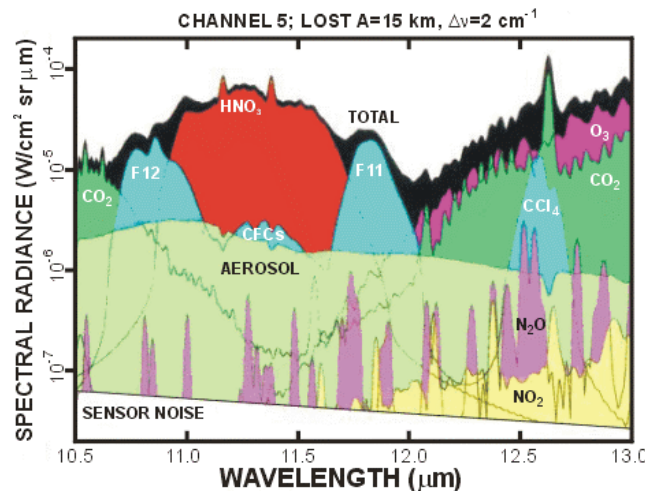


# Spectral Imaging through the Atmosphere

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Spectral imaging acquires data in multiple wavelength bandpasses, ranging in number from three (color video) to hundreds (hyperspectral), typically in the visible through long-wavelength infrared regions. The greater the number of wavelengths, the greater the potential to characterize materials and objects in the scene, but only if the effects of the intervening atmosphere can be modeled and/or removed. This talk will present an overview of recent and ongoing work at Spectral Sciences, Inc. on software, algorithms and measurements for spectral imagery analysis and acquisition. Examples include development of atmospheric radiation transport codes for the remote sensing community, simulation of three-dimensional, radiometrically accurate scenes, removal of atmospheric and shadow effects from hyperspectral data, hyperspectral classification and data mining, and development of new spectral sensor concepts for multi-dimensional characterization of solid and gaseous environments.

**10 am, Fri, June 19, 2009**

**Center for Imaging Science Auditorium 76-1125**

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