Hydrol. Earth Syst. Sci. Discuss., 11, C4593–C4594, 2014
www.hydrol-earth-syst-sci-discuss.net/11/C4593/2014/

Hydrology and Earth System Sciences
Open Access
Discussions

Interactive comment on "Confronting vicinity of the surface water and sea shore in a shallow glaciogenic aquifer in southern Finland" *by* S. Luoma et al.

Anonymous Referee #1

Received and published: 23 October 2014

The contribution from S.Louma et alii is related to a case study in southern Finland where surface waters located close to the sea shore have been analysed by hydrochemical, isotopic and statistical comparison. The manuscript is well organized, well written and the sampling and elaboration methodologies are correctly described. Results and discussion sections are correctly developed, obtaining significant results resumed in the conclusion section. Previous literature has been taken into account and figures and tables are totally informative of the content. The manuscript can be considered of interest for the readers of HESS, but I did not find particular novelties in the approach, neither in the findings of the manuscript. Consequently, in general is a

Full Screen / Esc
Printer-friendly Version
Interactive Discussion
Discussion Paper

positive contribution, but I am not sure it can be considered in average respect with the published papers on this prestigeous journal. I suggest to the Authors to better highlight their findings and to underline what is the novelty included in their work. Taking into account both the content and the interest raised by this manuscript, I suggest to perform minor revisions before publication. A list of minor concerns is provided below: - p.8657 line 15: the multilevel samplings have been performed by inflatable packer? By multilevel systems placed in the borehole? Please, add information about the procedure. If not multilevel systems have been applied, how you can consider the samplings representative of the different levels? This approach can affect your results and has to be carefully discussed - p.8660 line 14: please add reference of hte statistical program you used - p.8661 line 26: please specify if you use the kriging algorithm or other -p.8663, line 5: both periods for stable isotopes? have you find significant differences? The time changes do not seem to be discussed in detail. - p.8670 line 4-6: this sentence is obvious, you can cancel - p.8672 line 27: what about "potentially contaminaned" groundwater? You do not need isotopes to identify contamination, you have direct chemical analyses. I did not understand what you can obtain about contamination from isotope analyses, etc. Contamination is directly obtained from chemical analyses. The conclusion section does not have the goal to resume your contribution, but to highlight novelties and main findings (only partially coincident with results).

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 8651, 2014.