











## 8 REFERENCES

- Andreas, E.L., 1995. Physically based model of the form drag associated with sastrugi. CRREL Report No CR 95-16, 12pp.
- Andreas, E. L., R. E. Jordan, and A. P. Makshtas, 2005. Parameterizing turbulent exchange over sea ice: The Ice Station Weddell results. *Boundary-Layer Meteorol* 114: 439 – 460
- Bintanja, R., 2000. Snowdrift suspension and atmospheric turbulence. Part I: Theoretical background and model description. *Boundary-Layer Meteorol* 95: 343 – 368
- Cassano, J.J., and T.R. Parish, 2000. An analysis of the nonhydrostatic dynamics in numerically simulated Antarctic katabatic flows. *J Atmos Sci* 57: 891-898
- De Ridder, K., and H. Gallée. 1998. Land Surface–Induced Regional Climate Change in Southern Israel. *J Appl Meteorol* 37: 1470 – 1485, doi: 10.1175/1520-0450
- Duynkerke, P.G. and A.G.M. Driedonks, 1987. A model for the turbulent structure of the stratocumulus-topped atmospheric boundary layer. *J Atmos Sci* 44: 43 – 64
- Gallée, H., and G. Schayes, 1994. Development of a Three-Dimensional Meso-gamma Primitive Equations Model, Katabatic Winds Simulation in the area of Terra Nova Bay, Antarctica. *Mon Wea Rev* 122: 671 – 685
- Gallée H., 1995. Simulation of the mesocyclonic activity in the Ross Sea, Antarctica. *Mon Wea Rev* 123: 2051 – 2069
- Gallée, H., 1998. A simulation of blowing Snow over the Antarctic Ice Sheet. *Ann Glaciol* 26: 203 – 205.
- Gallée, H., Guyomarc'h, G., and E. Brun, 2001. Impact of Snow Drift on the Antarctic Ice Sheet Surface Mass Balance. Possible Sensitivity to Snow Surface Properties. *Boundary-Layer Meteorol* 99: 1 – 19
- Gallée, H., Peyaud, V., and I. Goodwin, 2005. Simulation of the net snow accumulation along the Wilkes Land transect, Antarctica, with a regional climate model. *Ann Glaciol* 41: 17 – 22
- Gallée, H., and I. Gorodetskaya, 2010. Validation of a limited area model over Dome C, Antarctic Plateau, during winter. *Clim Dyn* 23(1): 61 – 72, doi: 10.1007/s00382-008-0499-y
- Gallée, H., A. Trouvilliez, C. Agosta, C. Genthon, V. Favier and F. Naaim, 2012. Transport of snow by the wind: a comparison between observations made in Adélie Land, Antarctica, and simulations made with the Regional Climate Model MAR. *Boundary Layer Meteorology*, DOI: 10.1007/s10546-012-9764-z.
- Kessler, E., 1969). On the distribution and continuity of water substance in atmospheric circulations. *Met. Monograph* 10, No.32, American Meteorological Society, Boston, 84 pp.
- Kotlyakov, V.M., 1961. Results of a Study of the Processes of Formation and Structure of the Upper Layer of the Ice Sheet in Eastern Antarctica. *Antarctic Glaciology* 55, IAHS Press: 88 – 99
- Lenaerts, J. T. M., M. R. van den Broeke, S. J. Déry, G. König-Langlo, J. Ettema, and P. Kuipers Munneke, 2010. Modelling snowdrift sublimation on an Antarctic ice shelf. *The Cryosphere*, 4, 179-190, doi:10.5194/tc-4-179-2010
- Lenaerts, J. T. M. , M.R. van den Broeke, W.J. van de Berg, E. van Meijgaard and P. Kuipers Munneke, 2012. A new, high resolution surface mass balance map of Antarctica (1979-2010) based on regional climate modeling. *Geophys. Res. Lett.*, 39, L04501, doi:10.1029/2011GL050713
- Lenaerts, J. T. M., M. R. van den Broeke, S. J. Déry and E. van Meijgaard, W. J. van de Berg, S. P. Palm and J. Sanz Rodrigo, 2012: Modeling drifting snow in Antarctica with a regional climate model, Part I: Methods and model evaluation. *J. Geophys. Res.*, 117, D05108, doi:10.1029/2011JD016145
- Levkov, L., B. Rockel, H. Kapitza and E. Raschke, 1992. 3D Meso-Scale Numerical Studies of Cirrus and Stratus Clouds by their Time and Space Evolution. *Contrib Atmos Phys* 65: 35 – 58
- Lin, Y. J., Farley, R. D., and H.D. Orville, 1983. Bulk parameterization of the snow-field in a cloud model. *J Climate Appl Meteor* 22: 1065 – 1092
- Mahesh, A., R. Eager, J. R. Campbell, and J. D. Spinhirne, 2003. Observations of blowing snow at the South Pole. *J Geophys Res* 108(D22): 4707, doi:10.1029/2002JD003327
- Marticoarena, B., and G. Bergametti, 1995. Modeling the atmospheric dust cycle: 1. Design of a soil-derived dust emission scheme. *J Geophys Res* 100: 16415 – 16430
- Meyers, M.P., P.J. DeMott, and W.R. Cotton, 1992. New primary ice nucleation parameterizations in an explicit cloud model. *J Appl Meteorol* 31: 708 – 721
- Morcrette, J.-J., 2002. Assessment of the ECMWF model cloudiness and surface radiation fields at the ARM-SGP site. *Mon Wea Rev* 130: 257 – 277
- Nash, J.E. and J.V. Sutcliffe, 1970. River flow forecasting through conceptual models part I A discussion of principles. *J Hydrol* 10 (3): 282 – 290, doi:10.1016/0022-1694(70)90255-6
- Scarchilli, C., M. Frezzotti, P. Grigioni, L. Silvestri, L. Agnoletto, and S. Dolci, 2010. Extraordinary blowing snow transport events in East Antarctica. *Clim Dyn* 34(7-8): 1195 – 2306.
- Walden, Von P., Warren, S.G., and E. Tuttle, 2003. Atmospheric Ice Crystals over the Antarctic Plateau in Winter. *J Appl Meteor* 42: 1391 – 1405