

MULTI-SAT - EPSATSG-AMSRE - Surface Soil Moisture (0-5 cm) - West Africa - 0.1

General information

Dataset name:	MULTI-SAT - EPSATSG-AMSRE - Surface Soil Moisture (0-5 cm) - West Africa - 0.1
Created on:	2016-11-28
Useful in the framework of:	OPERATIONAL-DATA > Satellite products
Purpose:	The EPSAT-SG_AMSR-E dataset is based on the combination of two products: the 30-min EPSAT-SG rainfall product and daily AMSR-E brightness temperatures (TB) at C-band (6.9 GHz). Based on the Antecedent Precipitation Index (API) model, the EPSAT-SG rainfall product was used to produce soil moisture maps at a spatial resolution of 10×10 km ² and a temporal resolution of 30-min. Then, daily AMSR-E TBs, strongly related to surface soil moisture, were used to correct soil moisture estimates by multiplying the EPSAT-SG rainfall rates by a factor between 0 and 7 that minimizes the difference between simulated (obtained using a microwave emission model) and observed TBs from AMSR-E. Ground-based soil moisture measurements obtained at three sites in Niger, Mali and Benin were used to assess the method which was found to improve the soil moisture estimates on all three sites. More details can be found in pellarin et al., 2009.

Contact(s)

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Instrument

Satellite:	MULTI-SAT
Instrument:	EPSATSG-AMSRE

Parameter

Surface Soil Moisture (0-5 cm)

Parameter name:	Surface Soil Moisture (0-5 cm)
Parameter keyword:	Land Surface > Soils > Soil Moisture/Water Content

Coverage

Temporal coverage

Date begin (yyyy-mm-jj):	2006-06-01
Date end (yyyy-mm-jj):	2006-09-30

Geographic coverage

Data resolution

Temporal resolution:	0000-00-00 00:30:00
Latitude resolution:	0.1
Longitude resolution:	0.1

Data use information

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