

Principal Development References for NCAR Thermosphere-Ionosphere Models

- Roble, R. G., R. E., Dickinson and E. C. Ridley, Seasonal and solar-cycle variations of zonal mean circulation in the thermosphere, *J. Geophys. Res.*, 82, 5493-5504, 1977.
- Dickinson, R. E., E. C. Ridley and R. G. Roble, A three-dimensional general circulation model of the thermosphere, *J. Geophys. Res.*, 86, 1499-1512, 1981.
- Roble, R. G., R.E. Dickinson, and E. C. Ridley, Global circulation and temperature structure of the thermosphere with high-latitude plasma convection, *J. Geophys. Res.*, 87, 1599-1614, 1982.
- Dickinson, R. E., E. C. Ridley and R. G. Roble, Thermospheric general circulation with coupled dynamics and composition, *J. Atmos. Sci.*, 41, 205-219, 1984.
- Roble, R. G., E. C. Ridley and R. E. Dickinson, On the global mean structure of the thermosphere, *J. Geophys. Res.*, 92, 8745-8758, 1987.
- Roble, R. G., and E. C. Ridley, An auroral model for the NCAR thermospheric general circulation model (TGCM), *Annales Geophys.*, 5A, 369-382, 1987.
- Roble, R. G., E. C. Ridley, A. D. Richmond and R. E. Dickinson, A coupled thermosphere/ionosphere general circulation model, *Geophys. Res. Lett.*, 15, 1325-1328, 1988.
- Richmond, A. D., E. C. Ridley, and R. G. Roble, A thermosphere/ionosphere general circulation model with coupled electrodynamics, *Geophys. Res. Lett.*, 6, 601-604, 1992.
- Roble, R. G., and E. C. Ridley, A thermosphere-ionosphere-mesosphere-electrodynamics general circulation model (TIME-GCM): equinox solar cycle minimum simulations (30-500 km), *Geophys. Res. Lett.*, 21, 417-420, 1994.
- Richmond A. D., Ionospheric electrodynamics using magnetic apex coordinates, *Journal of Geomagnetism and Geoelectricity*, 47, 191-212, 1995.
- Roble, R. G., Energetics of the mesosphere and thermosphere, *AGU Geophysical Monograph*, 87, 1-22, 1995.
- Wang, W., T. L. Killeen, A. G. Burns, and R. G. Roble, A high-resolution, three-dimensional, time dependent, nested grid model of the coupled thermosphere-ionosphere, *J. Atmos. Sol.-Terr. Phys.*, 61, 385-397, 1999.
- Hagan, M. E., and R. G. Roble (2001), Modeling diurnal tidal variability with the National Center for Atmospheric Research thermosphere-ionosphere-mesosphere-electrodynamics general circulation model, *J. Geophys. Res.-Space Physics*, 106(A11), 24869-24882, doi:10.1029/2001JA000057.
- Wang, W., M. Wiltberger, A. G. Burns, S. Solomon, T. L. Killeen, N. Maruyama, and J. Lyon, Initial results from the CISM coupled magnetosphere-ionosphere-thermosphere (CMIT) model: thermosphere ionosphere responses, *J. Atmos. Sol.-Terr. Phys.*, 66, 1425-1442, doi:10.1016/j.jastp.2004.04.008, 2004.
- Solomon, S. C., and L. Y. Qian, Solar extreme-ultraviolet irradiance for general circulation models, *J. Geophys. Res.*, 110, A10306, doi:10.1029/2005JA011160, 2005.

Solomon, S. C., A. G. Burns, B. A. Emery, M. G. Mlynczak, L. Qian, W. Wang, D. R. Weimer, and M. Wiltberger, Modeling studies of the impact of high-speed streams and co-rotating interaction regions on the thermosphere-ionosphere, *J. Geophys. Res.*, *117*, A00L11, doi:10.1029/2011JA017417, 2012.

Qian, L., A. G. Burns, B. A. Emery, B. Foster, G. Lu, A. Maute, A. D. Richmond, R. G. Roble, S. C. Solomon, and W. Wang, The NCAR TIE-GCM: A community model of the coupled thermosphere/ionosphere system, in *Modeling the Ionosphere-Thermosphere System*, AGU Geophysical Monograph Series, 2014.