

Grímsvötn volcano

Status Report: 16:00 GMT, 25 May 2011

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Based on: IMO seismic monitoring; IES-IMO GPS monitoring; IMO hydrological data; weather radar; ash-fall reports; scientific overflights; UK Met Office ATDnet; MODIS and NOAA satellite images.

Eruption plume:

Height (a.s.l.): Yesterday evening until 20:00 UTC, the ash plume did not reach higher than 5 km, but after that there were frequent pulses to 5-7 km. At 02:00 UTC the plume reached 12 km height, but after 2:20 UTC the plume has not been detectable on radar, except for an steam plume at 3:30 UTC, which reached 5 km. Eyewitnesses have reported small steam bursts from the crater today. Widespread ash in cloud layers have been detectable from plane between 5-7 km W of the volcano and also some ash haze below 3 km SW of the eruption site.

Heading: Light north-easterly winds, but calm winds last night and today. South-east and southerly winds above 4 km.

Colour: Light-brown.

Tephra fallout: Only in the vicinity of the eruption site.

Lightning: Two lightning strikes were detected yesterday at 21:02 UTC and 12 lightning strikes between 02:09-02:19 UTC today.

Noise: No noise from the volcano has been reported.

Meltwater: According to satellite images very little ice has melted during the eruption. No signs of flooding is detected.

Conditions at eruption site:

Yesterday evening there was still active explosivity in Grímsvötn. The activity is in three to four tephra cones surrounded by meltwater. The activity is pulsating with explosions producing ash clouds that rise up from the craters, some reaching a few km. The eruption plume is not continuous and all the material falls out nearby.

- Seismic tremor: Seismic tremor level at the Grímsfjall station lowered yesterday evening between 21:15 - 21:45 UTC. At about 02 UTC today the tremor decreased considerably and has been fairly stable since.
- Earthquakes: No earthquakes were recorded in the volcano today.
- GPS deformation: No significant displacement was observed at the GPS-station at Mt. Grímsfjall yesterday.
- Overall assessment: All measurements and aerial observations show that the eruption has diminished substantially. Ash-fall is now confined to the vicinity of the eruption site.