Dr. Jianping Huang

5830 University Research Ct

College Park, MD 20740

[jianping.huang@noaa.gov](mailto:jianping.huang@noaa.gov)

November 10, 2021

Dr. Yang Zhang

Department of Civil and Environmental Engineering

Northeastern University 400 Snell Engineering Center,

360 Huntington Avenue

Boston, MA 02115

Dear Dr. Zhang:

I am writing in support of your proposal entitled “Enhancing high resolution forecasting capability of RRFS-CMAQ” to the NOAA WPO. The proposal will enhance the high resolution forecasting capability of RRFS-CMAQ by developing high resolution (3-km) emissions, establishing an offline coupled RRFS-CMAQ as a benchmark for the inline RRFS-CMAQ, and applying and validating offline and inline RRFS-CMAQ over an area in the northeastern U.S. at a 3-km grid resolution using observations from the US EPA’s surface networks and special field campaigns (e.g., FIREX-AQ 2019 and AEROMA 2023).

Should your proposal be funded, I would be happy to collaborate with you to complete the tasks as the project proposed. The collaborative activities may include:

* Providing offline coupled FV3 GRSv16-CMAQ v5.3.1 and a testbed;
* Providing inline coupled RRFS-CMAQ v5.2.1 and a testbed, as well as updated version;
* Provide technical guidance/assistance on the use of the above system and updated version
* Provide feedbacks to your proposed tasks

Sincerely,

Jianping Huang, Ph.D.

Senior Scientist

### I. M. Systems Group Inc. @NOAA/NCEP/Environmental Modeling Center