Geophysical Research Abstracts Vol. 18, EGU2016-10548, 2016 EGU General Assembly 2016 © Author(s) 2016. CC Attribution 3.0 License.



## Fequency of winds in various terrain

Guðrún Nína Petersen (1) and Haraldur Ólafsson (1,2)

(1) Icelandic Meteorol. Office (gnp@vedur.is), (2) Univ. Iceland (haraldur@vedur.is)

Based on a large dataset of observations of winds, a comprehensive diagramme is constructed, where the shape of the wind speed distribution is mapped according to the characteristics of the nearby topography.

On major characteristic of the wind speed frequency is a bimodal distribution, i.e. two distinct maxima that occur systematically at locations in deep fjords or valleys. This distribution can be attributed to orographic blocking and/or wake when the winds are blowing perpendicular to the valley/fjord.