General reply

In addition to the replies to the two referees, we would like to use the occasion to update the manuscript in two directions. Please note that this does not imply modifications in the content but updates the output data description and enriches visualization of model output.

1. Updated repositories for model output

As the year 2023 is now completed, we have used the chance to update GSWP3-ERA5 model output to include the year 2023. Hence, the two repositories (with and without direct human impacts) have been updated (values before 2023 are not changed) (Müller Schmied et al., 2024c,d). Furthermore, we received several requests to provide daily model output of water storage compartments. Hence, we provide this for the two climate forcings gswp3-era5 and gswp3-w5e5 (with direct human impact only) (Müller Schmied et al., 2024a,b). These datasets will be added to the assets, and for the GSWP3-ERA5 updates, this replace the provided asset data in the original submission. Due to the update of GSWP3-ERA5 we have updated the global-scale water balance component tables (Tables S4, S8) in the Supplement.

2. Inclusion of a WaterGAP WebApp

After submission of this manuscript we have been in collaboration with a geodata company (www.ageoce.com) who used the provided model output to create a WaterGAP WebApp (https://www.ageoce.com/en/apps/watergap/). We add this Website as asset and refer to it in the end of Sect. 8 (L 586) as: “A spatial view for a range of model output is available in a Web-App (Attard 2023)”.

References


Müller Schmied, H., Trautmann, T., Ackermann, S., Cáceres, D., Flörke, M., Gerdener, H., Kynast, E., Peiris, T. A., Schiebener, L., Schumacher, M., and Döll, P.: The global water resources and use model WaterGAP v2.2e - model output driven by gswp3-era5 and
neglecting direct human impacts, https://doi.org/10.25716/GUDE.1TWP-GNQP, 4 April 2024d.