

Calibration Record of Schenk 1330 Pyranometer

This page shows the calibration history of the Schenk 1330. 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 & 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.

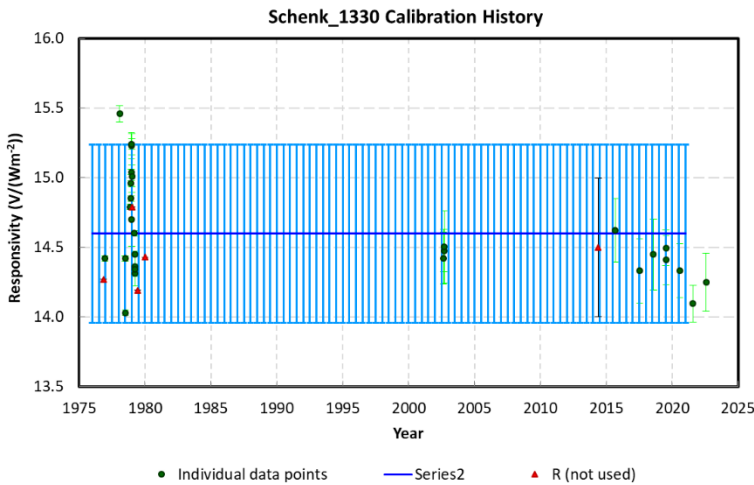


Figure 1: All calibration data plotted against time with long-term trend

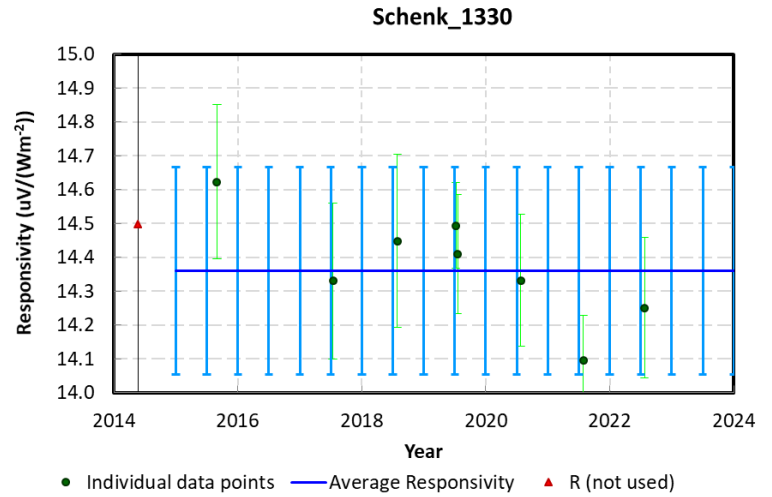


Figure 2: Calibration data plotted against time for 10 year trend

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 Schenk_1330

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	1976/11/02	14.2700	0.0000			factory	Factory	
2	1976/12/13	14.4200	0.0195				Eugene, OR	
3	1978/01/27	15.4600	0.0585				Eugene, OR	
4	1978/06/26	14.4200	0.0195				Eugene, OR	

5	1978/06/27	14.0300	0.0195				Eugene, OR	
6	1978/11/11	14.7900	0.0195				Eugene, OR	
7	1978/12/07	14.8500	0.0195		0.60		Eugene, OR	
8	1978/12/08	14.9600	0.0195		5.60		Eugene, OR	
9	1978/12/13	15.0400	0.0195		6.10		Eugene, OR	
10	1978/12/15	15.2300	0.0975		5.00		Eugene, OR	
11	1978/12/26	15.2400	0.0390		6.10		Eugene, OR	
12	1978/12/28	14.7000	0.1950		0.00		Eugene, OR	
13	1978/12/29	15.2400	0.0780		-2.80		Eugene, OR	
14	1978/12/30	15.0100	0.0780		-2.80		Eugene, OR	
15	1979/01/05	14.7900	0.0000		0.00		Eugene, OR	
16	1979/03/10	14.6000	0.0195		-	PSP_17854F3 R=7.5961?	Eugene, OR	
17	1979/03/20	14.4500	0.0195		14.40		Eugene, OR	
18	1979/03/20	14.3600	0.0195		16.70		Eugene, OR	
19	1979/03/23	14.3100	0.0195		17.20		Eugene, OR	
20	1979/03/24	14.3400	0.1170		18.90		Eugene, OR	
21	1979/06/07	14.1900	0.0000		16.10		Eugene, OR	
22	1980/01/01	14.4300	0.0000		-		Eugene, OR	
23	2002/08/23	14.4216	0.1861	45.07	26.62	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
24	2002/09/02	14.4753	0.1530	45.02	24.03	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
25	2002/09/12	14.5020	0.2609	44.98	24.73	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
26	2014/05/22	14.4985	0.5000	55.00	16.80	NIP_17668E6 R=8.6194, CMP22_120363 R=9.6822	Dillon, MT	
27	2015/08/30	14.6230	0.2274	45.03	22.22	NIP_17668E6 R=8.6373, CMP22_120363 R=9.6822	Dillon, MT	

28	2017/07/14	14.3297	0.2295	49.76	24.34	NIP_17668E6 R=8.6303, CMP22_120363 R=9.6916	Dillon, MT	
29	2018/07/28	14.4487	0.2553	45.01	20.82	NIP_17668E6 R=8.6091, CMP22_120363 R=9.6939	Dillon, MT	
30	2019/07/08	14.4943	0.1277	44.85	26.63	ACR R=1.00034, CMP22_120363 R=9.6981	Eugene, OR	
31	2019/07/19	14.4089	0.1754	44.97	-	NIP_17668E6 R=8.6121, CMP22_120363 R=9.6981	Hermiston, OR	
32	2020/07/23	14.3321	0.1959	44.97	27.70	NIP_17668E6 R=8.6121, CMP22_120363 R=9.6981	Hermiston, OR	
33	2021/07/28	14.0950	0.1332	44.88	27.94	NIP_17668E6 R=8.6210, CMP22_120363 R=9.7005	Hermiston, OR	
34	2022/07/23	14.2504	0.2081	44.80	-	NIP_17668E6 R=8.6210, CMP22_120363 R=9.7005	Hermiston, OR	