

Agenda

CERES Science Team Meeting

Lawrence Berkeley National Laboratory, Building 66
Berkeley, CA
October 29-31, 2019

Shuttle Transportation Between The Graduate Hotel and LBNL:

- LBNL offers shuttle service between downtown Berkeley BART and LBNL throughout the day.
- You will receive your visitor bus pass within a week before the meeting.
- ***Please print the bus pass for presenting to the shuttle driver.***
- From the Graduate Hotel at 2700 Durant Avenue, Berkeley, pick up the *Orange Shuttle line* at Bancroft and College or at Bancroft and Telegraph.
- The Orange Route runs ~20 minutes.
- Note the Berkeley Lab shuttle logo seen at shuttle stops.
- Present your bus pass to the shuttle driver and let them know you are going to Building 66.

Shuttle Website: <https://commute.lbl.gov/service/shuttle-buses/>

Registration:

- Plan on arriving at the Auditorium in Building 66 between 8:00-8:30 am. That should allow ample time for registration.

Major Objectives for the Meeting:

1. ***Review status of CERES Instruments and Data Products:***
 - Status of CERES
 - CERES Terra, Aqua, S-NPP, NOAA-20 SW/LW/TOTAL Channel Calibration Update
 - MODIS & VIIRS Cloud Algorithm & Validation Status
 - ADM, SOFA, SARB, TISA & FLASHFlux Working Group Reports
 - Changes in EBAF Ed4.1
 - Data Management Team Update: Terra/Aqua/S-NPP/NOAA-20
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.***

No-Host Dinner: 6:30 pm Tuesday Evening
(Cornerstone Berkeley, 2367 Shattuck Ave, Berkeley)

Tuesday, October 29

CERES Technical Session

8:00 am	Registration	
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 Instrument Update	<i>K. Priestley/ M. Shankar</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	Lunch	
1:30 pm	Time Interpolation and Spatial Averaging (TISA) Working Group: Update	<i>D. Doelling</i>
1:45 pm	TISA: Monthly FluxbyCloudType Product	<i>M. Sun</i>
2:00 pm	Surface Atmospheric Radiation Budget (SARB) Working Group Update	<i>S. Kato</i>
2:30 pm	EBAF Ed4.1: New Clear-Sky Flux Parameter	<i>N. Loeb</i>
2:45 pm	EBAF Ed4.1: Surface Flux Validation	<i>D. Rutan</i>
3:00 pm	Break	
3:30 pm	FLASHFLUX Update	<i>P. Stackhouse</i>
3:55 pm	CERES Data Management Team (DMT) Working Group Report	<i>K. Moore Dejwakh</i>
	Contributed Science Presentation	
4:20 pm	The incredible lightness of water vapor	<i>D. Yang</i>
4:40 pm	Adjourn	
6:30 pm	No-Host Dinner: Cornerstone Berkeley <i>(2367 Shattuck Ave, Berkeley)</i>	

Wednesday, October 30

Invited Science Presentations

- 9:00 am Using CERES to Understand the Atmospheric Energy Budget and Tropical Rainfall Variations *W. Boos*
- 9:45 am Machine Learning for Climate Extremes: Training is Everything *B. Collins*

10:30 am Break

- 11:00 am Temporal and Spectral Dimensions of Shortwave Cloud Radiative Effects from Observations and Models *D. Feldman*

Contributed Science Presentations

- 11:45 am The Far-Infrared Outgoing Radiation Understanding and Monitoring (FORUM) *M. Mlynczak*
- 12:05 pm Athena: NASA/USAF/NOAA Smallsat ERB technology demonstration mission to launch with JPSS-2 *K. Priestley*

12:25 pm Lunch

Contributed Science Presentations

- 2:00 pm Model dependence of cloud radiative kernels: can we use one cloud kernel for all models? *X. Huang*
- 2:20 pm On the nature of shortwave CRE in CERES and CMIP6 *M. Hakuba*
- 2:40 pm The changing Arctic surface energy budget: The role of clouds "Hiatus" *P. Taylor*
- 3:00 pm Atmospheric feedbacks in HadGEM3 *A. Bodas-Salcedo*
- 3:20 pm Break
- 3:50 pm Stereo photogrammetry of clouds (*Invited*) *D. Romps*
- 4:35 pm Examining cloud changes over the Eastern Pacific using CALIPSO and CloudSat *S.-H. Ham*
- 4:55 pm Developing an AVHRR-based CDR of TOA radiative fluxes within the CMSAF Project (update) *T. Akkermans*

5:15 pm Adjourn

Thursday, October 31

Contributed Science Presentations (Cont'd)

9:00 am	Improvements in an ice cloud optical property model	<i>A. Bell</i>
9:20 am	Examination of 1.24 and 1.6 micron cloud optical depth retrievals over snow and ice surfaces	<i>S. Sun-Mack</i>
9:40 am	The diurnal variations of cloud macrophysical properties over Eastern North Atlantic Ocean using Radar/lidar, MeteoSat, and CERES-MODIS measurements	<i>B. Xi</i>
10:00 am	Comparison of Satellite retrieved MBL cloud properties with Aircraft in-situ measurements	<i>X. Dong</i>
10:20 am	Break	
10:50 am	Radiative impacts of future Arctic sea ice melt	<i>K. Pistone</i>
11:10 am	Sampling for wintertime surface conductive flux at the sea-ice/atmosphere interface	<i>C. Kuo</i>
11:30 am	Evaluation of CERES-MODIS Ed4 cloud temperatures and heights using ten-year ARM ground based observation over the Arctic	<i>S. Qiu</i>
11:50 am	Using CERES Observations to Assess CMIP6 Climate Model Simulations of Changes in Earth's Radiation Budget During and After the Global Warming Hiatus	<i>N. Loeb</i>
12:10 pm	Adjourn	