# **Recent Publications**

(Alphabetized by lead author; EMC Federal authors in black boldface, EMC Contractor authors in red boldface; full author affiliations listed in the articles)

#### 2021

**Abdolali, A., Van Der Westhuysen, A., Ma, Z., Mehra, A.,** Roland, A., and Moghimi, S., 2021: Evaluating the accuracy and uncertainty of atmospheric and wave model hindcasts during severe events using model ensembles. *Ocean Dynamics*, **71**, 19 pp. <a href="https://doi.org/10.1007/s10236-020-01426-9">https://doi.org/10.1007/s10236-020-01426-9</a> or <a href="https://rdcu.be/cdfjB">https://rdcu.be/cdfjB</a>

**Carley, J. R.**, M. Matthews, **M. T. Morris**, **M. S. F. V. De Pondeca**, J. Colavito, and **R. Yang**, 2021: Variational assimilation of web camera-derived estimates of visibility for Alaska aviation. *Experimental Results*, **2**, e14. http://dx.doi.org/10.1017/exp.2020.66

Hazelton, A., **Z. Zhang, B. Liu, J. Dong**, G. Alaka, **W. Wang**, T. Marchok, **A. Mehra**, S. Gopalakrishnan, X. Zhang, M. Bender, **V. Tallapragada**, and F. Marks, 2021: 2019 Atlantic Hurricane Forecasts from The Global-Nested Hurricane Analysis and Forecast System: Composite Statistics and Key Events. *Wea. Forecasting*, **36**, <a href="https://doi.org/10.1175/WAF-D-20-0044.1">https://doi.org/10.1175/WAF-D-20-0044.1</a>

Qian, W.H., **J. Du**, and Y. Ai, 2021: A Review: anomaly-based versus full-field based weather analysis and forecasting. *Bull. Amer. Meteor. Soc*, **102**, DOI: <a href="https://doi.org/10.1175/BAMS-D-19-0297.1">https://doi.org/10.1175/BAMS-D-19-0297.1</a>

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Wang, W., B. Liu, L. Zhu, Z. Zhang, A. Mehra, and V. Tallapragada, 2021: A New Horizontal Mixing-Length Formulation for Numerical Simulations of Tropical Cyclones. *Wea. Forecasting*, **36**, https://doi.org/10.1175/WAF-D-20-0134.1

# 2020

Abdolali, A., Roland, A., Van Der Westhuysen, A., Meixner, J., Chawla, A., Hesser, T., Smith, J.M. and M. Dutour Sikiric, 2020, Large-scale Hurricane Modeling Using Domain Decomposition Parallelization and Implicit Scheme Implemented in

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