

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks October to December 2019

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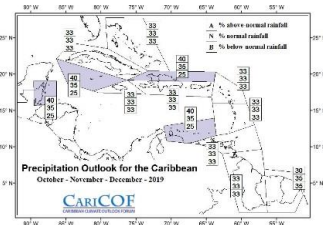
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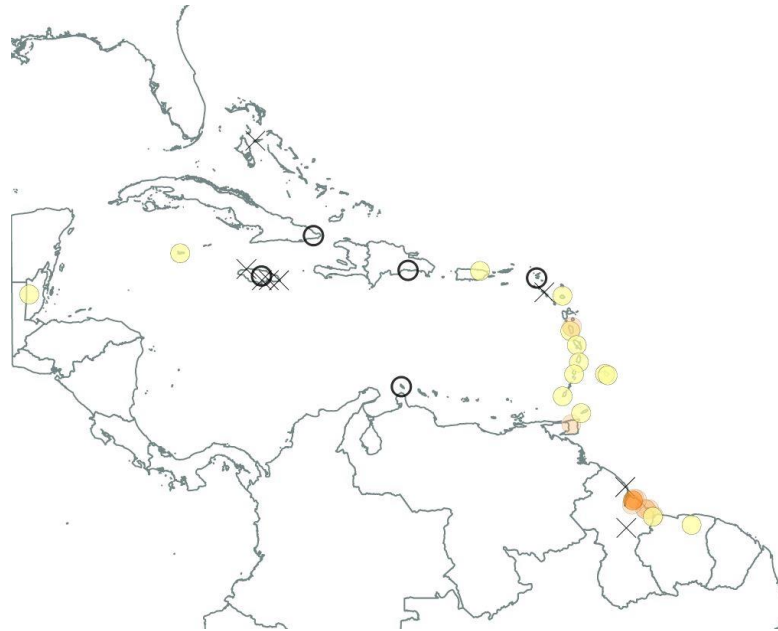
Wet day frequency shifts

Forecast for: October to December 2019

Precipitation outlook



OND 2019
Frequency of wet days



USUALLY: Out of 92 days in Oct-Nov-Dec, there are about 35 to 50 wet days (coastal Guianas: 20-40; ABC Islands: 15-35).

FORECAST: OND rainfall may be wetter than usual in the ABC Islands, Belize and Cayman, but drier than usual in French Guiana and Suriname. The forecast indicates a fraction fewer wet days in Guyana (*medium confidence*), possibly also in Belize, Cayman, Puerto Rico and the Lesser Antilles (*low confid.*), but little change elsewhere (*low confid.*).

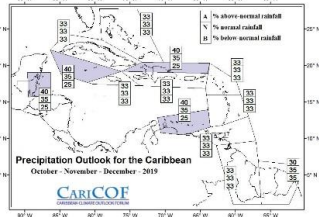
IMPLICATIONS:

- Surface wetness associated to the many wet days keeps environmental conditions more conducive to mosquito breeding and moisture related pests.
- Surface dryness possibly enhanced in Guyana and Suriname until late-November.

Wet spells frequency shifts

Forecast for: October to December 2019

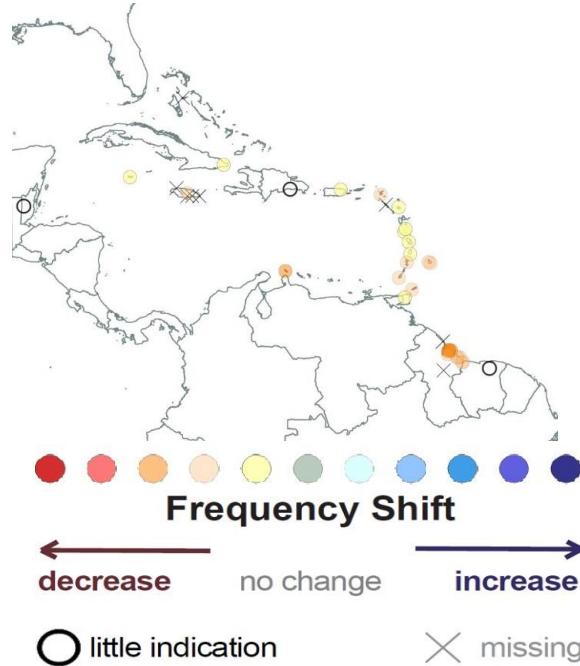
Precipitation outlook



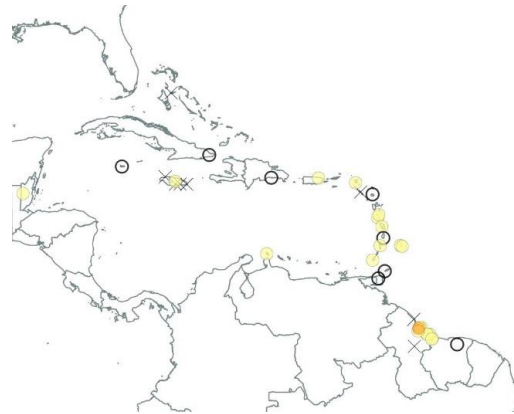
Wet days outlook



OND 2019 frequency of 7-day wet spells



SON 2019 frequency of 7-day very wet spells



USUALLY: Between 3 and 6 wet spells (coastal Guianas: 1-4) occur from October to December, with 1 to 4 of them ending up very wet (coastal Guianas: up to 2).

FORECAST: OND rainfall may be wetter than usual in the ABC Islands, Belize and Cayman, but drier than usual in French Guiana and Suriname. The forecast indicates a fraction fewer wet days and wet spells in Guyana (*medium confidence*), possibly also in Belize, Cayman, Puerto Rico and the Lesser Antilles (*low confid.*), but little change elsewhere (*low confid.*).

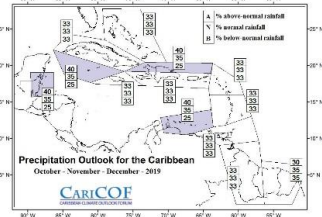
IMPLICATIONS:

- Potentially slower recharge of water reservoirs and soil moisture in Barbados and Windwards, but accelerated depletion in the Guianas.
- Significant, though slightly reduced potential for long-term flooding across the region.

Extreme wet spells frequency shifts

Forecast for: October to December 2019

Precipitation outlook



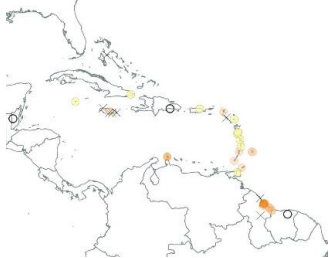
SON 2019 frequency of extreme (top 1%) 3-day wet spells



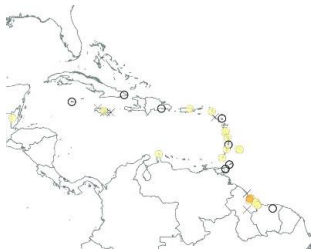
Wet days outlook



Wet spells outlook



Very wet spells outlook



USUALLY: Up to 2 extreme wet spell occur from October to December (Guianas: up to 1).

FORECAST: OND rainfall may be wetter than usual in the ABC Islands, Belize and Cayman, but drier than usual in French Guiana and Suriname. The forecast indicates a fraction fewer wet days and wet spells in Guyana (*medium confidence*), possibly also in Belize, Cayman, Puerto Rico and the Lesser Antilles (*low confid.*), but little change elsewhere (*low confid.*).
No significant change in the number of extreme wet spells is forecast (*low confid.*).

IMPLICATION:

Significant potential for flash flood, in view of the usual peak in the number of extreme wet spells until December in Belize and the Islands, and from late November onwards in the coastal Guianas.

October to December 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)	32-44	30-45	3-5.6	2.6-5.5	1.3-3.2	1.2-3.6	0-1	0-1.3
Aruba (Beatrix)	18-44	18-39	3.3-8.6	2.8-6.8	1.3-6.8	1-5.3	0-2.5	0-2.4
Barbados (CIMH)	35-48	33-48	3.4-5.6	2.9-5.5	1.3-3.9	1.2-3.7	0-2	0-1.9
Barbados (GAIA)	35-49	34-49	3.3-5.6	2.9-5.3	1.5-3.4	1.5-3.6	0-2	0-1.9
Belize (C. Farm)	33-49	29-48	2.8-5.4	2.7-5.5	1.4-2.6	1.4-2.9	0-1	0-1.3
Cayman	22-39	21-40	2.2-4.7	1.9-5.1	1-3.7	0.8-3.3	0-2.6	0-2.2
Cuba (Punta Maisi)	18-32	17-34	2.6-5.8	2.5-5.9	1.3-4.3	1.2-4.2	0-2	0-1.9
Dom. Republic (Las Americas)	26-35	23-38	2.5-4.9	2.1-5.3	0.4-3	0.5-3.2	0-1.9	0-1.1
Dominica (Canefield)	41-54	38-53	2.6-4.7	2.1-4.5	1-2.6	0.7-2.7	0-1.1	0-1.5
Dominica (Douglas Charles)	57-69	55-69	3-5.8	2.6-5.7	1.7-3.7	1.4-3.6	0-1.2	0-1.6
Grenada (MBIA)	33-48	31-47	3.4-5.6	2.7-5.4	1.4-3.4	1.1-3.7	0-2	0-1.9
Guyana_73	13-25	12-23	1.3-3.4	1-2.8	0.2-2.4	0-2.2	0-1.3	0-0.5
Guyana (Albion)	18-40	13-37	0.8-4.5	0.3-3.4	0-2.3	0-2	0-1.4	0-0.9
Guyana (Blairmont)	20-41	17-38	1-3.9	0.5-3.2	0.4-2.1	0-2	0-1	0-1.2
Guyana (Charity)								
Guyana (Enmore)	17-49	16-43	0.9-4.3	0.7-3.3	0.4-2.9	0.3-2.4	0-2	0-1.6
Guyana (Georgetown)	28-46	28-46	1.2-4.5	0.8-3.3	0.4-2.8	0.3-2.4	0-1.9	0-1.9
Guyana (Greatfall)								
Guyana (New Amsterdam)	23-40	20-38	1.1-3.9	0.4-3.2	0.4-2.2	0.1-2.1	0-1	0-1.4
Guyana (Skeldon)	26-39	22-40	1.3-3.6	1.1-3.1	0.4-1.9	0.4-1.9	0-1.5	0-1
Guyana (Timehri)	40-51	36-50	1.7-4.1	1.5-3.4	0.4-2.3	0.5-2.2	0-1	0-0.9
Guyana_Wales	30-48	28-46	1.7-4.4	1-3.6	0.4-2.6	0.3-2.2	0-1	0-1.1
Jamaica (Worthy Park)	24-39	22-40	2.6-5.1	2.1-4.3	1.1-2.6	0.9-3	0-1	0-1.1
Martinique (FDF Desaix)	49-61	46-63	3.3-6.2	2.6-5.9	1.4-3.2	1.3-3.2	0-2	0-1.7
Puerto Rico (San Juan)	39-52	35-54	3-5.9	2.8-5.4	0.9-3.4	1-3.6	0-1	0-1.1
St. Lucia (Hewanorra)	41-54	37-53	3-5.3	2.7-5.1	1.3-3.4	1.1-3.3	0-1.1	0-1.5
St. Maarten (TNCM)	36-50	34-51	2.7-5.6	2.6-5.4	1.6-3.8	1.2-3.4	0-1.9	0-2.1
St. Vincent (ET Joshua)	52-64	49-64	3.4-6.4	2.7-5.9	1.7-3.6	1.2-3.4	0-2	0-2.3
Suriname (Zanderij)	28-44	27-45	1.3-2.6	1.1-2.5	0-1.5	0-2.3	0-1	0-0.7
Tobago (ANR Robinson)	41-53	39-51	2.9-5.6	2.4-5.2	1.4-3.4	1.3-3	0-1	0-1.7
Trinidad (Piarco)	39-50	38-49	3.3-6	3.1-5.5	1.6-3.6	1.5-3.3	0-2	0-1.8

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



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