

MIHAIL V. CODRESCU

Space Weather Prediction Center, National Oceanic and Atmospheric Administration
W/NP9, 325 Broadway, Boulder, CO 80305
Tel.: (303) 497-6763; FAX: (303) 497-3645; E-mail: Mihail.Codrescu@noaa.gov

EDUCATION

- 1977 B.S.EM.E. Transilvania University, Brasov, Romania
- 1985 M.S.E.E. Boston University, College of Engineering, Boston, MA
- 1989 Ph.D. in Electrical Engineering, Boston University, Boston, MA

APPOINTMENTS

- present Space Weather Prediction Center, NOAA
Physicist/Ionosphere modeling and services
- 1991-2005 CIRES/University of Colorado at Boulder
Research Scientist–Thermosphere/Ionosphere Modeling
- 1990-1991 University College London/University of Southampton, UK
Research Assistant–Thermosphere/Ionosphere Coupling
- 1986-1989 National Center for Atmospheric Research/High Altitude Observatory
Graduate Research Assistant–System theory approach to a large
nonlinear computer model of the Thermosphere/Ionosphere System

SELECTED PUBLICATIONS

Codrescu, M. V., T. J. Fuller-Rowell, and C. F. Minter, An ensemble type Kalman filter for neutral thermospheric composition during geomagnetic storms, *SPACE WEATHER*, Vol. 2, S11002, doi:10.1029/2004SW000088, 2004.

Codrescu, M. V., T. J. Fuller-Rowell, Vlad Munteanu, and C. F. Minter, Validation of the coupled thermosphere ionosphere plasmasphere electrodynamics (CTIPe) model: CTIPe - MSIS Temperature comparison, *SPACE WEATHER*, VOL. 6, S09005, doi:10.1029/2007SW000364, 2008.

Codrescu, M. V., T. J. Fuller-Rowell, J. C. Foster, J. M. Holt, and S. J. Cariglia, Electric field variability associated with the Millstone Hill electric field model, *J. Geophys. Res.*, 105, 5265-5273, 2000.

Fuller-Rowell, T.J., M.V. Codrescu, and P. Wilkinson, Quantitative modeling of ionospheric response to geomagnetic activity, *Ann. Geophys.* 18, 766-781, 2000.

Codrescu, M. V., T. J. Fuller-Rowell and I. S. Kutiev, Modeling the F-layer During Specific Geomagnetic Storms, *J. Geophys. Res.*, 102, 14,315-14,329, 1997.

SYNERGISTIC ACTIVITIES

For his Ph.D., Dr. Codrescu used the NCAR three-dimensional, time-dependent thermospheric model (TGCM) to study the importance of an interactive ionosphere in thermosphere simulations. In 1991 he accepted a position with the Cooperative Institute for Research in Environmental Sciences at the University of Colorado at Boulder. Dr. Codrescu joined NOAA's Space Environment Center in Boulder, CO in 2005. He is interested in understanding and quantifying the response of the upper atmosphere to auroral precipitation and to the magnetosphere electric field. He has recently become involved with data assimilation techniques and the application of metrics to quantify our ability to specify and forecast the upper atmosphere. Dr. Codrescu has published over 40 scientific papers in refereed journals and has presented numerous talks at national and international meetings.