Reply to short comment of Clim. Past Discuss. 8, C119–C120, 2012 "Changes in the strength and width of the Hadley circulation since 1871" by Liu, J., M. Song, Y. Hu and X. Ren

We would like to thank the reviewer for the helpful comments on the paper. A point-by-point listing of our response to these comments follows.

First of all, 'Results' chapter encloses discussion material as well. Hence I suggest renaming this section as 'Results and Discussion'.

We renamed section 3 as "Result and Discussion".

In addition some primary data assessment (i.e. spectral analysis) is mentioned only in the 'Conclusions'. I recommend presenting the spectral analysis also in the 'Results and Discussion' section. Ideally with detailed methodology, because to provide a statistically solid proof to verify the mentioned 'secular peak' from a 137yr long time series sounds to be particularly challenging. A figure to visualize these results would be also warmly welcomed.

Based on the reviewer's suggestion, in this revision, we showed the plot of the spectral analysis, letting readers to better visualize a possible proof to verify the secular peak (see Fig. 5). The spectral analysis indicates that the width of the Hadley Circulation exhibits a clear secular peak indicative of centennial-scale variability that is distinct from the null hypothesis of a red-noise stochastic process, statistically significant (> 99%).

Vertical axes of the plots in Fig 2 and Fig 4 lack title and dimension. I ask Authors to consider giving title and units to these axes. It might alleviate understanding of the meaning of these figures. (Although much easier to find out the unit and title of the horizontal axes, whose also lack this basic information, to add the title to these axes would also ease the readability of the figures.)

We added title and units for the vertical axes of Fig. 2 and Fig. 4.

Finally, I realized a recurrent spelling mistake 'equtorward' should read 'equatorward' (e.g. p702, line 2 & 4)

We corrected them.