

# Rainfall frequency and extreme forecasts

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## wet days and wet spells outlooks January to March 2018

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# Wet day frequency shifts

Forecast for: January to March 2018

JFM 2018

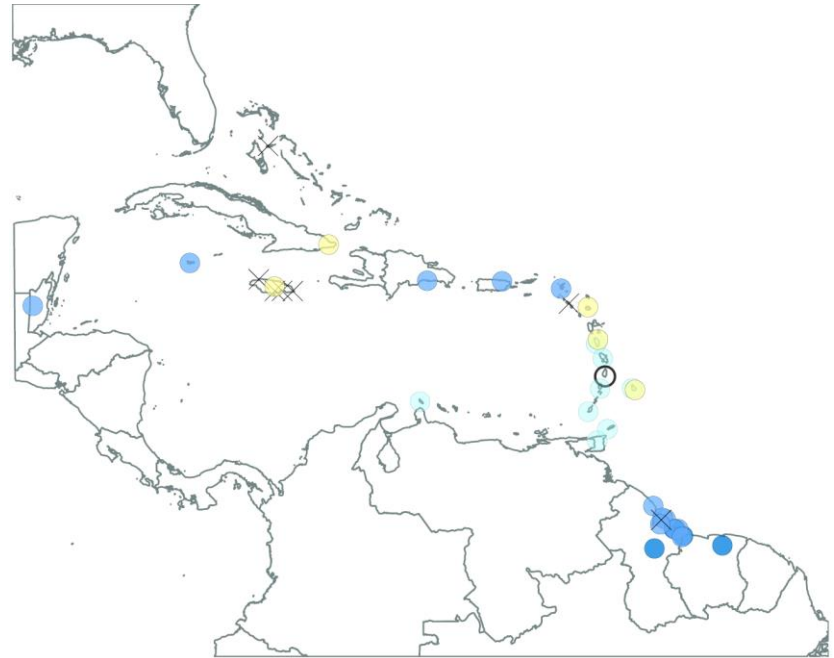
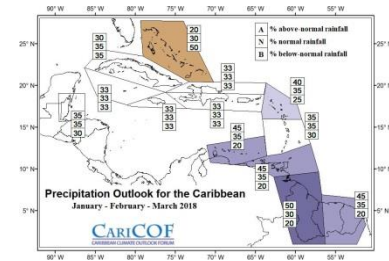
Frequency of wet days

**USUALLY:** Across the region during January-February-March, about 20 to 40 days out of a total of 90 days are wet days.

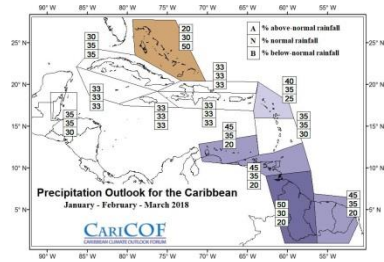
**FORECAST:** JFM rainfall is likely to be above- to normal in the ABC Islands, Guianas, Leewards and Trinidad & Tobago, but below- to normal in the Bahamas. The forecast indicates a slight increase in the number of wet days in coastal Guianas (*medium to high confidence*), and roughly the usual number elsewhere (*low to medium confid.*).

## IMPLICATION:

- Rainfall disruptions of outdoor activities, becoming less frequent towards February.
- Increased surface wetness in Guianas during January makes environmental conditions more conducive to moisture related pests.
- More reliable rains in the Guianas until the end of the wet season.



## Precipitation outlook



## Wet days outlook



## JFM 2018 frequency of 7-day wet spells



## JFM 2018 frequency of 7-day very wet spells



# Wet spells frequency shifts

## Forecast for: January to March 2018

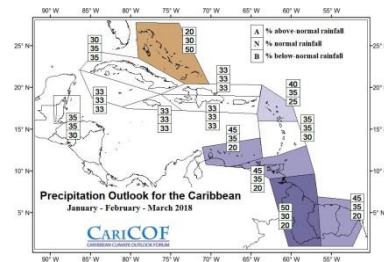
**USUALLY:** Up to 3 wet spells (ABC Islands and coastal Guianas: up to 4) occur from January to March, with up to 1 of them ending up very wet (ABC Islands: up to 2; coastal Guianas: up to 3).

**FORECAST:** JFM rainfall is likely to be above- to normal in the ABC Islands, Guianas, Leewards and Trinidad & Tobago, but below- to normal in the Bahamas. The forecast indicates a slight increase in the number of wet days in coastal Guianas (*medium to high confidence*), and roughly the usual number elsewhere (*low to medium confid.*). The forecast indicates no change from the usual number of wet spells and very wet spells (*low confidence*).

### IMPLICATION:

- Usual depletion rates of large water reservoirs during the dry season.
- Long-term flood potential in coastal Guianas.

## Precipitation outlook



# Extreme wet spells frequency shifts

## Forecast for: January to March 2018

**USUALLY:** Virtually no extreme wet spells occur between January and March, except in coastal Guianas (up to 1).

**FORECAST:** JFM rainfall is likely to be above-normal in the ABC Islands, Guianas, Leewards and Trinidad & Tobago, but below-normal in the Bahamas. The forecast indicates a slight increase in the number of wet days, wet spells & very wet spells in ABC Islands and Lesser Antilles (*low to medium confidence*), a 10-20% increase in coastal Guianas (*medium to high confid.*), but a decrease in wet days in Cayman and Jamaica (*low confid.*). The forecast indicates no change from the usual number of wet spells, very wet spells and extreme wet spells (*low confidence*).

## JFM 2018 frequency of extreme (top 1%) 3-day wet spells



## Wet days outlook



## Wet spells outlook



## Very wet spells outlook



**IMPLICATION:** Flash flood potential remains a concern in coastal Guianas through January.



# January - March 2018

	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	15-38	0.8-2.3	0.8-2.6	0-0.9	0-1	0-0
Aruba (Beatrix)	7-25	6-30	1.1-4.3	1.2-4.3	0-2	0-1.9	0-0	0-0
Barbados (CIMH)	17-38	18-44	0.2-1.7	0.3-2	0-0.9	0-0.9	0-0	0-0
Barbados (GAIA)	21-33	16-39	0.5-2.1	0.6-2.3	0-0.9	0-0.8	0-0	0-0
Belize (C. Farm)	14-26	14-35	0.9-2.6	0.7-2.6	0.4-1.3	0.2-1.3	0-0.2	0-0
Cayman	8-19	9-24	0-1.6	0.1-1.6	0-0.7	0-0.9	0-0	0-0
Cuba (Punta Maisi)	11-19	8-23	1.7-3.4	1.5-3.9	0.4-1.7	0.5-1.9	0-0.3	0-0.1
Dom. Republic (Las Americas)	12-19	12-24	0.8-1.9	0.6-2.2	0-0.9	0-1.2	0-0	0-0
Dominica (Canefield)	29-46	23-57	0-2.9	0.1-2.7	0-1.1	0-1.2	0-0	0-0
Dominica (Douglas Charles)	43-59	33-63	0.4-2.1	0.5-2.1	0-1.3	0-1.1	0-0	0-0
Grenada (MBIA)	15-31	14-36	0-2.3	0.1-2.3	0-1.1	0-1	0-0	0-0
Guyana_73	12-27	13-35	0.8-4.4	1-4.3	0.4-2.9	0.3-2.5	0-1	0-0.4
Guyana (Albion)	19-44	20-57	0.2-4.7	0.5-4.4	0-2.9	0.3-2.5	0-1	0-1
Guyana (Blairmont)	20-51	24-65	0.4-4.2	0.6-4.3	0-2.9	0.2-2.2	0-1.9	0-1.2
Guyana (Enmore)								
Guyana (Georgetown)	22-45	24-51	0.4-4.2	0.6-4.4	0.4-3	0.3-3	0-1.7	0-1.2
Guyana (New Amsterdam)	23-49	25-58	0.3-4.2	0.5-4.3	0-2.6	0.1-2.7	0-1	0-1.4
Guyana (Skeldon)	31-55	33-68	0.8-3.3	0.9-3.4	0-2.1	0.2-1.9	0-0.2	0-0.4
Guyana (Timehri)	21-46	24-58	0.4-3.9	0.7-3.9	0-3	0.2-2.4	0-1	0-0.9
Jamaica (Worthy Park)	20-46	22-56	0.9-4.2	1-4	0.3-2.6	0.3-2.2	0-0.6	0-0
Martinique (FDF Desaix)	23-52	28-64	0.4-3.9	0.8-4.1	0-2.6	0.2-2.4	0-1	0-1.5
Puerto Rico (San Juan)								
St. Lucia (Hewanorra)	14-26	12-28	0.4-3	0.3-3	0-1.4	0-1.5	0-0	0-0
St. Maarten (TNM)	39-54	29-66	0.4-2.1	0.4-2.5	0-0.9	0-0.9		
St. Vincent (ET Joshua)	26-41	23-48	0.9-2.6	0.8-2.9	0-0.9	0-1.2	0-0.9	0-0.2
Suriname (Zanderij)	24-42	23-45	0.4-2.1	0.7-2.2	0-0.9	0-1	0-0	0-0
Tobago (ANR Robinson)	28-43	26-52	1.3-3.7	1-3.9	0.2-1.4	0.2-1.5	0-0	0-0
Trinidad (Piarco)	39-54	32-64	0.4-2.5	0.4-2.4	0-1	0-1.1	0-0	0-0

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



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