

Review of Evaluating and improving modelled turbulent fluxes across the North American Great Lakes.

This is a well written paper and the authors have done a well at incorporating comments from my review and others. There are a couple of minor suggestions I have that may help to improve this and a couple of corrections that are needed.

I think in section 3.1 the authors need to give the long-term average temperatures when suggesting that the winter of 2012-2013 and 2013-2014 were unusually warm and cold respectively. Similar with regard to the summer temperature in 2012. This would help to put these statements in perspective.

In section 3.2 line 21 it is suggested that the fluxes for Spectacle Reef are underestimated. I cannot see this in the figures, except when the $z_{0,0,q}$ is updated. This needs to be rewritten so that the statement matches the figure.

The last sentence of the last paragraph of section 3.2 suggests that for White Shoal there was under- and overestimation, but this is very hard to see in the figures. I suggest you either use an insert or put a larger figure in the supplementary material.

I wonder if counter-gradient flux (Deardoff, 1966, Am. Meteorological Soc., 23: 503-506) is an explanation for the discrepancy discussed on page 18 first paragraph.

I found it difficult to see the differences between the original and updated data in figures 8-11. I wonder if using a x for one and an open circle for the other would be better.

Minor Corrections.

1. Page 11, line 5. Beljaars 1994 need to be a or b citation.
2. Page 17, line 16. Beljaars 1994 need to be a or b citation.
3. Page 18, line 12. Replace 'are' with 'is' and insert 'to be' after 'likely'.
4. Page 20, line 20. Insert 'Lake' before 'Communities'.
5. Table 1, Z98L, COARE. Citation of Fairall et al. (1996) needs to be a or b or both.
6. Page 25. Holtslag et al. (1991) is not in reference list but appears multiple times in text and tables.
7. Page 28. Reference Smith (1989) is not cited.
8. Page 29. Reference Zeng (2002) is not cited.