

***Interactive comment on “Terminations VI and VIII
(~ 530 and ~ 720 kyr BP) tell us the importance of
obliquity and precession in the triggering of
deglaciations” by F. Parrenin and D. Paillard***

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Dear Frédéric,

the two reviews indicate that major changes are needed before publication of this document.

In some ways the reviews are related in requiring a more careful examination of your conclusion and its placing in context. Reviewer 1 would like you to explore the context for these two terminations against the other terminations more thoroughly. Reviewer 2 would like to see much more rigour in your statistics and in particular a better exploration of the stochastic aspects of the system. Reviewer 2 also calls for better

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visualisation. I agree with reviewer 2, between the work of the likes of Michel Crucifix and Peter Huybers, there are examples of very neat visualisation of the forcings and responses at the terminations.

One further point of my own. The benthic isotopes are not simply representative of sea level. Your response to the comment of Julia Hargreaves suggests that your model performs less well with respect to sea level during MIS 7. If you consider efforts to more closely reconstruct sea level during MIS 7 then you will see that in fact the discrepancy may be your naive scaling of $d18O$ to sea level and not your model: Dutton et al 2009, Phasing and amplitude of sea-level and climate change during the penultimate interglacial, *Nature Geoscience* 2, 355 - 359.

While both reviewers are happy to see the eventual publication of the paper, it is not ready for publication before all of their points are addressed in full. I encourage a thorough revision and submission of full responses.

Best regards,

Mark

Interactive comment on *Clim. Past Discuss.*, 8, 3143, 2012.