Interactive comment on "An Internally Consistent Dataset of δ^{13}C-DIC in the North Atlantic Ocean – NAC13v1" *by* Meike Becker et al.

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The authors present a secondary quality controlled dataset of d13C_DIC data from the North Atlantic. I compliment the authors for this and share reviewer Olsen's desire to see this extended to the globe.

In Schmittner et al. (2013) we used AOU versus d13C_DIC plots to find outliers and identify offsets (but this may not be described in detail in that paper). Anyway we did not correct the dataset for any offsets, but we noticed them and were concerned about it. So, I'm glad that here a systematic approach is used to identify and correct offsets. But I wonder if the AOU vs d13C_DIC approach may also be of value to use here. E.g. it is not clear to me that internal variability could not change d13C_DIC on interannual-decadal time scales even in the deep ocean. Due to the strong correlation to AOU any

change in the biologically sequestered carbon that affects d13C_DIC should be visible in AOU. Anyway, this is just a suggestion that the authors may want to consider for a revision.

(page 3) Anthropogenic d13C_DIC changes have been estimated by models (e.g. our 2013 paper mentioned above). These model results (available at http://people.oregonstate.edu/~schmita2/data/schmittner13bg/Model/) could potentially be used to estimate the effect in different regions.

(page 7) Why does cruise 33MW199930704-1 have high quality data? Were there objective criteria used to determine this?

(line 140) these cruises are 10 years apart and I could imagine that at high latitudes anthropogenic d13C_DIC could have an impact. (see comments above)

(Fig. 3) the font and figure is too small. It is not readable. Please increase size.

(line 182) "-0.20 permil" but in Tab. 3 -0.15 permil is listed. Please check this inconsistency.