



Köln, 02.03.2016

Dear Dr. Kiefer,

thank you very much again for your helpful comments. Please find below the corrections regarding to your recommendations and the reviewer comments.

- We reworked Fig. 6, which now shows the context a lot better than before. We additionally added the Llamoca and Lizoite records, as suggested by Reviewer #1. We did not include more regional, older records, due to low resolution and a lack of data concerning the last 2000 years. We further “smoothed” some data to highlight the correlation (as also suggested by reviewer #1).
- With the help of Kira Rehfeld, we were able to work out a correlation with the Cariaco Bay record by Haug et al.
- Fig. 3 and Fig. 4 were reworked according to the reviewer’s comments.
- According to the reviewer’s comments, we added some text to the introduction, methods (statistics) and discussion. The order of subchapters in the discussion was changed to better highlight the influence of human impact and the proxies used for evidence. The conclusions were completely reworked.
- We added a supplement for an additional map, tables and the PCA.
- We changed the title of the paper as suggested by Marie-Pierre Ledru. Further, we added another co-author, who helped with statistics.

Best regards and many thanks,  
Karsten Schittek