# 2019 NASA LCLUC Spring Science Team Meeting, Rockville, MD

## Meeting Date:

04/09/2019 to 04/11/2019

## Venue:

Hilton Washington DC / Rockville Hotel & Executive Meeting Ctr, Rockville MD 20852,U.S.A

# **Workshop Focus:**

This LCLUC Science Team meeting will consist of presentations from the LCLUC Science Team members funded for research on the LCLUC in Southeast Asia and Caucasus (ROSES 2016 Selections), LCLUC Synthesis projects and posters of recent results from other ongoing LCLUC research, including LCLUC-relevant projects under other NASA programs, such as Inter-Disciplinary Science and Carbon Cycle Programs, the Graduate Student Research and New Investigator Program. The third day will focus on the preliminary results from the 2017 Multi-Source Land Imaging (MuSLI) component of the LCLUC Program.

# DAY 1 (9 APRIL, TUESDAY)

8:00-8:45 Breakfast

#### 9:00-10:20 Session I. Introduction Session

9:00- 9:40 Welcome Address and LCLUC Program Update - Garik Gutman (NASA HQ)

9:40- 9:50 Meeting Agenda – Chris Justice (University of Maryland)

9:50-10:20 NASA Earth Science Update & the Role of the LCLUC Program – Jack Kaye (NASA HQ) Q & A

10:20-10:40 Break

# 10:40-12:00 Session II. Preliminary Results on Evaluating the Use of Fine Resolution Data for LCLUC Science (Rapid presentations)

10:40-10:50 Introduction – Garik Gutman

10:50-11:00 Krishna Vadrevu

11:00-11:10 Peter Potapov/Matt Hansen

11:10-11:20 Jessica McCarty

11:20-11:30 David Roy

11:30-11:40 Sergii Skakun

11:40-11:50 Petya Campbell

11:50-12:00 Steve Walsh

12:00-12:15 Group Picture

12:15-1:30 Lunch

#### 1:30-3:30 Session III. LCLUC in Southeast Asia

1:30-1:50 The Agrarian Transition in Mainland Southeast Asia: Changes in Rice Farming 1995 to 2018 – Jeff Fox (East-West Center, Hawaii)

1:50-2:10 Land-Cover/Land-Use Change in Southern Vietnam through the Lenses of Conflict, Religion, and Politics, 1980s to Present – Jessica McCarty (Miami U., Ohio)

2:10-2:30 Agricultural Land Use Change in Central and Northeast Thailand: Effects on Biomass Emissions, Soil Quality, and Rural Livelihoods – Prasad Bandaru (U. Maryland)

2:30-2:50 Land-Use Status, Change and Impacts in Vietnam/Cambodia/Laos-Son Nghiem (JPL)

2:50-3:10 Quantifying the Impact of Perverse Incentives from Indonesia Deforestation Moratorium, 2011 to 2016 – Julie Silva/Matt Hansen and Laixiang Sun/Matt Hansen (U. Maryland)

3:10-3:30 Assessing the Impacts of Dams on the Dynamic Interactions Among Distant Wetlands, Land Use, Rural Communities in the Lower Mekong River Basin – Jiaquo Qi (Michigan State U.)

3:30-4:00 Break

## 4:00- 7:30 Session IV. Poster Presentations

4:00 - 5:00 Lightning talks (1.5 minutes) Introducing Posters (New LCLUC and LCLUC-Related Projects from NESSF, NIP, IDS, and Carbon Programs

5:00 - 7:30 Poster Viewing and Reception (Sponsored by KBRwyle Government Services)

7:30 Adjourn

# DAY 2 (10 APRIL, WEDNESDAY)

8:00-8:45 Breakfast

## 9:00 -10:30 Session V. International Linkages and Capacity Building in Southeast Asia

9:00- 9:20 - SARI Progress, Gaps, and Priorities including Capacity Building Activities - Krishna Vadrevu (NASA MSFC)

9:20-9:40 - SERVIR, ARSET, and DEVELOP Capacity Building Activities - Nancy Searby (NASA HQ)

9:40-10:00 - Capacity Building Activities on LCLUC in Thailand - Pariwate Vernakovida (King Mongkutt's University, Thailand)

10:00-10:30 Open Discussion of the Projects and Future Directions in SARI and Capacity Building Activities in the Region – Chris Justice (UMD) and Krishna Vadrevu (NASA MSFC)

10:30-11:00 Break

# 11:00-12:20 Session VI. Synthesis Projects Over the Globe

11:00- 11:20 Synthesis of LCLUC for Island Systems – Steve Walsh (U. North Carolina)

11:20 – 11:40 Synthesis of Land-Use Transitions in the Southeast US – Valerie Thomas (Virginia Tech.)

11:40–12:00 Synthesis of Large-Scale Transactions as Drivers of Land-Cover Change in Sub-saharan Africa (Dan Brown, University of Washington)

12:00–12:20 The Global Land Rush: A Socio-Environmental Synthesis. (Nick Magliocca, University of Alabama)

12:20 - 1:30 Lunch

# 1:30- 3:30 Session VII. LCLUC in Northern Eurasia (Caucasus Projects Preliminary Results)

1:30- 1:50 Comprehensive Analysis of Thirty Years of Land Change in Georgia: Patterns, Carbon Dynamics and Drivers – Pontus Olofsson (Boston U.)

1:50- 2:10 Long-Term Degradation in Caucasus – Volker Radeloff (U.Wisconsin, Madison)

2:10- 2:30 Land Use and Political Instability as Predictors of Malaria in Caucasus – Kirsten de Beurs (U. Oklahoma)

2:30- 2:50 Management of Socio-Ecological Grazing Systems in the Altai Mountain Trans-boundary Zone - Giorgos Mountrakis (State U. NY)

2:50- 3:10 Progress in NEFI (formerly NEESPI) and the Role of LCLUC Caucasus Projects – Groisman (NOAA/NCIE)

3:10-3:30 Discussion on NEFI LCLUC Status and Future Directions - Garik Gutman (NASA)

3:30 - 4:00 Break

## 4:00- 5:00 Session VIII. MuSLI Preliminary Results (LCLUC-2017 Round)

4:00- 4:30 HLS, MuSLI and Landsat Science Team Status - Jeff Masek (NASA GSFC) and Chris Crawford (USGS)

4:30- 4:45 Canopy Chlorophyl Content for Assessing Vegetation Function and Productivity - Petya Campbell (UMBC/GSFC)

4:45- 5:00 Monitoring Abandoned Agriculture, Fallow Fields and Grasslands. Volker Radeloff (U. Wisc Madison)

5:00 Adjourn

## DAY 3 (11 APRIL, THURSDAY)

8:00-8:45 Breakfast

## 9:00 – 12:00 MuSLI Preliminary Results (LCLUC-2017 Round) Continued

9:00-9:15 Crop Yield Assessment and Mapping by a Combined use of Landsat, Sentinel 2 and Sentinel 1. - Sergii Skakun (U. Maryland).

9:15-9:30 Characterizing Field-Scale Water Use, Phenology in Agricultural Landscapes - Martha Anderson (USDA BARC).

9:30-9:45 A High Spatio-temporal Resolution Land Surface Temperature Product for Urban Environments. Glynn Hulley (JPL)

9:45-10:00 Progress on Moving from Prototyping Multi-Source Land Imaging of Circumpolar Albedo to Production (Type 1) - Crystal Schaaf (U. Mass.Boston)

## 10:00-10:30 Break

10:30-10:50 Progress on Moving Multi-Source Land Imaging of Seasonal Dynamics in Land Surface to Production (Type 1) – Doug Bolton / Mark Friedl (Boston U.)

10:50-11:10 Progress on Moving Multi-Source Land Imaging of Africa Burned Area to Production (Type 1) – David Roy (Michigan State University)

11:10-11:30 Integrating Landsat 7, 8 and Sentinel 2 Data in Improving Crop Type Identification and Area Estimation (Xiao-Peng Song / Matt Hansen, U. Maryland)

11:30-12:00 MuSLI/Landsat Program Future Direction: Discussion—Jeff Masek (NASA GSFC)

#### 12:00-1:00 Lunch

1:00 – 1:15 Strengthening linkages between the NASA LP-DAAC and LCLUC Program – Chris Doescher (LPDAAC, USGS)

1:15-2:00 LCLUC Program Future Directions: Discussion – Chris Justice (UMD)

2:00-2:30 Meeting Summary and Concluding Remarks – Garik Gutman (NASA HQ)

## 2:30 Adjourn

# **Poster Presentations:**

S.No	Name	Affiliation
1	Dr. Ioannis Manakos	Center for Research and Technology Hellas
2	Nishan Bhattarai ( Meha Jain)	University of Michigan
3	Joseph Sexton	University of Maryland
4	Peter Leimgruber	Smithsonian Conservation Biology Institute
5	Tatiana Loboda	University of Maryland
6	Karen Seto	Yale University
7	Sarika Mittra( Aditya Singh)	University of Wisconsin-Madison
8	Junmein Tang( Liping Di)	George Mason University
9	Randolph Wynne	Virginia Tech
10	Mihai Daniel Nita	Transylvania University of Brasov
11	Sarika Khanwilkar (Ruth DeFries)	Columbia University
12	Anamika Shreevastava (Suresh Rao)	Purdue University
13	Radost Stanimirova (Mark Friedl)	Boston University
14	Luigi Boschetti /Andrea Melchiorre	University of Idaho
15	Hao Tang	University of Maryland
16	Nancy French (Laura Bourgeau-Chavez)	Michigan Technological University
17	Maria Tzortziou	City University of New York
18	Keelin Haynes ( Jessica McCarty)	Miami University
19	Konrad Wessels	George Mason University
20	Ranjeet John (Jiquan Chen)	Oklahoma State University

21	Atsushi Tomita	Baruch College, the City University of New York
22	Eric Brown de Colstoun	NASA GCFC
23	Mei Yu	University of Puerto Rico, Rio Piedras
24	Ipsita Kumar (V Bandaru)	University of Maryland
25	Kenton Ross	NASA DEVELOP Program, NASA Langley Research Center
26	Son Nghiem	Jet Propulsion Laboratory, California Institute of Technology
27	Fred Stolle / Gregory Taff	World Resources Institute
28	Yuanwei Qin	University of Oklahoma
29	Chris Doescher	NASA LP DAAC (USGS)
30	Vincent G. Ambrosia	NASA Applied Science Program, ESD, NASA HQ

# Lodging, Parking & Transportation

- All attendees must make room reservations, cancellations, and substitutions through Globetrotter Travel Management. You may contact Globetrotter Monday-Friday 9:00am to 5:30pm EST at (800)-322-7032, please select option 2 to speak with an agent. Reference the LCLUC Spring ST Meeting room block to ensure you receive our special rate. Please do not book rooms through the hotel directly.
- Closest metro stop is the Twinbrook station.
- Parking provided for overnight guests and they can pick up parking passes at the registration desk each day.