



SEASONAL FORECAST OUTLOOK FOR NORTH AFRICA

January-February-March 2021 issued December 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 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 January-February-March 2021:











































- For temperature:
 - ✚ Probably above normal conditions over Tunisia, Libya and Egypt.
 - ✚ Probably normal to above normal conditions over Algeria and almost Morocco except Center west region.
 - ✚ No special scenario elsewhere.
- For precipitation:
 - ✚ Probably normal to below normal conditions over Northern Morocco, Libya, Egypt and Northwestern Algeria.
 - ✚ 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

JANUARY-FEBRUARY-MARCH 2021

1. Seasonal temperature forecast
















































Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>					
<i>ECMWF</i>	 NW & SE  Elsewhere	 Almost Algeria		 NE  Elsewhere	 Almost Egypt
<i>UK Met-Office</i>	 NW & S  Elsewhere	 N  S  Elsewhere		 N  Elsewhere	 Almost Egypt
<i>C3S</i>	 Coasts & S  Elsewhere	 W  Elsewhere		 S  Elsewhere	
<i>LRF-NMME</i>		 Almost Algeria		 S  Elsewhere	
<i>IRI</i>	 SE Atl side  Elsewhere	 NW  Elsewhere			
Synthesis	No special scenario over the Center-West. Probably normal to above normal conditions elsewhere.	Probably normal to 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: Atl

2. Seasonal precipitation forecast

Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>					
<i>ECMWF</i>	 Almost Morocco	 NE  Elsewhere	 Almost Tunisia	 NW  Elsewhere	 N  Elsewhere
<i>UK Met-Office</i>		 C  Elsewhere	 N  Elsewhere	 Almost Libya	
<i>C3S</i>	 Almost Morocco	 SE  Elsewhere		 S  Elsewhere	
<i>LRF-NMME</i>	 Almost Morocco	 N & E  SE  Elsewhere		 NW  S  Elsewhere	 C & S  Elsewhere
<i>IRI</i>	 S  Elsewhere	 NW  NE  Elsewhere	 S  Elsewhere	 Almost Libya	 N  Elsewhere
Synthesis	Probably normal to below normal conditions over the North region. No special scenario elsewhere	Probably normal to below normal conditions over the Northwestern region. No special scenario elsewhere	No special scenario.	Probably normal to below normal conditions over the North. No special scenario elsewhere	Probably normal to below normal conditions over the North. No special scenario elsewhere

Legend



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