NASA LCLUC Spring Science Team Meeting 2014 -(Focus-Urban LCLUC)

Dates: April 23-25 2014

Location: Hilton Washington DC/Rockville Hotel & Executive Meeting Center
1750 Rockville Pike, Rockville, Maryland, USA 20852-1699, Tel: +1-301-468-1100
http://www3.hilton.com/en/hotels/maryland/hilton-washington-dc-rockville-hotel-and-executive-meeting-ctr-IADMRHF/index.html

Day 1 -April 23

Session 1:	**Introduction Session**
9:00 – 9:20	Welcome and Program Status – **Garik Gutman** (NASA HQ)
9:20 – 9:45	Objectives of the Meeting and Agenda – **Chris Justice**
9:45-10:00	HQ Earth Science update and the role of the LCLUC program - **Jack Kaye** (NASA HQ)
Session 2:	**LCLUC Urban studies**
10:00-10:20	Urban Cluster Development in Asia: An Overview– **Karen Seto** *(Yale U.)*
10:25-10:45	Overview of the Urbanization in China studies – Ann Marie Schneider *(U. Wisconsin-Madison) and* **Peilei Fan** *(Michigan State U.)*
10:45–11:00	***Break***
11:00–11:20	Mapping of Urban Expansion Using Multi-Decadal Landsat and Nightlights Data over North America - **Cristina Milesi** *(California State U., Monterey/NASA Ames)*
11:25–11:45	Using Landsat Global Land Survey Data to Measure and Monitor Worldwide Urbanization. – **Eric Brown de Colstoun** *(NASA GSFC)*
11:45-12:05	Understanding and Simulating Global Urban Expansion in the Context of Climate Change - **Yuyu Zhou** *(Joint Global Change Research Institute)*
12:10-12:35	Increased accessibility, landscape changes, rural transformations, and urbanization: Impacts of the east-west economic corridor from Da Nang, Vietnam, to Khon Kaen, Thailand - **Stephen Leisz** *(Colorado State U.)*
12:35– 12:45	***Group Photo***
12:45 – 1: 45	***Lunch***
1:45–2:05	Coastal Funnels: Upstream and coastal land cover/land use change and impacts on highly urbanized river delta systems-**Charles Vorosmarty** *(City College of New York)*
Session 3:	**Invited talks on International Programmatic Activities**
2:10-2:30	FAO GHG Emission Estimates –Integrating national statistics with geospatial information– **Francesco N. Tubiello** *(FAO)*
2:30-2:50	GOFC-GOLD: Future Directions for International Cooperation and Coordination of Land Earth Observations- **Tony Janetos (Boston U)**
2:50-3:10	Overview on the key findings of the IPCC WGIII report – **Karen Seto** *(Yale U.)*
3:15-4:00	***Break***
4:00 – 4:45	Discussion and summary: progress in urban monitoring worldwide and Future Directions
Session 4:	**Poster Session I**
4:45 – 5:30	**LCLUC-2013 rapid (1-min) introductions to posters**
5:30 – 7:30	**Poster viewing and reception:**

End of Day 1

Day 2-April 24

Session 5: Programmatic Perspectives and Initiatives

9:00-9:20	A report on the NRC Report on Land Use Modeling- **Dan Brown** (U Michigan*)*
9:25-9:40	Landsat-8 Update and collaboration with Sentinel-2 Program – **Jeff Masek** *(NASA GSFC)*
9:45-10:00	NASA-MAIRS Research Update **– Jiaguo Qi** *(Michigan State U)*
10:05-10:20	NASA-NEESPI Research Update **– Pasha Groisman** *(NOAA/UCAR)*
10:25–10:40	GOFC-GOLD Land Cover Office in Europe: priorities and plans-**Brice Mora**, *(GOFC-GOLD)*
10:45-11.10	***Break***
11.15-11:35	GOFC-GOLD Fire Office Activities-**Krishna Vadrevu**, (*UMD)*
11:40-12:05	Summary of the GOFC-GOLD East European (SCERIN) network activities - **Jana Albrechtová** *(Charles University, Prague)*
12:05-12:20	Summary of the GOFC-GOLD Central Asia (CARIN) network activities – **Jiaguo Qi** *(Michigan State U.)*
12:20-1:40	***Lunch***
1:40-2:00	Summary Report from the Berlin LCLUC-EARSEL meeting-**Chris Justice**, (UMD)
2:05- 2:25	Update on South Asia Research Initiative (SARI) - **Rama Nemani, (**NASA-AMES**)** and **Krishna Vadrevu** (UMD)
2:30-3:10	Discussion of initiatives and strengthening cooperation
3:10-3:30	***Break***

Session 6: LCLUC Synthesis Presentations

3:30-3:50	LCLUC Synthesis: Forested Land-Cover and Land-Use Change Across the Russian Far East and Central Siberia Under the Combined Drivers Of Climate and Socio-Economic Transformation - Kathleen Bergen (U. Michigan) *presented by* **Tatiana Laboda** (UMD)
3:55-4:15	Synthesis of Studies on Institutional Change and LCLUC Effects on Carbon, Biodiversity, and Agriculture after the Collapse of the Soviet Union - **Volker Radeloff** (U. Wisconsin, Madison)

Session 7: Poster Session II

4:20 – 5:00	**LCLUC-2013 rapid (1-min) introductions to posters**
5:00 - 5:30	**Poster viewing**

End of Day 2

Day 3. April 25

Session 8:	**IDS Urban studies (Environmental Impacts)**
9:00-9:20	Mega Urban Changes and Impacts in the Decade of the 2000s-**Son Nghiem,** *(JPL)*
9:25-9:45	Understanding Impacts of Desert Urbanization on Climate and Surrounding Environments to Foster Sustainable Cities Using Remote Sensing and Numerical Modeling - **Soe Myint,** *(Arizona State U)*
9:50-10:10	The Urban Transition in Ghana and Its Relation to Land Cover and Land Use Change through Analysis of Multi-Scale and Multi-Temporal Satellite Image Data - **Douglas Stow,** *(San Diego State U)*
10:15-10:35	Storms, Forms, and Complexity of the Urban Canopy: How Land Use, Settlement Patterns, and the Shapes of Cities Influence Severe Weather Storms, Forms, and Complexity of the Urban Canopy – **Geoff Henebry** *(South Dakota State U.)*
10:40-11:00	***Break***
11:00-11:20	4-D Modeling of the Regional Carbon Cycle in and Around Urban Environments: An Interdisciplinary Study to Advance Observational and Modeling Foundations- Mark Friedl, *(Boston U) presented by* **Lucy Hutyra,** *(Boston U)*
11:25-11:45	Combining Satellite Data and Models to Assess the Impacts of Urbanization on the Continental United States Surface Climate. - **Lahouari Bounoua,** (NASA GSFC)
Session 9:	**Meeting Wrap-Up Session**
11:50-12:10	Facilitated Q &A and discussion on the LCLUC Program – **Chris Justice** (UMD)
12:10-12:30	Meeting Summary and Concluding Program Remarks – **Garik Gutman** (NASA HQ)

End of Meeting

Posters Presented at the Meeting

Poster Number	Poster Title	Presenter
1	Monitoring peri-urbanization in the greater Ho Chi Minh City metropolitan area	Kontgis, Caitlin
2	The Land Cover Continuum; Multi-sensor Characterization of Human-Modified Landscape	Small, Christopher
3	Understanding the Effect of Policy on Urban Growth: Cellular Automata Modeling Approach	Chaudhuri, Gargi
4	UMd advancement of crop-type area estimates - soybeans	King, LeeAnn
5	Monitoring Land Cover Through Big Data: Finding Buried Treasure in Landsat Data	Zhu, Zhe
6	GOFC-GOLD EFFORTS IN SUPPORT OF GLOBAL LAND COVER MAPPING ACTIVITIES	Mora, Brice
7	Remote sensing estimates of stand-replacement fires in Russia, 2002-2011	Krylov, Alexander
8	Exposure of US National Parks to Land Use and Climate Change 1900-2100	Hansen, Andrew
9	Are protected areas effectively protecting forests?	Song, Xiao-Peng
10	DigitalGlobe Data Available to NASA LCLUC Scientists	Neigh, Chris
11	The Global Forest Cover Change Project: Global, Landsat-based records of forest cover and change from 1975-2005	Sexton, Joseph
12	Training Data Development for Mapping Global Impervious Surfaces Using Landsat Data	Phillips, Jackie
13	Effects of seasonality and land cover type on middle infrared radiance of urbanized areas	Krehbiel, Cole
14	Urban/Non-urban Mask using Object-Based Texture Classification for Mapping Global Impervious Surface	Wang, Panshi
15	Application of fuzzy logic-based approach to the remote sensing	Dara, Andrey
16	Urban Impervious Change Mapping Using GLS 2000 and 2010 Data: Case Studies in Europe and North America	Ling, Pui-Yu
17	Cropping Frequency, Expansion, and Abandonment in Mato Grosso, Brazil Had Selective Land Characteristics	Spera, Stephanie
18	HSegLearn – A Tool for Computer-Assisted Ground Reference Data Development	Tilton, James
19	Quantifying Cropland Loss to Urban Growth in China using MODIS Time Series and Nighttime Lights Data	Huang, Xiaoman
20	GLS-IMP: Global Impervious Cover From Landsat Data	Brown de Colstoun, Eric
21	Linking perceptions of well-being to land cover change: Lessons from the Great Limpopo Transfrontier Park, Mozambique	Loboda, Tatiana
22	Hyperspectral data as a tool for assessment of temporal changes in Norway spruce physiological status in the mountaineous region affected by long-term acidic deposition.	Albrechtova, Jana
23	A mixed-methods analysis of population, health and land cover/land use change in Burkina Faso	Grace, Kathryn
24	Prototyping global industrial forest mapping, a Landsat spatio-temporal approach	Boschetti, Luigi
25	A synthesis of remote-sensing studies, ground observations and modeling to understand the social-ecological consequences of climate change and resource development on the Yamal Peninsula, Russia, and relevance to the circumpolar Arctic	Epstein, Howard

26	Estimating fractional land cover in the central Kalahari: The impact of vegetation morphology and sensor across three spatial scales	Mishra, Niti
27	Understanding the ecological functioning of wetlands and the delivery of water quality services at the landscape scale: A process-based modeling approach	Lee, Sangchul
28	Water Rights, Climate Change, and Agricultural Land Use in the Snake River Basin	Cobourn, Kelly
29	Quantification of North Carolina's forest disturbance and timber production using time series Landsat observations	Ling, Pui-Yu
30	Land Cover Change Detection in Urban Siberia: Arctic Application of Landsat Dense Time Stacks using Decision Trees	Nyland, Kelsey
31	The role of environmental, socioeconomic, institutional, and land-cover/ land-use change factors to explain the pattern and drivers of anthropogenic fires in post-Soviet Eastern Europe: a case study comparison of Belarus, European Russia, and Lithuania	McCarty, Jesscia
32	Paring Landsat and Corona Data for Mapping Forest Cover Change from 1960s to 2000s: Case studies in Eastern US and Brazil	Song, Danxia
33	Urban cluster development and agricultural land loss in China and India: A multi-scale and multi-sensor analysis	Seto, Karen
34	Land Management Impacts on Water Quality in New Zealand across Political Boundaries	Julian, Jason
35	Lidar Remote Sensing of Vertical Foliage Profile (VFP) and Leaf Area Index (LAI)	Tang, Hao
36	Global Landsat surface reflectance products for 2010 validated using near simultaneous MODIS observations	Feng, Min
37	A Spatial-Temporal Analysis of Wetland Loss and Vulnerability on the Delmarva Peninsula: 30 Years of Impact from Physical and Anthropogenic Drivers	STUBBS, QUENTIN
38	Spectroscopic analysis of green, desiccated and dead tamarisk canopies	Meng, Ran
39	Regional wetland inundation mapping and change monitoring using Landsat and airborne LiDAR data	Jin, Huiran
40	Enhanced Detection of Inundation Below the Forest Canopy Using LiDAR Intensity	Lang, Megan
41	LCLUCs and their Effects on Carbon Dynamics in South and South East Asia: A Synthesis Study	Atul, Jain
42	Global Forest-Cover Change from 1990 to 2000 from Landsat	DoHyung, Kim
43	Urban Impervious Change Mapping Using GLS 2000 and 2010 Data: Example Results from Europe and North America	Chengquan, Huang
44	US Forest Disturbance Observed from Landsat from 1985-2010	Zhao, Feng