

Evapotranspiration Remote Sensing Workshop

February 10, 2016

UC Davis Conference Center (Ballroom B&C)

8:30am – 3:30pm



Agenda:

8:00 – 8:30am	Registration/Check-in
8:30 – 9:00am	Opening remarks on state needs
8:30 – 8:45am	CA Department of Water Resources (Rich Juricich)
8:45 – 9:00am	State Water Resources Control Board (Erik Ekdahl)
9:00 – 10:40am	Evapotranspiration (ET) Remote Sensing Algorithms
9:00 – 9:20am	METRIC and Its Application – Parameterization, Accuracy, Challenges and Successes (Richard Allen , University of Idaho)
9:20 – 9:40am	Mapping ET at High Spatial and Temporal Resolution Using Multi-sensor Data Fusion Techniques (Martha Anderson , USDA)
9:40 – 10:00am	Statewide Regional and Field Scale Evapotranspiration Mapping using MODIS and Landsat and Surface Energy Balance Systems (SEBS) (George Paul , Formation Environmental, LLC)
10:00 – 10:20am	Automated Approaches for Satellite Mapping of Evapotranspiration over Agricultural Land in California at the Field-Scale (Forrest Melton , NASA Ames)
10:20 – 10:40am	PT-JPL: Ecophysiological Constraints Downscale Priestly-Taylor Potential to Actual Evapotranspiration (Joshua Fisher , NASA JPL)
10:40 – 11:00am	Coffee Break

11:00 – 12:00pm	Other ET Approaches
11:00 – 11:15am	The California Irrigation Management Information System (CIMIS): Opportunities and Challenges (Bekele Temesgen , DWR)
11:15 – 11:30am	Cal-SIMETAW – A New Model for California Water Demands Planning (Morteza Orang , DWR)
11:30 – 11:45am	Estimating and Predicting ET and Meteorological Variables with WRF-ACASA: A Powerful, Flexible Downscaling System (Kyaw Tha Paw U , UC Davis)
11:45 – 12:00pm	Impacts of Evapotranspiration on Hydrology as an Ecosystem Service (Lorraine Flint , USGS)
12:00 – 1:00pm	Lunch
1:00 – 1:30pm	Case Studies
1:00 – 1:15pm	Examples of Remote Sensing of ET for Water Management in California (Byron Clerk , Davids Engineering, Inc)
1:15 – 1:30pm	Remotely Sensed Evapotranspiration Estimates and Crop Mapping within the Sacramento/San Joaquin Delta and Beyond (Joel Kimmelshue , LandIQ)
1:30 – 3:30pm	Discussion
1:30 – 2:10pm	Information and data needs for comprehensive water budget <i>Panel: Michael George (SWRCB), Jay Lund (UCD), Byron Clark (Davids Engineering)</i> <ul style="list-style-type: none"> - Cost-effective reporting and monitoring system - ET monitoring in SGMA framework
2:10 – 2:50pm	Challenges, barriers, and constraints <i>Panel: Richard Allen (U. Idaho), Erik Ekdahl (SWRCB), Alan Flint (USGS), Forrest Melton (NASA Ames)</i> <ul style="list-style-type: none"> - Lightning Talk: Comparison of Methods for Estimating Evapotranspiration in the Sacramento San Joaquin-Delta (Josue Medellin-Azuara, UC Davis) - Uncertainties, operational implementation, resource sharing - Linkage between natural ET and groundwater management in irrigated regions
2:50 – 3:30pm	Opportunities <i>Panel: Gary Darling (DWR), Ayse Kilic (UNL), Martha Anderson (USDA)</i> <ul style="list-style-type: none"> - Lightning Talk: The Google EEFlux Evapotranspiration Tool: METRIC in the fast lane (Ayse Kilic, University of Nevada-Lincoln) - Cloud platforms - Emerging technologies and multi-sensor data fusion: UAVs, Aerial imagery