



**AGENDA**  
**AIRS Project**  
**Science Team Meeting**  
**April 21-23, 2015**  
**Caltech**  
**Pasadena, Ca**

**Tuesday, April 21, 2015**

*Light Refreshments: 7:30 a.m.*

**Session 1: Project Status (Chair: Tom Pagano)**

Joao Teixeira	NASA JPL	Introduction	8:00 AM
Ramesh Kakar	NASA HQ	Headquarters Perspective	8:15 AM

**Session 2: Composition (Chair: Bill Irion)**

Mike Gunson	NASA JPL	Invited Talk: The Orbiting Carbon Observatory (OCO-2)	8:30 AM
Kevin Bowman	NASA JPL	Invited Talk: Observational constraints on climate forcing: perspectives from satellites, models, and assimilation	9:15 AM
<b>BREAK</b>			<b>10:00 AM</b>
Meiyun Lin	Princeton	Invited Talk: Challenges in understanding daily to inter-annual variability of tropospheric ozone: perspectives from satellites and models	10:35 AM
Dejian Fu	NASA JPL	Improved Ozone Profile Retrievals Using JPL (MS) <sup>3</sup> Retrieval Algorithm	11:20 AM
Joel Susskind	NASA GSFC	Major upgrades to the Version-6 ozone profile methodology	11:40 AM
<b>LUNCH</b>			<b>12:00 PM</b>
Vince Realmuto	NASA JPL	Towards a Standard AIRS SO <sub>2</sub> Product: a Multi-Sensor Comparison Exercise	1:30 PM
Olga Kalashnikova	NASA JPL	Mineral dust characterization approaches through MISR multiangular and AIRS spectral signatures	1:50 PM
Ming Luo	NASA JPL	TES NH <sub>3</sub> and CO observations and model simulations: their correlations and implications	2:10 PM
Chris Wilson	NASA JPL	Using AIRS CO to Improve Ground Based CO measurements in the Boundary Layer	2:30 PM

**BREAK** **2:50 PM**

**Session 3: CO<sub>2</sub> (Chair: Ed Olsen)**

Ed Olsen	NASA JPL	AIRS V6 CO <sub>2</sub> product development	3:10 PM
Amy Braverman	NASA JPL	Fusion of AIRS and OCO-2 carbon dioxide data for mapping lower-atmospheric CO <sub>2</sub>	3:30 PM
Le(Elva) Kuai	UCLA JIFRESSE	Profiling Tropospheric CO <sub>2</sub> using the Aura TES and TCCON instruments	3:50 PM
<i>Xun Jiang</i>	<i>Univ of Houston</i>	<i>Comparison of AIRS CO<sub>2</sub> with Other CO<sub>2</sub> Products</i>	<i>4:10 PM</i>
<i>Tomohiro Oda</i>	<i>NASA GSFC</i>	<i>Characterizing errors in AIRS Level 2 CO<sub>2</sub> retrievals using forward transport model simulation</i>	<i>4:30 PM</i>
Tom Pagano	NASA JPL	AIRS Mid-Tropospheric CO <sub>2</sub> Climatology Product	4:50 PM
Discussion Period	All		5:10 PM

**ADJOURN** **5:30 PM**



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Recap and Disussion                      All    8:00 AM

**Continuation: Session 1: Project Status & Session 2: Composition**

Tom Pagano	NASA JPL	AIRS Project Status	8:30 AM
Jennifer Wei	NASA GSFC	AIRS data distribution and support from the Goddard Earth Sciences Data and Information Services Center (GES-DISC)	8:50 AM
Juying Warner	UMBC	Preliminary Results for AIRS N2O Using Optimal Estimation	9:10 AM
Ira Leifer	BRI	Validation of Arctic AIRS and IASI boundary layer methane observations	9:30 AM

**Session 4: Weather and Climate (Chair: Joao Teixeira)**

<i>Sergio DeSouza-Machado</i>	<i>UMBC</i>	<i>Looking at stochastic forcing in the AIRS obs vs clear sky calcs using ERA/MERRA</i>	<i>9:50 AM</i>
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***BREAK*** ***10:10 AM***

Yi-Hui Wang	NASA JPL	Observational evidence of frontal-scale atmospheric response to Kuroshio Extension variability.	10:40 AM
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Jui-Lin (Frank) Li	NASA JPL	Characterizing Tropical Pacific Water Vapor and Radiative Biases in CMIP3 and CMIP5 GCMs: Observation-Based Analyses and a Snow and Radiation Interaction Sensitivity Experiment	11:00 AM
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Evan Fishbein	NASA JPL	Simulations Studies of Infrared Sounding of the Trade-Capped Boundary Layer	11:20 AM
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**Session 5: Cloud Products and Science (Chair: Brian Kahn)**

Brian Kahn	NASA JPL	Pixel-scale assessment and uncertainty analysis of AIRS and MODIS ice cloud optical thickness and effective radius	11:40 AM
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***LUNCH*** ***12:00 PM***

Qing Yue	NASA JPL	Observation-based Longwave Cloud Radiative Kernels Derived from the A-Train	1:30 PM
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Youri Plokhenko	Univ Wisconsin/Madison	Experimental processing of the AIRS hyperspectral measurements to estimate the cloud absorption vertical profiles for Hurricane Ioke on August 28, 2008	1:50 PM
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**Session 6: Retrievals and Products (Chair: Bjorn Lambrigtsen)**

Joel Susskind	NASA GSFC	Major upgrades to Version-6 water vapor retrieval methodology	2:10 PM
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Joel Susskind	NASA GSFC	CrIS/ATMS retrievals using the latest AIRS/AMSU retrieval methodology	2:30 PM
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Bill Irion	NASA JPL	Update on single-footprint retrievals from cloudy AIRS spectra	2:50 PM
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***BREAK*** ***3:10 PM***

Larabee Strow	UMBC	AIRS Forward Model Maintenance	3:30 PM
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Bill Blackwell	MIT Lincoln Laboratory	Neural Network Updates and Future Plans	3:50 PM
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Ben Ho	UCAR	A New Reprocessing Scheme to Improve the Aqua Global Temperature and Water Vapor Retrievals using GPS Radio Occultation Measurements	4:10 PM
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Chris Wilson	NASA JPL	Comparing Different Uses of MODIS Data in AIRS Retrievals	4:30 PM
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Baijun Tian	NASA JPL	AIRS Climatology Products	4:50 PM
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Discussion Period	ALL		5:10 PM
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***ADJOURN*** ***5:30 PM***

4/20/15

*Italics = Remote Presentation*

