

# Rainfall frequency and extreme forecasts

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## Wet days and Wet spells Outlooks December to February 2024-25

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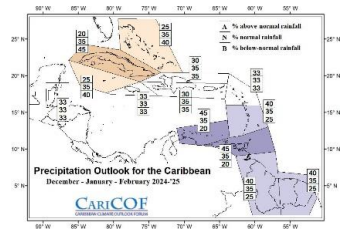
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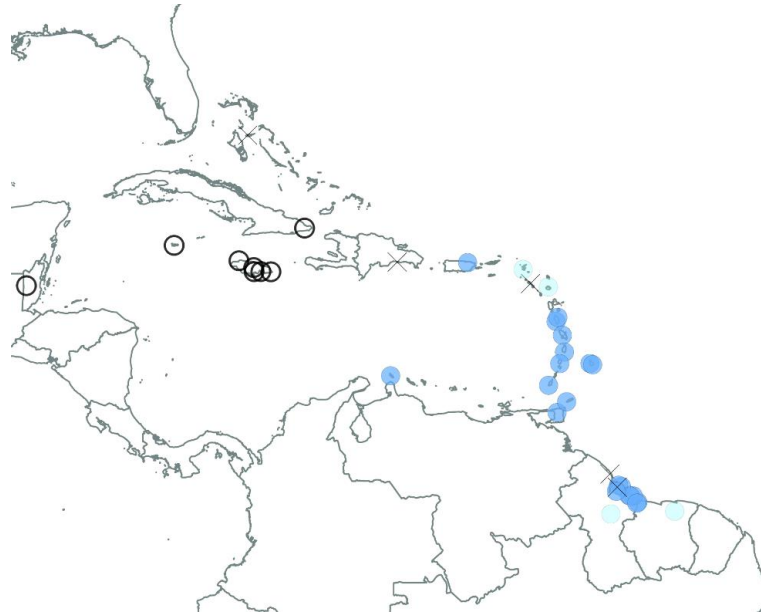
# Wet day frequency shifts

## Forecast for: December to February 2024-25

Precipitation outlook



### DJF 2024-25 Frequency of wet days



**USUALLY:** Out of 90 days in Dec-Jan-Feb, there are about 25 to 40 wet days (ABC Islands: 10-35; coastal Guianas: 30 to 50).

**FORECAST:** DJF may be wetter than usual south of Guadeloupe, but the usual or even drier elsewhere.

- *A higher than usual number of wet days is expected in the ABC islands, the coastal Guianas, the Lesser Antilles and Puerto Rico (low to medium confidence).*

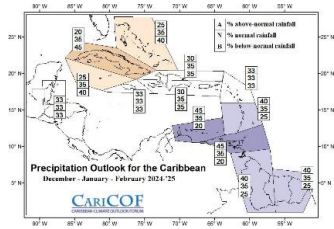
### IMPLICATIONS:

- The number of wet days should decrease towards February and, along with it, outdoor activity disruptions and environmental conditions conducive to moisture related pests. However, this decrease will likely be slower than usual in the ABC Is., the coastal Guianas, the Lesser Antilles and Puerto Rico.

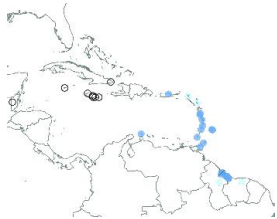
# Wet spells frequency shifts

## Forecast for: December to February 2024-25

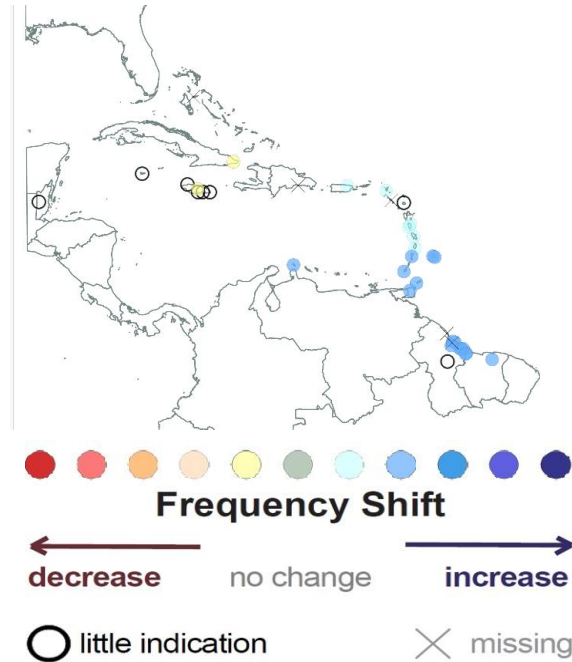
### Precipitation outlook



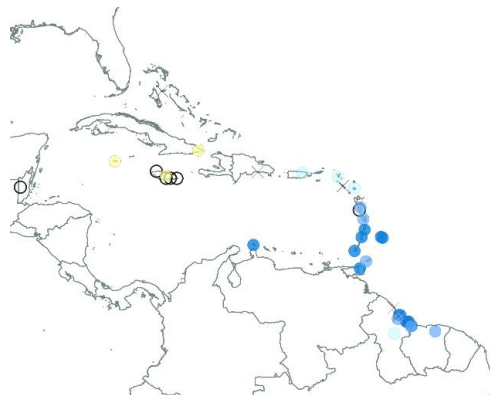
### Wet days outlook



### DJF 2024-25 frequency of 7-day wet spells



### DJF 2024-25 frequency of 7-day very wet spells



**USUALLY:** Between 1 and 3 wet spells occur from December to February (ABC Islands: 2 to 6; coastal Guianas: 1 to 5), with up to 1 or 2 of them ending up very wet (ABC Islands & coastal Guianas: up to 3).

**FORECAST:** DJF may be wetter than usual south of Guadeloupe, but the usual or even drier elsewhere.

- *An increase in the number of wet spells (low to medium confidence) and very wet spells (medium to strong confidence) is expected in the ABC islands, along the Lesser Antilles, the coastal Guianas and Puerto Rico.*
- *A slightly lower than usual number of wet and very wet spells is expected in eastern Cuba and Jamaica (low confidence).*

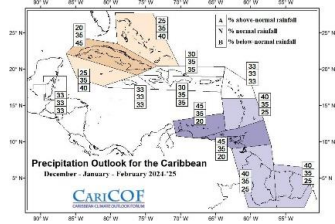
### IMPLICATIONS:

- Recharge rates of water reservoirs likely even faster than usual in view of frequent wet spells in the coastal Guianas.
- There is a high potential for long term flooding and cascading hazards in the coastal Guianas through early February, and in the Caribbean Islands southwards of Guadeloupe through December, esp. where soils are saturated.

# Extreme wet spells frequency shifts

## Forecast for: December to February 2024-25

Precipitation outlook



### DJF 2024-25 frequency of extreme (top 1%) 3-day wet spells

**USUALLY:** Up to 1 extreme wet spells occur from December to February in Belize and the islands (coastal Guianas: up to 2).

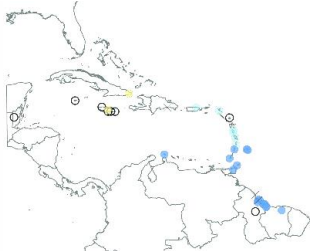
**FORECAST:** DJF may be wetter than usual south of Guadeloupe, but the usual or even drier elsewhere.

- *Little change from the usual number of 3-day wet spells is expected.*

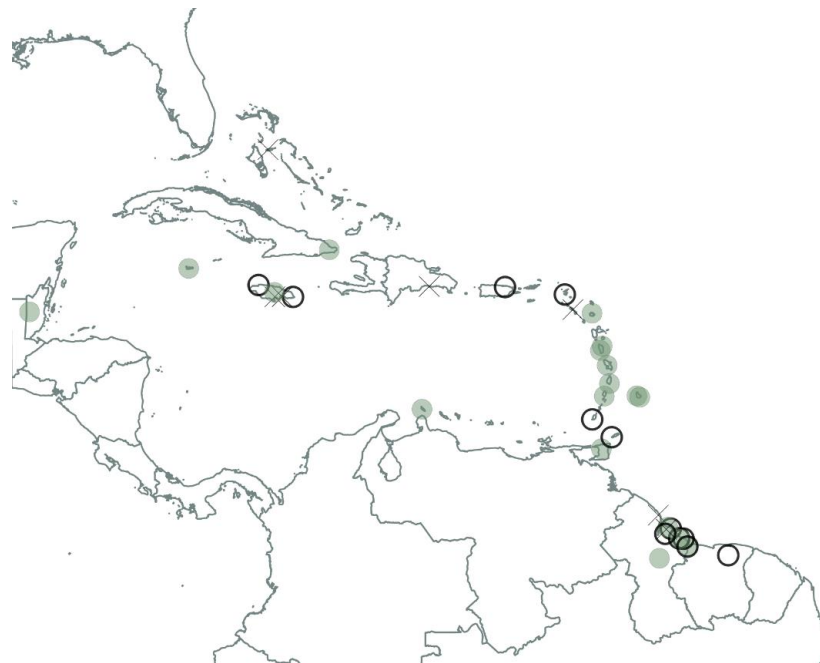
Wet days outlook



Wet spells outlook



Very wet spells outlook



### IMPLICATIONS:

- The high chance of occurrence of extreme wet spells in the northern Guianas translates to an extremely high potential for flash floods and cascading hazards in those areas.
- This potential decreases from *high* in December to *limited* in February in the Caribbean Islands and Belize.

# December to February 2024-25

	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)	25-39	24-43	1.3-2.6	1.3-3.4	0.4-1.3	0.2-1.7	0-0	0-0.2
Aruba (Beatrix)	13-35	14-46	2.6-6.4	3-7.3	0.5-3.6	1.5-4.7	0-1	0-1.2
Barbados (CIMH)	21-43	24-46	0.9-2.5	1-2.8	0-1.4	0.3-1.7	0-0	0-0.5
Barbados (GAIA)	23-42	24-46	0.9-3	1.1-3.7	0.2-1.5	0.4-1.6	0-0	0-0.6
Belize (C. Farm)	21-40	19-40	1.3-3.7	1.3-3.5	0.4-1.7	0.2-1.9	0-1	0-0.5
Cayman	11-22	10-25	0.4-2.1	0.3-2.3	0-0.9	0-1.1	0-0	0-0.4
Cuba (Punta Maisi)	13-22	11-25	1.5-3.9	1.4-4.3	0.5-2.1	0.3-2.2	0-0	0-0.4
Dom. Republic (Las Americas)								
Dominica (Canefield)	36-53	35-59	0.8-3.9	0.6-4	0-1.5	0-1.7	0-0	0-0.2
Dominica (Douglas Charles)	50-62	46-71	0.8-3.1	0.8-3.6	0-1.4	0.1-1.9	0-0.1	0-0.4
Grenada (MBIA)	21-39	20-49	0.8-3.9	0.9-4.4	0-2.1	0.2-2.7	0-1.1	0-1.4
Guyana_73	15-35	18-37	0.9-4.9	1.6-5.8	0.4-3.8	0.8-4.3	0-2	0-1.2
Guyana (Albion)	25-49	29-58	1.3-6.1	2.1-6.5	0.4-3.6	1.1-4.2	0-2	0-1.4
Guyana (Blairmont)	32-52	31-65	1.4-5.5	1.9-6	0.4-3.2	0.9-4	0-2	0-1.4
Guyana (Charity)								
Guyana (Enmore)	26-51	32-56	1.5-4.8	2.2-5.3	0.5-3.9	1-4.8	0-1	0-1.3
Guyana (Georgetown)	33-58	37-64	0.9-5.6	1.5-7.1	0-4.5	0.9-5.2	0-2	0-2.3
Guyana (Greatfall)	36-58	38-62	1.3-4.3	1.4-4.4	0.4-2.1	0.7-2.3	0-0.1	0-0.2
Guyana (New Amsterdam)	30-54	34-60	1-5.3	1.8-5.8	0.9-3.9	1-4.1	0-2	0-1.6
Guyana (Skeldon)	27-45	29-54	1.1-4.5	1.6-5.2	0.4-2.6	0.6-3.2	0-2.5	0-1.2
Guyana (Timehri)	38-63	40-68	1.4-4.7	1.9-5.6	0.5-3	0.9-3.8	0-1	0-1.6
Guyana_Wales								
Jamaica (Worthy Park)	16-24	13-27	0.5-2.6	0.3-2.3	0-1.7	0-1.3	0-0	0-0
Martinique (FDF Desaix)	44-59	43-65	0.9-3	1.1-3.5	0-1.3	0-1.7	0-0	0-0.4
Puerto Rico (San Juan)	32-46	33-49	1.5-3.6	1.7-3.9	0.5-1.3	0.5-2.4	0-1	0-1.1
St. Lucia (Hewanorra)	29-45	30-50	0.9-2.6	1.1-3.2	0-1.3	0.4-1.9	0-0	0-0.4
St. Maarten (TNM)	29-46	29-52	1.5-4.3	1.5-5	0.2-2.1	0.2-2.5	0-1	0-1.6
St. Vincent (ET Joshua)	43-57	41-64	0.9-3	1.2-3.3	0-1.7	0.5-2.3	0-0	0-0.5
Suriname (Zanderij)	41-55	40-59	1.6-4	2-4.4	0.4-2.3	0.9-3.6	0-1	0-1.3
Tobago (ANR RobinNDJ)	27-41	28-45	0-2.8	0.5-3.1	0-1.3	0.4-2.1	0-0.5	0-0.3
Trinidad (Piarco)	23-39	25-45	0.7-3.4	1.1-4.4	0-2.1	0.3-2.7	0-1	0-1.2

brown is a decrease in frequency, light blue an increase, grey none are expected



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