

WMO Northern Africa

PRESANORD-11 CONSENSUAL SEASONAL FORECAST OUTLOOK OVER NORTH AFRICA Valid FOR DECEMBER–JANUARY-FEBRUARY DJF 2017/2018 Zagreb,November 22,2017

Consensual seasonal forecast for DJF2017/2018 season over North Africa countries is based on known teleconnections of large and regional patterns as well as on dynamical models.

I. RECENT CLIMATE CONDITIONS AND OUTLOOK

The tropical Pacific reflected weak La Niña conditions, with SSTs in the east-central tropical Pacific past the threshold of La Niña and most atmosphere variables showing patterns suggestive of weak La Niña conditions. The collection of latest ENSO prediction models indicates weak La Niña as the most likely scenario for the winter. In the North Atlantic the pattern shows a large area, to the south of Greenland, where SSTs are below average, while the rest of the basin has above average SSTs. In the equatorial stratosphere the QBO has recently transitioned to its easterly phase. Eurasian snow cover is currently above average while Arctic sea ice extent is below average with the potential to influence the position of the Siberian High.

Most of dynamical models of GPC show dry pattern in the eastern pattern of the region and a zonal circulation over North Atlantic sector similar to positive NAO which is not in favor of precipitations over North West Africa.

A tendency for above-average temperature is the main feature over the whole region, the highest signal seems to be centered over Western Mediterranean, including most of the Iberian Peninsula and Northern Maghreb.

II. SEASONAL FORECAST OUTLOOK

Given oceanic and atmospheric patterns ,knowledge and understanding of seasonal climate variability and available long range forecasts products, the following outlook is provided for December-January-February (DJF) 2017/2018 season across North Africa.

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

A. Temperature :

- Zone 1 : Above normal temperature over North of Morocco, Algeria and Tunisia (60% for above normal, 30% for normal and 10% for below normal) (Figure 1).
- Zone 2 : Above normal temperature over the remaining part of North Africa including Egypt ,Libya, south of Tunisia and most of Algeria and Morocco (50% for above normal, 30% for normal and 20% for below normal) (Figure 1)



Figure 1: Seasonal forecast of temperature for DJF 2017-2018

B. Precipitations :

- Zone 1 : Below normal precipitations over North of Morocco and North West of Algeria (50% for below normal , 30% for near normal and 20% for above normal) (Figure 2).
- Zone 2 : Below normal precipitations over most part of Morocco and Algeria, Tunisia and almost Libya (40% for below normal , 35% for near normal and 25% for above normal (Fig 2).
- Zone 3 : Below normal precipitation over Eastern Libya and Egypt (50% for below normal, 25% for near normal and 25% for above normal) (Fig 2).
- Gray Zone : Dry masked area (no forecast)



Figure 2: Seasonal forecast of precipitation for DJF 2017-2