

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks June to August 2021

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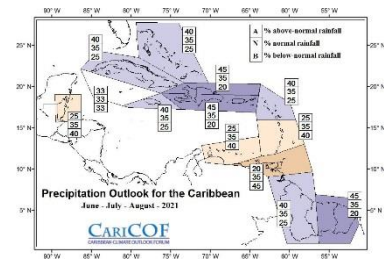
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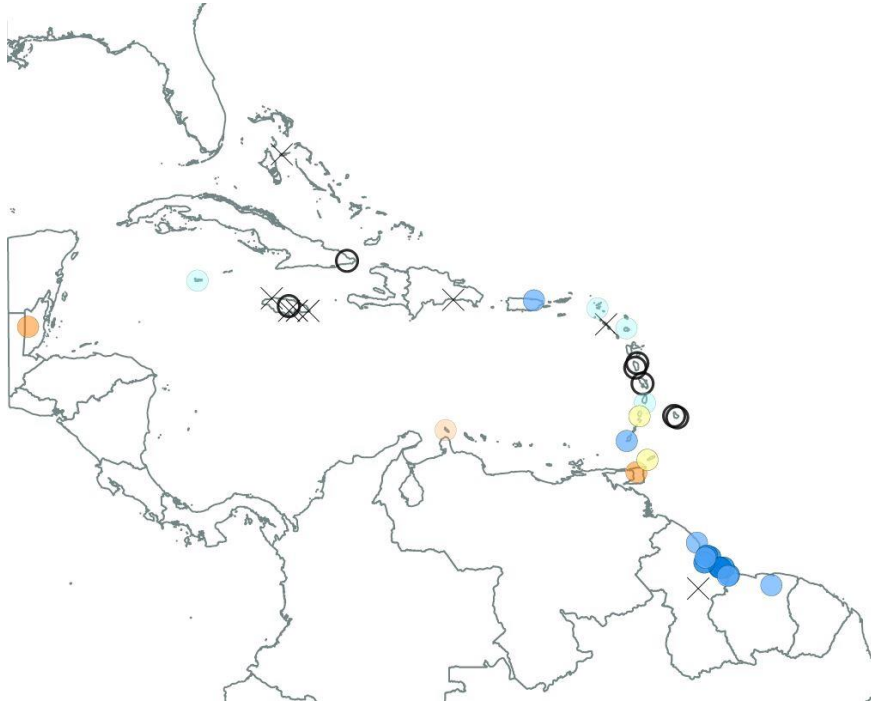
Wet day frequency shifts

Forecast for: June to August 2021

Precipitation outlook



JJA 2021 Frequency of wet days



USUALLY: Out of 92 days in June-July-August, there are about 30 to 45 wet days in relatively flat areas of Belize and the islands, but 50 to 65 in mountainous areas and in the coastal Guianas (ABC Islands: 5-15).

FORECAST: JJA may be drier than usual in Barbados, Belize, Trinidad & Tobago and the Windward Islands with possibly slightly fewer wet days than usual (*low to medium confidence*). But the forecast suggests at least as wet as usual with an increase in wet days compared to the usual across the Guianas (*medium confid.*), and a possible slight increase in the Greater Antilles and the Leeward Islands (*low confid.*).

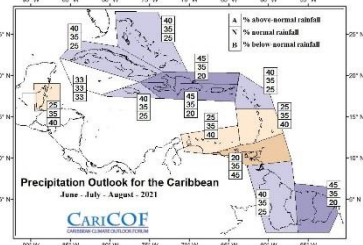
IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should be increasing (at a slower than usual rate in Belize and Trinidad).
- Decreasing surface dryness after June could make environmental conditions more conducive to moisture related pests, particularly in the Guianas.

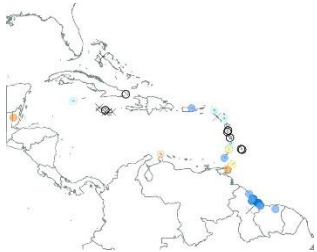
Wet spells frequency shifts

Forecast for: June to August 2021

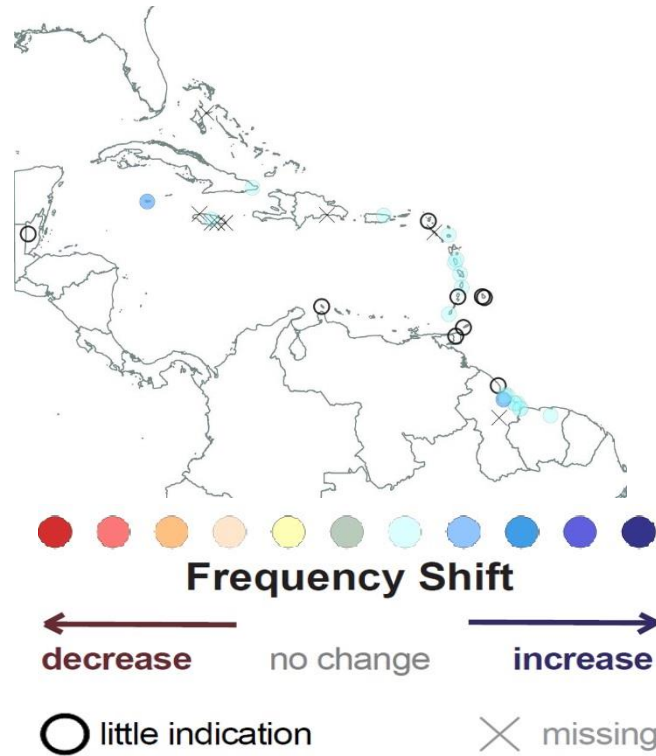
Precipitation outlook



Wet days outlook



JJA 2021 frequency of 7-day wet spells



JJA 2021 frequency of 7-day very wet spells



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

FORECAST: JJA may be drier than usual in Barbados, Belize, Trinidad & Tobago and the Windward Islands with possibly slightly fewer wet days than usual (low to medium confidence). But the forecast suggests at least as wet as usual with an increase in wet days compared to the usual across the Guianas (medium confid.), and a possible slight increase in the Greater Antilles and the Leeward Islands (low confid.). A few more wet spells and very wet spells than usual are forecast across most of the region (*low confid.*).

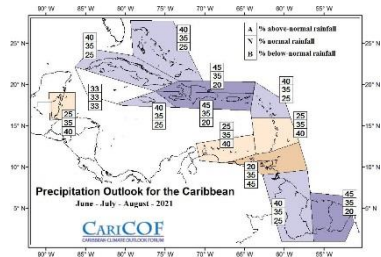
IMPLICATIONS:

- Accelerating recharge rates of large water reservoirs and soil moisture throughout the region
- The chance of a rapid succession of very wet spells translates to flood potential being limited to moderate in June, and high in August in Belize and most islands (except the ABC Islands); very high potential until early-August in the Guianas.

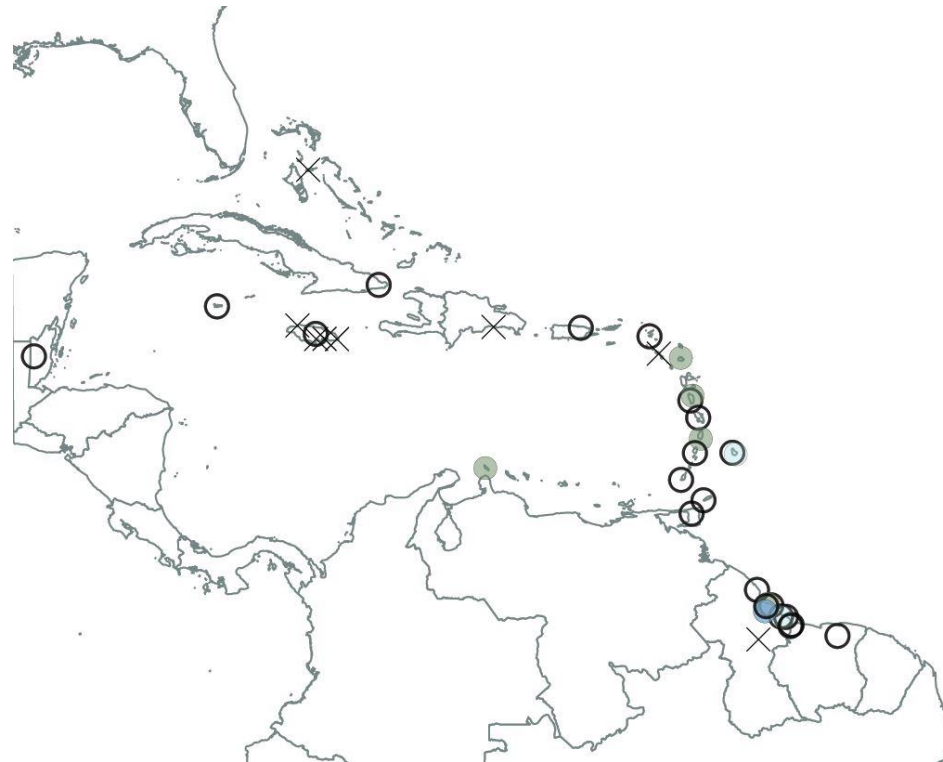
Extreme wet spells frequency shifts

Forecast for: June to August 2021

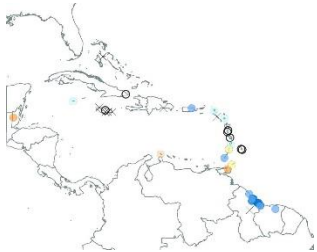
Precipitation outlook



JJA 2021 frequency of *extreme (top 1%) 3-day wet spells*



Wet days outlook



Wet spells outlook



Very wet spells outlook



USUALLY: Up to 1 extreme wet spell occurs between June to August (ABC Islands: up to 1).

FORECAST: JJA may be drier than usual in Barbados, Belize, Trinidad & Tobago and the Windward Islands with possibly slightly fewer wet days than usual (low to medium confidence). But the forecast suggests at least as wet as usual with an increase in wet days compared to the usual across the Guianas (medium confid.), and a possible slight increase in the Greater Antilles and the Leeward Islands (low confid.). A few more wet spells and very wet spells than usual are forecast across most of the region (low confid.).

No significant change in extreme wet spells is forecasted (*low confid.*).

IMPLICATIONS:

- In view of the chance of extreme wet spells increasing towards August in Belize and the islands the potential for flash floods and associated hazards is expected to increase from moderate to high. The inverse trend is expected in the Guianas.

June to August 2021

	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)	26-42	28-42	1.7-4.7	2-5.1	0.9-3.1	0.8-3.1	0-1	0-0
Aruba (Beatrix)	6-16	5-15	0.4-3.4	0.7-3.6	0-2.1	0.1-1.8	0-0.1	0-0.1
Barbados (CIMH)	34-51	34-48	2.6-6.4	3.1-6.8	0.9-3	1.1-3.7	0-1	0-1
Barbados (GAIA)	36-47	36-49	3-5.6	3.4-6	0.9-2.6	1-3.3	0-1	0-1.4
Belize (C. Farm)	33-48	30-44	2.6-5.6	2.4-6.4	1.3-3.4	1-3.7	0-1.2	0-1.7
Cayman	28-42	27-45	3-6.1	2.8-7.6	0.9-3.6	1.1-5.1	0-1	0-1.3
Cuba (Punta Maisi)	7-15	7-17	0.9-3.4	1-3.8	0-1.4	0-2	0-1	0-0.2
Dom. Republic (Las Americas)								
Dominica (Canefield)	50-67	48-69	4-7	4-7.7	1.7-4.6	1.4-5.6	0-1.3	0-1.5
Dominica (Douglas Charles)	53-69	53-72	2.2-5.6	2.6-5.9	0.9-3	0.9-3.4	0-0	0-0
Grenada (MBIA)	42-51	41-55	3.9-6.1	3.5-6.7	1.7-3.5	1.1-4.2	0-1	0-1.6
Guyana_73	25-36	27-42	3.4-5.6	2.9-6.4	1.3-3.4	1.4-4.2	0-1	0-1.2
Guyana (Albion)	37-52	40-57	3.4-6.7	3.5-6.5	1.7-3.6	1.5-4	0-1	0-1.7
Guyana (Blairmont)	44-60	47-63	3.4-6.9	3.2-7.7	1.3-3.9	1.5-4.6	0-1	0-1.6
Guyana (Charity)								
Guyana (Enmore)	41-57	44-64	3-6	3.1-6.9	1.1-3.4	0.9-4.4	0-1	0-1.3
Guyana (Georgetown)	51-63	51-68	3.2-5.6	3.1-6.6	1.3-3	1.3-3.7	0-1	0-0.8
Guyana (Greatfall)								
Guyana (New Amsterdam)	46-59	46-61	3.8-6.1	3.2-7.2	1.3-3.1	1.5-4	0-1	0-1.3
Guyana (Skeldon)	45-52	45-55	3.1-6.1	3.1-6.4	1.3-3.9	1.2-4.3	0-1.6	0-1.8
Guyana (Timehri)	55-67	57-70	3.4-5.7	3.3-6.7	1.3-3.5	1.3-4.5	0-1	0-1.5
Guyana_Wales	50-64	51-67	3.4-6	3.3-7.1	1.1-3.4	1.2-4.5	0-2	0-1.5
Jamaica (Worthy Park)	24-38	22-41	2.1-4.8	2.1-5.9	1.1-3	1-3.6	0-1.1	0-1.5
Martinique (FDF Desaix)	51-63	50-65	3-6	3.6-6.4	1.3-3.1	1.5-3	0-1	0-1.7
Puerto Rico (San Juan)	32-52	33-56	2.6-5.6	2.6-6.2	1.3-3.4	1.2-3.9	0-1	0-1.4
St. Lucia (Hewanorra)	41-57	41-59	3-5.6	3.4-6.2	0.9-2.7	1.1-3.5	0-1	0-0.4
St. Maarten (TNCM)	28-45	27-46	1.7-4.7	1.8-4.7	0.4-2.6	0.4-3.1	0-1	0-0.5
St. Vincent (ET Joshua)	54-67	52-67	3-5.5	2.8-5.5	0.9-3.1	0.9-3.2	0-1.1	0-1.3
Suriname (Zanderij)	51-63	51-67	3-5.1	3-5.6	1.3-3.1	1.2-4.1	0-1	0-1.5
Tobago (ANR Robinson)	53-64	48-62	4.5-6.5	4.5-6.8	1.9-3.5	1.6-3.3	0-1.1	0-1.6
Trinidad (Piarco)	43-50	38-52	3.9-5.7	3.5-5.9	1.3-3.5	1.3-3.1	0-1	0-1.1

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



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