Climate change and adaptive land management in southern Africa

Assessments Changes Challenges and Solutions

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Climate change and adaptive land management in southern Africa

Assessments, changes, challenges, and solutions

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A frequent issue at the NMSs was the entry of on-paper climate data. CLIMSOFT provides some templates for entering data directly into the databases, but these templates often do not satisfy the requirements of meteorological services. Therefore, an additional open-source tool was designed to facilitate data entry in the partner countries. The app provides users with a web-based interface to enter the data in the same way that they are structured on the on-paper form (Fig. 1). Users can also customize the structure of the forms and create their own templates. It also includes a quality control of absolute limits that checks the meteorological data as they are entered and alerts users if an entered value is implausible.

Similarly to the ACD-App, the keyEntry-App has been developed using Shiny so that it can easily be run on any PC with a web browser. It has also been hosted on GitHub for download and further development: https://github.com/sasscal-dwd-apps/keyEntry-App. A detailed manual on how to install the app and how to use it can be found here: https://sasscal-dwd-apps.github.io/keyEntry-App/en/documentation.html

Figure 1: (top) Original form and (bottom) digital form of ZMD. The digital form maintains the same structure as the on-paper form to facilitate data entry. It also provides embedded quality control, flagging the values entered that are outside a given threshold.