

Geosci. Instrum. Method. Data Syst. Discuss., referee comment RC1
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Comment on gi-2021-7

Simon C. Stähler (Referee)

Referee comment on "Passive seismic experiment "AniMaLS" in the Polish Sudetes (NE Variscides)" by Monika Bociarska et al., Geosci. Instrum. Method. Data Syst. Discuss., <https://doi.org/10.5194/gi-2021-7-RC1>, 2021

Review AniMaLS

The manuscript *Passive seismic experiment 'AniMaLS' in the Polish Sudetes (NE Variscides)* by Bociarska, Rewers et al is a description of the installation process and data quality of a temporary network in Silesia, Southern Poland. The experiment is a high-density network of broadband, wideband and short period seismic sensors with a scientific focus on regional crustal structure and anisotropy.

The paper is well-written and complete and provides a full description of station installation and performance that will be helpful for future users of this dataset. It covers all the necessary parts of such a network paper and can be published with a few small revisions, mainly to improve readability.

L. 41: What is "the study"? Maybe write "the experiment" or "the network"

L. 44: "Observations of anisotropy of seismic wave velocity" (remove the "the")

L. 49: Here I miss an overview over the paper. This description is about the network and the research planned with it. Could you please add a paragraph describing the structure of the paper?

L. 52. Remove "it"

L. 54: remove "with" before 10

L. 130: Maybe mention here that a data-based verification was done and is shown in sect. 3.2?

L. 164: I think that the official ObsPy reference is now Krischer et al 2015

L. 298: Please write as Stähler, in Latex $\text{St}\{a\}$ her

L. 298 and figs 11, 13: I am surprised to see this low performance of a "normal" CMG-40T. So far, I had assumed that it was an issue with the OBS variant. The authors might want to reference
TasiÄ I., and Runovc F.; Seismometer self-noise estimation using a single reference instrument, J. Seismol 2012. 16, no. 2, 183–194, doi:
<https://doi.org/10.1007/s10950-011-9257-4>
which shows a much better CMG-40T performance and
Simon C. Stähler, Mechita C. Schmidt Aursch, Gerrit Hein, Robert Mars; A Self-Noise Model for the German DEPAS OBS Pool. Seismological Research Letters 2018;; 89 (5): 1838–1845. doi: <https://doi.org/10.1785/0220180056>
Where we have a direct comparison of the "classical" CMG-40T and the OBS version. The noise curve shown here looks very much like what we saw for the "OBS version".
This does not speak well for the manufacturer.

Figure 15: Please add a legend to the figure.

Table 2: I think that two significant digits would be enough, given the sigma

L. 445 -464: I think it is not really necessary to repeat all the scientific plans here, given that this paper is well-focused on the instrumentation

L. 466: Could you mention whether there is a plan for future public release of the data and metadata?

All the best,

Simon Stähler