The Cryosphere Discuss., 7, C2746–C2747, 2013 www.the-cryosphere-discuss.net/7/C2746/2013/

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7, C2746–C2747, 2013

Interactive Comment

Interactive comment on "Results from the DAMOCLES ice-buoy campaigns in the transpolar drift stream 2007–2009" by M. Haller et al.

M. Haller et al.

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We thank the referee for the review and his constructive comments. We agree with the suggestions made and included them in the revised version of the paper.

We did not make new extra sections on methods and discussions, but add now more information on the applied methods in the respective sections. Furthermore, we deepen the discussion by relating our results to further actual literature (8 new references have been added). (1) Further information on methods has been added, for example, on calculation of ice drift (Sect. 2) and geostrophic wind (Sect. 4), on calculation of vorticity, divergence and deformation (Sect. 5), and on compositing (Sect. 5). (2) The case study in Sect. 6 on the 13 August 2007 storm has been expanded. Four sea-level pressure charts as new Fig.11 have been added to emphasise the cyclone trajectory and

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the temporal evolution of the event. (3) We deepened the discussion and included 8 more references of actual literature. Since our data analyses cover a wide range of scientific aspects, we decided to write no extra discussion section, but instead expand the discussion in the respective sections. (4) Vorticity, divergence, and deformation represent the kinematic changes of the ice deck. They depend on the way of atmospheric forcing and on the existing properties of the ice field (e.g. concentration, thickness, ice strength).

Interactive comment on The Cryosphere Discuss., 7, 3749, 2013.

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