

Number of Volcanic Eruptions in the Philippines from 2010-2017

Bulusan - 22

Kanlaon - 2

Mayon - 3

CHRONOLOGY OF HISTORICAL ERUPTIONS

The following tables summarize the historical eruptions of Bulusan, Kanlaon and Mayon Volcano.

BULUSAN

Erupt No.	No. of Events	Year/Duration	Site	Eruption Character
1	1	1852		
2	1	1886	crater	Phreatic
3	1	1889		Explosive
4	1	1892	crater	Phreatic
5	1	1894	crater	
6	1	1916 Jan. 18	crater	phreatic
7	1	1918 October - 1922	crater	phreatic; ashfall, landslide, lava flow, pyroclastic flow, dome building; height of column: ~ 2 km; 20 mild ash eruption & 1 lava emission
8	1	1928 June	crater	phreatic

9	1	1933 Dec. 25	crater	phreatic, explosive
10	2	1978 July 29, Aug 14	crater #3	phreatic, explosive, ashfall (7 mm thick); eruption column: 1.5 km (July) & 2.5-3 km (Aug.)
11	31	1979 Dec. 27 1980 Jan 12,7-9,14,28 1980 Mar 10,15,23,26,27 1980 Apr 15-19,21-25,29 1980 May 1,3-6,8,17,22,26,27 1980 June 13,14,22 1980 July 20,30 1980 Aug. 1,5,19,24 1980 Sept. 28, Oct.10	crater, fissure (1980)	phreatic, explosive; ashfall (0.5-2.5 mm thick); height of column: 0.8-1 km (Dec.) and 0.5 – 5.5 km (Jan-Oct.); a total of 54 ash explosions in 1980
12	4	1981 Apr 9,12-14,16,27		phreatic,explosive; ashfall (4-6 mm thick); height of column: 4-8 km
13	2	1983 June 25,29	crater no. 4	phreatic; rumbling/hissing sound, lightning flashes, ashfall (4-6 mm thick); 4.0-8.0 km column height; vents at the upper slope were opened
14	2	1988 Feb 20 – March 1,6-8		phreatic, explosive, height of eruption column:1-1.5 km

15	12	1994 Nov 27 1994 Dec. 3-5,12,18,20,22,24,27,31 1995 Jan 7,10,21,28		phreatic, explosive, pf(?), earthquake, ashfall, lahar; 1.0-1.5 km column height
16	23	2006 March 21,Apr.29, 2006 may 25,31 2006 June 7,10,13,18,20,28 2006 Oct. 10,19,23,30,31 2006 Dec. 20 2007 Jan 24,26 2007 Apr. 8,9 2007 May 12,Jul 31 2007 Oct 4	summit crater	phreatic, 1.0-5.0 km column height, earthquake, lahar, rumbling sounds
17	13	2010 Nov.6,8,9,12,15,21,24,26,Dec.16,23 2011 Jan. 18,Feb 21, 2011 May13	Active vents in the summit	Phreatic, 600-3000 m high ash column above the crater; with rumbling sound; earthquake
18	22 (as of Jun. 05'17 10:29 PM)	2015 May 01 08:09AM	New NW vent in the Upper Slopes	Phreatic, E-type earthquake 5min duration (obscured summit). Around 10:30AM when crater became visible, strong to moderate dirty white steam 200m high drifted WNW was observed.

19		2015 May 06 9:46 PM	New WNW vent in the Upper Slopes	Phreatic, E-type earthquake 3.5min duration, 250m high ash plume drifted West.
20		2015 June16 11:02 AM and 11:20AM		Phreatic, E-type earthquake for ten minutes with rumbling sound, 1km high grayish steam ash plume drifted WSW. The second event 11:20AM was smaller lasted for one minute.
21		2015 June 18 05:41AM		Obscured summit; E-type lasted for two minutes with rumbling sound.
22		2015 June 19 14:55PM		E-type lasted for seven minutes with rumbling sound; 1.5km high grayish ash plume; low-level ash cloud at NW Upper slopes; summit partially cloud covered

23		2015 June 21 13:15PM		E-type lasted for 111 seconds with rumbling sound; 150m tall column and distributed ash in the east of the volcano.
24		2015 June 23 20:08PM		E-type lasted for 46 seconds; obscured
25		2015 July 17 1:10PM	New NW vents	E-type lasted for 11 minutes; 200m-high gray ash plume that drifted west-northwest until the eruption ended at 1:21PM; with rumbling sound audible within 6km; later confirmed ashfall drifted further north and northeast.
26		2016 February 22 5:01 PM	New NW vents	Two E-type events lasted for four minutes and twenty one seconds accompanied by rumbling sounds. Grayish ash plume followed by a steam and ash plume approximately 500m high.

27		2016 June 10 11:35 AM	New NW vents	One E-type event lasted for five minutes accompanied by rumbling sound; grayish ash plume produced approximately two (2) kilometers height drifted towards northwest
28		2016 June 19 1:03 PM	New NW vents	One E-type event lasted for seven (7) minutes; dirty white ash plume produced approximately 300 meters height drifted northwest
29		2016 September 16 16:54 PM		The event lasted for approximately 4 minutes based on the seismic record and produced approximately 1500 meter-high dark gray ash plume that drifted towards the northeast

30		2016 September 30 06:50AM	SE vents	The SE vents were reactivated, releasing a low-lying steam plume with minor amounts of ash that crept down to the inhabited southern slopes. Strong sulfuric odor has been reported.
31		2016 October 06 03:03AM	Summit crater	The event lasted for approximately 15 minutes based on the seismic record and was recorded as a short harmonic tremor. This eruption could not be observed visually due to thick clouds covering the summit

32		2016 October 17 07:36 AM	southeast	The event lasted for approximately 24 minutes based on the seismic record. This eruption originated from the southeast vent and produced a dirty-white to grayish ash column that reached a height of 1,000 meters
33		2016 October 19 04:58 AM	Southeast Upper Slope	E-type earthquake lasted 9 minutes. Visual observation of the edifice was obscured by thick cloud cover, but limited observations near the vent approximated the eruption plume to have risen (1) kilometer high

34		2016 October 21 00:34 AM	crater	E-type 20minutes duration
35		2016 October 23 15:31 PM	crater	E-type earthquake 15minutes duration; dirty-white to grayish ash column 2.5km high drifted wsw. Generated small pyroclastic flows which cascaded downslopes approximately 2 kilometers from the summit. The second eruption was much smaller, originating from the southeast vent and producing a dirty-white to grayish ash column 500 meters above the vent

36		2016 December 29 14:40 PM	crater	E-type earthquake 16minutes duration; grayish to dirty white plume 2km high drifted west- northwest direction.
37		2017 March 02 01:57 PM – 02:23 PM		Based on seismic record (E-type) and remote ip camera; cloud covered summit
38		2017 June 05 10:29 PM		E-type quake 12 min. duration

KANLAON

Erupt No.	YEAR/DURATION	Site	Eruption Character
1	1866		Phreatic, mild
2	1881	crater	Phreatic, mild
3	1883 July	crater	Phreatic, ashfall
4	1884 May – June	crater	Phreatomagmatic
5	1893	crater	Phreatic
6	1894	crater	Phreatic
7	1898 June		
8	1902 Jan. 31	crater	Strombolian, lava emission
9	1904		Phreatic
10	1905 Nov. 6	crater	Phreatic, ashfall
11	1906 Jan. 16, Nov. 6	crater	Phreatic, ashfall
12	1927 Mar. 20	crater	Phreatic, ashfall
13	1932 Dec. 23 – 1933 Jan. 6	crater	
14	1969 Oct. 10 – 29	crater	Phreatic, ashfall, tephra fall, 6-km high eruption column
15	1978 Mar. 22 – Sept. 2	crater	Phreatic, 1.83-km high eruption column
16	1985 Mar. 13 –14, Nov 2	crater	Phreatic, ashfall, 0.4-0.8 km high eruption column
17	1986 June 3 –21 Aug. 18	crater	Phreatic, 4-km high eruption column
18	1987 Apr. 24	crater	Phreatic
19	1988 June 21	crater	Phreatic, ashfall, 0.3-1.0 km high eruption column

20	1989 Oct. 25 – Nov 17, Dec. 1	crater	Phreatic, 0.2-1.2 km high eruption column
21	1991 Feb. 13	crater	Very mild ash explosion reaching 0.5 km
22	1992 Jan.8, June 10	crater	Phreatic, ashfall, 0.8-1.0 high eruption column
23	1993 Aug. 25, Sept. 3	crater	Phreatic, 0.8-1.0 km high eruption column
24	1996 Aug. 10,13,16,27 Sept. 3	crater	Phreatic, 0.35-1.5 km high eruption column
25	2002 Nov. 28	crater	Ash explosion
26	2003 March 7, 17 June 01, 03, 04, 07, 08, 09, 10, 11, 12, 13, 14, 17, 18 July 01, 03, 04, 10, 11, 13, 14, 19, 20, 23	crater	Phreatic, 0.3-1.5 km high ash column
27	2005, Jan. 21, March 20, 24, 30, 31, April 02,3,7-17 May 25	crater	Phreatic, 0.1-1.0 km high ash column

28	2006 June 03,10,12-15,19,21-24, July 1,3,23,25	crater	Phreatic, 0.3 – 2.0 km high ash column
29	2015 November 23	crater	Phreatic, 1-1.5km white plume
	2015 December 11 - 05:13 AM	crater	Low energy ash eruption , 600 m grayish to dirty-white ash cloud; no seismic signal accompanying the event
	2015 December 12 - 11:40AM	crater	Low energy ash eruption, 200m dirty white ash clouds
	- 1:01 PM		Low energy ash eruption, 200m dirty white to light gray ash clouds
	2015 December 13 - 09:51AM	crater	Low energy ash eruption, 100m light gray ash clouds
	- 10:08AM	crater	Low energy ash eruption, 200m light gray ash clouds
	2015 December 15 - 09:38 PM	crater	Ash eruption; cloud-covered summit

	2015 December 23 - 02:57 PM	crater	Ash explosion; cloud-covered summit
	2015 December 24 - 09:09 PM	crater	Ash explosion; cloud-covered summit; Intensity II felt at Sitio Guintubdan, Brgy. Ara-al, La Carlota City
	2015 December 27 - 01:29 PM	crater	Ash eruption, 100m high, e-type earthquake felt at Intensity II in Brgy Cabagnaan, La Castellana, Sitio Guintubdan, Brgy Ara-al, and Brgy. Yubo, La Carlota City, and Brgy. Ilijan, Bago City.

30	2016 March 29 - 06:20 PM	crater	Ash eruption, 1500m high, e-type earthquake, booming sound, incandescent ejecta, volcanic tremors from 10:38PM March 29 to 00:26AM March 30 and from 01:30 AM March 30 to present (on-going)
	2016 June 18 - 09:19 AM	crater	Ash eruptions, three (3) consecutive e-type earthquakes lasted thirty (30), forty two (42) minutes and twenty nine (29) seconds. The first event erupted a light gray to white steam ash plume 1500m high before lofting 3km above the summit. This was followed by eruption of dense, dark gray black ash plume 500m high. The third event emitted dark gray ash plume 500m high.
	2017 December 9 - 09:47 AM	crater	Low-energy phreatic (steam-driven) eruption; dark ash and voluminous steam 3-4 kilometers above the summit vent.

	2017 December 20 - 02:33 AM	crater	Recorded as an explosion-type earthquake
--	--------------------------------	--------	--

MAYON

	Year/Duration	Eruption Character
1	1616 Feb. 19 – 24	explosive, pyroclastic flow, lava flow, lahar
2	1766 July 20 – 24 (Oct.20 - 25)	Vulcanian, lava flow, pyroclastic flows, bombs, ashfall; 10-15 Km eruption column (Lahar)
3	1800 Oct 30 – 31	Vulcanian, lava flow, pyroclastic flows, bombs, ashfall
4	1811 Oct.5 – 6	Vulcanian, lava flow, pyroclastic flows, bombs, ashfall
5	1814 Feb. 01	Plinian, pyroclastic flows, volcanic lightning, lahar, bomb
6	1827 Jun. 27 – 1828 Feb.	Vulcanian, pyroclastic flows, bombs, lava flows; 300 m high eruption column
7	1834 – 1835 May	Vulcanian, pyroclastic flows, ashfall, lahars, bombs
8	1839	Minor ash eruption
9	1845 Jan. 21	Vulcanian, ashfall, lava flow (15-30 minutes eruption)
10	1846 May 11	Vulcanian, pyroclastic flows, ashfall, lahar
11	1851 May 26 – Jun.	Minor ash eruption
12	1853 Jul. 7	Vulcanian, ashfall, pyroclastic flow, lahar
13	1855 Mar. 22	Minor eruption with incandescent ash and Pele's hair, explosive, lava flow

14	1857	Probably ash eruption
15	1858 Jan.	Strombolian, lava flow, lahar; intial lava fountaining lasted until December
16	1859 - 1860	
17	1861	Minor ash eruption
18	1862	Minor ash eruption, lahar
19	1868 Dec.17	Vulcanian, pyroclastic flows, lahar, bombc, volcanic lightning
20	1871 Dec. 8 - 1872 Jan	Vulcanian, ashfall, bombs, pyroclastic flows
21	1872 Sept. 5 - 9	
22	1873 Jun. 20	Minor ash eruption
23	1876 Nov. 26	Minor ash eruption
24	1881 Jul. 6 - 1882 Aug.	Strombolian, ashfall, lava, pyroclastic flow, lahar (crateral outburst started 21 Nov. 1881)
25	1885 Nov. 21	Lava flow
26	1886 Jul. 8 - 1887 Mar.	Strombolian, ashfall, lava and lahar
27	1888 Dec. 15	Minor ash eruption
28	1890 Sept. 10	Vulcanian-Strombolian, ashcloud, lava flow
29	1892 Feb. 3	Vulcanian, ashfall, pyroclastic flow, bombs, volcanic lightning
30	1893 Oct. 4 - 31	Minor ash, lapilli and bomb eruption, lava flow, lahar
31	1895 Jul. 7 - Nov. 26	Ashfall, lava flow, lahar, volcanic lightning
32	1896 Aug. 31 - Sept. 27	Minor ash and lava eruption

33	1897 Jun. 4 – Jul. 23	Vulcanian (strong), tephra fall, pyroclastic flow, lava flow, lahar, volcanic lightning
34	1900 Mar. 1 - 6	Vulcanian, ashfall, pyroclastic flows, lava flow, lahar
35	1902	Minor ash eruption, with lahar (probably due to 1900 deposits)
36	1928 Jan.	Vulcanian, pyroclastic flow, lava flow, ashfall
37	1938 June 5	Vulcanian, ashfall, pyroclastic flow, lava flow
38	1939 Aug. 21	Minor explosion, ashfall
39	1941 Sept. 13	Minor ash/steam eruption
40	1943	Minor ash/steam eruption
41	1947 Jan. 8 – Feb.	Vulcanian, ashfall, lava flow, pyroclastic flow

42	1968 Apr. 20 – May 20	Vulcanian, ashfall, pyroclastic flow, lava flow; eruption column of as high as 10 km
43	1978 May 3 – Jul.	Strombolian, ashfall, lava flow (lava emission lasted until July 4)
44	1984 Sept. 9 – Oct. 6	Strombolian-Vulcanian, ashfall, pyroclastic flow, lava flow, lahar, 1.7-16 km eruption column
45	1993 Feb. 2 – Apr. 4	Vulcanian-Strombolian, pyroclastic flow, lava flow, lahar, 1-5 km eruption column
46	2000 Feb. 24 – Mar. 1	Strombolian-Vulcanian, pyroclastic flow, lava flow, ashfall, 0.5-17 km high eruption column
47	2001 Jun. 1-22, 2001 Jun. 23 –Jul. 4, 2001 Jul. 26 – Aug. 4	Mild eruption, quiet effusion of lava (lava flow) Strombolian-Vulcanian, lava fountaining, pyroclastic flow, 10 km high eruption column
48	2006 Jul. 14 – Aug. 31	Lava flow; ash explosions – 800m high max.
49	2009 Nov. 11 – 2010 Jan. 2	Lava flow (extent of 500m from the summit); ash explosions – 2km high max.

50	2013 May 07	Ash explosion
51	2014 Aug. 12	New lava dome growth 30-50m height. No crater glow.
52	2018 Jan. 13	Series of ash explosions, lava collapses, lava fountaining, new lava dome