Climate Modeling Best Estimate (CMBE) Dataset


(1) LLNL, (2) PSU, (3) PNNL, (4) UW-Madison, (5) BNL, and (6) ORNL

Contact: mcoey20@llnl.gov

Introduction

A new ARM product, the Climate Modeling Best Estimate (CMBE) dataset, was created to serve the needs of climate model developers.

The dataset was assembled from the highest quality ARM observational and Value-Added Product (VAP) data relevant to climate model evaluation and diagnostics. The temporal resolution was chosen to be comparable with the climate model resolution of one hour. It is a multi-year data file from the 5 primary ARM Climate Research Facility sites at SGP, NSA, and TWP.

The CMBE dataset consists of hourly averaged:

- Cloud Fraction (narrow field-of-view and total sky) (ARSCL, TSI),
- Cloud liquid water path (Ceilometer and Lidar determined best estimate of cloud base)
- Surface radiation fluxes (QCRAD).

The CMBE dataset is located in the Showcase Section of the ARM Archive

Located in the Showcase Section of the ARM Archive

The CMBE dataset is located in the new ARM Data Category "Showcase Data Sets" with:

- Condensed and integrated subset of results from the ARM CRF data collection
- Targeted for a particular research community
- Contains only a few measurements
- Measurements are usually "best estimates" derived from several instruments and/or VAPS.

To download the data go to:

Web Access

Quick Look Daily, Monthly, Yearly Plots

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

ARM Archive Statistical Views Interface

The ARM Archive is developing a new interface to display graphs for Statistical Views from CMBE and other showcase datasets. Related statistical tabulations at various time scales will also be available.

Quick Look Daily, Monthly, Yearly Plots

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the

The plots as well as detailed description of the algorithms are available from the CMWG page:
http://science.arm.gov/wg/cpm/scm/data/best_estimates

The daily plots provide a detailed view of the original data as well as the hourly averaged CMBE data together with the QC Flag and the standard deviation.

The monthly and yearly plots provide a view of the hourly averaged CMBE data, the QC Flag and the Standard Deviation in the