### **Rainfall frequency and extreme forecasts**

# Wet days and Wet spells Outlooks April to June 2018

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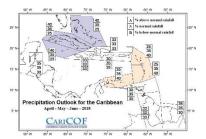






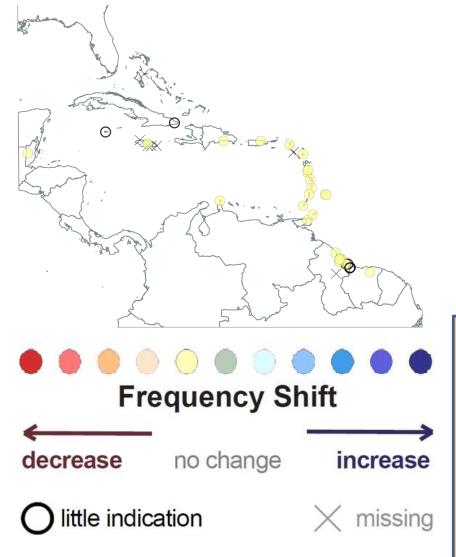


#### Precipitation outlook



### Wet day frequency shifts Forecast for: April to June 2018

AMJ 2018 Frequency of wet days



USUALLY: Across the region during April-May-June, about 25 to 40 days out of a total of 91 days are wet days (coastal Guianas: 45 to 60 days; ABC Islands: 10 or less).

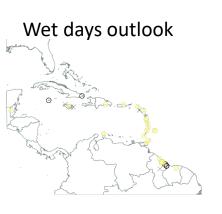
FORECAST: AMJ rainfall is likely to be above- to normal in the Bahamas, Cayman and Cuba, but below- to normal in the ABC Islands and the Lesser Antilles. The forecast indicates fewer wet days than usual (low confidence).

#### **IMPLICATIONS:**

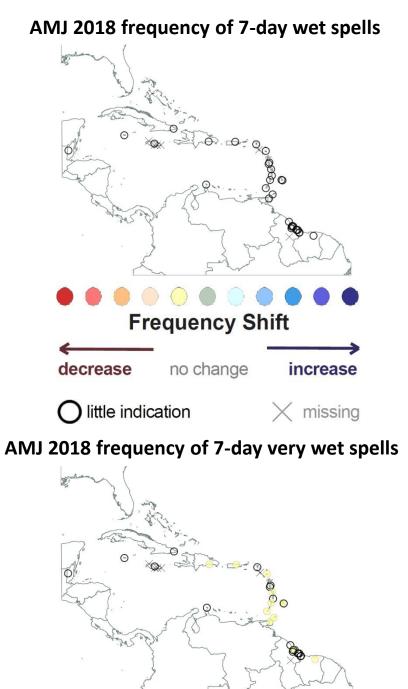
- Surface dryness increasing slightly faster than usual along the end of the dry season.
- Rainfall disruptions of outdoor activities to become more frequent from April onwards as the region transitions into its wet season.

#### Precipitation outlook





### Wet spells frequency shifts Forecast for: April to June 2018



USUALLY: 1 to 4 wet spells (ABC Islands up to 2; coastal Guianas: 3 to 6) occur from April to June, with 1 or 2 of them ending up very wet (ABC Islands: up to 1; coastal Guianas: 1 to 4).

FORECAST: AMJ rainfall is likely to be above- to normal in the Bahamas, Cayman and Cuba, but below- to normal in the ABC Islands and the Lesser Antilles. The forecast indicates fewer wet days, the usual number of wet spells, and fewer very wet spells for much of the islands from Dominican Rep. east- and southward (*low confidence*).

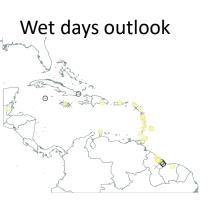
#### **IMPLICATIONS:**

- Usual depletion rates of large water reservoirs for the end of the dry season.
- Flood potential in Guianas in May and June associated with the usual many very wet spells.

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#### Precipitation outlook





Wet spells outlook

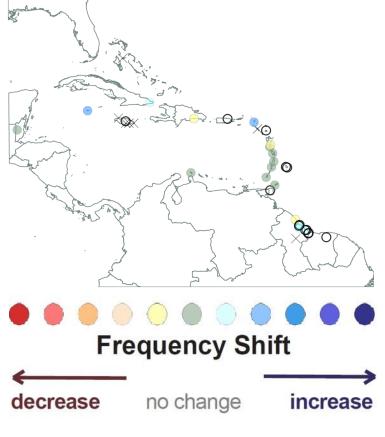


Very wet spells outlook



## **Extreme wet spells frequency shifts** Forecast for: April to June 2018

AMJ 2018 frequency of *extreme (top 1%)* 3-day wet spells



O little indication

 $\times$  missing

# USUALLY: : Up to 1 extreme wet spell occur between April to June (Guianas: up to 2).

FORECAST: AMJ rainfall is likely to be aboveto normal in the Bahamas, Cayman and Cuba, but below- to normal in the ABC Islands and the Lesser Antilles. The forecast indicates fewer wet days, the usual number of wet spells, and fewer very wet spells for much of the islands from Dominican Rep. east- and southward (low confidence).

Little changes in number of extreme wet spells are forecast in most places, (low to medium confid.).

IMPLICATION: Flash flood potential is becoming a concern across the region. Specifically, significant flash flood potential from May onwards in the Greater Antilles and the Guianas, and from June elsewhere.

April to June 2018	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)		expected
2010	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	ec'
Antigua (VC Bird)	18-32	16-31	1.2-3.8	1.1-3.9	0.4-2.4	0.5-2.2	0-1.2	0-1.1	bxb
Aruba (Beatrix)	4-9	3-9	0.4-1.7	0.1-1.7	0-1.2	0-1	0-0.9	0-0.1	re (
Barbados (CIMH)	18-34	17-33	0.9-3.8	0.8-3.3	0.4-1.8	0.2-1.6	0-0.9		a
Barbados (GAIA)	19-36	18-33	0.9-3.9	0.9-3.5	0.3-2.6	0.2-1.7	0-1	0-1	none
Belize (C. Farm)	18-28	16-28	1.2-3	1.2-3.3	0.4-2.1	0.4-2.1	0-1	0-0.8	
Cayman	18-28	17-30	2.1-3.7	1.7-4.1	0.9-2.4	0.7-3	0-1	0-1.5	grey
Cuba (Punta Maisi)	8-18	6-19	1.3-3.5	1-3.9	0.4-2.1	0.1-2.4	0-1	0-1.2	00
Dom. Republic (Las Americas)	17-31	15-30	1.7-4.6	1.5-4.6	0.6-3.1	0.4-2.9	0-1	0-0.8	e,
Dominica (Canefield)	27-44	24-44	0.8-3.4	0.9-4	0-2.4	0-2.2	0-0		increase,
Dominica (Douglas Charles)	41-63	37-60	0.9-4.6	1.2-4.3	0.4-2.6	0.1-2.4	0-1.7	0-0.8	ICr€
Grenada (MBIA)	19-34	17-34	1.2-3.4	1-3.4	0.4-2.1	0.1-1.9	0-1	0-0.5	n in
Guyana_73	26-40	25-39	2.8-6.2	2.9-6.7	1.3-3.4	1.1-4.2	0-1	0-2.2	a
Guyana (Albion)	37-52	37-52	2.7-5.6	2.7-6.1	1.3-3	1.4-3.1	0-2	0-1.9	blue
Guyana (Blairmont)	44-58	41-58	3.1-6.1	3.3-6.5	1.3-3.4	1.3-4.1	0-1.3	0-1.7	k b
Guyana (Charity)	34-53	30-55	2.6-5.4	2.1-6.8	0.9-3	0.7-3.2	0-1	0-0.1	dark
Guyana (Enmore)	42-54	40-54	2.7-5.6	2.8-6.2	1.3-3	1.1-3.3	0-1	0-1.7	0
Guyana (Georgetown)	45-60	44-58	3-6.4	2.9-5.9	1.4-3.4	1.1-3.4	0-1	0-1.3	Υ,
Guyana (New Amsterdam)	42-60	40-58	3-6.1	3.2-6.3	1.6-3.8	1.3-3.8	0-2	0-1.6	ncy
Guyana (Skeldon)	41-57	40-57	3.2-6.4	3.2-6.7	1.2-3.9	1.1-4.6	0-1	0-1.2	ənt
Guyana (Timehri)	49-61	46-62	3-6.4	2.8-6.3	0.9-3.4	1.1-3.5	0-2	0-2.3	frequency,
Guyana_Wales	46-58	45-59	3.1-6.1	3.1-6.4	1.3-4.3	0.9-3.9	0-1.9	0-2	n f
Jamaica (Worthy Park)	20-37	19-39	2.2-5.1	2-5.2	0.9-3	0.7-3.3	0-1.9	0-1.7	se i
Martinique (FDF Desaix)	34-50	31-50	1.3-3.3	1.2-3.5	0.4-2.1	0.4-1.9	0-0.9	0-0.1	crea
Puerto Rico (San Juan)	25-42	24-41	1.7-4.7	1.7-4.7	0.9-3.7	0.7-3.3	0-1.9	0-1.6	ecr
St. Lucia (Hewanorra)	26-41	22-40	1.2-4.2	1-3.5	0.3-2.1	0-1.9	0-0.9	0-0.2	a d
St. Maarten (TNCM)	22-34	21-34	1.3-3.5	1.3-3.6	0.4-2.1	0.3-2.1	0-1	0-1	is a
St. Vincent (ET Joshua)	33-56	31-56	1.3-3.8	0.9-3.7	0.4-2.1	0.3-1.6	0-1	0-0.8	N N
Suriname (Zanderij)	57-69	55-69	3.4-6.9	3.4-7.1	1.7-4.3	1.5-4.5	0-1.9	0-2.1	brown
Tobago (ANR Robinson)	27-44	25-42	1.3-4	1.3-4.1	0.4-1.8	0.5-2	0-1	0-1.1	q
Trinidad (Piarco)	22-36	21-36	1.3-3.4	1.2-3.8	0.4-2	0.2-2.1	0-1	0-0.7	





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