

2018



Annual Severe Weather Summary

A summary of weather events across Jamaica that produced prolonged periods of heavy or very little rainfall and strong winds leading to hazards, destruction of property and infrastructure and fatalities



ANNUAL SEVERE WEATHER SUMMARY - 2018

Climatology

Jamaica's bimodal rainfall pattern consists of two peak periods with higher values of rainfall and corresponding periods of lower rainfall amounts. The primary peak occurs in October and the secondary in May. The lowest amounts are at a minimum during the period February to March and the month of July. On a yearly basis the island has recorded a number of flooding events which were caused by weather systems generating high rainfall amounts and these not only occur during the traditional rainy periods but, also during times when rainfall amounts were expected to be low in quantities.

General

For 2018, there were six (6) months for which weather systems produced severe weather conditions that resulted in either isolated damages (such as a freak storm) or more substantial damages, such as flooding and/or earth movement (landslides), which caused damages to properties and infrastructure and these damages impacted several parishes. Unfortunately, severe weather events have been known to also claim lives around the world and sadly for Jamaica, there was one reported death from such an event.

The December to March months represent the traditional dry period for Jamaica however, in January 2018, the island experienced unprecedented rainfall which resulted in severe flooding in sections of Trelawny as, the Martha Brae River overflowed its banks which resulted in flooding in several surrounding towns. Other parishes also experienced flooding and landslides and which caused blocked roads in some places during this event. In addition to January, other months that recorded severe weather events were March, May, August, September and October. The one reported death which was due to flooding, was that of a 6 year old boy who was washed away by fast moving waters in May Pen, Clarendon on the afternoon of October 1, 2018.

Drought Analysis

The very wet conditions which the island experienced in January would see a reversal by mid-year (June/July) as, dry conditions affected sections of all parishes, with meteorological drought affecting eight parishes; namely Westmoreland, St. Elizabeth, Clarendon, Portland, St. Mary, St. Ann, St. James and Hanover. The number of parishes experiencing meteorological drought conditions on a bi-monthly basis would fluctuate for the rest of the year with Manchester, Kingston & St. Andrew (KSA) and St. Thomas also joining that list.

Tropical Cyclone

There was no tropical cyclone that directly impacted the island during the year however, the Remnants of Hurricane Isaac (September 16-17) and the Remnants of Tropical Storm Kirk (October 1) produced heavy rainfall across sections of the island.

Severe Weather Events Reported for 2018			
Date	Weather Feature	Damage/ Impact	Affected parishes/areas
January 15-20*	Stationary Front west of Jamaica.	Flooding.	Trelawny, St. Ann, St. Mary and Portland.
March 9*	Trough across Jamaica	Flooding.	Montego Bay, St. James.
May 3-7*	A Surface to Upper Level Trough west of Jamaica	Flooding, landslides and blocked roads.	All parishes except St. Catherine and Portland.
May 17	Mid to Upper Level Trough.	Flooding which caused blocked roads.	Lucea, Hanover.
August 6	Tropical Wave	Violent winds (freak storm).	Phantiland and Goshen, St. Elizabeth.
September 16-17*	A Tropical Wave (the Remnants of Hurricane Isaac).	Flooding.	St. Catherine, St. Andrew, St. Thomas and St. Ann.
October 1*#	A Tropical Wave (the Remnants of Tropical Storm 'Kirk).	Flooding which resulted in a 6 year old boy drowning after being washed away.	May Pen, Clarendon
October 3*#	Area of Low Pressure over the southern Caribbean Sea, which formed from the Tropical Wave.	Flooding.	Bog Walk Gorge, St. Catherine
October 5*#		Landslide resulting in blocked roads.	Font Hill and Danvers Pen in St. Thomas.
October 23	Surface Trough.	Street flooding causing major traffic gridlock.	Tinson Pen/Marcus Garvey Drive and its environs in western St. Andrew.
June - December	El Nino	Meteorological Drought	Most parishes.

Table 1 above shows the various severe weather events that occurred in 2018.ⁱ

*- Denotes weather events for which Severe Weather Reports were done.

*#- Denotes one Severe Weather Report being done.

ⁱ Disclaimer: The information about damages/impacts and parishes/areas affected were those reported in the local electronic and/or print media and therefore, the Meteorological Service, Jamaica takes no responsibility for the accuracy of the information, save and except for that of Meteorological Drought.

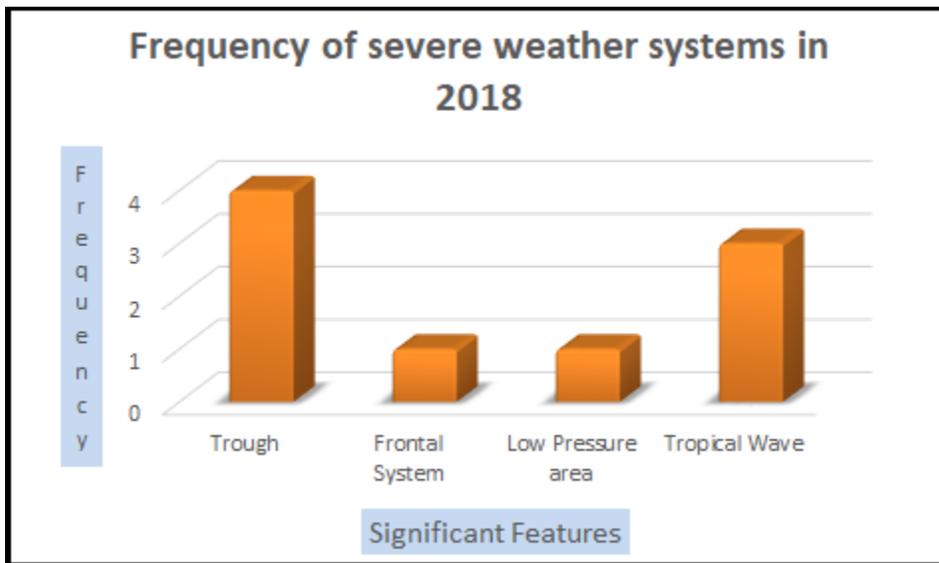


Figure 1: Shows the severe weather features that impacted the island during 2018

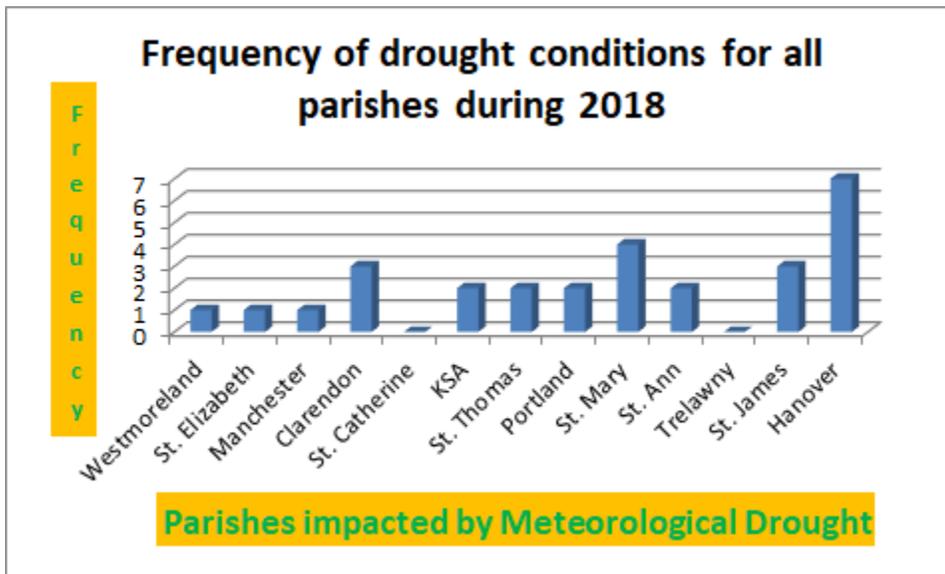


Figure 2: Parishes impacted by Meteorological Drought conditions during 2018