









SEVENTH SESSION OF THE ARAB CLIMATE OUTLOOK FORUM

SEASONAL FORECAST FOR JUNE-JULY-AUGUST 2021

Online session

June, 1st & 3rd 2021

National Meteorological Service of Morocco National Meteorological Service of Saudi Arabia

SEASONAL OUTLOOK FOR SUMMER 2021

Consensual seasonal forecast for boreal summer (June-July-August 2021) over the Arab region has been produced during the seventh session of the Arab Climate Outlook Forum (ArabCOF-7) conducted online on June 1st and 3rd 2021 in conjunction with the fifteenth session of North Africa Climate Outlook Forum(PRESANOD-15) and fourth session of the Gulf Cooperation Council Climate Outlook Forum (GCCCOF-4). It is based on known teleconnections of large and regional patterns as well as on dynamical and statistical model outputs.

ArabCOF operates as an overarching entity in support of two other sub-regional COFs in the region, PRESANORD (RCOF for North Africa) and the Gulf Cooperation Council Climate Outlook Forum (GCCCOF) and, it focuses on the large-scale forcings, such as the North Atlantic Oscillations (NAO), El Niño-Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD), that affect the whole region.

I. RECENT CLIMATE CONDITIONS AND OUTLOOK

Most of the key atmospheric and oceanic variables in the tropical Pacific indicate the end of La Nina during late spring and return to ENSO-neutral conditions. According to the recent WMO El Nino/La Niña Update, most of dynamical and statistical models indicate that ENSO-neutral conditions are likely to continue during boreal summer¹. Sea-surface temperatures are expected to be near normal over Tropical Atlantic and Indian Ocean for JJA 2021. The IOD index reflects near-neutral conditions and is predicted to continue being neutral during JJA 2021².

It is worth noting that seasonal forecast gives average tendencies for a season and in some cases sub-seasonal fluctuations can prevail.

¹ WMO El Nino/La Niña Update

² WMO Global Seasonal Climate Update JJA 2021

II. SEASONAL OUTLOOK

Given the current oceanic and atmospheric patterns, knowledge and understanding of seasonal climate variability and available long-range forecasts, the following seasonal outlook has been developed for JJA 2021 across Arab region.

The maps show the probabilistic consensus forecast for 3 categories of anomalies for seasonal mean temperature and total precipitation.

• TEMPERATURE

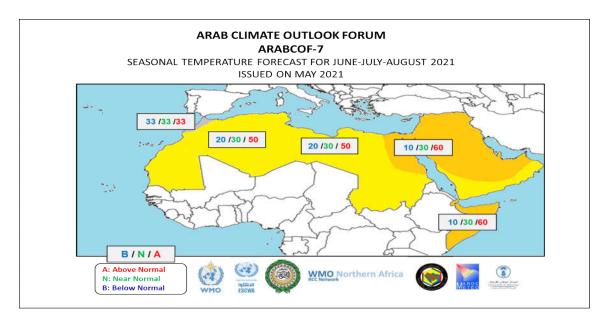


Figure 1: Seasonal forecast of mean temperature for JJA 2021

During JJA 2021, temperatures are likely to be above normal over almost entire Arab region with a higher probability of warmer than normal conditions over Eastern Egypt, Levant countries, Iraq, most of Saudi Arabia, UAE, Qatar, Kuwait, Bahrain, Somalia and Djibouti. No special scenario is favored elsewhere (Fig.1).

PRECIPITATION

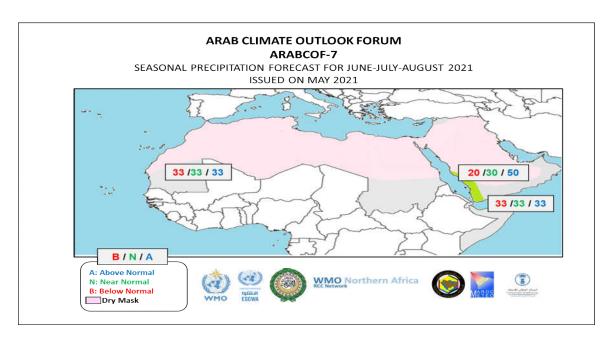


Figure 2: Seasonal forecast of precipitation for JJA 2021

A dry mask (Fig.2) is applied over most of the Arab region (shaded pink) given that JJA is climatologically very dry season.

For the remaining areas, during JJA 2021, total precipitation is expected to be above normal over small parts on the Southwest of Saudi Arabia and West of Yemen. No special scenario is given for most of Mauritania and Sudan, Northwest of Syria, Oman, most of Yemen, East of UAE, Somalia and Djibouti (Fig.2).