

Calibration Record of the RSR using LI-COR PY35965

This page shows the calibration history of the Rotating Shadowband Radiometer (RSR) using LI-COR pyranometer PY35965. 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 Figs. 1 & 2). 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.

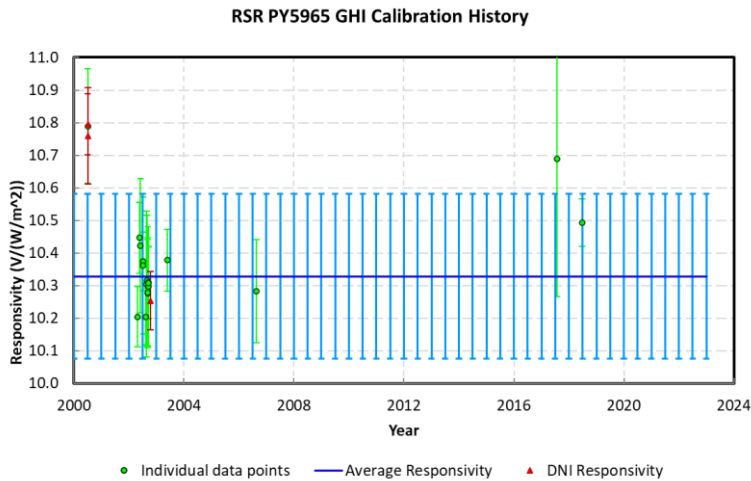


Figure 1: All calibration data plotted against time with long-term trend.

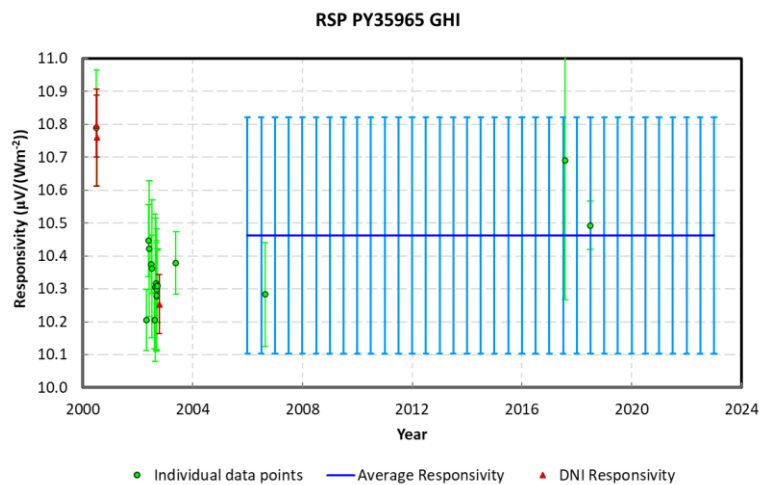


Figure 2: Calibration data plotted against time for 10-year trend

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 RSR_PY35965

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	2000/06/30	10.7947	0.0937	44.95	20.90	NIP_18948E6 R= 8.1358, PSP_18560F3 R=8.5134	Eugene, OR	

1a	2000/06/30	10.7893	0.1757	45.04	20.90	NIP_18948E6 R=8.1338, PSP_18560F3 R=8.06907125	Eugene, OR	
2	2000/07/02	10.7596	0.1476	46.98	18.35	NIP_18948E6 R= 8.1358, PSP_18560F3 R=8.5134	Eugene, OR	
3	2002/04/23	10.2048	0.0933	44.36	12.18	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
4	2002/05/22	10.4465	0.1088	45.29	22.75	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
5	2002/06/02	10.4220	0.2055	45.09	25.64	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
6	2002/07/02	10.3750	0.0891	44.80	25.54	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
7	2002/07/08	10.3615	0.2099	44.95	28.78	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
8	2002/08/08	10.2043	0.0865	44.72	22.69	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
9	2002/08/19	10.3041	0.2237	45.04	25.11	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
10	2002/08/26	10.3161	0.1989	45.11	27.30	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	

11	2002/09/04	10.2774	0.1638	45.00	23.36	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
12	2002/09/05	10.2786	0.1686	44.88	24.66	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
13	2002/09/12	10.2974	0.1838	44.76	26.87	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
14	2002/09/18	10.3103	0.1107	45.00	24.50	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
15	2002/09/19	10.3083	0.1105	45.01	24.51	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
16	2002/10/11	10.2532	0.0899	51.61	16.38	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
17	2003/05/23	10.3783	0.0949	45.00	26.06	NIP_18948E6 R= 8.1358, Schenk_1315 R=14.89	Eugene, OR	
18	2006/08/19	10.2831	0.1583	44.78	29.66	Li-Cor_PY22978 R=14.6629	Ashland, OR	
19	2017/07/29	10.6894	0.4225	45.01	28.71	CMP22_120363 R =9.6916	Cheney, WA	
20	2018/06/26	10.4929	0.0728	45.76	23.06	ACR R=1.0002, SCHENK_1315 R=14.9111	Eugene, OR	