



GCCCOF-1

SENSUAL SEASONAL FORECAST OUTLOOK OVER GULF COOPERATION COUNCIL

FOR DECEMBER JANUARY FEBRUARY 2019/20

Saudi Arabia, November 28, 2019

Consensual seasonal forecast for DJF2019/2020G season over Gulf Cooperation Council for the Arab States is based on known teleconnections of large and Regional patterns as well as on dynamical and statistical models.

I. RECENT CLIMATE CONDITIONS AND OUTLOOK

This prediction depends on outputs from dynamical models, statistical models and known teleconnections of large-scale climate features.

Observed sea surface temperatures and forecast for the coming three months show neutral ENSO conditions with most models showing high agreement for ocean evolution. The Indian Ocean Dipole (IOD) is main driver showing a clear signal with positive phase During December (warm anomalies over western tropical Indian Ocean and cold anomalies over the East), influencing the atmospheric circulation. Consequently, this positive phase translates to drier than normal signal over the Maritime Continent and Australia; and wetter than normal conditions over eastern Africa. In January and February (IOD) is expected to be on neutral phase.

Most models tend to show teleconnections with IOD foreseen towards Middle East and Central Asia. As continuation of previous forecasts, models show good agreement on favour of positive phases of East Atlantic (EA) and North Atlantic Oscillation NAO (which are two main modes of variability over the Atlantic), possibly linked with the strong IOD positive signal. It is worth noting that seasonal forecast gives average tendencies for a season and in some cases sub-seasonal fluctuations can prevail.

II. SEASONAL FORECAST OUTLOOK

Given oceanic and atmospheric patterns, knowledge and understanding of seasonal climate variability and available long-range forecasts products, the following outlook is provided for December-January-February 2019/20 season across Gulf Cooperation Council for the Arab States. The following maps show the probabilistic consensus forecast for 3 categories of anomalies for seasonal mean temperature and precipitation.

1. Temperature:

Temperatures are expected to be likely warmer than normal over almost the Gulf Cooperation Council region. (see figure 1).

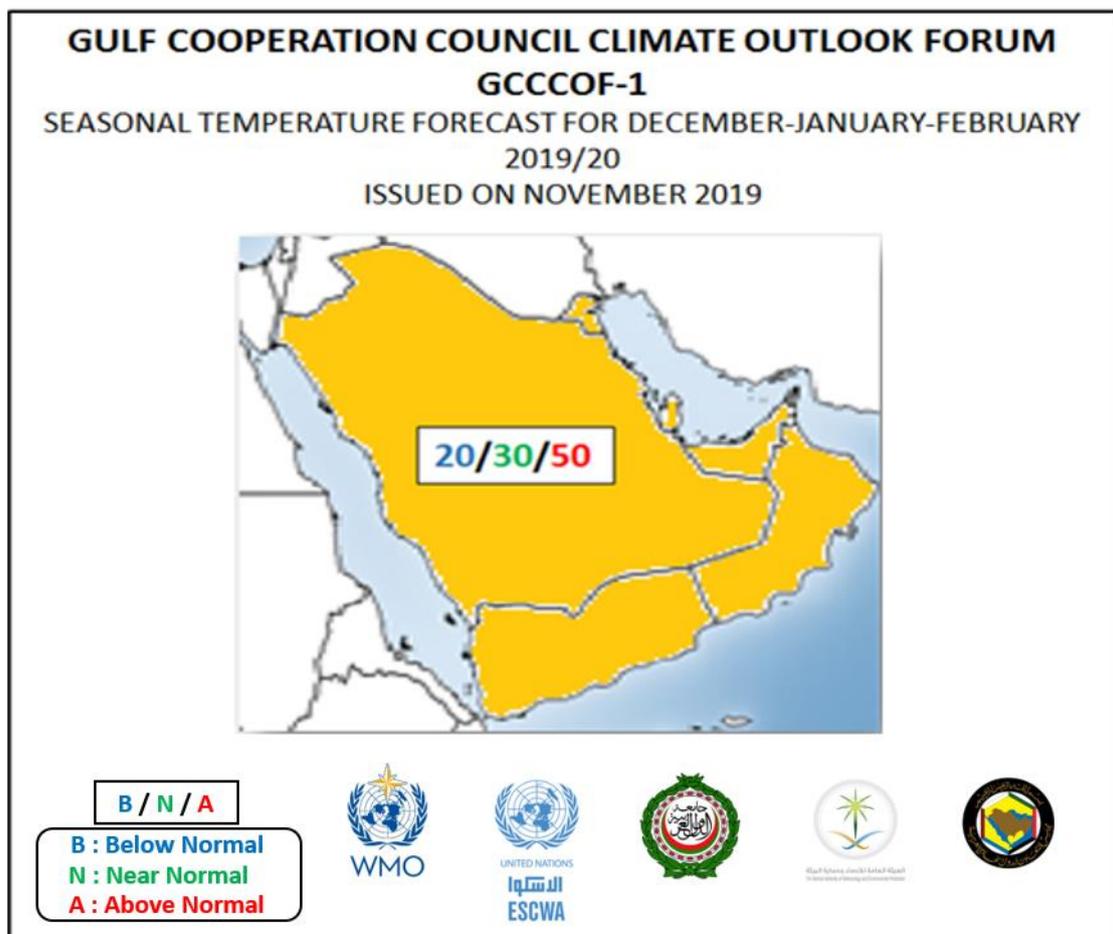


Figure 1: Seasonal Temperature Forecast over Gulf Cooperation Council for DJF2019/20.

2. Precipitation:

Precipitations are expected to be normal to below normal over Kuwait, Bahrain, Qatar and most of Saudi Arabia. Near normal conditions are projected over the south domain including Oman, United Arab Emirates and southern region of Saudi Arabia. (see figure 2).

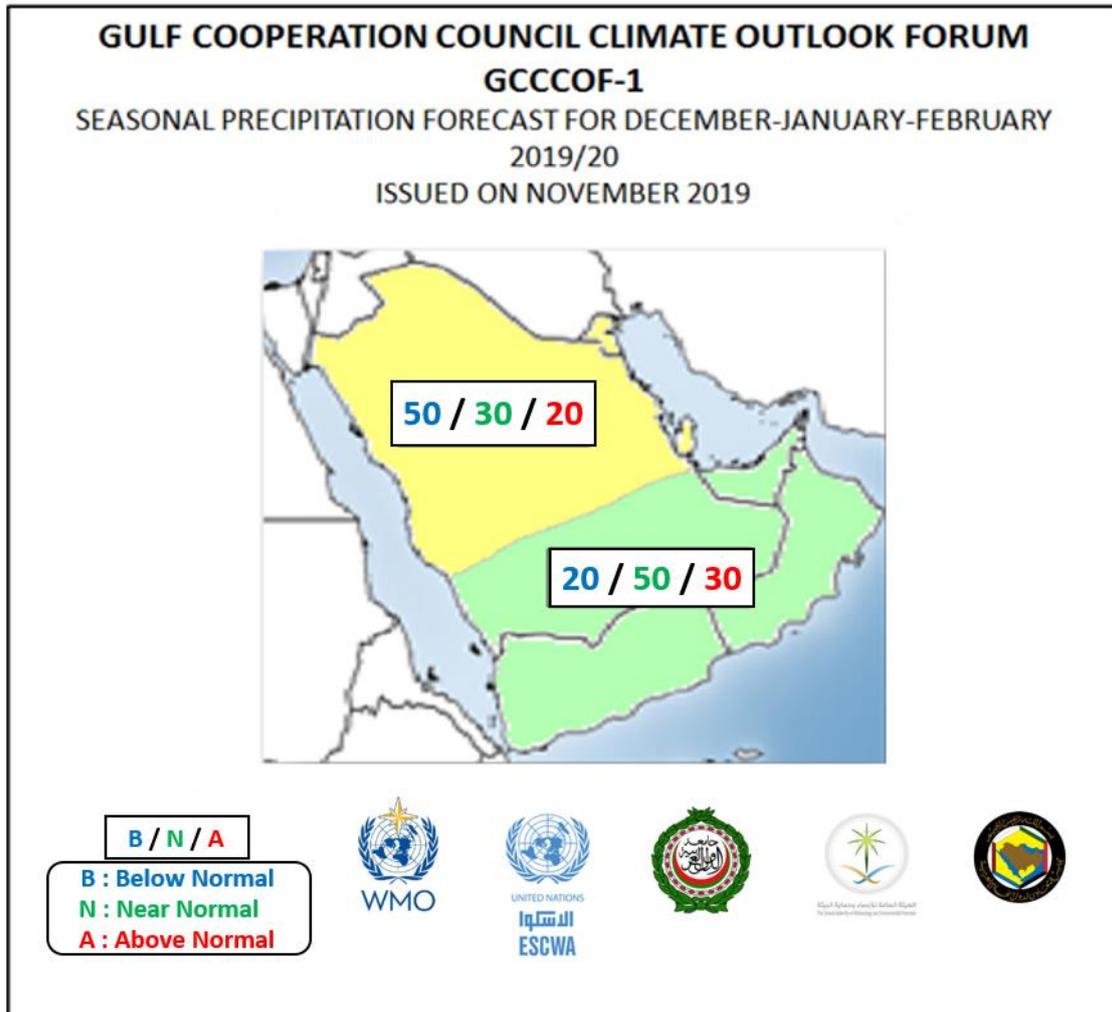


Figure 2: Seasonal Precipitation Forecast over Gulf Cooperation Council for DJF2019/20.