

Interactive comment on “The MAREDAT global database of high performance liquid chromatography marine pigment measurements” by J. Peloquin et al.

Anonymous Referee #1

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HPLC determination of phytoplankton pigments has proven to be extremely useful in studying a range of aspects of phytoplankton ecology. Now, HPLC is a standard tool in both basin-scale and local field campaigns not only for phytoplankton but also in biogeochemical processes. After the introduction of HPLC in oceanography in 1990s, considerable amounts of algal pigment data have been accumulated. Peloquin and colleagues rightly and timely recognize the situation and have compiled global algal pigment data into MAREDAT. The situation appears analogous to that in 1980s and 1990s when a huge dataset of oceanic chlorophyll accumulated by both trichromatic and fluorometric methods was used to establish standard algorithms for chlorophyll a from remotely sensed ocean color. The MAREDAT is expected to stimulate research

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in remote sensing and ecosystem and biogeochemical modeling to advance studies of PFTs. The data compilation is careful and the proposed QC measures are well justified. The measures seem work well in the compilation as shown in Figs. 2 and 3. I found the manuscript to be very clear, carefully considered and well written. Thus, I highly appreciate this carefully curated synthesis of the available phytoplankton pigments data in the ocean. I recommend its publication as it is. Such comments as I have are minor and follow:

Specific comments

Figure 4 is not informative, and considered to be deleted.

Figure 8 is too small in the printable pdf version. While I would suggest to place fewer on a page.

Table 1: The column “HPLC Method” is not useful for most of referred items. I would suggest to omit this column.

Table 2: Please explain what “Type 1” indicate.

Interactive comment on Earth Syst. Sci. Data Discuss., 5, 1179, 2012.