## Calibration Record of the Eppley NIP # 21902E6 Pyrheliometer

This page shows the calibration history of the NIP 21902E6. The responsivity used to transform the irradiance voltage data into Wm<sup>-2</sup> 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.

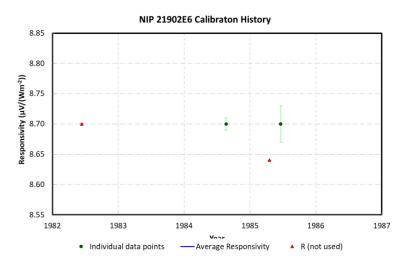


Figure 1: All calibration data plotted against time with long-term trend

## 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 21902E6 (N8)

|   | Calibration | Responsivity      | Uncertainty       | Average        | Temperature | Reference    | Location       | Notes |
|---|-------------|-------------------|-------------------|----------------|-------------|--------------|----------------|-------|
|   | Date        | $(\mu V/Wm^{-2})$ | $(\mu V/Wm^{-2})$ | <b>SZA</b> (°) | <b>(C)</b>  | Instruments  |                |       |
| 1 | 1982/06/10  | 8.7000            |                   |                | 21.00       | Factory      | Factory        |       |
| 2 | 1984/08/19  | 8.7000            | 0.0100            |                |             | NIP_17829E6, | Coeur d'Alene, |       |
|   |             |                   |                   |                |             | R=8.265      | ID             |       |
| 3 | 1985/04/17  | 8.6400            |                   |                | 10.00       | Factory      | Factory        |       |
| 4 | 1985/06/18  | 8.7000            | 0.0300            |                |             | NIP_13170E6, | Eugene, OR     |       |
|   |             |                   |                   |                |             | R=8.01       |                |       |