



**TENTH SESSION OF THE ARAB CLIMATE
OUTLOOK FORUM**

**SEASONAL FORECAST FOR DECEMBER-JANUARY-
FEBRUARY 2022/2023**

Online session

December, 1st&5th ,2022

SEASONAL OUTLOOK FOR WINTER 2022/2023

Consensual seasonal forecast for boreal winter (December-January-February 2022/2023) over the Arab region has been produced during the tenth session of the Arab Climate Outlook Forum (ArabCOF-10) conducted online on December 1st and 5th, 2022 in conjunction with the eighteenth session of North Africa Climate Outlook Forum (PRESANOD-18) and seventh session of the Gulf Cooperation Council Climate Outlook Forum (GCCCOF-7). 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 La Nina conditions. A set of dynamical and statistical models shows the continuation of La Nina through winter (with more than 70%) with a transition to ENSO-neutral conditions during February-March-April 2023(55% chance). Sea-surface temperatures over North Tropical Atlantic are expected to be near normal for DJF 2022/2023. The IOD index reflects the negative phase and is predicted to shift to neutral conditions for December-January-February 2022/2023.

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, the following seasonal outlook has been developed for DJF 2022/2023 across Arab region.

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

- **TEMPERATURE**

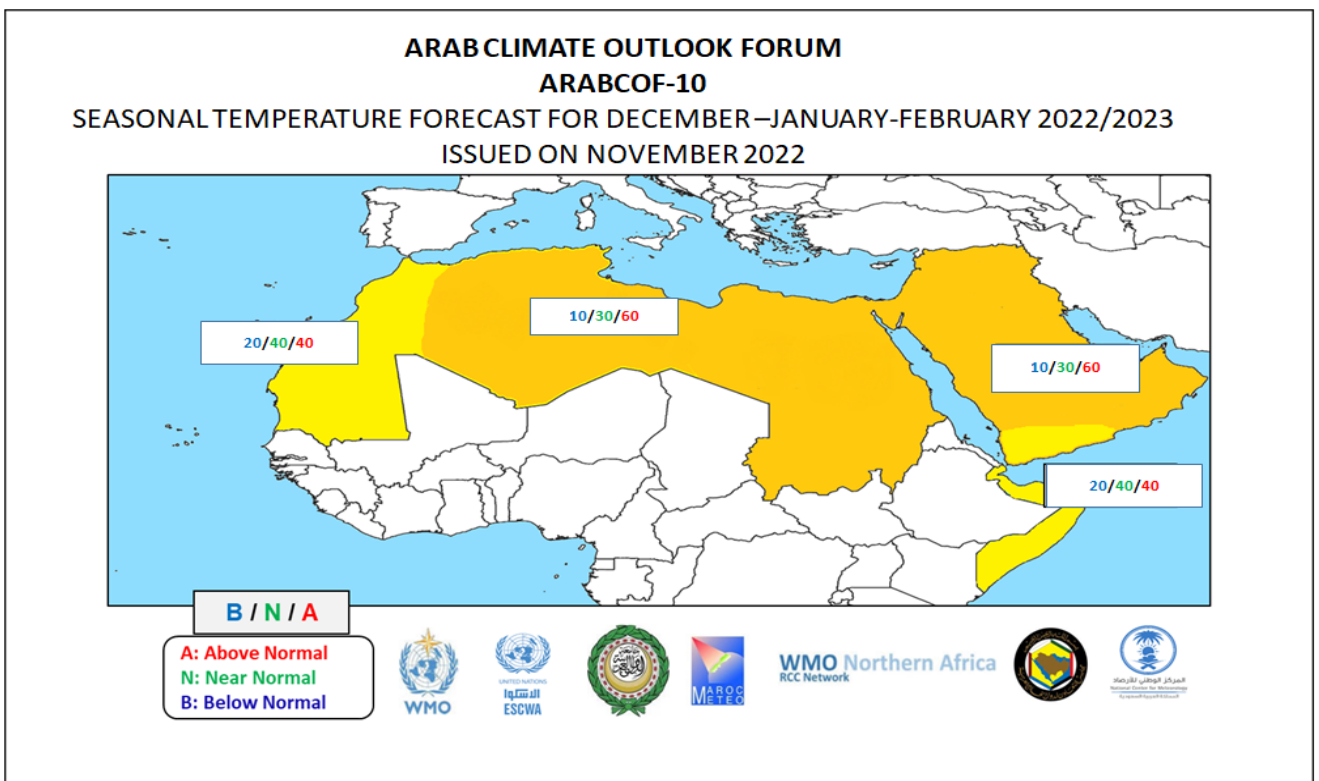


Figure 1: Seasonal forecast of mean temperature for DJF 2022/2023

During DJF 2022/2023, temperatures are likely to be above normal over most of the Arab region. Normal to above normal temperature are expected over Morocco, Mauritania, Western Algeria, Yemen, Somalia and Djibouti. (Fig.1).

- **PRECIPITATION**

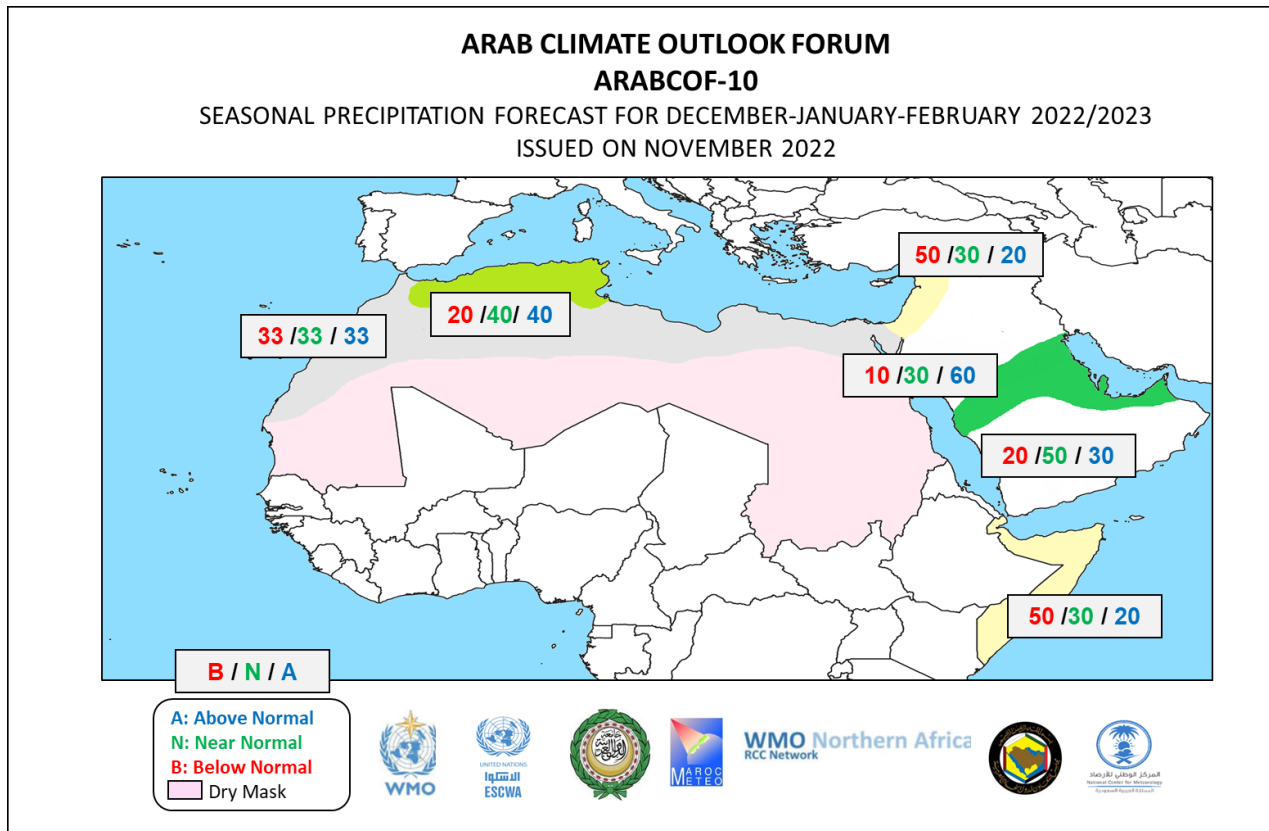


Figure 2: Seasonal forecast of precipitation for DJF 2022/2023

A dry mask (Fig.2) is applied over most of Mauritania, southern Algeria, southern Libya, southern Egypt and Sudan (shaded pink) given that DJF over these areas is climatologically dry season.

For the remaining areas, total precipitation during DJF 2022/2023 is expected to be normal to above normal over Northeastern Morocco, Northern Algeria, most of Tunisia, Northwestern Libya and above normal over Kuwait, Bahrain, Qatar, most of UAE and Saudi Arabia. Below normal conditions are predicted over Western Levant countries and Horn of Africa. No special scenario is favored elsewhere (Fig.2).