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A SEQUENCE OF COMPARISON STARS IN THE NEIGHBOURHOOD OF TT ARIETIS

In linking to the photoelectric UBV sequence in SA 71 given by Purgathofer (1969) and to the UBV magnitudes of Fuhrmann's star c (1981) given by Shafter (1985) on the plates of the Schmidt camera 50/70/172 cm and with the photoelectric 60 cm telescope I of Sonneberg Observatory a sequence of comparison stars in UBV in the neighbourhood of TT Arietis was established.

The individual stars which were measured are marked in Figure 1. The objects of the brighter part of the sequence are identical with known comparison stars given in the finding charts of the AAVSO (capital letters) and Fuhrmann (1981) (small letters from a to f). The designation of those stars has been retained. My own designation of stars is beginning with the letter g.

Photoelectric UBV measurements of the comparison stars given by Fuhrmann (1981) were obtained by W. Wenzel by linking them to Shafter's star ($V=10^m.99$, $B-V=0^m.69$, $U-B=0^m.23$).

The measurements on the photographic plates are extended to fainter stars

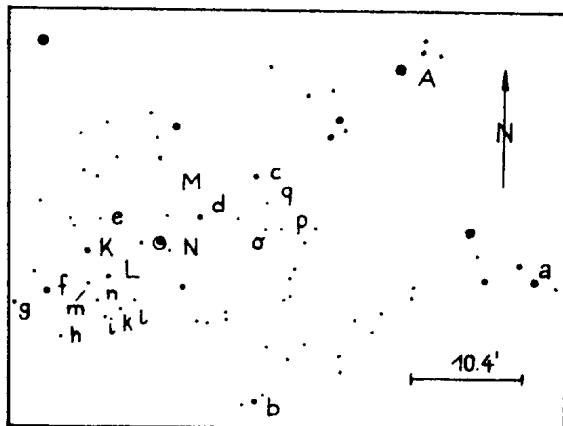


Figure 1

and to those given in the AAVSO finding chart. The individual magnitudes and colour indices of the comparison stars are listed in Table I. Comparing there

Table I

Comparison star	V	B	U	B-V	U-B	Remarks
a	9. ^m 73	10. ^m 26	10. ^m 23	0. ^m 53	-0. ^m 03	pe
b	10.50	11.13	11.33	0.63	+0.20	pe
c	10.99	11.68	11.91	0.69	+0.23	pe
d	11.02	12.17	13.38	1.15	+1.21	pe
e	11.76	12.34	12.42	0.58	+0.08	pe
f	12.01	13.01	13.80	1.00	+0.79	pe
g	13.80	14.67	15.20	0.87	+0.53	pg
h	14.15	14.94	15.30	0.79	+0.36	pg
i	13.95	14.63	15.05	0.68	+0.42	pg
k	14.55	15.26	15.90	0.71	+0.64	pg
l	15.10	15.74	16.05	0.64	+0.31	pg
m	15.75	15.88	16.05	0.13	+0.17	pg
n	15.75	16.24	16.30	0.49	+0.06	pg
o	15.95	16.12	16.40	0.17	+0.28	pg
p	16.20	16.42	16.25	0.22	-0.17	pg
q	15.75	16.27	16.50	0.52	+0.23	pg
A	9.20	9.55	9.25	0.35	-0.30	pg
K	12.55	13.24	13.65	0.69	+0.41	pg
L	13.25	13.54	13.85	0.29	+0.31	pg
M	13.86	14.37	15.20	0.51	+0.83	pg
N	14.85	15.27	15.60	0.42	+0.33	pg

the magnitude in B with those given by Fuhrmann, it can be seen that the stars a, b and c are brighter than published previously.

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