Bárðarbunga: 15.09.2014, 11:30 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. A representative from The Environment Agency of Iceland and Icelandic Directorate of Health was also present.

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

- The eruptive activity at Holuhraun and the subsidence of the Bárðarbunga caldera continues at similar intensity as yesterday. Scientists had to leave the area because of bad conditions so there is no new information about the progress of the lava flow.
- The subsidence of the Bárðarbunga caldera continues. According to GPS
  measurements the subsidence in the centre of the caldera is about 50 cm over the
  last 24 hours.
- Seismic activity is similar to what it has been in the past few days. The biggest earthquake, of magnitude 5.0, was detected today at around 08:00 in the south of Bárðarbunga. Four other earthquakes of 3.0 in magnitude or more have been detected since midnight.
- GPS monitoring shows insignificant crustal movements north of Vatnajökull.
- Air quality in urban areas in the East of Iceland:
- High air pollution was detected yesterday in Mývatnssveit. The highest peak was measured 1250 micrograms per cubic meter. The area likely affected by air pollution from the eruptoin is now marked by Bárðardalur to the west to Hólasandur/Merlakkaslétta platou in the east. This evening the affected area more to the east from Mývatn-area in the west to Vopnafjordur bay in the east. Tomorrow lighter westerly winds are expected and likely effected area will be from Vopnafjörður bay, and south towards Djúpivogur.

## Instructions:

- People who feel discomfort are advised to stay indoors, close their windows, turn up the heat and turn off air conditioning. Use periods of good air quality to ventilate the house. Measurements of air quality can be found on the webpage <a href="www.loftgaedi.is">www.loftgaedi.is</a> The Meteorological Office issues forecast on its web-page and warnings if conditions change to the worse.
- o Instructions from the office of the Chief Epidemiologist and The Environment Agency can be found on their web-sites <a href="https://www.ust.is">www.ust.is</a> and <a href="https://www.landlaeknir.is">www.landlaeknir.is</a>
- The Icelandic Met Office will read forecasts for sulphuric gases along with weather news on the national radio and TV.
- The Environment Agency is working on getting more measuring equipment to better monitor the gases coming from the volcanic eruption.
- O Information and any questions on air pollution can be sent to The Environment Agency through the email gos@ust.is. The Environment Agency is especially looking for information from people who have been in contact with high concentrations of gas; where they were, at what time it happened, how the gas cloud looked (colour and thickness of the cloud) and how they were affected by it. In the near future, there will be a page on the IMO's webpage for this type of information.

- Three scenarios are considered most likely:
  - Subsidence of the Bárðarbunga caldera stops and the eruption on Holuhraun declines gradually.
  - Large-scale subsidence of the caldera occurs, prolonging or strengthening the eruption on Holuhraun. In this situation, it is likely that the eruptive fissure would lengthen southwards under Dyngjujökull, resulting in a jökulhlaup and an ash-producing eruption. It is also possible that eruptive fissures could develop in another location under the glacier.
  - Large-scale subsidence of the caldera occurs, causing an eruption at the edge of the caldera. Such an eruption would melt large quantities of ice, leading to a major jökulhlaup, accompanied by ashfall.

Other scenarios cannot be excluded.

## From the Icelandic Met Office:

The Aviation Colour Code for Bárðarbunga remains at 'orange'.