



المركز الوطني للأرصاد  
National Center for Meteorology  
المملكة العربية السعودية



## GCCCOF-3

# CONSENSUAL SEASONAL OUTLOOK OVER GULF COOPERATION COUNCIL REGION

### FOR SUMMER 2021

On-line session, June 03, 2021

Consensual seasonal forecast for summer (June-July-August) 2021 over Arab Gulf countries and Yemen has been produced during the online GCCCOF session. It is based on known teleconnections of large scale and regional patterns as well as on the outputs of dynamical and statistical climate models.

## I. RECENT CLIMATE CONDITIONS AND OUTLOOK

Observed sea surface temperatures (SST) and forecast for the coming three months show neutral ENSO conditions, with majority of the models showing high agreement for the neutral ENSO conditions over the equatorial Pacific. The latest WMO ENSO outlook suggests 70% probability for ongoing ENSO-neutral conditions through June – August 2021 (see figure 1).

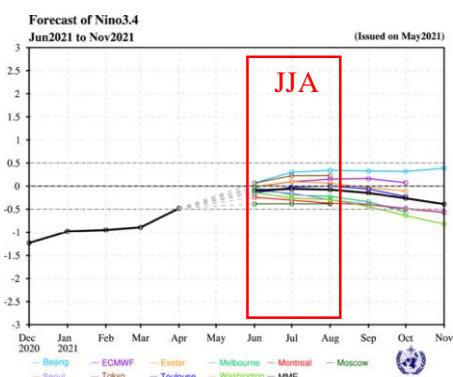


Figure1: Forecast of Nino3+4 for JJA 2021.

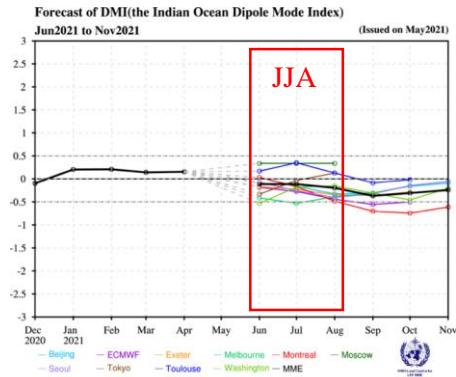


Figure2: Forecast of DMI for JJA 2021.

The neutral Indian Ocean Dipole (IOD) conditions are also prevailing and forecasts suggest that these neutral IOD conditions are likely to continue during summer season, with few climate models indicating the development of weak negative IOD conditions in the after the summer season (see figure 2).

## II.SEASONAL OUTLOOK

Given oceanic and atmospheric patterns, knowledge and understanding of seasonal climate variability and available long-range forecasts products from Global Producing Centres of Long-Range Forecast (GPCLRF), as well as the seasonal outlook for the entire Arab region (ArabCOF), the following outlook is provided for June-July-August 2021 season across Arab Gulf countries and Yemen. The following maps show the probabilistic consensus forecast for three categories of anomalies for seasonal average surface temperature and precipitation.

### Temperature

Surface Temperatures are likely to be warmer than normal over almost entire Arabian Peninsula, expected over the southern coastal regions of Yemen and Oman. (see figure 3). The probability of higher temperatures (above 0.5°C) over Saudi Arabia, Qatar, Bahrain and Kuwait is 70%.

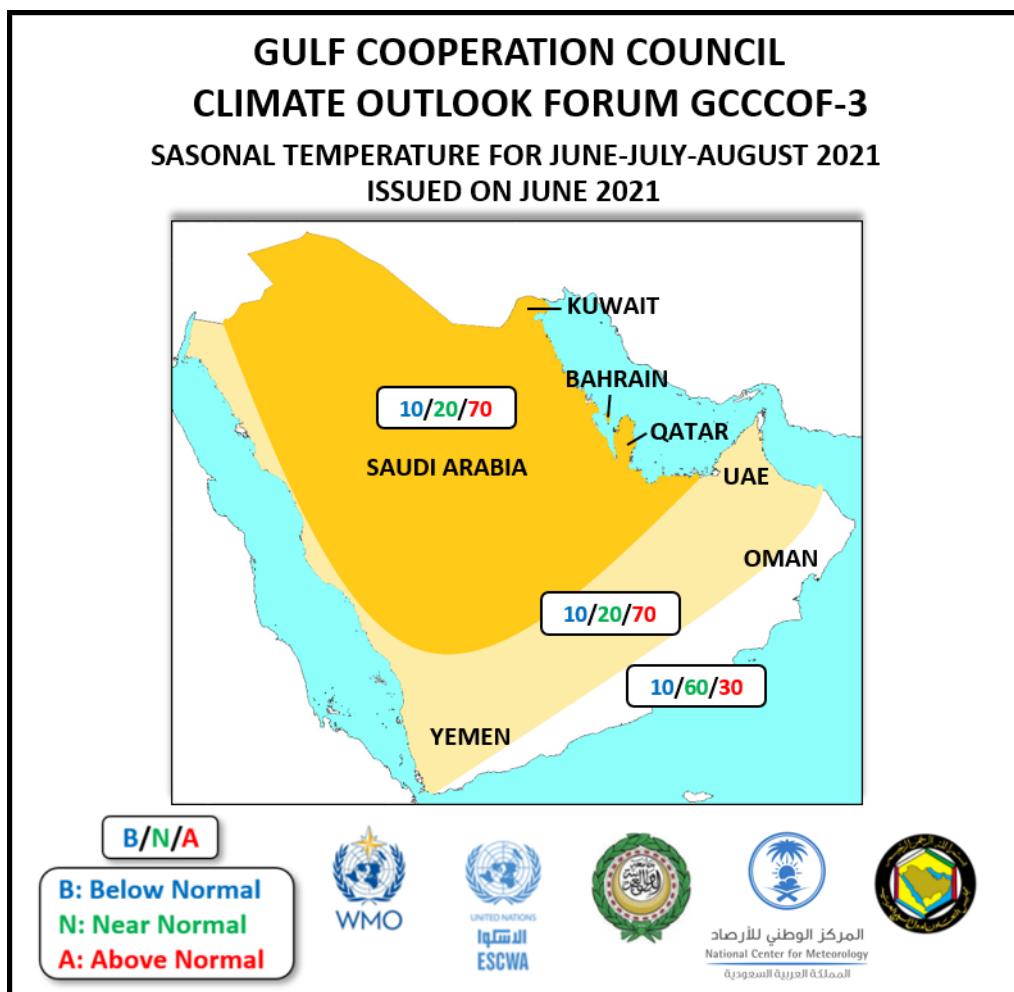


Figure 3: Seasonal Temperature Forecast over Arab Gulf countries and Yemen for JJA 2021.

## Precipitation

Total Precipitation is expected to be slightly above normal over south and southwest of Saudi Arabia, Yemen, Oman and United Arab Emirates. Near normal conditions are likely over Qatar, Bahrain, Kuwait and the remaining parts of Saudi Arabia. (see figure 4).

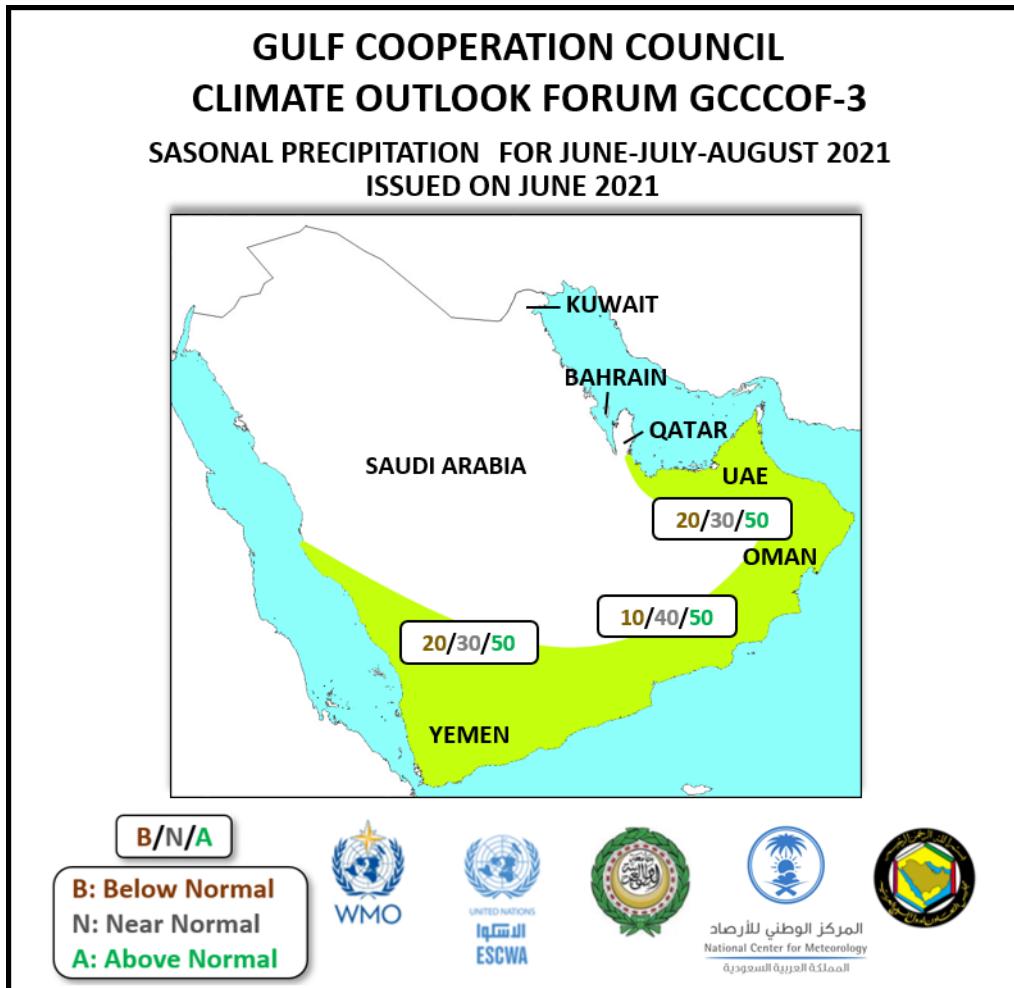


Figure 4 : Seasonal Precipitation Forecast over Arab Gulf countries and Yemen for JJA 2021.