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Satellite Data Based Air Pollution Monitoring with ML

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Abstract: *The abstract for research on satellite data based air pollution monitoring with Machine Learning (ML) describes using remote sensing data to overcome the limitations of sparse ground monitors and employing ML algorithms to predict ground-level pollutant concentrations with high spatial and temporal resolution. The goal is to provide cost-effective, extensive air quality assessments for public health and environmental policy. The increasing reliance on traditional ground-based air quality monitoring systems is hindered by their sparse spatial distribution and high operational costs, leading to data-poor regions and an incomplete picture of air quality dynamics. This study addresses these limitations by developing an integrated framework that leverages satellite remote sensing data and advanced machine learning techniques to provide a robust and scalable solution for air pollution monitoring*

Keywords: *Machine Learning*

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