



SIXTH SESSION OF ARAB CLIMATE OUTLOOK FORUM

SEASONAL FORECAST FOR DECEMBER-JANUARY- FEBRUARY 2020/2021

Online session

November, 30th&December,2nd,2020

National Meteorological Service of Morocco

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National Center for Meteorology - Saudi Arabia

SEASONAL OUTLOOK FOR WINTER 2020/2021

Consensual seasonal forecast for winter (December2020-February2021) over Arab region has been produced during the sixth session of Arab Climate Outlook Forum (ArabCOF-6) conducted online on November 30th and December 2nd, 2020. 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 more than 90% chance of ongoing La Niña conditions to continue during boreal winter¹. Sea-surface temperatures are expected to be normal to above normal over Tropical Atlantic Ocean and above normal over most of the Indian Ocean for DJF 2020/2021. The Indian Ocean Dipole index reflects near-neutral conditions and is predicted to continue being neutral for December2020-February 2021².

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 2020/2021 season across Arab region. The maps show the probabilistic consensus forecast for 3 categories of anomalies for seasonal mean temperature and total precipitation.

¹ [WMO El Nino/La Niña Update](#)

² WMO Global Seasonal Climate Update [DJF2020/2021](#)

- **TEMPERATURE**

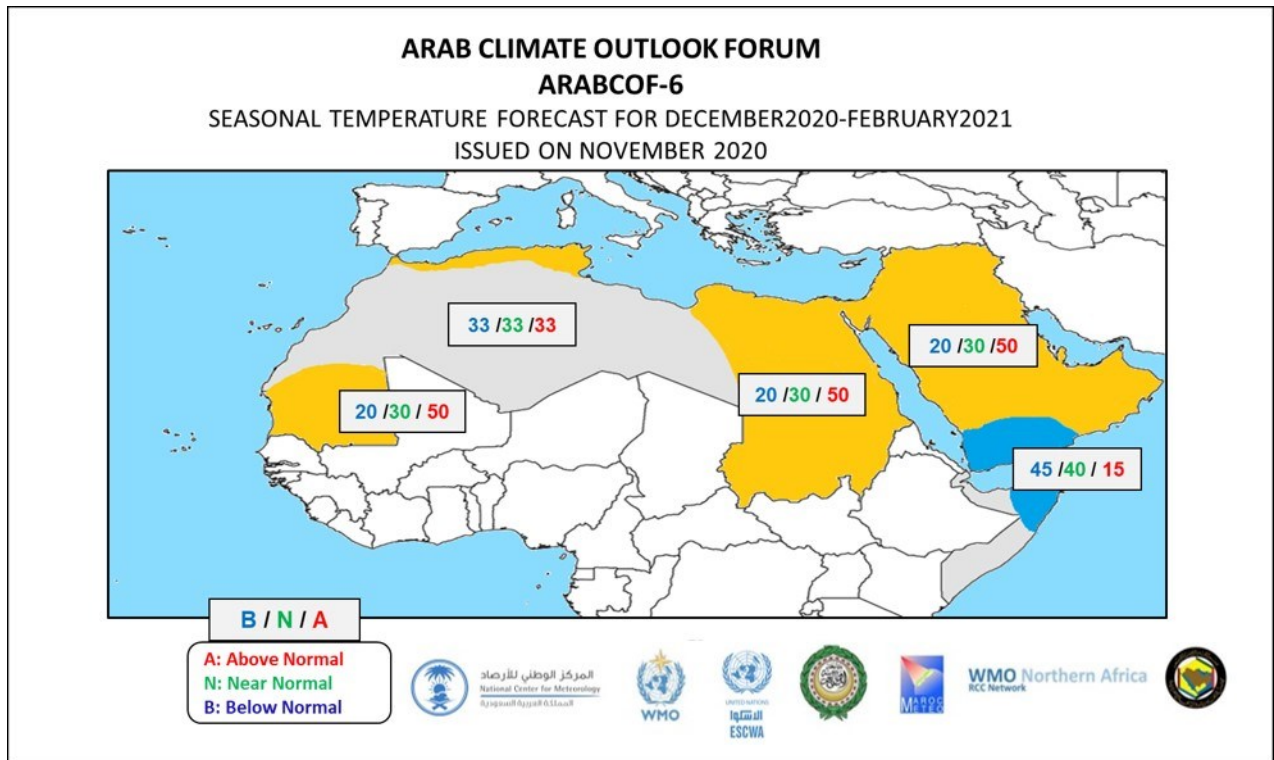


Figure 1: Seasonal forecast of surface temperature for DJF 2020/2021

During DJF 2020/2021, temperatures are likely to be above normal over northern Maghreb countries, most of Mauritania, eastern Libya, Egypt, Levant countries, Iraq, Kuwait, Bahrain, Qatar and most of Saudi Arabia. Below normal temperatures are expected over Southwest Arabian Peninsula and eastern Somalia. While no special scenario is favored elsewhere (Fig.1).

- **PRECIPITATION**

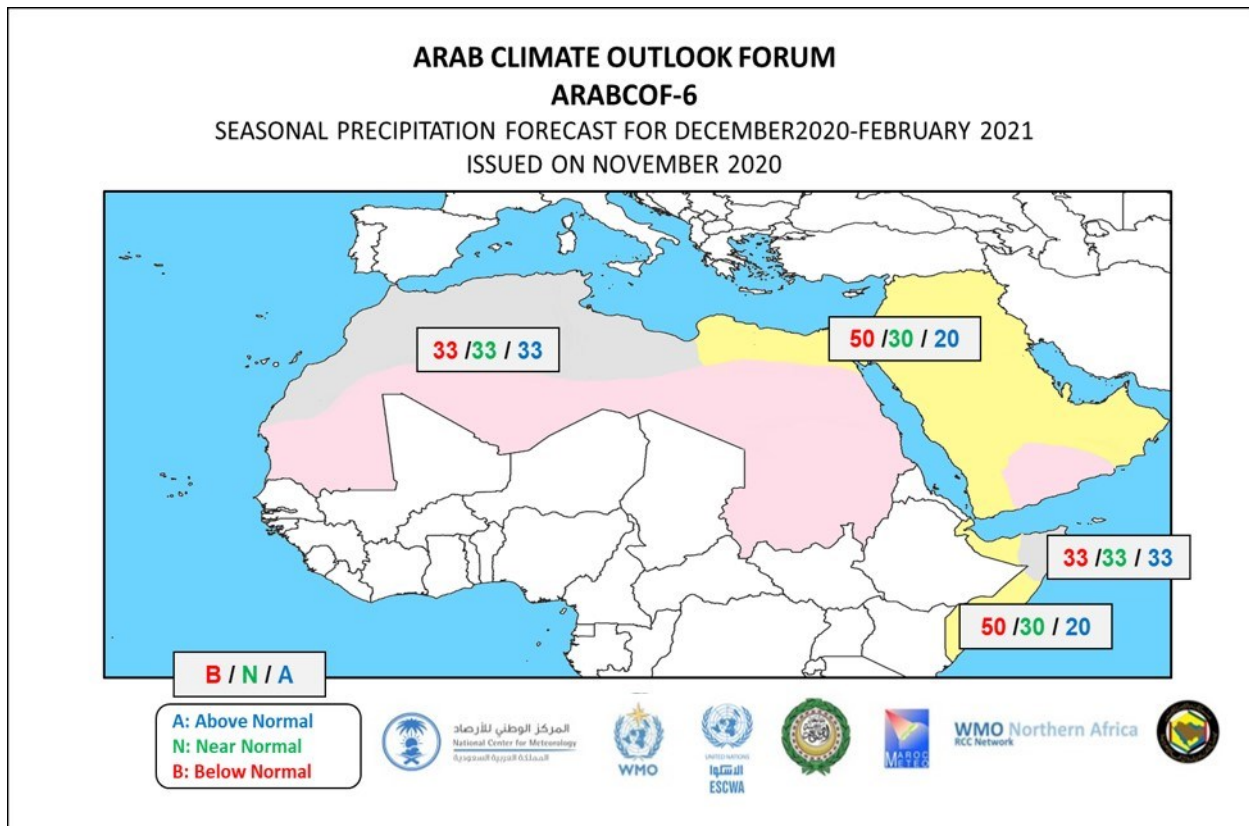


Figure 2: Seasonal forecast of precipitation for DJF 2020/2021

During DJF 2020/2021, total precipitation is expected to be below normal over Northeastern Libya, Northern Egypt, Levant countries, most of Arabian Peninsula, Djibouti and most of Somalia. No special scenario is given for the remaining part of the region (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).