



The 2020 Virtual Wet Season Caribbean Regional Climate Outlook Forum (CariCOF)

May 27, 2020

Report





1. Introduction

Since the 2012 CariCOF, the Caribbean Institute for Meteorology and Hydrology (CIMH) has been coordinating climate forecasting activities leading to a consistently growing body of climate forecasters who (i) contribute to the monthly production of consensus-based seasonal climate outlooks and (ii) engage with the user community, both nationally and regionally to facilitate awareness-building within climate sensitive sectors.

This year, in light of the global COVID-19 pandemic, all sessions were held virtually. In collaboration with the WMO, through the Climate Risk and Early Warning Systems (CREWS), the International Research Institute for Climate and Society (IRI), and the National Oceanic and Atmospheric Administration (NOAA), the 2020 Wet/Hurricane Season CariCOF Stakeholders Forum took place on 27 May. This forum was preceded by a session for meteorologists and climatologists from across the region to finalize the climate forecasts (25 May). Subsequent to the CariCOF forum a closed meeting of the Consortium of Regional Coordination Partners of the sectoral Early Warning Systems across Climate Timescales (EWISACTs) was convened 29 May.

2. Welcome Remarks (Dr. David Farrell – Principal, CIMH)

Dr. Farrell welcomed all participants to the CariCOF. The occurrence of COVID-19 at a time when the region is experiencing drought conditions and the discussion of the challenges COVID-19 would pose should be discussed, whether in this forum or in a subsequent one. Dr. Farrell encourages persons to talk or write about their experiences as it would help to approach a future pandemic during a dry period. Dr. Farrell also stressed that the drought situation has exposed challenges in the region in terms of socio-economic development. We need to ensure that we share the best information to obtain the best forecast. He further encouraged experts to continue to build the climate products and develop the services to the community so as to strengthen the adaptation to drought conditions.

Dr. Farrell is hopeful that one of the outcomes of CariCOF would be to strengthen the commitment to climate and health.





3.0 Recent Climate Conditions and Forecasts for The 2020 Wet/Hurricane Season (Dr. Cedric Van Meerbeeck and Mrs. Shontelle Stoute, CIMH)

Dr Cedric Van Meerbeeck began by highlighting the key messages which are summarized as follows:

1. Recently:

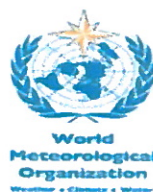
- Severe drought in many areas – affecting water availability – after a very dry 2019 and a drier than usual 2020 dry season. Heat is building up.

2. The 2020 Wet/Hurricane Season Outlook:

- 2 undesirable scenarios for June to August:
 1. Wetter than usual, particularly high flood potential and tropical cyclone activity, but tempered heat stress and progressive drought relief.
 2. Frequent heat stress and slow drought relief, but not particularly wet, with tempered flood potential and tropical cyclone activity by late-August.
- September to October:
 1. In Belize and the islands: hot and humid, heat stress peaking during frequent heat waves; very wet, strong tropical cyclone activity, high flood potential; long term drought easing.
 2. In the Guianas: hot, dry season.
- November: wet, high flood potential and progressively cooler

3. Prepare for: Drought (particularly in the first 2 months). Tropical cyclones. Floods. Heat stress.

Mrs. Shontelle Stoute further highlighted some of the impacts from the most recent drought conditions across the region. In Jamaica, water restrictions were enforced amidst incoming rains in July 2019. By the end of August 2019 Barbados was in a near crisis situation as some reservoirs had been 'bone dry'. Drought conditions also affected produce and livestock. Belize farmers suffered losses from a poor citrus harvest. Barbadians had to pay more for vegetables and the country reported a disappointing sugar cane yield. Jamaican farmers also suffered losses. Jamaica also reported record-breaking temperatures and there were reports of increased poultry deaths in Barbados.



Mrs. Stoute also mentioned that the 2019 Atlantic Hurricane season was another unforgettable one. There were 18 named storms, including six hurricanes of which three were category 3 or higher. Category 5 (185 mph winds) Hurricane Dorian was the most memorable of the season. It caused 74 deaths in The Bahamas with an estimate of \$3.4 billion in damage and losses.

Further review of the 2019 Wet/hurricane? season showed that some territories received less rainfall than usual, particularly Barbados. Warmer than usual temperatures were also observed across the 2019 season for the entire region.

Dr Van Meerbeeck explained what usually happens during the wet season before presenting the 2020 wet/hurricane season outlook. The factors driving the conditions include unusually warm sea surface temperatures in the Caribbean and Tropical North Atlantic; as well as the possibility of a La Nina episode. With respect to the 2020 Atlantic Hurricane Season, it is expected to be active with an average of 13-19 named storms; 6-10 hurricanes; and 3-6 major hurricanes (NOAA Climate Prediction Centre 21 May update). The CIMH experimental hurricane forecast predicts 8-21 tropical cyclones.

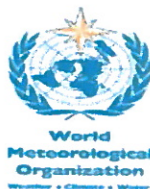
4.0 Discussion – Forecast Implications for the 2020 Wet/Hurricane Season

Nicole Greenidge (CDEMA) asked how would the products be best utilized where there are uncertainties in the forecast outputs. How best can they be used for decision-making?

In response, Dr. Van Meerbeeck stated that even though the models are uncertain that does not mean that the normal situation changes – the best way to prepare is to take note of the usual situation.

Karen Posen (PAHO) raised the concern regarding the COVID-19 pandemic and an active hurricane season. While some islands have been trying to return to normalcy we have to be mindful of the fact that we would be opening our countries to new cases as our borders reopen. Thus, there is the chance of exhausting our resources managing COVID-19 with the same resources having to manage an active season. It may require a different kind of approach.

Rodney Martinez (WMO-R/NCAC) mentioned that it would be a challenging season. In light of COVID-19 he gave some special considerations: design a joint project to look at implications and evolution of different climate parameters during the season and the potential implications in terms of the COVID-19 situation which may provide a summarized view of the main parameters for decision makers.



Dr. David Farrell (CIMH) raised concerns regarding siltation that may arise that utility companies would have to pay attention to. Also, there is an interesting dynamic with a shift in the demand curves (e.g. water, electricity) with the forecast of increasing temperatures as well as with more persons working from home.

Ms. Anuradha Maharaj (CWWA) queried whether any of the products are related to hydrological models so as to give an idea of aquifer recharge and recharge rate? What are the possibilities of downscaling information to the local level?

Dr. Van Meerbeek indicated that downscaling of products are currently being done by several meteorological services.

Mr. Shawn Boyce (CIMH) responded that some work with hydrological models have already started with Barbados as a pilot country and other territories to benefit.

Dr. Farrell also said that coupling of the models can be done. These should be kept simple to avoid over-complication.

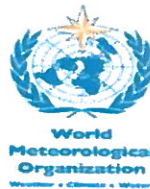
Dr. Farrell asked the representatives of CARPHA/PAHO whether there was any work done as it relates to mortality and morbidity around periods of heat stress.

Karen Posen of PAHO stated that there was currently no work being done. However, they are getting ready to engage a couple countries to assess such. The challenge is with the absence of health data.

Joy-Anne Johnson (Department of Emergency Management, Barbados) stated that the drought will have an impact on shelter management as it relates to hygiene practices at emergency shelters. One way to approach this challenge for Barbados, is to seek to reduce the number of persons housed at the shelters.

5.0 Closing Remarks

In closing, Mr. Adrian Trotman (CIMH) thanked all participants for being a part of the day's session. He also thanked the partners – the National Meteorological and Hydrological Services across the region, NOAA, and IRI. Mr. Trotman also relayed his appreciation of the support of CIMH, the Principal, and the staff of the Regional Climate Centre. The activities will end with a closed meeting of the EWISACTs with regional stakeholders (partners in providing climate services), along with the observation agencies who support in the development and completion of the Road Map Plan of Action for Climate Services.



Appendix I: CariCOF Wet/Hurricane Season Agenda



*2020 Wet/Hurricane Season
Caribbean Climate Outlook Forum
CariCOF
27 May, 2020
AGENDA*



Welcome – Dr. David Farrell (Principal, CIMH)

Presentation – *Recent Climatic Conditions and Forecast for the 2020 Wet/Hurricane Season* (CIMH – Dr. Cedric Van Meerbeeck and Mrs. Shontelle Stoute)

Discussion – *Forecast Implications for the 2020 Wet/Hurricane Season*

Vote of Thanks – Mr. Adrian Trotman

