

Interactive comment on “Sparse 3D reflection seismic survey for deep-targeting iron-oxide deposits and their host rocks, Ludvika Mines-Sweden” by Alireza Malehmir et al.

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We thank the reviewer for the positive comments and favorable review. We are aware of most 3D seismic surveys conducted in Canada for deep mineral exploration purposes. Examples from the Bathurst Mining Camp (such as Brunswick No. 6 and Halfmile Lake), those in Sudbury and recent ones for uranium exploration. They all nearly use the so-called regular geometry setup. Nevertheless, as reported by Cheraghi et al. (2013), even some of these dataset are narrow azimuth and have very irregular offset-azimuth distributions with strong acquisition footprints. We will add some of these references and elaborate further the complexity of narrow azimuth and sparse data.

C1

Regardless of the geology and intended planned azimuth, we anticipate some acquisition footprint in the results however this may not be so obvious as the target is strongly reflective and this may like visual observation of the footprint difficult.

Future surveys should likely investigate this further and also if possible a regular 3d seismic dataset to be acquired and compared. This will likely make the Blötberget seismic datasets complete and unique for extensive comparative works and studies.

The revised article will address these issues and cite a few more article relevant to this study. Thanks again.

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C2