

Eruption in Eyjafjallajökull

Status Report: 17:00 GMT, 23 May 2010

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

Compiled by: Sigbrúður Ármannsdóttir, Sigrún Hreinsóttir, Teitur Arason, Magnús Tumi Guðmundsson, Matthew J. Roberts, Hrafn Guðmundsson and Steinunn S. Jakobsdóttir.

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

Eruption plume:

Height (a.s.l.): According to a pilot, the plume is estimated at 3 km/10,000ft. A light northerly wind.

Heading: South.

Colour: White, steam.

Tephra fallout: No reports of ashfall.

Lightning: No lightning strikes have been detected.

Noises: No reports.

Meltwater: Low discharge from Gígjökull.

Conditions at eruption site: Measurements with heat camera made from an aircraft gave almost 100°C as the highest temperatures at the crater. The crater could not be observed due to steam rising from it. No signs of extrusion of magma could be seen.

Seismic tremor: Volcanic tremor is still decreasing and is approaching the level it had before the eruption.

Earthquakes: About twenty earthquakes have been recorded since midnight, mainly at shallow depths.

GPS deformation: Horizontal displacements toward the centre of Eyjafjallajökull volcano and subsidence.

Overall assessment: The eruption seems to be dormant today. There is still a considerable amount of steam coming from the crater, but no ash can be seen in it. The tremor is still higher than before the onset of the eruption, especially in the frequency band 1 – 2 Hz, but that might be due to the rising steam.