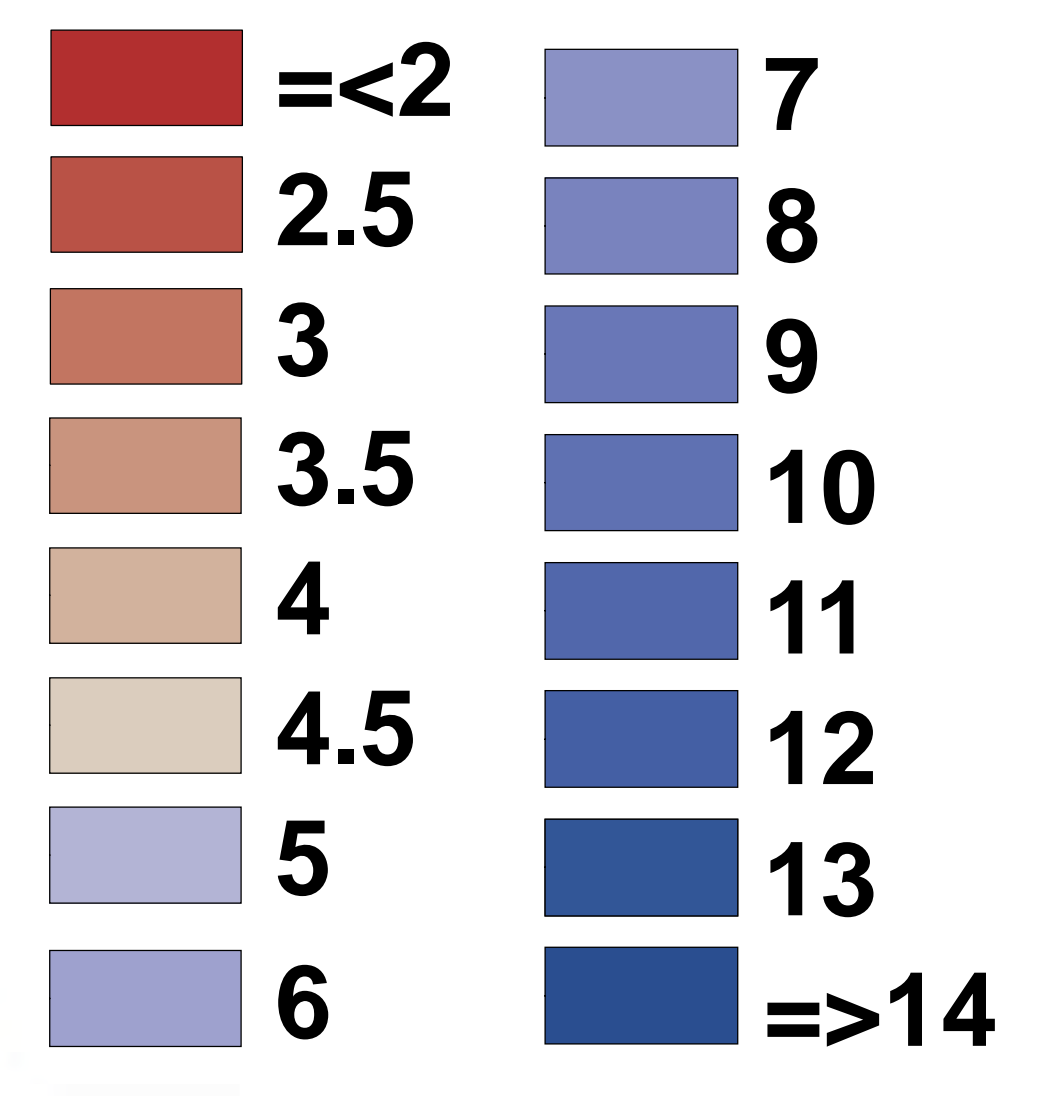


Average Summertime Hours of Fog & Low Clouds per Day



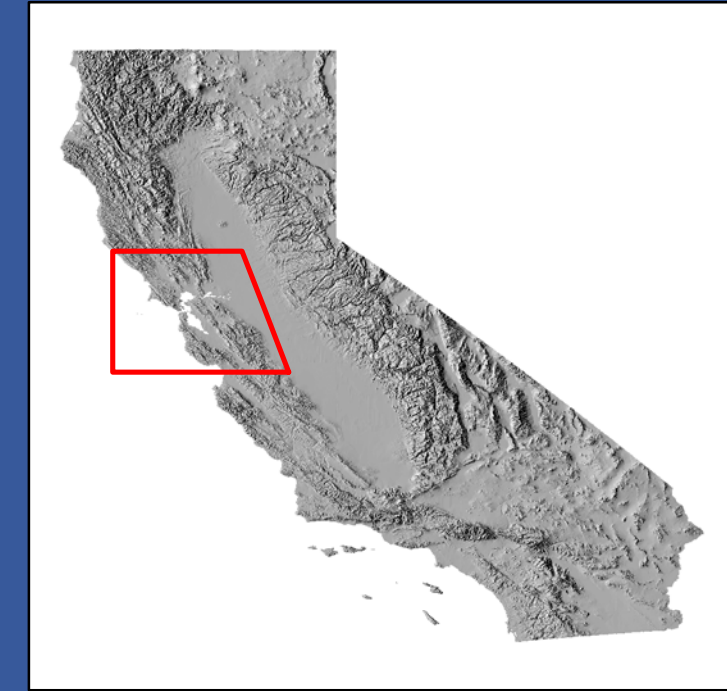
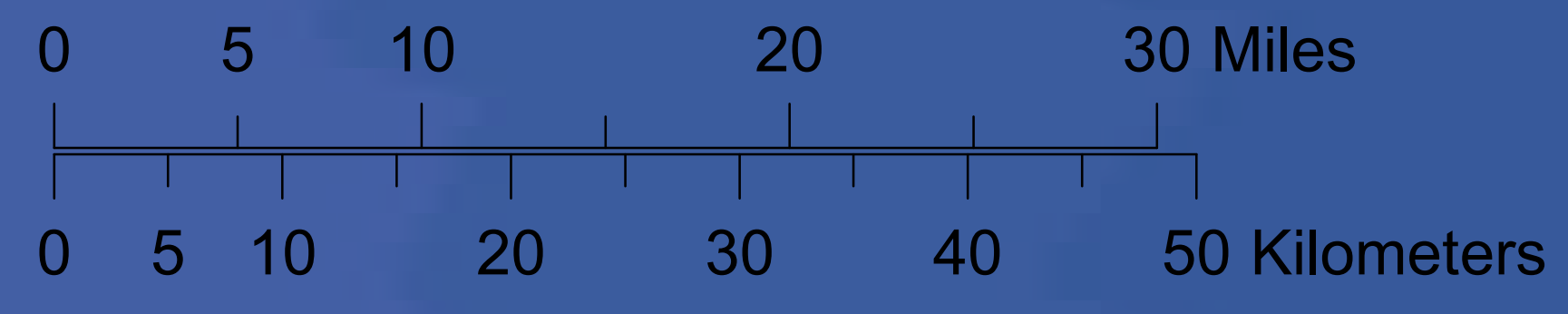
— Roads

Fog and Low Cloud Cover over the San Francisco Bay Area

Fog and low cloud cover (FLCC), is very important for coastal California during the seasonally arid Mediterranean climate summer months (June – September). The low stratus and stratocumulus clouds form over the ocean, advect onshore as fog and low clouds altering the water, energy, and nutrient flux of coastal ecosystems. Precisely located fog belt zones can be used to quantify the impacts of FLCC on ecosystem dynamics. The water and shade cover that FLCC provides during hot and dry summer periods is especially critical for endangered species such as coho salmon.

This contour map shows average daily summertime hours in 30 minute intervals. More than 26,000 hours of weather satellite imagery from 1999 to 2009 were used to generate the contours. The Cooperative Institute for Research on the Atmosphere classified the imagery into hourly cloud maps using the satellite sensor data in the visible, shortwave, and near infrared bands and USGS compressed the data to make this map.

For more details see:
 Torregrosa, A., C. Combs, and J. Peters (2016), GOES-derived fog and low cloud indices for coastal north and central California ecological analyses, *Earth and Space Science*, 3, doi:10.1002/2015EA000119



Road data from CalTrans
<http://www.dot.ca.gov>

