Institution Africaine parrainée par la CEA et l'OMM



African Institution under the aegis of UNECA and WMO



## REGIONAL CLIMATE OUTLOOK FORUM **PRESANORD-03** Tunis, Tunisia 24<sup>th</sup> – 28<sup>th</sup> September, 2012



### THEME: "Seasonal forecast: Climate Service for Risk Management and

Adaptation to Climate Change for Sustainable Development"

SEASONAL CLIMATE OUTLOOK VALID FOR OCTOBER –NOVEMBER-DECEMBER 2012 IN NORTH AFRICA, (TUNIS, 26th SEPTEMBER 2012)

# **SUMMARY**

Above normal Temperature is very likely over much of North Africa. Precipitation is more likely to be quite close to normal with slight deficits over coastal parts of Morocco and adjacent areas in Algeria and slight excess over coastal parts of African countries of the eastern Mediterranean region.

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 of Columbia University in New-York USA.

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#### A- RECENT CLIMATE CONDITIONS AND OUTLOOK

La Nina dissipated in April 2012 followed by ENSO-neutral conditions from May to June 2012. From July to September 2012, Equatorial Pacific Sea Surface Temperatures (SST) have been warmer than average to be close to an El Nino situation. Most dynamical models predict a transition from ENSO-neutral to El Nino by then end of 2012. A weak to moderate El Nino is expected during Northern Hemisphere winter of 2012/2013;

SST anomalies of 1°C above average off the Atlantic coast of Morocco, Spain and Portugal were recorded in June, July and August 2012. However, SSTs over the entire tropical north Eastern Atlantic have been mostly near average. Analysis of historical data, statistical and dynamical models outputs indicate near average conditions over tropical north Atlantic from September to December 2012. However, the warmer than average SST pattern over parts of tropical Eastern north Atlantic observed during the past few months is expected to persist. This pattern has been related to warmer than average near surface temperature over much of continental North Africa;

Above average SSTs were recorded over the western and the southeastern tropical Indian ocean off the coast of Australia. Below average SSTs conditions were observed near Indonesia and north Australia. Observed trends and models outputs are favorable for a persistence of these anomalies from September to December 2012;

Over the Mediterranean Sea, above average SSTs have been observed over the past few months. Observed trends and models outputs support an evolution towards near average SSTs conditions from September to December 2012;

Given global tropical SSTs patterns and related trends above, knowledge and understanding of regional climate variability and predictability, analysis and interpretation of Global Producing Centers for Long Range Forecasts and related Lead Centers products, analog years and composite analysis, the following precipitation and near surface air temperature patterns are expected during October-November-December 2012 in North Africa (see figures I and II below):

- Near normal to below normal precipitation very likely (figure I) over much of Morocco and coastal western Algeria (zone I of figure I). About 70% to 110% of normal precipitation is expected for zone I;

- Near normal to above normal precipitation very likely (figure I) over coastal Mediterranean areas in Libya, Western Egypt, Eastern Algeria and Tunisia (zone II). About 90% to 130% of normal precipitation is expected for zone II;

- Above normal Temperature very likely (figure II) over much of continental North Africa from southern Algeria to south western Egypt (zone IV);

Above normal to near normal Temperature very likely (figure II) over much Southern Morocco (zone V)

Near normal Temperature very likely (figure II) over coastal parts of North African countries from northern Morocco to Western Egypt (zone I and II);

Near normal to below normal Temperature very likely (figure II) over the Eastern half of Egypt (zone III).



Figure 1: Seasonal forecast of precipitation for OND 2012



#### Figure 2: Seasonal forecast of temperature for OND 2012

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 THE TOURISM SECTOR DURING OCTOBER-NOVEMBER-DECEMBER 2012

Given the temperature outlook above and interactions with experts of the sub-regional tourism sector, the following advices and action options are proposed to reduce climate risks and maximize opportunities to improve contribution of the tourism sector to socioeconomic development in North Africa from October to December 2012:

#### ZONE IV AND V: ABOVE NORMAL TEMPERATURE VERY LIKELY

 $\checkmark$  contact National Meteorological and Hydrological Services for information on temperature ranges of the above normal category and convey it to tourists;

- $\checkmark$  advise tourist to bring sun glasses and other necessary clothes;
- $\checkmark$  plan for transport using cars equipped with air conditioning systems;
- $\checkmark~$  advise tourist to bring enough drinking water;
- $\checkmark$  shorten duration of daytime walk ;
- $\checkmark\,$  organise walk on paths around villages or near roads;
- ✓ Prepare additional camels.

ZONE I, ZONE II ET III : NEAR NORMAL TEMPERATURE VERY LIKELY

 $\checkmark$  collect from National meteorological and Hydrological services near to above normal temperature ranges and distribute to tourists;

- ✓ keep paths usually followed by tourists;
- ✓ advise tourists to bring their normal equipments;
- ✓ support advertisement campaigns indicating that near normal temperatures are very likely;

 $\checkmark$  keep contact with National Meteorological and Hydrological Services for weather monitoring and forecasts information.

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