Rainfall frequency and extreme forecasts

Wet days and Wet spells Outlooks February to April 2024

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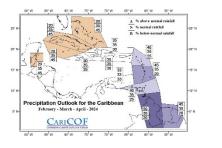






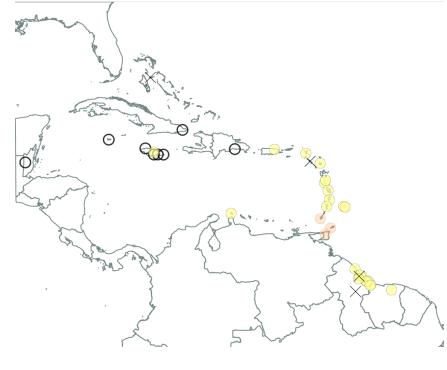


Precipitation outlook



Wet day frequency shifts Forecast for: February to April 2024

FMA 2024 Frequency of wet days

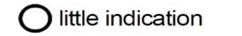


Frequency Shift

decrease no change

increase

missing



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).

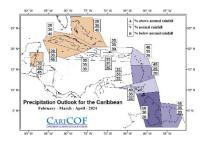
FORECAST: FMA may be wetter than usual along the Lesser Antilles and the Guianas, but drier than usual elsewhere.

• An even lower than usual number of wet days is expected across the ABC Islands, Puerto Rico, the Leeward & Windward Islands, and the coastal Guianas, with little indication of change from the usual in Belize and the Greater Antilles.

IMPLICATIONS:

 Few wet days during the core of the dry season, leading to fewer outdoor activity disruptions, as well as to drier surfaces and vegetation, in turn making environmental conditions less conducive to moisturerelated pests, but with heightened wildfire potential by March.

Precipitation outlook



Wet days outlook



Forecast for: February to April 2024 FMA 2024 frequency of 7-day wet spells Frequency Shift

no change decrease increase

O little indication

JFM 2023-24 frequency of 7-day very wet spells

 \times missing



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).

FORECAST: FMA may be wetter than usual along the Lesser Antilles and the Guianas, but drier than usual elsewhere.

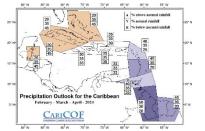
A faster than usual increase in the number of 7-day wet and very spells is expected for most of the Lesser Antilles and in **Puerto Rico** (medium confidence) **but, possibly, a slower** increase than usual in Belize, Sint Maarten (low to medium confidence), and with little change from the usual numbers elsewhere (low to medium confidence).

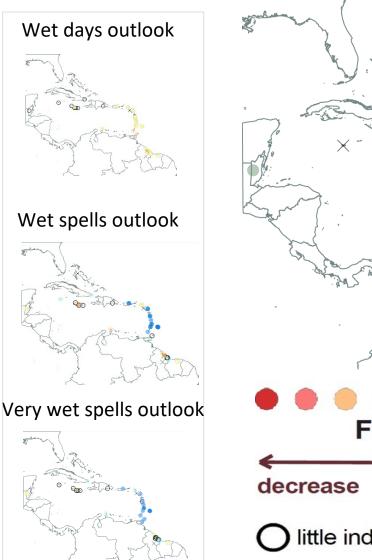
IMPLICATIONS:

Wet spells frequency shifts

- Though flooding potential should be low to moderate in the islands and Belize, it may more significantly increase by April than in most years. By comparison, moderate potential is forecast in the coastal Guianas – esp. where soils are saturated – during the core of the short dry season.
- Water depletion rates in smaller and larger surface reservoirs • and in rivers may be slower than usual in the Lesser Antilles.

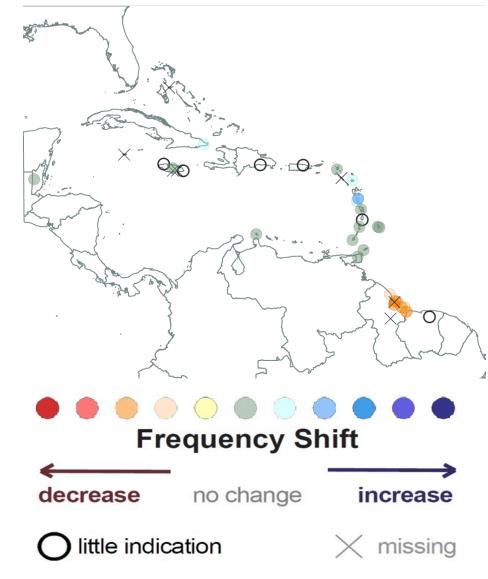
Precipitation outlook





Extreme wet spells frequency shifts Forecast for: February to April 2024

FMA 2024 frequency of *extreme (top 1%)* 3-day wet spells



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

FORECAST: FMA may be wetter than usual along the Lesser Antilles and the Guianas, but drier than usual elsewhere.

 Fewer extreme wet spells than usual are expected in Guyana (medium to high confidence), but slightly more than the usual expected in Antigua, easternmost Cuba, and Dominica (low confidence). No change is expected elsewhere.

IMPLICATIONS:

 There is a reduced chance of occurrence of extreme wet spells in the coastal Guianas, but an increased chance in mountainous areas. This translates to a moderate potential for flooding and cascading impacts increasing from limited through March, to moderate or high in April.

February to April 20		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	14-29	0.9-2.6	0.9-3.9	0.4-1.3	0.2-1.7	0-1	0-1
Aruba (Beatrix)	4-15	3-13	0.4-2.6	0.2-2	0-1.3	0-1.2	0-0	0-0
Barbados (CIMH)	15-30	15-30	0.4-1.6	0.6-2.5	0-0.9	0-1.2	0-0	0-0
Barbados (GAIA)	18-29	16-32	0.4-2.2	0.8-3.3	0-0.9	0.1-1.2	0-0	0-0
Belize (C. Farm)	9-17	8-18	0.4-1.4	0.1-1.7	0-0.9	0-0.8	0-0	0-0
Cayman	7-16	6-17	0-1.3	0-2.4	0-0.7	0-1.1		
Cuba (Punta Maisi)	10-16	9-17	1.7-3.1	1.5-4.1	0.4-1.8	0.4-2.2	0-1	0-0.8
Dom. Republic (Las Americas)	12-21	11-21	0.9-2.4	0.8-2.9	0.4-1.7	0.3-1.5	0-0	0-0.1
Dominica (Canefield)	25-35	20-39	0-2.2	0.1-2.6	0-1	0-1	0-0	0-0
Dominica (Douglas Charles)	38-56	35-56	0.4-2.4	0.8-4	0-1.7	0.1-2.1	0-0.6	0-0.9
Grenada (MBIA)	11-24	11-23	0-1.8	0-2.8	0-0.7	0-1.5	0-0	0-0
Guyana_73	16-27	15-28	1.3-4.3	1.2-5	0.4-2.6	0.6-3	0-0.9	0-0.2
Guyana (Albion)	22-37	21-38	0.9-3.5	0.8-3.6	0-1.9	0.2-2.1	0-1	0-0.5
Guyana (Blairmont)	24-43	22-42	0.9-3.3	0.6-3.7	0.4-1.7	0.2-2.1	0-1	0-0.2
Guyana (Charity)								
Guyana (Enmore)	24-38	23-37	1.3-3	0.7-2.7	0.4-2.2	0.2-1.8	0-1.1	0-0.5
Guyana (Georgetown)	23-42	22-41	0.7-3.4	0.4-2.8	0-2.1	0-1.9	0-1.1	0-0.3
Guyana (Greatfall)								
Guyana (New Amsterdam)	24-41	22-43	0.9-3.4	0.7-4	0.4-2.3	0.3-2.4	0-1	0-0.5
Guyana (Skeldon)	23-41	23-41	1.3-3.9	1.1-5.2	0.4-2.6	0.4-2.5	0-1	0-0.1
Guyana (Timehri)	24-45	24-45	0.4-3.1	0.4-3.6	0-1.8	0.1-2	0-1.1	0-0.3
Guyana_Wales								
Jamaica (Worthy Park)	13-25	12-25	0.9-3.1	0.4-3.3	0-2.1	0-1.6	0-0	0-0
Martinique (FDF Desaix)	30-47	27-48	0.4-1.8	0.3-2.6	0-0.9	0-1.5	0-0	0-0
Puerto Rico (San Juan)	21-35	20-36	0.9-2.9	1-3.9	0.4-1.7	0.4-2.7	0-1	0-1
St. Lucia (Hewanorra)	21-35	19-35	0-2.6	0.7-3.8	0-1.3	0.1-1.7	0-1	0-0.2
St. Maarten (TNCM)	21-38	20-37	0.9-2.9	0.5-3.5	0.4-1.3	0.1-1.7	0-0	0-0
St. Vincent (ET Joshua)	31-48	29-49	0-2.6	0.5-3.5	0-1.3	0-1.7	0-0	0-0
Suriname (Zanderij)	37-55	34-56	1.5-4.9	0.9-4.9	0.9-2.6	0.6-3.4	0-1.1	0-1.2
Tobago (ANR RobinNDJ)	12-30	12-25	0-1.3	0-1.3	0-0.4	0-1.1	0-0	0-0
Trinidad (Piarco)	11-32	10-26	0.2-2.1	0.1-2.5	0-1.3	0-1.5	0-0	0-0

grey none are expected

light blue an increase,

brown is a decrease in frequency,



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