

# Remote Sensing and Fluxes Upscaling for Real-world Impact

## Day 1: Tuesday, July 9

Pacific	Eastern	Agenda	Title
8:00	11:00	Welcome, workshop introduction	Your site is not so special, or is it? Scaling fluxes from the specific to the general and back again From the plot to the plane: NEON's integrated scaled design Harnessing Remote Sensing and Flux Measurements for Verified Carbon Standard and Agricultural Land Management Methodologies
Session 1 - site scale			
9:00	12:00 PM	Keynote: Ankur Desai (University of Wisconsin-Madison)	
9:20	12:20 PM	Science Talk: David Durden (NEON)	
9:30	12:30 PM	Impact Talk: Carolina Lisboa (Verra)	
9:40	12:40 PM	Q&A	
9:50	12:50 PM	Breakout Session 1	Scaling evergreen forest photosynthesis from the needle to the tower to space Bridge the link between flux towers and models to enable upscaling Foundation Models for Vegetation Growth and Carbon Sequestration
10:30	1:30 PM	BREAK	
Session 2 - regional/landscape			
11:00	2:00 PM	Keynote: Troy Magney (UC Davis)	
11:20	2:20 PM	Science Talk: Housen Chu (LBNL)	
11:30	2:30 PM	Impact Talk: Levente Klein (IBM)	
11:40	2:40 PM	Q&A	Reconciling Atmospheric Carbon and Water Fluxes: Integrated Top-Down and Bottom-Up Approaches with FLUXCOM-X and X-BASE Wetland CH <sub>4</sub> Emissions Upscaling by Causality Guided Machine Learning: from Regional to Global Scale Flux Estimation Solutions and Impacts in the Food and Beverage Sector
11:50	2:50 PM	Breakout Session 2	
12:30 PM	3:30 PM	Lunch and engagement with speakers	
Session 3 - global			
1:30 PM	4:30 PM	Keynote: Jacob Nelson & Samuel Upton (MPI BGC)	
1:50 PM	4:50 PM	Science Talk: Tammy (Kunxiaojia) Yuan (LBNL)	
2:00 PM	5:00 PM	Impact Talk: Robert Granat (CarbonSpace)	Beyond Boundaries: The Future of Land Surface Fluxes through Hyper-Resolution Remote Sensing across Space, Time, and Spectrum Linking Realms from Ground to Orbit: Matching Fluxes and States Across Scales Bridging the gap between science and social benefit: Eddy flux for measurement, reporting and verification of grassland carbon sequestration
2:10 PM	5:10 PM	Q&A	
2:20 PM	5:20 PM	Breakout Session 3	
3:00 PM	6:00 PM	BREAK	
Session 4 - integration			
3:30 PM	6:30 PM	Keynote: Youngryel Ryu (Seoul National University)	
3:50 PM	6:50 PM	Science Talk: Stefan Metzger (AtmoFacts)	Bridging the gap between science and social benefit: Eddy flux for measurement, reporting and verification of grassland carbon sequestration
4:00 PM	7:00 PM	Impact Talk: Kevin Tu (Kateri)	
4:10 PM	7:10 PM	Q&A	
4:20 PM	7:20 PM	Breakout Session 4	
5:00 PM	8:00 PM	Adjourn	

## Day 2: Wednesday July 10

Pacific	Eastern	Agenda	Facilitator
8:00	11:00	Arrival and tutorial setup	
9:00	12:00 PM	TOPIC 1: Hands-on tutorial: From site-scale...	Nicola Falco (LBNL), David Durden (NEON)
10:00	1:00 PM	BREAK	
10:15	1:15 PM	TOPIC 2: Hands-on tutorial: ... over regional-scale connectivity	David Durden (NEON), Stefan Metzger (CarbonDew)
11:15	2:15 PM	BREAK	
11:30	2:30 PM	TOPIC 3: Hands-on tutorial: ... to continental-scale connectivity	Paul Stoy (University of Wisconsin-Madison)
12:30 PM	3:30 PM	Lunch and presentation: tools for data discovery	Margaret Torn (LBNL), Rachel Hollowgrass (LBNL), Bridget Hass (NEON AOP)
1:30 PM	4:30 PM	Report back from Breakouts	Workshop Organizers
2:00 PM	5:00 PM	Future workshop topics discussion	Workshop Organizers
2:30 PM	5:30 PM	Workshop Summary	Workshop Organizers
3:00 PM	6:00 PM	Adjourn	