Capabilities of Optical Gas Imaging

Tracey L. Footer– Eastern Research Group, Inc.

OGI Stakeholder Workshop
November 10, 2020

Brief Background

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Technical Support Document

Optical Gas Imaging Protocol
(40 CFR Part 60, Appendix K)

Prepared for:

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Air Quality Assessment Division
Measurement Technology Group (E141-03)
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Revision No. 5
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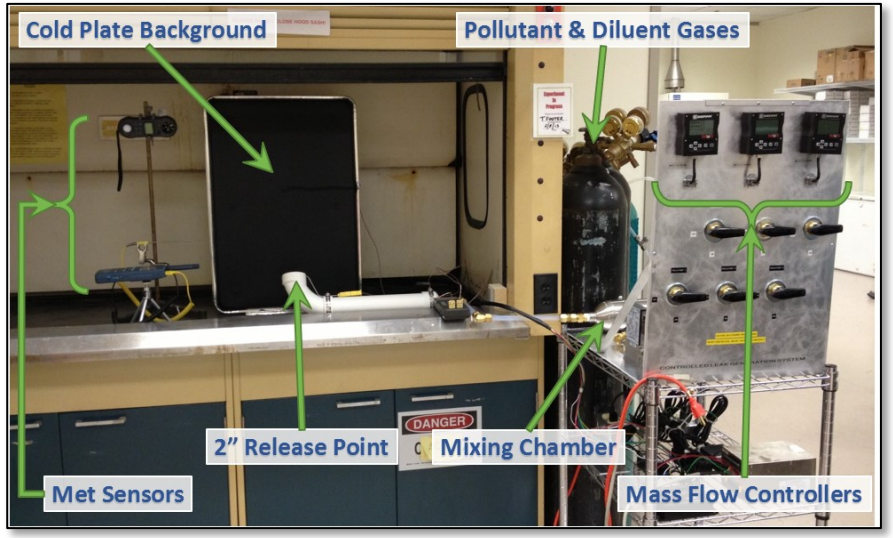
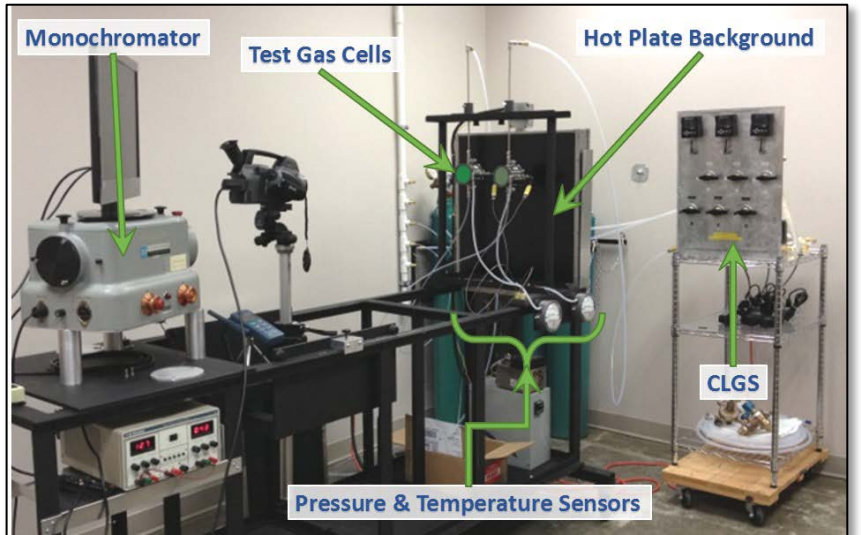
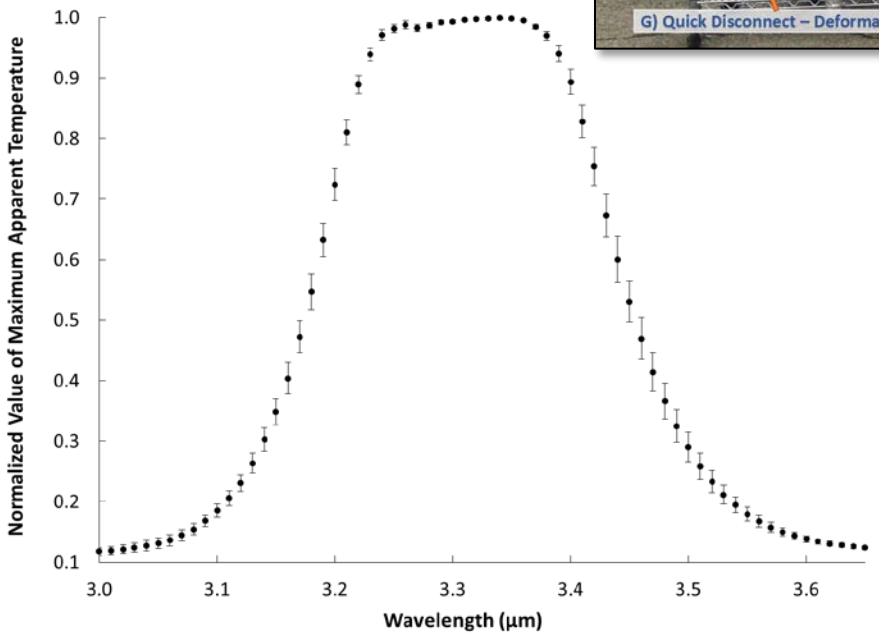
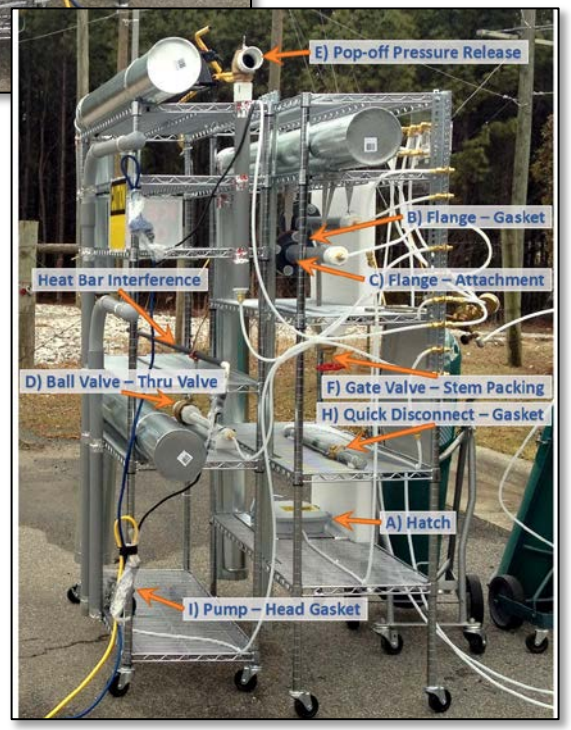
Past Studies





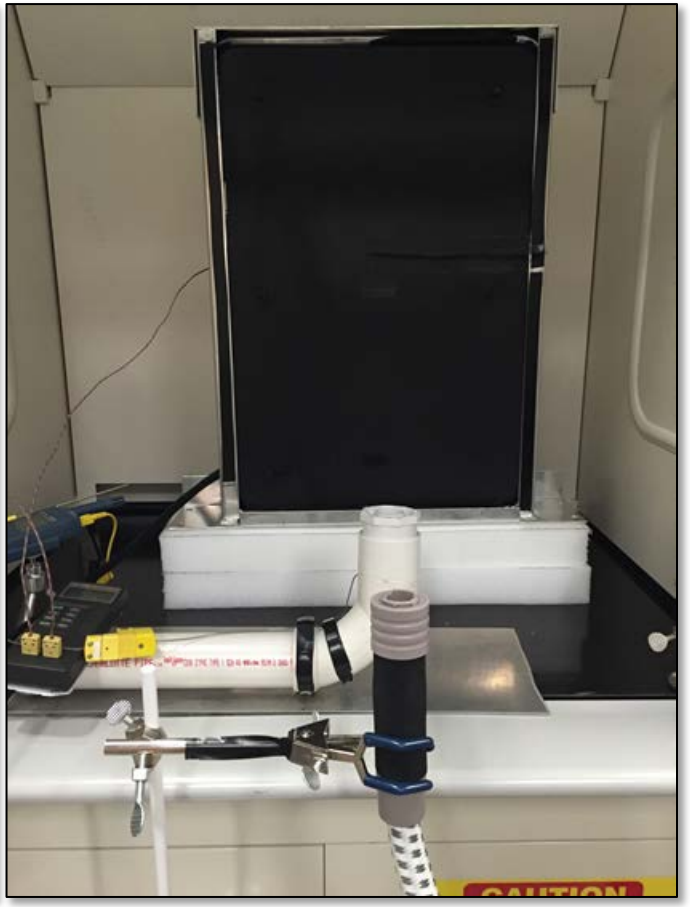




Additional Lab Studies

- Steam Interference
- Thermal Source Interference
- Additional Wind Shear
- Additional Leak Source Exit Velocity (Reynolds Number)
- Temperature Differential Magnitude
- Additional OGI Instrument Spectral Tests
- Additional Gas Sensitivity (Relative Response Factor Validation)
- Sky Background Data Collection
- Non-thermometric Data Reduction

Steam Interference



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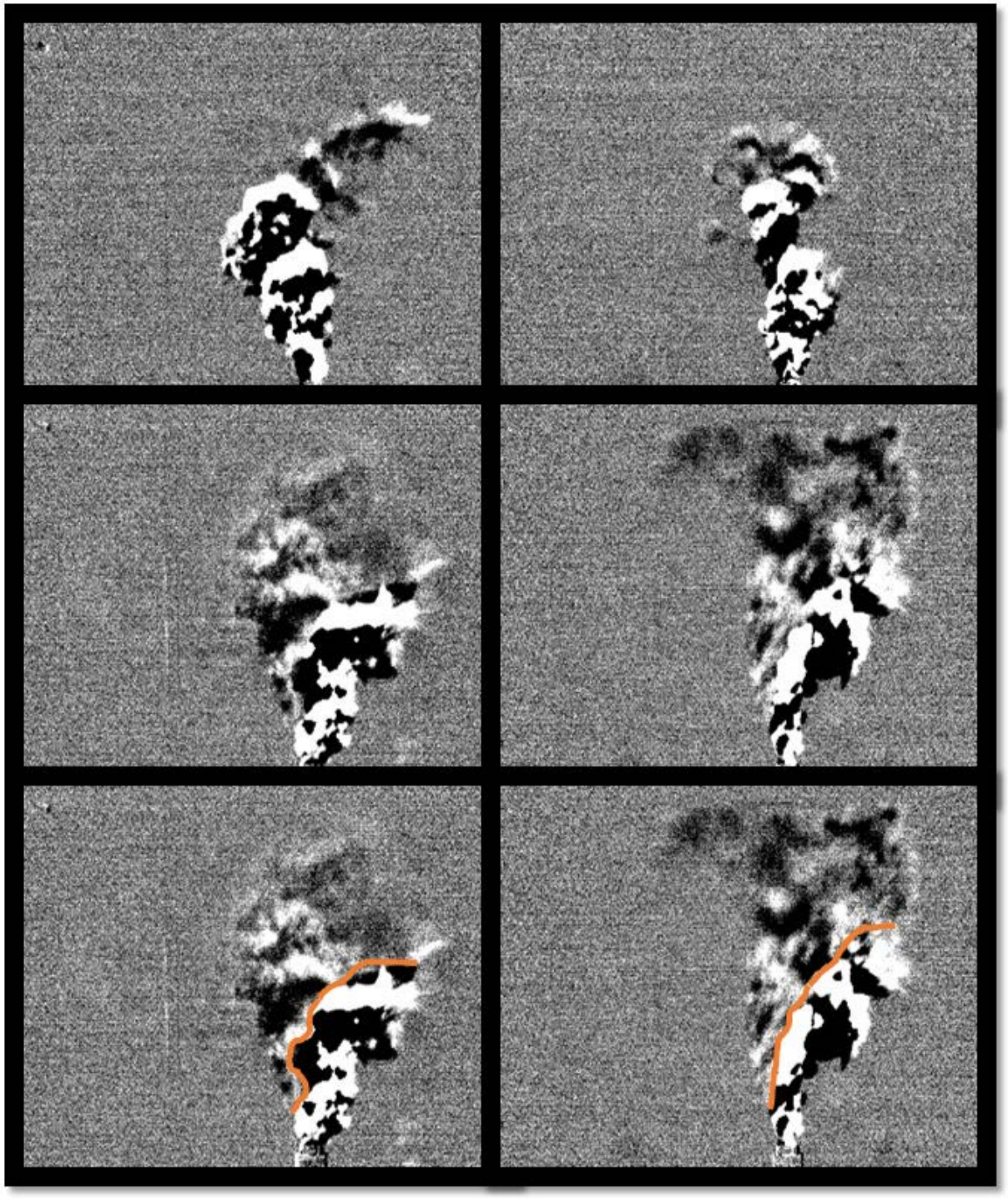

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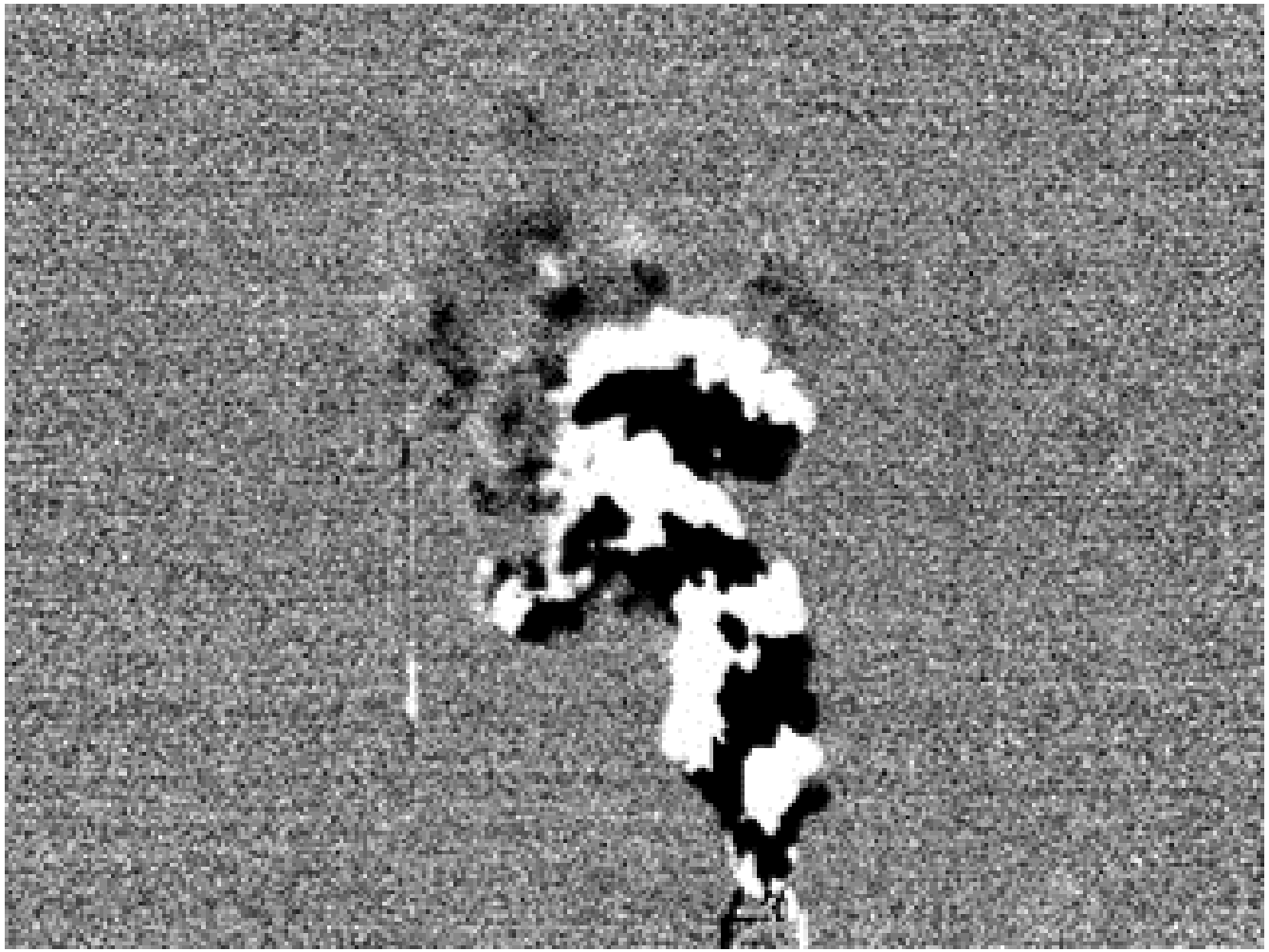
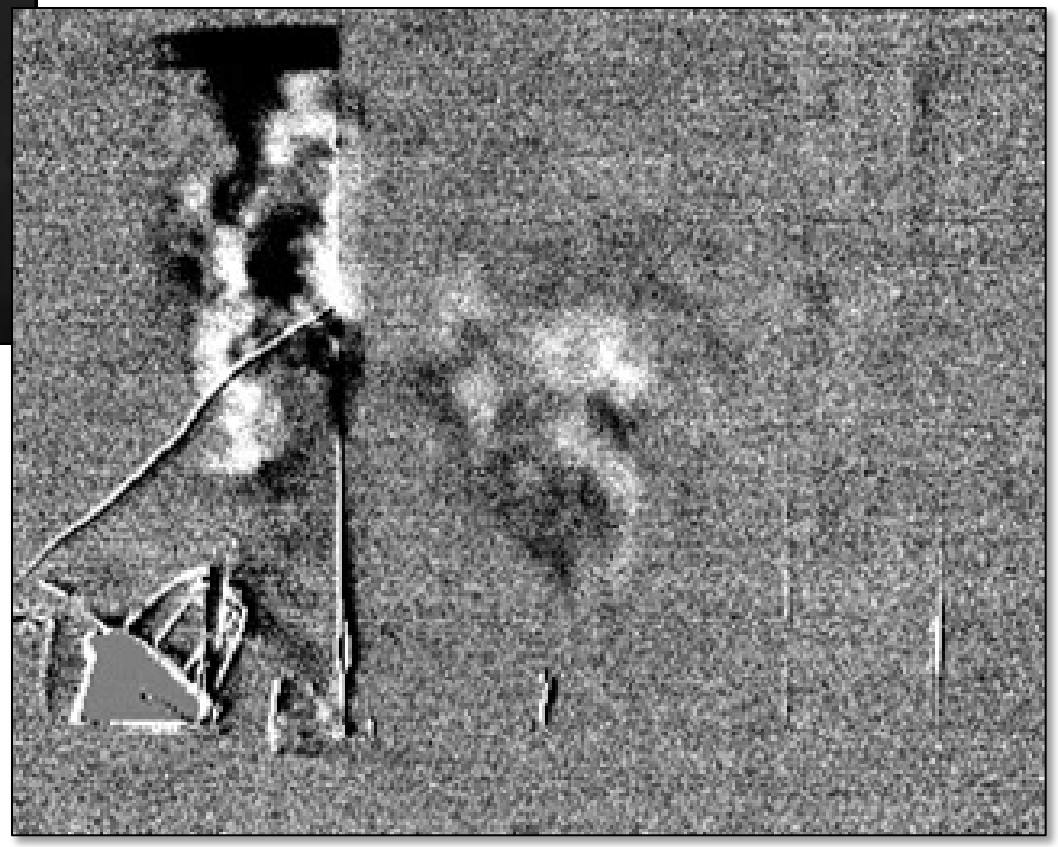


Thermal Interference

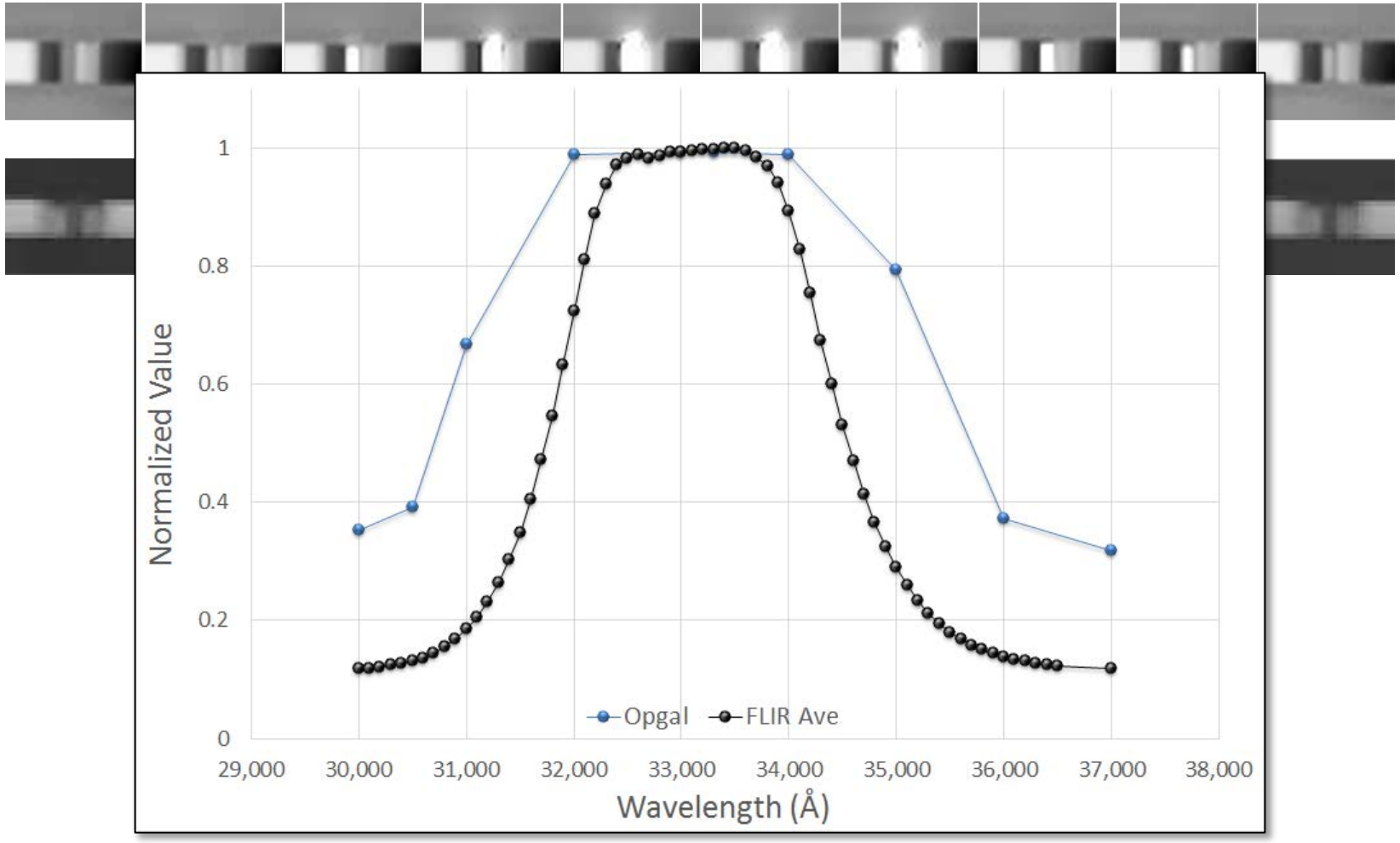
Thermal Interference



Non-Thermometric Data

- Opgal EyeCGas
- IRC Niatros

Non-Thermometric Data



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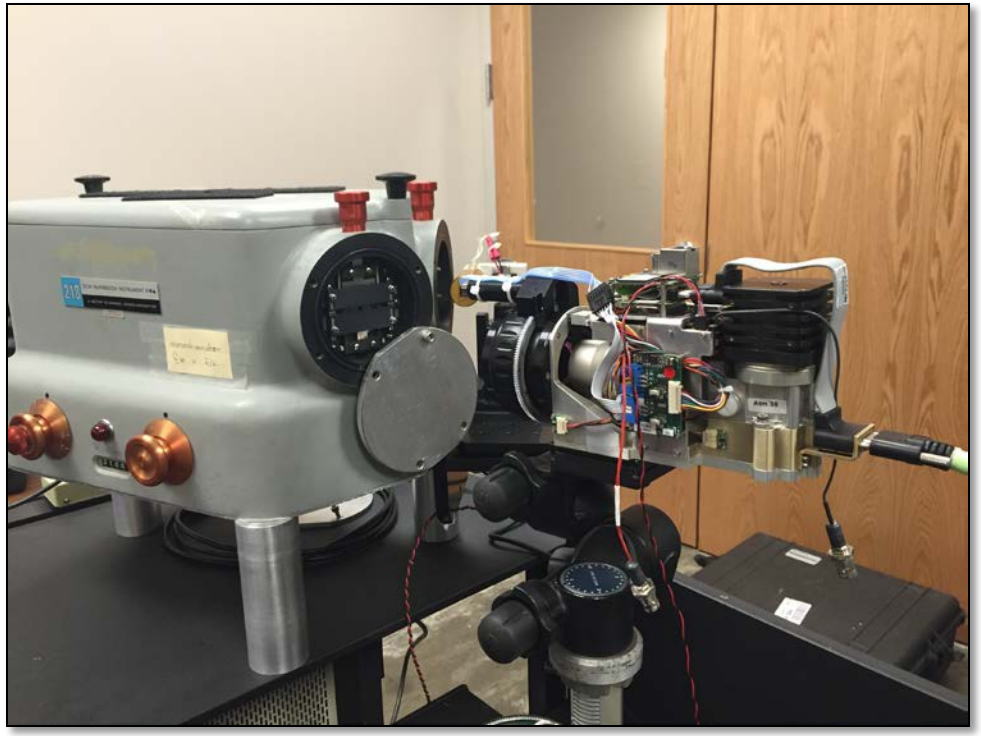
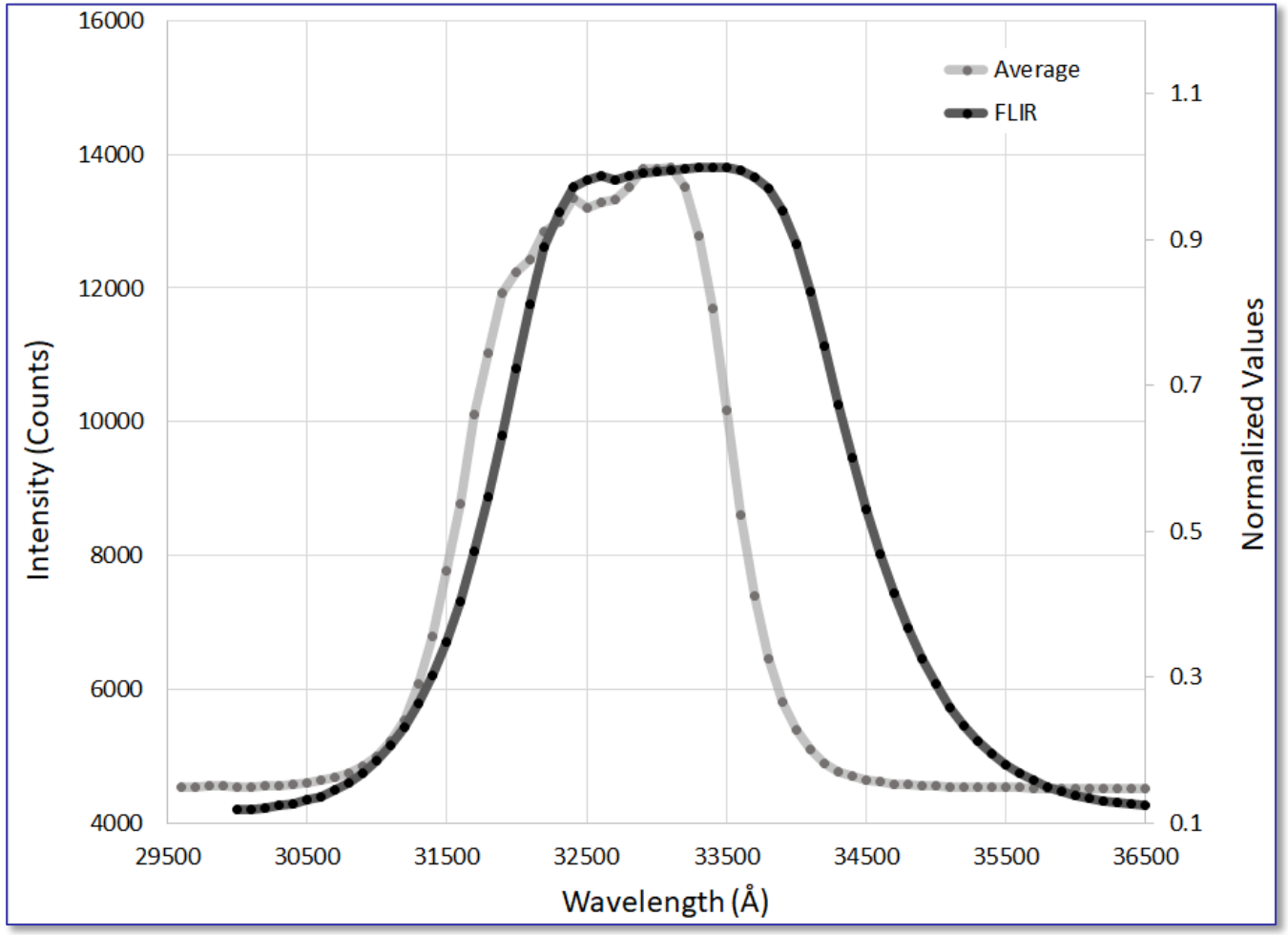
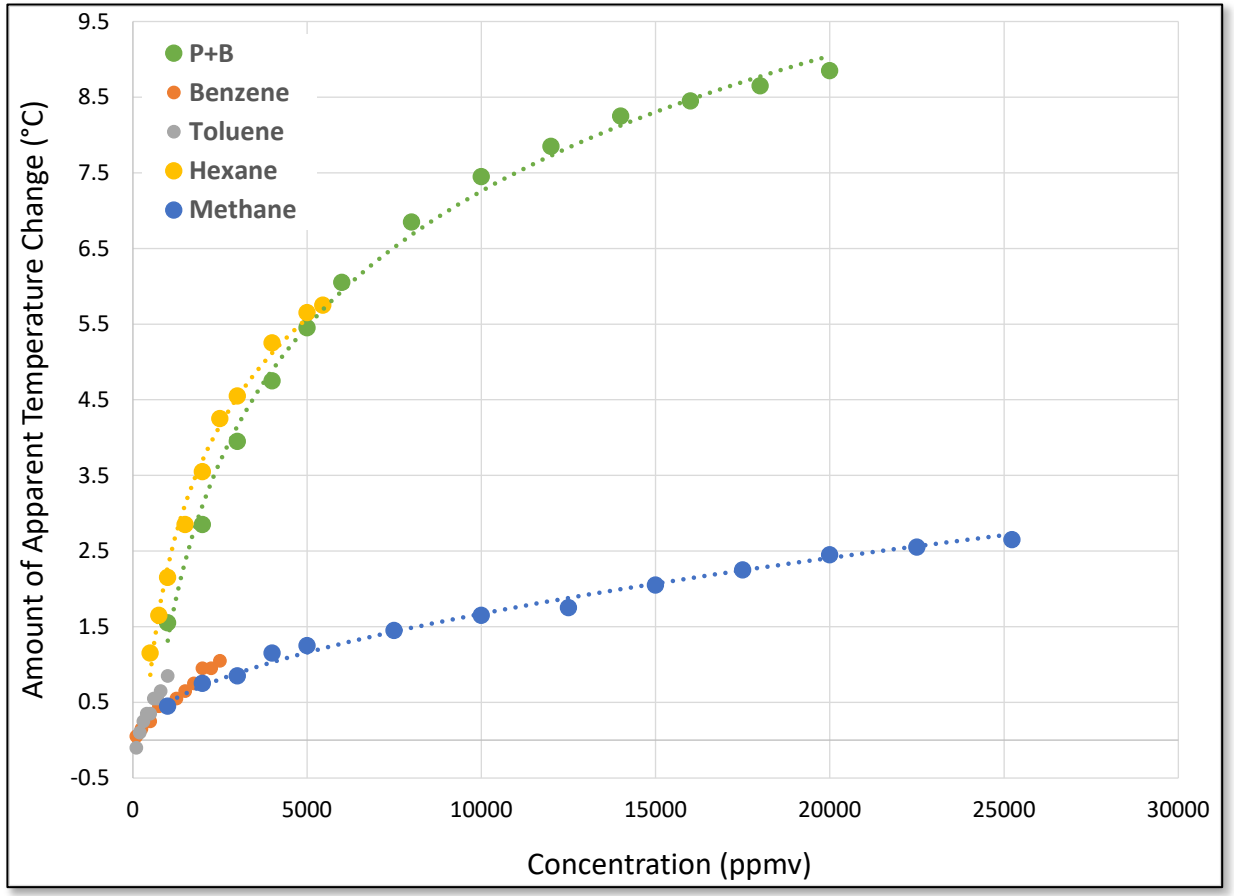
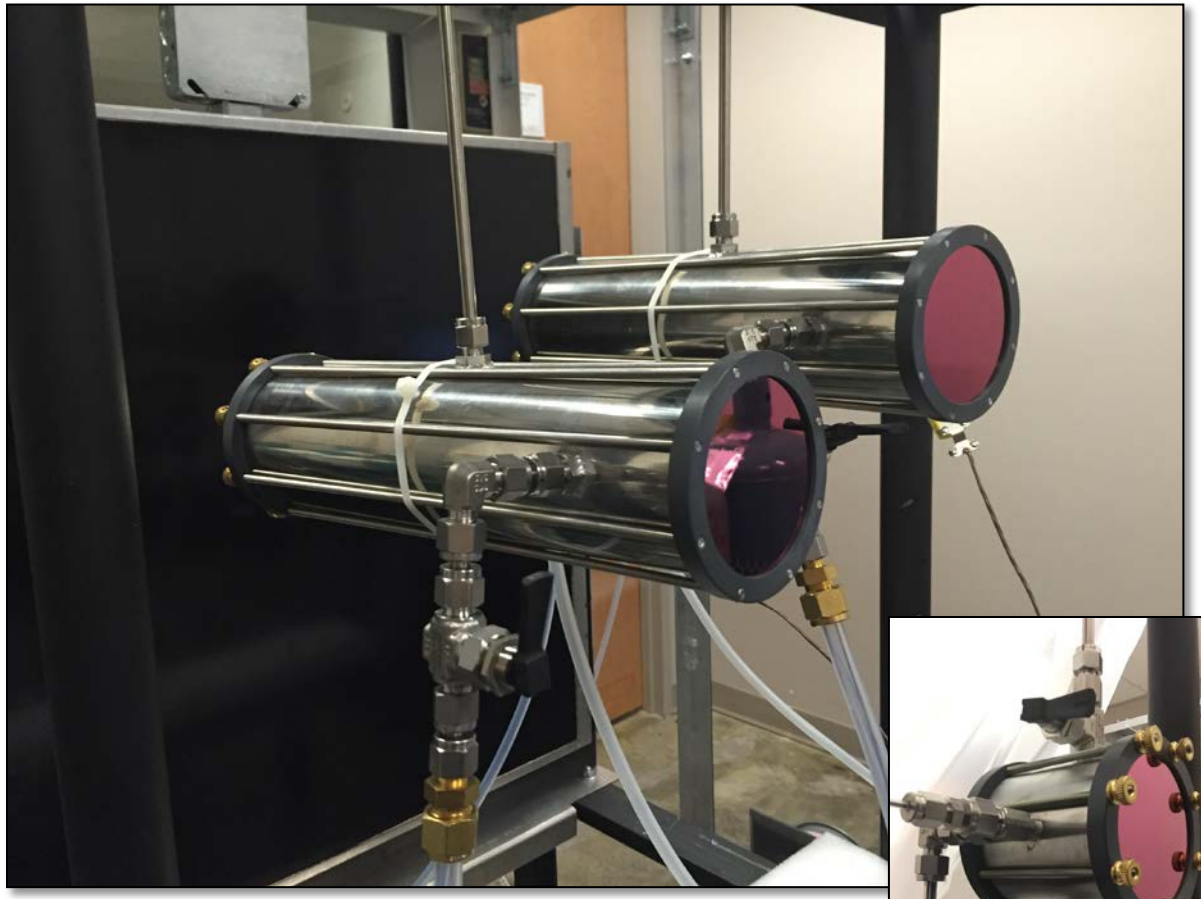
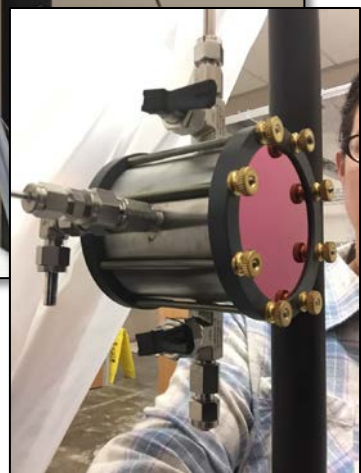




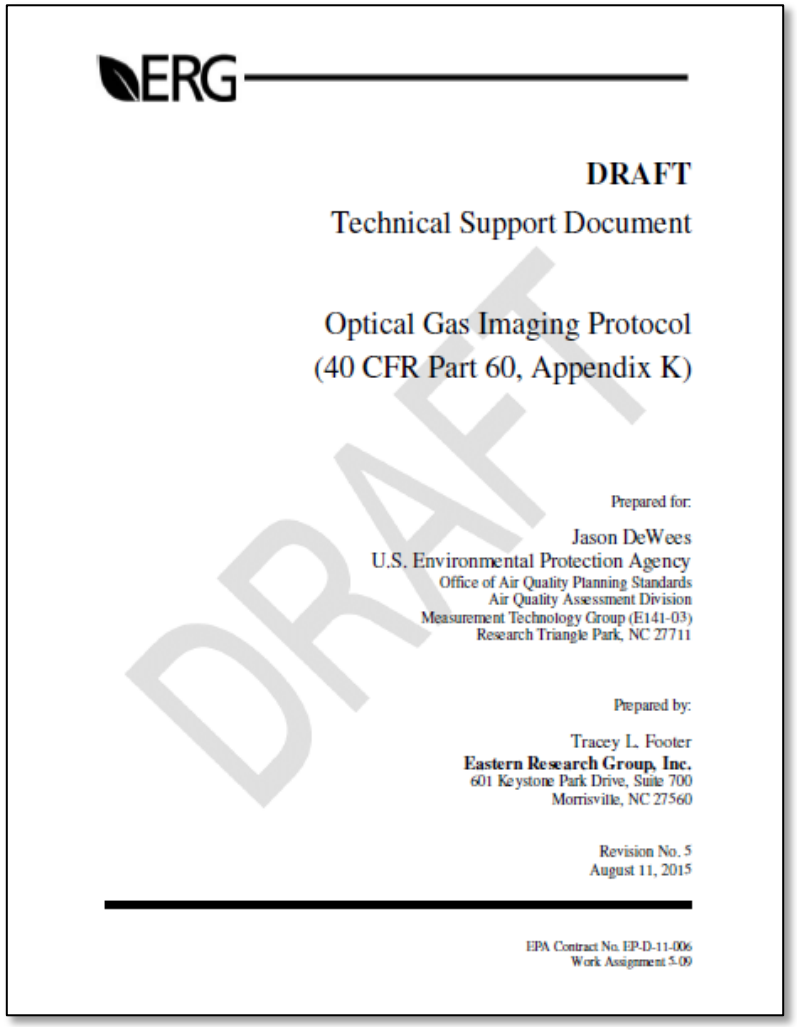
Additional Gas Sensitivity







TSD Updates



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Upcoming Updates

- Addition of continued lab tests
- Mention of related technologies
  - QOGI
  - Continuous/autonomous
  - Uncooled
  - Hyperspectral
- Updates on current technology specs
- Some notes from this workshop series

Thank you!

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