

Geophysical Research Abstracts,  
Vol. 10, EGU2008-A-06033, 2008  
SRef-ID: 1607-7962/gra/EGU2008-A-06033  
EGU General Assembly 2008  
© Author(s) 2008



## **Ensemble Kalman filtering for assimilation of mesosphere and lower thermosphere observations**

**T. Matsuo** (1), J. Anderson (2), D. Marsh (2), and A. Smith (2)

(1) University of Colorado, Boulder, CO (2) National Center for Atmospheric Research, Boulder, CO

In this paper the ability of the Ensemble Kalman Filter (EnKF) to assimilate a realistic set of space-based observations currently available in the Mesosphere Lower-Thermosphere (MLT) region is examined. An EnKF assimilation system has been constructed using a time-dependent, dynamical, chemical stratosphere-mesosphere model with the National Center for Atmospheric Research (NCAR) Data Assimilation Research Testbed (DART).