

# Rainfall frequency and extreme forecasts

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## Wet days and Wet spells Outlooks January to March 2022

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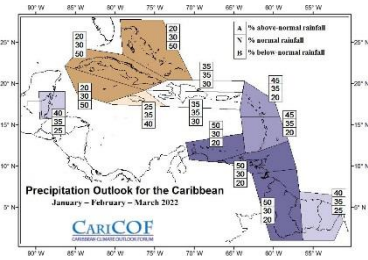
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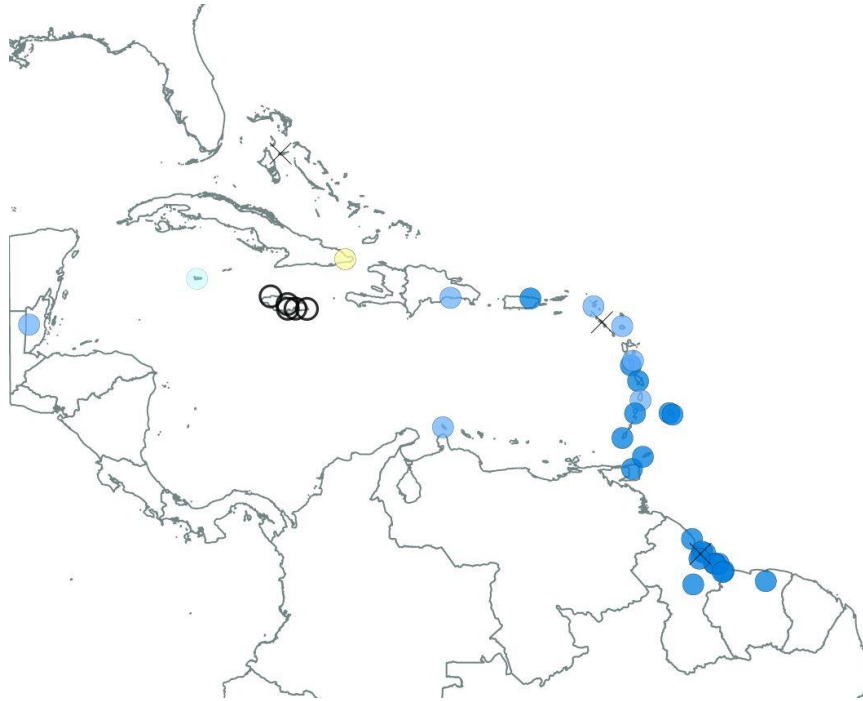
# Wet day frequency shifts

## Forecast for: January to March 2022

### Precipitation outlook



### JFM 2022 Frequency of wet days



**USUALLY:** Out of 90 days in Jan-Feb-Mar, there are about 15 to 30 wet days (ABC Islands: 10-25; coastal Guianas: 20 to 50).

**FORECAST:** At least the usual rainfall totals or wetter across Belize and the eastern part of the region, with an expected increase in wet days there as well (*medium confid.*).

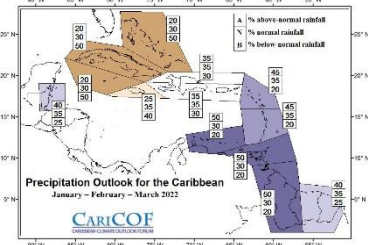
### IMPLICATIONS:

- The concentration of mosquitos and other moisture related pests associated with frequent rainfall should decrease a bit slower than usual towards March in the islands and in Belize.
- Surface dryness throughout the northwest region may increase faster than usual towards the end of March, resulting in a higher wildfire potential.

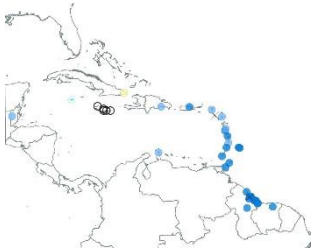
# Wet spells frequency shifts

## Forecast for: January to March 2022

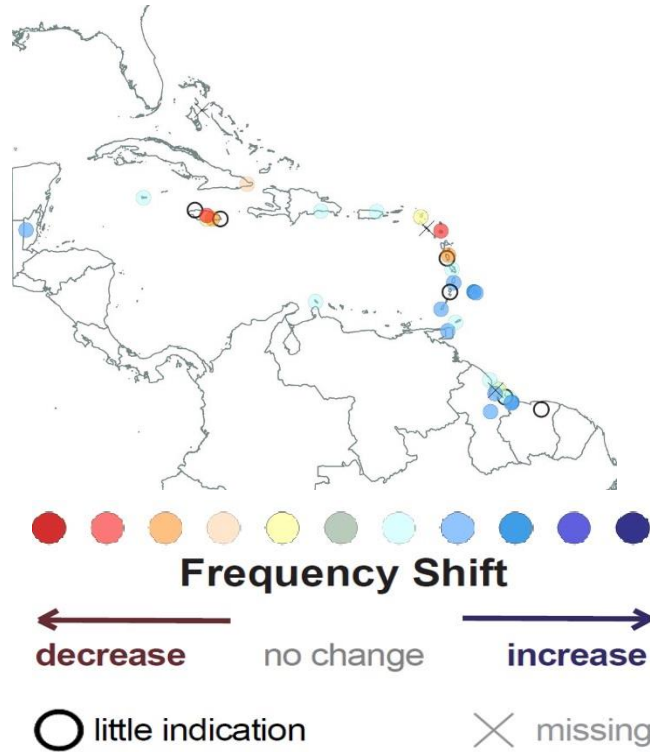
### Precipitation outlook



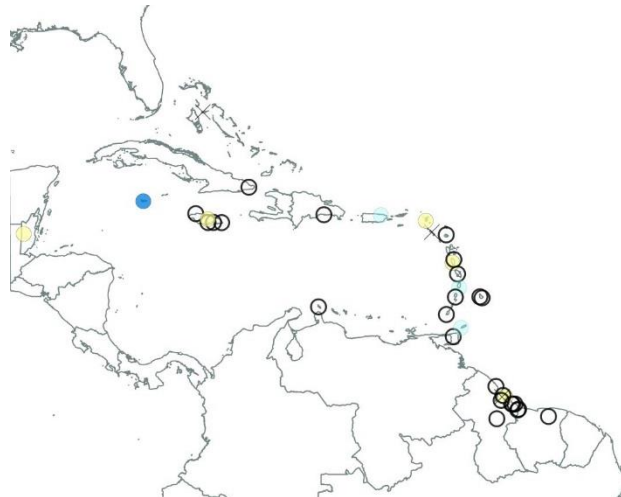
### Wet days outlook



### JFM 2022 frequency of 7-day wet spells



### JFM 2022 frequency of 7-day very wet spells



**USUALLY:** Up to 3 wet spells occur from January to March (ABC Islands: 1 to 4; coastal Guianas: up to 4), with up to 1 of them ending up very wet (ABC Islands: up to 2; coastal Guianas: up to 3).

**FORECAST:** At least the usual rainfall totals or wetter across Belize and the eastern part of the region, with an expected increase in wet days there as well (medium confid.) with an expected increase in wet spells in Belize and areas south of Dominica (medium confid.).

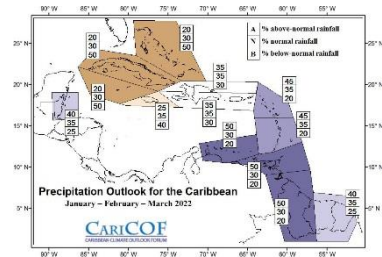
### IMPLICATIONS:

- A potential later than usual decrease in the frequency of wet spells into the dry season in the eastern Caribbean Islands and Belize may result in a slower depletion of large water reservoirs and above normal soil moisture.
- Flood potential should be higher than normal across the Guianas.

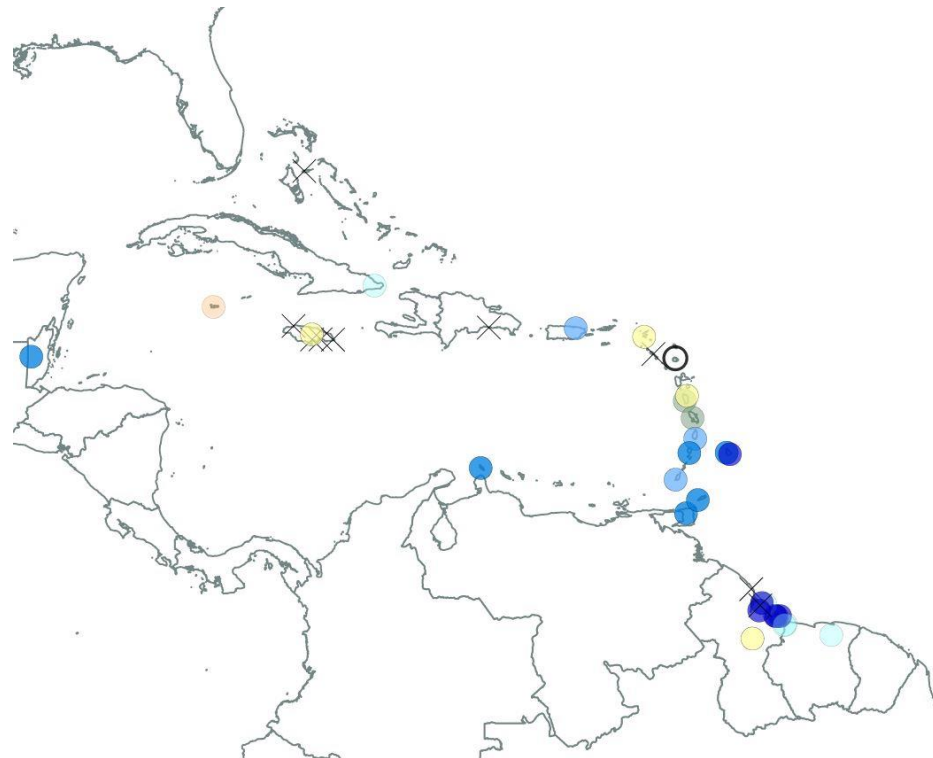
# Extreme wet spells frequency shifts

## Forecast for: January to March 2022

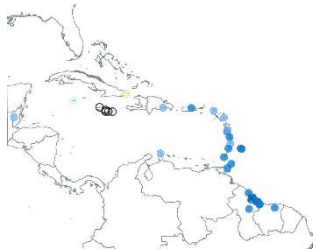
### Precipitation outlook



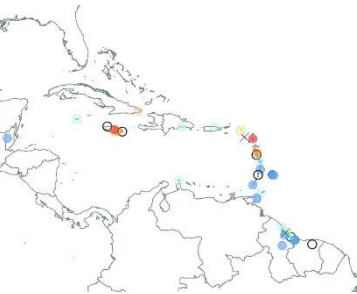
### JFM 2022 frequency of *extreme (top 1%) 3-day wet spells*



### Wet days outlook



### Wet spells outlook



### Very wet spells outlook



**USUALLY:** Up to 1 or 2 extreme wet spells occur from January to March in the coastal Guianas, but virtually none elsewhere.

**FORECAST:** At least the usual rainfall totals or wetter across Belize and the eastern part of the region, with an expected increase in wet days there as well (medium confid.) with an expected increase in wet spells in Belize and areas south of Dominica (medium confid.).

An increase in extreme wet spells is forecasted for Belize and much of the southeast part of the region (*med. to high confid.*).

### IMPLICATIONS:

- In view of the high chance of extreme wet spells in the Caribbean islands and in Belize until January, the potential for flash floods and associated hazards is expected to be moderate to high until then but decrease to marginal by March.
- In the coastal Guianas, flash flood potential is expected to be particularly high for the first part of the season.



# January to March 2022

	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)	16-34	23-43	0.8-2.4	1.4-3.9	0-0.9	0.3-1.7	0-0	0-0	light blue an increase, grey none are expected
Aruba (Beatrix)	7-27	12-47	1.2-4.3	2.4-7.9	0-2	1.5-5.4	0-0	0-1.1	
Barbados (CIMH)	17-37	22-45	0.2-1.7	0.8-2.8	0-0.9	0.4-1.8	0-0	0-0.3	
Barbados (GAIA)	21-33	23-42	0.8-2.1	0.8-3.5	0-0.9	0.7-1.9	0-0	0-0.5	
Belize (C. Farm)	14-25	19-41	0.9-2.6	1.2-4.2	0.4-1.3	0.1-1.7	0-0	0-0.5	
Cayman	7-19	10-22	0-1.7	0.2-2.3	0-1	0-1.1	0-0	0-0	
Cuba (Punta Maisi)	10-19	11-24	1.7-3.4	1.7-4.7	0.4-1.7	0.2-1.8	0-0.1	0-0	
Dom. Republic (Las Americas)	12-19	13-24	0.7-1.9	0.7-2.9	0-0.9	0-1.4	0-0	0-0.3	
Dominica (Canefield)	29-46	35-57	0-3.3	0.4-3.9	0-1.3	0-1.7	0-0	0-0	
Dominica (Douglas Charles)	42-60	48-68	0.4-2.2	0.8-3.5	0-1.3	0.1-1.4	0-0	0-0	
Grenada (MBIA)	15-33	18-45	0-2.6	0.6-3.6	0-1.5	0.1-2.4	0-0	0-0.8	
Guyana_73	14-29	17-35	0.8-4.2	1.2-4.3	0.4-2.7	1-4	0-1	0-1.9	
Guyana (Albion)	20-44	28-57	0.3-4.7	1.6-7.2	0.2-3	1.5-5.9	0-1.1	0-2.8	
Guyana (Blairmont)	19-51	30-64	0.4-4.3	1.3-6.8	0-2.6	1.4-5.7	0-1.6	0-2.9	
Guyana (Charity)									
Guyana (Enmore)	22-46	32-54	0.4-4.3	1.7-4.7	0.4-3.3	1.2-4.8	0-2	0-1.3	
Guyana (Georgetown)	23-50	35-64	0.4-4.3	1.1-7.6	0-2.8	1.4-7.4	0-1.6	0-3.4	
Guyana (Greatfall)									
Guyana (New Amsterdam)	21-46	31-59	0.4-3.9	1.3-5.8	0-3.1	1.5-5.9	0-1.1	0-2.5	
Guyana (Skeldon)	20-45	30-52	0.9-4.1	1.3-4.2	0.2-2.2	0.9-2.9	0-0.6	0-1.6	
Guyana (Timehri)	23-52	38-68	0.4-3.9	1.7-6.1	0-2.8	1.2-5.2	0-1.6	0-1.9	
Guyana_Wales									brown is a decrease in frequency,
Jamaica (Worthy Park)	14-25	14-26	0.2-3	0.4-2.7	0-1.6	0-1.3	0-0	0-0	
Martinique (FDF Desaix)	39-53	43-64	0.4-2.1	1-3.5	0-0.9	0.1-1.4		0-0	
Puerto Rico (San Juan)	26-40	30-50	0.9-2.6	1.6-4.3	0-0.9	0.4-1.8	0-0.6	0-1	
St. Lucia (Hewanorra)	25-41	30-47	0.7-2.1	1.1-3.1	0-0.9	0.3-1.6	0-0	0-0	
St. Maarten (TNCM)	28-43	29-50	0.9-3.5	1.8-5.9	0.2-1.4	0.3-2.5	0-0	0-1.2	
St. Vincent (ET Joshua)	40-53	40-63	0.4-2.5	0.8-3.3	0-1.2	0.7-2.4	0-0	0-0	
Suriname (Zanderij)	32-53	41-58	1.7-4.3	1.7-3.8	0.4-2.6	0.9-2.6	0-1	0-1.2	
Tobago (ANR Robinson)	17-34	24-45	0-1.7	0.7-4	0-0.7	0.2-1.8	0-0	0-0.7	
Trinidad (Piarco)	15-34	27-45	0.2-2.6	0.3-2.9	0-1.3	0-1.6	0-0	0-0.2	



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