Trends in Temperatures in the Canadian Arctic from Surface and Satellite Observations

Observations from surface stations across the Canadian Arctic and other locations in Canada are being used to examine long-term trends in temperature (50-100 yrs). Comparison of these trends from available clear sky satellite measurements (AVHRR) during the last 25 years will be presented. In most cases, the trends are consistent. While warming/cooling events are evident at some stations on decadal time scales, these appear to be related in part to interannual change in wintertime large scale pressure patterns such as the Pacific-North American Anomaly (PNA) in the northwest, and the North Atlantic (NAO) or Arctic Oscillation (AO) in the northeast. However, other locations appear to lack any significant long term temperature trends. Examples include Alert and Winnipeg. Time permitting, some recent studies relating trends in temperature and ice cover, and ocean heat transport will be reviewed.

Wednesday, 17 February 2010
11:00 a.m.
Room AOSS 351