

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks December to February 2023-24

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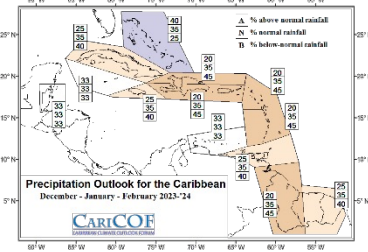
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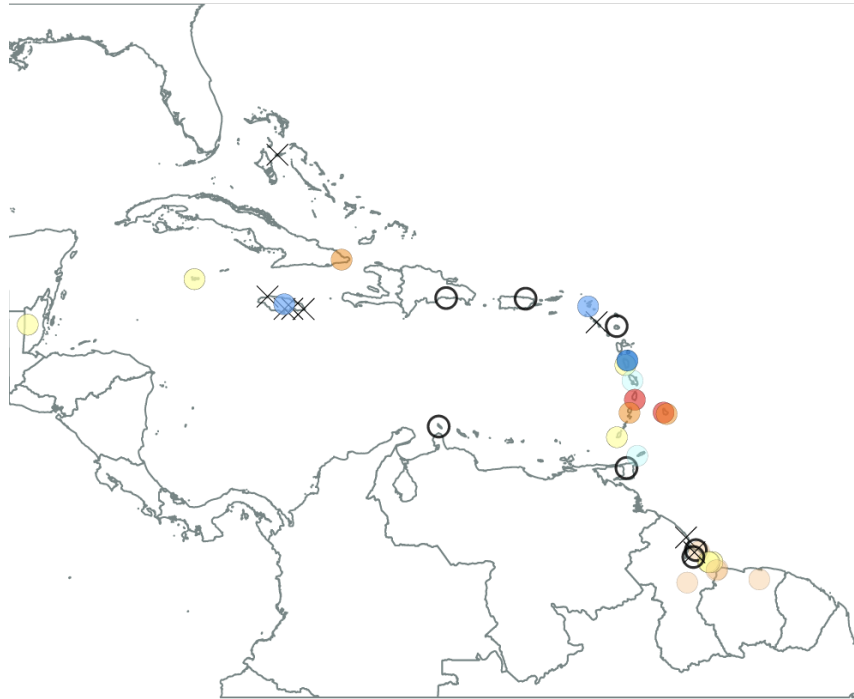
Wet day frequency shifts

Forecast for: December to February 2023-24

Precipitation outlook



DJF 2023-24 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 in The Bahamas, but the usual or even drier elsewhere.

- A faster than usual decrease in wet day frequency is expected in Barbados, Eastern Cuba, the southern Windward Islands and the Guianas (medium to high confidence), as well as in Belize and Grand Cayman (low confidence).*
- A slower decrease is expected in Dominica, along the Leeward Islands and Jamaica (medium confidence).*

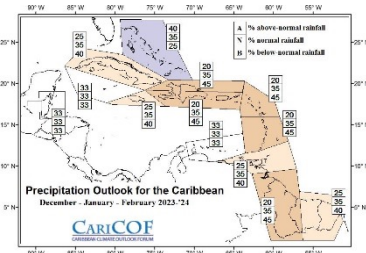
IMPLICATIONS:

- The number of wet days should decrease towards February and, along with it, outdoor activity disruptions and environmental conditions conducive to moisture related pests.
- A slower decrease in the above conditions is expected in Dominica, along the Leeward Islands and in Jamaica.

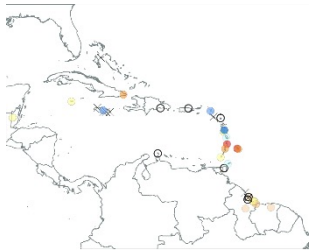
Wet spells frequency shifts

Forecast for: December to February 2023-24

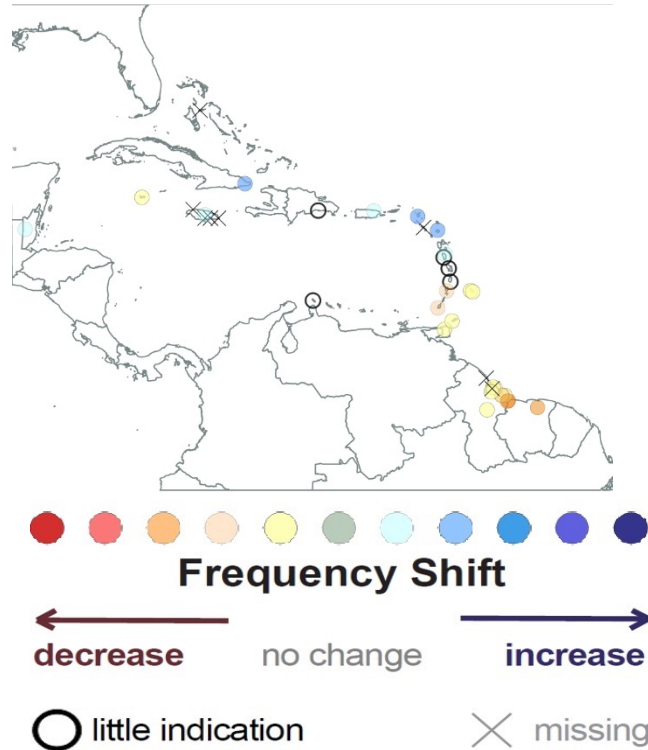
Precipitation outlook



Wet days outlook



DJF 2023-24 frequency of 7-day wet spells



DJF 2023-24 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 in The Bahamas, but the usual or even drier elsewhere.

- *A faster than usual decrease in the number of 7-day wet spells is expected in Barbados, Grand Cayman, Grenada, the Guianas and Trinidad & Tobago, but a slightly slower decrease in the Leeward Islands and the Greater Antilles (low to medium confidence).*
- *A slightly higher than usual number of very wet spells is expected across most of the ABC islands, the Lesser Antilles, and eastern Guyana (low confidence).*

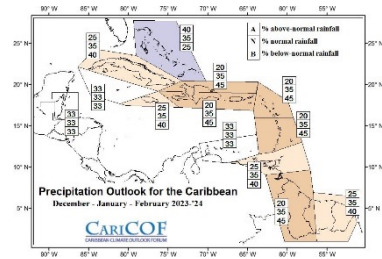
IMPLICATIONS:

- Depletion 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 (1) decreasing from high to low in Belize and the islands; (2) being high until early-February in the Guianas.

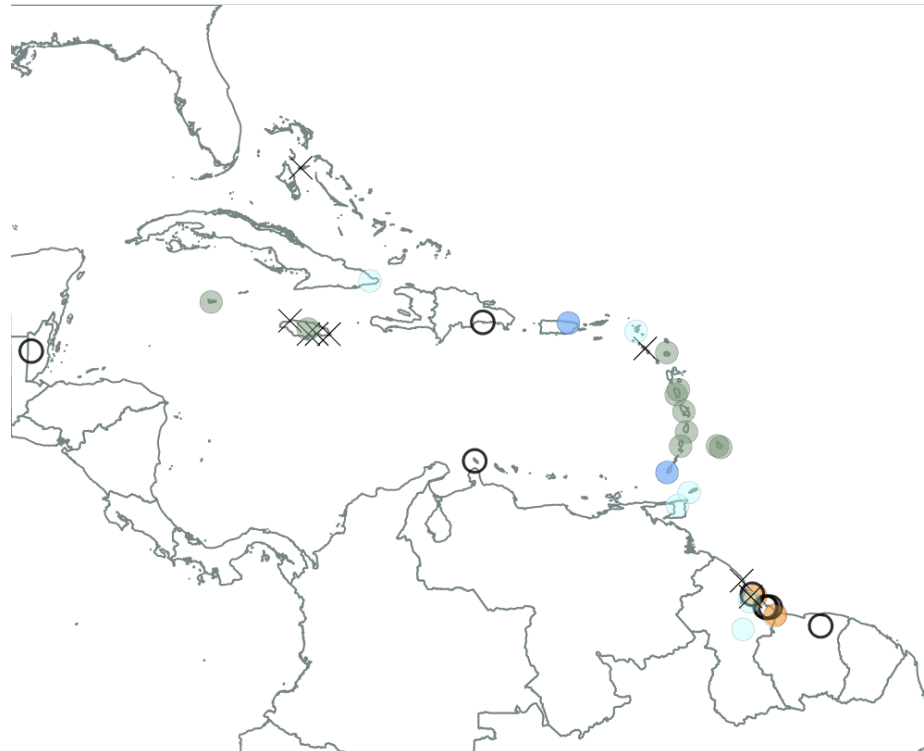
Extreme wet spells frequency shifts

Forecast for: December to February 2023-24

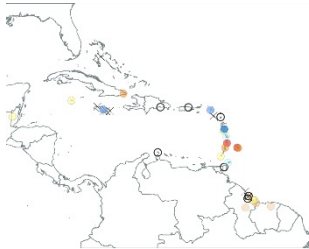
Precipitation outlook



DJF 2023-24 frequency of extreme (top 1%) 3-day wet spells



Wet days outlook



Wet spells outlook



Very wet spells outlook



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 in The Bahamas, but the usual or drier elsewhere.

- A slightly slower than usual decrease in the chance of extreme wet spells is expected in eastern Cuba, Grenada, Puerto Rico, Sint Maarten, Trinidad & Tobago (low confidence), with a lower than usual chance in parts of Coastal Guyana (medium confidence), but no change from the usual expected elsewhere.*

IMPLICATIONS:

- The high (though slightly reduced) chance of occurrence of extreme wet spells in the northern Guianas translates to a very high potential for flash floods and cascading hazards in those areas.
- This potential decreases from moderate to low in the Caribbean Islands and Belize.

December to February 2023-24

	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)	23-40	22-43	1.3-2.6	1.4-4	0.4-1.5	0.2-1.8	0-0	0-0
Aruba (Beatrix)	14-35	9-46	2.6-6.5	1.8-7	0.2-3.5	0.8-4.7	0-1	0-0.9
Barbados (CIMH)	21-44	15-36	0.9-2.5	0.6-2.4	0-1.3	0.1-1.6	0-0	0-0.5
Barbados (GAIA)	22-40	19-38	0.9-3	0.6-3.1	0-1.3	0.3-1.7	0-0	0-0.2
Belize (C. Farm)	21-41	18-40	1.3-3.7	1.2-4.3	0.4-1.7	0.2-1.9	0-1	0-0.3
Cayman	11-22	10-23	0.4-2.2	0.2-2.4	0-0.9	0-1.1	0-0	0-0
Cuba (Punta Maisi)	13-22	9-22	1.7-3.9	1.8-4.9	0.5-2.2	0.3-2.2	0-0	0-0.3
Dom. Republic (Las Americas)	15-22	12-24	0.9-1.9	0.6-2.7	0-1.3	0-1.6	0-0.1	0-0.8
Dominica (Canefield)	36-53	32-56	0.8-3.7	0.2-3.6	0-1.2	0-1.6	0-0	0-0
Dominica (Douglas Charles)	49-63	49-74	0.9-2.8	0.8-3.5	0-1.4	0-1.6	0-0	0-0
Grenada (MBIA)	21-38	15-42	0.9-3.5	0.5-3.2	0-2	0.2-2.2	0-1	0-1.1
Guyana_73	15-35	13-29	0.9-5.1	0.8-3.2	0.4-3.9	0.3-2.3	0-2	0-0.2
Guyana (Albion)	26-51	23-53	1.3-6.1	0.8-5.8	0.4-3.4	0.8-5	0-1.9	0-1.9
Guyana (Blairmont)	33-53	25-61	1.1-5.6	0.7-5.6	0.5-3.2	0.7-4.9	0-2	0-2.3
Guyana (Charity)								
Guyana (Enmore)	29-51	26-46	1.3-4.9	0.8-4	0.4-3.9	0.3-2.9	0-1	0-0.5
Guyana (Georgetown)	34-60	33-63	0.9-5.6	0.7-6.4	0-4.5	0.7-6.4	0-2	0-2.4
Guyana (Greatfall)	35-58	30-60	1.3-4.3	1.1-4.4	0.3-2.2	0.5-3.7	0-0.1	0-0.5
Guyana (New Amsterdam)	32-55	27-55	1.1-5.2	0.8-4.8	0.7-3.9	0.8-5	0-2	0-2.2
Guyana (Skeldon)	27-46	26-46	1.3-4.8	1-3.4	0.4-2.6	0.3-2	0-2	0-0.1
Guyana (Timehri)	40-64	35-68	1.3-5.1	1.3-5.2	0.4-3	0.7-4.5	0-1	0-1.8
Guyana_Wales								
Jamaica (Worthy Park)	17-25	15-30	0.4-2.6	0.5-3	0-1.7	0-1.5	0-0	0-0
Martinique (FDF Desaix)	45-59	41-64	0.9-3	0.8-3.3	0-1.3	0-1.7	0-0	0-0
Puerto Rico (San Juan)	32-46	29-51	1.3-3.7	1.5-4.2	0.4-1.5	0.5-2.5	0-1	0-1
St. Lucia (Hewanorra)	31-46	23-40	0.9-2.6	1-2.8	0-1.3	0.2-1.8	0-0	0-0.3
St. Maarten (TNCM)	30-47	31-56	1.7-4.5	1.7-6.1	0-2.2	0.1-2.6	0-1	0-1.6
St. Vincent (ET Joshua)	43-61	35-59	0.9-3	0.5-2.9	0.2-1.7	0.4-2.4	0-0	0-0
Suriname (Zanderij)	44-55	38-54	1.7-3.9	1.4-3.3	0.4-2.2	0.5-3.5	0-1	0-1
Tobago (ANR RobinNDJ)	27-40	25-44	0-2.4	0.3-2.6	0-1.3	0.1-1.9	0-1	0-0.7
Trinidad (Piarco)	23-37	22-45	0.9-3.5	0.5-3.5	0-2.1	0.3-2.7	0-1	0-0.9

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



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