Geoscientific Model Development Discussions

Geosci. Model Dev. Discuss., community comment CC1
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# Comment on gmd-2020-443

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Community comment on "COSMO-CLM regional climate simulations in the Coordinated Regional Climate Downscaling Experiment (CORDEX) framework: a review" by Silje Lund Sørland et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2020-443-CC1, 2021

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A few minor comments on:

Soerland et al., 2021: COSMO-CLM Regional Climate Simulations in the CORDEX framework: a review

- Line 124: The reference 'Schrodin and Heise' is slightly wrong. The year is 2001, not 2002. The name of the model is TERRA_LM, not TERRA-ML. Maybe, you say simply TERRA.

- Line 124: Perhaps you could add another reference here, which contains additional characteristics of TERRA which are missing in Schrodin and Heise (2001). This would be Schulz et al. (2016):

https://doi.org/10.1127/metz/2016/0537

It also has the advantage that it is a peer-reviewed article, not grey literature.

In total:

"... by the soil-vegetation-atmosphere-transfer sub-model TERRA (Schrodin and Heise, 2001; Schulz et al., 2016). ..."

- Line 137: Add the sentence:

"... (Lawrence and Chase, 2007). Furthermore, activating a formulation of soil thermal conductivity dependent on soil moisture was shown to improve the simulated diurnal cycles of the surface temperature, particularly in arid regions (Schulz et al., 2016). For the first CORDEX ..."

- Line 375: Add reference:

"... Thiery et al., 2016; Schulz et al., 2016). However, ..."

- Line 1034: Correct reference:

Schrodin and Heise, 2001: TERRA_LM

- Line 1040: Add reference:

Schulz et al., 2016. https://doi.org/10.1127/metz/2016/0537

Best regards

Jan-Peter