

## **An estimation of the radiative forcing of indirect effects of anthropogenic aerosols from satellite remote sensing and climate modeling**

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Climate forcing of anthropogenic aerosols has been recognized as an important issue in the global warming studies. The direct forcing is now widely being studied through satellite remote sensing and climate modeling, whereas the indirect forcing has been scarcely understood because of the complexity of the phenomenon. In this paper, we like to discuss an evaluation of the indirect forcing of aerosols using satellite remote sensing and climate modeling.

For this purpose, we have analysed four month AVHRR data to obtain the aerosol optical thickness and Ångström exponent, and cloud optical thickness and effective particle radius. The relation between aerosol and cloud parameters has been further compared with general circulation model results. It is found that the range of indirect forcing of anthropogenic aerosols is from  $-0.85$  to  $-2.1$  W/m<sup>2</sup> depending on various assumptions in the analysis.

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