

***Interactive comment on “Tracers confirm
downward mixing of Tyrrhenian Sea upper waters
associated with the Eastern Mediterranean
Transient” by W. Roether and J. E. Lupton***

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General comments

The paper presents interesting observations of tritium and ^3He in the Tyrrhenian Sea. The work addresses key questions for the Mediterranean oceanographic community such as the deep water formation in the Tyrrhenian Sea and the role of the Eastern Mediterranean Transient.

The results presented here are a substantial contribution since they provide evidence of a convective mixing of intermediate waters into deep waters associated to Eastern Mediterranean Transient. Moreover, they provide confirmation of the cyclonic nature of

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the deep water circulation in the studied sub-basin.

The presentation quality of the scientific results and conclusions is good.

For the above reasons, I recommended the publication of this paper.

Specific comments

I agree with referee V. Artale that the paper could touch a larger number of readers if the information about the mechanism of deep water formation would be improved.

Interactive comment on Ocean Sci. Discuss., 7, 1533, 2010.