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Title: Assessment of the 2013 - 2014 Drought on Ecosystems of the California Central Coast

Abstract. Calendar year 2013 was the driest on record in California, with a total of just 30 percent of average statewide precipitation. The objective of this present study was to assess the impacts of the historic 2013-2014 drought on ecosystems of the Central Coast region using a combination of satellite image analysis and in situ measurements of soil moisture. According to differences in Landsat NDWI and NDVI between May of 2010 and 2013, the geographic areas within the study region that were most severely impacted by the 2013 drought were the inland Carmel Valley in northern Monterey County, and the coast zones around San Simeon Point and Cambria in northern San Luis Obispo County. For more detailed examination of drought impacts, the entire study region was separated into the three predominate vegetation types (grasslands, shrublands, and forests) to examine changes in Landsat NDWI and NDVI in the context of differing plant community response to severe drought.