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Interactive comment on "Bulk partitioning the growing season net ecosystem exchange of CO<sub>2</sub> in Siberian tundra reveals the seasonality of its carbon sequestration strength" by B. R. K. Runkle et al.

## **Anonymous Referee #1**

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The paper discusses an interesting approach to estimate flux partitioning accounting for the seasonal change in respiration. The manuscript is well-written, even if some sentences are awkward, and would require revision to improve the flow. Also, some details needs to be specified (see specific comments).

Specific comments:

Lines 2-4 Page 13715: this sentence is too long split on two? Also "there exist" is a bit awkward, rephrase? Line26-27 Page13716: Should the photoinhibition occur

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when the radiation is higher not lower than a certain value? Clarify or correct Line 14 Page 13719: what is "uninterruptible"? Lines 3-4 Page 13724: awkward sentence, rephrase? Line 7 Page 13725: Light stress is something characteristics of Sphagnum dominated environment, it would be interesting to mention how much of your % cover are vascular plants and how much mosses? Adding an estimate of LAI would help in estimate the importance of vascular plants to the overall NEE. Line 19 Page 13725: which threshold? Specify Line 1 Page 13728: what low humidity refers to? Specify

Interactive comment on Biogeosciences Discuss., 9, 13713, 2012.