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The 2020 Taal Volcano (Philippines) Eruption as Recorded by the International Monitoring System

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On 12 January 2020, Taal Volcano (Philippines) had a strong phreatomagmatic eruption producing a 10-15 km ash column and ashfall reaching as far as Quezon City (~80 km). Taal is one of the most dangerous volcanoes known, with 34 eruptions since 1572, and eruptions being phreatic, phreatomagmatic, strombolian or plinian (e.g. 1954). Increased volcanic activity has been observed for a year but rapid intensification on 12 January prompted PHIVOLCS, the Philippine volcano warning agency, to raise the alert from level 1 to level 4 (hazardous eruption imminent), requiring immediate evacuation of thousands of people. The crisis lasted for 2 weeks with fissuring, ground deformation and high seismicity attributed to magma and gas intrusions. The decline in seismicity helped in lowering the alert level on 26 Jan. This eruption history was very well recorded by the CTBTO IMS as the 3-component auxiliary station AS80 (TGY) was situated only 11.8 km away from the volcano. In addition, two REB infrasound events related to the most powerful eruptive activities were also recorded by the IMS infrasound network. Such close seismo-acoustic activities are not often observed on the IMS network. This poster will present the seismicity and infrasound events as seen by the IMS.

Promotional text

One of the areas of interest of the CTBTO is the disaster early warning, The CTBTO's Member States and international and national institutions responsible, receive this information to perform on time an effective exercise of evacuation.

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