

Eruption in Eyjafjallajökull

Status Report: 15:00 GMT, 10 May 2010

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Based on: IMO seismic monitoring; IES-IMO GPS monitoring; IMO hydrological data; IMO weather radar measurements, MODIS satellite images.

Eruption plume:

Height (a.s.l.): ~5 km / 17,000 ft but sometimes shoots up to 6 km / 20,000 ft.

Heading: Southeast. Low level winds are variable.

Colour: Grey / light gray.

Tephra fallout: Ashfall reported at Drangshlíð and Skarðshlíð almost continuously for the last 24 hours. The ash is rather coarse, estimated by the farmers to be ~2-3 mm.

Lightning: No lightning has been detected on instruments over the eruption site for the last week.

Noises: No reports.

Meltwater: Low water discharge at Gígjökull. Daily fluctuations in discharge and temperature are dominating the water flow at Markarfljótsbrú. No flash floods have been detected.

Conditions at eruption site: There was no flight today, but observations from web cameras show similar activity to yesterday. The crater is getting higher. Lava flow is low and not visible on cameras. In the afternoon there was a slight increase in explosive activity, which resulted in a higher plume for a while.

Seismic tremor: Has been similar for the past 3 days, and similar amplitude on all frequency bands.

Earthquakes: A sequence of earthquakes started around 11:00h this morning. Some 40 earthquakes were located, mostly at depths of 18 – 20 km and magnitude range Ml 1 – Ml 2. As the background tremor is much lower now than last week, much smaller earthquakes are observed, partly counting for the number of earthquakes detected this morning.

GPS deformation: Horizontal displacement towards the center of Eyjafjallajökull volcano and subsidence. Some irregular movements are seen in the height of the station closest to the volcano.

Overall assessment: The earthquake sequence this morning indicates that magma is still flowing in from the mantle. Presently there are no indications that the eruption is about to end.