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Orograhpic flow off SE-Iceland

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On 18 October 2016 the flow pattern downstream of the topography of SE-Iceland was observed with the FAAM aircraft of the National Centre for Atmospheric Science (UK). The upstream winds were weak, giving relatively low Froude number. A well defined gap wind was observed between Mt. Myrdalsjokull and Mt. Vatnajokull with wakes downstream of both mountains. There was reversed flow inside the wakes and a wind component into the wake of Mt. Vatnajokull. The Mt. Myrdalsjokull wake and the reverse flow are nicely reproduced with the numercal model Harmonie, while the cross-flow extent of the Mt. Vatnajokull wake and the wind component in the gap flow into the wake are not as well simulated, indicating that the transition between wake and no wake flow may be very sensitive to the larger scale flow, or possibly details of the topography.