

Second review for manuscript titled “Are atmospheric PBDE levels declining in Central Europe? Examination of the seasonal variations, gas-particle partitioning and implications for long-range atmospheric transport” by Degrendele et al. (acp-2018-144)

The authors have taken into account all reviewers' questions and comments and have significantly improved the manuscript by providing more information regarding blanks and QA/QC procedures and corrected errors. I think the manuscript can be accepted for publication after the following minor issues are addressed:

P. 1, Line 20, line 28 and elsewhere in the text: Suggest that whenever the authors refer to the PBDE congeners, list the congener numbers from lowest to the highest. It is very strange to give “...found for BDE 100, 99, 153 and 209”, why not “...found for BDE 99, 100, 153 and 209”? Also, line 28, “...BDE99 and BDE 47”, why not “BDE 47 and 99”? It makes it easier to read.

p. 5 line 22 where did the conversion factor of 1.8 come from? What unit were the atmospheric concentrations of organic carbon given in?

p. 6 I presume that the vapor pressures given are at 25 °C. Please state this in the text.

Table S8 Should change to Spearman Correlation results.

p. 11, line 9 Please specify that the ABL is given as h_{mix} in Table S9.

p. 12, last line “Atmospheric boundary layer” was the term used earlier. Better use the same term to be consistent.

P. 20 Figure 1 The blue bars are too light and difficult to read. Please make them darker.

p. 23 Figure 4 I am wondering why the authors did not choose to show BDE 100 and 153, which show statistically significant trends, in this figure instead of BDE 47 and 183 that have no statistically significant trends.

Minor:

P. 1, Line 29 Usually “accounting for approximately...”

P. 3 Line 4 “gas-phase chemicals on ...”

p. 3 Line 8 “...discarded without further analysis...”

p. 5 line 27 spell out above ground level (a.g.l.)

p. 5 line 3 and elsewhere : Li et al. <no comma> (2015)

p. 7 last line: should read “...LRAT potential of PBDEs and for developing...”

p. 10, line 11 ...the precipitation rate were found for all PBDEs...

p. 11, line 22 missing space between “gaseous” and “concentrations”

p. 11, line 26 "On the other hand,..."

Table S3 Sample preparation, not Sampling preparation.