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## Weekly report

Institut de physique du globe de Paris

Observatoire volcanologique et sismologique de Martinique

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### Activity of Mount Pelée

Saint-Pierre, July 7, 2023 14:45 local time (GMT-4)

Volcanic activity remains low with **a total of 8 earthquakes** of volcanic origin recorded this week, 3 of very low-energy and 5 of moderate energy.

Between June 30, 2023 at 16:00 (UTC) and July 07, 2023 at 16:00 (UTC), the OVSM recorded:

- 3 volcano-tectonic earthquakes of very low energy that were precisely located as originating from one of the well-known seismically active zones below Mount Pelée, located between 1.0 and 1.4 km below the summit of the volcano. Superficial volcano-tectonic seismicity is associated with micro-fracturing in the volcanic edifice related to the overall reactivation of the volcano observed since late 2018.
- 5 long-period earthquakes of moderate energy, 4 of those were located at depths of about 20 to 34 km, at about 5-10 km distance from Mount Pelée below, to East, South-East, and West (magnitude  $M_L$  between 1,4 and 1,8). Long-period seismic signals contain low frequencies and are associated with the presence of magmatic fluids in the deep parts of the volcanic system of La Montagne Pelée.

These earthquakes were not felt by the population.

Last week, the OVSM had recorded 3 earthquakes of volcanic origin. As of 7 July, OVSM recorded an average of 3 to 4 volcanic earthquakes per week during the last 4 weeks. During phases of volcanic unrest on volcanoes similar to Mount Pelée, it is usual to observe seismic activity that varies over time in intensity and frequency.

For more details on longer-term observations and interpretations of volcanic activity, please refer to the monthly bulletins of the OVSM.

The alert level is currently YELLOW: vigilance.

The Director's office of OVSM-IPGP.

### Informations

The data in this report are preliminary and subject to change depending on their subsequent analysis.

The reports of OVSM-IPGP are available at <http://www.ipgp.fr/fr/ovsm/bilans>. You can also find us on our Facebook and Twitter accounts. Locations of volcano-tectonic and tectonic earthquakes determined by the OVSM-IPGP are available in real-time at <https://renass.unistra.fr/fr/zones/les-antilles/>.

To receive the weekly report by email, simply request it at: [infos@ovmp.martinique.univ-ag.fr](mailto:infos@ovmp.martinique.univ-ag.fr)

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