



# ENSO: El Niño- Southern Oscillation

Author: Amanda Latham

## What Is ENSO?

El Niño-Southern Oscillation (ENSO) refers to the recurring climate pattern response to changing water temperatures in the Pacific Ocean off the coast of Ecuador and Peru.

El Niño is when unusually warm water is present in that region, while La Niña is when unusually cold water is present.

## Why ENSO Matters

1. It impacts global temperature and precipitation patterns
2. Many extreme winter seasons occur under the influence of ENSO
3. La Niña and El Niño phases can persist for multiple years

## How Does ENSO Impact Wisconsin?

El Niño phases typically cause the polar jet stream to shift north, locking cold air in Canada. This often leads to a milder winter season in Wisconsin. There's no strong link to changes in Wisconsin's precipitation.

La Niña phases typically cause the jet stream to shift south. This often has less significant impacts on Wisconsin, but can create slightly cooler temperatures and slightly wetter conditions during the winter.

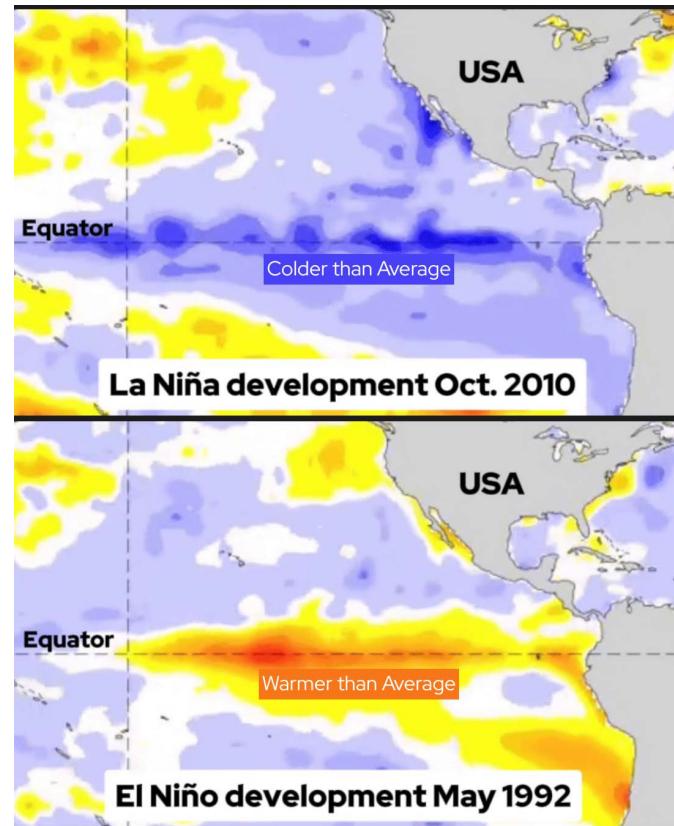


Figure 1: Water temperature anomalies in the Pacific Ocean during different ENSO phases.

## How Does ENSO Impact You?

ENSO can turn a typical Wisconsin winter on its head! Listening to experts on what's happening in the Pacific can cue you in on what to expect from next winter.

Learn more at: [go.wisc.edu/ENSO](http://go.wisc.edu/ENSO)



Wisconsin State Climatology Office  
UNIVERSITY OF WISCONSIN-MADISON