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OUTLOOK FOR APRIL — JUNE 2012

HIGHLIGHTS

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LA NINA UPDATE

- Persistence of weakened negative SST anomalies in the tropical Pacific.
- Models project persistent cold ENSO conditions to Neutral conditions.

Outlook Highlights

The 2011/12 rainfall season is terminating across most of SADC, i.e. the unimodal regions.

- Normal to below rains over the bulk of SADC region, including Island States.
- Normal to above – normal rainfall is expected across northernmost Angola, northern half of DRC and the north-eastern of Tanzania.
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SUMMARY

During the current La Niña phase, the rain-bearing system has been suppressed across the bulk of SADC region. This is unlike in most past La Niñas. Portions of enhancement of rainfall were observed over the east coastal area of the subregion. Meantime, the normal to below - normal rainfall conditions should persist through April to June 2012 for SADC region. Details are on pages 3 and 4.

La Niña status

- La Niña has weakened across the tropical Pacific Ocean .
- Atmospheric circulation anomalies remain largely consistent with La Niña .
- La Niña is expected to transition to ENSO-neutral conditions by the end of April 2012

LA-NIÑA UPDATE - ENSO-NEUTRAL CONDITIONS FORECAST

The rapid weakening of the negative surface and subsurface temperature anomalies during February 2012, combined with the historical tendency for La Niña to dissipate during the austral summer, lends support to the return of ENSO-neutral conditions in the coming months. Therefore, La Niña is expected to transition to ENSO-neutral conditions by the end of April 2012 (Fig. 1). Meantime, SST anomalies (departures from average) over Indian and Atlantic Basins reflected below average conditions in the vicinity of Madagascar and Mozambique Channel and in the central Atlantic ocean. It is warmer than normal over most of remainder of Indian Ocean, (Fig. 2).

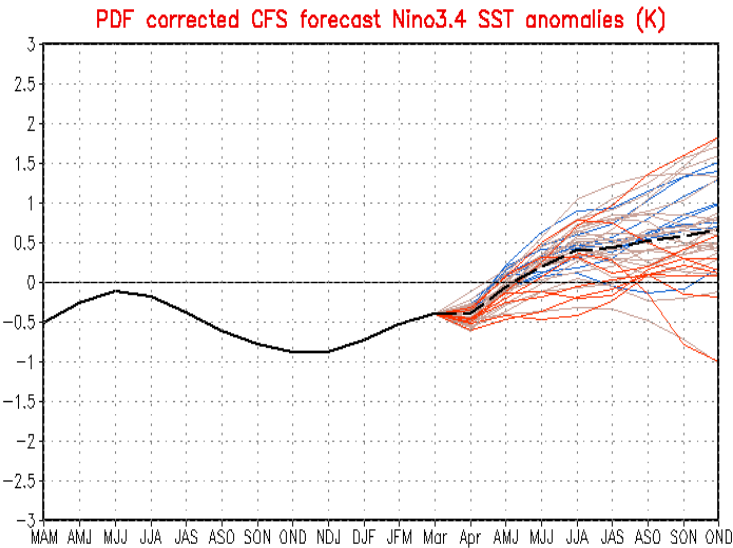


Fig.1: Model forecasts for El-Niño event (Source: NOAA/CPC)

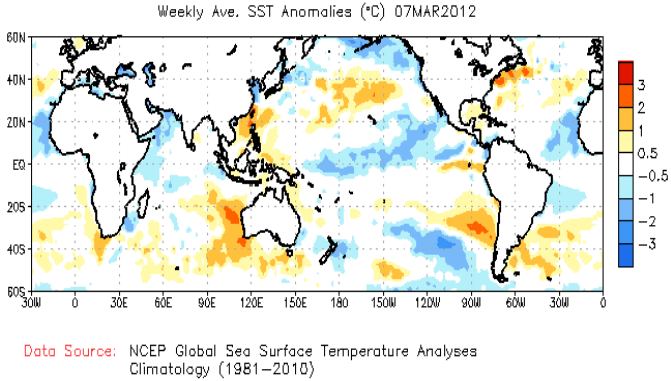


Fig. 2, Mean global oceans SST anomalies March 2012 (Source: NCEP/NOAA)

These anomalously dry conditions tended to occur in conjunction with relatively warm SSTs in the Atlantic and Indian Oceans and anomalously wet conditions tend to occur during the cold phase of La Nina in these oceans (Fig.2). Fortunately an unstable cyclonic pattern of 850 hPa vector wind anomalies over south of the region is enhanced convection by activated rains system in decade scale (Fig.3).

Impacts of current La Nina

Current La Nina's influence on rainfall has led to more positive rainfall anomalies in southwestern Africa stretching from southwestern Angola into Namibia, (see Fig.4, page 3). Further east, in the section stretching from southern Tanzania into Mozambique, positive anomalies also occurred but less extensively. Positive rainfall anomalies were predominant across Madagascar.

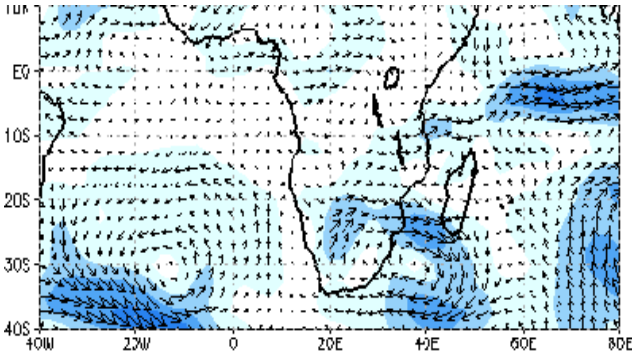


Fig 3. 850 hPa Vector Wind anomalies over Africa (Source: NCEP/NOAA)

Performance of rainfall during the current season

Below-normal rainfall persisted over most of the region since the beginning of the season. The diminished rainfall performance has resulted in significant deficits in many areas of the region. Localized heavy rains were, however, recorded over some parts of the subregion since the commencement of the season (Fig.4).

During the past 90 days, below average rainfall conditions obtained across portions of DRC, northern and western Angola, many parts of Zambia, Botswana, Zimbabwe and South Africa, central and southern Mozambique. Local areas in southern Angola, northern Namibia western Botswana, many parts of Tanzania, northeastern Mozambique and the bulk of Madagascar had above average rainfall. The rainfall season has begun exiting most of SADC countries that have uni-modal rains in austral summer. The areas that experience

bimodal rains will still experience more pronounced rains at times.

Meantime, the rain-producing systems will continue to be largely active for next several days across mostly the eastern and central as well as western sections of contiguous SADC (Fig.3).

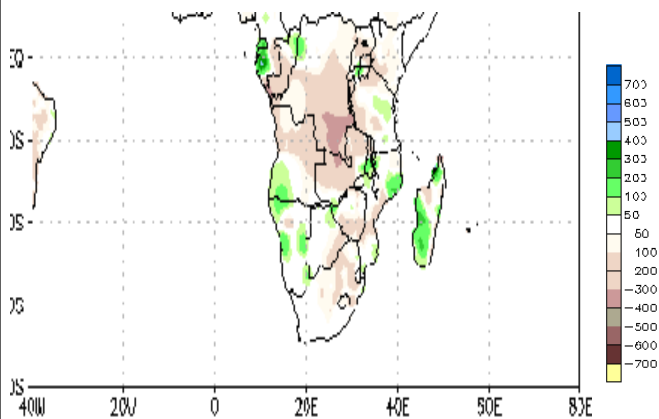


Fig. 4. Accumulated precipitation anomalies (mm) from 01 January 2012 to 21 March 2012 (Source: NOAA/CPC)

THIRTY—YEAR MEAN RAINFALL (1961-1990) FOR APRIL - JUNE

The thirty-year mean total rainfall map for April to June shows maxima of above 500 mm over north-eastern DRC. 300 mm are usually registered in Mauritius and Seychelles during this period. The remainder of the region receives rainfall much less than 100 mm, Fig. 5. It can be seen that the rain-producing systems are largely absent during this period across the bulk of contiguous SADC.

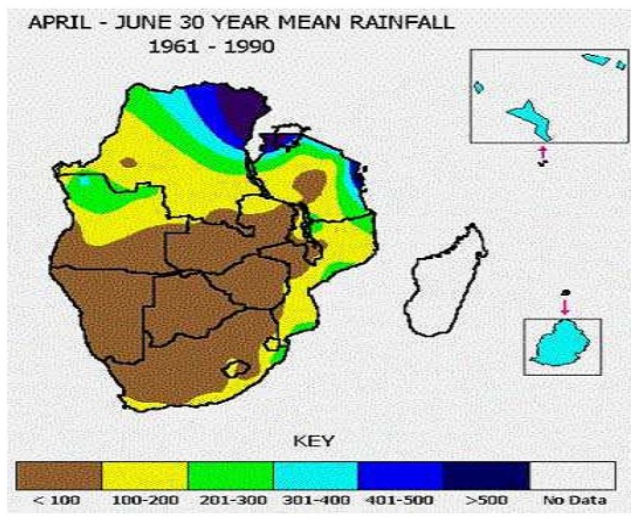


Fig. 5. Mean 30-year (1961-1990), April to June rainfall for SADC countries

SADC CSC in conjunction with other partners will continue to closely monitor the status of evolution of El Niño and relevant information and updates

RAINFALL FORECAST (APRIL—JUNE 2012)

FORECAST DETAILS

Zone I: (Bulk of DRC, extreme northern flank of Angola and northern and easternmost Tanzania)

Likelihood of normal to above-normal rainfall

Zone II: (southeastern DRC, most of Tanzania, bulk of Angola, northern half of Zambia, northern half of Malawi, coastal part of Mozambique and southeast coastal area of South Africa)

Likelihood of normal to below-normal rainfall

Zone III: (Southern half of Malawi, western part of Mozambique, southern half of Zambia, Zimbabwe, Botswana, Namibia, extreme south of Angola, Swaziland, Lesotho and the bulk of South Africa)

High likelihood of normal to below-normal rainfall

Zone IV: (Western half of Madagascar)

High likelihood of Normal to below-normal rainfall

Zone V (Eastern half of Madagascar)

Likelihood of normal to below-normal rainfall

Zone VI (Mauritius)

High likelihood of below-normal to Normal rainfall

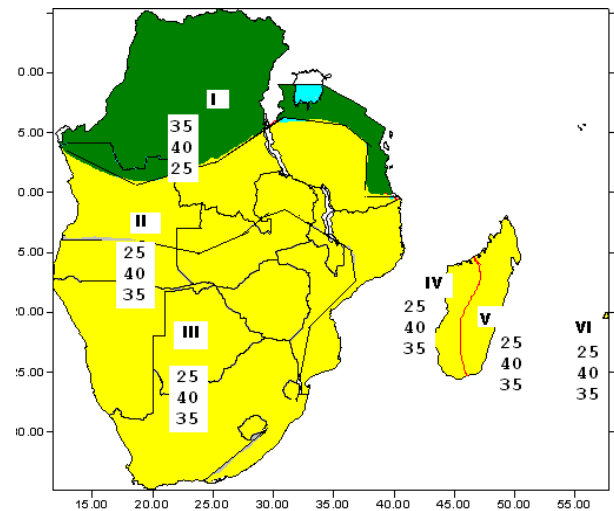


Fig 6. SADC rainfall outlook for March to May 2012

Map caption

The number for each zone indicate the probabilities of rainfall in each of the three categories: Above normal, Normal and Below normal (Fig. 9). 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 IV 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 their NMHSs for interpretation of this Outlook, finer details, updates and additional guidance.

Acknowledgements:

SADC NMHSs

Global climate monitoring and prediction centres

WMO