Comment on cp-2021-55
Vera Markgraf (Referee)

Referee comment on "Different facets of dryness/wetness pattern in southwestern China over the past 27,000 years" by Mengna Liao et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2021-55-RC1, 2021

Cp-2021-55bMengna Liao et al

This is a very interesting paper, using the analyses of grain size, mineralogy, stable isotopes on carbonates, C/N ratios and pollen of a 27k old sediment core retrieved from a lake in SW China to reconstruct past changes in monsoon intensity and local and regional hydrologic (soil water stress) balance. While the results of grain size, C/N and carbonate oxygen isotope data are well interpreted, there is no interpretation of the marked changes in the pollen record. In climatic (not just biomass) terms: what does the shift of *Quercus* Dec (= *Quercus* deciduous?), *Picea* and *Abies* at 13k to *Quercus* Eve (*Quercus* evergreen?) and *Betula*, etc. imply? How are the pollen changes at 8k and 6k interpreted? Besides the pollen changes not contemporaneous, do they corroborate the interpretation of changes in temperature and evaporation, interpreted from the other data?

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