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Heat Outlook for August 2019 to January 2020

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Excessive heat between August and October

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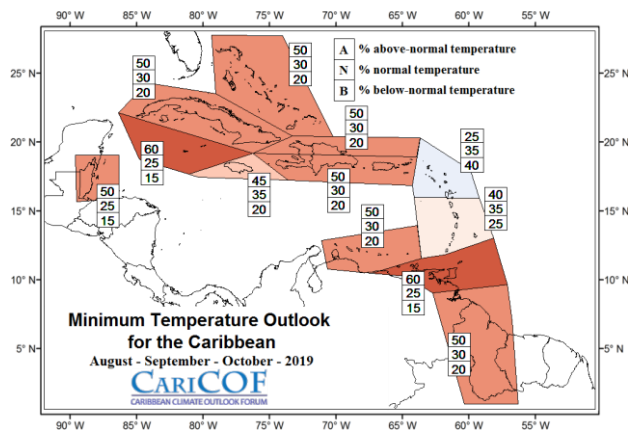
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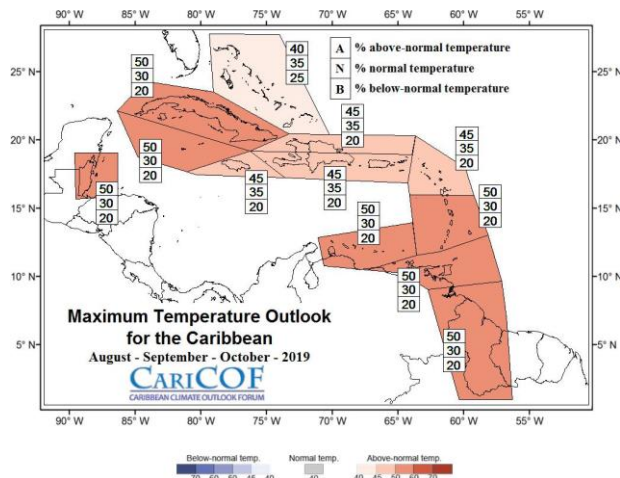
How hot will the next three to six months be?

Aug-Sep-Oct 2019

Night time



Day time

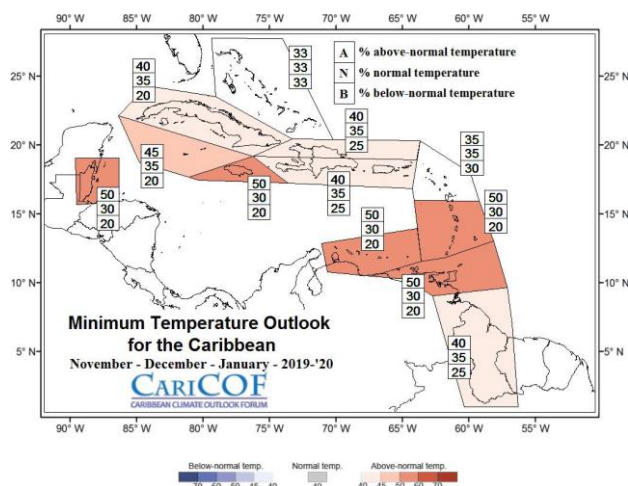


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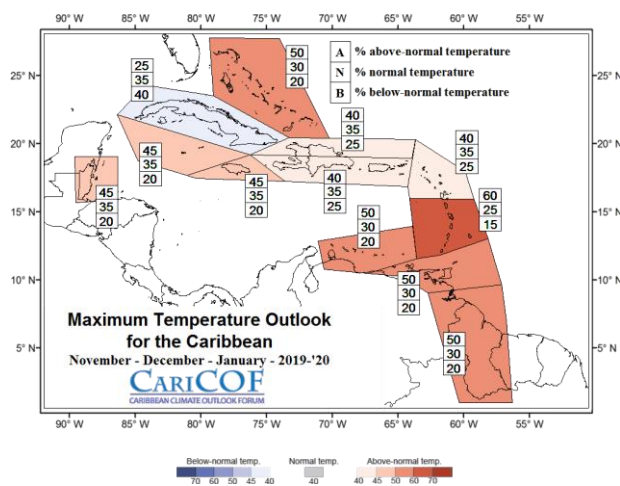
- The **Caribbean heat season** runs from May till October.
- In most years, **August** (in the Bahamas and much of the Greater Antilles) or **September** (elsewhere) are the hottest months and form the peak of the heat season.

Nov-Dec-Jan 2019-20

Milder Usual Hotter



Milder Usual Hotter

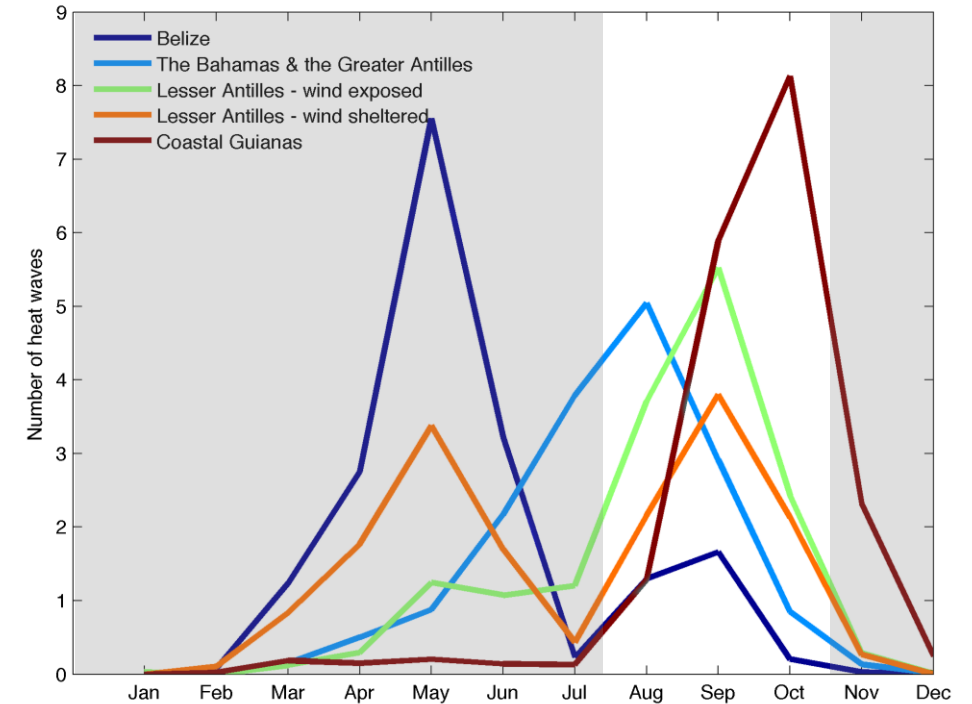
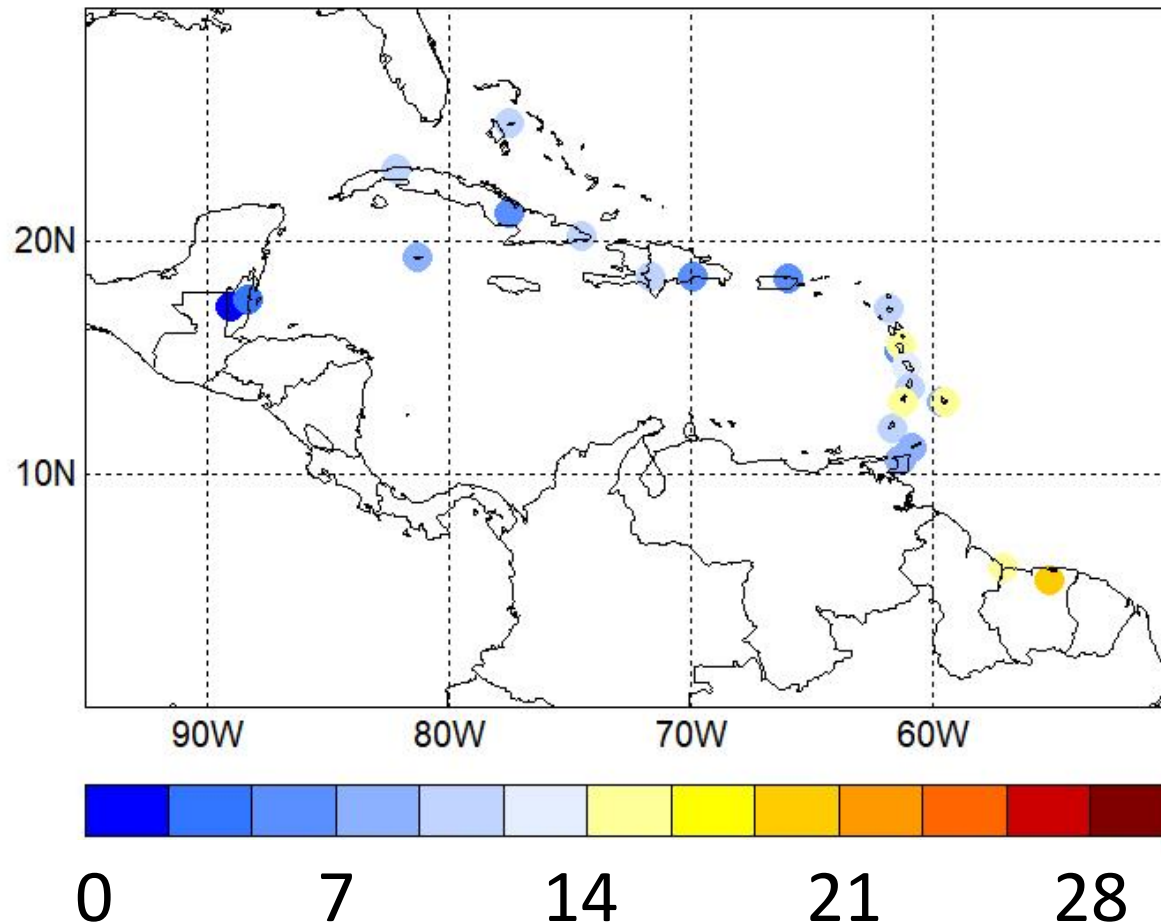


FORECAST:

1. The forecast suggests temperatures to be **at least as warm as usual** between August and January.
2. As such, it is expected that the heat season will be warmer than usual, with potentially dangerous heat exposure during dry spells between August and October.

How many heatwave days do we historically get on average?

From August to October

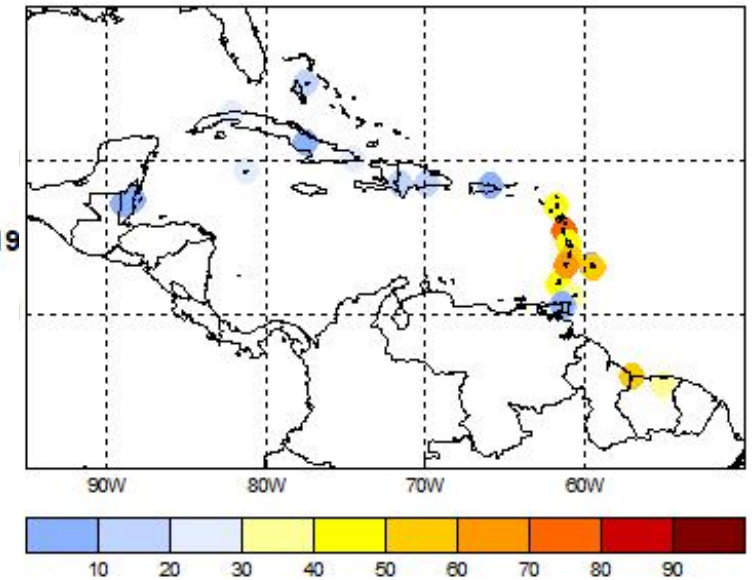


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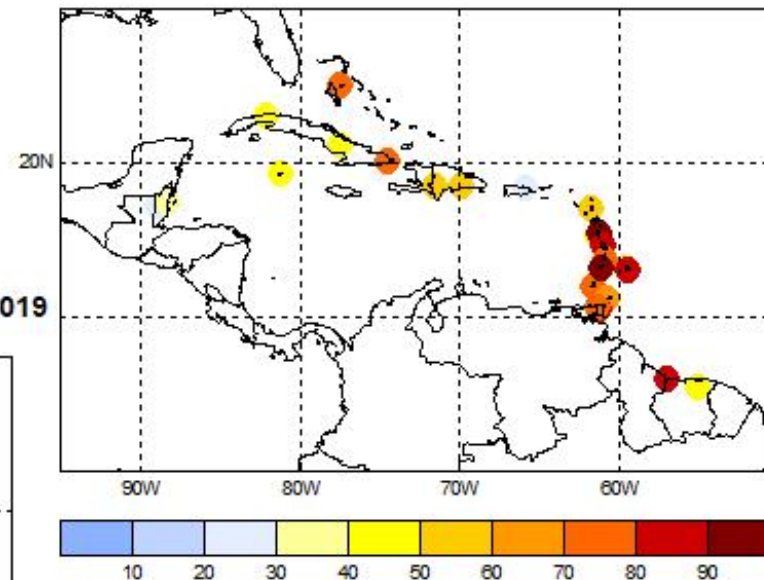
- In most years, **at least 7 heatwave days are counted from August to October** throughout most areas in the Caribbean, with the exception of Belize and in cool highland areas.
- In September, (i.e. during the **peak of the Caribbean heat season**) all stations can record heatwaves.

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

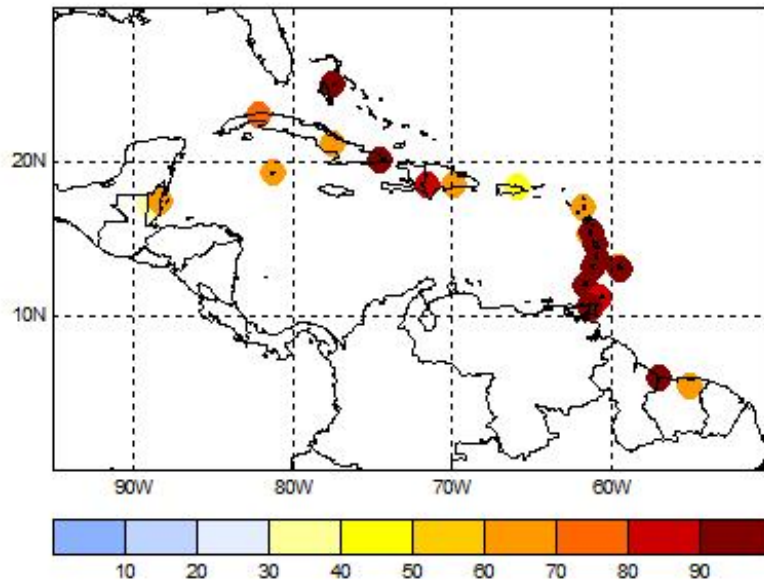
Prob. at least 30 heatwave days between Aug & Oct 2019



Prob. at least 14 heatwave days between Aug & Oct 2019



Prob at least 7 heatwave days between Aug & Oct 2019

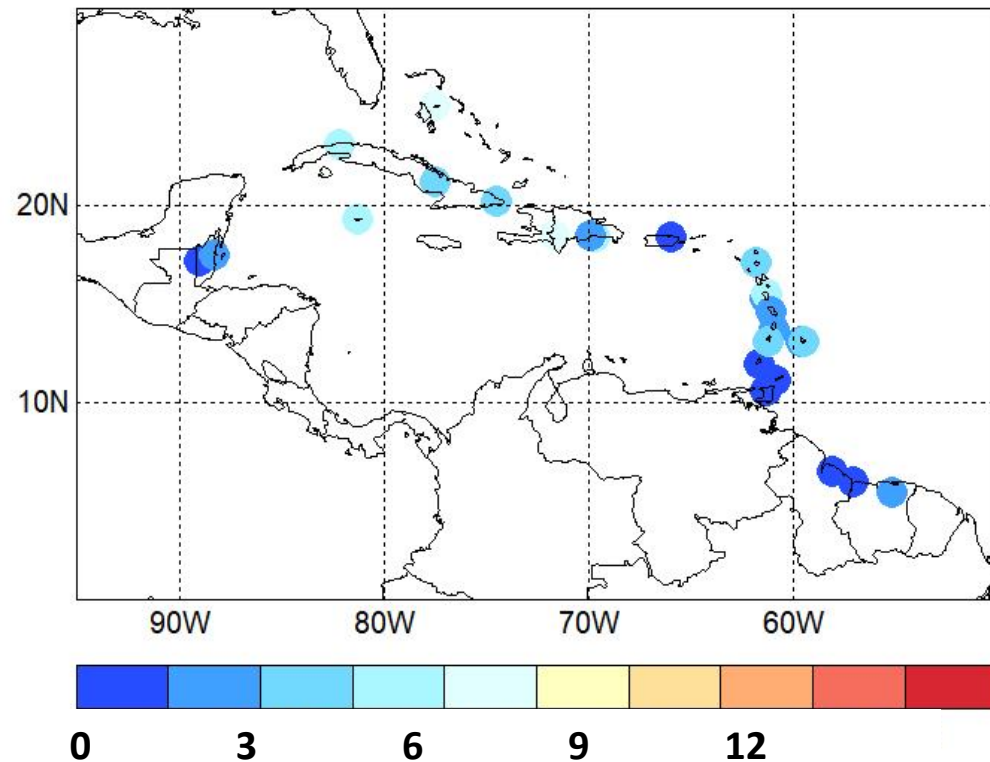


FORECAST:

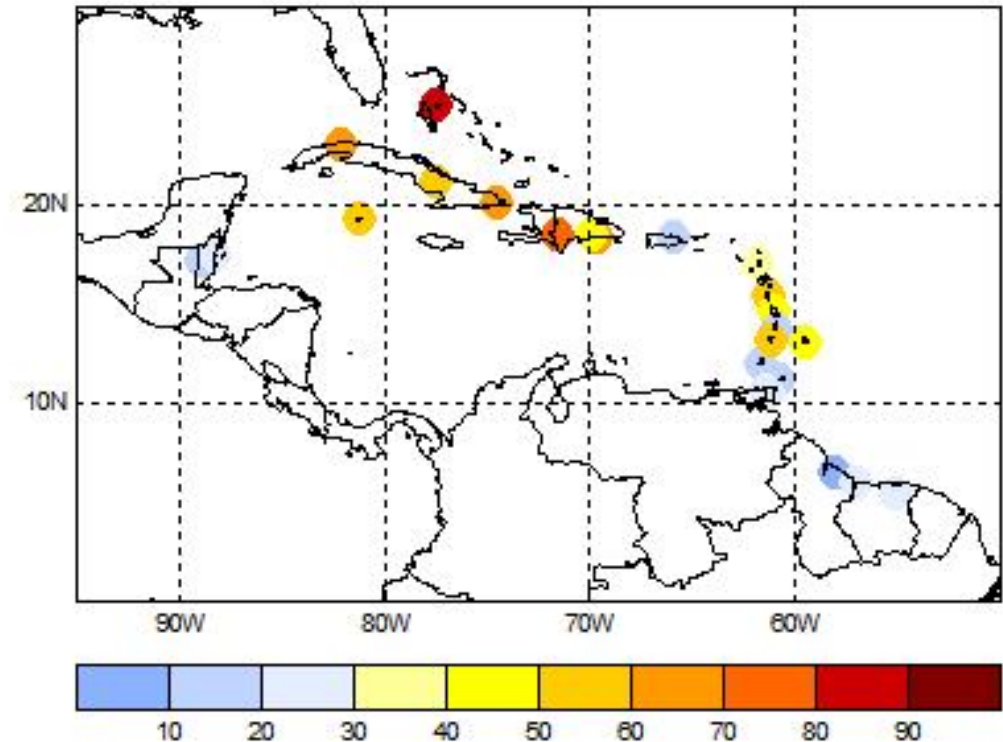
- At least 50% chance for **at least 14 heatwave days** from August to October 2019 across most locations east of 80°W.
- Many locations in the Guianas and the Lesser Antilles could record 14 heatwave days or more, mostly during multi-day dry spells, and especially in areas experiencing drought.

How many heatwave days to expect in August 2019?

Avg. # of heatwave days in August



Prob. at least 3 heatwave days in August 2019



USUALLY: up to 7 heatwave days in the Bahamas & Greater Antilles; up to 5 in the Lesser Antilles.
FORECAST: 40-70% chance of 3 or more heatwave days in July this year in those areas, except Grenada, Puerto Rico, Trinidad & Tobago.

How will heat affect the Caribbean until January 2020?

FORECAST:

1. The **forecast suggests temperatures to be at least as warm as usual** between August and January 2019-'20.
2. The heat season will likely be warmer 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 August to October 2019 across most locations; several locations in the eastern Caribbean will likely record 14 heatwave days or more.
4. 20-80% chance of 3 or more heatwave days in August this year in this area across the region.

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.**



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