

Earth Syst. Sci. Data Discuss., referee comment RC2  
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## Comment on **essd-2021-126**

Gino de Gelder (Referee)

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Referee comment on "A standardized database of Last Interglacial (MIS 5e) sea-level indicators in Southeast Asia" by Kathrine Maxwell et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-126-RC2>, 2021

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This paper presents a compilation of SE-Asian relative sea-level indicators from Marine Isotope Stage (MIS) 5e, and some from MIS 5a and 5c. Following a brief introduction, the authors give some background on SE-Asian tectonics, sea-level markers and technical details of the compilation, before going into more details on the specific sites compiled. The paper ends with some general discussion points and future research directions.

I think the paper is well written, and the authors have done a thorough job in systematically and consistently compiling all the data, which was undoubtedly a big effort. This will surely serve as a useful basis for researchers working on Quaternary sea-level in the region (including myself). As with any data-focused paper, it is understandably very descriptive, but nonetheless I would enjoy a little more scientific insights/depth. The future research directions would be the easiest section to insert some creativity, but is very generic; it seems to suggest we need more data from more suitable samples with better descriptions, as could apply anywhere. From a (seismo-)tectonic perspective, I think it would be interesting to investigate how these RSL estimates link with fault slip rates and earthquake activity, and from a geodynamic perspective it would be interesting to understand where the 5e shorelines are in the W half of your study area. According to Sarr et al., 2019, <https://doi.org/10.1130/G45629.1>) the Sunda Shelf is subsiding, and RSL markers should thus be looked for below present-day sea-level. These are just some suggestions, but in general I think the paper is in a good state to be published, with only some minor remarks for the authors' consideration.

Minor comments:

Abstract: I think it's useful to mention as well you have included some MIS 5a and 5c RSL estimates.

Line 33: 14 what? Publications?

Line 36: change to "Despite our work mostly being aimed"

Line 37: change to "also inserted"

Literature overview: I think it's good to mention here that the Sunda Shelf is largely subsiding (Sarr et al. and references therein, see above), which directly explains the absence of RSL markers in a large part of the map.

Line 72: change to "has resulted"

Line 159: "reflects sea-level stillstands" sounds vague to me. How about "is proportional to the duration of sea-level stillstands?"

Line 170: change to "as 20%"

Line 235: I would change tectonics (very generic) to "active tectonic"

Line 450: Not sure if there is a standard format, but to me it makes more sense to address Future research directions (scientific) before the Data availability (technical details)

Line 451: change to "reveals"

Line 452: change "done" with "obtained"

Line 454: remove "made"

In the data table: small typo throughout when writing "Chutcharavan adn Dutton"