

PROTOTYPE flash flood potential outlook – November 2024 to January 2025

Dr. Cedric VAN MEERBEECK

Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados






Picture credits: Barbados Today; Rosalind Blenman (Barbados Met Service, Desiree Neverson SVG Met Office; <https://www.cnc3.co.tt/press-release/rowley-national-disaster>; <https://reliefweb.int/report/trinidad-and-tobago/trinidad-and-tobago-floods-flash-note-no-01-24-october-2018>



caricof@cimh.edu.bb

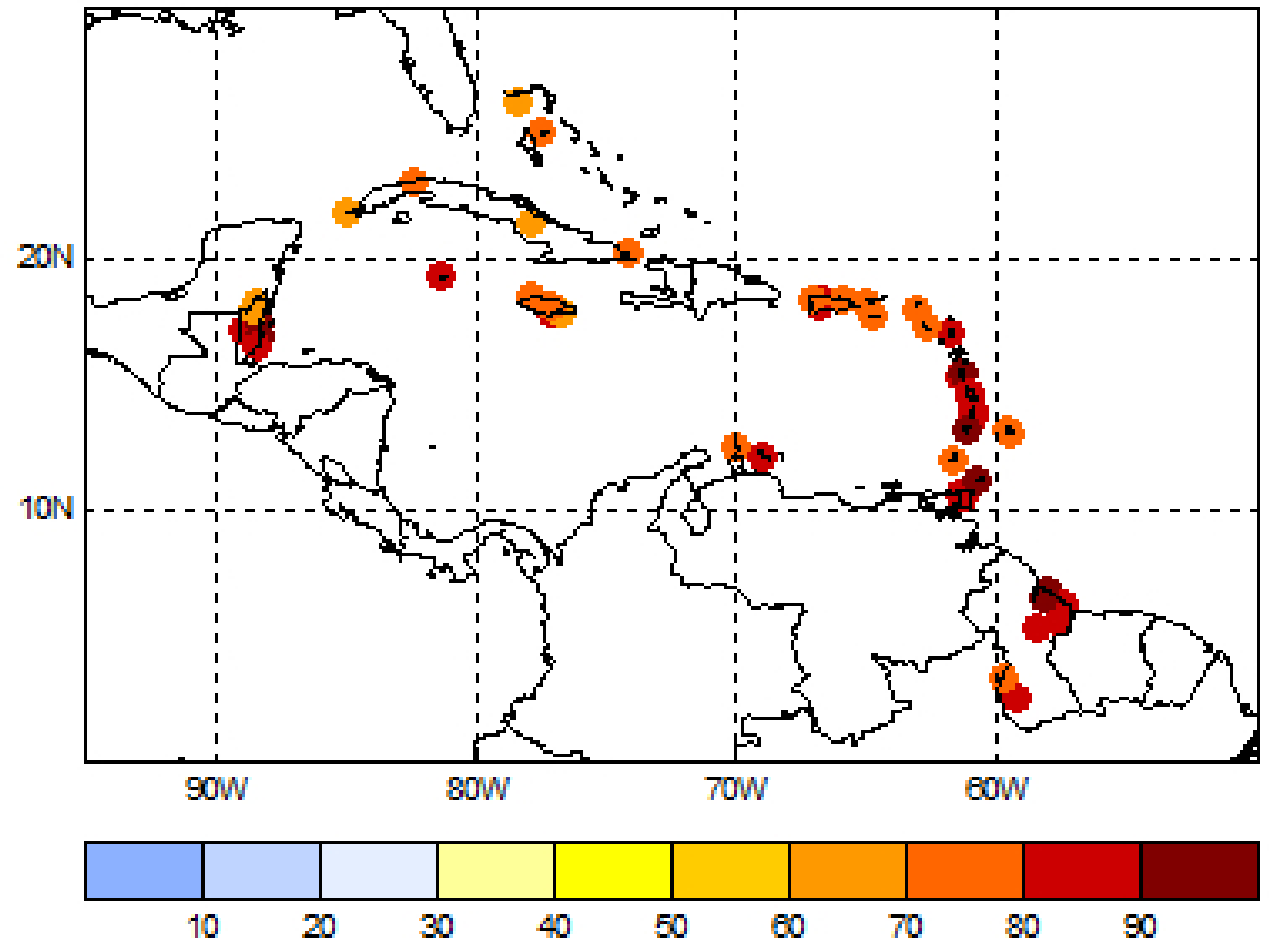


Flash flood potential associated with excessive rainfall* in Nov. – Dec. – Jan. 2024-25

Flash flood potential	Colour codes	Probability of excessive rainfall* event
EXTREMELY HIGH		>80%
HIGH		50-80%
MODERATE		20-50%
SLIGHT		10-20%
MARGINAL		0-10%

* excessive rainfall is defined here as at least 30 mm of rainfall within a 24-hour period

Probability excessive rainfall event Nov. to Jan. 2024-25



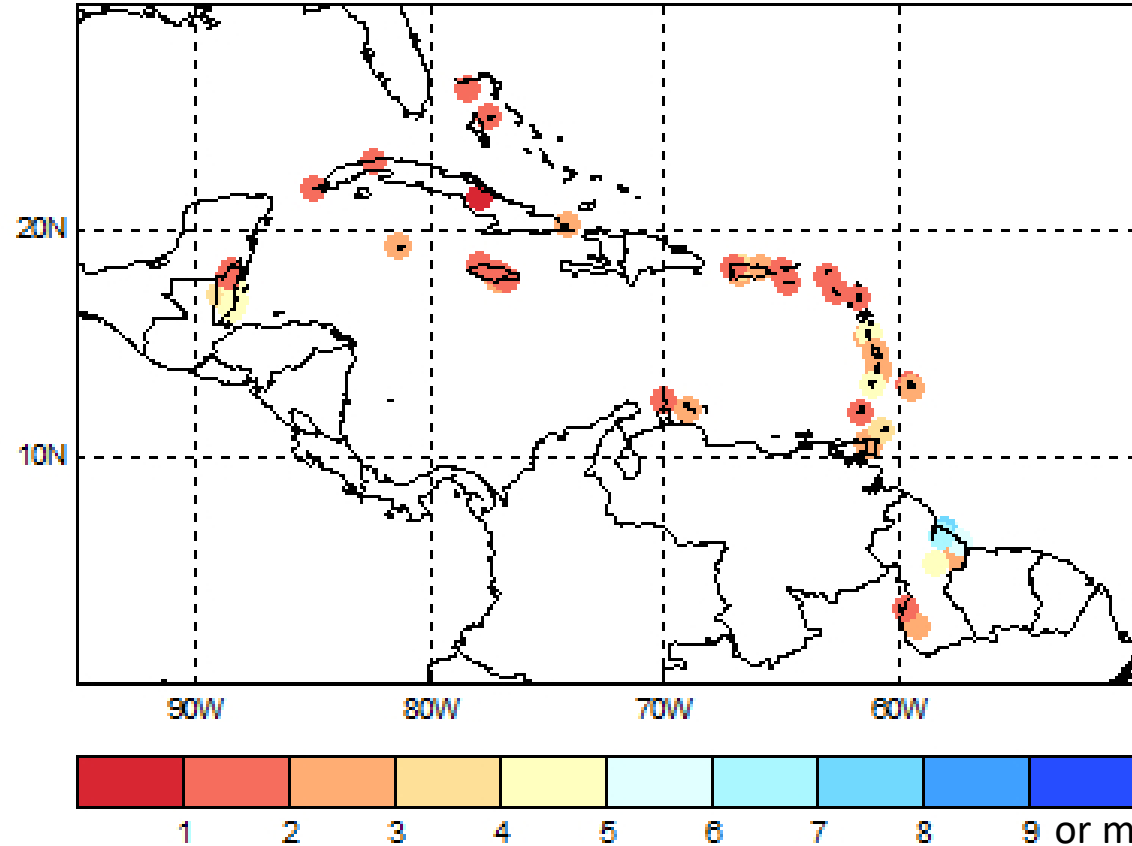
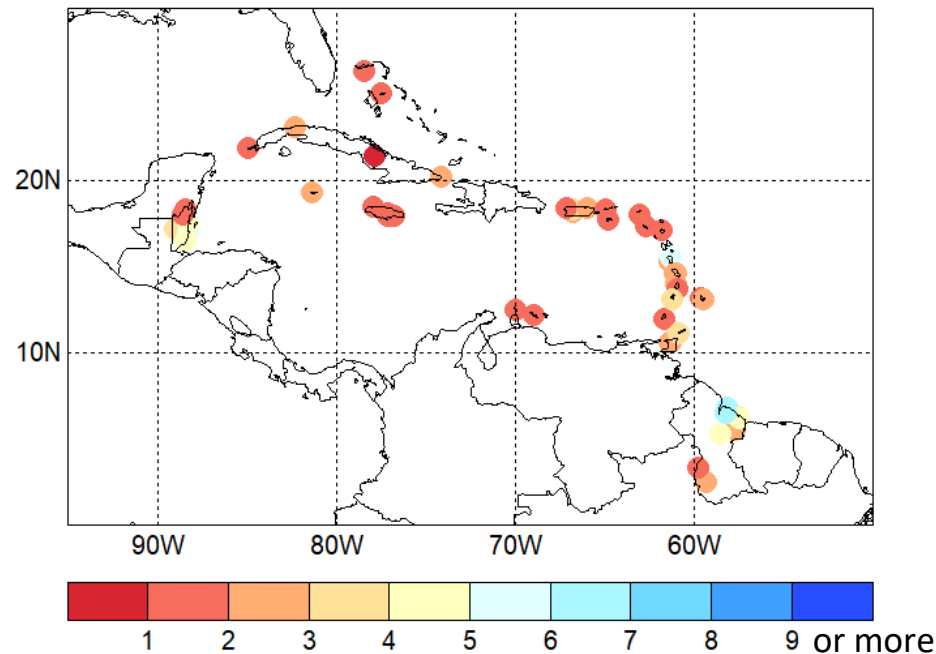
FORECAST: High to extremely high flash flood potential virtually across the entire region.

Number of excess rainfall events* that could trigger flash floods in Oct. – Nov. – Dec. 2024

* excessive rainfall is defined here as at least 30 mm of rainfall within a 24-hour period

Forecast # excess rainfall events - Nov. to Jan. 2024-25

Historical avg. # excess rainfall events Nov. to Jan.








Historically: Parts of the coastal Guianas 5 or more excess rainfall events; southern & central Belize, Grand Cayman, interior of Guyana, mountainous areas in the Antilles 3-5 events; Northern & Northwest Bahamas, northern Belize, other areas in the Greater & Lesser Antilles at most 2 events.
FORECAST: An increase in the number of excess rainfall events forecasted for northern Guyana. Little change from the historical norm in most other areas.

Number of excess rainfall events* that could trigger flash floods in **Nov. – Dec. – Jan. 2024-25**

* excessive rainfall is defined here as at least 30 mm of rainfall within a 24-hour period

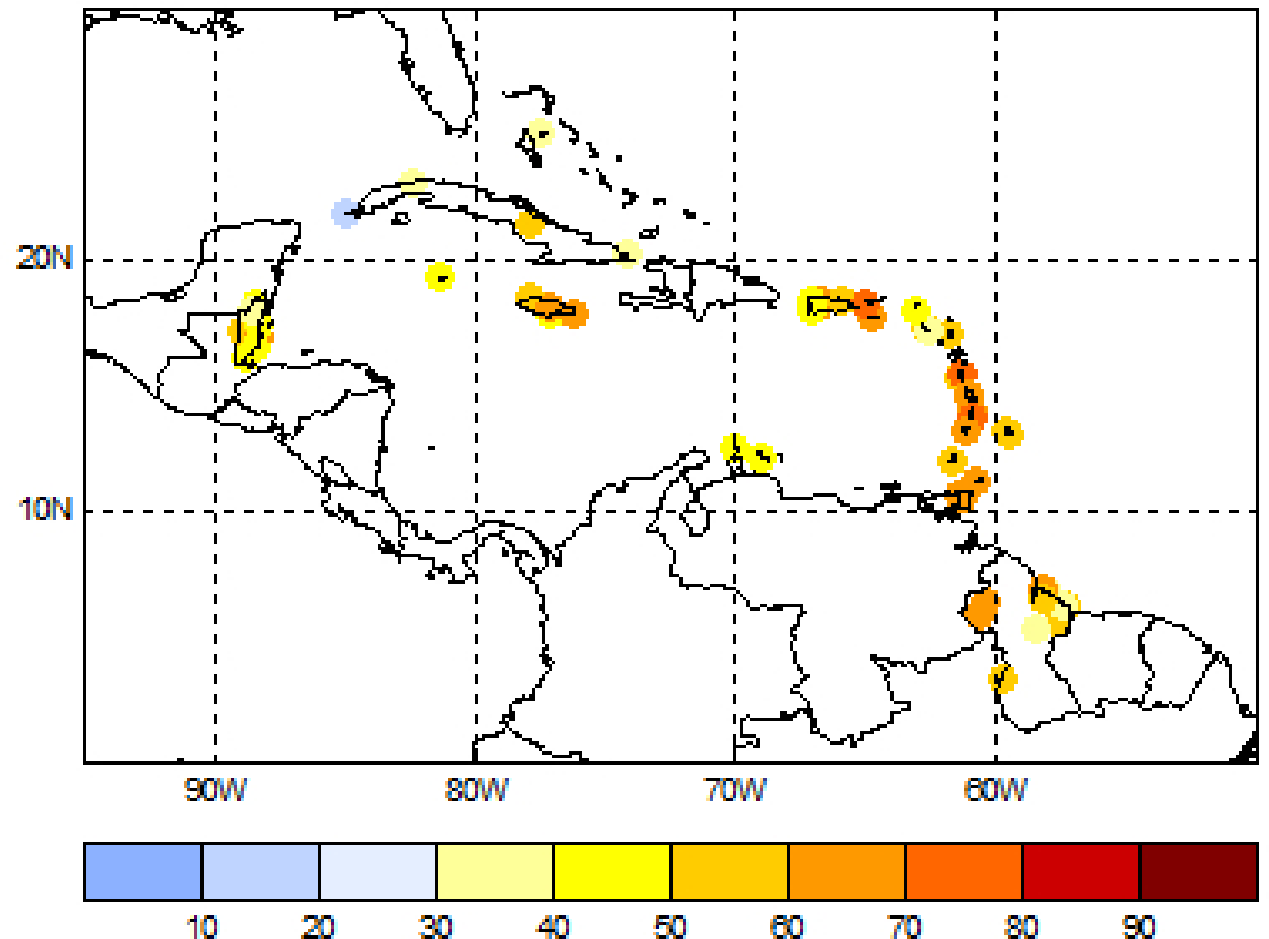
Country/Territory	(Island-) Station	NDJ 2024-25	range	Country/Territory2	(Island-) Station2	NDJ 2024-25	range2
Antigua & Barbuda	Antigua VC Bird	2	(0-3)	Guyana	Enmore Front	6	(2-9)
Aruba	Beatrix	1	(0-3)	Guyana	Georgetown	8	(3-12)
Bahamas	Freeport	1	(0-3)	Guyana	Great Falls	5	(1-8)
Bahamas	LPIA	2	(0-3)	Guyana	Lethem	1	(0-3)
Barbados	CIMH	2	(0-4)	Guyana	New Amsterdam	5	(1-10)
Barbados	GAIA	2	(0-4)	Guyana	Timehri	7	(3-11)
Belize	Belmopan	4	(1-7)	Jamaica	Bodles	2	(1-3)
Belize	Central Farm	3	(0-6)	Jamaica	Manley	1	(0-2)
Belize	Libertad	2	(0-4)	Jamaica	Sangster	2	(0-4)
Belize	Melinda	5	(2-7)	Jamaica	Worthy Park	2	(0-3)
Belize	PG Airport	4	(1-7)	Martinique	Fort de France Desaix	3	(1-4)
Belize	Savannah	4	(1-7)	Martinique	Lamentin Aeroport	3	(1-5)
Belize	Towerhill	1	(0-4)	Puerto Rico	Adjuntas	3	(0-5)
Cayman	Grand Cayman Meteo	2	(0-5)	Puerto Rico	Arecibo Observatory	3	(1-6)
Cuba	Cabo San Antonio	1	(0-3)	Puerto Rico	Coloso	2	(0-3)
Cuba	Casablanca	2	(0-4)	Puerto Rico	San Juan	2	(0-5)
Cuba	Camaguey	1	(0-2)	St. Kitts & Nevis	St Kitts RLBAirport	2	(0-4)
Cuba	Punta de Maisi	2	(0-5)	Saint Lucia	GFLCharles	3	(0-5)
Curaçao	TNCC	2	(0-4)	Saint Lucia	Hewanorra	2	(1-4)
Dominica	Canefield	3	(1-5)	Sint Maarten	TNCM	2	(0-4)
Dominica	Douglas Charles	5	(2-8)	St. Vincent & the Grenadines	St Vincent ET Joshua	4	(2-7)
Grenada	MBIA	2	(0-4)	Trinidad & Tobago	Trinidad Piarco	3	(1-5)
Guyana	Ashailton	3	(0-5)	Trinidad & Tobago	Trinidad UWI St Augustine	2	(1-4)
Guyana	Blairmont 7	4	(1-7)	Trinidad & Tobago	Tobago Crown Point	3	(1-5)
Guyana	Blairmont Front	5	(2-8)	USVI	St Croix	1	(0-3)
Guyana	Blairmont 6	4	(1-7)	USVI	St Thomas	1	(0-3)
Guyana	Ebini	3	(1-5)				

Flash flood potential associated with excessive rainfall* zooming in on **November 2024**

Flash flood potential	Colour codes	Probability of excessive rainfall* event
EXTREMELY HIGH		>80%
HIGH		50-80%
MODERATE		20-50%
SLIGHT		10-20%
MARGINAL		0-10%

* excessive rainfall is defined here as at least 30 mm of rainfall within a 24-hour period

Probability excess rainfall event in November 2024



FORECAST: *High* flash flood potential in Barbados, Trinidad & Tobago, the Windward Islands and other, mountainous areas in the Antilles and Guyana; *moderate* potential in most other areas.



CARICOF
CARIBBEAN CLIMATE OUTLOOK FORUM

**Regional climate data, information, tools,
experimental and operational products
are available at
rcc.cimh.edu.bb**

Coordination:
Contact:
Author(s):

Caribbean Institute for Meteorology & Hydrology
caricof@cimh.edu.bb

Dr. Cédric J. Van Meerbeeck – *Climatologist* (cmeerbeeck@cimh.edu.bb)

The prototype for this product was developed with the generous support
of the American People through the USAID funded BRCCC Programme in 2017.

Development Team: Dr. Cedric J. VAN MEERBEECK¹ (cmeerbeeck@cimh.edu.bb), Dr. Simon MASON²,
Dr. Hannah Nissan², Dr. Teddy ALLEN², Ms. Wazita Scott¹

¹Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados

²International Research Institute for Climate and Society (IRI), USA



CARICOF
CARIBBEAN CLIMATE OUTLOOK FORUM