

Interactive comment on “A statistical method to validate reconstructions of late-glacial relative sea level – Application to shallow water shells rated as low-grade sea-level indicators” by Milena Latinović et al.

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Received and published: 21 June 2018

Dear Barbara Mauz,

Thank you for the interest in our manuscript, helpful suggestions and for your contribution to the discussion forum of this manuscript.

We agree with your first comment that the text on page 2, line 9 is misleading. We replace the first two sentences by: ‘In the contrast to recent measurements by, e.g. tide gauges, sea level indicators are geological samples which were deposited usually

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below or above sea level at that time.’

Indeed, the indicator’s height does not provide the ‘indicative meaning’, but it contains indicative meaning regarding the samples deposition or depositional conditions with respect to the former sea level (van De Plassche 1986), and we agree that is more precise to use the term ‘indicative range’ for the vertical range of the sample in relation to the modern analogue.

We will keep the term ‘relative sea level’ to distinguish this measure from the absolute sea level which is measured against a fixed reference frame like the center of mass. However, you are right to point out the redundancy in the sentence on page 3, line 17. We will replace it by ‘relative to the local sea level’.

We understand transfer function as mathematical term relating the input to the corresponding output by applying additional operations. Therefore, we keep this terminology where we map the indicator’s depth to relative sea-level based on present day depth.

Once again, thank you for your useful suggestions, which we will consider in the revised version of the manuscript.

Kind regards,

Milena Latinović and Volker Klemann

van de Plassche, O., ed.: Sea-level Research: A Manual for the Collection and Evaluation of Data, Norwich, Geo Books, Norwich, <https://doi.org/10.1007/978-94-009-4215-8>, 1986.

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2018-50>, 2018.

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