@article{PoChedley2022,

abstract = {Comparisons between climate models and satellite observations consistently find that simulated warming of the tropical troposphere outpaces observations after 1979. There are a number of factors that may contribute to this discrepancy. Using machine learning and large ensembles of climate-model simulations, we find that internal variations in Earth's climate have, by chance, reduced real-world tropospheric warming over the satellite era. A spurious discontinuity in prescribed biomass-burning aerosol emissions has also artificially enhanced simulated warming. These two effects largely explain the difference between simulated and observed tropical tropospheric warming. This offsetting effect of internal climate variability on greenhouse warming cannot, however, be relied on to reduce future warming and may, instead, lead to periods of accelerated change.},

author = {Stephen Po-Chedley and John T Fasullo and Nicholas Siler and Zachary M Labe and Elizabeth A Barnes and C J eline W Bonfils and Benjamin D Santer and Edited by Dennis Hartmann},

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