## Rainfall frequency and extreme forecasts

# Wet days and Wet spells Outlooks January to March 2024

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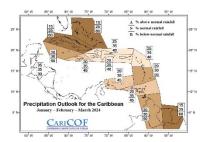




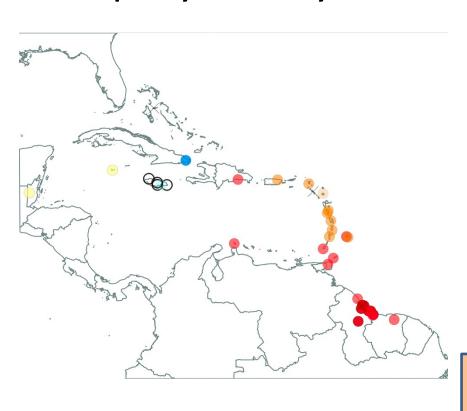
### Wet day frequency shifts

### Forecast for: January to March 2024

#### Precipitation outlook



JFM 2024 Frequency of wet days



Frequency Shift

decrease no change increase

Iittle indication 

missing

USUALLY: Out of 90 days in Jan-Feb-Mar, there are about 15 to 30 wet days (ABC Islands: 10-25; coastal Guianas: 20 to 50).

FORECAST: JFM may be drier than usual across the region.

 A faster than usual decrease in wet day frequency is expected across the region except in eastern Cuba and Jamaica where a potential increase in wet day frequency is expected.

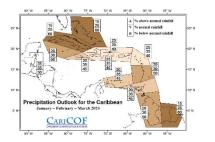
#### **IMPLICATIONS:**

- Few wet days leading to fewer outdoor activity disruptions and to drier surfaces and vegetation, in turn making environmental conditions less conducive to moisture related pests.
- Increased intensity of the core of the dry season with heightened wildfire potential by March.

### Wet spells frequency shifts

### Forecast for: January to March 2024

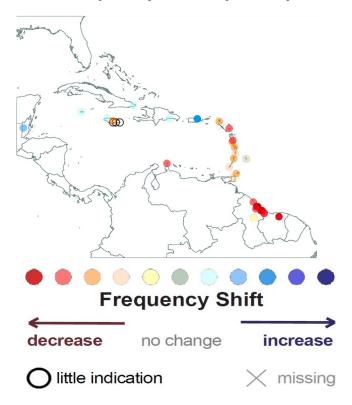
#### Precipitation outlook



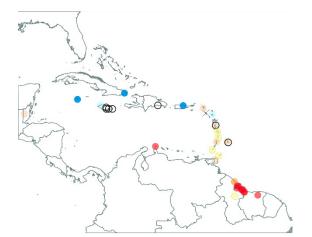
Wet days outlook



JFM 2024 frequency of 7-day wet spells



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



USUALLY: Up to 3 wet spells occur from January to March (ABC Islands: 1 to 4; coastal Guianas: up to 4), with up to 1 of them ending up very wet (ABC Islands: up to 2; coastal Guianas: up to 3).

**FORECAST:** JFM may be drier than usual across the region.

- A slower than usual decrease in the number of 7-day wet spells is expected in Belize, Grand Cayman, Eastern Cuba, Dominican Republic, Jamaica, and Puerto Rico (low confidence), but a faster decrease in the ABC islands, the Guianas, and the Lesser Antilles (medium to high confidence).
- A slightly higher than usual number of very wet spells is expected across Antigua, Grand Cayman, eastern Cuba, and Puerto Rico, with a reduction elsewhere (low to medium confidence).

#### **IMPLICATIONS:**

- Properties of large water reservoirs and soil moisture may be even faster than usual in Barbados, Grand Cayman, Grenada, the Guianas and Trinidad & Tobago, while slower recharge rates are expected in the coastal Guianas.
- The decreasing frequency of very wet spells translates to flood potential being (1) low in Belize and the islands; (2) high until early-February in the Guianas.

### **Extreme wet spells frequency shifts**

Forecast for: January to March 2024



JFM 2024 frequency of extreme (top 1%) 3-day wet spells **USUALLY:** Up to 1 or 2 extreme wet spells occur from January to March in the coastal Guianas, but virtually none elsewhere.

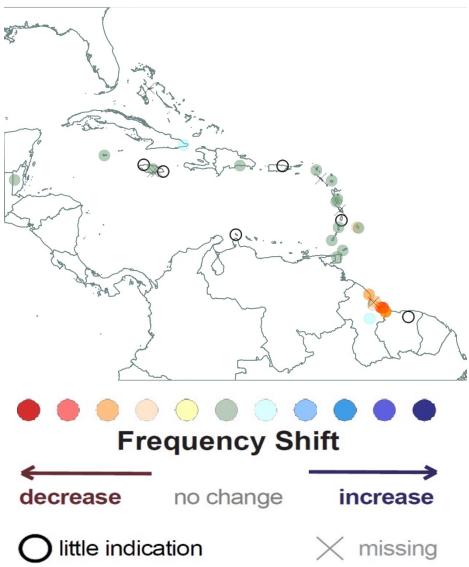
**FORECAST:** JFM may be drier than usual across the region.

Wet days outlook

Wet spells outlook

Very wet spells outlook





A slightly slower than usual decrease in the chance of extreme wet spells is expected in Guyana (medium to high confidence), but no change from the usual expected elsewhere.

#### **IMPLICATIONS:**

- Though reduced, the chance of occurrence of extreme wet spells in the northern Guianas translates to a moderate to high potential for flash floods and cascading hazards in those areas.
- This potential is mostly low in the Caribbean Islands and Belize, but moderate in mountainous areas.

January to March 2024					No. of 7-day very wet spells (10%		No. of 3-day extremely wet spells (1%	
	No. of wet days		No. of 7-day wet spells (20% wettest)				wettest)	
Antique (VC Bind)	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Climatology	extremely wet spells (1% wettest)  Forecast
Antigua (VC Bird)	16-34	14-35	0.8-2.4	0.3-1.7	0-0.9	0-1.1	0-0	0-0 0-0
Aruba (Beatrix)	7-27	2-18	1.2-4.3	0.1-2.7	0-2	0-1.1	0-0	
Barbados (CIMH)	17-37	13-33	0.2-1.7	0.2-2.4	0-0.9	0-0.8	0-0	0-0 0-0
Barbados (GAIA)	21-33	15-36	0.8-2.1	0.3-2.3	0-0.9	0-0.8	0-0	
Belize (C. Farm)	14-25	13-28	0.9-2.6	0.6-3.6	0.4-1.3	0-1.1	0-0	0-0 0-0
Cayman	7-19	7-20	0-1.7	0.1-2.2	0-1	0-1.4	0-0	
Cuba (Punta Maisi)	10-19	12-29	1.7-3.4	1.3-4.8	0.4-1.7	0.6-2.4	0-0.1	0-0.3
Dom. Republic (Las Americas)	12-19	9-18	0.7-1.9	0.7-2.5	0-0.9	0-1.2	0-0	0-0
Dominica (Canefield)	29-46	20-44	0-3.3	0-2.3	0-1.3	0-0.9	0-0	0-0 0-0
Dominica (Douglas Charles)	42-60	33-60	0.4-2.2	0-1.5	0-1.3	0-1	0-0	0-0
Grenada (MBIA)	15-33	9-26	0-2.6	0-2.6	0-1.5	0-0.9	0-0	0-0 0-0
Guyana_73	14-29	9-22	0.8-4.2	0.5-3	0.4-2.7	0-1.4	0-1	
Guyana (Albion)	20-44	12-33	0.3-4.7	0-2.3	0.2-3	0-1.4	0-1.1	0-0.1
Guyana (Blairmont)	19-51	13-38	0.4-4.3	0-1.9	0-2.6	0-1.3	0-1.6	0-0.1
Guyana (Charity)								0-0.1
Guyana (Enmore)	22-46	15-34	0.4-4.3	0-2	0.4-3.3	0-1.7	0-2	0-1
Guyana (Georgetown)	23-50	16-37	0.4-4.3	0-2.3	0-2.8	0-1.6	0-1.6	0-1.2
Guyana (Greatfall)	31-55	22-46	0.9-3.4	0.8-3.4	0-2.1	0-1.7	0-0.2	0-0.6 0-0.2 0-0 0-0.5
Guyana (New Amsterdam)	21-46	15-38	0.4-3.9	0-2	0-3.1	0-1.3	0-1.1	0-0.2
Guyana (Skeldon)	20-45	15-38	0.9-4.1	0.2-2.6	0.2-2.2	0-1.4	0-0.6	0-0
Guyana (Timehri)	23-52	17-41	0.4-3.9	0.1-2.4	0-2.8	0-1.4	0-1.6	0-0.5
Guyana_Wales								2.
Jamaica (Worthy Park)	14-25	12-29	0.2-3	0.1-2.3	0-1.6	0-1.5	0-0	0-0
Martinique (FDF Desaix)	39-53	26-51	0.4-2.1	0.1-2.2	0-0.9	0-1.1		
Puerto Rico (San Juan)	26-40	19-36	0.9-2.6	1-4.4	0-0.9	0.3-2.2	0-0.6	0-0.5
St. Lucia (Hewanorra)	25-41	21-40	0.7-2.1	0.3-2	0-0.9	0-1.2	0-0	U-U
St. Maarten (TNCM)	28-43	22-41	0.9-3.5	0.4-3	0.2-1.4	0-1.6	0-0	0-0
St. Vincent (ET Joshua)	40-53	28-52	0.4-2.5	0-1.8	0-1.2	0-1.2	0-0	
Suriname (Zanderij)	32-53	27-46	1.7-4.3	0.5-2.7	0.4-2.6	0.2-2.3	0-1	0-0 0-0.9 0-0
Tobago (ANR RobinNDJ)	17-34	9-27	0-1.7	0-1	0-0.7	0-0.9	0-0	0-0
Trinidad (Piarco)	15-34	9-27	0.2-2.6	0-2.1	0-1.3	0-1.4	0-0	0-0



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