

Publications in 4D Variational Data Assimilation

1. **Lin, C.-L.**, Q. Xia, and R. Calhoun, "Retrieval of Urban Boundary Layer Structures from Doppler Lidar Data. Part II: Proper Orthogonal Decomposition," *Journal of the Atmospheric Sciences*, Vol. 65, No. 1, pp. 21-42, **2008**.
2. Xia, Q., **C.-L. Lin**, R. Calhoun, R. K. Newsom, "Retrieval of Urban Boundary Layer Structures from Doppler Lidar Data. Part I: Accuracy Assessment," *Journal of the Atmospheric Sciences*, Vol. 65, No. 1, pp. 3-20, **2008**.
3. Chai, T., **C.-L. Lin**, and R. K. Newsom, "Retrieval of Microscale Flow Structures from High Resolution Doppler Lidar Data Using an Adjoint Model," *Journal of the Atmospheric Sciences*, Vol. 61 (13), pp. 1500-1520, **2004**.
4. Chai, T. and **C.-L. Lin**, "Estimation of Turbulent Viscosity and Diffusivity in Adjoint Recovery of Atmospheric Boundary-Layer Flow Structures," *SIAM Multiscale Modeling and Simulation*, Vol. 1 (2), pp. 196-220, **2003**.
5. **Lin, C.-L.**, T. Chai, and J. Sun, "On Smoothness Constraints for Four-Dimensional Data Assimilation," *Journal of Computational Physics*, Vol. 181, pp. 430-453, **2002**.
6. **Lin, C.-L.**, Chai, T., and J. Sun, "Retrieval of Flow Structures in a Convective Boundary Layer Using an Adjoint Model: Identical Twin Experiments," *Journal of the Atmospheric Sciences*, Vol. 58 (13), pp. 1767-1783, **2001**.