

Calibration History of the EKO MS80 S180030063 Pyranometer

This page shows the calibration history of the MS80 S180030063 pyranometer. The responsivity used to transform the irradiance voltage data into Wm^{-2} is a running average of the responsivity obtained over the years. This reduces the variation of the responsivities associated with the random uncertainty of a given calibration (See Fig. 1). The rate of change of the pyranometer responsivity is related to exposure to UV radiation. The responsivity values used are in the comprehensive format files or the site files. The responsivities measured during specific calibrations are listed in Table 1.

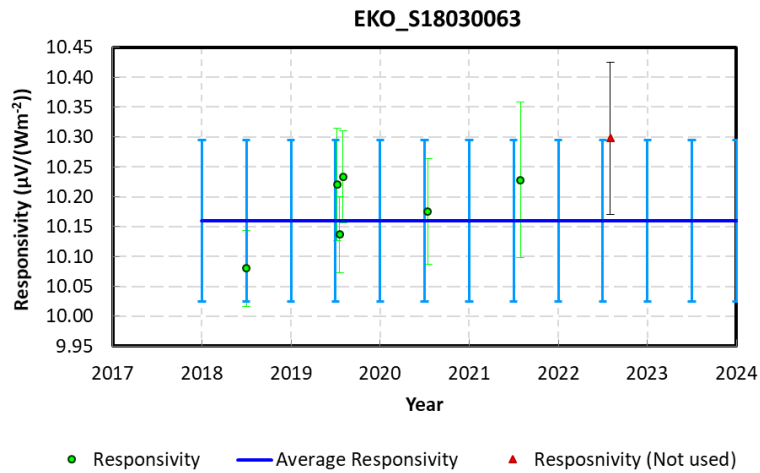


Fig. 1: Calibration data plotted against time for 10 year trend

Information provided in the table 1 are:

- Date of calibration
- Responsivity value
- Uncertainty at the 95% level of confidence
- Average SZA over which the calibration value was obtained
- Average temperature during the calibration
- Type of calibration and instruments used
- Location of calibration
- Notes

Table 1: Calibration information for MS80 S180030063

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	2018/06/25	10.0800	0.0635			Factory	Japan	
2	2019/07/08	10.2205	0.0942	44.85	26.63	ACR R=1.00034, CMP22_120363 R=9.6981	Eugene, OR.	
3	2019/07/19	10.1364	0.0638	44.65		ACR R=1.00034	Eugene, OR.	

4	2019/08/01	10.2332	0.0766	45.12	25.74	ACR R=1.00034, CMP22_120363 R=9.6981	Eugene, OR.	
5	2020/07/14	10.1748	0.0882	45.00	27.66	CMP22_120363 R=9.6981	Burns, OR.	
6	2021/07/29	10.2277	0.1301	44.99	31.67	NIP_17668E6 R=8.1621, CMP22_120363, R=9.7005	Burns, OR.	
7	2022/08/01	10.2980	0.1271	44.61	33.67	NIP_17668E6 R=8.1621, CMP22_120363 R=9.7005	Burns, OR.	Partially cloudy day