

# Rainfall frequency and extreme forecasts

## — Wet days and Wet spells Outlooks February to April 2019

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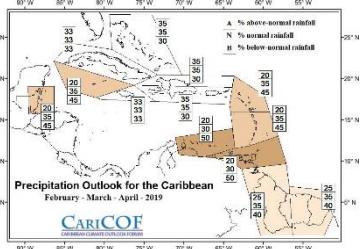
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# Wet day frequency shifts

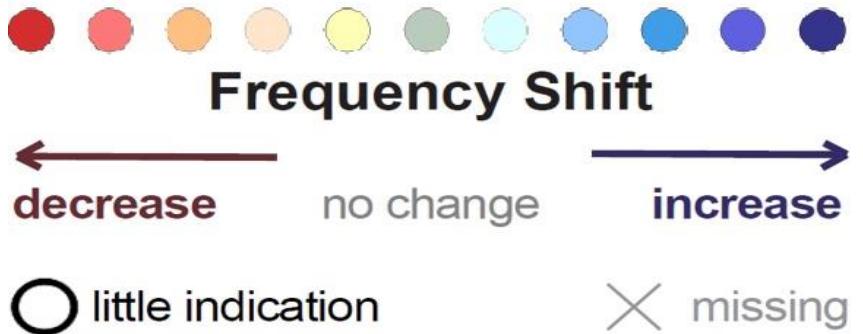
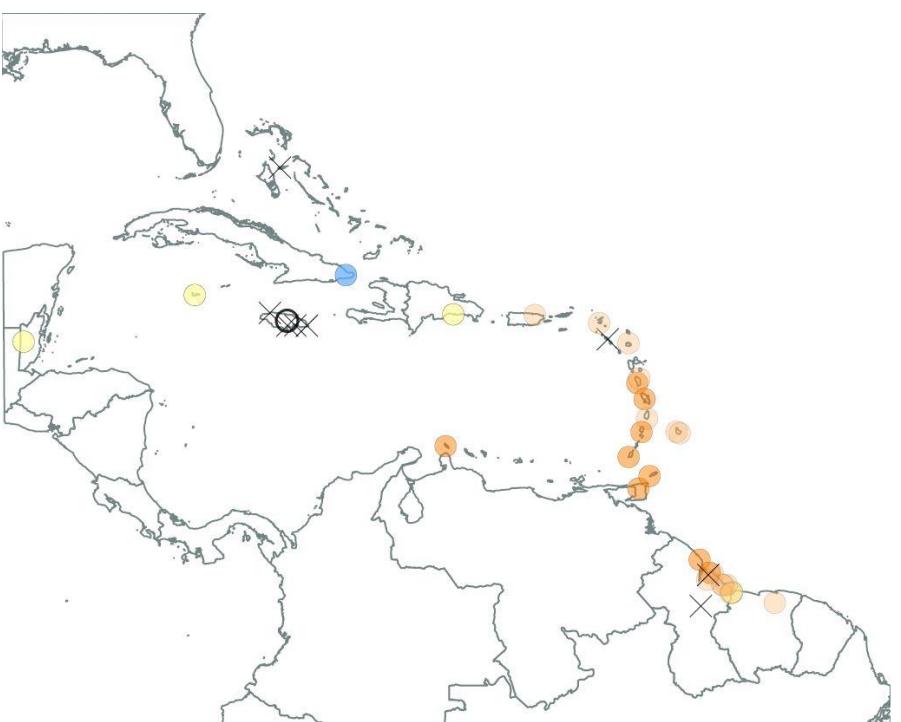
Forecast for: February to April 2019

Precipitation outlook



FMA 2019

Frequency of wet days



**USUALLY:** Out of 90 days in Feb-Mar-Apr, there are about 15 to 30 wet days (ABC Islands: 5-15; coastal Guianas: 20-45).

**FORECAST:** FMA rainfall may be drier than usual in Cayman, Belize, the Lesser Antilles and the Guianas. The forecast indicates slightly fewer wet days northwards of Dominica (except in Cuba) (*low confidence*), and further south (*medium to high confid.*).

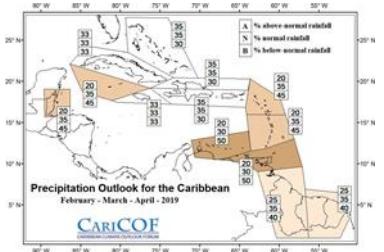
## IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should be low.
- Decreasing surface wetness in the dry season will progressively increase wild fire potential, while making environmental conditions less conducive to moisture related pests.

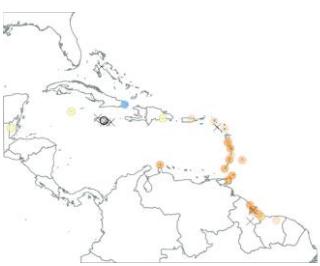
# Wet spells frequency shifts

Forecast for: February to April 2019

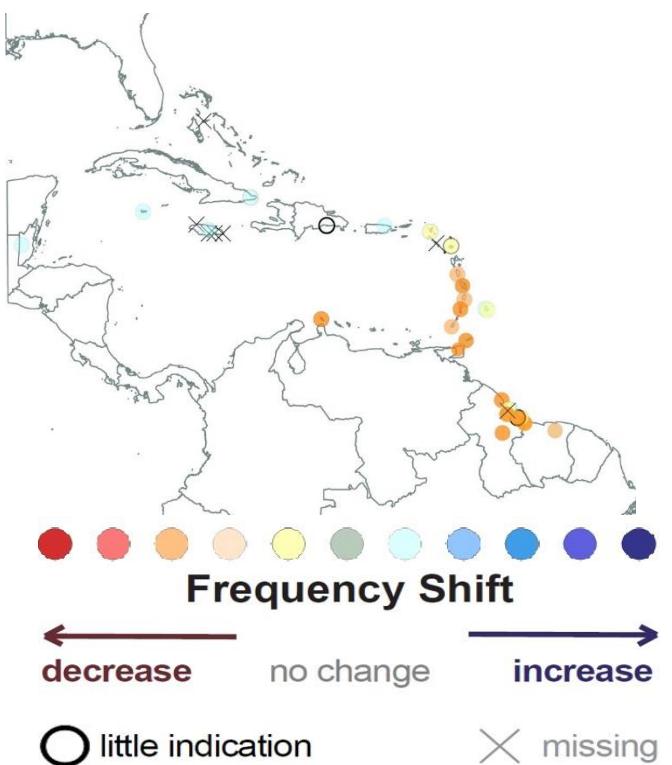
Precipitation outlook



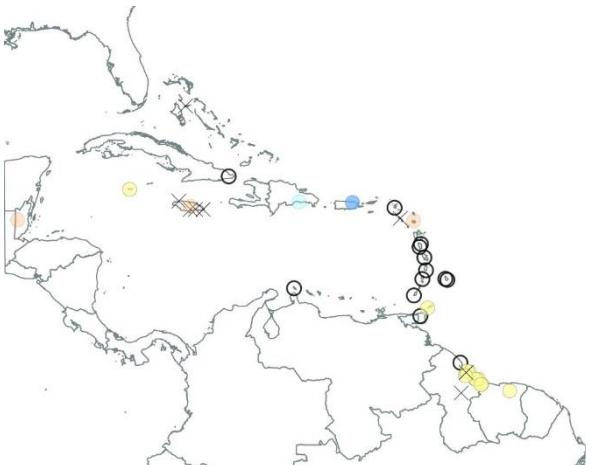
Wet days outlook



FMA 2019 frequency of 7-day wet spells



FMA 2019 frequency of 7-day very wet spells



**USUALLY:** Up to 3 wet spells (coastal Guianas: up to 4) occur from Feb to Apr, with up to 1 of them ending up very wet (coastal Guianas: up to 2).

**FORECAST:** FMA rainfall may be drier than usual in Cayman, Belize, the Lesser Antilles and the Guianas. The forecast indicates slightly fewer wet days northwards of Dominica (except in Cuba) (*low confid.*), and fewer wet days and wet spells further south (*medium to high confid.*), but little change in very wet spells (*low confid.*)

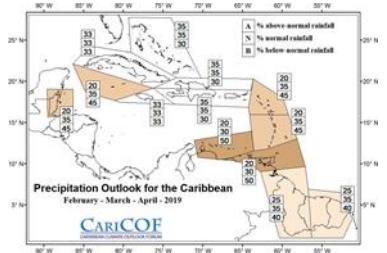
## IMPLICATIONS:

- Potentially slightly faster than the usual depletion of large water reservoirs and soil moisture in Eastern Caribbean.
- Limited flood potential in eastern part of the region through early April.

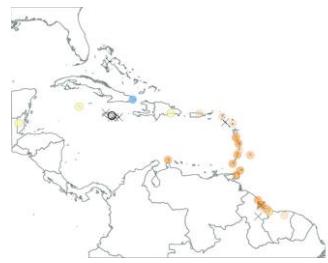
# Extreme wet spells frequency shifts

## Forecast for: February to April 2019

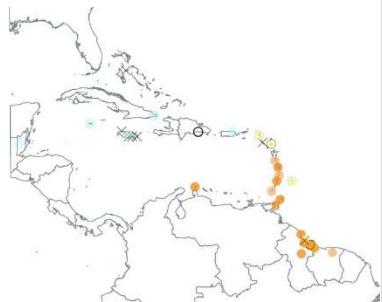
Precipitation outlook



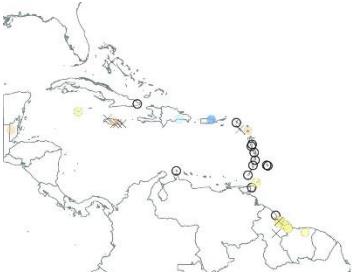
Wet days outlook



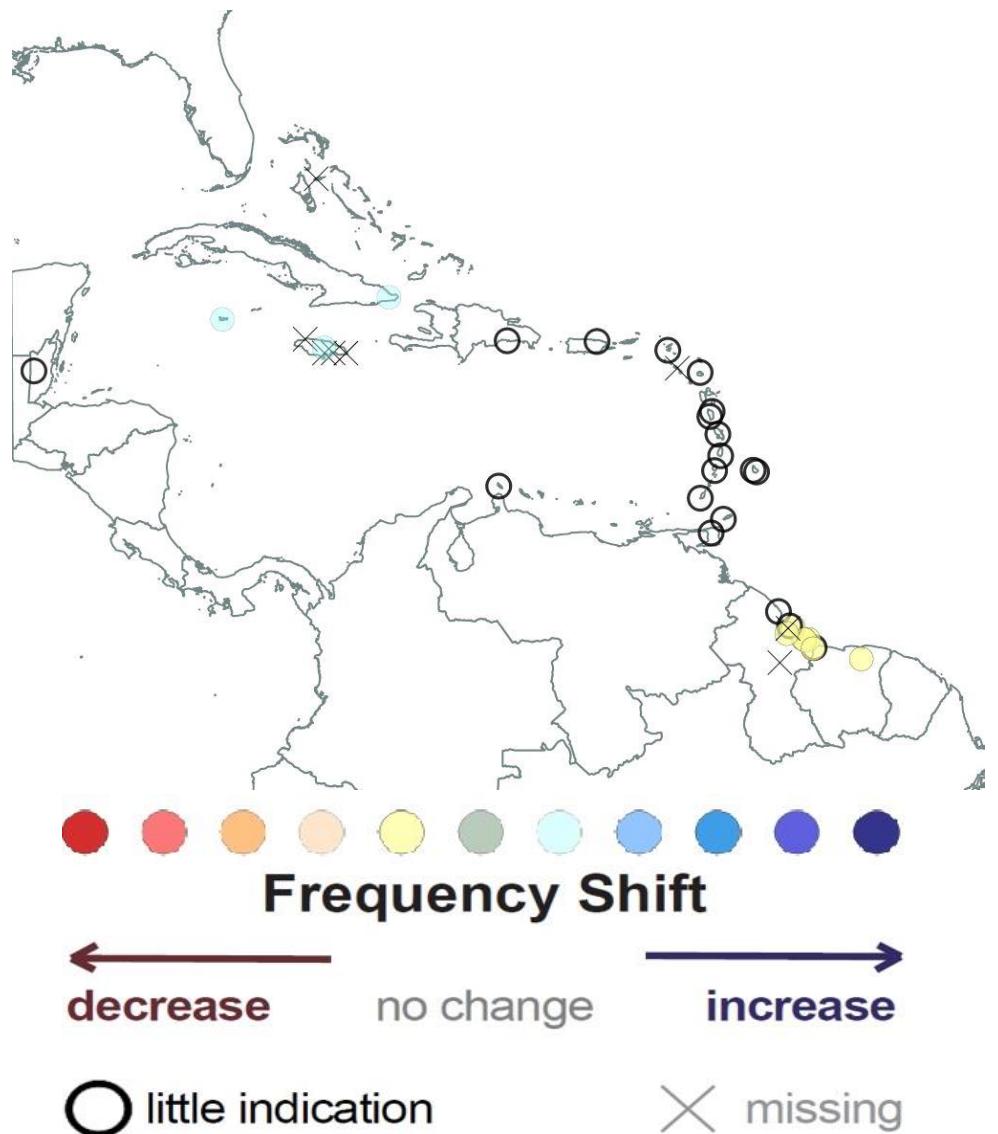
Wet spells outlook



Very wet spells outlook



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



**USUALLY:** Up to 1 extreme wet spell occurs from February to April. Virtually none in most other places through March.

**FORECAST:** FMA rainfall may be drier than usual in Cayman, Belize, the Lesser Antilles and the Guianas. The forecast indicates slightly fewer wet days northwards of Dominica (except in Cuba) (*low confid.*), and fewer wet days and wet spells further south (*medium to high confid.*), but little change in very wet spells (*low confid.*)

No significant change in the number of extreme wet spells is forecast.

### IMPLICATION:

Flash flood potential throughout the region is expected to be of some concern in April, especially in the Greater Antilles.

# February to April 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)	15-29	14-31	1-2.4	0.7-2.4	0.4-1.3	0.1-1.3	0-1	0-0.8
Aruba (Beatrix)	4-15	1-12	0.4-2.6	0.3-2.6	0-1.1	0-0.9	0-0	0-0
Barbados (CIMH)	15-30	13-29	0.4-1.6	0.2-1.7	0-0.9	0-0.8	0-0	0-0
Barbados (GAIA)	17-29	14-31	0.4-2.1	0.3-2.1	0-0.9	0-1	0-0	0-0
Belize (C. Farm)	9-20	6-20	0.4-1.6	0.1-1.5	0-0.9	0-0.8	0-0	0-0
Cayman	7-16	6-19	0-1.3	0-1.4	0-0.6	0-0.9	0-0	0-0
Cuba (Punta Maisi)	10-16	9-22	1.7-3.1	1.4-3.4	0.4-1.9	0.4-2	0-0.9	0-0.6
Dom. Republic (Las Americas)	12-21	10-22	0.9-2.5	0.8-3.1	0.4-1.7	0.3-1.5	0-0	0-0.1
Dominica (Canefield)	23-35	16-39	0-2	0-1.8	0-0.9	0-0.8	0-0	0-0
Dominica (Douglas Charles)	38-55	31-56	0.4-2.6	0.6-2.7	0-1.5	0-1.4	0-0.1	0-0
Grenada (MBIA)	11-24	9-21	0-1.2	0-1.5	0-0.6	0-0.7	0-0	0-0
Guyana_73	14-26	13-27	1-4.1	0.9-4.1	0.4-2.3	0.3-2.7	0-1.1	0-0.2
Guyana (Albion)	23-37	19-39	0.8-3.4	0.3-3.4	0-1.8	0.2-2.2	0-1	0-0.8
Guyana (Blairmont)	23-44	20-42	0.9-3.3	0.6-3.4	0.3-1.7	0.2-2.1	0-1	0-0.2
Guyana (Charity)								
Guyana (Enmore)	24-38	21-38	1.1-3	0.7-3.2	0.4-2.2	0.3-2.2	0-1.1	0-0.8
Guyana (Georgetown)	23-42	19-40	0.4-3.4	0.4-3.2	0-2.1	0.2-2.1	0-0.9	0-0
Guyana (New Amsterdam)	24-41	20-43	0.9-3.2	0.6-3.5	0.4-2	0.2-2.2	0-1	0-0.6
Guyana (Skeldon)	21-42	20-41	1-3.9	0.9-4.1	0.3-2.6	0.2-2.5	0-1	0-0.1
Guyana (Timehri)	23-46	21-45	0.4-3.1	0.5-3.6	0-1.8	0.2-1.7	0-1	0-0.5
Jamaica (Worthy Park)	14-25	13-27	1-3.2	0.6-3.2	0.2-2.1	0.2-2	0-0	0-0
Martinique (FDF Desaix)	31-47	21-48	0.3-1.7	0.2-1.8	0-0.9	0-0.9	0-0	0-0
Puerto Rico (San Juan)	21-35	18-36	0.9-2.7	0.9-3.1	0.4-1.7	0.2-1.8	0-1	0-1.2
St. Lucia (Hewanorra)	21-35	17-36	0-2.3	0.2-2.1	0-1.3	0-1.1	0-1	0-0.2
St. Maarten (TNCM)	22-38	18-37	0.9-3.3	0.7-3.5	0.4-1.3	0.1-1.4	0-0	0-0
St. Vincent (ET Joshua)	31-49	23-50	0.1-2.6	0.1-2.5	0-1.3	0-1.1	0-0	0-0
Suriname (Zanderij)	34-55	30-57	1.1-4.6	1-4.8	0.9-2.6	0.6-3	0-1	0-1
Tobago (ANR Robinson)	12-29	9-24	0-1.3	0-1.1	0-0.4	0-0.4	0-0	0-0
Trinidad (Piarco)	11-31	7-24	0-2	0-2.2	0-1.3	0-1.1	0-0	0-0

grey none are expected

dark blue an increase,

brown is a decrease in frequency,



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