Predicting El Nino from the South?

The theory of El Nino/Southern Oscillation (ENSO), and its prediction, have focused primarily on the equatorial climate. Recently, we have shown that there are precursors to ENSO in the extra-tropical southern hemisphere (see figure). This student project will test whether these precursors can be used to rethink ENSO theory and improve predictability. We will analyze observations and perform simulations with climate models of a range of complexity to address this issue.

Sea surface temperature and winds from models and observations that are precursors to ENSO from Zhang et al. (2013) *2013 Millero Prize for Best Student Paper

Dr. Amy Clement, aclement@rsmas.miami.edu