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BVRI OBSERVATIONS OF SEMIREGULAR VARIABLES

Observations on the Johnson BVRI system are reported for three variables classified as SR in the General Catalogue of Variable Stars. The Purdue High Speed Photometer, described by Barnes et al. (1978), was used in obtaining the data. The instrumental system and reduction procedures are discussed by Moffett and Barnes (1979).

Most of the observations were obtained on the 91-cm and 76-cm reflectors at McDonald Observatory and a few were also made on the 61-cm reflector at the Table Mountain Observatory and the No. 2, 91-cm telescope at Kitt Peak National Observatory.

The results for the three SR variables; U Hya, V441 Her and R Lyr are given in Table I. The estimated uncertainties for a single observation are : V = $\pm$0.014, (B-V) = $\pm$ 0.009, (V-R) = $\pm$0.009, and (R-I) = $\pm$0.012.

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References:

Barnes, T.G.,Evans,D.S.,and Moffett,T.J.,1978,M.N.R.A.S.,183,285
Moffett, T.J., and Barnes, T.G., 1979, P.A.S.P., (in press)

TABLE I

SEMIREGULAR VARIABLES

U Hya = BS4163

HJD	V	(B-V)	(V-R)	(R-I)
(2440000.+)				
3129.01	4.856	2.569	1.784	1.230
3130.00	4.860	2.519	1.775	1.207

V441 Her = BS6685

3248.97	5.418	0.328	0.318	0.164
3289.87	5.481	0.363	0.351	0.179
3290.83	5.502	0.361	0.355	0.196
3291.88	5.505	0.350	0.334	0.172
3296.90	5.487	0.348	0.349	0.190
3297.84	5.497	0.364	0.351	0.173
3301.82	5.452	0.352	0.322	0.207
3303.82	5.474	0.339	0.338	0.203
3303.85	5.451	0.336	0.325	0.176
3366.70	5.431	0.345	0.334	0.199
3427.57	5.479	0.377	0.351	0.199
3620.98	5.456	0.327	0.310	0.180
3645.88	5.450	0.338	0.314	0.169

R Lyr = BS7157

2920.77	4.149	1.490	2.237	1.851
2921.78	4.135	1.476	2.246	1.832
2921.91	4.127	1.479	2.231	1.855
2922.92	4.118	1.475	2.267	1.804
2924.78	4.073	1.486	2.244	1.825
2924.87	4.044	1.476	2.261	1.809
2924.96	4.051	1.511	2.256	1.801
2925.86	4.036	1.481	2.225	1.809
2926.81	4.025	1.476	2.235	1.792
2926.88	4.042	1.466	2.236	1.794
2928.73	4.006	1.499	2.215	1.795
2928.90	4.009	1.487	2.216	1.797
2928.96	4.015	1.516	2.224	1.798
2929.86	4.012	1.494	2.221	1.787
2929.95	4.015	1.498	2.230	1.782
2930.96	4.009	1.514	2.239	1.762
2931.75	3.991	1.511	2.188	1.810
2932.89	3.996	1.479	2.209	1.815
2932.96	4.000	1.521	2.213	1.815