We would like to thank Anonymous Referee #1 for his evaluations and positive feedback. Comments (mostly linguistic) that were provided in the attached annotated version of the manuscript were incorporated in the revised text.

Below we list answers to the specific comments:

(1) At the beginning of the "3.2 Processing" section, the paragraph beginning at line 35 mentions "sediments". Sediment usually refers to unconsolidated material. Do the authors mean "sedimentary rock". Moreover, I do not know what the authors mean by "keep the original sweep bandwidth in the sediments". This makes no sense to me with any interpretation of these words that I can think of. A rewrite of this sentence is warranted.

We changed "sediments" into "sedimentary cover". We also rewrote the sentence regarding the original ION processing, now it reads: "preserve the original sweep bandwidth in the sedimentary cover"

(2) In the "4 Results" section, beginning at line 5, amplitude decay curves are described. Were these calculated before or after AGC. The answer to this is likely to have implications for the interpretation of these curves.

Yes, indeed those decay curves were calculated after the AGC (which we overlooked somehow initially). Therefore, in this case, we cannot use them to properly decipher the signal penetration limits. However, we can still track relative amplitude changes and this is mostly why we use those plots – in our opinion, they were helpful to e.g. determine the Moho depth.

(3) The line numbering the convention that starts over ever 45 lines is not useful.

This is the default numbering scheme used by Copernicus in their template.

On behalf of the authors,

M. Mężyk