



## **Sensitivity of the antarctic surface mass balance to blowing snow processes**

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The RCM MAR (Modèle Atmosphérique Régional) has been nested in the european reanalyses to simulate the antarctic surface mass balance (ASMB). MAR is coupled with a blowing snow model, including the feedback of blown snow particles on the pressure gradient force. Simulations of the antarctic climate are performed with MAR in which the blowing snow model is switched on or off. Sensitivity of simulated ASMB to erosion of snow by the winds and subsequent sublimation is discussed.