

Interactive comment on “Composition and sources of sedimentary organic matter in the deep Eastern Mediterranean Sea” by R. Pedrosa-Pàmies et al.

Anonymous Referee #1

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In their manuscript, they applied multi proxies including lipid biomarkers, bulk elemental and isotopic compositions to evaluate the sources and distribution of organic matter (OM) in deep slopes and basins of the oligotrophic Eastern Mediterranean Sea. The manuscript is well written and clearly structured. The data are novel, and of relevance for the scientific communities focusing on organic geochemistry deep sea ecosystem. The interpretation of the data in this study is great. However, there are a few points of weakness identifiable in the manuscript listed below which needs to be addressed. General comments 1. The abstract is not informative enough (such as Page 2, Line 15-20) and needs rewritten. 2. I am wondering why you didn't check the fatty acid composition, which are also important to address the OM sources. 3. The authors

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excluded a few stations when the do correlations but did not provide evidence why some certain stations could be excluded.

Specific comments 1. Page 3 line 0-5 (P3L0-5), 'e.g.' or 'e.g.,'? Keep in consistent. 2. P3L0-5, I suggest include a reference. 3. P15 section 4.4, would be nice to show a few typical chromatograms. 4. P18L0-5 ($r = 0,65$ and $r = 0.72$, respectively, $p < 0.05$, ...) 5. P20L20-25, why don't you normalize the TerNA, TerN-OH and Mar data to OC? 6. The authors need to focus more on explaining their own results instead of providing lots of background information, such as P21L10-15, 25-29; P22L15-20. 7. P22L20-25, these information has been suggested by various previous studies. 8. P27L24, Straits'? 9. P45 Table 1, the longitude for west Ionian sea sediments need to be corrected.

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