Jonas
Hachmeister
Institute of Environmental Physics, University Bremen, Germany
Oliver Schneising, Institute of Environmental Physics, University Bremen, Germany
Michael Buchwitz, Institute of Environmental Physics, University Bremen, Germany
John P. Burrows, Institute of Environmental Physics, University Bremen, Germany
Justus Notholt, Institute of Environmental Physics, University Bremen, Germany
Matthias Buschmann, Institute of Environmental Physics, University Bremen, Germany
Poster
Atmospheric methane growth rates have recently reached record highs and exhibit significant year-to-year variability that is not yet fully understood. In addition, there are significant differences between bottom-up and top-down methane (CH4) budgets. Therefore, it is crucial to accurately estimate the atmospheric CH4 concentration and growth rate from observational data. Satellites can provide global measurements of the earth with high spatio-temporal resolution.
Sentinel-5 Precursor (S5P) is part of the latest generation of trace gas monitoring satellites and provides daily global coverage of column-averaged dry-air mole fractions of methane (XCH4) since April 2018. In this presentation, the global and zonal XCH4 growth rates, determined using the time series analysis of S5P data, are discussed. This includes the first results for growth rates in 2023. Furthermore, we compare the results obtained using the scientific WFMD data product with those derived from the ESA operational data products.
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