

Publication list of Timofei Sukhodolov

Publications in international peer-reviewed scientific journals (by the date of publication)

1. **Sukhodolov T.**, et al.: Evaluation of the ECHAM family radiation codes performance in the representation of the solar signal, *Geosci. Model Dev.*, 7, 1–8, doi: 10.5194/gmd-7-1-2014, 2014.
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3. Thuillier G., Harder J., Shapiro A., Woods N., Perrin J.-M., Snow M., **Sukhodolov T.**, Schmutz W.: The Infrared Solar Spectrum Measured by the SOLSPEC Spectrometer Onboard the International Space Station, *Solar. Phys.*, doi: 10.1007/s11207-015-0704-1, 2015.
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5. **Sukhodolov T.** et al.: Evaluation of simulated photolysis rates and their response to solar irradiance variability, *J. Geophys. Res. Atmos.*, 121, doi: 10.1002/2015JD024277, 2016.
6. Ball W. T., Kuchar A., Rozanov E. V., Staehelin J., Tummon F., Smith A. K., **Sukhodolov T.**, Stenke A., Revell L., Coulon A., Schmutz W., and Peter T.: An upper-branch Brewer-Dobson circulation index for attribution of stratospheric variability and improved ozone and temperature trend analysis, *Atm. Chem. Phys.*, doi: 10.5194/acp-16-15485-2016, 2016
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8. Thuillier G., Zhu P., Shapiro A. I., Sofia S., Tagirov R., van Ruymbeke M., Perrin J.-M., **Sukhodolov T.**, and Schmutz W.: The solar disk radius determined from observations made during eclipses with bolometric and photometric instruments onboard the PICARD satellite, *Astronomy and Astrophysics*, 603, doi:10.1051/0004-6361/201629386, 2017.
9. **Sukhodolov, T.**, Usoskin, I., Rozanov, E., Asvestari, E., Ball, W. T., Curran, M. A. J., Fischer, H., Kovaltsov, G., Miyake, F., Peter, T., Plummer, C., Schmutz, W., Severi, M., and Traversi, R.: Atmospheric impacts of the strongest known solar particle storm of 775 AD, *Sci. Rep.-UK*, 7, 45257, <https://doi.org/10.1038/srep45257>, 2017.
10. Revell L., Stenke A., Luo B., Kremser S., Rozanov E., **Sukhodolov T.**, and Peter T., Chemistry-climate model simulations of the Mt. Pinatubo eruption using CCM1 and CMIP6 stratospheric aerosol data, *Atmos. Chem. Phys.*, 10.5194/acp-17-13139-2017, 2017.
11. Funke, B., Ball, W., Bender, S., Gardini, A., Harvey, V. L., Lambert, A., López-Puertas, M., Marsh, D. R., Meraner, K., Nieder, H., Päiväranta, S.-M., Pérot, K., Randall, C. E., Reddmann, T., Rozanov, E., Schmidt, H., Seppälä, A., Sinnhuber, M., **Sukhodolov, T.**, Stiller, G. P., Tsvetkova, N. D., Verronen, P. T., Versick, S., von Clarmann, T., Walker, K. A., and Yushkov, V.: HEPPA-II model–measurement intercomparison project: EPP indirect effects during the dynamically perturbed NH winter 2008–2009, *Atmos. Chem. Phys.*, 17, 3573–3604, <https://doi.org/10.5194/acp-17-3573-2017>, 2017.
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 16. Klimenko, V.V., Klimenko, M.V., Bessarab, F.S., **Sukhodolov T.V.**, Rozanov, E.V.: The dependence of four-peak longitudinal structure of the tropical electric field on the processes in the lower atmosphere and geomagnetic field configuration, *Advances in Space Research*, [doi: 10.1016/j.asr.2019.06.029](https://doi.org/10.1016/j.asr.2019.06.029), 2019.
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44. Jozefiak, I. J., **Sukhodolov, T.**, Chiodo, G., Egorova, T., Peter, T., Rieder, H., Sedlacek, J., Stenke, A., Rozanov, E.: Stratospheric dynamics modulates ozone layer response to molecular oxygen variations. *Front. Earth Sci.* 11. doi: 10.3389/feart.2023.1239325, accepted.

Contributions to books

1. Rozanov E., **Sukhodolov T.**, Tourpali T.: chapter “Uncertainties in the modeling of the solar influence on climate” in book “Earth’s climate response to a changing Sun”, ISBN:978-2-7598-1733-7, doi: 10.1051/978-2-7598-1733-7, 2015.
2. Rozanov E., Feinberg A., **Sukhodolov T.**: chapter “Isotope transport” in book “Extreme Solar Particle Storms: The Hostile Sun”, doi: 10.1088/2514-3433/ab404ach4, 2020.
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Review articles

1. Chiodo G, Liu J, Revell L, **Sukhodolov T** and Zhang J, Editorial: The Evolution of the Stratospheric Ozone. *Front. Earth Sci.* 9:773826. doi:10.3389/feart.2021.773826, 2021.