

Supplementary Data

Table S1: Descriptive statistics of extracted AquaTerra DTB AOD retrievals and CAMS PM_{2.5} concentrations (µg/m³) for the selected 80 cities.

Parameter	N	Minimum	Mean	StDev	Q1	Median	Q3	Maximum
AOD	80	0.09	0.4	0.2	0.3	0.4	0.6	0.74
PM _{2.5}	80	17.84	69.4	32.6	45.69	67.37	92.84	170.53

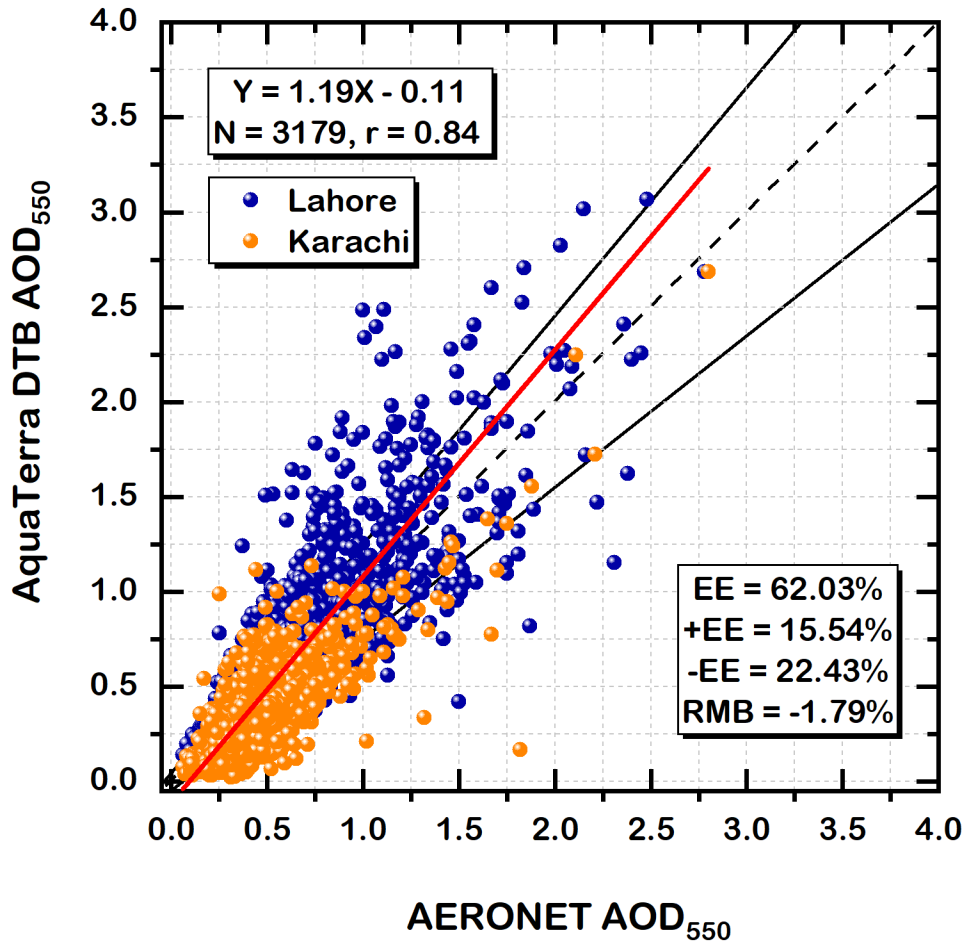


Figure S1: Validation of AquaTerra DTB AOD retrievals against AERONET Version 3 AOD measurements obtained for Lahore and Karachi AERONET sites from 2006 to

2017. The solid and dashed pink lines represent the upper and lower boundary of the EE, and $y = x$ line, respectively.



Source: <https://www.theguardian.com/environment/gallery/2019/feb/27/rivers-of-waste-pakistans-recyclers-go-out-on-patrol-in-pictures> (access date: 19th March 2021)



Source: <https://archive.pakistantoday.com.pk/2019/11/23/open-garbage-burning-aggravates-smog-in-punjab/> (access date: 19th March 2021)



Source: <https://archive.pakistantoday.com.pk/2018/05/03/national-highway-blocked-after-fire-destroys-gypsy-tents-report/> (access date: 19th March 2021)



Source: <https://nation.com.pk/16-Jan-2018/traders-sanitary-workers-burning-waste-on-roads> (access date: 19th March 2021)



Source: <https://www.urdupoint.com/en/pakistan/plastic-garbage-burning-getting-out-of-hand-529093.html> (access date: 19th March 2021)

Figure S2: Burning of solid waste and street garbage in Pakistan.

