



# DOMINICA METEOROLOGICAL BULLETIN

**VOL 2 ISSUE 03**

**July—September**

**YEAR 2017**

## Brief Summary

**April-May-June (AMJ) 2017**-Above to normal rainfall total was accumulated for the season. Day-time peak and average temperatures were above to normal, with normal minimum/ night-time temperatures.

**July-August-September (JAS) 2017**- Drier than usual to usual conditions overall is forecast. Chances of extremely dry or extremely wet conditions are quite low at this time (75% confidence). An increase in wet days and wet spells are also forecast. Temperatures across the Caribbean are forecast to be uncomfortably hot for many, with high humidity and a high chance for heat waves until the end of October.

## 2017 ATLANTIC HURRICANE SEASON OUTLOOK

June 1st to November 30th is designated as the official period for the Atlantic Hurricane Season. This year, forecasters at the US National Oceanic and Atmospheric Administration (NOAA) are predicting a 45% chance of an above-normal Atlantic Hurricane season, a 35% chance of a near-normal season and only a 20% chance of a below-normal season. An average season produces 12 named storms of which six become hurricanes, including three major hurricanes.

NOAA is predicting a 70 percent likelihood of:

- ◆ 11 to 17 Named Storms (winds of 39 mph or higher)
- ◆ 5 to 9 Hurricanes (winds of 74 mph higher)
- ◆ 2 to 4 Major Hurricanes (Category 3, 4 or 5; winds of 111 mph or higher)

## EL NIÑO SOUTHERN OSCILLATION (ENSO) UPDATE

In recent weeks, sea-surface temperatures (SSTs) in the equatorial eastern Pacific (NINO3.4) warmed to borderline El Niño conditions.

A majority of models suggest warm-neutral ENSO conditions during JAS (60% confidence) and neutral or El Niño conditions by October-November-December 2017(OND) (40-45% confidence).

The ongoing ENSO neutral state will have little effect on rainfall or temperatures. However, if El Niño manifests by OND 2017, odds are in favour of hotter conditions and less hurricane activity than usual in the latter part of the season, as well as drier weather with less extreme rainfall in the south and east of the region.



## 2017 Atlantic Tropical Cyclone Names\*

~~Arlene~~  
~~Bret~~  
~~Cindy~~  
Don  
Emily  
Franklin  
Gert

Harvey  
Irma  
Jose  
Katia  
Lee  
Maria  
Nate

Ophelia  
Philippe  
Rina  
Sean  
Tammy  
Vince  
Whitney

\*Names provided by the World Meteorological Organization

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC\_Atlantic on Twitter.

May 25, 2017

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## LOOKING BACK

### DECEMBER 2016 TO MAY 2017 DRY SEASON

Rainfall accumulated at both the Canefield and Douglas-Charles Airports was above normal. Above to normal temperatures were recorded at both stations.

December 2016 - May 2017 Dry Season NORMAL (1982-2017 )		
ACCUMULATED RAINFALL		
	CANEFIELD AIRPORT	DOUGLAS-CHARLES AIRPORT
Normal	310.6 to 564.6mm	620.4 to 1026.3mm
Dec 2016 – May 2017 Total	805.8mm (above normal)	1061.2mm(above normal)
TEMPERATURE		
Average Maximum Normal	30.1°C to 30.7°C	28.7°C to 29.1°C
Dec 2016 – May 2017 Average Maximum	31.0°C (above normal)	29.1°C (normal)
Average Mean Normal	26.9°C to 27.4°C	26.5°C to 26.9°C
Dec 2016 – May 2017 Mean	27.3°C (normal)	26.8°C (normal)
Average Minimum Normal	22.1°C to 22.6°C	22.3°C to 22.5°C
Dec 2016 – May 2017 Average Minimum	22.5°C (normal)	22.8°C (above normal)

### April-May-June 2017 Season

April-May-June is considered to be the transition period from the dry to the wet/ hurricane season. Above to normal rainfall total was accumulated for season. Day-time peak and average temperatures were above to normal, with normal minimum/ night-time temperatures.

April-May-June 2017 Season (AMJ) NORMAL (1982-2017 )		
RAINFALL		
	CANEFIELD AIRPORT	DOUGLAS-CHARLES AIRPORT
Normal	234.0 to 387.5mm	401.3 to 639.0mm
AMJ 2017 Total	377.2mm (normal)	817.5mm(above normal)
TEMPERATURE		
Average Maximum Normal	31.2°C to 31.8°C	29.7°C to 30.1°C
AMJ 2017 Average Maximum	32.1°C (above normal)	29.9°C (normal)
Average Mean Normal	27.5°C to 28.0°C	26.7°C to 27.1°C
AMJ 2017 Average Mean	28.6°C (above normal)	27.1°C (normal)
Average Minimum Normal	23.6°C to 23.9°C	23.7°C to 24.1°C
AMJ 2017 Average Minimum	23.8°C (normal)	24.1°C (normal)

## LOOKING AHEAD

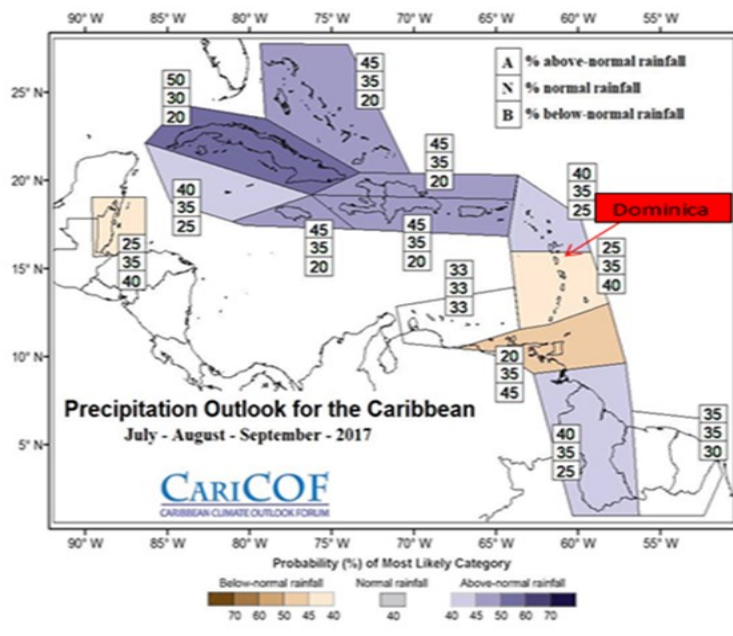
### (Climatological averages for July-August-September)

Parameter	Douglas-Charles Airport (1981-2010)			Canefield Airport (1982-2011)		
Month	July	August	September	July	August	September
Rainfall normal	199.1 to 273.2mm	203.6 to 257.2mm	245.9 to 342.8mm	218.8 to 315.1mm	181.1 to 271.5mm	201.7 to 280.8mm
-highest total	406.6mm (2010)	457.3mm (2010)	744.5mm (2004)	393.3mm (2010)	539.4mm (2007)	434.4mm (1996)
-lowest total	57.2mm (1975)	80.1mm (1984)	94.3mm (2012)	45.1mm (1994)	102.0mm (1984)	31.9mm (2012)
Temperature	28.6°C	28.8°C	28.6°C	28.9°C	28.9°C	28.7°C
-maximum	33.2°C (1995)	34.3°C (1996)	34.3°C (2012)	34.5°C (1995)	35.4°C (2005)	34.9°C (2005)
-minimum	20.7°C (1989,1993)	20.9°C (1992)	20.0°C (1992)	20.5°C (1989)	21.7°C (1996)	20.7°C (1997)
Wind	ESE @8kts	ESE @7kts	ESE @6kts	SE @ 6kts	SE @ 5kts	SSE @ 4kts
Chance of 5 day dry spell	20%	10%	33%	30%	40%	53%

WIND DIRECTION GUIDE: N—NORTH, S—SOUTH, W—WEST, E—EAST

## SEASONAL OUTLOOK FOR JULY-AUGUST-SEPTEMBER 2017

### RAINFALL OUTLOOK



#### Forecast:

⇒ Drier than usual to usual conditions overall is forecast for the season July-August-September 2017. The forecast for the season October-November-December 2017, which is usually the wettest part of the year, is for wetter than usual to usual conditions overall. Chances of extremely dry or extremely wet conditions are quite low at this time (75% confidence).

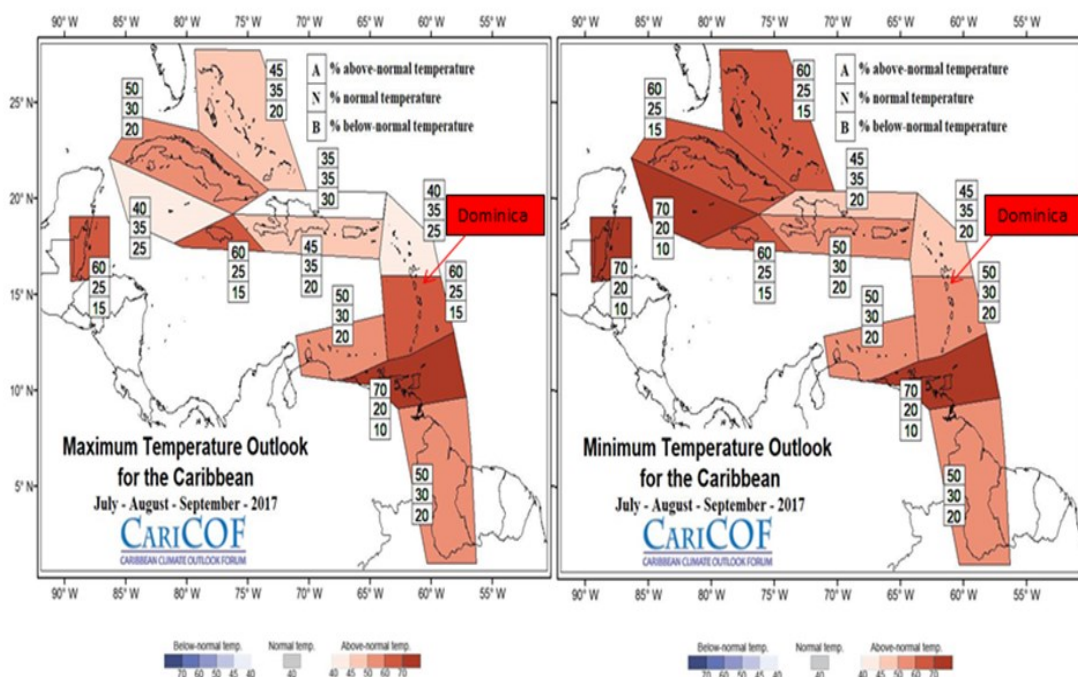
#### Probability for June-July-August 2017

- 25% chance of above normal
- 35% chance normal
- 40% chance of below normal

⇒ An increase in the number of wet days ( $\geq 1.0\text{mm}$ ) (*medium to high confidence*), 7-day wet and very wet spells (*low confidence*) is expected.

⇒ There is no short term (April to September 2017) and long term (December 2016 to November 2017) drought concerns for Dominica at this time. Please continue to monitor the situation in the coming months.

### TEMPERATURE OUTLOOK



#### Probability:

##### Maximum/ day-time temperature Probability:

60% chance of above normal; 25% chance normal; 15% chance of below normal

##### Minimum/ night-time temperature Probability:

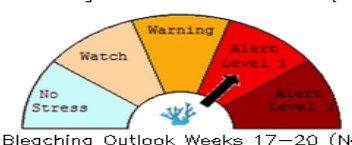
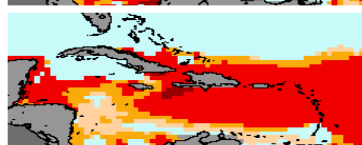
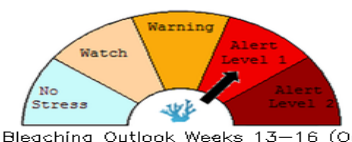
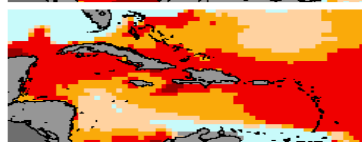
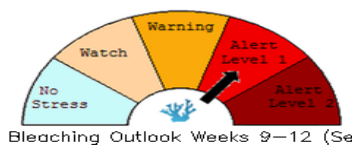
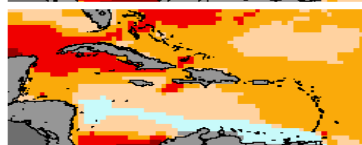
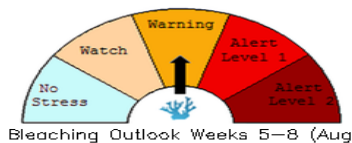
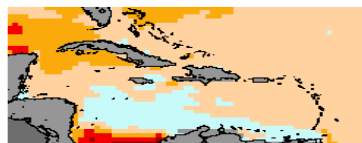
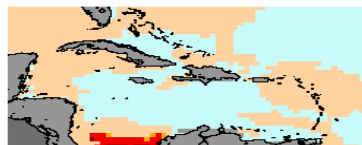
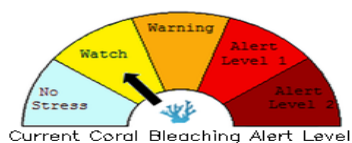
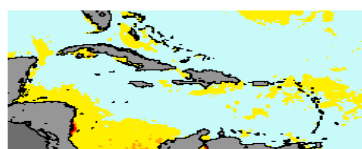
50% chance of above normal; 30% chance normal; 20% chance of below normal

Maximum (day-time) and minimum (night-time) temperatures averaged over the period July-August-September are forecast to be above to normal. Temperatures across the Caribbean are forecast to be uncomfortably hot for many, with high humidity and a high chance for heat waves until the end of October.



## CORAL BLEACHING OUTLOOK

Caribbean Satellite Bleaching Alert Area and Outlook  
2017-06-30



Sea surface temperatures (SSTs) around Dominica are about 28.3°C (82°F) a little less than 1°C warmer than normal but below the bleaching threshold of about 29.3°C. A coral bleaching watch is currently in effect for much of the region. A warning alert is expected by September with Alert Level 1 forecast for October into November.

[See Alert Level Guide Below](#)

### ALERT LEVEL GUIDE

No Stress	No Thermal Stress
Watch	Low-level thermal stress
Warning	Thermal stress is accumulating
Alert level 1	Bleaching expected
Alert level 2	Widespread bleaching and some mortality expected

### SECTORAL IMPLICATIONS

- ◆ Water availability should not be a concern at this time.
- ◆ Outdoor activities may be disrupted as we move into the wettest part of the year and with the expected increase in frequency of rainfall days.
- ◆ During the wet season, there is increased risk of Leptospirosis due to human contact with flood waters contaminated with the urine of infected animals, as well as food or soil exposed to these contaminated flood waters.
- ◆ Cases of gastroenteritis may increase in frequency. Increased temperatures may accelerate proliferation of pathogens. In the event of flash floods, contamination of food and water supplies might occur.
- ◆ High temperatures are common during the wet season. However, with the favourable chance of increased temperatures (both day and night), heat stress is a likely factor to consider from heat waves. Guard against heat stress especially for the most vulnerable groups such as elderly, young, persons suffering with major and chronic illnesses, livestock and crops.
- ◆ With the increasing heat and return of the wet season, there may be an increase in cases of vector borne diseases such as Dengue.
- ◆ The increased temperatures may shorten the generation time for mosquitoes and the maturation time for pathogens to fully develop inside the mosquito. Increased rainfall may create more breeding.
- ◆ An increase in the demand for cooling services is expected.

**NEW!!!!** Regional Sectoral Bulletins ([Agriculture](#), [Health](#) and [Tourism](#)). Visit: <https://rcc.cimh.edu.bb/>

### DOMINICA METEOROLOGICAL SERVICE

Canefield/Douglas-Charles Airports; metoffice@cwdom.dm, metoffcan@cwdom.dm; [www.weather.gov.dm](http://www.weather.gov.dm); Tel: 4491990/4457878.

Source: Caribbean Institute for Meteorology and Hydrology (CIMH) & National Oceanic and Atmospheric Administrative (NOAA)