

**Table 5.19-- VOLCANIC ERUPTIONS: MAUNA LOA 1950 TO 2022,
KILAUEA 1969 TO 2023**

[As of July 6, 2023. Four volcanoes have erupted in historical times: Haleakala, last active in 1460; Hualalai, last active in 1801; Mauna Loa, last active in 2022; Kilauea, last active in 2023]

Volcano and date of outbreak	Duration (days)	Location 1/	Elevation of main vent (meters)	Area covered by lava flows (km ²)	Volume of lava and/or ash erupted (km ³)
Mauna Loa					
1950: June 1	23	S, SWR	3,840-2,380	112.0	0.3760
1975: July 5	<1	S	3,900	13.5	0.0300
1984: March 25	22	S, NER	4,030-2,870	48.0	0.2200
2022: Nov. 27 2/	13	S, NER	3,500	42.7	0.1500
Kilauea					
1969: Feb. 22	6	ER	930-870	6.0	0.0161
May 24	874	ER	940	50.0	0.1850
1971: Aug. 14	<1	C	1,100-1,080	3.1	0.0091
Sept. 24	5	C, SWR	1,120-820	3.9	0.0077
1972: Feb. 3	900	ER	940	46.0	0.1620
1973: May 5	<1	ER	1,000-980	0.3	0.0012
Nov. 10	30	ER	980-870	1.0	0.0027
1974: July 19	3	C, ER	1,080-980	3.1	0.0066
Sept. 19	<1	C	1,100	1.0	0.0102
Dec. 31	<1	SWR	1,080	7.5	0.0143
1975: Nov. 29	<1	C	1,080-1,060	0.3	0.0002
1977: Sept. 13	18	ER	620-480	7.8	0.0329
1979: Nov. 16	1	ER	980-960	0.3	0.0006
1982: April 30	<1	C	1,080	0.3	0.0005
Sept. 25	<1	C	1,080	0.8	0.0030
1983: Jan. 3	12,893	ER	900	272.8	4.4000
2008: March 19	3,710	C	1,035	0.4	(3/)
2018: May 3	126	LER	200	35.5	1.0550
2020: Dec. 20 2/	4/ 154	C	715	0.5	0.0410
2021: Sept. 29 2/	4/ 437	C	755	4/ 1.2	4/ 0.1108
2023: Jan. 5 2/	62	C	887	1.2	0.0167
2023: June 7 2/	15	C	910	1.5	0.0091

1/ C, summit caldera; ER, east rift zone; NER, northeast rift zone; S, summit area; SWR, southwest rift LER, lower east rift zone. All historic Mauna Loa eruptions began as summit eruptions, and then either zone; remained in the summit or migrated down one of the rift zones.

2/ Preliminary results.

3/ Halemaumau Overlook Crater contained a lava lake with an area of 41,000 square meters, and total erupted mass of ash ejecta was 2.9×10^6 kg.

4/ Revised from previous *Data Book*.

Source: Gordon A. Macdonald, Agatin T. Abbott, and Frank L. Peterson, *Volcanoes in the Sea: The Geology of Hawaii*, 2nd ed. (1986), pp. 80-81; U.S. Geological Survey (USGS), Hawaiian Volcano Observatory <<https://www.usgs.gov/observatories/hvo>> and USGS records.