Rainfall frequency and extreme forecasts

Wet days and Wet spells Outlooks August to October 2023

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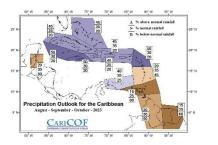




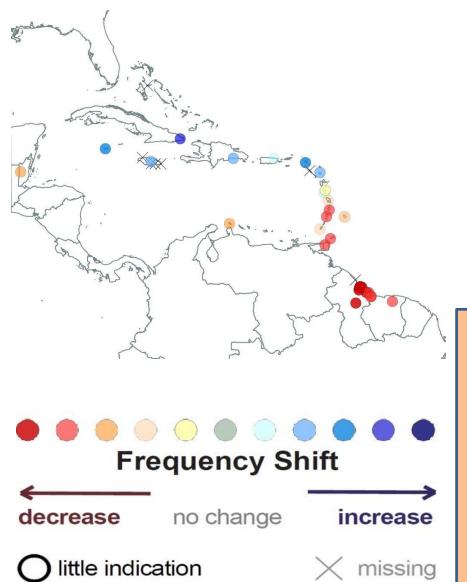
Wet day frequency shifts

Forecast for: August to October 2023

Precipitation outlook



ASO 2023 Frequency of wet days



USUALLY: Out of 92 days in Aug-Sep-Oct, there are about 35 to 50 wet days in relatively flat areas of Belize and the islands, but around 45 to 60 in mountainous areas and 15 to 30 in coastal Guianas (ABC Islands: 10-20).

FORECAST: ASO may be drier than usual in Belize and the Windward Islands, and the Guianas, and at least as wet as usual elsewhere.

• More wet days than usual may be expected in the Leeward Islands and the Greater Antilles (medium confidence) with fewer than usual wet days in Belize and elsewhere (medium to high confidence).

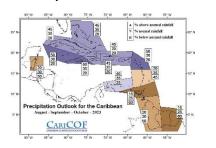
IMPLICATIONS:

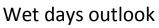
- Few outdoor activity disruptions due to rainfall across the Guianas after early-August, but frequent disruptions across Belize and the islands, particularly in the Greater Antilles and the Leeward Islands.
- Surface wetness with consecutive wet days could make environmental conditions more conducive to moisture related pests but, at the same time, largely prevent wildfires.

Wet spells frequency shifts

Forecast for: August to October 2023

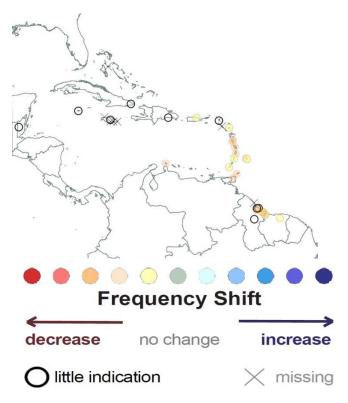
Precipitation outlook







ASO 2023 frequency of 7-day wet spells



ASO 2023 frequency of 7-day very wet spells



USUALLY: Between 3 to 6 wet spells (coastal Guianas: 1-3) occur from August to October, with 1 to 4 of them ending up very wet (coastal Guianas: up to 2).

FORECAST: ASO may be drier than usual in Belize and the Windward Islands, and the Guianas, and at least as wet as usual elsewhere.

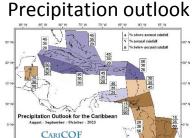
- A smaller number of wet spells is expected in the ABC Islands and areas east of Puerto Rico (low to medium confidence) with little indication for change elsewhere.
- An increase from the usual numbers of very wet spells is expected across most of the region (low to medium confidence).

IMPLICATIONS:

- Recharge rates of large water reservoirs and soil moisture may be somewhat slower than usual in the Lesser Antilles and coastal Guianas in view of the recurrence of wet spells.
- The chance of recurrent very wet spells translates to flood potential (1) being high in August and September in Belize and the islands; (2) moderate in August in the Guianas.

Extreme wet spells frequency shifts

Forecast for: August to October 2023



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

USUALLY: Up to 2 extreme wet spell occur between August to October, except in the Guianas where it is the dry season.

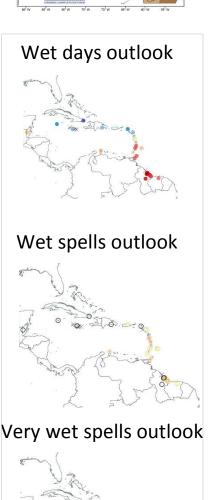
FORECAST: ASO may be drier than usual in Belize and the Windward Islands, and the Guianas, and at least as wet as usual elsewhere.

Frequency Shift decrease no change increase little indication missing

• A decrease in the number of extreme wet spells is expected in Suriname (low confidence), with an increase expected elsewhere (medium confidence).

IMPLICATIONS:

• In view of the high chance of extreme wet spells in Belize and the islands, the potential for flash floods and associated hazards is expected to be high to extremely high. A decrease to moderate potential is expected in the Guianas by the end of August.



August to October
2023

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%		expected
2023	No. of Climatology	wet days Forecast	No. of 7-day wet s Climatology	Forecast	Climatology	Forecast	Climatology	vettest) Forecast	(De
Antigua (VC Bird)	30-45	31-49	3.2-6	2.5-6	0.9-3.9	1.3-5	0-1	0-2	
Aruba (Beatrix)	9-21	4-22	1.7-5.1	1.2-5	0.4-3.4	0.8-4.7	0-1.5		are
Barbados (CIMH)	37-50	32-52	4.1-7.3	3.5-6.6	2-4.4	2-4.7	0-2		
Barbados (GAIA)	41-49	36-51	4.3-6.9	4-6.5	1.8-4.1	2-4.7	0-1.5		none
Belize (C. Farm)	33-50	26-52	3-6.4	2.8-6	1.3-3.9	1.1-4.1	0-2		
Cayman	35-46	36-56	4.3-6.9	4.1-6.8	1.7-4.3	1.4-5.1	0-1.9		grev
Cuba (Punta Maisi)	12-27	16-45	2.6-5.1	2.1-5.7	0.9-3.4	1.1-3.9	0-1.5		
Dom. Republic (Las Americas)	27-37	25-44	3.9-6	3.4-6.3	1.8-3.5	1.5-5.1	0-2		نه
Dominica (Canefield)	45-59	43-64	3.6-6.3	2.7-6.5	1.7-4.4	1.6-5.3	0-2.5	0-2.3	increase
Dominica (Douglas Charles)	58-70	55-75	3.5-6.9	2.8-6.4	1.7-3.7	1.6-4.7	0-1		Cre
Grenada (MBIA)	38-47	33-49	3.9-6.5	3.3-6.5	1.3-3.7	1.3-4.6	0-1.6		.⊑
Guyana_73	10-20	3-18	0.7-3	0.5-3	0-1.7	0.2-2.2	0-1	0-0.4	an
Guyana (Albion)	14-29	6-27	1.1-3.5	0.8-3.2	0.4-1.7	0.5-2.1	0-1	0-1	blue
Guyana (Blairmont)	19-32	9-28	0.9-3	0.5-2.8	0-1.3	0.1-1.6	0-0.1	0-0.2	9
Guyana (Charity)									light
Guyana (Enmore)	16-31	7-26	0.9-3	0.9-3.1	0.4-1.3	0.5-1.6	0-0		≝
Guyana (Georgetown)	22-38	9-30	0.5-2.6	0.4-2.5	0-1.5	0.1-1.6	0-0.5	0-0.1	
Guyana (Greatfall)	25-40	14-34	0.9-3	1-3.3	0.4-1.8	0.3-2.3	0-0.1		<u></u>
Guyana (New Amsterdam)	20-29	12-29	0.4-3	0.4-2.7	0-1.3	0-1.6	0-0.1		freguency
Guyana (Skeldon)	20-30	12-29	0.9-3	0.7-2.6	0.4-1.7	0.4-1.9	0-1	0-0.7	של
Guyana (Timehri)	34-44	24-41	1.7-3.4	1.3-3.3	0.4-1.7	0.6-2.3	0-0		
Guyana_Wales									.⊑
Jamaica (Worthy Park)	30-48	29-57	3.4-6.4	3.1-6.8	1.4-3.7	1.5-4.8	0-2		Se
Martinique (FDF Desaix)	51-62	46-64	3.9-7.3	3.5-6.6	1.9-4.3	2-4.1	0-2		rea
Puerto Rico (San Juan)	39-51	36-54	3.2-5.6	2.3-5.6	0.9-3	1.2-3.8	0-1		decre
St. Lucia (Hewanorra)	44-58	37-54	3.9-6.4	2.9-6.5	2-3.9	1.7-4.5	0-2	0-1.9	a
St. Maarten (TNCM)	37-49	35-59	2.8-5.6	2.7-6.6	0.9-3.4	1-3.8	0-1		<u>.v</u>
St. Vincent (ET Joshua)	53-63	45-61	3.2-6.9	2.8-6.7	1.5-3.4	1.6-3.9	0-2		2
Suriname (Zanderij)	25-42	16-36	0.9-3.2	0.6-2.9	0.2-2.2	0.1-2.8	0-0.2	0-0.2	brown
Tobago (ANR RobinOND)	44-56	35-53	3.9-5.6	3.2-5.8	1.3-3.4	1.1-3.8	0-1		ق
Trinidad (Piarco)	37-52	29-48	3.9-5.6	3.1-5.6	1.7-3	1.5-3.5	0-1	0-1.5	l e



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