## Rainfall frequency and extreme forecasts

# Wet days and Wet spells Outlooks June to August 2021

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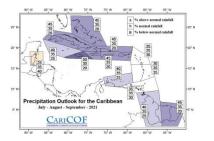




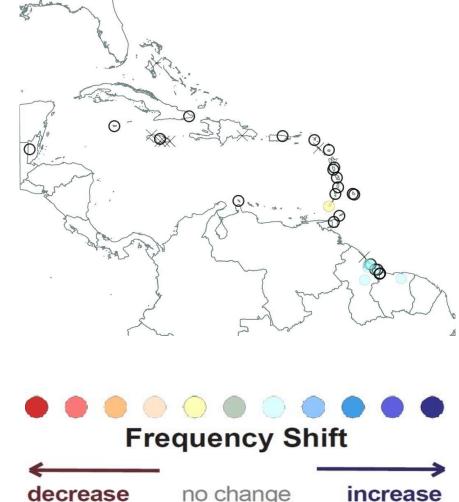
## Wet day frequency shifts

Forecast for: July to September 2021

### Precipitation outlook



**JAS 2021** Frequency of wet days



decrease

little indication

**USUALLY: USUALLY: Out of 92 days in Jul-Aug-Sep, there** are about 35 to 59 wet days in relatively flat areas of Belize and the islands, but 50 to 65 in mountainous areas and in coastal Guianas (ABC Islands: 5-15).

**FORECAST:** Wetter conditions in most areas with the likely exception of Belize. At this time, there is little indication of changes from the usual number of wet days in the forecasts in most areas (low confidence).

#### **IMPLICATIONS:**

increase

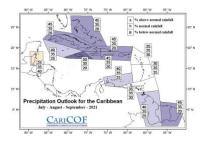
missing

- Outdoor activity disruptions due to rainfall should become more frequent due to the usual increase in the number of wet days into September in most places, but less frequent in the Guianas.
- **Decreasing surface wetness could make** environmental conditions progressively less conducive to moisture related pests in the Guianas.

## Wet spells frequency shifts

Forecast for: July to September 2021

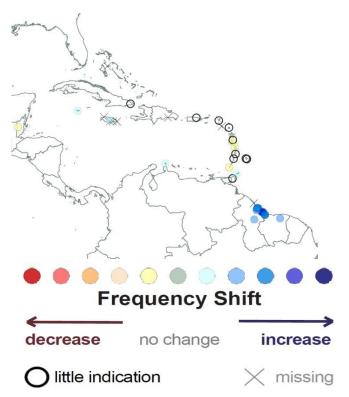
## Precipitation outlook



Wet days outlook



JAS 2021 frequency of 7-day wet spells



JAS 2021 frequency of 7-day very wet spells



USUALLY: 3 to 6 wet spells (ABC Islands: up to 3) occur from July to September, with 1 to 3 of them ending up very wet (ABC Islands: up to 2).

FORECAST: Wetter conditions in most areas with the likely exception of Belize. At this time, there is little indication of changes from the usual number of wet days and wet spells in the forecasts in most areas (low confidence), except for a significantly higher than usual number of wet spells in the Guianas (medium to high confid.). Very wet spells are forecast to be more frequent than usual in most locations (medium to high confid.).

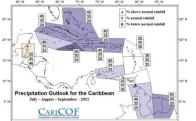
#### **IMPLICATIONS:**

- Accelerating recharge rates of large water reservoirs and soil moisture, except in the Guianas after July.
- The chance of successive very wet spells translates to flood potential rising from moderate in July to high in September in Belize and most islands (except the ABC Islands), but decreasing from extremely high in July to moderate potential in September in the Guianas.

## **Extreme wet spells frequency shifts**

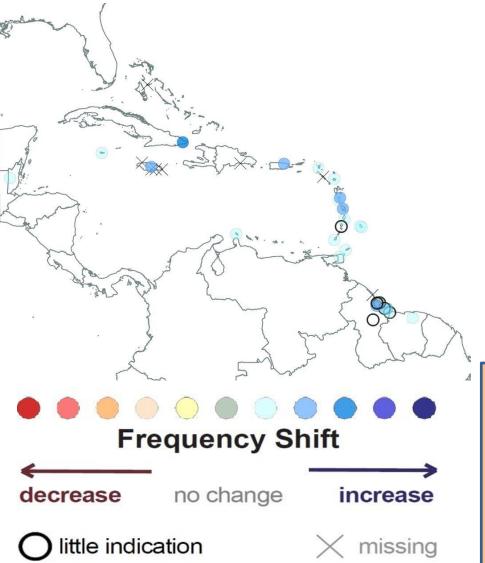
Forecast for: July to September 2021





JAS 2021 frequency of extreme (top 1%) 3-day wet spells





USUALLY: Up to 1 extreme wet spells occur between July to September in most places, but up to 2 in mountainous areas.

FORECAST: Wetter conditions in most areas with the likely exception of Belize. At this time, there is little indication of changes from the usual number of wet days and wet spells in the forecasts in most areas (low confidence), except for a significantly higher than usual number of wet spells in the Guianas (medium to high confid.). Very wet spells are forecast to be more frequent than usual in most locations (medium to high confid.).

A higher than usual chance for extreme wet spells is forecast for most of the region (low to med. confid.).

### **IMPLICATIONS:**

 In view of the rapidly increasing chance of extreme wet spells towards September in Belize and the islands, the potential for flash floods and associated hazards is expected to increase from moderate to high or even extremely high. The inverse trend is expected in the Guianas.

July	to Se	ptember
	202	21

2021	No. of wet days		No. of 7-day wet spells (20% wettest)		No. of 7-day very wet spells (10% wettest)		No. of 3-day extremely wet spells (19 wettest)		expected
	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Q X
Antigua (VC Bird)	29-42	30-43	2.6-5.1	2.4-5.4	0.9-3	0.9-3.9	0-1	0-1.6	
Aruba (Beatrix)	6-17	6-19	1.3-4	0.9-4.6	0.4-2.2	0.3-2.9	0-1	0-0.9	are
Barbados (CIMH)	37-49	36-49	3.4-6.4	3.6-6.8	1.5-3.4	1.6-4.3	0-1		ne
Barbados (GAIA)	39-49	39-51	3.9-6.5	3.8-6.9	1.7-3.9	1.4-4.2	0-1.1		none
Belize (C. Farm)	36-49	33-50	2.7-5.6	2.6-5.9	1.3-3.4	1.1-3.4	0-1.1		
Cayman	31-46	29-48	3.4-6.4	3.5-7.8	1.3-3.5	1.4-4.7	0-1		grev
Cuba (Punta Maisi)	10-18	11-19	1.3-3.9	1.1-4.3	0.4-1.8	0.2-1.9	0-1		
Dom. Republic (Las Americas)									ين ا
Dominica (Canefield)	52-65	50-65	3.7-7.4	3.4-8	1.8-5.5	1.2-6.3	0-2.5	0-2.5	increase
Dominica (Douglas Charles)	56-70	54-71	3-6.9	3-6.5	0.9-3.4	1-4.3	0-1		
Grenada (MBIA)	39-48	36-51	3.8-6.4	3-6.2	1.7-3.7	1.4-5.3	0-2	0-1.7	. <u>-</u>
Guyana_73	17-26	16-27	1.7-3.9	1.7-5.1	0.4-2.6	0.8-3.2	0-0.1	0-0.1	an
Guyana (Albion)	26-42	25-43	2.1-4.8	2.7-6.2	0.9-3	1-3.7	0-1	0-1.1	blue
Guyana (Blairmont)	33-46	31-46	2.1-5.1	2.7-6.8	0.9-2.6	1.1-3.8	0-1	0-1	0
Guyana (Charity)									light
Guyana (Enmore)	28-42	25-47	1.7-4.3	1.9-5.6	0.4-2.7	0.7-3.7	0-1	0-0.5	
Guyana (Georgetown)	35-51	34-54	1.7-4.3	2.1-5.8	0.4-2.6	0.9-3.5	0-1	0-0.2	
Guyana (Greatfall)									freguency
Guyana (New Amsterdam)	31-44	31-45	1.7-5.1	2.6-6.5	0.9-2.6	1.1-3.7	0-1	0-1	Jer
Guyana (Skeldon)	32-38	30-40	2.1-3.9	2.2-5	0.9-2.6	0.8-3.4	0-1		מו
Guyana (Timehri)	45-58	44-60	2.1-4.7	2.4-5.2	0.9-2.6	0.8-2.9	0-1	0-0.9	
Guyana_Wales	39-52	38-53	2.1-4.3	2.5-6.3	0.9-2.6	0.9-3.9	0-1	0-0.8	.⊑
Jamaica (Worthy Park)	29-42	27-43	2.6-5.6	2.6-6.4	0.9-3.1	1.2-4.8	0-2		decrease
Martinique (FDF Desaix)	52-64	51-65	3.9-7.3	3.4-6.6	1.7-3.9	1.1-3.6	0-1.1		reg
Puerto Rico (San Juan)	36-50	36-53	3-5.6	2.8-6.1	0.9-3.5	1.4-4.2	0-1		lec
St. Lucia (Hewanorra)	44-59	43-59	3.4-5.6	3.3-6.2	1.7-3.4	1.2-3.9	0-1		a d
St. Maarten (TNCM)	33-49	30-48	2.3-5.6	2.1-5.4	0.9-3.1	0.9-3.7	0-1		. <u>s</u>
St. Vincent (ET Joshua)	56-65	54-65	3.4-5.6	3.2-5.6	1.3-3.4	1.4-3.7	0-1.1		2
Suriname (Zanderij)	36-51	35-53	1.7-3.4	2-4.3	0.9-1.7	0.7-2.8	0-1		brown
Tobago (ANR Robinson)	47-59	47-59	3.9-6.5	3.6-6.7	1.5-3.5	1.2-3.8	0-1		م م
Trinidad (Piarco)	35-53	36-54	3.4-5.6	3.3-6.1	1.7-3.4	1.5-3.3	0-1	0-1.3	



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