

## **Determination of the Earth's Radiation Budget from CERES**

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The central goal of the Clouds and the Earth's Radiant Energy System (CERES) experiment is to determine the global distribution of reflected solar and the emitted thermal infrared radiation from the Earth at the top-of-atmosphere (TOA), within the atmosphere and surface together with the associated cloud and aerosol properties. To achieve this goal CERES merges data from several satellite instruments having different spatial, spectral and temporal sampling characteristics. This presentation will provide a brief overview of: i) the importance of the Earth's radiation budget to climate; ii) the approach used by CERES to estimate the Earth's radiation budget; iii) comparisons between CERES and other radiation budget datasets; iv) the error sources (including solar irradiance) involved in determining the global annual net TOA radiation.