



Supplement of

Quantification of the dust optical depth across spatiotemporal scales with the MIDAS global dataset (2003–2017)

Antonis Gkikas et al.

Correspondence to: Antonis Gkikas (agkikas@noa.gr)

The copyright of individual parts of the supplement might differ from the article licence.



Figure S1: Seasonal geographical distributions of the MIDAS fine spatial resolution (0.1° x 0.1°) DOD, across North Africa, the Tropical Atlantic Ocean and the broader Mediterranean basin, corresponding to: (i) December-January-February (DJF), (ii) March-April-May (MAM), (iii) June-July-August (JJA) and (iv) September-October-November (SON), averaged over the period 2003-2017. Grey color represents areas with absence of data.





MIDAS-DOD JJA [01_Jan_2003-31_Dec_2017]



Figure S2: As in Figure S1 but for the Middle East.

MIDAS-DOD SON [01_Jan_2003-31_Dec_2017]





Figure S3: As in Figure S1 but for the central and southwest Asia.



MIDAS-DOD SON [01_Jan_2003-31_Dec_2017]





(iii) Figure S4: As in Figure S1 but for the Indian subcontinent.

75°E

70°E

80°E

85°E

5°N 90°E 0.00

5°N 65°E



Figure S5: As in Figure S1 but for the East Asia and the Northern Pacific Ocean.



Figure S6: As in Figure S1 but for the North America.



Figure S7: As in Figure S1 but for the Australia.



MIDAS-DOD MAM [01_Jan_2003-31_Dec_2017] 130°E 135°E 140°E 145°E 150°E 155°E 160°E 10°S °E 115°E 120°E 125°E 10°5 0.40 15 15.5 0.35 0.30 20°5 20°5 0.25 25°5 25°S 0.20 0.15 30°S 30°S 0.10 35°5 35°S 0.05 40°S 110°E 115°E 120°E 125°E 130°E 135°E 140°E 145°E 150°E 155°E 160°E 0.00 **(ii)** MIDAS-DOD SON [01_Jan_2003-31_Dec_2017] °E 115°E 120°E 125°E 130°E 135°E 140°E 145°E 150°E 155°E 160 10°¢ °E 10°S 0.40 0.35 15° 15°S 0.30 20°5 20°5 0.25 25°5 25°S 0.20 0.15 30°9 30°S 0.10 35° 0.05 0.00 40°S 110°E 115°E 120°E 125°E 130°E 135°E 140°E 145°E 150°E 155°E 160°E (iv)





25°E

25°E

30°E

30°E 35°E

4.

(ii)

35°E 40°E

25°E

30°E

14.

40°E

35°E

45°E 10°S

15°S

20°5

25°S

30°S

35°S

40°S 45°E

45°E 10°S

15°S

40°E

3

0.40

0.35

0.30

0.25

0.20 0.15

0.10

0.05

0.00

0.40

0.35

0.30

0.25

0.20

0.15

0.10

0.05

0.00

10°E 15°E 20°E

10°E

10°E

15°E 20°E

15°E 20°E

Figure S8: As in Figure S1 but for the South Africa.



MIDAS-DOD JJA [01_Jan_2003-31_Dec_2017]



Figure S9: As in Figure S1 but for the South America.

MIDAS-DOD MAM [01_Jan_2003-31_Dec_2017]



MIDAS-DOD SON [01_Jan_2003-31_Dec_2017]

