Correlation between solar radiation and total syspended particulate matter in Santiago, Chile-Preliminary results

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This is a first-approach study tending to correlate solar radiation and temperature with total particulate matter in Santiago, Chile, a city heavily polluted by this contaminant. Experimental data for monthly average total radiation, G, were provided by the Chilean Meteorological Bureau. Diffuse monthly average radiation, D, was calculated. The concentrations of TSP were provided from the monitoring system of the Chilean Environment Health Service. Results show that there exists a relationship between TSP and solar radiation and temperature for urban sites, but not for suburban sites, even considering the monthly average values. Further and more detailed studies are necessary in this field. © 1995.