



Volcano Awareness Month Presentations



January 2023 – At-a-Glance

Monday	Tuesday	Wednesday	Thursday	
9	10	11	12 UH Hilo—7 pm <i>Tracking Kilauea faults and ground deformation</i>	14 - Saturday Ocean View—1–3 pm <i>Mauna Loa Talk Story</i>
16	17 West Hawaii Civic Center (Kona)—6 pm <i>Volcanic hazards</i>	18 Nā Leo—6 pm <i>Mauna Loa 2022 eruption and response</i>	19 UH-Hilo—7 pm <i>Mauna Loa geochemistry</i>	22 - Sunday Hawai'i Volcanoes National Park—10 am and 2 pm <i>Maunaulu Hike</i>
23	24 ADIP—7 pm <i>Mauna Loa eruption insights</i>	25	26 Pu'uhonua o Hōnaunau—6 pm <i>Mauna Loa eruption insights and staying prepared</i>	
30	31 ADIP – 7 pm <i>Kilauea summit changes since 2018</i>			

Details for presentations noted on this calendar are provided on the following pages.

Talks are free and open to the public.

University of Hawai'i at Hilo • 7:00 p.m.
Room 100, University Classroom Building (Bldg 301) • Main Campus
Directions: <http://www.hilo.hawaii.edu/uhh/maps.php>

Thursday, January 12

Tracking active faults and ground deformation south of Kīlauea caldera with the UH-Hilo Geology Department



The Koa'e fault system connects Kīlauea's East and Southwest Rift Zones south of the caldera. Faults here appear as low cliffs, or "scarps" along Hilina Pali Road in Hawai'i Volcanoes National Park and the area provides an important long-term record of Kīlauea south flank motion. These faults slip during major earthquakes, such as those of May 4, 2018—near the beginning of Kīlauea's 2018 eruption. Join **University of Hawai'i at Hilo (UHH) geology professor Steve Lundblad** as he describes how geology students track ground movements in the Koa'e fault

system, measuring active faults and tracking magmatic intrusions. On-the-ground measurements complement USGS Hawaiian Volcano Observatory geodetic instruments to keep track of this active part of the Kīlauea volcano. *UHH Photo: Geology majors measure vertical offset of Hilina Pali road on Kulanaokuaiki Pali in Hawai'i Volcanoes National Park shortly after the end of Kīlauea's 2018 eruption.*

Thursday, January 19

Tracking magma changes through time: 2022 Mauna Loa versus 2018 Kīlauea

After 38 years of relative quiet, Mauna Loa erupted on November 27, 2022. The eruption began in Moku'āweoweo, the summit caldera, and within a day had migrated to the Northeast Rift Zone, where large lava flows began moving down the slope of the volcano to the north. USGS Hawaiian Volcano Observatory geologists collected samples of the lava and brought them to the rapid response lab at the University



of Hawai'i at Hilo (UHH), where changes in the chemistry and crystals were tracked as the eruption progressed. Join **UHH geology professor Cheryl Gansecki** as she describes what we learned about the magma feeding this eruption and why it was so different from what we saw from Kīlauea in 2018. *USGS Photo: Aerial photograph of a lava flow from the Northeast Rift Zone eruption of Mauna Loa moving downslope to the north on November 29, 2022.*

ADIP (After Dark in the Park) Programs • 7:00 p.m.
Kīlauea Visitor Center Auditorium • Hawai'i Volcanoes National Park
Directions: <http://www.nps.gov/havo/planyourvisit/directions.htm>
(Park entrance fees may apply.)

Tuesday, January 24

Insights from Mauna Loa's first eruption in nearly 40 years



After 38 years of quiescence, Mauna Loa erupted from November 27 through December 10, 2022. The eruption began in the summit caldera and within a day had migrated to the Northeast Rift Zone. Lava flows moved downslope on the northeast flank but eventually stalled before impacting a major highway. Join **Matt Patrick and Mike Zoeller, geologists with the USGS Hawaiian Volcano Observatory**, as they describe this historic eruption and what we've learned from it. *USGS photo: Mauna Loa's Northeast Rift Zone erupting on November 30, 2022.*

Tuesday, January 31

Changes at the summit of Kīlauea since the 2018 caldera collapse

In 2018, the lava lake within Halema'uma'u crater drained and the caldera floor dropped by more than 1,600 feet (500 m). There has been a variety of activity within Halema'uma'u since then. The first-ever documented water lake filled the bottom of the crater starting in summer 2019. It reached approximately 160 feet (50 m) deep before Kīlauea started erupting again in December 2020. This eruption continued



until May 2021. Kīlauea was again quiet for about three months before it burst to life in September 2021. That eruption continued until December 2022. **USGS Hawaiian Volcano Observatory Geologist Drew Downs** recounts these events and how the USGS Hawaiian Volcano Observatory continues to monitor activity at this extraordinary volcano. *USGS photo: The lava lake within Halema'uma'u at the summit of Kīlauea on June 24, 2022.*

Hawaiian Ocean View Estates • January 14, 1–3 p.m.
Ocean View Community Center • 92-8924 Leilani Circle, Ocean View
Directions: <https://www.ovcahi.org/>



Saturday, January 14

Talk story about Mauna Loa

Join **USGS Hawaiian Volcano Observatory** and **County of Hawai‘i Civil Defense Agency** staff for an “open house” style event during which you can talk view informative displays about Mauna Loa volcano and talk story with scientists and public safety officials. Get answers to frequently asked questions and ask your questions. *Civil Air Patrol photo: aerial image of lava channels from the Northeast Rift Zone of Mauna Loa on November 28, 2022.*

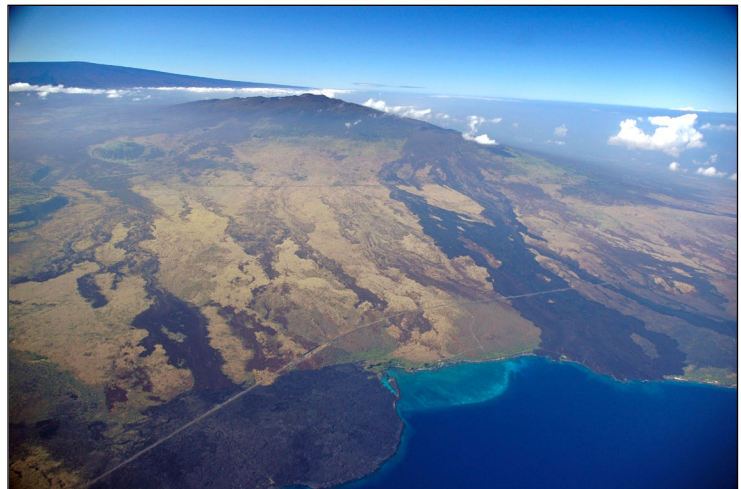
West Hawai‘i Civic Center • January 17, 6:00 p.m.
Council Chambers • 74-5044 Ane Keohokalole HWY, Kailua-Kona
Directions:
<https://www.hawaiicounty.gov/Home/Components/FacilityDirectory/FacilityDirectory/6/34>

Tuesday, January 17

Living with volcanic hazards in Kona

Kona residents live on an active volcano (Hualālai or Mauna Loa), and are downwind of several active volcanoes (Kīlauea, Mauna Loa, and Hualālai).

Natalia Deligne, USGS Hawaiian Volcanic Observatory geologist, talks about past eruptions from Hualālai and Mauna Loa that sent lava flows through parts of Kona, and the 1929 earthquake swarm at Hualālai volcano. Learn about how you and your ‘ohana can prepare for eruptions and volcanic unrest in Kona, and other hazards you may face from more distant eruptions, such as vog. *USGS photo: Hualālai (center) above Kīholo Bay on Hawai‘i Island's West Coast is flanked by lava flow erupted from the volcano around 1800 (right) and 1859 Mauna Loa flow (left).*



Nā Leo • January 18, 6:00 p.m.
Hilo Nā Leo Studio • 91 Mohouli St., Hilo
Directions: <https://naleo.tv/> (bottom of page)



Wednesday, January 18

Mauna Loa 2022 eruption and response

Tune in virtually or in-person for this talk on the recent eruption of Mauna Loa. **USGS Hawaiian Volcano Observatory Scientist-in-Charge Ken Hon** and **County of Hawai'i Civil Defense Agency Administrator Talmadge Magno** discuss the unrest leading to the eruption and describe how the eruption and response unfolded. What are the important takeaways

for Island of Hawai'i residents? Learn how you and your 'ohana can prepare for eruptions and volcanic unrest, and other hazards you may face from eruptions. Seating for this event is limited; if you would like to attend this event in person, please email askHVO@usgs.gov. This event will be recorded and available for later viewing. *USGS photo: Mauna Loa's fissure 3 erupting on the Northeast Rift Zone of Mauna Loa on December 8, 2022.*

Pu'uhonua o Hōnaunau Natl. Hist. Park • January 26, 6:00 p.m.
Amphitheater • State HWY 160, Hōnaunau

Directions: <https://www.nps.gov/puho/planyourvisit/maps.htm>
(Park entrance fees may apply.)

Thursday, January 26

Mauna Loa 2022 eruption insights and staying prepared

Join **USGS Hawaiian Volcano Observatory geologist Frank Trusdell** as he describes this historic 2022 eruption of Mauna Loa and what we've learned from it. The eruption was the first in 38 years and the first to be monitored with modern instruments. The eruption followed previous eruption patterns, beginning in the summit caldera and migrating to a rift zone. Learn what this eruption has taught us about Mauna Loa and how it can help us better prepare for the next eruption of Mauna Loa. *USGS photo: Lava flows from Mauna Loa's Northeast Rift Zone eruption on November 29, 2022.*



**Hawai'i Volcanoes National Park Hike • 10 a.m. and 2 p.m.
Led by USGS-HVO scientist • Details provided below**

Hikes are free, but National Park entrance fees may apply.



Sunday, January 22

**Hike back in time to the
1969-74 Maunaulu
eruption**

**USGS Hawaiian Volcano
Observatory geologist
Carolyn Parcheta** leads a
two-hour guided walk along
the fissure that started the
Maunaulu eruption on May
24, 1969. Lava continued to
erupt over the next five years,
making it the longest

observed effusive rift eruption of the time. The eruption ultimately built a lava shield, Maunaulu (“growing mountain”), a prominent landmark on Kīlauea volcano’s East Rift Zone. It also sent lava flows to the coast and allowed for detailed observations of eruption processes. During the walk, Carolyn will describe how fissures form, how lava fountains erupt, how these eruptions create the environments you see and why some lava drained back into the ground. Bring sun protection, rain gear, day pack, snacks and water. Meet at the Maunaulu parking lot before the 10:00 a.m. or 2:00 p.m. start time.

NPS Photo/J. Wei: A fern grows from one of the Maunaulu fissures.

Start time: 10:00 a.m. and 2:00 p.m.

Start/end location: Maunaulu parking lot on Chain of Craters Road in Hawai'i Volcanoes National Park (Map: <https://www.nps.gov/havo/planyourvisit/upload/HAVO-Unigrid-Brochure-2019.jpg>)

Amenities: vault toilet at the parking lot; no running water

Walking distance: 1 mile (1.6 km) round-trip

Estimated duration: 2 hours

Walk rating: easy, but crosses loose, gravel-like lava fragments and rough, uneven surfaces

For your safety: wear sturdy closed-toe walking shoes; bring protective gear for sun and rain; bring drinking water

More info: to explore the Mauna Ulu trail after this guided walk, download the NPS “Mauna Ulu Eruption Guide” at https://www.nps.gov/havo/planyourvisit/upload/mauna_ulu_trail_guide.pdf.

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*Hope to see you at these  
**2023 Volcano Awareness Month**  
presentations!*

Questions? Email [askHVO@usgs.gov](mailto:askHVO@usgs.gov)  
Thank you!