



A UAV field campaign in Antarctica in summer 2010-2011

Priit Tisler, Rostislav Kouznetsov, Timo Palo, and Timo Vihma
Finnish Meteorological Institute, Helsinki, Finland (priit.tisler@fmi.fi)

A field campaign was carried out at the Aboa station in Dronning Maud Land, Antarctica, in December 2010 – January 2011. The observations included UAV flights using SUMO aircraft, tethered sondes, sodar measurements, as well as weather mast, surface energy budget, and snow measurements. The studies addressed (1) the structure and dynamics of the stable boundary layer over the continental ice sheet, (2) katabatic winds, (3) effects of the boundary layer on gravity waves generated by a nunatak, and (4) convection over the nunatak and extension of the heat island.