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Dynamical Downscaling of Climate Change Projection over the African Region using the Regional Climate Model (RegCM3)

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The present-day climate conditions (1990-2003) and climate change projections (1990-2050) for the Africa region from a regional climate model experiments are presented. We completed two simulations for a domain covering all of Africa at 50 km resolution using the regional climate model RegCM3. For the control simulation, the ERA-Interim boundary conditions were used. For the A1B emission scenario simulation, the ECHAM5 GCM were employed used as boundary conditions. The control simulation (forced by ERA-Interim) performs quite well in terms of temperature and precipitation during the thirteen years of validation.