

Measurement and Assessment of Atmospheric Environment

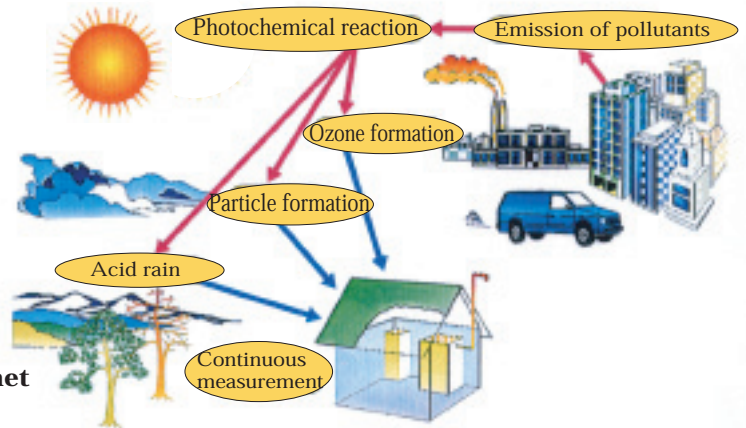
Aim

To assess the effects of improved vehicle emissions control technology, based on measurements of the atmospheric environment.

Method

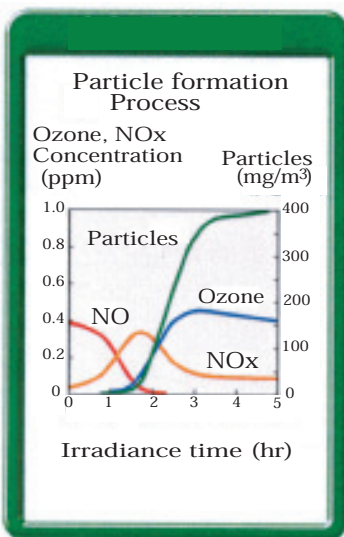
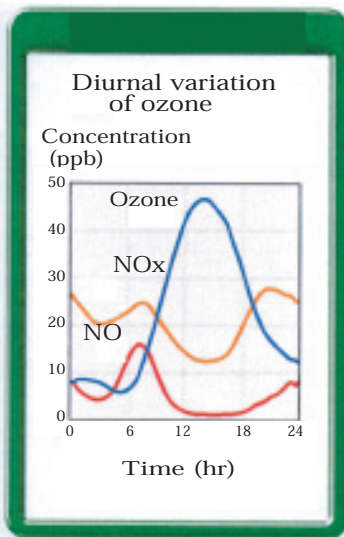
Assess environmental impact by conducting a highly precise atmospheric simulation based on measurement and analysis of the atmospheric environment (ozone, particles, acid rain, etc.).

Processes involved in atmospheric pollution, and its measurement and analysis



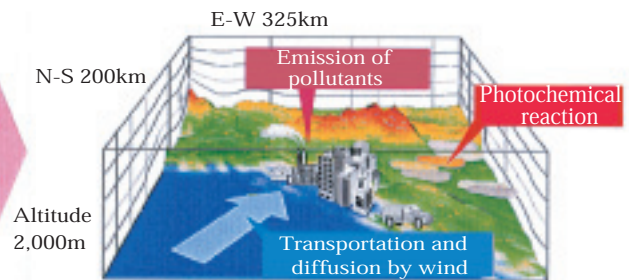
Measurement of atmospheric environment

Atmospheric environment experiment

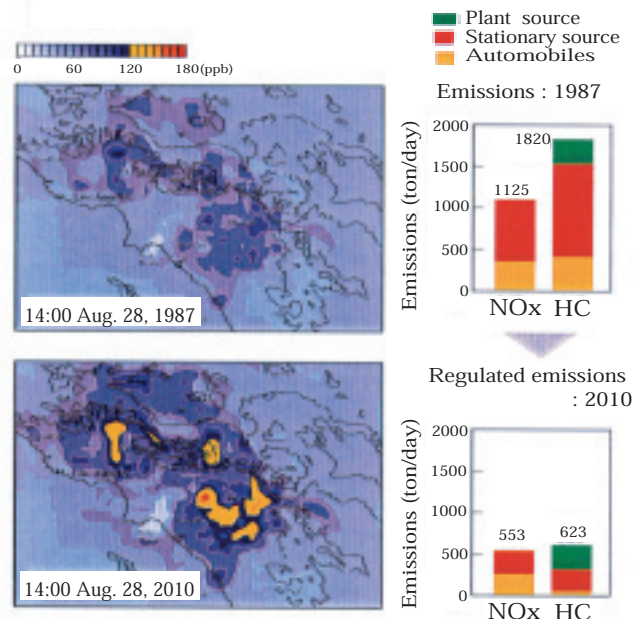


Atmospheric simulation

Atmospheric environment assessment model (Los Angeles, California and surrounding area)



Predicted distribution of ozone concentration



Characteristics

The atmospheric environment assessment model takes into consideration those reactions that yield particulate matter. Assessment of the environmental impact of new fuels and power systems is possible.

Application

The method along with the results were proposed to environmental related authorities in the U.S. and Japan as a useful tool for air quality improvement.