**Reviewer comments on the following manuscript:**

**essd-2020-17****,  Submitted on 24 Jan 2020  
Quality assurance and control on hydrological data off western Sardinia (2000–2004), western Mediterranean.  
by Alberto Ribotti, Roberto Sorgente, and Mireno Borghini**

**Reviewer**: Dr. Alain LEFEBVRE, Ifremer, France ([Alain.Lefebvre@ifremer.fr](mailto:Alain.Lefebvre@ifremer.fr))

The manuscript proposed by Alberto Ribotti and collaborators proposed data from seven oceanographic cruises (medgoos1 to 7; period 2000 - 2004) off western Sardinia, western Mediterranean. Metadata, data and maps are provided thanks to two SEANOE repositories (one for CTD profiles, one for Hydrological profile).

The manuscript follows the main recommendations from Earth System Science Data journal.

Whereas the proposed variables are classical one, the added-value of this contribution is to give the scientific community an open access to the first extended data set covering the whole Sardinia Sea. This data set should be used for research purposes but also to support ecological assessment as needed with Regional Sea Convention (Barcelone) and EU Directives (Marine Strategy Framework Directive).

Cruises have been defined to “give a useful contribution on the knowledge of the local upper, intermediate and deep circulation and its interaction with the general Mediterranean circulation”. Considering these objectives, what is surprising is that proposed variables do not include systematic current measurements but main classical physical and biological variables. Authors should explain why such current measurements were not implemented systematically. Indeed, in section 3. Other acquisition, we understand that current meters were deployed only during a limited number of cruises.

A link with the Essential Oceanographic Variables (EOV) and Essential Biodiversity Variables (EBV) as recommended for a well-suited monitoring programme should have been interesting to develop.

The materials and methods are described in sufficient details. The authors provided main characteristics of each sensor and also the associated range, accuracy, resolution and response time. The quality of the data is assured as the authors follow (well documented) good practises at sea and in lab. All these information are also included in the two associated SEANOE archives. We can however regret the absence of a validation protocol for fluorescence data.

The data set format as proposed in SEANOE is appropriate for immediate use.

I’m not sure that figures 2, 3 and 5 are very helpful.

The manuscript is well document. All the references cited in the main text are in the section “references”.

*See also the attached file with proposals for minor corrections and comments directly in the text.*

To conclude, I propose that the manuscript should be **accepted subject to minor revisions**.