

Agenda

CERES Science Team Meeting

Pearl Young Theater, Building 2102
NASA Langley Research Center, Hampton, VA
May 16-18, 2017

Major Objectives for the Meeting:

1. *Review status of CERES Instruments and Data Products:*
 - Status of CERES
 - CERES Terra, Aqua, S-NPP SW/LW/TOTAL Channel Calibration Update
 - CERES FM6 and RBI Update
 - MODIS & VIIRS Cloud Algorithm & Validation Status
 - ADM, SOFA, SARB and TISA Working Group Reports
 - EBAF-TOA & EBAF-SFC Edition4 Updates
 - Data Management Team Update: Terra/Aqua/S-NPP
 - Atmospheric Sciences Data Center (ASDC) Update
 - CERES Communication Activities
2. *Invited Presentations Session. Each presentation is 45 min including time for questions.*
3. *Contributed Science Reports. Each report is 20 min including time for questions.*

Meeting Minutes: PDF

We plan to publish the minutes of the meeting electronically, so please send an electronic copy of your presentation to Ed Kizer (edward.a.kizer@nasa.gov) either before or following the meeting. Desired format is a pdf document.

Dutch Treat Dinner: 6:30 pm Tuesday Evening
(Monsoon Indian Bistro. Peninsula Town Center, 2150 Allainby Way, Hampton)

Tuesday, May 16

CERES Technical Session

8:00 am	Registration at Badge and Pass Office	
8:55 am	Welcome/Meeting Logistics	<i>N. Loeb</i>
9:00 am	State of CERES	<i>N. Loeb</i>
9:30 am	CERES FM1-FM6 & RBI Instrument Update	<i>K. Priestley/ S. Thomas</i>
10:15 am	Break	
10:45 am	CERES Clouds Working Group Report	<i>B. Smith</i>
11:15 am	CERES Angular Distribution Model (ADM) Working Group Report	<i>W. Su</i>
11:45 am	Validation of Surface-Only Flux Algorithms	<i>D. Kratz</i>
12:00 pm	Lunch	
1:30 pm	Surface Atmospheric Radiation Budget (SARB) Working Group Update	<i>S. Kato</i>
1:40 pm	Time Interpolation and Spatial Averaging (TISA) Working Group Report	<i>D. Doelling</i>
2:10 pm	Ed4 Energy Balanced and Filled (EBAF)–TOA	<i>N. Loeb</i>
2:40 pm	Ed4 Energy Balanced and Filled (EBAF)–SFC	<i>Rose/Kato</i>
3:20 pm	Break	
3:45 pm	FLASHFLUX Update	<i>P. Stackhouse</i>
4:05 pm	CERES Data Management Team (DMT) Working Group Report	<i>K. Moore</i>
4:35 pm	Atmospheric Sciences Data Center (ASDC) Update	<i>J. Walters</i>
4:55 pm	Benchmark Year in Education: What’s Next for Ground Cloud Observation Featuring Satellite Comparison	<i>J. Taylor</i>
5:15 pm	Adjourn	

Wednesday, May 17

Invited Science Presentations

- 9:00 am Recent Model Development Activities at GFDL *Y. Ming*
- 9:45 am Using CERES and Energy Budget Observations to Develop and Assess a Coupled Earth System Model: Adventures with CESM2 *A. Gettelman*
- 10:30 am Break**
- 11:00 am Constraining the Components of Aerosol Forcing: How Well Can Measurements Keep Climate Models on Track? *R. Kahn*

11:45 am Lunch

Contributed Science Presentations

- 1:30 pm A Revision of the Earth's Energy Balance Framework *A. Dessler*
- 1:50 pm Cloud Radiative Effect breakdown by regime and vertical structure *L. Oreopoulos*
- 2:10 pm Arctic Low Cloud-Sea Ice-Stability Interactions and the Arctic Surface Energy Budget *P. Taylor*
- 2:30 pm The Regional Influence of Large-Scale Atmospheric Variability on the Wintertime Arctic Surface Radiation Budget and Sea Ice Growth *B. Hegyi*
- 2:50 pm Break**
- 3:20 pm A Hyperspectral Closure Study Using AIRS Radiances, ARM SGP Observations, and MERRA-2 Reanalysis *X. Huang*
- 3:40 pm Clear-Sky Flux Simulation Using GMAO FP and MERRA2 Products and Its Comparison to Ground and Satellite Observations *S.-H. Ham*
- 4:00 pm Simulation of Radiative Properties of Ice Clouds, Snow, and Dust Aerosol in Support of CERES *P. Yang*
- 4:20 pm Global and Regional Ice Cloud Properties Derived from Cloudsat/CALIPSO 2C-ice, CERES MODIS, GOES and NEXRAD *X. Dong*

4:40 pm Adjourn

Thursday, May 18

Contributed Science Presentations (Cont'd)

9:00 am	TOA SW and LW Irradiances Derived from ERBS Nonscanner Observations Consistent with CERES Irradiances	A. Shrestha
9:20 am	Analysis of Errors in the Modeling of CERES SW Observations Over Antarctica Introduced by the BRDF Model	A. Radkevich
9:40 am	Evaluation of the Sensitivity of the Amazonian Diurnal Cycle to Convective Intensity in Reanalyses	K. Itterly
10:00 am	Evaluating TOA Radiative Fluxes in Current Reanalyses Using CERES EBAF-TOA Ed4.0	H. Wang
10:20 am	Break	
10:50 am	Validating CERES Surface Irradiance in the Arctic with Airborne Radiometer Measurements from the ARISE Campaign	J. Corbett
11:10 am	Determination of CERES Unfiltered Radiances Using Broadband Radiation Transfer Simulations	L. Liang
11:30 am	Determination of CERES TOA Fluxes Using Machine-Learning Algorithms	B. Thampi
11:50 am	Detection and Retrieval of Single and Multilayer Clouds in an Artificial Neural Network Approach	S. Sun-Mack
12:10 pm	Adjourn	