

# Montserrat Volcano Observatory

15 December 2017 9:00 am

#### MVO Weekly Report for the Period 8 to 15 December 2017

Activity at the Soufrière Hills Volcano remains low.

The seismic network recorded one rockfall and four volcano-tectonic earthquakes this week.

Measurements of the  $SO_2$  flux were made using the helicopter on 13 December. A total of eight traverses beneath the plume were carried out, with an average  $SO_2$  flux of 726 tonnes per day. This is considerably higher than recent measurements and is the highest measured value since February 2014, when the flux was above 900 tonnes per day. Traverses from the helicopter measure the flux over a short time period, typically 30 minutes. This week's measurement may not represent a real change in the  $SO_2$  flux and could be caused by a short-term "spike" in the data which would not have been seen by the gas-monitoring network in use up until late 2015 which measured the average flux over several hours.

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: <a href="www.mvo.ms">www.mvo.ms</a>. Old weekly reports can be downloaded from <a href="http://www.mvo.ms/pub/Activity\_Reports/">http://www.mvo.ms/pub/Activity\_Reports/</a>. You can also follow @mvoms on both Facebook and Twitter.

Roderick Stewart Director



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### **Monitoring Data Summary**

## **Seismic Activity (number of events)**

	This week	Last week	Last 4 weeks (weekly average)
Rockfalls	1	0	0
VT earthquakes	4	2	1
Hybrid earthquakes	0	0	0
LP earthquakes	0	0	0

### **Sulphur Dioxide Flux (tonnes per day)**

	This week	Last week	Last 4 weeks
Average	n/a	n/a	n/a
Maximum	n/a	n/a	n/a
Minimum	n/a	n/a	n/a

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