

***Interactive comment on “Crustal uplifting rate associated with late-Holocene glacial-isostatic rebound at Skallen and Skarvsnes, Lützow-Holm Bay, East Antarctica: evidence of a synchrony in sedimentary and biological facies on geological setting” by Y. Takano et al.***

**E. J. Javaux (Editor)**

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The initial decision of the two reviewers was to reject the paper. The reviewers identified major issues with the methodology, such as doubt about the applicability of 16S rRNA-based DGGE profiling to increase the accuracy of the reconstructed geo-history; the need for correction of C14 dates (and error bars) for the marine reservoir effect because it has important implications for the calculation of the uplift rate and its comparison with

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other regions and previous records based upon raised beaches; the misidentification of some diatom taxa; the assumption that laminated (varved) sequences can preserve "fixed" uncontaminated ancient molecular signals, ... One of the reviewers also considered that the paper brought little new data to the topic. Although the authors have addressed some of these issues, they acknowledge that some of the problems still need to be addressed, and have submitted proposals for future research, for example, for conducting fossil diatom assemblage with 16S rRNA analysis, or for modeling uplift rates.

Based on the reviewers' comments and authors responses, the editor feels that there are still major issues with the methodology to be solved and that the paper cannot be accepted.

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