

Interactive comment on “Nitrogen deposition: how important is it for global terrestrial carbon uptake?” by G. Bala et al.

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I like the idea that this paper is trying to quantify the effects on carbon storage from CO₂, T and Nitrogen. The feedback metrics are appropriate for this.

I think it's important to show there are some quite strong non-linearities/interactions between the forcings. Especially (and not surprisingly), the role of N-limitation is greater under higher CO₂ than 1xCO₂. Your results are already sufficient to show this (it's clear in the figures and tables), but the text does not put much emphasis on it. Perhaps you could add some more around this. e.g. what does it mean to quantify your new feedback metric "delta" when the value of this depends on the CO₂ level? do we also need feedback metrics for the cross-terms?

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implications for the future projections are that the role of N will vary depending on the CO₂ level (e.g. it may be more important under RCP8.5 than under RCP2.6 perhaps?)
regards, Chris Jones

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