

ROYAUME DU MAROC

Ministère de l'Équipement,
du Transport, de la Logistique et de l'Eau
Département de l'Eau

DIRECTION DE LA METEOROLOGIE NATIONALE



المملكة المغربية
وزارة التجهيز والنقل
واللوجستيك والماء
قطاع الماء
مديرية الأرصاد الجوية الوطنية

SEASONAL FORECAST OUTLOOK FOR NORTH AFRICA

February-March-April 2020 issued January 2020

Seasonal forecast outlook for North Africa RCC domain is based on the ARPEGE-Climat coupled model output jointly with seasonal forecasts issued from ECMWF, UK Met-Office and IRI. The ARPEGE-Climat v5.2 coupled model is running at MAROC-METEO super-computer each month to elaborate seasonal ensemble forecasts. Sets of 27 forecasts are initialized by 9 atmospheric analysis, taken from ECMWF database, and 3 ocean analysis (PSY2G3R4) issued from MERCATOR center.

We also try to exploit the sources of predictability contained in the sea surface temperature (SST) by statistical methods when it is possible. We note, however, that this influence is not the same from one region to another or throughout all the year.

NB:

- 1. New: Multi-model probabilistic forecasts from EUROSIP and WMO LC-LRFMME*
- 2. All dynamical forecasts are experimental.*

SYNTHESIS































The analysis of current circulation, sea surface temperature, ENSO phenomenon and dynamical/statistical models outputs show probably for February-March-April 2020:

- For temperature:
 - ▣ Probably normal to above normal conditions over Morocco, Algeria and Tunisia.
- For precipitation:
 - ▣ Probably normal to below normal conditions over northern Morocco.
 - ▣ No special scenario elsewhere.

NB: Precipitation forecasts are given for September to May (the main rainy season). Temperature forecasts are given for January to December.

TABLES SUMMARIZING SEASONAL FORECAST
FEBRUARY-MARCH-APRIL 2020

I. Seasonal Temperature Forecast

Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>				 Almost Libya	
<i>ECMWF</i>		 N&SW  Elsewhere	 N  Elsewhere	 Almost Libya	 Almost Egypt
<i>UK Met-Office</i>					
<i>LRF-NMME</i>					
<i>IRI</i>	 ATL&SE ATL Side  Elsewhere		 Almost Tunisia	 W  Elsewhere	 SE&Ext N  Elsewhere
Synthesis	Probably normal to above normal conditions	Probably normal to above normal conditions	Probably normal to above normal conditions	Probably above normal conditions	Probably above normal conditions

Legend



Below-Normal



Normal








































Above-Normal



No special scenario

N: North; S: South; W: West; E: East; C: Center; ATL: Atlas

II. Seasonal Precipitation Forecast

Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>					 Ext.N  Elsewhere
<i>ECMWF</i>	 SW  Elsewhere		 S  Elsewhere	 W  Elsewhere	
<i>UK Met-Office</i>	 C&SE  Elsewhere	 C  Elsewhere	 S  Elsewhere	 NW  Elsewhere	 Almost Egypt
<i>LRF-NMME</i>	 NW  S  Elsewhere	 S  Elsewhere		 Almost Libya	 Almost Egypt
<i>IRI</i>	 Almost Morocco	 Almost Algeria	 Almost Tunisia	 NE&C  Elsewhere	 Almost Egypt
Synthesis	Probably normal to below normal conditions over the North. No special scenario elsewhere	No special scenario elsewhere	No special scenario elsewhere	No special scenario elsewhere	No special scenario elsewhere

Legend



Below-Normal



Normal



Above-Normal



No special scenario

N: North; S: South; W: West; E: East; C: Center; ATL: Atlas