Author technical corrections in response to the Topical Editor Decision "Cohesive and mixed sediment in the Regional Ocean Modeling System (ROMS v3.6) implemented in the Coupled Ocean Atmosphere Wave Sediment-Transport Modeling System (COAWST r1179 [now r1234])" by Christopher R. Sherwood et al.

We thank Topical Editor Guy Munhoven guidance through this process. His final technical remarks are shown here in **bold+italics**; our response is in normal text.

Topical Editor Decision: Publish subject to technical corrections (11 Apr 2018) by Guy Munhoven

Comments to the Author:

Dear Chris,

Dear co-authors,

We have received three anonymous referee comments for your manuscript ``Cohesive and mixed sediment in the Regional Ocean Modeling System (ROMS v3.6) implemented in the Coupled Ocean Atmosphere Wave Sediment-Transport Modeling System (COAWST r1179)".

All of the referees rate your manuscript "Good" or "Excellent" in all of the four rubrics (Scientific significance, Scientific quality, Scientific reproducibility, Presentation quality)

Anonymous Referees #1 and #2 recommend minor revision, while Anonymous Referee #3 recommends major revision. Anonymous Referee #1 has already expressed his/her satisfaction regarding your reply to her/his comments.

You have posted comprehensive replies to the referees comments, and I find that all of the referees' questions, comments and recommendations have been adequately dealt with.

As Anonymous Referee #3 recommends major revision, I have taken more time to go over this referee's comments and your reply (Editor review). I find that anonymous Referee #3 essentially asked for the fundamentals to be better presented (more comprehensive literature review). The requested changes thus mostly fall into category "Scientific quality" in our synthetic assessment form. In that category, your manuscript was rated "Excellent" by Anonymous Referee #3. I am therefore not sending out your revised manuscript out for review to the referee, but restrict this round to an Editor Review only, the more since the other two referees requested minor review only.

Upon examination, I find again that you have replied in an adequate manner to the referee's comments and amended the text accordingly.

I am pleased to inform you that I can now accept your manuscript for publication in Geoscientific Model Development, subject to technical corrections

Thank you. We are honored that the paper has been accepted and look forward to publishing in GMD.

There remain a few minor points to clarify or correct.

(1) In your reply to the points that Anonymous Referee #3 raised in RC4 (https://doi.org/10.5194/gmd-2017-267-RC4) in the paragraph on page C3 that starts with ``These four publications ...", there is some confusion: you indicate that - Mehta et al. (2014) - the first of the four listed by the referee -is

now cited in a sentence added to Section 1.2. This does not happen to be the case. The paper by Mehta et al. (2014) is not cited at all.

We have added the sentence "This has implications for deposition rates (Mehta et al., 2014)." to section 1.2, and we have added Mehta et al. (2014) to the References

- Mietta et al. (2009) has been added to the Discussion where you itemize processes that are not included in the model. This does not happen to be the case either. Mietta et al. is cited in a new sentence in Section 1.2.

Could you please check this, so that the reply to the referee's comments is consistent with the text of the revised manuscript.

We have added the following sentence to the discussion near line 695: "The floc model does not explicitly account for the effects of organic matter content, pH, or salinity on flocculation rate (e.g., Mietta et al., 2009); these influences are subsumed into user-adjustable parameters."

(2) There is some section/subsection numbering mismatch in the revised manuscript: - 2.2 has 2.2.1 and 2.2.3 as subsections (but no 2.2.2) - 2.3 has 2.2.1 (sic) and 2.2.2 (sic) as subsections (instead of 2.3.x)

Please correct the numbering.

Corrected.

(3) Finally, please make sure that the information about SVN revisions in the manuscript will be consistently updated: at lines 4 (title), 17, 712 and 738 in the revised manuscript, where either 1179 or XXXX is indicated. Please also include the correct contribution number at line 735.

We have updated the SVN revision number in three places, and in the Supplement. The correct version is 1234. We also added: "This paper is Contribution Number 3741 of the Virginia Institute of Marine Science, College of William & Mary", and corrected the CKH affiliation. We also added the postal code for JPR.

Other minor corrections include:

Spelling correction for "Acknowledgements"

Addition of a List of Figures.

Per the instructions in https://www.geoscientific-model-development.net/for-authors/manuscript preparation.html, the following changes have been made:

Title and author information for the supplement has been removed.

Equations have been changed to Eq., and units with / (e.g., m/s) have been consistently converted to exponential format (e.g, m s⁻¹).

Some other minor changes to punctuation have been made. A marked up version is available if you would like to see the changes itemized.

We have made minor changes to the figures, mostly to correct the format of the units.

Thank you for considering Geoscientific Model Development for the publication of your model developments.

Best regards,

Guy Munhoven

We thank Guy and the GMD editors for sage advice and support during this process.