



British Virgin Islands

Earthquake

8 May 2022

Preliminary Event Briefing

9 May 2022

1 INTRODUCTION

A magnitude 5.5 earthquake occurred at 13:32:58 (UTC) on 8 May 2022, 70 km (43.5 mi) NNE of Road Town, British Virgin Islands; 85.1 km (52.9 mi) NNE of Cruz Bay, U.S. Virgin Islands and 144.8 km (90 mi) NNE of Saint Croix, U.S. Virgin Islands. Initial estimates from the United States Geological Survey (USGS) located the epicentre of the event at 18.976°N, 64.359°W, and at a depth of 25.0 km (15.5 mi – Figure 1).

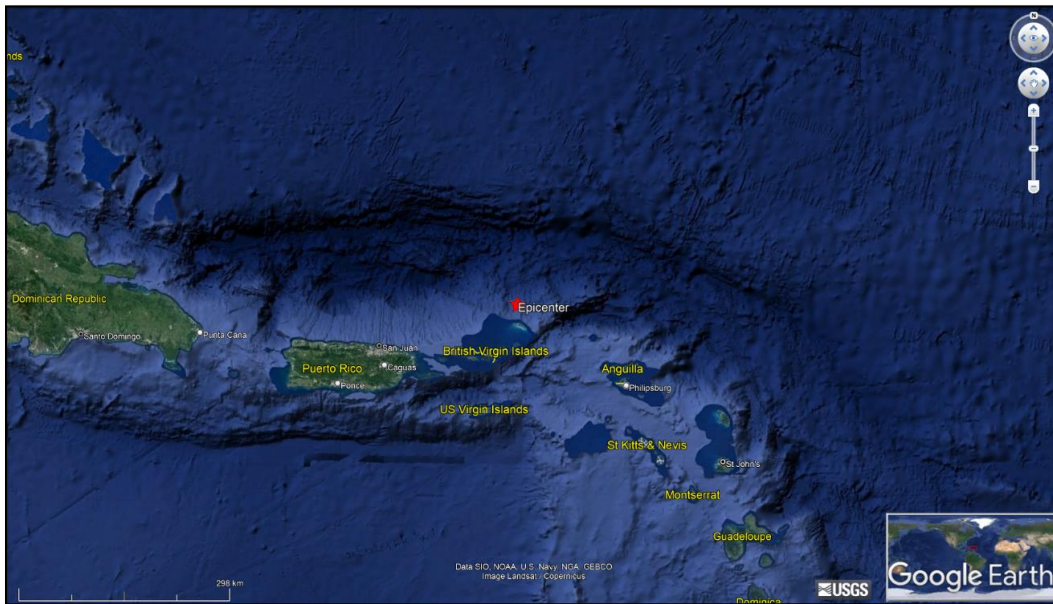


Figure 1 Information from the Earthquake Hazards Program of the United States Geological Survey regarding the earthquake event on 8 May 2022 at 13:32:58 UTC. Source: USGS¹

The British Virgin Islands was the only CCRIF member country where peak ground acceleration, computed with the SPHERA² EQ model, was greater than 0.01 g for this earthquake.

Preliminary runs of the CCRIF loss model for peak ground acceleration produced government losses for the British Virgin Islands, which were below the attachment point of the country’s earthquake policy and therefore no payout under the policy is due.

The Aggregated Deductible Cover (ADC) for this country’s EQ policy was not activated. This additional coverage was not activated because the modelled losses were below 10 per cent of the minimum payment of the policy. Therefore, no payment under the ADC feature is due for the British Virgin Islands.

¹ Download Event KML, United States Geological Survey, review date: 8 May 2022, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/pr2022128001/executive>

² System for Probabilistic Hazard Evaluation and Risk Assessment.

2 CCRIF MODEL OUTPUTS

Under CCRIF’s loss calculation protocol, a report using the CCRIF SPHERA model is produced for any earthquake with a magnitude greater than or equal to 5.0 that occurs within the region monitored by CCRIF and which generates a peak ground acceleration of at least 0.01 g in one or more grid cells of at least one CCRIF member country.

Based on the SPHERA footprint for the magnitude 5.5 earthquake, peak ground accelerations of up to 0.085 g were estimated in the British Virgin Islands. The peak ground acceleration footprint is the output from the CCRIF SPHERA EQ model. Figure 2 shows the regions in the British Virgin Islands affected following the magnitude 5.5 earthquake.

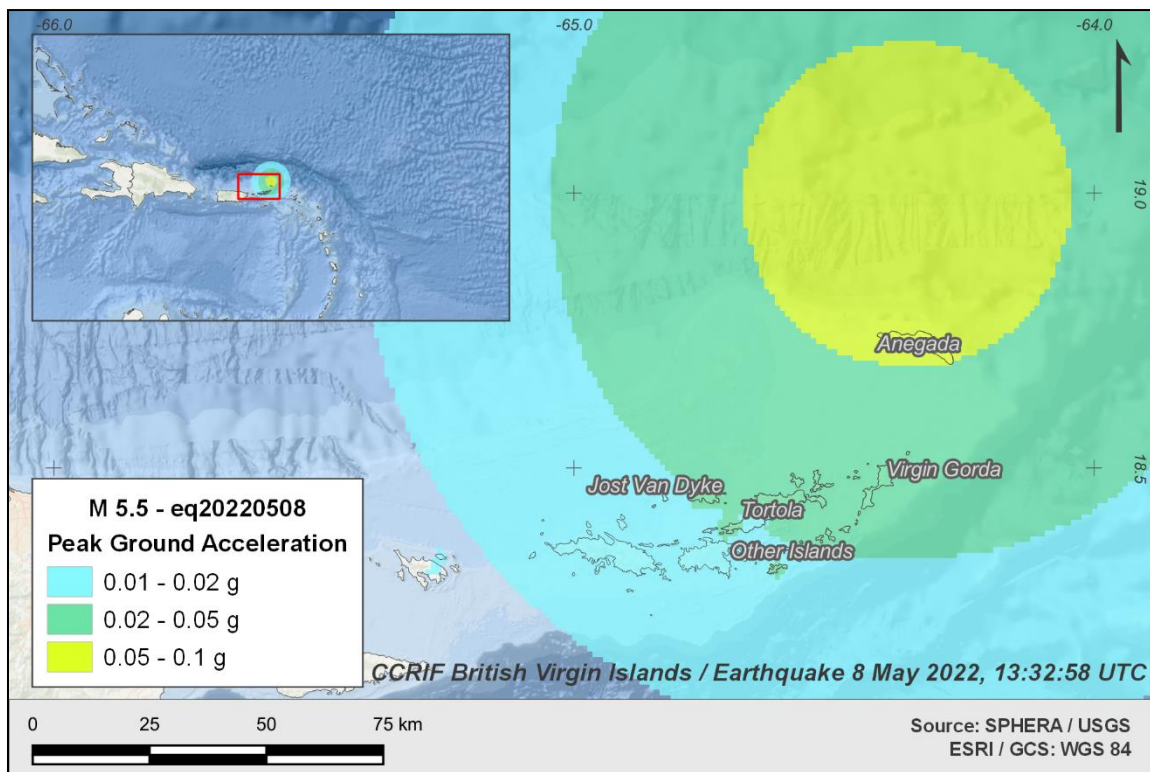


Figure 2 Map showing the peak ground acceleration in the British Virgin Islands computed using the SPHERA model following the magnitude 5.5 earthquake³ on 8 May at 13:32:58 UTC.

Source: *USGS & CCRIF SPHERA EQ Model.*

³ United States Geological Survey (USGS), review date: 8 May 2022, available at: '[M 5.5 - 84 km NNE of Cruz Bay, U.S. Virgin Islands](#)'

3 IMPACTS

At the time of writing this report, there was no available information on damage or loss in the British Virgin Islands due to this earthquake.

According to the USGS “*Did You Feel It?*” online tool⁴, 20 persons in the British Virgin Islands within a radius of 71 km (44.1 mi) from the epicentre reported the earthquake as being a “light shake with no damage” (Mercalli intensity: IV).

4 TRIGGER POTENTIAL

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For additional information, please contact CCRIF SPC at: pr@ccrif.org

⁴ Did You Feel It?, United States Geological Survey, review date: 9 May 2022, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/pr2022128001/executive>
