

**STATEMENT OF THE FIFTEENTH SOUTHERN  
AFRICA REGIONAL CLIMATE OUTLOOK  
FORUM (SARCOF-15),  
WINDHOEK, NAMIBIA, 29 – 30 AUGUST 2011.**

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**SUMMARY**

During the period October to December (OND) 2011, the bulk of contiguous Southern African Development Community (SADC), are expected to receive normal to below-normal rainfall. However, northern parts of Tanzania and southern Madagascar are expected to receive above-normal rainfall. The rest of the continental SADC and most of Madagascar and Mauritius are likely to receive normal to above-normal rainfall (Figure 1).

For the period January to March (JFM) 2012, the bulk of conterminous SADC and Mauritius are expected to receive normal to above-normal rainfall. However, the south eastern continental SADC as well as northern parts of Tanzania and Madagascar are expected to receive above-normal rainfall. Most parts of DRC and northern Angola are expected to receive normal to below-normal. The western flank of contiguous SADC is expected to receive below normal rainfall (Figure 2).

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

The Fifteenth Southern Africa Regional Climate Outlook Forum was held in Windhoek, Namibia, 29-30 August 2011 to present a consensus outlook for the 2011/2012 rainfall season over the SADC region. Climate scientists from the National Meteorological and/or Hydrological Services (NMHSs) of the SADC region and the SADC Climate Services Centre (CSC) and the IGAD Climate Prediction and Application Centre (ICPAC) formulated this outlook. Additional products were received from other global climate prediction centres and United Kingdom Met Office, among others. This outlook covers the major rainfall season of SADC i.e from October 2011 to March 2012.

**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, including local and month-to-month variations (intra-seasonal).**

**Users are strongly advised to contact the respective National Meteorological and Hydrological Services and SADC Climate Services Centre for interpretation of this Outlook, additional guidance and updates.**

## **METHODOLOGY**

Using statistical and other climate prediction schemes, the climate scientists determined likelihoods of above-normal, normal and below-normal rainfall for each area (Figures 1 and 2). Above-normal rainfall is defined as lying within the wettest third of recorded (30- year, that is, 1971 -2000 mean) rainfall amounts; below-normal is defined as within the driest third of rainfall amounts and normal is the middle third, centred on the climatological median. The scientists also took into account that neutral El Nino-Southern Oscillation (ENSO) phase is projected to persist into early 2012.

## **OUTLOOK**

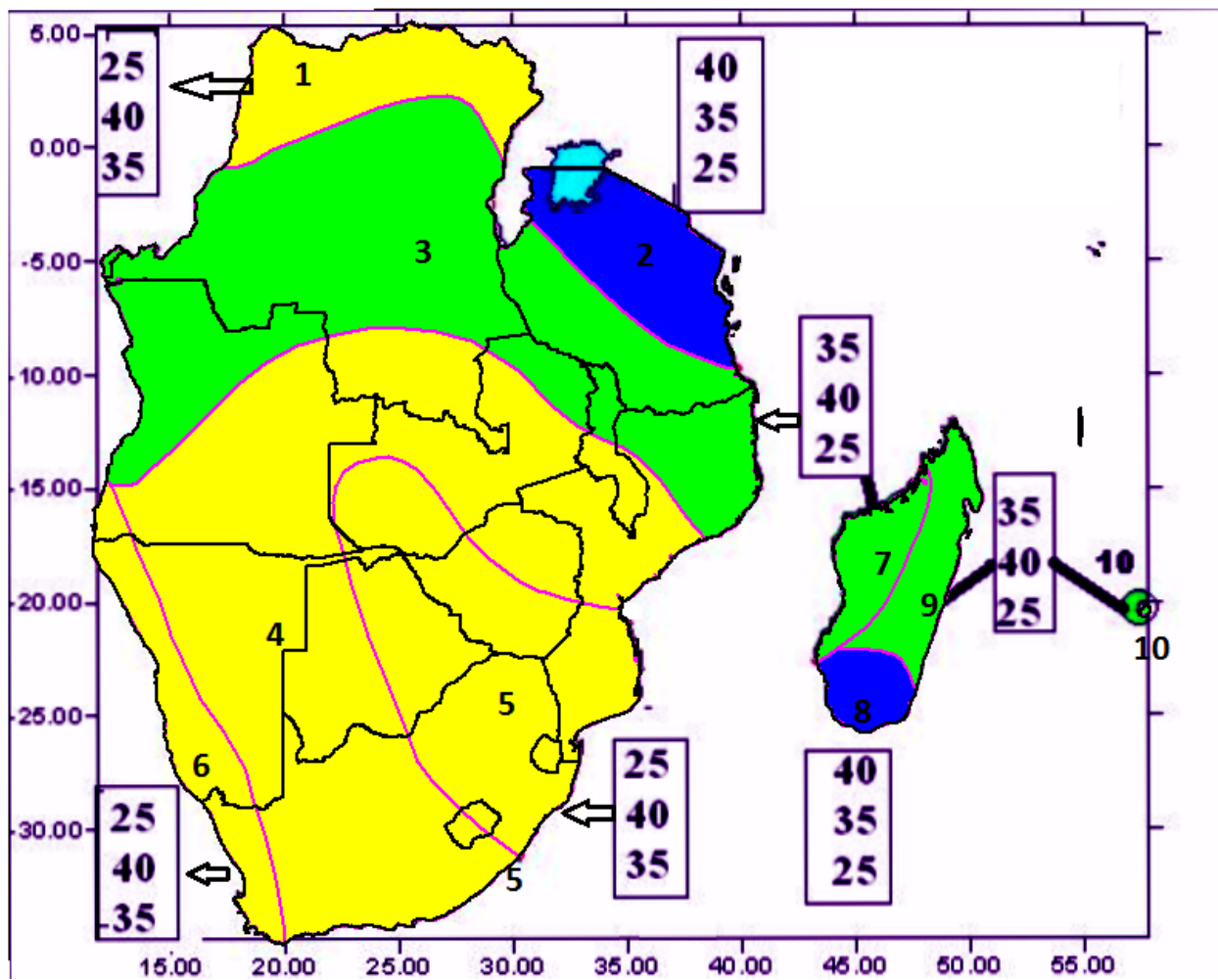
October to March is the main rainfall season over most of southern Africa. Owing to the differences in the rainfall-bearing systems, the rainy season has been divided into two three-month periods (i.e. October, November and December (OND) and January, February and March (JFM)).

## **CONTRIBUTORS**

The Fifteenth Southern Africa Climate Outlook Forum was hosted by the Namibia Meteorological Services. Support was provided by SADC, World Bank, United

Nations International Strategy for Disaster Reduction (UNISDR), World Meteorological Organization (WMO), Food and Agricultural Organization (FAO), Office of Coordination of Humanitarian Assistance (OCHA) and other partners.

## OND 2011 and JFM 2012 OUTLOOK



*Fig 1: Rainfall forecast for October-December 2011*

**Zone 1:** (The extreme north of the DRC).

**Increased chances of normal to below-normal rainfall**

**Zone 2:** (North-eastern half of Tanzania).

**Increased chances of above-normal rainfall**

**Zone 3:** (North-western half of Angola, the bulk of DRC, south-western half of Tanzania, extreme north-eastern parts of Zambia, northern half of Malawi and north eastern Mozambique).

**Increased chances of normal to above-normal rainfall**

**Zone 4:** (Central South Africa, south-western half of Lesotho, western half of Botswana, most of Namibia, south-eastern half of Angola, extreme south of DRC, central parts of Zambia, southern half of Malawi, north-eastern half Zimbabwe and central Mozambique).

**Increased chances of normal to below-normal rainfall**

**Zone 5:** (North-eastern half of Lesotho, north-eastern parts of South Africa, Swaziland, southern parts of Mozambique, south-western half of Zimbabwe, eastern half Botswana and south- western Zambia).

**Increased chances of normal to below-normal rainfall**

**Zone 6:** (The west coastal areas of South Africa, Namibia and the extreme south-western Angola).

**Increased chances of normal to below-normal rainfall**

**Zone 7:** (Western- Madagascar).

**Increased chances of normal to below-normal rainfall**

**Zone 8:** (Eastern Madagascar).

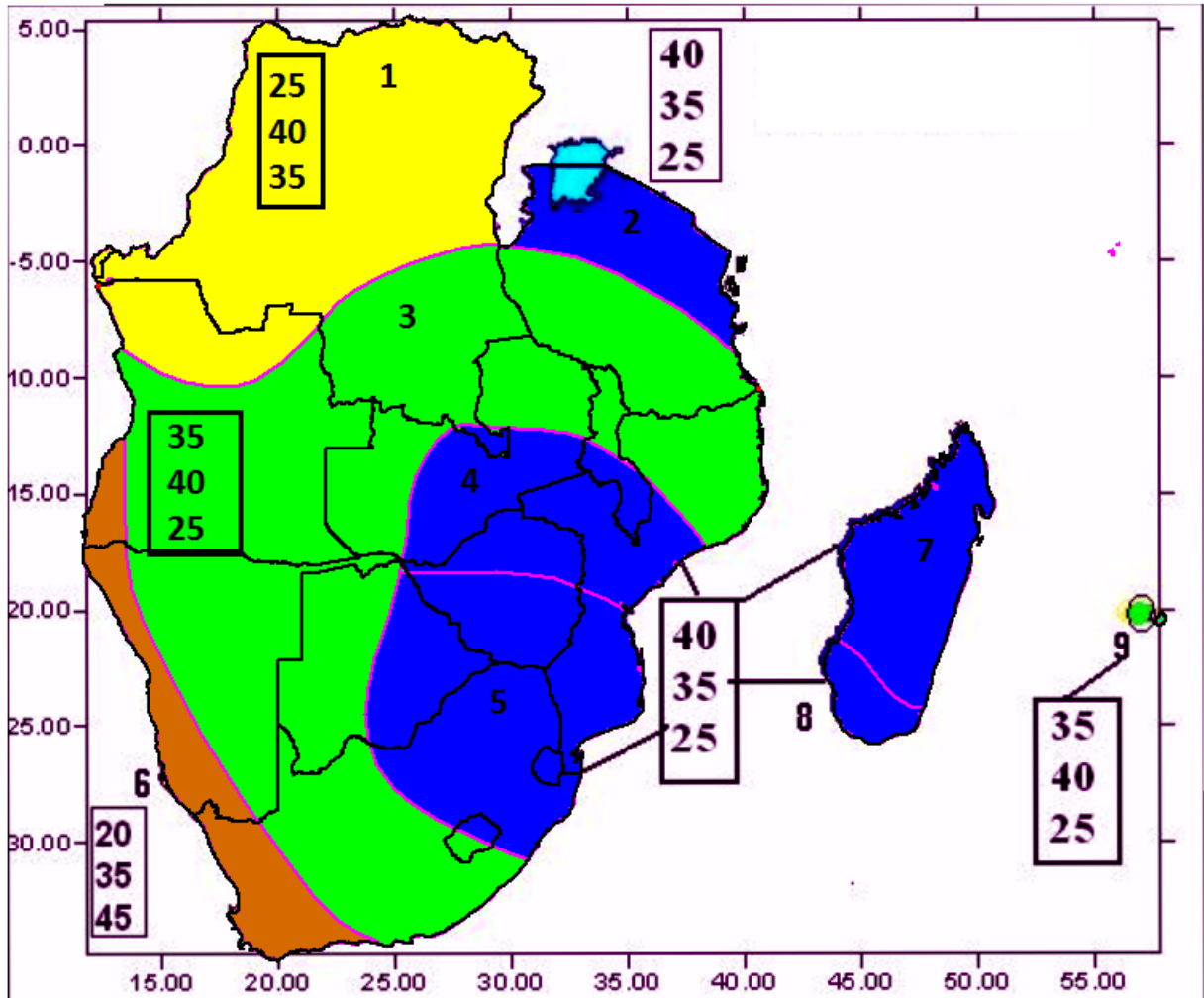
**Increased chances of normal to above-normal rainfall**

**Zone 9:** (Southern Madagascar).

**Increased chances of above- normal to normal rainfall**

**Zone 10:** (Mauritius).

**Increased chances of normal to above-normal rainfall**



**Fig 2: Rainfall forecast for January-March 2012**

**Zone 1:** (Most of DRC and northernmost Angola).  
**Increased chances of normal to below-normal rainfall**

**Zone 2:** (North-eastern half of Tanzania).  
**Increased chances of above-normal to normal rainfall**

**Zone 3:** (Central South Africa, south-western half of Lesotho, western half of Botswana, most of Namibia)

except coastal areas, western and northern Zambia, most of Angola except the extreme northern areas, southern DRC, southern Tanzania and northern Mozambique).

**Increased chances of normal to above-normal rainfall**

**Zone 4:** (Central parts of Mozambique, northern half of Zimbabwe, central parts of Zambia, extreme south of DRC, and southern half of Malawi).

**Increased chances of above normal to normal rainfall**

**Zone 5:** (North-eastern half of Lesotho, north-eastern parts of South Africa, Swaziland, eastern half of Botswana, southern half of Zimbabwe and southern Mozambique).

**Increased chances of above normal to normal rainfall**

**Zone 6:** (Extreme south coastal of South Africa, western coastal areas of Namibia and extreme south-eastern parts of Angola)

**Increased chances of below normal to normal rainfall**

**Zone 7:** (Most of Madagascar).

**Increased chances of above-normal to normal rainfall**

**Zone 8:** Southern Madagascar.

**Increased chances of above-normal to normal rainfall**

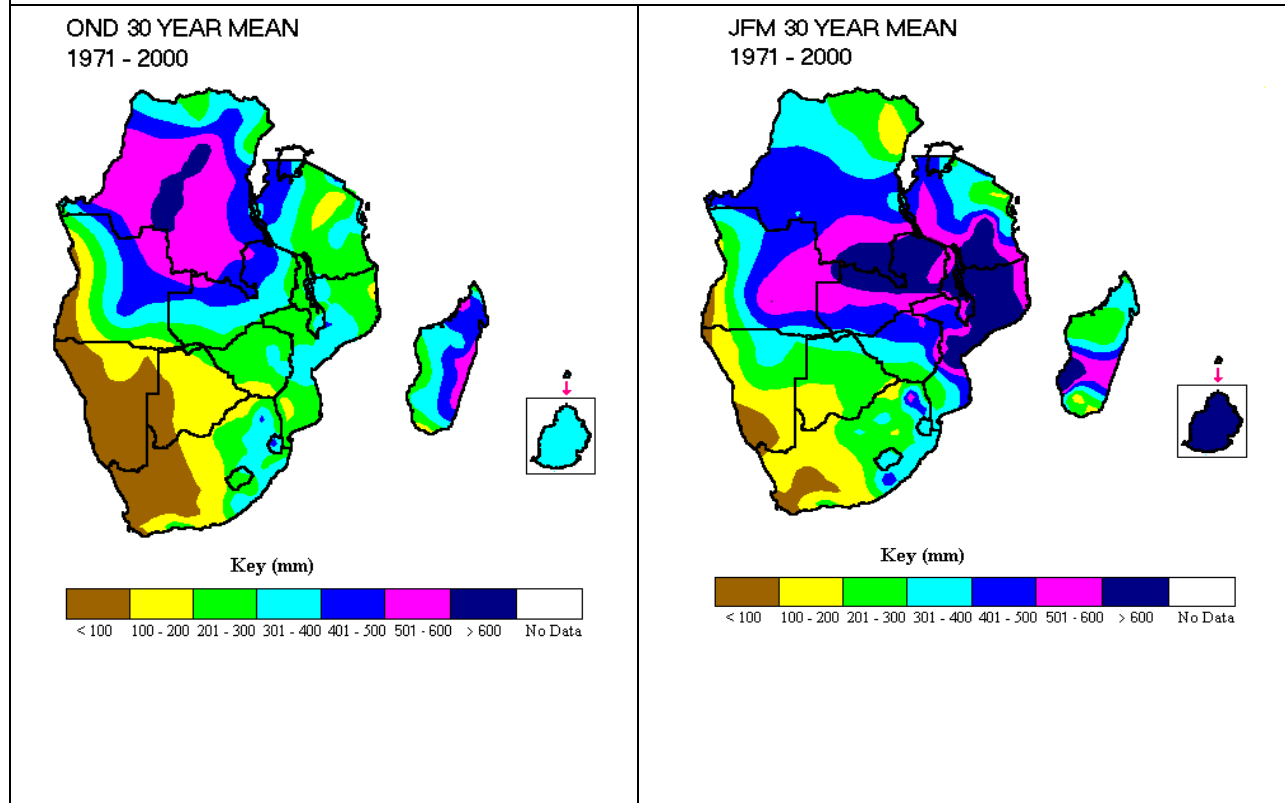
**Zone 9:** Mauritius.

## **Increased chances of normal to above-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 JFM, Figure 2, for Zone 6 , 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



*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 with maxima of 500 to 600 millimetres over the DRC in OND, figure 3(a). Over Madagascar the rains increase from west to east, while the rains are more uniformly distributed in Mauritius during OND. For the

period JFM the increase is largely from the southwest with the maxima of over 600 millimetres spreading from northwest to the eastern coast. Over Madagascar, the maximum is along the central areas. Mauritius also has amounts greater than 600 millimetres for JFM. The legend shows the amounts in millimetres.