



British Virgin Islands

Earthquake

7 October 2020

Final Event Briefing

18 October 2020

1 INTRODUCTION

A magnitude 5.3 earthquake occurred at 18:24:34 UTC on 7 October 2020, 56 km (34.8 mi) ESE of Road Town, British Virgin Islands; 78.1 km (48.5 mi) NE of Saint Croix, U.S. Virgin Islands and 81.7 km (50.8 mi) ESE of Charlotte Amalie, U.S. Virgin Islands. Estimates from the United States Geological Survey (USGS) located the epicentre of the event at 18.174°N, 64.178°W, and at a depth of 10.0 km (6.2 mi). The British Virgin Islands was the CCRIF member country closest to the epicentre.

Final runs of CCRIF's loss model estimated no government losses for the British Virgin Islands and therefore no payout is due.

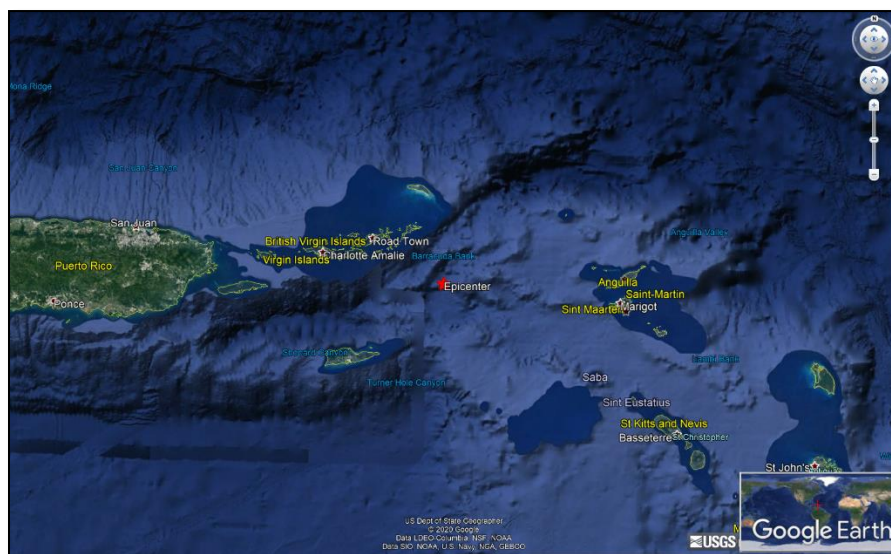


Figure 1 Information from the Earthquake Hazards Program of the United States Geological Survey regarding the earthquake event on 7 October 2020 at 18:24:34 UTC. Source: USGS¹

2 CCRIF MODEL OUTPUTS

Under CCRIF's loss calculation protocol, a report using the CCRIF System for Probabilistic Hazard Evaluation and Risk Assessment (SPHERA) 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 this earthquake, peak ground acceleration between 0.005 g and 0.05 g was estimated in the British Virgin Islands (Figure 2), but under SPHERA the earthquake generated a loss estimation of zero.

¹ Download Event KML, United States Geological Survey, review date: 7 October 2020, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/pr2020281016/executive>

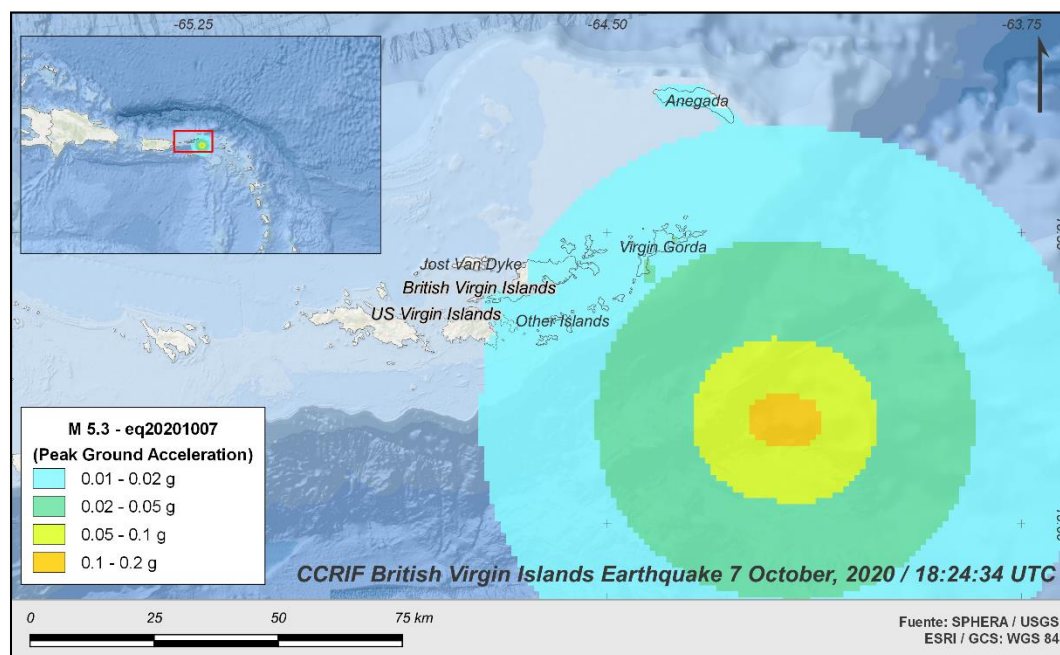


Figure 2 Map showing the peak ground acceleration in the British Virgin Islands computed using SPHERA model following the magnitude 5.3 earthquake on 7 October 2020 at 18:24:34 UTC.
Source: *USGS & CCRIF SPHERA EQ Model.*

3 IMPACTS

Ten days after the earthquake's occurrence and according to information published in the news^{2 3} the earthquake was felt by the population but no injuries or damage to infrastructure were reported.

According to the USGS “*Did You Feel It?*” online tool⁴, in the British Virgin Islands within a radius of 56 km (34.8 mi) from the epicentre, 8 persons reported the earthquake as feeling a “weak shake with no damage” (Mercalli intensities: II to III).

4 TRIGGER POTENTIAL

Final runs of CCRIF's loss model generated no government losses for the British Virgin Islands for this earthquake and therefore no payout is due under British Virgin Islands' CCRIF policy for earthquake.

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

² The Canadian, review date: 9 October 2020, available at: <https://thecanadian.news/>

³ Caribbean National Weekly, review date: 9 October 2020, available at: <https://www.caribbeannationalweekly.com/>

⁴ Did You Feel It?, United States Geological Survey, review date: 17 October 2020, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/pr2020281016/dyfi/responses>
