

Calibration Record of the Eppley PSP 17199F3

This page shows the calibration history of the PSP 17199F3. 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.

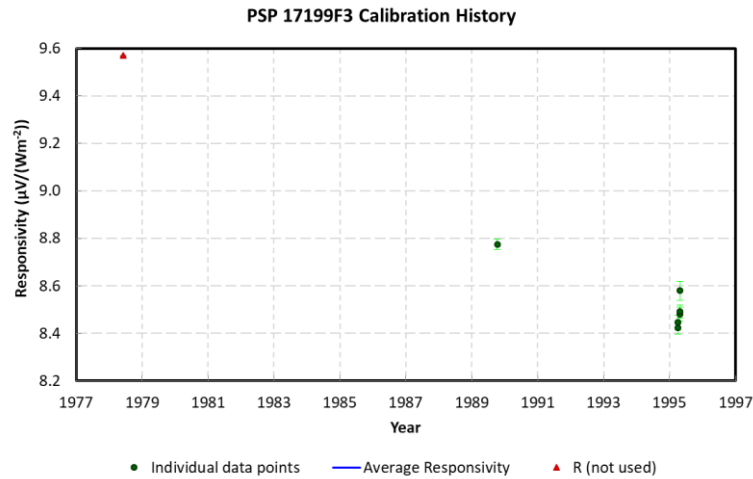


Figure 1: All calibration data plotted against time with trend. More years are needed to establish a long-term

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 17199F3 P18

	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	1978/06/06	9.5700			25.00	Factory	Factory	
2	1989/10/09	8.7740	0.0220			NREL/SRRL	NREL/SRRL	
3	1995/04/02	8.4237	0.0286			PSP_17853F3 R=7.347		1 stdev
4	1995/04/03	8.4456	0.0312			PSP_17853F3 R=7.347		1 stdev

5	1995/04/22	8.4815	0.0297			PSP_17853F3 R=7.347		1 stdev
6	1995/04/24	8.5794	0.0395			PSP_17853F3 R=7.347		1 stdev
7	1995/04/25	8.4922	0.0280			PSP_17853F3 R=7.347		1 stdev