Geophysical Research Abstracts, Vol. 9, 01446, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-01446

Human Induced Change in Winter Cyclone Frequency and Intensity

S. Lambert and **J. Fyfe**
Canadian Centre for Climate Modelling and Analysis, Environment Canada

The effect of enhanced greenhouse warming on the behaviour of mid-latitude cyclones is examined for changes in the total number of cyclone events and for changes in the number of intense events using daily output from the climate models participating in the IPCC AR4 diagnostic exercise. Under enhanced greenhouse warming the models simulate a reduction in the total number of events and an increase in the number of intense events. This is a robust result, which essentially all of the models exhibit under a wide range of increasing levels of greenhouse gases.