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## OUTLOOK FOR APRIL – JUNE 2008

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### HIGHLIGHTS

- Normal to above-normal rainfall is expected across most SADC Member States.
- Normal to below-normal over the northernmost of continental SADC.

### ENSO UPDATE

La Niña is expected to continue through June/July 2008.

Current atmospheric and oceanic conditions indicate that La Niña has continued. By the end of February 2008, equatorial SST anomalies were about 2.5°C below average across parts of the central and east-central equatorial Pacific (Fig. 1). This is expected to continue through June/July 2008.

The Southern Oscillation Index (SOI) has persisted to typical La Niña values. SOI for February 2008 was nearly + 2.7.

The cooler than normal SSTs north of Australia extending to eastern Indian Ocean are associated with a positive phase of the Indian Ocean Dipole.

### EL-NIÑO /LA NINA UPDATE`

- Negative SST anomalies across the tropical Pacific, maintain La Nina conditions.
- Positive Indian Ocean Dipole
- SOI maintained positive trend
- Models project La Nina conditions continuing through June/July 2008.

### RAINFALL UPDATE

Moderate to heavy rains continued to pound the bulk of SADC from time to time since the beginning of the season. The persistent heavy rains caused floods across many countries of contiguous SADC and Madagascar. However, the rains stopped for some time especially in the central and southern portions of the continental SADC.

Early April signifies the end of the rainfall season across most of SADC. However, the little rains expected during April to June 2008 should still be largely normal to above-normal. Meantime, as the rain-belt shifts northwards, the rainfall is expected to be normal to below-normal across northeast and northern sections of contiguous. The detailed rainfall outlook is provided on pages 3 and 4.

# ENSO UPDATE: COLD EPISODE TO PERSIST THROUGH JUNE/JULY 2008

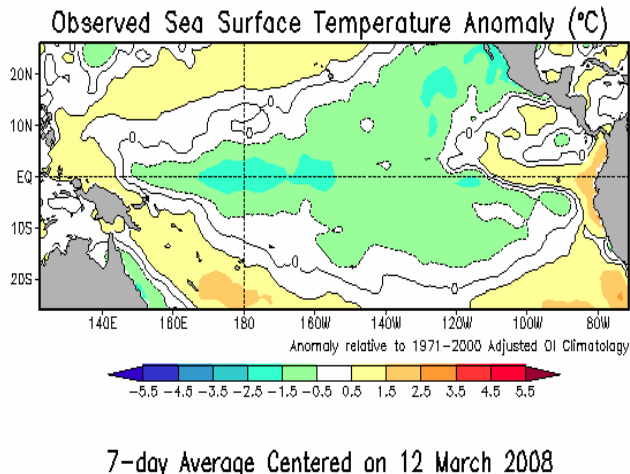


Fig. 1. SST anomalies (°C) in the Pacific basin for 9-15 March 2008. (Source- NOAA)

## SST anomalies

The sea-surface-temperature (SST) anomaly pattern for 9-15 March 2008 across the bulk of the tropical Pacific show colder than normal conditions. This is depicted in Fig. 1.

Meantime, SSTs in basins adjacent to southern Africa continue to be largely warmer than normal, Fig. 3.

The recent dynamical and statistical SST forecasts for the Niño 3.4 region project a persistence of moderate-to-strong La Niña which becomes somewhat weaker through June/July (Fig. 2). Thereafter, there is considerable spread in the models, with approximately one-half indicating La Niña could continue well beyond the rainfall season over the bulk of Southern Africa.

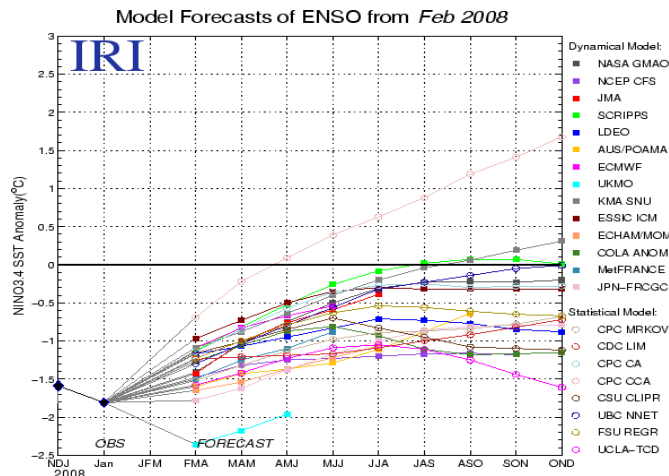


Fig. 2: Model forecasts for ENSO events from Feb 2008 (Source- IRI)

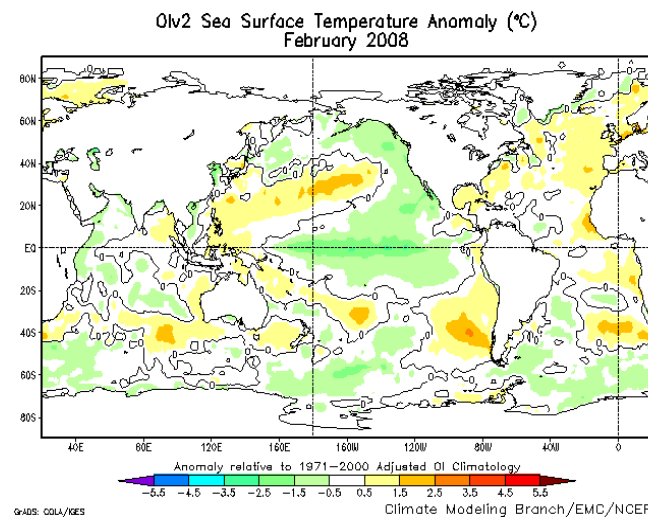


Fig. 3: SST anomalies in global ocean for Feb 2008 (Source- NOAA)

SADC DMC in conjunction with other partners will continue to closely monitor the status of ENSO and relevant information and updates will be issued from time to time.

**30—YEAR SADC MEAN RAINFALL (1971—2000) FOR APRIL TO JUNE**  
30-year (1971—2000) mean total rainfall for period April to June shows maxima (501-600 mm) over the eastern coastal zone of Madagascar and the northern tip of Tanzania, Fig 1. Northern parts of DRC and entirety of Mauritius follow with amounts of 401-500mm. It is much drier over the southern Angola, Namibia, Botswana, most of South Africa, Lesotho, Swaziland, Zimbabwe, southern Malawi, central Mozambique, Zambia, central portion of Tanzania and western Madagascar in the Island States, where three-monthly cumulative rainfall amounts are less than 100 mm.

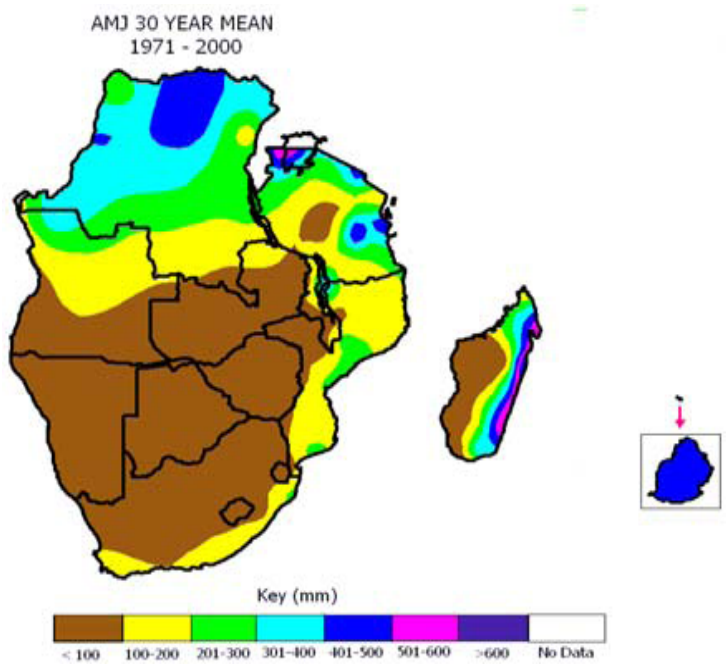


Fig 4. 30-year (1971-2000), mean rainfall for April to June

**SADC RAINFALL FORECAST (APRIL—JUNE 2008)**

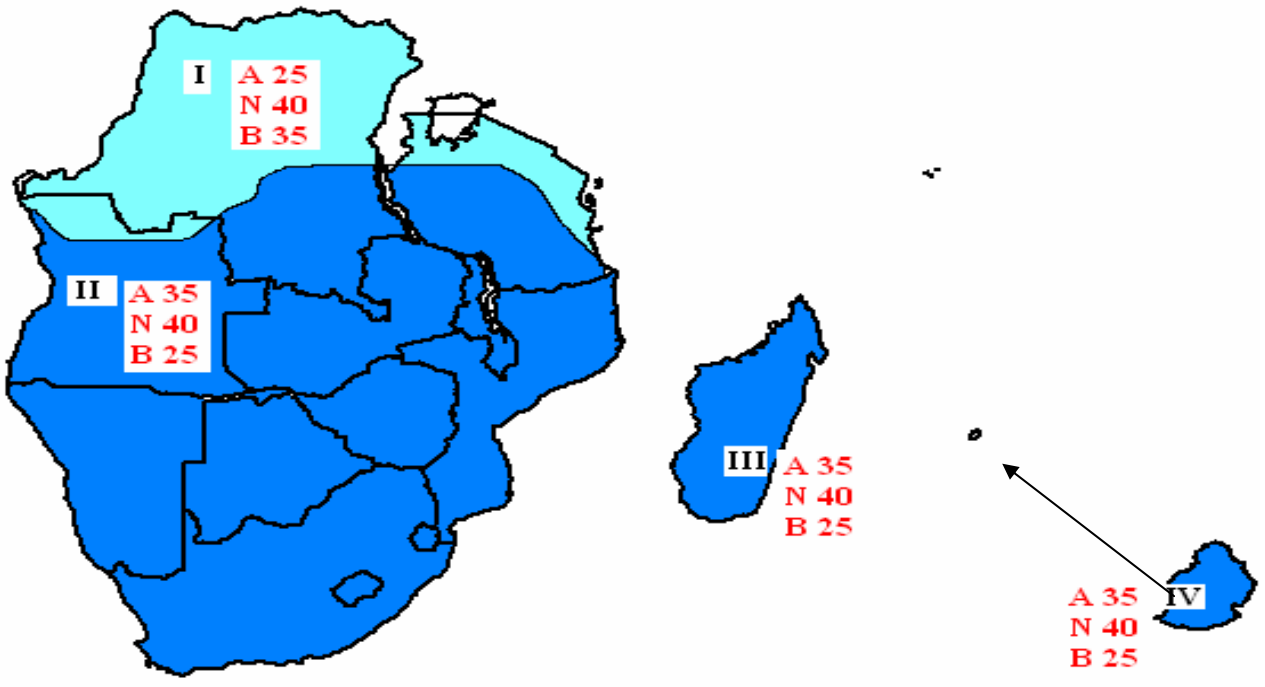


Fig 5. SADC rainfall outlook for April-May-June 2008

## FORECAST DETAILS

**Zone I:** (Northern and coastal Tanzania, bulk of DRC and northernmost Angola)

**Likelihood of normal to below-normal rainfall**

**Zone II:** (Bulk of Angola, southern DRC, most of Tanzania, Zambia, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, South Africa, Lesotho and Swaziland)

**High Likelihood of normal to above-normal rainfall**

**Zone III** (Madagascar)

**Likelihood of normal to above-normal rainfall**

**Zone IV** (Mauritius)

**Likelihood normal to above-normal rainfall**

## Map caption

The number for each zone indicates the probability of rainfall in each of the three categories: Above normal, Normal and Below normal (Fig. 5). The top number indicates the probability of rainfall occurring in the Above-normal category, the middle number for Normal and the bottom number for Below-normal. For example, in the case of Zone I there is a 25% probability for rainfall occurring in the Above-normal category; a 40% probability for rainfall in the Normal category; and 35% probability for rainfall for a Below-normal category. It is emphasized that boundaries between zones should be considered as transition zones.

**Note:** This update is relevant only for three monthly time scales and relatively large areas. Local to month to month variations may occur.

The users are strongly advised to contact respective NMHSs for interpretation of this Outlook, finer details, updates and additional guidance.

### **Acknowledgements:**

SADC NMHSs

Global climate monitoring and prediction centres

WMO