atmosphere

MDPI

Supplement: Comparison of MODIS and AERONET data

In order to apply MODIS products in the regression model the MODIS Aqua and Terra products of AOD and Precipitable water vapor was compared with that of AERONET in the 10 AERONET sites of the IGP. The results are presented in following figures.

Figure S1. Comparison of MODIS Aqua Derived AOD with AERONET AOD at the IGP stations.
Figure S2. Station wise comparison of MODIS Aqua AOD with AERONET AOD in terms of expected error (EE) for the IGP stations.
Figure S3. Comparison of MODIS Aqua and AERONET derived Atmospheric Water vapour (in cm) at the IGP Stations.
Figure S4. Comparison of MODIS Aqua derived AOD with AERONET AOD in four seasons in the IGP.
Figure S5. Comparison of MODIS Terra derived AOD with AERONET AOD at the IGP stations.
Figure S6. Station wise comparison of MODIS Terra AOD with AERONET AOD in terms of expected error (EE) in the IGP stations.
Figure S7. Comparison of MODIS Terra derived atmospheric water vapour with AERONET atmospheric water vapour at the IGP stations.
Figure S8. Comparison of MODIS Terra derived AOD with AERONET AOD in four seasons in the IGP.

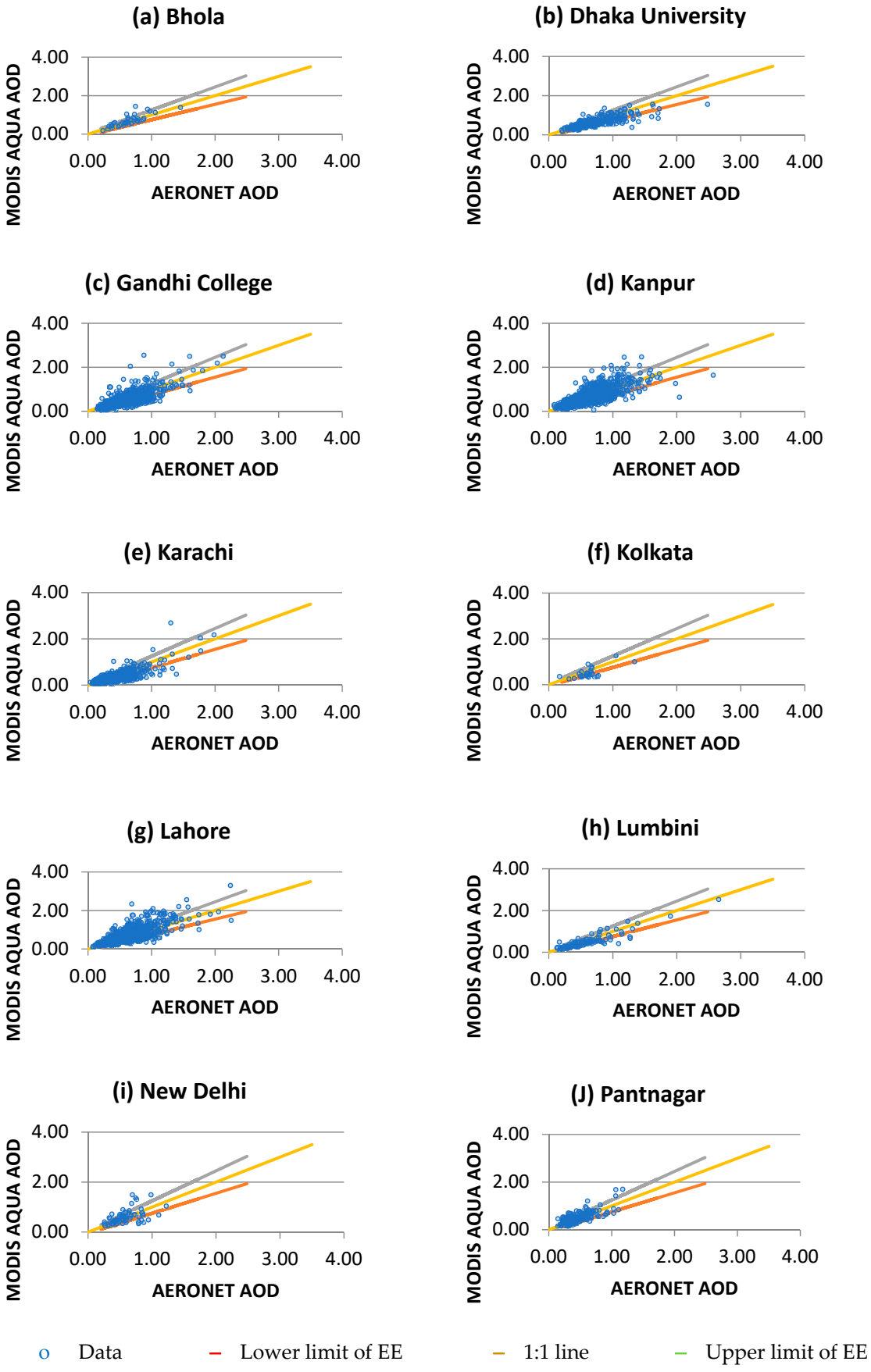

Figure S1. Comparison of MODIS Aqua Derived AOD with AERONET AOD at the IGP stations (**a**) Bhola (**b**) Dhaka University (**c**) Gandhi College (**d**) Kanpur (**e**) Karachi (**f**) Kolkata (**g**) Lahore (**h**) Lumbini (**i**) New Delhi (**j**) Pantnagar. Here EE is expected error range {±(0.05 + 0.2 × AOD)}.

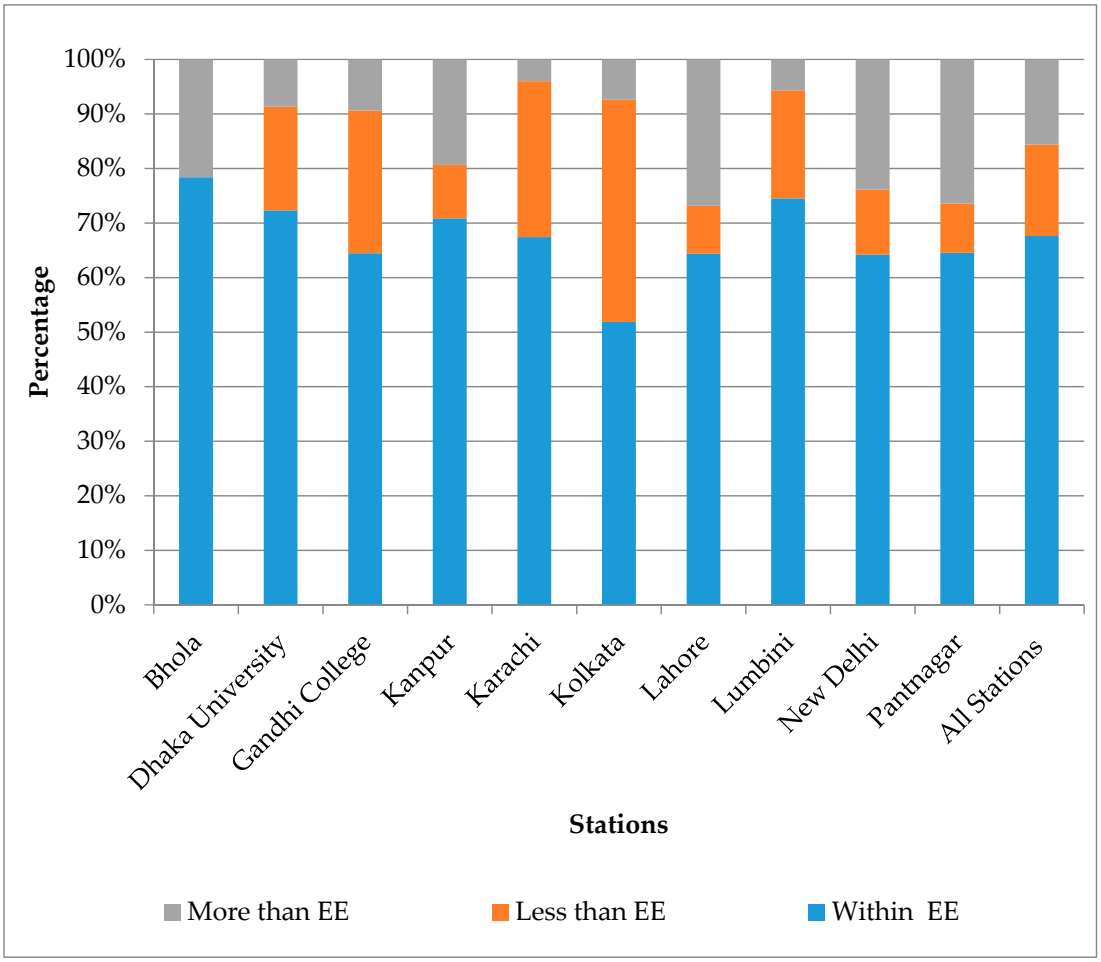

Figure S2. Station wise comparison of MODIS Aqua AOD with AERONET AOD in terms of expected error (EE) for the IGP stations.

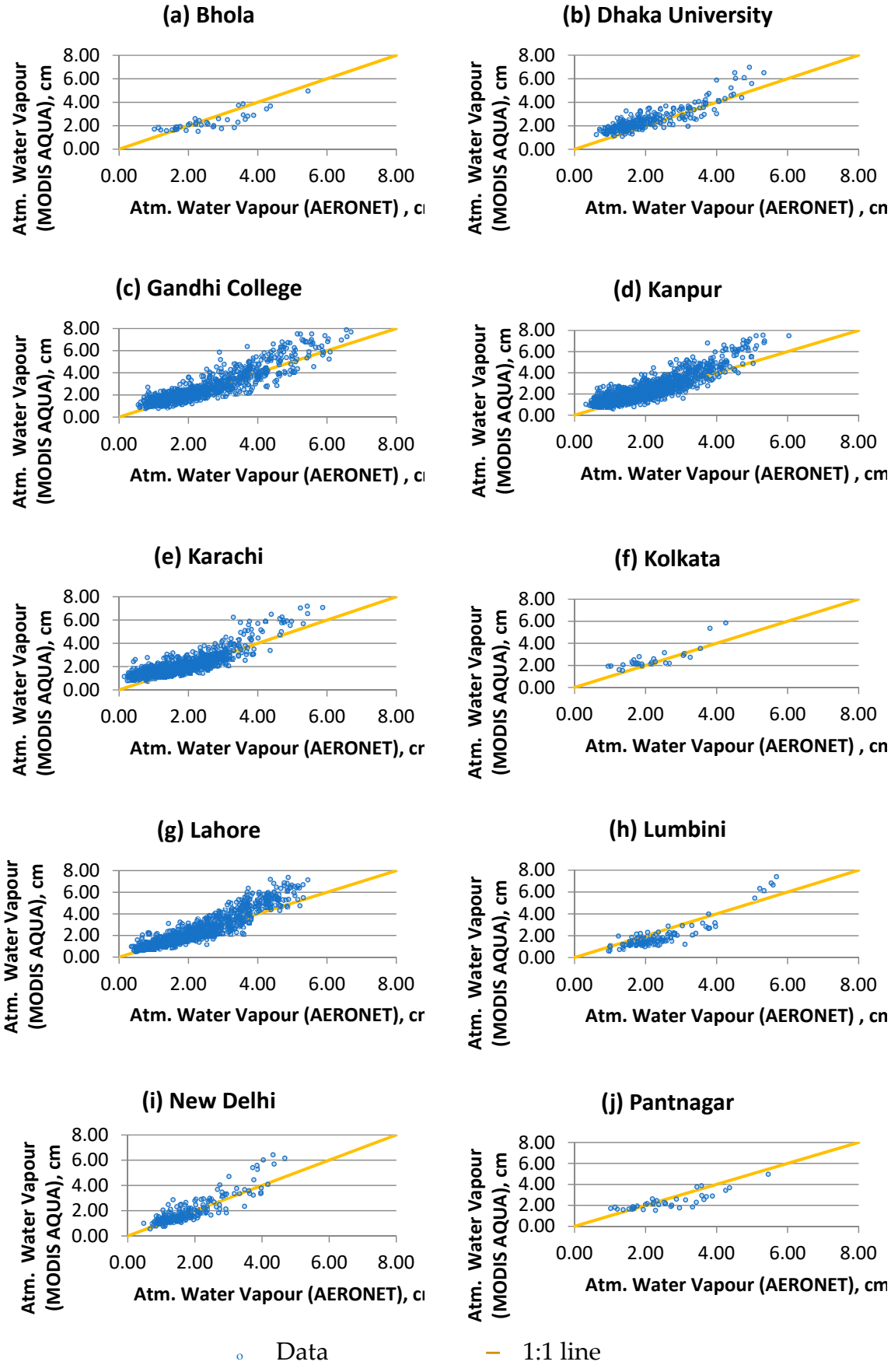

Figure S3. Comparison of MODIS Aqua and AERONET derived Atmospheric Water vapour (in cm) at the IGP Stations (**a**) Bhola (**b**) Dhaka University (**c**) Gandhi College (**d**) Kanpur (**e**) Karachi (**f**)Kolkata (**g**) Lahore (**h**) Lumbini (**i**) New Delhi (**j**) Pantnagar.

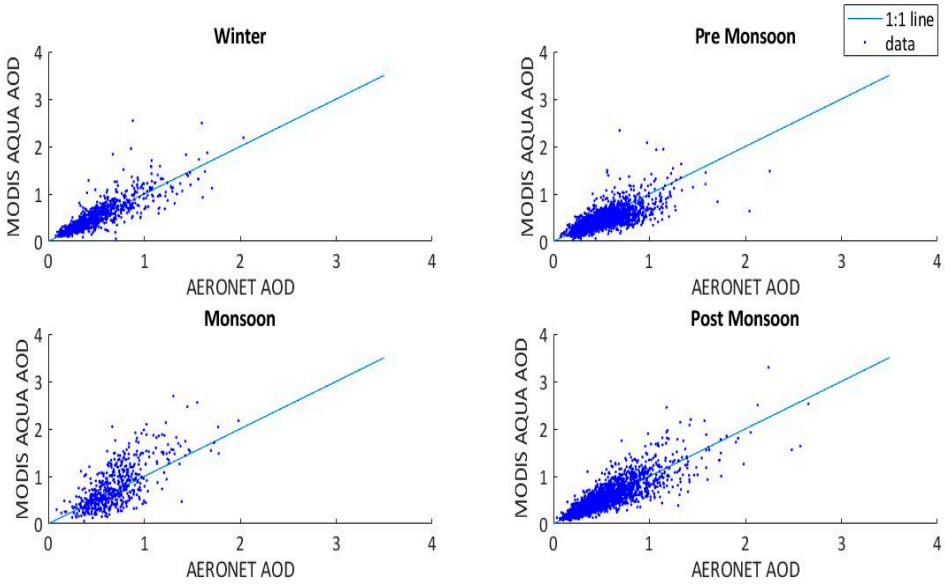

Figure S4. Comparison of MODIS Aqua derived AOD with AERONET AOD in four seasons in the IGP.

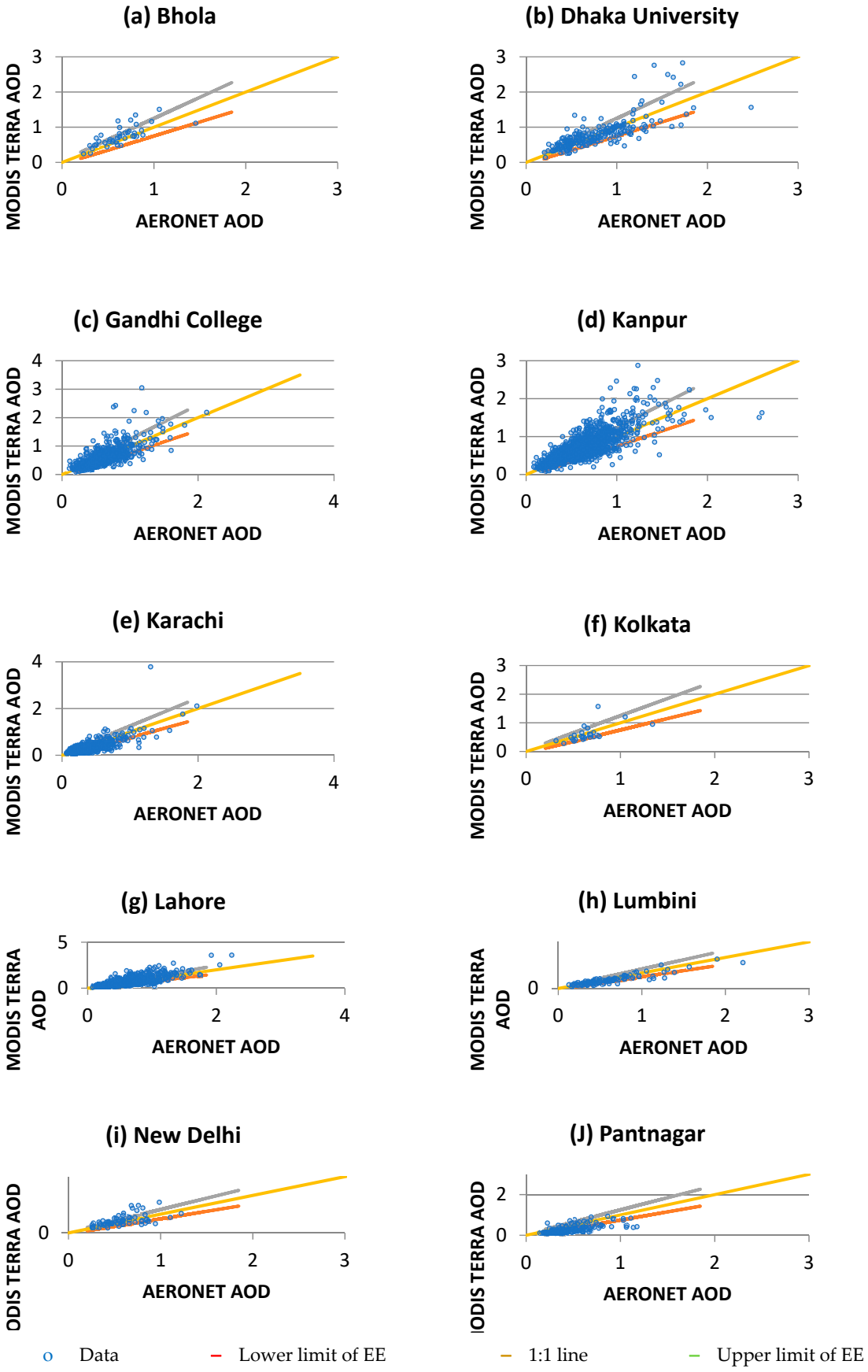

Figure S5. Comparison of MODIS Terra derived AOD with AERONET AOD at the IGP stations (**a**) Bhola (**b**) Dhaka University (**c**) Gandhi College (**d**) Kanpur (**e**) Karachi (**f**) Kolkata (**g**) Lahore (**h**) Lumbini (**i**) New Delhi (**j**) Pantnagar. Here EE is expected error range {±(0.05 + 0.2 × AOD)}.

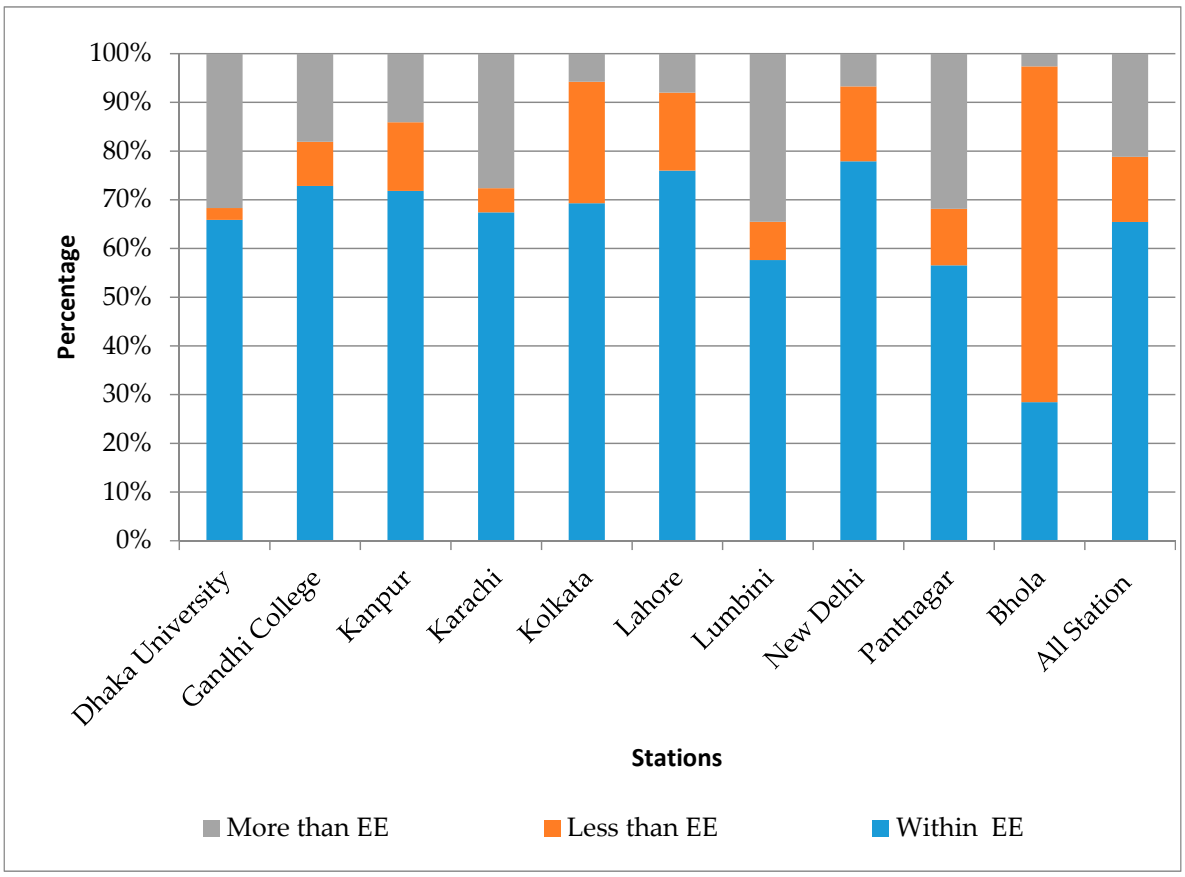

Figure S6. Station wise comparison of MODIS Terra AOD with AERONET AOD in terms of expected error (EE) in the IGP stations.

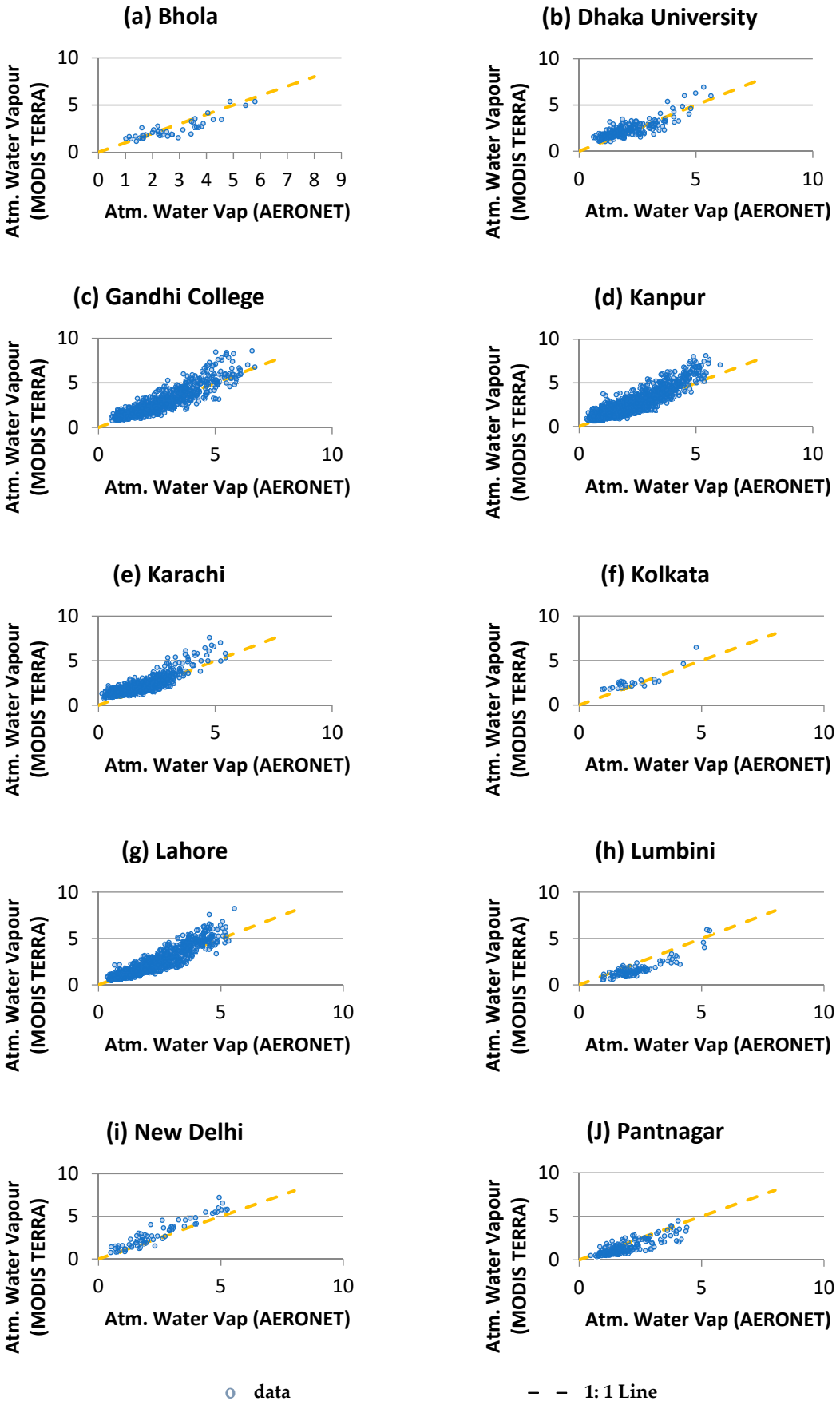

Figure S7. Comparison of MODIS Terra derived atmospheric water vapour with AERONET atmospheric water vapour at the IGP stations (**a**) Bhola (**b**) Dhaka University (**c**) Gandhi College (**d**) Kanpur (**e**) Karachi (**f**)Kolkata (**g**) Lahore (**h**) Lumbini (**i**) New Delhi (**j**) Pantnagar.

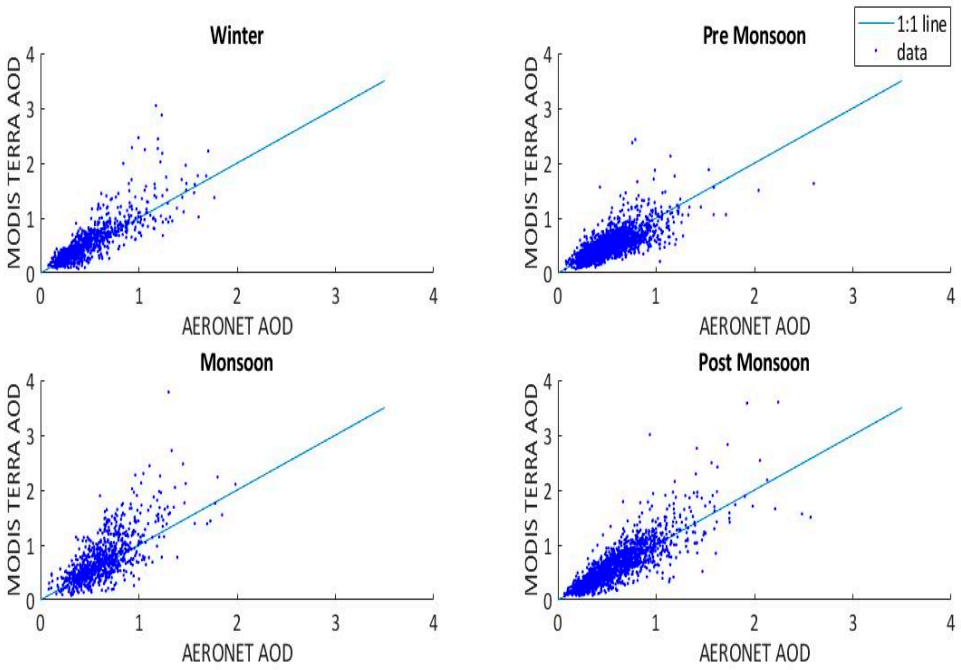

Figure S8. Comparison of MODIS Terra derived AOD with AERONET AOD in four seasons in the IGP.