

# Gridded rain intensity estimates from all passive microwave platforms and IR radiances (IMPETUS dataset ID = 460)

## General information

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Dataset name: Gridded rain intensity estimates from all passive microwave platforms and IR radiances (IMPETUS dataset ID = 460)  
Created on: 2006-02-01

### Contact(s)

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### Period

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Date begin (yyyy-mm-jj): 2002-04-01  
Date end (yyyy-mm-jj): 2006-05-30

### Project(s)

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IMPETUS

## Data description

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### Abstract

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Rain estimates from passive microwave sensors (TMI, SSM/I, AMSR-E, AMSU-B) projected to Meteosat-7 Pixel grid (5 km). Includes estimates from GPROF, GSCAT, Ferraro/Marx, and IMPETUS algorithms. Parameter, Attribute list: precipitation, rain. Dataset created by IMPETUS subproject AB1.

Data Lineage: PMW Brightness temperatures and downloadable pmw rain products, Meteosat-/ IR radiances, IMPETUS, NASA, NOAA, NSIDC; Data Consistency: rain is derived from ice water path between ground and satellite, evaporation of rain before reaching the ground causes inconsistencies with ground observations, Product is at approx 5 km resolution, but originating pmw sensors have between 15 and 30 km resolution; Data Completeness: 11 available pmw sensors during June-September 2002, 2004, 2005, further rainy seasons in preparation; Positional Accuracy: no known deficiencies; Data Completeness: Precipitation derived from ice scattering in micro-wave frequencies, More accurate than geostationary or interpolated estimates, less accurate than TRMM radar, less accurate than high resolution CATCH and IMPETUS rain gauges at station locations

### Observing strategy

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Instantaneous Precipitation estimates and co-located infra red cloud top temperature. Suitable for model validation, used in other Satellite rain products.

## Geographic information

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### Westafrica

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Location name:	Westafrica
West bounding coordinate (°):	-25
East bounding coordinate (°):	25
North bounding coordinate (°):	20
South bounding coordinate (°):	-5

## Measured parameters

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### Precipitation

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Parameter name:	precipitation
Parameter keyword:	Atmosphere > Precipitation

### Rain

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Parameter name:	rain
Parameter keyword:	Atmosphere > Precipitation > Liquid Precipitation > Rain

### Meteorological measurements

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Parameter name:	meteorological measurements
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## Data use information

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Use constraints:	Please inform the Point of Contact if you use the data for publication
Data policy:	IMPETUS data policy
Database:	IMPETUS
Original data format(s):	TGZ/GZ