

# **STATEMENT FROM THE TWELFTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM (SARCOF-12) HELD IN PRETORIA, SOUTH AFRICA FROM 27 – 28 AUGUST 2008**

## **SUMMARY**

Major parts of the Southern African Development Community (SADC) region will have an increased chance of receiving normal to above-normal rainfall during the period October-December (OND) 2008. However, parts of Namibia, south-western and extreme north-eastern Zambia, western Zimbabwe, bulk of Botswana, South Africa, Lesotho, Swaziland, northern part of Malawi, greater part of Angola, bulk of Tanzania, and southern half of Madagascar have an increased chance of receiving normal to below-normal rainfall during the period OND. In the second half of the season, January-March (JFM) 2009, most parts of SADC will receive normal to below-normal rainfall. However, greater part of the central and eastern half of the region and the western parts of Angola have an increased chance of receiving normal to above-normal rainfall during the period JFM 2009.

## **THE TWELFTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM**

The Twelfth Southern Africa Regional Climate Outlook Forum was held in Pretoria, South Africa from 18 – 28 August 2008. Its main objective was to come up with a SARCOF 12 consensus outlook for the 2008/2009 rainfall season over SADC. Climate scientists from SADC National Meteorological and/ or Hydrological Services (NMHSs) region and the Drought Monitoring Centre (DMC) prepared this outlook. Additional products were received from other global climate prediction centres, UK Met-office, IRI, etc. This outlook covers the major rainfall season OND 2008–JFM 2009. This Outlook is relevant only to seasonal time-scales and relatively large areas and may not fully account for all factors that influence regional and national climate variability, such as local and month-to-month variations (intra-seasonal). Users are strongly advised to contact the National Meteorological and Hydrological Services for interpretation of this Outlook, additional guidance and updates.

## **METHODOLOGY**

In developing the outlook, the scientists took into account principal factors such as the Sea Surface Temperatures (SSTs) in the Indian, Atlantic and Pacific Oceans. The current state of the equatorial Pacific Ocean is in a neutral state and projections point toward the likelihood of neutral El Nino-Southern Oscillation (ENSO) conditions during the next couple of months.

The climate scientists determined likelihoods of above-normal, normal and below-normal rainfall for each area (see Figures 1 and 2). Above-normal rainfall is defined as within the wettest third of historically recorded rainfall amounts; below-normal is defined as within the driest third of rainfall amounts and normal is the middle third, centred on the climatologically median.

## **OUTLOOK**

October to March is the main rainfall season over most of southern Africa. Owing to the differences in the rainfall-bearing systems, the rainy season has been divided into two three-month seasons (i.e. October-December and January to March).

## **CONTRIBUTORS**

The Twelfth Southern African Regional Climate Outlook Forum (SARCOF-12) was hosted by South African Weather Services in collaboration with SADC Drought Monitoring Centre and sponsored by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), World Meteorological Organization (WMO), and the Government of South Africa.

**Rainfall Forecast for October-December 2008**

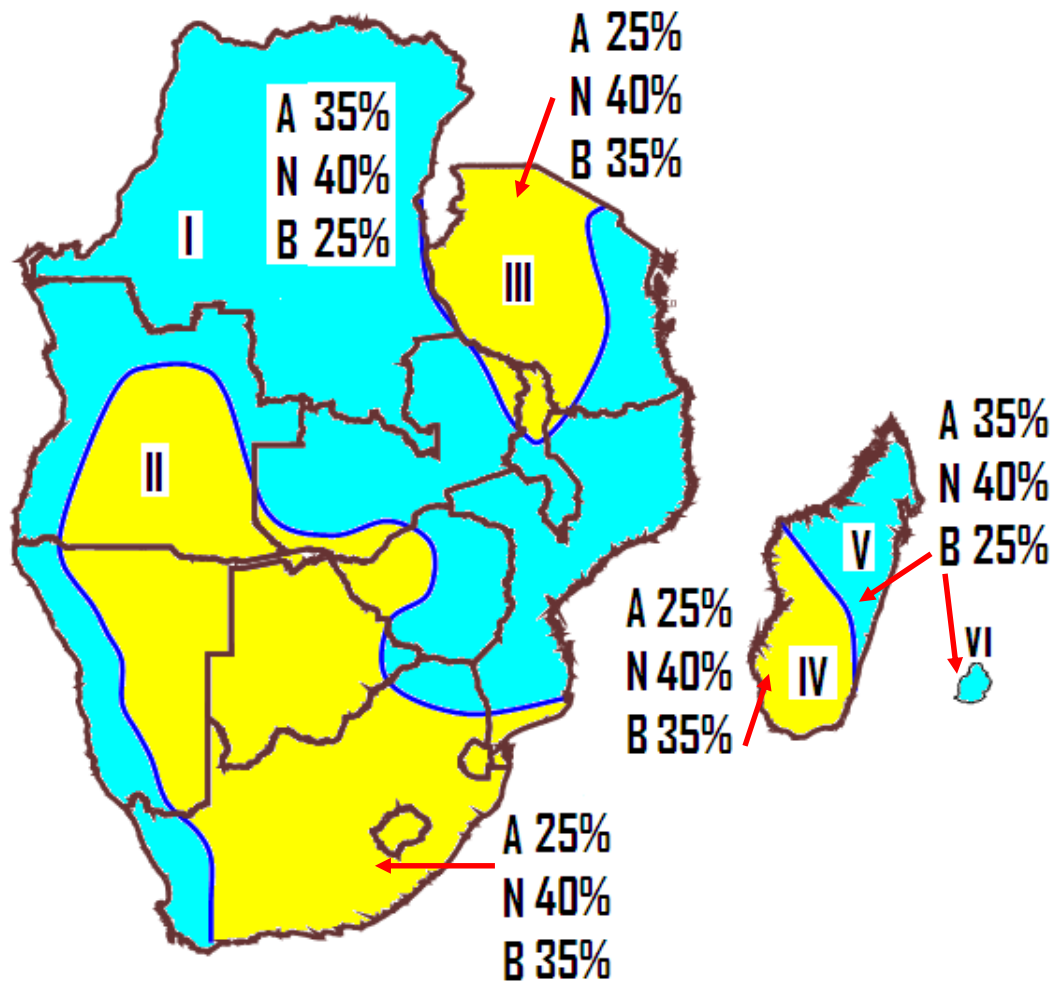


Figure.1. Rainfall Forecast for October-December 2008

**Zone I:** Western coastal South Africa, Namibia, western coastal and northern Angola, DRC, greater part of Zambia, bulk of Zimbabwe, Eastern tip of Botswana, North-eastern tip of South Africa, major part of Mozambique, central and southern part of Malawi and the Eastern parts of Tanzania.

**Increased chances of Normal to Above-normal rainfall.**

**Zone II:** Southern part of Angola, bulk of Namibia, Botswana, extreme south-western Zambia, western Zimbabwe, greater part of South Africa, Lesotho, Swaziland southern tip of Mozambique.

**Increased chances of Normal to Below-normal rainfall.**

**Zone III:** Bulk of Tanzania, northern Malawi, northeastern and southwestern parts of Zambia.

**Increased chances of Normal to Below-normal rainfall.**

**Zone IV:** Southern half of Madagascar.

**Increased chances of Normal to Below-normal rainfall.**

**Zone V:** Northern half of Madagascar  
**Increased chances of Normal to Above-normal rainfall.**

**Zone VI:** Mauritius  
**Increased chances of Normal to Above-normal rainfall.**

### Rainfall Forecast for January- March 2009

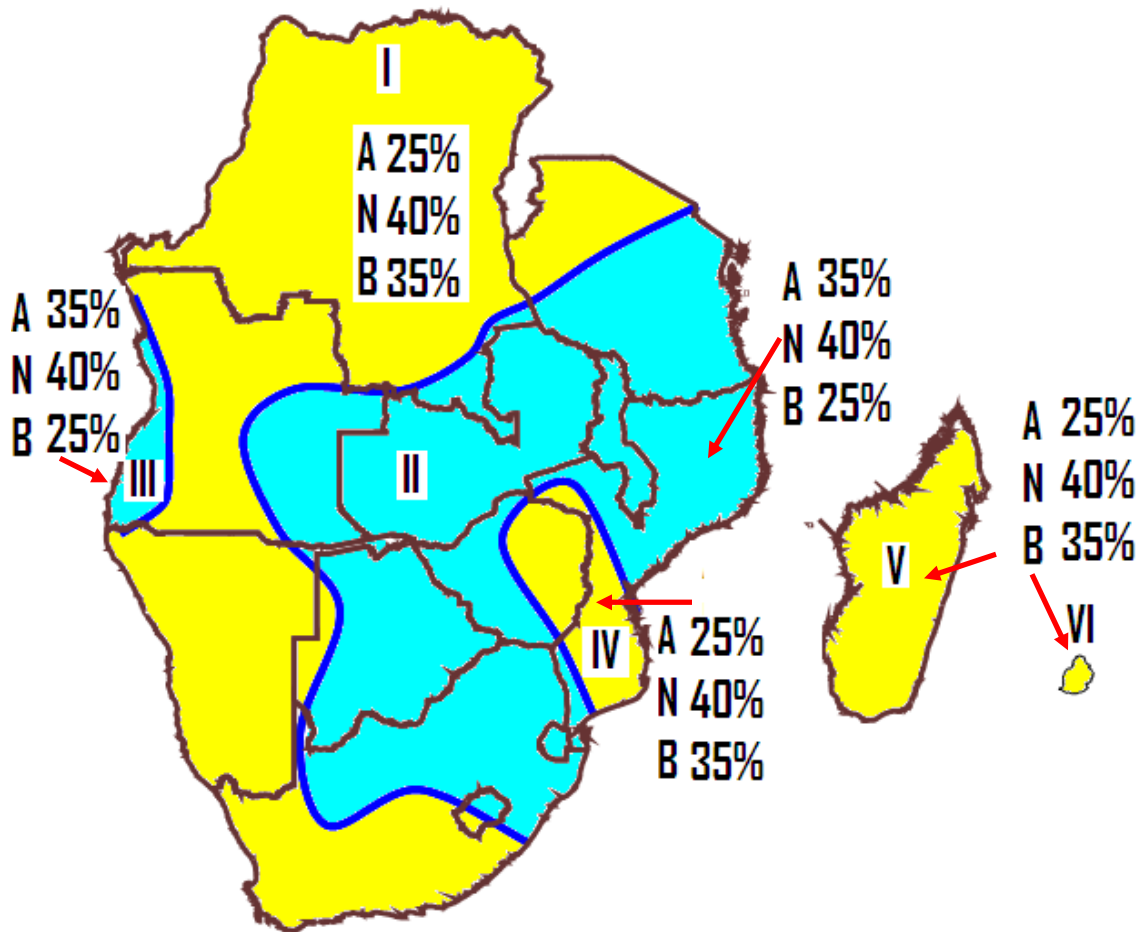


Figure 2. Rainfall Forecast for January-March 2009

**Zone I:** Northern Tanzania, Bulk of DRC, northern and central Angola, Namibia, western flank of Botswana and southern half of South Africa and southern half of Lesotho.

**Increased chances of Normal to Below-normal rainfall**

**Zone II:** Southern Tanzania, extreme southern DRC, south-eastern Angola, bulk of Botswana, northern half of South Africa, northern Lesotho, Swaziland, western half of Zimbabwe, Zambia, Malawi, and greater part of Mozambique.

**Increased chances of Normal to Above-normal rainfall**

**Zone III:** Coastal Angola.

**Increased chances of Normal to Above-normal rainfall**

**Zone IV:** Eastern half of Zimbabwe and central and southern Mozambique.

**Increased chances of Normal to Below-normal rainfall**

**Zone V:** Madagascar

**Increased chances of Normal to Below-normal rainfall**

**Zone VI: Mauritius**

**Increased chances of Normal to Below-normal rainfall**

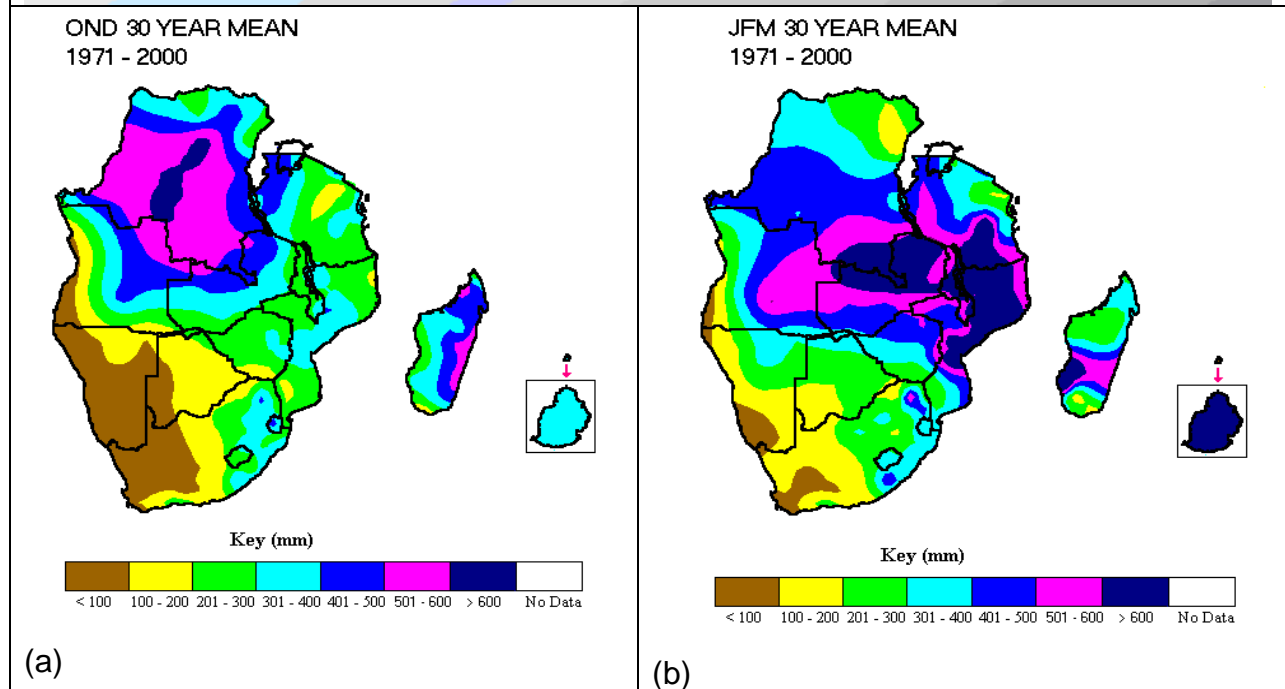
**FIGURE CAPTION**

It is emphasized that boundaries between zones should be considered as transition areas. Forecast information is provided only for countries that comprise the Southern Africa Development Community (SADC) region.

The numbers for each zone indicate the probabilities of rainfall in each of the three categories, below-normal, normal and above-normal.

The top number indicates the probability of rainfall occurring in the above-normal category, the middle number is for normal and the bottom number is for below-normal. For example in the case Figure 1, for Zone II, there is a 35% probability of rainfall occurring in the above-normal category; a 40% probability in the normal category; and 25% probability in the below-normal category.

# Long-term Rainfall Means



**Fig.3. 30-year (1971-2000) mean rainfall over SADC countries (a) OND (b) JFM.**

Figure 3 (a) and (b) show the 30-year (1971-2000) mean rainfall over SADC countries. Rainfall increases from southwest to northeast over contiguous SADC in either case. Over Madagascar the rains increase from west to east, while the rains are more uniformly distributed in Mauritius. The legend shows the amounts in millimeters.