

# Supplement to the paper “Multi-wavelength dataset of aerosol extinction profiles retrieved from GOMOS stellar occultation measurements”

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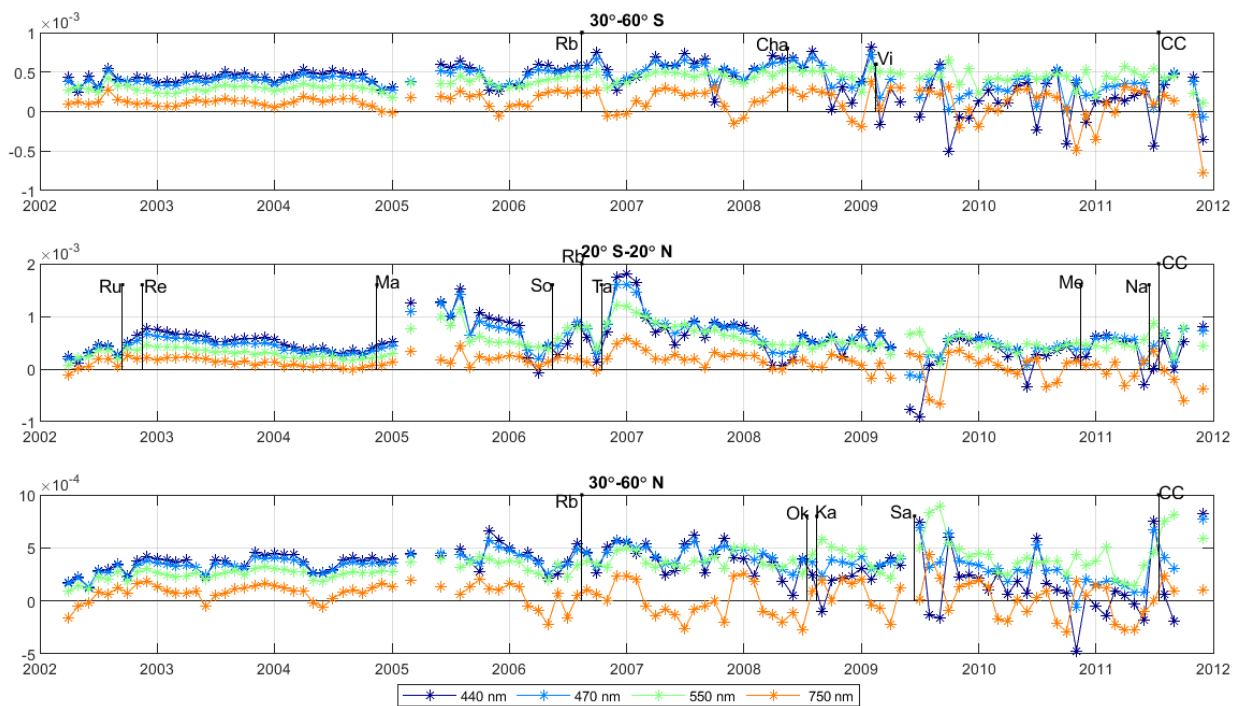


Figure S 1. Time series of AERGOM v.4 aerosol extinction (1/km) at 20 km in the latitude zones 30°-60° S (top), 20°S-20°N (center) and 30°-60° N (bottom). The wavelengths are indicated in the figure legend. The volcanos are indicated by black bars with the length proportional to volcanic explosivity index (VEI). Volcanos with  $VEI \geq 5$  are shown for all latitude zones, and with  $VEI > 3$  in the corresponding latitude zones. The valid data reported in the AERGOM files are included in the shown time series.

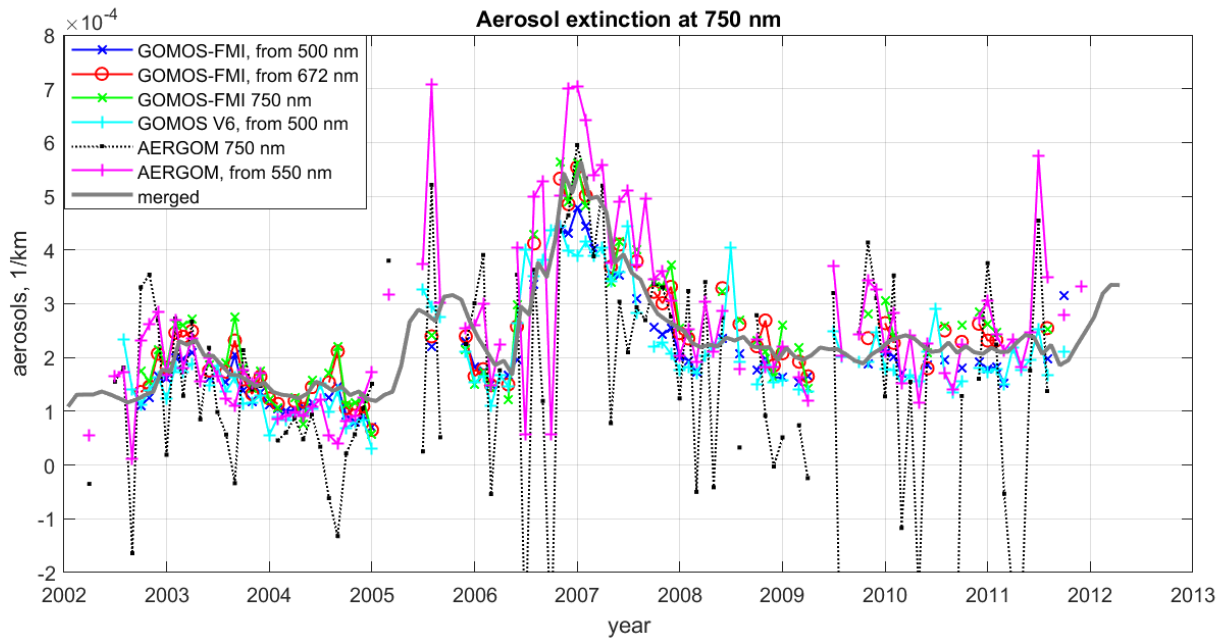


Figure S2. GOMOS aerosol extinction at 750 nm computed by different methods: GOMOS-FMI retrieved at 750 nm (green), GOMOS-FMI converted from 672 nm (red), GOMOS-FMI converted from 500 nm (blue), GOMOS IPF v6 converted from 500 nm (cyan) and AERGOM retrieved at 750 nm (black) and converted from 550 nm (magenta). Thick grey line indicates merged aerosol extinction. All time series are for the latitude bin 0-10°N and altitude 22 km. The valid data reported in the AERGOM files are included in the shown time series.