



Agenda

MODIS/VIIRS Calibration Workshop
The Hotel at the University of Maryland
November 18, 2019; College Park, MD



Registration	7:00 am
Morning Session, Monday, November 18, 8:30 am - 12:20 pm Room: Calvert Ballroom Salon A	
MODIS and VIIRS On-orbit Calibration Performance Jack Xiong and Truman Wilson, Chairs	
"Introduction" Jack Xiong, Goddard Space Flight Center	8:30 am
"Status of MODIS Instrument Operation" Daniel Link and Amit Angal, SSAI/Goddard Space Flight Center	8:40 am
"MODIS RSB Calibration and Performance" Kevin Twedt and Emily Aldoretta, SSAI/Goddard Space Flight Center	9:00 am
"MODIS TEB Calibration and Performance" Tiejun Chang and Aisheng Wu, SSAI/Goddard Space Flight Center	9:40 am
Coffee Break	10:05 am
"VIIRS RSB Calibration and Performance" Ning Lei and Kevin Twedt, SSAI/Goddard Space Flight Center	10:30 am
"VIIRS TEB Calibration and Performance" Carlos Pérez Díaz and Vincent Chiang, SSAI/Goddard Space Flight Center	11:10 am
"MODIS and VIIRS L1B and LUT Updates" Vincent Chiang and Xu Geng, SSAI/Goddard Space Flight Center	11:35 am
"MODIS and VIIRS Geometric Calibration" Gary Lin and Robert Wolfe, Goddard Space Flight Center	11:50 am
Lunch	12:20 pm

Afternoon Session, Monday, November 18, 1:50 pm - 5:30 pm
Room: Calvert Ballroom Salon A

General Calibration and Validation Topics
Jim Butler and Junqiang Sun, Chairs

“SNPP VIIRS Lunar Images and Irradiances - A Correlation Study of Moon Image Orientation” Tom Stone, U.S. Geological Survey	1:50 pm
“The airborne LUnar Spectral Irradiance (air-LUSI) Mission Update” Kevin Turpie, University of Maryland Baltimore County	2:05 pm
“MODIS and VIIRS TEB Performance Assessment” Chris Moeller, University of Wisconsin	2:20 pm
“In flight Validation of the MODIS and VIIRS Mid and Thermal Infrared Bands using the Automated Validation Sites at Lake Tahoe and Salton Sea” Simon Hook, Jet Propulsion Laboratory	2:35 pm
“Updates to the On-Orbit Calibration of SNPP and NOAA-20 VIIRS for Ocean Color Applications” Gene Eplee, SAIC/Goddard Space Flight Center	2:55 pm
Coffee Break	3:15 pm
MODIS and VIIRS Surface Reflectance Validation” Jeffrey Czapla-Myers, University of Arizona	3:40 pm
“Overview of MODIS and VIIRS L1B Top-Of-Atmosphere Reflectances and Radiances Aggregation Algorithm” Starry Manoharan, SSAI/Goddard Space Flight Center	4:00 pm
“Continuing the Dark Target Aerosol Record from MODIS to VIIRS” Virginia Sawyer, SSAI/Goddard Space Flight Center	4:20 pm
“MODIS and VIIRS Calibration Inter-comparisons” Aisheng Wu, SSAI/Goddard Space Flight Center	4:40 pm
“Radiometric scaling between S-NPP and NOAA-20 VIIRS” David Doelling, Langley Research Center	5:00 pm
“Summary” Jack Xiong, Goddard Space Flight Center	5:20 pm
Adjourn	5:30 pm



Agenda

MODIS/VIIRS Science Team Meeting
The Hotel at the University of Maryland
November 19 –21, 2019; College Park, MD



Registration	7:00 am
Morning Session, Tuesday, November 19, 8:30 am - 12:30 pm Room: Calvert Ballroom Salon A/B	
Plenary Michael King, Chair	
“Welcome – Review of Agenda, meeting logistics” Michael King, University of Colorado	8:30 am
“Status of the Aqua Mission” Claire Parkinson and Bill Guit, Goddard Space Flight Center	8:40 am
“Status of the Terra Mission” Robert Wolfe and Kurt Thome, Goddard Space Flight Center	9:00 am
“Plans for the 2020 Senior Review of Earth Sciences” Jamie Wicks and Cheryl Yuhas, Program Executive for Operating Missions, NASA Headquarters	9:20 am
“Terra and Aqua MODIS and VIIRS Instrument Status” Jack Xiong, Goddard Space Flight Center	9:40 am
Break	10:00 am
MODIS/VIIRS Land Science and Data Analysis Chris Justice, Chair	
“Land Science Overview” Chris Justice, University of Maryland	10:30 am
“MODIS and VIIRS Product Status” Sadashiva Devadiga, Goddard Space Flight Center	10:50 am
“Integrating Soil Moisture and Evapotranspiration” Wade Crow, USDA Beltsville Agricultural Research Center	11:10 am
“Snow Water Equivalent (Colorado and Indus Valley)” Ned Bair, University of California Santa Barbara	11:30 am

“China and India Lead in Greening of the World through Land-Use Management based on MODIS Leaf Area Index from 2000-2017” 11:50 am
Chi Chen, Ranga Myneni, et al., Boston University

“NOAA S-NPP and NOAA-20 VIIRS Product Updates” 12:10 pm
Ivan Csizsar, NOAA

Lunch 12:30 pm

Afternoon Session, Tuesday, November 19, 2:00 pm - 5:30 pm
Room: Calvert Ballroom Salon A/B

MODIS/VIIRS Ocean Science and Data Analysis
Bryan Franz, Chair

“Update on MODIS Sea Surface Temperatures” 2:00 pm
Peter Minnett, University of Miami

“Use of SWIR Channels for Daytime Sea Surface Temperature Retrieval” 2:20 pm
Prabhat Koner, University of Maryland

“Spectral Classification of MODIS and VIIRS Water-Leaving Reflectance” 2:40 pm
Ryan Vandermuelen, SSAI/Goddard Space Flight Center

Break 3:00 pm

“What’s New with the Satellite PIC Measurements?” 3:30 pm
Barney Balch, Bigelow Laboratory for Ocean Sciences

“Refinement of Ocean Color Algorithms for Estimating Particulate Organic Carbon Concentration in Surface Ocean Waters” 3:50 pm
Dariusz Stramski, Scripps Institution of Oceanography

“Estimating the Fraction of Photosynthetically Available Radiation Absorbed by Live Phytoplankton from MODIS and VIIRS Data” 4:10 pm
Robert Frouin, Scripps Institution of Oceanography

MODIS/VIIRS Atmospheric Science and Data Analysis
Steve Ackerman, Chair

“Aerosol Properties from MODIS & VIIRS” 4:30 pm
Christina Hsu and Rob Levy, Goddard Space Flight Center

“Assessment of Fusion-Based VIIRS IR Absorption Radiances through Comparisons with Aqua MODIS” 4:50 pm
Bryan Baum, STC

“Sounder Synergy with Imagers for Cloud Top Product Retrievals” 5:10 pm

Andy Heidinger, NOAA/NESDIS/ORA

Adjourn 5:30 pm

Morning Session, Wednesday, November 20, 8:30 am - 12:10 pm

Room: Calvert Ballroom Salon A/B

MODIS/VIIRS Atmospheric Science and Data Analysis

Steve Ackerman, Chair

“Atmosphere SIPS Status and Production Evaluation Infrastructure” 8:30 am
Liam Gumley, SIPS Atmosphere, University of Wisconsin

“Continuity of MODIS & VIIRS Cloud Products” 9:00 am
Steve Platnick, Goddard Space Flight Center

MODIS/VIIRS Multidisciplinary and Multisensor Science

Steve Platnick, Chair

“Characterizing Dust, Dust Deposition and Ocean Response in the North Pacific” 9:30 am
Lorraine Remer, University of Maryland Baltimore County

“Joint MISR/MODIS Ocean Color Atmospheric Correction with a New Algorithm that Utilizes Reflected Sun Glint” 9:50 am
Kirk Knobelspiesse, Goddard Space Flight Center

“Overview of the EPS-SG 3MI Instrument and Evaluation of SEVIRI Research Cloud Products with MODIS” 10:10 am
Jérôme Riedi, Université de Lille – Sciences et Technologies

Break 10:30 am

“Overview of the Camp2Ex Field Campaign and NRT use of Himawari AHI Geosynchronous Imager Data” 10:50 pm
Bob Holz, University of Wisconsin

“Long-term Trends in Aerosols & Fires over Indian Sub-continent: Implication to Regional Air Quality” 11:10 pm
Pawan Gupta, Goddard Space Flight Center

Plenary

Michael King, Chair

“Outlook from Senior HQ on ESD” 11:30 am
Paula Bontempi, Acting Deputy Director, Earth Sciences Division, NASA Headquarters

<p>“NASA Headquarters Perspective on MODIS and Suomi NPP” Paula Bontempi, MODIS and Suomi NPP Program Scientist, NASA Headquarters</p>	11:50 pm
Lunch	12:10 pm
Afternoon Session, Wednesday, November 20, 1:30 pm - 5:30 pm	
Discipline breakouts: Land, Ocean, and Atmosphere	1:30 pm
Land: Calvert Ballroom Salon A	
MODIS/VIIRS Science Products Status	
Miguel Román, Chair	
<p>“Senior Review Introduction” Michael King, University of Colorado</p>	1:30 pm
<p>“Summary of MODIS Maintenance Activities” Chris Justice, Univ. of Maryland, and Miguel Román, USRA/EfSI</p>	1:45 pm
<p>“Discussion on MODIS Senior Review Plans”</p>	2:30 pm
Break	3:00 pm
<p>“MODIS/VIIRS Sea Ice Leads” Steve Ackerman, University of Wisconsin</p>	3:30 pm
<p>“MODIS/VIIRS Long-term Reservoir Products” Huilin Gao, Texas A&M Engineering Experiment Station</p>	3:45 pm
<p>“Incident Downward Shortwave Radiation and PAR” Dongdong Wang, University of Maryland</p>	4:00 pm
<p>“VIIRS Continuity Land Surface Reflectance” Jean-Claude Roger, Goddard Space Flight Center</p>	4:15 pm
<p>“VIIRS Continuity MAIAC” Alexei Lyapustin, Goddard Space Flight Center</p>	4:30 pm
<p>“VIIRS Continuity Snow & Ice” George Riggs, Science Systems and Applications, Inc.</p>	4:45 pm
<p>“VIIRS Active Fire” Louis Giglio, University of Maryland at College Park</p>	5:00 pm
Adjourn	5:15 pm

Atmosphere: Calvert Ballroom Salon B

Steve Ackerman, Chair

"Objectives of the Session" Steve Ackerman, University of Wisconsin, and Steve Platnick, GSFC	1:30 pm
"Update of Decadal Survey ACCP Study Plan Activities" Hal Maring, NASA Headquarters	1:40 pm
"Overview of the FIREX-AQ Field Campaign" Barry Lefer and colleagues, NASA Headquarters	2:00 pm
"Overview on GEO aerosol MEaSUREs Project" Rob Levy, Goddard Space Flight Center	2:15 pm
"Ice Nucleation from Anthropogenic Aerosol" Yu Gu, University of California, Los Angeles	2:30 pm
"Volcanic Plume tracking in the IR" Vince Realmuto, Jet Propulsion Laboratory	2:45 pm
Break	3:00 pm
"Ice Particle Models and Radiative Calculations" Tong Ren, Texas A&M University	3:30 pm
"Cloud Impact on LTUS" Qiang Fu, University of Washington	3:45 pm
"Cloud-aerosol Observations" Tamas Varnai, Goddard Space Flight Center	4:00 pm
"Sc/Cu Transition and Cloud Feedbacks" Ivy Tan, Goddard Space Flight Center	4:15 pm
"Improved Tropical Convective Cloud Characterization by Combining MODIS and CloudSat Radar and CALIPSO Lidar Measurements" Zhien Wang, University of Colorado	4:30 pm
"Atmosphere Team Continuity Product Status/Plans for SNPP and NOAA-20" Atmosphere SIPS Personnel, University of Wisconsin	4:45 pm
"General Product Discussion: Product Dataset Usage, Distribution, User Needs, Questions" All	5:00 pm
Adjourn	5:30 pm

Ocean: Calvert Ballroom Salon C

Bryan Franz, Chair

“Objectives of the Session” Bryan Franz, Goddard Space Flight Center	1:30 pm
Break	3:00 pm
Adjourn	5:30 pm

Morning Session, Thursday, November 21, 9:30 am - 12:30 pm

Discipline breakout: Land 9:30 am

Land: Calvert Ballroom Salon A

MODIS/VIIRS Science Products Status

Chris Justice, Chair

“VIIRS Continuity Land Surface Temperature & Emissivity” Glynn Hulley, NASA Jet Propulsion Laboratory	9:30 am
“VIIRS Continuity BRDF, Albedo, and NBAR” Crystal Schaaf, University of Massachusetts Boston	9:45 am
“VIIRS Continuity Phenology” Xiaoyang Zhang, South Dakota State University	10:00 am
“NASA's Black Marble: Advancing the Science of Earth at Night” Miguel Román, USRA/EfSI	10:15 am
Break	10:30 am
“VIIRS Production Plan and Schedule Discussion” Sadashiva Devadiga, Goddard Space Flight Center	11:00 am
“Discussion on VIIRS Senior Review Readiness”	11:30 am
Lunch	12:30 pm

Poster Session

Ballroom Foyer

Posters	8:30 am
Lunch	12:30 pm

Afternoon Session, Thursday, November 21, 1:30 pm - 3:15 pm
Room: Calvert Ballroom Salon A/B

Plenary

Bryan Baum, Chair

“MODIS and Suomi-NPP Discipline Summary Report – Land” Chris Justice, Univ. of Maryland, and Miguel Román, USRA / EfSI	1:30 pm
“MODIS and Suomi-NPP Discipline Summary Report – Atmosphere” Steve Platnick, GSFC, and Steve Ackerman, Univ. of Wisconsin-Madison	2:00 pm
“MODIS and Suomi-NPP Discipline Summary Report – Oceans” Bryan Franz, GSFC, and Kevin Turpie, UMBC	2:30 pm
“Closing Remarks” Michael King, University of Colorado, and Bryan Baum, STC	3:00 pm
Adjourn	3:15 pm