

Supplementary information to:

The PolarRES dataset: a state-of-the-art regional climate model ensemble for understanding Antarctic climate

Gilbert, E.¹, Torres, J. A.²; Hofsteenge, M. G.³; van de Berg, W. J.³; Boberg, F.²; Christensen, O. B.²; van Dalum, C. T.^{3,4}; Fettweis, X.⁵; Gumber, S.¹; Hansen, N.²; Kittel, C.^{6,7}; Lambin, C.⁵; Maure, D.⁵; Mottram, R.²; Olesen, M.²; Orr, A.¹; Phillips, T.²; van Tiggelen, M.³; Verro, K.² & Mooney, P.A.⁸

♦ These authors contributed equally to leading this work

* Correspondence to: Ella Gilbert (ellgil82@bas.ac.uk) and Marte Hofsteenge (m.g.hofsteenge@uu.nl)

¹ British Antarctic Survey, Cambridge, United Kingdom

² Danish Meteorological Institute, Copenhagen, Denmark

³ Institute for Marine and Atmospheric Research (IMAU), Utrecht University, Utrecht, the Netherlands

⁴ Royal Netherlands Meteorological Institute, De Bilt, the Netherlands

⁵ SPHERE research unit, Department of Geography, University of Liège, Liège, Belgium

⁶ Université Grenoble Alpes/CNRS/IRD/G-INP/INRAE, Institut des Geosciences de l'Environnement, Grenoble, France

⁷ Physical Geography research group, Department of Geography, Vrije Universiteit Brussel, Brussels, Belgium

⁸ NORCE Norwegian Research Centre, Bjerknes Centre for Climate Research, Bergen, Norway

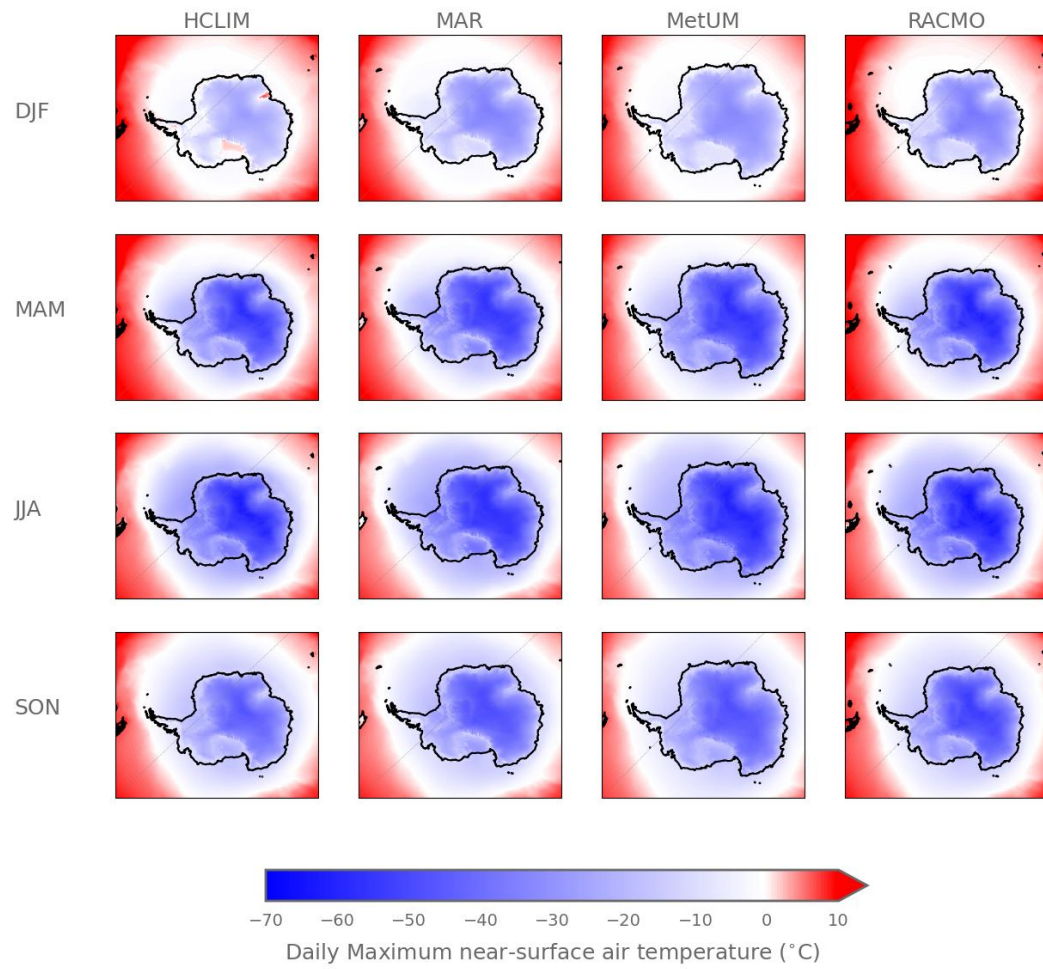


Figure S1: Seasonal mean daily maximum near-surface air temperature, in °C, during the period 2000-2019 for each of the four RCMs: HCLIM, MAR, MetUM and RACMO.