

## ***Interactive comment on “Combining resistivity and frequency domain electromagnetic methods to investigate submarine groundwater discharge (SGD) in the littoral zone” by Marieke Paepen et al.***

**Gerrit H. de Rooij (Editor)**

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The reviewers agree that the paper presents material worth publishing but have concerns about the presentation. The reviews offer many suggestions to improve the flow of the paper, and referee 1 offers numerous additional references that may help positioning the paper in the existing literature.

Referee 2 added a supplement that raises valid questions about the interpretation of the data by the authors. One of the issues raised by the referee is the fundamental problem that arises when data collected in a very narrow time window are used to draw conclusions about time-variant processes. I can imagine that this is a problem

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that occurs frequently in geophysics, because data are frequently collected in short, intensive campaigns. I would welcome it if the authors would discuss this issue in the text and clarify which conclusions they can confidently draw from the data, and which inferences are more speculative (should they choose to keep them in).

I agree with the reviewers that the structure and organisation of the paper needs to be improved. The responses of the authors indicate that the points the reviewers raised are taken and they know how to remedy them.

Overall, I believe the reviews are such that a revision of the paper is warranted. No new data are necessary, but elements of the data analysis, many details in the text and the figures, and the overall organisation of the paper require substantial improvement to make the paper more accessible.

I therefore recommend a major revision.

Sincerely,

Gerrit de Rooij

Editor

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