

Air Pollution quantification using Remote Sensing

– A Study on Particle Pollution concentration in Hyderabad

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ABSTRACT

Earth observations made by satellite sensor are likely to be a valuable tool for assessing and mapping atmospheric pollution due to their major benefit of providing complete and synoptic views of large areas in one snap-shot. Remote sensing of air quality provides large-scale coverage / an integrated view and measures over inaccessible areas. In this paper retrieved concentrations of particulate matter with diameter less than ten micrometer (PM₁₀) in the atmosphere using the Landsat 8 satellite images over Hyderabad City. The results of this study indicated that highest concentration of PM₁₀ is associated with Industrial areas, along the heavy traffic corridors and densely buildup area. The low level of concentration of PM₁₀ is associated with the places having greenery and vegetation.

Key words: Remote Sensing, Particulate Matter, Concentration, Satellite , atmosphere