

## Calibration Record of the Eppley NIP # 13170E6 Pyrheliometer

This page shows the calibration history of the NIP 13170E6. The responsivity used to transform the irradiance voltage data into  $\text{Wm}^{-2}$  is a running average of the responsivity obtained over the years. This reduces the variation of the responsivities associated with the calibration random uncertainties (See Figs. 1 and 2). The responsivity values used are in the comprehensive format file or the site files. The responsivity measured during specific calibrations are listed in Table 1.

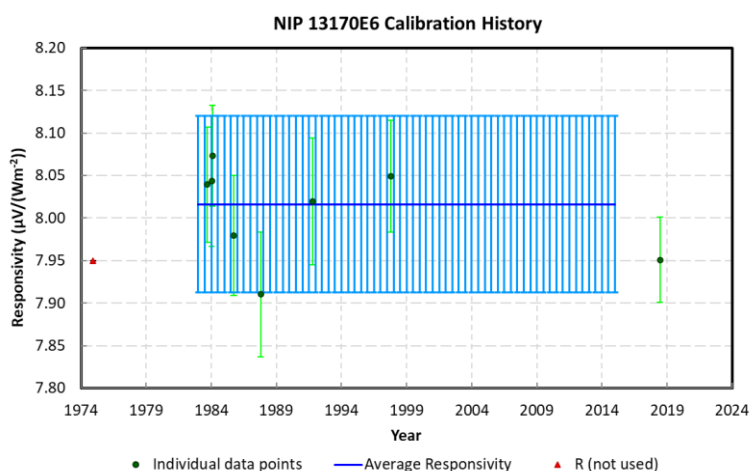


Figure 1: All calibration data plotted against time with long-term trend

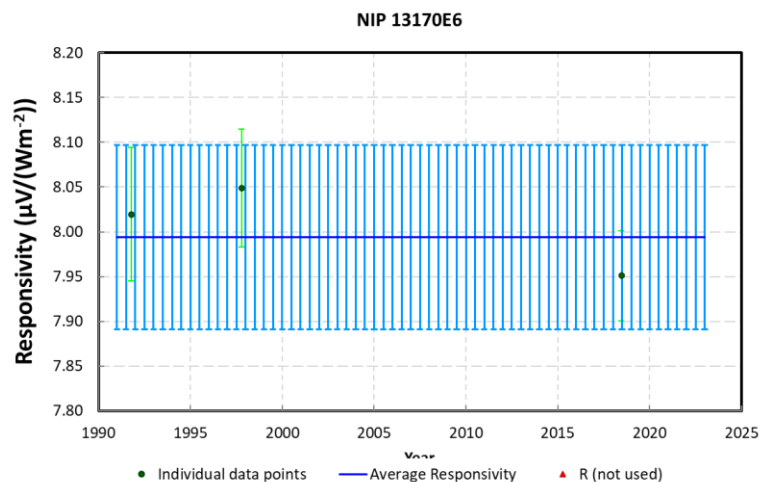


Figure 2: Calibrations from the most recent record

### 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 NIP 13170E6 (N1)

	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	1974/12/05	7.9500		-	1.00	-	Factory	ABS scale
2	1983/09/06	8.0394	0.0675	-	20.00	NIP_18948E6 R=8.1318	Eugene, OR	
3	1984/01/14	8.0434	0.0770	-	2.00	NIP_17668E6 R=8.719	Eugene, OR	
4	1984/02/04	8.0732	0.0593	-	7.50	NIP_17668E6 R=8.719	Eugene, OR	

5	1985/09/24	7.9795	0.0706	-	20.00	NIP_21149E6 R=8.392	Eugene, OR	
6	1987/10/19	7.9103	0.0736	-	17.50	NIP_18948E6 R=8.1318	Eugene, OR	
7	1991/10/15	8.0196	0.0746	-	14.50	NIP_18948E6 R=8.1318	Eugene, OR	
8	1997/10/13	8.0489	0.0658	-	16.60	NIP_18948E6 R=8.1318	Eugene, OR	
9	1905/07/10	7.9509	0.0500	45.13	28.10	ACR R=1.0002	Eugene, OR	