

Authors have made several changes and improvements, thanks. For most of my comments on the original manuscript, however, they responded in perfunctory or defensive manner. Fair enough, they represent current expert practitioners while this reviewer has not sorted a benthic sample in more than three decades. I evaluate the revised manuscript according to helpful guidelines posted by ESSD, e.g. at <https://www.earth-syst-sci-data.net/10/2275/2018/>.

I like this statement from those guidelines “effective evaluation should encourage authors to modify their initial submission in directions and with amendments that allow the data product as eventually published to more closely meet the full range of recommendations”. Have these authors made sufficient modifications in order to better meet those guidelines?

1. **Open access** - remains deficient, fails to meet this standard: “Users should not encounter registration steps, password requests, access agreements, or other log-in barriers or tracking mechanisms.” Not fatal but not exactly in compliance. Other repositories, e.g. CEH where terrestrial landscape data from Woods et al. reside, impose a registration step. Why do ecologists seem to hide behind these registration barriers? For a fully free and open example, look at ESSD-2019-17. This reviewer not impressed nor reassured by the justification given and the supposed confidentiality protections. Follow other good ESSD examples and just put the information in full open un-restricted access - no good reason why not! Not a reason for disqualification but something that the authors could improve.
2. **Permanent identifiers** - okay, no issues.
3. **Useful data descriptions including source attribution** - good.
4. **Codes and tools** - now available at the figshare link.
5. **Uncertainty analysis** - missing, but perhaps not essential or even appropriate for a database at the start-up stage? Again look at ESSD-2019-17 for an example of a more developed (15 years!) community database which has reached the stage where it can expose valid community-recognized uncertainties. These authors provide some uncertainty hints in the Discussion section where they list under-representation (a serious weakness?), divergence in trait descriptions (what they call ‘conflicts’), and sampling biases. But nowhere do we get a sense of overall uncertainty, today or as hoped for in the future?
6. **Data availability** - adequate, happy to see the university take a prominent role in data archiving but not quite to standard for open access reasons already mentioned.
7. **Interest and utility**, with this goal “*ensure that ESSD products enable substantial advances in future research.*” These authors list some ‘substantial advance’ goals: “increase our ecological understanding of this rapidly changing [Arctic] system” and “a cutting-edge tool for (not only) the marine realm and a role-model for prospective databases”. Unfortunately, after details of data base construction and content, they seem to have relaxed to the (more realistic?) goal of “tool for collecting and providing information”. They raised our hopes for a useful ecological analysis breakthrough but have so far gotten only as far as a (seriously incomplete?) trait accounting system? They need to lower expectations for the short term but clarify hopes for the longer term? I wonder what this product would look like in 5 years? Will it have stimulated a more systematic approach to Arctic benthic research? Will it then serve a larger community of researchers? Will it enable research on carbon or nutrient cycling, ecosystem function, ecosystem change, etc., issues that will prove crucial for the future Arctic? I take the point that publication in ESSD could stimulate interest and use, but the product as described seems highly preliminary and tentative, without - as yet - clear demonstration of community buy-in or broad research applicability. Again, the international gravity consortium database example (ESSD-2019-17) - perhaps not a fair comparison! - seems at least to point in some directions that this product might like to go? I miss a realistic calibrated message from the authors that distinguishes what they have (or have yet to) achieve versus what they hope as the eventual impact of this product.