

Eruption in Eyjafjallajökull

Status Report: 17:00 GMT, 19 May 2010

Icelandic Meteorological Office and Institute of Earth Sciences, University of Iceland

Compiled by: Sigprúður Ármannsdóttir, Sigrún Hreinsdóttir, Helga Ívarsdóttir, Matthew J. Roberts, Bergþóra S. Þorbjarnardóttir and Steinunn Jakobsdóttir.

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 and pilots observations, the plume has been slightly lower today than yesterday, at 5-6 km/18,000-20,000ft. Southerly winds prevailed this morning over the volcano, turning to the southwest at 15-18 m/s.

Heading: The plume drifted northwest early this morning, but then turned north-northeast (according to radar).

Colour: Gray or light gray.

Tephra fallout: Ash has fallen in the south at Flúðir, Fljótshlíð and Rangárþing ytri, and with rainfall in the north in Húsavík and Skagafjörður right before noon.

Lightning: Over 20 lightning strikes have been detected from midnight to midday, considerably fewer than yesterday.

Noises: No reports.

Meltwater: Heavy rainfall caused swelling of Eyjafjallajökull rivers today. The rain, together with ash from an area of a few square kilometers, resulted in a mudslide in Svaðbæli River, Hydrologists from IMO and a scientist from the Earth Science Institute, University of Iceland, gathered samples from the river and also from Skógar River. The discharge at the old bridge over markarfljót River has not been greater since 15 April. The discharge at Gígjökull is still low.

Conditions at eruption site: The plume is up to 5-6 km and drifts to the north-northeast according to reconnaissance flight from the Icelandic Coast Guard this afternoon. The number of lightning strikes has decreased.

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

Earthquakes: No earthquakes have been recorded in the area since the night before last.

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

Overall assessment: The ash plume has been slightly lower today than in the last days and the number of lightning strikes has decreased. Tephra fallout has been detected northwest of the eruption site and also in the north of the country at around and after 12 p.m.