

MAGS - The Mackenzie GEWEX Study

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Abstract

The Mackenzie GEWEX Study (MAGS) is an inter-disciplinary study of the hydrological (water) cycle of the whole Mackenzie Basin. It is one of five major studies around the world, collectively called the Global Energy and Water Cycle Experiments (GEWEX).

MAGS involves more than 40 federal government and university scientists. Since northern latitudes will be most affected by any climate change resulting from greenhouse gases, Canadian scientists decided that they could best contribute to the international effort by concentrating on a major northward-flowing river, the Mackenzie, which empties into the Arctic Ocean. The major goals of MAGS are to quantify all aspects of the hydrological cycle of the Mackenzie, to determine the effects which climate change will have on the water budget of the Mackenzie, and to develop numerical modelling capabilities to be able to predict these processes and potential impact on the northern climate.

This presentation will review MAGS hydrological, atmospheric, and modelling studies, including plans for an enhanced data collection period beginning in July, 1998.

