

Space for Early Warning & African Meteorological Satellite Application Facility (AMSATF)

**16th EUMETSAT User Forum in Africa
HIGHLIGHTS – 11 October 2024**

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Headlines

- 1) Scope of the Session
- 2) Summary of the presentation
- 3) Key messages from the Working Groups

New “Space for Early Warning in Africa” project start

- 1) EU and AUC announced new project to support use of space for early warning in Africa for 2025-2028. It includes:
 - Accompany MTG transition
 - Maintain RARS Africa to improve NWP models (global and regional)
 - Establish ASMAF Nowcasting in each region
- 2) NMHS initiated the discussion on the establishment of AMSAF-Nowcasting in each region, jointly coordinated by the RSMC (ANACIM, KMD&TMA, SAWS) and RECs specialised centres (AGRHYMET, ICPAC, CAPC-AC, SADC-CSC)
- 3) EUMETSAT and its NWC SAF will further engage with the regions

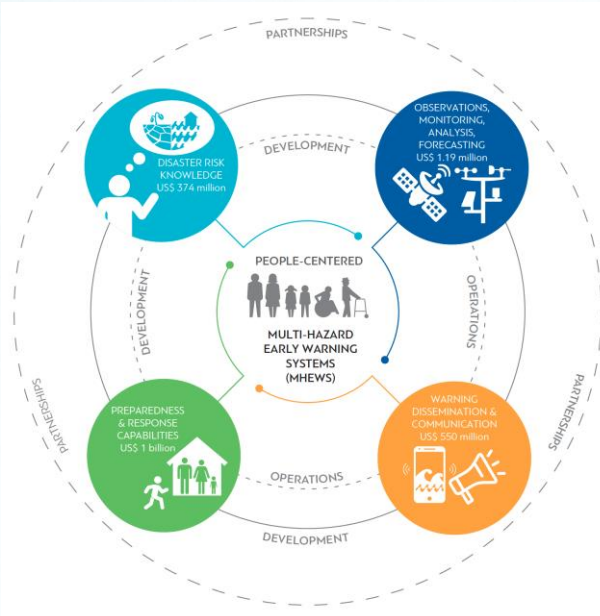
Session objectives:

- showcase the use of EO data in support to DRR,
- present data sets, products, tools and services
- present and discuss the upcoming Space for Early Warning in Africa project, and the AMSAF

16 presentations:

- Initiatives and projects
- Tools, data and services
- User cases in Benin, Egypt and Tunisia,
- Space for Early Warning in Africa project, and the AMSAF

Splinter groups: Regional discussions on how to implement the AMSAF

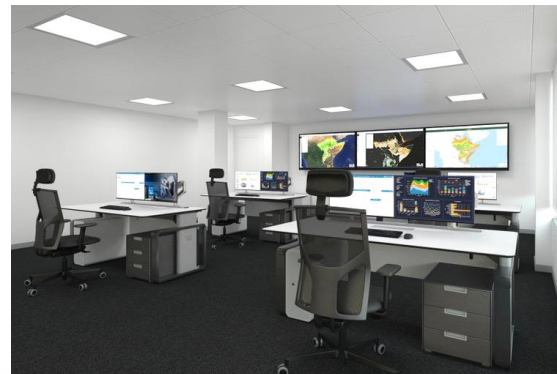


Africa Multi-Hazard Early Warning & Early Action Systems (AMHEWAS)

- 1 Multi-hazard risk knowledge is strengthened
- 2 Detection, monitoring, analysis and forecasting capacities are strengthened
- 3 Multi-hazard risk information accessible to African public
- 4 Early Action and preparedness and capabilities strengthened
- 5 Coordination and governance of MHEWS strengthened



EW4All action plan co-developed with AUC and WMO



Situation rooms @ AUC, ACMAD, ICPAC, ECOWAS, ECCAS and SADC

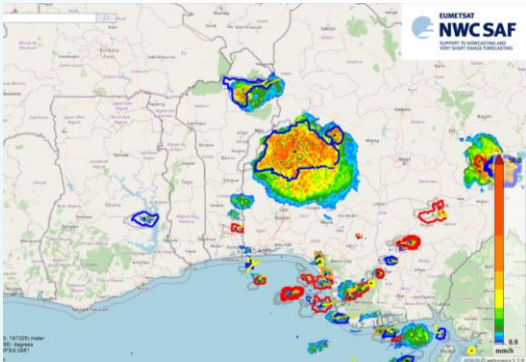
365/24/7 monitoring and EW



Free Nowcasting SAF SW (for GEOstationary and POLAR Satellites) -> Now available on Cloud !

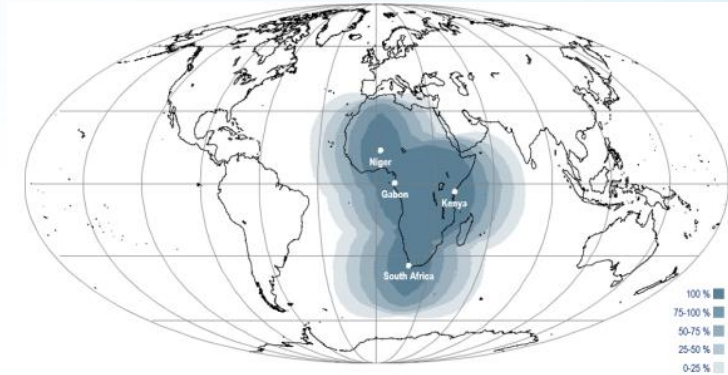
Southern Africa: regional approach

NWC-SAF running locally at SAWS since 2014



SAWIDRA:

four RARS antennas to get polar orbiting satellite data to feed Numerical Weather Prediction over Africa



ECMWF support in Africa

Support to **ACMAD**:
Co-operation
Agreement

Support to **ICPAC**
GloFAS, ERA5 (C3S),
CAMS data products
and training

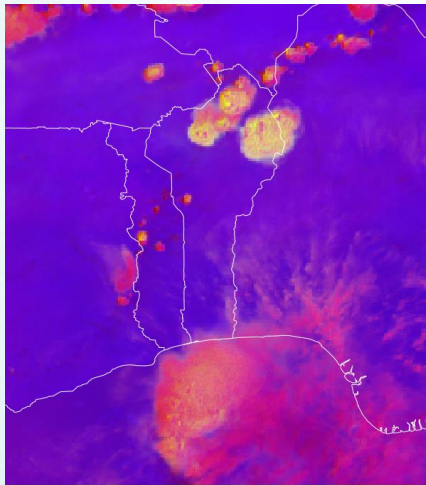
Support to **WMO**
SWFP
and
ACMAD countries
(WMO RAI)
via **EUMETCast**

Support via **WMO**
SOFF, use of
ECMWF's weather
data products

MTG: Game changer!!

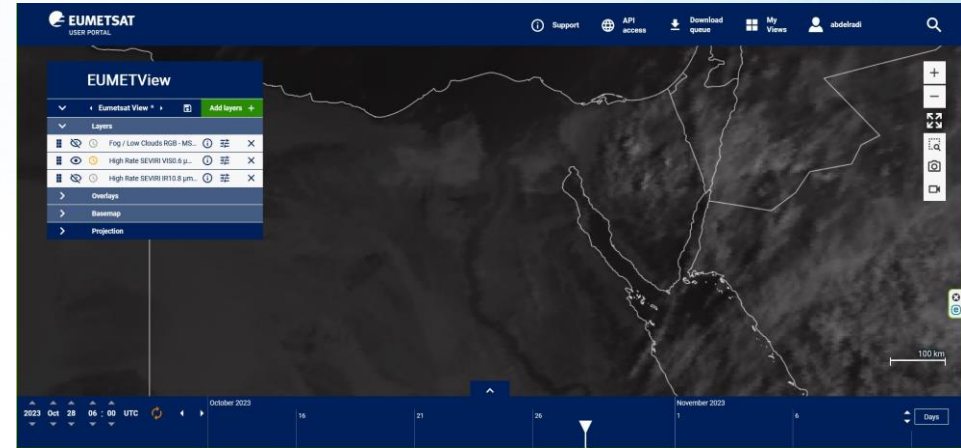
Benin:

- Use of Meteorological satellite data in support to Early Warning Services
- Use of Common Alert Protocol (ClimWeb Experience)



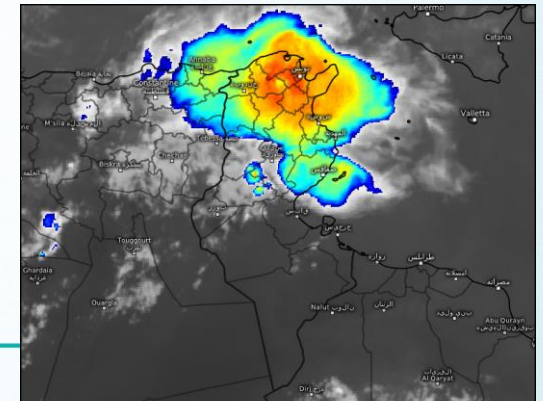
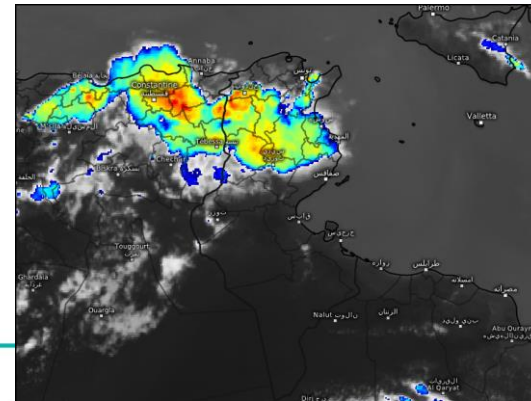
Egypt:

- Use of EUM data to reduce road traffic accidents



Tunisia

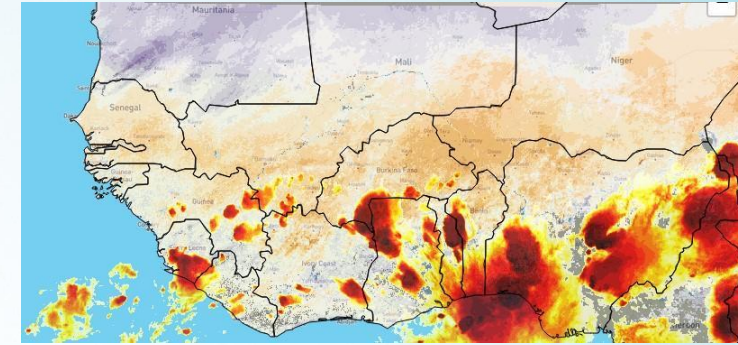
- EUMETSAT products in EWS: Example of flooding and drought events



Part of EU Funded project : Africa – EU Space partnership programme
Duration: 4 years

Elements presented and discussed:

- 1- Data access (Focus on MTG and EPS-SG)
- 2- AMSAF (Focus on Nowcasting)
- 3- Training (Infrastructure, Maintenance)



Establish AMSAF-Nowcasting in each region

- **Western Africa:** AGRHYMET and ANACIM
- **Eastern Africa:** ICPAC and KMD
- **Southern Africa** (inc. Indian Ocean): SADC-CSC and SAWS
- **Central Africa:** CAPC-AC with support from ACMAD and ANACIM



during Plenary and splinter groups per region

Establishment of regional AMSAF-Nowcasting

- Collection of needs, capacities and gaps on the use of Nowcasting for Early Warning at NMHSs
- Specifications for the infrastructure to run the NWC SAF software
- **Western Africa** – existing experience with Nowcasting SAF in the region
- **Eastern Africa** – NWC-SAF for Polar Orbit, in connection with the RARS station at ICPAC
- **Southern Africa** – specific needs for Indian Ocean
- **Northern Africa** – engage with WMO to initiate process for RSMC for Northern Africa
- **Central Africa** – CAPC-AC to coordinate (while RSCM is designated) with support from ACMAD and ANACIM