

## **Version 4 AIRS Data Products**

**Sung-Yung Lee, George Aumann, Eric Fetzer,  
Steve Gaiser, Stephanie Granger, and Evan Manning**

Jet Propulsion Laboratory  
California Institute of Technology

The AIRS science team finished the work on version 4 data processing software. Goddard DAAC is processing and releasing AIRS version 4 data products. The reprocessing of past AIRS data since September 2002 will be finished later this year. There were only few minor changes to calibration software. The improvements include smoothing of calibration coefficients to reduce striping on certain channels, geolocation of AIRS footprints and quality control of AIRS radiance products. The changes to radiances are very small in this version. This is the second release of level 2 data products, or retrieved geophysical parameters. The changes include improvement of retrievals over land surfaces, new quality flags for many retrieved parameters, and significant improvement to the cloud parameters. This version is the first release of AIRS level 3 data products, or mapped geophysical parameters. Many of the AIRS level 2 data products are averaged on a one degree by one degree grid. Retrievals from ascending orbits are averaged separately from those from descending orbits. Some MW only data products are also gridded. It has been observed that huge data volume of AIRS hinders the analysis of AIRS data, as well as data processing at Goddard DAAC. The AIRS data products now use the HDF internal data compression. This reduces the data volume by more than half without impacting the quality of data or the ease of its usage.

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