VOL 10 ISSUE 3



# **DOMINICA CLIMATIC NEWSLETTER**



# SEASONAL CLIMATE OUTLOOK SUMMARY

June- July- August

2025

Previous Season Forecast: Mar- Apr- May (MAM) 2025 Models were providing little information on rainfall accumulation. The usual amounts were communicated.

Temperatures were expected to be warmer than usual.

Mar- Apr- May (MAM) Observations: Above to normal rainfall totals with normal temperatures.

# Current Season Forecast: Jun- Jul- Aug (JJA) 2025

Rainfall accumulations are likely to be the usual or less, with higher confidence in northern regions.

Day and night-time temperatures are expected to be as high as usual (medium to high confidence), particularly in western regions

> Do not wait for the last minute, Get Prepared!



THE 2025 ATLANTIC HURRICANE SEASON

This year's activity has the potential to be intense but, erratic.

Drivers of the tropical cyclone activity include:

- Unusually warm sea surface temperatures in the Caribbean Sea and western Tropical Atlantic
- Slower warming in the eastern Tropical Atlantic may boost mid to late season activity
- Present ENSO neutral conditions do not provide much predictability, but possible La Nina conditions could promote late-season activity in September- October- November.
- Saharan dust incursions could stifle activity, particularly into August, however explosive tropical cyclone activity is possible between dust events.

	2025 At	tlantic Tropi	ical Cyclone	Names	Seattle and
Andrea	Erin	Imelda	Melissa	Rebekah	Wendy
Barry	Fernand	Jerry	Nestor	Sebastien	
Chantal	Gabrielle	Karen	Olga	Tanya	
Dexter	Humberto	Lorenzo	Pablo	Van	

# Looking Back: Mar- Apr- May (MAM) 2025





# Looking Back: Mar- Apr- May (MAM) 2025





- Total rainfall during MAM was normal at Canefield and above normal at Douglas-Charles.
- Overall, the dry season was wetter than normal which resulted in flooding and landslide events, particularly in the north of the island.
- Day and night-time temperatures were normal and comfortable. Temperatures were lower than expected.

FORECAST VERIFICATION					
RAINFALL CLIMATOLOGICAL	Canefield Airport	Douglas-Charles Airport			
NORMAL (1991-2020)	(Mar-Apr-May 2025)	(Mar-Apr-May 2025)			
Accumulated Normal	105.2 to 234.4mm	290.6 to 530.2mm			
Forecast	Models gave little information	Models gave little information			
Observed	219.4mm (normal)	705.1mm (above normal)			
Wet Days Normal	22 to 35 days	36 to 60 days			
Forecast	23 to 38 days	41 to 68 days			
Observed	30 days <mark>(within range</mark>	66 days <mark>(within range)</mark>			

FORECAST VERIFICATION						
TEMPERATURE AVERAGE	Canefield Airport	Douglas-Charles Airport				
(2006-2020)	(Mar-Apr-May 2025)	(Mar-Apr-May 2025)				
Average Maximum	30.8°C to 31.4°C	29.2°C to 29.6°C				
Forecast	Warmer than usual	Warmer than usual				
Observed	31.1°C (normal)	29.2°C (normal)				
Average Mean	26.7°C to 27.2°C	26.0°C to 26.4°C				
Forecast	Warmer than usual	Warmer than usual				
Observed	27.0°C (normal)	26.2°C (normal)				
Average Minimum	22.6°C to 23.0°C	22.7°C to 23.1°C				
Forecast	Warmer than usual	Warmer than usual				
Observed	22.9°C <mark>(normal)</mark>	23.0°C (normal)				

# Looking Ahead: 2025 Wet Season Outlook

## **INFLUENCING FACTORS**

- Eastern Equatorial Pacific Ocean Sea Surface Temperatures (SSTs) are currently near average, ENSO neutral conditions. The models forecast ENSO neutral conditions in JJA (~75% confidence) and a chance for remaining neutral through Sept-Oct-Nov (SON), though there is a slightly lower chance that La Niña conditions might return. ENSO neutral conditions do not contribute to seasonal forecast skill, whereas a return to La Niña would increase the odds of a wetter and more active tropical cyclone period in SON.
- SSTs in the Tropical North Atlantic (TNA) are significantly cooler than around the same time in 2024. SSTs are currently below
  average in the eastern TNA and unseasonably warm in and around the Caribbean Sea. Models are forecasting above average in JJA
  and SON across the Caribbean Sea and the western half of the TNA. Warm SSTs tend to contribute to higher air temperatures,
  humidity, rainfall totals and increased frequency of severe weather, including tropical cyclones.
- Saharan dust haze intrusions are not forecasted seasonally, but weekly. Climatologically, the frequency of Saharan Dust Haze intrusion increases during the season. The Saharan Air Layer (SAL) stifles shower activity.

## USUAL JUNE-JULY-AUGUST (JJA) VALUES

June-July-August Season					
CLIMATOLOGICAL NORMAL RAINFALL (1991-2020)					
	Canefield Airport	Douglas-Charles Airport			
Accumulated Normal	474.2 to 756.8mm	544.4 to 768.5mm			
Wet Days Normal	49 to 66 days	53 to 68 days			
7-Day Wet Spell Normal	4 to 7	2 to 7			
7-Day Dry Spell Normal	na	1			
TEMPERATURE AVERAGE (2006-2020)					
Average Maximum	32.2°C to 32.5°C	30.7°C to 31.2°C			
Average Mean	28.2°C to 28.5°C	27.7°C to 28.1°C			
Average Minimum	24.1°C to 24.6°C	24.7°C to 25.1°C			

#### **RAINFALL PROBABILITY FORECAST (%)**



- Rainfall activity is expected to increase into the wet season;
- Low to medium confidence that rainfall total is likely to be the usual in western communities and drier than to usual in eastern regions in JJA;
- The usual number of wet days (49 to 68) is likely;
- An increase in the number of wet spells is expected, with one to five 7-day very wet spells and at least 2 extreme wet spells;
- Moderate to high potential for at least two flash flood events, with potential increasing from July/ August;
- Depending on Saharan dust intrusion, there is a low chance of at least one 7-day dry spell;
- There is no concern for short-term drought by the end of August;
- SON is likely to be drier than usual at Canefield and wetter than usual at Douglas-Charles.

#### **TEMPERATURE PROBABILITY FORECAST (%)**



- Currently in the Caribbean heat season until October;
- In JJA, daytime temperatures, as well as air humidity, will likely be the usual or higher;
- Night-time lows are likely to be the usual in the east and warmer than usual in the west;
- High probability of at least 30 to 40 hot days;
- In SON, temperatures are likely to be warmer than usual, though eastern regions may see cooler than usual nights;
- Heat impact potential is marginal and record heat, such as that of 2024, is not expected.

## SECTORAL IMPLICATIONS

## AGRICULTURE

- Warmer temperatures and high humidity during the wet season are likely to maintain the increase in fungal diseases observed during the dry season;
- These conditions are also ideal for the proliferation of certain pests (whiteflies and aphids);
- Intense rainfall could lead to faster depletion of soil nutrients and loss of topsoil, due to surface run-off. The cost of production could increase as farmers spend more on fertilizers and pest controls;
- Though, farmers may continue to benefit from the reduced cost of open-field irrigation and greater harvest of root crops;
- The season is favourable for tree crop planting and reforestation programs;
- Farmers should employ good agricultural practices. Ensure proper drainage systems on farms and use protective structures where necessary.



## TOURISM

- The wet/ hurricane season may make the island unattractive to visitors resulting in economic losses. A campaign may be necessary to enhance marketing;
- While intense rainfall may make seasonal waterfalls such as Trafalgar Falls more attractive, tourists may face road closures or difficulties accessing tourism sites due to flooding or landslides;
- Disruptions to outdoor activities are likely and other opportunities, related to gastronomy, cultural heritage and customer service can be explored;
- Heat stress in the Atlantic Ocean corals is expected to increase into August, however, mass coral bleaching is not anticipated. Minimize runoff of pollutants into coastal waters and encourage the use of reef-safe sunscreen to increase the survival chances of coral reefs;
- Coastal tourism destinations may experience beach erosion and damage to marine ecosystems as tropical systems move through the region. This can affect beachgoers, as well as water sports businesses (diving, surfing, snorkelling);
- There are large quantities of Sargassum in the marine environment affecting beaches. Moderate to severe levels are expected this season.

For Regional Sectoral Bulletins (Agriculture, Health and Tourism) Visit: https://rcc.cimh.edu.bb/

Source: Dominica Meteorological Service (DMS) in collaboration with the Caribbean Institute for Meteorology and Hydrology (CIMH) & National Oceanic and Atmospheric Administrative (NOAA); UWI-CERMES

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# HYDROLOGY

- The potential for flooding, flash floods and related hazards arising from very wet and extremely wet spells is moderate to high;
- Intense periods of rainfall could lead to
  - sharp increases in the volumetric flow of the rivers;
  - excess overland flow which can result in street and urban flooding. Ponding is certain and the buildup of stones and other debris on the roads may impede traffic flow;
  - the increased likelihood of rivers being in flood stage which can increase turbidity and contaminate water sources. This could degrade water quality and affect drinking water supplies. Therefore, store water in clean, covered containers for such events.
  - saturated soils, which heighten the risk of landslides in hilly or mountainous regions.

# HEALTH

Stay tuned for the Dominica Health-Climatic Bulletin!!

- Episodes of hazardous heat stress across a wide section of the population are not expected, but vulnerable populations such as those going through menopause and andropause and those with NCDs should be vigilant. Warm nights can increase stress, insomnia and anxiety. Hydrate, make use of fans and AC units to improve comfort;
- An increase in humidity may worsen respiratory illnesses. Practice good hygiene, wear appropriate clothing, avoid large gatherings and increase fluid intake to manage;
- Frequent episodes of Saharan dust incursions increase the risk of allergic rhinitis and asthma in susceptible persons and mask usage may be necessary;
- Wear protective clothing and sunscreen to prevent skin damage on sunny days;
- Use of containers for water storage can maintain breeding sites for mosquitoes. Mosquito-borne diseases, such as Dengue, Chikungunya and Zika, are of great concern in these areas. Cover containers with protective mesh and establish plants in mud instead of water, to reduce this risk.



## ENERGY

- Usual rainfall amounts could reduce use of fuel and increase use of hydro-plant for electricity resulting in a possible decrease in cost of production;
- Likely increase in landslides can impact energy infrastructure and disrupt supply.

## UPDATE EMERGENCY PLANS

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