









Heat Outlook for April to September 2021

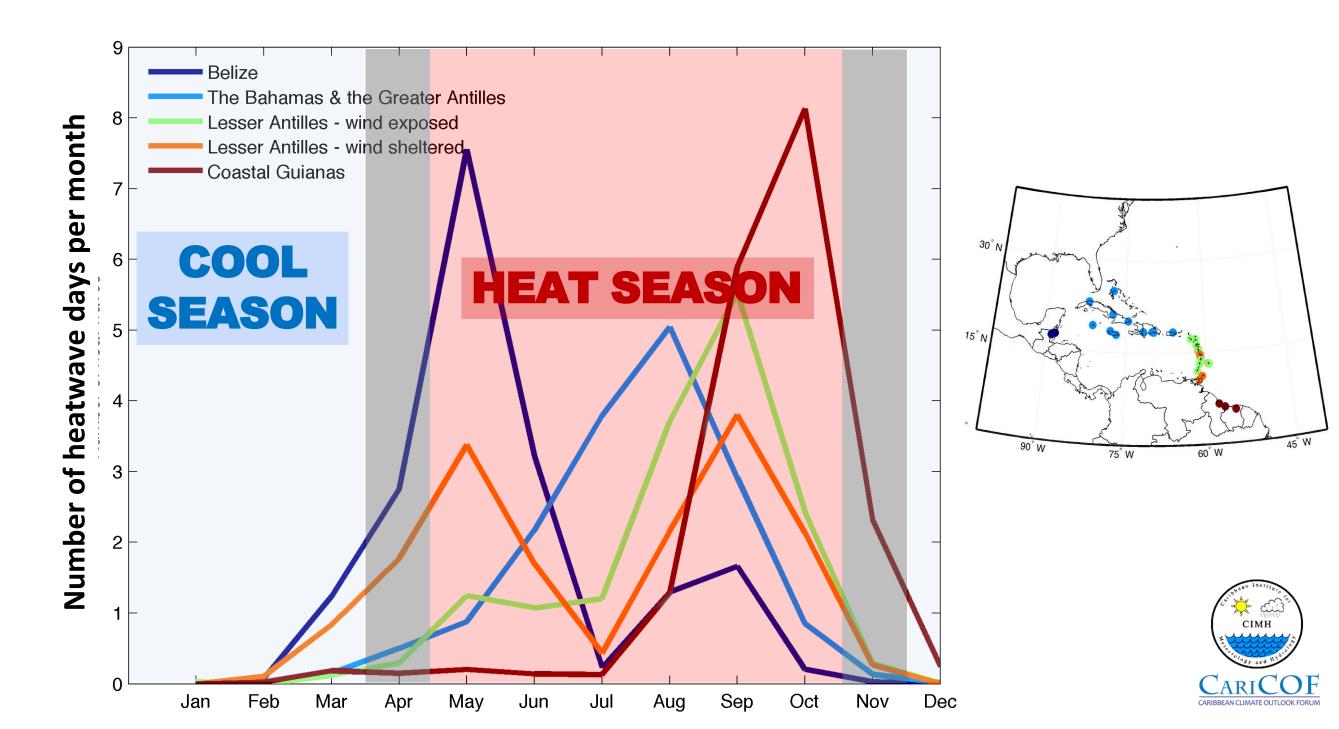
Excessive heat at times, especially in August and September

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

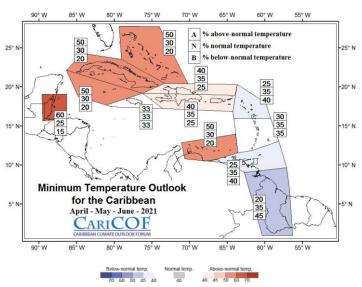


The Caribbean Heat Season: May to October

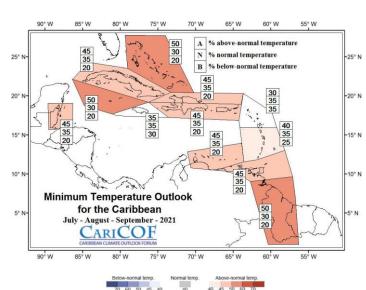


How hot will the next three to six months be?

Night time

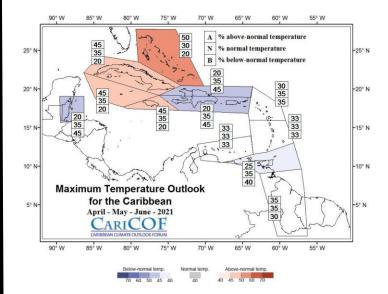


Milder Usual

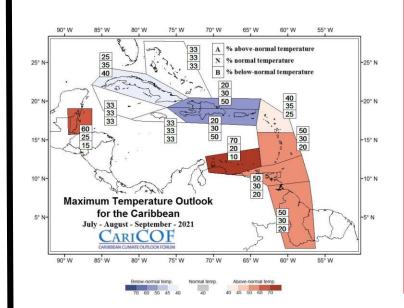


Hotter

Day time



Milder Usual Hotter



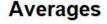
FORECAST:

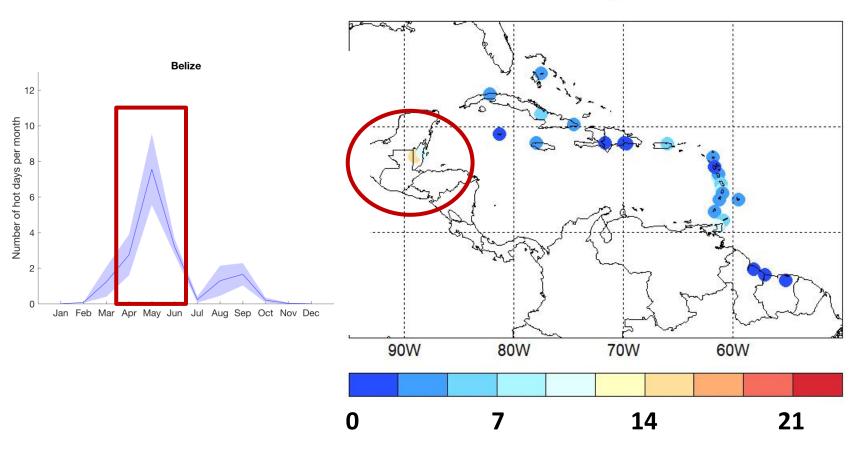
- The usual or higher night- and daytime temperatures in the western and northern Caribbean, over the period April to June.
- Intense night-time heat is expected throughout the region from July to September, though daytime temperatures may be slightly tempered in parts of the Greater Antilles.

IMPLICATIONS:

 significant heat stress in the vulnerable population & small livestock because of high temperature and increasing humidity from May through September, increasing cooling need.

What does the peak of the **Heat Season** look like in Belize, i.e. April to June?

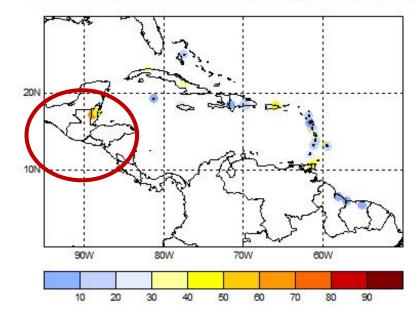




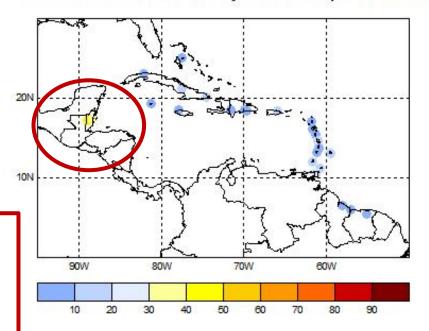
USUALLY: 10 to 14 heatwave days over 3 months in Belize and Trinidad. Fewer than 10 heatwave days elsewhere.

FORECAST: 65% and 40% chance for at least 7 and 14 heatwave days, respectively in the interior of Belize. Fewer than 10 in most other areas.

Prob. at least 7 heatwave days between Apr & Jun 2021



Prob. at least 14 heatwave days between Apr & Jun 2021



How many heatwave days from September till November 2020?

USUALLY:

• Usually, there are between 10 and 14 heatwave days in Belize and Trinidad, up to 10 in the Antilles and the Bahamas, but virtually none in the Guianas.

FORECAST:

- The usual number of heatwave days is expected in Belize, but fewer than the usual in Trinidad during the April to June period this year.
- 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 several can occur (especially during dry spells), heat stress in human populations or livestock will sharply increase.
- Region-wide, heat stress during the April to June period is expected to be significantly less intense than in 2010, 2016 and 2020, with the possible exception of few locations in Belize.



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