



# Nicaragua

## Earthquake

**16 January 2018**

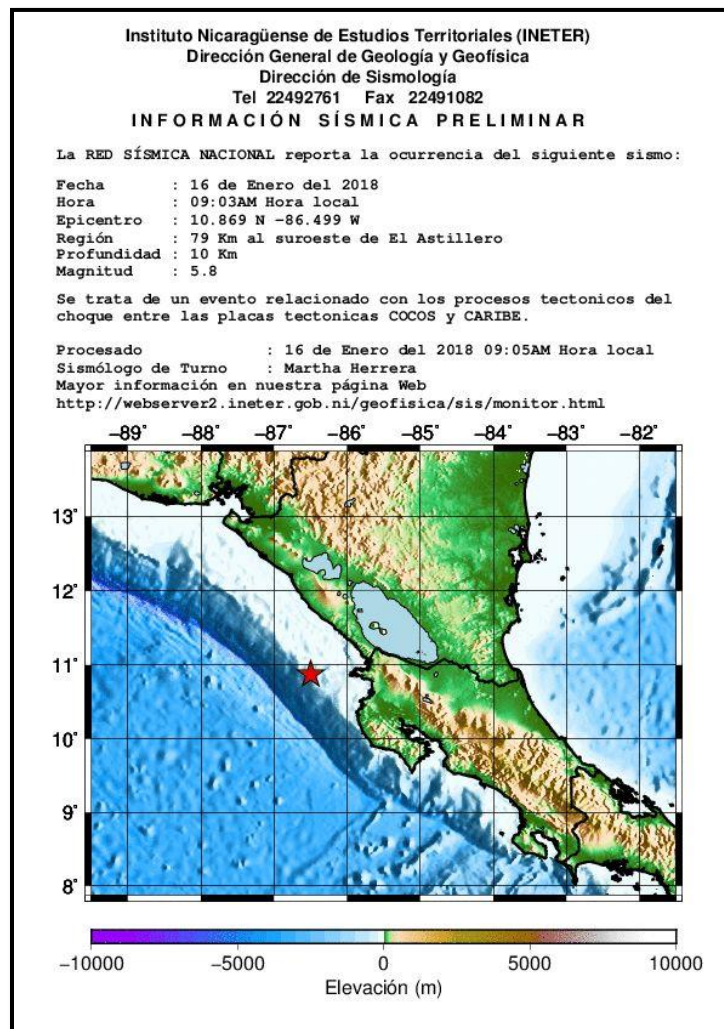
## Event Briefing

**17 January 2018**

## 1 INTRODUCTION

A magnitude 5.8 earthquake occurred at 15:03:54 UTC on 16 January 2018, (09:03:54 local time), 61.2 km (38.0 mi) SW of San Juan del Sur, Nicaragua; 77.9 km (48.4 mi) SW of Rivas, Nicaragua and 100.7 km (62.6 mi) S of San Rafael del Sur, Nicaragua. Initial estimates from the United States Geological Survey (USGS) located the epicentre of the event at 10.944°N, 86.335°W, at a depth of 39.3 km (24.4 mi). Nicaragua was the only CCRIF member country where peak ground acceleration was greater than 0.01g for this earthquake.

The earthquake was also reported by the Seismology Department of the Nicaraguan Institute of Territorial Studies (in Spanish: Dirección de Sismología del Instituto Nicaragüense de Estudios Territoriales), with the following earthquake characteristics: epicentre coordinates – 10.869°N and 86.499°W, magnitude – 5.8, depth – 10 km (6.2 mi) (Figure 1).

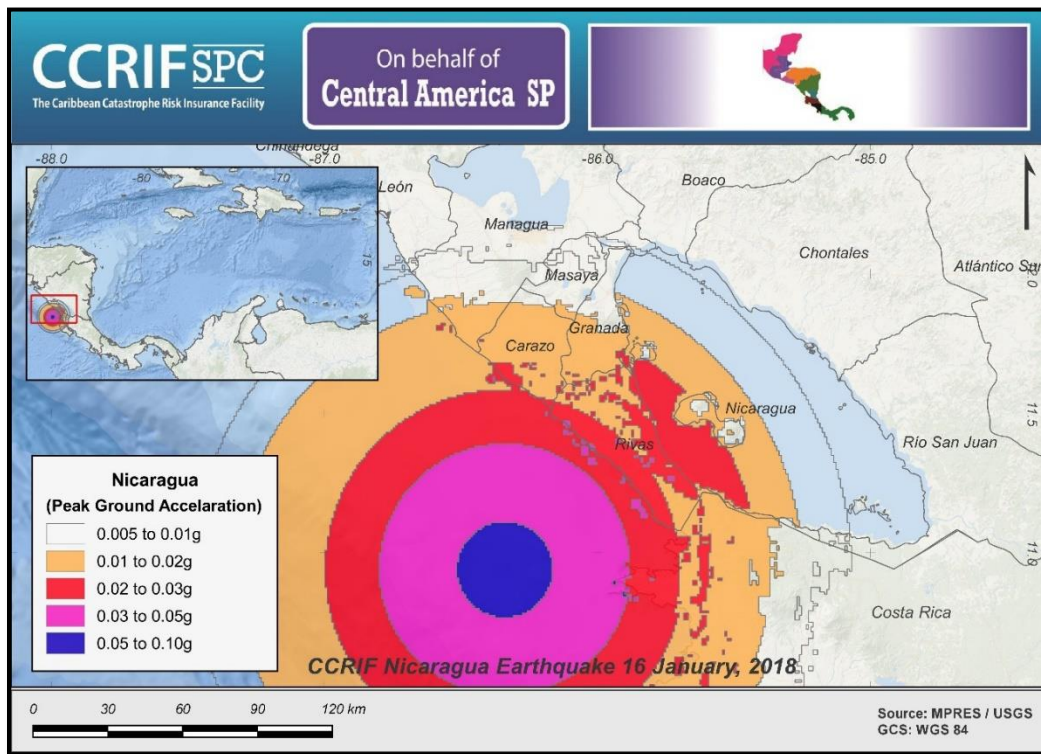


**Figure 1** Information from the Nicaraguan Institute of Territorial Studies Seismology Department, regarding the earthquake event on 16 January 2018.

Source: INETER (<http://ineter.gob.ni/>).

## 2 CCRIF MODEL OUTPUTS

Under CCRIF’s loss calculation protocol, a 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 0.01g and 0.05g was estimated in the territory of Nicaragua, for which the loss estimation was zero (Figure 2).



**Figure 2** Map showing the peak ground acceleration in Nicaragua following the magnitude 5.8 earthquake on 16 January 2018. Source: *USGS & CCRIF MPRES*.

## 3 IMPACTS

According to Vice-President Rosario Murillo, no damage was identified due to this earthquake. At the time of this report, information published in the local media<sup>1</sup>, reported that the earthquake downed two light poles.

According to the USGS “Did You Feel It?” online tool<sup>2</sup>, in Nicaragua within a radius of 146 km (90.7 mi) of the epicenter, 28 people reported the earthquake as a “weak shake with no damage” (Mercalli intensities: II-III) and another 4 people reported a “light shake with no damage” (Mercalli intensity: IV).

<sup>1</sup> tn8, Canal 8, review date: 16 January 2018, available at: <http://www.tn8.tv/>

<sup>2</sup> Did You Feel It?, United States Geological Survey, review date: 16 January 2018, available at: <https://earthquake.usgs.gov/earthquakes/eventpage/us2000cjyj#dyfi>

## **4 TRIGGER POTENTIAL**

The minimal impact reported corroborates preliminary runs of CCRIF's loss model that generated no government losses for Nicaragua, and therefore no payout is due.

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

Evaluación de Riesgos Naturales

Vito Alessio Robles No.179

Col. Hda Gpe Chimalistac.

Del. Álvaro Obregón. Cp 01050, México D.F.

+52 (55) 5616-8161, 62, 64

[cavelar@ccrif.org](mailto:cavelar@ccrif.org)