

## ***Interactive comment on “The effect of cyclones crossing the Mediterranean region on sea level anomalies at the Mediterranean Sea coast” by Piero Lionello et al.***

### **Anonymous Referee #1**

Received and published: 22 February 2019

This is an interesting paper that is well structured and deserves publication, but only after a major revision. Changes could be included regarding possible additions of new graphs about negative SLAs correlation to anticyclones and barometric highs over the Mediterranean or eventual removal of the try to link negative SLAs in specific locations of the basin to cyclonic motions over other remote parts of it. Moreover some extra clarifications of the approaches followed could enhance the paper's current scientific value. If the authors decide to defend their choice to link negative SLAs to storm tracks rather than to anticyclonic high SLPs in the area of study, then some extra clarifications are needed and/or more convincing explanations should be provided about the soundness of the approach. Moreover set-up/down results could be strengthened by further

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explanations behind the hydrodynamic response of SLAs to wind patterns in the area. The use of English language is good for a publishable article in NHES (please see comments on a few expressions in Technical Comments).

In the attached file I present my general concerns and some specific comments/questions together with a few editorial changes needed in order to strengthen the manuscript's quality. Major revisions would be required.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2019-6/nhess-2019-6-RC1-supplement.pdf>

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-6>, 2019.

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