**Comment on essd-2022-387**

Mathew Stiller-Reeve (Referee)

Referee comment on "Peer-reviewing for Earth System Science Data as a student training exercise" by Nadine Borduas-Dedekind et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-387-RC1, 2022

This editorial provides a short collection of anecdotes that speak to the benefits of open discussion forums in providing training peer-review for early career scientists (ECS). These benefits are experienced by students providing peer review and also the authors who are receiving the peer-review.

I was particularly excited to read this manuscript. I am an editor at another Copernicus journal and have published on peer-review and held short courses similar to the one described here. I am over-averagely interested in this topic and very much welcome this contribution.

**Here are some ideas for improvements and edits:**

(Abstract and paper organization) I would suggest renaming the 3 main parts of the story. Maybe split the descriptions between the author receiving and the student providing the peer review. Start with a description of the framework for the course itself.

- A framework for a peer-review course
- Experiences from an author
- Experiences from a student

(Line 8 and in general) I think the scope of this paper could be widened to have a (potentially) much bigger impact. Indeed ESSD is the journal in question, but actually the same ideas can be applied to any journal with an open discussion forum. I would recommend that the authors change the framing so that it includes this, but also clearly state that they use ESSD as an example. At the risk of putting words in the authors
minds, the Abstract could possibly start with something like “Journals with open
discussion fora lend themselves for student peer-review exercises and training. ESSD is a
good example of this, which is an open access journal for the publication of
interdisciplinary datasets and articles”.

(Line 20-29) I think it would be nice to tip one’s hat to the many articles published on the
need for training in peer-review and others who have published on how to peer review.
There are many such articles out there, which would help to provide a stronger foundation
for the authors claims in the first paragraph.

(Line 33) Also, the fact that each Copernicus journal has an open discussion forum, means
that anyone with a registered account can provide a comment. Everyone’s feedback is
valid in an open peer-review process. In this sense, it is technically not necessary to
contact the editor and author first. I would suggest that the authors change this in the
text to say that anyone can actually provide a review, but we contacted the editor and
author as a common courtesy. When I have held such courses before then we start the
comments with a short description of how the review came about and the backgrounds
and experience of the folks involved.

The first few lines (63-69) of the section “Author receiving a peer-review report from a
team of students” would be more appropriately positioned in the Introduction. I would like
to hear a few more details in this section about what kind of feedback the author received
and potentially how the feedback varied (or not) from a standard peer-reviewer.

I have an issue with the use of “I” and “us” and “we” in the text, which I am sure you can
find a solution for. It gets a little confusing when there are 3 authors and the first-person
pronouns relate to different authors throughout the text. One suggestion could be to
provide the authors name in brackets in each of the subheadings. For example, “Student
providing a peer-review report (by Samuel Carlsen)”. Or find another rhetorical move that
tackles this issue. Either way, I feel this needs to be resolved.

Finally, the authors do a good job at presenting the positive aspect of such training
exercises. However, I think it could be a healthy to ponder potential pit-falls in training
processes such as this. Are there any?

I very much welcome this contribution to the literature on peer-review training. It
provides a citable resource for me to justify many of my own practices, which I
appreciate. With some easy changes, I believe this editorial could have a wider impact
than just to the readership of ESSD (which it seemingly targets at present).