

About two-thirds of the required observations have now been made so that a preliminary report on the result is justified. These show that the system of the V magnitudes of stars in the E regions given in Cape Mimeogram No. 5 does not differ by more than 0.01 in colour equation or as much as 0.01^m in zero point from that exemplified by about fifty stars south of Dec. + 10° that have been measured by H.L. Johnson and his associates. (The results given in Ap, J. 120, 196, 1954 have been preferred). The measures of B-V suggest that there is some non-linearity in the relation between B-V as given in Mimeogram No. 5 and that measured with the 18-inch Reflector, but little or none between the latter and Johnson's B-V. This is probably due to the narrower band-width of the filter (2mm of Schott BG 12) used to reproduce the S'Pg magnitudes from which B-V was computed. The linear relation appears to give rise to errors not exceeding ± 0.01 for stars less red than B-V = 1.2.

The following stars have shown signs of slight variability, but the ranges are small and need confirmation. None of these stars was noted as definitely variable in Cape Mimeogram No. 1, but No. 3634 was suspected of variation.

H.R.	Spect.	Range (V)	No. Obs.
48	Ma	4.38 - 4.43	6
105	Mb	4.83 - 4.86	8
1162	Ma	4.38 - 4.41	7
1264	Mb	4.42 - 4.53	8
2596	B3 II	4.37 - 4.39	9
3237	B3 p	4.79 - 4.86	6
3447	B3 V	3.58 - 3.61	8
3634	K5	2.17 - 2.20	6
3642	B3 p	4.67 - 4.71	12
3654	B5	4.99 - 5.02	9
8698	Ma	3.71 - 3.74	7

It is to be noted that all these stars are either of early or late spectral type.

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