Rainfall frequency and extreme forecasts

Wet days and Wet spells Outlooks May to July 2023

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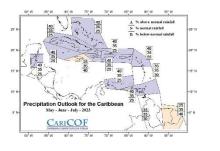






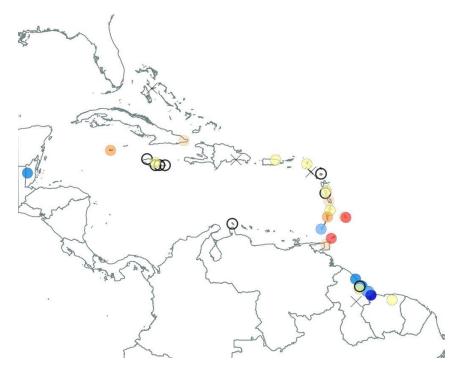


Precipitation outlook



Wet day frequency shifts Forecast for: May to July 2023

MJJ 2023 Frequency of wet days



Frequency Shift

no change

decrease

increase



missing

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).

SEASONAL RAINFALL FORECAST:

 The usual or higher rainfall totals across the region are expected except in Jamaica where drier than usual is expected.

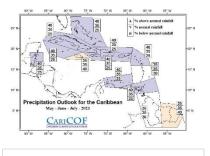
WET DAY (*= day with rainfall exceeding 1mm***) FORECAST:**

• Slight decrease in wet days across most of the region except in Belize and the Guianas (*medium confidence*).

IMPLICATIONS:

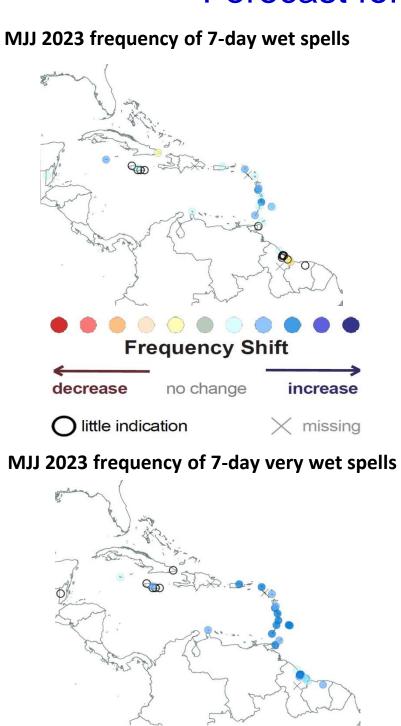
- Frequency of outdoor activity disruptions due to rainfall should be increasing (at a somewhat slower than usual rate in the Antilles) while the region transitions to the wet season.
- Decreasing surface dryness could make environmental conditions more conducive to moisture related pests, particularly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

Precipitation outlook



Wet days outlook





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).

WET SPELLS (=7-day spells with rainfall totals among top 20%**) FORECAST:**

 A slightly slower than usual increase in the number of wet spells may be expected in Guyana and Eastern Cuba, but an accelerated increase is expected elsewhere (*med. confidence*).

VERY WET SPELLS (=7-day spells with rainfall totals among top 10%) **FORECAST:**

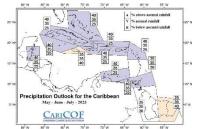
• A faster than usual increase in the number of very wet spells may be expected across most of the region (*med. confidence*).

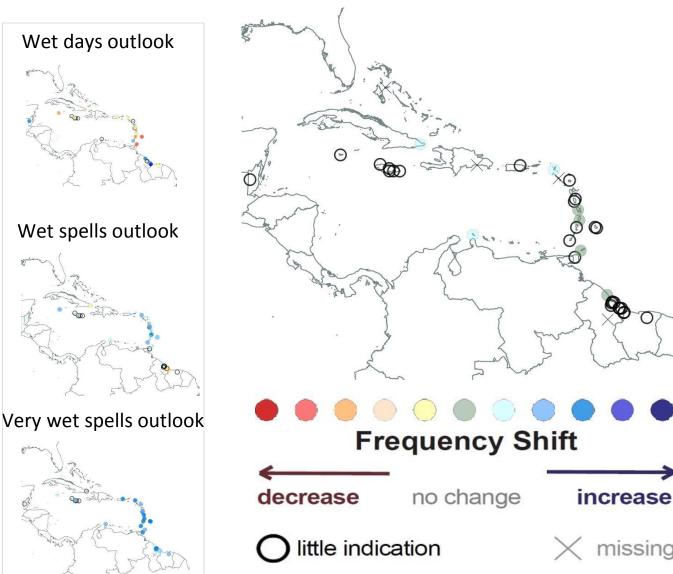
IMPLICATIONS:

- Accelerating recharge rates of large water reservoirs and soil moisture throughout the region, though possibly slower than usual in the islands where fewer wet spells than usual occur.
- Moderate flood potential in Belize and most Caribbean Islands (except the ABC Islands), high potential in the Guianas.

Wet spells frequency shifts Forecast for: May to July 2023

Precipitation outlook





Extreme wet spells frequency shifts Forecast for: May to July 2023

missing

MJJ 2023 frequency of extreme (top 1%) **3-day wet spells** USUALLY: Up to 1 extreme wet spell occur between May to July (Guianas: up to 2).

EXTREME WET SPELLS (= 3-day spells with rainfall totals among top 1%) FORECAST:

Little change from the usual number of 3-day extremely wet spells is expected across most of the region (low to medium confid.).

IMPLICATIONS:

Moderate potential for flash floods and associated hazards is a concern in view of the possible occurrence of extreme wet spells.

May to July 2023	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	• • •	Climatology	Forecast	Climatology	Forecast
Antigua (VC Bird)	21-38	21-42	1.3-4.9	1.6-5.6	0.4-3.2	0.8-4.1	0-1	0-1.1
Aruba (Beatrix)	6-12	5-14	0.7-2.4	0.6-3.1	0.2-1.3	0.5-1.7	0-1	0-0.5
Barbados (CIMH)	24-42	22-40	1.3-5.2	1.9-6.2	0.5-2.2		0-1	0-0.2
Barbados (GAIA)	27-45	22-39	2.1-4.9	2.1-5.5	0.4-2.7		0-1	
Belize (C. Farm)	28-40	29-44	2.4-5.1	2.3-5.6	1.3-3	1.1-3.5	0-1.1	
Cayman	25-36	20-34	3-5.5	2.8-7	1.1-3.4		0-1	
Cuba (Punta Maisi)	8-18	6-18	1.3-3.6	0.7-3.7	0.2-2.1	0-2	0-1	
Dom. Republic (Las Americas)								
Dominica (Canefield)	38-60	36-61	2.5-5.5	2.9-7.4	1.3-3.4		0-1.2	0-1.2
Dominica (Douglas Charles)	47-66	43-69	1.9-5	2-6.2	0.5-2.2	0.9-3.5	0-1	
Grenada (MBIA)	30-48	32-50	2-5	2.2-6.7	0.7-2.8		0-1	
Guyana_73	30-42	33-53	3.9-6.9	3.4-6.7	1.8-3.4	1.6-4.2	0-1	
Guyana (Albion)	44-58	44-63	3.9-7.2	3.3-7.1	2-3.9	1.8-4.7	0-2	
Guyana (Blairmont)	49-67	49-69	3.4-7.3	3.4-7.4	1.3-4.9		0-2	0-2
Guyana (Charity)								
Guyana (Enmore)	47-63	48-71	3.4-6.9	2.7-8	0.9-4.3		0-1.6	0-1.7
Guyana (Georgetown)	54-68	53-74	3.5-7.3	3.6-7.5	1.3-4.1		0-1	
Guyana (Greatfall)								
Guyana (New Amsterdam)	50-65	50-69	3.8-7.3	3.7-7.6	1.7-4.5		0-1.8	0-1.8
Guyana (Skeldon)	49-63	51-74	3.9-6.9	3.2-7	1.7-4.3	1.6-4.6	0-2	0-1.6
Guyana (Timehri)	56-71	54-76	3.9-7.3	3.5-6.9	1.7-4.3	1.6-5	0-2	0-2.1
Guyana_Wales								
Jamaica (Worthy Park)	25-41	22-43	2.6-5.6	2.2-6.5	1.3-3	1.2-3.8	0-2	0-1.8
Martinique (FDF Desaix)	43-59	39-59	2.1-5.1	2.3-6	0.9-3		0-1	0-0.6
Puerto Rico (San Juan)	29-47	27-50	2.2-5.8	2.1-6.9	0.9-3.9		0-1	
St. Lucia (Hewanorra)	32-51	31-52	1.7-5.3	2.2-6	0.4-2.6		0-1	0-0
St. Maarten (TNCM)	24-37	21-37	1.3-3.9	1.5-4.7	0.4-3	0.8-3.2	0-1	0-0.8
St. Vincent (ET Joshua)	44-64	38-58	2-5.1	1.8-5.7	0.9-3		0-1	0-1.1
Suriname (Zanderij)	58-70	53-73	4.2-6.7	3.4-7.3	1.8-4	1.8-5.1	0-2	
Tobago (ANR Robinson)	41-57	37-56	3.2-6.2	2.9-6.1	1.3-3		0-1	
Trinidad (Piarco)	32-46	28-43	2.4-4.7	2.2-5.7	0.9-3	1.1-3.9	0-1	0-1.1

grey none are expected

light blue an increase,

brown is a decrease in frequency,





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