

General comment Reviewer 1

I thank the authors for their work in responding to my comments. I find the paper to be acceptable for publication. I suggest a few, mostly typographical corrections and suggestions below.

Response to Reviewer 1

The authors thank the reviewer for their review of the revised manuscript. The authors have addressed all of the reviewer's comments within the manuscript.

General comments Reviewer 2

The paper presents substantial new results on the effects of model resolution on ecohydrological flux simulation using supplementary isotope data. The overall quality of the paper is very good, and the author's edits have improved the description of the methodology and the discussion of the results. While no further revisions are necessary prior to publication, the authors may wish to note a couple of minor points arising from the previous revisions:

237: NMAE was chosen for 'reducing overemphasis of peak values', which, strictly speaking, implies that peak values are still being overemphasized. Do the authors actual find that NMAE overemphasizes peak values, or should this be corrected?

248: Following revisions, the manuscript states the model was calibrated using a combination of NSE and NMAE, but the sensitivity was assessed using the RMSE. The metric used in the sensitivity analysis can influence the both the relative sensitivity, and in some cases the ranking, of a parameter. Was the potential divergence between the RMSE and the NMAE sensitivity considered?

Response to Reviewer 2

The authors thank the reviewer for their comments. As the reviewer has noted, the NMAE does not overemphasize the peak values so the statement in the manuscript has been revised accordingly. For the sensitivity analysis, the authors did conduct sensitivity analysis with multiple different efficiency criteria. As the reviewer suggested, the efficiency criteria considered did in some cases change the ranking of the parameters; however, the most sensitive parameters (for example the 10 most sensitive parameters for discharge) did not change. Furthermore, the output used in the sensitivity analysis was the same (except for Layer 2 soil moisture) as the output calibrated with NSE. Therefore, the authors chose to show the RMSE sensitivity as it best reflects the sensitivity of the calibration.