

Calibration History of the Kipp & Zonen CMP22 120363 Pyranometer

This page shows the calibration history of the CMP22 120263. 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.

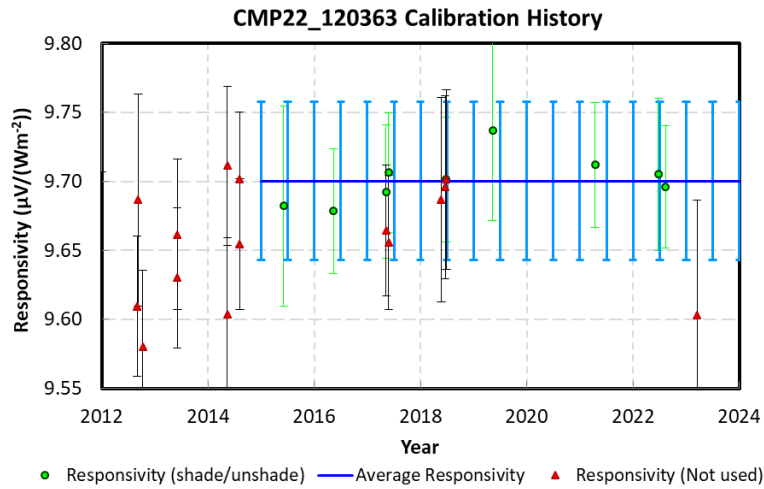


Figure 1: All calibration data plotted against time with long-term trend

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 CMP 120363

	Calibration Date	Responsivity ($\mu\text{V}/\text{Wm}^{-2}$)	Uncertainty ($\mu\text{V}/\text{Wm}^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	2012/06/21 ?	9.5200	0.1866	INSIDE	22.00	INSIDE	Factory	
2	2012/09/07	9.6865	0.0769	48.58	32.72	ACR, Schenk_1315 R=14.89	Eugene, OR	
3	2012/10/10	9.5801	0.0556	51.20	17.42	ACR, Schenk_1315 R=14.89	Eugene, OR	
4	2012/08/31	9.6094	0.0507	44.89	17.18	ACR, Schenk_1315 R=14.89	Eugene, OR	
5	2012/08/31	9.6094	0.0507	44.89	17.18	ACR, Schenk_1315 R=14.89	Eugene, OR	
6	2013/06/04	9.6301	0.0510	45.29	25.41	ACR, Schenk_1315 R=14.89	Eugene, OR	

7	2013/06/05	9.6615	0.0545	44.90	20.91	ACR, Schenk_1315 R=14.89	Eugene, OR	
8	2014/05/13	9.7112	0.0577	44.92	25.58	ACR, Schenk_1315 R=14.89	Eugene, OR	
9	2014/05/14	9.6040	0.0551	45.45	21.38	ACR, Schenk_1315 R=14.89	Eugene, OR	
10	2014/08/06	9.7016	0.0486	44.63	29.05	ACR, Schenk_1315 R=14.89	Eugene, OR	
11	2014/08/07	9.6547	0.0473	45.15	21.78	ACR, Schenk_1315 R=14.89	Eugene, OR	
12	2015/06/05	9.6822	0.0723	44.84	24.08	ACR	Eugene, OR	Shade/ Unshade
13	2016/05/11	9.6784	0.0453	45.10	23.42	ACR	Eugene, OR	Shade/ Unshade
14	2017/05/09	9.6926	0.0484	44.79	17.46	ACR R=1.0005	Eugene, OR	Shade/ Unshade
15	2017/05/09	9.6642	0.0474	44.81	17.48	ACR R=1.0005, Schenk_1315 R= 14.89	Eugene, OR	
16	2017/05/26	9.6559	0.0487	45.00	22.92	ACR R=1.0005, Schenk_1315 R= 14.89	Eugene, OR	
17	2017/05/26	9.7064	0.0434	45.00	22.92	ACR R=1.0005	Eugene, OR	Shade/ Unshade
18	2018/05/22	9.6869	0.0741	45.00	22.00	ACR R=1.0002, Schenk_1315 R=14.9111	Eugene, OR	
19	2018/06/19	9.6959	0.0661	45.12	26.46	ACR R=1.0002, CMP22_110265 R=8.9179	Eugene, OR	
20	2018/06/26	9.7015	0.0452	46.31	23.12	ACR R=1.0002	Eugene, OR	Shade/ Unshade
21	2018/06/26	9.7014	0.0650	45.50	23.05	ACR R=1.0002, Schenk_1315 R=14.9111	Eugene, OR	
22	2019/05/10	9.7371	0.0658	45.16	24.29	ACR R=1.00034	Eugene, OR	Shade/ Unshade
23	2021/04/14	9.7119	0.0453	45.09		ACR R=1.00038	Eugene, OR	Shade/ Unshade
24	2022/06/22	9.7051	0.0550	45.00		ACR R=1.00038	Eugene, OR	Shade/ Unshade
25	2022/08/11	9.6961	0.0444	45.89		ACR R=1.00038	Eugene, OR	Shade/ Unshade
26	2023/03/16	9.6031	0.0832	46.24		CHP1 110614 R=7.8235, SR20_4765 R=16.0892	Eugene, OR	