

## ***Interactive comment on “One plausible reason for the change in ENSO characteristics in the 2000s” by V. N. Stepanov***

**Anonymous Referee #1**

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This is an interesting hypothesis that there has been a recent change in ENSO such that the Southern Ocean has become a major driver of events, rather than the classical recharge mechanisms that was prevalent prior to the 2000s.

I am concerned however that the hypothesis is not supported by the data analysis. There is so much time filtering of fields, correlations of different indices that are rather small, use of short time series and use of high order EOFs that only explain a fraction of the variance, it is difficult to follow what is going on. This makes it impossible to judge if the results are really meaningful or are just a statistical fluke. In addition, the manuscript is long and rambling and very hard to follow.

While a physical mechanism is put forward for the link (page 962, para beginning line 9), I cannot tell if the preceding analysis has actually tested this mechanism. I would

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really encourage the author to consider a complete re-write, focussing on a couple of clear figures and a much shorter manuscript. I think the ENSO community could be interested in this hypothesis but, as the manuscript stands, they will not understand it and the paper will have zero impact.

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Interactive comment on Ocean Sci. Discuss., 11, 943, 2014.