Interactive comment on “Green’s theorem in seismic imaging across the scales” by K. Wapenaar et al.

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We thank referee 2 (Robert Nowack) for his positive review of this paper. We have addressed most of his comments in the annotated manuscript (changes are indicated in red). Here we discuss a number of specific issues.

We think that the last part of the title (... across the scales) is justified because the discussed methods apply to many scales. The examples are meant to be generic. At several points in the paper we have emphasized the references to applications at different scales.

We appreciate the suggestion to include the supplementary material as appendices, but we have chosen not to follow this suggestion. The supplementary material belongs
to two papers (this paper, and the companion paper by Brackenhoff et al.) and will be made accessible for both papers.

We have briefly defined the homogeneous Green’s function in the introduction and explained the name in section 2.

At various places we have emphasized the difference between the finite open surface $S_0$ and the closed surface $S$.

At the end of section 3.1 we have mentioned that the assumptions underlying the Marchenko method break down for strongly scattering media.

We do not see “e ed e e” on the lower part of Figure 5a. We will double-check this figure in the proof.