

SATELLITE TO ENABLE EARLY WARNING

Sarah Kimani

KMD-IMTR/RAIDEG Chair



@ #16UFA #EOAFRICA

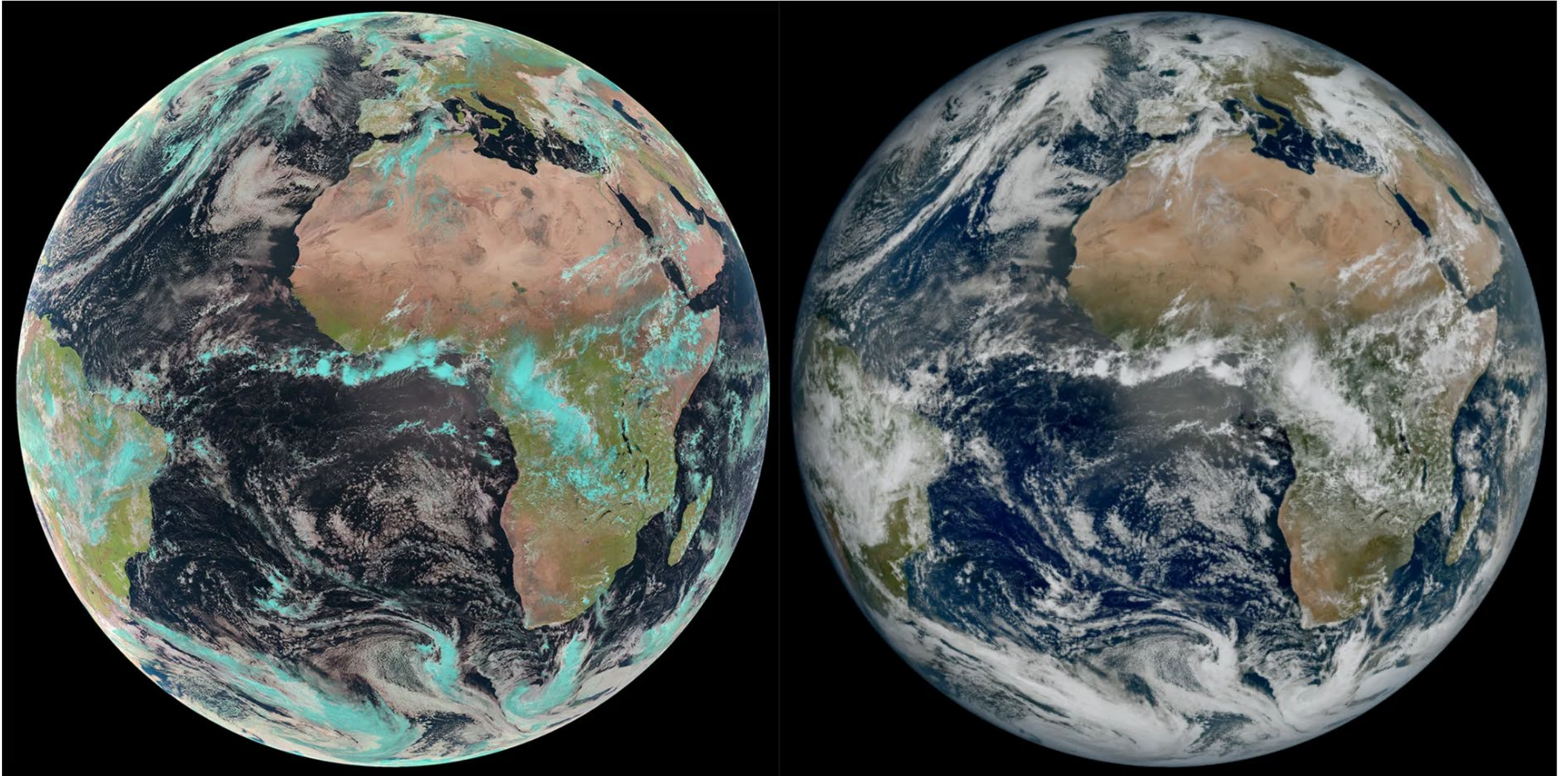
16-20 SEPTEMBER 2024
COTONOU, BENIN



MINISTÈRE DU CADRE DE VIE
ET DES TRANSPORTS
EN CHARGE DU DÉVELOPPEMENT DURABLE
RÉPUBLIQUE DU BÉNIN

Agence Nationale de la
Météorologie du Bénin
RÉPUBLIQUE DU BÉNIN

MTG Changes The Game?

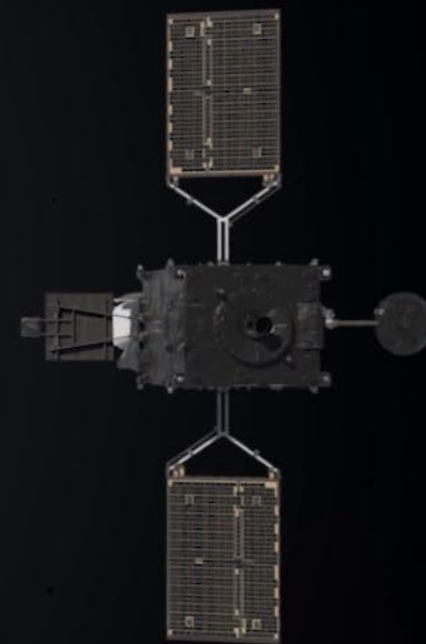


Current applications of EUMETSAT satellite data in Africa

- Weather forecasting and Nowcasting
- Verification and evaluation of weather forecasts and Numerical Weather Prediction outputs
- Data assimilation; improves the quality of the data being used
- Climate monitoring; changes in climate and agriculture
- Sector specific applications

MSG data

- Consistently good in quality and performance; able to be trusted
- Versatile; adapted to many different sectors or activities
- Exponential enhancement from MFG in the product offering
- Multiple ways in which to visualize data, including free software
- Relationships and collaborative work between organizations developed



Continuity with MSG with additional capabilities and data

MTG; Game Changer!!!

- Fire tracking products
- Lightning imager; storm development, life cycle; spatial distribution of total lightning activity and its extent will help improve public safety.
- Increased temporal (10mins) and spatial resolution (1km); forecasters to warn of imminent hazards and to predict fast developing severe weather such as strong winds, lightning, hail, heavy rain, tropical cyclones, and thunderstorms
- Improve forecasts and will make an important contribution to the EW4ALL, especially on the African continent



Data access & Visualization tools



Improved access, processing, applicability and use of EO data for Early Warning

- EUMETCast Terrestrial
- Cloud computing
- RARS, PUMA 2025 & ClimSA stations
- Skyceiver
- EUMETView

AMSAF

- To enable stronger support to nowcasting services across Africa:
- **(African Meteorological Satellite Application Facility) AMSAF – Abidjan declaration**
“Africa shall not only be a user of satellite data & products, but shall generate its own products”
- Establish 4 dedicated regional nowcasting data regional hubs across Africa.
- These regional hubs would take on the responsibility of
 - Receiving the full suite of MTG data,
 - Processing the data,
 - Running various processing software, such as EUMETSAT NWC SAF software and
 - Providing tailored products to several countries for which the regional hub is responsible.

LOOKING INTO THE FUTURE

- Relationships will strengthen and collaborative work between organizations will continue to develop
- Research opportunities; academic, space based products, sector specific etc
- Capacity development; growth and development of African Users
- Design and development of new operational products; Nowcasting

Towards early warnings for all in Africa

How data from EUMETSAT's next-generation satellite programmes contribute to early warning platforms for severe weather and climate events in Africa



Daouda Konaté, Director of the Côte d'Ivoire's National Meteorology Service and First Vice President of the World Meteorological Organization