



Nicaragua

Earthquake

16 May 2019

Final Event Briefing

27 May 2019

1 INTRODUCTION

A magnitude 5.9 earthquake occurred at 16:22:16 UTC on 16 May 2019 (10:22:16 local time), 45.9 km (28.5 mi) ENE of Jiquilillo, Nicaragua; 78.7 km (48.9 mi) E of Chinandega, Nicaragua and 75 km (46.6 mi) E of El Viejo, Nicaragua. Estimates from the United States Geological Survey (USGS) located the epicentre of the event (Figure 1) at 12.624°N, 87.856°W, and at a depth of 62.0 km (38.5 mi). Nicaragua 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 16 May 2019. Source: USGS (<https://earthquake.usgs.gov>).

The earthquake was reported also by the Seismology Department of the Nicaraguan Institute of Territorial Studies (in Spanish: Dirección de Sismología del Instituto Nicaragüense de Estudios Territoriales), with epicentre coordinates 12.590°N and 88.050°W, magnitude 6.1 and depth of 35 km (21.7 mi).

This event briefing is designed to review the model outputs for affected CCRIF member countries using the seismic parameters reported by the USGS.

Final runs of CCRIF’s model estimated losses below the Attachment Point for Nicaragua’s Earthquake policy and therefore no payout is due.

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 0.10g was estimated in the territory of Nicaragua (Figure 2), for which the MPRES loss estimation was zero.

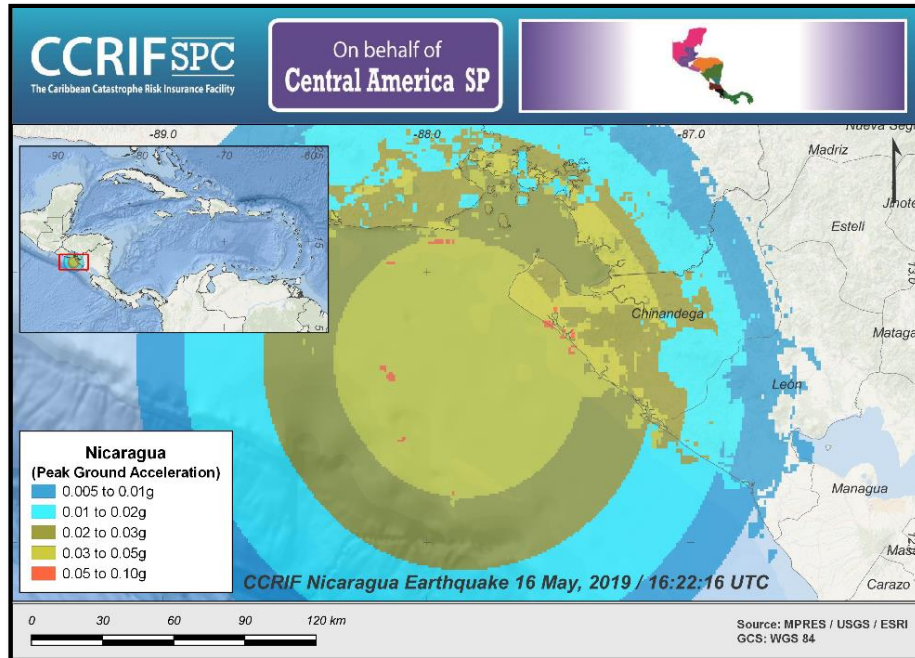


Figure 2 Map showing the peak ground acceleration computed using MPRES model in Nicaragua following the magnitude 5.9 earthquake on 16 May 2019. Source: *USGS & CCRIF MPRES*.

3 IMPACTS

More than 10 days after the earthquake’s occurrence, according to regional media in Nicaragua, no damages or injuries were reported due to this earthquake.

According to the USGS “Did You Feel It?” online tool¹, in Nicaragua within a radius of 216 km (134.2 mi) from the epicentre, 25 persons reported the earthquake as a “weak shake with no damage” to “moderate shake with very light damage” (Mercalli intensities: III to V).

4 TRIGGER POTENTIAL

The final runs of CCRIF’s loss model for peak ground acceleration produced government losses for Nicaragua that were below the attachment point of the country’s Earthquake policy, 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: 27 May 2019, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/us70003m2q/dyfi/responses>