Interactive comment on "A synthetic map of the northwest European Shelf sedimentary environment for applications in marine science" *by* Robert J. Wilson et al.

Anonymous Referee #1

Overall the subject of the paper is interesting and it is really focused in a case with high interest, the results and procedure are clear, and it deserves to be published in Earth System Science Data adding minor clarifications, which are the following according to the present reviewer:

- In Table 2 caption, add "Data sets 12" source. - In page 7, line 27, the number of data (20,709) does not match with the value in Table 2 (20,744), please check. - In Section 2.2.3, include the graph laser-mud vs. sieve-mud. - In Table 3, define TOC. Before it, carbon appears as POC. - In page 13, line 17, include the r2 value. - Figure 3 is not cited in the manuscript. - Revise the range of the raster of permeability in

the data_files_asc file. It has the same max and min values (1.19144e-18). - Mud is cohesive. How the authors have considered it in their maps of natural disturbance? - In Figures 4, 6, 7, 8, and 9, please include the original data to compare with the intermediate and the final results. - In page 18, explain why the r2 of rock classification is very low. - In Appendix A1, Ec. A4 does not match with the Soulsby and Smallnan (1986) expression. Please revise.