



Climate and Oceans Support  
Program in the Pacific

# ACCESS-S Workshop

**MODULE: Pacific climate - oceans**





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## Topics in this module

- Sea level
- NINO indices

### Expected learning outcomes

- Understanding of the general climate in the Pacific

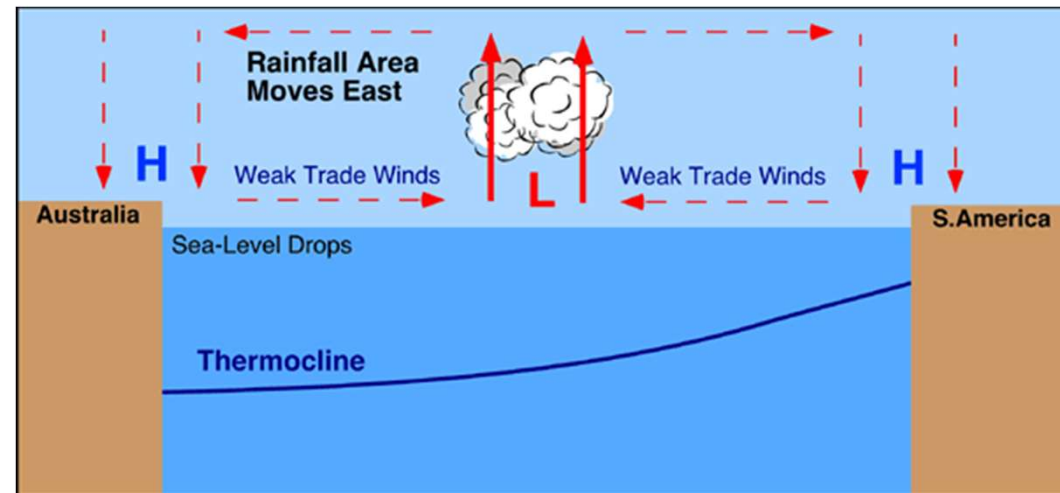
These outcomes are important for understanding and interpreting ACCESS-S outputs and products such as the tropical cyclone outlook and ENSO



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## Sea Level across the Pacific

- In ENSO neutral conditions, trade winds pile up warm water in the western pacific resulting in higher sea levels (~0.5 metre higher than the far eastern Pacific)
- In El Niño, the weakening trade winds causes the warm water to slump and therefore sea level drops also

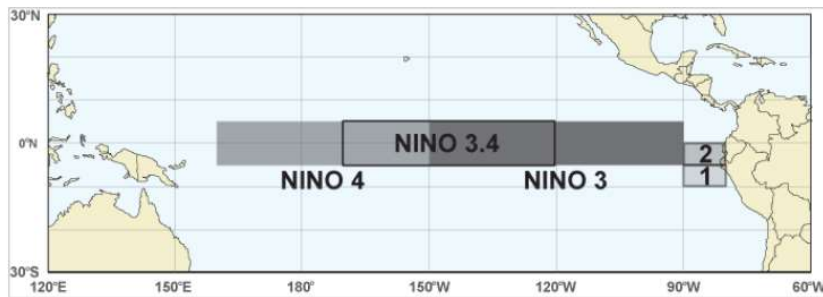




# NINO indices

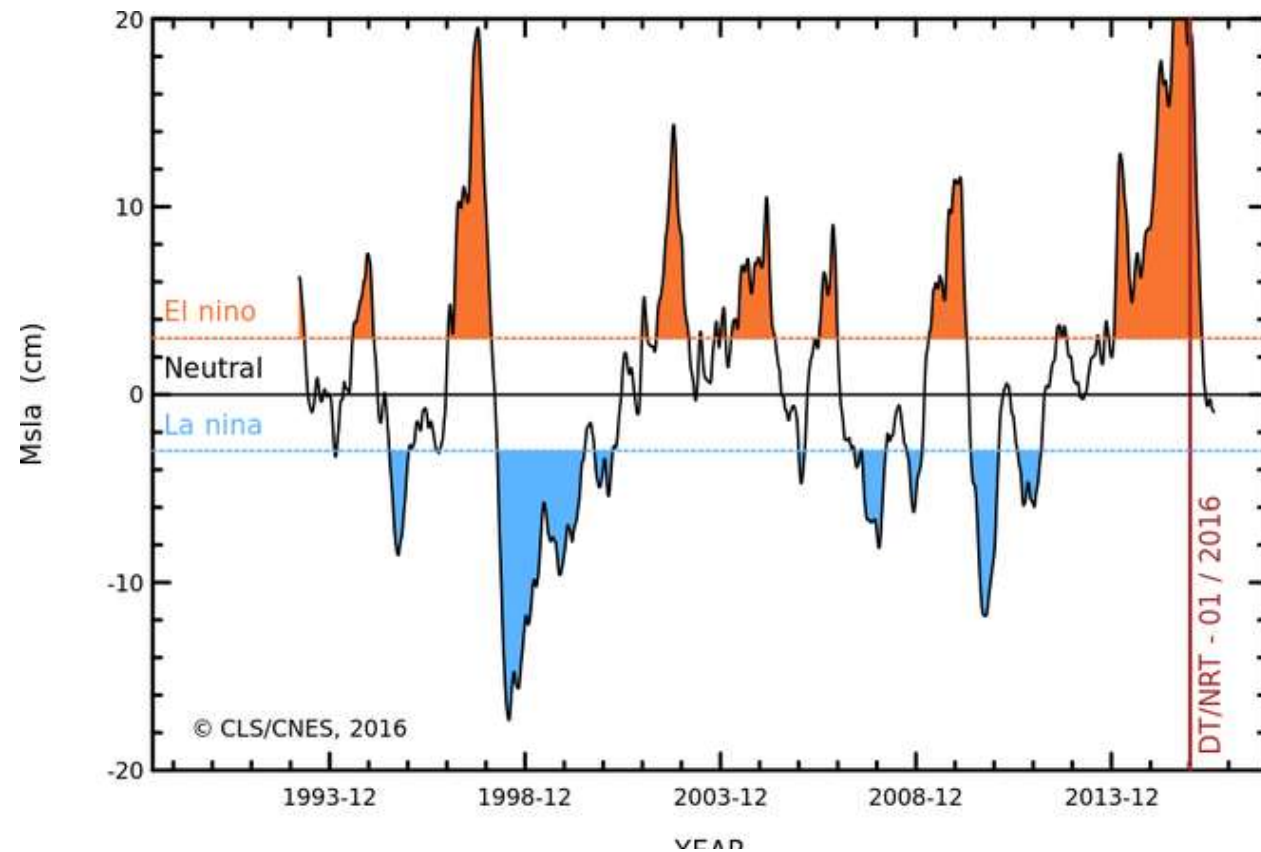
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- Within the NINO34 region, sea level is typically positive in El Niño and negative in La Niña.



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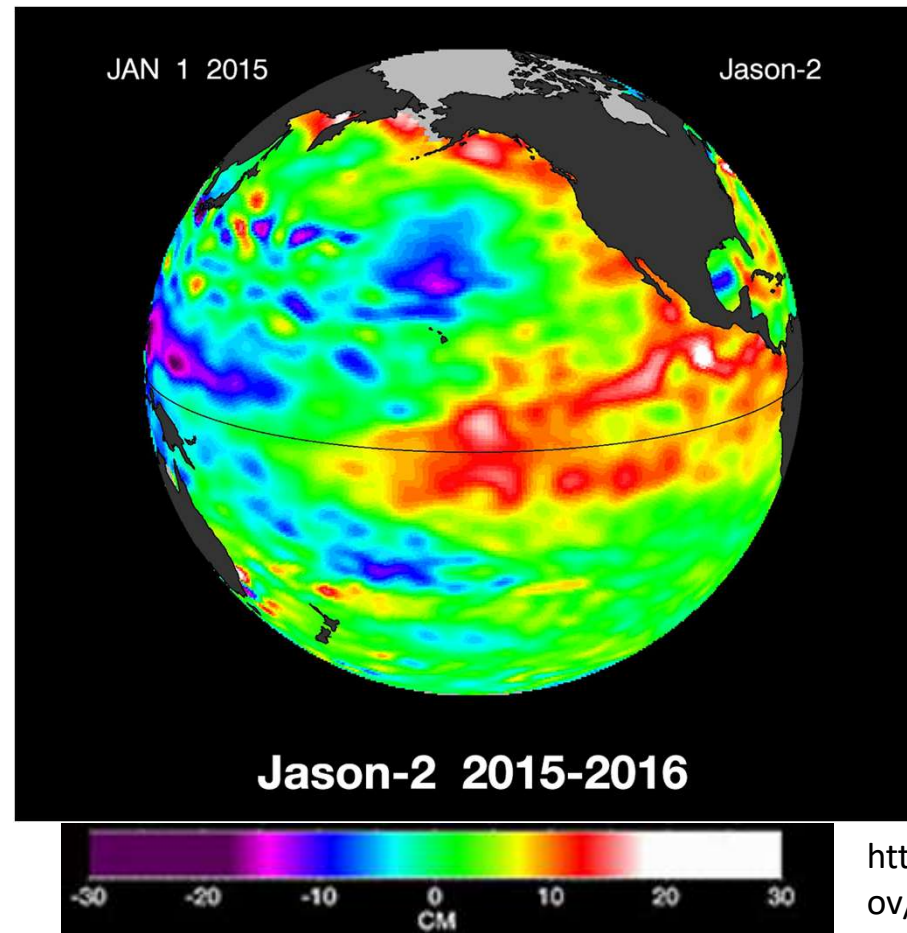
Sea Level Anomalies over the Nino 3.4 region





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# 2015/16 El Niño sea-surface height anomalies



[https://sealevel.jpl.nasa.gov/el\\_nino2015/](https://sealevel.jpl.nasa.gov/el_nino2015/)



