

STATISTICAL ANALYSIS OF THE RELATIONSHIP BETWEEN PRTR DATA AND AIR TOXICS MONITORING DATA IN JAPAN

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In recent years, the toxicity of many chemical species has been getting much attention regarding their effect on human health. The largest problem in this issue has been the lack of emission inventories. In Japan, the PRTR Law was implemented in 2000 and the compiled data in the first year (2001) was opened in March 2003. This dataset gives us various informations on the status of pollutant emissions. The objective of this study is to clarify the relationship between PRTR data and air toxics monitoring data. This paper reports some preliminary results. Socio-economic data were also used in the analysis. The analyses were carried out on the prefecture-by-prefecture basis. Principal statistical procedures used in this study are regression analysis, multiple regression analysis, factor analysis and so on. The principal results are as follows: 1) PRTR data are partly proportional to the air monitoring data. 2) PRTR data for some specific species are strongly related to some social or economic data. 3) The status of chemical pollution strongly depends on the prefectures.