

The authors have replied point-by-point to all comments given by the referees. Most of them addressed the issues properly. However, as the two referees mentioned, quite lots of effort are needed to improve the grammar and the quality of this manuscript. This does not mean the rest of the text apart from pointed comments listed by the referees are clear and precise enough for readers. There are still a lot of grammar mistakes and incorrect way of forming sentences for a scientific publication. I have listed some of them as the following comments. Thus, I suggest a close check through the text and a major revision of the current version.

Line 24: at -> in a

Line 28: Also -> Futhermore

Line 32: sedimentation -> sediment

Line 37: with -> to

Line 39: remove 'redistribute

Line 40: I am wondering if there are any studies existed in this area focusing on sediment transport due to density gradient? Water circulation caused by density gradient usually plays an important role in transport of sediment and formation of turbidity maixima in estuaries.

Line 41, 42: list references in a chronological order. (Please check through the manuscript)

Line 46: remove the second "("

Line 54-55: Text duplicated, please remove.

Line 64-65: rewrite: "; the knowledge of these ..." -> ", which may further benefit human activities management ..."

Line 77: add "m" behind 6.5

Line 78: change "6.5m" to "6.5 m"

Line 108: put (M-Sc) behind land station.

Line 126: consisted -> consists

Line 128: in (Cerralbo et al., 2015a) -> by Cerralbo et al. (2015a)
(Check through the manuscript for similar issuses)

Line 130: Rewrite this sentence. (e.g., The barotropic time step for ROMS is set to 30 s, and in SWAN the wave field is solved in a time interval of 3600 s.)

Line 131: change -> exchange?

Line 131: open boundary was forced -> boundary can't be forced. -> water motion at the open boundaries was forced by ...

Line 134: flow -> discharge

Line 135-136: This sentence is unclear, please rewrite.

Line 137: What are the velocity near the bottom and wave near the bottom?

Line 139: move "bottom stress" behind current and wave bothd.

Line 144: u and v are current speed in ? and ? direction? What is z_0 in your equation (1)? and the value is?

Line 153: (Kumar et al., 2012) -> Kumar et al. (2012)

Line 158: change "in" A2 to "at" A2. Use "at" for stations. Please close check your rest text and figure captions.

Line 159: measured sea level height?

Line 160: This sentence is still unclear, please rewrite it.

Line 162: change to "Two typical wind conditions are considered ..."

Line 168: remove ",", and include -> "includes"

Line 169: The sentence is too wordy. Please remove "characteristic"

Line 171: it is unclear the amplitude of what is maximum?

Line 173: it is unclear by analyzing what in the along-shore direction of Figure 3 reveals the peak of velocities are at the order of 0.5 m s^{-1} . Note that the along-shore direction only refers to coordinate, itself can't reveal anything, please be precise in your description.

Line 176: ... behavior ranging values from ... -> ... behavior with values ranging from ...

Line 176: I guess you mean Figure 2e.

Line 177: In this sense, three differentiated ... -> Three differentiated ...

Line 183: works -> work

Line 188: please explain what are the “points” mean ?

Line 189: First, please explain what are shown in this figure. I don't see “points”, but two triangles that represent current data analysed from station A_1 and A_2 , respectively, and one circle lying on the bottom of this figure reads “ADCP”. Without explanation, it is very hard to understand what can you read from this figure.

Line 193: add “the” before Alfacs Bay. Remove “The” before Figures 5. Moreover, it is better to describe two figures separately. First Figure 5, then Figure 6.

Line 194: different snapshots of what? Please be precise on what you what to show.

Line 194: both -> two.

Line 194: wave and current-induced bottom ... -> wave-induced and current-induced bottom... And also please be consists through the entire text.

Line 195: corresponds -> correspond (Please rewrite this sentence in correct grammar.)

Line 196: removed “combined”. It is clear that the bottom stress contains several components that due to different hydrodynamics, in which one or more dominant over the others.

Line 197: “stresses” -> “stress”; “due to the current bottom stress” -> “caused by currents”

Line 202: remove “to”

Line 205: add “),” behind E1, remove “where”, “increase” -> “increases”

Line 206-208: Rewrite. This sentence is not an English written for scientific publication.

Line 209: “This figure shows how...” -> “It reveals that ...”

Line 228: not the modelled stress itself suggest ... but the analysis of modelled stress. This is a problem frequently occurs in the manuscript. Please look into your grammar closely and fix it.

Line 231-232: In general, your sentences are wordy. Here is just one example. Moreover, it does not follow the structure formed in previous sentence. I suggest to rewrite as follows: “However, these studies did not explain the high spatial variability of the seiche-induced sediment resuspension, which are implied by the modelled current-induced bottom stress.”

Line 229-232: Please rewrite and improve your way of writing sentences.

Line 238: "the current bottom intensity measured" -> "the measured bottom current speed"

Line 238: (Llebot et al., 2014) and (Cerralbo et al. 2015a) -> Llebot et al. (2014) and Cerralbo et al. (2015a)

Line 239: ... a barotropic shape of what?

Line 240: behavior -> Please be consists with your spelling, use either British English or American English. Don't use them both in one manuscript. I observed "analyzed", "modeled", which are AE, while "behaviour", "modelled" are BE.

Line 245: "This" -> "The"

Line 246-248: Rewrite. Inconsistent structure.

Line 249-251: wordy sentence.

Line 256: similar to what in the second stage of E1.

Line 256: are -> is

Line 256: This sentence is unclear. Please rewrite.

Line 259: intensity -> speed

Line 261: have a relevant role in the resuspension mechanisms (wordy) -> relevant to the resuspension.

Line 262: remove "the"

Line 266: "the relative importance" with respect to what? To each other or to the combined bottom stress?

Line 267: quantify -> be quantified.

Line 271-272: I don't see how model data is correlated with field data. Model is, to some extent, to mimic features you observed in field data with giving open boundaries and initial conditions.

Line 275: mechanism itself does not have spatial and temporal variability, but the relative importance of each mechanism does. Mechanisms refer to, not physical variables, but processes as explanations of a phenomenon.

Line 279: "an evident influence" -> what is that?

Line 284-286: Grammar incorrect, thus hard to understand.

Line 292-293: don't use the same word through the entire text. Moreover, two "contribution" have different meaning. I suggest to replace the first one with "study"

Line 296: add "those considering" behind including.

Line 297: "must take into account" -> "should include"

Line 300: The bay geometry characteristics cannot suggest. Please rewrite this sentence.

Line 300: remove "effect"

Line 304: remove "the"

Line 305: "This may be consistent with ..." Please rewrite this sentence.

Line 308: "should allow" -> "allows"

Line 320: "Others" -> "Other"

Line 321: add "with" before "freshwater"

Figure 2 caption: "intensity" -> "speed"; "in" -> "at";

Line 509: "velocity" -> "speed". Note velocity refers to both speed and direction.

Line 510: "in" -> "by"

Figure 3 caption: (a) ...; (b) as (a), but for the cross-shore direction.

"showed" -> "shown"

Figure 5 caption: current-induced bottom stress (τ_c), wave-induced bottom stress (τ_w) and combined wave-current bottom stress ($\tau_c + \tau_w$).

Magenta is not very clear in the contour plots. I suggest to use a color with better contrast.

"Isobaths (in grey) are plotted each 3 m" -> Isobaths are plotted in grey solid lines in 3 m interval from ? m to ? m.

"the plot scale is transformed in log10" -> "the bottom stresses are plotted in log10 scale"