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## *Interactive comment on* "Nonlinear controls on evapotranspiration in Arctic coastal wetlands" *by* A. K. Liljedahl et al.

## A. K. Liljedahl et al.

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We would like to express our appreciation to the reviewer who presented constructive and helpful criticism. Thank You for your efforts. We would like to note that a minor bug was discovered in the flux data processing routing so the data was re-analyzed.

I think that the abstract, introduction, discussion and conclusion are well organized around the central statements. However, I lost the tread of this story somewhat in sections 3-5.

Re: We have revised section 3-5 to better link with the overall story.

2.1 General Comments 1. Many compound sentences could be broken into two to increase readability.

C3873

Re: Sentences have been shortened throughout the manuscript.

2. I would like the authors to restate the mechanisms limiting ET in the conclusions and not just allude to them.

Re: Completed.

2.2 Specific Comments 3. 6308.11: "Dry soils increased. . ." Increased compared to what?

Re: Clarification has been made.

4. 6311.4: "Transpiration is closely related to Leaf Area Index (LAI) as stomatal closure is rare at wet coastal Arctic sites". I suggest changing this to "total transpiration" for clarification.

Re: Your suggestion is implemented.

5. 6311.22-26 This sentence contrasts two sites but I can't tell which ones. I suggest splitting into two sentences and clarifying.

Re: The sentence has been re-structured for clarity.

6. 6311.23: "a larger portion", change to "a larger portion of energy"

Re: Implemented.

7. 6313.17: Instead of LAI, why not just use the unit? "Standing dead leaf biomass in the Barrow area reaches 1.23 (m2 m-2).

Re: Implemented.

8. 6315.23-26: Split into two sentences

Re: Done.

9. 6317.14: Remove the extra "if"

Re: Done.

10. 6318.8: Reference for 1.26?

Re: Reference incorporated.

11. 6318.11: Should be "suppresses"

Re: Thank you. Correction has been made.

12. 6319.3: "The maritime air mass" sentence is awkward. I suggest "The maritime nature of both sites leads to low variability in VPD and air temperatures."

Re: Thank you. The sentence is re-organized.

13. 6319.8: I suggest "defined as winds originating from between . . ."

Re: Suggestion implemented.

14. 6324.3: remove the first "through"

Re: Done.

15. 6325.3-4: Sentence beginning from "Also. . ." does not make sense with the parentheticals as they are.

Re: The sentence has been removed entirely but its message is now incorporated into the following sentence.

16. Table 1: Caption should read "including" rather than "such as".

Re: Thank you. Correction made.

Interactive comment on Biogeosciences Discuss., 8, 6307, 2011.

C3875