

EFFUSIVE ERUPTION AT LA SOUFRIÈRE VOLCANO, ST. VINCENT

SITUATION REPORT No. 2

AS OF 8:00 PM ON JANUARY 4, 2021

Volcanic Activity Continues at La Soufrière, St. Vincent Alert Level Remains at Orange

LOCATION:

La Soufrière Volcano, Saint Vincent and The Grenadines

PRESENT ACTIVITY:

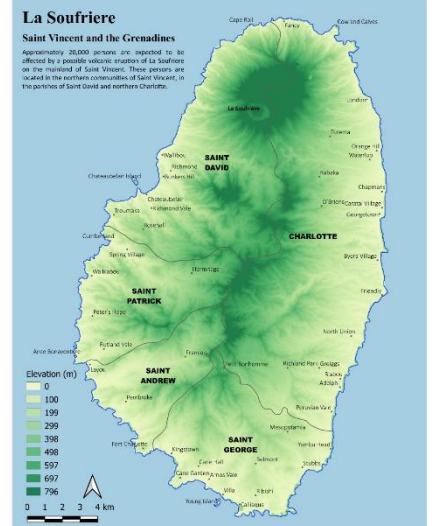
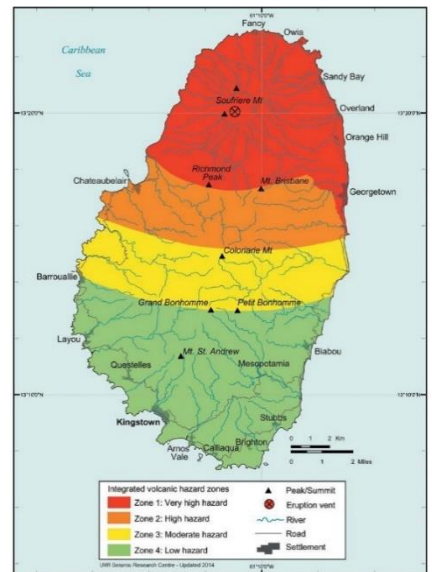
Effusive eruption, ongoing fumarolic activity, formation of a new volcanic dome, evaporation of the crater lake and increased seismic activity

ALERT LEVEL: ORANGE

SITUATION OVERVIEW

On 29th December 2020 the alert level for the La Soufrière volcano in St. Vincent and the Grenadines was elevated to **Orange** because of increased activity at the site. The volcano has had an effusive eruption, with visible gas and steam eruption and the formation of a new volcanic dome. The Volcano continues to exude magma on the surface and gas emissions can be observed from the Belmont Observatory. The small crater lake has almost evaporated, and the dome has grown. A UWI Seismic Research Centre team is currently in St. Vincent to support monitoring and data collection and analysis.

An Orange Level alert means that there is highly elevated seismicity or fumarolic activity, or both, or other highly unusual symptoms. Eruptions may occur with less than 24 hours notice. Monitoring systems are continuously manned and there is regular visual inspection of potential vent areas as well as continuous ground deformation and hydrothermal monitoring.



**No Evacuation Orders
have been issued. Access to the
volcano is strictly prohibited.**

SITUATION cont'd

Strong, greyish-white gas emissions are visible from the satellite dome and are being seen above the general area of the crater. The small crater lake has almost completely dried up. NASA FIRMS satellite imagery continues to register a hotspot anomaly in the crater. Analysis of ground deformation data from the cGPS station at the Belmont Observatory (~9 km away from the volcano) shows no detectable deformation associated with the current magma extrusion in the dome.

The UWI SRC has advised that, based on the complex patterns of previous eruptions, it is too early to conclude that the current activity will remain a simple dome extrusion event. There is still a possibility of a shift to an explosive phase. A definitive prognosis on the current unrest episode cannot be provided until further data analysis is completed.

A three-person team of scientists from the UWI Seismic Research Centre (SRC) arrived in St. Vincent on 31st December 2020, led by Vincentian Geologist Prof. Richard Robertson. The SRC team has begun upgrades to the Volcano Monitoring System.

A Web Cam Monitoring System was installed at Rose Hall to constantly monitor the summit of the Volcano. A Data Centre was established at the Observatory at Belmont, to analyse the data collected from the volcano. The team also conducted an alternate site exploration on 2nd January 2021 at Fancy and other areas to identify new sites where equipment will be installed over the next two weeks.

Aerial Reconnaissance flights have been challenged by high winds. The government is currently seeking to source a helicopter to support aerial observations.



Aerial Photos of La Soufriere, St. Vincent taken on 3rd January 2021. (Source: NEMO St. Vincent and the Grenadines <https://www.facebook.com/nemosvg/>)

Updates from Impacted CDEMA Participating States

The Caribbean Disaster Emergency Management Agency (CDEMA) made contact with the National Disaster Coordinator in St. Vincent and the Grenadines and the following was reported:



ST. VINCENT AND THE GRENADINES

1. The National Emergency Management Organisation (NEMO) has been in constant communication with the Seismic Research Centre of the University of the West Indies and the SRC scientific team on the ground, regarding activities at the La Soufriere volcano.
2. The Hon. Prime Minister and the Cabinet continue to receive briefings from NEMO and the Seismic Research Centre on the ongoing eruption.
3. The alert level remains at to Orange.
4. The National Volcano Emergency Plan has been activated and the National Emergency Operations Centre (NEOC) is partially activated.
5. The North Leeward District Disaster Committees met last Wednesday December 30th 2020 to sensitize members of the communities and to review the Volcano Emergency Plans.
6. The North Windward District Disaster Committees will meet January 5th - 9th 2021 to sensitize the members of their communities and to update their community evacuation plans.
7. Dissemination of information to the public is ongoing, including radio appearances by Prof. Richard Robertson of the UWI SRC team and NEMO Director Ms. Michelle Forbes.
8. The Director of NEMO briefed the Opposition Members of Parliament on Monday 4th January, 2021 at 10:30 a.m.
9. Collaboration with CDEMA, and other national disaster offices is ongoing.

THREAT LEVELS

Below is a summary of the threat alert levels for the La Soufriere volcano:

LA SOUFRIERE VOLCANO HAZARD ALERT LEVEL

Alert Level	Symptoms	Action Scientist	Action: Civil Authorities
Green	Volcano is quiescent (quiet): seismic and fumarolic (steam vent) activities are at or below the historical level at this volcano. No other unusual activity has been observed.	Normal monitoring	Undertake ongoing public awareness campaign and work on volcanic emergency plans.
Yellow	Volcano is restless: seismic or fumarolic activity or both are above the historical level at this volcano or other unusual activity has been observed (this activity will be specified at the same time that the alert level is raised).	Monitoring system will be brought up to full capability. Civil authorities alerted.	Undertake ongoing public awareness campaigns and work on volcanic emergency plans. Advise vulnerable communities of evacuation procedures in the event of an emergency.
Orange	Highly elevated level of seismicity or fumarolic activity or both or other highly unusual symptoms. Eruptions may occur with less than 24 hours notice.	Monitoring system continuously manned. Regular visual inspection of potential vent areas. Continuous ground deformation and hydrothermal monitoring. Daily assessment reports to civil authorities.	Coordinate evacuation (if necessary) based on hazard zones. Entry to the restricted access zone by scientist will be permitted after evacuation on a case-by-case basis. Organize regular radio and television announcements.
Red	Eruption is in progress or may occur without further warning	Measurements as permitted by safety condition. Civil authorities advised continuously.	Coordinate continued evaluation as necessary. Organize regular radio and television announcements.

Caribbean Disaster Emergency Management Agency (CDEMA) Actions

- The CDEMA Coordinating Unit (CU) continues to operate in accordance with the standard operating procedures (SOPs) of the Regional Coordination Plan (RCP) which includes maintaining contact with the threatened states and Regional Response Mechanism (RRM) partners.
- I. The CDEMA Coordinating Unit has undertaken technical consultations with the UWI Seismic Research Centre on the status of La Soufriere volcano.
 - II. The Regional Coordination Plan was activated at 6:00 PM December 29, 2020.
 - III. The Regional Coordination Centre has been activated at 9:30 AM December 30, 2020.
 - IV. The CDEMA Coordinating Unit has also undertaken consultations with the National Disaster Coordinator of the Subregional Focal Point in Barbados which stands ready to provide support.
 - V. In accordance with the Volcanic Annex of the RCP, the following Regional Response Mechanism (RRM) Teams have been placed on ALERT:
 - a) CARICOM Disaster Assessment and Coordination (CDAC)
 - b) CARICOM Operational Support Team (COST)
 - c) Rapid Needs Assessment Team (RNAT)
 - d) Caribbean Disaster Relief Unit (CDRU)
 - VI. Emergency telecommunications tests between the CDEMA CU and St. Vincent are being undertaken.
 - VII. The CDEMA Coordinating Unit will provide initial technical assistance to the National Emergency Management Organization in the following areas:
 - a) Evacuation Planning
 - b) Logistics Planning
 - VIII. The CDEMA CU is currently exploring options to assist the Government of St. Vincent and the Grenadines who has requested a helicopter to support the scientists with observations of the volcano.
 - IX. The CU will continue to monitor the situation in collaboration with the UWI Seismic Research Centre, the St. Vincent and the Grenadines NEMO and the national disaster management offices of Participating States in close proximity to the volcano and will provide updates to the RRM partners as necessary.

The CDEMA CU urges all Participating States and members of the RRM to monitor the progress of this volcanic event. The public should continue to monitor the releases from their local national disaster management office.

List of preparatory actions being undertaken by the RRM Partners [as of 5:00 p.m. 30th December 2020]



LOGISTICS SUPPORT

- The Regional Security System (RSS) airplane has provided transportation support the SRC team deployment to St. Vincent on 31st December 2020.
- The World Food Programme (WFP) preparedness and response mechanisms are on standby to assist, including logistical equipment, food kits and cash transfers.



AGRICULTURE & FOOD SECURITY

- The UN Food and Agriculture Organisation (FAO) is supporting the Ministry of Agriculture in their plans for evacuation of livestock.

GENERAL COORDINATION

- The International Federation of Red Cross and Red Crescent Societies (IFRC) has been in contact with the St. Vincent Red Cross Society and is on standby to provide assistance as requested.
- UNDP has alerted its national focal points and is closely monitoring the situation.
- UNFPA has contacted its national focal points and is available to provide support in key areas including the prevention of gender-based violence in emergencies.
- USAID/DHS Disaster Risk Management Specialists are in contact with the National Disaster Coordinator in St. Vincent. They are also in contact with regional partners and on standby to provide assistance.
- The Caribbean Water And Wastewater Association (CWWA) indicated that its resources are available to provide support as needed.
- The World Bank (WB) Group has been in contact with the ministry responsible for economic planning and is on standby to provide support as requested.
- FCO UK has been in contact with NEMO and identified the UK Commission in St. Vincent & the Grenadines as the contact for direct requests for assistance.
- The Government of Canada (GAC) is closely monitoring the developing situation.

List preparatory actions being undertaken by the RRM Partners [as of 5:00 p.m. 30th December 2020]



SECURITY

- An RSS Warning Order has been issued to its Member States to standby for deployment if requested by the impacted State.



HEALTH & NUTRITION

- No updates.



EDUCATION

- No updates.



RELIEF SUPPORT

- No updates.



FINANCIAL SUPPORT

- No updates.



EMERGENCY COMMUNICATION

- No updates.