DIFFERENTIAL OPTICAL ABSORPTION SPECTROMETER FOR MONITORING URBAN ATMOSPHERIC POLLUTANTS AND THEIR DISTRIBUTION

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A differential absorption spectrometer (DOAS) has been developed for monitoring the concentration of urban atmospheric pollutants such as NO_2 , formaldehyde, and O_3 . In addition to concentrations and distributions of trace atmospheric species, the DOAS provides information on elastic and inelastic scattering in the atmosphere. Current work on concentration retrieval algorithms and the development of statistical analysis methods will be presented.