

ROYAUME DU MAROC

Secrétariat d'Etat auprès du Ministre de
l'Équipement,
du Transport, de la Logistique et de l'Eau,
Chargé de l'Eau

DIRECTION DE LA METEOROLOGIE NATIONALE



المملكة المغربية
كتابة الدولة لدى وزير التجهيز والنقل
واللوجستيك والماء،
المكلفة بالماء
مديرية الأرصاد الجوية الوطنية

SEASONAL FORECAST OUTLOOK for North Africa

November-December-January 2018/19 issued October 2018

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 November-December-January 2018/19:

- For temperature:
 - ✚ Normal to above normal condition over Morocco.
 - ✚ Above normal conditions over Algeria, Tunisia, Libya and Egypt.
- For precipitation:
 - ✚ Normal to below normal conditions over Morocco, Algeria, Libya and Egypt.
 - ✚ Below normal conditions over Tunisia.





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 for November-December-January 2018/19

1. Seasonal temperature forecast











































Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
ARPEGE-Climat	 Atl coast&S  Elsewhere	 C  Elsewhere			
ECMWF	 SE&NE  Elsewhere	 S&Extreme N  Elsewhere		 Almost Libya	
UK Met-Office					
EUROSIP					
LRF-NMME					
IRI	 SE  Elsewhere	 Elsewhere  N	 S  Elsewhere	 Elsewhere  Extreme N	
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:Cente

2. Seasonal precipitation forecast

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

Legend



Below-Normal



Normal



Above-Normal



No special scenario

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