

Ocean Sci. Discuss., referee comment RC2 https://doi.org/10.5194/os-2021-90-RC2, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on os-2021-90

Anonymous Referee #2

Referee comment on "Inherent optical properties of dissolved and particulate matter in an Arctic fjord (Storfjorden, Svalbard) in early summer" by Tristan Petit et al., Ocean Sci. Discuss., https://doi.org/10.5194/os-2021-90-RC2, 2021

In general, the preprint Inherent optical properties and optical characteristics of dissolved organic and particulate matter in an Arctic fjord (Storfjorden, Svalbard) in early summer by Petit et al. presents a very good picture of the IOPs and the optical complexity within the Storfjorden. Dataset enhances bio-optical picture of Arctic Ocean with state-of-the-art data and methods. The dataset can be used to increase the amount of data to be used for modelling bio-optical complex waters in the Arctic Ocean. The preprint needs improvement, please take into consideration suggestions and comments in the **attached PDF.**

Specific comments:

- Do you have any solution how to avoid variability in blanks during cruise to create blanks under the same conditions as samples are taken?
- You describe the ratio of scattering to absorption. Can you please discus this ratio in more details?
- You clearly describe spectral slope. Can you please discuss this parameter in more details?

Please also note the supplement to this comment:

https://os.copernicus.org/preprints/os-2021-90/os-2021-90-RC2-supplement.pdf