Geophysical Research Abstracts, Vol. 9, 07894, 2007 SRef-ID: 1607-7962/gra/EGU2007-A-07894 © European Geosciences Union 2007



The climate of the Belgian research station in Antarctica from a regional atmospheric model

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In the austral summer of 2007-2008, the opening of a new research station in Antarctica is foreseen in the Sør Rondane Mountains, Dronning Maud Land, at a position of 71°57'S and 23°20'E. A one year record of an automatic weather station shows that the meteorological conditions of this part of Antarctica are relatively mild, with high temperatures and low wind speed. In this presentation we discuss how the measurements from the Belgian research station can be placed in a larger perspective both in time and space. For this, we use output from a regional atmospheric climate model (RACMO) for the period 1980-1994, using a grid spacing of 55 km. The model is driven from the lateral boundaries by Re-Analyses from the European Center for Medium-Range Weather Forecasts. Sea surface temperature is prescribed from satellite observations. Contrasts and correspondences between the Belgian research station and other sites in Antarctica will be discussed.