



# **British Virgin Islands**

## **Earthquake**

**6 February 2021**

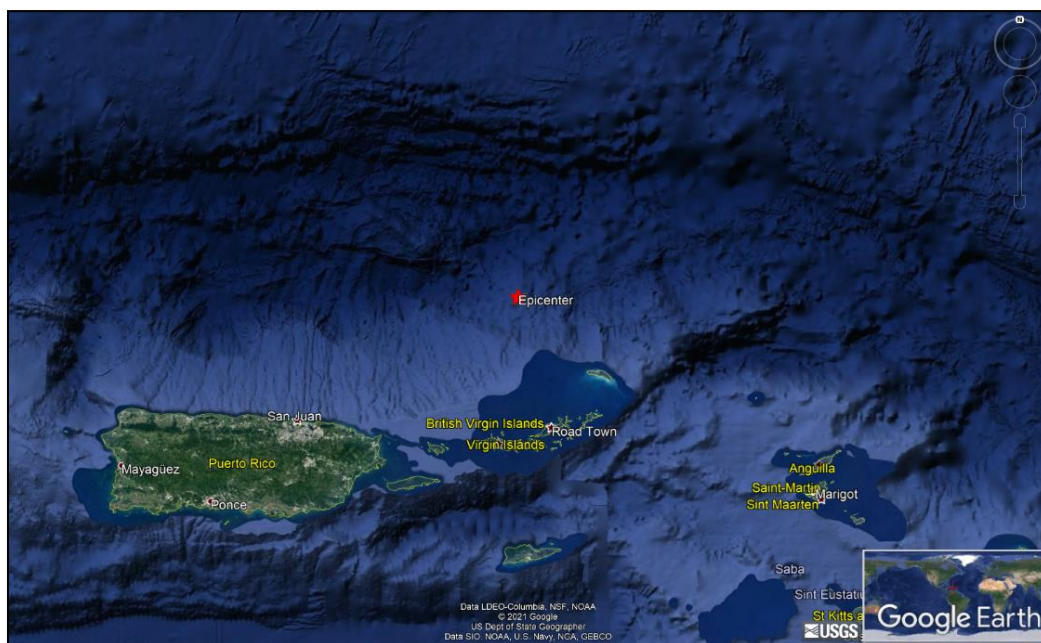
### **Final Event Briefing**

**17 February 2021**

## 1 INTRODUCTION

A magnitude 5.0 earthquake occurred at 07:05:02 UTC on 6 February 2021, 84.5 km (52.5 mi) SSE off Road Town, British Virgin Islands; 91.4 km (56.8 mi) N off Charlotte Amalie, Saint Thomas Island, U.S. Virgin Islands and 127.7 km (79.3 mi) NE off Fajardo, Puerto Rico. Estimates from the United States Geological Survey (USGS) located the epicentre of the event at 19.156°N, 64.816°W, and at a depth of 78.0 km (48.5 mi – Figure 1). The British Virgin Islands was the only CCRIF member country that was affected by the earthquake.

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 6 February 2021 at 07:05:02 UTC. Source: USGS<sup>1</sup>

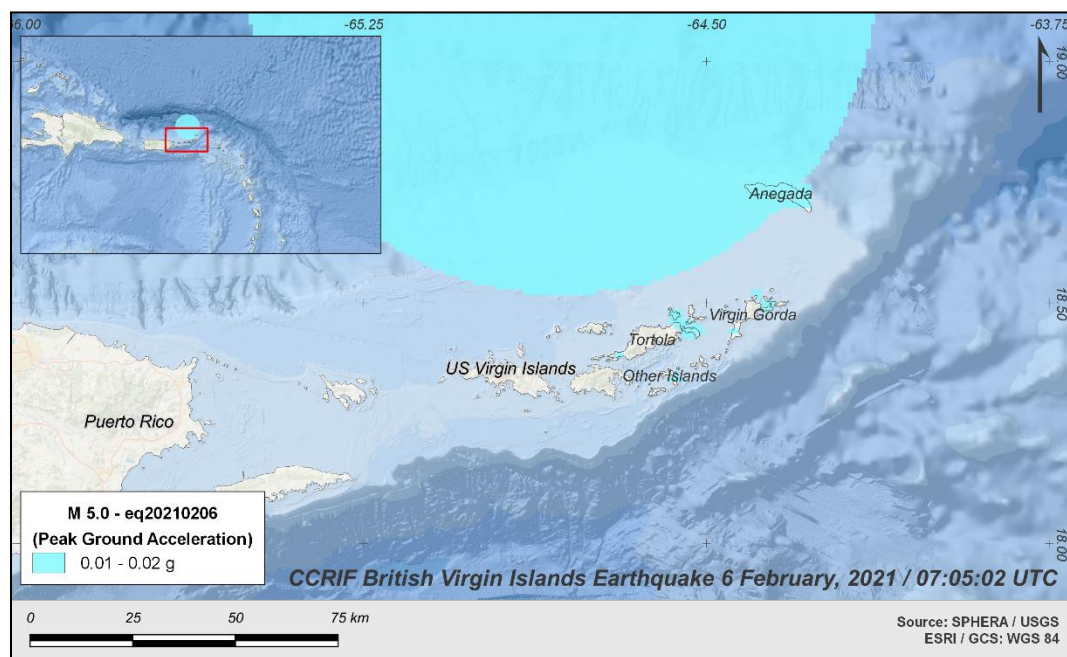
## 2 CCRIF MODEL OUTPUTS

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 of up to 0.02 g was estimated in the British Virgin Islands (Figure 2), but under SPHERA the earthquake generated a loss estimation of zero.

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<sup>1</sup> Download Event KML, United States Geological Survey, review date: 7 February 2021, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/pr2021037002/executive>

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**Figure 2** Map showing the peak ground acceleration in the British Virgin Islands computed using SPHERA model following the magnitude 5.0 earthquake on 6 February at 07:05:02 UTC.  
Source: *USGS & CCRIF SPHERA EQ Model.*

### 3 IMPACTS

Ten days after the earthquake's occurrence and according to information published in the local news<sup>2,3</sup>, the earthquake was felt by the population but no injuries to persons or damage to infrastructure were reported.

According to the USGS “*Did You Feel It?*” online tool<sup>4</sup>, 7 persons in the British Virgin Islands within a radius of 113 km (70.2 mi) from the epicentre reported the earthquake as being a “weak shake with no damage” (Mercalli intensities: II-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 the British Virgin Islands' CCRIF policy for earthquake.

For additional information, please contact CCRIF SPC at: [pr@ccrif.org](mailto:pr@ccrif.org)

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<sup>2</sup> GardaWorld, review date: 7 February 2021, available at: <https://www.garda.com/>

<sup>3</sup> The Gleaner Company (Media) Limited, review date: 7 February 2021, available at: <http://jamaica-gleaner.com/>

<sup>4</sup> Did You Feel It?, United States Geological Survey, review date: 17 February 2021, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/pr2021037002/dyfi/responses>

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