

**Progress in American monsoon research: Study on extremes over the Americas: the relative influence of ENSO and the Arctic Oscillation on winter temperature extremes in the southeast US**

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Interannual variations of the winter mean temperature and the number of days of warm and cold extremes were investigated for the southeast United States to identify the relative influence of El Niño/Southern Oscillation (ENSO) and the Arctic Oscillation (AO). Generalized extreme value theory was used to estimate the probability distribution function (PDF) of warm and cold extremes and their return values for different phases of ENSO and the AO. An analysis of the temperature observations for the past 58 years (1951-2008) reveals that both the winter mean temperature anomalies and the number of days of extreme cold are most closely linked to variations in the AO especially in the recent past (1981-2008). In contrast, the number of days of extreme warmth are linked to both ENSO and the AO. A number of information about extreme weather/climate over the Americas is provided on the web <http://gmao.gsfc.nasa.gov/research/subseasonal/atlas/Extremes.html>, under collaboration with CLIVAR VAMOS.