Mapping groundwater dependent ecosystems using a high-resolution global groundwater model

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Supplementary Information

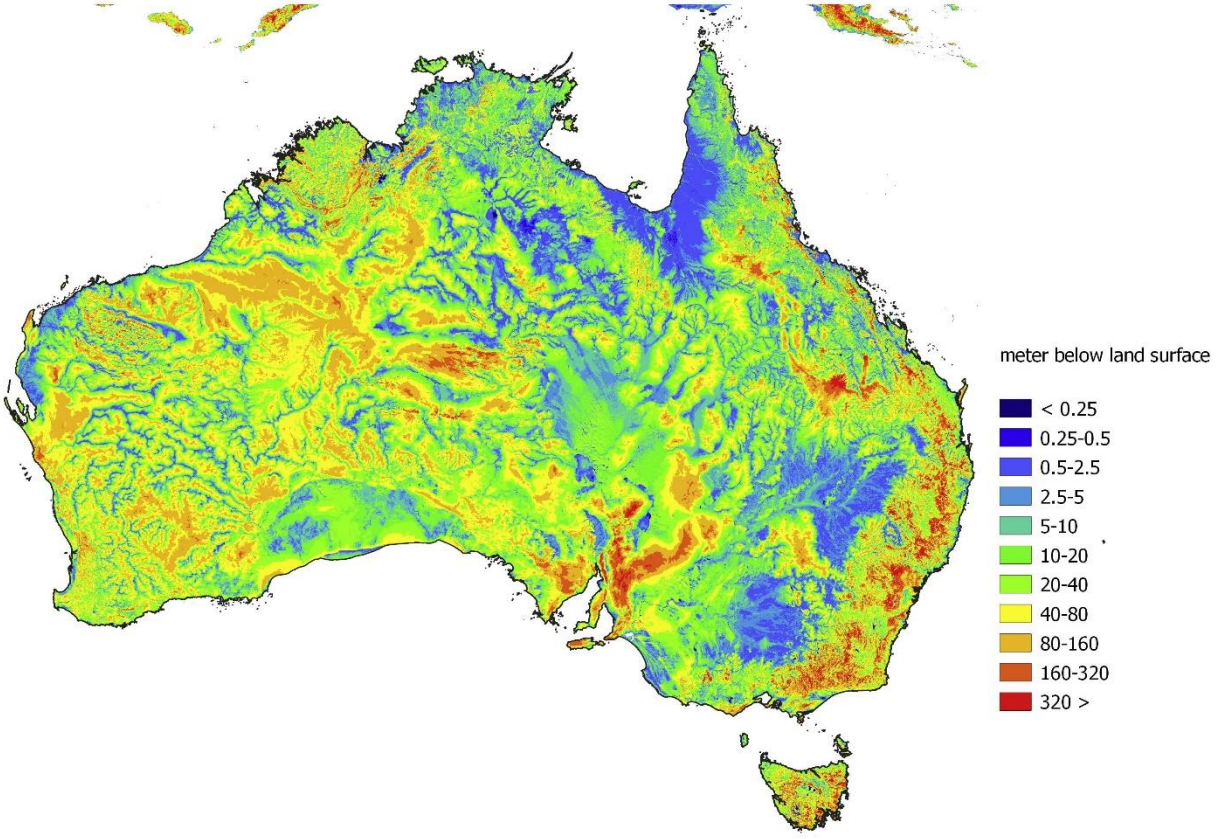

Figure S1. Average simulated groundwater levels for 1979 – 2019.

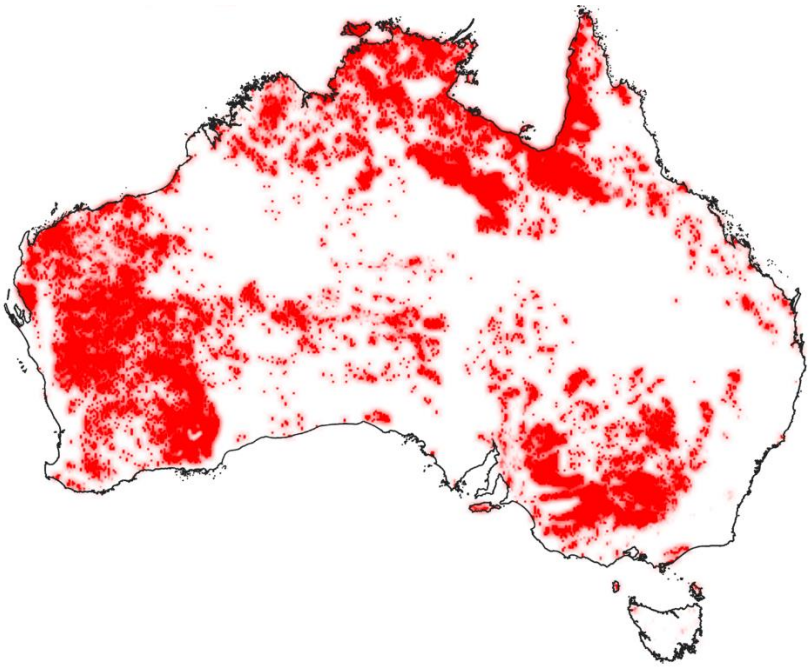

Figure S2. Locations (red) where groundwater seepage occurs from the lower model layer towards the upper layer of the groundwater model.

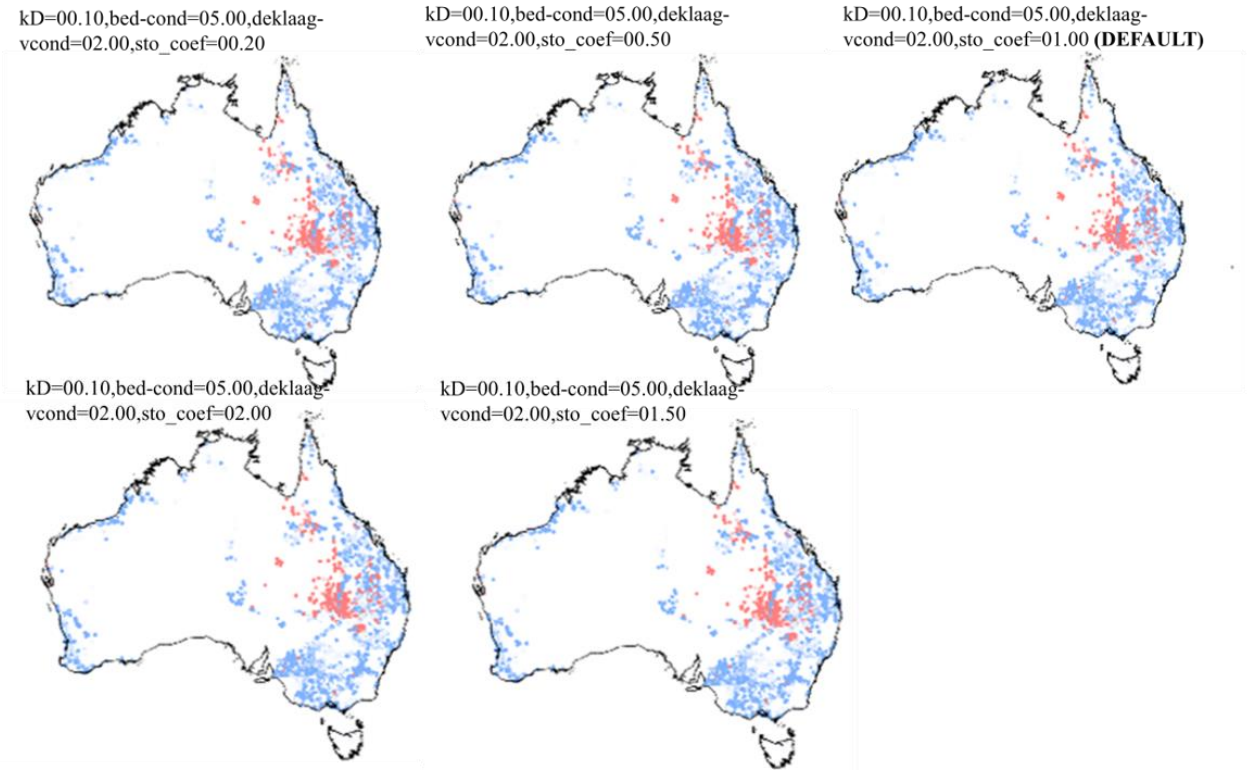

Figure S3. Bias of observed groundwater depths against simulated groundwater depth from pre factor global parameter sets . kD = transmissivity, bed-cond= river bed conductance, deklaag-vcond = thickness of the vertical confining layer and sto_coef = storage coefficient

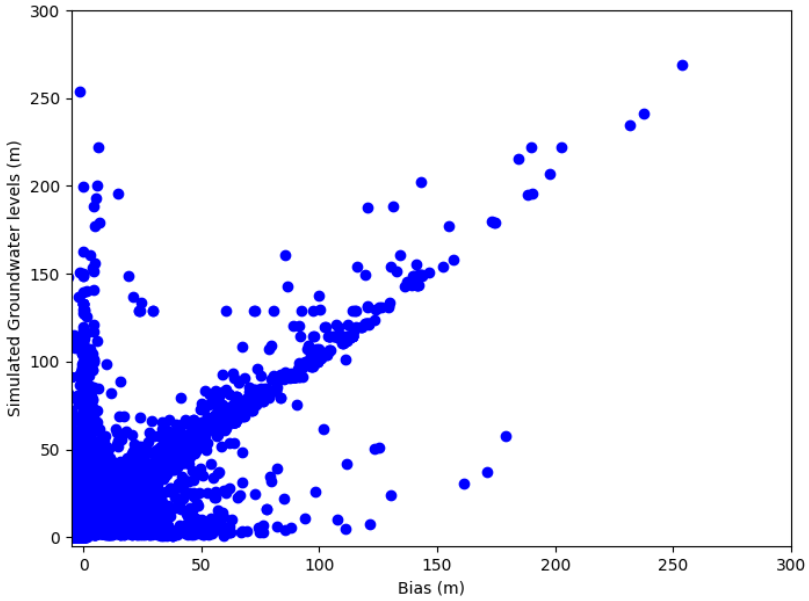

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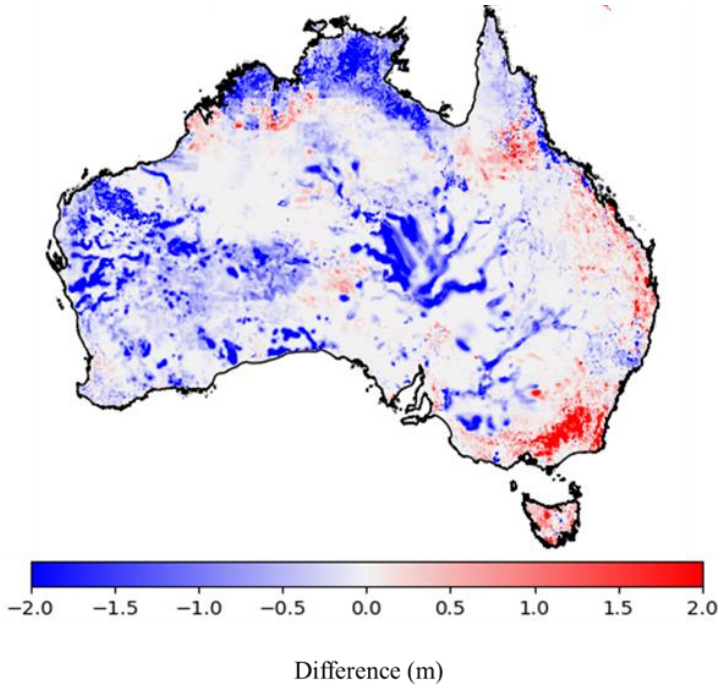
Figure S4. Scatter plot of bias of simulated groundwater depth (m) against the mean observed groundwater depth (m).



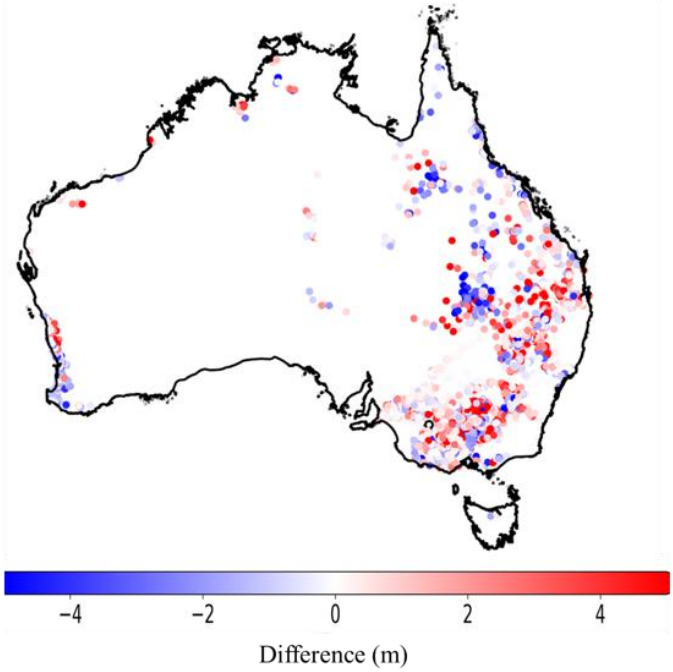
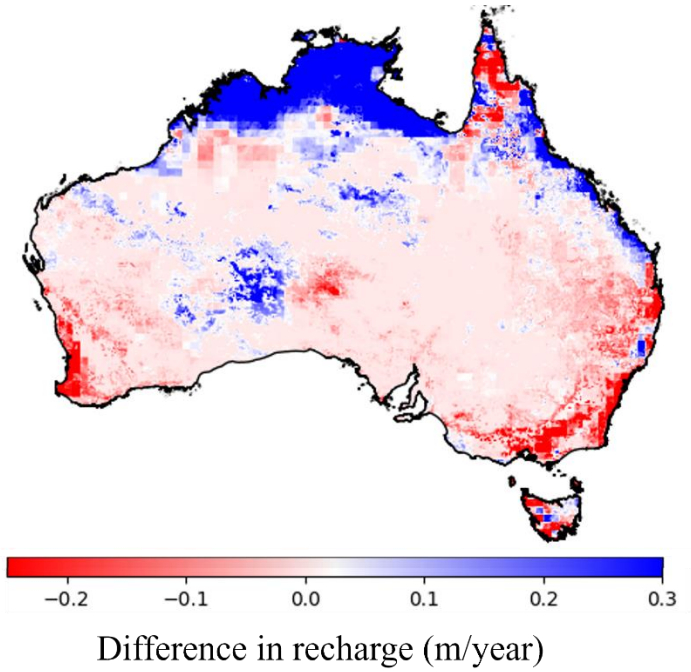


Figure S5. Differences below surface level (m) in average simulated (top) and observed (bottom) groundwater depths between 1979-2000 and 2001-2019. Red areas indicate a decline in groundwater levels and blue areas indicate areas with an increase in groundwater levels. White areas in bottom figure are locations with no well data.



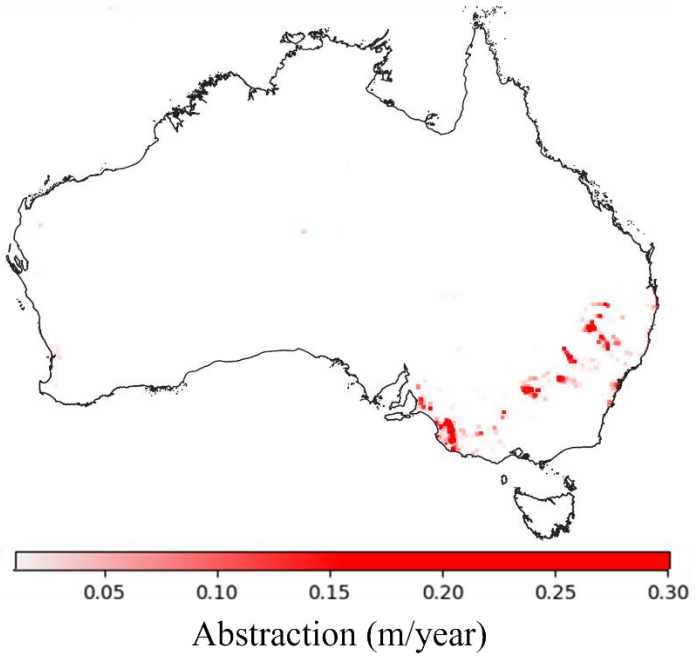


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Figure S6 : Changes between simulated groundwater recharge and between period 2001-2019 relative 1979-2000 and average abstraction rates over 2001-2019.