



Interactive comment on “Seasonal mean pressure reconstruction for the North Atlantic (1750–1850) based on early marine data” by D. Gallego et al.

D. Gallego et al.

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We appreciate the careful revision of the technical aspects of the manuscript and the useful comments of the referee, which will help to improve the clarity and precision of the text. Next, we address the specific comments and technical corrections raised.

Specific comments:

Comments 1 and 5: The revised text will be corrected accordingly.

Comment 2: We concur with the referee, the word “measures” could lead to confusion. The revised version will include the term “measurements”. A reference to the papers explaining the technical details of the original data will be included in the corresponding paragraph to guide those readers not familiarized with logbook data.

Comment 3: We only worked with the monthly summaries of ICOADS (which were the data used in our paper) so the database used does not contain SLP data before

1800 and our reference to 1784 can lead to confusion. The text will be changed in the revised version.

Comment 4: To calibrate the regression equations we used the 2x2 ICOADS monthly summaries. As the referee points out, this dataset includes SLP, u and v since 1800, but we only used the ICOADS data from 1851 on. The specific ICOADS dataset used will be clarified in the revised text.

Technical corrections (TC):

TC1 and TC8: As commented in our reply to M. Dima, in order to clarify the results, geographical coordinates will be included in the revised version of the figures and a new figure will be added instead of table 3 (comparison between CLIWOC and Luterbacher et al. 2002 reconstructions. See the original manuscript for the complete reference).

TC2 to TC 6: We agree with the referee, the proposed modifications add precision to the original sentences and the changes will be included in the revised version.

TC7: The “small number of squares” indicates that even for a region as wide as the North Atlantic, when it is represented on an 8x8 grid, the area of the reconstruction (see figure 4 in the manuscript) can be covered by about 20 to 22 “gridpoints”. We preferred using the term “square” instead of “gridpoint” to make it clear the fact that inside each 8x8 area, the CLIWOC wind averages are formed by a large number of measurements taken in different locations. A clarification to the sense of the term will be included in the revised version of the paper.

Interactive comment on Climate of the Past Discussions, 1, 57, 2005.

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