



Heat Outlook for July to December 2020

Frequent excessive heat from August to October

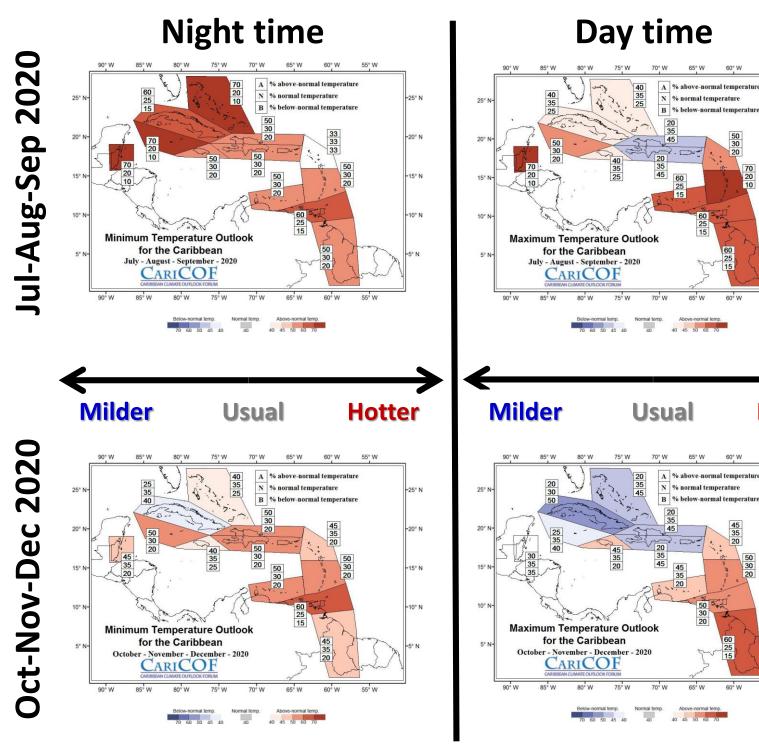
Dr. Cedric J. VAN MEERBEECK¹ (<u>cmeerbeeck@cimh.edu.bb</u>), Dr. Simon MASON², Dr. Hannah Nissan², Dr. Teddy ALLEN² , Wazita Scott¹

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?



FORECAST:

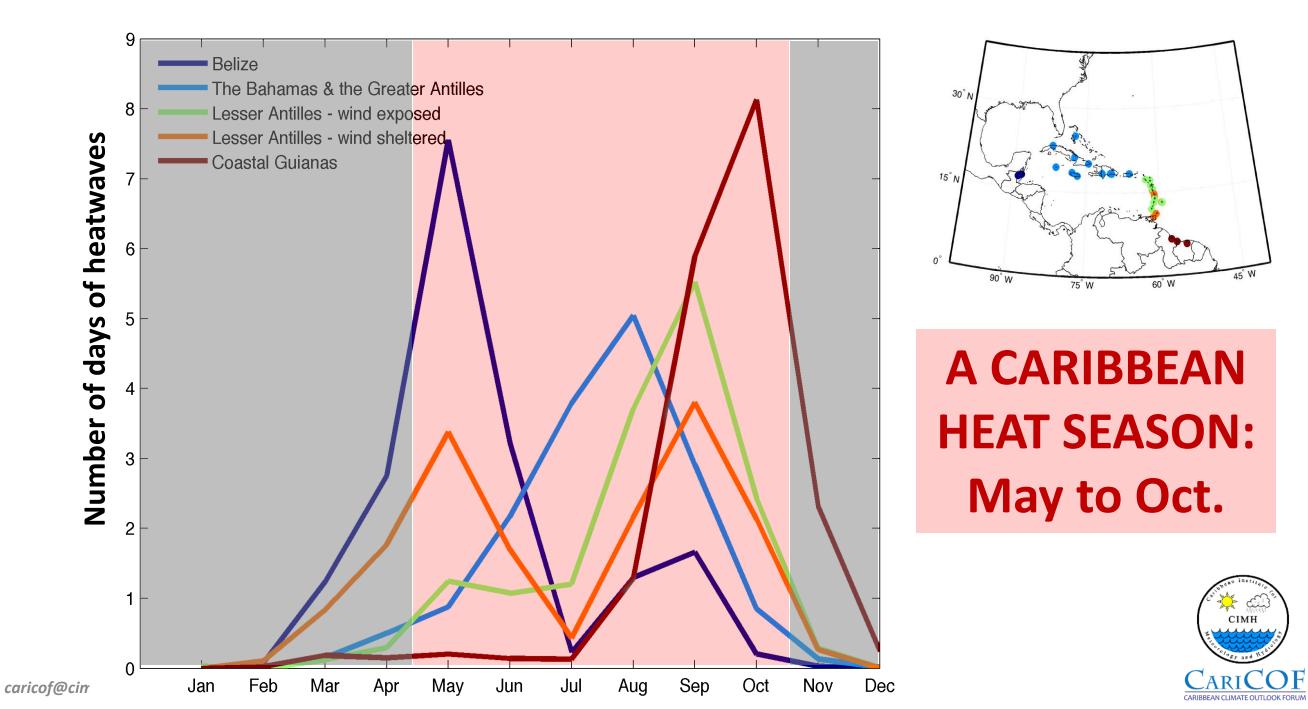
- 1. Warmer than usual nighttime conditions forecast for most areas through the rest of 2020.
- At least as warm as usual daytime conditions expected from July to Sept. (except Hispaniola and US C'bean Territories), and from Oct. to Dec. in ABC Islands, Jamaica, Lesser Antilles and Guyana.

IMPLICATIONS:

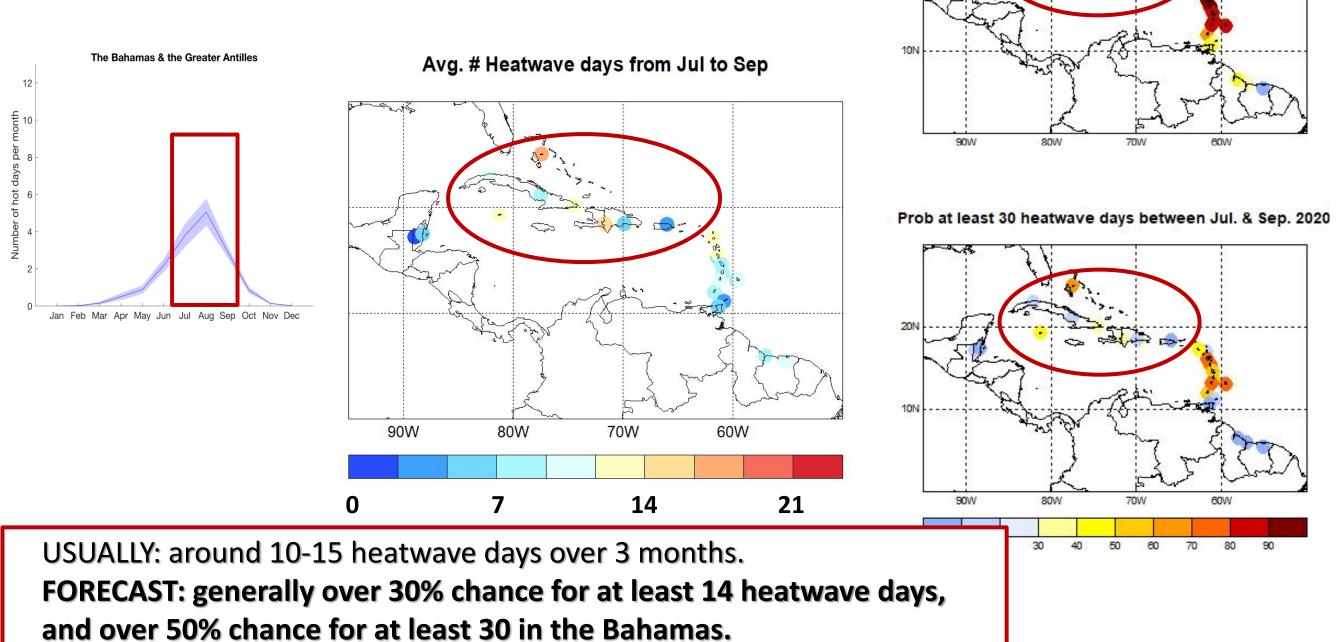
Hotter

- Heat stress in the vulnerable population & small livestock through September (Bahamas and Greater Antilles) or October (rest of the region)
- Higher than usual temperatures & humidity means higher cooling need until October, particularly at night, but also during the day in most places.

HEATWAVES: SEASONALITY



What does the peak of the **heat season** look like in **The Bahamas** and the **Greater Antilles**, i.e. July to September?



Prob at least 14 heatwave days between Jul. & Sep. 2020

How many heatwave days from July till September 2020?

USUALLY:

- 1) In most years, 10-15 heatwave days in the Bahamas and the Greater Antilles, where July to September forms the peak of the heat season, as well as, in the Leeward Islands.
- 2) In much of the rest of the region, less than 10 heatwave days are the norm.

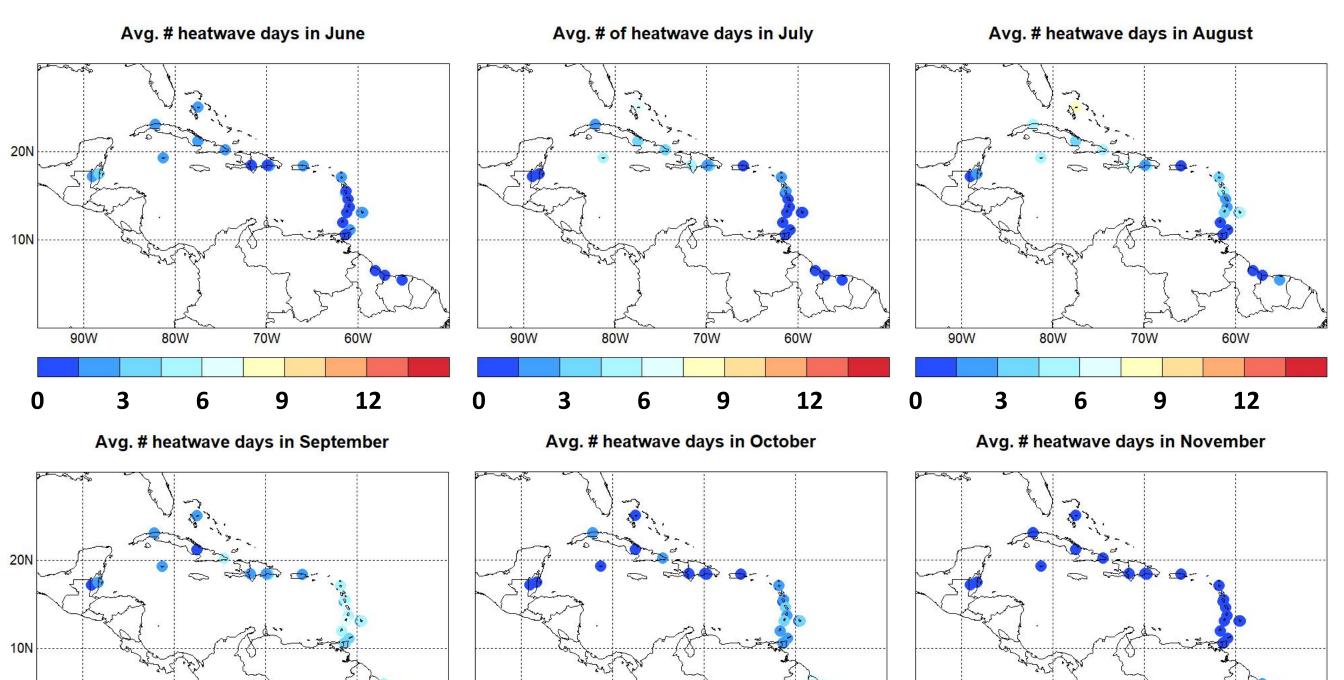
FORECAST:

- The number of heatwave days is expected to be much higher to what we usually get in the Bahamas and the Lesser Antilles during July to September 2020.
- Note that areas with more abundant rainfall than usual will see daytime temperatures and the frequency of heatwaves tempered.

IMPLICATIONS:

- In the event of heatwaves, of which more than 5 can occur (especially during dry spells), heat stress in human populations or livestock will sharply increase.
- Heat stress at the peak of the heat season on par with hottest years in the Bahamas and Lesser Antilles (e.g. 2016).

Historically, how many heatwave days on average per month?



90W

80W

70W

60W

90W

80W

70W

60W



How many heatwave days to expect in July 2020?

Avg. # of heatwave days in July 20N 20N 10N 101 90W 80W 70W 60W 80W 90W 70W 60W 30 70 10 20 40 50 60 80 90 12 3 6 9 0

USUALLY: up to 6 heatwave days in the Bahamas & Greater Antilles. FORECAST: over 40% chance that there will be 3 or more heatwave days in July 2020 in this area.

Prob. at least 3 heatwave days in July 2020





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