Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ El Nino

What does El Nino translate to and why was a weather phenomenon given this name?

Go to <https://portal.nnvl.noaa.gov/arcgis/apps/MapSeries/index.html?appid=2f400061735f4b86903bb4b80b9a1a48>

Click on Level 1 tab at the tap:

* What are satellites measuring to determine sea surface temperature?

Click on Level 3 tab at the top:

* In a typical year, why is the water in the Pacific Ocean warmer in the western part of the ocean that the eastern portion of the ocean?
* What is different in an El Nino year?
* What is upwelling and why does it occur in a typical year?
* During an El Nino year, when upwelling is disrupted what is not being supplied to the surface waters?

Click on level 3 tab at the top:

* Scroll all the way down to the “Answering a question with data” section
* Click on monthly and change the month to December
* Change the year to 2006
* Set latitude and longitude
	+ Upper-left latitude🡪10
	+ Upper-left longitude🡪120
	+ Lower-right latitude🡪-10
	+ Lower-right longitude🡪-80
* Download image
* Open image and determine if you think it looks like an el Nino based on the temperature.
* Repeat for 2007-2016 using the same month and same latitude and longitude.

|  |  |  |
| --- | --- | --- |
|  | Does the temperature map indicate an El Nino year? | Was this an El Nino year?(from your Google search) |
| 2006 |  |  |
| 2007 |  |  |
| 2008 |  |  |
| 2009 |  |  |
| 2010 |  |  |
| 2011 |  |  |
| 2012 |  |  |
| 2013 |  |  |
| 2014 |  |  |
| 2015 |  |  |
| 2016 |  |  |

* Google “El Nino Years” and check off the years that were considered to be El Nino years in the chart above.
* How could an El Nino event effect the fisheries off the coast of California? (hint: El Nino = lack of upwelling)