



The SASSCAL contribution to climate observation, climate data management and data rescue in Southern Africa

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Compared to other regions of the world, the availability and density of historic and present-day ground-based climate observations in southern Africa is still low. However, there is an increased need for climate information for research, climate adaptation measures and climate services in general and Africa is considered to be the most vulnerable continent in terms of climate variability and change. To respond to the challenges of climate change and related issues, Angola, Botswana, Germany, Namibia, South Africa and Zambia have initiated the interdisciplinary regional competence center SASSCAL, the “Southern African Science Service Centre for Climate Change and Adaptive Land Management” (SASSCAL; www.sasscal.org). SASSCAL will support local, national and regional institutions and service providers to develop relevant advisory and implementation skills.

One major task is to provide science-based environmental information and knowledge which includes the provision of consistent and reliable climate data for Southern Africa. Hence, SASSCAL, in close cooperation with the national weather authorities of Angola, Botswana, Germany and Zambia, and an NGO in Namibia, supports the extension of the regional meteorological observation network and the improvement of the climate archives at national level. With the ongoing rehabilitation of existing weather stations and the new installation of fully automated weather stations (AWS), altogether 87 AWS currently provide a set of climate variables at 15-min and 60-min intervals respectively. These records are made available through the SASSCAL Weathernet, an online platform providing near-real time data as well as various statistics and graphics, all in open access. This effort is complemented by the harmonization and improvement of climate data management concepts at the national weather authorities, capacity building activities and an extension of the data bases with historical climate data which are still available from different sources. These activities are performed through cooperation between regional and German institutions and will provide important information for climate service related activities.