



REGIONAL CLIMATE OUTLOOK FORUM

# PRESANORD-05

Tripoli, Libya 02<sup>nd</sup> - 05<sup>th</sup> December, 2013



**THEME:** *“Seasonal forecast: Climate Service for risk management in the Agriculture, Water Resources and Health Sectors”*

## The Regional Climate Outlook Forum for North Africa

### REPORT

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.*

## EXECUTIVE SUMMARY

The 5<sup>th</sup> Regional climate Outlook Forum for North Africa(PRESANORD-05) was held in Tripoli from 02 to 05 December 2013.

The experts from National meteorological and Hydrological services of participating countries were introduced to the use available seasonal forecasting tools and products during the pre-forum training and forecast production. Outputs from national statistical models, Climate prediction tool developed by IRI at Columbia University, expert knowledge and analysis of climate variability, Global Producing Centers for Long Range Forecasts and Regional Climate Centres were considered to derive a consensus outlook product valid for December-January-February 2013/14 over the region. The consensus product was presented to media and user sectors on December 04, 2013 with discussions on impacts and advices. The outlook was widely disseminated on December 05, 2013. It contained the following information:

- Below normal to near normal precipitation very likely over most of Morocco and western Algeria;
- Near normal precipitation very likely over northern Libya, south eastern Tunisia and north western Egypt;
- Above normal precipitation very likely over much of Tunisia and north eastern Algeria;
- Above normal to near normal Temperature very likely over much of Morocco and western Algeria;
- Near normal to above normal Temperature very likely over Tunisia, much of northern Algeria, northern Libya and north western Egypt;

Participants agreed to continue dissemination of the outlook in their respective countries and report back to the next Outlook forum.

## GENERAL SUMMARY OF THE WORK

### 1. OPENING

- 1.1 The forum objectives and expected outcomes was presented by ACMAD on December 02, 2013 followed by forecasting methods, tools and products from December 02 and 03, 2013.
- 1.2 The forum was officially opened by the Director General of the Libyan National Meteorological Centre representing his Excellency the Minister in charge of meteorology at 09.00 hours on December, 04 2013 at the Libyan National Meteorological Centre in Tripoli.
- 1.3 Dr. Benjamin LAMPTEY, representing the Director General of ACMAD thanked the government of Libya for accepting to host the event and expressed wishes for a fruitful forum.

### 2. ORGANIZATION OF THE FORUM

#### 2.1 Agenda

2.1.1 The agenda included a pre-forum for two days and a two days forum proper. The Pre-forum was held from December 02 to 03, 2013 to train national experts, exchange on new developments in seasonal forecasting and produce the climate outlook product presented and discussed during the forum. The pre-forum phase was mostly attended by experts from the climate community of northern African countries and international experts. The provisional agenda is provided in Annex I to this report.

#### 2.2 Working arrangements

2.2.1 The participants agreed on the working hours and other practical arrangements for transportation, breaks and lunch. Noting that a number of participants were new to the forum, a brief introduction among country and international experts was made to facilitate interactions throughout the forum. The list of participants in the meeting is provided in Annex II to this report.

2.2.2 The climate outlook bulletin prepared and distributed at the forum (see annex III) will be posted on the ACMAD and WMO websites.

### 3. GLOBAL&REGIONAL CLIMATE VARIABILITY AND CONSENSUS OUTLOOK

3.1 The Global Framework for Climate Services was presented by ACMAD followed by the global and regional observed climate anomalies. ACMAD experts provided training on seasonal forecasting with the Climate Predictability Tool.

Following the training, participating country experts prepared and presented national outlooks and ACMAD provided a summary of Global Producing Centres for Long Range Forecast products, the MEDCOF -01 outlook and the continental seasonal forecasts for all Africa. A forecast discussion leading to the production of the consensus outlook for December—January-February 2013/14 was completed on December 03, 2013.

3.2 After the opening ceremony (see section above I), the seasonal consensus outlook was presented by ACMAD followed by discussions on relevant advises and action options (see annex III ).

3.2.2 Country participants provided information on national strategies for communicating climate information. Discussions on approaches to improve communication of climate information led to some of the recommendations provided below.

### 4. CONCLUSIONS AND RECOMMENDATIONS

Based on presentations and discussions under the previous agenda items, the forum concluded and recommended the following:

#### Recommendation 1:

The Forum encourages formal and multidisciplinary collaborative framework that will include all user sectors, the media and National Meteorology Services (NMS).

#### Recommendation 2:

The forum encourages governments to financially support NMSs to organize national fora after regional fora for seasonal forecasts to further facilitate the use of forecast results. The main elements of national fora are:

- Capacity development for user sectors (Agriculture, Health care, Civil Protection, Trade and media);
- Improvement of climate information applications in the health, agriculture, trade, tourism and other sectors;
- Improvement of information dissemination using new information technologies

#### Recommendation 3:

Forum participants encourage NMS to get involved in the activities of NGOs and associations working in the field of climate change to assess their needs and provide appropriate technical assistance.

#### Recommendation 4:

Forum encourages NMS to continue or to start producing and publishing regularly dekadal and monthly bulletins and interact with user areas for advice and guidance.

#### Recommendation 5:

For better dissemination of climate information, the forum encourages the involvement of the media in communication, education and information on best practices and the impact of climate information in health, agriculture and other sectors. The Forum recommends that the NMSs develop a communication and awareness strategy to mobilize the government support for climate applications.

#### Recommendation 6:

The Forum recommends that the WMO, ACMAD, Countries and other partners provide financial support to strengthen the capacity building of climate services stakeholders.

#### Recommendation 7:

The Forum recommends the preparation of a plan for the implementation of recommendations of this forum. Countries are encouraged to nominate focal points for monitoring the implementation of recommendations and reporting to ACMAD.

#### Recommendation 8:

The forum recommends an extension of the forum period from four to five days.

#### Recommendation 9:

The forum recommends special training on analysis and visualization software (surfer, ArcGIS, GRADs, NCL, NCO...).

#### Recommendation 10:

The forum recommends more training on downloading, analyzing global products and downscaling using CPT and RCM.

#### Recommendation 11:

The forum recommends further training on analysis and forecasting of extreme climate events.

## 6. CLOSING

13.1 A presentation of forum results with emphasis on expected climate patterns and advices to the general public was presented to participants.

13.2 The forum (PRESANORD-05) closed at 13:00 on December 05, 2013 with a speech of the Director General of the Libyan National Meteorological Centre representing his Excellency the Minister in charge of meteorology.



<p>Day 3 Dec 04, 2013</p>	<p><b>Session1: Climate Outlook for DJF 2013/14</b></p> <p><b>Chair: LNMC      Rapporteurs: Algeria/Egypt</b></p> <p>10h45-11h15 : Summary of global climate and outlook for North Africa  11h00-11h15: All Africa outlooks for DJF 2013/14  11h15-11h30: North African LRF Node outlooks for DJF 2013/14  11h30-12h10: Regional consensus outlook for DJF 2013/14 over North Africa</p> <p>12h10-12h30: Discussions</p> <p>12H30-14H00: Lunch Break</p> <p><b>Session2: National outlooks and communication</b></p> <p><b>Chair: ACMAD      Rapporteurs: Algeria/Egypt</b></p> <p>14h00-15h30 : National outlooks for DJF 2013/14</p> <p>15h30-16h00: Communication of the past outlooks to national users by countries</p>	<p>ACMAD/GPCs Countries</p>
	<p>16h15-17h00: Cocktail reception</p>	<p>All</p>
<p>Day 4 Dec 05, 2013</p>	<p>09h00-10h15: Communication of seasonal forecasts: Lessons learnt from Agriculture, water, disaster and health sectors in the countries</p> <p>10h15-10h30: Collection and Presentation of sessions reports and Conclusions  10h30-10h45: Break</p> <p><b>Session3: Closing ceremony</b></p> <p><b>Chair: Libya      Rapporteurs: Algeria/Egypt</b></p> <p>10h45-11h00: Remarks by PR of Libya with WMO  11h00-11h15: Remarks by Countries  11h15-11h30 Remarks by WMO  11h30-11h45: Remarks by ACMAD  11h45-12h00: Closing speech by the Representative of the Libyan Government  12h00:            End of Forum</p>	<p>Algeria, Tunisia, Libya, Egypt ACMAD</p>

## ANNEX II: List of Participants

N°	Nom/Prénom	Pays	Adresse /Email	Institution	Position
01	Mohamed Hussein Korany	Egypte	Egyptian Meteorological Authority (EMA) Kobry El-Guobba, P.O.Box.11784 EL-Kalefa El Mammon St., Cairo, Egypt <a href="mailto:M_korany2002@yahoo.com">M_korany2002@yahoo.com</a> <a href="mailto:Mkorany2002@gmail.com">Mkorany2002@gmail.com</a> <a href="mailto:Ema.support@ema.gov.eg">Ema.support@ema.gov.eg</a>	Egyptian Meteorological Authority (EMA)	Senior Researcher
02	BELGHRISSI Haythem	Tunisie	National Institut of Meteorologie, Tunis, Haythem.belghrissi@hotmail.fr	National Institut of Meteorologie	Principal Engineer, Service Climate Study and Climate Change
03	Lotfi Halimi	Algerie	National Meteorology Office of ALGERIA Avenue Khemisti B.P 153 Dar El Beida Lotfi.halimi@gmail.com	National Meteorology Office of ALGERIA	Engineer in Geophysics & Meteorology Chief of analysis and climate perspective Section.
04	Benjamin LAMPTEY	Niger	Centre Africain pour les Applications de la Météorologie au Développement (ACMAD) BP : 13184 Niamey-Niger bllampzey@gmail.com	ACMAD	Deputy Director General
05	Bachir El hadji Garba DAN BOUZOUA	Niger	Centre Africain pour les Applications de la Météorologie au Développement (ACMAD) BP : 13184 Niamey-Niger Db_bachir_tn@yahoo.fr	ACMAD	Administration and finance officer
06	Mbaiguedem MIAMBAYE	Niger	Centre Africain pour les Applications de la Météorologie au Développement (ACMAD) BP : 13184 Niamey-Niger gmbaiguedem@yahoo.fr	ACMAD	Climate application specialist



## ANNEXX III: SEASONAL CLIMATE OUTLOOK BULLETIN

CENTRE AFRICAIN POUR LES APPLICATIONS  
DE LA METEOROLOGIE AU DEVELOPPEMENT



AFRICAN CENTRE OF METEOROLOGICAL  
APPLICATIONS FOR DEVELOPMENT

Institution Africaine parrainée par la CEA et l'OMM

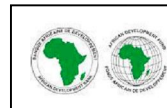
African Institution under the aegis of UNECA and WMO



REGIONAL CLIMATE OUTLOOK FORUM

### PRESANORD-05

Tripoli, Libya 02<sup>nd</sup> - 05<sup>th</sup> December, 2013



AFRICAN DEVELOPMENT  
BANK GROUP

**THEME:** *“Seasonal forecast: Climate Service for risk management in the Agriculture, Water Resources and Health Sectors”*

SEASONAL CLIMATE OUTLOOK BULLETIN  
VALID FOR DECEMBER-JANUARY-FEBRUARY 2013-2014  
IN NORTH AFRICA,  
(TRIPOLI, 05<sup>th</sup> DECEMBER 2013)

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.

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## A- RECENT CLIMATE CONDITIONS AND OUTLOOK

From June to November 2013, near average Sea Surface Temperatures (SSTs) were observed over much of the ENSO region. Most models and expert assessments are indicating persistence of near average to above average SSTs in the main ENSO region during the coming few months.

The Tropical North Atlantic and the Mediterranean Sea SSTs have been near to above average during the past few months. Most models outputs and expert assessments are favorable for a persistence of near to above average SSTs in these areas during the coming months.

The equatorial and southern tropical Atlantic SSTs have been mostly near to above average during the past few months. This pattern is expected to evolve slightly towards near to above average SSTs during the coming three to four months particularly over the coastal parts of the domain.

The equatorial western Indian Ocean SSTs have been near average and a limited above average SST pattern characterized part of the Eastern equatorial Indian Ocean during the past few months. These patterns are expected to persist during the coming three to four months.

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) 2013/14 seasons across North Africa (see figures below):

- Below normal to near normal precipitation likely (figure I) over most of Morocco and western Algeria (zone II).
- Near normal precipitation very likely (figure I) over northern Libya, south eastern Tunisia and north western Egypt (zone I).
- Above normal precipitation very likely (figure I) over much of Tunisia and north eastern Algeria (zone III).
- Above normal to near normal Temperature very likely (figure II) over much of Morocco and western Algeria (zone I)
- Near normal to above normal Temperature very likely (figure II) over Tunisia, much of northern Algeria, northern Libya and north western Egypt (zone II).

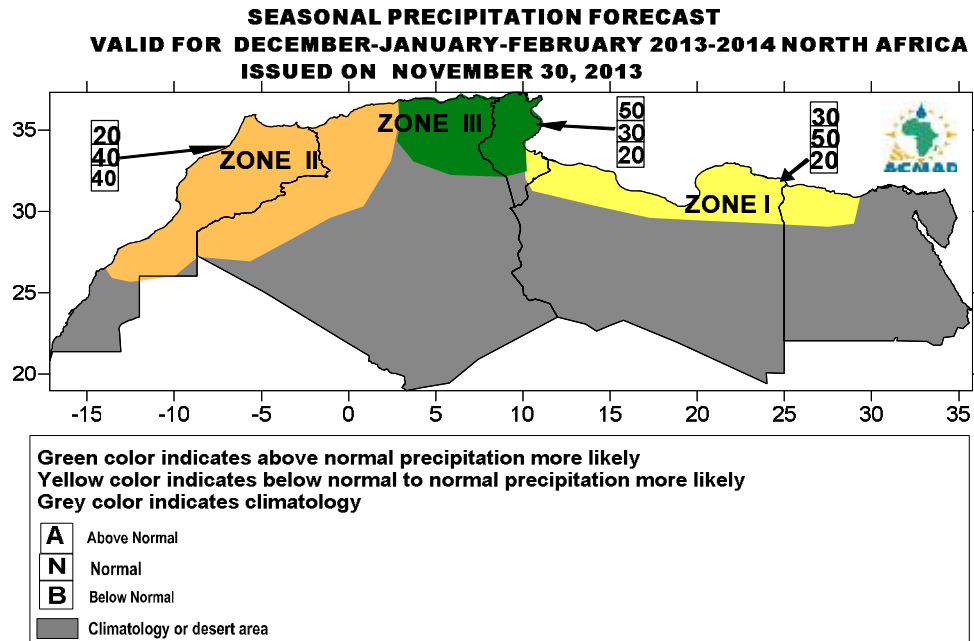


Figure 1: Seasonal forecast of precipitation for DJF 2013-2014

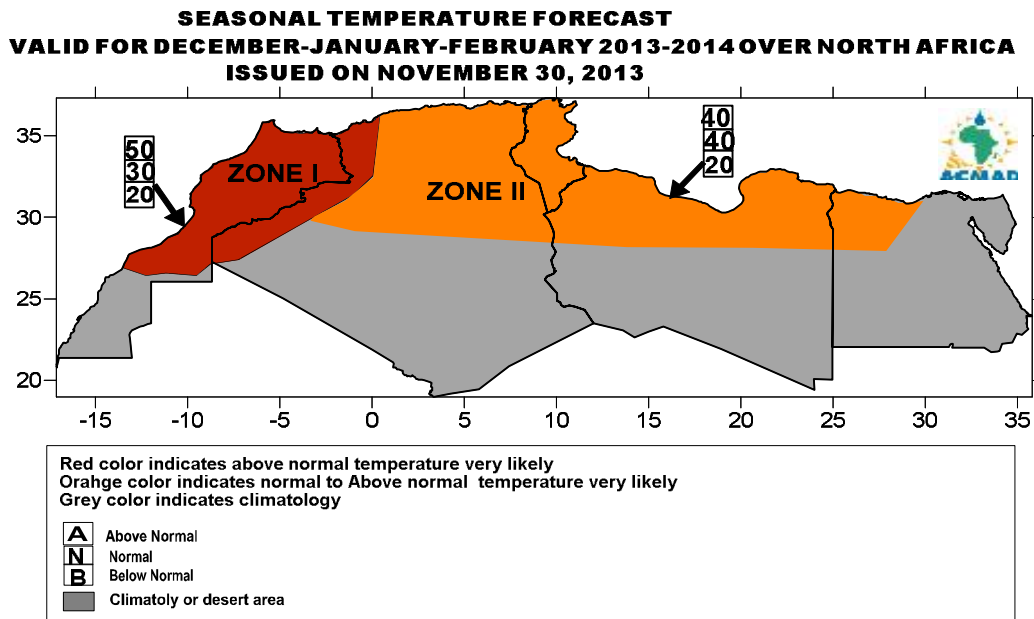


Figure 2: Seasonal forecast of temperature for DJF 2013-2014

*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 2013-2014

*ZONE III AND I: ABOVE NORMAL TO NORMAL PRECIPITATION VERY LIKELY*

- ✓ Maximize food production;
- ✓ Adapt dam management;
- ✓ Survey sanitation system
- ✓ Survey and control floods risk
- ✓ Survey and control insect infestation

*ZONE II: 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](http://www.acmad.org)) for further expert advices and assistance.*