

The 15th Annual LCLUC Science Team Meeting

The Marriott Inn and Conference Center at the University of Maryland University College
3501 University Blvd, East · Adelphi (Hyattsville), Maryland 20783 USA
March 28-30th 2011

Day 1. Monday 28th March

Session 1. Introduction

- 9:00 Welcome and Current Program Status - **Garik Gutman**, NASA Headquarters
- 9:30 IGBP/IHDP LUCC: The Origins of the LCLUC Program – **Dave Skole**, Michigan State University
- 9:50 Summary of LCLUC Program Achievements – **Chris Justice**, University of Maryland
- 10:10 Current Status of the Global Land Project – **Anette Reenberg**, University of Copenhagen

Morning Coffee Break 10.30 – 11.00 (put up posters)

Session 2. Reviews on State of the LCLUC Science

20 minute presentations followed by ten minute discussions

- 11:00 Land Use and Sustainability – **Billie Turner**, Arizona State University
- 11:30 The Impacts of LCLUC Change: Hydrology **Alexander Shiklomanov**, University of New Hampshire
- 12:00 Drivers of Land Use Change- **Ruth DeFries**, Columbia University

Lunch Break 12.30– 2.00

Evolution and Priorities for NASA's LCLUC Program - **Tony Janetos**, Joint Global Change Research Institute

Group Photograph 1:45

Session 2 continued

- 2:00 Modeling Processes and Projections of LU Change– **Dan Brown**, University of Michigan
- 2:30 Towards Integrated Modeling of LU Change – **George Hurtt**, University of Maryland
- 3:00 The Impacts of LCLUC Change: Energy Balance and Climate – **Dev Niyogi**, Purdue University

Afternoon Coffee Break 3.30 – 4.00

Session 3. Panel on the Future Directions for Land Cover and Land Use Research

Panel Members:

Ruth DeFries

Columbia University

Emilio Moran

Indiana University

Anette Reenberg

University of Copenhagen

Dave Skole

Michigan State University

Robert Kaufman

Boston University

Richard Moss

Pacific Northwest National Laboratory

Question and Answers (Moderator: Chris Justice)

6.00 - 8.00 Celebratory Reception and Poster Session (Cash Bar)

Day 2. Tuesday 29th March

Session 4. New Investigator Program and NASA Earth Science Students Fellowships Program: LCLUC Research Results

- 9:00 Introduction, **Garik Gutman**
- 9:15 The NASA-MSU Program, **Jack Liu**
- 9:30 Satellite-Derived Anthropogenic Land Use/Land Cover Changes: Integrating Detection, Modeling and Educational Approaches. **Giorgos Mountrakis** (NIP 2007 - State University of New York)
- 9:45 Agricultural Applications Of Multi-Year Remote Sensing: A Research And Education Program **David Lobell** (NIP 2007 - Lawrence Livermore National Laboratory)
- 10:00 EA spatially-explicit land use change model exploring impacts of oil palm expansion on C flux in Ketapang District, Indonesian Borneo. **Kimberly Carlson** (NESSF 2008 - Yale University)
- 10:15 Discussion

Morning Coffee Break 10.30 – 10.45

Session 5. LCLUC 2nd Year Preliminary Science Results (10.45 – 12.30) 6 X 15 mins

- 10:45 Understanding and Predicting the Impact of Climate Variability and Climate Change on Land Use and Land Cover Change via Socio-Economic Institutions in Southern Africa – **Jane Southworth**, University of Florida
- 11:00 Assimilation of Tower and Satellite-Based Methane Observations for Improved Estimation of Methane Fluxes over Northern Eurasia – **Dennis Lettenmaier**, University of Washington
- 11:15 Modeling Strategies for Adaptation to Linked Climate and Land Use Change in the United States – **Cristina Milesi**, CSU Monterey Bay/ NASA Ames
- 11:30 China's Urbanization and Its Sustainability under Future Climate Change – **Peilei Fan and Joseph Messina**, Michigan State University
- 11:45 Changes of Land Cover and Land Use and Greenhouse Gas Emissions in Northern Eurasia: Impacts on Human Adaptation and Quality of Life at Regional and Global Scales – **Qianlai Zhuang**, Purdue University

Session 6. LCLUC: International Programs

- 12:00 Land Use Land Cover Research Highlights from the MAIRS and NEESPI Science Programs – **Jianguo Qi**, Michigan State University
- 12:15 MEGAPOLI project– **Alexander Baklanov**, Danish Meteorological Institute
- 12:30 Land-Use and Land-Cover Changes in Temperate Forests of European Russia: The Past, the Current, and the Future – **Mutlu Ozdogan**, University of Wisconsin-Madison

Lunch and Research Posters 12.45 – 2.00

Session 7. Land Cover Mapping and Change Monitoring: Science Review

- 2:00 A retrospective and future directions for Land Cover and Change Mapping – **John Townshend**, University of Maryland
- 2:20 National-scale mapping of land cover and change with Landsat data – **Matt Hansen**, South Dakota State University
- 2:35 Towards Developing Annual Records of Forest Change History Using Landsat Observations – **Chengquan Huang**, University of Maryland
- 2:50 Recent Highlights of the Making Earth System Data Records for Use in Research Environments (MEaSUREs) Web-enabled Landsat data (WELD) Project – **David Roy**, South Dakota State University
- 3:05 Developing Land Cover Classification Products in Monsoon Asia Over the Period of 2004-2007 Through Integration of Landsat and ALOS/PALSAR Images - **Xiangming Xiao**, University of Oklahoma

Coffee Break 3.20 – 3.45

Session 8. LCLUC Tools and Data Products

- 3:45 The Chinese Data Accessibility Project – **Shunlin Liang**, University of Maryland
- 4:00 GLS Status and Plans – **Jeff Masek**, NASA
- 4:15 SCANEX GLS Contribution and Future Activities – **Vladimir Gershenzon**, SCANEX
- 4:30 LDCM and Ground Segment Status- **Jim Irons**, NASA GSFC
- 4:50 LDCM and Sentinel-2 synergy and US GEO Global 30m Landcover initiative – **Curtis Woodcock**, Boston University
- 5:10 Google Earth Engine- **Noel Gorelick**, Google

(Posters to be taken down end of Day 2)

- 6:30 DC Field trip- History and Geography of the Washington DC Metropolitan Area - **Mila Zlatic**
Includes stops at the Tidal Basin to view the Cherry Blossoms, and Dupont Circle.
Bus returns to UMUC Conference center around 11:30pm. Sign up at registration table required.

Day 3. Wednesday 30th (9-12.30)

Session 9. Final Reports of LCLUC Research Projects: Significant Results (9.00 – 10.40)

- 9:00 The Expansion of Rubber and its Implications for Water and Carbon Dynamics in Montane Mainland Southeast Asia: Final Results – **Jeff Fox**, East-West Center, Hawaii
- 9:20 Land Use - Ecosystem - Climate Interactions in Monsoon Asia – **Hanqin Tian**, Auburn University
- 9:40 Impact of Rapid Land-Use Change in the Northern Great Plains: Integrated Modeling of Land-Use Patterns, Biophysical Responses, Sustainability, and Economic and Environmental Consequences – **Shuguang Leo Liu**, USGS EROS
- 10:00 18 years of collaborative fire research in Siberia: accomplishments and perspectives – **Sue Conard**, USDA Forest Service

Coffee Break 10.20 – 11.00

Session 10. Meeting Summary and Program Directions

- 11:11 Meeting Summary – Program Scientist, Chris Justice
- 11:15 Program Directions and Next Steps – Program Manager, Garik Gutman
- 11:30 Question and Answer Session

END OF MEETING

Lunch 12.00 – 1.00
