

Earth Syst. Sci. Data Discuss., referee comment RC1  
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## **Comment on essd-2022-189**

Anonymous Referee #1

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Referee comment on "The HYPERMAQ dataset: bio-optical properties of moderately to extremely turbid waters" by Héloïse Lavigne et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2022-189-RC1>, 2022

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### **General comments**

The manuscript proposed by H. Lavigne et al. aims to describe the HYPERMAQ dataset dedicated to provide optical and biogeochemical parameters necessary to develop algorithm for ocean colour observation to retrieve main biogeochemical parameter as the chlorophyll-a concentration. Dedicated field experiments have been driven in six contrasted regions.

The manuscript is concise, well written and details each HYPERMAQ dataset components.

As a general comment, I mainly suggest to add a discussion on the choice of the six sampled regions. Indeed, except a short justification in the conclusion, the reader can't easily appreciate the interest of sampling such different regions.

Furthermore, this paper described a bundled dataset. Each individual dataset is also associated to Pangaea doi. It would be interesting to list (and associate DOIs) in the bundled paper.

Considering the limited needed improvements included in general and specific comments, I recommend this paper for potential publication after minor revisions.

### **Specific comments**

## *Title*

The title is built on a project/dataset name, maybe linked to an undefined acronym (found on the web ? Hyperspectral and multi-mission high resolution optical remote sensing of aquatic environments). I think that the title would benefit from a more explicit title giving an idea of the addressed dataset and/or parameter.

## *Tables 1 to 3*

Xangtze name is used instead of Yangtze.

## *3. Data collection*

p. 5-6 / l. 164 – 184

Sections are switching from 3.2 to 3.4. Section 3.3 is missing.

## *5. Conclusion*

p. 9 / l. 305 - Seven different studies areas are mentioned in the conclusion whereas six regions are described in the paper.

*Figure 8*

Y-axis should be explicitly defined including considered units.