BIOGRAPHICAL SKETCH:

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a. Professional Preparation:

1984 Ph.D., Mathematics, University of Michigan, Ann Arbor, MI
1979 M.A., Mathematics, SUNY, Stony Brook, NY
1977 B.S. with Honors, Summa Cum Laude, University of Michigan, Ann Arbor, MI

b. Appointments:

1998-present	Senior Research Scientist, NorthWest Research Associates, Inc.
1995-1998	Assistant Research Scientist, Space Physics Research Laboratory, University of Michigan
1988-1995	Senior Research Associate, Space Physics Research Laboratory, University of Michigan
1981-1984	Research Assistant, Space Physics Research Laboratory, University of Michigan
1986-1987	Visiting Researcher, Max Planck Institut für Mathematik, Bonn, West Germany

c. Publications:

Alexander, M. J. and D. A. Ortland, (2010): Equatorial waves in high resolution dynamics limb sounder (HIRDLS) data. *J. Geophys. Res*., 115, D24111, doi:10.1029/2010JD014782.

Killeen T. L., Q. Wu, S. C. Solomon, D. A. Ortland, W. R. Skinner, R. J. Niciejewski, D. A. Gell (2006): TIMED Doppler Interferometer: Overview and recent results, J. Geophys. Res., 111, A10S01, doi:10.1029/2005JA011484.

Lieberman, R. S., D. A. Ortland, and E. S. Yarosh (2003), Climatology and interannual variability of diurnal water vapor heating, *J. Geophys. Res.*, 108, 4123, doi:10.1029/2002JD002308.

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Ortland, D. A. (2005a), Generalized Hough Modes: The Structure of Damped Global-Scale Waves Propagating on a Mean Flow with Horizontal and Vertical Shear. Journal of the Atmospheric Sciences: Vol. 62, No. 8, pp. 2674–2683.

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Ortland, D. A., M. J. Alexander, and A. Grimsdell, 2011: On the tropical wave spectrum generated by latent heating, *J. Atmos. Sci.*, (to appear)

Ortland, D. A., and M. J. Alexander, 2011: Solutions to the vertical structure equation for simple models of the tropical troposphere. *J. Atmos. Sci. (*to appear)

Ryu, J.-H., M. J. Alexander, and D. A. Ortland, 2011: Equatorial atmospheric waves in the upper troposphere and lower stratosphere forced by latent heating estimated from TRMM rain rates. *J. Atmos. Sci* (to appear).

Wu, Q., T.L. Killeen, D.A. Ortland, S.C. Solomon, R.D. Gablehouse, R.M. Johnson, W.R. Skinner, R.J. Niciejewski and S.J. Franke (2006): TIMED Doppler Interferometer (TIDI) observations of migrating diurnal and semi-diurnal tides, J. Atmos. Terres. Phys. , 68, 408-417.

Wu, Q., D. A. Ortland, T. L. Killeen, W. R. Skinner, and R. J. Niciejewski (2010) ,Global distribution, seasonal, and interannual variations of mesospheric semidiurnal tide observed by TIMED TIDI, *J. Geophys. Res* (revision submitted)

d. Collaborators:

Joan Alexander, Ruth Lieberman, Dennis Riggin, Qian Wu, Rolando Garcia, Anne Smith

e. Experience

Dr. Ortland has extensive experience in the nonlinear modeling and theory of waves and tides in the neutral atmosphere from the surface to lower thermosphere. He has developed retrieval algorithms for HRDI/UARS and TIMED/TIDI, and has published papers on data analysis of the wind and temperature measurements from these instruments.