1. Description/Theory

The HPI algorithm is used to generate data to support the Global Precipitation Climatology Project (GPCP). It provides daily averages of the fractional cloud cover in 16 temperature intervalls in the area between latitudes +/- 40° and longitudes +/- 50° from the sub-satellite point with a spatial resolution of 1°x1°. In addition the mean of the brightness temperature and its standard deviation for each 1°x1° box is provided. It is left to the user to apply a linear or nonlinear relation between fractional cloud cover and precipitation.
Data are available from the archive of EUMETSAT on special request as a part of the ISCCP data set. For details and contact points see the EUMETSAT Web-page (http://www.eumesat.int) or contact the user service (http://www.eumetsat.int/feedback/form_ops.html).

2. Strengths and Weaknesses

3. Algorithm Inputs

A. Satellite Data

1. Geostationary

METEOSAT-7 (57° East)
METEOSAT-9 (0°)

2. Low Earth Orbit

B. Ancillary Data

5. Output Products

HPI product

1. Temporal/Spatial Resolution
Hourly, 1°x1°:

2. Spatial Coverage
Latitudes +/- 40° and longitudes +/- 50° from the sub-satellite point of METEOSAT-7 and METEOSAT-9

3. Dedicated Product Web Page Location
HPI-page

5. Operational Availability of Product

A. Source
EUMETSAT archive: UMARF

B. Latency
8-15 minutes after end of the image reception of the METEOSAT image

C. Update Frequency

D. Available Record Length

6. Historical Availability of Product

A. Source
EUMETSAT archive UMARF: UMARF

B. Update Frequency
Real-time ingestion into the archive

C. Available Record Length
Since 2000.

6. Planned Modifications/Improvements

7. Capability of Producing Retrospective Data
Limited re-processing capabilities available

8. Contact Personnel
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For all questions on data availability, please contact EUMETSAT users service: User Service