



What Is El Niño and How Might It Affect Our Weather This Year?

- Learning Resources

An [NSTA Science Update](#) with NSF NCAR's Dr. Clara Deser

Activities

- [El Niño Teaching Box](#): A 5E series of articles and activities that utilize data to build student understanding of the changes that happen to the Pacific Ocean and atmosphere during an El Niño event.
- [Climate Variability Card Shuffle](#): Students use a deck of cards to model climate variability and longer-term trends in climate.
- [Sort it Out: El Niño or La Niña](#): Students learn the difference between El Niños and La Niñas based on satellite image data in this online interactive sorting game.
- [Build a Buoy](#): Students will learn how different types of buoys collect data about the ocean and how the data is used to inform decision-making. (From the IOOS Education Toolkit).

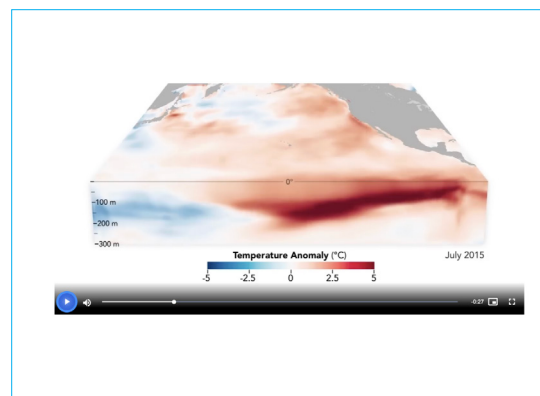


Learning Zone Articles and Media

- (Article) [A Super El Niño is Very Strong, But Even Weaker El Niños Affect the Weather](#): Scientists categorize El Niños as weak, moderate, strong, or very strong. With data from buoys and satellites, computer models forecast whether El Niño is likely.
- (Article) [An El Niño Fish Tale](#): Peruvian fishing boats used to return to shore each day heavy with anchovies, but in 1972 the boats returned to shore with empty nets.
- (Article) [Teleconnections: Changes in Weather Linked Together](#): Teleconnection patterns are caused by changes in the way air moves around the atmosphere. The changes may last from a few weeks to many months.

NSF NCAR Research & Other El Niño Resources

- (Article) [NSF NCAR Experimental Prediction System Call for a Super El Niño This Winter](#): The NSF NCAR forecast system has shown that it can do a remarkably good job of accurately hindcasting past El Niño events when testing it against historical data, resulting in high confidence for forecasting.
- [El Niño Theme Page, Pacific Marine Environmental Laboratory \(NOAA\)](#): A comprehensive FAQ page on El Niño.
- [El Niño \(NASA\)](#): Articles, interactives, data, historical accounts of El Niños. The site has a helpful simulation demonstrating how upwelling happens during an El Niño event (see image right).
- (Activity) [What Are the Causes and Effects of ENSO? \(NASA\)](#): Students play the role of a Peruvian policy maker, deciding how to allocate the country's resources in order to manage possible ENSO-related problems.
- (Activity) [The Return of El Niño \(BRIDGE\)](#): Students track over time some of the common climate changes caused by El Niño, paying close attention to wintertime changes and using data from [NOAA's Climate Prediction Center](#) and [NOAA's National Hurricane Center](#).



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