

Delta Science Program Brown Bag Series Presents

Hydrodynamic Processes in the Delta: Some Things That Might be Important and Probably are Tricky to Model

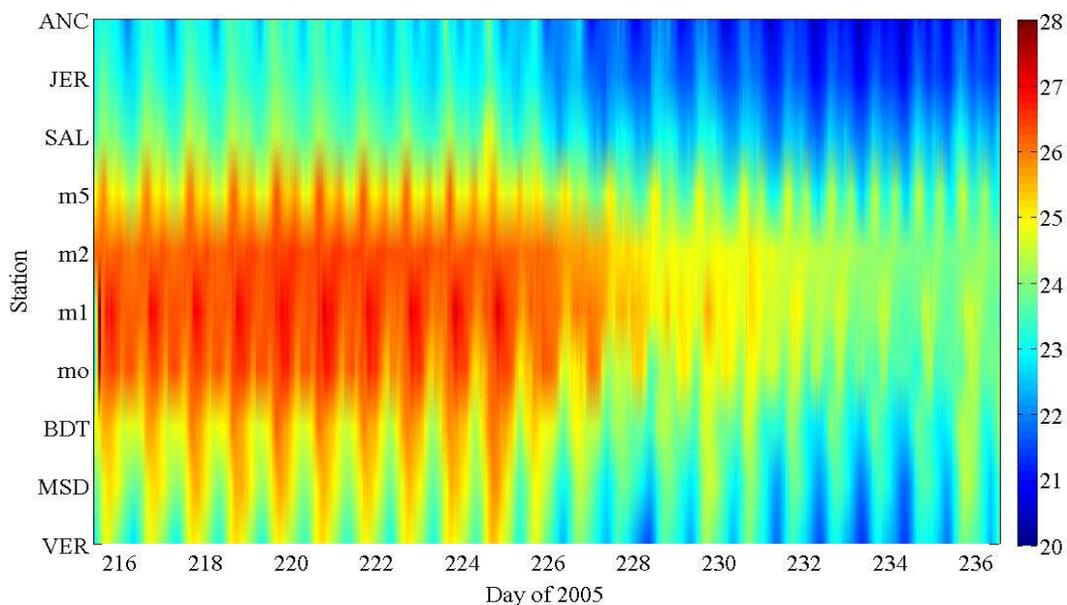
Stephen Monismith

Department of Civil and Environmental Engineering, Stanford University

Tuesday, Feb. 15, 2011, 12 noon – 1 p.m.

Cal-EPA Building, Conference Room 350

1001 "I" Street, Sacramento CA 95814



Temperature variability in the San Joaquin River – July/August 2005

Understanding the physics of the Sacramento-San Joaquin Delta is important for predicting how changes in geometry or management strategies will affect key ecological and water quality processes. Using work supported by CALFED, and carried out by Stanford researchers over the past decade as examples, this talk will address several aspects of the hydrodynamics of the Delta that may influence ecological and biogeochemical processes.

Stephen Monismith will discuss tidally variable bottom friction in Threemile Slough, longitudinal dispersion, stratification and turbulence in the San Joaquin River Deep Water Ship Channel, and the role of flow behavior at channel junctions. Monismith will also discuss recent modeling that has been done using a version of the California Department of Water Resources' Particle Tracking Model that has been altered to allow different kinds of particle behavior at junctions.