

## List of publications of the EMRP project solar UV

Most of the publications can be downloaded from the EMRP publication repository:

<http://www.euramet.org/index.php?id=repository>

- [1] T. Pulli, P. Kärhä, and E. Ikonen, "A method for optimizing the cosine response of solar UV diffusers," *Journal of Geophysical Research: Atmospheres* 118, 7897-7904 (2013).
- [2] T. Pulli, P. Kärhä, J. Mes, J. Schreder, P. Jaanson, F. Manoocheri, "Improved diffusers for solar UV spectroradiometers," *AIP Conference Proceedings* **1531**, 813 (2013), doi: 10.1063/1.4804894.
- [3] M. Blumthaler, J. Gröbner, L. Egli, S. Nevas, „A guide to measuring solar UV spectra using array spectroradiometers”, *AIP Conference Proceedings* **1531**, 805 (2013), doi: 10.1063/1.4804892.
- [4] L. Egli, J. Gröbner, M. Smid, G. Porrovecchio, T. Burnitt, K. Nield, S. Gibson, J. Dubard, S. Nevas, M. Tormen, “New Technologies to Reduce Stray Light for Measuring Solar UV with Array Spectroradiometers”, *AIP Conference Proceedings* **1531**, 825 (2013), doi:10.1063/1.4804897
- [5] P. Meidl, C. Monte, M. Wähmer, “Adaptation of a Fourier transform spectrometer as a reference instrument for solar UV irradiance measurements”, *AIP Conference Proceedings* **1531**, 829 (2013), doi:10.1063/1.4804898
- [6] S. Nowy, S. Nevas, M. López, M. Lindemann, A. Sperling, P. Blattner, S.M. Foaleng, „Stability of Light-Emitting Diodes in the Solar UV Spectral Range”, *AIP Conference Proceedings* **1531**, 833 (2013), doi:10.1063/1.4804899
- [7] G. Porrovecchio, M. Smid, J. Gröbner, M. Rajteri, C. Portesi, K. Nield, L. Egli, ” New Detection Systems for UV Solar Reference Scanning Spectroradiometers“, *AIP Conference Proceedings* **1531**, 837 (2013), doi:10.1063/1.4804900
- [8] H. Diemoz, L. Egli, J. Gröbner, A. Siani, F. Diotri, „Solar ultraviolet irradiance measurements in Aosta (Italy): An analysis of short- and middle-term spectral variability”, *AIP Conference Proceedings* **1531**, 856 (2013), doi: 10.1063/1.4804905
- [9] A. Feldmann, T. Burnitt, G. Porrovecchio, M. Smid, L. Egli, J. Gröbner, K. Nield, ” Diode-Array UV Solar Spectroradiometer Implementing a Digital Micromirror Device”, *Metrologia*, accepted 22 August 2014.
- [10] S. Nevas, J. Gröbner, L. Egli, M. Blumthaler, „Stray light correction of array spectroradiometers for solar UV measurements”, *Applied Optics*, **53**, 19, (2014).
- [11] A Chorley, M Higlett, K Baczynska, R Hunter and M Khazova. Measurements of pilots' occupational solar UV exposure. *Photochemistry and Photobiology*, **90**, 935-940 (2014).
- [12] P. Meindl, M. Wähmer, C. Monte, "Usability of a Fourier Transform Spectroradiometer for Absolute Surface Spectral Solar UV Irradiance Measurements", submitted in July 2014 to *Optics Express*.
- [13] M. Zucco, M. Pisani, V. Caricato, A. Egidi, "A hyperspectral imager based on a Fabry-Perot interferometer with dielectric mirrors", *Optics Express*, **22**, 2 (2014).
- [14] K. Baczynska, M. Khazova, “Methods of dark signal determination for CCD array spectroradiometers used in solar UV measurements”, *Radiation Protection Dosimetry*, doi:10.1093/rpd/ncu191(2014)
- [15] L. Price, R. Hooke, M. Khazova, “Effects of ambient temperature on performance of CCD array spectroradiometers and practical implications for field measurements”, *Journal of Radiological Protection.*, Accepted for publication on 24 June 2014.
- [16] L. Price, R. Hooke, M. Khazova, “Temperature dependence of array spectroradiometers and implications for photobiologists”, *CIE 2014 Proc.*, CIE x0039:2014, 950-956 (2014).
- [17] T. Pulli, Improved Diffusers for Solar UV Spectroradiometers, Master's thesis , *Aalto University School of Electrical Engineering*, Finland, 57 p. (2012).
- [18] J. Gröbner and the SolarUV consortium, “The EMRP Project “Traceability for surface spectral solar ultraviolet radiation,” *UVNews* 9, 4 – 6 (2013).

- [19] T. Pulli, P. Kärhä, J. Mes, J. Schreder, "Software for designing solar UV diffusers," *UVNews* 9, 7 – 9 (2013).
- [20] L. Egli, J. Gröbner, M. Blumthaler, "Impact of dynamic range limitations on solar UV radiation weighted irradiances", *UVNews* 9, 10 – 16 (2013).
- [21] S. Nevas, J. Gröbner, L. Egli, "Stray light correction of array spectroradiometer data for solar UV measurements," *UVNews* 9, 17 – 19 (2013).
- [22] S. Nowy, N. Van Hung, S. Nevas, P. Blattner, J. Gröbner, "Development of monitoring sources based on UV light-emitting diodes," *UVNews* 9, 20 – 21 (2013).
- [23] P. Meindl, C. Monte, M. Wähmer, "Characterization of a Fourier transform spectrometer for solar UV irradiance measurements," *UVNews* 9, 22 – 24 (2013).
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- [31] P.R. Dekker, O. ElGawhary, "Using a laser driven light source for spectral responsivity calibration of detectors between 250 and 400 nm wavelengths," *UVNews* 10, 20-21 (2014).
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- [38] J. Dubard, R. Etienne, and T. Valin, "Uncertainty evaluation of solar UV irradiance measurement using array spectroradiometer," *Proceedings of NEWRAD 2014*, Espoo, Finland, June 24 – 27, 2014, pp. 259 – 260.