

Calibration Record of Kipp & Zonen SPLite2 101903 Pyranometer

This page shows the calibration history of the Kipp & Zonen SPLite2 pyranometer number 101903. 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 Figs. 1 and 2). 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.

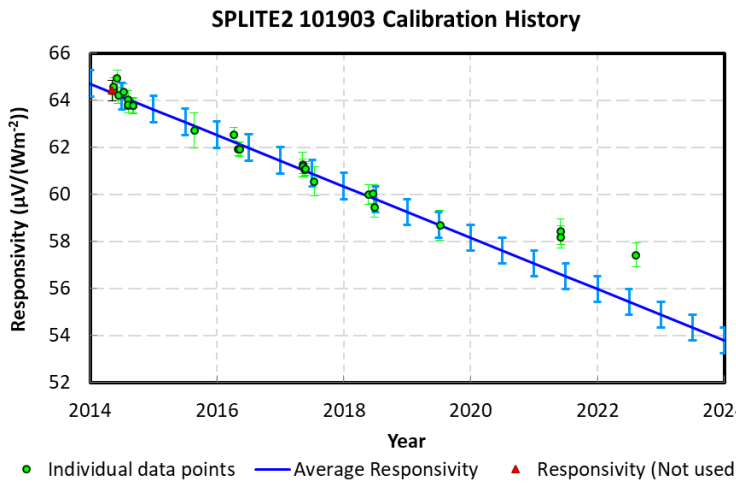


Figure 1: All calibration data plotted against time with long-term trend

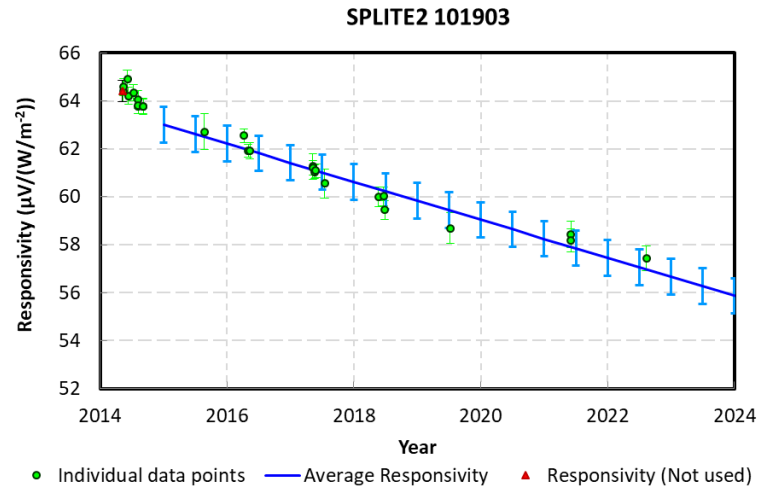


Figure 2: Calibration data plotted against time for 10 year trend

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 SPLite2 101903

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	2014/05/07	64.4238	0.4412	51.88	10.20	ACR, Schenk_1315 R=14.89	Eugene, OR	
2	2014/05/13	64.4238	0.4412	42.22	25.43	ACR, Schenk_1315 R=14.89	Eugene, OR	

3	2014/05/14	64.5888	0.3574	45.45	21.38	ACR, Schenk_1315 R=14.89	Eugene, OR	
4	2014/06/05	64.9245	0.3564	45.02	17.82	ACR, Schenk_1315 R=14.89	Eugene, OR	
5	2014/06/11	64.2086	0.3493	44.85	17.13	ACR, Schenk_1315 R=14.89	Eugene, OR	
6	2014/07/10	64.3434	0.3464	45.10	25.12	ACR, Schenk_1315 R=14.89	Eugene, OR	
7	2014/08/06	63.7791	0.2976	45.00	---	ACR?, Schenk_1315 R=14.89	Eugene, OR	
8	2014/08/06	64.0455	0.3770	44.63	29.05	ACR, Schenk_1315 R=14.89	Eugene, OR	
9	2014/08/07	63.7989	0.3264	45.15	21.78	ACR, Schenk_1315 R=14.89	Eugene, OR	
10	2014/09/04	63.7722	0.3177	44.96	27.22	ACR, Schenk_1315 R=14.89	Eugene, OR	
11	2014/09/05	63.7774	0.3415	45.08	24.25	ACR, Schenk_1315 R=14.89	Eugene, OR	
12	2015/08/22	62.7162	0.7416	45.24	22.61	ACR, Schenk_1315 R=14.89	Eugene, OR	
13	2016/04/07	62.5552	0.2882	45.02	19.79	ACR R=1.00069, Schenk_1315 R=14.89	Eugene, OR	
14	2016/05/01	61.9212	0.2809	44.99	23.84	ACR R=1.00069, Schenk_1315 R=14.89	Eugene, OR	
15	2016/05/11	61.9201	0.3222	45.00	23.50	ACR R=1.00069, Schenk_1315 R=14.89	Eugene, OR	
16	2017/05/08	61.2701	0.5380	44.81	16.60	ACR R=1.0005, Schenk_1315 R=14.89	Eugene, OR	
17	2017/05/09	61.1952	0.2992	44.80	17.53	ACR R=1.0005, Schenk_1315 R=14.89	Eugene, OR	
18	2017/05/19	61.0442	0.2844	45.03	24.17	ACR R=1.0005, Schenk_1315 R=14.89	Eugene, OR	
19	2017/05/26	61.0950	0.2873	45.01	22.79	ACR R=1.0005, Schenk_1315 R=14.89	Eugene, OR	

20	2017/07/15	60.5499	0.6171	44.98	21.89	NIP_18948E6 R=8.12018, Schenk_1315 R=14.89	Eugene, OR	
21	2018/05/22	59.9945	0.4239	45.00	22.00	ACR R=1.0002, Schenk_1315 R=14.911	Eugene, OR	
22	2018/06/19	60.0158	0.3968	45.12	26.46	ACR R=1.0002, CMP22_110265 R=8.9179	Eugene, OR	
23	2018/06/26	59.4469	0.4051	45.34	23.04	ACR R=1.0002, Schenk_1315 R=14.911	Eugene, OR	
24	2019/07/08	58.6916	0.6409	44.85	26.63	ACR R=1.00034, CMP22_110263 R=9.6981	Eugene, OR	
25	2021/06/02	58.4212	0.5530	44.93	27.10	ACR R=1.00038, CMP22_110263 R=9.7005	Eugene, OR	
26	2021/06/03	58.1857	0.4752	45.10	25.46	ACR R=1.00038, CMP22_110263 R=9.7005	Eugene, OR	
27	2022/08/11	57.4273	0.5094	45.05	-	ACR R=1.00038, CMP22_110265 R=8.9202	Eugene, OR	