

Weekly report

Institut de physique du globe de Paris

Observatoire volcanologique et sismologique de Martinique

Activity of Mount Pelée

Saint-Pierre, October 31, 2025, 16:30 local time (GMT-4)

Volcanic activity is characterized this week by **148 volcanic earthquakes** observed.

Between October 24, 2025 at 16:00 (UTC) and October 31, 2025 at 16:00 (UTC), the OVSM has recorded:

- **145 shallow volcano-tectonic** type earthquakes. Among them, 10 have a magnitude (duration magnitude M_d or local magnitude M_{lv}) greater than 0.5. The largest have a magnitude **$M_d = 0.96$** . The others are of lower energy. These earthquakes are located at depths between 0.8 and 3.7 km below the summit of the volcano. Several of them originate from well-known seismically active zones at 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 2019.
- **3 deep long-period** type earthquakes. They are located at approximately 28 km depth in the vicinity of Mount Pelée, with local magnitude ranging from $M_{lv} = 0.50$ to $M_{lv} = 1.14$. Deep long-period earthquakes are characterized by signals that contain only low frequencies and are associated with the circulation of magmatic fluids deep within the Mount Pelée volcanic system.

No earthquake was felt by the population.

The week before, the OVSM had recorded **171 earthquakes** of volcanic origin. As of October 31, and during the last 4 weeks, the OVSM recorded a total of 3393 volcanic earthquakes, and an average of **848 to 849 volcanic earthquakes** per week.

During phases of volcanic unrest on volcanoes similar to Mount Pelée, it is usual to observe seismic activity variable in intensity and frequency. The probability of eruptive activity in the short term remains low. However, given all the observations collected since the end of 2018 and their nature, and based on the recent observations of the OVSM-IPGP, we cannot exclude a medium-term evolution of the situation (weeks, months).

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

The alert level, in accordance with the provisions planned by the authorities, 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, including detailed monthly bulletins, are available at <https://www.ipgp.fr/observation/ovs/ovsm/>.

You can also find us on our [Bluesky](#) et [Facebook](#) 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

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