Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2019-173-AC4, 2019 © Author(s) 2019. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Technical note: A global database of the stable isotopic ratios of meteoric and terrestrial waters" by Annie L. Putman and Gabriel J. Bowen

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The authors thank the reviewers for their helpful comments. A summary of comments (italicized) is presented below along with the author's response. The responses include our intended changes to address these comments.

Reviewer 1:

1) Only the importance of isotope research and the data collected at present are explained in the abstract. I suggest that the author add the purpose and significance of

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this technique to the summary section in a short language.

We will add a sentence or two describing the purpose and significance of this project to the summary.

2) I recommend that the Database records for individual projects could be presented in Table, and it also shows the collection status of water samples on the global map (like Fig.2), and clearly labels specific sites and projects.

We will plan to change the project list to an excel spreadsheet and include it as supplementary information. While we like the suggestion of a map that has each of the projects marked clearly, there is too much data to make this map useful. Instead, we direct those interetested to the database, where they can sort by project to see the spatial and temporal coverage of the projects interactively.

3) Can the explanation of the method be more detailed and specific? Can you make a clear illustration of the three ways of introducing new data to the database? I suggest that the author make a simple sketch so that everyone can understand it.

We will create a simple flow chart to help illuminate these processes, which we will include in an updated version of the manuscript.

4) Figure 3 is not clear. I recommend that the author redraw Figure 3. It's better to distinguish the color clear.

It seems that this reviewer primarily has an issue with the color scale used for this figure, as opposed to the layout. We will reprint this figure with an updated colorscale to improve the reader's ability to distinguish between the different sample types.

Reviewer 2:

1) Describe the sample types more detail. For example, considering the phase of precipitation (rain, snow or mixed), the temperature of spring (hot or cold), the types or

depths of groundwater (confined or unconfined, and shallow or deep).

We will add a sentence or two describing how this information is stored within the database in the methods section, as these are attributes that are stored within the samples table.

2) Give the homepage of the wiDB web interface in the manuscript.

We will add the homepage of the wiDB to the manuscript.

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