Geophysical Research Abstracts
Vol. 18, EGU2016-1609, 2016
EGU General Assembly 2016


# Spatio-temporal variability of satellite derived aerosol optical thickness and ground measurements over East China

Fei Meng and Tongguang Shi
Department of Civil Engineering, Shandong Jianzhu University, Jinan, China (lzhmf@163.com)

Two-year records of Visible Infrared Imaging Radiometer Suite (VIIRS) Intermediate Product (IP) data on the aerosol optical thickness (AOT) at 550 nm were evaluated by comparing them with sun-sky radiometer measurements from the Chinese sun hazemeter network (CSHNET) and the aerosol robotic network (AERONET). The monthly and seasonal variations in the aerosol optical properties over eastern China were then investigated using collocated VIIRS IP data and CSHNET and AERONET measurements.Results show that the performances of the current VIIRS IP AOT retrievals at the provisional stage were consistent with ground measurements. Similar characteristics of seasonal and monthly variations were found among the measurements, though the observational methodologies were different, showing maxima in the summer and spring and minima in the winter and autumn.