



Caribbean Institute for Meteorology and Hydrology

P.O. Box 130, Bridgetown, Barbados

Tel: 246-425-1362/3/5

Fax: 246-424-4733

Email: info@cimh.edu.bb

Press Release

Caribbean Advised to Prepare for A Year of Climate Extremes

Barbados, March 20, 2024 – The Caribbean Institute of Meteorology and Hydrology (CIMH) is cautioning stakeholders that 2024 is shaping up to be a year of climate extremes for the region.

Based on anticipated climate patterns, these predicted climate extremes are driven by a complex interplay of factors specifically a fading El Niño event in the Pacific and continued, near-record warm Atlantic Ocean temperatures, as well as frequent Sahara dust intrusion says Dr. Cédric Van Meerbeeck, a Climatologist at the Institute.

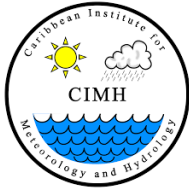
Dr. Van Meerbeeck advises that the return of La Niña, coupled with persistently warm Atlantic Ocean temperatures, are two of three main factors poised to influence weather patterns. He warns that this combination could intensify hurricane season activity and increase the potential for flooding.

"Understanding the dynamics of El Niño/La Niña, Atlantic Ocean temperatures, and intrusions of Saharan air is crucial in predicting climate extremes," explains Dr. Van Meerbeeck.

The frequency of Saharan dust intrusions, though less predictable, plays a pivotal role in shaping expected weather patterns in coming months. Infrequent intrusions create conditions ripe for extreme rainfall and tropical cyclone development, while frequent intrusions result in hotter but drier weather, which amplify heat-related hazards. Either way, 2024 promises to be a year with excessive heat and the associated heat discomfort.

Reflecting on historical events, Dr. Van Meerbeeck draws parallels to 2010, a year marked by devastating droughts abruptly followed by record-breaking rainfall, and an active hurricane season. He also highlights the escalating threat of heat-related hazards, as evidenced by recent record-warm years in the region.

"The potential scenarios for 2024 range from extremely hot and wet to record hot, but initially drier conditions, each posing unique challenges to key climate-sensitive sectors such as agriculture and food security, water, and health," explains Dr. Van Meerbeeck.



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Principal of the CIMH, Dr. David Farrell in acknowledging the critical link between actionable climate information and early warning services, explained that “Proactive measures are vital for mitigating the impacts of extreme weather events on climate sensitive sectors, communities, and national economies.”

Dr. Farrell also underscored the CIMH’s commitment to enhancing regional resilience, noting that the Institute has strategically expanded its services to include a sharper focus on water, marine systems, geological systems, earth observation, and climate, to support and advance early warning information services. He emphasized that by empowering experts to analyze and interpret climatological data effectively, the CIMH and National Hydrometeorological Services (NHMSs) will be able to provide actionable insights tailored to the needs of Caribbean Small Island Developing States (SIDS), to foster resilience and enhance sustainable development.

In the coming months, the outlook for 2024 may change due to shifts in predicted climate patterns. To keep stakeholders informed, the CIMH and NHMSs through the Caribbean Climate Outlook Forum, will provide monthly updates on any changes to the outlook for 2024.

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