STATISTICAL STUDY OF THE VARIATION OF THE CAO BETWEEN DIFFERENT STATIONS FROM THE METROPOLITAN AREA OF SANTIAGO DE CHILE

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An investigation of the behavior of the concentration of particulate material is made present in the air of Santiago de Chile, by means of the coefficient of optical absorption of the light (CAO) at the time of winter. The study is made on a sample monitored between April and Julio of year 2003 in the stations: USACH, Providence and Tree-lined avenue of the Metropolitan area. The objective of this work consists of analyzing the behavior of the CAO in the different stations and quantifying if the variation of its measures between the 5 hours and 9 hours A.M. is significantly different comparatively between those stations. The importance of this study is in which the monitored stations correspond to streets in which them change the direction of the transit or is belonged to secreted routes where the buses public flow more easily by two tracks and a third other type of vehicle with the purpose of reducing the contamination. The used computational support, in this analysis it is SPSS version 10,0. The results indicate, in some cases, that the difference of CAO significant is compared in the different stations, what would indicate that the measurement to reduce the pollution was guessed right. With this analysis the effectiveness of this strategy like measurement of the decontamination plan is verified. These stations investigated are more correlations by such effect. The statistical evaluation is made with the application of the Analysis of Variance.

KEY WORDS: CAO, variance analysis, secreted routes.