

(1) The basic premise in the title and throughout the paper is that "direct and tangible evidence" of palaeo-sea level estimates (from tectonically stable coastlines) are superior to uplift-rate-derived estimates of palaeo-sea level. In principle, this is correct, as uplift-rate-based estimates carry the assumption that uplift rate has been constant, whilst tectonically stable regions do not require this assumption. Nevertheless, the operative word in this is "tangible". Based on what others have commented on with Hearty's work from Bermuda, the Bahamas, and Hawaii, it is by no means established (except in Hearty's opinion) that MIS 11 deposits are present on these islands. Thus, the title is attempt to colour the reader's opinion right from the beginning.

(2) Inappropriate section titles:

Section 2 title, "rocks" is inappropriate--"rocks and sediments" would be a better phrase, as many are not lithified.

Section 3: "red herring" is inappropriate for this section: please find another title. "Red herring" is use of something that is intended to distract, or mislead. That is not what Bowen is doing at all--it is the very focus of his paper, so it is not a red herring at all.

Section 4: "Face the facts" is an impolite and confrontational phrase and is entirely inappropriate for a scientific journal. It is not even accurate, as the "facts" are not really established.

(3) Section 4, first sentence: inaccurate. Bowen does not "ignore" all relevant published studies on stage 11; indeed, it seems to me that he has done a rather comprehensive job of citing previous studies. Need to rephrase this.

(4) Table: phrases in here need to be toned down and not so emotional and inflammatory. Again, this is behaviour that is unprofessional and inappropriate for a scientific journal. Take out all the exclamation points, double question marks and replace childish and rude phrases and terms such as "dodgy", "laws of gravity need to be rewritten," etc. The same points can be made without inserting phrases with a sarcastic flavour.

(5) Table, point 10: cannot cite unpublished work, as this is unfair to readers: either include the data in here or remove the reference to it.

(6) Table, point 16: ages in stratigraphic order are a necessary, but not sufficient test of the accuracy of U-series ages on flowstones. Unlike corals, there is no way to ascertain the initial $^{234}\text{U}/^{238}\text{U}$ values in the waters that the flowstones precipitated from; thus, it is not possible to know if closed-system conditions prevailed with respect to U-series isotopes. I looked up the Hearty et al. (1999)

paper to which he refers, and it turns out that the coral pebbles that were dated in this Bermuda cave permit the possibility that the deposits are much older than MIS 11.

(7) Table, point 23: I looked up Hearty's (2002) paper on Hawaii, too, and it turns out that Hearty uses U-series ages of last-interglacial age to calibrate his amino acid racemization for dating the older deposits, but then rejects U-series as it applies to the same older deposits. I guess these are what he refers to as "dodgy" ages. I also looked up studies where others had done U-series on these deposits and found, interestingly enough, that three different laboratories (Veeh, reported in Stearns, 1973, GSA Bulletin; Szabo et al., 1994, Science; and R. Lawrence Edwards, who provided an age for Hearty in his own paper) all came up with essentially the same ages (500-600 ka) for corals from this deposit.

Thus, this whole tirade about Hawaii seems inconsistent to me--either one accepts U-series as a valid method or one doesn't. If Hearty wishes to reject the older U-series ages on Hawaii, then it seems to me that he needs to reject younger U-series ages there, too, along with all U-series ages from other localities as well (including his own from Bermuda).