

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

July-August-September 2019 issued June-2019

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:


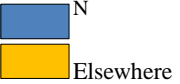
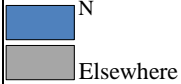
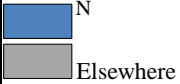

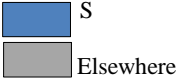
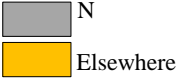

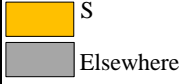
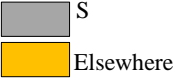






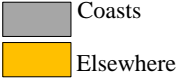













The analysis of current circulation, sea surface temperature, ENSO phenomenon and dynamical/statistical models outputs show probably for July-August-September 2019:

- For temperature:
 - Normal to below normal conditions over the Atlantic Coasts and Southern Morocco.
 - Normal to above normal conditions over the remaining part of Morocco and Northern Algeria.
 - Above normal conditions over the remaining part of Algeria, Libya and Egypt.
 - No special scenario 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 July-August-September 2019

1. Seasonal temperature forecast

Model/multi-model	Morocco	Algeria	Tunisia	Libya	Egypt
ARPEGE-Climat	 SE Elsewhere	 N Elsewhere	 N Elsewhere	 N Elsewhere	 Almost Egypt
ECMWF	 S Elsewhere	 N Elsewhere		 S Elsewhere	 S Elsewhere
UK Met-Office		 Almost Algeria		 Almost Libya	
EUROSIP	 S & Coasts Elsewhere	 Coasts Elsewhere	 Almost Tunisia	 Almost Libya	
LRF-NMME	 C & Coasts Elsewhere	 Almost Algeria	 Almost Tunisia		
IRI	 S Elsewhere		 NW Elsewhere	 N Elsewhere	 N & E Elsewhere
Synthesis	Probably normal to below normal conditions over the Atlantic Coasts & South and normal to above normal elsewhere.	Probably normal to above normal conditions over the North and above normal elsewhere.	No special scenario.	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