

Interactive comment on “Does temperature affect the accuracy of vented pressure transducer in fine-scale water level measurement?” by Z. Liu and C. W. Higgins

Anonymous Referee #2

Received and published: 5 November 2014

Reviewer opinion:

Author: Z. Liu and C. W. Higgins Title: “Does Temperature Affect the Accuracy of Vented Pressure Transducer in Fine-Scale Water Level Measurement?”

Recommendation Minor revision

Comments to Editor: This is an interesting paper that should be published after only some minor corrections.

Comments to the Author: In this paper the temperature effect on fine-scale water level

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measurement was analyzed in labor and in field as well. The results showed high sensitivity of sensors for temperature especially under field conditions. The change of the temperature and the absolute temperature were also related to errors. It is also interesting to note that sensors from the same manufacturers have different response to temperature, therefore a special performance test is needed for each of the sensors if they are used in a not tempered environment.

Minor problems: page 4, 2.1, 5, What does it mean the abbreviation CTD? page 4, 2.1, 10, What can be the situation when the cable length is significantly shorter than 10m? (because for surface water measurements this is the general case)? page 5, 2.2, 8, 30 or 40 cm (on page 13) What is the depth of burial? page 5, 2.2, 17, Where is located the EM50 datalogger? page 10, equation (14) to my mind L^2 is miss from the upper part of the division. page 14, 4, 1mm change to 1mm/day page 21 - Figure 2 and page 25 - Figure 6, The scale of water level vertical axis of the graph would be better 150-250.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 4, 533, 2014.

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