TS1: confirmed

TS2: Data are in the supplement

TS3: correct

TS4: Slinn, S. and Slinn, W.: Predictions for particle deposition on natural waters, Atmospheric Environment (1967), 14, 1013-1016, 1980.

TS5: Longhurst, Alan R. *Ecological geography of the sea,* Academic Press, Elsevier, 560 pp., 2010.

TS7: Brown, M. T. and Bruland, K. W.: An improved flow-injection analysis method for the determination of dissolved aluminum in seawater, Limnol. Oceanogr. Methods, 6, 87-95, 2008.

TS8: Hydes, D. and Liss, P.: Fluorimetric method for the determination of low concentrations of dissolved aluminium in natural waters, Analyst, 101, 922-931, 1976.

TS9: Correct

TS10: 17.09.2017

TS11: Sarthou, G., Baker, A. R., Blain, S., Achterberg, E. P., Boye, M., Bowie, A. R., Croot, P., Laan, P., de Baar, H. J. W., Jickells, T. D., and Worsfold, P. J.: Atmospheric iron deposition and sea-surface dissolved iron concentrations in the eastern Atlantic Ocean, Deep Sea Research Part I: Oceanographic Research Papers, 50, 1339-1352, 2003.

TS12: van Hulten, M. M. P., Sterl, A., Tagliabue, A., Dutay, J. C., Gehlen, M., de Baar, H. J. W., and Middag, R.: Aluminium in an ocean general circulation model compared with the West Atlantic Geotraces cruises, Journal of Marine Systems, 126, 3-23, 2013.

TS13: Yu, L. and Weller, R. A.: Objectively analyzed air–sea heat fluxes for the global ice-free oceans (1981–2005), Bulletin of the American Meteorological Society, 88, 527-539, 2007.

TS14: 17.09.2017

S15: Yes. Please remove figure 6. At the end of this email there is a note with the corresponding changes for the following figures (e.g. 7 and 8 which will need to be changed to 6 and 7).

TS16: 546 should be removed. It was a line number. Sorry.

TS17: Data are in the supplement.

TS19:Fine

TS20: Ok

TS21: Anderson, R. F., et al. "How well can we quantify dust deposition to the ocean?." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 374.2081 (2016): 20150285 doi: [10.1098/rsta.2015.0285](https://dx.doi.org/10.1098%2Frsta.2015.0285)

TS22: [**https://doi.org/10.1029/2003GL018518**](https://doi.org/10.1029/2003GL018518)

TS23:<https://doi.org/10.1038/359373a0> ; page range 370-380

TS24: [**https://doi.org/10.1029/2004GL020153**](https://doi.org/10.1029/2004GL020153) ; article number: L23S08

TS25:  [**https://doi.org/10.1029/2011GL049847**](https://doi.org/10.1029/2011GL049847) ; article number: L24601

TS26: Marine Chemistry

TS27: doi:10.1029/2007GB002975 ; article number: GB2003

TS28: doi:10.1029/2011GB004186 ; article number : GB2038

TS29: Dordrecht

TS30: doi:10.1029/2009JD013311 ; article number: D15202

TS31: doi:10.1029/2010JC006629 ; article number: C02013

TS32: [**https://doi.org/10.1029/2000JC000736**](https://doi.org/10.1029/2000JC000736) ; article number: 3079

TS33: Geophysical research letters

TS34:doi:10.1029/2001GB001407 ; article number: 1046

TS35: Deep sea research Part I:Oceanographic research papers

TS36: *Bulletin of the American Meteorological Society*

*TS37: page number:*45-74

TS38: <http://doi.org/10.1029/2004GB002402> ; article number: GB4025

TS39: [**https://doi.org/10.1029/2002JD002536**](https://doi.org/10.1029/2002JD002536) ; article number: 8592

TS40: doi:10.1029/2007GB003042 ; article number: GB1005

TS41: NOAA Atlas NESDIS 14, 100 pp., U. S. Gov. Print. Off., Washington, D. C.

TS42:[**https://doi.org/10.1029/2004GB002220**](https://doi.org/10.1029/2004GB002220) ; article number: GB4028

TS43: Dordrecht

TS44: Particle Flux in the Ocean, Wiley, New York, 19-52.

TS45:  **<https://doi.org/10.1029/2009JD012773>** ; article number: D13304

TS46: doi:10.1029/2007GC001586 ; article number: Q10Q06

TS47: doi:10.1029/2007GB002984 : article number:GB2006

TS48: doi:10.1029/2002JD002775 ; article number: 4416

CE1: Correct

CE2: Correct

CE3: Correct

CE4: Please remove sentence regarding yellow solid lines. It should not be there. For the blue dots: Please add the following sentence before the last sentence: Blue dots represent stations.

CE5: Correct

CE6: No. It should be the difference between the median MLDms and MLDar

CE7: Please remove which.

CE8: fine

CE9: Ok

C10: No. It is not variation of intensities. They are two different factors. 1) the migration of the ITZC and the dust pulses.

I would leave it as it is since the latter factors refers to both (migration of ITCZ and the dust pulses.

CE11: particulate aluminium (pAl)

CE12: Ok

CE13: the " Han" model

CE14: change aspects for variations

CE15: No. The residence refers to the NATR. Maybe better "for the NATR region" would yield .....

CE16: No. Then better: " poor in region with addition Al inputs (e.g. ....) and strong Al depletion by biogenic particles (e.g. upwelling regions)"

CE 17: No. As it is a key parameter of the GEOTRACES program it needs to be measured. GEOTRACES has around 15 parameters which are key and need to be measured on each cruise. Therefore the word "as such". Provides for implies is fine.

Note to correct figure numbering: First number is page and second number is line

10 - 8 : Fig. 7 should be 6

10 - 9 : Fig. 8 a, b, c, and d should be 7 a, b, c, and d

10 - 27: Fig. 7 and 8 a should be 6 and 7a, respectively

11 - 11 : Fig. 7 should be 6

11 - 15 : Fig. 7b should be 6b

11 - 26: Fig. 7b should be 6b

12 - 12: Fig. 7 and 8b should be 6 and 7b

13 - 1 : Fig. 8b should be 7b

13 - 6: Fig. 8b should be 7b

13 - 57,58: Fig. 7 and 8c should be 6 and 7c

13 - 95 : Fig. 7 and 8d should be 6 and 7d

Caption Figure 7 should be caption Figure 6

Caption Figure 8 should be caption Figure 7