EGUsphere, referee comment RC2
https://doi.org/10.5194/egusphere-2022-649-RC2, 2022

Comment on egusphere-2022-649

Anonymous Referee #2

Referee comment on "How subsurface and double-core anticyclones intensify the winter mixed layer deepening in the Mediterranean sea" by Alexandre Barboni et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-649-RC2, 2022

Comment on egusphere-2022-649 titled as: How subsurface and double-core anticyclones intensify the winter mixed layer deepening in the Mediterranean Sea" by Alexandre Barboni et al.,

The temporal evolution of MLD in the Mediterranean Sea is investigated in this ms. It is shown that the MLD restratification delay and connection with preexisting subsurface anomalies appear to be determinant in MLD modulation by mesoscale eddy and highlights the importance of interaction with eddy vertical structure. The study is novel and will advance our understanding of the impact of mesoscale eddies on the dynamics of seawater properties. The manuscript is well structured and discussed in detail. I recommend publication, after minor modification and changes. The general and specific comments are given below.

Please also note the supplement to this comment:
https://egusphere.copernicus.org/preprints/2022/egusphere-2022-649/egusphere-2022-649-RC2-supplement.pdf