

Interactive comment on “Teleseismic P-waves at the AlpArray seismic network: Wave fronts, absolute traveltimes and traveltime residuals” by Marcel Heinz Paffrath et al.

Anne Paul

anne.paul@univ-grenoble-alpes.fr

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Dear Marcel and co-authors,

Firstly, congratulations for this interesting and very detailed piece of work. I look forward to seeing the results of the inversion of travel time residuals published.

I have 2 suggestions and 1 question on your preprint.

The 2 suggestions deal with the origin of data and the citations of contributing networks:

1- in section 2, you write that "23 ocean bottom seismometers (were) deployed by the LOBSTER project". This is incorrect and I would be grateful if you could correct that

sentence.

The truth is that the OBS component of the AlpArray seismic network was deployed in the framework of a German-French collaboration funded by the LOBSTER project for the German side and by the AlpArray-FR project for the French side. This OBS component of the AASN included 16 instruments from the German DEPAS and GEOMAR pools (A402A, A404A, A405A, A406A, A409A, A412A, A414A, A415A, A417A, A418A, A420A, A421A, A423A, A428A, A430A, A434A) and 8 instruments from the French INSU and Geoazur pools (A401A, A410A, A413A, A416A, A419A, A422A, A425A, A429A). The total number of instruments with data distributed as part of the Z3 network is therefore 24 and not 23.

Please also correct the reference to LOBSTER in the caption of Fig. 10. This sentence should be modified to something like: The ocean-bottom seismometers of the temporary Z3 network in the Ligurian basin are also...

2- your citations and references to seismic networks do not follow the rules of the Federation of Digital Seismic Networks (FDSN) described in <http://www.fdsn.org/pdf/V1.0-21Jul2014-DOIFDSN.pdf>. Again, I would be grateful, on behalf of all those who acquire and distribute data, if you could correct these citations.

For example, network 1N should be referred to as "Malet et al. (2015)" and the complete citation is "Malet, J.-P., Hibert, C., Radiguet, M., Gautier, S., Larose, E., Amitrano, D., Jongmans, D., Bièvre, G., & RESIF. (2015). French Landslide Observatory – OMIV (Temporary data) (MT-campagne) (RESIF - SISMOB) [Data set]. RESIF - Réseau Sismologique et géodésique Français. <https://doi.org/10.15778/RESIF.1N2015>" as indicated in http://www.fdsn.org/networks/detail/1N_2015/.

The website <http://www.fdsn.org/networks/> indeed provides all the citations for all networks in a number of formats, including BibTeX.

Finally, the question deals with data preprocessing. In section 2.1, you only mention

bandpass filtering in 2 different frequency bands, the high-frequency one being selected specifically to reduce oceanic noise on OBS records. Does this mean that you did not correct the records for instrument response? If not, did you check that the responses of the broad variety of instruments used in the dataset are flat in the 0.03-0.1 Hz band?

Thank you in advance for taking these remarks into consideration.

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2020-189>, 2020.

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Discussion paper

