UCAC Proper Motions

Early epoch positions, necessary for the determination of the proper motions for the UCAC stars, will come from a number of sources and can be grouped in three ranges of magnitudes.

Magnitudes	Source Catalogs	Proper Motion Errors
8.0–11.0	140 TC/PC, AC	1-2 mas/yr
11.0–12.5	AC	2 mas/yr
12.5–16.0	NPM, SPM	3-5 mas/yr

Where 140 TC/PC are 140 different transit circle and photographic catalogs, AC is the Astrographic Catalog, and NPM & SPM the Northern & Southern Proper Motion Surveys.

The NPM (+90° to -20° dec, 1st epoch ≈1950, 2nd epoch ≈1976) and SPM (-90° to -10° dec, 1st epoch ≈1970, no complete 2nd epoch) positions will be determined from new measures made with the USNO's Precision Measureing Machine (PMM).