

Interactive comment on “Mid-Tertiary palaeoenvironments in Thailand: pollen evidences” by P. Sepulchre et al.

Anonymous Referee #1

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The manuscript by Sepulchre et al. presents pollen spectra from two Miocene and one Oligocene site in Thailand. Both sites and time intervals are of high scientific interest in regard to hominid evolution and climate change discussion. Unfortunately, the authors do not present entirely new data and also fail to define novel concepts or ideas. I therefore cannot recommend this manuscript in its present form for publication in CoP.

I fully agree with the authors in regard to scarcity of available data in Southeast Asia. It is indeed very difficult to access existing research data which are often hidden in oil companies' reports. However, I do not understand why Sepulchre et al. do not point out clearly that both of their northern sites, Mae Moh and Chiang Muan, have already been published by Songtham et al (2003, 2004). The authors shortly mention Songtham et al. in the discussion, but do not explain to what extent their results differ.

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In fact, the pollen spectra and findings are nearly identical. It is hard to say if the actual sampling sites are identical, but even if they are not - why did the authors re-sample these formations? The flora of the other Miocene site, from Khorat, has also been already described, although very shortly, in a previous publication by Chaimanee et al 2006; and again it is not clear what is new, apart from more detailed pollen counts. The last Oligocene site seems to be entirely new, but the material seems to allow a very short discussion only.

I also find the style of the manuscript a bit sluggish. It describes the palynoflora, without trying to define any major research question or hypothesis. The interpretation of pollen records is very local, whereas the literature review and therefore discussion of regional implications for Southeast Asia is rather weak. Frequent comparisons with African flora are irritating and give the impression that the authors do not feel very comfortable with Asian palaeoecology. I am also not happy with the use of modern taxa names in particular for the Oligocene. However, if modern taxa names are to be used, the authors should present at least a translation-table matching the Tertiary nomenclature (see e.g. Songtham et al.2003).

I am not an expert in Asian palaeobotany and I may have missed some important aspects here. But even so, the authors should put much more effort into explaining what is new and why their manuscript is worth publishing.

Interactive comment on Clim. Past Discuss., 5, 709, 2009.

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