

Monthly Technical Report

(Due to AQRP Project Manager on the 8th day of the month following the last day of the reporting period.)

PROJECT TITLE	Analysis of VOC, NO ₂ , SO ₂ and HCHO data from SOF, mobile DOAS and MW-DOAS during DISCOVER-AQ,	PROJECT #	14-007
PROJECT PARTICIPANTS (Enter all institutions with Task Orders for this Project)	Chalmers University of Technology University of Houston	DATE SUBMITTED	5/8/15
REPORTING PERIOD	From: April 1, 2015 To: April 30, 2015	REPORT #	9

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 *(Include all Task actions conducted during the reporting month.)*

Task 1) and 2) All relevant DOAS evaluations have been rerun with HCHO (formaldehyde) cross-sections from [Meller and Moortgat 2000¹] instead of the ones previously used from [Cantrell 1990]. The older ones are believed to be approximately 10 % too weak, thereby producing 10% higher evaluated columns. All DOAS results reported from this project will have used the newer HCHO cross-section.

Task 4a) and 4b) was completed. Work was started on task 4c) Task 4d) was discussed and initiated.

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

¹ Meller, R. and Moortgat, G.K. (2000). Temperature dependence of the absorption cross sections of formaldehyde between 223 and 323 K in the wavelength range 225–375 nm. *Journal of Geophysical Research* 105: doi: 10.1029/1999JD901074. issn: 0148-0227.

None

Goals and Anticipated Issues for the Succeeding Reporting Period

We will continue with task 1 a, 1 b and 1 c and summarize the work that has been done in the Final Draft Report. The work in task 3, comparisons to the Discover data, will go into further detail as this is one of the most important parts still missing for the planned paper. Task 4c) will be finished and task 4d) will have a draft prepared.

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.*)

Submitted to AQRP by: _____

Principal Investigator: Johan Mellqvist_____