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Metal distribution in PM₁₀ during the MILAGRO campaign in Tamaulipas, Mexico

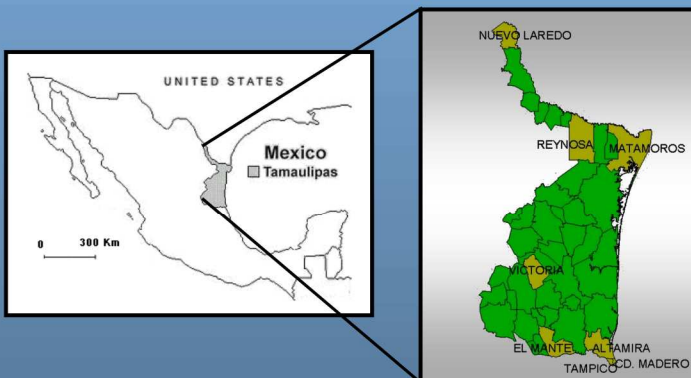
INTRODUCTION

This project was first developed as a result of a linkage between CICATA-IPN Altamira and Tamaulipas Government and the need of the establishment of an air quality monitoring network in other important urban and industrial zones as Tampico, Madero, Altamira, Matamoros, Reynosa, etc. in Tamaulipas.

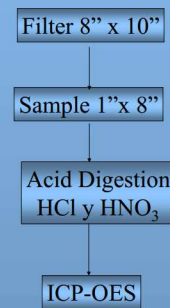
OBJECTIVES

To study for the first time the metal distribution in Ciudad Victoria, Matamoros, Reynosa, Nuevo Laredo and Altamira, Tamaulipas.

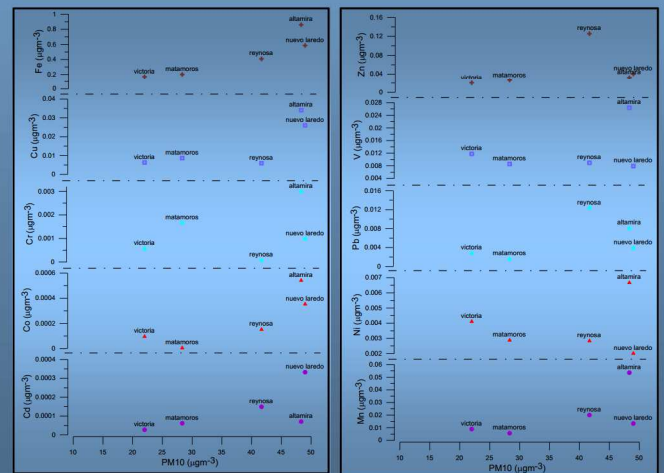
MONITORING SITES IN TAMAULIPAS



METAL EXTRACTIONS METHOD EPA IO-3.1

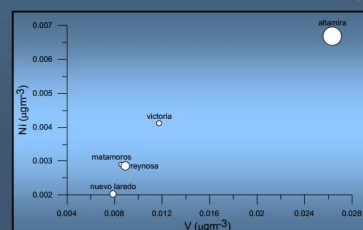
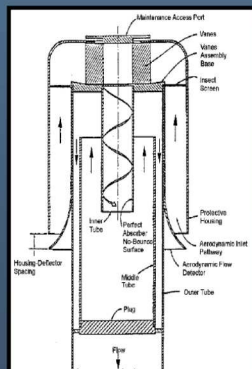


RESULTS



Figures showing the relationship, concentration and distribution of Cd, Co; Cr, Cu, Fe, Mn, Ni, Pb, V, Zn and PM₁₀ along Tamaulipas sites.

High Volume Sampler Particulate Matter less than 10µm (PM₁₀) Wedding & Associates



Bubble plot of V, Ni and Mn in the X, Y and Z axis, respectively.

CONCLUSIONS

The PM₁₀ concentrations ranged from 22 to 48 µg/m³ in Tamaulipas. The concentrations Pb were less than 0.0081 µg/m³ among the cities. The highest concentration of metals was observed by Fe and Zn in Altamira and Reynosa with 0.86 and 0.1255 µg/m³, respectively. High correlation was found between V and Ni.