

Release of CM SAF Surface Radiation and Fluxes from Meteosat First and Second Generation - Edition 1 (LANDFLUX Ed. 1)

The LANDFLUX Ed. 1 Climate Data Record provides the Surface Radiation Budget, Latent and Sensible Heat Fluxes derived from the Meteosat Visible and InfraRed Imager (MVIIR) on board the Meteosat First Generation (MFG) and the Spinning Enhanced Visible and InfraRed Imager (SEVIRI) onboard the Meteosat Second Generation (MSG) satellites. The covered time period ranges from January 1983 to December 2020. The products are available as hourly, daily and monthly data on a 0.05° x 0.05° regular latitude and longitude grid for the Meteosat disk up to ± 65° latitude and longitude.

Original thermal radiances were inter-calibrated by the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT). The single radiation components of the surface radiation budget (SRB) are derived from the thermal and optical channels of the MVIIR and SEVIRI instruments onboard the geostationary Meteosat satellites. All components of the SRB are derived jointly based on physical retrieval schemes using the GeoSatClim software. Surface Latent and Sensible Heat fluxes are obtained thanks to an adapted version of the land surface model developed by the Satellite Application Facility on Land Surface Analysis (LSA SAF). While soil moisture and meteorological inputs are adapted from the ERA5 dataset, the radiation components of the surface radiation budget described above are taken as model input.

The data record can be ordered via the [Web User Interface](#). More information on the data record and accompanying documentation is available from the DOI page: [10.5676/EUM_SAF_CM/SLF_METEOSAT/V001](https://doi.org/10.5676/EUM_SAF_CM/SLF_METEOSAT/V001)

Further information on CM SAF Workshop on 24 October 2024

- Learn about the latest developments on satellite-based climate data supporting your national duties?
- Learn about the upcoming anomaly service from CM SAF?
- Interact and discuss your requirements with satellite experts supporting your needs and services on the national and regional scale?
- Learn about already existing applications?

On **24 October 2024** a one-day **workshop on usage of satellite-based climate data records in climate services and NMHSs** will take place at Deutscher Wetterdienst in Offenbach, Germany.

Our workshop will focus on the application of climate data for your climate services. It will not only provide an overview of the latest European developments for satellite-based climate data records but will be a great opportunity to discuss your requirements and needs! You will out more under this www.cmsaf.eu/workshop_2024.

New date for CM SAF workshop in early 2025: now taking place 28 to 30 January 2025

As announce in our last newsletter CM SAF plans a workshop on analysis of climate change and adaptation with satellite-based climate data records. This was originally planned for early February, but had to be shifted by one week and will now take place from **28 – 30 January 2025 in Bonn, Germany**.

Please change the dates in your calendars, we sincerely apologize for this change in dates!

Publications by CM SAF team

The following list gives an overview of some recently published papers by the CM SAF team covering CM SAF products and developments. Authors from the current CM SAF team are marked in bold:

Meloni, D.; **Trentmann, J.**; **Pfeifroth, U.**; di Sarra, A.; Trisolino, P. (2024): Comparison of satellite-derived with ground-based PAR measurements at Lampedusa island (Central Mediterranean) and the impact of the aerosol optical depth. *AIP Conf. Proc.*; 2988 (1): 110001. DOI: [10.1063/5.0183467](https://doi.org/10.1063/5.0183467)

Trentmann, J.; Psiloglou, B.; Bais, A.; Natsis, A. (2024): Evaluation of satellite-derived surface irradiance in Greece using reference surface measurements. *AIP Conf. Proc.*; 2988 (1): 110003. [10.1063/5.0183447](https://doi.org/10.1063/5.0183447)

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