Kīlauea Volcano’s 2018 lower East Rift Zone eruption

Tuesday, April 23, 2019 • 7:00 p.m.
Kīlauea Visitor Center Auditorium
Hawaiʻi Volcanoes National Park

Kīlauea Volcano’s long-lasting East Rift Zone eruption changed abruptly when the Puʻu ʻŌʻō crater floor collapsed on April 30, 2018, followed by an intrusion of magma downrift. On May 3, lava erupted in the Leilani Estates subdivision; within two weeks, 24 fissures had opened along a 4.2-mile-long segment of the lower East Rift Zone. Fissure 8 soon became the dominant vent, erupting a fast-moving channelized lava flow that reached the ocean, burying 13.7 square miles of land and destroying over 700 structures along the way. Join USGS Hawaiian Volcano Observatory geologist Carolyn Parcheta as she recounts the progression of this dramatic eruption and shares her experiences monitoring it in this “After Dark in the Park” program.

Overview of Kīlauea Volcano’s 2018 events

Thursday, May 2, 2019 • 7:00 p.m.
University Classroom Building, Room 100
University of Hawaiʻi at Hilo
200 W. Kawili St., Hilo, HI 96720

In 2018, the largest flank eruption and caldera collapse in at least 200 years occurred on Kīlauea Volcano. It began on May 3, when a fissure erupted in Hawaiʻi Island’s lower Puna District. In all, 24 fissures eventually erupted along a 4.2-mile-long segment of Kīlauea’s lower East Rift Zone (LERZ). Fissure 8 became the dominant vent, erupting a voluminous lava flow that reached the ocean, destroying over 700 structures along the way. As magma drained from the summit reservoir to feed the lava flow, parts of Kīlauea’s summit caldera collapsed, by more than 1600 feet in places, accompanied by dozens of earthquakes each day. In early August 2018, the summit subsidence and earthquakes abruptly ended, and the LERZ lava effusion declined until September 5, when active lava was no longer observed at fissure 8. USGS Hawaiian Volcano Observatory scientist Ingrid Johanson presents an overview of this summer’s unprecedented events on Kīlauea, including how tilt data, GPS, and satellite radar helped scientists understand what was happening in 2018 and what the volcano is doing now.