AQRP Monthly Technical Report

PROJECT TITLE	New Satellite Tools to Evaluate Emission Inventories: Is a 3-D Model Necessary?	PROJECT #	20-020
PROJECT PARTICIPANTS	University of Wisconsin – Madison Ramboll	DATE SUBMITTED	8/21/2020
REPORTING PERIOD	From: July 20, 2020 To: July 31, 2020	REPORT #	1

A Financial Status Report (FSR) and Invoice will be submitted separately from each of the Project Participants reflecting charges for this Reporting Period. I understand that the FSR and Invoice are due to the AQRP by the 15th of the month following the reporting period shown above.

Detailed Accomplishments by Task for reporting period

The Task Order was issued, Project 20-020 was initiated, and work was carried out on Task 1.

Task 1: Simulate NO2 and SO2 amounts with the high-resolution WRF-CAMx model The Ramboll modeling team held initial discussions, began project planning and started developing the 2019 WRF-CAMx modeling platform. As part of this work, Ramboll downloaded and began processing CEM data for 2019.

Task 2. Compare model simulations with TROPOMI and near-surface observations Task 2 has not yet been initiated.

Task 3. Compare satellite data and emissions for power plants and urban areas Task 3 has not yet been initiated.

Task 4. Evaluate mobile emissions assessments performed with and without Task 4 has not yet been initiated.

Preliminary Analysis None.

Data Collected None. **Identify Any Problems or Issues Encountered and Proposed Solutions or Adjustments** None.

Goals and Anticipated Issues for the Succeeding Reporting Period Continue developing 2019 WRF-CAMx modeling platform by processing emissions.

Detailed Analysis of the Progress of the Task Order to Date None.

Do you have any publications related to this project currently under development? If so, please provide a working title, and the journals you plan to submit to.

☐ Yes ⊠ No Do you have any publications related to this project currently under review by a journal? If so, what is the working title and the journal name? Have you sent a copy of the article to your AQRP Project Manager and your TCEQ Liaison?

Do you have any bibliographic publications (ie: publications that cite the project) related to this project that have been published? If so, please list the reference information. List all items for the lifetime of the project.

Do you have any presentations related to this project currently under development? If so, please provide working title, and the conference you plan to present it (this does not include presentations for the AQRP Workshop).

Do you have any presentations related to this project that have been published? If so, please list reference information. List all items for the lifetime of the project.

Have any personnel changes occurred that were not listed in the original proposal? If so, please include a detailed description of the personnel change(s) below.

Are any delays expected in the progress of the research? If so, please include a detailed description of the potential delay below.

Describe any possible concerns/issues (technical or non-technical) that AQRP should be made aware of. None.

Are you anticipating using all the available funds allocated to this project by the end date? If not, why and approximately what is the amount to be returned?

🛛 Yes 🛛 🗆 No

Submitted to AQRP by Jeremiah Johnson

Principal Investigator Tracey Holloway