PM 3-'Particulate Matter Monitoring' LIFE+ Project: Integration of Satellite Remotely Sensed Data and Ground Measurements

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Abstract:

PM3 is the result of a joint effort of the Department of Labour Inspection in Cyprus , Aristotle University of Thessaloniki, ESS Austria, Cyprus University of Technology and the Atlantis Consulting Cyprus Ltd and aims to improve the air quality and on a long term basis the quality of life and health of all Cyprus's citizens. Through the project, the Department aspires to reduce level of dust in the atmosphere through targeted measures. The project is funded by LIFE+ Environment Policy & Governance. This paper presents some of the results obtained by using ground and satellite remotely sensed data. Moreover an emphasis is given to the main local emission sources, including mines and quarries, worksites and unpaved roads with high emissions. Statistical analysis between PM10 and aerosol optical thickness as retrieved from satellite images has been made. Finally NDVI maps required for the forecasting purposes of air pollution as will be further used in the model are presented.