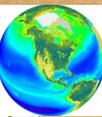


Day 1 Final Remarks



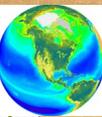
Selections



Sean Healey Africa New PI to LCLUC	US Forest Service	Sensor fusion using daily Planet imagery allows rapid deforestation monitoring in Madagascar
Volker Radeloff Global	U. Wisconsin	Global Hotspots of the Wildland-Urban Interface
Dave Skole Africa	Michigan State	Hotspot detection for monitoring new trends in carbon sequestration in systems of Trees Outside of Forests (TOF)
David Lutz South America New PI to LCLUC	Dartmouth College	Rapid Change from Alluvial Mining and Development in Madre de Dios, Peru : A Multi-Sensor Fusion Approach to Quantify Terrestrial and Aquatic Impacts and Test Policy Effectiveness
Alexandra Tyukavina Global New PI to LCLUC	U. Maryland	Multi-Resolution Quantification and Driver Assessment of Hot Spots of Global Forest Disturbance
Chris Neigh Africa	NASA GSFC	The Impact of Investment on Irrigated Rice, Dryland Agriculture and Afforestation in Senegal using SAR and Optical Time-Series Imagery in Data Fusion Approaches
Michael Keller South America New PI to LCLUC	US Forest Service @JPL	Quantifying agricultural expansion and tropical forest degradation in the Brazilian Arc of Deforestation: A multi-sensor, multi-scale approach



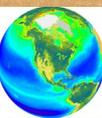
Recommended Selections (cont.)



Jody Vogeler Africa New PI to LCLUC	Colorado State U.	The last urban frontier: Assessing drivers of urbanization and tradeoffs among social and ecosystem services associated with LCLUC in Africa
David Roy Global	Michigan State U.	Where are the missing burned areas? Global hotspots of burned area - a multiresolution analysis
Marc Simard Global	JPL	Global Hotspots of Change in Mangrove Forests
Yufang Jin USA/California New PI to LCLUC	U. California, Davis	Multi-source Wildland Urban Interface Characterization Enhanced with Machine Learning: Dynamics and Hazard Assessment
Sergii Skakun, Ukraine/Poland	U. Maryland	High-Impact Hot Spots of Land Cover Land Use Change: Ukraine and Neighboring Countries
Nicholas Magliocca Central America New PI to LCLUC	U. Alabama	Making the Hidden Visible: Accelerated Land-Use Change and Degradation Caused by Narco-Trafficking In and Around Central America's Protected Areas



Data and Techniques

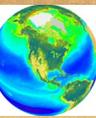


Data to be used:

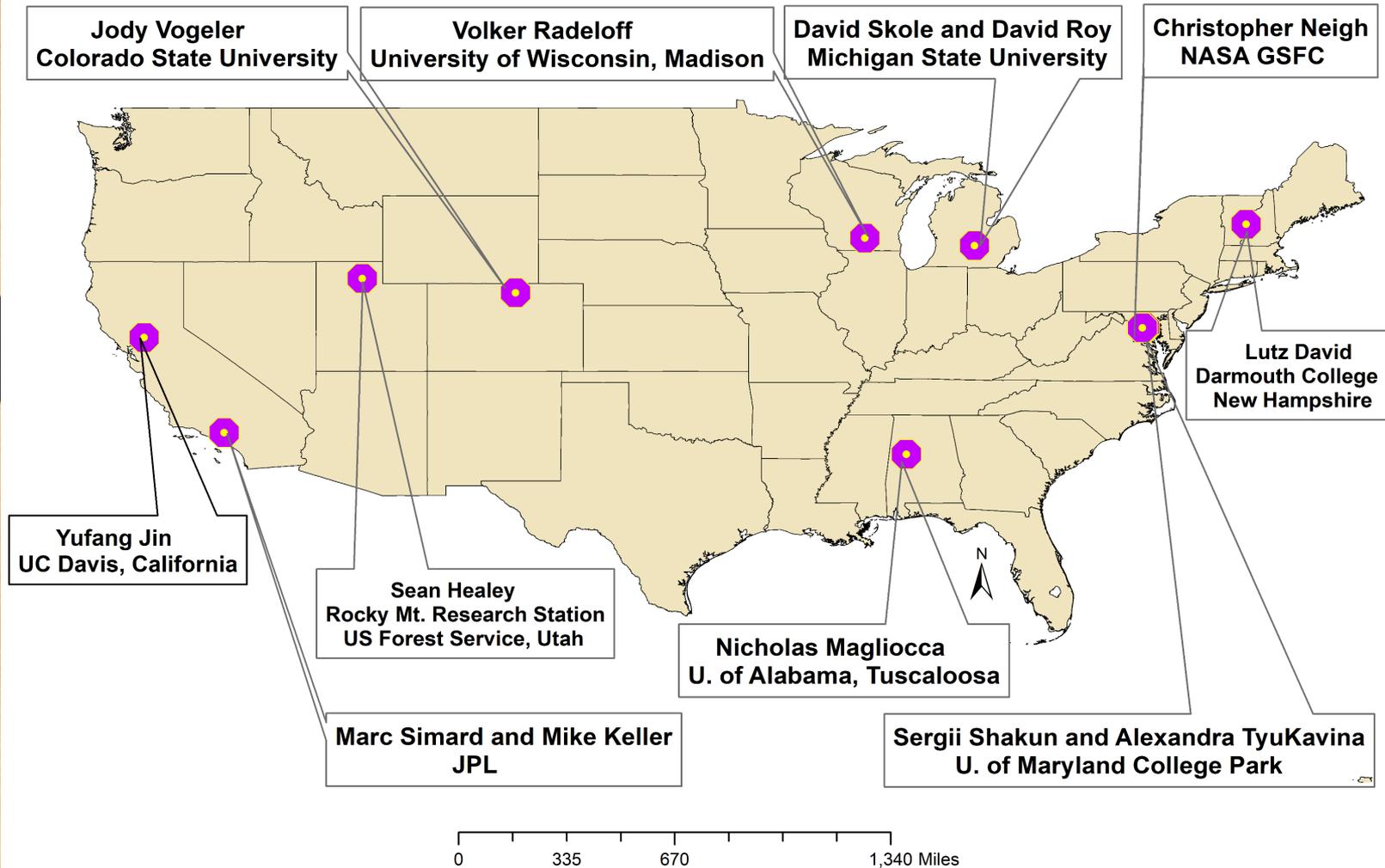
- Optical
 - Coarse and mid-resolution: MODIS, VIIRS, Landsat, Sentinel-2
 - Very High-Resolution data (PlanetScope, Digital Globe)
- Radars: Sentinel-1, SRTM, ICESAT, PALSAR
- Lidars: ICESAT-1, -2, GEDI
- Hyperspectral: PRISMA
- Airborne: UAV, LIDAR, NAIP aerial imagery

Techniques to be used:

- Spectral mixture analysis, time-series analysis, Semantic image segmentation, Support Vector Machines, Semi-supervised learning, Geographical Object-Based Image Analysis, Machine Learning, Dyna-CLUE model, Kalman filtering fusion, Neural Networks
 - Convolutional neural networks
 - Deep neural networks
 - Super resolution Generative Adversarial Networks (SRGAN)
 - Long short-term memory network (LSTM)

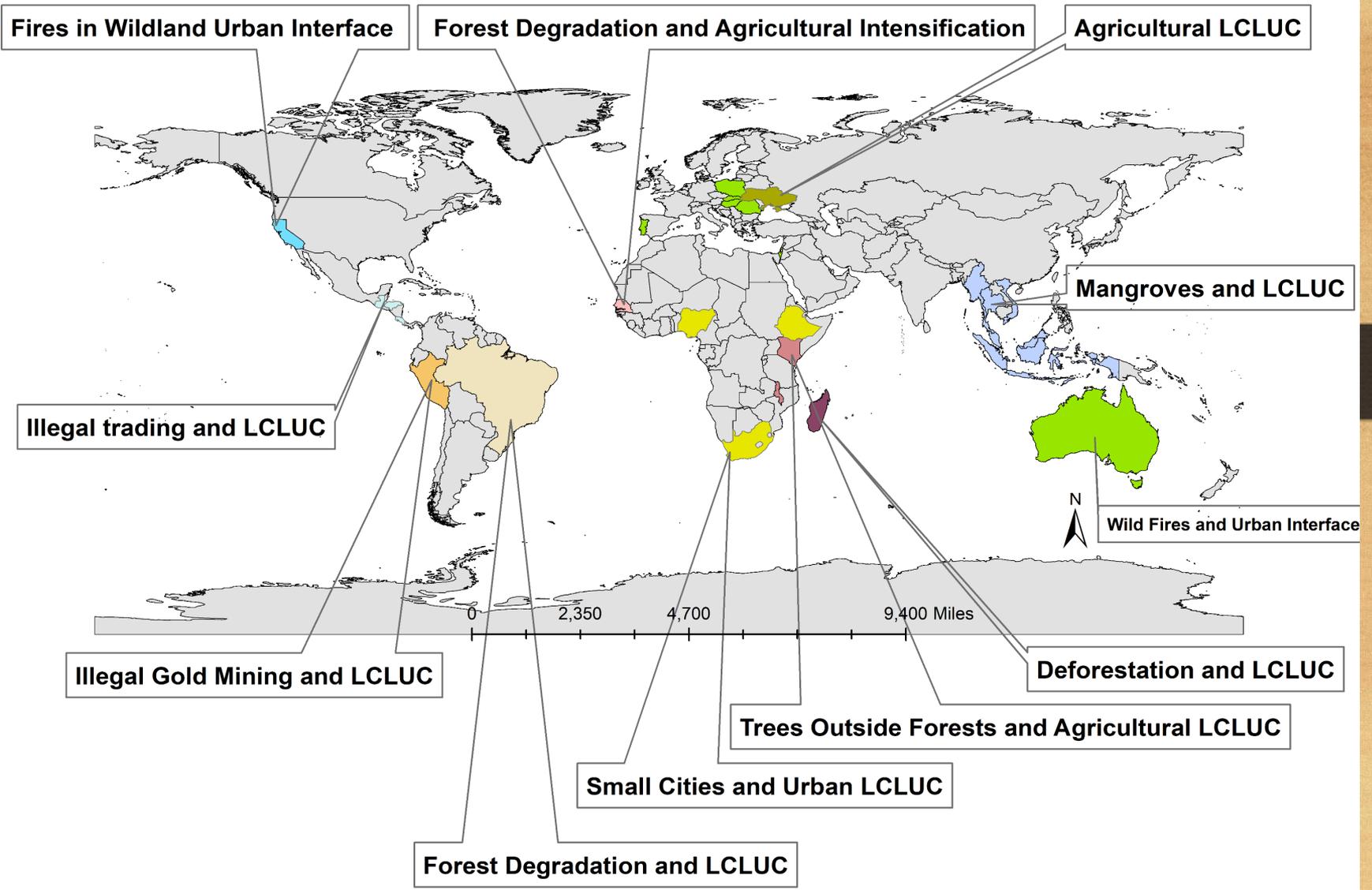
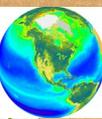


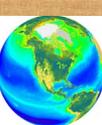
LCLUC-20 Selections: PI's Institutions





Global Distribution of Hotspots





- LCLUC website
- E-newsletters
- Facebook

Outreach

Kudos to Meghavi!

LCLUC Webinars series

- During 2014-2020 presentations on Urban, Urban-Ag transitions, Ag, last two years focus on SARI

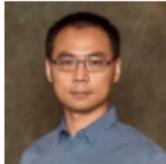


Presenter: Mark Cochrane, University of Maryland

[Land-Use Transitions in Indonesian Peatlands](#)

October 09, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

[Registration link](#)



Presenter: Lin Yan, Michigan State University

[Forced and Truncated Agrarian Transitions in Asia Through the Lens of Field Size Change](#)

October 02, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

[Registration link](#)



Presenter: Peter Potapov, University of Maryland

[Shifting Cultivation at a Crossroad: Drivers and Outcomes of Recent Land-Use Changes in Laos PDR](#)

September 17, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

[Webinar Recording](#)



Presenter: Pellei Fan, Michigan State University

[Divergent Local Responses to Globalization: Urbanization, Land Transition, and Environmental Changes in Southeast Asia](#)

September 4, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

[Webinar Recording](#)



Presenter: David Skole, Michigan State University

[New Transitions in Smallholder Agricultural Systems that Promote Increased Tree Cover Outside of Forests](#)

August 6, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

[Webinar Recording](#)



Presenter: Josh Gray, North Carolina State University

July 31st, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

[Sowtime: Climate Adaptive Agriculture in the Eastern Gangetic Plains](#)

[Webinar Recording](#)



Presenter: Naiara Pinto, NASA Jet Propulsion Laboratory

June 25th, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

Registration is closed. This event has already been held.

[Webinar Recording](#)



Presenter: Jessica McCarty, Miami University

[Land-Cover/Land-Use Change in Southern Vietnam Through the Lenses of Conflict, Religion, and Politics, 1980s to Present](#)

June 4th, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

Registration is closed. This event has already been held.

[Webinar Recording](#)



Presenter: Son Nghiem, NASA Jet Propulsion Laboratory

[Land Use Status, Change and Impacts in Vietnam, Cambodia and Laos](#)

May 28th, 2020, 11:00 AM Eastern Standard Time (New York, GMT-05:00)

Registration is closed. This event has already been held.

[Webinar Recording](#)



Presenter: Jeff Vincent, Nicholas School of the Environment Duke University

[Consequences of Changing Mangrove Forests in South Asia on the Provision of Global Ecosystem Goods and Services](#)

May 18th, 2020, 03:00 PM Eastern Standard Time (New York, GMT-05:00)

Registration is closed. This event has already been held.

[Webinar Recording](#)



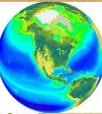
Presenter: Marc Simard, NASA Jet Propulsion Laboratory

[Mapping and Monitoring Mangrove Forests in Southeast Asia](#)

April 16th, 2020, 03:00 PM Eastern Standard Time (New York, GMT-05:00)

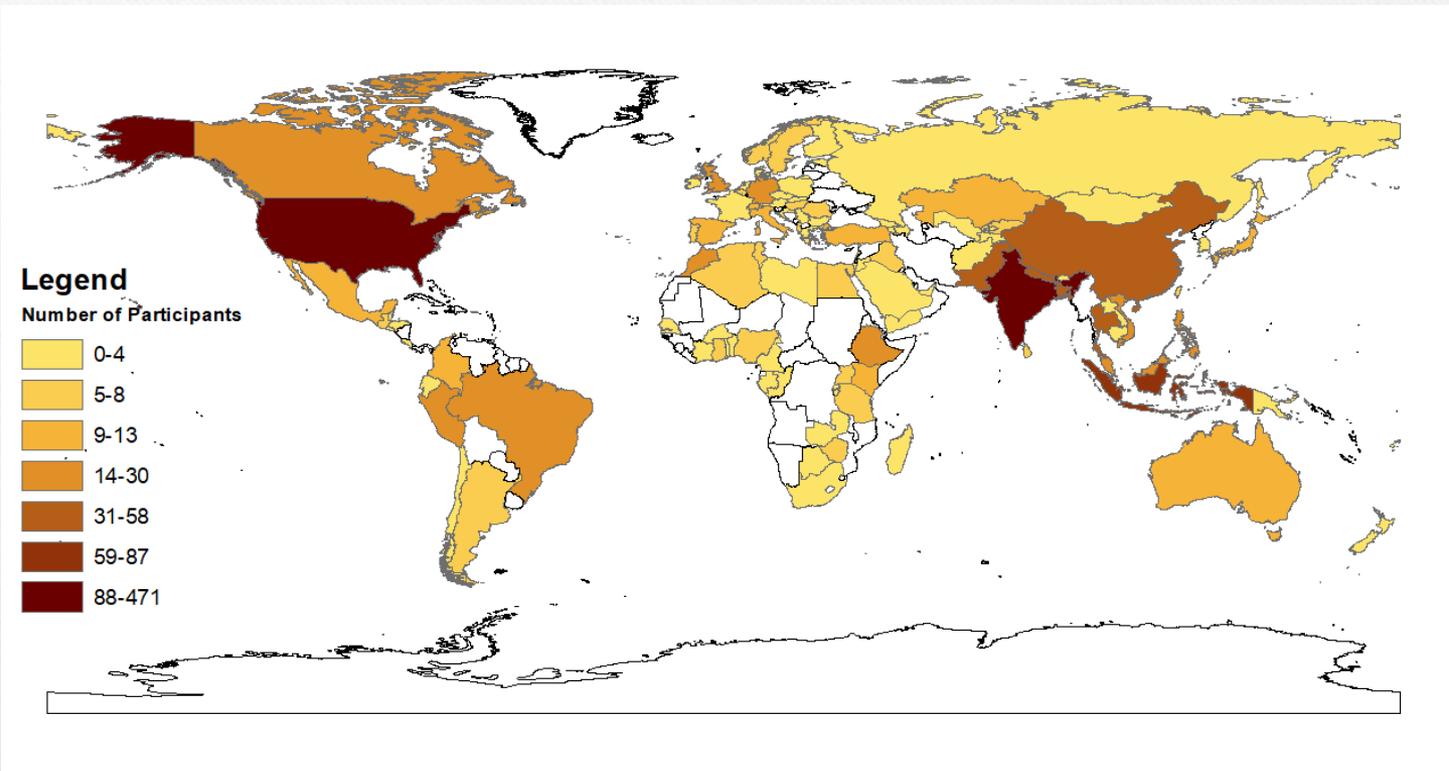
Registration is closed. This event has already been held.

[Webinar Recording](#)



NASA LCLUC SARI Webinar Statistics

- Total 21 SARI Webinars.
- Total 1845 individual participants from 117 country registered for the SARI webinar.
- Highest participation from US and India, followed by other Asian countries





Thanks go to

Organizers: C. J. and Co.



Mary



Jack



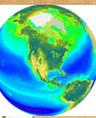
Indu



Meghavi



Deputy LCLUC Program
Manager
Krishna Vadrevu, NASA
MSFC



Thank you
Join us the next 2 days