

Interactive comment on "Transport of Antarctic stratospheric strongly dehydrated air into the troposphere observed during the HALO-ESMVal campaign 2012" *by* C. Rolf et al.

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Received and published: 23 March 2015

Dear Adrian Tuck, thank you for the nice compliment on the paper!

Also thank you for suggesting further publications. I will look through them and include them in the next version of the paper.

It seems that the bottom of the Antarctic vortex is full of such small scale filaments and they seem to be conserved up to certain point. As we showed in the paper, the origin seems to be in-mixing caused by the strong Rossby wave activity near the jet

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but the further development of such small filaments is also very interesting and could be analyzed in more detailed in a further publication. I will look into the data to see whether a analysis as suggested is possible and promising.

Thanks again!

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 7895, 2015.