

## Eruption in Eyjafjallajökull

Status Report: 17:00 GMT, 20 May 2010

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Based on: IMO seismic monitoring; IES-IMO GPS monitoring; IMO hydrological data; IMO weather radar measurements, web cameras, ATDnet – UK Met. Offices lightning detection system, NOAA satellite images and web-based ash reports from the public.

### Eruption plume:

Height (a.s.l.): According to radar observations, the plume has been at around 5 km/18,000ft. today. Over the volcano, winds blow from the south at 10 m/s, but at the top of the plume the wind is south-southwesterly at 13 m/s.

Heading: North, but turns to the northeast over the highlands (according to radar and weather satellite).

Colour: Gray.

Tephra fallout: Ashfall has only been reported at Fljótshlíð, the innermost farm in Fljótshlíð, beginning last night and continuing all day.

Lightning: Ten lightning strikes were detected from midnight to 13h, but none since.

Noises: No reports.

Meltwater: Meltwater from the eruption site is still at a low. Water discharge in rivers around the Eyjafjallajökull glacier has decreased again after the increase caused by rainfall yesterday. Tomorrow, water gauges will be installed in Bakkakot River to monitor potential mudslides like the one that occurred yesterday in Svaðbæli River.

Conditions at eruption site: The volcano has not been visible for two days due to cloudy weather. Radar images from TF-SIF show no major changes in the ice cauldrons where the cinder cone is forming. The eruption is mainly explosive and almost no lava flows down Gígjökull.

Seismic tremor: Volcanic tremor is fairly steady and similar to that of the last few days.

Earthquakes: Two microearthquakes have been recorded in the volcano since midnight, at depths of around 7 and 3 km.

GPS deformation: Irregular oscillations in the vertical component of stations closest to the volcano.

Overall assessment: The height of the ash plume has decreased in the last few days which suggests a decrease in magma flow (considerably less than 50 tonns/sec) compared to the flow over the weekend and at the end of last week. Fluctuations in eruption activity and varying ashfall can still be expected.