

Interactive comment on "A comprehensive global oceanic dataset of helium isotope and tritium measurements" by William J. Jenkins et al.

Anonymous Referee #2

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Jenkins et al. (ESSD-2018-136) introduces a dataset of oceanic helium and tritium measurements, which is open to the world via www with DOI. The dataset is definitely valuable for any earth scientists, especially oceanographers. Analytical methods used are valid. Various formats of the dataset provided are helpful. I have nothing to say without some tiny/minor points before its publication on ESSD.

P1L15: Add "." between depth and When

P1L19: with a half-life of 12.3y?

P2L2-5: Numerous refs are nice but their generations seem biased in 20th century. Please introduce nice papers in 21st century if possible.

P2L12-14: In turn, generations of refs here seem biased in 21st century. Please intro-

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duce classic/pioneering papers if possible.

P2L16: Please add refs for each of these programs.

P3L17: How deep and old? Please introduce approximate criteria.

P3L23: 4He and 20Ne are NOT ion currents.

P4L6: Please add density into the dataset because of its importance in oceanography.

P5L2: I request the dataset distributed by another (non-US) web server for more robust accessibility if possible.

P6L13: figure number? P6L23: figure number?

P6L30: Figure 6?

P7L5: How large and small?

P7L18: I cannot understand why numerous hard workers in Table 3 are not included in the authorship list. I know analyses of helium and tritium in seawater (also sampling of oceanic water) are definitely hard. I think the list should include the hard workers.

Figure 7: Another map for 3000m (or 3500m) seems nice to figure out the impact from hydrothermal activity on the ridges represented in the current 2500m map.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2018-136, 2018.