NiMet Nigerian Meteorological Agency

NIGERIAN METEOROLOGICAL AGENCY

NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE
NNAMDIAZIKIWEINTERNATIONALAIRPORTABUJA, NIGERIA.

Drought and Flood Monitoring Bulletin

Providing Weather Climate and Water Information for Safety and Sustainable Development

Monthly Bulletin ***ISSN 2315-9804*** ***MAY 2018***

PREAMBLE

The May edition of Drought and Flood Monitoring Bulletin (DFMB) was prepared using the WMO recommended Standardized Precipitation Index (SPI) technique, which compares this month's rainfall values with the normal across the country. This value could be higher, equal or lower than the 30-year average. During this period, significant parts of the country including few states in the extreme north, recorded above normal rainfall amounts. The maps represent the 1-month (i.e. May, 2018), the 3-month (March - May, 2018), the 6-month (December, 2017 - May, 2018) and the 12-month (June, 2017 - May, 2018) SPIs respectively depicting degree of wetness and/ or dryness across the country during the period under review.

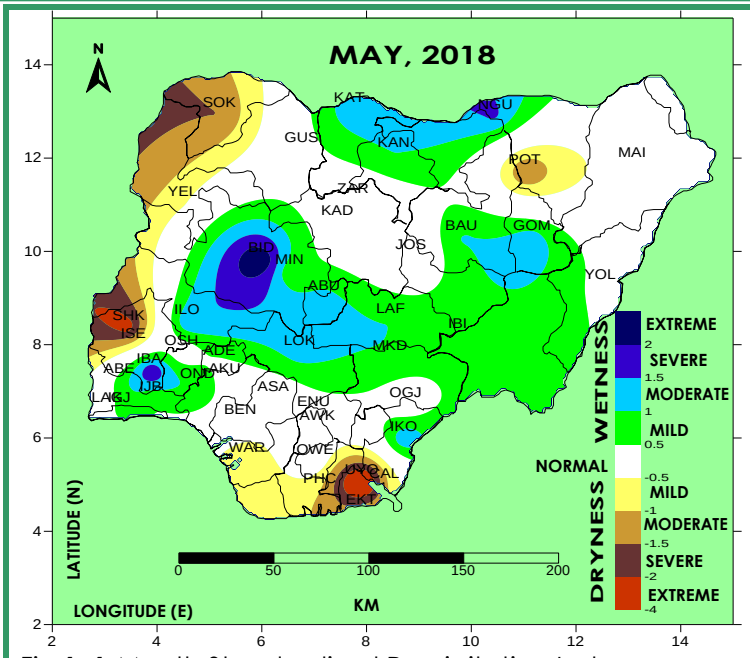

Fig.1: 1-Month Standardized Precipitation Index *(for meteorological drought)*

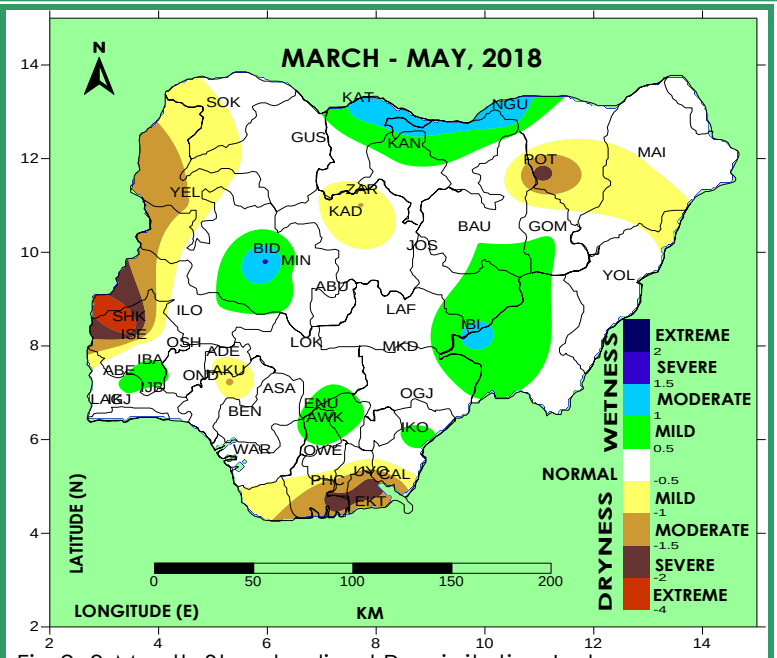

Fig.2: 3-Month Standardized Precipitation Index *(for agricultural drought)*

OBSERVED FEATURES

The1-month Standardized Precipitation Index (SPI) for May 2018 (Fig.1) shows extreme wetness over Bida, Niger state; with places like Minna in Niger, parts of Katsina, Kano, Gombe, Bauchi, Taraba, Kogi, Kwara, Ogun and Cross River States falling into the category of severe –to- moderate wetness. There is mild wetness over parts of the North central states except Plateau. Other states with similar conditions are; parts of Adamawa, Gombe, Bauchi, Ondo, Osun, Lagos, Ekiti and Oyo states. However, extreme dryness was recorded over parts of Oyo, Cross River and Akwa Ibom. Parts of Yobe, Sokoto, Kebbi, Zamfara, Delta, Rivers and Bayelsa had mild-to-moderate dryness, with the other parts of the country in Normal conditions.

Analysis of the 3-month Standardized Precipitation Index (SPI) in (Fig.2) reveals most parts of the country in Normal condition except for parts of Katsina, Kano, Yobe, Niger, Taraba, Gombe, Bauchi, Cross River, Nasarawa, Oyo, Akwa Ibom, Enugu, Anambra and Ogun States where mild – to –moderate wetter soil conditions prevailed. Extreme dryness was observed over parts of Shaki and Iseyin in Oyo states. Parts of Yobe, Rivers and Cross River, were under severe dryness then reducing to mild – to – moderate dryness over Sokoto, Kebbi, Kaduna, Borno, Adamawa, Ondo, Bayelsa, Cross River and Akwa Ibom States.

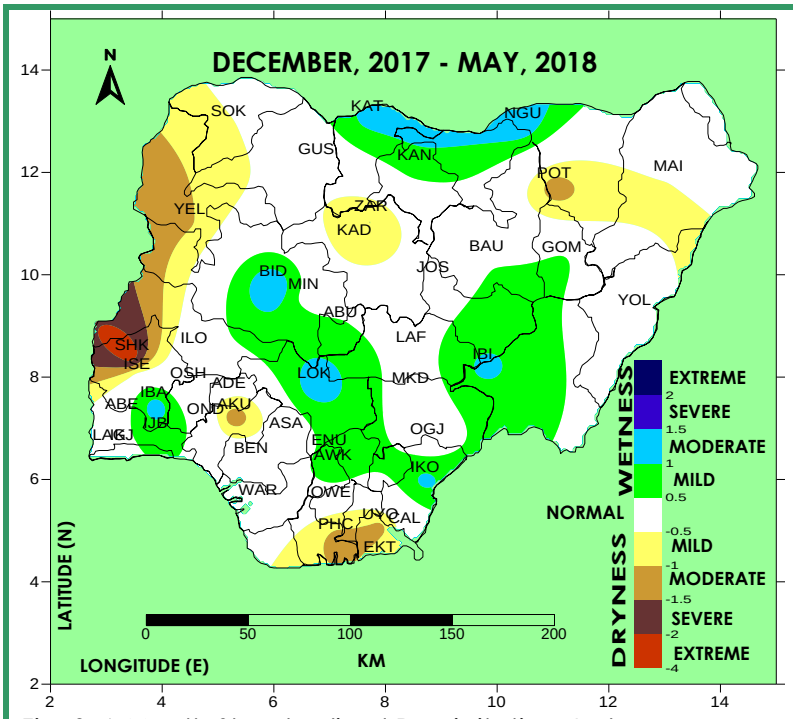

Fig. 3: 6-Month Standardized Precipitation Index (for Groundwater drought)

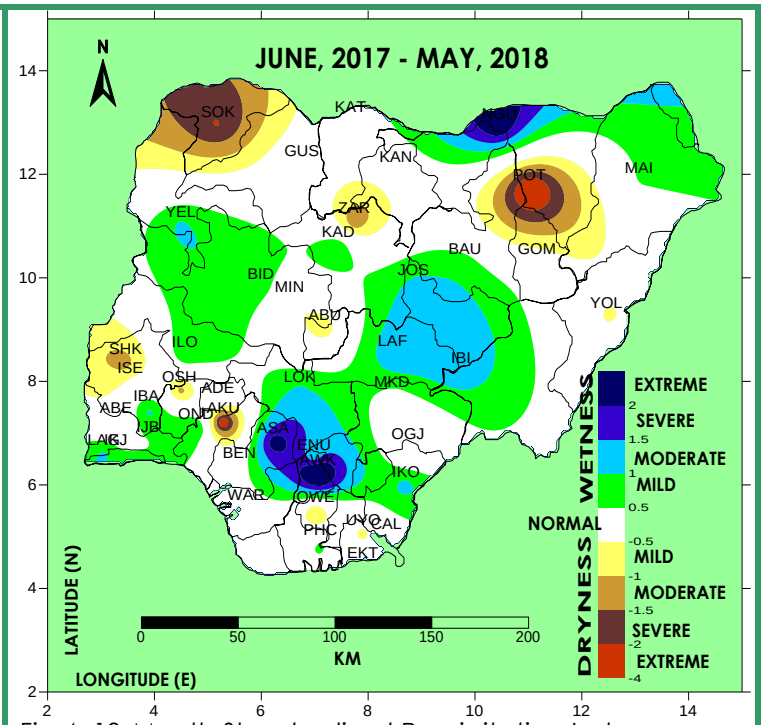

Fig.4: 12-Month Standardized Precipitation Index (for stream-flow and lake storage drought)

The cumulative rainfall analysis (SPI-6) for groundwater monitoring (Fig.3) shows moderate wetness over parts of Katsina, Kano, Yobe, Niger, Kogi, Ogun, Taraba and Akwa Ibom. Their environs including parts of FCT, Nasarawa, Bauchi, Gombe, Plateau, Enugu and Anambra states experienced mild wetness. This condition favors the recharge of groundwater resource in these areas. However, the dry condition is a replica of what was observed in Fig. 2. The rest of the country were in normal condition.

The 12-month Standardized Precipitation Index (SPI) for stream flows and lake storage monitoring analysis reveals wetter than normal condition over parts of Yobe, Delta and Anambra states. Parts of Borno, Yobe, Taraba, Plateau, Nasarawa, Kebbi, Benue, Niger, Kwara, Kaduna, Delta, Enugu, Imo, Akwa Ibom and Lagos states experienced mild-to- moderate wetness. This condition is expected to aid recovery of rivers in those locations with reduced water level. Whereas, parts of Yobe and Ondo showed extreme dryness, with other parts of Sokoto, Kaduna, Gombe, Yola, Abuja, Oyo, Osun and Rivers states, in mild-to-moderate dryness.

OUTLOOK FOR JUNE, 2018

The southern parts of the country with bimodal rainfall pattern are likely to have their first peak during the month. With the recovering of most rivers especially in the Southern and Central States, flooding of river banks and coastal towns are not unlikely. Additionally, places like Kano, Katsina, Yobe, Niger, Ogun and Oyo States are at high risk of surface run-off events. States Agencies and Local Governments should ensure drainages are cleared of obstructions and debris to ensure optimum performance to avoid flooding in residential areas.

For Comments, please write to:
The Director-General /CEO,
Nigerian Meteorological Agency,
National Weather Forecasting and Climate Research Centre,
Nnamdi Azikiwe International Airport, Abuja.
E-mail: nimetdrought2009@gmail.com.
Tel: +2348110300289, +2348038620950.