

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks February to April 2023

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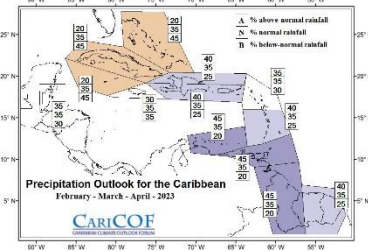
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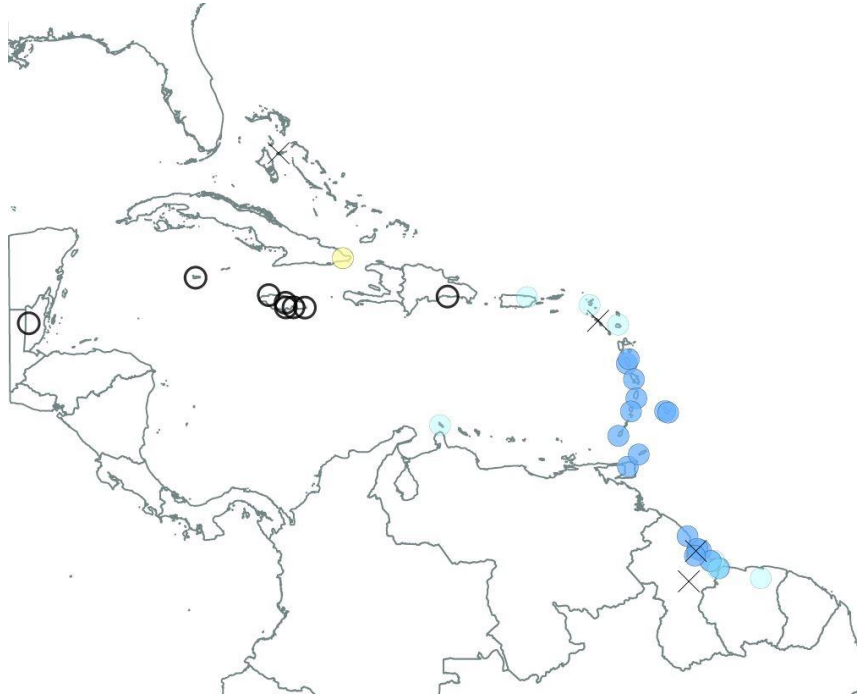
Wet day frequency shifts

Forecast for: February to April 2023

Precipitation outlook



FMA 2023 Frequency of wet days



USUALLY: Out of 90 days in Feb-Mar-Apr, there are about 15 to 30 wet days (ABC Islands: 5-15; coastal Guianas: 20-45).

SEASONAL RAINFALL FORECAST:

- At least the usual rainfall totals across most of the region, but possibly drier than usual in The Bahamas, Cayman Is. and Cuba.

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

- A decrease in the number of wet days may be expected in Eastern Cuba (*low confidence*), with an increase expected elsewhere (*medium confid.*).

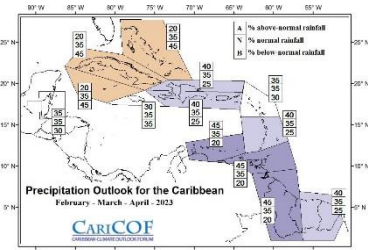
IMPLICATIONS:

- Favourable conditions for outdoor tourism-based activities due to a low number of wet days.
- Slowly increasing surface dryness, with a possible increase of local airborne dust and wildfire potential across the region. However, a faster increase is likely in Cuba and The Bahamas.

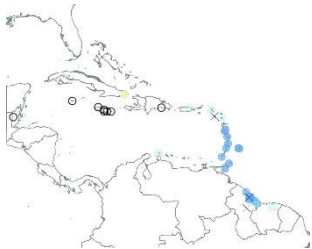
Wet spells frequency shifts

Forecast for: February to April 2023

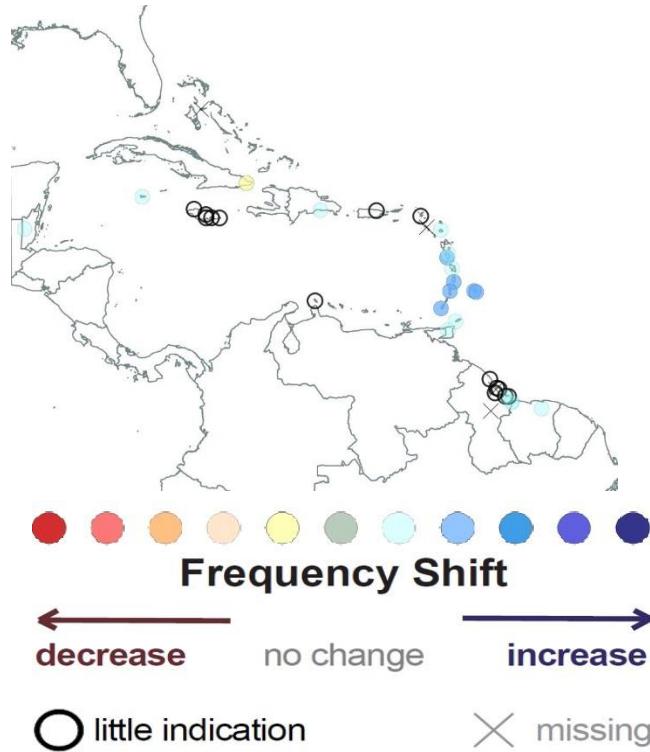
Precipitation outlook



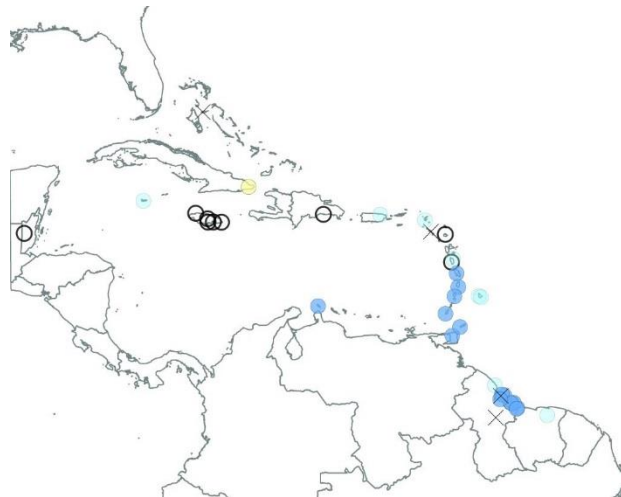
Wet days outlook



FMA 2022-'23 frequency of 7-day wet spells



FMA 2022 frequency of 7-day very wet spells



USUALLY: Up to 3 wet spells (coastal Guianas: up to 4) occur from Feb to Apr, with up to 1 of them ending up very wet (coastal Guianas: up to 2).

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

- Fewer wet spells than usual are forecast in Eastern Cuba with more elsewhere across the region (*low – med. confidence*).

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

- Fewer very wet spells than usual are forecast in Eastern Cuba with more elsewhere across the region (*low – med. confidence*).

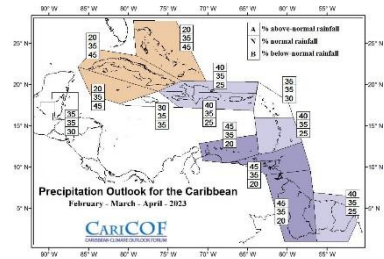
IMPLICATIONS:

- Limited flooding potential in the islands and Belize, but moderate potential in the coastal Guianas – esp. where soils are saturated – during the core of the dry season.
- Water depletion rates in smaller and larger surface reservoirs and in rivers may be even faster than usual in Cuba and The Bahamas.

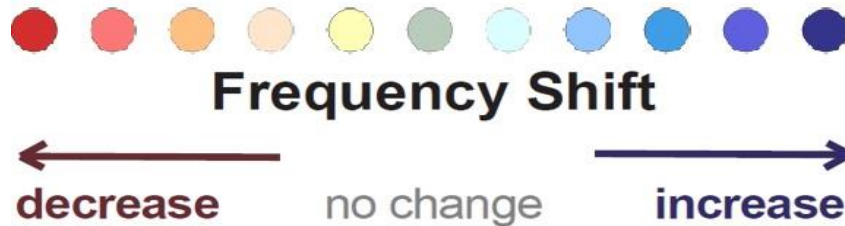
Extreme wet spells frequency shifts

Forecast for: February to April 2023

Precipitation outlook

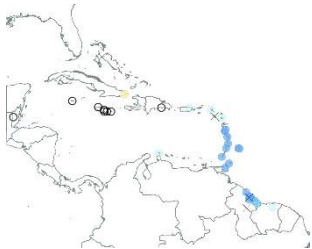


FMA 2022-'23 frequency of extreme (top 1%) 3-day wet spells

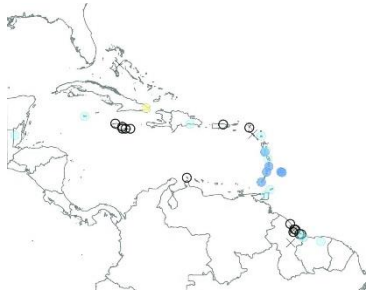


○ little indication X missing

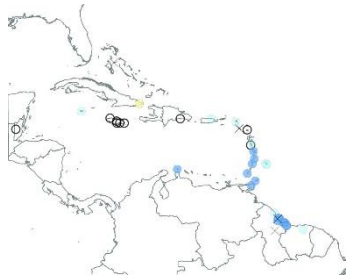
Wet days outlook



Wet spells outlook



Very wet spells outlook



USUALLY: Up to 1 extreme wet spell occurs from February to April in the coastal Guianas and in mountainous areas of other countries.

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

- No change from the usual number of 3-day extremely wet spells is expected across the region. (*low to medium confid.*)

IMPLICATIONS:

- There is a chance of occurrence of extreme wet spells in the coastal Guianas, particularly in early February and in April, as well as in mountainous areas region-wide in April. This translates to a moderate potential for flash floods and cascading hazards decreasing to moderate from about mid-February onwards.

February to April 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	Forecast	Climatology	Forecast	Climatology	Forecast	
Antigua (VC Bird)	15-29	16-33	0.9-2.6	0.8-3	0.2-1.3	0-1.5	0-1	0-1	light blue an increase, grey none are expected
Aruba (Beatrix)	4-15	4-17	0.4-2.6	0.4-2.3	0-1.3	0-1.4	0-0	0-0	
Barbados (CIMH)	15-29	18-34	0.4-1.7	0.4-2	0-0.9	0-1.1	0-0	0-0	
Barbados (GAIA)	18-29	19-35	0.4-2.2	0.5-2.5	0-0.9	0-1.2	0-0	0-0	
Belize (C. Farm)	9-17	8-19	0.4-1.4	0.3-1.8	0-0.9	0-0.9	0-0	0-0	
Cayman	7-16	6-18	0-1.3	0-2.2	0-0.8	0-1.2			
Cuba (Punta Maisi)	10-16	8-17	1.7-3.1	1.3-3.3	0.4-1.8	0.3-1.7	0-1	0-0.4	
Dom. Republic (Las Americas)	12-21	11-22	0.9-2.3	0.8-3.2	0.4-1.5	0.2-1.7	0-0	0-0	
Dominica (Canefield)	25-35	24-44	0-2.2	0.3-2.7	0-1	0-1	0-0	0-0	
Dominica (Douglas Charles)	38-56	39-61	0.4-2.4	0.7-3.2	0-1.7	0-1.8	0-0.6	0-0.2	
Grenada (MBIA)	11-24	14-28	0-1.8	0.1-2.6	0-0.8	0-1.5	0-0	0-0	
Guyana_73	16-27	17-31	1.3-4.3	1.3-4.4	0.4-2.6	0.5-2.9	0-1.1	0-0.9	
Guyana (Albion)	23-37	23-42	0.9-3.5	0.9-3.5	0-1.8	0.4-2.4	0-1	0-1.4	
Guyana (Blairmont)	24-43	25-48	0.9-3.3	1-3.6	0.4-1.7	0.4-2.4	0-1	0-0.7	
Guyana (Charity)									
Guyana (Enmore)	24-38	26-42	1.3-3	1.3-3.1	0.4-2	0.5-2.2	0-1.1	0-1.3	
Guyana (Georgetown)	23-42	26-47	0.7-3.4	0.7-3.1	0-2.1	0.2-2.4	0-1	0-1.3	
Guyana (Greatfall)									
Guyana (New Amsterdam)	24-41	26-48	0.9-3.4	1-4	0.3-2.2	0.5-2.7	0-1	0-1.3	
Guyana (Skeldon)	23-41	26-46	1.3-3.9	1.3-4.4	0.4-2.4	0.5-2.6	0-1	0-0.4	
Guyana (Timehri)	25-45	28-52	0.4-3.1	0.8-3.6	0-2	0.4-2.3	0-1	0-1.5	
Guyana_Wales									brown is a decrease in frequency,
Jamaica (Worthy Park)	14-25	13-27	0.9-3.1	0.7-3.8	0-2.1	0-1.9	0-0	0-0	
Martinique (FDF Desaix)	30-47	31-53	0.4-1.8	0.5-2.3	0-0.9	0.1-1.5	0-0	0-0	
Puerto Rico (San Juan)	21-35	22-39	0.9-2.8	0.9-2.9	0.4-1.7	0.2-2.4	0-1	0-0.8	
St. Lucia (Hewanorra)	21-35	22-41	0-2.6	0.5-2.9	0-1.3	0-1.7	0-1	0-1	
St. Maarten (TNM)	22-38	22-40	0.9-2.9	0.7-3.5	0.2-1.3	0.1-1.7	0-0	0-0	
St. Vincent (ET Joshua)	31-48	33-55	0-2.6	0.5-3.1	0-1.3	0-1.8	0-0	0-0	
Suriname (Zanderij)	37-55	36-60	1.5-4.9	1.6-5.1	0.9-2.7	0.7-3.8	0-1	0-1.3	
Tobago (ANR Robinson)	12-31	16-32	0-1.3	0-1.2	0-0.4	0-1.1	0-0	0-0	
Trinidad (Piarco)	11-32	15-34	0.2-2	0.2-2.4	0-1.3	0-1.6	0-0	0-0	



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