

STEVEN GRECO

Simpson Weather Associates, Inc.

809 E. Jefferson Street

Charlottesville, VA 22902

Work: (434) 979-3571 Cell: (434) 989-5155 e-mail: sxg@swa.com

EXPERIENCE

8/94-present

Senior Scientist/Assistant Director Environmental Laser Division -

Simpson Weather Associates, Inc., Charlottesville, VA

Duties include:

- Scientific research focusing on synoptic, mesoscale, and boundary layer meteorology in the tropics, mid-latitudes and Arctic
- Analysis of meteorological data including lidar (ground based and airborne) and radar data, satellite data (GLAS, CALIPSO, MODIS etc..) conventional meteorological data, field campaign data and model output from operational mesoscale models, global models and Nature Runs
- Project Management
- Running, tuning and analysis of numerical models (WRF) for atmospheric research
- Software development
- Coordinating and conducting collaborative research with many Federal agencies such as NASA, NOAA, and DoD (ONR, AFRL and ARL/ARO)
- Development and solicitation of new business, including lead proposal writing
- Writing of manuscripts, conference proceedings and reports
- Development and overseeing of an operational precipitation alert system for private agricultural and industrial clients
- Head Forecaster and scientific support for NASA field programs in Arctic and SWA's activities in environmental monitoring
- Military Applications: Precision Airdrop Studies; Automated Energy Prospecting by UAVs; Wing-tip vortices
- Environmental impact studies and air quality modeling (CALPUFF, MMIF, etc.)
- Forensics/litigation and past weather research

Languages/Software: FORTRAN, C#, UNIX, XML, IDL, MATLAB, Python

Data Formats: Grib, BUFR, HDF, NetCDF, others

Software/Graphics Packages: IDL, MATLAB, Voxler, Surfer, Grapher,

Google Earth, Microsoft Word/PowerPoint/Excel, others

5/93 - 8/94

Lead Physical Scientist - Intergovernmental Panel on Climate Change WG II Technical Support Unit -- SM Systems Research Corporation, Washington, D.C.

As staff atmospheric/physical scientist for the IPCC WG II Technical Support Unit, helped oversee the coordination, writing and review of the IPCC Second Assessment Report on Climate Change: Adaptations and Mitigation. Duties focused on aiding international authors and scientists in the writing of their individual chapters and the overall synthesis of a complete cohesive report. In addition, worked with global climate modelers to create a Climate Scenario and Socio-Economic Projection reference document and model data set for IPCC WG II Assessment authors to utilize.

5/92 - 8/94

Staff Scientist - NASA Headquarters -- SM Systems Research Corporation, Washington, D.C.

Provided scientific and programmatic support to NASA Headquarters Program Managers dealing with all aspects of Mission To Planet Earth Research and EOS Science Objective. Included: EOSDIS, NOAA-NASA Pathfinder Program, Landsat, Global Change Research and focusing on process studies in atmospheric sciences, hydrology and ecology.

4/86 – 4/92

Research Coordinator/Research Meteorologist – University of Virginia, Charlottesville, VA

Lead researcher and coordinator of a 5-8 person research group that conducted scientific research on the meteorology of the tropics, particularly the Amazon Basin. Duties included: organizing, overseeing and conducting scientific research, data analysis, software development, and the writing of manuscripts, reports and proposals.

6/85-12/85

Forecast and Radar Meteorologist – Atmospherics, Inc., Fresno, CA

Head Meteorologist and supervisor of an operational cloud seeding and weather modification project based in Madras, India.

EDUCATION

1984: MS, Florida State University, Meteorology

1981: BS, State University of New York at Oneonta, Meteorology

Minor: Mathematics

SELECTED PUBLICATIONS - REVIEWED

- 2017 DuVivier, A.K., J.J. Cassano, **S. Greco** and G.D. Emmitt: A Case Study of Observed and Modeled Barrier Flow in the Denmark Strait in May 2015, *Mon. Weather Review*, Accepted for publication
- 2015 R. Atlas, R. N. Hoffman, Z. Ma, G. D. Emmitt, S. A. Wood, Jr., **S. Greco**, S. Tucker, L. Bucci, B. Annane, R. M. Hardesty, and S. Murillo. Observing system simulation experiments (OSSEs) to evaluate the potential impact of an optical autocovariance wind lidar (OAWL) on numerical weather prediction. *J. Atmospheric Oceanic Technology*, 19 June 2015. In press. doi:10.1175/JTECH-D-15-00038.1.
- 2014 Garstang, M., R.E. Davis, K. Leggett, **S. Greco**, O. Frauenfeld, E. Zipser and M. Petersen: Response of African elephants (*Loxodonta Africana*) to seasonal changes in rainfall, Accepted for Publication, *PLOS One*, 10/2014; 9(10):e108736.
DOI: 10.1371/journal.pone.0108736
- 2012 De Wekker, S.F.J., K.S. Godwin, G.D. Emmitt and **S. Greco**: Airborne Doppler Lidar Measurements in Complex Terrain. A Case Study in the Salinas Valley in California, *Jour. of App. Meteor. and Climatology*, 51, no. 8 (2012): 1558-1574.
- Riishojgaard, L.P., Z. Ma, M. Masutani, J.S. Woolen, G.D. Emmitt, S.A. Wood and **S. Greco**: Observation System Simulation Experiments for a Global Wind Observing Sounder, *Geophysical Research Letters* 39, no. 17 (2012)
- Greco, S.** and G.D. Emmitt, CALIPSO and LITE Data for Space-based DWL Design and Data Utility Studies, Final Report/NASA Technical Report. January 2012.
- Wang, Y., C. Williamson, G. Huynh, D. Emmitt, and S. Greco: Airborne Doppler Wind Lidar Data Fusion with a Diagnostic Wind Model, Proceedings of SPIE - The International Society for Optical Engineering 05/2012
- 2011: Angelini, I.A., M. Garstang, R. Davis, B. Hayden, D. Fitzjarrald, D. Legates, **S. Greco**, S. Macko and V. Connors: On the coupling between vegetation and the atmosphere, *Theor Appl. Climatol* (2011) 105:243-261
- 2010: Wang, Y., C. Williamson, G. Huynh, D. Emmitt and **S. Greco**, Diagnostic Wind Model Initialization over Complex Terrain Using the Airborne Doppler Wind Lidar Data, *The Open Remote Sensing Journal*, 2010,3,17-27
- 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.: Observing System Simulation

Experiments at the National Centers for Environmental Prediction. *Journal of Geophysical Research: Atmospheres*, Volume 115, Issue D7, CiteID D07101

- 2008: Masutani, M., J. Woolen, S. Lord, T. Kleepsies, G.D. Emmitt, H. Sun, S.A. Wood, **S. Greco**, J. Terry, R. Treadon and K. Campana: Observing System Simulation Experiments at the National Centers for Environmental Prediction- Evaluation of Doppler Wind Lidar , Bulletin of the American Meteorological Society.
- 2003: Stein, D. C., R. Swap, **S. Greco**, S. Piketh, S. Macko, B. Doddridge, T. Elias and R. Buintjes: Haze layer characterization and associated meteorological controls along the eastern coastal region of southern Africa. J. Geophys. Res., Vol. 108, No. D13
- 1994: Garstang, M., H. Massie, J. Halverson, **S. Greco**, and J. Scala: Amazon coastal squall lines: Part I: Structure and kinematics. Mon. Wea. Rev., 122, 608-622.
- Greco, S.**, M. Garstang, J. Scala, J. Halverson, H. Massie, J. Scala and W.-K. Tao: Amazon coastal squall lines: Part II: Heat and moisture transports. Mon. Wea. Rev., 122, 623-635.
- Maiden, M. and **S. Greco**: NASA's Pathfinder data set programme: land surface parameters, International Journal of Remote Sensing, Vol. 13, 3333-3345
- Greco, S.**, R.H. Moss, D. Viner and R. Jenne: Climate Scenarios and Socio-Economic Projections for IPCC WG II Assessment. Working Document, Intergovernmental Panel on Climate Change. Working Group II Technical Support Unit, Washington, DC, 67 pp.
- 1993: Colucci, S.J., Jacobsen, R.B. and **Greco, S.**: Meteorology of the storm of November 3-5, 1985 in West Virginia and Virginia, US Geological Survey Bulletin, 1981, B1-B31
- 1992: **Greco, S.**, S. Ulanski, M. Garstang and S. Houston: Low-level nocturnal wind accelerations over the Central Amazon Basin. Bound. Layer Meteor., 58, 91-115.
- Swap, R., M. Garstang, **S. Greco**, R. Talbot and P. Kållberg: Saharan dust in the Amazon Basin. Tellus, 44B, 133-149.
- 1990: **Greco, S.**, R. Swap, M. Garstang, S. Ulanski, M. Shipham, R.C. Harriss, R. Talbot, M.O. Andreae and P. Artaxo: Rainfall and surface kinematic conditions over the Central Amazon Basin during ABLE 2B. J. Geophys. Res., 95, 17001-17014.
- Garstang, M., S. Ulanski, **S. Greco**, J. Scala, R. Swap, D. Fitzjarrald, D. Martin, E. Browell, M. Shipham, V. Connors, R. Harriss and R. Talbot: The Amazon Boundary Layer Experiment (ABLE 2B): A Meteorological Perspective. Bull. Amer. Meteor. Soc., 71, 19-32.
- 1988: Martin, C.L., D. Fitzjarrald, M. Garstang, A.P. Oliveira, **S. Greco** and E. Browell:

Structure and growth of the mixing layer over the Amazonian rainforest. J. Geophys. Res., 93, 1351-1375.

Garstang, M., J. Scala, **S. Greco**, R. Harriss, S. Beck, E. Browell, G. Sachse, G. Gregory, G. Hill, J. Simpson, W.-K. Tao and A. Torres: Trace gas exchanges and convective transports over the Amazonian rainforest. J. Geophys. Res., 93, 1528-1550.

Garstang, M. and **S. Greco**, Modeling and Direct Ground-based Techniques for In-Situ measurements of Precipitation, Report of the International Workshop On The VALIDATION OF SATELLITE PRECIPITATION MEASUREMENTS For The Global Precipitation Climatology Project Edited By J.C. Wilkerson, WCRP, WMO

1987: **Greco, S.** and D. Cadet: Water vapor transport over the Indian Ocean during the 1979 Summer Monsoon. Part II: Water vapor budgets. Mon. Wea. Rev., 115, 2358-2366.

Cadet, D. and **S. Greco** : Water vapor transport over the Indian Ocean during the 1979 Summer Monsoon. Part I: Water vapor fluxes. Mon. Wea. Rev., 115, 653-663.

SELECTED PUBLICATIONS: CONFERENCE PROCEEDINGS and REPORTS

2018 Greco, S., G.D. Emmitt, M. Garstang, M. Kavaya and U. Singh, CPEX 2017: Utilizing DAWN wind measurements for convective studies and mass budget calculations, Working Group on Space-based Lidar Winds, Boulder, CO, February 7-8, 2018

Emmitt, G.D., S. Greco, C. O'Handley, M. Kavaya and D. Winker, **Airborne DWL: hurricane and boundary layer studies**, Working Group on Space-based Lidar Winds, Boulder, CO, February 7-8, 2018

Greco, S., G.D. Emmitt, M. Garstang, M. Kavaya and U. Singh, CPEX 2017: Utilizing DAWN wind measurements for convective studies and mass budget calculations, Working Group on Space-based Lidar Winds, Boulder, CO, February 7-8, 2018

Emmitt, G.D., S. Greco, M. Garstang, M. Kavaya and U. Singh, CPEX 2017: DAWN performance during CPEX 2017, comparison with dropsondes, and future applications, Working Group on Space-based Lidar Winds, Boulder, CO, February 7-8, 2018

Emmitt, G.D., S. Greco, M. Garstang and M. Beaubein: CPEX 2017: Utilizing the Airborne Doppler Aerosol WiNd Lidar and Dropsondes for Convective Process Studies, Annual Conf. of the American Met. Society, 22nd Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS-AOLS), Austin, TX, January 2018

- 2017 Greco, S., G.D. Emmitt, A. DuVivier and M. Kavaya, DAWN contributions to investigating Arctic atmospheric dynamics and numerical model validation, Working Group Meeting on Space-based Lidar Winds, Newport News, VA, March 21-23, 2017.
- Emmitt, G.D., S. Greco, and M. Kavaya, Plans for using DAWN in multi-scale interaction study in the tropics (CPEX 2017), Working Group Meeting on Space-based Lidar Winds, Newport News, VA, March 21-23, 2017.
- Singh, U., G.D. Emmitt, M. Kavaya...and S. Greco, Coherent Wind Lidar Activities and Vision at NASA Langley Res. Cntr. Working Group Meeting on Space-based Lidar Winds, Newport News, VA, March 21-23, 2017.
- Wood, S.A., G.D. Emmitt and **S. Greco**: Simulation testbed for the assessment of space-based and airborne wind measuring systems, Annual Conf. of the American Met. Society, 8th Symposium on Lidar Atmospheric Applications, Seattle, WA, January 2017
- Emmitt, G.D., **S. Greco** and S.A. Wood: 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 2017
- Greco, S.**, G.D. Emmitt, S.A. Wood, A. DuVivier, J. Cassano and K. Hines: 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 2017
- Emmitt, G.D., K.S. Godwin, **S. Greco** and S.A. Wood: The 2014-2015 Polar Winds DAWN Airborne Campaigns; Instrument Performance, Data Collection and Advanced Data Processing Algorithm Development, Annual Conf. of the American Met. Society, 8th Symposium on Lidar Atmospheric Applications, Seattle, WA, January 2017
- Greco, S.**, G.D. Emmitt and S.A. Wood, 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 2017
- 2016 Emmitt, G.D., **S. Greco**, K. Godwin, M. Kavaya, G. Koch and U. Singh, 2016: *Airborne DWL in Polar Winds: Greenland and Iceland Campaigns.*, CLRC 2016 18th Conference on Coherent Laser Radar Conference to be held in Boulder, CO on June 27 – July 1, 2016
- Greco, S.**, G.D. Emmitt, M. Kavaya, R. Kakar, J. Cassano and K. Hines: Airborne Doppler Wind Lidar Missions in the Arctic: Low Level Observations and Comparison with Models and other Observing Platforms, 2016 Annual. Conf. of the Amer. Meteo. Soc., 20th Conference on Integrated Observing and Assimilation Systems for the

Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Extended Abstract, January 2016, New Orleans, LA

Emmitt, G.D., **S. Greco**, K. Godwin, R. Kakar and M. Kavaya: Airborne Doppler Wind Lidar Missions in the Arctic: Calibration and Validation of Existing and Future Space-based Wind measuring Platforms, 2016 Annual. Conf. of the Amer. Meteo. Soc., 20th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), January 2016, New Orleans, LA

Emmitt, G.D., K. Godwin and **S. Greco**, Precision Airdrop Modeling studies Using High Resolution Wind Data Collected over Complex Terrain during MATERHORN-X, 2016 Annual. Conf. of the Amer. Meteo. Soc., January 2016, New Orleans, LA

- 2015 **Greco, S.**, G.D. Emmitt, J. Cassano and K. Hines, 2015: Polar Winds 2015: Dropsonde and DAWN comparisons along east coast of Greenland. Working Group Meeting on Space-based Lidar Winds at Miami FL, Nov 2-4.

Emmitt, G.D., **S. Greco** and K. Godwin, 2015: Using ADWL soundings to establish expectations for precision airdrops. Working Group Meeting on Space-based Lidar Winds at Miami FL, Nov 2-4.

Emmitt, G.D., **S. Greco** and K. Godwin, 2015: ADM Cal Val 2015: DAWN performance in the presence of upper level jets and boundary layer rolls. Working Group Meeting on Space-based Lidar Winds at Miami FL, Nov 2-4.

Greco, S., G.D. Emmitt, S.A. Wood, M. Kavaya, G. Koch, K. Hines and J. Cassano: Airborne Doppler Wind Lidar studies for ADM cal/val and investigations of boundary layer Arctic wind fields , 2015 Annual. Conf. of the Amer. Meteo. Soc, 5th Conf on Lidar Applications, January 2015, Phoenix, AZ

Greco, S., G.D. Emmitt, S.A. Wood, M. Costello and M. Chtangeev: The utilization of numerical forecast models and airborne Doppler Wind Lidars for UAS flight path planning and energy extraction, 2015 Annual. Conf. of the Amer. Meteo. Soc, 5th Conf on Lidar Applications, January 2015, Phoenix, AZ

Emmitt, G.D., R. Foster, S. DeWekker, K. Godwin and **S. Greco**: Airborne Doppler Wind Lidar investigations of OLEs and LLJs in the marine boundary layer and their implications for flux parameterization, 2015 Annual. Conf. of the Amer. Meteo. Soc, 10th Conf on Air-Sea Interaction, January 2015, Phoenix, AZ

- 2014 **Greco, S.**, G.D. Emmitt, S. A. Wood and M. Costello: Atmospheric energy harvesting: use of Doppler Wind Lidars on UAVs to extend mission endurance and enable quit operations, Proc. of SPIE 2014 Security and Defense Conference, 22-25 September 2014, Amsterdam, Netherlands

Wood, S.A., G.D. Emmitt and **S. Greco**: Simulation testbed for the assessment of space based wind measuring systems, Proc. of SPIE 2014 Remote Sensing Conference, 22-25 September 2014, Amsterdam, Netherlands

Emmitt, G.D., R. Foster and **S. Greco**, 2014: Marine Boundary Layer Organized Structures and their Potential Impact on Fluxes. Working Group Meeting on Space-based Lidar Winds at Boulder CO, May 13-14, 2014.

Emmitt, G.D., **S. Greco**, M. Costello and Z. Pu, 2014: Mountain Waves and Energy Harvesting for UAVs using a DWL. Working Group Meeting on Space-based Lidar Winds at Boulder CO, May 13-14, 2014.

Masutani, M., L. P. Riishojgaard, Z. Ma, J. S. Woollen, G. D. Emmitt, S. A. Wood, and **S. Greco**: 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.

2013 **Greco, S.** and G.D. Emmitt, 2013: Simulating Cloud Motion Winds from Nature Runs for use in OSSEs, Presented at the Working Group Meeting on Space-based Lidar Winds at College Park, MD, April 17-19 (<http://cires.colorado.edu/events/lidarworkshop/LWG/>)

Emmitt, G.D., R.C. Foster, K. Godwin and **S. Greco**: Investigating the impacts of LLJs and OLEs on ABL exchanges and transports using an airborne Doppler wind lidar, Presented at the 2013 Fall AGU Meeting, San Francisco, CA, Dec. 9-12.

Godwin, K., G.D. Emmitt, **Greco, S.** and S. De Wekker: Evaluating the accuracy and representativeness of Airborne Doppler Wind Lidar wind in complex terrain, Presented at the 2013 Fall AGU Meeting, San Francisco, CA, Dec. 9-12.

Emmitt, G.D. , and **S. Greco** : Study of airborne DWL in support of Precision Airdrops, Presented at the Working Group Meeting on Space-based Lidar Winds at College Park, MD, April 17-19 (<http://cires.colorado.edu/events/lidarworkshop/LWG/>)

Greco, S., G.D. Emmitt, and K. Godwin : Airborne DWL investigation of flow over complex terrain (MATERHORN 2012), Presented at the Working Group Meeting on Space-based Lidar Winds at College Park, MD, April 17-19 (<http://cires.colorado.edu/events/lidarworkshop/LWG/>)

Masutani, M., J.S. Woolen, S. Casey, T. Zhu, Z. Ma, L. Cucurull, L.P. Riishojgaard, **S. Greco** and F. Weng: Simulation of observations for Joint OSSE based on 2012 systems, Proc. Of the Annual Amer. Meteo. Soc. Meeting., 2013

De Wekker, S.F.J., G.D. Emmitt, **S. Greco**. K. Godwin, R. Foster, S. Pal, and H.J. Fernando, 2013: Wind and turbulence structure in and above the boundary layer around

an isolated mountain: first results from airborne measurements during the MATERHORN field study, Submitted, Davos Atmosphere and Cryosphere Assembly DACA-13 in Switzerland in July 2013.

Foster, R. C., G. D. Emmitt, K. Godwin and **S. Greco**, 2013. Boundary Layer Rolls Observed Above and Below a Jet in a Marine Boundary Layer. AGU Fall meeting 2013, San Francisco. Atmospheric Boundary Layer Processes and Turbulence I Posters. A43A-0216.

2012: **Greco, S.** and G.D. Emmitt, 2012: CALIPSO and LITE Data for Space-based DWL Design and Data Utility Studies. Final Report/NASA Technical Report. January 2012

Wang Y., C. Williamson, G. Huynh, D. Emmitt and **S. Greco**: Airborne Doppler wind lidar data fusion with a diagnostic wind model", Proc. SPIE 8379, 83790L (2012); <http://dx.doi.org/10.1117/12.918466>

Emmitt, G.D., R. Foster, S. De Wekker and **S. Greco**, Investigation of the Representation of OLEs and Terrain Effects Within the Coastal Zone in the EDMF Parameterization Scheme: An Airborne Doppler Wind Lidar Perspective, ONR Annual Report, Grant No. N000141110450, July 2012

Emmitt, G.D., K. Godwin and **S. Greco**, Investigation of the Air-Wave-Sea Interaction Modes Using an Airborne Doppler Wind Lidar: Analyses of the HRDL data taken during DYNAMO, ONR Final Report, Grant No. NO00 1411 C0464, July 2012

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: 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**: 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**: 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.

2011: **Greco, S.**, G.D. Emmitt, D.A. Bowdle and K.A. Fuller: Establishing an aerosol backscatter climatology at .355 and 2.06um for the Global Wind Observing System (GWOS) using CALIPSO data and models, 5th Symposium on Lidar Atmospheric Applications, Annual AMS Meeting

Davis, R. E., M. Garstang, K. Leggett, E. Zipser, **S. Greco**, and M. Peterson, 2011: Weather and climate influences on the movement patterns of the African elephant (*Loxodonta africana*) and the role of infrasound. *19th International Congress of Biometeorology*.

Davis, R.E., M. Garstang, K. Leggett, E. Zipser, **S. Greco** and M. Petersen: Weather and climate influences on the movement patterns of the African elephant (*Loxodonta africana*) and the role of infrasound, submitted to the Annual Proceedings of the ISB

Emmitt, G.D., Z. Pu, K. Godwin and **S. Greco**: Airborne Doppler Wind Lidar data impacts on tropical cyclone track and intensity forecasting: the data processing, interpretation and assimilation, 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS-AOLS), Annual AMS Meeting

Davis R.E., Angelini I.M., Garstang M., Hayden BP, Fitzjarrald DR, Legates DR, **Greco S**, Macko S, and V. Connors, What is the source of continental precipitation? Annual Meeting of the Association of American Geographers, Seattle, WA, April 14, 2011.

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

Emmitt, G. D and **S. Greco.**, 2011: Implications of CALIPSO observations to space-based DWL performance and impacts. Working Group on Space-Based Lidar Winds. Miami, Florida, Feb.8-9.

Riishøjgaard, L. P., Z. Ma, M. Masutani, J. Woollen, G. D. Emmitt, S.A. Wood and **S. Greco**: 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

2010: Wang, Y., C. Williamson, G. Huynh, D. Emmitt and **S. Greco**: Diagnostic Wind Model Initialization over Complex Terrain Using the Airborne Doppler Wind Lidar Data, 14th Annual GMU Conference on Atmospheric Transport and Dispersion Modeling, Fairfax, VA

Masutani, M., L.P. Riishojgaard, G.D. Emmitt, **S. Greco**, S.A. Wood, A. Stoffelen, G.J. Marseille and J.S. Woolen: Evaluation of Space Based Doppler Wind Lidar in Joint OSSEs, 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Proc. Of the Annual AMS Meeting

Emmitt, G.D., **S. Greco** and S.A. Wood: Using an airborne doppler wind lidar to explore the potential impact of a future space-based wind lidar, particularly in the case of “cloud challenging” tropical cyclones, 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), Annual AMS Meeting

Emmitt, G.D. and **S. Greco**: Airborne Doppler Wind Lidar: investigating tropical cyclones with curtains of wind profiles, 15th Symposium on Meteorological Observation and Instrumentation, Annual AMS Meeting

Emmitt, G.D., **S. Greco** and S. Wood, Airborne Doppler Lidar Analyses and Adaptive Targeting System (ADLAATS), Final Report to US Army Research Office, W911NF06C0091, 27 December 2010.

Emmitt, G.D., S.A. Wood, **S. Greco**, B. Gentry and M. Kavaya: 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. Riishojgaard, G. D. Emmitt, **S. Greco**, S. A. Wood, A. Stoffelen, G. J. Marseille, and J. S. Woollen: 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. Riishojgaard, G.D. Emmitt, **S. Greco**, S.A. Wood., A. Stoffelen., G.-J.Marseille and J. Woollen: Progress in Evaluation of Space Based DWL in Joint OSSEs. Working Group on Space-Based Lidar Winds. Destin, Florida, Feb. 2 - 4.

Emmitt, G.D., K. Godwin and **S. Greco**, 2010: Comparisons of TPARC P3DWL Wind Profiles with Dropsondes in the Presence of Clouds. Working Group on Space-Based Lidar Winds. Destin, Florida, Feb. 2 - 4.

Emmitt, G.D., K. Godwin and **S. Greco**, 2010: Advanced Signal Processing for Airborne Data in Severe Weather. Working Group on Space-Based Lidar Winds. Destin, Florida, Feb. 2 - 4.

2009: **Greco, S.** and G.D. Emmitt, 2009: Comparison of CALIPSO, GLAS, and LITE CFLOS Statistics for Use in DWL Mission Design and OSSEs. Working Group on Space-Based Lidar Winds, Wintergreen, Virginia, June 16 - 19.

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

Emmitt. G.D., **S. Greco**, S.A. Wood, and S.T. Shipley, Airborne Doppler Wind Lidar: In-flight visualization and analysis using Google Earth, 25th Conference on IIPS, AMS Annual Meeting, Phoenix, AZ, January

Emmitt, G.D. and **S. Greco**, 2009: Overview of P3DWL T-PARC/TCS-08 Mission and Data Analysis. Working Group on Space-Based Lidar Winds, Wintergreen, Virginia, June 16 - 19.

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Emmitt, G.D., D. Winker, **S. Greco**, 2009: Status of CFLOS Study Using CALIPSO Data. Working Group on Space-Based Lidar Winds, Destin, Florida, Jan. 27 - 30

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