Building Resilience to Disasters in Western Balkans and Turkey

IPA PROJECT

BUILDING RESILIENCE TO DISASTERS IN WESTERN BALKANS AND TURKEY

Potential Future Projects

Dimitar Ivanov, WMO

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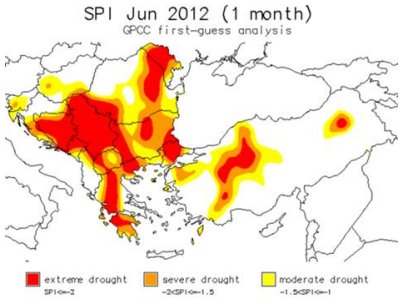
Regional Design Meeting



1. Resolving shortcomings and deficiencies in the basic technical capacities

Project 1.1 - Revitalization of 2 to 3 upper-air stations in the W Balkans

- **Objective:** Improve the monitoring of atmospheric conditions; Comply with WMO requirements and European best practice regarding the basic OBS capabilities
- **Expected benefits:** improved analysis of upper air; improvements in NWP; forecasting of convection, TS and severe weather potential
- **Budget:** low, but running cost
- **Potential participants:** the former Yugoslav Republic of Macedonia, Albania, BiH, Montenegro
- **Characteristics:** low cost – high impact

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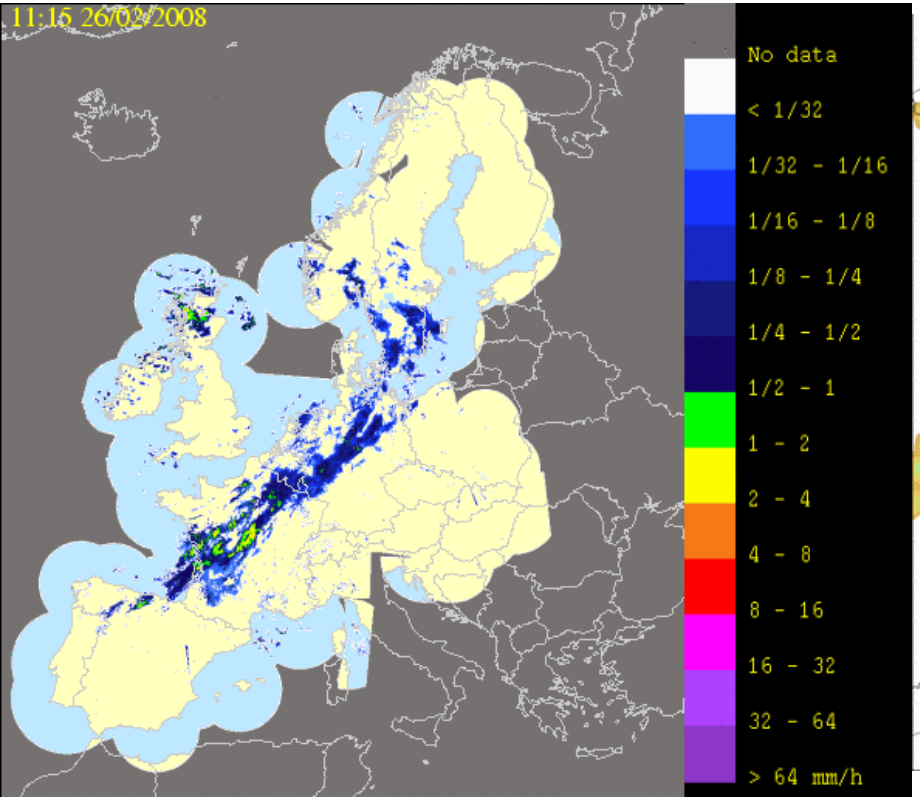
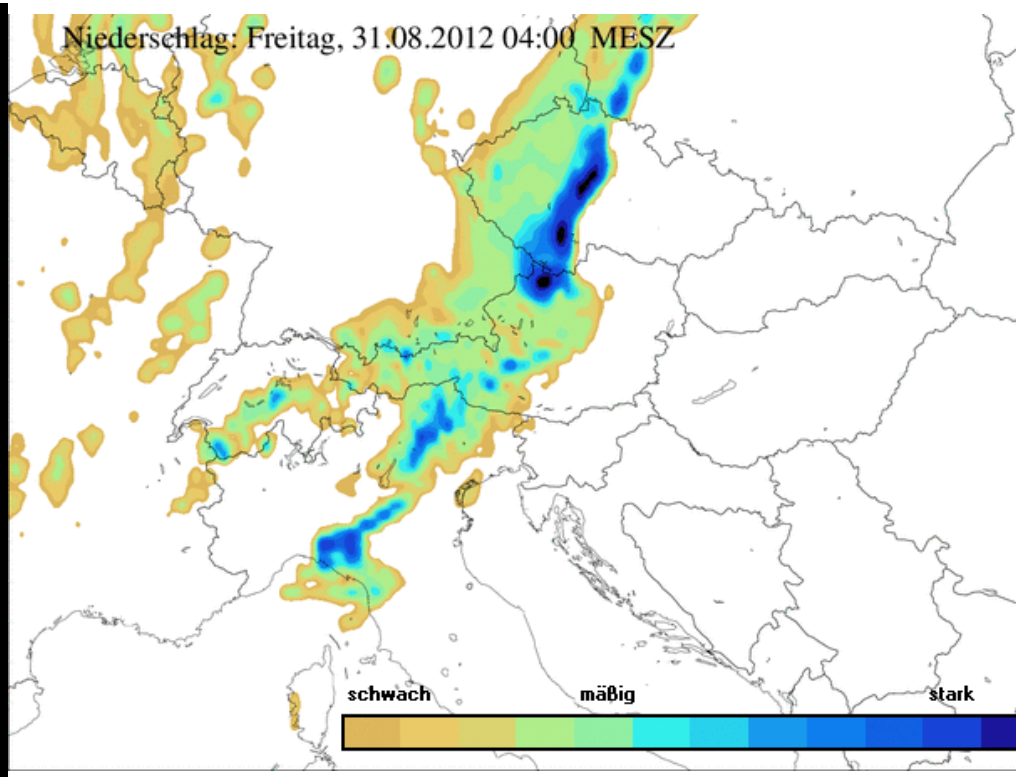
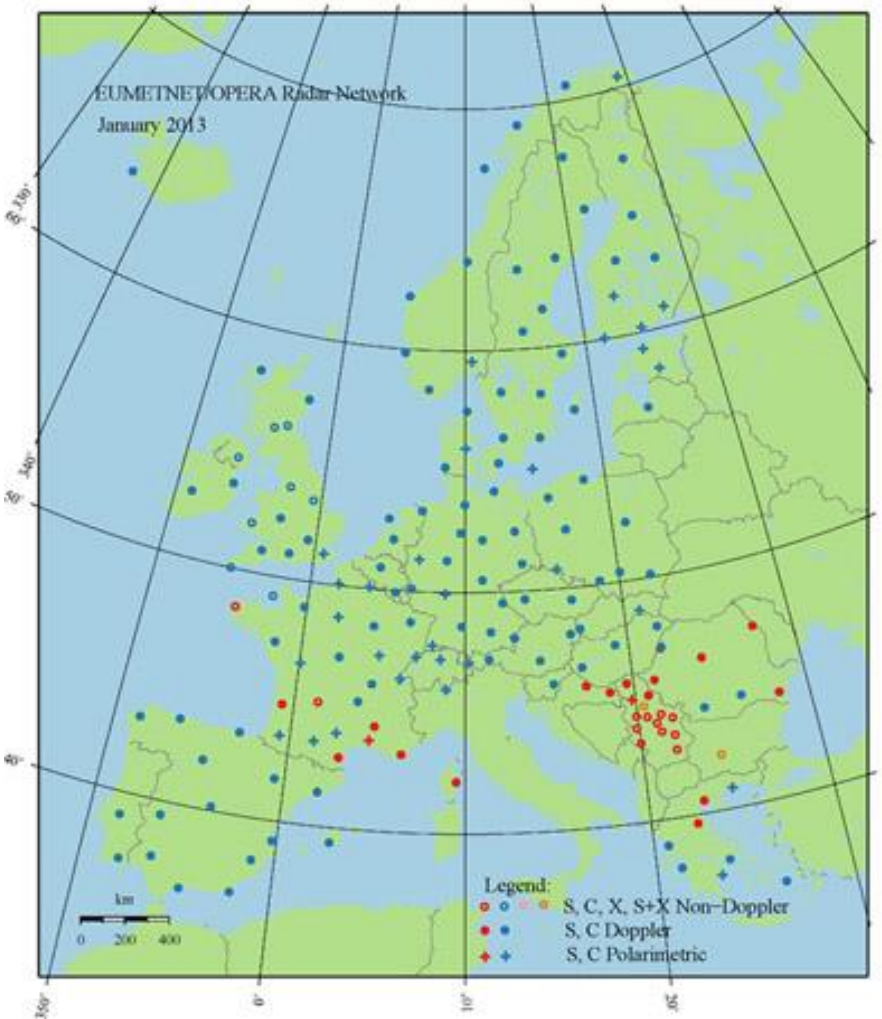
Project 1.2 - Building the W Balkans weather radar network





Project 1.2 - Building the W Balkans weather radar network

Objective: Develop capacity to detect and forecast/nowcast and warn for severe weather related to heavy precipitations (both summer and winter), severe thunderstorms, hailstorms.



Project 1.2 - Building the W Balkans weather radar network

- **Objective (cont):** To support flood forecasting with radar information, including flash floods. To allow areal precipitation assessments necessary for flood loss estimates, for improved climatology of precipitations and for development of specialized products (e.g., for insurance sector).

- **Expected benefits:** Alignment of observing and forecasting/warning capabilities with those of European Union countries. More accurate warnings for extreme events with potential of saving lives from flash floods, hail storms, lightning, etc. Better support by specialized products of vulnerable economic sectors.

Project 1.2 - Building the W Balkans weather radar network

- **Potential Participants:** Albania (1 or 2 radars), the former Yugoslav Republic of Macedonia (2 radars); BiH (1 or 2 radars); Montenegro (1 radar); Serbia (integration of existing radars); Croatia (integration of existing radars).

Note: The project to benefit from the know-how developed through the EUMETNET OPERA programme and from other regional radar networks in Europe.

- **Budget:** High (nx10 millions EUR)
- **Characteristic:** High cost – High Impact

- **Project 1.3 -** Lightning detection system for W Balkans

- **Objective:** To supplement the weather radar network and provide enhanced capabilities in detection and warning
- **Potential Participants:** All beneficiaries
- **Budget:** Low to medium
- **Characteristic:** Low to medium cost – medium to high Impact

Project 1.4 - Harmonization of hydrological observing networks

- **Objective:** To enhance capabilities in flood forecasting and water management
- **Expected benefits:** Comparable and Reliable hydrological data, interoperability, optimal cross-border network design
- **Potential Participants:** All beneficiaries

Note: *Some actions already initiated, e.g., GIZ project for the Drin River Basin*

- **Budget:** Medium to high
- **Characteristic:** Medium to high cost – high impact

Project 1.5 – Harmonization and optimization of meteorological observing networks

Details to be developed to cover:

- Cross-border optimization of the observing networks
- Automation
- Data quality – calibration and maintenance
- Communications
- Data management
- Data exchange policies

Note: All these developments would be supported by the WMO to ensure an integrated approach based on the WIGOS concept

2. Resolving the deficiencies with human resources available in W Balkan NMHSs to support effective MHEWS

- **Project 2.1 -** Develop harmonized long-term education and training programme for W Balkans countries

- **Objective:** To ensure sufficient number of experts to fill the gaps in the W Balkan countries (e.g., between 15 and 20 forecasters)
- **Expected benefits:** Enhance EWS capabilities and through 365/7/24 service availability
- **Potential Participants:** W Balkan beneficiaries

Note: WMO would support by providing advice on the needed training programmes and identifying appropriate education and training institutions. However, the funding should come from development partners.

3. Support disaster risk analysis with improved hydrometeorological hazard/extreme weather analysis

Project 3.1 – Regional Data Rescue and Extreme Weather Analysis

- **Objective:** To rescue existing national historical data, establish a harmonized regional data set and conduct harmonized extreme weather analysis
- **Expected benefits:** Building a common picture of extreme weather; secure national historical data
- **Potential Participants:** All beneficiaries

Note: Details and costing to be developed

4. Other potential project and cooperation actions

Enhanced hazard forecasting – floods, drought, other extremes

- **Objective:** Provide accurate and timely forecasts and warnings in support of DRR
- **Expected benefits:** Harmonized and seamless forecasting system
- **Potential Participants:** W Balkans

Note: Details and costing to be developed

Enhance the collaborative decision making process and dissemination of warning information

- **Objective:** To harmonize and optimize standard operating procedures for provision of hydrometeorological warning information to DRR stakeholders; implement best practices in dissemination of such information to enhance socio-economic benefits
- **Expected benefits:** Enhance socio-economic benefits of forecasts and warnings
- **Potential Participants:** All beneficiaries

Note: Details and costing to be developed

- Feasibility studies of regional approach to EWS
- Meteorological and hydrological modelling and forecasting
- Data exchange policies
- Sustain the SEECOF
- PPP initiatives (e.g., development of services to insurance sector)
- Regional research projects under the EC Horizon 2020

Summary of regional approach to projects

- Projects should be based on priorities and linked to national development plans
- Individual national projects to be coordinated under a regional coordination framework
- Identification of user requirements should be part of project design
- Scalable approach
- Integration is essential – interoperability should be a main requirement
- Need to ensure sustainability at the design phase
- WMO could play important role

THANK YOU!