



INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME

SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

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INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME



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BENEFICIARIES



A. HIGHLIGHTS

- **The rainfall during March 2025** was significant in northern SADC areas, including Angola, Namibia, northern Zambia, Malawi, northern Mozambique, Tanzania, Madagascar, and parts of South Africa. Southern areas—like southern South Africa, Namibia, Zambia, Botswana, Zimbabwe, and south of Mozambique—were mostly dry, with wetter pockets in Namibia, Angola, and the far north.
- Extreme dryness persisted across much of the region (SPI-12), with some improvement in northern and central areas (SPI-3). Southern parts and northern Madagascar remained extremely dry.
- **Dry days:** Most of the southern half of the region and southern Madagascar experienced 18–30 consecutive dry days in March, while northern areas recorded only 3–9 dry days. Isolated pockets of short dry spells also appeared in parts of the central region.
- **The minimum temperature anomalies.** Most of the region recorded average minimum temperatures above 25°C in March, except for much of South Africa, where values remained below 11°C. Positive anomalies exceeding 2°C were widespread, including in Madagascar, while central areas showed negative anomalies approaching -1°C.
- **Positive maximum temperatures anomalies.** In March, average maximum temperatures exceeded 36°C across most of the region, except in central South Africa, Angola, and parts of Tanzania, DRC, and Madagascar. Positive anomalies around 4°C were observed in the north and northern Madagascar, while negative anomalies affected much of the southern half of the subcontinent.
- **Day time heat waves:** Prolonged daytime heatwaves exceeding 23 days were recorded in the northern areas and most of Madagascar. Night-time heatwaves of around 25 days affected the northern and southern extremes of the region, while central areas remained less affected.
- **Rainfall and temperature outlook for April:** Most of the subcontinent expected above normal rainfall. Temperature outlook shows that most of the region will record high average temperatures in March, except the central parts of the region.
- Above-normal rainfall is likely across most of the region, except in northern DRC, northern Angola, and western South Africa, where below-normal conditions are expected. Much above-normal temperatures are forecast for most of the region, excluding central areas.

1. REGIONAL RAINFALL PERFORMANCE

The rainfall during March 2025 was considerable over most areas of the SADC region, particularly over the northern parts of the subcontinent located within parts of Angola, Namibia, north of Zambia, Malawi, north of Mozambique Tanzania, Madagascar and parts of South Africa. The Southernmost parts of the region, located mainly in the southern tip of South Africa, South Namibia, South Zambia, Botswana, Zimbabwe and South of Mozambique were generally dry in March, [Figure 1 left]. The anomalies of total precipitation show that despite this rainfall records, the bulk of the region, including the islands, continued relatively dry, except Namibia, isolated parts of South Africa and Angola, and most of the northern parts of the region located DRC, Tanzania and northern Mozambique, [Figure 1 right].

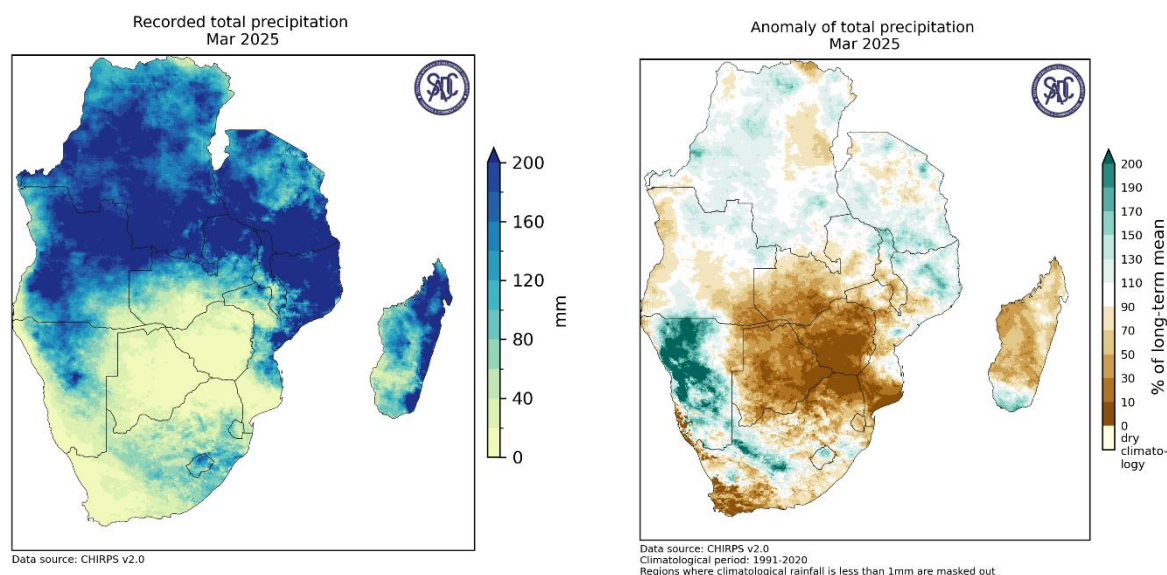


Figure 1: Observed rainfall (left) and rainfall anomaly (right) for the month of March 2025

1.1 Drought Monitoring

1.1.1 Seasonal and Annual Drought Assessment

Despite the reduction of precipitation by comparison with the previous month the 12-month SPI (SPI-12), show that extremely dry conditions were prevalent over most of the whole region, except over isolated area within the central parts of the region, and the northeast where the soils were near normal. In Madagascar the southeasternmost part was also near normal wet, [Figure 2 left].

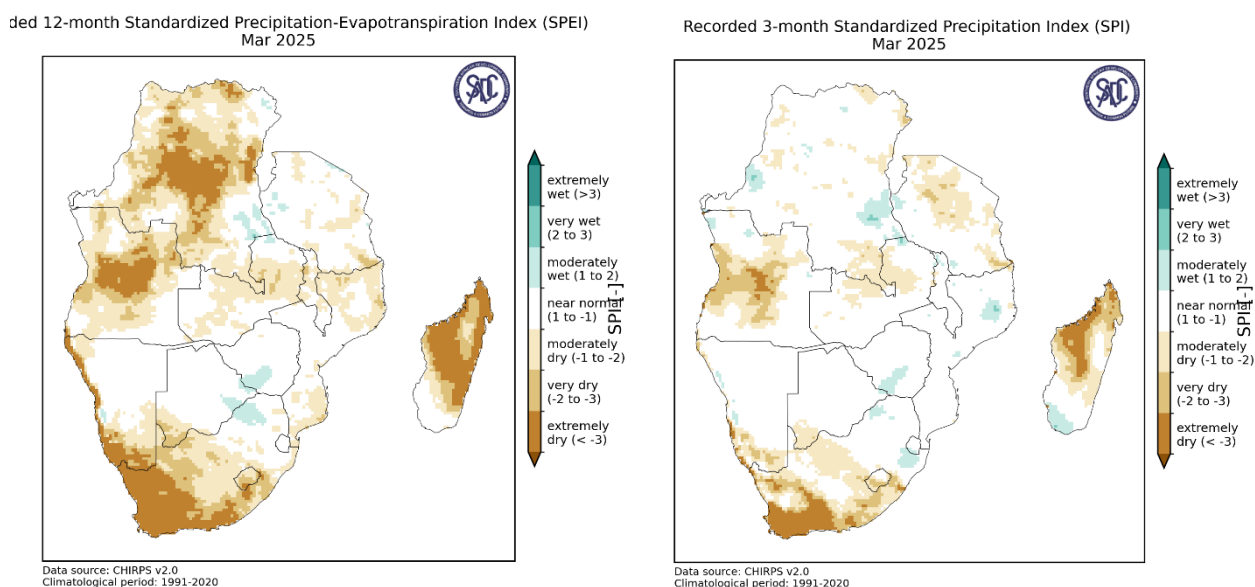


Figure 2: Drought assessment: SPI for 12-months (left) and 3-months SPI (right)

The 3-month SPI shows that the recently recorded precipitation has improved considerably the soils conditions mainly within the northernmost parts of the region located in DRC and Tanzania, and the central regions located in Botswana, Zambia, Zimbabwe, and Mozambique. Most of the southern half of South Africa and the northern half Madagascar were extremely dry, [Figure 2 right].

1.1.2 Short term drought (dry spells)

Consecutive number of dry days ranging from 18 to 30 were recorded over most of the southern half of the SADC region, and south of Madagascar in March. On the other hand, the northernmost parts covering Angola, DRC North Zambia and Malawi and Tanzania recorded dray days between 3 and 9 days. Isolated areas with 3 to 9 days were also observed within Namibia, South Africa, north Mozambique and parts of Tanzania, [Figure 3].

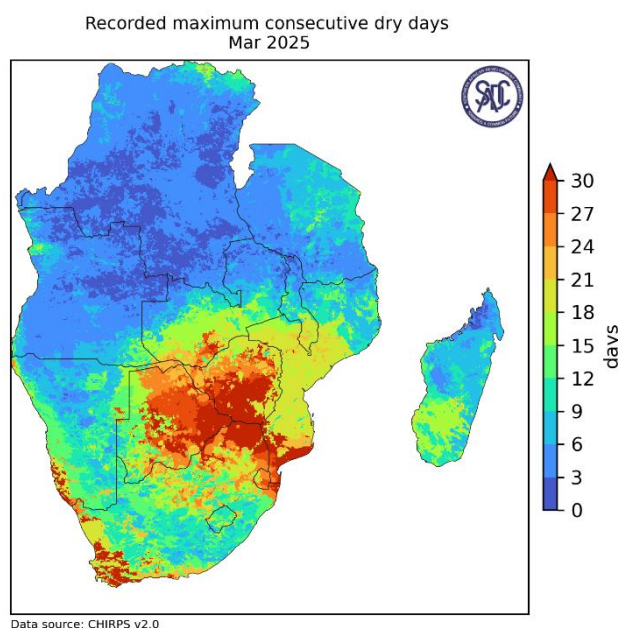


Figure 3: Dry spells prevalence during the month of March 2025

1.2 Extreme Rainfall

The whole subcontinent recorded no extreme precipitation in a single day period, except for the central and northern Mozambique, as well as the southern ends of Tanzania where isolated areas received precipitation close to 100mm in a single day, [Figure 4].

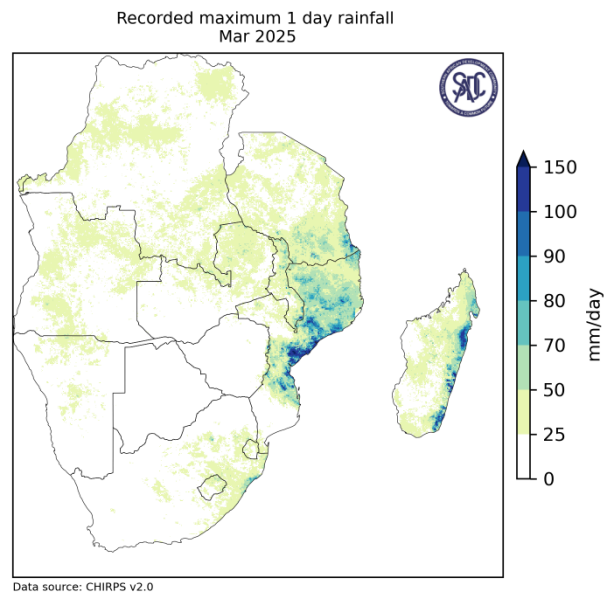


Figure 4: Maximum rainfall recorded over a one-day period during the month of March 2025

2. REGIONAL TEMPERATURE

2.1 Minimum Temperature

Average minimum of daily temperatures of above 25°C were recorded within most of the region except within most of South Africa, where the minimum temperatures below 11°C persisted, [Figure 5 left]. The absolute anomaly of minimum temperatures shows that in March there were positive signals above 2°C over most of the region including within the island of Madagascar. The central parts of the SADC region located mainly within the territories of Zimbabwe, Botswana recorded negative anomalies of minimum temperatures of -1°C or close to 0°C, [Figure 5 right].

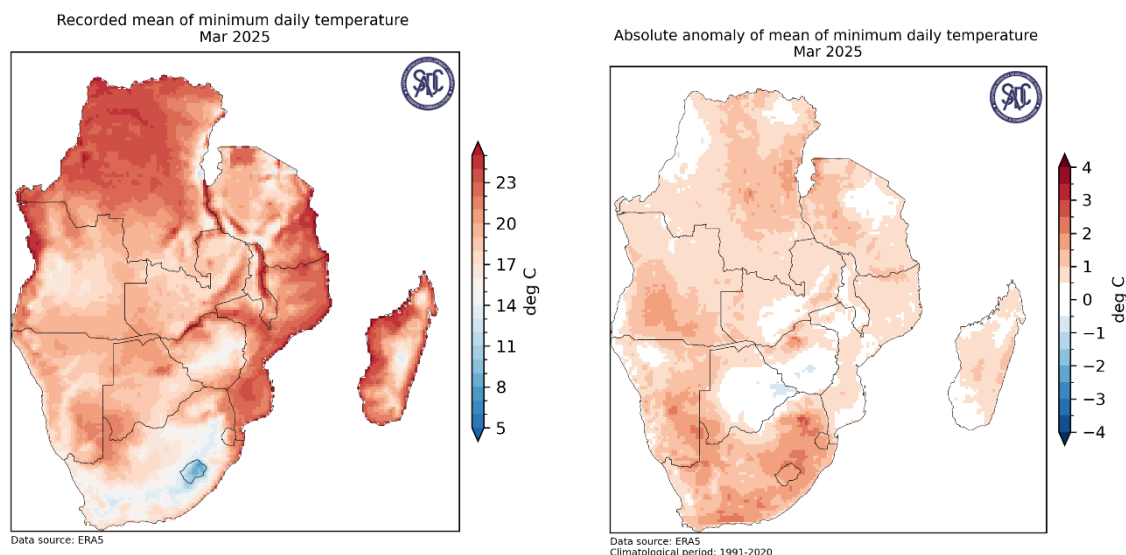


Figure 5: Observed average minimum temperature (left) and anomalies (right) for March 2025

2.2 Maximum Temperature

The average of maximum temperatures in March, peaked to above 36°C over most of the region, except the central South Africa, Central Angola and in some isolated areas in Tanzania, DRC and central Madagascar, [Figure 6 left]. Positive absolute of maximum temperatures anomalies of around 4°C were recorded over most of the northern part of the subcontinent and the northern Madagascar, but not in most of the southern half

of the subcontinent covering Namibia, Botswana and most of South Africa and the southernmost tip of Madagascar, where negative anomalies of the maximum temperatures were recorded, [Figure 6 right].

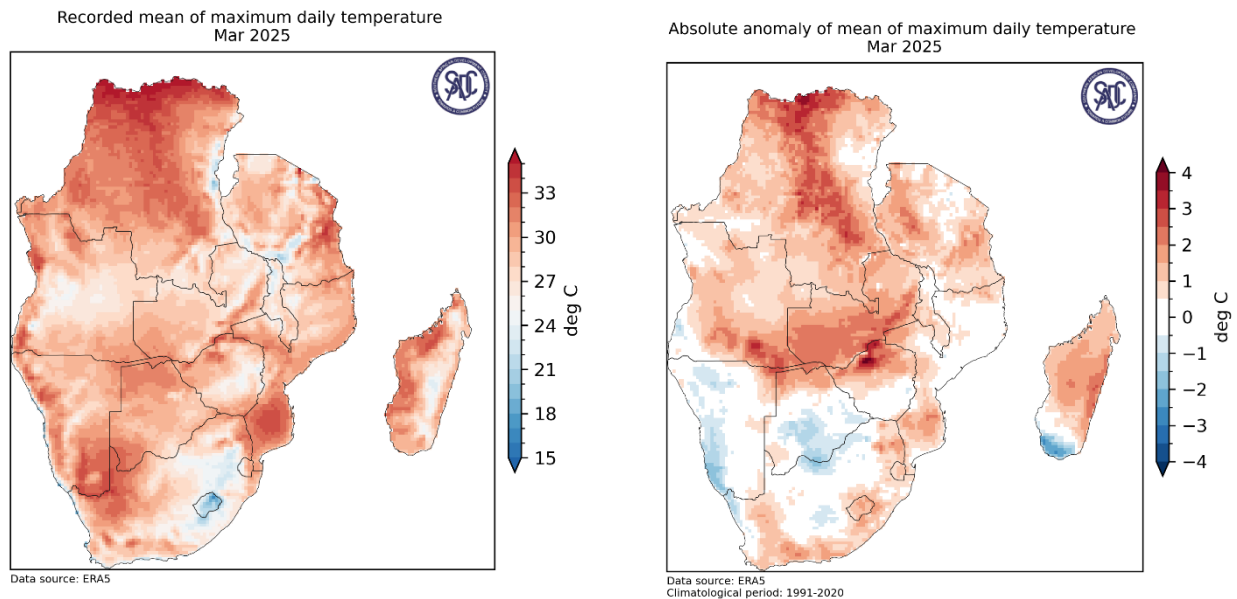


Figure 6: Observed maximum average temperature (left) and anomalies (right) for March 2025.

2.3 Heatwaves

We distinguish here two types of heatwaves which differ in economic and human health impacts – daytime defined based on maximum temperature recorded during daytime, and night-time, defined based on minimum temperature recorded during nighttime.

Daytime heat waves of more than 23 days were recorded within the northernmost parts of the region lying in DRC, Zambia, and Tanzania, and most of Madagascar [Figure 7 left].

Night-time heatwaves of around 25 days were recorded within most of the northern part of the SADC region, and the southern tip of the subcontinent. Nevertheless, this did not happen on the central part located in Namibia, Botswana, Zimbabwe and Mozambique, [Figure 7 right].

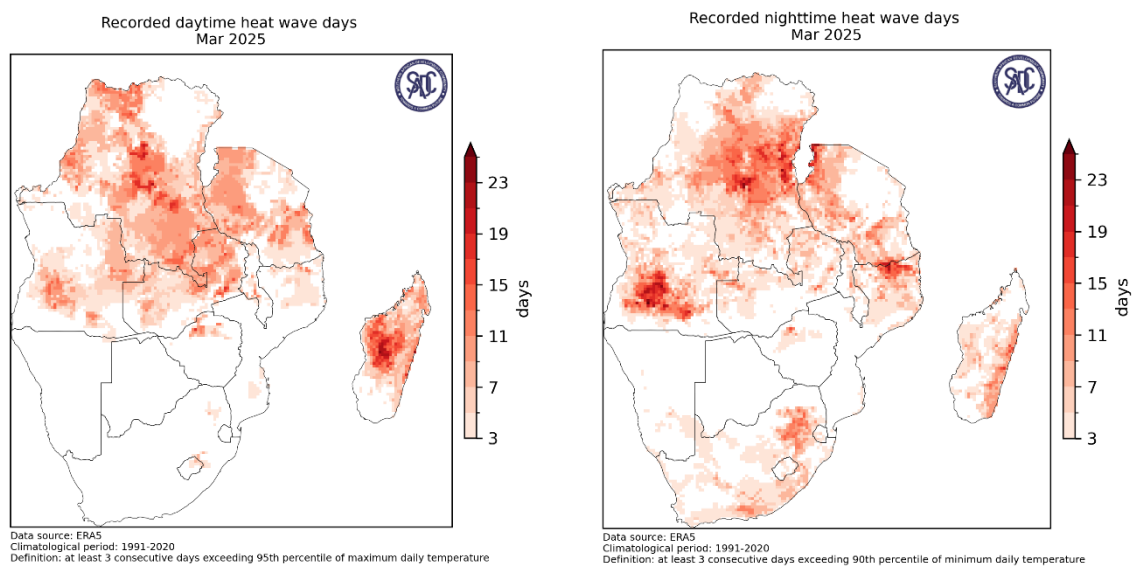


Figure 7: Heatwaves detected during the month of March 2025

3. REGIONAL MONTHLY OUTLOOKS

3.1 Rainfall Outlook

There is an increased probability for above normal rainfall over most of the region except the norther DRC, norther Angola, and western South Africa, where below normal precipitation is expected, [Figure 8].

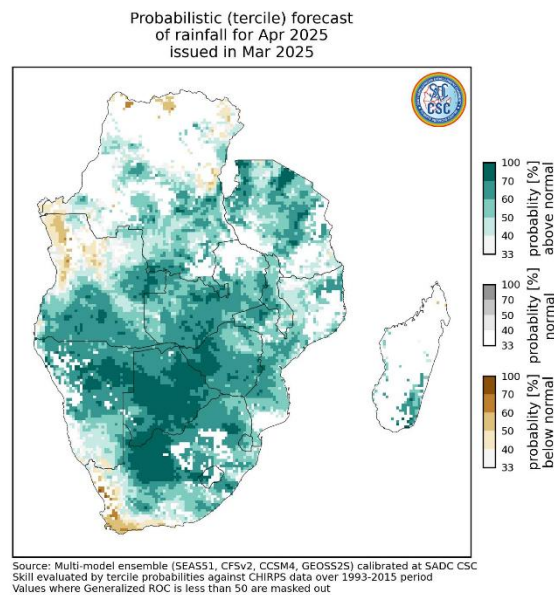


Figure 8: Rainfall probabilistic forecast for April 2025

3.2 Temperature Outlook

Much above normal temperatures are expected over most of the region of SADC, but not within the central parts located within east angola, Zambia, eat Namibia, Botswana, Zimbabwe and the central South Africa, [Figure 9].

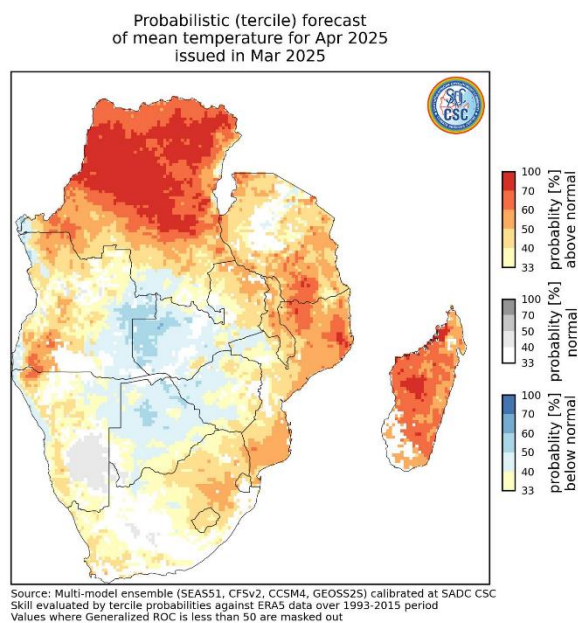


Figure 9: Temperature probabilistic forecast for April 2025

NOTE:

This bulletin used CHIRPS and ERA5 data. While these datasets are considered broadly representative to local conditions over the SADC region, the results presented here may differ from those derived using local observations from Member States.

Users are therefore, urged to consult the local National Meteorological and Hydrological Services (NMHSs) for local conditions and detailed interpretation of the contents of this bulletin.



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