HYDROMETEOROLOGICAL SERVICE OF GUYANA

DROUGHT MONITORING BULLETIN

To observe, archive and understand Guyana's weather and climate and provide meteorological, hydrological and oceanographic services in support of Guyana's national needs and international obligations.

Issue # 6 ***April 2018***

Introduction: The Drought Monitoring Bulletin for March was prepared using the WMO recommended Standardized Precipitation Index (SPI). The maps represent the 1-month (March 2018), 3-month (January - March 2018), 6-month (October 2017 - March 2018) and 12-month (April 2017 - March 2018) SPIs respectively, showing various degrees of wetness and/or dryness across the country.

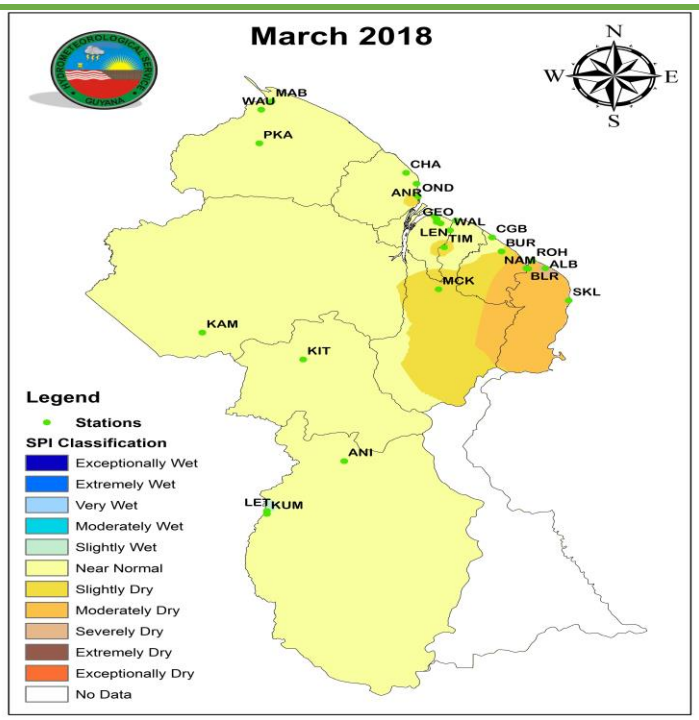

Fig.1: 1-Month Standardized Precipitation Index(SPI)

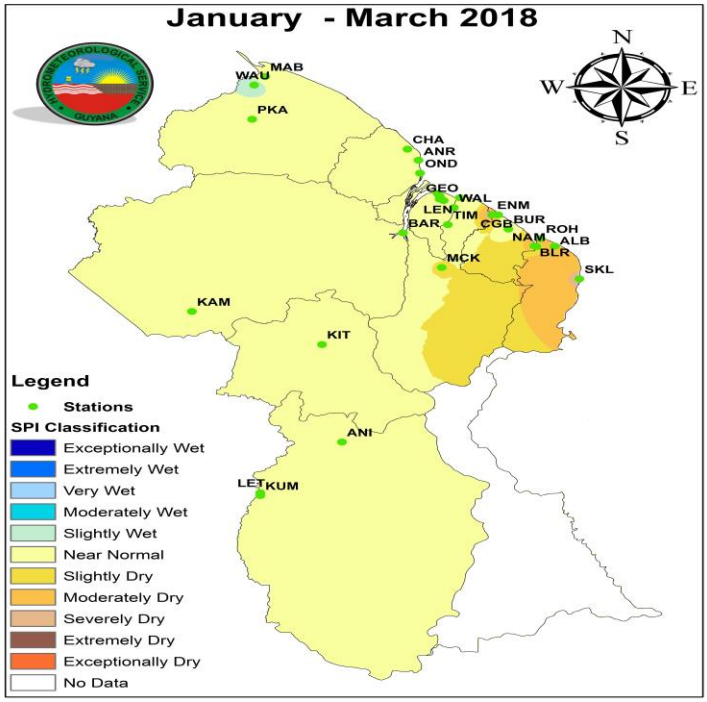

Fig.2: 3-Month Standardized Precipitation Index(SPI)
(for agricultural drought-soil moisture)

OBSERVED FEATURES

The 1-Month Standardized Precipitation Index (SPI) analysis for March (Fig.1) shows that all of the stations analysed ranged from near normal to moderately dry conditions. Port Kaituma, Kamarang, Annai, and Kaieteur were some of the stations that experienced near normal conditions. Other places such as Anna Regina, Timehri and McKenzie were slightly dry. Further, all the stations in Region 6 were classified as moderately dry.

For the 3-month Standardized Precipitation Index (SPI) (Fig. 2) most stations experienced near normal to moderately dry conditions with the exception of Wauna. Anna Regina, Georgetown, and Lethem were some of the stations that experienced near normal conditions over the three-month period. On the contrary, all of the stations along the Corentyne Coast were classified as moderately dry. These results indicate that there has been deficit rainfall over some areas which would have resulted in soil moisture deficits over the period considered.

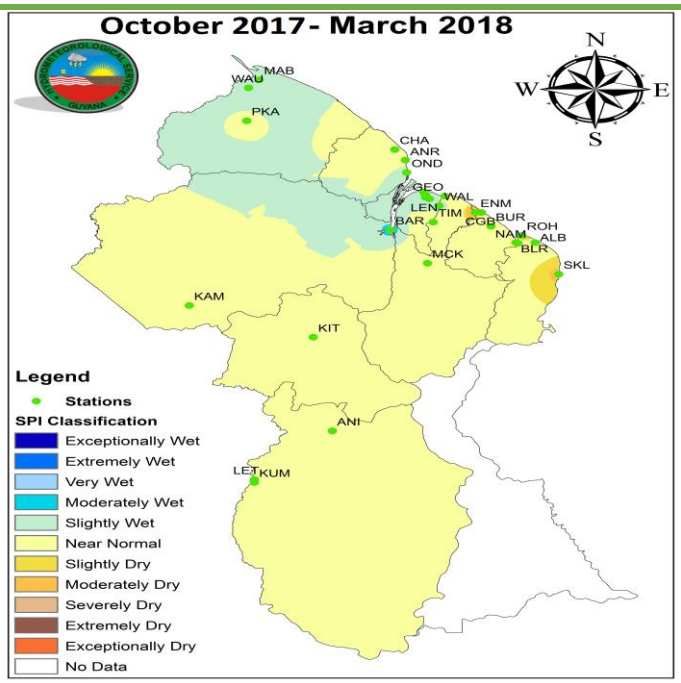

Fig.3: 6-Month Standardized Precipitation Index(SPI)

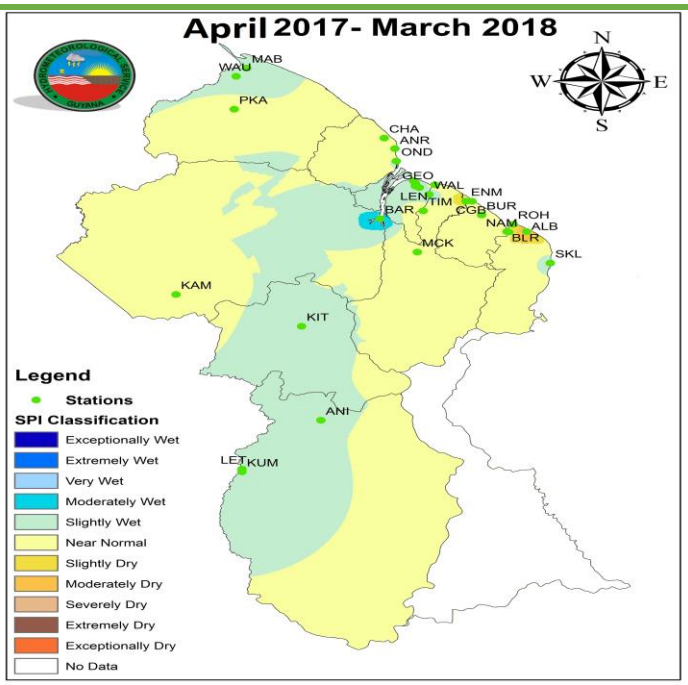

Fig.4: 12-Month Standardized Precipitation Index(SPI)

The 6-months cumulative rainfall (SPI) analysis (Fig. 3) showed that stations such as Skeldon, Albion, and Enmore experienced deficit rainfall over the past six months. Additionally, Maburuma, Wauna, and Georgetown were classified as slightly wet while Annai, Mckenzie, Kaieteur, and Kamarang were classified as having near normal conditions over the six-month period.

Based on the 12-month Standardized Precipitation Index (SPI) analysis (Fig.4), most of the areas analyzed ranged from moderately wet to moderately dry conditions. Bartica was the only station considered as moderately wet for the period considered. Kamarang, Charity and M^{c}kenzie were some of the stations that recorded near normal conditions.

OUTLOOK FOR APRIL, 2018

Although there are some areas of concern of deficit rainfall as can be seen in the Maps represented above. The primary rainy season is expected to bring relief to those areas, thus there is no long-term drought concern presently.

Southern Guyana (Rupununi Region) is expected to transition into its main rainy season by the end of April. Therefore, there is no long-term drought concern for this Region.

INTERPRETING THE SPI MAPS

For example, the 3-month SPI provides a comparison of the precipitation over a specific 3-month period with the precipitation totals from the same 3-month period for all the years included in the historical record. The same concept applies to the other timescales. Additionally, a 3-month SPI reflects short- and medium-term moisture conditions and provides a seasonal estimation of precipitation. In primary agricultural regions, a 3-month SPI might be more effective in highlighting available moisture conditions.

STATION ABBREVIATIONS

PKA-PORT KAITUMA	OND-ONDERNEEMING	DKF-DE KENDREN FRONT	ENM-ENMORE	BLR-BLAIRMONT	KAM-KAMARANG	ANI-ANNAI
WAU-WAUNA	UIV-UITVLUGT	LEN-LEONORA	TIM-TIMHERI	NAM-NEW AMSTERDAM	LET-LETHEM	BAR-BARTICA
ANR-ANNA REGINA	DKB-DE KENDREN BACK	GEO-GEORGETOWN	CGB-CANE GROVE BACK	ALB-ALBION	KUM-KUMU	MCK-M^{c}KENZIE
WAL-WALES	ROH-ROSE HALL	SKL-SKELDON	BUR- BURMA	MAB-MABURUMA	CHA-CHARITY	KIT -KAIETEUR

This bulletin is prepared by the Hydrometeorological Service of Guyana. We welcome feedback, suggestions and comments on this bulletin. Correspondences should be directed to The Chief Hydrometeorological Officer (Ag) at garvin.cummings@gmail.com and the Agronomist at agrodonessa@yahoo.com. You may also visit our website at www.hydromet.gov.gy. Tele#: (592)-225-9303 and Fax# :(592)-226-1460.