

Replies to Referee comments (Referee #2)

Referee #2: Hoppenbrock, Johannes, report 11 Dec 2024, Report #2

Thank you for your comments! We have addressed them below:

Line 156: You mention that you roughly estimated the noise level. It might be beneficial to specify the noise level at this point. Later, you mention a noise level of 10% in relation to the synthetic model. Does this also apply to the noise level of the field data?

Yes, the noise level of 10 % applies to the synthetic model and to the file data. We indicated the noise level in line 156.

Line 174 / Figure 3: Consider adding labels to the different regions in the figure for clarity.

We have added labels for the different regions.

Line 271 / Figure 6: Small arrows could be added to indicate the direction of the profiles. Also, the letters a-d could be made more prominent for better visibility.

We added small arrows that indicate the direction of the profiles according to their display in Fig. 5 (left to right). We also increased the font size of the letters a-d in both subfigures.

Lines 281–284: The general introduction of the types of errors (points 1) and 2)) might be more effective if placed before the start of section 3.2.1. This could provide a clearer context for readers.

We decided not to place the general introduction of the types of errors earlier in the text since we already point towards our analysis of errors from the survey design in the introduction (lines 24 & 68-70).