Geophysical Research Abstracts, Vol. 7, 06594, 2005 SRef-ID: 1607-7962/gra/EGU05-A-06594 © European Geosciences Union 2005



Total column ozone loss during arctic winter 2004/05 and comparison to previous years

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The total ozone reduction in the Arctic vortex is derived each winter since 1993/94 by comparing the measurements of the SAOZ network to 3D CTM model passive ozone runs where chemistry is ignored. The cumulative loss at the end of the season is ranging from 5-10% during the warmest winters as in 1998/99, 2000/01 and 2001/02, to 30%-32% during coldest and longest ones as in 1994/95 and 1995/96. An average total loss of 20-24 % is found during the cold winters starting generally in mid- or late January except during the winter of 2002/03, when it started very early in the season, in late December. In this study, preliminary results for the winter 2004/05 will be presented. The focus will be put on the timing of the chemical ozone loss and on the ability of two 3D CTM (REPROBUS and SLIMCAT) to reproduce the loss.