



# Heat Outlook for June to November 2021

## **Frequent excessive heat** from August to October... But region-wide less intense than in 2020

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# How hot will the next three to six months be?



#### **FORECAST:**

-15° N

-15° N

- Daytime temperatures at least as 1. warm as usual southwards of Guadeloupe, but somewhat tempered in most other areas.
- The usual or slightly higher night-2. time temperatures for most from September to November.

#### **IMPLICATIONS:**

- Heat stress in the vulnerable population & small livestock from
  - July to September in the **Bahamas and Greater Antilles;**
  - August to October in the Lesser **Antilles;**
  - September to November in the Guianas.
- **Enhanced cooling need until October.**

# The Caribbean Heat Season: April/May to October



### How many heatwave days on average per month?









#### How many heatwave days do we historically get on average from June to November?

Heatwave days from Jun. to Nov. (1991-2020 avg.)



# How many heatwave days to expect in **June 2021**?



Prob. no more than 5 heatwave days in June 2021

Heatwave days in June (1991-2020 avg.)

USUALLY: 4-8 heatwave days from Sint Maarten westwards. FORECAST: Region-wide, no more than 5 heatwave days are forecasted for June this year, though this number might be exceeded in few locations.

### What do we expect for the **peak of the** heat season in The Bahamas and the **Greater Antilles**, i.e. July to September?





70W

14

60W

21

28

Prob. at least 15 heatwave days between Jul & Sep 2021



Prob. at least 30 heatwave days between Jul & Sep 2021



USUALLY: around 15-25 heatwave days over 3 months. FORECAST: generally over 50% chance that there will be less than 15 heatwave days, but higher numbers are likely in the Bahamas.

7

80W

90W

Ω

### What do we expect for the **peak of the** heat season in the Lesser Antilles, i.e. August to October?

#### Heatwave days from Aug. to Oct. (1991-2020 avg.) Lesser Antilles - wind exposed 80W 90W 70W 60W 10 Prob. at least 30 heatwave days between Aug & Sep 2021 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Lesser Antilles - wind sheltered 90W 80W 70W 60W 90W 80W 70W 80W 28 14 21 0

USUALLY: around 20-30 heatwave days over 3 months. FORECAST: no significant change from the usual number of heatwave days is forecasted for the Lesser Antilles.

#### Prob. at least 15 heatwave days between Aug & Oct 2021



Number of hot days per

month

Number of hot days per

· month

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

### What do we expect for the **peak of the heat season** in the **Guianas**, i.e. September to November?



Heatwave days from Sep. to Nov. (1991-2020 avg.)



USUALLY: more than 30 heatwave days over 3 months. FORECAST: 70% and 40% chance for at least 15 and 30 heatwave days.

#### Prob at least 15 heatwave days between Sep & Nov 2021



#### Prob at least 30 heatwave days between Sep & Nov 2021



# How many heatwave days from June till November 2021?

#### **USUALLY:**

- 1) In most years, relatively few heatwaves in Belize. In much of the rest of the region, on average around 25 to 35 heatwave days are counted between June and November.
- 2) In the Caribbean Islands, the monthly number of heatwaves (and heatwave days) strongly increases from June (0-8) to August (6-12).
- 3) The peak season for heatwaves is: July to September in The Bahamas and the Greater Antilles, August to October in the Lesser Antilles, September to November in the Guianas.

#### FORECAST:

- This year, the number of heatwave days is expected to be similar to what we usually get.
- Region-wide, no more than 5 heatwave days are forecasted for June, though this number might be exceeded in few locations.

#### **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, the heat season should be markedly less intense than in recent, hotter years (2010, 2016 or 2020).