

Interactive comment on “The R package “eseis” – a comprehensive software toolbox for environmental seismology” by Michael Dietze

Anonymous Referee #1

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The article describes an innovative toolbox package to process seismic data for environmental, trans disciplinary purposes. It is too early to determine whether the package will be of major help for the community, but this article will be certainly important to initiate developments and attract interest. The article is well written and well documented, and significantly informative about the use of the package. After minor corrections/complements, I suggest to publish the manuscript in Earth Surf Dyn

Minor comments - do you include readings of other formats like SE2 or SEGY ? - do you provide a user manual ? - when processing data from different stations, how do you handle heterogeneous lacks of samples and sample redatings ?

In general, the package does not currently process ambient noise xcorr, which is a major field of environmental seismology. Maybe you should change the title accordingly,

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like “The R package ‘eseis’ – a comprehensive software toolbox for source analysis and active environmental process” and restrain the current paper to studying active source process?

P3: you pretend that R will be stable on the long term. How can you make sure of this ? many other languages pretended the same years ago, some are still maintained, others have retired. . .

P4 , pat 3.1 : how will you handle file format for correlations data (from ambient noise for instance)?

P6: tools proposed for Centaurs and Cubes stations. Why those ones and not others ? If this is just a choice due to hardware availability at the authors’ home, please mention it.

P7 L14: higher order of $2n = ?$ please explain literally that it’s the total number of samples, with n a positive integer. . .

P9 fig 4: verb tenses ?

P10 L5: make sure the example dataset is an actual rockfall and not a base-jump crash !

P16 L25-30: please specify clearly from the beginning that the source location is obtained for surface waves (and not P-wave migration)

P21 fig 8: curves (b) are not labeled/commented; the figure is overall impossible to understand. What is what ?

P23 5.2: please recall an active url. . .

Please change ref SensSchoenfelder and Larose Earthquake Science 2010 by C. Sens-Schönfelder and E. Larose : Temporal changes in the lunar soil from correlation of diffuse vibrations, Phys. Rev E 78, 045601 (2008).

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