



REGIONAL CLIMATE OUTLOOK FORUM

PRESANORD-09

Marrakech, Maroc 26th November 2015



THEME: “Seasonal forecast: Climate Service for better management of risks and opportunities related to climate variability and change for sustainable development”

SEASONAL CLIMATE OUTLOOK BULLETIN
VALID FOR DECEMBER-JANUARY-FEBRUARY 2015-2016
IN NORTH AFRICA,
(MARRAKECH, 26th NOVEMBER 2015)

Produced by
The African Centre of Meteorological Applications for development (ACMAD) in collaboration with
National Meteorological and Hydrological Services of North Africa, WMO designated Global Producing
Centers for Long Range Forecasts and the International Research Institute for Climate & Society at
Columbia University in New-York USA.

This is a product of the Institutional Support to African Climate Institution Project (ISACIP) funded by the African Development Bank group.

A- RECENT CLIMATE CONDITIONS AND OUTLOOK

Consensual Seasonal forecast for DJF2015/2016 season over RCC-North Africa is based on known teleconnections of large and regional patterns, on dynamical and statistical models.

A strong El Niño continued during November as indicated by well above-average sea surface temperatures (SST) across the central and eastern equatorial Pacific Ocean. These conditions are associated with enhanced convection over the central and eastern tropical Pacific and with suppressed convection over Indonesia. Most models indicate that a strong El Niño will continue through the Northern Hemisphere winter 2015-16, followed by weakening and a transition to ENSO-neutral during the late spring or early summer. El Niño has already produced significant global impacts and it is expected to affect positively temperature anomalies in most regions over North Africa.

SST patterns in the Tropical Northern Atlantic may offer some predictability for this winter, especially over Morocco, due to the anomalously warm water in the tropical region. The QBO is currently in the westerly phase that can drive positive NAO over our region. This atmospheric phenomenon doesn't enhance the rain over North Africa.

The maps show the probabilistic consensus forecast for 3 categories of anomalies for seasonal mean temperature and precipitation

Given these SST anomalies, sub-surface temperature patterns and trends, knowledge and understanding of seasonal climate variability in Africa, and available long range forecasts products, the following outlooks are provided for December-January-February (DJF) 2015/16 seasons across North Africa (see figures below):

Precipitation:

- Near average to below precipitation is likely over northern and along coastal part of southern Morocco and northwest Algeria (figure 1 zone I).
- Below average precipitation is very likely over most of Algeria, Libya, Tunisia and Egypt (figure 1 Zone II).
- Near to below average precipitation is very likely over southeastern Libya and southern Egypt (figure 1 zone III).

Temperature

- Above average temperature is very likely over Morocco, Tunisia, most of Algeria and western Libya (figure 2 Zone I).
- Near to above average temperature is likely over southern Algeria, eastern and southern Libya and Egypt (figure 2 Zone II).



**SEASONAL PRECIPITATION FORECAST
VALID FOR DECEMBER-JANUARY-FEBRUARY 2015-2016
ISSUED ON NOVEMBER 25 2015**

**PREVISION CLIMATIQUE SAISONNIERE DES PRECIPITATIONS
VALABLE POUR DECEMBRE-JANVIER-FEVRIER 2015-2016
ELABOREE LE 25 NOVEMBRE 2015**

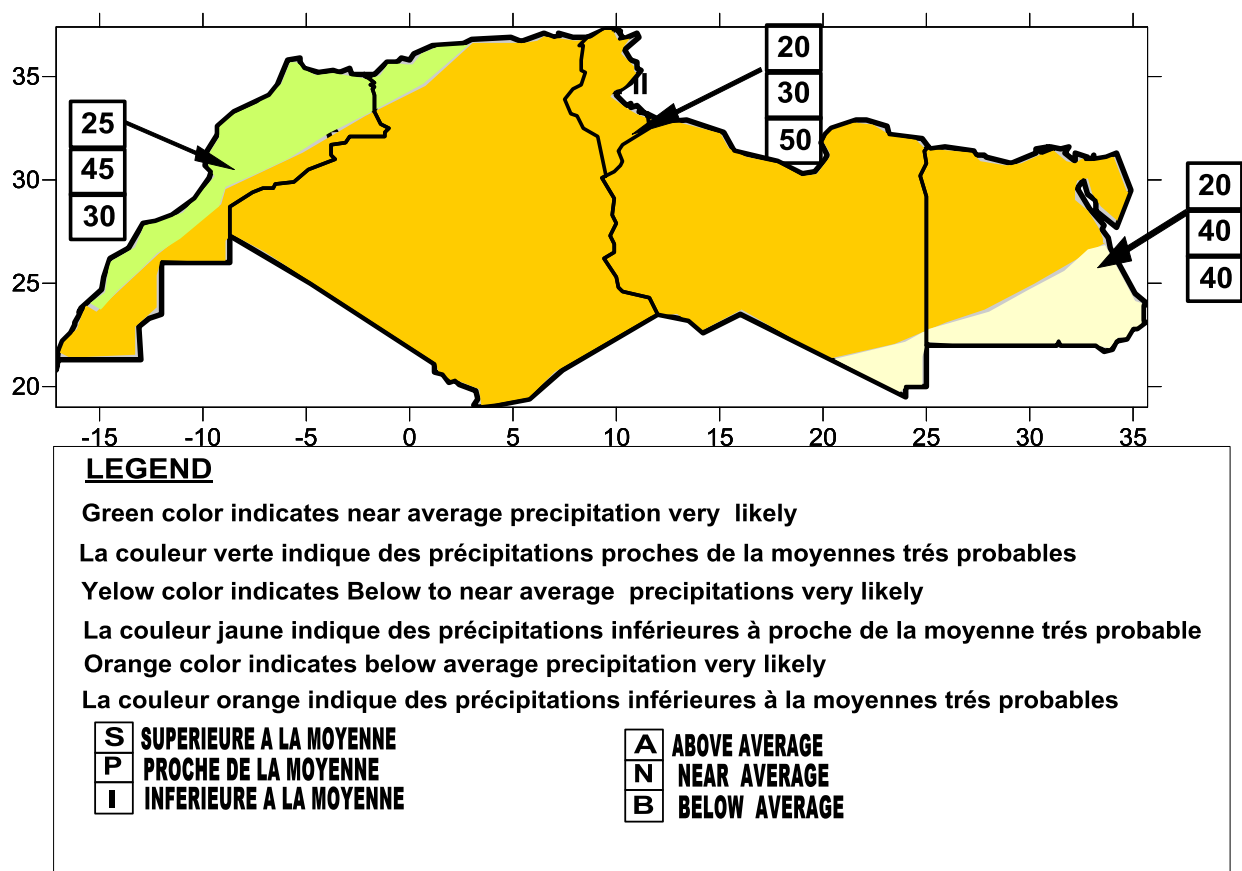


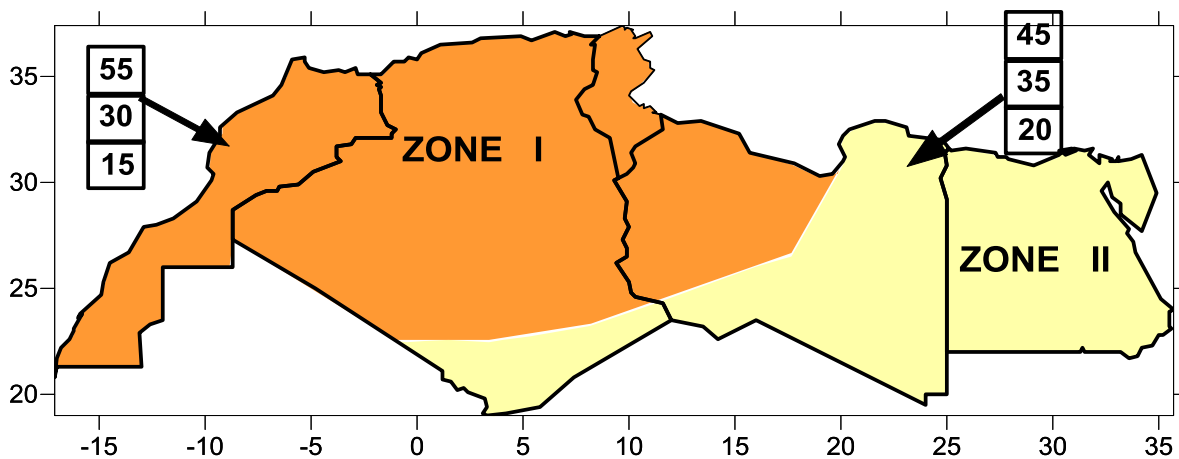
Figure 1: Seasonal forecast of precipitation for DJF 2015-2016



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**SEASONAL TEMPERATURE FORECAST
VALID FOR DECEMBER-JANUARY-FEBRUARY 2015-2016
ISSUED ON NOVEMBER, 25 2015**

**PREVISION CLIMATIQUE SAISONNIERE DESTEMPERATURES
VALABLE POUR DECEMBRE-JANVIER-FEVRIER 2015-2016
ELABOREE LE 25 NOVEMBER 2015**



LEGEND

Orange color indicates above average temperature very likely

La couleur orange indique des températures au dessus des moyennes très probable

Yellow color indicates above to near average temperature very likely

La couleur jaune indique des températures supérieures à proche de la moyenne très probable

S	SUPERIEURE A LA MOYENNE
N	PROCHE MOYENNE
I	INFERIEURE A LA MOYENNE

A	ABOVE AVERAGE
N	NEAR AVERAGE
B	BELOW AVERAGE

Figure 2: Seasonal forecast of temperature for DJF 2015-2016

This outlook is produced at the regional scale. Thus, its interpretation should be for regional use. For local and/or country adaptation and applications needs, it is highly recommended to consult the National Meteorological and Hydrological Services of North African countries for local details.

**B- SOME ADVICES AND ACTIONS OPTIONS FOR SECTORS DURING DECEMBER-
JANUARY-FEBRUARY 2015-2016**

ZONE I, II AND III: BELOW/ NORMAL TO NORMAL PRECIPITATION VERY LIKELY

- ✓ Prepare more water resources for irrigation;
- ✓ Use drought resistant crop varieties;
- ✓ Use irrigation system for crops
- ✓ Optimize water dams resources exploitation

ZONE I: ABOVE NORMAL TEMPERATURE VERY LIKELY

- ✓ contact National Meteorological and Hydrological Services for information on temperature ranges of the above normal category and convey it to tourists;
- ✓ advise tourist to bring sun glasses and other necessary clothes;
- ✓ plan for transport using cars equipped with air conditioning systems;
- ✓ advise tourist to bring enough drinking water;
- ✓ organise walk on paths around villages or near roads;
- ✓ prepare additional dromedary
- ✓ use drought resistant crops and plants
- ✓ minimize the use of energy to produce electricity

ZONE II: NEAR NORMAL TEMPERATURE VERY LIKELY

- ✓ collect near to above temperature ranges and distribute to tourists;
- ✓ keep the paths usually followed by tourists;
- ✓ advise tourists to bring their normal equipments;

Users are strongly advised to contact their National Meteorological and Hydrological Services as well as ACMAD website (www.acmad.org) for further expert advices and assistance.