

## Interactive comment on "Characterizing the global ocean ambient noise as recorded by the dense seismo-acoustic Kazakh network" by Alexandr Smirnov et al.

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Thanks a lot for the good overall appraisal of our work. We will do our best to react adequately to the specific comments. It is not a big challenge as we are agreeing with them in most of the cases. The referee is absolutely wright that: "In data processing, when you work on the amplitude and phase of the signal, the frequency response of both seismic and infrasonic sensors is a crucial point. This is especially true in this work, where the frequency range of signals that you are analyzing, is at the bound of the linear frequency response of some of the used sensors. As you show in Figures 3 and 6, you hold the frequency response curve of Microbarometers MB2000, and GS-

C1

21 and CMG-3V seismic sensors, I was wondering, did you correct the signal for the frequency response?" As most of the sensors used in infrasound investigations are broadband the correction for the frequency response is seldom applied when studying the lion's share of the infrasound signals including microbaroms with the aid of the PMCC detector. The procedure was not applied here. However, for the data of the ABKAR, KKAR, and MKAR it should be used for the purposes of the accurate absolute amplitude discrimination. In the opinion of the authors for that particular investigation, this is not a critical failure. Phase responses of the CMG-21 are stable and the absence of the correction doesn't affect the accuracy of the azimuth determination using PMCC. Surely the absolute amplitudes are measured with a huge error. However, the absolute amplitude determination is not an essential result in this paper, only relative amplitudes are shown. But again the response correction is certainly needed when measuring the absolute amplitudes.

If the referee agreed the next version of the preprint will be presented after all the referee reports come.

Interactive comment on Solid Earth Discuss., https://doi.org/10.5194/se-2020-8, 2020.