



SEASONAL FORECAST OUTLOOK FOR NORTH AFRICA

March-April-May 2021 issued February 2021

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 Copernicus C3S 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 March-April-May 2021:




































- For temperature:
 - ✚ Probably normal to above normal conditions over Morocco.
 - ✚ Probably above normal conditions over Algeria, Tunisia, Libya and Egypt.
- For precipitation:
 - ✚ No special scenario over Morocco, Algeria, Tunisia, Libya and Egypt.

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

MARCH-APRIL-MAY 2021

1. Seasonal temperature forecast





































Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>					
<i>ECMWF</i>	 SE ATL side  Elsewhere				
<i>UK Met-Office</i>	 SE ATL  Elsewhere	 N  Elsewhere	 N  Elsewhere		
<i>C3S</i>					
<i>LRF-NMME</i>					
<i>IRI</i>		 E&S  Elsewhere	 Almost Tunisia	 Almost Libya	 Almost Egypt
Synthesis	Probably normal to above normal conditions elsewhere.	Probably above normal conditions.	Probably above normal conditions	Probably above normal conditions.	Probably above normal conditions.

Legend



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

2. Seasonal precipitation forecast

Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>				 Almost Libya	 Almost Egypt
<i>ECMWF</i>					
<i>UK Met-Office</i>	 Almost Morocco	 Almost Algeria	 Almost Tunisia	 W  Elsewhere	 Almost Egypt
<i>C3S</i>	 Almost Morocco	 Almost Algeria	 Almost Tunisia	 W  Elsewhere	
<i>LRF-NMME</i>	 N  Elsewhere	 Almost Algeria	 Almost Tunisia	 E& S  Elsewhere	 NE  Elsewhere
<i>IRI</i>	 SE ATL side  Elsewhere	 Almost Algeria	 Almost Tunisia	 Almost Libya	 Almost Egypt
Synthesis	No special scenario*	No special scenario	No special scenario	No special scenario	No special scenario

Legend



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

*No special scenario : equiprobability between the three categories “Below normal”, “Normal” and “Above normal”