

Interactive comment on “Glider data collected during the Algerian Basin Circulation Unmanned Survey from 2014 to 2016” by Y. Cotroneo et al.

Anonymous Referee #2

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The paper presents data recorded by gliders in the Algerian Basin in an under-sampled area (between Balearic Island and Algerian waters). Eight transects have been performed in fall 2014 (3 transects), 2015 (1 transect), 2016 (4 transects), following different altimetric tracks. Moreover, taking advantage from the adaptative sampling ability some mesoscales process where investigated, deviating from the planned route.

Parts of this dataset were already discussed in two scientific papers dealing with an Algerian eddy (ABACUS 2014) or with a concomitant use of altimetry (ABACUS 2014, ABACUS 2015). Nevertheless, a rapid examination of the dataset demonstrates its potential interest for further studies (mainly mesoscale or even sub-mesoscale processes).

The monitoring of the dynamics of this area is less achieved as the dataset cover only three consecutive years. Ones should encourage the authors to add progressively their more recent data in the same data base, as they suggest in the conclusion. A quick overview on the SOCIB website reveals that similar experiments were conducted in May 2016, in Fall 2017 and in May 2018. If the authors agree, a less restrictive title should be proposed (an unrestricted time period?) and the potential future extension of the database should be mentioned in the abstract.

Data processing and data quality check are the state of the art and well described. The paper is well written and organized. I tested the data repository and I appreciate the Netcdf file organisation. The on-line data visualisation is a little bit frustrating and not very informative. One would appreciate alternatively quick locks of the transects (on line or in an attached pdf file).

My general feeling is very positive and I recommend the publication of this paper and of the associated dataset, with minor modification.

We thank the Reviewer for his work and comments, and we are glad that he appreciated this version of our manuscript.

We agree with him on the possibility of removing the reference years from the title and will contact the Editor about it.

A new sentence about data extension has been added to the abstract as more recent data (years 2017/2018) will be added to the same DOI database soon.

Suggestions from the Reviewer on the online visualization of the data have been forwarded to the SOCIB Data Centre to improve ABACUS plot accessibility.

A point by point response (in red) to the specific comments received is provided below.

Best regards, Dr Yuri Cotroneo

Detailed comment:

line 52: What is exactly MW? - Modified Atlantic Water interacting with newly inflowing AW - Deeper water masses as LIW?

At line 52, we used the acronym MW to refer to all water masses that are typically formed or resident in the Mediterranean Sea.

The acronym was removed to clarify.

Please choose a unified name for your different dataset. Sometime you wrote (ABACUS ABACUS 2, ABACUS 3 (figure 5) or ABACUS 1, ABACUS 2, ABACUS 3 (line 139) or ABACUS 2014 (line 315). Note that this classification disappears on the data repository.

The text has been corrected and the “ABACUS 1, ABACUS 2, ABACUS 3” format has been adopted for the different missions. “ABACUS” will now describe the entire research programme.