

***Interactive comment on “Indian Ocean subtropical mode water: its water characteristics and spatial distribution” by T. Tsubouchi et al.***

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We thank the referee for his/her careful reading and constructive comments. Enhanced by the comments, we did some analysis and we are revising the manuscript. We will add a few figures for the manuscript. The revised manuscript will be submitted by the end of September.

Following is a reply for key issue. Please see supplement for complete reply and additional figures. Another mode water: its core temperature is 12-14C We totally agree with the referee's comments. We should clarify the relationship between this mode water and our defined IOSTMW. We assumed IOSTMW as a mode water

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which is associated with the subtropical western boundary currents. This concept is based on the definition of type I mode water defined by Hanawa and Talley (2001). From this point of view, the relationship between IOSTMW and mode water with core temperature 12-14C was investigated. We include a few figures in supplement in order to clarify this issue. As a conclusion, we argue that this mode water with core temperature 12-14C should be recognized as another mode water from view points of water characteristics, distribution area and formation region.

Please also note the Supplement to this comment.

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Interactive comment on Ocean Sci. Discuss., 6, 723, 2009.