

Interactive comment on “Evolution of structures and hydrothermal alteration in a Palaeoproterozoic metasupracrustal belt: Constraining paired deformation-fluid flow events in a Fe and Cu-Au prospective terrain in northern Sweden” by Joel B. H. Andersson et al.

Kunfeng Qiu (Referee)

kunfengqiu@qq.com

Received and published: 26 December 2019

Review of SE-2019-150: “Evolution of structures and hydrothermal alteration in a Palaeoproterozoic metasupracrustal belt: Constraining paired deformation-fluid flow events in a Fe and Cu-Au prospective terrain in northern Sweden” by Andersson et al., This manuscript presents systematic field-based investigation of an Orosirian meta-supracrustal belt, including geological mapping and petrographic and paragenetic as-

C1

essment. The authors constrain structural evolution and furthermore link hydrothermal events to specific phases of deformation. In my opinion, the presented descriptions support the aforementioned conclusions, and this makes the manuscript an interesting contribution to international community, so presumably suitable for acceptance. However the manuscript presented for reviewing has some issues and I therefore recommend minor correction before its publication. Major comments: 1) The authors have constrained the timing of deformation by previous geochronological data. In my opinion, the paper will be more attractive if the authors could add some basic geologic characteristics, geochronology, and time scale of mineralization in the figure 16 and section 6.4.1

General comments: 1) Please unify the labels of the figures (uppercase or lowercase) in text and figure and explain the abbreviations. 2) Figure 6: Add some spaces between the images 3) Figure 8d: Delete the extra box. 4) I suggest the authors add the location (area) in the caption of figure 15. It is difficult to link the coordinates to the different key areas. 5) In section 6.4, the author mentioned hornblende + epidote + plagioclase assemblage in figure 15e. But there is no corresponding information in the figure.

Kunfeng Qiu, China University of Geosciences, Beijing

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2019-150>, 2019.

C2