Interactive comment on “Groundwater flow and storage within an alpine meadow-talus complex” by A. F. McClymont et al.

Anonymous Referee #1

Received and published: 28 March 2010

> I’m hydrologist and not expert in geophysical methods. Then my very positive rate concerns basically the hydrological approach. Globally and considering my domain of competency, I found this paper excellent and very interesting. I have only few technical comments.

> The readability of Fig. 1 could be improved with a display of the topography as grey’s levels or colored elevation intervals (as in Fig. 6) and not with contour lines, which are overcharging the display.

> The Fig. 2b, which is of basic interest for the understanding of the paper, is too small.

> Page 1547, line 3: the thickness of the layer cannot be seen on Fig. 2b.

> In the Fig. 6, why don’t you use the same scales of colors and values, at least for 6a
and 6b? It should facilitate the comparisons?

> Page 1550, line 22: the expression “growing season” obviously concerns the vegetation, but seems quite strange.

> On Fig. 7c, the two observed points before the installation of the weir are not significant. The precipitation on July, 10 has very likely given an important flood, at least significantly higher than both points, considering the impact of the precipitation on the level of the water table, which can be compared with the conditions on August, 9 or August, 20-22. Then I suggest to cancel those points and to mark on the graph the beginning of the true continuous monitoring of the discharges.

> The Fig. 8 is not exactly a conceptual model as written page 1552, line 9. It’s a diagram, which can be directly compared to the Figure 5 of the Catena’s paper by Caballero et al. (2002), already quoted above.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 1535, 2010.