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Ocean Science
Discussions

Interactive comment on "Mesoscale Eddies in the Algerian Basin: do they differ as a function of their formation site?" *by* Federica Pessini et al.

Anonymous Referee #2

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This work presents a statistical analysis of the dynamics of meso scale anticyclones in the western mediterranean sea, and especially in the Algerian Basin, performed with an automatic eddy detection and tracking algorithm applied to 22 years sea level anomaly of the AVISO/DUACS data set. This analysis emphasis on the dynamical properties of two distinct types of anticylones, the AEs and the FAEs, formed in distinct area. However, due to some a priori choices which exclude the cyclones from the analysis or limit the area of investigation, some important dynamical features are missed in the present analysis. I listed a numbers of important issues: - Sensitivity of the eddy contour to the Okubo-Weiss threshold W should be done - The statistical analysis of cyclonic eddies is missing. - The western part of the Algerian basin (<2°E) is not studied. - Interactions and mixing between FAEs and AEs are a priori excluded

that should be satisfactorily addressed in order to consider a (major) revised paper for publication in Ocean Science. See the attached supplement file for my detailed review.

Please also note the supplement to this comment:
https://www.ocean-sci-discuss.net/os-2017-93/os-2017-93-RC2-supplement.pdf

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