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Interactive comment on "Modeling insights from distributed temperature sensing data" by C. R. Buck and S. E. Null

Anonymous Referee #3

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This study reports on a DTS data collection campaign in a very interesting hydrological system where baseflow is contributed by a number of springs with a distinctly different temperature from the river water. Hence, the expectation would be that DTS data will be useful to capture the inflows and potentially quantify their dynamics from DTS monitoring. Also, the fish-habitat aspect of this study is an interesting flavour of this study in itself.

The 'limitations' section in some respects is the more interesting to read as it contains a real discussion of the performance of the DTS data, and which aspects of installation will impact the temperature patterns. I think a much more in-depth of the data itself would make a more interesting study than to take the data and match them with a model. Especially if calibration, DTS set-up (doubleended/single ended?) is not C5514

discussed much. Besides this, the model set-up boundary conditions and equations solved are not really fully explained and therefore the match with the DTS data becomes a bit meaningless, at least it does not add much in my mind. I understand that modeling is potentially an important managemen t/prediction tool, but this is not necessarily what makes a paper interesting.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 9999, 2013.