

# MSG - SEVIRI - Albedo BroadBand Bi-Hemispherical - West Africa -

## 0.05

### General information

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| Dataset name:               | MSG - SEVIRI - Albedo BroadBand Bi-Hemispherical - West Africa - 0.05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Created on:                 | 2016-11-28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Useful in the framework of: | OPERATIONAL-DATA > Satellite products                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Purpose:                    | <p>These products are derived from SEVIRI/MSG data processed by the LSA SAF operational node at the Institute of Meteorology of Portugal.</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>The DSLF (Downwelling Surface Longwave radiation Flux) (<math>W.m^{-2}</math>) 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 (4-100<math>\mu m</math>).</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>The DSSF (Downwelling Surface Shortwave radiation Flux) (<math>W.m^{-2}</math>) refers to the radiative energy in the wavelength interval [0.3<math>\mu m</math> ? 4.0<math>\mu m</math>] reaching the Earth?s surface per time and surface unit.</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>The LST (Land Surface Temperature) is the radiative skin temperature of the land surface.</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>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.</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>A QFLAG is associated with each value of parameter.</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>The Product User Manual documents describing the algorithms for each parameter are available in the website <a href="http://landsaf.meteo.pt">http://landsaf.meteo.pt</a> in the section Algorithms. The meaning of QFLAG is also explained in the PUMs.</p> <p>&lt;br/&gt;&lt;br/&gt;</p> <p>&lt;b&gt;Projection:&lt;/b&gt;&lt;/p&gt;<p>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</p></p> |

the coordinates of their center.

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<b>Product Quality:</b>

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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Roselyne Lacaze - POSTEL - Lacaze@medias.cnes.fr (PI or Lead scientist)

## Instrument

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

## Parameter

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### Albedo BroadBand Bi-Hemispherical

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|                    |                                                      |
|--------------------|------------------------------------------------------|
| Parameter name:    | Albedo BroadBand Bi-Hemispherical                    |
| Parameter keyword: | Land Surface > Surface Radiative Properties > Albedo |

## Coverage

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### Temporal coverage

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|                          |            |
|--------------------------|------------|
| Date begin (yyyy-mm-jj): | 2005-09-01 |
| Date end (yyyy-mm-jj):   | 2012-10-01 |

### Geographic coverage

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|            |     |
|------------|-----|
| Area name: | MSG |
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### Data resolution

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|                       |                     |
|-----------------------|---------------------|
| Temporal resolution:  | 0000-00-01 00:00:00 |
| Latitude resolution:  | 0.05                |
| Longitude resolution: | 0.05                |

## Data use information

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