

Interactive comment on “A Compact Ocean Bottom Electromagnetic Receiver and Seismometer” by Kai Chen et al.

Anonymous Referee #2

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The concept of this instrumentation paper is unique and good. We, OBS researcher working with OBEM persons, also have been thinking about the similar system.

But, probably due to all authors are EM researchers, there is less care for the seismic data acquisition system and the data too. This paper has no real evaluation for the seismic data obtained now. At least, each single shot waveform, its spectrum, and the background noise spectrum should be indicated in the figure.

Some instrumental weak points are, use of the omni direction geophone without the leveling (gimbal) and the flag for finding aids. Because of the ocean bottom instrument has some amount of tilt on the seafloor, 3-comp. geophones should not be true UD/H1/H2 output. The tilt may be estimated by cross correlations between channels. Problem of the use of the flag is a high level noise source at the seafloor, which is well

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known in the OBS world.

Several corrections and small questions are written as comments in the PDF.

Please also note the supplement to this comment:

<https://www.geosci-instrum-method-data-syst-discuss.net/gi-2019-25/gi-2019-25-RC4-supplement.pdf>

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss.,
<https://doi.org/10.5194/gi-2019-25>, 2019.

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