

Earth Syst. Sci. Data Discuss., referee comment RC2  
<https://doi.org/10.5194/essd-2022-34-RC2>, 2022  
© Author(s) 2022. This work is distributed under  
the Creative Commons Attribution 4.0 License.

## **Comment on essd-2022-34**

Anonymous Referee #2

---

Referee comment on "The CISE-LOCEAN seawater isotopic database (1998–2021)" by  
Gilles Reverdin et al., Earth Syst. Sci. Data Discuss.,  
<https://doi.org/10.5194/essd-2022-34-RC2>, 2022

---

Reviews for "The CISE-LOCEAN sea water isotopic database (1998-2021)"

Authored by Reverdin et al.

Submitted to Earth System Science Data

### *Summary and overall opinion:*

This study compiles and discusses the uncertainty assessment of seawater  $\delta^{18}\text{O}$  and  $\delta^2\text{H}$ . The data set will be very useful for many applications such as constraining ocean circulation. The main issue is with writing and figure captioning and labelling, some of which I have listed below. Overall, I recommend this manuscript for publication after authors edit it thoroughly for grammar and phrasing.

### *Minor comments:*

**Abstract:**

Line 8: It'd be better to change "0.03 / 0.15‰ for  $\delta^{18}\text{O}$  and  $\delta\text{D}$ ." to "0.03 and 0.15‰ for  $\delta^{18}\text{O}$  and  $\delta\text{D}$ , respectively." You can apply this comment to any setup like this in the entire manuscript.

**Introduction:**

Line 33: change "designed as" to "termed as".

Line 53: you can use one "in" and name all the basins.

Line 58: do you mean "some samples were also run"?

Line 72: add the "to which" after "extent".

**Uncertainties:**

Line 132-133: change "before been analyzed" to "before analysis".

Line 139: change "was" to "were".

Line 150: change "this way ... " to "this technique is applied to minimize the inter-sample contamination ...".

Line 182: change "sea water" to "seawater".

Line 219: change "As commented above" to "As mentioned above".

Figure 1: Please add panel labels (a, b, c, and d) and axis labels to the figure.

Figure 3: add labels to each panel. Also you do not need to say "six maps". Readers can see the number of maps. Just label them and caption each label separately. Also add axis label to the color bars.

Figure 4: add label to the color bar.

Figure 5: same comments as above.