**Introduction**

The physical variability of the California Current System (CCS) drives changes in the biogeochemistry of the ecosystem, and this coupled bio-physical interactions result in a consistent response of the CCS to El Niño and La Niña events, that can be exploited as a potential predictor of the ecosystem.

In this study we use products from a simulation with the Regional Oceanographic Model System (ROMS) on a ~7km high resolution grid, coupled to an ecological component (NEMURO) to characterize the physical and biological response of the CCS to ENSO (El Niño Southern Oscillation) over the period from 1958 to 2007.

**Composite results from ROMS-NEMURO over CCS**

**Winners and losers of the California Current Ecosystem (CCE) during ENSO events**

**Asymmetry in the response of the CCS to ENSO events and its links with the tropical Pacific**

The cooling of the CCS during La Niña events is more consistent than the warming related to El Niño. This is also observed in the Niño 4 region over the tropical Pacific, where atmospheric teleconnections originate (PNA pattern).

**Methods**


Each physical and biological field from the model was filtered with a high-pass Lanczos filter with a cut-off frequency of 10 years.

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