

A process is described that is used to establish a consistent calibration record for Eppley Precision Spectral Pyranometers (PSPs) employed in the University of Oregon (UO) Solar Radiation Monitoring Network. Several calibration methodologies are discussed and compared, and the relationship between different calibration results are given. The long-term decrease in responsivity of PSPs under study is determined. Clear day solar noon irradiance values are used to check the consistency of the calibration procedures. The rate of decrease in responsivity of the PSPs was found to be between 0.4% to 1% per year.