Solid Earth Discuss., https://doi.org/10.5194/se-2020-103-EC1, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



**SED** 

Interactive comment

## Interactive comment on "Sensing earth and environment dynamics by telecommunication fiber-optic sensors: An urban experiment in Pennsylvania USA" by Tieyuan Zhu et al.

Gilda Currenti (Editor)

gilda.currenti@ingv.it

Received and published: 8 October 2020

Most important points to be addressed:

- 1) In Figure 3 the fk plot is illustrated. Please check the label over the x-axis. The plot seems symmetric, as it has been shown for negative and positive frequencies.
- 2) Always in Fig. 3, the strain is +- 50 microstrain, while particle velocity, derived for fk scaling, is +- 100 micro\_m/s. This means that the average apparent velocity is 2 m/s. This outcome is not convincing. Please, check the results of the fk transform.
- 3) It is surprising to see a large strain variation of the order of microstrain for a tele-

Printer-friendly version

Discussion paper



seism. Estimates of dynamic strains at regional and teleseismic distances are available in literature. Please, refer to Agnew and Wyatt (2014). I suggest you to check carefully your conversion factor or the scale unit.

## Minor points:

- 1) Fig. 4 correct the label in the y-axis from "partical" in "particle"
- 2) It would be helpful to have the colorbar scale in all the figures

Interactive comment on Solid Earth Discuss., https://doi.org/10.5194/se-2020-103, 2020.

## SED

Interactive comment

Printer-friendly version

Discussion paper

