MAUNA LOA

Volcano Updates

The Hawaiian Volcano Observatory issues updates and other types of Mauna Loa notifications as activity warrants.

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Alert Level: ADVISORY, Color Code: YELLOW 2022-12-15 18:04:49 UTC

HAWAIIAN VOLCANO OBSERVATORY DAILY UPDATE
U.S. Geological Survey
Thursday, December 15, 2022, 8:04 AM HST (Thursday, December 15, 2022, 18:04 UTC)

MAUNA LOA (VNUM #332020)
19°28'30" N 155°36'29" W, Summit Elevation 13681 ft (4170 m)
Current Volcano Alert Level: ADVISORY
Current Aviation Color Code: YELLOW

Activity Summary:

Mauna Loa is no longer erupting.

As of 7:00 a.m. today, December 15, webcams only captured residual incandescence and no lava movement in the F3 vent. The channels below the vent appear drained of lava and no longer feed the main flow front.

The inactive main flow front remains stalled about 1.7 mi (2.8 km) from the Daniel K. Inouye Highway (Saddle Road) when last measured on the morning of December 10. The inactive main flow front still glows at a few spots at night and may inch northward very slowly as it continues to settle.

Sulfur dioxide (SO_2) emission rates are at background levels; on December 10, the emission rate was approximately 2,000 tonnes per day (t/d). The Hawaii Interagency Vog Information Dashboard has detailed information about vog: https://vog.ivhhn.org/. Forecasts for the dispersion of vog can be found on the VMAP Vog Forecast Dashboard: http://weather.hawaii.edu/vmap/new/.

Tremor (a signal associated with subsurface fluid movement) is no longer detectable; summit and Northeast Rift Zone inflation is slowing.

The significance of the continuing inflation while the flow field is inactive is not yet clear; it is common for eruptions to wax and wane or pause completely, but none of the eight recorded eruptions from Mauna Loa's Northeast Rift Zone returned to high eruption rates after those rates decreased significantly. Nevertheless, the Hawaiian Volcano Observatory continues to closely monitor the current activity.

There is no active lava within Moku'āweoweo caldera nor in either rift zone. Satellite imagery shows the entire 2022 flow field cooling and no longer active.

Most recent eruption map: https://www.usgs.gov/media/images/most-recent-mauna-loa-northeast-rift-zone-eruption-map

Information on lava viewing: https://hawaii-county-volcano-hazards-hawaiicountygis.hub.arcgis.com/

Residents with questions about emergency response and resources that may be available to assist those at risk should consult https://hawaii-county-civil-defense-agency-hawaiicountygis.hub.arcgis.com/.

Hawai'i Volcanoes National Park has closed the Mauna Loa Road from Kīpukapuaulu and the closure extends to the summit caldera; for more information please see https://www.nps.gov/havo/index.htm.

Next Notice:

HVO Daily Updates on the status of Mauna Loa activity will be posted every Thursday on the HVO web site at: https://www.usgs.gov/volcanoes/mauna-loa/volcano-updates

You can receive these updates via email by subscribing to the free Volcano Notification Service at: http://volcanoes.usgs.gov/vns/.

Questions can be emailed to askHVO@usgs.gov.

More Information:

- Mauna Loa activity summary also available by phone: (808) 967-8866
- Mauna Loa webcam images: https://www.usgs.gov/volcanoes/mauna-loa/webcams
- Mauna Loa photos/video: https://www.usgs.gov/volcanoes/mauna-loa/photo-and-video-chronology-mauna-loa
- Mauna Loa maps: https://www.usgs.gov/volcanoes/mauna-loa/maps
- Mauna Loa FAQs: https://www.usgs.gov/volcanoes/mauna-loa/frequently-asked-questions-about-mauna-loa-volcano
- Recent Volcano Watch on Mauna Loa: https://www.usgs.gov/observatories/hvo/news/volcano-watch-mauna-loa-reawakens-0
- Map-based webpage for Mauna Loa: https://geonarrative.usgs.gov/maunaloa/
- Additional Mauna Loa Resources: https://www.usgs.gov/volcanoes/mauna-loa/prepare-mauna-loa-resources

Volcanic Hazards:

Air quality/volcanic gas plume (fissure eruption): High levels of volcanic gas, including sulfur dioxide (SO_2) , are emitted from the fissure vents. As SO_2 is released from the eruption, it will react in the atmosphere with oxygen, sunlight, moisture, and other gases and particles and within hours to days, convert to fine particles. The particles scatter sunlight and cause the visible haze, known as vog (volcanic air pollution, from "volcanic smog"). Vog creates the potential for airborne health hazards to residents and visitors, damages agricultural crops and other plants, and affects livestock operations.

Tephra fall: Pele's hair and other lightweight volcanic glass fragments from lava fountains and spattering will fall downwind, dusting the ground within a few hundred meters (yards) of the vent. High winds may waft lighter particles and transport them greater distances downwind. These particles are sharp and can irritate the skin and eyes and could be respiratory health hazard.

The Hawaiian Volcano Observatory is one of five volcano observatories within the U.S. Geological Survey and is responsible for monitoring volcanoes and earthquakes in Hawai'i and American Samoa.

CONTACT INFORMATION:

askHVO@usgs.gov

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Recent earthquakes in Hawai'i (map and list): https://www.usgs.gov/observatories/hvo
Explanation of Volcano Alert Levels and Aviation Color Codes: https://www.usgs.gov/programs/VHP/volcanic-alert-levels-characterize-conditions-us-volcanoes