We received the reviewer report directly from the Topical Editor. Below we respond to the reviewer's queries in a point-wise fashion:

[R1.1] *When converting strain rate to particle velocity, I didn't see any velocity scaling. So the waveform in Fig 13e is strain? Please clarify this.*

No "velocity scaling" is needed in our method; the procedure is encapsulated in Eq. (7). The waveforms in Fig 13e are velocity, not strain. In lines 281-282 we added that: "*[...] no assumptions are made regarding the apparent propagation speed of the signals to convert strain rate into particle motion (as is typically done in other methods; e.g. Lior et al., 2021; Zhu et al., 2021, this issue)*". This convenient result follows from Eq. (7).

[R1.2] *In section 3.2, there are several reasons to explain the DAS waveform incoherence. In the conclusion part, the author mainly ascribes the failure of DAS beamforming to the incoherence of DAS traces caused by local scattering (line 463). Maybe I was missing why the scattering is the main reason over others, like axial sensitivity of optic fiber? Fig 10 shows the pretty good coherent waveforms in each linear segment, which seems that scatterings are not strong.*

In Section 3.4 of the original manuscript, we investigate these segments with locally strong waveform coherence, and we conclude that these coherent signals likely originate from scattering sources. So even though locally coherent segments can be found, this coherence does not persist at the scale of the array.