# LCLUC Spring Science Team Meeting, 2017 12,13,14 April, 2017, Hilton, Rockville, Maryland

## **Meeting Objectives**

This LCLUC Science Team meeting **(2.0 days - 12th and 13th)** is in two parts: i) presentations from the LCLUC Science Team members funded for research on LCLUC in Mountainous Regions and Synthesis studies (ROSES 2013 Selections) and to review posters of recent results from other on going LCLUC research, ii) presentations on the Multi-source Land Imaging (MuSLI) projects.

The third day (14th) will be a **closed door** working-session for the MuSLI P.I.'s and their international partners.

#### **A**GENDA

### DAY 1 (12 APRIL, WEDNESDAY)

9:00- 9:50	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)
9:50-11:20	Session-II. LCLUC Invited Talks
9:50-10:20	NASA Earth Science Update & the Role of the LCLUC Program – Jack Kaye (NASA HQ) Q & A
10:20-10:50	Break
10:50 – 11:20	Invited Keynote: The Global Land Project Recent Developments – (Allison Thomson, GLP-SSC, Fieldtomarket)
11:20 - 11:45	Discussion on Future Directions for LCLUC Research – Chris Justice
11:45-12:00	Group Picture
12:00-1:30	Lunch
1:30-3:30	Session - III. LCLUC in Mountainous Regions
1:30-1:50	Land use change in the Caucasus Mountains due to ethnic differences, national policies, and armed conflicts – Volker Radeloff (U. Wisconsin, Madison)

1:50-2:10	Climatic and socioeconomic drivers of land-cover and land-use change in tropical Andean alpine wetlands – Dan Slayback (SSAI/GSFC)
2:10-2:30	Twenty-five years of community forestry: Mapping forest dynamics in the Middle Hills of Nepal– Jeff Fox (East-West Center, Hawaii)
2:30-2:50	Management of social-ecological grazing systems in the Altai Mountain transboundary zone - Giorgos Mountrakis (SUNY, Syracuse, NY)
2:50-3:10	Downscaling IPCC land use scenarios for global change adaptation planning in mountainous environment – Andrew Hansen (Montana State U.)
3:10-3:30	How Environmental Change in Central Asian Highlands Impacts High Elevation Communities – Geoff Henebry (South Dakota State U.)
3:30 – 4:00	Break
4:00 - 7:30	Session – IV. Posters and Reception
4:00-5:00	Rapid (2-minute) Introduction to Posters
5:00-7:30	Poster viewing and Reception (Sponsored by SGT)
7:30	Adjourn

## Day 2 (13 April, Thursday)

9:00 – 12:00 Session – V. LCLUC Regional Synthesis Presentations		
9:00-9:40	Invited Keynote: Structural transformation, increasing returns to scale and land use change - or a proposal for a unified land use theory –Volker Radeloff, U. Wisconsin.	
9:40-10:00	Synthesis of LCLUC studies on Urbanization – Karen Seto, Yale U.	
10:00-10:20	Large-Scale Land Transactions as Drivers of Land-Cover Change in Sub-Saharan Africa – Dan Brown, U. Michigan.	
10:20-10:40	Urbanization and Sustainability Under Global Change and Transitional Economies: Synthesis from Southeast, East and N. Asia (SENA) - Peilei Fan (Michigan State U.)	
10:40-11:00	Break	

11:00 – 2:30 Session – VI. Multi-Source Land Imaging Project Updates

11:00 -11:20	Operational algorithms and products for near real time maps of rice extent and rice crop growth stage using multi-source remote sensing - Bill Salas (Applied GeoSolutions, LL) /Thuy Le Toan (CESBIO, France)
11:20- 11:40	Towards Near Daily Monitoring of Inundated Areas over North America through Multi-Source Fusion of Optical and Radar Data – Chengquan Huang (U. Maryland) / Irena Creed (Western U., Canada)
11:40-12:00	Prototyping a Landsat-8 Sentinel-2 global burned area product - David Roy (South Dakota State U.)
12:00-1:30	Lunch
1:30-1:45	Multi-source imaging of time-series tree and water cover at continental to global scales - John Townshend (U. Maryland) /Christiane Schmullius (FS Jena U., Germany)
1:45-2:00	Multi-source imaging of infrastructure and urban growth using Landsat, Sentinel and SRTM - Chris Small (Columbia U.) / Thomas Esch (DLR, Germany)
2:00-2:15	Multisource Imaging of Seasonal Dynamics in Land Surface Phenology: A Fusion Approach Using Landsat and Sentinel-2 - Marc Friedl (Boston U.) / Eklundh/Griffith (Sweden)
2:15-2:30	Integrating Landsat 7, 8 and Sentinel 2 data in improving crop type identification and area estimation - Matt Hansen, (U. Maryland) / Pierre Defourny (U. Cat. Louvain)

### 2:30 - 3:0 - Break

3:20 -3:40

3:00 – 4:00 Session – VII. International Programs and Capacity Building: Focus on South/Southeast Asia	
3:00-3:20	South/Southeast Asia Research Initiative (SARI) - Krishna Vadrevu (NASA MSFC)

USAID and SERVIR activities in Southeast Asia - Speaker to be confirmed.

3:40-4:00 Future Asia activities in the SARI region – Jiaquo Qi (Michigan State U.)

3.40-4.00	Future Asia activities in the SAKI region – Jiaquo Qi (Michigan State 0.)
4:00 – 5:00	Session – VIII. Meeting Wrap-Up
4:00-4:20	Facilitated Q&A Discussion on the LCLUC Program – Chris Justice (U. Maryland)
4:20-5:00	Meeting Summary and Concluding Remarks – Garik Gutman (NASA HQ)
5:00	Adjourn

## DAY 3 (14 APRIL, FRIDAY)

# 8.45 – 12:30 Closed Door MuSLI Working Session: exchange of experience and ideas (working-session for the MuSLI P.I.'s and their international partners) Co Chairs – Garik Gutman ( NASA HQ) and Jeff Masek (NASA GSFC)

Presenters are asked to give short summary presentations and allow time for discussion

8.45:-9:05	Invited keynote: ESA Status of Sentinel Program and contribution to LCLUC/MuSLI component - Benjamin Koetz (ESA)
9:05-9:25	NASA MuSLI HLS update - Jeff Masek (NASA GSFC)
9:25-9.45	Atmospheric Correction Update and ACIX Status - Eric Vermote (NASA GSFC)
9.45-10:05	Sentinel 2 data accessibility and archive for US MuSLI investigators – John Dwyer (USGS EDC)
10:05-10:20	Break
10:20-10:35	Sentinel-2/Landsat-8 automated registration software tool development to support the terrestrial moderate spatial resolution user community – Lin Yan / David Roy, (SDSU)
10:35-10:55	Cloud masking, application to multi temporal mapping- Curtis Woodcock (Boston U.)
10:55 -11:20	Discussion
11:20 -11:40	Sentinel2Agri and CCI Landcover – Pierre Defourny (U. Louvain, Belgium)
11:40- 12:00	ISLAND2VA activities - Patrick Griffith (U. Humboldt, Germany)
12:00- 12:30	Summary and Action Items - Jeff Masek (NASA GSFC)
12:30	Adjourn
12:30-1:30	Lunch