

Heat Outlook for July to December 2025

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Episodes of excessive heat expected to ramp up as the Caribbean faces an intense Heat Season

Participating countries and territories

Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St. Martin, St. Vincent & the Grenadines, Suriname, Trinidad & Tobago and the US Virgin Islands



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CARIBBEAN CLIMATE OUTLOOK FORUM

Health: Recurrent episodes of excessive heat *likely* peaking in September; regionally lower levels of impact than in 2023 or 2024

Public health:

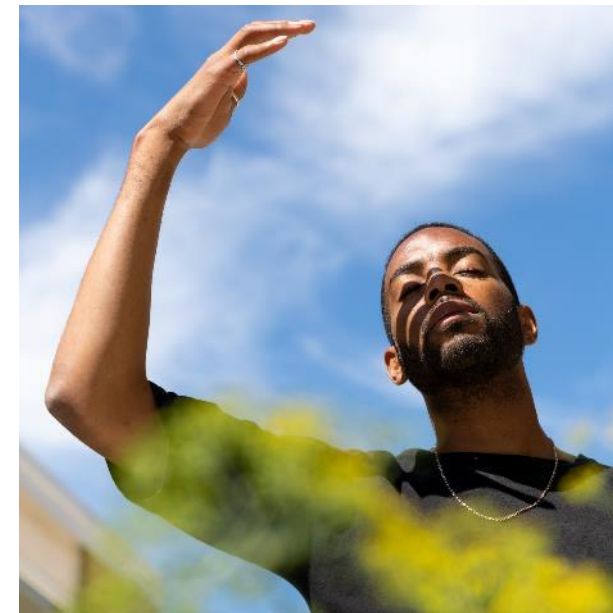
- *strong* increase in mild heat symptoms
- *notable* increase in heat illnesses, fainting episodes, hospitalisations, health services
- *likely* increase in biological risk (e.g. Aedes mosquito borne diseases, gastrointestinal disease)
- *exacerbation* of vulnerability in patients with chronic illness, children, pregnant women and the elderly

Occupational health:

- *potential* increase in exhaustion during intense outdoor activity
- *significantly* reduced labour performance and productivity if unprotected

Well-being:

- *significantly* increased sweating and water consumption
- snacking/binge eating leading to acute negative health impacts (hypertension, diabetes) and weight gain
- *increased* fatigue, irritability and aggression during prolonged heatwaves



Agriculture: Expect impacts from recurrent, excessive heat, *likely* peaking in September



Livestock:

- *increased* cooling and ventilation need to mitigate heat stress in small and large livestock
- stunted growth rate of broilers and egg production of layers
- *likely* reduced dairy production

Crop agriculture:

- *exacerbation* of any evolving drought conditions leading to increased wilting
- *strongly* reduced productivity between 10 AM and 3 PM

Fisheries:

- *increased* water temperatures potentially reducing catch of reef fish, die-off and migration of pelagic fish
- *significant* potential for coral reef bleaching as early as August

Forestry:

- *exacerbation* of any evolving drought conditions
- increased wildfire potential if fuel stock is dry

Tourism – Energy – Water: Expect impacts from recurrent, excessive heat, *likely* peaking in September

Tourism:

- **Heat adaptation** – *significantly* increased demand for AC and refrigeration and associated costs in hotels
- **Diving operations** – *significant* potential coral reef bleaching, resulting in long-term reduction in demand



Energy:

- **Production** – reduced efficiency of power generation; potential increase in interruptions as a result of spikes in cooling demand
- **Demand and consumption** – *significantly* increased cooling need in households, hotels, restaurants



Water:

- **Quantity and quality** – recharge of water reservoirs along the wet season slowed down due to increased evapotranspiration; *potential* increase in algal blooms
- **Consumption** – *likely* increase in households, hotels and power utilities



DRM – Child Care & Education: Expect impacts from recurrent, excessive heat, *likely* peaking in September



DRM:

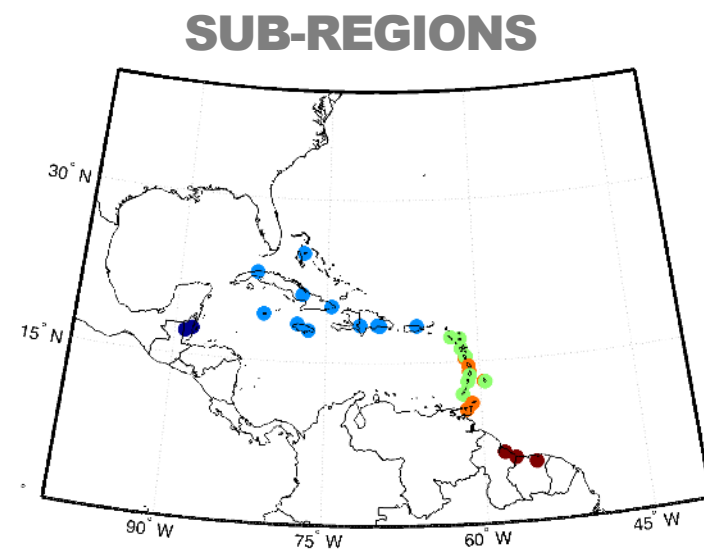
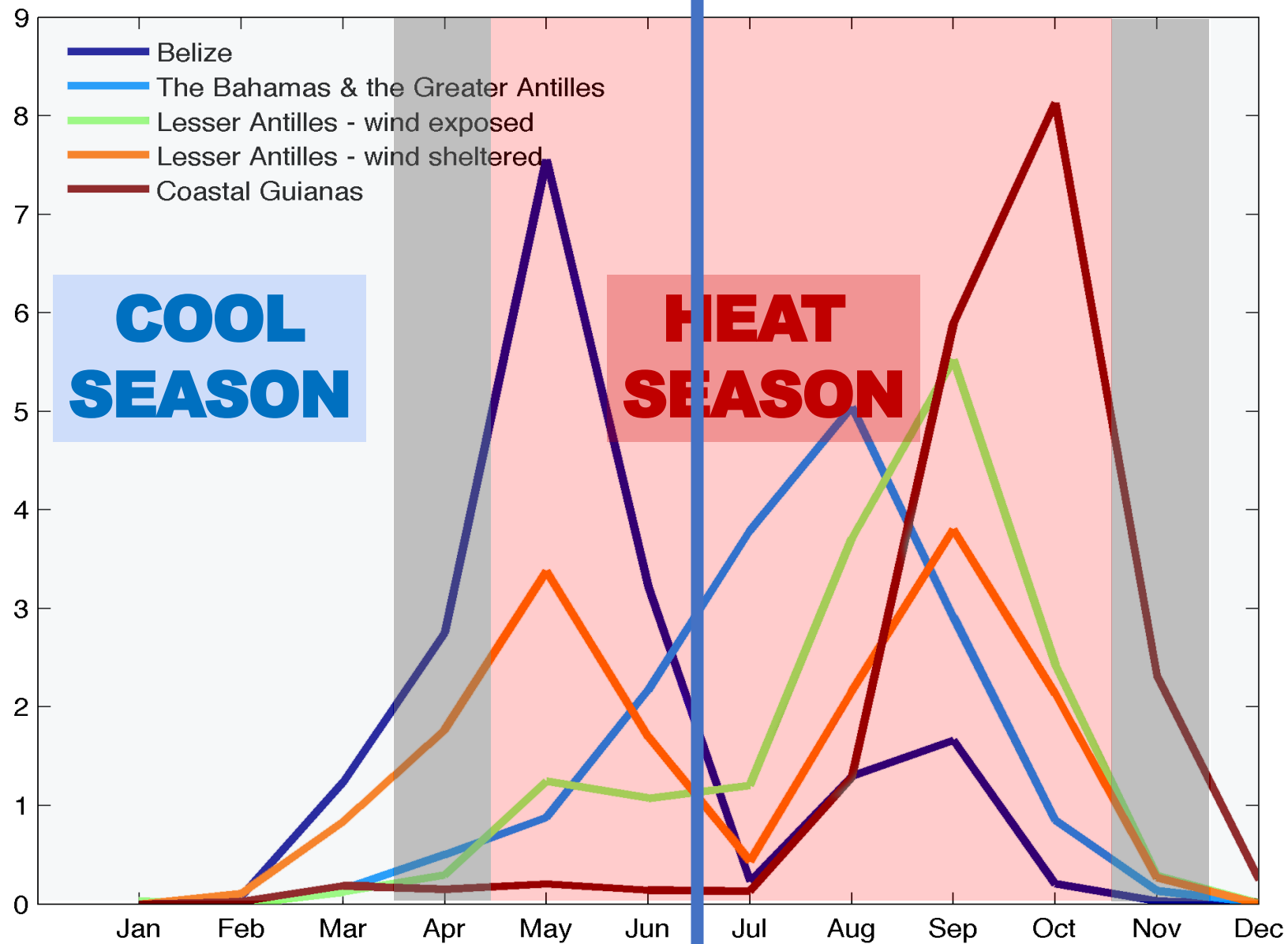
- **Risk:** *potentially* increased mortality and increased need for cooling strategies immediately post disaster (e.g. intense heat after passage of tropical cyclone); increased wildfire potential (if fuel stock is dry)
- **Operations:** *likely* reduced productivity of warehouse staff if unprotected



Child care and education:

- **Learning:** *significantly* reduced productivity and reduced learning ability of students during the summer semester and during the first two months of the 2025-2026 school year
- **Child Protection:** *potential* increase in aggression during prolonged heatwaves

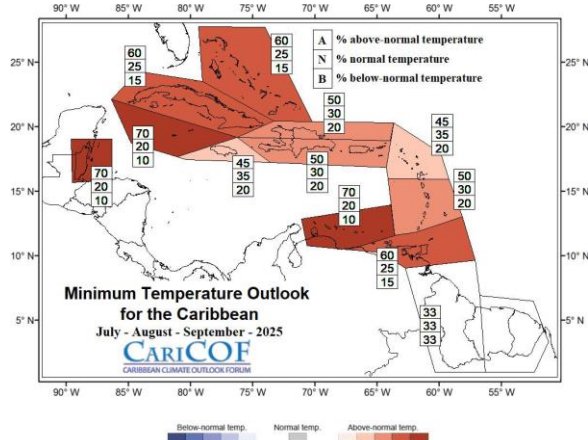
Number of days per month
spent in heatwaves



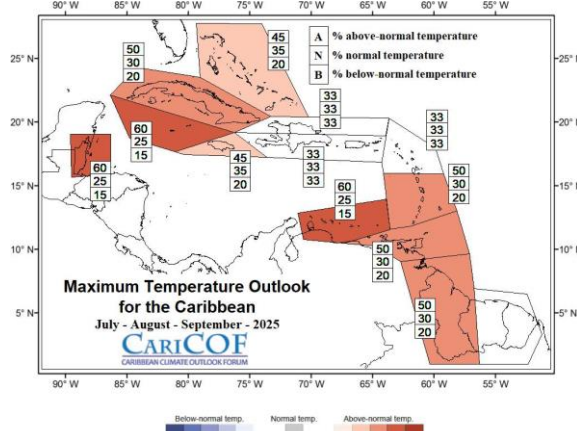
Overall, how hot will the next three to six months be?

Jul-Aug-Sep 2025

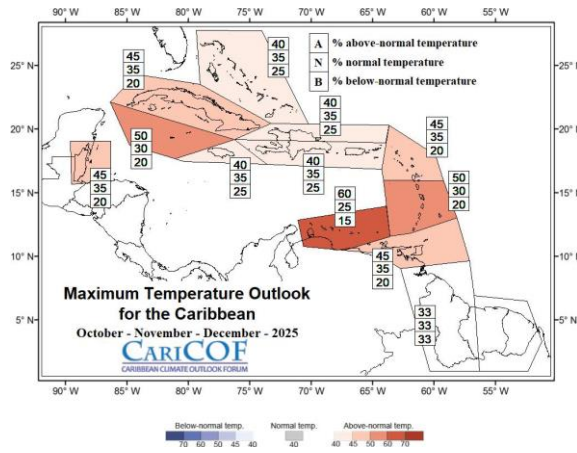
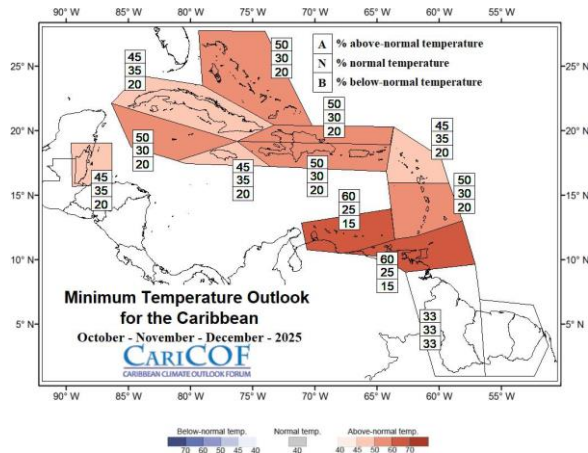
Night-time



Daytime



Oct-Nov-Dec 2025



Milder

Usual

Hotter

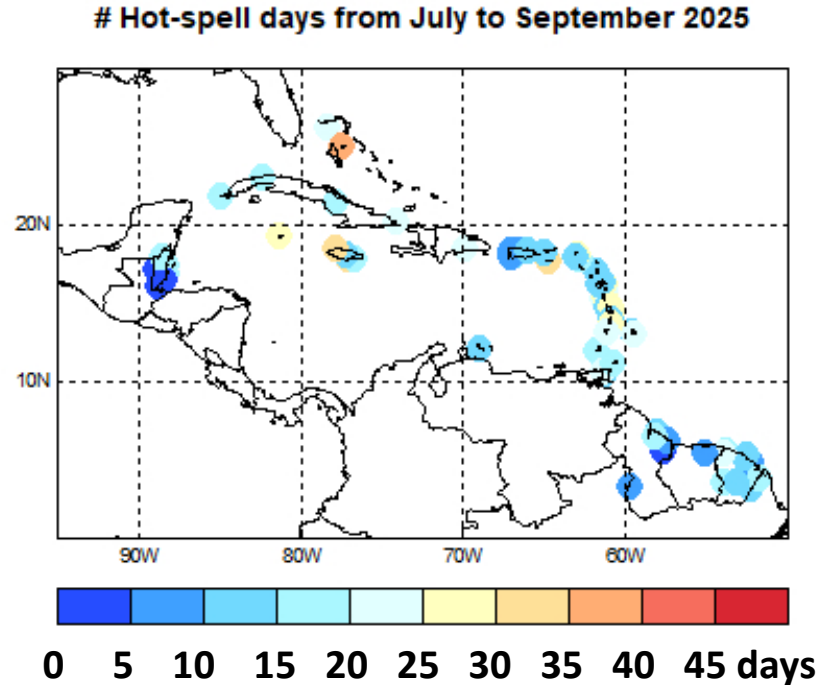
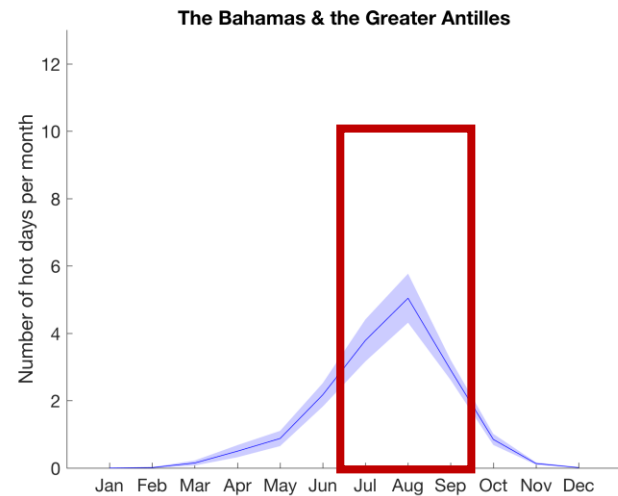
FORECAST

1. July to September, marking the lead up to the peak of the Heat Season Islands, is forecast to *likely* be at least as warm as usual, particularly at night, unless stronger than average cooling breezes maintain or cooling rains are very frequent.
2. As the Heat Season subsides after October – or, in the Guianas, November –, the recurrence of excessive heat will decrease both at night and during the daytime.

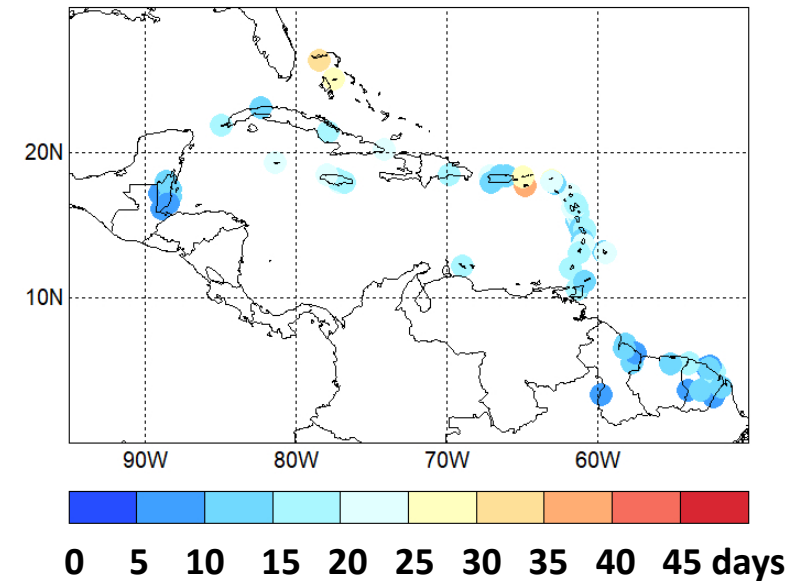
IMPLICATIONS

- Frequent and possibly intense episodes of heat stress in the vulnerable population & small livestock because of high temperature and increasing humidity through October.
- Cooling need set to peak in August and September (or, in Guianas, October).

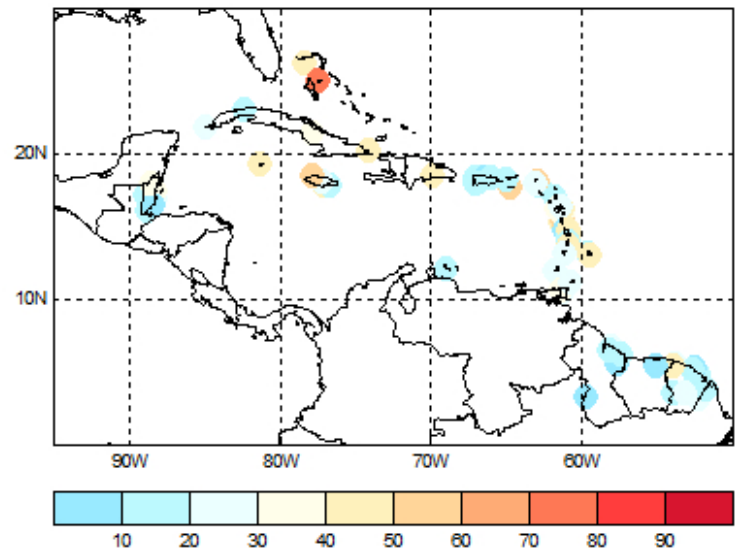
How many days spent in hot spells to expect for July to September 2025?



Hot-spell days from July to Sept. (1991-2020 avg.)




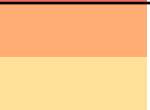
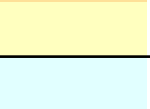


Prob. at least 30 hot-spell days from July to Sept. 2025



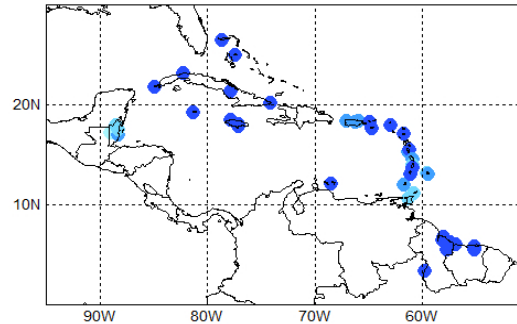
USUALLY 25-40 hot-spell days in The Bahamas and the USVI; 10-25 in northern Belize, in most island locations and most areas in the Guianas; no more than 15 in central and southern Belize.

FORECAST: 25 or more hot-spell days in The Bahamas, Grand Cayman, northwest and southeast Jamaica, leeward locations in Dominica, Martinique, Saint Lucia and St. Martin, and in St. Croix; *likely* at least 30 heatwave days in the Northwestern Bahamas.

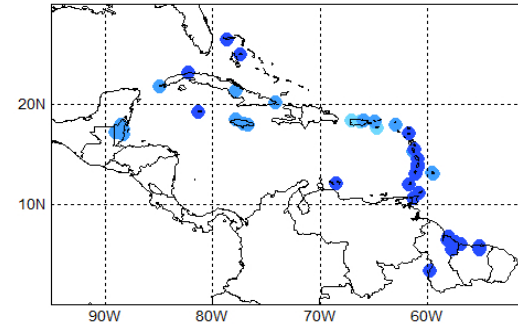
Heat impact potential due to heatwaves during the Heat Season (historical averages)

Heat impact potential	Colour codes	Percentage of time spent in heatwaves
EXTREMELY HIGH		>80%
HIGH		50-80%
MODERATE		20-50%
SLIGHT		10-20%
MARGINAL		0-10%

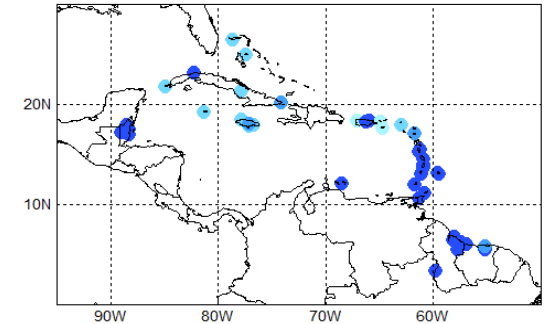
May



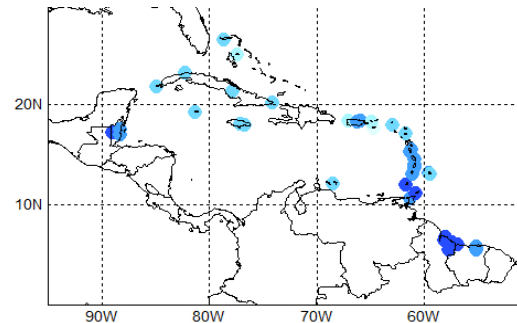
June



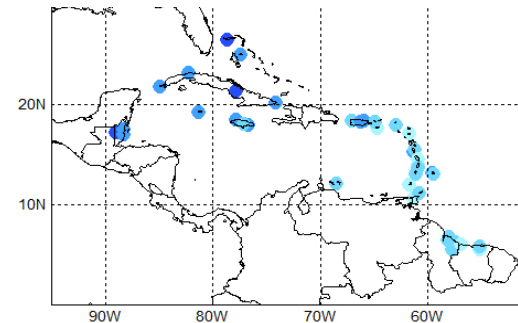
July



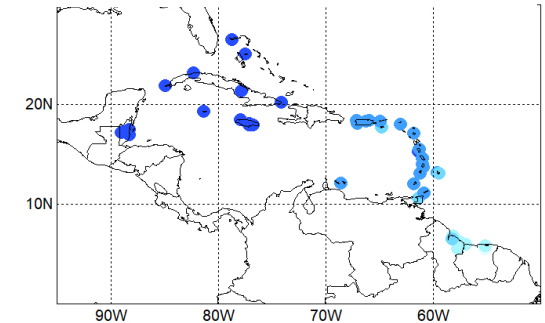
Aug



Sept



Oct



- May: Moderate potential in Belize; marginal to slight elsewhere.
- Jun.: Slight potential in Barbados and areas from St. Martin westwards; marginal elsewhere.
- Jul.: Slight to moderate potential in the Greater Antilles & Leeward Is.; marginal to slight elsewhere.
- Aug.: Moderate potential in Barbados & islands westwards of Guadeloupe; marginal elsewhere.
- Sep.: Moderate potential in the ABC Is., Lesser Antilles, Guianas; marginal to slight elsewhere.
- Oct.: Moderate potential in Barbados, the Guianas & St. Croix; marginal westwards of Hispaniola; slight elsewhere.



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