

# Rainfall frequency and extreme forecasts

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## Wet days and Wet spells Outlooks November to January 2019-'20

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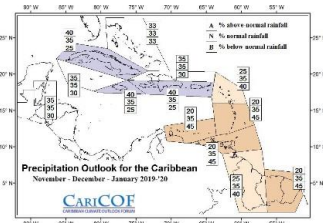
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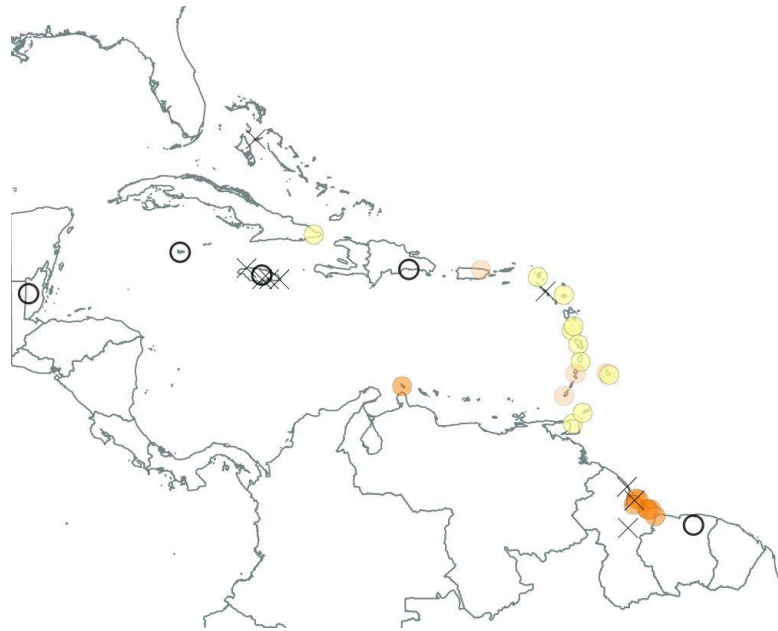
# Wet day frequency shifts

## Forecast for: November to January 2019-'20

Precipitation outlook



NDJ 2019  
Frequency of wet days



**USUALLY:** Out of 92 days in Nov-Dec-Jan, there are about 35 to 50 wet days (coastal Guianas: 30-50; ABC Islands: 20-45).

**FORECAST:** NDJ rainfall may be wetter than usual in Cuba, S Hispaniola and US C'bean Terr., but drier than in the ABC Isls, Guianas and Lesser Antilles, with a fraction fewer wet days (*low to medium confidence*).

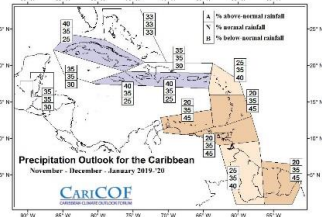
### IMPLICATIONS:

- Decreasing surface wetness associated to the decreasing number of wet days will make environmental conditions less conducive to mosquito breeding and moisture related pests in Belize and the islands.
- Surface dryness enhanced in Guyana and Suriname until late-November.

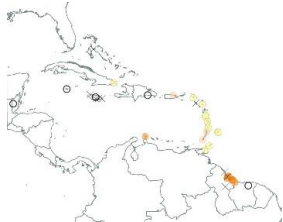
# Wet spells frequency shifts

## Forecast for: November to January 2019-'20

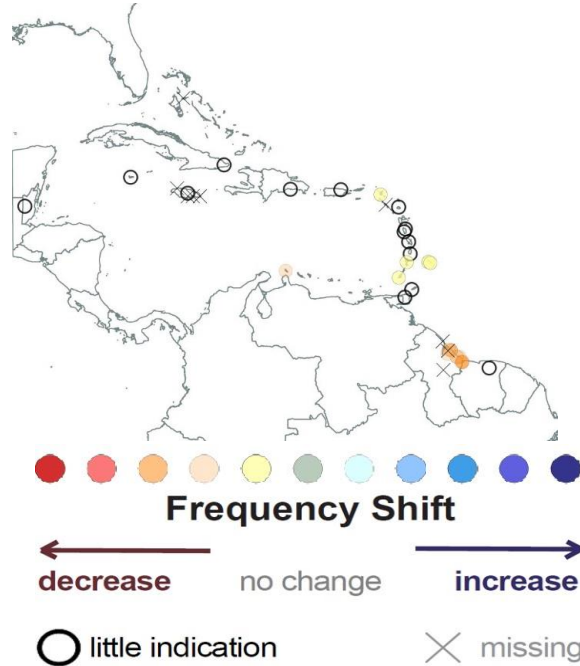
Precipitation outlook



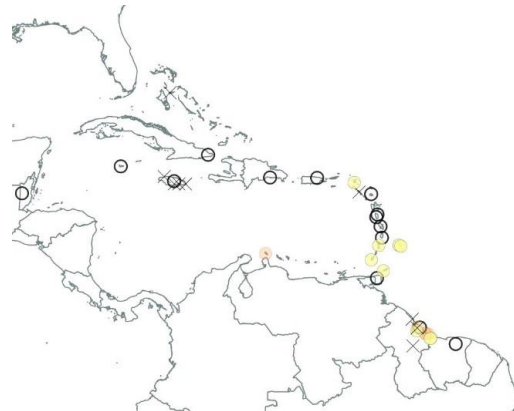
Wet days outlook



NDJ 2019 frequency of 7-day wet spells



NDJ 2019 frequency of 7-day very wet spells



**USUALLY:** Between 2 and 5 wet spells occur from November to January, with 1 to 3 of them ending up very wet (coastal Guianas: up to 3).

**FORECAST:** NDJ rainfall may be wetter than usual in Cuba, S Hispaniola and US C'bean Terr., but drier than in the ABC Isls, Guianas and Lesser Antilles, with a fraction fewer wet days (*low to medium confidence*) there is no shift in the forecast number of wet and very wet spells in these areas, but a more marked decrease in Guyana, where fewer wet and very wet spells are also expected (*medium to high confid.*).

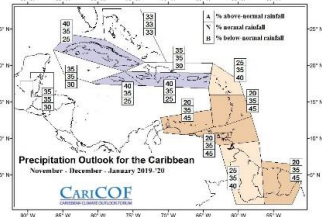
### IMPLICATIONS:

- Progressively slower recharge of water reservoirs and soil moisture in Belize and the Islands in view of the decreasing number of wet spells.
- Significant, though slightly reduced potential for long-term flooding across the region.

# Extreme wet spells frequency shifts

## Forecast for: November to January 2019-'20

Precipitation outlook



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



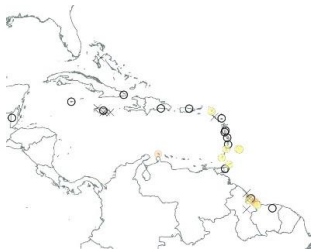
Wet days outlook



Wet spells outlook



Very wet spells outlook



**USUALLY:** Up to 2 extreme wet spells occur from November to January (Belize and the Greater Antilles up to 1).

**FORECAST:** NDJ rainfall may be wetter than usual in Cuba, S Hispaniola and US C'bean Terr., but drier than in the ABC Isls, Guianas and Lesser Antilles, with a fraction fewer wet days (*low to medium confidence*) there is no shift in the forecast number of wet and very wet spells in these areas, but a more marked decrease in Guyana, where fewer wet and very wet spells are also expected (*medium to high confid.*).  
**A slightly reduced chance for extreme wet spells is forecast (*low to medium confid.*) for the Guianas.**

### IMPLICATION:

**Significant potential for flash flood up until December in Belize and the islands, and from late November onwards in the coastal Guianas.**

# November to January 2019-'20

	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)	29-44	27-44	2.1-4.7	2-4.6	0.9-2.6	0.7-2.6	0-1	0-1.1
Aruba (Beatrix)	18-44	15-37	2.6-8.1	2.5-7	0.9-5.4	0.8-3.9	0-2	0-2.1
Barbados (CIMH)	30-47	28-46	1.7-4.7	1.5-4.2	0.9-2.7	0.5-2.7	0-1	0-1.5
Barbados (GAIA)	31-45	28-45	2-4.7	1.7-4.5	0.9-3	0.7-2.8	0-1.4	0-1.5
Belize (C. Farm)	30-46	27-48	1.8-5.2	2-5.1	0.9-2.7	0.8-2.7	0-1	0-0.7
Cayman	18-26	16-30	1-3	0.9-3.3	0.4-2.1	0.3-2	0-1	0-1.4
Cuba (Punta Maisi)	17-27	15-28	2.7-4.7	2.5-4.9	1-2.8	0.9-3.1	0-1	0-1.3
Dom. Republic (Las Americas)	20-28	18-29	1.8-3.5	1.4-3.6	0.4-1.7	0.3-1.9	0-0.8	0-0.3
Dominica (Canefield)	41-53	39-54	1.9-3.4	1.6-3.9	0.6-2.2	0.6-2.1	0-1	0-0.3
Dominica (Douglas Charles)	55-66	52-68	1.8-4.7	1.7-5	0.5-2.6	0.6-2.8	0-1	0-1.4
Grenada (MBIA)	29-43	25-44	2-4.6	1.8-4.6	0.9-2.6	0.7-2.6	0-1.1	0-1.8
Guyana_73	15-31	13-25	1.3-4.6	1-3.4	0.4-3.2	0.3-2.3	0-2	0-0.8
Guyana (Albion)	26-49	22-43	1.3-5.1	1.1-4.1	0.4-3	0.4-2.1	0-1	0-0.9
Guyana (Blairmont)	30-55	26-48	1.7-4.8	1.3-4.1	0.5-2.6	0.4-2.2	0-2	0-1.1
Guyana (Enmore)	27-52	24-48	1.7-4.9	1.3-3.9	0.9-3.4	0.8-3	0-1.4	0-1.2
Guyana (Georgetown)	36-60	33-52	1.3-5.6	1.1-4.4	0.7-4.2	0.3-3	0-2.9	0-1.9
Guyana (New Amsterdam)	30-51	27-46	1.6-4.3	1.1-3.8	0.6-3.3	0.5-2.5	0-2	0-1.7
Guyana (Skeldon)	32-45	27-46	1.7-4.3	1.2-3.2	0.4-2.5	0-2.1	0-1.7	0-0.7
Guyana (Timehri)	40-64	39-56	1.6-5.3	1.4-4.3	0.9-3.2	0.5-2.6	0-1	0-1.4
Jamaica (Worthy Park)	22-28	18-31	1.7-3	1.4-3	0.2-2.1	0.4-2.1	0-1	0-0.1
Martinique (FDF Desaix)	51-62	47-64	2.5-4.7	1.8-5	0.9-2.6	0.7-2.6	0-1	0-1.3
Puerto Rico (San Juan)	36-51	34-51	2.7-5.3	2.7-5.2	0.9-2.6	0.9-3	0-1	0-1.3
St. Lucia (Hewanorra)	38-50	34-52	1.7-3.6	1.9-4.2	0.7-2.6	0.6-2.5	0-1	0-1.3
St. Maarten (TNCM)	34-52	32-53	2.1-5.3	2.2-5.5	1.3-3.2	0.9-2.8	0-1	0-2.1
St. Vincent (ET Joshua)	50-66	47-63	2-4.7	1.5-4.7	0.9-2.6	0.7-2.7	0-1	0-1.5
Suriname (Zanderij)	40-52	37-55	1.7-3.6	1.6-3.5	0.4-1.7	0.4-2.6	0-1	0-1.1
Tobago (ANR Robinson)	36-51	34-48	2.1-4	1.5-4.4	0.9-2.4	0.9-2.3	0-1	0-1.5
Trinidad (Piarco)	35-46	31-46	2.6-4.5	2.2-4.6	1.3-3	0.8-2.7	0-1	0-1.4

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



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