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Investigating Anomalies in the Output Generated by the Weather Research and Forecasting (WRF) Model NICHOLAS DECICCO, JOSEPH TROUT, J. RUSSELL MANSON, Richard Stockton College of NJ, MANNY RIOS, Federal Aviation Administration (FAA), DAVID KING, Richard Stockton College of NJ — The Weather Research and Forecasting (WRF) model is an advanced mesoscale numerical weather prediction (NWP) model comprised of two numerical cores, the Numerical Mesoscale Modeling (NMM) core, and the Advanced Research WRF (ARW) core. An investigation was done to determine the source of erroneous output generated by the NMM core. In particular were the appearance of zero values at regularly spaced grid cells in output fields and the NMM core's evident (mis)use of static geographic information at a resolution lower than the nesting level for which the core is performing computation. A brief discussion of the high-level modular architecture of the model is presented as well as methods utilized to identify the cause of these problems. Presented here are the initial results from a research grant, "A Pilot Project to Investigate Wake Vortex Patterns and Weather Patterns at the Atlantic City Airport by the Richard Stockton College of NJ and the FAA"

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