

satellite view of the widespread haze pollution in China

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During the last decades, large increase in anthropogenic emissions has led to severe air pollution problems in China, with high concentration of fine particles and widespread haze layers in many areas. The complex sources and high emissions of atmospheric pollutants has exerted great challenge on air quality in China. Compared with regular measurements in ground sites, satellite observations can provide a unique view of the amounts of atmospheric components and formation processes of haze pollution from regional to global scales. Considering the special atmospheric conditions of high aerosol loading and large spatial and temporal variations in China, we made several improvements such as identification of haze areas in the retrieval of aerosol loading. In particular, we conducted comprehensive investigations in optical properties, spatial variation, and formation processes of the regional haze pollution of China using integrated satellite observations, ground measurements, and meteorological data.

Keywords: air quality , satellite , China