

Interactive comment on “Drought propagation and its impact on groundwater hydrology of wetlands” by Buruk Kitachew Wossenyeleh et al.

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The manuscript is very interesting and well written, proposing a method to analyse the the propagation of meteorological drought to groundwater recharge, groundwater levels, and groundwater discharge to a wetland. Some changes could make the manuscript clearer and more focused, especially in the Methods section. Below are some comments to the authors:

1. Title. Since the study focuses in a case study with very particular hydro-geological conditions, the name of the case study may be included in the title.
2. Abstract: The last paragraph of the abstract is confusing and seems contradictory.
3. paragraph 30. Please revise to include meteorological drought.

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4. paragraph 40. First line, what type of droughts? The results in Figure 5 disagree with this statement. This result should be highlighted.

5. Methods: Add a section on validation of the simulation model with empirical data, and an example by using the time series of Figure 5 (200 Average monthly groundwater recharge).

6. Methods: Add a framework figure, linking the modelling components.

7. Results and discussion: As written now, it is a summary of individual results of the different modelling components. The manuscript will benefit from a more comprehensive text that links the results to the final goal of analysis.

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