

Calibration Record of the Kipp & Zonen CHP1 110614 Pyrheliometer

This page shows the calibration history of the CHP1 110614. 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 calibration random uncertainties (See Figs 1 & 2). The responsivity values used are in the comprehensive format file or the site files. The responsivity measured during specific calibrations are listed in Table 1.

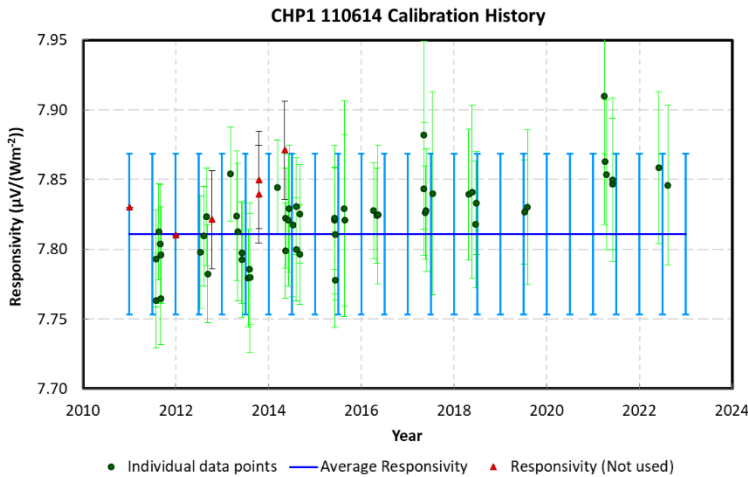


Figure 1: All calibration data plotted against time with long-term trend

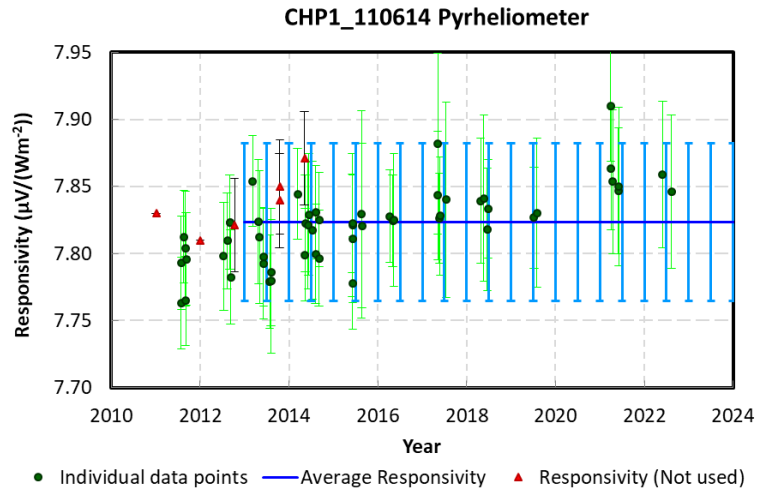


Figure 2: Calibration data plotted against time for 10 year trend

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 History for CHP1 110614

	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	2011/01/03	7.8300			21.50	Factory	Davos, Switzerland	
2	2011/07/28	7.7632	0.0341	45.05	32.74	ACR	Eugene, OR	
3	2011/07/29	7.7933	0.0348	44.51	28.42	ACR	Eugene, OR	
4	2011/08/19	7.8125	0.0344	44.35	24.43	ACR	Eugene, OR	
5	2011/09/01	7.8036	0.0428	45.11	21.00	ACR	Eugene, OR	

6	2011/09/03	7.7648	0.0332	44.50	34.86	ACR	Eugene, OR	
7	2011/09/06	7.7959	0.0344	44.79	26.72	ACR	Eugene, OR	
8	2012/01/01	7.8100		-	21.50	Factory	Davos, Switzerland	
9	2012/07/11	7.7979	0.0402	44.89	25.00	ACR	Eugene, OR	
10	2012/08/09	7.8095	0.0356	45.49	31.11	ACR	Eugene, OR	
11	2012/08/31	7.8233	0.0352	44.89	17.18	ACR	Eugene, OR	
12	2012/08/31	7.8233	0.0352	44.89	17.18	ACR	Eugene, OR	
13	2012/09/07	7.7824	0.0352	48.58	36.72	ACR	Eugene, OR	
14	2012/10/10	7.8212	0.0351	51.20	17.42	ACR	Eugene, OR	
15	2013/03/07	7.8539	0.0338	49.15	9.78	ACR	Eugene, OR	
16	2013/04/23	7.8239	0.0464	44.76	14.00	ACR	Eugene, OR	
17	2013/05/03	7.8124	0.0494	44.86	19.00	ACR	Eugene, OR	
18	2013/06/04	7.7975	0.0367	45.29	25.41	ACR	Eugene, OR	
19	2013/06/05	7.7924	0.0411	44.90	20.91	ACR	Eugene, OR	
20	2013/07/25	7.7793	0.0349	45.44	32.26	ACR	Eugene, OR	
21	2013/08/05	7.7858	0.0398	44.84	31.10	ACR	Eugene, OR	
22	2013/08/06	7.7797	0.0537	44.99	23.77	ACR	Eugene, OR	
23	2013/10/15	7.8394	0.0350	52.89	14.48	ACR	Eugene, OR	
24	2013/10/16	7.8499	0.0351	54.82	13.70	ACR	Eugene, OR	
25	2014/03/12	7.8444	0.0340	47.26	12.65	ACR	Eugene, OR	
26	2014/05/07	7.8710	0.0350	51.88	10.20	ACR	Eugene, OR	
27	2014/05/13	7.7991	0.0343	44.92	25.58	ACR	Eugene, OR	
28	2014/05/14	7.8223	0.0359	45.45	21.38	ACR	Eugene, OR	
29	2014/06/05	7.8210	0.0471	45.02	17.82	ACR	Eugene, OR	
30	2014/06/11	7.8291	0.0455	44.85	17.13	ACR	Eugene, OR	
31	2014/07/10	7.8173	0.0512	45.10	25.12	ACR	Eugene, OR	
32	2014/08/06	7.7997	0.0369	44.63	29.05	ACR	Eugene, OR	
33	2014/08/07	7.8309	0.0349	45.15	21.78	ACR	Eugene, OR	
34	2014/09/04	7.7965	0.0357	44.96	27.22	ACR	Eugene, OR	
35	2014/09/05	7.8253	0.0354	45.08	24.25	ACR	Eugene, OR	
36	2015/06/05	7.8212	0.0531	44.77	23.32	ACR	Eugene, OR	
37	2015/06/06	7.8223	0.0366	44.73	21.63	ACR	Eugene, OR	
38	2015/06/07	7.7780	0.0343	47.02	30.72	ACR	Eugene, OR	
39	2015/06/08	7.8109	0.0474	45.01	26.97	ACR	Eugene, OR	

40	2015/08/22	7.8208	0.0615	45.24	22.61	ACR WRR = 1.003, Schenk_1315 R=14.89	Eugene, OR	
41	2015/08/18	7.8293	0.0774	44.99	25.76	NIP_18948E6 R=8.1358	Eugene, OR	
42	2016/04/07	7.8278	0.0343	45.00	19.79	ACR R=1.00069	Eugene, OR	
43	2016/05/01	7.8242	0.0343	44.99	23.84	ACR R=1.00069	Eugene, OR	
44	2016/05/11	7.8249	0.0497	45.00	23.50	ACR R=1.00069	Eugene, OR	
45	2017/05/08	7.8819	0.0675	44.81	16.60	ACR R=1.0005	Eugene, OR	
46	2017/05/09	7.8433	0.0477	44.80	17.53	ACR R=1.0005	Eugene, OR	
47	2017/05/19	7.8263	0.0337	45.03	24.17	ACR R=1.0005	Eugene, OR	
48	2017/05/26	7.8279	0.0440	45.01	22.79	ACR R=1.0005	Eugene, OR	
49	2017/07/15	7.8402	0.0728	44.98	21.89	NIP_18948E6 R=8.12018	Eugene, OR	
50	2018/04/25	7.8393	0.0467	44.99	22.45	ACR R=1.0002	Eugene, OR	
51	2018/05/22	7.8411	0.0621	45.00	22.00	ACR R=1.0002	Eugene, OR	
52	2018/06/19	7.8178	0.0455	45.13	28.10	ACR R=1.0002	Eugene, OR	
53	2018/06/26	7.8331	0.0368	45.34	23.04	ACR R=1.0002	Eugene, OR	
54	2019/07/08	7.8267	0.0375	44.85	26.62	ACR R=1.00034	Eugene, OR	
55	2019/08/01	7.8303	0.0554	45.12	25.74	ACR R=1.00034	Eugene, OR	
56	2021/03/30	7.9099	0.0414	44.35	10.05	ACR R=1.00038	Eugene, OR	
57	2021/04/01	7.8632	0.0452	44.78	19.80	ACR R=1.00038	Eugene, OR	
58	2021/04/16	7.8535	0.0538	44.94	-	ACR R=1.00038	Eugene, OR	
59	2021/06/02	7.8468	0.0470	44.93	27.10	ACR R=1.00038	Eugene, OR	
60	2021/06/03	7.8500	0.0588	45.10	25.46	ACR R=1.00038	Eugene, OR	
61	2022/05/31	7.8586	0.0546	44.96	25.08	ACR R=1.00038	Eugene, OR	
62	2022/08/11	7.8460	0.0571	44.89		ACR R=1.00038	Eugene, OR	