

Interactive comment on “Baseline for ostracod-based northwestern Pacific and Indo-Pacific shallow-marine paleoenvironmental reconstructions: ecological modeling of species distributions” by Yuanyuan Hong et al.

T. M. Cronin

tcronin@usgs.gov

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Biogeosciences review of Yuanyuan Hong, Moriaki Yasuhara Baseline for ostracod-based northwestern Pacific and Indo-Pacific shallow5 marine paleoenvironmental reconstructions: ecological modeling of species 6 distributions

General This is a well-written paper by experts in application of microfossils to anthropogenic influences. The Hong Kong region especially is ideal due to long term, urban human influence. The environmental dataset is excellent and more robust than most

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ecological studies like this. The paper is error free, statistically rigorous and ecologically solid. The results section however is awfully descriptive and redundant, each paragraph starting the same way: Relative abundance of SPECIES X was correlated only with ENVIRONMENTAL.... These data is given in the tables and need only be highlighted. So authors should emphasize in discussions the key species of most utility in east Asia, not just Hong Kong. The data in tables are fine, but I think the authors have to discuss the most obvious and useful species as indicators of natural [T, S DO] and human [toxics, metals] chemical and physical factors. Don't just plot and chart all the data. Perhaps some environmental measurements have no influence over most species. A little variability in writing style would help too.

Specifics

Tropical not tropic? Some might argue 150 microns and larger misses some smaller species. I wonder why most specimens were dead shells and living animals were so scarce? Line 289. Why if *K. kloempitensis* lives in deeper water is it useful for sea level reconstruction? Species that live at or mean SL are best.

Figure 7 could be re-designed to show the distributions better, for example, in shallow water regions along the E Asian coasts.

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