

## ***Interactive comment on “Seasonal and interannual (ENSO) climate variabilities and trends in the South China Sea over the last three decades” by Violaine Piton and Thierry Delcroix***

**Anonymous Referee #3**

Received and published: 3 March 2018

The paper discusses the so called “Essential Climate Variables” in the area of the South China Sea over the last three decades. Included are mean and standard deviation, seasonal and inter-annual variability, and trends for five ECVs. The ECVs included are: SST, SLA, precipitation, surface wind and water discharge.

Although the paper definitely contains some interesting aspects, which might be worth a publication I cannot recommend publication in its current version for several reasons.

My main criticism is that the authors seem to be not convinced of their own results and somewhat repeat and hide behind the results/finding of others, which is mirrored in the length of the paper and many redundancies. I do think also it is because of the

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repetitions too long and it contains too many figures, which are partly meaningless, because nothing new is shown. This is strikingly clear in case of the e.g. reversing signals in SST and wind on annual scale. In a monsoon driven system not really surprising, worth presenting, no, because nothing new. This is just one example.

I miss also connection (in presentation and/or discussion) between the parameters studied, since they are not disconnected from each, but instead the reader get presented much information which is known, established and therefore the detailed presentation of their results e.g for the SST and wind pattern, is again redundant. Both the annual mean SST and wind speeds are presented despite the circumstance that in a monsoon dominated area these quantities are more or less meaningless, since in one year both the oceanic and atmospheric system alternates between two dominant phases.

My another main criticism is regarding precipitation and river discharge, as the authors just include Vietnamese data. Why contributions from China, which limits SCS to a huge extent, are not included at all? Not a single word is mentioning this, and I do think Pearl River might have a significant river discharge into SCS?

I have noted a number of additional minor points, but since I'm not recommending publication at this stage it is not worth listing them now, as the authors need to rewrite the entire manuscript in a short, precise way omitting all redundancies, but highlighting their results instead.

I'm sorry I cannot be more positive at this moment.

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Interactive comment on Ocean Sci. Discuss., <https://doi.org/10.5194/os-2017-104>, 2018.