Climate change and adaptive land management in southern Africa

Assessments Changes Challenges and Solutions

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Assessments, changes, challenges, and solutions

Edited by

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Key Entry Form Application to digitize climate data (keyEntry-App)

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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



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	310	NA	NA	23	22	22	NA	NA	25	NA	34	-10	0	9668	NA	66	NA	NA	NA	NA	NA	NA	NA	8	3	1	1	0	3	NA
	285	NA	NA	22	22	25	NA	NA	25	NA	0	-10	8	9078	NA	85 NA	NA	NA	NA	NA NA	NA	NA	NA NA	0	0	1		0	3	NA
	295	NA	NA	20	24	22	NA	NA	25	NA	NA	-10	0	9674	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	3	1	1	0	3	NA
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)	300	NA	NA	19	21	23	NA	NA	25	NA	NA	-10	0	9692	NA	77	NA	NA	NA	NA	NA	NA	NA	0	3	1	1	0	3	NA
	280	NA	NA	23	22	23	NA	NA	25	NA	NA	-10	7	9681	NA	73	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	0	0	NA
	295	NA	NA	22	22	23	NA	NA	25	NA	NA	-10	0	9670	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	0	0	NA
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	245	NA	NA	21	22	20	NA	NA	20	NA	NA	-10	7	9059	MA	95	NA	NA	NA	NA	NA	NA	NA	0	3	0	0	0	3	NA
	275	NA	NA	21	21	22	NA	NA	24	NA	NA	-10	7	9664	NA	48	NA	NA	NA	NA	NA	NA	NA	0	4	0	0	0	3	NA
	265	NA	NA	21	21	23	NA	NA	25	NA	NA	-10	7	9657	NA	48	NA	NA	NA	NA	NA	NA	NA	0	4	0	0	0	3	NA
5	260	NA	NA	23	22	23	NA	NA	24	NA	NA	-10	0	9675	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	3	1	1	0	3	NA
	255	NA	NA	21	21	23	NA	NA	24	NA	NA	-10	0	9686	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	4	1	1	0	3	NA
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	270	NA	NA	21	22	22	NA	NA	24	NA	NA	-10	7	9674	NA	76	NA	NA	NA	NA	NA	NA	NA	0	4	1	1	0	3	NA
	265	NA	NA	22	22	22	NA	NA	24	NA	NA	-10	7	9667	NA	91	NA	NA	NA	NA	NA	NA	NA	0	3	1	1	0	3	NA
	250	NA	NA	21	21	22	NA	NA	24	NA	NA	-10	0	NA 9875	NA	84 NA	MA	NA	NA	NA	NA	NA	NA	0	3	1	1 NA	0	3	NA
5	260	NA	NA	21	21	24	NA	NA	24	NA	NA	-10	0	9687	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	3	1	NA	0	3	NA
3	275	NA	NA	21	21	22	NA	NA	24	NA	NA	-10	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	NA	0	0	NA
	270	NA	NA	21	22	22	NA	NA	24	NA	NA	-10	0	9662	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	NA	0	0	NA
5	285	NA	NA	22	22	23	NA	NA	24	NA	NA	-10	7	9677	NA	78	NA	NA	NA	NA	NA	NA	NA	0	3	0	NA	0	3	NA
9	280	NA	NA	23	23	24	NA	NA	24	NA	NA	-10	7	NA	NA	79	NA	NA	NA	NA	NA	NA	NA	0	3	0	NA	0	3	NA
0	295	NA	NA	22	23	24	NA	NA	25	NA	NA	-10	7	NA	NA	79	NA	NA	NA	NA	NA	NA	NA	0	4	3	NA	0	3	NA
I X	325	NA	N/A N/A	22	23	24	NA	NA	24	NA	563	-10	8	NA 9692	NA	05	NA	NA	NA	NA	NA	NA	NA	0	0	0	NA 1	0	0	NA
es. N	245	NA	NA	19	21	23	NA	NA	24	NA	0	-10	0	9657	NA	48	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	0	0	NA
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on-paper form to facilitate data entry. It also provides embedded quality control, flagging the values entered that are outside a given threshold.