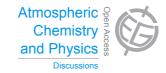
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ACPD 15, C2117–C2118, 2015

> Interactive Comment

Interactive comment on "Increasing and decreasing trends of the atmospheric deposition of organochlorine compounds in European remote areas during the last decade" by L. Arellano et al.

L. Zhang (Editor)

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This published ACPD version has been revised significantly based on the comments received from the first round quick reviews. While one reviewer posted more comments on this ACPD version, another review chose not to provide further comments. I have a few minor points for the authors to consider in the final version of this paper.

P3417, L23. Using "high solubility" instead of "low Henry's law constant" may be more straightforward. This is because different units are used in literature for Henry's law constant, and in some literature where a different unit is used than the one referred



Discussion Paper



here, high H is equivalent to high solubility. In the main body of this paper where Henry's law constant is first used, the unit needs to be provided and a statement that "low H generally means high solubility" is preferred.

P3418, L23. Some species have short lifetime, but can reemit from the surface after deposition and are then transported further down the wind (the so-called grass-hopper effect). Is this mechanism considered in this study?

P3420, L24. In general, bulk deposition collectors only collect a portion of dry deposition besides colleting all of the wet deposition. The magnitude of this collected dry deposition portion depends on species gas-particle partitioning, among many other factors (solubility, meteorological conditions, materials used in the collectors). Can the authors provide a brief discussion on how much portion the dry deposition was collected (should be species dependent)? Such information might be important, because in reality, dry deposition contributes more than wet deposition on annual basis for many pops (this is especially the case in non-snow season over vegetated surfaces).

P3423, L16-22. Are these concentrations referred to ambient air concentrations? For all classes of POS, deposition and air concentration need to be discussed together to better explain the trends and patterns.

PP3425, L4. Also see a more recent and quantified study of snow scavenging (Zhang et al., 2015, ACP 15, 1421-1434)

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 3415, 2015.

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