In this study, Terzić and colleagues examine the spatial distribution and temporal variability of surface saline lakes (SSLs) across the Mediterranean Sea, ranging from seasonal changes to long-term trends. A detection metric based on Argo float data is employed to characterize SSLs, as well as associated temperature and density patterns. The results indicate that SSLs are present in nearly all Mediterranean sub-basins. Furthermore, a significant upward trend in SSL depth is observed over the study period. Longer-term observations are likely required to determine whether this trend reflects multi-decadal variability or ongoing salinization driven by climate change. The manuscript is well-structured and easy to follow overall. However, there are several areas that require improvement in terms of clarity and presentation. Some points are summarized as follows.

Based on these concerns, I recommend the manuscript for publication with major revisions.

Introduction
While the article investigates SSL characteristics, the introduction begins with general physical background and then shifts focus to thermohaline circulation. Although SSLs and deep-water formation are indeed intertwined, introducing SSLs (Line 63) in the final paragraph of the introduction may be inappropriate. A more SSL-focused introduction is recommended.

L70: Gulf of Gabes
Mark the geographic location in Fig. 1. Additional locations mentioned in the text could also be included in Fig. 1 or another figure to aid readers unfamiliar with the region.

L77-78: QC=1, QC=2
How reliable is Argo profiling data labeled with QC=2, and how is this category of data typically treated? What proportion of the total dataset falls under QC=2? Would limiting analysis to only QC=1 data significantly influence conclusions, such as those related to seasonal patterns or long-term trends?

L96-98: 1%-2%
These two criteria were applied to ensure a minimum level of data coverage for each month of each year. Is there any justification provided for selecting these specific thresholds, or has any sensitivity analysis been performed to test their impact?

L133-135: intensified mixing
More explanation of the intensified mixing and its penetration into deeper layers in late winter and early spring 2024 would be beneficial.
In addition, consider moving the WMO=6903269 float case (Hovmöller diagram) to Section 3.2, as the title of Section 3.1 focuses on climatology.

L159: “lowest values in the Adriatic Sea”
zSG values are indeed low during most months in the Adriatic Sea, but they peak in March. Are you referring to the annual mean of the monthly climatology? Please clarify.

L165-170: “SSI”
The author attributes the higher SSI during winter in the Western Mediterranean to low surface PDA values caused by fresher Atlantic Water, and in the Levantine and Aegean Seas (not mentioned) to deeper zSG. However, although an increase in zSG from September to December is evident, it is not reflected in the SSI.

L184-185:
The SSI peak in the Adriatic Sea appears visually higher than in the Ionian Sea. Additionally, the conclusion that the Adriatic and Ionian Seas exhibit the most similar curves seems somewhat arbitrary.

L195-197:
Since the significance of the linear trend depends on the data distribution, you should state your assumption or show the distribution.

L216-217:
The sharp rise in zSG is unlikely from sampling, as discussed by the author. Atmospheric forcing is mentioned but not well explained

L237: “…the case in subtropical gyres in the Atlantic and Pacific Oceans”
Any reference?

Consider increasing the font size in Figure 4 for better readability.