

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks September to November 2019

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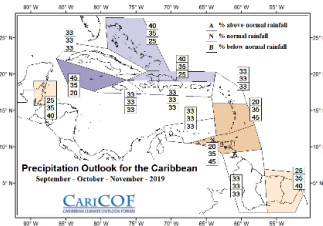
³Antigua and Barbuda Meteorological Services



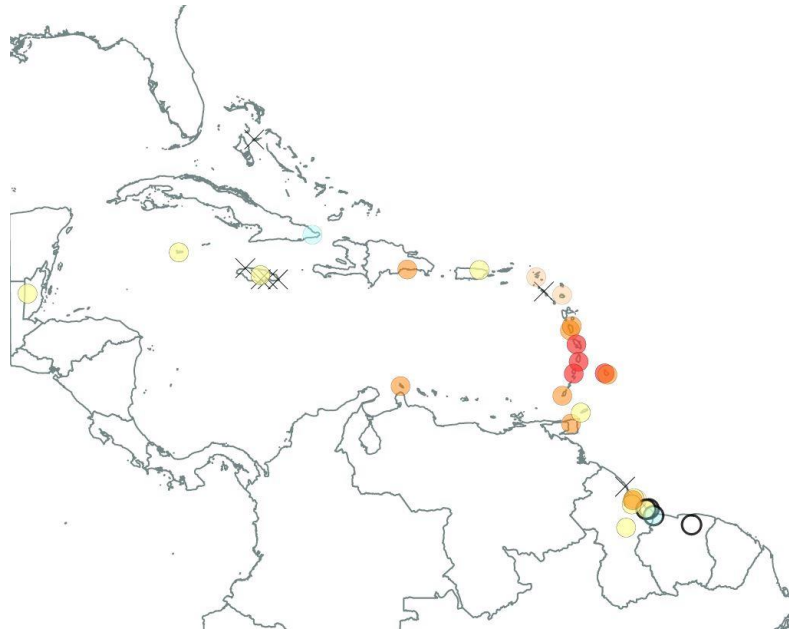
Wet day frequency shifts

Forecast for: September to November 2019

Precipitation outlook



SON 2019
Frequency of wet days



USUALLY: Out of 91 days in Sep-Oct-Nov, there are about 35 to 50 wet days (coastal Guianas: 20-35; ABC Islands: 10-20).

FORECAST: SON rainfall may be drier than usual in the Barbados, Belize, Guianas, and Windwards. The forecast indicates about 10-15% fewer wet days especially in most of those areas (*medium to high confidence*), but little change in other areas (*low confid.*).

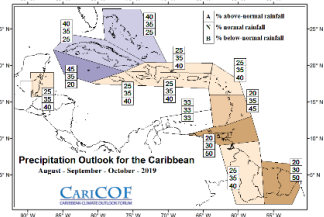
IMPLICATIONS:

- Surface wetness during the peak of the wet season may be slightly lower than usual, particularly in Barbados and the Windwards.
- Less reliable rains for agriculture than usual for the ABC Isls., Barbados, and Windwards.

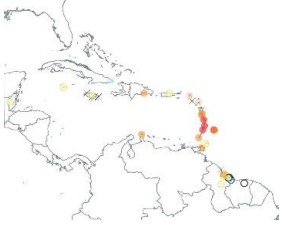
Wet spells frequency shifts

Forecast for: September to November 2019

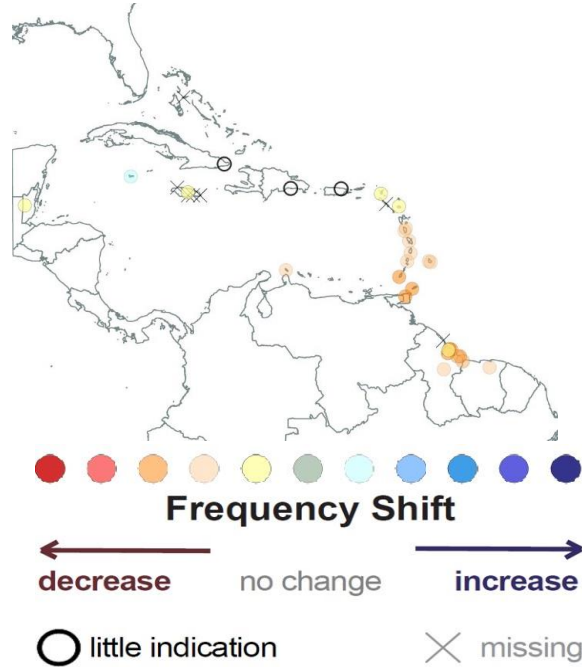
Precipitation outlook



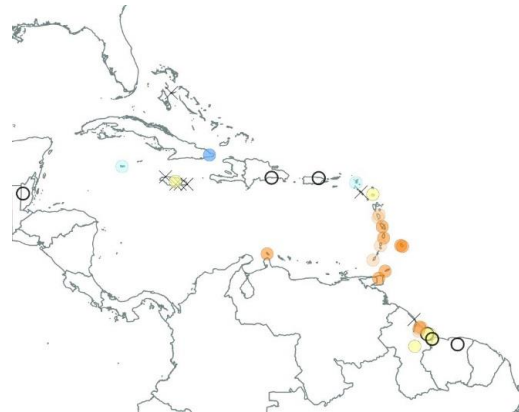
Wet days outlook



SON 2019 frequency of 7-day wet spells



SON 2019 frequency of 7-day very wet spells



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

FORECAST: SON rainfall may be drier than usual in the Barbados, Belize, Guianas, and Windwards. The forecast indicates about 10-15% fewer wet days especially in most of those areas (medium to high confidence), and possibly slightly fewer wet spells (*medium confid.*), but not much change in other areas (*low confid.*).

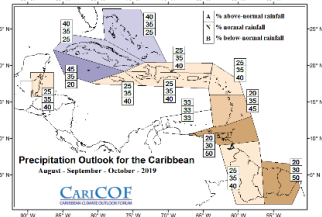
IMPLICATIONS:

- Potentially slower recharge of water reservoirs and soil moisture in Barbados and Windwards, but accelerated depletion in the Guianas.
- Slightly reduced, but considerable concern of flood potential across most of the region in view of the number of very wet spells.

Extreme wet spells frequency shifts

Forecast for: September to November 2019

Precipitation outlook



SON 2019 frequency of extreme (top 1%) 3-day wet spells



USUALLY: Up to 2 extreme wet spells occur from September to November, except in the Guianas where it is the dry season.

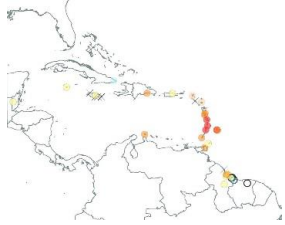
FORECAST: SON rainfall may be drier than usual in the Barbados, Belize, Guianas, and Windwards. The forecast indicates about 10-15% fewer wet days especially in most of those areas (medium to high confidence), and possibly slightly fewer wet spells (medium confid.), but not much change in other areas (low confid.).

No significant change in the number of extreme wet spells is forecast for most areas (low confid.)

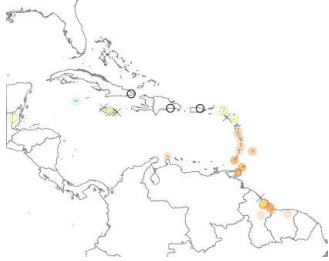
IMPLICATION:

Considerable flash flood potential is expected in view of the usual peak in extreme wet spell occurrence at this time of the year.

Wet days outlook



Wet spells outlook



Very wet spells outlook



September to November 2019

	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)	31-44	29-42	3.3-6	2.8-5.9	1.6-4.1	1.1-4.3	0-1.4	0-1.9
Aruba (Beatrix)	14-30	10-27	2.6-6.9	2.2-5.9	1.3-5.1	0.9-3.7	0-2.5	0-2.3
Barbados (CIMH)	38-50	31-46	4.3-6.9	3.4-6.6	2-4.3	1.7-3.8	0-2.9	0-2.5
Barbados (GAIA)	40-49	36-47	4.3-6.5	3.8-6.4	2.1-4.1	1.8-3.9	0-2	0-2.4
Belize (C. Farm)	31-48	30-50	3.3-5.6	2.9-5.7	1.7-3.4	1.4-3.5	0-1.9	0-1.7
Cayman	29-46	27-46	3.9-6.4	3.8-6.9	1.7-4.3	1.9-4.8	0-2.6	0-2.5
Cuba (Punta Maisi)	17-31	17-37	2.9-6.2	2.8-6.9	1.3-4.6	1.8-4.8	0-2	0-1.9
Dom. Republic (Las Americas)	28-38	22-38	3.4-6.2	3-6.6	1.3-4.3	1.3-4	0-2	0-1.7
Dominica (Canefield)	42-54	37-51	3-5.8	2.4-5.8	1.7-3.5	1.2-3.5	0-2	0-2.1
Dominica (Douglas Charles)	57-69	51-67	3.8-6	3.4-6.2	1.9-3.7	1.7-3.5	0-1.2	0-1.9
Grenada (MBIA)	35-48	30-45	3.9-6	2.9-6.1	1.7-3.9	1.3-3.8	0-1.5	0-1.7
Guyana_73	10-19	9-20	0.4-2.7	0.3-2.4	0-1.3	0-1.3	0-0	0-0
Guyana (Albion)	11-26	9-30	0.4-2.6	0.1-2.2	0-0.9	0-1.1	0-0.4	0-0.5
Guyana (Blairmont)	13-30	10-29	0.4-2.1	0.1-2.1	0-1.3	0-1.3	0-0	0-0
Guyana (Charity)								
Guyana (Enmore)	12-34	10-31	0.4-2.6	0.1-2	0-1.3	0-1.1	0-0.1	0-0
Guyana (Georgetown)	19-36	17-36	0.5-3	0.3-2.3	0.3-1.5	0-1.2	0-1	0-1
Guyana (Greatfall)								
Guyana (New Amsterdam)	16-28	12-32	0.4-2.6	0.3-2.2	0-1.7	0-1.4	0-1	0-0.7
Guyana (Skeldon)	15-32	15-38	0.5-2.6	0.5-2.5	0.4-1.3	0.3-1.4	0-0.7	0-0.4
Guyana (Timehri)	31-42	28-44	1.3-3	1.1-2.7	0.4-1.7	0.4-1.6	0-0	0-0
Guyana_Wales	25-40	21-35	1.3-3.2	0.8-3.3	0.4-1.7	0.1-1.6	0-0.7	0-0.7
Jamaica (Worthy Park)	29-46	27-46	3.2-5.6	3.1-6.1	1.7-3.4	1.2-3.6	0-2	0-1.8
Martinique (FDF Desaix)	53-62	44-59	4-6.4	3.2-6.8	2.2-3.9	1.7-3.2	0-2	0-2.3
Puerto Rico (San Juan)	38-52	36-51	3.4-5.6	3-6.3	1.4-3.4	1.4-3.7	0-1	0-1.4
St. Lucia (Hewanorra)	44-54	38-49	4-5.8	3.5-5.8	2.1-3.9	1.3-3.2	0-2	0-2
St. Maarten (TNCM)	38-50	34-50	3.3-6	3.1-6.1	1.7-3.4	1.7-3.8	0-2	0-1.9
St. Vincent (ET Joshua)	54-66	48-61	3.9-6.7	3.5-6.5	1.8-3.9	1.5-3.4	0-2.8	0-2.7
Suriname (Zanderij)	22-35	21-38	0.9-2.1	0.8-2	0-1.3	0-2.2	0-0.3	0-0.1
Tobago (ANR Robinson)	43-54	37-51	3.4-6	2.7-5.5	1.7-3.4	0.9-2.8	0-1	0-1.6
Trinidad (Piarco)	41-51	37-51	3.7-6	3-5.5	2-3.4	1.3-2.9	0-2	0-1.9

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





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