# **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)

## 2022

Hamill, T., Whitaker, J. S., Shlyaeva, A., Bates, G., Fredrick, S., Pegion, P., Sinsky, E., Zhu, Y., Tallapragada, V., Guan, H., Zhou, X., and Woollen, J. (2021). The Reanalysis for the Global Ensemble Forecast System, version 12. *Mon. Wea. Rev.*, <a href="https://doi.org/10.1175/MWR-D-21-0023.1">https://doi.org/10.1175/MWR-D-21-0023.1</a>

## 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>

**Belochitski, A., and V. Krasnopolsky**, 2021: Robustness of neural network emulations of radiative transfer parameterizations in a state-of-the-art general circulation model. *Geosci. Model Dev.*, **14**, 7425–7437, 2021. https://doi.org/10.5194/gmd-14-7425-2021

Black, T. L., J. A. Abeles, B. T. Blake, D. Jovic, E. Rogers, X. Zhang, E. A. Aligo, L. C. Dawson, Y. Lin, E. Strobach, P. C. Shafran, and J. R. Carley, 2021: A Limited Area Modeling Capability for the Finite-Volume Cubed-Sphere (FV3) Dynamical Core and Comparison with a Global Two-Way Nest. *Journal of Advances in Modeling Earth Systems*, 13(6), https://doi.org/10.1029/2021MS002483

Boukabara, S., **Krasnopolsky, V.**, Penny, S. G., Stewart, J. Q., McGovern, A., Hall, D., Ten Hoeve, J. E., Hickey, J., Allen Huang, H., Williams, J. K., Ide, K., Tissot, P., Haupt, S. E., Casey, K. S., Oza, N., Geer, A. J., Maddy, E. S., and Hoffman, R. N., 2021: Outlook for Exploiting Artificial Intelligence in the Earth and Environmental Sciences, *Bull. Amer. Meteor. Soc.*, **102**, E1016-E1032. <a href="https://doi.org/10.1175/BAMS-D-20-0031.1">https://doi.org/10.1175/BAMS-D-20-0031.1</a>

Brus, S. R., Wolfram, P.J., Van Roekel, L.P., and **Meixner, J.D.**, 2021: Unstructured global to coastal wave modeling for the Energy Exascale Earth System Model using WAVEWATCH III version 6.07. *Geosci. Model Dev.*, **14**, 2917-2938. <a href="https://doi.org/10.5194/gmd-14-2917-2021">https://doi.org/10.5194/gmd-14-2917-2021</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. <a href="http://dx.doi.org/10.1017/exp.2020.66">http://dx.doi.org/10.1017/exp.2020.66</a>
- Fan, Y., **V. Krasnopolsky**, H. van den Dool, C.-Y. Wu, and J. Gottschalck, 2021: Using Artificial Neural Networks to Improve CFS Week 3-4 Precipitation and 2-Meter Air Temperature Forecasts. *Wea. Forecasting*, **36**, <a href="https://doi.org/10.1175/WAF-D-20-0014.1">https://doi.org/10.1175/WAF-D-20-0014.1</a>
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