

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks March to May 2019

**Dr. Cedric VAN MEERBEECK¹, Dr. Teddy ALLEN¹, Dr. Simon MASON²,
Ángel MUÑOZ², Wazita Scott¹, Dale Destin³**

¹Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados

²International Research Institute for Climate and Society (IRI), USA

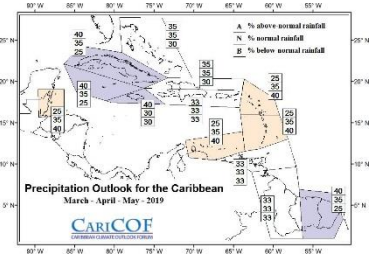
³Antigua and Barbuda Meteorological Services



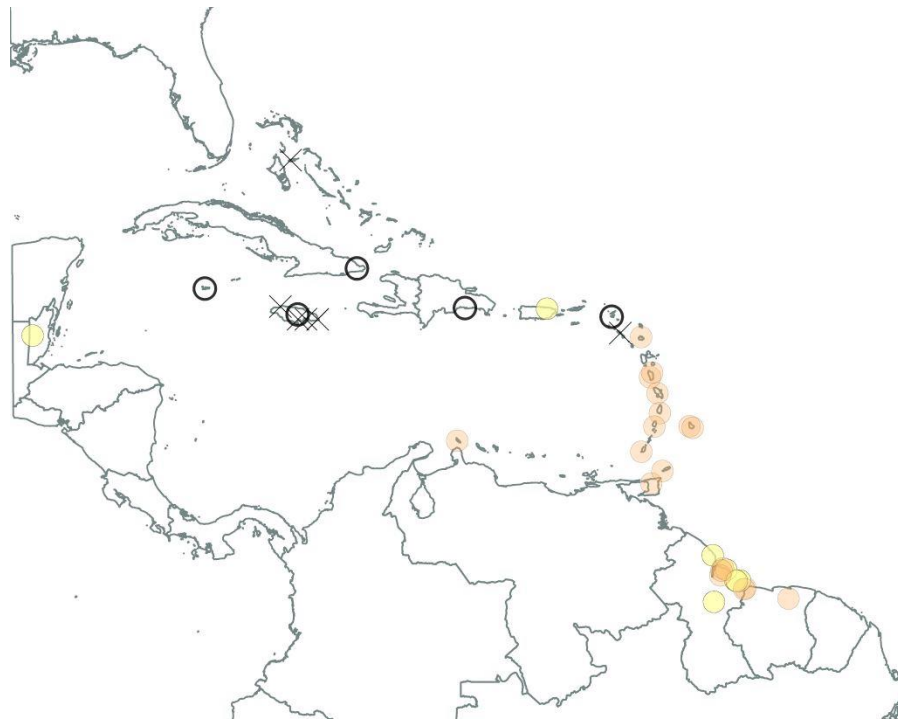
Wet day frequency shifts

Forecast for: March to May 2019

Precipitation outlook



MAM 2019
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 drier than usual in the ABC islands, Belize, and the Lesser Antilles. The forecast indicates slightly fewer wet days throughout the ABC Islands, Belize, Guianas, and Lesser Antilles (*low to medium confidence*).

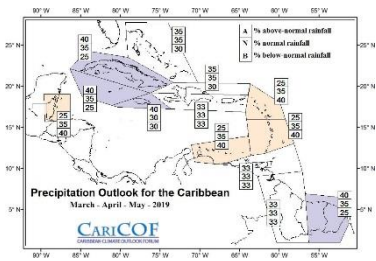
IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should be low, but increasing towards May, particularly in the Greater Antilles and Guianas.
- Decreasing surface wetness towards the end of the dry season will progressively increase wild fire potential.

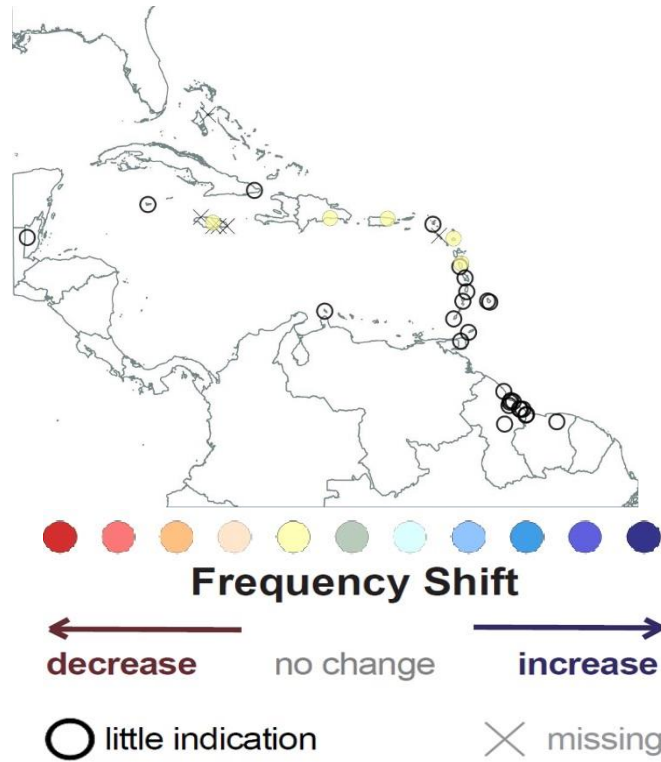
Wet spells frequency shifts

Forecast for: March to May 2019

Precipitation outlook



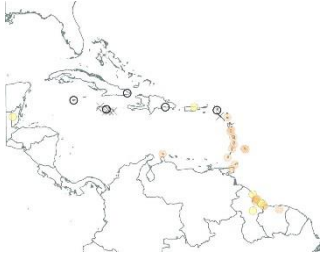
MAM 2019 frequency of 7-day wet spells



MAM 2019 frequency of 7-day very wet spells



Wet days outlook



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 drier than usual in the ABC islands, Belize, and the Lesser Antilles. The forecast indicates slightly fewer wet days throughout the ABC Islands, Belize, Guianas, and Lesser Antilles (*low to medium confidence*); **fewer wet spells in the Leeward Isls. and parts of the Greater Antilles (*low confidence*), but little change in very wet spells, except a slight increase in the southern Caribbean and Guyana (*low confidence*).**

IMPLICATIONS:

- **Potentially slightly faster than the usual depletion of large water reservoirs and soil moisture in Greater Antilles and Leewards.**
- **Rising flood potential towards May, especially in coastal Guyana.**

Extreme wet spells frequency shifts

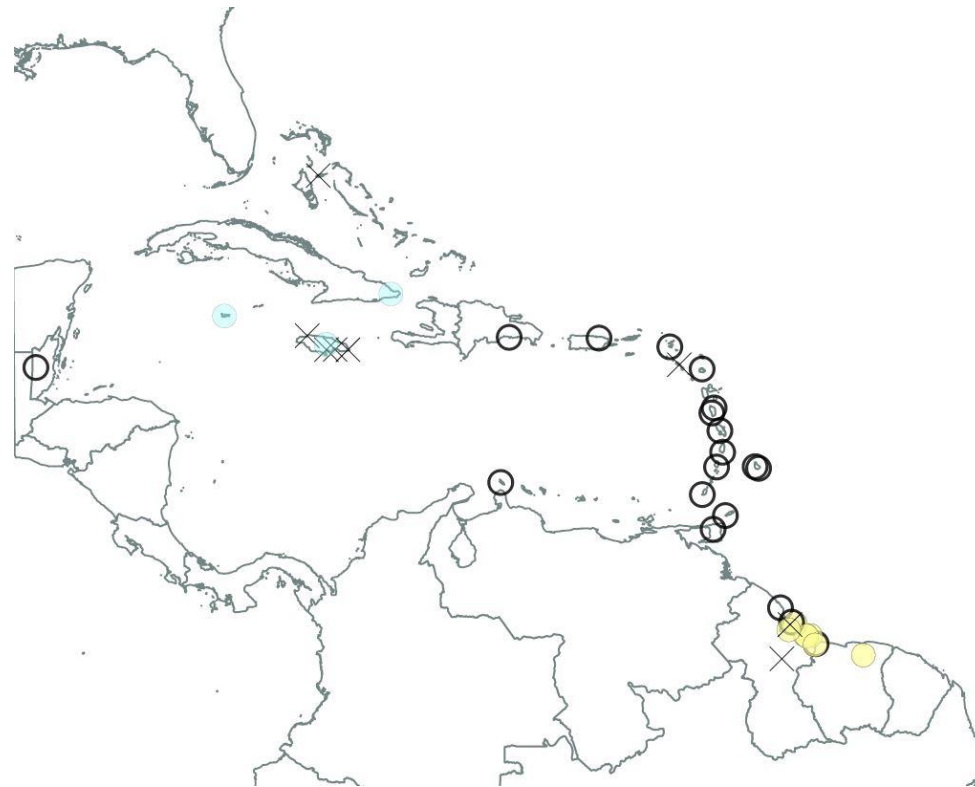
Forecast for: March to May 2019

USUALLY: : Up to 1 extreme wet spell occurs from March to May. Virtually none in most other places.

FORECAST: MAM rainfall may be drier than usual in the ABC islands, Belize, and the Lesser Antilles. The forecast indicates slightly fewer wet days throughout the ABC Islands, Belize, Guianas, and Lesser Antilles (*low to medium confidence*); fewer wet spells in the Leeward Isls. and parts of the Greater Antilles (*low confidence*), but little change in very wet spells, except a slight increase in the southern Caribbean and Guyana (*low confidence*).

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

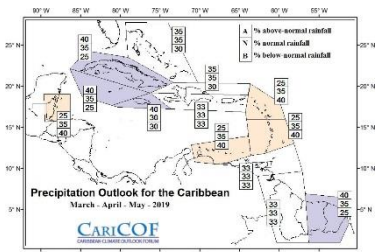
MAM 2019 frequency of extreme (top 1%) 3-day wet spells



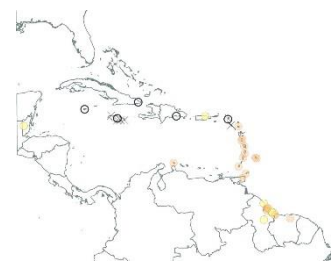
IMPLICATION:

Flash flood potential throughout the region is expected to be of little concern until April, but increase in May, especially in the Greater Antilles.

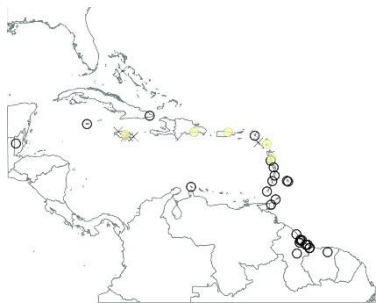
Precipitation outlook



Wet days outlook



Wet spells outlook



Very wet spells outlook



March to May 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)	17-29	14-29	1.2-3.7	0.7-3.3	0.4-2	0.3-2.1	0-1	0-1.5
Aruba (Beatrix)	2-9	1-8	0.4-1.3	0.2-1.5	0-0.9	0-1	0-0	0-0
Barbados (CIMH)	14-28	12-26	0.4-2.2	0.2-2.3	0-1.3	0-1.6	0-0.9	0-0.4
Barbados (GAIA)	15-29	14-28	0.4-2.4	0.3-2.5	0-1.3	0.1-1.6	0-1	0-0.8
Belize (C. Farm)	11-21	9-20	0.4-1.9	0.4-2	0-1.1	0-1.3	0-0	0-0
Cayman	9-22	9-24	0.9-2.4	0.9-2.7	0.4-1.1	0.3-1.7	0-1	0-1.1
Cuba (Punta Maisi)	8-20	8-22	1.3-3.9	1.1-4.3	0.4-1.9	0.4-2.1	0-1	0-1.2
Dom. Republic (Las Americas)	13-25	13-27	1.2-3.7	1-4	0.4-2	0.5-2.5	0-1	0-0.9
Dominica (Canefield)	21-35	20-33	0-2	0-2.4	0-1.2	0-1.3	0-0	0-0
Dominica (Douglas Charles)	36-60	32-55	1.3-3.4	0.9-3.6	0.1-1.7	0.1-2.2	0-1.5	0-1.7
Grenada (MBIA)	10-25	7-23	0-1.3	0-1.5	0-0.7	0-1.2	0-0	0-0
Guyana_73	19-33	18-30	1.7-5.7	1.6-5.5	0.9-2.5	0.9-3.4	0-1	0-1.5
Guyana (Albion)	27-45	25-43	1.8-4.3	2-4.5	0.9-2.3	1-2.8	0-1	0-1.2
Guyana (Blairmont)	31-48	29-48	1.9-4.9	1.8-4.7	0.9-2.4	0.9-3.4	0-1	0-1.2
Guyana (Charity)								
Guyana (Enmore)	32-44	28-44	1.7-4.7	1.7-4.9	0.9-2.4	0.9-3.1	0-1.1	0-1.4
Guyana (Georgetown)	34-50	29-48	1.4-4.1	1.6-4.4	0.9-2.1	1-2.7	0-1	0-1.2
Guyana (New Amsterdam)	33-48	28-48	1.8-4.7	1.9-4.8	0.9-2.3	1.1-3.1	0-1	0-1
Guyana (Skeldon)	32-50	29-47	1.8-5.1	1.7-5.5	0.9-2.8	1-3.4	0-1	0-1
Guyana (Timehri)	35-55	32-51	1.7-4.9	1.9-4.7	0.5-2.2	0.8-2.9	0-1.9	0-1.5
Jamaica (Worthy Park)	20-33	19-34	2.1-4.3	1.8-4.4	0.7-2.4	0.6-2.9	0-1	0-1.5
Martinique (FDF Desaix)	28-47	24-44	0.9-2.5	0.7-2.5	0.4-1.3	0.3-1.4	0-0	0-0
Puerto Rico (San Juan)	25-38	22-36	0.9-3.7	1-3.9	0.7-2.2	0.6-2.8	0-1.5	0-2.2
St. Lucia (Hewanorra)	21-39	17-35	0.4-2.5	0.1-2.4	0-1.5	0-1.6	0-0.9	0-0.5
St. Maarten (TNM)	22-33	21-36	1-3	1-3.3	0.4-1.4	0.5-1.7	0-0.9	0-0.1
St. Vincent (ET Joshua)	31-53	25-49	0.4-2.6	0.1-2.6	0-1.5	0-1.3	0-0.1	0-0.1
Suriname (Zanderij)	47-60	44-59	2.5-5.7	2-6.1	1.6-3.1	1.1-3.9	0-1.9	0-1.9
Tobago (ANR Robinson)	14-31	11-28	0.1-1.7	0-1.9	0-0.7	0-1	0-0	0-0
Trinidad (Piarco)	12-31	10-27	0.3-2.6	0.1-2.4	0-1.3	0-1.4	0-0.5	0-0



brown is a decrease in frequency,

dark blue an increase,

grey none are expected



CARICOF
CARIBBEAN CLIMATE OUTLOOK FORUM

caricof@cimh.edu.bb

rcc.cimh.edu.bb

Caribbean Institute for Meteorology and Hydrology

TEL: (246) 425-1362/3 | FAX: (246) 424-4733