



Particulate matter air pollution in global mega cities: a satellite view

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As urbanization increases, the particulate matter air pollution in mega cities of the world also continues to increase. While developed nations have various methods for monitoring and assessing air quality, these tools are limited or non-existent in most of the developing countries. New methods are now available from remotely sensed measurements from space that allows for monitoring air quality on a global basis. We demonstrate the potential of satellite data and evaluate particulate matter air pollution in 20 mega cities (population > 10 million) of the world. Pollution levels in 15 out of the 20 mega cities exceeds the World Health Organization (WHO) standards by 5 to 10 times and mega cities in developing countries severely affected by particle pollution. Monitoring pollution is imperative before policy decisions can be made and satellite Remote Sensing may be the only viable method for monitoring air pollution from space especially where ground measurements are scarce. We will present multiple year satellite analysis for particulate matter air quality over all the mega cities of the world.