Ministry of Works and Transport
Namibia Meteorological Service

UPDATED STATEMENT ON THE 2020/2021 RAINFALL SEASON

Since the beginning of our winter, negative SST anomalies developed and are continuing over the east-central and eastern equatorial Pacific Ocean. During the second week of November 2020 Nino indices were -0.7 °C for Nino 4 , -1.0 °C for the Nino 3.4 region, -0.9 °C for the Nino 3 region and -0.3°C for the Nino 1+2 region. La Niña is likely (>80% chance) from November through February but subduing around February and moving into neutral phase towards the end of our rainfall season (see fig.1). El Nino is associated with depressed rainfall over Namibia and La Nina with enhanced rainfall.

Indian Ocean Dipole (IOD) is observed to be neutral and projected to once again drop to negative values during November, however it is unlikely that the negative values will be sustained for long period. It is expected to settle into positive territory during early 2021, but remaining neutral.

The IDO has three phases namely neutral, positive and the negative phase. The warm phase together with its associated easterly winds are more favourable for enhanced rainfall over Namibia.

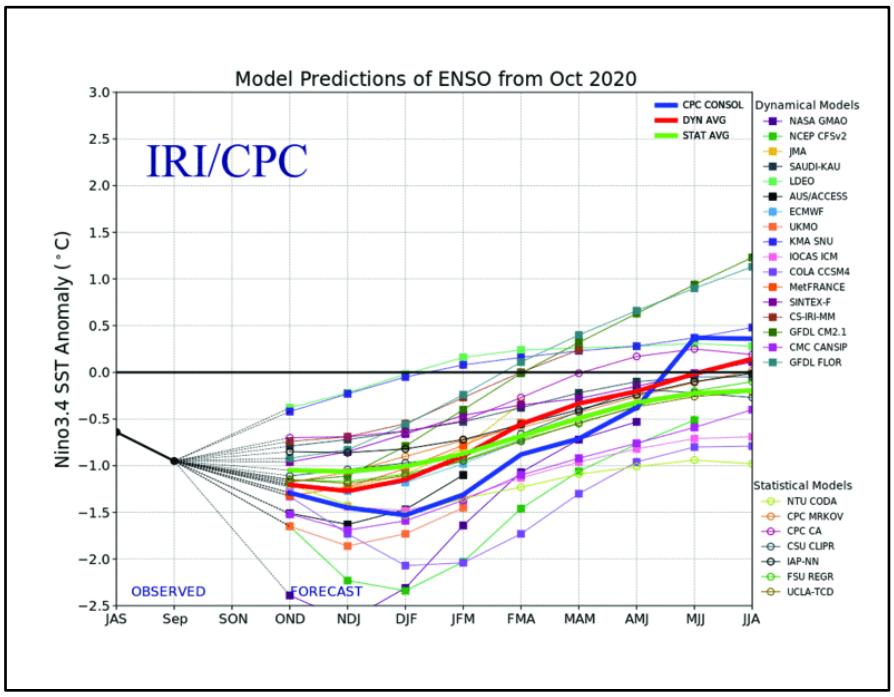
Statistical and dynamic climate prediction models were used to determine the likelihoods of above-normal, normal and below-normal rainfall for each area for overlapping three-monthly periods i.e. December-January-February (DJF). Below-normal is defined as within the driest third of rainfall amounts of the thirty year (1961 to 1990, 1971 to 2000 and 1981 to 2010) rainfall amounts, while above-normal rainfall is defined as lying within the wettest third of recorded rainfall amounts and normal is the middle third, centred on the climatological median. The normal category is than sub-divided into two parts normal to above-normal and normal to below-normal to give direction towards the extremes.

During the period DJF, large parts of the country are likely to receive normal-above-normal rainfall with pockets of normal to below-normal over some western areas, as shown in the map below (see fig.2).

The colours for each zone indicate the probabilities of rainfall in each of the four categories, above normal, normal to above, normal to below and below normal. The first colour (blue) indicates the probability of rainfall occurring in the above normal category, the second colour (cyan) is for normal to above-normal rainfall, while the third colour (yellow) represent the probability for normal to below-normal rainfall and

the last colour (brown) is for below-normal rainfall. The probabilities associated with the categories are provided as A for above normal, N for Normal and B for below normal.

Figure 1: Source IRI/CPC



Probability rainfall forecast for December 2020 to February 2021

Figure 2: Source NMS