Geophysical Research Abstracts, Vol. 9, 01378, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-01378
© European Geosciences Union 2007

# Transpacific Pollution Transport during INTEX-B in Relation to Other Years

G.G. Pfister, L.K. Emmons, D. P. Edwards, P.G. Hess, J.C. Gille
National Center for Atmospheric Research, Boulder, CO

We are analysing the transport of pollution across the Pacific during springtime 2006 by integrating model simulations performed with the chemistry transport model MOZART (Model for Ozone and Related Chemical Tracers) with a suite of observations. The observational data set includes aircraft measurements of trace gases and aerosols performed during INTEX-B (Intercontinental Chemical Transport Experiment) and satellite observations of CO from the Measurements of Pollution in the Troposphere (MOPITT) instrument and of aerosol loading from the Moderate Resolution Imaging Spectroradiometer (MODIS). Model tracers are used to examine the contributions of different regions to pollution levels over the Pacific and to estimate the ozone production from $NO_x$ sources in Asia to ozone loadings over the Pacific and North America. The MOPITT and MODIS multi-year data series reaching back to 2000 are used to put 2006 into relation to the transpacific transport occurring in other years.