

Lab #9 El Niño—Southern Oscillation (ENSO) Interactive Links
Please make sure to read through the Lab Introduction before beginning the lab!

Part I: Review of Concepts from Lab Introduction and ENSO Video Animation

Animation exploring “El Niño - What is it?” video (4:26 minutes):

<https://youtu.be/WPA-KpldDVc>

Video has narration; make sure volume is turned on. Closed captioning is also available

Part II: Equatorial Pacific TAO Means and Anomalies

TAO El Niño Observing System -Watch the video (2:23 minutes):

<https://youtu.be/nzBAWirHMvA>

Video has narration; make sure volume is turned on. Closed captioning is also available

[Figure 8—October 22, 2008 TAO image](#)

[Figures 9 & 10—November 1997 and November 1998 TAO images](#)

[Figure 11—SST and water temperature profiles](#)

[Figure 12— TAO/TRITON images from January 2012 and November 2015](#)

The TAO/TRITON Animations Website allows one to view data in a time series format. This sequential format enables one to identify developing trends within a specific oceanographic property.

- For questions 9a & 9b, you will be viewing the most recent animation for the TAO data related to [monthly sea surface temperature \(SST\) and wind](#).
- For questions 9c & 9d, you will be viewing the most recent animation for the TAO data related to [3-D Temperature and Dynamic Height](#).

Part III: Ocean Surface Topography From Space

[Figure 13—JPL Ocean Surface Topography—December 1, 2009](#)

[Figure 14—JPL Ocean Surface Topography—December 26, 2010](#)

The JPL El Niño/La Niña Watch web site provides the most recent sea level data:

[Global sea level height in millimeters \(mm\)](#)

Part IV: Impacts of ENSO

[Figure 15—CoastWatch SST Anomaly & MODIS Chlorophyll-a — September 2009](#)

[Figure 16—CoastWatch SST Anomaly & MODIS Chlorophyll-a — December 2010](#)

The CoastWatch Website allows one to view current data for the coastal regions along Southern California. The [sea surface temperature \(SST\) anomaly map](#) and the [chlorophyll concentration map](#) provide snapshots of current conditions.

[Figure 17—CalCOFI survey of Pacific sardine spawning](#)

[Figure 18—U.S. Precipitation Anomalies](#)

[Table 1 and Figure 19—Influence of El Niño on Hurricane Formation](#)

[Detailed information on the ENSO hurricane connection.](#)

[NASA Scientific Visualization Studio information](#)