

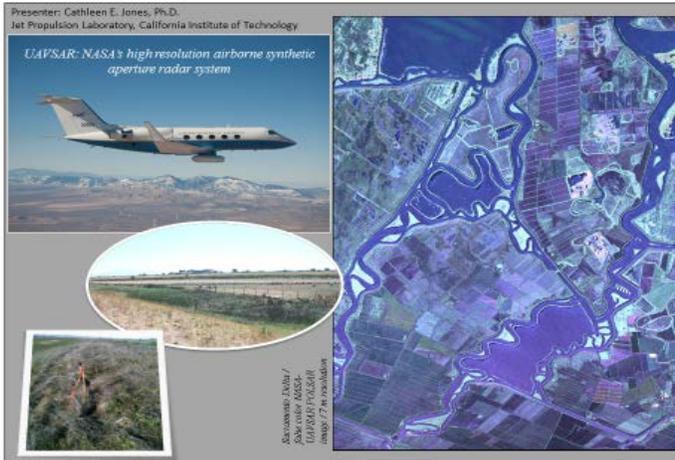


Delta Stewardship Council



The Delta Science Program, Ecosystem Restoration Program & Surface Water Ambient Monitoring Program Jointly Present a Brown Bag Seminar Series

Sacramento Delta Levees Radar-based monitoring from 41,000 feet



Dr. Cathleen Jones

**Jet Propulsion Laboratory, California
Institute of Technology**

**Wednesday, July 15, 2015
12:00 – 1:00 p.m.**

**Location: Byron Sher Auditorium
CAL/EPA Building, 1001 I Street
Sacramento, CA 95814**

HOW CAN WE DETECT LEVEE THREATS USING RADAR REMOTE SENSING?

The levees of the Sacramento-San Joaquin Delta serve a variety of critical functions, from maintaining California's primary water supply to protecting the diverse flora and fauna of a major estuary of the western United States. Monitoring and maintaining the levees in that area is an enormous undertaking, involving local, state, and federal resources. Currently, levee monitoring is done primarily through ground-level observations and instrumentation, which takes a lot of time and people, and cannot rapidly or frequently cover the nearly 1100 miles of levees in the area.

Radar remote sensing could provide a game-changing technology for determining levee health status rapidly and on a broad scale through the use of airborne and spaceborne radar instruments and Synthetic Aperture Radar Interferometry (InSAR). A pilot project to determine its feasibility using one of NASA's premier airborne science instruments, the UAVSAR synthetic aperture radar, has been undertaken in the Sacramento Delta, in collaboration with the California Department of Water Resources. This talk will present the status of the study and discuss the types of levee threats that can be determined from an aircraft flying at 41,000 feet above the Delta.

This work is supported by NASA, the Department of Homeland Security, and the California Department of Water Resources, and was carried out in part at the Jet Propulsion Laboratory, California Institute of Technology.

Contact: Jiro Ariyama at (916) 445-5398 or jiro.ariyama@deltacouncil.ca.gov
for WebEx access information or other questions.