

Lidar Study of PM10 Aerosols Particles in Paris Area in the Frame of MEGAPOLI Project

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In the frame of MEGAPOLI project, that brings together leading European research groups, state-of-the-art scientific tools and key players from third countries to investigate the interactions among megacities, air quality and climate, four elastic lidars were deployed in the outskirts of Paris following the four cardinal points and a Doppler Wind Lidar in the center to investigate the aerosol dynamics and the sources of emission. This work presents the spatiotemporal variability of aerosol concentrations in Paris area and investigates the agreement between those lidar-derived mass concentrations and PM10 observations obtained on Paris air quality network monitoring sites