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Return slip here (delete as applicable):

I do plan to attend the ITSC-13 in Quebec: YES

I would like to give an oral presentation (a title + abstract is attached): YES

I would like to give a poster (a title + abstract is attached): NO

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*Please complete for your poster/presentation*

**Title: Level 1B Products from the Atmospheric Infrared Sounder (AIRS) on the EOS Aqua Spacecraft**

By Thomas S. Pagano , Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA

**Abstract:** The Atmospheric Infrared Sounder (AIRS) was launched May 4, 2002 on the EOS Aqua Spacecraft. AIRS is the first high spectral resolution infrared imaging sounder with 2378 infrared channels ranging from 3.7 - 15.4 microns and a spectral resolution of 1200. A discussion of the objectives of the AIRS experiment including requirements on the data products is given. We summarize the instrument characteristics including sensitivity, noise and spectral response and preflight calibration results leading to the estimate of the calibration accuracy. We show the in-flight behavior and stability of the instrument and steps taken to mitigate the effects of icing and radiation effects. Indications are that the radiometric accuracy of AIRS is better than 0.2K for all frequencies at a scene temperature of 250K, and stability better than 0.2K as well. Spectral stability is shown to be better than 2ppm of the center frequency. The Level 1B calibration algorithm will be presented as well as the results of in-flight stability and sensitivity measurements.