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Ocean Science
Discussions

Interactive comment on "Hydrography, transport and mixing of the West Spitsbergen Current: the Svalbard Branch in summer 2015" *by* Eivind Kolås and Ilker Fer

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R E V I E W

Journal: OS Title: Hydrography, transport and mixing of the West Spitsbergen Current: the Svalbard Branch in summer 2015 Author(s): Eivind Kolås and Ilker Fer MS No.: os-2018-86 MS Type: Research article

This is this rear occasion when reviewing a manuscript is fun work. The topic of the study is important and well thought. Data set is beautiful and in hands of skillful researchers. Analysis is thorough. Findings are solid and provide a new insight into

dynamics in the complex area under consideration. The manuscript is well and clearly written and presented materials are sufficient to illustrate conclusions made by the authors.

I congratulate the authors with such a nice piece of work.

I have just a few minor comments and suggestions and recommend publication after very minor changes.

Minor comments: 1. P. 3, lines 15-20. Any way to merge these conflicting estimates? 2. P. 5, Table 1: Can you please add mean vertical limits for the water masses? 3. P. 10. Line 29: Should the power be -2? 4. P. 11, line 21: "Extracting" is not a clear word here. 5. P. 11, lines 22-23: I do not see a point for placing this sentence ("Note that . . .") here. 6. P. 11, line 30: Should it be comma instead of "-" after McPhee? 7. P. 12, line 35. How was the correspondence between buoyancy and heat fluxes found? 8. Fig. 10b: Any comment on elevated dissipation rate at $\sim$400m in the third deepest profile (i.e. in the interior) and lack of such a signature in other profiles?

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