

## HFIP Publications 2012

### Journals and Periodicals

- Aksoy, A., S. Lorsolo, T. Vukicevic, K.J. Sellwood, S.D. Aberson, and F. Zhang, 2012: The HWRF Hurricane Ensemble Data Assimilation System (HEDAS) for High-resolution Data: The Impact of Airborne Doppler Radar Observations in an OSSE. *Monthly Weather Review*, 140(6):1843-1862 (doi:10.1175/MWR-D-11-00212.1).
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- Davis, C., A., and D. A. Ahijevych, 2012: Mesoscale Structural Evolution of Three Tropical Weather Systems Observed during PREDICT. *Journal of the Atmospheric Sciences*, 69(4):1284–1305, (doi: 10.1175/JAS-D-11-0225.1).
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- Doyle, J.D., C.A. Reynolds, C. Amerault, and J. Moskaitis, 2012: Adjoint Sensitivity and Predictability of Tropical Cyclogenesis. *Journal of the Atmospheric Sciences*, 69(12):3535-3557 (doi: 10.1175/JAS-D-12-0110.1).
- Fang, J. and F. Zhang, 2012: Beta Effect on the Development of Tropical Cyclones. *Monthly Weather Review*, 140(10): 3327-3346 (doi: 10.1175/MWR-D-10-05021.1).
- Galarneau, T. J., Jr., and C. A. Davis, 2013: Diagnosing Forecast Errors in Tropical Cyclone Motion. *Monthly Weather Review*, 141(2):405-430 (doi: 10.1175/MWR-D-12-00071.1).
- Giammanco, I.M., J.L. Schroeder, and M.D. Powell, 2012: Observed Characteristics of Tropical Cyclone Vertical Wind Profiles. *Wind and Structures*, 15(1):65-86.
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- Xie, B., F. Zhang, Q. Zhang, J. Poterjoy, and Y. Weng, 2013: Observing Strategy and Observation Targeting for Tropical Cyclones Using Ensemble-based Sensitivity Analysis and Data Assimilation. *Monthly Weather Review*, (doi: 10.1175/MWR-D-12-00188.1).
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### Publications in Print

Aksoy, A., Storm-Relative Tropical Cyclone Data Assimilation with an Ensemble Kalman Filter. *Monthly Weather Review*.

Aksoy, A., S. D. Aberson, T. Vukicevic, K. J. Sellwood, S. Lorsolo, and X. Zhang, 2013: Assimilation of High-resolution Tropical Cyclone Observations with an Ensemble Kalman Filter Using NOAA/AOML/HRD's HEDAS: Evaluation of the 2008-2011 Vortex-scale Analyses. *Monthly Weather Review*;in print, (doi: 10.1175/MWR-D-12-00194.1).

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Giammanco, I. M., J. L. Schroeder, and M. D. Powell, GPS Dropwindsonde and WSR-88D Observations of Tropical Cyclone Vertical Wind Profiles and Their Characteristics. *Weather and Forecasting*.

Gopalakrishnan, S., F. Marks, J. Zhang, X. Zhang, J.-W. Bao, and V. Tallapragada, A Study of the Impact of Vertical Diffusion on the Structure and Intensity of Tropical Cyclones Using the High-resolution HWRF System. *Journal of the Atmospheric Sciences*.

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- Knapp, K. R., J. Knaff, C. Sampson, G. Riggio, and A. D. Schnapp, 2013: A Pressure-based Analysis of the Historical Western North Pacific Tropical Cyclone Intensity Record, *Monthly Weather Review*, accepted.
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- Lorsolo, S., J. Gamache, and A. Aksoy. Evaluation of the Hurricane Research Division Radar Analysis Software Using Synthetic Data. *Journal of Atmospheric and Oceanic Technology*.
- Rogers, R., S. Aberson, A. Aksoy, B. Annane, M. Black, J. Cione, N. Dorst, J. Dunion, J. Gamache, S. Goldenberg, S. Gopalakrishnan, J. Kaplan, B. Klotz, S. Lorsolo, F. Marks, S. Murillo, M. Powell, P. Reasor, K. Sellwood, E. Uhlhorn, T. Vukicevic, J. Zhang and X. Zhang. NOAA’s Hurricane Intensity Forecasting Experiment (IFEX): A Progress Report. *Bulletin of the American Meteorological Society*.
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- Stern, D. P., and F. Zhang, 2013: How Does the Eye Warm? Part II: Sensitivity to Vertical Wind Shear, and a Trajectory Analysis. *Journal of the Atmospheric Sciences*, in press
- Thomsen, G. L., R. K. Smith and M. T. Montgomery. Tropical-cyclone Flow Asymmetries Induced by a Uniform Flow Revisited. *Quarterly Journal of the Royal Meteorological Society*.
- Zhang, F., and D. Tao, 2013: Impacts of Vertical Wind Shear on the Predictability of Tropical Cyclones. *Journal of the Atmospheric Sciences*, in press. (doi: 10.1175/JAS-D-12-0133.1)

## Publications in Review

- Aberson, S. D., : Climatological Forecasts of Tropical Cyclone Phase. *Weather and Forecasting*
- Bao, J.-W., S. G. Gopalakrishnan, S. A. Michelson, and coauthors,: Impact of Horizontal and Vertical Diffusion on Idealized Intensification in the HWRF Model. *Monthly Weather Review*.
- Byrne, D., and J. A. Zhang, : Turbulence Energy Cascade in the Hurricane Boundary Layer. *Science*.
- DeMaria, M., J. A. Knaff, M. Brennan, D. Brown, C. Lauer, R. T. DeMaria, A. Schumacher, R. D. Knabb, D. P. Roberts, C. R. Sampson, P. Santos, D. Sharp, and K. A. Winters, 2013: Improvements to the Operational Tropical Cyclone Wind Speed Probability Model, *Weather and Forecasting*.

- Dunion, J., V. Thorncroft and C Velden, : The Tropical Cyclone Diurnal Cycle. *Monthly Weather Review*
- Edson, J.B., J. V. S. Raju, C.W. Fairall, R.A. Weller, S. Bigorre, A. Plueddemann, and H. Hersbach, 2013: Wind-speed and Wave-age Dependence of Momentum Exchange Over the Open Ocean. *Journal of Atmospheric and Oceanic Technology*.
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- Jin, Y., W. T. Thompson, M. DeMaria, F. Zhang, M. Peng, M. Powell, F. Marks and P. Black, : Observations and Modeling of Landfalling Tropical Cyclones. *Bulletin of the American Meteorological Society*
- Katzberg, S. J., J. P. Dunion, and G. G. Ganoe, : The Use of Reflected GPS Signals to Retrieve Ocean Surface Wind Speeds in Tropical Cyclones. *Radio Science*
- Kim, H.-S., C. Lozano, V. Tallapragada, D. Iredell, D. Sheinin, H. L. Tolman, V. M. Gerald, and J. Sims, 2013: Performance of Ocean Simulations in the Coupled HWRF-HYCOM Model. *Journal of Atmospheric and Oceanic Technology*, submitted January 2013.
- Lathem T. L., A. Nenes, Y. Deng, H. Zhang, B. E. Anderson, S. N. Crumeyrolle, A. J. Beyersdorf, L. D. Ziembka, K. L. Thornhill, E. L. Winstead, R. A. Black, and S. T. Murillo, : Eyewall Seeding May Promote Rapid Intensification of Tropical Cyclones. *Science*
- Li, X., W. Zheng, X. Yang, J. A. Zhang, W. Pichel, and Z. Li, : Coexistence of Atmospheric Gravity Waves and Boundary-layer Rolls Observed by SAR. *Journal of the Atmospheric Sciences*
- Ming, J., J. A. Zhang, R. F. Rogers, F. D. Marks, Y. Wang, and N. Cai, : An Observational Study of the Atmospheric Boundary Layer Structure During Landfall of Typhoon Marokot (2009). *Journal of the Atmospheric Sciences*
- Misra, V., S. DiNapoli, and M. D. Powell, : The Track Integrated Kinetic Energy of Atlantic Tropical Cyclones. *Monthly Weather Review*
- Montgomery, M. T. and R. K. Smith, : Paradigms for Tropical Cyclone Intensification. *Quarterly Journal of the Royal Meteorological Society*.
- Nicholls, M. E., and M. T. Montgomery, : An Examination of Two Pathways to Tropical Cyclogenesis Occurring in Idealized Simulations With a Cloud-resolving Numerical Model. *Atmospheric Chemistry and Physics*.
- Peak, J., C. R. Sampson, J. Cummings, J. A. Knaff, M. DeMaria, W. Schubert, 2013: An Upper Ocean Thermal Field Metrics Dataset. *Journal of Operational Oceanography*, submitted.
- Reasor, P., R. Rogers, and S. Lorsolo, : Environmental Flow Impacts on Tropical Cyclone Structure Diagnosed from Airborne Doppler Radar Composites. *Monthly Weather Review*
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- Hristova-Veleva, S. M., S. Gopalakrishnan, T. Vukicevic, Z. S. Haddad, S. D. Aberson, T. Quirino, F. J. Turk, P. P. Li, B. W. Knosp, B. H. Lambrigtsen, S. L. Durden, and S. Tanelli, 2012: The Experimental HWRF-HEDAS system: Using Satellite and Airborne Observations from GRIP/PREDICT/IFEX to Evaluate the Model and to Assess the Impact of Data Assimilation. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Hristova-Veleva, S. M., P. Li, B. Knosp, F. J. Turk, Q. A. Vu, B. Lambrigtsen, S. Tanelli, N. Niamsuwan, Z. Haddad, and W. L. Poulsen, 2012: Fusion Of Hurricane Models and Observations: Developing the Technology to Improve the Forecasts, American Geophysical Union Fall Meeting December, 2012, N33D-03, San Francisco, CA. (invited)
- Hristova-Veleva, S. M., J. Steward, T. Vukicevic, Z. Haddad, S. Aberson, S. Gopalakrishnan, T. Quirino, F. J. Turk, P. P. Li, B. Knosp, B. Lambrigtsen, S. Durden, and S. Tanelli, 2012: The Experimental HWRF-HEDAS System: Using Satellite Observations to Evaluate the Model and to Assess the Impact of Data Assimilation, 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Vedra Beach, FL.
- Hristova-Veleva, S., and T. Vukicevic, 2012: Understanding the Rapid Intensification of Hurricane Karl From Observations and Models: Using NASA’s Airborne and Satellite Observations to Evaluate the Operational Hurricane Forecast Model HWRF. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Jaimes, B., L. K. Shay and G. R. Halliwell, Jr. , 2012: The Response of Quasi-Geostrophic Oceanic Vortices to Tropical Cyclone Forcing. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.

- Jiang, H., and J. Kaplan, 2012: Enhancement of SHIPS Rapid Intensification Index Using the 37 GHz Ring Pattern. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Jing, J. -G., C. Landsea, and S. Murillo, 2012: 2011 Update on The Joint Hurricane Testbed (JHT). 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Jin, Y., J. Doyle, R. Hodur, and J.R. Moskaitis, 2012: Evaluation of Tropical Cyclone Landfall Track Forecasts by the Navy's Regional Model. Observations and Modeling of Land-Falling Tropical Cyclones. 10th Symposium on the Coastal Environment, American Meteorological Society Annual Conference. 23-27 January, 2012, New Orleans, LA.
- Jin, Y., J. R. Moskaitis, H. Jin, and J. Doyle, 2012: COAMPS-TC Diagnostics. Hurricane Forecast Improvement Project Diagnostics Workshop, 10 August, 2012 National Centers for Environmental Prediction, Environmental Modeling Center.
- Jin, Y., G. Thompson, S. Wang, J. Nachamkin, J. Doyle, R. Hodur, T.R. Holt, J.R. Moskaitis, and Q. Zhao, 2012: Evaluating Cloud Microphysical Parameterizations in COAMPS-TC for Tropical Cyclone Intensity and Structure Prediction. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Vedra Beach, FL.
- Jin H., S. Wang, S. Chen, and J.D. Doyle, 2012: Coupled COAMPS-TC Real-Time Forecasts for the ITOP Experiment. American Meteorological Society. American Meteorological Society, 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Verdra Beach FL.
- Jin, H., S. Wang, and Y. Jin, 2012: Coastal Oceanic Variability During Typhoon Fanapi (2010) Passage. 10th Symposium on the Coastal Environment, American Meteorological Society Annual Conference , 23-27 January, 2012, New Orleans, LA.
- Jin H., S. Wang, and Y. Jin, 2012: Impact of Air-Sea Interaction on the Tropical Cyclone Intensity. 18th Conference on the Air-Sea Interaction, American Meteorological Society, 9-12 July, 2012, Boston, MA.
- Juracic, A. and J. P. Dunion. The Entropy Budget of Several 2010 Atlantic Hurricanes. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL. Poster.
- Kaplan, J., 2012: Improvements to the SHIPS Rapid Intensification Index. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Kaplan, J., C. M. Rozoff, C. R. Sampson, J. P. Kossin, C. S. Velden, M. DeMaria, and J. A. Knaff, 2012: Assessing the Predictability of Tropical Cyclone Rapid Intensification as a Function of Forecast Lead-time Using the SHIPS Rapid Intensification Index. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Kaufman, M., I. Ginis and R. Yablonsky, 2012. Impact of an Ocean Model's Horizontal Resolution on the Ocean Response to a Hurricane. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL. 5D.9.
- Kim, H.-S., C. Lozano, J. Sims and D. Iredell, 2012: Numerical Study on the Ocean Effect on Hurricane Intensity. 2012 Ocean Sciences Meeting, Oceanography Society, American Society of Limnology and Oceanography and American Geophysical Union, 20-24 February, 2012, Salt Lake City, UT.
- Kim, H.-S., HYCOM and HWRF teams, 2012: 1. The 2013 HYCOM-HWRF (HyHWRF) System; 2. Real-Time Transmitted Data. HFIP Air/Sea Coupling Workshop, 19-20 September, 2012.

- Kim, H.-S., H. Tolman, C. Lozano, D. Irdell, and HYCOM and HWRF teams, 2012: Coupled HYCOM-HWRF(HyHWRF) System: Past, Present and Future. 66th Interdepartmental Hurricane Conference, 5-8 March, 2012, Charleston, SC.
- Kim, H.-S., and H. Tolman, 2013: Study of the Ocean Role in Intensity Forecast for Landfall Hurricanes Using Coupled HYCOM-HWRF System. 93rd American Meteorological Society Annual Meeting, 6-10 January, 2013, Austin, TX.
- Klotz, B., 2012: Improved SFMR Surface Wind Measurements in Intense Rain Conditions: A JHT Project. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Klotz, B., W., and E. W. Uhlhorn, 2012: Improving SFMR Surface Wind Measurements in Heavy Rain Conditions. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL
- Klotz, B. W., E. W. Uhlhorn, J. A. Zhang, and M. Fischer, 2012: Examining Surface Momentum Balance and Boundary Layer Conditions in Extreme Tropical Cyclones. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL. Poster.
- Knaff, J., M. DeMaria, C. Sampson, J. E. Peak, J. Cummings and W. Schubert, 2012: The Upper Ocean's Thermal Response to Tropical Cyclones. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra Beach, FL.  
<https://ams.confex.com/ams/30Hurricane/webprogram/Paper204597.html>
- Kucera, P. A., Barb G. Brown, Louisa Nance, and Christopher L. Williams, 2012: Evaluation of Experimental Models for Tropical Cyclone Forecasting in Support of the NOAA Hurricane Forecast Improvement Project (HFIP), The European Geosciences Union 2012 Annual Assembly, 23-27 April, 2012, Vienna, Austria.
- Lorsolo, S., R. Rogers, and P. Reasor, 2012: Analysis of the Hurricane Boundary Layer Kinematic Structure Using Doppler Radar Profiles. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Li, Y., X. Wang and M. Xue, 2012: Assimilation of Radar Radial Velocity Data with the WRF Ensemble-3DVAR Hybrid System for the Prediction of Hurricane Ike (2008). 92nd American Meteorological Society Annual Meeting, New Orleans, LA, January, 22-26, 2012.
- Li, Y., X. Wang and M. Xue, 2012: Assimilation of Radar Radial Velocity Data with the WRF ensemble-3DVAR Hybrid System for the Prediction of Hurricane Ike (2008). 5th EnKF Workshop, 22 May, 2012, Albany, NY.
- Li, Y., X. Wang, M. Xue, and M. Tong: Assimilation of Airborne Radar Radial Velocity Data With the GSI-based EnKF-3DVar Hybrid System for HWRF for the Prediction of Hurricane Irene (2011). 93rd American Meteorological Society Annual Meeting, 6-10 January, 2013, Austin, TX.
- Marchok, T., M. Morin, M. Bender, 2012: Evaluation of a GFDL Hurricane Model Ensemble Forecast System. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra Beach, FL.
- Marchok, T. P., M. Morin, and M. Bender, 2012: GFDL Hurricane Model Ensemble Performance During the 2012 Hurricane Season. HFIP Annual Review Telecon, 12 December 2012.

- Marks, F., 2012: Advances in Hurricane Research. Florida Governor's Hurricane Conference, 15 May, 2012, Fort Lauderdale, FL.
- Marks, F., 2012: Advancing Tropical Cyclone Forecasts Using Aircraft Observations: A Historical Perspective. 92nd American Meteorological Society Annual Meeting, 23-26 January, 2012, New Orleans, LA.
- Marks, F., 2012: Latest Developments in HFIP Research. NOAA Aircraft Operations Center. 15 August, 2012, MacDill AFB, FL.
- Marks, F., 2012: Nature's Huffs and Puffs: The Latest Developments in Hurricane Science. Scripps Howard Institute on the Environment and Science, Florida Atlantic University. 26 May, 2012, Boca Raton, FL.
- Marks, F., 2012: NOAA Hurricane Forecast Improvement Project. 2012 Doppler Wind Lidar Workshop 01-02 May, 2012, Miami, FL.
- Marks, F. 2012: NOAA Hurricane Research. World Meteorological Organization Regional Association IV Training Workshop, 12 March, 2012, Miami, FL.
- Marks, F., 2012: NOAA Service Assessment Hurricane Irene. Atlantic Oceanographic and Meteorological Laboratory Seminar, 31 July, 2012, Miami, FL.
- Marks, F., 2012: NOAA Service Assessment Hurricane Irene. NOAA Hurricane Meeting. 27 November, 2012.
- Marks, F., 2012: Structure of the Eye and Eyewall of Hurricane Hugo (1989): How We Improved HWRF. NOAA/OAR Scientist2Scientist Webinar. 20 September, 2012.
- Marks, F. and R. Ferek, 2012: Overview of WG/TCR Efforts and Promising Results. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Marks, F. and T. Vukicevic, 2012: Can We Hope to Improve Prediction of Tropical Cyclone Intensity. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- McNoldy, B. D., K. D. Musgrave and M. DeMaria, 2012: Diagnostics and verification of the tropical cyclone environment in regional models. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra Beach, FL. (<https://ams.confex.com/ams/30Hurricane/webprogram/Paper204581.html>)
- Michelson, S., and J.-W. Bao, 2012: Comparison and Evaluation of Two Types of PBL Schemes in Tropical Cyclone Boundary Layer Simulations. The European Geosciences Union 2012 Annual Assembly, 22-27 April 2012, Vienna, Austria.
- Michelson, S. and J.-W. Bao, 2012: Sensitivity of Asymptotic Behavior of Idealized Tropical Cyclone Intensification to Parameterizations of the Atmospheric Boundary Layer Mixing. 13th Weather Research and Forecasting Model Users' Workshop, 26-29 June, 2012, Boulder, CO, USA.
- Miller, T. L., M. W. James, J. B. Roberts, L. Jones, C. S. Ruf, E., W. Uhlhorn, S. Biswas, C. May, P. G. Black, and C. D. Buckley 2012: Observations During GRIP From HIRAD: Images of C-Band Brightness Temperatures and Ocean Surface Wind Speed and Rain Rate. 92nd American Meteorological Society Annual Meeting, 23-26 January, 2012, New Orleans, LA.
- Montgomery, M., 2012: Pre-Depression Investigation of Cloud Systems in the Tropics (PREDICT) Experiment: Scientific Basis, New Analysis Tools and Some First Results. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.

Morin, M. J., T. Marchok, and M. Bender, 2012: GFDL Hurricane Model Ensemble: Alternative Exploratory Approaches to Real-time Ensemble-based Hurricane Forecasting. 2012 Dynamics Research Corporation Internal Trade Show, 1 November, 2012, Reston, VA.

Moskaitis, J. R., 2012: Are Atlantic Basin Tropical Cyclone Intensity Forecasts Improving? 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Vedra Beach, FL.

Moskaitis, J. R., C. Reynolds, E. Serra, and J. McLay, 2012: Verification of Tropical Cyclone Track Predictions from an Experimental High-resolution NOGAPS Ensemble. 92nd American Meteorological Society Annual Meeting. 21-26 January, 2012, New Orleans, LA.

Moskaitis, J. R., J. Doyle, and R. Hodur, 2012: Diagnostic Verification of COAMPS-TC Performance for the HFIP Retrospective Forecasts. 66th Interdepartmental Hurricane Conference. 5-8 March, 2012, Charleston, SC.

Moskaitis, J. R., Y. Jin, and J. Doyle, 2012: A Case Study of the Intensification of Hurricane Maria (2011) in a Real-time COAMPS-TC Prediction. 66th Interdepartmental Hurricane Conference. 5-8 March, 2012, Charleston, SC.

Moskaitis, J., Y. Jin, and J.D. Doyle, 2012: Verification of COAMPS-TC Predictions of the Synoptic-scale Flow in the Tropics and Subtropics. 30th Conference on Hurricanes and Tropical Meteorology, 15-20 April, 2012, Ponte Vedra Beach, FL.

Murillo, S. 2012: Intensity Forecasting Experiment (IFEX) 2012 Hurricane Field Campaign. NOAA Aircraft Operations Center. 15 August, 2012, MacDill AFB, FL.

Murillo, S., 2012: 2012 NOAA's Intensity Forecasting Experiment. NASA/FIU Hurricane and Remote Sensing Summer Education and Research Internship Program. 17 August, 2012, Miami, FL.

Murillo, S., 2012: 2012 Plans for NOAA's Intensity Forecast Experiment (IFEX). 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.

Murillo, S. T., J.-G. Jiing, and C. W. Landsea, 2012: The Joint Hurricane Testbed (JHT): Transitioning Research to Operations. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.

Musgrave, K. D., M. DeMaria, B. D. McNoldy, Y. Jin and M. Fiorino, 2012: Creation of a Statistical Ensemble for Tropical Cyclone Intensity Prediction. 66th Interdepartmental Hurricane Conference, 5-8 March, 2012, Charleston, SC.

Musgrave, K. D., B. D. McNoldy and M. DeMaria, 2012: Creation of a statistical ensemble for tropical cyclone intensity prediction. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra Beach, FL. (<https://ams.confex.com/ams/30Hurricane/webprogram/Paper204580.html>)

Nance, L., B. G. Brown, T. L. Fowler, E. Gilleland, P. A. Kucera, K. Newman, C. L. Williams, and C. Zhou, 2012: Objective Evaluation of 2011 Stream 1.5 Candidates. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April 2012, Ponte Vedra Beach, FL.

Nolan, D. S., K. Bhatia, R. M. Atlas, and L. R. Bucci, 2012. Development and Validation of a High-Resolution Hurricane Nature Run Using the ECMWF and WRF Models. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL. Poster.

- Park, M.-S., A.B. Penny, R.L. Elsberry, B.J Billings, and J.D. Doyle: 2012: Latent Heating and Cooling Rates in Developing and Non-developing Tropical Disturbances During tcs-08: Radar-equivalent Retrievals from Mesoscale Numerical Model Simulations and ELDORA Observations. 30th Conference on Hurricanes and Tropical Meteorology, 15-20 April, 2012, Ponte Vedra Beach, FL.
- J. E. Peak, C. R. Sampson, J. Cummings, J. A. Knaff, M. DeMaria and W. H. Schubert, 2012: An Upper Ocean Thermal Field Metrics Dataset. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra Beach, FL.  
<https://ams.confex.com/ams/30Hurricane/webprogram/Paper204772.html>
- Peng, J., Y. Zhu and R. Wobus, 2012: Tropical Cyclone Probabilistic Prediction Through Multi-model Ensemble Forecasts. 92nd American Meteorological Society Annual Meeting, 23-26 January, 2012, New Orleans, LA.
- Peng, J., Y. Zhu and R. Wobus, 2012: Tropical Cyclone Track and Genesis Prediction Through Multi-model Ensemble Forecasts. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Vedra Beach, FL.
- PopStefanija, I, and E. J. Walsh, 2012: Operation of the Wide Swath Radar Altimeter (WSRA) 2011 Hurricane Season. 66th Interdepartmental Hurricane Conference, 5-8 March, 2012, Charleston, SC .
- PopStefanija, I, and E. J. Walsh, 2012: Real-time Directional Wave Spectra from the Wide Swath Radar Altimeter. 66th Interdepartmental Hurricane Conference, 5-8 March, 2012, Charleston, SC .
- PopStefanija, I, and E. J. Walsh, 2012: Real-time Rain Rate from the Wide Swath Radar Altimeter. 66th Interdepartmental Hurricane Conference, 5-8 March, 2012, Charleston, SC.
- Powell, M., 2012: Hurricane Measurements and Modeling for Wind Turbine Siting and Design. 92nd American Meteorological Society Annual Meeting, 23-26 January, 2012, New Orleans, LA.
- Powell, M., 2012: Wind Vs. Surge: Hurricane Ike. 92nd American Meteorological Society Annual Meeting, 23-26 January, 2012, New Orleans, LA. Poster.
- Powell, M., L. Holthuijsen, and J. Pietrzak, 2012: Spatial Variation of Surface Drag Coefficient in Tropical Cyclones. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Ramos, N., S. D. Aberson, and V. Morris, 2012: Structure and Evolution of Developing and Non-developing African Easterly Waves during NAMMA. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Reasor, P., 2012: Environmental Flow Impacts on Tropical Cyclone Structure Diagnosed from Airborne Doppler Radar Composites. Atlantic Oceanographic and Meteorological Laboratory CHART Seminar, 20 June, 2012, Miami, FL.
- Reasor, P. and M. T. Montgomery, 2012: Does the Tropical Cyclone's Response to Vertical Wind Shear Depend on the Near-core Tangential Wind Structure? 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL. Poster.
- Reasor, P., R. F. Rogers, and S. Lorsolo, 2012: Environmental Impacts on Tropical Cyclone Structure and Intensity Diagnosed from Airborne Doppler Radar Composites. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Reinecke, P. A., J. Moskaitis, H. Jin, and J. Doyle, 2012: Real-time Ensemble Prediction and Data Assimilation of Tropical Cyclones with COAMPS-TC. American Meteorological Society Conference on Tropical Meteorology. 15-20 April, 2012, Ponte Verda Beach, FL.

- Reynolds, C. A., J. D. Doyle, and C. Amerault: Adjoint-based Predictability Studies of Tropical Cyclones and Extra-tropical Transitions. 4th International Workshop on Extratropical Transition (IWET-4). Sainte Adele, Quebec, Canada, 20-25 May 2012.
- Reynolds, C. A., R. Langland, P. Pauley, and C. Velden: Tropical Cyclone Data Impact Studies: Influence of Model Bias and Synthetic Observations. 25th American Meteorological Society Conference on Numerical Weather Prediction /Weather Analysis and Forecasting, 29 May – 1 June, 2012, Montreal, Canada.
- Reynolds, C. A. , J. Ridout and J. McLay: Impact of Parameter Variations in a Global Atmospheric Ensemble. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 15-20 April 2012, Ponte Vedra Beach, FL.
- Rogers, R., 2012: Advancing NOAA's Hurricane Mission with HRD Science. NOAA/OAR Senior Research Council. 10 October, 2012.
- Rogers, R., 2012: Atlantic Hurricanes. Flying Into the Eye of the Storm. Miami Science Museum. 09 June, 2012, Miami, FL.
- Rogers, R., 2012: Inner-core Structural Differences of Intensifying and Steady-state Tropical Cyclones. International Top Level Forum on Rapid Change Phenomena in Tropical Cyclones. 05-07 November, 2012, Haikou China.
- Rogers, R., 2012: NOAA's Intensity Forecasting Experiment. NASA GRIP Science Meeting. 09-10 May, 2012.
- Rogers, R., 2012: NOAA's Intensity Forecasting Experiment: Ongoing Work and 2010 Summary. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Rogers, R., 2012: Observations of Hurricanes to Improve the Understanding and Prediction of Tropical Cyclones. NASA/FIU Hurricane and Remote Sensing Summer Education and Research Internship Program. 17 August, 2012, Miami, FL.
- Rogers, R., P. Reasor, S. Lorsolo, and J. Zhang 2012: Observations of the Inner-Core Structure of Rapidly Intensifying Tropical Cyclones. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Rozoff, C., and J. Kaplan, 2012: Improvements in the Probabilistic Prediction of Tropical Cyclone Rapid Intensification Resulting from Inclusion of Satellite Passive Microwave Observations. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Ruf, C. S., S. Gleason, Z. Jelenak, S. Katzberg, A. Ridley, R. Rose, J.Scherrer, and V. Zavorotny, 2012: The CYGNSS Nanosatellite Constellation Hurricane Mission. International Union of Radio Science-National Radio Science Meeting, 4-7 January 2012, Boulder, CO.
- Ruf, C. S., S. Gleason, Z. Jelenak, S. Katzberg, A. Ridley, R. Rose, J.Scherrer, and V. Zavorotny, 2012: The CYGNSS Nanosatellite Constellation Hurricane Mission, International Geoscience and Remote Sensing Symposium, 22-27 July, 2012, Munich, Germany.
- Sanabia, E, P. Black, S. Chen, and J. Cummings: Experimental Deployment of AXBTs During Operational Hurricane Reconnaissance Flights, 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Verdra Beach FL.

Sanabia E., E. Hoy, I. Park, P. Black, J. Kerling, S. Chen, and J. Cummings 2012: Preliminary Results from the AXBT Demonstration Project in Support of Hurricane Coupled Modeling Products and Improvement in Guidance to NHC Hurricane Specialists. 66th Interdepartmental Hurricane Conference. 5-8 March, 2012, Charleston SC.

Schumacher, B., M. DeMaria, R. Berg, E. Gibney, and R. D. Knabb, 2013: Recent advancements in the tropical cyclone wind speed probability program. Special Symposium on the Next Level of Predictions in Tropical Meteorology: Techniques, Usage, Support, and Impacts, 93rd American Meteorological Society Annual Meeting, 6-10 January, 2013, Austin, TX. (<https://ams.confex.com/ams/93Annual/webprogram/Paper223029.html>)

Schumacher, A. B., M. DeMaria, K. D. Musgrave and J. A. Knaff, 2012: Development of a Hybrid Statistical-Dynamical Wind Speed Probability Model. 66th Interdepartmental Hurricane Conference, 5-8 March, 2012, Charleston, SC.

Sellwood, K., 2012: Assimilation of Non-NOAA and Non-AF GPS Dropwindsonde Data into NOAA Numerical Models. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.

Slocum, C. J., 2012: Determining Tropical Cyclone Intensity Change Through Balanced Vortex Model Applications. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra Beach, FL. (<https://ams.confex.com/ams/30Hurricane/webprogram/Paper204595.html>)

Smith T. A., S. Chen, T. Campbell, E. Rogers, S. Gaberšek, D. Wang, S. Carroll, and R. Allard, 2012: Ocean-Wave Coupled Modeling in COAMPS-TC: A Study of Hurricane Ivan (2004) , 30th conference on hurricane and tropical meteorology30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 15-20 April, 2012, Ponte Verdra Beach FL.

Steward, J. L., Z. Haddad, S. M. Hristova-Veleva, and T. Vukicevic, 2013: A Reduced-Order Observation Operator for TRMM/TMI based on Canonical Correlation Analysis. 17th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface; 93rd American Meteorological Society Annual Meeting, 6-10 January, 2013, Austin, TX.

Torn, R. D., 2012: Developing a Framework for Understanding the Sensitivity of Tropical Cyclone Genesis Forecasts to Initial Conditions. National Hurricane Center Seminar, 11 October, 2012, Miami, FL.

Torn R. D. and D. Cook, 2012: The Sensitivity of Pre-genesis Forecasts of Hurricanes Danielle and Karl (2010) to Pouch and Environmental Initial Conditions. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.

Uhlhorn, E. W., M. Fischer, B. W. Klotz, and J. Zhang. 2012: Dynamical Boundary-Layer Depths in Hurricanes Derived from Surface Wind Observations. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.

Uhlhorn E. W., and J. Zhang, 2012: Friction Residual of the Near-Surface Momentum Budget at the Eyewall: Role of the Radial Momentum Transport. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL. Poster.

Voronovich, A. G. and V. U. Zavorotny, 2012: GNSS and Radio Beacons Reflected Waveforms Modeled With Small Slope Approximation. International Union of Radio Science-National Radio Science Meeting, 4-7 January, 2012, Boulder, CO.

Voronovich, A.G., and V. U. Zavorotny, 2012: Ocean-scattered Polarized Bistatic Radar Signals Modeled with Small-slope Approximation. International Geoscience and Remote Sensing Symposium, 22-27 July, 2012, Munich, Germany.

- Vukicevic, T., 2012: Assimilation of High-Resolution Hurricane Inner-Core Data with the HWRF Hurricane Ensemble Data Assimilation System. Atlantic Oceanographic and Meteorological Laboratory CHART Seminar, 29 February 2012, Miami, FL.
- Vukicevic, T., 2012: Assimilation of High-resolution Hurricane Inner-core Data with HWRF Hurricane Ensemble Data Assimilation System: Impact of Forecast Errors or How Wise is the Wise Man? Atlantic Oceanographic and Meteorological Laboratory Seminar. 27 March, 2012, Miami, FL.
- Vukicevic, T., 2012: Validation of HWRF Forecasts with Satellite Observations. 66th Interdepartmental Hurricane Conference, 05-08 March, 2012, Charleston, SC.
- Vukicevic, T., A. Aksoy, S. Aberson, K. Sellwood, and F. Marks, 2012: Short-term Dynamic Forecast Bias and Its Impact on Vortex Scale Data Assimilation. 30th Conference on Hurricane and Tropical Meteorology, American Meteorological Society, 16-20 April, 2012, Ponte Vedra, FL.
- Wang, S., H. Jin, P. Black, S. Chen, J. Doyle, and L. O'Neill, 2003: Formation and Recovery of a Cold Wake from Fanapi (2010) during ITOP. 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 15–20 April, 2012, Ponte Vedra Beach, FL.
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