

Bárðarbunga: 07.09.2014, 13:20 UTC

Scientists from the Icelandic Met Office and the Institute of Earth Sciences and representatives of the Civil Protection in Iceland attend the meetings of the Scientific Advisory Board of the Icelandic Civil Protection.

Conclusions of the Scientific Advisory Board of the Icelandic Civil Protection:

- The eruptive activity at Holuhraun has not decreased. Magma flow is between 100 and 200 m³/s. The lava advances by about 1 km/day and its area yesterday afternoon was around 16 km².
 - The eruption sites are the same as before. The eruptive intensity on the southern fissure that opened on Friday is much less than on the northern fissure that has been active since the beginning of the eruption.
 - The lava tongue now extends 11 km to the north and has reached the western main branch of Jökulsá á Fjöllum river. However, no explosive activity due to the lava and river water interaction has been observed, but steam rises from the lava.
 - A white eruption cloud rises 3 - 4 km and is directed to the north and northeast.
- Seismicity in the area is similar to yesterday. Around 140 earthquakes have been recorded since midnight. At 03:30 this morning, a magnitude 4.6 earthquake occurred at the rim of the Bárðarbunga caldera. Shortly after 07:00, a magnitude 5.4 earthquake occurred on the rim, one of the largest recorded since the start of the present activity.
- The amount of magma flow into the dyke seems to be similar to the magma erupting from the fissures. GPS stations outside the glacier record insignificant crustal movements.
- Four scenarios are still likely:
 - The migration of magma could stop, resulting in a gradual reduction in seismic activity and no further eruptions.
 - The dyke could reach the Earth's surface at different locations outside the glacier. Lava flow and/or explosive activity cannot be excluded.
 - The intrusion again reaches the surface under the glacier and possibly leads to a significant eruption. This would most likely produce a flood in Jökulsá á Fjöllum and perhaps explosive, ash-producing activity.
 - An eruption in Bárðarbunga. The eruption could cause an outburst flood and possibly an explosive, ash-producing activity. In the event of a subglacial eruption, it is most likely that flooding would affect Jökulsá á Fjöllum. However it is not possible to exclude the following flood paths: Skjálafandafliót, Kaldakvísl, Skaftá and Grímsvötn.Other scenarios cannot be excluded.

From the Icelandic Met Office:

The Aviation Colour Code for Bárðarbunga remains at 'orange' and the code for Askja at 'yellow'.