

Calibration Record of the Hukseflux SR20 3374

This page shows the calibration history of the Hukseflux SR20 pyranometer 3374. 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 Fig. 1). 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.

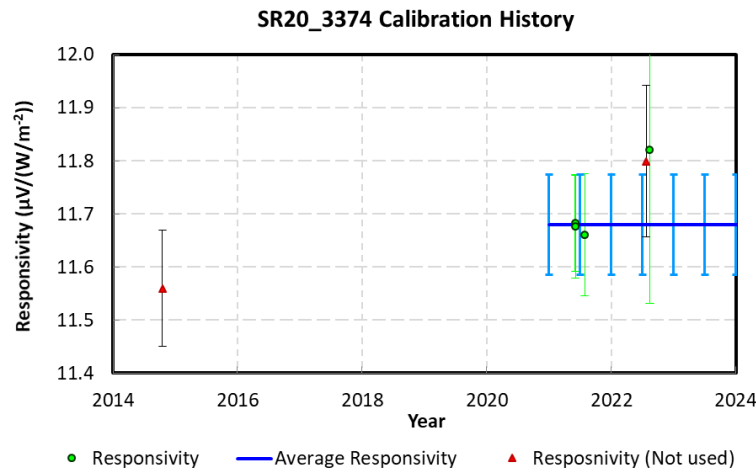


Figure 1: All calibration data plotted against time with long-term trend. More years are needed to establish a long-term trend.

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 SR20_3374

	Calibration Date	Responsivity ($\mu V/Wm^{-2}$)	Uncertainty ($\mu V/Wm^{-2}$)	Average SZA ($^{\circ}$)	Temperature (C)	Reference Instruments	Location	Notes
1	2014/10/17	11.5600	0.1100	0.00	20.00		Factory	
2	2021/06/02	11.6822	0.0901	44.93	28.93	ACR R=1.00038, CMP22_120363 R=9.7005	Eugene, OR	

3	2021/06/03	11.6765	0.0974	45.10	25.46	ACR R=1.00038, CMP22_120363 R=9.7005	Eugene, OR	
4	2021/07/28	11.6607	0.1152	44.88	27.94	NIP_17668E6 R=8.621, CMP22_120363 R=9.7005	Hermiston, OR	
5	2022/07/23	11.7992	0.1424	31.82		NIP_17668E6 R=8.621, CMP22_120363 R=9.7006	Hermiston, OR	
6	2022/08/13	11.8212	0.2893	44.97	27.65	NIP_23385E6 R=8.5247, Shenk_1330 R=14.3501	Hermiston, OR	