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Biogeosciences Discussions

Interactive comment on "Optics and remote sensing of Bahamian carbonate sediment whitings and potential relationship to wind-driven Langmuir circulation" *by* H. M. Dierssen et al.

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This paper is a nice, fairly clear discussion of a specific whiting event, and whiting events on the Bahama Banks in general with a lot of references to look up more details if desired. I think it should be published; I only have a few specific comments below. I also am ashamed to say that I know almost nothing about Langmuir circulation, so can't comment on that part. One thing I found a little interesting is while there was a lot of discussion about the cell going throughout the water column, I didn't see (or missed) any discussion of profile data with the optical packages?

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Specific comments:

Page 4781, line17-19. "Measurements...(Sullivan et al 2005)." This isn't a sentence. Given the rest is so well written, it must have been a typo. (or they are checking if I am was still paying attention)

Same page, line 26, isn't it more proper to add "coefficient", such as "specific absorption coefficient".

Page 4782, line 25. Some mention should be made of the timing between the insitu data and the MODIS image (do you exclude data over xx time from the image. how simultaneous were the ground truth and satellite data?).

Page 4783, line 24. The reference to Fig 1b is sort of misleading here (I read this and went to the figure expecting to see a picture of the instrument package.

Page 4785, line 12 and around. In various places in the paper it is mentioned that these whitings consist of aragonite particles, and in one place it even talks about the size. In another place it discusses the size of the sediment, which is argued as the source of the whiting. With all of this, how is it relevant at all to determine the size distribution as a Junge distribution slope (from a analysis which depends on sphericity and junge distribution) and go even farther to try to get to an index of refraction? I think this is a large, unjustified stretch. It is reasonable to say that the bbtilda is high, consistent with the waters having aragonite minerals (which you give the index of refraction of).

Page 4791, line 25... might be more proper to reference Slade somehow, who had given the paper at OO.

Page 4793, top... are there any profiles of the water column?

Interactive comment on Biogeosciences Discuss., 5, 4777, 2008.