

Holuhraun Lava Field Iceland

As an island in the moist, turbulent North Atlantic, Iceland is often shrouded in clouds and difficult to observe from space. In 2014, the island started making some of its own cloud cover, as the Earth split open between the Bárðarbunga and Askja volcanoes and spewed lava and hot gas.

Landsat 8 captured this view of the eruption in September 2014. The false-color image combines shortwave infrared, near-infrared, and green light. Ice and the plume of steam and sulfur dioxide appear cyan and bright blue, while liquid water is navy blue. Bare or rocky ground around the Holuhraun lava field appears in shades of green or brown, and fresh lava is bright orange. Offshore clouds appear in bright cyan.

Infrared imagery can help scientists estimate the rate at which lava is pouring out of Earth, as well as the sulfur dioxide content of the plume. It also helps them pinpoint lava flows and model how the eruption evolved.