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6, C783-C785, 2009

Interactive Comment

Interactive comment on "Integrating field and numerical modeling methods for applied urban karst hydrogeology" by J. Epting et al.

J. Epting et al.

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We also acknowledge the elaborate review of the anonymous referee #2. We integrated nearly all suggestions into the text (see Paper_Karst_HESS_review_2.doc attached).

The following statements to specific suggestions:

- 1) p. 3580 / I.20: Quinn et al. (2006) summarized the existing modeling approaches for simulating flow in karst environments. However, the following list includes more approaches than Quinn et al. (2006) had summarized. By this the appendix is meant.
- 6) p. 3590, l. 18: Yes, practically "specified flow"-boundary conditions are equal to a line of recharge wells.

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- 7) Revised *.doc, p. 13, l. 8: Here, the conceptual difference between the two modeling packages is elucidated.
- 12) Tab.2: Concerning the water balances: As the zones also incorporate model cells that are defined as boundary conditions a slight divergence of the balance can occur.
- 14) p. 3601, l. 12-14: changed to: The results from the 2-D KEM clearly illustrate that the occurrence of gypsum within the non-weathered and weathered rock determines karstification and the development of connected percolation pathways necessary for breakthrough from infiltration locations to base levels.

Please also note the Supplement to this comment.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 3577, 2009.

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Fig. 1. revised Fig. 2

6, C783-C785, 2009

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