



WMO-Supported Satellite Activities in Africa

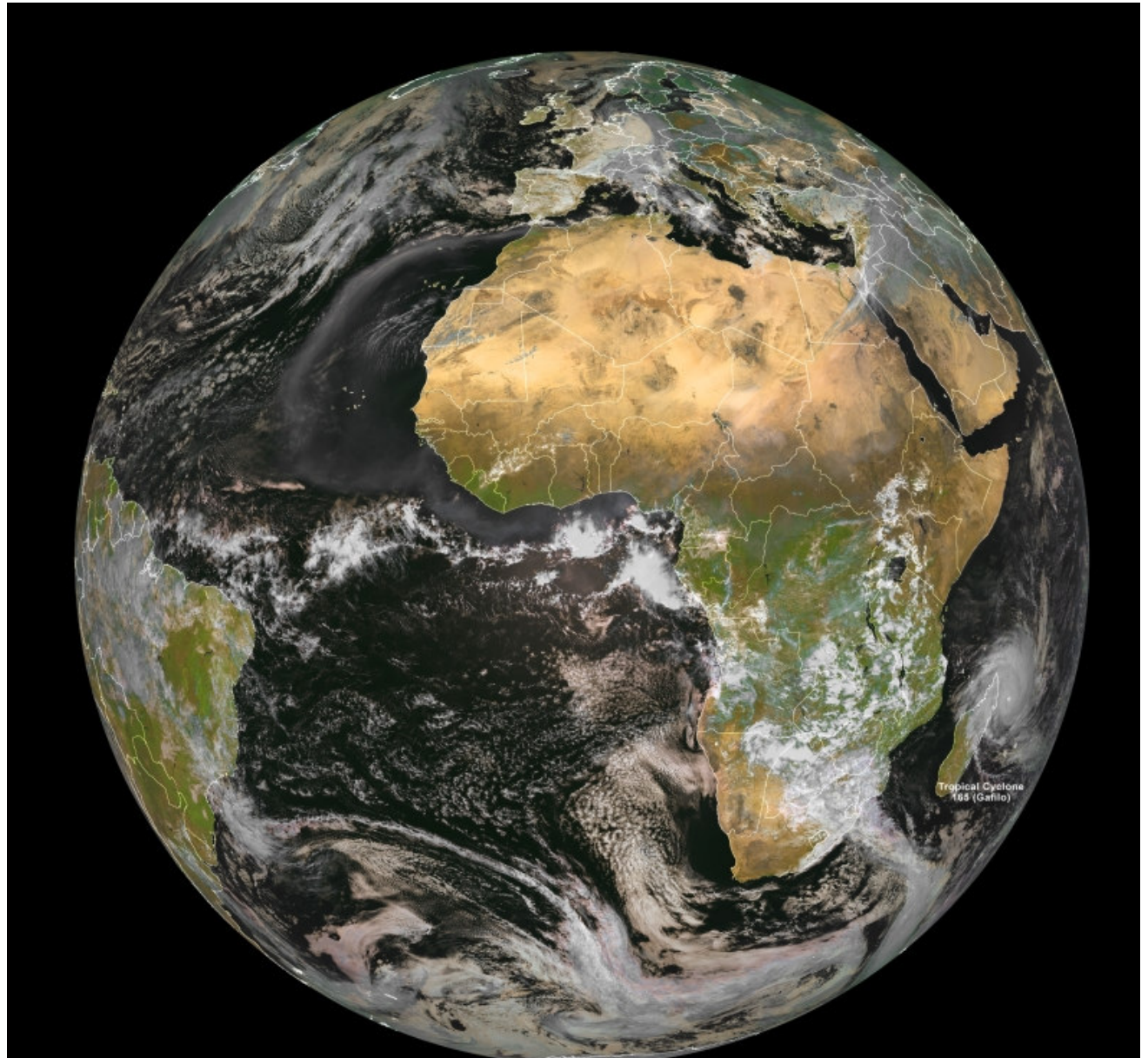
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Outline

- Space-based observation capabilities
 - Meteosat
- Timely access to meteorological satellite data
 - EUMETCast
- Regional products/applications
 - AMESD
- Training
 - Virtual Laboratory

Space-based observation capability

- Privileged location of Africa for Meteosat (0° , 0°)
- Essential support provided by EUMETSAT
- Free access to data for low-GNP countries
- User support





Timely access to satellite data and products

- WMO IGDDS/WIS projects promotes DVB-S systems for multicasting sat data/products
- EUMETSAT has implemented a DVB-S dissemination service for Africa in C-Band (EUMETCast-Africa)

DVB-S dissemination systems

EUMETCast / GEONETCast

- Low cost receivers using **off-the-shelf** technology
- **One-stop shop** : multiple data sources using the same dissemination system
- **Scalable** (through increasing bandwidth)
- Can disseminate products generated by **local centres**
- **Training** channel
- Planned **alert channel** (Common Alerts Protocol (CAP))



Regional products/applications

-AMESD project

www.amesd.org

AMESD operational objectives



Arican Monitoring of the Environment for Sustainable Development

Provides:

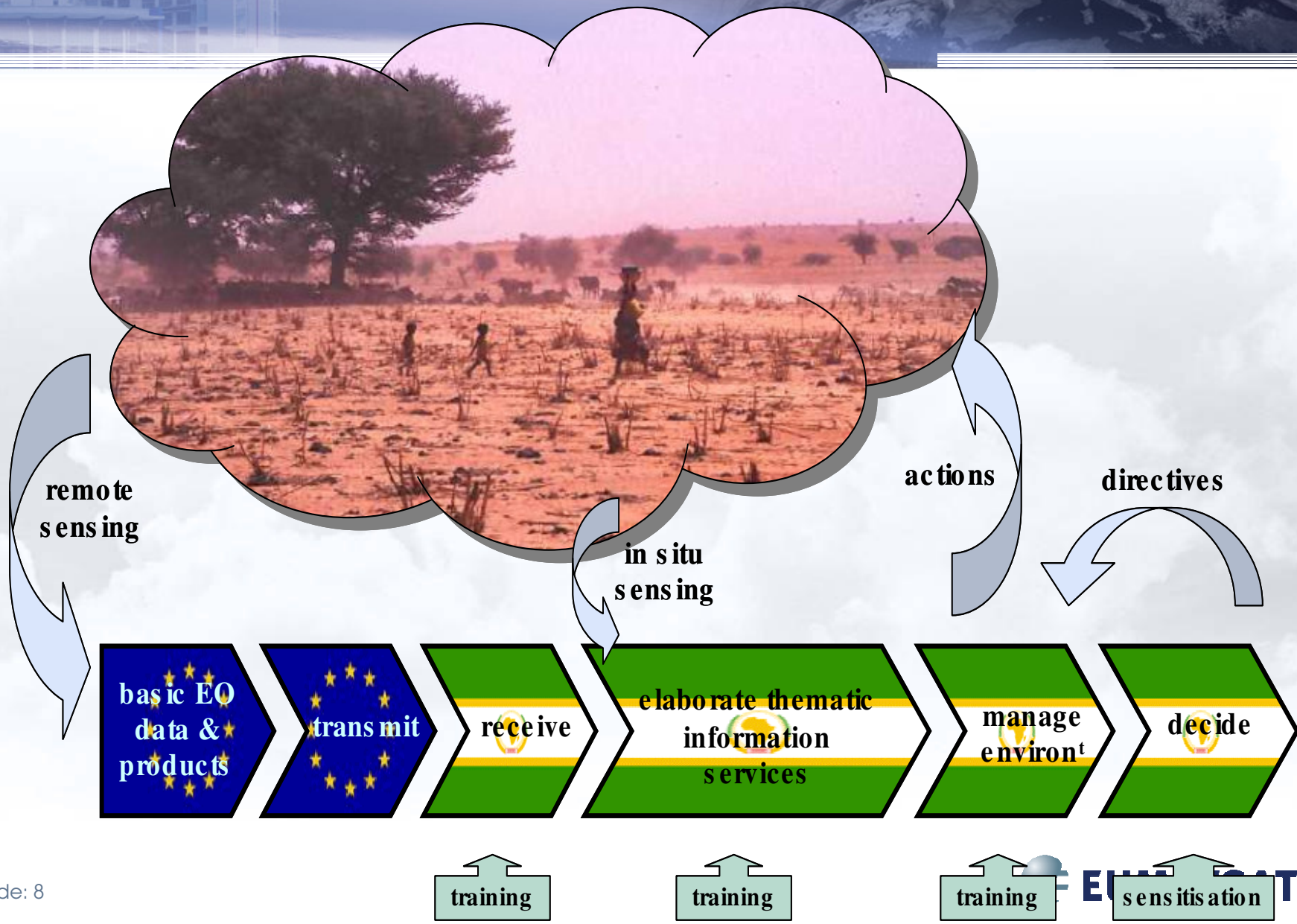
Continuity of PUMA / Maintenance and enhancement of the 49 PUMA receiving stations

Capacity building: infrastructure and training

Use of Earth Observation data for environmental issues through 5 regional projects



AMESD Value-Chain





AMESD Management

Project funded through the European Development Funds
Implemented by the African Union Commission

Technical Assistance : 3 experts in Addis, 5 in the regions

Steering Committee

Voting members: AUC, RECs, ACP Secretariat

Observers: European Commission, EUMETSAT, WMO, UNEP, UNECA, FAO

Continental dimension (activities coordinated in Addis)

PUMA maintenance, training, policy framework, coordination

Slide: 9

Regional aspect





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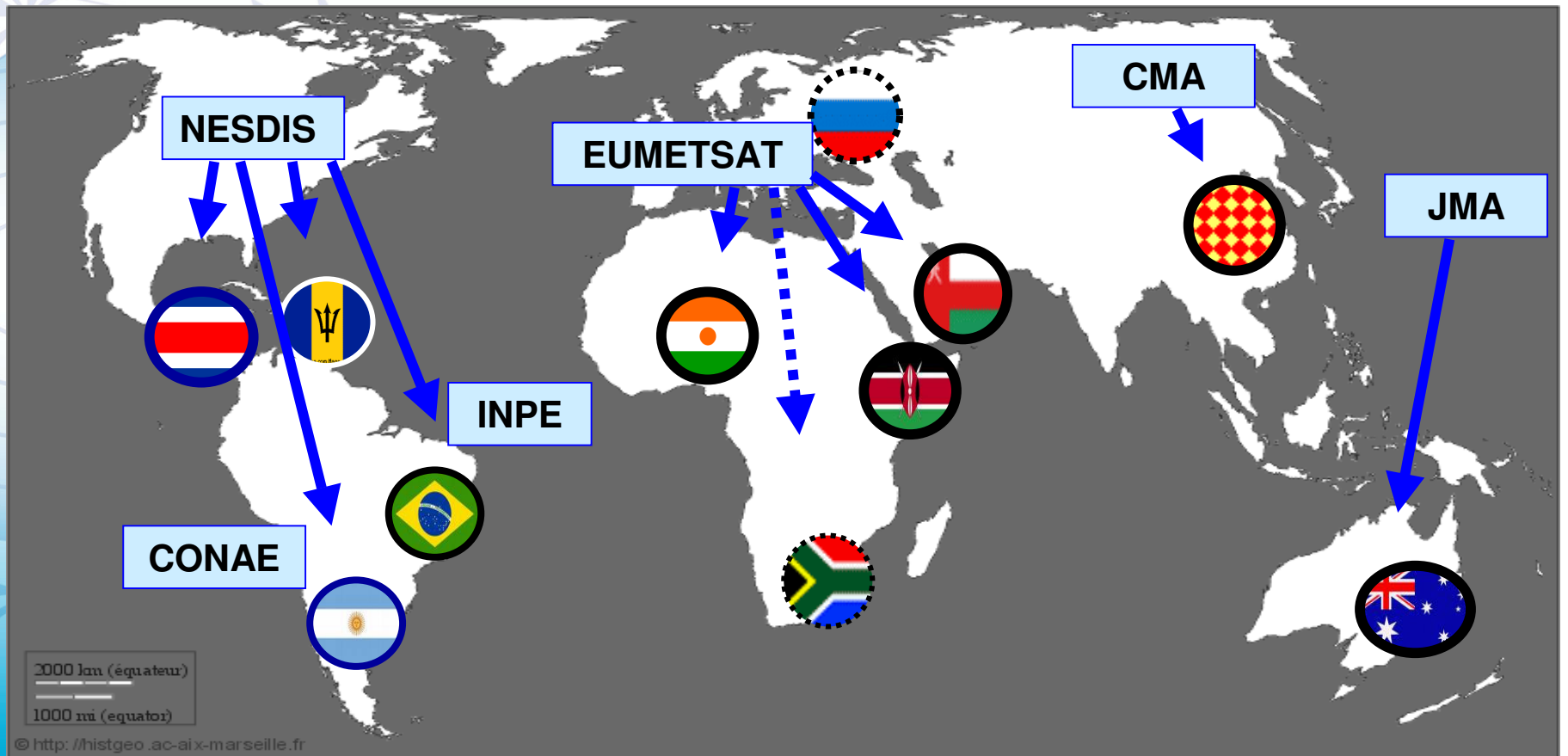
Regional Economic Community - REC	Regional Thematic Action	Regional Implementation Centre - RIC
CEMAC	Management of Water Resources	CICOS (Commission Internationale du bassin Congo-Oubangui-Sangha), Kinshasa (DRC)
ECOWAS	Water Management for Cropland and Rangeland Management	AGRHYMET (Centre Régional en agro-météorologie et hydrologie, Niamey (Niger))
IGAD	Land Degradation Mitigation and Natural Habitat	ICPAC (IGAD Climate Predictions and Applications Centre), Nairobi (Kenya)
IOC	Coastal and Marine Management	MOI (Mauritius Oceanography Institute), Quatre-Bornes (Mauritius Island)
SADC	Agricultural and Environmental Resource Management	BDMS (Botswana Department of Meteorological Service), Gaborone (Botswana)



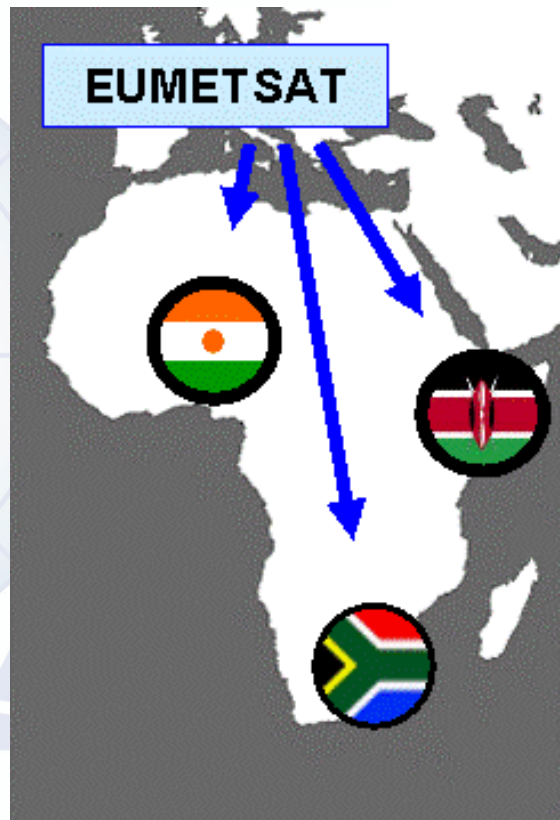
Training

Centres of Excellence for Training within the Virtual Laboratory

Sponsored by space agencies



Centres of Excellence for Training within the Virtual Laboratory



3 CoEs in Africa:

- Niamey (Niger)
- Nairobi (Kenya)
- Pretoria (South Africa)

WMO/CGMS Strategy of the Virtual Laboratory for Training in Satellite Meteorology

- Centres of Excellence in all WMO Regions / languages
- Blended learning (distance, face-to-face, computer aided)
- Regional Focus Groups around each CoE
- Centrally managed Virtual Resource Library
- Expansion to environmental topics
- Continued active sponsoring by satellite operators

An aerial photograph of a river valley. The terrain is highly textured and colorful, with shades of red, orange, yellow, green, and blue. The river flows through the center of the valley, surrounded by dense vegetation and rocky banks. The overall scene is a vibrant, multi-colored landscape.

**Thank you for your
attention**