Temporal variation of Aerosol Optical Depth (AOD) over Peshawar district using terra satellite level three data

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Abstract:
Aerosol optical depth (AOD) means aerosol measurements extended from the surface of the earth to the top of the atmosphere inside an air column. For this study, the Terra MODerate Resolution Imaging Spectroradiometer (MODIS) satellite downloaded monthly images from AOD during the period 2005–2017. The data was extracted using ArcGIS from such images. Data were taken from meteorical station for mean daily rainfall and mean daily temperature. Correlation charts display the monthly mean temperatures for each year from 2005–2017, between monthly AOD and monthly Rainfall. Correlation graphs show that AOD is negative with Rainfall and AOD with Temperature Correlation is positive.

Keywords: Aerosol Optical Depth (AOD); Terra MODIS; Geographic Information System (GIS).

Biography:
Muhammad Jalal Khan is currently working in Department of Physics, University of Peshawar, Pakistan in Pakistan.