Atmospheric Circulation in the lower Troposphere above Dome-C, Antarctica: Observation and Simulations by the MAR RCM.

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Abstract

A comparaison is done between observed and simulated temperature and wind speed vertical profiles over the antarctic plateau. Observations were obtained from a 45 m - high tower situated at Dome C and simulations are performed using the regional climate model MAR (Modèle Atmosphérique Régional). The vertical resolution is very hight, with 12 levels located in the first 20 m above ground level (a.g.l.). Sensitivity tests are made to the vertical resolution and to the parameterizations used in the model.