

Interactive comment on “An automated method to build groundwater model hydrostratigraphy from airborne electromagnetic data and lithological borehole logs” by P. A. Marker et al.

P. A. Marker et al.

paam@env.dtu.dk

Received and published: 16 April 2015

First, the authors would like to thank Referee#4 for the comments on the paper. Referee comments will be presented in quotes.

“I agree with the remarks by Jan Gunnink and reviewers 1 and 2. The clay fraction concept should be explained in more details and examples because it is the link between geophysics and the geostatistic approach of this model.”

For details of the CF-model inversion we refer to Foged et al., 2014, HESS, to avoid excessive overlap. However, we will consider including more details about the CF-

C1080

model inversion and its implications for hydrological applications where relevant in the results and discussion.

“It is good that a region at the Danish Baltic coast with complicated geological conditions due to 3 glaciations is chosen for the groundwater model. The reference model is also based on AEM data, for both models the hydraulic conductivity was found through calibration to water heads and discharge. So both models are quite similar and it is not surprising that the results are similar.”

All four reviewers agree that the inclusion of the reference model has little added value and is partly confusing. We will therefore consider removing the discussion of the reference model from this paper.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 1555, 2015.