Comparison of the catalogs ACRS, PPM, and Tokyo PMC

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The positions of about 306,000 common stars of the recently published catalogs ACRS and PPM are compared. The positions agree very well (rms < 0.11) at the epoch of 1950, but the differences become larger as the epoch becomes farther from 1950 due to the deficiency in the accuracy of proper motions. The rms at the epoch of 2000 is about 0.36. The agreement is better for the stars in the southern hemisphere, as is shown in the figures below, although the southern part of PPM (1991 April version) is still preliminary.

Comparison of ACRS and PPM with Tokyo PMC catalogs shows that the overall positional accuracy of ACRS and PPM is almost the same (about 0.3) at the current epoch.

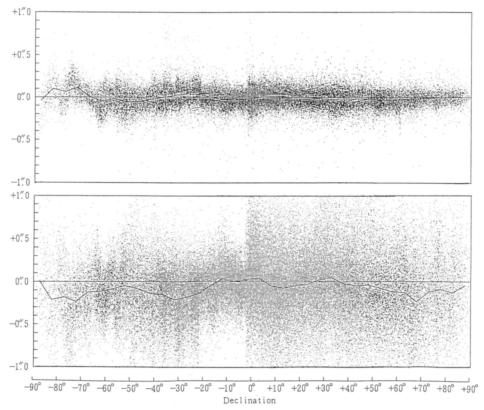


Fig. Differences ACRS – PPM in right ascension ($\Delta \alpha \cos \delta$) for the epoch 1950 (above) and 2000 (below)

404

I.I. Mueller and B. Kołaczek (eds.), Developments in Astrometry and Their Impact on Astrophysics and Geodynamics, 404, © 1993 IAU. Printed in the Netherlands.