

Field Study in Mount Tai



Mt Tai (1534m asl.) is the highest mountain in the populated (and polluted) North China Plains. It is an ideal place to observe and study regional air pollution problems such as ozone, haze and acid rain. A pilot study was conducted in the summer and autumn of 2003 when ozone, CO, SO₂, PM_{2.5} and NMHCs were measured (Gao et al., 2005).

The site was used again for two intensive campaigns in spring and summer 2007 during which very comprehensive list of trace gases, aerosols (physical and chemical properties), and cloud water composition were measured. The study is part of China's National Basic Research Program (also called in the '973 program) on acid rain pollution. The work was conducted in collaboration with Shandong University and Tai'an Meteorological Station. Analyses of the data are under way.

Related References:

1. Gao, J., **T. Wang***, A. J. Ding, and C. B. Liu. "Observational Study of Ozone and Carbon Monoxide at the Summit of Mount Tai (1534m A.S.L.) in Central-Eastern China." *Atmospheric Environment* 39, no. 26 (Aug 2005): 4779-91. <http://dx.doi.org/10.1016/j.atmosenv.2005.04.030>.
2. Ren, Y., A. J. Ding, **T. Wang ***, X. H. Shen, J. Guo, J. M. Zhang, Y. Wang, P. J. Xu, X. F. Wang, J. Gao, and J. L. Collett. "Measurement of Gas-Phase Total Peroxides at the Summit of Mount Tai in China." *Atmospheric Environment* 43, no. 9 (Mar 2009): 1702-11. <http://dx.doi.org/10.1016/j.atmosenv.2008.12.020>.
3. Zhou, Y., **T. Wang ***, X. M. Gao, L. K. Xue, X. F. Wang, Z. Wang, J. A. Gao, Q. Z. Zhang, and W. X. Wang. "Continuous Observations of Water-Soluble Ions in Pm_{2.5} at Mount Tai (1534 Ma.S.L.) in Central-Eastern China." *Journal of Atmospheric Chemistry* 64, no. 2-3 (Dec 2009): 107-27. <http://dx.doi.org/10.1007/s10874-010-9172-z>.

4. Wang, Y. *, J. Guo, **T. Wang**, A. J. Ding, J. A. Gao, Y. Zhou, J. L. Collett, and W. X. Wang. "Influence of Regional Pollution and Sandstorms on the Chemical Composition of Cloud/Fog at the Summit of Mt. Taishan in Northern China." *Atmospheric Research* 99, no. 3-4 (Mar 2011): 434-42. <http://dx.doi.org/10.1016/j.atmosres.2010.11.010>.