

Dear colleagues,

We invite you to participate in a "sounding science" community workshop we are planning on May 7 immediately following the AIRS Science Team Meeting (May 4-6). The purpose of the workshop is to discuss the driving science questions in atmospheric research that revolves around "moist thermodynamics", the hydrologic cycle and satellite observations – we call it "sounding science" for short, but we welcome other suggestions. We hope to provide a unified voice for a community working on some of the most important questions in weather and climate research. As we're sure you are aware, the science community in this field is quite dispersed and does not often speak with a common voice - which has led to an uncertain future for relevant observing systems. These observations are critical to research progress, and we propose forming a science working group that can speak with authority about the needs regarding observations, models, and related issues.

Our goal is to provide clear science guidance from our community so we can exploit advances in technology and influence future investments. We believe improved observations are needed to complement the advances in modeling capabilities expected in the coming years. We must also address the reality of new observing systems, such as NPP and NPOESS, that may not be optimized for climate research. After preliminary discussions, we decided to take the first step in conjunction with the AIRS meeting. This will nicely segue into a related mini-program on "Climate Feedbacks and Future Remote Sensing Observations" that is being organized by Joao Teixeira (JPL) and Yuk Yung (Caltech), in September 2009, through the newly formed Keck Institute for Space Studies (KISS), at Caltech. We are planning for a third opportunity for this community to meet via a session at the Fall AGU.

We have invited a few scientists, including Andrew Dessler (Texas A&M) and Andrew Gettelman (NCAR), to set the tone for this meeting on the general topics of water vapor feedback and modeling. In addition to the invited speakers, we hope to have a number of contributed papers. We invite you to submit abstracts. We also plan to have a roundtable discussion about "issues and challenges" in this field, and we hope to form a core science working group that will maintain contact with the community and keep working on the issues. One of the goals of this workshop and the KISS and AGU meetings is to produce a whitepaper that could become the basis for future directions in scientific and programmatic development in the context of "sounding science".

Please send your abstracts to one of us. It would also help us organize this event if you would register through the AIRS web site: <http://airs.jpl.nasa.gov/meetings/science-team-pasadena>. If you are coming for the workshop only, please enter a comment to that effect when you register. We hope to see you in Pasadena on May 7!

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