



Latitudinal variations of cloud and aerosol optical thickness trends based on MODIS satellite data

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- Moderate Resolution Imaging Spectroradiometer (MODIS) global monthly data from the Terra satellite (MOD08_M3, from March 2000 to May 2006) indicated, with the exception of the tropics, declining trends in aerosol optical thickness (AOD) over much of the globe, in contrast to slightly increasing trends in cloud optical thickness (COT) at many latitudes. In the tropics, increasing AOD trends coincide with increasing COT trends. In the latitudinal distribution of COT, in the Northern Hemisphere, a transition from increasing to declining tendencies was observed between 40°N and 60°N. There is a pronounced hemispheric asymmetry in latitudinal variations of the averaged total AOD, in contrast to those of the averaged total COT.