Between silver and silicon: creating digital data from astronomical photographs at the Lund observatory 1970-1990

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Observational optical astronomy was for a long time a photographic practice. Stars and spectra were registered on the light-sensitive silver salt emulsion coatings on glass plates or acetate films for later analysis, storage and transport between observatories. During the latter part of the 20th century, methods and practices for analyzing these plates with digital methods were developed. One way of describing the transition from an analog to a digital era in astronomy has been to discuss it in terms of standardization processes (such as the FITS file format) and organizational interventions such as the creation of national data centres for access to astronomical data and lessening data friction (McCray 2014, 2017). With ASTOL, a unit at the Lund observatory, as a case, this presentation is about a transitional phase in the technologies of optical astronomy, a science that for several decades used analog and chemistry based photographic technologies as well as digital.

McCray, W. Patrick. 2014. "How Astronomers Digitized the Sky". *Technology and Culture* 55 (4): 908–44.

———. 2017. "The Biggest Data of All: Making and Sharing a Digital Universe". *Osiris* 32 (1): 243–63.