

Interactive comment on “Functional trait responses to sediment deposition reduce macrofauna-mediated ecosystem functioning in an estuarine mudflat” by Sebastiaan Mestdagh et al.

Anonymous Referee #2

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This is an interesting study. The authors simulated a sudden deposition of sediment and assessed the impact of sediment deposition with different thickness on intertidal microbenthic communities and oxygen consumption. The results showed functional trait could provide important insights on ecosystem functioning, and the taxonomic diversity alone is not sufficient to explain changes. The manuscript is well written and easy to follow. I have only minor concerns about the tables and figures. The tables and figures can be improved. It is expected that your table and figure legends will be quite detailed and very precise. In fact, from the figure title and the axis labels of

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a graph/table the reader should be able to determine the question being asked, get a good idea of how the study was done, and be able to interpret the figure without reference to the text. The current table legend is more like discussion, and a mere descriptive of data is preferred. It would be more appropriate that the authors simply provide the objective data, and let the readers to judge whether your conclusion or interpretation are reasonable or not. For example, in Table 1 (page 16) (1) Table legend. The top 3 species with the cumulative contribution (>50%) to the total dissimilarity between treatments. The SIMPER analysis, and the cumulative contribution can be described as footnote. (2) Treatment. Please explain what these treatment mean. For example. What does T0-1 refer to. Please simply state what these data represent. In addition, the cumulative contribution column is redundant and can be deleted, or the contribution column can be deleted because these two column are essentially the same As for Table 2 (page 17) (1) In table legend, Please do not start with “Results...”. Please go straight forward what you want to present. For example, statistical factors (2) Is it necessary to show all these factors?

As for Table 3 (page 19). Please consider whether all these equations need to be shown in a table. Maybe the equations could be placed in the supplementary materials Figure 1. please explain the x axis, i.e., what the treatment of 0, 1, 2 and 5 mean

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