

Calibration Record of the RSR using LI-COR PY35563

This page shows the calibration history of the Rotating Shadowband Radiometer (RSR) using LI-COR pyranometer PY35563. 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.

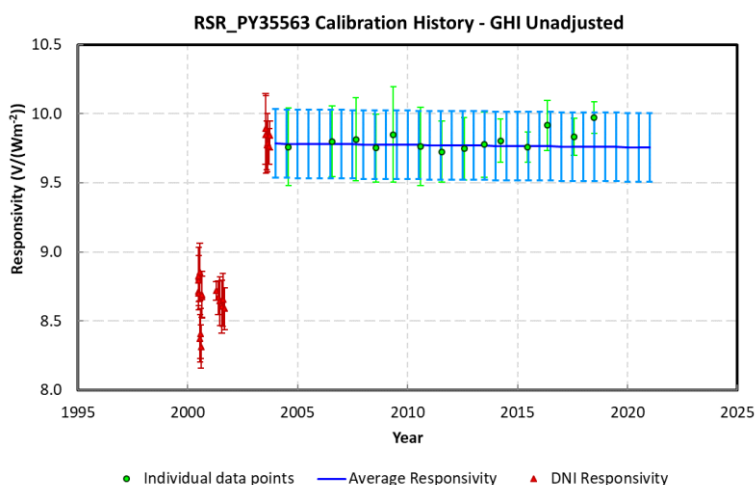


Figure 1: All calibration data plotted against time with long-term trend

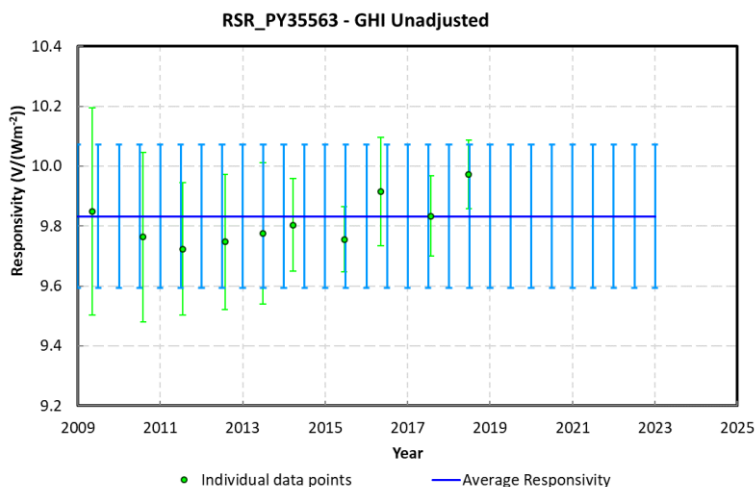


Figure 2: Calibration data plotted against time for 10 year trend

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_PY35563

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	2000/06/29	8.7939	0.1814	44.85	26.42	NIP_18948E6 R=8.1358, PSP_18560F3 R=8.5134	EUGENE, OR	

2	2000/06/30	8.7170	0.0754	44.95	20.90	NIP_18948E6 R=8.1358, PSP_18560F3 R=8.5134	EUGENE, OR	
3	2000/07/02	8.6984	0.1170	46.98	18.35	NIP_18948E6 R=8.1358, PSP_18560F3 R=8.5134	EUGENE, OR	
4	2000/07/02	8.8223	0.2098	45.09	24.08	NIP_18948E6 R=8.1358, PSP_18560F3 R=8.5134	EUGENE, OR	
5	2000/07/18	8.8537	0.2077	44.98	26.71	NIP_18948E6 R=8.1358, PSP_18560F3 R=8.5134	EUGENE, OR	
6	2000/07/24	8.3730	0.1707	44.95	27.36	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
7	2000/08/01	8.4085	0.1823	45.13	27.98	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
8	2000/08/08	8.3142	0.1569	45.26	22.72	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
9	2000/08/24	8.6747	0.1479	45.06	23.16	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
10	2000/08/28	8.6894	0.1689	44.96	26.08	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
11	2001/04/20	8.7174	0.0671	44.79	25.54	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	

12	2001/05/21	8.6683	0.1215	44.89	26.61	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
13	2001/06/19	8.6434	0.1777	45.25	28.70	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
14	2001/07/18	8.6045	0.1922	44.98	25.80	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
15	2001/08/07	8.6538	0.1922	44.98	29.25	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
16	2001/09/06	8.5888	0.1513	44.90	24.86	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
17	2003/07/16	9.8900	0.2557	45.05	29.32	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
18	2003/07/22	9.8490	0.2812	45.02	29.54	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
19	2003/08/04	9.7703	0.1779	44.99	25.62	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
20	2003/08/15	9.7901	0.2119	45.03	27.63	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
21	2003/09/12	9.7638	0.1290	44.88	21.96	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	

22	2003/09/22	9.8443	0.1047	45.16	26.49	NIP_18948E6 R=8.1358, Schenk_1315 R=14.89	EUGENE, OR	
23	2004/07/30	9.7589	0.2806	44.93	33.32	NIP_17668E6 R=8.1358 , PSP_13365F3 R=7.6777	HERMISTON, OR	
24	2006/07/25	9.7989	0.2553	44.81	33.51	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.6238	HERMISTON, OR	
25	2007/08/23	9.8137	0.3004	44.82	26.89	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.6091	HERMISTON, OR	
26	2008/07/23	9.7510	0.2472	44.99	22.94	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.5945	HERMISTON, OR	
27	2009/05/08	9.8491	0.3459	44.87	16.02	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.5798	HERMISTON, OR	
28	2010/08/03	9.7634	0.2822	45.21	32.63	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.5651	HERMISTON, OR	
29	2011/07/19	9.7239	0.2212	45.03	19.91	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.5505	HERMISTON, OR	
30	2012/07/27	9.7472	0.2265	44.99	27.24	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.5358	HERMISTON, OR	
31	2013/06/27	9.7759	0.2364	45.14	30.20	NIP_17668E6 R=8.6373, PSP_13365F3 R=7.5211	HERMISTON, OR	
32	2014/03/21	9.8041	0.1554	45.56		CMP22_120363 R=9.68217	HERMISTON, OR	

33	2015/06/17	9.7560	0.1090	44.63		CMP22_120363 R=9.68217	HERMISTON, OR	
34	2016/05/07	9.9151	0.1817	45.01	---	CMP22_120363 R=9.68027	HERMISTON, OR	
35	2017/07/27	9.8338	0.1347	45.02	28.96	CMP22_120363 R=9.6916	HERMISTON, OR	
36	2018/06/25	9.9726	0.1152	44.98	22.36	Licor_PY22978 R=14.6603	Ashland, OR	