

Contributed Talk

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THE BAMBERG PHOTOGRAPHIC PLATE ARCHIVE -
THE DIGITIZATION PROJECT

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Regular observations of star fields are the common procedure to search for variable stars. In former times these observations have been done mostly using photographic emulsions, usually applied onto glass plates. 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.

These plates are not only interesting for a historian, but also from a scientist's point of view they are still an important tool in order to hunt e.g. for long time variable or high proper motion stars, or to better calculate the orbits of asteroids and comets. The study of the predecessors of eruptive, cataclysmic or explosive variable stars, and other optical transients, is also only possible using these (very) old observations.

However, some of the photographic emulsions already begin to decompose and dissolve from their glass plates. The best way to preserve these observations, and to give the community access to the data, is digitization. In collaboration of the Leibnitz astrophysical institute at Potsdam, the Hamburg observatory at Hamburg, and the Remeis-observatory at Bamberg, a DFG funded project was initiated in 2012 in order to digitize all photographic plates stored at each institute, and integrate the resulting data into the Virtual Observatory.

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