



**Dear Representative,**

On behalf of the National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS), National Centers for Environmental Prediction (NCEP), and the Environmental Modeling Center (EMC) Regional Air Quality Modeling team, I am writing to express our strong support for the proposal entitled: “Advancing JEDI-Based Chemical Data Assimilation and Emission Inversion to Improve the National Air Quality Forecast Capability.”

NOAA/NWS/NCEP/EMC, in partnership with Dr. Youhua Tang’s team at George Mason University (GMU), has a long-standing history of collaboration focused on enhancing the National Air Quality Forecasting Capability (NAQFC) and providing critical numerical guidance for air quality forecasting across the nation. This collaboration includes initiatives such as the development and refinement of the Unified Forecast System (UFS)-based online air quality prediction system, data assimilation, and emissions modeling.

Dr. Tang’s proposal aligns closely with NOAA’s mission to advance air quality forecasting by leveraging innovative approaches to improve the simulation of air quality processes, enhance initial condition constraints, increase model accuracy, and refine air quality forecast products. If funded, EMC will collaborate closely with Dr. Tang’s team, though our contributions will not involve direct funding support for activities at EMC.

Our potential collaborative efforts may include:

- Providing updates and guidance on the use of NOAA’s UFS-based online air quality prediction system.
- Supplying baseline data and model inputs, such as fire emissions and restart files from operational models like AQMv7 and the newly developed AQMv8, to support the testing of JEDI-Based Chemical Data Assimilation.
- Preparing and submitting publications and conference presentations to share project outcomes.

These collaborative activities between EMC and GMU will significantly enhance the capabilities of NOAA’s UFS-AQM online systems, improving NAQFC forecast products. We are excited about the prospect of partnering with GMU on developing JEDI-Based Chemical Data Assimilation techniques to further refine NAQFC forecast products, and we strongly support the proposal’s consideration for funding.

Sincerely,

Jianping Huang, Ph.D.

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National Weather Service / National Centers for Environmental Prediction  
Environmental Modeling Center (EMC), Physics and Dynamic Division