## **Rainfall frequency and extreme forecasts**

## Wet days and Wet spells Outlooks March to May 2023

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#### Precipitation outlook



### Wet day frequency shifts Forecast for: March to May 2023

MAM 2023 Frequency of wet days USUALLY: Out of 90 days in Mar-Apr-May, there are about 15 to 30 wet days in low lying, 30-50 in mountainous locations (ABC Islands: 1-10; coastal Guianas: 30-50).

#### SEASONAL RAINFALL FORECAST:

• Usual rainfall totals across the region are expected.

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

• Little change from the usual number of wet days is forecasted for the region (*low confidence*).



#### **IMPLICATIONS:**

- Favourable conditions for outdoor tourism-based activities due to a low number of wet days.
- Increasing surface dryness, with a potential increase of local airborne dust and wildfire potential until April in the Greater Antilles and the Guianas, and until May elsewhere.

#### Precipitation outlook





USUALLY: Up to 3 wet spells (coastal Guianas: up to 5) occur from Mar to May, with up to 2 of them ending up very wet (coastal Guianas: up to 3).

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

A slight increase in the number of wet spells may be expected in certain islands along the Lesser Antilles including Aruba and coastal Guianas (low confidence).

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

An increase in the number of very wet spells may be expected in certain islands along Aruba, the Lesser Antilles and coastal Guianas (low to medium confidence), but a possible slight decrease in Cuba (low confidence).

#### **IMPLICATIONS:**

Wet spells frequency shifts

- Limited flooding potential until April in the islands and Belize, but moderate potential in the Guianas during the dry season. Increasing flooding potential in May except.
- Water depletion rates in smaller and larger surface reservoirs and in rivers may be even faster than usual in Cuba and The Bahamas.







Wet spells outlook



Very wet spells outlook



## **Extreme wet spells frequency shifts** Forecast for: March to May 2023

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



**USUALLY:** Up to 1 extreme wet spell occurs from March to May

# **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:**

 The occurrence of extreme wet spells is rare in March but increases into May across most of the region (except the ABC Islands). This translates to a moderate potential for flash floods and cascading hazards from May onwards, particularly in the Greater Antilles and Guianas.

March to May 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)	17-29	16-34	1.1-4.3	1-4.3	0.4-2.6	0.3-2.9	0-1	0-1.3
Aruba (Beatrix)	2-10	2-13	0.4-1.3	0.3-2	0-0.9	0-1.5	0-0	0-0
Barbados (CIMH)	14-28	14-31	0.4-2.6	0.4-2.9	0-1.7	0-2	0-0.5	0-0.2
Barbados (GAIA)	15-30	16-33	0.4-2.8	0.5-3.2	0-1.7	0.3-2	0-1	0-0.3
Belize (C. Farm)	10-22	9-21	0.4-1.9	0.5-2.2	0-1.3	0.1-1.3	0-0	0-0
Cayman	9-22	8-24	0.9-2.6	0.9-3	0.4-1.6	0.2-2	0-1	0-1.2
Cuba (Punta Maisi)	8-20	7-22	1.3-3.9	1.2-4	0.4-1.7	0.3-1.9	0-1	0-1.1
Dom. Republic (Las Americas)	13-26	14-30	1.1-3.9	1.4-4.6	0.4-2.3	0.6-3.1	0-1	0-0.6
Dominica (Canefield)	22-35	22-36	0-2.5	0.1-2.8	0-1.6	0-1.8	0-0	0-0
Dominica (Douglas Charles)	36-60	37-63	1.3-3.6	1.1-4.3	0-2.1	0.1-2.6	0-2	0-1.6
Grenada (MBIA)	10-26	10-33	0-1.9	0.2-2.4	0-1.1	0-1.8	0-0	0-0
Guyana_73	21-34	21-35	1.8-5.7	1.9-5.9	0.9-3	0.9-3.4	0-1	0-1.2
Guyana (Albion)	28-45	29-47	1.9-4.3	2.1-4.9	0.9-3	1-3	0-1	0-1.4
Guyana (Blairmont)	31-48	31-49	1.9-4.7	2-5	0.9-3	0.8-3.7	0-1	0-1.4
Guyana (Charity)								
Guyana (Enmore)	32-44	32-48	1.8-4.7	1.7-5.2	0.9-2.6	0.9-2.9	0-1.3	0-1.5
Guyana (Georgetown)	34-50	32-50	1.8-4.3	1.8-4.7	0.9-2.1	1-2.8	0-1	0-1.2
Guyana (Greatfall)	39-60	28-64	2.1-5.2	1.9-5.8	0.8-3.4	0.8-4.5	0-2	0-2.2
Guyana (New Amsterdam)	34-48	32-52	1.9-4.7	2.1-5.1	0.9-3	1.1-3.5	0-1	0-1.4
Guyana (Skeldon)	34-49	33-51	1.8-5.1	2-5.8	0.9-3	1-3.8	0-1	0-1.1
Guyana (Timehri)	35-54	35-54	1.7-4.7	2.1-5	0.5-2.6	0.8-3.3	0-2	0-1.8
Guyana_Wales								
Jamaica (Worthy Park)	20-33	19-34	2.1-4.3	1.9-4.5	0.7-2.6	0.5-3.2	0-1	0-1.5
Martinique (FDF Desaix)	29-47	27-48	0.9-3.4	0.8-3.4	0.4-1.9	0.4-2.2	0-0	0-0
Puerto Rico (San Juan)	25-38	24-40	0.9-3.7	1.3-4.3	0.7-2.7	0.7-3.5	0-1.1	0-1.5
St. Lucia (Hewanorra)	21-39	19-40	0.5-3	0.5-3.2	0-1.7	0-2.2	0-1	0-0.5
St. Maarten (TNCM)	21-33	20-36	0.9-3	1.1-3.5	0.4-1.4	0.4-1.8	0-1	0-0.2
St. Vincent (ET Joshua)	31-51	29-53	0.4-3	0.4-3.4	0-1.7	0-1.8	0-0	0-0
Suriname (Zanderij)	48-61	46-62	2.6-5.9	2.5-6.5	1.7-3.5	1.1-4.8	0-2	0-2.1
Tobago (ANR Robinson)	14-31	14-36	0-1.7	0.2-2.3	0-0.9	0-1.4	0-0	0-0
Trinidad (Piarco)	13-33	13-33	0.4-2.4	0.3-2.7	0-1.5	0-2	0-1	0-0.5

grey none are expected

light blue an increase,

brown is a decrease in frequency,





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