Van Dam et al. have made significant improvements to this manuscript and have addressed all of my major constructive criticisms. I am please to recommend this manuscript for publication.

There are several areas where I recommend the authors address minor outstanding issues to improve the rigor and accessibility of the manuscript. I have outlined them here for consideration:

P. 8, L 11: I understand the reasons for omitting the effects of NEP on the total alkalinity budget, but the statement "… indicated that this TA production was small compared to total NEC" would be more robust if it was stated quantitatively. For example, "… indicated that this TA production was never more than X% of the NEC."

Fig. 4: I find this figure to be nearly unreadable. Overlapping NEC, NEP_DIC, and NEP_DO on the same plots with small markers is confusing. I strongly recommend that the authors reformat this plot to add more panels such that only a single metabolic rate (NEC, NEP_DIC, or NEP_DO) is displayed per plot.

On a broader note, is Fig. 4 necessary since the same information is found in Fig. 5? In my opinion, Fig. 5 is a "truer" representation of the data collected. If you want to show composite daily cycles, I recommend re-ordering Figs. 4 and 5.

Fig. 5: I also find this figure to be largely unreadable. No reader giving any reasonable amount of effort is going to be able to understand three overlapping metabolic rate time series, each with associated error bounds which are all the same color. I strongly recommend that the authors split this figure into multiple panels such that each metabolic rate is on a different panel. An improvement would be to display the error bounds in the same color as the mean metabolic rate time series. An even better improvement could be to display the range (upper bound to lower bound) as a filled ribbon with the mean estimates as a solid line in the middle.

Fig. 6a: The overlapping error bounds for the daytime and nighttime measurements are unreadable. If the authors staggered the error bounds (move one a little to the left and the other a little the right) and used color coordination between the bar plots and error bars, it would greatly improve the ability of a reader to comprehend this figure.