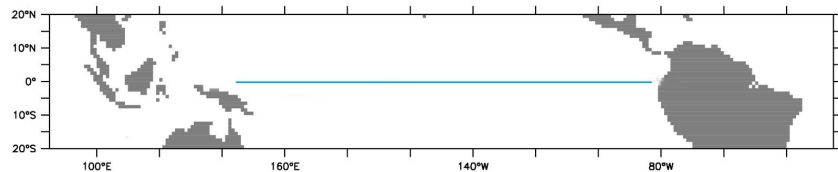
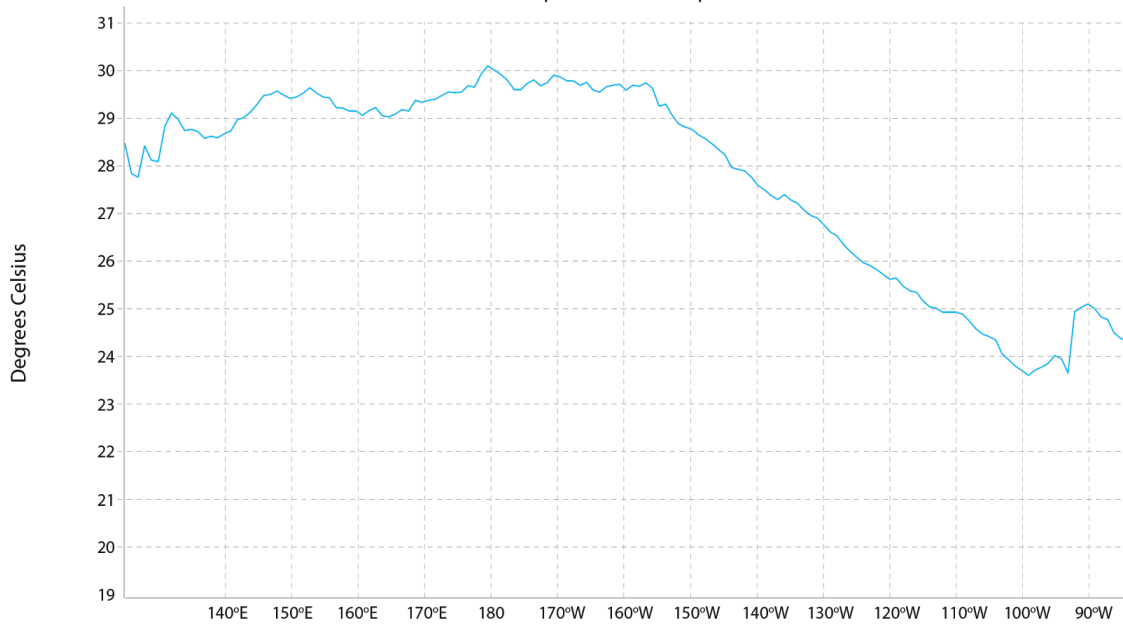


Graphing Sea Surface Temperature Measurements

Sea Surface Temperature at the Equator, December 2015



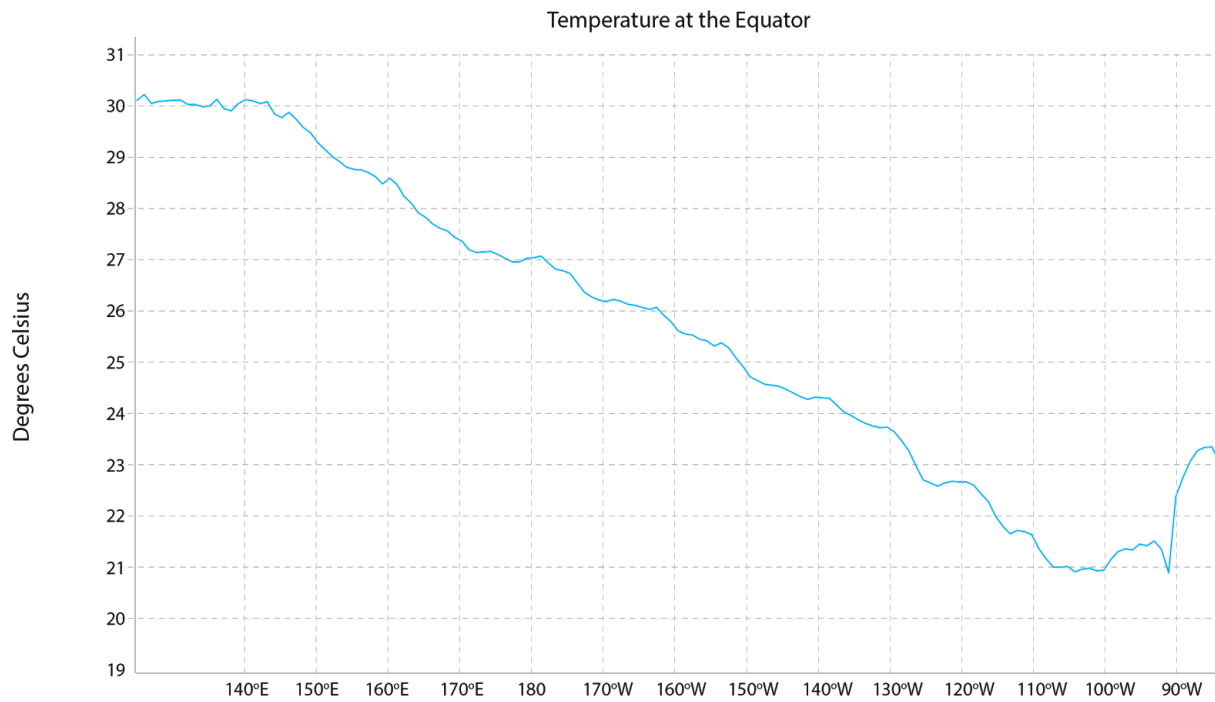
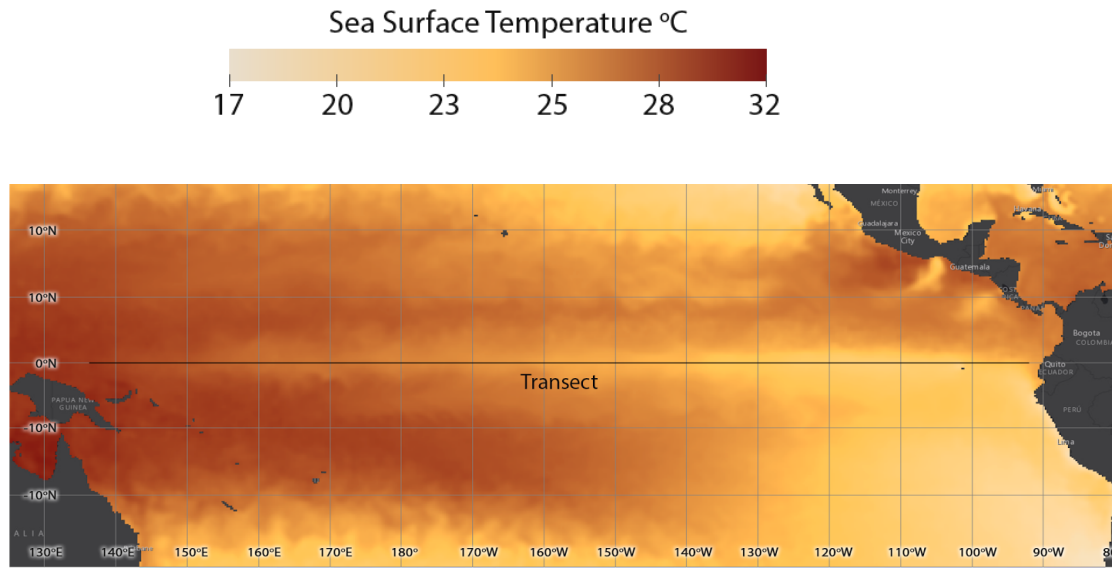
Instructions: Examine the line graph showing sea surface temperature at the equator. Below the graph is a reference map showing an area of the Pacific Ocean. The line running west to east is the area represented by the data on the graph.

Question 1: What were the monthly average sea surface temperatures along 0° latitude at these locations? Fill in the chart below.

Longitude	140° E	180°	140° W	100° W
SST				

Understanding Maps and Graphs

Sea Surface Temperature Across the Pacific Ocean, December 2010



The map on the previous page shows sea surface temperature (SST) for December 2010. Notice the 'transect' line across the equator. Below the map is the corresponding line graph of sea surface temperature at the equator.

Instructions:

- Locate 140° E along the x-axis of the line graph. Using a ruler, draw a vertical line from this point on the line graph to the above map, along the same 140° E line of longitude. End the line at the transect (the Equator). Repeat - drawing these same connecting lines between the map and graph at 180°, 140° W and 100° W.
- On the map, use the colorbar to estimate the values of temperature at each line of longitude. Enter your temperature estimates in the chart below. Repeat the same process with the graph.

Longitude	140° E	180°	140° W	100° W
SST from map				
SST from graph				

Question 2: Compare your results using the map and the line graph. Are they exactly the same? If not, explain why you may have obtained different results.

Question 3: What is one advantage of using a map over a line graph? *Circle the answer.*

- A) A map can help determine precise data along a line of latitude.
- B) A map can help to identify data patterns over large areas.