






CariCOF Flash flood potential outlook – December 2024 to February 2025

Dr. Cedric VAN MEERBEECK

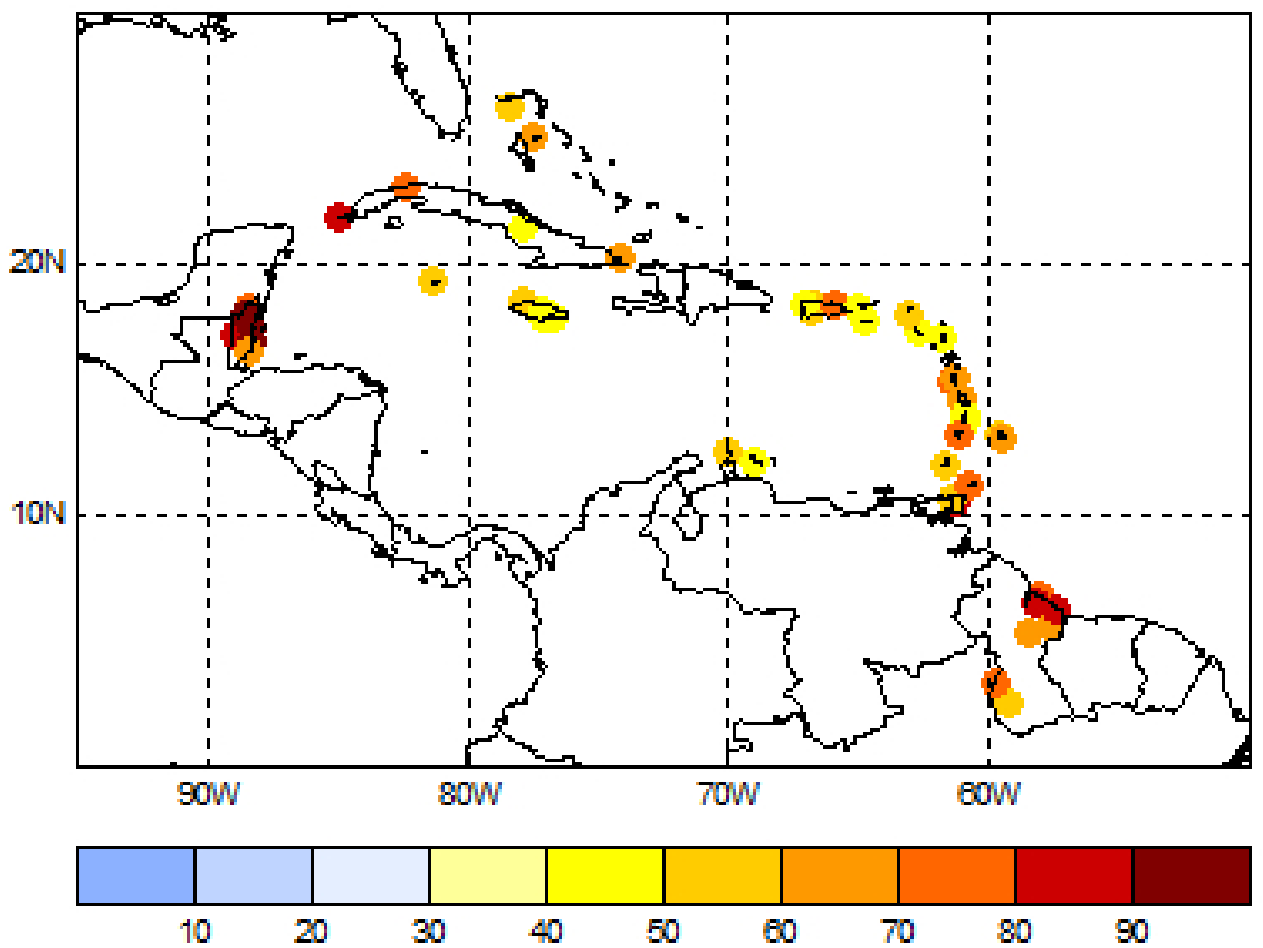
Caribbean Institute for Meteorology and Hydrology (CIMH), Barbados

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>

Flash flood potential associated with excessive rainfall* in Dec. – Jan. – Feb. 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%

Probability excess rainfall event Dec. to Feb. 2024-25



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

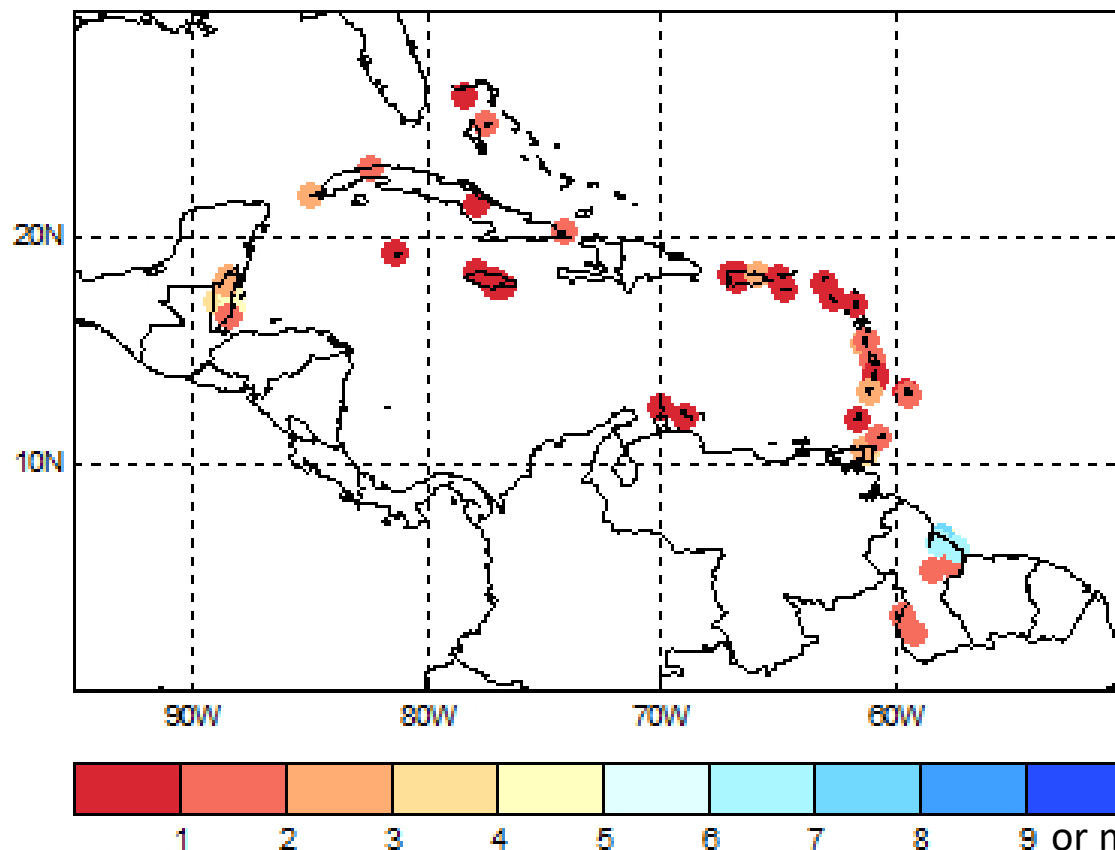
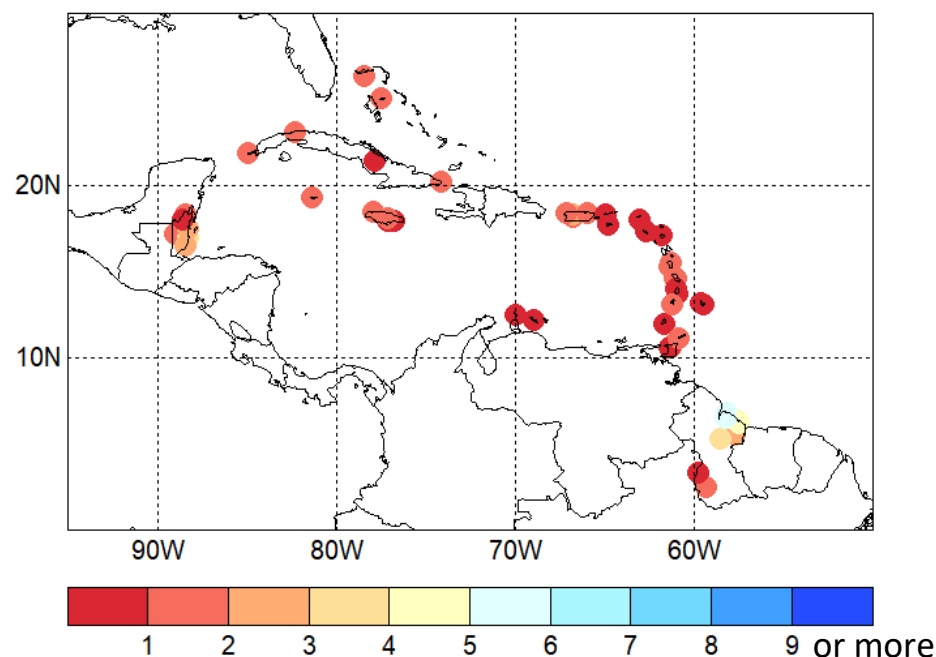
FORECAST: *High to extremely high* flash flood potential in Belize and Guyana; *high* potential in the Windward Islands; *moderate to high* potential elsewhere.

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

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

Forecast # excess rainfall events - Dec. to Feb. 2024-25

Historical avg. # excess rainfall events Dec. to Feb.



Historically: Northern parts of the Guianas at least 3 excess rainfall events; southern & central Belize 2-3 events; mountainous areas in the Antilles, northern Belize, southwest Guyana 1-2 events; ABC Islands, smaller, low-lying islands of the Lesser Antilles up to 1 event.






FORECAST: An increase in the number of excess rainfall events forecasted for Belize, coastal and far southwest Guyana, St. Vincent, Trinidad. Little change from the historical norm in most other areas.

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

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

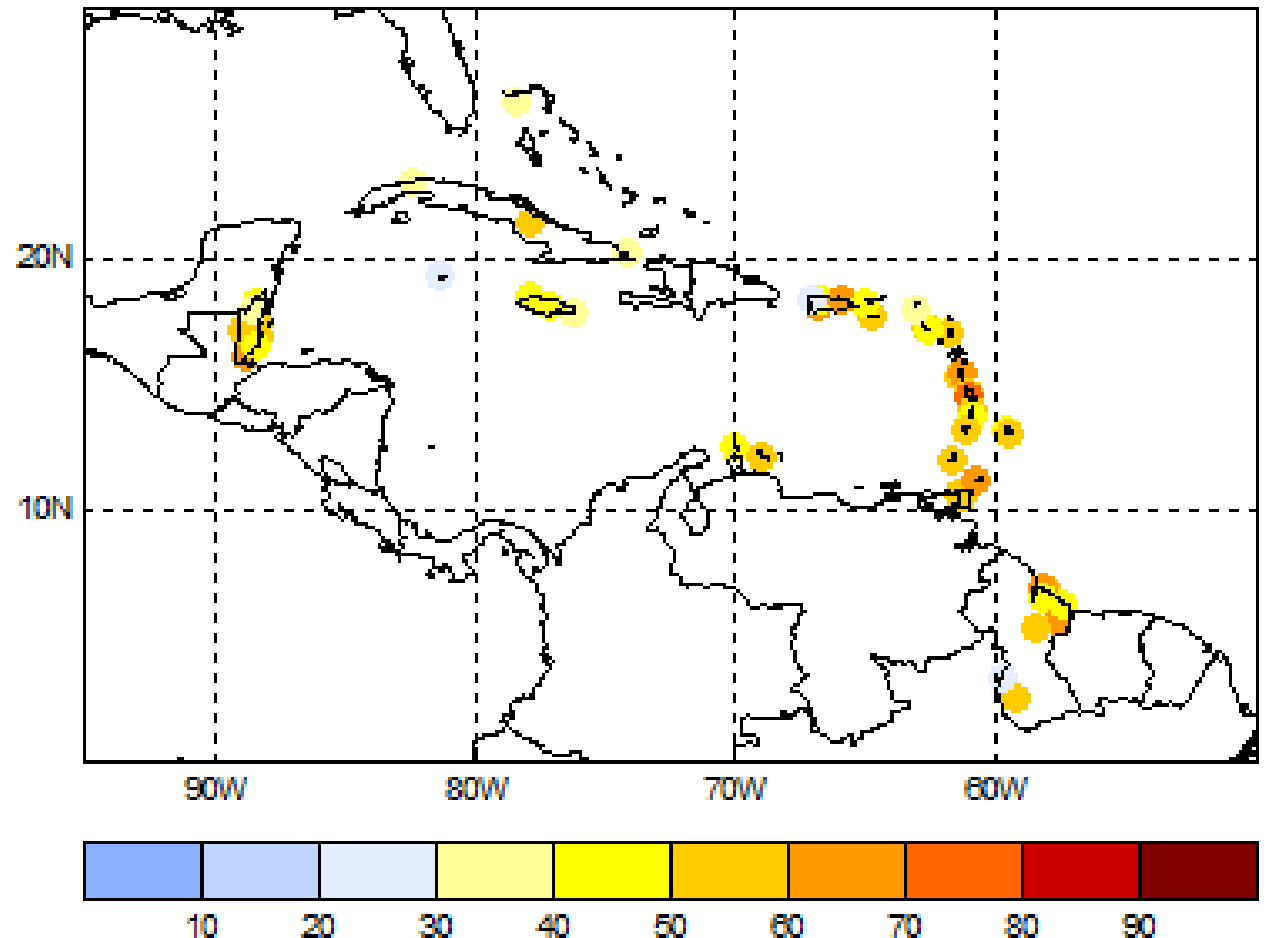
Country/Territory	(Island-) Station	DJF 2024-25	range	Country/Territory	(Island-) Station	DJF 2024-25	range
Antigua & Barbuda	Antigua VC Bird	0	(0-2)	Guyana	Enmore Front	5	(0-11)
Aruba	Beatrix	1	(0-5)	Guyana	Georgetown	7	(0-15)
Bahamas	Freeport	1	(0-3)	Guyana	Great Falls	2	(0-7)
Bahamas	LPIA	2	(0-5)	Guyana	Lethem	2	(0-4)
Barbados	CIMH	1	(0-2)	Guyana	New Amsterdam	6	(0-12)
Barbados	GAIA	1	(0-2)	Guyana	Timehri	6	(0-12)
Belize	Belmopan	2	(0-3)	Jamaica	Bodles	0	(0-2)
Belize	Central Farm	3	(1-5)	Jamaica	Manley	0	(0-10)
Belize	Libertad	2	(0-4)	Jamaica	Sangster	1	(0-4)
Belize	Melinda	5	(2-7)	Jamaica	Worthy Park	0	(0-5)
Belize	PG Airport	5	(1-8)	Martinique	Fort de France Desaix	1	(0-3)
Belize	Savannah	2	(0-5)	Martinique	Lamentin Aeroport	1	(0-3)
Belize	Towerhill	2	(2-3)	Puerto Rico	Adjuntas	1	(0-3)
Cayman	Grand Cayman Meteo	1	(0-2)	Puerto Rico	Arecibo Observatory	1	(0-5)
Cuba	Cabo San Antonio	2	(1-4)	Puerto Rico	Coloso	0	(0-2)
Cuba	Casablanca	2	(0-4)	Puerto Rico	San Juan	2	(0-4)
Cuba	Camaguey	0	(0-2)	St. Kitts & Nevis	St Kitts RLBAirport	0	(0-5)
Cuba	Punta de Maisi	1	(0-3)	Saint Lucia	GFLCharles	0	(0-3)
Curaçao	TNCC	0	(0-7)	Saint Lucia	Hewanorra	0	(0-5)
Dominica	Canefield	3	(0-6)	Sint Maarten	TNCM	1	(0-6)
Dominica	Douglas Charles	2	(0-5)	St. Vincent & the Grenadines	St Vincent ET Joshua	2	(0-6)
Grenada	MBIA	1	(0-5)	Trinidad & Tobago	Trinidad Piarco	3	(0-7)
Guyana	Ashailton	1	(0-5)	Trinidad & Tobago	Trinidad UWI St Augustine	2	(0-36)
Guyana	Blairmont 7	11	(6-16)	Trinidad & Tobago	Tobago Crown Point	2	(0-4)
Guyana	Blairmont Front	10	(4-16)	USVI	St Croix	0	(0-3)
Guyana	Blairmont 6	9	(4-15)	USVI	St Thomas	0	(0-2)
Guyana	Ebini	2	(0-5)				

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

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Probability excess rainfall event in December 2024



FORECAST: *High* flash flood potential in Curaçao, Trinidad & Tobago, the Windward Islands and other, mountainous areas in the Antilles; *moderate to high* potential in the ABC Islands, Belize and Guyana; *moderate* potential in other low-lying/flat areas and in the smallest islands.



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