

**Approved Proposals in Response to NRA-97-MTPE-03  
"Satellite Remote Sensing Measurement Accuracy, Variability and Validation Studies"**

***Type 1 Proposals*** (see pages 2 and 3 for Type 2 Proposals)

<u>Principal Investigator</u>	<u>Organization</u>	<u>Proposal Title</u>
Armstrong, Richard L	University of Colorado	Passive Microwave Snow Cover Algorithm Intercomparison and Validation
Di, Liping	Hughes STX Corporation	Validation and Algorithm Inter-Comparison of Global NDVI Time Series Products Derived from NOAA AVHRR
Ellingson, Robert G	University of Maryland College Park	Evaluation of Operational Longwave Radiation Budget Parameters Using the GOES Sounders
Emery, William J	University of Colorado	Improving the Accuracy of Satellite Sea Surface Temperature Measurements by Explicitly Accounting for the Bulk-Skin Temperature Difference
Fowler, Charles	University of Colorado	AVHRR-Based Polar Pathfinder Products - Evaluation, Enhancement and Transition to MODIS
Freilich, Michael H	Oregon State University	Comprehensive Validation of Satellite Ocean Winds: Advanced Techniques and Multi-Instrument Analysis
Goldstein, Richard	Jet Propulsion Laboratory	Interferometric Propagation Delays
Goodman, Steven J	Marshall Space Flight Center	Interpretation of Lightning Observations for Understanding the Meteorological Properties of Clouds
Ignatov, Alexander	NOAA/NESDIS	Validation and Adjustments of Aerosol Retrievals from TRMM/VIRS
Jaross, Glen	Hughes STX Corporation	Reflectance-Based Sensor Validation over Ice Surfaces
Jezek, Kenneth C	Ohio State University	The Spatial and Temporal Characteristics of High Latitude Seasonal Snow Melt as Detected by Passive and Active Microwave Sensors
Kursinski, E Robert	Jet Propulsion Laboratory	Assessing and Improving the Accuracy of Passive Operational Sounders Using GPS
Lacis, Andrew A	Goddard Inst. for Space Studies	Intercomparison of SCARAB, ERBE, and ISCCP Seasonal Flux Variability
Lindsay, Ronald W	University of Washington	Validation of Radarsat Geophysical Processing System Products
Minnett, Peter J	University of Miami	High Accuracy Infrared Interferometric Validation of Satellite Surface Temperature Retrievals
Morris, Gary Allen	Goddard Space Flight Center	Validation of H2O and O3 Measurements from SAGE III Using Trajectory Mapping and Constituent Reconstruction
Pinker, Rachel T	University of Maryland College Park	Evaluation of Accuracies in Geophysical Parameters Derived from PATHFINDER Data
Robertson, F.R.	Marshall Space Flight Center	Intercalibration and Validation of Top-of-Atmosphere Longwave Clear-Sky Fluxes and Surface Skin Temperatures for Climate Diagnostic and Feedback Studies
Smith, Eric A	Florida State University	Combining SSM/I, T, T2 and GOES Measurements for a Satellite-based Atmospheric Water Budget of the Gulf of Mexico-Caribbean Sea Basin
Stephens, Graeme	Colorado State University	Assessing the Impact of Remote Sensing Data on the Cloudiness Prediction in Short-Term Forecasts
Wood, Eric F	Princeton University	Remote Sensing for Land Surface Hydrology: Accuracy and Uncertainty Analyses

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***Type 2 Proposals (page 2 of 3)***

<u>Principal Investigator</u>	<u>Organization</u>	<u>Proposal Title</u>
Arrigo, Kevin R	Goddard Space Flight Center	Satellite Remote Sensing Measurement Accuracy, Variability, and Validation Studies
Augustine, John A	NOAA/ARL	Surface Radiation Budget and Cloud Measurements for NASA's EOS/CERES Programs
Baldocchi, Dennis	NOAA/ARL	FLUXNET: Unifying a Global Array of Tower Flux Networks for Validating EOS Terrestrial Carbon, Water and Energy Budgets
Boccippio, Dennis J	Marshall Space Flight Center	Cross-Sensor Validation of the Lightning Imaging Sensor
Brogniez, Colette	University of Science and Technology - Lille	European Coordinated Programme for SAGE III Validation
Brown, Linda R	Jet Propulsion Laboratory	Calibration of the Oxygen A-Band for Sage III
Collins, William D	National Center for Atmospheric Research	Validation of the CERES Surface Radiation Budget Using Long-Term Observations from the Indian Ocean Experiment
Dutton, Ellsworth G	NOAA/CMDL	EOS/CERES Surface Radiation Validation at NOAA Climate Monitoring and Diagnostics Laboratory Field Sites
Ferrare, Richard A	Goddard Space Flight Center	EOS Validation of Aerosol and Water Vapor Profiles by Raman Lidar
Gower, Stith T	University of Wisconsin Madison	Validation of ASTER and MODIS Surface-Temperature and Vegetation Products with Surface-Flux Applications
Henry, Patrice	CNES	Cross-Calibration Between EOS AM-1 and CNES Sensors
Heymsfield, A.	National Center for Atmospheric Research	In-Situ and Remote Sensing Measurements in Support of the EOS/MODIS Retrieval Algorithm Validation Program
Hook, Simon J	Jet Propulsion Laboratory	Validation of Thermal Infrared Data and Products from MODIS and ASTER over
Hooker, Stanford B	Goddard Space Flight Center	Marine Optical & Biological Measurements from the Atlantic Meridional Transect for MODIS Calibration and Validation
Jessup, Andrew T	University of Washington	Broadband Infrared Thermometer Measurements for MODIS Validation
Krider, E Philip	University of Arizona	LIS Validation Studies Using Lightning at the KSC-ER
Li, Shusun	University of Alaska - Fairbanks	Validation of MODIS Snow and Sea Ice Products in the Southern Ocean
Liang, Shunlin	Univ. of Maryland - College Park	Validating MODIS/MISR Land Surface Reflectance and Albedo Products
Mace, Gerald G	University of Utah	Cloud Property and Surface Radiation Observations and Diagnostics in Support of EOS CERES, MODIS, and MISR Validation Efforts
Marshak, Alexander	Univ. of Maryland - Baltimore Cnty	Validation of Cloud Optical Depths Retrieved From EOS/MODIS Data
McMillan, William	University of Maryland Baltimore County	Validation of MOPITT Column and Profile CO from Spaceborne, Airborne, and Ground-based Interferometers
Meyer, David J	USGS/EROS Data Center	Validating MODIS Surface Reflectance, fAPAR and LAI Products Over the North American Grasslands

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***Type 2 Proposals - Continued (page 3 of 3)***

<b><u>Principal Investigator</u></b>	<b><u>Organization</u></b>	<b><u>Proposal Title</u></b>
Murcray, Frank J	University of Denver	Near IR Ballon-Borne Measurements in Support of SAGE III and MOPITT
Murcray, Frank J	University of Denver	Ground Based FTIR Solar Spectral Measurements in Support of MOPITT & SAGE
Myers, Daryl R	National Renewable Energy Laboratory	Application of Saudi Arabian Surface Radiation Flux Measurements for Validation of Satellite Remote Sensing Systems
Nolin, Anne W	University of Colorado	Validation Studies and Sensitivity Analyses for Retrievals of Snow Albedo and Snow Covered Area from EOS AM-1 Instruments
Novelli, Paul C	NOAA/CMDL	Vertical Profiles of Carbon Monoxide and Other Gases in the Troposphere
Olson, Richard J	Oak Ridge National Laboratory	A Global Flux Data and Information System to Support EOS Product Validation
Pinker, Rachel T	Univ. of Maryland - College Park	EOS Validation Activity in a Desert Encroachment Zone of Sub-Sahel Africa
Platnick, Steven	University of Maryland Baltimore County	A Study of Uncertainties for MODIS Cloud Retrievals of Optical Thickness and Effective Radius
Porter, John N	University of Hawaii - Manoa	Aircraft Radiation and Aerosol Measurements near Hawaii: Satellite Validation at the MOBY and the HOT Sites
Pougatchev, N. S.	Christopher Newport University	Validation of Measurement of Pollution in the Troposphere (MOPITT) Experiment by Ground-based Infrared Solar Spectroscopic Measurements of CO and CH4
Privette, Jeffrey L	Goddard Space Flight Center	Southern Africa Validation of EOS (SAVE): Coordinated Augmentation of Existing Networks
Sander, Stanley P	Jet Propulsion Laboratory	Validation of SAGE III Measurements of NO3: Ground-Based Vertical Profile Measurements
Schmidlin, Francis J	GSFC/Wallops Flight Facility	Balloon-Borne Ozone Measurements in Collaboration with SAGE III
Schowengerdt, R A	University of Arizona	Validation and Correction for the MODIS Spatial Response
Shi, Jiancheng	U. of California - Santa Barbara	Investigation of Snow Properties Using MODIS and ASTER Data
Stramski, Dariusz	Scripps Institution of Oceanography	Optical and Ancillary Measurements at High Latitudes in Support of the MODIS Ocean Validation Program
Teillet, Philippe M	Canada Cntr for Remote Sensing	Quality Assurance and Stability Reference (QUASAR) Monitoring
Thome, Kurtis J	University of Arizona	Absolute Radiometric Calibration of EOS Multispectral Imaging Sensors
Uttal, Taneil	NOAA/ETL	Validation of CERES Cloud Retrievals Over the Arctic with Surface-Based Millimeter-Wave Radar
Ward, Darold E	US Department of Agriculture	Biomass Burning and Emissions of Trace Gases and Aerosols: Validation of EOS Biomass Burning Products
Webster, Chris. R	Jet Propulsion Laboratory	In situ Measurements of NO2 and CH4 by the Aircraft Laser Infrared Absorption Spectrometer (ALIAS) for SAGE III Validation Studies
Yurganov, Leonid	University of Toronto	Validation of MOPITT Carbon Monoxide and Methane Measurements Using Remote Sensing by IR Solar Spectroscopy of Moderate Resolution Combined with In-situ Measurements