

Earth Syst. Sci. Data Discuss., referee comment RC1
<https://doi.org/10.5194/essd-2022-374-RC1>, 2023
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Comment on **essd-2022-374**

Fabio Conte (Referee)

Referee comment on "Evaluating the transport of surface seawater from 1956 to 2021 using ^{137}Cs deposited in the global ocean as a chemical tracer" by Yayoi Inomata and Michio Aoyama, Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2022-374-RC1>, 2023

Dear Author,

The work is flowing and clear in the exposition. There are some graphical inaccuracies and greater attention to local processes such as in the Mediterranean and Black Sea.

Please, correct the UNSCEAR quote which is incorrect in almost all of the text.

line 56 the dissolved ^{137}Cs

line 490 Papucci

line 1850 Papucci, C., Salvi, S., Lorenzelli R.

line 1857 Papucci

please, define tap in a more explicit way: apparent half-life

please, define the start of half year because layering could affect the mixed layer

Correct the follow figure:

fig 1 (a-b) unreadable labels and coordinates

fig 2 label, mediterranean

fig 5 b unreadable coordinates

fig 6 b unreadable coordinates

fig 7 (a-j) unreadable label

fig 8 (a-j) unreadable coordinates

fig 10 (a b) unreadable coordinates

fig 12 (a-j) unreadable labels and coordinates

fig 18 (b) unreadable coordinates

fig 19 (a-i) unreadable label

fig 20 (a-i) unreadable coordinates

line 480

the value that is almost equal to the value before Chernobyl accident demonstrates the importance of increased release from the rivers flowing through the area affected by the accident: in fact, in Mediterranean Sea, where this input is negligible, the value in 2002 were less than half pre-Chernobyl accident.

Thank you