

Interactive comment on “Atmospheric nitric oxide and ozone at the WAIS Divide deep coring site: a discussion of local sources and transport in West Antarctica” by S. Masclin et al.

J. Savarino

jsavarino@ujf-grenoble.fr

Received and published: 15 March 2013

Another interesting piece of the NO_x/O₃ puzzle above icy terrains.

Now, considering that WAIS possesses the same snow accumulation and latitude coordinate than Summit in Greenland, it is very puzzling to see the sharp decrease of nitrate concentration in WAIS snow pits while absent in Summit snow pits. I think this sharp difference deserves a specific discussion, considering that in the manuscript photolysis of nitrate is proposed to be the main NO_x source above this site. Apparently, as previously thought, the accumulation rate is not the only parameter controlling the photodissociation of nitrate in snow (for a given solar flux).

C590

Joel Savarino

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 6807, 2013.