

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks April to June 2020

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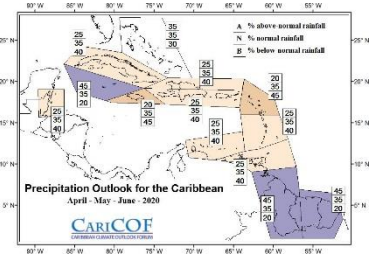
³Antigua and Barbuda Meteorological Services



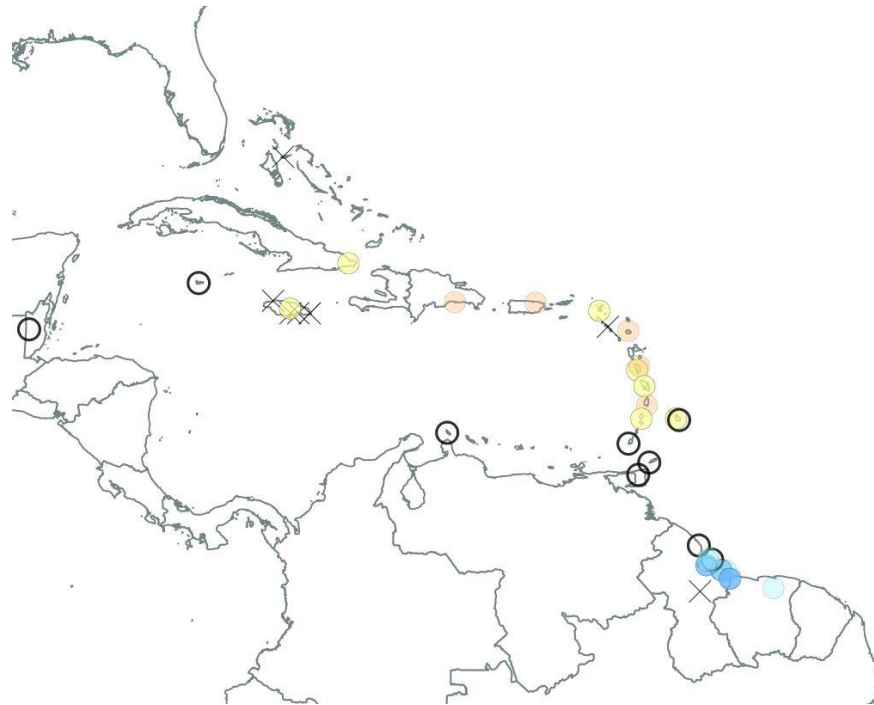
Wet day frequency shifts

Forecast for: April to June 2020

Precipitation outlook



AMJ 2020
Frequency of wet days



USUALLY: Across the region during April-May-June, about 25 to 40 days out of a total of 91 days are wet days (coastal Guianas: 45 to 60 days; ABC Islands: 10 or less).

FORECAST: AMJ rainfall may be more than usual in the Cayman Is. and the Guianas, with a slight increase in the number of wet days (*low to medium confidence*), but drier than usual elsewhere, with possibly slightly fewer wet days than usual (*low confid.*).

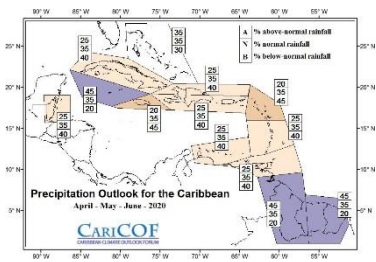
IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should be low, but increasing towards May (Guianas) and June (elsewhere).
- Increasing surface dryness until May will make environmental conditions less conducive to moisture related pests, but engender the peak of the wild fire season.

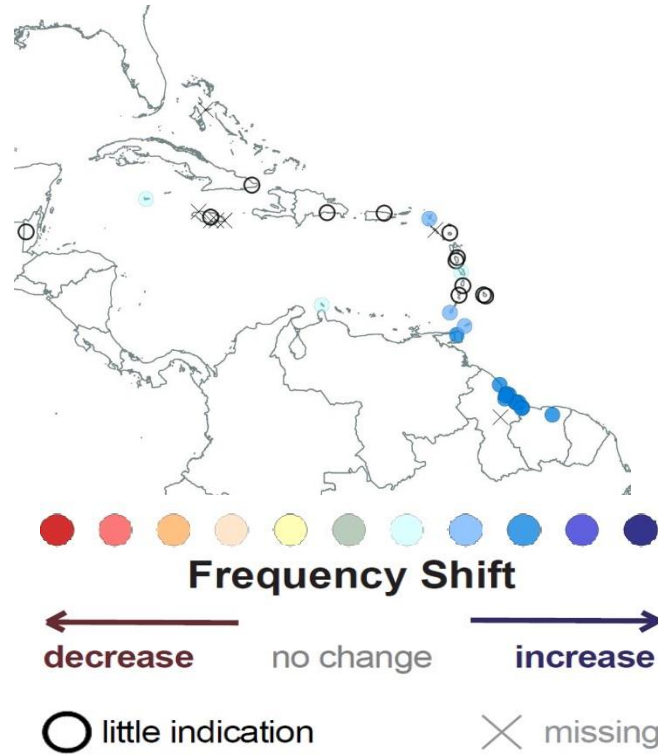
Wet spells frequency shifts

Forecast for: April to June 2020

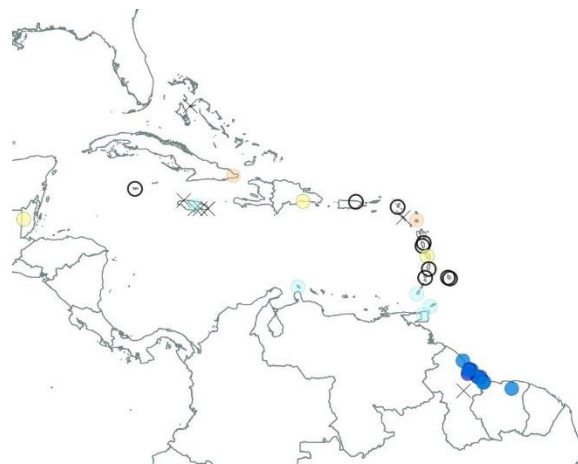
Precipitation outlook



AMJ 2020 frequency of 7-day wet spells



AMJ 2020 frequency of 7-day very wet spells



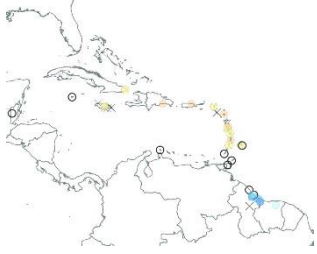
USUALLY: 1 to 4 wet spells (ABC Islands up to 2; coastal Guianas: 3 to 6) occur from April to June, with 1 or 2 of them ending up very wet (ABC Islands: up to 1; coastal Guianas: 1 to 4).

FORECAST: AMJ rainfall may be more than usual in the Cayman Is. and the Guianas, with a slight increase in the number of wet days (*low to medium confidence*) and wet and very wet spells (*medium to high confid.*), but drier than usual elsewhere, with possibly slightly fewer wet days than usual (*low confid.*), but no clear changes in the number of wet spells.

IMPLICATIONS:

- Potentially accelerated recharge of large water reservoirs and soil moisture from May onwards in the Guianas.
- Rising flood potential towards May, especially in coastal Guianas in view of the increased frequency of very wet spells.

Wet days outlook



Extreme wet spells frequency shifts

Forecast for: April to June 2020

USUALLY: : Up to 1 or 2 extreme wet spells occur between April to June (Guianas: up to 2 or 3).

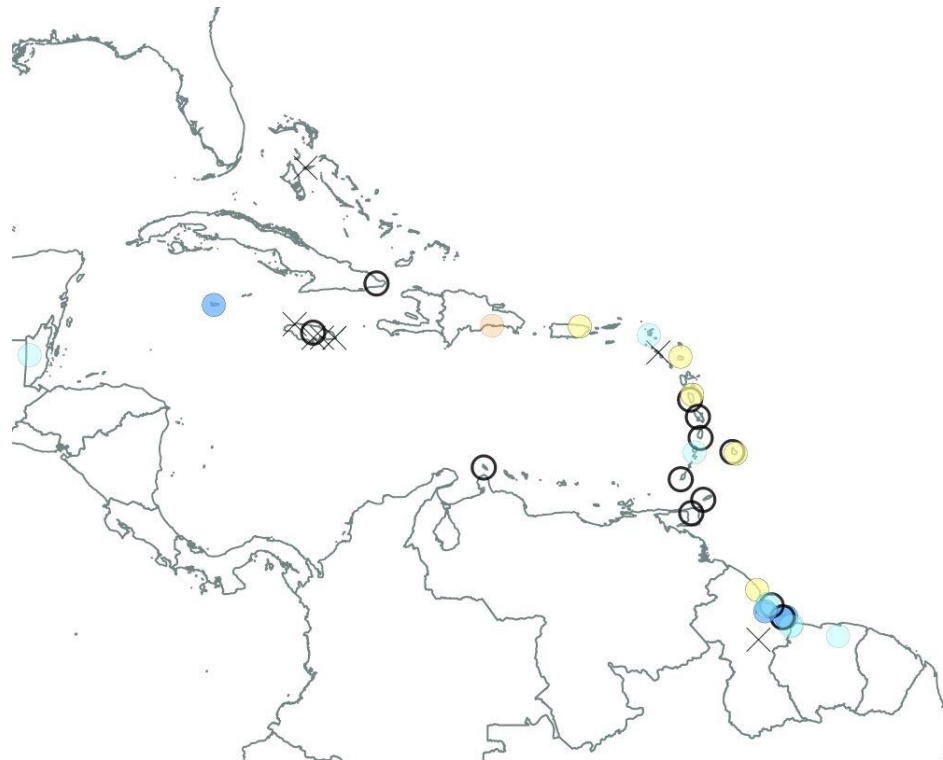
FORECAST: : AMJ rainfall may be more than usual in the Cayman Is. and the Guianas, with a slight increase in the number of wet days (*low to medium confidence*) and wet and very wet spells (*medium to high confid.*), but drier than usual elsewhere, with possibly slightly fewer wet days than usual (*low confid.*), but no clear changes in the number of wet spells.

No large departures from the usual number of extreme wet spells are on forecast (*low confid.*).

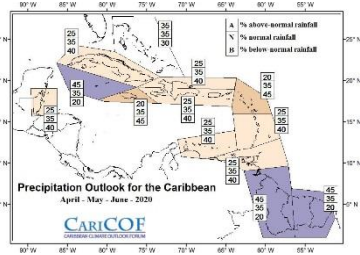
IMPLICATION:

- Flash flood potential throughout the region is a growing concern from May onwards in view of the possible occurrence of extreme wet spells, especially in the Guianas.

AMJ 2020 frequency of extreme (top 1%) 3-day wet spells



Precipitation outlook



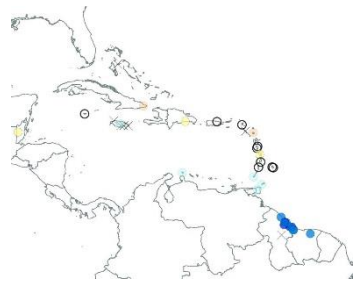
Wet days outlook



Wet spells outlook



Very wet spells outlook



April to June 2020

	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)	18-32	15-31	1.2-3.9	1.1-4.1	0.4-2.4	0.5-2.1	0-1.3	0-1.1
Aruba (Beatrix)	4-9	3-10	0.4-1.7	0.2-2	0-1.2	0.1-1.2	0-0.8	0-0.3
Barbados (CIMH)	18-34	17-33	0.9-3.7	0.9-3.6	0.4-1.9	0.3-1.9	0-0.8	0-0.2
Barbados (GAIA)	19-36	19-35	0.9-3.9	1-4.1	0.3-2.5	0.4-2.1	0-1	0-0.8
Belize (C. Farm)	17-28	17-30	1.2-3	0.9-3.4	0.4-2.1	0.4-2	0-1	0-1.3
Cayman	18-28	17-31	2.1-3.7	1.7-4.1	0.9-2.4	0.8-2.9	0-1	0-1.5
Cuba (Punta Maisi)	7-18	6-19	1.3-3.6	1-4.1	0.4-2.1	0-2	0-1	0-1.2
Dom. Republic (Las Americas)	17-31	14-29	1.7-4.7	1.4-5	0.6-3.1	0.5-3.2	0-1	0-1
Dominica (Canefield)	27-44	23-45	0.8-3.4	0.9-4.4	0-2.5	0.1-2.3	0-0	0-0
Dominica (Douglas Charles)	41-63	36-61	0.9-4.6	1.2-4.7	0.4-2.7	0.2-2.6	0-1.5	0-1.3
Grenada (MBIA)	19-34	18-37	1.3-3.4	1.3-4.1	0.4-2.1	0.4-2.3	0-1	0-0.6
Guyana_73	26-40	27-42	2.8-6.3	3.5-8.2	1.3-3.4	1.9-6	0-1	0-2.8
Guyana (Albion)	37-52	38-55	2.8-5.6	3.4-7.4	1.3-3	2-4	0-2	0-2.9
Guyana (Blairmont)	44-58	43-63	3.2-6.2	4-7.6	1.3-3.4	2.3-6.2	0-1.4	0.2-2
Guyana (Enmore)								
Guyana (Georgetown)	42-54	41-56	2.8-5.7	3.6-7.6	1.3-3	1.5-4.2	0-1.1	0-1.7
Guyana (New Amsterdam)	45-60	45-61	3.1-6.4	3.6-6.9	1.5-3.6	1.9-4.9	0-1	0-1.5
Guyana (Skeldon)								
Guyana (Timehri)	42-60	42-62	3-6.2	4-7.5	1.6-3.8	2.1-5.1	0-2	0-2
Jamaica (Worthy Park)	41-57	42-61	3.2-6.4	3.8-8.1	1.2-3.9	2-6.7	0-1	0-1.4
Martinique (FDF Desaix)	49-61	48-66	3-6.4	3.8-7.6	1-3.6	2-5.2	0-2	0-3
Puerto Rico (San Juan)	46-58	47-61	3.2-6.2	3.8-7.5	1.3-4.3	1.8-5.9	0-2	0-2.6
St. Lucia (Hewanorra)	20-37	18-39	2.2-5.1	2-5.5	0.9-3	0.9-3.8	0-2	0-2.2
St. Maarten (TNM)	34-51	30-51	1.4-3.2	1.3-3.9	0.4-2.1	0.5-2	0-1	0-0.3
St. Vincent (ET Joshua)	25-42	22-40	1.7-4.7	1.6-5.1	0.9-3.7	0.8-3.6	0-1.8	0-1.7
Suriname (Zanderij)	26-41	21-40	1.2-4.2	1-3.8	0.3-2.1	0.2-2	0-1	0-0.7
Tobago (ANR Robinson)	22-34	20-34	1.3-3.6	1.4-4.2	0.4-2.1	0.4-2.4	0-1	0-1
Trinidad (Piarco)	33-58	30-56	1.3-3.9	0.9-3.9	0.4-2.1	0.5-2	0-1	0-1.1

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



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