

# NPS Remote Sensing Research (PH)

2010

## Remote Sensing Of Sulfur Dioxide (So2) Using The Lineate Imaging Near-Ultraviolet Spectrometer (Linus)

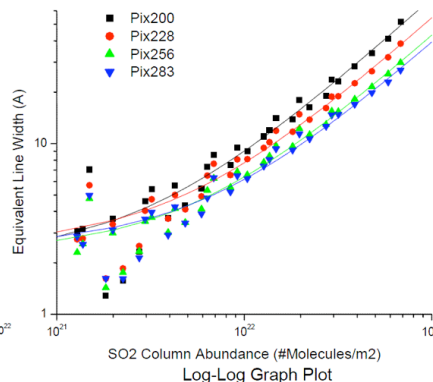
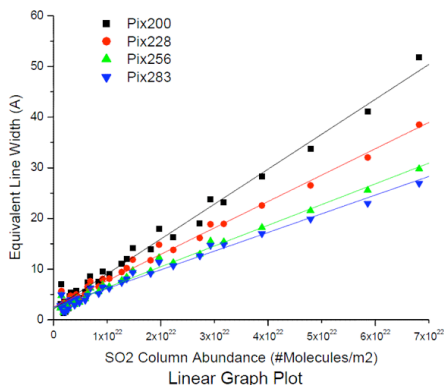
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The Lineate Image Near Ultraviolet Spectrometer (LINUS) is a spectral imager developed to operate in the 0.3-0.4 micron spectral region. The 2-D imager operates with a scan mirror, forming image scenes over time intervals of 10-20 minutes. Sensor calibration was conducted in the laboratory, and the system response to Sulfur Dioxide (SO<sub>2</sub>) gas was determined.

The absorption profile for SO<sub>2</sub> was measured, and curves of growth were constructed as a function of gas concentration. Test measurements were performed at the Naval Postgraduate School (NPS), from the roof of Spanagel Hall. Field observations were conducted at a coal-burning factory site at Concord, CA with the purpose of quantifying the presence of SO<sub>2</sub>. The Concord field measurement showed traces of SO<sub>2</sub>, with further analysis still required.



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