General information:
supplementary chlorophyll-a data used in the publication
“Bottom fishery impact generates tracer peaks easily confused with bioturbation traces in marine sediments”
DOI: 10.5194/bg-2023-145)

The data contained are depicted in figures from DOI: 10.5194/bg-2023-145.

Title of the record:
Chlorophyll-a concentrations in marine sediments from experiments and Fehmarn Belt (2020-2021)

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Type of data:
concentration measurements of Chlorophyll-a versus sediment depth

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Abstract:
During an investigation on the effects that bottom-trawling, we found that otter boards that keep the nets open, bury surface sediment at a few centimeters sediment depth.
This is also done by animals living in the sediment and the process is considered very important for sediment ecosystem integrity. We try to differentiate between the two and estimate that natural bioturbation is much more likely than otter board sediment reversal in OUR sediment areas.

Objective/Problem Statement
In the paper “Bottom fishery impact generates tracer peaks easily confused with bioturbation traces in marine sediments” the problem of tracer peaks that may be indistinguishable is dealt with by considering concentration-depth profiles of the particle tracer chlorophyll a in the sediment.
The chlorophyll data used in this publication are provided here as csv-data.

Data Format: csv

Data Structure:
all supplement chlorophyll-a data is reported for individual concentration - depth profiles with ONE common depth axes reported in the first column, z(cm).

All subsequent columns report concentrations, C(µg/cm³), either of single profiles or as averaged concentrations.
Average concentration profiles are followed by columns reporting standard deviations, sd(µg/cm³).
Standard deviations for Fehmarn Belt relate to n=3 replicate chlorophyll-a determinations from one depth interval (slice) within one core.
"NA": no data available

Profiles are numbered consecutively:

1-7 (in situ experiment, controls, n=7);
8 (in situ experiment, controls, average);
9 (in situ experiment, controls, standard deviation);

10-16 (in situ experiment, net, n=7);
17 (in situ experiment, net, average);
18 (in situ experiment, net, standard deviation);

19-25 (in situ experiment, mound, n=7);
26 (in situ experiment, mound, average);
27 (in situ experiment, mound, standard deviation);

28-34 (in situ experiment, furrow, n=7);
35 (in situ experiment, furrow, average);
36 (in situ experiment, furrow, standard deviation);

37-41 (ex situ experiment, controls, n=5);
42 (ex situ experiment, control, average);
43 (ex situ experiment, control, standard deviation);

44-46 (ex situ experiment, net, n=3);
47 (ex situ experiment, net, average);
48 (ex situ experiment, net, standard deviation);

49-53 (ex situ experiment, furrow, n=5);
54 (ex situ experiment, furrow, average);
55 (ex situ experiment, furrow, standard deviation);

56-60 (ex situ experiment, mound, n=5);
61 (ex situ experiment, mound, average);
62 (ex situ experiment, mound, standard deviation);

63 (in situ Fehmarn Belt, 26-4a, average);
64 (in situ Fehmarn Belt, 26-4a, standard deviation);
65 (in situ Fehmarn Belt, 30-1, average);
66 (in situ Fehmarn Belt, 30-1, standard deviation);

67 (in situ Fehmarn Belt, 37-1, average);
68 (in situ Fehmarn Belt, 37-1, standard deviation);

69 (in situ Fehmarn Belt, 39-1, average);
70 (in situ Fehmarn Belt, 39-1, standard deviation)