



## Agenda

### MODIS/VIIRS Science Team Meeting Sheraton Silver Spring Hotel

October 15 –19, 2018; Silver Spring, MD



<b>Registration</b>	7:00 am
<b>Morning Session, Monday, October 15, 8:30 am - 11:45 am</b> <b>Room: Cypress Ballroom</b>	
<b>Plenary</b> <b>Michael King, Chair</b>	
“Welcome – Review of Agenda, meeting logistics” Michael King, University of Colorado	8:30 am
“Outlook from Senior HQ on ESD” Sandra Cauffman, Deputy Director of Earth Science Division, NASA Headquarters	8:45 am
“NASA Headquarters Perspective on MODIS and Suomi NPP” Paula Bontempi, MODIS and Suomi NPP Program Scientist, NASA Headquarters	9:15 am
“Terra and Aqua MODIS and VIIRS Instrument Status” Jack Xiong, Goddard Space Flight Center	9:45 am
Break	10:15 am
“Assessment of Relative Shortwave Radiometry between S-NPP and MODIS Aqua” Kerry Meyer, Goddard Space Flight Center	10:45 am
“Perspectives on Achieving Continuity from MODIS to VIIRS” Bryan Baum, Suomi NPP Team Leader, Science & Technology Corp. (STC)	11:05 am
“CLIMCAPS: Use of the AIRS/ AMSU and CrIS/ ATMS Continuity Sounding Product for Cloud Feedback Studies” Chris Barnet, Suomi NPP Sounder Team Leader, STC	11:25 am
Lunch	11:45 pm

**Afternoon Session, Monday, October 15, 1:00 pm - 5:30 pm**  
**Room: Cypress Ballroom**

**MODIS Data Products & Algorithm Status**

**MODIS/VIIRS Atmosphere Science Algorithms and Data Analysis**  
**Steve Platnick, Chair**

“Aerosol Optical Properties from MODIS: Dark Target Algorithm” Rob Levy et al., Goddard Space Flight Center	1:00 pm
“Aerosol Properties: Deep Blue Extension from MODIS to VIIRS” Christina Hsu, and Jaehwa Lee, et al., Goddard Space Flight Center	1:20 pm
“Biomass Burning and Aerosol Characteristics in India” Pawan Gupta, USRA/Marshall Space Flight Center	1:40 pm
“Aerosol Properties in Partly Cloudy Regions” Tamas Várnai, Goddard Space Flight Center	2:00 pm
“Aerosol Single Scattering Albedo and Layer Height using VIIRS and OMPS-NM” Santiago Gassó, Goddard Space Flight Center	2:20 pm
“Atmospheric Heating by Black Carbon Aerosols” Eric Wilcox, Desert Research Institute, and Jun Wang, University of Iowa	2:40 pm
Break	3:00 pm

**MODIS/VIIRS Atmospheric Science Analysis**  
**Steve Ackerman, Chair**

“TIR-based Volcanic SO <sub>2</sub> Products” Vince Realmuto, Jet Propulsion Laboratory	3:30 pm
“Fusion of VIIRS and CrIS Data to Construct Supplementary Infrared Radiances for VIIRS” Bryan Baum, Science & Technology Corp. (STC)	3:50 pm
“Cloud Detection, Height, and Optical Properties: Challenges in Extending MODIS to VIIRS” Steve Platnick, Kerry Meyer, et al., Goddard Space Flight Center	4:10 pm
“Consistency of Ice Cloud Models in Forward Retrieval and Radiative Forcing” Ping Yang, Texas A&M University	4:30 pm
“Type-Dependent Aerosol Impact on Ice Clouds from Satellite Retrievals”	4:50 pm

Yu Gu, Bin Zhao, and Kuo-Nan Liou, University of California Los Angeles

“Influence of Volcanic Sulfate Aerosol on Cloud Properties” 5:10 pm

Gerald Mace, University of Utah

Adjourn 5:30 pm

**Morning Session, Tuesday, October 16, 8:30 am - 12:20 pm**

**Room: Cypress Ballroom**

MODIS/VIIRS Atmospheric Science Analysis

**Bryan Baum, Chair**

“Net Radiative Effects of Dust in the Tropical North Atlantic based on 8:30 am

Integrated Satellite Observations and in situ Measurements”

Zhibo Zhang, University of Maryland-Baltimore County, and

Hongbin Yu, Goddard Space Flight Center

“Characterization of Polar Mixed-phase Clouds and Tropical Convective 8:50 am  
Clouds”

Zhien Wang, University of Colorado

“Extratropical Cloud Optical Depth Feedback” 9:10 am

Ivy Tan, University of Maryland-Baltimore County

MODIS Land Science Analysis

**Chris Justice, Chair**

“Land Introduction and MODIS Land Maintenance” 9:30 am

Chris Justice, University of Maryland

“S-NPP VIIRS Land Product Overview” 10.00am

Miguel Román, Goddard Space Flight Center

Break 10:30 am

Selected S-NPP VIIRS Presentations

“Incident downward shortwave radiation and PAR” 11:00 am

Dongdong Wang, University of Maryland

“Land Surface Phenology” 11:20 am

Xiaoyang Zhang, South Dakota State University

“NASA's Black Marble Standard Suite” 11:40 am

Miguel Román, Goddard Space Flight Center

“VIIRS Land Surface Temperature and Emissivity (LST&E) Product” 12:00 pm

Glynn Hulley, Jet Propulsion Laboratory

Lunch 12:20 pm

**Afternoon Session, Tuesday, October 16, 1:30 pm - 5:30 pm**

**Discipline breakouts: Land, Ocean, and Atmosphere** 1:30 pm

**Land: Cypress Ballroom**

“Objectives of the Session” 1:30 pm

Chris Justice, University of Maryland

“MODIS C6 and 6.1” 1:40 pm

Sadashiva Devadiga, Goddard Space Flight Center

“VIIRS Delivery and Issues” 2:05 pm

Miguel Román, Goddard Space Flight Center

“LPDAAC & NSIDC Land Product Distribution Stats and Issues” 2:30 pm

Break 3:00 pm

“VIIRS and Sentinel 3 Surface Reflectance” 3:30 pm

Eric Vermote, Goddard Space Flight Center

“NOAA S-NPP and NOAA-20 VIIRS Products Update” 3:50 pm

Ivan Csiszar, NOAA

“Land Product Strategy Initial Discussion” 4:15 pm

Chris Justice, University of Maryland

“HQ Perspective” 4:45pm

Hank Margolis, NASA Headquarters

Adjourn 5:30 pm

**Atmosphere: Persimmon I & II**

“Objectives of the Session” 1:30 pm

Steve Ackerman, University of Wisconsin

“VIIRS-MODIS Continuity Products” ? pm

Steve Ackerman, University of Wisconsin, and Steve Platnick, GSFC

“SIPS Overview” ? pm

Liam Gumley and Elaine Prins, University of Wisconsin

“Delivery Schedule/Plans” ? pm

Steve Ackerman, University of Wisconsin, and Steve Platnick, GSFC	
“Status of Algorithms: File Structure, Parameter Naming Convention, Version Numbering, Example Products” All	? pm
“Product Documentation and Publications” Steve Ackerman, University of Wisconsin	? pm
“Continuity Challenges: How do the Algorithm Groups Plan to Demonstrate the Products have Continuity?” Steve Ackerman, University of Wisconsin, and Steve Platnick, GSFC	? pm
“MODIS Standard Products” Steve Ackerman, University of Wisconsin, and Steve Platnick, GSFC	? pm
“Product Updates/Plans to Extent not Addressed by Algorithm Plenary Talks” All	? pm
“HQ Perspective” Hal Maring, NASA Headquarters	5:15pm
Adjourn	5:30 pm

**Morning Session, Wednesday, October 17, 9:30 am - 12:00 pm**  
**Room: Cypress Ballroom**

MODIS Land Science Analysis  
**Miguel Román, Chair**

“Phenology and productivity in Agriculture “ Feng Gao, USDA BARC	9:30 am
“Integrating Multi-Platform Satellite Soil Moisture and Evapotranspiration Retrievals to Constrain Water and Energy Balance Coupling” Wade Crowe, USDA Beltsville Agricultural Research Center	9:50 am
“Fusion of MODIS, VIIRS, and Landsat Snow Cover Data to Create Estimates of Snow Water Equivalent” Edward Bair, University of California, Santa Barbara	10:10 am
Break	10:30 am
“Multi-Sensor Analysis of Global Volcanic Thermal Unrest” Rob Wright, University of Hawaii	11:20 am
“Developing a Long-term Global Reservoir Product Series by Fusing	11:20 am

Multi-Satellite Observations"  
Huilin Gao, Texas A&M Engineering Experiment Station

Lunch 12:00 pm

**Afternoon Session, Wednesday, October 17, 1:30 pm - 5:00 pm**

**Room: Cypress Ballroom**

"GEONEX: A NASA-NOAA Collaboration for Producing Land  
Surface Products from Geostationary Satellites"  
Rama Nemani, Ames Research Center 1:30 pm

**MODIS/VIIRS Ocean Algorithms and Science Analysis**  
**Kevin Turpie, Chair**

"Continuity of MODIS & VIIRS Ocean Color Products"  
Bryan Franz, Goddard Space Flight Center 1:50 pm

"Joint MISR/MODIS Ocean Color Atmospheric Correction with a New  
Algorithm that Utilizes Reflected Sun Glint"  
Kirk Knobelspiesse, Goddard Space Flight Center 2:10 pm

"Carbon-based Phytoplankton Size Classes using Multi-platform Ocean  
Color Observations and Earth System Models: Satellite Algorithm  
Development and Interannual Variability"  
Irina Marinov, Univ. of Pennsylvania, and Tiho Kostadinov, CSU San Marcos 2:30 pm

"Particulate Inorganic Carbon from MODIS"  
Barney Balch, Bigelow Laboratory for Ocean Sciences 2:50 pm

Break 3:10 pm

**MODIS/VIIRS Ocean Algorithms and Science Analysis**  
**Bryan Franz, Chair**

"Estimating the Fraction of Photosynthetically Available Radiation  
Absorbed by Live Phytoplankton from MODIS and VIIRS Data"  
Jing Tan and Robert Frouin, Scripps Institution of Oceanography 3:40 pm

"Understanding Airborne Fertilization of Oceanic Ecosystems using  
MODIS, VIIRS and CALIPSO"  
Lorraine Remer, University of Maryland-Baltimore County 4:00 pm

"MODIS and VIIRS SST: Validation of Continuity Products and Results  
from Alternative Algorithms"  
Goshka Szczodrak and Peter Minnett, University of Miami 4:20 pm

"Use of SWIR Channels for Daytime Sea Surface Temperature Retrieval" 4:40 pm

Prabhat Koner, University of Maryland

Adjourn 5:00 pm

**Morning Session, Thursday, October 18, 9:00 am - 11:30 am**

**Room: Cypress Ballroom**

**Plenary**

**Bryan Baum, Chair**

“Worldview/GIBS and the Availability of MODIS and VIIRS Products” 9:00 am  
Matt Cechini, Science Systems and Applications, Inc. (SSAI), and  
Ryan Boller, Goddard Space Flight Center

“MODIS and Suomi-NPP Discipline Summary Report – Land” 9:30 am  
Chris Justice, Univ. of Maryland, and Miguel Román, GSFC

“MODIS and Suomi-NPP Discipline Summary Report – Atmosphere” 10:00 am  
Steve Platnick, GSFC, and Steve Ackerman, Univ. of Wisconsin-Madison

“MODIS and Suomi-NPP Discipline Summary Report – Oceans” 10:30 am  
Bryan Franz, GSFC, and Kevin Turpie, UMBC

“Closing Remarks” 11:00 am  
Michael King, University of Colorado, and Bryan Baum, STC

Adjourn 11:30 am

**Afternoon Session, Thursday, October 18, 1:00 pm - 5:20 pm**

**Room: Cypress Ballroom**

**MODIS Calibration Workshop**

**Jack Xiong and Jim Butler, Chairs**

MODIS operation, calibration, and performance 1:00 pm

Coffee Break 2:45 pm

**General MODIS and VIIRS Calibration Topics I**

Atmosphere, Land, and Ocean Science topics 3:50 pm

Adjourn 5:20 pm

**Morning Session, Friday, October 19, 8:20 am - 12:00 pm**  
**Room: Cypress Ballroom**

**VIIRS Calibration Workshop**  
**Jim Butler and Jack Xiong, Chairs**

VIIRS operation, calibration, and performance 8:20 am

Coffee Break 10:00 am

**General MODIS and VIIRS Calibration Topics II**

Atmosphere, Land, and Ocean Science topics 10:20 am

Adjourn 12:00 pm