

2006 VOLCANIC ACTIVITIES OF MONITORED PHILIPPINE VOLCANOES

by

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Abstract

Four out of the six monitored volcanoes showed restiveness in 2006 to which PHIVOLCS quickly responded with the issuance of advisories and updates to warn the public of increased activity. First to erupt was Bulusan Volcano from March to December followed by Kanlaon Volcano from June to July and Mayon Volcano from July to September. On the other hand, seismic swarm and geysering occurred in Taal Volcano.

Bulusan Volcano's series of 18 minor eruptions from 21 March to 20 December 2006 was characterized by sudden explosions caused by shallow hydrothermal activity. The height of ash columns varied from 1,000 to 2,000 meters above the summit crater. The explosions were recorded mostly as explosion-type earthquakes accompanied by rumbling sounds and lightning flashes. The absence of significant earthquake activity (i.e. large earthquake, earthquake swarms or long duration tremor) before the events indicated that no magma intrusion had taken place. The prevailing winds dispersed the ash predominantly to the southwest, west-southwest, northwest and north sectors of the volcano.

Kanlaon Volcano began exhibiting minor ash ejections on 03 June 2006. Subsequent ash explosions occurred almost daily from June 10 to June 25 but most of these were not detected by the volcano's seismic network. The ash emissions were characterized by ejection of steam clouds having minimal ash contents that rose from 600 to 1,500 meters above the summit crater. The ashes were drifted over the southwest, southeast and northwest mid-upper slopes of the volcano.

Mayon Volcano began extruding lava out from its summit crater on 12 July 2006. Incandescent lava fragments were observed detaching from the summit crater and forming an apron of pyroclastic debris onto the middle slopes at the SE flank of the volcano. Continuous lava extrusion and falling lava blocks along the Bonga Gully characterized Mayon Volcano's day-to-day activities. Within a period of three weeks, the edge of the Mabinit lava flow has reached the volcano's 6-kilometer Permanent Danger Zone (PDZ) boundary, and by 13 August, it reached 700 meters beyond the 6-km PDZ.

Nine (9) ash explosions that occurred on 07 August 2006 prompted the raising of the volcano's status to Alert Level 4. Ash deposits were confined at the volcano's upper slopes. A total of 72 ash explosions occurred from 07 August to 01 September 2006. The cessation of explosions on

02 September indicated Mayon Volcano's waning activity. Lava extrusion also dwindled until it stopped in late September. Moreover, steam emission slowly declined to normal level.

Taal Volcano's activity was characterized by sporadic occurrences of felt volcanic events at Volcano Island in August, September and November. Five of the September earthquakes were felt at Intensities II to III at Volcano Island and were located at the north-northeast and north-northwest flanks of Volcano Island, while November quakes were centered at the southeast sector of Volcano Island, covering the Main Crater Lake and Calauit down to Taal Lake. On 17 November 2006, geysering occurred approximately 5 meters from the Main Crater Lake shoreline. Muddy water was spewed to about 2 to 3 meters high. Simultaneously, bubbling activity at the northeast side of the Crater Lake also increased.

Pinatubo and Hibok-Hibok Volcanoes continued to remain normal throughout 2006. Volcanic earthquakes rarely occurred and steam emission from the summit was rarely observed.