



# Temporal Evolution of New Year Aerosol Volume Size Distribution in Manila, Philippines: A Case Study using Kaijser's Method

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## Abstract.

Aerosol volume size distributions from 2006 New Year fireworks and fire cracker activities in Manila, Philippines were obtained from spectral optical depth values. The optical depth values were measured from a USB2000 Ocean Optics spectrometer. The results show that, at around 17:00 of 31 December 2005, coarse mode type aerosols were dominant. However, as the New Year was approaching, frequent firecracker and fireworks were used creating a hazy, aerosol loaded atmosphere. The development of finer modes was observed after the New Year. This condition lasted even after midnight when there were less frequent use of firecrackers and fireworks. The results can be used to initiate modeling of size distribution changes during festive activities that involve fireworks in this part of the world.

