

Askja Volcano - Iceland



Askja is a caldera situated in a remote part of the central highlands. The name Askja refers to a complex of nested calderas within the surrounding Dyngjufjoll mountains, which rise to 1,510 m, askja meaning box or caldera in Icelandic. The region is only accessible for a few months of the year. Being situated in the rain shadow to the northeast of the Vatnajokull glacier, the area receives only about 45 cm of rainfall annually. The area was used during training for the Apollo program to prepare astronauts for the lunar missions. Their main objective in Askja was to study geology.



Within the Askja Caldera: Viti (Hell) Crater with Oskjuvatn Lake in the background

The Askja-S eruption occurred in the early Holocene, ca 11,000 years ago. Tephra from this eruption has been found in south-east Sweden, Northern Ireland and north Norway and recently as far south as Romania, which makes it one of the most far-travelled Icelandic tephtras. The outer caldera of Askja, representing a prehistoric eruption, is about 50 km², and there is evidence of other later caldera-forming events within it. The main crater floor lies at about 1,100 m. The rim is a few thousand meters higher.

Askja was virtually unknown until the tremendous eruption which started on March 29, 1875. The ashfall in the eastern fjords especially, was heavy enough to poison the land and kill livestock. Ash or tephra from this eruption was wind-blown to Norway, Sweden, Germany and Poland. The eruption triggered a substantial wave of emigration from Iceland. Oskjuvatn Lake fills much of the smaller caldera resulting from the 1875 eruption. Its surface lies about 50 m below the level of the main caldera floor and covers about 12 km². When the lake originally formed it was warm, but today it is frozen over for most of the year. Oskjuvatn is the second deepest lake in Iceland at 220 m deep.

The last eruption of Askja was in 1961.

In June 2010, Volcano expert Hazel Rymer said seismic activity was increasing at Askja and that an eruption could be around the corner. The increased earthquake activity is located to the northeast of the central volcano, in the direction of Herdubreid tuya. It was ruled out that any activity from Eyjafjallajokull was responsible for the increase in activity at Askja. The news came as scientists continue to watch Katla. In early April 2012 it was noted that the lake in the caldera was totally clear of ice, which usually does not happen until in June or July in a normal year. It is believed that increased geothermal activity in the volcano is heating the lake. Travel in the area was restricted until further research could be carried out.