

Seasonal Climate Outlook Summary

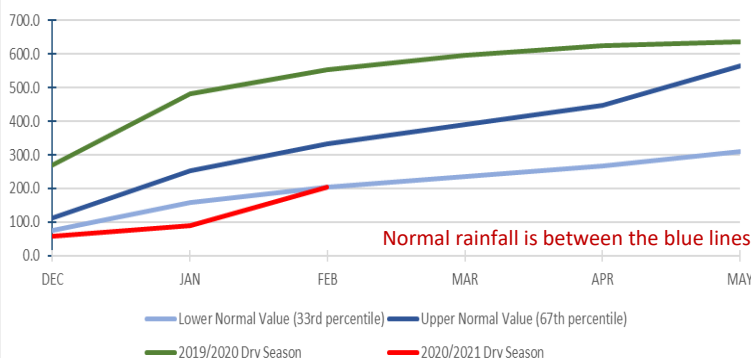
Previous Season Forecast; Dec-Jan-Feb (DJF) 2020/21– Wetter than to usual conditions with a slight increase in the frequency of wet days. Warmer than to usual temperatures but comfortable for that time of year.

DJF 2020/21 Observations: Accumulated rainfall totals and the frequency of wet days were normal. Slightly warmer than usual temperatures were recorded at Canefield. However, at Douglas-Charles, while daytime highs were warmer than usual, both the nighttime and daily mean temperatures were slightly cooler than usual.

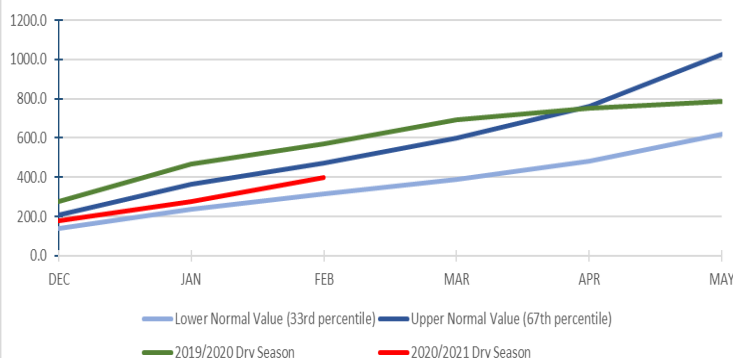
Current Season Forecast; Mar-Apr-May (MAM) 2021– At least as dry as usual conditions expected for the remainder of the dry season. Drought like conditions are possible by the end of May, especially along the western half of the island.

Looking Back -December-January-February (DJF) 2020/2021

DRY SEASON ACCUMULATED RAINFALL TOTALS AT CANEFIELD



DRY SEASON ACCUMULATED RAINFALL TOTALS AT DOUGLAS-CHARLES



- ◆ Rainfall accumulations for the season at both stations were normal.
- ◆ The frequency of wet days was also normal.
- ◆ There were three 9-day dry spells and one 7-day dry spell in December and January at Canefield. There were no significant dry spells at Douglas-Charles.
- ◆ Temperatures at Canefield were slightly warmer than usual. At Douglas-Charles, the daytime highs were also warmer than usual, however, the night-times and the daily mean were slightly cooler than usual.

December 2020 -January-February 2021 Season CLIMATOLOGICAL NORMAL (30YEARS)

RAINFALL	CANEFIELD AIRPORT	DOUGLAS-CHARLES AIRPORT
Normal	204.1 to 333.5mm	314.8 to 470.1mm
2020/21 Total	205.4mm (normal)	399.6mm (normal)
Wet Days Normal	36 to 53 days	49 to 63 days
2020/21 Wet Days Total	36	52
7-Day Dry Spells Normal	n/a	0 to 1
2020/21 7-Day Dry Spells	4	0

TEMPERATURE 15YRS AVERAGES

Average Maximum	29.8°C to 30.2°C	28.5°C to 28.9°C
2020/21 Average Maximum	30.4°C (above normal)	29.1°C (above normal)
Average Mean	25.8°C to 26.1°C	25.5°C to 25.8°C
2020/21 Average Mean	26.3°C (above normal)	25.4°C (below normal)
Average Minimum	21.6°C to 22.0°C	22.3°C to 22.8°C
2020/21 Average Minimum	22.1°C (above normal)	21.6°C (below normal)

World Meteorological Day 2021

- The World Meteorological Day theme - **The Ocean, Our Climate and Weather** – celebrates WMO's focus in connecting the ocean, climate and weather within the Earth System.
- Covering some 70% of the Earth's surface, the ocean is a major driver of the world's weather and climate.
- It also plays a central role in climate change.
- The ocean is also a major driver of the global economy, carrying more than 90% of world trade and sustaining the 40% of humanity that lives within 100 km of the coast.
- Today, the growing impacts of climate change makes ocean observations, research and services more critical than ever before.
- WMO, as the United Nations specialized agency for climate, weather and water, strives to support understanding the inextricable link between ocean, climate and weather. This helps us understand the world in which we live, including the impacts of climate change and to help members strengthen their ability to keep lives and property safe – reducing the risk of disaster – and to maintain viable economies.



SEASONAL OUTLOOK FOR MARCH-APRIL-MAY (MAM) 2021

INFLUENCING FACTORS

El Niño Southern Oscillation (ENSO)

The models favour La Niña to continue into March-April-May 2021 season (55% confidence). A transition to ENSO neutral conditions is anticipated by the end of the season (60% confidence). During the dry season (December to May), La Niña tilts the odds to more frequent rainfall events and cooler temperatures.

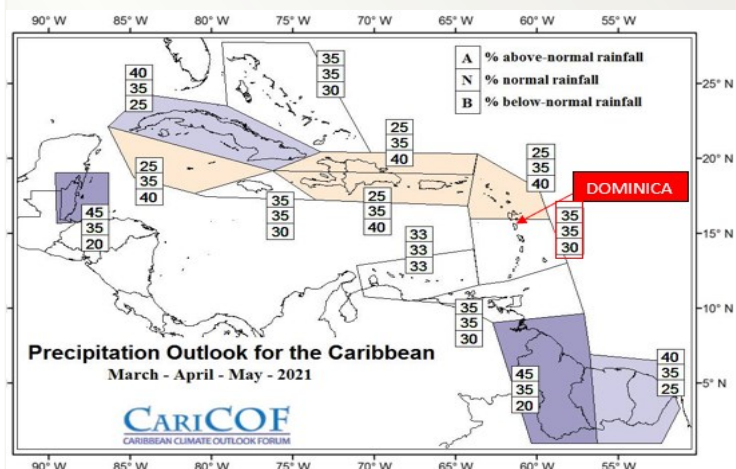
Climate conditions in the Tropical North Atlantic and Caribbean

SSTs along the shores of the Caribbean and in parts of the Tropical North Atlantic (TNA) and sub-tropical North Atlantic are around 0.5°C to 1°C above average. Uncertainties exist in the forecast of the SSTs across the Caribbean Sea and the TNA through June-July-August 2021. Continued warm SSTs in and around the Caribbean tends to contribute to above-average humidity, seasonal rainfall totals, reduced dry spell frequency and a potential slightly earlier start of the wet season in the Lesser Antilles.

March-April-May Season CLIMATOLOGICAL NORMAL (30YEARS)		
RAINFALL	CANEFIELD AIRPORT	DOUGLAS-CHARLES AIRPORT
Normal	106.5 to 231.0mm	305.5 to 556.1mm
Wet Days Normal	21 to 35 days	36 to 60 days
7-Day Dry Spells Normal	n/a	0 to 4
TEMPERATURE (15YRS AVERAGES)		
Average Maximum	30.6°C to 31.3°C	29.2°C to 29.8°C
Average Mean	26.7°C to 27.2°C	26.0°C to 26.5°C
Average Minimum	22.5°C to 23.1°C	22.9°C to 23.2°C



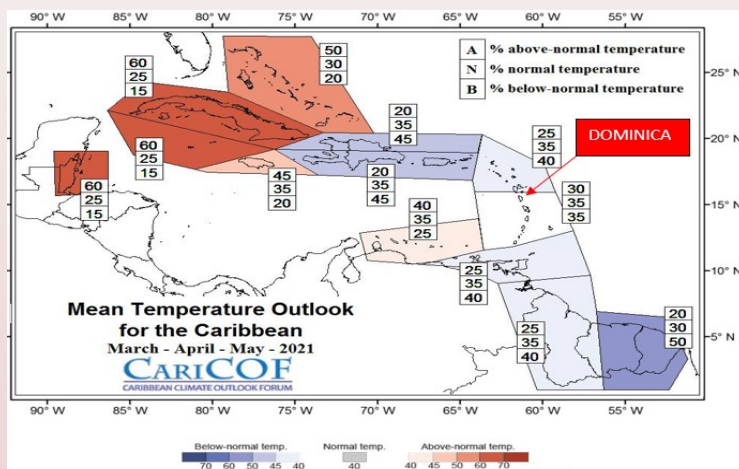
RAINFALL FORECAST



- At least as dry as usual conditions is forecast for the second half of the season.
- A drier pattern may occur towards the end of the season which may result in drought like conditions especially along the western half of the island.
- A slight increase in the frequency of wet days (Wet day: greater than or equal to 1.0mm of rainfall) is forecast.
- The chances of having at least one 3-day extreme wet spell exists (medium confidence). Keep updated.



TEMPERATURE FORECAST



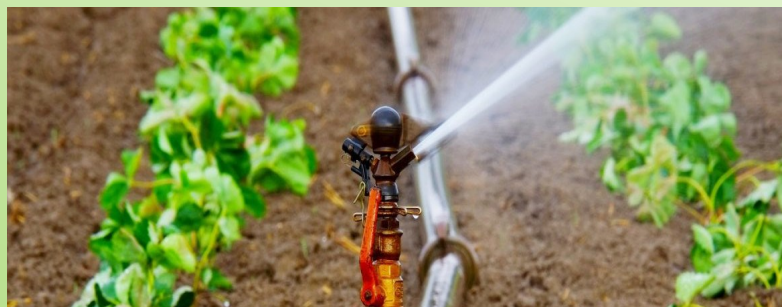
- Daytime highs are expected to be slightly cooler to usual for that time of year.
- Night-time temperatures and the daily mean is forecast to be at least as warm as usual.
- The heat season begins in May and as usual, an increase in temperatures is expected by that time.

SECTORAL IMPLICATIONS



AGRICULTURE

- Farmers are encouraged to continue their “on the farm” cultural practices and must be vigilant against all pests and diseases.
- Although the dry season thus far had adequate moisture, farmers must ensure that water storage and or an irrigation system is available on the farm as precautionary measures should be taken during dry and hot days.
- Water containers should be properly covered and proper sanitation is encouraged.
- Good drainage systems should be maintained in the event of extremely wet spells.
- Livestock should be protected during dry and hot days by the provision of shelter and adequate water.





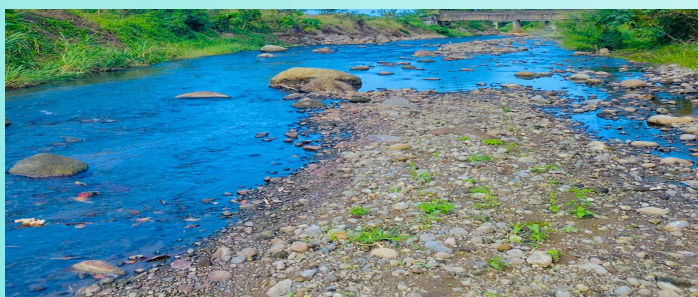
TOURISM

- ◆ Maintain a state of readiness including communication plans and response protocols to deal with sudden eventualities, especially given the Covid-19 pandemic.
- ◆ Monitor Covid-19 progress in source regions and enhance marketing strategies.
- ◆ Cooling needs will increase especially during dry spells and more so towards the end of the dry season as the island enters its heat season.
- ◆ The frequency in disruptions of outdoor activities is expected to be low.
- ◆ This is a good season to engage in coral reef restoration activities that build coral resilience. Coral bleaching is not a concern during the season.
- ◆ Tourism operators are encouraged to continue to monitor for updated information and daily weather advisories issued by the Dominica Meteorological Services.



HYDROLOGY

- ◆ Expect for the continuation of normal to slightly below normal flow for most rivers. Temporary increase in river flow is likely in river catchments especially in rainfall prone areas during extreme wet spells and may lead to localized flooding.



- ◆ The river temperature is expected to increase as the air temperature increases. However, this will not significantly affect the water quality of the rivers.
- ◆ The ability for oxygen and other gases to dissolve in water will decrease with increase water temperature. However, it should not have any drastic effect on aquatic life.
- ◆ Shallow water trees will continue to be evident in low flowing rivers. E.g. Algae. Photosynthesis should increase in rivers where algae is normally present.



HEALTH

- ◆ Due to the ongoing COVID-19 pandemic, water availability is critical to support prevention strategies to combat the COVID-19 pandemic, especially with regards to safe water availability for hygiene purposes.
- ◆ Educate yourself and volunteer to be vaccinated to help curb the spread of COVID-19. Continue wearing face masks and ensure they are breathable. If feeling ill, remove masks in a private space. Sweaty masks should be changed.
- ◆ Illnesses from excessive heat due to high temperatures should not be an issue up to May. Keep hydrated during dry and hot days.
- ◆ Manage water storage containers properly to reduce mosquito breeding areas and the incidents of vector-borne diseases such as Dengue, Chikungunya and Zika.



The 2021 Hurricane Season begins officially on June 1st. Be Prepared!!!

Disclaimer: The **Dominica Meteorological Service** makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability or suitability of this newsletter and will not be held liable for any actions taken in reliance thereon. The information is free for use with the understanding that content may not be modified and presented as original material.

Contact Us: dmsclimate@dominica.gov.dm; Tel: 266 4494/ 4490/ 4458; www.weather.gov.dm

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