

AstroImageJ: ImageJ for Astronomy

ImageJ (IJ) is a popular, public domain, Java-based image processing program developed at the National Institutes of Health. Although many of the more than 1700 users and developers of IJ are from life sciences fields, its image processing capabilities are useful and extendable to other scientific fields. I will discuss an extension, referred to as AstroImageJ (AIJ), which has been optimized for the astronomy field. AIJ provides an astronomy specific image display environment and tools for astronomy specific image calibration and data reduction, analysis, detrending, modeling, and plotting. Although AIJ is a general purpose package, it is streamlined for time-series differential photometry, light curve detrending and fitting, and light curve plotting. I will show the differences between IJ and AIJ and provide an overview of the AIJ specific features and associated user interfaces. Live demos of AIJ in use will be included.