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Ice core site considerations from modeling CO_2 and O_2 / N_2 ratio diffusion in interior East Antarctica

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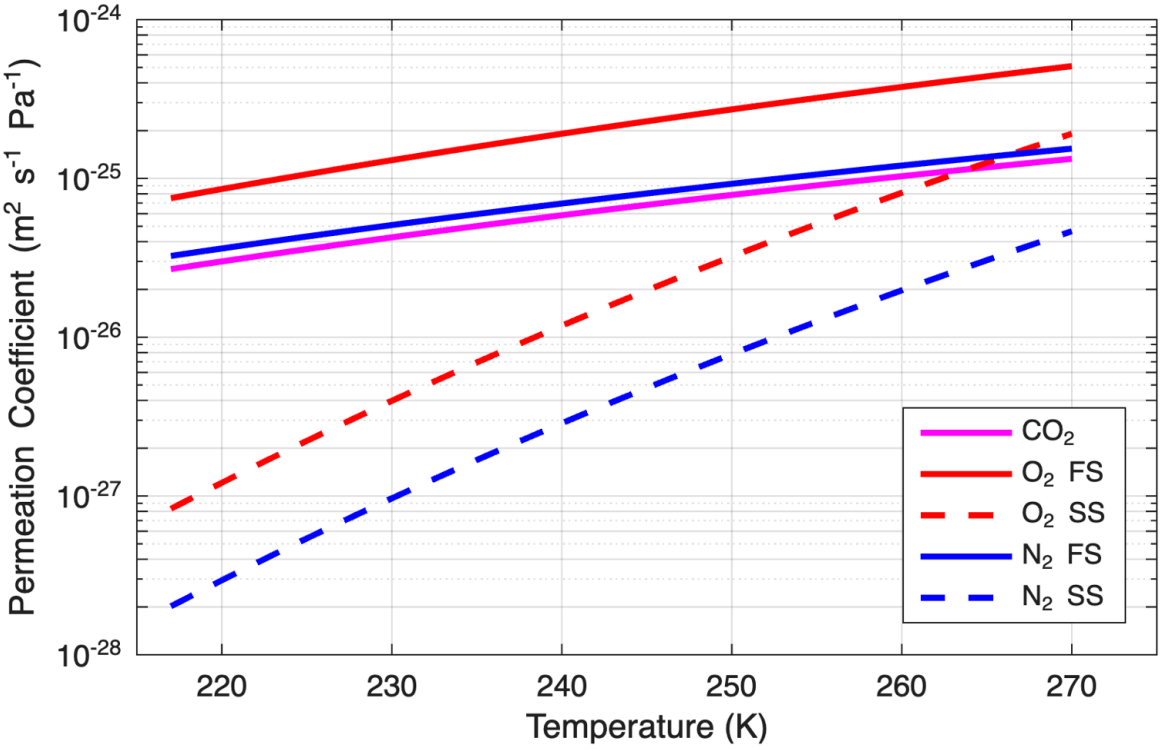

Figure S1: Gas permeation coefficient values for CO_2, O_2, and N_2. The "fast set" (FS) is from Ikeda-Fukuzawa et al. (2004). The "slow set" (SS) is from Salamatin et al. (2001). The slow set is what is utilized in the study. Figure is based on Figure 2 in Bereiter et al. (2014).

Bereiter, B., Fischer, H., Schwander, J., & Stocker, T. F.: Diffusive equilibration of N2, O2 and CO2 mixing ratios in a 1.5-million-years-old ice core, The Cryosphere, 8, 245-256, https://doi.org/10.5194/tc-8-245-2014, 2014.

Ikeda-Fukazawa, T., Kawamura, K., and Hondoh, T.: Mechanism of Molecular Diffusion in Ice Crystals, Molecular Simulation, 30, 973–979, https://doi.org/10.1080/08927020410001709307, 2004.

Salamatin, A. N., Lipenkov, V. Y., Ikeda-Fukazawa, T., and Hondoh, T.: Kinetics of air–hydrate nucleation in polar ice sheets, J. Cryst. Growth, 223, 285-305, https://doi.org/10.1016/S0022-0248(00)01002-2, 2001.