



TWENTIETH SESSION OF THE NORTH AFRICA CLIMATE OUTLOOK FORUM

PRESANORD-20

**SEASONAL FORECAST FOR DECEMBER-JANUARY-FEBRUARY
2023/2024**

Online session

November, 28th, 2023

SEASONAL OUTLOOK FOR WINTER 2022/2023

Consensual seasonal forecast for boreal winter (December-January-February 2023/2024) over the North Africa region has been produced during the twentieth session of North Africa Climate Outlook Forum (PRESANOD-20) conducted online on November, 28th,2023 in conjunction with the twelfth session of the Arab Climate Outlook Forum (ArabCOF-12) and the ninth session of the Gulf Cooperation Council Climate Outlook Forum (GCCCOF-9). It is based on known teleconnections of large and regional patterns as well as on dynamical and statistical model outputs.

I. RECENT CLIMATE CONDITIONS AND OUTLOOK

Most of the key atmospheric and oceanic variables in the tropical Pacific indicate El Nino conditions. A set of dynamical and statistical models suggests the continuation of El Niño conditions throughout the boreal spring of 2024. There is a 100% probability of these conditions during the boreal winter, and over a 80% during the boreal spring. Sea-surface temperatures over North Tropical Atlantic are expected to be above normal for DJF 2023/2024.

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 DJF2023/2024 across North Africa region.

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

- **TEMPERATURE**

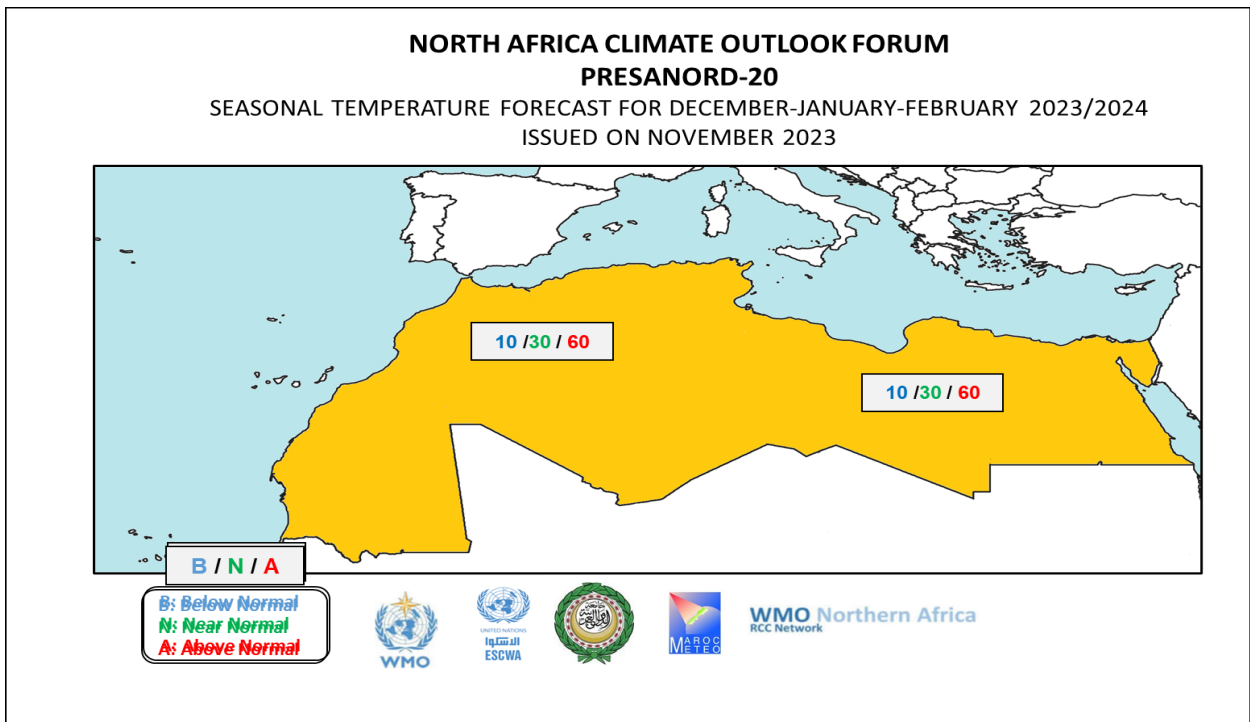


Figure 1: Seasonal forecast of mean temperature for DJF 2023/2024

During DJF 2023/2024, temperatures are likely to be above normal over all the North Africa countries. (Fig.1).

- **PRECIPITATION**

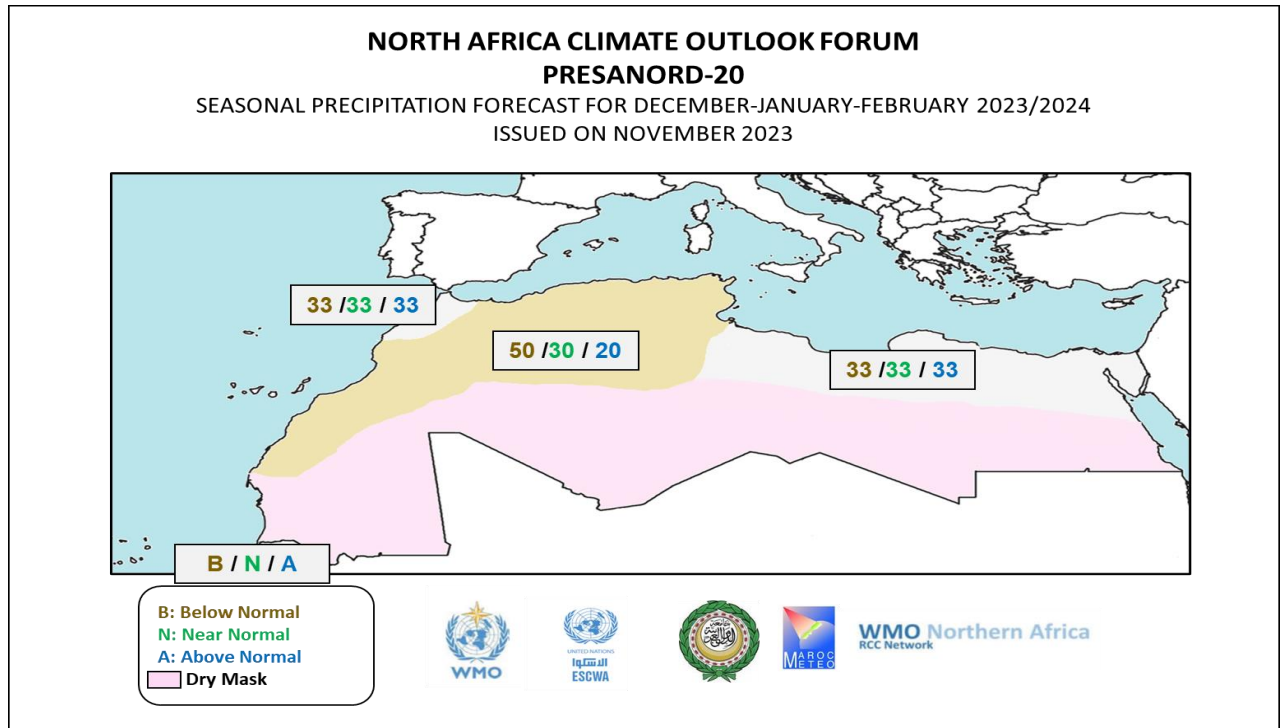


Figure 2: Seasonal forecast of precipitation for DJF 2023/2024

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

For the remaining areas, total precipitation during DJF 2023/2024 is expected to range from normal to below normal levels over most of Morocco, Northern Algeria, Tunisia. No special scenario favored elsewhere due to high uncertainty regarding the dominant climate scenario (Fig.2).