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Education:

M.S., Meteorology, Old Dominion University, 1983
" Identification of aerosol composition from multi-wavelength lidar measurements. "

B.S., Meteorology, Old Dominion University, 1980

Present Employment:

1987-present: Senior Scientist, Computer Facility Manager, Scientific Software Engineer
Simpson Weather Associates, Inc., Charlottesville, VA.

Previous Employment:

1983-1987: Senior Scientist, ST Systems Corporation, Lexington, MA

1982-1983: Research Technician, Old Dominion University Research Foundation, Norfolk, VA.

1982: Instructor, Old Dominion University, Department of Geophysical Sciences, Norfolk, VA.

Professional Societies/Honorary Achievements:

Member, American Meteorological Society
Member, Optical Society of America
Vice Chairman, Old Dominion University Student Chapter of the American Meteorological Society
Dean's List Honors
NASA Group Achievement Award, EOSDIS Version 0 Team

Publications: Reviewed

Atlas, R., R. Hoffman, Z. Ma, G. Emmitt, S. Wood, S. Greco, S. Tucker, L. Bucci, B. Annane, R. Hardesty, and S. Murillo, 2015: Observing System Simulation Experiments (OSSEs) to Evaluate the Potential Impact of an Optical Autocovariance Wind Lidar (OAWL) on Numerical Weather Prediction. *J. Atmos. Oceanic Technol.* doi:10.1175/JTECH-D-15-0038.1

Riishojgaard, L. P., Z. Ma, M. Masutani, J. S. Woollen, G. D. Emmitt, S. A. Wood, and S. Greco, 2012: Observation System Simulation Experiments for a Global Wind Observing Sounder, *Geophys. Res. Lett.*, 39, L17805, doi: 10.1029/2012GL051814.

Masutani, Michiko; Woollen, John S.; Lord, Stephen J.; Emmitt, G. David; Kleespies, Thomas J.; Wood, Sidney A.; Greco, Steven; Sun, Haibing; Terry, Joseph; Kapoor, Vaishali; Treadon, Russ; Campana, Kenneth A., 2010: Observing System Simulation Experiments at the National Centers for Environmental Prediction. *Journal of Geophysical Research: Atmospheres*, Volume 115, Issue D7, CiteID D07101

Proceedings/Presentations:

Wood, S. A. , G. D. Emmitt, S. Greco and C. O'Handley, 2019: Doppler Lidar Wind Measurements around Hurricane Maria and Hurricane Lane during NOAA Hurricane Reconnaissance Programs. Amer. Meteor. Soc. 99th Ann. Meeting, 9th Symposium on Lidar Atmospheric Applications Poster Session, Phoenix Az., January 9.

Wood, S. A. , G. D. Emmitt, S. Greco and L. Bucci, 2019: Doppler Lidar Wind Measurements around Hurricane Maria and Hurricane Lane during NOAA Hurricane Reconnaissance Programs. Working Group on Space-based Lidar Winds, National Institute for Aerospace (NIA), Hampton, VA, July 10-11.

Bucci, L., S. J. Majumdar, R. Atlas, G. D. Emmitt, S. Greco and S. Wood, 2019: Idealized Space-Based Doppler-Wind Lidar in a Hurricane OSSE. Working Group on Space-based Lidar Winds, National Institute for Aerospace (NIA), Hampton, VA, July 10-11.

Emmitt, G. D, S. A. Wood and M. Kavaya, 2019: Global Vector Winds, Wind Turbulence, and ABL Structure from the Coherent WIND-SP Instrument Concept. Amer. Meteor. Soc. 99th Ann. Meeting, 23rd Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Session 19 Observing the Boundary Layer from Space—Part IV, Phoenix Az., January 10.

Greco, S., G. D. Emmitt, S. A. Wood and S. Rodier, 2019: Preliminary Comparisons of DAWN, Dropsonde and Aeolus Wind Observations. Working Group on Space-based Lidar Winds, National Institute for Aerospace (NIA), Hampton, VA, July 10-11.

Emmitt, G. D., S. A. Wood, M. Kavaya and U. Singh, 2018: Modeled performance of a coherent DWL in a pathfinder mission. Working Group on Space-based Lidar Winds, David Skaggs Research Center, Boulder, CO, February 7-8.

Emmitt, G. D., K.S. Godwin, S. Greco and S.A. Wood, 2017: The 2014-2015 PolarWinds DAWN Airborne Campaigns; Instrument Performance, Data Collection and Advanced data Processing Algorithm Development. Session: 8th Symposium on Lidar Atmospheric Applications AMS Annual Meeting, Seattle, WA, January.

Emmitt, G.D., S. Greco and S.A. Wood, 2017: Global Wind Observations Capitalizing on Doppler Wind Lidar Synergisms with other Wind Measuring Systems. Annual Conf. of the American Met. Society, Observation Symposium, Seattle, WA, January.

Emmitt, G. D., S. A. Wood, S. Greco and C. O'Handley, 2017: Atmospheric energy harvesting for autonomous in-flight path planning of a UAV instrumented with Doppler Wind Lidar. Working Group on Space-based Lidar Winds, Hampton, Va, March 21-13.

Greco, S., G.D. Emmitt and S.A. Wood, 2017: Recent Airborne Doppler Wind Lidar Investigations of Lower Troposphere Circulations from the Tropics to the Poles. Annual Conf. of the American Met. Society, Observation Symposium, Seattle, WA, January.

Greco, S., G.D. Emmitt, S.A. Wood, A. DuVivier, J. Cassano and K. Hines, 2017: The 2014-2105 Polar Winds Airborne Campaigns: Investigating Lower Tropospheric Circulations and Model Performance near Greenland Utilizing Doppler Wind Lidar and Dropsondes. Annual Conf. of the American Met. Society, 14th Conference on Polar Meteorology, Seattle, WA, January.

Emmitt, G.D., S. C. Tucker and S.A. Wood, 2015: A new Doppler Wind Lidar concept for obtaining space-based vector winds throughout the troposphere: data product simulations. Session: 19th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS). AMS annual meeting, January 04 - 08, 2015, Phoenix Az.

Emmitt, G. D. , S. A. Wood, S. Greco, S. Majumdar and R. Atlas, 2015: Developing the configuration trade space for space-based DWLs: vertical and horizontal coverage. Working Group Meeting on Space-based Lidar Winds at Boulder, CO, Apr 27-29.

Greco, S., G. D. Emmitt, S. A. Wood, M. Costello, and M. Chtangeev, 2015: The utilization of numerical forecast models and airborne Doppler Wind Lidars for UAS flight path planning and energy extraction. Session: Seventh Symposium on Lidar Atmospheric Applications. AMS annual meeting, January 04 - 08, 2015, Phoenix Az.

Greco, S., G. D. Emmitt, S. A. Wood, M. J. Kavaya, G. J. Koch, J. J. Cassano, and K. Hines, 2015: Airborne Doppler Wind Lidar studies for ADM cal/val and investigations of boundary layer Arctic

wind fields. Session: Space-Based Lidar Developments for Global Weather and Climate Information. AMS annual meeting, January 04 - 08, 2015, Phoenix Az.

Emmitt, G.D., S. Greco, S.A. Wood and M. Costello, 2014: Atmospheric energy harvesting: use of Doppler Wind Lidars on UAVs to extend mission endurance and enable quiet operations. SPIE Security and Defense at Amsterdam, NL. [9254-39], Sep 22-15.

Emmitt, G.D. and S.A. Wood, 2014: Useful Aerosol Returns from the Mid and Upper Troposphere with OAWL (532). Working Group Meeting on Space-based Lidar Winds at Boulder CO, May 13-14, 2014.

Wood, S.A., G.D. Emmitt and S. Greco, 2014: Simulation testbeds for the assessment of space-based wind measuring systems. SPIE Remote Sensing at Amsterdam, NL. Conference 9241: Sensors, Systems, and Next-Generation Satellites

Masutani, M., L. P. Riishojgaard, Z. Ma, J. S. Woollen, G. D. Emmitt, S. A. Wood, and S. Greco, 2013: Evaluation of configuration of Doppler Wind Lidar using OSSEs. Session: Observing System Simulation Experiments (OSSEs) II: Applications to Data Assimilation and Observing Strategies. 18th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS). AMS annual meeting, February 2014, Atlanta Ga.

Emmitt, G.D. and S. A. Wood, 2013: Simulating new DWL concepts for ISS science missions. Working Group Meeting on Space-based Lidar Winds at College Park, MD, April 17-19.

Wood, S.A. and G. D. Emmitt, 2013: Study of Global aerosol backscatter opportunities as used in OSSEs: a new approach. Working Group Meeting on Space-based Lidar Winds at College Park, MD, April 17-19.

Emmitt, G. D. and S. Wood, 2012: Revisiting target atmospheres for space-based DWL concept comparisons. Working Group on Space-Based Lidar Winds. Boulder, CO October 16 - 18.

Masutani, M., L. P. Riishojgaard, J. S. Woollen, Z. Ma, T. Zhu, D. Emmitt, S. A. Wood, S. Greco, H. Sun, F. Weng, D. Groff, M. Lueken and Y. Xie, 2012: Joint OSSEs at NOAA, Calibration Evaluation of DWL, JPSS, and DWSS. Jan 26, 2012

Riishojgaard, L. P., Z. Ma, M. Masutani, J. S. Woollen, G. D. Emmitt, S. A. Wood, and S. Greco, 2012: Observing System Simulation Experiments for a Space-borne Doppler Wind Lidar in the Joint Center for Satellite Data Assimilation. 11th International Winds Workshop, Auckland, Feb 20-24.

Riishojgaard, L.P., Z. Ma, M. Masutani, J. Woollen, G.D. Emmitt, S.A. Wood, S. Greco, 2012: Wind Lidar OSSEs in the Joint Center for Satellite Data Assimilation. Working Group on Space-

Based Lidar Winds. Coconut Grove, Florida, May 1 - May 2.

Emmitt, G. D., S. Greco and S. Wood, 2011: Impact of thin and sub-visual cirrus on space based DWL simulations. Working Group on Lidar winds from Space, Boulder, CO.

Emmitt, G. D. , S. A. Wood , M. J. Kavaya, B. Gentry, and W. Baker 2011: Technology and data utility challenges for a Doppler Wind Lidar on the International Space Station, 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Seattle, WA, Amer. Meteor. Soc., 2.2.

Masutani, M., J.S. Woollen, Z. Ma, L.P. Riishøjgaard, T. Zhu, H Sun, N. Prive, Y. Xie, G.D. Emmitt, S.A. Wood, S. Greco, T. J. Kleespies, F. Weng, Y. Han, E. Salmon, B. McHale, G.P. Lou, F. Yang, R. Vogel, D. Stokes, K.L. Howard, 2011: Simulation of observation and calibrations for Joint OSSEs. 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Seattle, WA, Amer. Meteor. Soc.

Riishøjgaard, L. P., Z. Ma, M. Masutani, J. Woollen, G. D. Emmitt, S.A. Wood and S. Greco, 2011: Observing System Simulation Experiments for a US Wind Lidar space mission, Presentation, 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Seattle, WA, Amer. Meteor. Soc., 2.5.

Talabac, S. J., R. M. Atlas, G. D. Emmitt, S. A. Wood, J. Ardizzone, R. Burns, E. M. Kemp, and L. R. Bucci, 2011: A sensor web simulator: project status and the benefits to the atmospheric sciences. Amer. Meteor. Soc., 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS-AOLS), 26 Jan. Seattle WA.

Emmitt, G. D., S. Greco and S. Wood, 2010: Using an airborne Doppler wind lidar to explore the potential impact of a future space-based wind lidar, particularly in the case of tropical cyclones. Amer. Meteor. Soc., 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 18 Jan.

Emmitt, G.D., S.A. Wood and S. DeWecker: 2010: WRF model and DWL data processing in real time on laptop. Working Group on Space-Based Lidar Winds. Bar Harbor, Maine, Aug.24-26.

Emmitt, G.D., S.A. Wood, S. Greco, B. Gentry and M. Kavaya, 2010: Simulation Studies in Support of an ISS GWOS Mission. Working Group on Space-Based Lidar Winds. Bar Harbor, Maine, Aug.24-26.

Masutani, M., L. P. Riishøjgaard, G. D. Emmitt, S. Greco, S. A. Wood, A. Stoffelen, G. J. Marseille, and J. S. Woollen, 2010: Evaluation of Space Based Doppler Wind Lidar in Joint OSSEs. Amer. Meteor. Soc., 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 18 Jan.

Masutani, M., L. P. Riishøjgaard, G.D. Emmitt, S. Greco., S.A. Wood., A. Stoffelen., G.-

J.Marseille and J. Woollen, 2010: Progress in Evaluation of Space Based DWL in Joint OSSEs. Working Group on Space-Based Lidar Winds. Destin, Florida, Feb. 2 - 4.

Masutani, M., J. Woollen, S. Lord, G.D. Emmitt, T.J. Kleespies, S. Wood, S. Greco, H. Sun, J. Terry, V. Kapoor, R. Treadon, and K. Campana, 2010b: Observing system simulation experiments at the National Centers for Environmental Prediction. *Journal of Geophys. Res.*, Vol. 115, D07101.

Seablom, M., S. J. Talabac, R. Burns, J. Ardizzone, S. A. Wood, E. M. Kemp, G. S. Wojcik, S. L. Applegate, H. N. Kleinwaks, G. D. Emmitt, and R. M. Atlas, 2010: Development of a sensor web simulator: status and preliminary results for a future satellite wind lidar mission. *Amer. Meteor. Soc.*, 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 18 Jan.

Talabac S.J., M.S. Seablom, G.D. Emmitt, S.A. Wood, R. Atlas, J. Ardizzone, R. Burns and E. Kemp, 2010: End-to-End Design and Objective Evaluation of Sensor Web Modeling and Data Assimilation System Architectures: Phase II. 2010 Earth Science Technology Forum.

Emmitt, G.D., S. Greco, S.A. Wood and S.T. Shipley, 2009: Airborne Doppler Wind Lidar: In-flight visualization and analysis using Google Earth. *Amer. Meteor. Soc.*, 25h Conference on IIPS, Phoenix, AZ, 15 January.

Foster, R.C., G. D. Emmitt, D. Carre, S. Greco, S. Wood, D. Eleutario, B. H. Tang, and M. Riemer, 2009: Preliminary look at boundary layer doppler wind lidar wind profiles from the Tropical Cyclone Structure, 2008 (TCS-08) experiment. *Amer. Meteor. Soc.*, 16th Conference on Air-Sea Interaction, 12 Jan.

Greco, S., S. Shipley, D. Emmitt and S.A. Wood, 2009: Visualization and Fusion of Model and Airborne Doppler Wind Lidar Data Within a Google Earth. Working Group on Space-Based Lidar Winds, Wintergreen, Virginia, June 16 - 19.

Masutani, M., G.D. Emmitt, G.J. Marseille, A. Stoffelen, S. Greco, S. Wood, E. Andersson, E. Brin, A. da Silva, M.J. McGill, J. Woollen and L.P. Riishojgaard, 2009: Assessment of space based DWL in Joint OSSE. *Amer. Meteor. Soc.*, Fourth Symposium on Lidar Atmospheric Applications.

Masutani, M., R. Errico, L.-P. Riishojgaard, J.S. Woollen, E. Andersson, Stoffelen, G.-J. Marseille, O. Reale, Y. Xie, N. Prive, T. Zhu, F. Weng, G.D. Emmitt, T.W. Schlatter, S.J. Lord, S. Greco, S.A. Wood, R. Yang, H. Son, T.J. Kleespies, Y. Song, 2009: Simulation of observation and calibration in joint OSSEs. Working Group on Space-Based Lidar Winds.

Masutani, M., L.-P. Riishojgaard, R. Errico, E. Andersson, J. S. Woollen, A. Stoffelen, G.-J. Marseille, O. Reale, Y. Xie, N. Prive, T. Zhu, F. Weng, G. D. Emmitt, T. W. Schlatter, S. J. Lord, S. Greco, S. A. Wood, R. Yang, H. Sun, T. J. Kleespies, and Y. Song, 2009: International

collaborative Joint OSSEs, Toward reliable and timely assessment of future observing systems, The Anthony J. Hollingsworth Symposium, Phoenix, AZ, Amer. Meteor. Soc., P1.2

Masutani, M. J. S. Woollen, R. Errico, T. W. Schlatter, Y. Xie, T. Zhu, N. Prive, R. Yang, S. Greco, L. P. Riishojgaard, A. Stoffelen, G.-J. Marseille, E. Andersson, F. Weng, T. J. Kleespies, O. Reale, G. D. Emmitt, S. A. Wood, C. Hill, V. Anantharaj, P. Fitzpatrick, X. Fan, H. Pryor, E. Salmon, H.- C. Liu, M. Sienkiewicz, A. da Silva, H. Sun, Y. Song, M. Govett, Z. Pu, L. Cucurull, S. J. Lord, D. Devenyi, D. L. Birkenheuer, T. Jung, A. Thompkins, D. Groff, D. Kleist, R. Treadon, K. Fielding, W. Lahoz, E. Brin, Z. Toth, Y. Sato, M. Hu, S. Weygandt, M. J. McGill, T. Miyosh, T. Enomoto, M. Watanabe, H. Koyama, Y. Rochen, M. Seablom, B. I. Hauss, R. Burn, G. Higgins, R. Atlas, S. Koch, H. Wang, Y. Chen¹⁶, X.-Y. Huang, 2009: Expanding collaboration in Joint OSSEs, 13th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface, Phoenix, AZ, Amer. Meteor. Soc., 13.2.

Wood, S.A., G.D. Emmitt and S. Greco, 2009: Update on NASA's Sensor Web Experiments Using Simulated Doppler Wind Lidar Data. Working Group on Space-Based Lidar Winds, Wintergreen, Virginia, June 16 - 19.

Emmitt, G.D., S. De Wekker, S. Greco and S.A. Wood, 2008: Airborne Doppler Lidar Analyses and Adaptive Targeting System (ADLAATS): Integrating Mesoscale Models with DWL Data in Realtime. Working Group on Space-Based Lidar Winds, Wintergreen, VA July 8 – 11.

Emmitt, G.D., S. Shipley, S. Greco and S. Wood, 2008: Airborne Doppler Wind Lidar: recent results and in-flight visualization using Google Earth. Working Group on Space-Based Lidar Winds, Wintergreen, VA July 8 – 11.

Emmitt, G.D. and S.A. Wood, 2008: Simulating GWOS, ADM, and NWOS: Coverage and Accuracy. Working Group on Space-Based Lidar Winds, Monterey, California, Feb. 5 - 8.

Emmitt, G.D., S. A. Wood, R. Atlas, and J. Terry, 2008: Potential impacts of a space-based Doppler Wind Lidar. Amer. Met. Soc., 12th Conference on IOAS-AOLS, 24 Jan.

Emmitt, G.D., S. A. Wood, S. Greco, C. O'Handley, and H. Jonsson, 2008: Use of airborne Doppler Wind Lidar to optimize the utility of UAV and space-based systems. Amer. Met. Soc., Third Symposium on LIDAR Atmospheric Applications, 18 Jan.

Emmitt, G.D., S. A. Wood, S. Greco, C. O'Handley, and H. Jonsson, 2008: Use of airborne Doppler Wind Lidar to optimize the utility of UAV and space-based systems. Amer. Met. Soc., Symposium on Recent Developments in Atmospheric Applications of Radar and Lidar, 22 Jan.

Greco, S., G.D. Emmitt, S. Wood, C. O'Handley and H. Jonsson, 2008: Synergisms and comparisons between airborne Doppler Wind Lidar observations and other remote and in-situ wind measurements and model forecasts. Amer. Met. Soc., 12th Conference on IOAS-AOLS, New

Orleans, LA.

Masutani, M., E. Andersson, G. D. Emmitt, A. Stoffelen, G.J. Marseille, L. Riishojgaard, R. Errico, J. S. Woollen, T. W. Schlatter, F. Weng, Z. Toth, S. Lord, S. A. Wood, S. Greco, Y. Xie, T. Zhu, R. Yang, H. Sun, N. Prive, O. Reale, A. da Silva, M. J. McGill, V. Anantharaj, C. Hill, P. J. Fitzpatrick, D. Devenyi, S. Weygandt, Y. Song, T. Miyoshi, T. Enomoto, M. Yamaguchi, E. Liu, D. Groff, D. Kleist, 2008: Progress in Joint OSSEs. New nature runs and international collaboration. 24th International Laser Rader Conference 23-27 June: Boulder, Colorado.

Masutani, M., J. S. Woollen, R. Errico, Y. Xie, T. Zhu, H. Sun, J. Terry, R. Yang, S. Greco, N. Prive, E. Andersson, T. W. Schlatter, A. Stoffelen, F. Weng, O. Reale, L. Riishojgaard, G. D. Emmitt, S. Lord, Z. Toth, G.J. Marseille, V. Anantharaj, K. Fielding, G. McConaughy, S. Worley, C.-F. Shih, M. Yamaguchi, J. C. Jusem, C. Hill, P. J. Fitzpatrick, D. Devenyi, S. Weygandt, S. A. Wood, Y. Song, E. Liu, D. Groff, M. Hart, G. Gayno, A. da Silva, M. J. McGill, D. Kleist, Y. Sato, S. Boukabara, 2008: Progress in Joint OSSEs. Three Joint OSSE nature runs and simulation of observation, Amer. Meteor. Soc., 12th Conference on IOAS-AOLS New Orleans, LA, 20- 24 January.

Masutani, M., J. S. Woollen, S. J. Lord, G. D. Emmitt, S. A. Wood, S. Greco, Z. Toth, Y. Song, 2008: Evaluating Space Based Doppler Wind Lidar using a full OSSE at NCEP. 24th International Laser Rader Conference, Boulder, CO, S02P04.

Seabloom, M., S. Talabac, G. McConaughy, J. Ardizzone, G. Brin, B. Womak, R. Burns, S. Wood and G.D. Emmitt, 2008: DWL Operations within a Sensor Web Modeling and Data Assimilation System. Working Group on Space-Based Lidar Winds, Wintergreen, VA July 8 – 11.

Shipley, S. T.; Greco, S.; Emmitt, D. and S.A. Wood, 2008: In-flight Visualization of Airborne Doppler Wind Lidar Data Using KML and Google Earth. American Geophysical Union, Fall Meeting 2008, abstract #IN41A-1129.

Emmitt, G.D., C. O’Handley, S.A. Wood and S. Greco, 2007: Integrating Airborne DWL and PBL Models in Real Time. Working Group on Space-based Lidar Winds, Miami, Florida, Feb. 17 - 20.

Michiko, M., E. Andersson, J. Terry, O. Reale, J-C. Jusem, L. P. Riishojgaard, T. Schlatter, A. Stoffelen, J. Woollen, S. Lord, Z. Toth, Y. Song, D. Kleist, Y. Xie, N. Prive, E. Liu, H. Sun, G.D. Emmitt, S. Greco, S. A. Wood, G. Marseille, R. Errico, R. Yang, G. McConaughy, D. Devenyi, S. Weygandt, A. Tompkins, T. Jung, V. Anantharaj, C. Hill, P. Fitzpatrick, F. Weng, T. Zhu, S. Boukabara, 2007: Progress in Joint OSSEs - A new nature run and international collaboration. Amer. Meteor. Soc., 18th Conference on Numerical Weather Prediction 25 - 29 June, Park City, UT.

Wood, S.A. and G.D. Emmitt, 2007: Clouds, Shear, and Hybrid DWL Performance. Working Group on Space-based Lidar Winds, Miami, Florida, Feb. 17 - 20.

Emmitt, G.D., S.A. Wood, B. Gentry and M. Kavaya, 2006: Latest Simulations for a Tropospheric Wind Sounder on NPOESS and Beyond. Working Group on Space-based Lidar Winds, Key West, Florida, Jan. 17 - 20.

Emmitt, G. D., S. A. Wood and S. Greco, 2006: Integrating real-time airborne Doppler Lidar wind and aerosol measurements with operational mesoscale and dispersion models. Amer. Met. Soc., 14th Joint Conference on the Applications of Air Pollution Meteorology with the Air and Waste Management Assoc., 1 Feb.

Emmitt, G. D., S. A. Wood, S. Greco, M. Masutani, J. Woolen, Z. Toth, and Y. Song, 2006: Adaptive targeting OSSEs for planning a space-based Doppler Wind Lidar. Amer. Met. Soc., 10th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 30 Jan.

Masutani, M, J. S. Woollen, S.J. Lord, T. J. Kleespies, G. D. Emmitt, H. Sun, S. A. Wood, S. Greco, J. Terry, R. Treadon and K. A. Campana, 2006: Observing System Simulation Experiments at NCEP. NCEP Office note No.451. August. Working Group on Space-based Lidar Winds, Key West, Florida, Jan. 17 - 20.

Singh, U. N., G.J. Koch, S. Ismail, M. Kavaya, J. Yu, S.A. Wood and G.D. Emmitt, 2006: Combined 2-micron Dial and Doppler Lidar: Application to the Atmosphere of Earth or Mars. 23rd International Laser Radar Conference (ILRC23), 24028 Jul. 2006, Nara, Japan.

Bowdle, D., G.D. Emmitt and S.A. Wood, 2005: Structure, Dynamics, and Microphysics of Organized Aerosol Backscatter Features in the Marine Boundary Layer, Observed by TODWL and Optical Particle Counters. Working Group on Space-based Lidar Winds, Sedona, AZ, Feb. 1-3.

Emmitt, G.D., C. O'Handley, S.A. Wood, R. Bluth and H. Jonsson, 2005: TODWL: An airborne Doppler wind lidar for atmospheric research. Proc. of the Annual Amer. Met. Soc., 2nd Symposium on Lidar Atmospheric Applications, San Diego, CA, January.

Emmitt, G.D., S.A. Wood and S. Greco, 2005: Investigation of the Utility of Airborne DWL Data in Mesoscale Models. Working Group on Space-based Lidar Winds, Welches, Oregon, June 28 - July 1.

Emmitt G.D., S. Wood, S. Greco, R. Atlas, J. Terry, 2005: OSSE's for realistic DWL concepts: Impacts on Hurricane Track Forecasts. Amer. Meteor. Soc., Ninth Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), San Diego, CA, January.

Emmitt, G.D., S.A. Wood, M. Kavaya and B. Gentry, 2005: Simulating a Dual Technology at 833

km. Working Group on Space-based Lidar Winds, Welches, Oregon, June 28 - July 1.

Emmitt, G.D., S. A. Wood and G. Koch, 2005: Comparison of GWOLF and VALIDAR Doppler Lidar Measurements. Amer. Met. Soc., 2nd Symposium on Lidar Atmospheric Applications, 12 Jan.

Wood, S. A., G. D. Emmitt and D. A. Bowdle, 2005: Aerosol Variability within the Marine Boundary Layer off the California Coast. Amer. Met. Soc., 2nd Symposium on Lidar Atmospheric Applications, 11 Jan.

Bowdle, D., G.D. Emmitt, and S. Wood, 2004: Using TODWL and in situ particle probes to understand the backscatter signature of marine, boundary layer organized structures. Working Group on Space-based Lidar Winds, Frisco, CO, June 29-July 1.

Emmitt, G.D. and S.A. Wood, 2004: Hybrid DWL Simulations for OSSEs. Working Group on Space-based Lidar Winds, Frisco, CO, June 29-July 1.

Emmitt, G. D., S. A. Wood, D. Bowdle, R. Foster, S. M. Hannon, and H. Jonsson, 2004: Dynamical and microphysical characteristics of turbulent waves in and above the marine boundary layer: an integrated perspective from the TODWL data base. Remote Sensing of the Atmosphere, Ocean, Environment, and Space, Honolulu, Hawaii, 8-11 November.

Emmitt, G.D., S.A. Wood, S. Greco, and C. O'Handley, 2004: Comparisons of TODWL soundings with MM5, microwave sounders, towers, and other wind sensors., Working Group on Space-based Lidar Winds, Sedona, AZ, January 27-29.

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