

# THE BAMBERG PHOTOGRAPHIC PLATE ARCHIVE - THE DIGITIZATION PROJECT

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Nowadays, observational astronomy is almost synonymic to ones performed by CCD detectors. But it is merely 20 years ago that only photographic emulsions, usually applied onto glass plates, were used for all observations.

Many collections of such plates are stored within German observatories; e.g. the Dr. Remeis-observatory at Bamberg accommodates about 40.000. The oldest photographic plates stored at the Bamberg archive are from the early 1910s.

Not only from a historian's point of view these plates have to be preserved for future generations to come, but also for a scientist they are still very important tools in order to hunt for possible variabilities in time e.g. for long period variable stars (e.g. Mira, semiregular, slow irregular), eruptive variable stars (e.g. protostars, giants and supergiants, flare stars), cataclysmic or explosive variable stars (e.g. novae, supernovae, dwarf novae), and other optical transients, but also to search for possible variabilities in their position e.g. for high proper motion stars, or asteroids and comets.

However, some of the photographic emulsions already begin to decompose and dissolve from their glass plates. High resolution scanners together with the necessary computational power and especially a large amount of storage space these days become reasonably affordable. So the best way to preserve them is digitization. This is also the best way to give the community access to the data.

The DFG approved this and funded a project, a collaboration of the Leibniz astrophysical institute at Potsdam, the Hamburg observatory at Hamburg, and the Remeis-observatory at Bamberg, to digitize our plates.

We report about the first year of operation at the Dr. Remeis-observatory at Bamberg.