



Haiti

Earthquake

23 September 2018

Event Briefing

24 September 2018

1 INTRODUCTION

A magnitude 5.2 earthquake occurred at 05:45:50 UTC on 23 September 2018, (01:45:50 local time), at 3.3 km (2.0 mi) NW of Villa Elisa, Dominican Republic; 28.2 km (17.5 mi) NW of Mao, Dominican Republic and 26.0 km (16.2 mi) NNE of Sabaneta, Dominican Republic. Initial estimates from the United States Geological Survey (USGS) located the epicentre of the event (Figure 1) at 19.708°N, 71.291°W, and at a depth of 14.0 km (8.7 mi). Haiti was the only CCRIF member country where peak ground acceleration, computed with the MPRES model, was greater than 0.01g for this earthquake.



Figure 1 Information from the Earthquake Hazards Program of the United States Geological Survey, regarding the earthquake event on 23 September 2018. Source: USGS (<https://earthquake.usgs.gov>).

This event briefing is designed to review the possible impact and damages using the seismic parameters reported by the USGS.

2 CCRIF MODEL OUTPUTS

Under CCRIF’s loss calculation protocol, a CCRIF Multi-Peril Risk Estimation System (MPRES) report is required for any earthquake with a magnitude of 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 member country. Based on the MPRES footprint for this earthquake, peak ground acceleration between 0.005g and 0.02g was estimated in the territory of Haiti (Figure 2), for which the MPRES loss estimation was zero.

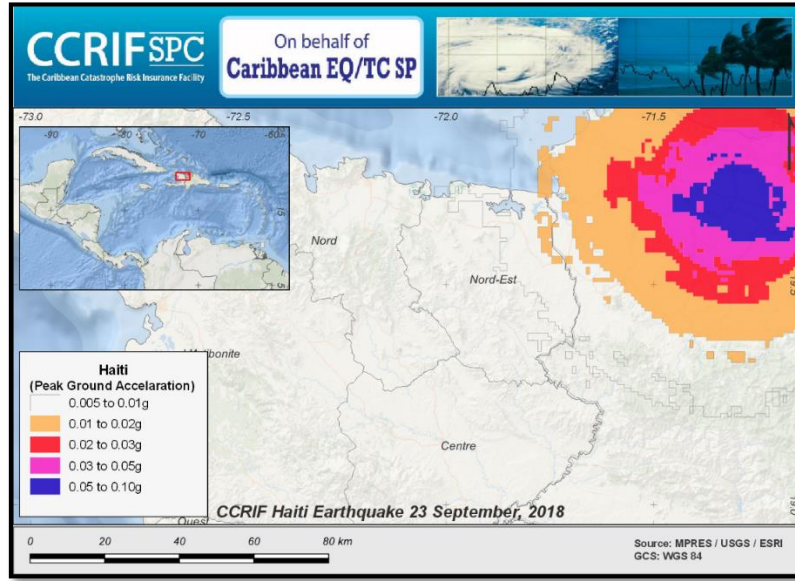


Figure 2 Map showing the peak ground acceleration computed using MPRES model in Haiti following the magnitude 5.2 earthquake on 23 September 2018. Source: *USGS & CCRIF MPRES*.

3 IMPACTS

At the time of this report, and according to the Director of the Office for Civil Protection, Dr. Jerry Chandler, the tremor was felt in various cities of the northern shore of Haiti (Ouanaminthe, Fort Liberte, Cap Haitien). It caused panic but no structural damage or casualties.

According to the USGS “Did You Feel It?” online tool¹, in Haiti within a radius of 101 km (62.7 mi) from the epicentre, 2 persons reported the earthquake as a “weak shake with no damage” (Mercalli intensities: II-III).

4 TRIGGER POTENTIAL

Preliminary runs of CCRIF’s loss model reported no government losses for Haiti and therefore no payout is due.

For further information, please contact ERN-RED, the CCRIF SPC Risk Management Specialist.

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¹ Did You Feel It?, United States Geological Survey, review date: 24 September 2018, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/us2000hiw5#dyfi>