

Elemental composition of PM₁₀ and PM_{2.5} in T0 during MILAGRO campaign

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A field study was carried out during the MILAGRO campaign in March 2006 to examine the overall composition of particulate matter (PM₁₀ and PM_{2.5}) in Mexico City. 60 collected samples were examined for gravimetric mass, organic and elemental carbon concentrations, inorganic ion concentrations, and heavy metals. Mass concentrations ranged from 51 to 130 $\mu\text{g m}^{-3}$ and from 32 to 70 $\mu\text{g m}^{-3}$ in PM₁₀ and PM_{2.5} respectively. The average ratio of PM_{2.5}/PM₁₀ was 0.58. Most of the mass of both size particles are comprised of carbon, sulfate, nitrate, ammonium and crustal components (Si, Al, Fe, Ca). After Fe, Zn was the most abundant heavy metal followed by

The PM_{2.5}/PM₁₀ ratio for different metals ranged for different metals between 0.71 for Pb and 0.34 for Cu.