Geophysical Research Abstracts
Vol. 20, EGU2018-6976, 2018
EGU General Assembly 2018

Cases of wind forecast errors in non-stationary flows

Florian Ruff (1,2,3) and Haraldur Ólafsson (2,3)

(1) Freie Univ. Berlin (florian.ruff@gmx.de), (2) University of Iceland, Iceland (haraldur68@gmail.com), (3) Icelandic Meteorol. Office

Case studies of large wind forecast errors simulated by the NWP system Harmonie with horizontal resolution of 2,5km and boundary-conditions from the ECMWF are presented. The errors are all associated with rapid changes in wind speed, whose climatology in the complex terrain of Iceland is also described. In most cases, the strong winds are associated with the surrounding topography, but in a few cases, there is a slight temporal shift in the timing of an arrival of a zone of strong horizontal windshear. Like the moving windshear, the topographic patterns leading to the errors are in general of a non-staionary nature.