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A quantitative Study of Ozone Losses in the Polar-Vortex by assimilation of Odin/SMR Data.

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Ozone mixing ratios from the Sub-Millimetre Radiometer (SMR) instrument on the Odin satellite have been assimilated into a wind-driven Eulerian transport model for the purpose of separating chemical ozone depletion from large scale transport processes. Quantitative estimates of polar ozone destruction in the Arctic winters of 2002/2003, 2003/2004, 2004/2005 and 2005/2006 and in the Antarctic winters of 2002, 2003, 2004, 2005 and 2006 will be presented.