# Rainfall frequency and extreme forecasts

# Wet days and Wet spells Outlooks April to June 2019

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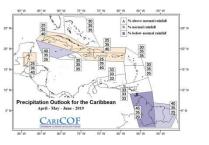




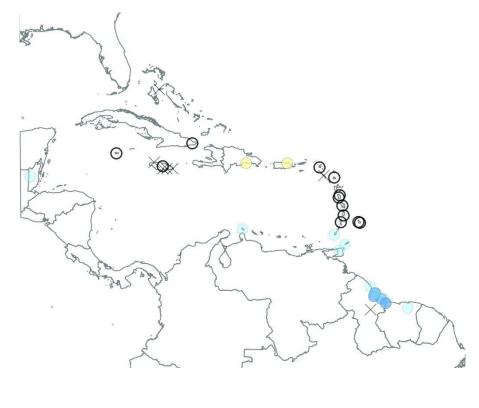
# Wet day frequency shifts

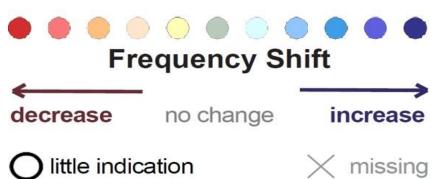
Precipitation outlook





AMJ 2019 Frequency of wet days





USUALLY: Across the region during April-May-June, about 25 to 40 days out of a total of 91 days are wet days (coastal Guianas: 45 to 60 days; ABC Islands: 10 or less).

FORECAST: AMJ rainfall may be drier than usual in Belize, Cuba, Hispaniola and the US C'bean Territories, with slightly fewer wet days in the latter two areas (low confid.); but possibly wetter than usual in the Guianas, with slightly more wet days there (medium confid.) and in ABC Isls., Grenada, Trinidad & Tobago (low confid.).

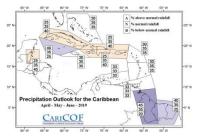
## **IMPLICATIONS:**

- Frequency of outdoor activity disruptions due to rainfall should be increasing towards June.
- Decreasing surface wetness towards April (Belize, Guianas and Greater Antilles) or May (Lesser Antilles) will progressively increase wild fire potential.

# Wet spells frequency shifts

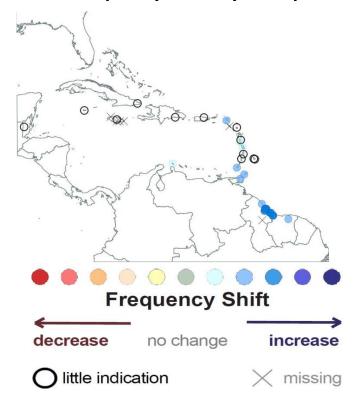
Forecast for: April to June 2019

#### Precipitation outlook





AMJ 2019 frequency of 7-day wet spells



AMJ 2019 frequency of 7-day very wet spells



USUALLY: 1 to 4 wet spells (ABC Islands up to 2; coastal Guianas: 3 to 6) occur from April to June, with 1 or 2 of them ending up very wet (ABC Islands: up to 1; coastal Guianas: 1 to 4).

FORECAST: AMJ rainfall may be drier than usual in Belize, Cuba, Hispaniola and the US C'bean Territories, with slightly fewer wet days in the latter two areas (low confid.); but possibly wetter than usual in the Guianas, with slightly more wet days, wet spells and very wet spells there (medium confid.) and in ABC Isls., Grenada, Trinidad & Tobago (low confid.).

## **IMPLICATIONS:**

- Depletion of large water reservoirs and soil moisture should continue up until the end of the dry season (i.e. usually late April or May).
- Rising flood potential towards May, especially in coastal Guyana.

# **Extreme wet spells frequency shifts**

Forecast for: April to June 2019

missing

## Precipitation outlook







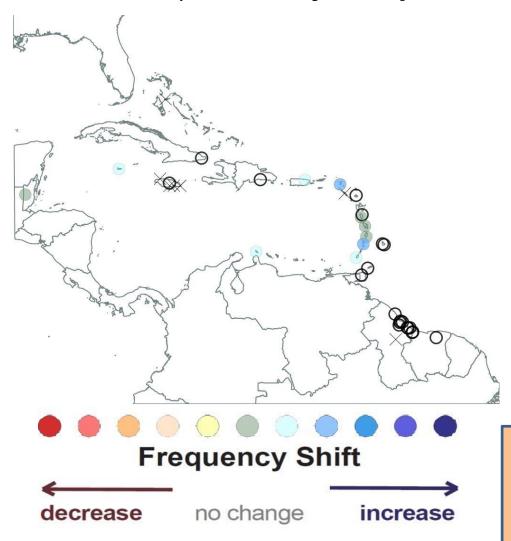
Wet spells outlook



Very wet spells outlook



AMJ 2019 frequency of extreme (top 1%) 3-day wet spells



little indication

USUALLY: : Up to 1 extreme wet spell occur between April to June (Guianas: up to 2).

FORECAST: AMJ rainfall may be drier than usual in Belize, Cuba, Hispaniola and the US C'bean Territories, with slightly fewer wet days in the latter two areas (low confid.); but possibly wetter than usual in the Guianas, with slightly more wet days, wet spells and very wet spells there (medium confid.) and in ABC Isls., Grenada, Trinidad & Tobago (low confid.).

No significant change or a slight increase in the number of extreme wet spells is forecast.

## **IMPLICATION:**

Flash flood potential throughout the region is expected to be of limited concern until April, but increase from May onwards.

April to June 2019	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)	18-31	16-32	1.2-3.8	1.1-4.2	0.4-2.4	0.5-2.4	0-1.4	0-1.4
Aruba (Beatrix)	4-8	3-10	0.4-1.7	0.2-1.9	0-1.1	0-1.2	0-0.9	0-0.3
Barbados (CIMH)	18-33	18-35	0.9-3.7	0.9-3.7	0.4-1.9	0.3-2	0-0.9	0-0.3
Barbados (GAIA)	19-35	20-36	0.9-3.9	1-4.1	0.3-2.6	0.4-2.1	0-1	
Belize (C. Farm)	17-28	17-30	1.2-3	1-3.4	0.4-2.1	0.4-2.2	0-1	0-0.7
Cayman	18-28	16-30	2.1-3.7	1.6-4.1	0.9-2.4	0.7-2.9	0-1	
Cuba (Punta Maisi)	7-18	6-20	1.3-3.6	1-4.2	0.4-2.1	0-2.3	0-1	
Dom. Republic (Las Americas)	17-31	15-31	1.7-4.6	1.4-5	0.6-3	0.5-3.3	0-1	
Dominica (Canefield)	27-43	24-47	0.8-3.4	0.9-4.4	0-2.4	0-2.4	0-0	0-0
Dominica (Douglas Charles)	41-63	38-63	0.9-4.5	1.1-4.7	0.4-2.5	0.3-2.9	0-1.5	
Grenada (MBIA)	19-34	19-37	1.2-3.4	1.2-4	0.4-2.1	0.4-2.3	0-1	0-0.7
Guyana_73	26-39	27-41	2.8-6.3	3.2-7.8	1.3-3.4	1.3-5.1	0-1	
Guyana (Albion)	37-52	38-55	2.7-5.6	3.1-7.1	1.3-3	1.7-3.7	0-2	0-2
Guyana (Blairmont)	44-58	44-62	3.1-6.2	3.7-7.4	1.3-3.4	1.7-5.4	0-1.5	
Guyana (Enmore)	42-54	42-57	2.7-5.6	3.2-7.4	1.3-3	1.3-3.8	0-1.1	
Guyana (Georgetown)	45-60	46-61	3.1-6.4	3.3-6.7	1.5-3.4	1.4-4.4	0-1	
Guyana (New Amsterdam)	42-60	42-63	3-6.2	3.6-7.3	1.6-3.8	1.6-4.6	0-2	0-1.5
Guyana (Skeldon)	41-57	43-60	3.2-6.4	3.5-7.7	1.2-3.9	1.3-5.6	0-1	
Guyana (Timehri)	49-61	48-65	3-6.4	3.4-7.3	1-3.4	1.5-4.6	0-2	
Jamaica (Worthy Park)	20-37	19-40	2.2-5.1	2-5.5	0.9-3	0.8-3.8	0-1.9	0-1.6
Martinique (FDF Desaix)	34-50	31-52	1.4-3.2	1.3-4	0.4-2.1	0.4-2.2	0-0.9	0-0.3
Puerto Rico (San Juan)	25-42	23-42	1.7-4.7	1.6-5.1	0.9-3.6	0.8-4	0-1.9	
St. Lucia (Hewanorra)	26-41	22-42	1.2-4.1	1-3.9	0.3-2.1	0.3-2.2	0-0.9	0-0.4
St. Maarten (TNCM)	22-34	21-35	1.3-3.6	1.4-4.1	0.4-2.1	0.5-2.5	0-1	0-1
St. Vincent (ET Joshua)	33-55	32-57	1.3-3.8	0.9-4	0.4-2.1	0.4-2	0-1	0-1
Suriname (Zanderij)	57-69	57-71	3.4-6.9	3.7-8	1.7-4.3	1.8-5.3	0-1.9	
Tobago (ANR Robinson)	27-44	27-46	1.4-4.1	1.6-5	0.4-1.9	0.6-2.4	0-1	
Trinidad (Piarco)	22-36	22-38	1.3-3.4	1.4-4.5	0.4-1.9	0.4-2.4	0-1	0-0.9
								CARIBBEAN CLIMATE OUT



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