



Antigua and Barbuda

Earthquake

15 September 2025

Preliminary Event Briefing

16 September 2025

1 INTRODUCTION

A magnitude 5.0 earthquake occurred at 09:16:21 (UTC) on 15 September 2025, located at 51.3 km (31.9 mi) NW of Falmouth, Saint Paul, Antigua and Barbuda; 28.9 km (17.9 mi) SSW of Anse-Bertrand, Guadeloupe, Guadeloupe and 43.9 km (27.3 mi) S of Le Moule, Guadeloupe, Guadeloupe. Initial estimates from the United States Geological Survey (USGS) located the epicentre of the event at 16.719°N, 61.423°W, and at a depth of 60.7 km (37.7 mi). – Figure 1.

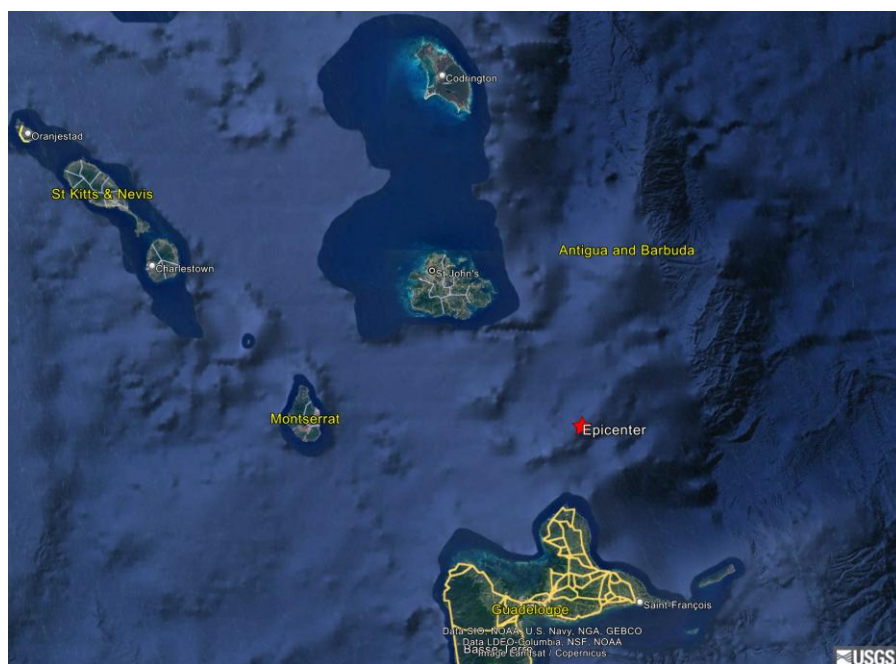


Figure 1 Information from the Earthquake Hazards Program of the United States Geological Survey regarding the earthquake event on 15 September 2025. Source: USGS¹

Antigua and Barbuda was the only CCRIF member country where peak ground acceleration, computed with the SPHERA model, was greater than 0.03 g for this earthquake.

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

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 0.03 g in one or more grid cells of at least one CCRIF member country. Based on the SPHERA

¹ Download Event KML, United States Geological Survey, review date: 15 September 2025, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/us7000qw9p/executive>

footprint for this earthquake, peak ground acceleration of up to 0.03 g was estimated in Antigua and Barbuda (Figure 2), but under the SPHERA model, the earthquake generated a loss estimation of zero.

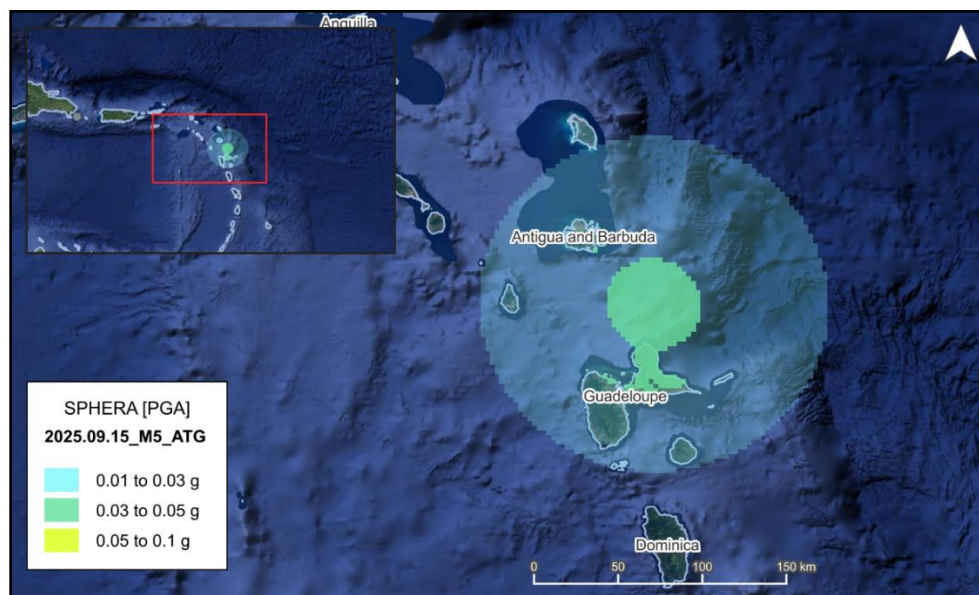


Figure 2 Map showing the peak ground acceleration in Antigua and Barbuda computed using the SPHERA model following the magnitude 5.0 earthquake² on 15 September 2025

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 tool, 5 persons in Antigua and Barbuda within an average radius of 84 km (52.2 mi) from epicentre reported the earthquake as being a “weak to moderate shake” (Mercalli intensity: III to V)

4 TRIGGER POTENTIAL

Preliminary runs of the CCRIF loss model for peak ground acceleration produced no government losses for Antigua and Barbuda. Therefore, no payout is due under this country’s earthquake policy.

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

² United States Geological Survey (USGS), review date: 15 September 2025, available at: [M5.0 Earthquake - Leeward Islands](#)
