



Is Antarctica Experiencing Changes in Climate?

Previous studies have noted a warming over the Antarctic Peninsula while noting a slight cooling over the continent's interior. However, a recent study which blended satellite measurements and automated surface weather station observations conclusively shows a significant warming over most of western Antarctica. This positive trend in temperatures over western Antarctica exceeds 0.1C per decade over the past 50 years. More importantly, these trends are in agreement with climate models. It is likely that the breakup of the Larsen B Ice Shelf (which was attached to this peninsula) in 2002 is in response to this dramatic warming. Why do we care so much about the climate trends of this large continent? Well, the East and West Antarctic Ice Sheets, if melted, could raise sea level by ~70m (Shepherd and Wingham, 2007). What happens in remote places has dramatic impacts on us all.

Steig et al., 2009, Warming of the Antarctic Ice-sheet surface since the 1957 International Geophysical Year, *Nature*, Vol. 457, pp. 459-463.