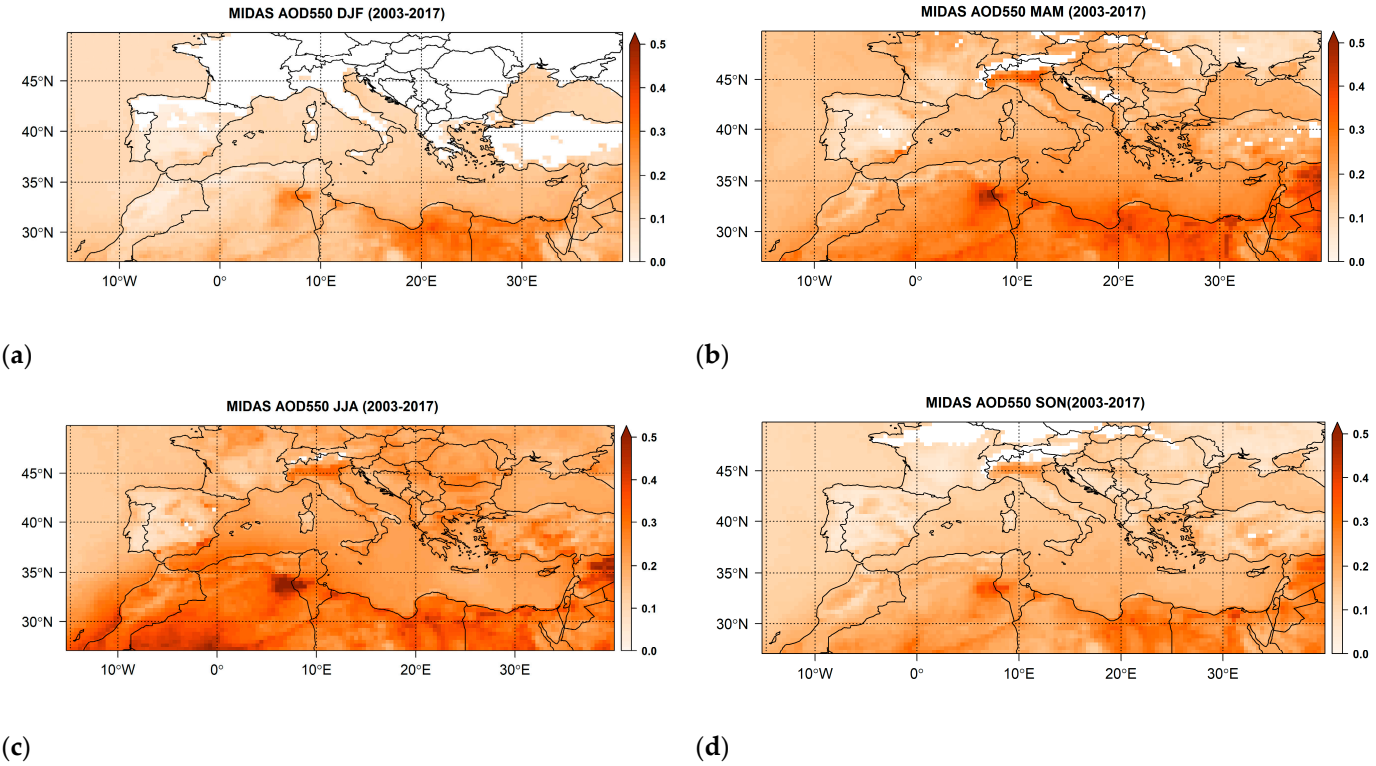
remote sensing

MDPI

Article

15-Year Analysis of Direct Effects of Total and Dust Aerosols in Solar Radiation/Energy over the Mediterranean Basin

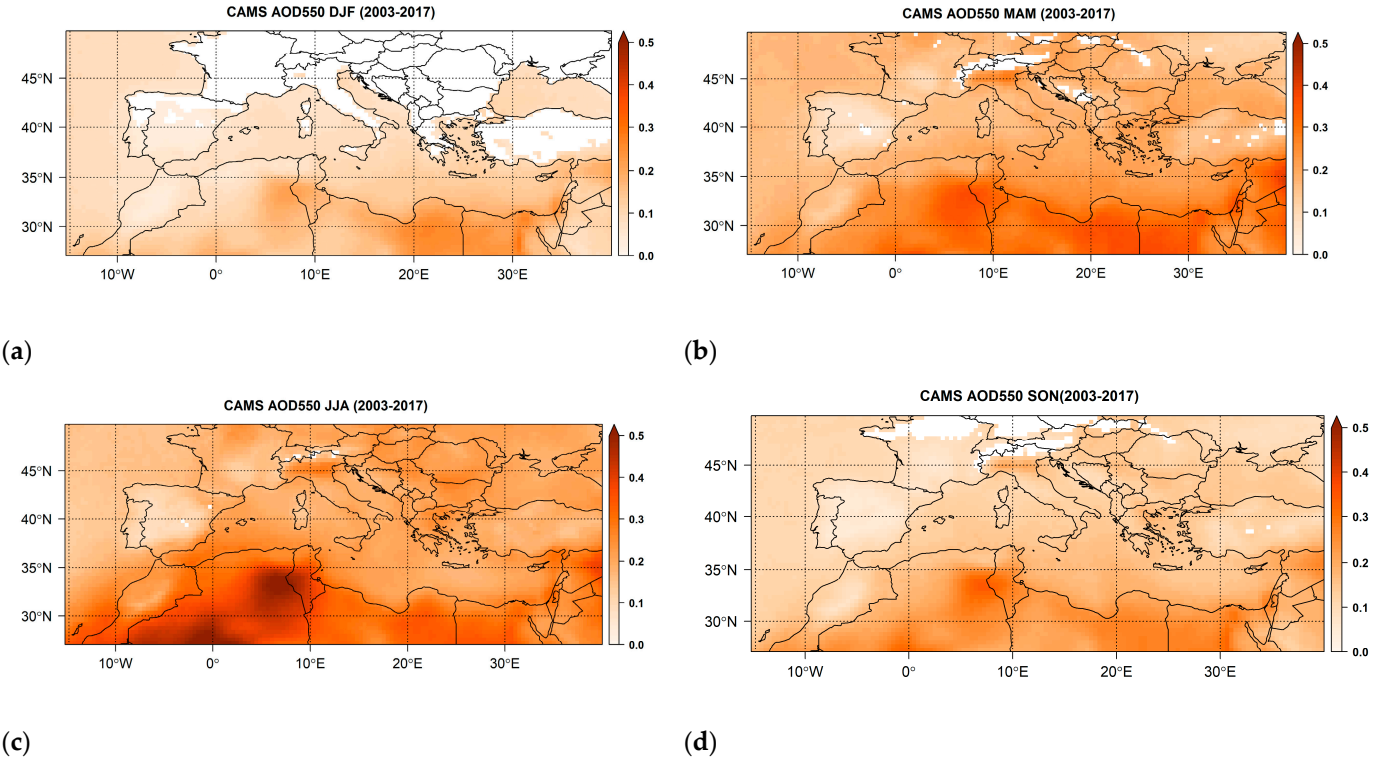
Supplement



(**a**) (**b**)

(**c**) (**d**)

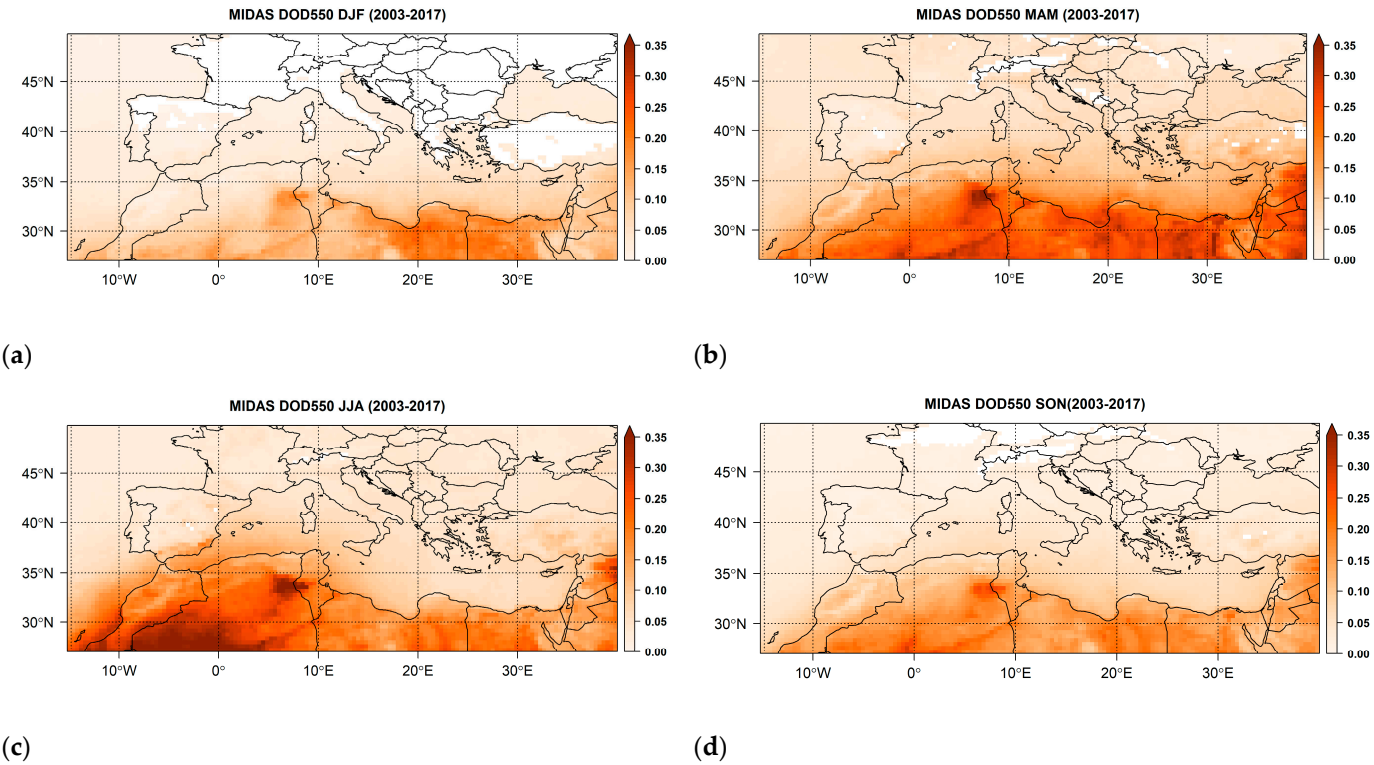
Figure S1. Geographical distribution of long-term average of seasonal mean AOD at 550nm from MODIS. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



(**a**) (**b**)

(**c**) (**d**)

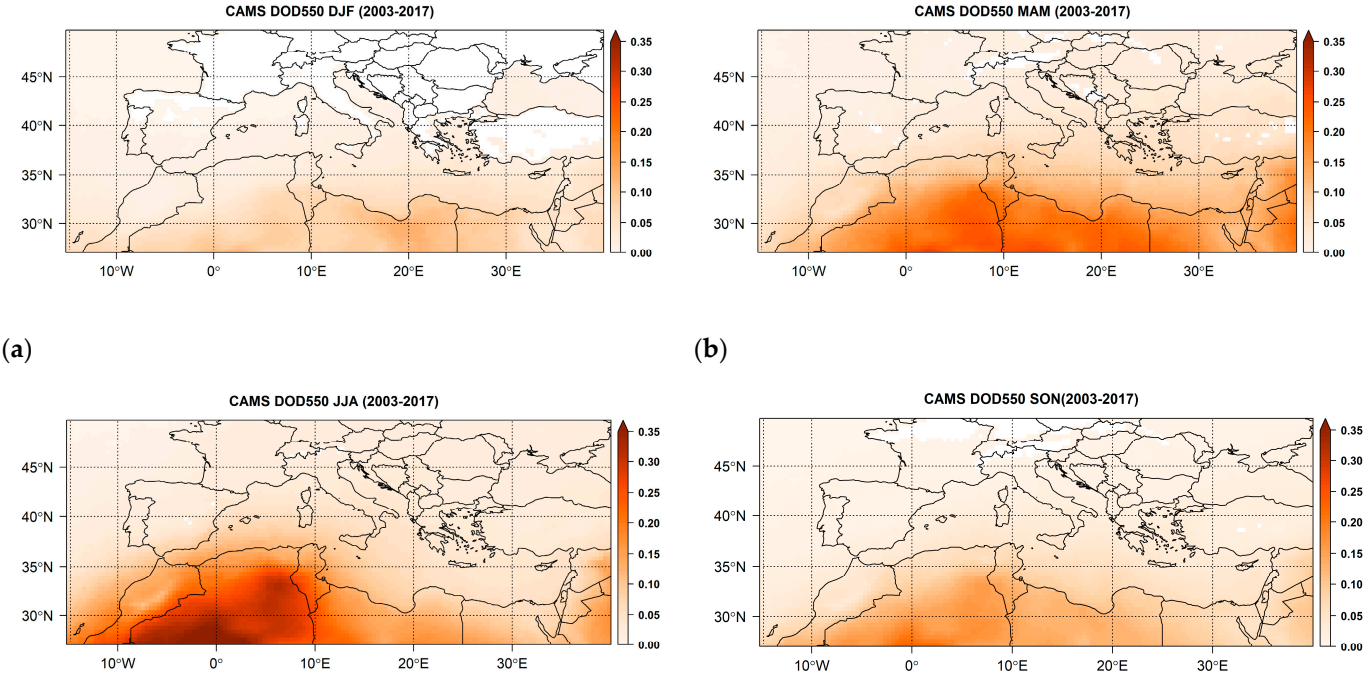
Figure S2. Geographical distribution of long-term average of seasonal mean AOD at 550nm from CAMS. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



(**a**) (**b**)

(**c**) (**d**)

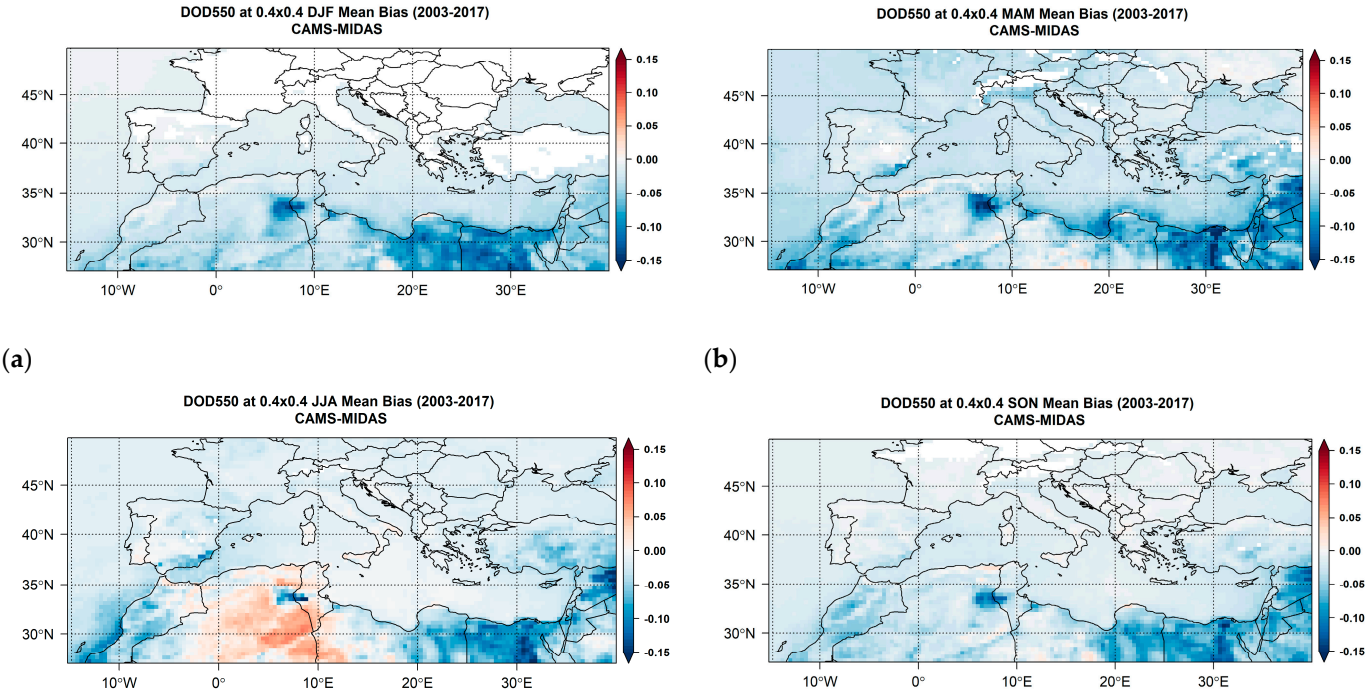
Figure S3. Geographical distribution of long-term average of seasonal mean DOD at 550nm from MIDAS. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



(**a**) (**b**)

(**c**) (**d**)

Figure S4. Geographical distribution of long-term average of seasonal mean DOD at 550nm from CAMS. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



(**a**) (**b**)

(**c**) (**d**)

Figure S5. Geographical distribution of annual mean CAMS–MIDAS DOD biases. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.

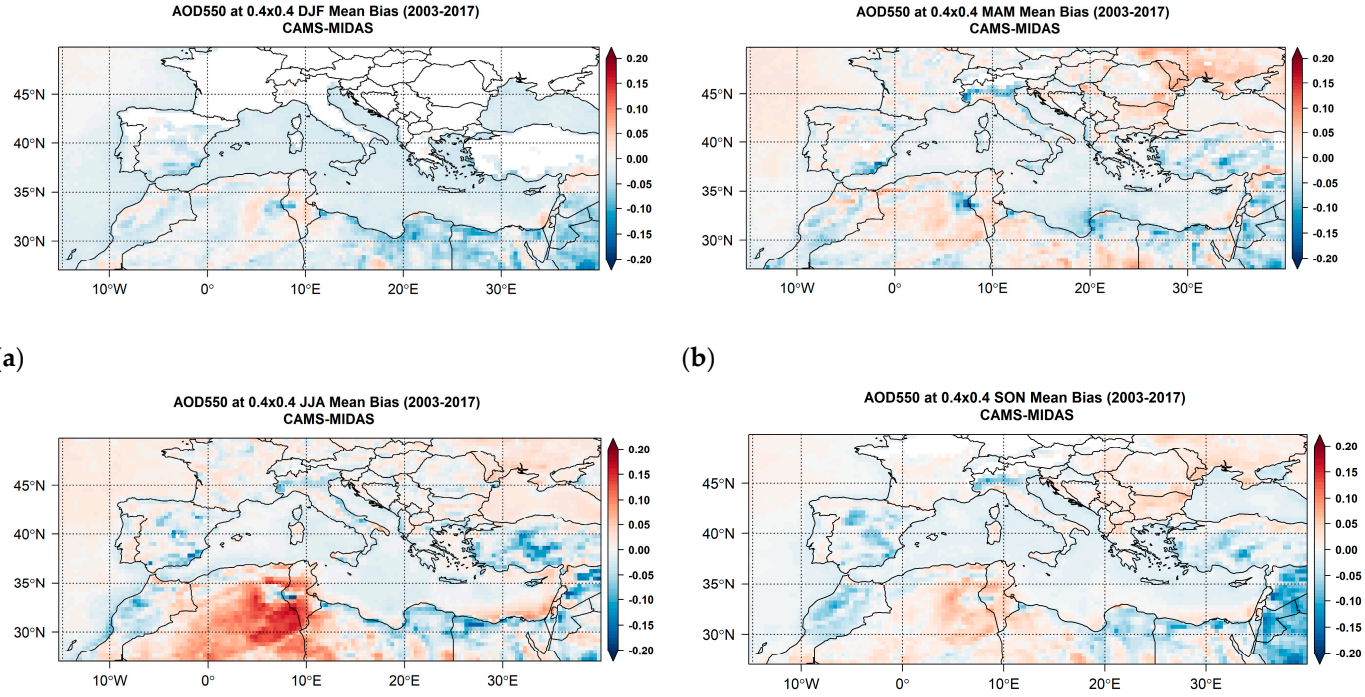


Figure S6. Geographical distribution of annual mean CAMS–MIDAS AOD biases. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.

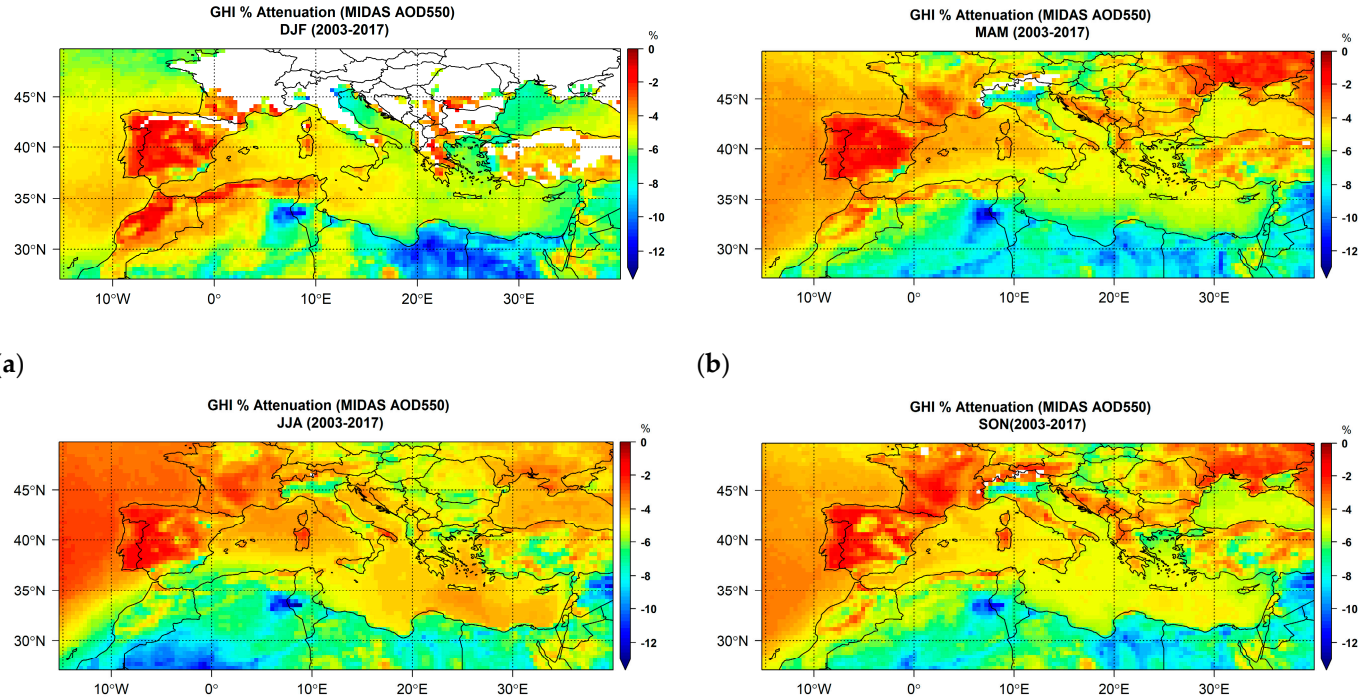


Figure S7. Change (in %) of the mean seasonal integral of GHI due to the presence of aerosols under MODIS AOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.

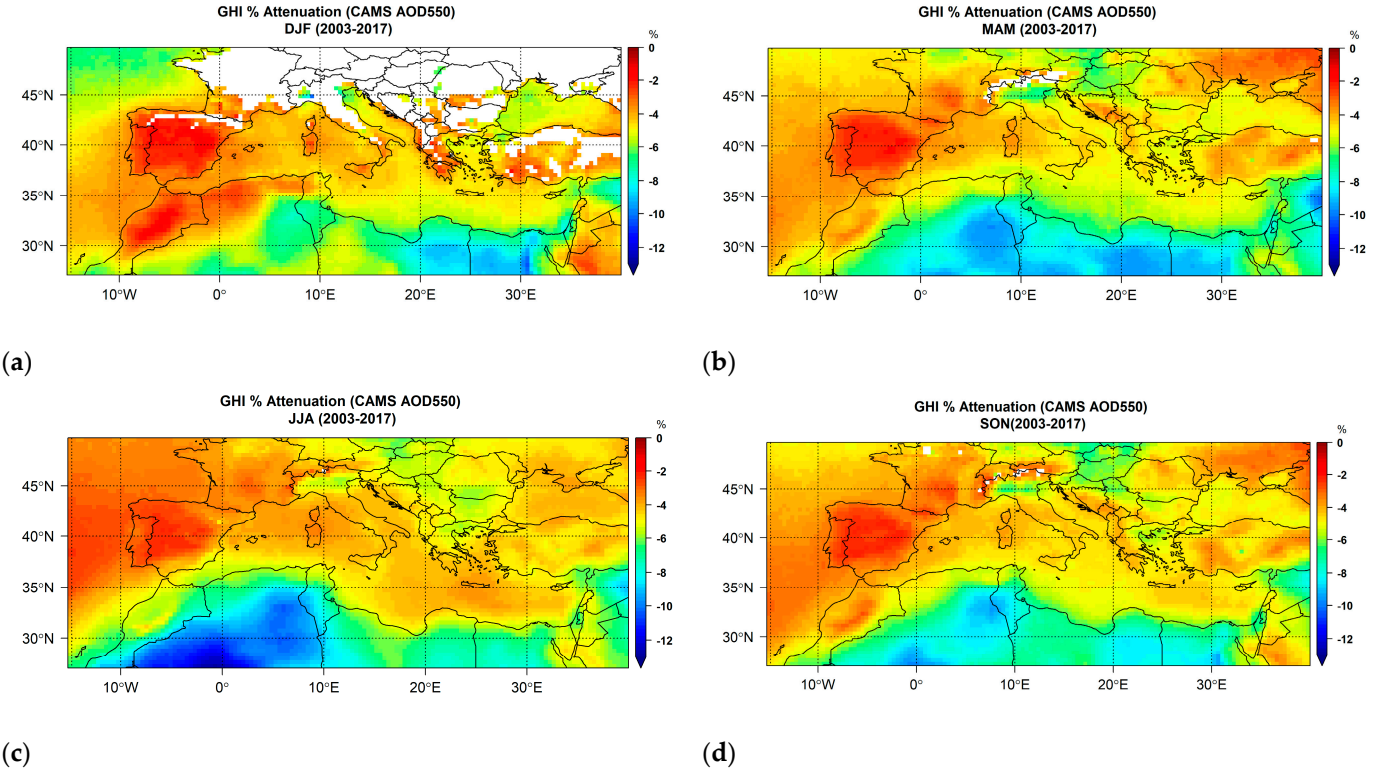


Figure S8. Change (in %) of the mean seasonal integral of GHI due to the presence of aerosols under CAMS AOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.

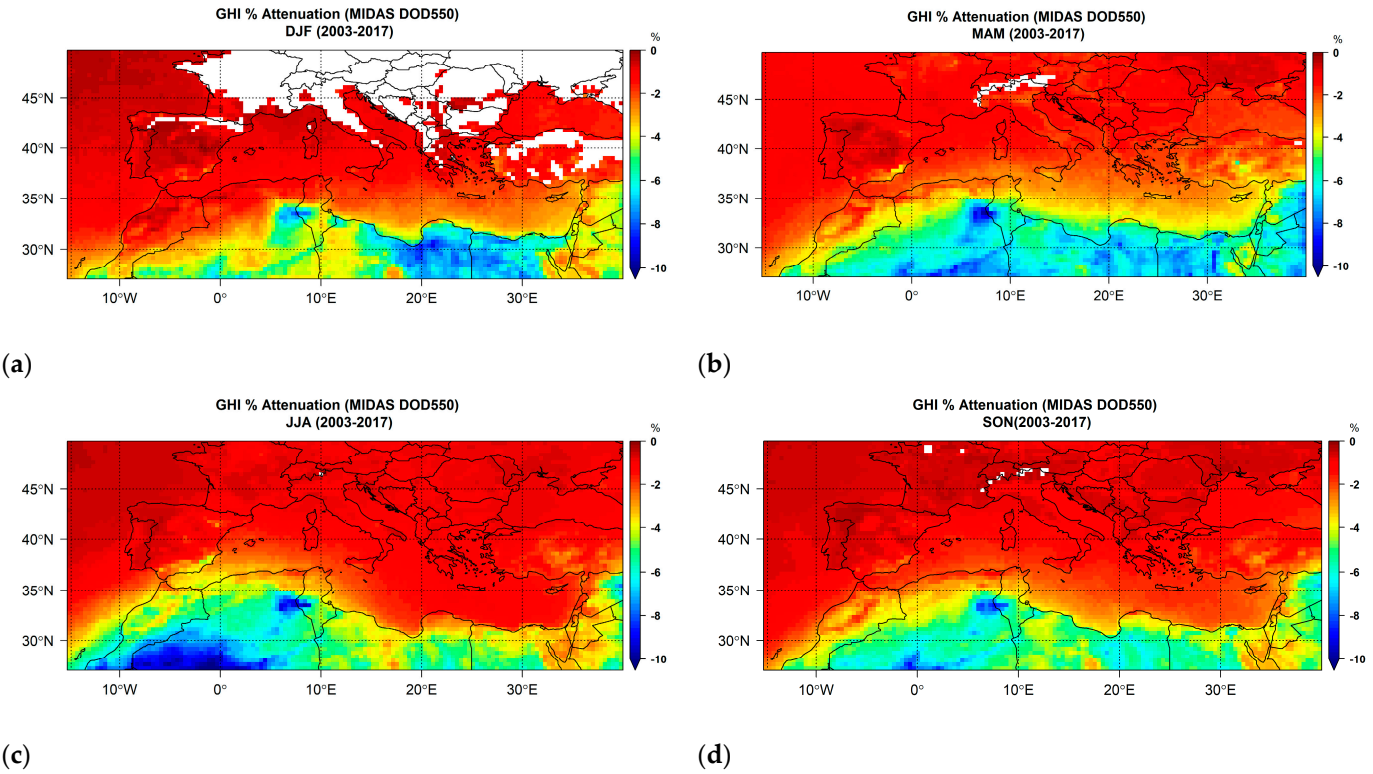
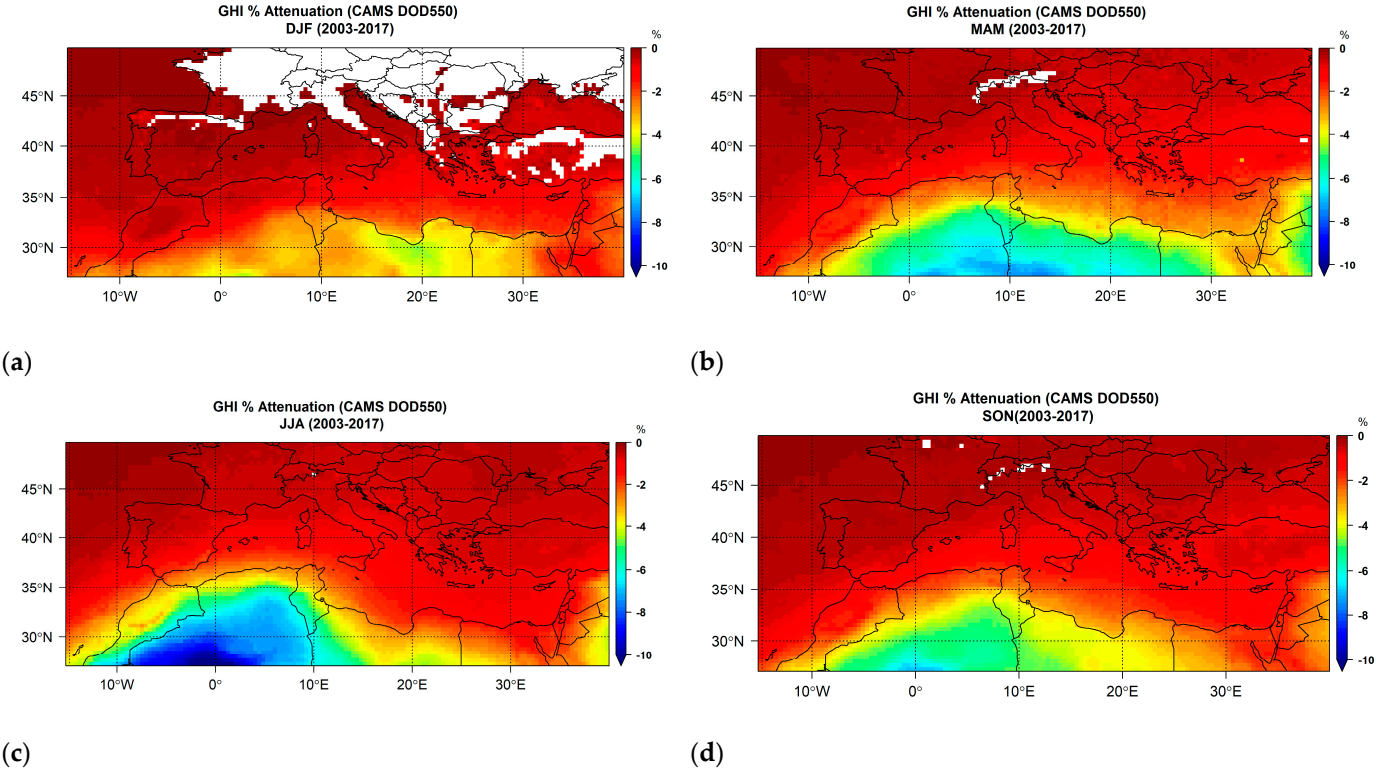


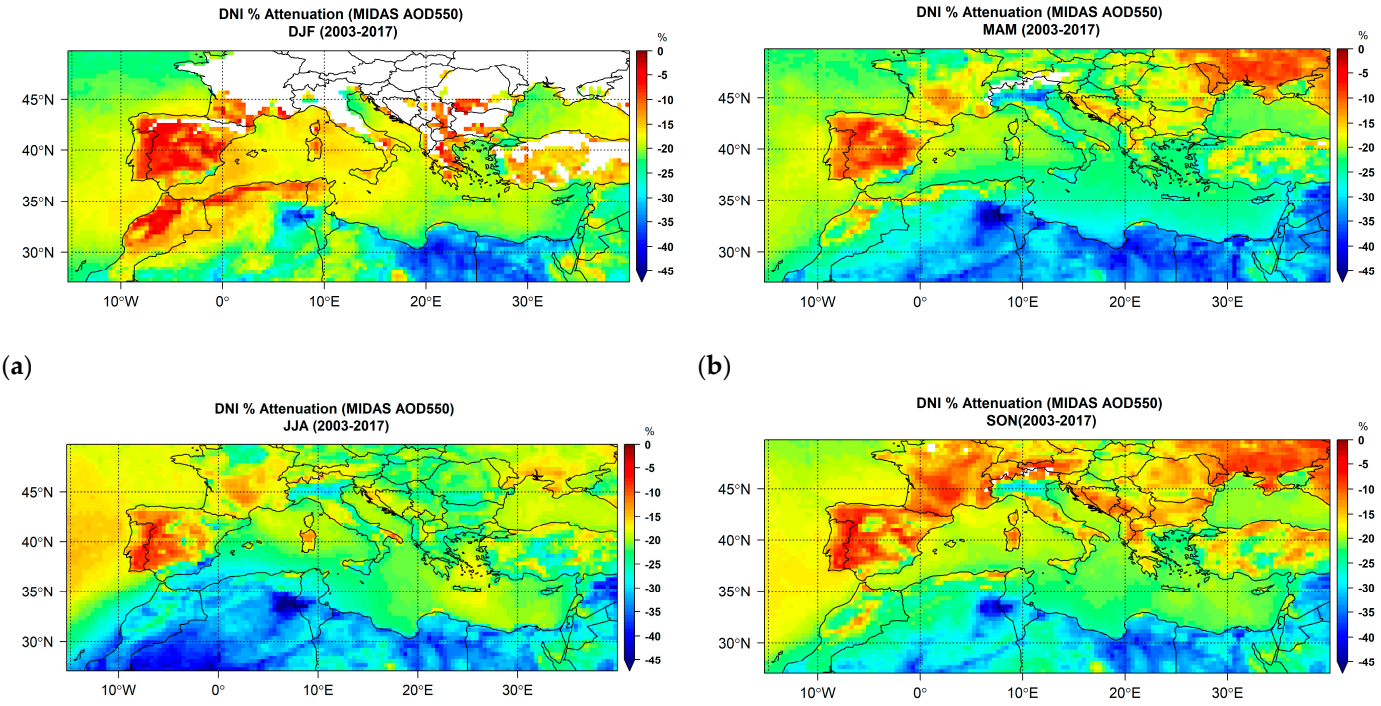
Figure S9. Change (in %) of the mean annual integral of GHI due to the presence of dust under MIDAS DOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



(**a**) (**b**)

(**c**) (**d**)

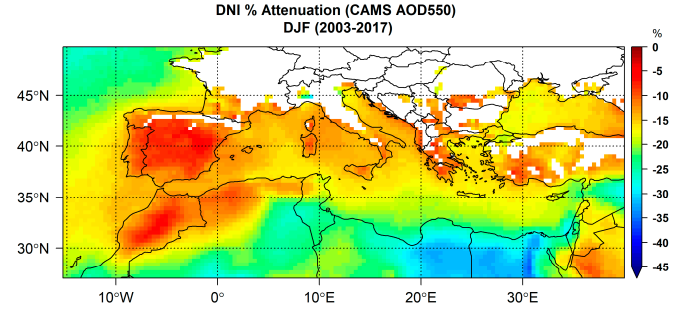
Figure S10. Change (in %) of the mean annual integral of GHI due to the presence of dust under CAMS DOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



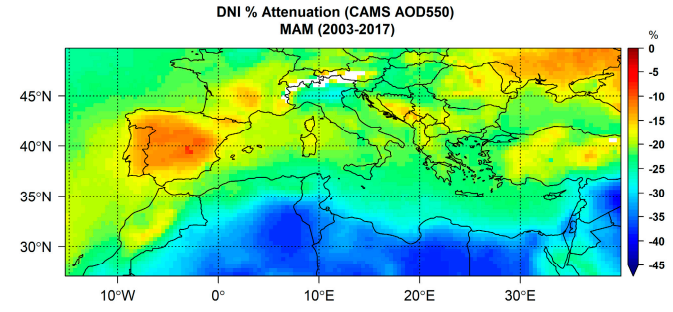
(**a**) (**b**)

(**c**) (**d**)

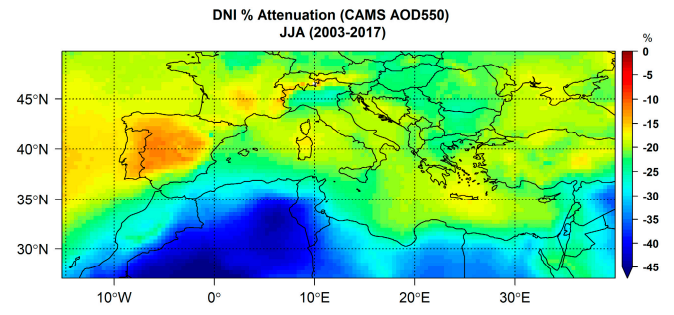
Figure S11. Change (in %) of the mean annual integral of DNI due to the presence of aerosols under MODIS AOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



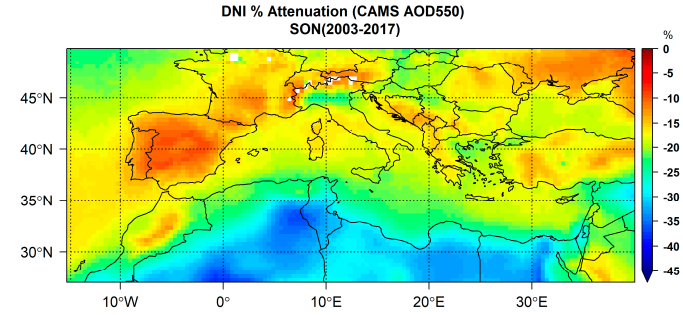
(**a**)



(**b**)

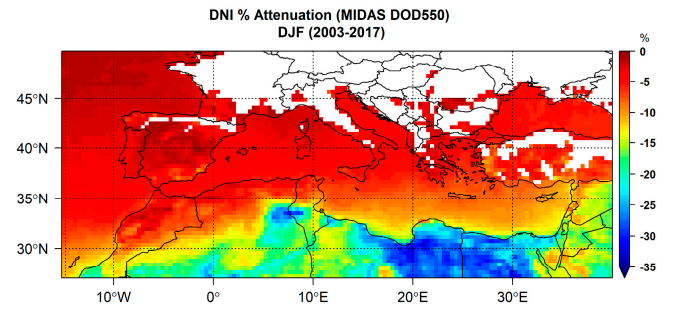


(**c**)

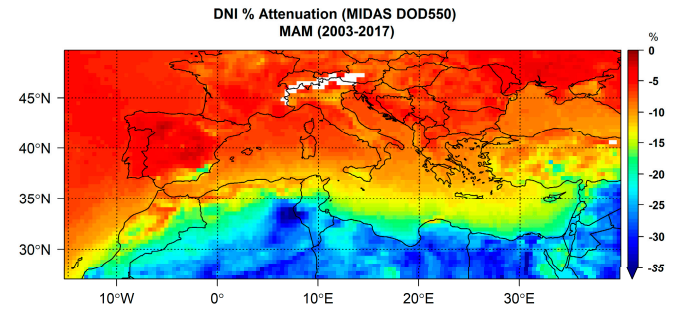


(**d**)

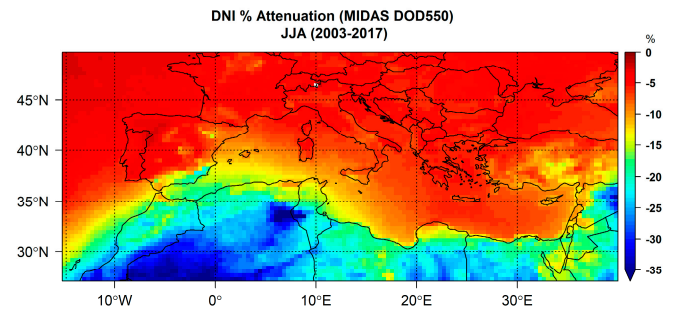
Figure S12. Change (in %) of the mean annual integral of DNI due to the presence of aerosols under CAMS AOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.



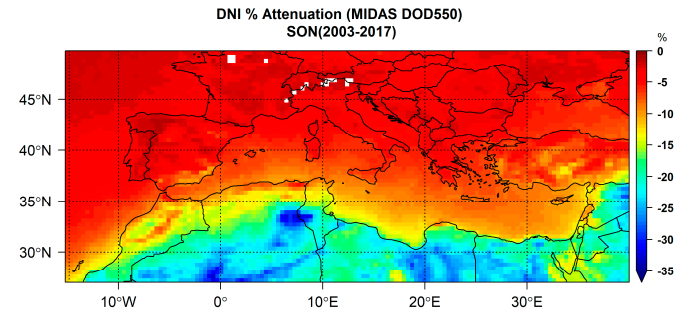
(**a**)



(**b**)



(**c**)



(**d**)

Figure S13. Change (in %) of the mean annual integral of DNI due to the presence of dust under MIDAS DOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.

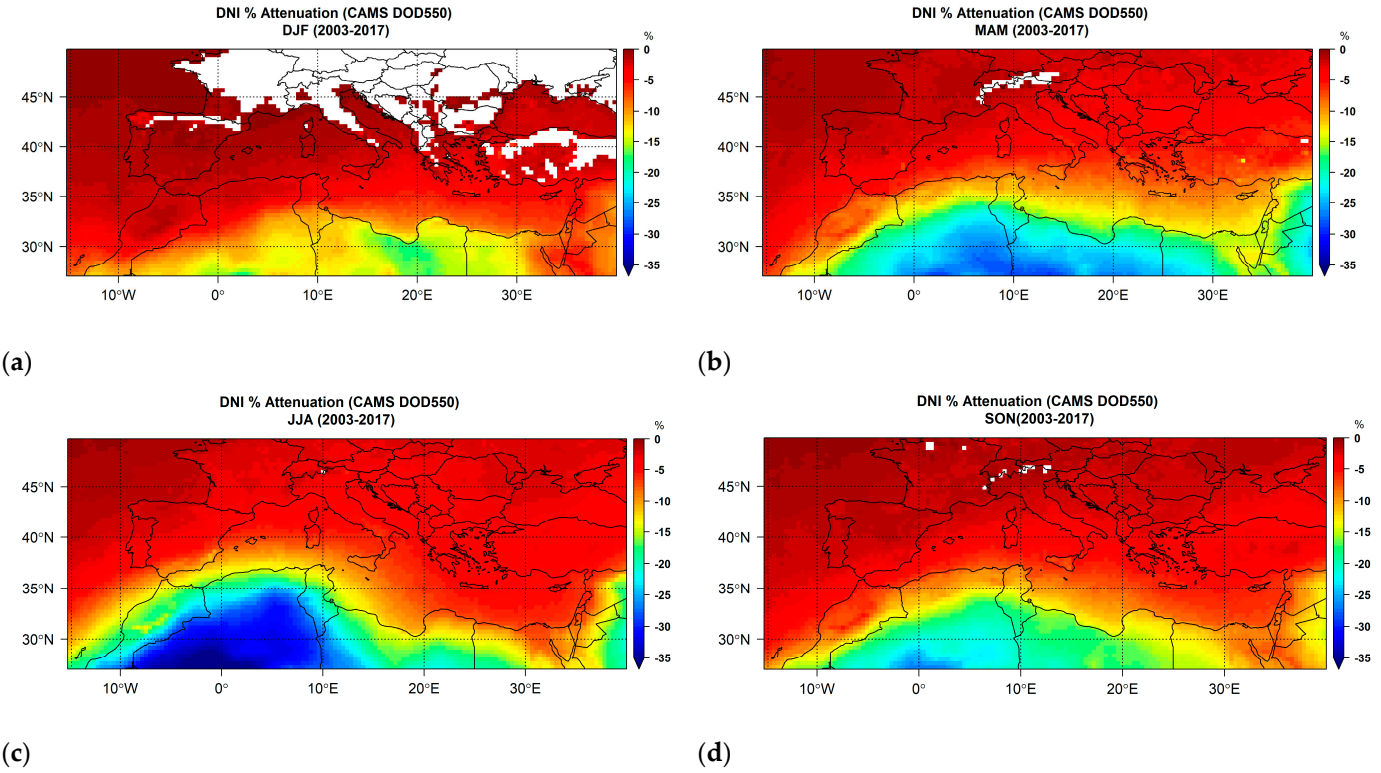


Figure S14. Change (in %) of the mean annual integral of DNI due to the presence of dust under CAMS DOD. Blank grid points are those that did not fulfill the criterion of at least 20% data availability on annual basis.

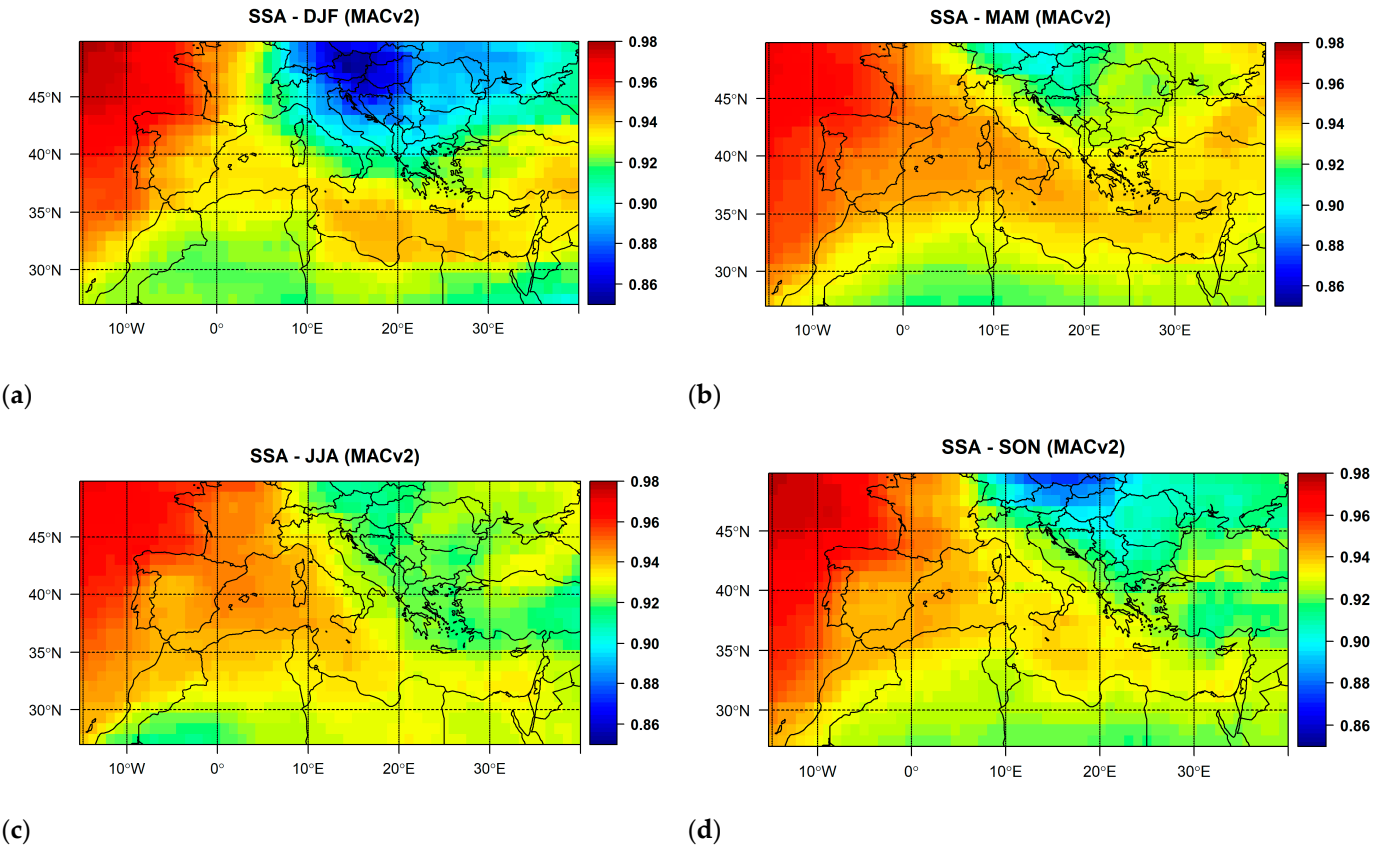
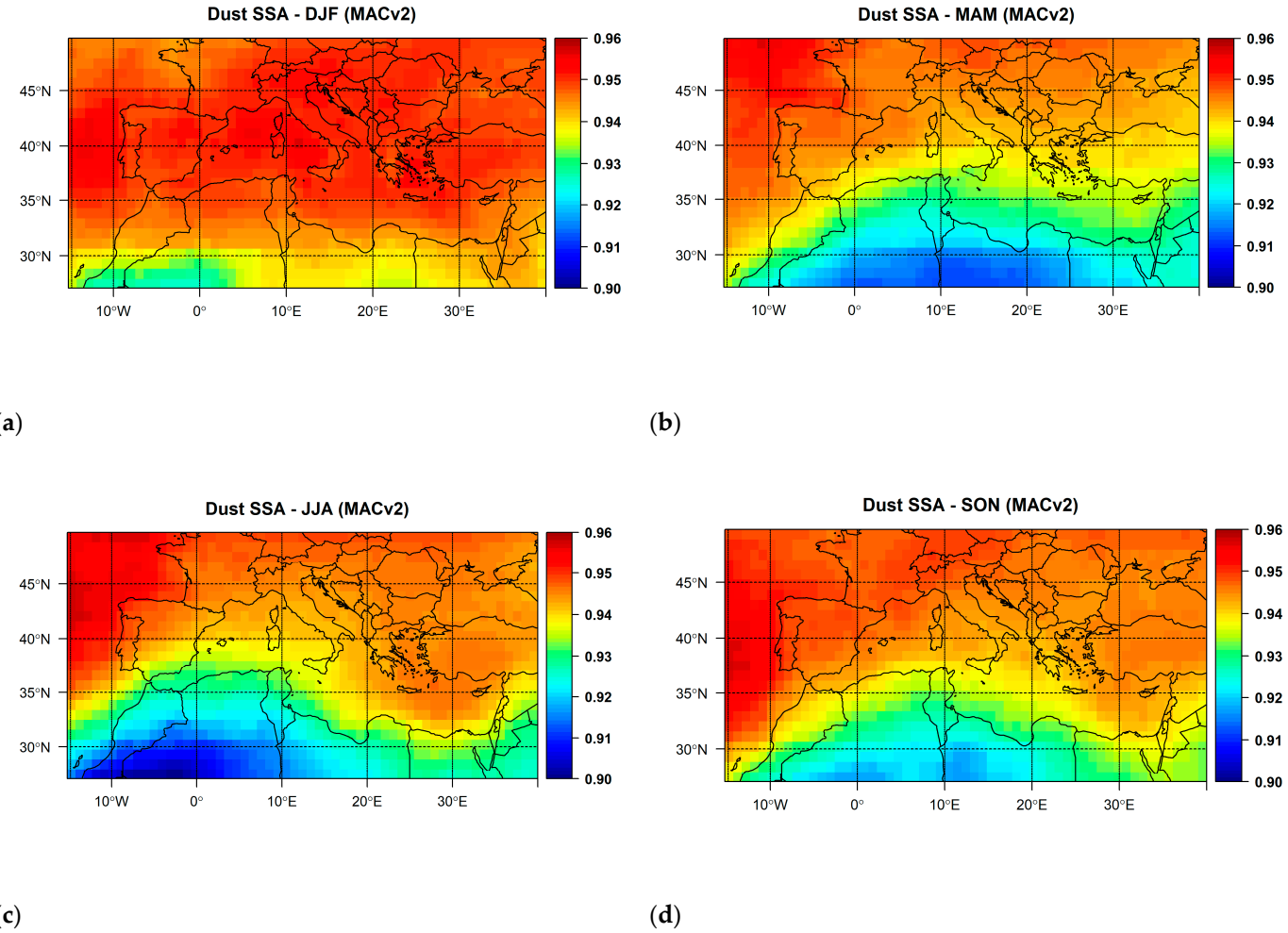


Figure S15. Geographical distribution of seasonal mean SSA (MACv2 [63]).



(**a**) (**b**)

(**c**) (**d**)

Figure S16. Geographical distribution of seasonal mean DU SSA (MACv2 [63]).

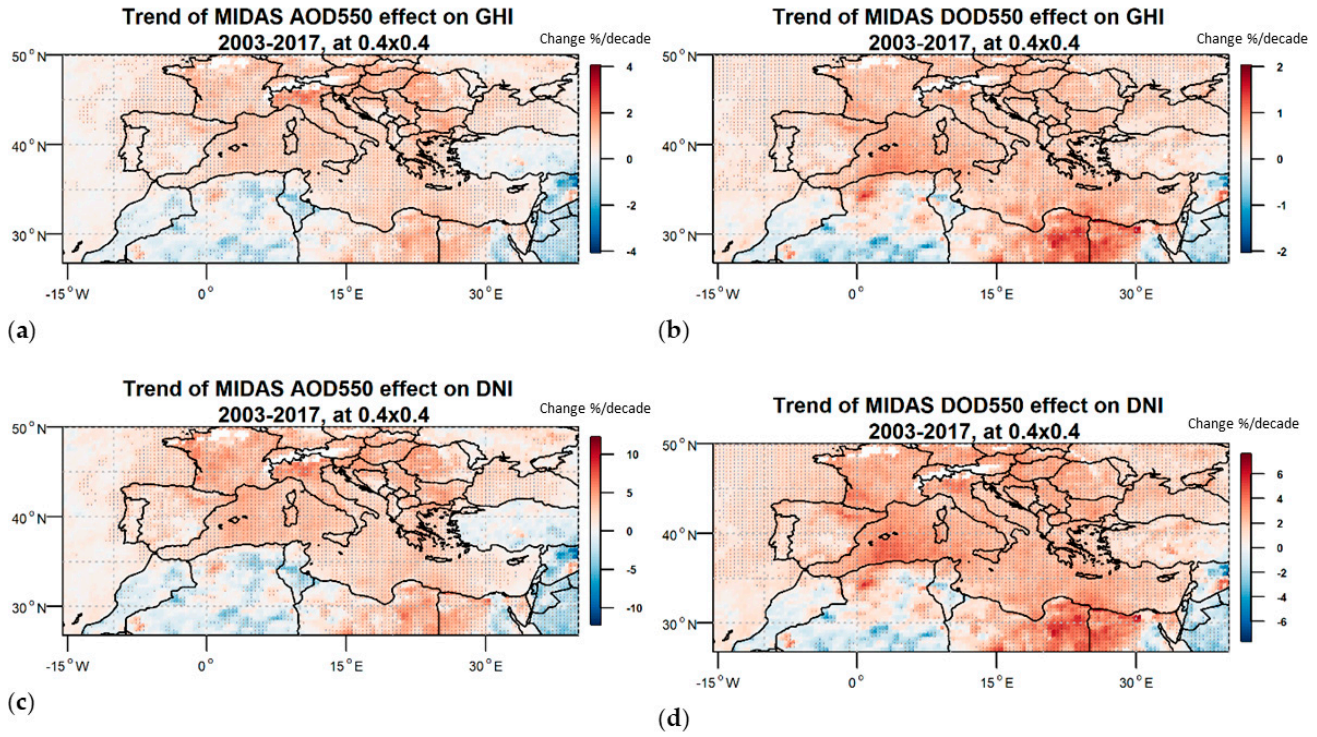


Figure S17. Trends in % per decade for GHI (panels (**a**,**b**)) and DNI (panels (**c**,**d**)) due to the changes in AOD (panels (**a**,**c**)) and DOD (panels (**b**,**d**)).

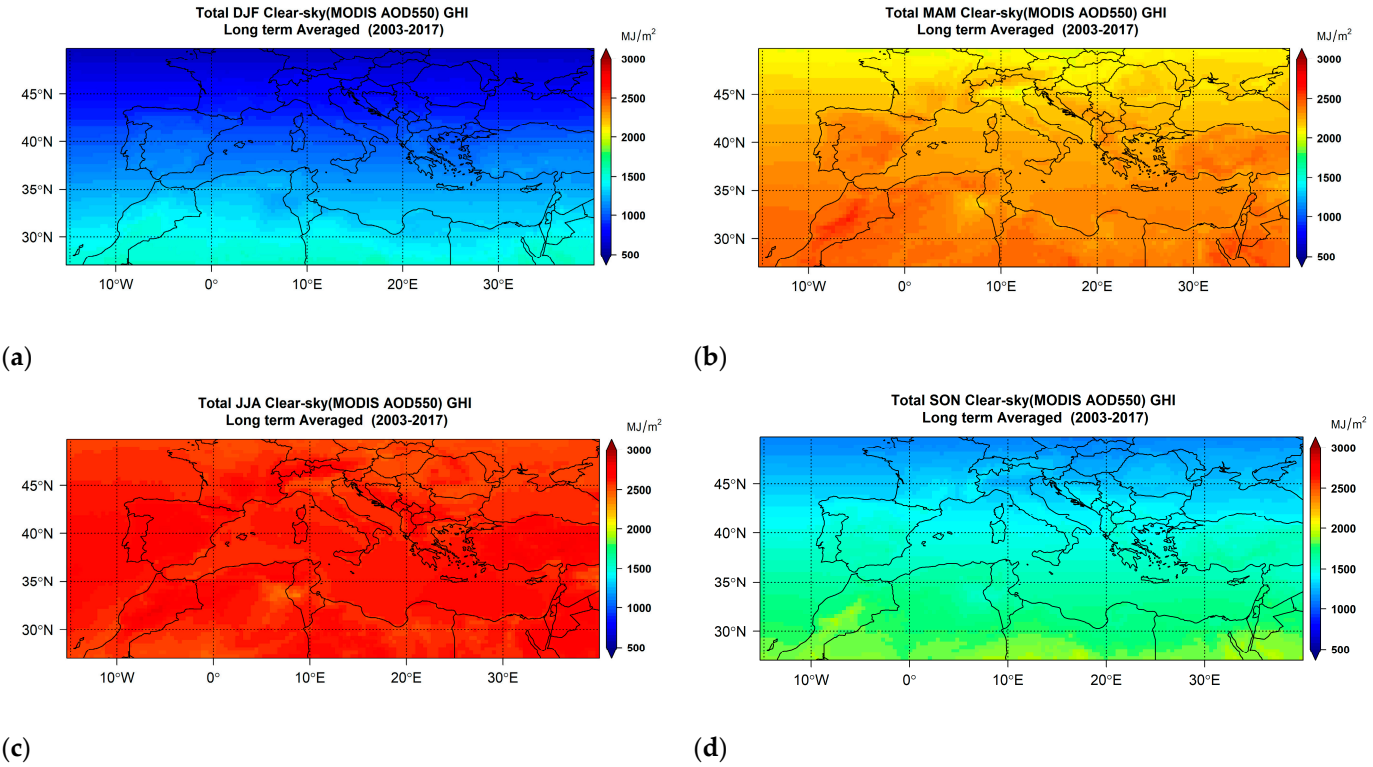


Figure S18. Mean seasonal integrals for clear-sky GHI using MODIS AOD.

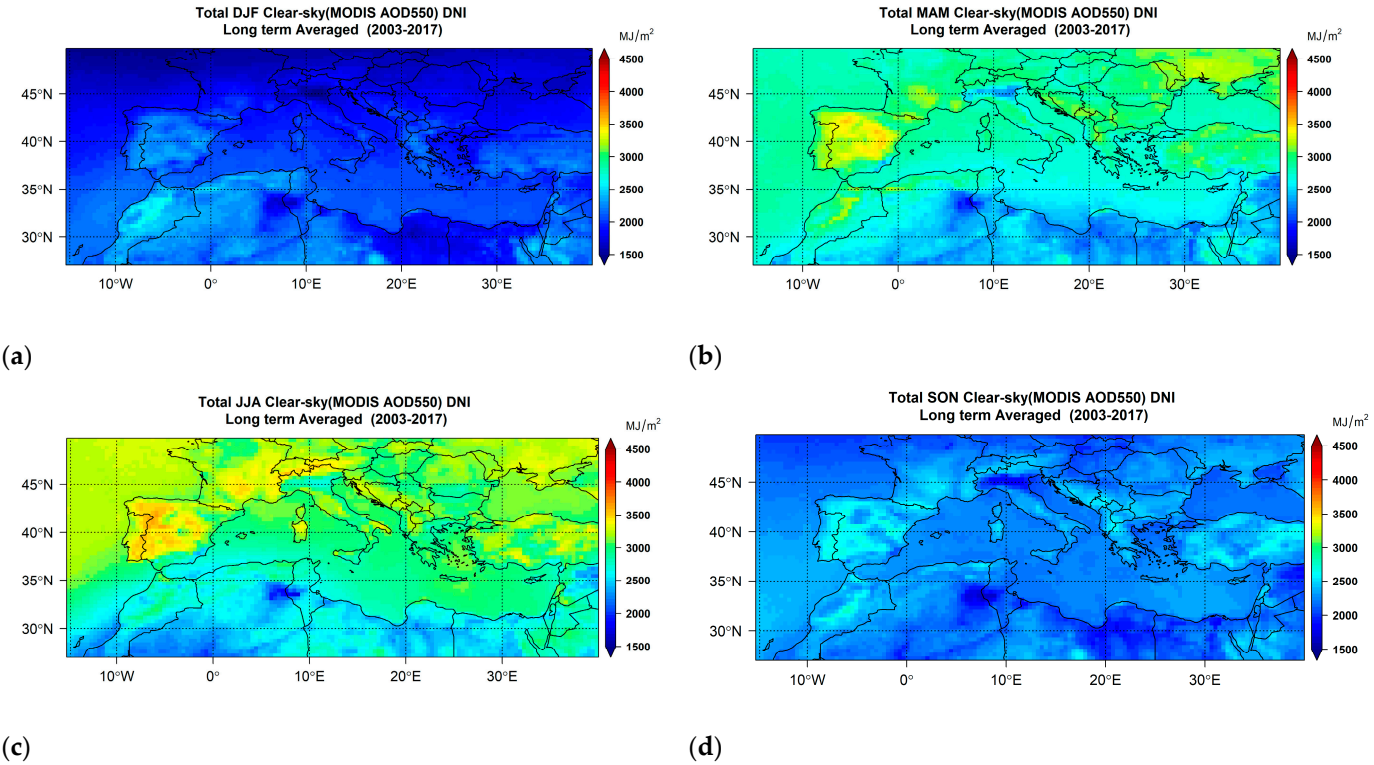


Figure S19. Mean seasonal integrals for clear-sky DNI using MODIS AOD.