

## Monthly Technical Report

*(Due to AQRP Project Manager on the 8<sup>th</sup> day of the month following the last day of the reporting period.)*

<b>PROJECT TITLE</b>	Analysis of VOC, NO <sub>2</sub> , SO <sub>2</sub> and HCHO data from SOF, mobile DOAS and MW-DOAS during DISCOVER-AQ,	<b>PROJECT #</b>	14-007
<b>PROJECT PARTICIPANTS</b> (Enter all institutions with Task Orders for this Project)	Chalmers University of Technology University of Houston	<b>DATE SUBMITTED</b>	12/9/14
<b>REPORTING PERIOD</b>	<b>From:</b> November 1, 2014 <b>To:</b> November 30, 2014	<b>REPORT #</b>	4

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 15<sup>th</sup> of the month following the reporting period shown above.

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### **Detailed Accomplishments by Task** *(Include all Task actions conducted during the reporting month.)*

Task 1c) The radiative transfer model has been run for the test data compiled by University of Houston and the results have been qualitatively examined. The resulting air-mass factors will now be applied to the retrieved columns from Task 1b after matching them based on solar angles.

Task 1d) Color indices have been calculated for all spectra in all (zenith) Mobile DOAS measurement series during the campaign and corresponding simulated values have been produced for different aerosol conditions. This allows a cloud filter to be applied as soon as a suitable way of choosing the threshold for the color index is determined. This will be done by testing various schemes and comparing to logged observations and other indicators.

Task 1e) Some progress has been made to compensate for the Mobile DOAS instrumental artifact discovered previously in the project. The effect in terms of evaluated columns appear to be reasonably small in most cases.

### **Preliminary Analysis** *(Include graphs and tables as necessary.)*

NA

**Data Collected** *(Include raw and refine data.)*

NA

**Identify Problems or Issues Encountered and Proposed Solutions or Adjustments**

None

**Goals and Anticipated Issues for the Succeeding Reporting Period**

We will continue with task 1 b and 1 c and 1 e. The data will be finalized and we will start the comparisons to the Discover data. .

**Detailed Analysis of the Progress of the Task Order to Date** *(Discuss the Task Order schedule, progress being made toward goals of the Work Plan, explanation for any delays in completing tasks and/or project goals. Provide justification for any milestones completed more than one (1) month later than projected.)*

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Submitted to AQRP by: \_\_\_\_\_

Principal Investigator: Johan Mellqvist\_\_\_\_\_

*(Printed or Typed)*