

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks August to October 2021

**Dr. Cedric VAN MEERBEECK¹, Dr. Teddy ALLEN¹, Dr. Simon MASON²,
Dr. Ángel MUÑOZ², Wazita Scott¹, Dale Destin³**

¹Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados

²International Research Institute for Climate and Society (IRI), USA

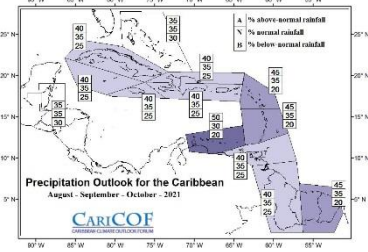
³Antigua and Barbuda Meteorological Services



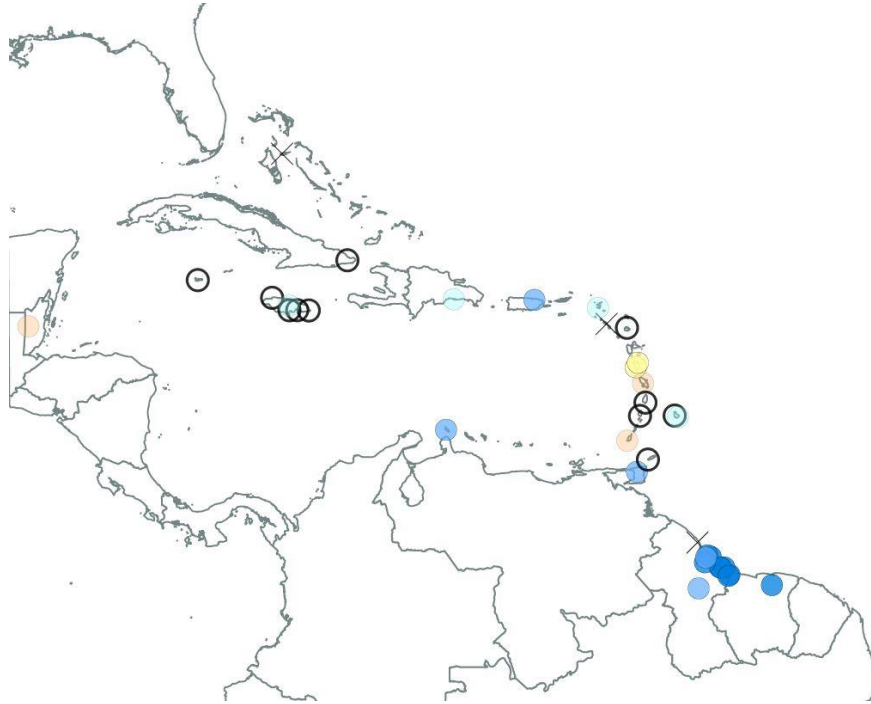
Wet day frequency shifts

Forecast for: August to October 2021

Precipitation outlook



ASO 2021
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: Wetter conditions in most areas of the region are expected along with an increase in wet days in Aruba, Trinidad, Puerto Rico, St. Maarten and across the Guianas (*medium to high confidence*), while slightly fewer wet days than usual are on forecast for Belize, and some of the windward islands (*low confid.*).

IMPLICATIONS:

- Outdoor activity disruptions and environmental conditions conducive to moisture related pests due to rainfall should be frequent due to the annual peak in the number of wet days in Belize and the islands.
- Progressively fewer disruptions of outdoor activities and drier conditions in the Guianas from August onwards, though remaining relatively high.

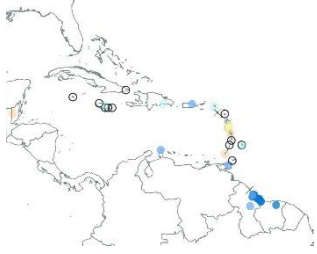
Wet spells frequency shifts

Forecast for: August to October 2021

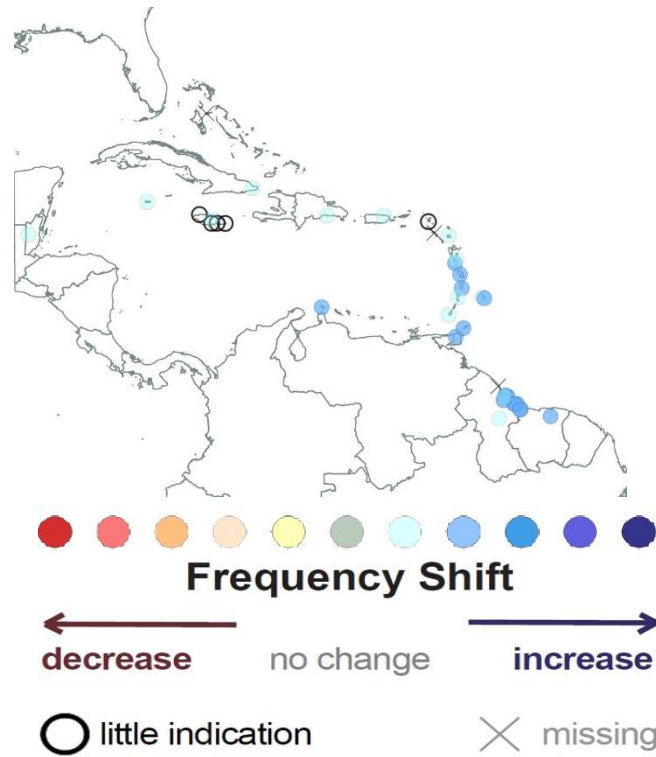
Precipitation outlook



Wet days outlook



ASO 2021 frequency of 7-day wet spells



ASO 2021 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: Wetter conditions in most areas of the region are expected along with an increase in wet days in Aruba, Trinidad, Puerto Rico, St. Maarten and across the Guianas (*medium to high confidence*), while slightly fewer wet days than usual are on forecast for Belize, and some of the windward islands (*low confid.*). A higher than usual number of wet and very wet spells are forecasted across the region (*medium confid.*).

IMPLICATIONS:

- Accelerating recharge rates of large water reservoirs and soil moisture, except in the Guianas.
- The chance of successive very wet spells translates to flood potential being high in Belize and most islands (from October in the ABC Islands), but decreasing from extremely to moderate potential in the Guianas.

Extreme wet spells frequency shifts

Forecast for: August to October 2021

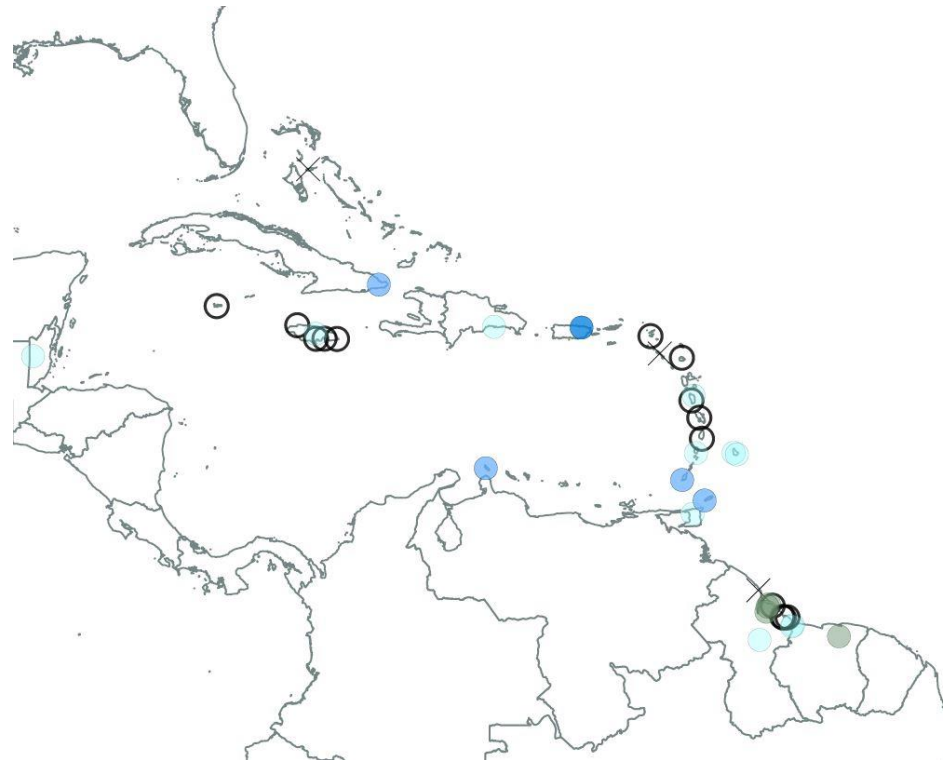
USUALLY: Up to 2 extreme wet spell occur between August to October, except in the Guianas where it is the dry season.

FORECAST: Wetter conditions in most areas of the region are expected along with an increase in wet days in Aruba, Trinidad, Puerto Rico, St. Maarten and across the Guianas (*medium to high confidence*), while slightly fewer wet days than usual are on forecast for Belize, and some of the windward islands (*low confid.*). A higher than usual number of wet, very wet are forecasted across the region (*medium confid.*), as well as an increased chance of two or more extreme dry spells across Belize and the islands (*low to medium confid.*).

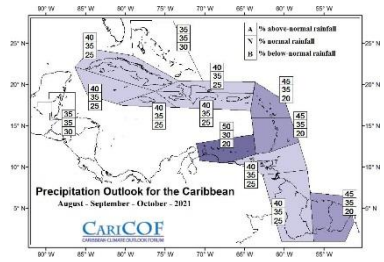
IMPLICATIONS:

- 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 or even extremely high. The potential is expected to be moderate in the Guianas.

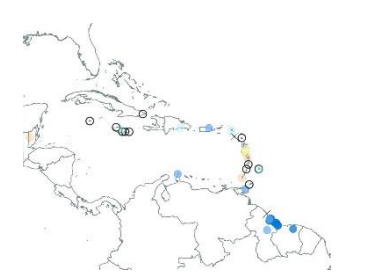
ASO 2021 frequency of extreme (top 1%) 3-day wet spells



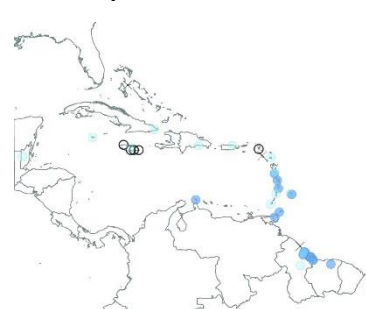
Precipitation outlook



Wet days outlook



Wet spells outlook



Very wet spells outlook



August to October 2021

	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)	31-45	33-44	3-5.8	3.1-6.1	0.9-3.9	1.2-4.5	0-1	0-1.7
Aruba (Beatrix)	8-19	9-25	1.7-4.9	1.9-6.3	0.4-3.2	0.9-4.1	0-2	0-2.1
Barbados (CIMH)	37-50	35-51	4.3-6.7	4.1-7.6	2.2-4.1	2-4.7	0-2	0-2.3
Barbados (GAIA)	41-49	39-51	4.3-6.9	4.6-7.3	1.9-3.9	1.9-4.6	0-2	0-2
Belize (C. Farm)	33-50	29-49	3-6.4	3-6.7	1.3-3.9	1.3-4.2	0-2	0-2.4
Cayman	37-46	34-48	4.5-6.9	4.5-7.3	1.9-4.4	1.9-5.3	0-2	0-2
Cuba (Punta Maisi)	14-27	13-30	2.6-5.3	2.4-5.9	1.1-3.4	1.3-3.7	0-2	0-2.1
Dom. Republic (Las Americas)	27-37	27-40	3.9-6	3.8-6.3	1.8-3.6	1.6-4.8	0-2	0-2
Dominica (Canefield)	45-61	44-60	3.6-6.4	3.4-8.5	1.8-4.6	1.6-5.2	0-2.5	0-2.2
Dominica (Douglas Charles)	57-71	55-71	3.6-6.9	3.6-7.3	1.5-3.6	1.6-4.3	0-1	0-1.5
Grenada (MBIA)	37-47	34-47	3.8-6.2	3.1-7.2	1.3-3.9	1.3-4.8	0-1.4	0-2
Guyana_73	10-20	12-27	0.7-2.8	0.8-3.4	0-1.7	0.2-2	0-0.5	0-0.4
Guyana (Albion)	14-29	15-36	0.9-3.3	1.1-3.9	0.4-1.7	0.5-2.1	0-1	0-0.4
Guyana (Blairmont)	19-31	20-36	0.9-3	1-3.5	0-1.3	0.1-1.5	0-0	0-0
Guyana (Charity)								
Guyana (Enmore)	16-30	19-38	0.9-3	1-3.6	0.4-1.3	0.5-1.8	0-0.1	0-0.1
Guyana (Georgetown)	21-38	25-47	0.4-2.6	0.9-3.5	0-1.1	0.2-1.6	0-0.5	0-0
Guyana (Greatfall)								
Guyana (New Amsterdam)	20-30	22-36	0.7-3	1-3.6	0-1.3	0.2-1.6	0-0.1	0-0.3
Guyana (Skeldon)	20-32	21-35	0.9-3	1.1-3.8	0.4-1.7	0.7-1.8	0-1	0-1
Guyana (Timehri)	34-43	35-48	1.7-3.4	1.7-4.1	0.4-1.7	0.6-2.2	0-0	0-0
Guyana_Wales	27-38	28-41	1.7-3	1.4-3.7	0.1-1.7	0.2-1.9	0-0.2	0-0.1
Jamaica (Worthy Park)	30-48	31-51	3.2-6.4	3.3-6.9	1.3-4.1	1.6-5.2	0-2	0-2.5
Martinique (FDF Desaix)	50-63	47-62	3.9-6.9	3.9-7.8	1.8-4.1	1.7-4	0-2	0-2.2
Puerto Rico (San Juan)	39-51	39-53	3.4-5.6	2.9-6.2	0.9-3	1.3-3.8	0-1	0-1.6
St. Lucia (Hewanorra)	44-55	43-57	3.9-6.2	3.5-7.7	2-3.9	1.3-4.3	0-2	0-1.6
St. Maarten (TNM)	34-49	34-53	2.6-5.6	2.4-6.5	0.9-3.4	1.1-3.7	0-1.5	0-1.9
St. Vincent (ET Joshua)	53-63	53-64	3.2-6.5	3.4-7.4	1.5-3.4	1.7-3.7	0-2	0-2.2
Suriname (Zanderij)	25-42	28-46	0.9-3.4	0.8-3.6	0.2-1.7	0.2-2.6	0-0.1	0-0
Tobago (ANR Robinson)	44-54	44-58	3.9-5.6	3.6-6.6	1.3-3.4	1.2-3.9	0-1	0-1.6
Trinidad (Piarco)	37-51	36-51	3.7-5.4	3.5-6.5	1.7-2.8	1.6-3.3	0-1	0-1.4

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



CARICOF
CARIBBEAN CLIMATE OUTLOOK FORUM

caricof@cimh.edu.bb

rcc.cimh.edu.bb

Caribbean Institute for Meteorology and Hydrology

TEL: (246) 425-1362/3 | FAX: (246) 424-4733