



Multi-scale variability of winds in the complex topography of Southwestern Norway.

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Using 20 years of surface observational and ERA interim reanalysis data, the wind climatology in the complex topography of the greater Bergen area, western Norway, has been investigated. Significant local- to regional-scale variations in wind speed, mainly set up by the topography, are found for different larger-scale wind speeds, directions and atmospheric stabilities. Main findings are a larger-scale orographic blocking in westerly flow, wake and down-slope winds in easterly flow and increased wind speeds for southerly and northerly flow. More detailed small-scale patterns are presented and related to various theories of orographic flow modification.