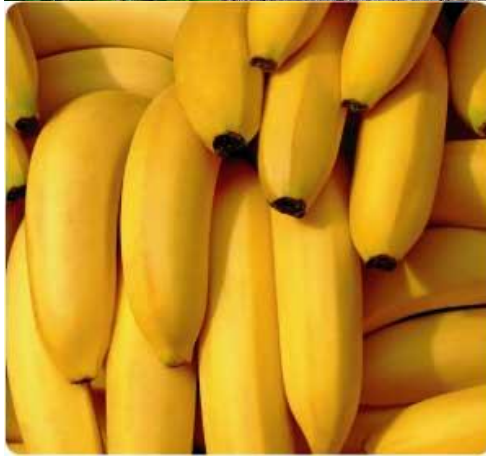


NATIONAL AGROMET BULLETIN



Issued by

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August 2015



- + Exceptional drought conditions reported for some southern and western stations.**
- + Below normal rainfall forecast for most stations for September through November.**
- + Above normal Temperature forecast to continue through November 2015.**

Weather Summary for month of August 2015

Throughout the month of August surface troughs were the dominant weather feature affecting the island. This resulted in a few occasional showers over some central and western parishes but mainly sunny conditions for the most part.

During the month, Sangster in the northwest recorded 29.4 mm of rainfall, while Norman Manley in the southeast recorded 1.6 mm of rainfall. There were three (3) rainfall days reported for Sangster while Norman Manley International Airport had only one (1) rain day. Both Manley and Sangster received well below the average rainfall for the month of August based on the 30-year rainfall means.

The highest maximum temperature recorded for Norman Manley Airport was 34.3°C (27th August) meanwhile Sangster Airport reported **35.5°C** (31st August) which exceeded the 20-yr mean figure of **34.6** for the station.

Standardized Precipitation Index (SPI)

The Standardized Precipitation Index (SPI), developed by T.B. McKee, N.J. Doesken, and J. Kleist in 1993, is based only on precipitation. One unique feature is that the SPI can be used to monitor conditions on a variety of time scales namely 1- month, 3-month, 6-month, 9-month and 12-month periods. This temporal flexibility allows the SPI to be useful in both short-term agricultural and long-term hydrological applications.

KEY

SPI Value	Category	SPI Value	Category
0 to -0.4	Normal drought	0 to 0.4	Normal Wetness
-0.5 to -0.7	Abnormally Dry (30%tile)	0.5 to 0.7	Abnormal Wetness (70%tile)
-0.8 to -1.2	Moderate Drought (20%tile)	0.8 to 1.2	Moderate Wetness (80%tile)
-1.3 to -1.5	Severe Drought (10%tile)	1.3 to 1.5	Severe Wetness (90%tile)
-1.6 to -1.9	Extreme Drought (5%tile)	1.6 to 1.9	Extreme Wetness (95%tile)
-2.0 or less	Exceptional Drought (2%tile)	2.0 or more	Exceptional Wetness (98%tile)

Table 1. Rainfall and Drought Analysis for Selected Stations

Parish	Station	August Monthly Total (mm)	Percent of 30 year Mean (%)	SPI for August
Hanover	Mount Peto	358	116	-1.44
Westmoreland	Sav-la-mar	112	45	-2.09
Westmoreland	Frome	202	72	-1.12
Manchester	Sutton	212	130	-0.94
St. Elizabeth	Y.S Estates	285	104	-0.41
St. Elizabeth	Potsdam	49	36	-1.47
Clarendon	Beckford Kraal	71	49	-1.81
St. Catherine	Tulloch	49	23	-2.85
St. Catherine	Worthy Park	31	21	-2.79
Trelawny	Orange Valley	17	22	-1.59
St. James	Sangster	29	32	-2.01
St. Ann	Cave Valley	252	178	0.11
St. Mary	Hampstead	22	23	-1.78
Portland	Shirley Castle	34	17	-1.65
St. Thomas	Serge Island	28	12	-2.64
KSA	Langley	120	59	-0.59
KSA	Manley Airport	6	8	-1.86

Standardized Precipitation Index Discussion

All stations with the exception of Cave Valley in St. Ann were reporting some level of drought however the worst affected areas were Tulloch and Worthy Park in St. Catherine, Serge Island in St. Thomas, Sav-la-mar in Westmoreland and Sangster in St. James which were all reporting exceptional drought which represents the lowest level on the SPI scale (see Key above). The primary rainfall season has begun but the expected rains have not materialized so far. Instead the below normal rainfall activity continues to plague the country especially over southern areas.

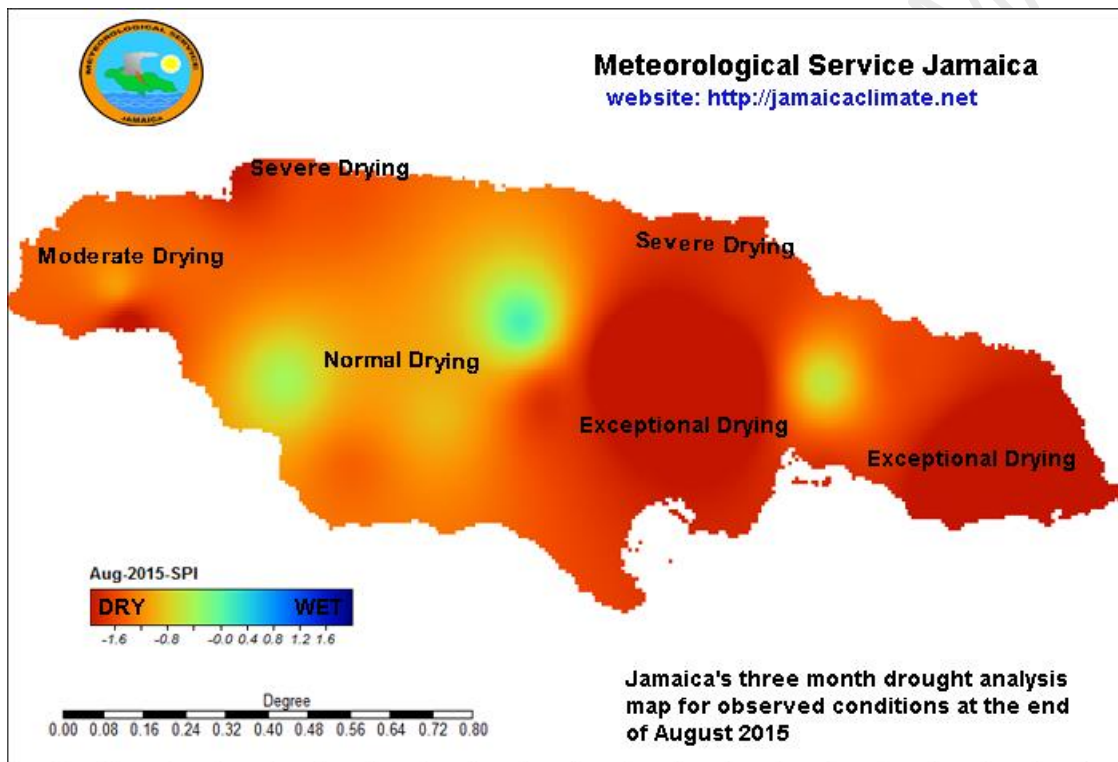


Fig.1 Station observed drought conditions for end of August 2015

Precipitation Forecast – September to November 2015

The rainfall outlook for the period September to November, from the Global Dynamic Models as well as Climate Predictability Tool (CPT) are indicating warmer than normal temperatures with below normal rainfall for the Caribbean.



Of the seventeen rainfall stations that were examined across Jamaica, most stations over eastern and central parishes are likely to continue receiving below normal rainfall. Our most recent forecast indicates most eastern parishes especially St Thomas are likely to experience rainfall deficit during the next three months. The parishes of St Catherine, Clarendon, St. Thomas, Portland, St Mary and St Ann will experience the greatest deficit in rainfall during the period.

Table 2. Climate Predictability Tool (CPT) Outlook SON 2015.

Stations	Below (B) %	Normal (N) %	Above (A) %
Manley (Kingston)	45	15	40
Sangster (St. James)	40	35	25
Sav. (Westmoreland)	40	35	25
Beckford (Clarendon)	50	15	35
Serge Island (St. Thomas)	45	30	25
Cave Valley (St. Ann)	45	15	40
Tulloch Estate (St. Cath.)	45	15	40
Y.S. Estate (St. Elizabeth)	30	25	45
Hampstead (St. Mary)	45	15	40
Orange Valley (Trelawny)	45	25	30
Langley (Kingston)	35	15	50
Mount Peto (Hanover)	45	15	40
Shirley Castle (Portland)	40	35	25
Suttons (Manchester)	45	15	40
Potsdam (St. Elizabeth)	45	15	40
Frome (Westmoreland)	40	15	45
Worthy Park (St. Cath.)	45	15	40
Jamaica	45	20	35

Key

- A: Above normal rainfall means greater than 66 percentile of the rank data
 N: Near normal rainfall means between 33 and 66 percentile of the rank data
 B: Below normal rainfall means below 33 percentile of the rank data

Drought Forecast – November 2015

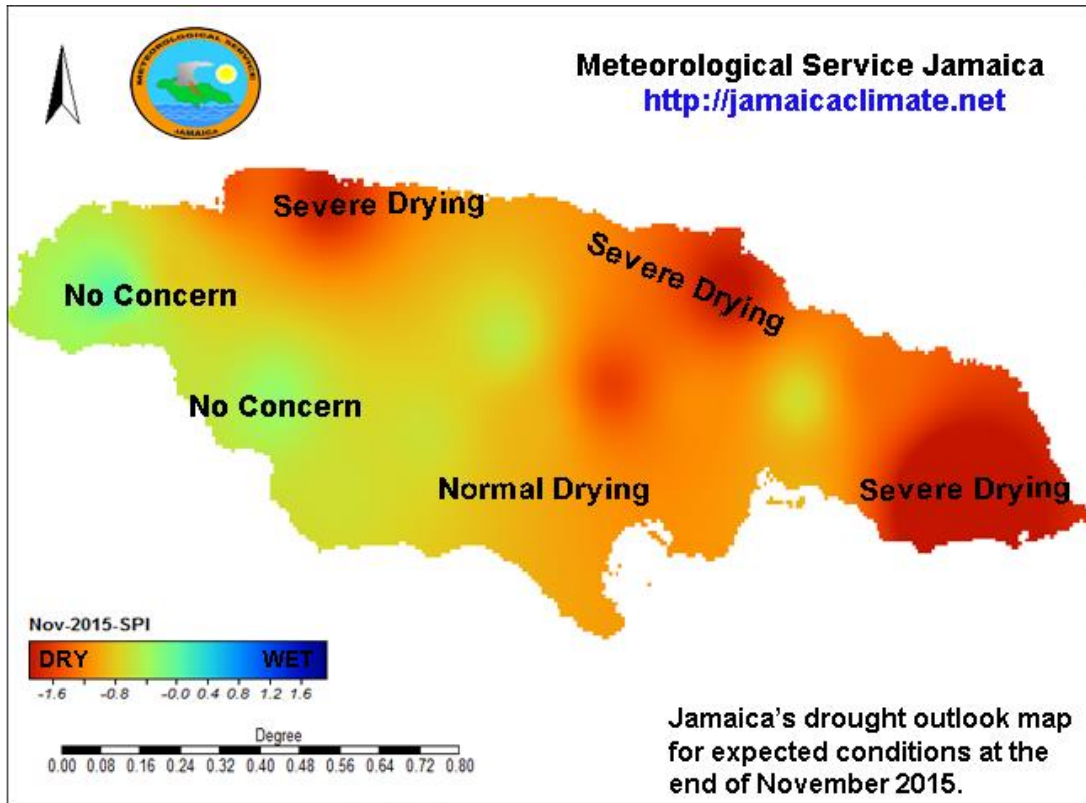


Fig.2 Expected drought conditions by end of November 2015

Temperature Forecast – September to November 2015

Location	Below (B) %	Normal (N) %	Above (A) %
Jamaica Temperature Outlook	15	10	75



Summary and Expected Agricultural Impacts

Precipitation forecast through November remains below normal for most stations with highest deficits expected for central and eastern parishes. Although some rainfall is expected during the three month period it will be insufficient to break the prolonged drought affecting sections of the island.

El Nino continues to strengthen and is now showing a strong possibility of continuing into the dry season (Dec-Mar 2015/2016). The impact of this would be very severe especially for farming communities and other water users.

Plans should be well underway for the remainder of this year as well as early 2016 which could include the early rainfall season. This will ensure that whatever situation unfolds can be properly managed.

METEOROLOGICAL SERVICE, JAMAICA