

ROYAL ASTRONOMICAL SOCIETY OF NEW ZEALAND.

VARIABLE STAR SECTION.

CIRCULAR No. 169.

OBSERVATIONS OF NOVAE.

SUMMARY: Visual observations are published for Nova (HR) Del 1967, continuing those published in Circular 153, and for Nova Scuti 1970; Nova Ser 1970 and Nova Aql 1970.

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NOVA SCUTI 1970.

Since Circular 161 visual observations received are summarised below as daily means.

<u>MEAN J.D.</u>	<u>MEAN</u> <u>MAG</u> <u>v</u>	<u>No.</u> <u>of</u> <u>OBS.</u>	<u>MEAN J.D.</u>	<u>MEAN</u> <u>MAG</u> <u>v</u>	<u>No.</u> <u>of</u> <u>OBS.</u>	<u>MEAN J.D.</u>	<u>MEAN</u> <u>MAG</u> <u>v</u>	<u>No.</u> <u>of</u> <u>OBS.</u>
2,440,000 +								
801.90	8.0	1 (a)	816.87	9.40	2	828.88	10.1	1
802.93	8.30	3	817.89	9.00	3	831.94	10.15	3
803.90	8.05	2	818.92	8.98	4	833.91	10.3	1
804.91	8.20	2	819.89	9.05	2	834.91	11.2	1 (b)
805.94	8.30	2	820.93	9.0	1	835.90	10.5	1
807.91	8.25	2	821.97	9.1	1	838.92	10.2	1
808.96	8.35	2	822.95	9.60	2	841.84	10.7	1
809.93	8.70	2	823.91	9.40	3	846.90	11.2	1
811.03	8.9	1	824.89	10.05	2	847.90	12.1	1
813.87	8.95	2	825.93	9.35	2	849.90	13.0?	1 (c)
814.88	8.90	2	826.92	9.57	3	856.92	11.7	1
815.94	9.0	1	827.94	9.35	2			

NOTES:- (a) A very doubtful observation, due to clouds, of 9.3 at 801.95 omitted.
 (b) Doubtful. Class 2.
 (c) Doubtful. Class 3.

NOVA SERPENTIS 1970

Observations were published in Circulars 146 & 149. Records received since are published below as individual estimates.

<u>J.D.</u>	<u>MAG</u> <u>v</u>	<u>OBS.</u>	<u>JD</u>	<u>MAG</u> <u>v</u>	<u>OBS.</u>	<u>JD</u>	<u>MAG</u> <u>v</u>	<u>OBS.</u>	<u>JD</u>	<u>MAG</u> <u>v</u>	<u>OBS.</u>
2,440,000 +											
635.21	5.0	Jo	662.2	5.7	Jo	685.2	6.3	Jo	764.0	9.9	Ca
639.19	5.0	Jo	.3	5.6	Tr	688.1	6.7	Sr	775.9	10.6	Jo
.26	4.8	Jn	666.1	6.0	Wc	690.2	7.1	Wc	793.9	10.1	Jo
646.20	5.2	Jo	667.2	6.1	Jo	.2	6.5	Jo	806.0	10.5	Jo
649.19	5.6	Jo	668.2	5.7	Wc	694.2	8.0	Wc	816.8	10.2	Jo
.27	5.7	Sb	669.2	5.9	Wc	.3	8.0	Tr	821.9	9.9	Jo
650.19	5.6	Jo	671.3	6.1	Tr	695.3	7.8	Sr	831.9	10.1	Jo
653.19	5.7	Wc	674.2	6.3	Wc	696.2	8.0	Jo	838.9	10.0	Jo
655.3	5.6	Tr	.3	6.0	Cm	697.3	8.5	Jo			
657.3	6.0	Tr	678.2	6.5	Jo	705.3	9.5	Wc			
660.1	5.5	Wc	681.2	6.6	Wc	736.0	9.6	Cm			
661.2	5.7	Jo	683.2	6.4	Jo	739.1	10.4	MM			
662.2	5.9	Wc	685.2	6.9	Wc	743.1	9.7	Cm			

V.S.S. CIRCULAR No. 169 (cont).

NOVA AQUILAE 1970.

Since the publication of Circular 155 the following observations have been received. Additional observations are awaiting determination of the magnitudes of faint comparison stars.

<u>J.D.</u>	<u>MAG</u> v	<u>OBS.</u>	<u>J.D.</u>	<u>MAG</u> v	<u>OBS.</u>
2,440,000 +			708.2	8.5	Jo
662.3	7.2	Tr	709.3	8.7	Jo
696.2	7.2	Jo	711.3	8.8	Jo
.2	7.5	En	719.2	9.0	Jo
697.2	7.1	En	748.0	11.3?	Ca (Class 3)
.2	7.2	Jo			
705.2	8.5	Wc			

NOVA (HR) DELPHINI 1967.

Daily means to 1968 December 31 were published in Circular 153. As this nova has not been so well observed since 1968 December 31 the individual estimates are given below up to 1970 November 30.

<u>J.D.</u>	<u>MAG</u> v	<u>OBS</u>	<u>J.D.</u>	<u>MAG</u> v	<u>OBS</u>	<u>J.D.</u>	<u>MAG</u> v	<u>OBS</u>	<u>J.D.</u>	<u>MAG</u> v	<u>OBS</u>	<u>JD</u>	<u>MAG</u> v	<u>OBS</u>
2,440,000+														
319.3	7.9	Mk	436.0	8.4	Gm	469.9	8.5	Jn	500.0	7.9	Hs	719.2	8.7	Jo
.3	8.0	Gm	.0	7.9	Jo	470.9	8.0	Hs	502.0	8.1	Hs	723.2	8.6	Hl
321.2	7.3	Jo	437.0	8.3	Jn	471.9	8.4	Jo	503.9	8.2	Hs	802.0	8.7	Sb
324.3	8.1	Mk	440.0	8.5	Jn	472.0	7.9	Hs	504.9	8.6	Jn	806.0	8.8	Jo
330.3	7.9	Jn	443.0	8.6	Jn	476.0	7.8	Hs	505.0	8.3	Hs	818.0	8.7	Sb
338.3	8.3	Mk	444.9	8.5	Jn	479.0	8.0	Hs	.9	8.9	Sa	.9	8.9	Jn
342.3	7.8	Jo	449.9	8.5	Jn	.9	8.5	Jn	506.9	8.1	Jo	819.9	8.7	Sb
349.2	7.6	Wc	451.0	8.5	Jn	480.0	7.9	Hs	507.9	7.9	Hs	822.0	8.9	Jo
356.2	7.6	Wc	.9	8.5	Jn	.9	8.5	Jn	510.0	8.0	Hs	827.9	8.7	Sb
367.3	8.4	Mk	453.9	8.5	Jn	481.9	8.5	Jn	514.0	8.2	Hs	831.9	8.9	Jn
372.3	7.8	Jo	457.0	7.9	Jo	483.0	7.8	Hs	515.0	8.3	Hs	835.9	8.8	Jo
390.3	7.9	Jo	.9	8.5	Jn	.0	8.5	Bk	523.9	8.6	Jn	880.9	8.9	Jn
392.0	7.8	Wc	463.9	8.5	Jn	487.0	7.9	Mf	529.9	8.6	Jn	889.9	9.0	Jn
394.0	7.7	Wc	464.9	8.5	Jn	492.9	8.5	Jn	532.9	8.8	Jn	912.9	9.0	Jn
410.0	8.3	Mm	464.0	7.9	Wk	493.9	8.6	Jn	534.9	8.6	Jn			
415.0	7.9	Fy	465.9	8.5	Jn	494.0	8.2	Hs	535.9	8.5	Jn			
421.0	8.4	Gm	466.9	8.5	Jn	.9	8.0	Wk	683.2	8.3	Jo			
.9	7.9	Fy	467.9	8.5	Jn	497.9	8.5	Jn	694.3	8.7	Jn			
422.0	8.0	Jn	468.9	8.5	Jn	498.9	8.5	Jn	696.2	8.6	Jo			
436.0	8.4	Jn	469.0	8.0	Hs	499.9	8.5	Jn	711.3	8.6	Jo			

OBSERVERS. The observers who have contributed to the foregoing observations are:

Bk	BRYANT, K.	Jo	JONES, A.F.	Sd	SCHMIDT, P.B.
Ca	CAMERON, D.J.	Jn	JONES, M.V.	Sb	SUMNER, B.
Ci	CHRISTIE, G.W.	Hl	HULL, O.R.	Sr	STRANSON, I.
Cm	CROMPTON, A.	Mm	McMILLAN, S.C.	Tr	TREGASKIS, T.B.
En	EVANS, R.W.	Mk	MASON, M.	Wk	WALKER, W.S.G.
Fy	FEASEY, R.	Mt	MATCHETT, (Dr) V.L.	Wc	WELCH, R.G.
Gm	GRIMMETT, M.J.	Mf	MENZIES, B.		
Hs	HARRISON, A.	Sa	SALISBURY, J.V.		

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18 POOLLES ROAD,
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DIRECTOR.