

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks July to September 2018

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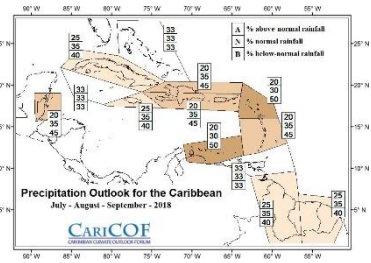
³Antigua and Barbuda Meteorological Services



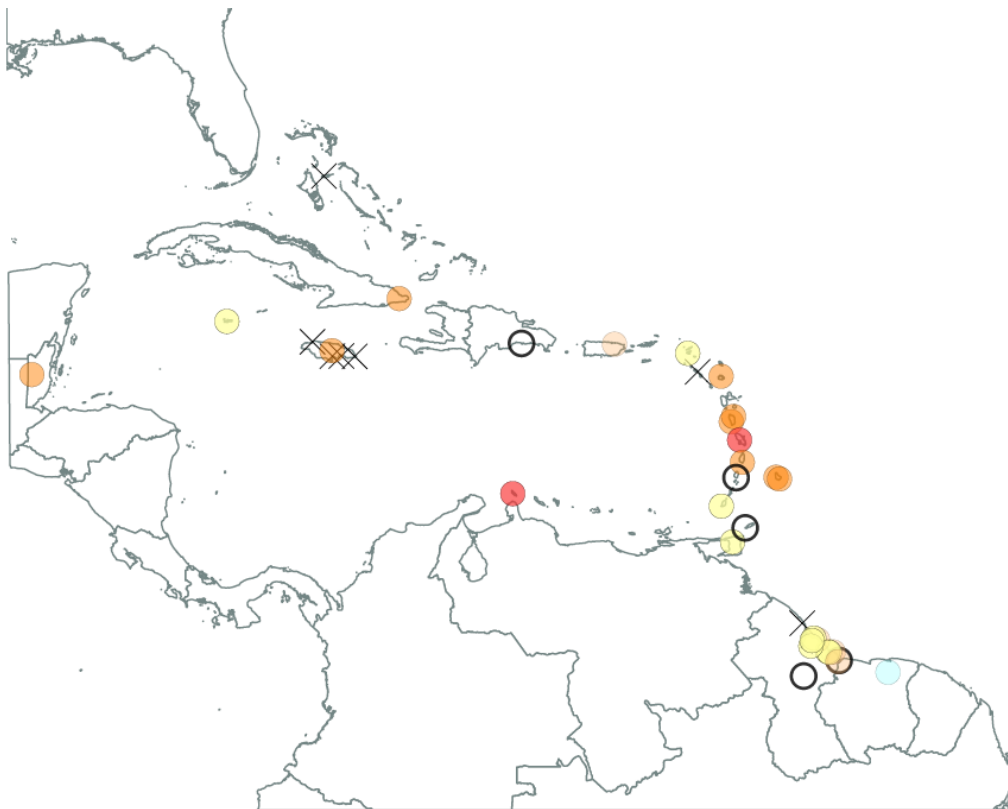
Wet day frequency shifts

Forecast for: July to September 2018

Precipitation outlook



JAS 2018
Frequency of wet days



USUALLY: Out of 92 days in Jul-Aug-Sep, there are about 35 to 59 wet days in relatively flat areas of Belize and the islands, but 50 to 65 in mountainous areas and in coastal Guianas (ABC Islands: 5-15).

FORECAST: JAS rainfall may be drier than usual with fewer wet days across the region except for a small increase in Suriname (*medium confidence*).

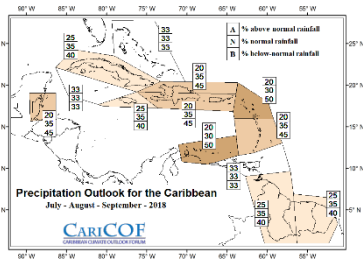
IMPLICATIONS:

- Surface wetness increasing slower than usual.
- Less reliable rains for agriculture than usual.
- Increasing frequency of rainfall disruptions of outdoor activities.

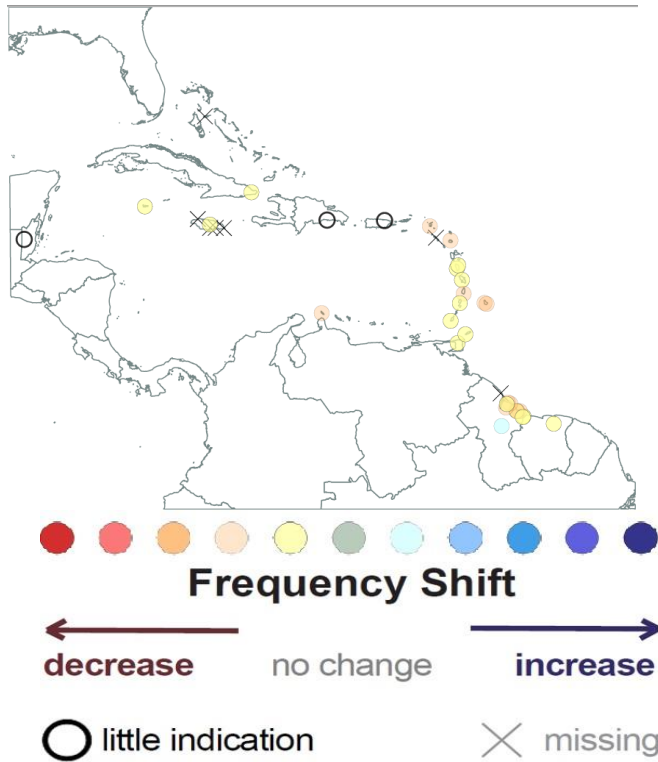
Wet spells frequency shifts

Forecast for: July to September 2018

Precipitation outlook



JAS 2018 frequency of 7-day wet spells



JAS 2018 frequency of 7-day very wet spells



USUALLY: 3 to 6 wet spells (ABC Islands: up to 3) occur from July to September, with 1 to 3 of them ending up very wet (ABC Islands: up to 2).

FORECAST: JAS rainfall may be drier than usual with fewer wet days, wet spells and very wet spells (*medium confidence*), except for the inner region of Guyana an increase in wet spells (*low to medium confid.*).

IMPLICATIONS:

- Recharge rates of large water reservoirs associated with the wet season potentially slower than usual.
- Flooding potential in the inner region of Guyana associated with wet spells.

Extreme wet spells frequency shifts

Forecast for: July to September 2018

USUALLY: Up to 1 extreme wet spell occur between July to September (ABC Islands: up to 1).

FORECAST: : JAS rainfall may be drier than usual with fewer wet days, wet spells and very wet spells (*medium confidence*), except for the inner region of Guyana an increase in wet spells (*low to medium confid.*).

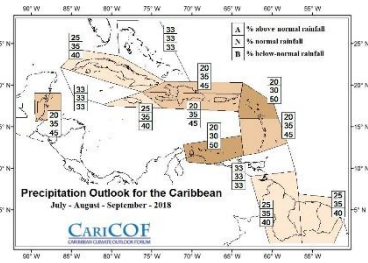
By contrast, no substantial shift in extreme wet spells is forecast (*low confid.*).

IMPLICATION: Flash flood potential is becoming a concern across the region.

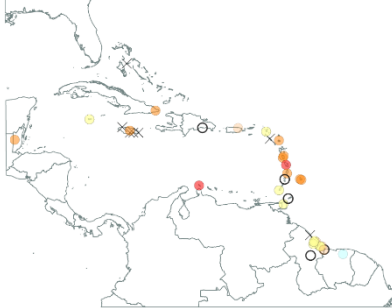
JAS 2018 frequency of extreme (top 1%) 3-day wet spells



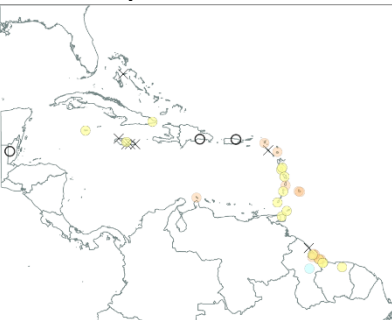
Precipitation outlook



Wet days outlook



Wet spells outlook



Very wet spells outlook



July to September 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)	29-41	27-39	2.6-4.9	2.2-4.6	0.9-3	0.8-3	0-1	0-1.3
Aruba (Beatrix)	6-17	4-15	1.2-3.9	0.6-3.8	0.4-2.1	0.2-2.1	0-0.9	0-0
Barbados (CIMH)	37-48	32-46	3.4-6.4	3-6	1.4-3.2	1.3-3.4	0-1	0-1.2
Barbados (GAIA)	39-49	36-47	3.9-6.2	3.5-6.1	1.6-3.9	1.2-3.7	0-1	0-1.5
Belize (C. Farm)	37-49	31-47	2.8-5.6	2.8-5.9	1.3-3.4	1.3-3.7	0-1.1	0-1.4
Cayman	31-44	27-45	3.4-6.2	3.1-6.5	1.2-3.4	1.1-3.7	0-1	0-0.9
Cuba (Punta Maisi)	10-18	8-16	1.4-3.9	1-3.7	0.4-1.7	0.1-1.6	0-1	0-0.2
Dom. Republic (Las Americas)	24-34	21-32	3-5.1	2.6-5.2	1.7-3.3	1.3-3.3	0-1	0-1.3
Dominica (Canefield)	52-64	46-60	3.7-7.2	3.4-7.3	1.8-5.4	1.4-5.2	0-2.5	0-2.3
Dominica (Douglas Charles)	56-69	53-68	2.9-6.6	2.2-6	0.9-3.2	0.8-3.4	0-1	0-1.1
Grenada (MBIA)	39-48	36-51	3.9-6.4	3.1-6.2	1.7-3.6	1.2-3.9	0-2	0-1.7
Guyana_73	17-26	15-26	1.7-4.1	1.3-4.3	0.4-2.4	0.4-2.2	0-0.1	0-0.1
Guyana (Albion)	26-41	22-40	2.1-4.8	1.9-4.6	0.9-3	0.7-2.6	0-1	0-0.9
Guyana (Blairmont)	32-46	29-44	2.1-5.1	1.7-5.1	0.7-2.6	0.8-2.5	0-1	0-0.9
Guyana (Enmore)	27-42	22-40	1.7-4.3	1.3-4	0.4-2.7	0.3-2.4	0-1	0-0.8
Guyana (Georgetown)	35-51	31-51	1.7-4.3	1.4-4	0.4-2.5	0.5-2.2	0-1	0-0.4
Guyana (Greatfall)	34-51	32-58	1.8-5.4	1.7-6.2	0.9-2.6	0.7-3	0-1	0-1.4
Guyana (New Amsterdam)	31-44	29-43	1.8-4.7	1.6-4.4	0.7-2.6	0.5-2.4	0-1	0-0.8
Guyana (Skeldon)	32-38	28-38	2.1-3.9	1.5-3.8	0.7-2.6	0.6-2.4	0-1	0-1.3
Guyana (Timehri)	45-58	42-58	2.1-4.7	1.9-4.5	0.9-2.6	0.7-2.2	0-1	0-0.4
Guyana_Wales	39-52	37-51	2.1-4.3	2-4.7	0.9-2.6	0.6-2.5	0-0.8	0-0.5
Jamaica (Worthy Park)	28-42	25-39	2.6-5.6	2.2-5.2	0.9-3	0.8-3	0-2	0-1.7
Martinique (FDF Desaix)	53-64	48-60	3.9-7	3.3-6.5	1.7-3.7	1.2-3.8	0-1.4	0-1.6
Puerto Rico (San Juan)	36-50	32-50	2.7-5.4	2.4-5.6	0.9-3.2	0.8-3.2	0-1	0-1.3
St. Lucia (Hewanorra)	44-59	39-56	3.4-5.6	2.9-5.7	1.7-3.4	1.1-3.6	0-1.1	0-1.6
St. Maarten (TNM)	33-49	29-49	2.2-5.7	1.9-5.1	0.9-3	0.6-2.8	0-1	0-1
St. Vincent (ET Joshua)	56-65	53-67	3.4-5.5	3.2-5.7	1.3-3.3	1.3-3.3	0-1.1	0-1.4
Suriname (Zanderij)	36-51	35-53	1.9-3.4	1.7-3.5	0.7-1.7	0.6-1.9	0-1	0-1.4
Tobago (ANR Robinson)	47-59	47-58	4-6.4	3.5-6.3	1.5-3.4	1.4-3.6	0-1	0-1.3
Trinidad (Piarco)	36-53	34-56	3.4-5.6	3-5.7	1.7-3.4	1.4-3.2	0-1	0-1.2

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



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