Rainfall frequency and extreme forecasts

Wet days and Wet spells Outlooks November to January 2023-24

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Precipitation outlook



Wet day frequency shifts Forecast for: November to January 2023-24

NDJ 2023-24 Frequency of wet days



little indication

USUALLY: Out of 92 days in Nov-Dec-Jan, there are usually about 35 to 50 wet days (coastal Guianas: 30-55; ABC Islands: 20-45).

FORECAST: NDJ may be wetter than usual in Belize and Trinidad and Tobago, but the usual or drier elsewhere.

• The forecast skill for wet days is low and thus little indication of change in the seasonal number of wet spells is found in the forecast (low confidence).

IMPLICATIONS:

missing

 Outdoor activity disruptions and environmental conditions conducive to moisture related pests as rainfall should be frequent due to the annual peak in the number of wet days in the islands and in Belize at least through November, as well as in the Guianas from late-November onwards.

Precipitation outlook



Wet days outlook



Wet spells frequency shifts Forecast for: November to January 2023-24 NDJ 2023-24 frequency of 7-day wet spells USUALLY: Between 2 and 5 wet spells

USUALLY: Between 2 and 5 wet spells occur from November to January, with 1 to 3 of them ending up very wet (coastal Guianas: up to 3).

FORECAST: NDJ may be wetter than usual in Belize and Trinidad and Tobago, but the usual or drier elsewhere.

- An increase in the number of 7-day wet spells is expected across most of the Lesser Antilles, Belize and Suriname (low to medium confidence), with fewer elsewhere across the region.
- An increase from the usual numbers of very wet spells is expected across most of the Windward Islands, the ABC Islands, Guyana and Jamaica.

NDJ 2023-24 frequency of 7-day very wet spells

Frequency Shift

no change

increase

 \times missing

decrease

O little indication



IMPLICATIONS:

- Recharge rates of large water reservoirs and soil moisture by wet spells may be even faster than usual in the Lesser Antilles and coastal Guianas through the end of the year.
- The chance of recurrent very wet spells translates to flood potential (1) being high through December in Belize and the islands, particularly in the Windward Is.; (2) increasing from moderate to high in the coastal Guianas after November.

Precipitation outlook





Very wet spells outlook



Extreme wet spells frequency shifts Forecast for: November to January 2023-24

NDJ 2023-24 frequency of *extreme (top 1%)* 3-day wet spells



USUALLY: Up to 2 extreme wet spells occur from November to January (Belize and the Greater Antilles up to 1).

FORECAST: NDJ may be wetter than usual in Belize and Trinidad and Tobago, but the usual or drier elsewhere.

• A slight increase in the chance of extreme wet spells is expected across the region (low confidence) except along the area southward of Guadeloupe where little indication of change from the usual is found in the forecast.

IMPLICATIONS:

- In view of the high chance of extreme wet spells in Belize and the islands through December, the potential for flash floods and associated hazards is expected to be high.
- In the Guianas, moderate potential through November is set to increase to high thereafter.

November to January No. of 7-day very wet spells (10% No. of 3-day extremely wet spells (1% 2023-24 No. of 7-day wet spells (20% wettest) No. of wet days wettest) wettest) Climatology Climatology Climatology **Forecast** Climatology Forecast Forecast Forecast Antigua (VC Bird) 2.1-4.7 29-44 28-45 2-5.3 0.9-2.6 0.6-3.1 0-1 Aruba (Beatrix) 2.7-8.1 19-45 17-47 2.9-10.5 0.9-5.4 1.4-8.6 0-2 **Barbados (CIMH)** 1.8-4.7 30-47 29-49 2-6.1 0.8-4.5 0-1 0.9-2.7 **Barbados (GAIA)** 2-4.7 32-45 29-46 2.1-6.3 0.9-3 0.9-4.5 0-1.5 Belize (C. Farm) 30-46 27-49 1.8-5.2 1.9-5.7 0.9-2.8 0.5-2.8 0-1 0-1 0.9-3 Cayman 18-26 16-31 0.6-3.5 0.4-2.1 0.1-2.3 0-1 Cuba (Punta Maisi) 17-27 15-30 2.6-4.7 2.3-5.1 0.9-2.6 0.7-3.7 0-1 Dom. Republic (Las Americas) 20-28 18-32 1.7-3.4 1.5-4.8 0.4-1.7 0.2-2.8 0-0.9 0-0.8 **Dominica** (Canefield) 2-3.4 41-53 39-56 0.6-2.2 0.5-2.5 0-1 1.6-4.6 **Dominica (Douglas Charles)** 55-66 52-69 1.8-4.7 1.5-5.5 0.5-2.6 0.5-3.3 0-1 Grenada (MBIA) 2.2-4.6 0-1.2 30-43 28-47 2.2-5.6 0.9-2.6 1.2-4.2 Guyana 73 15-32 15-30 1.3-4.7 0.9-3.9 0.4-3 0.2-2.3 0-2 0-1.6 Guyana (Albion) 1.4-5.1 27-49 26-53 1.3-6.6 0.4-3 0.7-4.6 0-1 Guyana (Blairmont) 0-2 30-56 29-57 1.8-4.8 1.5-5.7 0.5-2.6 0.8-5 0-1.9 Guyana (Charity) Guyana (Enmore) 1.7-4.9 0.7-3 27-52 27-52 0.6-4.1 0.9-3.4 0-1.4 Guyana (Georgetown) 1.3-5.6 1.3-6.8 0-3 37-60 36-61 0.9-4.3 0.7-6.3 0-2.9 Guyana (Greatfall) Guyana (New Amsterdam) 1-4.9 30-52 30-54 1.7-4.3 1.4-5.8 0.7-3 0-2 Guyana (Skeldon) 0.4-2.5 1.7-4.3 32-45 29-47 1.1-3.8 0.2-2.1 0-1.7 0-1.8 Guyana (Timehri) 40-64 41-66 1.7-5.3 0.9-3.2 0.8-5.3 0-1 1.6-6.3 **Guyana Wales** Jamaica (Worthy Park) 1.7-3 22-28 19-31 1.2-3 0.3-2.1 0.2-2.6 0-1 Martinique (FDF Desaix) 2.6-4.7 51-62 49-65 1.8-6.1 0.9-2.6 0.7-2.9 0-1 Puerto Rico (San Juan) 38-51 36-55 2.6-5.3 2.5-5.7 0.9-2.6 0.8-3.2 0-1 0-1.1 St. Lucia (Hewanorra) 2-5.3 39-50 35-54 1.8-3.6 0.9-2.6 0.6-3.5 0-1 St. Maarten (TNCM) 2.2-5.3 0.9-4 34-52 33-54 2.1-6.2 1.3-3.2 0-1 St. Vincent (ET Joshua) 2-6.2 50-66 48-66 2.2-4.7 1-2.6 0.9-4.1 0-1 Suriname (Zanderij) 39-52 38-55 1.7-3.4 1.6-3.8 0.4-1.7 0.4-3.4 0-1 Tobago (ANR RobinNDJ) 36-51 35-50 2.1-4.1 1.5-5.6 0.9-2.4 0.8-2.9 0-1 Trinidad (Piarco) 2.6-4.5 36-46 32-48 2.4-5.6 1.3-3 0.9-3.7 0-1



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