

Royaume du Maroc

Ministère délégué auprès du Ministre
de l'Énergie des Mines de l'Eau et de
l'Environnement, chargé de l'Eau
Direction de la Météorologie Nationale



المملكة المغربية
الوزارة المنتدبة لدى وزير
الطاقة و المعادن و الماء و البيئة
المكلفة بالماء
مديرية الأرصاد الجوية الوطنية

SEASONAL FORECAST OUTLOOK for North Africa

NOVEMBER-DECEMBER-JANUARY 2016/17 issued October 2016

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 (PSY2G3R3) 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: 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 2016/17:

- For temperature:
 - ✚ Above normal conditions over Morocco, Tunisia and Egypt.
 - ✚ Normal to above normal conditions over Algeria and Libya.
- For precipitation:
 - ✚ Normal to below normal conditions over Morocco, Algeria and Tunisia.
 - ✚ No special scenario over 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 for November-December-January 2016/17

1. Seasonal temperature forecast









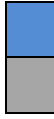




















Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>					
<i>ECMWF</i>					
<i>UK Met-Office</i>		 to 		 to 	
<i>IRI</i>					
Synthesis	Probably above normal conditions	Probably normal to above normal conditions	Probably above normal conditions	Probably normal to above normal conditions	Probably above normal conditions

Legend

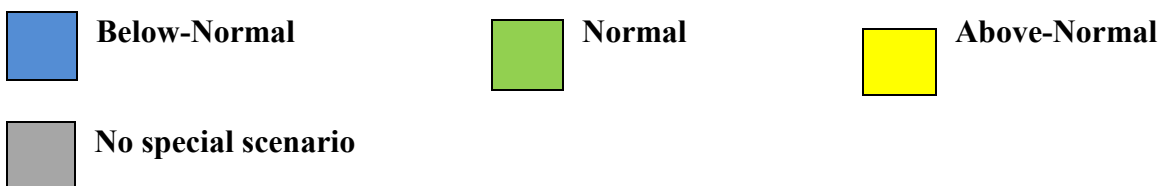
	Below-Normal		Normal		Above-Normal
	No special scenario				

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

2. Seasonal precipitation forecast

Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
<i>ARPEGE-Climat</i>				 to 	 to 
<i>ECMWF</i>	 S Elsewhere	 S Elsewhere	 S Elsewhere	 to 	 to 
<i>UK Met-Office</i>	 to 	 to 	 to 	 to 	 to 
<i>IRI</i>					
Synthesis	Probably normal to below normal conditions	Probably normal to below normal conditions	Probably normal to below normal conditions	No special scenario	No special scenario

Legend



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