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New Insights Into Fog Role In Atmospheric Deposition Using Satellite Images

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Abstract : This study aims to examine the spatial and temporal patterns of fog occurrences across Czech Republic. It utilizes satellite imagery and other data sources to achieve this goal. The main objective is to understand the role of fog in atmospheric deposition processes and its potential impact on the environment and ecosystems. Through satellite image analysis, the study will identify and categorize different types of fog, including radiation fog, orographic fog, and mountain fog. Fog detection algorithms and cloud type products will be evaluated to assess the frequency and distribution of fog events throughout the Czech Republic. Furthermore, the regions covered by fog will be classified based on their fog type and associated pollution levels. This will provide insights into the variability in fog characteristics and its implications for atmospheric deposition. Spatial analysis techniques will be used to pinpoint areas prone to frequent fog events and evaluate their pollution levels. Statistical methods will be employed to analyze patterns in fog occurrence over time and its connection with environmental factors. The ultimate goal of this research is to offer fresh perspectives on fog's role in atmospheric deposition processes, enhancing our understanding of its environmental significance and informing future research and environmental management initiatives.

Keywords : pollution, GIS, FOG, satellie, atmospheric deposition
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