

## ***Interactive comment on “Measuring the seismic risk along the Nazca-Southamerican subduction front: Shannon entropy and mutability” by Eugenio E. Vogel et al.***

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Thank you for your valuable comments all of which have been taken into account in the present version of the paper. We explicitly mention natural time now in the text and in the figures; previous literature is quoted. We notice, though, that in our case, temporal information is kept, since vector files analyzed contain the interevent times. So there are similarities with the “natural time” concept, since vectors are indexed by the event number, but there are also subtleties that we believe should be taken into account as well. The paragraph beginning with “Data may come ...” in Page 1 has now been extended to include other related data sources. We have also rephrased

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some parts to clarify the presentation. The notation problem Concerning  $G_{\{Z,k\}}$  has been settled. Other typos you mention also were corrected. Thank you. Yes, you are right concerning the lack of discussion for the time window  $\nu$ . We have written now a full paragraph (previous to Section IIC), quoting two references, to justify this choice. Additionally, the examples given in the Appendix all used a time window of 24 instants to better appreciate this is an appropriate choice. The already mentioned Appendix comes in support of a more extended presentation on mutability, defining explicitly  $w$  and  $w^*$  as you ask. We did not do that in previous version since in the literature there are already thorough presentations with examples. However, for the benefit of the audience it could be convenient to have examples more related to the present kind of data. The ways the error bars are obtained are now explained including the way the semester averages are calculated, discussing the extreme values.

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