HFIP 2010 Publications:

Peer-reviewed Manuscripts (appeared and in press/accepted):


Liou, Chi-Sann and Keith D. Sashegyi, 2011: On the Initialization of Tropical Cyclones with a Three Dimensional Variational Analysis, Accepted for publication in special issue on "Tropical Cyclones in the 21st Century" in *Natural Hazards*. Springer, the Netherlands.


Nolan, D.S., J.A. Zhang, and D.P. Stern, 2009: "Evaluation of planetary boundary layer parameterizations in tropical cyclones by comparison of in-situ observations and high resolution simulations of Hurricane Isabel (2003), Part I: Initialization, maximum


**Peer-reviewed Manuscripts (submitted):**


Submitted to *J. Applied Met. and Clim.*


**Book Chapters:**


**Non-peer reviewed publications**


**Technical Reports:**


**Conference and Workshop Presentations:**


Berger, Howard and Velden, Chris., 2010: Recent advances in the processing, targeting and data assimilation applications of satellite-derived atmospheric motion vectors (AMVs). International Winds Workshop, 10th, Tokyo, Japan, 22-28 February 2010.

Bernardet, L., 2010. DTC’s contribution to hurricane R2O. HFIP Annual Meeting, Miami. 8-10 November.


Beven, J., 2010: User perspective on use of NWP for tropical cyclone prediction (with an emphasis on the importance of satellite data. Joint HFIP/JCSDA Workshop, Miami, FL.

Billings, B. J., and J. D. Doyle, 2010: COAMPS-TC forecasts of tropical cyclones interacting with mountain islands in the Pacific. 35th NWA Annual Meeting, National Weather Association, Tucson, AZ.


Billings, B. J., and J. D. Doyle, 2010: Typhoon interaction with the Taiwan topography during the Tropical Cyclone Structure-2008 (TCS-08) experiment. 14th Conf. on Mountain Meteorology, Amer. Meteor. Soc., Squaw Valley, CA.


Ginis, I., 2010: Air-sea interaction in hurricanes. Air-Sea Interaction Workshop, April 10-12, Kingston, RI.

Ginis, I., 2010: Numerical modeling of air-sea interaction in tropical cyclones, 17th Conference on Air Sea Interaction, 26 - 30 September, Annapolis, MD.


Goerss, J., 2010: Ensemble, corrected consensus, and weighted consensus TC track forecasts. 64th Interdepartmental Hurricane Conference, 1-4 March 2010, Savannah, GA

Goerss, J., 2010: Impact of new global models and ensemble prediction systems on consensus TC track forecasts. NCEP EMC Seminar, 22 July 2010, Camp Springs, MD

Goerss, J., 2010: Navy global 4DVAR for NOGAPS. JCSDA-HFIP Workshop on Satellite Data Assimilation for Hurricane Forecasting, 2-3 December 2010, Miami, FL


Hogsett, W., 2010: Analysis of model initial conditions. EMC HWRF initialization meeting, Camp Springs, MD. 7 September 2010.


Hristova-Veleva, S. M., F. J. Turk, P. Li, B. W. Knosp, Q. Vu, B. Lambrigsten, M. Montgomery, M. Boothe, C. S. Velden, S. Gopalakrishnan, S. L. Durden, S. Tanelli, and


Lorsolo, S., and A. Aksoy, 2010: An airborne Doppler radar radial wind forward operator for the ensemble Kalman filter hurricane data assimilation system at NOAA/AOML/HRD: Preliminary results. 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS-AOLS), Atlanta, GA


Marks, F., 2009: 9-10 November 2009: HFIP Team Workshop presentations, FIU, Miami, FL


Marks, F., 2010:5 February 2010: HFIP Executive Oversight Board (HEOB) Meeting update, VTC


Pu, Z, and R. Atlas, 2010: On the problems and challenges in regional OSSEs. 14th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS-AOLS), Atlanta, GA.

Reasor, P. D., S. Gopalakrishnan, S. Lorsolo, J. Gamache, and F. D. Marks, 2010: Vertical wind shear impacts on hurricane structure deduced from airborne-Doppler and HWRF IC databases. American Geophysical Union Annual Meeting, San Francisco, CA.


Denis, La ReUnion, France, World Meteorological Organization Tropical Meteorology Research Series, WMO TMRP, Eds.C. Velden, J. Kepert, and R. Rogers, Geneva, Switzerland


Tallapragada, V., 2010: Overview of the operational HWRF Modeling System, JCSDA-HFIP Workshop on Satellite Data Assimilation for Hurricane Forecasting, 2-3 December 2010, Miami, FL.


Vukicevic, T., A. Aksoy, K. Sellwood, P. D. Reasor, S. Gopalakrishnan, L. Bucci, S. Aberson, and F. D. Marks, 2010: Analysis of forecast errors of high-resolution hurricane forecast using the ensemble data assimilation system. American Geophysical Union Annual Meeting, San Francisco, CA.


Wimmers, A. J. and C. S. Velden, 2009: MIMIC-TPW: Real-time, hourly total precipitable water imagery over the oceans from advective blending of polar-orbiting microwave


Yeh, K., 2010: High resolution tests with HWRF vortex initialization. EMC HWRF initialization meeting, Camp Springs, MD. 7 September 2010.


Zhang, J., 2010: Estimation of dissipative heating using low-level in-situ aircraft observations. Workshop on air-sea interactions under tropical cyclones (hurricanes), Kingston, RI.


Bao, J.-W., S. G. Gopalakrishnan and S. A. Michelson, 2010: Sensitivity of the NOAA Hurricane Research and Forecasting Model (HWRFX) to Various Cloud and Boundary Layer Parameterizations.


Billings, B. J., and J. D. Doyle, 2010: The effects of complex terrain on tropical cyclone track, intensity, and rainfall during TCS-08.

Billings, B. J., and J. D. Doyle, 2010: Tropical cyclone flow structure in the presence of elevated terrain. Poster.


Gamache, J., A. Aksoy, S. Lorsolo, and S. Aberson, 2010: Comparison of HRD airborne-Doppler radar quality control and analysis to independent data sources.


Ginis, I., B. Thomas, M. A. Bender, and T. Marchok, 2010: Performance of the GFDL hurricane model during HFIP High-Resolution Hurricane Test Project


Knaff, J., M. DeMaria, J. Kaplan, and J. Dunion, 2010: Assessing the impact of total precipitable water and lightning on SHIPS intensity forecasts.


Marks, F., 2010: 10-14 May 2010: chaired HFIP session and presented HFIP overview.
ftp://ftp.aoml.noaa.gov/hrd/pub/marks/Marks_presentations/3C.1_Marks_HFIP.ppt


Peng, M. S., E. A. Hendricks, T. Li, and X. Ge, 2010: Initialization of tropical cyclones in numerical prediction systems.


Reasor, P. D., 2010: Sensitivity of hurricane tilt evolution to outer-core profile.

Richardson R., I. Ginis, B. Thomas, R. Yablonsky and M. Bender: Evaluation of 1D and 3D ocean coupling on GFDL hurricane model forecast skill in the Western Pacific.

Rogers, R. F., S. Lorsolo, P. D. Reasor, J. Gamache, and F. Marks, 2010: Multiscale observations of tropical cyclone structure using airborne Doppler composites.


Tuleya R.E. and Y. Wu, 2010: Test results using the NOAH LSM in the operational HWRF system.


Vukicevic, T., J. Dunion, A. Aksoy, F. D. Marks, S. G. Gopalakrishnan, S. D. Aberson, and M. van L.-W., 2010: Improving regional high resolution hurricane forecasts through data assimilation and diagnostic verification with satellite observations.


Zhang, J., J. Stamates, S. Cummings, S. Kimball, and F. Marks, 2010: Shallow water wave measurements in the hurricane environment.


Zhu, P. J. Zhang and F. Masters, 2010: Wavelet analyses of turbulence in the hurricane boundary layer during landfalls.