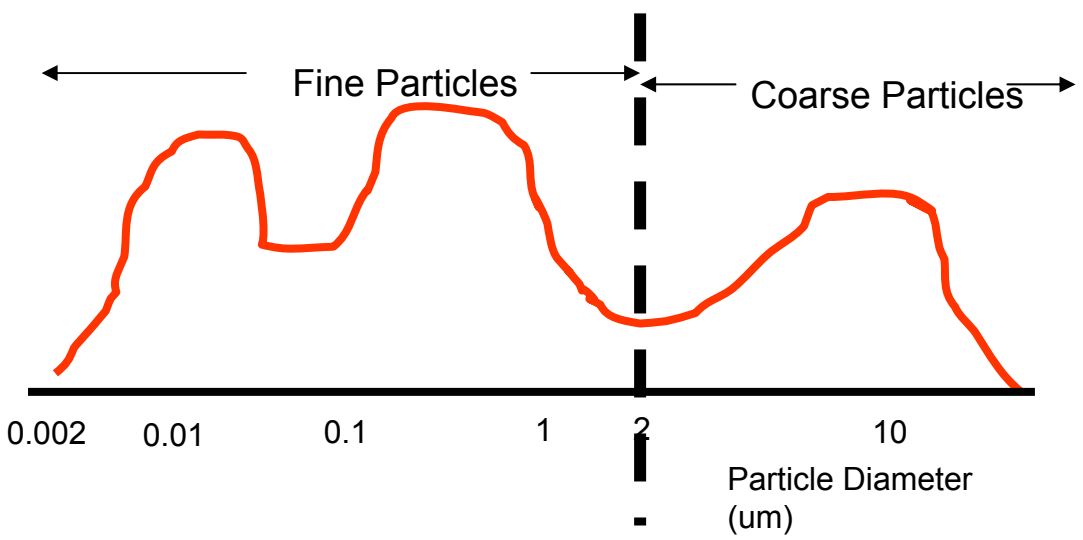
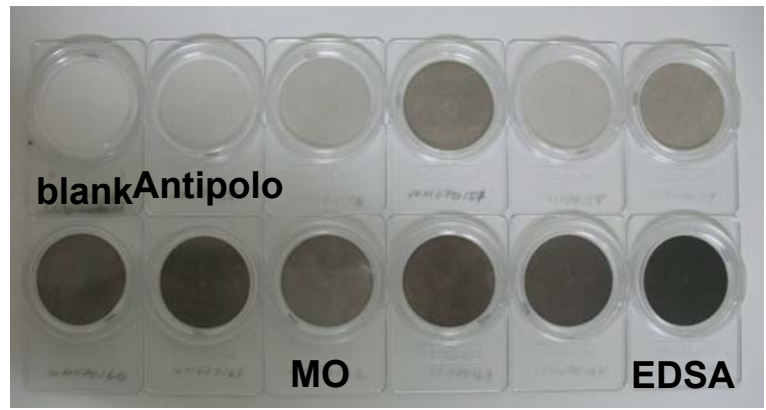




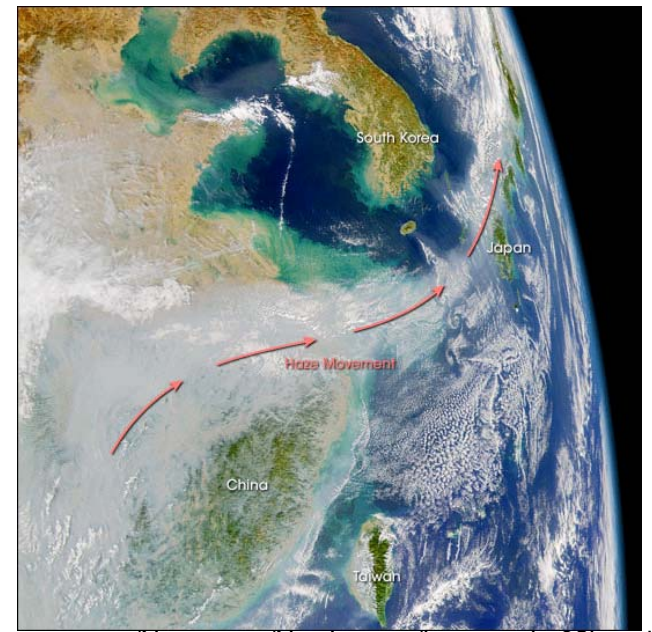
Particulate Matter Basics



Modal distribution of atmospheric particles



Pollution over China Blows out to sea



Picture by Prapat Pongkiatkul (May 2007)

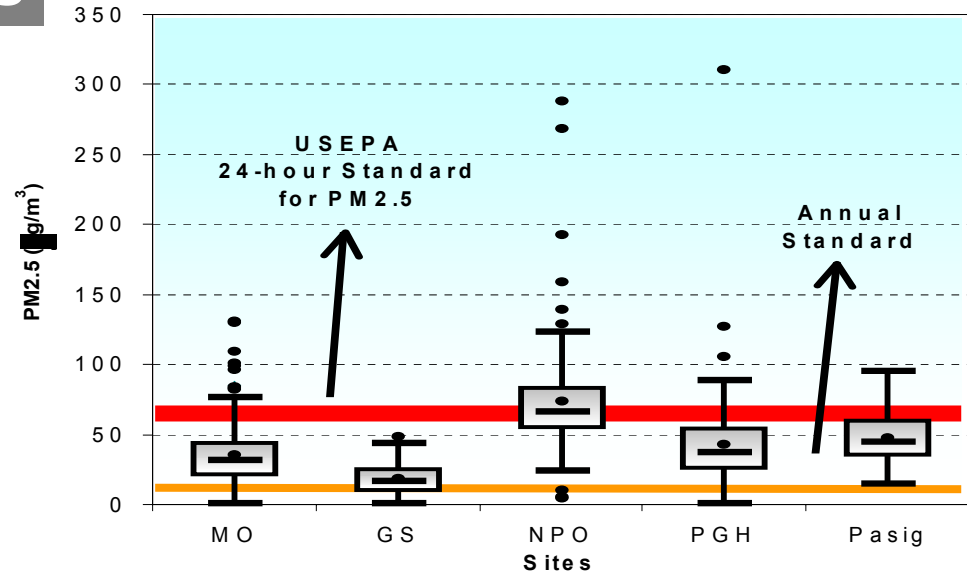
manilaobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=16712



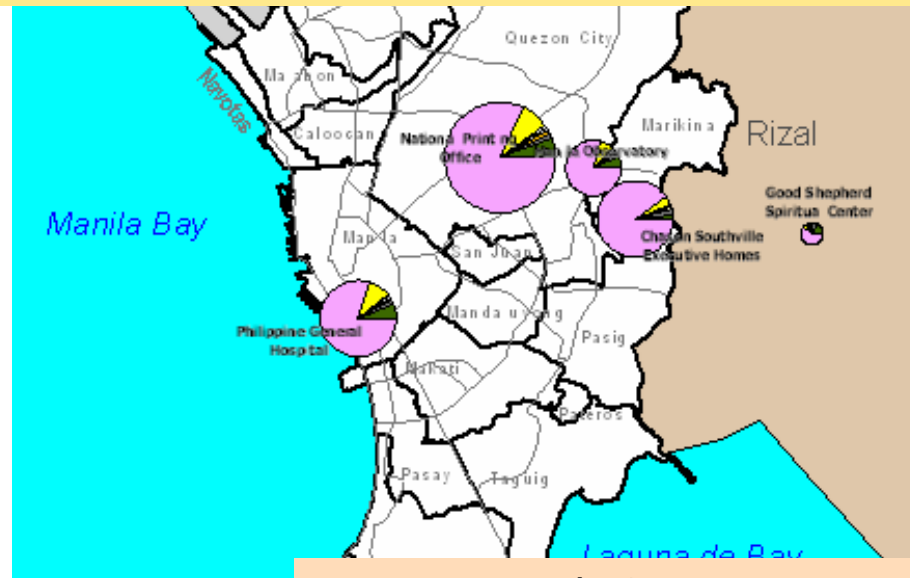


PM2.5 Results in 5 Metro Manila Sites

24-Hr PM2.5 Concentrations (Aug 2000-Feb 2004)



Receptor Modeling Results (PM2.5)



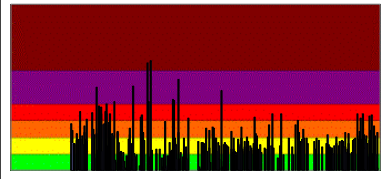
There were increased levels of particulates in the traffic site. Model results suggest a great contribution of traffic to the PM2.5. (MO data)



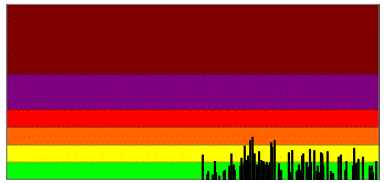


Implications of PM2.5 Results

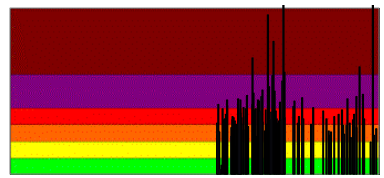
(MO)



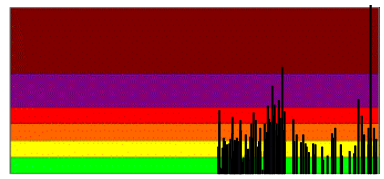
(GS)



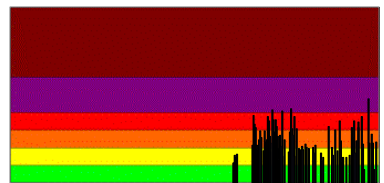
(NPO)



(PGH)



(Pasig)



PM Levels in the 5 sites were unhealthy for sensitive groups.

Levels of Health Concern	Cautionary Statements
	PM _{2.5}
Hazardous	Everyone should avoid any outdoor exertion; people with respiratory or heart disease, the elderly, and children should remain indoors.
Very Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid any outdoor activity; everyone else should avoid prolonged exertion.
Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion.
Sensitive Groups	People with respiratory or heart disease, the elderly, and children should limit prolonged exertion.
Moderate	None
Good	None

Beside the deaths, 90,000 Filipinos in Manila also suffer from severe chronic bronchitis, costing the government 7 percent of its gross domestic product in terms of health costs, the Bank said.

According to the World Bank's 2000 Annual Review, in Manila alone more than 4,000 Filipinos die each year because of air pollution.

For mortality, it was shown that the incidence rates for respiratory and natural mortality increase by 2.6% and 3.9% respectively for every 10 µg/m³ increase in PM₁₀. ("Public Health Monitoring of the Metro Manila Air Quality Improvement Sector Development Program, 2004")

