

## **Cordex Africa analysis: Projected changes in summer rainfall characteristics over Southern Africa**

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The CORDEX-Africa analysis initiative was developed to investigate the multi-model ensemble of regionally downscaled data for the African continent. This study uses output from the CORDEX Africa project to investigate changes in seasonal rainfall characteristics such as seasonal boundaries (i.e. rainfall onset and cessation), rainfall intensity and frequency, and duration of dry spells over southern Africa region. This region relies much on rain-fed agriculture, an understanding of how seasonal rainfall characteristics are likely to change in the future is therefore of vital importance. The ability of the downscaling methods to reproduce the observed rainfall characteristics is assessed and models that have higher skill in simulating observed rainfall characteristics are then used to investigate the projected changes of these. Despite the absence of a statistically significant change in total austral summer (December - February) rainfall in parts of southern Africa, changes in seasonal rainfall characteristics may be significant. The mechanisms responsible for the simulated changes will also be investigated.