

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

April-May-June 2019 issued March-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 April-May-June 2019:

- For temperature:
 - ✚ Near normal conditions over Tunisia, Northern of Morocco, Algeria, Libya and Egypt.
 - ✚ 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 for March-April-May 2019

1. Seasonal temperature forecast

| Model/multi-model | Morocco | Algeria | Tunisia | Libya | Egypt |
|----------------------|---|---|--|--|---|
| <i>ARPEGE-Climat</i> |  |  |  |  |  |
| <i>ECMWF</i> |  N  S  Elsewhere |  |  |  Almost Libya |  Ext NE  Elsewhere |
| <i>UK Met-Office</i> |  |  Ext N & SE  Elsewhere |  Ext N  Elsewhere |  N  Elsewhere |  Almost Egypt |
| <i>EUROSIP</i> |  N & Atlantic Coast S  Elsewhere |  Almost Algeria |  |  Ext N  Elsewhere |  Almost Egypt |
| <i>LRF-NMME</i> |  |  |  |  Almost Libya |  |
| <i>IRI</i> |  N  Elsewhere |  SE  Elsewhere |  Ext NE & CE  Elsewhere |  W & Ext S  Elsewhere |  Almost Egypt |
| Synthesis | Probably near normal conditions over the North | Probably near normal conditions over the North | Probably near normal conditions | Probably near normal conditions over the North | Probably near normal conditions over the North |

Legend

 **Below-Normal**
  **Normal**
  **Above-Normal**
 **No special scenario**

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