South African Weather Service

Seasonal Climate Watch

July to Nov 2025

Date issued: 04 July 2025

1. Overview

The El Niño-Southern Oscillation (ENSO) is firmly in a neutral state and is predicted to be in a neutral state for the foreseeable future. ENSO, however, has limited influence on the South Africa during the winter seasons and is not expected to have a significant impact.

During late winter and early and mid-spring, the areas that receive significant seasonal rainfall is limited to the southwestern parts of the country and the southern and eastern coastal areas. During Late winter and early spring, the south-western parts of the country is still expected to receive below-normal rainfall. The eastern coastal areas however are expected to receive above-normal rainfall during early and mid-spring.

Minimum and maximum temperatures are largely expected to be above-normal for the most parts during the late winter and spring seasons.

The SAWS will continue to monitor the weather and climate conditions and provide updates on any future assessments that may provide more clarity on the current expectations for the coming season.

2. South African Weather Service Prediction System

2.1. Ocean-Atmosphere Global Climate Model

This section is under review and reconstruction due to the recent cyber security attack.

2.2. Seasonal Forecasts for South Africa from the SAWS seasonal prediction system

The GFDL-SPEAR and COLA-RSMAS-CCSM4 systems (part of the North American Multi-Model Ensemble System) for South Africa, as issued with the June 2025 initial conditions, and are presented below (District names can be seen in the appendix indicated in Figure A4):

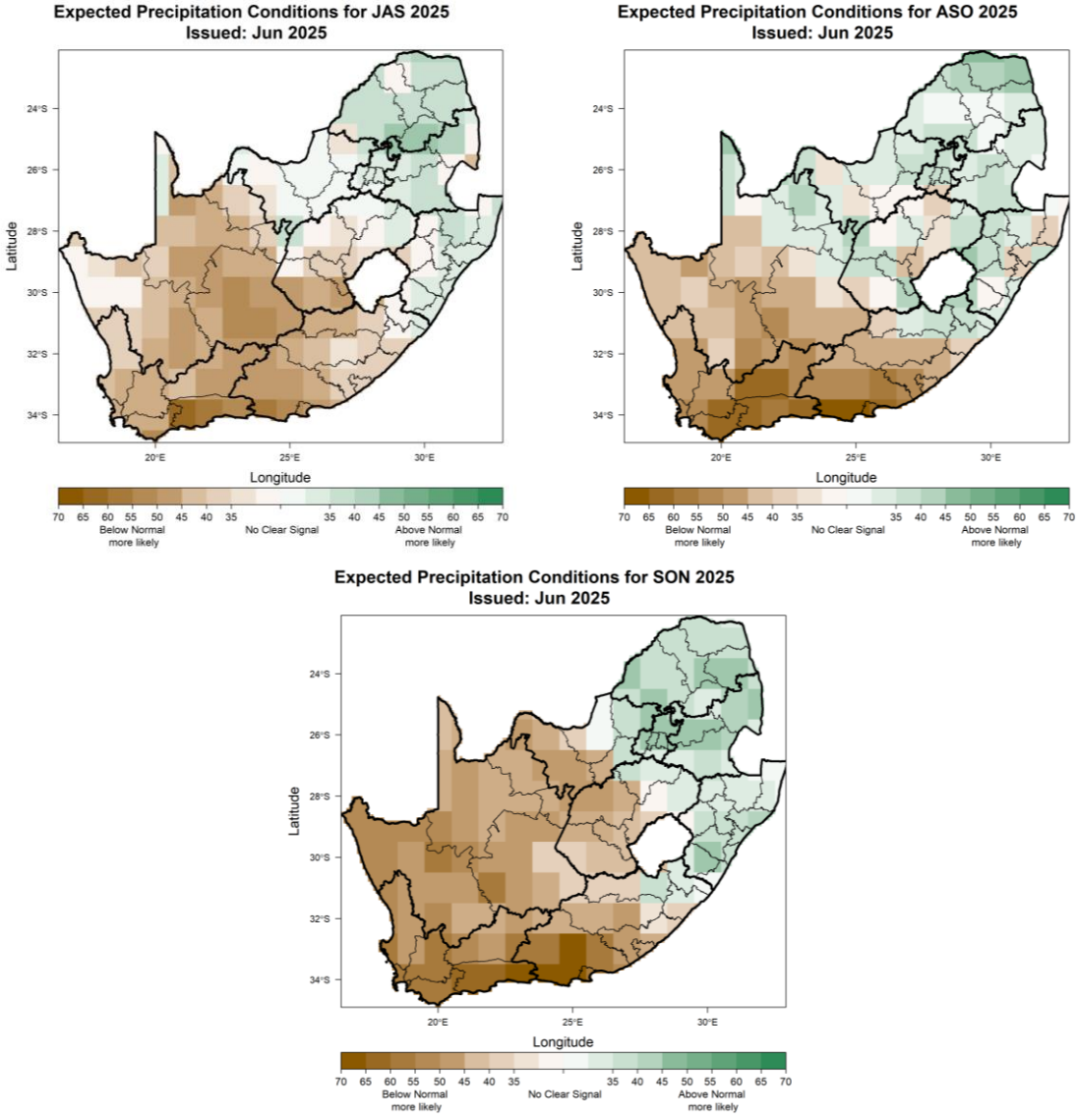

Figure 3: July-August-September 2025 (JAA; left), August-September-October 2025 (ASO; right), September-October-November 2025 (SON; bottom) seasonal precipitation prediction. Maps indicate the highest probability of the above-normal and below-normal categories. Please refer to appendix Figure A1 for forecast skill levels.

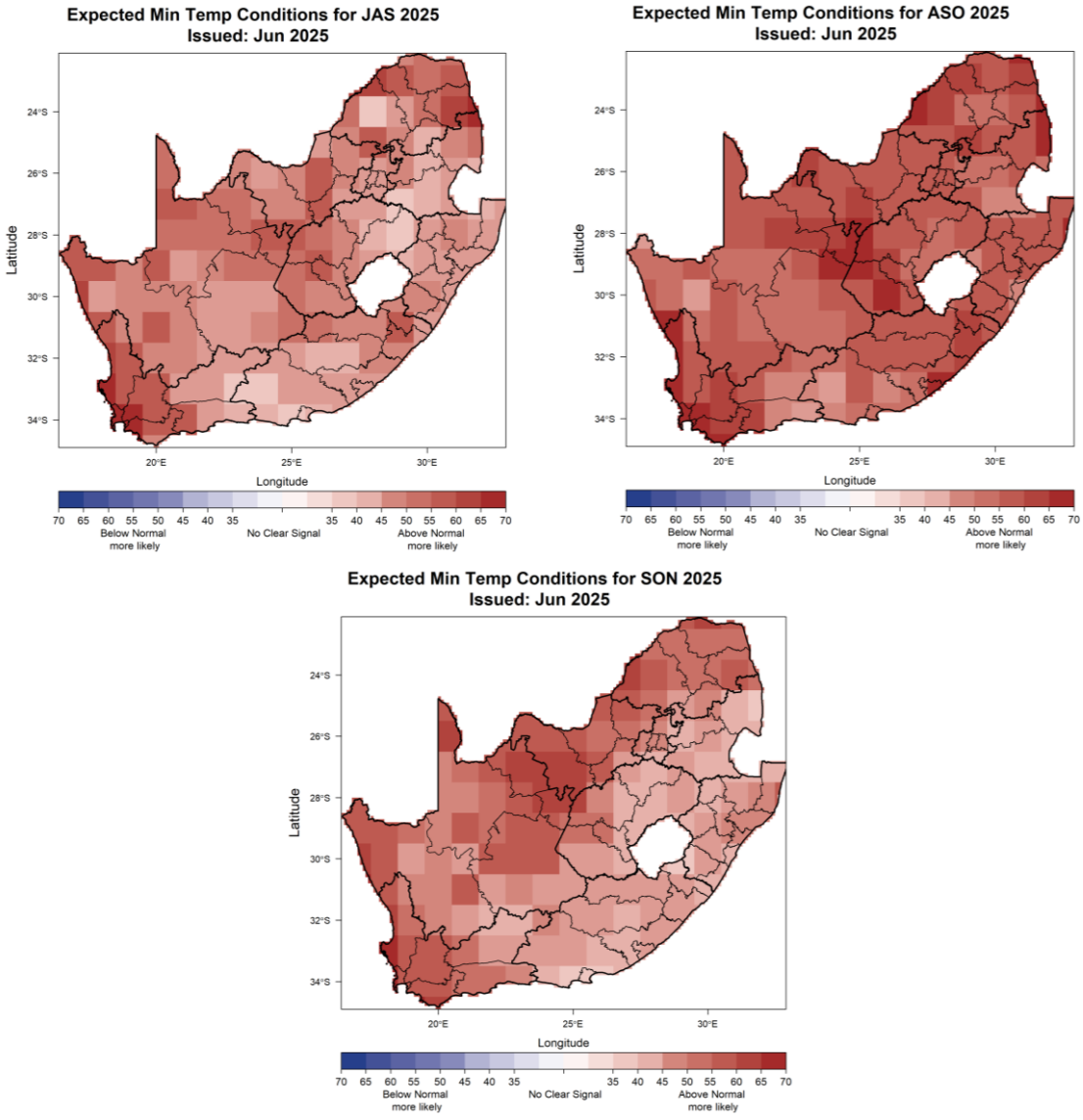

Figure 4: July-August-September 2025 (JAA; left), August-September-October 2025 (ASO; right), September-October-November 2025 (SON; bottom) seasonal minimum temperature prediction. Maps indicate the highest probability of the above-normal and below-normal categories. Please refer to appendix Figure A2 for forecast skill levels.

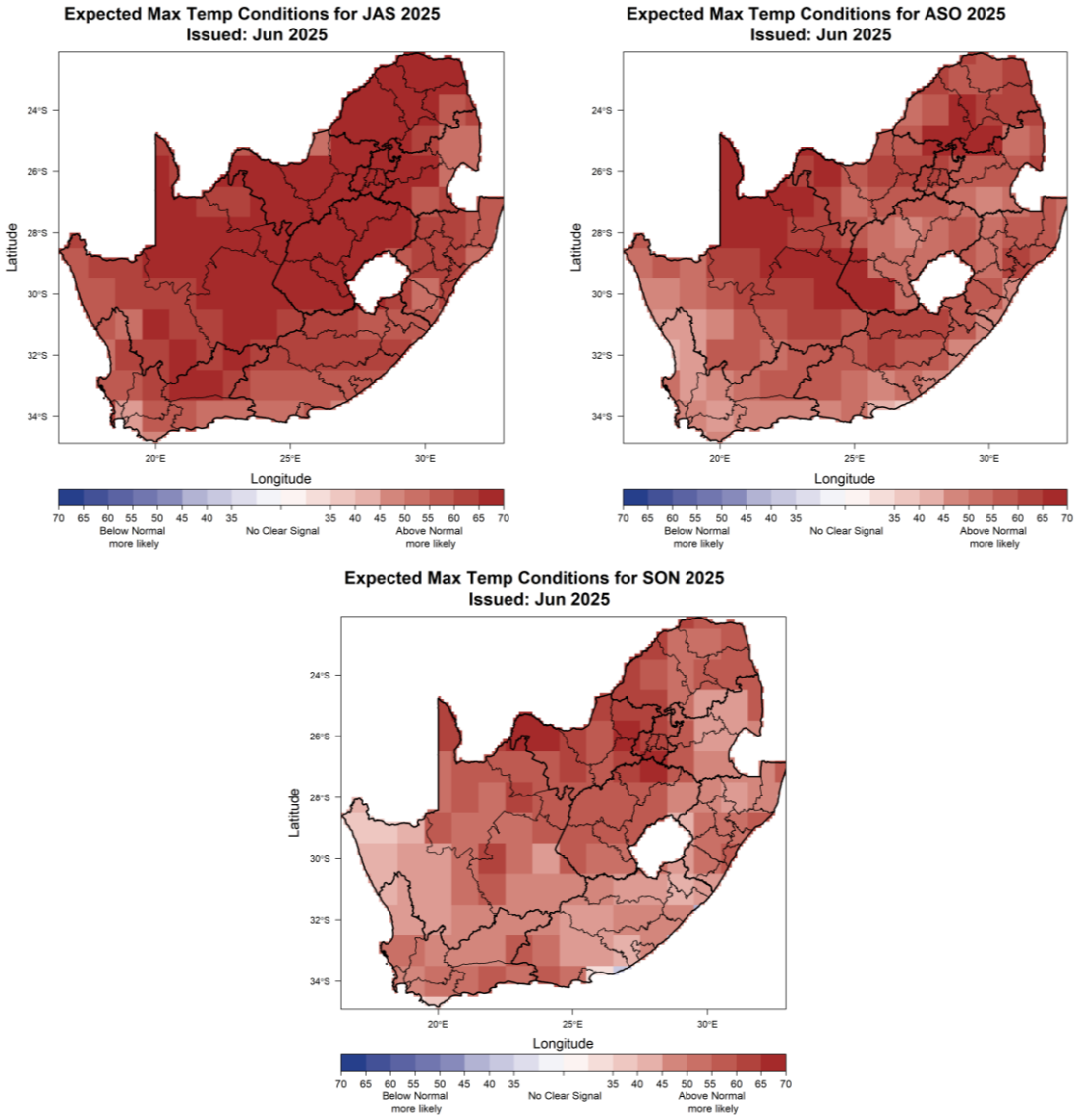

Figure 5: July-August-September 2025 (JAA; left), August-September-October 2025 (ASO; right), September-October-November 2025 (SON; bottom) seasonal maximum temperature prediction. Maps indicate the highest probability of the above-normal and below-normal categories. Please refer to appendix Figure A3 for forecast skill levels.

2.3. Climatological Seasonal Totals and Averages

The following maps indicate the rainfall and temperature (minimum and maximum temperature) climatology for the June-July-August, July-August-September and August-September-October seasons. The rainfall and temperature climates are representative of the average rainfall and temperature conditions over a long period of time for the relevant 3-month seasons presented here.

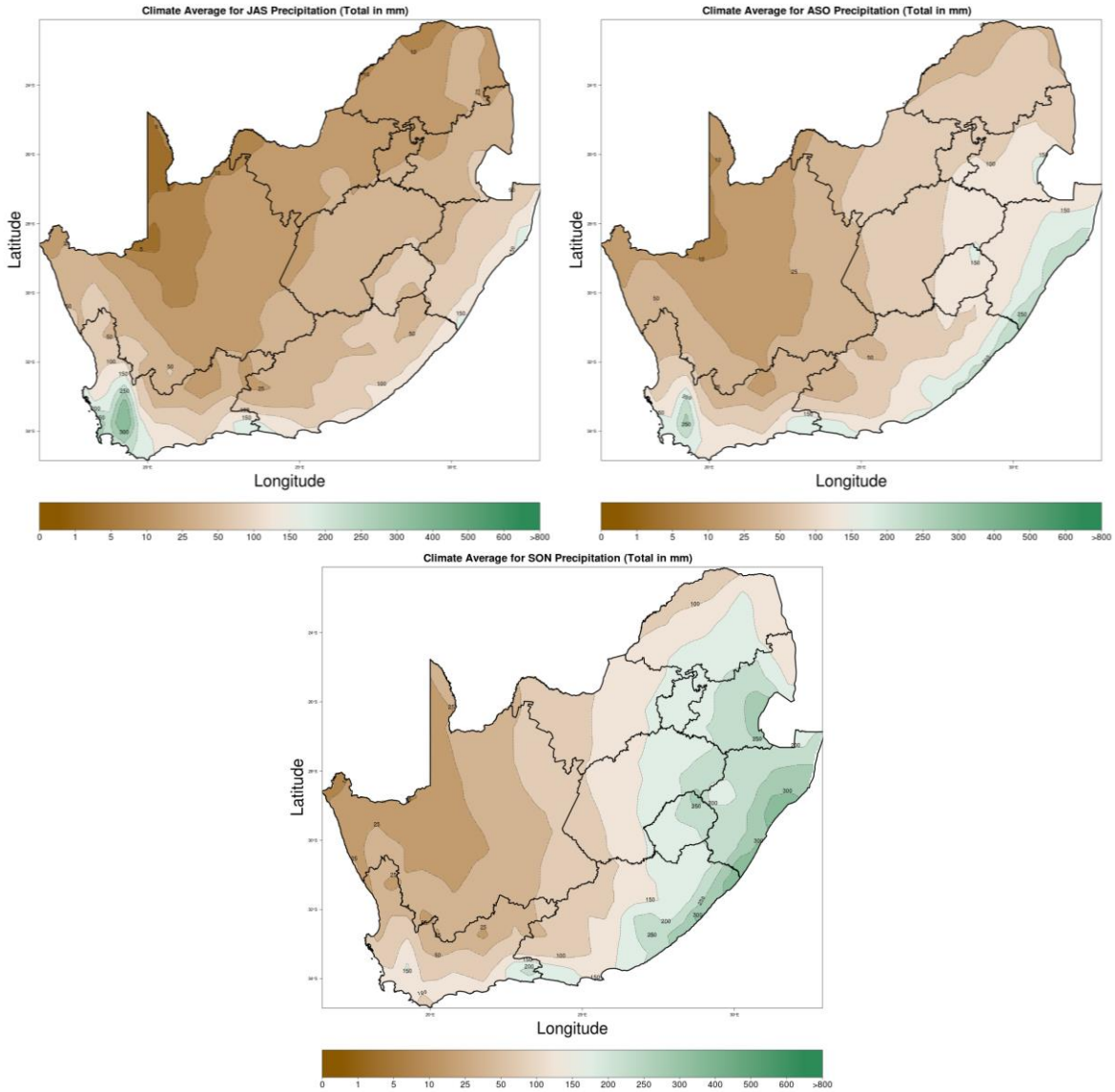

Figure 6: Climatological seasonal totals for precipitation during July-August-September (JAS; left), August-September-October (ASO; right) and September-October-November (SON; bottom).

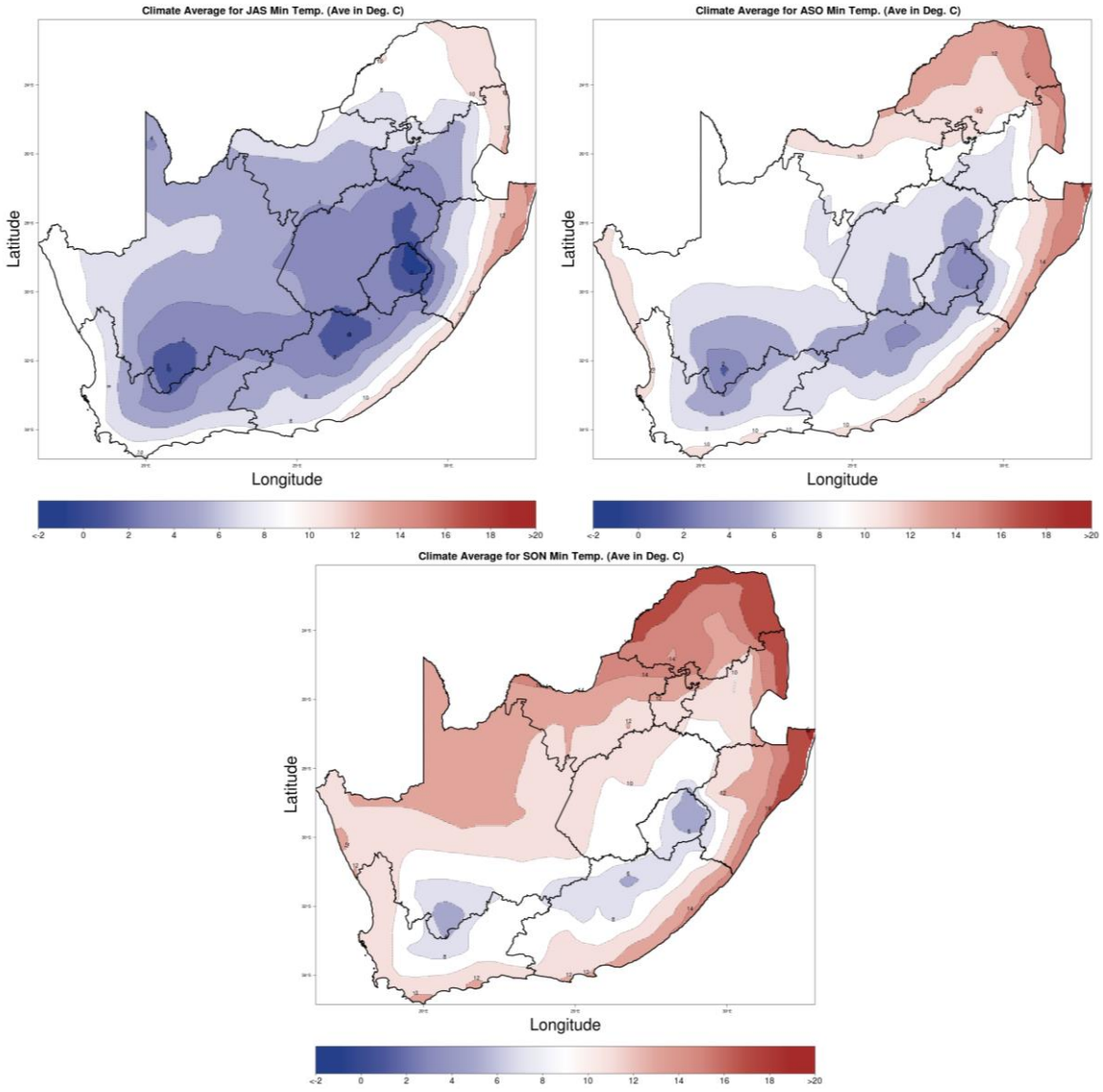

Figure 7: Climatological seasonal averages for minimum temperature during July-August-September (JAS; left), August-September-October (ASO; right) and September-October-November (SON; bottom).

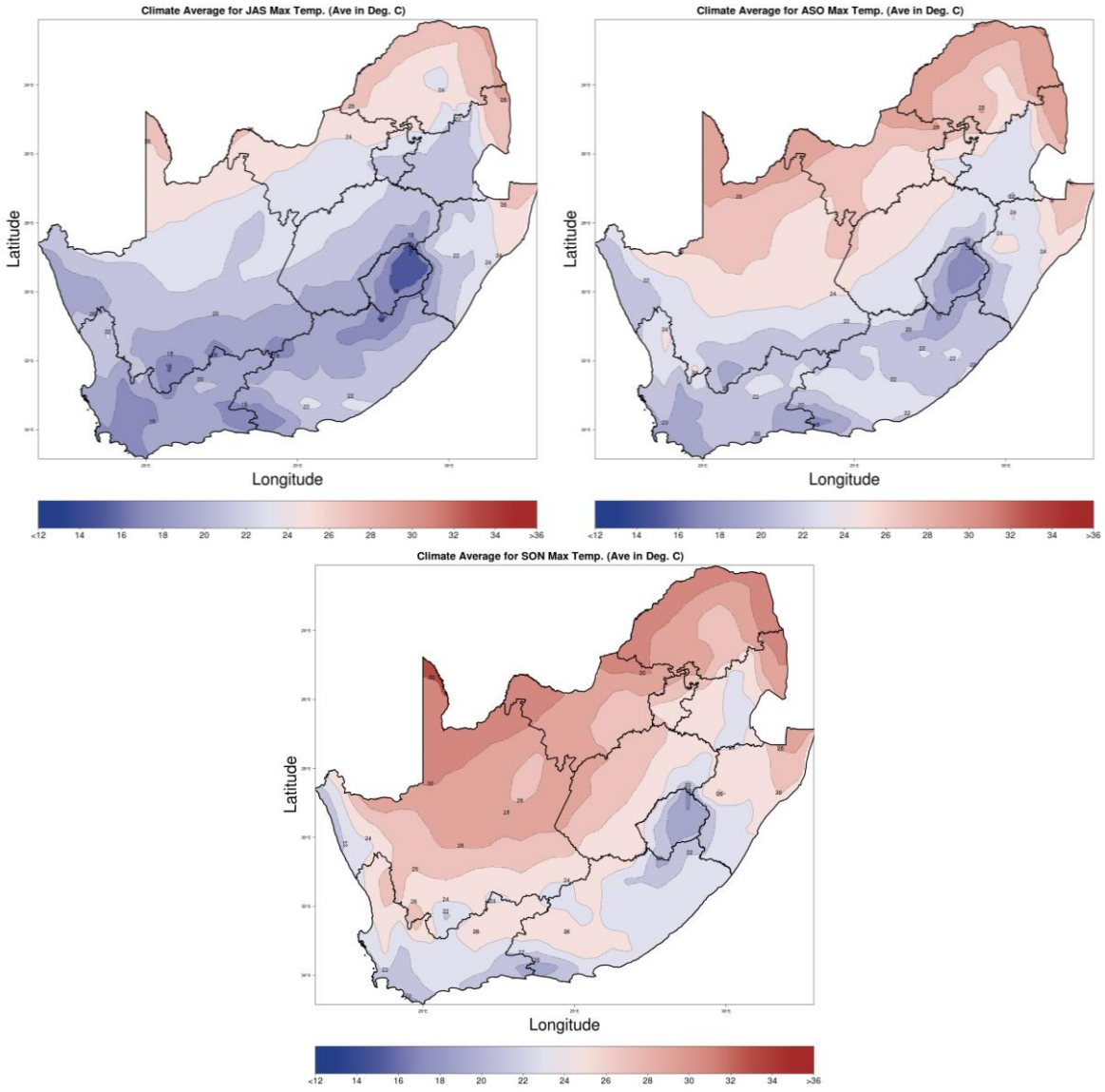

Figure 8: Climatological seasonal averages for maximum temperature during July-August-September (JAS; left), August-September-October (ASO; right) and September-October-November (SON; bottom).

3. Summary implications to various economic sector decision makers

Water and Energy

The anticipated above-normal rainfall during the early- and mid-spring seasons is unlikely to benefit water reservoirs in the eastern coastal areas (where several settlements are still experiencing moderate drought conditions) due to, among others, the expected above-normal minimum and maximum temperatures, which can result in water loses through evapotranspiration processes. Furthermore, the expected mostly above normal minimum and maximum temperatures across the country are likely to result in increased demand for cooling during the spring season. Relevant decision-makers are encouraged to take note of these possible outcomes and communicate with affected businesses and communities accordingly.

Health

The predicted above-normal minimum and maximum temperatures across most parts of South Africa during the late winter and spring seasons may have several health implications. Elevated temperatures can increase the risk of prolonged exposure to ultraviolet (UV) radiation, raising the likelihood of sunburn, skin damage, and other UV-related health issues. In addition, the forecasted above-normal rainfall for the eastern coastal areas during early and mid-spring may result in health concerns associated with wetter conditions, such as an increased risk of waterborne diseases and vector-borne illnesses. Moreover, the anticipated below-normal rainfall in the south-western parts during late-winter and early spring may cause health problems related to drier conditions. Prolonged dry conditions may elevate respiratory health risks by increasing airborne dust and pollutants, disproportionately affecting individuals with chronic respiratory conditions. The predicted below-normal rainfall is also likely to affect water availability in areas with existing water challenges, which might increase dependency on unsafe or poorly treated water sources. Communities in these regions are strongly advised to take appropriate precautions and adhere to the guidance provided by local authorities and health officials.

Agriculture

Above-normal rainfall is predicted for the eastern coastal regions of the country during early and mid-spring, which is likely to benefit crop and livestock production. However, below-normal rainfall is forecasted for the south-western part in late-winter and early spring, which could have a negative impact on agriculture. Therefore, the relevant decision-makers are encouraged to advise farmers in these regions to practice soil and water conservation, proper water harvesting and storage, and other appropriate farming practices.

This forecast is updated monthly, and users are advised to monitor the updated forecasts, as there is a possibility for them to change, especially the longer lead-time forecasts. Moreover, farmers are advised to

keep monitoring the weekly and monthly forecasts issued by the SAWS. Farmers are also advised to keep on monitoring advisories from the Department of Agriculture and make changes as required.

4. Contributing institutions and useful links

All the forecasts presented here are a result of the probabilistic prediction based on the ensemble members from the coupled climate model from the SAWS and two models from the NMME. Other useful links for seasonal forecasts are:

- http://www.weathersa.co.za/home/seasonal (Latest predictions from the SAWS for the whole of SADC)
- https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/ (ENSO predictions from various centres)
- https://iri.columbia.edu/our-expertise/climate/forecasts/seasonal-climate-forecasts/ (Copernicus Global forecasts)

Appendix – Verification

The following three figures show the Relative Operating Characteristic (ROC) scores for the relevant multi-model forecasts in the main document. The ROC scores are commonly used in seasonal forecasts to determine the areas where the forecasts perform well, so that the user can make more informed decisions on using the given forecast. As a general guideline, a score over 0,5 is technically better than chance, however, scores around and higher than 0,6 are considered to have significant skill to add confidence to the forecast.

From the figures there will be two ROC scores per season per variable, which indicate the score when a certain rainfall or temperature category is favoured. For example, if an area is favoured to receive above-normal rainfall, then the ROC score to look at would be the one calculated for the above-normal category (right side of the figures below). Also, make sure to look at the correct corresponding seasons indicated in the title of each map.

The aim of these maps is to add (or remove) confidence of a particular forecast over certain areas for specific seasons. Seasonal model skill over South Africa can be highly variable, highlighting the importance of knowing exactly where the forecasting system generally performs well or where it may struggle. It is important to note that the maps do not indicate where the current forecast will be correct or incorrect but rather highlights confidence levels in the forecasting system.

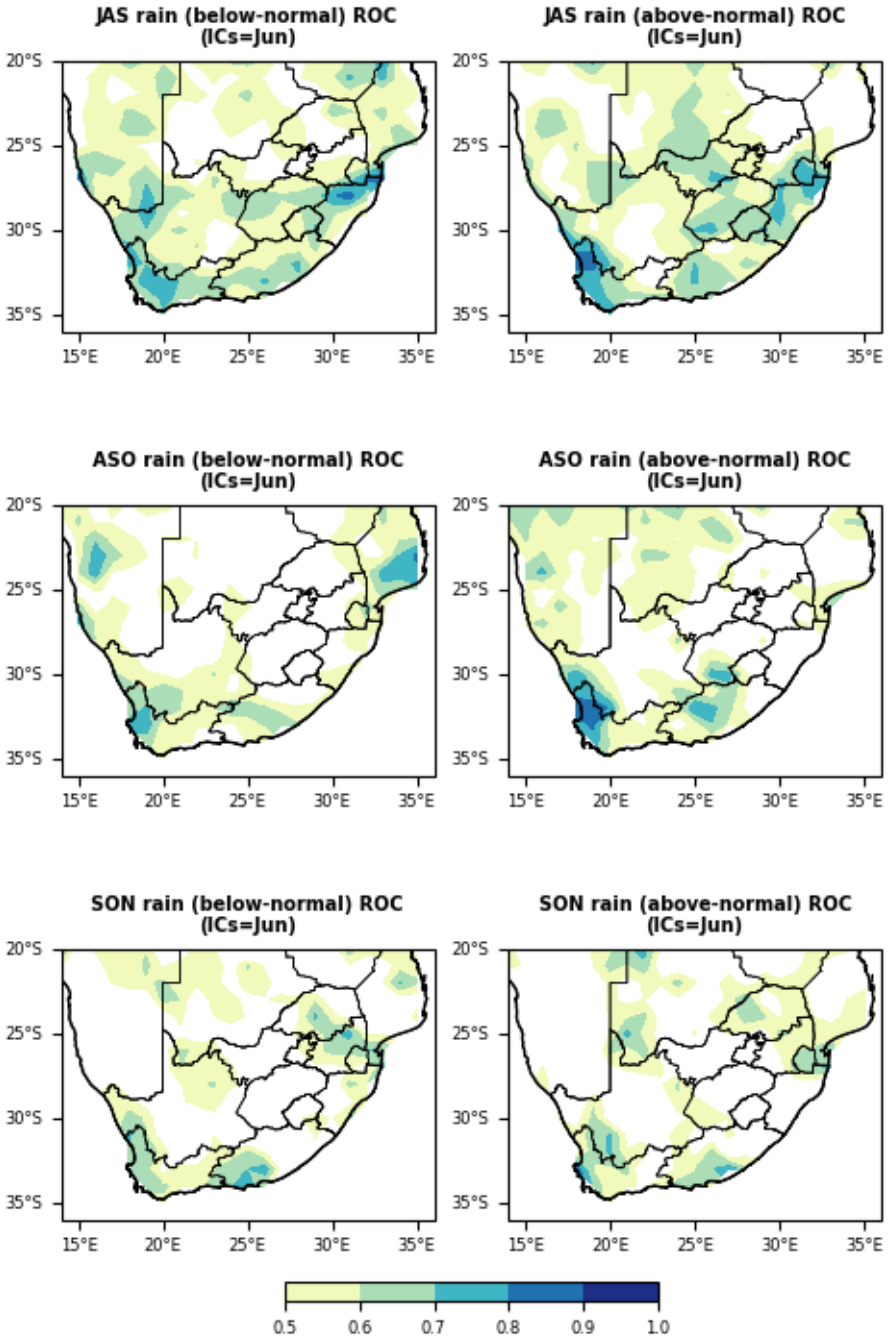

Figure A1: ROC scores for rainfall relevant to the current forecasts in Figure 3.

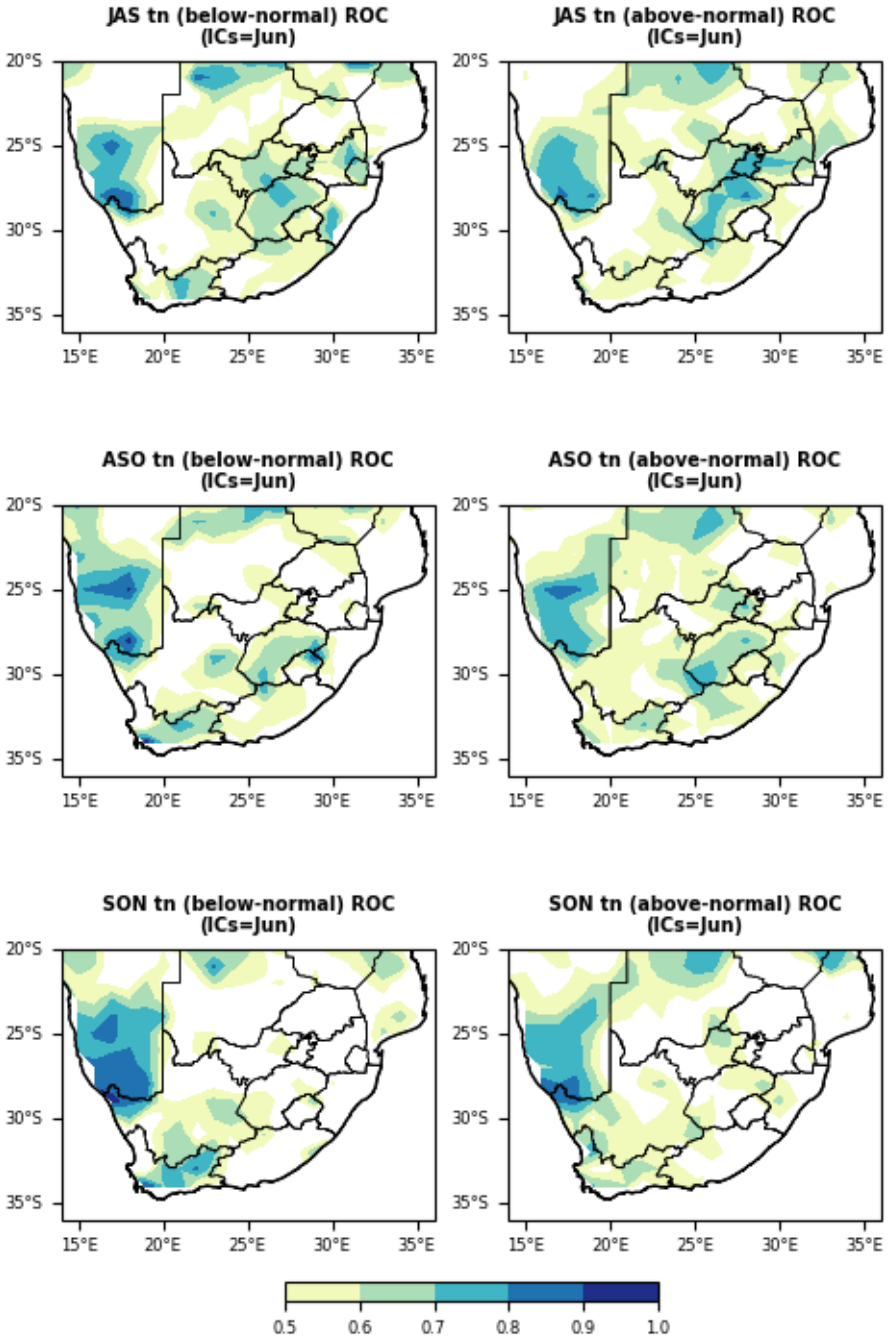

Figure A2: ROC scores for minimum temperatures relevant to the current forecasts in Figure 4.

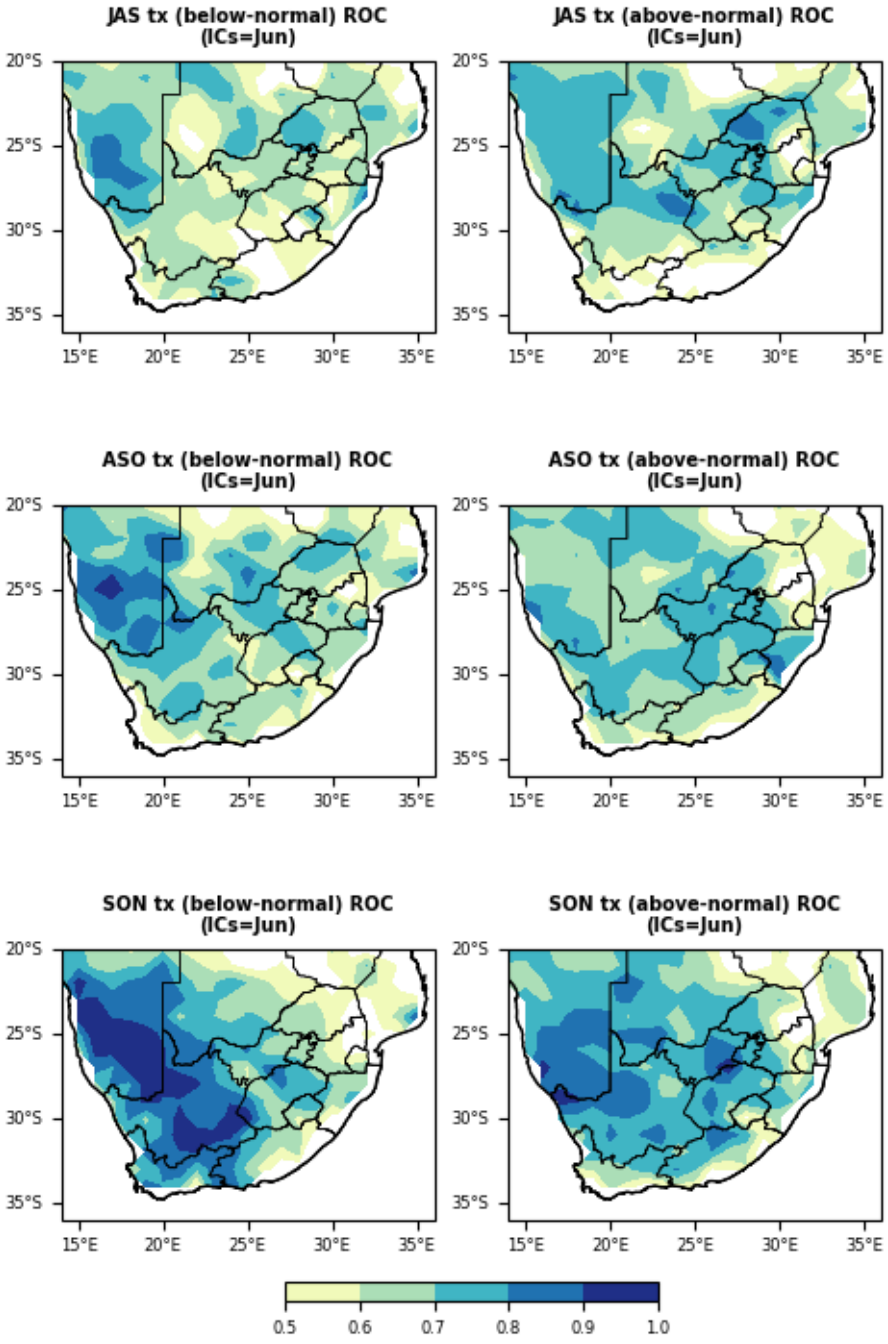

Figure A3: ROC scores for maximum temperatures relevant to the current forecasts in Figure 5.

Appendix – District Information

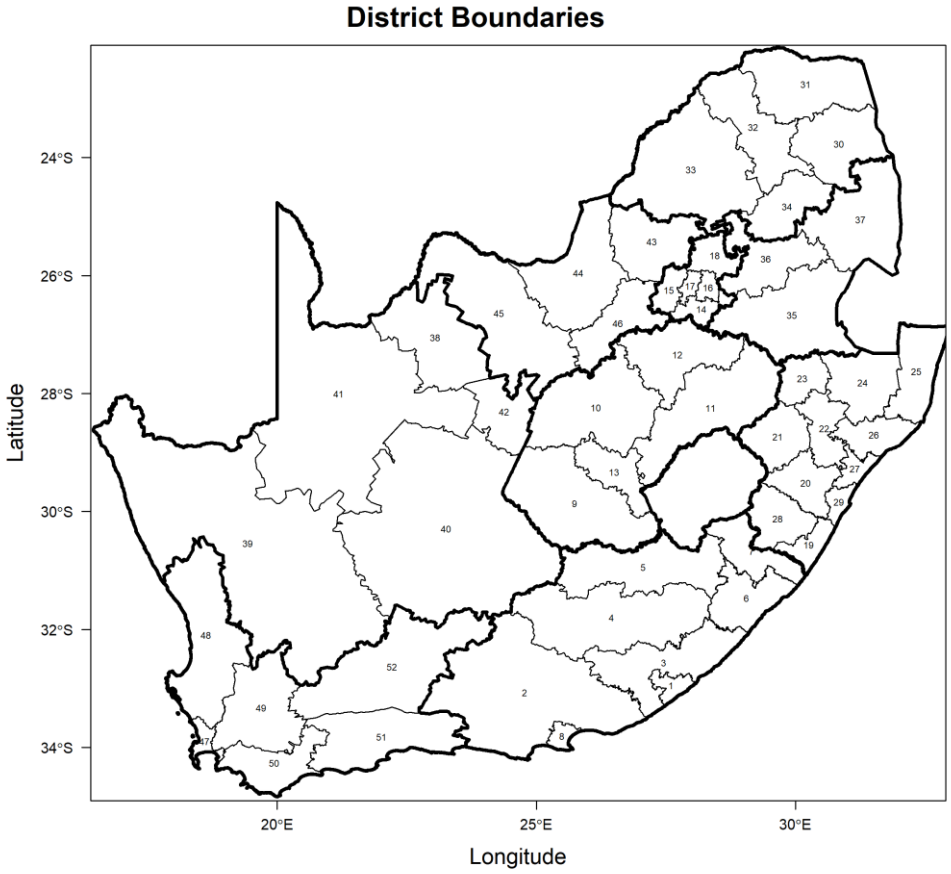

Figure A4: Local District Map with numbers corresponding to the table below with names.

Table with District Names and Numbers

Nr.	District Name	Nr.	District Name	Nr.	District Name	Nr.	District Name
1	Buffalo City	16	Ekurhuleni	31	Vhembe	46	Dr Kenneth Kaunda
2	Sarah Baartman	17	City of Johannesburg	32	Capricorn	47	City of Cape Town
3	Amathole	18	City of Tshwane	33	Waterberg	48	West Coast
4	Chris Hani	19	Ugu	34	Sekhukhune	49	Cape Winelands
5	Joe Gqabi	20	Umgungundlovu	35	Gert Sibande	50	Overberg
6	O.R.Tambo	21	Uthukela	36	Nkangala	51	Garden Route
7	Alfred Nzo	22	Umzinyathi	37	Ehlanzeni	52	Central Karoo
8	Nelson Mandela Bay	23	Amajuba	38	John Taolo Gaetsewe		
9	Xhariep	24	Zululand	39	Namakwa		
10	Lejweleputswa	25	Umkhanyakude	40	Pixley ka Seme		
11	Thabo Mofutsanyane	26	King Cetshwayo	41	Z F Mgcawu		
12	Fezile Dabi	27	iLembe	42	Frances Baard		
13	Mangaung	28	Harry Gwala	43	Bojanala		
14	Sedibeng	29	eThekwini	44	Ngaka Modiri Molema		
15	West Rand	30	Mopani	45	Dr Ruth Segomotsi Mompati		