

# Calibration Record of the Eppley NIP # 17666E6 Pyrheliometer

This page shows the calibration history of the NIP 17666E6. 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 calibration random uncertainties (See Fig. 1). 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.

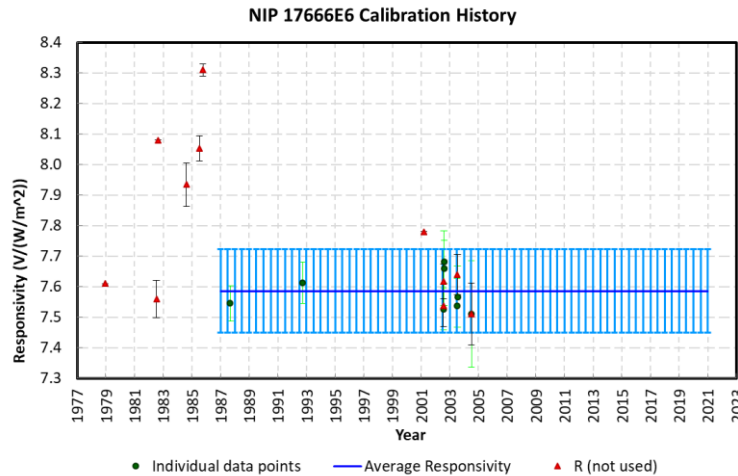


Figure 1: All calibration data plotted against time with long-term trend

## 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 17666E6 (N2)

	Calibration Date	Responsivity ( $\mu V/Wm^{-2}$ )	Uncertainty ( $\mu V/Wm^{-2}$ )	Average SZA ( $^{\circ}$ )	Temperature (C)	Reference Instruments	Location	Notes
1	1978/12/10	7.6100			-6.00	Factory Reference	Factory	
2	1982/07/13	7.5597	0.0605			NIP_18948E6 R=8.12	Whitehorse Ranch, OR	

3	1982/08/26	8.0800			21.00	Factory Reference	Factory	
4	1984/08/18	7.9344	0.0707			NIP_17829E6 R=8.265	Hermiston, OR	
5	1985/07/13	8.0525	0.0411			NIP_21902E6 R=8.64	Hermiston, OR	
6	1985/10/08	8.3100	0.0200			NIP_13170E6 R=8.01	Eugene, OR	
7	1987/09/05	7.5454	0.0580			NIP_13170E6 R=8.01	Eugene, OR	
8	1992/09/27	7.6125	0.0674			NIP_18948E6 R=8.12	Eugene, OR	
9	2001/03/12	7.7800			7.00	Factory Reference	Factory	
10	2002/07/24	7.6175	0.0558			NIP=17668E6 R=8.72	Eugene, OR	
11	2002/07/24	7.5274	0.0681	44.95	29.01	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
12	2002/08/06	7.6607	0.1231	44.73	22.54	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
13	2002/08/08	7.6828	0.0700	44.72	22.69	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
14	2003/07/11	7.6404	0.0659			NIP=17668E6 R=8.72	Eugene, OR	
15	2003/07/11	7.5376	0.0897	45.03	29.81	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
16	2003/07/16	7.5675	0.1007	45.04	29.01	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	
17	2004/07/04	7.5106	0.1736	44.98	25.75	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	Eugene, OR	

