# Rainfall frequency and extreme forecasts

# Wet days and Wet spells Outlooks January to March 2025

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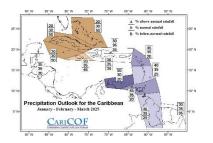




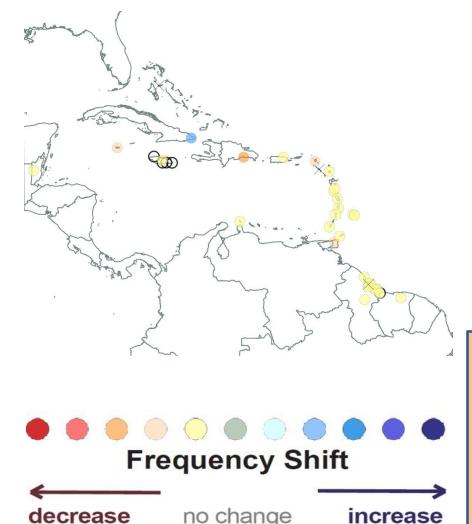
# Wet day frequency shifts

Forecast for: January to March 2025

## Precipitation outlook



JFM 2025 Frequency of wet days



little indication

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 Bahamas, Cayman Is., Cuba and Jamaica and wetter than usual in the ABC islands, the Lesser Antilles, Trinidad and Tobago and Guyana.

• A slightly faster than usual decrease in wet day frequency is expected across the region (low confidence) except in eastern Cuba where a slower decrease in wet day frequency is expected (medium confidence).

## **IMPLICATIONS:**

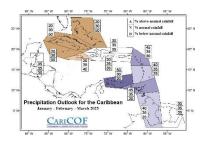
missing

- 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 2025

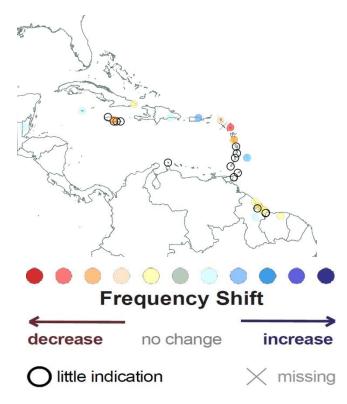
## Precipitation outlook



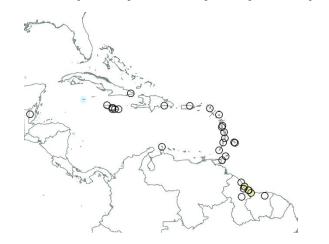
## Wet days outlook



JFM 2025 frequency of 7-day wet spells



JFM 2025 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 Bahamas, Cayman Is., Cuba and Jamaica and wetter than usual in the ABC islands, the Lesser Antilles, Trinidad and Tobago and Guyana.

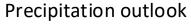
- A patchwork of frequency shifts in the number of wet spells is indicative of low forecast skill, leaving us with little additional information in the forecast of wet spells.
- There is little additional information in the forecast of very wet spells at this time.

#### **IMPLICATIONS:**

- Gradual depletion of large water reservoirs and soil moisture along these months, while the usual recharge rates are expected in the coastal Guianas until early February.
- The decreasing frequency of very wet spells into March 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 2025



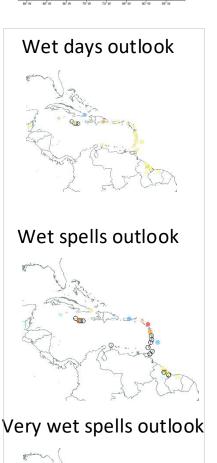


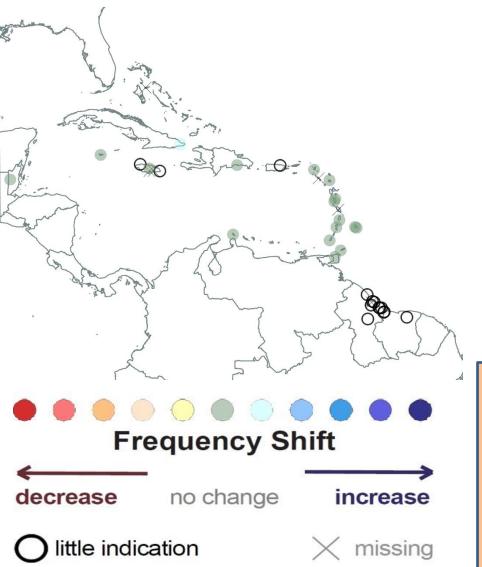
JFM 2025 frequency of extreme (top 1%) 3-day wet spells

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 Bahamas, Cayman Is., Cuba and Jamaica and wetter than usual in the ABC islands, the Lesser Antilles, Trinidad and Tobago and Guyana.

 No change in the number of extreme 3-day wet spells from the usual is expected across the region.





## **IMPLICATIONS:**

- 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.

lanuary to March 2025	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)	16-34	14-35	0.8-2.4	0.3-1.8	0-0.9	0-1	0-0		
Aruba (Beatrix)	7-27	5-26	1.2-4.3	0.9-3.9	0-2	0.1-1.9	0-0		
Barbados (CIMH)	17-37	16-38	0.2-1.7	0.4-2.4	0-0.9	0-0.9	0-0		
Barbados (GAIA)	21-33	17-40	0.8-2.1	0.6-2.5	0-0.9	0-0.8	0-0		
Belize (C. Farm)	14-25	12-27	0.9-2.6	0.7-3.2	0.4-1.3	0-1.2	0-0		
Cayman	7-19	7-19	0-1.7	0-1.9	0-1	0-1.1	0-0		
Cuba (Punta Maisi)	10-19	10-26	1.7-3.4	1.3-4	0.4-1.7	0.4-2	0-0.1	0-0.4	
Dom. Republic (Las Americas)	12-19	9-19	0.7-1.9	0.7-2.4	0-0.9	0-1.1	0-0		
Dominica (Canefield)	29-46	23-49	0-3.3	0.1-2.5	0-1.3	0-1.2	0-0		
Dominica (Douglas Charles)	42-60	35-64	0.4-2.2	0.1-1.7	0-1.3	0-1.1	0-0		
Grenada (MBIA)	15-33	13-33	0-2.6	0.1-3	0-1.5	0-1.4	0-0		
Guyana_73	14-29	13-29	0.8-4.2	1.1-4.4	0.4-2.7	0.1-2.2	0-1	0-0.3	
Guyana (Albion)	20-44	18-45	0.3-4.7	0.3-3.8	0.2-3	0.1-2.4	0-1.1	0-0.9	
Guyana (Blairmont)	19-51	19-50	0.4-4.3	0.3-3.3	0-2.6	0.1-2.1	0-1.6	0-0.9	
Guyana (Charity)									
Guyana (Enmore)	22-46	21-44	0.4-4.3	0.2-3.1	0.4-3.3	0.1-2.8	0-2	0-1.2	
Guyana (Georgetown)	23-50	23-49	0.4-4.3	0.3-3.6	0-2.8	0-2.6	0-1.6	0-1.4	
Guyana (Greatfall)	31-55	28-58	0.9-3.4	1.4-3.7	0-2.1	0.2-2	0-0.2	0-0.4	
Guyana (New Amsterdam)	21-46	21-50	0.4-3.9	0.4-3.4	0-3.1	0-2.3	0-1.1	0-0.8	
Guyana (Skeldon)	20-45	20-47	0.9-4.1	0.8-3.7	0.2-2.2	0.2-2	0-0.6	0-0	
Guyana (Timehri)	23-52	24-53	0.4-3.9	0.7-3.7	0-2.8	0.1-2.3	0-1.6	0-1.3	
Guyana_Wales									
Jamaica (Worthy Park)	14-25	11-27	0.2-3	0.1-2.1	0-1.6	0-1.6	0-0	0-0	
Martinique (FDF Desaix)	39-53	29-56	0.4-2.1	0.4-2.5	0-0.9	0-1.2			
Puerto Rico (San Juan)	26-40	21-39	0.9-2.6	0.9-3.5	0-0.9	0.1-1.9	0-0.6	0-0.5	
St. Lucia (Hewanorra)	25-41	22-41	0.7-2.1	0.8-2.2	0-0.9	0-1.2	0-0		
St. Maarten (TNCM)	28-43	23-43	0.9-3.5	0.6-3.5	0.2-1.4	0-1.6	0-0		
St. Vincent (ET Joshua)	40-53	31-56	0.4-2.5	0.3-2.3	0-1.2	0-1.4	0-0		
Suriname (Zanderij)	32-53	32-54	1.7-4.3	1.2-3.6	0.4-2.6	0.7-2.9	0-1	0-1	
Tobago (ANR RobinNDJ)	17-34	12-35	0-1.7	0-1.4	0-0.7	0-1.1	0-0		
Trinidad (Piarco)	15-34	13-36	0.2-2.6	0.1-2.5	0-1.3	0-1.4	0-0		



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