

**Interferometric Observations of California's Central Valley
Using the NASA/JPL Airborne SAR**

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On 7 June 1996, the NASA/JPL Airborne Synthetic Aperture (SAR) flew nine 130 km flightlines over California's central valley as part of the GeoSAR project. These interferometric C-band (5.6 cm wavelength) data were processed and mosaicked to form a single amplitude image and digital elevation model (DEM) of the entire 110 by 70 km rectangular area. The maps are posted at 5 m. The statistical uncertainty of the DEM heights is typically 2 m. The area imaged extends from north of Sacramento to south of Stockton. In this talk, we will present this unique data set. Using the DEM and the interferometric correlation estimates, we have derived slope and curvature estimates. We will discuss appropriate methods and limitations in determining the slope and curvature from interferometric aircraft data such as this and discuss the hydrological implications of our data set.

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