

Solid Earth Discuss., referee comment RC2
<https://doi.org/10.5194/se-2021-101-RC2>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.

Comment on se-2021-101

Anonymous Referee #2

Referee comment on "Three-dimensional reflection seismic imaging of the iron oxide deposits in the Ludvika mining area, Sweden, using Fresnel volume migration" by Felix Hloušek et al., Solid Earth Discuss., <https://doi.org/10.5194/se-2021-101-RC2>, 2021

This contribution presents well defined images of mineralized structures by using image processing, FVM (Fresnel Volume Migration) and KPSDM.

The contribution is almost ready for publication only there are minor issues that can increase the impact of the manuscript, see notes in the attached pdf. Perhaps the major issues are:

Can the comparison of the resulting images between both methods can be quantified some how (perhaps giving an estimate of the resulting signal-to-noise ratio)?

The manuscript is focused on the geometry of the structures dipping reflectors and their relationships. But why are they reflective structures, including perhaps a log of a borehole in the area intersecting the "known" mineralizations would certainly increase the interest of the reader.

There are other minor issues. This is a good contribution and should be published after minor assesment.

Please also note the supplement to this comment:

<https://se.copernicus.org/preprints/se-2021-101/se-2021-101-RC2-supplement.pdf>