Maura E. Hagan
Abbreviated Curriculum Vitae
May 17, 2021

Professional Experience

1/ 2021 - present	Professor Emeritus, Utah State University
10/2015 - present	Senior Scientist Emeritus, National Center for Atmospheric Research, High Altitude Observatory
9/2015 - 1/2021	Dean, College of Science, Professor of Physics, Utah State University
8/1992 - 8/2015	Scientist, National Center for Atmospheric Research, High Altitude Observatory; promoted to Senior Scientist in 2003
3/2013 - 8/2013	Interim Director, National Center for Atmospheric Research
8/2008 - 9/2013	Deputy Director, National Center for Atmospheric Research
8/2005 - 5/2010	Director, Advanced Study Program, National Center for Atmospheric Research

Research Interests

The effects of space weather, meteorological disturbances, and global change on Earth's atmosphere. Physics of the upper atmosphere, including solar, geomagnetic, and lower atmospheric dynamical drivers, chemical/dynamical coupling, electrodynamic coupling between ionospheric plasma and the neutral thermosphere.

Education

Ph.D. in Physics, 1987, Boston College, Chestnut Hill, Massachusetts

M.S. in Physics, 1980, Boston College, Chestnut Hill, Massachusetts

B.A. in Physics, 1975, Emmanuel College, Boston, Massachusetts

Honors

Member, National Academy of Sciences, 2019

American Geophysical Union Bowie Lecture Series, Space Physics and Aeronomy Marcel Nicolet Lecture, December 2014

Fellow, American Geophysical Union, 2011

Fellow, American Meteorological Society, 2011

NASA Group Achievement Award, Thermosphere Ionosphere Mesosphere Energetics and Dynamics (TIMED) Satellite Team Member, 2008

NASA Group Achievement Award, Upper Atmosphere Research Satellite (UARS) Team Member, 2006

NSF Coupling Energetics and Dynamics of Atmospheric Regions Prize Lecturer, 2004

Professional Service

Co-Chair, Committee on Solar and Space Physics of the National Academies, 3/2017 - present

Member, Association of Universities for Research in Astronomy Board of Directors and Chair of

the Solar Observatory Council, 7/2015 - 6/2019

Member, Board on Atmospheric Sciences and Climate of the National Academies, 9/2014 - 8/2017

Acting Chair, NSF Geospace Sciences Committee of Visitors, 6/2014

Member, American Geophysical Union Space Physics and Aeronomy Advocacy Committee, 7/2013 - 7/2014

Member, Science Committee of the NASA Advisory Council and Chair of the Heliophysics Subcommittee, 5/2012 - 4/2015

Select Journal Publications

Gasperini, F., M. E. Hagan, and J. M Forbes, (2018), Seminal Evidence of a 2.5-sol Ultra-Fast Kelvin Wave in Mars' Middle and Upper Atmosphere, *Geophys. Res. Lett.*, doi:10.1029/2018GL077882.

Jones, M. Jr., J. M. Forbes, and M. E. Hagan (2016), Solar cycle variability in mean thermospheric composition and temperature induced by atmospheric tides, J. *Geophys. Res. Space Physics*, 121, 5837–5855, doi:10.1002/2016JA022701.

Liu, H.-L., B. T. Foster, M. E. Hagan, J. M. McInerney, A. Maute, L. Qian, A. D. Richmond, R. G. Roble, S. C. Solomon, R. R. Garcia, D. Kinnison, D. R. Marsh, A. K. Smith, J. Richter, F. Sassi, and J. Oberheide (2010), Thermosphere extension of the Whole Atmosphere Community Climate Model, *J. Geophys. Res*., doi:10.1029/2010JA015586.

Hagan, M. E., A. Maute, and R. G. Roble (2009), Tropospheric tidal effects on the middle and upper atmosphere, *J. Geophys. Res*., 114, A01302, doi:10.1029/2008JA013637.

Hagan, M. E., A. I., Maute, R. G. Roble, A. D. Richmond, T. J. Immel, and S. L. England (2007), Connections between deep tropical clouds and the Earth's ionosphere, *Geophys. Res. Lett*., 34, L20109, doi:10.1029/2007GL030142.

Immel, T. J., E. Sagawa, S. L. England, S. B. Henderson, M. E. Hagan, S. B. Mende, H. U. Frey, C. M. Swenson, and L. J. Paxton (2006), Control of equatorial ionospheric morphology by atmospheric tides, *Geophys. Res. Lett*., 33, L15108, doi:10.1029/2006GL026161.

Hagan, M. E. and J. M. Forbes (2002), Migrating and nonmigrating diurnal tides in the middle and upper atmosphere excited by tropospheric latent heat release, *J. Geophys. Res*., 107(D24), 4754, doi:10.1029/2001JD001236.

Hagan, M. E. and J. M. Forbes (2003), Migrating and nonmigrating semidiurnal tides in the middle and upper atmosphere excited by tropospheric latent heat release, *J. Geophys. Res*., 107(D24), 4754, doi:10.1029/2002JA009466.

Hagan, M. E., M. D. Burrage, J. M. Forbes, J. Hackney, W. J. Randel, and X. Zhang (1999), GSWM-98: Results for migrating solar tides, *J. Geophys. Res*., 104, 6813-6828, doi: 10.1029/1998JA900125.

Hagan, M. E., Comparative effects of migrating solar sources on tidal signatures in the middle and upper atmosphere (1996), *J. Geophys. Res*., 101, 21,213-21,222, doi:10.1029/96JD01374.

Hagan, M. E., J. M. Forbes, and F. Vial (1995), On modeling migrating solar tides, *Geophys. Res. Lett*., 22, 893-896, doi:10.1029/95GL00783.