

Calibration Record of the Eppley PSP 13192F3

This page shows the calibration history of the PSP 13192F3 pyranometer. 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.

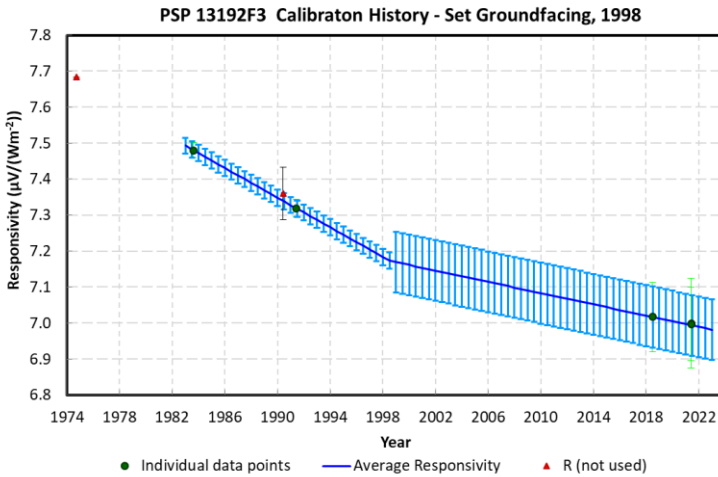


Figure 1: All calibration data plotted against time with long-term trend. More years are needed to establish a long-term trend.

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 13192F3 P2

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	1974/09/16	7.6833			24.00	Factory	Factory	
2	1983/08/06	7.4804	0.0200		25.00	PSP_13365F3 R=8.25	Eugene, OR	
3	1990/06/01	7.3600	0.0730		-	NREL/SRRL	NREL/SRRL	

4	1991/06/01	7.3193	0.0250		-	PSP_17853F3 R=7.47	Eugene, OR	
5	2018/06/26	7.0169	0.0962	45.34	23.04	ACR R=1.0002, SCHENK_1315 R=14.9111	Eugene, OR	
6	2021/06/02	6.9990	0.1249	44.93	27.10	ACR R=1.00038, CMP22_120363 R=9.7005	Eugene, OR	
7	2021/06/03	6.9970	0.1021	45.10	25.46	ACR R=1.00038, CMP22_120363 R=9.7005	Eugene, OR	