

16th Eumetsat user Forum in Africa

WG#5: MTG for early warning system in NA countries

Cotonou, Bénin - 18 September 2024

NA countries represented by: Morocco, Algeria, Tunisia and Egypte

Main points discussed :

1. Current infrastructures in NA countries
2. Capacity development
3. Early warning systems (Existent)
4. Challenges and opportunities
5. Recommandations

1. Current infrastructures in NA countries

- All countries have various observation systems, including stations for receiving satellite data from MSG, with ongoing upgrades for the transition to MTG.
- There is a significant shortage of Automatic Weather Stations (AWS) and marine observation systems, which affects the accuracy of Numerical Weather Prediction (NWP).
- Some countries are equipped with altitude observation systems, including radar, lightning detection sensors, sounding systems, and marine HF radar.

2. Capacity development

- All countries have been benefit from some training on the Early warning system carried out by WMO.
- But we need more training on the use and interpretation of satellite data in order to improve our nowcasting and the EWS.

3. Early warning systems (Existent)

- All the countries have Early warning system since many years ago, but needed to be upgraded in order to follow the extreme technologies development and the extreme weather events in our region.
- Some countries need support (fund, training, ...) to upgrade their early warning system.

4. Challenges and Opportunities

- There is currently no established (RMSE) for North African countries; the Maghreb Union could play a role in addressing this.
- Creation and integration for multi hazard early warning systems for all North African countries is essential.
- Development of cooperative frameworks among countries to assist each other in issuing early warnings for severe phenomena.
- The need for more satellite products based on EPS to compensate for the lack of marine observations across all countries, ensuring ease of use and accessibility via the Eumetcast service.

5. Recommendations

- Strengthen altitude observation systems, particularly radar, sounding systems, and lightning data, at the national level.
- Establish a regional platform to collect and integrate remote sensing data that can assist in monitoring severe weather.
- Form a steering committee for EW4ALL at the EMA, coordinating efforts with National Meteorological and Hydrological Services (NMHSs) in North Africa.
- Enhance capacity development focused on the use and interpretation of MTG data.
- More training and cooperation between North Africa countries for how to use nowcasting SAF products.