La Nina Teleconnections in Antarctica

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Substantial evidence exists for teleconnections associated with El Nino Southern Oscillation (ENSO) events throughout Antarctica and the Southern Ocean. These phenomena have been primarily viewed through the lens of comparing the opposite phases, El Nino and La Nina, of ENSO. This methodology has provided substantial understanding of regions where both phases have opposing effects. Of interest for this poster are regions where only one phase has an effect, or regions not generally discussed in prior literature. Areas of specific interest generally associated with ENSO are the Amundsen Bellingshausen Sea Low, West Antarctica, and the Antarctic Peninsula. This poster explores the differences throughout the atmosphere between these phases with specific emphasis on La Nina as represented in the European Center for Mid Range Weather Forecasting Reanalysis Interim (ERA-Interim) from 1979-2014. The focus is on regions affected outside of these areas that show significant variation. Of particular interest are variations seen throughout East Antarctica. Possible interactions with other forcings are also briefly explored.