

# TRMM - TMI - Total Column of Water Vapor - Atlantic and Africa - 0.25

## General information

---

Dataset name:	TRMM - TMI - Total Column of Water Vapor - Atlantic and Africa - 0.25
Created on:	2016-11-29
Useful in the framework of:	OPERATIONAL-DATA > Satellite products
Purpose:	<p>The parameters are derived from observations made by a radiometer onboard the Tropical Rainfall Measuring Mission (TRMM) satellite. This radiometer, the TRMM Microwave Imager (TMI) is well-calibrated, similar to SSM/I and contains lower frequency channels required for sea surface temperature retrievals. The TMI measures the intensity of radiation at five separate frequencies: 10.7, 19.4, 21.3, 37, 85.5 GHz. The entire data set includes sea surface temperatures (SST), surface wind speeds derived using two different radiometer channels, atmospheric water vapor, liquid cloud water and rain rates, over ocean. The algorithm for retrieving SSTs from radiometer data is described in "AMSR Ocean Algorithm" (See reference). The algorithms used to retrieve the other data (except SST) are those used in SSM/I data processing, described in "A well-calibrated ocean algorithm for SSM/I" (See reference). TRMM is a joint program between NASA and the National Space Development Agency of Japan (NASDA). The TRMM satellite travels west to east in a semi-equatorial orbit. This produces data collected at changing local times for any given earth location between 40S and 40N. So we offer ascending/descending maps of TRMM data. The entire TMI ocean data set has been completely reprocessed. As of February 14, 2003, all TMI data files have been updated from Version-3 to Version-3a. The data are available from December 1997 to the present. and the pixel resolution is 0.25 deg (25 km). The originating TMI products extracted from the originating center RSS (see Data set citation) have been converted by IPSL data center into the netcdf format for the AMMASAT database (See Data center information). No interpolation has been made. This DIF describes the dataset available at IPSL.</p>

## Contact(s)

---

Monge Jean-louis - LMD - [monge@lmd.polytechnique.fr](mailto:monge@lmd.polytechnique.fr) (PI or Lead scientist)

## Instrument

---

Satellite:	TRMM
Instrument:	TMI
Instrument type:	MR > MICROWAVE RADIOMETER

## Parameter

---

### Total Column of Water Vapor

---

Parameter name:	Total Column of Water Vapor
Parameter keyword:	Atmosphere > Atmospheric Water Vapor

## Coverage

---

### Temporal coverage

---

Date begin (yyyy-mm-jj):	1997-12-07
Date end (yyyy-mm-jj):	2010-09-23

### Geographic coverage

---

### Data resolution

---

Temporal resolution:	0000-00-01 00:00:00
Latitude resolution:	0.25
Longitude resolution:	0.25

## Data use information

---

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