OPTICAL OBSERVATIONS OF RADIO STARS WITH THE ASTROLABE AT VALINHOS 1

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ABSTRACT: The use of radio stars can provide a direct connection between the radio reference frame and the fundamental optical reference system.

Three radio stars, selected from the galactic object list established by the IAU Commission 24, have been systematically observed since 1980 with the astrolabe of the University of São Paulo "Abrahão de Moraes" Observatory at Valinhos ($\psi = -23^{0}00^{\circ}$; $\lambda = +\ 3^{h}07^{m}$). These stars (FK4 nos 306, 309 and 616) have been observed inside the fundamental groups, thus allowing the use of standard reduction procedures.

From the mean residuals in zenith distance we computed $\Delta\alpha$ and $\Delta\delta$ corrections and the corresponding mean square errors. Results are referred to the FK4 system.

Key words: radio-stars; astrolabe

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