EGU21-8521, updated on 26 Sep 2021
https://doi.org/10.5194/egusphere-egu21-8521
EGU General Assembly 2021


# The NASA-TROPOMI Aerosol Algorithm: Evaluation of first results

**Omar Torres**[1], Hiren Jethva[2], Changwoo Ahn[3], Glen Jaross[1], and Diego Loyola[4]

[1]NASA Goddard Space Flight Center, Greenbelt, MD, USA (omar.o.torres@nasa.gov)
[2]Universities Space Research Association USRA/GESTAR, Columbia, MD, USA (hiren.t.jethva@nasa.gov)
[3]Science Systems and Applications Inc., Lanham, MD, USA (changwoo.ahn@ssaihq.com)
[4]German Aerospace Center (DLR), Remote Sensing Technology Institute, Oberpfaffenhofen, 82234 Weßling, Germany (diego.loyola@dlr.de)

The NASA-TROPOMI aerosol algorithm (TropOMAER), is an adaptation of the currently operational OMI near-UV (OMAERUV & OMACA) inversion schemes, that take advantage of TROPOMI's unprecedented fine spatial resolution at UV wavelengths, and the availability of ancillary aerosol-related information to derive aerosol loading in cloud-free and above-cloud aerosols scenes. In this presentation we will introduce the NASA TROPOMI aerosol algorithm and discuss initial evaluation results of retrieved aerosol optical depth (AOD) and single scattering albedo (SSA) by direct comparison to AERONET AOD direct measurements and SSA inversions. We will also demonstrate TropOMAER retrieval capabilities in the context of recent continental scale aerosol events.