

Werkcollege from 9 September

Tasks:

select 1 deg region from the galactic plane and from one of galactic poles from 2MASS and USNO-A2

crossidentify these regions

find completeness limit for each magnitude in original catalog and in cross-identified catalog

find completeness limit for each range of colors in RMAG-JMAG (from -1.0 till 3.0 with 1.0 mag step)

Hint: to find a completeness limit you have to build a histogram: number of sources per magnitude. Try to do it with SQL statement (SELECT with COUNT() function and a magnitude in some interval in WHERE statement). send following information:

your name, email address

coordinates you selected for your area

completeness limit in J, H, K for 2MASS and B, R for USNOA2

completeness limit in J, H, K and B, R for cross-identified catalog for R-J in [-1.0,0.0], [0.0,1.0], [1.0,2.0], [2.0,3.0]

plot of CMD for R - (R-J) or any other combination of 2MASS and USNO magnitudes

SQL statements you used

to belikov@astro.rug.nl with subject "VO Course werkcollege 9 Feb"