

Urban atmosphere remote-sensing project

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Recently general society is increasingly concerned with air quality and weather disaster issues in urban or city areas such as, e.g., city air pollution and down pour in a small area. In an urban region such as the land covered by man-made architecture, the behavior of the boundary layer has not been understood well enough especially in terms of vertical or 3-D structure of the atmosphere, because of a lack of continuous and dense measurement techniques.

We are now starting a new project to observe the boundary layer and lower troposphere by developing Doppler lidars and wind profiler radars, so that the vertical and horizontal structures of the boundary layer can be monitored after the development.

Current situation of the instrument development and preliminary results of summer 2006 observations will be introduced in the talk.