

## Grímsvötn volcano

Status Report: 17:00 GMT, 4 November 2010

Icelandic Meteorological Office and Institute of Earth Sciences, University of Iceland

- Compiled by: Thorunn Skaftadóttir, Eyjólfur Magnússon, Snorri Zophoniasson, Steinunn S. Jakobsdóttir, Gunnar B. Gudmundsson and Matthew J. Roberts.
- Based on: IMO seismic monitoring; IMO hydrological data; IES-IMO GPS monitoring
- Meltwater: The jökulhlaup in the Gígja river peaked yesterday between 13:00 and 14:00 GMT at  $\sim 2,600 \text{ m}^3/\text{s}$ . At 10:30 GMT today, a discharge of  $1,005 \text{ m}^3/\text{s}$  was recorded. The electrical conductivity of floodwater draining beneath the Gígja bridge remains high, with values of over  $500 \text{ }\mu\text{S}/\text{cm}$  measured today.
- Seismic tremor: Tremor levels at seismic station 'grf' are declining rapidly. There is no sign of low frequency tremor indicative of volcanic activity.
- Earthquakes: Since yesterday evening, four earthquakes ranging in size from magnitude 0.7 to 1.2 have been detected at Grímsvötn.
- GPS deformation: No change; see status report from 01 November 2010.
- Overall assessment: During the last 24 hours, tremor levels at seismic station 'grf' have declined considerably. Discharge measurements from the Gígja bridge show that the jökulhlaup peaked yesterday between 13:00 and 14:00 GMT; at this time, the maximum discharge was  $\sim 2,600 \text{ m}^3/\text{s}$ . Electrical conductivity levels in Gígja river remain high, signifying continued drainage of meltwater from Grímsvötn. Presently, there are no detectable signs of the beginning of a volcanic eruption at Grímsvötn.