

NASA CMS SCIENCE TEAM MEETING

Tuesday Nov 17 — Fountain Ballroom

8:30	Welcome	<i>Peter Griffith</i>
8:35	HQ Perspective	<i>Kathy Hibbard, Ken Jucks</i>
8:45	CMS Science Team	<i>George Hurtt</i>
9:00	2013 CMS Project Reports — 3 Parallel Sessions	
2013-A: Fountain Ballroom—Peter Griffith (Chair)		
9:00	A framework for carbon monitoring and upscaling in forests across Mexico to support implementation of REDD+ (Vargas-01)	<i>Rodrigo Vargas</i>
9:15	An Historically Consistent and Broadly Applicable MRV System Based on Lidar Sampling and Landsat Time-series (Tested in the US, and applied to the US NGHGI reporting system) (Cohen-02)	<i>Warren Cohen</i>
9:30	Development of a Prototype MRV System to Support Carbon Ecomarket Infrastructure in Sonoma County (Dubayah-04)	<i>George Hurtt</i>
9:45	Long-Term Carbon Consequences of Amazon Forest Degradation (Morton-02)	<i>Doug Morton</i>
10:00	Developing Statistically Rigorous Sampling Design and Analysis Methods to Reduce and Quantify Uncertainties Associated with Carbon Monitoring Systems (Stehman-01)	<i>Steve Stehman</i>
2013-B: San Marino—Vanessa Escobar (Chair)		
9:00	Quantifying fossil and biospheric CO ₂ fluxes in California using ground-based and satellite observations (Graven-01)	<i>Marc Fischer</i>
9:15	Off-the-shelf Commercial Compact Solar FTS for CO ₂ and CH ₄ Observations for MRV (Dubey-01)	<i>Manvendra Dubey</i>
9:30	Quantification of the sensitivity of NASA CMS Flux inversions to uncertainty in atmospheric transport (Lauvaux-01)	<i>Martha Butler</i>
9:45	Prototype Monitoring, Reporting and Verification System for the Regional Scale: The Boston-DC Corridor (Nehrkorn-01)	<i>Thomas Nehrkorn</i>
10:00	Understanding user needs for carbon monitoring information (Duren-01)	<i>Riley Duren</i>
10:15	Applications of the NASA Carbon Monitoring System: Engagement, Use, and Evaluation (Escobar-01)	<i>Vanessa Escobar</i>

2013-C: Altadena—Libby Larson (Chair)

9:00	Filling a Critical Gap in Indonesia's National Carbon Monitoring, Reporting, and Verification Capabilities for Supporting REDD+ Activities: Incorporating, Quantifying and Locating Fire Emissions from Within Tropical Peat-swamp Forests (Cochrane-01)	<i>Erianto Indra Putra</i>
9:15	Carbon Monitoring of Agricultural Lands: Developing a Globally Consistent Estimate of Carbon Stocks and Fluxes (Asrar-West-04)	<i>Ghassem Asrar Tris West</i>
9:30	A data assimilation approach to quantify uncertainty for estimates of biomass stocks and changes in Amazon forests (Keller-01)	<i>Michael Keller</i>
9:45	Operational multi-sensor design for national scale forest carbon monitoring to support REDD+ MRV systems (Hagen-01)	<i>Steve Hagen</i>
10:00	Time Series Fusion of Optical and Radar Imagery for Improved Monitoring of Activity Data, and Uncertainty Analysis of Emission Factors for Estimation of Forest Carbon Flux (Kellndorfer-03)	<i>Curtis Woodcock</i>
10:30	Break	
11:00	Working Groups Progress Reports —Fountain Ballroom <ul style="list-style-type: none">• Data (Crystal Schaaf)• MRV (Rodrigo Vargas)• Algorithms (Sangram Ganguly, Robert Kennedy)• Framework (Kevin Bowman)• Atmospheric Verification (Manvendra Dubey)• External Communications (David Lagomasino)	
12:30	Lunch and Poster Session on 2013 Projects (Lunch on your own—posters in Fountain Ballroom IV)	
2:00	Working Group Breakout Session 1 <ul style="list-style-type: none">• Data — Fountain Ballroom (Crystal Schaaf)• MRV —San Marino (Rodrigo Vargas)• Algorithms —Altadena (Sangram Ganguly, Robert Kennedy)	
3:30	Break	
4:00	Working Group Breakout Session 2 <ul style="list-style-type: none">• Framework —Fountain Ballroom (Kevin Bowman)• Atmospheric Verification —San Marino (Manvendra Dubey)• External Communications —Altadena (David Lagomasino)	
5:30	Summary Discussion — Fountain Ballroom	
6:00	Adjourn	

Wednesday Nov 18 — Fountain Ballroom

8:30	Project Support	<i>Peter Griffith</i>
9:00	2014 Project Reports	
2014-A: Fountain Ballroom—Peter Griffith (Chair)		
9:00	Reducing Uncertainties in Satellite-Derived Forest Aboveground Biomass Estimates Using a High Resolution Forest Cover Map (Ganguly-01)	<i>Sangram Ganguly</i>
9:15	Reducing Uncertainties in Estimating California's Forest Carbon Stocks (Greenberg-01)	<i>Jonathan Greenberg</i>
9:30	Prototyping A Methodology To Develop Regional-Scale Forest Aboveground Biomass Carbon Maps Predicted From Landsat Time Series, Trained From Field and Lidar Data Collections, And Independently Validated With FIA Data (Hudak-01)	<i>Andrew Hudak</i>
9:45	A Joint USFS-NASA Pilot Project to Estimate Forest Carbon Stocks in Interior Alaska by Integrating Field, Airborne and Satellite Data (Morton-01)	<i>Doug Morton</i>
10:00	High-Resolution Carbon Monitoring and Modeling: Continuing Prototype Development and Deployment (Hurt-03)	<i>George Hurt</i>
2014-B: San Marino—Libby Larson (Chair)		
9:00	Total Carbon Estimation in African Mangroves and Coastal Wetlands in Preparation for REDD and Blue Carbon Credits (Fatoyinbo-01)	<i>Emanuelle Antonio Feliciano</i>
9:15	An Integrated Terrestrial-Coastal Ocean Observation and Modeling Framework for Carbon Management Decision Support (Lohrenz-05)	<i>Steven Lohrenz</i>
9:30	Linking Satellite and Soil Data to Validate Coastal Wetland 'Blue Carbon' Inventories: Upscaled Support for Developing MRV and REDD+ Protocols (Windham-Myers-01)	<i>Lisamarie Windham-Myers</i>
9:45	Direct Measurement of Aboveground Carbon Dynamics in Support of Large-Area CMS Development (Walker-W-01)	<i>Wayne Walker</i>
10:00	Translating Forest Change to Carbon Emissions/Removals Linking Disturbance Products, Biomass Maps, and Carbon Cycle Modeling in a Comprehensive Carbon Monitoring Framework (<i>Williams-C-01</i>)	<i>Huan Gu</i>

2014-C: Altadena—Kevin Bowman (Chair)

9:00	Continuation of the CMS-Flux Pilot Project (Bowman-02)	<i>Kevin Bowman</i>
9:15	Regional Inverse Modeling in North and South America for the NASA Carbon Monitoring System (Andrews-03)	<i>Arlyn Andrews</i>
9:30	A Global High-Resolution Atmospheric Data Assimilation System for Carbon Flux Monitoring and Verification (Baker-01)	<i>David Baker</i>
9:45	GEOS-Carb II: Delivering Carbon Flux and Concentration Products Based on the GEOS Modeling System(Ott-01)	<i>Lesley Ott</i>
10:00	High-Resolution Constraints on North American and Global Methane Sources Using Satellites (Jacob-02)	<i>Daniel Jacob</i>
10:30	Break	
11:00	Working Groups Plenary Report Back /Future Plans — Fountain Ballroom <ul style="list-style-type: none">• Data (Crystal Schaaf)• MRV (Stephen Hagen)• Algorithms (Sangram Ganguly, Robert Kennedy)• Framework (Kevin Bowman)• Atmospheric Verification (Manvendra Dubey)• External Communications (David Lagomasino)	
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4:00	Science Team Leader and HQ Reflection	
5:00	Adjourn	