

***Interactive comment on “Divergence of seafloor elevation and sea level rise in coral reef regions” by Kimberly K. Yates et al.***

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As I initially said, I think this is a good study - for exactly the same reasons the readers intended. I am satisfied with the revision suggestions but strongly encourage the authors to make sure that the reader understands that the main goal is to focus on the magnitude of change with the caveat that attributing mechanisms is much less well constrained. In this vein, I suggest that the authors take an opportunity to perhaps comment on where we have big gaps in our knowledge that hamper such attributions and why at least a semi-quantitative understanding of the relative relationships between carbonate addition and removal is important to our understanding of the changing dynamic between accretion/erosion and SL rise. The non-linear relationship between water depth across the reef and wave energy passing by has been elegantly demonstrated by many careful instrumental studies. This study addresses ways to quantify

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the first half of that relationship and, therefore, has considerable value when we move on from coral loss to longer-term physical and social impacts - whether in Miami or some small atoll in the Indo-Pacific region.

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