

THIRTEENTH SESSION OF THE ARAB CLIMATE OUTLOOK FORUM SEASONAL FORECAST FOR JUNE-JULY-AUGUST

2024

Online session

June ,3rd, 2024

SEASONAL OUTLOOK FOR SUMMER 2024

Consensual seasonal forecast for boreal summer (June-July-August 2024) over the Arab region has been produced during the eleventh session of the Arab Climate Outlook Forum (ArabCOF-13) conducted online on June 3rd, 2024, in conjunction with the twenty first session of North Africa Climate Outlook Forum (PRESANOD-21) and tenth session of the Gulf Cooperation Council Climate Outlook Forum (GCCCOF-10). It is based on known teleconnections of global 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 transition from El Nino conditions to neutral conditions with a tendency to shift toward the negative phase (La Niña) by the end of JJA.. Sea-surface temperatures over North Tropical Atlantic and Mediterranean Sea are expected to be above normal for JJA 2024. The IOD index reflects a positive phase and is predicted to continue being positive during JJA 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, the knowledge and understanding of seasonal climate variability and available long-range forecasts, the following seasonal outlook has been developed for JJA 2024 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 2024

During JJA 2024, temperatures are very likely to be above normal over the entire Arab region (Fig. 1), with higher probabilities over most of Northern Maghreb, Levant, and most of the Arabian Peninsula. There is a potential for hot extremes over the northern part of Morocco, Northern Algeria, and Northern Tunisia, and risk of fires in the forested areas of Morocco, Algeria, and Tunisia. Due to the inherent uncertainties in the forecasts, it is crucial to monitor the situation closely and prepare for these conditions accordingly.

PRECIPITATION



Figure 2: Seasonal forecast of precipitation for JJA 2024

During JJA 2024, total precipitation is expected to be above normal over Southern Arabian Peninsula, including Oman, Yemen, UAE, and southern Saudi Arabia, as well as East Africa, covering Djibouti and Northern Somalia, and Southern Mauritania. Normal to slightly above normal conditions are anticipated over most of Saudi Arabia, Qatar, and Bahrain, while near-normal precipitation is expected in Northern Saudi Arabia and Kuwait. Due to the typically dry conditions during JJA, a dry mask is applied over North Africa and the Levant. No significant deviations are forecasted for the rest of the Arab region (Fig. 2). There is a potential for heavy rainfall in the southern Arabian Peninsula and East Africa, which could lead to flooding. It is recommended to monitor closely and take necessary precautions.