SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

CLIMATE SERVICES CENTRE (SADC-CSC)

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INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME

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BENEFICIARIES

A. HIGHLIGHTS

- **The rainfall during September:** During September 2025, significant rainfall was confined to the northernmost SADC areas, including central and northern DRC, northern Angola, and coastal regions of eastern South Africa and eastern Madagascar, with isolated totals of about 40 mm in central Angola, Mozambique, and Tanzania. Rainfall anomalies showed markedly above normal conditions in most of South Africa, southern Namibia, southwest Zimbabwe, parts of Mozambique, northwest Zambia, and isolated areas in Angola, while below normal to very dry conditions dominated northern Angola, much of Botswana, DRC, Mozambique, southwestern South Africa, northern and central Tanzania, northern Zambia, Madagascar, and the central belt of the region stretching across Angola, Namibia, Botswana, Zambia, and Zimbabwe.
- **Drought monitoring:** In September 2025, soil moisture remained critically low across most of the SADC region**,** as indicated by the 12-month and 3-month Standardized Precipitation Indices (SPI-12 and SPI-3). Exceptionally dry conditions dominated the DRC, Angola, Zambia, Mozambique, and Madagascar**,** extending into parts of Namibia, Botswana, and South Africa**.** Localized wetter areas were observed in eastern DRC, western Tanzania**,** and parts of central South Africa and western Zambia. Overall, the region experienced widespread dryness**,** with near-normal soil moisture limited to southern Madagascar and parts of southwestern SADC**.**
- **Dry days:** In September 2025, prolonged dry spells of 27–30 days prevailed across most of the SADC region, including western Madagascar**,** while northern DRC, parts of Tanzania, Angola, Mozambique, eastern Madagascar, and much of South Africa recorded only 0–6 dry days, indicating localized wetter conditions**.**
- **The minimum temperature anomalies:** In September 2025, mean minimum temperatures were generally low across interior South Africa and Lesotho, reaching about 5°C, while northern areas of the SADC region, including the DRC, Angola, Mozambique, Tanzania, and coastal Madagascar, recorded warmer nights exceeding 23°C. Positive anomalies dominated most of the subcontinent, particularly over Botswana and Madagascar, where departures reached up to 3°C, while negative anomalies of around –2°C occurred over Zambia, Namibia, and coastal Angola. Near-normal conditions prevailed elsewhere across the region.
- **Maximum temperatures anomalies:** In September 2025, daytime temperatures were generally warm across most of the region, with mean maximum values between 26°C and 36°C, while cooler conditions of 16°C to 23°C were limited to

southern areas of the subcontinent, including South Africa, eastern Madagascar, and isolated parts of Tanzania and eastern DRC. Maximum temperature anomalies were mostly positive, with increases of up to +3°C in places such as Madagascar and Botswana. Cooler-than-normal conditions of around –3°C were confined mainly to western Angola, while near-normal anomalies appeared sporadically across central and eastern Angola and southeastern South Africa.

- **Day and nighttime heat waves:** The daytime heatwaves lasting up to 13 days affected north and central Botswana, northwest South Africa, Zimbabwe, Mozambique, much of DRC, and western Madagascar. Night-time heatwaves of similar duration were recorded in central DRC, parts of Tanzania, southeastern South Africa, and southern Madagascar.
- **Rainfall and temperature outlook for October:** In October 2025, above-normal rainfall is likely in northern Angola, much of the DRC, and parts of Tanzania, while central areas such as Zambia, southern Angola, northern Namibia, Botswana, and Zimbabwe are expected to remain near normal. Drier-than-normal conditions are forecast for Mozambique, isolated parts of South Africa, and portions of the DRC. Temperatures are expected to be above normal across most of the region, including Madagascar, with only small areas of eastern Angola, southwestern South Africa, central Botswana, and northern Mozambique projected to stay near normal.

1. REGIONAL RAINFALL PERFORMANCE

During September 2025, substantial rainfall was observed over the northernmost parts of the SADC region, particularly across the central and northernmost areas of the Democratic Republic of Congo (DRC), the north Angola, and the coastal areas on the east of South Africa and east of Madagascar. The bulk of the region did not receive any precipitation, except in isolated areas in Central Angola, Mozambique and Tanzania, where precipitation of around 40mm were recorded, [Figure 1, left].

Rainfall anomalies for September indicate markedly above normal conditions within most of South Africa, south of Namibia, southwest Zimbabwe, some parts of central and southeast Mozambique, northwest Zambia and within isolated areas in Angola. The bulk of northern Angola, Botswana, the whole DRC, Mozambique and the southwest South Africa, the northwestern parts of Tanzania and north of Zambia received below normal precipitation. In southern and northern parts of Madagascar the condition was also below normal. The central parts of the SADC region located in south Angola, most of west Namibia, north of Botswana, the bulk of Zambia, north of Zimbabwe, parts of central Tanzania and isolated areas in north of Mozambique recorded very dry conditions, [Figure 1, right].

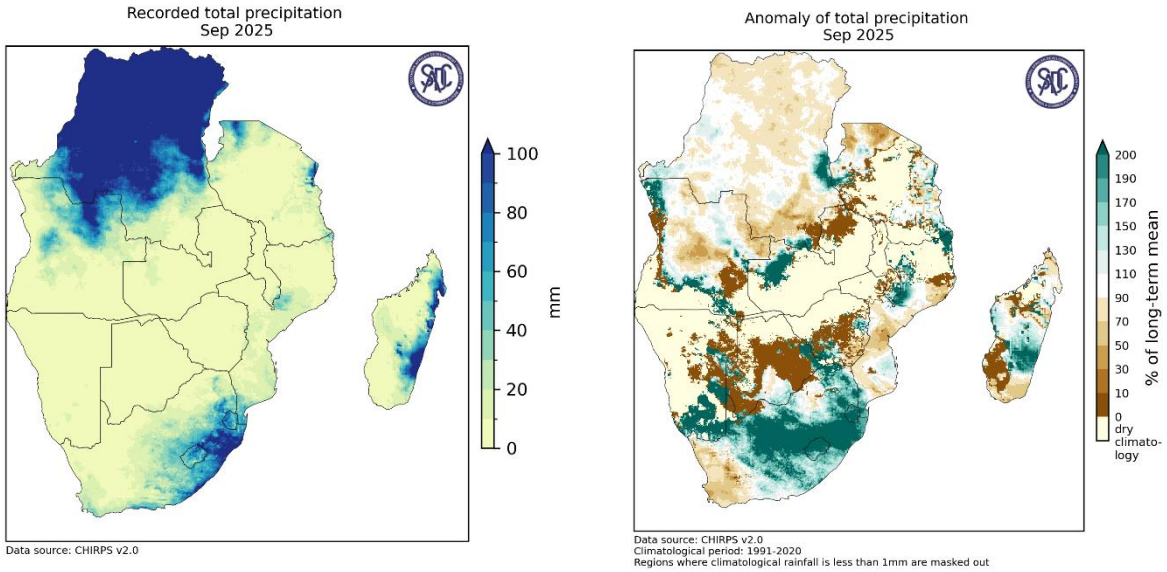

Figure 1: Observed rainfall (left) and rainfall anomaly (right) for the month of September 2025.

1.1 Drought Monitoring

1.1.1 Seasonal and Annual Drought Assessment

During September 2025, the 12-month Standardized Precipitation Index (SPI-12) indicated severely dry conditions across most of the SADC region, including the northern half of Madagascar**.** The dryness was particularly pronounced over central and northern DRC, central Angola, and along the DRC–Zambia border**,** with a few other isolated pockets across the region.
Exceptionally wet conditions were confined to isolated areas in eastern DRC and western Tanzania**,** extending along their border and near the Botswana–Zimbabwe–South Africa frontier**.** Near-normal soil moisture was observed in southern Madagascar, northern South Africa, most of Namibia, Botswana, Zimbabwe, parts of Tanzania and Mozambique, eastern Zambia, western Angola, and southern DRC [Figure 2, left].

Meanwhile**,** the 3-month SPI (SPI-3) revealed extremely dry soil moisture over the western fringes of Namibia, South Africa, and Angola**,** as well as across Mozambique, much of Zambia, Malawi, northern Botswana, Tanzania, eastern Madagascar, and large portions of the DRC**.**
However, moderately to very wet conditions were observed in central South Africa, southeastern Namibia, western Madagascar, parts of Angola, and western Zambia [Figure 2, right].

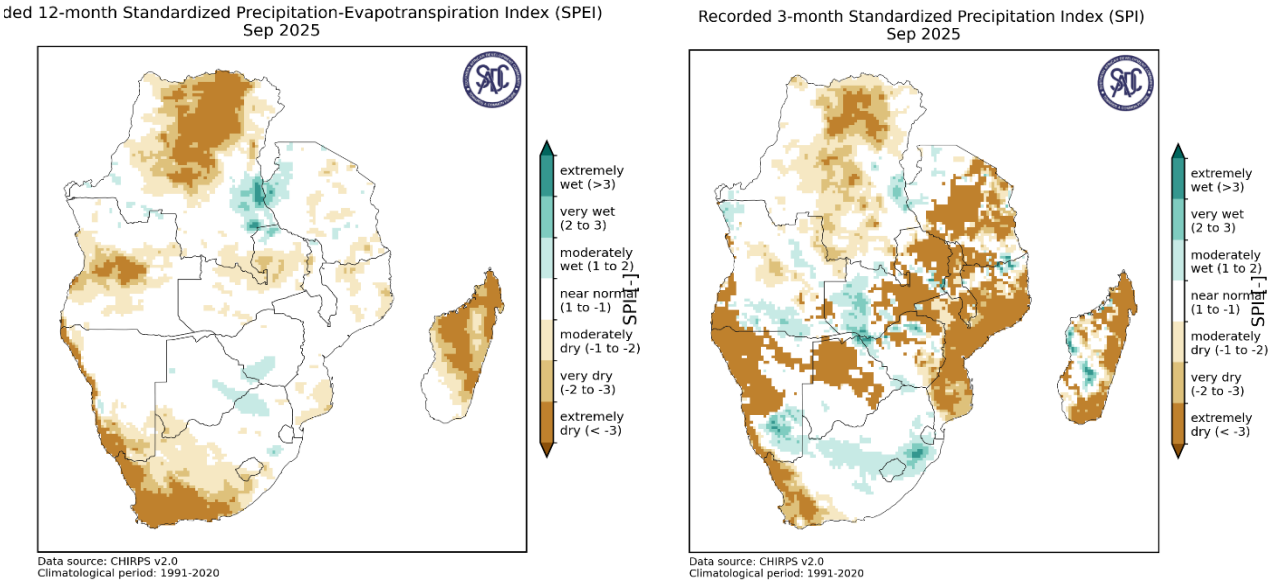

Figure 2: Drought assessment: SPI for 12-months (left) and 3-months SPI (right).

1.1.2 Short term drought (dry spells)

A prolonged spell of dry conditions lasting between 27 and 30 consecutive days was recorded across most parts of the SADC region**,** including the western areas of the Island of Madagascar**.** In contrast, northern DRC**,** localized areas in northern and eastern Tanzania**,** central and northern Angola**,** southern and central Mozambique**,** eastern Madagascar and most of South Africa experienced significantly fewer dry days**,** ranging from 0 to 6 days [Figure 3].

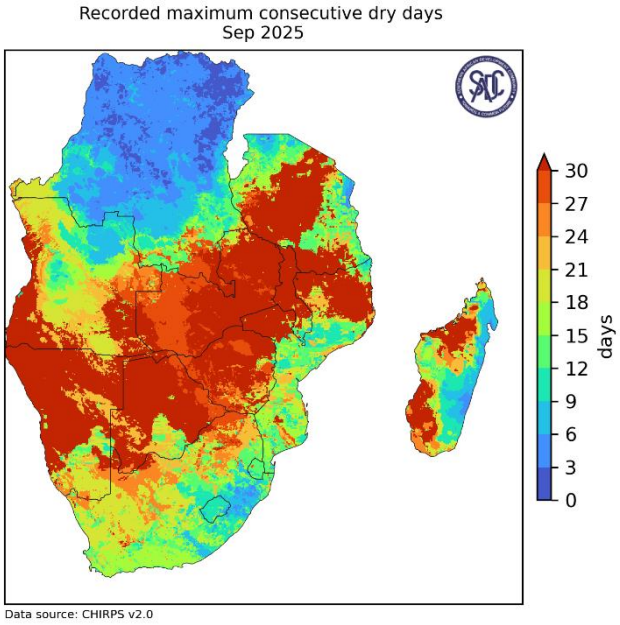

Figure 3: Dry spells prevalence during the month of September 2025.

1.2 Extreme Rainfall

Most of the subcontinent did not record any extreme precipitation events over a single day during

the month of September 2025. Most of the sub-continent including the island of Madagascar recorded almost near null precipitation in September 2025. However, highest rainfall in a single day of near 25-50 mm was recorded in isolated areas within most of the northern DRC, and within parts of South Africa and south of Mozambique, [Figure 4].

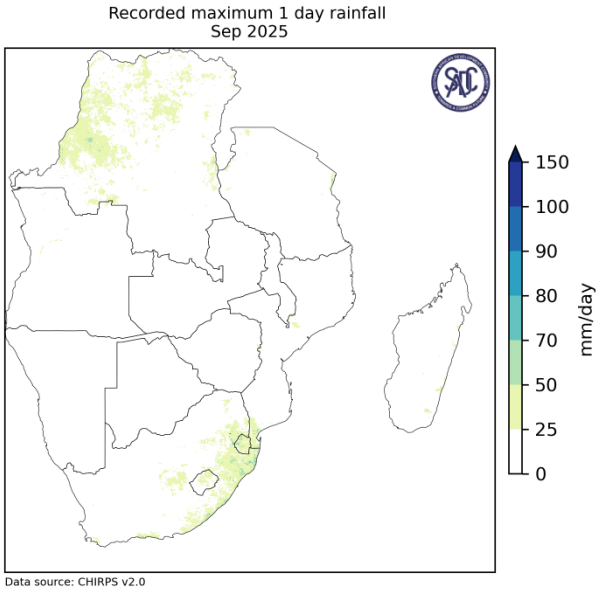

Figure 4: Maximum rainfall recorded over a one-day period during the month of September 2025.

2. REGIONAL TEMPERATURE

2.1 Minimum Temperature

In September, the lowest mean minimum temperatures**,** reaching around 5°C**,** were observed over the interior South Africa and Lesotho**.** Similar, low values were also noted across large areas of Namibia, southern Botswana, eastern Zimbabwe, and in isolated parts of Tanzania and central Madagascar**.** Across most of the subcontinent, average minimum temperatures hovered around 11°C. The highest minimum temperatures**,** exceeding 23°C, were recorded in the northernmost parts of the region**,** particularly over much of the DRC, parts of Angola, northern Botswana, Mozambique, Tanzania**,** and along the coastal fringes of Madagascar [Figure 5, left].

In September 2025, mean minimum temperature anomalies were predominantly positive across most parts of the subcontinent, including the greater part of Madagascar, where positive departures of up to 2°C were observed. In Botswana, the anomalies were even higher, reaching approximately +3°C**.**
In contrast, negative anomalies of around –2°C were recorded across the central parts of the subcontinent**,** particularly along the coastal areas between Angola and Namibia, and over most of Zambia and Namibia. Near-normal (neutral) conditions were observed in scattered areas across the region [Figure 5, right].

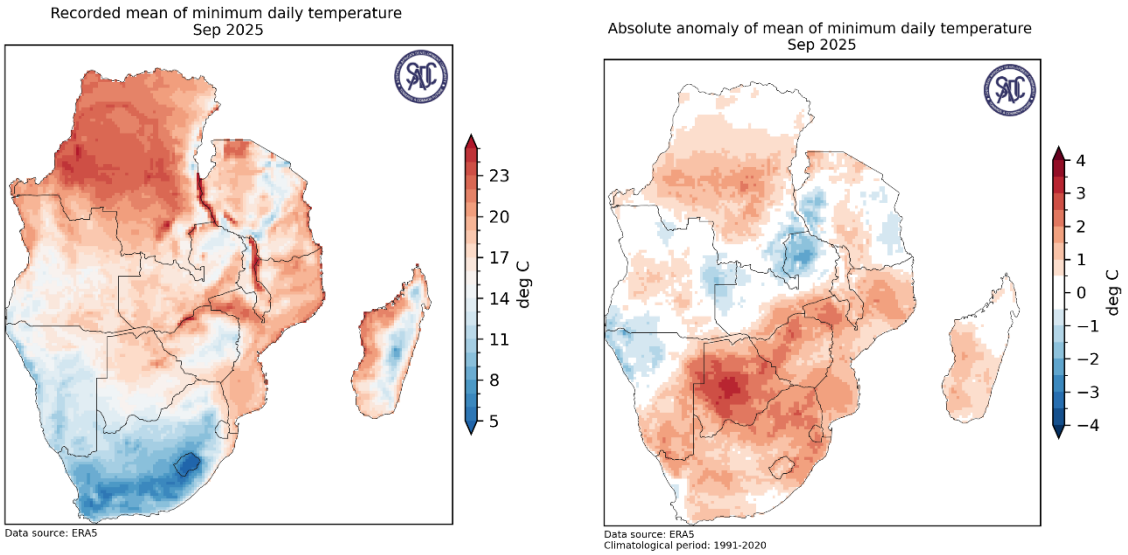

Figure 5: Observed average minimum temperature (left) and anomalies (right) for September 2025.

2.2 Maximum Temperature

Recorded mean maximum temperatures across the region in September 2025 ranged from 26°C to 36°C**,** covering most areas of the subcontinent, including the western side of the Island of Madagascar. In contrast, lower maximum temperatures of 16°C to 23°C were observed in the southernmost parts of the region—particularly in South Africa, eastern Madagascar, and isolated areas of Tanzania and eastern DRC [Figure 6, left]**.**

Maximum temperature anomalies in September 2025 were predominantly positive across the subcontinent, including Madagascar, where values reached up to +3°C. In contrast, negative anomalies of about –3°C were recorded over much of western Angola. Near-neutral anomalies appeared in several areas, particularly across central and eastern Angola and parts of the southeastern and eastern South Africa [Figure 6, right]**.**

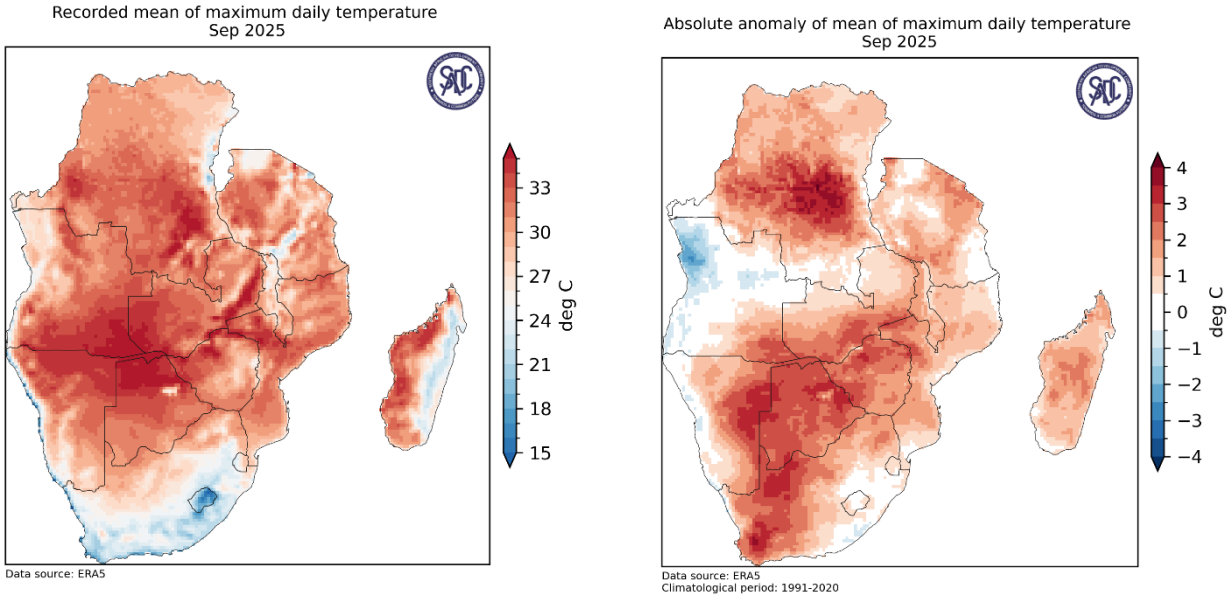

Figure 6: Observed maximum average temperature (left) and anomalies (right) for September 2025.

2.3 Heatwaves

Daytime heatwaves lasting up to 20 days were recorded in September 2025 across several parts of the region, including central DRC, northwestern Namibia, the southeastern corner of Angola, most of Botswana, Zambia, the western parts of Zimbabwe, central South Africa, and isolated areas of Tanzania and central Madagascar [Figure 7, left].

Night-time heatwaves of around 20 days were also observed, mainly over central DRC and isolated areas along the eastern side of the sub-region, including much of the Island of Madagascar [Figure 7, right].

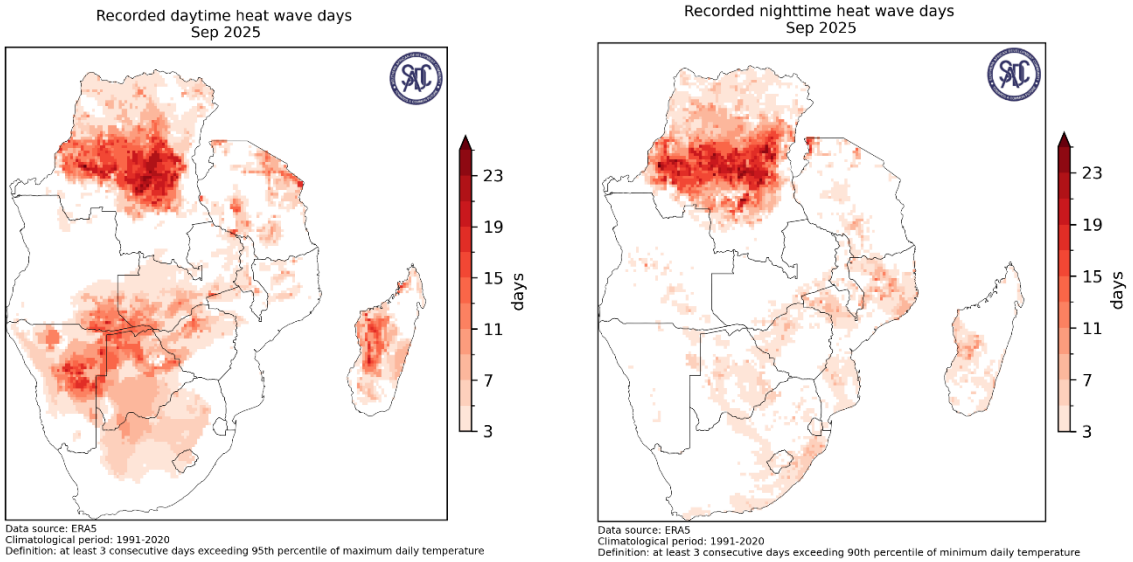

Figure 7: Heatwaves detected during the month of September 2025

3. REGIONAL MONTHLY OUTLOOKS

3.1 Rainfall Outlook

An increased likelihood of above-normal rainfall is forecast for October 2025 in isolated parts of the SADC region, including much of the DRC, northwestern and eastern Tanzania, and northern Angola. Most central areas of the subcontinent—covering Zambia, southern Angola, northern Namibia, Botswana, and Zimbabwe—are expected to receive near-normal rainfall. In contrast, below-normal rainfall is likely in Mozambique, isolated parts of South Africa, and portions of the DRC [Figure 8].

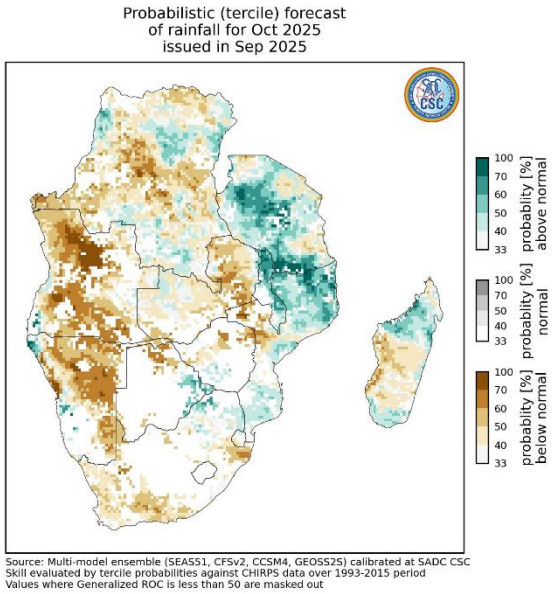

Figure 8: Rainfall probabilistic forecast for September 2025

3.2 Temperature Outlook

Above-normal temperatures are forecast across most of the SADC region for October 2025, including the entire island of Madagascar. However, isolated areas in eastern Angola, southwestern South Africa, central Botswana, and northern Mozambique are expected to experience near-normal temperatures [Figure 9].

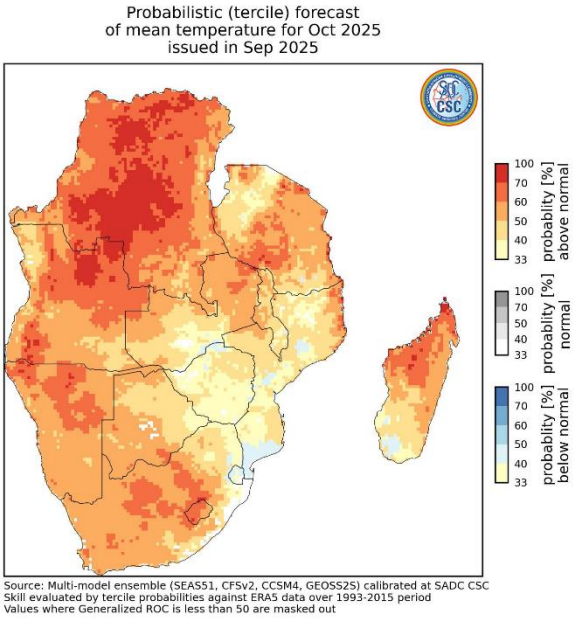

Figure 9: Temperature probabilistic forecast for October 2025

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 September 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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