

Optical Measurements of Aerosols for MIRAGE-MEX



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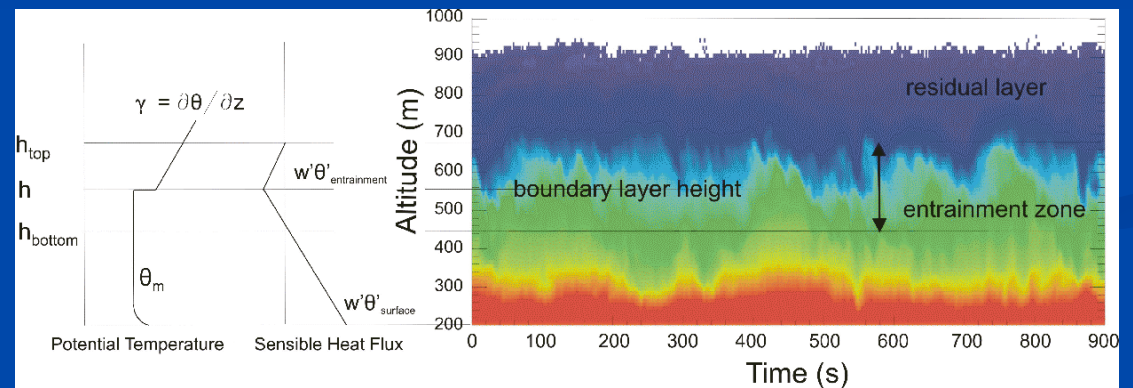
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Optical Measurements of Aerosols for MIRAGE-MEX T0 Site

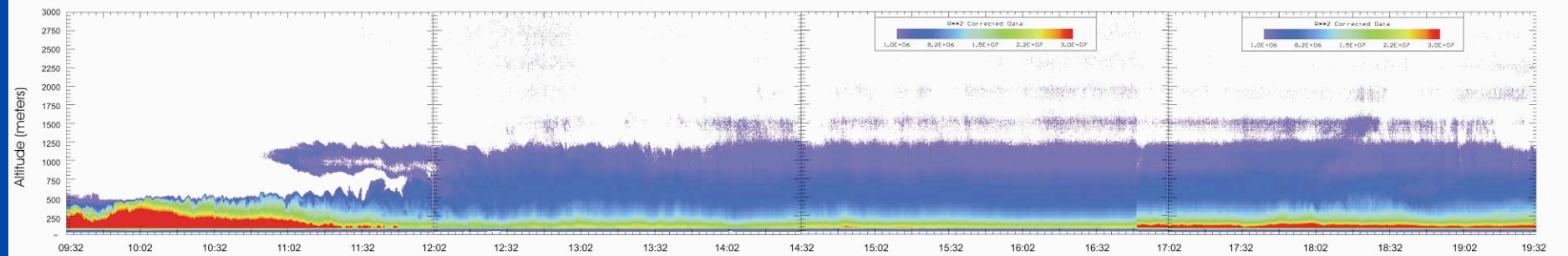
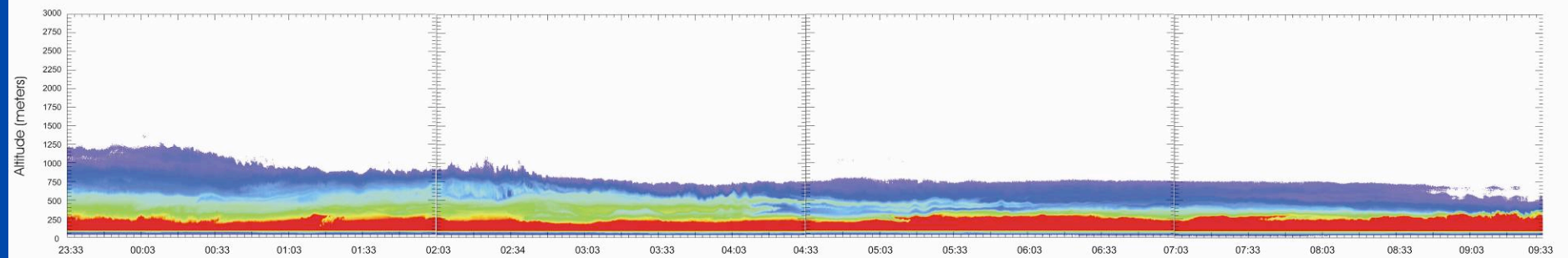
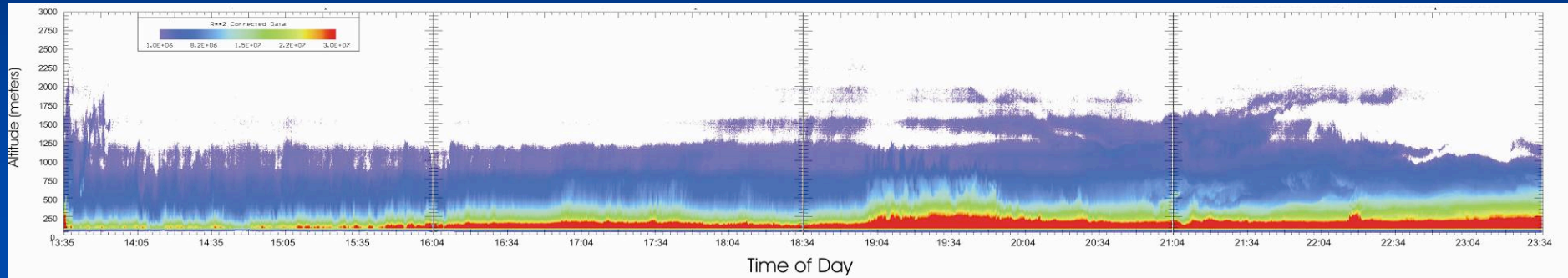
Vertical Sounding Lidar



High Resolution Aerosol Profile Measurements



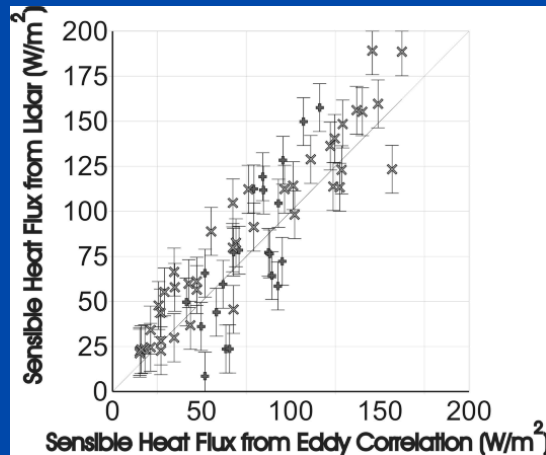
Optical Measurements of Aerosols for MIRAGE-MEX - T0 Site



Optical Measurements of Aerosols for MIRAGE-MEX – T0 Site

Derived Products

- * Boundary Layer Height
- * Residual Layer Height
- * Entrainment Zone Depth
- * Entrainment Parameter
- * Regional Sensible Heat Flux



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Meteorological Measurements - T0

Fast Response

3D Sonic Anemometer

CO₂, Water Vapor, Temperature

Upwelling/Downwelling, long and
short wave radiometer

Temperature, Humidity, pressure

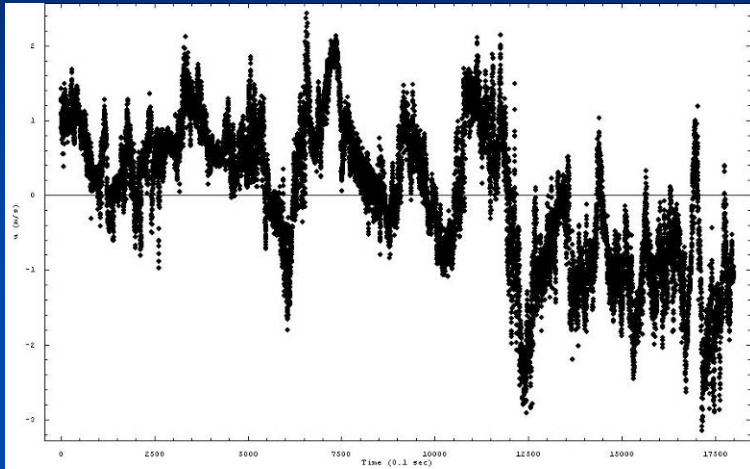
Latent, Sensible, CO₂ Fluxes



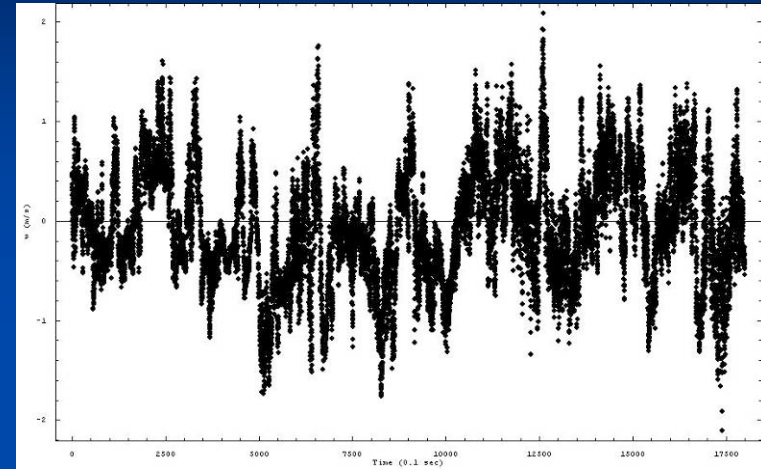
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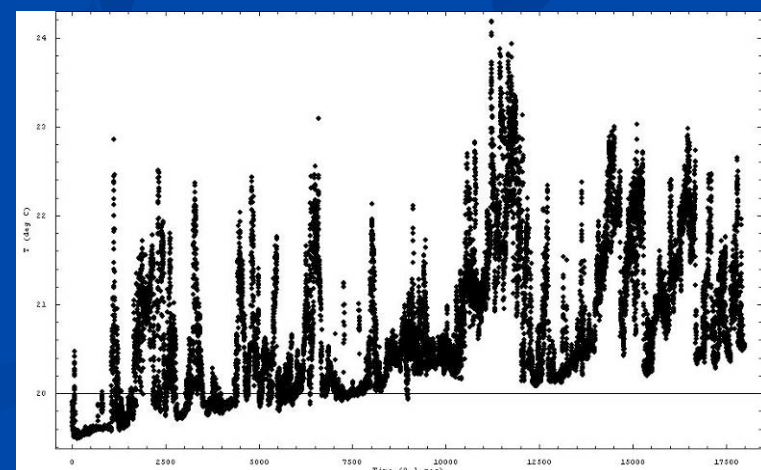
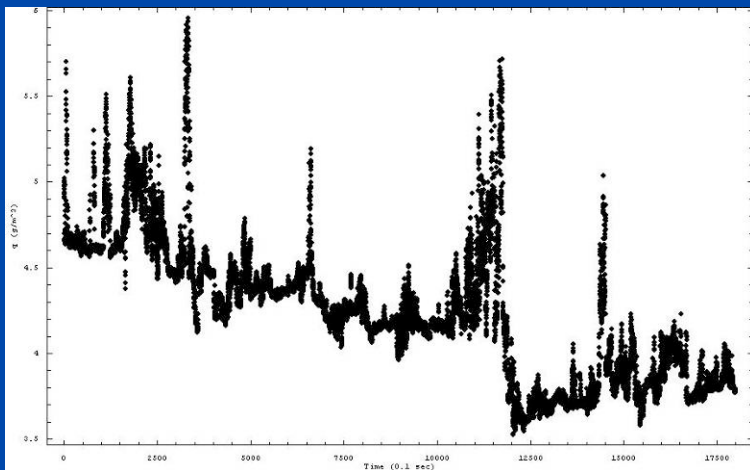
Meteorological Measurements - T0



Horizontal Wind Speed
Water Vapor



Vertical Wind Speed
Temperature



Lidar Mapping of Aerosols from Mexico City

Changes in Distribution, Size, and Optical Properties with Distance

Solar Spectrometer

High Resolution Vertical Lidar

POM 01



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Lidar Mapping of Aerosols from Mexico City

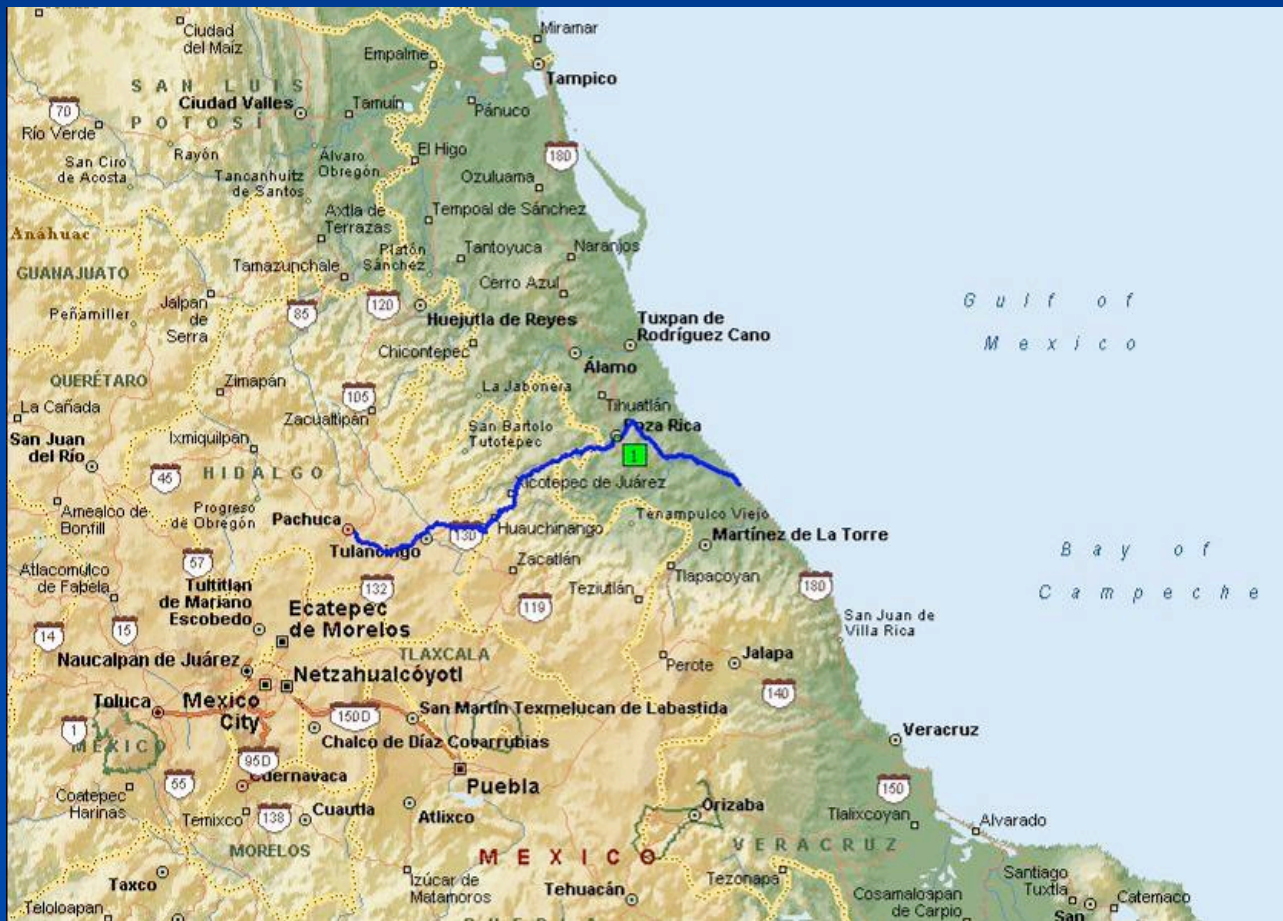
Changes in Distribution, Size, and Optical Properties with Distance



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Lidar Mapping of Aerosols from Mexico City

Changes in Distribution, Size, and Optical Properties with Distance



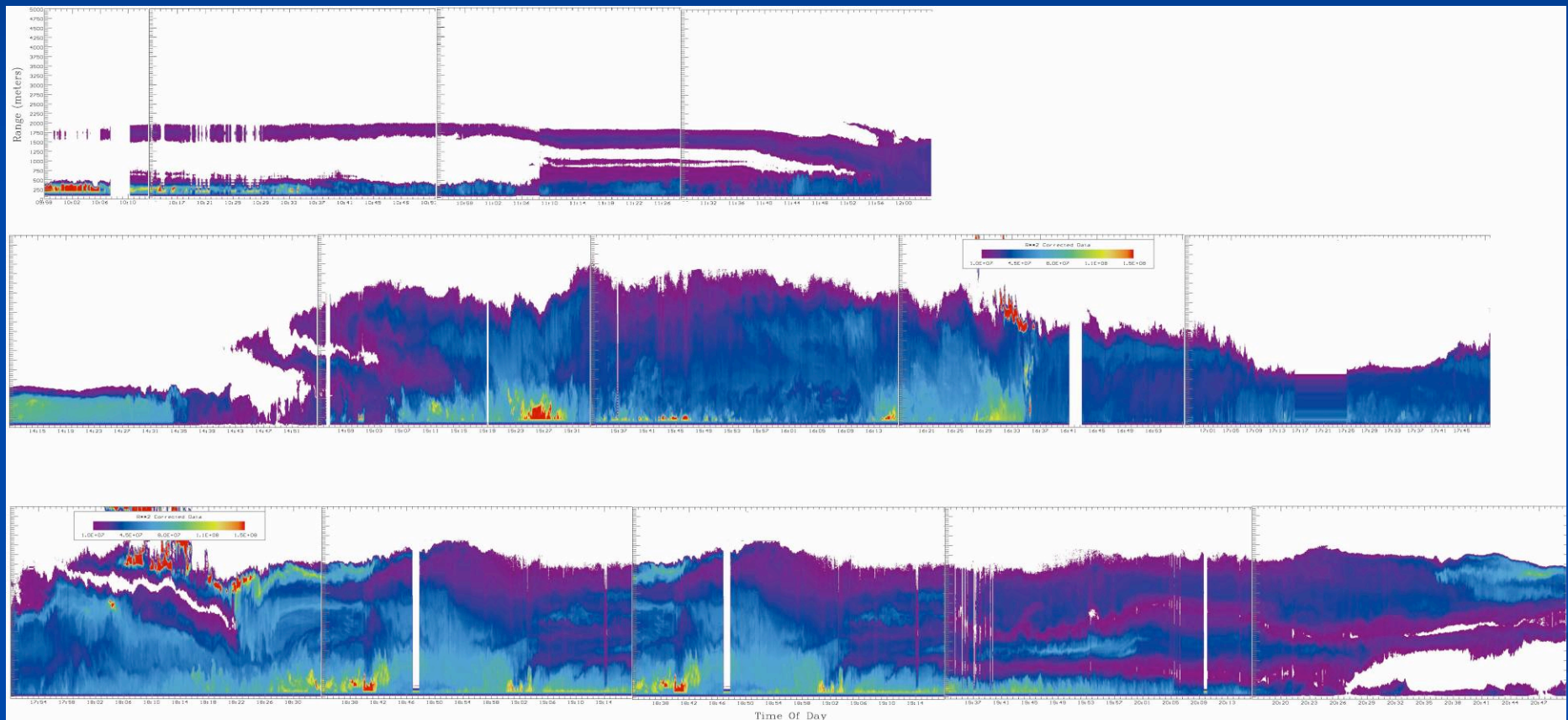
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Lidar Mapping of Aerosols from Mexico City

The screenshot displays a GPS navigation application interface. The main map area shows a route in Mexico City, with a blue line indicating the current path and a red arrow pointing to a specific location. The map includes a scale bar from 0 to 0.5 miles and labels for 'North America', 'Mexico', and 'Puebla'. The GPS pane on the left shows the current speed as 9 mph, altitude as 5291.01 ft, and time as 11:59:26 AM. It also includes a 'Start GPS tracking' section with various options like 'Provide Driving Guidance', 'Arrange map view', and 'Create GPS trail'. A 'Routing' section is visible with a search bar and buttons for 'Route Planner', 'Repeat Instruction', and 'Turn Voice Off'. A small window in the bottom left corner shows a live video feed from a PC camera, displaying a road scene with a truck.

Lidar Mapping of Aerosols from Mexico City

Changes in Distribution, Size, and Optical Properties with Distance



Mapping of Aerosols from Mexico City

Changes in Distribution, Size, and Optical Properties with Distance



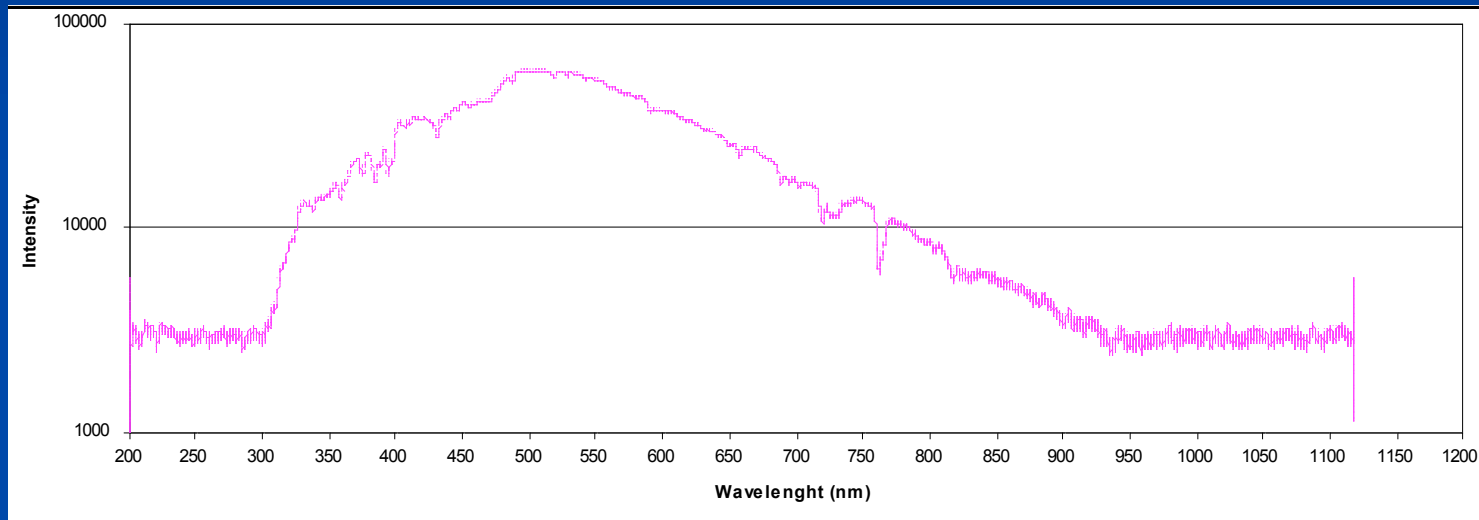
Solar Intensity with Wavelength



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Lidar Mapping of Aerosols from Mexico City

Changes in Distribution, Size, and Optical Properties with Distance



Solar Intensity with Wavelength



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Lidar Mapping of Aerosols from Mexico City

Changes in Distribution, Size, and Optical Properties with Distance

Looking for ways to take advantage of our capabilities

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