

Calibration Record of Eppley PSP 23620F3 Pyranometer

This page shows the calibration history of the Eppley PSP pyranometer number 23620F3. 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.

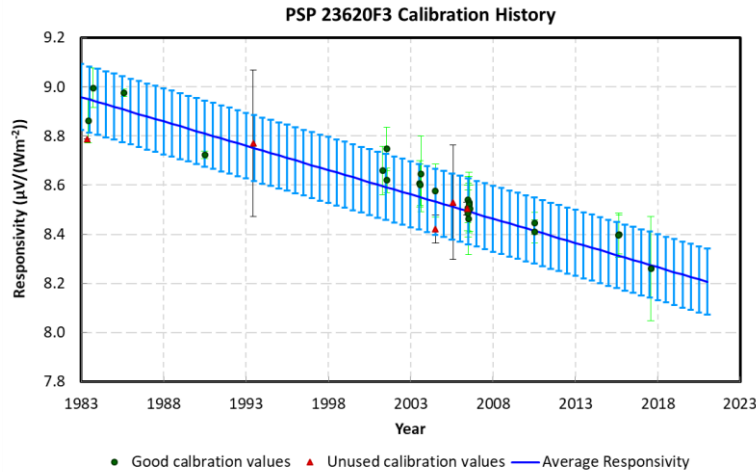


Figure 1: All calibration data plotted against time with long-term trend

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 History for PSP_23620F3_P10

	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	1983/05/12	8.99			25.00	factory	Factory	
2	1983/06/06	9.2500	0.0900			PSP_13365F3 R=8.25	Eugene, OR	
3	1983/09/20	8.9962	0.0800			PSP_13365F3 R=8.25	Eugene, OR	

4	1985/09/06	9.4200	0.0600			PSP_13365F3 R=8.25	Eugene, OR	
5	1990/07/01	8.8.934	0.0650			PSP_17853F3 R=7.470	Eugene, OR	
6	1993/06/13	8.7450	0.2973	50	25.00	ACR, PSP 17802F3	NREL, SRRL	
7	2001/07/24	8.6200	0.0500		20.00	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
8	2001/04/20	8.6588	0.0985	44.79	25.54	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
9	2001/07/18	8.7476	0.0893	49.94	25.80	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
10	2003/07/22	8.6061	0.0941	45.02	29.54	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
11	2003/08/04	8.6013	0.0839	44.99	25.62	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
12	2003/08/15	8.6464	0.1541	45.03	27.63	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
13	2004/07/01	8.4253	0.0570	49.81	17.3 to 34.5	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
14	2004/07/04	8.5776	0.1073	44.98	25.75	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
15	2005/07/27	8.3225	0.4204	45.00	25.04	ACR, B&W	NREL, SRRL	
16	2006/06/01	8.5040	0.0260		-	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	

17	2006/06/17	8.5066	0.0935	44.94	20.76	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
18	2006/06/24	8.5410	0.0938	44.95	29.76	N5 (R ={8.13580}), P16 (R ={7.76230})	Eugene, OR	
19	2006/06/27	8.4837	0.0958	45.01	27.71	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
20	2006/07/07	8.4621	0.1450	45.02	26.57	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
21	2006/07/16	8.5294	0.1242	45.01	29.32	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
22	2006/07/26	8.5214	0.1143	44.97	26.75	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
23	2006/08/06	8.5055	0.0948	44.95	26.85	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
24	2010/07/14	8.4114	0.0462	44.81	28.55	ACR, Schenk R=14.89	Eugene, OR	
25	2010/07/15	8.4454	0.0447	45.05	25.36	ACR, Schenk R=14.89	Eugene, OR	
26	2015/08/22	8.3990	0.0791	45.24	22.61	ACR R=1, Schenk R=14.89	Eugene, OR	
27	2015/01/23	8.3970	0.0902	44.99	25.02	NIP_28948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
28	2017/07/31	8.2602	0.2127	45.06	26.94	CMP22_120363 R=9.6916	Seattle, WA	