

Calibration History of the Kipp & Zonen CMP22 110265 Pyranometer

This page shows the calibration history of the CMP22 110265. 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.

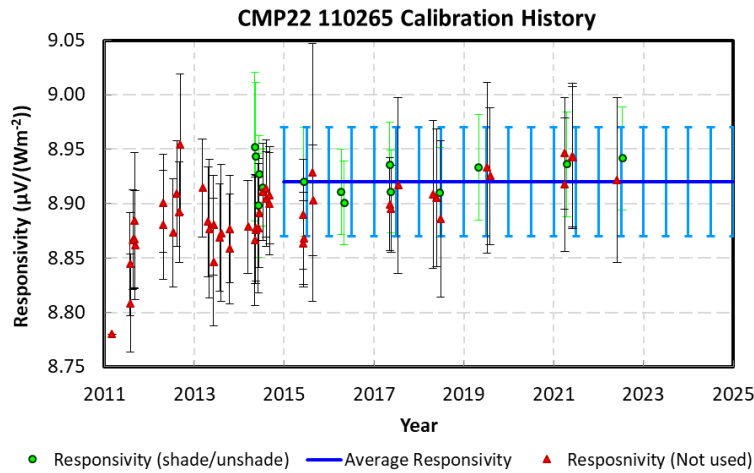


Figure 1: All calibration data plotted against time with long-term trend

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 110265

	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	2011/03/01	8.7800	0.0000		?	Factory	Factory	
2	2011/07/28	8.8445	0.0474	45.05	28.74	ACR, Schenk_1315 R=14.89	Eugene, OR	
3	2011/07/29	8.8083	0.0450	44.51	23.42	ACR, Schenk_1315 R=14.89	Eugene, OR	
4	2011/08/19	8.8668	0.0458	44.35	22.43	ACR, Schenk_1315 R=14.89	Eugene, OR	
5	2011/09/01	8.8847	0.0625	45.11	21.00	ACR, Schenk_1315 R=14.89	Eugene, OR	
6	2011/09/03	8.8670	0.0448	44.50	32.86	ACR, Schenk_1315 R=14.89	Eugene, OR	
7	2011/09/06	8.8619	0.0498	44.79	24.72	ACR, Schenk_1315 R=14.89	Eugene, OR	

8	2012/04/22	8.9003	0.0451	37.86	24.37	ACR, Schenk_1315 R=14.89	Eugene, OR	
9	2012/04/23	8.8801	0.0500	44.93	21.04	ACR, Schenk_1315 R=14.89	Eugene, OR	
10	2012/07/11	8.8732	0.0498	44.89	25.00	ACR, Schenk_1315 R=14.89	Eugene, OR	
11	2012/08/09	8.9090	0.0484	45.49	27.11	ACR, Schenk_1315 R=14.89	Eugene, OR	
12	2012/08/31	8.8919	0.0462	44.89	17.18	ACR, Schenk_1315 R=14.89	Eugene, OR	
13	2012/08/31	8.8919	0.0462	44.89	17.18	ACR, Schenk_1315 R=14.89	Eugene, OR	
14	2012/09/07	8.9545	0.0647	48.58	30.72	ACR, Schenk_1315 R=14.89	Eugene, OR	
15	2013/03/07	8.9145	0.0450	49.15	9.78	ACR, Schenk_1315 R=14.89	Eugene, OR	
16	2013/04/23	8.8832	0.0506	44.76	14.00	ACR, Schenk_1315 R=14.89	Eugene, OR	
17	2013/05/03	8.8768	0.0636	44.86	19.00	ACR, Schenk_1315 R=14.89	Eugene, OR	
18	2013/06/04	8.8802	0.0456	45.29	25.41	ACR, Schenk_1315 R=14.89	Eugene, OR	
19	2013/06/05	8.8463	0.0585	44.90	20.91	ACR, Schenk_1315 R=14.89	Eugene, OR	
20	2013/07/25	8.8689	0.0493	45.44	32.26	ACR, Schenk_1315 R=14.89	Eugene, OR	
21	2013/08/06	8.8730	0.0632	44.87	23.77	ACR, Schenk_1315 R=14.89	Eugene, OR	
22	2013/10/15	8.8585	0.0504	52.89	14.48	ACR, Schenk_1315 R=14.89	Eugene, OR	
23	2013/10/16	8.8765	0.0491	54.82	13.70	ACR, Schenk_1315 R=14.89	Eugene, OR	
24	2014/03/12	8.8788	0.0427	47.26	12.65	ACR, Schenk_1315 R=14.89	Eugene, OR	
25	2014/05/07	8.9522	0.0685		11.50	ACR (U=.39)	Eugene, OR	
26	2014/05/07	8.8663	0.0601	51.88	10.20	ACR, Schenk_1315 R=14.89	Eugene, OR	
27	2014/05/13	8.9430	0.0684		23.50	ACR (U=.39)	Eugene, OR	
28	2014/05/13	8.8755	0.0489	44.92	25.58	ACR, Schenk_1315 R=14.89	Eugene, OR	
29	2014/05/14	8.8773	0.0485	45.45	21.38	ACR, Schenk_1315 R=14.89	Eugene, OR	
30	2014/06/05	8.8986	0.0478		23.50	ACR (U=.39)	Eugene, OR	
31	2014/06/05	8.8772	0.0594	44.67	19.01	ACR, Schenk_1315 R=14.89	Eugene, OR	
32	2014/06/11	8.9272	0.0354		23.50	ACR (U=.39)	Eugene, OR	
33	2014/06/11	8.8916	0.0500	44.42	17.20	ACR, Schenk_1315 R=14.89	Eugene, OR	
34	2014/07/10	8.9143	0.0353		23.50	ACR (U=.39)	Eugene, OR	
35	2014/07/10	8.9107	0.0445	45.13	28.69	ACR, Schenk_1315 R=14.89	Eugene, OR	
36	2014/08/06	8.9134	0.0446	44.63	29.05	ACR, Schenk_1315 R=14.89	Eugene, OR	
37	2014/08/07	8.9042	0.0433	45.15	21.78	ACR, Schenk_1315 R=14.89	Eugene, OR	
38	2014/09/04	8.9001	0.0470	44.96	27.22	ACR, Schenk_1315 R=14.89	Eugene, OR	
39	2014/09/05	8.9077	0.0448	45.08	24.25	ACR, Schenk_1315 R=14.89	Eugene, OR	
40	2015/06/05	8.8901	0.0505	44.77	23.32	ACR, CMP22_120363 R=9.68217	Eugene, OR	
41	2015/06/06	8.8631	0.0394	44.73	21.63	ACR, CMP22_120363 R=9.68217	Eugene, OR	
42	2015/06/07	8.8680	0.0420	47.02	30.72	ACR, CMP22_120363 R=9.68217	Eugene, OR	
43	2015/06/08	8.9201	0.0499	45.13	27.66	ACR, Shade/Unshade	Eugene, OR	
44	2015/08/18	8.9284	0.1183	44.99	25.76	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
45	2015/08/22	8.9028	0.0509	45.24	22.61	ACR, R=1.0003, Schenk_1315 R=14.89	Eugene, OR	
46	2016/04/07	8.9106	0.0391	44.78	19.66	ACR, R=1.00069	Eugene, OR	
47	2016/05/01	8.9008	0.0386	44.66	23.77	ACR, R=1.00069	Eugene, OR	
48	2017/05/08	8.9355	0.0393	44.99		ACR, R=1.0005	Eugene, OR	

49	2017/05/08	8.8993	0.0427	44.82	16.79	ACR, R=1.0005	Eugene, OR
50	2017/05/19	8.9110	0.0383	45.11	24.21	ACR, R=1.0005	Eugene, OR
51	2017/05/19	8.8952	0.0401	45.08	24.21	ACR, R=1.0005	Eugene, OR
52	2017/07/15	8.9166	0.0806	44.98	21.89	NIP_18948E6 R=8.1202, Schenk_1315 R=14.89	Eugene, OR
53	2018/04/25	8.9087	0.0679	44.99	22.45	ACR, R=1.0002, Schenk_1315 R=14.9111	Eugene, OR
54	2018/05/22	8.9054	0.0632	45.00	22.00	ACR R=1.0002, SCHENK_1315 R=14.9111	Eugene, OR
55	2018/06/19	8.9100	0.0411	45.10	34.07	ACR R=1.0002	Eugene, OR
56	2018/06/26	8.8859	0.0722	45.34	23.04	ACR R=1.0002, SCHENK_1315 R=14.9111	Eugene, OR
57	2019/04/30	8.9332	0.0483	45.02	16.18	ACR R=1.00034	Eugene, OR
58	2019/07/08	8.9331	0.0786	44.85	26.63	ACR R=1.00034, CMP22_120363 R=9.6981	Eugene, OR
59	2019/08/01	8.9251	0.0629	45.12	25.74	ACR R=1.00034, CMP22_120363 R=9.6981	Eugene, OR
60	2021/03/30	8.9463	0.0512	44.35	10.05	ACR R=1.00038, Schenk_1315 R=14.8685	Eugene, OR
61	2021/04/01	8.9173	0.0610	44.78	19.80	ACR R=1.00038, Schenk_1315 R=14.8685	Eugene, OR
62	2021/04/16	8.9360	0.0482	45.02		ACR R=1.00038	Eugene, OR
63	2021/06/02	8.9436	0.0669	44.93	27.10	ACR R=1.00038, CMP22_120363 R=9.7005	Eugene, OR
64	2021/06/03	8.9429	0.0646	45.10	25.46	ACR R=1.00038, CMP22_120363 R=9.7005	Eugene, OR
65	2022/05/31	8.9217	0.0760	44.96	25.08	ACR R=1.00038, Schenk_1315 R=14.855	Eugene, OR
66	2022/07/12	8.9415	0.0475	44.37			Eugene, OR