

ENSO and Winter Storms in California

Dr. Daniel R. Cayan

Researcher, Scripps Institution of Oceanography and US Geological Survey
dcayan@ucsd.edu 858 634 4507

Dr. Peter Bromirski

Researcher, Scripps Institution of Oceanography and US Geological Survey
pdbromirski@ucsd.edu 858 822 0552

Abstract: The frequency and intensity of North Pacific winter storms that penetrate the California coast drives the winds, sea level, precipitation and streamflow that are crucial influences on coastal processes. There is considerable variability of these storm characteristics, in large part owing to the El Nino/Southern Oscillation (ENSO) phenomenon. There is a great contrast of the storm characteristics during the El Nino phase vs. the La Nina phase, with the largest scale, southerly extensive winter storms generated during El Nino.