

Interactive comment on “Structural geology and geophysics as a key to build a hydrogeologic model of granite rock to support a mine” by L. Martinez Landa et al.

C. Juhlin (Referee)

christopher.juhlin@geo.uu.se

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The paper is of potential interest for Solid Earth and fits the scope of the journal. I highly recommend that a proper hydrogeologist reviews this paper since this is not my field of expertise.

GENERAL COMMENTS

A. I find the paper rather incoherent and the authors do not provide enough background information and figures to make it consistent with the title "Structural geology and geophysics as a key"

B. The English needs significant improvement before the paper can be accepted.

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MINOR COMMENTS

pg 2, lines 1-3: I think reference to the Canadian URL should also be given here.

pg 2, line 4: Clarify here, they may have been subjected to tectonics, but not glacial tectonics. Or are they not disturbed at all?

pg 5, line 15: There is no temperature log in Figure 4!

pg 10, line 11: Provide some quantification of the fit to show that it is excellent.

pg 10, line 21: I do not see how the geophysics have demonstrated the existence of the fracture systems in this paper.

pg 11, lines 1-3: I think this is a rather bold statement if it is based on this paper.

Figure 4: I do not see how the geophysical logs helped identify the dyke. There should be a large difference in the gamma log between the granite and the diabase dyke. Please explain. Resistivity is normally plotted using a log scale. Also, the resistivity seems quite low for in-tact granite. Please elaborate on this.

Figure caption 5: The authors state that "S ranges from 1 to 53 x 10⁻³." The range seems to be much more than this when I look at the figure.

Figure 7: K is now used instead of T, this makes comparisons with previous figures difficult.

Figure 9: It is not clear to me what this figure implies. Are the circles observation points and lines the modelling?

Figure 11: Again, some more explanation needed in the figure caption.

Table 1: The storativity values here are quite different from the ones provided in Figure 5.

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