Hydrology and Earth System Sciences

Open Access

Discussions

HESSD

Interactive
comment

Interactive comment on "Evaluating and improving modeled turbulent heat fluxes across the North American Great Lakes" *by* Umarporn Charusombat et al.

Anonymous Referee #1

Received and published: 11 February 2018

This is generally a well written paper with a few minor grammatical errors. I have listed these below. My main issue is with the conclusions which read like a summary rather than conclusions. The main conclusion of this paper are that when corrected for z0ïĄś,q the four models give similar results. I also wonder if the amount of measurement points that could be included would be helped by using the foot print analysis in McGloin et al. (2014, Water Resources Res., 50:494-513). This may allow more of the data at Long Point to be included.

Minor Corrections 1. Page 14, Line 11. Delete 'occurs'. 2. Page 14, lines 20-21. The sentence starting 'This is because...' does not make sense as written and has two

Printer-friendly version

Discussion paper

full stops in it. 3. Page 14, line 24. Delete the second 'due to'. 4. Page 15, line 6, Replace 'o' with 'of'. 5. Page 15, lines25-26. I suggest rewriting after 'significant' with (28% compared to 50% for Stannard Rock, Spectacle Reef, and Long Point according to error reduction ratios (Table 3). 6. Page 15, line 28. Replace 'The' with 'These data'. 7. Page 16, line 20. Space needed between 'sustained' and 'low'. 8. Page 17, line 17. 'more comprehensive.' in what? The authors need to elaborate how the models need to be improved and why. 9. Page 17, line 30. Insert 'from the present data set.' After 'possibility'. 10. Page 18, line 8. Replace '(i.e.' with 'and resulting in' and delete ')' after 'H'.