



OVSM - IPGP – Friday 30th of April 2021 – 12h (local time, UTC-4h)

Weekly report on the activity of la Montagne Pelée

April 23 to April 30, 2021

Seismicity of volcanic origin has increased sharply over the past week. Between April 23, 2021 at 4 p.m. (UTC) and April 30, 2021 at 4 p.m. (UTC), the OVSM recorded at least 312 volcano-tectonic earthquakes of magnitude less than or equal to 1.0, including 241 between the 27 and 29 April with nearly 163 earthquakes on April 28. These earthquakes were located inside the volcanic edifice between 3.0 km below sea level and 1 km above sea level. None of these earthquakes were felt by the population. This volcano-tectonic-type superficial seismicity is associated with the formation of micro-fractures in the volcanic edifice. During the reporting period, OVSM also recorded 13 hybrid-type earthquakes. These signals, containing low frequencies, are associated with the presence of fluids (gas, hydrothermal waters) within the volcanic edifice.

Despite this strong increase in seismicity and in the evolution of earthquakes characteristics (depth and seismic waveforms) in few days, it should be noted that the average magnitude remained clearly below 1. During phases of volcanic reactivation, periods of higher seismic activity often alternate with phases of lower seismicity. Activity declined markedly on April 30 but seismicity above baseline is still recorded. No other changes were noted in the activity of Mount Pelée.

A main zone of strongly degraded, browned and dead vegetation is still observed on the southwest flank of Montagne Pelée, between the upper Claire River and the Chaude River.

These observations reflect the variable dynamics of processes of magmatic and hydrothermal origin on la Montagne Pelée, in coherence with the volcanic unrest observed as of April 2019.

The reports of OVSM-IPGP are available at <http://www.ipgp.fr/fr/ovsm/actualites-communiques-publics-de-lovsm>. You can also find us on our Facebook and Twitter accounts.

The alert level remains YELLOW: vigilance.

The Director's office of OVSM IPGP.