

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks January to March 2019

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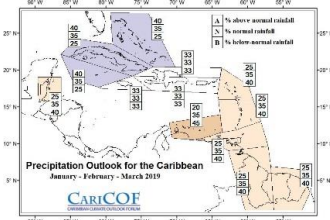
³Antigua and Barbuda Meteorological Services



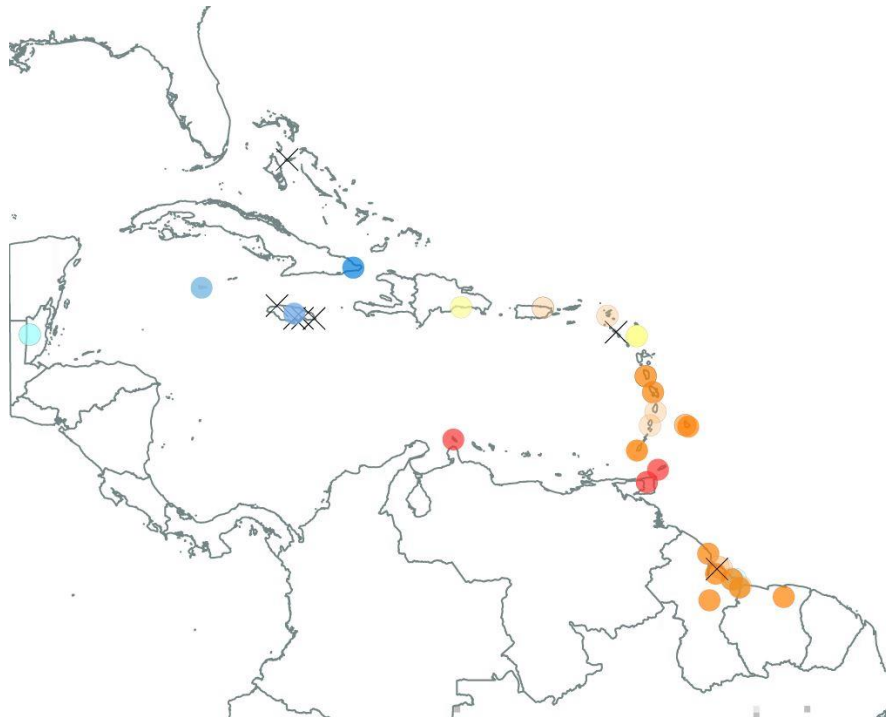
Wet day frequency shifts

Forecast for: January to March 2019

Precipitation outlook



JFM 2019
Frequency of wet days



USUALLY: Out of 90 days in Jan-Feb-Mar, there are about 15 to 50 wet days (ABC Islands: 10-25; coastal Guianas: 20 to 50).

FORECAST: JFM rainfall may be drier than usual in ABC Islands, Belize, Guianas and Lesser Antilles, but wetter than usual in The Bahamas, Cayman & Cuba. The forecast indicates slightly more wet days westwards of Dom. Rep. (*low to medium confidence*), and fewer wet days east- and southwards (*medium to high confid.*).

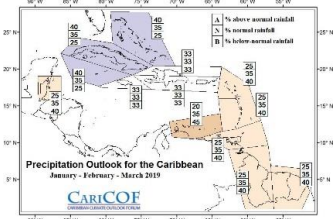
IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should decrease with time.
- Decreasing surface wetness will progressively make environmental conditions less conducive to mosquito breeding and moisture related pests.

Wet spells frequency shifts

Forecast for: January to March 2019

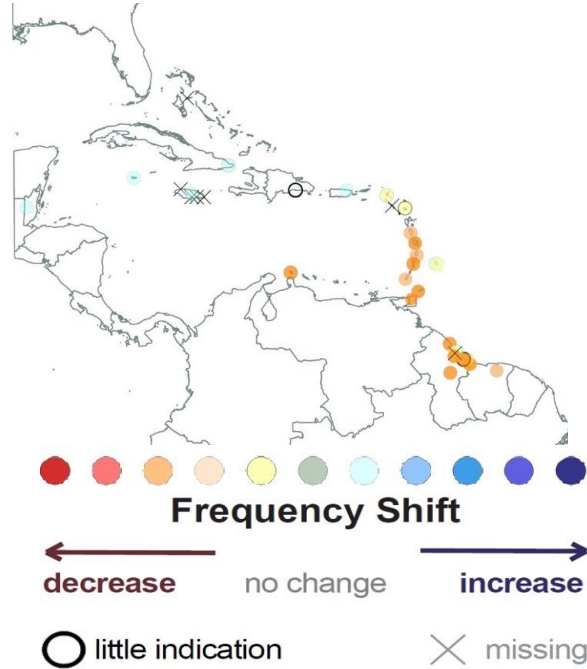
Precipitation outlook



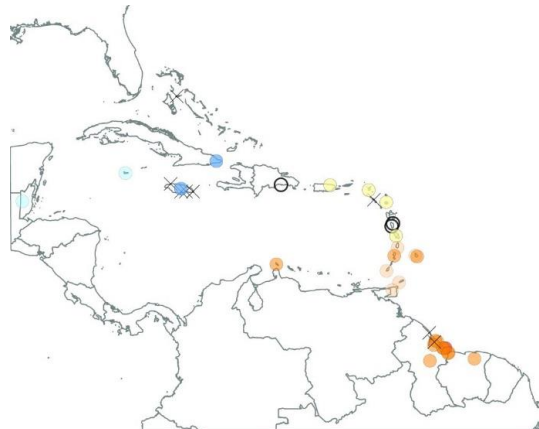
Wet days outlook



JFM 2019 frequency of 7-day wet spells



DJF 2018-'19 frequency of 7-day very wet spells



USUALLY: Between 1 and 4 wet spells occur from January to March, with up to 1 or 2 of them ending up very wet (ABC Islands & coastal Guianas: up to 3).

FORECAST: JFM rainfall may be drier than usual in ABC Islands, Belize, Guianas and Lesser Antilles, but wetter than usual in The Bahamas, Cayman & Cuba. The forecast indicates slightly more wet days and wet spells westwards of Dom. Rep. (*low to medium confidence*), and fewer wet days and wet spells east- and southwards (*medium to high confid.*).

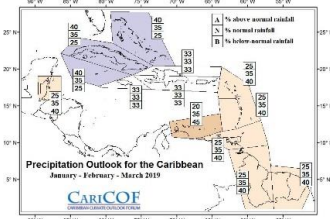
IMPLICATIONS:

- Potentially slightly faster than the usual depletion of large water reservoirs in Eastern Caribbean.
- Weakened flood potential in eastern part of the region through early March.

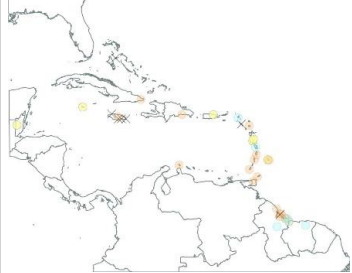
Extreme wet spells frequency shifts

Forecast for: January to March 2019

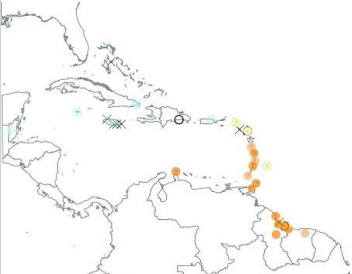
Precipitation outlook



Wet days outlook



Wet spells outlook



Very wet spells outlook



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



USUALLY: Up to 1 extreme wet spell occur from January to March in the coastal Guianas, but nearly none in other parts of the region

FORECAST: JFM rainfall may be drier than usual in ABC Islands, Belize, Guianas and Lesser Antilles, but wetter than usual in The Bahamas, Cayman & Cuba. The forecast indicates slightly more wet days and wet spells westwards of Dom. Rep. (*low to medium confidence*), and fewer wet days and wet spells east- and southwards (*medium to high confid.*). **A slightly lower chance of the occurrence of extreme wet spells is forecast for the Guianas.**

IMPLICATION:

Flash flood potential is expected to be very low in Belize and the Caribbean Islands and slightly reduced in the coastal Guianas.

January to March 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)	16-35	16-37	0.9-2.3	0.6-2.5	0-0.9	0-1	0-0	0-0
Aruba (Beatrix)	7-25	1-18	1-4.3	0.3-3.1	0-1.9	0-1.4	0-0	0-0
Barbados (CIMH)	16-38	14-35	0.3-1.7	0.1-1.6	0-0.9	0-0.7	0-0	0-0
Barbados (GAIA)	21-33	15-36	0.6-2.1	0.3-1.8	0-0.9	0-0.7	0-0	0-0
Belize (C. Farm)	14-26	14-31	0.9-2.6	0.7-2.9	0.4-1.3	0.2-1.3	0-0.3	0-0
Cayman	8-19	10-22	0-1.6	0.2-1.7	0-0.7	0-1	0-0	0-0
Cuba (Punta Maisi)	11-19	11-27	1.8-3.4	1.7-4.4	0.4-1.7	0.7-2.4	0-0.4	0-0.2
Dom. Republic (Las Americas)	12-19	11-22	0.8-2	0.5-2.3	0-0.9	0-1.2	0-0	0-0
Dominica (Canefield)	28-46	20-47	0-2.9	0-2.2	0-1.1	0-1.2	0-0	0-0
Dominica (Douglas Charles)	43-59	32-58	0.5-2.1	0.1-1.8	0-1.3	0-1	0-0	0-0
Grenada (MBIA)	15-30	10-26	0-2.3	0-1.8	0-1	0-0.8	0-0	0-0
Guyana_73	12-27	9-23	0.7-4.4	0.5-2.9	0.4-2.9	0-1.7	0-1	0-0.1
Guyana (Albion)	18-44	12-39	0.2-4.7	0-2.7	0-2.9	0-1.8	0-1	0-0.4
Guyana (Blairmont)	20-51	15-44	0.4-4.2	0.1-2.9	0-2.8	0-1.6	0-1.8	0-0.5
Guyana (Enmore)	21-45	16-37	0.4-4.2	0.1-3.3	0.4-3.1	0-2.1	0-1.5	0-1.1
Guyana (Georgetown)	23-49	16-42	0.3-4.2	0-2.7	0-2.6	0-1.8	0-1.1	0-1
Guyana (New Amsterdam)	21-46	16-42	0.4-3.9	0.1-2.6	0-3	0-1.7	0-1.1	0-0.4
Guyana (Skeldon)	20-46	15-41	0.9-4.2	0.4-2.8	0.3-2.6	0-1.6	0-0.4	0-0
Guyana (Timehri)	23-52	18-45	0.4-3.9	0.3-2.7	0-2.6	0-1.6	0-1.1	0-1.1
Jamaica (Worthy Park)	14-26	14-30	0.4-3	0.4-3.4	0-1.5	0-1.6	0-0	0-0
Martinique (FDF Desaix)	40-54	25-56	0.4-2.1	0.1-1.9	0-0.9	0-0.8		
Puerto Rico (San Juan)	26-41	20-40	0.9-2.6	0.8-3.2	0-0.9	0-1.2	0-0.8	0-0.2
St. Lucia (Hewanorra)	24-42	22-41	0.4-2.1	0.3-1.8	0-0.9	0-0.8	0-0	0-0
Tobago (ANR Robinson)	17-33	10-28	0-1.4	0-0.8	0-0.5	0-0.5	0-0	0-0
Trinidad (Piarco)	15-33	9-27	0-2.5	0-1.7	0-1.3	0-0.9	0-0	0-0

brown is a decrease in frequency,

dark blue an increase,

grey none are expected



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