Comment on essd-2022-209
Anonymous Referee #2

Referee comment on "Deep water hydrodynamic observations of two moorings sites on the continental slope of the Southern Adriatic Sea (Mediterranean Sea)" by Francesco Paladini de Mendoza et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-209-RC2, 2022

General overview

The presented work of 8-years ocean monitoring activities on the western Southern Adriatic Sea is based on two moorings, systematically maintained since 2012, located at representative sites for different ocean-dynamics conditions. As the continuous measurements at ocean are scarce, the value of these timeseries is important to improve, not only the knowledge of the dynamics of the area, but their evolution along the time and their possible responses to the climatic changes and/or regional variability.

The authors made an strong effort to detail and explain the followed methodology. In this sense, assessing the data quality, descriptions of methodologies, test and criteria are extremely important to facilitate the usability of the timeseries the robustness of the results.

It is expected that the observatory and the moorings will be maintained along the time and linked to EU initiatives as EMSO-ERIC or Hydrochanges (cited along the text between others). It is also expected that data set will be periodically updated. The availability of these will benefit not only to the scientific community but the local ones, as a better knowledge will report in better sustainable uses for the area.

Despite all this, before the final publication of this paper, I would like to draw the authors' attention to the following aspects:
The authors describe the configuration of the observatory and 6-months recovery activities. It could be also useful a brief description of the maintenance methodology that is, undoubtedly, more that change batteries and cleaning the instrumentation. I am quite sure that along 8 years, some sensors and instruments have been calibrated and/or replaced. Some explanation about the calibration processes could be very useful in order to reuse the timeseries, especially when they try to detect decadal to interdecadal signals, as they could do in a near future.

Regarding to the previous point, the instrument description, lines 81-93 (accuracy, etc) could be easily readable if it is displayed in a table. The authors should evaluate the convenience or not of this suggestion.

In relation to the dataset at zenodo repository, I find and download the 4 netcdf files, but I am not able to find the reports: “dataset information (DI)” neither “variables in dataset (VD)” described in the paper. It could be my fault, but please check it and add them in case. Mentioned FAIR data principles include more than giving DOIs and making them accessible (downloadable), but provide the relating information to facilitate the reusing of them. Then, these 2 files are important. I also suppose they include descriptions of the vocabularies standards descriptions which are mentioned in the paper.

Text editing issues for consideration

- I cannot find along the text the reference to Bignami et al, 1990. It appears in the reference list.
- For manuscript coherence, please substitute “meters” for “m”, i.e. line 55 and line 74, and “seconds” for “s” (line 84).
- Regarding the salinity, please, decide if adding PSU (i.e. line 176) or not (i.e. line 175 and others along the text). This criterion should be maintained a summary table 5.
- Line 104. Please, add the unit (s?) to the sampling interval 10800.
- Line 155. Please add the reference to table 2 that, probably, is missing.
- Also, for coherence, please decide if the intervals are typeset as “-5 -45” (line 87), “100 and 225” (line 211) or “(140-150)” (line 270).