Authors' response to the reviewers' comments (by Varotsos et al.)

We would like to thank the three referees for their fruitful comments and suggestions that help us to improve our manuscript. We also appreciate their support to our findings.
We fully agree with their comments, suggestions etc and therefore we will take into account all of them in the revised version of our paper.
Below we respond to their comments:

Response to Referee #1

1. In Section 2, lines 23-24 (Page 35789): The authors mention that the method of analysis they used is based on the change of the entropy in natural time under time reversal calculated for a window size of i events. Although they give a few references on this subject, it would be useful for the reader to insert a brief description of "natural time" and "the entropy in natural time under time reversal".

We will add a description of "natural time" and "the entropy in natural time under time reversal" in the revised version.

2. Page 35795: In Figure 1 the y-axis titles should be centered and parallel to the axis.

We will revise Figure 1 accordingly.

3. Page 35797: The same as before. In Figure 3 the y-axis titles should be centered and parallel to the axis.

We will also revise Figure 3 accordingly.

Response to Referee #2

- The El Niño Southern Oscillation (ENSO) and its effects have been widely studied by the scientific community. Thus, I suggest adding a few references on the subject in the Introduction section.

We will insert a few references on this subject in the revised version.

- In page 35790 and in Figure 2 the results of the Receiver Operating Characteristics (ROC) analysis and the estimation of the appropriate value of the threshold ΔSthres on the basis of ROC are presented. It would be helpful to give some more information about the ROC analysis before the presentation of the results obtained.

We will add some more information about the ROC analysis in Section 2.

Response to Referee #3

In lines 17-22, Page 35791 the authors compare the variation of the entropy change in natural time under time reversal during the current El Niño event with that during the events of 1982–1983 and 1997–1998 in order to confirm their results. The authors should make their justification more clear or insert more discussion on this point.

We will insert more discussion on this point, adding also a new figure, in order to make our justification more clear.