

Abstract

This diploma thesis' goal is the comparison of photometric data in key historical catalogues with those of today. It contains a description of history of astronomical photometry, of the methods and instruments used, and also of the compared catalogues, starting with the *Almagest* and ending with the modern Hipparcos catalogue. The comparison of the recorded brightness of stars is done with respect to the data of the Tycho-2 catalogue. This thesis also concerns itself with the changes of the definition of the key unit magnitude which influenced the recorded values of stars' brightness. The comparison is done on a chosen sample of two open clusters Pleiades and Hyades, with stars up to the tenth magnitude. The difference between bright stars — visible by naked eye — and the faint ones, mentioned only in newer catalogues, is also discussed. Part of the thesis was also the identification of stars in the historical catalogues which do not make use of one of today's nomenclatures.