Leonid
Yurganov
UMBC
Poster
Carbon monoxide (CO) concentrations in wildfire plumes are easily measured from satellites. This gas can be used as a proxy for carbon dioxide and methane. Forest fires play an important role in the carbon balance and, in particular, the CO balance. The most likely causes of mega-fires of 2003, 2012, 2021, and 2023 in Northern hemisphere are heat waves and severe droughts associated with changes in general circulation. Here we analyze satellite data obtained by two different sounders, AIRS and TROPOMI and archived by NASA and ESA. Different sensitivities of these two instruments to the lowest troposphere allows obtaining information about anthropogenic and/or pyrogenic contamination of the boundary layer. Shapes of areas polluted by mega-fires in 2019-2020 (Southeastern Australia), 2021 (Central Siberia) coincide with the areas occupied by coal deposits. The Siberian Lena and Tunguska coal basins are the two largest coal fields in the world. In 2021, their combined area accounted for 90% of fire CO emission from the entire Russian Federation. So strong fires have not observed in this area before. Underground coal combustion is recommended for the list of wildfire fuels, at least their role for ignition should be admitted. Further research is needed to assess the importance of coal fires to global climate.
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