

Interactive comment on “Technical Note: Medium-term morphodynamics in an unprotected sandy beach of the Adriatic Sea” by M. Postacchini et al.

Anonymous Referee #1

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This preliminary analysis of medium-term dynamics of an unprotected barred beach is of interest because it focuses on the natural evolution of a system without human intervention. The paper is concise making it a pleasant length to read with relevant figures. There could be some additional information added in a couple of places. P1713 L24, is h the water depth at every cross-shore point representing the profile. P1714 L10-13, is the estimate of A obtained for every individual profile or a set of profiles representing the region of interest? It's hard to see the bars in Fig. 1d, I assume these are the 2D/3D features between -2 and -1m depth in Fig. 1a. Introducing the site before the experimental data would seem a more logical order of sections. P1717, the relation between A and D_{50} is found. A statement about this agreement should be added to

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the conclusion. When discussing the wave frequency (P1717) it would improve clarity to refer to the empty area as the blue outline and the full area of the orange area in the figures. On P1718 L20, how can you be sure that it is a seaward migration rather than the formation of new bars offshore? When describing the bar features refer to the bed elevation rather than the bed depth. The Rotonda needs to be introduced in the description of the site as it impacts the beach evolution. P1722, is the change in fetch or the elevated water level allowing waves to break closer to the coast the more important process during a surge? Radar images could also be listed in the final sentence of the conclusions.

I would recommend a through proof read, checking the grammar and clarity of sentences paying attention to: P1712 L25/26, P1713 L2 L3 L5 L13, P1714 L4 L10 L12, P1715 L1/2 L22, P1717 L2/3 L14 and P1718 L16. Below are a few suggestions for alternative text.

P1712, L1 – to beach protection

P1712, L6 – the region

P1712, L21/22 – ... the submerged beach. This is probably due to the presence of both the harbor...

P1714, L15 – usually form on

P1715, L20 – The surveys cover the...

P1718, L7 – seabed evolution

P1721 – between consecutive surveys

P1722 L4 – ...are associated with large surges...

P1722 L19 – thus disturbing

Fig. 1caption – What is the white area, the Rotonda

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Fig. 2 caption – Sea bed evolution. Also describe what the dotted lines are (bar crests).

Interactive comment on Ocean Sci. Discuss., 12, 1711, 2015.