



Heat Outlook for July to December 2019

Excessive heat between August and October

Dr. Simon MASON², Dr. Cedric J. VAN MEERBEECK¹ (cmeerbeeck@cimh.edu.bb), Dr. Hannah Nissan², Dr. Teddy ALLEN² , Wazita Scott¹

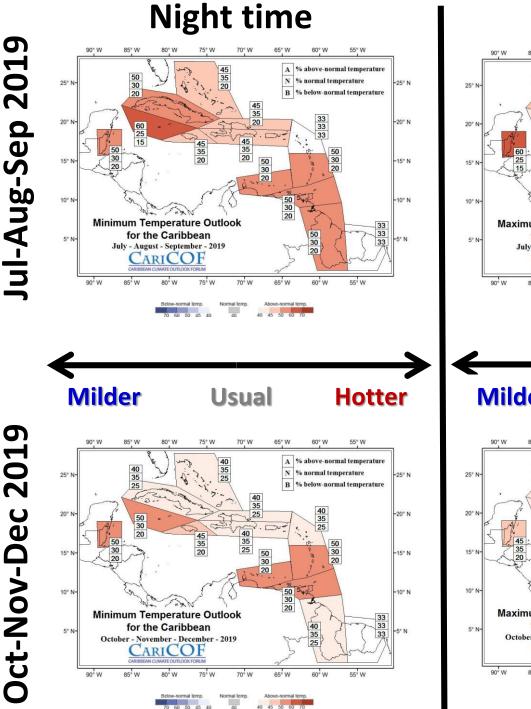
¹Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados ²International Research Institute for Climate and Society (IRI), USA



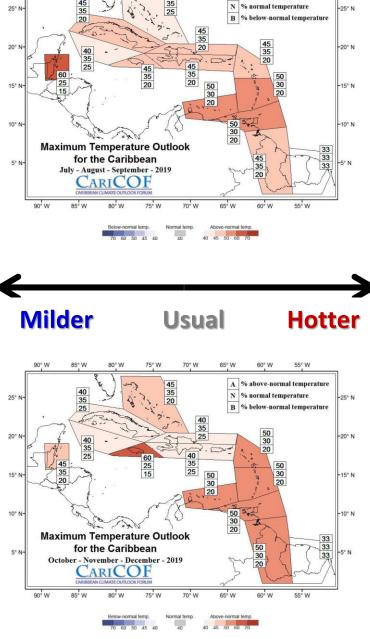
caricof@cimh.edu.bb

How hot will the next three to six months be?

A % above-normal temperatur



Day time



USUALLY:

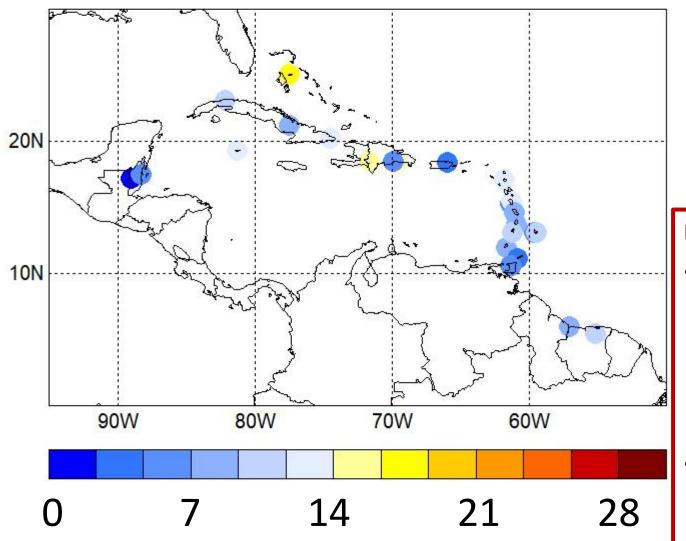
- The **Caribbean heat season** runs from May till October.
- In most years, August (in the Bahamas and much of the Greater Antilles) or September (elsewhere) are the hottest months and form the peak of the heat season.

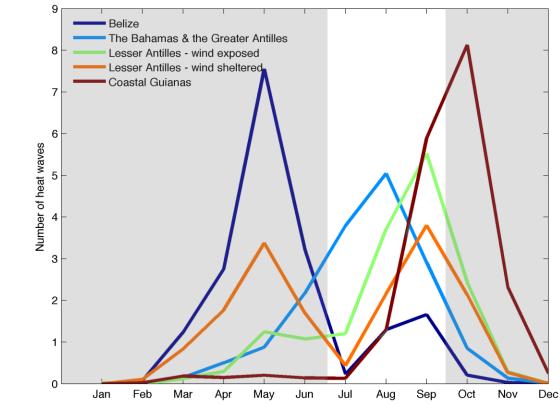
FORECAST:

- 1. The forecast suggests temperatures to be at least as warm as usual between July and December.
- 2. As such, it is expected that the heat season will be significantly hotter than in the past two years, with potentially dangerous heat exposure during dry spells between August and October.

How many heatwave days do we historically get on average?

From July to September



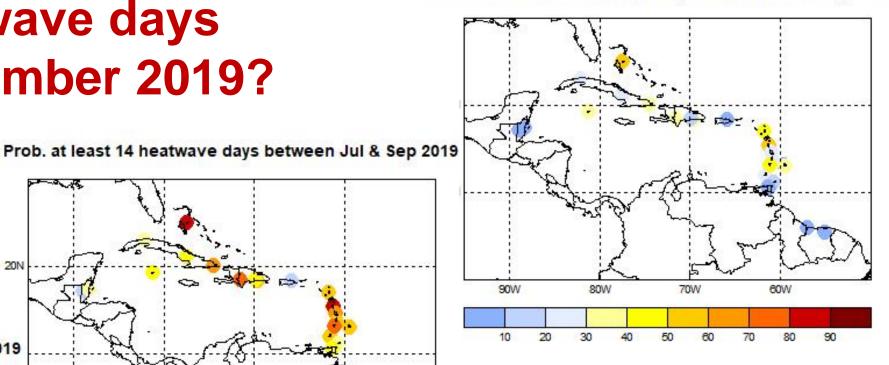


USUALLY:

- In most years, at least 7 heatwave days are counted from July to September throughout most areas in the Caribbean, with the exception of Belize, Trinidad, and in cool highland areas.
- In September, (i.e. during the peak of the Caribbean heat season) all stations can record heatwaves.

What's the chance of having at least ... heatwave days from July to September 2019?

Prob. at least 30 heatwave days between Jul & Sep 2019



Prob. at least 7 heatwave days between Jul & Sep 2019

FORECAST:

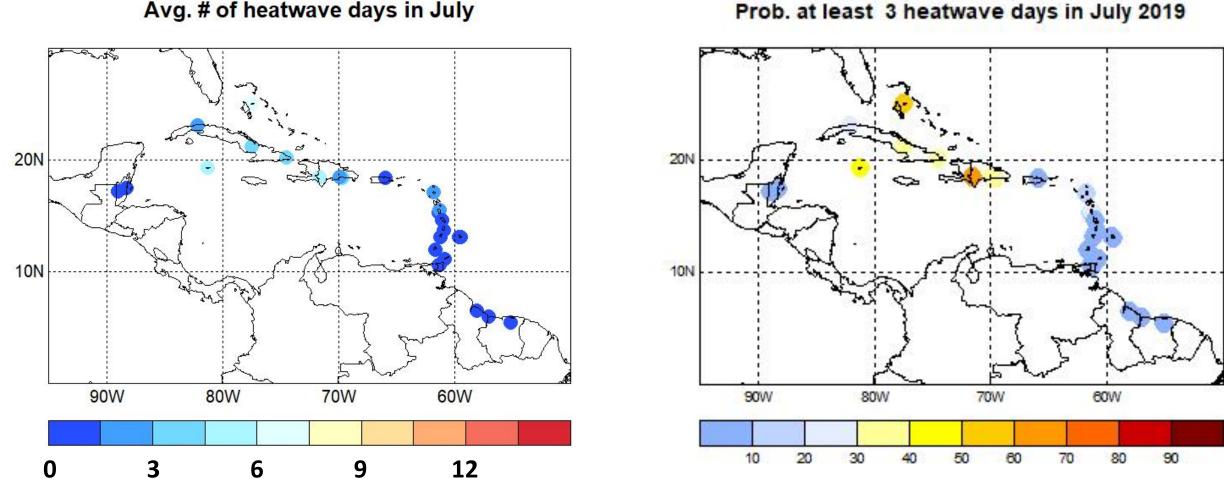
80W

70W

90W

- At least 50% chance that there will be **at least 7 heatwave days** from July to September 2019 across most locations.
- Several locations will likely record 14 heatwave days or more, especially the NW Bahamas and areas experiencing drought.

How many heatwave days to expect in July 2019?



Prob. at least 3 heatwave days in July 2019

USUALLY: up to 6 heatwave days in the Bahamas & Greater Antilles. FORECAST: 40-70% chance of 3 or more heatwave days in July this year in this area.

How will heat affect the Caribbean until December 2019?

FORECAST:

- 1. The **forecast suggests temperatures to be at least as warm as usual** between July and December 2019.
- 2. The heat season will likely be significantly hotter than in the past two years, with potentially dangerous heat exposure during dry spells between August and October.
- 3. At least 50% chance that there will be at least 7 heatwave days from July to September 2019 across most locations; several locations will likely record 14 heatwave days or more, especially the NW Bahamas and areas experiencing drought.
- 4. 40-70% chance of 3 or more heatwave days in July this year in this area.

IMPLICATIONS:

- Heat stress in the vulnerable population & small livestock until October (or November in the Guianas), and likely to a greater extent than in the past two years.
- By consequence, cooling needs until October will be substantially increased.
- The occurrence of heatwaves will (at times) further increase heat stress in human populations or livestock.





caricof@cimh.edu.bb rcc.cimh.edu.bb Caribbean Institute for Meteorology and Hydrology TEL: (246) 425-1362/3 | FAX: (246) 424-4733