

Tropical Cyclone Matthew (AL152010)

Event Briefing

*Caribbean Risk Managers Ltd
Facility Supervisor*

4 October 2010



Facility Supervisor: Caribbean Risk Managers Ltd
Email: ccrif@ccrif.org; Main Tel (Barbados): +1 (246) 426-1525
Tel (Jamaica): +1 (876) 920-4182; Tel (USA): +1 (202) 465-4301



1 SUMMARY

Tropical Cyclone Matthew formed on 23 September 2010 and was the fifteenth tropical cyclone and thirteenth named storm of the 2010 Tropical Atlantic Hurricane Season. At its maximum intensity in the southwestern Caribbean Sea, Matthew was associated with 60 mph winds and a sea-level pressure of 998 mbar. Maximum sustained winds decreased significantly as then-Tropical Storm Matthew made landfall in Central America and moved inland over Honduras and towards Belize.

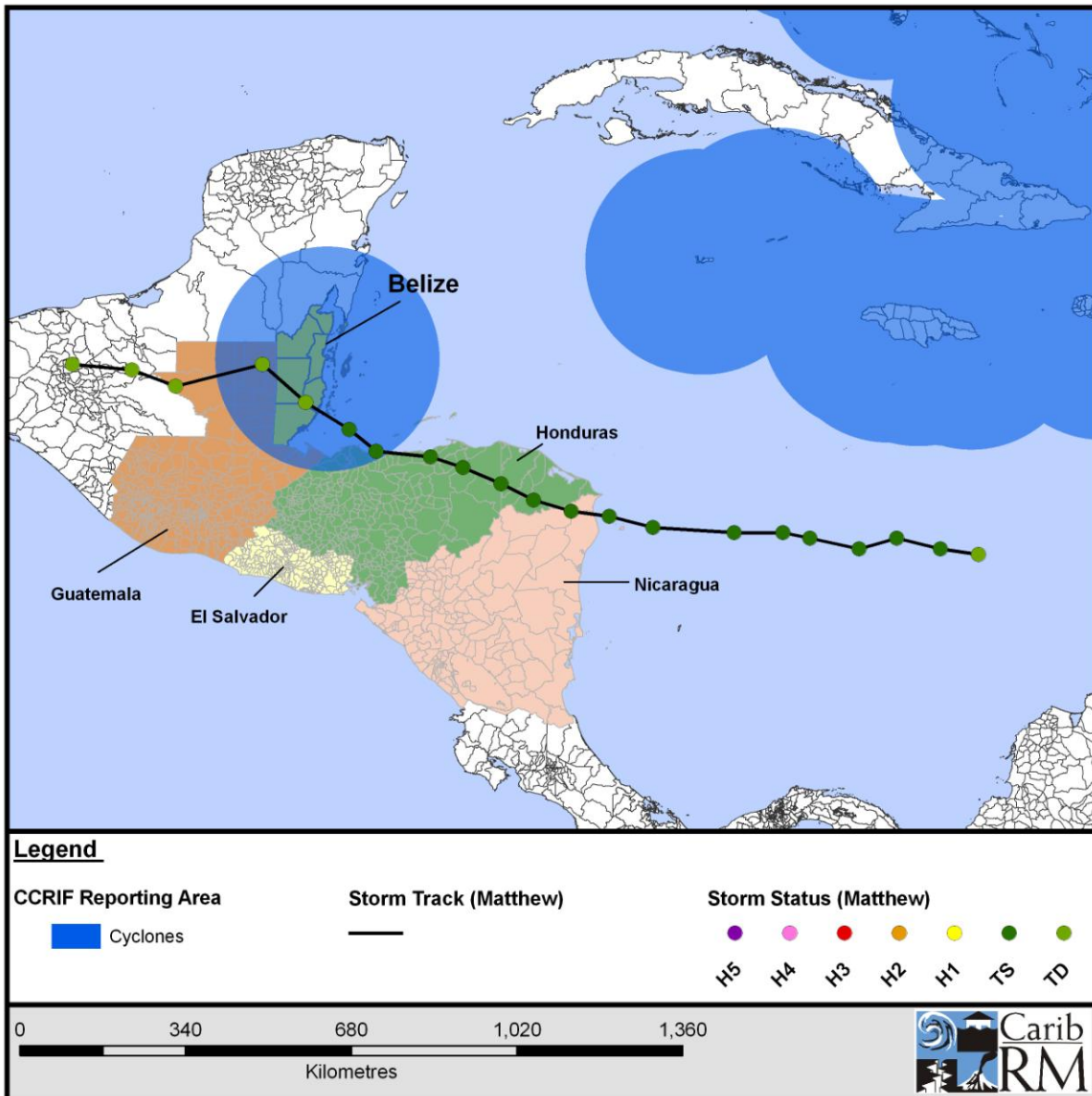


Figure 1 Track for Tropical Cyclone Matthew. *Source: NOAA/NHC.*

At about 15:00 GMT on 25 September, Matthew weakened to a strong Tropical Depression and data supplied by the US National Hurricane Center suggest that the point of landfall was near 16.2° N, 87.8° W. Matthew brought 1-minute maximum sustained winds to the region of around 40 mph (64 km/h) but wind gusts in the area may have been higher.

As shown in the model wind footprint graphic below, Matthew passed over the south of Belize (the only CCRIF country affected) but with winds below Tropical Storm force. Hence Matthew did not qualify as a qualifying event under CCRIF's hurricane policy. The CCRIF model wind footprint corresponds with data from the National Hurricane Center.

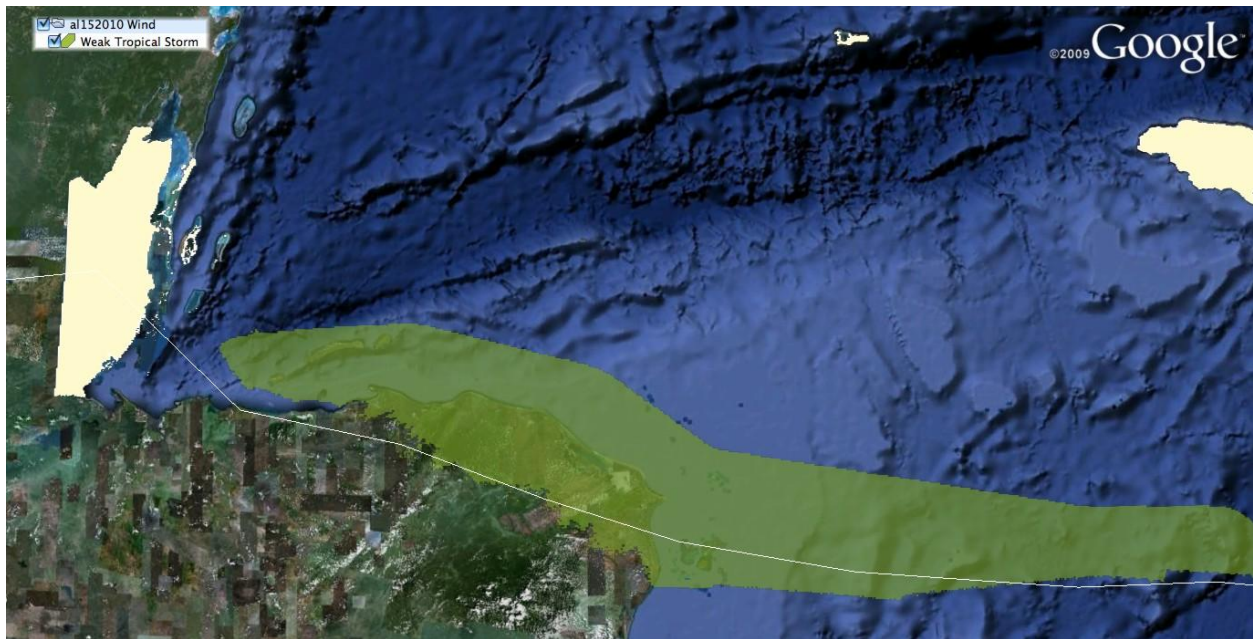


Figure 2 Wind footprint for Tropical Cyclone Matthew from CCRIF 2G hazard/loss model.

As expected for the level of modelled wind speed, the CCRIF loss model did not generate any losses in Belize as a result of Matthew.

Although Matthew resulted in some flooding in Belize, there was no loss of life or significant property damage, and there were no occurrences of disabled infrastructure. Figure 3 shows the estimated rainfall totals for Matthew from the Tropical Rainfall Measurement Mission satellite ensemble. We are awaiting on-the-ground rainfall data from Belize to further characterise this event.

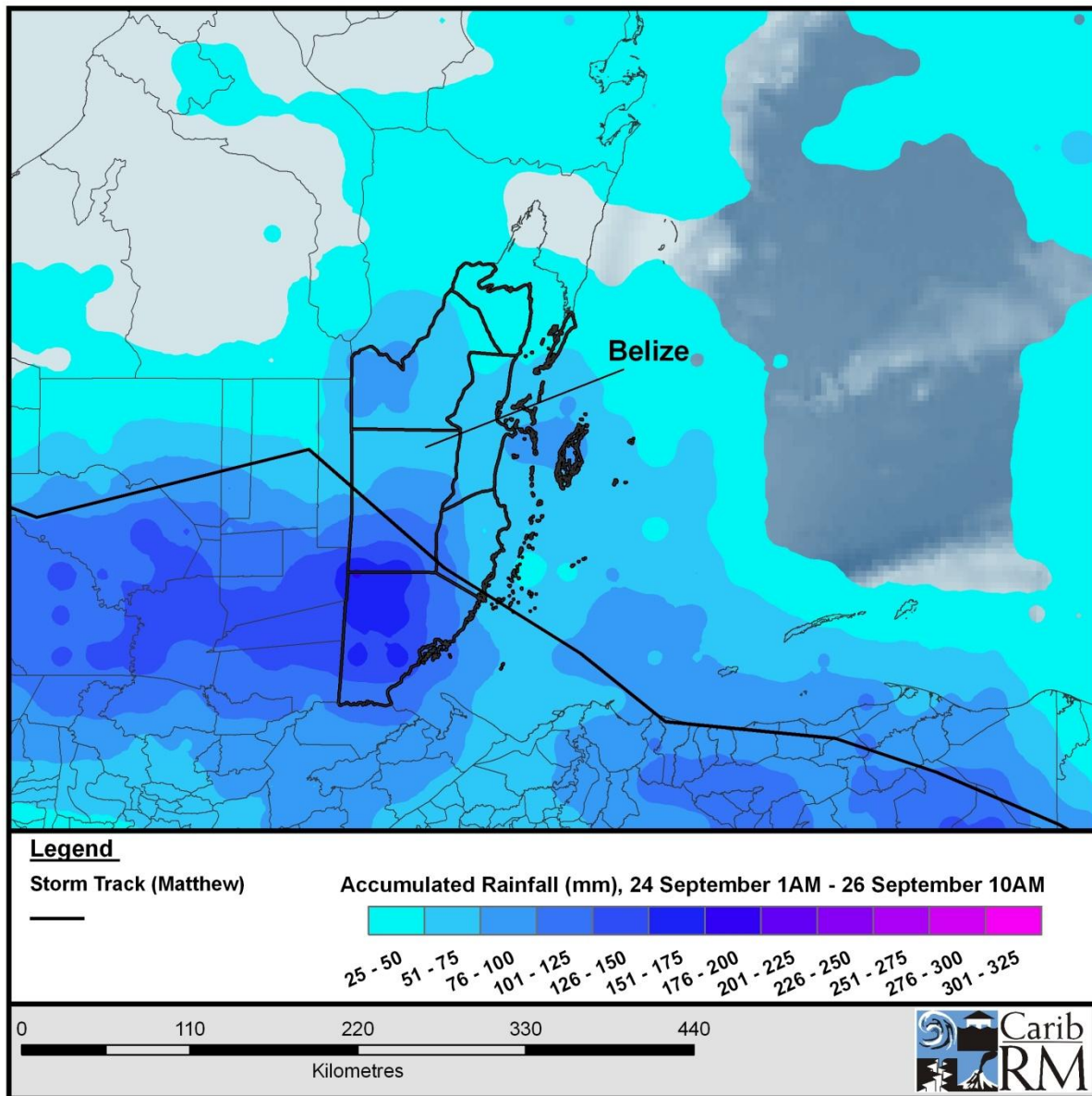


Figure 3 TRMM rainfall totals for Matthew. *Source: NASA/JSA TRMM.*

As the system moved further inland away from Belize and towards southern Mexico it underwent further gradual weakening while simultaneously losing forward speed. It eventually became a remnant system of low pressure on 26 September and finally dissipated on 28 September in the area west of the Yucatan Peninsula. Very heavy rains occurred over southern Mexico, particularly in Oaxaca, Chiapas, Tabasco, and southern Veracruz states, causing landslides and floods.