

Calibration Record of the Eppley NIP # 14981E6 Pyrheliometer

This page shows the calibration history of the NIP 14981E6. 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 Figs 1 & 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.

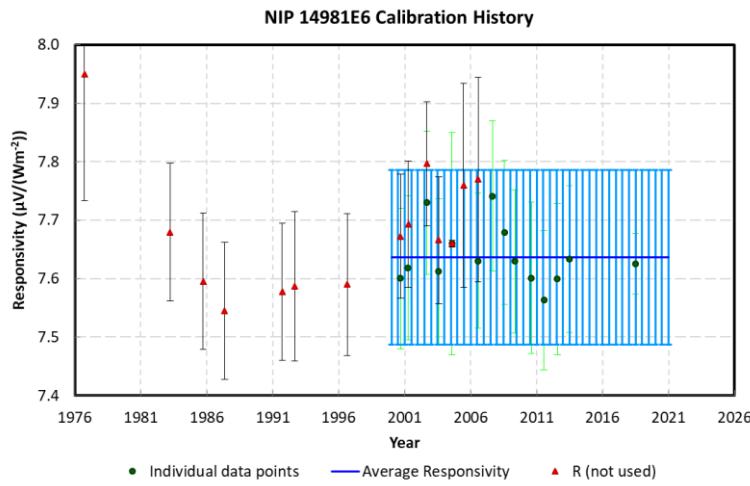


Figure 1: All calibration data plotted against time with long-term trend

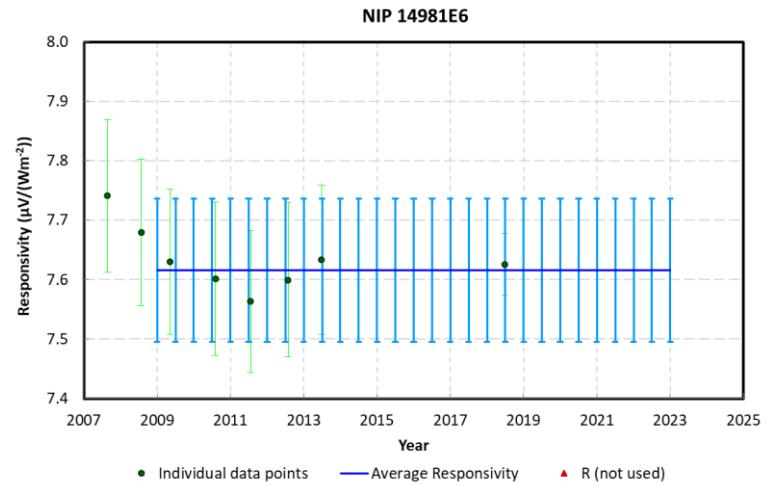


Figure 2: Calibration data plotted against time for 10 year trend

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 14981E6 (N9)

	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	1976/09/22	7.9500	0.2165		15	Factory	Factory	
2	1983/03/19	7.6796	0.1177		15	NIP_13170E6 R=8.0080	Eugene, OR	
3	1985/09/19	7.5956	0.1167		22.5	NIP_13170E6 R=8.0080	Eugene, OR	

4	1987/05/08	7.5448	0.1168		32	NIP_21149E6 R=8.392	Eugene, OR	
5	1991/09/18	7.578	0.1173		25.5	NIP_21149E6 R=8.392	Eugene, OR	
6	1992/09/01	7.5869	0.1281		16.8	NIP_17668E6 R=8.1318	Eugene, OR	
7	1996/08/22	7.5898	0.1217		31.2	NIP_17668E6 R=8.1318	Eugene, OR	
8	2000/09/06	7.6725	0.1059		19.6	NIP_18948E6 R=8.719	Hermiston, OR	
9	2000/09/06	7.6006	0.12	45.3	20.7	NIP_17668E6 R=8.6373	Hermiston, OR	
10	2001/04/04	7.6933	0.1081		11.4	NIP_17668E6 R=8.6373	Hermiston, OR	
11	2001/04/04	7.6187	0.1231	44.94	12.21	NIP_17668E6 R=8.6373	Hermiston, OR	
12	2002/09/04	7.7963	0.1066		15	NIP_18948E6 R=8.719	Hermiston, OR	
13	2002/09/04	7.7299	0.1222	51.32	16.85	NIP_17668E6 R=8.6373	Hermiston, OR	
14	2003/07/31	7.6657	0.1087		33	NIP_18948E6 R=8.719	Hermiston, OR	
15	2003/07/30	7.6121	0.1248	44.93	34.96	NIP_17668E6 R=8.6373	Hermiston, OR	
16	2004/07/30	7.66	0.006		33	NIP_23928E6 R=8.2637	Hermiston, OR	
17	2004/07/30	7.6598	0.1901	44.93	33.32	NIP_23928E6 R=8.2637	Hermiston, OR	
18	2005/06/15	7.7595	0.1749		34	NIP_18948E6 R=8.719	Hermiston, OR	
19	2006/07/25	7.6303	0.1155	44.81	33.51	NIP_17668E6 R=8.6373	Hermiston, OR	
20	2006/07/26	7.7699	0.1749		27	NIP_18948E6 R=8.719	Hermiston, OR	
21	2007/08/23	7.7411	0.1285	44.82	26.89	NIP_17668E6 R=8.6373	Hermiston, OR	
22	2008/07/23	7.6791	0.1234	44.99	22.94	NIP_17668E6 R=8.6373	Hermiston, OR	
23	2009/05/08	7.6297	0.1223	44.87	16.02	NIP_17668E6 R=8.6373	Hermiston, OR	
24	2010/08/03	7.6013	0.1294	44.91	29.36	NIP_17668E6 R=8.6373	Hermiston, OR	

25	2011/01/02	7.5632	0.119	45.03	19.91	NIP_17668E6 R=8.6373	Hermiston, OR	
26	2012/07/27	7.5992	0.1296	44.99	27.24	NIP_17668E6 R=8.6373	Hermiston, OR	
27	2013/06/27	7.6334	0.1257	45.14	30.2	NIP_17668E6 R=8.6373	Hermiston, OR	
28	2018/06/26	7.6254	0.0521	45.34	23.04	ACR R=1.0002	Eugene, OR	