

Eruption in Eyjafjallajökull

Status Report: 16:00 GMT, 07 May 2010

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Based on: IMO seismic monitoring; IES-IMO GPS monitoring; IMO hydrological data; IMO weather radar measurements, MERIS satellite image; reports from sent through the IMO web site, information from commercial flights.

Eruption plume:

Height (a.s.l.): 7 km according to IMO weather radar measurements at 1155h. Commercial flight heading towards Keflavík at 15:18h: 20,000-25,000ft (7-7.6 km).

Heading: Southeast

Colour: Colour: Dark at the bottom, otherwise light gray.

Tephra fallout: Considerable in Vík ashfall began at 21h last night; ashfall reaches to ~55-60 km from eruption site, midway through Mýrdalssandur.

Lightning: No detections today over the eruption site.

Noises: No reports

Meltwater: During the last 24 hours there have been no flash floods from Gígjökull measured at Markarfljótsbrú. Electrical conductivity has been decreasing and daily fluctuations in discharge and water temperature have been observed. The electrical conductivity in Jökulsá á Sólheimasandi which has been traced to ash contamination from the glacier is still quite high. An increase in discharge has been observed in rivers in the area around Mýrdals- and Eyjafjallajökull due to higher ambient temperature.

Conditions at eruption site: The ash plume is lower now than yesterday. The wind affects the plume and ashfall is less. The cinder cone continues to build up around the eruption vent in the ice cauldron. The lava flow to the north has been stagnant past two days.

Seismic tremor: Tremor levels are low, comparable to yesterday and the period on 14-17 April.

Earthquakes: Earthquakes are still being recorded at 5-13 km depth, but fewer than yesterday.

GPS deformation: Measurements from around Eyjafjallajökull indicate no major net displacements, suggesting a stabilization of the surface deformation since yesterday.

Other remarks: Grainsize analysis of samples taken of ash that fell on May 3rd at 64 km distance from the eruption site shows that about 5 % of the ash is smaller than 10 micron (aerosols). This is a considerable decrease of fine particles compared to ash from April 15th (25% aerosols) sampled at a similar distance. The grain size analysis was carried out by Nýsköpunarmiðstöð Íslands.

Overall assessment: Explosive activity seems to have decreased since yesterday. The ash plume does not rise as high into the air and is lighter in colour. Steam rises from the lava tongue under Gígjökull which is a sign that ice is melting in the tunnel, but to a much lesser degree than when the lava flow was at its peak. There are no signs that the eruption is ending.