

Interactive comment on "Coastline evolution of Portuguese low-lying sandy coast in the last 50 years: an integrated approach" *by* Cristina Ponte Lira et al.

Anonymous Referee #2

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The dataset that the authors present within this paper is relevant for future research and management practices as the authors state through the manuscript. Therefore, I support its publication with minor changes and further explanations to the questions raised below at each section.

Abstract: How can the authors affirm that erosion trends dominate the Portuguese beach-dune systems if the result is as low as -0.24m/yr? Indeed, the authors after affirming this call the reader attention to the exceptions to the rule. I would recommend the authors to split the coast into two major areas: the north (which is indeed the one that shows a clear erosive trend) and the south, with a rather stable trend. As you are referring to the littoral cells that you define at the methods section within the abstract, I

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would recommend to at least say something about these cells in the abstract (e.g. total number of cells). Regarding your dataset, the layer file (the one linked to EMODnet project) cannot be visualized, when is this going to be available?

Line 7: what do you mean by global?

Line 8: please include "coasts" at the end of the sentence.

Line 15: I would delete the end of the sentence: . . .for all mainland Portuguese beachdune systems. ..

Introduction: I would recommend the authors to explain how representative is the analysis of only two shoreline positions over fifty years in order to further support their dataset; would not be possible to add an intermediate point to better represent the long term trend?

Page 1, Line 25: please rephrase: ... As human demands...

Page 2, Line 30: again, what do you mean by global?

Study area:

Page 4, Line 22: please change mounth by mouth

Results and Discussion:

Page 7, Line 11: please give some details about the timing when these will be available

Page 8, Line 19: please check: \ldots globally, this sector presents a slight erosive trend with a +0.04m/yr

Page 8, Line 32: after checking within the dataset, I was not able to find rates of +3.11 within this cell, could you please check this?

Page 9, Line 10: as I have stated at the abstract, I would recommend the authors to rewrite this as looking at the overall coast it is not so clear that erosion dominates, and indeed the resultant value is too low.

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