#### Royaume du Maroc

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



# المملكة المغربية الوزارة المنتدبة لدى وزير الوزارة المنتدبة لدى وزير الطاقة و المعادن و المساء المكلفة بالمساء مديرية الأرصاد الجويسة الوطنية

## SEASONAL FORECAST OUTLOOK for North Africa NOVEMBER-DECEMBER-JANUARY 2015 issued October 2015

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 October-November-December 2015 :

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

NB: <u>Precipitation forecasts are given for September to May (the main rainy season). Temperature forecasts are given for January to December.</u>

#### Tables summarizing seasonal forecast for November-December-January 2015

#### 1. Seasonal temperature forecast

| Model/multi-model | Morocco                                   | Algeria                                   | Tunisia                                   | Libya  | Egypt                                     |
|-------------------|---|---|---|--|---|
| ARPEGE-Climat     |   |   |   |  |   |
| <b>ECMWF</b>      |   |   |   | N<br>S   | N<br>S                                    |
| UK Met-Office     |   |   |   |  |   |
| IRI               |   |   |   |  |   |
| Statistical model |   |   |   |  |   |
| Synthesis         | Probably<br>above<br>normal<br>conditions | Probably<br>above<br>normal<br>conditions | Probably<br>above<br>normal<br>conditions | Probably<br>normal to<br>above<br>normal<br>conditions | Probably<br>above<br>normal<br>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                            |
|-------------------|--|--|--|----------------------------------|----------------------------------|
| ARPEGE-Climat     |  |  |  | SE<br>Elsewhere                  | SW<br>Else                       |
| <b>ECMWF</b>      |  |  |  |                                  |                                  |
| UK Met-Office     |  |  |  | to                               |                                  |
| IRI               |  |  |  |                                  |                                  |
| Synthesis         | Probably<br>normal to<br>below<br>normal<br>conditions | Probably<br>normal to<br>below<br>normal<br>conditions | Probably<br>normal to<br>below<br>normal<br>conditions | Probably<br>normal<br>conditions | Probably<br>Normal<br>conditions |

### Legend

Below-Normal (B)

No special scenario

No special scenario

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