

Drought and Flood Monitoring Bulletin

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PREAMBLE

The WMO recommended Standardized Precipitation Index (SPI), which compares this month's rainfall values with the normal across the country is presented. This value which could be higher, equal or lower than the 30-year average was used in the preparation of this edition. During the period under review, rainfall events were observed over some parts of the country. The maps represents the 1-month (i.e. February, 2019), the 3-month (December, 2018- February, 2019), the 6-month (September, 2018 - February, 2019) and the 12-month (March. 2018 - February. 2019) SPIs respectively.

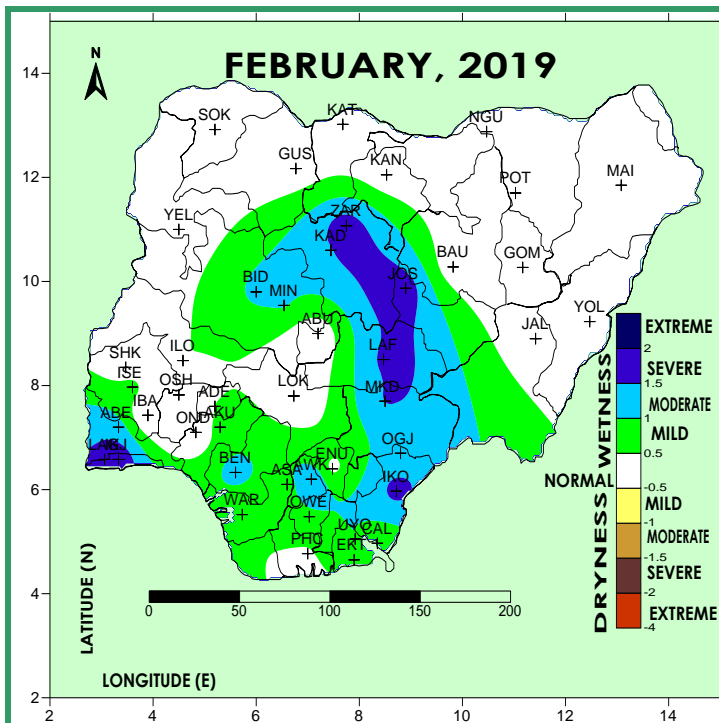


Fig.1: 1-Month Standardized Precipitation Index (for meteorological drought)

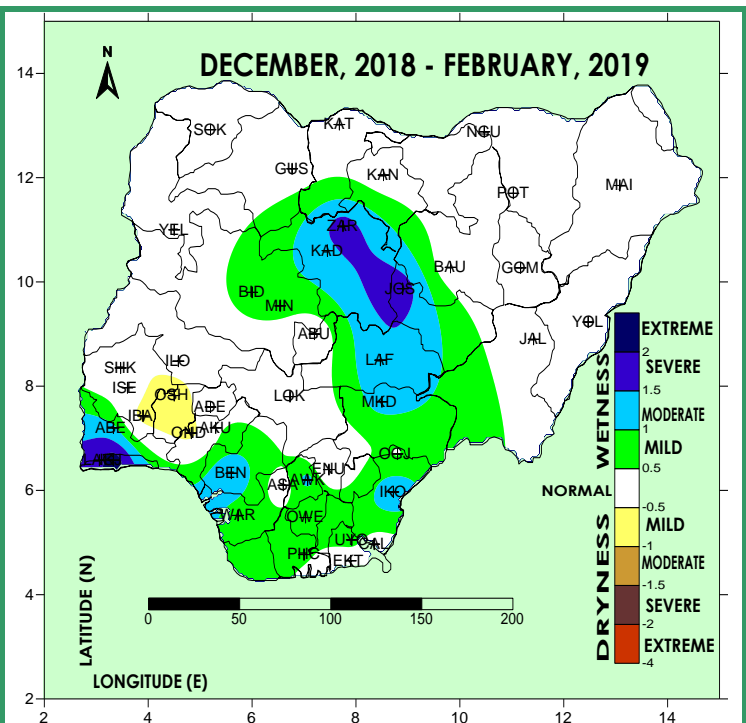


Fig.2: 3-Month Standardized Precipitation Index (for agricultural drought)

OBSERVED FEATURES

The 1-month Standardized Precipitation Index (SPI) for February indicated that mild-to-severe wetter conditions prevailed over the Central and Southern States particularly around Kaduna, Plateau, Nasarawa, Benue, Cross River and Lagos states. This feature however, was as a result of above normal rainfall amounts recorded over the aforementioned areas.

Analysis of the 3-month Standardized Precipitation Index (SPI) in (Fig.2) depicts similar mild-to-severe wetter conditions over parts of the Central down to the Southern states with Kaduna, Plateau and Lagos states experiencing severe wetness. However, mild dryness was noticeable around Osun, Oyo and Ondo states.

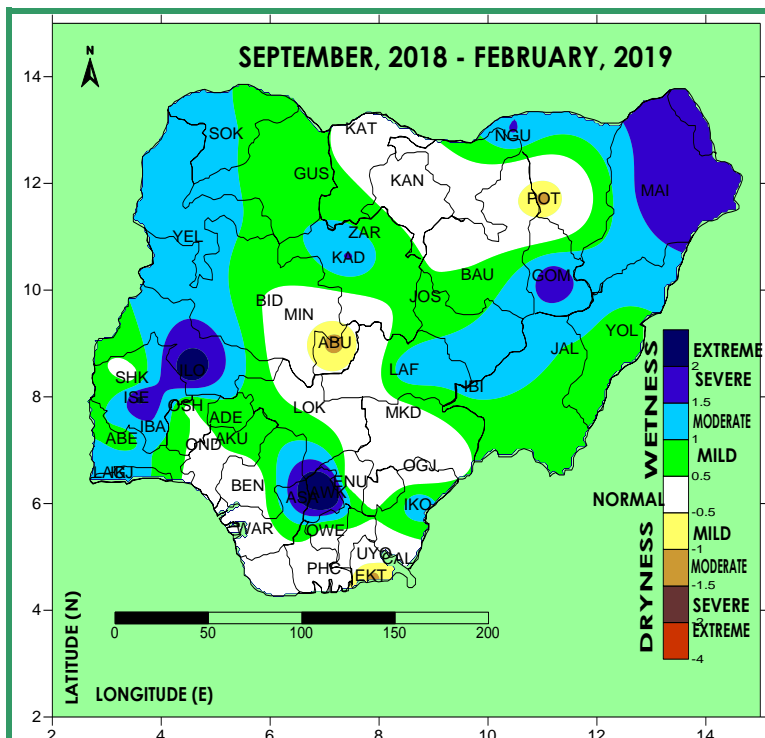


Fig. 3: 6-Month Standardized Precipitation Index (for Groundwater drought)

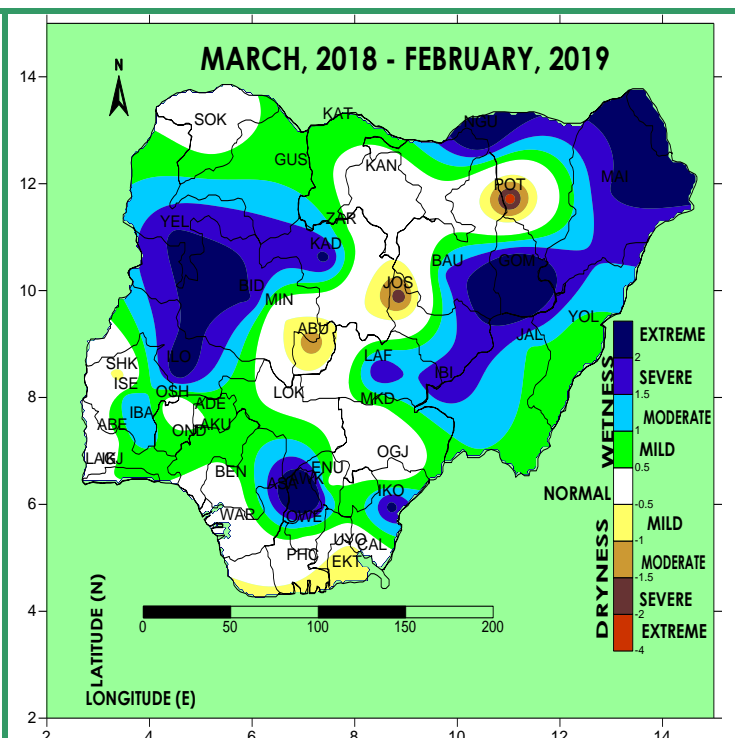


Fig.4: 12-Month Standardized Precipitation Index (for stream-flow and lake storage drought)

The cumulative rainfall analysis (SPI-6) for groundwater monitoring (Fig.3) indicates that moderate-to-severe wetness was observed in the last six months over parts of Borno, Yobe, Sokoto, Kebbi, Niger, Kaduna, Gombe, Nasarawa, Taraba, Lagos, Delta and Cross River states.; the index also indicated extreme wetness over parts of Kwara, Oyo and Imo states. This situation however, translates to positive groundwater recharge over those areas. Meanwhile, Yobe, FCT and Akwa Ibom states experienced mild-to-moderate dryness. The remaining parts of the country were under normal conditions.

The 12-month Standardized Precipitation Index (SPI) for stream flows and lake storage monitoring analysis showed that places like Borno, Yobe, Gombe, Kebbi, Niger, Nasarawa, Kwara and Osun states experienced severe-to-extreme wetness in the last 12 months while moderate-to-mild wetness was observed over Oyo, Osun and Ekiti states. However, parts of Yobe, Plateau, FCT, Oyo, Rivers, Bayelsa and Akwa Ibom states have in the last 12 months showed low stream flow and lake storage due to moderate-to-severe dryness observed over these states.

OUTLOOK FOR MARCH, 2019

Generally, the ITD is expected to push up in March allowing inflow of moisture as a result of likely prevalence of South westerly wind components during the period. Temperature is expected to rise both in the southern and Northern parts of the Country resulting in drier conditions with attendant low flows in lakes and rivers. Thus impacting negatively on maritime, hydropower generation and other water related activities.

For Comments, please write to:

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