

Publication list

Kaisa Lakkala, FMI

9.10.2024

**A ) Peer-reviewed scientific articles:**

**2024**

Butler A.H, Lee S.H., Bernhard G.H., Fioletov V.E.,Grooß, J.-U., Ialongo I., Johnsen B., Lakkala, K., Müller, R., Svendby, T. and Ballinger T.J., The Arctic - Atmosphere [in "State of the Climate in 2023"], Bull. Amer. Meteor. Soc., 105 (8), S285-S287. <https://doi.org/10.1175/BAMS-D-24-0101.1>

Lakkala, K., Aun, M., Sanchez, R., Kujanpää, J., Arola, A., Bernhard, G., García Skabar, Y., Hassinen, S., Heikkilä, A., Karhu, J.M., Karppinen, T., Suokanerva, H., Tamminen J., 2024: UV radiation measurements at Arctic and Antarctic sites: Results from Sodankylä (67°N) and Marambio (64°S). *AIP Conf. Proc.* 18 January 2024; 2988 (1): 090005.

<https://doi.org/10.1063/5.0183783>

Neugart S., Dolezal, M., Martínez-Abaigar J., Núñez-Olivera E., Schreiner M., Strid Å., Viczián A., Albert A., Badenes-Perez R., Bamberg A., Castagna A., Dader B., Fereres A., Fernandes C., Gaberscik A., Gulyás Á, Gwynn-Jones D., Jones A., Julkunen-Tiitto R., Konstantinova N., Lakkala K., Llorens L., Martínez-Lüscher J., Nybakken L., Olsen J., Pascual I., Ranieri A., Regier N., Robson M., Rosenqvist E., Turunen M., Van Der Straeten D., Vandebussche F., Verdaguer D., Winkler B., Witzel K., Grifoni D., Zipoli G., Hideg É, Jansen M. AK, Hauser M-T:A synchronized, large-scale field experiment using *Arabidopsis thaliana* reveals the significance of the UV-B photoreceptor UVR8 under natural conditions. *Plant, Cell & Environment*, 47, 4031–4047.

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Ruuhela, R., Ruosteenoja, K., Lakkala, K., 2023: Projected changes in incident solar radiation in Northern Hemisphere high-latitude areas, *FMI's Clim. Bull. Res. Lett.*, [preprint], <https://doi.org/10.35614/ISSN-2341-6408-IK-2024-02-RL>

Bernhard G., Fioletov V., Grooss J.-U., Ialongo I, Johnsen B, Lakkala K, Manney G., Müller R., Svendby, T., 2023: Ozone and UV radiation [in "State of the Climate in 2022"], Bull. Amer. Meteor. Soc., 104 (9), S 308 -S 310 , <https://doi.org/10.1175/2023BAMSStateoftheClimate.1>.

**2022**

Bernhard G., Fioletov V., Grooss J.-U., Ialongo I, Johnsen B, Lakkala K, Manney G., Müller R., Svendby, T., 2022: Ozone and UV radiation [in "State of the Climate in 2021"], Bull. Amer. Meteor. Soc., 108 (3), S293-S296, <https://doi.org/10.1175/BAMS-D-22-0082.1>.

Haga L., Ruuhela R., Auranen K., Lakkala K., Heikkilä A., Gregow H., Impact of Selected Meteorological Factors on COVID-19 Incidence in Southern Finland during 2020–2021. *Int. J. Environ. Res. Public Health*, 19, 13398. <https://doi.org/10.3390/ijerph192013398>, 2022

Eleftheratos, K., Kapsomenakis, J., Fountoulakis, I., Zerefos, C. S., Jöckel, P., Dameris, M., Bais, A. F., Bernhard, G., Kouklaki, D., Tourpali, K., Stierle, S., Liley, J. B., Brogniez, C., Auriol, F., Diémoz, H., Simic, S., Petropavlovskikh, I., Lakkala, K., and Douvis, K.: Ozone, DNA-active UV radiation, and cloud changes for the near-global mean and at high latitudes due to enhanced greenhouse gas concentrations, *Atmos. Chem. Phys.*, 22, 12827–12855, <https://doi.org/10.5194/acp-22-12827-2022>, 2022.

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Kosmopoulos, P. G., Kazadzis, S., Schmalwieser, A. W., Raptis, P. I., Papachristopoulou, K., Fountoulakis, I., Masoom, A., Bais, A. F., Bilbao, J., Blumthaler, M., Kreuter, A., Siani, A. M., Eleftheratos, K., Topaloglou, C., Gröbner, J., Johnsen, B., Svendby, T. M., Vilaplana, J. M., Doppler, L., Webb, A. R., Khazova, M., De Backer, H., Heikkilä, A., Lakkala, K., Jaroslowski, J., Meleti, C., Diémoz, H., Hülsen, G., Klotz, B., Rimmer, J., and Kontoes, C.: Real-time UV index retrieval in Europe using Earth observation-based techniques: system description and quality assessment, *Atmos. Meas. Tech.*, 14, 5657–5699, <https://doi.org/10.5194/amt-14-5657-2021>, 2021.

Kramarova, N., P. A. Newman, E. R. Nash, S. E. Strahan, C. S. Long, B. Johnson, M. Pitts, M. L. Santee, I. Petropavlovskikh, L. Coy, J. de Laat, G. H. Bernhard, S. Stierle, and K. Lakkala, 2021: 2020 Antarctic ozone hole [in “State of the Climate in 2020”]. *Bull. Amer. Meteor. Soc.*, 102 (8), S345–S349, <https://doi.org/10.1175/BAMS-D-21-0081.1>

Lamy, K., Portafaix, T., Brogniez, C., Lakkala, K., Pitkänen, M. R. A., Arola, A., Forestier, J.-B., Amelie, V., Tohir, M. A., and Rakotoniaina, S.: UV-Indien network: ground-based measurements dedicated to the monitoring of UV radiation over the western Indian Ocean, *Earth Syst. Sci. Data*, 13, 4275–4301, <https://doi.org/10.5194/essd-13-4275-2021>, 2021.

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## 2020

Aun, M., Lakkala, K., Sanchez, R., Asmi, E., Nollas, F., Meinander, O., Sogacheva, L., De Bock, V., Arola, A., de Leeuw, G., Aaltonen, V., Bolsée, D., Cizkova, K., Mangold, A., Metelka, L.,

Jakobson, E., Svendby, T., Gillotay, D., and Van Opstal, B.: Solar UV radiation measurements in Marambio, Antarctica, during years 2017–2019, *Atmos. Chem. Phys.*, 20, 6037–6054, <https://doi.org/10.5194/acp-20-6037-2020>, 2020.

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Bernhard G., Fioletov V., Grooss J.-U., Ialongo I, Johnsen B, Lakkala K, Manney G., Müller R., Ozone and UV radiation [in State of the Climate in 2018], *Bull. Amer. Meteor. Soc.*, 100 (9), S165-S168, 2019, doi:10.1175/2019BAMSStateoftheClimate.1.

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G. H. Bernhard, V. E. Fioletov, J.-U. Grooß, I. Ialongo, B. Johnsen, K. Lakkala, G. L. Manney, and R. Müller, 2018: Ozone and UV radiation [in “State of the Climate in 2017”]. *Bull. Amer. Meteor. Soc.*, 99 (8), S171–S173, doi:10.1175 /2018BAMSStateoftheClimate.1.

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ozone, aerosols, clouds and surface reflectivity. *Comptes Rendus Geoscience*, 350 (7), 393-402, <https://doi.org/10.1016/j.crte.2018.07.011>.

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