Hydrol. Earth Syst. Sci. Discuss., 6, C1097–C1099, 2009
www.hydrol-earth-syst-sci-discuss.net/6/C1097/2009/

Hydrology and Earth System Sciences Discussions

Interactive comment on "Linking hydropedology and ecosystem services: differential controls of surface field saturated hydraulic conductivity in a volcanic setting in central Mexico" *by* A. Gómez-Tagle

Anonymous Referee #2

Received and published: 8 June 2009

Does the paper address relevant scientific questions within the scope of HESS? Yes.

Does the paper present novel concepts, ideas, tools, or data? No, besides the data for the region.

Are substantial conclusions reached? No. There are a lot of conclusions, but none are substantial.

Are the scientific methods and assumptions valid and clearly outlined? In fact, the

paper gets lost in a lot of assumptions.

Are the results sufficient to support the interpretations and conclusions? As the conclusions are rather diffuse it is hard to say. Nonetheless, in this field, if one would wish to reach a state where the conductivity measurements can be used to address genetic or ecological interpretations, then a much larger and more diverse data base would be needed.

Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? Yes.

Do the authors give proper credit to related work and clearly indicate their own new/original contribution? Yes.

Does the title clearly reflect the contents of the paper? No. The title indicates a general framework where hydropedology and ecological functions are linked together. This goal is utopic. The paper then gives rather general considerations combined with a small and local dataset that connot be interpreted withijn this framework.

Does the abstract provide a concise and complete summary? No, too long and off the track.

Is the overall presentation well structured and clear? No. The introduction and the application do not fit together.

Is the language fluent and precise? Yes. The language is about the best of this paper.

Are mathematical formulae, symbols, abbreviations, and units correctly defined and used? Yes

Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated? The whole paper.

Are the number and quality of references appropriate? The number is too high.

Is the amount and quality of supplementary material appropriate? The core of the dataset is too little. On the other hand, the profile descriptions are lengthy.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 2499, 2009.