Interactive comment on "A compilation of global bio-optical in situ data for ocean-colour satellite applications – version two" *by* André Valente et al.

Anonymous Referee #1

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This study updates the global high quality ocean-color in-situ datasets, increasing samples of Chl-a, aph, etc., adding new parameter, TSM, and enhance the format to improve operatablity and to keep original information as much as possible. It also includes definition of the variables and explanation of each data source. This revised dataset will help the ocean color community to use the same database for comparison among satellite ocean color algorithms and improve the interoperability among the different satellite datasets. Publication can be strongly recommended but authors should check some small technical issues.

About the new variable, TSM, the tag name,TSM (g/m^3) in the document should be consistent to one in the data file (insituab_iopskdtsm.tab), TSS (mg/l). Authors should check again the unit or definition of the TSS in the dataset (insituab_iopskdtsm*.tab).

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Some TSM data (especially from "mermaid_BioPotEuroFleets-k0*") seem too low even if the Chl-a range (not so small: 0.28mg/m^3 - 17.28mg/m^3) and possible variation of the inorganic SM are considered.

The following sentences about the rrs BRDF correction are confusing a little bit:

P5 L31-32: "Thus, for consistency with satellite "rrs" product, only in situ "rrs" that included the latter normalization were included in the compilation."

P12 L22-23: (MERMAID) "Remote-sensing reflectance was calculated by dividing by pi the original irradiance reflectance provided."

I suppose the final value, "rrs", is not the "Remote-sensing reflectance" and it have been calculated by normalizing the "Remote-sensing reflectance". Is that right?