

Preliminary Statement - SAC 22

November 9<sup>th</sup>, 2017

Soufrière Hills volcano has shown no significant changes in its behaviour during the past year. Seismicity has remained at a very low level except for occasional short episodes of volcano-tectonic earthquakes. Temperatures of volcanic gases that escape through fractures and fumaroles have remained high, as observed in the previous years. Monitoring of ground deformation indicates a slow but continuous lengthening trend over the island, with a maximum uplift of about one centimetre over the last year. These trends are consistent with the activity we have seen over the previous 6 years. Measurements of sulphur dioxide emission rates have resumed and are similar to previous measurements.

Taking these observations together, we conclude that the volcano remains in a state of unrest. We still consider a likely cause of this unrest to be the slow but steady accumulation of magma in a deep reservoir below the volcano. While a restart of lava extrusion remains a possibility in the future, there are no signs that this is imminent. We feel that the most likely scenario for the next year is a continuation of the current state.

The major part of the lava dome remains stable but continuing erosion has the potential to destabilize steep parts of the dome. The chance that pyroclastic flows will occur within the next year remains low. However, the volcano is still a potential source of hazards, some of which could occur at any time with little or no warning and could pose a threat to people working in or visiting Zone V.