



Montserrat Volcano Observatory

27 October 2023
9:00 am

MVO Weekly Report for the Period 20 to 27 October 2023

Activity at the Soufrière Hills Volcano remains low.

The seismic network recorded 9 volcano-tectonic earthquakes and one rockfall this week. Five of these occurred in a brief swarm on 20 October.

Measurements of the SO₂ flux were taken by helicopter on 26 October. There were ten traverses with an average flux of 427 tonnes per day.

Due to the large size of the lava dome, pyroclastic flows can occur at any time without warning on any side of the volcano, including Gages from where they can travel rapidly into Plymouth. Tracks across the Belham Valley can be destroyed or heavily modified by flash flooding or lahars, and caution should be exercised crossing the valley during and after rainfall.

The Hazard Level is 1. There is no public access to Zone V, including Plymouth. Maritime Zones E and W are daytime transit only between sunrise and sunset (boats may sail through the zone but must not stop). Anyone who ignores these restrictions is liable to be prosecuted.

This report along with additional information on the Soufrière Hills Volcano and the Hazard Level System can be found at the MVO website: www.mvo.ms. Old weekly reports can be downloaded from http://www.mvo.ms/pub/Activity_Reports/. You can also follow @mvoms on both Facebook, Instagram, and Twitter.

Graham A. Ryan
Director

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Monitoring Data Summary

Seismic Activity (number of events)

| | This week | Last week | Last 4 weeks (weekly average) |
|--------------------|-----------|-----------|----------------------------------|
| Rockfalls | 1 | 3 | 2 |
| VT earthquakes | 9 | 8 | 8 |
| Hybrid earthquakes | 0 | 0 | 0 |
| LP earthquakes | 0 | 0 | 0 |

Sulphur Dioxide Flux (tonnes per day)

| | This week | Last week | Last 4 weeks |
|---------|-----------|-----------|--------------|
| Average | 427 | 191 | 267 |
| Maximum | 497 | 231 | 321 |
| Minimum | 353 | 157 | 223 |

Note: The numbers provided in the tables above are provisional and may be subject to change after further analysis of the data.