

The Magnesium II Index: 35 Years and Counting

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The Magnesium II core-to-wing ratio has been measured on a daily basis from a variety of spacecraft since the late 1970s. The line core is formed in the solar chromosphere, while the wings of the line come from the upper photosphere. Since the photosphere is very stable relative to the variable chromosphere, this ratio captures the essential variability of the outer atmosphere of the Sun. Variation at many other wavelengths is proportional to the variation of the MgII index, so it is a powerful proxy for the irradiance variations important to the Earth's upper atmosphere. Combining the instrumental records from three decades of measurements into a single proxy can be a challenge. In this talk, we will describe progress on creating an up-to-date single time series and prospects for continuing this measurement into the future.