

Interactive comment on “Evolution of karst conduit networks in transition from pressurised flow to free surface flow” by M. Perne et al.

M. Perne et al.

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We are posting replies to both reviews of the original manuscript. Both reviews pointed to deficiencies in the paper particularly related to the clarity of presentation. The main critic go to the unclear presentation of what is new compared to the existing model, the relative simplicity of the modelling domain and use of transport controlled dissolution kinetics (salt). We see most of their arguments relevant and valuable. In the revised version we will clearly distinct mechanisms of pathway selection in early stage, in pressurised flow regime and in the free surface flow regime. The former two has been revealed by existing physical and numerical models, the latter is new. In our reply we are giving arguments for the selection of dissolution kinetics and relatively simple

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modelling domain. We will add additional discussion on these topics also in a revised version if this is required from your side.

We thank the reviewer's for the valuable comments, which will surely improve the manuscript.

The detailed reply to the review is uploaded as a supplement.

Yours sincerely, For the authors, Franci Gabrovšek

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/11/C3538/2014/hessd-11-C3538-2014-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 6519, 2014.

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