

# Report of RAIDEG

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World Meteorological Organization

Organisation météorologique mondiale

WEATHER CLIMATE WATER  
TEMPS CLIMAT EAU

# RA-I Dissemination Expert Group (RAIDEG) report

- Established in 2010 by WMO, in cooperation with EUMETSAT
- Endorsed by WMO RA-I at its 16<sup>th</sup> session in 2015, as part of its Working Group on Observations Telecommunications and Infrastructures
- **Its overall role is: to improve satellite data accessibility and user awareness in RA-I.**
- **Its purpose is:** to optimise data and products dissemination through EUMETCAST and usage by the African community



# RA-I Dissemination Expert Group (RAIDEG)

The Expert Group is composed of experts from the:-

- **National Meteorological Services;**
  - Morocco, for Northern Africa,
  - Senegal, for Western Africa,
  - Congo, for Central Africa,
  - South Africa, for Southern Africa,
  - Mauritius, for Indian Ocean region, and
  - Kenya, for Eastern Africa.
- **Regional Training and Climate Centres (IMTR, SAWS, EAMAC, ACMAD);**
- **MESA RIC for oceanic thema (Univ of Ghana)**
- **EUMETSAT; and**
- **WMO Secretariat.**



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# RA-I Dissemination Expert Group (RAIDEG)

## Activities of the Group include:

- Follow up and Feedback on the EUMETCast-Africa baseline
  - A new EUMETCast-Africa service
  - Meteosat-8 IODC image data and products
  - EU Copernicus Products (mostly from Sentinel-3 and Land Service)
  - Meteosat Mission Swap in Q1/2018: Meteosat-11 is taking over as prime at 0° in February; Meteosat-10 to provide Rapid Scan Service over Europe.
  - LRIT Direct Dissemination Service from Meteosat 0° service is to be terminated in March 2018.
  - Update on the Copernicus Data Access (CODA) mechanism, and the EUMETView service (Sentinel-3 products).



- Expression of user needs (including marine, climate etc) for satellite data, NWP products and software
- requesting training related to satellite and NWP products, and others users (climate, marine, agromet...)
- User feedback on MESA implementation
  - Invitation to MESA infrastructures tender evaluation
  - Factory acceptance tests
  - Feedbacks on PUMA2015 and MESA functionalities
- User representation in preparation for Meteosat Third Generation (MTG)
  - MTG for Africa Project Study MAPS; lots of discussion for the optimum data to send in Africa bearing in mind the bandwidth limit



## RAIDEG7, 11-12 September 2016, Kigali



- Meeting at WMO with Climate Department and the chairs of RAIDEG and chair of RAI-WG-CSA in April 2017 to identify satellite climate data needs

- **RAIDEG8 , 1-2 November 2017, Geneva** with participation of the Chair of RAI working group on Climate Services and Applications and C3S

## RAIDEG 9, 22-23 September 2018, Abidjan



# Achievements

- Follow up with MESA, PUMA deployments: completed 2017: we can note some improvements. More flexible, easier to use and more data. Raise any problem to EUMETSAT: eg antenna problem of togo and some functionalities
- More products from UKMet and better timeliness (every 3hours, 6hours)
- Hopely better timeliness from ECMWF every 6hours, but not visualisable
- Copernicus data available
- Few more training events on marine meterology and satellite climate products



## RAIDEG7 recommendations to KIGALI Forum

1. PRs: Nominate focal points to better address the African community needs
2. RICs: to work with RAIDEG for their needs
3. Eumetsat: To continue investigations optimising both temporal and spatial resolutions
4. Noting the bandwidth limitations, appreciating the efforts of EUMETSAT to guaranty continuity of optimum service, we recommand the African community to seek **extra funding** with (for bandwidth and infrastrures) in order to make best use of MTG



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## Main recommendations from RAIDEG8

- Follow up on MTG progress with EUMETSAT
- Follow up on training activities with EUMETSAT: Two more training workshops were organised (on satellite climate data and marine satellite data)
- Follow up with EUMETSAT with future upgrade on PUMA2015
- Follow up on GMES Africa activities to ensure that all african countries can receive and use EUMETSAT data
- 



# Strong focus on

- MESA , PUMA2015 equipments
- trainings needs
- MTG preparedness



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# What does MTG?

- A better spectral resolution: 16 channels, with 4 more visible than MSG
- A better spatial resolution (IR 2km, Vis 1km) with a total coverage of Africa
- A better spatial resolution (every 10min)
- A better radiometric resolution (12bits/pixel)
- A lightning imager
- An IR sounder
- A UVN sounder



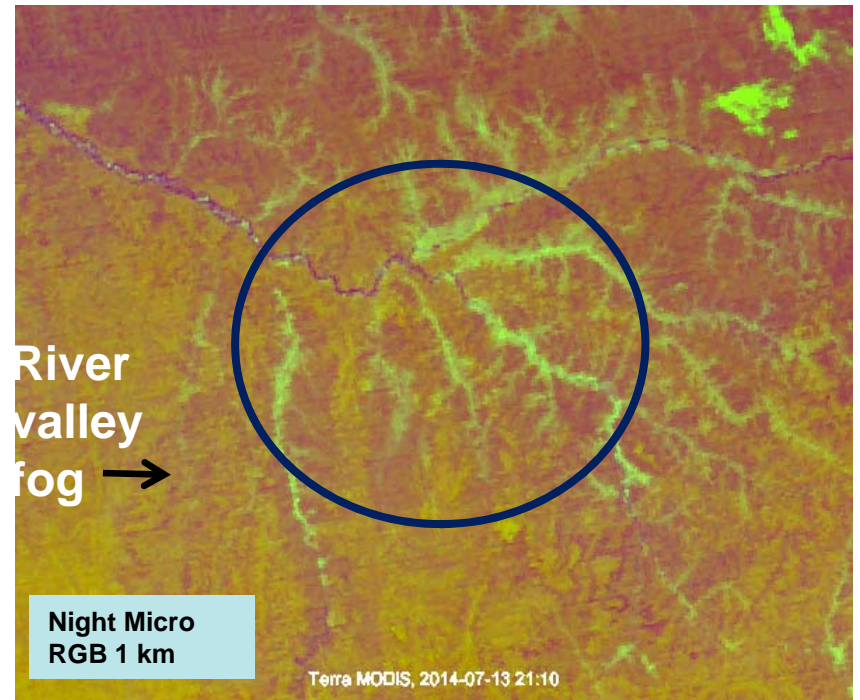
# MTG Improvements: fog monitoring

## SEVERI (21:00 UTC)

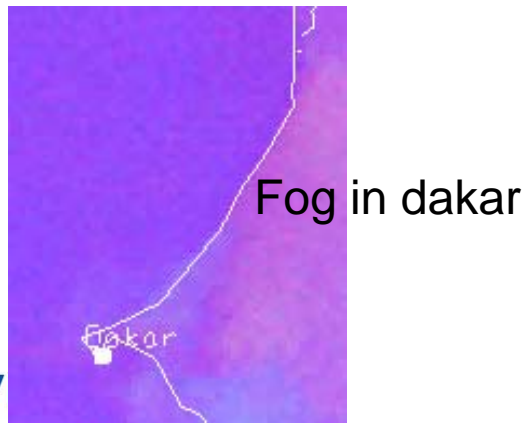
Shallow river valley fog often not detected in MSG (too thin and too small area)



## MODIS (21:10 UTC)

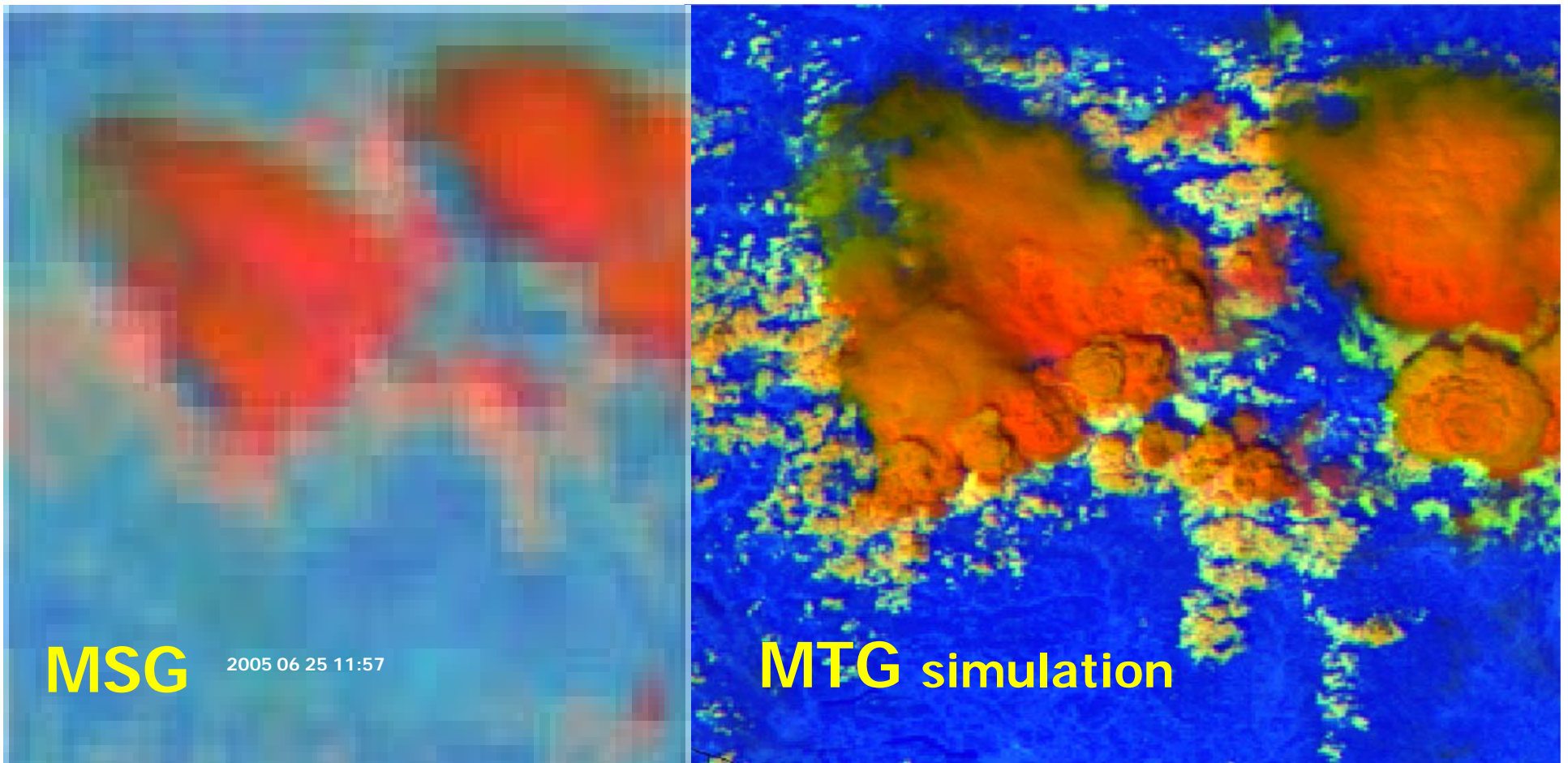


Source: EUMETSAT User Forum 2014



# MTG Improvements: horizontal sampling

(courtesy J. Kermann, EUMETSAT)



# But at which costs?

70 times more data than MSG

Infrastructures to cope with this expansion:

MORE Bandwidth to transmit the data  
adequate equipments to receive the data,  
analyse and visualise

**WE NEED TO PRIORITISE TO GET BEST OF IT**



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analysis of choices suggested by EUMETSAT  
unconclusive

Need a scenario balancing both temporal  
resolution and spatial resolution ...work out  
optimal solutions



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Some solutions at RAIDEG9 for MTG

Still some recommendations on critical mass training and training the trainers

Needs for capacity development in infrastructures and human resources

Technology transfert: African SAF

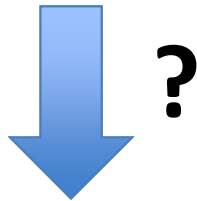
RAIDEG7+ RAIDEG8 + RAIDEG9



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**RAIDEG7 + RAIDEG8 + RAIDEG9**



**ABIDJAN AMCOMET DECLARATION**

Please Nominate your national focal points to help us serve you better !



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# Thank you



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