

NASA Land-Cover and Land-Use Change Science Team Meeting
UMUC Inn and Conference Center
April 11-13, 2006
DRAFT AGENDA

Day 1 Tuesday, April 11th, 9.00 – 5.30

| **Gutman (NASA HQ)** Welcome and Program Update

Justice (UMd) Strategic Issues for the LCLUC Community

10.00 – 10.40 Science Presentations - Carbon Emphasis

Skole (MSU) What are the Global Rates and Extent of Tropical Deforestation, Forest Regeneration, Selective Logging, and Fragmentation?

DeFries (UMd)/Collatz (NASA GSFC) Reducing Uncertainties of Carbon Emissions from Land Use-Related Fires with MODIS Data: From Local to Global Scale

10.40 – 11.00 Break

Curran (Yale) Effects of Logging, Plantation Conversion, Biomass Burning and Regrowth on Carbon Dynamics in Bornean Peat and Dipterocarp Forests: Implications for Global Carbon Cycle

Laporte (WHRC) Forest Biomass and Land-Use Change in Central Africa: Reducing Regional Carbon Cycle Uncertainty

11.40 – 12.20 Programmatic Presentations

| **Irons (NASA GSFC)** Landsat Instrument Status and LDCM

Covington (NASA GSFC) The Mid Decadal Land Survey

12.20 – 1.30 Lunch

1.30 – 2.30 Invited Poster Session

2.30 – 3.30 Programmatic Presentations

Sheffner (NASA HQ) NASA Carbon Applications Program

| **Townshend (UMd)** International Observations GOFD/GOLD and IGOL

Masek (NASA GSFC) Land Cover Measurement Team Whitepaper

3.30 – 5.30 Breakout Groups: LCLUC Community Input

1. NASA Land Cover Measurement Requirements
2. Mid-Decadal Data Set Product Requirements

3. NASA LCLUC Future Science Directions

Day 2 Wednesday, April 12th, 9.00 - 5.30

9.00 – 9.20 Programmatic Presentation

Wickland (NASA HQ) LCLUC and the NACP

9.20 – 10.40 Science Presentations – NA Carbon Emphasis

Tucker (NASA GSFC) Identifying and Understanding Carbon Cycle Implications of North American Natural and Anthropogenic Disturbances: 1982-2005

Saatchi (NASA JPL) Forest Woody Biomass Carbon Estimates of North America from Synergistic Analysis of MODIS, MISR, and JERS Data in Support of the North American Carbon Program

Goward (UMd) North American Forest Disturbance and Regrowth since 1972: Empirical Assessment with Field Measurements and Satellite Remotely Sensing Observations

Simard (NASA JPL) Mapping Mean Tree Height, Biomass and Productivity in the Everglades National Park

10.40 – 11.00 Break

11.00 – 12.30 Breakout Groups Report Back - Discussion

1. NASA Land Cover Measurements
2. Mid Decadal Data Set Product Requirements
3. LCLUC Future Research Directions

12.30 – 1.30 Lunch

1.00 – 2.00 SAXTA Demo: A High Resolution Data Dissemination System (In main conference room)

1.30 – 2.30 Invited Poster Session

2.30 – 2.50 Programmatic Presentation

Groisman (NOAA) LCLUC/Carbon and NEESPI Status Report

2.50 – 5.30 Science Presentations – NEESPI Carbon Emphasis

Krankina (OSU) Northern Eurasia Landcover Dynamics Analysis (NELDA: Monitoring and validating the distribution and change in land cover across Northern Eurasia

Sun (UMd)/Masek (NASA GSFC) Comparative Studies on Carbon Dynamics in Disturbed Forest Ecosystems: Eastern Russia and Northeastern China

Shugart (UVA) Modeling the Carbon Dynamics of the Eurasian Boreal Forest

Break 3.50 – 4.10

Conard (USFS) Wildfire Impacts on Carbon Stocks and Exchanges in Forests of Central Siberia: Quantifying Effects of Fire Intensity, Fire Severity, and Burning Conditions

Xiao, X. (UNH) Quantifying CO₂ Fluxes from Boreal Forests in Northern Eurasia: An Integrated Analysis of Flux Tower Data, Remote Sensing Data and Biogeochemical Modeling

Qi (MSU) CARBON, Land Use and Land Cover Dynamics of China in Support of GOC/GOLD and NEESPI Sciences

McDonald (NASA JPL) Diagnosis and Prognosis of Changes in Lake and Wetland Extent on the Regional Carbon Balance of Northern Eurasia

Day 3 Thursday, April 13th, 9.00 – 12.00

9.00 – 9.40 Programmatic Presentations

Coronado (NASA GSFC) NASA DB Developments

Ojima (CSU) The Land Project (IGBP/IHDP)

9.40 -10.40 Science Presentations – NEESPI Carbon Emphasis

Tubiello (Columbia U.) Carbon, Climate and Managed Land in Ukraine: Integrating Data and Models of Land Use for NEESPI

Ojima (CSU) Northern Eurasian C-Land Use Climate Interaction in the Semi-Arid Regions (NASA)

Woodcock (CRSA) Quantifying the Effects of Land Use Change on Carbon Budgets in the Black Sea Region

10.40 – 11.00 Break

11.00 – 12.00 Future Directions and Community Feedback

Gutman (NASA HQ)/Justice (UMd) ***OPEN DISCUSSION***

POSTER SESSION (Posters will remain up for the first two days in break out rooms)

Chopping (Montclair State University) Quantifying Changes in Carbon Pools with Shrub Invasion of Desert Grasslands Using Multi-Angle Data from EOS Terra and Aqua

Csiszar (UMd) Fires in Eurasia and South America

Goward (UMd) North American Forest Disturbance and Regrowth since 1972: Empirical Assessment with Field Measurements and Satellite Remotely Sensing Observations, NACP

Gubbels (SSAI) SAXTA: A High Resolution Data Dissemination System

Masek (NASA GSFC) LEDAPS: A High Resolution Data Processing System

Masuoka (NASA GSFC) MODIS Collection 5 Processing

Morisette (NASA GSFC) CEOS Land Product Validation Subgroup
Lefebvre (WHRC) LBA Amazon Scenarios: Modeling Interactions Among Land Use, Fire and Climate
Ranson (NASA GSFC) Boreal Zone Forest Type and Structure from EOS Data Sets
Smith (Batelle PNW Lab) NACP, Projections of Land-Use Change and the Carbon-Cycle: Atmospheric Consequences
Walsh (UNC) LBA - Modeling the Scale Dependent Drivers of LCLU Dynamics in Northeastern Ecuador: Simulating Patterns of Landscape Change and Assessing their Cause and Consequence through Multi-Level Models and Cellular Automata
Wolfe (NASA GSFC) Improvements in MODIS Land and Atmosphere data access for North American Carbon Project Scientists

Posters by New Investigators

Brown de Colstoun (NASA GSFC) Consequences of Land Cover/Use Changes on Two National Parks in the Upper Delaware River Basin
Cochrane (SDSU) The Synergism of Fire, Forest Fragmentation and Selective Logging in the Brazilian Amazon
French (Altarum Institute) Assessment of Biomass Consumption Variability in Forest Fires Using Satellite Remote Sensing
Messina (MSU) Simulating the Effects of "Plan Colombia" on Land Use and Land Cover in the Ecuadorian Amazon: A Complex Systems Approach

Posters by NASA Graduate Fellows

Liu, D. (UC Berkeley) Spatio-temporal Mapping and Modeling of Forest Disease Spread Using Multi-temporal Remote Sensing Imagery
Loboda (UMd) Impact of Climate and Land Use Change on Wildland Fire Frequency and the Amur Tiger
McCarty (UMd) Seasonal and Interannual Variability of Greenhouse Gas Emissions from Crop Residue Burning in the Contiguous United States
Mena (UNC) Land Use Land Cover Trajectories in the Northern Ecuadorian Amazon: Drivers, Feedbacks, Uncertainties, and Spatial Simulations
Morton (UMd) Savannization of a Tropical Forest Frontier: Carbon Consequences of Climate and Anthropogenic Fire from a Height-Structured Ecosystem Model
Schroeder (UMd) Towards an Integrated System of Systems for Vegetation Fire Monitoring
Shrestha (UGA) Smallholder's Land Use Strategies and Land Cover Change in the Nepal Himalaya: Integrating Household and Community Data with Remote Sensing Applications
Stickler (UF) Alternative Landscapes Along the Amazon's Frontier: Simulating Future Land Use and Carbon Dynamics in the Xingu River Headwaters Region
Wheeler (Carnegie Institute) Changes in Carbon Dynamics Following Woody Encroachment in the Southwest U.S.: Integrating Field, Remote Sensing and Modeling Approaches
Xiao, J. (UNC) Carbon Sink Due to Woody Encroachment in Non-Forest Areas in the Western U.S. and Impacts of Fire and Climate