

USAID
FROM THE AMERICAN PEOPLE



Heat Outlook for October 2018 to March 2019:

Initially some heat in the south, but comfortable from November onwards

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

¹Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados

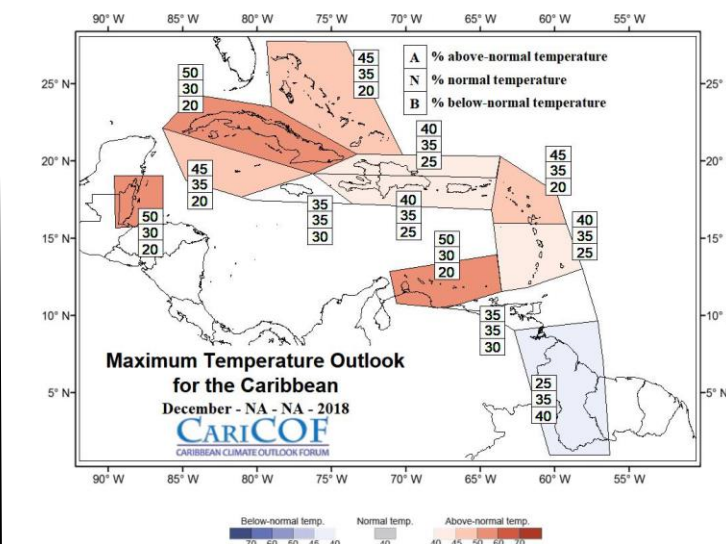
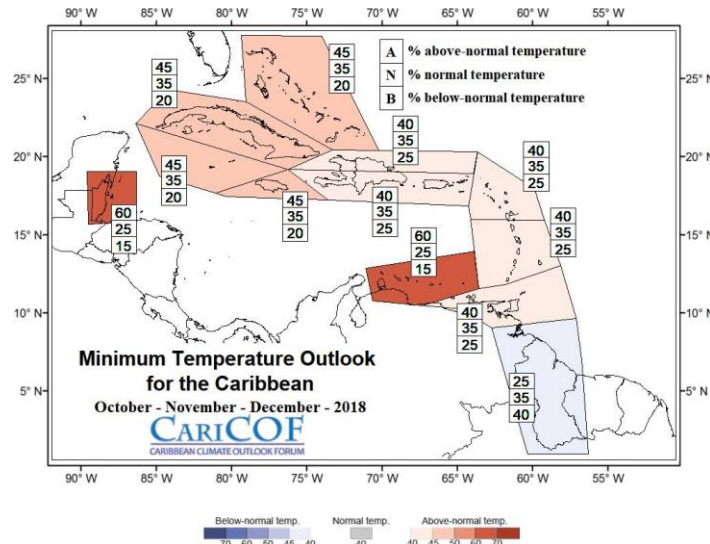
²International Research Institute for Climate and Society (IRI), USA



How hot will the next three to six months be?

Night time

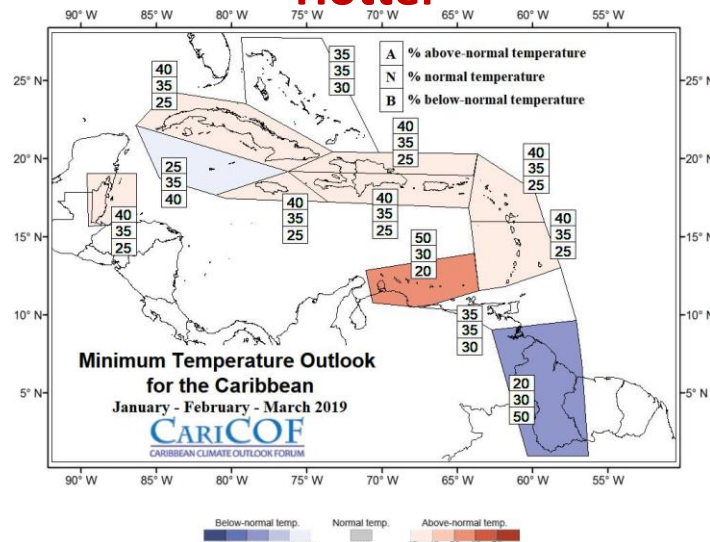
Day time



Milder

Usual

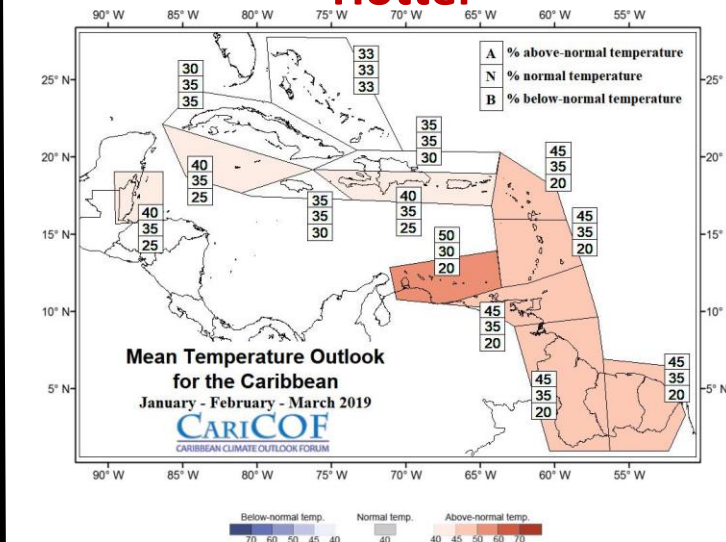
Hotter



Milder

Usual

Hotter



USUALLY:

- The **hotter** part of the year ends in October in Belize and the islands, in November in the Guianas.
- Temperatures comfortable from December to March throughout the region.

FORECAST:

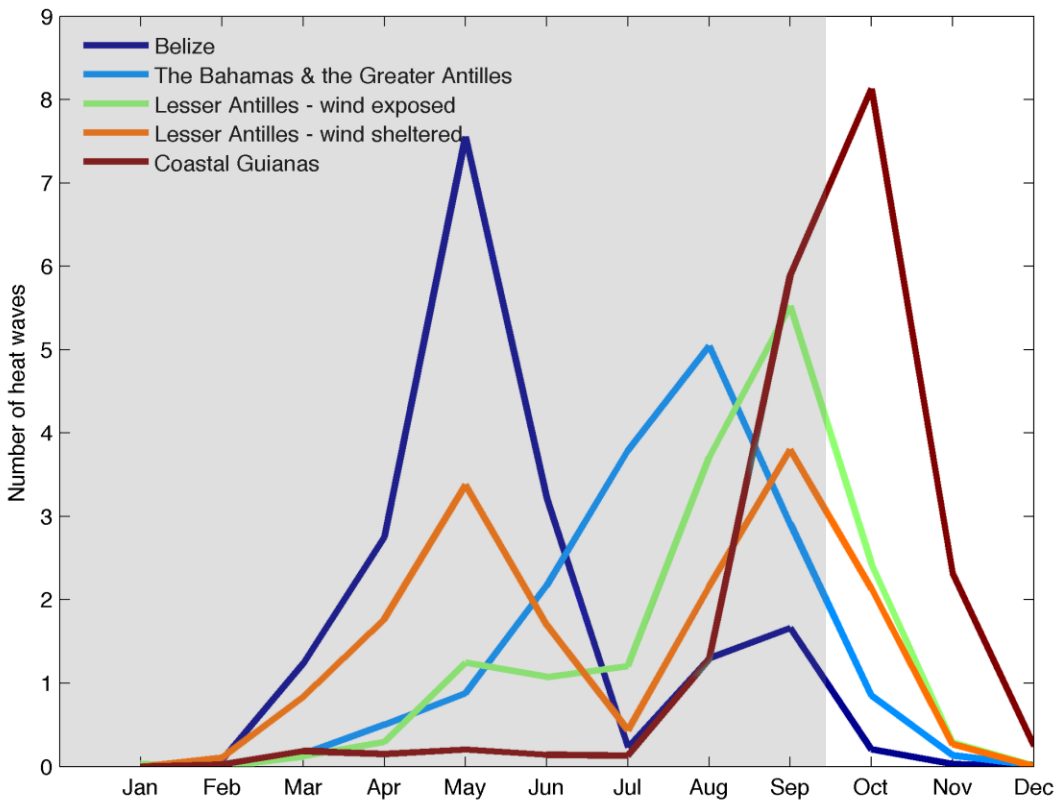
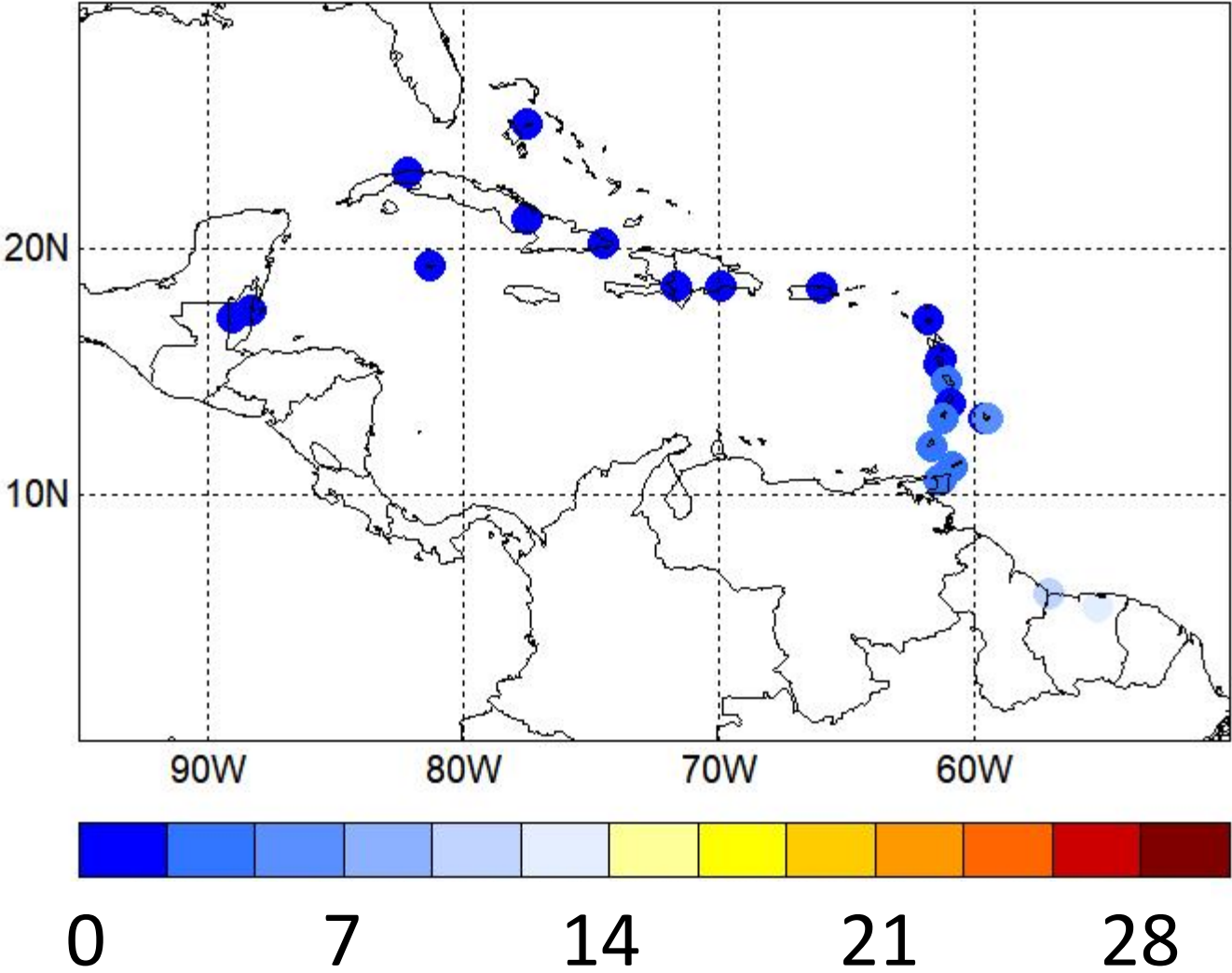
1. The forecast suggests both daytime and nighttime temperatures may be **warmer** than usual between October and December throughout Belize and the Islands, but possibly cooler in the Guianas, reducing heat stress in the vulnerable sections of the population.
2. That said, uncomfortably high temperatures are not on forecast anywhere after November.

Oct-Nov-Dec 2018

Jan-Feb-Mar 2019

How many heatwave days do we historically get on average?

From September to November

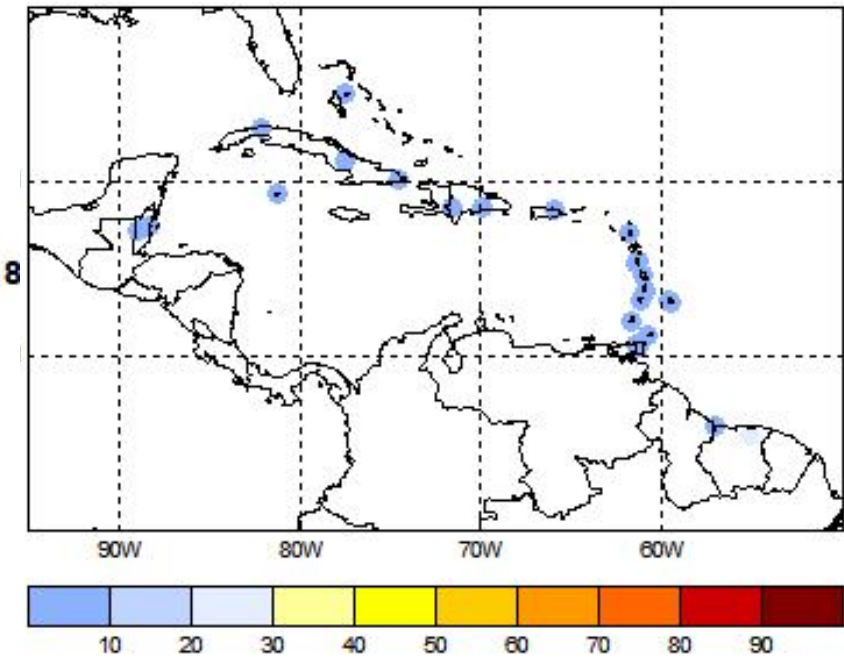


USUALLY:

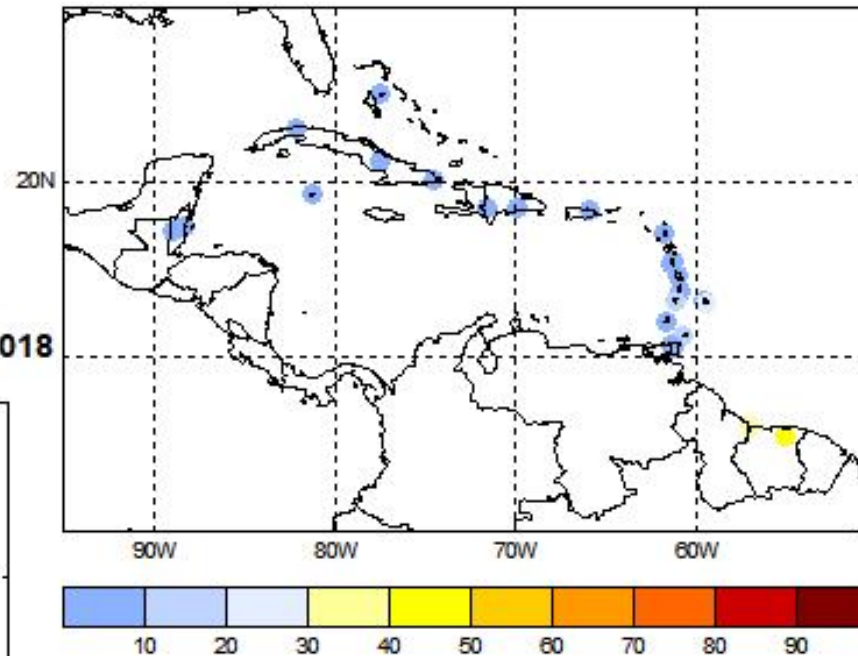
- In most years, up to 7 heatwave days are counted from October to December in Barbados and the Leeward Isls., and 10-14 in the Guianas.
- October is the last month of the hotter half year in the Lesser Antilles, but the core of the hot, dry season in the Guianas.

What's the chance of having at least ... heatwave days from October to December 2018?

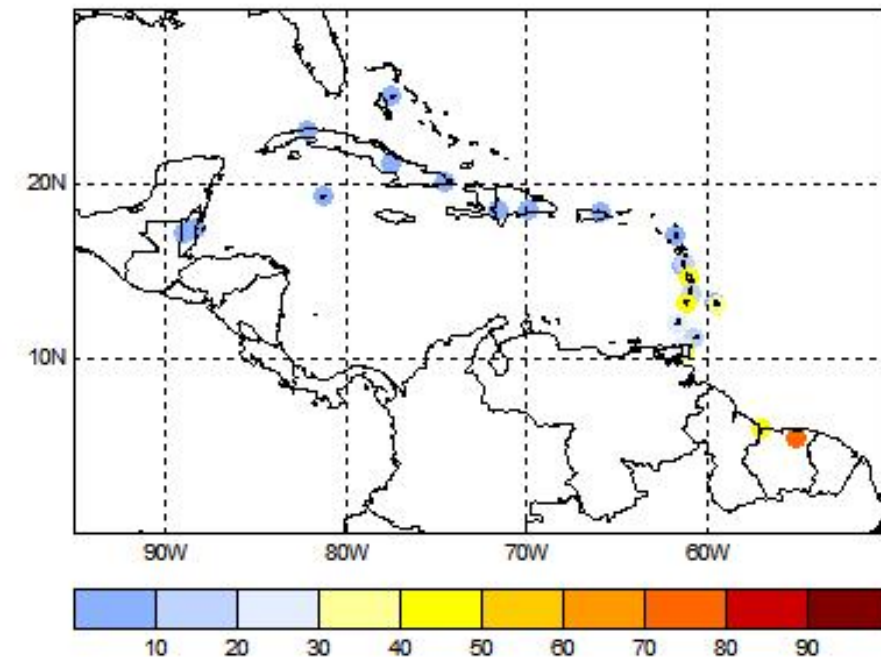
Prob. at least 30 heatwave days between Oct & Dec 2018



Prob. at least 14 heatwave days between Oct & Dec 2018



Prob. at least 7 heatwave days between Oct & Dec 2018



FORECAST:

- 20-40% chance that there will be **at least 7 heatwave days** from October to December 2018 in Barbados and the Leewards, and 40-70% in the Guianas.
- A few locations in the Guianas could record 14 heatwave days.

How will heat affect the Caribbean from October till December 2018?

FORECAST:

1. The forecast suggests both daytime and nighttime temperatures may be warmer than usual between October and December throughout Belize and the Islands, but possibly cooler in the Guianas, reducing heat stress in the vulnerable sections of the population.
2. That said, uncomfortably high temperatures are not on forecast anywhere after November.
3. **20-40% chance that there will be at least 7 heatwave days from October to December 2018 in Barbados and the Leewards, and 40-70% in the Guianas. A few locations in the Guianas could record 14 heatwave days.**

IMPLICATIONS:

- Some **Heat stress** in the vulnerable population & small livestock until the end of October in the Lesser Antilles (November in the Guianas), but **unlikely to the same extent** as in recent years such as 2014, 2015 and 2016.
- By consequence, **cooling needs until October are reduced** compared to those years.
- Nevertheless, the **occurrence of a few heatwaves** in the southern Caribbean is likely to **temporarily increase heat stress** in human populations or livestock, especially in areas that experience unusually dry conditions.