

Calibration Record of Schenk 1327 Pyranometer

This page shows the calibration history of the Schenk 1327. 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.

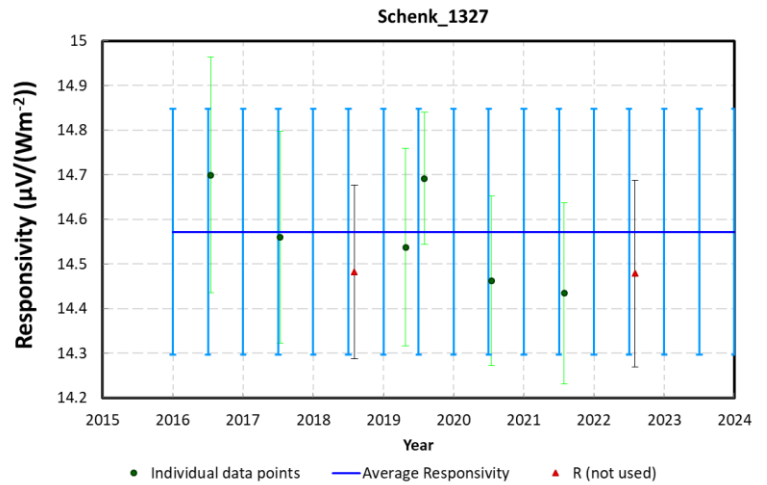
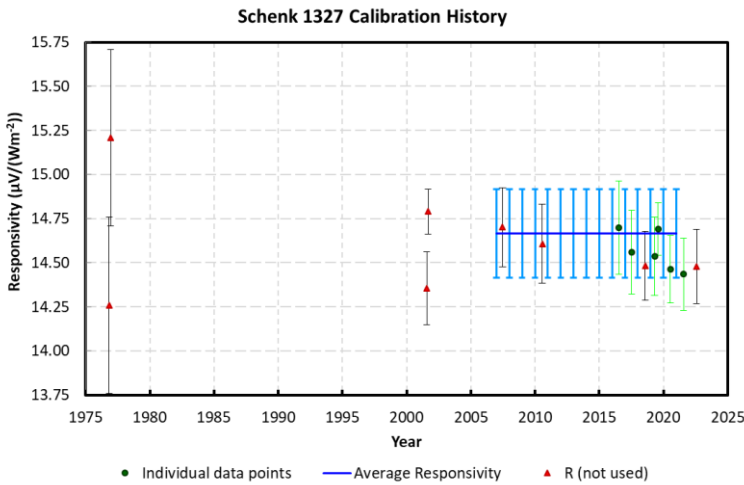


Figure 1: All calibration data plotted against time with long-term trend

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_1327

	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	14.2600	0.5000			factory	Factory	
2	1976/12/13	15.2100	0.5000				Eugene, OR	
3	2001/07/28	14.3560	0.2069	30.00 to 60.00	30.18	ACR, Eppley B&W	NREL/ SRRL	

4	2001/09/06	14.7902	0.1264	44.90	24.86	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
5	2007/06/21	14.7007	0.2222	19.56	28.24	NIP_17668E6 R=8.4262,PSP_17053F3 R=8.553	Twin Falls, ID	
6	2010/07/24	14.6077	0.2252	33.45	24.57	NIP_17668E6 R=8.4262,PSP_17053F3 R=8.7229	Twin Falls, ID	
7	2016/07/14	14.6994	0.2640	44.95		NIP_17668E6 R=8.6373, CMP22_120363 R=9.6803	Twin Falls, ID	
8	2017/07/11	14.5599	0.2369	45.00	28.88	NIP_17668E6 R=8.630302026, CMP22_120363 R=9.691603485	Twin Falls, ID	
9	2018/08/02	14.4826	0.1946	45.04	25.66	NIP_17668E6 R=8.6091, CMP22_120363 R=9.6939	Twin Falls, ID	
10	2019/04/25	14.5380	0.2216	45.27	17.96	NIP_17668E6 R=8.6091, CMP22_120363 R=9.6981	Twin Falls, ID	
11	2019/08/01	14.6918	0.1479	45.12	25.74	ACR R=1.00034, CMP22_120363 R=9.6981	Eugene, OR	
12	2020/07/14	14.4625	0.1903	44.95	26.68	CMP22_120363 R=9.6981	Burns, OR	
13	2021/07/29	14.4343	0.2035	44.99	31.67	NIP_17668E6 R=8.6121, CMP22_120363 R=9.7005	Burns, OR	
14	2022/08/01	14.4791	0.2092	44.61	33.67	NIP_17668E6 R=8.6121, CMP22_120363 R=9.7005	Burns, OR	