

## RADIAL VELOCITIES OF 19 G, K-, AND M-TYPE STARS

M. B. K. SARMA

*Centre of Advanced Study in Astronomy, Osmania University, Hyderabad 500 007*

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The present list of Radial Velocities for 19 stars obtained from 35 Mount Wilson and Palomar Spectrograms is a continuation of the list given by Abhyankar (1964) and Sarma (1967). In deriving the radial velocity from a plate, two independent systems of lines were taken. One system in the ultraviolet region from 3700 Å to 3900 Å consisted of twenty-two lines of Fe I and the other system in the visual region from 4000 Å to 4500 Å consisted of twenty-one lines mostly of Fe I except 4034.49 Å of Mn I. The standard lines chosen for the radial velocity measurements and the method of measurement are the same as those given by Abhyankar (1964). The explanation for observed differences in radial velocities derived from U. V. System and Visual System is given by Abhyankar (1963).

Table 1 gives the dates of observation of the plates (Mid Time of exposure) and helio-centric radial velocities. The helio-centric correction to the radial velocity  $V_{\odot}$  and the difference  $\Delta V_r$  (Visual-Ultraviolet) are also given in col. 5 and 8 respectively of the same table. The average internal probable error of each measurement is  $\pm 0.27$  km/sec. in U. V. System and  $\pm 0.25$  km/sec. in the Visual System.

Table 2 contains star number and name, spectral type, the value of Radial Velocity as given in General Catalogue of Stellar Radial Velocities (Wilson 1953) and the mean helio-centric radial velocity in U. V. and Visual Systems obtained from the present study.

Table 1

Star HD No. and Name	Plate and Exposure	Date	J.D. 2400000 +	$V_{\odot}$ km/sec	Hel. Rad. Vel. in km/sec		$\Delta V_r$ (Vis. -U.V.) System
					U.V. System	Visual System.	
60522 ( $\nu$ Gem)	Ce 10348	1956 Mar. 21	35553.628	-27.70	-19.25 $\pm$ 0.28	-20.18 $\pm$ 0.18	-0.93
	Ce 10407	1956 Apr. 16	35579.630	-29.55	...	-17.51 $\pm$ 0.24	...
	Pc 2580	1956 Apr. 24	35587.663	-29.01	-21.54 $\pm$ 0.22	-20.01 $\pm$ 0.20	+1.53
	Pc 2582	1956 Apr. 25	35588.680	-28.92	-20.18 $\pm$ 0.18	-20.23 $\pm$ 0.25	-0.05
71369	Pc 3630	1958 Jan. 02	36205.749	+04.57	+20.60 $\pm$ 0.27	+20.15 $\pm$ 0.25	-0.45
72184	Ce 10361	1956 Mar. 23	35555.687	-24.82	+14.11 $\pm$ 0.27	+12.53 $\pm$ 0.33	-1.58
72324	Ce 13279	1960 Mar. 07	37000.745	-19.94	+74.87 $\pm$ 0.27	+74.33 $\pm$ 0.25	-0.54
	Ce 13286	1960 Mar. 09	37002.714	-20.63	+73.89 $\pm$ 0.24	+74.16 $\pm$ 0.25	+0.27
	Pc 4923	1960 Jan. 17	36950.847	+04.22	+74.53 $\pm$ 0.29	+72.40 $\pm$ 0.17	-2.13
	Pc 5553	1960 Dec. 29	37297.892	+13.36	+73.63 $\pm$ 0.23	+73.29 $\pm$ 0.23	-0.34
73108 ( $\pi$ UMa)	Pc 5560	1960 Dec. 30	37298.913	+12.83	+73.90 $\pm$ 0.19	+75.19 $\pm$ 0.24	+1.29
	Pc 3631	1958 Jan. 02	36205.812	+04.27	+16.55 $\pm$ 0.22	+15.89 $\pm$ 0.18	-0.66
	Pc 5039	1960 Apr. 09	37033.631	-19.98	+16.45 $\pm$ 0.16	+15.68 $\pm$ 0.23	-0.77
	Pc 4434	1959 Mar. 25	36652.743	-23.86	-39.31 $\pm$ 0.23	-39.20 $\pm$ 0.21	+0.11
73593	Ce 11835	1958 Mar. 30	36292.675	-17.29	+46.04 $\pm$ 0.39	+43.24 $\pm$ 0.24	-2.80
73752	Ce 13291	1960 Mar. 10	37003.726	-11.95	+46.56 $\pm$ 0.26	+45.67 $\pm$ 0.26	-0.89
74485	Pc 4275	1959 Jan. 02	36570.956	+11.90	-07.73 $\pm$ 0.18	-08.54 $\pm$ 0.32	-0.81
74395 (31 Mon)	Ce 7978	1952 Mar. 09	34141.671	-27.05	+33.00 $\pm$ 0.35	+31.91 $\pm$ 0.34	+0.91
	Ce 10220	1955 Dec. 03	35444.938	+24.60	+32.04 $\pm$ 0.36	+30.38 $\pm$ 0.22	-1.66
75958	Pc 4322	1959 Jan. 25	36593.866	+04.06	+08.43 $\pm$ 0.24	+08.10 $\pm$ 0.23	-0.33
76294 ( $\zeta$ Hya)	Pc 3621	1957 Dec. 31	36203.771	+17.19	+23.83 $\pm$ 0.23	+22.45 $\pm$ 0.21	-0.38
77353	Pc 4864	1959 Nov. 21	36894.008	+28.34	+70.39 $\pm$ 0.21	+69.93 $\pm$ 0.22	-0.46
78647 ( $\lambda$ Vel)	Pc 3635	1958 Jan. 03	36206.885	+14.46	...	+19.64 $\pm$ 0.26	...
	Pc 5561	1960 Dec. 30	37298.953	+14.74	+21.08 $\pm$ 0.36	+19.55 $\pm$ 0.21	-1.53

Table 1 (Contd.)

Star HD No. and Name	Plate and Exposure	Date	J.D. 2400000+	$V_{\odot}$ km/sec	Hel.	Rad.	Vel in km/sec	$\Delta V_r$ (Vis	
					U.V. System	Visual System	—U.V) System		
79354	Pc 4331	1959 Jan. 27	36595.864	-02.03	-	30.49 ± 0.29	-	31.07 ± 0.26	-0.58
79452	Ce 12530	1959 Mar. 19	36646.762	-20.89	+	53.93 ± 0.27	+	53.77 ± 0.31	-0.16
	Pc 4920	1960 Jan. 14	36947.898	+08.41	+	57.15 ± 0.30	+	56.18 ± 0.28	-0.97
80479	Pc 5050	1960 Apr. 11	37035.656	-20.55	-	30.27 ± 0.39	-	30.81 ± 0.22	-0.54
80493 ( $\alpha$ Lyn)	Ce 7855	1952 Mar. 12	34083.926	-18.49	+	39.34 ± 0.51	+	38.28 ± 0.27	-1.06
	Pc 1881	1954 Dec. 12	35088.915	+22.32	+	39.48 ± 0.22	+	38.83 ± 0.37	-0.65
81192	Ce 10362	1956 Nov. 23	35800.781	-21.17	+	139.33 ± 0.35	+	138.22 ± 0.30	-1.11
	Ce 12524	1959 Nov. 18	36890.719	-18.81	+	135.70 ± 0.35	+	135.94 ± 0.23	+0.24
	Ce 13298	1960 Nov. 11	37249.738	-16.24	+	135.60 ± 0.16	+	135.80 ± 0.23	+0.20
	Pc 5046	1960 Apr. 10	37034.668	-26.29	+	135.80 ± 0.23	+	135.21 ± 0.24	-0.59
219916	Pc 3630	1958 Jan. 02	36205.625	-12.88	-	17.83 ± 0.29	-	18.41 ± 0.24	-0.58

Table 2

## Mean Radial Velocities

Star HD No. and Name	Mount Wilson Spectral Type	Radial Velocity in Gen. Cat. km/sec	Mean Helocentric Radial Velocity in km/sec	
			U.V. System	Vis. System
60522 ( $\nu$ Gem)	gM0	- 20.60	- 20.32 (3)*	- 19.48 (4)*
71369	gG1	+ 19.80	+ 20.60 (1)	+ 20.15 (1)
72184	gK3	+ 14.80	+ 14.11 (1)	+ 12.53 (1)
72324	gK1	+ 74.70	+ 74.16 (5)	+ 73.87 (5)
73108 ( $\pi$ UMa)	gK2	+ 14.70	+ 16.50 (2)	+ 15.78 (2)
73593	SgG6	- 37.00	- 39.31 (1)	- 39.20 (1)
73752	dG6	+ 43.40	+ 46.30 (2)	+ 44.46 (2)
74485	gG4	- 12.20	- 07.73 (1)	- 08.54 (1)
74395 (31 Mon)	cG4	+ 31.40	+ 32.52 (2)	+ 31.14 (2)
75958	gG3	+ 03.00	+ 08.43 (1)	+ 08.10 (1)
76294 ( $\zeta$ Hya)	gG5	+ 22.80	+ 23.83 (1)	+ 22.45 (1)
77353	gG8	+ 73.20	+ 70.39 (1)	+ 69.93 (1)
78647 ( $\lambda$ Vel)	cK4	+ 18.40	+ 21.08 (1)	+ 19.60 (2)
79354	gM0	- 30.40	- 30.49 (1)	- 31.07 (1)
79452	SgG3	+ 56.40	+ 55.54 (2)	+ 54.98 (2)
80479	gK4	- 29.60	- 30.27 (1)	- 30.81 (1)
80493 ( $\infty$ Lyn)	gM0	+ 37.60	+ 39.41 (2)	+ 38.56 (2)
81192	dG5	+135.30	+136.61 (4)	+136.29 (4)
219916	gG7	- 18.20	- 17.83 (1)	- 18.41 (1)

\* The number in parenthesis gives the number of plates used in averaging the result.

## References :

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