

Geosci. Instrum. Method. Data Syst. Discuss., referee comment RC1 https://doi.org/10.5194/gi-2021-7-RC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

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. 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 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 selfâ□□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. Schmidtâ□□Aursch, Gerrit Hein, Robert Mars; A Selfâ□□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? |
| |

L. 54: remove "with" before 10

All the best,

Simon Stähler