

Rainfall frequency and extreme forecasts

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wet days and wet spells outlooks

May to July 2016

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Wet day frequency shifts

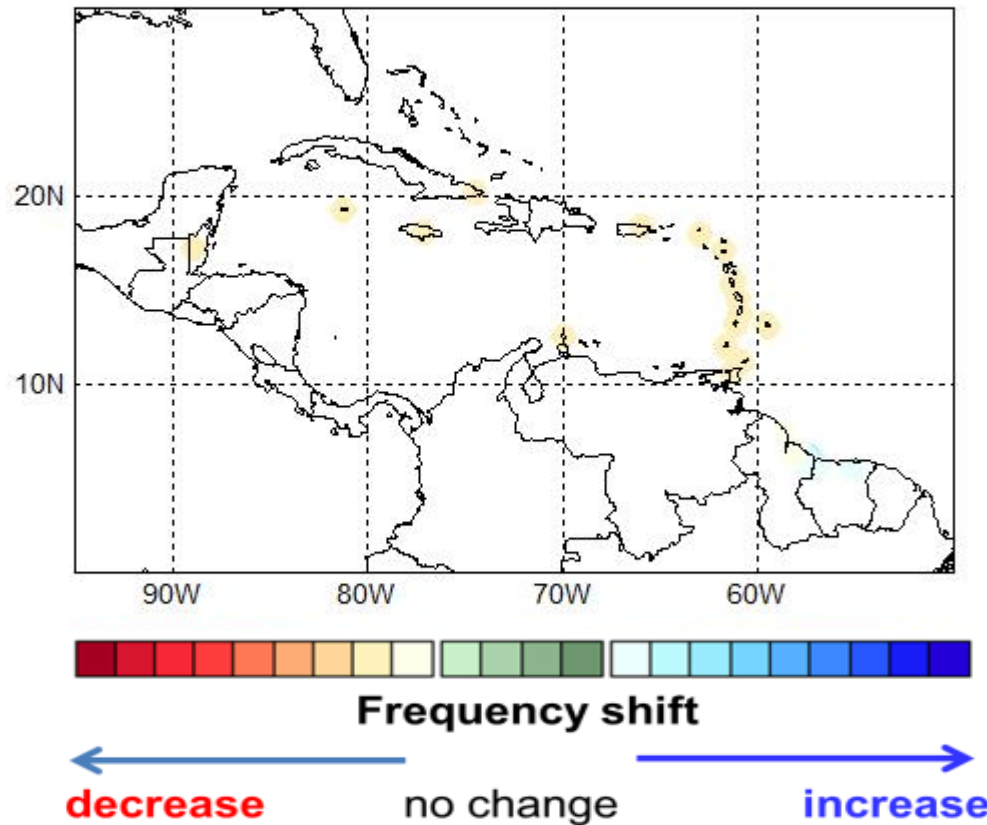
Forecast for: May to July 2016

USUALLY: Roughly, between 30 and 60 days during May-June-July are wet days.

FORECAST: MJJ rainfall is likely to be above- to normal in the north-western islands and the Guianas, but below- to normal in ABC Islands, Belize, Hispaniola and the US C'bean Territories. **Fewer wet days** (*low confidence*) are expected across the region.

IMPLICATION:
Decreasing surface dryness;
disruption of outdoor activities
on several occasions.

MJJ 2016 Wet Days Frequency Shift



Wet spells frequency shifts

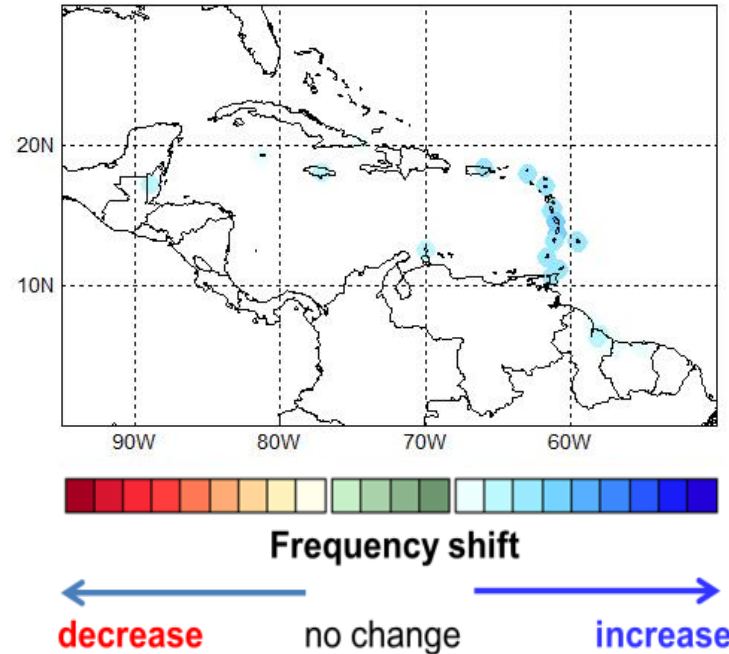
Forecast for: May to July 2016

USUALLY: Roughly 2 to 6 wet spells occur between May & July, of which 1 to 4 are very wet.

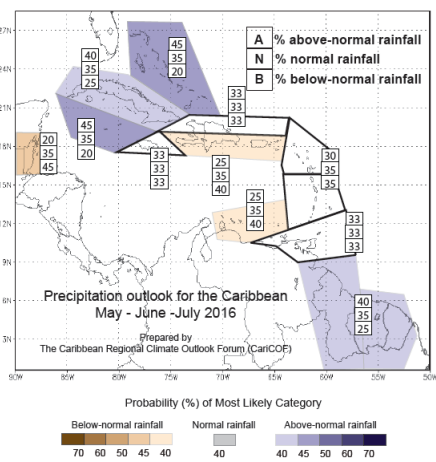
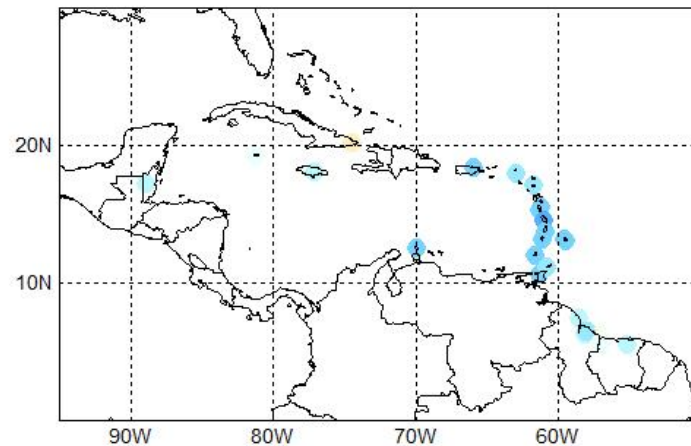
FORECAST: MJJ rainfall is likely to be above- to normal in the north-western islands and the Guianas, but below- to normal in ABC Islands, Belize, Hispaniola and the US C'bean Territories. Fewer wet days (*low confidence*) are expected across the region, but with more wet and very spells in the Lesser Antilles (*medium confidence*).

IMPLICATION:
Recharge of large water reservoirs after a prolonged drought.

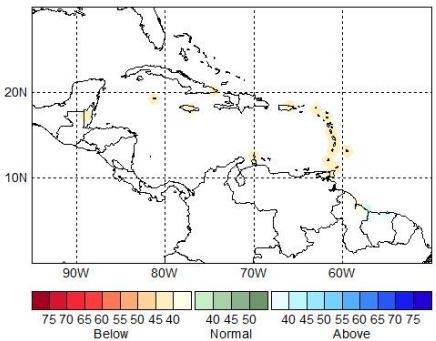
MJJ 2016 frequency of 7-day wet spells



MJJ 2016 frequency of 7-day very wet spells



MJJ 2016 Wet Days Frequency Shift



Extreme wet spells frequency shifts

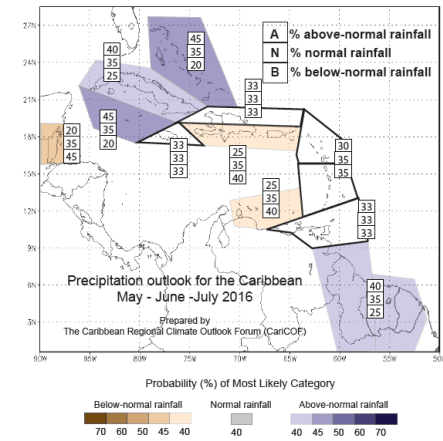
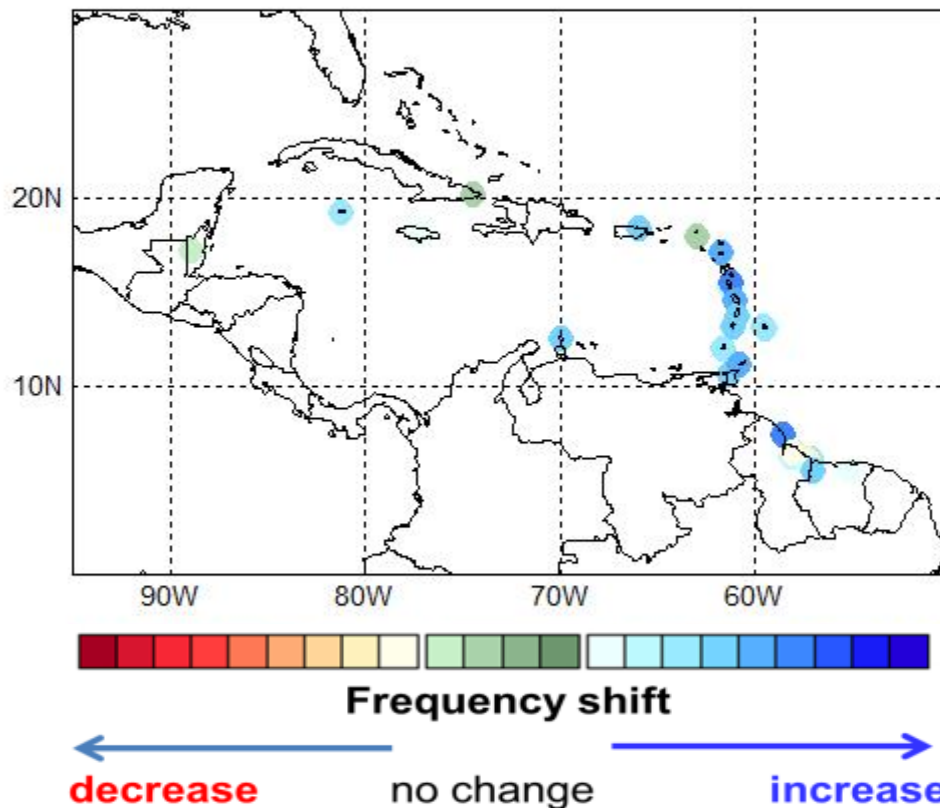
Forecast for: May to July 2016

USUALLY: Up to 1 or 2 extreme wet spells between May & July.

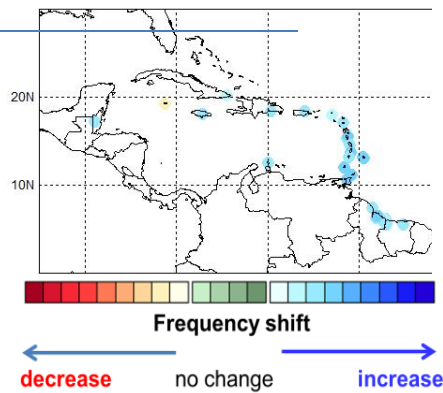
FORECAST: MJJ rainfall is likely to be above- to normal in the north-western islands and the Guianas, but below- to normal in ABC Islands, Belize, Hispaniola and the US C'bean Territories. Fewer wet days (*low confidence*) are expected across the region, but with more wet and very spells in the Lesser Antilles (*medium confidence*) and increased chance of extreme wet spells, especially in the east (*medium to high confidence*).

IMPLICATION: Serious flash flood potential developing.

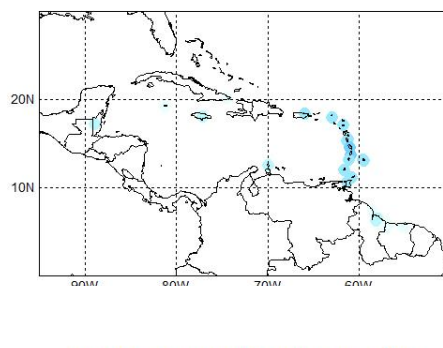
MJJ 2016 frequency of *extreme* (top 1%) 3-day wet spells



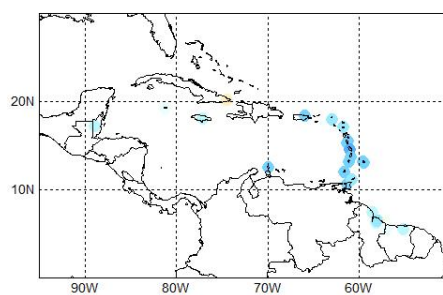
AMJ 2016 Wet Days Frequency Shift



MJJ 2016 7 Day Wet Spell Freq Shift



MJJ 2016 7day VeryWet Spell Freq. Shift



May to July 2016

| | 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 | 19-37 | 1.3-4.9 | 1.8-5.6 | 0.4-3.2 | 0.7-3.5 | 0-1 | 0-1.4 |
| Aruba (Beatrix) | 6-13 | 5-13 | 0.4-2.6 | 0.7-3.2 | 0-1.4 | 0.4-1.7 | 0-1 | 0-0.7 |
| Barbados (CIMH) | 24-42 | 22-40 | 1.3-5.2 | 2-5.9 | 0.4-2.4 | 0.9-2.9 | 0-1 | 0-0.6 |
| Barbados (GAIA) | 26-45 | 25-42 | 2.1-4.7 | 2.3-5.5 | 0.4-2.6 | 0.8-3.1 | 0-1 | 0-1.4 |
| Belize (C. Farm) | 28-40 | 27-41 | 2-5.1 | 2.4-5.5 | 1.1-3 | 1.2-3.5 | 0-1 | 0-1.4 |
| Cayman | 24-36 | 22-38 | 2.9-5.5 | 2.7-6.1 | 1.1-3.4 | 1.2-3.6 | 0-1 | 0-1.5 |
| Cuba (Punta Maisi) | 8-18 | 6-18 | 1.3-3.6 | 1-3.7 | 0.3-2.1 | 0-1.8 | 0-1 | 0-1 |
| Dom. Republic (Las Americas) | | | | | | | | |
| Dominica (Canefield) | 35-60 | 34-58 | 2.1-5.4 | 2.7-6.9 | 0.8-3.4 | 1.4-4.1 | 0-1.1 | 0-1.2 |
| Dominica (Douglas Charles) | 45-66 | 43-66 | 1.7-5 | 2.1-6.1 | 0.5-2.3 | 0.9-3.4 | 0-1 | 0-1.8 |
| Grenada (MBIA) | 30-48 | 28-46 | 2-4.9 | 2.3-6 | 0.7-2.7 | 1.1-3.6 | 0-1 | 0-1.4 |
| Guyana_73 | 30-42 | 29-44 | 3.9-6.9 | 3.7-6.9 | 1.6-3.4 | 1.4-4.5 | 0-1 | 0-1.5 |
| Guyana (Albion) | 44-57 | 43-59 | 3.9-7.2 | 3.8-7.8 | 2-3.9 | 1.7-4.6 | 0-1.4 | 0-2.2 |
| Guyana (Blairmont) | 50-67 | 49-68 | 3.4-7.4 | 3.7-7.7 | 1.3-4.9 | 1.4-4.9 | 0-2 | 0-1.5 |
| Guyana (Charity) | 40-65 | 34-72 | 3.4-6.8 | 2.7-8 | 1.3-4.1 | 1.2-4.4 | 0-1 | 0-1.7 |
| Guyana (Enmore) | 47-63 | 45-65 | 3.4-7 | 3.2-8.4 | 0.9-4.3 | 1-5.1 | 0-1.4 | 0-1.3 |
| Guyana (Georgetown) | 54-68 | 52-71 | 3.4-7.3 | 3.8-7.8 | 1.3-4 | 1.5-5.4 | 0-1 | 0-1.3 |
| Guyana (New Amsterdam) | 50-65 | 48-66 | 3.8-7.3 | 3.9-7.6 | 1.7-4.7 | 1.6-4.5 | 0-1.7 | 0-1.6 |
| Guyana (Skeldon) | 49-63 | 47-65 | 3.7-7.3 | 3.7-7.5 | 1.7-4.4 | 1.6-4.6 | 0-2 | 0-2.1 |
| Guyana (Timehri) | 56-71 | 56-74 | 3.9-7.3 | 3.7-7.2 | 1.7-4.3 | 1.5-4.7 | 0-2 | 0-2.2 |
| Guyana_Wales | 55-69 | 54-71 | 3.7-7.4 | 3.8-8.4 | 0.9-4.6 | 1.3-6 | 0-2.3 | 0-1.9 |
| Jamaica (Worthy Park) | 25-41 | 22-41 | 2.4-5.6 | 2.5-6.3 | 1.3-3 | 1.1-3.5 | 0-2 | 0-1.7 |
| Martinique (FDF Desaix) | 42-59 | 39-58 | 2.1-5.1 | 2.6-6.1 | 0.7-3 | 1.1-3.5 | 0-1 | 0-1.4 |
| Puerto Rico (San Juan) | 29-47 | 26-47 | 2.1-5.7 | 2.3-6.8 | 0.9-3.9 | 1.3-4.4 | 0-1 | 0-1.9 |
| St. Lucia (Hewanorra) | 30-52 | 31-49 | 1.7-5.3 | 2.4-5.8 | 0.4-2.6 | 0.8-3.1 | 0-1 | 0-0.5 |
| St. Maarten (TNM) | 24-39 | 21-38 | 1.1-4 | 1.6-4.7 | 0.4-3 | 0.6-3 | 0-1 | 0-0.7 |
| St. Vincent (ET Joshua) | 44-66 | 42-61 | 2-5.1 | 2.1-5.7 | 0.7-2.9 | 0.9-3.4 | 0-1 | 0-1.3 |
| Suriname (Zanderij) | 58-70 | 56-74 | 4.3-6.7 | 3.8-7.5 | 1.7-3.9 | 1.7-4.9 | 0-2 | 0-1.9 |
| Tobago (ANR Robinson) | 40-57 | 39-56 | 3.3-6.2 | 3.4-6.4 | 1.3-3 | 1.6-3.3 | 0-1 | 0-1.4 |
| Trinidad (Piarco) | 31-46 | 30-45 | 2.1-5.2 | 2.3-6.1 | 0.7-3 | 1-4.3 | 0-1 | 0-2 |

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