Rainfall frequency and extreme forecasts

Wet days and Wet spells Outlooks March to May 2020

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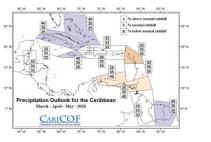




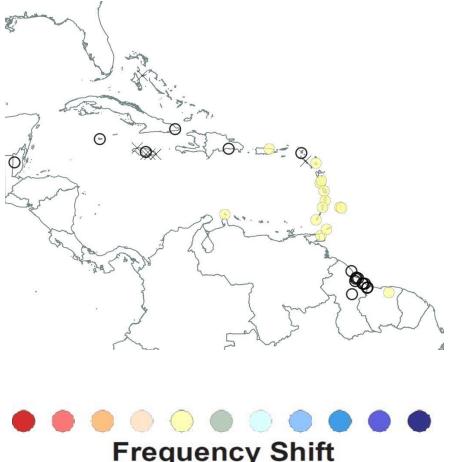
Wet day frequency shifts

Precipitation outlook





MAM 2020 Frequency of wet days



Frequency Shift

decrease no change increase

O little indication

missing

USUALLY: Out of 90 days in Mar-Apr-May, there are about 15 to 30 wet days in low lying, 30-50 in mountainous locations (ABC Islands: 1-10; coastal Guianas: 30-50).

FORECAST: MAM rainfall may be less than usual in the ABC Islands and parts of the Lesser Antilles, but wetter than usual in the Bahamas, Cuba, E Guianas, Jamaica. A slight decrease in the number of wet days is forecast for the ABC Is. and Lesser Antilles (low confidence).

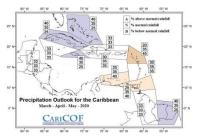
IMPLICATIONS:

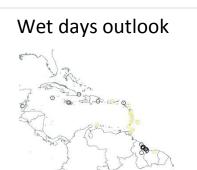
- Frequency of outdoor activity disruptions due to rainfall should be low, but increasing towards May in the Guianas.
- Increasing surface dryness will make environmental conditions less conducive to moisture related pests, but engender the peak of the wild fire season.

Wet spells frequency shifts

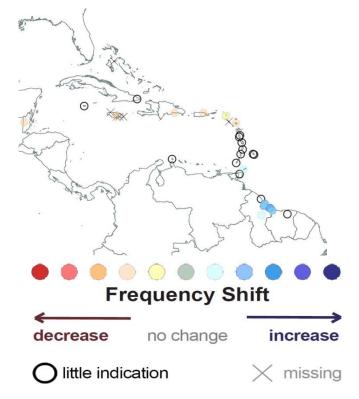
Forecast for: March to May 2020

Precipitation outlook

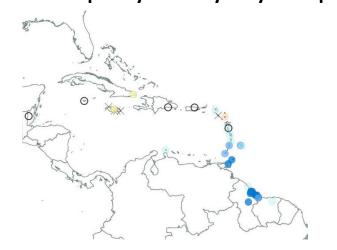




MAM 2020 frequency of 7-day wet spells



MAM 2020 frequency of 7-day very wet spells



USUALLY: Up to 3 wet spells (coastal Guianas: up to 5) occur from Mar to May, with up to 2 of them ending up very wet (coastal Guianas: up to 3).

FORECAST: MAM rainfall may be less than usual in the ABC Islands and parts of the Lesser Antilles, but wetter than usual in the Bahamas, Cuba, E Guianas, Jamaica. A slight decrease in the number of wet days is forecast for the ABC Is. and Lesser Antilles (low confidence), while a slight increase in the number of wet spells is forecast for Guyana (low to medium confid.), as well as, an increase in very wet spells in Barbados, the windward islands and the Guianas (moderate to high confid.).

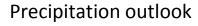
IMPLICATIONS:

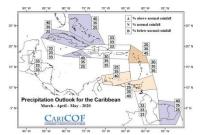
- Relatively fast depletion of large water reservoirs and soil moisture at least until April in Greater Antilles and Guianas, until May elsewhere.
- Rising flood potential towards May, especially in Greater Antilles and coastal Guianas in view of the increased frequency of very wet spells.

Extreme wet spells frequency shifts

Forecast for: March to May 2020

missing





MAM 2020 frequency of extreme (top 1%) 3-day wet spells

USUALLY: : Up to 1 extreme wet spell occurs from March to May. Virtually none in most other places.

Wet days outlook

Wet spells outlook

Very wet spells outlook

Frequency Shift decrease no change increase

little indication

FORECAST:: MAM rainfall may be less than usual in the ABC Islands and parts of the Lesser Antilles, but wetter than usual in the Bahamas, Cuba, E Guianas, Jamaica. A slight decrease in the number of wet days is forecast for the ABC Is. and Lesser Antilles (low confidence), while a slight increase in the number of wet spells is forecast for Guyana (low to medium confid.), as well as, an increase in very wet spells in Barbados, the windward islands and the Guianas (moderate to high confid.).

No change is expected in extreme wet spells.

IMPLICATION:

• Flash flood potential throughout the region is a growing concern from April onwards in view of the possible occurrence of extreme wet spells, especially in the Greater Antilles.

March to May 2020	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)	17-29	15-30	1.2-3.8	0.5-3.1	0.4-2.3	0.2-2	0-1	0-1.4
Aruba (Beatrix)	2-9	2-8	0.4-1.3	0.2-1.5	0-0.8	0-1.1	0-0	
Barbados (CIMH)	14-28	14-28	0.4-2.2	0.2-2.3	0-1.5	0-1.9	0-0.8	0-0.1
Barbados (GAIA)	15-29	15-30	0.4-2.5	0.3-2.5	0-1.5	0.1-1.8	0-1	0-0.5
Belize (C. Farm)	11-22	9-21	0.4-1.9	0.3-1.9	0-1.3	0-1.3	0-0	
Cayman	9-22	9-24	0.9-2.4	0.8-2.6	0.4-1.6	0.3-1.8	0-1	0-1.1
Cuba (Punta Maisi)	8-20	8-22	1.3-3.9	1.1-4.3	0.4-1.7	0.3-2.1	0-1	0-1.1
Dom. Republic (Las Americas)	13-26	13-27	1.2-3.8	0.9-3.8	0.4-2.2	0.4-2.7	0-1	0-0.7
Dominica (Canefield)	21-35	21-34	0-2	0-2.3	0-1.5	0-1.4	0-0	
Dominica (Douglas Charles)	36-60	34-58	1.3-3.4	1-3.7	0.1-2	0.1-2.2	0-1.5	0-1.5
Grenada (MBIA)	10-25	8-25	0-1.3	0-1.6	0-0.9	0-1.4	0-0	
Guyana_73	19-34	19-32	1.7-5.6	2.1-6.4	0.9-2.8	1.1-4.7	0-1	0-1.6
Guyana (Albion)	27-45	27-44	1.8-4.2	2.3-5	0.9-2.7	1.3-3.4	0-1	0-1.3
Guyana (Blairmont)	31-48	31-50	2-4.9	2.1-5.4	0.9-2.9	1.3-4.8	0-1	0-1.3
Guyana (Enmore)								
Guyana (Georgetown)	32-44	29-45	1.7-4.7	1.8-5.2	0.9-2.6	1-4.6	0-1.1	0-1.5
Guyana (New Amsterdam)	34-50	30-50	1.4-4.2	1.9-5	0.9-2.1	1.3-3.8	0-1	0-1.2
Guyana (Skeldon)								
Guyana (Timehri)	33-48	29-50	1.8-4.7	2.2-5.5	0.9-2.9	1.4-4.2	0-1	0-1.2
Jamaica (Worthy Park)	32-50	31-49	1.9-5.1	2-6	0.9-3	1.1-4.4	0-1	0-1
Martinique (FDF Desaix)	35-55	34-53	1.7-4.9	2.2-5.2	0.5-2.6	1-4.1	0-1.8	0-1.6
Puerto Rico (San Juan)	34-49	33-51	1.7-4.4	1.9-5.1	0.9-3.2	1-4.9	0-1.3	0-1.6
St. Lucia (Hewanorra)	20-33	19-34	2.1-4.3	1.6-4.1	0.8-2.7	0.5-3	0-1	0-1.5
St. Maarten (TNCM)	28-47	26-47	0.9-2.6	0.7-2.6	0.4-1.3	0.3-1.8	0-0	
St. Vincent (ET Joshua)	25-38	23-37	0.9-3.8	0.9-3.6	0.8-2.8	0.6-3.2	0-1.4	0-1.8
Suriname (Zanderij)	21-39	18-36	0.4-2.6	0.2-2.5	0-1.5	0-1.9	0-0.8	0-0.5
Tobago (ANR Robinson)	21-33	21-36	1-3	1-3.2	0.4-1.5	0.4-2.1	0-0.8	0-0
Trinidad (Piarco)	31-53	26-51	0.4-2.7	0.2-2.7	0-1.4	0-1.8	0-0.1	0-0.1



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