

ATS/CIRA Colloquium

Sid-Ahmed Boukabara

Visiting ATS from NOAA

**Overview of some of NOAA's activities in Support of the
Joint Center for Satellite Data Assimilation (JCSDA)**

Hosted by Chris Kummerow

Friday, February 14, 2014

**ATS room 101; Discussion will begin at 11:15am
Refreshments will be served at 10:45am in the weather lab**

The intent of this presentation is to give a general description of the U.S. Joint Center for Satellite Data Assimilation (JCSDA), its objectives, mission, and scientific priorities. It also aims at presenting some of NOAA's activities (scientific, technical and High-Power Computing HPC-building), including those performed at the NOAA Cooperative Institutes and other external partners, that support the JCSDA mission. Some of the highlights that will be presented include activities related to the community radiative transfer model (CRTM) including associated components (emissivity, line by line modeling, spectroscopy maintenance, etc), activities in advanced satellite data assimilation of existing and new sensors (cloudy and rainy radiance assimilation, surface sensitive data assimilation, active sensors data assimilation, etc). The data impact assessment and the OSSE activities will also be covered. An important objective of this presentation will however be to highlight the major effort that is being undertaken at the Joint Center and NOAA, to set up a comprehensive Operations-To-Research (O2R) environment and how to help the scientific community involved in satellite data assimilation, including CIRA, to benefit from this effort and simultaneously make the scientific projects being undertaken relevant to the JCSDA and NOAA missions. The supercomputers S4 and JIBB, and their upcoming upgrades are the cornerstone of this O2R effort. Several ways to foster the collaboration and increase cross-fertilization of ideas will be suggested, including the NOAA/JCSDA visiting scientist program that CIRA is playing a critical role in establishing.

Link to colloquium videos and announcement page: <http://www.atmos.colostate.edu/dept/colloquia.php>