

***Interactive comment on “Ecosystem effects of
CO₂ concentration: evidence from past climates”
by I. C. Prentice and S. P. Harrison***

Anonymous Referee #2

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This article addresses the crucial question of the role of atmospheric CO₂ concentration on vegetation production. The authors demonstrate that the use of paleodata as well as vegetation models may greatly help to resolve this question and argue that realistic palaeoclimate reconstruction cannot be performed unless atmospheric CO₂ variations are considered. Finally they conclude that “CO₂ effects at the ecosystem scale are neither trivial nor transient”

This paper is presented as a very clear, useful and well illustrated review of most of the related studies on the topic to date. Such paper may greatly help the conception and development of the next generation of dynamic global vegetation models. However, this paper would have benefit to briefly mention the actual concerns about the sensitivity and elasticity of the mentioned vegetation models to the modifications of driving

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parameters such as atmospheric CO₂ concentration.

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