



EIGHT SESSION OF THE ARAB CLIMATE OUTLOOK FORUM

SEASONAL CLIMATE FORECAST

DECEMBER-JANUARY-FEBRUARY 2021/2022

Online session

December, 6th&7th, 2021

SEASONAL CLIMATE OUTLOOK FOR WINTER 2021/2022

Consensual seasonal forecast for winter (December2021-February2022) over the Arab region has been produced during the sixth session of Arab Climate Outlook Forum (ArabCOF-8) conducted online on December 6th and 7th, 2021. It is based on known teleconnections of large and regional patterns as well as on dynamical and statistical models 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 El Niño–Southern Oscillation, North Atlantic and Arctic Oscillations, Indian Ocean Dipole, that affect the whole region.

I. RECENT CLIMATE CONDITIONS AND OUTLOOK

Most of the key atmospheric and oceanic variables in the tropical Pacific indicate La Niña conditions. The majority of dynamical and statistical models indicate a 90% chance of ongoing La Niña conditions to continue during boreal winter¹. Sea-surface temperatures are expected to be near normal over Tropical Atlantic Ocean and above normal over most of the Indian Ocean for DJF 2021/2022. The Indian Ocean Dipole index reflects near-neutral conditions and is predicted to continue being neutral for December2021-February 2022².

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

II. SEASONAL OUTLOOK

Given the current oceanic and atmospheric patterns, knowledge and understanding of seasonal climate variability and available long range forecasts products, the following outlook is provided for DJF 2021/2022 season across Arab region.

¹ [WMO El Nino/La Niña Update](#)

² WMO Global Seasonal Climate Update DJF2021/2022

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

- **TEMPERATURE**

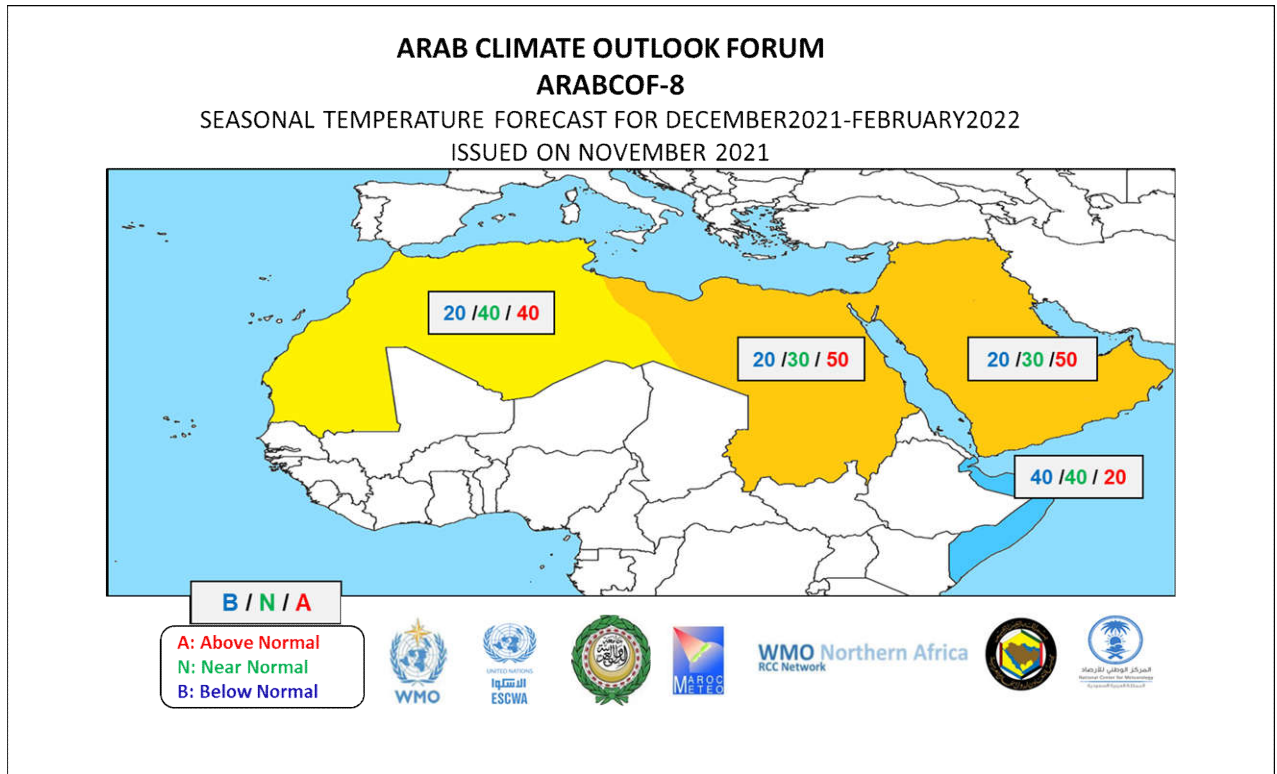


Figure 1: Seasonal forecast of surface temperature for DJF 2021/2022

During DJF 2021/2022, temperatures are likely to be above normal over most of Libya, Egypt, Levant countries, Iraq, Kuwait, Bahrain, Qatar, UAE, Oman, Saudi Arabia and Yemen. Normal to above normal temperature are expected over Morocco, Mauritania, Algeria and Tunisia. While normal to below normal temperatures are predicted over Somalia and Djibouti (Fig.1).

For complementary information, please refer also to North Africa (PRESANORD) and GCC (GCCCOF) climate outlooks

- **PRECIPITATION**

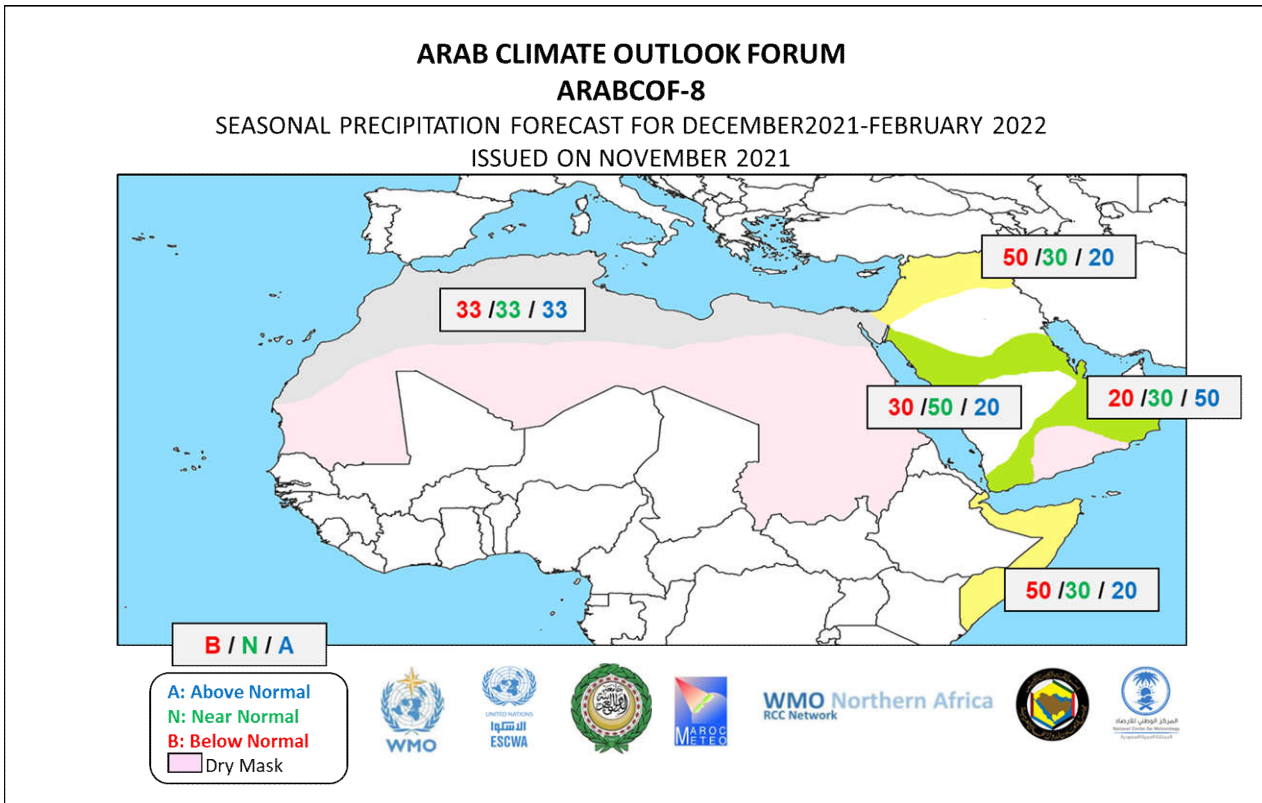


Figure 2: Seasonal forecast of precipitation for DJF 2021/2022

During DJF 2021/2022, total precipitation is expected to be normal to above normal over most Saudi Arabia, Kuwait, Bahrain, Qatar, UAE and most of Oman and Yemen. Near normal conditions are probably prevailing over the remaining parts of Saudi Arabia. While normal to below normal conditions are probably expected over Levant countries, Somalia and Djibouti (Fig.2).

It is worth noting that a dry mask (Fig.2) is applied over most of Mauritania, southern Algeria, southern Libya, southern Egypt, Sudan and central southern Arabian Peninsula (shaded pink).

For complementary information, please refer also to North Africa (PRESANORD) and GCC (GCCCOF) climate outlooks