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Supplement of

Comparison of aerosol optical depth from satellite (MODIS), sun photometer and broadband pyrheliometer ground-based observations in Cuba

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Monthly Statistics for single observations AOD Deep Blue																		
	Terra						Aqua						Terra + Aqua					
Month	RMSE	MAE	BIAS	R	f	N	RMSE	MAE	BIAS	R	f	N	RMSE	MAE	BIAS	R	f	N
J	0.049	0.035	-0.019	0.32	0.86	160	0.035	0.026	-0.009	0.25	0.91	54	0.046	0.032	-0.017	0.34	0.87	214
F	0.052	0.039	-0.026	0.63	0.83	118	0.038	0.029	-0.008	0.34	0.85	68	0.047	0.035	-0.019	0.63	0.84	186
M	0.081	0.058	-0.045	0.68	0.66	109	0.056	0.036	-0.020	0.60	0.88	69	0.072	0.050	-0.035	0.65	0.75	178
A	0.104	0.078	-0.066	0.68	0.59	34	0.062	0.048	-0.040	0.61	0.71	35	0.085	0.063	-0.053	0.69	0.65	69
M	0.091	0.078	-0.073	0.73	0.51	35	0.082	0.066	-0.064	0.74	0.69	29	0.087	0.073	-0.069	0.74	0.59	64
J	0.116	0.102	-0.101	0.75	0.31	49	0.105	0.092	-0.085	0.83	0.50	6	0.115	0.101	-0.100	0.76	0.33	55
J	0.135	0.096	-0.080	0.81	0.63	27	0.099	0.077	-0.017	0.89	0.71	28	0.118	0.086	-0.048	0.82	0.67	55
A	0.132	0.105	-0.092	0.69	0.50	64	0.137	0.122	-0.096	0.78	0.30	20	0.133	0.109	-0.093	0.63	0.45	84
S	0.116	0.103	-0.103	0.72	0.22	55	0.064	0.057	-0.027	0.82	0.56	9	0.110	0.097	-0.092	0.66	0.27	64
O	0.084	0.068	-0.068	0.70	0.44	48	0.070	0.060	-0.058	0.80	0.42	19	0.080	0.066	-0.065	0.62	0.43	67
N	0.063	0.051	-0.051	0.74	0.54	39	0.045	0.030	-0.022	0.85	0.82	22	0.057	0.044	-0.040	0.66	0.64	61
D	0.042	0.031	-0.019	0.25	0.85	142	0.037	0.029	-0.017	0.36	0.85	60	0.040	0.030	-0.019	0.31	0.85	202

Table S1: Tabulated results of the comparison between single observations AOD_t, AOD_a and AOD_{ta} derived using DB algorithm with AOD_{SP} at monthly scale.

Monthly Statistics for single observations AOD Dark Target																		
Month	Terra						Aqua						Terra + Aqua					
	RMSE	MAE	BIAS	R	f	N	RMSE	MAE	BIAS	R	f	N	RMSE	MAE	BIAS	R	f	N
J	0.043	0.034	0.025	0.48	0.88	163	0.046	0.042	0.039	0.39	0.90	52	0.044	0.036	0.028	0.51	0.88	215
F	0.045	0.039	0.036	0.68	0.82	115	0.058	0.051	0.048	0.26	0.68	50	0.049	0.042	0.039	0.72	0.78	165
M	0.072	0.060	0.053	0.53	0.67	98	0.074	0.062	0.056	0.39	0.62	55	0.073	0.061	0.054	0.59	0.65	153
A	0.057	0.051	0.041	0.58	0.74	31	0.058	0.048	0.017	0.75	0.74	38	0.058	0.049	0.028	0.78	0.74	69
M	0.083	0.066	0.059	0.59	0.56	41	0.069	0.058	0.056	0.73	0.76	29	0.078	0.063	0.058	0.70	0.64	70
J	0.085	0.062	-0.042	0.76	0.72	47	0.097	0.075	-0.063	0.81	0.64	14	0.088	0.065	-0.047	0.79	0.70	61
J	0.079	0.064	-0.027	0.83	0.59	32	0.090	0.077	0.020	0.89	0.79	33	0.085	0.071	-0.003	0.87	0.69	65
A	0.105	0.076	-0.040	0.70	0.59	63	0.079	0.064	-0.048	0.79	0.71	41	0.096	0.071	-0.043	0.66	0.63	104
S	0.069	0.060	-0.054	0.71	0.61	57	0.087	0.068	-0.025	0.75	0.68	22	0.074	0.063	-0.046	0.65	0.63	79
O	0.063	0.050	-0.041	0.65	0.69	51	0.055	0.037	-0.027	0.59	0.82	38	0.060	0.044	-0.035	0.52	0.74	89
N	0.043	0.034	-0.018	0.64	0.87	45	0.044	0.034	0.010	0.48	0.87	45	0.044	0.034	-0.004	0.60	0.87	90
D	0.030	0.023	0.003	0.49	0.94	157	0.046	0.035	0.024	0.36	0.94	83	0.037	0.027	0.010	0.35	0.94	240

Table S2: Tabulated results of the comparison between single observations AOD_t, AOD_a and AOD_{ta} derived using DT algorithm with AOD_{SP} at monthly scale.