

List of HFIP Publication 2019

Publications in Journals and Periodicals

2019

Alaka, G.J., X. Zhang, S.G. Gopalakrishnan, Z. Zhang, F.D. Marks, and R. Atlas, 2019: Track Uncertainty in High-Resolution HWRF Ensemble Forecasts of Hurricane Joaquin. *Wea. Forecasting*, 34, 1889–1908, <https://doi.org/10.1175/WAF-D-19-0028.1>.

Ahern, K., M. A. Bourassa, R. E. Hart, J. A. Zhang, and R. F. Rogers, 2019: Observed kinematic and thermodynamic structure in the hurricane boundary layer during intensity change. *Mon. Wea. Rev.*, 147, 2765-2785. <https://doi.org/10.1175/MWR-D-18-0380.1>.

Bhalachandran, S., Z. S. Haddad, S. Hristova-Veleva, and F. D. Marks, 2019: The relative importance of factors influencing tropical cyclone rapid intensity changes. *Geo. Res. Lett.*, 46, 2282-2292. <https://doi.org/10.1029/2018GL079997>.

Bhalachandran, S., R. Nadimpalli, K. K. Osuri, F. Marks, S. Gopalakrishnan, S. Subramanian, U. C. Mohanty, and D. Niyogi, 2019: On the processes influencing rapid intensity changes of tropical cyclones over the Bay of Bengal, *Sci Rep*, 9, 3382. <https://doi.org/10.1038/s41598-019-40332-z>.

Bhalachandran, S., P. S. C. Rao, and F. Marks, 2019: A conceptual framework for the scale-specific stochastic modeling of transitions in tropical cyclone intensities. *Earth Space Sci.*, 6, 972-981. <https://doi.org/10.1029/2019EA000585>.

Chen, X., J. A. Zhang, and F. D. Marks, 2019: A thermodynamic pathway leading to rapid intensification of tropical cyclones in shear. *Geophys. Res. Lett.*, 46, 9241-9251. <https://doi.org/10.1029/2019GL083667>.

Chen, X. and F. Zhang, 2019: Development of a Convection-Permitting Air-Sea-Coupled Ensemble Data Assimilation System for Tropical Cyclone Prediction, *Journal of Advances in Modeling Earth Systems*, 11. <https://doi.org/10.1029/2019MS001795>.

Chen, X., F. Zhang, and J. Rupert, 2019: Modulations of Coastal Rainfall Diurnal Cycle over South China by the Boreal Summer Intraseasonal Oscillation, *J. Climate*, 32(7), 2089-2108. <https://doi.org/10.1175/JCLI-D-18-0786.1>.

Chen, X. and F. Zhang, 2019: Relative roles of preconditioning moistening and global circumnavigating mode on the MJO convective initiation during DYNAMO, *Geophys. Res. Lett.*, <https://doi.org/10.1029/2018GL080987>.

Domingues, R., A. Kuwano-Yoshida, P. Chardon-Maldonado, R.E Todd, G.R. Halliwell, H-S Kim, I-I Lin, K. Sato, T. Narazaki, L. K. Shay, T. Miles, S. Glenn, J.A. Zhang, S.R. Jayne, L.R. Centurioni, M.L. Hénaff, G. Foltz, F. Bringas, M.M. Ali, S. DiMarco, S. Hosoda, T. Fukuoka, B. LaCour, A. Mehra, E. R. Sanabia, J. R. Gyakum, J. Dong, J. Knaff, and G. J. Goni, 2019: Ocean Observations in Support of Studies and Forecasts of Tropical and Extratropical Cyclones, *Frontiers in Marine Science*, Ocean Observation section, 6:446. <https://doi.org/10.3389/fmars.2019.00446>.

Dunion, J. P., C. D. Thorncroft, and D. S. Nolan, 2019: Tropical cyclone diurnal cycle signals in a hurricane nature run. *Mon. Wea. Rev.*, 147, 363-388. <https://doi.org/10.1175/MWR-D-18-0130.1>.

Gopalakrishnan, S. G., K. K. Osuri, F. Marks, and U. C. Mohanty, 2019: An inner-core analysis of the axisymmetric and asymmetric intensification processes in tropical cyclones. *Mausam*, 70, 667-690. <https://metnet.imd.gov.in/imdmausam/>.

He, J., F. Zhang, X. Chen, X. Bao, D. Chen, H. M. Kim, et al. 2019: Development and evaluation of an ensemble-based data assimilation system for regional reanalysis over the Tibetan Plateau and surrounding regions. *Journal of Advances in Modeling Earth Systems*, 11, 8, 2503-2522. <https://doi.org/10.1029/2019MS001665>.

Jin, S., X. Li, X. Yang, J. A. Zhang, and D. Shen, 2019: Identification of tropical cyclone centers in SAR imagery based on template matching and particle swarm optimization algorithm. *IEEE Trans. Geosci. Rem. Sens.*, 57, 598-608. <https://doi.org/10.1109/TGRS.2018.2863259>.

Klotz, B. W., and D. S. Nolan, 2019: SFMR surface wind undersampling over the tropical cyclone life cycle. *Mon. Wea. Rev.*, 147, 247-268. <https://doi.org/10.1175/MWR-D-18-0296.1>.

Lim, A. H. N., J. A. Jung, S. E. Nebuda, J. M. Daniels, M. Tong and V. Tallapragada, 2019: Hurricane Track and Intensity Forecasts Impact Assessment from the Assimilation of Hourly Visible, Shortwave and Clear Air Water Vapor Atmospheric Motion Vectors in HWRF, *Weather and Forecasting*, 34, 177-198. <https://doi.org/10.1175/WAF-D-18-0072.1>.

Martinez, J., M. M. Bell., R. F. Rogers, and J. D. Doyle, 2019: Axisymmetric potential vorticity evolution of Hurricane Patricia (2015). *J. Atmos. Sci.*, 76, 2043-2063. <https://doi.org/10.1175/JAS-D-18-0373.1>.

Molinari, J., J. A. Zhang, R. F. Rogers, and D. Vollaro, 2019: Repeated eyewall replacement cycles in Hurricane Frances (2004). *Mon. Wea. Rev.*, 147, 2009-2022. <https://doi.org/10.1175/MWR-D-18-0345.1>.

Nguyen, L. T., R. F. Rogers, J. Zawislak, and J. A. Zhang, 2019: Assessing the influence of convective downdrafts and surface enthalpy fluxes on tropical cyclone intensity change in moderate vertical wind shear. *Mon. Wea. Rev.*, 147, 3519-3534. <https://doi.org/10.1175/MWR-D-18-0461.1>.

Papangelis K., D. Potena, W. Smari, E. Storti, K. Wu, 2019: Advanced technologies and systems for collaboration and computer supported cooperative work, *Future Generation Computer Systems* 95, 764-774. <https://doi.org/10.1016/j.future.2019.02.041>.

Rao, X., K. Zhao, X. Chen, A. Huang, M. Xue, Q. Zhang, and M. Wang, 2019: Influence of synoptic pattern and low-level wind speed on intensity and diurnal variations of orographic convection in summer over Pearl River Delta, South China. *J. Geophys. Res. Atmos.*, 124, 6157– 6179. <https://doi.org/10.1029/2019JD030384>.

Ren, Y., J. A. Zhang, S. R. Guimond, and X. Wang, 2019: Hurricane boundary layer height relative to storm motion from GPS dropsonde composites. *Atmosphere*, 10, 339. <https://doi.org/10.3390/atmos10060339>.

Ryan, K., L. Bucci, R. Atlas, J. Delgado, and S. Murillo, 2019: Impact of Gulfstream-IV dropsondes in tropical cyclone prediction in a regional OSSE system. *Mon. Wea. Rev.*, 147, 2961-2977. <https://doi.org/10.1175/MWR-D-18-0157.1>.

Wu, T.-C., M. Zupanski, L. Grasso, C. D. Kummerow, S.-A. Boukabara, 2019: All-Sky Radiance Assimilation of ATMS in HWRF: A Demonstration Study. *Mon. Wea. Rev.*, 147(1), 85-106, DOI:10.1175/MWR-D-17-0337.1. <https://doi.org/10.1175/MWR-D-17-0337.1>.

Zhang, F., M. Masashi, R. Nystrom, Chen, X., S.-J. Lin, and L. Harris, 2019: Improving Harvey Forecasts with Next-Generation Weather Satellites: Advanced Hurricane Analysis and Prediction with Assimilation of GOES-R All-Sky Radiances, *Bull. Amer. Meteor. Soc.*, 100, 1217–1222. <https://doi.org/10.1175/BAMS-D-18-0149.1>.

Zhang, J. A., and R. F. Rogers, 2019: Effects of parameterized boundary layer structure on hurricane rapid intensification in shear. *Mon. Wea. Rev.*, 147, 853-871. <https://doi.org/10.1175/MWR-D-18-0010.1>.

Zhu, P., B. Tyner, J. A. Zhang, E. Aligo, S. Gopalakrishnan, F. D. Marks, A. Mehra, and V. Tallapragada, 2019: Role of eyewall and rainband in-cloud turbulent mixing in tropical cyclone intensification. *Atmospheric Chemistry and Physics*, 19, 14289–14310, <https://doi.org/10.5194/acp-19-14289-2019>.

Early 2020

Chen, X., O. M. Pauluis, L. R. Leung, and F. Zhang, 2020: Significant contribution of mesoscale overturning to tropical mass and energy transport revealed by the ERA5 reanalysis. *Geophys. Res. Lett.*, 47, <https://doi.org/10.1029/2019GL085333>.

Li, J., J. Li, C. Velden, P. Wang, T. J. Schmit, and J. Sippel, 2020: Impact of rapid-scan-based dynamical information from GOES-16 on HWRF hurricane forecasts. *Journal of Geophysical Research: Atmospheres*, 125, e2019JD031647. <https://doi.org/10.1029/2019JD031647>.

Nystrom, R. G., X. Chen, F. Zhang, and C. A. Davis 2020: Nonlinear Impacts of Surface Exchange Coefficient Uncertainty on Tropical Cyclone Intensity and Air-Sea Interactions. *Geophys. Res. Lett.*, 47, <https://doi.org/10.1029/2019GL085783>.

Ren, Y., J. Zhang, J. Vigh, P. Zhu, H. Liu, and J. Wadler, 2020: An observational study of the symmetric boundary layer structure and tropical cyclone intensity, *Atmosphere* 2020, 11(2), 158; <https://doi.org/10.3390/atmos11020158>.

Technical Reports, Books, Chapters, Manuals, and Proceedings

Kim, H-S., J. Meixner, A. Wallcraft, D. Sheinin, A. Mehra, and V. Tallapragada, 2019: NCEP HWRF-HYCOM-WW3 Forecast System, WMO WGNE 2019 Blue Book, section 8, p7. http://bluebook.meteoinfo.ru/uploads/2019/docs/08_Kim_Hyun_Sook_CoupledModels.pdf

Wang, W., L. Zhu, H-S. Kim, D. Iredell, J. Dong, Z. Zhang, A. Mehra, and V. Tallapragada, 2019: NCEP HMON-based hurricane ensemble forecast system, WMO WGNE blue book 2019, Section 5, p15. http://bluebook.meteoinfo.ru/uploads/2019/docs/05_Wang_Weiguo_HMON.pdf.

Wang, W., B. Liu, Z. Zhang, L. Zhu, A. Mehra, and V. Tallapragada, 2019: Comparisons of high-resolution simulations of tropical cyclones with a single domain and nested domains, WMO WGNE blue book 2019, Section 3, p11. http://bluebook.meteoinfo.ru/uploads/2019/docs/05_Zhang_Zhan_HWRF.pdf.

Zhang, Z., W. Wang, L. Zhu, B. Liu, K. Wu, A. Mehra, and V. Tallapragada, 2019: NCEP HWRP-based Hurricane Ensemble Prediction System. WMO WGNE blue book 2019, Section 5, P17. http://bluebook.meteoinfo.ru/uploads/2019/docs/05_Zhang_Zhan_HWRF.pdf.

Publications in print

Alvey, G. R. III, E. Zipser, and J. Zawislak, 2020: How does Hurricane Edouard (2014) evolve toward symmetry before rapid intensification? A Cloud-resolving ensemble study. *J. Atmos. Sci.*

Bhalachandran, S., D. R. Chavas, F. D Marks Jr., S. Dubey, A. Shreevastava, and T. N. Krishnamurti, 2020: Characterizing the energetics of vortex-scale and sub-vortex-scale asymmetries during tropical cyclone rapid intensity changes. *J. Atmos. Sci.*

Cione, J. J., G. H. Bryan, R. Dobosy, J. A. Zhang, G. D. Boer, A. Aksoy, J. B. Wadler, E. A. Kalina, B. A. Dahl, K. Ryan, J. Neuhaus, E. Dumas, F. D. Marks, A. M. Farber, T. Hock, and X. Chen, 2020: Eye of the storm: Observing hurricanes with a small Unmanned Aircraft System. *Bull. Amer. Met. Soc.*

Fischer, M., R. Rogers, and P. Reasor, 2020: The rapid intensification and eyewall replacement cycles of Hurricane Irma (2017). *Mon. Wea. Rev.*

Rupert J. and X. Chen, 2020: Island Rainfall Enhancement in the Maritime Continent, *Geophys. Res. Lett.*

Rupert J., X. Chen, and F. Zhang, 2020: Diurnal Gravity Waves and Rectification of Mean Circulation in the Maritime Continent, *J. Atmos. Sci.*

Wick, G. A., J. P. Dunion, P. G. Black, J. R. Walker, R. D. Torn, A. Aksoy, H. Christophersen, L. Cucurull, B. Dahl, J. M. English, K. Friedman, A. C. Kren, T. R. Peevey, K. Sellwood, J. A. Sippel, V. Tallapragada, J. Taylor, R. E. Hood, and P. Hall, 2020: NOAA's Sensing Hazards with Operational Unmanned Technology (SHOUT) Experiment. *Bull. Amer. Met. Soc.*

Zawislak, J., 2020: Global survey of precipitation properties observed during tropical cyclogenesis and their differences compared to nondeveloping disturbances. *Mon. Wea. Rev.*

Zhao, Z, P. W. Chan, N. Wu, J. A. Zhang, and K. K. Hon, 2020: Aircraft observations of turbulent characteristics in the tropical cyclone boundary layer. *Bound. Layer Meteor.*

Publications accepted with revision

Aberson, S. D. and J. Kaplan. The relationship between the Madden-Julian Oscillation and hurricane rapid intensification. *Wea. Forecast.*

Biswas, M. K., J. A. Zhang, E. Grell, E. Kalina, K. Newman, L. Bernardet, L. Carson, J. Frimel and G. Grell. Evaluation of the Grell-Freitas convective scheme in the Hurricane Weather Research and Forecasting (HWRF) model. *Wea. Forecast.*

Fan, S., B. Zhang, A. Mouche, W. Perrie, and J. A. Zhang. Tropical cyclone wind direction estimation for C-band Dual-Polarization Synthetic Aperture Radar. *IEEE Trans. Geos. Rem. Sens.*

Fitzpatrick, P., Y. Lau, G. Alaka, and F. Marks. A multi-metric ranking technique for comparing forecast products applied to 2017 Atlantic tropical cyclone guidance. *Wea. Forecast.*

Guimond, S. D., P. D. Reasor, G. M. Heymsfield, and M. M. McLinden. Vortex Rossby wave dynamics in hurricane Matthew (2016): New insights on storm structure change from remote sensing measurements. *J. Atmos. Sci.*

Hazelton, A., X. Zhang, S. Gopalakrishnan, F. Marks, W. Ramstrom, and J. Zhang. High-resolution ensemble HFV3 forecasts of Hurricane Michael (2018): Rapid intensification in moderate to strong shear. *Mon. Wea. Rev.*

Ming, J., J. A. Zhang, and X. Cai. Observed difference of drag coefficient in tropical cyclones between the Western Pacific and Atlantic Oceans. *J. Appl. Meteor. Clim.*

Patel, P., K Ankur, N. K. R. Busireddy, S. Jamshidi, A. Tiwari, S. Safaee, S. Karmakar, S. Ghosh, K. K. Osuri, V. Merwade, D. Aliaga, J. Smith, F. Marks, and D. Niyogi. Impact of urban parameterization on simulation of hurricane rainfall. *Geophys. Res. Lett.*

Rogers, R. F., J. A. Zawislak, P. D. Reasor, and L. T. Nguyen. The intensification of a weak tropical cyclone in moderate vertical shear. *Mon. Wea. Rev.*

Subramanian, S., G. S. Gopalakrishnan, R. Tuleya, and D. Niyogi. Impact of antecedent land state on post landfall tropical cyclone sustenance. *Nat. Sci. Rep.*

Sun, Z., B. Zhang, J. A. Zhang, and W. Perrie. Examination of surface wind asymmetry in tropical cyclones over the North West Pacific Ocean using SMAP observations. *Rem. Sens.*

Tymochko, S., E. Munch, J. Dunion, K. Corbosiero, and R. Torn. Using persistent homology to quantify a diurnal cycle in Hurricane Felix. *Pattern Recog. Lett.*

Publications under review

Aberson, S. D., Serial correlation of tropical cyclone track and intensity forecasts. *Wea. Forecast.*

Alford, A. A., J. A. Zhang, M. I. Biggerstaff, P. Dodge, F. D. Marks, and D. J. Bodine. Transition of the hurricane boundary layer during the landfall of Hurricane Irene (2011). *J. Atmos. Sci.*

Balaguru, K., G. F. Foltz, L.R. Leung, J. Kaplan, W. Xu, N. Reul and B. Chapron. Pronounced impact of salinity on rapidly intensifying Atlantic hurricanes. *Bull. Amer. Met. Soc.*

Chan M., F. Zhang, X. Chen, and L. R. Leung. Impacts of Assimilating All-sky Satellite Infrared Radiances on Convection-Permitting Analysis and Prediction of Tropical Convection, *Mon. Wea. Rev.*

Chen, X., J. Zhang, F. D. Marks, R. F. Rogers, and J. J. Cione. Precipitation Symmetrization and Rapid Intensification of Tropical Cyclones in Shear. *J. Atmos. Sci.*

Chen, X., Y. Lu, E. E. Clothiaux, F. Zhang, M. Xue, S-J. Lin, L. M. Harris, M. Mori, and Y. Sun. Sensitivity of Convection-Permitting Tropical Cyclone Forecasts to Initial Conditions and Model Physics in a Global-to-Regional Nested FV3-based Model, *Weather and Forecasting*.

Ji, Y., K. Zhao, X. Chen, A. Huang, and Y. Zheng. The diurnal cycle of lightning and storms over Yangtze-Huaihe River Basin, China, *J. Climate*.

Klotz, B. W., and H. Jiang. Examination of surface wind asymmetries in tropical cyclones: Part II: Intensity change. *Adv. Meteor.*

Kren, A. C., L. Cucurull, and H. Wang. Addressing sensitivity of forecast impact to flight path design through combined objective ensemble transform sensitivity and meteorological reasoning: A demonstration in an OSSE framework. *Meteor. Appl.*

Li, Y., P. Zhu, Z. Gao, and K. Cheung. Sensitivity of large eddy simulations of tropical cyclone to sub-grid scale mixing parameterization. *J. Adv. Model. Earth Syst.*

Mueller, M. J., A. C. Kren, L. Cucurull, R. N. Hoffman, R. Atlas, and T. R. Peevey. Impact of refractivity profiles from a proposed GNSS-RO constellation on tropical cyclone forecasts in a global modeling system. *Mon. Wea. Rev.*

Ou, T., D. Chen, X. Chen, C. Lin, K. Yang, H. Lai, and F. Zhang. Regional simulation of summer precipitation diurnal cycle over the Tibetan Plateau at gray-zone grid spacing, under review at *Climate Dynamics*.

Wadler, J. B., D. S. Nolan, J. A. Zhang, and L. K. Shay. Thermodynamic characteristics of downdrafts in tropical cyclones as seen in idealized simulations of different intensities. *J. Atmos. Sci.*

Wang, X., H. Jiang, X. Li, and J. A. Zhang. Observed shear-relative rainfall asymmetries associated with landfalling tropical cyclones. *Atmos. Res.*

Wu, D., F. Zhang, X. Chen, A. Ryzhkov, K. Zhao, M. R. Kumjian, X. Chen and P.-K. Chan. Evaluation of microphysics schemes in tropical cyclones using polarimetric radar observations: Convective precipitation in outer rainband, *Mon. Wea. Rev.*

Zhu, L., X. Chen, and L. Bai. Relative Roles of Low-level Wind Speed and Moisture in the Diurnal Cycle of Rainfall over a Tropical Island under Monsoonal Flows, under review at *Geophys. Res. Lett.*

To Be Submitted for Review

Chen, X., R. G. Nystrom, C.A. Davis, and C. Zarzycki. Dynamical Structures of Cross-Domain Forecast Error Covariance of Tropical Cyclone in a Convection-Permitting Coupled Atmosphere-Ocean Model, in preparation for submission.

Domingo R., M. LeHenaff, G. Halliwell, J. Zhang, F. Bringas, P. Chardon, H-S. Kim, J. Morell, and G. Goni. The Impact of the Ocean Conditions on the Intensification and Forecasts of three Major Atlantic Hurricanes from 2017, to be submitted to JGR-Ocean.

Wang, W., B. Liu, L. Zhu, Z. Zhang, A. Mehra, V. Tallapragada. A new horizontal mixing-length formulation for the simulations of tropical cyclones, to be submitted to MWR.

Zhang, Z., J. A. Zhang, K. Wu, A. Mehra, and V. Tallapragada. A Statistical Analysis of High Frequency Track and Intensity Forecasts from NOAA's Operational Hurricane Weather Research and Forecasting Model (HWRF), to be submitted to MWR.

Presentations & Posters

2019

Blake, E., 2019: NHC's analysis and forecasting challenges. 2019 HFIP Annual Review Meeting, Miami, FL. http://hfip.org/events/annual_meeting_nov_2019/docs/1_230PM_Blake_hfip_2019.pdf

Cangialosi, J., 2019: Current forecast capabilities – NHC Verification. 2019 HFIP Annual Review Meeting, Miami, FL. http://hfip.org/events/annual_meeting_nov_2019/docs/1_210PM_Cangialosi_NHC_Verification.pdf

Chen, X., 2019: Coupled Air-Sea Modeling and Data Assimilation for Improving Tropical Cyclone Prediction, 18th Conference on Mesoscale Processes, Savannah, GA.

Chen, X., 2019: Regional simulation and Isentropic Analysis of Indian summer monsoon intraseasonal oscillations, Second ADAPT Symposium on Advanced Understanding, Monitoring and Prediction of Weather, Climate and Environmental systems, The Pennsylvania State University, State College, Pennsylvania.

Chen, X., 2019: Analysis, Prediction and Predictability of Weather and Climate at the Subseasonal to Seasonal Timescales, The Pennsylvania State University, State College, Pennsylvania (Colloquium Talk).

Chen, X., 2019: An Energetic Perspective of Hurricane Patricia (2015) as a Heat Engine through Isentropic Analysis, 99th AMS Annual Meeting, Phoenix, Arizona.

Chen, X., 2019: Impacts of sea surface temperatures on 2017 hurricanes, 99th AMS Annual Meeting, Phoenix, Arizona.

Chen, X., 2019: MJO Affects the Monsoon Onset Timing over the Indian Region, 99th AMS Annual Meeting, Phoenix, Arizona.

DeMaria, M., 2019: W-TCM Project Overview. 2019 NOAA Hurricane Conference, Miami, FL.

DeMaria, M. and J.L. Franklin, 2019: HFIP Performance Measures for Rapid Intensification. 2019 HFIP Annual Review Meeting, Miami, FL. http://hfip.org/events/annual_meeting_nov_2019/docs/2_0900AM_DeMaria.pdf

Domingues R., P. Chardon-Maldonado, R. E. Todd, G. Halliwell, H-S. Kim, I-I Lin, L. K. Shay, T. Miles, S. Glenn, J. A. Zhang, S. R. Jayne, L. Centurioni, M. Le Hénaff, G. R. Foltz, F. Bringas, MM. Ali, S. F. DiMarco1, B. LaCour, A. Mehra, E. S. Sanabia, J. Dong, J. A. Knaff, G. Goni, 2019: Ocean Observations in Support of Studies and Forecasts of Tropical Cyclones, OCEAN OBS19, Hawaii.

Franklin, J.L., 2019: Operational Applications and Ensemble Products. 2019 HFIP Annual Review Meeting, Miami, FL. http://hfip.org/events/annual_meeting_nov_2019/docs/1_310PM_Franklin.pdf

Zelinsky, D.A., 2019: Post-Processing and Verification (PPAV) Team Update. 2019 HFIP Annual Review Meeting, Miami, FL. http://hfip.org/events/annual_meeting_nov_2019/docs/1_330PM_Zelinsky_PPAV_update.pdf

2020

Aristizabal M. F., H-S. Kim, T. N. Miles, S. M. Glenn and A. Mehra, 2020: Evaluation of the Ocean Initial Conditions and Evolution of the Ocean Mixed Layer Temperature on the HWRF-POM Forecasting Model during Hurricane Dorian. Ocean Sciences Meeting 2020, Feb 21, 2020.

Chen, X., 2020: Development of a Convection-Permitting Air–Sea Coupled Ensemble Data Assimilation System for Tropical Cyclone Prediction, 100th American Meteorological Society Annual Meeting, Boston, MA.

Chen, X., 2020: Potential for Parameter Estimation of Tropical Cyclone Air-sea Enthalpy and Momentum Exchange Coefficients through Ensemble Data Assimilation, 100th American Meteorological Society Annual Meeting, Boston, MA.

Chen, X., 2020: Diurnal Forcing and Phase Locking of Gravity Waves in the Maritime Continent, 100th American Meteorological Society Annual Meeting, Boston, MA.

Chen, X., 2020: Potential Impacts of Assimilating All-sky Satellite Infrared Radiances on Convection-Permitting Analysis and Prediction of Tropical Convection, 100th American Meteorological Society Annual Meeting, Boston, MA.

Chen, X., 2020: Modulations of the Diurnal Cycle of Coastal Rainfall over South China Caused by the Boreal Summer Intraseasonal Oscillation, 100th American Meteorological Society Annual Meeting, Boston, MA.

Dong J., B. Liu, Z. Zhang, W. Wang, L. Zhu, C. Zhang, K. Wu, A. Hazelton, X. Zhang, A. Mehra, and V. Tallapragada, 2020: Hurricane Analysis and Forecast System (HAFS) Stand-Alone Regional Model (SAR) 2019 Atlantic Hurricane Season Real-Time Forecasts. 2020 AMS annual meeting, Boston, Jan. 15 2020.

Hazelton A., Z. Zhang, J. Dong, B. Liu, W. Wang, G. J. Alaka Jr., X. Zhang, C. Zhang, L. Zhu, K. Wu, S. Gopalakrishnan, F. Marks, A. Mehra, and V. Tallapragada, 2020: The Global-Nested Hurricane Analysis and Forecast System (HAFS): Results from the 2019 Atlantic Hurricane Season: 2020 AMS annual meeting, Boston, Jan. 15 2020

Kim H-S., B. Liu, T. Spindler, A. Mehra, and V. Tallapragada, 2020: Interruptions in the Gulf Stream - Oceanic local and remote response to Hurricane Dorian (2020), at Ocean sciences meeting 2020, San Diego, Feb 21.

Kim H-S., B. Liu, J. Meixner, B. Thomas, D. Sheinin, A. Wallcraft, A. Mehra and V. Tallapragada, 2020: NCEP HWRF-HYCOM_WW3 Forecast System: Sensitivity Study - Hurricane Michael 2018. Ocean Sciences Meeting 2020, Feb 19.

Kim H.S., and A. Mehra, 2020: HFIP-IFEX Hurricane Dorian De-brief: Ocean Responses, at AOML HRD, Jan 30, 2020.

Henaff, M. L., R. M. Domingues, G. J. Goni, G. R. Halliwell Jr, F. Bringas, H-S. Kim, J. Dong, A. Mehra and V. Tallapragada, 2020: Impact of ocean conditions on hurricane development and forecast: examples of Hurricanes Maria (2017) and Michael (2018). Ocean Sciences Meeting 2020, San Diego, Feb 19, 2020.

Wang W., B. Liu, L. Zhu, Z. Zhang, A. Mehra, and V. Tallapragada, 2020: A flow-dependent horizontal mixing length scale and its impact on track simulations of Harvey (2017) in HWRF. AMS 2020 annual meeting. Boston, MA, Jan, 2020

Zhang Z., W. Wang, L. Zhu, B. Liu, K. Wu, A. Mehra, and V. Tallapragada: 2020: Application of a sub-setting Ensemble Post-processing Method on HWRF based ensemble Prediction System.