SUPPORTING INFORMATION

A dynamic model to study the exchange of gas-phase POPs between air and a seasonal snowpack

Kaj M. Hansen,[1,] Crispin J. Halsall,[2] and Jesper H. Christensen[1]*

Department of Atmospheric Environment, National Environmental Research Institute, P.O. box 358, Frederiksborgvej 399, 4000 Roskilde, Denmark, and Environmental Science Department, Lancaster University, Lancaster, LA1 4YQ, UK.

[*]CORRESPONDING AUTHOR phone: +45 46 30 18 72; fax: +45 46 30 12 14; e-mail: kmh@dmu.dk. [1] National Environmental Research Institute. [2] Lancaster University.

FIGURE S1

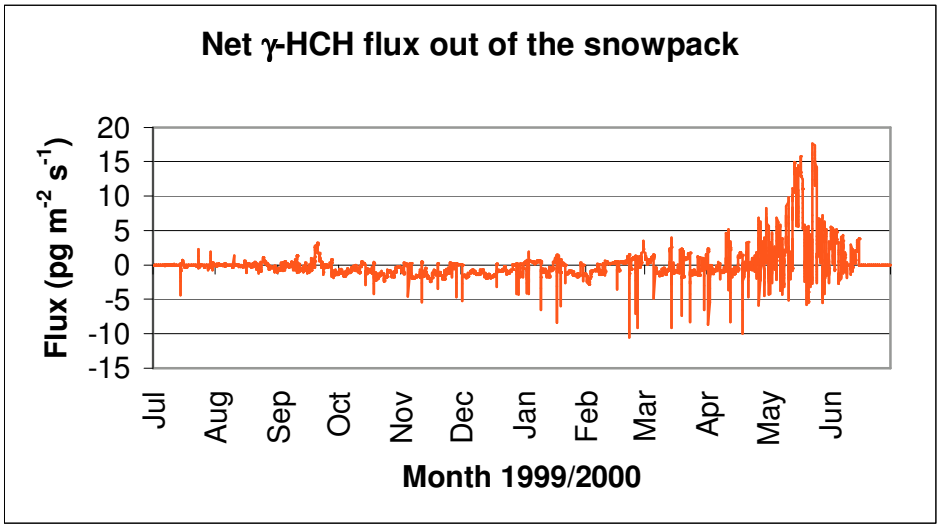
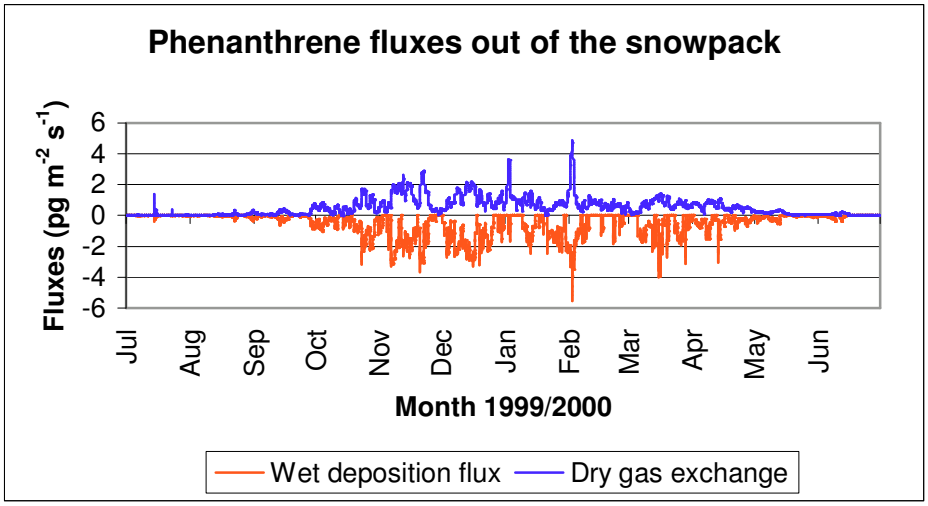
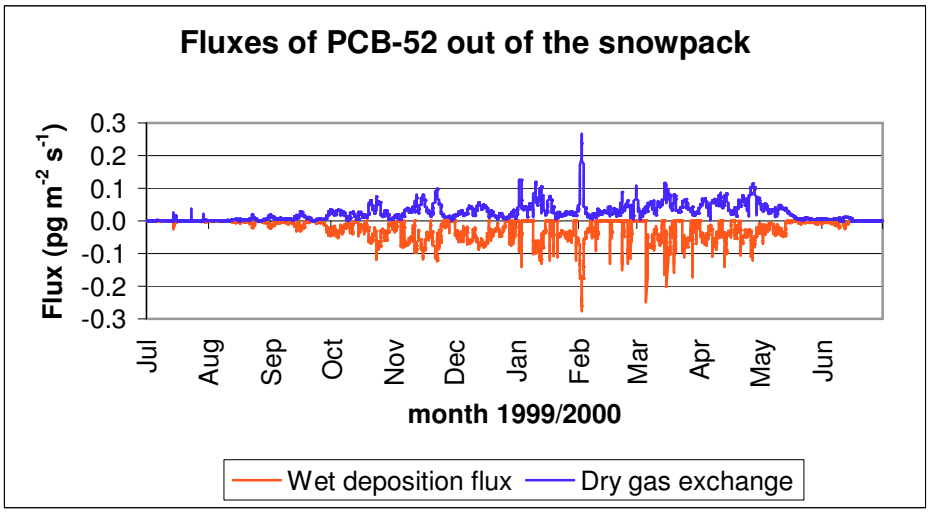


FIGURE S1. Net γ-HCH fluxes out of the snowpack.

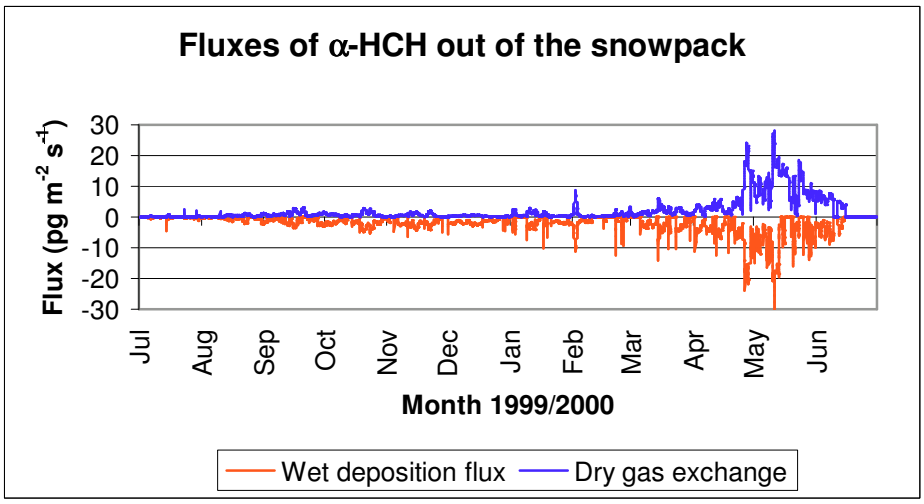
FIGURE S2



a)



b)

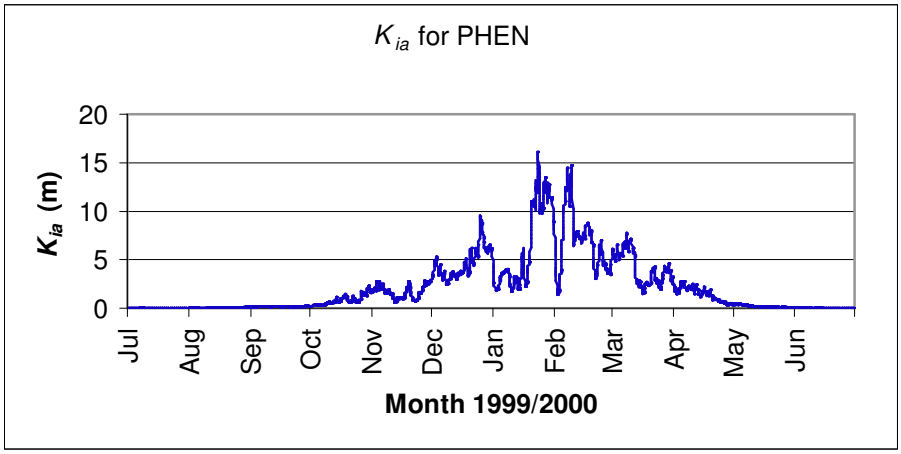


c)

FIGURE S2. Wet deposition (red) and gas exchange (blue) fluxes out of the snowpack for phenanthrene (a), PCB-52 (b), and α-HCH (c).

FIGURE S3

a)



b)

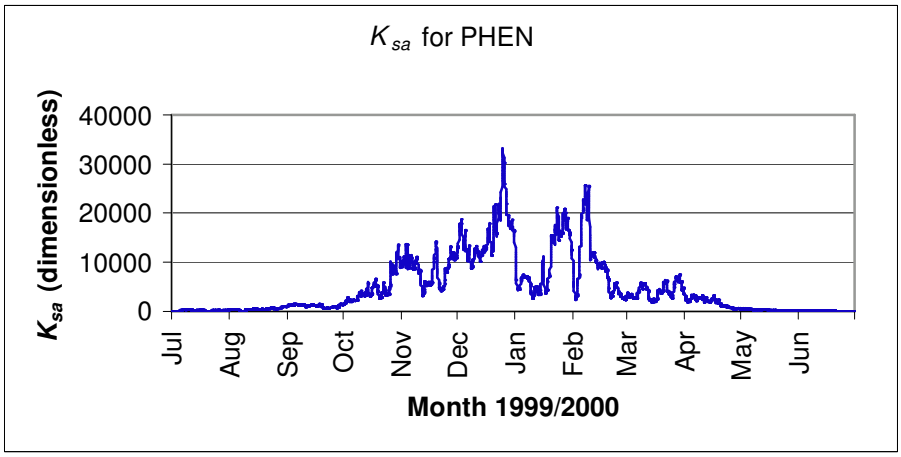


FIGURE S3. K_{ia} and K_{sa} values for phenanthrene.

FIGURE S4

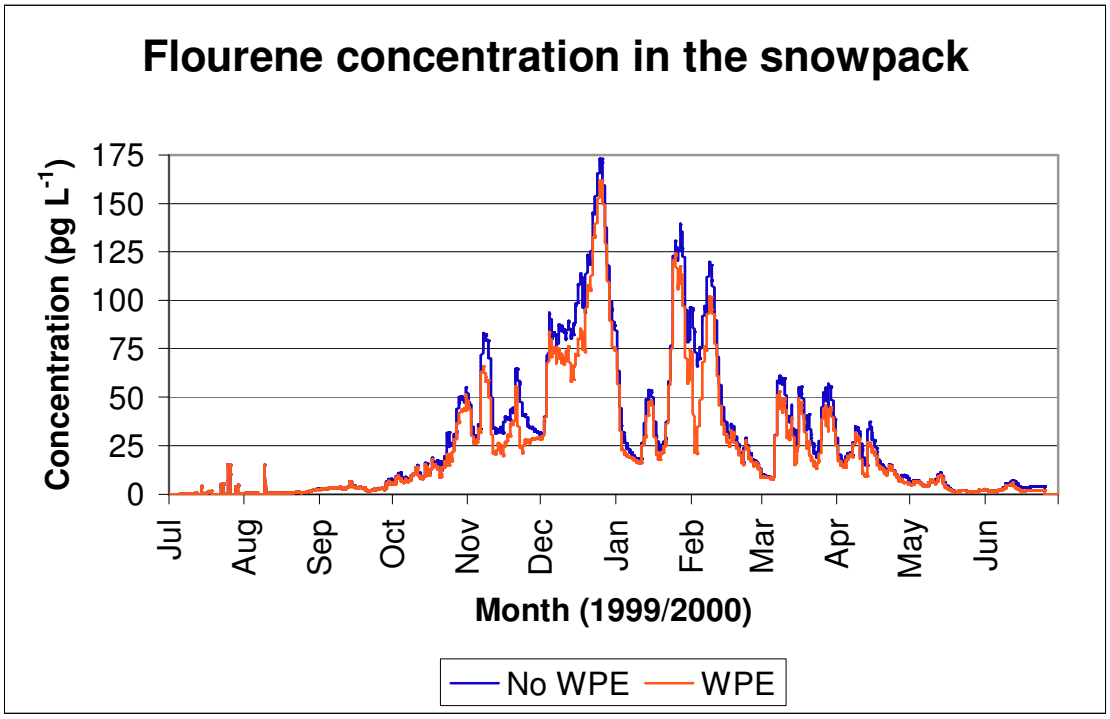


FIGURE S4. Predicted flourene concentration in the snowpack when including the wind pumping effect (WPE) and without (No WPE).