

The Art of Science and the Physics of Sun-Like Stars

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Nearly six decades of observations of Sun-like stars at two different observatories (Mount Wilson and Lowell) allow unique insights into stellar dynamos, the use and maintenance of astronomical instruments, and the management and curation of very large time-domain data sets. The most recent published results from the Solar-Stellar Spectrograph (SSS) project at Lowell are from 2009; those from Mount Wilson are from 1995. With collaborators from HAO now leading the effort, we are conducting a full analysis of the current SSS data, now augmented by several more years of observations after our earlier publications, and supplemented to the extent possible by the MWO time series. I will review the present results, as well as the lessons in practicing science learned from sixty years of maniacally observing the same objects. These lessons provide clear guidance for future observational and theoretical programs, and I will discuss initial efforts to implement these.