



## Description of CPC CAMS-OPI v0208 monthly gridded precipitation data set

Please note: As of February 8, 2005, the CAMS-OPI v0208 data at the CPC web site were changed in the following ways:

1. Anomalies & % of Gamma fields have been recomputed using the 1979-2000 base period
2. A new, internally consistent climatology is now used (1979-2000) over South America. In the past, a climatology was used for South America that was not computed from the CAMS\_OPI data, which led to problems there such as anomalies over the base period not adding up to zero. All anomalies & % of Gamma fields have been recomputed.

These changes appeared in the CAMS-OPI v0208 data available from the IRI Data Library as of March 4, 2005. The "old" version of CAMS-OPI v0208, which ends in January 2005, can be found in the following location in the IRI Data Library:

[http://iridl.ldeo.columbia.edu/SOURCES/NOAA/NCEP/CPC/CAMS\\_OPI/v0208\\_old/](http://iridl.ldeo.columbia.edu/SOURCES/NOAA/NCEP/CPC/CAMS_OPI/v0208_old/)

More information on the CAMS-OPI precipitation product can be found at the U.S. Climate Prediction Center website: [http://www.cpc.ncep.noaa.gov/products/global\\_precip/html/wpage.cams\\_opi.html](http://www.cpc.ncep.noaa.gov/products/global_precip/html/wpage.cams_opi.html)

The following documentation is from the DOCUMENTATION\_cams\_opi\_v0208 file available from the following ftp site: [ftp://ftp.cpc.ncep.noaa.gov/precip/data-req/cams\\_opi\\_v0208/](ftp://ftp.cpc.ncep.noaa.gov/precip/data-req/cams_opi_v0208/)

The data in this directory is for a new version ("v0208") of the CAMS\_OPI data. The following changes have been made to the original method:

1. To ensure consistency among this product and the CPC analyses over the US, Mexico and South America, this version does NOT use monthly reports from station in these areas. Instead, the analysis values from the CPC analyses are used.
2. The historical cams\_opi data files have been modified by inserting the data from the CPC analyses over the US & Mexico back to 1979; this was not done over South America because historical data isn't available.
3. The climatology & gamma/beta computations have been recomputed so that the anomalies will be consistent with the data in these regions.

The "CAMS\_OPI" data are 2.5 degree lat/lon spatial means of monthly mean precipitation derived from station gauges and satellite estimates. Each data 'record' is a 144 x 72 array, oriented from SOUTH -> North and Eastward from 1.25E.

The array orientation is:

0	2.5E	5.0E	2.5W	0	
-----					South Pole
(1,1)	(2,1)	....	(144,1)	.....	88.75S

					87.5S
(1,2)	(2,2)	....	(144,2)	.....	86.25S
					85.0S
		.			
		.			
		.			
					87.5N
(1,72)	(2,72)	....	(144,72)	.....	88.75N
					Nort Pole
.	.		.		
.	.		.		
.	.		.		
1.25E	3.75E		1.25W		

Note that the the coordinates for each grid correspond to the center of each box since the data values are spatial averages.

A separate data file for each month exists. The data arrays are in a FORTRAN 77 "direct", binary records ("IEEE") and are grouped as follows:

- Record 1: Precipitation analysis based on raingauge data only (CAMS)
- 2: number of CAMS gauges
- 3: Precipitation analysis based on OPI estimates only
- 4: The blended analysis CAMS\_OPI monthly total precip. analysis
- 5: For Internal Use only
- 6: CAMS\_OPI monthly anomaly (1979-1995 base period)
- 7: " " " expressed as % of gamma distribution

The units are "mm/day" for the means and anomalies.

#### REFERENCE

Janowiak, J. E. and P. Xie, 1999: CAMS\_OPI: A Global Satellite-Rain Gauge Merged Product for Real-Time Precipitation Monitoring Applications. J. Climate, vol. 12, 3335-3342.

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