

CORRECTIONS OF THE ABSOLUTE PROPER MOTIONS OF THE XPM CATALOGUE

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The results of the work on correcting proper motions of stars of the XPM catalogue are presented. We applied two primary procedures to correct proper motions. The first of them allow us to create in the each field of the XPM catalogue the sample of galaxies cleaned from stars of our Galaxy. Wherein to divide all objects to galactic and extragalactic sources we used colour-colour diagrams (B - I) - (J - W1) which are constructed based on photometric data in the J and W1 bands taken from 2MASS and WISE catalogues respectively as well as in B and I bands taken from the Super COSMOS catalogue.

The second procedure aims to eliminating errors connected with determination of zero-points of the proper motions as well as to exclusion of the magnitude equation in the each field of the XPM catalogue. As a result the system of proper motions of the stars of the derived XPMc catalogue is linked to extragalactic sources from 2MASS rather than to positions of extended sources of the XSC catalogue like before.

Also the results of the comparison of derived proper motions of stars with ones of other catalogues are presented.