MSG - SEVIRI - Land Surface Temperature - West Africa - 0.05

General information

Dataset name:	MSG - SEVIRI - Land Surface Temperature - West Africa - 0.05
Created on:	2016-11-29
Useful in the framework of:	OPERATIONAL-DATA > Satellite products
Purpose:	These products are derived from SEVIRI/MSG data processed by the LSA SAF operational node at the Institute of Meteorology of Portugal.

The DSLF (Downwelling Surface Longwave radiation Flux) (W.m-²) is one of the most important components of the surface energy balance over land and can be defined as the thermal irradiance reaching the surface in the thermal infrared spectrum (4-100µm).

The DSSF (Downwelling Surface Shortwave radiation Flux) (W.m-²) refers to the radiative energy in the wavelength interval [0.3µm ? 4.0µm] reaching the Earth?s surface per time and surface unit.

The LST (Land Surface Temperature) is the radiative skin temperature of the land surface.

The broadband bi-hemispherical albedo (AL-BB-BH) is the fraction of the incoming solar radiation reflected by the land surface, integrated over the whole viewing and illumination directions, and integrated over the whole solar spectrum. An error (AL-BB-BH-ERR) is associated to albedo.

A QFLAG is associated with each value of parameter.

The Product User Manual documents describing the algorithms for each parameter are available in the website http://landsaf.meteo.pt in the section Algorithms. The meaning of QFLAG is also explained in the PUMs.

Projection:

The original LSA SAF products are presented in the satellite MSG projection. They have been put in the geographical lat/lon projection (plate-carrée) with a grid step equal to 0.05°. The West_Africa area, which covers the zone from 24.98° West to 24.98° East, and from 4.98° South to 19.98° North, have been extracted from the 0.05° resolution grid. The pixels of the grids are located by the coordinates of their center.

Product Quality:

The DSSF, DSLF, LST and AL-BB-BH products over West Africa display a line of no-data pixel for 0° of latitude. This is an impact of a problem concerning the cloud mask in the original LSA SAF algorithm. This is under correction at Institute of Meteorology.

Contact(s)

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Instrument

Satellite:	MSG
Instrument:	SEVIRI
Instrument type:	Imaging Spectrometers/Radiometers

Parameter

Land Surface Temperature

Parameter keyword:	Land Surface > Surface Thermal Properties > Land Surface Temperature

Coverage

Temporal coverage

Date begin (yyyy-mm-jj):	2005-07-13
Date end (yyyy-mm-jj):	2012-10-01

Geographic coverage

Area name:	MSG

Data resolution

Temporal resolution:	0000-00-00 00:15:00
Latitude resolution:	0.05
Longitude resolution:	0.05

Data use information

Use constraints:	See AMMA data poolicy.
Data policy:	AMMA data policy
Original data format(s):	NetCDF