

CM SAF Newsletter 11

June 2013

The EUMETSAT
Network of
Satellite Application
Facilities



New version of SIS and SID EDR products from May 2013 onwards

A bug has been discovered in a routine used for the calculation of the CM SAF SIS EDR products (from SEVIRI and AVHRR) and the SID EDR product (SEVIRI based only). A wrong "out of range" limit for the surface albedo values led to a truncation of the surface albedo in the calculation of the SIS and SID products. This in turn led to an overestimation of the optical thickness of the clouds over land surfaces and hence to a negative bias in SIS and SID. This resulted in an inhomogeneity (break) in the SEVIRI SIS and SID operational products (V330+331). The values between 01 March 2012 and 30 April 2013 exhibit a significant negative bias in comparison to the whole time series. Also the AVHRR based SIS products are affected from V302 onwards till V310, i.e. starting from 01 Jan 2009.

The bug has been fixed for the new versions for products from 01 May 2013 onwards. The new version numbers are 340 for the MSG/SEVIRI based SIS and SID product and 320 for the AVHRR-based SIS product.

The affected products are provided with a new version number for products with a reference date from May 2013 onwards. Information on the latest version number and changes in the products are published via the [ChangeLog](#) of the CM SAF web page. ***Users with a standing order of the affected products will need to re-new their standing order if they want to further receive the products.***

Availability of TRS and TET EDR products based on Meteosat-10 data

Complementing the Service Message 67, we are pleased to announce that the Top Of Atmosphere (TOA) radiation EDR products are also generated from Meteosat-10 since 1st of January 2013. The products are TOA Reflected Solar (TRS) and TOA Emitted Thermal fluxes in monthly mean, daily mean and monthly mean diurnal cycle formats. As the Geostationary Earth Radiation Budget (GERB) instrument on Meteosat-10 is still under calibration/validation, it is not used and the CM SAF products are currently based on the SEVIRI instrument data (these data are converted in broadband radiation through empirical regressions which have been derived from SEVIRI and GERB observations on Meteosat-9). A message will be issued when the GERB data will be used again in the CM SAF TOA radiation products.

The products from January 2013 onwards are provided with a new version number and new data source in the filename. Information on the latest version number and changes in the products are also published via the [ChangeLog](#) of the CM SAF web page. ***Users with a standing order of the affected products will need to re-new their standing order if they want to further receive the products.***

CLARA A1 cloud physical processing error and consequences on data usage

Recently, an error in the CLARA-A1 cloud physical property processing was detected. The radiative transfer look-up tables, used for the retrieval of particle effective radius from the 3.7 micrometer AVHRR channel (channel 3b), were based on spherical instead of hexagonal ice crystals. The use of spheres causes too low retrieved effective radii. The magnitude of the underestimation depends on the viewing and illumination geometry as well as on the cloud optical properties themselves, and cannot be characterized in a simple way. The erroneous ice particle effective radius directly affects the ice water path. Since the cloud thermodynamic phase retrieval is coupled with the optical thickness and effective radius retrieval, the cloud phase is also affected. Finally, the liquid water path is affected indirectly through the changing cloud phase.

Investigation of the consequences for the official CLARA-A1 cloud products lead to the following conclusions:

- Fractional Cloud Cover (CFC, CM-05): no effect
- Joint Cloud property Histogram (JCH, CM-11): minor effect (product can still be used)
- Cloud Top Level (CTO, CM-17): no effect
- Cloud Optical Thickness (COT, CM-34): minor effect (product can still be used)
- Cloud Phase (CPH, CM-38): small effect, less than the accuracy requirement (product can still be used)
- Liquid Water Path (LWP, CM-43): small effect, less than the accuracy requirement (product can still be used)
- Ice Water Path (IWP, CM-47): considerable effect (product cannot be used)

Products from all AVHRR sensors are affected, except those that had channel 3a (1.6 micrometer) active instead of channel 3b. This means that products derived from Metop-A, NOAA-17, and NOAA-16 from October 2000 until April 2003 are not affected.

No intermediate reprocessing will take place. The next release, CLARA-A2, is planned in 2016.

CM SAF Training Workshop 2013

The 2013 CM SAF Training Workshop is organized in co-operation with EUMETSAT and the Finnish Meteorological Institute (FMI) and will be held from 07 – 11 October 2013 in Helsinki, Finland.

The focus of this year's Training Workshop is to instruct active and potential users of satellite data for climate applications in the use of CM SAF products for operational climate monitoring and climate research. The Workshop will concentrate on applications in high latitudes, but, of course, applications in other regions are also supported.

Online material and lectures will be provided prior to the workshop. The 5-day classroom workshop will include lectures, exercises and working group discussions. Focus will be given to practical classes using CM SAF data based on free software tools (climate data operators (cdo) and R). During the workshop the participants will

have the opportunity to explore the use of CM SAF data in their daily work. Participants are encouraged to bring their own laptops. The number of participants is limited to 20.

More information and the link to the applications form can be found at <http://training.eumetsat.int/mod/page/view.php?id=5289>

Please note that the deadline for application is Friday, 14 June 2013.

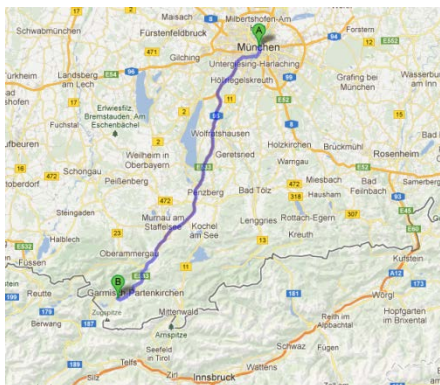
CM SAF User Workshop 2014

The 4th CM SAF user Workshop will take place in Grainau, Germany, from 10-12 March 2014. The objective of the workshop is to provide a forum for users to present and discuss experiences and requirements with respect to satellite based climate monitoring products and services and as well as to present and discuss the provision of products and services by CM SAF in the time frame 2017-2022. The first announcement of the workshop is attached to this newsletter.

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If you do not want to receive the CM SAF newsletter any longer you can cancel it at any time by changing the settings in your user profile on the Web User Interface page <http://wui.cmsaf.eu>

Grainau



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Coming from...

Munich International Airport

Continue by train or rental car / 132 km (82 mi)

Innsbruck Airport

Continue by train or rental car / 65km (40 mi)

Garmisch-Partenkirchen Train Station

Continue by taxi / 8 km (5 mi)

Zugspitzbahn Station in Grainau

0.8 km (0.5 miles) / 10-minute walk



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The modern, 4-star “Hotel am Badersee” in Grainau lies directly on the banks of the scenic Badersee Lake with a panoramic mountain view and to Germany’s highest mountain the Zugspitze.

The EUMETSAT
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Satellite
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Consortium:

Schweizerische Eidgenossenschaft

Deutscher Wetterdienst

Finnish Meteorological Institute

Koninklijk Nederlands Meteorologisch
Instituut

Royal Meteorological Institute of Belgium

Swedish Meteorological and Hydrological
Institute

Met Office, United Kingdom



Satellite Application Facility on Climate Monitoring

4th User Workshop

10 – 12 March 2014

1st Announcement



Hotel am Badersee, Grainau, Germany

The EUMETSAT
Network of
Satellite
Application
Facilities



Deutscher Wetterdienst
Wetter und Klima aus einer Hand



1st Announcement

Introduction

The EUMETSAT Satellite Application Facility on Climate Monitoring (CM SAF) generates, archives and disseminates satellite-based products in support to climate monitoring. Regular user workshops shall stimulate the discussion between users and CM SAF service and product providers.

Objective

The objective of the workshop is

- to provide a forum for users to present and discuss experiences and requirements w.r.t. satellite based climate monitoring products and services
- to present and discuss the provision of products and services by the Satellite Application Facility on Climate Monitoring in the time frame 2017 – 2022

Venue

The workshop will be held at:

Hotel am Badersee

Am Badersee 1- 5
D-82491 Grainau
Deutschland

Tel.: +49 8821 821-0

Fax: +49 8821 821-292

E-mail:

info@hotelambadersee.de

Participation

The workshop primarily addresses users of satellite-based climate monitoring products and scientists with expertise to support and realise user requirements.

Participants

are invited to submit poster to be presented during dedicated poster sessions.

Language, fees, accommodation

The official language of the workshop is English. Workshop participants are required to book accommodation at Hotel am Badersee. The daily rate is 88 €. This includes accommodation, breakfast, lunch and coffee & soft drinks during the conference.

Please note that the number of participants is limited.

Registration

Please register via www.cmsaf.eu/workshop and indicate whether or not you would like to submit a poster.

Contact

Patricia.Willing@dwd.de
www.cmsaf.eu

Programme

Monday, 10th March 2013

Registration

Opening and key note lectures

Overview of CM SAF activities

Poster Session

Icebreaker

Tuesday, 11th March 2013

Application of CM SAF data

Data requirements

Poster Session

Wednesday, 12th March 2013

User demands and future plans for CM SAF

There will be plenty of room for discussions and exchange of ideas in the ambiance of poster sessions and presentations.