	Europe	no	5,800,986	1,206	3,101,126	0.4	13
CZE	Czech Republic	Europe	no	336,714	49	182,876	0.3	14
MDA	Moldova, Republic of	Europe	no	9,896	2	8,053	0.3	15
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	2,325,009	0.2	16
SVK	Slovakia	Europe	no	124,390	22	88,405	0.2	17
BEL	Belgium	Europe	no	739,159	101	456,696	0.2	18
NLD	Netherlands	Europe	no	1,593,735	160	721,171	0.2	19
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	20,030	0.2	20
POL	Poland	Europe	no	659,150	66	475,111	0.1	21
ESP	Spain	Europe	no	2,695,139	198	1,437,861	0.1	22
SRB	Serbia	Europe	no	16,907	5	44,764	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [%]	
RUS	Russian Federation	Europe	no	2,209,139	168	1,356,393	0.1	24
LUX	Luxembourg	Europe	no	45,036	4	36,700	0.1	25
FRA	France	Europe	no	3,653,264	260	2,620,062	0.1	26
PRT	Portugal	Europe	no	296,296	21	245,251	0.1	27
IRL	Ireland	Europe	no	244,117	8	171,957	0.1	28
EST	Estonia	Europe	no	28,069	1	17,933	0.1	29
UKR	Ukraine	Europe	no	278,497	6	141,773	0.0	30
LTU	Lithuania	Europe	no	53,397	1	36,811	0.0	31
NOR	Norway	Europe	no	386,892	4	358,009	0.0	32
LVA	Latvia	Europe	no	39,277	0	24,210	0.0	33
DNK	Denmark	Europe	no	381,265	2	292,535	0.0	34
SMR	San Marino	Europe	no	1,846	5			35
LIE	Liechtenstein	Europe	no	8,070	5			36
GIB	Gibraltar	Europe	no	3,141	2			37
MCO	Monaco	Europe	no	5,380	4			38
SWE	Sweden	Europe	no	369,792	2	431,251		39
FIN	Finland	Europe	no	209,050	1	235,640		40
BLR	Belarus	Europe	no	74,427	0	62,212		41
FRO	Faroe Islands	Europe	no	1,012	-			42
MLT	Malta	Pacific	no	18,630	10	8,111	1.3	1
NZL	New Zealand	Australia	no	238,609	163			2
AUS	Australia	Australia	no	1,832,960	17			3
HND	Honduras	Latin America	no	18,844	230	18,594	12.4	1
SLV	El Salvador	Latin America	no	22,582	300	24,921	12.1	2
NIC	Nicaragua	Latin America	no	10,935	58	8,405	7.0	3
CHL	Chile	Latin America	no	326,640	869	198,120	4.4	4
CRI	Costa Rica	Latin America	no	38,475	131	36,941	3.6	5
GTM	Guatemala	Latin America	no	38,263	156	45,670	3.4	6
ECU	Ecuador	Latin America	no	68,550	192	61,265	3.1	7
PER	Peru	Latin America	no	189,980	447	152,561	2.9	8
COL	Colombia	Latin America	no	325,385	803	294,580	2.7	9
PAN	Panama	Latin America	no	30,296	44	27,738	1.6	10
MEX	Mexico	Latin America	no	1,818,298	1,568	1,049,803	1.5	11
VEN	Venezuela	Latin America	no	435,869	439	346,724	1.3	12
BOL	Bolivia	Latin America	no	13,112	21	18,301	1.1	13
USA	United States of America	North America	no	22,004,154	8,400	15,103,640	0.6	14
ARG	Argentina	Latin America	no	403,909	128	356,545	0.4	15
CAN	Canada	North America	no	2,051,584	72	1,606,667	0.0	16
GLP	Guadeloupe	Caribbean	no	19,838	196			17
MTQ	Martinique	Caribbean	no	21,052	92			18
CYM	Cayman Islands	Caribbean	no	3,603	1			19
TCA	Turks and Caicos islands	Caribbean	no	332	0			20
GUF	French Guiana	Latin America	no	8,339	-			21
BRA	Brazil	Latin America	no	1,715,746	3	2,108,637		22
PRY	Paraguay	Latin America	no	19,203	-	17,941		23
URY	Uruguay	Latin America	no	28,590	-	39,936		24
TUN	Tunisia	North Africa	no	65,420	49	46,643	1.1	1
MAR	Morocco	North Africa	no	136,300	46	99,808	0.5	2
EGY	Egypt	North Africa	no	234,939	51	229,362	0.2	3
MWI	Malawi	Sub Saharan Africa	no	1,883	1	5,605	0.2	4
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	14,723	0.2	5
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	3,511	0.1	6
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	369,463	0.1	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	26,224	0.1	8
UGA	Uganda	Sub Saharan Africa	no	6,628	2	18,757	0.1	9
BWA	Botswana	Sub Saharan Africa	no	18,941	1	15,360	0.1	10
KEN	Kenya	Sub Saharan Africa	no	18,470	3	35,486	0.1	11
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	11,309	0.1	12
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	4,329	0.1	13
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	15,617	0.0	14
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	8,897	0.0	15
SDN	Sudan	Sub Saharan Africa	no	26,851	1	61,511	0.0	16
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	23,429	0.0	17
GAB	Gabon	Sub Saharan Africa	no	25,086	0	10,274	0.0	18
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	35,978	0.0	19
NAM	Namibia	Sub Saharan Africa	no	7,239	0	12,035	0.0	20
SEN	Senegal	Sub Saharan Africa	no	11,619	0	15,485	0.0	21
BDI	Burundi	Sub Saharan Africa	no	168	0			22
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			24
DZA	Algeria	North Africa	no	259,977	359			25
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			26
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			27
MDG	Madagascar	Sub Saharan Africa	no	2,575	0			28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			29
CAF	Central African Republic	Sub Saharan Africa	no	916	-			30
ERI	Eritrea	Sub Saharan Africa	no	1,892	0			31
SOM	Somalia	Sub Saharan Africa	no	3,573	0			32
LBR	Liberia	Sub Saharan Africa	no	515	-			33
AGO	Angola	Sub Saharan Africa	no	25,225	0	72,456		34
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	168,996		35
GIN	Guinea	Sub Saharan Africa	no	3,259	-	4,711		36
COG	Congo	Sub Saharan Africa	no	12,566	-	8,109		37
BEN	Benin	Sub Saharan Africa	no	3,585	-	7,536		38
TCD	Chad	Sub Saharan Africa	no	6,664	-	9,469		39
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	4,195		40
REU	Réunion	Sub Saharan Africa	no	42,937	-			41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	21,734		43
GMB	Gambia	Sub Saharan Africa	no	680	-	963		44
GHA	Ghana	Sub Saharan Africa	no	12,649	-	35,414		45
MLI	Mali	Sub Saharan Africa	no	3,869	-			46
NER	Niger	Sub Saharan Africa	no	2,800	-			47
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	2,142		48
TGO	Togo	Sub Saharan Africa	no	1,644	-			49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			50
SLB	Solomon islands	Asia	yes	211	12	885	14.0	1
VUT	Vanuatu	Asia	yes	102	10	743	13.6	2
PNG	Papua New Guinea	Asia	yes	5,433	86	9,217	9.3	3
FJI	Fiji	Asia	yes	2,100	3	3,569	0.8	4
NCL	New Caledonia	Asia	yes	4,771	19			5
BHR	Bahrain	Asia	yes	32,575	17			6
TON	Tonga	Pacific	yes	230	9	510	18.2	1
WSM	Samoa	Pacific	yes	361	1	727	1.2	2
SGP	Singapore	Pacific	yes	526,900	114	150,187	0.8	3
PLW	Palau	Pacific	yes	279	0			4
PYF	French Polynesia	Pacific	yes	6,568	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			6
MDV	Maldives	Pacific	yes	907	-	2,244		7
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21	1,329	16.0	1
DMA	Dominica	Caribbean	yes	356	5	573	8.4	2
HTI	Haiti	Caribbean	yes	8,553	64	9,743	6.6	3
DOM	Dominican Republic	Caribbean	yes	72,573	363	57,847	6.3	4
GRD	Grenada	Caribbean	yes	1,229	5	996	4.6	5
BRB	Barbados	Caribbean	yes	4,677	18	4,317	4.1	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3	914	3.1	7
JAM	Jamaica	Caribbean	yes	28,963	26	16,776	1.5	8
LCA	Saint Lucia	Caribbean	yes	543	2	1,355	1.4	9
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			10
VGB	British Virgin Islands	Caribbean	yes	424	4			11
AIA	Anguilla	Caribbean	yes	20	0			12
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			13
PRI	Puerto Rico	Caribbean	yes	135,818	330			14
ABW	Aruba	Caribbean	yes	6,526	8			15
BLZ	Belize	Latin America	yes	1,251	1			16
CUB	Cuba	Caribbean	yes	46,280	10			17
BHS	Bahamas	Caribbean	yes	21,313	0			18
GUY	Guyana	Latin America	yes	3,468	-			19
SUR	Suriname	Latin America	yes	2,797	-			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	766		21
COM	Comoros	Sub Saharan Africa	yes	310	0			1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	10,934		2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-			3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
PHL	Philippines	Asia	no	186,193	5,004	19,403	257.9	1
JPN	Japan	Asia	no	14,617,394	59,828	1,094,349	54.7	2
BGD	Bangladesh	Asia	no	72,949	198	5,387	36.7	3
PAK	Pakistan	Asia	no	170,444	409	14,053	29.1	4
ARM	Armenia	Asia	no	14,187	28	1,231	22.7	5
UZB	Uzbekistan	Asia	no	44,370	154	6,853	22.5	6
KGZ	Kyrgyzstan	Asia	no	3,644	20	877	22.4	7
AZE	Azerbaijan	Asia	no	45,197	128	5,852	21.8	8
GEO	Georgia	Asia	no	21,157	50	2,453	20.4	9
ARE	United Arab Emirates	Asia	no	248,015	421	24,545	17.2	10
TUR	Turkey	Asia	no	1,578,228	1,766	104,758	16.9	11
IDN	Indonesia	Asia	no	575,183	1,005	64,015	15.7	12
TJK	Tajikistan	Asia	no	5,576	21	1,658	12.4	13
LBN	Lebanon	Asia	no	56,965	53	4,711	11.3	14
KAZ	Kazakhstan	Asia	no	180,409	180	16,117	11.2	15
SYR	Syrian Arab Republic	Asia	no	68,489	52	5,991	8.6	16
TKM	Turkmenistan	Asia	no	12,707	18	2,212	7.9	17
CYP	Cyprus	Asia	no	23,484	32	4,558	7.0	18
MYS	Malaysia	Asia	no	318,727	162	30,273	5.4	19
JOR	Jordan	Asia	no	40,997	26	5,910	4.4	20
ISR	Israel	Asia	no	293,550	192	52,616	3.6	21
CHN	China	Asia	no	4,512,825	2,351	791,999	3.0	22
IND	India	Asia	no	1,429,881	524	198,830	2.6	23
MNG	Mongolia	Asia	no	9,273	2	851	2.4	24
HKG	Hong Kong	Asia	no	1,138,019	41	18,948	2.2	25
THA	Thailand	Asia	no	394,598	81	41,294	2.0	26
MAC	Macau	Asia	no	96,993	3	2,186	1.4	27
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	672	1.2	28
KOR	Republic of Korea	Asia	no	2,787,207	164	155,748	1.1	29
VNM	Viet Nam	Asia	no	115,441	7	6,947	1.0	30
SAU	Saudi Arabia	Asia	no	751,807	83	97,875	0.8	31
KHM	Cambodia	Asia	no	4,335	0	713	0.1	32
LKA	Sri Lanka	Asia	no	49,967	0	7,718	0.0	33
AFG	Afghanistan	Asia	no	16,132	39	-	-	34
NPL	Nepal	Asia	no	6,537	31			35
BTN	Bhutan	Asia	no	1,167	5			36
TWN	Taiwan	Asia	no	872,409	3,857			37
MMR	Myanmar	Asia	no	20,572	40			38
IRQ	Iraq	Asia	no	47,245	56			39
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721			40
KWT	Kuwait	Asia	no	202,236	137			41
YEM	Yemen	Asia	no	21,556	8			42
BRN	Brunei Darussalam	Asia	no	20,094	6			43
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			44
OMN	Oman	Asia	no	42,201	23			45
QAT	Qatar	Asia	no	113,981	64			46
GRC	Greece	Europe	no	642,888	1,732	54,736	31.7	1
ALB	Albania	Europe	no	13,964	14	952	15.1	2
BGR	Bulgaria	Europe	no	70,023	112	7,539	14.9	3
ITA	Italy	Europe	no	3,701,619	3,795	435,241	8.7	4
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	1,683	5.1	5
CHE	Switzerland	Europe	no	839,518	257	60,549	4.2	6
ISL	Iceland	Europe	no	25,742	14	3,261	4.2	7
HRV	Croatia	Europe	no	65,145	46	13,084	3.5	8
SVN	Slovenia	Europe	no	36,896	34	9,752	3.5	9
MNE	Montenegro	Europe	no	2,738	3	775	3.4	10
AUT	Austria	Europe	no	615,592	240	73,430	3.3	11
DEU	Germany	Europe	no	5,800,986	1,206	647,378	1.9	12
HUN	Hungary	Europe	no	286,209	51	28,084	1.8	13
MDA	Moldova, Republic of	Europe	no	9,896	2	1,377	1.5	14
SVK	Slovakia	Europe	no	124,390	22	17,073	1.3	15
CZE	Czech Republic	Europe	no	336,714	49	41,897	1.2	16
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	518,869	1.1	17
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	3,498	1.0	18
BEL	Belgium	Europe	no	739,159	101	113,598	0.9	19
POL	Poland	Europe	no	659,150	66	88,643	0.8	20
SRB	Serbia	Europe	no	16,907	5	7,380	0.7	21
NLD	Netherlands	Europe	no	1,593,735	160	221,964	0.7	22
ESP	Spain	Europe	no	2,695,139	198	292,417	0.7	23



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
RUS	Russian Federation	Europe	no	2,209,139	168	287,875	0.6	24
LUX	Luxembourg	Europe	no	45,036	4	8,868	0.5	25
PRT	Portugal	Europe	no	296,296	21	49,074	0.4	26
FRA	France	Europe	no	3,653,264	260	635,621	0.4	27
EST	Estonia	Europe	no	28,069	1	3,959	0.2	28
UKR	Ukraine	Europe	no	278,497	6	27,731	0.2	29
IRL	Ireland	Europe	no	244,117	8	39,102	0.2	30
LTU	Lithuania	Europe	no	53,397	1	7,241	0.1	31
LVA	Latvia	Europe	no	39,277	0	4,122	0.1	32
NOR	Norway	Europe	no	386,892	4	92,372	0.0	33
DNK	Denmark	Europe	no	381,265	2	90,977	0.0	34
SWE	Sweden	Europe	no	369,792	2	123,918	0.0	35
FIN	Finland	Europe	no	209,050	1	58,644	0.0	36
BLR	Belarus	Europe	no	74,427	0	8,828	0.0	37
SMR	San Marino	Europe	no	1,846	5			38
LIE	Liechtenstein	Europe	no	8,070	5			39
GIB	Gibraltar	Europe	no	3,141	2			40
MCO	Monaco	Europe	no	5,380	4			41
FRO	Faroe Islands	Europe	no	1,012	-			42
MLT	Malta	Pacific	no	18,630	10	1,711	6.0	1
NZL	New Zealand	Australia	no	238,609	163			2
AUS	Australia	Australia	no	1,832,960	17			3
SLV	El Salvador	Latin America	no	22,582	300	2,312	130.0	1
NIC	Nicaragua	Latin America	no	10,935	58	627	93.1	2
HND	Honduras	Latin America	no	18,844	230	2,777	82.8	3
GTM	Guatemala	Latin America	no	38,263	156	4,254	36.6	4
CHL	Chile	Latin America	no	326,640	869	26,588	32.7	5
PER	Peru	Latin America	no	189,980	447	15,659	28.6	6
ECU	Ecuador	Latin America	no	68,550	192	6,807	28.3	7
PAN	Panama	Latin America	no	30,296	44	1,561	28.1	8
CRI	Costa Rica	Latin America	no	38,475	131	6,358	20.6	9
COL	Colombia	Latin America	no	325,385	803	46,769	17.2	10
MEX	Mexico	Latin America	no	1,818,298	1,568	120,640	13.0	11
VEN	Venezuela	Latin America	no	435,869	439	42,419	10.3	12
BOL	Bolivia	Latin America	no	13,112	21	2,718	7.5	13
USA	United States of America	North America	no	22,004,154	8,400	2,522,700	3.3	14
ARG	Argentina	Latin America	no	403,909	128	55,024	2.3	15
CAN	Canada	North America	no	2,051,584	72	343,217	0.2	16
BRA	Brazil	Latin America	no	1,715,746	3	442,019	0.0	17
GLP	Guadeloupe	Caribbean	no	19,838	196			18
MTQ	Martinique	Caribbean	no	21,052	92			19
CYM	Cayman Islands	Caribbean	no	3,603	1			20
TCA	Turks and Caicos islands	Caribbean	no	332	0			21
GUF	French Guiana	Latin America	no	8,339	-			22
PRY	Paraguay	Latin America	no	19,203	-	1,711		23
URY	Uruguay	Latin America	no	28,590	-	5,117		24
TUN	Tunisia	North Africa	no	65,420	49	7,209	6.8	1
MAR	Morocco	North Africa	no	136,300	46	15,913	2.9	2
EGY	Egypt	North Africa	no	234,939	51	24,436	2.1	3
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	2,153	1.2	4
MWI	Malawi	Sub Saharan Africa	no	1,883	1	976	1.0	5
UGA	Uganda	Sub Saharan Africa	no	6,628	2	2,015	0.8	6
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	719	0.7	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	4,052	0.7	8
KEN	Kenya	Sub Saharan Africa	no	18,470	3	4,226	0.7	9
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	71,742	0.6	10
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	935	0.5	11
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	1,166	0.5	12
BWA	Botswana	Sub Saharan Africa	no	18,941	1	3,130	0.5	13
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	1,281	0.2	14
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	913	0.2	15
GAB	Gabon	Sub Saharan Africa	no	25,086	0	1,267	0.2	16
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	3,029	0.1	17
SDN	Sudan	Sub Saharan Africa	no	26,851	1	9,428	0.1	18
SEN	Senegal	Sub Saharan Africa	no	11,619	0	1,124	0.1	19
NAM	Namibia	Sub Saharan Africa	no	7,239	0	2,692	0.0	20
CMR	Cameroon	Sub Saharan Africa	no	16,950	0			21
BDI	Burundi	Sub Saharan Africa	no	168	0			22
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			23



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%o]	
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			24
DZA	Algeria	North Africa	no	259,977	359			25
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ERI	Eritrea	Sub Saharan Africa	no	1,892	0			31
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NGA	Nigeria	Sub Saharan Africa	no	121,669	1			35
GIN	Guinea	Sub Saharan Africa	no	3,259	-	339		36
COG	Congo	Sub Saharan Africa	no	12,566	-	1,186		37
BEN	Benin	Sub Saharan Africa	no	3,585	-			38
TCD	Chad	Sub Saharan Africa	no	6,664	-	1,131		39
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	646		40
REU	Réunion	Sub Saharan Africa	no	42,937	-			41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	1,968		43
GMB	Gambia	Sub Saharan Africa	no	680	-	121		44
GHA	Ghana	Sub Saharan Africa	no	12,649	-	3,511		45
MLI	Mali	Sub Saharan Africa	no	3,869	-			46
NER	Niger	Sub Saharan Africa	no	2,800	-			47
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	233		48
TGO	Togo	Sub Saharan Africa	no	1,644	-			49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			50
PNG	Papua New Guinea	Asia	yes	5,433	86	897	95.8	1
SLB	Solomon islands	Asia	yes	211	12			2
VUT	Vanuatu	Asia	yes	102	10			3
FJI	Fiji	Asia	yes	2,100	3			4
NCL	New Caledonia	Asia	yes	4,771	19			5
BHR	Bahrain	Asia	yes	32,575	17			6
TON	Tonga	Pacific	yes	230	9	67	139.5	1
SGP	Singapore	Pacific	yes	526,900	114	22,293	5.1	2
WSM	Samoa	Pacific	yes	361	1			3
PLW	Palau	Pacific	yes	279	0			4
PYF	French Polynesia	Pacific	yes	6,568	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			6
MDV	Maldives	Pacific	yes	907	-			7
DOM	Dominican Republic	Caribbean	yes	72,573	363	3,965	91.5	1
DMA	Dominica	Caribbean	yes	356	5	81	59.3	2
BRB	Barbados	Caribbean	yes	4,677	18	835	21.3	3
JAM	Jamaica	Caribbean	yes	28,963	26	2,368	10.8	4
LCA	Saint Lucia	Caribbean	yes	543	2	192	9.9	5
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21			6
HTI	Haiti	Caribbean	yes	8,553	64			7
GRD	Grenada	Caribbean	yes	1,229	5			8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3			9
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			10
VGB	British Virgin Islands	Caribbean	yes	424	4			11
AIA	Anguilla	Caribbean	yes	20	0			12
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			13
PRI	Puerto Rico	Caribbean	yes	135,818	330			14
ABW	Aruba	Caribbean	yes	6,526	8			15
BLZ	Belize	Latin America	yes	1,251	1			16
CUB	Cuba	Caribbean	yes	46,280	10			17
BHS	Bahamas	Caribbean	yes	21,313	0			18
GUY	Guyana	Latin America	yes	3,468	-	341		19
SUR	Suriname	Latin America	yes	2,797	-			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-			21
COM	Comoros	Sub Saharan Africa	yes	310	0			1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	1,393		2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-			3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			6



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ITEC S.A.S. – INGENIAR LTDA. – EAI S.A.

ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
JPN	Japan	Asia	no	14,617,394	59,828	1,144,171	52.3	1
TJK	Tajikistan	Asia	no	5,576	21	144	25.6	2
KGZ	Kyrgyzstan	Asia	no	3,644	20	419	12.8	3
ARM	Armenia	Asia	no	14,187	28	1,530	1.3	4
PHL	Philippines	Asia	no	186,193	5,004	22,170	1.2	5
AZE	Azerbaijan	Asia	no	45,197	128	4,557	0.6	6
CYP	Cyprus	Asia	no	23,484	32	2,630	0.5	7
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	893	0.4	8
BRN	Brunei Darussalam	Asia	no	20,094	6	1,279	0.2	9
JOR	Jordan	Asia	no	40,997	26	3,205	0.2	10
LBN	Lebanon	Asia	no	56,965	53	5,937	0.2	11
BGD	Bangladesh	Asia	no	72,949	198	19,006	0.1	12
PAK	Pakistan	Asia	no	170,444	409	18,461	0.1	13
SYR	Syrian Arab Republic	Asia	no	68,489	52	6,052	0.1	14
KAZ	Kazakhstan	Asia	no	180,409	180	11,258	0.1	15
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721	46,695	0.1	16
IDN	Indonesia	Asia	no	575,183	1,005	52,407	0.0	17
ISR	Israel	Asia	no	293,550	192	30,157	0.0	18
MYS	Malaysia	Asia	no	318,727	162	30,724	0.0	19
TUR	Turkey	Asia	no	1,578,228	1,766	87,701	0.0	20
MAC	Macau	Asia	no	96,993	3	4,316	0.0	21
KHM	Cambodia	Asia	no	4,335	0	1,494	0.0	22
THA	Thailand	Asia	no	394,598	81	42,938	0.0	23
VNM	Viet Nam	Asia	no	115,441	7	19,932	0.0	24
SAU	Saudi Arabia	Asia	no	751,807	83	66,377	0.0	25
IND	India	Asia	no	1,429,881	524	248,602	0.0	26
HKG	Hong Kong	Asia	no	1,138,019	41	52,025	0.0	27
CHN	China	Asia	no	4,512,825	2,351	930,625	0.0	28
KOR	Republic of Korea	Asia	no	2,787,207	164	200,936	0.0	29
UZB	Uzbekistan	Asia	no	44,370	154			30
GEO	Georgia	Asia	no	21,157	50			31
ARE	United Arab Emirates	Asia	no	248,015	421			32
TKM	Turkmenistan	Asia	no	12,707	18			33
MNG	Mongolia	Asia	no	9,273	2			34
LKA	Sri Lanka	Asia	no	49,967	0	7,159		35
AFG	Afghanistan	Asia	no	16,132	39			36
NPL	Nepal	Asia	no	6,537	31			37
BTN	Bhutan	Asia	no	1,167	5			38
TWN	Taiwan	Asia	no	872,409	3,857			39
MMR	Myanmar	Asia	no	20,572	40			40
IRQ	Iraq	Asia	no	47,245	56			41
KWT	Kuwait	Asia	no	202,236	137			42
YEM	Yemen	Asia	no	21,556	8			43
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			44
OMN	Oman	Asia	no	42,201	23			45
QAT	Qatar	Asia	no	113,981	64			46
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	823	0.8	1
ALB	Albania	Europe	no	13,964	14	1,329	0.8	2
MDA	Moldova, Republic of	Europe	no	9,896	2	563	0.4	3
BGR	Bulgaria	Europe	no	70,023	112	5,626	0.3	4
ISL	Iceland	Europe	no	25,742	14	3,437	0.2	5
SVN	Slovenia	Europe	no	36,896	34	7,746	0.1	6
SRB	Serbia	Europe	no	16,907	5	2,776	0.1	7
HRV	Croatia	Europe	no	65,145	46	8,147	0.1	8
GRC	Greece	Europe	no	642,888	1,732	42,781	0.1	9
SVK	Slovakia	Europe	no	124,390	22	11,975	0.0	10
LUX	Luxembourg	Europe	no	45,036	4	6,616	0.0	11
HUN	Hungary	Europe	no	286,209	51	14,219	0.0	12
EST	Estonia	Europe	no	28,069	1	3,738	0.0	13
AUT	Austria	Europe	no	615,592	240	48,760	0.0	14
CZE	Czech Republic	Europe	no	336,714	49	22,186	0.0	15
CHE	Switzerland	Europe	no	839,518	257	64,161	0.0	16
ITA	Italy	Europe	no	3,701,619	3,795	253,228	0.0	17
PRT	Portugal	Europe	no	296,296	21	29,628	0.0	18
BEL	Belgium	Europe	no	739,159	101	59,532	0.0	19
LVA	Latvia	Europe	no	39,277	0	5,143	0.0	20
POL	Poland	Europe	no	659,150	66	52,601	0.0	21
LTU	Lithuania	Europe	no	53,397	1	5,768	0.0	22
UKR	Ukraine	Europe	no	278,497	6	14,671	0.0	23



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
NLD	Netherlands	Europe	no	1,593,735	160	92,014	0.0	24
IRL	Ireland	Europe	no	244,117	8	33,055	0.0	25
RUS	Russian Federation	Europe	no	2,209,139	168	100,485	0.0	26
DEU	Germany	Europe	no	5,800,986	1,206	413,986	0.0	27
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	335,845	0.0	28
ESP	Spain	Europe	no	2,695,139	198	216,748	0.0	29
DNK	Denmark	Europe	no	381,265	2	39,721	0.0	30
FRA	France	Europe	no	3,653,264	260	306,117	0.0	31
NOR	Norway	Europe	no	386,892	4	47,607	0.0	32
MNE	Montenegro	Europe	no	2,738	3			33
BIH	Bosnia and Herzegovina	Europe	no	10,433	4			34
SWE	Sweden	Europe	no	369,792	2	60,814		35
FIN	Finland	Europe	no	209,050	1	30,495		36
BLR	Belarus	Europe	no	74,427	0	8,860		37
SMR	San Marino	Europe	no	1,846	5			38
LIE	Liechtenstein	Europe	no	8,070	5			39
GIB	Gibraltar	Europe	no	3,141	2			40
MCO	Monaco	Europe	no	5,380	4			41
FRO	Faroe Islands	Europe	no	1,012	-			42
MLT	Malta	Pacific	no	18,630	10	1,008	0.5	1
NZL	New Zealand	Australia	no	238,609	163	15,614	0.0	2
AUS	Australia	Australia	no	1,832,960	17	150,632	0.0	3
SLV	El Salvador	Latin America	no	22,582	300	2,799	4.8	1
HND	Honduras	Latin America	no	18,844	230	2,998	4.1	2
USA	United States of America	North America	no	22,004,154	8,400	2,212,313	3.8	3
NIC	Nicaragua	Latin America	no	10,935	58	1,445	3.7	4
GTM	Guatemala	Latin America	no	38,263	156	4,200	1.0	5
BOL	Bolivia	Latin America	no	13,112	21	1,619	1.0	6
CRI	Costa Rica	Latin America	no	38,475	131	4,507	0.8	7
ECU	Ecuador	Latin America	no	68,550	192	5,925	0.5	8
PAN	Panama	Latin America	no	30,296	44	4,074	0.4	9
PER	Peru	Latin America	no	189,980	447	18,553	0.1	10
CHL	Chile	Latin America	no	326,640	869	27,076	0.1	11
COL	Colombia	Latin America	no	325,385	803	33,173	0.1	12
VEN	Venezuela	Latin America	no	435,869	439	48,477	0.0	13
MEX	Mexico	Latin America	no	1,818,298	1,568	159,403	0.0	14
ARG	Argentina	Latin America	no	403,909	128	75,477	0.0	15
CAN	Canada	North America	no	2,051,584	72	203,409	0.0	16
BRA	Brazil	Latin America	no	1,715,746	3	138,995		17
GLP	Guadeloupe	Caribbean	no	19,838	196			18
MTQ	Martinique	Caribbean	no	21,052	92			19
CYM	Cayman Islands	Caribbean	no	3,603	1			20
TCA	Turks and Caicos islands	Caribbean	no	332	0			21
GUF	French Guiana	Latin America	no	8,339	-			22
PRY	Paraguay	Latin America	no	19,203	-	1,552		23
URY	Uruguay	Latin America	no	28,590	-	3,671		24
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	257	0.5	1
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	265	0.4	2
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	141	0.4	3
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	815	0.3	4
TUN	Tunisia	North Africa	no	65,420	49	6,865	0.1	5
UGA	Uganda	Sub Saharan Africa	no	6,628	2	2,609	0.1	6
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	3,995	0.1	7
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	1,432	0.1	8
DZA	Algeria	North Africa	no	259,977	359	18,029	0.1	9
MDG	Madagascar	Sub Saharan Africa	no	2,575	0	1,317	0.0	10
KEN	Kenya	Sub Saharan Africa	no	18,470	3	3,803	0.0	11
BWA	Botswana	Sub Saharan Africa	no	18,941	1	1,880	0.0	12
MAR	Morocco	North Africa	no	136,300	46	16,366	0.0	13
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	3,519	0.0	14
SDN	Sudan	Sub Saharan Africa	no	26,851	1	3,285	0.0	15
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	2,363	0.0	16
NAM	Namibia	Sub Saharan Africa	no	7,239	0	1,324	0.0	17
EGY	Egypt	North Africa	no	234,939	51	30,406	0.0	18
GAB	Gabon	Sub Saharan Africa	no	25,086	0	1,639	0.0	19
SEN	Senegal	Sub Saharan Africa	no	11,619	0	2,278	0.0	20
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	38,298	0.0	21
MWI	Malawi	Sub Saharan Africa	no	1,883	1			22
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1			23



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0			24
BDI	Burundi	Sub Saharan Africa	no	168	0			25
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			26
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			27
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			28
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			29
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			30
CAF	Central African Republic	Sub Saharan Africa	no	916	-			31
SOM	Somalia	Sub Saharan Africa	no	3,573	0			32
LBR	Liberia	Sub Saharan Africa	no	515	-			33
AGO	Angola	Sub Saharan Africa	no	25,225	0			34
NGA	Nigeria	Sub Saharan Africa	no	121,669	1			35
GIN	Guinea	Sub Saharan Africa	no	3,259	-	391		36
COG	Congo	Sub Saharan Africa	no	12,566	-			37
BEN	Benin	Sub Saharan Africa	no	3,585	-	720		38
TCD	Chad	Sub Saharan Africa	no	6,664	-			39
MRT	Mauritania	Sub Saharan Africa	no	3,622	-			40
REU	Réunion	Sub Saharan Africa	no	42,937	-			41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	1,082		43
GMB	Gambia	Sub Saharan Africa	no	680	-			44
GHA	Ghana	Sub Saharan Africa	no	12,649	-			45
MLI	Mali	Sub Saharan Africa	no	3,869	-	1,042		46
NER	Niger	Sub Saharan Africa	no	2,800	-			47
SLE	Sierra Leone	Sub Saharan Africa	no	523	-			48
TGO	Togo	Sub Saharan Africa	no	1,644	-			49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			50
PNG	Papua New Guinea	Asia	yes	5,433	86			1
SLB	Solomon islands	Asia	yes	211	12			2
VUT	Vanuatu	Asia	yes	102	10			3
FJI	Fiji	Asia	yes	2,100	3			4
NCL	New Caledonia	Asia	yes	4,771	19			5
BHR	Bahrain	Asia	yes	32,575	17			6
SGP	Singapore	Pacific	yes	526,900	114	36,452	0.0	1
TON	Tonga	Pacific	yes	230	9			2
WSM	Samoa	Pacific	yes	361	1			3
PLW	Palau	Pacific	yes	279	0			4
PYF	French Polynesia	Pacific	yes	6,568	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			6
MDV	Maldives	Pacific	yes	907	-			7
HTI	Haiti	Caribbean	yes	8,553	64	1,081	6.9	1
BLZ	Belize	Latin America	yes	1,251	1	180	5.6	2
DOM	Dominican Republic	Caribbean	yes	72,573	363	5,996	0.8	3
CUB	Cuba	Caribbean	yes	46,280	10	5,742	0.0	4
BHS	Bahamas	Caribbean	yes	21,313	0	2,547	0.0	5
DMA	Dominica	Caribbean	yes	356	5			6
BRB	Barbados	Caribbean	yes	4,677	18			7
JAM	Jamaica	Caribbean	yes	28,963	26			8
LCA	Saint Lucia	Caribbean	yes	543	2			9
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21			10
GRD	Grenada	Caribbean	yes	1,229	5			11
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3			12
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			13
VGB	British Virgin Islands	Caribbean	yes	424	4			14
AIA	Anguilla	Caribbean	yes	20	0			15
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			16
PRI	Puerto Rico	Caribbean	yes	135,818	330			17
ABW	Aruba	Caribbean	yes	6,526	8			18
GUY	Guyana	Latin America	yes	3,468	-			19
SUR	Suriname	Latin America	yes	2,797	-			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-			21
COM	Comoros	Sub Saharan Africa	yes	310	0			1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	1,571		2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-	262		3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	190		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
PHL	Philippines	Asia	no	186,193	35,940	19.3	1
NPL	Nepal	Asia	no	6,537	865	13.2	2
BTN	Bhutan	Asia	no	1,167	147	12.6	3
KGZ	Kyrgyzstan	Asia	no	3,644	229	6.3	4
AZE	Azerbaijan	Asia	no	45,197	2,418	5.4	5
BGD	Bangladesh	Asia	no	72,949	3,688	5.1	6
GEO	Georgia	Asia	no	21,157	968	4.6	7
CYP	Cyprus	Asia	no	23,484	1,053	4.5	8
JPN	Japan	Asia	no	14,617,394	624,437	4.3	9
TWN	Taiwan	Asia	no	872,409	32,961	3.8	10
TJK	Tajikistan	Asia	no	5,576	210	3.8	11
UZB	Uzbekistan	Asia	no	44,370	1,574	3.6	12
LBN	Lebanon	Asia	no	56,965	2,002	3.5	13
ARM	Armenia	Asia	no	14,187	466	3.3	14
AFG	Afghanistan	Asia	no	16,132	520	3.2	15
MMR	Myanmar	Asia	no	20,572	660	3.2	16
PAK	Pakistan	Asia	no	170,444	4,857	2.9	17
ARE	United Arab Emirates	Asia	no	248,015	6,688	2.7	18
TKM	Turkmenistan	Asia	no	12,707	307	2.4	19
ISR	Israel	Asia	no	293,550	7,083	2.4	20
IRQ	Iraq	Asia	no	47,245	1,060	2.2	21
JOR	Jordan	Asia	no	40,997	863	2.1	22
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	2.0	23
IDN	Indonesia	Asia	no	575,183	9,693	1.7	24
TUR	Turkey	Asia	no	1,578,228	26,102	1.7	25
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023	1.6	26
KAZ	Kazakhstan	Asia	no	180,409	2,124	1.2	27
KWT	Kuwait	Asia	no	202,236	2,236	1.1	28
YEM	Yemen	Asia	no	21,556	214	1.0	29
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	1.0	30
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170	0.9	31
MYS	Malaysia	Asia	no	318,727	2,111	0.7	32
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180	0.7	33
CHN	China	Asia	no	4,512,825	28,876	0.6	34
OMN	Oman	Asia	no	42,201	271	0.6	35
MNG	Mongolia	Asia	no	9,273	\$ 55	0.6	36
QAT	Qatar	Asia	no	113,981	661	0.6	37
THA	Thailand	Asia	no	394,598	\$ 1,739	0.4	38
IND	India	Asia	no	1,429,881	5,862	0.4	39
VNM	Viet Nam	Asia	no	115,441	\$ 223	0.2	40
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072	0.1	41
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	0.1	42
MAC	Macao	Asia	no	96,993	\$ 108	0.1	43
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	0.1	44
KHM	Cambodia	Asia	no	4,335	\$ 2	0.0	45
LKA	Sri Lanka	Asia	no	49,967	\$ 9	0.0	46
SMR	San Marino	Europe	no	1,846	268	14.5	1
SVN	Slovenia	Europe	no	36,896	1,311	3.6	2
GRC	Greece	Europe	no	642,888	20,095	3.1	3
MNE	Montenegro	Europe	no	2,738	77	2.8	4
LIE	Liechtenstein	Europe	no	8,070	225	2.8	5
ALB	Albania	Europe	no	13,964	378	2.7	6
GIB	Gibraltar	Europe	no	3,141	78	2.5	7
MCO	Monaco	Europe	no	5,380	130	2.4	8
ISL	Iceland	Europe	no	25,742	602	2.3	9
BGR	Bulgaria	Europe	no	70,023	1,426	2.0	10
HRV	Croatia	Europe	no	65,145	1,079	1.7	11
ITA	Italy	Europe	no	3,701,619	54,248	1.5	12
CHE	Switzerland	Europe	no	839,518	\$ 10,275	1.2	13
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	1.2	14
AUT	Austria	Europe	no	615,592	7,442	1.2	15
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	0.8	16
DEU	Germany	Europe	no	5,800,986	\$ 44,276	0.8	17
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	0.7	18
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	0.7	19
SRB	Serbia	Europe	no	16,907	\$ 113	0.7	20
BEL	Belgium	Europe	no	739,159	\$ 4,460	0.6	21
HUN	Hungary	Europe	no	286,209	\$ 1,548	0.5	22
SVK	Slovakia	Europe	no	124,390	\$ 623	0.5	23



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NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	0.5	24
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	0.4	25
POL	Poland	Europe	no	659,150	\$ 2,170	0.3	26
LUX	Luxembourg	Europe	no	45,036	\$ 102	0.2	27
FRA	France	Europe	no	3,653,264	\$ 7,324	0.2	28
ESP	Spain	Europe	no	2,695,139	\$ 4,313	0.2	29
IRL	Ireland	Europe	no	244,117	\$ 306	0.1	30
PRT	Portugal	Europe	no	296,296	\$ 340	0.1	31
EST	Estonia	Europe	no	28,069	\$ 22	0.1	32
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	0.1	33
UKR	Ukraine	Europe	no	278,497	\$ 187	0.1	34
LTU	Lithuania	Europe	no	53,397	\$ 20	0.0	35
NOR	Norway	Europe	no	386,892	\$ 150	0.0	36
LVA	Latvia	Europe	no	39,277	\$ 15	0.0	37
DNK	Denmark	Europe	no	381,265	\$ 66	0.0	38
SWE	Sweden	Europe	no	369,792	\$ 52	0.0	39
FIN	Finland	Europe	no	209,050	\$ 17	0.0	40
BLR	Belarus	Europe	no	74,427	\$ 5	0.0	41
FRO	Faroe Islands	Europe	no	1,012	\$ -	-	42
MLT	Malta	Pacific	no	18,630	279	1.5	1
NZL	New Zealand	Australia	no	238,609	2,343	1.0	2
AUS	Australia	Australia	no	1,832,960	\$ 397	0.0	3
GLP	Guadeloupe	Caribbean	no	19,838	3,795	19.1	1
HND	Honduras	Latin America	no	18,844	2,976	15.8	2
MTQ	Martinique	Caribbean	no	21,052	3,045	14.5	3
SLV	El Salvador	Latin America	no	22,582	3,022	13.4	4
NIC	Nicaragua	Latin America	no	10,935	891	8.2	5
CRI	Costa Rica	Latin America	no	38,475	2,701	7.0	6
ECU	Ecuador	Latin America	no	68,550	4,162	6.1	7
GTM	Guatemala	Latin America	no	38,263	2,304	6.0	8
COL	Colombia	Latin America	no	325,385	19,055	5.9	9
BOL	Bolivia	Latin America	no	13,112	721	5.5	10
PER	Peru	Latin America	no	189,980	9,450	5.0	11
PAN	Panama	Latin America	no	30,296	869	2.9	12
CHL	Chile	Latin America	no	326,640	7,647	2.3	13
VEN	Venezuela	Latin America	no	435,869	9,004	2.1	14
CYM	Cayman Islands	Caribbean	no	3,603	58	1.6	15
MEX	Mexico	Latin America	no	1,818,298	26,503	1.5	16
TCA	Turks and Caicos islands	Caribbean	no	332	3	1.1	17
ARG	Argentina	Latin America	no	403,909	\$ 2,558	0.6	18
USA	United States of America	North America	no	22,004,154	\$ 118,733	0.5	19
CAN	Canada	North America	no	2,051,584	\$ 1,390	0.1	20
GUF	French Guiana	Latin America	no	8,339	\$ 0	-	21
BRA	Brazil	Latin America	no	1,715,746	\$ 77	-	22
PRY	Paraguay	Latin America	no	19,203	\$ 1	-	23
URY	Uruguay	Latin America	no	28,590	\$ -	-	24
BDI	Burundi	Sub Saharan Africa	no	168	5	3.1	1
TUN	Tunisia	North Africa	no	65,420	1,906	2.9	2
DJI	Djibouti	Sub Saharan Africa	no	2,525	71	2.8	3
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	2.4	4
MWI	Malawi	Sub Saharan Africa	no	1,883	45	2.4	5
DZA	Algeria	North Africa	no	259,977	5,884	2.3	6
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	1.2	7
MAR	Morocco	North Africa	no	136,300	\$ 1,325	1.0	8
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	0.8	9
MYT	Mayotte	Sub Saharan Africa	no	2,341	17	0.7	10
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459	0.6	11
EGY	Egypt	North Africa	no	234,939	\$ 1,280	0.5	12
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	0.5	13
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	0.5	14
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	0.5	15
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	0.3	16
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	0.3	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	0.2	18
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	0.2	19
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	0.2	20
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	0.1	21
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	0.1	22
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	0.1	24
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	0.1	25
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	0.1	26
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	0.1	27
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	0.1	28
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2	0.1	29
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	0.0	30
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	0.0	31
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	0.0	32
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	0.0	33
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	0.0	34
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	0.0	35
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	0.0	36
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	0.0	37
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	0.0	38
TCO	Chad	Sub Saharan Africa	no	6,664	\$ 1	0.0	39
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	0.0	40
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -	-	41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	-	42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	-	43
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	-	44
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	-	45
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	-	46
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	-	47
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	-	48
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	-	49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -	-	50
SLB	Solomon islands	Asia	yes	211	\$ 103	49.0	1
VUT	Vanuatu	Asia	yes	102	\$ 35	34.7	2
NCL	New Caledonia	Asia	yes	4,771	\$ 259	5.4	3
FJI	Fiji	Asia	yes	2,100	\$ 105	5.0	4
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	4.8	5
BHR	Bahrain	Asia	yes	32,575	\$ 189	0.6	6
TON	Tonga	Pacific	yes	230	\$ 60	26.1	1
WSM	Samoa	Pacific	yes	361	\$ 15	4.1	2
PLW	Palau	Pacific	yes	279	\$ 11	3.8	3
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	0.2	4
PYF	French Polynesia	Pacific	yes	6,568	\$ -	-	5
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	-	6
MDV	Maldives	Pacific	yes	907	\$ -	-	7
DMA	Dominica	Caribbean	yes	356	\$ 112	31.5	1
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	28.4	2
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108	25.6	3
AIA	Anguilla	Caribbean	yes	20	\$ 5	24.7	4
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911	22.3	5
BRB	Barbados	Caribbean	yes	4,677	\$ 807	17.3	6
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	15.5	7
GRD	Grenada	Caribbean	yes	1,229	\$ 170	13.8	8
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	12.6	9
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	10.3	10
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	8.7	11
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150	8.6	12
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082	6.0	13
ABW	Aruba	Caribbean	yes	6,526	\$ 327	5.0	14
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	4.2	15
BLZ	Belize	Latin America	yes	1,251	\$ 20	1.6	16
CUB	Cuba	Caribbean	yes	46,280	\$ 374	0.8	17
BHS	Bahamas	Caribbean	yes	21,313	\$ 9	0.0	18
GUY	Guyana	Latin America	yes	3,468	\$ 0	0.0	19
SUR	Suriname	Latin America	yes	2,797	\$ -	-	20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	-	21
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	1.4	1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	-	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	-	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	-	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	-	5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	-	6



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PHL	Philippines	Asia	no	186,193	35,940	199,589	18.0	1
JPN	Japan	Asia	no	14,617,394	624,437	5,458,837	11.4	2
BTN	Bhutan	Asia	no	1,167	147	1,516	9.7	3
GEO	Georgia	Asia	no	21,157	968	11,667	8.3	4
LBN	Lebanon	Asia	no	56,965	2,002	39,006	5.1	5
ARM	Armenia	Asia	no	14,187	466	9,371	5.0	6
KGZ	Kyrgyzstan	Asia	no	3,644	229	4,616	5.0	7
AZE	Azerbaijan	Asia	no	45,197	2,418	51,774	4.7	8
CYP	Cyprus	Asia	no	23,484	1,053	23,132	4.6	9
UZB	Uzbekistan	Asia	no	44,370	1,574	38,982	4.0	10
TJK	Tajikistan	Asia	no	5,576	210	5,640	3.7	11
BGD	Bangladesh	Asia	no	72,949	3,688	100,357	3.7	12
TUR	Turkey	Asia	no	1,578,228	26,102	734,365	3.6	13
ISR	Israel	Asia	no	293,550	7,083	217,333	3.3	14
JOR	Jordan	Asia	no	40,997	863	27,574	3.1	15
AFG	Afghanistan	Asia	no	16,132	520	17,243	3.0	16
PAK	Pakistan	Asia	no	170,444	4,857	176,870	2.8	17
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	59,147	2.3	18
ARE	United Arab Emirates	Asia	no	248,015	6,688	297,649	2.3	19
TKM	Turkmenistan	Asia	no	12,707	307	20,001	1.5	20
KAZ	Kazakhstan	Asia	no	180,409	2,124	149,059	1.4	21
IDN	Indonesia	Asia	no	575,183	9,693	706,558	1.4	22
IRQ	Iraq	Asia	no	47,245	1,060	82,150	1.3	23
MYS	Malaysia	Asia	no	318,727	2,111	237,797	0.9	24
MNG	Mongolia	Asia	no	9,273	\$ 55	6,200	0.9	25
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	224,458	0.6	26
THA	Thailand	Asia	no	394,598	\$ 1,739	318,522	0.6	27
CHN	China	Asia	no	4,512,825	28,876	5,926,612	0.5	28
MAC	Macau	Asia	no	96,993	\$ 108	27,960	0.4	29
IND	India	Asia	no	1,429,881	5,862	1,727,111	0.3	30
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	7,296	0.3	31
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072	434,666	0.3	32
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	1,014,483	0.2	33
VNM	Viet Nam	Asia	no	115,441	\$ 223	106,427	0.2	34
KHM	Cambodia	Asia	no	4,335	\$ 2	11,242	0.0	35
LKA	Sri Lanka	Asia	no	49,967	\$ 9	49,552	0.0	36
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170			37
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023			38
NPL	Nepal	Asia	no	6,537	865			39
TWN	Taiwan	Asia	no	872,409	32,961			40
MMR	Myanmar	Asia	no	20,572	660			41
KWT	Kuwait	Asia	no	202,236	2,236			42
YEM	Yemen	Asia	no	21,556	214			43
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180			44
OMN	Oman	Asia	no	42,201	271			45
QAT	Qatar	Asia	no	113,981	661			46
GRC	Greece	Europe	no	642,888	20,095	301,083	6.7	1
ISL	Iceland	Europe	no	25,742	602	12,574	4.8	2
ALB	Albania	Europe	no	13,964	378	11,786	3.2	3
BGR	Bulgaria	Europe	no	70,023	1,426	47,714	3.0	4
SVN	Slovenia	Europe	no	36,896	1,311	46,908	2.8	5
ITA	Italy	Europe	no	3,701,619	54,248	2,051,412	2.6	6
AUT	Austria	Europe	no	615,592	7,442	379,069	2.0	7
CHE	Switzerland	Europe	no	839,518	\$ 10,275	527,920	2.0	8
MNE	Montenegro	Europe	no	2,738	77	4,111	1.9	9
HRV	Croatia	Europe	no	65,145	1,079	60,852	1.8	10
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	9,189	1.6	11
DEU	Germany	Europe	no	5,800,986	\$ 44,276	3,280,530	1.4	12
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	2,248,831	1.3	13
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	5,809	1.3	14
HUN	Hungary	Europe	no	286,209	\$ 1,548	128,632	1.2	15
NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	779,356	1.0	16
BEL	Belgium	Europe	no	739,159	\$ 4,460	469,374	1.0	17
SVK	Slovakia	Europe	no	124,390	\$ 623	87,268	0.7	18
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	192,032	0.7	19
POL	Poland	Europe	no	659,150	\$ 2,170	469,440	0.5	20
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	16,578	0.4	21
ESP	Spain	Europe	no	2,695,139	\$ 4,313	1,407,405	0.3	22
SRB	Serbia	Europe	no	16,907	\$ 113	38,423	0.3	23



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FRA	France	Europe	no	3,653,264	\$ 7,324	2,560,002	0.3	24
LUX	Luxembourg	Europe	no	45,036	\$ 102	53,334	0.2	25
PRT	Portugal	Europe	no	296,296	\$ 340	228,872	0.2	26
UKR	Ukraine	Europe	no	278,497	\$ 187	137,929	0.1	27
IRL	Ireland	Europe	no	244,117	\$ 306	211,390	0.1	28
EST	Estonia	Europe	no	28,069	\$ 22	19,217	0.1	29
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	1,479,819	0.1	30
LVA	Latvia	Europe	no	39,277	\$ 15	24,010	0.1	31
LTU	Lithuania	Europe	no	53,397	\$ 20	36,306	0.1	32
NOR	Norway	Europe	no	386,892	\$ 150	412,990	0.0	33
DNK	Denmark	Europe	no	381,265	\$ 66	309,866	0.0	34
SWE	Sweden	Europe	no	369,792	\$ 52	458,973	0.0	35
FIN	Finland	Europe	no	209,050	\$ 17	238,746	0.0	36
BLR	Belarus	Europe	no	74,427	\$ 5	54,713	0.0	37
SMR	San Marino	Europe	no	1,846	268			38
LIE	Liechtenstein	Europe	no	8,070	225			39
GIB	Gibraltar	Europe	no	3,141	78			40
MCO	Monaco	Europe	no	5,380	130			41
FRO	Faroe Islands	Europe	no	1,012	\$ -			42
MLT	Malta	Pacific	no	18,630	279	8,256	3.4	1
NZL	New Zealand	Australia	no	238,609	2,343			2
AUS	Australia	Australia	no	1,832,960	\$ 397			3
HND	Honduras	Latin America	no	18,844	2,976	15,400	19.3	1
SLV	El Salvador	Latin America	no	22,582	3,022	21,215	14.3	2
NIC	Nicaragua	Latin America	no	10,935	891	6,551	13.6	3
CRI	Costa Rica	Latin America	no	38,475	2,701	35,831	7.5	4
ECU	Ecuador	Latin America	no	68,550	4,162	57,978	7.2	5
COL	Colombia	Latin America	no	325,385	19,055	288,189	6.6	6
PER	Peru	Latin America	no	189,980	9,450	157,053	6.0	7
GTM	Guatemala	Latin America	no	38,263	2,304	41,186	5.6	8
BOL	Bolivia	Latin America	no	13,112	721	19,650	3.7	9
CHL	Chile	Latin America	no	326,640	7,647	212,741	3.6	10
PAN	Panama	Latin America	no	30,296	869	26,689	3.3	11
MEX	Mexico	Latin America	no	1,818,298	26,503	1,034,804	2.6	12
VEN	Venezuela	Latin America	no	435,869	9,004	391,848	2.3	13
USA	United States of America	North America	no	22,004,154	\$ 118,733	14,586,740	0.8	14
ARG	Argentina	Latin America	no	403,909	\$ 2,558	368,736	0.7	15
CAN	Canada	North America	no	2,051,584	\$ 1,390	1,577,040	0.1	16
BRA	Brazil	Latin America	no	1,715,746	\$ 77	2,087,890		17
GLP	Guadeloupe	Caribbean	no	19,838	3,795			18
MTQ	Martinique	Caribbean	no	21,052	3,045			19
CYM	Cayman Islands	Caribbean	no	3,603	58			20
TCA	Turks and Caicos islands	Caribbean	no	332	3			21
GUF	French Guiana	Latin America	no	8,339	\$ 0			22
PRY	Paraguay	Latin America	no	19,203	\$ 1	18,333		23
URY	Uruguay	Latin America	no	28,590	\$ -	40,265		24
TUN	Tunisia	North Africa	no	65,420	1,906	44,291	4.3	1
DZA	Algeria	North Africa	no	259,977	5,884	159,426	3.7	2
MAR	Morocco	North Africa	no	136,300	\$ 1,325	90,805	1.5	3
MWI	Malawi	Sub Saharan Africa	no	1,883	45	5,106	0.9	4
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	5,628	0.7	5
EGY	Egypt	North Africa	no	234,939	\$ 1,280	218,894	0.6	6
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	16,193	0.5	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	23,057	0.4	8
BDI	Burundi	Sub Saharan Africa	no	168	5	1,611	0.3	9
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	31,409	0.3	10
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	2,132	0.2	11
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	17,011	0.2	12
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	9,586	0.2	13
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	363,704	0.2	14
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	13,145	0.1	15
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	14,857	0.1	16
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	2,117	0.1	17
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	62,046	0.1	18
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	7,474	0.1	19
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	3,645	0.1	20
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	22,394	0.1	21
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	13,011	0.1	22
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	14,007	0.1	23



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	29,717	0.0	24
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	2,013	0.0	25
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	8,721	0.0	26
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	12,170	0.0	27
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	12,954	0.0	28
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	986	0.0	29
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	193,669	0.0	30
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	84,391	0.0	31
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	4,511	0.0	32
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	11,898	0.0	33
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	6,633	0.0	34
TCD	Chad	Sub Saharan Africa	no	6,664	\$ 1	7,588	0.0	35
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	3,636	0.0	36
DJI	Djibouti	Sub Saharan Africa	no	2,525	71			37
MYT	Mayotte	Sub Saharan Africa	no	2,341	17			38
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459			39
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2			40
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -			41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	8,820		42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	22,780		43
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	807		44
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	31,306		45
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	9,251		46
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	5,549		47
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	1,905		48
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	3,153		49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -			50
SLB	Solomon islands	Asia	yes	211	\$ 103	679	15.2	1
VUT	Vanuatu	Asia	yes	102	\$ 35	699	5.1	2
FJI	Fiji	Asia	yes	2,100	\$ 105	3,189	3.3	3
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	9,480	2.7	4
NCL	New Caledonia	Asia	yes	4,771	\$ 259			5
BHR	Bahrain	Asia	yes	32,575	\$ 189			6
TON	Tonga	Pacific	yes	230	\$ 60	348	17.2	1
PLW	Palau	Pacific	yes	279	\$ 11	171	6.2	2
WSM	Samoa	Pacific	yes	361	\$ 15	574	2.6	3
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	208,765	0.6	4
PYF	French Polynesia	Pacific	yes	6,568	\$ -			5
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	297		6
MDV	Maldives	Pacific	yes	907	\$ -	1,908		7
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	20,604	43.3	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	1,211	31.0	2
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911	6,710	28.5	3
DMA	Dominica	Caribbean	yes	356	\$ 112	466	24.1	4
GRD	Grenada	Caribbean	yes	1,229	\$ 170	773	22.0	5
BRB	Barbados	Caribbean	yes	4,677	\$ 807	4,110	19.6	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	705	15.2	7
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	51,766	12.2	8
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	14,252	8.5	9
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	1,198	5.7	10
BLZ	Belize	Latin America	yes	1,251	\$ 20	1,401	1.4	11
BHS	Bahamas	Caribbean	yes	21,313	\$ 9	7,538	0.1	12
GUY	Guyana	Latin America	yes	3,468	\$ 0	2,226	0.0	13
CUB	Cuba	Caribbean	yes	46,280	\$ 374			14
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108			15
AIA	Anguilla	Caribbean	yes	20	\$ 5			16
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150			17
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082			18
ABW	Aruba	Caribbean	yes	6,526	\$ 327			19
SUR	Suriname	Latin America	yes	2,797	\$ -			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	652		21
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	541	0.8	1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	9,729		2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	937		3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	1,648		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	879		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	197		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
PHL	Philippines	Asia	no	186,193	35,940	199,897	18.0	1
JPN	Japan	Asia	no	14,617,394	624,437	5,601,557	11.1	2
BTN	Bhutan	Asia	no	1,167	147	1,420	10.4	3
GEO	Georgia	Asia	no	21,157	968	11,484	8.4	4
KGZ	Kyrgyzstan	Asia	no	3,644	229	4,273	5.4	5
LBN	Lebanon	Asia	no	56,965	2,002	39,051	5.1	6
AZE	Azerbaijan	Asia	no	45,197	2,418	48,307	5.0	7
ARM	Armenia	Asia	no	14,187	466	9,710	4.8	8
CYP	Cyprus	Asia	no	23,484	1,053	22,539	4.7	9
UZB	Uzbekistan	Asia	no	44,370	1,574	39,013	4.0	10
TJK	Tajikistan	Asia	no	5,576	210	5,570	3.8	11
TUR	Turkey	Asia	no	1,578,228	26,102	727,056	3.6	12
AFG	Afghanistan	Asia	no	16,132	520	15,162	3.4	13
ISR	Israel	Asia	no	293,550	7,083	210,353	3.4	14
BGD	Bangladesh	Asia	no	72,949	3,688	109,695	3.4	15
JOR	Jordan	Asia	no	40,997	863	27,820	3.1	16
PAK	Pakistan	Asia	no	170,444	4,857	183,620	2.7	17
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	57,266	2.4	18
TKM	Turkmenistan	Asia	no	12,707	307	18,107	1.7	19
KAZ	Kazakhstan	Asia	no	180,409	2,124	131,868	1.6	20
IDN	Indonesia	Asia	no	575,183	9,693	686,633	1.4	21
IRQ	Iraq	Asia	no	47,245	1,060	77,842	1.4	22
MNG	Mongolia	Asia	no	9,273	\$ 55	5,640	1.0	23
MYS	Malaysia	Asia	no	318,727	2,111	229,566	0.9	24
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	229,165	0.6	25
THA	Thailand	Asia	no	394,598	\$ 1,739	304,812	0.6	26
CHN	China	Asia	no	4,512,825	28,876	5,957,012	0.5	27
IND	India	Asia	no	1,429,881	5,862	1,712,645	0.3	28
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	6,978	0.3	29
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	1,014,760	0.2	30
VNM	Viet Nam	Asia	no	115,441	\$ 223	102,008	0.2	31
KHM	Cambodia	Asia	no	4,335	\$ 2	10,664	0.0	32
LKA	Sri Lanka	Asia	no	49,967	\$ 9	48,916	0.0	33
ARE	United Arab Emirates	Asia	no	248,015	6,688			34
MAC	Macau	Asia	no	96,993	\$ 108			35
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072			36
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170			37
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023			38
NPL	Nepal	Asia	no	6,537	865			39
TWN	Taiwan	Asia	no	872,409	32,961			40
MMR	Myanmar	Asia	no	20,572	660			41
KWT	Kuwait	Asia	no	202,236	2,236			42
YEM	Yemen	Asia	no	21,556	214			43
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180			44
OMN	Oman	Asia	no	42,201	271			45
QAT	Qatar	Asia	no	113,981	661			46
GRC	Greece	Europe	no	642,888	20,095	292,874	6.9	1
ISL	Iceland	Europe	no	25,742	602	9,975	6.0	2
ALB	Albania	Europe	no	13,964	378	11,682	3.2	3
BGR	Bulgaria	Europe	no	70,023	1,426	46,025	3.1	4
SVN	Slovenia	Europe	no	36,896	1,311	46,217	2.8	5
ITA	Italy	Europe	no	3,701,619	54,248	2,023,916	2.7	6
AUT	Austria	Europe	no	615,592	7,442	377,063	2.0	7
MNE	Montenegro	Europe	no	2,738	77	4,083	1.9	8
HRV	Croatia	Europe	no	65,145	1,079	58,806	1.8	9
CHE	Switzerland	Europe	no	839,518	\$ 10,275	568,639	1.8	10
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	8,992	1.7	11
DEU	Germany	Europe	no	5,800,986	\$ 44,276	3,341,391	1.3	12
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	2,280,719	1.3	13
HUN	Hungary	Europe	no	286,209	\$ 1,548	122,372	1.3	14
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	6,280	1.2	15
NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	772,747	1.0	16
BEL	Belgium	Europe	no	739,159	\$ 4,460	477,644	0.9	17
SVK	Slovakia	Europe	no	124,390	\$ 623	86,077	0.7	18
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	179,432	0.7	19
POL	Poland	Europe	no	659,150	\$ 2,170	452,275	0.5	20
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	17,008	0.4	21
ESP	Spain	Europe	no	2,695,139	\$ 4,313	1,388,744	0.3	22
SRB	Serbia	Europe	no	16,907	\$ 113	37,533	0.3	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	Risk indicator GNI [USD million]	PML ₂₅₀ /GNI [%]	Ranking
FRA	France	Europe	no	3,653,264	\$ 7,324	2,606,780	0.3	24
LUX	Luxembourg	Europe	no	45,036	\$ 102	37,925	0.3	25
IRL	Ireland	Europe	no	244,117	\$ 306	171,260	0.2	26
PRT	Portugal	Europe	no	296,296	\$ 340	221,243	0.2	27
UKR	Ukraine	Europe	no	278,497	\$ 187	135,920	0.1	28
EST	Estonia	Europe	no	28,069	\$ 22	18,420	0.1	29
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	1,431,121	0.1	30
LVA	Latvia	Europe	no	39,277	\$ 15	24,073	0.1	31
LTU	Lithuania	Europe	no	53,397	\$ 20	35,687	0.1	32
NOR	Norway	Europe	no	386,892	\$ 150	413,980	0.0	33
DNK	Denmark	Europe	no	381,265	\$ 66	315,664	0.0	34
SWE	Sweden	Europe	no	369,792	\$ 52	467,254	0.0	35
FIN	Finland	Europe	no	209,050	\$ 17	242,899	0.0	36
BLR	Belarus	Europe	no	74,427	\$ 5	53,379	0.0	37
SMR	San Marino	Europe	no	1,846	268			38
LIE	Liechtenstein	Europe	no	8,070	225			39
GIB	Gibraltar	Europe	no	3,141	78			40
MCO	Monaco	Europe	no	5,380	130			41
FRO	Faroe Islands	Europe	no	1,012	\$ -			42
MLT	Malta	Pacific	no	18,630	279	7,698	3.6	1
NZL	New Zealand	Australia	no	238,609	2,343			2
AUS	Australia	Australia	no	1,832,960	\$ 397			3
HND	Honduras	Latin America	no	18,844	2,976	14,798	20.1	1
SLV	El Salvador	Latin America	no	22,582	3,022	20,834	14.5	2
NIC	Nicaragua	Latin America	no	10,935	891	6,273	14.2	3
CRI	Costa Rica	Latin America	no	38,475	2,701	34,896	7.7	4
ECU	Ecuador	Latin America	no	68,550	4,162	56,924	7.3	5
COL	Colombia	Latin America	no	325,385	19,055	276,072	6.9	6
PER	Peru	Latin America	no	189,980	9,450	147,000	6.4	7
GTM	Guatemala	Latin America	no	38,263	2,304	39,987	5.8	8
CHL	Chile	Latin America	no	326,640	7,647	197,331	3.9	9
BOL	Bolivia	Latin America	no	13,112	721	18,790	3.8	10
PAN	Panama	Latin America	no	30,296	869	25,037	3.5	11
MEX	Mexico	Latin America	no	1,818,298	26,503	1,020,288	2.6	12
VEN	Venezuela	Latin America	no	435,869	9,004	389,038	2.3	13
USA	United States of America	North America	no	22,004,154	\$ 118,733	14,635,600	0.8	14
ARG	Argentina	Latin America	no	403,909	\$ 2,558	358,619	0.7	15
CAN	Canada	North America	no	2,051,584	\$ 1,390	1,549,652	0.1	16
BRA	Brazil	Latin America	no	1,715,746	\$ 77	2,049,164		17
GLP	Guadeloupe	Caribbean	no	19,838	3,795			18
MTQ	Martinique	Caribbean	no	21,052	3,045			19
CYM	Cayman Islands	Caribbean	no	3,603	58			20
TCA	Turks and Caicos islands	Caribbean	no	332	3			21
GUF	French Guiana	Latin America	no	8,339	\$ 0			22
PRY	Paraguay	Latin America	no	19,203	\$ 1	17,853		23
URY	Uruguay	Latin America	no	28,590	\$ -	39,161		24
TUN	Tunisia	North Africa	no	65,420	1,906	42,020	4.5	1
DZA	Algeria	North Africa	no	259,977	5,884	155,538	3.8	2
MAR	Morocco	North Africa	no	136,300	\$ 1,325	88,578	1.5	3
MWI	Malawi	Sub Saharan Africa	no	1,883	45	4,980	0.9	4
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	5,582	0.7	5
EGY	Egypt	North Africa	no	234,939	\$ 1,280	214,530	0.6	6
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	14,300	0.5	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	23,012	0.4	8
BDI	Burundi	Sub Saharan Africa	no	168	5	1,589	0.3	9
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	31,264	0.3	10
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	16,720	0.2	11
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	2,553	0.2	12
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	9,421	0.2	13
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	356,475	0.2	14
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	12,263	0.2	15
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	14,771	0.1	16
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	55,939	0.1	17
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	2,097	0.1	18
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	6,988	0.1	19
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	11,467	0.1	20
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	9,578	0.1	21
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	3,586	0.1	22
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	22,030	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	29,625	0.0	24
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	2,009	0.0	25
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	8,628	0.0	26
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	12,077	0.0	27
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	12,900	0.0	28
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	805	0.0	29
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	176,769	0.0	30
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	8,619	0.0	31
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	75,516	0.0	32
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	4,231	0.0	33
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	6,633	0.0	34
TCD	Chad	Sub Saharan Africa	no	6,664	\$ 1	6,734	0.0	35
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	3,672	0.0	36
DJI	Djibouti	Sub Saharan Africa	no	2,525	71			37
MYT	Mayotte	Sub Saharan Africa	no	2,341	17			38
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459			39
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2			40
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -			41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	8,810		42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	21,729		43
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	743		44
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	30,776		45
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	8,909		46
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	5,493		47
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	1,905		48
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	2,826		49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -			50
SLB	Solomon islands	Asia	yes	211	\$ 103	555	18.6	1
VUT	Vanuatu	Asia	yes	102	\$ 35	678	5.2	2
FJI	Fiji	Asia	yes	2,100	\$ 105	3,090	3.4	3
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	9,262	2.8	4
NCL	New Caledonia	Asia	yes	4,771	\$ 259			5
BHR	Bahrain	Asia	yes	32,575	\$ 189			6
TON	Tonga	Pacific	yes	230	\$ 60	352	17.0	1
PLW	Palau	Pacific	yes	279	\$ 11	135	7.8	2
WSM	Samoa	Pacific	yes	361	\$ 15	557	2.7	3
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	201,050	0.6	4
PYF	French Polynesia	Pacific	yes	6,568	\$ -			5
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	312		6
MDV	Maldives	Pacific	yes	907	\$ -	1,817		7
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	19,255	46.3	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	1,179	31.9	2
DMA	Dominica	Caribbean	yes	356	\$ 112	454	24.7	3
GRD	Grenada	Caribbean	yes	1,229	\$ 170	727	23.4	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	691	15.5	5
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	49,972	12.6	6
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	13,574	9.0	7
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	1,163	5.9	8
BLZ	Belize	Latin America	yes	1,251	\$ 20	1,303	1.5	9
GUY	Guyana	Latin America	yes	3,468	\$ 0	2,238	0.0	10
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911			11
BRB	Barbados	Caribbean	yes	4,677	\$ 807			12
BHS	Bahamas	Caribbean	yes	21,313	\$ 9			13
CUB	Cuba	Caribbean	yes	46,280	\$ 374			14
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108			15
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PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082			18
ABW	Aruba	Caribbean	yes	6,526	\$ 327			19
SUR	Suriname	Latin America	yes	2,797	\$ -			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	620		21
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	539	0.8	1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	9,798		2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	855		3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	1,579		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	877		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	200		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
PHL	Philippines	Asia	no	46,143	1,243	26.9	1
KGZ	Kyrgyzstan	Asia	no	756	4	5.3	2
NPL	Nepal	Asia	no	2,411	12	5.1	3
TWN	Taiwan	Asia	no	38,310	163	4.3	4
JPN	Japan	Asia	no	542,290	2,246	4.1	5
BTN	Bhutan	Asia	no	371	1	3.9	6
TJK	Tajikistan	Asia	no	2,412	9	3.7	7
UZB	Uzbekistan	Asia	no	10,382	36	3.5	8
AZE	Azerbaijan	Asia	no	12,666	36	2.8	9
BGD	Bangladesh	Asia	no	14,034	38	2.7	10
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305	2.5	11
AFG	Afghanistan	Asia	no	9,988	24	2.4	12
PAK	Pakistan	Asia	no	37,562	90	2.4	13
GEO	Georgia	Asia	no	3,815	9	2.4	14
ARM	Armenia	Asia	no	2,899	6	2.0	15
MMR	Myanmar	Asia	no	9,829	19	1.9	16
ARE	United Arab Emirates	Asia	no	11,165	19	1.7	17
IDN	Indonesia	Asia	no	113,457	190	1.7	18
TKM	Turkmenistan	Asia	no	3,779	5	1.4	19
CYP	Cyprus	Asia	no	1,154	2	1.4	20
IRQ	Iraq	Asia	no	15,555	18	1.2	21
TUR	Turkey	Asia	no	164,353	186	1.1	22
KAZ	Kazakhstan	Asia	no	20,880	21	1.0	23
LBN	Lebanon	Asia	no	4,139	4	0.9	24
SYR	Syrian Arab Republic	Asia	no	18,783	14	0.8	25
KWT	Kuwait	Asia	no	6,168	4	0.7	26
ISR	Israel	Asia	no	22,505	15	0.7	27
JOR	Jordan	Asia	no	10,652	7	0.6	28
QAT	Qatar	Asia	no	2,116	1	0.6	29
OMN	Oman	Asia	no	4,095	2	0.5	30
CHN	China	Asia	no	599,699	310	0.5	31
MYS	Malaysia	Asia	no	37,377	19	0.5	32
YEM	Yemen	Asia	no	10,133	4	0.4	33
IND	India	Asia	no	320,919	117	0.4	34
LAO	Lao People's Democratic Republic	Asia	no	938	0	0.3	35
BRN	Brunei Darussalam	Asia	no	895	0	0.3	36
MNG	Mongolia	Asia	no	2,335	1	0.2	37
THA	Thailand	Asia	no	43,178	9	0.2	38
PRK	Dem People's Rep of Korea	Asia	no	10,245	2	0.2	39
SAU	Saudi Arabia	Asia	no	73,922	8	0.1	40
VNM	Viet Nam	Asia	no	24,066	1	0.1	41
KOR	Republic of Korea	Asia	no	95,180	5	0.1	42
HKG	Hong Kong	Asia	no	47,718	2	0.0	43
MAC	Macau	Asia	no	1,989	0	0.0	44
KHM	Cambodia	Asia	no	1,623	-	0.0	45
LKA	Sri Lanka	Asia	no	14,385	0	-	46
GRC	Greece	Europe	no	27,597	81	2.9	1
SMR	San Marino	Europe	no	113	0	2.8	2
BGR	Bulgaria	Europe	no	9,040	15	1.6	3
ITA	Italy	Europe	no	188,526	193	1.0	4
ALB	Albania	Europe	no	3,381	3	1.0	5
SVN	Slovenia	Europe	no	2,231	2	0.9	6
MNE	Montenegro	Europe	no	269	0	0.9	7
GIB	Gibraltar	Europe	no	274	0	0.7	8
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	0.7	9
HRV	Croatia	Europe	no	6,064	4	0.7	10
LIE	Liechtenstein	Europe	no	198	0	0.7	11
MCO	Monaco	Europe	no	123	0	0.7	12
ISL	Iceland	Europe	no	1,071	1	0.5	13
AUT	Austria	Europe	no	28,002	11	0.4	14
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	0.3	15
CHE	Switzerland	Europe	no	40,078	12	0.3	16
SRB	Serbia	Europe	no	1,938	1	0.3	17
DEU	Germany	Europe	no	262,867	54	0.2	18
MDA	Moldova, Republic of	Europe	no	3,416	1	0.2	19
HUN	Hungary	Europe	no	30,434	5	0.2	20
SVK	Slovakia	Europe	no	9,245	2	0.2	21
BEL	Belgium	Europe	no	29,496	4	0.2	22
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
CZE	Czech Republic	Europe	no	23,126	3	0.1	24
NLD	Netherlands	Europe	no	49,481	5	0.1	25
POL	Poland	Europe	no	60,706	6	0.1	26
LUX	Luxembourg	Europe	no	2,462	0	0.1	27
FRA	France	Europe	no	236,236	17	0.1	28
RUS	Russian Federation	Europe	no	288,219	21	0.1	29
PRT	Portugal	Europe	no	18,087	1	0.1	30
ESP	Spain	Europe	no	122,131	8	0.1	31
IRL	Ireland	Europe	no	16,223	1	0.0	32
EST	Estonia	Europe	no	2,851	0	0.0	33
UKR	Ukraine	Europe	no	32,769	1	0.0	34
LTU	Lithuania	Europe	no	7,227	0	0.0	35
LVA	Latvia	Europe	no	4,998	-	0.0	36
DNK	Denmark	Europe	no	31,778	0	0.0	37
NOR	Norway	Europe	no	33,800	0	0.0	38
SWE	Sweden	Europe	no	27,971	0	-	39
FIN	Finland	Europe	no	14,927	-	-	40
BLR	Belarus	Europe	no	21,160	-	-	41
FRO	Faroe Islands	Europe	no	42	-	-	42
NZL	New Zealand	Australia	no	12,682	10	0.8	1
MLT	Malta	Pacific	no	1,330	1	0.6	2
AUS	Australia	Australia	no	47,971	1	0.0	3
SLV	El Salvador	Latin America	no	4,297	57	13.2	1
HND	Honduras	Latin America	no	5,414	66	12.2	2
GLP	Guadeloupe	Caribbean	no	904	9	9.9	3
NIC	Nicaragua	Latin America	no	2,310	12	5.0	4
MTQ	Martinique	Caribbean	no	889	4	4.4	5
GTM	Guatemala	Latin America	no	8,748	34	3.9	6
CRI	Costa Rica	Latin America	no	6,892	23	3.3	7
ECU	Ecuador	Latin America	no	10,202	28	2.7	8
COL	Colombia	Latin America	no	53,054	130	2.4	9
CHL	Chile	Latin America	no	18,070	44	2.4	10
PER	Peru	Latin America	no	24,717	57	2.3	11
BOL	Bolivia	Latin America	no	4,521	7	1.6	12
PAN	Panama	Latin America	no	5,115	7	1.4	13
VEN	Venezuela	Latin America	no	42,697	43	1.0	14
MEX	Mexico	Latin America	no	260,866	245	0.9	15
USA	United States of America	North America	no	1,224,802	474	0.4	16
CYM	Cayman Islands	Caribbean	no	81	-	0.4	17
TCA	Turks and Caicos islands	Caribbean	no	28	-	0.4	18
ARG	Argentina	Latin America	no	39,520	12	0.3	19
CAN	Canada	North America	no	121,895	4	0.0	20
BRA	Brazil	Latin America	no	300,613	0	-	21
GUF	French Guiana	Latin America	no	378	-	-	22
PRY	Paraguay	Latin America	no	4,301	-	-	23
URY	Uruguay	Latin America	no	4,269	-	-	24
DZA	Algeria	North Africa	no	67,908	92	1.4	1
BDI	Burundi	Sub Saharan Africa	no	145	0	0.9	2
TUN	Tunisia	North Africa	no	14,190	11	0.8	3
RWA	Rwanda	Sub Saharan Africa	no	962	1	0.7	4
DJI	Djibouti	Sub Saharan Africa	no	656	0	0.6	5
MWI	Malawi	Sub Saharan Africa	no	1,519	1	0.5	6
MYT	Mayotte	Sub Saharan Africa	no	154	0	0.4	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	0.4	8
MAR	Morocco	North Africa	no	41,389	12	0.3	9
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.3	10
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5	0.3	11
UGA	Uganda	Sub Saharan Africa	no	3,787	1	0.2	12
EGY	Egypt	North Africa	no	101,974	22	0.2	13
KEN	Kenya	Sub Saharan Africa	no	8,730	1	0.2	14
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	0.2	15
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.1	16
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	0.1	17
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	0.1	18
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.1	19
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	0.1	20
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	0.1	21
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.1	22
MDG	Madagascar	Sub Saharan Africa	no	1,546	0	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
ERI	Eritrea	Sub Saharan Africa	no	1,076	0	0.1	24
SDN	Sudan	Sub Saharan Africa	no	12,166	1	0.0	25
CAF	Central African Republic	Sub Saharan Africa	no	351	-	0.0	26
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-	0.0	27
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	0.0	28
SOM	Somalia	Sub Saharan Africa	no	2,303	0	0.0	29
NAM	Namibia	Sub Saharan Africa	no	1,706	-	0.0	30
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	0.0	31
GAB	Gabon	Sub Saharan Africa	no	2,633	-	0.0	32
SEN	Senegal	Sub Saharan Africa	no	5,536	-	0.0	33
GIN	Guinea	Sub Saharan Africa	no	1,643	-	0.0	34
AGO	Angola	Sub Saharan Africa	no	9,237	0	0.0	35
TCO	Chad	Sub Saharan Africa	no	4,004	-	-	36
COG	Congo	Sub Saharan Africa	no	3,326	-	-	37
REU	Réunion	Sub Saharan Africa	no	2,161	-	-	38
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	41
GMB	Gambia	Sub Saharan Africa	no	334	-	-	42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	43
LBR	Liberia	Sub Saharan Africa	no	263	-	-	44
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	46
NER	Niger	Sub Saharan Africa	no	1,230	-	-	47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	48
TGO	Togo	Sub Saharan Africa	no	529	-	-	49
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	50
VUT	Vanuatu	Asia	yes	25	3	99.6	1
SLB	Solomon islands	Asia	yes	85	5	59.2	2
PNG	Papua New Guinea	Asia	yes	1,289	20	15.8	3
NCL	New Caledonia	Asia	yes	107	0	4.1	4
FJI	Fiji	Asia	yes	309	0	1.3	5
BHR	Bahrain	Asia	yes	1,670	1	0.5	6
TON	Tonga	Pacific	yes	47	2	40.9	1
WSM	Samoa	Pacific	yes	93	0	2.4	2
PLW	Palau	Pacific	yes	25	-	0.8	3
SGP	Singapore	Pacific	yes	18,751	4	0.2	4
PYF	French Polynesia	Pacific	yes	116	-	-	5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	-	6
MDV	Maldives	Pacific	yes	154	-	-	7
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35	15.2	1
DMA	Dominica	Caribbean	yes	43	1	13.5	2
AIA	Anguilla	Caribbean	yes	2	-	10.0	3
VGB	British Virgin Islands	Caribbean	yes	18	0	8.8	4
ATG	Antigua and Barbuda	Caribbean	yes	272	2	8.8	5
HTI	Haiti	Caribbean	yes	1,584	12	7.5	6
DOM	Dominican Republic	Caribbean	yes	13,790	68	5.0	7
BRB	Barbados	Caribbean	yes	253	1	3.8	8
GRD	Grenada	Caribbean	yes	63	0	3.7	9
LCA	Saint Lucia	Caribbean	yes	73	0	3.5	10
VIR	United States Virgin Islands	Caribbean	yes	82	0	3.3	11
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	2.6	12
PRI	Puerto Rico	Caribbean	yes	3,197	8	2.4	13
ABW	Aruba	Caribbean	yes	358	0	1.2	14
BLZ	Belize	Latin America	yes	65	0	1.1	15
JAM	Jamaica	Caribbean	yes	4,148	4	0.9	16
CUB	Cuba	Caribbean	yes	5,936	1	0.2	17
BHS	Bahamas	Caribbean	yes	985	-	0.0	18
GUY	Guyana	Latin America	yes	884	-	0.0	19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	20
SUR	Suriname	Latin America	yes	364	-	-	21
COM	Comoros	Sub Saharan Africa	yes	156	0	0.4	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	-	2
SYC	Seychelles	Sub Saharan Africa	yes	631	-	-	3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
AFG	Afghanistan	Asia	no	9,988	24	1,852	13.2	1
PHL	Philippines	Asia	no	46,143	1,243	203,208	6.1	2
TJK	Tajikistan	Asia	no	2,412	9	8,227	1.1	3
AZE	Azerbaijan	Asia	no	12,666	36	33,777	1.1	4
UZB	Uzbekistan	Asia	no	10,382	36	38,768	0.9	5
KGZ	Kyrgyzstan	Asia	no	756	4	6,067	0.7	6
GEO	Georgia	Asia	no	3,815	9	13,709	0.7	7
ARM	Armenia	Asia	no	2,899	6	11,639	0.5	8
PAK	Pakistan	Asia	no	37,562	90	186,087	0.5	9
JPN	Japan	Asia	no	542,290	2,246	5,396,265	0.4	10
BGD	Bangladesh	Asia	no	14,034	38	106,991	0.4	11
IDN	Indonesia	Asia	no	113,457	190	695,009	0.3	12
TKM	Turkmenistan	Asia	no	3,779	5	20,575	0.3	13
SYR	Syrian Arab Republic	Asia	no	18,783	14	59,401	0.2	14
TUR	Turkey	Asia	no	164,353	186	774,921	0.2	15
JOR	Jordan	Asia	no	10,652	7	33,470	0.2	16
KAZ	Kazakhstan	Asia	no	20,880	21	127,087	0.2	17
MYS	Malaysia	Asia	no	37,377	19	195,443	0.1	18
LBN	Lebanon	Asia	no	4,139	4	47,915	0.1	19
ARE	United Arab Emirates	Asia	no	11,165	19	270,334	0.1	20
ISR	Israel	Asia	no	22,505	15	212,896	0.1	21
MNG	Mongolia	Asia	no	2,335	1	6,675	0.1	22
IND	India	Asia	no	320,919	117	1,783,129	0.1	23
CYP	Cyprus	Asia	no	1,154	2	24,623	0.1	24
CHN	China	Asia	no	599,699	310	5,694,512	0.1	25
LAO	Lao People's Democratic Republic	Asia	no	938	0	7,629	0.0	26
THA	Thailand	Asia	no	43,178	9	295,072	0.0	27
SAU	Saudi Arabia	Asia	no	73,922	8	341,826	0.0	28
VNM	Viet Nam	Asia	no	24,066	1	117,363	0.0	29
HKG	Hong Kong	Asia	no	47,718	2	211,863	0.0	30
MAC	Macau	Asia	no	1,989	0	11,994	0.0	31
NPL	Nepal	Asia	no	2,411	12			32
BTN	Bhutan	Asia	no	371	1			33
TWN	Taiwan	Asia	no	38,310	163			34
MMR	Myanmar	Asia	no	9,829	19			35
IRQ	Iraq	Asia	no	15,555	18			36
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			37
KWT	Kuwait	Asia	no	6,168	4			38
YEM	Yemen	Asia	no	10,133	4			39
BRN	Brunei Darussalam	Asia	no	895	0			40
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			41
OMN	Oman	Asia	no	4,095	2			42
QAT	Qatar	Asia	no	2,116	1			43
KOR	Republic of Korea	Asia	no	95,180	5	986,184		44
KHM	Cambodia	Asia	no	1,623	-	11,854		45
LKA	Sri Lanka	Asia	no	14,385	0	54,079		46
BGR	Bulgaria	Europe	no	9,040	15	48,622	0.3	1
GRC	Greece	Europe	no	27,597	81	327,811	0.3	2
ALB	Albania	Europe	no	3,381	3	14,377	0.2	3
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	10,902	0.1	4
ITA	Italy	Europe	no	188,526	193	2,087,749	0.1	5
MDA	Moldova, Republic of	Europe	no	3,416	1	8,053	0.1	6
HRV	Croatia	Europe	no	6,064	4	61,162	0.1	7
SVN	Slovenia	Europe	no	2,231	2	46,643	0.1	8
ISL	Iceland	Europe	no	1,071	1	11,313	0.1	9
MNE	Montenegro	Europe	no	269	0	5,265	0.0	10
HUN	Hungary	Europe	no	30,434	5	120,269	0.0	11
CHE	Switzerland	Europe	no	40,078	12	468,037	0.0	12
AUT	Austria	Europe	no	28,002	11	362,737	0.0	13
DEU	Germany	Europe	no	262,867	54	3,101,126	0.0	14
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	20,030	0.0	15
SVK	Slovakia	Europe	no	9,245	2	88,405	0.0	16
CZE	Czech Republic	Europe	no	23,126	3	182,876	0.0	17
RUS	Russian Federation	Europe	no	288,219	21	1,356,393	0.0	18
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	2,325,009	0.0	19
BEL	Belgium	Europe	no	29,496	4	456,696	0.0	20
SRB	Serbia	Europe	no	1,938	1	44,764	0.0	21
NLD	Netherlands	Europe	no	49,481	5	721,171	0.0	22
POL	Poland	Europe	no	60,706	6	475,111	0.0	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	Risk indicator GNE [USD million]	AAL/GNE [‰]	Ranking
LUX	Luxembourg	Europe	no	2,462	0	36,700	0.0	24
FRA	France	Europe	no	236,236	17	2,620,062	0.0	25
ESP	Spain	Europe	no	122,131	8	1,437,861	0.0	26
EST	Estonia	Europe	no	2,851	0	17,933	0.0	27
SMR	San Marino	Europe	no	113	0			28
LIE	Liechtenstein	Europe	no	198	0			29
GIB	Gibraltar	Europe	no	274	0			30
MCO	Monaco	Europe	no	123	0			31
IRL	Ireland	Europe	no	16,223	1	171,957		32
PRT	Portugal	Europe	no	18,087	1	245,251		33
UKR	Ukraine	Europe	no	32,769	1	141,773		34
LTU	Lithuania	Europe	no	7,227	0	36,811		35
NOR	Norway	Europe	no	33,800	0	358,009		36
LVA	Latvia	Europe	no	4,998	-	24,210		37
DNK	Denmark	Europe	no	31,778	0	292,535		38
SWE	Sweden	Europe	no	27,971	0	431,251		39
FIN	Finland	Europe	no	14,927	-	235,640		40
BLR	Belarus	Europe	no	21,160	-	62,212		41
FRO	Faroe Islands	Europe	no	42	-			42
MLT	Malta	Pacific	no	1,330	1	8,111	0.1	1
NZL	New Zealand	Australia	no	12,682	10			2
AUS	Australia	Australia	no	47,971	1			3
HND	Honduras	Latin America	no	5,414	66	18,594	3.6	1
SLV	El Salvador	Latin America	no	4,297	57	24,921	2.3	2
NIC	Nicaragua	Latin America	no	2,310	12	8,405	1.4	3
GTM	Guatemala	Latin America	no	8,748	34	45,670	0.7	4
CRI	Costa Rica	Latin America	no	6,892	23	36,941	0.6	5
ECU	Ecuador	Latin America	no	10,202	28	61,265	0.5	6
COL	Colombia	Latin America	no	53,054	130	294,580	0.4	7
BOL	Bolivia	Latin America	no	4,521	7	18,301	0.4	8
PER	Peru	Latin America	no	24,717	57	152,561	0.4	9
PAN	Panama	Latin America	no	5,115	7	27,738	0.3	10
MEX	Mexico	Latin America	no	260,866	245	1,049,803	0.2	11
CHL	Chile	Latin America	no	18,070	44	198,120	0.2	12
VEN	Venezuela	Latin America	no	42,697	43	346,724	0.1	13
ARG	Argentina	Latin America	no	39,520	12	356,545	0.0	14
USA	United States of America	North America	no	1,224,802	474	15,103,640	0.0	15
GLP	Guadeloupe	Caribbean	no	904	9			16
MTQ	Martinique	Caribbean	no	889	4			17
CYM	Cayman Islands	Caribbean	no	81	-			18
TCA	Turks and Caicos islands	Caribbean	no	28	-			19
CAN	Canada	North America	no	121,895	4	1,606,667		20
BRA	Brazil	Latin America	no	300,613	0	2,108,637		21
GUF	French Guiana	Latin America	no	378	-			22
PRY	Paraguay	Latin America	no	4,301	-	17,941		23
URY	Uruguay	Latin America	no	4,269	-	39,936		24
TUN	Tunisia	North Africa	no	14,190	11	46,643	0.2	1
MWI	Malawi	Sub Saharan Africa	no	1,519	1	5,605	0.1	2
MAR	Morocco	North Africa	no	41,389	12	99,808	0.1	3
EGY	Egypt	North Africa	no	101,974	22	229,362	0.1	4
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	14,723	0.1	5
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	3,511	0.1	6
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	26,224	0.1	7
UGA	Uganda	Sub Saharan Africa	no	3,787	1	18,757	0.1	8
KEN	Kenya	Sub Saharan Africa	no	8,730	1	35,486	0.0	9
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	11,309	0.0	10
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	15,617	0.0	11
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	369,463	0.0	12
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	0.0	13
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	14
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	35,978	0.0	15
SDN	Sudan	Sub Saharan Africa	no	12,166	1	61,511	0.0	16
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	8,897	0.0	17
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	23,429	0.0	18
BDI	Burundi	Sub Saharan Africa	no	145	0			19
DJI	Djibouti	Sub Saharan Africa	no	656	0			20
RWA	Rwanda	Sub Saharan Africa	no	962	1			21
DZA	Algeria	North Africa	no	67,908	92			22
MYT	Mayotte	Sub Saharan Africa	no	154	0			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [%]	
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			24
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			25
CAF	Central African Republic	Sub Saharan Africa	no	351	-			26
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			27
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			28
SOM	Somalia	Sub Saharan Africa	no	2,303	0			29
NAM	Namibia	Sub Saharan Africa	no	1,706	-	12,035		30
AGO	Angola	Sub Saharan Africa	no	9,237	0	72,456		31
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	168,996		32
GAB	Gabon	Sub Saharan Africa	no	2,633	-	10,274		33
SEN	Senegal	Sub Saharan Africa	no	5,536	-	15,485		34
GIN	Guinea	Sub Saharan Africa	no	1,643	-	4,711		35
TCD	Chad	Sub Saharan Africa	no	4,004	-	9,469		36
COG	Congo	Sub Saharan Africa	no	3,326	-	8,109		37
REU	Réunion	Sub Saharan Africa	no	2,161	-			38
BEN	Benin	Sub Saharan Africa	no	1,223	-	7,536		39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	21,734		41
GMB	Gambia	Sub Saharan Africa	no	334	-	963		42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	35,414		43
LBR	Liberia	Sub Saharan Africa	no	263	-			44
MLI	Mali	Sub Saharan Africa	no	1,887	-			45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	4,195		46
NER	Niger	Sub Saharan Africa	no	1,230	-			47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	2,142		48
TGO	Togo	Sub Saharan Africa	no	529	-			49
ESH	Western Sahara	Sub Saharan Africa	no	418	-			50
SLB	Solomon islands	Asia	yes	85	5	885	5.7	1
VUT	Vanuatu	Asia	yes	25	3	743	3.4	2
PNG	Papua New Guinea	Asia	yes	1,289	20	9,217	2.2	3
FJI	Fiji	Asia	yes	309	0	3,569	0.1	4
NCL	New Caledonia	Asia	yes	107	0			5
BHR	Bahrain	Asia	yes	1,670	1			6
TON	Tonga	Pacific	yes	47	2	510	3.7	1
WSM	Samoa	Pacific	yes	93	0	727	0.3	2
SGP	Singapore	Pacific	yes	18,751	4	150,187	0.0	3
PLW	Palau	Pacific	yes	25	-			4
PYF	French Polynesia	Pacific	yes	116	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			6
MDV	Maldives	Pacific	yes	154	-	2,244		7
ATG	Antigua and Barbuda	Caribbean	yes	272	2	1,329	1.8	1
HTI	Haiti	Caribbean	yes	1,584	12	9,743	1.2	2
DOM	Dominican Republic	Caribbean	yes	13,790	68	57,847	1.2	3
DMA	Dominica	Caribbean	yes	43	1	573	1.1	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914	0.4	5
BRB	Barbados	Caribbean	yes	253	1	4,317	0.2	6
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.2	7
JAM	Jamaica	Caribbean	yes	4,148	4	16,776	0.2	8
GRD	Grenada	Caribbean	yes	63	0	996	0.2	9
AIA	Anguilla	Caribbean	yes	2	-			10
VGB	British Virgin Islands	Caribbean	yes	18	0			11
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			12
VIR	United States Virgin Islands	Caribbean	yes	82	0			13
PRI	Puerto Rico	Caribbean	yes	3,197	8			14
ABW	Aruba	Caribbean	yes	358	0			15
BLZ	Belize	Latin America	yes	65	0			16
CUB	Cuba	Caribbean	yes	5,936	1			17
BHS	Bahamas	Caribbean	yes	985	-			18
GUY	Guyana	Latin America	yes	884	-			19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	766		20
SUR	Suriname	Latin America	yes	364	-			21
COM	Comoros	Sub Saharan Africa	yes	156	0			1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	10,934		2
SYC	Seychelles	Sub Saharan Africa	yes	631	-			3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
PHL	Philippines	Asia	no	46,143	1,243	19,403	64.0	1
BGD	Bangladesh	Asia	no	14,034	38	5,387	7.1	2
PAK	Pakistan	Asia	no	37,562	90	14,053	6.4	3
AZE	Azerbaijan	Asia	no	12,666	36	5,852	6.1	4
TJK	Tajikistan	Asia	no	2,412	9	1,658	5.4	5
UZB	Uzbekistan	Asia	no	10,382	36	6,853	5.3	6
ARM	Armenia	Asia	no	2,899	6	1,231	4.6	7
KGZ	Kyrgyzstan	Asia	no	756	4	877	4.6	8
GEO	Georgia	Asia	no	3,815	9	2,453	3.7	9
IDN	Indonesia	Asia	no	113,457	190	64,015	3.0	10
TKM	Turkmenistan	Asia	no	3,779	5	2,212	2.4	11
SYR	Syrian Arab Republic	Asia	no	18,783	14	5,991	2.4	12
JPN	Japan	Asia	no	542,290	2,246	1,094,349	2.1	13
TUR	Turkey	Asia	no	164,353	186	104,758	1.8	14
KAZ	Kazakhstan	Asia	no	20,880	21	16,117	1.3	15
JOR	Jordan	Asia	no	10,652	7	5,910	1.1	16
LBN	Lebanon	Asia	no	4,139	4	4,711	0.8	17
ARE	United Arab Emirates	Asia	no	11,165	19	24,545	0.8	18
MYS	Malaysia	Asia	no	37,377	19	30,273	0.6	19
MNG	Mongolia	Asia	no	2,335	1	851	0.6	20
IND	India	Asia	no	320,919	117	198,830	0.6	21
LAO	Lao People's Democratic Republic	Asia	no	938	0	672	0.5	22
CHN	China	Asia	no	599,699	310	791,999	0.4	23
CYP	Cyprus	Asia	no	1,154	2	4,558	0.4	24
ISR	Israel	Asia	no	22,505	15	52,616	0.3	25
THA	Thailand	Asia	no	43,178	9	41,294	0.2	26
VNM	Viet Nam	Asia	no	24,066	1	6,947	0.2	27
HKG	Hong Kong	Asia	no	47,718	2	18,948	0.1	28
SAU	Saudi Arabia	Asia	no	73,922	8	97,875	0.1	29
MAC	Macau	Asia	no	1,989	0	2,186	0.1	30
KOR	Republic of Korea	Asia	no	95,180	5	155,748	0.0	31
LKA	Sri Lanka	Asia	no	14,385	0	7,718	0.0	32
AFG	Afghanistan	Asia	no	9,988	24	-	-	33
NPL	Nepal	Asia	no	2,411	12			34
BTN	Bhutan	Asia	no	371	1			35
TWN	Taiwan	Asia	no	38,310	163			36
MMR	Myanmar	Asia	no	9,829	19			37
IRQ	Iraq	Asia	no	15,555	18			38
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			39
KWT	Kuwait	Asia	no	6,168	4			40
YEM	Yemen	Asia	no	10,133	4			41
BRN	Brunei Darussalam	Asia	no	895	0			42
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			43
OMN	Oman	Asia	no	4,095	2			44
QAT	Qatar	Asia	no	2,116	1			45
KHM	Cambodia	Asia	no	1,623	-	713		46
ALB	Albania	Europe	no	3,381	3	952	3.6	1
BGR	Bulgaria	Europe	no	9,040	15	7,539	1.9	2
GRC	Greece	Europe	no	27,597	81	54,736	1.5	3
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	1,683	0.8	4
MDA	Moldova, Republic of	Europe	no	3,416	1	1,377	0.5	5
ITA	Italy	Europe	no	188,526	193	435,241	0.4	6
HRV	Croatia	Europe	no	6,064	4	13,084	0.3	7
MNE	Montenegro	Europe	no	269	0	775	0.3	8
SVN	Slovenia	Europe	no	2,231	2	9,752	0.2	9
CHE	Switzerland	Europe	no	40,078	12	60,549	0.2	10
HUN	Hungary	Europe	no	30,434	5	28,084	0.2	11
ISL	Iceland	Europe	no	1,071	1	3,261	0.2	12
AUT	Austria	Europe	no	28,002	11	73,430	0.2	13
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	3,498	0.1	14
SVK	Slovakia	Europe	no	9,245	2	17,073	0.1	15
DEU	Germany	Europe	no	262,867	54	647,378	0.1	16
CZE	Czech Republic	Europe	no	23,126	3	41,897	0.1	17
SRB	Serbia	Europe	no	1,938	1	7,380	0.1	18
RUS	Russian Federation	Europe	no	288,219	21	287,875	0.1	19
POL	Poland	Europe	no	60,706	6	88,643	0.1	20
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	518,869	0.1	21
BEL	Belgium	Europe	no	29,496	4	113,598	0.0	22
FRA	France	Europe	no	236,236	17	635,621	0.0	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	Risk indicator GGC [USD million]	AAL/GGC [%]	Ranking
ESP	Spain	Europe	no	122,131	8	292,417	0.0	24
EST	Estonia	Europe	no	2,851	0	3,959	0.0	25
NLD	Netherlands	Europe	no	49,481	5	221,964	0.0	26
LUX	Luxembourg	Europe	no	2,462	0	8,868	0.0	27
PRT	Portugal	Europe	no	18,087	1	49,074	0.0	28
UKR	Ukraine	Europe	no	32,769	1	27,731	0.0	29
IRL	Ireland	Europe	no	16,223	1	39,102	0.0	30
LTU	Lithuania	Europe	no	7,227	0	7,241	0.0	31
SMR	San Marino	Europe	no	113	0			32
LIE	Liechtenstein	Europe	no	198	0			33
GIB	Gibraltar	Europe	no	274	0			34
MCO	Monaco	Europe	no	123	0			35
NOR	Norway	Europe	no	33,800	0	92,372		36
LVA	Latvia	Europe	no	4,998	-	4,122		37
DNK	Denmark	Europe	no	31,778	0	90,977		38
SWE	Sweden	Europe	no	27,971	0	123,918		39
FIN	Finland	Europe	no	14,927	-	58,644		40
BLR	Belarus	Europe	no	21,160	-	8,828		41
FRO	Faroe Islands	Europe	no	42	-			42
MLT	Malta	Pacific	no	1,330	1	1,711	0.4	1
NZL	New Zealand	Australia	no	12,682	10			2
AUS	Australia	Australia	no	47,971	1			3
SLV	El Salvador	Latin America	no	4,297	57	2,312	24.6	1
HND	Honduras	Latin America	no	5,414	66	2,777	23.8	2
NIC	Nicaragua	Latin America	no	2,310	12	627	18.3	3
GTM	Guatemala	Latin America	no	8,748	34	4,254	7.9	4
PAN	Panama	Latin America	no	5,115	7	1,561	4.5	5
ECU	Ecuador	Latin America	no	10,202	28	6,807	4.1	6
PER	Peru	Latin America	no	24,717	57	15,659	3.7	7
CRI	Costa Rica	Latin America	no	6,892	23	6,358	3.6	8
COL	Colombia	Latin America	no	53,054	130	46,769	2.8	9
BOL	Bolivia	Latin America	no	4,521	7	2,718	2.6	10
MEX	Mexico	Latin America	no	260,866	245	120,640	2.0	11
CHL	Chile	Latin America	no	18,070	44	26,588	1.7	12
VEN	Venezuela	Latin America	no	42,697	43	42,419	1.0	13
ARG	Argentina	Latin America	no	39,520	12	55,024	0.2	14
USA	United States of America	North America	no	1,224,802	474	2,522,700	0.2	15
CAN	Canada	North America	no	121,895	4	343,217	0.0	16
GLP	Guadeloupe	Caribbean	no	904	9			17
MTQ	Martinique	Caribbean	no	889	4			18
CYM	Cayman Islands	Caribbean	no	81	-			19
TCA	Turks and Caicos islands	Caribbean	no	28	-			20
BRA	Brazil	Latin America	no	300,613	0	442,019		21
GUF	French Guiana	Latin America	no	378	-			22
PRY	Paraguay	Latin America	no	4,301	-	1,711		23
URY	Uruguay	Latin America	no	4,269	-	5,117		24
TUN	Tunisia	North Africa	no	14,190	11	7,209	1.5	1
EGY	Egypt	North Africa	no	101,974	22	24,436	0.9	2
MWI	Malawi	Sub Saharan Africa	no	1,519	1	976	0.8	3
MAR	Morocco	North Africa	no	41,389	12	15,913	0.8	4
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	2,153	0.6	5
UGA	Uganda	Sub Saharan Africa	no	3,787	1	2,015	0.5	6
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	1,166	0.4	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	4,052	0.4	8
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	719	0.4	9
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	935	0.3	10
KEN	Kenya	Sub Saharan Africa	no	8,730	1	4,226	0.3	11
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	71,742	0.1	12
SWZ	Swaziland	Sub Saharan Africa	no	769	0	913	0.1	13
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,130	0.1	14
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	3,029	0.1	15
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	1,281	0.1	16
SDN	Sudan	Sub Saharan Africa	no	12,166	1	9,428	0.1	17
CMR	Cameroon	Sub Saharan Africa	no	6,256	0			18
BDI	Burundi	Sub Saharan Africa	no	145	0			19
DJI	Djibouti	Sub Saharan Africa	no	656	0			20
RWA	Rwanda	Sub Saharan Africa	no	962	1			21
DZA	Algeria	North Africa	no	67,908	92			22
MYT	Mayotte	Sub Saharan Africa	no	154	0			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [‰]	
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			24
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			25
CAF	Central African Republic	Sub Saharan Africa	no	351	-			26
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			27
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			28
SOM	Somalia	Sub Saharan Africa	no	2,303	0			29
NAM	Namibia	Sub Saharan Africa	no	1,706	-	2,692		30
AGO	Angola	Sub Saharan Africa	no	9,237	0			31
NGA	Nigeria	Sub Saharan Africa	no	45,741	0			32
GAB	Gabon	Sub Saharan Africa	no	2,633	-	1,267		33
SEN	Senegal	Sub Saharan Africa	no	5,536	-	1,124		34
GIN	Guinea	Sub Saharan Africa	no	1,643	-	339		35
TCD	Chad	Sub Saharan Africa	no	4,004	-	1,131		36
COG	Congo	Sub Saharan Africa	no	3,326	-	1,186		37
REU	Réunion	Sub Saharan Africa	no	2,161	-			38
BEN	Benin	Sub Saharan Africa	no	1,223	-			39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	1,968		41
GMB	Gambia	Sub Saharan Africa	no	334	-	121		42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	3,511		43
LBR	Liberia	Sub Saharan Africa	no	263	-			44
MLI	Mali	Sub Saharan Africa	no	1,887	-			45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	646		46
NER	Niger	Sub Saharan Africa	no	1,230	-			47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	233		48
TGO	Togo	Sub Saharan Africa	no	529	-			49
ESH	Western Sahara	Sub Saharan Africa	no	418	-			50
PNG	Papua New Guinea	Asia	yes	1,289	20	897	22.8	1
SLB	Solomon islands	Asia	yes	85	5			2
VUT	Vanuatu	Asia	yes	25	3			3
FJI	Fiji	Asia	yes	309	0			4
NCL	New Caledonia	Asia	yes	107	0			5
BHR	Bahrain	Asia	yes	1,670	1			6
TON	Tonga	Pacific	yes	47	2	67	28.5	1
SGP	Singapore	Pacific	yes	18,751	4	22,293	0.2	2
WSM	Samoa	Pacific	yes	93	0			3
PLW	Palau	Pacific	yes	25	-			4
PYF	French Polynesia	Pacific	yes	116	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			6
MDV	Maldives	Pacific	yes	154	-			7
DOM	Dominican Republic	Caribbean	yes	13,790	68	3,965	17.3	1
DMA	Dominica	Caribbean	yes	43	1	81	7.4	2
LCA	Saint Lucia	Caribbean	yes	73	0	192	1.6	3
JAM	Jamaica	Caribbean	yes	4,148	4	2,368	1.6	4
BRB	Barbados	Caribbean	yes	253	1	835	1.2	5
ATG	Antigua and Barbuda	Caribbean	yes	272	2			6
HTI	Haiti	Caribbean	yes	1,584	12			7
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			8
GRD	Grenada	Caribbean	yes	63	0			9
AIA	Anguilla	Caribbean	yes	2	-			10
VGB	British Virgin Islands	Caribbean	yes	18	0			11
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			12
VIR	United States Virgin Islands	Caribbean	yes	82	0			13
PRI	Puerto Rico	Caribbean	yes	3,197	8			14
ABW	Aruba	Caribbean	yes	358	0			15
BLZ	Belize	Latin America	yes	65	0			16
CUB	Cuba	Caribbean	yes	5,936	1			17
BHS	Bahamas	Caribbean	yes	985	-			18
GUY	Guyana	Latin America	yes	884	-	341		19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-			20
SUR	Suriname	Latin America	yes	364	-			21
COM	Comoros	Sub Saharan Africa	yes	156	0			1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	1,393		2
SYC	Seychelles	Sub Saharan Africa	yes	631	-			3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [%]	
TJK	Tajikistan	Asia	no	2,412	9	143	62.1	1
PHL	Philippines	Asia	no	46,143	1,243	54,291	22.9	2
GEO	Georgia	Asia	no	3,815	9	1,152	7.8	3
KGZ	Kyrgyzstan	Asia	no	756	4	908	4.4	4
ARM	Armenia	Asia	no	2,899	6	1,761	3.2	5
JOR	Jordan	Asia	no	10,652	7	2,520	2.7	6
PAK	Pakistan	Asia	no	37,562	90	38,491	2.3	7
TUR	Turkey	Asia	no	164,353	186	99,948	1.9	8
JPN	Japan	Asia	no	542,290	2,246	1,296,892	1.7	9
AZE	Azerbaijan	Asia	no	12,666	36	23,913	1.5	10
SYR	Syrian Arab Republic	Asia	no	18,783	14	9,944	1.4	11
BGD	Bangladesh	Asia	no	14,034	38	38,537	1.0	12
LBN	Lebanon	Asia	no	4,139	4	4,428	0.9	13
IDN	Indonesia	Asia	no	113,457	190	225,795	0.8	14
CYP	Cyprus	Asia	no	1,154	2	2,138	0.7	15
KAZ	Kazakhstan	Asia	no	20,880	21	41,723	0.5	16
ISR	Israel	Asia	no	22,505	15	39,726	0.4	17
MNG	Mongolia	Asia	no	2,335	1	1,682	0.3	18
MYS	Malaysia	Asia	no	37,377	19	78,265	0.2	19
LAO	Lao People's Democratic Republic	Asia	no	938	0	1,429	0.2	20
IND	India	Asia	no	320,919	117	582,180	0.2	21
CHN	China	Asia	no	599,699	310	3,137,116	0.1	22
THA	Thailand	Asia	no	43,178	9	97,152	0.1	23
VNM	Viet Nam	Asia	no	24,066	1	33,911	0.0	24
HKG	Hong Kong	Asia	no	47,718	2	67,159	0.0	25
KOR	Republic of Korea	Asia	no	95,180	5	321,095	0.0	26
LKA	Sri Lanka	Asia	no	14,385	0	12,267	0.0	27
UZB	Uzbekistan	Asia	no	10,382	36			28
TKM	Turkmenistan	Asia	no	3,779	5			29
ARE	United Arab Emirates	Asia	no	11,165	19			30
SAU	Saudi Arabia	Asia	no	73,922	8			31
MAC	Macau	Asia	no	1,989	0			32
AFG	Afghanistan	Asia	no	9,988	24			33
NPL	Nepal	Asia	no	2,411	12			34
BTN	Bhutan	Asia	no	371	1			35
TWN	Taiwan	Asia	no	38,310	163			36
MMR	Myanmar	Asia	no	9,829	19			37
IRQ	Iraq	Asia	no	15,555	18			38
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			39
KWT	Kuwait	Asia	no	6,168	4			40
YEM	Yemen	Asia	no	10,133	4			41
BRN	Brunei Darussalam	Asia	no	895	0			42
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			43
OMN	Oman	Asia	no	4,095	2			44
QAT	Qatar	Asia	no	2,116	1			45
KHM	Cambodia	Asia	no	1,623	-	1,408		46
GRC	Greece	Europe	no	27,597	81	13,935	5.8	1
ISL	Iceland	Europe	no	1,071	1	200	3.0	2
ALB	Albania	Europe	no	3,381	3	1,584	2.1	3
BGR	Bulgaria	Europe	no	9,040	15	11,333	1.3	4
MDA	Moldova, Republic of	Europe	no	3,416	1	920	0.8	5
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	2,228	0.6	6
ITA	Italy	Europe	no	188,526	193	329,250	0.6	7
HRV	Croatia	Europe	no	6,064	4	13,329	0.3	8
SVN	Slovenia	Europe	no	2,231	2	10,333	0.2	9
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	2,469	0.2	10
HUN	Hungary	Europe	no	30,434	5	26,266	0.2	11
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	262,969	0.1	12
AUT	Austria	Europe	no	28,002	11	93,705	0.1	13
SRB	Serbia	Europe	no	1,938	1	5,958	0.1	14
SVK	Slovakia	Europe	no	9,245	2	17,544	0.1	15
CZE	Czech Republic	Europe	no	23,126	3	40,414	0.1	16
POL	Poland	Europe	no	60,706	6	79,285	0.1	17
DEU	Germany	Europe	no	262,867	54	758,427	0.1	18
CHE	Switzerland	Europe	no	40,078	12	189,918	0.1	19
RUS	Russian Federation	Europe	no	288,219	21	409,148	0.1	20
PRT	Portugal	Europe	no	18,087	1	22,310	0.0	21
BEL	Belgium	Europe	no	29,496	4	107,310	0.0	22
FRA	France	Europe	no	236,236	17	447,208	0.0	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [%]	
NLD	Netherlands	Europe	no	49,481	5	182,627	0.0	24
ESP	Spain	Europe	no	122,131	8	264,944	0.0	25
UKR	Ukraine	Europe	no	32,769	1	23,811	0.0	26
IRL	Ireland	Europe	no	16,223	1	20,525	0.0	27
EST	Estonia	Europe	no	2,851	0	4,667	0.0	28
LUX	Luxembourg	Europe	no	2,462	0	10,285	0.0	29
LTU	Lithuania	Europe	no	7,227	0	6,723	0.0	30
DNK	Denmark	Europe	no	31,778	0	68,142	0.0	31
NOR	Norway	Europe	no	33,800	0	139,329	0.0	32
SWE	Sweden	Europe	no	27,971	0	114,466	0.0	33
MNE	Montenegro	Europe	no	269	0			34
SMR	San Marino	Europe	no	113	0			35
LIE	Liechtenstein	Europe	no	198	0			36
GIB	Gibraltar	Europe	no	274	0			37
MCO	Monaco	Europe	no	123	0			38
LVA	Latvia	Europe	no	4,998	-	5,696		39
FIN	Finland	Europe	no	14,927	-	49,428		40
BLR	Belarus	Europe	no	21,160	-	13,701		41
FRO	Faroe Islands	Europe	no	42	-			42
MLT	Malta	Pacific	no	1,330	1	1,012	0.7	1
NZL	New Zealand	Australia	no	12,682	10			2
AUS	Australia	Australia	no	47,971	1			3
HND	Honduras	Latin America	no	5,414	66	2,499	26.4	1
SLV	El Salvador	Latin America	no	4,297	57	2,332	24.4	2
NIC	Nicaragua	Latin America	no	2,310	12	843	13.6	3
GTM	Guatemala	Latin America	no	8,748	34	5,176	6.5	4
CRI	Costa Rica	Latin America	no	6,892	23	5,483	4.1	5
COL	Colombia	Latin America	no	53,054	130	54,533	2.4	6
ECU	Ecuador	Latin America	no	10,202	28	13,145	2.1	7
PER	Peru	Latin America	no	24,717	57	35,828	1.6	8
PAN	Panama	Latin America	no	5,115	7	4,608	1.5	9
BOL	Bolivia	Latin America	no	4,521	7	4,912	1.4	10
MEX	Mexico	Latin America	no	260,866	245	250,619	1.0	11
CHL	Chile	Latin America	no	18,070	44	49,226	0.9	12
VEN	Venezuela	Latin America	no	42,697	43	123,339	0.3	13
USA	United States of America	North America	no	1,224,802	474	1,591,569	0.3	14
ARG	Argentina	Latin America	no	39,520	12	82,845	0.1	15
CAN	Canada	North America	no	121,895	4	290,588	0.0	16
BRA	Brazil	Latin America	no	300,613	0	345,223	0.0	17
GLP	Guadeloupe	Caribbean	no	904	9			18
MTQ	Martinique	Caribbean	no	889	4			19
CYM	Cayman Islands	Caribbean	no	81	-			20
TCA	Turks and Caicos islands	Caribbean	no	28	-			21
GUF	French Guiana	Latin America	no	378	-			22
PRY	Paraguay	Latin America	no	4,301	-	4,028		23
URY	Uruguay	Latin America	no	4,269	-	6,538		24
TUN	Tunisia	North Africa	no	14,190	11	8,985	1.2	1
SWZ	Swaziland	Sub Saharan Africa	no	769	0	94	1.1	2
EGY	Egypt	North Africa	no	101,974	22	38,951	0.6	3
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	1,040	0.5	4
MAR	Morocco	North Africa	no	41,389	12	27,932	0.4	5
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	743	0.4	6
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	4,664	0.4	7
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	3,637	0.4	8
UGA	Uganda	Sub Saharan Africa	no	3,787	1	3,193	0.3	9
KEN	Kenya	Sub Saharan Africa	no	8,730	1	5,011	0.3	10
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	59,850	0.2	11
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,926	0.1	12
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	4,934	0.1	13
SDN	Sudan	Sub Saharan Africa	no	12,166	1	11,031	0.0	14
AGO	Angola	Sub Saharan Africa	no	9,237	0	13,454	0.0	15
MWI	Malawi	Sub Saharan Africa	no	1,519	1			16
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0			17
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0			18
CMR	Cameroon	Sub Saharan Africa	no	6,256	0			19
BDI	Burundi	Sub Saharan Africa	no	145	0			20
DJI	Djibouti	Sub Saharan Africa	no	656	0			21
RWA	Rwanda	Sub Saharan Africa	no	962	1			22
DZA	Algeria	North Africa	no	67,908	92			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [‰]	
MYT	Mayotte	Sub Saharan Africa	no	154	0			24
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			25
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			26
CAF	Central African Republic	Sub Saharan Africa	no	351	-			27
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			28
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			29
SOM	Somalia	Sub Saharan Africa	no	2,303	0			30
NAM	Namibia	Sub Saharan Africa	no	1,706	-	4,130		31
NGA	Nigeria	Sub Saharan Africa	no	45,741	0			32
GAB	Gabon	Sub Saharan Africa	no	2,633	-			33
SEN	Senegal	Sub Saharan Africa	no	5,536	-			34
GIN	Guinea	Sub Saharan Africa	no	1,643	-	443		35
TCD	Chad	Sub Saharan Africa	no	4,004	-			36
COG	Congo	Sub Saharan Africa	no	3,326	-			37
REU	Réunion	Sub Saharan Africa	no	2,161	-			38
BEN	Benin	Sub Saharan Africa	no	1,223	-			39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-			41
GMB	Gambia	Sub Saharan Africa	no	334	-	102		42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	6,616		43
LBR	Liberia	Sub Saharan Africa	no	263	-			44
MLI	Mali	Sub Saharan Africa	no	1,887	-			45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-			46
NER	Niger	Sub Saharan Africa	no	1,230	-			47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	248		48
TGO	Togo	Sub Saharan Africa	no	529	-			49
ESH	Western Sahara	Sub Saharan Africa	no	418	-			50
PNG	Papua New Guinea	Asia	yes	1,289	20	2,660	7.7	1
SLB	Solomon islands	Asia	yes	85	5			2
VUT	Vanuatu	Asia	yes	25	3			3
FJI	Fiji	Asia	yes	309	0			4
NCL	New Caledonia	Asia	yes	107	0			5
BHR	Bahrain	Asia	yes	1,670	1			6
SGP	Singapore	Pacific	yes	18,751	4	95,806	0.0	1
TON	Tonga	Pacific	yes	47	2			2
WSM	Samoa	Pacific	yes	93	0			3
PLW	Palau	Pacific	yes	25	-			4
PYF	French Polynesia	Pacific	yes	116	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			6
MDV	Maldives	Pacific	yes	154	-			7
DMA	Dominica	Caribbean	yes	43	1	6	104.2	1
DOM	Dominican Republic	Caribbean	yes	13,790	68	3,771	18.1	2
JAM	Jamaica	Caribbean	yes	4,148	4	1,745	2.1	3
LCA	Saint Lucia	Caribbean	yes	73	0	223	1.3	4
BRB	Barbados	Caribbean	yes	253	1			5
ATG	Antigua and Barbuda	Caribbean	yes	272	2			6
HTI	Haiti	Caribbean	yes	1,584	12			7
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			8
GRD	Grenada	Caribbean	yes	63	0			9
AIA	Anguilla	Caribbean	yes	2	-			10
VGB	British Virgin Islands	Caribbean	yes	18	0			11
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			12
VIR	United States Virgin Islands	Caribbean	yes	82	0			13
PRI	Puerto Rico	Caribbean	yes	3,197	8			14
ABW	Aruba	Caribbean	yes	358	0			15
BLZ	Belize	Latin America	yes	65	0			16
CUB	Cuba	Caribbean	yes	5,936	1			17
BHS	Bahamas	Caribbean	yes	985	-			18
GUY	Guyana	Latin America	yes	884	-	338		19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-			20
SUR	Suriname	Latin America	yes	364	-			21
COM	Comoros	Sub Saharan Africa	yes	156	0			1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	1,603		2
SYC	Seychelles	Sub Saharan Africa	yes	631	-			3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
PHL	Philippines	Asia	no	46,143	9,068	19.7	1
NPL	Nepal	Asia	no	2,411	343	14.2	2
BTN	Bhutan	Asia	no	371	50	13.5	3
KGZ	Kyrgyzstan	Asia	no	756	48	6.4	4
AZE	Azerbaijan	Asia	no	12,666	682	5.4	5
BGD	Bangladesh	Asia	no	14,034	718	5.1	6
GEO	Georgia	Asia	no	3,815	175	4.6	7
CYP	Cyprus	Asia	no	1,154	52	4.5	8
JPN	Japan	Asia	no	542,290	23,364	4.3	9
TJK	Tajikistan	Asia	no	2,412	91	3.8	10
TWN	Taiwan	Asia	no	38,310	1,422	3.7	11
UZB	Uzbekistan	Asia	no	10,382	368	3.6	12
LBN	Lebanon	Asia	no	4,139	146	3.5	13
ARM	Armenia	Asia	no	2,899	95	3.3	14
AFG	Afghanistan	Asia	no	9,988	323	3.2	15
MMR	Myanmar	Asia	no	9,829	317	3.2	16
PAK	Pakistan	Asia	no	37,562	1,071	2.9	17
ARE	United Arab Emirates	Asia	no	11,165	302	2.7	18
TKM	Turkmenistan	Asia	no	3,779	92	2.4	19
ISR	Israel	Asia	no	22,505	543	2.4	20
IRQ	Iraq	Asia	no	15,555	352	2.3	21
JOR	Jordan	Asia	no	10,652	224	2.1	22
SYR	Syrian Arab Republic	Asia	no	18,783	375	2.0	23
IDN	Indonesia	Asia	no	113,457	1,877	1.7	24
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970	1.6	25
TUR	Turkey	Asia	no	164,353	2,703	1.6	26
KAZ	Kazakhstan	Asia	no	20,880	249	1.2	27
KWT	Kuwait	Asia	no	6,168	68	1.1	28
YEM	Yemen	Asia	no	10,133	101	1.0	29
LAO	Lao People's Democratic Republic	Asia	no	938	9	1.0	30
BRN	Brunei Darussalam	Asia	no	895	8	0.8	31
MYS	Malaysia	Asia	no	37,377	259	0.7	32
CHN	China	Asia	no	599,699	3,876	0.7	33
PRK	Dem People's Rep of Korea	Asia	no	10,245	66	0.7	34
OMN	Oman	Asia	no	4,095	27	0.7	35
MNG	Mongolia	Asia	no	2,335	14	0.6	36
QAT	Qatar	Asia	no	2,116	12	0.6	37
THA	Thailand	Asia	no	43,178	190	0.4	38
IND	India	Asia	no	320,919	1,329	0.4	39
VNM	Viet Nam	Asia	no	24,066	44	0.2	40
SAU	Saudi Arabia	Asia	no	73,922	106	0.1	41
HKG	Hong Kong	Asia	no	47,718	60	0.1	42
MAC	Macau	Asia	no	1,989	2	0.1	43
KOR	Republic of Korea	Asia	no	95,180	76	0.1	44
KHM	Cambodia	Asia	no	1,623	1	0.0	45
LKA	Sri Lanka	Asia	no	14,385	3	0.0	46
SMR	San Marino	Europe	no	113	16	14.6	1
GRC	Greece	Europe	no	27,597	998	3.6	2
SVN	Slovenia	Europe	no	2,231	80	3.6	3
MNE	Montenegro	Europe	no	269	7	2.8	4
LIE	Liechtenstein	Europe	no	198	5	2.8	5
ALB	Albania	Europe	no	3,381	91	2.7	6
GIB	Gibraltar	Europe	no	274	7	2.4	7
MCO	Monaco	Europe	no	123	3	2.3	8
ISL	Iceland	Europe	no	1,071	25	2.3	9
BGR	Bulgaria	Europe	no	9,040	184	2.0	10
HRV	Croatia	Europe	no	6,064	103	1.7	11
ITA	Italy	Europe	no	188,526	2,771	1.5	12
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	1.2	13
CHE	Switzerland	Europe	no	40,078	487	1.2	14
AUT	Austria	Europe	no	28,002	337	1.2	15
DEU	Germany	Europe	no	262,867	2,006	0.8	16
MDA	Moldova, Republic of	Europe	no	3,416	25	0.7	17
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	0.7	18
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	0.7	19
BEL	Belgium	Europe	no	29,496	191	0.7	20
SRB	Serbia	Europe	no	1,938	12	0.6	21
HUN	Hungary	Europe	no	30,434	160	0.5	22
NLD	Netherlands	Europe	no	49,481	251	0.5	23



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SVK	Slovakia	Europe	no	9,245	46	0.5	24
CZE	Czech Republic	Europe	no	23,126	85	0.4	25
POL	Poland	Europe	no	60,706	199	0.3	26
LUX	Luxembourg	Europe	no	2,462	6	0.2	27
FRA	France	Europe	no	236,236	469	0.2	28
ESP	Spain	Europe	no	122,131	174	0.1	29
IRL	Ireland	Europe	no	16,223	20	0.1	30
PRT	Portugal	Europe	no	18,087	17	0.1	31
EST	Estonia	Europe	no	2,851	2	0.1	32
RUS	Russian Federation	Europe	no	288,219	206	0.1	33
UKR	Ukraine	Europe	no	32,769	20	0.1	34
LTU	Lithuania	Europe	no	7,227	3	0.0	35
NOR	Norway	Europe	no	33,800	13	0.0	36
LVA	Latvia	Europe	no	4,998	2	0.0	37
DNK	Denmark	Europe	no	31,778	6	0.0	38
SWE	Sweden	Europe	no	27,971	4	0.0	39
FIN	Finland	Europe	no	14,927	1	0.0	40
BLR	Belarus	Europe	no	21,160	1	-	41
FRO	Faroe Islands	Europe	no	42	-	-	42
MLT	Malta	Pacific	no	1,330	20	1.5	1
NZL	New Zealand	Australia	no	12,682	141	1.1	2
AUS	Australia	Australia	no	47,971	10	0.0	3
GLP	Guadeloupe	Caribbean	no	904	178	19.7	1
HND	Honduras	Latin America	no	5,414	891	16.5	2
MTQ	Martinique	Caribbean	no	889	134	15.1	3
SLV	El Salvador	Latin America	no	4,297	582	13.5	4
NIC	Nicaragua	Latin America	no	2,310	188	8.1	5
CRI	Costa Rica	Latin America	no	6,892	480	7.0	6
ECU	Ecuador	Latin America	no	10,202	614	6.0	7
GTM	Guatemala	Latin America	no	8,748	518	5.9	8
COL	Colombia	Latin America	no	53,054	3,103	5.9	9
BOL	Bolivia	Latin America	no	4,521	251	5.6	10
PER	Peru	Latin America	no	24,717	1,243	5.0	11
PAN	Panama	Latin America	no	5,115	146	2.9	12
CHL	Chile	Latin America	no	18,070	404	2.2	13
VEN	Venezuela	Latin America	no	42,697	885	2.1	14
CYM	Cayman Islands	Caribbean	no	81	1	1.6	15
MEX	Mexico	Latin America	no	260,866	4,079	1.6	16
TCA	Turks and Caicos islands	Caribbean	no	28	0	1.1	17
ARG	Argentina	Latin America	no	39,520	247	0.6	18
USA	United States of America	North America	no	1,224,802	6,768	0.6	19
CAN	Canada	North America	no	121,895	82	0.1	20
BRA	Brazil	Latin America	no	300,613	13	-	21
GUF	French Guiana	Latin America	no	378	-	-	22
PRY	Paraguay	Latin America	no	4,301	-	-	23
URY	Uruguay	Latin America	no	4,269	-	-	24
BDI	Burundi	Sub Saharan Africa	no	145	4	3.1	1
TUN	Tunisia	North Africa	no	14,190	415	2.9	2
DJI	Djibouti	Sub Saharan Africa	no	656	19	2.8	3
RWA	Rwanda	Sub Saharan Africa	no	962	24	2.5	4
MWI	Malawi	Sub Saharan Africa	no	1,519	37	2.4	5
DZA	Algeria	North Africa	no	67,908	1,535	2.3	6
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	1.2	7
MAR	Morocco	North Africa	no	41,389	344	0.8	8
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	0.8	9
MYT	Mayotte	Sub Saharan Africa	no	154	1	0.7	10
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108	0.6	11
UGA	Uganda	Sub Saharan Africa	no	3,787	20	0.5	12
EGY	Egypt	North Africa	no	101,974	553	0.5	13
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	0.5	14
KEN	Kenya	Sub Saharan Africa	no	8,730	45	0.5	15
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	0.3	16
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	0.3	17
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	0.2	18
SDN	Sudan	Sub Saharan Africa	no	12,166	19	0.2	19
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	0.2	20
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	0.1	21
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	0.1	22
SWZ	Swaziland	Sub Saharan Africa	no	769	1	0.1	23



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CAF	Central African Republic	Sub Saharan Africa	no	351	0	0.1	24
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	0.1	25
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	0.1	26
BWA	Botswana	Sub Saharan Africa	no	4,287	3	0.1	27
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	0.1	28
SOM	Somalia	Sub Saharan Africa	no	2,303	1	0.1	29
NAM	Namibia	Sub Saharan Africa	no	1,706	1	0.0	30
AGO	Angola	Sub Saharan Africa	no	9,237	3	0.0	31
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	0.0	32
GAB	Gabon	Sub Saharan Africa	no	2,633	1	0.0	33
SEN	Senegal	Sub Saharan Africa	no	5,536	1	0.0	34
GIN	Guinea	Sub Saharan Africa	no	1,643	0	0.0	35
TCO	Chad	Sub Saharan Africa	no	4,004	0	0.0	36
COG	Congo	Sub Saharan Africa	no	3,326	0	0.0	37
REU	Réunion	Sub Saharan Africa	no	2,161	-	-	38
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	41
GMB	Gambia	Sub Saharan Africa	no	334	-	-	42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	43
LBR	Liberia	Sub Saharan Africa	no	263	-	-	44
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	46
NER	Niger	Sub Saharan Africa	no	1,230	-	-	47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	48
TGO	Togo	Sub Saharan Africa	no	529	-	-	49
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	50
SLB	Solomon islands	Asia	yes	85	50	59.4	1
VUT	Vanuatu	Asia	yes	25	10	38.8	2
NCL	New Caledonia	Asia	yes	107	6	5.8	3
FJI	Fiji	Asia	yes	309	16	5.2	4
PNG	Papua New Guinea	Asia	yes	1,289	63	4.9	5
BHR	Bahrain	Asia	yes	1,670	10	0.6	6
TON	Tonga	Pacific	yes	47	13	28.7	1
WSM	Samoa	Pacific	yes	93	4	4.4	2
PLW	Palau	Pacific	yes	25	1	3.7	3
SGP	Singapore	Pacific	yes	18,751	43	0.2	4
PYF	French Polynesia	Pacific	yes	116	-	-	5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	-	6
MDV	Maldives	Pacific	yes	154	-	-	7
AIA	Anguilla	Caribbean	yes	2	1	52.7	1
DMA	Dominica	Caribbean	yes	43	19	44.2	2
VGB	British Virgin Islands	Caribbean	yes	18	6	36.7	3
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	29.2	4
HTI	Haiti	Caribbean	yes	1,584	371	23.4	5
BRB	Barbados	Caribbean	yes	253	48	19.2	6
ATG	Antigua and Barbuda	Caribbean	yes	272	44	16.3	7
GRD	Grenada	Caribbean	yes	63	10	16.2	8
LCA	Saint Lucia	Caribbean	yes	73	10	14.5	9
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	11.1	10
VIR	United States Virgin Islands	Caribbean	yes	82	8	9.6	11
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	8.9	12
PRI	Puerto Rico	Caribbean	yes	3,197	192	6.0	13
ABW	Aruba	Caribbean	yes	358	18	5.0	14
JAM	Jamaica	Caribbean	yes	4,148	177	4.3	15
BLZ	Belize	Latin America	yes	65	1	1.7	16
CUB	Cuba	Caribbean	yes	5,936	49	0.8	17
BHS	Bahamas	Caribbean	yes	985	0	0.1	18
GUY	Guyana	Latin America	yes	884	0	0.0	19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	20
SUR	Suriname	Latin America	yes	364	-	-	21
COM	Comoros	Sub Saharan Africa	yes	156	2	1.4	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	-	2
SYC	Seychelles	Sub Saharan Africa	yes	631	-	-	3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	6



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PHL	Philippines	Asia	no	46,143	9,068	199,589	4.5	1
BTN	Bhutan	Asia	no	371	50	1,516	3.3	2
AFG	Afghanistan	Asia	no	9,988	323	17,243	1.9	3
TJK	Tajikistan	Asia	no	2,412	91	5,640	1.6	4
GEO	Georgia	Asia	no	3,815	175	11,667	1.5	5
AZE	Azerbaijan	Asia	no	12,666	682	51,774	1.3	6
KGZ	Kyrgyzstan	Asia	no	756	48	4,616	1.1	7
ARM	Armenia	Asia	no	2,899	95	9,371	1.0	8
UZB	Uzbekistan	Asia	no	10,382	368	38,982	0.9	9
JOR	Jordan	Asia	no	10,652	224	27,574	0.8	10
BGD	Bangladesh	Asia	no	14,034	718	100,357	0.7	11
SYR	Syrian Arab Republic	Asia	no	18,783	375	59,147	0.6	12
PAK	Pakistan	Asia	no	37,562	1,071	176,870	0.6	13
TKM	Turkmenistan	Asia	no	3,779	92	20,001	0.5	14
IRQ	Iraq	Asia	no	15,555	352	82,150	0.4	15
JPN	Japan	Asia	no	542,290	23,364	5,458,837	0.4	16
TUR	Turkey	Asia	no	164,353	2,703	734,365	0.4	17
LBN	Lebanon	Asia	no	4,139	146	39,006	0.4	18
IDN	Indonesia	Asia	no	113,457	1,877	706,558	0.3	19
ISR	Israel	Asia	no	22,505	543	217,333	0.3	20
CYP	Cyprus	Asia	no	1,154	52	23,132	0.2	21
MNG	Mongolia	Asia	no	2,335	14	6,200	0.2	22
KAZ	Kazakhstan	Asia	no	20,880	249	149,059	0.2	23
LAO	Lao People's Democratic Republic	Asia	no	938	9	7,296	0.1	24
MYS	Malaysia	Asia	no	37,377	259	237,797	0.1	25
ARE	United Arab Emirates	Asia	no	11,165	302	297,649	0.1	26
IND	India	Asia	no	320,919	1,329	1,727,111	0.1	27
CHN	China	Asia	no	599,699	3,876	5,926,612	0.1	28
THA	Thailand	Asia	no	43,178	190	318,522	0.1	29
VNM	Viet Nam	Asia	no	24,066	44	106,427	0.0	30
HKG	Hong Kong	Asia	no	47,718	60	224,458	0.0	31
SAU	Saudi Arabia	Asia	no	73,922	106	434,666	0.0	32
KOR	Republic of Korea	Asia	no	95,180	76	1,014,483	0.0	33
LKA	Sri Lanka	Asia	no	14,385	3	49,552	0.0	34
MAC	Macau	Asia	no	1,989	2	27,960	0.0	35
KHM	Cambodia	Asia	no	1,623	1	11,242	0.0	36
NPL	Nepal	Asia	no	2,411	343			37
TWN	Taiwan	Asia	no	38,310	1,422			38
MMR	Myanmar	Asia	no	9,829	317			39
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970			40
KWT	Kuwait	Asia	no	6,168	68			41
YEM	Yemen	Asia	no	10,133	101			42
BRN	Brunei Darussalam	Asia	no	895	8			43
PRK	Dem People's Rep of Korea	Asia	no	10,245	66			44
OMN	Oman	Asia	no	4,095	27			45
QAT	Qatar	Asia	no	2,116	12			46
ALB	Albania	Europe	no	3,381	91	11,786	0.8	1
MDA	Moldova, Republic of	Europe	no	3,416	25	5,809	0.4	2
BGR	Bulgaria	Europe	no	9,040	184	47,714	0.4	3
GRC	Greece	Europe	no	27,597	998	301,083	0.3	4
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	9,189	0.3	5
ISL	Iceland	Europe	no	1,071	25	12,574	0.2	6
MNE	Montenegro	Europe	no	269	7	4,111	0.2	7
HRV	Croatia	Europe	no	6,064	103	60,852	0.2	8
SVN	Slovenia	Europe	no	2,231	80	46,908	0.2	9
ITA	Italy	Europe	no	188,526	2,771	2,051,412	0.1	10
HUN	Hungary	Europe	no	30,434	160	128,632	0.1	11
AUT	Austria	Europe	no	28,002	337	379,069	0.1	12
CHE	Switzerland	Europe	no	40,078	487	527,920	0.1	13
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	2,248,831	0.1	14
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	16,578	0.1	15
DEU	Germany	Europe	no	262,867	2,006	3,280,530	0.1	16
SVK	Slovakia	Europe	no	9,245	46	87,268	0.1	17
CZE	Czech Republic	Europe	no	23,126	85	192,032	0.0	18
POL	Poland	Europe	no	60,706	199	469,440	0.0	19
BEL	Belgium	Europe	no	29,496	191	469,374	0.0	20
SRB	Serbia	Europe	no	1,938	12	38,423	0.0	21
NLD	Netherlands	Europe	no	49,481	251	779,356	0.0	22
FRA	France	Europe	no	236,236	469	2,560,002	0.0	23



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RUS	Russian Federation	Europe	no	288,219	206	1,479,819	0.0	24
PRT	Portugal	Europe	no	18,087	17	228,872	0.0	25
ESP	Spain	Europe	no	122,131	174	1,407,405	0.0	26
UKR	Ukraine	Europe	no	32,769	20	137,929	0.0	27
IRL	Ireland	Europe	no	16,223	20	211,390	0.0	28
EST	Estonia	Europe	no	2,851	2	19,217	0.0	29
LUX	Luxembourg	Europe	no	2,462	6	53,334	0.0	30
LTU	Lithuania	Europe	no	7,227	3	36,306	0.0	31
LVA	Latvia	Europe	no	4,998	2	24,010	0.0	32
DNK	Denmark	Europe	no	31,778	6	309,866		33
NOR	Norway	Europe	no	33,800	13	412,990		34
SWE	Sweden	Europe	no	27,971	4	458,973		35
SMR	San Marino	Europe	no	113	16			36
LIE	Liechtenstein	Europe	no	198	5			37
GIB	Gibraltar	Europe	no	274	7			38
MCO	Monaco	Europe	no	123	3			39
FIN	Finland	Europe	no	14,927	1	238,746		40
BLR	Belarus	Europe	no	21,160	1	54,713		41
FRO	Faroe Islands	Europe	no	42	-			42
MLT	Malta	Pacific	no	1,330	20	8,256	0.2	1
NZL	New Zealand	Australia	no	12,682	141			2
AUS	Australia	Australia	no	47,971	10			3
HND	Honduras	Latin America	no	5,414	891	15,400	5.8	1
NIC	Nicaragua	Latin America	no	2,310	188	6,551	2.9	2
SLV	El Salvador	Latin America	no	4,297	582	21,215	2.7	3
CRI	Costa Rica	Latin America	no	6,892	480	35,831	1.3	4
BOL	Bolivia	Latin America	no	4,521	251	19,650	1.3	5
GTM	Guatemala	Latin America	no	8,748	518	41,186	1.3	6
COL	Colombia	Latin America	no	53,054	3,103	288,189	1.1	7
ECU	Ecuador	Latin America	no	10,202	614	57,978	1.1	8
PER	Peru	Latin America	no	24,717	1,243	157,053	0.8	9
PAN	Panama	Latin America	no	5,115	146	26,689	0.6	10
MEX	Mexico	Latin America	no	260,866	4,079	1,034,804	0.4	11
VEN	Venezuela	Latin America	no	42,697	885	391,848	0.2	12
CHL	Chile	Latin America	no	18,070	404	212,741	0.2	13
ARG	Argentina	Latin America	no	39,520	247	368,736	0.1	14
USA	United States of America	North America	no	1,224,802	6,768	14,586,740	0.1	15
CAN	Canada	North America	no	121,895	82	1,577,040	0.0	16
BRA	Brazil	Latin America	no	300,613	13	2,087,890		17
GLP	Guadeloupe	Caribbean	no	904	178			18
MTQ	Martinique	Caribbean	no	889	134			19
CYM	Cayman Islands	Caribbean	no	81	1			20
TCA	Turks and Caicos islands	Caribbean	no	28	0			21
GUF	French Guiana	Latin America	no	378	-			22
PRY	Paraguay	Latin America	no	4,301	-	18,333		23
URY	Uruguay	Latin America	no	4,269	-	40,265		24
DZA	Algeria	North Africa	no	67,908	1,535	159,426	1.0	1
TUN	Tunisia	North Africa	no	14,190	415	44,291	0.9	2
MWI	Malawi	Sub Saharan Africa	no	1,519	37	5,106	0.7	3
RWA	Rwanda	Sub Saharan Africa	no	962	24	5,628	0.4	4
MAR	Morocco	North Africa	no	41,389	344	90,805	0.4	5
BDI	Burundi	Sub Saharan Africa	no	145	4	1,611	0.3	6
EGY	Egypt	North Africa	no	101,974	553	218,894	0.3	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	23,057	0.2	8
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	16,193	0.2	9
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	2,132	0.2	10
KEN	Kenya	Sub Saharan Africa	no	8,730	45	31,409	0.1	11
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	9,586	0.1	12
UGA	Uganda	Sub Saharan Africa	no	3,787	20	17,011	0.1	13
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	13,145	0.1	14
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	363,704	0.0	15
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	2,117	0.0	16
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	29,717	0.0	17
SDN	Sudan	Sub Saharan Africa	no	12,166	19	62,046	0.0	18
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	7,474	0.0	19
SWZ	Swaziland	Sub Saharan Africa	no	769	1	3,645	0.0	20
BWA	Botswana	Sub Saharan Africa	no	4,287	3	14,857	0.0	21
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	22,394	0.0	22
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	8,721	0.0	23



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CAF	Central African Republic	Sub Saharan Africa	no	351	0	2,013	0.0	24
NAM	Namibia	Sub Saharan Africa	no	1,706	1	12,170	0.0	25
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	193,669	0.0	26
GAB	Gabon	Sub Saharan Africa	no	2,633	1	13,011	0.0	27
SEN	Senegal	Sub Saharan Africa	no	5,536	1	12,954	0.0	28
GIN	Guinea	Sub Saharan Africa	no	1,643	0	4,511	0.0	29
TCD	Chad	Sub Saharan Africa	no	4,004	0	7,588	0.0	30
AGO	Angola	Sub Saharan Africa	no	9,237	3	84,391		31
DJI	Djibouti	Sub Saharan Africa	no	656	19			32
MYT	Mayotte	Sub Saharan Africa	no	154	1			33
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108			34
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	14,007		35
SOM	Somalia	Sub Saharan Africa	no	2,303	1			36
COG	Congo	Sub Saharan Africa	no	3,326	0	11,898		37
REU	Réunion	Sub Saharan Africa	no	2,161	-			38
BEN	Benin	Sub Saharan Africa	no	1,223	-	6,633		39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	8,820		40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	22,780		41
GMB	Gambia	Sub Saharan Africa	no	334	-	807		42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	31,306		43
LBR	Liberia	Sub Saharan Africa	no	263	-	986		44
MLI	Mali	Sub Saharan Africa	no	1,887	-	9,251		45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	3,636		46
NER	Niger	Sub Saharan Africa	no	1,230	-	5,549		47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	1,905		48
TGO	Togo	Sub Saharan Africa	no	529	-	3,153		49
ESH	Western Sahara	Sub Saharan Africa	no	418	-			50
SLB	Solomon islands	Asia	yes	85	50	679	7.4	1
VUT	Vanuatu	Asia	yes	25	10	699	1.4	2
PNG	Papua New Guinea	Asia	yes	1,289	63	9,480	0.7	3
FJI	Fiji	Asia	yes	309	16	3,189	0.5	4
NCL	New Caledonia	Asia	yes	107	6			5
BHR	Bahrain	Asia	yes	1,670	10			6
TON	Tonga	Pacific	yes	47	13	348	3.8	1
WSM	Samoa	Pacific	yes	93	4	574	0.7	2
PLW	Palau	Pacific	yes	25	1	171	0.5	3
SGP	Singapore	Pacific	yes	18,751	43	208,765	0.0	4
PYF	French Polynesia	Pacific	yes	116	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	297		6
MDV	Maldives	Pacific	yes	154	-	1,908		7
HTI	Haiti	Caribbean	yes	1,584	371	6,710	5.5	1
DMA	Dominica	Caribbean	yes	43	19	466	4.1	2
ATG	Antigua and Barbuda	Caribbean	yes	272	44	1,211	3.6	3
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	20,604	3.3	4
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	51,766	2.4	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	705	2.1	6
GRD	Grenada	Caribbean	yes	63	10	773	1.3	7
JAM	Jamaica	Caribbean	yes	4,148	177	14,252	1.2	8
BRB	Barbados	Caribbean	yes	253	48	4,110	1.2	9
LCA	Saint Lucia	Caribbean	yes	73	10	1,198	0.9	10
BLZ	Belize	Latin America	yes	65	1	1,401	0.1	11
BHS	Bahamas	Caribbean	yes	985	0	7,538	0.0	12
AIA	Anguilla	Caribbean	yes	2	1			13
VGB	British Virgin Islands	Caribbean	yes	18	6			14
VIR	United States Virgin Islands	Caribbean	yes	82	8			15
PRI	Puerto Rico	Caribbean	yes	3,197	192			16
ABW	Aruba	Caribbean	yes	358	18			17
CUB	Cuba	Caribbean	yes	5,936	49			18
GUY	Guyana	Latin America	yes	884	0	2,226		19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	652		20
SUR	Suriname	Latin America	yes	364	-			21
COM	Comoros	Sub Saharan Africa	yes	156	2	541	0.4	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	9,729		2
SYC	Seychelles	Sub Saharan Africa	yes	631	-	937		3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	1,648		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	879		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	197		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
PHL	Philippines	Asia	no	46,143	9,068	199,897	4.5	1
BTN	Bhutan	Asia	no	371	50	1,420	3.5	2
AFG	Afghanistan	Asia	no	9,988	323	15,162	2.1	3
TJK	Tajikistan	Asia	no	2,412	91	5,570	1.6	4
GEO	Georgia	Asia	no	3,815	175	11,484	1.5	5
AZE	Azerbaijan	Asia	no	12,666	682	48,307	1.4	6
KGZ	Kyrgyzstan	Asia	no	756	48	4,273	1.1	7
ARM	Armenia	Asia	no	2,899	95	9,710	1.0	8
UZB	Uzbekistan	Asia	no	10,382	368	39,013	0.9	9
JOR	Jordan	Asia	no	10,652	224	27,820	0.8	10
BGD	Bangladesh	Asia	no	14,034	718	109,695	0.7	11
SYR	Syrian Arab Republic	Asia	no	18,783	375	57,266	0.7	12
PAK	Pakistan	Asia	no	37,562	1,071	183,620	0.6	13
TKM	Turkmenistan	Asia	no	3,779	92	18,107	0.5	14
IRQ	Iraq	Asia	no	15,555	352	77,842	0.5	15
JPN	Japan	Asia	no	542,290	23,364	5,601,557	0.4	16
TUR	Turkey	Asia	no	164,353	2,703	727,056	0.4	17
LBN	Lebanon	Asia	no	4,139	146	39,051	0.4	18
IDN	Indonesia	Asia	no	113,457	1,877	686,633	0.3	19
ISR	Israel	Asia	no	22,505	543	210,353	0.3	20
MNG	Mongolia	Asia	no	2,335	14	5,640	0.3	21
CYP	Cyprus	Asia	no	1,154	52	22,539	0.2	22
KAZ	Kazakhstan	Asia	no	20,880	249	131,868	0.2	23
LAO	Lao People's Democratic Republic	Asia	no	938	9	6,978	0.1	24
MYS	Malaysia	Asia	no	37,377	259	229,566	0.1	25
IND	India	Asia	no	320,919	1,329	1,712,645	0.1	26
CHN	China	Asia	no	599,699	3,876	5,957,012	0.1	27
THA	Thailand	Asia	no	43,178	190	304,812	0.1	28
VNM	Viet Nam	Asia	no	24,066	44	102,008	0.0	29
HKG	Hong Kong	Asia	no	47,718	60	229,165	0.0	30
KOR	Republic of Korea	Asia	no	95,180	76	1,014,760	0.0	31
LKA	Sri Lanka	Asia	no	14,385	3	48,916	0.0	32
KHM	Cambodia	Asia	no	1,623	1	10,664	0.0	33
ARE	United Arab Emirates	Asia	no	11,165	302			34
SAU	Saudi Arabia	Asia	no	73,922	106			35
MAC	Macau	Asia	no	1,989	2			36
NPL	Nepal	Asia	no	2,411	343			37
TWN	Taiwan	Asia	no	38,310	1,422			38
MMR	Myanmar	Asia	no	9,829	317			39
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970			40
KWT	Kuwait	Asia	no	6,168	68			41
YEM	Yemen	Asia	no	10,133	101			42
BRN	Brunei Darussalam	Asia	no	895	8			43
PRK	Dem People's Rep of Korea	Asia	no	10,245	66			44
OMN	Oman	Asia	no	4,095	27			45
QAT	Qatar	Asia	no	2,116	12			46
ALB	Albania	Europe	no	3,381	91	11,682	0.8	1
MDA	Moldova, Republic of	Europe	no	3,416	25	6,280	0.4	2
BGR	Bulgaria	Europe	no	9,040	184	46,025	0.4	3
GRC	Greece	Europe	no	27,597	998	292,874	0.3	4
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	8,992	0.3	5
ISL	Iceland	Europe	no	1,071	25	9,975	0.3	6
MNE	Montenegro	Europe	no	269	7	4,083	0.2	7
HRV	Croatia	Europe	no	6,064	103	58,806	0.2	8
SVN	Slovenia	Europe	no	2,231	80	46,217	0.2	9
ITA	Italy	Europe	no	188,526	2,771	2,023,916	0.1	10
HUN	Hungary	Europe	no	30,434	160	122,372	0.1	11
AUT	Austria	Europe	no	28,002	337	377,063	0.1	12
CHE	Switzerland	Europe	no	40,078	487	568,639	0.1	13
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	2,280,719	0.1	14
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	17,008	0.1	15
DEU	Germany	Europe	no	262,867	2,006	3,341,391	0.1	16
SVK	Slovakia	Europe	no	9,245	46	86,077	0.1	17
CZE	Czech Republic	Europe	no	23,126	85	179,432	0.1	18
POL	Poland	Europe	no	60,706	199	452,275	0.0	19
BEL	Belgium	Europe	no	29,496	191	477,644	0.0	20
SRB	Serbia	Europe	no	1,938	12	37,533	0.0	21
NLD	Netherlands	Europe	no	49,481	251	772,747	0.0	22
FRA	France	Europe	no	236,236	469	2,606,780	0.0	23



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UKR	Ukraine	Europe	no	32,769	20	135,920	0.0	24
LUX	Luxembourg	Europe	no	2,462	6	37,925	0.0	25
RUS	Russian Federation	Europe	no	288,219	206	1,431,121	0.0	26
PRT	Portugal	Europe	no	18,087	17	221,243	0.0	27
ESP	Spain	Europe	no	122,131	174	1,388,744	0.0	28
IRL	Ireland	Europe	no	16,223	20	171,260	0.0	29
EST	Estonia	Europe	no	2,851	2	18,420	0.0	30
LTU	Lithuania	Europe	no	7,227	3	35,687	0.0	31
LVA	Latvia	Europe	no	4,998	2	24,073	0.0	32
DNK	Denmark	Europe	no	31,778	6	315,664		33
NOR	Norway	Europe	no	33,800	13	413,980		34
SWE	Sweden	Europe	no	27,971	4	467,254		35
SMR	San Marino	Europe	no	113	16			36
LIE	Liechtenstein	Europe	no	198	5			37
GIB	Gibraltar	Europe	no	274	7			38
MCO	Monaco	Europe	no	123	3			39
FIN	Finland	Europe	no	14,927	1	242,899		40
BLR	Belarus	Europe	no	21,160	1	53,379		41
FRO	Faroe Islands	Europe	no	42	-			42
MLT	Malta	Pacific	no	1,330	20	7,698	0.3	1
NZL	New Zealand	Australia	no	12,682	141			2
AUS	Australia	Australia	no	47,971	10			3
HND	Honduras	Latin America	no	5,414	891	14,798	6.0	1
NIC	Nicaragua	Latin America	no	2,310	188	6,273	3.0	2
SLV	El Salvador	Latin America	no	4,297	582	20,834	2.8	3
CRI	Costa Rica	Latin America	no	6,892	480	34,896	1.4	4
BOL	Bolivia	Latin America	no	4,521	251	18,790	1.3	5
GTM	Guatemala	Latin America	no	8,748	518	39,987	1.3	6
COL	Colombia	Latin America	no	53,054	3,103	276,072	1.1	7
ECU	Ecuador	Latin America	no	10,202	614	56,924	1.1	8
PER	Peru	Latin America	no	24,717	1,243	147,000	0.9	9
PAN	Panama	Latin America	no	5,115	146	25,037	0.6	10
MEX	Mexico	Latin America	no	260,866	4,079	1,020,288	0.4	11
VEN	Venezuela	Latin America	no	42,697	885	389,038	0.2	12
CHL	Chile	Latin America	no	18,070	404	197,331	0.2	13
ARG	Argentina	Latin America	no	39,520	247	358,619	0.1	14
USA	United States of America	North America	no	1,224,802	6,768	14,635,600	0.1	15
CAN	Canada	North America	no	121,895	82	1,549,652	0.0	16
BRA	Brazil	Latin America	no	300,613	13	2,049,164		17
GLP	Guadeloupe	Caribbean	no	904	178			18
MTQ	Martinique	Caribbean	no	889	134			19
CYM	Cayman Islands	Caribbean	no	81	1			20
TCA	Turks and Caicos islands	Caribbean	no	28	0			21
GUF	French Guiana	Latin America	no	378	-			22
PRY	Paraguay	Latin America	no	4,301	-	17,853		23
URY	Uruguay	Latin America	no	4,269	-	39,161		24
DZA	Algeria	North Africa	no	67,908	1,535	155,538	1.0	1
TUN	Tunisia	North Africa	no	14,190	415	42,020	1.0	2
MWI	Malawi	Sub Saharan Africa	no	1,519	37	4,980	0.7	3
RWA	Rwanda	Sub Saharan Africa	no	962	24	5,582	0.4	4
MAR	Morocco	North Africa	no	41,389	344	88,578	0.4	5
BDI	Burundi	Sub Saharan Africa	no	145	4	1,589	0.3	6
EGY	Egypt	North Africa	no	101,974	553	214,530	0.3	7
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	14,300	0.3	8
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	23,012	0.2	9
KEN	Kenya	Sub Saharan Africa	no	8,730	45	31,264	0.1	10
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	2,553	0.1	11
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	9,421	0.1	12
UGA	Uganda	Sub Saharan Africa	no	3,787	20	16,720	0.1	13
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	12,263	0.1	14
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	356,475	0.0	15
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	2,097	0.0	16
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	29,625	0.0	17
SDN	Sudan	Sub Saharan Africa	no	12,166	19	55,939	0.0	18
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	6,988	0.0	19
SWZ	Swaziland	Sub Saharan Africa	no	769	1	3,586	0.0	20
BWA	Botswana	Sub Saharan Africa	no	4,287	3	14,771	0.0	21
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	22,030	0.0	22
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	8,628	0.0	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
CAF	Central African Republic	Sub Saharan Africa	no	351	0	2,009	0.0	24
NAM	Namibia	Sub Saharan Africa	no	1,706	1	12,077	0.0	25
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	176,769	0.0	26
GAB	Gabon	Sub Saharan Africa	no	2,633	1	11,467	0.0	27
SEN	Senegal	Sub Saharan Africa	no	5,536	1	12,900	0.0	28
GIN	Guinea	Sub Saharan Africa	no	1,643	0	4,231	0.0	29
TCD	Chad	Sub Saharan Africa	no	4,004	0	6,734	0.0	30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	9,578	0.0	31
COG	Congo	Sub Saharan Africa	no	3,326	0	8,619	0.0	32
AGO	Angola	Sub Saharan Africa	no	9,237	3	75,516		33
DJI	Djibouti	Sub Saharan Africa	no	656	19			34
MYT	Mayotte	Sub Saharan Africa	no	154	1			35
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108			36
SOM	Somalia	Sub Saharan Africa	no	2,303	1			37
REU	Réunion	Sub Saharan Africa	no	2,161	-			38
BEN	Benin	Sub Saharan Africa	no	1,223	-	6,633		39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	8,810		40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	21,729		41
GMB	Gambia	Sub Saharan Africa	no	334	-	743		42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	30,776		43
LBR	Liberia	Sub Saharan Africa	no	263	-	805		44
MLI	Mali	Sub Saharan Africa	no	1,887	-	8,909		45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	3,672		46
NER	Niger	Sub Saharan Africa	no	1,230	-	5,493		47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	1,905		48
TGO	Togo	Sub Saharan Africa	no	529	-	2,826		49
ESH	Western Sahara	Sub Saharan Africa	no	418	-			50
SLB	Solomon islands	Asia	yes	85	50	555	9.0	1
VUT	Vanuatu	Asia	yes	25	10	678	1.4	2
PNG	Papua New Guinea	Asia	yes	1,289	63	9,262	0.7	3
FJI	Fiji	Asia	yes	309	16	3,090	0.5	4
NCL	New Caledonia	Asia	yes	107	6			5
BHR	Bahrain	Asia	yes	1,670	10			6
TON	Tonga	Pacific	yes	47	13	352	3.7	1
WSM	Samoa	Pacific	yes	93	4	557	0.7	2
PLW	Palau	Pacific	yes	25	1	135	0.7	3
SGP	Singapore	Pacific	yes	18,751	43	201,050	0.0	4
PYF	French Polynesia	Pacific	yes	116	-			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	312		6
MDV	Maldives	Pacific	yes	154	-	1,817		7
DMA	Dominica	Caribbean	yes	43	19	454	4.2	1
ATG	Antigua and Barbuda	Caribbean	yes	272	44	1,179	3.7	2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	19,255	3.5	3
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	49,972	2.4	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	691	2.2	5
GRD	Grenada	Caribbean	yes	63	10	727	1.4	6
JAM	Jamaica	Caribbean	yes	4,148	177	13,574	1.3	7
LCA	Saint Lucia	Caribbean	yes	73	10	1,163	0.9	8
BLZ	Belize	Latin America	yes	65	1	1,303	0.1	9
HTI	Haiti	Caribbean	yes	1,584	371			10
BRB	Barbados	Caribbean	yes	253	48			11
BHS	Bahamas	Caribbean	yes	985	0			12
AIA	Anguilla	Caribbean	yes	2	1			13
VGB	British Virgin Islands	Caribbean	yes	18	6			14
VIR	United States Virgin Islands	Caribbean	yes	82	8			15
PRI	Puerto Rico	Caribbean	yes	3,197	192			16
ABW	Aruba	Caribbean	yes	358	18			17
CUB	Cuba	Caribbean	yes	5,936	49			18
GUY	Guyana	Latin America	yes	884	0	2,238		19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	620		20
SUR	Suriname	Latin America	yes	364	-			21
COM	Comoros	Sub Saharan Africa	yes	156	2	539	0.4	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	9,798		2
SYC	Seychelles	Sub Saharan Africa	yes	631	-	855		3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	1,579		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	877		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	200		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
PHL	Philippines	Asia	no	186,193	2,039	11.0	1
TWN	Taiwan	Asia	no	872,409	4,441	5.1	2
JPN	Japan	Asia	no	14,617,394	45,933	3.1	3
KOR	Republic of Korea	Asia	no	2,787,207	8,652	3.1	4
CHN	China	Asia	no	4,512,825	8,954	2.0	5
HKG	Hong Kong	Asia	no	1,138,019	927	0.8	6
BGD	Bangladesh	Asia	no	72,949	58	0.8	7
PRK	Dem People's Rep of Korea	Asia	no	27,936	20	0.7	8
MAC	Macau	Asia	no	96,993	68	0.7	9
BRN	Brunei Darussalam	Asia	no	20,094	11	0.6	10
NPL	Nepal	Asia	no	6,537	2	0.3	11
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.3	12
VNM	Viet Nam	Asia	no	115,441	23	0.2	13
IND	India	Asia	no	1,429,881	230	0.2	14
PAK	Pakistan	Asia	no	170,444	24	0.1	15
MMR	Myanmar	Asia	no	20,572	3	0.1	16
LKA	Sri Lanka	Asia	no	49,967	5	0.1	17
KHM	Cambodia	Asia	no	4,335	0	0.1	18
IDN	Indonesia	Asia	no	575,183	41	0.1	19
OMN	Oman	Asia	no	42,201	2	0.1	20
BTN	Bhutan	Asia	no	1,167		0.0	21
MYS	Malaysia	Asia	no	318,727	6	0.0	22
THA	Thailand	Asia	no	394,598	7	0.0	23
ARE	United Arab Emirates	Asia	no	248,015	2	0.0	24
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0		25
QAT	Qatar	Asia	no	113,981	0		26
AFG	Afghanistan	Asia	no	16,132			27
ARM	Armenia	Asia	no	14,187			28
AZE	Azerbaijan	Asia	no	45,197			29
CYP	Cyprus	Asia	no	23,484			30
GEO	Georgia	Asia	no	21,157			31
IRQ	Iraq	Asia	no	47,245			32
ISR	Israel	Asia	no	293,550			33
JOR	Jordan	Asia	no	40,997			34
KAZ	Kazakhstan	Asia	no	180,409			35
KWT	Kuwait	Asia	no	202,236			36
KGZ	Kyrgyzstan	Asia	no	3,644			37
LBN	Lebanon	Asia	no	56,965			38
MNG	Mongolia	Asia	no	9,273			39
SAU	Saudi Arabia	Asia	no	751,807			40
SYR	Syrian Arab Republic	Asia	no	68,489			41
TJK	Tajikistan	Asia	no	5,576			42
TUR	Turkey	Asia	no	1,578,228			43
TKM	Turkmenistan	Asia	no	12,707			44
UZB	Uzbekistan	Asia	no	44,370			45
YEM	Yemen	Asia	no	21,556			46
PRT	Portugal	Europe	no	296,296	0		1
RUS	Russian Federation	Europe	no	2,209,139	2		2
ALB	Albania	Europe	no	13,964			3
AUT	Austria	Europe	no	615,592			4
BLR	Belarus	Europe	no	74,427			5
BEL	Belgium	Europe	no	739,159			6
BIH	Bosnia and Herzegovina	Europe	no	10,433			7
BGR	Bulgaria	Europe	no	70,023			8
HRV	Croatia	Europe	no	65,145			9
CZE	Czech Republic	Europe	no	336,714			10
DNK	Denmark	Europe	no	381,265			11
EST	Estonia	Europe	no	28,069			12
FRO	Faroe Islands	Europe	no	1,012			13
FIN	Finland	Europe	no	209,050			14
FRA	France	Europe	no	3,653,264			15
DEU	Germany	Europe	no	5,800,986			16
GIB	Gibraltar	Europe	no	3,141			17
GRC	Greece	Europe	no	642,888			18
HUN	Hungary	Europe	no	286,209			19
ISL	Iceland	Europe	no	25,742			20
IRL	Ireland	Europe	no	244,117			21
ITA	Italy	Europe	no	3,701,619			22
LVA	Latvia	Europe	no	39,277			23



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ITEC S.A.S. – INGENIAR LTDA. – EAI S.A.

ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
LIE	Liechtenstein	Europe	no	8,070			24
LTU	Lithuania	Europe	no	53,397			25
LUX	Luxembourg	Europe	no	45,036			26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			27
MDA	Moldova, Republic of	Europe	no	9,896			28
MCO	Monaco	Europe	no	5,380			29
MNE	Montenegro	Europe	no	2,738			30
NLD	Netherlands	Europe	no	1,593,735			31
NOR	Norway	Europe	no	386,892			32
POL	Poland	Europe	no	659,150			33
SMR	San Marino	Europe	no	1,846			34
SRB	Serbia	Europe	no	16,907			35
SVK	Slovakia	Europe	no	124,390			36
SVN	Slovenia	Europe	no	36,896			37
ESP	Spain	Europe	no	2,695,139			38
SWE	Sweden	Europe	no	369,792			39
CHE	Switzerland	Europe	no	839,518			40
UKR	Ukraine	Europe	no	278,497			41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			42
NZL	New Zealand	Australia	no	238,609	30	0.1	1
AUS	Australia	Australia	no	1,832,960	84	0.1	2
MLT	Malta	Pacific	no	18,630			3
CYM	Cayman Islands	Caribbean	no	3,603	42	11.5	1
TCA	Turks and Caicos islands	Caribbean	no	332	4	10.5	2
GLP	Guadeloupe	Caribbean	no	19,838	192	9.7	3
MTQ	Martinique	Caribbean	no	21,052	103	4.9	4
HND	Honduras	Latin America	no	18,844	70	3.7	5
MEX	Mexico	Latin America	no	1,818,298	3,472	1.9	6
USA	United States of America	North America	no	22,004,154	11,460	0.5	7
GTM	Guatemala	Latin America	no	38,263	18	0.5	8
NIC	Nicaragua	Latin America	no	10,935	3	0.3	9
SLV	El Salvador	Latin America	no	22,582	5	0.2	10
VEN	Venezuela	Latin America	no	435,869	66	0.2	11
CAN	Canada	North America	no	2,051,584	310	0.2	12
PAN	Panama	Latin America	no	30,296	2	0.1	13
CRI	Costa Rica	Latin America	no	38,475	1	0.0	14
COL	Colombia	Latin America	no	325,385	7	0.0	15
GUF	French Guiana	Latin America	no	8,339	0	0.0	16
ARG	Argentina	Latin America	no	403,909			17
BOL	Bolivia	Latin America	no	13,112			18
BRA	Brazil	Latin America	no	1,715,746			19
CHL	Chile	Latin America	no	326,640			20
ECU	Ecuador	Latin America	no	68,550			21
PRY	Paraguay	Latin America	no	19,203			22
PER	Peru	Latin America	no	189,980			23
URY	Uruguay	Latin America	no	28,590			24
REU	Réunion	Sub Saharan Africa	no	42,937	261	6.1	1
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	5.8	2
MYT	Mayotte	Sub Saharan Africa	no	2,341	8	3.3	3
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1.4	4
MWI	Malawi	Sub Saharan Africa	no	1,883	0	0.1	5
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.1	6
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	0.0	7
BWA	Botswana	Sub Saharan Africa	no	18,941	0	0.0	8
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.0	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	0.0	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	0.0	11
LSO	Lesotho	Sub Saharan Africa	no	3,522			12
DZA	Algeria	North Africa	no	259,977			13
EGY	Egypt	North Africa	no	234,939			14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903			15
MAR	Morocco	North Africa	no	136,300			16
TUN	Tunisia	North Africa	no	65,420			17
AGO	Angola	Sub Saharan Africa	no	25,225			18
BEN	Benin	Sub Saharan Africa	no	3,585			19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			20
BDI	Burundi	Sub Saharan Africa	no	168			21
CMR	Cameroon	Sub Saharan Africa	no	16,950			22
CAF	Central African Republic	Sub Saharan Africa	no	916			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
TCD	Chad	Sub Saharan Africa	no	6,664			24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			25
COG	Congo	Sub Saharan Africa	no	12,566			26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			27
DJI	Djibouti	Sub Saharan Africa	no	2,525			28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			29
ERI	Eritrea	Sub Saharan Africa	no	1,892			30
ETH	Ethiopia	Sub Saharan Africa	no	5,141			31
GAB	Gabon	Sub Saharan Africa	no	25,086			32
GMB	Gambia	Sub Saharan Africa	no	680			33
GHA	Ghana	Sub Saharan Africa	no	12,649			34
GIN	Guinea	Sub Saharan Africa	no	3,259			35
KEN	Kenya	Sub Saharan Africa	no	18,470			36
LBR	Liberia	Sub Saharan Africa	no	515			37
MLI	Mali	Sub Saharan Africa	no	3,869			38
MRT	Mauritania	Sub Saharan Africa	no	3,622			39
NAM	Namibia	Sub Saharan Africa	no	7,239			40
NER	Niger	Sub Saharan Africa	no	2,800			41
NGA	Nigeria	Sub Saharan Africa	no	121,669			42
RWA	Rwanda	Sub Saharan Africa	no	1,558			43
SEN	Senegal	Sub Saharan Africa	no	11,619			44
SLE	Sierra Leone	Sub Saharan Africa	no	523			45
SOM	Somalia	Sub Saharan Africa	no	3,573			46
SDN	Sudan	Sub Saharan Africa	no	26,851			47
TGO	Togo	Sub Saharan Africa	no	1,644			48
UGA	Uganda	Sub Saharan Africa	no	6,628			49
ESH	Western Sahara	Sub Saharan Africa	no	2,173			50
FJI	Fiji	Asia	yes	2,100	13	6.0	1
VUT	Vanuatu	Asia	yes	102	0	1.6	2
SLB	Solomon islands	Asia	yes	211	0	0.7	3
NCL	New Caledonia	Asia	yes	4,771	2	0.3	4
PNG	Papua New Guinea	Asia	yes	5,433	0	0.1	5
BHR	Bahrain	Asia	yes	32,575			6
TON	Tonga	Pacific	yes	230	2	10.1	1
WSM	Samoa	Pacific	yes	361	3	6.8	2
PYF	French Polynesia	Pacific	yes	6,568	32	4.9	3
FSM	Micronesia (Federated States of)	Pacific	yes	585	3	4.4	4
PLW	Palau	Pacific	yes	279	1	1.8	5
MDV	Maldives	Pacific	yes	907			6
SGP	Singapore	Pacific	yes	526,900			7
AIA	Anguilla	Caribbean	yes	20	0	15.0	1
VIR	United States Virgin Islands	Caribbean	yes	1,755	16	9.2	2
VGB	British Virgin Islands	Caribbean	yes	424	3	6.9	3
PRI	Puerto Rico	Caribbean	yes	135,818	795	5.9	4
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12	4.9	5
BLZ	Belize	Latin America	yes	1,251	6	4.7	6
DMA	Dominica	Caribbean	yes	356	1	3.7	7
HTI	Haiti	Caribbean	yes	8,553	32	3.7	8
BHS	Bahamas	Caribbean	yes	21,313	70	3.3	9
LCA	Saint Lucia	Caribbean	yes	543	2	2.7	10
BRB	Barbados	Caribbean	yes	4,677	10	2.2	11
JAM	Jamaica	Caribbean	yes	28,963	59	2.0	12
ABW	Aruba	Caribbean	yes	6,526	11	1.7	13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2	1.5	14
GRD	Grenada	Caribbean	yes	1,229	1	1.2	15
CUB	Cuba	Caribbean	yes	46,280	40	0.9	16
DOM	Dominican Republic	Caribbean	yes	72,573	61	0.8	17
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17	0.5	18
GUY	Guyana	Latin America	yes	3,468	0	0.1	19
SUR	Suriname	Latin America	yes	2,797	0	0.0	20
KNA	Saint Kitts and Nevis	Caribbean	yes	2			21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	5.3	1
COM	Comoros	Sub Saharan Africa	yes	310	1	3.1	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	0.2	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949		0.0	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [%]	
PHL	Philippines	Asia	no	186,193	2,039	203,208	10.0	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	986,184	8.8	2
JPN	Japan	Asia	no	14,617,394	45,933	5,396,265	8.5	3
MAC	Macau	Asia	no	96,993	68	11,994	5.7	4
HKG	Hong Kong	Asia	no	1,138,019	927	211,863	4.4	5
CHN	China	Asia	no	4,512,825	8,954	5,694,512	1.6	6
BGD	Bangladesh	Asia	no	72,949	58	106,991	0.5	7
VNM	Viet Nam	Asia	no	115,441	23	117,363	0.2	8
PAK	Pakistan	Asia	no	170,444	24	186,087	0.1	9
IND	India	Asia	no	1,429,881	230	1,783,129	0.1	10
LKA	Sri Lanka	Asia	no	49,967	5	54,079	0.1	11
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	7,629	0.1	12
IDN	Indonesia	Asia	no	575,183	41	695,009	0.1	13
KHM	Cambodia	Asia	no	4,335	0	11,854	0.0	14
MYS	Malaysia	Asia	no	318,727	6	195,443	0.0	15
THA	Thailand	Asia	no	394,598	7	295,072	0.0	16
ARE	United Arab Emirates	Asia	no	248,015	2	270,334	0.0	17
TWN	Taiwan	Asia	no	872,409	4,441			18
BRN	Brunei Darussalam	Asia	no	20,094	11			19
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			20
NPL	Nepal	Asia	no	6,537	2			21
MMR	Myanmar	Asia	no	20,572	3			22
OMN	Oman	Asia	no	42,201	2			23
BTN	Bhutan	Asia	no	1,167				24
QAT	Qatar	Asia	no	113,981	0			25
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0			26
AFG	Afghanistan	Asia	no	16,132		1,852		27
ARM	Armenia	Asia	no	14,187		11,639		28
AZE	Azerbaijan	Asia	no	45,197		33,777		29
CYP	Cyprus	Asia	no	23,484		24,623		30
GEO	Georgia	Asia	no	21,157		13,709		31
IRQ	Iraq	Asia	no	47,245				32
ISR	Israel	Asia	no	293,550		212,896		33
JOR	Jordan	Asia	no	40,997		33,470		34
KAZ	Kazakhstan	Asia	no	180,409		127,087		35
KWT	Kuwait	Asia	no	202,236				36
KGZ	Kyrgyzstan	Asia	no	3,644		6,067		37
LBN	Lebanon	Asia	no	56,965		47,915		38
MNG	Mongolia	Asia	no	9,273		6,675		39
SAU	Saudi Arabia	Asia	no	751,807		341,826		40
SYR	Syrian Arab Republic	Asia	no	68,489		59,401		41
TJK	Tajikistan	Asia	no	5,576		8,227		42
TUR	Turkey	Asia	no	1,578,228		774,921		43
TKM	Turkmenistan	Asia	no	12,707		20,575		44
UZB	Uzbekistan	Asia	no	44,370		38,768		45
YEM	Yemen	Asia	no	21,556				46
PRT	Portugal	Europe	no	296,296	0	245,251		1
RUS	Russian Federation	Europe	no	2,209,139	2	1,356,393		2
ALB	Albania	Europe	no	13,964		14,377		3
AUT	Austria	Europe	no	615,592		362,737		4
BLR	Belarus	Europe	no	74,427		62,212		5
BEL	Belgium	Europe	no	739,159		456,696		6
BIH	Bosnia and Herzegovina	Europe	no	10,433		20,030		7
BGR	Bulgaria	Europe	no	70,023		48,622		8
HRV	Croatia	Europe	no	65,145		61,162		9
CZE	Czech Republic	Europe	no	336,714		182,876		10
DNK	Denmark	Europe	no	381,265		292,535		11
EST	Estonia	Europe	no	28,069		17,933		12
FRO	Faroe Islands	Europe	no	1,012				13
FIN	Finland	Europe	no	209,050		235,640		14
FRA	France	Europe	no	3,653,264		2,620,062		15
DEU	Germany	Europe	no	5,800,986		3,101,126		16
GIB	Gibraltar	Europe	no	3,141				17
GRC	Greece	Europe	no	642,888		327,811		18
HUN	Hungary	Europe	no	286,209		120,269		19
ISL	Iceland	Europe	no	25,742		11,313		20
IRL	Ireland	Europe	no	244,117		171,957		21
ITA	Italy	Europe	no	3,701,619		2,087,749		22
LVA	Latvia	Europe	no	39,277		24,210		23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNE [USD million]		AAL/GNE [‰]	Ranking
LIE	Liechtenstein	Europe	no	8,070					24
LTU	Lithuania	Europe	no	53,397			36,811		25
LUX	Luxembourg	Europe	no	45,036			36,700		26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			10,902		27
MDA	Moldova, Republic of	Europe	no	9,896			8,053		28
MCO	Monaco	Europe	no	5,380					29
MNE	Montenegro	Europe	no	2,738			5,265		30
NLD	Netherlands	Europe	no	1,593,735			721,171		31
NOR	Norway	Europe	no	386,892			358,009		32
POL	Poland	Europe	no	659,150			475,111		33
SMR	San Marino	Europe	no	1,846					34
SRB	Serbia	Europe	no	16,907			44,764		35
SVK	Slovakia	Europe	no	124,390			88,405		36
SVN	Slovenia	Europe	no	36,896			46,643		37
ESP	Spain	Europe	no	2,695,139			1,437,861		38
SWE	Sweden	Europe	no	369,792			431,251		39
CHE	Switzerland	Europe	no	839,518			468,037		40
UKR	Ukraine	Europe	no	278,497			141,773		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			2,325,009		42
NZL	New Zealand	Australia	no	238,609	30				1
AUS	Australia	Australia	no	1,832,960	84				2
MLT	Malta	Pacific	no	18,630			8,111		3
HND	Honduras	Latin America	no	18,844	70		18,594	3.7	1
MEX	Mexico	Latin America	no	1,818,298	3,472		1,049,803	3.3	2
USA	United States of America	North America	no	22,004,154	11,460		15,103,640	0.8	3
GTM	Guatemala	Latin America	no	38,263	18		45,670	0.4	4
NIC	Nicaragua	Latin America	no	10,935	3		8,405	0.4	5
SLV	El Salvador	Latin America	no	22,582	5		24,921	0.2	6
VEN	Venezuela	Latin America	no	435,869	66		346,724	0.2	7
CAN	Canada	North America	no	2,051,584	310		1,606,667	0.2	8
PAN	Panama	Latin America	no	30,296	2		27,738	0.1	9
CRI	Costa Rica	Latin America	no	38,475	1		36,941	0.0	10
COL	Colombia	Latin America	no	325,385	7		294,580	0.0	11
TCA	Turks and Caicos islands	Caribbean	no	332	4				12
CYM	Cayman Islands	Caribbean	no	3,603	42				13
GLP	Guadeloupe	Caribbean	no	19,838	192				14
MTQ	Martinique	Caribbean	no	21,052	103				15
GUF	French Guiana	Latin America	no	8,339	0				16
ARG	Argentina	Latin America	no	403,909			356,545		17
BOL	Bolivia	Latin America	no	13,112			18,301		18
BRA	Brazil	Latin America	no	1,715,746			2,108,637		19
CHL	Chile	Latin America	no	326,640			198,120		20
ECU	Ecuador	Latin America	no	68,550			61,265		21
PRY	Paraguay	Latin America	no	19,203			17,941		22
PER	Peru	Latin America	no	189,980			152,561		23
URY	Uruguay	Latin America	no	28,590			39,936		24
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8		11,309	0.7	1
MWI	Malawi	Sub Saharan Africa	no	1,883	0		5,605	0.1	2
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0		4,329	0.1	3
ZAF	South Africa	Sub Saharan Africa	no	335,148	11		369,463	0.0	4
BWA	Botswana	Sub Saharan Africa	no	18,941	0		15,360	0.0	5
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0		8,897	0.0	6
ZMB	Zambia	Sub Saharan Africa	no	9,806	0		14,723	0.0	7
REU	Réunion	Sub Saharan Africa	no	42,937	261				8
MDG	Madagascar	Sub Saharan Africa	no	2,575	15				9
MYT	Mayotte	Sub Saharan Africa	no	2,341	8				10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0		26,224		11
LSO	Lesotho	Sub Saharan Africa	no	3,522			3,511		12
DZA	Algeria	North Africa	no	259,977					13
EGY	Egypt	North Africa	no	234,939			229,362		14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903					15
MAR	Morocco	North Africa	no	136,300			99,808		16
TUN	Tunisia	North Africa	no	65,420			46,643		17
AGO	Angola	Sub Saharan Africa	no	25,225			72,456		18
BEN	Benin	Sub Saharan Africa	no	3,585			7,536		19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120					20
BDI	Burundi	Sub Saharan Africa	no	168					21
CMR	Cameroon	Sub Saharan Africa	no	16,950			23,429		22
CAF	Central African Republic	Sub Saharan Africa	no	916					23



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TCD	Chad	Sub Saharan Africa	no	6,664			9,469		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			15,617		25
COG	Congo	Sub Saharan Africa	no	12,566			8,109		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			21,734		27
DJI	Djibouti	Sub Saharan Africa	no	2,525					28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765					29
ERI	Eritrea	Sub Saharan Africa	no	1,892					30
ETH	Ethiopia	Sub Saharan Africa	no	5,141			35,978		31
GAB	Gabon	Sub Saharan Africa	no	25,086			10,274		32
GMB	Gambia	Sub Saharan Africa	no	680			963		33
GHA	Ghana	Sub Saharan Africa	no	12,649			35,414		34
GIN	Guinea	Sub Saharan Africa	no	3,259			4,711		35
KEN	Kenya	Sub Saharan Africa	no	18,470			35,486		36
LBR	Liberia	Sub Saharan Africa	no	515					37
MLI	Mali	Sub Saharan Africa	no	3,869					38
MRT	Mauritania	Sub Saharan Africa	no	3,622			4,195		39
NAM	Namibia	Sub Saharan Africa	no	7,239			12,035		40
NER	Niger	Sub Saharan Africa	no	2,800					41
NGA	Nigeria	Sub Saharan Africa	no	121,669			168,996		42
RWA	Rwanda	Sub Saharan Africa	no	1,558					43
SEN	Senegal	Sub Saharan Africa	no	11,619			15,485		44
SLE	Sierra Leone	Sub Saharan Africa	no	523			2,142		45
SOM	Somalia	Sub Saharan Africa	no	3,573					46
SDN	Sudan	Sub Saharan Africa	no	26,851			61,511		47
TGO	Togo	Sub Saharan Africa	no	1,644					48
UGA	Uganda	Sub Saharan Africa	no	6,628			18,757		49
ESH	Western Sahara	Sub Saharan Africa	no	2,173					50
FJI	Fiji	Asia	yes	2,100	13		3,569	3.6	1
VUT	Vanuatu	Asia	yes	102	0		743	0.3	2
SLB	Solomon islands	Asia	yes	211	0		885	0.2	3
PNG	Papua New Guinea	Asia	yes	5,433	0		9,217	0.0	4
NCL	New Caledonia	Asia	yes	4,771	2				5
BHR	Bahrain	Asia	yes	32,575					6
TON	Tonga	Pacific	yes	230	2		510	4.5	1
WSM	Samoa	Pacific	yes	361	3		727	3.4	2
FSM	Micronesia (Federated States of)	Pacific	yes	585	3				3
PYF	French Polynesia	Pacific	yes	6,568	32				4
PLW	Palau	Pacific	yes	279	1				5
MDV	Maldives	Pacific	yes	907			2,244		6
SGP	Singapore	Pacific	yes	526,900			150,187		7
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12		1,329	9.0	1
JAM	Jamaica	Caribbean	yes	28,963	59		16,776	3.5	2
HTI	Haiti	Caribbean	yes	8,553	32		9,743	3.3	3
BRB	Barbados	Caribbean	yes	4,677	10		4,317	2.3	4
DMA	Dominica	Caribbean	yes	356	1		573	2.3	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2		914	1.6	6
GRD	Grenada	Caribbean	yes	1,229	1		996	1.4	7
LCA	Saint Lucia	Caribbean	yes	543	2		1,355	1.1	8
DOM	Dominican Republic	Caribbean	yes	72,573	61		57,847	1.1	9
AIA	Anguilla	Caribbean	yes	20	0				10
VIR	United States Virgin Islands	Caribbean	yes	1,755	16				11
VGB	British Virgin Islands	Caribbean	yes	424	3				12
BLZ	Belize	Latin America	yes	1,251	6				13
PRI	Puerto Rico	Caribbean	yes	135,818	795				14
BHS	Bahamas	Caribbean	yes	21,313	70				15
ABW	Aruba	Caribbean	yes	6,526	11				16
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17				17
CUB	Cuba	Caribbean	yes	46,280	40				18
GUY	Guyana	Latin America	yes	3,468	0				19
SUR	Suriname	Latin America	yes	2,797	0				20
KNA	Saint Kitts and Nevis	Caribbean	yes	2			766		21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69		10,934	6.3	1
COM	Comoros	Sub Saharan Africa	yes	310	1				2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1				3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949					4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466					5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311					6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GGC [USD million]	AAL/GGC [%]	
PHL	Philippines	Asia	no	186,193	2,039	19,403	105.1	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	155,748	55.6	2
HKG	Hong Kong	Asia	no	1,138,019	927	18,948	48.9	3
JPN	Japan	Asia	no	14,617,394	45,933	1,094,349	42.0	4
MAC	Macau	Asia	no	96,993	68	2,186	31.0	5
CHN	China	Asia	no	4,512,825	8,954	791,999	11.3	6
BGD	Bangladesh	Asia	no	72,949	58	5,387	10.8	7
VNM	Viet Nam	Asia	no	115,441	23	6,947	3.3	8
PAK	Pakistan	Asia	no	170,444	24	14,053	1.7	9
IND	India	Asia	no	1,429,881	230	198,830	1.2	10
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	672	0.9	11
IDN	Indonesia	Asia	no	575,183	41	64,015	0.6	12
LKA	Sri Lanka	Asia	no	49,967	5	7,718	0.6	13
KHM	Cambodia	Asia	no	4,335	0	713	0.6	14
MYS	Malaysia	Asia	no	318,727	6	30,273	0.2	15
THA	Thailand	Asia	no	394,598	7	41,294	0.2	16
ARE	United Arab Emirates	Asia	no	248,015	2	24,545	0.1	17
TWN	Taiwan	Asia	no	872,409	4,441			18
BRN	Brunei Darussalam	Asia	no	20,094	11			19
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			20
NPL	Nepal	Asia	no	6,537	2			21
MMR	Myanmar	Asia	no	20,572	3			22
OMN	Oman	Asia	no	42,201	2			23
BTN	Bhutan	Asia	no	1,167				24
QAT	Qatar	Asia	no	113,981	0			25
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0			26
AFG	Afghanistan	Asia	no	16,132				27
ARM	Armenia	Asia	no	14,187		1,231		28
AZE	Azerbaijan	Asia	no	45,197		5,852		29
CYP	Cyprus	Asia	no	23,484		4,558		30
GEO	Georgia	Asia	no	21,157		2,453		31
IRQ	Iraq	Asia	no	47,245				32
ISR	Israel	Asia	no	293,550		52,616		33
JOR	Jordan	Asia	no	40,997		5,910		34
KAZ	Kazakhstan	Asia	no	180,409		16,117		35
KWT	Kuwait	Asia	no	202,236				36
KGZ	Kyrgyzstan	Asia	no	3,644		877		37
LBN	Lebanon	Asia	no	56,965		4,711		38
MNG	Mongolia	Asia	no	9,273		851		39
SAU	Saudi Arabia	Asia	no	751,807		97,875		40
SYR	Syrian Arab Republic	Asia	no	68,489		5,991		41
TJK	Tajikistan	Asia	no	5,576		1,658		42
TUR	Turkey	Asia	no	1,578,228		104,758		43
TKM	Turkmenistan	Asia	no	12,707		2,212		44
UZB	Uzbekistan	Asia	no	44,370		6,853		45
YEM	Yemen	Asia	no	21,556				46
PRT	Portugal	Europe	no	296,296	0	49,074	0.0	1
RUS	Russian Federation	Europe	no	2,209,139	2	287,875	0.0	2
ALB	Albania	Europe	no	13,964		952		3
AUT	Austria	Europe	no	615,592		73,430		4
BLR	Belarus	Europe	no	74,427		8,828		5
BEL	Belgium	Europe	no	739,159		113,598		6
BIH	Bosnia and Herzegovina	Europe	no	10,433		3,498		7
BGR	Bulgaria	Europe	no	70,023		7,539		8
HRV	Croatia	Europe	no	65,145		13,084		9
CZE	Czech Republic	Europe	no	336,714		41,897		10
DNK	Denmark	Europe	no	381,265		90,977		11
EST	Estonia	Europe	no	28,069		3,959		12
FRO	Faroe Islands	Europe	no	1,012				13
FIN	Finland	Europe	no	209,050		58,644		14
FRA	France	Europe	no	3,653,264		635,621		15
DEU	Germany	Europe	no	5,800,986		647,378		16
GIB	Gibraltar	Europe	no	3,141				17
GRC	Greece	Europe	no	642,888		54,736		18
HUN	Hungary	Europe	no	286,209		28,084		19
ISL	Iceland	Europe	no	25,742		3,261		20
IRL	Ireland	Europe	no	244,117		39,102		21
ITA	Italy	Europe	no	3,701,619		435,241		22
LVA	Latvia	Europe	no	39,277		4,122		23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GGC [USD million]	AAL/GGC [%]	
LIE	Liechtenstein	Europe	no	8,070				24
LTU	Lithuania	Europe	no	53,397		7,241		25
LUX	Luxembourg	Europe	no	45,036		8,868		26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		1,683		27
MDA	Moldova, Republic of	Europe	no	9,896		1,377		28
MCO	Monaco	Europe	no	5,380				29
MNE	Montenegro	Europe	no	2,738		775		30
NLD	Netherlands	Europe	no	1,593,735		221,964		31
NOR	Norway	Europe	no	386,892		92,372		32
POL	Poland	Europe	no	659,150		88,643		33
SMR	San Marino	Europe	no	1,846				34
SRB	Serbia	Europe	no	16,907		7,380		35
SVK	Slovakia	Europe	no	124,390		17,073		36
SVN	Slovenia	Europe	no	36,896		9,752		37
ESP	Spain	Europe	no	2,695,139		292,417		38
SWE	Sweden	Europe	no	369,792		123,918		39
CHE	Switzerland	Europe	no	839,518		60,549		40
UKR	Ukraine	Europe	no	278,497		27,731		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		518,869		42
NZL	New Zealand	Australia	no	238,609	30			1
AUS	Australia	Australia	no	1,832,960	84			2
MLT	Malta	Pacific	no	18,630		1,711		3
MEX	Mexico	Latin America	no	1,818,298	3,472	120,640	28.8	1
HND	Honduras	Latin America	no	18,844	70	2,777	25.0	2
NIC	Nicaragua	Latin America	no	10,935	3	627	4.9	3
USA	United States of America	North America	no	22,004,154	11,460	2,522,700	4.5	4
GTM	Guatemala	Latin America	no	38,263	18	4,254	4.2	5
SLV	El Salvador	Latin America	no	22,582	5	2,312	2.3	6
VEN	Venezuela	Latin America	no	435,869	66	42,419	1.6	7
PAN	Panama	Latin America	no	30,296	2	1,561	1.4	8
CAN	Canada	North America	no	2,051,584	310	343,217	0.9	9
CRI	Costa Rica	Latin America	no	38,475	1	6,358	0.2	10
COL	Colombia	Latin America	no	325,385	7	46,769	0.2	11
TCA	Turks and Caicos islands	Caribbean	no	332	4			12
CYM	Cayman Islands	Caribbean	no	3,603	42			13
GLP	Guadeloupe	Caribbean	no	19,838	192			14
MTQ	Martinique	Caribbean	no	21,052	103			15
GUF	French Guiana	Latin America	no	8,339	0			16
ARG	Argentina	Latin America	no	403,909		55,024		17
BOL	Bolivia	Latin America	no	13,112		2,718		18
BRA	Brazil	Latin America	no	1,715,746		442,019		19
CHL	Chile	Latin America	no	326,640		26,588		20
ECU	Ecuador	Latin America	no	68,550		6,807		21
PRY	Paraguay	Latin America	no	19,203		1,711		22
PER	Peru	Latin America	no	189,980		15,659		23
URY	Uruguay	Latin America	no	28,590		5,117		24
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1,166	6.5	1
MWI	Malawi	Sub Saharan Africa	no	1,883	0	976	0.3	2
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	913	0.2	3
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	71,742	0.2	4
BWA	Botswana	Sub Saharan Africa	no	18,941	0	3,130	0.1	5
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	1,281	0.1	6
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	2,153	0.1	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	4,052	0.0	8
REU	Réunion	Sub Saharan Africa	no	42,937	261			9
MDG	Madagascar	Sub Saharan Africa	no	2,575	15			10
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			11
LSO	Lesotho	Sub Saharan Africa	no	3,522		935		12
DZA	Algeria	North Africa	no	259,977				13
EGY	Egypt	North Africa	no	234,939		24,436		14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				15
MAR	Morocco	North Africa	no	136,300		15,913		16
TUN	Tunisia	North Africa	no	65,420		7,209		17
AGO	Angola	Sub Saharan Africa	no	25,225				18
BEN	Benin	Sub Saharan Africa	no	3,585				19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120				20
BDI	Burundi	Sub Saharan Africa	no	168				21
CMR	Cameroon	Sub Saharan Africa	no	16,950				22
CAF	Central African Republic	Sub Saharan Africa	no	916				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GGC [USD million]		AAL/GGC [%]	Ranking
TCD	Chad	Sub Saharan Africa	no	6,664		1,131			24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		719			25
COG	Congo	Sub Saharan Africa	no	12,566		1,186			26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		1,968			27
DJI	Djibouti	Sub Saharan Africa	no	2,525					28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765					29
ERI	Eritrea	Sub Saharan Africa	no	1,892					30
ETH	Ethiopia	Sub Saharan Africa	no	5,141		3,029			31
GAB	Gabon	Sub Saharan Africa	no	25,086		1,267			32
GMB	Gambia	Sub Saharan Africa	no	680		121			33
GHA	Ghana	Sub Saharan Africa	no	12,649		3,511			34
GIN	Guinea	Sub Saharan Africa	no	3,259		339			35
KEN	Kenya	Sub Saharan Africa	no	18,470		4,226			36
LBR	Liberia	Sub Saharan Africa	no	515					37
MLI	Mali	Sub Saharan Africa	no	3,869					38
MRT	Mauritania	Sub Saharan Africa	no	3,622		646			39
NAM	Namibia	Sub Saharan Africa	no	7,239		2,692			40
NER	Niger	Sub Saharan Africa	no	2,800					41
NGA	Nigeria	Sub Saharan Africa	no	121,669					42
RWA	Rwanda	Sub Saharan Africa	no	1,558					43
SEN	Senegal	Sub Saharan Africa	no	11,619		1,124			44
SLE	Sierra Leone	Sub Saharan Africa	no	523		233			45
SOM	Somalia	Sub Saharan Africa	no	3,573					46
SDN	Sudan	Sub Saharan Africa	no	26,851		9,428			47
TGO	Togo	Sub Saharan Africa	no	1,644					48
UGA	Uganda	Sub Saharan Africa	no	6,628		2,015			49
ESH	Western Sahara	Sub Saharan Africa	no	2,173					50
PNG	Papua New Guinea	Asia	yes	5,433	0	897	0.3		1
FJI	Fiji	Asia	yes	2,100	13				2
VUT	Vanuatu	Asia	yes	102	0				3
SLB	Solomon islands	Asia	yes	211	0				4
NCL	New Caledonia	Asia	yes	4,771	2				5
BHR	Bahrain	Asia	yes	32,575					6
TON	Tonga	Pacific	yes	230	2	67	34.5		1
WSM	Samoa	Pacific	yes	361	3				2
FSM	Micronesia (Federated States of)	Pacific	yes	585	3				3
PYF	French Polynesia	Pacific	yes	6,568	32				4
PLW	Palau	Pacific	yes	279	1				5
MDV	Maldives	Pacific	yes	907					6
SGP	Singapore	Pacific	yes	526,900		22,293			7
JAM	Jamaica	Caribbean	yes	28,963	59	2,368	24.9		1
DMA	Dominica	Caribbean	yes	356	1	81	16.1		2
DOM	Dominican Republic	Caribbean	yes	72,573	61	3,965	15.3		3
BRB	Barbados	Caribbean	yes	4,677	10	835	12.1		4
LCA	Saint Lucia	Caribbean	yes	543	2	192	7.8		5
GUY	Guyana	Latin America	yes	3,468	0	341	0.6		6
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12				7
HTI	Haiti	Caribbean	yes	8,553	32				8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2				9
GRD	Grenada	Caribbean	yes	1,229	1				10
AIA	Anguilla	Caribbean	yes	20	0				11
VIR	United States Virgin Islands	Caribbean	yes	1,755	16				12
VGB	British Virgin Islands	Caribbean	yes	424	3				13
BLZ	Belize	Latin America	yes	1,251	6				14
PRI	Puerto Rico	Caribbean	yes	135,818	795				15
BHS	Bahamas	Caribbean	yes	21,313	70				16
ABW	Aruba	Caribbean	yes	6,526	11				17
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17				18
CUB	Cuba	Caribbean	yes	46,280	40				19
SUR	Suriname	Latin America	yes	2,797	0				20
KNA	Saint Kitts and Nevis	Caribbean	yes	2					21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	1,393	49.5		1
COM	Comoros	Sub Saharan Africa	yes	310	1				2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1				3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949					4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466					5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311					6



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				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
PHL	Philippines	Asia	no	186,193	2,039	22,170	92.0	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	200,936	43.1	2
JPN	Japan	Asia	no	14,617,394	45,933	1,144,171	40.1	3
HKG	Hong Kong	Asia	no	1,138,019	927	52,025	17.8	4
MAC	Macau	Asia	no	96,993	68	4,316	15.7	5
CHN	China	Asia	no	4,512,825	8,954	930,625	9.6	6
BRN	Brunei Darussalam	Asia	no	20,094	11	1,279	8.7	7
BGD	Bangladesh	Asia	no	72,949	58	19,006	3.1	8
PAK	Pakistan	Asia	no	170,444	24	18,461	1.3	9
VNM	Viet Nam	Asia	no	115,441	23	19,932	1.1	10
IND	India	Asia	no	1,429,881	230	248,602	0.9	11
IDN	Indonesia	Asia	no	575,183	41	52,407	0.8	12
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	893	0.7	13
LKA	Sri Lanka	Asia	no	49,967	5	7,159	0.7	14
KHM	Cambodia	Asia	no	4,335	0	1,494	0.3	15
MYS	Malaysia	Asia	no	318,727	6	30,724	0.2	16
THA	Thailand	Asia	no	394,598	7	42,938	0.2	17
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0	46,695	0.0	18
ARE	United Arab Emirates	Asia	no	248,015	2			19
TWN	Taiwan	Asia	no	872,409	4,441			20
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			21
NPL	Nepal	Asia	no	6,537	2			22
MMR	Myanmar	Asia	no	20,572	3			23
OMN	Oman	Asia	no	42,201	2			24
BTN	Bhutan	Asia	no	1,167				25
QAT	Qatar	Asia	no	113,981	0			26
AFG	Afghanistan	Asia	no	16,132				27
ARM	Armenia	Asia	no	14,187		1,530		28
AZE	Azerbaijan	Asia	no	45,197		4,557		29
CYP	Cyprus	Asia	no	23,484		2,630		30
GEO	Georgia	Asia	no	21,157				31
IRQ	Iraq	Asia	no	47,245				32
ISR	Israel	Asia	no	293,550		30,157		33
JOR	Jordan	Asia	no	40,997		3,205		34
KAZ	Kazakhstan	Asia	no	180,409		11,258		35
KWT	Kuwait	Asia	no	202,236				36
KGZ	Kyrgyzstan	Asia	no	3,644		419		37
LBN	Lebanon	Asia	no	56,965		5,937		38
MNG	Mongolia	Asia	no	9,273				39
SAU	Saudi Arabia	Asia	no	751,807		66,377		40
SYR	Syrian Arab Republic	Asia	no	68,489		6,052		41
TJK	Tajikistan	Asia	no	5,576		144		42
TUR	Turkey	Asia	no	1,578,228		87,701		43
TKM	Turkmenistan	Asia	no	12,707				44
UZB	Uzbekistan	Asia	no	44,370				45
YEM	Yemen	Asia	no	21,556				46
RUS	Russian Federation	Europe	no	2,209,139	2	100,485	0.0	1
PRT	Portugal	Europe	no	296,296	0	29,628	0.0	2
ALB	Albania	Europe	no	13,964		1,329		3
AUT	Austria	Europe	no	615,592		48,760		4
BLR	Belarus	Europe	no	74,427		8,860		5
BEL	Belgium	Europe	no	739,159		59,532		6
BIH	Bosnia and Herzegovina	Europe	no	10,433				7
BGR	Bulgaria	Europe	no	70,023		5,626		8
HRV	Croatia	Europe	no	65,145		8,147		9
CZE	Czech Republic	Europe	no	336,714		22,186		10
DNK	Denmark	Europe	no	381,265		39,721		11
EST	Estonia	Europe	no	28,069		3,738		12
FRO	Faroe Islands	Europe	no	1,012				13
FIN	Finland	Europe	no	209,050		30,495		14
FRA	France	Europe	no	3,653,264		306,117		15
DEU	Germany	Europe	no	5,800,986		413,986		16
GIB	Gibraltar	Europe	no	3,141				17
GRC	Greece	Europe	no	642,888		42,781		18
HUN	Hungary	Europe	no	286,209		14,219		19
ISL	Iceland	Europe	no	25,742		3,437		20
IRL	Ireland	Europe	no	244,117		33,055		21
ITA	Italy	Europe	no	3,701,619		253,228		22
LVA	Latvia	Europe	no	39,277		5,143		23



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ITEC S.A.S. – INGENIAR LTDA. – EAI S.A.

ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value)	(Cyclones)	GFCF(GCF)	AAL/GFCF(GCF)	
				[USD million]	[USD million]	[USD million]	[%]	
LIE	Liechtenstein	Europe	no	8,070				24
LTU	Lithuania	Europe	no	53,397		5,768		25
LUX	Luxembourg	Europe	no	45,036		6,616		26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		823		27
MDA	Moldova, Republic of	Europe	no	9,896		563		28
MCO	Monaco	Europe	no	5,380				29
MNE	Montenegro	Europe	no	2,738				30
NLD	Netherlands	Europe	no	1,593,735		92,014		31
NOR	Norway	Europe	no	386,892		47,607		32
POL	Poland	Europe	no	659,150		52,601		33
SMR	San Marino	Europe	no	1,846				34
SRB	Serbia	Europe	no	16,907		2,776		35
SVK	Slovakia	Europe	no	124,390		11,975		36
SVN	Slovenia	Europe	no	36,896		7,746		37
ESP	Spain	Europe	no	2,695,139		216,748		38
SWE	Sweden	Europe	no	369,792		60,814		39
CHE	Switzerland	Europe	no	839,518		64,161		40
UKR	Ukraine	Europe	no	278,497		14,671		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		335,845		42
NZL	New Zealand	Australia	no	238,609	30	15,614	1.9	1
AUS	Australia	Australia	no	1,832,960	84	150,632	0.6	2
MLT	Malta	Pacific	no	18,630		1,008		3
HND	Honduras	Latin America	no	18,844	70	2,998	23.2	1
MEX	Mexico	Latin America	no	1,818,298	3,472	159,403	21.8	2
USA	United States of America	North America	no	22,004,154	11,460	2,212,313	5.2	3
GTM	Guatemala	Latin America	no	38,263	18	4,200	4.2	4
NIC	Nicaragua	Latin America	no	10,935	3	1,445	2.1	5
SLV	El Salvador	Latin America	no	22,582	5	2,799	1.9	6
CAN	Canada	North America	no	2,051,584	310	203,409	1.5	7
VEN	Venezuela	Latin America	no	435,869	66	48,477	1.4	8
PAN	Panama	Latin America	no	30,296	2	4,074	0.5	9
CRI	Costa Rica	Latin America	no	38,475	1	4,507	0.2	10
COL	Colombia	Latin America	no	325,385	7	33,173	0.2	11
TCA	Turks and Caicos islands	Caribbean	no	332	4			12
CYM	Cayman Islands	Caribbean	no	3,603	42			13
GLP	Guadeloupe	Caribbean	no	19,838	192			14
MTQ	Martinique	Caribbean	no	21,052	103			15
GUF	French Guiana	Latin America	no	8,339	0			16
ARG	Argentina	Latin America	no	403,909		75,477		17
BOL	Bolivia	Latin America	no	13,112		1,619		18
BRA	Brazil	Latin America	no	1,715,746		138,995		19
CHL	Chile	Latin America	no	326,640		27,076		20
ECU	Ecuador	Latin America	no	68,550		5,925		21
PRY	Paraguay	Latin America	no	19,203		1,552		22
PER	Peru	Latin America	no	189,980		18,553		23
URY	Uruguay	Latin America	no	28,590		3,671		24
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	1,317	11.5	1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1,432	5.3	2
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	265	0.8	3
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	38,298	0.3	4
BWA	Botswana	Sub Saharan Africa	no	18,941	0	1,880	0.2	5
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	815	0.1	6
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	3,995	0.0	7
MWI	Malawi	Sub Saharan Africa	no	1,883	0			8
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0			9
REU	Réunion	Sub Saharan Africa	no	42,937	261			10
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			11
LSO	Lesotho	Sub Saharan Africa	no	3,522		257		12
DZA	Algeria	North Africa	no	259,977		18,029		13
EGY	Egypt	North Africa	no	234,939		30,406		14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				15
MAR	Morocco	North Africa	no	136,300		16,366		16
TUN	Tunisia	North Africa	no	65,420		6,865		17
AGO	Angola	Sub Saharan Africa	no	25,225				18
BEN	Benin	Sub Saharan Africa	no	3,585		720		19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120				20
BDI	Burundi	Sub Saharan Africa	no	168				21
CMR	Cameroon	Sub Saharan Africa	no	16,950		2,363		22
CAF	Central African Republic	Sub Saharan Africa	no	916				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GFCF(GCF) AAL/GFCF(GCF) [USD million] [%]		Ranking
TCD	Chad	Sub Saharan Africa	no	6,664				24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433				25
COG	Congo	Sub Saharan Africa	no	12,566				26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		1,082		27
DJI	Djibouti	Sub Saharan Africa	no	2,525				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765				29
ERI	Eritrea	Sub Saharan Africa	no	1,892		141		30
ETH	Ethiopia	Sub Saharan Africa	no	5,141		3,519		31
GAB	Gabon	Sub Saharan Africa	no	25,086		1,639		32
GMB	Gambia	Sub Saharan Africa	no	680				33
GHA	Ghana	Sub Saharan Africa	no	12,649				34
GIN	Guinea	Sub Saharan Africa	no	3,259		391		35
KEN	Kenya	Sub Saharan Africa	no	18,470		3,803		36
LBR	Liberia	Sub Saharan Africa	no	515				37
MLI	Mali	Sub Saharan Africa	no	3,869		1,042		38
MRT	Mauritania	Sub Saharan Africa	no	3,622				39
NAM	Namibia	Sub Saharan Africa	no	7,239		1,324		40
NER	Niger	Sub Saharan Africa	no	2,800				41
NGA	Nigeria	Sub Saharan Africa	no	121,669				42
RWA	Rwanda	Sub Saharan Africa	no	1,558				43
SEN	Senegal	Sub Saharan Africa	no	11,619		2,278		44
SLE	Sierra Leone	Sub Saharan Africa	no	523				45
SOM	Somalia	Sub Saharan Africa	no	3,573				46
SDN	Sudan	Sub Saharan Africa	no	26,851		3,285		47
TGO	Togo	Sub Saharan Africa	no	1,644				48
UGA	Uganda	Sub Saharan Africa	no	6,628		2,609		49
ESH	Western Sahara	Sub Saharan Africa	no	2,173				50
PNG	Papua New Guinea	Asia	yes	5,433	0			1
FJI	Fiji	Asia	yes	2,100	13			2
VUT	Vanuatu	Asia	yes	102	0			3
SLB	Solomon islands	Asia	yes	211	0			4
NCL	New Caledonia	Asia	yes	4,771	2			5
BHR	Bahrain	Asia	yes	32,575				6
TON	Tonga	Pacific	yes	230	2			1
WSM	Samoa	Pacific	yes	361	3			2
FSM	Micronesia (Federated States of)	Pacific	yes	585	3			3
PYF	French Polynesia	Pacific	yes	6,568	32			4
PLW	Palau	Pacific	yes	279	1			5
MDV	Maldives	Pacific	yes	907				6
SGP	Singapore	Pacific	yes	526,900		36,452		7
BLZ	Belize	Latin America	yes	1,251	6	180	32.8	1
HTI	Haiti	Caribbean	yes	8,553	32	1,081	29.5	2
BHS	Bahamas	Caribbean	yes	21,313	70	2,547	27.6	3
DOM	Dominican Republic	Caribbean	yes	72,573	61	5,996	10.1	4
CUB	Cuba	Caribbean	yes	46,280	40	5,742	7.0	5
JAM	Jamaica	Caribbean	yes	28,963	59			6
DMA	Dominica	Caribbean	yes	356	1			7
BRB	Barbados	Caribbean	yes	4,677	10			8
LCA	Saint Lucia	Caribbean	yes	543	2			9
GUY	Guyana	Latin America	yes	3,468	0			10
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12			11
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2			12
GRD	Grenada	Caribbean	yes	1,229	1			13
AIA	Anguilla	Caribbean	yes	20	0			14
VIR	United States Virgin Islands	Caribbean	yes	1,755	16			15
VGB	British Virgin Islands	Caribbean	yes	424	3			16
PRI	Puerto Rico	Caribbean	yes	135,818	795			17
ABW	Aruba	Caribbean	yes	6,526	11			18
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17			19
SUR	Suriname	Latin America	yes	2,797	0			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2				21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	1,571	43.9	1
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	262	2.3	2
COM	Comoros	Sub Saharan Africa	yes	310	1			3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949		190		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466				5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311				6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
PHL	Philippines	Asia	no	186,193	29,234	15.7	1
KOR	Republic of Korea	Asia	no	2,787,207	155,099	5.6	2
TWN	Taiwan	Asia	no	872,409	42,503	4.9	3
BGD	Bangladesh	Asia	no	72,949	3,058	4.2	4
JPN	Japan	Asia	no	14,617,394	547,820	3.8	5
CHN	China	Asia	no	4,512,825	126,734	2.8	6
BRN	Brunei Darussalam	Asia	no	20,094	555	2.8	7
HKG	Hong Kong	Asia	no	1,138,019	24,805	2.2	8
PRK	Dem People's Rep of Korea	Asia	no	27,936	587	2.1	9
NPL	Nepal	Asia	no	6,537	112	1.7	10
MAC	Macau	Asia	no	96,993	1,550	1.6	11
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	0.8	12
PAK	Pakistan	Asia	no	170,444	1,188	0.7	13
IND	India	Asia	no	1,429,881	9,531	0.7	14
VNM	Viet Nam	Asia	no	115,441	587	0.5	15
MMR	Myanmar	Asia	no	20,572	101	0.5	16
IDN	Indonesia	Asia	no	575,183	2,060	0.4	17
KHM	Cambodia	Asia	no	4,335	15	0.4	18
LKA	Sri Lanka	Asia	no	49,967	172	0.3	19
OMN	Oman	Asia	no	42,201	131	0.3	20
BTN	Bhutan	Asia	no	1,167	3	0.3	21
MYS	Malaysia	Asia	no	318,727	328	0.1	22
THA	Thailand	Asia	no	394,598	259	0.1	23
ARE	United Arab Emirates	Asia	no	248,015	150	0.1	24
QAT	Qatar	Asia	no	113,981	18	0.0	25
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21		26
AFG	Afghanistan	Asia	no	16,132			27
ARM	Armenia	Asia	no	14,187			28
AZE	Azerbaijan	Asia	no	45,197			29
CYP	Cyprus	Asia	no	23,484			30
GEO	Georgia	Asia	no	21,157			31
IRQ	Iraq	Asia	no	47,245			32
ISR	Israel	Asia	no	293,550			33
JOR	Jordan	Asia	no	40,997			34
KAZ	Kazakhstan	Asia	no	180,409			35
KWT	Kuwait	Asia	no	202,236			36
KGZ	Kyrgyzstan	Asia	no	3,644			37
LBN	Lebanon	Asia	no	56,965			38
MNG	Mongolia	Asia	no	9,273			39
SAU	Saudi Arabia	Asia	no	751,807	1		40
SYR	Syrian Arab Republic	Asia	no	68,489			41
TJK	Tajikistan	Asia	no	5,576			42
TUR	Turkey	Asia	no	1,578,228			43
TKM	Turkmenistan	Asia	no	12,707			44
UZB	Uzbekistan	Asia	no	44,370			45
YEM	Yemen	Asia	no	21,556			46
PRT	Portugal	Europe	no	296,296	13		1
RUS	Russian Federation	Europe	no	2,209,139	58		2
ALB	Albania	Europe	no	13,964			3
AUT	Austria	Europe	no	615,592			4
BLR	Belarus	Europe	no	74,427			5
BEL	Belgium	Europe	no	739,159			6
BIH	Bosnia and Herzegovina	Europe	no	10,433			7
BGR	Bulgaria	Europe	no	70,023			8
HRV	Croatia	Europe	no	65,145			9
CZE	Czech Republic	Europe	no	336,714			10
DNK	Denmark	Europe	no	381,265			11
EST	Estonia	Europe	no	28,069			12
FRO	Faroe Islands	Europe	no	1,012			13
FIN	Finland	Europe	no	209,050			14
FRA	France	Europe	no	3,653,264			15
DEU	Germany	Europe	no	5,800,986			16
GIB	Gibraltar	Europe	no	3,141			17
GRC	Greece	Europe	no	642,888			18
HUN	Hungary	Europe	no	286,209			19
ISL	Iceland	Europe	no	25,742			20
IRL	Ireland	Europe	no	244,117			21
ITA	Italy	Europe	no	3,701,619			22
LVA	Latvia	Europe	no	39,277			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
LIE	Liechtenstein	Europe	no	8,070			24
LTU	Lithuania	Europe	no	53,397			25
LUX	Luxembourg	Europe	no	45,036			26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			27
MDA	Moldova, Republic of	Europe	no	9,896			28
MCO	Monaco	Europe	no	5,380			29
MNE	Montenegro	Europe	no	2,738			30
NLD	Netherlands	Europe	no	1,593,735			31
NOR	Norway	Europe	no	386,892			32
POL	Poland	Europe	no	659,150			33
SMR	San Marino	Europe	no	1,846			34
SRB	Serbia	Europe	no	16,907			35
SVK	Slovakia	Europe	no	124,390			36
SVN	Slovenia	Europe	no	36,896			37
ESP	Spain	Europe	no	2,695,139			38
SWE	Sweden	Europe	no	369,792			39
CHE	Switzerland	Europe	no	839,518			40
UKR	Ukraine	Europe	no	278,497			41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			42
NZL	New Zealand	Australia	no	238,609	677	0.3	1
AUS	Australia	Australia	no	1,832,960	1,857	0.1	2
MLT	Malta	Pacific	no	18,630			3
TCA	Turks and Caicos islands	Caribbean	no	332	121	36.7	1
CYM	Cayman Islands	Caribbean	no	3,603	1,195	33.2	2
GLP	Guadeloupe	Caribbean	no	19,838	6,191	31.2	3
MTQ	Martinique	Caribbean	no	21,052	4,820	22.9	4
HND	Honduras	Latin America	no	18,844	2,730	14.5	5
MEX	Mexico	Latin America	no	1,818,298	102,450	5.6	6
GTM	Guatemala	Latin America	no	38,263	698	1.8	7
NIC	Nicaragua	Latin America	no	10,935	133	1.2	8
USA	United States of America	North America	no	22,004,154	194,597	0.9	9
VEN	Venezuela	Latin America	no	435,869	3,263	0.8	10
SLV	El Salvador	Latin America	no	22,582	165	0.7	11
CAN	Canada	North America	no	2,051,584	10,965	0.5	12
PAN	Panama	Latin America	no	30,296	129	0.4	13
CRI	Costa Rica	Latin America	no	38,475	71	0.2	14
COL	Colombia	Latin America	no	325,385	354	0.1	15
GUF	French Guiana	Latin America	no	8,339	0		16
ARG	Argentina	Latin America	no	403,909			17
BOL	Bolivia	Latin America	no	13,112			18
BRA	Brazil	Latin America	no	1,715,746			19
CHL	Chile	Latin America	no	326,640			20
ECU	Ecuador	Latin America	no	68,550			21
PRY	Paraguay	Latin America	no	19,203			22
PER	Peru	Latin America	no	189,980			23
URY	Uruguay	Latin America	no	28,590			24
REU	Réunion	Sub Saharan Africa	no	42,937	7,386	17.2	1
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	15.5	2
MYT	Mayotte	Sub Saharan Africa	no	2,341	310	13.3	3
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	7.2	4
MWI	Malawi	Sub Saharan Africa	no	1,883	13	0.7	5
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	0.6	6
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	0.2	7
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	0.1	8
BWA	Botswana	Sub Saharan Africa	no	18,941	4	0.0	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	0.0	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	0.0	11
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	0.0	12
DZA	Algeria	North Africa	no	259,977			13
EGY	Egypt	North Africa	no	234,939			14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903			15
MAR	Morocco	North Africa	no	136,300			16
TUN	Tunisia	North Africa	no	65,420			17
AGO	Angola	Sub Saharan Africa	no	25,225			18
BEN	Benin	Sub Saharan Africa	no	3,585			19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			20
BDI	Burundi	Sub Saharan Africa	no	168			21
CMR	Cameroon	Sub Saharan Africa	no	16,950			22
CAF	Central African Republic	Sub Saharan Africa	no	916			23



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TCD	Chad	Sub Saharan Africa	no	6,664			24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			25
COG	Congo	Sub Saharan Africa	no	12,566			26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			27
DJI	Djibouti	Sub Saharan Africa	no	2,525			28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			29
ERI	Eritrea	Sub Saharan Africa	no	1,892			30
ETH	Ethiopia	Sub Saharan Africa	no	5,141			31
GAB	Gabon	Sub Saharan Africa	no	25,086			32
GMB	Gambia	Sub Saharan Africa	no	680			33
GHA	Ghana	Sub Saharan Africa	no	12,649			34
GIN	Guinea	Sub Saharan Africa	no	3,259			35
KEN	Kenya	Sub Saharan Africa	no	18,470			36
LBR	Liberia	Sub Saharan Africa	no	515			37
MLI	Mali	Sub Saharan Africa	no	3,869			38
MRT	Mauritania	Sub Saharan Africa	no	3,622			39
NAM	Namibia	Sub Saharan Africa	no	7,239			40
NER	Niger	Sub Saharan Africa	no	2,800			41
NGA	Nigeria	Sub Saharan Africa	no	121,669			42
RWA	Rwanda	Sub Saharan Africa	no	1,558			43
SEN	Senegal	Sub Saharan Africa	no	11,619			44
SLE	Sierra Leone	Sub Saharan Africa	no	523			45
SOM	Somalia	Sub Saharan Africa	no	3,573			46
SDN	Sudan	Sub Saharan Africa	no	26,851			47
TGO	Togo	Sub Saharan Africa	no	1,644			48
UGA	Uganda	Sub Saharan Africa	no	6,628			49
ESH	Western Sahara	Sub Saharan Africa	no	2,173			50
FJI	Fiji	Asia	yes	2,100	385	18.3	1
VUT	Vanuatu	Asia	yes	102	5	4.8	2
SLB	Solomon islands	Asia	yes	211	5	2.2	3
NCL	New Caledonia	Asia	yes	4,771	35	0.7	4
PNG	Papua New Guinea	Asia	yes	5,433	9	0.2	5
BHR	Bahrain	Asia	yes	32,575	0		6
TON	Tonga	Pacific	yes	230	56	24.3	1
WSM	Samoa	Pacific	yes	361	85	23.6	2
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	15.5	3
PYF	French Polynesia	Pacific	yes	6,568	973	14.8	4
PLW	Palau	Pacific	yes	279	14	5.2	5
MDV	Maldives	Pacific	yes	907			6
SGP	Singapore	Pacific	yes	526,900	1		7
AIA	Anguilla	Caribbean	yes	20	9	43.6	1
VIR	United States Virgin Islands	Caribbean	yes	1,755	439	25.0	2
VGB	British Virgin Islands	Caribbean	yes	424	103	24.3	3
BLZ	Belize	Latin America	yes	1,251	291	23.3	4
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	18.4	5
PRI	Puerto Rico	Caribbean	yes	135,818	24,190	17.8	6
DMA	Dominica	Caribbean	yes	356	60	16.8	7
HTI	Haiti	Caribbean	yes	8,553	1,416	16.6	8
LCA	Saint Lucia	Caribbean	yes	543	73	13.5	9
BRB	Barbados	Caribbean	yes	4,677	534	11.4	10
BHS	Bahamas	Caribbean	yes	21,313	2,355	11.1	11
ABW	Aruba	Caribbean	yes	6,526	562	8.6	12
JAM	Jamaica	Caribbean	yes	28,963	2,255	7.8	13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	7.6	14
GRD	Grenada	Caribbean	yes	1,229	81	6.6	15
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	3.2	16
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	3.1	17
CUB	Cuba	Caribbean	yes	46,280	1,229	2.7	18
GUY	Guyana	Latin America	yes	3,468	4	0.1	19
SUR	Suriname	Latin America	yes	2,797	1	0.0	20
KNA	Saint Kitts and Nevis	Caribbean	yes	2			21
COM	Comoros	Sub Saharan Africa	yes	310	47	15.1	1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	13.6	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	0.7	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	0.0	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
KOR	Republic of Korea	Asia	no	2,787,207	155,099	1,014,483	15.3	1
PHL	Philippines	Asia	no	186,193	29,234	199,589	14.7	2
HKG	Hong Kong	Asia	no	1,138,019	24,805	224,458	11.1	3
JPN	Japan	Asia	no	14,617,394	547,820	5,458,837	10.0	4
MAC	Macau	Asia	no	96,993	1,550	27,960	5.5	5
BGD	Bangladesh	Asia	no	72,949	3,058	100,357	3.1	6
CHN	China	Asia	no	4,512,825	126,734	5,926,612	2.1	7
PAK	Pakistan	Asia	no	170,444	1,188	176,870	0.7	8
VNM	Viet Nam	Asia	no	115,441	587	106,427	0.6	9
IND	India	Asia	no	1,429,881	9,531	1,727,111	0.6	10
LKA	Sri Lanka	Asia	no	49,967	172	49,552	0.4	11
IDN	Indonesia	Asia	no	575,183	2,060	706,558	0.3	12
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	7,296	0.3	13
BTN	Bhutan	Asia	no	1,167	3	1,516	0.2	14
KHM	Cambodia	Asia	no	4,335	15	11,242	0.1	15
MYS	Malaysia	Asia	no	318,727	328	237,797	0.1	16
THA	Thailand	Asia	no	394,598	259	318,522	0.1	17
ARE	United Arab Emirates	Asia	no	248,015	150	297,649	0.1	18
BRN	Brunei Darussalam	Asia	no	20,094	555			19
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21			20
TWN	Taiwan	Asia	no	872,409	42,503			21
PRK	Dem People's Rep of Korea	Asia	no	27,936	587			22
NPL	Nepal	Asia	no	6,537	112			23
MMR	Myanmar	Asia	no	20,572	101			24
OMN	Oman	Asia	no	42,201	131			25
QAT	Qatar	Asia	no	113,981	18			26
AFG	Afghanistan	Asia	no	16,132		17,243		27
ARM	Armenia	Asia	no	14,187		9,371		28
AZE	Azerbaijan	Asia	no	45,197		51,774		29
CYP	Cyprus	Asia	no	23,484		23,132		30
GEO	Georgia	Asia	no	21,157		11,667		31
IRQ	Iraq	Asia	no	47,245		82,150		32
ISR	Israel	Asia	no	293,550		217,333		33
JOR	Jordan	Asia	no	40,997		27,574		34
KAZ	Kazakhstan	Asia	no	180,409		149,059		35
KWT	Kuwait	Asia	no	202,236				36
KGZ	Kyrgyzstan	Asia	no	3,644		4,616		37
LBN	Lebanon	Asia	no	56,965		39,006		38
MNG	Mongolia	Asia	no	9,273		6,200		39
SAU	Saudi Arabia	Asia	no	751,807	1	434,666		40
SYR	Syrian Arab Republic	Asia	no	68,489		59,147		41
TJK	Tajikistan	Asia	no	5,576		5,640		42
TUR	Turkey	Asia	no	1,578,228		734,365		43
TKM	Turkmenistan	Asia	no	12,707		20,001		44
UZB	Uzbekistan	Asia	no	44,370		38,982		45
YEM	Yemen	Asia	no	21,556				46
PRT	Portugal	Europe	no	296,296	13	228,872	0.0	1
RUS	Russian Federation	Europe	no	2,209,139	58	1,479,819		2
ALB	Albania	Europe	no	13,964		11,786		3
AUT	Austria	Europe	no	615,592		379,069		4
BLR	Belarus	Europe	no	74,427		54,713		5
BEL	Belgium	Europe	no	739,159		469,374		6
BIH	Bosnia and Herzegovina	Europe	no	10,433		16,578		7
BGR	Bulgaria	Europe	no	70,023		47,714		8
HRV	Croatia	Europe	no	65,145		60,852		9
CZE	Czech Republic	Europe	no	336,714		192,032		10
DNK	Denmark	Europe	no	381,265		309,866		11
EST	Estonia	Europe	no	28,069		19,217		12
FRO	Faroe Islands	Europe	no	1,012				13
FIN	Finland	Europe	no	209,050		238,746		14
FRA	France	Europe	no	3,653,264		2,560,002		15
DEU	Germany	Europe	no	5,800,986		3,280,530		16
GIB	Gibraltar	Europe	no	3,141				17
GRC	Greece	Europe	no	642,888		301,083		18
HUN	Hungary	Europe	no	286,209		128,632		19
ISL	Iceland	Europe	no	25,742		12,574		20
IRL	Ireland	Europe	no	244,117		211,390		21
ITA	Italy	Europe	no	3,701,619		2,051,412		22
LVA	Latvia	Europe	no	39,277		24,010		23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
LIE	Liechtenstein	Europe	no	8,070				24
LTU	Lithuania	Europe	no	53,397		36,306		25
LUX	Luxembourg	Europe	no	45,036		53,334		26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		9,189		27
MDA	Moldova, Republic of	Europe	no	9,896		5,809		28
MCO	Monaco	Europe	no	5,380				29
MNE	Montenegro	Europe	no	2,738		4,111		30
NLD	Netherlands	Europe	no	1,593,735		779,356		31
NOR	Norway	Europe	no	386,892		412,990		32
POL	Poland	Europe	no	659,150		469,440		33
SMR	San Marino	Europe	no	1,846				34
SRB	Serbia	Europe	no	16,907		38,423		35
SVK	Slovakia	Europe	no	124,390		87,268		36
SVN	Slovenia	Europe	no	36,896		46,908		37
ESP	Spain	Europe	no	2,695,139		1,407,405		38
SWE	Sweden	Europe	no	369,792		458,973		39
CHE	Switzerland	Europe	no	839,518		527,920		40
UKR	Ukraine	Europe	no	278,497		137,929		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,248,831		42
NZL	New Zealand	Australia	no	238,609	677			1
AUS	Australia	Australia	no	1,832,960	1,857			2
MLT	Malta	Pacific	no	18,630		8,256		3
HND	Honduras	Latin America	no	18,844	2,730	15,400	17.7	1
MEX	Mexico	Latin America	no	1,818,298	102,450	1,034,804	9.9	2
NIC	Nicaragua	Latin America	no	10,935	133	6,551	2.0	3
GTM	Guatemala	Latin America	no	38,263	698	41,186	1.7	4
USA	United States of America	North America	no	22,004,154	194,597	14,586,740	1.3	5
VEN	Venezuela	Latin America	no	435,869	3,263	391,848	0.8	6
SLV	El Salvador	Latin America	no	22,582	165	21,215	0.8	7
CAN	Canada	North America	no	2,051,584	10,965	1,577,040	0.7	8
PAN	Panama	Latin America	no	30,296	129	26,689	0.5	9
CRI	Costa Rica	Latin America	no	38,475	71	35,831	0.2	10
COL	Colombia	Latin America	no	325,385	354	288,189	0.1	11
TCA	Turks and Caicos islands	Caribbean	no	332	121			12
CYM	Cayman Islands	Caribbean	no	3,603	1,195			13
GLP	Guadeloupe	Caribbean	no	19,838	6,191			14
MTQ	Martinique	Caribbean	no	21,052	4,820			15
GUF	French Guiana	Latin America	no	8,339	0			16
ARG	Argentina	Latin America	no	403,909		368,736		17
BOL	Bolivia	Latin America	no	13,112		19,650		18
BRA	Brazil	Latin America	no	1,715,746		2,087,890		19
CHL	Chile	Latin America	no	326,640		212,741		20
ECU	Ecuador	Latin America	no	68,550		57,978		21
PRY	Paraguay	Latin America	no	19,203		18,333		22
PER	Peru	Latin America	no	189,980		157,053		23
URY	Uruguay	Latin America	no	28,590		40,265		24
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	8,721	4.6	1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	9,586	4.2	2
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	3,645	0.3	3
MWI	Malawi	Sub Saharan Africa	no	1,883	13	5,106	0.3	4
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	363,704	0.2	5
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	7,474	0.1	6
BWA	Botswana	Sub Saharan Africa	no	18,941	4	14,857	0.0	7
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	16,193	0.0	8
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	2,132	0.0	9
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	23,057		10
REU	Réunion	Sub Saharan Africa	no	42,937	7,386			11
MYT	Mayotte	Sub Saharan Africa	no	2,341	310			12
DZA	Algeria	North Africa	no	259,977		159,426		13
EGY	Egypt	North Africa	no	234,939		218,894		14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				15
MAR	Morocco	North Africa	no	136,300		90,805		16
TUN	Tunisia	North Africa	no	65,420		44,291		17
AGO	Angola	Sub Saharan Africa	no	25,225		84,391		18
BEN	Benin	Sub Saharan Africa	no	3,585		6,633		19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120		8,820		20
BDI	Burundi	Sub Saharan Africa	no	168		1,611		21
CMR	Cameroon	Sub Saharan Africa	no	16,950		22,394		22
CAF	Central African Republic	Sub Saharan Africa	no	916		2,013		23



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TCD	Chad	Sub Saharan Africa	no	6,664		7,588		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		13,145		25
COG	Congo	Sub Saharan Africa	no	12,566		11,898		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		22,780		27
DJI	Djibouti	Sub Saharan Africa	no	2,525				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765		14,007		29
ERI	Eritrea	Sub Saharan Africa	no	1,892		2,117		30
ETH	Ethiopia	Sub Saharan Africa	no	5,141		29,717		31
GAB	Gabon	Sub Saharan Africa	no	25,086		13,011		32
GMB	Gambia	Sub Saharan Africa	no	680		807		33
GHA	Ghana	Sub Saharan Africa	no	12,649		31,306		34
GIN	Guinea	Sub Saharan Africa	no	3,259		4,511		35
KEN	Kenya	Sub Saharan Africa	no	18,470		31,409		36
LBR	Liberia	Sub Saharan Africa	no	515		986		37
MLI	Mali	Sub Saharan Africa	no	3,869		9,251		38
MRT	Mauritania	Sub Saharan Africa	no	3,622		3,636		39
NAM	Namibia	Sub Saharan Africa	no	7,239		12,170		40
NER	Niger	Sub Saharan Africa	no	2,800		5,549		41
NGA	Nigeria	Sub Saharan Africa	no	121,669		193,669		42
RWA	Rwanda	Sub Saharan Africa	no	1,558		5,628		43
SEN	Senegal	Sub Saharan Africa	no	11,619		12,954		44
SLE	Sierra Leone	Sub Saharan Africa	no	523		1,905		45
SOM	Somalia	Sub Saharan Africa	no	3,573				46
SDN	Sudan	Sub Saharan Africa	no	26,851		62,046		47
TGO	Togo	Sub Saharan Africa	no	1,644		3,153		48
UGA	Uganda	Sub Saharan Africa	no	6,628		17,011		49
ESH	Western Sahara	Sub Saharan Africa	no	2,173				50
FJI	Fiji	Asia	yes	2,100	385	3,189	12.1	1
VUT	Vanuatu	Asia	yes	102	5	699	0.7	2
SLB	Solomon islands	Asia	yes	211	5	679	0.7	3
PNG	Papua New Guinea	Asia	yes	5,433	9	9,480	0.1	4
NCL	New Caledonia	Asia	yes	4,771	35			5
BHR	Bahrain	Asia	yes	32,575	0			6
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	297	30.4	1
TON	Tonga	Pacific	yes	230	56	348	16.1	2
WSM	Samoa	Pacific	yes	361	85	574	14.9	3
PLW	Palau	Pacific	yes	279	14	171	8.4	4
PYF	French Polynesia	Pacific	yes	6,568	973			5
MDV	Maldives	Pacific	yes	907		1,908		6
SGP	Singapore	Pacific	yes	526,900	1	208,765		7
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	1,211	36.8	1
BHS	Bahamas	Caribbean	yes	21,313	2,355	7,538	31.2	2
HTI	Haiti	Caribbean	yes	8,553	1,416	6,710	21.1	3
BLZ	Belize	Latin America	yes	1,251	291	1,401	20.8	4
JAM	Jamaica	Caribbean	yes	28,963	2,255	14,252	15.8	5
BRB	Barbados	Caribbean	yes	4,677	534	4,110	13.0	6
DMA	Dominica	Caribbean	yes	356	60	466	12.9	7
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	705	11.3	8
GRD	Grenada	Caribbean	yes	1,229	81	773	10.4	9
LCA	Saint Lucia	Caribbean	yes	543	73	1,198	6.1	10
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	20,604	4.9	11
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	51,766	4.4	12
GUY	Guyana	Latin America	yes	3,468	4	2,226	0.2	13
CUB	Cuba	Caribbean	yes	46,280	1,229			14
AIA	Anguilla	Caribbean	yes	20	9			15
VIR	United States Virgin Islands	Caribbean	yes	1,755	439			16
VGB	British Virgin Islands	Caribbean	yes	424	103			17
PRI	Puerto Rico	Caribbean	yes	135,818	24,190			18
ABW	Aruba	Caribbean	yes	6,526	562			19
SUR	Suriname	Latin America	yes	2,797	1			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2		652		21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	9,729	18.3	1
COM	Comoros	Sub Saharan Africa	yes	310	47	541	8.6	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	937	2.0	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	1,648	0.0	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466		879		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311		197		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
KOR	Republic of Korea	Asia	no	2,787,207	155,099	1,014,760	15.3	1
PHL	Philippines	Asia	no	186,193	29,234	199,897	14.6	2
HKG	Hong Kong	Asia	no	1,138,019	24,805	229,165	10.8	3
JPN	Japan	Asia	no	14,617,394	547,820	5,601,557	9.8	4
BGD	Bangladesh	Asia	no	72,949	3,058	109,695	2.8	5
CHN	China	Asia	no	4,512,825	126,734	5,957,012	2.1	6
PAK	Pakistan	Asia	no	170,444	1,188	183,620	0.7	7
VNM	Viet Nam	Asia	no	115,441	587	102,008	0.6	8
IND	India	Asia	no	1,429,881	9,531	1,712,645	0.6	9
LKA	Sri Lanka	Asia	no	49,967	172	48,916	0.4	10
IDN	Indonesia	Asia	no	575,183	2,060	686,633	0.3	11
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	6,978	0.3	12
BTN	Bhutan	Asia	no	1,167	3	1,420	0.2	13
KHM	Cambodia	Asia	no	4,335	15	10,664	0.1	14
MYS	Malaysia	Asia	no	318,727	328	229,566	0.1	15
THA	Thailand	Asia	no	394,598	259	304,812	0.1	16
MAC	Macau	Asia	no	96,993	1,550			17
ARE	United Arab Emirates	Asia	no	248,015	150			18
BRN	Brunei Darussalam	Asia	no	20,094	555			19
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21			20
TWN	Taiwan	Asia	no	872,409	42,503			21
PRK	Dem People's Rep of Korea	Asia	no	27,936	587			22
NPL	Nepal	Asia	no	6,537	112			23
MMR	Myanmar	Asia	no	20,572	101			24
OMN	Oman	Asia	no	42,201	131			25
QAT	Qatar	Asia	no	113,981	18			26
AFG	Afghanistan	Asia	no	16,132		15,162		27
ARM	Armenia	Asia	no	14,187		9,710		28
AZE	Azerbaijan	Asia	no	45,197		48,307		29
CYP	Cyprus	Asia	no	23,484		22,539		30
GEO	Georgia	Asia	no	21,157		11,484		31
IRQ	Iraq	Asia	no	47,245		77,842		32
ISR	Israel	Asia	no	293,550		210,353		33
JOR	Jordan	Asia	no	40,997		27,820		34
KAZ	Kazakhstan	Asia	no	180,409		131,868		35
KWT	Kuwait	Asia	no	202,236				36
KGZ	Kyrgyzstan	Asia	no	3,644		4,273		37
LBN	Lebanon	Asia	no	56,965		39,051		38
MNG	Mongolia	Asia	no	9,273		5,640		39
SAU	Saudi Arabia	Asia	no	751,807	1			40
SYR	Syrian Arab Republic	Asia	no	68,489		57,266		41
TJK	Tajikistan	Asia	no	5,576		5,570		42
TUR	Turkey	Asia	no	1,578,228		727,056		43
TKM	Turkmenistan	Asia	no	12,707		18,107		44
UZB	Uzbekistan	Asia	no	44,370		39,013		45
YEM	Yemen	Asia	no	21,556				46
PRT	Portugal	Europe	no	296,296	13	221,243	0.0	1
RUS	Russian Federation	Europe	no	2,209,139	58	1,431,121		2
ALB	Albania	Europe	no	13,964		11,682		3
AUT	Austria	Europe	no	615,592		377,063		4
BLR	Belarus	Europe	no	74,427		53,379		5
BEL	Belgium	Europe	no	739,159		477,644		6
BIH	Bosnia and Herzegovina	Europe	no	10,433		17,008		7
BGR	Bulgaria	Europe	no	70,023		46,025		8
HRV	Croatia	Europe	no	65,145		58,806		9
CZE	Czech Republic	Europe	no	336,714		179,432		10
DNK	Denmark	Europe	no	381,265		315,664		11
EST	Estonia	Europe	no	28,069		18,420		12
FRO	Faroe Islands	Europe	no	1,012				13
FIN	Finland	Europe	no	209,050		242,899		14
FRA	France	Europe	no	3,653,264		2,606,780		15
DEU	Germany	Europe	no	5,800,986		3,341,391		16
GIB	Gibraltar	Europe	no	3,141				17
GRC	Greece	Europe	no	642,888		292,874		18
HUN	Hungary	Europe	no	286,209		122,372		19
ISL	Iceland	Europe	no	25,742		9,975		20
IRL	Ireland	Europe	no	244,117		171,260		21
ITA	Italy	Europe	no	3,701,619		2,023,916		22
LVA	Latvia	Europe	no	39,277		24,073		23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GNI [USD million]		PML ₂₅₀ /GNI [%]	Ranking
LIE	Liechtenstein	Europe	no	8,070					24
LTU	Lithuania	Europe	no	53,397		35,687			25
LUX	Luxembourg	Europe	no	45,036		37,925			26
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		8,992			27
MDA	Moldova, Republic of	Europe	no	9,896		6,280			28
MCO	Monaco	Europe	no	5,380					29
MNE	Montenegro	Europe	no	2,738		4,083			30
NLD	Netherlands	Europe	no	1,593,735		772,747			31
NOR	Norway	Europe	no	386,892		413,980			32
POL	Poland	Europe	no	659,150		452,275			33
SMR	San Marino	Europe	no	1,846					34
SRB	Serbia	Europe	no	16,907		37,533			35
SVK	Slovakia	Europe	no	124,390		86,077			36
SVN	Slovenia	Europe	no	36,896		46,217			37
ESP	Spain	Europe	no	2,695,139		1,388,744			38
SWE	Sweden	Europe	no	369,792		467,254			39
CHE	Switzerland	Europe	no	839,518		568,639			40
UKR	Ukraine	Europe	no	278,497		135,920			41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,280,719			42
NZL	New Zealand	Australia	no	238,609	677				1
AUS	Australia	Australia	no	1,832,960	1,857				2
MLT	Malta	Pacific	no	18,630		7,698			3
HND	Honduras	Latin America	no	18,844	2,730	14,798	18.5		1
MEX	Mexico	Latin America	no	1,818,298	102,450	1,020,288	10.0		2
NIC	Nicaragua	Latin America	no	10,935	133	6,273	2.1		3
GTM	Guatemala	Latin America	no	38,263	698	39,987	1.8		4
USA	United States of America	North America	no	22,004,154	194,597	14,635,600	1.3		5
VEN	Venezuela	Latin America	no	435,869	3,263	389,038	0.8		6
SLV	El Salvador	Latin America	no	22,582	165	20,834	0.8		7
CAN	Canada	North America	no	2,051,584	10,965	1,549,652	0.7		8
PAN	Panama	Latin America	no	30,296	129	25,037	0.5		9
CRI	Costa Rica	Latin America	no	38,475	71	34,896	0.2		10
COL	Colombia	Latin America	no	325,385	354	276,072	0.1		11
TCA	Turks and Caicos islands	Caribbean	no	332	121				12
CYM	Cayman Islands	Caribbean	no	3,603	1,195				13
GLP	Guadeloupe	Caribbean	no	19,838	6,191				14
MTQ	Martinique	Caribbean	no	21,052	4,820				15
GUF	French Guiana	Latin America	no	8,339	0				16
ARG	Argentina	Latin America	no	403,909		358,619			17
BOL	Bolivia	Latin America	no	13,112		18,790			18
BRA	Brazil	Latin America	no	1,715,746		2,049,164			19
CHL	Chile	Latin America	no	326,640		197,331			20
ECU	Ecuador	Latin America	no	68,550		56,924			21
PRY	Paraguay	Latin America	no	19,203		17,853			22
PER	Peru	Latin America	no	189,980		147,000			23
URY	Uruguay	Latin America	no	28,590		39,161			24
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	8,628	4.6		1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	9,421	4.3		2
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	3,586	0.4		3
MWI	Malawi	Sub Saharan Africa	no	1,883	13	4,980	0.3		4
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	356,475	0.2		5
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	6,988	0.1		6
BWA	Botswana	Sub Saharan Africa	no	18,941	4	14,771	0.0		7
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	14,300	0.0		8
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	2,553	0.0		9
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	23,012			10
REU	Réunion	Sub Saharan Africa	no	42,937	7,386				11
MYT	Mayotte	Sub Saharan Africa	no	2,341	310				12
DZA	Algeria	North Africa	no	259,977		155,538			13
EGY	Egypt	North Africa	no	234,939		214,530			14
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903					15
MAR	Morocco	North Africa	no	136,300		88,578			16
TUN	Tunisia	North Africa	no	65,420		42,020			17
AGO	Angola	Sub Saharan Africa	no	25,225		75,516			18
BEN	Benin	Sub Saharan Africa	no	3,585		6,633			19
BFA	Burkina Faso	Sub Saharan Africa	no	3,120		8,810			20
BDI	Burundi	Sub Saharan Africa	no	168		1,589			21
CMR	Cameroon	Sub Saharan Africa	no	16,950		22,030			22
CAF	Central African Republic	Sub Saharan Africa	no	916		2,009			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GNI [USD million]	PML ₂₅₀ /GNI [%]	Ranking
TCD	Chad	Sub Saharan Africa	no	6,664		6,734		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		12,263		25
COG	Congo	Sub Saharan Africa	no	12,566		8,619		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		21,729		27
DJI	Djibouti	Sub Saharan Africa	no	2,525				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765		9,578		29
ERI	Eritrea	Sub Saharan Africa	no	1,892		2,097		30
ETH	Ethiopia	Sub Saharan Africa	no	5,141		29,625		31
GAB	Gabon	Sub Saharan Africa	no	25,086		11,467		32
GMB	Gambia	Sub Saharan Africa	no	680		743		33
GHA	Ghana	Sub Saharan Africa	no	12,649		30,776		34
GIN	Guinea	Sub Saharan Africa	no	3,259		4,231		35
KEN	Kenya	Sub Saharan Africa	no	18,470		31,264		36
LBR	Liberia	Sub Saharan Africa	no	515		805		37
MLI	Mali	Sub Saharan Africa	no	3,869		8,909		38
MRT	Mauritania	Sub Saharan Africa	no	3,622		3,672		39
NAM	Namibia	Sub Saharan Africa	no	7,239		12,077		40
NER	Niger	Sub Saharan Africa	no	2,800		5,493		41
NGA	Nigeria	Sub Saharan Africa	no	121,669		176,769		42
RWA	Rwanda	Sub Saharan Africa	no	1,558		5,582		43
SEN	Senegal	Sub Saharan Africa	no	11,619		12,900		44
SLE	Sierra Leone	Sub Saharan Africa	no	523		1,905		45
SOM	Somalia	Sub Saharan Africa	no	3,573				46
SDN	Sudan	Sub Saharan Africa	no	26,851		55,939		47
TGO	Togo	Sub Saharan Africa	no	1,644		2,826		48
UGA	Uganda	Sub Saharan Africa	no	6,628		16,720		49
ESH	Western Sahara	Sub Saharan Africa	no	2,173				50
FJI	Fiji	Asia	yes	2,100	385	3,090	12.5	1
SLB	Solomon islands	Asia	yes	211	5	555	0.8	2
VUT	Vanuatu	Asia	yes	102	5	678	0.7	3
PNG	Papua New Guinea	Asia	yes	5,433	9	9,262	0.1	4
NCL	New Caledonia	Asia	yes	4,771	35			5
BHR	Bahrain	Asia	yes	32,575	0			6
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	312	29.0	1
TON	Tonga	Pacific	yes	230	56	352	15.9	2
WSM	Samoa	Pacific	yes	361	85	557	15.3	3
PLW	Palau	Pacific	yes	279	14	135	10.7	4
PYF	French Polynesia	Pacific	yes	6,568	973			5
MDV	Maldives	Pacific	yes	907		1,817		6
SGP	Singapore	Pacific	yes	526,900	1	201,050		7
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	1,179	37.8	1
BLZ	Belize	Latin America	yes	1,251	291	1,303	22.4	2
JAM	Jamaica	Caribbean	yes	28,963	2,255	13,574	16.6	3
DMA	Dominica	Caribbean	yes	356	60	454	13.2	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	691	11.6	5
GRD	Grenada	Caribbean	yes	1,229	81	727	11.1	6
LCA	Saint Lucia	Caribbean	yes	543	73	1,163	6.3	7
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	19,255	5.3	8
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	49,972	4.5	9
GUY	Guyana	Latin America	yes	3,468	4	2,238	0.2	10
BHS	Bahamas	Caribbean	yes	21,313	2,355			11
HTI	Haiti	Caribbean	yes	8,553	1,416			12
BRB	Barbados	Caribbean	yes	4,677	534			13
CUB	Cuba	Caribbean	yes	46,280	1,229			14
AIA	Anguilla	Caribbean	yes	20	9			15
VIR	United States Virgin Islands	Caribbean	yes	1,755	439			16
VGB	British Virgin Islands	Caribbean	yes	424	103			17
PRI	Puerto Rico	Caribbean	yes	135,818	24,190			18
ABW	Aruba	Caribbean	yes	6,526	562			19
SUR	Suriname	Latin America	yes	2,797	1			20
KNA	Saint Kitts and Nevis	Caribbean	yes	2		620		21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	9,798	18.1	1
COM	Comoros	Sub Saharan Africa	yes	310	47	539	8.7	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	855	2.2	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	1,579	0.0	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466		877		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311		200		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
PHL	Philippines	Asia	no	46,143	505	10.9	1
TWN	Taiwan	Asia	no	38,310	188	4.9	2
JPN	Japan	Asia	no	542,290	1,724	3.2	3
KOR	Republic of Korea	Asia	no	95,180	202	2.1	4
CHN	China	Asia	no	599,699	1,195	2.0	5
BGD	Bangladesh	Asia	no	14,034	11	0.8	6
HKG	Hong Kong	Asia	no	47,718	37	0.8	7
PRK	Dem People's Rep of Korea	Asia	no	10,245	7	0.7	8
MAC	Macau	Asia	no	1,989	1	0.7	9
BRN	Brunei Darussalam	Asia	no	895	1	0.6	10
NPL	Nepal	Asia	no	2,411	1	0.3	11
LAO	Lao People's Democratic Republic	Asia	no	938	0	0.3	12
VNM	Viet Nam	Asia	no	24,066	4	0.2	13
IND	India	Asia	no	320,919	51	0.2	14
PAK	Pakistan	Asia	no	37,562	5	0.1	15
MMR	Myanmar	Asia	no	9,829	1	0.1	16
LKA	Sri Lanka	Asia	no	14,385	1	0.1	17
KHM	Cambodia	Asia	no	1,623	0	0.1	18
IDN	Indonesia	Asia	no	113,457	8	0.1	19
OMN	Oman	Asia	no	4,095	0	0.1	20
BTN	Bhutan	Asia	no	371		0.0	21
MYS	Malaysia	Asia	no	37,377	1	0.0	22
THA	Thailand	Asia	no	43,178	1	0.0	23
ARE	United Arab Emirates	Asia	no	11,165	0	0.0	24
AFG	Afghanistan	Asia	no	9,988			25
ARM	Armenia	Asia	no	2,899			26
AZE	Azerbaijan	Asia	no	12,666			27
CYP	Cyprus	Asia	no	1,154			28
GEO	Georgia	Asia	no	3,815			29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0		30
IRQ	Iraq	Asia	no	15,555			31
ISR	Israel	Asia	no	22,505			32
JOR	Jordan	Asia	no	10,652			33
KAZ	Kazakhstan	Asia	no	20,880			34
KWT	Kuwait	Asia	no	6,168			35
KGZ	Kyrgyzstan	Asia	no	756			36
LBN	Lebanon	Asia	no	4,139			37
MNG	Mongolia	Asia	no	2,335			38
QAT	Qatar	Asia	no	2,116			39
SAU	Saudi Arabia	Asia	no	73,922			40
SYR	Syrian Arab Republic	Asia	no	18,783			41
TJK	Tajikistan	Asia	no	2,412			42
TUR	Turkey	Asia	no	164,353			43
TKM	Turkmenistan	Asia	no	3,779			44
UZB	Uzbekistan	Asia	no	10,382			45
YEM	Yemen	Asia	no	10,133			46
RUS	Russian Federation	Europe	no	288,219	0		1
ALB	Albania	Europe	no	3,381			2
AUT	Austria	Europe	no	28,002			3
BLR	Belarus	Europe	no	21,160			4
BEL	Belgium	Europe	no	29,496			5
BIH	Bosnia and Herzegovina	Europe	no	1,424			6
BGR	Bulgaria	Europe	no	9,040			7
HRV	Croatia	Europe	no	6,064			8
CZE	Czech Republic	Europe	no	23,126			9
DNK	Denmark	Europe	no	31,778			10
EST	Estonia	Europe	no	2,851			11
FRO	Faroe Islands	Europe	no	42			12
FIN	Finland	Europe	no	14,927			13
FRA	France	Europe	no	236,236			14
DEU	Germany	Europe	no	262,867			15
GIB	Gibraltar	Europe	no	274			16
GRC	Greece	Europe	no	27,597			17
HUN	Hungary	Europe	no	30,434			18
ISL	Iceland	Europe	no	1,071			19
IRL	Ireland	Europe	no	16,223			20
ITA	Italy	Europe	no	188,526			21
LVA	Latvia	Europe	no	4,998			22
LIE	Liechtenstein	Europe	no	198			23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
LTU	Lithuania	Europe	no	7,227			24
LUX	Luxembourg	Europe	no	2,462			25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000			26
MDA	Moldova, Republic of	Europe	no	3,416			27
MCO	Monaco	Europe	no	123			28
MNE	Montenegro	Europe	no	269			29
NLD	Netherlands	Europe	no	49,481			30
NOR	Norway	Europe	no	33,800			31
POL	Poland	Europe	no	60,706			32
PRT	Portugal	Europe	no	18,087			33
SMR	San Marino	Europe	no	113			34
SRB	Serbia	Europe	no	1,938			35
SVK	Slovakia	Europe	no	9,245			36
SVN	Slovenia	Europe	no	2,231			37
ESP	Spain	Europe	no	122,131			38
SWE	Sweden	Europe	no	27,971			39
CHE	Switzerland	Europe	no	40,078			40
UKR	Ukraine	Europe	no	32,769			41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134			42
NZL	New Zealand	Australia	no	12,682	1	0.1	1
AUS	Australia	Australia	no	47,971	2	0.1	2
MLT	Malta	Pacific	no	1,330			3
CYM	Cayman Islands	Caribbean	no	81	1	11.6	1
TCA	Turks and Caicos islands	Caribbean	no	28	0	10.7	2
GLP	Guadeloupe	Caribbean	no	904	9	9.7	3
MTQ	Martinique	Caribbean	no	889	4	4.9	4
HND	Honduras	Latin America	no	5,414	20	3.7	5
MEX	Mexico	Latin America	no	260,866	459	1.8	6
USA	United States of America	North America	no	1,224,802	642	0.5	7
GTM	Guatemala	Latin America	no	8,748	4	0.5	8
NIC	Nicaragua	Latin America	no	2,310	1	0.3	9
SLV	El Salvador	Latin America	no	4,297	1	0.2	10
VEN	Venezuela	Latin America	no	42,697	7	0.2	11
CAN	Canada	North America	no	121,895	18	0.2	12
PAN	Panama	Latin America	no	5,115	0	0.1	13
CRI	Costa Rica	Latin America	no	6,892	0	0.0	14
GUF	French Guiana	Latin America	no	378		0.0	15
COL	Colombia	Latin America	no	53,054	1	0.0	16
ARG	Argentina	Latin America	no	39,520			17
BOL	Bolivia	Latin America	no	4,521			18
BRA	Brazil	Latin America	no	300,613			19
CHL	Chile	Latin America	no	18,070			20
ECU	Ecuador	Latin America	no	10,202			21
PRY	Paraguay	Latin America	no	4,301			22
PER	Peru	Latin America	no	24,717			23
URY	Uruguay	Latin America	no	4,269			24
REU	Réunion	Sub Saharan Africa	no	2,161	13	6.1	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	9	5.8	2
MYT	Mayotte	Sub Saharan Africa	no	154	1	3.3	3
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	1.3	4
MWI	Malawi	Sub Saharan Africa	no	1,519	0	0.1	5
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.1	6
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	0.0	7
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.0	8
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		0.0	9
ZMB	Zambia	Sub Saharan Africa	no	4,976		0.0	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	0.0	11
LSO	Lesotho	Sub Saharan Africa	no	2,124			12
DZA	Algeria	North Africa	no	67,908			13
EGY	Egypt	North Africa	no	101,974			14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501			15
MAR	Morocco	North Africa	no	41,389			16
TUN	Tunisia	North Africa	no	14,190			17
AGO	Angola	Sub Saharan Africa	no	9,237			18
BEN	Benin	Sub Saharan Africa	no	1,223			19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847			20
BDI	Burundi	Sub Saharan Africa	no	145			21
CMR	Cameroon	Sub Saharan Africa	no	6,256			22
CAF	Central African Republic	Sub Saharan Africa	no	351			23



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TCD	Chad	Sub Saharan Africa	no	4,004			24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914			25
COG	Congo	Sub Saharan Africa	no	3,326			26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304			27
DJI	Djibouti	Sub Saharan Africa	no	656			28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626			29
ERI	Eritrea	Sub Saharan Africa	no	1,076			30
ETH	Ethiopia	Sub Saharan Africa	no	3,583			31
GAB	Gabon	Sub Saharan Africa	no	2,633			32
GMB	Gambia	Sub Saharan Africa	no	334			33
GHA	Ghana	Sub Saharan Africa	no	4,753			34
GIN	Guinea	Sub Saharan Africa	no	1,643			35
KEN	Kenya	Sub Saharan Africa	no	8,730			36
LBR	Liberia	Sub Saharan Africa	no	263			37
MLI	Mali	Sub Saharan Africa	no	1,887			38
MRT	Mauritania	Sub Saharan Africa	no	1,470			39
NAM	Namibia	Sub Saharan Africa	no	1,706			40
NER	Niger	Sub Saharan Africa	no	1,230			41
NGA	Nigeria	Sub Saharan Africa	no	45,741			42
RWA	Rwanda	Sub Saharan Africa	no	962			43
SEN	Senegal	Sub Saharan Africa	no	5,536			44
SLE	Sierra Leone	Sub Saharan Africa	no	302			45
SOM	Somalia	Sub Saharan Africa	no	2,303			46
SDN	Sudan	Sub Saharan Africa	no	12,166			47
TGO	Togo	Sub Saharan Africa	no	529			48
UGA	Uganda	Sub Saharan Africa	no	3,787			49
ESH	Western Sahara	Sub Saharan Africa	no	418			50
FJI	Fiji	Asia	yes	309	2	6.0	1
VUT	Vanuatu	Asia	yes	25		1.6	2
SLB	Solomon islands	Asia	yes	85	0	0.7	3
NCL	New Caledonia	Asia	yes	107		0.3	4
PNG	Papua New Guinea	Asia	yes	1,289	0	0.1	5
BHR	Bahrain	Asia	yes	1,670			6
TON	Tonga	Pacific	yes	47	1	10.2	1
WSM	Samoa	Pacific	yes	93	1	6.9	2
PYF	French Polynesia	Pacific	yes	116	1	4.9	3
FSM	Micronesia (Federated States of)	Pacific	yes	216	1	4.4	4
PLW	Palau	Pacific	yes	25	0	2.0	5
MDV	Maldives	Pacific	yes	154			6
SGP	Singapore	Pacific	yes	18,751			7
AIA	Anguilla	Caribbean	yes	2		30.0	1
VIR	United States Virgin Islands	Caribbean	yes	82	1	9.3	2
VGB	British Virgin Islands	Caribbean	yes	18	0	7.1	3
PRI	Puerto Rico	Caribbean	yes	3,197	19	5.9	4
ATG	Antigua and Barbuda	Caribbean	yes	272	1	4.9	5
BLZ	Belize	Latin America	yes	65	0	4.8	6
HTI	Haiti	Caribbean	yes	1,584	6	3.7	7
DMA	Dominica	Caribbean	yes	43	0	3.7	8
BHS	Bahamas	Caribbean	yes	985	3	3.3	9
LCA	Saint Lucia	Caribbean	yes	73	0	2.8	10
BRB	Barbados	Caribbean	yes	253	1	2.1	11
JAM	Jamaica	Caribbean	yes	4,148	8	2.0	12
ABW	Aruba	Caribbean	yes	358	1	1.7	13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	1.5	14
GRD	Grenada	Caribbean	yes	63	0	1.1	15
CUB	Cuba	Caribbean	yes	5,936	5	0.9	16
DOM	Dominican Republic	Caribbean	yes	13,790	11	0.8	17
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1	0.5	18
GUY	Guyana	Latin America	yes	884	0	0.1	19
SUR	Suriname	Latin America	yes	364		0.0	20
KNA	Saint Kitts and Nevis	Caribbean	yes	0			21
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	5.3	1
COM	Comoros	Sub Saharan Africa	yes	156	1	3.1	2
SYC	Seychelles	Sub Saharan Africa	yes	631	0	0.2	3
CPV	Cape Verde	Sub Saharan Africa	yes	446			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114			6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value)	(Cyclones)	GNE	AAL/GNE	
				[USD million]	[USD million]	[USD million]	[%]	
PHL	Philippines	Asia	no	46,143	505	203,208	2.5	1
JPN	Japan	Asia	no	542,290	1,724	5,396,265	0.3	2
KOR	Republic of Korea	Asia	no	95,180	202	986,184	0.2	3
CHN	China	Asia	no	599,699	1,195	5,694,512	0.2	4
HKG	Hong Kong	Asia	no	47,718	37	211,863	0.2	5
MAC	Macau	Asia	no	1,989	1	11,994	0.1	6
BGD	Bangladesh	Asia	no	14,034	11	106,991	0.1	7
VNM	Viet Nam	Asia	no	24,066	4	117,363	0.0	8
LAO	Lao People's Democratic Republic	Asia	no	938	0	7,629	0.0	9
PAK	Pakistan	Asia	no	37,562	5	186,087	0.0	10
IND	India	Asia	no	320,919	51	1,783,129	0.0	11
LKA	Sri Lanka	Asia	no	14,385	1	54,079	0.0	12
KHM	Cambodia	Asia	no	1,623	0	11,854	0.0	13
IDN	Indonesia	Asia	no	113,457	8	695,009	0.0	14
TWN	Taiwan	Asia	no	38,310	188			15
BRN	Brunei Darussalam	Asia	no	895	1			16
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			17
NPL	Nepal	Asia	no	2,411	1			18
MMR	Myanmar	Asia	no	9,829	1			19
OMN	Oman	Asia	no	4,095	0			20
BTN	Bhutan	Asia	no	371				21
MYS	Malaysia	Asia	no	37,377	1	195,443		22
THA	Thailand	Asia	no	43,178	1	295,072		23
ARE	United Arab Emirates	Asia	no	11,165	0	270,334		24
AFG	Afghanistan	Asia	no	9,988		1,852		25
ARM	Armenia	Asia	no	2,899		11,639		26
AZE	Azerbaijan	Asia	no	12,666		33,777		27
CYP	Cyprus	Asia	no	1,154		24,623		28
GEO	Georgia	Asia	no	3,815		13,709		29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			30
IRQ	Iraq	Asia	no	15,555				31
ISR	Israel	Asia	no	22,505		212,896		32
JOR	Jordan	Asia	no	10,652		33,470		33
KAZ	Kazakhstan	Asia	no	20,880		127,087		34
KWT	Kuwait	Asia	no	6,168				35
KGZ	Kyrgyzstan	Asia	no	756		6,067		36
LBN	Lebanon	Asia	no	4,139		47,915		37
MNG	Mongolia	Asia	no	2,335		6,675		38
QAT	Qatar	Asia	no	2,116				39
SAU	Saudi Arabia	Asia	no	73,922		341,826		40
SYR	Syrian Arab Republic	Asia	no	18,783		59,401		41
TJK	Tajikistan	Asia	no	2,412		8,227		42
TUR	Turkey	Asia	no	164,353		774,921		43
TKM	Turkmenistan	Asia	no	3,779		20,575		44
UZB	Uzbekistan	Asia	no	10,382		38,768		45
YEM	Yemen	Asia	no	10,133				46
RUS	Russian Federation	Europe	no	288,219	0	1,356,393		1
ALB	Albania	Europe	no	3,381		14,377		2
AUT	Austria	Europe	no	28,002		362,737		3
BLR	Belarus	Europe	no	21,160		62,212		4
BEL	Belgium	Europe	no	29,496		456,696		5
BIH	Bosnia and Herzegovina	Europe	no	1,424		20,030		6
BGR	Bulgaria	Europe	no	9,040		48,622		7
HRV	Croatia	Europe	no	6,064		61,162		8
CZE	Czech Republic	Europe	no	23,126		182,876		9
DNK	Denmark	Europe	no	31,778		292,535		10
EST	Estonia	Europe	no	2,851		17,933		11
FRO	Faroe Islands	Europe	no	42				12
FIN	Finland	Europe	no	14,927		235,640		13
FRA	France	Europe	no	236,236		2,620,062		14
DEU	Germany	Europe	no	262,867		3,101,126		15
GIB	Gibraltar	Europe	no	274				16
GRC	Greece	Europe	no	27,597		327,811		17
HUN	Hungary	Europe	no	30,434		120,269		18
ISL	Iceland	Europe	no	1,071		11,313		19
IRL	Ireland	Europe	no	16,223		171,957		20
ITA	Italy	Europe	no	188,526		2,087,749		21
LVA	Latvia	Europe	no	4,998		24,210		22
LIE	Liechtenstein	Europe	no	198				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [‰]	
LTU	Lithuania	Europe	no	7,227		36,811		24
LUX	Luxembourg	Europe	no	2,462		36,700		25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		10,902		26
MDA	Moldova, Republic of	Europe	no	3,416		8,053		27
MCO	Monaco	Europe	no	123				28
MNE	Montenegro	Europe	no	269		5,265		29
NLD	Netherlands	Europe	no	49,481		721,171		30
NOR	Norway	Europe	no	33,800		358,009		31
POL	Poland	Europe	no	60,706		475,111		32
PRT	Portugal	Europe	no	18,087		245,251		33
SMR	San Marino	Europe	no	113				34
SRB	Serbia	Europe	no	1,938		44,764		35
SVK	Slovakia	Europe	no	9,245		88,405		36
SVN	Slovenia	Europe	no	2,231		46,643		37
ESP	Spain	Europe	no	122,131		1,437,861		38
SWE	Sweden	Europe	no	27,971		431,251		39
CHE	Switzerland	Europe	no	40,078		468,037		40
UKR	Ukraine	Europe	no	32,769		141,773		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,325,009		42
NZL	New Zealand	Australia	no	12,682	1			1
AUS	Australia	Australia	no	47,971	2			2
MLT	Malta	Pacific	no	1,330		8,111		3
HND	Honduras	Latin America	no	5,414	20	18,594	1.1	1
MEX	Mexico	Latin America	no	260,866	459	1,049,803	0.4	2
GTM	Guatemala	Latin America	no	8,748	4	45,670	0.1	3
NIC	Nicaragua	Latin America	no	2,310	1	8,405	0.1	4
USA	United States of America	North America	no	1,224,802	642	15,103,640	0.0	5
SLV	El Salvador	Latin America	no	4,297	1	24,921	0.0	6
VEN	Venezuela	Latin America	no	42,697	7	346,724	0.0	7
CAN	Canada	North America	no	121,895	18	1,606,667	0.0	8
PAN	Panama	Latin America	no	5,115	0	27,738	0.0	9
CRI	Costa Rica	Latin America	no	6,892	0	36,941	0.0	10
TCA	Turks and Caicos islands	Caribbean	no	28	0			11
CYM	Cayman Islands	Caribbean	no	81	1			12
GLP	Guadeloupe	Caribbean	no	904	9			13
MTQ	Martinique	Caribbean	no	889	4			14
COL	Colombia	Latin America	no	53,054	1	294,580		15
GUF	French Guiana	Latin America	no	378				16
ARG	Argentina	Latin America	no	39,520		356,545		17
BOL	Bolivia	Latin America	no	4,521		18,301		18
BRA	Brazil	Latin America	no	300,613		2,108,637		19
CHL	Chile	Latin America	no	18,070		198,120		20
ECU	Ecuador	Latin America	no	10,202		61,265		21
PRY	Paraguay	Latin America	no	4,301		17,941		22
PER	Peru	Latin America	no	24,717		152,561		23
URY	Uruguay	Latin America	no	4,269		39,936		24
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	11,309	0.5	1
MWI	Malawi	Sub Saharan Africa	no	1,519	0	5,605	0.0	2
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	0.0	3
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	369,463	0.0	4
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	5
REU	Réunion	Sub Saharan Africa	no	2,161	13			6
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			7
MYT	Mayotte	Sub Saharan Africa	no	154	1			8
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		8,897		9
ZMB	Zambia	Sub Saharan Africa	no	4,976		14,723		10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	26,224		11
LSO	Lesotho	Sub Saharan Africa	no	2,124		3,511		12
DZA	Algeria	North Africa	no	67,908				13
EGY	Egypt	North Africa	no	101,974		229,362		14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				15
MAR	Morocco	North Africa	no	41,389		99,808		16
TUN	Tunisia	North Africa	no	14,190		46,643		17
AGO	Angola	Sub Saharan Africa	no	9,237		72,456		18
BEN	Benin	Sub Saharan Africa	no	1,223		7,536		19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				20
BDI	Burundi	Sub Saharan Africa	no	145				21
CMR	Cameroon	Sub Saharan Africa	no	6,256		23,429		22
CAF	Central African Republic	Sub Saharan Africa	no	351				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [‰]	
TCD	Chad	Sub Saharan Africa	no	4,004		9,469		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		15,617		25
COG	Congo	Sub Saharan Africa	no	3,326		8,109		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,734		27
DJI	Djibouti	Sub Saharan Africa	no	656				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				29
ERI	Eritrea	Sub Saharan Africa	no	1,076				30
ETH	Ethiopia	Sub Saharan Africa	no	3,583		35,978		31
GAB	Gabon	Sub Saharan Africa	no	2,633		10,274		32
GMB	Gambia	Sub Saharan Africa	no	334		963		33
GHA	Ghana	Sub Saharan Africa	no	4,753		35,414		34
GIN	Guinea	Sub Saharan Africa	no	1,643		4,711		35
KEN	Kenya	Sub Saharan Africa	no	8,730		35,486		36
LBR	Liberia	Sub Saharan Africa	no	263				37
MLI	Mali	Sub Saharan Africa	no	1,887				38
MRT	Mauritania	Sub Saharan Africa	no	1,470		4,195		39
NAM	Namibia	Sub Saharan Africa	no	1,706		12,035		40
NER	Niger	Sub Saharan Africa	no	1,230				41
NGA	Nigeria	Sub Saharan Africa	no	45,741		168,996		42
RWA	Rwanda	Sub Saharan Africa	no	962				43
SEN	Senegal	Sub Saharan Africa	no	5,536		15,485		44
SLE	Sierra Leone	Sub Saharan Africa	no	302		2,142		45
SOM	Somalia	Sub Saharan Africa	no	2,303				46
SDN	Sudan	Sub Saharan Africa	no	12,166		61,511		47
TGO	Togo	Sub Saharan Africa	no	529				48
UGA	Uganda	Sub Saharan Africa	no	3,787		18,757		49
ESH	Western Sahara	Sub Saharan Africa	no	418				50
FJI	Fiji	Asia	yes	309	2	3,569	0.5	1
SLB	Solomon islands	Asia	yes	85	0	885	0.1	2
PNG	Papua New Guinea	Asia	yes	1,289	0	9,217	0.0	3
VUT	Vanuatu	Asia	yes	25		743		4
NCL	New Caledonia	Asia	yes	107				5
BHR	Bahrain	Asia	yes	1,670				6
TON	Tonga	Pacific	yes	47	1	510	1.0	1
WSM	Samoa	Pacific	yes	93	1	727	0.8	2
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			3
PYF	French Polynesia	Pacific	yes	116	1			4
PLW	Palau	Pacific	yes	25	0			5
MDV	Maldives	Pacific	yes	154		2,244		6
SGP	Singapore	Pacific	yes	18,751		150,187		7
ATG	Antigua and Barbuda	Caribbean	yes	272	1	1,329	1.0	1
HTI	Haiti	Caribbean	yes	1,584	6	9,743	0.6	2
JAM	Jamaica	Caribbean	yes	4,148	8	16,776	0.5	3
DMA	Dominica	Caribbean	yes	43	0	573	0.4	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914	0.2	5
DOM	Dominican Republic	Caribbean	yes	13,790	11	57,847	0.2	6
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.2	7
BRB	Barbados	Caribbean	yes	253	1	4,317	0.1	8
GRD	Grenada	Caribbean	yes	63	0	996	0.1	9
AIA	Anguilla	Caribbean	yes	2				10
VGB	British Virgin Islands	Caribbean	yes	18	0			11
VIR	United States Virgin Islands	Caribbean	yes	82	1			12
BLZ	Belize	Latin America	yes	65	0			13
PRI	Puerto Rico	Caribbean	yes	3,197	19			14
BHS	Bahamas	Caribbean	yes	985	3			15
ABW	Aruba	Caribbean	yes	358	1			16
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			17
CUB	Cuba	Caribbean	yes	5,936	5			18
GUY	Guyana	Latin America	yes	884	0			19
SUR	Suriname	Latin America	yes	364				20
KNA	Saint Kitts and Nevis	Caribbean	yes	0		766		21
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	10,934	0.8	1
COM	Comoros	Sub Saharan Africa	yes	156	1			2
SYC	Seychelles	Sub Saharan Africa	yes	631	0			3
CPV	Cape Verde	Sub Saharan Africa	yes	446				4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value)	(Cyclones)	GGC	AAL/GGC	
				[USD million]	[USD million]	[USD million]	[‰]	
PHL	Philippines	Asia	no	46,143	505	19,403	26.0	1
BGD	Bangladesh	Asia	no	14,034	11	5,387	2.1	2
HKG	Hong Kong	Asia	no	47,718	37	18,948	2.0	3
JPN	Japan	Asia	no	542,290	1,724	1,094,349	1.6	4
CHN	China	Asia	no	599,699	1,195	791,999	1.5	5
KOR	Republic of Korea	Asia	no	95,180	202	155,748	1.3	6
MAC	Macau	Asia	no	1,989	1	2,186	0.6	7
VNM	Viet Nam	Asia	no	24,066	4	6,947	0.6	8
PAK	Pakistan	Asia	no	37,562	5	14,053	0.4	9
LAO	Lao People's Democratic Republic	Asia	no	938	0	672	0.3	10
IND	India	Asia	no	320,919	51	198,830	0.3	11
LKA	Sri Lanka	Asia	no	14,385	1	7,718	0.2	12
KHM	Cambodia	Asia	no	1,623	0	713	0.1	13
IDN	Indonesia	Asia	no	113,457	8	64,015	0.1	14
MYS	Malaysia	Asia	no	37,377	1	30,273	0.0	15
THA	Thailand	Asia	no	43,178	1	41,294	0.0	16
TWN	Taiwan	Asia	no	38,310	188			17
BRN	Brunei Darussalam	Asia	no	895	1			18
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			19
NPL	Nepal	Asia	no	2,411	1			20
MMR	Myanmar	Asia	no	9,829	1			21
OMN	Oman	Asia	no	4,095	0			22
BTN	Bhutan	Asia	no	371				23
ARE	United Arab Emirates	Asia	no	11,165	0	24,545		24
AFG	Afghanistan	Asia	no	9,988				25
ARM	Armenia	Asia	no	2,899		1,231		26
AZE	Azerbaijan	Asia	no	12,666		5,852		27
CYP	Cyprus	Asia	no	1,154		4,558		28
GEO	Georgia	Asia	no	3,815		2,453		29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			30
IRQ	Iraq	Asia	no	15,555				31
ISR	Israel	Asia	no	22,505		52,616		32
JOR	Jordan	Asia	no	10,652		5,910		33
KAZ	Kazakhstan	Asia	no	20,880		16,117		34
KWT	Kuwait	Asia	no	6,168				35
KGZ	Kyrgyzstan	Asia	no	756		877		36
LBN	Lebanon	Asia	no	4,139		4,711		37
MNG	Mongolia	Asia	no	2,335		851		38
QAT	Qatar	Asia	no	2,116				39
SAU	Saudi Arabia	Asia	no	73,922		97,875		40
SYR	Syrian Arab Republic	Asia	no	18,783		5,991		41
TJK	Tajikistan	Asia	no	2,412		1,658		42
TUR	Turkey	Asia	no	164,353		104,758		43
TKM	Turkmenistan	Asia	no	3,779		2,212		44
UZB	Uzbekistan	Asia	no	10,382		6,853		45
YEM	Yemen	Asia	no	10,133				46
RUS	Russian Federation	Europe	no	288,219	0	287,875		1
ALB	Albania	Europe	no	3,381		952		2
AUT	Austria	Europe	no	28,002		73,430		3
BLR	Belarus	Europe	no	21,160		8,828		4
BEL	Belgium	Europe	no	29,496		113,598		5
BIH	Bosnia and Herzegovina	Europe	no	1,424		3,498		6
BGR	Bulgaria	Europe	no	9,040		7,539		7
HRV	Croatia	Europe	no	6,064		13,084		8
CZE	Czech Republic	Europe	no	23,126		41,897		9
DNK	Denmark	Europe	no	31,778		90,977		10
EST	Estonia	Europe	no	2,851		3,959		11
FRO	Faroe Islands	Europe	no	42				12
FIN	Finland	Europe	no	14,927		58,644		13
FRA	France	Europe	no	236,236		635,621		14
DEU	Germany	Europe	no	262,867		647,378		15
GIB	Gibraltar	Europe	no	274				16
GRC	Greece	Europe	no	27,597		54,736		17
HUN	Hungary	Europe	no	30,434		28,084		18
ISL	Iceland	Europe	no	1,071		3,261		19
IRL	Ireland	Europe	no	16,223		39,102		20
ITA	Italy	Europe	no	188,526		435,241		21
LVA	Latvia	Europe	no	4,998		4,122		22
LIE	Liechtenstein	Europe	no	198				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GGC [USD million]		AAL/GGC [‰]	Ranking
LTU	Lithuania	Europe	no	7,227		7,241			24
LUX	Luxembourg	Europe	no	2,462		8,868			25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		1,683			26
MDA	Moldova, Republic of	Europe	no	3,416		1,377			27
MCO	Monaco	Europe	no	123					28
MNE	Montenegro	Europe	no	269		775			29
NLD	Netherlands	Europe	no	49,481		221,964			30
NOR	Norway	Europe	no	33,800		92,372			31
POL	Poland	Europe	no	60,706		88,643			32
PRT	Portugal	Europe	no	18,087		49,074			33
SMR	San Marino	Europe	no	113					34
SRB	Serbia	Europe	no	1,938		7,380			35
SVK	Slovakia	Europe	no	9,245		17,073			36
SVN	Slovenia	Europe	no	2,231		9,752			37
ESP	Spain	Europe	no	122,131		292,417			38
SWE	Sweden	Europe	no	27,971		123,918			39
CHE	Switzerland	Europe	no	40,078		60,549			40
UKR	Ukraine	Europe	no	32,769		27,731			41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		518,869			42
NZL	New Zealand	Australia	no	12,682	1				1
AUS	Australia	Australia	no	47,971	2				2
MLT	Malta	Pacific	no	1,330		1,711			3
HND	Honduras	Latin America	no	5,414	20	2,777		7.2	1
MEX	Mexico	Latin America	no	260,866	459	120,640		3.8	2
NIC	Nicaragua	Latin America	no	2,310	1	627		1.0	3
GTM	Guatemala	Latin America	no	8,748	4	4,254		0.9	4
SLV	El Salvador	Latin America	no	4,297	1	2,312		0.4	5
PAN	Panama	Latin America	no	5,115	0	1,561		0.3	6
USA	United States of America	North America	no	1,224,802	642	2,522,700		0.3	7
VEN	Venezuela	Latin America	no	42,697	7	42,419		0.2	8
CAN	Canada	North America	no	121,895	18	343,217		0.1	9
CRI	Costa Rica	Latin America	no	6,892	0	6,358		0.0	10
COL	Colombia	Latin America	no	53,054	1	46,769		0.0	11
TCA	Turks and Caicos islands	Caribbean	no	28	0				12
CYM	Cayman Islands	Caribbean	no	81	1				13
GLP	Guadeloupe	Caribbean	no	904	9				14
MTQ	Martinique	Caribbean	no	889	4				15
GUF	French Guiana	Latin America	no	378					16
ARG	Argentina	Latin America	no	39,520		55,024			17
BOL	Bolivia	Latin America	no	4,521		2,718			18
BRA	Brazil	Latin America	no	300,613		442,019			19
CHL	Chile	Latin America	no	18,070		26,588			20
ECU	Ecuador	Latin America	no	10,202		6,807			21
PRY	Paraguay	Latin America	no	4,301		1,711			22
PER	Peru	Latin America	no	24,717		15,659			23
URY	Uruguay	Latin America	no	4,269		5,117			24
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	1,166		4.6	1
MWI	Malawi	Sub Saharan Africa	no	1,519	0	976		0.2	2
SWZ	Swaziland	Sub Saharan Africa	no	769	0	913		0.1	3
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	71,742		0.0	4
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,130		0.0	5
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	4,052		0.0	6
REU	Réunion	Sub Saharan Africa	no	2,161	13				7
MDG	Madagascar	Sub Saharan Africa	no	1,546	9				8
MYT	Mayotte	Sub Saharan Africa	no	154	1				9
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		1,281			10
ZMB	Zambia	Sub Saharan Africa	no	4,976		2,153			11
LSO	Lesotho	Sub Saharan Africa	no	2,124		935			12
DZA	Algeria	North Africa	no	67,908					13
EGY	Egypt	North Africa	no	101,974		24,436			14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501					15
MAR	Morocco	North Africa	no	41,389		15,913			16
TUN	Tunisia	North Africa	no	14,190		7,209			17
AGO	Angola	Sub Saharan Africa	no	9,237					18
BEN	Benin	Sub Saharan Africa	no	1,223					19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847					20
BDI	Burundi	Sub Saharan Africa	no	145					21
CMR	Cameroon	Sub Saharan Africa	no	6,256					22
CAF	Central African Republic	Sub Saharan Africa	no	351					23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GGC [USD million]	AAL/GGC [‰]	
TCD	Chad	Sub Saharan Africa	no	4,004		1,131		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		719		25
COG	Congo	Sub Saharan Africa	no	3,326		1,186		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		1,968		27
DJI	Djibouti	Sub Saharan Africa	no	656				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				29
ERI	Eritrea	Sub Saharan Africa	no	1,076				30
ETH	Ethiopia	Sub Saharan Africa	no	3,583		3,029		31
GAB	Gabon	Sub Saharan Africa	no	2,633		1,267		32
GMB	Gambia	Sub Saharan Africa	no	334		121		33
GHA	Ghana	Sub Saharan Africa	no	4,753		3,511		34
GIN	Guinea	Sub Saharan Africa	no	1,643		339		35
KEN	Kenya	Sub Saharan Africa	no	8,730		4,226		36
LBR	Liberia	Sub Saharan Africa	no	263				37
MLI	Mali	Sub Saharan Africa	no	1,887				38
MRT	Mauritania	Sub Saharan Africa	no	1,470		646		39
NAM	Namibia	Sub Saharan Africa	no	1,706		2,692		40
NER	Niger	Sub Saharan Africa	no	1,230				41
NGA	Nigeria	Sub Saharan Africa	no	45,741				42
RWA	Rwanda	Sub Saharan Africa	no	962				43
SEN	Senegal	Sub Saharan Africa	no	5,536		1,124		44
SLE	Sierra Leone	Sub Saharan Africa	no	302		233		45
SOM	Somalia	Sub Saharan Africa	no	2,303				46
SDN	Sudan	Sub Saharan Africa	no	12,166		9,428		47
TGO	Togo	Sub Saharan Africa	no	529				48
UGA	Uganda	Sub Saharan Africa	no	3,787		2,015		49
ESH	Western Sahara	Sub Saharan Africa	no	418				50
PNG	Papua New Guinea	Asia	yes	1,289	0	897	0.1	1
FJI	Fiji	Asia	yes	309	2			2
SLB	Solomon islands	Asia	yes	85	0			3
VUT	Vanuatu	Asia	yes	25				4
NCL	New Caledonia	Asia	yes	107				5
BHR	Bahrain	Asia	yes	1,670				6
TON	Tonga	Pacific	yes	47	1	67	7.5	1
WSM	Samoa	Pacific	yes	93	1			2
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			3
PYF	French Polynesia	Pacific	yes	116	1			4
PLW	Palau	Pacific	yes	25	0			5
MDV	Maldives	Pacific	yes	154				6
SGP	Singapore	Pacific	yes	18,751		22,293		7
JAM	Jamaica	Caribbean	yes	4,148	8	2,368	3.6	1
DOM	Dominican Republic	Caribbean	yes	13,790	11	3,965	2.9	2
DMA	Dominica	Caribbean	yes	43	0	81	2.5	3
LCA	Saint Lucia	Caribbean	yes	73	0	192	1.0	4
BRB	Barbados	Caribbean	yes	253	1	835	0.6	5
GUY	Guyana	Latin America	yes	884	0	341	0.3	6
ATG	Antigua and Barbuda	Caribbean	yes	272	1			7
HTI	Haiti	Caribbean	yes	1,584	6			8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			9
GRD	Grenada	Caribbean	yes	63	0			10
AIA	Anguilla	Caribbean	yes	2				11
VGB	British Virgin Islands	Caribbean	yes	18	0			12
VIR	United States Virgin Islands	Caribbean	yes	82	1			13
BLZ	Belize	Latin America	yes	65	0			14
PRI	Puerto Rico	Caribbean	yes	3,197	19			15
BHS	Bahamas	Caribbean	yes	985	3			16
ABW	Aruba	Caribbean	yes	358	1			17
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			18
CUB	Cuba	Caribbean	yes	5,936	5			19
SUR	Suriname	Latin America	yes	364				20
KNA	Saint Kitts and Nevis	Caribbean	yes	0				21
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	1,393	6.6	1
COM	Comoros	Sub Saharan Africa	yes	156	1			2
SYC	Seychelles	Sub Saharan Africa	yes	631	0			3
CPV	Cape Verde	Sub Saharan Africa	yes	446				4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GS [USD million]	AAL/GS [‰]	Ranking
PHL	Philippines	Asia	no	46,143	505	54,291	9.3	1
JPN	Japan	Asia	no	542,290	1,724	1,296,892	1.3	2
KOR	Republic of Korea	Asia	no	95,180	202	321,095	0.6	3
HKG	Hong Kong	Asia	no	47,718	37	67,159	0.6	4
CHN	China	Asia	no	599,699	1,195	3,137,116	0.4	5
BGD	Bangladesh	Asia	no	14,034	11	38,537	0.3	6
LAO	Lao People's Democratic Republic	Asia	no	938	0	1,429	0.1	7
PAK	Pakistan	Asia	no	37,562	5	38,491	0.1	8
VNM	Viet Nam	Asia	no	24,066	4	33,911	0.1	9
LKA	Sri Lanka	Asia	no	14,385	1	12,267	0.1	10
IND	India	Asia	no	320,919	51	582,180	0.1	11
KHM	Cambodia	Asia	no	1,623	0	1,408	0.1	12
IDN	Indonesia	Asia	no	113,457	8	225,795	0.0	13
MYS	Malaysia	Asia	no	37,377	1	78,265	0.0	14
THA	Thailand	Asia	no	43,178	1	97,152	0.0	15
MAC	Macau	Asia	no	1,989	1			16
TWN	Taiwan	Asia	no	38,310	188			17
BRN	Brunei Darussalam	Asia	no	895	1			18
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			19
NPL	Nepal	Asia	no	2,411	1			20
MMR	Myanmar	Asia	no	9,829	1			21
OMN	Oman	Asia	no	4,095	0			22
BTN	Bhutan	Asia	no	371				23
ARE	United Arab Emirates	Asia	no	11,165	0			24
AFG	Afghanistan	Asia	no	9,988				25
ARM	Armenia	Asia	no	2,899		1,761		26
AZE	Azerbaijan	Asia	no	12,666		23,913		27
CYP	Cyprus	Asia	no	1,154		2,138		28
GEO	Georgia	Asia	no	3,815		1,152		29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			30
IRQ	Iraq	Asia	no	15,555				31
ISR	Israel	Asia	no	22,505		39,726		32
JOR	Jordan	Asia	no	10,652		2,520		33
KAZ	Kazakhstan	Asia	no	20,880		41,723		34
KWT	Kuwait	Asia	no	6,168				35
KGZ	Kyrgyzstan	Asia	no	756		908		36
LBN	Lebanon	Asia	no	4,139		4,428		37
MNG	Mongolia	Asia	no	2,335		1,682		38
QAT	Qatar	Asia	no	2,116				39
SAU	Saudi Arabia	Asia	no	73,922				40
SYR	Syrian Arab Republic	Asia	no	18,783		9,944		41
TJK	Tajikistan	Asia	no	2,412		143		42
TUR	Turkey	Asia	no	164,353		99,948		43
TKM	Turkmenistan	Asia	no	3,779				44
UZB	Uzbekistan	Asia	no	10,382				45
YEM	Yemen	Asia	no	10,133				46
RUS	Russian Federation	Europe	no	288,219	0	1,356,393	0.0	1
ALB	Albania	Europe	no	3,381		14,377		2
AUT	Austria	Europe	no	28,002		362,737		3
BLR	Belarus	Europe	no	21,160		62,212		4
BEL	Belgium	Europe	no	29,496		456,696		5
BIH	Bosnia and Herzegovina	Europe	no	1,424		20,030		6
BGR	Bulgaria	Europe	no	9,040		48,622		7
HRV	Croatia	Europe	no	6,064		61,162		8
CZE	Czech Republic	Europe	no	23,126		182,876		9
DNK	Denmark	Europe	no	31,778		292,535		10
EST	Estonia	Europe	no	2,851		17,933		11
FRO	Faroe Islands	Europe	no	42				12
FIN	Finland	Europe	no	14,927		235,640		13
FRA	France	Europe	no	236,236		2,620,062		14
DEU	Germany	Europe	no	262,867		3,101,126		15
GIB	Gibraltar	Europe	no	274				16
GRC	Greece	Europe	no	27,597		327,811		17
HUN	Hungary	Europe	no	30,434		120,269		18
ISL	Iceland	Europe	no	1,071		11,313		19
IRL	Ireland	Europe	no	16,223		171,957		20
ITA	Italy	Europe	no	188,526		2,087,749		21
LVA	Latvia	Europe	no	4,998		24,210		22
LIE	Liechtenstein	Europe	no	198				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GS [USD million]	AAL/GS [‰]	Ranking
LTU	Lithuania	Europe	no	7,227		36,811		24
LUX	Luxembourg	Europe	no	2,462		36,700		25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		10,902		26
MDA	Moldova, Republic of	Europe	no	3,416		8,053		27
MCO	Monaco	Europe	no	123				28
MNE	Montenegro	Europe	no	269		5,265		29
NLD	Netherlands	Europe	no	49,481		721,171		30
NOR	Norway	Europe	no	33,800		358,009		31
POL	Poland	Europe	no	60,706		475,111		32
PRT	Portugal	Europe	no	18,087		245,251		33
SMR	San Marino	Europe	no	113				34
SRB	Serbia	Europe	no	1,938		44,764		35
SVK	Slovakia	Europe	no	9,245		88,405		36
SVN	Slovenia	Europe	no	2,231		46,643		37
ESP	Spain	Europe	no	122,131		1,437,861		38
SWE	Sweden	Europe	no	27,971		431,251		39
CHE	Switzerland	Europe	no	40,078		468,037		40
UKR	Ukraine	Europe	no	32,769		141,773		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,325,009		42
NZL	New Zealand	Australia	no	12,682	1			1
AUS	Australia	Australia	no	47,971	2			2
MLT	Malta	Pacific	no	1,330		8,111		3
HND	Honduras	Latin America	no	5,414	20	18,594	8.0	1
MEX	Mexico	Latin America	no	260,866	459	1,049,803	1.8	2
GTM	Guatemala	Latin America	no	8,748	4	45,670	0.8	3
NIC	Nicaragua	Latin America	no	2,310	1	8,405	0.7	4
SLV	El Salvador	Latin America	no	4,297	1	24,921	0.4	5
USA	United States of America	North America	no	1,224,802	642	15,103,640	0.4	6
PAN	Panama	Latin America	no	5,115	0	27,738	0.1	7
CAN	Canada	North America	no	121,895	18	1,606,667	0.1	8
VEN	Venezuela	Latin America	no	42,697	7	346,724	0.1	9
CRI	Costa Rica	Latin America	no	6,892	0	36,941	0.0	10
COL	Colombia	Latin America	no	53,054	1	294,580	0.0	11
TCA	Turks and Caicos islands	Caribbean	no	28	0			12
CYM	Cayman Islands	Caribbean	no	81	1			13
GLP	Guadeloupe	Caribbean	no	904	9			14
MTQ	Martinique	Caribbean	no	889	4			15
GUF	French Guiana	Latin America	no	378				16
ARG	Argentina	Latin America	no	39,520		356,545		17
BOL	Bolivia	Latin America	no	4,521		18,301		18
BRA	Brazil	Latin America	no	300,613		2,108,637		19
CHL	Chile	Latin America	no	18,070		198,120		20
ECU	Ecuador	Latin America	no	10,202		61,265		21
PRY	Paraguay	Latin America	no	4,301		17,941		22
PER	Peru	Latin America	no	24,717		152,561		23
URY	Uruguay	Latin America	no	4,269		39,936		24
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	11,309	5.2	1
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	1.1	2
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	369,463	0.0	3
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	4
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	26,224	0.0	5
MWI	Malawi	Sub Saharan Africa	no	1,519	0	5,605		6
REU	Réunion	Sub Saharan Africa	no	2,161	13			7
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			8
MYT	Mayotte	Sub Saharan Africa	no	154	1			9
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		8,897		10
ZMB	Zambia	Sub Saharan Africa	no	4,976		14,723		11
LSO	Lesotho	Sub Saharan Africa	no	2,124		3,511		12
DZA	Algeria	North Africa	no	67,908				13
EGY	Egypt	North Africa	no	101,974		229,362		14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				15
MAR	Morocco	North Africa	no	41,389		99,808		16
TUN	Tunisia	North Africa	no	14,190		46,643		17
AGO	Angola	Sub Saharan Africa	no	9,237		72,456		18
BEN	Benin	Sub Saharan Africa	no	1,223		7,536		19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				20
BDI	Burundi	Sub Saharan Africa	no	145				21
CMR	Cameroon	Sub Saharan Africa	no	6,256		23,429		22
CAF	Central African Republic	Sub Saharan Africa	no	351				23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GS [USD million]	AAL/GS [‰]	
TCD	Chad	Sub Saharan Africa	no	4,004		9,469		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		15,617		25
COG	Congo	Sub Saharan Africa	no	3,326		8,109		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,734		27
DJI	Djibouti	Sub Saharan Africa	no	656				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				29
ERI	Eritrea	Sub Saharan Africa	no	1,076				30
ETH	Ethiopia	Sub Saharan Africa	no	3,583		35,978		31
GAB	Gabon	Sub Saharan Africa	no	2,633		10,274		32
GMB	Gambia	Sub Saharan Africa	no	334		963		33
GHA	Ghana	Sub Saharan Africa	no	4,753		35,414		34
GIN	Guinea	Sub Saharan Africa	no	1,643		4,711		35
KEN	Kenya	Sub Saharan Africa	no	8,730		35,486		36
LBR	Liberia	Sub Saharan Africa	no	263				37
MLI	Mali	Sub Saharan Africa	no	1,887				38
MRT	Mauritania	Sub Saharan Africa	no	1,470		4,195		39
NAM	Namibia	Sub Saharan Africa	no	1,706		12,035		40
NER	Niger	Sub Saharan Africa	no	1,230				41
NGA	Nigeria	Sub Saharan Africa	no	45,741		168,996		42
RWA	Rwanda	Sub Saharan Africa	no	962				43
SEN	Senegal	Sub Saharan Africa	no	5,536		15,485		44
SLE	Sierra Leone	Sub Saharan Africa	no	302		2,142		45
SOM	Somalia	Sub Saharan Africa	no	2,303				46
SDN	Sudan	Sub Saharan Africa	no	12,166		61,511		47
TGO	Togo	Sub Saharan Africa	no	529				48
UGA	Uganda	Sub Saharan Africa	no	3,787		18,757		49
ESH	Western Sahara	Sub Saharan Africa	no	418				50
PNG	Papua New Guinea	Asia	yes	1,289	0	2,660	0.0	1
FJI	Fiji	Asia	yes	309	2			2
SLB	Solomon islands	Asia	yes	85	0			3
VUT	Vanuatu	Asia	yes	25				4
NCL	New Caledonia	Asia	yes	107				5
BHR	Bahrain	Asia	yes	1,670				6
TON	Tonga	Pacific	yes	47	1	510		1
WSM	Samoa	Pacific	yes	93	1	727		2
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			3
PYF	French Polynesia	Pacific	yes	116	1			4
PLW	Palau	Pacific	yes	25	0			5
MDV	Maldives	Pacific	yes	154		2,244		6
SGP	Singapore	Pacific	yes	18,751		150,187		7
DMA	Dominica	Caribbean	yes	43	0	573	34.7	1
JAM	Jamaica	Caribbean	yes	4,148	8	16,776	4.8	2
DOM	Dominican Republic	Caribbean	yes	13,790	11	57,847	3.0	3
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.9	4
GUY	Guyana	Latin America	yes	884	0		0.3	5
BRB	Barbados	Caribbean	yes	253	1	4,317		6
ATG	Antigua and Barbuda	Caribbean	yes	272	1	1,329		7
HTI	Haiti	Caribbean	yes	1,584	6	9,743		8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914		9
GRD	Grenada	Caribbean	yes	63	0	996		10
AIA	Anguilla	Caribbean	yes	2				11
VGB	British Virgin Islands	Caribbean	yes	18	0			12
VIR	United States Virgin Islands	Caribbean	yes	82	1			13
BLZ	Belize	Latin America	yes	65	0			14
PRI	Puerto Rico	Caribbean	yes	3,197	19			15
BHS	Bahamas	Caribbean	yes	985	3			16
ABW	Aruba	Caribbean	yes	358	1			17
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			18
CUB	Cuba	Caribbean	yes	5,936	5			19
SUR	Suriname	Latin America	yes	364				20
KNA	Saint Kitts and Nevis	Caribbean	yes	0		766		21
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	10,934	5.7	1
COM	Comoros	Sub Saharan Africa	yes	156	1			2
SYC	Seychelles	Sub Saharan Africa	yes	631	0			3
CPV	Cape Verde	Sub Saharan Africa	yes	446				4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
PHL	Philippines	Asia	no	46,143	7,309	15.8	1
TWN	Taiwan	Asia	no	38,310	1,821	4.8	2
BGD	Bangladesh	Asia	no	14,034	589	4.2	3
JPN	Japan	Asia	no	542,290	20,590	3.8	4
KOR	Republic of Korea	Asia	no	95,180	3,600	3.8	5
CHN	China	Asia	no	599,699	17,031	2.8	6
BRN	Brunei Darussalam	Asia	no	895	25	2.7	7
PRK	Dem People's Rep of Korea	Asia	no	10,245	216	2.1	8
HKG	Hong Kong	Asia	no	47,718	1,003	2.1	9
NPL	Nepal	Asia	no	2,411	42	1.7	10
MAC	Macau	Asia	no	1,989	32	1.6	11
LAO	Lao People's Democratic Republic	Asia	no	938	7	0.8	12
PAK	Pakistan	Asia	no	37,562	263	0.7	13
IND	India	Asia	no	320,919	2,109	0.7	14
MMR	Myanmar	Asia	no	9,829	48	0.5	15
VNM	Viet Nam	Asia	no	24,066	111	0.5	16
KHM	Cambodia	Asia	no	1,623	6	0.4	17
LKA	Sri Lanka	Asia	no	14,385	49	0.3	18
IDN	Indonesia	Asia	no	113,457	387	0.3	19
OMN	Oman	Asia	no	4,095	13	0.3	20
BTN	Bhutan	Asia	no	371	1	0.3	21
MYS	Malaysia	Asia	no	37,377	39	0.1	22
THA	Thailand	Asia	no	43,178	24	0.1	23
ARE	United Arab Emirates	Asia	no	11,165	7	0.1	24
AFG	Afghanistan	Asia	no	9,988			25
ARM	Armenia	Asia	no	2,899			26
AZE	Azerbaijan	Asia	no	12,666			27
CYP	Cyprus	Asia	no	1,154			28
GEO	Georgia	Asia	no	3,815			29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4		30
IRQ	Iraq	Asia	no	15,555			31
ISR	Israel	Asia	no	22,505			32
JOR	Jordan	Asia	no	10,652			33
KAZ	Kazakhstan	Asia	no	20,880			34
KWT	Kuwait	Asia	no	6,168			35
KGZ	Kyrgyzstan	Asia	no	756			36
LBN	Lebanon	Asia	no	4,139			37
MNG	Mongolia	Asia	no	2,335			38
QAT	Qatar	Asia	no	2,116			39
SAU	Saudi Arabia	Asia	no	73,922			40
SYR	Syrian Arab Republic	Asia	no	18,783			41
TJK	Tajikistan	Asia	no	2,412			42
TUR	Turkey	Asia	no	164,353			43
TKM	Turkmenistan	Asia	no	3,779			44
UZB	Uzbekistan	Asia	no	10,382			45
YEM	Yemen	Asia	no	10,133			46
RUS	Russian Federation	Europe	no	288,219	7		1
ALB	Albania	Europe	no	3,381			2
AUT	Austria	Europe	no	28,002			3
BLR	Belarus	Europe	no	21,160			4
BEL	Belgium	Europe	no	29,496			5
BIH	Bosnia and Herzegovina	Europe	no	1,424			6
BGR	Bulgaria	Europe	no	9,040			7
HRV	Croatia	Europe	no	6,064			8
CZE	Czech Republic	Europe	no	23,126			9
DNK	Denmark	Europe	no	31,778			10
EST	Estonia	Europe	no	2,851			11
FRO	Faroe Islands	Europe	no	42			12
FIN	Finland	Europe	no	14,927			13
FRA	France	Europe	no	236,236			14
DEU	Germany	Europe	no	262,867			15
GIB	Gibraltar	Europe	no	274			16
GRC	Greece	Europe	no	27,597			17
HUN	Hungary	Europe	no	30,434			18
ISL	Iceland	Europe	no	1,071			19
IRL	Ireland	Europe	no	16,223			20
ITA	Italy	Europe	no	188,526			21
LVA	Latvia	Europe	no	4,998			22
LIE	Liechtenstein	Europe	no	198			23



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LTU	Lithuania	Europe	no	7,227			24
LUX	Luxembourg	Europe	no	2,462			25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000			26
MDA	Moldova, Republic of	Europe	no	3,416			27
MCO	Monaco	Europe	no	123			28
MNE	Montenegro	Europe	no	269			29
NLD	Netherlands	Europe	no	49,481			30
NOR	Norway	Europe	no	33,800			31
POL	Poland	Europe	no	60,706			32
PRT	Portugal	Europe	no	18,087	0		33
SMR	San Marino	Europe	no	113			34
SRB	Serbia	Europe	no	1,938			35
SVK	Slovakia	Europe	no	9,245			36
SVN	Slovenia	Europe	no	2,231			37
ESP	Spain	Europe	no	122,131			38
SWE	Sweden	Europe	no	27,971			39
CHE	Switzerland	Europe	no	40,078			40
UKR	Ukraine	Europe	no	32,769			41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134			42
NZL	New Zealand	Australia	no	12,682	28	0.2	1
AUS	Australia	Australia	no	47,971	49	0.1	2
MLT	Malta	Pacific	no	1,330			3
TCA	Turks and Caicos islands	Caribbean	no	28	12	42.6	1
CYM	Cayman Islands	Caribbean	no	81	29	35.9	2
GLP	Guadeloupe	Caribbean	no	904	290	32.0	3
MTQ	Martinique	Caribbean	no	889	210	23.6	4
HND	Honduras	Latin America	no	5,414	800	14.8	5
MEX	Mexico	Latin America	no	260,866	13,716	5.3	6
GTM	Guatemala	Latin America	no	8,748	154	1.8	7
NIC	Nicaragua	Latin America	no	2,310	27	1.2	8
USA	United States of America	North America	no	1,224,802	10,909	0.9	9
VEN	Venezuela	Latin America	no	42,697	319	0.8	10
SLV	El Salvador	Latin America	no	4,297	31	0.7	11
CAN	Canada	North America	no	121,895	653	0.5	12
PAN	Panama	Latin America	no	5,115	21	0.4	13
CRI	Costa Rica	Latin America	no	6,892	12	0.2	14
COL	Colombia	Latin America	no	53,054	56	0.1	15
GUF	French Guiana	Latin America	no	378			16
ARG	Argentina	Latin America	no	39,520			17
BOL	Bolivia	Latin America	no	4,521			18
BRA	Brazil	Latin America	no	300,613			19
CHL	Chile	Latin America	no	18,070			20
ECU	Ecuador	Latin America	no	10,202			21
PRY	Paraguay	Latin America	no	4,301			22
PER	Peru	Latin America	no	24,717			23
URY	Uruguay	Latin America	no	4,269			24
REU	Réunion	Sub Saharan Africa	no	2,161	384	17.8	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	15.6	2
MYT	Mayotte	Sub Saharan Africa	no	154	22	14.1	3
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	7.2	4
MWI	Malawi	Sub Saharan Africa	no	1,519	11	0.7	5
SWZ	Swaziland	Sub Saharan Africa	no	769	5	0.6	6
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	0.2	7
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	0.1	8
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.0	9
BWA	Botswana	Sub Saharan Africa	no	4,287	1	0.0	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	0.0	11
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.0	12
DZA	Algeria	North Africa	no	67,908			13
EGY	Egypt	North Africa	no	101,974			14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501			15
MAR	Morocco	North Africa	no	41,389			16
TUN	Tunisia	North Africa	no	14,190			17
AGO	Angola	Sub Saharan Africa	no	9,237			18
BEN	Benin	Sub Saharan Africa	no	1,223			19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847			20
BDI	Burundi	Sub Saharan Africa	no	145			21
CMR	Cameroon	Sub Saharan Africa	no	6,256			22
CAF	Central African Republic	Sub Saharan Africa	no	351			23



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TCD	Chad	Sub Saharan Africa	no	4,004			24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914			25
COG	Congo	Sub Saharan Africa	no	3,326			26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304			27
DJI	Djibouti	Sub Saharan Africa	no	656			28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626			29
ERI	Eritrea	Sub Saharan Africa	no	1,076			30
ETH	Ethiopia	Sub Saharan Africa	no	3,583			31
GAB	Gabon	Sub Saharan Africa	no	2,633			32
GMB	Gambia	Sub Saharan Africa	no	334			33
GHA	Ghana	Sub Saharan Africa	no	4,753			34
GIN	Guinea	Sub Saharan Africa	no	1,643			35
KEN	Kenya	Sub Saharan Africa	no	8,730			36
LBR	Liberia	Sub Saharan Africa	no	263			37
MLI	Mali	Sub Saharan Africa	no	1,887			38
MRT	Mauritania	Sub Saharan Africa	no	1,470			39
NAM	Namibia	Sub Saharan Africa	no	1,706			40
NER	Niger	Sub Saharan Africa	no	1,230			41
NGA	Nigeria	Sub Saharan Africa	no	45,741			42
RWA	Rwanda	Sub Saharan Africa	no	962			43
SEN	Senegal	Sub Saharan Africa	no	5,536			44
SLE	Sierra Leone	Sub Saharan Africa	no	302			45
SOM	Somalia	Sub Saharan Africa	no	2,303			46
SDN	Sudan	Sub Saharan Africa	no	12,166			47
TGO	Togo	Sub Saharan Africa	no	529			48
UGA	Uganda	Sub Saharan Africa	no	3,787			49
ESH	Western Sahara	Sub Saharan Africa	no	418			50
FJI	Fiji	Asia	yes	309	60	19.5	1
VUT	Vanuatu	Asia	yes	25	1	5.1	2
SLB	Solomon islands	Asia	yes	85	2	2.3	3
NCL	New Caledonia	Asia	yes	107	1	0.8	4
PNG	Papua New Guinea	Asia	yes	1,289	2	0.2	5
BHR	Bahrain	Asia	yes	1,670			6
TON	Tonga	Pacific	yes	47	12	26.6	1
WSM	Samoa	Pacific	yes	93	24	26.1	2
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	17.8	3
PYF	French Polynesia	Pacific	yes	116	18	15.6	4
PLW	Palau	Pacific	yes	25	2	6.3	5
MDV	Maldives	Pacific	yes	154			6
SGP	Singapore	Pacific	yes	18,751			7
AIA	Anguilla	Caribbean	yes	2	1	94.3	1
VGB	British Virgin Islands	Caribbean	yes	18	5	32.1	2
VIR	United States Virgin Islands	Caribbean	yes	82	21	26.4	3
BLZ	Belize	Latin America	yes	65	16	24.7	4
DMA	Dominica	Caribbean	yes	43	8	19.6	5
ATG	Antigua and Barbuda	Caribbean	yes	272	52	19.1	6
PRI	Puerto Rico	Caribbean	yes	3,197	572	17.9	7
HTI	Haiti	Caribbean	yes	1,584	269	17.0	8
LCA	Saint Lucia	Caribbean	yes	73	11	14.7	9
BHS	Bahamas	Caribbean	yes	985	121	12.3	10
BRB	Barbados	Caribbean	yes	253	31	12.1	11
ABW	Aruba	Caribbean	yes	358	30	8.5	12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	8.2	13
JAM	Jamaica	Caribbean	yes	4,148	325	7.8	14
GRD	Grenada	Caribbean	yes	63	4	6.9	15
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	3.2	16
DOM	Dominican Republic	Caribbean	yes	13,790	430	3.1	17
CUB	Cuba	Caribbean	yes	5,936	158	2.7	18
GUY	Guyana	Latin America	yes	884	1	0.1	19
SUR	Suriname	Latin America	yes	364	0	0.0	20
KNA	Saint Kitts and Nevis	Caribbean	yes	0			21
COM	Comoros	Sub Saharan Africa	yes	156	24	15.5	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	13.8	2
SYC	Seychelles	Sub Saharan Africa	yes	631	3	0.4	3
CPV	Cape Verde	Sub Saharan Africa	yes	446			4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258			5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114			6



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PHL	Philippines	Asia	no	46,143	7,309	199,589	3.7	1
BGD	Bangladesh	Asia	no	14,034	589	100,357	0.6	2
HKG	Hong Kong	Asia	no	47,718	1,003	224,458	0.5	3
JPN	Japan	Asia	no	542,290	20,590	5,458,837	0.4	4
KOR	Republic of Korea	Asia	no	95,180	3,600	1,014,483	0.4	5
CHN	China	Asia	no	599,699	17,031	5,926,612	0.3	6
PAK	Pakistan	Asia	no	37,562	263	176,870	0.2	7
IND	India	Asia	no	320,919	2,109	1,727,111	0.1	8
MAC	Macau	Asia	no	1,989	32	27,960	0.1	9
LAO	Lao People's Democratic Republic	Asia	no	938	7	7,296	0.1	10
VNM	Viet Nam	Asia	no	24,066	111	106,427	0.1	11
LKA	Sri Lanka	Asia	no	14,385	49	49,552	0.1	12
KHM	Cambodia	Asia	no	1,623	6	11,242	0.1	13
BTN	Bhutan	Asia	no	371	1	1,516	0.1	14
IDN	Indonesia	Asia	no	113,457	387	706,558	0.1	15
MYS	Malaysia	Asia	no	37,377	39	237,797	0.0	16
THA	Thailand	Asia	no	43,178	24	318,522	0.0	17
TWN	Taiwan	Asia	no	38,310	1,821			18
BRN	Brunei Darussalam	Asia	no	895	25			19
PRK	Dem People's Rep of Korea	Asia	no	10,245	216			20
NPL	Nepal	Asia	no	2,411	42			21
MMR	Myanmar	Asia	no	9,829	48			22
OMN	Oman	Asia	no	4,095	13			23
ARE	United Arab Emirates	Asia	no	11,165	7	297,649		24
AFG	Afghanistan	Asia	no	9,988		17,243		25
ARM	Armenia	Asia	no	2,899		9,371		26
AZE	Azerbaijan	Asia	no	12,666		51,774		27
CYP	Cyprus	Asia	no	1,154		23,132		28
GEO	Georgia	Asia	no	3,815		11,667		29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4			30
IRQ	Iraq	Asia	no	15,555		82,150		31
ISR	Israel	Asia	no	22,505		217,333		32
JOR	Jordan	Asia	no	10,652		27,574		33
KAZ	Kazakhstan	Asia	no	20,880		149,059		34
KWT	Kuwait	Asia	no	6,168				35
KGZ	Kyrgyzstan	Asia	no	756		4,616		36
LBN	Lebanon	Asia	no	4,139		39,006		37
MNG	Mongolia	Asia	no	2,335		6,200		38
QAT	Qatar	Asia	no	2,116				39
SAU	Saudi Arabia	Asia	no	73,922		434,666		40
SYR	Syrian Arab Republic	Asia	no	18,783		59,147		41
TJK	Tajikistan	Asia	no	2,412		5,640		42
TUR	Turkey	Asia	no	164,353		734,365		43
TKM	Turkmenistan	Asia	no	3,779		20,001		44
UZB	Uzbekistan	Asia	no	10,382		38,982		45
YEM	Yemen	Asia	no	10,133				46
RUS	Russian Federation	Europe	no	288,219	7	1,479,819		1
ALB	Albania	Europe	no	3,381		11,786		2
AUT	Austria	Europe	no	28,002		379,069		3
BLR	Belarus	Europe	no	21,160		54,713		4
BEL	Belgium	Europe	no	29,496		469,374		5
BIH	Bosnia and Herzegovina	Europe	no	1,424		16,578		6
BGR	Bulgaria	Europe	no	9,040		47,714		7
HRV	Croatia	Europe	no	6,064		60,852		8
CZE	Czech Republic	Europe	no	23,126		192,032		9
DNK	Denmark	Europe	no	31,778		309,866		10
EST	Estonia	Europe	no	2,851		19,217		11
FRO	Faroe Islands	Europe	no	42				12
FIN	Finland	Europe	no	14,927		238,746		13
FRA	France	Europe	no	236,236		2,560,002		14
DEU	Germany	Europe	no	262,867		3,280,530		15
GIB	Gibraltar	Europe	no	274				16
GRC	Greece	Europe	no	27,597		301,083		17
HUN	Hungary	Europe	no	30,434		128,632		18
ISL	Iceland	Europe	no	1,071		12,574		19
IRL	Ireland	Europe	no	16,223		211,390		20
ITA	Italy	Europe	no	188,526		2,051,412		21
LVA	Latvia	Europe	no	4,998		24,010		22
LIE	Liechtenstein	Europe	no	198				23



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LTU	Lithuania	Europe	no	7,227		36,306		24
LUX	Luxembourg	Europe	no	2,462		53,334		25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		9,189		26
MDA	Moldova, Republic of	Europe	no	3,416		5,809		27
MCO	Monaco	Europe	no	123				28
MNE	Montenegro	Europe	no	269		4,111		29
NLD	Netherlands	Europe	no	49,481		779,356		30
NOR	Norway	Europe	no	33,800		412,990		31
POL	Poland	Europe	no	60,706		469,440		32
PRT	Portugal	Europe	no	18,087	0	228,872		33
SMR	San Marino	Europe	no	113				34
SRB	Serbia	Europe	no	1,938		38,423		35
SVK	Slovakia	Europe	no	9,245		87,268		36
SVN	Slovenia	Europe	no	2,231		46,908		37
ESP	Spain	Europe	no	122,131		1,407,405		38
SWE	Sweden	Europe	no	27,971		458,973		39
CHE	Switzerland	Europe	no	40,078		527,920		40
UKR	Ukraine	Europe	no	32,769		137,929		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,248,831		42
NZL	New Zealand	Australia	no	12,682	28			1
AUS	Australia	Australia	no	47,971	49			2
MLT	Malta	Pacific	no	1,330		8,256		3
HND	Honduras	Latin America	no	5,414	800	15,400	5.2	1
MEX	Mexico	Latin America	no	260,866	13,716	1,034,804	1.3	2
NIC	Nicaragua	Latin America	no	2,310	27	6,551	0.4	3
GTM	Guatemala	Latin America	no	8,748	154	41,186	0.4	4
SLV	El Salvador	Latin America	no	4,297	31	21,215	0.1	5
PAN	Panama	Latin America	no	5,115	21	26,689	0.1	6
VEN	Venezuela	Latin America	no	42,697	319	391,848	0.1	7
USA	United States of America	North America	no	1,224,802	10,909	14,586,740	0.1	8
CAN	Canada	North America	no	121,895	653	1,577,040	0.0	9
CRI	Costa Rica	Latin America	no	6,892	12	35,831	0.0	10
COL	Colombia	Latin America	no	53,054	56	288,189	0.0	11
TCA	Turks and Caicos islands	Caribbean	no	28	12			12
CYM	Cayman Islands	Caribbean	no	81	29			13
GLP	Guadeloupe	Caribbean	no	904	290			14
MTQ	Martinique	Caribbean	no	889	210			15
GUF	French Guiana	Latin America	no	378				16
ARG	Argentina	Latin America	no	39,520		368,736		17
BOL	Bolivia	Latin America	no	4,521		19,650		18
BRA	Brazil	Latin America	no	300,613		2,087,890		19
CHL	Chile	Latin America	no	18,070		212,741		20
ECU	Ecuador	Latin America	no	10,202		57,978		21
PRY	Paraguay	Latin America	no	4,301		18,333		22
PER	Peru	Latin America	no	24,717		157,053		23
URY	Uruguay	Latin America	no	4,269		40,265		24
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	9,586	3.0	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	8,721	2.8	2
MWI	Malawi	Sub Saharan Africa	no	1,519	11	5,106	0.2	3
SWZ	Swaziland	Sub Saharan Africa	no	769	5	3,645	0.1	4
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	363,704	0.0	5
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	7,474	0.0	6
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	16,193	0.0	7
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	2,132	0.0	8
BWA	Botswana	Sub Saharan Africa	no	4,287	1	14,857		9
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	23,057		10
REU	Réunion	Sub Saharan Africa	no	2,161	384			11
MYT	Mayotte	Sub Saharan Africa	no	154	22			12
DZA	Algeria	North Africa	no	67,908		159,426		13
EGY	Egypt	North Africa	no	101,974		218,894		14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				15
MAR	Morocco	North Africa	no	41,389		90,805		16
TUN	Tunisia	North Africa	no	14,190		44,291		17
AGO	Angola	Sub Saharan Africa	no	9,237		84,391		18
BEN	Benin	Sub Saharan Africa	no	1,223		6,633		19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847		8,820		20
BDI	Burundi	Sub Saharan Africa	no	145		1,611		21
CMR	Cameroon	Sub Saharan Africa	no	6,256		22,394		22
CAF	Central African Republic	Sub Saharan Africa	no	351		2,013		23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
TCD	Chad	Sub Saharan Africa	no	4,004		7,588		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		13,145		25
COG	Congo	Sub Saharan Africa	no	3,326		11,898		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		22,780		27
DJI	Djibouti	Sub Saharan Africa	no	656				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626		14,007		29
ERI	Eritrea	Sub Saharan Africa	no	1,076		2,117		30
ETH	Ethiopia	Sub Saharan Africa	no	3,583		29,717		31
GAB	Gabon	Sub Saharan Africa	no	2,633		13,011		32
GMB	Gambia	Sub Saharan Africa	no	334		807		33
GHA	Ghana	Sub Saharan Africa	no	4,753		31,306		34
GIN	Guinea	Sub Saharan Africa	no	1,643		4,511		35
KEN	Kenya	Sub Saharan Africa	no	8,730		31,409		36
LBR	Liberia	Sub Saharan Africa	no	263		986		37
MLI	Mali	Sub Saharan Africa	no	1,887		9,251		38
MRT	Mauritania	Sub Saharan Africa	no	1,470		3,636		39
NAM	Namibia	Sub Saharan Africa	no	1,706		12,170		40
NER	Niger	Sub Saharan Africa	no	1,230		5,549		41
NGA	Nigeria	Sub Saharan Africa	no	45,741		193,669		42
RWA	Rwanda	Sub Saharan Africa	no	962		5,628		43
SEN	Senegal	Sub Saharan Africa	no	5,536		12,954		44
SLE	Sierra Leone	Sub Saharan Africa	no	302		1,905		45
SOM	Somalia	Sub Saharan Africa	no	2,303				46
SDN	Sudan	Sub Saharan Africa	no	12,166		62,046		47
TGO	Togo	Sub Saharan Africa	no	529		3,153		48
UGA	Uganda	Sub Saharan Africa	no	3,787		17,011		49
ESH	Western Sahara	Sub Saharan Africa	no	418				50
FJI	Fiji	Asia	yes	309	60	3,189	1.9	1
SLB	Solomon islands	Asia	yes	85	2	679	0.3	2
VUT	Vanuatu	Asia	yes	25	1	699	0.2	3
PNG	Papua New Guinea	Asia	yes	1,289	2	9,480	0.0	4
NCL	New Caledonia	Asia	yes	107	1			5
BHR	Bahrain	Asia	yes	1,670				6
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	297	12.9	1
WSM	Samoa	Pacific	yes	93	24	574	4.2	2
TON	Tonga	Pacific	yes	47	12	348	3.5	3
PLW	Palau	Pacific	yes	25	2	171	0.9	4
PYF	French Polynesia	Pacific	yes	116	18			5
MDV	Maldives	Pacific	yes	154		1,908		6
SGP	Singapore	Pacific	yes	18,751		208,765		7
ATG	Antigua and Barbuda	Caribbean	yes	272	52	1,211	4.3	1
HTI	Haiti	Caribbean	yes	1,584	269	6,710	4.0	2
JAM	Jamaica	Caribbean	yes	4,148	325	14,252	2.3	3
DMA	Dominica	Caribbean	yes	43	8	466	1.8	4
BHS	Bahamas	Caribbean	yes	985	121	7,538	1.6	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	705	1.6	6
BLZ	Belize	Latin America	yes	65	16	1,401	1.2	7
LCA	Saint Lucia	Caribbean	yes	73	11	1,198	0.9	8
DOM	Dominican Republic	Caribbean	yes	13,790	430	51,766	0.8	9
BRB	Barbados	Caribbean	yes	253	31	4,110	0.8	10
GRD	Grenada	Caribbean	yes	63	4	773	0.6	11
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	20,604	0.4	12
GUY	Guyana	Latin America	yes	884	1	2,226	0.0	13
AIA	Anguilla	Caribbean	yes	2	1			14
VGB	British Virgin Islands	Caribbean	yes	18	5			15
VIR	United States Virgin Islands	Caribbean	yes	82	21			16
PRI	Puerto Rico	Caribbean	yes	3,197	572			17
ABW	Aruba	Caribbean	yes	358	30			18
CUB	Cuba	Caribbean	yes	5,936	158			19
SUR	Suriname	Latin America	yes	364	0			20
KNA	Saint Kitts and Nevis	Caribbean	yes	0		652		21
COM	Comoros	Sub Saharan Africa	yes	156	24	541	4.5	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	9,729	2.5	2
SYC	Seychelles	Sub Saharan Africa	yes	631	3	937	0.3	3
CPV	Cape Verde	Sub Saharan Africa	yes	446		1,648		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258		879		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114		197		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
PHL	Philippines	Asia	no	46,143	7,309	199,897	3.7	1
BGD	Bangladesh	Asia	no	14,034	589	109,695	0.5	2
HKG	Hong Kong	Asia	no	47,718	1,003	229,165	0.4	3
JPN	Japan	Asia	no	542,290	20,590	5,601,557	0.4	4
KOR	Republic of Korea	Asia	no	95,180	3,600	1,014,760	0.4	5
CHN	China	Asia	no	599,699	17,031	5,957,012	0.3	6
PAK	Pakistan	Asia	no	37,562	263	183,620	0.1	7
IND	India	Asia	no	320,919	2,109	1,712,645	0.1	8
VNM	Viet Nam	Asia	no	24,066	111	102,008	0.1	9
LAO	Lao People's Democratic Republic	Asia	no	938	7	6,978	0.1	10
LKA	Sri Lanka	Asia	no	14,385	49	48,916	0.1	11
BTN	Bhutan	Asia	no	371	1	1,420	0.1	12
KHM	Cambodia	Asia	no	1,623	6	10,664	0.1	13
IDN	Indonesia	Asia	no	113,457	387	686,633	0.1	14
MYS	Malaysia	Asia	no	37,377	39	229,566	0.0	15
THA	Thailand	Asia	no	43,178	24	304,812	0.0	16
MAC	Macau	Asia	no	1,989	32			17
TWN	Taiwan	Asia	no	38,310	1,821			18
BRN	Brunei Darussalam	Asia	no	895	25			19
PRK	Dem People's Rep of Korea	Asia	no	10,245	216			20
NPL	Nepal	Asia	no	2,411	42			21
MMR	Myanmar	Asia	no	9,829	48			22
OMN	Oman	Asia	no	4,095	13			23
ARE	United Arab Emirates	Asia	no	11,165	7			24
AFG	Afghanistan	Asia	no	9,988		15,162		25
ARM	Armenia	Asia	no	2,899		9,710		26
AZE	Azerbaijan	Asia	no	12,666		48,307		27
CYP	Cyprus	Asia	no	1,154		22,539		28
GEO	Georgia	Asia	no	3,815		11,484		29
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4			30
IRQ	Iraq	Asia	no	15,555		77,842		31
ISR	Israel	Asia	no	22,505		210,353		32
JOR	Jordan	Asia	no	10,652		27,820		33
KAZ	Kazakhstan	Asia	no	20,880		131,868		34
KWT	Kuwait	Asia	no	6,168				35
KGZ	Kyrgyzstan	Asia	no	756		4,273		36
LBN	Lebanon	Asia	no	4,139		39,051		37
MNG	Mongolia	Asia	no	2,335		5,640		38
QAT	Qatar	Asia	no	2,116				39
SAU	Saudi Arabia	Asia	no	73,922				40
SYR	Syrian Arab Republic	Asia	no	18,783		57,266		41
TJK	Tajikistan	Asia	no	2,412		5,570		42
TUR	Turkey	Asia	no	164,353		727,056		43
TKM	Turkmenistan	Asia	no	3,779		18,107		44
UZB	Uzbekistan	Asia	no	10,382		39,013		45
YEM	Yemen	Asia	no	10,133				46
RUS	Russian Federation	Europe	no	288,219	7	1,431,121		1
ALB	Albania	Europe	no	3,381		11,682		2
AUT	Austria	Europe	no	28,002		377,063		3
BLR	Belarus	Europe	no	21,160		53,379		4
BEL	Belgium	Europe	no	29,496		477,644		5
BIH	Bosnia and Herzegovina	Europe	no	1,424		17,008		6
BGR	Bulgaria	Europe	no	9,040		46,025		7
HRV	Croatia	Europe	no	6,064		58,806		8
CZE	Czech Republic	Europe	no	23,126		179,432		9
DNK	Denmark	Europe	no	31,778		315,664		10
EST	Estonia	Europe	no	2,851		18,420		11
FRO	Faroe Islands	Europe	no	42				12
FIN	Finland	Europe	no	14,927		242,899		13
FRA	France	Europe	no	236,236		2,606,780		14
DEU	Germany	Europe	no	262,867		3,341,391		15
GIB	Gibraltar	Europe	no	274				16
GRC	Greece	Europe	no	27,597		292,874		17
HUN	Hungary	Europe	no	30,434		122,372		18
ISL	Iceland	Europe	no	1,071		9,975		19
IRL	Ireland	Europe	no	16,223		171,260		20
ITA	Italy	Europe	no	188,526		2,023,916		21
LVA	Latvia	Europe	no	4,998		24,073		22
LIE	Liechtenstein	Europe	no	198				23



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LTU	Lithuania	Europe	no	7,227		35,687		24
LUX	Luxembourg	Europe	no	2,462		37,925		25
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		8,992		26
MDA	Moldova, Republic of	Europe	no	3,416		6,280		27
MCO	Monaco	Europe	no	123				28
MNE	Montenegro	Europe	no	269		4,083		29
NLD	Netherlands	Europe	no	49,481		772,747		30
NOR	Norway	Europe	no	33,800		413,980		31
POL	Poland	Europe	no	60,706		452,275		32
PRT	Portugal	Europe	no	18,087	0	221,243		33
SMR	San Marino	Europe	no	113				34
SRB	Serbia	Europe	no	1,938		37,533		35
SVK	Slovakia	Europe	no	9,245		86,077		36
SVN	Slovenia	Europe	no	2,231		46,217		37
ESP	Spain	Europe	no	122,131		1,388,744		38
SWE	Sweden	Europe	no	27,971		467,254		39
CHE	Switzerland	Europe	no	40,078		568,639		40
UKR	Ukraine	Europe	no	32,769		135,920		41
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,280,719		42
NZL	New Zealand	Australia	no	12,682	28			1
AUS	Australia	Australia	no	47,971	49			2
MLT	Malta	Pacific	no	1,330		7,698		3
HND	Honduras	Latin America	no	5,414	800	14,798	5.4	1
MEX	Mexico	Latin America	no	260,866	13,716	1,020,288	1.3	2
NIC	Nicaragua	Latin America	no	2,310	27	6,273	0.4	3
GTM	Guatemala	Latin America	no	8,748	154	39,987	0.4	4
SLV	El Salvador	Latin America	no	4,297	31	20,834	0.2	5
PAN	Panama	Latin America	no	5,115	21	25,037	0.1	6
VEN	Venezuela	Latin America	no	42,697	319	389,038	0.1	7
USA	United States of America	North America	no	1,224,802	10,909	14,635,600	0.1	8
CAN	Canada	North America	no	121,895	653	1,549,652	0.0	9
CRI	Costa Rica	Latin America	no	6,892	12	34,896	0.0	10
COL	Colombia	Latin America	no	53,054	56	276,072	0.0	11
TCA	Turks and Caicos islands	Caribbean	no	28	12			12
CYM	Cayman Islands	Caribbean	no	81	29			13
GLP	Guadeloupe	Caribbean	no	904	290			14
MTQ	Martinique	Caribbean	no	889	210			15
GUF	French Guiana	Latin America	no	378				16
ARG	Argentina	Latin America	no	39,520		358,619		17
BOL	Bolivia	Latin America	no	4,521		18,790		18
BRA	Brazil	Latin America	no	300,613		2,049,164		19
CHL	Chile	Latin America	no	18,070		197,331		20
ECU	Ecuador	Latin America	no	10,202		56,924		21
PRY	Paraguay	Latin America	no	4,301		17,853		22
PER	Peru	Latin America	no	24,717		147,000		23
URY	Uruguay	Latin America	no	4,269		39,161		24
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	9,421	3.0	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	8,628	2.8	2
MWI	Malawi	Sub Saharan Africa	no	1,519	11	4,980	0.2	3
SWZ	Swaziland	Sub Saharan Africa	no	769	5	3,586	0.1	4
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	356,475	0.0	5
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	6,988	0.0	6
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	14,300	0.0	7
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	2,553	0.0	8
BWA	Botswana	Sub Saharan Africa	no	4,287	1	14,771		9
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	23,012		10
REU	Réunion	Sub Saharan Africa	no	2,161	384			11
MYT	Mayotte	Sub Saharan Africa	no	154	22			12
DZA	Algeria	North Africa	no	67,908		155,538		13
EGY	Egypt	North Africa	no	101,974		214,530		14
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				15
MAR	Morocco	North Africa	no	41,389		88,578		16
TUN	Tunisia	North Africa	no	14,190		42,020		17
AGO	Angola	Sub Saharan Africa	no	9,237		75,516		18
BEN	Benin	Sub Saharan Africa	no	1,223		6,633		19
BFA	Burkina Faso	Sub Saharan Africa	no	1,847		8,810		20
BDI	Burundi	Sub Saharan Africa	no	145		1,589		21
CMR	Cameroon	Sub Saharan Africa	no	6,256		22,030		22
CAF	Central African Republic	Sub Saharan Africa	no	351		2,009		23



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TCD	Chad	Sub Saharan Africa	no	4,004		6,734		24
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		12,263		25
COG	Congo	Sub Saharan Africa	no	3,326		8,619		26
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,729		27
DJI	Djibouti	Sub Saharan Africa	no	656				28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626		9,578		29
ERI	Eritrea	Sub Saharan Africa	no	1,076		2,097		30
ETH	Ethiopia	Sub Saharan Africa	no	3,583		29,625		31
GAB	Gabon	Sub Saharan Africa	no	2,633		11,467		32
GMB	Gambia	Sub Saharan Africa	no	334		743		33
GHA	Ghana	Sub Saharan Africa	no	4,753		30,776		34
GIN	Guinea	Sub Saharan Africa	no	1,643		4,231		35
KEN	Kenya	Sub Saharan Africa	no	8,730		31,264		36
LBR	Liberia	Sub Saharan Africa	no	263		805		37
MLI	Mali	Sub Saharan Africa	no	1,887		8,909		38
MRT	Mauritania	Sub Saharan Africa	no	1,470		3,672		39
NAM	Namibia	Sub Saharan Africa	no	1,706		12,077		40
NER	Niger	Sub Saharan Africa	no	1,230		5,493		41
NGA	Nigeria	Sub Saharan Africa	no	45,741		176,769		42
RWA	Rwanda	Sub Saharan Africa	no	962		5,582		43
SEN	Senegal	Sub Saharan Africa	no	5,536		12,900		44
SLE	Sierra Leone	Sub Saharan Africa	no	302		1,905		45
SOM	Somalia	Sub Saharan Africa	no	2,303				46
SDN	Sudan	Sub Saharan Africa	no	12,166		55,939		47
TGO	Togo	Sub Saharan Africa	no	529		2,826		48
UGA	Uganda	Sub Saharan Africa	no	3,787		16,720		49
ESH	Western Sahara	Sub Saharan Africa	no	418				50
FJI	Fiji	Asia	yes	309	60	3,090	1.9	1
SLB	Solomon islands	Asia	yes	85	2	555	0.4	2
VUT	Vanuatu	Asia	yes	25	1	678	0.2	3
PNG	Papua New Guinea	Asia	yes	1,289	2	9,262	0.0	4
NCL	New Caledonia	Asia	yes	107	1			5
BHR	Bahrain	Asia	yes	1,670				6
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	312	12.4	1
WSM	Samoa	Pacific	yes	93	24	557	4.4	2
TON	Tonga	Pacific	yes	47	12	352	3.5	3
PLW	Palau	Pacific	yes	25	2	135	1.2	4
PYF	French Polynesia	Pacific	yes	116	18			5
MDV	Maldives	Pacific	yes	154		1,817		6
SGP	Singapore	Pacific	yes	18,751		201,050		7
ATG	Antigua and Barbuda	Caribbean	yes	272	52	1,179	4.4	1
JAM	Jamaica	Caribbean	yes	4,148	325	13,574	2.4	2
DMA	Dominica	Caribbean	yes	43	8	454	1.9	3
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	691	1.6	4
BLZ	Belize	Latin America	yes	65	16	1,303	1.2	5
LCA	Saint Lucia	Caribbean	yes	73	11	1,163	0.9	6
DOM	Dominican Republic	Caribbean	yes	13,790	430	49,972	0.9	7
GRD	Grenada	Caribbean	yes	63	4	727	0.6	8
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	19,255	0.4	9
GUY	Guyana	Latin America	yes	884	1	2,238	0.0	10
HTI	Haiti	Caribbean	yes	1,584	269			11
BHS	Bahamas	Caribbean	yes	985	121			12
BRB	Barbados	Caribbean	yes	253	31			13
AIA	Anguilla	Caribbean	yes	2	1			14
VGB	British Virgin Islands	Caribbean	yes	18	5			15
VIR	United States Virgin Islands	Caribbean	yes	82	21			16
PRI	Puerto Rico	Caribbean	yes	3,197	572			17
ABW	Aruba	Caribbean	yes	358	30			18
CUB	Cuba	Caribbean	yes	5,936	158			19
SUR	Suriname	Latin America	yes	364	0			20
KNA	Saint Kitts and Nevis	Caribbean	yes	0		620		21
COM	Comoros	Sub Saharan Africa	yes	156	24	539	4.5	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	9,798	2.5	2
SYC	Seychelles	Sub Saharan Africa	yes	631	3	855	0.3	3
CPV	Cape Verde	Sub Saharan Africa	yes	446		1,579		4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258		877		5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114		200		6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
PHL	Philippines	Asia	no	186,193	7,043	37.8	1
TWN	Taiwan	Asia	no	872,409	8,297	9.5	2
JPN	Japan	Asia	no	14,617,394	105,761	7.2	3
KGZ	Kyrgyzstan	Asia	no	3,644	20	5.4	4
NPL	Nepal	Asia	no	6,537	33	5.1	5
BTN	Bhutan	Asia	no	1,167	5	3.9	6
TJK	Tajikistan	Asia	no	5,576	21	3.7	7
BGD	Bangladesh	Asia	no	72,949	256	3.5	8
UZB	Uzbekistan	Asia	no	44,370	154	3.5	9
KOR	Republic of Korea	Asia	no	2,787,207	8,816	3.2	10
AZE	Azerbaijan	Asia	no	45,197	128	2.8	11
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,722	2.5	12
PAK	Pakistan	Asia	no	170,444	433	2.5	13
CHN	China	Asia	no	4,512,825	11,305	2.5	14
AFG	Afghanistan	Asia	no	16,132	39	2.4	15
GEO	Georgia	Asia	no	21,157	50	2.4	16
MMR	Myanmar	Asia	no	20,572	43	2.1	17
ARM	Armenia	Asia	no	14,187	28	2.0	18
IDN	Indonesia	Asia	no	575,183	1,046	1.8	19
ARE	United Arab Emirates	Asia	no	248,015	423	1.7	20
TKM	Turkmenistan	Asia	no	12,707	18	1.4	21
CYP	Cyprus	Asia	no	23,484	32	1.4	22
IRQ	Iraq	Asia	no	47,245	56	1.2	23
TUR	Turkey	Asia	no	1,578,228	1,766	1.1	24
KAZ	Kazakhstan	Asia	no	180,409	180	1.0	25
LBN	Lebanon	Asia	no	56,965	53	0.9	26
PRK	Dem People's Rep of Korea	Asia	no	27,936	25	0.9	27
BRN	Brunei Darussalam	Asia	no	20,094	17	0.9	28
HKG	Hong Kong	Asia	no	1,138,019	968	0.9	29
SYR	Syrian Arab Republic	Asia	no	68,489	52	0.8	30
MAC	Macau	Asia	no	96,993	71	0.7	31
KWT	Kuwait	Asia	no	202,236	137	0.7	32
ISR	Israel	Asia	no	293,550	192	0.7	33
JOR	Jordan	Asia	no	40,997	26	0.6	34
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.6	35
OMN	Oman	Asia	no	42,201	25	0.6	36
QAT	Qatar	Asia	no	113,981	64	0.6	37
MYS	Malaysia	Asia	no	318,727	169	0.5	38
IND	India	Asia	no	1,429,881	754	0.5	39
YEM	Yemen	Asia	no	21,556	8	0.4	40
VNM	Viet Nam	Asia	no	115,441	30	0.3	41
THA	Thailand	Asia	no	394,598	88	0.2	42
MNG	Mongolia	Asia	no	9,273	2	0.2	43
KHM	Cambodia	Asia	no	4,335	1	0.1	44
SAU	Saudi Arabia	Asia	no	751,807	83	0.1	45
LKA	Sri Lanka	Asia	no	49,967	5	0.1	46
SMR	San Marino	Europe	no	1,846	5	2.8	1
GRC	Greece	Europe	no	642,888	1,732	2.7	2
BGR	Bulgaria	Europe	no	70,023	112	1.6	3
ALB	Albania	Europe	no	13,964	14	1.0	4
ITA	Italy	Europe	no	3,701,619	3,795	1.0	5
MNE	Montenegro	Europe	no	2,738	3	0.9	6
SVN	Slovenia	Europe	no	36,896	34	0.9	7
GIB	Gibraltar	Europe	no	3,141	2	0.7	8
HRV	Croatia	Europe	no	65,145	46	0.7	9
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	0.7	10
MCO	Monaco	Europe	no	5,380	4	0.7	11
LIE	Liechtenstein	Europe	no	8,070	5	0.6	12
ISL	Iceland	Europe	no	25,742	14	0.5	13
AUT	Austria	Europe	no	615,592	240	0.4	14
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	0.3	15
SRB	Serbia	Europe	no	16,907	5	0.3	16
CHE	Switzerland	Europe	no	839,518	257	0.3	17
DEU	Germany	Europe	no	5,800,986	1,206	0.2	18
MDA	Moldova, Republic of	Europe	no	9,896	2	0.2	19
HUN	Hungary	Europe	no	286,209	51	0.2	20
SVK	Slovakia	Europe	no	124,390	22	0.2	21
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	0.2	22
CZE	Czech Republic	Europe	no	336,714	49	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
BEL	Belgium	Europe	no	739,159	101	0.1	24
POL	Poland	Europe	no	659,150	66	0.1	25
NLD	Netherlands	Europe	no	1,593,735	160	0.1	26
LUX	Luxembourg	Europe	no	45,036	4	0.1	27
RUS	Russian Federation	Europe	no	2,209,139	170	0.1	28
ESP	Spain	Europe	no	2,695,139	198	0.1	29
FRA	France	Europe	no	3,653,264	260	0.1	30
PRT	Portugal	Europe	no	296,296	21	0.1	31
EST	Estonia	Europe	no	28,069	1	0.0	32
IRL	Ireland	Europe	no	244,117	8	0.0	33
UKR	Ukraine	Europe	no	278,497	6	0.0	34
LTU	Lithuania	Europe	no	53,397	1	0.0	35
NOR	Norway	Europe	no	386,892	4	0.0	36
LVA	Latvia	Europe	no	39,277	0	0.0	37
DNK	Denmark	Europe	no	381,265	2	0.0	38
SWE	Sweden	Europe	no	369,792	2	0.0	39
FIN	Finland	Europe	no	209,050	1	0.0	40
BLR	Belarus	Europe	no	74,427	0	0.0	41
FRO	Faroe Islands	Europe	no	1,012	-	-	42
NZL	New Zealand	Australia	no	238,609	192	0.8	1
MLT	Malta	Pacific	no	18,630	10	0.5	2
AUS	Australia	Australia	no	1,832,960	101	0.1	3
GLP	Guadeloupe	Caribbean	no	19,838	388	19.6	1
HND	Honduras	Latin America	no	18,844	300	15.9	2
SLV	El Salvador	Latin America	no	22,582	306	13.5	3
CYM	Cayman Islands	Caribbean	no	3,603	43	11.9	4
TCA	Turks and Caicos islands	Caribbean	no	332	4	11.1	5
MTQ	Martinique	Caribbean	no	21,052	195	9.2	6
NIC	Nicaragua	Latin America	no	10,935	62	5.6	7
GTM	Guatemala	Latin America	no	38,263	174	4.5	8
CRI	Costa Rica	Latin America	no	38,475	132	3.4	9
ECU	Ecuador	Latin America	no	68,550	192	2.8	10
MEX	Mexico	Latin America	no	1,818,298	5,040	2.8	11
CHL	Chile	Latin America	no	326,640	869	2.7	12
COL	Colombia	Latin America	no	325,385	810	2.5	13
PER	Peru	Latin America	no	189,980	447	2.4	14
BOL	Bolivia	Latin America	no	13,112	21	1.6	15
PAN	Panama	Latin America	no	30,296	46	1.5	16
VEN	Venezuela	Latin America	no	435,869	505	1.2	17
USA	United States of America	North America	no	22,004,154	19,301	0.9	18
ARG	Argentina	Latin America	no	403,909	128	0.3	19
CAN	Canada	North America	no	2,051,584	382	0.2	20
GUF	French Guiana	Latin America	no	8,339	0	0.0	21
BRA	Brazil	Latin America	no	1,715,746	3	0.0	22
PRY	Paraguay	Latin America	no	19,203	-	-	23
URY	Uruguay	Latin America	no	28,590	-	-	24
REU	Réunion	Sub Saharan Africa	no	42,937	261	6.1	1
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	5.9	2
MYT	Mayotte	Sub Saharan Africa	no	2,341	9	3.7	3
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1.5	4
DZA	Algeria	North Africa	no	259,977	359	1.4	5
BDI	Burundi	Sub Saharan Africa	no	168	0	1.2	6
TUN	Tunisia	North Africa	no	65,420	49	0.7	7
RWA	Rwanda	Sub Saharan Africa	no	1,558	1	0.7	8
MWI	Malawi	Sub Saharan Africa	no	1,883	1	0.7	9
DJI	Djibouti	Sub Saharan Africa	no	2,525	2	0.6	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	0.4	11
MAR	Morocco	North Africa	no	136,300	46	0.3	12
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	0.3	13
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21	0.3	14
UGA	Uganda	Sub Saharan Africa	no	6,628	2	0.2	15
EGY	Egypt	North Africa	no	234,939	51	0.2	16
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.2	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	55	0.2	18
KEN	Kenya	Sub Saharan Africa	no	18,470	3	0.2	19
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	0.1	20
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	0.1	21
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.1	22
BWA	Botswana	Sub Saharan Africa	no	18,941	2	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	0.1	24
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	0.1	25
SDN	Sudan	Sub Saharan Africa	no	26,851	1	0.0	26
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0	0.0	27
SOM	Somalia	Sub Saharan Africa	no	3,573	0	0.0	28
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	0.0	29
NAM	Namibia	Sub Saharan Africa	no	7,239	0	0.0	30
SEN	Senegal	Sub Saharan Africa	no	11,619	0	0.0	31
GAB	Gabon	Sub Saharan Africa	no	25,086	0	0.0	32
AGO	Angola	Sub Saharan Africa	no	25,225	0	0.0	33
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	0.0	34
CAF	Central African Republic	Sub Saharan Africa	no	916	-	-	35
LBR	Liberia	Sub Saharan Africa	no	515	-	-	36
COG	Congo	Sub Saharan Africa	no	12,566	-	-	37
GIN	Guinea	Sub Saharan Africa	no	3,259	-	-	38
BEN	Benin	Sub Saharan Africa	no	3,585	-	-	39
TCD	Chad	Sub Saharan Africa	no	6,664	-	-	40
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	-	41
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-	-	42
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	-	43
GMB	Gambia	Sub Saharan Africa	no	680	-	-	44
GHA	Ghana	Sub Saharan Africa	no	12,649	-	-	45
MLI	Mali	Sub Saharan Africa	no	3,869	-	-	46
NER	Niger	Sub Saharan Africa	no	2,800	-	-	47
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	-	48
TGO	Togo	Sub Saharan Africa	no	1,644	-	-	49
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-	-	50
VUT	Vanuatu	Asia	yes	102	10	100.8	1
SLB	Solomon islands	Asia	yes	211	13	59.7	2
PNG	Papua New Guinea	Asia	yes	5,433	86	15.9	3
FJI	Fiji	Asia	yes	2,100	15	7.3	4
NCL	New Caledonia	Asia	yes	4,771	21	4.4	5
BHR	Bahrain	Asia	yes	32,575	17	0.5	6
TON	Tonga	Pacific	yes	230	12	50.4	1
WSM	Samoa	Pacific	yes	361	3	9.4	2
PYF	French Polynesia	Pacific	yes	6,568	32	4.9	3
FSM	Micronesia (Federated States of)	Pacific	yes	585	3	4.4	4
PLW	Palau	Pacific	yes	279	1	2.5	5
SGP	Singapore	Pacific	yes	526,900	114	0.2	6
MDV	Maldives	Pacific	yes	907	-	-	7
AIA	Anguilla	Caribbean	yes	20	1	24.7	1
DMA	Dominica	Caribbean	yes	356	6	17.1	2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	492	15.7	3
VGB	British Virgin Islands	Caribbean	yes	424	6	15.1	4
ATG	Antigua and Barbuda	Caribbean	yes	2,428	33	13.7	5
VIR	United States Virgin Islands	Caribbean	yes	1,755	22	12.5	6
HTI	Haiti	Caribbean	yes	8,553	96	11.2	7
PRI	Puerto Rico	Caribbean	yes	135,818	1,125	8.3	8
LCA	Saint Lucia	Caribbean	yes	543	3	6.3	9
BRB	Barbados	Caribbean	yes	4,677	28	6.0	10
DOM	Dominican Republic	Caribbean	yes	72,573	423	5.8	11
BLZ	Belize	Latin America	yes	1,251	7	5.8	12
GRD	Grenada	Caribbean	yes	1,229	6	4.9	13
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	4	4.1	14
BHS	Bahamas	Caribbean	yes	21,313	71	3.3	15
JAM	Jamaica	Caribbean	yes	28,963	85	2.9	16
ABW	Aruba	Caribbean	yes	6,526	19	2.9	17
CUB	Cuba	Caribbean	yes	46,280	50	1.1	18
GUY	Guyana	Latin America	yes	3,468	0	0.1	19
SUR	Suriname	Latin America	yes	2,797	0	0.0	20
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	-	21
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	5.3	1
COM	Comoros	Sub Saharan Africa	yes	310	1	3.6	2
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	0.2	3
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	-	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-	-	5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-	-	6



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
PHL	Philippines	Asia	no	46,143	1,747	37.9	1
TWN	Taiwan	Asia	no	38,310	351	9.2	2
JPN	Japan	Asia	no	542,290	3,969	7.3	3
NPL	Nepal	Asia	no	2,411	13	5.4	4
KGZ	Kyrgyzstan	Asia	no	756	4	5.3	5
BTN	Bhutan	Asia	no	371	1	3.8	6
TJK	Tajikistan	Asia	no	2,412	9	3.7	7
BGD	Bangladesh	Asia	no	14,034	49	3.5	8
UZB	Uzbekistan	Asia	no	10,382	36	3.5	9
AZE	Azerbaijan	Asia	no	12,666	36	2.8	10
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305	2.5	11
PAK	Pakistan	Asia	no	37,562	95	2.5	12
CHN	China	Asia	no	599,699	1,505	2.5	13
AFG	Afghanistan	Asia	no	9,988	24	2.4	14
GEO	Georgia	Asia	no	3,815	9	2.4	15
KOR	Republic of Korea	Asia	no	95,180	207	2.2	16
MMR	Myanmar	Asia	no	9,829	20	2.1	17
ARM	Armenia	Asia	no	2,899	6	2.0	18
IDN	Indonesia	Asia	no	113,457	198	1.7	19
ARE	United Arab Emirates	Asia	no	11,165	19	1.7	20
CYP	Cyprus	Asia	no	1,154	2	1.4	21
TKM	Turkmenistan	Asia	no	3,779	5	1.4	22
IRQ	Iraq	Asia	no	15,555	18	1.2	23
TUR	Turkey	Asia	no	164,353	186	1.1	24
KAZ	Kazakhstan	Asia	no	20,880	21	1.0	25
LBN	Lebanon	Asia	no	4,139	4	0.9	26
PRK	Dem People's Rep of Korea	Asia	no	10,245	9	0.9	27
BRN	Brunei Darussalam	Asia	no	895	1	0.9	28
HKG	Hong Kong	Asia	no	47,718	39	0.8	29
MAC	Macau	Asia	no	1,989	2	0.8	30
SYR	Syrian Arab Republic	Asia	no	18,783	14	0.8	31
KWT	Kuwait	Asia	no	6,168	4	0.7	32
ISR	Israel	Asia	no	22,505	15	0.7	33
JOR	Jordan	Asia	no	10,652	7	0.6	34
OMN	Oman	Asia	no	4,095	2	0.6	35
QAT	Qatar	Asia	no	2,116	1	0.6	36
LAO	Lao People's Democratic Republic	Asia	no	938	1	0.5	37
MYS	Malaysia	Asia	no	37,377	20	0.5	38
IND	India	Asia	no	320,919	168	0.5	39
YEM	Yemen	Asia	no	10,133	4	0.4	40
VNM	Viet Nam	Asia	no	24,066	6	0.2	41
THA	Thailand	Asia	no	43,178	10	0.2	42
MNG	Mongolia	Asia	no	2,335	1	0.2	43
SAU	Saudi Arabia	Asia	no	73,922	8	0.1	44
LKA	Sri Lanka	Asia	no	14,385	1	0.1	45
KHM	Cambodia	Asia	no	1,623	0	0.1	46
GRC	Greece	Europe	no	27,597	81	2.9	1
SMR	San Marino	Europe	no	113	0	2.7	2
BGR	Bulgaria	Europe	no	9,040	15	1.6	3
ITA	Italy	Europe	no	188,526	193	1.0	4
ALB	Albania	Europe	no	3,381	3	1.0	5
SVN	Slovenia	Europe	no	2,231	2	0.9	6
MCO	Monaco	Europe	no	123	0	0.8	7
MNE	Montenegro	Europe	no	269	0	0.7	8
GIB	Gibraltar	Europe	no	274	0	0.7	9
HRV	Croatia	Europe	no	6,064	4	0.7	10
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	0.7	11
ISL	Iceland	Europe	no	1,071	1	0.6	12
LIE	Liechtenstein	Europe	no	198	0	0.5	13
AUT	Austria	Europe	no	28,002	11	0.4	14
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	0.4	15
SRB	Serbia	Europe	no	1,938	1	0.3	16
CHE	Switzerland	Europe	no	40,078	12	0.3	17
DEU	Germany	Europe	no	262,867	54	0.2	18
MDA	Moldova, Republic of	Europe	no	3,416	1	0.2	19
HUN	Hungary	Europe	no	30,434	5	0.2	20
SVK	Slovakia	Europe	no	9,245	2	0.2	21
CZE	Czech Republic	Europe	no	23,126	3	0.1	22
BEL	Belgium	Europe	no	29,496	4	0.1	23



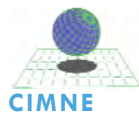
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GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	0.1	24
NLD	Netherlands	Europe	no	49,481	5	0.1	25
POL	Poland	Europe	no	60,706	6	0.1	26
LUX	Luxembourg	Europe	no	2,462	0	0.1	27
RUS	Russian Federation	Europe	no	288,219	21	0.1	28
FRA	France	Europe	no	236,236	17	0.1	29
ESP	Spain	Europe	no	122,131	8	0.1	30
PRT	Portugal	Europe	no	18,087	1	0.1	31
EST	Estonia	Europe	no	2,851	0	0.0	32
IRL	Ireland	Europe	no	16,223	1	0.0	33
UKR	Ukraine	Europe	no	32,769	1	0.0	34
LTU	Lithuania	Europe	no	7,227	0	0.0	35
NOR	Norway	Europe	no	33,800	0	0.0	36
DNK	Denmark	Europe	no	31,778	0	0.0	37
SWE	Sweden	Europe	no	27,971	0	0.0	38
LVA	Latvia	Europe	no	4,998	-	-	39
FIN	Finland	Europe	no	14,927	-	-	40
BLR	Belarus	Europe	no	21,160	-	-	41
FRO	Faroe Islands	Europe	no	42	-	-	42
NZL	New Zealand	Australia	no	12,682	12	0.9	1
MLT	Malta	Pacific	no	1,330	1	0.5	2
AUS	Australia	Australia	no	47,971	3	0.1	3
GLP	Guadeloupe	Caribbean	no	904	18	19.6	1
HND	Honduras	Latin America	no	5,414	86	15.9	2
SLV	El Salvador	Latin America	no	4,297	58	13.5	3
CYM	Cayman Islands	Caribbean	no	81	1	11.1	4
TCA	Turks and Caicos Islands	Caribbean	no	28	0	10.6	5
MTQ	Martinique	Caribbean	no	889	8	9.2	6
NIC	Nicaragua	Latin America	no	2,310	12	5.2	7
GTM	Guatemala	Latin America	no	8,748	38	4.3	8
CRI	Costa Rica	Latin America	no	6,892	23	3.3	9
ECU	Ecuador	Latin America	no	10,202	28	2.7	10
MEX	Mexico	Latin America	no	260,866	704	2.7	11
COL	Colombia	Latin America	no	53,054	131	2.5	12
CHL	Chile	Latin America	no	18,070	44	2.4	13
PER	Peru	Latin America	no	24,717	57	2.3	14
BOL	Bolivia	Latin America	no	4,521	7	1.6	15
PAN	Panama	Latin America	no	5,115	7	1.4	16
VEN	Venezuela	Latin America	no	42,697	49	1.2	17
USA	United States of America	North America	no	1,224,802	1,115	0.9	18
ARG	Argentina	Latin America	no	39,520	12	0.3	19
CAN	Canada	North America	no	121,895	22	0.2	20
BRA	Brazil	Latin America	no	300,613	0	0.0	21
GUF	French Guiana	Latin America	no	378	-	-	22
PRY	Paraguay	Latin America	no	4,301	-	-	23
URY	Uruguay	Latin America	no	4,269	-	-	24
REU	Réunion	Sub Saharan Africa	no	2,161	13	6.1	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	9	5.9	2
MYT	Mayotte	Sub Saharan Africa	no	154	1	3.9	3
MOZ	Mozambique	Sub Saharan Africa	no	3,991	6	1.5	4
DZA	Algeria	North Africa	no	67,908	92	1.4	5
TUN	Tunisia	North Africa	no	14,190	11	0.7	6
RWA	Rwanda	Sub Saharan Africa	no	962	1	0.7	7
BDI	Burundi	Sub Saharan Africa	no	145	0	0.7	8
MWI	Malawi	Sub Saharan Africa	no	1,519	1	0.7	9
DJI	Djibouti	Sub Saharan Africa	no	656	0	0.6	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	0.4	11
MAR	Morocco	North Africa	no	41,389	12	0.3	12
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5	0.3	13
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.3	14
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.3	15
UGA	Uganda	Sub Saharan Africa	no	3,787	1	0.2	16
EGY	Egypt	North Africa	no	101,974	22	0.2	17
ZAF	South Africa	Sub Saharan Africa	no	69,420	11	0.2	18
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	0.2	19
KEN	Kenya	Sub Saharan Africa	no	8,730	1	0.1	20
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.1	21
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.1	22
ERI	Eritrea	Sub Saharan Africa	no	1,076	0	0.1	23



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	0.1	24
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	0.1	25
SOM	Somalia	Sub Saharan Africa	no	2,303	0	0.0	26
SDN	Sudan	Sub Saharan Africa	no	12,166	1	0.0	27
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	0.0	28
AGO	Angola	Sub Saharan Africa	no	9,237	0	0.0	29
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	0.0	30
CAF	Central African Republic	Sub Saharan Africa	no	351	-	-	31
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-	-	32
NAM	Namibia	Sub Saharan Africa	no	1,706	-	-	33
GAB	Gabon	Sub Saharan Africa	no	2,633	-	-	34
SEN	Senegal	Sub Saharan Africa	no	5,536	-	-	35
GIN	Guinea	Sub Saharan Africa	no	1,643	-	-	36
TCO	Chad	Sub Saharan Africa	no	4,004	-	-	37
COG	Congo	Sub Saharan Africa	no	3,326	-	-	38
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	39
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	40
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	41
GMB	Gambia	Sub Saharan Africa	no	334	-	-	42
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	43
LBR	Liberia	Sub Saharan Africa	no	263	-	-	44
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	45
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	46
NER	Niger	Sub Saharan Africa	no	1,230	-	-	47
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	48
TGO	Togo	Sub Saharan Africa	no	529	-	-	49
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	50
VUT	Vanuatu	Asia	yes	25	3	99.7	1
SLB	Solomon islands	Asia	yes	85	5	60.2	2
PNG	Papua New Guinea	Asia	yes	1,289	21	15.9	3
FJI	Fiji	Asia	yes	309	2	7.4	4
NCL	New Caledonia	Asia	yes	107	0	3.7	5
BHR	Bahrain	Asia	yes	1,670	1	0.5	6
TON	Tonga	Pacific	yes	47	2	51.5	1
WSM	Samoa	Pacific	yes	93	1	8.6	2
PYF	French Polynesia	Pacific	yes	116	1	5.2	3
FSM	Micronesia (Federated States of)	Pacific	yes	216	1	4.6	4
PLW	Palau	Pacific	yes	25	0	4.0	5
SGP	Singapore	Pacific	yes	18,751	4	0.2	6
MDV	Maldives	Pacific	yes	154	-	-	7
DMA	Dominica	Caribbean	yes	43	1	18.5	1
VGB	British Virgin Islands	Caribbean	yes	18	0	16.8	2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	36	15.8	3
ATG	Antigua and Barbuda	Caribbean	yes	272	4	13.6	4
VIR	United States Virgin Islands	Caribbean	yes	82	1	13.4	5
HTI	Haiti	Caribbean	yes	1,584	18	11.2	6
PRI	Puerto Rico	Caribbean	yes	3,197	27	8.3	7
LCA	Saint Lucia	Caribbean	yes	73	1	6.9	8
BLZ	Belize	Latin America	yes	65	0	6.2	9
BRB	Barbados	Caribbean	yes	253	2	5.9	10
DOM	Dominican Republic	Caribbean	yes	13,790	80	5.8	11
GRD	Grenada	Caribbean	yes	63	0	4.7	12
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	1	4.5	13
BHS	Bahamas	Caribbean	yes	985	3	3.3	14
JAM	Jamaica	Caribbean	yes	4,148	12	2.9	15
ABW	Aruba	Caribbean	yes	358	1	2.8	16
CUB	Cuba	Caribbean	yes	5,936	7	1.1	17
GUY	Guyana	Latin America	yes	884	0	0.1	18
AIA	Anguilla	Caribbean	yes	2	-	-	19
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	20
SUR	Suriname	Latin America	yes	364	-	-	21
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	5.3	1
COM	Comoros	Sub Saharan Africa	yes	156	1	3.8	2
SYC	Seychelles	Sub Saharan Africa	yes	631	0	0.3	3
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	4
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	5
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	6



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**Risk indicators for the countries
by economy level group
and SDIS – no SIDS**



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
JPN	Japan	Asia	no	14,617,394	59,828	4.1	1
SMR	San Marino	Europe	no	1,846	5	2.8	2
GRC	Greece	Europe	no	642,888	1,732	2.7	3
ARE	United Arab Emirates	Asia	no	248,015	421	1.7	4
CYP	Cyprus	Asia	no	23,484	32	1.4	5
ITA	Italy	Europe	no	3,701,619	3,795	1.0	6
SVN	Slovenia	Europe	no	36,896	34	0.9	7
KWT	Kuwait	Asia	no	202,236	137	0.7	8
NZL	New Zealand	Australia	no	238,609	163	0.7	9
MCO	Monaco	Europe	no	5,380	4	0.7	10
ISR	Israel	Asia	no	293,550	192	0.7	11
LIE	Liechtenstein	Europe	no	8,070	5	0.6	12
QAT	Qatar	Asia	no	113,981	64	0.6	13
MLT	Malta	Pacific	no	18,630	10	0.6	14
OMN	Oman	Asia	no	42,201	23	0.5	15
ISL	Iceland	Europe	no	25,742	14	0.5	16
AUT	Austria	Europe	no	615,592	240	0.4	17
USA	United States of America	North America	no	22,004,154	8,400	0.4	18
CHE	Switzerland	Europe	no	839,518	257	0.3	19
BRN	Brunei Darussalam	Asia	no	20,094	6	0.3	20
DEU	Germany	Europe	no	5,800,986	1,206	0.2	21
SVK	Slovakia	Europe	no	124,390	22	0.2	22
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	0.2	23
CZE	Czech Republic	Europe	no	336,714	49	0.2	24
BEL	Belgium	Europe	no	739,159	101	0.1	25
SAU	Saudi Arabia	Asia	no	751,807	83	0.1	26
NLD	Netherlands	Europe	no	1,593,735	160	0.1	27
LUX	Luxembourg	Europe	no	45,036	4	0.1	28
ESP	Spain	Europe	no	2,695,139	198	0.1	29
FRA	France	Europe	no	3,653,264	260	0.1	30
PRT	Portugal	Europe	no	296,296	21	0.1	31
KOR	Republic of Korea	Asia	no	2,787,207	164	0.1	32
HKG	Hong Kong	Asia	no	1,138,019	41	0.0	33
CAN	Canada	North America	no	2,051,584	72	0.0	34
MAC	Macau	Asia	no	96,993	3	0.0	35
IRL	Ireland	Europe	no	244,117	8	0.0	36
EST	Estonia	Europe	no	28,069	1	0.0	37
NOR	Norway	Europe	no	386,892	4	0.0	38
DNK	Denmark	Europe	no	381,265	2	0.0	39
AUS	Australia	Australia	no	1,832,960	17	0.0	40
SWE	Sweden	Europe	no	369,792	2	-	41
FIN	Finland	Europe	no	209,050	1	-	42
TWN	Taiwan	Asia	no	872,409	3,857	4.4	1
CRI	Costa Rica	Latin America	no	38,475	131	3.4	2
CHL	Chile	Latin America	no	326,640	869	2.7	3
COL	Colombia	Latin America	no	325,385	803	2.5	4
BGR	Bulgaria	Europe	no	70,023	112	1.6	5
PAN	Panama	Latin America	no	30,296	44	1.5	6
TUR	Turkey	Asia	no	1,578,228	1,766	1.1	7
VEN	Venezuela	Latin America	no	435,869	439	1.0	8
KAZ	Kazakhstan	Asia	no	180,409	180	1.0	9
MNE	Montenegro	Europe	no	2,738	3	1.0	10
LBN	Lebanon	Asia	no	56,965	53	0.9	11
MEX	Mexico	Latin America	no	1,818,298	1,568	0.9	12
GIB	Gibraltar	Europe	no	3,141	2	0.7	13
HRV	Croatia	Europe	no	65,145	46	0.7	14
MYS	Malaysia	Asia	no	318,727	162	0.5	15
CYM	Cayman Islands	Caribbean	no	3,603	1	0.4	16
SRB	Serbia	Europe	no	16,907	5	0.3	17
ARG	Argentina	Latin America	no	403,909	128	0.3	18
LYB	Libyan Arab Jamahiriya	North Africa	no	78,903	21	0.3	19
PRK	Dem People's Rep of Korea	Asia	no	27,936	5	0.2	20
HUN	Hungary	Europe	no	286,209	51	0.2	21
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	0.1	22
POL	Poland	Europe	no	659,150	66	0.1	23
RUS	Russian Federation	Europe	no	2,209,139	168	0.1	24
BWA	Botswana	Sub Saharan Africa	no	18,941	1	0.1	25
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0	0.0	26
LVA	Latvia	Europe	no	39,277	0	0.0	27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
LTU	Lithuania	Europe	no	53,397	1	0.0	28
GAB	Gabon	Sub Saharan Africa	no	25,086	0	0.0	29
BLR	Belarus	Europe	no	74,427	0	-	30
BRA	Brazil	Latin America	no	1,715,746	3	-	31
URY	Uruguay	Latin America	no	28,590	-	-	32
PHL	Philippines	Asia	no	186,193	5,004	26.9	1
SLV	El Salvador	Latin America	no	22,582	300	13.3	2
HND	Honduras	Latin America	no	18,844	230	12.2	3
GTM	Guatemala	Latin America	no	38,263	156	4.1	4
BTN	Bhutan	Asia	no	1,167	5	3.9	5
AZE	Azerbaijan	Asia	no	45,197	128	2.8	6
ECU	Ecuador	Latin America	no	68,550	192	2.8	7
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721	2.5	8
GEO	Georgia	Asia	no	21,157	50	2.4	9
PER	Peru	Latin America	no	189,980	447	2.4	10
ARM	Armenia	Asia	no	14,187	28	2.0	11
IDN	Indonesia	Asia	no	575,183	1,005	1.8	12
BOL	Bolivia	Latin America	no	13,112	21	1.6	13
TKM	Turkmenistan	Asia	no	12,707	18	1.4	14
DZA	Algeria	North Africa	no	259,977	359	1.4	15
IRQ	Iraq	Asia	no	47,245	56	1.2	16
ALB	Albania	Europe	no	13,964	14	1.0	17
SYR	Syrian Arab Republic	Asia	no	68,489	52	0.8	18
TUN	Tunisia	North Africa	no	65,420	49	0.8	19
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	0.7	20
JOR	Jordan	Asia	no	40,997	26	0.6	21
DJI	Djibouti	Sub Saharan Africa	no	2,525	2	0.6	22
CHN	China	Asia	no	4,512,825	2,351	0.5	23
MAR	Morocco	North Africa	no	136,300	46	0.3	24
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	0.3	25
MNG	Mongolia	Asia	no	9,273	2	0.2	26
EGY	Egypt	North Africa	no	234,939	51	0.2	27
THA	Thailand	Asia	no	394,598	81	0.2	28
MDA	Moldova, Republic of	Europe	no	9,896	2	0.2	29
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.1	30
UKR	Ukraine	Europe	no	278,497	6	0.0	31
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	0.0	32
NAM	Namibia	Sub Saharan Africa	no	7,239	0	0.0	33
AGO	Angola	Sub Saharan Africa	no	25,225	0	0.0	34
LKA	Sri Lanka	Asia	no	49,967	0	-	35
FRO	Faroe Islands	Europe	no	1,012	-	-	36
PRY	Paraguay	Latin America	no	19,203	-	-	37
COG	Congo	Sub Saharan Africa	no	12,566	-	-	38
GLP	Guadeloupe	Caribbean	no	19,838	196	9.9	1
KGZ	Kyrgyzstan	Asia	no	3,644	20	5.4	2
NIC	Nicaragua	Latin America	no	10,935	58	5.3	3
NPL	Nepal	Asia	no	6,537	31	4.8	4
MTQ	Martinique	Caribbean	no	21,052	92	4.4	5
TJK	Tajikistan	Asia	no	5,576	21	3.7	6
UZB	Uzbekistan	Asia	no	44,370	154	3.5	7
BGD	Bangladesh	Asia	no	72,949	198	2.7	8
AFG	Afghanistan	Asia	no	16,132	39	2.4	9
PAK	Pakistan	Asia	no	170,444	409	2.4	10
MMR	Myanmar	Asia	no	20,572	40	1.9	11
BDI	Burundi	Sub Saharan Africa	no	168	0	0.9	12
RWA	Rwanda	Sub Saharan Africa	no	1,558	1	0.7	13
MWI	Malawi	Sub Saharan Africa	no	1,883	1	0.5	14
TCA	Turks and Caicos islands	Caribbean	no	332	0	0.5	15
MYT	Mayotte	Sub Saharan Africa	no	2,341	1	0.4	16
IND	India	Asia	no	1,429,881	524	0.4	17
YEM	Yemen	Asia	no	21,556	8	0.4	18
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	0.4	19
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.3	20
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	0.3	21
UGA	Uganda	Sub Saharan Africa	no	6,628	2	0.2	22
KEN	Kenya	Sub Saharan Africa	no	18,470	3	0.2	23
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	0.2	24
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	0.1	25
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	0.1	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.1	27
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	0.1	28
VNM	Viet Nam	Asia	no	115,441	7	0.1	29
MDG	Madagascar	Sub Saharan Africa	no	2,575	0	0.1	30
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	0.1	31
SDN	Sudan	Sub Saharan Africa	no	26,851	1	0.0	32
CAF	Central African Republic	Sub Saharan Africa	no	916	-	0.0	33
LBR	Liberia	Sub Saharan Africa	no	515	-	0.0	34
SOM	Somalia	Sub Saharan Africa	no	3,573	0	0.0	35
KHM	Cambodia	Asia	no	4,335	0	0.0	36
SEN	Senegal	Sub Saharan Africa	no	11,619	0	0.0	37
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	0.0	38
GUF	French Guiana	Latin America	no	8,339	-	-	39
GIN	Guinea	Sub Saharan Africa	no	3,259	-	-	40
BEN	Benin	Sub Saharan Africa	no	3,585	-	-	41
TCD	Chad	Sub Saharan Africa	no	6,664	-	-	42
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	-	43
REU	Réunion	Sub Saharan Africa	no	42,937	-	-	44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-	-	45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	-	46
GMB	Gambia	Sub Saharan Africa	no	680	-	-	47
GHA	Ghana	Sub Saharan Africa	no	12,649	-	-	48
MLI	Mali	Sub Saharan Africa	no	3,869	-	-	49
NER	Niger	Sub Saharan Africa	no	2,800	-	-	50
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	-	51
TGO	Togo	Sub Saharan Africa	no	1,644	-	-	52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-	-	53
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475	15.1	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21	8.7	2
BHR	Bahrain	Asia	yes	32,575	17	0.5	3
SGP	Singapore	Pacific	yes	526,900	114	0.2	4
BHS	Bahamas	Caribbean	yes	21,313	0	0.0	5
DMA	Dominica	Caribbean	yes	356	5	13.3	1
DOM	Dominican Republic	Caribbean	yes	72,573	363	5.0	2
BRB	Barbados	Caribbean	yes	4,677	18	3.8	3
GRD	Grenada	Caribbean	yes	1,229	5	3.7	4
LCA	Saint Lucia	Caribbean	yes	543	2	3.4	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3	2.6	6
JAM	Jamaica	Caribbean	yes	28,963	26	0.9	7
PLW	Palau	Pacific	yes	279	0	0.7	8
CUB	Cuba	Caribbean	yes	46,280	10	0.2	9
MDV	Maldives	Pacific	yes	907	-	-	10
SUR	Suriname	Latin America	yes	2,797	-	-	11
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	-	12
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	-	13
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-	-	14
VUT	Vanuatu	Asia	yes	102	10	99.2	1
TON	Tonga	Pacific	yes	230	9	40.4	2
WSM	Samoa	Pacific	yes	361	1	2.4	3
FJI	Fiji	Asia	yes	2,100	3	1.3	4
BLZ	Belize	Latin America	yes	1,251	1	1.0	5
GUY	Guyana	Latin America	yes	3,468	-	0.0	6
FSM	Micronesia (Federated States of)	Pacific	yes	585	-	-	7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	-	8
SLB	Solomon islands	Asia	yes	211	12	58.9	1
PNG	Papua New Guinea	Asia	yes	5,433	86	15.8	2
VGB	British Virgin Islands	Caribbean	yes	424	4	8.2	3
AIA	Anguilla	Caribbean	yes	20	0	7.5	4
HTI	Haiti	Caribbean	yes	8,553	64	7.5	5
NCL	New Caledonia	Asia	yes	4,771	19	4.0	6
VIR	United States Virgin Islands	Caribbean	yes	1,755	6	3.3	7
PRI	Puerto Rico	Caribbean	yes	135,818	330	2.4	8
ABW	Aruba	Caribbean	yes	6,526	8	1.2	9
COM	Comoros	Sub Saharan Africa	yes	310	0	0.4	10
PYF	French Polynesia	Pacific	yes	6,568	-	-	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-	-	12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-	-	13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNP [USD million]	AAL/GNE [%]	
JPN	Japan	Asia	no	14,617,394	59,828	5,396,265	11.1	1
GRC	Greece	Europe	no	642,888	1,732	327,811	5.3	2
ITA	Italy	Europe	no	3,701,619	3,795	2,087,749	1.8	3
ARE	United Arab Emirates	Asia	no	248,015	421	270,334	1.6	4
CYP	Cyprus	Asia	no	23,484	32	24,623	1.3	5
MLT	Malta	Pacific	no	18,630	10	8,111	1.3	6
ISL	Iceland	Europe	no	25,742	14	11,313	1.2	7
ISR	Israel	Asia	no	293,550	192	212,896	0.9	8
SVN	Slovenia	Europe	no	36,896	34	46,643	0.7	9
AUT	Austria	Europe	no	615,592	240	362,737	0.7	10
USA	United States of America	North America	no	22,004,154	8,400	15,103,640	0.6	11
CHE	Switzerland	Europe	no	839,518	257	468,037	0.6	12
DEU	Germany	Europe	no	5,800,986	1,206	3,101,126	0.4	13
CZE	Czech Republic	Europe	no	336,714	49	182,876	0.3	14
MAC	Macau	Asia	no	96,993	3	11,994	0.3	15
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	2,325,009	0.2	16
SVK	Slovakia	Europe	no	124,390	22	88,405	0.2	17
SAU	Saudi Arabia	Asia	no	751,807	83	341,826	0.2	18
BEL	Belgium	Europe	no	739,159	101	456,696	0.2	19
NLD	Netherlands	Europe	no	1,593,735	160	721,171	0.2	20
HKG	Hong Kong	Asia	no	1,138,019	41	211,863	0.2	21
KOR	Republic of Korea	Asia	no	2,787,207	164	986,184	0.2	22
ESP	Spain	Europe	no	2,695,139	198	1,437,861	0.1	23
LUX	Luxembourg	Europe	no	45,036	4	36,700	0.1	24
FRA	France	Europe	no	3,653,264	260	2,620,062	0.1	25
PRT	Portugal	Europe	no	296,296	21	245,251	0.1	26
IRL	Ireland	Europe	no	244,117	8	171,957	0.1	27
EST	Estonia	Europe	no	28,069	1	17,933	0.1	28
CAN	Canada	North America	no	2,051,584	72	1,606,667	0.0	29
NOR	Norway	Europe	no	386,892	4	358,009	0.0	30
DNK	Denmark	Europe	no	381,265	2	292,535	0.0	31
SMR	San Marino	Europe	no	1,846	5			32
LIE	Liechtenstein	Europe	no	8,070	5			33
MCO	Monaco	Europe	no	5,380	4			34
KWT	Kuwait	Asia	no	202,236	137			35
NZL	New Zealand	Australia	no	238,609	163			36
BRN	Brunei Darussalam	Asia	no	20,094	6			37
OMN	Oman	Asia	no	42,201	23			38
QAT	Qatar	Asia	no	113,981	64			39
AUS	Australia	Australia	no	1,832,960	17			40
SWE	Sweden	Europe	no	369,792	2	431,251		41
FIN	Finland	Europe	no	209,050	1	235,640		42
CHL	Chile	Latin America	no	326,640	869	198,120	4.4	1
CRI	Costa Rica	Latin America	no	38,475	131	36,941	3.6	2
COL	Colombia	Latin America	no	325,385	803	294,580	2.7	3
BGR	Bulgaria	Europe	no	70,023	112	48,622	2.3	4
TUR	Turkey	Asia	no	1,578,228	1,766	774,921	2.3	5
PAN	Panama	Latin America	no	30,296	44	27,738	1.6	6
MEX	Mexico	Latin America	no	1,818,298	1,568	1,049,803	1.5	7
KAZ	Kazakhstan	Asia	no	180,409	180	127,087	1.4	8
VEN	Venezuela	Latin America	no	435,869	439	346,724	1.3	9
LBN	Lebanon	Asia	no	56,965	53	47,915	1.1	10
MYS	Malaysia	Asia	no	318,727	162	195,443	0.8	11
HRV	Croatia	Europe	no	65,145	46	61,162	0.8	12
MNE	Montenegro	Europe	no	2,738	3	5,265	0.5	13
HUN	Hungary	Europe	no	286,209	51	120,269	0.4	14
ARG	Argentina	Latin America	no	403,909	128	356,545	0.4	15
POL	Poland	Europe	no	659,150	66	475,111	0.1	16
SRB	Serbia	Europe	no	16,907	5	44,764	0.1	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	369,463	0.1	18
RUS	Russian Federation	Europe	no	2,209,139	168	1,356,393	0.1	19
BWA	Botswana	Sub Saharan Africa	no	18,941	1	15,360	0.1	20
LTU	Lithuania	Europe	no	53,397	1	36,811	0.0	21
GAB	Gabon	Sub Saharan Africa	no	25,086	0	10,274	0.0	22
LVA	Latvia	Europe	no	39,277	0	24,210	0.0	23
TWN	Taiwan	Asia	no	872,409	3,857			24
GIB	Gibraltar	Europe	no	3,141	2			25
CYM	Cayman Islands	Caribbean	no	3,603	1			26
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNP [USD million]	AAL/GNP [%]	
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			28
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			29
BLR	Belarus	Europe	no	74,427	0	62,212		30
BRA	Brazil	Latin America	no	1,715,746	3	2,108,637		31
URY	Uruguay	Latin America	no	28,590	-	39,936		32
PHL	Philippines	Asia	no	186,193	5,004	203,208	24.6	1
HND	Honduras	Latin America	no	18,844	230	18,594	12.4	2
SLV	El Salvador	Latin America	no	22,582	300	24,921	12.1	3
AZE	Azerbaijan	Asia	no	45,197	128	33,777	3.8	4
GEO	Georgia	Asia	no	21,157	50	13,709	3.7	5
GTM	Guatemala	Latin America	no	38,263	156	45,670	3.4	6
ECU	Ecuador	Latin America	no	68,550	192	61,265	3.1	7
PER	Peru	Latin America	no	189,980	447	152,561	2.9	8
ARM	Armenia	Asia	no	14,187	28	11,639	2.4	9
IDN	Indonesia	Asia	no	575,183	1,005	695,009	1.5	10
BOL	Bolivia	Latin America	no	13,112	21	18,301	1.1	11
TUN	Tunisia	North Africa	no	65,420	49	46,643	1.1	12
ALB	Albania	Europe	no	13,964	14	14,377	1.0	13
SYR	Syrian Arab Republic	Asia	no	68,489	52	59,401	0.9	14
TKM	Turkmenistan	Asia	no	12,707	18	20,575	0.9	15
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	10,902	0.8	16
JOR	Jordan	Asia	no	40,997	26	33,470	0.8	17
MAR	Morocco	North Africa	no	136,300	46	99,808	0.5	18
CHN	China	Asia	no	4,512,825	2,351	5,694,512	0.4	19
MNG	Mongolia	Asia	no	9,273	2	6,675	0.3	20
THA	Thailand	Asia	no	394,598	81	295,072	0.3	21
MDA	Moldova, Republic of	Europe	no	9,896	2	8,053	0.3	22
EGY	Egypt	North Africa	no	234,939	51	229,362	0.2	23
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	20,030	0.2	24
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	4,329	0.1	25
UKR	Ukraine	Europe	no	278,497	6	141,773	0.0	26
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	23,429	0.0	27
NAM	Namibia	Sub Saharan Africa	no	7,239	0	12,035	0.0	28
BTN	Bhutan	Asia	no	1,167	5			29
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			30
DZA	Algeria	North Africa	no	259,977	359			31
IRQ	Iraq	Asia	no	47,245	56			32
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721			33
AGO	Angola	Sub Saharan Africa	no	25,225	0	72,456		34
LKA	Sri Lanka	Asia	no	49,967	0	54,079		35
COG	Congo	Sub Saharan Africa	no	12,566	-	8,109		36
FRO	Faroe Islands	Europe	no	1,012	-			37
PRY	Paraguay	Latin America	no	19,203	-	17,941		38
AFG	Afghanistan	Asia	no	16,132	39	1,852	21.3	1
NIC	Nicaragua	Latin America	no	10,935	58	8,405	7.0	2
UZB	Uzbekistan	Asia	no	44,370	154	38,768	4.0	3
KGZ	Kyrgyzstan	Asia	no	3,644	20	6,067	3.2	4
TJK	Tajikistan	Asia	no	5,576	21	8,227	2.5	5
PAK	Pakistan	Asia	no	170,444	409	186,087	2.2	6
BGD	Bangladesh	Asia	no	72,949	198	106,991	1.9	7
IND	India	Asia	no	1,429,881	524	1,783,129	0.3	8
MWI	Malawi	Sub Saharan Africa	no	1,883	1	5,605	0.2	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	14,723	0.2	10
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	3,511	0.1	11
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	26,224	0.1	12
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	7,629	0.1	13
UGA	Uganda	Sub Saharan Africa	no	6,628	2	18,757	0.1	14
KEN	Kenya	Sub Saharan Africa	no	18,470	3	35,486	0.1	15
VNM	Viet Nam	Asia	no	115,441	7	117,363	0.1	16
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	11,309	0.1	17
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	15,617	0.0	18
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	8,897	0.0	19
SDN	Sudan	Sub Saharan Africa	no	26,851	1	61,511	0.0	20
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	35,978	0.0	21
KHM	Cambodia	Asia	no	4,335	0	11,854	0.0	22
SEN	Senegal	Sub Saharan Africa	no	11,619	0	15,485	0.0	23
GLP	Guadeloupe	Caribbean	no	19,838	196			24
MTQ	Martinique	Caribbean	no	21,052	92			25
NPL	Nepal	Asia	no	6,537	31			26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
MMR	Myanmar	Asia	no	20,572	40			27
BDI	Burundi	Sub Saharan Africa	no	168	0			28
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			29
TCA	Turks and Caicos islands	Caribbean	no	332	0			30
YEM	Yemen	Asia	no	21,556	8			31
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			32
MDG	Madagascar	Sub Saharan Africa	no	2,575	0			33
CAF	Central African Republic	Sub Saharan Africa	no	916	-			34
ERI	Eritrea	Sub Saharan Africa	no	1,892	0			35
SOM	Somalia	Sub Saharan Africa	no	3,573	0			36
LBR	Liberia	Sub Saharan Africa	no	515	-			37
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	168,996		38
GIN	Guinea	Sub Saharan Africa	no	3,259	-	4,711		39
BEN	Benin	Sub Saharan Africa	no	3,585	-	7,536		40
TCO	Chad	Sub Saharan Africa	no	6,664	-	9,469		41
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	4,195		42
REU	Réunion	Sub Saharan Africa	no	42,937	-			43
GUF	French Guiana	Latin America	no	8,339	-			44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	21,734		46
GMB	Gambia	Sub Saharan Africa	no	680	-	963		47
GHA	Ghana	Sub Saharan Africa	no	12,649	-	35,414		48
MLI	Mali	Sub Saharan Africa	no	3,869	-			49
NER	Niger	Sub Saharan Africa	no	2,800	-			50
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	2,142		51
TGO	Togo	Sub Saharan Africa	no	1,644	-			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21	1,329	16.0	1
SGP	Singapore	Pacific	yes	526,900	114	150,187	0.8	2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			3
BHR	Bahrain	Asia	yes	32,575	17			4
BHS	Bahamas	Caribbean	yes	21,313	0			5
DMA	Dominica	Caribbean	yes	356	5	573	8.4	1
DOM	Dominican Republic	Caribbean	yes	72,573	363	57,847	6.3	2
GRD	Grenada	Caribbean	yes	1,229	5	996	4.6	3
BRB	Barbados	Caribbean	yes	4,677	18	4,317	4.1	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3	914	3.1	5
JAM	Jamaica	Caribbean	yes	28,963	26	16,776	1.5	6
LCA	Saint Lucia	Caribbean	yes	543	2	1,355	1.4	7
PLW	Palau	Pacific	yes	279	0			8
CUB	Cuba	Caribbean	yes	46,280	10			9
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	10,934		10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-			11
SUR	Suriname	Latin America	yes	2,797	-			12
MDV	Maldives	Pacific	yes	907	-	2,244		13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	766		14
TON	Tonga	Pacific	yes	230	9	510	18.2	1
VUT	Vanuatu	Asia	yes	102	10	743	13.6	2
WSM	Samoa	Pacific	yes	361	1	727	1.2	3
FJI	Fiji	Asia	yes	2,100	3	3,569	0.8	4
BLZ	Belize	Latin America	yes	1,251	1			5
GUY	Guyana	Latin America	yes	3,468	-			6
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-			8
SLB	Solomon islands	Asia	yes	211	12	885	14.0	1
PNG	Papua New Guinea	Asia	yes	5,433	86	9,217	9.3	2
HTI	Haiti	Caribbean	yes	8,553	64	9,743	6.6	3
VGB	British Virgin Islands	Caribbean	yes	424	4			4
AIA	Anguilla	Caribbean	yes	20	0			5
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			6
PRI	Puerto Rico	Caribbean	yes	135,818	330			7
NCL	New Caledonia	Asia	yes	4,771	19			8
ABW	Aruba	Caribbean	yes	6,526	8			9
COM	Comoros	Sub Saharan Africa	yes	310	0			10
PYF	French Polynesia	Pacific	yes	6,568	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			12
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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
JPN	Japan	Asia	no	14,617,394	59,828	1,094,349	54.7	1
GRC	Greece	Europe	no	642,888	1,732	54,736	31.7	2
ARE	United Arab Emirates	Asia	no	248,015	421	24,545	17.2	3
ITA	Italy	Europe	no	3,701,619	3,795	435,241	8.7	4
CYP	Cyprus	Asia	no	23,484	32	4,558	7.0	5
MLT	Malta	Pacific	no	18,630	10	1,711	6.0	6
CHE	Switzerland	Europe	no	839,518	257	60,549	4.2	7
ISL	Iceland	Europe	no	25,742	14	3,261	4.2	8
ISR	Israel	Asia	no	293,550	192	52,616	3.6	9
SVN	Slovenia	Europe	no	36,896	34	9,752	3.5	10
USA	United States of America	North America	no	22,004,154	8,400	2,522,700	3.3	11
AUT	Austria	Europe	no	615,592	240	73,430	3.3	12
HKG	Hong Kong	Asia	no	1,138,019	41	18,948	2.2	13
DEU	Germany	Europe	no	5,800,986	1,206	647,378	1.9	14
MAC	Macau	Asia	no	96,993	3	2,186	1.4	15
SVK	Slovakia	Europe	no	124,390	22	17,073	1.3	16
CZE	Czech Republic	Europe	no	336,714	49	41,897	1.2	17
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	518,869	1.1	18
KOR	Republic of Korea	Asia	no	2,787,207	164	155,748	1.1	19
BEL	Belgium	Europe	no	739,159	101	113,598	0.9	20
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ESP	Spain	Europe	no	2,695,139	198	292,417	0.7	23
LUX	Luxembourg	Europe	no	45,036	4	8,868	0.5	24
PRT	Portugal	Europe	no	296,296	21	49,074	0.4	25
FRA	France	Europe	no	3,653,264	260	635,621	0.4	26
EST	Estonia	Europe	no	28,069	1	3,959	0.2	27
CAN	Canada	North America	no	2,051,584	72	343,217	0.2	28
IRL	Ireland	Europe	no	244,117	8	39,102	0.2	29
NOR	Norway	Europe	no	386,892	4	92,372	0.0	30
DNK	Denmark	Europe	no	381,265	2	90,977	0.0	31
SWE	Sweden	Europe	no	369,792	2	123,918	0.0	32
FIN	Finland	Europe	no	209,050	1	58,644	0.0	33
SMR	San Marino	Europe	no	1,846	5			34
LIE	Liechtenstein	Europe	no	8,070	5			35
MCO	Monaco	Europe	no	5,380	4			36
KWT	Kuwait	Asia	no	202,236	137			37
NZL	New Zealand	Australia	no	238,609	163			38
BRN	Brunei Darussalam	Asia	no	20,094	6			39
OMN	Oman	Asia	no	42,201	23			40
QAT	Qatar	Asia	no	113,981	64			41
AUS	Australia	Australia	no	1,832,960	17			42
CHL	Chile	Latin America	no	326,640	869	26,588	32.7	1
PAN	Panama	Latin America	no	30,296	44	1,561	28.1	2
CRI	Costa Rica	Latin America	no	38,475	131	6,358	20.6	3
COL	Colombia	Latin America	no	325,385	803	46,769	17.2	4
TUR	Turkey	Asia	no	1,578,228	1,766	104,758	16.9	5
BGR	Bulgaria	Europe	no	70,023	112	7,539	14.9	6
MEX	Mexico	Latin America	no	1,818,298	1,568	120,640	13.0	7
LBN	Lebanon	Asia	no	56,965	53	4,711	11.3	8
KAZ	Kazakhstan	Asia	no	180,409	180	16,117	11.2	9
VEN	Venezuela	Latin America	no	435,869	439	42,419	10.3	10
MYS	Malaysia	Asia	no	318,727	162	30,273	5.4	11
HRV	Croatia	Europe	no	65,145	46	13,084	3.5	12
MNE	Montenegro	Europe	no	2,738	3	775	3.4	13
ARG	Argentina	Latin America	no	403,909	128	55,024	2.3	14
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SRB	Serbia	Europe	no	16,907	5	7,380	0.7	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	71,742	0.6	18
RUS	Russian Federation	Europe	no	2,209,139	168	287,875	0.6	19
BWA	Botswana	Sub Saharan Africa	no	18,941	1	3,130	0.5	20
GAB	Gabon	Sub Saharan Africa	no	25,086	0	1,267	0.2	21
LTU	Lithuania	Europe	no	53,397	1	7,241	0.1	22
LVA	Latvia	Europe	no	39,277	0	4,122	0.1	23
BLR	Belarus	Europe	no	74,427	0	8,828	0.0	24
BRA	Brazil	Latin America	no	1,715,746	3	442,019	0.0	25
TWN	Taiwan	Asia	no	872,409	3,857			26
GIB	Gibraltar	Europe	no	3,141	2			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
CYM	Cayman Islands	Caribbean	no	3,603	1			28
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			31
URY	Uruguay	Latin America	no	28,590	-	5,117		32
PHL	Philippines	Asia	no	186,193	5,004	19,403	257.9	1
SLV	El Salvador	Latin America	no	22,582	300	2,312	130.0	2
HND	Honduras	Latin America	no	18,844	230	2,777	82.8	3
GTM	Guatemala	Latin America	no	38,263	156	4,254	36.6	4
PER	Peru	Latin America	no	189,980	447	15,659	28.6	5
ECU	Ecuador	Latin America	no	68,550	192	6,807	28.3	6
ARM	Armenia	Asia	no	14,187	28	1,231	22.7	7
AZE	Azerbaijan	Asia	no	45,197	128	5,852	21.8	8
GEO	Georgia	Asia	no	21,157	50	2,453	20.4	9
IDN	Indonesia	Asia	no	575,183	1,005	64,015	15.7	10
ALB	Albania	Europe	no	13,964	14	952	15.1	11
SYR	Syrian Arab Republic	Asia	no	68,489	52	5,991	8.6	12
TKM	Turkmenistan	Asia	no	12,707	18	2,212	7.9	13
BOL	Bolivia	Latin America	no	13,112	21	2,718	7.5	14
TUN	Tunisia	North Africa	no	65,420	49	7,209	6.8	15
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	1,683	5.1	16
JOR	Jordan	Asia	no	40,997	26	5,910	4.4	17
CHN	China	Asia	no	4,512,825	2,351	791,999	3.0	18
MAR	Morocco	North Africa	no	136,300	46	15,913	2.9	19
MNG	Mongolia	Asia	no	9,273	2	851	2.4	20
EGY	Egypt	North Africa	no	234,939	51	24,436	2.1	21
THA	Thailand	Asia	no	394,598	81	41,294	2.0	22
MDA	Moldova, Republic of	Europe	no	9,896	2	1,377	1.5	23
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	3,498	1.0	24
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	913	0.2	25
UKR	Ukraine	Europe	no	278,497	6	27,731	0.2	26
NAM	Namibia	Sub Saharan Africa	no	7,239	0	2,692	0.0	27
LKA	Sri Lanka	Asia	no	49,967	0	7,718	0.0	28
CMR	Cameroon	Sub Saharan Africa	no	16,950	0			29
BTN	Bhutan	Asia	no	1,167	5			30
DJI	Djibouti	Sub Saharan Africa	no	2,525	2			31
DZA	Algeria	North Africa	no	259,977	359			32
IRQ	Iraq	Asia	no	47,245	56			33
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721			34
AGO	Angola	Sub Saharan Africa	no	25,225	0			35
COG	Congo	Sub Saharan Africa	no	12,566	-	1,186		36
FRO	Faroe Islands	Europe	no	1,012	-			37
PRY	Paraguay	Latin America	no	19,203	-	1,711		38
NIC	Nicaragua	Latin America	no	10,935	58	627	93.1	1
BGD	Bangladesh	Asia	no	72,949	198	5,387	36.7	2
PAK	Pakistan	Asia	no	170,444	409	14,053	29.1	3
UZB	Uzbekistan	Asia	no	44,370	154	6,853	22.5	4
KGZ	Kyrgyzstan	Asia	no	3,644	20	877	22.4	5
TJK	Tajikistan	Asia	no	5,576	21	1,658	12.4	6
IND	India	Asia	no	1,429,881	524	198,830	2.6	7
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	2,153	1.2	8
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	672	1.2	9
MWI	Malawi	Sub Saharan Africa	no	1,883	1	976	1.0	10
VNM	Viet Nam	Asia	no	115,441	7	6,947	1.0	11
UGA	Uganda	Sub Saharan Africa	no	6,628	2	2,015	0.8	12
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	719	0.7	13
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	4,052	0.7	14
KEN	Kenya	Sub Saharan Africa	no	18,470	3	4,226	0.7	15
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	935	0.5	16
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	1,166	0.5	17
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	1,281	0.2	18
KHM	Cambodia	Asia	no	4,335	0	713	0.1	19
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	3,029	0.1	20
SDN	Sudan	Sub Saharan Africa	no	26,851	1	9,428	0.1	21
SEN	Senegal	Sub Saharan Africa	no	11,619	0	1,124	0.1	22
AFG	Afghanistan	Asia	no	16,132	39	-	-	23
GLP	Guadeloupe	Caribbean	no	19,838	196			24
MTQ	Martinique	Caribbean	no	21,052	92			25
NPL	Nepal	Asia	no	6,537	31			26



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MMR	Myanmar	Asia	no	20,572	40			27
BDI	Burundi	Sub Saharan Africa	no	168	0			28
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			29
TCA	Turks and Caicos islands	Caribbean	no	332	0			30
YEM	Yemen	Asia	no	21,556	8			31
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			32
MDG	Madagascar	Sub Saharan Africa	no	2,575	0			33
CAF	Central African Republic	Sub Saharan Africa	no	916	-			34
ERI	Eritrea	Sub Saharan Africa	no	1,892	0			35
SOM	Somalia	Sub Saharan Africa	no	3,573	0			36
LBR	Liberia	Sub Saharan Africa	no	515	-			37
NGA	Nigeria	Sub Saharan Africa	no	121,669	1			38
GIN	Guinea	Sub Saharan Africa	no	3,259	-	339		39
BEN	Benin	Sub Saharan Africa	no	3,585	-			40
TCD	Chad	Sub Saharan Africa	no	6,664	-	1,131		41
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	646		42
REU	Réunion	Sub Saharan Africa	no	42,937	-			43
GUF	French Guiana	Latin America	no	8,339	-			44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	1,968		46
GMB	Gambia	Sub Saharan Africa	no	680	-	121		47
GHA	Ghana	Sub Saharan Africa	no	12,649	-	3,511		48
MLI	Mali	Sub Saharan Africa	no	3,869	-			49
NER	Niger	Sub Saharan Africa	no	2,800	-			50
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	233		51
TGO	Togo	Sub Saharan Africa	no	1,644	-			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			53
SGP	Singapore	Pacific	yes	526,900	114	22,293	5.1	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21			2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			3
BHR	Bahrain	Asia	yes	32,575	17			4
BHS	Bahamas	Caribbean	yes	21,313	0			5
DOM	Dominican Republic	Caribbean	yes	72,573	363	3,965	91.5	1
DMA	Dominica	Caribbean	yes	356	5	81	59.3	2
BRB	Barbados	Caribbean	yes	4,677	18	835	21.3	3
JAM	Jamaica	Caribbean	yes	28,963	26	2,368	10.8	4
LCA	Saint Lucia	Caribbean	yes	543	2	192	9.9	5
GRD	Grenada	Caribbean	yes	1,229	5			6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3			7
PLW	Palau	Pacific	yes	279	0			8
CUB	Cuba	Caribbean	yes	46,280	10			9
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	1,393		10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-			11
SUR	Suriname	Latin America	yes	2,797	-			12
MDV	Maldives	Pacific	yes	907	-			13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-			14
TON	Tonga	Pacific	yes	230	9	67	139.5	1
VUT	Vanuatu	Asia	yes	102	10			2
WSM	Samoa	Pacific	yes	361	1			3
FJI	Fiji	Asia	yes	2,100	3			4
BLZ	Belize	Latin America	yes	1,251	1			5
GUY	Guyana	Latin America	yes	3,468	-	341		6
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-			8
PNG	Papua New Guinea	Asia	yes	5,433	86	897	95.8	1
SLB	Solomon islands	Asia	yes	211	12			2
HTI	Haiti	Caribbean	yes	8,553	64			3
VGB	British Virgin Islands	Caribbean	yes	424	4			4
AIA	Anguilla	Caribbean	yes	20	0			5
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			6
PRI	Puerto Rico	Caribbean	yes	135,818	330			7
NCL	New Caledonia	Asia	yes	4,771	19			8
ABW	Aruba	Caribbean	yes	6,526	8			9
COM	Comoros	Sub Saharan Africa	yes	310	0			10
PYF	French Polynesia	Pacific	yes	6,568	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			13



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [%]	
JPN	Japan	Asia	no	14,617,394	59,828	1,144,171	52.3	1
USA	United States of America	North America	no	22,004,154	8,400	2,212,313	3.8	2
MLT	Malta	Pacific	no	18,630	10	1,008	0.5	3
CYP	Cyprus	Asia	no	23,484	32	2,630	0.5	4
BRN	Brunei Darussalam	Asia	no	20,094	6	1,279	0.2	5
ISL	Iceland	Europe	no	25,742	14	3,437	0.2	6
SVN	Slovenia	Europe	no	36,896	34	7,746	0.1	7
GRC	Greece	Europe	no	642,888	1,732	42,781	0.1	8
NZL	New Zealand	Australia	no	238,609	163	15,614	0.0	9
ISR	Israel	Asia	no	293,550	192	30,157	0.0	10
SVK	Slovakia	Europe	no	124,390	22	11,975	0.0	11
LUX	Luxembourg	Europe	no	45,036	4	6,616	0.0	12
EST	Estonia	Europe	no	28,069	1	3,738	0.0	13
AUT	Austria	Europe	no	615,592	240	48,760	0.0	14
MAC	Macau	Asia	no	96,993	3	4,316	0.0	15
CZE	Czech Republic	Europe	no	336,714	49	22,186	0.0	16
CHE	Switzerland	Europe	no	839,518	257	64,161	0.0	17
ITA	Italy	Europe	no	3,701,619	3,795	253,228	0.0	18
PRT	Portugal	Europe	no	296,296	21	29,628	0.0	19
BEL	Belgium	Europe	no	739,159	101	59,532	0.0	20
SAU	Saudi Arabia	Asia	no	751,807	83	66,377	0.0	21
NLD	Netherlands	Europe	no	1,593,735	160	92,014	0.0	22
IRL	Ireland	Europe	no	244,117	8	33,055	0.0	23
HKG	Hong Kong	Asia	no	1,138,019	41	52,025	0.0	24
DEU	Germany	Europe	no	5,800,986	1,206	413,986	0.0	25
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	335,845	0.0	26
ESP	Spain	Europe	no	2,695,139	198	216,748	0.0	27
KOR	Republic of Korea	Asia	no	2,787,207	164	200,936	0.0	28
DNK	Denmark	Europe	no	381,265	2	39,721	0.0	29
FRA	France	Europe	no	3,653,264	260	306,117	0.0	30
NOR	Norway	Europe	no	386,892	4	47,607	0.0	31
CAN	Canada	North America	no	2,051,584	72	203,409	0.0	32
AUS	Australia	Australia	no	1,832,960	17	150,632	0.0	33
ARE	United Arab Emirates	Asia	no	248,015	421			34
SWE	Sweden	Europe	no	369,792	2	60,814		35
FIN	Finland	Europe	no	209,050	1	30,495		36
SMR	San Marino	Europe	no	1,846	5			37
LIE	Liechtenstein	Europe	no	8,070	5			38
MCO	Monaco	Europe	no	5,380	4			39
KWT	Kuwait	Asia	no	202,236	137			40
OMN	Oman	Asia	no	42,201	23			41
QAT	Qatar	Asia	no	113,981	64			42
CRI	Costa Rica	Latin America	no	38,475	131	4,507	0.8	1
PAN	Panama	Latin America	no	30,296	44	4,074	0.4	2
BGR	Bulgaria	Europe	no	70,023	112	5,626	0.3	3
LBN	Lebanon	Asia	no	56,965	53	5,937	0.2	4
SRB	Serbia	Europe	no	16,907	5	2,776	0.1	5
CHL	Chile	Latin America	no	326,640	869	27,076	0.1	6
KAZ	Kazakhstan	Asia	no	180,409	180	11,258	0.1	7
HRV	Croatia	Europe	no	65,145	46	8,147	0.1	8
COL	Colombia	Latin America	no	325,385	803	33,173	0.1	9
BWA	Botswana	Sub Saharan Africa	no	18,941	1	1,880	0.0	10
VEN	Venezuela	Latin America	no	435,869	439	48,477	0.0	11
MYS	Malaysia	Asia	no	318,727	162	30,724	0.0	12
TUR	Turkey	Asia	no	1,578,228	1,766	87,701	0.0	13
HUN	Hungary	Europe	no	286,209	51	14,219	0.0	14
GAB	Gabon	Sub Saharan Africa	no	25,086	0	1,639	0.0	15
MEX	Mexico	Latin America	no	1,818,298	1,568	159,403	0.0	16
ARG	Argentina	Latin America	no	403,909	128	75,477	0.0	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	44	38,298	0.0	18
LVA	Latvia	Europe	no	39,277	0	5,143	0.0	19
POL	Poland	Europe	no	659,150	66	52,601	0.0	20
LTU	Lithuania	Europe	no	53,397	1	5,768	0.0	21
RUS	Russian Federation	Europe	no	2,209,139	168	100,485	0.0	22
MNE	Montenegro	Europe	no	2,738	3			23
BLR	Belarus	Europe	no	74,427	0	8,860		24
BRA	Brazil	Latin America	no	1,715,746	3	138,995		25
TWN	Taiwan	Asia	no	872,409	3,857			26
GIB	Gibraltar	Europe	no	3,141	2			27



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CYM	Cayman Islands	Caribbean	no	3,603	1			28
PRK	Dem People's Rep of Korea	Asia	no	27,936	5			29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21			30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0			31
URY	Uruguay	Latin America	no	28,590	-	3,671		32
SLV	El Salvador	Latin America	no	22,582	300	2,799	4.8	1
HND	Honduras	Latin America	no	18,844	230	2,998	4.1	2
ARM	Armenia	Asia	no	14,187	28	1,530	1.3	3
PHL	Philippines	Asia	no	186,193	5,004	22,170	1.2	4
GTM	Guatemala	Latin America	no	38,263	156	4,200	1.0	5
BOL	Bolivia	Latin America	no	13,112	21	1,619	1.0	6
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	823	0.8	7
ALB	Albania	Europe	no	13,964	14	1,329	0.8	8
AZE	Azerbaijan	Asia	no	45,197	128	4,557	0.6	9
ECU	Ecuador	Latin America	no	68,550	192	5,925	0.5	10
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	265	0.4	11
MDA	Moldova, Republic of	Europe	no	9,896	2	563	0.4	12
JOR	Jordan	Asia	no	40,997	26	3,205	0.2	13
PER	Peru	Latin America	no	189,980	447	18,553	0.1	14
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TUN	Tunisia	North Africa	no	65,420	49	6,865	0.1	16
DZA	Algeria	North Africa	no	259,977	359	18,029	0.1	17
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,721	46,695	0.1	18
IDN	Indonesia	Asia	no	575,183	1,005	52,407	0.0	19
MAR	Morocco	North Africa	no	136,300	46	16,366	0.0	20
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	2,363	0.0	21
NAM	Namibia	Sub Saharan Africa	no	7,239	0	1,324	0.0	22
EGY	Egypt	North Africa	no	234,939	51	30,406	0.0	23
THA	Thailand	Asia	no	394,598	81	42,938	0.0	24
UKR	Ukraine	Europe	no	278,497	6	14,671	0.0	25
CHN	China	Asia	no	4,512,825	2,351	930,625	0.0	26
GEO	Georgia	Asia	no	21,157	50			27
TKM	Turkmenistan	Asia	no	12,707	18			28
MNG	Mongolia	Asia	no	9,273	2			29
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IRQ	Iraq	Asia	no	47,245	56			34
AGO	Angola	Sub Saharan Africa	no	25,225	0			35
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FRO	Faroe Islands	Europe	no	1,012	-			37
PRY	Paraguay	Latin America	no	19,203	-	1,552		38
TJK	Tajikistan	Asia	no	5,576	21	144	25.6	1
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LAO	Lao People's Democratic Republic	Asia	no	2,322	1	893	0.4	5
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	141	0.4	6
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	815	0.3	7
BGD	Bangladesh	Asia	no	72,949	198	19,006	0.1	8
PAK	Pakistan	Asia	no	170,444	409	18,461	0.1	9
UGA	Uganda	Sub Saharan Africa	no	6,628	2	2,609	0.1	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	3,995	0.1	11
MOZ	Mozambique	Sub Saharan Africa	no	5,633	1	1,432	0.1	12
MDG	Madagascar	Sub Saharan Africa	no	2,575	0	1,317	0.0	13
KEN	Kenya	Sub Saharan Africa	no	18,470	3	3,803	0.0	14
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	3,519	0.0	15
SDN	Sudan	Sub Saharan Africa	no	26,851	1	3,285	0.0	16
KHM	Cambodia	Asia	no	4,335	0	1,494	0.0	17
SEN	Senegal	Sub Saharan Africa	no	11,619	0	2,278	0.0	18
VNM	Viet Nam	Asia	no	115,441	7	19,932	0.0	19
IND	India	Asia	no	1,429,881	524	248,602	0.0	20
UZB	Uzbekistan	Asia	no	44,370	154			21
MWI	Malawi	Sub Saharan Africa	no	1,883	1			22
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1			23
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0			24
AFG	Afghanistan	Asia	no	16,132	39			25
GLP	Guadeloupe	Caribbean	no	19,838	196			26



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MTQ	Martinique	Caribbean	no	21,052	92			27
NPL	Nepal	Asia	no	6,537	31			28
MMR	Myanmar	Asia	no	20,572	40			29
BDI	Burundi	Sub Saharan Africa	no	168	0			30
RWA	Rwanda	Sub Saharan Africa	no	1,558	1			31
TCA	Turks and Caicos islands	Caribbean	no	332	0			32
YEM	Yemen	Asia	no	21,556	8			33
MYT	Mayotte	Sub Saharan Africa	no	2,341	1			34
CAF	Central African Republic	Sub Saharan Africa	no	916	-			35
SOM	Somalia	Sub Saharan Africa	no	3,573	0			36
LBR	Liberia	Sub Saharan Africa	no	515	-			37
NGA	Nigeria	Sub Saharan Africa	no	121,669	1			38
GIN	Guinea	Sub Saharan Africa	no	3,259	-	391		39
BEN	Benin	Sub Saharan Africa	no	3,585	-	720		40
TCD	Chad	Sub Saharan Africa	no	6,664	-			41
MRT	Mauritania	Sub Saharan Africa	no	3,622	-			42
REU	Réunion	Sub Saharan Africa	no	42,937	-			43
GUF	French Guiana	Latin America	no	8,339	-			44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-			45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	1,082		46
GMB	Gambia	Sub Saharan Africa	no	680	-			47
GHA	Ghana	Sub Saharan Africa	no	12,649	-			48
MLI	Mali	Sub Saharan Africa	no	3,869	-	1,042		49
NER	Niger	Sub Saharan Africa	no	2,800	-			50
SLE	Sierra Leone	Sub Saharan Africa	no	523	-			51
TGO	Togo	Sub Saharan Africa	no	1,644	-			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-			53
SGP	Singapore	Pacific	yes	526,900	114	36,452	0.0	1
BHS	Bahamas	Caribbean	yes	21,313	0	2,547	0.0	2
ATG	Antigua and Barbuda	Caribbean	yes	2,428	21			3
TTO	Trinidad and Tobago	Caribbean	yes	31,370	475			4
BHR	Bahrain	Asia	yes	32,575	17			5
DOM	Dominican Republic	Caribbean	yes	72,573	363	5,996	0.8	1
CUB	Cuba	Caribbean	yes	46,280	10	5,742	0.0	2
DMA	Dominica	Caribbean	yes	356	5			3
BRB	Barbados	Caribbean	yes	4,677	18			4
JAM	Jamaica	Caribbean	yes	28,963	26			5
LCA	Saint Lucia	Caribbean	yes	543	2			6
GRD	Grenada	Caribbean	yes	1,229	5			7
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	3			8
PLW	Palau	Pacific	yes	279	0			9
MUS	Mauritius	Sub Saharan Africa	yes	13,089	-	1,571		10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	-	262		11
SUR	Suriname	Latin America	yes	2,797	-			12
MDV	Maldives	Pacific	yes	907	-			13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-			14
BLZ	Belize	Latin America	yes	1,251	1	180	5.6	1
TON	Tonga	Pacific	yes	230	9			2
VUT	Vanuatu	Asia	yes	102	10			3
WSM	Samoa	Pacific	yes	361	1			4
FJI	Fiji	Asia	yes	2,100	3			5
GUY	Guyana	Latin America	yes	3,468	-			6
FSM	Micronesia (Federated States of)	Pacific	yes	585	-			7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	190		8
HTI	Haiti	Caribbean	yes	8,553	64	1,081	6.9	1
PNG	Papua New Guinea	Asia	yes	5,433	86			2
SLB	Solomon islands	Asia	yes	211	12			3
VGB	British Virgin Islands	Caribbean	yes	424	4			4
AIA	Anguilla	Caribbean	yes	20	0			5
VIR	United States Virgin Islands	Caribbean	yes	1,755	6			6
PRI	Puerto Rico	Caribbean	yes	135,818	330			7
NCL	New Caledonia	Asia	yes	4,771	19			8
ABW	Aruba	Caribbean	yes	6,526	8			9
COM	Comoros	Sub Saharan Africa	yes	310	0			10
PYF	French Polynesia	Pacific	yes	6,568	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
SMR	San Marino	Europe	no	1,846	268	14.5	1
CYP	Cyprus	Asia	no	23,484	1,053	4.5	2
JPN	Japan	Asia	no	14,617,394	624,437	4.3	3
SVN	Slovenia	Europe	no	36,896	1,311	3.6	4
GRC	Greece	Europe	no	642,888	20,095	3.1	5
LIE	Liechtenstein	Europe	no	8,070	225	2.8	6
ARE	United Arab Emirates	Asia	no	248,015	6,688	2.7	7
MCO	Monaco	Europe	no	5,380	130	2.4	8
ISR	Israel	Asia	no	293,550	7,083	2.4	9
ISL	Iceland	Europe	no	25,742	602	2.3	10
MLT	Malta	Pacific	no	18,630	279	1.5	11
ITA	Italy	Europe	no	3,701,619	54,248	1.5	12
CHE	Switzerland	Europe	no	839,518	\$ 10,275	1.2	13
AUT	Austria	Europe	no	615,592	7,442	1.2	14
KWT	Kuwait	Asia	no	202,236	2,236	1.1	15
NZL	New Zealand	Australia	no	238,609	2,343	1.0	16
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170	0.9	17
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	0.8	18
DEU	Germany	Europe	no	5,800,986	\$ 44,276	0.8	19
OMN	Oman	Asia	no	42,201	271	0.6	20
BEL	Belgium	Europe	no	739,159	\$ 4,460	0.6	21
QAT	Qatar	Asia	no	113,981	661	0.6	22
USA	United States of America	North America	no	22,004,154	\$ 118,733	0.5	23
SVK	Slovakia	Europe	no	124,390	\$ 623	0.5	24
NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	0.5	25
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	0.4	26
LUX	Luxembourg	Europe	no	45,036	\$ 102	0.2	27
FRA	France	Europe	no	3,653,264	\$ 7,324	0.2	28
ESP	Spain	Europe	no	2,695,139	\$ 4,313	0.2	29
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072	0.1	30
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	0.1	31
IRL	Ireland	Europe	no	244,117	\$ 306	0.1	32
MAC	Macau	Asia	no	96,993	\$ 108	0.1	33
PRT	Portugal	Europe	no	296,296	\$ 340	0.1	34
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	0.1	35
EST	Estonia	Europe	no	28,069	\$ 22	0.1	36
CAN	Canada	North America	no	2,051,584	\$ 1,390	0.1	37
NOR	Norway	Europe	no	386,892	\$ 150	0.0	38
AUS	Australia	Australia	no	1,832,960	\$ 397	0.0	39
DNK	Denmark	Europe	no	381,265	\$ 66	0.0	40
SWE	Sweden	Europe	no	369,792	\$ 52	0.0	41
FIN	Finland	Europe	no	209,050	\$ 17	0.0	42
CRI	Costa Rica	Latin America	no	38,475	2,701	7.0	1
COL	Colombia	Latin America	no	325,385	19,055	5.9	2
TWN	Taiwan	Asia	no	872,409	32,961	3.8	3
LBN	Lebanon	Asia	no	56,965	2,002	3.5	4
PAN	Panama	Latin America	no	30,296	869	2.9	5
MNE	Montenegro	Europe	no	2,738	77	2.8	6
GIB	Gibraltar	Europe	no	3,141	78	2.5	7
CHL	Chile	Latin America	no	326,640	7,647	2.3	8
VEN	Venezuela	Latin America	no	435,869	9,004	2.1	9
BGR	Bulgaria	Europe	no	70,023	1,426	2.0	10
HRV	Croatia	Europe	no	65,145	1,079	1.7	11
TUR	Turkey	Asia	no	1,578,228	26,102	1.7	12
CYM	Cayman Islands	Caribbean	no	3,603	58	1.6	13
MEX	Mexico	Latin America	no	1,818,298	26,503	1.5	14
KAZ	Kazakhstan	Asia	no	180,409	2,124	1.2	15
SRB	Serbia	Europe	no	16,907	\$ 113	0.7	16
MYS	Malaysia	Asia	no	318,727	2,111	0.7	17
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180	0.7	18
ARG	Argentina	Latin America	no	403,909	\$ 2,558	0.6	19
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459	0.6	20
HUN	Hungary	Europe	no	286,209	\$ 1,548	0.5	21
POL	Poland	Europe	no	659,150	\$ 2,170	0.3	22
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	0.2	23
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	0.1	24
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	0.1	25
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	0.1	26
LTU	Lithuania	Europe	no	53,397	\$ 20	0.0	27



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LVA	Latvia	Europe	no	39,277	\$ 15	0.0	28
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	0.0	29
BLR	Belarus	Europe	no	74,427	\$ 5	0.0	30
BRA	Brazil	Latin America	no	1,715,746	\$ 77	-	31
URY	Uruguay	Latin America	no	28,590	\$ -	-	32
PHL	Philippines	Asia	no	186,193	35,940	19.3	1
HND	Honduras	Latin America	no	18,844	2,976	15.8	2
SLV	El Salvador	Latin America	no	22,582	3,022	13.4	3
BTN	Bhutan	Asia	no	1,167	147	12.6	4
ECU	Ecuador	Latin America	no	68,550	4,162	6.1	5
GTM	Guatemala	Latin America	no	38,263	2,304	6.0	6
BOL	Bolivia	Latin America	no	13,112	721	5.5	7
AZE	Azerbaijan	Asia	no	45,197	2,418	5.4	8
PER	Peru	Latin America	no	189,980	9,450	5.0	9
GEO	Georgia	Asia	no	21,157	968	4.6	10
ARM	Armenia	Asia	no	14,187	466	3.3	11
TUN	Tunisia	North Africa	no	65,420	1,906	2.9	12
DJI	Djibouti	Sub Saharan Africa	no	2,525	71	2.8	13
ALB	Albania	Europe	no	13,964	378	2.7	14
TKM	Turkmenistan	Asia	no	12,707	307	2.4	15
DZA	Algeria	North Africa	no	259,977	5,884	2.3	16
IRQ	Iraq	Asia	no	47,245	1,060	2.2	17
JOR	Jordan	Asia	no	40,997	863	2.1	18
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	2.0	19
IDN	Indonesia	Asia	no	575,183	9,693	1.7	20
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023	1.6	21
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	1.2	22
MAR	Morocco	North Africa	no	136,300	\$ 1,325	1.0	23
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	0.7	24
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	0.7	25
CHN	China	Asia	no	4,512,825	28,876	0.6	26
MNG	Mongolia	Asia	no	9,273	\$ 55	0.6	27
EGY	Egypt	North Africa	no	234,939	\$ 1,280	0.5	28
THA	Thailand	Asia	no	394,598	\$ 1,739	0.4	29
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	0.1	30
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	0.1	31
UKR	Ukraine	Europe	no	278,497	\$ 187	0.1	32
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	0.0	33
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	0.0	34
LKA	Sri Lanka	Asia	no	49,967	\$ 9	0.0	35
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	0.0	36
FRO	Faroe Islands	Europe	no	1,012	\$ -	-	37
PRY	Paraguay	Latin America	no	19,203	\$ 1	-	38
GLP	Guadeloupe	Caribbean	no	19,838	3,795	19.1	1
MTQ	Martinique	Caribbean	no	21,052	3,045	14.5	2
NPL	Nepal	Asia	no	6,537	865	13.2	3
NIC	Nicaragua	Latin America	no	10,935	891	8.2	4
KGZ	Kyrgyzstan	Asia	no	3,644	229	6.3	5
BGD	Bangladesh	Asia	no	72,949	3,688	5.1	6
TJK	Tajikistan	Asia	no	5,576	210	3.8	7
UZB	Uzbekistan	Asia	no	44,370	1,574	3.6	8
AFG	Afghanistan	Asia	no	16,132	520	3.2	9
MMR	Myanmar	Asia	no	20,572	660	3.2	10
BDI	Burundi	Sub Saharan Africa	no	168	5	3.1	11
PAK	Pakistan	Asia	no	170,444	4,857	2.9	12
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	2.4	13
MWI	Malawi	Sub Saharan Africa	no	1,883	45	2.4	14
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	1.2	15
TCA	Turks and Caicos islands	Caribbean	no	332	3	1.1	16
YEM	Yemen	Asia	no	21,556	214	1.0	17
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	1.0	18
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	0.8	19
MYT	Mayotte	Sub Saharan Africa	no	2,341	17	0.7	20
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	0.5	21
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	0.5	22
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	0.5	23
IND	India	Asia	no	1,429,881	5,862	0.4	24
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	0.3	25
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	0.3	26



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VNM	Viet Nam	Asia	no	115,441	\$ 223	0.2	27
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	0.2	28
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	0.2	29
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	0.1	30
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	0.1	31
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	0.1	32
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	0.1	33
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2	0.1	34
KHM	Cambodia	Asia	no	4,335	\$ 2	0.0	35
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	0.0	36
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	0.0	37
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	0.0	38
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	0.0	39
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	0.0	40
TCD	Chad	Sub Saharan Africa	no	6,664	\$ 1	0.0	41
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	0.0	42
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -	-	43
GUF	French Guiana	Latin America	no	8,339	\$ 0	-	44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	-	45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	-	46
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	-	47
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	-	48
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	-	49
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	-	50
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	-	51
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	-	52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -	-	53
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	28.4	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	15.5	2
BHR	Bahrain	Asia	yes	32,575	\$ 189	0.6	3
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	0.2	4
BHS	Bahamas	Caribbean	yes	21,313	\$ 9	0.0	5
DMA	Dominica	Caribbean	yes	356	\$ 112	31.5	1
BRB	Barbados	Caribbean	yes	4,677	\$ 807	17.3	2
GRD	Grenada	Caribbean	yes	1,229	\$ 170	13.8	3
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	12.6	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	10.3	5
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	8.7	6
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	4.2	7
PLW	Palau	Pacific	yes	279	\$ 11	3.8	8
CUB	Cuba	Caribbean	yes	46,280	\$ 374	0.8	9
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	-	10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	-	11
SUR	Suriname	Latin America	yes	2,797	\$ -	-	12
MDV	Maldives	Pacific	yes	907	\$ -	-	13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	-	14
VUT	Vanuatu	Asia	yes	102	\$ 35	34.7	1
TON	Tonga	Pacific	yes	230	\$ 60	26.1	2
FJI	Fiji	Asia	yes	2,100	\$ 105	5.0	3
WSM	Samoa	Pacific	yes	361	\$ 15	4.1	4
BLZ	Belize	Latin America	yes	1,251	\$ 20	1.6	5
GUY	Guyana	Latin America	yes	3,468	\$ 0	0.0	6
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	-	7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	-	8
SLB	Solomon Islands	Asia	yes	211	\$ 103	49.0	1
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108	25.6	2
AIA	Anguilla	Caribbean	yes	20	\$ 5	24.7	3
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911	22.3	4
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150	8.6	5
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082	6.0	6
NCL	New Caledonia	Asia	yes	4,771	\$ 259	5.4	7
ABW	Aruba	Caribbean	yes	6,526	\$ 327	5.0	8
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	4.8	9
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	1.4	10
PYF	French Polynesia	Pacific	yes	6,568	\$ -	-	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	-	12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	-	13



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JPN	Japan	Asia	no	14,617,394	624,437	5,458,837	11.4	1
GRC	Greece	Europe	no	642,888	20,095	301,083	6.7	2
ISL	Iceland	Europe	no	25,742	602	12,574	4.8	3
CYP	Cyprus	Asia	no	23,484	1,053	23,132	4.6	4
MLT	Malta	Pacific	no	18,630	279	8,256	3.4	5
ISR	Israel	Asia	no	293,550	7,083	217,333	3.3	6
SVN	Slovenia	Europe	no	36,896	1,311	46,908	2.8	7
ITA	Italy	Europe	no	3,701,619	54,248	2,051,412	2.6	8
ARE	United Arab Emirates	Asia	no	248,015	6,688	297,649	2.3	9
AUT	Austria	Europe	no	615,592	7,442	379,069	2.0	10
CHE	Switzerland	Europe	no	839,518	\$ 10,275	527,920	2.0	11
DEU	Germany	Europe	no	5,800,986	\$ 44,276	3,280,530	1.4	12
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	2,248,831	1.3	13
NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	779,356	1.0	14
BEL	Belgium	Europe	no	739,159	\$ 4,460	469,374	1.0	15
USA	United States of America	North America	no	22,004,154	\$ 118,733	14,586,740	0.8	16
SVK	Slovakia	Europe	no	124,390	\$ 623	87,268	0.7	17
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	192,032	0.7	18
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	224,458	0.6	19
MAC	Macau	Asia	no	96,993	\$ 108	27,960	0.4	20
ESP	Spain	Europe	no	2,695,139	\$ 4,313	1,407,405	0.3	21
FRA	France	Europe	no	3,653,264	\$ 7,324	2,560,002	0.3	22
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072	434,666	0.3	23
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	1,014,483	0.2	24
LUX	Luxembourg	Europe	no	45,036	\$ 102	53,334	0.2	25
PRT	Portugal	Europe	no	296,296	\$ 340	228,872	0.2	26
IRL	Ireland	Europe	no	244,117	\$ 306	211,390	0.1	27
EST	Estonia	Europe	no	28,069	\$ 22	19,217	0.1	28
CAN	Canada	North America	no	2,051,584	\$ 1,390	1,577,040	0.1	29
NOR	Norway	Europe	no	386,892	\$ 150	412,990	0.0	30
DNK	Denmark	Europe	no	381,265	\$ 66	309,866	0.0	31
SWE	Sweden	Europe	no	369,792	\$ 52	458,973	0.0	32
FIN	Finland	Europe	no	209,050	\$ 17	238,746	0.0	33
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170			34
NZL	New Zealand	Australia	no	238,609	2,343			35
AUS	Australia	Australia	no	1,832,960	\$ 397			36
SMR	San Marino	Europe	no	1,846	268			37
LIE	Liechtenstein	Europe	no	8,070	225			38
MCO	Monaco	Europe	no	5,380	130			39
KWT	Kuwait	Asia	no	202,236	2,236			40
OMN	Oman	Asia	no	42,201	271			41
QAT	Qatar	Asia	no	113,981	661			42
CRI	Costa Rica	Latin America	no	38,475	2,701	35,831	7.5	1
COL	Colombia	Latin America	no	325,385	19,055	288,189	6.6	2
LBN	Lebanon	Asia	no	56,965	2,002	39,006	5.1	3
CHL	Chile	Latin America	no	326,640	7,647	212,741	3.6	4
TUR	Turkey	Asia	no	1,578,228	26,102	734,365	3.6	5
PAN	Panama	Latin America	no	30,296	869	26,689	3.3	6
BGR	Bulgaria	Europe	no	70,023	1,426	47,714	3.0	7
MEX	Mexico	Latin America	no	1,818,298	26,503	1,034,804	2.6	8
VEN	Venezuela	Latin America	no	435,869	9,004	391,848	2.3	9
MNE	Montenegro	Europe	no	2,738	77	4,111	1.9	10
HRV	Croatia	Europe	no	65,145	1,079	60,852	1.8	11
KAZ	Kazakhstan	Asia	no	180,409	2,124	149,059	1.4	12
HUN	Hungary	Europe	no	286,209	\$ 1,548	128,632	1.2	13
MYS	Malaysia	Asia	no	318,727	2,111	237,797	0.9	14
ARG	Argentina	Latin America	no	403,909	\$ 2,558	368,736	0.7	15
POL	Poland	Europe	no	659,150	\$ 2,170	469,440	0.5	16
SRB	Serbia	Europe	no	16,907	\$ 113	38,423	0.3	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	363,704	0.2	18
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	1,479,819	0.1	19
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	14,857	0.1	20
GAB	Gabon	Sub Saharan Africa	no	25,086	\$ 8	13,011	0.1	21
LVA	Latvia	Europe	no	39,277	\$ 15	24,010	0.1	22
LTU	Lithuania	Europe	no	53,397	\$ 20	36,306	0.1	23
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	14,007	0.1	24
BLR	Belarus	Europe	no	74,427	\$ 5	54,713	0.0	25
BRA	Brazil	Latin America	no	1,715,746	\$ 77	2,087,890		26
TWN	Taiwan	Asia	no	872,409	32,961			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
GIB	Gibraltar	Europe	no	3,141	78			28
CYM	Cayman Islands	Caribbean	no	3,603	58			29
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180			30
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459			31
URY	Uruguay	Latin America	no	28,590	\$ -	40,265		32
HND	Honduras	Latin America	no	18,844	2,976	15,400	19.3	1
PHL	Philippines	Asia	no	186,193	35,940	199,589	18.0	2
SLV	El Salvador	Latin America	no	22,582	3,022	21,215	14.3	3
BTN	Bhutan	Asia	no	1,167	147	1,516	9.7	4
GEO	Georgia	Asia	no	21,157	968	11,667	8.3	5
ECU	Ecuador	Latin America	no	68,550	4,162	57,978	7.2	6
PER	Peru	Latin America	no	189,980	9,450	157,053	6.0	7
GTM	Guatemala	Latin America	no	38,263	2,304	41,186	5.6	8
ARM	Armenia	Asia	no	14,187	466	9,371	5.0	9
AZE	Azerbaijan	Asia	no	45,197	2,418	51,774	4.7	10
TUN	Tunisia	North Africa	no	65,420	1,906	44,291	4.3	11
DZA	Algeria	North Africa	no	259,977	5,884	159,426	3.7	12
BOL	Bolivia	Latin America	no	13,112	721	19,650	3.7	13
ALB	Albania	Europe	no	13,964	378	11,786	3.2	14
JOR	Jordan	Asia	no	40,997	863	27,574	3.1	15
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	59,147	2.3	16
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	9,189	1.6	17
TKM	Turkmenistan	Asia	no	12,707	307	20,001	1.5	18
MAR	Morocco	North Africa	no	136,300	\$ 1,325	90,805	1.5	19
IDN	Indonesia	Asia	no	575,183	9,693	706,558	1.4	20
IRQ	Iraq	Asia	no	47,245	1,060	82,150	1.3	21
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	5,809	1.3	22
MNG	Mongolia	Asia	no	9,273	\$ 55	6,200	0.9	23
EGY	Egypt	North Africa	no	234,939	\$ 1,280	218,894	0.6	24
THA	Thailand	Asia	no	394,598	\$ 1,739	318,522	0.6	25
CHN	China	Asia	no	4,512,825	28,876	5,926,612	0.5	26
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	16,578	0.4	27
UKR	Ukraine	Europe	no	278,497	\$ 187	137,929	0.1	28
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	3,645	0.1	29
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	22,394	0.1	30
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	12,170	0.0	31
LKA	Sri Lanka	Asia	no	49,967	\$ 9	49,552	0.0	32
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	84,391	0.0	33
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	11,898	0.0	34
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023			35
DJI	Djibouti	Sub Saharan Africa	no	2,525	71			36
FRO	Faroe Islands	Europe	no	1,012	\$ -			37
PRY	Paraguay	Latin America	no	19,203	\$ 1	18,333		38
NIC	Nicaragua	Latin America	no	10,935	891	6,551	13.6	1
KGZ	Kyrgyzstan	Asia	no	3,644	229	4,616	5.0	2
UZB	Uzbekistan	Asia	no	44,370	1,574	38,982	4.0	3
TJK	Tajikistan	Asia	no	5,576	210	5,640	3.7	4
BGD	Bangladesh	Asia	no	72,949	3,688	100,357	3.7	5
AFG	Afghanistan	Asia	no	16,132	520	17,243	3.0	6
PAK	Pakistan	Asia	no	170,444	4,857	176,870	2.8	7
MWI	Malawi	Sub Saharan Africa	no	1,883	45	5,106	0.9	8
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	5,628	0.7	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	16,193	0.5	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	23,057	0.4	11
IND	India	Asia	no	1,429,881	5,862	1,727,111	0.3	12
BDI	Burundi	Sub Saharan Africa	no	168	5	1,611	0.3	13
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	7,296	0.3	14
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	31,409	0.3	15
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	2,132	0.2	16
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	17,011	0.2	17
VNM	Viet Nam	Asia	no	115,441	\$ 223	106,427	0.2	18
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	9,586	0.2	19
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	13,145	0.1	20
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	2,117	0.1	21
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	62,046	0.1	22
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	7,474	0.1	23
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	29,717	0.0	24
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	2,013	0.0	25
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	8,721	0.0	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
KHM	Cambodia	Asia	no	4,335	\$ 2	11,242	0.0	27
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	12,954	0.0	28
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	986	0.0	29
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	193,669	0.0	30
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	4,511	0.0	31
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	6,633	0.0	32
TCD	Chad	Sub Saharan Africa	no	6,664	\$ 1	7,588	0.0	33
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	3,636	0.0	34
GLP	Guadeloupe	Caribbean	no	19,838	3,795			35
MTQ	Martinique	Caribbean	no	21,052	3,045			36
NPL	Nepal	Asia	no	6,537	865			37
MMR	Myanmar	Asia	no	20,572	660			38
TCA	Turks and Caicos islands	Caribbean	no	332	3			39
YEM	Yemen	Asia	no	21,556	214			40
MYT	Mayotte	Sub Saharan Africa	no	2,341	17			41
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2			42
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -			43
GUF	French Guiana	Latin America	no	8,339	\$ 0			44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	8,820		45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	22,780		46
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	807		47
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	31,306		48
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	9,251		49
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	5,549		50
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	1,905		51
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	3,153		52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -			53
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	20,604	43.3	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	1,211	31.0	2
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	208,765	0.6	3
BHS	Bahamas	Caribbean	yes	21,313	\$ 9	7,538	0.1	4
BHR	Bahrain	Asia	yes	32,575	\$ 189			5
DMA	Dominica	Caribbean	yes	356	\$ 112	466	24.1	1
GRD	Grenada	Caribbean	yes	1,229	\$ 170	773	22.0	2
BRB	Barbados	Caribbean	yes	4,677	\$ 807	4,110	19.6	3
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	705	15.2	4
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	51,766	12.2	5
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	14,252	8.5	6
PLW	Palau	Pacific	yes	279	\$ 11	171	6.2	7
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	1,198	5.7	8
CUB	Cuba	Caribbean	yes	46,280	\$ 374			9
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	9,729		10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	937		11
SUR	Suriname	Latin America	yes	2,797	\$ -			12
MDV	Maldives	Pacific	yes	907	\$ -	1,908		13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	652		14
TON	Tonga	Pacific	yes	230	\$ 60	348	17.2	1
VUT	Vanuatu	Asia	yes	102	\$ 35	699	5.1	2
FJI	Fiji	Asia	yes	2,100	\$ 105	3,189	3.3	3
WSM	Samoa	Pacific	yes	361	\$ 15	574	2.6	4
BLZ	Belize	Latin America	yes	1,251	\$ 20	1,401	1.4	5
GUY	Guyana	Latin America	yes	3,468	\$ 0	2,226	0.0	6
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	297		7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	1,648		8
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911	6,710	28.5	1
SLB	Solomon islands	Asia	yes	211	\$ 103	679	15.2	2
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	9,480	2.7	3
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	541	0.8	4
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108			5
AIA	Anguilla	Caribbean	yes	20	\$ 5			6
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150			7
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082			8
NCL	New Caledonia	Asia	yes	4,771	\$ 259			9
ABW	Aruba	Caribbean	yes	6,526	\$ 327			10
PYF	French Polynesia	Pacific	yes	6,568	\$ -			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	879		12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	197		13



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				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
JPN	Japan	Asia	no	14,617,394	624,437	5,601,557	11.1	1
GRC	Greece	Europe	no	642,888	20,095	292,874	6.9	2
ISL	Iceland	Europe	no	25,742	602	9,975	6.0	3
CYP	Cyprus	Asia	no	23,484	1,053	22,539	4.7	4
MLT	Malta	Pacific	no	18,630	279	7,698	3.6	5
ISR	Israel	Asia	no	293,550	7,083	210,353	3.4	6
SVN	Slovenia	Europe	no	36,896	1,311	46,217	2.8	7
ITA	Italy	Europe	no	3,701,619	54,248	2,023,916	2.7	8
AUT	Austria	Europe	no	615,592	7,442	377,063	2.0	9
CHE	Switzerland	Europe	no	839,518	\$ 10,275	568,639	1.8	10
DEU	Germany	Europe	no	5,800,986	\$ 44,276	3,341,391	1.3	11
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	\$ 28,996	2,280,719	1.3	12
NLD	Netherlands	Europe	no	1,593,735	\$ 7,551	772,747	1.0	13
BEL	Belgium	Europe	no	739,159	\$ 4,460	477,644	0.9	14
USA	United States of America	North America	no	22,004,154	\$ 118,733	14,635,600	0.8	15
SVK	Slovakia	Europe	no	124,390	\$ 623	86,077	0.7	16
CZE	Czech Republic	Europe	no	336,714	\$ 1,251	179,432	0.7	17
HKG	Hong Kong	Asia	no	1,138,019	\$ 1,423	229,165	0.6	18
ESP	Spain	Europe	no	2,695,139	\$ 4,313	1,388,744	0.3	19
FRA	France	Europe	no	3,653,264	\$ 7,324	2,606,780	0.3	20
LUX	Luxembourg	Europe	no	45,036	\$ 102	37,925	0.3	21
KOR	Republic of Korea	Asia	no	2,787,207	\$ 2,440	1,014,760	0.2	22
IRL	Ireland	Europe	no	244,117	\$ 306	171,260	0.2	23
PRT	Portugal	Europe	no	296,296	\$ 340	221,243	0.2	24
EST	Estonia	Europe	no	28,069	\$ 22	18,420	0.1	25
CAN	Canada	North America	no	2,051,584	\$ 1,390	1,549,652	0.1	26
NOR	Norway	Europe	no	386,892	\$ 150	413,980	0.0	27
DNK	Denmark	Europe	no	381,265	\$ 66	315,664	0.0	28
SWE	Sweden	Europe	no	369,792	\$ 52	467,254	0.0	29
FIN	Finland	Europe	no	209,050	\$ 17	242,899	0.0	30
ARE	United Arab Emirates	Asia	no	248,015	6,688			31
MAC	Macau	Asia	no	96,993	\$ 108			32
SAU	Saudi Arabia	Asia	no	751,807	\$ 1,072			33
BRN	Brunei Darussalam	Asia	no	20,094	\$ 170			34
NZL	New Zealand	Australia	no	238,609	2,343			35
AUS	Australia	Australia	no	1,832,960	\$ 397			36
SMR	San Marino	Europe	no	1,846	268			37
LIE	Liechtenstein	Europe	no	8,070	225			38
MCO	Monaco	Europe	no	5,380	130			39
KWT	Kuwait	Asia	no	202,236	2,236			40
OMN	Oman	Asia	no	42,201	271			41
QAT	Qatar	Asia	no	113,981	661			42
CRI	Costa Rica	Latin America	no	38,475	2,701	34,896	7.7	1
COL	Colombia	Latin America	no	325,385	19,055	276,072	6.9	2
LBN	Lebanon	Asia	no	56,965	2,002	39,051	5.1	3
CHL	Chile	Latin America	no	326,640	7,647	197,331	3.9	4
TUR	Turkey	Asia	no	1,578,228	26,102	727,056	3.6	5
PAN	Panama	Latin America	no	30,296	869	25,037	3.5	6
BGR	Bulgaria	Europe	no	70,023	1,426	46,025	3.1	7
MEX	Mexico	Latin America	no	1,818,298	26,503	1,020,288	2.6	8
VEN	Venezuela	Latin America	no	435,869	9,004	389,038	2.3	9
MNE	Montenegro	Europe	no	2,738	77	4,083	1.9	10
HRV	Croatia	Europe	no	65,145	1,079	58,806	1.8	11
KAZ	Kazakhstan	Asia	no	180,409	2,124	131,868	1.6	12
HUN	Hungary	Europe	no	286,209	\$ 1,548	122,372	1.3	13
MYS	Malaysia	Asia	no	318,727	2,111	229,566	0.9	14
ARG	Argentina	Latin America	no	403,909	\$ 2,558	358,619	0.7	15
POL	Poland	Europe	no	659,150	\$ 2,170	452,275	0.5	16
SRB	Serbia	Europe	no	16,907	\$ 113	37,533	0.3	17
ZAF	South Africa	Sub Saharan Africa	no	335,148	\$ 620	356,475	0.2	18
RUS	Russian Federation	Europe	no	2,209,139	\$ 1,641	1,431,121	0.1	19
BWA	Botswana	Sub Saharan Africa	no	18,941	\$ 13	14,771	0.1	20
GAB	Gabon	Sub Saharan Africa	no	25,086	8	11,467	0.1	21
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	\$ 7	9,578	0.1	22
LVA	Latvia	Europe	no	39,277	\$ 15	24,073	0.1	23
LTU	Lithuania	Europe	no	53,397	\$ 20	35,687	0.1	24
BLR	Belarus	Europe	no	74,427	\$ 5	53,379	0.0	25
BRA	Brazil	Latin America	no	1,715,746	\$ 77	2,049,164		26
TWN	Taiwan	Asia	no	872,409	32,961			27



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CYM	Cayman Islands	Caribbean	no	3,603	58			29
PRK	Dem People's Rep of Korea	Asia	no	27,936	\$ 180			30
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	\$ 459			31
URY	Uruguay	Latin America	no	28,590	\$ -	39,161		32
HND	Honduras	Latin America	no	18,844	2,976	14,798	20.1	1
PHL	Philippines	Asia	no	186,193	35,940	199,897	18.0	2
SLV	El Salvador	Latin America	no	22,582	3,022	20,834	14.5	3
BTN	Bhutan	Asia	no	1,167	147	1,420	10.4	4
GEO	Georgia	Asia	no	21,157	968	11,484	8.4	5
ECU	Ecuador	Latin America	no	68,550	4,162	56,924	7.3	6
PER	Peru	Latin America	no	189,980	9,450	147,000	6.4	7
GTM	Guatemala	Latin America	no	38,263	2,304	39,987	5.8	8
AZE	Azerbaijan	Asia	no	45,197	2,418	48,307	5.0	9
ARM	Armenia	Asia	no	14,187	466	9,710	4.8	10
TUN	Tunisia	North Africa	no	65,420	1,906	42,020	4.5	11
BOL	Bolivia	Latin America	no	13,112	721	18,790	3.8	12
DZA	Algeria	North Africa	no	259,977	5,884	155,538	3.8	13
ALB	Albania	Europe	no	13,964	378	11,682	3.2	14
JOR	Jordan	Asia	no	40,997	863	27,820	3.1	15
SYR	Syrian Arab Republic	Asia	no	68,489	1,363	57,266	2.4	16
TKM	Turkmenistan	Asia	no	12,707	307	18,107	1.7	17
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	150	8,992	1.7	18
MAR	Morocco	North Africa	no	136,300	\$ 1,325	88,578	1.5	19
IDN	Indonesia	Asia	no	575,183	9,693	686,633	1.4	20
IRQ	Iraq	Asia	no	47,245	1,060	77,842	1.4	21
MDA	Moldova, Republic of	Europe	no	9,896	\$ 73	6,280	1.2	22
MNG	Mongolia	Asia	no	9,273	\$ 55	5,640	1.0	23
EGY	Egypt	North Africa	no	234,939	\$ 1,280	214,530	0.6	24
THA	Thailand	Asia	no	394,598	\$ 1,739	304,812	0.6	25
CHN	China	Asia	no	4,512,825	28,876	5,957,012	0.5	26
BIH	Bosnia and Herzegovina	Europe	no	10,433	\$ 72	17,008	0.4	27
UKR	Ukraine	Europe	no	278,497	\$ 187	135,920	0.1	28
SWZ	Swaziland	Sub Saharan Africa	no	2,012	\$ 2	3,586	0.1	29
CMR	Cameroon	Sub Saharan Africa	no	16,950	\$ 13	22,030	0.1	30
NAM	Namibia	Sub Saharan Africa	no	7,239	\$ 3	12,077	0.0	31
LKA	Sri Lanka	Asia	no	49,967	\$ 9	48,916	0.0	32
COG	Congo	Sub Saharan Africa	no	12,566	\$ 2	8,619	0.0	33
AGO	Angola	Sub Saharan Africa	no	25,225	\$ 8	75,516	0.0	34
IRN	Iran (Islamic Republic of)	Asia	no	676,481	11,023			35
DJI	Djibouti	Sub Saharan Africa	no	2,525	71			36
FRO	Faroe Islands	Europe	no	1,012	\$ -			37
PRY	Paraguay	Latin America	no	19,203	\$ 1	17,853		38
NIC	Nicaragua	Latin America	no	10,935	891	6,273	14.2	1
KGZ	Kyrgyzstan	Asia	no	3,644	229	4,273	5.4	2
UZB	Uzbekistan	Asia	no	44,370	1,574	39,013	4.0	3
TJK	Tajikistan	Asia	no	5,576	210	5,570	3.8	4
AFG	Afghanistan	Asia	no	16,132	520	15,162	3.4	5
BGD	Bangladesh	Asia	no	72,949	3,688	109,695	3.4	6
PAK	Pakistan	Asia	no	170,444	4,857	183,620	2.7	7
MWI	Malawi	Sub Saharan Africa	no	1,883	45	4,980	0.9	8
RWA	Rwanda	Sub Saharan Africa	no	1,558	38	5,582	0.7	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	\$ 75	14,300	0.5	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	\$ 92	23,012	0.4	11
IND	India	Asia	no	1,429,881	5,862	1,712,645	0.3	12
BDI	Burundi	Sub Saharan Africa	no	168	5	1,589	0.3	13
LAO	Lao People's Democratic Republic	Asia	no	2,322	\$ 23	6,978	0.3	14
KEN	Kenya	Sub Saharan Africa	no	18,470	\$ 94	31,264	0.3	15
VNM	Viet Nam	Asia	no	115,441	\$ 223	102,008	0.2	16
UGA	Uganda	Sub Saharan Africa	no	6,628	\$ 35	16,720	0.2	17
LSO	Lesotho	Sub Saharan Africa	no	3,522	\$ 5	2,553	0.2	18
MOZ	Mozambique	Sub Saharan Africa	no	5,633	\$ 18	9,421	0.2	19
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	\$ 18	12,263	0.2	20
SDN	Sudan	Sub Saharan Africa	no	26,851	\$ 42	55,939	0.1	21
ERI	Eritrea	Sub Saharan Africa	no	1,892	\$ 1	2,097	0.1	22
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	\$ 5	6,988	0.1	23
ETH	Ethiopia	Sub Saharan Africa	no	5,141	\$ 13	29,625	0.0	24
CAF	Central African Republic	Sub Saharan Africa	no	916	\$ 1	2,009	0.0	25
MDG	Madagascar	Sub Saharan Africa	no	2,575	\$ 3	8,628	0.0	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
KHM	Cambodia	Asia	no	4,335	\$ 2	10,664	0.0	27
SEN	Senegal	Sub Saharan Africa	no	11,619	\$ 3	12,900	0.0	28
LBR	Liberia	Sub Saharan Africa	no	515	\$ 0	805	0.0	29
NGA	Nigeria	Sub Saharan Africa	no	121,669	\$ 34	176,769	0.0	30
GIN	Guinea	Sub Saharan Africa	no	3,259	\$ 1	4,231	0.0	31
BEN	Benin	Sub Saharan Africa	no	3,585	\$ 1	6,633	0.0	32
TCD	Chad	Sub Saharan Africa	no	6,664	\$ 1	6,734	0.0	33
MRT	Mauritania	Sub Saharan Africa	no	3,622	\$ 0	3,672	0.0	34
GLP	Guadeloupe	Caribbean	no	19,838	3,795			35
MTQ	Martinique	Caribbean	no	21,052	3,045			36
NPL	Nepal	Asia	no	6,537	865			37
MMR	Myanmar	Asia	no	20,572	660			38
TCA	Turks and Caicos islands	Caribbean	no	332	3			39
YEM	Yemen	Asia	no	21,556	214			40
MYT	Mayotte	Sub Saharan Africa	no	2,341	17			41
SOM	Somalia	Sub Saharan Africa	no	3,573	\$ 2			42
REU	Réunion	Sub Saharan Africa	no	42,937	\$ -			43
GUF	French Guiana	Latin America	no	8,339	\$ 0			44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	\$ -	8,810		45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	\$ 0	21,729		46
GMB	Gambia	Sub Saharan Africa	no	680	\$ -	743		47
GHA	Ghana	Sub Saharan Africa	no	12,649	\$ -	30,776		48
MLI	Mali	Sub Saharan Africa	no	3,869	\$ -	8,909		49
NER	Niger	Sub Saharan Africa	no	2,800	\$ -	5,493		50
SLE	Sierra Leone	Sub Saharan Africa	no	523	\$ -	1,905		51
TGO	Togo	Sub Saharan Africa	no	1,644	\$ -	2,826		52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	\$ -			53
TTO	Trinidad and Tobago	Caribbean	yes	31,370	\$ 8,913	19,255	46.3	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	\$ 376	1,179	31.9	2
SGP	Singapore	Pacific	yes	526,900	\$ 1,196	201,050	0.6	3
BHS	Bahamas	Caribbean	yes	21,313	\$ 9			4
BHR	Bahrain	Asia	yes	32,575	\$ 189			5
DMA	Dominica	Caribbean	yes	356	\$ 112	454	24.7	1
GRD	Grenada	Caribbean	yes	1,229	\$ 170	727	23.4	2
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	\$ 107	691	15.5	3
DOM	Dominican Republic	Caribbean	yes	72,573	\$ 6,310	49,972	12.6	4
JAM	Jamaica	Caribbean	yes	28,963	\$ 1,216	13,574	9.0	5
PLW	Palau	Pacific	yes	279	\$ 11	135	7.8	6
LCA	Saint Lucia	Caribbean	yes	543	\$ 69	1,163	5.9	7
BRB	Barbados	Caribbean	yes	4,677	\$ 807			8
CUB	Cuba	Caribbean	yes	46,280	\$ 374			9
MUS	Mauritius	Sub Saharan Africa	yes	13,089	\$ -	9,798		10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	\$ -	855		11
SUR	Suriname	Latin America	yes	2,797	\$ -			12
MDV	Maldives	Pacific	yes	907	\$ -	1,817		13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	\$ -	620		14
TON	Tonga	Pacific	yes	230	\$ 60	352	17.0	1
VUT	Vanuatu	Asia	yes	102	\$ 35	678	5.2	2
FJI	Fiji	Asia	yes	2,100	\$ 105	3,090	3.4	3
WSM	Samoa	Pacific	yes	361	\$ 15	557	2.7	4
BLZ	Belize	Latin America	yes	1,251	\$ 20	1,303	1.5	5
GUY	Guyana	Latin America	yes	3,468	\$ 0	2,238	0.0	6
FSM	Micronesia (Federated States of)	Pacific	yes	585	\$ -	312		7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	\$ -	1,579		8
SLB	Solomon islands	Asia	yes	211	\$ 103	555	18.6	1
PNG	Papua New Guinea	Asia	yes	5,433	\$ 260	9,262	2.8	2
COM	Comoros	Sub Saharan Africa	yes	310	\$ 4	539	0.8	3
HTI	Haiti	Caribbean	yes	8,553	\$ 1,911			4
VGB	British Virgin Islands	Caribbean	yes	424	\$ 108			5
AIA	Anguilla	Caribbean	yes	20	\$ 5			6
VIR	United States Virgin Islands	Caribbean	yes	1,755	\$ 150			7
PRI	Puerto Rico	Caribbean	yes	135,818	\$ 8,082			8
NCL	New Caledonia	Asia	yes	4,771	\$ 259			9
ABW	Aruba	Caribbean	yes	6,526	\$ 327			10
PYF	French Polynesia	Pacific	yes	6,568	\$ -			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	\$ -	877		12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	\$ -	200		13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
JPN	Japan	Asia	no	542,290	2,246	4.1	1
GRC	Greece	Europe	no	27,597	81	2.9	2
SMR	San Marino	Europe	no	113	0	2.8	3
ARE	United Arab Emirates	Asia	no	11,165	19	1.7	4
CYP	Cyprus	Asia	no	1,154	2	1.4	5
ITA	Italy	Europe	no	188,526	193	1.0	6
SVN	Slovenia	Europe	no	2,231	2	0.9	7
NZL	New Zealand	Australia	no	12,682	10	0.8	8
KWT	Kuwait	Asia	no	6,168	4	0.7	9
LIE	Liechtenstein	Europe	no	198	0	0.7	10
ISR	Israel	Asia	no	22,505	15	0.7	11
MCO	Monaco	Europe	no	123	0	0.7	12
QAT	Qatar	Asia	no	2,116	1	0.6	13
MLT	Malta	Pacific	no	1,330	1	0.6	14
OMN	Oman	Asia	no	4,095	2	0.5	15
ISL	Iceland	Europe	no	1,071	1	0.5	16
AUT	Austria	Europe	no	28,002	11	0.4	17
USA	United States of America	North America	no	1,224,802	474	0.4	18
BRN	Brunei Darussalam	Asia	no	895	0	0.3	19
CHE	Switzerland	Europe	no	40,078	12	0.3	20
DEU	Germany	Europe	no	262,867	54	0.2	21
SVK	Slovakia	Europe	no	9,245	2	0.2	22
BEL	Belgium	Europe	no	29,496	4	0.2	23
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	0.1	24
CZE	Czech Republic	Europe	no	23,126	3	0.1	25
SAU	Saudi Arabia	Asia	no	73,922	8	0.1	26
NLD	Netherlands	Europe	no	49,481	5	0.1	27
LUX	Luxembourg	Europe	no	2,462	0	0.1	28
FRA	France	Europe	no	236,236	17	0.1	29
PRT	Portugal	Europe	no	18,087	1	0.1	30
ESP	Spain	Europe	no	122,131	8	0.1	31
KOR	Republic of Korea	Asia	no	95,180	5	0.1	32
HKG	Hong Kong	Asia	no	47,718	2	0.0	33
MAC	Macau	Asia	no	1,989	0	0.0	34
IRL	Ireland	Europe	no	16,223	1	0.0	35
EST	Estonia	Europe	no	2,851	0	0.0	36
CAN	Canada	North America	no	121,895	4	0.0	37
DNK	Denmark	Europe	no	31,778	0	0.0	38
NOR	Norway	Europe	no	33,800	0	0.0	39
AUS	Australia	Australia	no	47,971	1	0.0	40
SWE	Sweden	Europe	no	27,971	0	-	41
FIN	Finland	Europe	no	14,927	-	-	42
TWN	Taiwan	Asia	no	38,310	163	4.3	1
CRI	Costa Rica	Latin America	no	6,892	23	3.3	2
COL	Colombia	Latin America	no	53,054	130	2.4	3
CHL	Chile	Latin America	no	18,070	44	2.4	4
BGR	Bulgaria	Europe	no	9,040	15	1.6	5
PAN	Panama	Latin America	no	5,115	7	1.4	6
TUR	Turkey	Asia	no	164,353	186	1.1	7
VEN	Venezuela	Latin America	no	42,697	43	1.0	8
KAZ	Kazakhstan	Asia	no	20,880	21	1.0	9
LBN	Lebanon	Asia	no	4,139	4	0.9	10
MEX	Mexico	Latin America	no	260,866	245	0.9	11
MNE	Montenegro	Europe	no	269	0	0.9	12
GIB	Gibraltar	Europe	no	274	0	0.7	13
HRV	Croatia	Europe	no	6,064	4	0.7	14
MYS	Malaysia	Asia	no	37,377	19	0.5	15
CYM	Cayman Islands	Caribbean	no	81	-	0.4	16
ARG	Argentina	Latin America	no	39,520	12	0.3	17
SRB	Serbia	Europe	no	1,938	1	0.3	18
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5	0.3	19
PRK	Dem People's Rep of Korea	Asia	no	10,245	2	0.2	20
HUN	Hungary	Europe	no	30,434	5	0.2	21
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	0.1	22
POL	Poland	Europe	no	60,706	6	0.1	23
RUS	Russian Federation	Europe	no	288,219	21	0.1	24
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.1	25
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-	0.0	26
LTU	Lithuania	Europe	no	7,227	0	0.0	27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [%]	Ranking
LVA	Latvia	Europe	no	4,998	-	0.0	28
GAB	Gabon	Sub Saharan Africa	no	2,633	-	0.0	29
BLR	Belarus	Europe	no	21,160	-	-	30
BRA	Brazil	Latin America	no	300,613	0	-	31
URY	Uruguay	Latin America	no	4,269	-	-	32
PHL	Philippines	Asia	no	46,143	1,243	26.9	1
SLV	El Salvador	Latin America	no	4,297	57	13.2	2
HND	Honduras	Latin America	no	5,414	66	12.2	3
BTN	Bhutan	Asia	no	371	1	3.9	4
GTM	Guatemala	Latin America	no	8,748	34	3.9	5
AZE	Azerbaijan	Asia	no	12,666	36	2.8	6
ECU	Ecuador	Latin America	no	10,202	28	2.7	7
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305	2.5	8
GEO	Georgia	Asia	no	3,815	9	2.4	9
PER	Peru	Latin America	no	24,717	57	2.3	10
ARM	Armenia	Asia	no	2,899	6	2.0	11
IDN	Indonesia	Asia	no	113,457	190	1.7	12
BOL	Bolivia	Latin America	no	4,521	7	1.6	13
TKM	Turkmenistan	Asia	no	3,779	5	1.4	14
DZA	Algeria	North Africa	no	67,908	92	1.4	15
IRQ	Iraq	Asia	no	15,555	18	1.2	16
ALB	Albania	Europe	no	3,381	3	1.0	17
SYR	Syrian Arab Republic	Asia	no	18,783	14	0.8	18
TUN	Tunisia	North Africa	no	14,190	11	0.8	19
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	0.7	20
JOR	Jordan	Asia	no	10,652	7	0.6	21
DJI	Djibouti	Sub Saharan Africa	no	656	0	0.6	22
CHN	China	Asia	no	599,699	310	0.5	23
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	0.3	24
MAR	Morocco	North Africa	no	41,389	12	0.3	25
MNG	Mongolia	Asia	no	2,335	1	0.2	26
EGY	Egypt	North Africa	no	101,974	22	0.2	27
THA	Thailand	Asia	no	43,178	9	0.2	28
MDA	Moldova, Republic of	Europe	no	3,416	1	0.2	29
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.1	30
UKR	Ukraine	Europe	no	32,769	1	0.0	31
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	0.0	32
NAM	Namibia	Sub Saharan Africa	no	1,706	-	0.0	33
AGO	Angola	Sub Saharan Africa	no	9,237	0	0.0	34
LKA	Sri Lanka	Asia	no	14,385	0	-	35
FRO	Faroe Islands	Europe	no	42	-	-	36
PRY	Paraguay	Latin America	no	4,301	-	-	37
COG	Congo	Sub Saharan Africa	no	3,326	-	-	38
GLP	Guadeloupe	Caribbean	no	904	9	9.9	1
KGZ	Kyrgyzstan	Asia	no	756	4	5.3	2
NPL	Nepal	Asia	no	2,411	12	5.1	3
NIC	Nicaragua	Latin America	no	2,310	12	5.0	4
MTQ	Martinique	Caribbean	no	889	4	4.4	5
TJK	Tajikistan	Asia	no	2,412	9	3.7	6
UZB	Uzbekistan	Asia	no	10,382	36	3.5	7
BGD	Bangladesh	Asia	no	14,034	38	2.7	8
AFG	Afghanistan	Asia	no	9,988	24	2.4	9
PAK	Pakistan	Asia	no	37,562	90	2.4	10
MMR	Myanmar	Asia	no	9,829	19	1.9	11
BDI	Burundi	Sub Saharan Africa	no	145	0	0.9	12
RWA	Rwanda	Sub Saharan Africa	no	962	1	0.7	13
MWI	Malawi	Sub Saharan Africa	no	1,519	1	0.5	14
MYT	Mayotte	Sub Saharan Africa	no	154	0	0.4	15
YEM	Yemen	Asia	no	10,133	4	0.4	16
IND	India	Asia	no	320,919	117	0.4	17
TCA	Turks and Caicos islands	Caribbean	no	28	-	0.4	18
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	0.4	19
LAO	Lao People's Democratic Republic	Asia	no	938	0	0.3	20
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.3	21
UGA	Uganda	Sub Saharan Africa	no	3,787	1	0.2	22
KEN	Kenya	Sub Saharan Africa	no	8,730	1	0.2	23
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	0.2	24
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.1	25
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	0.1	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	AAL/PC [‰]	Ranking
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	0.1	27
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	0.1	28
VNM	Viet Nam	Asia	no	24,066	1	0.1	29
MDG	Madagascar	Sub Saharan Africa	no	1,546	0	0.1	30
ERI	Eritrea	Sub Saharan Africa	no	1,076	0	0.1	31
SDN	Sudan	Sub Saharan Africa	no	12,166	1	0.0	32
CAF	Central African Republic	Sub Saharan Africa	no	351	-	0.0	33
SOM	Somalia	Sub Saharan Africa	no	2,303	0	0.0	34
KHM	Cambodia	Asia	no	1,623	-	0.0	35
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	0.0	36
SEN	Senegal	Sub Saharan Africa	no	5,536	-	0.0	37
GIN	Guinea	Sub Saharan Africa	no	1,643	-	0.0	38
GUF	French Guiana	Latin America	no	378	-	-	39
TCO	Chad	Sub Saharan Africa	no	4,004	-	-	40
REU	Réunion	Sub Saharan Africa	no	2,161	-	-	41
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	44
GMB	Gambia	Sub Saharan Africa	no	334	-	-	45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	46
LBR	Liberia	Sub Saharan Africa	no	263	-	-	47
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	49
NER	Niger	Sub Saharan Africa	no	1,230	-	-	50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	51
TGO	Togo	Sub Saharan Africa	no	529	-	-	52
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	53
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35	15.2	1
ATG	Antigua and Barbuda	Caribbean	yes	272	2	8.8	2
BHR	Bahrain	Asia	yes	1,670	1	0.5	3
SGP	Singapore	Pacific	yes	18,751	4	0.2	4
BHS	Bahamas	Caribbean	yes	985	-	0.0	5
DMA	Dominica	Caribbean	yes	43	1	13.5	1
DOM	Dominican Republic	Caribbean	yes	13,790	68	5.0	2
BRB	Barbados	Caribbean	yes	253	1	3.8	3
GRD	Grenada	Caribbean	yes	63	0	3.7	4
LCA	Saint Lucia	Caribbean	yes	73	0	3.5	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	2.6	6
JAM	Jamaica	Caribbean	yes	4,148	4	0.9	7
PLW	Palau	Pacific	yes	25	-	0.8	8
CUB	Cuba	Caribbean	yes	5,936	1	0.2	9
MDV	Maldives	Pacific	yes	154	-	-	10
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	11
SUR	Suriname	Latin America	yes	364	-	-	12
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	-	13
SYC	Seychelles	Sub Saharan Africa	yes	631	-	-	14
VUT	Vanuatu	Asia	yes	25	3	99.6	1
TON	Tonga	Pacific	yes	47	2	40.9	2
WSM	Samoa	Pacific	yes	93	0	2.4	3
FJI	Fiji	Asia	yes	309	0	1.3	4
BLZ	Belize	Latin America	yes	65	0	1.1	5
GUY	Guyana	Latin America	yes	884	-	0.0	6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	-	7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	8
SLB	Solomon Islands	Asia	yes	85	5	59.2	1
PNG	Papua New Guinea	Asia	yes	1,289	20	15.8	2
AIA	Anguilla	Caribbean	yes	2	-	10.0	3
VGB	British Virgin Islands	Caribbean	yes	18	0	8.8	4
HTI	Haiti	Caribbean	yes	1,584	12	7.5	5
NCL	New Caledonia	Asia	yes	107	0	4.1	6
VIR	United States Virgin Islands	Caribbean	yes	82	0	3.3	7
PRI	Puerto Rico	Caribbean	yes	3,197	8	2.4	8
ABW	Aruba	Caribbean	yes	358	0	1.2	9
COM	Comoros	Sub Saharan Africa	yes	156	0	0.4	10
PYF	French Polynesia	Pacific	yes	116	-	-	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
JPN	Japan	Asia	no	542,290	2,246	5,396,265	0.4	1
GRC	Greece	Europe	no	27,597	81	327,811	0.3	2
MLT	Malta	Pacific	no	1,330	1	8,111	0.1	3
ITA	Italy	Europe	no	188,526	193	2,087,749	0.1	4
ARE	United Arab Emirates	Asia	no	11,165	19	270,334	0.1	5
ISR	Israel	Asia	no	22,505	15	212,896	0.1	6
CYP	Cyprus	Asia	no	1,154	2	24,623	0.1	7
SVN	Slovenia	Europe	no	2,231	2	46,643	0.1	8
ISL	Iceland	Europe	no	1,071	1	11,313	0.1	9
CHE	Switzerland	Europe	no	40,078	12	468,037	0.0	10
AUT	Austria	Europe	no	28,002	11	362,737	0.0	11
USA	United States of America	North America	no	1,224,802	474	15,103,640	0.0	12
DEU	Germany	Europe	no	262,867	54	3,101,126	0.0	13
SVK	Slovakia	Europe	no	9,245	2	88,405	0.0	14
CZE	Czech Republic	Europe	no	23,126	3	182,876	0.0	15
SAU	Saudi Arabia	Asia	no	73,922	8	341,826	0.0	16
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	2,325,009	0.0	17
BEL	Belgium	Europe	no	29,496	4	456,696	0.0	18
NLD	Netherlands	Europe	no	49,481	5	721,171	0.0	19
LUX	Luxembourg	Europe	no	2,462	0	36,700	0.0	20
FRA	France	Europe	no	236,236	17	2,620,062	0.0	21
ESP	Spain	Europe	no	122,131	8	1,437,861	0.0	22
HKG	Hong Kong	Asia	no	47,718	2	211,863	0.0	23
MAC	Macau	Asia	no	1,989	0	11,994	0.0	24
EST	Estonia	Europe	no	2,851	0	17,933	0.0	25
SMR	San Marino	Europe	no	113	0			26
LIE	Liechtenstein	Europe	no	198	0			27
MCO	Monaco	Europe	no	123	0			28
NZL	New Zealand	Australia	no	12,682	10			29
KWT	Kuwait	Asia	no	6,168	4			30
BRN	Brunei Darussalam	Asia	no	895	0			31
OMN	Oman	Asia	no	4,095	2			32
QAT	Qatar	Asia	no	2,116	1			33
IRL	Ireland	Europe	no	16,223	1	171,957		34
PRT	Portugal	Europe	no	18,087	1	245,251		35
KOR	Republic of Korea	Asia	no	95,180	5	986,184		36
CAN	Canada	North America	no	121,895	4	1,606,667		37
NOR	Norway	Europe	no	33,800	0	358,009		38
AUS	Australia	Australia	no	47,971	1			39
DNK	Denmark	Europe	no	31,778	0	292,535		40
SWE	Sweden	Europe	no	27,971	0	431,251		41
FIN	Finland	Europe	no	14,927	-	235,640		42
CRI	Costa Rica	Latin America	no	6,892	23	36,941	0.6	1
COL	Colombia	Latin America	no	53,054	130	294,580	0.4	2
BGR	Bulgaria	Europe	no	9,040	15	48,622	0.3	3
PAN	Panama	Latin America	no	5,115	7	27,738	0.3	4
TUR	Turkey	Asia	no	164,353	186	774,921	0.2	5
MEX	Mexico	Latin America	no	260,866	245	1,049,803	0.2	6
CHL	Chile	Latin America	no	18,070	44	198,120	0.2	7
KAZ	Kazakhstan	Asia	no	20,880	21	127,087	0.2	8
VEN	Venezuela	Latin America	no	42,697	43	346,724	0.1	9
MYS	Malaysia	Asia	no	37,377	19	195,443	0.1	10
LBN	Lebanon	Asia	no	4,139	4	47,915	0.1	11
HRV	Croatia	Europe	no	6,064	4	61,162	0.1	12
MNE	Montenegro	Europe	no	269	0	5,265	0.0	13
HUN	Hungary	Europe	no	30,434	5	120,269	0.0	14
ARG	Argentina	Latin America	no	39,520	12	356,545	0.0	15
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	369,463	0.0	16
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	17
RUS	Russian Federation	Europe	no	288,219	21	1,356,393	0.0	18
SRB	Serbia	Europe	no	1,938	1	44,764	0.0	19
POL	Poland	Europe	no	60,706	6	475,111	0.0	20
TWN	Taiwan	Asia	no	38,310	163			21
GIB	Gibraltar	Europe	no	274	0			22
CYM	Cayman Islands	Caribbean	no	81	-			23
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			24
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			25
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			26
LTU	Lithuania	Europe	no	7,227	0	36,811		27



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
LVA	Latvia	Europe	no	4,998	-	24,210		28
GAB	Gabon	Sub Saharan Africa	no	2,633	-	10,274		29
BRA	Brazil	Latin America	no	300,613	0	2,108,637		30
BLR	Belarus	Europe	no	21,160	-	62,212		31
URY	Uruguay	Latin America	no	4,269	-	39,936		32
PHL	Philippines	Asia	no	46,143	1,243	203,208	6.1	1
HND	Honduras	Latin America	no	5,414	66	18,594	3.6	2
SLV	El Salvador	Latin America	no	4,297	57	24,921	2.3	3
AZE	Azerbaijan	Asia	no	12,666	36	33,777	1.1	4
GTM	Guatemala	Latin America	no	8,748	34	45,670	0.7	5
GEO	Georgia	Asia	no	3,815	9	13,709	0.7	6
ARM	Armenia	Asia	no	2,899	6	11,639	0.5	7
ECU	Ecuador	Latin America	no	10,202	28	61,265	0.5	8
BOL	Bolivia	Latin America	no	4,521	7	18,301	0.4	9
PER	Peru	Latin America	no	24,717	57	152,561	0.4	10
IDN	Indonesia	Asia	no	113,457	190	695,009	0.3	11
TKM	Turkmenistan	Asia	no	3,779	5	20,575	0.3	12
ALB	Albania	Europe	no	3,381	3	14,377	0.2	13
SYR	Syrian Arab Republic	Asia	no	18,783	14	59,401	0.2	14
TUN	Tunisia	North Africa	no	14,190	11	46,643	0.2	15
JOR	Jordan	Asia	no	10,652	7	33,470	0.2	16
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	10,902	0.1	17
MAR	Morocco	North Africa	no	41,389	12	99,808	0.1	18
EGY	Egypt	North Africa	no	101,974	22	229,362	0.1	19
MDA	Moldova, Republic of	Europe	no	3,416	1	8,053	0.1	20
MNG	Mongolia	Asia	no	2,335	1	6,675	0.1	21
CHN	China	Asia	no	599,699	310	5,694,512	0.1	22
THA	Thailand	Asia	no	43,178	9	295,072	0.0	23
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	20,030	0.0	24
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	0.0	25
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	23,429	0.0	26
BTN	Bhutan	Asia	no	371	1			27
DJI	Djibouti	Sub Saharan Africa	no	656	0			28
DZA	Algeria	North Africa	no	67,908	92			29
IRQ	Iraq	Asia	no	15,555	18			30
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			31
UKR	Ukraine	Europe	no	32,769	1	141,773		32
NAM	Namibia	Sub Saharan Africa	no	1,706	-	12,035		33
AGO	Angola	Sub Saharan Africa	no	9,237	0	72,456		34
LKA	Sri Lanka	Asia	no	14,385	0	54,079		35
COG	Congo	Sub Saharan Africa	no	3,326	-	8,109		36
FRO	Faroe Islands	Europe	no	42	-			37
PRY	Paraguay	Latin America	no	4,301	-	17,941		38
AFG	Afghanistan	Asia	no	9,988	24	1,852	13.2	1
NIC	Nicaragua	Latin America	no	2,310	12	8,405	1.4	2
TJK	Tajikistan	Asia	no	2,412	9	8,227	1.1	3
UZB	Uzbekistan	Asia	no	10,382	36	38,768	0.9	4
KGZ	Kyrgyzstan	Asia	no	756	4	6,067	0.7	5
PAK	Pakistan	Asia	no	37,562	90	186,087	0.5	6
BGD	Bangladesh	Asia	no	14,034	38	106,991	0.4	7
MWI	Malawi	Sub Saharan Africa	no	1,519	1	5,605	0.1	8
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	14,723	0.1	9
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	3,511	0.1	10
IND	India	Asia	no	320,919	117	1,783,129	0.1	11
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	26,224	0.1	12
UGA	Uganda	Sub Saharan Africa	no	3,787	1	18,757	0.1	13
LAO	Lao People's Democratic Republic	Asia	no	938	0	7,629	0.0	14
KEN	Kenya	Sub Saharan Africa	no	8,730	1	35,486	0.0	15
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	11,309	0.0	16
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	15,617	0.0	17
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	35,978	0.0	18
VNM	Viet Nam	Asia	no	24,066	1	117,363	0.0	19
SDN	Sudan	Sub Saharan Africa	no	12,166	1	61,511	0.0	20
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	8,897	0.0	21
GLP	Guadeloupe	Caribbean	no	904	9			22
MTQ	Martinique	Caribbean	no	889	4			23
NPL	Nepal	Asia	no	2,411	12			24
MMR	Myanmar	Asia	no	9,829	19			25
BDI	Burundi	Sub Saharan Africa	no	145	0			26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNE [USD million]	AAL/GNE [‰]	
RWA	Rwanda	Sub Saharan Africa	no	962	1			27
TCA	Turks and Caicos islands	Caribbean	no	28	-			28
YEM	Yemen	Asia	no	10,133	4			29
MYT	Mayotte	Sub Saharan Africa	no	154	0			30
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			31
CAF	Central African Republic	Sub Saharan Africa	no	351	-			32
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			33
SOM	Somalia	Sub Saharan Africa	no	2,303	0			34
KHM	Cambodia	Asia	no	1,623	-	11,854		35
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	168,996		36
SEN	Senegal	Sub Saharan Africa	no	5,536	-	15,485		37
GIN	Guinea	Sub Saharan Africa	no	1,643	-	4,711		38
TCD	Chad	Sub Saharan Africa	no	4,004	-	9,469		39
REU	Réunion	Sub Saharan Africa	no	2,161	-			40
GUF	French Guiana	Latin America	no	378	-			41
BEN	Benin	Sub Saharan Africa	no	1,223	-	7,536		42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	21,734		44
GMB	Gambia	Sub Saharan Africa	no	334	-	963		45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	35,414		46
LBR	Liberia	Sub Saharan Africa	no	263	-			47
MLI	Mali	Sub Saharan Africa	no	1,887	-			48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	4,195		49
NER	Niger	Sub Saharan Africa	no	1,230	-			50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	2,142		51
TGO	Togo	Sub Saharan Africa	no	529	-			52
ESH	Western Sahara	Sub Saharan Africa	no	418	-			53
ATG	Antigua and Barbuda	Caribbean	yes	272	2	1,329	1.8	1
SGP	Singapore	Pacific	yes	18,751	4	150,187	0.0	2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			3
BHR	Bahrain	Asia	yes	1,670	1			4
BHS	Bahamas	Caribbean	yes	985	-			5
DOM	Dominican Republic	Caribbean	yes	13,790	68	57,847	1.2	1
DMA	Dominica	Caribbean	yes	43	1	573	1.1	2
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914	0.4	3
BRB	Barbados	Caribbean	yes	253	1	4,317	0.2	4
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.2	5
JAM	Jamaica	Caribbean	yes	4,148	4	16,776	0.2	6
GRD	Grenada	Caribbean	yes	63	0	996	0.2	7
PLW	Palau	Pacific	yes	25	-			8
CUB	Cuba	Caribbean	yes	5,936	1			9
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	10,934		10
SYC	Seychelles	Sub Saharan Africa	yes	631	-			11
MDV	Maldives	Pacific	yes	154	-	2,244		12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	766		13
SUR	Suriname	Latin America	yes	364	-			14
TON	Tonga	Pacific	yes	47	2	510	3.7	1
VUT	Vanuatu	Asia	yes	25	3	743	3.4	2
WSM	Samoa	Pacific	yes	93	0	727	0.3	3
FJI	Fiji	Asia	yes	309	0	3,569	0.1	4
BLZ	Belize	Latin America	yes	65	0			5
GUY	Guyana	Latin America	yes	884	-			6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			8
SLB	Solomon islands	Asia	yes	85	5	885	5.7	1
PNG	Papua New Guinea	Asia	yes	1,289	20	9,217	2.2	2
HTI	Haiti	Caribbean	yes	1,584	12	9,743	1.2	3
AIA	Anguilla	Caribbean	yes	2	-			4
VGB	British Virgin Islands	Caribbean	yes	18	0			5
VIR	United States Virgin Islands	Caribbean	yes	82	0			6
PRI	Puerto Rico	Caribbean	yes	3,197	8			7
NCL	New Caledonia	Asia	yes	107	0			8
ABW	Aruba	Caribbean	yes	358	0			9
COM	Comoros	Sub Saharan Africa	yes	156	0			10
PYF	French Polynesia	Pacific	yes	116	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			13



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [%]	
JPN	Japan	Asia	no	542,290	2,246	1,094,349	2.1	1
GRC	Greece	Europe	no	27,597	81	54,736	1.5	2
ARE	United Arab Emirates	Asia	no	11,165	19	24,545	0.8	3
ITA	Italy	Europe	no	188,526	193	435,241	0.4	4
MLT	Malta	Pacific	no	1,330	1	1,711	0.4	5
CYP	Cyprus	Asia	no	1,154	2	4,558	0.4	6
ISR	Israel	Asia	no	22,505	15	52,616	0.3	7
SVN	Slovenia	Europe	no	2,231	2	9,752	0.2	8
CHE	Switzerland	Europe	no	40,078	12	60,549	0.2	9
USA	United States of America	North America	no	1,224,802	474	2,522,700	0.2	10
ISL	Iceland	Europe	no	1,071	1	3,261	0.2	11
AUT	Austria	Europe	no	28,002	11	73,430	0.2	12
SVK	Slovakia	Europe	no	9,245	2	17,073	0.1	13
HKG	Hong Kong	Asia	no	47,718	2	18,948	0.1	14
DEU	Germany	Europe	no	262,867	54	647,378	0.1	15
CZE	Czech Republic	Europe	no	23,126	3	41,897	0.1	16
SAU	Saudi Arabia	Asia	no	73,922	8	97,875	0.1	17
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	518,869	0.1	18
MAC	Macau	Asia	no	1,989	0	2,186	0.1	19
BEL	Belgium	Europe	no	29,496	4	113,598	0.0	20
FRA	France	Europe	no	236,236	17	635,621	0.0	21
ESP	Spain	Europe	no	122,131	8	292,417	0.0	22
EST	Estonia	Europe	no	2,851	0	3,959	0.0	23
KOR	Republic of Korea	Asia	no	95,180	5	155,748	0.0	24
NLD	Netherlands	Europe	no	49,481	5	221,964	0.0	25
LUX	Luxembourg	Europe	no	2,462	0	8,868	0.0	26
PRT	Portugal	Europe	no	18,087	1	49,074	0.0	27
IRL	Ireland	Europe	no	16,223	1	39,102	0.0	28
CAN	Canada	North America	no	121,895	4	343,217	0.0	29
SMR	San Marino	Europe	no	113	0			30
LIE	Liechtenstein	Europe	no	198	0			31
MCO	Monaco	Europe	no	123	0			32
NZL	New Zealand	Australia	no	12,682	10			33
KWT	Kuwait	Asia	no	6,168	4			34
BRN	Brunei Darussalam	Asia	no	895	0			35
OMN	Oman	Asia	no	4,095	2			36
QAT	Qatar	Asia	no	2,116	1			37
NOR	Norway	Europe	no	33,800	0	92,372		38
AUS	Australia	Australia	no	47,971	1			39
DNK	Denmark	Europe	no	31,778	0	90,977		40
SWE	Sweden	Europe	no	27,971	0	123,918		41
FIN	Finland	Europe	no	14,927	-	58,644		42
PAN	Panama	Latin America	no	5,115	7	1,561	4.5	1
CRI	Costa Rica	Latin America	no	6,892	23	6,358	3.6	2
COL	Colombia	Latin America	no	53,054	130	46,769	2.8	3
MEX	Mexico	Latin America	no	260,866	245	120,640	2.0	4
BGR	Bulgaria	Europe	no	9,040	15	7,539	1.9	5
TUR	Turkey	Asia	no	164,353	186	104,758	1.8	6
CHL	Chile	Latin America	no	18,070	44	26,588	1.7	7
KAZ	Kazakhstan	Asia	no	20,880	21	16,117	1.3	8
VEN	Venezuela	Latin America	no	42,697	43	42,419	1.0	9
LBN	Lebanon	Asia	no	4,139	4	4,711	0.8	10
MYS	Malaysia	Asia	no	37,377	19	30,273	0.6	11
HRV	Croatia	Europe	no	6,064	4	13,084	0.3	12
MNE	Montenegro	Europe	no	269	0	775	0.3	13
ARG	Argentina	Latin America	no	39,520	12	55,024	0.2	14
HUN	Hungary	Europe	no	30,434	5	28,084	0.2	15
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	71,742	0.1	16
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,130	0.1	17
SRB	Serbia	Europe	no	1,938	1	7,380	0.1	18
RUS	Russian Federation	Europe	no	288,219	21	287,875	0.1	19
POL	Poland	Europe	no	60,706	6	88,643	0.1	20
LTU	Lithuania	Europe	no	7,227	0	7,241	0.0	21
TWN	Taiwan	Asia	no	38,310	163			22
GIB	Gibraltar	Europe	no	274	0			23
CYM	Cayman Islands	Caribbean	no	81	-			24
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			25
LYB	Libyan Arab Jamahiriya	North Africa	no	18,501	5			26
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Earthquake) [USD million]	Risk indicator GGC [USD million]	AAL/GGC [‰]	Ranking
LVA	Latvia	Europe	no	4,998	-	4,122		28
GAB	Gabon	Sub Saharan Africa	no	2,633	-	1,267		29
BRA	Brazil	Latin America	no	300,613	0	442,019		30
BLR	Belarus	Europe	no	21,160	-	8,828		31
URY	Uruguay	Latin America	no	4,269	-	5,117		32
PHL	Philippines	Asia	no	46,143	1,243	19,403	64.0	1
SLV	El Salvador	Latin America	no	4,297	57	2,312	24.6	2
HND	Honduras	Latin America	no	5,414	66	2,777	23.8	3
GTM	Guatemala	Latin America	no	8,748	34	4,254	7.9	4
AZE	Azerbaijan	Asia	no	12,666	36	5,852	6.1	5
ARM	Armenia	Asia	no	2,899	6	1,231	4.6	6
ECU	Ecuador	Latin America	no	10,202	28	6,807	4.1	7
GEO	Georgia	Asia	no	3,815	9	2,453	3.7	8
PER	Peru	Latin America	no	24,717	57	15,659	3.7	9
ALB	Albania	Europe	no	3,381	3	952	3.6	10
IDN	Indonesia	Asia	no	113,457	190	64,015	3.0	11
BOL	Bolivia	Latin America	no	4,521	7	2,718	2.6	12
TKM	Turkmenistan	Asia	no	3,779	5	2,212	2.4	13
SYR	Syrian Arab Republic	Asia	no	18,783	14	5,991	2.4	14
TUN	Tunisia	North Africa	no	14,190	11	7,209	1.5	15
JOR	Jordan	Asia	no	10,652	7	5,910	1.1	16
EGY	Egypt	North Africa	no	101,974	22	24,436	0.9	17
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	1,683	0.8	18
MAR	Morocco	North Africa	no	41,389	12	15,913	0.8	19
MNG	Mongolia	Asia	no	2,335	1	851	0.6	20
MDA	Moldova, Republic of	Europe	no	3,416	1	1,377	0.5	21
CHN	China	Asia	no	599,699	310	791,999	0.4	22
THA	Thailand	Asia	no	43,178	9	41,294	0.2	23
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	3,498	0.1	24
SWZ	Swaziland	Sub Saharan Africa	no	769	0	913	0.1	25
UKR	Ukraine	Europe	no	32,769	1	27,731	0.0	26
LKA	Sri Lanka	Asia	no	14,385	0	7,718	0.0	27
CMR	Cameroon	Sub Saharan Africa	no	6,256	0			28
BTN	Bhutan	Asia	no	371	1			29
DJI	Djibouti	Sub Saharan Africa	no	656	0			30
DZA	Algeria	North Africa	no	67,908	92			31
IRQ	Iraq	Asia	no	15,555	18			32
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			33
NAM	Namibia	Sub Saharan Africa	no	1,706	-	2,692		34
AGO	Angola	Sub Saharan Africa	no	9,237	0			35
COG	Congo	Sub Saharan Africa	no	3,326	-	1,186		36
FRO	Faroe Islands	Europe	no	42	-			37
PRY	Paraguay	Latin America	no	4,301	-	1,711		38
NIC	Nicaragua	Latin America	no	2,310	12	627	18.3	1
BGD	Bangladesh	Asia	no	14,034	38	5,387	7.1	2
PAK	Pakistan	Asia	no	37,562	90	14,053	6.4	3
TJK	Tajikistan	Asia	no	2,412	9	1,658	5.4	4
UZB	Uzbekistan	Asia	no	10,382	36	6,853	5.3	5
KGZ	Kyrgyzstan	Asia	no	756	4	877	4.6	6
MWI	Malawi	Sub Saharan Africa	no	1,519	1	976	0.8	7
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	2,153	0.6	8
IND	India	Asia	no	320,919	117	198,830	0.6	9
UGA	Uganda	Sub Saharan Africa	no	3,787	1	2,015	0.5	10
LAO	Lao People's Democratic Republic	Asia	no	938	0	672	0.5	11
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	1,166	0.4	12
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	4,052	0.4	13
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	719	0.4	14
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	935	0.3	15
KEN	Kenya	Sub Saharan Africa	no	8,730	1	4,226	0.3	16
VNM	Viet Nam	Asia	no	24,066	1	6,947	0.2	17
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	3,029	0.1	18
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	1,281	0.1	19
SDN	Sudan	Sub Saharan Africa	no	12,166	1	9,428	0.1	20
AFG	Afghanistan	Asia	no	9,988	24	-	-	21
GLP	Guadeloupe	Caribbean	no	904	9			22
MTQ	Martinique	Caribbean	no	889	4			23
NPL	Nepal	Asia	no	2,411	12			24
MMR	Myanmar	Asia	no	9,829	19			25
BDI	Burundi	Sub Saharan Africa	no	145	0			26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GGC [USD million]	AAL/GGC [‰]	
RWA	Rwanda	Sub Saharan Africa	no	962	1			27
TCA	Turks and Caicos islands	Caribbean	no	28	-			28
YEM	Yemen	Asia	no	10,133	4			29
MYT	Mayotte	Sub Saharan Africa	no	154	0			30
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			31
CAF	Central African Republic	Sub Saharan Africa	no	351	-			32
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			33
SOM	Somalia	Sub Saharan Africa	no	2,303	0			34
KHM	Cambodia	Asia	no	1,623	-	713		35
NGA	Nigeria	Sub Saharan Africa	no	45,741	0			36
SEN	Senegal	Sub Saharan Africa	no	5,536	-	1,124		37
GIN	Guinea	Sub Saharan Africa	no	1,643	-	339		38
TCD	Chad	Sub Saharan Africa	no	4,004	-	1,131		39
REU	Réunion	Sub Saharan Africa	no	2,161	-			40
GUF	French Guiana	Latin America	no	378	-			41
BEN	Benin	Sub Saharan Africa	no	1,223	-			42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	1,968		44
GMB	Gambia	Sub Saharan Africa	no	334	-	121		45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	3,511		46
LBR	Liberia	Sub Saharan Africa	no	263	-			47
MLI	Mali	Sub Saharan Africa	no	1,887	-			48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	646		49
NER	Niger	Sub Saharan Africa	no	1,230	-			50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	233		51
TGO	Togo	Sub Saharan Africa	no	529	-			52
ESH	Western Sahara	Sub Saharan Africa	no	418	-			53
SGP	Singapore	Pacific	yes	18,751	4	22,293	0.2	1
ATG	Antigua and Barbuda	Caribbean	yes	272	2			2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			3
BHR	Bahrain	Asia	yes	1,670	1			4
BHS	Bahamas	Caribbean	yes	985	-			5
DOM	Dominican Republic	Caribbean	yes	13,790	68	3,965	17.3	1
DMA	Dominica	Caribbean	yes	43	1	81	7.4	2
LCA	Saint Lucia	Caribbean	yes	73	0	192	1.6	3
JAM	Jamaica	Caribbean	yes	4,148	4	2,368	1.6	4
BRB	Barbados	Caribbean	yes	253	1	835	1.2	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			6
GRD	Grenada	Caribbean	yes	63	0			7
PLW	Palau	Pacific	yes	25	-			8
CUB	Cuba	Caribbean	yes	5,936	1			9
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	1,393		10
SYC	Seychelles	Sub Saharan Africa	yes	631	-			11
MDV	Maldives	Pacific	yes	154	-			12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-			13
SUR	Suriname	Latin America	yes	364	-			14
TON	Tonga	Pacific	yes	47	2	67	28.5	1
VUT	Vanuatu	Asia	yes	25	3			2
WSM	Samoa	Pacific	yes	93	0			3
FJI	Fiji	Asia	yes	309	0			4
BLZ	Belize	Latin America	yes	65	0			5
GUY	Guyana	Latin America	yes	884	-	341		6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			8
PNG	Papua New Guinea	Asia	yes	1,289	20	897	22.8	1
SLB	Solomon islands	Asia	yes	85	5			2
HTI	Haiti	Caribbean	yes	1,584	12			3
AIA	Anguilla	Caribbean	yes	2	-			4
VGB	British Virgin Islands	Caribbean	yes	18	0			5
VIR	United States Virgin Islands	Caribbean	yes	82	0			6
PRI	Puerto Rico	Caribbean	yes	3,197	8			7
NCL	New Caledonia	Asia	yes	107	0			8
ABW	Aruba	Caribbean	yes	358	0			9
COM	Comoros	Sub Saharan Africa	yes	156	0			10
PYF	French Polynesia	Pacific	yes	116	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [%]	
GRC	Greece	Europe	no	27,597	81	13,935	5.8	1
ISL	Iceland	Europe	no	1,071	1	200	3.0	2
JPN	Japan	Asia	no	542,290	2,246	1,296,892	1.7	3
CYP	Cyprus	Asia	no	1,154	2	2,138	0.7	4
MLT	Malta	Pacific	no	1,330	1	1,012	0.7	5
ITA	Italy	Europe	no	188,526	193	329,250	0.6	6
ISR	Israel	Asia	no	22,505	15	39,726	0.4	7
USA	United States of America	North America	no	1,224,802	474	1,591,569	0.3	8
SVN	Slovenia	Europe	no	2,231	2	10,333	0.2	9
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	262,969	0.1	10
AUT	Austria	Europe	no	28,002	11	93,705	0.1	11
SVK	Slovakia	Europe	no	9,245	2	17,544	0.1	12
CZE	Czech Republic	Europe	no	23,126	3	40,414	0.1	13
DEU	Germany	Europe	no	262,867	54	758,427	0.1	14
CHE	Switzerland	Europe	no	40,078	12	189,918	0.1	15
PRT	Portugal	Europe	no	18,087	1	22,310	0.0	16
BEL	Belgium	Europe	no	29,496	4	107,310	0.0	17
FRA	France	Europe	no	236,236	17	447,208	0.0	18
NLD	Netherlands	Europe	no	49,481	5	182,627	0.0	19
ESP	Spain	Europe	no	122,131	8	264,944	0.0	20
HKG	Hong Kong	Asia	no	47,718	2	67,159	0.0	21
IRL	Ireland	Europe	no	16,223	1	20,525	0.0	22
EST	Estonia	Europe	no	2,851	0	4,667	0.0	23
LUX	Luxembourg	Europe	no	2,462	0	10,285	0.0	24
KOR	Republic of Korea	Asia	no	95,180	5	321,095	0.0	25
CAN	Canada	North America	no	121,895	4	290,588	0.0	26
DNK	Denmark	Europe	no	31,778	0	68,142	0.0	27
NOR	Norway	Europe	no	33,800	0	139,329	0.0	28
SWE	Sweden	Europe	no	27,971	0	114,466	0.0	29
ARE	United Arab Emirates	Asia	no	11,165	19			30
SAU	Saudi Arabia	Asia	no	73,922	8			31
MAC	Macau	Asia	no	1,989	0			32
SMR	San Marino	Europe	no	113	0			33
LIE	Liechtenstein	Europe	no	198	0			34
MCO	Monaco	Europe	no	123	0			35
NZL	New Zealand	Australia	no	12,682	10			36
KWT	Kuwait	Asia	no	6,168	4			37
BRN	Brunei Darussalam	Asia	no	895	0			38
OMN	Oman	Asia	no	4,095	2			39
QAT	Qatar	Asia	no	2,116	1			40
AUS	Australia	Australia	no	47,971	1			41
FIN	Finland	Europe	no	14,927	-	49,428		42
CRI	Costa Rica	Latin America	no	6,892	23	5,483	4.1	1
COL	Colombia	Latin America	no	53,054	130	54,533	2.4	2
TUR	Turkey	Asia	no	164,353	186	99,948	1.9	3
PAN	Panama	Latin America	no	5,115	7	4,608	1.5	4
BGR	Bulgaria	Europe	no	9,040	15	11,333	1.3	5
MEX	Mexico	Latin America	no	260,866	245	250,619	1.0	6
CHL	Chile	Latin America	no	18,070	44	49,226	0.9	7
LBN	Lebanon	Asia	no	4,139	4	4,428	0.9	8
KAZ	Kazakhstan	Asia	no	20,880	21	41,723	0.5	9
VEN	Venezuela	Latin America	no	42,697	43	123,339	0.3	10
HRV	Croatia	Europe	no	6,064	4	13,329	0.3	11
MYS	Malaysia	Asia	no	37,377	19	78,265	0.2	12
HUN	Hungary	Europe	no	30,434	5	26,266	0.2	13
ZAF	South Africa	Sub Saharan Africa	no	69,420	9	59,850	0.2	14
ARG	Argentina	Latin America	no	39,520	12	82,845	0.1	15
SRB	Serbia	Europe	no	1,938	1	5,958	0.1	16
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,926	0.1	17
POL	Poland	Europe	no	60,706	6	79,285	0.1	18
RUS	Russian Federation	Europe	no	288,219	21	409,148	0.1	19
LTU	Lithuania	Europe	no	7,227	0	6,723	0.0	20
BRA	Brazil	Latin America	no	300,613	0	345,223	0.0	21
MNE	Montenegro	Europe	no	269	0			22
TWN	Taiwan	Asia	no	38,310	163			23
GIB	Gibraltar	Europe	no	274	0			24
CYM	Cayman Islands	Caribbean	no	81	-			25
PRK	Dem People's Rep of Korea	Asia	no	10,245	2			26
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	5			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNS [USD million]	AAL/GNS [‰]	
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-			28
LVA	Latvia	Europe	no	4,998	-	5,696		29
GAB	Gabon	Sub Saharan Africa	no	2,633	-			30
BLR	Belarus	Europe	no	21,160	-	13,701		31
URY	Uruguay	Latin America	no	4,269	-	6,538		32
HND	Honduras	Latin America	no	5,414	66	2,499	26.4	1
SLV	El Salvador	Latin America	no	4,297	57	2,332	24.4	2
PHL	Philippines	Asia	no	46,143	1,243	54,291	22.9	3
GEO	Georgia	Asia	no	3,815	9	1,152	7.8	4
GTM	Guatemala	Latin America	no	8,748	34	5,176	6.5	5
ARM	Armenia	Asia	no	2,899	6	1,761	3.2	6
JOR	Jordan	Asia	no	10,652	7	2,520	2.7	7
ALB	Albania	Europe	no	3,381	3	1,584	2.1	8
ECU	Ecuador	Latin America	no	10,202	28	13,145	2.1	9
PER	Peru	Latin America	no	24,717	57	35,828	1.6	10
AZE	Azerbaijan	Asia	no	12,666	36	23,913	1.5	11
BOL	Bolivia	Latin America	no	4,521	7	4,912	1.4	12
SYR	Syrian Arab Republic	Asia	no	18,783	14	9,944	1.4	13
TUN	Tunisia	North Africa	no	14,190	11	8,985	1.2	14
SWZ	Swaziland	Sub Saharan Africa	no	769	0	94	1.1	15
IDN	Indonesia	Asia	no	113,457	190	225,795	0.8	16
MDA	Moldova, Republic of	Europe	no	3,416	1	920	0.8	17
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	2,228	0.6	18
EGY	Egypt	North Africa	no	101,974	22	38,951	0.6	19
MAR	Morocco	North Africa	no	41,389	12	27,932	0.4	20
MNG	Mongolia	Asia	no	2,335	1	1,682	0.3	21
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	2,469	0.2	22
CHN	China	Asia	no	599,699	310	3,137,116	0.1	23
THA	Thailand	Asia	no	43,178	9	97,152	0.1	24
UKR	Ukraine	Europe	no	32,769	1	23,811	0.0	25
LKA	Sri Lanka	Asia	no	14,385	0	12,267	0.0	26
AGO	Angola	Sub Saharan Africa	no	9,237	0	13,454	0.0	27
TKM	Turkmenistan	Asia	no	3,779	5			28
CMR	Cameroon	Sub Saharan Africa	no	6,256	0			29
BTN	Bhutan	Asia	no	371	1			30
DJI	Djibouti	Sub Saharan Africa	no	656	0			31
DZA	Algeria	North Africa	no	67,908	92			32
IRQ	Iraq	Asia	no	15,555	18			33
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305			34
NAM	Namibia	Sub Saharan Africa	no	1,706	-	4,130		35
COG	Congo	Sub Saharan Africa	no	3,326	-			36
FRO	Faroe Islands	Europe	no	42	-			37
PRY	Paraguay	Latin America	no	4,301	-	4,028		38
TJK	Tajikistan	Asia	no	2,412	9	143	62.1	1
NIC	Nicaragua	Latin America	no	2,310	12	843	13.6	2
KGZ	Kyrgyzstan	Asia	no	756	4	908	4.4	3
PAK	Pakistan	Asia	no	37,562	90	38,491	2.3	4
BGD	Bangladesh	Asia	no	14,034	38	38,537	1.0	5
MOZ	Mozambique	Sub Saharan Africa	no	3,991	1	1,040	0.5	6
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	743	0.4	7
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	4,664	0.4	8
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	3,637	0.4	9
UGA	Uganda	Sub Saharan Africa	no	3,787	1	3,193	0.3	10
KEN	Kenya	Sub Saharan Africa	no	8,730	1	5,011	0.3	11
LAO	Lao People's Democratic Republic	Asia	no	938	0	1,429	0.2	12
IND	India	Asia	no	320,919	117	582,180	0.2	13
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	4,934	0.1	14
SDN	Sudan	Sub Saharan Africa	no	12,166	1	11,031	0.0	15
VNM	Viet Nam	Asia	no	24,066	1	33,911	0.0	16
UZB	Uzbekistan	Asia	no	10,382	36			17
MWI	Malawi	Sub Saharan Africa	no	1,519	1			18
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0			19
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0			20
AFG	Afghanistan	Asia	no	9,988	24			21
GLP	Guadeloupe	Caribbean	no	904	9			22
MTQ	Martinique	Caribbean	no	889	4			23
NPL	Nepal	Asia	no	2,411	12			24
MMR	Myanmar	Asia	no	9,829	19			25
BDI	Burundi	Sub Saharan Africa	no	145	0			26



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TCA	Turks and Caicos islands	Caribbean	no	28	-			28
YEM	Yemen	Asia	no	10,133	4			29
MYT	Mayotte	Sub Saharan Africa	no	154	0			30
MDG	Madagascar	Sub Saharan Africa	no	1,546	0			31
CAF	Central African Republic	Sub Saharan Africa	no	351	-			32
ERI	Eritrea	Sub Saharan Africa	no	1,076	0			33
SOM	Somalia	Sub Saharan Africa	no	2,303	0			34
KHM	Cambodia	Asia	no	1,623	-	1,408		35
NGA	Nigeria	Sub Saharan Africa	no	45,741	0			36
SEN	Senegal	Sub Saharan Africa	no	5,536	-			37
GIN	Guinea	Sub Saharan Africa	no	1,643	-	443		38
TCD	Chad	Sub Saharan Africa	no	4,004	-			39
REU	Réunion	Sub Saharan Africa	no	2,161	-			40
GUF	French Guiana	Latin America	no	378	-			41
BEN	Benin	Sub Saharan Africa	no	1,223	-			42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-			43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-			44
GMB	Gambia	Sub Saharan Africa	no	334	-	102		45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	6,616		46
LBR	Liberia	Sub Saharan Africa	no	263	-			47
MLI	Mali	Sub Saharan Africa	no	1,887	-			48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-			49
NER	Niger	Sub Saharan Africa	no	1,230	-			50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	248		51
TGO	Togo	Sub Saharan Africa	no	529	-			52
ESH	Western Sahara	Sub Saharan Africa	no	418	-			53
SGP	Singapore	Pacific	yes	18,751	4	95,806	0.0	1
ATG	Antigua and Barbuda	Caribbean	yes	272	2			2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	35			3
BHR	Bahrain	Asia	yes	1,670	1			4
BHS	Bahamas	Caribbean	yes	985	-			5
DMA	Dominica	Caribbean	yes	43	1	6	104.2	1
DOM	Dominican Republic	Caribbean	yes	13,790	68	3,771	18.1	2
JAM	Jamaica	Caribbean	yes	4,148	4	1,745	2.1	3
LCA	Saint Lucia	Caribbean	yes	73	0	223	1.3	4
BRB	Barbados	Caribbean	yes	253	1			5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			6
GRD	Grenada	Caribbean	yes	63	0			7
PLW	Palau	Pacific	yes	25	-			8
CUB	Cuba	Caribbean	yes	5,936	1			9
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	1,603		10
SYC	Seychelles	Sub Saharan Africa	yes	631	-			11
MDV	Maldives	Pacific	yes	154	-			12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-			13
SUR	Suriname	Latin America	yes	364	-			14
TON	Tonga	Pacific	yes	47	2			1
VUT	Vanuatu	Asia	yes	25	3			2
WSM	Samoa	Pacific	yes	93	0			3
FJI	Fiji	Asia	yes	309	0			4
BLZ	Belize	Latin America	yes	65	0			5
GUY	Guyana	Latin America	yes	884	-	338		6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-			7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-			8
PNG	Papua New Guinea	Asia	yes	1,289	20	2,660	7.7	1
SLB	Solomon islands	Asia	yes	85	5			2
HTI	Haiti	Caribbean	yes	1,584	12			3
AIA	Anguilla	Caribbean	yes	2	-			4
VGB	British Virgin Islands	Caribbean	yes	18	0			5
VIR	United States Virgin Islands	Caribbean	yes	82	0			6
PRI	Puerto Rico	Caribbean	yes	3,197	8			7
NCL	New Caledonia	Asia	yes	107	0			8
ABW	Aruba	Caribbean	yes	358	0			9
COM	Comoros	Sub Saharan Africa	yes	156	0			10
PYF	French Polynesia	Pacific	yes	116	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	PML ₂₅₀ /PC [%]	Ranking
SMR	San Marino	Europe	no	113	16	14.6	1
CYP	Cyprus	Asia	no	1,154	52	4.5	2
JPN	Japan	Asia	no	542,290	23,364	4.3	3
GRC	Greece	Europe	no	27,597	998	3.6	4
SVN	Slovenia	Europe	no	2,231	80	3.6	5
LIE	Liechtenstein	Europe	no	198	5	2.8	6
ARE	United Arab Emirates	Asia	no	11,165	302	2.7	7
ISR	Israel	Asia	no	22,505	543	2.4	8
MCO	Monaco	Europe	no	123	3	2.3	9
ISL	Iceland	Europe	no	1,071	25	2.3	10
MLT	Malta	Pacific	no	1,330	20	1.5	11
ITA	Italy	Europe	no	188,526	2,771	1.5	12
CHE	Switzerland	Europe	no	40,078	487	1.2	13
AUT	Austria	Europe	no	28,002	337	1.2	14
NZL	New Zealand	Australia	no	12,682	141	1.1	15
KWT	Kuwait	Asia	no	6,168	68	1.1	16
BRN	Brunei Darussalam	Asia	no	895	8	0.8	17
DEU	Germany	Europe	no	262,867	2,006	0.8	18
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	0.7	19
OMN	Oman	Asia	no	4,095	27	0.7	20
BEL	Belgium	Europe	no	29,496	191	0.7	21
QAT	Qatar	Asia	no	2,116	12	0.6	22
USA	United States of America	North America	no	1,224,802	6,768	0.6	23
NLD	Netherlands	Europe	no	49,481	251	0.5	24
SVK	Slovakia	Europe	no	9,245	46	0.5	25
CZE	Czech Republic	Europe	no	23,126	85	0.4	26
LUX	Luxembourg	Europe	no	2,462	6	0.2	27
FRA	France	Europe	no	236,236	469	0.2	28
SAU	Saudi Arabia	Asia	no	73,922	106	0.1	29
ESP	Spain	Europe	no	122,131	174	0.1	30
HKG	Hong Kong	Asia	no	47,718	60	0.1	31
IRL	Ireland	Europe	no	16,223	20	0.1	32
MAC	Macau	Asia	no	1,989	2	0.1	33
PRT	Portugal	Europe	no	18,087	17	0.1	34
KOR	Republic of Korea	Asia	no	95,180	76	0.1	35
EST	Estonia	Europe	no	2,851	2	0.1	36
CAN	Canada	North America	no	121,895	82	0.1	37
NOR	Norway	Europe	no	33,800	13	0.0	38
AUS	Australia	Australia	no	47,971	10	0.0	39
DNK	Denmark	Europe	no	31,778	6	0.0	40
SWE	Sweden	Europe	no	27,971	4	0.0	41
FIN	Finland	Europe	no	14,927	1	0.0	42
CRI	Costa Rica	Latin America	no	6,892	480	7.0	1
COL	Colombia	Latin America	no	53,054	3,103	5.9	2
TWN	Taiwan	Asia	no	38,310	1,422	3.7	3
LBN	Lebanon	Asia	no	4,139	146	3.5	4
PAN	Panama	Latin America	no	5,115	146	2.9	5
MNE	Montenegro	Europe	no	269	7	2.8	6
GIB	Gibraltar	Europe	no	274	7	2.4	7
CHL	Chile	Latin America	no	18,070	404	2.2	8
VEN	Venezuela	Latin America	no	42,697	885	2.1	9
BGR	Bulgaria	Europe	no	9,040	184	2.0	10
HRV	Croatia	Europe	no	6,064	103	1.7	11
TUR	Turkey	Asia	no	164,353	2,703	1.6	12
CYM	Cayman Islands	Caribbean	no	81	1	1.6	13
MEX	Mexico	Latin America	no	260,866	4,079	1.6	14
KAZ	Kazakhstan	Asia	no	20,880	249	1.2	15
MYS	Malaysia	Asia	no	37,377	259	0.7	16
PRK	Dem People's Rep of Korea	Asia	no	10,245	66	0.7	17
SRB	Serbia	Europe	no	1,938	12	0.6	18
ARG	Argentina	Latin America	no	39,520	247	0.6	19
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108	0.6	20
HUN	Hungary	Europe	no	30,434	160	0.5	21
POL	Poland	Europe	no	60,706	199	0.3	22
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	0.2	23
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	0.1	24
BWA	Botswana	Sub Saharan Africa	no	4,287	3	0.1	25
RUS	Russian Federation	Europe	no	288,219	206	0.1	26
LTU	Lithuania	Europe	no	7,227	3	0.0	27



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LVA	Latvia	Europe	no	4,998	2	0.0	28
GAB	Gabon	Sub Saharan Africa	no	2,633	1	0.0	29
BRA	Brazil	Latin America	no	300,613	13	-	30
BLR	Belarus	Europe	no	21,160	1	-	31
URY	Uruguay	Latin America	no	4,269	-	-	32
PHL	Philippines	Asia	no	46,143	9,068	19.7	1
HND	Honduras	Latin America	no	5,414	891	16.5	2
SLV	El Salvador	Latin America	no	4,297	582	13.5	3
BTN	Bhutan	Asia	no	371	50	13.5	4
ECU	Ecuador	Latin America	no	10,202	614	6.0	5
GTM	Guatemala	Latin America	no	8,748	518	5.9	6
BOL	Bolivia	Latin America	no	4,521	251	5.6	7
AZE	Azerbaijan	Asia	no	12,666	682	5.4	8
PER	Peru	Latin America	no	24,717	1,243	5.0	9
GEO	Georgia	Asia	no	3,815	175	4.6	10
ARM	Armenia	Asia	no	2,899	95	3.3	11
TUN	Tunisia	North Africa	no	14,190	415	2.9	12
DJI	Djibouti	Sub Saharan Africa	no	656	19	2.8	13
ALB	Albania	Europe	no	3,381	91	2.7	14
TKM	Turkmenistan	Asia	no	3,779	92	2.4	15
DZA	Algeria	North Africa	no	67,908	1,535	2.3	16
IRQ	Iraq	Asia	no	15,555	352	2.3	17
JOR	Jordan	Asia	no	10,652	224	2.1	18
SYR	Syrian Arab Republic	Asia	no	18,783	375	2.0	19
IDN	Indonesia	Asia	no	113,457	1,877	1.7	20
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970	1.6	21
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	1.2	22
MAR	Morocco	North Africa	no	41,389	344	0.8	23
MDA	Moldova, Republic of	Europe	no	3,416	25	0.7	24
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	0.7	25
CHN	China	Asia	no	599,699	3,876	0.7	26
MNG	Mongolia	Asia	no	2,335	14	0.6	27
EGY	Egypt	North Africa	no	101,974	553	0.5	28
THA	Thailand	Asia	no	43,178	190	0.4	29
SWZ	Swaziland	Sub Saharan Africa	no	769	1	0.1	30
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	0.1	31
UKR	Ukraine	Europe	no	32,769	20	0.1	32
NAM	Namibia	Sub Saharan Africa	no	1,706	1	0.0	33
AGO	Angola	Sub Saharan Africa	no	9,237	3	0.0	34
LKA	Sri Lanka	Asia	no	14,385	3	0.0	35
COG	Congo	Sub Saharan Africa	no	3,326	0	0.0	36
FRO	Faroe Islands	Europe	no	42	-	-	37
PRY	Paraguay	Latin America	no	4,301	-	-	38
GLP	Guadeloupe	Caribbean	no	904	178	19.7	1
MTQ	Martinique	Caribbean	no	889	134	15.1	2
NPL	Nepal	Asia	no	2,411	343	14.2	3
NIC	Nicaragua	Latin America	no	2,310	188	8.1	4
KGZ	Kyrgyzstan	Asia	no	756	48	6.4	5
BGD	Bangladesh	Asia	no	14,034	718	5.1	6
TJK	Tajikistan	Asia	no	2,412	91	3.8	7
UZB	Uzbekistan	Asia	no	10,382	368	3.6	8
AFG	Afghanistan	Asia	no	9,988	323	3.2	9
MMR	Myanmar	Asia	no	9,829	317	3.2	10
BDI	Burundi	Sub Saharan Africa	no	145	4	3.1	11
PAK	Pakistan	Asia	no	37,562	1,071	2.9	12
RWA	Rwanda	Sub Saharan Africa	no	962	24	2.5	13
MWI	Malawi	Sub Saharan Africa	no	1,519	37	2.4	14
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	1.2	15
TCA	Turks and Caicos islands	Caribbean	no	28	0	1.1	16
YEM	Yemen	Asia	no	10,133	101	1.0	17
LAO	Lao People's Democratic Republic	Asia	no	938	9	1.0	18
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	0.8	19
MYT	Mayotte	Sub Saharan Africa	no	154	1	0.7	20
UGA	Uganda	Sub Saharan Africa	no	3,787	20	0.5	21
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	0.5	22
KEN	Kenya	Sub Saharan Africa	no	8,730	45	0.5	23
IND	India	Asia	no	320,919	1,329	0.4	24
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	0.3	25
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	0.3	26



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VNM	Viet Nam	Asia	no	24,066	44	0.2	27
SDN	Sudan	Sub Saharan Africa	no	12,166	19	0.2	28
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	0.2	29
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	0.1	30
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	0.1	31
CAF	Central African Republic	Sub Saharan Africa	no	351	0	0.1	32
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	0.1	33
SOM	Somalia	Sub Saharan Africa	no	2,303	1	0.1	34
KHM	Cambodia	Asia	no	1,623	1	0.0	35
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	0.0	36
SEN	Senegal	Sub Saharan Africa	no	5,536	1	0.0	37
GIN	Guinea	Sub Saharan Africa	no	1,643	0	0.0	38
TCD	Chad	Sub Saharan Africa	no	4,004	0	0.0	39
REU	Réunion	Sub Saharan Africa	no	2,161	-	-	40
GUF	French Guiana	Latin America	no	378	-	-	41
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	44
GMB	Gambia	Sub Saharan Africa	no	334	-	-	45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	46
LBR	Liberia	Sub Saharan Africa	no	263	-	-	47
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	49
NER	Niger	Sub Saharan Africa	no	1,230	-	-	50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	51
TGO	Togo	Sub Saharan Africa	no	529	-	-	52
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	53
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	29.2	1
ATG	Antigua and Barbuda	Caribbean	yes	272	44	16.3	2
BHR	Bahrain	Asia	yes	1,670	10	0.6	3
SGP	Singapore	Pacific	yes	18,751	43	0.2	4
BHS	Bahamas	Caribbean	yes	985	0	0.1	5
DMA	Dominica	Caribbean	yes	43	19	44.2	1
BRB	Barbados	Caribbean	yes	253	48	19.2	2
GRD	Grenada	Caribbean	yes	63	10	16.2	3
LCA	Saint Lucia	Caribbean	yes	73	10	14.5	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	11.1	5
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	8.9	6
JAM	Jamaica	Caribbean	yes	4,148	177	4.3	7
PLW	Palau	Pacific	yes	25	1	3.7	8
CUB	Cuba	Caribbean	yes	5,936	49	0.8	9
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	-	10
SYC	Seychelles	Sub Saharan Africa	yes	631	-	-	11
MDV	Maldives	Pacific	yes	154	-	-	12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	13
SUR	Suriname	Latin America	yes	364	-	-	14
VUT	Vanuatu	Asia	yes	25	10	38.8	1
TON	Tonga	Pacific	yes	47	13	28.7	2
FJI	Fiji	Asia	yes	309	16	5.2	3
WSM	Samoa	Pacific	yes	93	4	4.4	4
BLZ	Belize	Latin America	yes	65	1	1.7	5
GUY	Guyana	Latin America	yes	884	0	0.0	6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	-	7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	8
SLB	Solomon islands	Asia	yes	85	50	59.4	1
AIA	Anguilla	Caribbean	yes	2	1	52.7	2
VGB	British Virgin Islands	Caribbean	yes	18	6	36.7	3
HTI	Haiti	Caribbean	yes	1,584	371	23.4	4
VIR	United States Virgin Islands	Caribbean	yes	82	8	9.6	5
PRI	Puerto Rico	Caribbean	yes	3,197	192	6.0	6
NCL	New Caledonia	Asia	yes	107	6	5.8	7
ABW	Aruba	Caribbean	yes	358	18	5.0	8
PNG	Papua New Guinea	Asia	yes	1,289	63	4.9	9
COM	Comoros	Sub Saharan Africa	yes	156	2	1.4	10
PYF	French Polynesia	Pacific	yes	116	-	-	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
JPN	Japan	Asia	no	542,290	23,364	5,458,837	0.4	1
GRC	Greece	Europe	no	27,597	998	301,083	0.3	2
ISR	Israel	Asia	no	22,505	543	217,333	0.3	3
MLT	Malta	Pacific	no	1,330	20	8,256	0.2	4
CYP	Cyprus	Asia	no	1,154	52	23,132	0.2	5
ISL	Iceland	Europe	no	1,071	25	12,574	0.2	6
SVN	Slovenia	Europe	no	2,231	80	46,908	0.2	7
ITA	Italy	Europe	no	188,526	2,771	2,051,412	0.1	8
ARE	United Arab Emirates	Asia	no	11,165	302	297,649	0.1	9
AUT	Austria	Europe	no	28,002	337	379,069	0.1	10
CHE	Switzerland	Europe	no	40,078	487	527,920	0.1	11
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	2,248,831	0.1	12
DEU	Germany	Europe	no	262,867	2,006	3,280,530	0.1	13
USA	United States of America	North America	no	1,224,802	6,768	14,586,740	0.1	14
SVK	Slovakia	Europe	no	9,245	46	87,268	0.1	15
CZE	Czech Republic	Europe	no	23,126	85	192,032	0.0	16
BEL	Belgium	Europe	no	29,496	191	469,374	0.0	17
NLD	Netherlands	Europe	no	49,481	251	779,356	0.0	18
HKG	Hong Kong	Asia	no	47,718	60	224,458	0.0	19
FRA	France	Europe	no	236,236	469	2,560,002	0.0	20
SAU	Saudi Arabia	Asia	no	73,922	106	434,666	0.0	21
PRT	Portugal	Europe	no	18,087	17	228,872	0.0	22
ESP	Spain	Europe	no	122,131	174	1,407,405	0.0	23
IRL	Ireland	Europe	no	16,223	20	211,390	0.0	24
EST	Estonia	Europe	no	2,851	2	19,217	0.0	25
LUX	Luxembourg	Europe	no	2,462	6	53,334	0.0	26
KOR	Republic of Korea	Asia	no	95,180	76	1,014,483	0.0	27
CAN	Canada	North America	no	121,895	82	1,577,040	0.0	28
MAC	Macau	Asia	no	1,989	2	27,960	0.0	29
DNK	Denmark	Europe	no	31,778	6	309,866		30
NOR	Norway	Europe	no	33,800	13	412,990		31
SWE	Sweden	Europe	no	27,971	4	458,973		32
SMR	San Marino	Europe	no	113	16			33
LIE	Liechtenstein	Europe	no	198	5			34
MCO	Monaco	Europe	no	123	3			35
NZL	New Zealand	Australia	no	12,682	141			36
KWT	Kuwait	Asia	no	6,168	68			37
BRN	Brunei Darussalam	Asia	no	895	8			38
OMN	Oman	Asia	no	4,095	27			39
QAT	Qatar	Asia	no	2,116	12			40
AUS	Australia	Australia	no	47,971	10			41
FIN	Finland	Europe	no	14,927	1	238,746		42
CRI	Costa Rica	Latin America	no	6,892	480	35,831	1.3	1
COL	Colombia	Latin America	no	53,054	3,103	288,189	1.1	2
PAN	Panama	Latin America	no	5,115	146	26,689	0.6	3
BGR	Bulgaria	Europe	no	9,040	184	47,714	0.4	4
MEX	Mexico	Latin America	no	260,866	4,079	1,034,804	0.4	5
TUR	Turkey	Asia	no	164,353	2,703	734,365	0.4	6
LBN	Lebanon	Asia	no	4,139	146	39,006	0.4	7
VEN	Venezuela	Latin America	no	42,697	885	391,848	0.2	8
CHL	Chile	Latin America	no	18,070	404	212,741	0.2	9
MNE	Montenegro	Europe	no	269	7	4,111	0.2	10
KAZ	Kazakhstan	Asia	no	20,880	249	149,059	0.2	11
HRV	Croatia	Europe	no	6,064	103	60,852	0.2	12
HUN	Hungary	Europe	no	30,434	160	128,632	0.1	13
MYS	Malaysia	Asia	no	37,377	259	237,797	0.1	14
ARG	Argentina	Latin America	no	39,520	247	368,736	0.1	15
ZAF	South Africa	Sub Saharan Africa	no	69,420	129	363,704	0.0	16
POL	Poland	Europe	no	60,706	199	469,440	0.0	17
SRB	Serbia	Europe	no	1,938	12	38,423	0.0	18
BWA	Botswana	Sub Saharan Africa	no	4,287	3	14,857	0.0	19
RUS	Russian Federation	Europe	no	288,219	206	1,479,819	0.0	20
LTU	Lithuania	Europe	no	7,227	3	36,306	0.0	21
LVA	Latvia	Europe	no	4,998	2	24,010	0.0	22
GAB	Gabon	Sub Saharan Africa	no	2,633	1	13,011	0.0	23
BRA	Brazil	Latin America	no	300,613	13	2,087,890		24
TWN	Taiwan	Asia	no	38,310	1,422			25
GIB	Gibraltar	Europe	no	274	7			26
CYM	Cayman Islands	Caribbean	no	81	1			27



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PRK	Dem People's Rep of Korea	Asia	no	10,245	66			28
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108			29
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	14,007		30
BLR	Belarus	Europe	no	21,160	1	54,713		31
URY	Uruguay	Latin America	no	4,269	-	40,265		32
HND	Honduras	Latin America	no	5,414	891	15,400	5.8	1
PHL	Philippines	Asia	no	46,143	9,068	199,589	4.5	2
BTN	Bhutan	Asia	no	371	50	1,516	3.3	3
SLV	El Salvador	Latin America	no	4,297	582	21,215	2.7	4
GEO	Georgia	Asia	no	3,815	175	11,667	1.5	5
AZE	Azerbaijan	Asia	no	12,666	682	51,774	1.3	6
BOL	Bolivia	Latin America	no	4,521	251	19,650	1.3	7
GTM	Guatemala	Latin America	no	8,748	518	41,186	1.3	8
ECU	Ecuador	Latin America	no	10,202	614	57,978	1.1	9
ARM	Armenia	Asia	no	2,899	95	9,371	1.0	10
DZA	Algeria	North Africa	no	67,908	1,535	159,426	1.0	11
TUN	Tunisia	North Africa	no	14,190	415	44,291	0.9	12
JOR	Jordan	Asia	no	10,652	224	27,574	0.8	13
PER	Peru	Latin America	no	24,717	1,243	157,053	0.8	14
ALB	Albania	Europe	no	3,381	91	11,786	0.8	15
SYR	Syrian Arab Republic	Asia	no	18,783	375	59,147	0.6	16
TKM	Turkmenistan	Asia	no	3,779	92	20,001	0.5	17
MDA	Moldova, Republic of	Europe	no	3,416	25	5,809	0.4	18
IRQ	Iraq	Asia	no	15,555	352	82,150	0.4	19
MAR	Morocco	North Africa	no	41,389	344	90,805	0.4	20
IDN	Indonesia	Asia	no	113,457	1,877	706,558	0.3	21
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	9,189	0.3	22
EGY	Egypt	North Africa	no	101,974	553	218,894	0.3	23
MNG	Mongolia	Asia	no	2,335	14	6,200	0.2	24
CHN	China	Asia	no	599,699	3,876	5,926,612	0.1	25
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	16,578	0.1	26
THA	Thailand	Asia	no	43,178	190	318,522	0.1	27
SWZ	Swaziland	Sub Saharan Africa	no	769	1	3,645	0.0	28
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	22,394	0.0	29
UKR	Ukraine	Europe	no	32,769	20	137,929	0.0	30
LKA	Sri Lanka	Asia	no	14,385	3	49,552	0.0	31
NAM	Namibia	Sub Saharan Africa	no	1,706	1	12,170	0.0	32
AGO	Angola	Sub Saharan Africa	no	9,237	3	84,391		33
DJI	Djibouti	Sub Saharan Africa	no	656	19			34
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970			35
COG	Congo	Sub Saharan Africa	no	3,326	0	11,898		36
FRO	Faroe Islands	Europe	no	42	-			37
PRY	Paraguay	Latin America	no	4,301	-	18,333		38
NIC	Nicaragua	Latin America	no	2,310	188	6,551	2.9	1
AFG	Afghanistan	Asia	no	9,988	323	17,243	1.9	2
TJK	Tajikistan	Asia	no	2,412	91	5,640	1.6	3
KGZ	Kyrgyzstan	Asia	no	756	48	4,616	1.1	4
UZB	Uzbekistan	Asia	no	10,382	368	38,982	0.9	5
BGD	Bangladesh	Asia	no	14,034	718	100,357	0.7	6
MWI	Malawi	Sub Saharan Africa	no	1,519	37	5,106	0.7	7
PAK	Pakistan	Asia	no	37,562	1,071	176,870	0.6	8
RWA	Rwanda	Sub Saharan Africa	no	962	24	5,628	0.4	9
BDI	Burundi	Sub Saharan Africa	no	145	4	1,611	0.3	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	23,057	0.2	11
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	16,193	0.2	12
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	2,132	0.2	13
KEN	Kenya	Sub Saharan Africa	no	8,730	45	31,409	0.1	14
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	9,586	0.1	15
LAO	Lao People's Democratic Republic	Asia	no	938	9	7,296	0.1	16
UGA	Uganda	Sub Saharan Africa	no	3,787	20	17,011	0.1	17
IND	India	Asia	no	320,919	1,329	1,727,111	0.1	18
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	13,145	0.1	19
VNM	Viet Nam	Asia	no	24,066	44	106,427	0.0	20
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	2,117	0.0	21
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	29,717	0.0	22
SDN	Sudan	Sub Saharan Africa	no	12,166	19	62,046	0.0	23
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	7,474	0.0	24
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	8,721	0.0	25
CAF	Central African Republic	Sub Saharan Africa	no	351	0	2,013	0.0	26



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GDP [USD million]	PML ₂₅₀ /GDP [%]	
KHM	Cambodia	Asia	no	1,623	1	11,242	0.0	27
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	193,669	0.0	28
SEN	Senegal	Sub Saharan Africa	no	5,536	1	12,954	0.0	29
GIN	Guinea	Sub Saharan Africa	no	1,643	0	4,511	0.0	30
TCD	Chad	Sub Saharan Africa	no	4,004	0	7,588	0.0	31
GLP	Guadeloupe	Caribbean	no	904	178			32
MTQ	Martinique	Caribbean	no	889	134			33
NPL	Nepal	Asia	no	2,411	343			34
MMR	Myanmar	Asia	no	9,829	317			35
TCA	Turks and Caicos islands	Caribbean	no	28	0			36
YEM	Yemen	Asia	no	10,133	101			37
MYT	Mayotte	Sub Saharan Africa	no	154	1			38
SOM	Somalia	Sub Saharan Africa	no	2,303	1			39
REU	Réunion	Sub Saharan Africa	no	2,161	-			40
GUF	French Guiana	Latin America	no	378	-			41
BEN	Benin	Sub Saharan Africa	no	1,223	-	6,633		42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	8,820		43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	22,780		44
GMB	Gambia	Sub Saharan Africa	no	334	-	807		45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	31,306		46
LBR	Liberia	Sub Saharan Africa	no	263	-	986		47
MLI	Mali	Sub Saharan Africa	no	1,887	-	9,251		48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	3,636		49
NER	Niger	Sub Saharan Africa	no	1,230	-	5,549		50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	1,905		51
TGO	Togo	Sub Saharan Africa	no	529	-	3,153		52
ESH	Western Sahara	Sub Saharan Africa	no	418	-			53
ATG	Antigua and Barbuda	Caribbean	yes	272	44	1,211	3.6	1
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	20,604	3.3	2
SGP	Singapore	Pacific	yes	18,751	43	208,765	0.0	3
BHS	Bahamas	Caribbean	yes	985	0	7,538	0.0	4
BHR	Bahrain	Asia	yes	1,670	10			5
DMA	Dominica	Caribbean	yes	43	19	466	4.1	1
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	51,766	2.4	2
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	705	2.1	3
GRD	Grenada	Caribbean	yes	63	10	773	1.3	4
JAM	Jamaica	Caribbean	yes	4,148	177	14,252	1.2	5
BRB	Barbados	Caribbean	yes	253	48	4,110	1.2	6
LCA	Saint Lucia	Caribbean	yes	73	10	1,198	0.9	7
PLW	Palau	Pacific	yes	25	1	171	0.5	8
CUB	Cuba	Caribbean	yes	5,936	49			9
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	9,729		10
SYC	Seychelles	Sub Saharan Africa	yes	631	-	937		11
MDV	Maldives	Pacific	yes	154	-	1,908		12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	652		13
SUR	Suriname	Latin America	yes	364	-			14
TON	Tonga	Pacific	yes	47	13	348	3.8	1
VUT	Vanuatu	Asia	yes	25	10	699	1.4	2
WSM	Samoa	Pacific	yes	93	4	574	0.7	3
FJI	Fiji	Asia	yes	309	16	3,189	0.5	4
BLZ	Belize	Latin America	yes	65	1	1,401	0.1	5
GUY	Guyana	Latin America	yes	884	0	2,226		6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	297		7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	1,648		8
SLB	Solomon islands	Asia	yes	85	50	679	7.4	1
HTI	Haiti	Caribbean	yes	1,584	371	6,710	5.5	2
PNG	Papua New Guinea	Asia	yes	1,289	63	9,480	0.7	3
COM	Comoros	Sub Saharan Africa	yes	156	2	541	0.4	4
AIA	Anguilla	Caribbean	yes	2	1			5
VGB	British Virgin Islands	Caribbean	yes	18	6			6
VIR	United States Virgin Islands	Caribbean	yes	82	8			7
PRI	Puerto Rico	Caribbean	yes	3,197	192			8
NCL	New Caledonia	Asia	yes	107	6			9
ABW	Aruba	Caribbean	yes	358	18			10
PYF	French Polynesia	Pacific	yes	116	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	879		12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	197		13



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				FISCAL (Exposed value) [USD million]	(Earthquake) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
JPN	Japan	Asia	no	542,290	23,364	5,601,557	0.4	1
GRC	Greece	Europe	no	27,597	998	292,874	0.3	2
ISR	Israel	Asia	no	22,505	543	210,353	0.3	3
MLT	Malta	Pacific	no	1,330	20	7,698	0.3	4
ISL	Iceland	Europe	no	1,071	25	9,975	0.3	5
CYP	Cyprus	Asia	no	1,154	52	22,539	0.2	6
SVN	Slovenia	Europe	no	2,231	80	46,217	0.2	7
ITA	Italy	Europe	no	188,526	2,771	2,023,916	0.1	8
AUT	Austria	Europe	no	28,002	337	377,063	0.1	9
CHE	Switzerland	Europe	no	40,078	487	568,639	0.1	10
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	1,685	2,280,719	0.1	11
DEU	Germany	Europe	no	262,867	2,006	3,341,391	0.1	12
USA	United States of America	North America	no	1,224,802	6,768	14,635,600	0.1	13
SVK	Slovakia	Europe	no	9,245	46	86,077	0.1	14
CZE	Czech Republic	Europe	no	23,126	85	179,432	0.1	15
BEL	Belgium	Europe	no	29,496	191	477,644	0.0	16
NLD	Netherlands	Europe	no	49,481	251	772,747	0.0	17
HKG	Hong Kong	Asia	no	47,718	60	229,165	0.0	18
FRA	France	Europe	no	236,236	469	2,606,780	0.0	19
LUX	Luxembourg	Europe	no	2,462	6	37,925	0.0	20
PRT	Portugal	Europe	no	18,087	17	221,243	0.0	21
ESP	Spain	Europe	no	122,131	174	1,388,744	0.0	22
IRL	Ireland	Europe	no	16,223	20	171,260	0.0	23
EST	Estonia	Europe	no	2,851	2	18,420	0.0	24
KOR	Republic of Korea	Asia	no	95,180	76	1,014,760	0.0	25
CAN	Canada	North America	no	121,895	82	1,549,652	0.0	26
ARE	United Arab Emirates	Asia	no	11,165	302			27
SAU	Saudi Arabia	Asia	no	73,922	106			28
MAC	Macau	Asia	no	1,989	2			29
DNK	Denmark	Europe	no	31,778	6	315,664		30
NOR	Norway	Europe	no	33,800	13	413,980		31
SWE	Sweden	Europe	no	27,971	4	467,254		32
SMR	San Marino	Europe	no	113	16			33
LIE	Liechtenstein	Europe	no	198	5			34
MCO	Monaco	Europe	no	123	3			35
NZL	New Zealand	Australia	no	12,682	141			36
KWT	Kuwait	Asia	no	6,168	68			37
BRN	Brunei Darussalam	Asia	no	895	8			38
OMN	Oman	Asia	no	4,095	27			39
QAT	Qatar	Asia	no	2,116	12			40
AUS	Australia	Australia	no	47,971	10			41
FIN	Finland	Europe	no	14,927	1	242,899		42
CRI	Costa Rica	Latin America	no	6,892	480	34,896	1.4	1
COL	Colombia	Latin America	no	53,054	3,103	276,072	1.1	2
PAN	Panama	Latin America	no	5,115	146	25,037	0.6	3
BGR	Bulgaria	Europe	no	9,040	184	46,025	0.4	4
MEX	Mexico	Latin America	no	260,866	4,079	1,020,288	0.4	5
TUR	Turkey	Asia	no	164,353	2,703	727,056	0.4	6
LBN	Lebanon	Asia	no	4,139	146	39,051	0.4	7
VEN	Venezuela	Latin America	no	42,697	885	389,038	0.2	8
CHL	Chile	Latin America	no	18,070	404	197,331	0.2	9
KAZ	Kazakhstan	Asia	no	20,880	249	131,868	0.2	10
MNE	Montenegro	Europe	no	269	7	4,083	0.2	11
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SRB	Serbia	Europe	no	1,938	12	37,533	0.0	18
BWA	Botswana	Sub Saharan Africa	no	4,287	3	14,771	0.0	19
RUS	Russian Federation	Europe	no	288,219	206	1,431,121	0.0	20
LTU	Lithuania	Europe	no	7,227	3	35,687	0.0	21
LVA	Latvia	Europe	no	4,998	2	24,073	0.0	22
GAB	Gabon	Sub Saharan Africa	no	2,633	1	11,467	0.0	23
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	1	9,578	0.0	24
BRA	Brazil	Latin America	no	300,613	13	2,049,164		25
TWN	Taiwan	Asia	no	38,310	1,422			26
GIB	Gibraltar	Europe	no	274	7			27



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PRK	Dem People's Rep of Korea	Asia	no	10,245	66			29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501	108			30
BLR	Belarus	Europe	no	21,160	1	53,379		31
URY	Uruguay	Latin America	no	4,269	-	39,161		32
HND	Honduras	Latin America	no	5,414	891	14,798	6.0	1
PHL	Philippines	Asia	no	46,143	9,068	199,897	4.5	2
BTN	Bhutan	Asia	no	371	50	1,420	3.5	3
SLV	El Salvador	Latin America	no	4,297	582	20,834	2.8	4
GEO	Georgia	Asia	no	3,815	175	11,484	1.5	5
AZE	Azerbaijan	Asia	no	12,666	682	48,307	1.4	6
BOL	Bolivia	Latin America	no	4,521	251	18,790	1.3	7
GTM	Guatemala	Latin America	no	8,748	518	39,987	1.3	8
ECU	Ecuador	Latin America	no	10,202	614	56,924	1.1	9
DZA	Algeria	North Africa	no	67,908	1,535	155,538	1.0	10
TUN	Tunisia	North Africa	no	14,190	415	42,020	1.0	11
ARM	Armenia	Asia	no	2,899	95	9,710	1.0	12
PER	Peru	Latin America	no	24,717	1,243	147,000	0.9	13
JOR	Jordan	Asia	no	10,652	224	27,820	0.8	14
ALB	Albania	Europe	no	3,381	91	11,682	0.8	15
SYR	Syrian Arab Republic	Asia	no	18,783	375	57,266	0.7	16
TKM	Turkmenistan	Asia	no	3,779	92	18,107	0.5	17
IRQ	Iraq	Asia	no	15,555	352	77,842	0.5	18
MDA	Moldova, Republic of	Europe	no	3,416	25	6,280	0.4	19
MAR	Morocco	North Africa	no	41,389	344	88,578	0.4	20
IDN	Indonesia	Asia	no	113,457	1,877	686,633	0.3	21
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	24	8,992	0.3	22
EGY	Egypt	North Africa	no	101,974	553	214,530	0.3	23
MNG	Mongolia	Asia	no	2,335	14	5,640	0.3	24
CHN	China	Asia	no	599,699	3,876	5,957,012	0.1	25
BIH	Bosnia and Herzegovina	Europe	no	1,424	10	17,008	0.1	26
THA	Thailand	Asia	no	43,178	190	304,812	0.1	27
SWZ	Swaziland	Sub Saharan Africa	no	769	1	3,586	0.0	28
CMR	Cameroon	Sub Saharan Africa	no	6,256	5	22,030	0.0	29
UKR	Ukraine	Europe	no	32,769	20	135,920	0.0	30
LKA	Sri Lanka	Asia	no	14,385	3	48,916	0.0	31
NAM	Namibia	Sub Saharan Africa	no	1,706	1	12,077	0.0	32
COG	Congo	Sub Saharan Africa	no	3,326	0	8,619	0.0	33
AGO	Angola	Sub Saharan Africa	no	9,237	3	75,516		34
DJI	Djibouti	Sub Saharan Africa	no	656	19			35
IRN	Iran (Islamic Republic of)	Asia	no	120,445	1,970			36
FRO	Faroe Islands	Europe	no	42	-			37
PRY	Paraguay	Latin America	no	4,301	-	17,853		38
NIC	Nicaragua	Latin America	no	2,310	188	6,273	3.0	1
AFG	Afghanistan	Asia	no	9,988	323	15,162	2.1	2
TJK	Tajikistan	Asia	no	2,412	91	5,570	1.6	3
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UZB	Uzbekistan	Asia	no	10,382	368	39,013	0.9	5
MWI	Malawi	Sub Saharan Africa	no	1,519	37	4,980	0.7	6
BGD	Bangladesh	Asia	no	14,034	718	109,695	0.7	7
PAK	Pakistan	Asia	no	37,562	1,071	183,620	0.6	8
RWA	Rwanda	Sub Saharan Africa	no	962	24	5,582	0.4	9
BDI	Burundi	Sub Saharan Africa	no	145	4	1,589	0.3	10
ZMB	Zambia	Sub Saharan Africa	no	4,976	37	14,300	0.3	11
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	55	23,012	0.2	12
KEN	Kenya	Sub Saharan Africa	no	8,730	45	31,264	0.1	13
LSO	Lesotho	Sub Saharan Africa	no	2,124	3	2,553	0.1	14
MOZ	Mozambique	Sub Saharan Africa	no	3,991	13	9,421	0.1	15
LAO	Lao People's Democratic Republic	Asia	no	938	9	6,978	0.1	16
UGA	Uganda	Sub Saharan Africa	no	3,787	20	16,720	0.1	17
IND	India	Asia	no	320,919	1,329	1,712,645	0.1	18
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	10	12,263	0.1	19
VNM	Viet Nam	Asia	no	24,066	44	102,008	0.0	20
ERI	Eritrea	Sub Saharan Africa	no	1,076	1	2,097	0.0	21
ETH	Ethiopia	Sub Saharan Africa	no	3,583	9	29,625	0.0	22
SDN	Sudan	Sub Saharan Africa	no	12,166	19	55,939	0.0	23
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	6,988	0.0	24
MDG	Madagascar	Sub Saharan Africa	no	1,546	2	8,628	0.0	25
CAF	Central African Republic	Sub Saharan Africa	no	351	0	2,009	0.0	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Earthquake) [USD million]	Risk indicator GNI [USD million]	PML ₂₅₀ /GNI [%]	Ranking
KHM	Cambodia	Asia	no	1,623	1	10,664	0.0	27
NGA	Nigeria	Sub Saharan Africa	no	45,741	13	176,769	0.0	28
SEN	Senegal	Sub Saharan Africa	no	5,536	1	12,900	0.0	29
GIN	Guinea	Sub Saharan Africa	no	1,643	0	4,231	0.0	30
TCD	Chad	Sub Saharan Africa	no	4,004	0	6,734	0.0	31
GLP	Guadeloupe	Caribbean	no	904	178			32
MTQ	Martinique	Caribbean	no	889	134			33
NPL	Nepal	Asia	no	2,411	343			34
MMR	Myanmar	Asia	no	9,829	317			35
TCA	Turks and Caicos islands	Caribbean	no	28	0			36
YEM	Yemen	Asia	no	10,133	101			37
MYT	Mayotte	Sub Saharan Africa	no	154	1			38
SOM	Somalia	Sub Saharan Africa	no	2,303	1			39
REU	Réunion	Sub Saharan Africa	no	2,161	-			40
GUF	French Guiana	Latin America	no	378	-			41
BEN	Benin	Sub Saharan Africa	no	1,223	-	6,633		42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	8,810		43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	21,729		44
GMB	Gambia	Sub Saharan Africa	no	334	-	743		45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	30,776		46
LBR	Liberia	Sub Saharan Africa	no	263	-	805		47
MLI	Mali	Sub Saharan Africa	no	1,887	-	8,909		48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	3,672		49
NER	Niger	Sub Saharan Africa	no	1,230	-	5,493		50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	1,905		51
TGO	Togo	Sub Saharan Africa	no	529	-	2,826		52
ESH	Western Sahara	Sub Saharan Africa	no	418	-			53
ATG	Antigua and Barbuda	Caribbean	yes	272	44	1,179	3.7	1
TTO	Trinidad and Tobago	Caribbean	yes	2,299	671	19,255	3.5	2
SGP	Singapore	Pacific	yes	18,751	43	201,050	0.0	3
BHS	Bahamas	Caribbean	yes	985	0			4
BHR	Bahrain	Asia	yes	1,670	10			5
DMA	Dominica	Caribbean	yes	43	19	454	4.2	1
DOM	Dominican Republic	Caribbean	yes	13,790	1,220	49,972	2.4	2
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	15	691	2.2	3
GRD	Grenada	Caribbean	yes	63	10	727	1.4	4
JAM	Jamaica	Caribbean	yes	4,148	177	13,574	1.3	5
LCA	Saint Lucia	Caribbean	yes	73	10	1,163	0.9	6
PLW	Palau	Pacific	yes	25	1	135	0.7	7
BRB	Barbados	Caribbean	yes	253	48			8
CUB	Cuba	Caribbean	yes	5,936	49			9
MUS	Mauritius	Sub Saharan Africa	yes	1,749	-	9,798		10
SYC	Seychelles	Sub Saharan Africa	yes	631	-	855		11
MDV	Maldives	Pacific	yes	154	-	1,817		12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	620		13
SUR	Suriname	Latin America	yes	364	-			14
TON	Tonga	Pacific	yes	47	13	352	3.7	1
VUT	Vanuatu	Asia	yes	25	10	678	1.4	2
WSM	Samoa	Pacific	yes	93	4	557	0.7	3
FJI	Fiji	Asia	yes	309	16	3,090	0.5	4
BLZ	Belize	Latin America	yes	65	1	1,303	0.1	5
GUY	Guyana	Latin America	yes	884	0	2,238		6
FSM	Micronesia (Federated States of)	Pacific	yes	216	-	312		7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	1,579		8
SLB	Solomon islands	Asia	yes	85	50	555	9.0	1
PNG	Papua New Guinea	Asia	yes	1,289	63	9,262	0.7	2
COM	Comoros	Sub Saharan Africa	yes	156	2	539	0.4	3
HTI	Haiti	Caribbean	yes	1,584	371			4
AIA	Anguilla	Caribbean	yes	2	1			5
VGB	British Virgin Islands	Caribbean	yes	18	6			6
VIR	United States Virgin Islands	Caribbean	yes	82	8			7
PRI	Puerto Rico	Caribbean	yes	3,197	192			8
NCL	New Caledonia	Asia	yes	107	6			9
ABW	Aruba	Caribbean	yes	358	18			10
PYF	French Polynesia	Pacific	yes	116	-			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	877		12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	200		13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
JPN	Japan	Asia	no	14,617,394	45,933	3.1	1
KOR	Republic of Korea	Asia	no	2,787,207	8,652	3.1	2
HKG	Hong Kong	Asia	no	1,138,019	927	0.8	3
MAC	Macau	Asia	no	96,993	68	0.7	4
BRN	Brunei Darussalam	Asia	no	20,094	11	0.6	5
USA	United States of America	North America	no	22,004,154	11,460	0.5	6
CAN	Canada	North America	no	2,051,584	310	0.2	7
NZL	New Zealand	Australia	no	238,609	30	0.1	8
OMN	Oman	Asia	no	42,201	2	0.1	9
AUS	Australia	Australia	no	1,832,960	84	0.1	10
ARE	United Arab Emirates	Asia	no	248,015	2	0.0	11
QAT	Qatar	Asia	no	113,981	0		12
CYP	Cyprus	Asia	no	23,484			13
ISR	Israel	Asia	no	293,550			14
KWT	Kuwait	Asia	no	202,236			15
SAU	Saudi Arabia	Asia	no	751,807			16
PRT	Portugal	Europe	no	296,296	0		17
AUT	Austria	Europe	no	615,592			18
BEL	Belgium	Europe	no	739,159			19
CZE	Czech Republic	Europe	no	336,714			20
DNK	Denmark	Europe	no	381,265			21
EST	Estonia	Europe	no	28,069			22
FIN	Finland	Europe	no	209,050			23
FRA	France	Europe	no	3,653,264			24
DEU	Germany	Europe	no	5,800,986			25
GRC	Greece	Europe	no	642,888			26
ISL	Iceland	Europe	no	25,742			27
IRL	Ireland	Europe	no	244,117			28
ITA	Italy	Europe	no	3,701,619			29
LIE	Liechtenstein	Europe	no	8,070			30
LUX	Luxembourg	Europe	no	45,036			31
MCO	Monaco	Europe	no	5,380			32
NLD	Netherlands	Europe	no	1,593,735			33
NOR	Norway	Europe	no	386,892			34
SMR	San Marino	Europe	no	1,846			35
SVK	Slovakia	Europe	no	124,390			36
SVN	Slovenia	Europe	no	36,896			37
ESP	Spain	Europe	no	2,695,139			38
SWE	Sweden	Europe	no	369,792			39
CHE	Switzerland	Europe	no	839,518			40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			41
MLT	Malta	Pacific	no	18,630			42
CYM	Cayman Islands	Caribbean	no	3,603	42	11.5	1
TWN	Taiwan	Asia	no	872,409	4,441	5.1	2
MEX	Mexico	Latin America	no	1,818,298	3,472	1.9	3
PRK	Dem People's Rep of Korea	Asia	no	27,936	20	0.7	4
VEN	Venezuela	Latin America	no	435,869	66	0.2	5
PAN	Panama	Latin America	no	30,296	2	0.1	6
CRI	Costa Rica	Latin America	no	38,475	1	0.0	7
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	0.0	8
MYS	Malaysia	Asia	no	318,727	6	0.0	9
COL	Colombia	Latin America	no	325,385	7	0.0	10
BWA	Botswana	Sub Saharan Africa	no	18,941	0	0.0	11
KAZ	Kazakhstan	Asia	no	180,409			12
LBN	Lebanon	Asia	no	56,965			13
TUR	Turkey	Asia	no	1,578,228			14
RUS	Russian Federation	Europe	no	2,209,139	2		15
BLR	Belarus	Europe	no	74,427			16
BGR	Bulgaria	Europe	no	70,023			17
HRV	Croatia	Europe	no	65,145			18
GIB	Gibraltar	Europe	no	3,141			19
HUN	Hungary	Europe	no	286,209			20
LVA	Latvia	Europe	no	39,277			21
LTU	Lithuania	Europe	no	53,397			22
MNE	Montenegro	Europe	no	2,738			23
POL	Poland	Europe	no	659,150			24
SRB	Serbia	Europe	no	16,907			25
ARG	Argentina	Latin America	no	403,909			26
BRA	Brazil	Latin America	no	1,715,746			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
CHL	Chile	Latin America	no	326,640			28
URY	Uruguay	Latin America	no	28,590			29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903			30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			31
GAB	Gabon	Sub Saharan Africa	no	25,086			32
PHL	Philippines	Asia	no	186,193	2,039	11.0	1
HND	Honduras	Latin America	no	18,844	70	3.7	2
CHN	China	Asia	no	4,512,825	8,954	2.0	3
GTM	Guatemala	Latin America	no	38,263	18	0.5	4
SLV	El Salvador	Latin America	no	22,582	5	0.2	5
LKA	Sri Lanka	Asia	no	49,967	5	0.1	6
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.1	7
IDN	Indonesia	Asia	no	575,183	41	0.1	8
BTN	Bhutan	Asia	no	1,167		0.0	9
THA	Thailand	Asia	no	394,598	7	0.0	10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0		11
ARM	Armenia	Asia	no	14,187			12
AZE	Azerbaijan	Asia	no	45,197			13
GEO	Georgia	Asia	no	21,157			14
IRQ	Iraq	Asia	no	47,245			15
JOR	Jordan	Asia	no	40,997			16
MNG	Mongolia	Asia	no	9,273			17
SYR	Syrian Arab Republic	Asia	no	68,489			18
TKM	Turkmenistan	Asia	no	12,707			19
ALB	Albania	Europe	no	13,964			20
BIH	Bosnia and Herzegovina	Europe	no	10,433			21
FRO	Faroe Islands	Europe	no	1,012			22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			23
MDA	Moldova, Republic of	Europe	no	9,896			24
UKR	Ukraine	Europe	no	278,497			25
BOL	Bolivia	Latin America	no	13,112			26
ECU	Ecuador	Latin America	no	68,550			27
PRY	Paraguay	Latin America	no	19,203			28
PER	Peru	Latin America	no	189,980			29
DZA	Algeria	North Africa	no	259,977			30
EGY	Egypt	North Africa	no	234,939			31
MAR	Morocco	North Africa	no	136,300			32
TUN	Tunisia	North Africa	no	65,420			33
AGO	Angola	Sub Saharan Africa	no	25,225			34
CMR	Cameroon	Sub Saharan Africa	no	16,950			35
COG	Congo	Sub Saharan Africa	no	12,566			36
DJI	Djibouti	Sub Saharan Africa	no	2,525			37
NAM	Namibia	Sub Saharan Africa	no	7,239			38
TCA	Turks and Caicos islands	Caribbean	no	332	4	10.5	1
GLP	Guadeloupe	Caribbean	no	19,838	192	9.7	2
REU	Réunion	Sub Saharan Africa	no	42,937	261	6.1	3
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	5.8	4
MTQ	Martinique	Caribbean	no	21,052	103	4.9	5
MYT	Mayotte	Sub Saharan Africa	no	2,341	8	3.3	6
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1.4	7
BGD	Bangladesh	Asia	no	72,949	58	0.8	8
NPL	Nepal	Asia	no	6,537	2	0.3	9
NIC	Nicaragua	Latin America	no	10,935	3	0.3	10
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.3	11
VNM	Viet Nam	Asia	no	115,441	23	0.2	12
IND	India	Asia	no	1,429,881	230	0.2	13
PAK	Pakistan	Asia	no	170,444	24	0.1	14
MMR	Myanmar	Asia	no	20,572	3	0.1	15
MWI	Malawi	Sub Saharan Africa	no	1,883	0	0.1	16
KHM	Cambodia	Asia	no	4,335	0	0.1	17
GUF	French Guiana	Latin America	no	8,339	0	0.0	18
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.0	19
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	0.0	20
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	0.0	21
AFG	Afghanistan	Asia	no	16,132			22
KGZ	Kyrgyzstan	Asia	no	3,644			23
TJK	Tajikistan	Asia	no	5,576			24
UZB	Uzbekistan	Asia	no	44,370			25
YEM	Yemen	Asia	no	21,556			26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [%]	Ranking
LSO	Lesotho	Sub Saharan Africa	no	3,522			27
BEN	Benin	Sub Saharan Africa	no	3,585			28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			29
BDI	Burundi	Sub Saharan Africa	no	168			30
CAF	Central African Republic	Sub Saharan Africa	no	916			31
TCO	Chad	Sub Saharan Africa	no	6,664			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			34
ERI	Eritrea	Sub Saharan Africa	no	1,892			35
ETH	Ethiopia	Sub Saharan Africa	no	5,141			36
GMB	Gambia	Sub Saharan Africa	no	680			37
GHA	Ghana	Sub Saharan Africa	no	12,649			38
GIN	Guinea	Sub Saharan Africa	no	3,259			39
KEN	Kenya	Sub Saharan Africa	no	18,470			40
LBR	Liberia	Sub Saharan Africa	no	515			41
MLI	Mali	Sub Saharan Africa	no	3,869			42
MRT	Mauritania	Sub Saharan Africa	no	3,622			43
NER	Niger	Sub Saharan Africa	no	2,800			44
NGA	Nigeria	Sub Saharan Africa	no	121,669			45
RWA	Rwanda	Sub Saharan Africa	no	1,558			46
SEN	Senegal	Sub Saharan Africa	no	11,619			47
SLE	Sierra Leone	Sub Saharan Africa	no	523			48
SOM	Somalia	Sub Saharan Africa	no	3,573			49
SDN	Sudan	Sub Saharan Africa	no	26,851			50
TGO	Togo	Sub Saharan Africa	no	1,644			51
UGA	Uganda	Sub Saharan Africa	no	6,628			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173			53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12	4.9	1
BHS	Bahamas	Caribbean	yes	21,313	70	3.3	2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17	0.5	3
BHR	Bahrain	Asia	yes	32,575			4
SGP	Singapore	Pacific	yes	526,900			5
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	5.3	1
DMA	Dominica	Caribbean	yes	356	1	3.7	2
LCA	Saint Lucia	Caribbean	yes	543	2	2.7	3
BRB	Barbados	Caribbean	yes	4,677	10	2.2	4
JAM	Jamaica	Caribbean	yes	28,963	59	2.0	5
PLW	Palau	Pacific	yes	279	1	1.8	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2	1.5	7
GRD	Grenada	Caribbean	yes	1,229	1	1.2	8
CUB	Cuba	Caribbean	yes	46,280	40	0.9	9
DOM	Dominican Republic	Caribbean	yes	72,573	61	0.8	10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	0.2	11
SUR	Suriname	Latin America	yes	2,797	0	0.0	12
MDV	Maldives	Pacific	yes	907			13
KNA	Saint Kitts and Nevis	Caribbean	yes	2			14
TON	Tonga	Pacific	yes	230	2	10.1	1
WSM	Samoa	Pacific	yes	361	3	6.8	2
FJI	Fiji	Asia	yes	2,100	13	6.0	3
BLZ	Belize	Latin America	yes	1,251	6	4.7	4
FSM	Micronesia (Federated States of)	Pacific	yes	585	3	4.4	5
VUT	Vanuatu	Asia	yes	102	0	1.6	6
GUY	Guyana	Latin America	yes	3,468	0	0.1	7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949		0.0	8
AIA	Anguilla	Caribbean	yes	20	0	15.0	1
VIR	United States Virgin Islands	Caribbean	yes	1,755	16	9.2	2
VGB	British Virgin Islands	Caribbean	yes	424	3	6.9	3
PRI	Puerto Rico	Caribbean	yes	135,818	795	5.9	4
PYF	French Polynesia	Pacific	yes	6,568	32	4.9	5
HTI	Haiti	Caribbean	yes	8,553	32	3.7	6
COM	Comoros	Sub Saharan Africa	yes	310	1	3.1	7
ABW	Aruba	Caribbean	yes	6,526	11	1.7	8
SLB	Solomon islands	Asia	yes	211	0	0.7	9
NCL	New Caledonia	Asia	yes	4,771	2	0.3	10
PNG	Papua New Guinea	Asia	yes	5,433	0	0.1	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [%]	
KOR	Republic of Korea	Asia	no	2,787,207	8,652	986,184	8.8	1
JPN	Japan	Asia	no	14,617,394	45,933	5,396,265	8.5	2
MAC	Macau	Asia	no	96,993	68	11,994	5.7	3
HKG	Hong Kong	Asia	no	1,138,019	927	211,863	4.4	4
USA	United States of America	North America	no	22,004,154	11,460	15,103,640	0.8	5
CAN	Canada	North America	no	2,051,584	310	1,606,667	0.2	6
ARE	United Arab Emirates	Asia	no	248,015	2	270,334	0.0	7
BRN	Brunei Darussalam	Asia	no	20,094	11			8
OMN	Oman	Asia	no	42,201	2			9
NZL	New Zealand	Australia	no	238,609	30			10
AUS	Australia	Australia	no	1,832,960	84			11
QAT	Qatar	Asia	no	113,981	0			12
CYP	Cyprus	Asia	no	23,484		24,623		13
ISR	Israel	Asia	no	293,550		212,896		14
KWT	Kuwait	Asia	no	202,236				15
SAU	Saudi Arabia	Asia	no	751,807		341,826		16
PRT	Portugal	Europe	no	296,296	0	245,251		17
AUT	Austria	Europe	no	615,592		362,737		18
BEL	Belgium	Europe	no	739,159		456,696		19
CZE	Czech Republic	Europe	no	336,714		182,876		20
DNK	Denmark	Europe	no	381,265		292,535		21
EST	Estonia	Europe	no	28,069		17,933		22
FIN	Finland	Europe	no	209,050		235,640		23
FRA	France	Europe	no	3,653,264		2,620,062		24
DEU	Germany	Europe	no	5,800,986		3,101,126		25
GRC	Greece	Europe	no	642,888		327,811		26
ISL	Iceland	Europe	no	25,742		11,313		27
IRL	Ireland	Europe	no	244,117		171,957		28
ITA	Italy	Europe	no	3,701,619		2,087,749		29
LIE	Liechtenstein	Europe	no	8,070				30
LUX	Luxembourg	Europe	no	45,036		36,700		31
MCO	Monaco	Europe	no	5,380				32
NLD	Netherlands	Europe	no	1,593,735		721,171		33
NOR	Norway	Europe	no	386,892		358,009		34
SMR	San Marino	Europe	no	1,846				35
SVK	Slovakia	Europe	no	124,390		88,405		36
SVN	Slovenia	Europe	no	36,896		46,643		37
ESP	Spain	Europe	no	2,695,139		1,437,861		38
SWE	Sweden	Europe	no	369,792		431,251		39
CHE	Switzerland	Europe	no	839,518		468,037		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,325,009		41
MLT	Malta	Pacific	no	18,630		8,111		42
MEX	Mexico	Latin America	no	1,818,298	3,472	1,049,803	3.3	1
VEN	Venezuela	Latin America	no	435,869	66	346,724	0.2	2
PAN	Panama	Latin America	no	30,296	2	27,738	0.1	3
CRI	Costa Rica	Latin America	no	38,475	1	36,941	0.0	4
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	369,463	0.0	5
MYS	Malaysia	Asia	no	318,727	6	195,443	0.0	6
BWA	Botswana	Sub Saharan Africa	no	18,941	0	15,360	0.0	7
COL	Colombia	Latin America	no	325,385	7	294,580	0.0	8
CYM	Cayman Islands	Caribbean	no	3,603	42			9
TWN	Taiwan	Asia	no	872,409	4,441			10
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			11
KAZ	Kazakhstan	Asia	no	180,409		127,087		12
LBN	Lebanon	Asia	no	56,965		47,915		13
TUR	Turkey	Asia	no	1,578,228		774,921		14
RUS	Russian Federation	Europe	no	2,209,139	2	1,356,393		15
BLR	Belarus	Europe	no	74,427		62,212		16
BGR	Bulgaria	Europe	no	70,023		48,622		17
HRV	Croatia	Europe	no	65,145		61,162		18
GIB	Gibraltar	Europe	no	3,141				19
HUN	Hungary	Europe	no	286,209		120,269		20
LVA	Latvia	Europe	no	39,277		24,210		21
LTU	Lithuania	Europe	no	53,397		36,811		22
MNE	Montenegro	Europe	no	2,738		5,265		23
POL	Poland	Europe	no	659,150		475,111		24
SRB	Serbia	Europe	no	16,907		44,764		25
ARG	Argentina	Latin America	no	403,909		356,545		26
BRA	Brazil	Latin America	no	1,715,746		2,108,637		27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNE [USD million]	AAL/GNE [%]	Ranking
CHL	Chile	Latin America	no	326,640		198,120		28
URY	Uruguay	Latin America	no	28,590		39,936		29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765				31
GAB	Gabon	Sub Saharan Africa	no	25,086		10,274		32
PHL	Philippines	Asia	no	186,193	2,039	203,208	10.0	1
HND	Honduras	Latin America	no	18,844	70	18,594	3.7	2
CHN	China	Asia	no	4,512,825	8,954	5,694,512	1.6	3
GTM	Guatemala	Latin America	no	38,263	18	45,670	0.4	4
SLV	El Salvador	Latin America	no	22,582	5	24,921	0.2	5
LKA	Sri Lanka	Asia	no	49,967	5	54,079	0.1	6
IDN	Indonesia	Asia	no	575,183	41	695,009	0.1	7
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	4,329	0.1	8
THA	Thailand	Asia	no	394,598	7	295,072	0.0	9
BTN	Bhutan	Asia	no	1,167				10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0			11
ARM	Armenia	Asia	no	14,187		11,639		12
AZE	Azerbaijan	Asia	no	45,197		33,777		13
GEO	Georgia	Asia	no	21,157		13,709		14
IRQ	Iraq	Asia	no	47,245				15
JOR	Jordan	Asia	no	40,997		33,470		16
MNG	Mongolia	Asia	no	9,273		6,675		17
SYR	Syrian Arab Republic	Asia	no	68,489		59,401		18
TKM	Turkmenistan	Asia	no	12,707		20,575		19
ALB	Albania	Europe	no	13,964		14,377		20
BIH	Bosnia and Herzegovina	Europe	no	10,433		20,030		21
FRO	Faroe Islands	Europe	no	1,012				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		10,902		23
MDA	Moldova, Republic of	Europe	no	9,896		8,053		24
UKR	Ukraine	Europe	no	278,497		141,773		25
BOL	Bolivia	Latin America	no	13,112		18,301		26
ECU	Ecuador	Latin America	no	68,550		61,265		27
PRY	Paraguay	Latin America	no	19,203		17,941		28
PER	Peru	Latin America	no	189,980		152,561		29
DZA	Algeria	North Africa	no	259,977				30
EGY	Egypt	North Africa	no	234,939		229,362		31
MAR	Morocco	North Africa	no	136,300		99,808		32
TUN	Tunisia	North Africa	no	65,420		46,643		33
AGO	Angola	Sub Saharan Africa	no	25,225		72,456		34
CMR	Cameroon	Sub Saharan Africa	no	16,950		23,429		35
COG	Congo	Sub Saharan Africa	no	12,566		8,109		36
DJI	Djibouti	Sub Saharan Africa	no	2,525				37
NAM	Namibia	Sub Saharan Africa	no	7,239		12,035		38
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	11,309	0.7	1
BGD	Bangladesh	Asia	no	72,949	58	106,991	0.5	2
NIC	Nicaragua	Latin America	no	10,935	3	8,405	0.4	3
VNM	Viet Nam	Asia	no	115,441	23	117,363	0.2	4
PAK	Pakistan	Asia	no	170,444	24	186,087	0.1	5
IND	India	Asia	no	1,429,881	230	1,783,129	0.1	6
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	7,629	0.1	7
MWI	Malawi	Sub Saharan Africa	no	1,883	0	5,605	0.1	8
KHM	Cambodia	Asia	no	4,335	0	11,854	0.0	9
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	8,897	0.0	10
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	14,723	0.0	11
TCA	Turks and Caicos Islands	Caribbean	no	332	4			12
GLP	Guadeloupe	Caribbean	no	19,838	192			13
MTQ	Martinique	Caribbean	no	21,052	103			14
REU	Réunion	Sub Saharan Africa	no	42,937	261			15
MDG	Madagascar	Sub Saharan Africa	no	2,575	15			16
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			17
NPL	Nepal	Asia	no	6,537	2			18
MMR	Myanmar	Asia	no	20,572	3			19
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	26,224		20
LSO	Lesotho	Sub Saharan Africa	no	3,522		3,511		21
GUF	French Guiana	Latin America	no	8,339	0			22
AFG	Afghanistan	Asia	no	16,132		1,852		23
KGZ	Kyrgyzstan	Asia	no	3,644		6,067		24
TJK	Tajikistan	Asia	no	5,576		8,227		25
UZB	Uzbekistan	Asia	no	44,370		38,768		26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNE [USD million]		AAL/GNE [‰]	Ranking
YEM	Yemen	Asia	no	21,556					27
BEN	Benin	Sub Saharan Africa	no	3,585		7,536			28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120					29
BDI	Burundi	Sub Saharan Africa	no	168					30
CAF	Central African Republic	Sub Saharan Africa	no	916					31
TCO	Chad	Sub Saharan Africa	no	6,664		9,469			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		15,617			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		21,734			34
ERI	Eritrea	Sub Saharan Africa	no	1,892					35
ETH	Ethiopia	Sub Saharan Africa	no	5,141		35,978			36
GMB	Gambia	Sub Saharan Africa	no	680		963			37
GHA	Ghana	Sub Saharan Africa	no	12,649		35,414			38
GIN	Guinea	Sub Saharan Africa	no	3,259		4,711			39
KEN	Kenya	Sub Saharan Africa	no	18,470		35,486			40
LBR	Liberia	Sub Saharan Africa	no	515					41
MLI	Mali	Sub Saharan Africa	no	3,869					42
MRT	Mauritania	Sub Saharan Africa	no	3,622		4,195			43
NER	Niger	Sub Saharan Africa	no	2,800					44
NGA	Nigeria	Sub Saharan Africa	no	121,669		168,996			45
RWA	Rwanda	Sub Saharan Africa	no	1,558					46
SEN	Senegal	Sub Saharan Africa	no	11,619		15,485			47
SLE	Sierra Leone	Sub Saharan Africa	no	523		2,142			48
SOM	Somalia	Sub Saharan Africa	no	3,573					49
SDN	Sudan	Sub Saharan Africa	no	26,851		61,511			50
TGO	Togo	Sub Saharan Africa	no	1,644					51
UGA	Uganda	Sub Saharan Africa	no	6,628		18,757			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173					53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12	1,329	9.0		1
BHS	Bahamas	Caribbean	yes	21,313	70				2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17				3
BHR	Bahrain	Asia	yes	32,575					4
SGP	Singapore	Pacific	yes	526,900		150,187			5
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	10,934	6.3		1
JAM	Jamaica	Caribbean	yes	28,963	59	16,776	3.5		2
BRB	Barbados	Caribbean	yes	4,677	10	4,317	2.3		3
DMA	Dominica	Caribbean	yes	356	1	573	2.3		4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2	914	1.6		5
GRD	Grenada	Caribbean	yes	1,229	1	996	1.4		6
LCA	Saint Lucia	Caribbean	yes	543	2	1,355	1.1		7
DOM	Dominican Republic	Caribbean	yes	72,573	61	57,847	1.1		8
PLW	Palau	Pacific	yes	279	1				9
CUB	Cuba	Caribbean	yes	46,280	40				10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1				11
SUR	Suriname	Latin America	yes	2,797	0				12
MDV	Maldives	Pacific	yes	907		2,244			13
KNA	Saint Kitts and Nevis	Caribbean	yes	2		766			14
TON	Tonga	Pacific	yes	230	2	510	4.5		1
FJI	Fiji	Asia	yes	2,100	13	3,569	3.6		2
WSM	Samoa	Pacific	yes	361	3	727	3.4		3
VUT	Vanuatu	Asia	yes	102	0	743	0.3		4
BLZ	Belize	Latin America	yes	1,251	6				5
FSM	Micronesia (Federated States of)	Pacific	yes	585	3				6
GUY	Guyana	Latin America	yes	3,468	0				7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949					8
HTI	Haiti	Caribbean	yes	8,553	32	9,743	3.3		1
SLB	Solomon islands	Asia	yes	211	0	885	0.2		2
PNG	Papua New Guinea	Asia	yes	5,433	0	9,217	0.0		3
AIA	Anguilla	Caribbean	yes	20	0				4
VIR	United States Virgin Islands	Caribbean	yes	1,755	16				5
VGB	British Virgin Islands	Caribbean	yes	424	3				6
PRI	Puerto Rico	Caribbean	yes	135,818	795				7
COM	Comoros	Sub Saharan Africa	yes	310	1				8
PYF	French Polynesia	Pacific	yes	6,568	32				9
ABW	Aruba	Caribbean	yes	6,526	11				10
NCL	New Caledonia	Asia	yes	4,771	2				11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466					12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311					13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GGC [USD million]	AAL/GGC [%]	
KOR	Republic of Korea	Asia	no	2,787,207	8,652	155,748	55.6	1
HKG	Hong Kong	Asia	no	1,138,019	927	18,948	48.9	2
JPN	Japan	Asia	no	14,617,394	45,933	1,094,349	42.0	3
MAC	Macau	Asia	no	96,993	68	2,186	31.0	4
USA	United States of America	North America	no	22,004,154	11,460	2,522,700	4.5	5
CAN	Canada	North America	no	2,051,584	310	343,217	0.9	6
ARE	United Arab Emirates	Asia	no	248,015	2	24,545	0.1	7
PRT	Portugal	Europe	no	296,296	0	49,074	0.0	8
BRN	Brunei Darussalam	Asia	no	20,094	11			9
OMN	Oman	Asia	no	42,201	2			10
NZL	New Zealand	Australia	no	238,609	30			11
AUS	Australia	Australia	no	1,832,960	84			12
QAT	Qatar	Asia	no	113,981	0			13
CYP	Cyprus	Asia	no	23,484		4,558		14
ISR	Israel	Asia	no	293,550		52,616		15
KWT	Kuwait	Asia	no	202,236				16
SAU	Saudi Arabia	Asia	no	751,807		97,875		17
AUT	Austria	Europe	no	615,592		73,430		18
BEL	Belgium	Europe	no	739,159		113,598		19
CZE	Czech Republic	Europe	no	336,714		41,897		20
DNK	Denmark	Europe	no	381,265		90,977		21
EST	Estonia	Europe	no	28,069		3,959		22
FIN	Finland	Europe	no	209,050		58,644		23
FRA	France	Europe	no	3,653,264		635,621		24
DEU	Germany	Europe	no	5,800,986		647,378		25
GRC	Greece	Europe	no	642,888		54,736		26
ISL	Iceland	Europe	no	25,742		3,261		27
IRL	Ireland	Europe	no	244,117		39,102		28
ITA	Italy	Europe	no	3,701,619		435,241		29
LIE	Liechtenstein	Europe	no	8,070				30
LUX	Luxembourg	Europe	no	45,036		8,868		31
MCO	Monaco	Europe	no	5,380				32
NLD	Netherlands	Europe	no	1,593,735		221,964		33
NOR	Norway	Europe	no	386,892		92,372		34
SMR	San Marino	Europe	no	1,846				35
SVK	Slovakia	Europe	no	124,390		17,073		36
SVN	Slovenia	Europe	no	36,896		9,752		37
ESP	Spain	Europe	no	2,695,139		292,417		38
SWE	Sweden	Europe	no	369,792		123,918		39
CHE	Switzerland	Europe	no	839,518		60,549		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		518,869		41
MLT	Malta	Pacific	no	18,630		1,711		42
MEX	Mexico	Latin America	no	1,818,298	3,472	120,640	28.8	1
VEN	Venezuela	Latin America	no	435,869	66	42,419	1.6	2
PAN	Panama	Latin America	no	30,296	2	1,561	1.4	3
MYS	Malaysia	Asia	no	318,727	6	30,273	0.2	4
CRI	Costa Rica	Latin America	no	38,475	1	6,358	0.2	5
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	71,742	0.2	6
COL	Colombia	Latin America	no	325,385	7	46,769	0.2	7
BWA	Botswana	Sub Saharan Africa	no	18,941	0	3,130	0.1	8
RUS	Russian Federation	Europe	no	2,209,139	2	287,875	0.0	9
CYM	Cayman Islands	Caribbean	no	3,603	42			10
TWN	Taiwan	Asia	no	872,409	4,441			11
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			12
KAZ	Kazakhstan	Asia	no	180,409		16,117		13
LBN	Lebanon	Asia	no	56,965		4,711		14
TUR	Turkey	Asia	no	1,578,228		104,758		15
BLR	Belarus	Europe	no	74,427		8,828		16
BGR	Bulgaria	Europe	no	70,023		7,539		17
HRV	Croatia	Europe	no	65,145		13,084		18
GIB	Gibraltar	Europe	no	3,141				19
HUN	Hungary	Europe	no	286,209		28,084		20
LVA	Latvia	Europe	no	39,277		4,122		21
LTU	Lithuania	Europe	no	53,397		7,241		22
MNE	Montenegro	Europe	no	2,738		775		23
POL	Poland	Europe	no	659,150		88,643		24
SRB	Serbia	Europe	no	16,907		7,380		25
ARG	Argentina	Latin America	no	403,909		55,024		26
BRA	Brazil	Latin America	no	1,715,746		442,019		27



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CHL	Chile	Latin America	no	326,640			26,588		28
URY	Uruguay	Latin America	no	28,590			5,117		29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903					30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765					31
GAB	Gabon	Sub Saharan Africa	no	25,086			1,267		32
PHL	Philippines	Asia	no	186,193	2,039		19,403	105.1	1
HND	Honduras	Latin America	no	18,844	70		2,777	25.0	2
CHN	China	Asia	no	4,512,825	8,954		791,999	11.3	3
GTM	Guatemala	Latin America	no	38,263	18		4,254	4.2	4
SLV	El Salvador	Latin America	no	22,582	5		2,312	2.3	5
IDN	Indonesia	Asia	no	575,183	41		64,015	0.6	6
LKA	Sri Lanka	Asia	no	49,967	5		7,718	0.6	7
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0		913	0.2	8
THA	Thailand	Asia	no	394,598	7		41,294	0.2	9
BTN	Bhutan	Asia	no	1,167					10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0				11
ARM	Armenia	Asia	no	14,187			1,231		12
AZE	Azerbaijan	Asia	no	45,197			5,852		13
GEO	Georgia	Asia	no	21,157			2,453		14
IRQ	Iraq	Asia	no	47,245					15
JOR	Jordan	Asia	no	40,997			5,910		16
MNG	Mongolia	Asia	no	9,273			851		17
SYR	Syrian Arab Republic	Asia	no	68,489			5,991		18
TKM	Turkmenistan	Asia	no	12,707			2,212		19
ALB	Albania	Europe	no	13,964			952		20
BIH	Bosnia and Herzegovina	Europe	no	10,433			3,498		21
FRO	Faroe Islands	Europe	no	1,012					22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			1,683		23
MDA	Moldova, Republic of	Europe	no	9,896			1,377		24
UKR	Ukraine	Europe	no	278,497			27,731		25
BOL	Bolivia	Latin America	no	13,112			2,718		26
ECU	Ecuador	Latin America	no	68,550			6,807		27
PRY	Paraguay	Latin America	no	19,203			1,711		28
PER	Peru	Latin America	no	189,980			15,659		29
DZA	Algeria	North Africa	no	259,977					30
EGY	Egypt	North Africa	no	234,939			24,436		31
MAR	Morocco	North Africa	no	136,300			15,913		32
TUN	Tunisia	North Africa	no	65,420			7,209		33
AGO	Angola	Sub Saharan Africa	no	25,225					34
CMR	Cameroon	Sub Saharan Africa	no	16,950					35
COG	Congo	Sub Saharan Africa	no	12,566			1,186		36
DJI	Djibouti	Sub Saharan Africa	no	2,525					37
NAM	Namibia	Sub Saharan Africa	no	7,239			2,692		38
BGD	Bangladesh	Asia	no	72,949	58		5,387	10.8	1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8		1,166	6.5	2
NIC	Nicaragua	Latin America	no	10,935	3		627	4.9	3
VNM	Viet Nam	Asia	no	115,441	23		6,947	3.3	4
PAK	Pakistan	Asia	no	170,444	24		14,053	1.7	5
IND	India	Asia	no	1,429,881	230		198,830	1.2	6
LAO	Lao People's Democratic Republic	Asia	no	2,322	1		672	0.9	7
KHM	Cambodia	Asia	no	4,335	0		713	0.6	8
MWI	Malawi	Sub Saharan Africa	no	1,883	0		976	0.3	9
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0		1,281	0.1	10
ZMB	Zambia	Sub Saharan Africa	no	9,806	0		2,153	0.1	11
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0		4,052	0.0	12
TCA	Turks and Caicos islands	Caribbean	no	332	4				13
GLP	Guadeloupe	Caribbean	no	19,838	192				14
MTQ	Martinique	Caribbean	no	21,052	103				15
REU	Réunion	Sub Saharan Africa	no	42,937	261				16
MDG	Madagascar	Sub Saharan Africa	no	2,575	15				17
MYT	Mayotte	Sub Saharan Africa	no	2,341	8				18
NPL	Nepal	Asia	no	6,537	2				19
MMR	Myanmar	Asia	no	20,572	3				20
LSO	Lesotho	Sub Saharan Africa	no	3,522			935		21
GUF	French Guiana	Latin America	no	8,339	0				22
AFG	Afghanistan	Asia	no	16,132					23
KGZ	Kyrgyzstan	Asia	no	3,644			877		24
TJK	Tajikistan	Asia	no	5,576			1,658		25
UZB	Uzbekistan	Asia	no	44,370			6,853		26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GGC [USD million]		AAL/GGC [‰]	Ranking
YEM	Yemen	Asia	no	21,556					27
BEN	Benin	Sub Saharan Africa	no	3,585					28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120					29
BDI	Burundi	Sub Saharan Africa	no	168					30
CAF	Central African Republic	Sub Saharan Africa	no	916					31
TCD	Chad	Sub Saharan Africa	no	6,664		1,131			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		719			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		1,968			34
ERI	Eritrea	Sub Saharan Africa	no	1,892					35
ETH	Ethiopia	Sub Saharan Africa	no	5,141		3,029			36
GMB	Gambia	Sub Saharan Africa	no	680		121			37
GHA	Ghana	Sub Saharan Africa	no	12,649		3,511			38
GIN	Guinea	Sub Saharan Africa	no	3,259		339			39
KEN	Kenya	Sub Saharan Africa	no	18,470		4,226			40
LBR	Liberia	Sub Saharan Africa	no	515					41
MLI	Mali	Sub Saharan Africa	no	3,869					42
MRT	Mauritania	Sub Saharan Africa	no	3,622		646			43
NER	Niger	Sub Saharan Africa	no	2,800					44
NGA	Nigeria	Sub Saharan Africa	no	121,669					45
RWA	Rwanda	Sub Saharan Africa	no	1,558					46
SEN	Senegal	Sub Saharan Africa	no	11,619		1,124			47
SLE	Sierra Leone	Sub Saharan Africa	no	523		233			48
SOM	Somalia	Sub Saharan Africa	no	3,573					49
SDN	Sudan	Sub Saharan Africa	no	26,851		9,428			50
TGO	Togo	Sub Saharan Africa	no	1,644					51
UGA	Uganda	Sub Saharan Africa	no	6,628		2,015			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173					53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12				1
BHS	Bahamas	Caribbean	yes	21,313	70				2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17				3
BHR	Bahrain	Asia	yes	32,575					4
SGP	Singapore	Pacific	yes	526,900		22,293			5
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	1,393		49.5	1
JAM	Jamaica	Caribbean	yes	28,963	59	2,368		24.9	2
DMA	Dominica	Caribbean	yes	356	1	81		16.1	3
DOM	Dominican Republic	Caribbean	yes	72,573	61	3,965		15.3	4
BRB	Barbados	Caribbean	yes	4,677	10	835		12.1	5
LCA	Saint Lucia	Caribbean	yes	543	2	192		7.8	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2				7
GRD	Grenada	Caribbean	yes	1,229	1				8
PLW	Palau	Pacific	yes	279	1				9
CUB	Cuba	Caribbean	yes	46,280	40				10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1				11
SUR	Suriname	Latin America	yes	2,797	0				12
MDV	Maldives	Pacific	yes	907					13
KNA	Saint Kitts and Nevis	Caribbean	yes	2					14
TON	Tonga	Pacific	yes	230	2	67		34.5	1
GUY	Guyana	Latin America	yes	3,468	0	341		0.6	2
FJI	Fiji	Asia	yes	2,100	13				3
WSM	Samoa	Pacific	yes	361	3				4
VUT	Vanuatu	Asia	yes	102	0				5
BLZ	Belize	Latin America	yes	1,251	6				6
FSM	Micronesia (Federated States of)	Pacific	yes	585	3				7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949					8
PNG	Papua New Guinea	Asia	yes	5,433	0	897		0.3	1
HTI	Haiti	Caribbean	yes	8,553	32				2
SLB	Solomon islands	Asia	yes	211	0				3
AIA	Anguilla	Caribbean	yes	20	0				4
VIR	United States Virgin Islands	Caribbean	yes	1,755	16				5
VGB	British Virgin Islands	Caribbean	yes	424	3				6
PRI	Puerto Rico	Caribbean	yes	135,818	795				7
COM	Comoros	Sub Saharan Africa	yes	310	1				8
PYF	French Polynesia	Pacific	yes	6,568	32				9
ABW	Aruba	Caribbean	yes	6,526	11				10
NCL	New Caledonia	Asia	yes	4,771	2				11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466					12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311					13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value)	(Cyclones)	GFCF(GCF)	AAL/GFCF(GCF)	
				[USD million]	[USD million]	[USD million]	[%]	
KOR	Republic of Korea	Asia	no	2,787,207	8,652	200,936	43.1	1
JPN	Japan	Asia	no	14,617,394	45,933	1,144,171	40.1	2
HKG	Hong Kong	Asia	no	1,138,019	927	52,025	17.8	3
MAC	Macau	Asia	no	96,993	68	4,316	15.7	4
BRN	Brunei Darussalam	Asia	no	20,094	11	1,279	8.7	5
USA	United States of America	North America	no	22,004,154	11,460	2,212,313	5.2	6
NZL	New Zealand	Australia	no	238,609	30	15,614	1.9	7
CAN	Canada	North America	no	2,051,584	310	203,409	1.5	8
AUS	Australia	Australia	no	1,832,960	84	150,632	0.6	9
PRT	Portugal	Europe	no	296,296	0	29,628	0.0	10
ARE	United Arab Emirates	Asia	no	248,015	2			11
OMN	Oman	Asia	no	42,201	2			12
QAT	Qatar	Asia	no	113,981	0			13
CYP	Cyprus	Asia	no	23,484		2,630		14
ISR	Israel	Asia	no	293,550		30,157		15
KWT	Kuwait	Asia	no	202,236				16
SAU	Saudi Arabia	Asia	no	751,807		66,377		17
AUT	Austria	Europe	no	615,592		48,760		18
BEL	Belgium	Europe	no	739,159		59,532		19
CZE	Czech Republic	Europe	no	336,714		22,186		20
DNK	Denmark	Europe	no	381,265		39,721		21
EST	Estonia	Europe	no	28,069		3,738		22
FIN	Finland	Europe	no	209,050		30,495		23
FRA	France	Europe	no	3,653,264		306,117		24
DEU	Germany	Europe	no	5,800,986		413,986		25
GRC	Greece	Europe	no	642,888		42,781		26
ISL	Iceland	Europe	no	25,742		3,437		27
IRL	Ireland	Europe	no	244,117		33,055		28
ITA	Italy	Europe	no	3,701,619		253,228		29
LIE	Liechtenstein	Europe	no	8,070				30
LUX	Luxembourg	Europe	no	45,036		6,616		31
MCO	Monaco	Europe	no	5,380				32
NLD	Netherlands	Europe	no	1,593,735		92,014		33
NOR	Norway	Europe	no	386,892		47,607		34
SMR	San Marino	Europe	no	1,846				35
SVK	Slovakia	Europe	no	124,390		11,975		36
SVN	Slovenia	Europe	no	36,896		7,746		37
ESP	Spain	Europe	no	2,695,139		216,748		38
SWE	Sweden	Europe	no	369,792		60,814		39
CHE	Switzerland	Europe	no	839,518		64,161		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		335,845		41
MLT	Malta	Pacific	no	18,630		1,008		42
MEX	Mexico	Latin America	no	1,818,298	3,472	159,403	21.8	1
VEN	Venezuela	Latin America	no	435,869	66	48,477	1.4	2
PAN	Panama	Latin America	no	30,296	2	4,074	0.5	3
ZAF	South Africa	Sub Saharan Africa	no	335,148	11	38,298	0.3	4
CRI	Costa Rica	Latin America	no	38,475	1	4,507	0.2	5
BWA	Botswana	Sub Saharan Africa	no	18,941	0	1,880	0.2	6
COL	Colombia	Latin America	no	325,385	7	33,173	0.2	7
MYS	Malaysia	Asia	no	318,727	6	30,724	0.2	8
RUS	Russian Federation	Europe	no	2,209,139	2	100,485	0.0	9
CYM	Cayman Islands	Caribbean	no	3,603	42			10
TWN	Taiwan	Asia	no	872,409	4,441			11
PRK	Dem People's Rep of Korea	Asia	no	27,936	20			12
KAZ	Kazakhstan	Asia	no	180,409		11,258		13
LBN	Lebanon	Asia	no	56,965		5,937		14
TUR	Turkey	Asia	no	1,578,228		87,701		15
BLR	Belarus	Europe	no	74,427		8,860		16
BGR	Bulgaria	Europe	no	70,023		5,626		17
HRV	Croatia	Europe	no	65,145		8,147		18
GIB	Gibraltar	Europe	no	3,141				19
HUN	Hungary	Europe	no	286,209		14,219		20
LVA	Latvia	Europe	no	39,277		5,143		21
LTU	Lithuania	Europe	no	53,397		5,768		22
MNE	Montenegro	Europe	no	2,738				23
POL	Poland	Europe	no	659,150		52,601		24
SRB	Serbia	Europe	no	16,907		2,776		25
ARG	Argentina	Latin America	no	403,909		75,477		26
BRA	Brazil	Latin America	no	1,715,746		138,995		27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				TOTAL (Exposed value) [USD million]	(Cyclones) [USD million]	GFCF(GCF) [USD million]	AAL/GFCF(GCF) [‰]	
CHL	Chile	Latin America	no	326,640		27,076		28
URY	Uruguay	Latin America	no	28,590		3,671		29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765				31
GAB	Gabon	Sub Saharan Africa	no	25,086		1,639		32
PHL	Philippines	Asia	no	186,193	2,039	22,170	92.0	1
HND	Honduras	Latin America	no	18,844	70	2,998	23.2	2
CHN	China	Asia	no	4,512,825	8,954	930,625	9.6	3
GTM	Guatemala	Latin America	no	38,263	18	4,200	4.2	4
SLV	El Salvador	Latin America	no	22,582	5	2,799	1.9	5
IDN	Indonesia	Asia	no	575,183	41	52,407	0.8	6
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	265	0.8	7
LKA	Sri Lanka	Asia	no	49,967	5	7,159	0.7	8
THA	Thailand	Asia	no	394,598	7	42,938	0.2	9
IRN	Iran (Islamic Republic of)	Asia	no	676,481	0	46,695	0.0	10
BTN	Bhutan	Asia	no	1,167				11
ARM	Armenia	Asia	no	14,187		1,530		12
AZE	Azerbaijan	Asia	no	45,197		4,557		13
GEO	Georgia	Asia	no	21,157				14
IRQ	Iraq	Asia	no	47,245				15
JOR	Jordan	Asia	no	40,997		3,205		16
MNG	Mongolia	Asia	no	9,273				17
SYR	Syrian Arab Republic	Asia	no	68,489		6,052		18
TKM	Turkmenistan	Asia	no	12,707				19
ALB	Albania	Europe	no	13,964		1,329		20
BIH	Bosnia and Herzegovina	Europe	no	10,433				21
FRO	Faroe Islands	Europe	no	1,012				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		823		23
MDA	Moldova, Republic of	Europe	no	9,896		563		24
UKR	Ukraine	Europe	no	278,497		14,671		25
BOL	Bolivia	Latin America	no	13,112		1,619		26
ECU	Ecuador	Latin America	no	68,550		5,925		27
PRY	Paraguay	Latin America	no	19,203		1,552		28
PER	Peru	Latin America	no	189,980		18,553		29
DZA	Algeria	North Africa	no	259,977		18,029		30
EGY	Egypt	North Africa	no	234,939		30,406		31
MAR	Morocco	North Africa	no	136,300		16,366		32
TUN	Tunisia	North Africa	no	65,420		6,865		33
AGO	Angola	Sub Saharan Africa	no	25,225				34
CMR	Cameroon	Sub Saharan Africa	no	16,950		2,363		35
COG	Congo	Sub Saharan Africa	no	12,566				36
DJI	Djibouti	Sub Saharan Africa	no	2,525				37
NAM	Namibia	Sub Saharan Africa	no	7,239		1,324		38
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	1,317	11.5	1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1,432	5.3	2
BGD	Bangladesh	Asia	no	72,949	58	19,006	3.1	3
NIC	Nicaragua	Latin America	no	10,935	3	1,445	2.1	4
PAK	Pakistan	Asia	no	170,444	24	18,461	1.3	5
VNM	Viet Nam	Asia	no	115,441	23	19,932	1.1	6
IND	India	Asia	no	1,429,881	230	248,602	0.9	7
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	893	0.7	8
KHM	Cambodia	Asia	no	4,335	0	1,494	0.3	9
ZMB	Zambia	Sub Saharan Africa	no	9,806	0	815	0.1	10
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	0	3,995	0.0	11
MWI	Malawi	Sub Saharan Africa	no	1,883	0			12
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0			13
TCA	Turks and Caicos islands	Caribbean	no	332	4			14
GLP	Guadeloupe	Caribbean	no	19,838	192			15
MTQ	Martinique	Caribbean	no	21,052	103			16
REU	Réunion	Sub Saharan Africa	no	42,937	261			17
MYT	Mayotte	Sub Saharan Africa	no	2,341	8			18
NPL	Nepal	Asia	no	6,537	2			19
MMR	Myanmar	Asia	no	20,572	3			20
LSO	Lesotho	Sub Saharan Africa	no	3,522		257		21
GUF	French Guiana	Latin America	no	8,339	0			22
AFG	Afghanistan	Asia	no	16,132				23
KGZ	Kyrgyzstan	Asia	no	3,644		419		24
TJK	Tajikistan	Asia	no	5,576		144		25
UZB	Uzbekistan	Asia	no	44,370				26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GFCF(GCF) AAL/GFCF(GCF) [USD million] [%]		Ranking
YEM	Yemen	Asia	no	21,556				27
BEN	Benin	Sub Saharan Africa	no	3,585		720		28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120				29
BDI	Burundi	Sub Saharan Africa	no	168				30
CAF	Central African Republic	Sub Saharan Africa	no	916				31
TCO	Chad	Sub Saharan Africa	no	6,664				32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433				33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		1,082		34
ERI	Eritrea	Sub Saharan Africa	no	1,892		141		35
ETH	Ethiopia	Sub Saharan Africa	no	5,141		3,519		36
GMB	Gambia	Sub Saharan Africa	no	680				37
GHA	Ghana	Sub Saharan Africa	no	12,649				38
GIN	Guinea	Sub Saharan Africa	no	3,259		391		39
KEN	Kenya	Sub Saharan Africa	no	18,470		3,803		40
LBR	Liberia	Sub Saharan Africa	no	515				41
MLI	Mali	Sub Saharan Africa	no	3,869		1,042		42
MRT	Mauritania	Sub Saharan Africa	no	3,622				43
NER	Niger	Sub Saharan Africa	no	2,800				44
NGA	Nigeria	Sub Saharan Africa	no	121,669				45
RWA	Rwanda	Sub Saharan Africa	no	1,558				46
SEN	Senegal	Sub Saharan Africa	no	11,619		2,278		47
SLE	Sierra Leone	Sub Saharan Africa	no	523				48
SOM	Somalia	Sub Saharan Africa	no	3,573				49
SDN	Sudan	Sub Saharan Africa	no	26,851		3,285		50
TGO	Togo	Sub Saharan Africa	no	1,644				51
UGA	Uganda	Sub Saharan Africa	no	6,628		2,609		52
ESH	Western Sahara	Sub Saharan Africa	no	2,173				53
BHS	Bahamas	Caribbean	yes	21,313	70	2,547	27.6	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	12			2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	17			3
BHR	Bahrain	Asia	yes	32,575				4
SGP	Singapore	Pacific	yes	526,900		36,452		5
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	1,571	43.9	1
DOM	Dominican Republic	Caribbean	yes	72,573	61	5,996	10.1	2
CUB	Cuba	Caribbean	yes	46,280	40	5,742	7.0	3
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	262	2.3	4
JAM	Jamaica	Caribbean	yes	28,963	59			5
DMA	Dominica	Caribbean	yes	356	1			6
BRB	Barbados	Caribbean	yes	4,677	10			7
LCA	Saint Lucia	Caribbean	yes	543	2			8
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	2			9
GRD	Grenada	Caribbean	yes	1,229	1			10
PLW	Palau	Pacific	yes	279	1			11
SUR	Suriname	Latin America	yes	2,797	0			12
MDV	Maldives	Pacific	yes	907				13
KNA	Saint Kitts and Nevis	Caribbean	yes	2				14
BLZ	Belize	Latin America	yes	1,251	6	180	32.8	1
TON	Tonga	Pacific	yes	230	2			2
GUY	Guyana	Latin America	yes	3,468	0			3
FJI	Fiji	Asia	yes	2,100	13			4
WSM	Samoa	Pacific	yes	361	3			5
VUT	Vanuatu	Asia	yes	102	0			6
FSM	Micronesia (Federated States of)	Pacific	yes	585	3			7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949		190		8
HTI	Haiti	Caribbean	yes	8,553	32	1,081	29.5	1
PNG	Papua New Guinea	Asia	yes	5,433	0			2
SLB	Solomon islands	Asia	yes	211	0			3
AIA	Anguilla	Caribbean	yes	20	0			4
VIR	United States Virgin Islands	Caribbean	yes	1,755	16			5
VGB	British Virgin Islands	Caribbean	yes	424	3			6
PRI	Puerto Rico	Caribbean	yes	135,818	795			7
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NCL	New Caledonia	Asia	yes	4,771	2			11
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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
KOR	Republic of Korea	Asia	no	2,787,207	155,099	5.6	1
JPN	Japan	Asia	no	14,617,394	547,820	3.8	2
BRN	Brunei Darussalam	Asia	no	20,094	555	2.8	3
HKG	Hong Kong	Asia	no	1,138,019	24,805	2.2	4
MAC	Macau	Asia	no	96,993	1,550	1.6	5
USA	United States of America	North America	no	22,004,154	194,597	0.9	6
CAN	Canada	North America	no	2,051,584	10,965	0.5	7
OMN	Oman	Asia	no	42,201	131	0.3	8
NZL	New Zealand	Australia	no	238,609	677	0.3	9
AUS	Australia	Australia	no	1,832,960	1,857	0.1	10
ARE	United Arab Emirates	Asia	no	248,015	150	0.1	11
QAT	Qatar	Asia	no	113,981	18	0.0	12
CYP	Cyprus	Asia	no	23,484			13
ISR	Israel	Asia	no	293,550			14
KWT	Kuwait	Asia	no	202,236			15
SAU	Saudi Arabia	Asia	no	751,807	1		16
PRT	Portugal	Europe	no	296,296	13		17
AUT	Austria	Europe	no	615,592			18
BEL	Belgium	Europe	no	739,159			19
CZE	Czech Republic	Europe	no	336,714			20
DNK	Denmark	Europe	no	381,265			21
EST	Estonia	Europe	no	28,069			22
FIN	Finland	Europe	no	209,050			23
FRA	France	Europe	no	3,653,264			24
DEU	Germany	Europe	no	5,800,986			25
GRC	Greece	Europe	no	642,888			26
ISL	Iceland	Europe	no	25,742			27
IRL	Ireland	Europe	no	244,117			28
ITA	Italy	Europe	no	3,701,619			29
LIE	Liechtenstein	Europe	no	8,070			30
LUX	Luxembourg	Europe	no	45,036			31
MCO	Monaco	Europe	no	5,380			32
NLD	Netherlands	Europe	no	1,593,735			33
NOR	Norway	Europe	no	386,892			34
SMR	San Marino	Europe	no	1,846			35
SVK	Slovakia	Europe	no	124,390			36
SVN	Slovenia	Europe	no	36,896			37
ESP	Spain	Europe	no	2,695,139			38
SWE	Sweden	Europe	no	369,792			39
CHE	Switzerland	Europe	no	839,518			40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040			41
MLT	Malta	Pacific	no	18,630			42
CYM	Cayman Islands	Caribbean	no	3,603	1,195	33.2	1
MEX	Mexico	Latin America	no	1,818,298	102,450	5.6	2
TWN	Taiwan	Asia	no	872,409	42,503	4.9	3
PRK	Dem People's Rep of Korea	Asia	no	27,936	587	2.1	4
VEN	Venezuela	Latin America	no	435,869	3,263	0.8	5
PAN	Panama	Latin America	no	30,296	129	0.4	6
CRI	Costa Rica	Latin America	no	38,475	71	0.2	7
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	0.2	8
COL	Colombia	Latin America	no	325,385	354	0.1	9
MYS	Malaysia	Asia	no	318,727	328	0.1	10
BWA	Botswana	Sub Saharan Africa	no	18,941	4	0.0	11
KAZ	Kazakhstan	Asia	no	180,409			12
LBN	Lebanon	Asia	no	56,965			13
TUR	Turkey	Asia	no	1,578,228			14
RUS	Russian Federation	Europe	no	2,209,139	58		15
BLR	Belarus	Europe	no	74,427			16
BGR	Bulgaria	Europe	no	70,023			17
HRV	Croatia	Europe	no	65,145			18
GIB	Gibraltar	Europe	no	3,141			19
HUN	Hungary	Europe	no	286,209			20
LVA	Latvia	Europe	no	39,277			21
LTU	Lithuania	Europe	no	53,397			22
MNE	Montenegro	Europe	no	2,738			23
POL	Poland	Europe	no	659,150			24
SRB	Serbia	Europe	no	16,907			25
ARG	Argentina	Latin America	no	403,909			26
BRA	Brazil	Latin America	no	1,715,746			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
CHL	Chile	Latin America	no	326,640			28
URY	Uruguay	Latin America	no	28,590			29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903			30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765			31
GAB	Gabon	Sub Saharan Africa	no	25,086			32
PHL	Philippines	Asia	no	186,193	29,234	15.7	1
HND	Honduras	Latin America	no	18,844	2,730	14.5	2
CHN	China	Asia	no	4,512,825	126,734	2.8	3
GTM	Guatemala	Latin America	no	38,263	698	1.8	4
SLV	El Salvador	Latin America	no	22,582	165	0.7	5
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	0.6	6
IDN	Indonesia	Asia	no	575,183	2,060	0.4	7
LKA	Sri Lanka	Asia	no	49,967	172	0.3	8
BTN	Bhutan	Asia	no	1,167	3	0.3	9
THA	Thailand	Asia	no	394,598	259	0.1	10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21		11
ARM	Armenia	Asia	no	14,187			12
AZE	Azerbaijan	Asia	no	45,197			13
GEO	Georgia	Asia	no	21,157			14
IRQ	Iraq	Asia	no	47,245			15
JOR	Jordan	Asia	no	40,997			16
MNG	Mongolia	Asia	no	9,273			17
SYR	Syrian Arab Republic	Asia	no	68,489			18
TKM	Turkmenistan	Asia	no	12,707			19
ALB	Albania	Europe	no	13,964			20
BIH	Bosnia and Herzegovina	Europe	no	10,433			21
FRO	Faroe Islands	Europe	no	1,012			22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415			23
MDA	Moldova, Republic of	Europe	no	9,896			24
UKR	Ukraine	Europe	no	278,497			25
BOL	Bolivia	Latin America	no	13,112			26
ECU	Ecuador	Latin America	no	68,550			27
PRY	Paraguay	Latin America	no	19,203			28
PER	Peru	Latin America	no	189,980			29
DZA	Algeria	North Africa	no	259,977			30
EGY	Egypt	North Africa	no	234,939			31
MAR	Morocco	North Africa	no	136,300			32
TUN	Tunisia	North Africa	no	65,420			33
AGO	Angola	Sub Saharan Africa	no	25,225			34
CMR	Cameroon	Sub Saharan Africa	no	16,950			35
COG	Congo	Sub Saharan Africa	no	12,566			36
DJI	Djibouti	Sub Saharan Africa	no	2,525			37
NAM	Namibia	Sub Saharan Africa	no	7,239			38
TCA	Turks and Caicos islands	Caribbean	no	332	121	36.7	1
GLP	Guadeloupe	Caribbean	no	19,838	6,191	31.2	2
MTQ	Martinique	Caribbean	no	21,052	4,820	22.9	3
REU	Réunion	Sub Saharan Africa	no	42,937	7,386	17.2	4
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	15.5	5
MYT	Mayotte	Sub Saharan Africa	no	2,341	310	13.3	6
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	7.2	7
BGD	Bangladesh	Asia	no	72,949	3,058	4.2	8
NPL	Nepal	Asia	no	6,537	112	1.7	9
NIC	Nicaragua	Latin America	no	10,935	133	1.2	10
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	0.8	11
MWI	Malawi	Sub Saharan Africa	no	1,883	13	0.7	12
PAK	Pakistan	Asia	no	170,444	1,188	0.7	13
IND	India	Asia	no	1,429,881	9,531	0.7	14
VNM	Viet Nam	Asia	no	115,441	587	0.5	15
MMR	Myanmar	Asia	no	20,572	101	0.5	16
KHM	Cambodia	Asia	no	4,335	15	0.4	17
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	0.1	18
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	0.0	19
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	0.0	20
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	0.0	21
GUF	French Guiana	Latin America	no	8,339	0		22
AFG	Afghanistan	Asia	no	16,132			23
KGZ	Kyrgyzstan	Asia	no	3,644			24
TJK	Tajikistan	Asia	no	5,576			25
UZB	Uzbekistan	Asia	no	44,370			26



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YEM	Yemen	Asia	no	21,556			27
BEN	Benin	Sub Saharan Africa	no	3,585			28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			29
BDI	Burundi	Sub Saharan Africa	no	168			30
CAF	Central African Republic	Sub Saharan Africa	no	916			31
TCO	Chad	Sub Saharan Africa	no	6,664			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			34
ERI	Eritrea	Sub Saharan Africa	no	1,892			35
ETH	Ethiopia	Sub Saharan Africa	no	5,141			36
GMB	Gambia	Sub Saharan Africa	no	680			37
GHA	Ghana	Sub Saharan Africa	no	12,649			38
GIN	Guinea	Sub Saharan Africa	no	3,259			39
KEN	Kenya	Sub Saharan Africa	no	18,470			40
LBR	Liberia	Sub Saharan Africa	no	515			41
MLI	Mali	Sub Saharan Africa	no	3,869			42
MRT	Mauritania	Sub Saharan Africa	no	3,622			43
NER	Niger	Sub Saharan Africa	no	2,800			44
NGA	Nigeria	Sub Saharan Africa	no	121,669			45
RWA	Rwanda	Sub Saharan Africa	no	1,558			46
SEN	Senegal	Sub Saharan Africa	no	11,619			47
SLE	Sierra Leone	Sub Saharan Africa	no	523			48
SOM	Somalia	Sub Saharan Africa	no	3,573			49
SDN	Sudan	Sub Saharan Africa	no	26,851			50
TGO	Togo	Sub Saharan Africa	no	1,644			51
UGA	Uganda	Sub Saharan Africa	no	6,628			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173			53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	18.4	1
BHS	Bahamas	Caribbean	yes	21,313	2,355	11.1	2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	3.2	3
BHR	Bahrain	Asia	yes	32,575	0		4
SGP	Singapore	Pacific	yes	526,900	1		5
DMA	Dominica	Caribbean	yes	356	60	16.8	1
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	13.6	2
LCA	Saint Lucia	Caribbean	yes	543	73	13.5	3
BRB	Barbados	Caribbean	yes	4,677	534	11.4	4
JAM	Jamaica	Caribbean	yes	28,963	2,255	7.8	5
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	7.6	6
GRD	Grenada	Caribbean	yes	1,229	81	6.6	7
PLW	Palau	Pacific	yes	279	14	5.2	8
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	3.1	9
CUB	Cuba	Caribbean	yes	46,280	1,229	2.7	10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	0.7	11
SUR	Suriname	Latin America	yes	2,797	1	0.0	12
MDV	Maldives	Pacific	yes	907			13
KNA	Saint Kitts and Nevis	Caribbean	yes	2			14
TON	Tonga	Pacific	yes	230	56	24.3	1
WSM	Samoa	Pacific	yes	361	85	23.6	2
BLZ	Belize	Latin America	yes	1,251	291	23.3	3
FJI	Fiji	Asia	yes	2,100	385	18.3	4
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	15.5	5
VUT	Vanuatu	Asia	yes	102	5	4.8	6
GUY	Guyana	Latin America	yes	3,468	4	0.1	7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	0.0	8
AIA	Anguilla	Caribbean	yes	20	9	43.6	1
VIR	United States Virgin Islands	Caribbean	yes	1,755	439	25.0	2
VGB	British Virgin Islands	Caribbean	yes	424	103	24.3	3
PRI	Puerto Rico	Caribbean	yes	135,818	24,190	17.8	4
HTI	Haiti	Caribbean	yes	8,553	1,416	16.6	5
COM	Comoros	Sub Saharan Africa	yes	310	47	15.1	6
PYF	French Polynesia	Pacific	yes	6,568	973	14.8	7
ABW	Aruba	Caribbean	yes	6,526	562	8.6	8
SLB	Solomon islands	Asia	yes	211	5	2.2	9
NCL	New Caledonia	Asia	yes	4,771	35	0.7	10
PNG	Papua New Guinea	Asia	yes	5,433	9	0.2	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
KOR	Republic of Korea	Asia	no	2,787,207	155,099	1,014,483	15.3	1
HKG	Hong Kong	Asia	no	1,138,019	24,805	224,458	11.1	2
JPN	Japan	Asia	no	14,617,394	547,820	5,458,837	10.0	3
MAC	Macau	Asia	no	96,993	1,550	27,960	5.5	4
USA	United States of America	North America	no	22,004,154	194,597	14,586,740	1.3	5
CAN	Canada	North America	no	2,051,584	10,965	1,577,040	0.7	6
ARE	United Arab Emirates	Asia	no	248,015	150	297,649	0.1	7
PRT	Portugal	Europe	no	296,296	13	228,872	0.0	8
BRN	Brunei Darussalam	Asia	no	20,094	555			9
NZL	New Zealand	Australia	no	238,609	677			10
AUS	Australia	Australia	no	1,832,960	1,857			11
OMN	Oman	Asia	no	42,201	131			12
QAT	Qatar	Asia	no	113,981	18			13
CYP	Cyprus	Asia	no	23,484		23,132		14
ISR	Israel	Asia	no	293,550		217,333		15
KWT	Kuwait	Asia	no	202,236				16
SAU	Saudi Arabia	Asia	no	751,807	1	434,666		17
AUT	Austria	Europe	no	615,592		379,069		18
BEL	Belgium	Europe	no	739,159		469,374		19
CZE	Czech Republic	Europe	no	336,714		192,032		20
DNK	Denmark	Europe	no	381,265		309,866		21
EST	Estonia	Europe	no	28,069		19,217		22
FIN	Finland	Europe	no	209,050		238,746		23
FRA	France	Europe	no	3,653,264		2,560,002		24
DEU	Germany	Europe	no	5,800,986		3,280,530		25
GRC	Greece	Europe	no	642,888		301,083		26
ISL	Iceland	Europe	no	25,742		12,574		27
IRL	Ireland	Europe	no	244,117		211,390		28
ITA	Italy	Europe	no	3,701,619		2,051,412		29
LIE	Liechtenstein	Europe	no	8,070				30
LUX	Luxembourg	Europe	no	45,036		53,334		31
MCO	Monaco	Europe	no	5,380				32
NLD	Netherlands	Europe	no	1,593,735		779,356		33
NOR	Norway	Europe	no	386,892		412,990		34
SMR	San Marino	Europe	no	1,846				35
SVK	Slovakia	Europe	no	124,390		87,268		36
SVN	Slovenia	Europe	no	36,896		46,908		37
ESP	Spain	Europe	no	2,695,139		1,407,405		38
SWE	Sweden	Europe	no	369,792		458,973		39
CHE	Switzerland	Europe	no	839,518		527,920		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,248,831		41
MLT	Malta	Pacific	no	18,630		8,256		42
MEX	Mexico	Latin America	no	1,818,298	102,450	1,034,804	9.9	1
VEN	Venezuela	Latin America	no	435,869	3,263	391,848	0.8	2
PAN	Panama	Latin America	no	30,296	129	26,689	0.5	3
CRI	Costa Rica	Latin America	no	38,475	71	35,831	0.2	4
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	363,704	0.2	5
MYS	Malaysia	Asia	no	318,727	328	237,797	0.1	6
COL	Colombia	Latin America	no	325,385	354	288,189	0.1	7
BWA	Botswana	Sub Saharan Africa	no	18,941	4	14,857	0.0	8
RUS	Russian Federation	Europe	no	2,209,139	58	1,479,819		9
CYM	Cayman Islands	Caribbean	no	3,603	1,195			10
TWN	Taiwan	Asia	no	872,409	42,503			11
PRK	Dem People's Rep of Korea	Asia	no	27,936	587			12
KAZ	Kazakhstan	Asia	no	180,409		149,059		13
LBN	Lebanon	Asia	no	56,965		39,006		14
TUR	Turkey	Asia	no	1,578,228		734,365		15
BLR	Belarus	Europe	no	74,427		54,713		16
BGR	Bulgaria	Europe	no	70,023		47,714		17
HRV	Croatia	Europe	no	65,145		60,852		18
GIB	Gibraltar	Europe	no	3,141				19
HUN	Hungary	Europe	no	286,209		128,632		20
LVA	Latvia	Europe	no	39,277		24,010		21
LTU	Lithuania	Europe	no	53,397		36,306		22
MNE	Montenegro	Europe	no	2,738		4,111		23
POL	Poland	Europe	no	659,150		469,440		24
SRB	Serbia	Europe	no	16,907		38,423		25
ARG	Argentina	Latin America	no	403,909		368,736		26
BRA	Brazil	Latin America	no	1,715,746		2,087,890		27



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CHL	Chile	Latin America	no	326,640		212,741		28
URY	Uruguay	Latin America	no	28,590		40,265		29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765		14,007		31
GAB	Gabon	Sub Saharan Africa	no	25,086		13,011		32
HND	Honduras	Latin America	no	18,844	2,730	15,400	17.7	1
PHL	Philippines	Asia	no	186,193	29,234	199,589	14.7	2
CHN	China	Asia	no	4,512,825	126,734	5,926,612	2.1	3
GTM	Guatemala	Latin America	no	38,263	698	41,186	1.7	4
SLV	El Salvador	Latin America	no	22,582	165	21,215	0.8	5
LKA	Sri Lanka	Asia	no	49,967	172	49,552	0.4	6
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	3,645	0.3	7
IDN	Indonesia	Asia	no	575,183	2,060	706,558	0.3	8
BTN	Bhutan	Asia	no	1,167	3	1,516	0.2	9
THA	Thailand	Asia	no	394,598	259	318,522	0.1	10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21			11
ARM	Armenia	Asia	no	14,187		9,371		12
AZE	Azerbaijan	Asia	no	45,197		51,774		13
GEO	Georgia	Asia	no	21,157		11,667		14
IRQ	Iraq	Asia	no	47,245		82,150		15
JOR	Jordan	Asia	no	40,997		27,574		16
MNG	Mongolia	Asia	no	9,273		6,200		17
SYR	Syrian Arab Republic	Asia	no	68,489		59,147		18
TKM	Turkmenistan	Asia	no	12,707		20,001		19
ALB	Albania	Europe	no	13,964		11,786		20
BIH	Bosnia and Herzegovina	Europe	no	10,433		16,578		21
FRO	Faroe Islands	Europe	no	1,012				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		9,189		23
MDA	Moldova, Republic of	Europe	no	9,896		5,809		24
UKR	Ukraine	Europe	no	278,497		137,929		25
BOL	Bolivia	Latin America	no	13,112		19,650		26
ECU	Ecuador	Latin America	no	68,550		57,978		27
PRY	Paraguay	Latin America	no	19,203		18,333		28
PER	Peru	Latin America	no	189,980		157,053		29
DZA	Algeria	North Africa	no	259,977		159,426		30
EGY	Egypt	North Africa	no	234,939		218,894		31
MAR	Morocco	North Africa	no	136,300		90,805		32
TUN	Tunisia	North Africa	no	65,420		44,291		33
AGO	Angola	Sub Saharan Africa	no	25,225		84,391		34
CMR	Cameroon	Sub Saharan Africa	no	16,950		22,394		35
COG	Congo	Sub Saharan Africa	no	12,566		11,898		36
DJI	Djibouti	Sub Saharan Africa	no	2,525				37
NAM	Namibia	Sub Saharan Africa	no	7,239		12,170		38
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	8,721	4.6	1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	9,586	4.2	2
BGD	Bangladesh	Asia	no	72,949	3,058	100,357	3.1	3
NIC	Nicaragua	Latin America	no	10,935	133	6,551	2.0	4
PAK	Pakistan	Asia	no	170,444	1,188	176,870	0.7	5
VNM	Viet Nam	Asia	no	115,441	587	106,427	0.6	6
IND	India	Asia	no	1,429,881	9,531	1,727,111	0.6	7
MWI	Malawi	Sub Saharan Africa	no	1,883	13	5,106	0.3	8
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	7,296	0.3	9
KHM	Cambodia	Asia	no	4,335	15	11,242	0.1	10
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	7,474	0.1	11
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	16,193	0.0	12
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	2,132	0.0	13
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	23,057		14
TCA	Turks and Caicos islands	Caribbean	no	332	121			15
GLP	Guadeloupe	Caribbean	no	19,838	6,191			16
MTQ	Martinique	Caribbean	no	21,052	4,820			17
REU	Réunion	Sub Saharan Africa	no	42,937	7,386			18
MYT	Mayotte	Sub Saharan Africa	no	2,341	310			19
NPL	Nepal	Asia	no	6,537	112			20
MMR	Myanmar	Asia	no	20,572	101			21
GUF	French Guiana	Latin America	no	8,339	0			22
AFG	Afghanistan	Asia	no	16,132		17,243		23
KGZ	Kyrgyzstan	Asia	no	3,644		4,616		24
TJK	Tajikistan	Asia	no	5,576		5,640		25
UZB	Uzbekistan	Asia	no	44,370		38,982		26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GDP [USD million]		PML ₂₅₀ /GDP [%]	Ranking
YEM	Yemen	Asia	no	21,556					27
BEN	Benin	Sub Saharan Africa	no	3,585		6,633			28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120		8,820			29
BDI	Burundi	Sub Saharan Africa	no	168		1,611			30
CAF	Central African Republic	Sub Saharan Africa	no	916		2,013			31
TCD	Chad	Sub Saharan Africa	no	6,664		7,588			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433		13,145			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298		22,780			34
ERI	Eritrea	Sub Saharan Africa	no	1,892		2,117			35
ETH	Ethiopia	Sub Saharan Africa	no	5,141		29,717			36
GMB	Gambia	Sub Saharan Africa	no	680		807			37
GHA	Ghana	Sub Saharan Africa	no	12,649		31,306			38
GIN	Guinea	Sub Saharan Africa	no	3,259		4,511			39
KEN	Kenya	Sub Saharan Africa	no	18,470		31,409			40
LBR	Liberia	Sub Saharan Africa	no	515		986			41
MLI	Mali	Sub Saharan Africa	no	3,869		9,251			42
MRT	Mauritania	Sub Saharan Africa	no	3,622		3,636			43
NER	Niger	Sub Saharan Africa	no	2,800		5,549			44
NGA	Nigeria	Sub Saharan Africa	no	121,669		193,669			45
RWA	Rwanda	Sub Saharan Africa	no	1,558		5,628			46
SEN	Senegal	Sub Saharan Africa	no	11,619		12,954			47
SLE	Sierra Leone	Sub Saharan Africa	no	523		1,905			48
SOM	Somalia	Sub Saharan Africa	no	3,573					49
SDN	Sudan	Sub Saharan Africa	no	26,851		62,046			50
TGO	Togo	Sub Saharan Africa	no	1,644		3,153			51
UGA	Uganda	Sub Saharan Africa	no	6,628		17,011			52
ESH	Western Sahara	Sub Saharan Africa	no	2,173					53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	1,211	36.8		1
BHS	Bahamas	Caribbean	yes	21,313	2,355	7,538	31.2		2
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	20,604	4.9		3
BHR	Bahrain	Asia	yes	32,575	0				4
SGP	Singapore	Pacific	yes	526,900	1	208,765			5
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	9,729	18.3		1
JAM	Jamaica	Caribbean	yes	28,963	2,255	14,252	15.8		2
BRB	Barbados	Caribbean	yes	4,677	534	4,110	13.0		3
DMA	Dominica	Caribbean	yes	356	60	466	12.9		4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	705	11.3		5
GRD	Grenada	Caribbean	yes	1,229	81	773	10.4		6
PLW	Palau	Pacific	yes	279	14	171	8.4		7
LCA	Saint Lucia	Caribbean	yes	543	73	1,198	6.1		8
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	51,766	4.4		9
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	937	2.0		10
CUB	Cuba	Caribbean	yes	46,280	1,229				11
SUR	Suriname	Latin America	yes	2,797	1				12
MDV	Maldives	Pacific	yes	907		1,908			13
KNA	Saint Kitts and Nevis	Caribbean	yes	2		652			14
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	297	30.4		1
BLZ	Belize	Latin America	yes	1,251	291	1,401	20.8		2
TON	Tonga	Pacific	yes	230	56	348	16.1		3
WSM	Samoa	Pacific	yes	361	85	574	14.9		4
FJI	Fiji	Asia	yes	2,100	385	3,189	12.1		5
VUT	Vanuatu	Asia	yes	102	5	699	0.7		6
GUY	Guyana	Latin America	yes	3,468	4	2,226	0.2		7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	1,648	0.0		8
HTI	Haiti	Caribbean	yes	8,553	1,416	6,710	21.1		1
COM	Comoros	Sub Saharan Africa	yes	310	47	541	8.6		2
SLB	Solomon Islands	Asia	yes	211	5	679	0.7		3
PNG	Papua New Guinea	Asia	yes	5,433	9	9,480	0.1		4
AIA	Anguilla	Caribbean	yes	20	9				5
VIR	United States Virgin Islands	Caribbean	yes	1,755	439				6
VGB	British Virgin Islands	Caribbean	yes	424	103				7
PRI	Puerto Rico	Caribbean	yes	135,818	24,190				8
PYF	French Polynesia	Pacific	yes	6,568	973				9
ABW	Aruba	Caribbean	yes	6,526	562				10
NCL	New Caledonia	Asia	yes	4,771	35				11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466		879			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311		197			13



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KOR	Republic of Korea	Asia	no	2,787,207	155,099	1,014,760	15.3	1
HKG	Hong Kong	Asia	no	1,138,019	24,805	229,165	10.8	2
JPN	Japan	Asia	no	14,617,394	547,820	5,601,557	9.8	3
USA	United States of America	North America	no	22,004,154	194,597	14,635,600	1.3	4
CAN	Canada	North America	no	2,051,584	10,965	1,549,652	0.7	5
PRT	Portugal	Europe	no	296,296	13	221,243	0.0	6
MAC	Macau	Asia	no	96,993	1,550			7
ARE	United Arab Emirates	Asia	no	248,015	150			8
BRN	Brunei Darussalam	Asia	no	20,094	555			9
NZL	New Zealand	Australia	no	238,609	677			10
AUS	Australia	Australia	no	1,832,960	1,857			11
OMN	Oman	Asia	no	42,201	131			12
QAT	Qatar	Asia	no	113,981	18			13
CYP	Cyprus	Asia	no	23,484		22,539		14
ISR	Israel	Asia	no	293,550		210,353		15
KWT	Kuwait	Asia	no	202,236				16
SAU	Saudi Arabia	Asia	no	751,807	1			17
AUT	Austria	Europe	no	615,592		377,063		18
BEL	Belgium	Europe	no	739,159		477,644		19
CZE	Czech Republic	Europe	no	336,714		179,432		20
DNK	Denmark	Europe	no	381,265		315,664		21
EST	Estonia	Europe	no	28,069		18,420		22
FIN	Finland	Europe	no	209,050		242,899		23
FRA	France	Europe	no	3,653,264		2,606,780		24
DEU	Germany	Europe	no	5,800,986		3,341,391		25
GRC	Greece	Europe	no	642,888		292,874		26
ISL	Iceland	Europe	no	25,742		9,975		27
IRL	Ireland	Europe	no	244,117		171,260		28
ITA	Italy	Europe	no	3,701,619		2,023,916		29
LIE	Liechtenstein	Europe	no	8,070				30
LUX	Luxembourg	Europe	no	45,036		37,925		31
MCO	Monaco	Europe	no	5,380				32
NLD	Netherlands	Europe	no	1,593,735		772,747		33
NOR	Norway	Europe	no	386,892		413,980		34
SMR	San Marino	Europe	no	1,846				35
SVK	Slovakia	Europe	no	124,390		86,077		36
SVN	Slovenia	Europe	no	36,896		46,217		37
ESP	Spain	Europe	no	2,695,139		1,388,744		38
SWE	Sweden	Europe	no	369,792		467,254		39
CHE	Switzerland	Europe	no	839,518		568,639		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040		2,280,719		41
MLT	Malta	Pacific	no	18,630		7,698		42
MEX	Mexico	Latin America	no	1,818,298	102,450	1,020,288	10.0	1
VEN	Venezuela	Latin America	no	435,869	3,263	389,038	0.8	2
PAN	Panama	Latin America	no	30,296	129	25,037	0.5	3
CRI	Costa Rica	Latin America	no	38,475	71	34,896	0.2	4
ZAF	South Africa	Sub Saharan Africa	no	335,148	528	356,475	0.2	5
MYS	Malaysia	Asia	no	318,727	328	229,566	0.1	6
COL	Colombia	Latin America	no	325,385	354	276,072	0.1	7
BWA	Botswana	Sub Saharan Africa	no	18,941	4	14,771	0.0	8
RUS	Russian Federation	Europe	no	2,209,139	58	1,431,121		9
CYM	Cayman Islands	Caribbean	no	3,603	1,195			10
TWN	Taiwan	Asia	no	872,409	42,503			11
PRK	Dem People's Rep of Korea	Asia	no	27,936	587			12
KAZ	Kazakhstan	Asia	no	180,409		131,868		13
LBN	Lebanon	Asia	no	56,965		39,051		14
TUR	Turkey	Asia	no	1,578,228		727,056		15
BLR	Belarus	Europe	no	74,427		53,379		16
BGR	Bulgaria	Europe	no	70,023		46,025		17
HRV	Croatia	Europe	no	65,145		58,806		18
GIB	Gibraltar	Europe	no	3,141				19
HUN	Hungary	Europe	no	286,209		122,372		20
LVA	Latvia	Europe	no	39,277		24,073		21
LTU	Lithuania	Europe	no	53,397		35,687		22
MNE	Montenegro	Europe	no	2,738		4,083		23
POL	Poland	Europe	no	659,150		452,275		24
SRB	Serbia	Europe	no	16,907		37,533		25
ARG	Argentina	Latin America	no	403,909		358,619		26
BRA	Brazil	Latin America	no	1,715,746		2,049,164		27



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CHL	Chile	Latin America	no	326,640		197,331		28
URY	Uruguay	Latin America	no	28,590		39,161		29
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765		9,578		31
GAB	Gabon	Sub Saharan Africa	no	25,086		11,467		32
HND	Honduras	Latin America	no	18,844	2,730	14,798	18.5	1
PHL	Philippines	Asia	no	186,193	29,234	199,897	14.6	2
CHN	China	Asia	no	4,512,825	126,734	5,957,012	2.1	3
GTM	Guatemala	Latin America	no	38,263	698	39,987	1.8	4
SLV	El Salvador	Latin America	no	22,582	165	20,834	0.8	5
LKA	Sri Lanka	Asia	no	49,967	172	48,916	0.4	6
SWZ	Swaziland	Sub Saharan Africa	no	2,012	12	3,586	0.4	7
IDN	Indonesia	Asia	no	575,183	2,060	686,633	0.3	8
BTN	Bhutan	Asia	no	1,167	3	1,420	0.2	9
THA	Thailand	Asia	no	394,598	259	304,812	0.1	10
IRN	Iran (Islamic Republic of)	Asia	no	676,481	21			11
ARM	Armenia	Asia	no	14,187		9,710		12
AZE	Azerbaijan	Asia	no	45,197		48,307		13
GEO	Georgia	Asia	no	21,157		11,484		14
IRQ	Iraq	Asia	no	47,245		77,842		15
JOR	Jordan	Asia	no	40,997		27,820		16
MNG	Mongolia	Asia	no	9,273		5,640		17
SYR	Syrian Arab Republic	Asia	no	68,489		57,266		18
TKM	Turkmenistan	Asia	no	12,707		18,107		19
ALB	Albania	Europe	no	13,964		11,682		20
BIH	Bosnia and Herzegovina	Europe	no	10,433		17,008		21
FRO	Faroe Islands	Europe	no	1,012				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415		8,992		23
MDA	Moldova, Republic of	Europe	no	9,896		6,280		24
UKR	Ukraine	Europe	no	278,497		135,920		25
BOL	Bolivia	Latin America	no	13,112		18,790		26
ECU	Ecuador	Latin America	no	68,550		56,924		27
PRY	Paraguay	Latin America	no	19,203		17,853		28
PER	Peru	Latin America	no	189,980		147,000		29
DZA	Algeria	North Africa	no	259,977		155,538		30
EGY	Egypt	North Africa	no	234,939		214,530		31
MAR	Morocco	North Africa	no	136,300		88,578		32
TUN	Tunisia	North Africa	no	65,420		42,020		33
AGO	Angola	Sub Saharan Africa	no	25,225		75,516		34
CMR	Cameroon	Sub Saharan Africa	no	16,950		22,030		35
COG	Congo	Sub Saharan Africa	no	12,566		8,619		36
DJI	Djibouti	Sub Saharan Africa	no	2,525				37
NAM	Namibia	Sub Saharan Africa	no	7,239		12,077		38
MDG	Madagascar	Sub Saharan Africa	no	2,575	399	8,628	4.6	1
MOZ	Mozambique	Sub Saharan Africa	no	5,633	404	9,421	4.3	2
BGD	Bangladesh	Asia	no	72,949	3,058	109,695	2.8	3
NIC	Nicaragua	Latin America	no	10,935	133	6,273	2.1	4
PAK	Pakistan	Asia	no	170,444	1,188	183,620	0.7	5
VNM	Viet Nam	Asia	no	115,441	587	102,008	0.6	6
IND	India	Asia	no	1,429,881	9,531	1,712,645	0.6	7
MWI	Malawi	Sub Saharan Africa	no	1,883	13	4,980	0.3	8
LAO	Lao People's Democratic Republic	Asia	no	2,322	18	6,978	0.3	9
KHM	Cambodia	Asia	no	4,335	15	10,664	0.1	10
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	3	6,988	0.1	11
ZMB	Zambia	Sub Saharan Africa	no	9,806	2	14,300	0.0	12
LSO	Lesotho	Sub Saharan Africa	no	3,522	0	2,553	0.0	13
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	1	23,012		14
TCA	Turks and Caicos islands	Caribbean	no	332	121			15
GLP	Guadeloupe	Caribbean	no	19,838	6,191			16
MTQ	Martinique	Caribbean	no	21,052	4,820			17
REU	Réunion	Sub Saharan Africa	no	42,937	7,386			18
MYT	Mayotte	Sub Saharan Africa	no	2,341	310			19
NPL	Nepal	Asia	no	6,537	112			20
MMR	Myanmar	Asia	no	20,572	101			21
GUF	French Guiana	Latin America	no	8,339	0			22
AFG	Afghanistan	Asia	no	16,132		15,162		23
KGZ	Kyrgyzstan	Asia	no	3,644		4,273		24
TJK	Tajikistan	Asia	no	5,576		5,570		25
UZB	Uzbekistan	Asia	no	44,370		39,013		26



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YEM	Yemen	Asia	no	21,556					27
BEN	Benin	Sub Saharan Africa	no	3,585			6,633		28
BFA	Burkina Faso	Sub Saharan Africa	no	3,120			8,810		29
BDI	Burundi	Sub Saharan Africa	no	168			1,589		30
CAF	Central African Republic	Sub Saharan Africa	no	916			2,009		31
TCD	Chad	Sub Saharan Africa	no	6,664			6,734		32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433			12,263		33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298			21,729		34
ERI	Eritrea	Sub Saharan Africa	no	1,892			2,097		35
ETH	Ethiopia	Sub Saharan Africa	no	5,141			29,625		36
GMB	Gambia	Sub Saharan Africa	no	680			743		37
GHA	Ghana	Sub Saharan Africa	no	12,649			30,776		38
GIN	Guinea	Sub Saharan Africa	no	3,259			4,231		39
KEN	Kenya	Sub Saharan Africa	no	18,470			31,264		40
LBR	Liberia	Sub Saharan Africa	no	515			805		41
MLI	Mali	Sub Saharan Africa	no	3,869			8,909		42
MRT	Mauritania	Sub Saharan Africa	no	3,622			3,672		43
NER	Niger	Sub Saharan Africa	no	2,800			5,493		44
NGA	Nigeria	Sub Saharan Africa	no	121,669			176,769		45
RWA	Rwanda	Sub Saharan Africa	no	1,558			5,582		46
SEN	Senegal	Sub Saharan Africa	no	11,619			12,900		47
SLE	Sierra Leone	Sub Saharan Africa	no	523			1,905		48
SOM	Somalia	Sub Saharan Africa	no	3,573					49
SDN	Sudan	Sub Saharan Africa	no	26,851			55,939		50
TGO	Togo	Sub Saharan Africa	no	1,644			2,826		51
UGA	Uganda	Sub Saharan Africa	no	6,628			16,720		52
ESH	Western Sahara	Sub Saharan Africa	no	2,173					53
ATG	Antigua and Barbuda	Caribbean	yes	2,428	446	1,179	37.8	1	
TTO	Trinidad and Tobago	Caribbean	yes	31,370	1,011	19,255	5.3	2	
BHS	Bahamas	Caribbean	yes	21,313	2,355			3	
BHR	Bahrain	Asia	yes	32,575	0			4	
SGP	Singapore	Pacific	yes	526,900	1	201,050		5	
MUS	Mauritius	Sub Saharan Africa	yes	13,089	1,776	9,798	18.1	1	
JAM	Jamaica	Caribbean	yes	28,963	2,255	13,574	16.6	2	
DMA	Dominica	Caribbean	yes	356	60	454	13.2	3	
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	80	691	11.6	4	
GRD	Grenada	Caribbean	yes	1,229	81	727	11.1	5	
PLW	Palau	Pacific	yes	279	14	135	10.7	6	
LCA	Saint Lucia	Caribbean	yes	543	73	1,163	6.3	7	
DOM	Dominican Republic	Caribbean	yes	72,573	2,270	49,972	4.5	8	
SYC	Seychelles	Sub Saharan Africa	yes	2,495	18	855	2.2	9	
BRB	Barbados	Caribbean	yes	4,677	534			10	
CUB	Cuba	Caribbean	yes	46,280	1,229			11	
SUR	Suriname	Latin America	yes	2,797	1			12	
MDV	Maldives	Pacific	yes	907		1,817		13	
KNA	Saint Kitts and Nevis	Caribbean	yes	2		620		14	
FSM	Micronesia (Federated States of)	Pacific	yes	585	90	312	29.0	1	
BLZ	Belize	Latin America	yes	1,251	291	1,303	22.4	2	
TON	Tonga	Pacific	yes	230	56	352	15.9	3	
WSM	Samoa	Pacific	yes	361	85	557	15.3	4	
FJI	Fiji	Asia	yes	2,100	385	3,090	12.5	5	
VUT	Vanuatu	Asia	yes	102	5	678	0.7	6	
GUY	Guyana	Latin America	yes	3,468	4	2,238	0.2	7	
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	1	1,579	0.0	8	
COM	Comoros	Sub Saharan Africa	yes	310	47	539	8.7	1	
SLB	Solomon islands	Asia	yes	211	5	555	0.8	2	
PNG	Papua New Guinea	Asia	yes	5,433	9	9,262	0.1	3	
HTI	Haiti	Caribbean	yes	8,553	1,416			4	
AIA	Anguilla	Caribbean	yes	20	9			5	
VIR	United States Virgin Islands	Caribbean	yes	1,755	439			6	
VGB	British Virgin Islands	Caribbean	yes	424	103			7	
PRI	Puerto Rico	Caribbean	yes	135,818	24,190			8	
PYF	French Polynesia	Pacific	yes	6,568	973			9	
ABW	Aruba	Caribbean	yes	6,526	562			10	
NCL	New Caledonia	Asia	yes	4,771	35			11	
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466		877		12	
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311		200		13	



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JPN	Japan	Asia	no	542,290	1,724	3.2	1
KOR	Republic of Korea	Asia	no	95,180	202	2.1	2
HKG	Hong Kong	Asia	no	47,718	37	0.8	3
MAC	Macau	Asia	no	1,989	1	0.7	4
BRN	Brunei Darussalam	Asia	no	895	1	0.6	5
USA	United States of America	North America	no	1,224,802	642	0.5	6
CAN	Canada	North America	no	121,895	18	0.2	7
NZL	New Zealand	Australia	no	12,682	1	0.1	8
OMN	Oman	Asia	no	4,095	0	0.1	9
AUS	Australia	Australia	no	47,971	2	0.1	10
ARE	United Arab Emirates	Asia	no	11,165	0	0.0	11
CYP	Cyprus	Asia	no	1,154			12
ISR	Israel	Asia	no	22,505			13
KWT	Kuwait	Asia	no	6,168			14
QAT	Qatar	Asia	no	2,116			15
SAU	Saudi Arabia	Asia	no	73,922			16
AUT	Austria	Europe	no	28,002			17
BEL	Belgium	Europe	no	29,496			18
CZE	Czech Republic	Europe	no	23,126			19
DNK	Denmark	Europe	no	31,778			20
EST	Estonia	Europe	no	2,851			21
FIN	Finland	Europe	no	14,927			22
FRA	France	Europe	no	236,236			23
DEU	Germany	Europe	no	262,867			24
GRC	Greece	Europe	no	27,597			25
ISL	Iceland	Europe	no	1,071			26
IRL	Ireland	Europe	no	16,223			27
ITA	Italy	Europe	no	188,526			28
LIE	Liechtenstein	Europe	no	198			29
LUX	Luxembourg	Europe	no	2,462			30
MCO	Monaco	Europe	no	123			31
NLD	Netherlands	Europe	no	49,481			32
NOR	Norway	Europe	no	33,800			33
PRT	Portugal	Europe	no	18,087			34
SMR	San Marino	Europe	no	113			35
SVK	Slovakia	Europe	no	9,245			36
SVN	Slovenia	Europe	no	2,231			37
ESP	Spain	Europe	no	122,131			38
SWE	Sweden	Europe	no	27,971			39
CHE	Switzerland	Europe	no	40,078			40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134			41
MLT	Malta	Pacific	no	1,330			42
CYM	Cayman Islands	Caribbean	no	81	1	11.6	1
TWN	Taiwan	Asia	no	38,310	188	4.9	2
MEX	Mexico	Latin America	no	260,866	459	1.8	3
PRK	Dem People's Rep of Korea	Asia	no	10,245	7	0.7	4
VEN	Venezuela	Latin America	no	42,697	7	0.2	5
PAN	Panama	Latin America	no	5,115	0	0.1	6
CRI	Costa Rica	Latin America	no	6,892	0	0.0	7
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	0.0	8
MYS	Malaysia	Asia	no	37,377	1	0.0	9
COL	Colombia	Latin America	no	53,054	1	0.0	10
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.0	11
KAZ	Kazakhstan	Asia	no	20,880			12
LBN	Lebanon	Asia	no	4,139			13
TUR	Turkey	Asia	no	164,353			14
RUS	Russian Federation	Europe	no	288,219	0		15
BLR	Belarus	Europe	no	21,160			16
BGR	Bulgaria	Europe	no	9,040			17
HRV	Croatia	Europe	no	6,064			18
GIB	Gibraltar	Europe	no	274			19
HUN	Hungary	Europe	no	30,434			20
LVA	Latvia	Europe	no	4,998			21
LTU	Lithuania	Europe	no	7,227			22
MNE	Montenegro	Europe	no	269			23
POL	Poland	Europe	no	60,706			24
SRB	Serbia	Europe	no	1,938			25
ARG	Argentina	Latin America	no	39,520			26
BRA	Brazil	Latin America	no	300,613			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
CHL	Chile	Latin America	no	18,070			28
URY	Uruguay	Latin America	no	4,269			29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501			30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626			31
GAB	Gabon	Sub Saharan Africa	no	2,633			32
PHL	Philippines	Asia	no	46,143	505	10.9	1
HND	Honduras	Latin America	no	5,414	20	3.7	2
CHN	China	Asia	no	599,699	1,195	2.0	3
GTM	Guatemala	Latin America	no	8,748	4	0.5	4
SLV	El Salvador	Latin America	no	4,297	1	0.2	5
LKA	Sri Lanka	Asia	no	14,385	1	0.1	6
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.1	7
IDN	Indonesia	Asia	no	113,457	8	0.1	8
BTN	Bhutan	Asia	no	371		0.0	9
THA	Thailand	Asia	no	43,178	1	0.0	10
ARM	Armenia	Asia	no	2,899			11
AZE	Azerbaijan	Asia	no	12,666			12
GEO	Georgia	Asia	no	3,815			13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0		14
IRQ	Iraq	Asia	no	15,555			15
JOR	Jordan	Asia	no	10,652			16
MNG	Mongolia	Asia	no	2,335			17
SYR	Syrian Arab Republic	Asia	no	18,783			18
TKM	Turkmenistan	Asia	no	3,779			19
ALB	Albania	Europe	no	3,381			20
BIH	Bosnia and Herzegovina	Europe	no	1,424			21
FRO	Faroe Islands	Europe	no	42			22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000			23
MDA	Moldova, Republic of	Europe	no	3,416			24
UKR	Ukraine	Europe	no	32,769			25
BOL	Bolivia	Latin America	no	4,521			26
ECU	Ecuador	Latin America	no	10,202			27
PRY	Paraguay	Latin America	no	4,301			28
PER	Peru	Latin America	no	24,717			29
DZA	Algeria	North Africa	no	67,908			30
EGY	Egypt	North Africa	no	101,974			31
MAR	Morocco	North Africa	no	41,389			32
TUN	Tunisia	North Africa	no	14,190			33
AGO	Angola	Sub Saharan Africa	no	9,237			34
CMR	Cameroon	Sub Saharan Africa	no	6,256			35
COG	Congo	Sub Saharan Africa	no	3,326			36
DJI	Djibouti	Sub Saharan Africa	no	656			37
NAM	Namibia	Sub Saharan Africa	no	1,706			38
TCA	Turks and Caicos islands	Caribbean	no	28	0	10.7	1
GLP	Guadeloupe	Caribbean	no	904	9	9.7	2
REU	Réunion	Sub Saharan Africa	no	2,161	13	6.1	3
MDG	Madagascar	Sub Saharan Africa	no	1,546	9	5.8	4
MTQ	Martinique	Caribbean	no	889	4	4.9	5
MYT	Mayotte	Sub Saharan Africa	no	154	1	3.3	6
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	1.3	7
BGD	Bangladesh	Asia	no	14,034	11	0.8	8
NPL	Nepal	Asia	no	2,411	1	0.3	9
NIC	Nicaragua	Latin America	no	2,310	1	0.3	10
LAO	Lao People's Democratic Republic	Asia	no	938	0	0.3	11
VNM	Viet Nam	Asia	no	24,066	4	0.2	12
IND	India	Asia	no	320,919	51	0.2	13
PAK	Pakistan	Asia	no	37,562	5	0.1	14
MMR	Myanmar	Asia	no	9,829	1	0.1	15
MWI	Malawi	Sub Saharan Africa	no	1,519	0	0.1	16
KHM	Cambodia	Asia	no	1,623	0	0.1	17
GUF	French Guiana	Latin America	no	378		0.0	18
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		0.0	19
ZMB	Zambia	Sub Saharan Africa	no	4,976		0.0	20
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	0.0	21
AFG	Afghanistan	Asia	no	9,988			22
KGZ	Kyrgyzstan	Asia	no	756			23
TJK	Tajikistan	Asia	no	2,412			24
UZB	Uzbekistan	Asia	no	10,382			25
YEM	Yemen	Asia	no	10,133			26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	AAL/PC [‰]	Ranking
LSO	Lesotho	Sub Saharan Africa	no	2,124			27
BEN	Benin	Sub Saharan Africa	no	1,223			28
BFA	Burkina Faso	Sub Saharan Africa	no	1,847			29
BDI	Burundi	Sub Saharan Africa	no	145			30
CAF	Central African Republic	Sub Saharan Africa	no	351			31
TCD	Chad	Sub Saharan Africa	no	4,004			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304			34
ERI	Eritrea	Sub Saharan Africa	no	1,076			35
ETH	Ethiopia	Sub Saharan Africa	no	3,583			36
GMB	Gambia	Sub Saharan Africa	no	334			37
GHA	Ghana	Sub Saharan Africa	no	4,753			38
GIN	Guinea	Sub Saharan Africa	no	1,643			39
KEN	Kenya	Sub Saharan Africa	no	8,730			40
LBR	Liberia	Sub Saharan Africa	no	263			41
MLI	Mali	Sub Saharan Africa	no	1,887			42
MRT	Mauritania	Sub Saharan Africa	no	1,470			43
NER	Niger	Sub Saharan Africa	no	1,230			44
NGA	Nigeria	Sub Saharan Africa	no	45,741			45
RWA	Rwanda	Sub Saharan Africa	no	962			46
SEN	Senegal	Sub Saharan Africa	no	5,536			47
SLE	Sierra Leone	Sub Saharan Africa	no	302			48
SOM	Somalia	Sub Saharan Africa	no	2,303			49
SDN	Sudan	Sub Saharan Africa	no	12,166			50
TGO	Togo	Sub Saharan Africa	no	529			51
UGA	Uganda	Sub Saharan Africa	no	3,787			52
ESH	Western Sahara	Sub Saharan Africa	no	418			53
ATG	Antigua and Barbuda	Caribbean	yes	272	1	4.9	1
BHS	Bahamas	Caribbean	yes	985	3	3.3	2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1	0.5	3
BHR	Bahrain	Asia	yes	1,670			4
SGP	Singapore	Pacific	yes	18,751			5
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	5.3	1
DMA	Dominica	Caribbean	yes	43	0	3.7	2
LCA	Saint Lucia	Caribbean	yes	73	0	2.8	3
BRB	Barbados	Caribbean	yes	253	1	2.1	4
JAM	Jamaica	Caribbean	yes	4,148	8	2.0	5
PLW	Palau	Pacific	yes	25	0	2.0	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	1.5	7
GRD	Grenada	Caribbean	yes	63	0	1.1	8
CUB	Cuba	Caribbean	yes	5,936	5	0.9	9
DOM	Dominican Republic	Caribbean	yes	13,790	11	0.8	10
SYC	Seychelles	Sub Saharan Africa	yes	631	0	0.2	11
SUR	Suriname	Latin America	yes	364		0.0	12
MDV	Maldives	Pacific	yes	154			13
KNA	Saint Kitts and Nevis	Caribbean	yes	0			14
TON	Tonga	Pacific	yes	47	1	10.2	1
WSM	Samoa	Pacific	yes	93	1	6.9	2
FJI	Fiji	Asia	yes	309	2	6.0	3
BLZ	Belize	Latin America	yes	65	0	4.8	4
FSM	Micronesia (Federated States of)	Pacific	yes	216	1	4.4	5
VUT	Vanuatu	Asia	yes	25		1.6	6
GUY	Guyana	Latin America	yes	884	0	0.1	7
CPV	Cape Verde	Sub Saharan Africa	yes	446			8
AIA	Anguilla	Caribbean	yes	2		30.0	1
VIR	United States Virgin Islands	Caribbean	yes	82	1	9.3	2
VGB	British Virgin Islands	Caribbean	yes	18	0	7.1	3
PRI	Puerto Rico	Caribbean	yes	3,197	19	5.9	4
PYF	French Polynesia	Pacific	yes	116	1	4.9	5
HTI	Haiti	Caribbean	yes	1,584	6	3.7	6
COM	Comoros	Sub Saharan Africa	yes	156	1	3.1	7
ABW	Aruba	Caribbean	yes	358	1	1.7	8
SLB	Solomon islands	Asia	yes	85	0	0.7	9
NCL	New Caledonia	Asia	yes	107		0.3	10
PNG	Papua New Guinea	Asia	yes	1,289	0	0.1	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [%]	
JPN	Japan	Asia	no	542,290	1,724	5,396,265	0.3	1
KOR	Republic of Korea	Asia	no	95,180	202	986,184	0.2	2
HKG	Hong Kong	Asia	no	47,718	37	211,863	0.2	3
MAC	Macau	Asia	no	1,989	1	11,994	0.1	4
USA	United States of America	North America	no	1,224,802	642	15,103,640	0.0	5
CAN	Canada	North America	no	121,895	18	1,606,667	0.0	6
BRN	Brunei Darussalam	Asia	no	895	1			7
OMN	Oman	Asia	no	4,095	0			8
NZL	New Zealand	Australia	no	12,682	1			9
AUS	Australia	Australia	no	47,971	2			10
ARE	United Arab Emirates	Asia	no	11,165	0	270,334		11
CYP	Cyprus	Asia	no	1,154		24,623		12
ISR	Israel	Asia	no	22,505		212,896		13
KWT	Kuwait	Asia	no	6,168				14
QAT	Qatar	Asia	no	2,116				15
SAU	Saudi Arabia	Asia	no	73,922		341,826		16
AUT	Austria	Europe	no	28,002		362,737		17
BEL	Belgium	Europe	no	29,496		456,696		18
CZE	Czech Republic	Europe	no	23,126		182,876		19
DNK	Denmark	Europe	no	31,778		292,535		20
EST	Estonia	Europe	no	2,851		17,933		21
FIN	Finland	Europe	no	14,927		235,640		22
FRA	France	Europe	no	236,236		2,620,062		23
DEU	Germany	Europe	no	262,867		3,101,126		24
GRC	Greece	Europe	no	27,597		327,811		25
ISL	Iceland	Europe	no	1,071		11,313		26
IRL	Ireland	Europe	no	16,223		171,957		27
ITA	Italy	Europe	no	188,526		2,087,749		28
LIE	Liechtenstein	Europe	no	198				29
LUX	Luxembourg	Europe	no	2,462		36,700		30
MCO	Monaco	Europe	no	123				31
NLD	Netherlands	Europe	no	49,481		721,171		32
NOR	Norway	Europe	no	33,800		358,009		33
PRT	Portugal	Europe	no	18,087		245,251		34
SMR	San Marino	Europe	no	113				35
SVK	Slovakia	Europe	no	9,245		88,405		36
SVN	Slovenia	Europe	no	2,231		46,643		37
ESP	Spain	Europe	no	122,131		1,437,861		38
SWE	Sweden	Europe	no	27,971		431,251		39
CHE	Switzerland	Europe	no	40,078		468,037		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,325,009		41
MLT	Malta	Pacific	no	1,330		8,111		42
MEX	Mexico	Latin America	no	260,866	459	1,049,803	0.4	1
VEN	Venezuela	Latin America	no	42,697	7	346,724	0.0	2
PAN	Panama	Latin America	no	5,115	0	27,738	0.0	3
CRI	Costa Rica	Latin America	no	6,892	0	36,941	0.0	4
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	369,463	0.0	5
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	6
CYM	Cayman Islands	Caribbean	no	81	1			7
TWN	Taiwan	Asia	no	38,310	188			8
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			9
COL	Colombia	Latin America	no	53,054	1	294,580		10
MYS	Malaysia	Asia	no	37,377	1	195,443		11
KAZ	Kazakhstan	Asia	no	20,880		127,087		12
LBN	Lebanon	Asia	no	4,139		47,915		13
TUR	Turkey	Asia	no	164,353		774,921		14
RUS	Russian Federation	Europe	no	288,219	0	1,356,393		15
BLR	Belarus	Europe	no	21,160		62,212		16
BGR	Bulgaria	Europe	no	9,040		48,622		17
HRV	Croatia	Europe	no	6,064		61,162		18
GIB	Gibraltar	Europe	no	274				19
HUN	Hungary	Europe	no	30,434		120,269		20
LVA	Latvia	Europe	no	4,998		24,210		21
LTU	Lithuania	Europe	no	7,227		36,811		22
MNE	Montenegro	Europe	no	269		5,265		23
POL	Poland	Europe	no	60,706		475,111		24
SRB	Serbia	Europe	no	1,938		44,764		25
ARG	Argentina	Latin America	no	39,520		356,545		26
BRA	Brazil	Latin America	no	300,613		2,108,637		27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNE [USD million]	AAL/GNE [‰]	Ranking
CHL	Chile	Latin America	no	18,070		198,120		28
URY	Uruguay	Latin America	no	4,269		39,936		29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				31
GAB	Gabon	Sub Saharan Africa	no	2,633		10,274		32
PHL	Philippines	Asia	no	46,143	505	203,208	2.5	1
HND	Honduras	Latin America	no	5,414	20	18,594	1.1	2
CHN	China	Asia	no	599,699	1,195	5,694,512	0.2	3
GTM	Guatemala	Latin America	no	8,748	4	45,670	0.1	4
SLV	El Salvador	Latin America	no	4,297	1	24,921	0.0	5
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	0.0	6
LKA	Sri Lanka	Asia	no	14,385	1	54,079	0.0	7
IDN	Indonesia	Asia	no	113,457	8	695,009	0.0	8
BTN	Bhutan	Asia	no	371				9
THA	Thailand	Asia	no	43,178	1	295,072		10
ARM	Armenia	Asia	no	2,899		11,639		11
AZE	Azerbaijan	Asia	no	12,666		33,777		12
GEO	Georgia	Asia	no	3,815		13,709		13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			14
IRQ	Iraq	Asia	no	15,555				15
JOR	Jordan	Asia	no	10,652		33,470		16
MNG	Mongolia	Asia	no	2,335		6,675		17
SYR	Syrian Arab Republic	Asia	no	18,783		59,401		18
TKM	Turkmenistan	Asia	no	3,779		20,575		19
ALB	Albania	Europe	no	3,381		14,377		20
BIH	Bosnia and Herzegovina	Europe	no	1,424		20,030		21
FRO	Faroe Islands	Europe	no	42				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		10,902		23
MDA	Moldova, Republic of	Europe	no	3,416		8,053		24
UKR	Ukraine	Europe	no	32,769		141,773		25
BOL	Bolivia	Latin America	no	4,521		18,301		26
ECU	Ecuador	Latin America	no	10,202		61,265		27
PRY	Paraguay	Latin America	no	4,301		17,941		28
PER	Peru	Latin America	no	24,717		152,561		29
DZA	Algeria	North Africa	no	67,908				30
EGY	Egypt	North Africa	no	101,974		229,362		31
MAR	Morocco	North Africa	no	41,389		99,808		32
TUN	Tunisia	North Africa	no	14,190		46,643		33
AGO	Angola	Sub Saharan Africa	no	9,237		72,456		34
CMR	Cameroon	Sub Saharan Africa	no	6,256		23,429		35
COG	Congo	Sub Saharan Africa	no	3,326		8,109		36
DJI	Djibouti	Sub Saharan Africa	no	656				37
NAM	Namibia	Sub Saharan Africa	no	1,706		12,035		38
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	11,309	0.5	1
BGD	Bangladesh	Asia	no	14,034	11	106,991	0.1	2
NIC	Nicaragua	Latin America	no	2,310	1	8,405	0.1	3
MWI	Malawi	Sub Saharan Africa	no	1,519	0	5,605	0.0	4
VNM	Viet Nam	Asia	no	24,066	4	117,363	0.0	5
LAO	Lao People's Democratic Republic	Asia	no	938	0	7,629	0.0	6
PAK	Pakistan	Asia	no	37,562	5	186,087	0.0	7
IND	India	Asia	no	320,919	51	1,783,129	0.0	8
KHM	Cambodia	Asia	no	1,623	0	11,854	0.0	9
TCA	Turks and Caicos islands	Caribbean	no	28	0			10
GLP	Guadeloupe	Caribbean	no	904	9			11
MTQ	Martinique	Caribbean	no	889	4			12
REU	Réunion	Sub Saharan Africa	no	2,161	13			13
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			14
MYT	Mayotte	Sub Saharan Africa	no	154	1			15
NPL	Nepal	Asia	no	2,411	1			16
MMR	Myanmar	Asia	no	9,829	1			17
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		8,897		18
ZMB	Zambia	Sub Saharan Africa	no	4,976		14,723		19
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	26,224		20
LSO	Lesotho	Sub Saharan Africa	no	2,124		3,511		21
GUF	French Guiana	Latin America	no	378				22
AFG	Afghanistan	Asia	no	9,988		1,852		23
KGZ	Kyrgyzstan	Asia	no	756		6,067		24
TJK	Tajikistan	Asia	no	2,412		8,227		25
UZB	Uzbekistan	Asia	no	10,382		38,768		26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNE [USD million]	AAL/GNE [‰]	
YEM	Yemen	Asia	no	10,133				27
BEN	Benin	Sub Saharan Africa	no	1,223		7,536		28
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				29
BDI	Burundi	Sub Saharan Africa	no	145				30
CAF	Central African Republic	Sub Saharan Africa	no	351				31
TCD	Chad	Sub Saharan Africa	no	4,004		9,469		32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		15,617		33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,734		34
ERI	Eritrea	Sub Saharan Africa	no	1,076				35
ETH	Ethiopia	Sub Saharan Africa	no	3,583		35,978		36
GMB	Gambia	Sub Saharan Africa	no	334		963		37
GHA	Ghana	Sub Saharan Africa	no	4,753		35,414		38
GIN	Guinea	Sub Saharan Africa	no	1,643		4,711		39
KEN	Kenya	Sub Saharan Africa	no	8,730		35,486		40
LBR	Liberia	Sub Saharan Africa	no	263				41
MLI	Mali	Sub Saharan Africa	no	1,887				42
MRT	Mauritania	Sub Saharan Africa	no	1,470		4,195		43
NER	Niger	Sub Saharan Africa	no	1,230				44
NGA	Nigeria	Sub Saharan Africa	no	45,741		168,996		45
RWA	Rwanda	Sub Saharan Africa	no	962				46
SEN	Senegal	Sub Saharan Africa	no	5,536		15,485		47
SLE	Sierra Leone	Sub Saharan Africa	no	302		2,142		48
SOM	Somalia	Sub Saharan Africa	no	2,303				49
SDN	Sudan	Sub Saharan Africa	no	12,166		61,511		50
TGO	Togo	Sub Saharan Africa	no	529				51
UGA	Uganda	Sub Saharan Africa	no	3,787		18,757		52
ESH	Western Sahara	Sub Saharan Africa	no	418				53
ATG	Antigua and Barbuda	Caribbean	yes	272	1	1,329	1.0	1
BHS	Bahamas	Caribbean	yes	985	3			2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			3
BHR	Bahrain	Asia	yes	1,670				4
SGP	Singapore	Pacific	yes	18,751		150,187		5
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	10,934	0.8	1
JAM	Jamaica	Caribbean	yes	4,148	8	16,776	0.5	2
DMA	Dominica	Caribbean	yes	43	0	573	0.4	3
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914	0.2	4
DOM	Dominican Republic	Caribbean	yes	13,790	11	57,847	0.2	5
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.2	6
BRB	Barbados	Caribbean	yes	253	1	4,317	0.1	7
GRD	Grenada	Caribbean	yes	63	0	996	0.1	8
PLW	Palau	Pacific	yes	25	0			9
CUB	Cuba	Caribbean	yes	5,936	5			10
SYC	Seychelles	Sub Saharan Africa	yes	631	0			11
SUR	Suriname	Latin America	yes	364				12
MDV	Maldives	Pacific	yes	154		2,244		13
KNA	Saint Kitts and Nevis	Caribbean	yes	0		766		14
TON	Tonga	Pacific	yes	47	1	510	1.0	1
WSM	Samoa	Pacific	yes	93	1	727	0.8	2
FJI	Fiji	Asia	yes	309	2	3,569	0.5	3
BLZ	Belize	Latin America	yes	65	0			4
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			5
VUT	Vanuatu	Asia	yes	25		743		6
GUY	Guyana	Latin America	yes	884	0			7
CPV	Cape Verde	Sub Saharan Africa	yes	446				8
HTI	Haiti	Caribbean	yes	1,584	6	9,743	0.6	1
SLB	Solomon islands	Asia	yes	85	0	885	0.1	2
PNG	Papua New Guinea	Asia	yes	1,289	0	9,217	0.0	3
AIA	Anguilla	Caribbean	yes	2				4
VGB	British Virgin Islands	Caribbean	yes	18	0			5
VIR	United States Virgin Islands	Caribbean	yes	82	1			6
PRI	Puerto Rico	Caribbean	yes	3,197	19			7
PYF	French Polynesia	Pacific	yes	116	1			8
COM	Comoros	Sub Saharan Africa	yes	156	1			9
ABW	Aruba	Caribbean	yes	358	1			10
NCL	New Caledonia	Asia	yes	107				11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value)	(Cyclones)	GGC	AAL/GGC	
				[USD million]	[USD million]	[USD million]	[%]	
HKG	Hong Kong	Asia	no	47,718	37	18,948	2.0	1
JPN	Japan	Asia	no	542,290	1,724	1,094,349	1.6	2
KOR	Republic of Korea	Asia	no	95,180	202	155,748	1.3	3
MAC	Macau	Asia	no	1,989	1	2,186	0.6	4
USA	United States of America	North America	no	1,224,802	642	2,522,700	0.3	5
CAN	Canada	North America	no	121,895	18	343,217	0.1	6
BRN	Brunei Darussalam	Asia	no	895	1			7
OMN	Oman	Asia	no	4,095	0			8
NZL	New Zealand	Australia	no	12,682	1			9
AUS	Australia	Australia	no	47,971	2			10
ARE	United Arab Emirates	Asia	no	11,165	0	24,545		11
CYP	Cyprus	Asia	no	1,154		4,558		12
ISR	Israel	Asia	no	22,505		52,616		13
KWT	Kuwait	Asia	no	6,168				14
QAT	Qatar	Asia	no	2,116				15
SAU	Saudi Arabia	Asia	no	73,922		97,875		16
AUT	Austria	Europe	no	28,002		73,430		17
BEL	Belgium	Europe	no	29,496		113,598		18
CZE	Czech Republic	Europe	no	23,126		41,897		19
DNK	Denmark	Europe	no	31,778		90,977		20
EST	Estonia	Europe	no	2,851		3,959		21
FIN	Finland	Europe	no	14,927		58,644		22
FRA	France	Europe	no	236,236		635,621		23
DEU	Germany	Europe	no	262,867		647,378		24
GRC	Greece	Europe	no	27,597		54,736		25
ISL	Iceland	Europe	no	1,071		3,261		26
IRL	Ireland	Europe	no	16,223		39,102		27
ITA	Italy	Europe	no	188,526		435,241		28
LIE	Liechtenstein	Europe	no	198				29
LUX	Luxembourg	Europe	no	2,462		8,868		30
MCO	Monaco	Europe	no	123				31
NLD	Netherlands	Europe	no	49,481		221,964		32
NOR	Norway	Europe	no	33,800		92,372		33
PRT	Portugal	Europe	no	18,087		49,074		34
SMR	San Marino	Europe	no	113				35
SVK	Slovakia	Europe	no	9,245		17,073		36
SVN	Slovenia	Europe	no	2,231		9,752		37
ESP	Spain	Europe	no	122,131		292,417		38
SWE	Sweden	Europe	no	27,971		123,918		39
CHE	Switzerland	Europe	no	40,078		60,549		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		518,869		41
MLT	Malta	Pacific	no	1,330		1,711		42
MEX	Mexico	Latin America	no	260,866	459	120,640	3.8	1
PAN	Panama	Latin America	no	5,115	0	1,561	0.3	2
VEN	Venezuela	Latin America	no	42,697	7	42,419	0.2	3
CRI	Costa Rica	Latin America	no	6,892	0	6,358	0.0	4
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	71,742	0.0	5
BWA	Botswana	Sub Saharan Africa	no	4,287	0	3,130	0.0	6
MYS	Malaysia	Asia	no	37,377	1	30,273	0.0	7
COL	Colombia	Latin America	no	53,054	1	46,769	0.0	8
CYM	Cayman Islands	Caribbean	no	81	1			9
TWN	Taiwan	Asia	no	38,310	188			10
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			11
KAZ	Kazakhstan	Asia	no	20,880		16,117		12
LBN	Lebanon	Asia	no	4,139		4,711		13
TUR	Turkey	Asia	no	164,353		104,758		14
RUS	Russian Federation	Europe	no	288,219	0	287,875		15
BLR	Belarus	Europe	no	21,160		8,828		16
BGR	Bulgaria	Europe	no	9,040		7,539		17
HRV	Croatia	Europe	no	6,064		13,084		18
GIB	Gibraltar	Europe	no	274				19
HUN	Hungary	Europe	no	30,434		28,084		20
LVA	Latvia	Europe	no	4,998		4,122		21
LTU	Lithuania	Europe	no	7,227		7,241		22
MNE	Montenegro	Europe	no	269		775		23
POL	Poland	Europe	no	60,706		88,643		24
SRB	Serbia	Europe	no	1,938		7,380		25
ARG	Argentina	Latin America	no	39,520		55,024		26
BRA	Brazil	Latin America	no	300,613		442,019		27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GGC [USD million]	AAL/GGC [‰]	Ranking
CHL	Chile	Latin America	no	18,070		26,588		28
URY	Uruguay	Latin America	no	4,269		5,117		29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				31
GAB	Gabon	Sub Saharan Africa	no	2,633		1,267		32
PHL	Philippines	Asia	no	46,143	505	19,403	26.0	1
HND	Honduras	Latin America	no	5,414	20	2,777	7.2	2
CHN	China	Asia	no	599,699	1,195	791,999	1.5	3
GTM	Guatemala	Latin America	no	8,748	4	4,254	0.9	4
SLV	El Salvador	Latin America	no	4,297	1	2,312	0.4	5
LKA	Sri Lanka	Asia	no	14,385	1	7,718	0.2	6
IDN	Indonesia	Asia	no	113,457	8	64,015	0.1	7
SWZ	Swaziland	Sub Saharan Africa	no	769	0	913	0.1	8
THA	Thailand	Asia	no	43,178	1	41,294	0.0	9
BTN	Bhutan	Asia	no	371				10
ARM	Armenia	Asia	no	2,899		1,231		11
AZE	Azerbaijan	Asia	no	12,666		5,852		12
GEO	Georgia	Asia	no	3,815		2,453		13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			14
IRQ	Iraq	Asia	no	15,555				15
JOR	Jordan	Asia	no	10,652		5,910		16
MNG	Mongolia	Asia	no	2,335		851		17
SYR	Syrian Arab Republic	Asia	no	18,783		5,991		18
TKM	Turkmenistan	Asia	no	3,779		2,212		19
ALB	Albania	Europe	no	3,381		952		20
BIH	Bosnia and Herzegovina	Europe	no	1,424		3,498		21
FRO	Faroe Islands	Europe	no	42				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		1,683		23
MDA	Moldova, Republic of	Europe	no	3,416		1,377		24
UKR	Ukraine	Europe	no	32,769		27,731		25
BOL	Bolivia	Latin America	no	4,521		2,718		26
ECU	Ecuador	Latin America	no	10,202		6,807		27
PRY	Paraguay	Latin America	no	4,301		1,711		28
PER	Peru	Latin America	no	24,717		15,659		29
DZA	Algeria	North Africa	no	67,908				30
EGY	Egypt	North Africa	no	101,974		24,436		31
MAR	Morocco	North Africa	no	41,389		15,913		32
TUN	Tunisia	North Africa	no	14,190		7,209		33
AGO	Angola	Sub Saharan Africa	no	9,237				34
CMR	Cameroon	Sub Saharan Africa	no	6,256				35
COG	Congo	Sub Saharan Africa	no	3,326		1,186		36
DJI	Djibouti	Sub Saharan Africa	no	656				37
NAM	Namibia	Sub Saharan Africa	no	1,706		2,692		38
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	1,166	4.6	1
BGD	Bangladesh	Asia	no	14,034	11	5,387	2.1	2
NIC	Nicaragua	Latin America	no	2,310	1	627	1.0	3
VNM	Viet Nam	Asia	no	24,066	4	6,947	0.6	4
PAK	Pakistan	Asia	no	37,562	5	14,053	0.4	5
LAO	Lao People's Democratic Republic	Asia	no	938	0	672	0.3	6
IND	India	Asia	no	320,919	51	198,830	0.3	7
MWI	Malawi	Sub Saharan Africa	no	1,519	0	976	0.2	8
KHM	Cambodia	Asia	no	1,623	0	713	0.1	9
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	4,052	0.0	10
TCA	Turks and Caicos islands	Caribbean	no	28	0			11
GLP	Guadeloupe	Caribbean	no	904	9			12
MTQ	Martinique	Caribbean	no	889	4			13
REU	Réunion	Sub Saharan Africa	no	2,161	13			14
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			15
MYT	Mayotte	Sub Saharan Africa	no	154	1			16
NPL	Nepal	Asia	no	2,411	1			17
MMR	Myanmar	Asia	no	9,829	1			18
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		1,281		19
ZMB	Zambia	Sub Saharan Africa	no	4,976		2,153		20
LSO	Lesotho	Sub Saharan Africa	no	2,124		935		21
GUF	French Guiana	Latin America	no	378				22
AFG	Afghanistan	Asia	no	9,988				23
KGZ	Kyrgyzstan	Asia	no	756		877		24
TJK	Tajikistan	Asia	no	2,412		1,658		25
UZB	Uzbekistan	Asia	no	10,382		6,853		26



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CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		1,968		34
ERI	Eritrea	Sub Saharan Africa	no	1,076				35
ETH	Ethiopia	Sub Saharan Africa	no	3,583		3,029		36
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MRT	Mauritania	Sub Saharan Africa	no	1,470		646		43
NER	Niger	Sub Saharan Africa	no	1,230				44
NGA	Nigeria	Sub Saharan Africa	no	45,741				45
RWA	Rwanda	Sub Saharan Africa	no	962				46
SEN	Senegal	Sub Saharan Africa	no	5,536		1,124		47
SLE	Sierra Leone	Sub Saharan Africa	no	302		233		48
SOM	Somalia	Sub Saharan Africa	no	2,303				49
SDN	Sudan	Sub Saharan Africa	no	12,166		9,428		50
TGO	Togo	Sub Saharan Africa	no	529				51
UGA	Uganda	Sub Saharan Africa	no	3,787		2,015		52
ESH	Western Sahara	Sub Saharan Africa	no	418				53
ATG	Antigua and Barbuda	Caribbean	yes	272	1			1
BHS	Bahamas	Caribbean	yes	985	3			2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			3
BHR	Bahrain	Asia	yes	1,670				4
SGP	Singapore	Pacific	yes	18,751		22,293		5
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	1,393	6.6	1
JAM	Jamaica	Caribbean	yes	4,148	8	2,368	3.6	2
DOM	Dominican Republic	Caribbean	yes	13,790	11	3,965	2.9	3
DMA	Dominica	Caribbean	yes	43	0	81	2.5	4
LCA	Saint Lucia	Caribbean	yes	73	0	192	1.0	5
BRB	Barbados	Caribbean	yes	253	1	835	0.6	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0			7
GRD	Grenada	Caribbean	yes	63	0			8
PLW	Palau	Pacific	yes	25	0			9
CUB	Cuba	Caribbean	yes	5,936	5			10
SYC	Seychelles	Sub Saharan Africa	yes	631	0			11
SUR	Suriname	Latin America	yes	364				12
MDV	Maldives	Pacific	yes	154				13
KNA	Saint Kitts and Nevis	Caribbean	yes	0				14
TON	Tonga	Pacific	yes	47	1	67	7.5	1
GUY	Guyana	Latin America	yes	884	0	341	0.3	2
WSM	Samoa	Pacific	yes	93	1			3
FJI	Fiji	Asia	yes	309	2			4
BLZ	Belize	Latin America	yes	65	0			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			6
VUT	Vanuatu	Asia	yes	25				7
CPV	Cape Verde	Sub Saharan Africa	yes	446				8
PNG	Papua New Guinea	Asia	yes	1,289	0	897	0.1	1
HTI	Haiti	Caribbean	yes	1,584	6			2
SLB	Solomon islands	Asia	yes	85	0			3
AIA	Anguilla	Caribbean	yes	2				4
VGB	British Virgin Islands	Caribbean	yes	18	0			5
VIR	United States Virgin Islands	Caribbean	yes	82	1			6
PRI	Puerto Rico	Caribbean	yes	3,197	19			7
PYF	French Polynesia	Pacific	yes	116	1			8
COM	Comoros	Sub Saharan Africa	yes	156	1			9
ABW	Aruba	Caribbean	yes	358	1			10
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				FISCAL (Exposed value)	(Cyclones)	GNS	AAL/GNS	
				[USD million]	[USD million]	[USD million]	[%]	
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KOR	Republic of Korea	Asia	no	95,180	202	321,095	0.6	2
HKG	Hong Kong	Asia	no	47,718	37	67,159	0.6	3
USA	United States of America	North America	no	1,224,802	642	15,103,640	0.4	4
CAN	Canada	North America	no	121,895	18	1,606,667	0.1	5
MAC	Macau	Asia	no	1,989	1			6
BRN	Brunei Darussalam	Asia	no	895	1			7
OMN	Oman	Asia	no	4,095	0			8
NZL	New Zealand	Australia	no	12,682	1			9
AUS	Australia	Australia	no	47,971	2			10
ARE	United Arab Emirates	Asia	no	11,165	0			11
CYP	Cyprus	Asia	no	1,154		2,138		12
ISR	Israel	Asia	no	22,505		39,726		13
KWT	Kuwait	Asia	no	6,168				14
QAT	Qatar	Asia	no	2,116				15
SAU	Saudi Arabia	Asia	no	73,922				16
AUT	Austria	Europe	no	28,002		362,737		17
BEL	Belgium	Europe	no	29,496		456,696		18
CZE	Czech Republic	Europe	no	23,126		182,876		19
DNK	Denmark	Europe	no	31,778		292,535		20
EST	Estonia	Europe	no	2,851		17,933		21
FIN	Finland	Europe	no	14,927		235,640		22
FRA	France	Europe	no	236,236		2,620,062		23
DEU	Germany	Europe	no	262,867		3,101,126		24
GRC	Greece	Europe	no	27,597		327,811		25
ISL	Iceland	Europe	no	1,071		11,313		26
IRL	Ireland	Europe	no	16,223		171,957		27
ITA	Italy	Europe	no	188,526		2,087,749		28
LIE	Liechtenstein	Europe	no	198				29
LUX	Luxembourg	Europe	no	2,462		36,700		30
MCO	Monaco	Europe	no	123				31
NLD	Netherlands	Europe	no	49,481		721,171		32
NOR	Norway	Europe	no	33,800		358,009		33
PRT	Portugal	Europe	no	18,087		245,251		34
SMR	San Marino	Europe	no	113				35
SVK	Slovakia	Europe	no	9,245		88,405		36
SVN	Slovenia	Europe	no	2,231		46,643		37
ESP	Spain	Europe	no	122,131		1,437,861		38
SWE	Sweden	Europe	no	27,971		431,251		39
CHE	Switzerland	Europe	no	40,078		468,037		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,325,009		41
MLT	Malta	Pacific	no	1,330		8,111		42
MEX	Mexico	Latin America	no	260,866	459	1,049,803	1.8	1
PAN	Panama	Latin America	no	5,115	0	27,738	0.1	2
VEN	Venezuela	Latin America	no	42,697	7	346,724	0.1	3
ZAF	South Africa	Sub Saharan Africa	no	69,420	2	369,463	0.0	4
CRI	Costa Rica	Latin America	no	6,892	0	36,941	0.0	5
BWA	Botswana	Sub Saharan Africa	no	4,287	0	15,360	0.0	6
COL	Colombia	Latin America	no	53,054	1	294,580	0.0	7
MYS	Malaysia	Asia	no	37,377	1	78,265	0.0	8
RUS	Russian Federation	Europe	no	288,219	0	1,356,393	0.0	9
CYM	Cayman Islands	Caribbean	no	81	1			10
TWN	Taiwan	Asia	no	38,310	188			11
PRK	Dem People's Rep of Korea	Asia	no	10,245	7			12
KAZ	Kazakhstan	Asia	no	20,880		41,723		13
LBN	Lebanon	Asia	no	4,139		4,428		14
TUR	Turkey	Asia	no	164,353		99,948		15
BLR	Belarus	Europe	no	21,160		62,212		16
BGR	Bulgaria	Europe	no	9,040		48,622		17
HRV	Croatia	Europe	no	6,064		61,162		18
GIB	Gibraltar	Europe	no	274				19
HUN	Hungary	Europe	no	30,434		120,269		20
LVA	Latvia	Europe	no	4,998		24,210		21
LTU	Lithuania	Europe	no	7,227		36,811		22
MNE	Montenegro	Europe	no	269		5,265		23
POL	Poland	Europe	no	60,706		475,111		24
SRB	Serbia	Europe	no	1,938		44,764		25
ARG	Argentina	Latin America	no	39,520		356,545		26
BRA	Brazil	Latin America	no	300,613		2,108,637		27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Cyclones) [USD million]	Risk indicator GNS [USD million]	AAL/GNS [‰]	Ranking
CHL	Chile	Latin America	no	18,070		198,120		28
URY	Uruguay	Latin America	no	4,269		39,936		29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626				31
GAB	Gabon	Sub Saharan Africa	no	2,633		10,274		32
PHL	Philippines	Asia	no	46,143	505	54,291	9.3	1
HND	Honduras	Latin America	no	5,414	20	18,594	8.0	2
SWZ	Swaziland	Sub Saharan Africa	no	769	0	4,329	1.1	3
GTM	Guatemala	Latin America	no	8,748	4	45,670	0.8	4
SLV	El Salvador	Latin America	no	4,297	1	24,921	0.4	5
CHN	China	Asia	no	599,699	1,195	3,137,116	0.4	6
LKA	Sri Lanka	Asia	no	14,385	1	12,267	0.1	7
IDN	Indonesia	Asia	no	113,457	8	225,795	0.0	8
THA	Thailand	Asia	no	43,178	1	97,152	0.0	9
BTN	Bhutan	Asia	no	371				10
ARM	Armenia	Asia	no	2,899		1,761		11
AZE	Azerbaijan	Asia	no	12,666		23,913		12
GEO	Georgia	Asia	no	3,815		1,152		13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	0			14
IRQ	Iraq	Asia	no	15,555				15
JOR	Jordan	Asia	no	10,652		2,520		16
MNG	Mongolia	Asia	no	2,335		1,682		17
SYR	Syrian Arab Republic	Asia	no	18,783		9,944		18
TKM	Turkmenistan	Asia	no	3,779				19
ALB	Albania	Europe	no	3,381		14,377		20
BIH	Bosnia and Herzegovina	Europe	no	1,424		20,030		21
FRO	Faroe Islands	Europe	no	42				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		10,902		23
MDA	Moldova, Republic of	Europe	no	3,416		8,053		24
UKR	Ukraine	Europe	no	32,769		141,773		25
BOL	Bolivia	Latin America	no	4,521		18,301		26
ECU	Ecuador	Latin America	no	10,202		61,265		27
PRY	Paraguay	Latin America	no	4,301		17,941		28
PER	Peru	Latin America	no	24,717		152,561		29
DZA	Algeria	North Africa	no	67,908				30
EGY	Egypt	North Africa	no	101,974		229,362		31
MAR	Morocco	North Africa	no	41,389		99,808		32
TUN	Tunisia	North Africa	no	14,190		46,643		33
AGO	Angola	Sub Saharan Africa	no	9,237		72,456		34
CMR	Cameroon	Sub Saharan Africa	no	6,256		23,429		35
COG	Congo	Sub Saharan Africa	no	3,326		8,109		36
DJI	Djibouti	Sub Saharan Africa	no	656				37
NAM	Namibia	Sub Saharan Africa	no	1,706		12,035		38
MOZ	Mozambique	Sub Saharan Africa	no	3,991	5	11,309	5.2	1
NIC	Nicaragua	Latin America	no	2,310	1	8,405	0.7	2
BGD	Bangladesh	Asia	no	14,034	11	38,537	0.3	3
LAO	Lao People's Democratic Republic	Asia	no	938	0	1,429	0.1	4
PAK	Pakistan	Asia	no	37,562	5	38,491	0.1	5
VNM	Viet Nam	Asia	no	24,066	4	33,911	0.1	6
IND	India	Asia	no	320,919	51	582,180	0.1	7
KHM	Cambodia	Asia	no	1,623	0	1,408	0.1	8
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	0	26,224	0.0	9
MWI	Malawi	Sub Saharan Africa	no	1,519	0	5,605		10
TCA	Turks and Caicos islands	Caribbean	no	28	0			11
GLP	Guadeloupe	Caribbean	no	904	9			12
MTQ	Martinique	Caribbean	no	889	4			13
REU	Réunion	Sub Saharan Africa	no	2,161	13			14
MDG	Madagascar	Sub Saharan Africa	no	1,546	9			15
MYT	Mayotte	Sub Saharan Africa	no	154	1			16
NPL	Nepal	Asia	no	2,411	1			17
MMR	Myanmar	Asia	no	9,829	1			18
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889		8,897		19
ZMB	Zambia	Sub Saharan Africa	no	4,976		14,723		20
LSO	Lesotho	Sub Saharan Africa	no	2,124		3,511		21
GUF	French Guiana	Latin America	no	378				22
AFG	Afghanistan	Asia	no	9,988				23
KGZ	Kyrgyzstan	Asia	no	756		908		24
TJK	Tajikistan	Asia	no	2,412		143		25
UZB	Uzbekistan	Asia	no	10,382				26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	AAL Value	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNS [USD million]	AAL/GNS [‰]	
YEM	Yemen	Asia	no	10,133				27
BEN	Benin	Sub Saharan Africa	no	1,223		7,536		28
BFA	Burkina Faso	Sub Saharan Africa	no	1,847				29
BDI	Burundi	Sub Saharan Africa	no	145				30
CAF	Central African Republic	Sub Saharan Africa	no	351				31
TCD	Chad	Sub Saharan Africa	no	4,004		9,469		32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		15,617		33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,734		34
ERI	Eritrea	Sub Saharan Africa	no	1,076				35
ETH	Ethiopia	Sub Saharan Africa	no	3,583		35,978		36
GMB	Gambia	Sub Saharan Africa	no	334		963		37
GHA	Ghana	Sub Saharan Africa	no	4,753		35,414		38
GIN	Guinea	Sub Saharan Africa	no	1,643		4,711		39
KEN	Kenya	Sub Saharan Africa	no	8,730		35,486		40
LBR	Liberia	Sub Saharan Africa	no	263				41
MLI	Mali	Sub Saharan Africa	no	1,887				42
MRT	Mauritania	Sub Saharan Africa	no	1,470		4,195		43
NER	Niger	Sub Saharan Africa	no	1,230				44
NGA	Nigeria	Sub Saharan Africa	no	45,741		168,996		45
RWA	Rwanda	Sub Saharan Africa	no	962				46
SEN	Senegal	Sub Saharan Africa	no	5,536		15,485		47
SLE	Sierra Leone	Sub Saharan Africa	no	302		2,142		48
SOM	Somalia	Sub Saharan Africa	no	2,303				49
SDN	Sudan	Sub Saharan Africa	no	12,166		61,511		50
TGO	Togo	Sub Saharan Africa	no	529				51
UGA	Uganda	Sub Saharan Africa	no	3,787		18,757		52
ESH	Western Sahara	Sub Saharan Africa	no	418				53
ATG	Antigua and Barbuda	Caribbean	yes	272	1	1,329		1
BHS	Bahamas	Caribbean	yes	985	3			2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	1			3
BHR	Bahrain	Asia	yes	1,670				4
SGP	Singapore	Pacific	yes	18,751		150,187		5
DMA	Dominica	Caribbean	yes	43	0	573	34.7	1
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	10,934	5.7	2
JAM	Jamaica	Caribbean	yes	4,148	8	16,776	4.8	3
DOM	Dominican Republic	Caribbean	yes	13,790	11	57,847	3.0	4
LCA	Saint Lucia	Caribbean	yes	73	0	1,355	0.9	5
BRB	Barbados	Caribbean	yes	253	1	4,317		6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	0	914		7
GRD	Grenada	Caribbean	yes	63	0	996		8
PLW	Palau	Pacific	yes	25	0			9
CUB	Cuba	Caribbean	yes	5,936	5			10
SYC	Seychelles	Sub Saharan Africa	yes	631	0			11
SUR	Suriname	Latin America	yes	364				12
MDV	Maldives	Pacific	yes	154		2,244		13
KNA	Saint Kitts and Nevis	Caribbean	yes	0		766		14
GUY	Guyana	Latin America	yes	884	0		0.3	1
TON	Tonga	Pacific	yes	47	1	510		2
WSM	Samoa	Pacific	yes	93	1	727		3
FJI	Fiji	Asia	yes	309	2			4
BLZ	Belize	Latin America	yes	65	0			5
FSM	Micronesia (Federated States of)	Pacific	yes	216	1			6
VUT	Vanuatu	Asia	yes	25				7
CPV	Cape Verde	Sub Saharan Africa	yes	446				8
PNG	Papua New Guinea	Asia	yes	1,289	0	2,660	0.0	1
HTI	Haiti	Caribbean	yes	1,584	6	9,743		2
SLB	Solomon islands	Asia	yes	85	0			3
AIA	Anguilla	Caribbean	yes	2				4
VGB	British Virgin Islands	Caribbean	yes	18	0			5
VIR	United States Virgin Islands	Caribbean	yes	82	1			6
PRI	Puerto Rico	Caribbean	yes	3,197	19			7
PYF	French Polynesia	Pacific	yes	116	1			8
COM	Comoros	Sub Saharan Africa	yes	156	1			9
ABW	Aruba	Caribbean	yes	358	1			10
NCL	New Caledonia	Asia	yes	107				11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258				12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114				13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
JPN	Japan	Asia	no	542,290	20,590	3.8	1
KOR	Republic of Korea	Asia	no	95,180	3,600	3.8	2
BRN	Brunei Darussalam	Asia	no	895	25	2.7	3
HKG	Hong Kong	Asia	no	47,718	1,003	2.1	4
MAC	Macau	Asia	no	1,989	32	1.6	5
USA	United States of America	North America	no	1,224,802	10,909	0.9	6
CAN	Canada	North America	no	121,895	653	0.5	7
OMN	Oman	Asia	no	4,095	13	0.3	8
NZL	New Zealand	Australia	no	12,682	28	0.2	9
AUS	Australia	Australia	no	47,971	49	0.1	10
ARE	United Arab Emirates	Asia	no	11,165	7	0.1	11
CYP	Cyprus	Asia	no	1,154			12
ISR	Israel	Asia	no	22,505			13
KWT	Kuwait	Asia	no	6,168			14
QAT	Qatar	Asia	no	2,116			15
SAU	Saudi Arabia	Asia	no	73,922			16
AUT	Austria	Europe	no	28,002			17
BEL	Belgium	Europe	no	29,496			18
CZE	Czech Republic	Europe	no	23,126			19
DNK	Denmark	Europe	no	31,778			20
EST	Estonia	Europe	no	2,851			21
FIN	Finland	Europe	no	14,927			22
FRA	France	Europe	no	236,236			23
DEU	Germany	Europe	no	262,867			24
GRC	Greece	Europe	no	27,597			25
ISL	Iceland	Europe	no	1,071			26
IRL	Ireland	Europe	no	16,223			27
ITA	Italy	Europe	no	188,526			28
LIE	Liechtenstein	Europe	no	198			29
LUX	Luxembourg	Europe	no	2,462			30
MCO	Monaco	Europe	no	123			31
NLD	Netherlands	Europe	no	49,481			32
NOR	Norway	Europe	no	33,800			33
PRT	Portugal	Europe	no	18,087	0		34
SMR	San Marino	Europe	no	113			35
SVK	Slovakia	Europe	no	9,245			36
SVN	Slovenia	Europe	no	2,231			37
ESP	Spain	Europe	no	122,131			38
SWE	Sweden	Europe	no	27,971			39
CHE	Switzerland	Europe	no	40,078			40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134			41
MLT	Malta	Pacific	no	1,330			42
CYM	Cayman Islands	Caribbean	no	81	29	35.9	1
MEX	Mexico	Latin America	no	260,866	13,716	5.3	2
TWN	Taiwan	Asia	no	38,310	1,821	4.8	3
PRK	Dem People's Rep of Korea	Asia	no	10,245	216	2.1	4
VEN	Venezuela	Latin America	no	42,697	319	0.8	5
PAN	Panama	Latin America	no	5,115	21	0.4	6
CRI	Costa Rica	Latin America	no	6,892	12	0.2	7
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	0.2	8
COL	Colombia	Latin America	no	53,054	56	0.1	9
MYS	Malaysia	Asia	no	37,377	39	0.1	10
BWA	Botswana	Sub Saharan Africa	no	4,287	1	0.0	11
KAZ	Kazakhstan	Asia	no	20,880			12
LBN	Lebanon	Asia	no	4,139			13
TUR	Turkey	Asia	no	164,353			14
RUS	Russian Federation	Europe	no	288,219	7		15
BLR	Belarus	Europe	no	21,160			16
BGR	Bulgaria	Europe	no	9,040			17
HRV	Croatia	Europe	no	6,064			18
GIB	Gibraltar	Europe	no	274			19
HUN	Hungary	Europe	no	30,434			20
LVA	Latvia	Europe	no	4,998			21
LTU	Lithuania	Europe	no	7,227			22
MNE	Montenegro	Europe	no	269			23
POL	Poland	Europe	no	60,706			24
SRB	Serbia	Europe	no	1,938			25
ARG	Argentina	Latin America	no	39,520			26
BRA	Brazil	Latin America	no	300,613			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	PML ₂₅₀ /PC [%]	Ranking
CHL	Chile	Latin America	no	18,070			28
URY	Uruguay	Latin America	no	4,269			29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501			30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626			31
GAB	Gabon	Sub Saharan Africa	no	2,633			32
PHL	Philippines	Asia	no	46,143	7,309	15.8	1
HND	Honduras	Latin America	no	5,414	800	14.8	2
CHN	China	Asia	no	599,699	17,031	2.8	3
GTM	Guatemala	Latin America	no	8,748	154	1.8	4
SLV	El Salvador	Latin America	no	4,297	31	0.7	5
SWZ	Swaziland	Sub Saharan Africa	no	769	5	0.6	6
LKA	Sri Lanka	Asia	no	14,385	49	0.3	7
IDN	Indonesia	Asia	no	113,457	387	0.3	8
BTN	Bhutan	Asia	no	371	1	0.3	9
THA	Thailand	Asia	no	43,178	24	0.1	10
ARM	Armenia	Asia	no	2,899			11
AZE	Azerbaijan	Asia	no	12,666			12
GEO	Georgia	Asia	no	3,815			13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4		14
IRQ	Iraq	Asia	no	15,555			15
JOR	Jordan	Asia	no	10,652			16
MNG	Mongolia	Asia	no	2,335			17
SYR	Syrian Arab Republic	Asia	no	18,783			18
TKM	Turkmenistan	Asia	no	3,779			19
ALB	Albania	Europe	no	3,381			20
BIH	Bosnia and Herzegovina	Europe	no	1,424			21
FRO	Faroe Islands	Europe	no	42			22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000			23
MDA	Moldova, Republic of	Europe	no	3,416			24
UKR	Ukraine	Europe	no	32,769			25
BOL	Bolivia	Latin America	no	4,521			26
ECU	Ecuador	Latin America	no	10,202			27
PRY	Paraguay	Latin America	no	4,301			28
PER	Peru	Latin America	no	24,717			29
DZA	Algeria	North Africa	no	67,908			30
EGY	Egypt	North Africa	no	101,974			31
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TUN	Tunisia	North Africa	no	14,190			33
AGO	Angola	Sub Saharan Africa	no	9,237			34
CMR	Cameroon	Sub Saharan Africa	no	6,256			35
COG	Congo	Sub Saharan Africa	no	3,326			36
DJI	Djibouti	Sub Saharan Africa	no	656			37
NAM	Namibia	Sub Saharan Africa	no	1,706			38
TCA	Turks and Caicos islands	Caribbean	no	28	12	42.6	1
GLP	Guadeloupe	Caribbean	no	904	290	32.0	2
MTQ	Martinique	Caribbean	no	889	210	23.6	3
REU	Réunion	Sub Saharan Africa	no	2,161	384	17.8	4
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	15.6	5
MYT	Mayotte	Sub Saharan Africa	no	154	22	14.1	6
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	7.2	7
BGD	Bangladesh	Asia	no	14,034	589	4.2	8
NPL	Nepal	Asia	no	2,411	42	1.7	9
NIC	Nicaragua	Latin America	no	2,310	27	1.2	10
LAO	Lao People's Democratic Republic	Asia	no	938	7	0.8	11
MWI	Malawi	Sub Saharan Africa	no	1,519	11	0.7	12
PAK	Pakistan	Asia	no	37,562	263	0.7	13
IND	India	Asia	no	320,919	2,109	0.7	14
MMR	Myanmar	Asia	no	9,829	48	0.5	15
VNM	Viet Nam	Asia	no	24,066	111	0.5	16
KHM	Cambodia	Asia	no	1,623	6	0.4	17
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	0.1	18
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.0	19
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	0.0	20
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.0	21
GUF	French Guiana	Latin America	no	378			22
AFG	Afghanistan	Asia	no	9,988			23
KGZ	Kyrgyzstan	Asia	no	756			24
TJK	Tajikistan	Asia	no	2,412			25
UZB	Uzbekistan	Asia	no	10,382			26



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CAF	Central African Republic	Sub Saharan Africa	no	351			31
TCD	Chad	Sub Saharan Africa	no	4,004			32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914			33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304			34
ERI	Eritrea	Sub Saharan Africa	no	1,076			35
ETH	Ethiopia	Sub Saharan Africa	no	3,583			36
GMB	Gambia	Sub Saharan Africa	no	334			37
GHA	Ghana	Sub Saharan Africa	no	4,753			38
GIN	Guinea	Sub Saharan Africa	no	1,643			39
KEN	Kenya	Sub Saharan Africa	no	8,730			40
LBR	Liberia	Sub Saharan Africa	no	263			41
MLI	Mali	Sub Saharan Africa	no	1,887			42
MRT	Mauritania	Sub Saharan Africa	no	1,470			43
NER	Niger	Sub Saharan Africa	no	1,230			44
NGA	Nigeria	Sub Saharan Africa	no	45,741			45
RWA	Rwanda	Sub Saharan Africa	no	962			46
SEN	Senegal	Sub Saharan Africa	no	5,536			47
SLE	Sierra Leone	Sub Saharan Africa	no	302			48
SOM	Somalia	Sub Saharan Africa	no	2,303			49
SDN	Sudan	Sub Saharan Africa	no	12,166			50
TGO	Togo	Sub Saharan Africa	no	529			51
UGA	Uganda	Sub Saharan Africa	no	3,787			52
ESH	Western Sahara	Sub Saharan Africa	no	418			53
ATG	Antigua and Barbuda	Caribbean	yes	272	52	19.1	1
BHS	Bahamas	Caribbean	yes	985	121	12.3	2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	3.2	3
BHR	Bahrain	Asia	yes	1,670			4
SGP	Singapore	Pacific	yes	18,751			5
DMA	Dominica	Caribbean	yes	43	8	19.6	1
LCA	Saint Lucia	Caribbean	yes	73	11	14.7	2
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	13.8	3
BRB	Barbados	Caribbean	yes	253	31	12.1	4
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	8.2	5
JAM	Jamaica	Caribbean	yes	4,148	325	7.8	6
GRD	Grenada	Caribbean	yes	63	4	6.9	7
PLW	Palau	Pacific	yes	25	2	6.3	8
DOM	Dominican Republic	Caribbean	yes	13,790	430	3.1	9
CUB	Cuba	Caribbean	yes	5,936	158	2.7	10
SYC	Seychelles	Sub Saharan Africa	yes	631	3	0.4	11
SUR	Suriname	Latin America	yes	364	0	0.0	12
MDV	Maldives	Pacific	yes	154			13
KNA	Saint Kitts and Nevis	Caribbean	yes	0			14
TON	Tonga	Pacific	yes	47	12	26.6	1
WSM	Samoa	Pacific	yes	93	24	26.1	2
BLZ	Belize	Latin America	yes	65	16	24.7	3
FJI	Fiji	Asia	yes	309	60	19.5	4
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	17.8	5
VUT	Vanuatu	Asia	yes	25	1	5.1	6
GUY	Guyana	Latin America	yes	884	1	0.1	7
CPV	Cape Verde	Sub Saharan Africa	yes	446			8
AIA	Anguilla	Caribbean	yes	2	1	94.3	1
VGB	British Virgin Islands	Caribbean	yes	18	5	32.1	2
VIR	United States Virgin Islands	Caribbean	yes	82	21	26.4	3
PRI	Puerto Rico	Caribbean	yes	3,197	572	17.9	4
HTI	Haiti	Caribbean	yes	1,584	269	17.0	5
PYF	French Polynesia	Pacific	yes	116	18	15.6	6
COM	Comoros	Sub Saharan Africa	yes	156	24	15.5	7
ABW	Aruba	Caribbean	yes	358	30	8.5	8
SLB	Solomon islands	Asia	yes	85	2	2.3	9
NCL	New Caledonia	Asia	yes	107	1	0.8	10
PNG	Papua New Guinea	Asia	yes	1,289	2	0.2	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258			12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114			13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GDP [USD million]	PML ₂₅₀ /GDP [%]	Ranking
HKG	Hong Kong	Asia	no	47,718	1,003	224,458	0.5	1
JPN	Japan	Asia	no	542,290	20,590	5,458,837	0.4	2
KOR	Republic of Korea	Asia	no	95,180	3,600	1,014,483	0.4	3
MAC	Macau	Asia	no	1,989	32	27,960	0.1	4
USA	United States of America	North America	no	1,224,802	10,909	14,586,740	0.1	5
CAN	Canada	North America	no	121,895	653	1,577,040	0.0	6
BRN	Brunei Darussalam	Asia	no	895	25			7
OMN	Oman	Asia	no	4,095	13			8
NZL	New Zealand	Australia	no	12,682	28			9
AUS	Australia	Australia	no	47,971	49			10
ARE	United Arab Emirates	Asia	no	11,165	7	297,649		11
CYP	Cyprus	Asia	no	1,154		23,132		12
ISR	Israel	Asia	no	22,505		217,333		13
KWT	Kuwait	Asia	no	6,168				14
QAT	Qatar	Asia	no	2,116				15
SAU	Saudi Arabia	Asia	no	73,922		434,666		16
AUT	Austria	Europe	no	28,002		379,069		17
BEL	Belgium	Europe	no	29,496		469,374		18
CZE	Czech Republic	Europe	no	23,126		192,032		19
DNK	Denmark	Europe	no	31,778		309,866		20
EST	Estonia	Europe	no	2,851		19,217		21
FIN	Finland	Europe	no	14,927		238,746		22
FRA	France	Europe	no	236,236		2,560,002		23
DEU	Germany	Europe	no	262,867		3,280,530		24
GRC	Greece	Europe	no	27,597		301,083		25
ISL	Iceland	Europe	no	1,071		12,574		26
IRL	Ireland	Europe	no	16,223		211,390		27
ITA	Italy	Europe	no	188,526		2,051,412		28
LIE	Liechtenstein	Europe	no	198				29
LUX	Luxembourg	Europe	no	2,462		53,334		30
MCO	Monaco	Europe	no	123				31
NLD	Netherlands	Europe	no	49,481		779,356		32
NOR	Norway	Europe	no	33,800		412,990		33
PRT	Portugal	Europe	no	18,087	0	228,872		34
SMR	San Marino	Europe	no	113				35
SVK	Slovakia	Europe	no	9,245		87,268		36
SVN	Slovenia	Europe	no	2,231		46,908		37
ESP	Spain	Europe	no	122,131		1,407,405		38
SWE	Sweden	Europe	no	27,971		458,973		39
CHE	Switzerland	Europe	no	40,078		527,920		40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,248,831		41
MLT	Malta	Pacific	no	1,330		8,256		42
MEX	Mexico	Latin America	no	260,866	13,716	1,034,804	1.3	1
PAN	Panama	Latin America	no	5,115	21	26,689	0.1	2
VEN	Venezuela	Latin America	no	42,697	319	391,848	0.1	3
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	363,704	0.0	4
CRI	Costa Rica	Latin America	no	6,892	12	35,831	0.0	5
COL	Colombia	Latin America	no	53,054	56	288,189	0.0	6
MYS	Malaysia	Asia	no	37,377	39	237,797	0.0	7
BWA	Botswana	Sub Saharan Africa	no	4,287	1	14,857		8
RUS	Russian Federation	Europe	no	288,219	7	1,479,819		9
CYM	Cayman Islands	Caribbean	no	81	29			10
TWN	Taiwan	Asia	no	38,310	1,821			11
PRK	Dem People's Rep of Korea	Asia	no	10,245	216			12
KAZ	Kazakhstan	Asia	no	20,880		149,059		13
LBN	Lebanon	Asia	no	4,139		39,006		14
TUR	Turkey	Asia	no	164,353		734,365		15
BLR	Belarus	Europe	no	21,160		54,713		16
BGR	Bulgaria	Europe	no	9,040		47,714		17
HRV	Croatia	Europe	no	6,064		60,852		18
GIB	Gibraltar	Europe	no	274				19
HUN	Hungary	Europe	no	30,434		128,632		20
LVA	Latvia	Europe	no	4,998		24,010		21
LTU	Lithuania	Europe	no	7,227		36,306		22
MNE	Montenegro	Europe	no	269		4,111		23
POL	Poland	Europe	no	60,706		469,440		24
SRB	Serbia	Europe	no	1,938		38,423		25
ARG	Argentina	Latin America	no	39,520		368,736		26
BRA	Brazil	Latin America	no	300,613		2,087,890		27



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CHL	Chile	Latin America	no	18,070		212,741		28
URY	Uruguay	Latin America	no	4,269		40,265		29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626		14,007		31
GAB	Gabon	Sub Saharan Africa	no	2,633		13,011		32
HND	Honduras	Latin America	no	5,414	800	15,400	5.2	1
PHL	Philippines	Asia	no	46,143	7,309	199,589	3.7	2
GTM	Guatemala	Latin America	no	8,748	154	41,186	0.4	3
CHN	China	Asia	no	599,699	17,031	5,926,612	0.3	4
SLV	El Salvador	Latin America	no	4,297	31	21,215	0.1	5
SWZ	Swaziland	Sub Saharan Africa	no	769	5	3,645	0.1	6
LKA	Sri Lanka	Asia	no	14,385	49	49,552	0.1	7
BTN	Bhutan	Asia	no	371	1	1,516	0.1	8
IDN	Indonesia	Asia	no	113,457	387	706,558	0.1	9
THA	Thailand	Asia	no	43,178	24	318,522	0.0	10
ARM	Armenia	Asia	no	2,899		9,371		11
AZE	Azerbaijan	Asia	no	12,666		51,774		12
GEO	Georgia	Asia	no	3,815		11,667		13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4			14
IRQ	Iraq	Asia	no	15,555		82,150		15
JOR	Jordan	Asia	no	10,652		27,574		16
MNG	Mongolia	Asia	no	2,335		6,200		17
SYR	Syrian Arab Republic	Asia	no	18,783		59,147		18
TKM	Turkmenistan	Asia	no	3,779		20,001		19
ALB	Albania	Europe	no	3,381		11,786		20
BIH	Bosnia and Herzegovina	Europe	no	1,424		16,578		21
FRO	Faroe Islands	Europe	no	42				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		9,189		23
MDA	Moldova, Republic of	Europe	no	3,416		5,809		24
UKR	Ukraine	Europe	no	32,769		137,929		25
BOL	Bolivia	Latin America	no	4,521		19,650		26
ECU	Ecuador	Latin America	no	10,202		57,978		27
PRY	Paraguay	Latin America	no	4,301		18,333		28
PER	Peru	Latin America	no	24,717		157,053		29
DZA	Algeria	North Africa	no	67,908		159,426		30
EGY	Egypt	North Africa	no	101,974		218,894		31
MAR	Morocco	North Africa	no	41,389		90,805		32
TUN	Tunisia	North Africa	no	14,190		44,291		33
AGO	Angola	Sub Saharan Africa	no	9,237		84,391		34
CMR	Cameroon	Sub Saharan Africa	no	6,256		22,394		35
COG	Congo	Sub Saharan Africa	no	3,326		11,898		36
DJI	Djibouti	Sub Saharan Africa	no	656				37
NAM	Namibia	Sub Saharan Africa	no	1,706		12,170		38
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	9,586	3.0	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	8,721	2.8	2
BGD	Bangladesh	Asia	no	14,034	589	100,357	0.6	3
NIC	Nicaragua	Latin America	no	2,310	27	6,551	0.4	4
MWI	Malawi	Sub Saharan Africa	no	1,519	11	5,106	0.2	5
PAK	Pakistan	Asia	no	37,562	263	176,870	0.2	6
IND	India	Asia	no	320,919	2,109	1,727,111	0.1	7
LAO	Lao People's Democratic Republic	Asia	no	938	7	7,296	0.1	8
VNM	Viet Nam	Asia	no	24,066	111	106,427	0.1	9
KHM	Cambodia	Asia	no	1,623	6	11,242	0.1	10
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	7,474	0.0	11
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	16,193	0.0	12
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	2,132	0.0	13
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	23,057		14
TCA	Turks and Caicos islands	Caribbean	no	28	12			15
GLP	Guadeloupe	Caribbean	no	904	290			16
MTQ	Martinique	Caribbean	no	889	210			17
REU	Réunion	Sub Saharan Africa	no	2,161	384			18
MYT	Mayotte	Sub Saharan Africa	no	154	22			19
NPL	Nepal	Asia	no	2,411	42			20
MMR	Myanmar	Asia	no	9,829	48			21
GUF	French Guiana	Latin America	no	378				22
AFG	Afghanistan	Asia	no	9,988		17,243		23
KGZ	Kyrgyzstan	Asia	no	756		4,616		24
TJK	Tajikistan	Asia	no	2,412		5,640		25
UZB	Uzbekistan	Asia	no	10,382		38,982		26



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YEM	Yemen	Asia	no	10,133				27
BEN	Benin	Sub Saharan Africa	no	1,223		6,633		28
BFA	Burkina Faso	Sub Saharan Africa	no	1,847		8,820		29
BDI	Burundi	Sub Saharan Africa	no	145		1,611		30
CAF	Central African Republic	Sub Saharan Africa	no	351		2,013		31
TCD	Chad	Sub Saharan Africa	no	4,004		7,588		32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		13,145		33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		22,780		34
ERI	Eritrea	Sub Saharan Africa	no	1,076		2,117		35
ETH	Ethiopia	Sub Saharan Africa	no	3,583		29,717		36
GMB	Gambia	Sub Saharan Africa	no	334		807		37
GHA	Ghana	Sub Saharan Africa	no	4,753		31,306		38
GIN	Guinea	Sub Saharan Africa	no	1,643		4,511		39
KEN	Kenya	Sub Saharan Africa	no	8,730		31,409		40
LBR	Liberia	Sub Saharan Africa	no	263		986		41
MLI	Mali	Sub Saharan Africa	no	1,887		9,251		42
MRT	Mauritania	Sub Saharan Africa	no	1,470		3,636		43
NER	Niger	Sub Saharan Africa	no	1,230		5,549		44
NGA	Nigeria	Sub Saharan Africa	no	45,741		193,669		45
RWA	Rwanda	Sub Saharan Africa	no	962		5,628		46
SEN	Senegal	Sub Saharan Africa	no	5,536		12,954		47
SLE	Sierra Leone	Sub Saharan Africa	no	302		1,905		48
SOM	Somalia	Sub Saharan Africa	no	2,303				49
SDN	Sudan	Sub Saharan Africa	no	12,166		62,046		50
TGO	Togo	Sub Saharan Africa	no	529		3,153		51
UGA	Uganda	Sub Saharan Africa	no	3,787		17,011		52
ESH	Western Sahara	Sub Saharan Africa	no	418				53
ATG	Antigua and Barbuda	Caribbean	yes	272	52	1,211	4.3	1
BHS	Bahamas	Caribbean	yes	985	121	7,538	1.6	2
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	20,604	0.4	3
BHR	Bahrain	Asia	yes	1,670				4
SGP	Singapore	Pacific	yes	18,751		208,765		5
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	9,729	2.5	1
JAM	Jamaica	Caribbean	yes	4,148	325	14,252	2.3	2
DMA	Dominica	Caribbean	yes	43	8	466	1.8	3
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	705	1.6	4
PLW	Palau	Pacific	yes	25	2	171	0.9	5
LCA	Saint Lucia	Caribbean	yes	73	11	1,198	0.9	6
DOM	Dominican Republic	Caribbean	yes	13,790	430	51,766	0.8	7
BRB	Barbados	Caribbean	yes	253	31	4,110	0.8	8
GRD	Grenada	Caribbean	yes	63	4	773	0.6	9
SYC	Seychelles	Sub Saharan Africa	yes	631	3	937	0.3	10
CUB	Cuba	Caribbean	yes	5,936	158			11
SUR	Suriname	Latin America	yes	364	0			12
MDV	Maldives	Pacific	yes	154		1,908		13
KNA	Saint Kitts and Nevis	Caribbean	yes	0		652		14
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	297	12.9	1
WSM	Samoa	Pacific	yes	93	24	574	4.2	2
TON	Tonga	Pacific	yes	47	12	348	3.5	3
FJI	Fiji	Asia	yes	309	60	3,189	1.9	4
BLZ	Belize	Latin America	yes	65	16	1,401	1.2	5
VUT	Vanuatu	Asia	yes	25	1	699	0.2	6
GUY	Guyana	Latin America	yes	884	1	2,226	0.0	7
CPV	Cape Verde	Sub Saharan Africa	yes	446		1,648		8
COM	Comoros	Sub Saharan Africa	yes	156	24	541	4.5	1
HTI	Haiti	Caribbean	yes	1,584	269	6,710	4.0	2
SLB	Solomon islands	Asia	yes	85	2	679	0.3	3
PNG	Papua New Guinea	Asia	yes	1,289	2	9,480	0.0	4
AIA	Anguilla	Caribbean	yes	2	1			5
VGB	British Virgin Islands	Caribbean	yes	18	5			6
VIR	United States Virgin Islands	Caribbean	yes	82	21			7
PRI	Puerto Rico	Caribbean	yes	3,197	572			8
PYF	French Polynesia	Pacific	yes	116	18			9
ABW	Aruba	Caribbean	yes	358	30			10
NCL	New Caledonia	Asia	yes	107	1			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258		879		12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114		197		13



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HKG	Hong Kong	Asia	no	47,718	1,003	229,165		0.4	1
JPN	Japan	Asia	no	542,290	20,590	5,601,557		0.4	2
KOR	Republic of Korea	Asia	no	95,180	3,600	1,014,760		0.4	3
USA	United States of America	North America	no	1,224,802	10,909	14,635,600		0.1	4
CAN	Canada	North America	no	121,895	653	1,549,652		0.0	5
MAC	Macau	Asia	no	1,989	32				6
BRN	Brunei Darussalam	Asia	no	895	25				7
OMN	Oman	Asia	no	4,095	13				8
NZL	New Zealand	Australia	no	12,682	28				9
AUS	Australia	Australia	no	47,971	49				10
ARE	United Arab Emirates	Asia	no	11,165	7				11
CYP	Cyprus	Asia	no	1,154		22,539			12
ISR	Israel	Asia	no	22,505		210,353			13
KWT	Kuwait	Asia	no	6,168					14
QAT	Qatar	Asia	no	2,116					15
SAU	Saudi Arabia	Asia	no	73,922					16
AUT	Austria	Europe	no	28,002		377,063			17
BEL	Belgium	Europe	no	29,496		477,644			18
CZE	Czech Republic	Europe	no	23,126		179,432			19
DNK	Denmark	Europe	no	31,778		315,664			20
EST	Estonia	Europe	no	2,851		18,420			21
FIN	Finland	Europe	no	14,927		242,899			22
FRA	France	Europe	no	236,236		2,606,780			23
DEU	Germany	Europe	no	262,867		3,341,391			24
GRC	Greece	Europe	no	27,597		292,874			25
ISL	Iceland	Europe	no	1,071		9,975			26
IRL	Ireland	Europe	no	16,223		171,260			27
ITA	Italy	Europe	no	188,526		2,023,916			28
LIE	Liechtenstein	Europe	no	198					29
LUX	Luxembourg	Europe	no	2,462		37,925			30
MCO	Monaco	Europe	no	123					31
NLD	Netherlands	Europe	no	49,481		772,747			32
NOR	Norway	Europe	no	33,800		413,980			33
PRT	Portugal	Europe	no	18,087	0	221,243			34
SMR	San Marino	Europe	no	113					35
SVK	Slovakia	Europe	no	9,245		86,077			36
SVN	Slovenia	Europe	no	2,231		46,217			37
ESP	Spain	Europe	no	122,131		1,388,744			38
SWE	Sweden	Europe	no	27,971		467,254			39
CHE	Switzerland	Europe	no	40,078		568,639			40
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134		2,280,719			41
MLT	Malta	Pacific	no	1,330		7,698			42
MEX	Mexico	Latin America	no	260,866	13,716	1,020,288		1.3	1
PAN	Panama	Latin America	no	5,115	21	25,037		0.1	2
VEN	Venezuela	Latin America	no	42,697	319	389,038		0.1	3
ZAF	South Africa	Sub Saharan Africa	no	69,420	108	356,475		0.0	4
CRI	Costa Rica	Latin America	no	6,892	12	34,896		0.0	5
COL	Colombia	Latin America	no	53,054	56	276,072		0.0	6
MYS	Malaysia	Asia	no	37,377	39	229,566		0.0	7
BWA	Botswana	Sub Saharan Africa	no	4,287	1	14,771			8
RUS	Russian Federation	Europe	no	288,219	7	1,431,121			9
CYM	Cayman Islands	Caribbean	no	81	29				10
TWN	Taiwan	Asia	no	38,310	1,821				11
PRK	Dem People's Rep of Korea	Asia	no	10,245	216				12
KAZ	Kazakhstan	Asia	no	20,880		131,868			13
LBN	Lebanon	Asia	no	4,139		39,051			14
TUR	Turkey	Asia	no	164,353		727,056			15
BLR	Belarus	Europe	no	21,160		53,379			16
BGR	Bulgaria	Europe	no	9,040		46,025			17
HRV	Croatia	Europe	no	6,064		58,806			18
GIB	Gibraltar	Europe	no	274					19
HUN	Hungary	Europe	no	30,434		122,372			20
LVA	Latvia	Europe	no	4,998		24,073			21
LTU	Lithuania	Europe	no	7,227		35,687			22
MNE	Montenegro	Europe	no	269		4,083			23
POL	Poland	Europe	no	60,706		452,275			24
SRB	Serbia	Europe	no	1,938		37,533			25
ARG	Argentina	Latin America	no	39,520		358,619			26
BRA	Brazil	Latin America	no	300,613		2,049,164			27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	PML ₂₅₀ (Cyclones) [USD million]	Risk indicator GNI [USD million]	PML ₂₅₀ /GNI [%]	Ranking
CHL	Chile	Latin America	no	18,070		197,331		28
URY	Uruguay	Latin America	no	4,269		39,161		29
LBY	Libyan Arab Jamahiriya	North Africa	no	18,501				30
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626		9,578		31
GAB	Gabon	Sub Saharan Africa	no	2,633		11,467		32
HND	Honduras	Latin America	no	5,414	800	14,798	5.4	1
PHL	Philippines	Asia	no	46,143	7,309	199,897	3.7	2
GTM	Guatemala	Latin America	no	8,748	154	39,987	0.4	3
CHN	China	Asia	no	599,699	17,031	5,957,012	0.3	4
SLV	El Salvador	Latin America	no	4,297	31	20,834	0.2	5
SWZ	Swaziland	Sub Saharan Africa	no	769	5	3,586	0.1	6
LKA	Sri Lanka	Asia	no	14,385	49	48,916	0.1	7
BTN	Bhutan	Asia	no	371	1	1,420	0.1	8
IDN	Indonesia	Asia	no	113,457	387	686,633	0.1	9
THA	Thailand	Asia	no	43,178	24	304,812	0.0	10
ARM	Armenia	Asia	no	2,899		9,710		11
AZE	Azerbaijan	Asia	no	12,666		48,307		12
GEO	Georgia	Asia	no	3,815		11,484		13
IRN	Iran (Islamic Republic of)	Asia	no	120,445	4			14
IRQ	Iraq	Asia	no	15,555		77,842		15
JOR	Jordan	Asia	no	10,652		27,820		16
MNG	Mongolia	Asia	no	2,335		5,640		17
SYR	Syrian Arab Republic	Asia	no	18,783		57,266		18
TKM	Turkmenistan	Asia	no	3,779		18,107		19
ALB	Albania	Europe	no	3,381		11,682		20
BIH	Bosnia and Herzegovina	Europe	no	1,424		17,008		21
FRO	Faroe Islands	Europe	no	42				22
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000		8,992		23
MDA	Moldova, Republic of	Europe	no	3,416		6,280		24
UKR	Ukraine	Europe	no	32,769		135,920		25
BOL	Bolivia	Latin America	no	4,521		18,790		26
ECU	Ecuador	Latin America	no	10,202		56,924		27
PRY	Paraguay	Latin America	no	4,301		17,853		28
PER	Peru	Latin America	no	24,717		147,000		29
DZA	Algeria	North Africa	no	67,908		155,538		30
EGY	Egypt	North Africa	no	101,974		214,530		31
MAR	Morocco	North Africa	no	41,389		88,578		32
TUN	Tunisia	North Africa	no	14,190		42,020		33
AGO	Angola	Sub Saharan Africa	no	9,237		75,516		34
CMR	Cameroon	Sub Saharan Africa	no	6,256		22,030		35
COG	Congo	Sub Saharan Africa	no	3,326		8,619		36
DJI	Djibouti	Sub Saharan Africa	no	656				37
NAM	Namibia	Sub Saharan Africa	no	1,706		12,077		38
MOZ	Mozambique	Sub Saharan Africa	no	3,991	285	9,421	3.0	1
MDG	Madagascar	Sub Saharan Africa	no	1,546	241	8,628	2.8	2
BGD	Bangladesh	Asia	no	14,034	589	109,695	0.5	3
NIC	Nicaragua	Latin America	no	2,310	27	6,273	0.4	4
MWI	Malawi	Sub Saharan Africa	no	1,519	11	4,980	0.2	5
PAK	Pakistan	Asia	no	37,562	263	183,620	0.1	6
IND	India	Asia	no	320,919	2,109	1,712,645	0.1	7
VNM	Viet Nam	Asia	no	24,066	111	102,008	0.1	8
LAO	Lao People's Democratic Republic	Asia	no	938	7	6,978	0.1	9
KHM	Cambodia	Asia	no	1,623	6	10,664	0.1	10
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	2	6,988	0.0	11
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	14,300	0.0	12
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	2,553	0.0	13
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	1	23,012		14
TCA	Turks and Caicos islands	Caribbean	no	28	12			15
GLP	Guadeloupe	Caribbean	no	904	290			16
MTQ	Martinique	Caribbean	no	889	210			17
REU	Réunion	Sub Saharan Africa	no	2,161	384			18
MYT	Mayotte	Sub Saharan Africa	no	154	22			19
NPL	Nepal	Asia	no	2,411	42			20
MMR	Myanmar	Asia	no	9,829	48			21
GUF	French Guiana	Latin America	no	378				22
AFG	Afghanistan	Asia	no	9,988		15,162		23
KGZ	Kyrgyzstan	Asia	no	756		4,273		24
TJK	Tajikistan	Asia	no	2,412		5,570		25
UZB	Uzbekistan	Asia	no	10,382		39,013		26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC]	PML ₂₅₀	Risk indicator		Ranking
				FISCAL (Exposed value) [USD million]	(Cyclones) [USD million]	GNI [USD million]	PML ₂₅₀ /GNI [%]	
YEM	Yemen	Asia	no	10,133				27
BEN	Benin	Sub Saharan Africa	no	1,223		6,633		28
BFA	Burkina Faso	Sub Saharan Africa	no	1,847		8,810		29
BDI	Burundi	Sub Saharan Africa	no	145		1,589		30
CAF	Central African Republic	Sub Saharan Africa	no	351		2,009		31
TCD	Chad	Sub Saharan Africa	no	4,004		6,734		32
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914		12,263		33
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304		21,729		34
ERI	Eritrea	Sub Saharan Africa	no	1,076		2,097		35
ETH	Ethiopia	Sub Saharan Africa	no	3,583		29,625		36
GMB	Gambia	Sub Saharan Africa	no	334		743		37
GHA	Ghana	Sub Saharan Africa	no	4,753		30,776		38
GIN	Guinea	Sub Saharan Africa	no	1,643		4,231		39
KEN	Kenya	Sub Saharan Africa	no	8,730		31,264		40
LBR	Liberia	Sub Saharan Africa	no	263		805		41
MLI	Mali	Sub Saharan Africa	no	1,887		8,909		42
MRT	Mauritania	Sub Saharan Africa	no	1,470		3,672		43
NER	Niger	Sub Saharan Africa	no	1,230		5,493		44
NGA	Nigeria	Sub Saharan Africa	no	45,741		176,769		45
RWA	Rwanda	Sub Saharan Africa	no	962		5,582		46
SEN	Senegal	Sub Saharan Africa	no	5,536		12,900		47
SLE	Sierra Leone	Sub Saharan Africa	no	302		1,905		48
SOM	Somalia	Sub Saharan Africa	no	2,303				49
SDN	Sudan	Sub Saharan Africa	no	12,166		55,939		50
TGO	Togo	Sub Saharan Africa	no	529		2,826		51
UGA	Uganda	Sub Saharan Africa	no	3,787		16,720		52
ESH	Western Sahara	Sub Saharan Africa	no	418				53
ATG	Antigua and Barbuda	Caribbean	yes	272	52	1,179	4.4	1
TTO	Trinidad and Tobago	Caribbean	yes	2,299	73	19,255	0.4	2
BHS	Bahamas	Caribbean	yes	985	121			3
BHR	Bahrain	Asia	yes	1,670				4
SGP	Singapore	Pacific	yes	18,751		201,050		5
MUS	Mauritius	Sub Saharan Africa	yes	1,749	242	9,798	2.5	1
JAM	Jamaica	Caribbean	yes	4,148	325	13,574	2.4	2
DMA	Dominica	Caribbean	yes	43	8	454	1.9	3
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	11	691	1.6	4
PLW	Palau	Pacific	yes	25	2	135	1.2	5
LCA	Saint Lucia	Caribbean	yes	73	11	1,163	0.9	6
DOM	Dominican Republic	Caribbean	yes	13,790	430	49,972	0.9	7
GRD	Grenada	Caribbean	yes	63	4	727	0.6	8
SYC	Seychelles	Sub Saharan Africa	yes	631	3	855	0.3	9
BRB	Barbados	Caribbean	yes	253	31			10
CUB	Cuba	Caribbean	yes	5,936	158			11
SUR	Suriname	Latin America	yes	364	0			12
MDV	Maldives	Pacific	yes	154		1,817		13
KNA	Saint Kitts and Nevis	Caribbean	yes	0		620		14
FSM	Micronesia (Federated States of)	Pacific	yes	216	38	312	12.4	1
WSM	Samoa	Pacific	yes	93	24	557	4.4	2
TON	Tonga	Pacific	yes	47	12	352	3.5	3
FJI	Fiji	Asia	yes	309	60	3,090	1.9	4
BLZ	Belize	Latin America	yes	65	16	1,303	1.2	5
VUT	Vanuatu	Asia	yes	25	1	678	0.2	6
GUY	Guyana	Latin America	yes	884	1	2,238	0.0	7
CPV	Cape Verde	Sub Saharan Africa	yes	446		1,579		8
COM	Comoros	Sub Saharan Africa	yes	156	24	539	4.5	1
SLB	Solomon islands	Asia	yes	85	2	555	0.4	2
PNG	Papua New Guinea	Asia	yes	1,289	2	9,262	0.0	3
HTI	Haiti	Caribbean	yes	1,584	269			4
AIA	Anguilla	Caribbean	yes	2	1			5
VGB	British Virgin Islands	Caribbean	yes	18	5			6
VIR	United States Virgin Islands	Caribbean	yes	82	21			7
PRI	Puerto Rico	Caribbean	yes	3,197	572			8
PYF	French Polynesia	Pacific	yes	116	18			9
ABW	Aruba	Caribbean	yes	358	30			10
NCL	New Caledonia	Asia	yes	107	1			11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258		877		12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114		200		13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
JPN	Japan	Asia	no	14,617,394	105,761	7.2	1
KOR	Republic of Korea	Asia	no	2,787,207	8,816	3.2	2
SMR	San Marino	Europe	no	1,846	5	2.8	3
GRC	Greece	Europe	no	642,888	1,732	2.7	4
ARE	United Arab Emirates	Asia	no	248,015	423	1.7	5
CYP	Cyprus	Asia	no	23,484	32	1.4	6
ITA	Italy	Europe	no	3,701,619	3,795	1.0	7
SVN	Slovenia	Europe	no	36,896	34	0.9	8
USA	United States of America	North America	no	22,004,154	19,301	0.9	9
BRN	Brunei Darussalam	Asia	no	20,094	17	0.9	10
HKG	Hong Kong	Asia	no	1,138,019	968	0.9	11
NZL	New Zealand	Australia	no	238,609	192	0.8	12
MAC	Macau	Asia	no	96,993	71	0.7	13
KWT	Kuwait	Asia	no	202,236	137	0.7	14
MCO	Monaco	Europe	no	5,380	4	0.7	15
ISR	Israel	Asia	no	293,550	192	0.7	16
LIE	Liechtenstein	Europe	no	8,070	5	0.6	17
OMN	Oman	Asia	no	42,201	25	0.6	18
QAT	Qatar	Asia	no	113,981	64	0.6	19
MLT	Malta	Pacific	no	18,630	10	0.5	20
ISL	Iceland	Europe	no	25,742	14	0.5	21
AUT	Austria	Europe	no	615,592	240	0.4	22
CHE	Switzerland	Europe	no	839,518	257	0.3	23
DEU	Germany	Europe	no	5,800,986	1,206	0.2	24
CAN	Canada	North America	no	2,051,584	382	0.2	25
SVK	Slovakia	Europe	no	124,390	22	0.2	26
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	3,684,040	564	0.2	27
CZE	Czech Republic	Europe	no	336,714	49	0.1	28
BEL	Belgium	Europe	no	739,159	101	0.1	29
SAU	Saudi Arabia	Asia	no	751,807	83	0.1	30
NLD	Netherlands	Europe	no	1,593,735	160	0.1	31
LUX	Luxembourg	Europe	no	45,036	4	0.1	32
ESP	Spain	Europe	no	2,695,139	198	0.1	33
FRA	France	Europe	no	3,653,264	260	0.1	34
PRT	Portugal	Europe	no	296,296	21	0.1	35
AUS	Australia	Australia	no	1,832,960	101	0.1	36
EST	Estonia	Europe	no	28,069	1	0.0	37
IRL	Ireland	Europe	no	244,117	8	0.0	38
NOR	Norway	Europe	no	386,892	4	0.0	39
DNK	Denmark	Europe	no	381,265	2	0.0	40
SWE	Sweden	Europe	no	369,792	2	0.0	41
FIN	Finland	Europe	no	209,050	1	0.0	42
CYM	Cayman Islands	Caribbean	no	3,603	43	11.9	1
TWN	Taiwan	Asia	no	872,409	8,297	9.5	2
CRI	Costa Rica	Latin America	no	38,475	132	3.4	3
MEX	Mexico	Latin America	no	1,818,298	5,040	2.8	4
CHL	Chile	Latin America	no	326,640	869	2.7	5
COL	Colombia	Latin America	no	325,385	810	2.5	6
BGR	Bulgaria	Europe	no	70,023	112	1.6	7
PAN	Panama	Latin America	no	30,296	46	1.5	8
VEN	Venezuela	Latin America	no	435,869	505	1.2	9
TUR	Turkey	Asia	no	1,578,228	1,766	1.1	10
KAZ	Kazakhstan	Asia	no	180,409	180	1.0	11
MNE	Montenegro	Europe	no	2,738	3	0.9	12
LBN	Lebanon	Asia	no	56,965	53	0.9	13
PRK	Dem People's Rep of Korea	Asia	no	27,936	25	0.9	14
GIB	Gibraltar	Europe	no	3,141	2	0.7	15
HRV	Croatia	Europe	no	65,145	46	0.7	16
MYS	Malaysia	Asia	no	318,727	169	0.5	17
SRB	Serbia	Europe	no	16,907	5	0.3	18
ARG	Argentina	Latin America	no	403,909	128	0.3	19
LBY	Libyan Arab Jamahiriya	North Africa	no	78,903	21	0.3	20
HUN	Hungary	Europe	no	286,209	51	0.2	21
ZAF	South Africa	Sub Saharan Africa	no	335,148	55	0.2	22
POL	Poland	Europe	no	659,150	66	0.1	23
BWA	Botswana	Sub Saharan Africa	no	18,941	2	0.1	24
RUS	Russian Federation	Europe	no	2,209,139	170	0.1	25
GNQ	Equatorial Guinea	Sub Saharan Africa	no	6,765	0	0.0	26
LTU	Lithuania	Europe	no	53,397	1	0.0	27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
GAB	Gabon	Sub Saharan Africa	no	25,086	0	0.0	28
LVA	Latvia	Europe	no	39,277	0	0.0	29
BRA	Brazil	Latin America	no	1,715,746	3	0.0	30
BLR	Belarus	Europe	no	74,427	0	0.0	31
URY	Uruguay	Latin America	no	28,590	-	-	32
PHL	Philippines	Asia	no	186,193	7,043	37.8	1
HND	Honduras	Latin America	no	18,844	300	15.9	2
SLV	El Salvador	Latin America	no	22,582	306	13.5	3
GTM	Guatemala	Latin America	no	38,263	174	4.5	4
BTN	Bhutan	Asia	no	1,167	5	3.9	5
AZE	Azerbaijan	Asia	no	45,197	128	2.8	6
ECU	Ecuador	Latin America	no	68,550	192	2.8	7
IRN	Iran (Islamic Republic of)	Asia	no	676,481	1,722	2.5	8
CHN	China	Asia	no	4,512,825	11,305	2.5	9
GEO	Georgia	Asia	no	21,157	50	2.4	10
PER	Peru	Latin America	no	189,980	447	2.4	11
ARM	Armenia	Asia	no	14,187	28	2.0	12
IDN	Indonesia	Asia	no	575,183	1,046	1.8	13
BOL	Bolivia	Latin America	no	13,112	21	1.6	14
DZA	Algeria	North Africa	no	259,977	359	1.4	15
TKM	Turkmenistan	Asia	no	12,707	18	1.4	16
IRQ	Iraq	Asia	no	47,245	56	1.2	17
ALB	Albania	Europe	no	13,964	14	1.0	18
SYR	Syrian Arab Republic	Asia	no	68,489	52	0.8	19
TUN	Tunisia	North Africa	no	65,420	49	0.7	20
MKD	The former Yugoslav Republic of Macedonia	Europe	no	12,415	9	0.7	21
JOR	Jordan	Asia	no	40,997	26	0.6	22
DJI	Djibouti	Sub Saharan Africa	no	2,525	2	0.6	23
MAR	Morocco	North Africa	no	136,300	46	0.3	24
BIH	Bosnia and Herzegovina	Europe	no	10,433	4	0.3	25
THA	Thailand	Asia	no	394,598	88	0.2	26
EGY	Egypt	North Africa	no	234,939	51	0.2	27
MNG	Mongolia	Asia	no	9,273	2	0.2	28
MDA	Moldova, Republic of	Europe	no	9,896	2	0.2	29
SWZ	Swaziland	Sub Saharan Africa	no	2,012	0	0.2	30
LKA	Sri Lanka	Asia	no	49,967	5	0.1	31
CMR	Cameroon	Sub Saharan Africa	no	16,950	0	0.0	32
UKR	Ukraine	Europe	no	278,497	6	0.0	33
NAM	Namibia	Sub Saharan Africa	no	7,239	0	0.0	34
AGO	Angola	Sub Saharan Africa	no	25,225	0	0.0	35
FRO	Faroe Islands	Europe	no	1,012	-	-	36
PRY	Paraguay	Latin America	no	19,203	-	-	37
COG	Congo	Sub Saharan Africa	no	12,566	-	-	38
GLP	Guadeloupe	Caribbean	no	19,838	388	19.6	1
TCA	Turks and Caicos islands	Caribbean	no	332	4	11.1	2
MTQ	Martinique	Caribbean	no	21,052	195	9.2	3
REU	Réunion	Sub Saharan Africa	no	42,937	261	6.1	4
MDG	Madagascar	Sub Saharan Africa	no	2,575	15	5.9	5
NIC	Nicaragua	Latin America	no	10,935	62	5.6	6
KGZ	Kyrgyzstan	Asia	no	3,644	20	5.4	7
NPL	Nepal	Asia	no	6,537	33	5.1	8
TJK	Tajikistan	Asia	no	5,576	21	3.7	9
MYT	Mayotte	Sub Saharan Africa	no	2,341	9	3.7	10
BGD	Bangladesh	Asia	no	72,949	256	3.5	11
UZB	Uzbekistan	Asia	no	44,370	154	3.5	12
PAK	Pakistan	Asia	no	170,444	433	2.5	13
AFG	Afghanistan	Asia	no	16,132	39	2.4	14
MMR	Myanmar	Asia	no	20,572	43	2.1	15
MOZ	Mozambique	Sub Saharan Africa	no	5,633	8	1.5	16
BDI	Burundi	Sub Saharan Africa	no	168	0	1.2	17
RWA	Rwanda	Sub Saharan Africa	no	1,558	1	0.7	18
MWI	Malawi	Sub Saharan Africa	no	1,883	1	0.7	19
LAO	Lao People's Democratic Republic	Asia	no	2,322	1	0.6	20
IND	India	Asia	no	1,429,881	754	0.5	21
YEM	Yemen	Asia	no	21,556	8	0.4	22
TZA	United Republic of Tanzania	Sub Saharan Africa	no	7,854	3	0.4	23
ZMB	Zambia	Sub Saharan Africa	no	9,806	3	0.3	24
VNM	Viet Nam	Asia	no	115,441	30	0.3	25
UGA	Uganda	Sub Saharan Africa	no	6,628	2	0.2	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] TOTAL (Exposed value) [USD million]	AAL Value (Eq+Cy) [USD million]	AAL(Eq+Cy) /PC [%]	Ranking
KEN	Kenya	Sub Saharan Africa	no	18,470	3	0.2	27
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	3,433	1	0.1	28
LSO	Lesotho	Sub Saharan Africa	no	3,522	1	0.1	29
KHM	Cambodia	Asia	no	4,335	1	0.1	30
ZWE	Zimbabwe	Sub Saharan Africa	no	4,073	0	0.1	31
ETH	Ethiopia	Sub Saharan Africa	no	5,141	0	0.1	32
ERI	Eritrea	Sub Saharan Africa	no	1,892	0	0.1	33
SDN	Sudan	Sub Saharan Africa	no	26,851	1	0.0	34
SOM	Somalia	Sub Saharan Africa	no	3,573	0	0.0	35
GUF	French Guiana	Latin America	no	8,339	0	0.0	36
SEN	Senegal	Sub Saharan Africa	no	11,619	0	0.0	37
NGA	Nigeria	Sub Saharan Africa	no	121,669	1	0.0	38
CAF	Central African Republic	Sub Saharan Africa	no	916	-	-	39
LBR	Liberia	Sub Saharan Africa	no	515	-	-	40
GIN	Guinea	Sub Saharan Africa	no	3,259	-	-	41
BEN	Benin	Sub Saharan Africa	no	3,585	-	-	42
TCD	Chad	Sub Saharan Africa	no	6,664	-	-	43
MRT	Mauritania	Sub Saharan Africa	no	3,622	-	-	44
BFA	Burkina Faso	Sub Saharan Africa	no	3,120	-	-	45
CIV	Côte d'Ivoire	Sub Saharan Africa	no	17,298	-	-	46
GMB	Gambia	Sub Saharan Africa	no	680	-	-	47
GHA	Ghana	Sub Saharan Africa	no	12,649	-	-	48
MLI	Mali	Sub Saharan Africa	no	3,869	-	-	49
NER	Niger	Sub Saharan Africa	no	2,800	-	-	50
SLE	Sierra Leone	Sub Saharan Africa	no	523	-	-	51
TGO	Togo	Sub Saharan Africa	no	1,644	-	-	52
ESH	Western Sahara	Sub Saharan Africa	no	2,173	-	-	53
TTO	Trinidad and Tobago	Caribbean	yes	31,370	492	15.7	1
ATG	Antigua and Barbuda	Caribbean	yes	2,428	33	13.7	2
BHS	Bahamas	Caribbean	yes	21,313	71	3.3	3
BHR	Bahrain	Asia	yes	32,575	17	0.5	4
SGP	Singapore	Pacific	yes	526,900	114	0.2	5
DMA	Dominica	Caribbean	yes	356	6	17.1	1
LCA	Saint Lucia	Caribbean	yes	543	3	6.3	2
BRB	Barbados	Caribbean	yes	4,677	28	6.0	3
DOM	Dominican Republic	Caribbean	yes	72,573	423	5.8	4
MUS	Mauritius	Sub Saharan Africa	yes	13,089	69	5.3	5
GRD	Grenada	Caribbean	yes	1,229	6	4.9	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	1,047	4	4.1	7
JAM	Jamaica	Caribbean	yes	28,963	85	2.9	8
PLW	Palau	Pacific	yes	279	1	2.5	9
CUB	Cuba	Caribbean	yes	46,280	50	1.1	10
SYC	Seychelles	Sub Saharan Africa	yes	2,495	1	0.2	11
SUR	Suriname	Latin America	yes	2,797	0	0.0	12
MDV	Maldives	Pacific	yes	907	-	-	13
KNA	Saint Kitts and Nevis	Caribbean	yes	2	-	-	14
VUT	Vanuatu	Asia	yes	102	10	100.8	1
TON	Tonga	Pacific	yes	230	12	50.4	2
WSM	Samoa	Pacific	yes	361	3	9.4	3
FJI	Fiji	Asia	yes	2,100	15	7.3	4
BLZ	Belize	Latin America	yes	1,251	7	5.8	5
FSM	Micronesia (Federated States of)	Pacific	yes	585	3	4.4	6
GUY	Guyana	Latin America	yes	3,468	0	0.1	7
CPV	Cape Verde	Sub Saharan Africa	yes	1,949	-	-	8
SLB	Solomon islands	Asia	yes	211	13	59.7	1
AIA	Anguilla	Caribbean	yes	20	1	24.7	2
PNG	Papua New Guinea	Asia	yes	5,433	86	15.9	3
VGB	British Virgin Islands	Caribbean	yes	424	6	15.1	4
VIR	United States Virgin Islands	Caribbean	yes	1,755	22	12.5	5
HTI	Haiti	Caribbean	yes	8,553	96	11.2	6
PRI	Puerto Rico	Caribbean	yes	135,818	1,125	8.3	7
PYF	French Polynesia	Pacific	yes	6,568	32	4.9	8
NCL	New Caledonia	Asia	yes	4,771	21	4.4	9
COM	Comoros	Sub Saharan Africa	yes	310	1	3.6	10
ABW	Aruba	Caribbean	yes	6,526	19	2.9	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	466	-	-	12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	311	-	-	13



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [‰]	Ranking
JPN	Japan	Asia	no	542,290	3,969	7.3	1
GRC	Greece	Europe	no	27,597	81	2.9	2
SMR	San Marino	Europe	no	113	0	2.7	3
KOR	Republic of Korea	Asia	no	95,180	207	2.2	4
ARE	United Arab Emirates	Asia	no	11,165	19	1.7	5
CYP	Cyprus	Asia	no	1,154	2	1.4	6
ITA	Italy	Europe	no	188,526	193	1.0	7
SVN	Slovenia	Europe	no	2,231	2	0.9	8
USA	United States of America	North America	no	1,224,802	1,115	0.9	9
NZL	New Zealand	Australia	no	12,682	12	0.9	10
BRN	Brunei Darussalam	Asia	no	895	1	0.9	11
HKG	Hong Kong	Asia	no	47,718	39	0.8	12
MCO	Monaco	Europe	no	123	0	0.8	13
MAC	Macau	Asia	no	1,989	2	0.8	14
KWT	Kuwait	Asia	no	6,168	4	0.7	15
ISR	Israel	Asia	no	22,505	15	0.7	16
OMN	Oman	Asia	no	4,095	2	0.6	17
QAT	Qatar	Asia	no	2,116	1	0.6	18
ISL	Iceland	Europe	no	1,071	1	0.6	19
MLT	Malta	Pacific	no	1,330	1	0.5	20
LIE	Liechtenstein	Europe	no	198	0	0.5	21
AUT	Austria	Europe	no	28,002	11	0.4	22
CHE	Switzerland	Europe	no	40,078	12	0.3	23
DEU	Germany	Europe	no	262,867	54	0.2	24
CAN	Canada	North America	no	121,895	22	0.2	25
SVK	Slovakia	Europe	no	9,245	2	0.2	26
CZE	Czech Republic	Europe	no	23,126	3	0.1	27
BEL	Belgium	Europe	no	29,496	4	0.1	28
GBR	U.K. of Great Britain and Northern Ireland	Europe	no	235,134	34	0.1	29
SAU	Saudi Arabia	Asia	no	73,922	8	0.1	30
NLD	Netherlands	Europe	no	49,481	5	0.1	31
LUX	Luxembourg	Europe	no	2,462	0	0.1	32
FRA	France	Europe	no	236,236	17	0.1	33
ESP	Spain	Europe	no	122,131	8	0.1	34
AUS	Australia	Australia	no	47,971	3	0.1	35
PRT	Portugal	Europe	no	18,087	1	0.1	36
EST	Estonia	Europe	no	2,851	0	0.0	37
IRL	Ireland	Europe	no	16,223	1	0.0	38
NOR	Norway	Europe	no	33,800	0	0.0	39
DNK	Denmark	Europe	no	31,778	0	0.0	40
SWE	Sweden	Europe	no	27,971	0	0.0	41
FIN	Finland	Europe	no	14,927	-	-	42
CYM	Cayman Islands	Caribbean	no	81	1	11.1	1
TWN	Taiwan	Asia	no	38,310	351	9.2	2
CRI	Costa Rica	Latin America	no	6,892	23	3.3	3
MEX	Mexico	Latin America	no	260,866	704	2.7	4
COL	Colombia	Latin America	no	53,054	131	2.5	5
CHL	Chile	Latin America	no	18,070	44	2.4	6
BGR	Bulgaria	Europe	no	9,040	15	1.6	7
PAN	Panama	Latin America	no	5,115	7	1.4	8
VEN	Venezuela	Latin America	no	42,697	49	1.2	9
TUR	Turkey	Asia	no	164,353	186	1.1	10
KAZ	Kazakhstan	Asia	no	20,880	21	1.0	11
LBN	Lebanon	Asia	no	4,139	4	0.9	12
PRK	Dem People's Rep of Korea	Asia	no	10,245	9	0.9	13
MNE	Montenegro	Europe	no	269	0	0.7	14
GIB	Gibraltar	Europe	no	274	0	0.7	15
HRV	Croatia	Europe	no	6,064	4	0.7	16
MYS	Malaysia	Asia	no	37,377	20	0.5	17
SRB	Serbia	Europe	no	1,938	1	0.3	18
ARG	Argentina	Latin America	no	39,520	12	0.3	19
LYB	Libyan Arab Jamahiriya	North Africa	no	18,501	5	0.3	20
HUN	Hungary	Europe	no	30,434	5	0.2	21
ZAF	South Africa	Sub Saharan Africa	no	69,420	11	0.2	22
POL	Poland	Europe	no	60,706	6	0.1	23
BWA	Botswana	Sub Saharan Africa	no	4,287	0	0.1	24
RUS	Russian Federation	Europe	no	288,219	21	0.1	25
LTU	Lithuania	Europe	no	7,227	0	0.0	26
BRA	Brazil	Latin America	no	300,613	0	0.0	27



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
GNQ	Equatorial Guinea	Sub Saharan Africa	no	626	-	-	28
LVA	Latvia	Europe	no	4,998	-	-	29
GAB	Gabon	Sub Saharan Africa	no	2,633	-	-	30
BLR	Belarus	Europe	no	21,160	-	-	31
URY	Uruguay	Latin America	no	4,269	-	-	32
PHL	Philippines	Asia	no	46,143	1,747	37.9	1
HND	Honduras	Latin America	no	5,414	86	15.9	2
SLV	El Salvador	Latin America	no	4,297	58	13.5	3
GTM	Guatemala	Latin America	no	8,748	38	4.3	4
BTN	Bhutan	Asia	no	371	1	3.8	5
AZE	Azerbaijan	Asia	no	12,666	36	2.8	6
ECU	Ecuador	Latin America	no	10,202	28	2.7	7
IRN	Iran (Islamic Republic of)	Asia	no	120,445	305	2.5	8
CHN	China	Asia	no	599,699	1,505	2.5	9
GEO	Georgia	Asia	no	3,815	9	2.4	10
PER	Peru	Latin America	no	24,717	57	2.3	11
ARM	Armenia	Asia	no	2,899	6	2.0	12
IDN	Indonesia	Asia	no	113,457	198	1.7	13
BOL	Bolivia	Latin America	no	4,521	7	1.6	14
TKM	Turkmenistan	Asia	no	3,779	5	1.4	15
DZA	Algeria	North Africa	no	67,908	92	1.4	16
IRQ	Iraq	Asia	no	15,555	18	1.2	17
ALB	Albania	Europe	no	3,381	3	1.0	18
SYR	Syrian Arab Republic	Asia	no	18,783	14	0.8	19
TUN	Tunisia	North Africa	no	14,190	11	0.7	20
MKD	The former Yugoslav Republic of Macedonia	Europe	no	2,000	1	0.7	21
JOR	Jordan	Asia	no	10,652	7	0.6	22
DJI	Djibouti	Sub Saharan Africa	no	656	0	0.6	23
BIH	Bosnia and Herzegovina	Europe	no	1,424	1	0.4	24
MAR	Morocco	North Africa	no	41,389	12	0.3	25
SWZ	Swaziland	Sub Saharan Africa	no	769	0	0.3	26
THA	Thailand	Asia	no	43,178	10	0.2	27
EGY	Egypt	North Africa	no	101,974	22	0.2	28
MNG	Mongolia	Asia	no	2,335	1	0.2	29
MDA	Moldova, Republic of	Europe	no	3,416	1	0.2	30
LKA	Sri Lanka	Asia	no	14,385	1	0.1	31
CMR	Cameroon	Sub Saharan Africa	no	6,256	0	0.0	32
UKR	Ukraine	Europe	no	32,769	1	0.0	33
AGO	Angola	Sub Saharan Africa	no	9,237	0	0.0	34
NAM	Namibia	Sub Saharan Africa	no	1,706	-	-	35
FRO	Faroe Islands	Europe	no	42	-	-	36
PRY	Paraguay	Latin America	no	4,301	-	-	37
COG	Congo	Sub Saharan Africa	no	3,326	-	-	38
GLP	Guadeloupe	Caribbean	no	904	18	19.6	1
TCA	Turks and Caicos islands	Caribbean	no	28	0	10.6	2
MTQ	Martinique	Caribbean	no	889	8	9.2	3
REU	Réunion	Sub Saharan Africa	no	2,161	13	6.1	4
MDG	Madagascar	Sub Saharan Africa	no	1,546	9	5.9	5
NPL	Nepal	Asia	no	2,411	13	5.4	6
KGZ	Kyrgyzstan	Asia	no	756	4	5.3	7
NIC	Nicaragua	Latin America	no	2,310	12	5.2	8
MYT	Mayotte	Sub Saharan Africa	no	154	1	3.9	9
TJK	Tajikistan	Asia	no	2,412	9	3.7	10
BGD	Bangladesh	Asia	no	14,034	49	3.5	11
UZB	Uzbekistan	Asia	no	10,382	36	3.5	12
PAK	Pakistan	Asia	no	37,562	95	2.5	13
AFG	Afghanistan	Asia	no	9,988	24	2.4	14
MMR	Myanmar	Asia	no	9,829	20	2.1	15
MOZ	Mozambique	Sub Saharan Africa	no	3,991	6	1.5	16
RWA	Rwanda	Sub Saharan Africa	no	962	1	0.7	17
BDI	Burundi	Sub Saharan Africa	no	145	0	0.7	18
MWI	Malawi	Sub Saharan Africa	no	1,519	1	0.7	19
LAO	Lao People's Democratic Republic	Asia	no	938	1	0.5	20
IND	India	Asia	no	320,919	168	0.5	21
TZA	United Republic of Tanzania	Sub Saharan Africa	no	4,677	2	0.4	22
YEM	Yemen	Asia	no	10,133	4	0.4	23
ZMB	Zambia	Sub Saharan Africa	no	4,976	1	0.3	24
UGA	Uganda	Sub Saharan Africa	no	3,787	1	0.2	25
VNM	Viet Nam	Asia	no	24,066	6	0.2	26



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ISO code	Country Name	Region	SIDS	Produced Capital [PC] FISCAL (Exposed value) [USD million]	AAL Value (Eq+Wd) [USD million]	AAL/PC [%]	Ranking
ZAR	Democratic Republic of the Congo	Sub Saharan Africa	no	1,914	0	0.2	27
KEN	Kenya	Sub Saharan Africa	no	8,730	1	0.1	28
LSO	Lesotho	Sub Saharan Africa	no	2,124	0	0.1	29
ERI	Eritrea	Sub Saharan Africa	no	1,076	0	0.1	30
ETH	Ethiopia	Sub Saharan Africa	no	3,583	0	0.1	31
KHM	Cambodia	Asia	no	1,623	0	0.1	32
ZWE	Zimbabwe	Sub Saharan Africa	no	1,889	0	0.1	33
SOM	Somalia	Sub Saharan Africa	no	2,303	0	0.0	34
SDN	Sudan	Sub Saharan Africa	no	12,166	1	0.0	35
NGA	Nigeria	Sub Saharan Africa	no	45,741	0	0.0	36
CAF	Central African Republic	Sub Saharan Africa	no	351	-	-	37
SEN	Senegal	Sub Saharan Africa	no	5,536	-	-	38
GIN	Guinea	Sub Saharan Africa	no	1,643	-	-	39
GUF	French Guiana	Latin America	no	378	-	-	40
TCD	Chad	Sub Saharan Africa	no	4,004	-	-	41
BEN	Benin	Sub Saharan Africa	no	1,223	-	-	42
BFA	Burkina Faso	Sub Saharan Africa	no	1,847	-	-	43
CIV	Côte d'Ivoire	Sub Saharan Africa	no	5,304	-	-	44
GMB	Gambia	Sub Saharan Africa	no	334	-	-	45
GHA	Ghana	Sub Saharan Africa	no	4,753	-	-	46
LBR	Liberia	Sub Saharan Africa	no	263	-	-	47
MLI	Mali	Sub Saharan Africa	no	1,887	-	-	48
MRT	Mauritania	Sub Saharan Africa	no	1,470	-	-	49
NER	Niger	Sub Saharan Africa	no	1,230	-	-	50
SLE	Sierra Leone	Sub Saharan Africa	no	302	-	-	51
TGO	Togo	Sub Saharan Africa	no	529	-	-	52
ESH	Western Sahara	Sub Saharan Africa	no	418	-	-	53
TTO	Trinidad and Tobago	Caribbean	yes	2,299	36	15.8	1
ATG	Antigua and Barbuda	Caribbean	yes	272	4	13.6	2
BHS	Bahamas	Caribbean	yes	985	3	3.3	3
BHR	Bahrain	Asia	yes	1,670	1	0.5	4
SGP	Singapore	Pacific	yes	18,751	4	0.2	5
DMA	Dominica	Caribbean	yes	43	1	18.5	1
LCA	Saint Lucia	Caribbean	yes	73	1	6.9	2
BRB	Barbados	Caribbean	yes	253	2	5.9	3
DOM	Dominican Republic	Caribbean	yes	13,790	80	5.8	4
MUS	Mauritius	Sub Saharan Africa	yes	1,749	9	5.3	5
GRD	Grenada	Caribbean	yes	63	0	4.7	6
VCT	Saint Vincent and the Grenadines	Caribbean	yes	134	1	4.5	7
PLW	Palau	Pacific	yes	25	0	4.0	8
JAM	Jamaica	Caribbean	yes	4,148	12	2.9	9
CUB	Cuba	Caribbean	yes	5,936	7	1.1	10
SYC	Seychelles	Sub Saharan Africa	yes	631	0	0.3	11
MDV	Maldives	Pacific	yes	154	-	-	12
KNA	Saint Kitts and Nevis	Caribbean	yes	0	-	-	13
SUR	Suriname	Latin America	yes	364	-	-	14
VUT	Vanuatu	Asia	yes	25	3	99.7	1
TON	Tonga	Pacific	yes	47	2	51.5	2
WSM	Samoa	Pacific	yes	93	1	8.6	3
FJI	Fiji	Asia	yes	309	2	7.4	4
BLZ	Belize	Latin America	yes	65	0	6.2	5
FSM	Micronesia (Federated States of)	Pacific	yes	216	1	4.6	6
GUY	Guyana	Latin America	yes	884	0	0.1	7
CPV	Cape Verde	Sub Saharan Africa	yes	446	-	-	8
SLB	Solomon islands	Asia	yes	85	5	60.2	1
VGB	British Virgin Islands	Caribbean	yes	18	0	16.8	2
PNG	Papua New Guinea	Asia	yes	1,289	21	15.9	3
VIR	United States Virgin Islands	Caribbean	yes	82	1	13.4	4
HTI	Haiti	Caribbean	yes	1,584	18	11.2	5
PRI	Puerto Rico	Caribbean	yes	3,197	27	8.3	6
PYF	French Polynesia	Pacific	yes	116	1	5.2	7
COM	Comoros	Sub Saharan Africa	yes	156	1	3.8	8
NCL	New Caledonia	Asia	yes	107	0	3.7	9
ABW	Aruba	Caribbean	yes	358	1	2.8	10
AIA	Anguilla	Caribbean	yes	2	-	-	11
GNB	Guinea-Bissau	Sub Saharan Africa	yes	258	-	-	12
STP	Sao Tome and Principe	Sub Saharan Africa	yes	114	-	-	13