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OPTICAL AND RADIO POSITIONS OF α SCORPII

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ABSTRACT. In order to provide a direct connection between the radio reference frame and the fundamental optical system, a radiostars observing programme has been started in 1982, with the Danjon astrolabe at Valinhos. First results, which include the radiostar α Scorpii (FK4 No. 616) have been published (Clauzet et al. 1985 and 1986). Radio astrometric data for this star have been published (Florkowski et al. 1985) which enable an "optical-radio" comparison in right ascension. At Valinhos latitude, this star is observed far from meridian and, consequently, it is not possible to determine its declination. Comparison of radio determinations of A and B components positions of α Sco with the optical ones suggests that a photocenter effect may play an important role in the optical results. An evaluation of this effect reduces the difference between radio and optical results from $+0^{s}.021$ to $-0^{s}.007$. At the level of accuracy obtained, this result shows that it is, more and more, necessary to take into account the effects of physical parameters of observed objects. This project of astrolabe teams, which begins to be a reality, will increase the precision of astrolabe results.

Key words: ASTROMETRY

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