

# Eruption in Eyjafjallajökull

Status Report: 15:00 GMT, 04 May 2010

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Based on: IMO seismic monitoring; IES-IMO GPS monitoring; IMO hydrological data; web cameras of the eruption site from Vodafone, Milan and Mulakot; IMO weather radar measurements, NOAA satellite image; information from an eye witness at Fljótshlíð (MJR), information from the Icelandic Coast Guard flight.

## Eruption plume:

Height (a.s.l.): Plume observed at 5.8-6 km height (19-20,000 ft) estimated from the Icelandic Coast Guard (ICG) flight at 10:40 and 15:30 GMT. The plume has also been observed on IMO's weather radar at 5.2-5.4 km height between 13:05 and 14:00 GMT.

Heading: East-south-east to south-east from the eruption site. Plume track clearly visible up to 300-400 km distance from the eruption site on a noaa satellite image at 13:13 GMT.

Colour: Observation from web cameras and from pilots in ICG-flight: Dark grey ash plume observed over the eruptive site, larger than yesterday. White (steam) plumes rising from Gígjökull outlet glacier, north of the eruption site smaller than yesterday.

Tephra fallout: According to the police at Hvolsvöllur there was ash-fall in Áltaver and Meðalland, 65-80 km east-south-east of Eyjafjallajökull, where people could hardly see next farms (in a few kilometres distance).

Lightning: No detections today over the eruption site.

Noises: An eye witness in Fljótshlíð (9-10 N of eruption site) heard explosions every few seconds. He also hears separate noises from Gígjökull outlet glacier.

Meltwater: Water levels have been rather constant. Water temperature at Markarfljot bridge was low this morning (below 2°C) but seems to be rising (about 5°C at noon). Water level seems to be slightly decreasing.

Conditions at eruption site: Explosive activity and ash production is strong and has increased since yesterday. Dark ash plume rises above the crater. Lava is still flowing northwards, forming a lava fall down the steep hill under Gígjökull, about 4 km north of the crater. Blue gas is seen rising from the lava and white steam plumes are seen somewhat lower and mark the front of the lava stream. Radar images from ICG-flight today

show tunnels in Gígjökull increasing in size and continuing the build up of the cone at the crater. The size of the eruptive crater is 280 x 190 m. Lava splashes are thrown at least a few hundred meters into the air.

**Seismic tremor:** Tremor levels decreased last night (3 May) and have decreased even further this morning at around 11:00 GMT. They now seem to be at a similar level as on 18 April.

**Earthquakes:** Several earthquakes were detected beneath Eyjafjallajökull yesterday evening and early this morning. As yesterday, they seem to originate deep in the crust (14 -20 km).

**GPS deformation:** Irregular oscillations in vertical component of stations next to the volcano.

**Other remarks:** No measurable geophysical changes within the Katla volcano.

**Overall assessment:** More explosive activity and ash production than was observed yesterday. Progression of the lava seems to be slower than yesterday. Presently there are no indications that the eruption is about to end.