

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks May to July 2020

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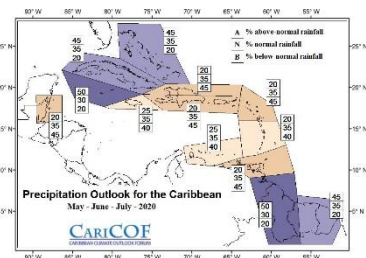
³Antigua and Barbuda Meteorological Services



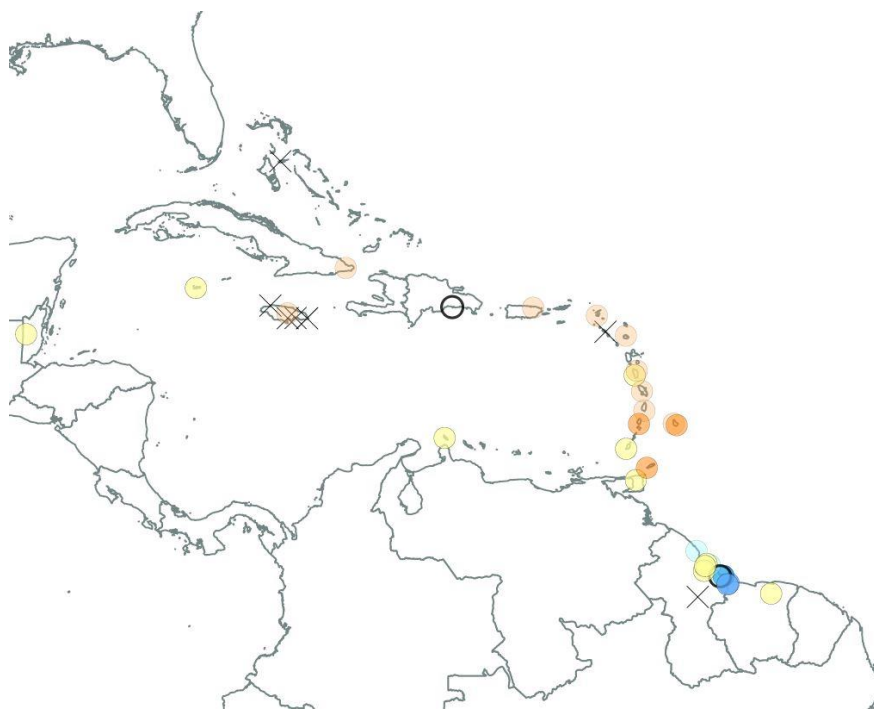
Wet day frequency shifts

Forecast for: May to July 2020

Precipitation outlook



MJJ 2020
Frequency of wet days



USUALLY: During May-June-July, about 25 to 40 days out of a total of 92 days are wet days in relatively flat areas in the islands, and 45 to 65 in mountainous areas and in coastal Guianas (ABC Islands: 5-15).

FORECAST: MJJ rainfall may be more than usual in the NW areas and the Guianas, with a slight increase in the number of wet days in parts of Guyana (*low to medium confidence*), but drier than usual elsewhere, with slightly fewer wet days than usual (*medium confid.*).

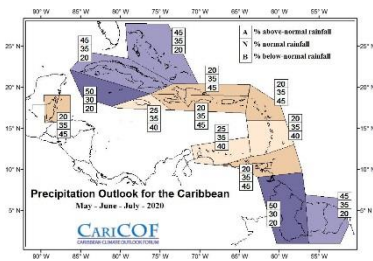
IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should increase in May (Guianas) and June (elsewhere).
- Decrease in surface dryness to reduce wildfire potential after the onset of the wet season
- Environmental conditions conducive to moisture-related pests/diseases in Guianas.

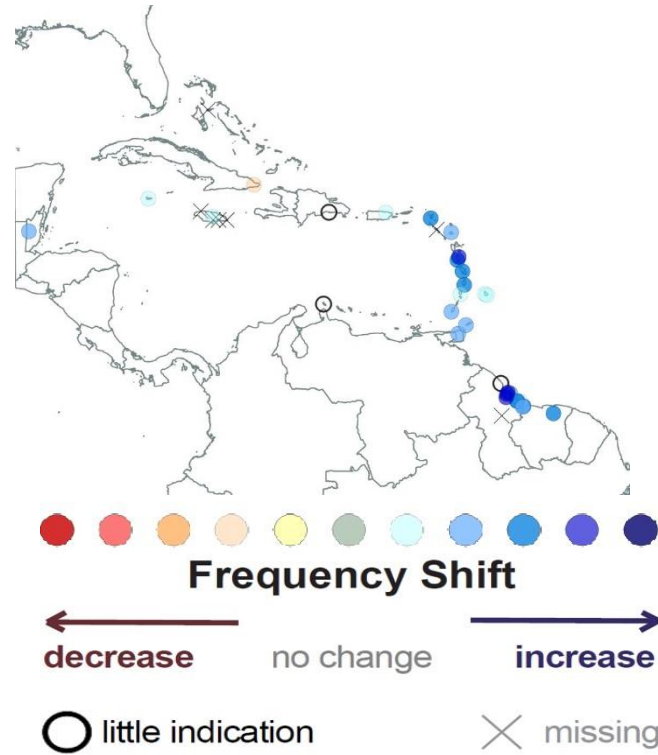
Wet spells frequency shifts

Forecast for: May to July 2020

Precipitation outlook



MJJ 2020 frequency of 7-day wet spells



MJJ 2020 frequency of 7-day very wet spells



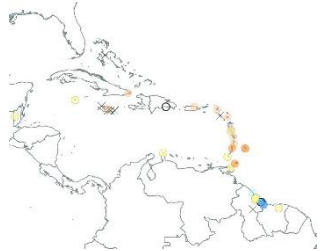
USUALLY: 1 to 5 wet spells (coastal Guianas: 4 to 7) occur from May to July, with 2 or 3 of them ending up very wet (ABC Islands: up to 1; coastal Guianas: 1 to 5).

FORECAST: FORECAST: MJJ rainfall may be more than usual in the NW areas and the Guianas, with a slight increase in the number of wet days in parts of Guyana (low to medium confidence), but drier than usual elsewhere, with slightly fewer wet days than usual (medium confid.). **More wet and very wet spells are expected across most of the region** (medium to high confidence).

IMPLICATIONS:

- Recharge of large water reservoirs and soil moisture may be aided by frequent wet spells, to some extent even in drier than usual areas.
- Rising flood potential, especially in the Guianas in view of the increased frequency of very wet spells.
- Increased risk of street flooding.

Wet days outlook



Extreme wet spells frequency shifts

Forecast for: May to July 2020

USUALLY: Up to 1 extreme wet spell occur between May to July (Guianas: up to 2).

FORECAST: : MJJ rainfall may be more than usual in the NW areas and the Guianas, with a slight increase in the number of wet days in parts of Guyana (low to medium confidence), but drier than usual elsewhere, with slightly fewer wet days than usual (medium confid.). More wet and very wet spells are expected across most of the region (medium to high confidence).

The forecast does not indicate any substantial change from the usual number of extreme wet spells at this time (*low confid.*).

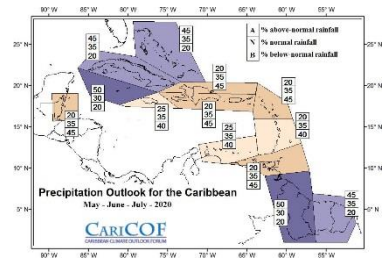
IMPLICATION:

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

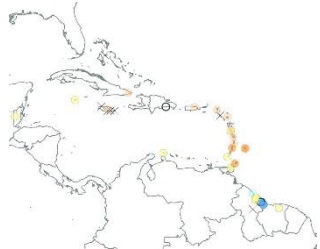
MJJ 2020 frequency of extreme (top 1%) 3-day wet spells



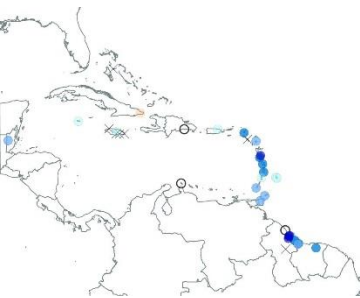
Precipitation outlook



Wet days outlook



Wet spells outlook



Very wet spells outlook



May to July 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)	20-38	19-36	1.4-4.6	1.9-5.1	0.4-2.9	0.6-3	0-1	0-0.6
Aruba (Beatrix)	6-13	5-13	0.4-2.6	0.6-2.8	0.1-1.4	0.3-1.6	0-1	0-0.6
Barbados (CIMH)	24-42	22-39	1.3-5.1	1.9-5.4	0.5-2.3	0.8-2.6	0-1	0-0.2
Barbados (GAIA)	26-44	24-40	2.1-4.3	2.3-5.1	0.4-2.5	0.7-2.9	0-1	0-1.2
Belize (C. Farm)	28-40	27-41	2-5.1	2.5-5.7	1.3-3	1.1-3.2	0-1.1	0-1.5
Cayman	24-36	22-36	2.9-5.3	2.9-5.9	1.2-3.4	1.3-3.5	0-1	0-1.4
Cuba (Punta Maisi)	8-18	6-16	1.4-3.4	0.9-3.3	0.4-2.1	0-1.9	0-1	0-1.2
Dom. Republic (Las Americas)	18-31	16-31	1.3-4.6	2-6	0.4-3.6	0.4-4.6	0-1.1	0-0.7
Dominica (Canefield)	35-59	34-58	2.1-5.2	3-7.2	0.9-3.3	1.3-3.7	0-1.1	0-0.6
Dominica (Douglas Charles)	45-66	41-65	1.7-4.7	2.6-6.4	0.5-2.2	0.8-3	0-1	0-1
Grenada (MBIA)	30-47	29-45	2-4.8	2.3-5.8	0.8-2.7	1-3.5	0-1	0-1.4
Guyana_73	30-41	30-45	3.9-6.9	4.2-7.5	1.6-3.4	1.5-5	0-1	0-1.7
Guyana (Albion)	44-57	45-63	3.9-7.2	3.9-7.9	2.1-3.9	1.9-4.7	0-1	0-1.9
Guyana (Blairmont)	50-67	49-68	3.6-7.4	4.6-8.6	1.4-4.9	2-5.5	0-2	0-2.3
Guyana (Enmore)								
Guyana (Georgetown)	48-63	46-66	3.7-7	3.7-8.6	1-4.3	1.3-5.4	0-1.4	0-1.7
Guyana (New Amsterdam)	56-68	53-71	3.7-7.1	5-8.8	1.4-4	1.9-5.5	0-1	0-1.4
Guyana (Skeldon)								
Guyana (Timehri)	50-65	48-66	4-7.3	4.6-8.5	1.7-4.7	2-4.9	0-1.7	0-1.9
Jamaica (Worthy Park)	49-63	48-66	4-7.3	4.2-8	1.7-4.5	1.7-5.2	0-2	0-1.6
Martinique (FDF Desaix)	57-71	55-74	3.9-7.3	4.6-7.9	1.7-4.3	1.9-5.4	0-2	0-2.2
Puerto Rico (San Juan)	57-68	54-70	3.9-7.3	5.1-9.6	1-4.6	1.7-6.2	0-2.4	0-2.6
St. Lucia (Hewanorra)	25-41	22-40	2.6-5.4	2.5-6.2	1.3-3	1.2-3.6	0-1.8	0-1.8
St. Maarten (TNM)	42-58	38-57	2.1-5.1	2.9-6.2	0.9-2.8	0.9-2.8	0-1	0-0.5
St. Vincent (ET Joshua)	29-47	26-45	2.1-5.3	2.3-6	0.9-3.4	1.3-3.6	0-1	0-1.3
Suriname (Zanderij)	31-52	30-49	1.7-5.3	2.4-5.8	0.4-2.4	0.8-2.7	0-1	0-0.1
Tobago (ANR Robinson)	24-39	20-37	1.2-3.8	1.9-5.1	0.4-2.9	0.5-2.8	0-1	0-0.9
Trinidad (Piarco)	44-66	40-60	2-5.1	1.9-5.3	0.8-2.9	0.8-2.7	0-1	0-1.2

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



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