





Weekly report

Institut de physique du globe de Paris

Observatoire volcanologique et sismologique de Martinique

Activity of Mount Pelée

Saint-Pierre, November 7, 2025, 21:00 local time (GMT-4)

Volcanic activity has slightly decreased in numbers this week by 127 volcanic earthquakes observed.

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

- 118 shallow volcano-tectonic type earthquakes. Among them, 9 have a magnitude (duration magnitude Md or local magnitude Mlv) greater than 0.5. The largest have a magnitude Mlv = 1.31. The others are of lower energy. These earthquakes are located at depths between 0.6 and 3.2 km below the summit of the volcano. Most 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.
- 6 shallow hybrid type earthquakes, that could not be located but whose signals indicate that they originated in the same area as the shallow volcano-tectonic earthquakes. Hybrid seismic signals are enriched in low frequencies and are associated with the circulation of fluids (gas, hydrothermal fluids) in the volcanic edifice.
- 3 deep long-period type earthquakes. They are located at depths between 18 and 36 km depth in the vicinity of Mont Pelée, with local magnitude ranging from Mlv = 0.66 to Mlv = 0.97. 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 **148 earthquakes** of volcanic origin. As of November 7, and during the last 4 weeks, the OVSM recorded a total of 854 volcanic earthquakes, and an average of **213 to 214 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. The information in this document cannot be used without explicit reference to it.

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