Interactive comment on “Tropical Pacific spatial trend patterns in observed sea level: internal variability and/or anthropogenic signature?” by B. Meyssignac et al.

Anonymous Referee #1

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I was asked by the editor to comment on the technical aspects of this paper as someone "from outside the sea-level community". I’m not sure I have the requisite expertise to pass serious comment on any part of it, but I’ve been asked to submit my brief assessment anyway.

Overall, the approach taken seems reasonable enough to me. Given the dependency of sea-level patterns on the thermosteric component, it is perhaps unsurprising to find the majority of the longer term variability in this region arising from ENSO-like behaviour, with the attendant inter-model spread in this phenomenon, but the investigation presented still seems worthwhile. As is often the case when relying on the CMIP3
database there are obstacles and annoyances arising from which models archived what data from which experiment, but the authors have had a decent go and it doesn’t seem like they’re trying to stretch their sensible conclusions past the limitations of the models/data available.

minor points:

I found the abstract, particularly the method outlined, rather confusing to follow, although pretty much all the material is much better expressed later in the paper (e.g in the Method section)

page 355, line 24: "lastest"

the rather important fig 7. is way too small and difficult to read, even massively zooming in to the max my pdf reader will do. I guess it’s not a print journal, but this would be better reformatted somehow to improve legibility.

Interactive comment on Clim. Past Discuss., 8, 349, 2012.