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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, November 8, 2024, 16:30 local time (GMT-4)

Volcanic activity is relatively stable in number this week, with **11 volcanic earthquakes** observed.

Between November 1st, 2024 at 16:00 (UTC) and November 8, 2024 at 16:00 (UTC), the OVSM has recorded:

- **10** 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.
- **1 hybrid** type earthquake of magnitude  $M_l=1.3$  located at a depth of around 1 km (relative to sea level) beneath the western flank of Montagne Pelée. Hybrid seismic signals are enriched in low frequencies and are associated with the presence of fluids (gas, hydrothermal fluids) within the volcanic edifice.

No earthquake was felt by the population.

The week before, the OVSM had recorded **13 earthquakes** of volcanic origin. As of November 8, and during the last 4 weeks, the OVSM recorded a total of 29 volcanic earthquakes, and an average of **7 to 8 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 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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