

# Rainfall frequency and extreme forecasts

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## Wet days and Wet spells Outlooks March to May 2021

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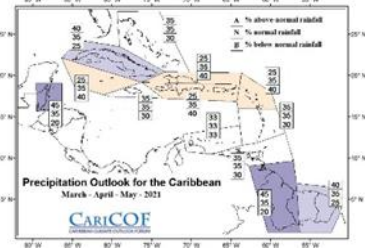
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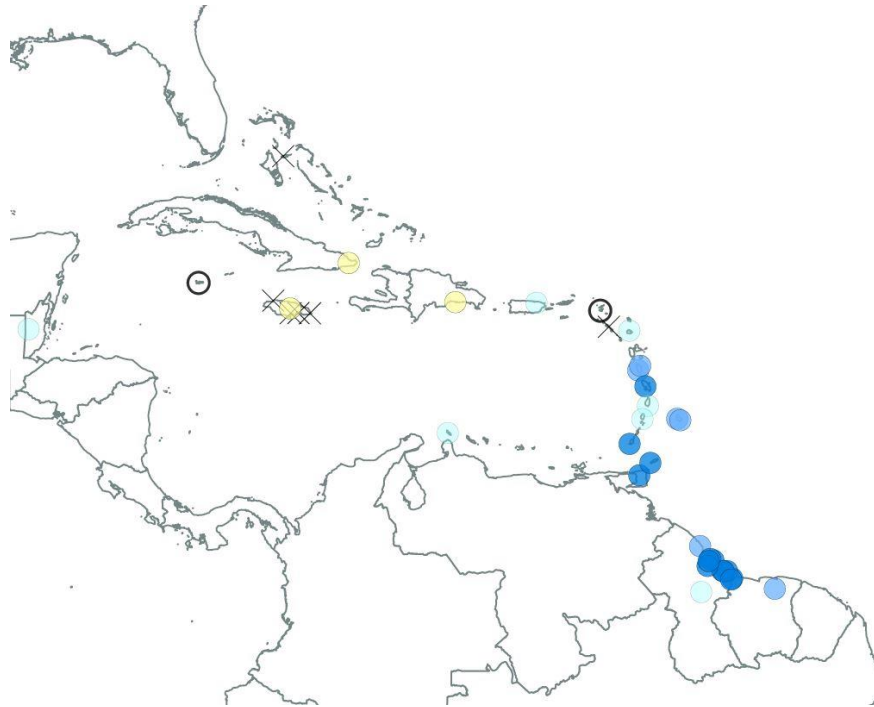
# Wet day frequency shifts

## Forecast for: March to May 2021

Precipitation outlook



**MAM 2021**  
**Frequency of wet days**



**USUALLY:** Out of 90 days in Mar-Apr-May, there are about 15 to 30 wet days in low lying, 30-50 in mountainous locations (ABC Islands: 1-10; coastal Guianas: 30-50).

**FORECAST:** MAM rainfall may be wetter than usual in the Belize, Cayman Is., and the Guianas, with an increase in wet days compared to the usual from Puerto Rico eastwards including Belize (*medium to high confidence*), but usual or drier elsewhere with, possibly, a slight decrease in the number of wet days from the usual (*low confid.*).

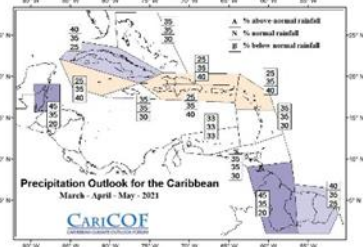
### IMPLICATIONS:

- Potentially optimal weather for outdoor activities on most days through March in view of the low number of wet days from the Dominican Republic westwards.
- Limited wildfire potential and local airborne dust towards April from Dominica southwards, but a possible increase from the Dom. Rep. westwards.

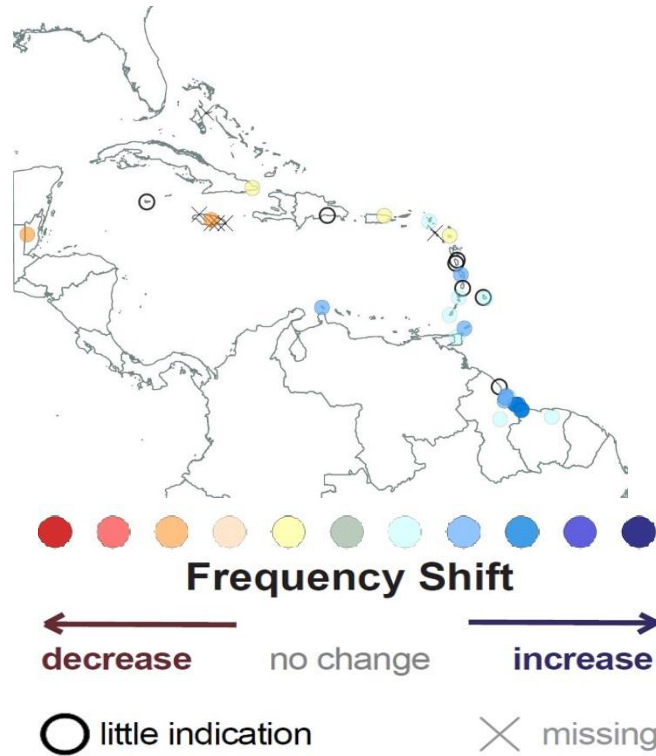
# Wet spells frequency shifts

## Forecast for: March to May 2021

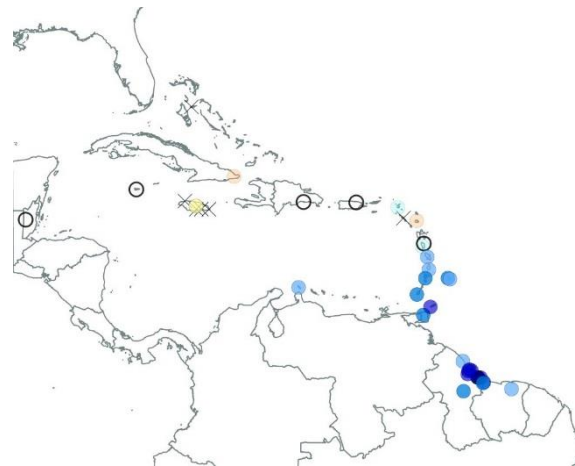
Precipitation outlook



MAM 2021 frequency of 7-day wet spells



MAM 2021 frequency of 7-day very wet spells



**USUALLY:** Up to 3 wet spells (coastal Guianas: up to 5) occur from Mar to May, with up to 2 of them ending up very wet (coastal Guianas: up to 3).

**FORECAST:** MAM rainfall may be wetter than usual in the Belize, Cayman Is., and the Guianas, with an increase in wet days compared to the usual from Puerto Rico eastwards including Belize (*medium to high confidence*), with an increase in wet spells and very wet spells than usual from Martinique southwards (*medium to high confidence*), with, possibly, a slight decrease in the number of wet days and very wet spells from the usual (*low confid.*).

### IMPLICATIONS:

- Relatively fast depletion of water reservoirs from Puerto Rico westwards into April.
- Increased flooding potential from Martinique southwards in the islands starting April and in the coastal Guianas throughout the period.

# Extreme wet spells frequency shifts

## Forecast for: March to May 2021

**USUALLY:** : Up to 1 extreme wet spell occurs from March to May.

**FORECAST:** MAM rainfall may be wetter than usual in the Belize, Cayman Is., and the Guianas, with an increase in wet days compared to the usual from Puerto Rico eastwards including Belize (*medium to high confidence*), with an increase in wet spells and very wet spells than usual from Martinique southwards (*medium to high confidence*), with, possibly, a slight decrease in the number of wet days and very wet spells from the usual (*low confid.*).

No significant changes in the number of extreme wet spells is on forecast for Belize and the islands, whereas chances of 1 extreme wet spell in the Guianas are higher than usual (*medium confid.*).

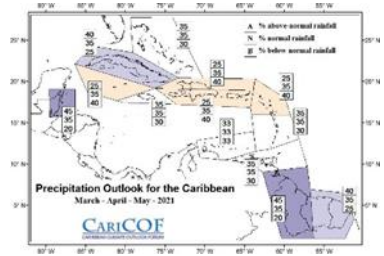
### IMPLICATIONS:

- Marginal flash flood, landslide/rockfall and soil erosion potential in Belize and the islands through March, limited potential in the northern Guianas.
- Limited to moderate potential for flash floods and associated hazards in Belize and the islands in April and May, with increased concern in the Guianas.

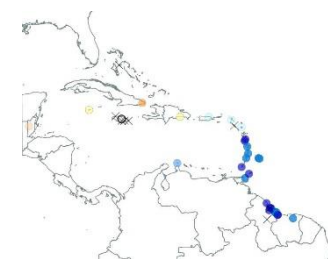
**MAM 2021 frequency of extreme (top 1%) 3-day wet spells**



Precipitation outlook



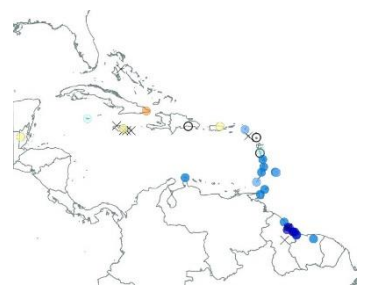
Wet days outlook



Wet spells outlook



Very wet spells outlook





# March to May 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 (1% wettest)	
	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast
Antigua (VC Bird)	17-29	15-32	1.2-3.8	0.6-3.4	0.4-2.3	0.4-2.4	0-1	0-1.3
Aruba (Beatrix)	2-9	2-10	0.4-1.3	0.3-1.9	0-0.8	0-1.3	0-0	0-0
Barbados (CIMH)	14-28	15-31	0.4-2.2	0.3-2.6	0-1.5	0-2.1	0-0.8	0-0.6
Barbados (GAIA)	15-29	16-33	0.4-2.5	0.5-2.9	0-1.5	0.4-2	0-1	0-0.6
Belize (C. Farm)	11-22	9-22	0.4-1.9	0.2-1.8	0-1.3	0-1.3	0-0	0-0
Cayman	9-22	9-24	0.9-2.4	0.8-2.7	0.4-1.6	0.3-1.9	0-1	0-1.3
Cuba (Punta Maisi)	8-20	7-20	1.3-3.9	0.9-3.9	0.4-1.7	0.2-1.8	0-1	0-0.8
Dom. Republic (Las Americas)	13-26	13-27	1.2-3.8	1.1-4.4	0.4-2.2	0.5-2.8	0-1	0-0.7
Dominica (Canefield)	21-35	22-37	0-2	0-2.6	0-1.5	0-1.6	0-0	0-0
Dominica (Douglas Charles)	36-60	36-62	1.3-3.4	1-4.1	0.1-2	0.3-2.3	0-1.5	0-1.4
Grenada (MBIA)	10-25	10-30	0-1.3	0.1-1.8	0-0.9	0-1.8	0-0	0-0
Guyana_73	19-34	20-34	1.7-5.6	2.3-7.2	0.9-2.8	1.1-4	0-1	0-2.8
Guyana (Albion)	27-45	28-47	1.8-4.2	2.5-5.5	0.9-2.7	1.4-3.4	0-1	0-1.6
Guyana (Blairmont)	31-48	32-52	2-4.9	2.4-6	0.9-2.9	1.2-4.4	0-1	0-1.8
Guyana (Charity)								
Guyana (Enmore)	32-44	30-47	1.7-4.7	1.8-5.5	0.9-2.6	1-3.8	0-1.1	0-1.5
Guyana (Georgetown)	34-50	32-52	1.4-4.2	1.9-5.3	0.9-2.1	1.3-3.4	0-1	0-1.2
Guyana (Greatfall)								
Guyana (New Amsterdam)	33-48	30-52	1.8-4.7	2.2-5.9	0.9-2.9	1.4-4	0-1	0-1.7
Guyana (Skeldon)	32-50	33-52	1.9-5.1	2.3-6.8	0.9-3	1.1-3.9	0-1	0-1.2
Guyana (Timehri)	35-55	36-56	1.7-4.9	2.2-5.5	0.5-2.6	1.1-3.7	0-1.8	0-2.1
Guyana_Wales	34-49	35-54	1.7-4.4	2-5.5	0.9-3.2	1-3.9	0-1.3	0.2-2.2
Jamaica (Worthy Park)	20-33	19-34	2.1-4.3	1.4-3.9	0.8-2.7	0.4-2.8	0-1	0-1.6
Martinique (FDF Desaix)	28-47	29-52	0.9-2.6	0.8-3.1	0.4-1.3	0.5-1.9	0-0	0-0.2
Puerto Rico (San Juan)	25-38	24-39	0.9-3.8	0.9-3.8	0.8-2.8	0.7-3.3	0-1.4	0-1.3
St. Lucia (Hewanorra)	21-39	20-40	0.4-2.6	0.3-2.8	0-1.5	0.2-1.9	0-0.8	0-1.3
St. Maarten (TNM)	21-33	20-36	1-3	1.1-3.7	0.4-1.5	0.5-1.9	0-0.8	0-0.1
St. Vincent (ET Joshua)	31-53	29-56	0.4-2.7	0.3-3.2	0-1.4	0-1.7	0-0.1	0-0.4
Suriname (Zanderij)	47-60	45-63	2.5-5.7	2.1-6.6	1.6-3.3	1.2-4.5	0-1.8	0-1.9
Tobago (ANR Robinson)	14-31	15-35	0.1-1.7	0.2-2.1	0-0.9	0-1.4	0-0	0-0.4
Trinidad (Piarco)	12-31	14-33	0.3-2.5	0.3-2.9	0-1.3	0.2-2	0-0.8	0-0.4

**brown** is a decrease in frequency, **light blue** an increase, **grey** none are expected



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