

Interactive comment on “Ecosystem carbon exchange of a subtropical evergreen coniferous plantation subjected to seasonal drought, 2003–2007” by X.-F. Wen et al.

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Q1: P8702, Line 3-4: If possible, please insert the reference about heat stress induced by Asian monsoon. A1: The reference was provided. Sun et al., 2006. Seasonal drought effects on carbon sequestration of a mid-subtropical planted forest of south-eastern China. *Science in China Ser. D Earth Sciences*, 49(S2): 110-118.

Q2: P8702, Line 6: The word “uniquely” is very ambiguous. Please revise it into more apparent words, like as “independently to climate” etc. A2: Revised. The variation of NEP is complex, because NEP integrates two interactive processes, GEP and RE, both of which respond independently to climate.

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Q3: P8702, Line 10-13: This sentence is quite badly managed. The authors have to add the reference literatures about who said “generally” depletion of water near the soil surface reduced soil respiration, while water remaining deep in the soil column supported photosynthesis during the early days of drought. A3: Revised. During the early days of drought, soil drying could decrease the activities of roots and soil microorganisms and inhibited their respiration, since sufficient water was essential for normal root and microbial function. At the same time, water that could be withdrawn from the deeper soil column by roots supported photosynthesis. The water in the deep soil would be exhausted with the process of the intensified drought.

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