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Discussions

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Interactive comment on "Mesozooplankton structure and functioning during the onset of the Kerguelen phytoplankton bloom during the Keops2 survey" *by* F. Carlotti et al.

Anonymous Referee #1

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The paper is an interesting contribution to the knowledge of the factors controlling the development of zooplankton in an area of the Southern Ocean under the influence of the Polar Front. However, in my opinion there are technical aspects of the paper that need to be improved, and methodological questions that must be clarified. 1) The language needs to be revised and edited. This is the first requirement, as in its present form the text is quite heavy. Sentences of 7 lines (P. 2382, lines 4-10) made the text hard to be easily read. The terminology must be also revised. 2) The second aspect is the structure of the paper. The complex station's notation and the diverse sampling strategy (i.e., "Perpendicular transects" "semi-lagrangian, "24 h", etc.), would require to be explained and justified. Aside from these general problems, the main

gaps in the paper are: Some methodological aspects need to be discussed, like the problem derived from the use of 330 μm-mesh. The small zooplankton forms like small copepod species, mainly belonging to the genus Oithona (one of the most abundant genus), Microsetella and Oncaea are seriously underestimated by the mesh used, even considering the clogging of nets. To say nothing of juveniles (nauplii and copepodites). And this will affect not only the abundance and biomass, but the isotopic signature. Why in Table 1 the abundance is given as an index (and in ind/m3), while in Fig. 2 is in Ind/m2? the same for biomass. The comparison of the results obtained during the KEOPS-2 cruise with previous ones (KEOPS-1), where different counting devices were used, ought to be better discussed.

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