

A LUNI-SOLAR PRECESSION AND NUTATION ANALYSIS FROM RADIO ASTROMETRIC OBSERVATIONS

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The Cambridge 5-km Radio Interferometer astrometric results from 1972 to 1987 were analysed, leading to corrections to the main terms of luni-solar precession and nutation. The method used follows Elsmore's 1976 suggestion (MNRAS **177**, 291) which takes pairs of sources nearly 12-h apart in right ascension.

Using sources whose positions would maximize the effects, 773 observations, all at 5GHz, of 21 extragalactic radio sources were considered. No selection criterion was used other than that of a minimum standard of quality of the observations. The results were grouped per source, per season, forming a total of 110 groups.

The main result shows the following corrections to the 1964 IAU System. Constant of luni-solar precession, centennial: $\Delta p_1 = 1''.11 \pm 0''.15$, 18.6y term of nutation in longitude $\Delta N = 0''.05 \pm 0''.01$. Details are in preparation for publication in Monthly Notices of the Royal Astronomical Society.