

SEQUENCES FOR SOUTHERN VARIABLES.

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SUMMARY:- V and B-V magnitudes are published for the sequences in the fields of:- V436 & V442 Cen; RT Aps; GU Sgr; FN Sgr; T, RS, RX and RY Mic.

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INTRODUCTION:- This Circular continues the results of sequence determinations carried out at the Auckland Observatory. Details of equipment, calibration and reduction methods were given in Circular No. 148 (1).

Previous results have appeared in Circular No. 177(2). Those now published are given in the same form as in Circular No. 177. The references to charts are to those published in "Charts for Southern Variables" (3).

Visual observers are requested to use the magnitudes given under "Adopted" (V magnitudes rounded off to tenths), in place of chart letters when making their estimates.

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1972 February 19

18 POOLES ROAD,  
GREERTON,  
TAURANGA.  
NEW ZEALAND.

REFERENCES:-

- (1) 1970. Bateson, F.M. & Menzies, B. "Sequence Determination" Circ. 148, VSS, RASNZ.
- (2) 1971. Bateson, F.M., Gordon, P.J. & Menzies, B. "Sequences for Southern Variables". Circ. 177, VSS, RASNZ.
- (3) 1960-70. Bateson, F.M., Jones, A.F. & Stranson, I. "Charts for Southern Variables." Series 2 to 7. Published by F.M. Bateson.
- (4) 1954-1968. Cape Obs. Annals. Vols. 17 to 22. "Cape Photographic Catalogue for 1950.0"
- (5) 1963. Cousins, A.W.J. & Stoy, R.H. Royal Obs. Bull. No. 64. "Photoelectric Magnitudes and Colours of Southern Stars."
- (6) 1956. Hiltner, W.A. & Johnson, H.L. Ap.J. 124, 367.
- (7) 1965. Przybylski, A. & Kennedy, P.M. MNRAS, 129, 63.

SEQUENCES.

V436 Cen. (Charts 101 & 103)

Standard CoD -35° 7049. SP<sub>v</sub> 9.63; C.I. +0.68 G8 (4)

<u>CHART LETTER</u>	<u>V</u>	<u>B-V</u>	<u>ADOPTED</u>	<u>REMARKS.</u>	V (Publ. 4) (75)
a	10.42	+ 1.0	10.4		10.49
b	10.99	+ 1.6	11.0		11.05
c	11.32	+ 1.4	11.3		
d	11.67	+ 0.7	11.7		11.75
e	11.92	+ 0.7	11.9		12.01
f	12.24	+ 0.9	12.2		12.53
g	12.88	+ 0.8	12.9		12.93
h	13.19	+ 0.6	13.2		13.19
k	...	...	...	NOT YET DETERMINED	
n	...	...	...	do	

V.S.S. CIRCULAR No. 187 (cont).

V442 Cen. (Charts 101 & 102).

Standard HD 98284. V 8.30; B-V +0.54 GO (5)

g	11.64	+ 0.8	11.6	
h	12.16	+ 0.7	12.2	
I	12.35	+ 0.8	12.4	
l	13.21	+ 0.7	13.2	
n	13.37	+ 0.7	13.4	
q	...	...	...	Not yet determined
y	...	...	...	do

RT Aps. (Chart 41).

Standard HD 121574. V 8.99; B-V +1.08. K1 (5)

r	12.51	+ 0.7	12.5
s	12.83	+ 0.6	12.8
t	12.88	+ 0.3	12.9
u	12.90	+ 1.7	12.9
w	13.71	+ 0.6	13.7

GU Sgr (Charts 110 & 111)

Standard HD 169118. V 7.57; B-V +1.50. K2 (5)

f	10.09	+ 0.8	10.1
e	10.64	+ 0.6	10.6
h	10.87	+ 0.3	10.9
g	11.06	+ 0.3	11.1
n	11.27	+ 1.2	11.3
m	11.35	+ 0.7	11.4
k	11.40	+ 0.4	11.4
p	12.16	+ 0.9	12.2
r	12.25	+ 0.5	12.3
q	12.44	+ 0.7	12.4
t	13.46	+ 0.7	13.5
s	13.65	+ 0.1	13.7

FN Sgr. (Charts 105 & 106).

Standard HD 175754. V 7.04; B-V -0.07. O8 (6)

f	10.12	+ 0.1	10.1	
h	10.67	+ 0.5	10.7	
k	10.99	+ 0.3	11.0	
m	11.20	+ 0.4	11.2	
p	11.46	+ 1.3	11.5	
q	11.78	+ 0.7	11.8	
r	12.99	+ 0.5	13.0	
t	...	...	...	Appears variable from 12.4 to 13.0

V.S.S. CIRCULAR No. 187 (cont).

T and RS Mic. (Charts 207 & 208).

Standard. HD 196081. V 7.20; B-V +0.42 F5 (5)

a	5.88	+ 1.1	5.9	CoD	-29°17049
A	6.34	+ 0.3	6.3		-29 17122
B	6.98	+ 0.3	7.0		-29 17159
c	7.17	+ 1.2	7.2		-29 17069
b'	7.30	+ 0.1	7.3		-28 17144
b	7.54	+ 0.6	7.5		-29 17081
b <sup>2</sup>	7.75	+ 1.0	7.7		-28 16732
d'	8.37	+ 0.1	8.4		-28 16722
c'	8.41	+ 0.2	8.4		-29 17046
d	9.12	+ 0.1	9.1		-29 17060
e	9.47	+ 0.8	9.5		-28 16674
f	9.89	+ 1.1	9.9		
g	10.97	+ 1.1	11.0		
J	12.50	+ 0.6	12.5		
h	12.58	+ 0.5	12.6		
l	12.77	+ 0.8	12.8		
K	12.87	+ 0.6	12.9		
p	13.19	+ 1.2	13.2		
r	...	...	...	Not determined	
t'	...	...	...	do	

RX Mic. (Charts 211 & 212).

Standard HD 198749. V 8.35; B-V + 0.58 F8 (5)

a	9.40	+ 1.2	9.4	CPD	-27° 7141
g	9.65	+ 1.1	9.7		-28 7339
b	9.69	+ 0.6	9.7		-27 7144
d	9.93	+ 1.0	9.9		-28 7343
c	10.12	+ 0.6	10.1		-27 7135
k	10.34	+ 0.6	10.3		-28 7340
l	10.84	+ 0.6	10.8		-28 7342
m	11.34	+ 0.7	11.3		-27 7138
n	11.46	+ 1.2	11.5		
p	11.53	+ 1.3	11.5		
o	12.03	+ 0.6	12.0	CPD	-28° 7335
s	12.42	+ 1.2	12.4		
q	12.52	+ 0.8	12.5		
r	12.55	+ 0.6	12.5		
t	12.93	+ 0.6	12.9		
u	13.61	+ 1.1	13.6		
w	13.83	+ 0.8	13.8		
y	...	...	...	Not determined	

RY Mic. (Charts 213 & 214).

Standard HD 198245. V 8.94; B-V + 0.64; U-B +0.03. KO (7)

b	8.32	+ 1.1	8.3	CPD	-40°9430
d	9.74	+ 0.5	9.7		-40 9432
e	10.05	+ 1.1	10.0		
f	10.24	+ 1.1	10.2		
g	10.87	+ 0.6	10.9		
J	11.23	+ 0.7	11.2		
m	11.28	+ 1.1	11.3		
l	11.29	+ 1.0	11.3		
h	11.33	+ 0.5	11.3		
o	11.73	+ 0.9	11.7		
r	12.76	+ 0.9	12.8		
t	13.36	+ 0.9	13.4		