

## Grímsvötn volcano

Status Report: 16:00 GMT, 2 November 2010

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- Based on: IMO seismic monitoring; IES-IMO GPS monitoring; IMO hydrological data.
- Meltwater: Water continues to drain from Grímsvötn, but the rate of discharge increase has slowed. At 09:30 GMT today, discharge was gauged at 1,200 m<sup>3</sup>/s. Electrical conductivity has increased to 500 µS/cm. Increased electrical conductivity in the Súla river suggests that a small volume of geothermal water is draining from the western side of the Skeiðarárjökull glacier.
- Seismic tremor: High-frequency seismic tremor continues to increase at seismic station 'grf', located near Grímsvötn. This tremor is similar in character to the tremor that accompanied the jökulhlaup in November 2004. Presently, there is no sign of volcanic tremor.
- Earthquakes: Two earthquakes occurred beneath Grímsvötn yesterday evening: 18:50 GMT and 20:59 GMT. Today, two earthquakes have been recorded: 06:06 GMT and 06:42 GMT. The magnitudes of these earthquakes are between 1.2 to 1.5. One icequake was detected this morning at the western edge of Skeiðarárjökull, indicating that floodwater is propagating beneath the glacier.
- GPS deformation: No change; see status report from 01 November 2010.
- Overall assessment: High-frequency seismic tremor continues to intensify, signifying increasing discharge of water from Grímsvötn. Discharge continues to increase in the Gígjukvísl river. Additionally, high levels of electrical conductivity in the river indicate the presence of geothermal meltwater. Presently, there are no detectable signs of the beginning of a volcanic eruption at Grímsvötn.