

Giant crater in Russia's far north sparks mystery

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A mysterious crater in the permafrost north of regional capital Salekhard in the Yamalo-Nenets region, 2,000 km from Moscow, on June 16, 2014

A vast crater discovered in a remote region of Siberia known to locals as "the end of the world" is causing a sensation in Russia, with a group of scientists being sent to investigate.

The giant hole in the remote energy-rich Yamalo-Nenetsky region first

came to light in a video uploaded to YouTube that has since been viewed more than seven million times.

"The crater is enormous in size—you could fly down into it in several Mi-8s (helicopters) without being afraid of hitting anything," the person who posted the video, named only as Bulka, wrote.

The crater is located in the permafrost around 30 kilometres (18 miles) from a huge gas field north of the regional capital of Salekhard, roughly 2,000 kilometres northeast of Moscow.

The appearance of the mysterious chasm prompted numerous conspiracy theories and speculation that it may have been caused by something otherworldly, with some even suggesting aliens might be behind it.

Initial theories suggesting the crater was caused by a meteorite, however, were dismissed by scientists.

"This does not stand up to any criticism," the deputy director of the Oil and Gas Research Institute of the Russian Academy of Sciences, Vasily Bogoyavlensky, was quoted as saying by Interfax news agency.

He said the crater was likely to have been caused by the melting of underground ice in the permafrost, freeing gas that then built up high pressure and broke through to the surface.

"At some point an explosion took place without any flame," Bogoyavlensky said.

In an effort to discover its mysteries, regional governor Dmitry Kobylkin sent a group of scientists into the tundra where the crater is located in the Yamal peninsula—which translates as "the end of the world", Interfax reported.



A scientist walks near a mysterious crater in the permafrost north of regional capital Salekhard in the Yamalo-Nenets region, 2,000 km from Moscow, on June 16, 2014

Marina Leibman, chief researcher at the Earth Cryosphere Institute, which studies permafrost, was part the team sent to scour the area.

"A thorough search showed there were no traces of people or machinery" by the crater, Leibman said in a statement released by local authorities.

She said that the crater could not have been caused by a meteorite because there were no traces of burning around the edge.

"It most likely happened when pressure went up in some cavity containing deposits of marsh gas (methane)," she said.

"So far this is just a hypothesis, the least contradictory one. There is no proof," she cautioned.

No radiation

Andrei Plekhanov, a senior researcher at the state Scientific Centre for the Study of the Arctic, said the crater has a diameter of around 40 metres (130 feet) on the inside and 60 metres on the outside.

"To measure the depth precisely, you need specialists with serious mountaineering equipment," he added.

"It's deadly dangerous to go close because the sides of the raised mound around it constantly cave in," Plekhanov said, quoted by the regional authorities in a statement.

Scientists measured radioactivity levels and found there was no dangerous radiation.

The Yamalo-Nenetsky region is the source of more than 80 percent of the natural gas Russia pumps out.

The find also prompted speculation that the crater could have been caused by an explosion of shale gas, the regional authorities said in a statement, adding: "This version will also be studied by researchers."

Scientists have also found a second, smaller crater with a diameter of around 15 metres, Interfax reported, after reindeer herders alerted them.

"It's just like the one near Bovanenkovo but many times smaller, around 15 metres in diameter. Snow can be seen inside the hole," local lawmaker Mikhail Lapsui told Interfax after visiting the site.

Experts said they were keen to explore the big crater further.

"It's an interesting phenomenon. We are discussing further study of this place. It really is worth continuing scientific work," Vladimir Pushkarev, the head of the Russian Centre for Developing the Arctic, was quoted as saying by regional authorities.

"A lot of scientists... would like to study the vertical wall of the crater," said Leibman.

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