

Inclusion of new data types in the Canadian data assimilation system

**Nicolas Wagneur, L. Garand, J. Aparicio, A. Beaulne, M. Buehner,
J-M. Bélanger, D. Anselmo, G. Deblonde, J. Hallé, P. Koclas,
R. Sarrazin, and G. Verner**

The Canadian data assimilation system is now benefiting from several new data types: Quikscat oceanic winds, radiances from seven SSM/I channels, and 87 AIRS channels. Extreme scan angles from AMSU-A and AMSU-B are also assimilated, which increases by about 25 % the volume of these data. In addition, the radiative transfer model was upgraded to RTTOV-8 along with a new vertical interpolator. The poster will present the impact of these new data as evaluated in a parallel run which was run from January to April 2008. At the time of this writing, results are clearly positive in the Southern hemisphere and closer to neutral in the Northern Hemisphere. In the Tropics, a large improvement in the geopotential bias is noted. It is planned to continue that parallel run with the inclusion of GPS radio-occultation data assimilated up to 30 km. Results on the impact of these data should be available at the time of the conference.