



Volume 42

Issue 25

August 2008

ISSN 1352-2310

ATMOSPHERIC ENVIRONMENT

Special Issue: PRIDE-PRD 2004 Campaign: Program of
Regional Integrated Experiments on Air Quality over Pearl
River Delta of China

Guest Editors

Y.H. Zhang, M. Hu, S.C. Liu and A. Wiedensohler



CONTENTS

Special Issue

PRIDE-PRD 2004 Campaign : Program of Regional Integrated Experiments on Air Quality over Pearl River Delta of China

Guest Editors

Y.H. Zhang, M. Hu, S.C. Liu and A. Wiedensohler

Preface

- Y.H. Zhang, M. Hu, S.C. Liu and A. Wiedensohler 6155 The special issue on PRIDE-PRD2004 Campaign

- Y.H. Zhang, M. Hu, L.J. Zhong, A. Wiedensohler, S.C. Liu, M.O. Andreae, W. Wang and S.J. Fan 6157 Regional Integrated Experiments on Air Quality over Pearl River Delta 2004 (PRIDE-PRD2004): Overview

- S. Fan, B. Wang, M. Tesche, R. Engelmann, A. Althausen, J. Liu, W. Zhu, Q. Fan, M. Li, N. Ta, L. Song and K. Leong 6174 Meteorological conditions and structures of atmospheric boundary layer in October 2004 over Pearl River Delta area

- W. Wang, L. Ren, Y. Zhang, J. Chen, H. Liu, L. Bao, S. Fan and D. Tang 6187 Aircraft measurements of gaseous pollutants and particulate matter over Pearl River Delta in China

- Y.H. Zhang, H. Su, L.J. Zhong, Y.F. Cheng, L.M. Zeng, X.S. Wang, Y.R. Xiang, J.L. Wang, D.F. Gao, M. Shao, S.J. Fan and S.C. Liu 6203 Regional ozone pollution and observation-based approach for analyzing ozone-precursor relationship during the PRIDE-PRD2004 campaign

- H. Su, Y.F. Cheng, P. Cheng, Y.H. Zhang, S. Dong, L.M. Zeng, X. Wang, J. Slanina, M. Shao and A. Wiedensohler 6219 Observation of nighttime nitrous acid (HONO) formation at a non-urban site during PRIDE-PRD2004 in China

- J.-L. Wang, C.-H. Wang, C.-H. Lai, C.-C. Chang, Y. Liu, Y. Zhang, S. Liu and M. Shao 6233 Characterization of ozone precursors in the Pearl River Delta by time series observation of non-methane hydrocarbons

- Y. Liu, M. Shao, L. Fu, S. Lu, L. Zeng and D. Tang 6247 Source profiles of volatile organic compounds (VOCs) measured in China: Part I

- Y. Liu, M. Shao, S. Lu, C.-C. Chang, J.-L. Wang and L. Fu 6261 Source apportionment of ambient volatile organic compounds in the Pearl River Delta, China: Part II

- S. Liu, M. Hu, Z. Wu, B. Wehner, A. Wiedensohler and Y. Cheng 6275 Aerosol number size distribution and new particle formation at a rural/coastal site in Pearl River Delta (PRD) of China

S. Liu, M. Hu, S. Slanina, L.-Y. He, Y.-W. Niu, E. Bruegemann, T. Gnauk and H. Herrmann	6284	Size distribution and source analysis of ionic compositions of aerosols in polluted periods at Xinken in Pearl River Delta (PRD) of China
T. Gnauk, K. Müller, D. van Pinxteren, L.-Y. He, Y. Niu, M. Hu and H. Herrmann	6296	Size-segregated particulate chemical composition in Xinken, Pearl River Delta, China: OC/EC and organic compounds
M. Hu, Z. Wu, J. Slanina, P. Lin, S. Liu and L. Zeng	6310	Acidic gases, ammonia and water-soluble ions in PM _{2.5} at a coastal site in the Pearl River Delta, China
H. Eichler, Y.F. Cheng, W. Birmili, A. Nowak, A. Wiedensohler, E. Brüggemann, T. Gnauk, H. Herrmann, D. Althausen, A. Ansmann, R. Engelmann, M. Tesche, M. Wendisch, Y.H. Zhang, M. Hu, S. Liu and L.M. Zeng	6321	Hygroscopic properties and extinction of aerosol particles at ambient relative humidity in South-Eastern China
M.O. Andreae, O. Schmid, H. Yang, D. Chand, J. Zhen Yu, L.-M. Zeng and Y.-H. Zhang	6335	Optical properties and chemical composition of the atmospheric aerosol in urban Guangzhou, China
Y.F. Cheng, A. Wiedensohler, H. Eichler, H. Su, T. Gnauk, E. Brüggemann, H. Herrmann, J. Heintzenberg, J. Slanina, T. Tuch, M. Hu and Y.H. Zhang	6351	Aerosol optical properties and related chemical apportionment at Xinken in Pearl River Delta of China
Y.F. Cheng, A. Wiedensohler, H. Eichler, J. Heintzenberg, M. Tesche, A. Ansmann, M. Wendisch, H. Su, D. Althausen, H. Herrmann, T. Gnauk, E. Brüggemann, M. Hu and Y.H. Zhang	6373	Relative humidity dependence of aerosol optical properties and direct radiative forcing in the surface boundary layer at Xinken in Pearl River Delta of China: An observation based numerical study
M. Tesche, D. Müller, A. Ansmann, M. Hu and Y. Zhang	6398	Retrieval of microphysical properties of aerosol particles from one-wavelength Raman lidar and multiwavelength Sun photometer observations
M. Wendisch, O. Hellmuth, A. Ansmann, J. Heintzenberg, R. Engelmann, D. Althausen, H. Eichler, D. Müller, M. Hu, Y. Zhang and J. Mao	6405	Radiative and dynamic effects of absorbing aerosol particles over the Pearl River Delta, China