Interactive comment on “Ocean acidification limits temperature-induced poleward expansion of coral habitats around Japan” by Y. Yara et al.

Anonymous Referee #1

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This study and manuscript represent are well done and cover a topic of interest to both the ocean acidification and coral reef research communities – whether or not thermally sensitive corals will be able to move to higher latitudes to escape warming. Its been known that one encumbrance to corals moving to cooler waters was that carbonate saturation states decline with latitude and it is very nice to see this quantified here according to recent climate models that incorporate warming and OA. This will be an important paper and I recommend its publication almost as is, with the exception of three very minor technical comments.

1) Last sentence of section 3.1 says that you will discuss uncertainties in the discussion section. However, you have provided a merged results/discussion, therefore the reader is already in the discussion section.

2) p. 7178 – you have italicized Acroporidae. It is incorrect to italicize the Family name and this should be changed.

3) There is a typo in the Buddemeier et al. 2004 reference.

Interactive comment on Biogeosciences Discuss., 9, 7165, 2012.