

Home

Online Library ACP

- ▣ Recent Final Revised Papers
- ▣ [Volumes and Issues](#)
- ▣ Special Issues
- ▣ Library Search
- ▣ Title and Author Search

Online Library ACPD

Alerts & RSS Feeds

General Information

Submission

Review

Production

Subscription

Comment on a Paper

Impact
Factor
4.865

ISI
indexed



▣ [Volumes and Issues](#) ▣ [Contents of Issue 5](#) ▣ [Special Issue](#)

Atmos. Chem. Phys., 3, 1887-1902, 2003

www.atmos-chem-phys.net/3/1887/2003/

© Author(s) 2003. This work is licensed under a Creative Commons License.

Transport and build-up of tropospheric trace gases during the MINOS campaign: comparison of GOME, in situ aircraft measurements and MATCH-MPIC-data

A. Ladstätter-Weißmayer¹, J. Heland², R. Kormann³, R. von Kuhlmann³, M. G. Lawrence³, J. Meyer-Arnek¹, A. Richter¹, F. Wittrock¹, H. Ziereis³, and J. P. Burrows¹

¹Institute of Environmental Physics, University of Bremen, P.O. Box 330440, D-28334 Bremen, Germany

²Institute of Atmospheric Physics, DLR, Oberpfaffenhofen, D-82234 Wessling, Germany

³Max-Planck-Institute for Chemistry, P.O. Box 3060, D-55020 Mainz, Germany

Abstract. The MINOS (Mediterranean INTensive Oxidant Study) campaign was an international, multi-platform field campaign to measure long-range transport of air-pollution and aerosols from South East Asia and Europe towards the Mediterranean basin during August 2001. High pollution events were observed during this campaign. For the Mediterranean region enhanced tropospheric nitrogen dioxide (NO₂) and formaldehyde (HCHO), which are precursors of tropospheric ozone (O₃), were detected by the satellite based GOME (Global Ozone Monitoring Experiment) instrument and compared with airborne in situ measurements as well as with the output from the global 3D photochemistry-transport model MATCH-MPIC (Model of Atmospheric Transport and CHEMistry - Max Planck Institute for Chemistry). The increase of pollution in that region leads to severe air quality degradation with regional and global implications.

▣ [Final Revised Paper](#) (PDF, 1666 KB) ▣ [Discussion Paper](#) (ACPD)

Citation: Ladstätter-Weißmayer, A., Heland, J., Kormann, R., von Kuhlmann, R., Lawrence, M. G., Meyer-Arnek, J., Richter, A., Wittrock, F., Ziereis, H., and Burrows, J. P.: Transport and build-up of tropospheric trace gases during the MINOS campaign: comparison of GOME, in situ aircraft measurements and MATCH-MPIC-data, Atmos. Chem. Phys., 3, 1887-1902, 2003. ▣ [Bibtex](#) ▣ [EndNote](#) ▣ [Reference Manager](#)

Search ACP

Library Search

Author Search

News

- ▣ [Sister Journals AMT & GMD](#)
- ▣ [Financial Support for Authors](#)
- ▣ [Journal Impact Factor](#)
- ▣ [Public Relations & Background Information](#)

Recent Papers

01 | ACP, 11 Mar 2009: Measurements of Pollution In The Troposphere (MOPITT) validation through 2006

02 | ACP, 11 Mar 2009: Air-sea fluxes of biogenic bromine from the tropical and North Atlantic Ocean

03 | ACPD, 10 Mar 2009: Characterization of organic ambient aerosol during MIRAGE 2006 on three platforms

04 | ACPD, 10 Mar 2009: Regional differences in