

AQRP Monthly Technical Report

PROJECT TITLE	Incorporating Space-borne Observations to Improve Biogenic Emission Estimates in Texas	PROJECT #	14-017
PROJECT PARTICIPANTS	Arastoo Pour-Biazar; Richard McNider; Daniel Cohan	DATE SUBMITTED	11/10/2014
REPORTING PERIOD	From: October 1, 2014 To: October 31, 2014	REPORT #	6

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

Complete set of surface observations from Soil Climate Analysis Network (SCAN) and NOAA's SURFRAD (Surface Radiation) Network for September 2013 were obtained and preliminary evaluation were performed. **(TASKS 2&3)**

Some of the problems in the preliminary evaluation were corrected. Based on the evaluation results we made few adjustments to the retrieval algorithm and reprocessed the satellite data (first iteration). PAR retrievals for 2006 from the University of Maryland were downloaded. **(TASKS 1&2)**

Preliminary biogenic emissions using MEGAN and satellite PAR were performed and results evaluated. **(TASK 3)**

Preliminary Analysis

Preliminary evaluation work resulted in few adjustments in the PAR retrieval algorithm. New retrievals were produced and evaluated against surface observations. Biogenic emissions estimated by MEGAN using satellite derived PAR is also being evaluated. The results are being compiled for the quarterly report and will be documented in the report.

Data Collected

Previous PAR retrievals for 2006 from the University of Maryland (<http://metosrv2.umd.edu/~srb/gcip/cgi-bin/historic.cgi?auth=no¶meter=par>) were downloaded. New satellite derived PAR for September 2013 and June-July 2011 were produced.

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

Due to the differences in computer system and compilers used, we encountered problems reading UMD binary data. We developed the appropriate code for reading the data.

Goals and Anticipated Issues for the Succeeding Reporting Period

We are in the process of compiling the results to be documented in the quarterly report.

Detailed Analysis of the Progress of the Task Order to Date

Quarterly report will document the satisfactory progress with respect to tasks 1-3. Activities with respect to task 4 is underway.

Arastoo Pour Biazar

Submitted to AQRP by:

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