

**Engaging on use of EO for Hydrology and  
River Basin Management in Africa**

**EUMETSAT HQ, 19 – 21 March 2024**

**Main recommendations and Way Forward**

## **Context 1/2**

Objectives: Raise awareness and highlight current use of EO for hydrology in Africa, present sets of products, (e.g rainfall estimate, soil moisture, EtP, altimetry), and flood forecast,

-> first step to engage with the hydrological user community in Africa .

*Targeted audience: Water Basin Authorities, NHSs,*

**315 attendees including from 43 African states**

## Context 2/2

Workshop 19-21 March on “Engaging on use of EO for Hydrology and River Basin Management in Africa”

Participants from Africa and Europe

Objectives

- Continue interactions btw data producers and the Water Management sector
- Roadmap that would outlines specific actions for improving the use of EO data for hydrology in Africa



# **Content of the workshop**

- **#1 – Roadmap for Africa-Europe cooperation on EO for Hydrology**
- **#2 – Operational applications, user needs and available data**
- **#3 – Data access**
- **#4 – Science, including products validation**
- **#5 – Knowledge Transfer and Capacity Building**

Various user cases

## Data access

- Survey on data use and processing infrastructure (Target: Water Basin Authorities, to be expanded to other scientific org) -
- Include 1-2 representative(s) of the Hydrological community in the RA-I Dissemination Expert Group (RAIDEG)
- Link with JRC to see how JRC eStation could support EO hydrology applications
- Highlight how PUMA station data could be extracted and use for hydrology applications
- Discuss among data producers to seek synergies on facilitating access to both on Altimetry and H-SAF products and associated tools.

## **Science, including products validation**

*Cal/Val activities are already been performed in Africa but the situations are diversified amongst the various hydrology products.*

*Some of these activities are already involving local institutions, not all.*

*In terms of opportunity, GMES&Africa Regional programme grants, in involving the regional scientific communities ICPAC, CICOS, CSE, have expressed their interest in that sense.*

- Joint discussion between data producers (LEGOS and H-SAF) to share their plan for Cal/Val activities and engagement with African institutions and to seek synergy on calval activities
- GMES&Africa Consortia (i.e with CSE, CICOS, ICPAC, SASSCAL) to activate cross-fertilization activities in Hydrology taken into account results of the present workshop-
- Engagement with AMHEWAS to identify Hydrological products to consolidate and in support to the Situation rooms in Africa
- Develop joint Research project under Horizon Europe, EO-Africa .

# **Knowledge Exchange and Capacity building on EO for Hydrology in Africa**

- Consolidate the list of priorities of African “Hydrology” Communities of Practice and identify the institutions to work with. *EUMETSAT to support the shaping of the training of the Community of Practice.*
- Identify African institutions / initiatives that could support / coord a broader agenda on capacity building in Africa (e.g GEO, ANBO, PAU, African CoE in Water Management)
- Identify group trainers that H-SAF could engage with and could relay H-SAF training activities in Africa

# Further engagement and structuring of the dialogue

- Engagement with ANBO secretariat:
  - Present EO hydrology / results of the wshop to next ANBO technical meeting
  - Presentation and discussion on the survey
  - PoC for EO identification in each of the Water Basin Org
  - Invitation of the ANBO to the 16-EUFA (16-20 Sep - Benin)
- Include 1-2 representative(s) of the Hydrological community in the RA-I Dissemination Expert Group (RAIDEG),
- Report of the Workshop and opportunities of EO for the WRM and Water led disasters to the AMCOW/AMCOMET/AWG-DRR through [AUC](#),
- [Water Basin Org](#) to report on the outcomes of this workshop in their network and further engage with their communities. EUMETSAT can support with PR materials.



# Way forward

- **Session in Hydrology during 16-EUFA (16-20 Sep 2024 - Benin)**
  - **Report of the wshop and follow-on**
- Organise session or contribute to WaterNet events or other relevant Platforms (e.g AARSE, user cases to be presented) and showcase existing work and report of the wshop,
- Coordination of the Building capacity activities with the support of CREWS
- Engagement with policy makers: Issue policy briefs
- Establishment of Community of Practice(s) based on a priority listing,
- Participants of the workshop to be part and form a “working group” to be further embedded into African context.