Comment on essd-2021-126
Anonymous Referee #1

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-RC1, 2021

Review of ESSD essd-2021-126

A standardized database of Last interglacial (MIS 5e) sea-level indicators in Southeast Asia by Maxwell et al.

This is an interesting dataset that screened and reviewed 14 studies on LIG sea-level indicators in Southeast Asia. After screening the authors report 43 unique RSL proxies that are predominantly coral reef terraces along with data point from a tidal notch. The sites are collated against 134 dated samples from U-series dating and some Electron Spin Resonance (ESR) dating from older studies.

The work is publishable and provides a good summary of the dataset and some implications for future work.

I have one primary criticism of the work and that relates to the discussion or lack thereof regarding tectonics. The authors go to great lengths to describe the tectonics of the region in the first part of the paper and this is a great start. They are indeed correct inferring that almost all data from Southeast Asia will be subject to tectonic contamination and they summarise this nicely at the start.

The authors then say very little about tectonics when they start presenting the datasets and plotting the data. This is a shame because if one was to assume a LIG global sea level high of somewhere between 5-10 metres (there are many to choose from) and transpose that to their figures then the influence of tectonics since the LIG may be somewhat constrained in terms of average uplift rates. They could then compare that to modern uplift rates in the same systems.

Minor comments include a few areas of awkward wording and some inclusions which seem superfluous.

Examples include;

Line 36 – Despite our .... (suggest rewording this sentence)
Line 80 – vague statement. Please clarify and reword

Line 435 – I am not sure I see the point of mentioning the Holocene database in section 7.3? If it is as a template for further studies maybe make that explicit.