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OBSERVATIONS OF BRIGHT T Tau STARS IN NGC 2264

Between December 16, 1972 and April 8, 1973 twenty exposures of the young galactic cluster NGC 2264 were taken with the 6" refractor of the Wilhelm Foerster Observatory on Kodak 103 a-f film. The limiting magnitudes of these exposures are between  $14^m.5$  and  $15^m.3$  V. Using the identification charts and V-magnitudes of Walker (1956), the magnitudes of seven bright T Tau stars were determined by the Argelander step method. Daily means of these magnitudes are listed in Table 1, they are uncertain by about  $\pm 0^m.1$ .

Rapid variability by about  $0^m.4$  within half an hour is observed for IO Mon, MM Mon and S5192. LR Mon, MM Mon and MO Mon showed brightness fluctuations of about  $0^m.5$  within some days. IP Mon showed only slow variability and S5181 seemed to be constant during these observations.

Table 1

Date (J.D.)	IO	IP	LR	MM	MO	S5181	S5192
2441 668 <sup>d</sup> <sub>3</sub>		13.3	<13.5				13.2 <sup>+</sup>
681.3	13.8	13.7	13.9	13.7:	13.7	13.1	14.1:
682.3	14.1:	13.6	14.0:	13.9:	14.0	13.3	14.3:
685.3	13.9	13.6	14.3	14.4:	13.7 <sup>+</sup>	13.4	14.3
740.3	13.7	13.6	14.0	14.1	13.8	13.4	14.2
758.3	13.8:	13.2	<14.3	14.0:	14.1:	13.5	<14.3
764.3	13.6	13.5	14.0	13.5	<13.7	13.2	<14.0
766.3	13.6	13.4	14.1	14.2:	14.1	13.2	13.9:
772.3	13.8 <sup>+</sup>	13.4	14.1:	13.9 <sup>+</sup>	13.7	13.3	14.2:
773.3	13.7	13.5	14.1	13.6	13.7	13.3	14.2
781.3	13.7	13.4	14.1	13.8	13.6	13.3	14.1

+ rapid variability by  $0^m.4$  within half an hour observed

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Reference:

Walker, M.F. 1956 - Astrophys.J.Suppl. 2, 365