

Preliminary Statement SAC 21

November 11th, 2016

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. Monitoring of ground deformation indicates a slow but continuous lengthening trend over the island, with a maximum uplift of about one centimeter over the last year. These trends are consistent with the activity we have seen over the previous 5 years. Measurements of sulphur dioxide emission rates were not possible in the past year, but the existence of a visible plume shows that degassing is ongoing.

Taking these observations together, we conclude that the volcano remains in a state of unrest. We consider the most likely cause of this unrest 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.

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.