

Eruption is a pipsqueak by Iceland's standards

Country's raw, rugged beauty is born out of impressive volcanic credentials



This photo was taken during first phase of the Eyjafjallajökull volcano eruption in late March.

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The eruption of Iceland's very photogenic Eyjafjallajökull volcano has heated up in the last few days, leading to the cancellation of hundreds of commercial plane flights and effectively shutting down much of northern Europe's airspace.

This is a hassle for thousands of people, and it's a testament to the region's governments and aviation authorities that no one is taking chances here — the danger to aircraft from volcanic ash clouds is not to be trifled with.

That said, it's worth noting that this eruption is a pipsqueak by Iceland's standards. The country's famously raw, rugged beauty is born out of impressive volcanic credentials -- it not only straddles the mid-Atlantic ridge, where the European and North American tectonic plates are spreading apart, it is also a hotspot like Hawaii.

In 1783, the world saw what Iceland's volcanoes are capable of. On June 8, the Laki fissures began erupting in the southern part of the island.

The effects were catastrophic on Iceland: 9,000 people were killed, between 20 and 25 percent of the population at the time. Livestock herds were decimated, animals' succumbed to grisly deaths as their teeth and bones dissolved in millions of tons of hydrogen fluoride gas that poured forth from Laki.

Through the summer, sulfur dioxide fumes swept down through Europe, turning the sun blood red and throwing weather systems around the planet into chaos for years. Inhalation of the gas is thought to have killed tens of thousands of Europeans.

As this latest, much smaller eruption plume swirls across the United Kingdom, Scandinavia, and countries throughout Europe, the effects will be much more muted. But volcanic ash poses more than just a threat to airplanes — there is evidence that even in small concentrations, **it can kill people.**

From a scientific standpoint, this eruption is a terrific opportunity to see how volcanic ash and gases disperse across Europe, and how they affect air quality in populated areas. From a human standpoint, the sunsets will likely be spectacular across the continent.

Overall, people should not be worried about a large impact on public health — any effects on people's airways or aggravating respiratory diseases will likely be minor, or may not show up at all.

But history shows us that with the eruption of Eyjafjallajokull, **the nearby Katla volcano usually follows**, and more violently. If that happens, it may be time to break out the breathing masks.

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