

Weekly report

Institut de physique du globe de Paris

Observatoire volcanologique et sismologique de Martinique

Activity of Mount Pelée

Saint-Pierre, May 23, 2025, 15:00 local time (GMT-4)

Volcanic activity has increased this week, with **59 volcanic earthquakes** observed.

Between May 16, 2025 at 16:00 (UTC) and May 23, 2025 at 16:00 (UTC), the OVSM has recorded:

- **56 low-energy volcano-tectonic** type earthquakes. These earthquakes were clearly identified as originating from one of the well-known seismically active zones on 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.
- **2 long-period** type earthquakes located south-east of Mont Pelée at 31 and 33 km depth, with magnitudes of $M_{lv} = 0.9$ and $M_{lv} = 1.0$ respectively. Deep long-period events contain only low frequencies and are associated with the circulation of magmatic fluids deep within the Mont Pelée volcanic system.
- **1 deep hybrid** type earthquake located south-east of Mont Pelée at 31 km depth and magnitude $M_{lv} = 1.4$. Hybrid seismic signals are enriched in low frequencies and are also generally associated with the circulation of magmatic fluids in the deep part of Mount Pelée volcanic system.

No earthquake was felt by the population.

The week before, the OVSM had recorded **31 earthquakes** of volcanic origin. As of May 23, and during the last 4 weeks, the OVSM recorded a total of 483 volcanic earthquakes, and an average of **120 to 121 volcanic earthquakes** per week.

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, 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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