

# LCLUC Spring Science Team Meeting

Chesapeake Salon C,  
Marriott Hotel and Conference Center, College Park, MD

## 22<sup>nd</sup> April, 2015    **Session I: Sentinel-2 Preparatory Studies\***

\*to be held in conjunction with the NASA Ecosystems Focus Area meeting

### Introduction and Overview

1:30 – 1:45    Welcome and Task Objectives - **Garik Gutman** (NASA HQ)

1:45 – 2:00    Sentinel-2 Overview and Agenda - **Jeff Masek** (NASA GSFC)

### Session 1: Radiometric characterization, cal/val and BRDF

2:00 – 2:15    Overview of Calibration Team Status and Planning for Sentinel-2 and MSI Performance - **Brian Markham** (NASA GSFC)

2:15 – 2:30    On-orbit calibration: Use of PICS sites, vicarious campaigns, and global averaging - **Dennis Helder** (South Dakota State U.) and **Jeff Czaplak-Myers** (U. Arizona)

2:30 – 2:45    DIRSIG simulations of SR & biophysical time series from Sentinel-2 + Landsat - **Aaron Gerace** (Rochester Institute of Technology)

### Session 2: Harmonizing Sentinel-2 and Landsat Reflectance Products

2:45 – 3:00    Overview and Processing Flow - **Martin Claverie** (U. Maryland) and **David Roy** (South Dakota State U.)

3:00 – 3:15    MSI and Landsat prototype atmospheric corrections - **Eric Vermote** (GSFC)

3:15 – 3:30    MSI and Landsat Cloud masking algorithms - **Curtis Woodcock** (Boston U.)

3:30 – 3:45    BRDF and Band Pass corrections - **Crystal Schaaf** (U. Massachusetts) and **Martin Claverie** (U. Maryland)

3:45 – 4:00    Regridding/Projection approach for MSI & merged products; compositing Approach - **David Roy** (South Dakota State U.)

4:00 – 4:15    *Break*

### Session 3: Higher-level processing and product generation

- 4:15 – 4:30 Potential higher level products for NASA Land Science - **Chris Justice** (U. Maryland) and **Curtis Woodcock** (Boston U.)
- 4:30 – 4:45 NEX system processing for Landsat-8 /Sentinel-2 data - **Jennifer Dungan** (NASA Ames) and **Sangram Ganguly** (NASA Ames)

### Discussion

- 4:45 – 5:15 Discussion of issues raised - **Jeff Masek** (NASA-GSFC) discussion lead

### Meeting Wrap-Up Session

- 5:15 - 5:30 Concluding Program Remarks - **Jeff Masek** (NASA-GSFC) and **Garik Gutman** (NASA HQ)
- 5:30 *End of Meeting*

## 23<sup>rd</sup> April 2015      Session II: Contribution of Remote Sensing to LCLUC Modeling and Scenarios

### Introduction and Overview

- 9:00 – 9:25 Welcome and Program Status – **Garik Gutman** (Program Manager, NASA HQ)
- 9:25 – 9:30 European Collaborations with NASA LCLUC Program and Current Priorities - **Ioannis Manakos** (Chairman of the EARSeL Special Interest Group on Land Use & Land Cover (EARSeL SIG LU/LC), Center for Research and Technology Hellas – Information Technologies Institute (CERTH-ITI), Greece)
- 9:30 – 9:45 Objectives of the Meeting and Agenda – **Chris Justice** (Program Scientist, U. Maryland)
- 9:45 – 10:00 The Role of Remote Sensing in LCLUC Future Scenarios - **Dan Brown** (U. Michigan)
- 10:00 – 10:15 Summary of the USGCRP workshop on LCLUC Scenarios - **Richard Moss** (PNNL Joint Global Research Institute, MD)

### Session II. Introduction to LCLUC Modeling and Scenarios in USA

- 10:15– 10:30 **Invited:** Modeling Strategies for Adaptation to Coupled Climate and Land Use Change – **Scott Goetz** (Woods Hole Research Center, MA)

10:30-10:45 Scenarios for Urban Expansion in the Context of Climate Change - **Yuyu Zhou** (PNNL, Joint Global Research Institute, MD)

10:45-11:00 Adaptation to Changing Water Resources in Western U.S. - **Kelly Cobourn** (Virginia Tech.)

11:00 – 11:30 *Break*

### Session III. New LCLUC Regional Programs

11:30-11:45 South Asia Regional Initiative (SARI) – **Krishna Vadrevu** (U. Maryland) and Rama Nemani (NASA AMES)

### Session IV. LCLUC Impacts in Northern Eurasia

11:45 – 12:00 **Invited:** Assessing Future Vulnerability and Adaptation to Changing Climate and Population Dynamics: A case study in Russia – **Kirsten De Beurs** (U. Oklahoma)

12:00 – 12:15 Environmental, Socioeconomic, Institutional Impacts on Fire - **Jessica McCarty** (Michigan Technological U.)

12:15-1:30 *Lunch*

### Session V. LCLUC Impacts in Asia and Pacific

1:30-1:45 Impacts of the EW Corridor on LCLUC in SE Asia - **Stephen Leisz** (Colorado State U.)

1:45–2:00 Land Management Impacts on Water Resources in New Zealand - **Jason Julian** (Texas State U.)

### Session VI. LCLUC Impacts in Africa and Latin America

2:00-2:15 **Invited:** Impacts of sugarcane and soybean expansion on future land use changes: Economic scenarios in Brazilian Cerrado region - **Michael Coe** (Woods Hole Research Center, MA)

2:15 – 2:30 Land Tenure, Property Rights, and LCLUC in Meso-America - **Kelly Jones** (Colorado State U.)

2:30-2:45 Agriculture and Human Health in a Context of Climate Change: Food Availability for Different Climate Scenarios in Africa – **Greg Husak** (U. California, Santa Barbara)

2:45- 3:00 Economic analysis of food security and poverty in Malawi - **Gillian Galford** (U. Vermont)

3:00 – 3:15 Effects of global governance on land use decisions in Sub-Saharan Africa  
- **Tatiana Loboda** (U. Maryland)

3:15-3:45 *Break*

**Session VII. Summary Discussion**

3:45- 4:15 Summary Discussion of the role of Remote Sensing in LCLUC modeling and developing future scenarios - **Dan Brown** (U. Michigan) – **Moderator**

**Session VIII. Meeting Wrap-Up Session**

4:15 – 4:45 Facilitated Q &A and discussion on the LCLUC Program – **Chris Justice** (U. Maryland)

4:45 – 5:15 Meeting Summary and Concluding Program Remarks – **Garik Gutman** (NASA HQ)

5:15 *End of Meeting*