AQRP Monthly Technical Report

PROJECT TITLE	Texas Urban Vegetation BVOC Emission Source Inventory	PROJECT #	20-007
PROJECT PARTICIPANTS	Ramboll Alex Guenther Wildland Solutions Chris Geron	DATE SUBMITTED	8/10/2020
REPORTING PERIOD	**From:** July 22, 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 20-007 was initiated, and work was carried out on Task 1 and Task 2.

Task 1: High Resolution (8-day, 10-m) LAI and Vegetation Cover Fraction for Urban Texas
Processed Sentinel 10-m resolution 4-band data for 2019 for tile RTP (the northern 50% of the Houston domain) using the SNAP tool. The available data has been quality checked and interpolated to generate 8-day average LAI and vegetation cover for all of 2019.

Task 2. BVOC Emitting Tree Distributions for Three Major Texas Urban Areas
Initiated development of tree key for using aerial imagery and ground observations (using Google Earth and Google Street Map) to identify the dominant Houston, Austin and San Antonio trees. The trees species in the key are the dominant urban trees including all of the high BVOC emitters based on the tree inventories and USDA urban FIA reports available for Houston and Austin. Initial training and evaluation areas in Houston have been selected and trees identified and geolocated.

Task 3. MEGAN and BEIS input data, processors and results
Task 3 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 fine spatial resolution time-varying LAI, total vegetation cover and the relative abundance of high BVOC-emitting trees and other vegetation cover types for three Texas urban areas: San Antonio, Austin and Houston.

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?

☐ Yes ☒ No

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.

☐ Yes ☒ No

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).
☐ Yes ☒ No

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.

☐ Yes ☒ No

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.

☐ Yes ☒ No

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

☐ Yes ☒ No

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   Tejas Shah

Principal Investigator   Tejas Shah