



Cayman Islands

Earthquake

8 February 2025

Preliminary Event Briefing

10 February 2025

1 INTRODUCTION

A magnitude 7.6 earthquake occurred at 23:23:14 (UTC) on 8 February 2025, located at 210.1 km (130.6 mi) NNE of George Town, Cayman Islands; 216.3 km (134.4 mi) NE of Bodden Town, Cayman Islands and 218.1 km (135.5 mi) NNE of West Bay, Cayman Islands. Initial estimates from the United States Geological Survey (USGS) located the epicentre of the event at 17.702°N, 82.456°W, and at a depth of 10.0 km (6.21 mi) – Figure 1.

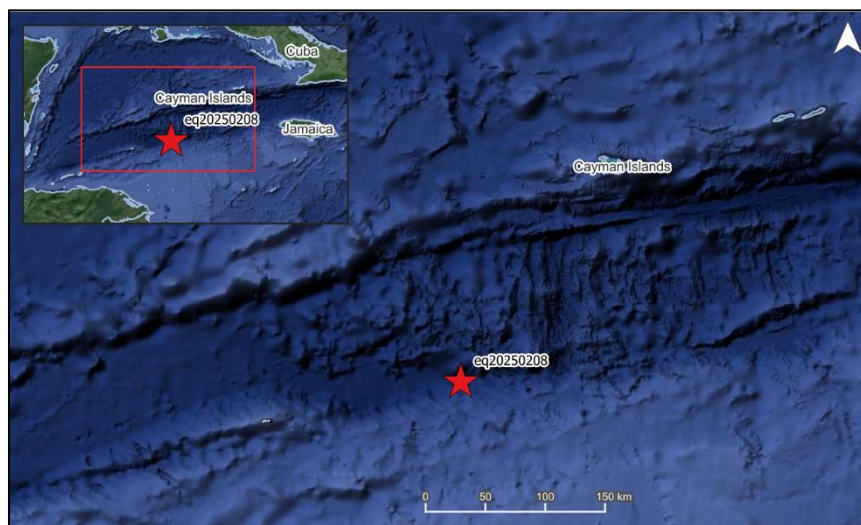


Figure 1 Information from the Earthquake Hazards Program of the United States Geological Survey regarding the earthquake event on 8 February 2025. Source: USGS¹

Cayman Islands 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 Cayman Islands and therefore no payout is due under the 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 footprint for this earthquake, peak ground acceleration of up to 0.03 g was estimated in Cayman Islands (Figure 2), but under the SPHERA model, the earthquake generated a loss estimation of zero.

¹ Download Event KML, United States Geological Survey, review date: 9 February 2025, available at: <https://earthquake.usgs.gov/earthquakes/feed/v1.0/detail/us7000pcdl.kml>

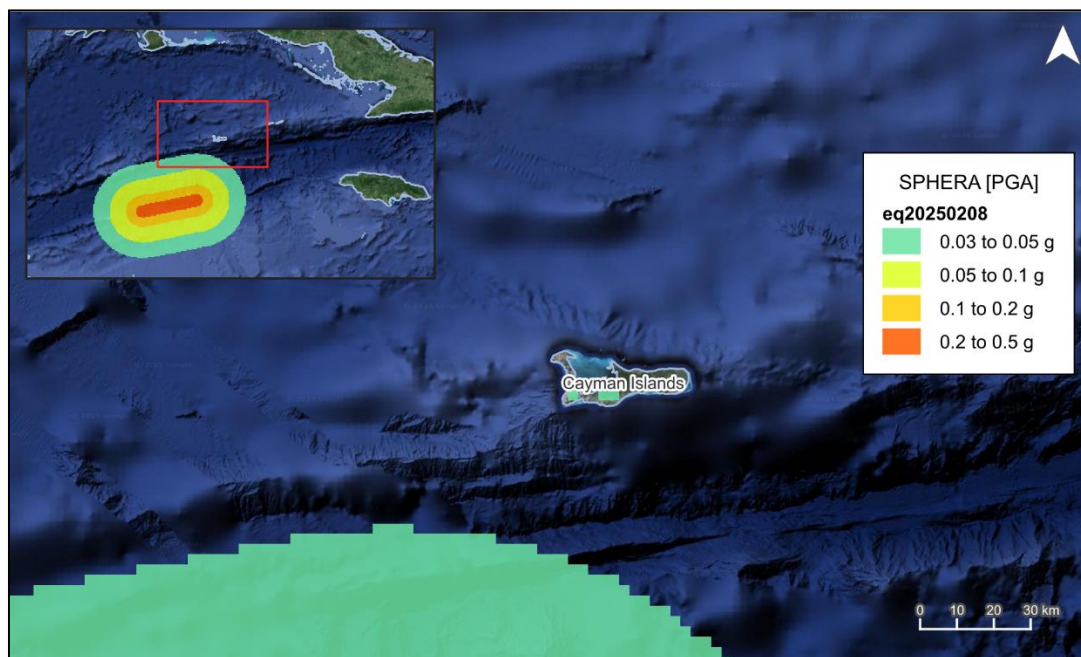


Figure 2 Map showing the peak ground acceleration in Cayman Islands computed using the SPHERA model following the magnitude 7.6 earthquake² on 8 February 2025
Source: *USGS & CCRIF SPHERA EQ Model*.

3 IMPACTS

At the time of writing this report, there was no available information on damage or loss in Cayman Islands due to this earthquake. However, this earthquake triggered a tsunami advisory for Puerto Rico, U.S. Virgin Islands, the British Virgin Islands, also threatening Cuba, Honduras and the Cayman Islands. By the night of 8 February, the threat had passed for the entire region³.

4 TRIGGER POTENTIAL

Preliminary runs of the CCRIF loss model for peak ground acceleration produced no government losses for Cayman Islands. 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: 8 February 2025, available at: [M 7.6 - 209 km SSW of George Town, Cayman Islands](#)

³ [Powerful earthquake in Caribbean triggers brief tsunami alerts](#)
