



## **Estimating Antarctic ice sheet surface mass balance contribution to future sea level rise using the regional atmospheric climate model MAR**

Cécile Agosta (1), Xavier Fettweis (1), and Hubert Gallée (2)

(1) Department of Geography, University of Liège, Belgium, (2) UJF–Grenoble 1/CNRS, Laboratoire de Glaciologie et Géophysique de l'Environnement (LGGE) UMR 5183, Grenoble, F-38041, France

We report future projections of Surface Mass Balance (SMB) over the Antarctic ice sheet obtained with the regional climate model MAR, for different warming scenarios. MAR forcing is carefully selected among the CMIP5 GCMs panel according to its ability to simulate the current climate over Antarctica. MAR includes blowing snow modeling, an important process in Antarctica.