EUMETCast Africa Update
UFA 12 – Sally Wannop
Overview

1. EUMETCast Africa system updates
2. EUMETCast Africa baseline content updates
3. EUMETCast Africa support to other services
System updates and evolution plans
EUMETCast Users Worldwide as of 30 June 2016

User Distribution:

- **3425** users world-wide
- **4541** stations

EUMETCast Global User Community

EUMETCast Americas
SES 6, C-BAND

EUMETCast Africa
EUTELSAT 5 WEST A, C-BAND

EUMETCast Europe
EUTELSAT 9 A, KU-BAND
EUMETCast Africa Service

EUMETCast Africa status at September 2016:

Telecommunications satellite: EUTELSAT 5° West
Current service until: Mid-2018
Net data rate: 2.8 Mbps

Number of data collections: 244

Full contents of the data stream is included in the Product Navigator:
http://navigator.eumetsat.int/

Number of users is 344:
- National institutes: 238
- Education/research: 88
- Commercial: 7
- Private users: 11
EUMETCast System Updates

• Future EUMETCast Africa Service bandwidth updates:

  • To accommodate new services bandwidth increase is required:
    • Meteosat-8 Indian Ocean Data Service (IODC): 1.5 mbps
    • Copernicus Sentinel-3 Marine Level 2: 3.5 mbps
  • Service bandwidth will increase to around c.8 mbps once these services are added.
EUMETCast System Updates

• EUMETCast Africa new service provider contract:
  • There will be a service contract update in early 2018:
    • There will be a period of parallel operations (c. 2-3 months) with the existing service to allow users to transition;
    • Information will be provided on the specifics of this new service (e.g. any changes to transponder, coverage footprint, etc.) once the procurement process is complete.
Content baseline updates
EUMETCast Africa Baseline Updates

• Overview of the changes since 11\textsuperscript{th} UFA:
  
  • New/enhanced EUMETSAT products: 15
  • New/enhanced Third Party: 16

  • Those directly triggered through RAIDEG: 5

  • See backup slides for update details
Content baseline highlights and updates
EUMETCast Support to other Services

• EUMETSAT supports the International Charter Space and Major Disasters:
  • EUMETCast Africa can be used by Authorised User of the Charter as a means to receive Charter Products
  • If interested to learn more about the Charter see: https://www.disasterscharter.org/web/guest/home
  • Recent African activation in August 2016 caused by flood water and saturated soil over Wad Madani, Al Jazeera State, Sudan following heavy rains.
EUMETCast Support to other Services

Information Channel:

• Start of dissemination of Operational Service Status Indicator (OSSI), 3 July 2015
• For many years we have been providing User Notification messages.

Training Channel:

• New MESA training material, 15 July 2015;
• Land training resources (CEOS WGCapD Distance Education Course: A Webinar Series on Remote Sensing Technology for Disaster Management), 15 July 2015;
• ASMET 7 modules on aviation forecasting in Africa (French version), 23 April 2015.
EUMETCast-Africa Baseline Updates

• IODC Meteosat-8 data will be distributed on EUMETCast in parallel to the Meteosat-7 data, in the period from 4 October 2016 to around end March 2017;
  • Station upgrade will be required in order for these data to be processed/visualised by the PUMA 2015 stations;
  • EUMETSAT is discussing with the Technical Support for the maintenance the implications and the process for upgrade
  • Met-8 IODC Test data can be found at:

EUMETCast Support to DCPs

• EUMETCast provides access to Data Collection Platform (DCP) messages
• As DCP operator you can receive DCP messages through EUMETCast in addition to via our ftp site.

• If you need further information on DCPs, please contact us.
Standard and High Rate DCPs

• The current Meteosat system employs 100bps ‘Standard’ Rate DCPs;

• High Rate DCPs (HRDCPs) 1200 bps, have been introduced for the 0° Meteosat Second Generation Satellites and new IODC service;

• HRDCPs – More data, more often, more reliable

• Both Standard and High Rate will be supported for the foreseeable future.
A total of 1276 registered DCPs deployed in 75 countries
Conclusions

- EUMETCast Africa service is foreseen to continue;
- A service provider change is planned for 2018;
- New products are progressively being added to the baseline;
- WMO RAIDEG are the group to channel any new requirements through;
- EUMETCast supports the delivery of Charter products, provides access to Training material and delivers service status information.
EUMETCast Africa Contact & Information

If you need support or want to engage with us remember:

User Helpdesk  ops@eumetsat.int

For information on service updates: User Notification Service (UNS)

Follow us on Twitter: @eumetsat_users

Product Navigator for the latest catalogue information:

http://navigator.eumetsat.int/

WMO RAI RAIDEG group is there to capture your requirements

Information on EUMETCast can be found at:

www.eumetcast.com
Back up slides

List of EUMETCast Africa Baseline changes since 11th UFA meeting
EUMETSAT Central Facility

- **Meteosat Services:**
  - Enhancement to the GII, FIR & OCA products (v 11.2 RTTOV), 22 April 2015
  - IODC Multi-Sensor Precipitation Estimate (MPE) – enhanced on 04 Nov 2015
    - Update of the algorithm using external SSMIS data from DMSP-F17, F18 and F19
Updates to Africa Baseline since last meeting

**Meteosat Services cont.:**

- **MPEF Release 2.2. – enhanced (25/04/16):**
  - Product processing area extended from 65 to 67.5 degrees Great Circle Arc around the sub-satellite point.
  - AMV product updated to have two new height assignments: a height assignment based on the Optimal Cloud Analysis and an improved height assignment for the clear sky water vapour winds contained within the product.
  - Zenith angle and sub-satellite point information included in the All Sky Radiances BUFR files, as it is for the Clear Sky Radiances.
Updates to Africa Baseline since last meeting

**Metop Services:**

- V 6.1 of IASI L2 processing software will be released in September 2015;
- Update of the ASCAT Level 2 Soil Moisture products, at 12.5 km and 25 km swath grids, 20 July 2015;
- EARS-ASCAT addition of Metop-A and Metop-B data from the Canadian Gander station, 6 May 2015;
- EARS-ASCAT addition of Metop-B data from Moscow station, 4 March 2015.
Updates to Africa Baseline since last meeting

• **Metop Services cont.**:
  - **IASI Level 2 Sounding Products (02/06/16)**:
    - Update of IASI L2 processor to version 6.2, introducing enhancements to the carbon monoxide (CO) products and an important algorithm update of the first-guess all-sky products, with the PWLR-cube algorithm.

• **Regional Data Service, EARS**:
  - **EARS ASCAT (03/03/16)**:
    - ASCAT regional ocean surface winds at 12.5 km node grid are replaced with the new ASCAT Regional Coastal Winds at 12.5 km. New product enhanced with coastal processing as per the OSI SAF ASCAT Global Coastal Winds.
Updates to Africa Baseline since last meeting

EUMETSAT Satellite Application Facilities (SAFs)

- OSI SAF:
  - Sea Ice Edge, Sea Ice Type and Sea Ice Drift products will be updated, 15 September 2015;
  - Discontinuation of ASCAT Winds and Soil Moisture at 12.5 km Swath Grid, 28 April 2015;
  - Full resolution SST product based on Metop-A IASI data, pre-operational on, 8 Jan 2015.
Updates to Africa Baseline since last meeting

SAFs cont.:
• OSI SAF:
  • SST products – Enhanced (23/02/16)
    • Global, North Atlantic and Regional, Full Resolution and
      IASI, product generation switched from Metop-A to Metop-B
      data
  • SST products – Enhanced (14/07/16)
    • New GHRSSST compliant netCDF format for all SST
      products

• CM SAF
  • Monthly means – new (21/04/16)
    • Fractional Cloud Cover and Monthly means of Surface
      Incoming Shortwave Radiation start of full dissemination on
      EUMETCast Africa.
Third-Party Data Services

- Monitoring Atmosphere:
  - MTSAT 3-hrly image data service ceased in October 2015 replaced by Himawari-8 on EUMETCast Europe only;
  - Change from FY2E to FY2G (105°E), June 2015;
  - Change from FY2D to FY2E (86.5°E), June 2015
  - Dust forecast products from the Barcelona Dust Forecast Center – New (05/11/2015).
Updates to Africa Baseline since last meeting

Third-Party Data Services cont.:

• Monitoring Ocean:
  • MESA-ECOWAS PFZ – new (04/08/16)
  • UG-MESA Potential Fishing Zone Maps in the equatorial Atlantic
  • Jason-3 OGDRs – New (01/07/16)
    • OGDRs in netCDF
    • OGDR-SSHA in netCDF
    • OGDR-BUFR.
Updates to Africa Baseline since last meeting

Third-Party Data Services cont.: 
• Monitoring Ocean cont.: 
  • NASA Chlorophyll Alpha product – format change to netCDF4, July 2015 
  • Updated BUFR tables for the Operational Geophysical Data Record (BUFR) – SARAL, 25 March 2015; 
  • Corrected Sea Surface Height (CorSSH) products from CNES-AVISO, 23 March 2015; 
  • DUACS 2014 products from CNES AVISO – Upgrade to the Along-track and Gridded products in both Near Real-Time and Delayed-Time, 25 September 2014.
Updates to Africa Baseline since last meeting

Third-Party Data Services cont.:

- Monitoring Land:
  - Copernicus Global Land Service SWI – enhanced (07/07/16)
    - NRT delivery of the Soil Water Index (SWI) product, updated to Version 3
  - CSIR Fire danger forecast Southern Africa – enhanced (14/07/16)
  - Copernicus Global Land Service Fraction of Absorbed Photosynthetically Active Radiation (FAPAR), August 2015
  - Copernicus Global Land Service – Vegetation Condition Index (VCI) covering Africa, 16 October 2014.
Updates to Africa Baseline since last meeting

Third-Party Data Services cont.:

- MDD surface and upper air observations - removal of duplicate data flow in July 2016:
  - MDD data flow was removed from EUMETCast's 'EUMETSAT Data Channel 3'. MDD data are available on WMO-RA-I channel.
Updates to Africa Baseline since last meeting

Third-Party Data Services cont.:

• Model updates:
  • Met Office 4 km East Africa Model Data – new (15/09/16)
  • Met Office Unified Model Data for Africa – New (22/02/16)
    • Includes Humidity, Temperature, Convective Cloud, Convective Rain Rate, Convective Snow Rate, Fog Fraction, Land Mask, etc.
Updates to Africa Baseline since last meeting

Third-Party Data Services cont.: 

• Model updates:
  
  • MESA-ECOWAS – new (04/08/16)
    
    • ECOWAS marine forecast for west Africa based upon data obtained from the Operational Mercator global Ocean analysis system via the Copernicus programme at a resolution of 1/12 (0.08) degree;

  • Moroccan DMN Wave Watch III – new (05/11/15)
    
    • Maps of swell (height, period and direction) of the WAVE WATCH III model covering north Atlantic ocean, Version 2.22, until 60 hours of forecasting;
Updates to Africa Baseline since last meeting

User Support Services through EUMETCast

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