



LIST OF RECOMMENDATIONS OF THE 8th EUMETSAT USER FORUM IN AFRICA

The recommendations of the 8th EUMETSAT User Forum in Africa are sorted by:

1. Data and products
2. EUMETCast stations
3. Training and research
4. AMESD and GMES Africa
5. Others

They were generated in the various sessions and reviewed and approved during the last session.

1. Data and products

Recommendations #1 and 2

Access, use and coverage of SAF products

The Forum expresses high interest in accessing and using EUMETSAT Satellite Application Facility (SAF) products and software relevant to Africa (especially Land SAF, Climate SAF, OSI SAF, NWP SAF and Hydrological SAF), including products in pre-operational status. The Forum recommends

Recommendation #1

- that EUMETSAT takes further steps to facilitate the accessibility and use of SAF data and products by continuing to include them within the EUMETCast-Africa dissemination service.

Recommendation #2

- that the geographical coverage of relevant SAFs products should be extended to the whole of Africa. Additionally, these products should have a high temporal resolution,

suitable for, e.g. Nowcasting. The products should also be well documented.

Recommendation #3

Cooperation between the SAFs and the African User Communities

The Forum notes the interest of the African user communities, not only in accessing and using SAF products and software, but also in enhancing cooperation between the SAFs and African users (including scientists at regional centres, research institutes and universities). The Forum, therefore, recommends further strengthening of links between the various SAF programmes and the African users (for example, through training, workshops, joint research programmes, product development and validation, availability of SAF product documentation, etc.) with a view to ensuring that generated products meet user requirements.

Recommendation #4

Access to Metop and Jason products and data via EUMETCast

The Forum appreciates the new data and products provided by the Metop-A and Jason satellites and notes the interest of African users in having access to some of the Metop A data and derived products. The Forum, therefore, recommends that interested African user communities analyse their requirements for the most relevant Metop products for EUMETSAT to

facilitate access to this data via EUMETCast.

**Recommendation #5
Establishment of a Products and
Dissemination Requirements
Coordination Group**

The Forum considers that NMHS in RA-1 have increasing needs for data from various satellites, for products from non-satellite sources such as MDD, and for products from African NMHS, centres of excellence, and other environmental monitoring organizations in Africa.

Recognizing the essential value of EUMETCast to fulfil these needs, the Forum recommends that WMO, in cooperation with African NMHSs and EUMETSAT, establish a group of experts to assess requirements and priorities, including those of environmental monitoring organisations and centres of excellence in Africa, for the dissemination of products through EUMETCast-Africa.

**Recommendation #6
IODC coverage beyond 2010**

The Forum expresses its appreciation to the EUMETSAT Council for continuing the IODC service until 2010, as recommended during the 7th EUMETSAT User Forum in Africa, held in Maputo, Mozambique, in October 2006. Stressing the critical importance of this service, including the DCP tsunami early warning service, for a large number of African countries subject to meteorological phenomena originating in that region, the Forum recommends that EUMETSAT should continue its provision of the IODC, or similar service beyond 2010.

**Recommendation #7
Continuity of Satellite Altimetry
mission**

Taking note of the importance of Satellite Altimetry for sea level and climate monitoring, and stressing the high potential impact of climate change for the African Continent, the Forum recommends that EUMETSAT should continue the satellite altimetry programme, to ensure the long term continuity of this data and its access.

**Recommendation #8
Provision of additional Web imagery**

The Forum notes that some African users make operational use of imagery provided via the EUMETSAT web site during periods of non operation of their EUMETCast receiving stations. The Forum, therefore, invites EUMETSAT to consider providing hourly imagery on its web site.

**Recommendation #9
ATOVS level 2 products**

Noting a lack of upper air data over much of Africa, the Forum recommends that ATOVS level 2 products should be made accessible in Africa to enhance upper air data availability, in complement to the efforts of AMDAR.

**Recommendation #10
Ground radar data via EUMETCast**

Noting how well radar imagery complements and validates satellite data, the Forum invites NCAR/UCAR to consider expanding the scope of its initiative to establish a radar network in West Africa, to other regions of Africa and to organize and promote a workshop in 2009 on the applications possible from using African radar

network data in combination with satellite data, as a follow-up of an earlier NCAR/UCAR workshop held in Ougadougou in April, 2007.

The Forum recommends that products derived from the combination of data from African radar networks with satellite data should be included within the EUMETCast dissemination service, with particular emphasis upon nowcasting, and climatological and hydrological applications.

Recommendation # 11 Format harmonisation

Taking into account the increasing number of data and products disseminated via EUMETCast/GEONETCast, the Forum recommends harmonising existing and new data formats, metadata and documentation.

Recommendation # 12 SW availability

The Forum encourages software suppliers to make available their application software as open source for use with EUMETCast datasets.

2. PUMA stations and EUMETCast

Recommendation #13 Return link on EUMETCast

The Forum recommends that an upload capacity is made available on the EUMETCast system for diffusing added value data and products, developed by the RICs within the framework of AMESD, to all stakeholders. Upload capacity should be also open for other data providers in Africa to disseminate their products in Africa.

Recommendation #14 PUMA maintenance within AMESD project – customs clearance and tax exemption

The Forum recommends that the lists of equipment to be delivered from 2009 within the framework of the PUMA maintenance contract, are communicated by the AMESD project as soon as possible to the NMHS and the RICs, in order to facilitate customs clearance formalities and the necessary exemption from VAT and customs duties, in accordance with the Cotonou agreement, and to avoid equipment bottlenecks experienced in the past in the PUMA Project.

Recommendation #15 Internet access at PUMA station

The Forum recommends that the use of internet access provided with the PUMA station is used exclusively for remote maintenance, in order to minimise virus contamination of the operational software.

3. Training and research

Recommendation #16 and #17 and #18 Appropriate equipment in the training Centre

Recognizing the need to reinforce the Training Centres, the Forum recommends that

Recommendation #16

- PUMA stations in Training Centres are upgraded (within the framework of the PUMA/AMESD maintenance) as a priority to ensure adequate training using new resources; this activity should also include the maintenance of the PUMA station and the provision of

permanent licenses for the s/w needed for training;

Recommendation #17

- the training infrastructure in these centres (e.g. the PCs) should be maintained in an operational status, and capable of conducting training on the use of satellite imagery; this includes the replacement of PCs of the training laboratories to make them compatible with the updated PUMA receiving stations, the upgrading of bandwidth of the internet, the acquisition of antivirus software for the laboratory and the procurement of a UPS to ensure a stable laboratory power supply;

Recommendation #18

- the Regional Training Centres should have access to new training materials in French, Portuguese and English addressing the expanding number of data and products;

Recommendation #19 and #20 Content of training at the training centre

Concerning training on applications, the Forum recommends:

Recommendation #19

- that the AMESD project maximises the use of the IMTR, EAMAC, SAWS and Mauritius NMHS Training Centres in performing AMESD training activities.

Recommendation #20

- that the Regional Training Centres consider the requirements of NMHSs in their training plans.

Recommendation #21

Training on new satellite products and cooperation with research institutes

Recognizing the need to strengthen satellite meteorology training and to enhance training in the use of new data and products (especially from the SAFs, Metop and Jason), the Forum recommends that future training developments in Africa draw upon expertise existing in NMHSs, African Universities and other specialists institutes.

Recommendation #22

Training on EUMETCast

The Forum recommends the use of the EUMETCast Training Information Service to deliver training material for self-educational purposes and in support of targeted training events.

4. AMESD and GMES Africa

Recommendation #23

AMESD Training strategy

The Forum recommends that AMESD develops a comprehensive training strategy taking into account the user requirements for training on data acquisition and processing, production of value-added information, through to the dissemination and use of information by all stakeholders, in particular decision-makers.

Recommendation #24

AMESD national and regional networks

To optimise the sharing and use of AMESD information at national and regional level, the Forum recommends that AMESD builds, via the thematic EUMETCast stations at the NMHSs,

inter-sectoral national networks, making use of and strengthening mechanisms and thematic networks already in place, especially within the domain of water management, desertification, forest-cover and fires, biodiversity, agriculture, etc.

Recommendation #25
AMESD cross-fertilization between regions

It is recommended that the AMESD project develops a continental strategy to link the different thematic operational information systems which will allow cross-fertilisation between regions (e.g. sharing of products, models, best practices, etc) and clarifying the responsibilities of the different actors at continental, regional and national levels.

Recommendation #26
AMESD Forum

The Forum recommends that the AMESD project organises an AMESD Forum in October 2009 to ensure, inter alia, ownership by all stakeholders, to address the issues raised at the 8th EUMETSAT User Forum in Africa and to provide recommendations to the Program Steering Committee.

Recommendation #27
AMESD in North African countries and in South Africa

The Forum recommends that the African Union should associate with North African countries and with South Africa, to permit these countries to integrate AMESD and to develop joint continental initiatives (e.g. for GMES-Africa) by identifying appropriate implementation mechanisms.

Recommendations #28 and #29
AMESD Thema – involvement of NMHS

The Forum recognizes the extreme complexity of the AMESD project, in particular, the implementation of the regional thema. The Forum appreciates the support of the AUC, RECs and ACP Secretariat and the effort of RICs and international technical assistance.

However, the Forum recognizes that the level of NMHS participation in the AMESD project is currently limited to maintenance of the PUMA and EUMETCast stations and capacity building. The RICs should link up with NMHS who will facilitate the dissemination of products to users at the national level.

Considering the experience acquired by Meteorological Services in the framework of the PUMA project, considering the transverse role of NMHS in sustainable development, considering the recommendation #6 of the 7th EUMETSAT User Forum in Africa, noting that meteorological forecasts are essentially based on satellite images and data, the Forum recommends

Recommendation #28

- that the RICs take account of the recommendation #6 of the 7th EUMETSAT User Forum in Africa and

Recommendation #29

- that NMHS establish the most appropriate national network for the effective sharing of information generated through AMESD, in collaboration with the RICs and the RECs.

The WMO is invited to support the NMHS in this process.

Recommendation #30
AMESD focal points in the ECOWAS region

Noting that the AGRHYMET centre has carried out activities largely in isolation of most of the NMHS of the ECOWAS region, the Forum urges ECOWAS to instruct AGRHYMET to transfer the national focal point of AMESD to the NMHS.

Recommendations #31 and #32
NMHS involvement in GMES Africa and link with GOOS Africa

The Forum recommends that, in the framework of their cooperation, WMO and EUMETSAT develop a strategy allowing

Recommendation #31

- the RA-I NMHSs define their role in the conception of projects such as GMES Africa, and in the framework of the Group of Earth Observation (GEO). To develop such a strategy, the Forum proposes that the RA-I NMHS invite EUMETSAT to participate at its regional meetings.

Recommendation #32

- the establishment of links with the programme for ocean monitoring for Africa (GOOS Africa).

Recommendation #33
Benefit from ACMAD competences

The Forum recommends that the African Union takes full benefit of the competences of ACMAD in its implementation of AMESD, as well as in the preparation and implementation of GMES Africa.

5. Others

Recommendation #34
EUMETSAT User Satisfaction Survey

The Forum recommends that, in future, the EUMETSAT simplified User Satisfaction Survey is distributed just prior to the time of the Africa User Forum, in order to ensure a full response by the time of the meeting itself.

Recommendation #35
ICT technologies at NMHS

The Forum recognises the importance of new technologies (including distance learning and access to EO portals) associated with the handling of satellite data and products and related training support, and recommends that all African NMHSs and their training institutes should be fully equipped to carry out these tasks by having adequate, and dedicated internet capacity.