

Rainfall frequency and extreme forecasts

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Wet days and Wet spells Outlooks May to July 2021

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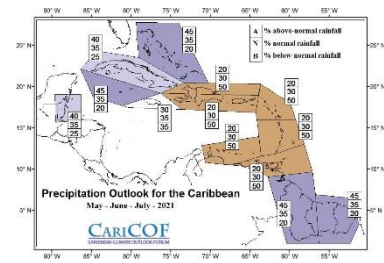
³Antigua and Barbuda Meteorological Services



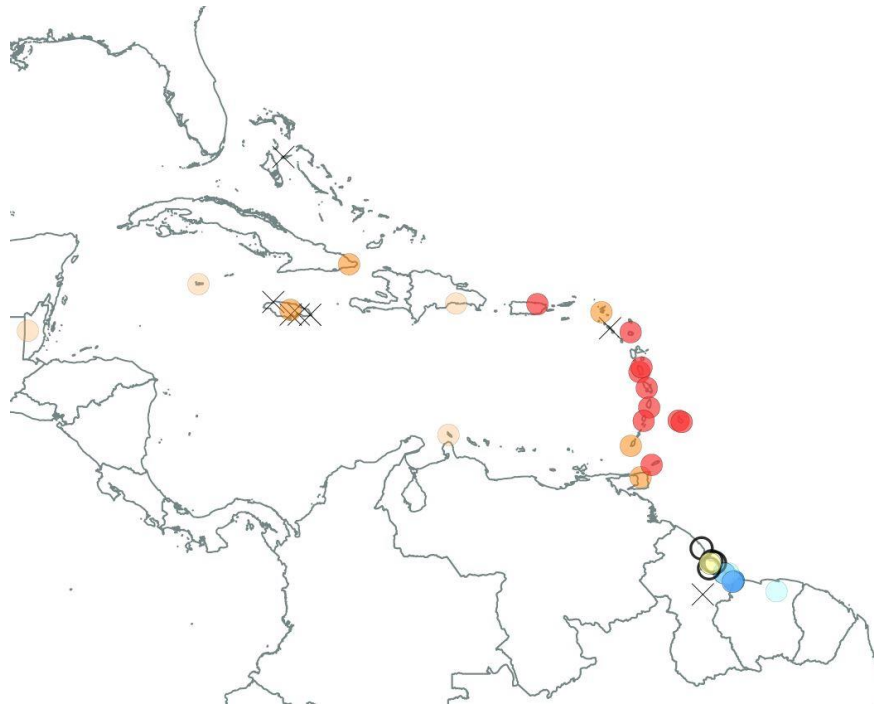
Wet day frequency shifts

Forecast for: May to July 2021

Precipitation outlook



MJJ 2021 Frequency of wet days



USUALLY: During May-June-July, about 25 to 40 days out of a total of 92 days are wet days in relatively flat areas in the islands, and 45 to 65 in mountainous areas and in coastal Guianas (ABC Islands: 5-15).

FORECAST: MJJ may be drier than usual for the islands east of Cuba and wetter elsewhere, with a decrease in wet days compared to the usual across the region (*medium to high confidence*), except for a possible, slightly higher number of wet days in parts of coastal Guyana and Suriname (*low confid.*).

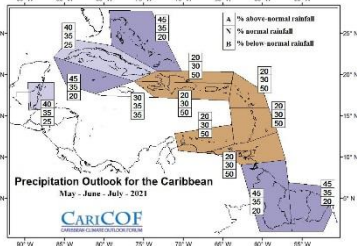
IMPLICATIONS:

- Frequency of outdoor activity disruptions due to rainfall should be increasing (at a slower than usual rate in the Antilles) while the region transitions to the wet season.
- Decreasing surface dryness after May or June could make environmental conditions more conducive to moisture related pests, particularly in the Guianas.

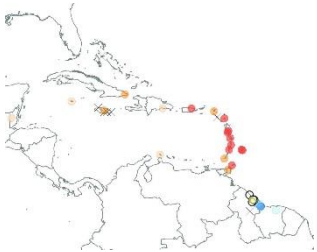
Wet spells frequency shifts

Forecast for: May to July 2021

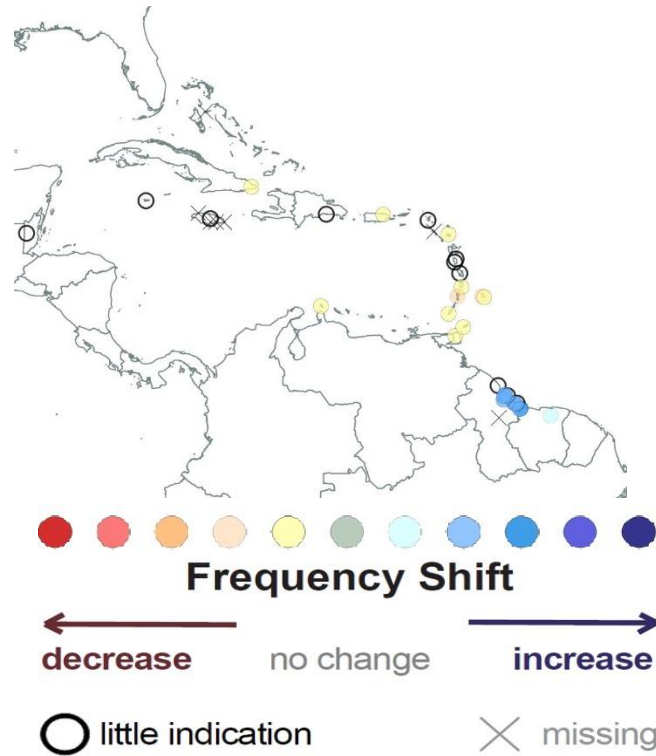
Precipitation outlook



Wet days outlook



MJJ 2021 frequency of 7-day wet spells



MJJ 2021 frequency of 7-day very wet spells



USUALLY: 1 to 5 wet spells (coastal Guianas: 4 to 7) occur from May to July, with 2 or 3 of them ending up very wet (ABC Islands: up to 1; coastal Guianas: 1 to 5).

FORECAST: MJJ may be drier than usual for the islands east of Cuba and wetter elsewhere, with a decrease in wet days (*medium – high confidence*), wet spells, and very wet spells (*low confid.*) compared to the usual across the region, except for a possible, slightly higher number of wet days and wet spells in parts of coastal Guyana and Suriname (*low to medium confid.*).

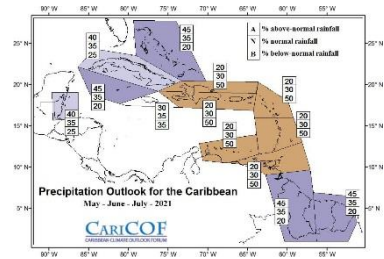
IMPLICATIONS:

- Accelerating recharge rates of large water reservoirs and soil moisture throughout the region, though possibly slower than usual in the islands where fewer wet spells than usual occur.
- Moderate flood potential in Belize and most Caribbean Islands (except the ABC Islands), high potential in the Guianas.

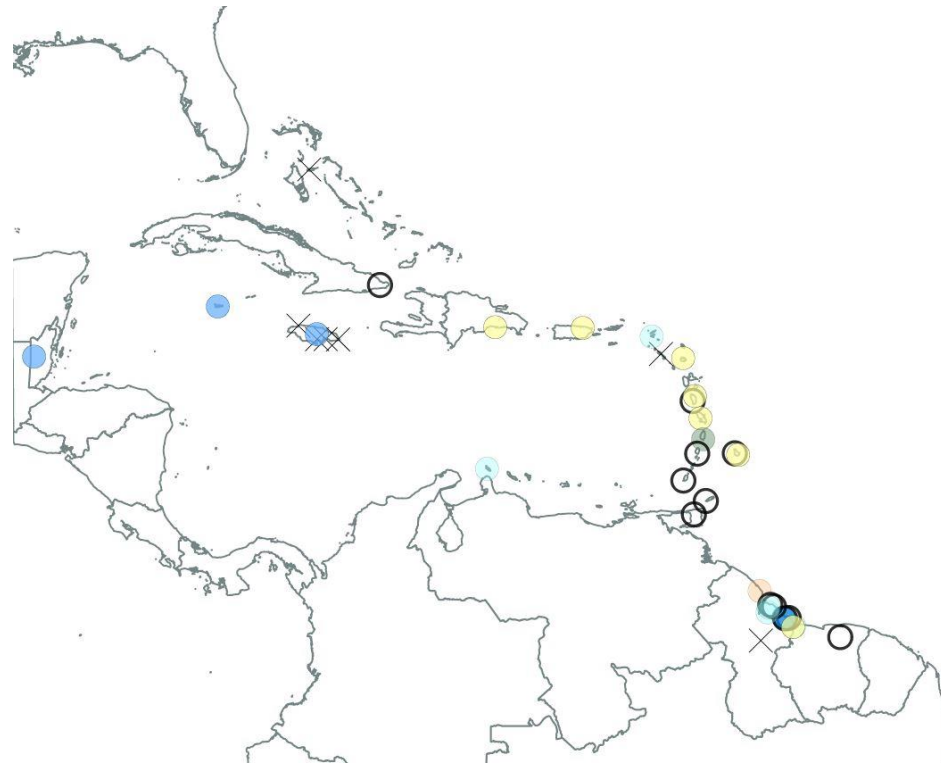
Extreme wet spells frequency shifts

Forecast for: May to July 2021

Precipitation outlook



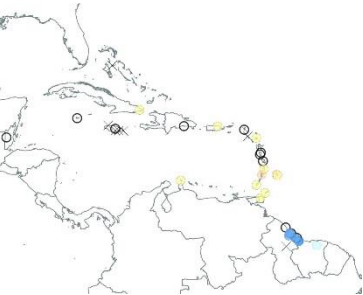
MJJ 2021 frequency of extreme (top 1%) 3-day wet spells



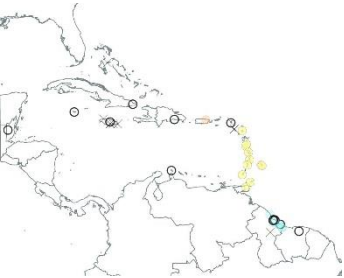
Wet days outlook



Wet spells outlook



Very wet spells outlook



USUALLY: Up to 1 extreme wet spell occur between May to July (Guianas: up to 2).

FORECAST: MJJ may be drier than usual for the islands east of Cuba and wetter elsewhere, with a decrease in wet days (*medium – high confidence*), wet spells, and very wet spells (*low confid.*) compared to the usual across the region, except for a possible, slightly higher number of wet days and wet spells in parts of coastal Guyana and Suriname (*low to medium confid.*).

A higher than usual chance for extreme wet spells may be expected for Belize, the Cayman Islands and Jamaica (*med. confidence*), but the usual or a slightly reduced chance elsewhere (*low confid.*).

IMPLICATIONS:

- The moderate potential for flash floods and associated hazards is a concern in view of the possible occurrence of extreme wet spells.

May to July 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) | 20-38 | 16-31 | 1.4-4.6 | 1.4-4.1 | 0.4-2.9 | 0.4-2.4 | 0-1 | 0-0.6 |
| Aruba (Beatrix) | 6-13 | 5-12 | 0.4-2.6 | 0.4-2.5 | 0.1-1.4 | 0.1-1.3 | 0-1 | 0-0.6 |
| Barbados (CIMH) | 24-42 | 19-33 | 1.3-5.1 | 1.3-4.3 | 0.5-2.3 | 0.3-2 | 0-1 | 0-0.1 |
| Barbados (GAIA) | 26-44 | 21-36 | 2.1-4.3 | 1.7-4.3 | 0.4-2.5 | 0.3-2.1 | 0-1 | 0-1.1 |
| Belize (C. Farm) | 28-40 | 26-41 | 2-5.1 | 2.1-5.3 | 1.3-3 | 1-3.1 | 0-1.1 | 0-1.7 |
| Cayman | 24-36 | 21-36 | 2.9-5.3 | 2.6-5.6 | 1.2-3.4 | 1.2-3.4 | 0-1 | 0-1.5 |
| Cuba (Punta Maisi) | 8-18 | 5-16 | 1.4-3.4 | 0.9-3.5 | 0.4-2.1 | 0.1-2.2 | 0-1 | 0-1.2 |
| Dom. Republic (Las Americas) | 18-31 | 13-25 | 1.3-4.6 | 1.2-5.2 | 0.4-3.6 | 0-3.4 | 0-1.1 | 0-0.2 |
| Dominica (Canefield) | 35-59 | 29-51 | 2.1-5.2 | 2.2-5.8 | 0.9-3.3 | 0.5-3 | 0-1.1 | 0-0.5 |
| Dominica (Douglas Charles) | 45-66 | 37-59 | 1.7-4.7 | 1.7-5 | 0.5-2.2 | 0.5-2.4 | 0-1 | 0-0.7 |
| Grenada (MBIA) | 30-47 | 26-42 | 2-4.8 | 1.7-4.9 | 0.8-2.7 | 0.5-2.7 | 0-1 | 0-1.3 |
| Guyana_73 | 30-41 | 30-45 | 3.9-6.9 | 4.2-7.6 | 1.6-3.4 | 1.3-4.8 | 0-1 | 0-1.6 |
| Guyana (Albion) | 44-57 | 44-61 | 3.9-7.2 | 3.6-7.4 | 2.1-3.9 | 1.7-4.2 | 0-1 | 0-2 |
| Guyana (Blairmont) | 50-67 | 51-70 | 3.6-7.4 | 4.4-8.7 | 1.4-4.9 | 1.8-5.4 | 0-2 | 0-2.5 |
| Guyana (Charity) | | | | | | | | |
| Guyana (Enmore) | 48-63 | 45-66 | 3.7-7 | 3-7.9 | 1-4.3 | 0.9-4.6 | 0-1.4 | 0-1.6 |
| Guyana (Georgetown) | 56-68 | 52-72 | 3.7-7.1 | 4.1-7.8 | 1.4-4 | 1.3-4.4 | 0-1 | 0-1.4 |
| Guyana (Greatfall) | | | | | | | | |
| Guyana (New Amsterdam) | 50-65 | 49-68 | 4-7.3 | 4.1-8.2 | 1.7-4.7 | 1.8-4.7 | 0-1.7 | 0-1.8 |
| Guyana (Skeldon) | 49-63 | 48-67 | 4-7.3 | 4.2-8.1 | 1.7-4.5 | 1.7-5.2 | 0-2 | 0-1.3 |
| Guyana (Timehri) | 57-71 | 55-76 | 3.9-7.3 | 4-7.4 | 1.7-4.3 | 1.5-4.7 | 0-2 | 0-2.4 |
| Guyana_Wales | 57-68 | 54-71 | 3.9-7.3 | 4.1-8.4 | 1-4.6 | 1.1-5 | 0-2.4 | 0-2.7 |
| Jamaica (Worthy Park) | 25-41 | 20-39 | 2.6-5.4 | 2.2-5.9 | 1.3-3 | 1-3.3 | 0-1.8 | 0-2 |
| Martinique (FDF Desaix) | 42-58 | 34-52 | 2.1-5.1 | 2.1-5.1 | 0.9-2.8 | 0.5-2.2 | 0-1 | 0-0 |
| Puerto Rico (San Juan) | 29-47 | 22-40 | 2.1-5.3 | 1.7-5.2 | 0.9-3.4 | 0.8-3.1 | 0-1 | 0-0.9 |
| St. Lucia (Hewanorra) | 31-52 | 27-45 | 1.7-5.3 | 1.6-4.5 | 0.4-2.4 | 0.4-2.2 | 0-1 | 0-0 |
| St. Maarten (TNCM) | 24-39 | 18-34 | 1.2-3.8 | 1.2-4 | 0.4-2.9 | 0.2-2.3 | 0-1 | 0-0.9 |
| St. Vincent (ET Joshua) | 44-66 | 37-56 | 2-5.1 | 1.4-4.6 | 0.8-2.9 | 0.4-2.3 | 0-1 | 0-1.2 |
| Suriname (Zanderij) | 58-70 | 56-75 | 4.2-6.7 | 3.9-8 | 1.8-3.9 | 1.6-4.9 | 0-2 | 0-2.2 |
| Tobago (ANR Robinson) | 41-56 | 37-54 | 3.4-5.9 | 2.9-5.7 | 1.4-3 | 1.3-2.7 | 0-1 | 0-1.1 |
| Trinidad (Piarco) | 33-46 | 28-42 | 2.2-5.1 | 1.7-5.1 | 0.8-3 | 0.6-3 | 0-1 | 0-0.7 |

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



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