# Rainfall frequency and extreme forecasts

# Wet days and Wet spells Outlooks March to May 2022

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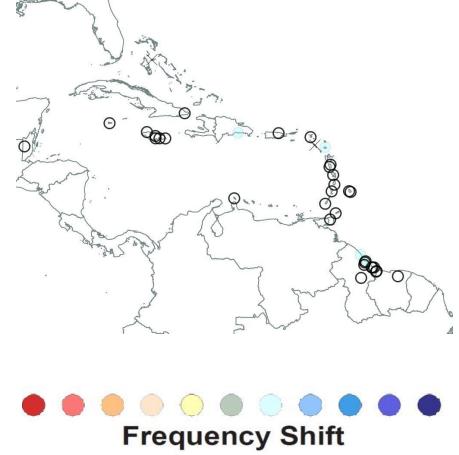
# Wet day frequency shifts

Forecast for: March to May 2022

Precipitation outlook



MAM 2022 Frequency of wet days



no change

increase

missing

decrease

little indication

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).

FORECAST: The forecast skill for MAM seasonal rainfall is very low, therefore, climatology (equal chances for above/normal/below) may be expected for both seasonal rainfall totals and the number of wet days during MAM.

#### **IMPLICATIONS:**

- Seasonally low rainfall totals and wet days may lead to expected low rainfall conditions towards May, which include dryness and wildfire potential, especially in the Greater Antilles.
- Potential decrease in mosquito related health risk.

# Wet spells frequency shifts

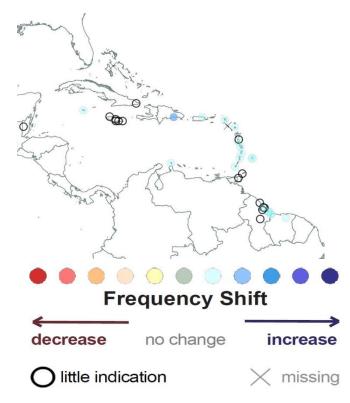
## Forecast for: March to May 2022

#### Precipitation outlook





MAM 2022 frequency of 7-day wet spells

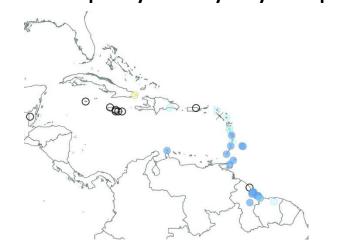


USUALLY: Up to 3 wet spells (coastal Guianas: up to 5) occur from Mar to May, with up to 2 of them ending up very wet (coastal Guianas: up to 3).

FORECAST: The forecast skill for MAM seasonal rainfall is very low, therefore, climatology (equal chances for above/normal/below) may be expected for both seasonal rainfall totals and the number of wet days during MAM.

However, a slight increase in the number of wet and very wet spells is expected east of and including The Dominican Republic (low to med confid.).

#### MAM 2022 frequency of 7-day very wet spells



#### **IMPLICATIONS:**

- Relatively fast depletion of water reservoirs from Puerto Rico westwards into April.
- Rising flood potential towards May, especially in the Lesser Antilles and coastal Guyana in view of the increased frequency of very wet spells.

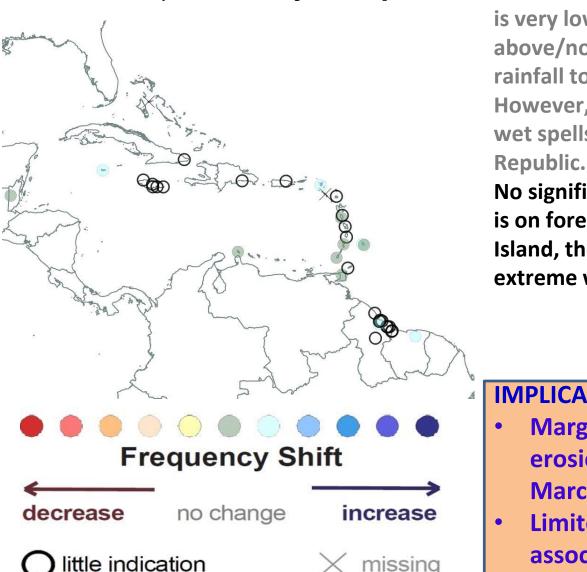
# **Extreme wet spells frequency shifts**

Forecast for: March to May 2022 **USUALLY:** Up to 1 extreme wet spell occurs



**FORECAST:** The forecast skill for MAM seasonal rainfall is very low, therefore, climatology (equal chances for above/normal/below) may be expected for both seasonal rainfall totals and the number of wet days during MAM. However, a slight increase in the number of wet and very wet spells is expected east of and including The Dominican

No significant changes in the number of extreme wet spells is on forecast for Belize and the islands, except for Cayman Island, the Guianas, and Sint Martin where chances of 1 extreme wet spell are higher than usual (low confid.).



### **IMPLICATIONS:**

from March to May.

- Marginal flash flood, landslide/rockfall and soil erosion potential in Belize and the islands through March.
- Limited to moderate potential for flash floods and associated hazards in Belize and the islands in April and May.

## Precipitation outlook



## Wet days outlook



Wet spells outlook



Very wet spells outlook



March to May 2022	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)	17-29	23-43	1.1-4.3	1.4-3.9	0.4-2.6	0.3-1.7	0-1	0-0
Aruba (Beatrix)	2-10	12-47	0.4-1.3	2.4-7.9	0-0.9	1.5-5.4	0-0	
Barbados (CIMH)	14-28	22-45	0.4-2.6	0.8-2.8	0-1.7	0.4-1.8	0-0.5	0-0.3
Barbados (GAIA)	15-30	23-42	0.4-2.8	0.8-3.5	0-1.7	0.7-1.9	0-1	0-0.5
Belize (C. Farm)	10-22	19-41	0.4-1.9	1.2-4.2	0-1.3	0.1-1.7	0-0	
Cayman	9-22	10-22	0.9-2.6	0.2-2.3	0.4-1.6	0-1.1	0-1	0-0
Cuba (Punta Maisi)	8-20	11-24	1.3-3.9	1.7-4.7	0.4-1.7	0.2-1.8	0-1	0-0
Dom. Republic (Las Americas)	13-26	13-24	1.1-3.9	0.7-2.9	0.4-2.3	0-1.4	0-1	0-0.3
Dominica (Canefield)	22-35	35-57	0-2.5	0.4-3.9	0-1.6	0-1.7	0-0	0-0
Dominica (Douglas Charles)	36-60	48-68	1.3-3.6	0.8-3.5	0-2.1	0.1-1.4	0-2	0-0
Grenada (MBIA)	10-26	18-45	0-1.9	0.6-3.6	0-1.1	0.1-2.4	0-0	
Guyana_73	21-34	17-35	1.8-5.7	1.2-4.3	0.9-3	1-4	0-1	
Guyana (Albion)	28-45	28-57	1.9-4.3	1.6-7.2	0.9-3	1.5-5.9	0-1	
Guyana (Blairmont)	31-48	30-64	1.9-4.7	1.3-6.8	0.9-3	1.4-5.7	0-1	
Guyana (Charity)								
Guyana (Enmore)	32-44	32-54	1.8-4.7	1.7-4.7	0.9-2.6	1.2-4.8	0-1.3	0-1.3
Guyana (Georgetown)	34-50	35-64	1.8-4.3	1.1-7.6	0.9-2.1	1.4-7.4	0-1	
Guyana (Greatfall)	39-60	34-61	2.1-5.2	1.3-5	0.8-3.4	0.9-4.1	0-2	0-0.2
Guyana (New Amsterdam)	34-48	31-59	1.9-4.7	1.3-5.8	0.9-3	1.5-5.9	0-1	
Guyana (Skeldon)	34-49	30-52	1.8-5.1	1.3-4.2	0.9-3	0.9-2.9	0-1	
Guyana (Timehri)	35-54	38-68	1.7-4.7	1.7-6.1	0.5-2.6	1.2-5.2	0-2	0-1.9
Guyana_Wales								
Jamaica (Worthy Park)	20-33	14-26	2.1-4.3	0.4-2.7	0.7-2.6	0-1.3	0-1	0-0
Martinique (FDF Desaix)	29-47	43-64	0.9-3.4	1-3.5	0.4-1.9	0.1-1.4	0-0	
Puerto Rico (San Juan)	25-38	30-50	0.9-3.7	1.6-4.3	0.7-2.7	0.4-1.8	0-1.1	0-1
St. Lucia (Hewanorra)	21-39	30-47	0.5-3	1.1-3.1	0-1.7	0.3-1.6	0-1	0-0
St. Maarten (TNCM)	21-33	29-50	0.9-3	1.8-5.9	0.4-1.4	0.3-2.5	0-1	
St. Vincent (ET Joshua)	31-51	40-63	0.4-3	0.8-3.3	0-1.7	0.7-2.4	0-0	
Suriname (Zanderij)	48-61	41-58	2.6-5.9	1.7-3.8	1.7-3.5	0.9-2.6	0-2	0-1.2
Tobago (ANR Robinson)	14-31	24-45	0-1.7	0.7-4	0-0.9	0.2-1.8	0-0	
Trinidad (Piarco)	13-33	27-45	0.4-2.4	0.3-2.9	0-1.5	0-1.9	0-1	0-0.3



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