Geoscientific Model Development Discussions

Geosci. Model Dev. Discuss., author comment AC1
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Comment on gmd-2021-97

Tom Gleeson et al.

Author comment on "GMD perspective: The quest to improve the evaluation of groundwater representation in continental- to global-scale models" by Tom Gleeson et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-97-AC1, 2021

Dear Chief-executive editor David Ham and Topical Editor Jatin Kala

Thank you for handling the reviews of our proposed GMD Perspective article entitled "Improving the evaluation of groundwater modeled at continental to global scales".

The two reviewers are convergent that the manuscript is 'a very well written paper and authors provide important insights about how to move the community forward' and 'very thorough and exhaustive'.

The most significant suggested revision is to add 'examples of existing global scale groundwater models' or 'add a table that summarizes the main characteristics of the existing models at the continental and global scale'. Based on these suggestions, the most significant change to the manuscript we made is adding a new sub-section called "2.1 Brief overview of current large-scale groundwater models" and a new Table 1 which summarizes the main characteristics of existing models at the continental and global scale.

We also address each of the minor comments as we outline ini the supplement.

Warmly, Tom Gleeson, Thorsten Wagener and Petra Döll

Please also note the supplement to this comment:
https://gmd.copernicus.org/preprints/gmd-2021-97/gmd-2021-97-AC1-supplement.pdf