

## Eruption in Eyjafjallajökull

Status Report: 17:00 GMT, 18 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 mostly at 7 km/21,000 ft. South and southwesterly winds (25-35 kt) over the volcano. Near the surface, the wind was easterly, blowing ash from the ground towards west and northwest.

Heading: The plume is drifting northeast.

Colour: Gray (as seen on web cameras).

Tephra fallout: Ash has fallen in the Gnúpverjahreppur area, Hrauneyjar and in the north-east and east part of Iceland (from Laugar in S-Thingeyjarsýsla to Seydisfjordur). Higher aerosol concentrations have been recorded in Reykjavík around midday due to ash drifting over the area.

Lightning: More than 70 lightning strikes from midnight to midday (up to 10 flashes per hour until noon but has decreased in the afternoon) have been detected.

Noises: No reports.

Meltwater: Low water discharge at Gígjökull.

Conditions at eruption site: No direct observations of the eruption site today. The plume has been mostly steady at 7 km height. The size, height and colour of the plume suggest that conditions are similar to what they have been over the last several days.

Seismic tremor: Volcanic tremor is similar to that of the last few days, although the low frequency has slightly decreased during the last days.

Earthquakes: One microearthquake has been recorded since midnight at a depth of more than 16 km.

GPS deformation: Continued horizontal displacements towards the center of Eyjafjallajökull volcano together with subsidence.

Overall assessment: A powerful explosive eruption is ongoing and the height of the suggests that the eruption rate is over 200 tonnes/s. Fallout of tephra has been detected mainly to the northeast of the volcano, with recorded fallout on the northeast coast. Some tephra dispersion towards west in the afternoon.