



REGIONAL CLIMATE OUTLOOK FORUM

SWIOCOF-03

Niamey, Niger
November 20, 2014



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 FROM NOVEMBER TO APRIL 2014/15
OVER SOUTH WEST INDIAN OCEAN COUNTRIES
(Niamey, NOVEMBER 20, 2014)

Produced by

The African Centre of Meteorological Applications for development (ACMAD) in collaboration with National Meteorological and Hydrological Services of south west Indian ocean African countries and Meteo-France regional office in La Reunion with support of 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

Given the current circulation, sea surface and sub-surface temperature patterns and trends, models outputs and expert judgment, the cyclone and precipitation outlooks from November to April 2014/15 are as follows:

- The South West Indian Ocean (SWIO) basin is very likely to record near average number of storms (approximately between 9 and 11 storms);
- Tropical cyclones are more likely to follow more southward or southeastward tracks;
- Above to well above average precipitation is very likely over much of Madagascar, the northern half of Mozambique, Comoros, Mauritius, La reunion, parts of Seychelles southern and western parts of Tanzania;
- Near to below average precipitation is very likely over south Africa and adjacent areas in southern Mozambique;
- Given the expected above to well above average precipitation in parts of the region, monitoring and forecasting days to weeks in advance are strongly recommended to anticipate heavy rain and potential floods.

RECENT CLIMATE CONDITIONS AND OUTLOOK

I- STATE OF THE GLOBAL OCEANS AND TRENDS

- In October 2014, near average Sea Surface Temperatures (SSTs) were observed over most of the Equatorial Pacific (ENSO region). Models outputs and experts judgments are favorable for a start of a weak to moderate El Nino during the next 1 to 2 months. It is expected to last into northern hemisphere spring of 2015.
- Above average SSTs developed over the tropical north Atlantic in October 2014 and early November. Most models outputs and expert judgment are favorable for a persistence of this pattern with less warming conditions during the coming few months.
- Below average Sea Surface Temperatures characterize the mid latitude Atlantic ocean in October and early November 2014. This pattern is expected to persist and expand southward towards the subtropical Atlantic during the coming few months.
- The tropical south Atlantic waters have been mostly below average in October and early November 2014. This pattern is expected to evolve toward near average conditions during the coming few months.
- Seas surface temperatures of the western equatorial Indian Ocean and the tropical southern Indian Ocean have been mostly above average in October and early November 2014. Models outputs and experts assessments support a persistence of these patterns during the coming few months.
- The South west Indian Ocean Dipole (SIOD) mode is currently negative and is expected to persist in this phase during much of the cyclone season.

II- PRECIPITATION AND CYCLONE ACTIVITY OUTLOOK

Given these SST anomalies, sub-surface temperature patterns and trends, knowledge and understanding of seasonal climate variability over the South West Indian Ocean region as well as available long range forecasts products, the following outlooks are provided for December-January-February (DJF) 2014/15 precipitation and the November to April 2014/15 cyclone season in the region (see figure 1):

- **The South West Indian Ocean (SWIO) basin is very likely to record near average number of storms (approximately between 9 and 11 storms);**
- **Tropical cyclones are very likely to follow more southward or southeastward tracks;**
- **Above to well above average precipitation is very likely over much of Madagascar, the northern half of Mozambique, Comoros, Mauritius, La reunion, parts of Seychelles southern and western parts of Tanzania;**
- **Near to below average precipitation is very likely over South Africa and adjacent areas in southern Mozambique;**

- Given the expected above to well above average precipitation in parts of the region, monitoring and forecasting days to weeks in advance are strongly recommended to anticipate heavy rains and potential floods.

NB: Users are advised to seek more detailed climate information on the distribution of precipitation during the season, impacts and action options from National Meteorological and Hydrological Services and ACMAD website (www.acmad.org).

**SEASONAL PRECIPITATION FORECAST FOR SOUTH WEST INDIAN OCEAN BASIN
VALID FOR DECEMBER- JANUARY-FEBRUARY 2014-2015
ISSUED ON NOVEMBER 20 2014**

**PREVISION CLIMATIQUE SAISONNIERE DES PRECIPITATIONS
DE DECEMBRE- JANVIER- JANVIER 2014-2015, ELABOREE LE 20 OCTOBRE 2014**

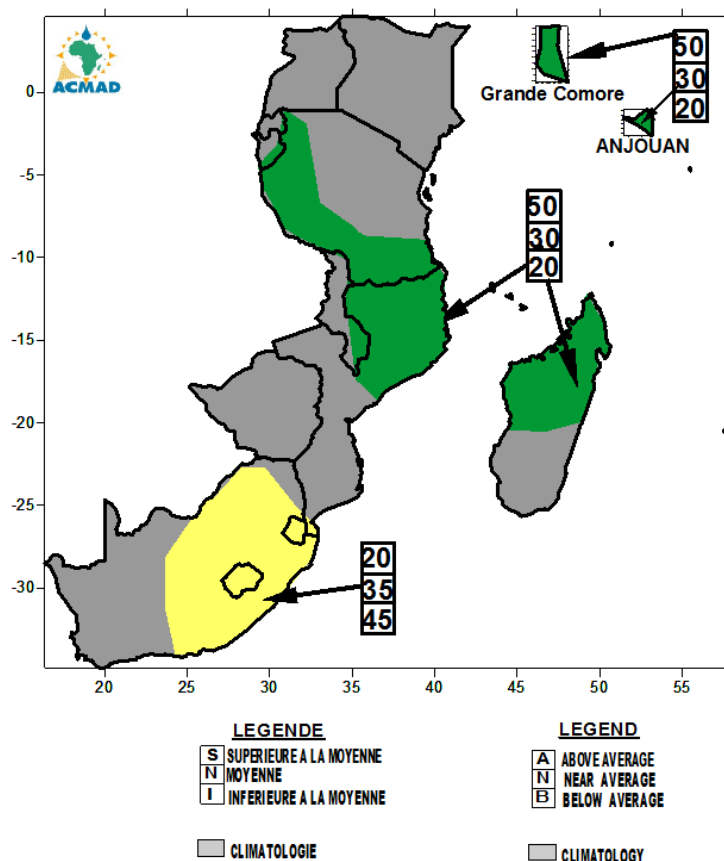


Figure 1: Seasonal forecasts for precipitation valid for December-January-February 2014/15

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 for local details.