Ocean Sci. Discuss., 8, C634–C635, 2011 www.ocean-sci-discuss.net/8/C634/2011/

© Author(s) 2011. This work is distributed under the Creative Commons Attribute 3.0 License.



## Interactive comment on "A computational method for determining XBT depths" by J. Stark et al.

S. Kizu

kizu@pol.gp.tohoku.ac.jp

Received and published: 13 September 2011

Our data used for Kizu et al(2005b; comparing LMS T5 and TSK T5 with CTD casts) were sent today to the correspondent author by email. The same set was sent to NOAA last week to be shared on the XBT Bias and Reference Page. I hope our data will help the present authors assess their results in more detail.

However, my major comment is NOT to suggest use of CTD data. That should be helpful, but not enough. More important point is that the authors' claim about the "accuracy" of their calculation is not convincing. Their model did not include some important elements of the probes and their motion, but the authors claim that their calculation is still accurate. What is accurate? Is the modeled flow really equivalent with the one the XBTs experience during their fall? I think the authors should first compare their present results to profiles taken by XBTs with snipped tail (to suppress

C634

spin).

These points are missing in the paper and Dr. John Abraham's replies. So, they are addressed here again. The authors' work is very challenging. I hope they will draw reasonable and convincing conclusions without putting off important problems because they're just difficult.

Interactive comment on Ocean Sci. Discuss., 8, 1777, 2011.