

# Significant Weather Impacts

## Barbados

2020



**CMC60-Virtual**

**18<sup>th</sup> November, 2020**

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Barbados Meteorological Services

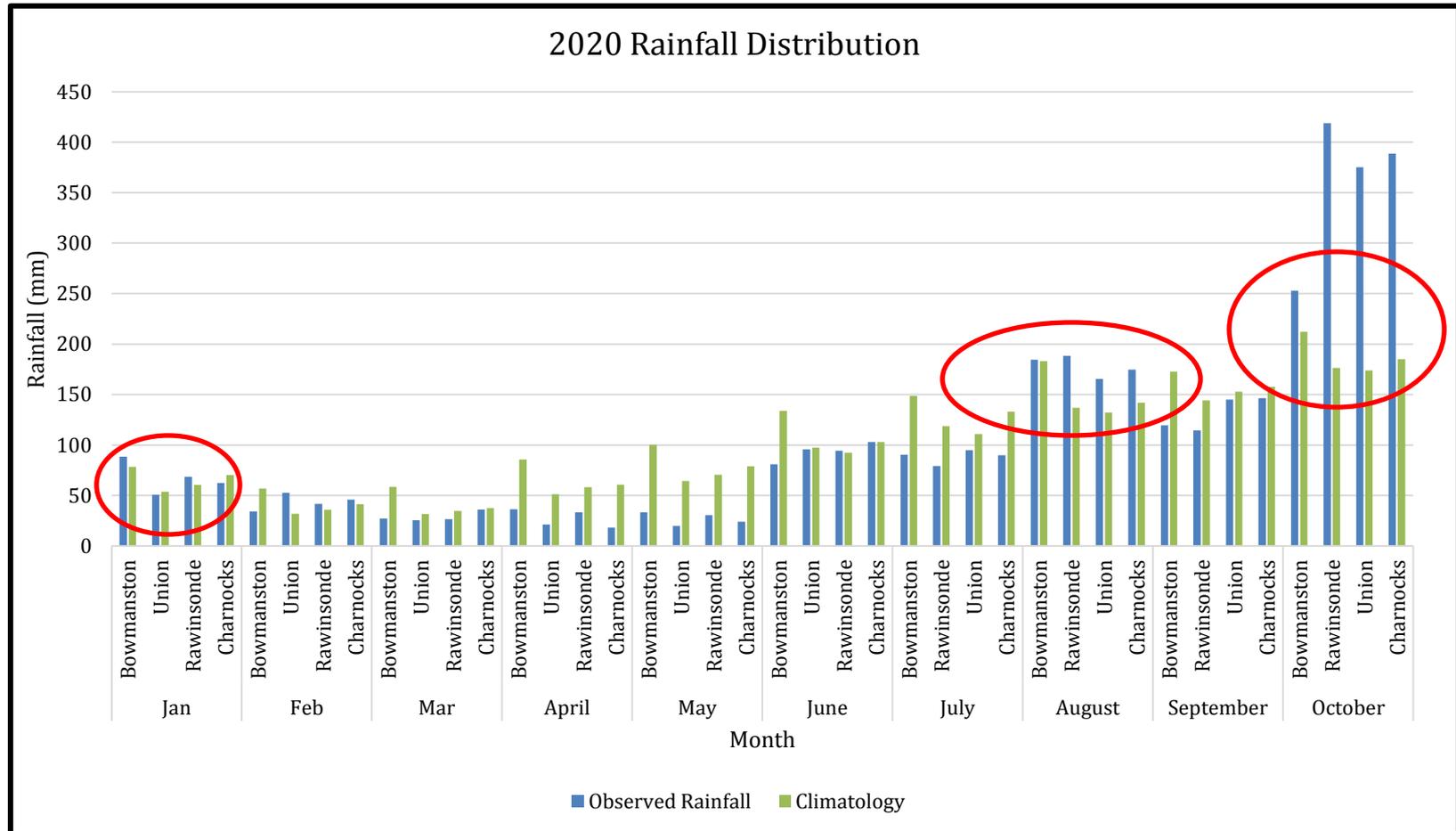
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# Significant weather events

- 2019 Drought which persisted through to the beginning of 2020
- Majority of rainfall was as a result of localized activity which resulted in severe flash flooding.
- Passage of Potential Tropical Cyclone#9 (Tropical Storm Isaias)
- Thick concentrations of dust haze across Barbados and the eastern Caribbean in June 2020

# 2020 Barbados Rainfall Distribution

## January to October



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# Evolving Drought from 2019 into 2020



- Crop loss and reduction in crop yield e.g. cassava and sweet potato
- Incidence of fungal pathogens, insects and pests





- Significant depletion of underground coral aquifers
- Water restrictions remained enforced from 2019 into 2020.
- Shutdown of several pumping stations in several parishes due to low water levels
- Water outages/shortages
- Pumping station in the east of the island critically low water levels
- Water tanks were erected in communities most affected by low water levels.

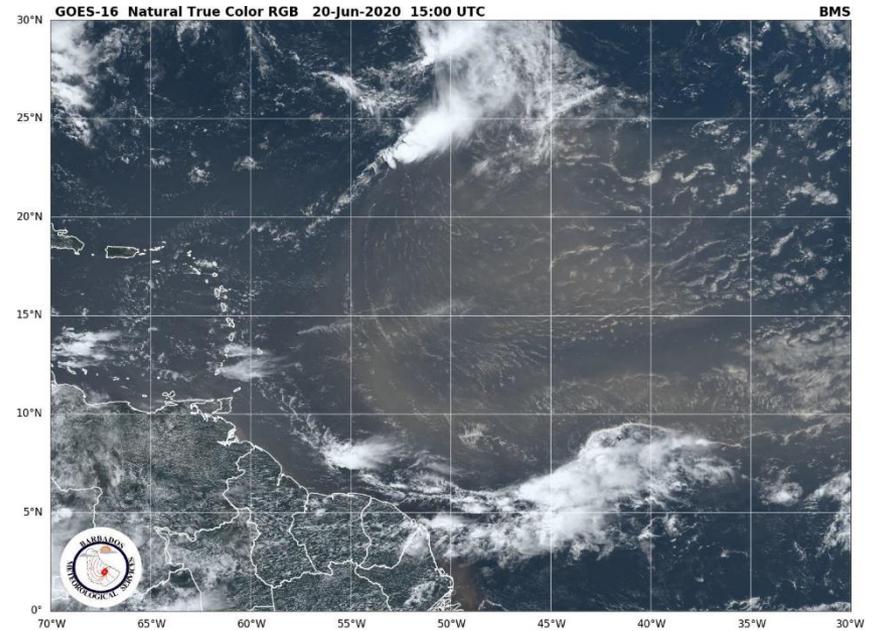




- Decline in sugarcane yield which had already suffered a significant reduction in sugarcane productivity in 2019 and in 2018.



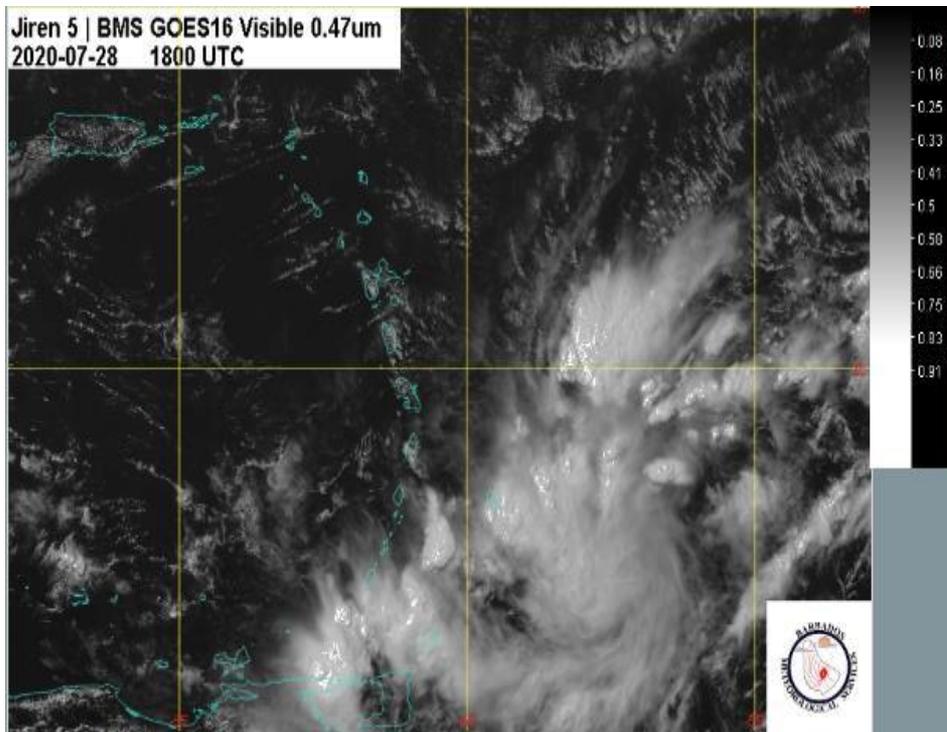
# Significant Dust Haze Event (June 2020)



One of the most significant dust events to date was experienced between the 17<sup>th</sup> and 23<sup>rd</sup> of June 2020. This was of a concern to,

- Persons with respiratory issues and/or allergies

# Potential Tropical Cyclone Nine 28<sup>th</sup> July (Tropical Storm Isaias)



- Was a strong Tropical wave when it affected Barbados
- Over 2 inches of rain reported during the afternoon of the 28<sup>th</sup>
- Flash-flooding occurred in some areas. 1-2 inches received during the afternoon. Further 3-4 inches was forecast
- Flash-Flood warning issued 6PM.





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# Localized Activity (September 13th)

- Light winds
- Adequate moisture
- Strong daytime heating
- Support from upper levels in some cases

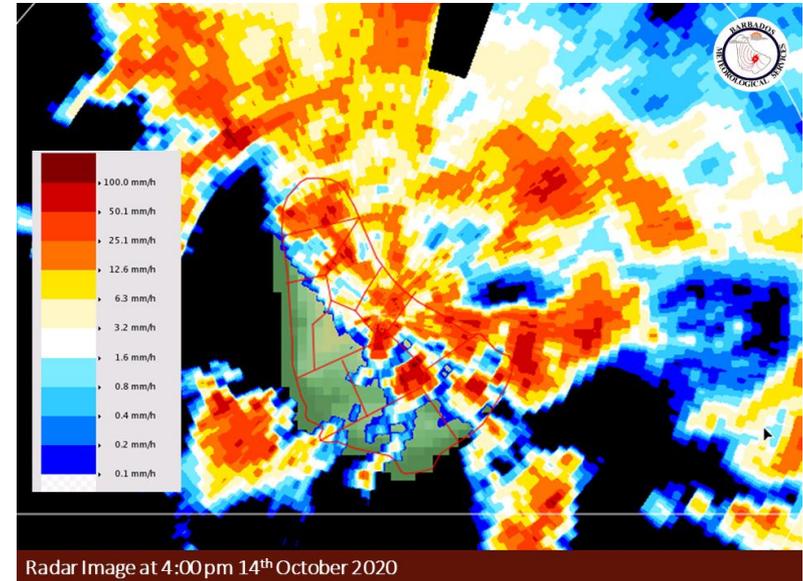


- Severe flash-flooding occurred in northern and north-western side of the Island which resulted in 2 inches in 2 hours
- Flash-Flood watch issued at 10:15AM. Upgraded to flash-flood warning at 12 noon. A further 2 - 4 inches was received during the afternoon.



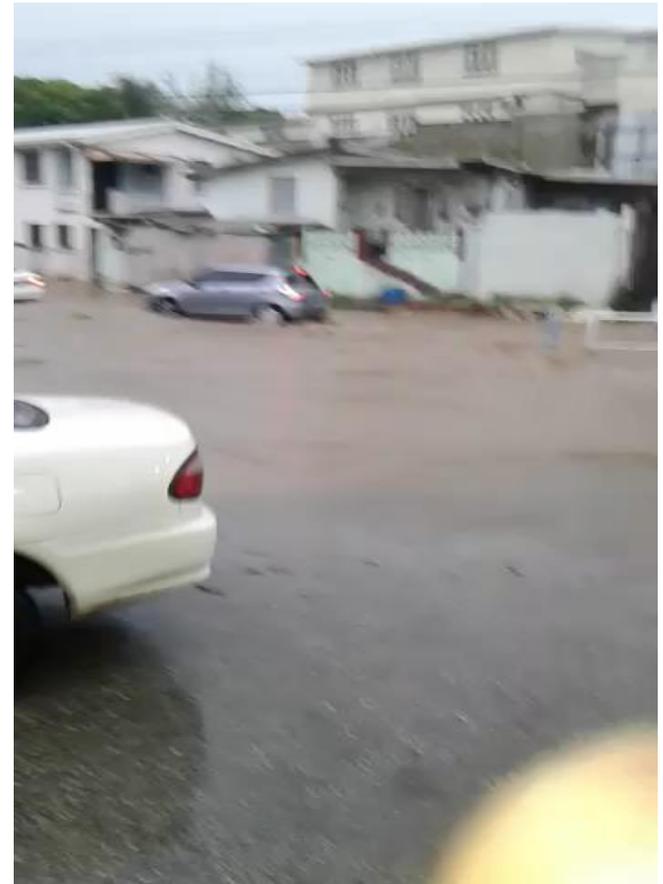
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# Localized Activity/ Tropical Wave (October 14<sup>th</sup>)



- Severe flash-flooding in central parts of the island associated with localized activity in the western and north western parts of the island. Flash-flood warning issued at 10AM
- Arc-line associated with a Tropical Wave moved across the island during the evening, prompting another flash-flood watch at 4PM
- \*About 2 inches in 2 hours

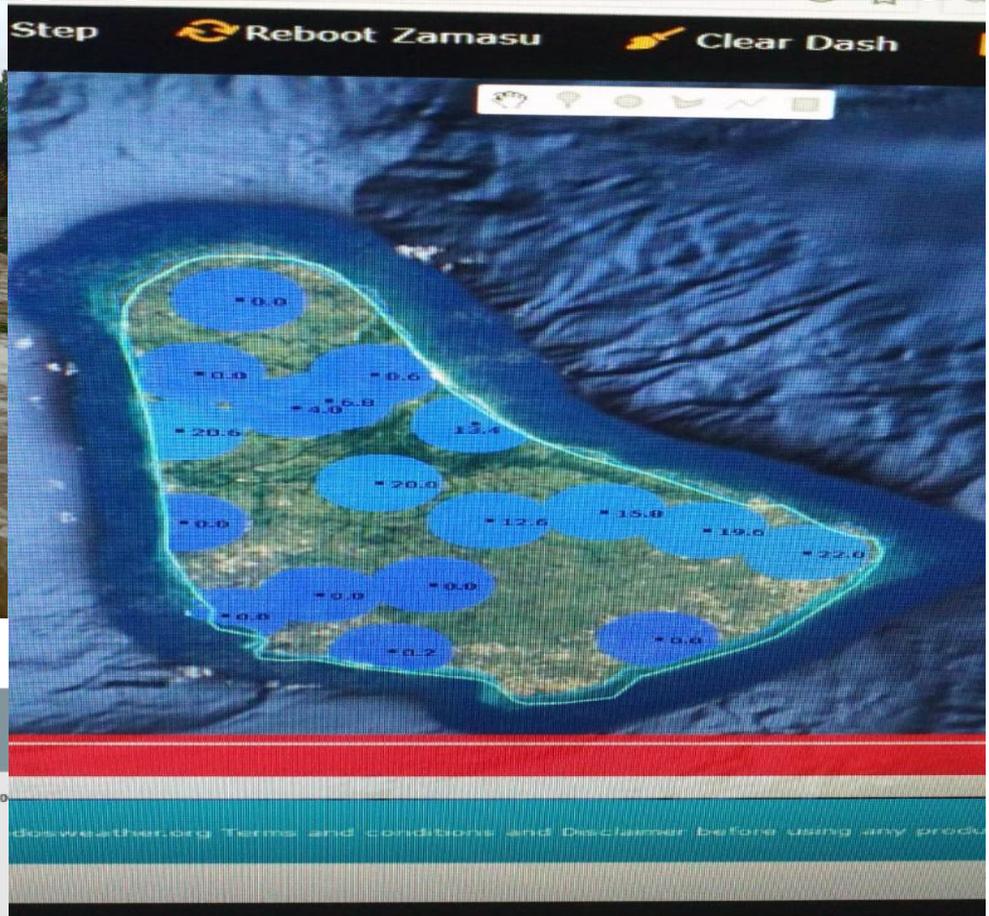
# Localized Activity/ Tropical Wave (October 14<sup>th</sup>)



- Heavy rainfall events left soils supersaturated thus increasing the severity of flooding.
- Flooded fields left, damaged crops and spoilage



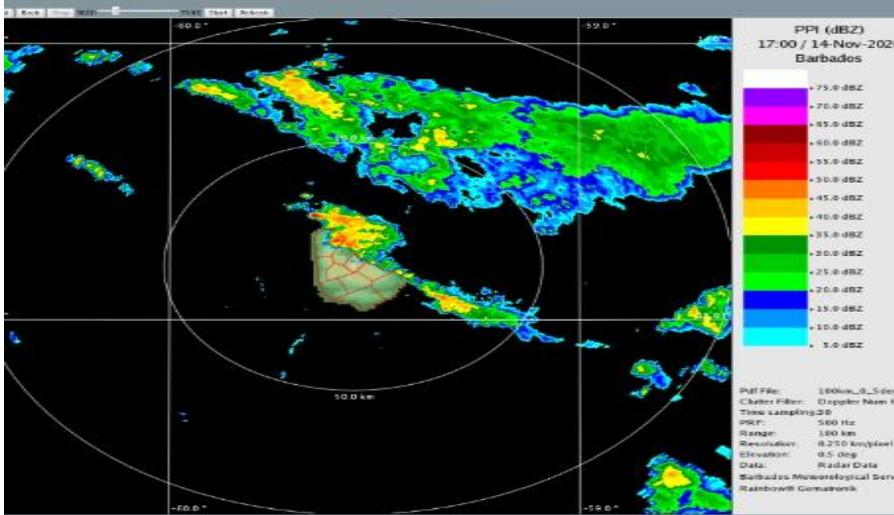
# Localized Activity (November 14<sup>th</sup>)



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# Impacts associated Flooding



- This activity resulted in one fatality, where the individual was swept away by rapid flood waters in a gully

*Thank You!*