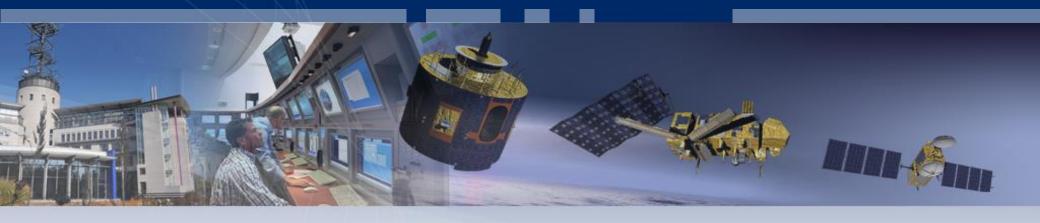


EUMETSAT

Monitoring weather and climate from space

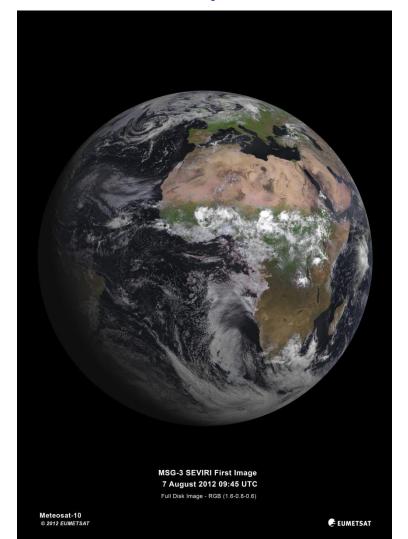


EUMETSAT report for GHRSST



Introduction: 2012 launches

MSG-3: 5th July 2012



Metop-B: 17th September 2012



Level 2 products produced and delivered through EUMETSAT OSI-SAF www.osi-saf.org

L1, L2 IASI SST and OSI-SAF L2 products from the EUMETSAT data centre http://www.eumetsat.int/Home/Main/DataAccess/index.htm?l=en



EUMETSAT -space data provider for operational oceanography

- Operational data provider for services, environment, climate and science
- User-driven programmes based on user requirements

Meteosat First Generation (MFG)

Meteosat-5 Meteosat-6

Meteosat-7 1997-

Meteosat Second Generation (MSG)

Meteosat-8 2002-Meteosat-9 2005-

Meteosat-10 2012-Meteosat-11 2015-

Meteosat Third Generation (MTG)

2020-

SST

radiative fluxes

potential products: turbidity, thermal fronts, upwellings case-1 chlorophyll

significant wave height wind speed sea surface topography



sea surface winds

radiative fluxes

ocean colour

sea surface winds

SST, sea ice

sea ice

SST

EUMETSAT Polar System (EPS)

MetOp-A 2006-MetOp-B 2012-MetOp-C 2018-

EPS Second Generation (EPS-SG)

2020-

Jason Ocean Surface Topography
Jason-2 2008Jason-3 2014-

Jason Continuity of Services (Jason-CS)

2017-



Third Party data re-distribution

NOAA, NASA, ISRO, Chinese SOA

ocean colour SST

SST sea surface topography

Copernicus Sentinel-3

2014-



climate mission product reprocessing





Third party data and reprocessing

- Bilateral with SOA/NSOAS 17-21 June 2013 at EUMETSAT.
- Global VIIRS ACSPO to be distributed via EUMETSAT.

Geostationary reprocessing:

- Work on inter-satellite calibration of complete Meteosat series referenced to IASI employing HIRS measurements is ongoing, first data expected in 2014.
- EUM OSI-SAF will reprocess SEVIRI SST based on already reprocessed SEVIRI L1.5 also using NWC-SAF cloud mask data in full temporal resolution produced at CM SAF.
- Nothing planned for Meteosat First Generation.



Climate/reprocessing

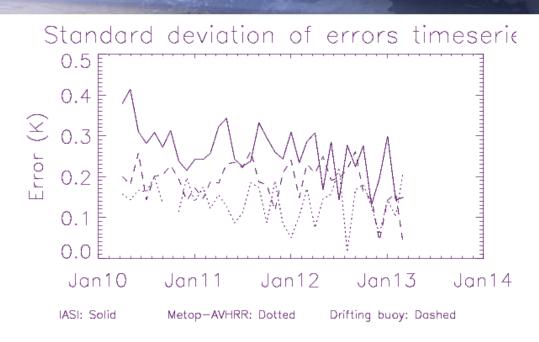
Polar Orbit:

- IASI Level 1c reprocessing now planned for 2014/2015.
- EUM CF will support the ESA CCI SST project in phase 2 to use IASI to constrain drift in AVHRR, by 'predicting' stable AVHRR clear-sky BTs from IASI spectra. EUM will implement a IASI spectra extraction tool to provide match-up data for AVHRR clear sky data.
- Although it could be appended to the IASI L1C reprocessing, needs for reproduction of the IASI SST product were not stated and are currently not part of the EUMETSAT CF plan.
- EUM CM SAF is part of a new SCOPE-CM project together with NOAA and RAL on the creation of an AVHRR L1b FCDR that will start in January 2014.

Slide: 5

IASI sea surface temperature

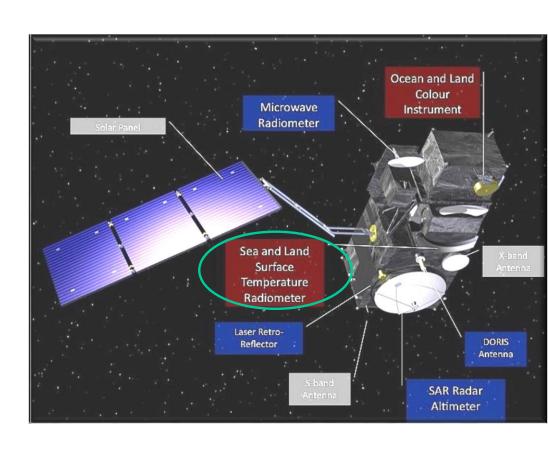
- IASI L2 products available from April 2008; L2Pcore from March 2010.
- Full IASI L2P products to be available from the OSI-SAF CDOP-2 phase late 2013.
- Current version is IASI L2 PPF v5.



- IASI L2 PPF v6 late 2013 to include new cloud scheme and L2 product quality flagging
- Metop-B IASI SSTs give consistent results to Metop-A

Sentinel-3 Cal/Val activities

- ESA-EUMETSAT planning and preparation for the mission well in advance of launch
- ESA-EUMETSAT joint Cal/Val Plan
- benefits from community recommendations
- Cal/Val plan version 1 ready and reviewed
- ESA-EUMETSAT joint call for
- Sentinel-3 Validation Team (S3VT)
- rolling call, no funds from ESA or EUMETSAT
- 80 total submissions
- 9 surface temperature submissions
- First workshop 26-29 November 2013
- S3VT special session: GHRSST meeting
- S3VT subgroups
- Ocean Colour **Temperature**
- Altimetry Land parameters









EUMETSAT Sentinel-3 Marine Centre

- ESA leads in the development of Sentinel-3 Space and Ground Segments; EUMETSAT supports the development
- Sentinel-3 EUMETSAT mandate
- monitoring and control of Sentinel-3 platform and payloads
- acquisition, processing, maintenance and distribution of instrument data and marine products
- support of the marine user community
- Operations of Payload Data Ground Segment (PDGS)
 - ESA land services
 - **EUMETSAT** marine services
- **EUMETSAT Marine Centre**
 - the first deployed Sentinel-3 centre

EUMETSAT Marine Centre

Mission Management Mission Planning

Routine Quality Control

IPF Configuration

Help Desk

Maintenance of Processing Algorithms

Cal/val activities

Provision of cal/val data from cal/val infrastructure

Production of L0 products

Production of NRT L1

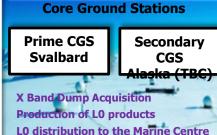
Production of NRT L2 marine products

Pick-Up Point (On-line Rolling Archive)

Production of L1/L2 STC & NTC marine products Dissemination of L1/L2 NRT & STC over EUMETCast Long Term Archiving of L0 & L1 products Long Term Archiving of L2 marine products Reprocessing of marine products

> Routine **Operations** Flight **Operations** Segment

Satellite Monitoring and Control









EUMETSAT conferences

- EUMETSAT Meteorological Satellite Conference, Vienna, Austria, 16-20 September 2013
 - http://www.eumetsat.int/Home/Main/News/Conferences
 and Events/index.htm
 - Sessions include "Satellite based observations of the cryosphere", "Satellite based observations of the oceans", "Calibration and characterisation"...

