

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks September to November 2018

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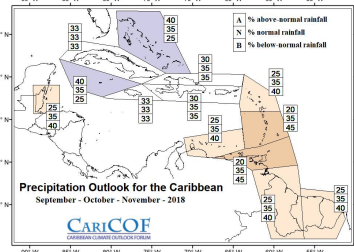
³Antigua and Barbuda Meteorological Services



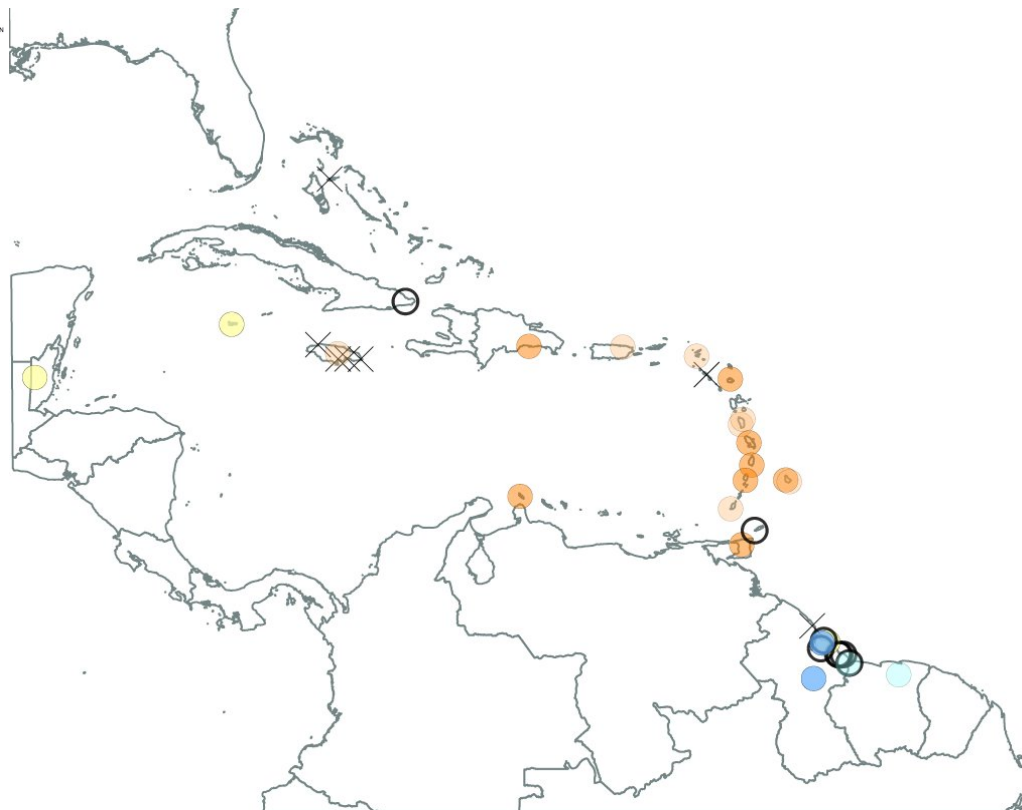
Wet day frequency shifts

Forecast for: September to November 2018

Precipitation outlook



SON 2018
Frequency of wet days



USUALLY: Out of 91 days in Sep-Oct-Nov, there are about 35 to 50 wet days (coastal Guianas: 20-35; ABC Islands: 10-20).

FORECAST: SON rainfall may be drier than usual throughout the region except Bahamas and Cayman Isl., with fewer wet days across the region except for a small increase in in the Guianas (*medium confidence*).

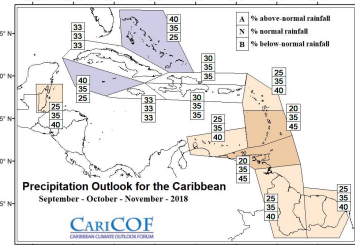
IMPLICATIONS:

- Annual peak in frequency of rainfall disruptions of outdoor activities throughout Belize and the islands.
- Slightly less reliable rains than usual, but unlikely to severely impact agriculture.

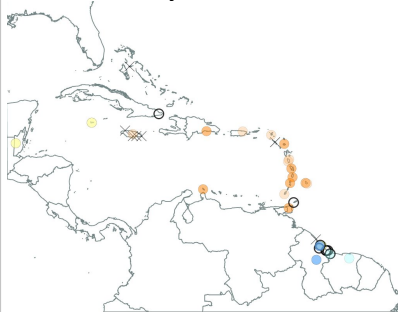
Wet spells frequency shifts

Forecast for: September to November 2018

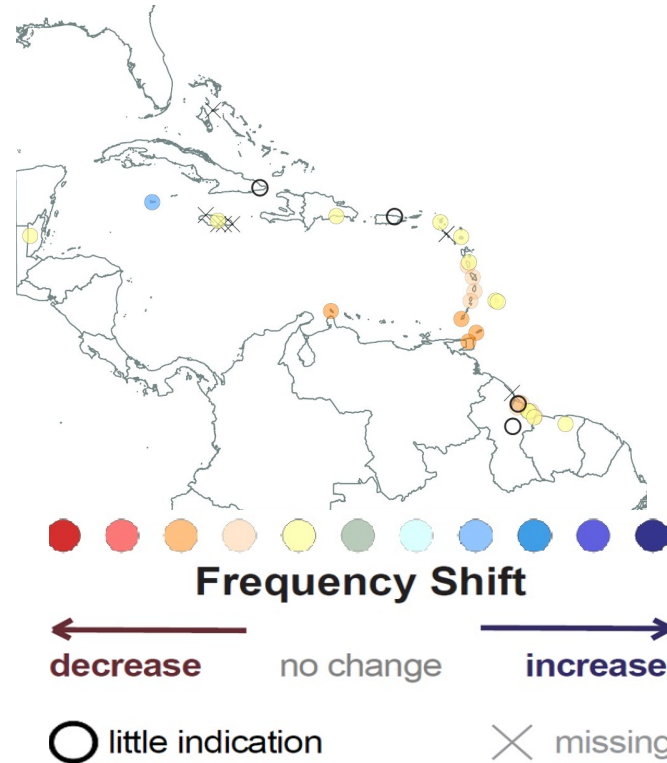
Precipitation outlook



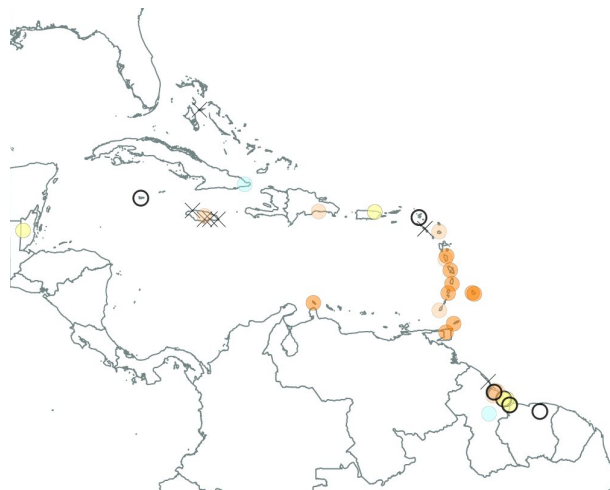
Wet days outlook



SON 2018 frequency of 7-day wet spells



SON 2018 frequency of 7-day very wet spells



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

FORECAST: SON rainfall may be drier than usual throughout the region except Bahamas and Cayman Isl., with fewer wet days (*medium confidence*), **wet spells and very wet spells across the region** (*low to medium confid.*) except for a small increase in the number of wet days in the Guianas (*medium confid.*).

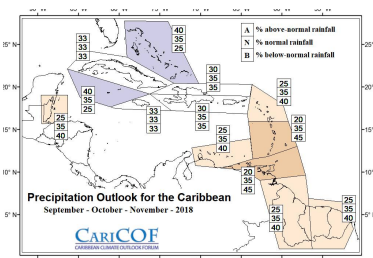
IMPLICATIONS:

- Recharge rates of large water reservoirs associated with the wet season potentially slower than usual.
- Flood potential slightly reduced during peak season for long-term flooding in Belize and the islands.

Extreme wet spells frequency shifts

Forecast for: September to November 2018

Precipitation outlook



**SON 2018 frequency of
*extreme (top 1%) 3-day wet spells***



Frequency Shift

← decrease no change increase →

○ little indication X missing

USUALLY: Up to 2 extreme wet spell occur from September to November, except in the Guianas where it is the dry season.

FORECAST: : SON rainfall may be drier than usual throughout the region except Bahamas and Cayman Isl., with fewer wet days (*medium confidence*), **wet spells and very wet spells across the region** (*low to medium confidence*) **except for a small increase in the number of wet days in the Guianas** (*medium confidence*).

By contrast, no substantial shift in extreme wet spells is forecast (*low confid.*).

IMPLICATION:

Flash flood potential is a concern throughout the region, including coastal Guianas from November onwards.

September to November 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)	31-44	29-42	3.2-6	2.8-5.9	1.5-4.1	1-4.1	0-1.5	0-1.8
Aruba (Beatrix)	14-30	10-26	2.6-7.1	2.1-5.7	1.3-5.2	0.7-3.3	0-2.5	0-2.2
Barbados (CIMH)	38-50	33-47	4.3-6.8	3.6-6.6	1.9-4.3	1.6-3.7	0-2.9	0-2.4
Barbados (GAIA)	40-49	37-48	4.3-6.5	3.9-6.5	2.1-4.1	1.8-4	0-2	0-2.4
Belize (C. Farm)	31-48	30-50	3.3-5.5	2.9-5.6	1.7-3.4	1.3-3.3	0-1.9	0-1.6
Cayman	29-46	28-47	3.9-6.3	3.8-6.9	1.7-4.3	1.9-4.6	0-2.5	0-2.4
Cuba (Punta Maisi)	17-31	16-35	2.8-6.2	2.8-6.8	1.3-4.6	1.6-4.5	0-2	0-1.9
Dom. Republic (Las Americas)	27-38	22-37	3.4-6.2	2.9-6.4	1.3-4.3	1.1-3.7	0-2	0-1.5
Dominica (Canefield)	42-54	39-53	3-5.7	2.5-5.9	1.7-3.5	1.2-3.5	0-2	0-2
Dominica (Douglas Charles)	57-69	53-69	3.8-6	3.5-6.3	2-3.7	1.7-3.5	0-1.2	0-1.8
Grenada (MBIA)	35-48	32-47	3.9-6	2.9-6	1.7-3.9	1.2-3.7	0-1.5	0-1.8
Guyana_73	10-19	9-20	0.4-2.6	0.4-2.5	0-1.3	0-1.3	0-0	0-0
Guyana (Albion)	11-26	9-30	0.4-2.6	0.2-2.3	0-0.9	0-1.1	0-0.4	0-0.5
Guyana (Blairmont)	13-30	10-30	0.4-2.3	0.2-2.3	0-1.3	0-1.3	0-0	0-0
Guyana (Enmore)	12-34	11-33	0.4-2.6	0.2-2.2	0-1.3	0-1.1	0-0.1	0-0
Guyana (Georgetown)	19-37	19-38	0.5-3	0.4-2.5	0.2-1.6	0.1-1.2	0-1	0-1.1
Guyana (Greatfall)	24-40	24-43	0.7-2.6	0.6-2.9	0-1.3	0-1.7	0-0.1	0-0.5
Guyana (New Amsterdam)	16-28	12-32	0.4-2.6	0.3-2.3	0-1.7	0-1.4	0-1	0-0.8
Guyana (Skeldon)	15-32	15-37	0.5-2.6	0.5-2.6	0.4-1.3	0.2-1.4	0-0.5	0-0.4
Guyana (Timehri)	31-42	28-44	1.3-3	1.2-2.8	0.4-1.7	0.4-1.6	0-0	0-0
Guyana_Wales	25-40	26-42	1.3-3.2	1.1-3.6	0.4-1.7	0.2-1.8	0-0.7	0-0.6
Jamaica (Worthy Park)	30-46	26-45	3.3-5.7	3.1-5.9	1.7-3.4	1.1-3.4	0-2	0-1.7
Martinique (FDF Desaix)	53-62	47-61	4-6.4	3.2-6.6	2.2-3.9	1.7-3.7	0-2	0-2.2
Puerto Rico (San Juan)	38-52	36-50	3.4-5.6	3-6.2	1.4-3.4	1.3-3.3	0-1	0-1.4
St. Lucia (Hewanorra)	44-54	40-50	3.9-5.7	3.6-5.7	2.1-4	1.1-3.7	0-2	0-2
St. Maarten (TNM)	38-50	35-49	3.4-6.1	3.1-5.9	1.7-3.5	1.5-3.9	0-2	0-1.7
St. Vincent (ET Joshua)	54-66	50-64	3.9-6.9	3.5-6.5	1.7-4	1.4-3.8	0-2.8	0-2.5
Suriname (Zanderij)	22-35	23-39	0.9-2.1	0.9-2.1	0-1.2	0-1.3	0-0.2	0-0.2
Tobago (ANR Robinson)	43-54	39-52	3.4-5.9	2.8-5.6	1.7-3.4	1-3.2	0-1	0-1.6
Trinidad (Piarco)	41-51	38-53	3.7-6	3.1-5.6	1.9-3.4	1.3-3	0-2	0-1.8

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



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