

**Recommendations resulting  
from the 16th EUMETSAT User Forum in Africa  
Cotonou, Benin  
16-20 September 2024**

### **Overview of the recommendations**

The 14 recommendations were regrouped under seven different themes:

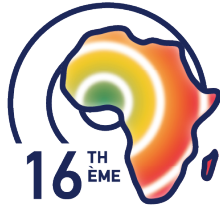
1. Data access and Training - recommendations #1 to #3
2. African Meteorological Satellite Application Facility (AMSAF) – recommendations #4 to #6
3. Climate and Air Quality monitoring – recommendations #7 to #11
4. Earth Observation for Hydrology – recommendations #12 and #13
5. Blue economy - recommendations #14

### **MTG data access and training**

#### **Recommendation #1 - PUMA-2025 and ClimSA Stations Deployment**

The Forum acknowledged the progress made by the African Union Commission in deploying the PUMA-2025 and ClimSA Stations across Africa countries, as part of the EU-funded ClimSA programme. To streamline the installation process, the Forum recommended:

- Each NMHS to confirm their EUMETSAT Earth Observation Portal (EOP) Point of Contact;
- AUC to provide NMHS Director copy of the correspondence sent through the Ministry of Foreign Affairs, as well as the list of donated equipment to facilitate preparation of customs clearance;
- NMHSs Director to ensure availability of their IT personnel during the stations deployment and installation.



### **Recommendation #2 - PUMA-2025 and ClimSA Stations Training**

The Forum welcomed the Training Plan presented by the African Union Commission that will accompany the deployment of the PUMA-2025 and ClimSA Stations. The Forum recommended:

- AUC, in coordination with EUMETSAT, IMTR and EAMAC to continue cooperation to ensure that all NMHS can have at least 2 persons trained as system administrator for the PUMA-2025 and ClimSA stations, as well we at least 2 persons trained as users of the new PUMA-2025 station, in a timely manner;
- AUC, in coordination with JRC and RECs specialised centres (AGRHYMET, ICPAC, CAPC-AC, SADC-CSC that all NMHS can have at least 2 persons trained as users of the new ClimSA Climate station, in a timely manner.

### **Recommendation #3: EUMETCast -Terrestrial and EUMETView**

The Forum noted that EUMETCAST-Terrestrial allows potentially access to all MTG data & products. The Forum recommended:

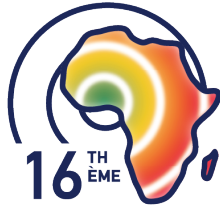
- NMHSs and Regional Centers to take benefits of the AFricaConnect project and engage with their NREN at national level to connect to EUMETCast-Terrestrial;
- NMHS to use EUMETView to visualize MTG data while the new PUMA-2025 are being deployed;
- EUMETSAT to continue assisting NMHS in engaging with NREN and in accessing training materials and information on EUMETView and EUMETCast-Terrestrial.

## **African Meteorological Satellite Application Facility (AMSAF)**

### **Recommendation #4 - Establishment of regional AMSAF-Nowcasting (generic)**

The Forum noted the role of Regional Specialized Meteorological Centers (RSMCs) and REC's specialized centres (AGRHYMET, ICPAC, CAPC-AC, SADC-CSC) in supporting meteorological and climate services in their respective regions and in engaging with NMHS and regional users. The Forum recommended:

1. RSMCs and REC's centers to act as regional coordinator for the establishment of the AMSAF-Nowcasting in each region (Western, Central, Eastern, Southern incl. Indian Ocean);



2. RSMCs and REC's centers to engage with NMHSs to gather the needs, current capacities and gaps on the use of Nowcasting for Early Warning;
3. EUMETSAT and NWC SAF to share with regional AMSAF-NWC further technical; information on the capacities necessary to run the NWC SAF software;
4. EUMETSAT and NWC SAF to engage with the RSMC and REC's centers in each region to support the process and identify the necessary activities and infrastructure to establish and operate a regional AMSAF-Nowcasting.

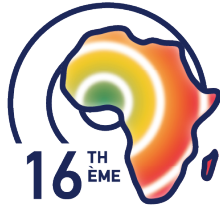
**Recommendation #5 - Establishment of regional AMSAF-Nowcasting (regional specific)**

The Forum acknowledged the discussions that occurred during the regional Working Groups. Based on the outcomes of these working groups, the forum recommended:

1. Western Africa – ANACIM and AGRHYMET to engage with English speaking NMHS having experience with Nowcasting SAF in the region to ease knowledge transfer for English speaking countries;
2. Central Africa – While waiting for a RSMC to be designated for the region, CAPC-AC to coordinate the activities, in cooperation with the other RCC and RSMC, and universities;
3. Eastern Africa – KMD, TMA and ICPAC consider using the NWC-SAF for Polar Orbit, in connection with the RARS station operated by ICPAC;
4. Southern Africa – SAWS and SADC-CSC to ensure coverage of Indian Ocean islands states, taking into account their specific needs;
5. Northern Africa – NMHS to engage with WMO to initiate process for a RSMC for Northern Africa.

**Recommendation #6 – MyDewetra and Situation Rooms**

The Forum recommended to CIMA (Centro Internazionale in Monitoraggio Ambientale) to consider including MTG data&products into the MyDewetra platform, so that AMHEWAS Situation Rooms across the continent can benefit from the new products.



## **Climate and Air Quality monitoring**

### **Recommendation #7 – Cotonou Declaration**

The Forum welcomed the Cotonou Declaration on Satellite Data for Monitoring Greenhouse Gas and Air Quality and encourage to signatories to ensure a streamlined implementation of the Declaration.

The Forum recommended that the AUC to establish the necessary partnerships to ensure the successful execution of this important initiative.

### **Recommendation #8 – Training on Air Quality monitoring**

The Forum recommended to EUMETSAT to further organise training events for Africa on space-based Air Quality monitoring and, in consultation with WMO and AUC, to consider promoting establishment of an African Training infrastructure on this topic (e.g. group of African trainers and institutions that can provide training).

### **Recommendation #9 – Integration of CM-SAF Products and Tools into the ClimSA Station**

The Forum noted with interest the availability of the Climate Monitoring SAF (CM-SAF) products and tools for climate data analysis over Africa. It also recognized the wide variety of datasets available in the ClimSA Station software.

The Forum recommended that EUMETSAT, the CM-SAF and the Joint Research Centre (JRC) collaborate to assess the feasibility of integrating CM-SAF products and tools into the ClimSA Station, enhancing the system's capability to deliver comprehensive space-based climate monitoring and analysis for African users.

### **Recommendation #10 – Development of sub-seasonal climate services**

The Forum recognized the importance of sub-seasonal forecasts for addressing critical sectors such as agriculture and enhancing Early Warning Systems (EWS) for riverine floods and other applications.

The Forum recommended that RECs specialized centres (e.g. RCC) and AUC to consider pursuing ClimSA efforts on developing services based on Sub-Seasonal Forecasting and consider reinforcing this aspect in a potential ClimSA follow-on activities.



### **Recommendation #11 – Climate Agrometeorology**

The Forum took note of the H-SAF and TAMSAT products and tools and the work done by the ClimSA partner in the area of agrometeorology. The Forum recommended:

- To ClimSA regional centre to consider to update/upgrade the existing agro-met platform at regional and national level (including the ClimSA stations) so that they can also benefit from the MTG, H-SAF and TAMSAT data;
- To agrometeorologists in NMHS to access on-line training material made available by the H-SAF and TAMSAT on their products for agriculture;
- To agrometeorologist in NMHS to access the Copernicus Climate Change Service (C3S) Climate Data Store platform, via their ClimSA station, and explore the numerous products available on this platform (seasonal forecasting, anomalies, etc).

### **Earth observation for Hydrology**

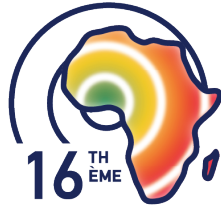
#### **Recommendation #12 – Transition to MTG for Water Basin Authorities**

The Forum recognized the critical role that River Basin Authorities play in managing water resources. It acknowledged that some of these authorities have been utilizing satellite data from Meteosat for essential operations and decision-making processes. The Forum recommended:

- River Basin Authorities (RBAs) and EUMETSAT to cooperate to facilitate the transition of RBAs to MTG, as well as strengthen use of H-SAF and TAMSAT data and products, in complement to ground observations;
- RBAs to engage with hydrologist at national level to create awareness on the PUMA-2025 and Climate stations, and encourage their use for hydrology applications;
- AUC to engage with AMCOW and RBAs in order to facilitate sharing of knowledge and experience on use of EO to support their respective mandate.

#### **Recommendation #13: Training and Calibration & Validation activities**

The Forum recommended EUMETSAT and H-SAF to continue engaging with African institution for training and activities to strengthen Calibration & Validation of the EO hydrology products. in line with the outcome of the EO –Hydrology workshop from March 2024, co-organised by AUC and EUMETSAT.



## Blue economy

### **Recommendation #14 – GMES & Africa Marine and Coastal Services**

The Forum acknowledged the progress made by the GMES & Africa marine and coastal services consortia in cooperating with meteorological services, especially for the safety-at-sea service. The Forum recommended to the two consortia to continue strengthen collaborations in order to extent the geographic coverage&impact of their services in more countries, and cooperate with NMHS when engaging with user communities at national level.