



Antigua and Barbuda

Earthquake

15 February 2022

Preliminary Event Briefing

16 February 2022

1 INTRODUCTION

A magnitude 5.0 earthquake occurred at 08:03:00 UTC on 15 February 2022, 39.7 km (24.7 mi) NNE of Anse-Bertrand, Guadeloupe, 51.2 km (31.8 mi) N of Le Moule, Guadeloupe and 53.6 km (33.3 mi) ESE of Falmouth, on the island of Antigua in Antigua and Barbuda. Initial estimates from the United States Geological Survey (USGS) located the epicentre of the event at 16.792°N, 61.342°W, and at a depth of 43.7 km (27.1 mi – Figure 1).

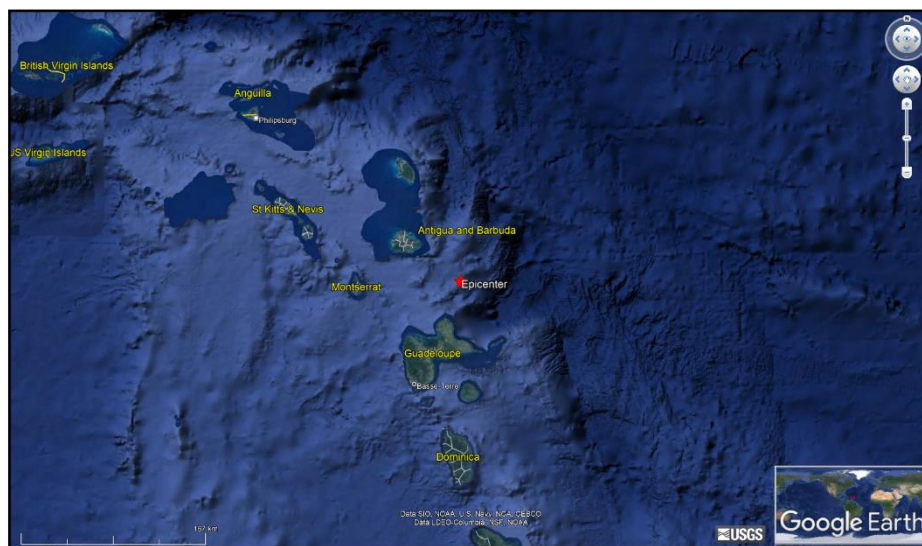


Figure 1 Information from the Earthquake Hazards Program of the United States Geological Survey regarding the earthquake event on 15 February 2022 at 08:03:00 UTC. Source: USGS¹

Antigua and Barbuda was the only CCRIF member country where peak ground acceleration, computed with SPHERA model, was greater than 0.01 g for this earthquake.

Preliminary runs of CCRIF’s loss model estimated no government losses for Antigua and Barbuda and therefore no payout under the country’s earthquake policy is due.

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 this earthquake, peak ground acceleration of up to 0.014 g was estimated in Antigua and Barbuda (Figure 2), but under SPHERA, the earthquake generated a loss estimation of zero.

¹ Download Event KML, United States Geological Survey, review date: 15 February 2022, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/us7000gl0d/executive>

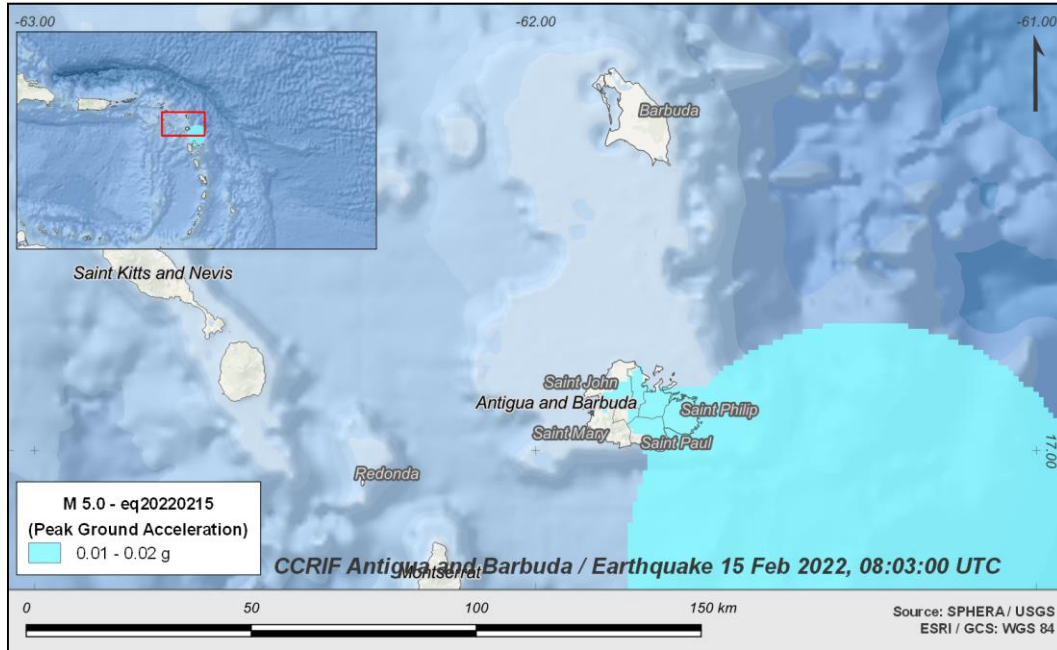


Figure 2 Map showing the peak ground acceleration in Antigua and Barbuda computed using SPHERA model following the magnitude 5.0 earthquake on 15 February at 08:03:00 UTC.

Source: *USGS & CCRIF SPHERA EQ Model.*

3 IMPACTS

At the time of writing this report, there was no available information on damage or loss in Antigua and Barbuda due to this earthquake.

According to the USGS “*Did You Feel It?*” online tool², 23 persons in Antigua and Barbuda within a radius of 115 km (71.5 mi) from the epicentre reported the magnitude 5.0 earthquake as ranging from “weak shake with no damage” to “light shake with no damage”(Mercalli intensities: II - IV).

4 TRIGGER POTENTIAL

Preliminary runs of CCRIF’s loss model generated no government losses for Antigua and Barbuda for this earthquake and therefore no payout is due under the country’s CCRIF earthquake policy.

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

² Did You Feel It?, United States Geological Survey, review date: 16 February 2022, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/us7000gl0d/dyfi/responses>