

# Haiti Aftershocks and Cayman Islands Earthquake, January 2010

*EVENT BRIEFING, 21 January 2010*

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## 1 HAITI AFTERSHOCKS

Haiti continues to be affected by aftershocks in the aftermath of the Magnitude 7.0 event which rocked the country on 12 January 2010. The most recent recorded aftershock to affect the island and the largest since the Magnitude 7.0 earthquake, was a strong Magnitude 5.9 (revised from initial estimate of 6.1) event, which occurred in the early hours of Wednesday morning, 20 January (11:03:43 UTC, local time is -5 hrs.)

Information released by the United States geological Survey (USGS) placed the aftershock at 18.425°N, 72.805°W with a depth of 10 km (6.2 miles). It was located 50 km (30 miles) WSW of Port-au-Prince and about 30 km west of the main 12 January epicentre.

As the aftershock occurred too far inland, it was not strong enough to generate a tsunami and hence no tsunami warnings were triggered. Although the largest aftershock in a week, the location and magnitude are still within the envelope of what is likely to be a protracted aftershock sequence.

There have been reports of collapsed buildings, which had already been weakened by the Magnitude 7.0 event, and panicked survivors pouring into the streets in Port-au-Prince. This has resulted in further complications to rescue efforts.

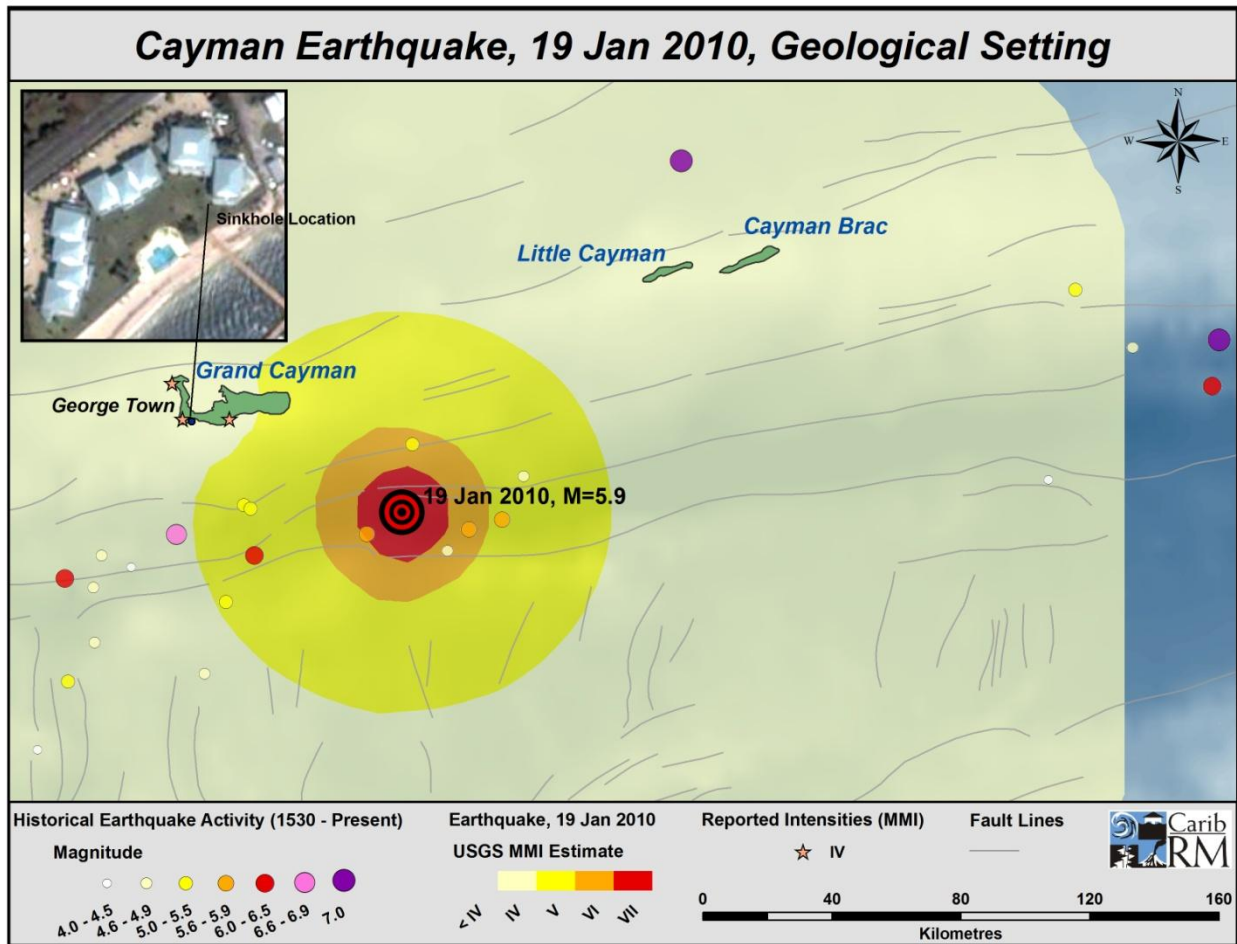
## 2 CAYMAN ISLANDS EARTHQUAKE

On Tuesday 19 January 2010, a magnitude 5.9 earthquake struck the Cayman Islands region at 14:23:38 UTC (local time is -5 hrs.) According to the USGS, the epicentre of the event was placed at 19.020°N, 80.779°W with a depth of 10 km (6.2 miles), hence being 70 km (45 miles) ESE of George Town, Grand Cayman (Figure 1.)



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**Figure 1**

Historical data does not indicate a link between this earthquake and the Magnitude 7.0 earthquake event which occurred in Haiti on 12 January 2010. Preliminary results seem to indicate that this earthquake occurred along the Oriente Transform Fault which forms the northern boundary of the Cayman Trench to the east of the Mid-Cayman Rise.

There have been no injuries or significant damage reported, with citizens given the all clear to return to their homes and businesses half an hour after the earthquake occurred. A large sinkhole did appear close a residence along the south coast of Grand Cayman (see photo inset on Figure 1, and Figure 2.)



Figure 2

### 3 CCRIF COVERAGE

#### Haiti

Although the Magnitude 5.9 event was strongly felt and resulted in further losses in Haiti, it did not trigger a payment from CCRIF for two reasons:

- Firstly, the CCRIF policy stipulates that only the single, largest earthquake event within a 25 day window will be used as a basis for calculations for payout. This clause is to account for the non-random nature of aftershocks, which make them ‘uninsurable’. The 20 January event is therefore classified as an aftershock within this 25 day window, and because it was smaller than the main event (more than ten times smaller), does not require a payout calculation.
- Secondly, the payout received by Haiti for the main event (US\$7.75 million) is their annual aggregate coverage limit for earthquakes, so no further payments would be made under the current policy conditions.

#### Cayman Islands

- Although this event was felt widely across the islands, it produced a **preliminary** Index Value of zero (indicating that CCRIF’s parametric models estimated that no damage or losses to government would occur from this event), and hence a payment was not triggered.