First Atmospheric Aerosol Monitoring Results from Geostationary Environment Monitoring Spectrometer (GEMS) over Asia

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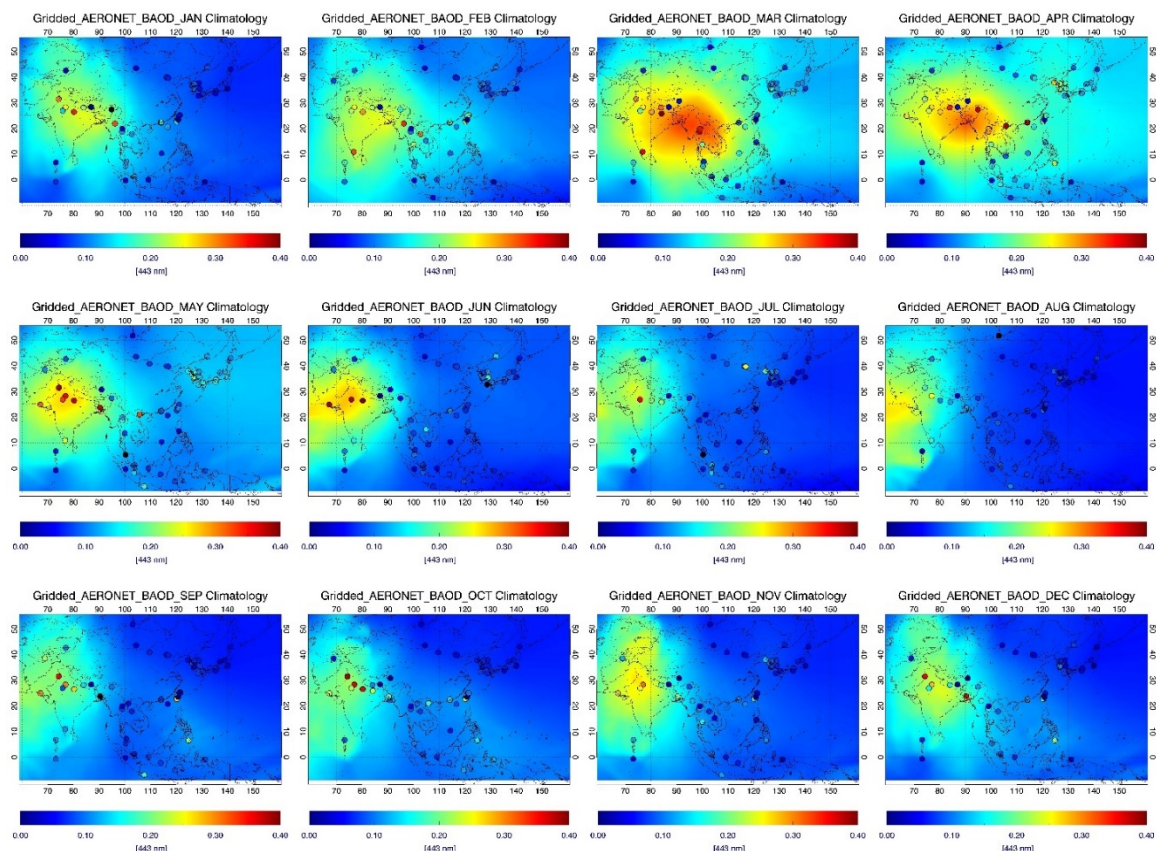
Figure S1: Monthly BAOD at 443 nm from 2-year AERONET AOD and interpolated to a 0.1 × 0.1° box. The lowest fifth percentiles of the AERONET AOD 443 nm values at each AERONET site are plotted as circles for comparison.
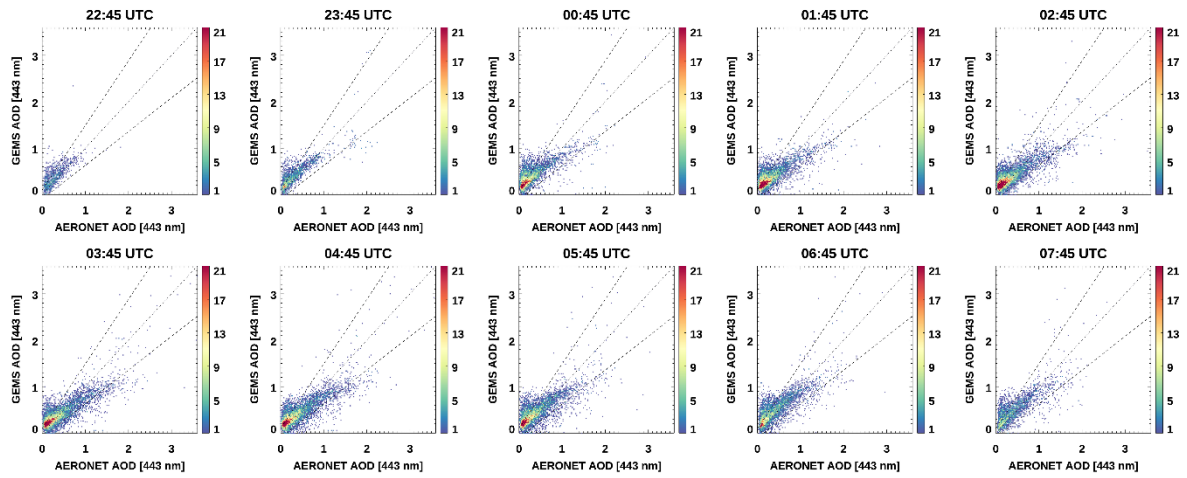
Figure S2: Hourly comparison of GEMS and AERONET AOD. The dashed lines indicate an uncertainty envelope of maximum (0.1 or 30%) in AOD. The dotted lines represent the 1:1 line.
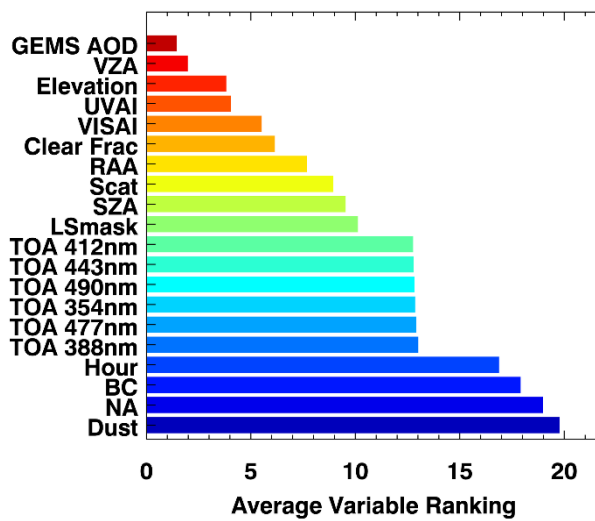

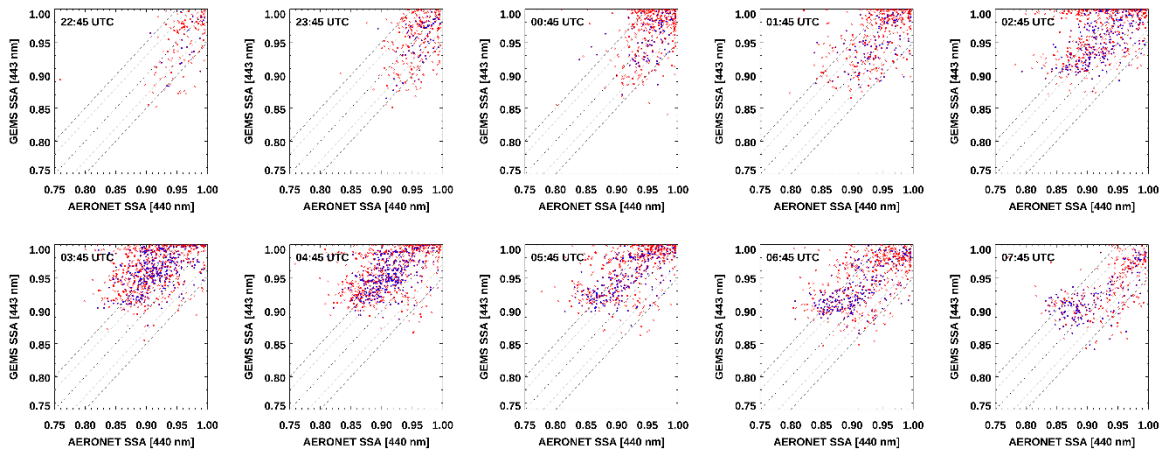**Figure S3: Average variable ranking from RF model for the post-processing correction of GEMS AOD.**

Figure S4: Hourly comparison of GEMS and AERONET SSA. The red circles represent the pixels when AOD > 0.4, and the blue circles represent the pixels when AOD > 1.0. The gray dashed lines indicate an uncertainty envelope of ±0.03 in SSA, the black dashed lines indicate an uncertainty envelope of ±0.05 in SSA, and the dotted lines represent the 1:1 line.
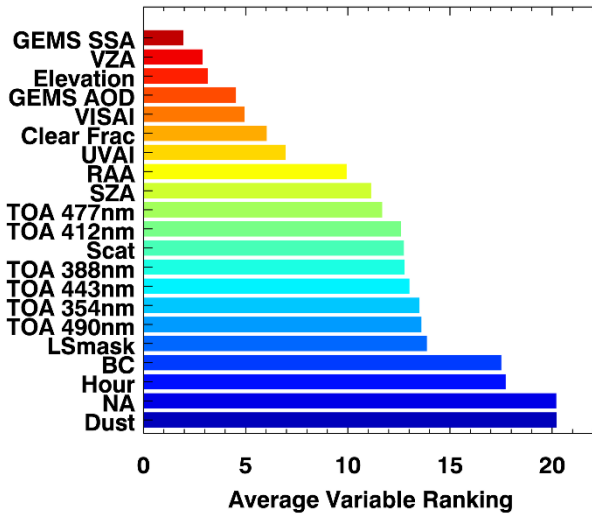

Figure S5: Average variable ranking from RF model for the post-processing correction of GEMS SSA.