ASTRONOMY & ASTROPHYSICS
SUPPLEMENT SERIES

Astron. Astrophys. Suppl. Ser. **92,** 533-563 (1992)

Intensive photometry of southern Be variables. II. Summer objects*

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Received May 13; accepted May 24, 1991

Abstract. — In this paper we present further results of an intensive photometric campaign on some bright southern Be stars to search for periodic light variations. In order to obtain good phase coverage, many observations were conducted from two sites with different longitudes: ESO and SAAO. As in Paper I, we found a large fraction of early-Be stars to be variable with periods close, or equal to their rotational periods. Particular attention was devoted to the late-Be stars. Unlike the hotter members of this class, the late-Be stars do not seem to have detectable periodic light variations except for one or two stars of very small amplitude.

Key words: Be stars — Variable stars — Photometry — Stellar pulsations.

1. Introduction.

In a previous paper (Cuypers *et al.* 1989, Paper I) we presented results of an intensive photometric campaign on 17 bright Be stars visible during the southern winter. We found that most of these objects maintained the same period over several seasons and that this period is always close to the expected period of rotation of the star. In no case did we find evidence of multiple periods characteristic of nonradial pulsation (NRP). An analysis of these results (which also includes most of the stars presented here) showed that the periods do not differ from the rotational periods by more than 7 percent (Balona 1990). In paper I, the stars observed were nearly always in the B0-B3 group. In this study we have made a particular effort in observing as many late Be stars as possible with the aim of determining the domain of the periodic variability.

As mentioned in Paper I, it is most important that observations be obtained from more than one site as the periods are close to one day. In summer the nights are short and the aliasing problem attains its greates severity. We were able to observe from ESO and SAAO during four weeks in January 1988 which enabled the ambiguity in the periods of many stars to be resolved.

Details of the observing procedure, analysis and period finding techniques have been discussed in Paper I. In this paper all observations were obtained with the Strömgren b filter. Period analysis was performed using the standard Fourier technique for unequally spaced data and also the phase dispersion minimization (PDM) technique. A list of the program and comparison stars is given in Table 1. Data for the most interesting stars are presented in Table 2.

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* Observations collected at the European Southern Observatory and the South African Astronomical Observatory.

2. The early-type stars.

2.1. DU Eri = HR 1423.

Campbell & Moore (1928) obtained a variable radial velocity from the hydrogen lines. Since these were in emission the results probably have little weight; it is not certain that the star is a spectroscopic binary. The most recent spectroscopic observations are by Hanuschik *et al.* (1988) and Mennickent & Vogt (1988) who found double emission in Hα and a variable V/R ratio.

We obtained only 61 observations during eight nights in November 1987 at the SAAO. While the star is clearly variable with a timescale of one day and a range of about 0.05 mag., the data are too few to obtain a reliable period. The analysis suggests a period of 0.61 d or 1.22 d or one of the aliases.

2.2. DX Eri = HR 1508.

Cousins (1963) found this star to be a variable with a range of nearly 0.10 mag. later Feinstein (1968) found a variation of similar range over a period of 35 months. Heck & Manfroid (1982) re-observed this star and concluded that daily variations of a few hundredths of a magnitude were present. From five spectra, Plaskett & Pearce (1931) could find no indications of orbital motion. Variations in the profile of the Hα line have been reported by Barker (1986) and Hanuschik *et al.* (1988). Mennickent & Vogt (1988) did not detect emission at Hβ during the 1986/7 season.

Our photometric observations (SAAO only) cover the 1986/7 and 1987/8 seasons, though the latter set of data are too few for an independent period analysis. The earlier set of data clearly indicate periodic variability with a range of 0.10 mag. The periodogram reveals several peaks at frequencies of 0.04 and 0.80 d^{-1} together with the corresponding one day aliases. The low frequency is a result of a long-term trend in the light curve with a range not much smaller than the light range of the short-period variations. We removed this trend by an iterative process whereby we first fitted a Fourier curve to the shorter period and then used the residuals to define the trend. By fitting a polynomial to this trend we were able to obtain a better approximation to the underlying short-period variation. We obtained an improved period $P = 1.113$ d by repeating the periodogram analysis on the data with the trend removed. The resulting light curve, with the trend removed, is shown in Figure 1. It seems to be of the double-wave variety with depths of 0.07 and 0.04 mag.

The 1987/8 data are of little use in confirming this period. The presence of a trend comparable in amplitude with the short period variations makes any conclusion regarding the period very uncertain, particularly as this star was observed from only one site. Further (preferably multisite) observations are required.

2.3. λ Eri = HR 1679.

Intensive photometry of this star for the seasons 1985/6 and 1986/7 has been presented by Balona *et al.* (1987). They confirmed the period $P = 0.700$ d previously reported by Bolton (1981) from radial velocity measurements. The light amplitude was very low (less than 0.01 mag. peak-to-peak).

Our data consist of 6 nights in November 1987 (SAAO only) and 23 nights in January 1988 (SAAO and ESO). The Fourier periodograms of the combined data show the highest peak at a frequency of $f = 1.42$ d^{-1} which is the same as observed in previous years. By combining our data with that of Balona *et al.* (1987) we obtain the following ephemeris for minimum light:

$$\mathrm{HJD_{min}} = 2446000.685 + 0.70165(\pm 0.00003)\mathrm{E}$$

The light curves for November 1987 and January 1988, as well as those by Balona *et al.* (1987), are shown in Figure 2.

The light amplitude during November 1987 is considerably larger than in the recent past and also higher than in January 1988. This may be connected with a report of increased spectroscopic activity during this time (Smith 1989). The larger scatter during November 1987 probably implies the presence of a long-term trend or increased flickering. The apparently larger amplitude need not imply that the short-period variation was of actually larger amplitude at this time.

In spite of the very low amplitude, there is a suggestion of a shallow minimum at phase 0.5 during January 1988. This could mean that λ Eri may develop a double-wave light curve by a deepening of this feature. A change of this nature has been observed in other Be stars (van Vuuren *et al.* 1988).

2.4. ω Ori = HR 1934.

Balona *et al.* (1987) showed that ω Ori has a double-wave light variation with a period of 1.9 d. The light minima are of nearly the same amplitude and it is possible that the true period is only half this value. The closeness to one day ensures that it is virtually impossible to obtain complete phase coverage from only one site.

We observed this star during january 1988 from SAAO and ESO; Figure 3 shows the run of magnitude as a function of time. This figure illustrates how easy it is to confuse a short-period variability with a period close to one day with trend of much longer period. It also shows unequivocally that ω Ori does indeed have a short period and emphasizes the importance of multi-site observations. Details on the period analysis are given in Cuypers & Balona (1990).

By combining our data with that of Balona *et al.* (1987) we obtain the following ephemeris for minimum light:

$$\mathrm{HJD_{min}} = 2446000.785 + 0.98078(\pm 0.00006)\mathrm{E}.$$

As pointed out by Balona *et al.* (1987), the true period could be 1.9616 d, in which case the light curve is of the double-wave variety. The evidence for this is not as convincing as it appeared in the past. In Figure 4 we plot all the data using the double-wave period.

2.5. FT CMa = HR 2492.

Long term light variations with a range exceeding 0.1 mag have been observed in FT CMa in common with many other Be stars. Baade (1984) reported variations in the profile of HeI 4471 with a time scale of about one day. He obtained a period of 1.36 ± 0.05 and a range of nearly 80 km s^{-1} from twelve spectra. Baade also obtained some

photometry which indicated a period of 0.66 d. This is very nearly half the spectroscopic period.

We observed this star from SAAO and ESO during January 1988. A correction of +0.008 mag. was applied to the SAAO data for best agreement with the ESO magnitudes. The Fourier and PDM periodograms of the combined data (311 points) have the strongest power at $f = 0.04$ and 0.77 d^{-1} together with the corresponding one day aliases. The low frequency component is due to a long-term trend which is clearly visible when the magnitude is plotted against time. The range of this variation appears to be comparable to the amplitude of the short-period component. This complicates the period analysis and introduces considerable uncertainty in the final result.

We proceeded by fitting a Fourier curve using $f = 0.77$ d^{-1}. By removing this function from the data, we obtained a better approximation of the long-term trend. The light curve with the trend removed still shows considerable scatter which is common in many periodic Be stars (flickering). The PDM periodogram has considerable power at $f = 0.38$ d^{-1}; it seems likely that the light curve is actually a double-wave as the minima have distinctly unequal depths (Fig. 5). We obtain the following ephemeris for minimum light:

$$\mathrm{HJD_{min}} = 2446002.237 + 2.63(\pm 0.01)\mathrm{E}$$

We note that this period is rather close to twice the period found by Baade (1984). Given the uncertainty in Baade's period determination and the fact that the light curve is of the double-wave kind, the period found here is not significantly different from Baade's period which should really be 2.72 ± 0.05 d. Indeed, a reasonable velocity curve is produced if Baade's radial velocity data are phased with $P = 2.63$ d.

2.6. HP CMa = HR 2501.

We originally used this star as a comparison, not realizing that it was listed as a variable. Corbally (1984) found the Hβ, Hγ and Hδ lines in emission and estimated a large projected rotational velocity ($v \sin i \simeq 350$ km s^{-1}). It is also a close visual double ($\Delta m = 2.3$ mag, 4.9″). Earlier spectroscopic observations do not show Balmer emission; the radial velocity appears to be variable. Cote (1987) noted its very large infrared excess as measured by IRAS and modeled this result in terms of a dust cloud at a temperature of 585 K and a radius of 21 stellar radii.

HP CMa was first discovered to be variable by Jerzykiewicz & Sterken (1977) who found a range of 0.12 mag. The time scale of the variations appeared to be a few days. Waelkens *et al.* (1983) found a similar behaviour. Our observations consist of 317 data points from SAAO and ESO during January 1988 and a further 65 observations obtained in January 1991. In Figure 6 the magnitude is shown as a function of time for the two seasons. Note the considerable difference in brightness (0.4 mag) between 1988 and 1991.

We could find no evidence of periodicity in either of the two seasons, though it is evident that the star is very active. During January 1988 a sudden flare was seen on one night both at SAAO and ESO. The star was particularly active in 1991 when two flaring events were seen.

2.7. FV CMa = HR 2690.

The variable star catalogue designation of FV CMa arises from the long-term photometric behaviour characteristic of most Be stars. The most recent spectroscopic observations (Mennickent & Vogt 1988) show double emission at Hβ and Hγ with $V \ll R$ during january 1987.

Our results consist of 171 observations made at ESO during 1987/8 and 70 observations made at SAAO in January 1991. Considerable photometric variations occurred during both seasons (Fig. 7). Also, the star was about 0.2 mag brighter during 1991. It is not possible to ascertain whether any periodicities are present. From 10 nights in March 1988, Barrera *et al.* (1991) found a period of 0.52 d.

2.8. 19 Mon = HR 2648.

Irvine (1975) discovered a very weak emission feature at Hα in 19 Mon. That this is a Be star was confirmed by Hirata & Asada (1976). they found weak Hα absorption at low dispersion but a distinct, though weak, red emission component and a central shell absorption feature at high dispersion on spectra taken in December 1975.

Balona (1977) discovered light variations in this star with a period of about 4 hours and an amplitude of 0.04 mag. On this basis it was classified as a β Cep variable. Further observations (Balona & Engelbrecht 1979) showed that two closely spaced periods, $4^h\ 35^m$ and $4^h\ 44^m$, were present. The very large projected rotational velocity ($v \sin i = 336$ km s^{-1}) makes this star the most rapidly rotating β Cep variable.

The dual nature of 19 Mon as both a Be star and a β Cep variable is of particular interest. In this regard it resembles ζ Oph (Cuypers *et al.* 1989), though it is later in spectral type and 27 CMa (Balona & Rozowsky 1991). Since the presence of β Cep pulsations is clearly unrelated to the Be phenomenon (because most β Cep are not Be stars), we must regard the presence of short-period low-order pulsations as incidental. The spectral type, B1Ve, puts the star in the middle of the β Cep instability strip. We known of no reason why a star cannot be both a periodic Be star and a β Cep variable, just as some Ap stars shown long-term light variations due to star spots as well as rapid oscillations (roAp stars) due to pulsation.

The top panel of Figure 8 shows the periodogram of the combined data. The strongest power occurs at the period $P_1 = 4^h\ 35^m$ found by Balona & Engelbrecht (1979).The second panel shows the effect of removing a sinusoid of this period from the data. The highest peaks are now at a frequency of 0.17 d^{-1} ($P_2 = 5.95$ d) and its one day aliases. Finally, the bottom panel shows the result of removing P_1 and P_2 simultaneously. There is no significant peak except possibly at $P_3 = 4^h\ 54^m$ and its one day alias. However, these are barely above the general noise level and are probably not real.

We have confirmed that 19 Mon is a β Cep variable, though we do not find the second period proposed by Balona & Engelbrecht (1979). Their data were obtained over seven nights which is not sufficient to disciminate adequately between the two closely spaced periods. Note, however, that the beat period given by Balona & Engelbrecht (1979) is very nearly the same as the 5.95 d period found here. This suggests that their second period is in fact an alias.

The fact that this star is a β Cep variable with a high amplitude offers an alternative explanation for the weak emission seen at Hα. Many β Cep stars, particularly those with large pulsation amplitudes, show shock phenomena in their atmospheres at certain phases. It is possible that this might be the case in 19 Mon and that it is not a genuine Be star. Detailed spectroscopic observations are required to settle this point.

2.9. NV Pup = HR 2787.

Dachs *et al.* (1981) found this star to display strong emission in the Balmer lines down to at least Hγ during 1978 with Hβ and Hγ having a central reversal. V/R variations are present on a timescale of about 20 days. These features were still present in 1987 (Mennickent & Vogt 1988).

This star is clearly variable with a timescale of a day or two. However, only 65 observations over ten nights were obtained (January 1991). Periodogram analysis suggests $f = 1.07\ d^{-1}$ or $1.31\ d^{-1}$ with amplitude 0.015 mag. but this clearly needs confirmation.

2.10. NW Pup = HR 2790.

Dachs *et al.* (1981) suggest that the emission classification of this star is erroneous. There is some indication of variability at a low level (0.01 mag. or less) but the number of observations are too small to determine any periodicity.

2.11. HR 3135 = HD 65875.

Radial velocity measurements (Plaskett & Pearce 1931, Blaauw & van Albada 1963) indicate that this star could be a spectroscopic binary with a period of several weeks.

The ESO and SAAO data show that it is periodic with $P = 0.855$ d, though the peak-to-peak amplitude is only 0.012 mag. Some power is also visible at frequencies close to one cycle per day. This was found to be an artifact and is due to a difference in zero point of -0.008 mag. between SAAO and ESO. A further artifact arises from incomplete extinction corrections, but this is of very low amplitude. There seems to be no further significant periodicity in this star. We obtain the following ephemeris for minimum light:

$$\mathrm{HJD_{min}} = 2447169.708 + 0.855(\pm 0.008)\mathrm{E}$$

The light curve is shown in Figure 9.

2.12. PQ Pup = HR 3195.

Andersen & Nordström (1983) find this B4Ve star to be a probable radial velocity variable. Strong, sharp central emission was found in the Balmer lines. This star was used by Balona & Laing (1986) as a comparison star: no significant light variability was found. Stagg (1987) included this star in his photometric survey where the star is shown not to be significantly variable. The present data is based on 65 observations obtained in January 1991; no significant variability was found.

2.13. HR 3356.

Mennickent & Vogt (1988) found weak double emission in 1986. Stagg (1987) did not find any significant light variability. Our results show that the star is constant to within 4 millimags.

2.14. HR 3593.

This B2Vnn(e) star was found to be variable by Burki *et al.* (1980). On the basis of light curves obtained on two consecutive nights, they estimated a period of about 7 hours and classified it as a β Cep star.

From 282 observations made at SAAO and ESO, we find a period of 0.612 d. The light curve (Fig. 10) is sinusoidal with the large amplitude of 0.08 mag. There is considerable flickering which occasionally mimics a non-persisting short-period variation. The period of 0.612 d seems too long for a β Cep variable. The PDM periodogram suggests that the true period may even be twice this value, but this is not certain since the minima are of nearly equal depth. HR3593 is very likely another periodic Be star. The ephemeris for minimum light is:

$$\mathrm{HJD_{min}} = 2447173.591 + 0.612(\pm 0.004)\mathrm{E}$$

2.15. HD 91188.

This star was suspect of being very luminous owing to the presence of OI 7774 (Albers 1969). Klare & Szeidl (1966) reported the presence of emission in the Hα line. Garrison *et al.* (1977) classify it as B4IIIe. Since Geneva photometry of this star suggested large variability on a short time scale (Waelkens, priv. comm.), HD 91188 was added to the program.

The variability of this star was apparent after a few nights. From 530 observations made at ESO and SAAO, we find the most likely frequency at $f = 0.684$ d^{-1}. However, considerable power is present in the PDM periodogram at half this value. Inspection of the light curve $f = 0.342$ d^{-1} shows a convincing double-wave light curve with unequal minima (Fig. 11). On this basis we found the following ephemeris for minimum light:

$$\mathrm{HJD_{min}} = 2447168.685 + 2.924(\pm 0.002)\mathrm{E}$$

2.16. HR 4618 = HR 105382.

This is a close companion of δ Cen and classified as B2IIIne by Hiltner *et al.* (1969). However, Dachs *et al.* (1981) could not find any emission.

We observed this star in 1988 and 1990; in both seasons the period was found to be 1.2927 d. There is no problem with aliasing; the period of 0.42 d found by Barrera *et al.* (19991) does not seem to be correct. The combined light curve (Fig 12) shows surprisingly little scatter (rms of the resifuals is 5 millimags). The possibility exists that this is an interacting binary, though the few published radial velocities appear to contradict this as they do not differ significantly. The ephemeris for minimum light is:.

$$\mathrm{HJD_{min}} = 2447246.272 + 1.2927(\pm 0.0003)\mathrm{E}$$

2.17. δ Cen = HR 4621.

Percy *et al.* (1981) found this bright B2IVne star to be variable with a timescale of a day. It displays strong emission as far as Hδ (Mennickent & Vogt 1988).

We found the star to be certainly variable, but finding a period proved difficult. In the 1988 season $P = 1.923$ d is indicated, but no convincing period could be found in 1990 (Fig. 13). In both seasons the random variations (flickering) are very large. The star clearly needs to be observed again to confirm the tentative period.

2.18. 39 Cru = HR 4823.

The *Bright Star Catalogue* mentions that in 1896, May 22, 39 Cru was observed to be of magnitude 7.5; no reference is given. If true, this is extraordinary as the star is now of magnitude 4.9. We observed this star during 1991; periodogram analysis shows a very significant peak at $f = 1.295$ d^{-1} ($P = 0.772$ d), but with a peak-to-peak amplitude of only 0.01 mag. The light curve is shown in Figure 14. This period is not in agreement with the one of 1.63 d found by Barrera *et al.* (1991). This is nearly twice our period, so it is possible that 39 Cru may have had a double-wave in 1991. The ephemeris for minimum light is:

$$\mathrm{HJD_{min}} = 2448335.737 + 0.772(\pm 0.009)\mathrm{E}.$$

2.19. λ Cru = HR 4897.

Both 39 Cru and λ Cru were used as comparison stars by van Hoof in his observations of the β Cep star β Cru (Cuypers 1983). These stars were recognized as variables. Subsequently Shobbrook (1981) found λ Cru to have a period of 0.39 d with variable amplitude. A solution for a second period gives $P_2 = 0.18$ d, but it must be borne in mind that the star was observed for only four nights. The light range was found to be about 0.01 mag.

We included λ Cru on our list of objects for 1991 and found it to be distinctly variable. From 75 observations taken on 11 nights we obtain a highly significant frequency at 2.66 d^{-1} which gives $P = 0.376$ d, which is not significantly different from Shobbrook's (1981) value. We also find a change in amplitude with time, but on the much longer timescale of one week. Changes in amplitude are quite common for the periodic Be stars. However, it is unusual to find a change in phase in this short time interval (Fig. 15). This star merits further attention on the part of observers.

3. The late-type stars.

An interesting question is the extent of short-period variations of Be stars in the HR diagram. Since most Be stars are earlier than B5, it is important to include later-type stars in order to determine the low-temperature limit. We made a special effort to observe all bright Be stars which have spectral types later than B6.

We found the following late-Be stars to be constant within 5 millimags: HR 1960, HR 3488, HR 3670, ω Car (HR 4037), HR 4123, HR 4460, HR 4696, HR4804, HR 5327 and HD 98922. One of these (ω Car) was included in a search for line profile variations in late B dwarfs and giants (Baade 1989a,b) which likewise proved negative. HR 4696 was found to have a period of 0.51 d by Barrera *et al.* (1991). Possibly periodic stars are discussed below.

3.1. α Col = HR 1956.

The Balmer emission in this star is reported to be very stable on long time scales and seems to represent a Be

star envelope in a very well balanced equilibrium state (Hanuschik *et al.* 1988). Bijaoui & Doazan (1979) detected rapid variations in the Hβ line profile, but this has never been confirmed.

We obtained 347 photometric data points from SAAO during 25 nights in the 1986/7 season. A period analysis suggests $P = 1.4$ d, but the resulting semi-amplitude of 5 millimags is so small as to place doubt on this determination. Until this period can be confirmed, we regard α Col to be constant in light.

3.2. μ Pic = HR 2412.

Very few observations are available of this bright B9Ve star. We observed μ Pic during January 1991. Periodogram analysis indicates variability with $f = 2.52$ d^{-1} ($P = 0.9397$ d), but the amplitude is less than 0.01 mag. (Fig. 16). Since only 62 observations spread over ten nights were obtained, this value needs to be confirmed.

3.3. HR 4221 = HD 93563.

This B8-9IIIe star is very poorly studied. Campbell & Moore (1928) obtained six radial velocities with a range of about 40 km s^{-1}. They did not consider this significant because of the broad lines ($v \sin i = 218$ km s^{-1}). This star was included in Stagg's (1987) photometric survey and considered a candidate for short-period variability. Mennickent & Vogt (1988) reported double emission and shell characteristics.

During the 1990 season the star was clearly variable, but with a very small amplitude. Periodogram analysis shown a very significant peak at $f = 1.15$ d^{-1}. Although this is suspiciously close to one cycle per day, the phase is well covered. This period was confirmed in 1991 when the amplitude was even lower. The combined data yields a best frequency $f = 1.149$ d^{-1} ($P = 0.870$ d, Fig. 17).

4. Conclusions

Analysis of the results of Paper I and this paper (Balona 1990) shows that periodic variations are very common amongst Be stars earlier than B7 and that the periods are not significantly different from the periods of rotation. No case of multiperiodicity is found, but quite often a large amount of flickering was observed. It is not very easy to obtain a quantitative measurement of the flickering time-scale and its amplitude. The best we have been able to do is to examine the periodogram and note where the power begins to merge with the background noise. Our impression is that the flickering time-scale is not too different from the period of rotation of the star. The amplitude varies in an unpredictable way. There does not seem to be any connection between the flickering amplitude and the shape or amplitude of the periodic light component. It is highly probable that the flickering is a manifestation of the transient phenomena seen in the line profile observations (Smith 1989).

An important new result is that photometric short-period variability is very rare amongst Be stars of spectral type B7 or later. The few cases in which such periodicity may be present (α Col, μ Pic and HR4221) all suggest periods of around one day but at much smaller amplitude. This appears to confirm the survey by Baade (1989a,b) who was unable to find line-profile variations in a sample of late-Be stars. This would appear to be a valuable clue to the mechanism responsible for the variations.

Acknowledgements.

We are grateful to Dr. C. Waelkens for his help in organizing the multi-site campaign and for his comments and suggestions. We thank Mr.F. van Wyk and Mr. J. Rozowsky for assisting in the observations and Dr. D. Baade for helpful comments.

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TABLE 1. *A summary of stars observed. Notes are given for program stars; the others are comparison stars. The grouping includes stars which are in close proximity and for which he same transparency corrections were applied. The mean Strömgren b magnitude and the total number of observations is shown. DW stands for a double-wave light curve.*

HR	HD	Name	MK type	vsini	<b>	N	Notes
HR 1312	HD 26739		B5IV		6.39	61	
HR 1423	HD 28497	DU Eri	B1Vne	340	5.48	61	Var. with short period.
HR 1508	HD 30076	DX Eri	B2Ve	240	5.95	391	DW, P=1.113 d.
HR 1640	HD 32612		B2.5IV		6.326	407	
HR 1679	HD 33328	λ Eri	B2IVne	336	4.21	238	P=0.70165 d.
HR 1748	HD 34748		B1.5Vn	280	6.301	195	
HR 1934	HD 37490	ω Ori	B3IIIe	194	4.43	197	P=0.98078 d. DW?
HR 1950	HD 37744		B1.5V	35	6.133	197	
HR 1960	HD 37935		B9.5Ve		6.290	59	Constant.
HR 2064	HD 39844	ϵ Dor	B6V		5.063	62	
HR 2410	HD 46792		B3V		6.111	61	
HR 2412	HD 46860	μ Pic	B9Ve		5.691	62	P=0.397 d?
HR 1956	HD 37795	α Col	B7IVe	176	2.58	347	Constant?
HR 1996	HD 38666	μ Col	O9.5V	153	5.054	349	
HR 2492	HD 48917	FT CMa	B2IIIe		5.27	311	DW, P=2.632 d.
HR 2497	HD 49028		B8IV	60	6.477	317	
HR 2501	HD 49131	HP CMa	B1.5Vne	350	5.74	317	Variable.
HR 2619	HD 52092		B3V	36	4.994	146	
HR 2690	HD 54309	FV CMa	B2IVe	290	5.84	171	Variable.
HR 2734	HD 55857		B0.5V		6.017	145	
HR 2769	HD 56733		B4V		5.765	70	
HR 2787	HD 57150	NV Pup	B3IVe	277	4.710	70	Variable.
HR 2790	HD 57219	NW Pup	B2IVne	124	5.060	70	Variable?
HR 2648	HD 52918	19 Mon	B1Ve	336	4.92	281	β Cep, P=0.191, 5.95 d.
HR 2656	HD 53240		B9IIIn		6.426	212	
HR 2806	HD 57682		O9V	35	6.362	290	
HR 3135	HD 65875		B2.5Ve	148	6.59	294	P=0.855 d.
HR 3195	HD 67880	PQ Pup	B4Ve		6.402	65	Constant.
HR 3205	HD 68242		B7V		6.273	281	
HR 3322	HD 71302		B3V		5.919	65	
HR 3356	HD 72067		B2Vne		5.791	65	Constant.
HR 3371	HD 72350		B4IV		6.338	416	
HR 3488	HD 75081		B9Ve		6.195	413	Constant.
HR 3501	HD 75387		B2IV–V		6.348	414	
HR 3593	HD 77320	IU Vel	B2.5Vne		6.01	282	P=0.612 d.
HR 3670	HD 79621		B9Ve		5.892	403	Constant.
HR 3680	HD 79900		B8V		6.230	402	
HR 4002	HD 88473		A0IV		5.831	42	
HR 4037	HD 89080	ω Car	B8IIIe	225	3.288	44	Constant.
HR 4089	HD 90264		B8V	79	4.924	46	
HR 4022	HD 88907		B2V	55	6.381	436	
HR 4038	HD 89104		B2IV–V	104	6.095	436	
	HD 91188		B4IIIe		6.62	530	DW, P=2.924 d.

TABLE 1. *(continued)*

HR	HD	Name	MK type	vsini	<b>	N	Notes
HR 4055	HD 89455		A9V	112	6.163	61	
HR 4123	HD 91120		B9Vne	310	5.607	59	Constant.
HR 4172	HD 92245		A0Vn	210	6.052	59	
	HD 89740		B3V		6.926	64	
HR 4221	HD 93563		B8–9IIIe	218	5.130	168	P=0.870 d.
HR 4239	HD 93943		B9.5IV–V		5.878	64	
HR 4390	HD 98718	π Cen	B5Vn	326	3.825	102	
	HD 98922		B9Ve		6.839	104	Constant.
HR 4460	HD 100673		B9Ve	159	4.596	102	Constant.
HR 4576	HD 103961		B8III		5.439	103	
HR 4618	HD 105382		B6IIIe	127	4.400	189	P=1.292 d.
HR 4619	HD 105383		B9V		6.363	181	
HR 4620	HD 105416		B9V		5.346	103	
HR 4621	HD 105435	δ Cen	B2IVne	181	2.590	181	P=1.923 d?
HR 4635	HD 105850	3 Crv	A2V	124	5.475	81	
HR 4696	HD 107348	ζ Crv	B8Vne		5.177	81	Constant.
HR 4670	HD 106819		A2IV		6.119	80	
HR 4664	HD 106676		A0V		6.219	80	
HR 4798	HD 109668	α Mus	B2IV–V	147	2.603	77	
HR 4804	HD 109857		B8Vne		6.589	80	Constant.
HR 4823	HD 110335	39 Cru	B6IVe	185	4.952	77	P=0.772 d.
HR 4832	HD 110461		B9V		6.075	77	
HR 4897	HD 112078	λ Cru	B4Vne	317	4.562	77	P=0.376 d.
HR 4944	HD 113823		B9IV		6.336	79	
HR 5303	HD 123998	η Aps	A2m	43	5.025	77	
HR 5327	HD 124639		B8Ve		6.484	77	Constant.
HR 5336	HD 124771	ϵ Aps	B4V	216	5.036	77	

TABLE 2a. *Strömgren-b observations for periodic Be stars observed at SAAO. The heliocentric Julian day is with respect to JD 2440000.000.*

DU Eri = HR 1423 = HD 28497

HJD	b	HJD	b	HJD	b	HJD	b
7104.3194	5.505	7106.3072	5.495	7107.5925	5.472	7114.3646	5.493
7104.3591	5.497	7106.3256	5.498	7109.3375	5.451	7114.3880	5.477
7104.4103	5.494	7106.3403	5.493	7113.3067	5.478	7114.4114	5.462
7104.4464	5.495	7106.3638	5.487	7113.3381	5.458	7114.4352	5.458
7104.4812	5.499	7107.3017	5.454	7113.3620	5.468	7114.4749	5.468
7104.5367	5.490	7107.3168	5.455	7113.3889	5.462	7114.5218	5.453
7104.5674	5.487	7107.3335	5.457	7113.4153	5.464	7114.5399	5.454
7104.5909	5.483	7107.3483	5.468	7113.4401	5.466	7114.5576	5.454
7105.3038	5.483	7107.3725	5.474	7113.4652	5.473	7114.5760	5.456
7105.3219	5.475	7107.3972	5.487	7113.4910	5.481	7116.4126	5.454
7105.3397	5.482	7107.4213	5.487	7113.5151	5.488	7116.4923	5.452
7105.3585	5.475	7107.4498	5.491	7113.5388	5.495	7116.5161	5.458
7105.3966	5.471	7107.4755	5.492	7113.5864	5.486	7116.5343	5.459
7105.4217	5.474	7107.5038	5.488	7114.3138	5.508		
7105.4604	5.480	7107.5320	5.482	7114.3276	5.511		
7105.4852	5.479	7107.5571	5.478	7114.3417	5.501		

TABLE 2a. *(continued)*

DX Eri = HR 1508 = HD 30076

HJD	b	HJD	b	HJD	b	HJD	b
6761.3224	5.942	6766.3223	5.924	6769.3233	5.935	6772.5154	5.931
6761.3441	5.941	6766.3378	5.925	6769.3372	5.938	6772.5308	5.933
6761.3619	5.941	6766.3517	5.925	6769.3509	5.933	6772.5455	5.932
6761.3773	5.948	6766.3669	5.923	6769.3647	5.937	6772.5589	5.931
6761.4420	5.962	6766.3823	5.926	6769.3785	5.936	6772.5730	5.939
6762.2755	5.917	6766.3974	5.925	6769.3941	5.932	6773.2821	5.933
6762.2847	5.918	6766.4127	5.922	6769.4146	5.934	6773.3013	5.924
6762.2929	5.916	6766.4271	5.926	6769.4288	5.930	6773.3187	5.930
6762.3020	5.914	6766.4424	5.927	6769.4436	5.926	6773.3350	5.931
6762.3178	5.915	6766.4596	5.924	6769.4591	5.926	6773.3539	5.922
6762.3336	5.915	6766.4761	5.928	6769.4751	5.926	6773.3697	5.925
6762.3493	5.918	6766.4911	5.926	6769.4894	5.926	6773.3853	5.926
6762.3644	5.910	6766.5068	5.930	6769.5038	5.922	6773.4036	5.920
6762.3804	5.912	6766.5228	5.934	6769.5184	5.923	6773.4221	5.926
6763.3348	5.940	6766.5402	5.933	6769.5338	5.922	6773.4410	5.925
6763.3521	5.933	6766.5561	5.937	6769.5479	5.921	6773.4579	5.926
6763.3678	5.941	6766.5717	5.940	6769.5622	5.921	6773.4756	5.923
6763.3829	5.938	6767.2809	5.934	6769.5754	5.916	6773.4924	5.928
6763.3993	5.936	6767.2941	5.938	6770.2828	5.929	6773.5086	5.929
6763.4147	5.936	6767.3118	5.927	6770.3154	5.935	6773.5234	5.928
6763.4315	5.927	6767.3275	5.928	6770.3308	5.936	6773.5377	5.930
6764.2753	5.970	6767.3426	5.923	6770.3458	5.932	6773.5529	5.927
6764.2865	5.986	6767.3591	5.933	6770.3634	5.936	6774.3026	5.987
6764.2945	5.977	6767.3738	5.935	6770.3776	5.935	6774.3214	5.984
6764.3019	5.976	6767.3885	5.935	6770.3927	5.936	6775.3005	5.992
6764.3102	5.980	6767.4040	5.933	6770.4067	5.936	6775.3245	5.991
6764.3170	5.978	6767.4193	5.930	6770.4221	5.934	6775.4830	5.997
6764.3255	5.971	6767.4341	5.933	6770.4372	5.940	6775.5052	5.998
6764.3412	5.971	6767.4509	5.934	6770.4522	5.934	6775.5260	5.995
6764.3561	5.973	6767.4664	5.934	6770.4712	5.934	6775.5462	5.991
6764.3716	5.972	6767.4820	5.931	6770.4861	5.940	6777.2896	5.946
6764.3869	5.967	6767.4977	5.930	6770.5019	5.933	6777.3139	5.949
6764.4020	5.961	6767.5128	5.928	6770.5154	5.934	6777.3359	5.951
6764.4173	5.962	6767.5283	5.931	6770.5290	5.935	6777.3591	5.948
6764.4325	5.959	6767.5433	5.926	6770.5428	5.934	6777.3787	5.948
6764.4492	5.956	6767.5577	5.923	6770.5571	5.931	6777.3988	5.949
6764.4639	5.961	6767.5721	5.928	6770.5714	5.928	6777.4191	5.952
6764.4812	5.956	6768.2819	5.943	6771.2861	5.925	6777.4439	5.945
6764.4980	5.954	6768.3028	5.938	6771.3025	5.926	6777.4642	5.949
6764.5136	5.957	6768.3174	5.939	6771.3182	5.934	6777.4840	5.949
6764.5282	5.953	6768.3337	5.938	6771.3394	5.934	6777.5028	5.952
6764.5433	5.952	6768.3480	5.934	6771.3545	5.937	6777.5214	5.953
6764.5588	5.959	6768.3630	5.936	6771.3711	5.937	6777.5395	5.949
6765.3777	5.978	6768.3786	5.933	6771.4259	5.942	6778.2819	5.975
6765.3922	5.973	6768.3938	5.932	6771.4415	5.945	6778.3014	5.966
6765.4071	5.982	6768.4078	5.931	6771.4571	5.946	6778.3208	5.972
6765.4210	5.982	6768.4217	5.930	6771.4724	5.949	6778.3395	5.966
6765.4351	5.984	6768.4362	5.928	6771.4888	5.949	6778.3587	5.964
6765.4511	5.989	6768.4508	5.929	6772.3303	5.918	6778.3785	5.960
6765.4683	5.986	6768.4649	5.928	6772.3466	5.920	6778.3973	5.956
6765.4827	5.987	6768.4804	5.922	6772.3617	5.915	6778.4178	5.955
6765.4967	5.986	6768.4955	5.921	6772.3773	5.916	6778.4401	5.955
6765.5148	5.981	6768.5099	5.919	6772.3928	5.921	6778.4606	5.952
6765.5298	5.981	6768.5237	5.920	6772.4074	5.916	6778.4796	5.951
6765.5442	5.982	6768.5402	5.919	6772.4232	5.917	6778.4991	5.951
6765.5597	5.976	6768.5541	5.919	6772.4384	5.920	6778.5179	5.946
6765.5735	5.975	6768.5691	5.922	6772.4532	5.919	6778.5366	5.950
6766.2793	5.920	6769.2809	5.937	6772.4716	5.927	6779.2820	5.975
6766.2939	5.924	6769.2947	5.936	6772.4873	5.928	6779.3008	5.972
6766.3062	5.923	6769.3094	5.937	6772.5010	5.927	6779.3182	5.971

TABLE 2a. *(continued)*

DX Eri = HR 1508 = HD 30076

HJD	b	HJD	b	HJD	b	HJD	b
6779.3367	5.973	6783.3128	5.956	6786.4941	5.977	7107.3716	5.978
6779.3547	5.973	6783.3336	5.955	6786.5109	5.978	7107.3963	5.974
6779.3721	5.973	6783.3608	5.952	6787.3004	5.963	7107.4204	5.969
6779.3903	5.971	6783.3815	5.952	6787.3440	5.960	7107.4489	5.967
6779.4096	5.971	6783.3990	5.953	6787.3605	5.963	7107.4746	5.965
6779.4282	5.975	6783.4160	5.953	6787.3775	5.963	7107.5029	5.959
6779.4478	5.969	6783.4338	5.952	6787.3936	5.965	7107.5287	5.957
6779.4664	5.968	6783.4532	5.951	6787.4113	5.962	7107.5560	5.955
6779.4835	5.969	6783.4717	5.952	6787.4290	5.961	7107.5914	5.951
6779.5004	5.971	6783.4942	5.949	6787.4479	5.960	7109.3361	6.020
6779.5181	5.967	6783.5119	5.949	6787.4657	5.958	7113.3060	5.918
6779.5373	5.967	6784.2904	6.008	6787.4819	5.960	7113.3372	5.909
6780.3427	5.977	6784.3094	6.006	6787.4979	5.958	7113.3613	5.910
6780.3624	5.982	6784.3284	6.005	6787.5135	5.961	7113.3877	5.910
6780.3806	5.982	6784.3469	6.005	7104.3179	6.014	7113.4145	5.915
6780.3988	5.988	6784.3653	6.006	7104.3580	6.010	7113.4393	5.919
6780.4165	5.988	6784.3836	6.006	7104.4093	5.985	7113.4644	5.919
6780.4357	5.987	6784.4016	6.009	7104.4454	5.973	7113.4902	5.926
6780.4573	5.988	6784.4191	6.008	7104.4804	5.967	7113.5143	5.923
6780.4747	5.984	6784.4371	6.000	7104.5358	5.960	7113.5379	5.924
6781.2955	5.954	6784.4551	5.999	7104.5665	5.953	7113.5852	5.917
6781.3139	5.949	6784.4781	5.996	7104.5899	5.957	7114.3132	5.893
6781.3351	5.952	6784.4968	5.988	7105.3028	6.003	7114.3268	5.890
6782.2915	5.952	6784.5147	5.995	7105.3208	6.011	7114.3409	5.894
6782.3099	5.955	6784.5317	5.990	7105.3385	6.008	7114.3639	5.898
6782.3295	5.951	6785.5011	5.993	7105.3576	6.008	7114.3873	5.888
6782.3490	5.953	6785.5186	5.998	7105.3957	6.010	7114.4104	5.885
6782.3670	5.953	6786.2906	5.957	7105.4208	6.010	7114.4344	5.886
6782.3853	5.952	6786.3091	5.955	7105.4594	6.014	7114.4740	5.888
6782.4055	5.949	6786.3268	5.960	7105.4844	6.010	7114.5210	5.883
6782.4238	5.947	6786.3459	5.963	7106.3063	5.947	7114.5392	5.882
6782.4410	5.949	6786.3639	5.958	7106.3246	5.953	7114.5567	5.877
6782.4604	5.949	6786.3832	5.962	7106.3394	5.952	7114.5751	5.879
6782.4770	5.946	6786.4000	5.963	7106.3628	5.955	7116.4118	5.831
6782.4935	5.939	6786.4177	5.964	7107.3008	5.982	7116.4914	5.823
6782.5130	5.945	6786.4365	5.965	7107.3158	5.976	7116.5154	5.820
6782.5306	5.945	6786.4536	5.967	7107.3326	5.991	7116.5335	5.815
6783.2916	5.961	6786.4769	5.970	7107.3474	5.989		

TABLE 2a. *(continued)*

Lam Eri = HR 1679 = HD 33328

HJD	b	HJD	b	HJD	b	HJD	b
7104.3393	4.181	7177.4724	4.214	7195.2829	4.209	7180.5467	4.207
7104.3727	4.190	7178.2805	4.228	7195.3218	4.204	7180.6005	4.210
7104.4193	4.191	7178.3222	4.208	7195.3591	4.202	7180.6516	4.206
7104.4550	4.189	7178.3977	4.205	7195.4003	4.205	7180.6953	4.211
7104.4892	4.182	7178.4316	4.205	7195.4311	4.213	7181.5452	4.222
7104.5447	4.165	7178.4616	4.205	7170.5695	4.212	7181.5844	4.217
7104.5750	4.152	7179.3690	4.219	7170.6230	4.212	7181.6191	4.219
7105.3286	4.152	7179.4126	4.214	7170.6689	4.219	7181.6604	4.212
7105.3455	4.156	7182.2822	4.239	7171.5899	4.218	7181.7073	4.216
7105.4029	4.146	7182.3171	4.213	7171.6289	4.225	7182.5501	4.212
7105.4271	4.147	7182.3475	4.212	7171.6700	4.230	7182.5842	4.208
7105.4665	4.152	7182.3830	4.209	7171.7074	4.224	7182.6208	4.208
7105.4911	4.162	7182.4107	4.201	7171.7438	4.231	7182.6604	4.205
7106.3458	4.164	7182.4617	4.206	7172.5567	4.219	7182.6955	4.210
7106.3695	4.192	7183.2889	4.216	7172.5994	4.212	7182.7337	4.208
7107.3539	4.164	7183.3189	4.203	7172.6375	4.207	7183.5458	4.215
7107.3787	4.159	7183.3550	4.201	7172.6854	4.212	7183.5847	4.212
7107.4028	4.154	7183.3861	4.198	7172.7297	4.207	7183.6257	4.216
7107.4307	4.143	7183.4179	4.199	7172.7678	4.207	7183.6718	4.218
7107.4556	4.148	7183.4705	4.194	7173.5567	4.208	7183.7132	4.219
7107.4834	4.146	7185.2803	4.214	7173.5946	4.213	7184.5482	4.207
7107.5097	4.147	7185.3195	4.209	7173.6336	4.210	7184.5892	4.212
7107.5381	4.153	7185.3532	4.210	7173.6737	4.206	7184.6292	4.211
7107.5638	4.158	7185.3816	4.210	7173.7116	4.212	7184.6668	4.208
7107.5983	4.163	7185.4084	4.208	7173.7493	4.222	7184.7033	4.217
7114.3474	4.171	7185.4353	4.211	7174.5588	4.220	7185.5516	4.207
7114.3701	4.177	7186.2847	4.222	7174.5944	4.213	7185.5977	4.208
7114.3937	4.175	7186.3189	4.204	7174.6326	4.213	7185.6310	4.213
7114.4175	4.175	7186.3489	4.208	7174.6737	4.214	7185.6701	4.219
7114.4406	4.178	7186.3780	4.210	7174.7082	4.203	7186.5459	4.220
7114.5269	4.183	7186.4046	4.216	7174.7453	4.214	7186.5858	4.217
7114.5451	4.177	7186.4329	4.223	7175.5509	4.213	7186.6186	4.212
7114.5632	4.178	7187.2885	4.219	7175.5838	4.215	7186.6625	4.208
7114.5814	4.177	7187.3425	4.210	7175.6232	4.219	7186.7017	4.202
7116.4184	4.187	7187.3794	4.195	7175.6592	4.211	7187.5438	4.212
7116.4986	4.173	7187.4177	4.198	7175.6919	4.206	7187.5819	4.212
7116.5217	4.171	7188.2863	4.215	7175.7231	4.209	7187.6176	4.211
7116.5402	4.169	7188.3387	4.209	7175.7592	4.204	7187.6601	4.218
7173.2874	4.222	7188.3821	4.203	7176.5534	4.222	7187.6978	4.212
7173.2915	4.209	7188.4189	4.202	7176.5892	4.219	7188.5564	4.224
7173.3379	4.212	7188.4566	4.202	7176.6321	4.219	7188.5909	4.222
7173.3969	4.208	7189.2871	4.219	7176.6644	4.222	7188.6248	4.219
7173.4363	4.210	7189.3355	4.216	7176.7015	4.220	7188.6642	4.218
7173.4639	4.212	7189.3835	4.207	7176.7361	4.214	7190.5484	4.212
7173.4989	4.214	7189.4238	4.206	7177.5484	4.208	7190.5893	4.217
7174.4219	4.207	7191.3131	4.216	7177.5882	4.215	7190.6370	4.209
7174.4491	4.197	7191.3503	4.218	7177.6238	4.206	7190.6778	4.223
7175.4100	4.200	7191.3874	4.218	7177.6611	4.210	7191.5470	4.216
7175.4380	4.204	7191.4243	4.223	7177.7005	4.211	7191.5998	4.215
7175.4716	4.222	7192.3893	4.205	7178.5456	4.203	7191.6425	4.214
7176.3165	4.211	7192.4196	4.214	7178.5922	4.212	7191.6853	4.214
7176.3568	4.212	7193.3462	4.208	7178.6357	4.217	7193.5482	4.225
7176.3994	4.200	7193.3879	4.206	7178.6786	4.225	7193.5819	4.205
7176.4337	4.199	7193.4251	4.220	7178.7163	4.225	7193.6148	4.214
7176.4600	4.208	7193.4386	4.230	7179.5493	4.217	7193.6583	4.205
7177.2851	4.210	7194.3070	4.211	7179.6165	4.217	7195.5482	4.220
7177.3093	4.212	7194.3478	4.210	7179.6743	4.204	7195.5911	4.217
7177.3733	4.211	7194.3485	4.206	7179.6165	4.244	7195.6514	4.212
7177.4079	4.211	7194.3849	4.209	7179.6743	4.206		
7177.4404	4.210	7194.4224	4.217	7179.7185	4.205		

TABLE 2a. *(continued)*

Ome Ori = HR 1934 = HD 37490

HJD	b	HJD	b	HJD	b	HJD	b
7104.3758	4.540	7116.4210	4.467	7179.4165	4.390	7187.4209	4.421
7104.4218	4.532	7116.5009	4.443	7182.2866	4.417	7188.2899	4.428
7104.4570	4.526	7116.5241	4.433	7182.3201	4.399	7188.3423	4.436
7104.4914	4.524	7116.5425	4.429	7182.3516	4.398	7188.3853	4.426
7104.5470	4.520	7173.2978	4.391	7182.3530	4.401	7188.4224	4.429
7104.5776	4.513	7173.3434	4.395	7182.3862	4.397	7188.4595	4.426
7105.4051	4.522	7173.4002	4.387	7182.4134	4.395	7189.2904	4.434
7105.4291	4.530	7173.4390	4.386	7182.4647	4.388	7189.3390	4.440
7105.4685	4.517	7173.4682	4.382	7183.2918	4.405	7189.3868	4.430
7106.3715	4.550	7174.4246	4.386	7183.3219	4.408	7189.4270	4.422
7107.3560	4.520	7174.4596	4.391	7183.3594	4.404	7191.3163	4.452
7107.3808	4.532	7175.4128	4.388	7183.3890	4.397	7191.3535	4.453
7107.4049	4.524	7175.4416	4.386	7183.4211	4.399	7191.3907	4.442
7107.4333	4.520	7175.4753	4.405	7183.4733	4.390	7191.4272	4.449
7107.4576	4.517	7176.3201	4.397	7185.2840	4.416	7192.3922	4.449
7107.4859	4.517	7176.3598	4.392	7185.3224	4.408	7192.4227	4.442
7107.5119	4.514	7176.4030	4.398	7185.3560	4.415	7193.3494	4.458
7107.5403	4.510	7176.4363	4.389	7185.3851	4.413	7193.3909	4.447
7107.5660	4.512	7176.4629	4.378	7185.4111	4.413	7193.4279	4.450
7107.6006	4.507	7177.3126	4.401	7185.4379	4.411	7193.4413	4.454
7114.3497	4.542	7177.3765	4.400	7186.2885	4.414	7194.3104	4.456
7114.3722	4.544	7177.4109	4.395	7186.3217	4.409	7194.3516	4.460
7114.3958	4.522	7177.4432	4.389	7186.3516	4.414	7194.3883	4.453
7114.4197	4.537	7177.4752	4.402	7186.3806	4.409	7194.4253	4.444
7114.4427	4.541	7178.3263	4.401	7186.4071	4.414	7195.2859	4.470
7114.5293	4.516	7178.4004	4.397	7186.4357	4.419	7195.3250	4.465
7114.5474	4.514	7178.4347	4.397	7187.2916	4.418	7195.3622	4.455
7114.5656	4.503	7178.4645	4.389	7187.3456	4.424	7195.4032	4.452
7114.5834	4.498	7179.3721	4.405	7187.3832	4.413	7195.4340	4.438

19 Mon = HR 2648 = HD 52918

HJD	b	HJD	b	HJD	b	HJD	b
7173.3213	4.937	7178.3001	4.936	7185.3030	4.879	7191.3693	4.926
7173.3615	4.929	7178.3425	4.925	7185.3353	4.894	7191.4067	4.906
7173.4169	4.898	7178.4139	4.895	7185.3677	4.919	7191.4075	4.898
7173.4496	4.889	7178.4472	4.900	7185.3957	4.934	7191.4411	4.891
7173.4827	4.918	7178.4789	4.920	7185.4219	4.936	7191.4851	4.931
7173.5132	4.938	7178.5047	4.924	7185.4487	4.918	7191.5141	4.941
7173.5384	4.951	7178.5281	4.928	7185.4925	4.903	7191.5325	4.959
7173.5628	4.950	7178.5535	4.917	7185.5138	4.907	7192.4051	4.904
7174.4352	4.899	7179.3849	4.894	7185.5368	4.927	7192.4392	4.918
7174.4728	4.923	7179.4714	4.940	7186.3011	4.896	7192.4718	4.919
7174.4738	4.920	7179.5026	4.925	7186.3350	4.925	7192.4993	4.913
7174.5183	4.920	7179.5281	4.906	7186.3648	4.932	7192.5300	4.924
7175.4236	4.917	7179.5568	4.897	7186.3913	4.920	7193.3659	4.915
7175.4551	4.926	7180.5172	4.913	7186.4185	4.909	7193.4090	4.916
7175.4863	4.911	7180.5475	4.932	7186.4457	4.896	7193.4468	4.907
7175.5118	4.894	7182.3026	4.901	7186.4858	4.910	7193.4855	4.892
7175.5398	4.894	7182.3333	4.908	7186.5085	4.928	7193.5119	4.882
7176.3367	4.879	7182.3685	4.890	7187.3126	4.916	7194.3261	4.910
7176.3810	4.920	7182.3977	4.870	7187.3620	4.887	7194.3673	4.926
7176.4176	4.941	7182.4258	4.863	7187.3976	4.879	7194.4047	4.918
7176.4458	4.915	7182.4755	4.902	7187.4365	4.896	7194.4397	4.891
7176.4754	4.879	7182.4973	4.926	7187.4766	4.927	7194.4806	4.874
7176.5048	4.870	7182.5191	4.937	7187.5097	4.917	7194.5082	4.897
7176.5293	4.892	7182.5404	4.939	7188.3586	4.866	7195.3395	4.923
7176.5534	4.912	7183.3040	4.909	7188.3993	4.890	7195.3795	4.903
7177.3517	4.927	7183.3345	4.892	7188.4384	4.926	7195.4162	4.879
7177.3918	4.913	7183.3714	4.871	7188.4818	4.912	7195.4495	4.875
7177.4233	4.906	7183.4009	4.876	7188.5131	4.884	7195.4801	4.892
7177.4570	4.884	7183.4335	4.902	7189.3046	4.886	7195.5040	4.914
7177.4873	4.884	7183.4866	4.932	7189.3537	4.890	7198.4774	4.919
7177.5133	4.900	7183.5103	4.922	7189.4032	4.927		
7177.5437	4.925	7183.5322	4.907	7191.3316	4.944		

TABLE 2a. *(continued)*

FT Cma = HR 2492 = HD 48917

HJD	b	HJD	b	HJD	b	HJD	b
7173.3152	5.289	7178.3369	5.242	7183.3296	5.236	7191.3636	5.273
7173.3567	5.290	7178.4083	5.249	7183.3667	5.238	7191.3991	5.276
7173.4107	5.298	7178.4423	5.248	7183.3956	5.239	7191.4358	5.269
7173.4455	5.302	7178.4724	5.251	7183.4288	5.243	7191.4794	5.274
7173.4773	5.307	7178.5000	5.255	7183.4819	5.243	7191.5088	5.276
7173.5087	5.304	7178.5237	5.254	7183.5054	5.251	7191.5420	5.276
7173.5336	5.302	7178.5493	5.260	7186.2964	5.257	7192.4003	5.257
7173.5585	5.299	7178.5782	5.258	7186.3307	5.257	7192.4337	5.273
7173.5811	5.290	7179.3803	5.240	7186.3602	5.262	7192.4660	5.269
7174.4303	5.248	7179.4239	5.240	7186.3871	5.269	7192.4942	5.272
7174.4674	5.239	7179.4979	5.237	7186.4142	5.275	7192.5243	5.273
7174.5133	5.244	7179.5233	5.238	7186.4416	5.272	7193.3595	5.284
7175.4185	5.236	7179.5521	5.234	7186.4815	5.278	7193.4010	5.289
7175.4499	5.239	7179.5757	5.235	7186.5040	5.281	7193.4356	5.288
7175.4815	5.239	7180.5111	5.249	7186.5298	5.278	7193.4802	5.294
7175.5070	5.248	7180.5426	5.256	7186.5515	5.281	7193.5069	5.293
7175.5350	5.246	7180.5695	5.260	7187.3070	5.260	7193.5333	5.291
7176.3316	5.263	7182.2973	5.247	7187.3566	5.261	7194.3202	5.279
7176.3761	5.254	7182.3288	5.254	7187.3924	5.257	7194.3616	5.280
7176.4126	5.262	7182.3630	5.254	7187.4307	5.258	7194.3968	5.285
7176.4419	5.257	7182.3935	5.248	7187.4706	5.255	7194.4334	5.279
7176.4709	5.260	7182.4201	5.248	7187.5042	5.264	7194.4655	5.284
7176.4947	5.266	7182.4713	5.250	7187.5334	5.255	7194.5028	5.281
7176.5248	5.268	7182.4931	5.248	7188.3027	5.256	7194.5371	5.288
7176.5487	5.261	7182.5145	5.250	7188.3527	5.255	7195.2948	5.255
7176.5762	5.265	7182.5360	5.251	7188.3935	5.260	7195.3344	5.256
7177.3468	5.254	7182.5591	5.243	7188.4329	5.258	7195.3726	5.264
7177.3862	5.253	7183.2993	5.236	7188.4765	5.257	7195.4113	5.268
7177.4186	5.260	7183.3296	5.236	7188.5065	5.261	7195.4418	5.266
7177.4525	5.264	7183.3667	5.238	7188.5437	5.259	7195.4748	5.271
7177.4827	5.268	7183.3956	5.239	7189.2993	5.263	7195.4991	5.271
7177.5079	5.271	7183.4288	5.243	7189.3480	5.263	7195.5269	5.269
7177.5380	5.277	7183.4819	5.243	7189.3971	5.261	7198.4715	5.273
7177.5680	5.277	7183.5054	5.251	7189.4408	5.261		
7178.2944	5.244	7183.2993	5.236	7191.3261	5.275		

HR 3135 = HD 65875

HJD	b	HJD	b	HJD	b	HJD	b
7173.3242	6.587	7177.5749	6.590	7183.5343	6.585	7191.3343	6.584
7173.3632	6.570	7178.3035	6.596	7185.3061	6.579	7191.3723	6.586
7173.4204	6.577	7178.3454	6.581	7185.3378	6.573	7191.4102	6.586
7173.4514	6.575	7178.4168	6.584	7185.3699	6.576	7191.4437	6.583
7173.4852	6.588	7178.4494	6.580	7185.3978	6.569	7191.4877	6.597
7173.5151	6.583	7178.4810	6.583	7185.4241	6.581	7191.5166	6.599
7173.5410	6.588	7178.5067	6.592	7185.4508	6.578	7191.5351	6.602
7173.5647	6.583	7178.5309	6.589	7185.4947	6.588	7192.4076	6.583
7173.5880	6.590	7178.5556	6.592	7185.5160	6.594	7192.4420	6.591
7174.4370	6.581	7179.3870	6.576	7185.5400	6.600	7192.4745	6.596
7174.4767	6.584	7179.4749	6.594	7186.3039	6.572	7192.5021	6.596
7174.5207	6.591	7179.5052	6.591	7186.3374	6.578	7192.5327	6.604
7175.4256	6.580	7179.5301	6.583	7186.3675	6.582	7193.3694	6.593
7175.4574	6.591	7179.5588	6.587	7186.3936	6.583	7193.4118	6.590
7175.4892	6.593	7180.5200	6.585	7186.4215	6.590	7193.4495	6.598
7175.5142	6.596	7180.5496	6.584	7186.4479	6.590	7193.4880	6.602
7175.5419	6.608	7182.3053	6.589	7186.4880	6.599	7193.5146	6.605
7176.3399	6.591	7182.3357	6.573	7186.5111	6.601	7194.3289	6.605
7176.3839	6.590	7182.3712	6.579	7187.3155	6.583	7194.3701	6.592
7176.4199	6.601	7182.3999	6.585	7187.3647	6.586	7194.4075	6.596
7176.4476	6.596	7182.4279	6.588	7187.4003	6.591	7194.4426	6.601
7176.4777	6.598	7182.4776	6.597	7187.4390	6.590	7194.4833	6.602
7176.5073	6.596	7182.4994	6.600	7187.4792	6.600	7194.5109	6.604
7176.5315	6.604	7182.5212	6.609	7187.5124	6.601	7195.3422	6.601
7176.5555	6.598	7182.5425	6.603	7188.3615	6.589	7195.3824	6.601
7177.3545	6.586	7183.3064	6.586	7188.4023	6.582	7195.4189	6.595
7177.3945	6.593	7183.3370	6.587	7188.4410	6.593	7195.4520	6.596
7177.4264	6.592	7183.3739	6.588	7188.4845	6.598	7195.4826	6.593
7177.4591	6.592	7183.4039	6.594	7188.5161	6.605	7195.5066	6.593
7177.4901	6.598	7183.4359	6.593	7189.3073	6.581	7198.4800	6.593
7177.5154	6.591	7183.4902	6.596	7189.3566	6.586		
7177.5460	6.597	7183.5126	6.597	7189.4060	6.593		

TABLE 2a. *(continued)*

IU Vel = HR 3593 = HD 77320

HJD	b	HJD	b	HJD	b	HJD	b
7173.3240	6.012	7179.5307	6.010	7186.3676	6.004	7192.5526	6.003
7173.3629	6.006	7179.5595	6.008	7186.3942	6.012	7192.5672	6.007
7173.4214	6.008	7179.5791	6.003	7186.4227	6.017	7192.5798	6.005
7173.4515	6.010	7179.5895	6.000	7186.4484	6.017	7192.5928	6.014
7173.4860	6.017	7179.5999	6.008	7186.4885	6.020	7192.6043	6.018
7173.5150	6.017	7179.6117	6.008	7186.5122	6.018	7192.6153	6.024
7173.5422	6.021	7180.5203	5.992	7186.5339	6.014	7193.3726	6.052
7173.5643	6.027	7180.5497	5.991	7186.5553	6.017	7193.4144	6.049
7173.5885	6.030	7180.5728	5.985	7186.5670	6.016	7193.4539	6.032
7173.6082	6.035	7180.5833	5.983	7186.5787	6.012	7193.4895	6.007
7174.4370	6.007	7180.5952	5.982	7186.5915	6.012	7193.5173	5.994
7174.4779	6.028	7180.6059	5.976	7186.6063	6.017	7193.5381	5.995
7174.5215	6.026	7182.3060	6.028	7186.6194	6.017	7193.5514	5.996
7174.5882	5.997	7182.3361	6.009	7187.3663	5.972	7193.5628	5.998
7175.4258	6.000	7182.3719	5.989	7187.4027	5.970	7193.5749	5.997
7175.4581	6.025	7182.4005	5.982	7187.4402	5.975	7193.5863	6.001
7175.4895	6.011	7182.4290	5.988	7187.4836	5.984	7193.5996	6.003
7175.5158	6.026	7182.4777	5.983	7187.5140	5.995	7193.6124	6.000
7176.3412	5.974	7182.5001	5.984	7187.5390	6.004	7194.3315	6.046
7176.3848	5.968	7182.5215	5.985	7187.5563	6.012	7194.3732	6.059
7176.4205	5.982	7182.5442	5.987	7187.5690	6.011	7194.4106	6.065
7176.4478	5.990	7182.5630	5.985	7187.5825	6.014	7194.4442	6.051
7176.4779	6.007	7182.5758	5.989	7187.5971	6.004	7194.4856	6.028
7176.5077	6.023	7182.5871	5.991	7187.6101	6.001	7194.5143	6.009
7176.5319	6.028	7182.5980	5.995	7188.3633	5.985	7194.5419	6.011
7176.5554	6.039	7182.6086	5.995	7188.4047	5.992	7194.5549	6.004
7176.5805	6.043	7182.6191	6.003	7188.4429	6.004	7194.5698	6.002
7176.5941	6.040	7183.3069	6.013	7188.4863	5.997	7194.5812	6.000
7177.3554	6.021	7183.3376	6.018	7188.5176	5.989	7194.5933	5.995
7177.3949	6.012	7183.3747	6.029	7188.5488	5.979	7194.6059	5.991
7177.4273	6.005	7183.4053	6.029	7188.5620	5.971	7194.6172	5.998
7177.4600	5.996	7183.4366	6.027	7188.5758	5.976	7195.3442	5.987
7177.4907	5.995	7183.4906	6.017	7188.5881	5.979	7195.3892	5.990
7177.5164	5.981	7183.5131	6.010	7188.6024	5.979	7195.4203	6.003
7177.5469	5.972	7183.5347	6.009	7189.3619	6.029	7195.4532	6.006
7177.5758	5.974	7185.3079	5.996	7189.4086	6.010	7195.4840	6.007
7177.5965	5.979	7185.3389	5.986	7191.3359	6.001	7195.5078	6.015
7177.6100	5.983	7185.3706	5.984	7191.3737	6.038	7195.5319	6.025
7178.3046	6.013	7185.3985	6.003	7191.4120	6.052	7195.5435	6.024
7178.3472	6.021	7185.4251	6.010	7191.4455	6.052	7195.5562	6.025
7178.4172	6.021	7185.4515	6.015	7191.4898	6.030	7195.5691	6.020
7178.4501	6.018	7185.4956	6.018	7191.5189	6.002	7195.5827	6.023
7178.4812	6.013	7185.5164	6.014	7191.5472	5.986	7195.5948	6.023
7178.5071	6.004	7185.5406	5.999	7191.5643	5.979	7195.6066	6.026
7178.5324	6.010	7185.5591	5.989	7191.5778	5.983	7195.6183	6.023
7178.5559	6.013	7185.5698	5.979	7191.5909	5.978	7198.4820	5.992
7178.5819	6.014	7185.5799	5.979	7191.6030	5.977	7199.5780	6.000
7178.5919	6.014	7185.5901	5.976	7191.6147	5.987	7199.5896	6.005
7178.6029	6.010	7185.6003	5.976	7192.4093	6.033	7199.6008	5.996
7178.6180	6.015	7185.6108	5.970	7192.4438	6.029	7199.6118	5.998
7179.4002	5.984	7185.6223	5.968	7192.4760	6.023		
7179.4761	6.013	7186.3047	6.000	7192.5056	6.015		
7179.5055	6.016	7186.3385	6.001	7192.5347	6.004		

TABLE 2a. *(continued)*

HD 91188

HJD	b	HJD	b	HJD	b	HJD	b
7173.3273	6.631	7180.6129	6.629	7187.5889	6.633	7194.5860	6.617
7173.3664	6.616	7182.3101	6.600	7187.6025	6.634	7194.5980	6.616
7173.4260	6.615	7182.3402	6.603	7187.6150	6.635	7194.6106	6.617
7173.4549	6.613	7182.3759	6.602	7188.3691	6.625	7194.6215	6.617
7173.4908	6.605	7182.4040	6.599	7188.4112	6.612	7195.3495	6.608
7173.5180	6.605	7182.4333	6.601	7188.4484	6.608	7195.3942	6.598
7173.5469	6.600	7182.4814	6.607	7188.4923	6.612	7195.4254	6.594
7173.5678	6.602	7182.5037	6.607	7188.5242	6.613	7195.4579	6.590
7173.5944	6.603	7182.5253	6.615	7188.5542	6.608	7195.4885	6.592
7174.4401	6.633	7182.5478	6.610	7188.5678	6.610	7195.5126	6.598
7174.4822	6.649	7182.5669	6.612	7188.5805	6.609	7195.5365	6.594
7174.5276	6.661	7182.5803	6.612	7188.5942	6.612	7195.5480	6.596
7175.4293	6.616	7182.5906	6.612	7188.6086	6.613	7195.5610	6.595
7175.4628	6.621	7182.6018	6.612	7189.3764	6.642	7195.5742	6.598
7175.4927	6.616	7182.6124	6.613	7189.4149	6.640	7195.5875	6.601
7175.5197	6.624	7183.3114	6.664	7191.3414	6.618	7195.5997	6.604
7176.3468	6.605	7183.3486	6.657	7191.3792	6.618	7195.6111	6.606
7176.3889	6.608	7183.3794	6.657	7191.4174	6.626	7195.6230	6.603
7176.4253	6.616	7183.4100	6.659	7191.4515	6.622	7198.4872	6.596
7176.4508	6.604	7183.4420	6.655	7191.4951	6.617	7199.5828	6.628
7176.4819	6.604	7183.4941	6.653	7191.5241	6.616	7199.5942	6.629
7176.5122	6.606	7183.5168	6.644	7191.5529	6.618	7199.6051	6.627
7176.5362	6.606	7183.5383	6.644	7191.5696	6.615	7199.6162	6.623
7176.5603	6.608	7185.3124	6.614	7191.5828	6.613	7199.6209	6.626
7176.5854	6.601	7185.3453	6.616	7191.5959	6.613	7199.6252	6.622
7176.5990	6.615	7185.3747	6.610	7191.6073	6.612	7230.5686	6.610
7177.3616	6.642	7185.4020	6.610	7191.6190	6.613	7231.4495	6.622
7177.3992	6.649	7185.4290	6.612	7192.4138	6.610	7231.5820	6.650
7177.4319	6.653	7185.4554	6.621	7192.4533	6.617	7233.3353	6.642
7177.4642	6.649	7185.4992	6.618	7192.4808	6.621	7233.3940	6.642
7177.4950	6.647	7185.5203	6.620	7192.5110	6.619	7233.4372	6.641
7177.5206	6.643	7185.5447	6.620	7192.5397	6.609	7233.4745	6.644
7177.5514	6.648	7185.5627	6.623	7192.5579	6.605	7233.5110	6.637
7177.5798	6.651	7185.5735	6.621	7192.5718	6.611	7233.5470	6.627
7177.6020	6.647	7185.5834	6.625	7192.5848	6.607	7233.5798	6.626
7177.6146	6.643	7185.5937	6.619	7192.5969	6.608	7235.2973	6.613
7178.3104	6.614	7185.6040	6.618	7192.6085	6.605	7235.3407	6.615
7178.3519	6.612	7185.6148	6.620	7192.6198	6.601	7235.3789	6.621
7178.4217	6.614	7186.3102	6.643	7193.3811	6.613	7235.4111	6.623
7178.4542	6.613	7186.3424	6.632	7193.4191	6.623	7235.4447	6.621
7178.4847	6.611	7186.3715	6.640	7193.4588	6.625	7235.4769	6.627
7178.5112	6.612	7186.3984	6.645	7193.4945	6.631	7235.5096	6.630
7178.5363	6.611	7186.4270	6.639	7193.5219	6.628	7235.5415	6.624
7178.5599	6.613	7186.4525	6.640	7193.5432	6.633	7235.5730	6.625
7178.5854	6.614	7186.4921	6.637	7193.5556	6.628	7236.2622	6.641
7178.5959	6.611	7186.5174	6.637	7193.5670	6.635	7236.3103	6.635
7178.6098	6.613	7186.5395	6.634	7193.5794	6.638	7236.3472	6.627
7179.4046	6.619	7186.5596	6.631	7193.5907	6.630	7236.3927	6.616
7179.4827	6.607	7186.5718	6.635	7193.6043	6.637	7236.4314	6.613
7179.5092	6.607	7186.5831	6.632	7193.6174	6.637	7236.4688	6.611
7179.5372	6.607	7186.5976	6.632	7193.6219	6.637	7236.5076	6.603
7179.5635	6.613	7186.6115	6.629	7194.3409	6.623	7236.5422	6.604
7179.5828	6.607	7187.3725	6.616	7194.3785	6.619	7236.5768	6.609
7179.5929	6.611	7187.4088	6.620	7194.4164	6.623	7237.2659	6.616
7179.6039	6.609	7187.4495	6.625	7194.4503	6.629	7237.2990	6.614
7180.5269	6.635	7187.4909	6.630	7194.4905	6.627	7237.3353	6.620
7180.5541	6.629	7187.5197	6.633	7194.5209	6.623	7237.3703	6.627
7180.5765	6.625	7187.5456	6.631	7194.5471	6.620	7237.4041	6.630
7180.5875	6.626	7187.5610	6.630	7194.5625	6.616	7237.4374	6.636
7180.5992	6.630	7187.5744	6.637	7194.5742	6.619	7237.4701	6.640

TABLE 2a. *(continued)*

HD 91188

HJD	b	HJD	b	HJD	b	HJD	b
7238.2670	6.625	7242.3017	6.606	7247.3837	6.626	7263.3715	6.625
7238.2996	6.619	7242.3348	6.606	7247.4170	6.628	7263.4070	6.624
7238.3326	6.623	7242.3705	6.607	7247.4545	6.632	7264.2477	6.608
7238.3657	6.624	7242.4079	6.606	7247.4898	6.640	7265.2782	6.629
7238.4006	6.624	7242.4409	6.601	7247.5261	6.643	7265.3114	6.623
7238.4348	6.626	7242.4745	6.609	7248.2814	6.600	7265.3887	6.615
7238.4688	6.631	7242.5068	6.610	7248.3343	6.609	7265.4394	6.614
7238.5020	6.632	7242.5532	6.618	7248.3788	6.612	7265.4898	6.612
7238.5345	6.620	7243.2753	6.648	7248.4389	6.612	7266.2446	6.623
7238.5698	6.628	7243.3090	6.641	7250.2877	6.663	7266.2806	6.629
7239.2650	6.628	7243.3422	6.645	7250.3480	6.636	7266.3137	6.633
7240.2646	6.626	7243.3737	6.642	7250.3967	6.629	7266.3466	6.632
7240.2975	6.622	7243.4068	6.641	7251.3075	6.598	7266.4114	6.635
7240.3325	6.622	7243.4395	6.634	7251.3633	6.602	7266.4685	6.635
7240.3668	6.621	7243.4746	6.629	7251.4049	6.622	7267.2505	6.598
7240.4017	6.618	7243.5066	6.631	7252.3099	6.636	7267.2970	6.594
7240.4348	6.621	7243.5386	6.629	7252.3465	6.631	7267.3477	6.601
7240.4692	6.621	7244.2654	6.615	7252.3821	6.625	7268.2438	6.646
7240.5019	6.629	7245.4871	6.597	7252.4168	6.620	7268.2918	6.645
7240.5344	6.632	7245.5188	6.592	7260.2656	6.615	7268.3437	6.643
7240.5678	6.620	7246.2721	6.633	7260.3168	6.613	7268.3935	6.628
7241.2669	6.615	7246.3060	6.626	7260.3902	6.629	7268.4466	6.623
7241.2988	6.618	7246.3378	6.626	7260.3938	6.619	7270.2437	6.608
7241.3347	6.623	7246.3699	6.626	7262.2594	6.617	7270.2945	6.605
7241.3681	6.620	7246.4010	6.633	7262.3032	6.618	7270.3482	6.599
7241.4020	6.626	7246.4348	6.629	7262.3422	6.626	7270.4014	6.599
7241.4344	6.627	7246.4712	6.623	7262.3778	6.618	7270.4573	6.600
7241.4675	6.623	7246.5036	6.627	7262.4138	6.620	7274.2508	6.636
7241.5026	6.625	7246.5352	6.618	7263.2619	6.622	7274.3125	6.628
7241.5368	6.625	7247.3132	6.625	7263.3010	6.620	7274.3761	6.625
7242.2679	6.615	7247.3501	6.626	7263.3386	6.620	7274.4335	6.626

TABLE 2a. *(continued)*

HR 4618 = HD 105382

HJD	b	HJD	b	HJD	b	HJD	b
7246.5916	4.407	7263.4268	4.400	7930.4920	4.388	7946.3355	4.395
7246.6185	4.403	7263.4624	4.398	7930.5305	4.390	7946.3841	4.394
7247.6033	4.419	7263.4973	4.396	7930.5657	4.389	7946.4313	4.394
7247.6195	4.415	7263.5341	4.400	7930.6000	4.389	7946.4913	4.397
7248.3020	4.403	7264.2664	4.414	7931.3561	4.421	7946.5408	4.402
7248.3517	4.384	7265.2964	4.397	7931.3877	4.416	7946.5872	4.403
7248.3982	4.380	7265.4066	4.402	7931.4283	4.417	7946.6134	4.406
7248.4444	4.396	7265.4580	4.409	7931.4668	4.415	7948.3336	4.415
7248.5654	4.401	7265.5079	4.408	7931.5038	4.410	7948.3793	4.413
7250.3178	4.415	7265.5424	4.405	7931.5452	4.408	7948.4269	4.407
7250.3740	4.393	7265.5812	4.413	7931.5773	4.412	7948.4908	4.401
7250.4191	4.398	7266.2643	4.387	7931.6124	4.401	7949.3432	4.417
7250.4769	4.402	7266.2992	4.386	7933.2962	4.391	7949.3919	4.419
7250.5260	4.391	7266.3327	4.386	7933.3263	4.387	7949.4440	4.421
7251.3319	4.406	7266.3646	4.389	7933.3560	4.390	7949.5029	4.421
7251.3848	4.412	7266.4303	4.391	7933.3855	4.385	7950.4208	4.403
7251.4242	4.412	7266.4874	4.392	7933.4154	4.388	7950.4744	4.401
7251.4682	4.418	7266.5211	4.389	7933.4522	4.391	7951.2987	4.391
7251.5062	4.417	7266.5618	4.398	7933.4886	4.392	7951.3696	4.389
7251.5417	4.410	7267.2688	4.402	7933.5245	4.392	7951.4050	4.391
7251.5792	4.413	7267.3154	4.391	7933.5562	4.394	7951.4579	4.380
7252.3303	4.392	7267.3659	4.401	7933.5866	4.394	7951.5020	4.387
7252.3666	4.398	7268.2627	4.430	7933.6190	4.403	7951.5396	4.387
7252.4003	4.397	7268.3100	4.413	7934.3060	4.412	7951.5787	4.389
7252.4381	4.412	7268.3615	4.409	7934.3355	4.401	7951.6137	4.389
7252.4823	4.415	7268.4153	4.409	7934.3674	4.386	7952.3164	4.405
7252.5227	4.410	7268.4644	4.410	7934.3978	4.390	7952.3527	4.410
7252.5616	4.414	7270.2635	4.393	7934.4420	4.389	7952.3962	4.397
7252.5952	4.414	7270.3137	4.388	7934.4864	4.391	7952.5809	4.391
7260.2944	4.421	7270.3672	4.388	7934.5272	4.389	7952.6128	4.385
7260.3407	4.408	7270.4212	4.397	7934.5586	4.386	7953.2955	4.415
7261.4627	4.399	7270.4756	4.402	7934.5906	4.386	7953.3480	4.417
7261.5023	4.401	7270.5091	4.404	7934.6211	4.390	7953.3943	4.418
7261.5384	4.406	7270.5427	4.395	7939.2893	4.410	7953.4378	4.415
7261.5696	4.406	7274.2726	4.396	7939.3183	4.407	7953.4874	4.414
7262.2832	4.394	7274.3350	4.397	7939.5479	4.392	7953.5298	4.414
7262.3234	4.395	7274.3975	4.396	7942.2912	4.389	7953.5718	4.410
7262.3613	4.391	7274.4567	4.401	7942.3204	4.383	7953.6074	4.404
7262.3979	4.389	7274.4942	4.406	7942.5366	4.396	7954.3216	4.392
7262.4322	4.390	7274.5319	4.410	7944.3341	4.419	7954.3626	4.402
7262.4696	4.392	7929.4396	4.384	7944.3890	4.408	7954.3967	4.405
7262.5044	4.390	7929.4863	4.382	7944.4427	4.410	7956.4841	4.388
7262.5424	4.388	7929.5274	4.387	7944.5059	4.411	7956.5246	4.385
7262.5760	4.393	7929.5683	4.385	7944.5583	4.416	7956.5807	4.387
7263.2857	4.405	7929.5970	4.390	7944.6075	4.409	7956.6172	4.392
7263.3232	4.402	7929.6322	4.397	7945.5158	4.419		
7263.3569	4.402	7930.4109	4.397	7945.5726	4.418		
7263.3911	4.401	7930.4492	4.396	7945.6176	4.418		

TABLE 2a. *(continued)*

Del Cen = HR 4621 = HD 105435

HJD	b	HJD	b	HJD	b	HJD	b
7246.5955	2.552	7265.4600	2.546	7931.3918	2.591	7946.5479	2.601
7246.6204	2.551	7265.5096	2.543	7931.4326	2.592	7946.5936	2.598
7247.6050	2.566	7265.5444	2.538	7931.4707	2.594	7946.6205	2.594
7247.6213	2.565	7265.5830	2.569	7931.5081	2.588	7948.3420	2.583
7248.3037	2.580	7266.2666	2.572	7931.5499	2.589	7948.3866	2.575
7248.3534	2.559	7266.3008	2.568	7931.5815	2.584	7948.4339	2.573
7248.3998	2.550	7266.3343	2.570	7931.6160	2.585	7948.4991	2.575
7248.5673	2.570	7266.3663	2.570	7933.2999	2.595	7949.3518	2.590
7250.3224	2.590	7266.4319	2.580	7933.3301	2.591	7949.3998	2.581
7250.3243	2.577	7266.4893	2.586	7933.3600	2.605	7949.4512	2.581
7250.3764	2.561	7266.5231	2.588	7933.3893	2.612	7949.5110	2.587
7250.4214	2.568	7266.5638	2.588	7933.4190	2.609	7950.4273	2.583
7250.4800	2.577	7267.2705	2.580	7933.4560	2.601	7950.4800	2.577
7250.5300	2.563	7267.3171	2.572	7933.4923	2.606	7951.3042	2.586
7251.3345	2.579	7267.3676	2.589	7933.5289	2.609	7951.3752	2.607
7251.3867	2.590	7268.2645	2.598	7933.5599	2.605	7951.4110	2.612
7251.4260	2.594	7268.3119	2.587	7933.5931	2.601	7951.4651	2.583
7251.4702	2.591	7268.3631	2.587	7933.6224	2.594	7951.5077	2.580
7251.5085	2.588	7268.4170	2.600	7934.3098	2.590	7951.5447	2.583
7251.5433	2.569	7268.4662	2.591	7934.3391	2.591	7951.5846	2.580
7251.5808	2.577	7270.2654	2.584	7934.3711	2.589	7951.6190	2.576
7252.3321	2.588	7270.3155	2.585	7934.4017	2.589	7951.6340	2.580
7252.3684	2.590	7270.3689	2.589	7934.4456	2.587	7952.3220	2.575
7252.4020	2.592	7270.4229	2.602	7934.4904	2.598	7952.3623	2.571
7252.4402	2.598	7270.4773	2.601	7934.5310	2.605	7952.4027	2.575
7252.4840	2.588	7270.5112	2.591	7934.5623	2.604	7952.5863	2.602
7252.5245	2.569	7270.5450	2.581	7934.5941	2.596	7952.6183	2.593
7252.5634	2.575	7274.2751	2.592	7934.6246	2.595	7952.6331	2.602
7252.5975	2.585	7274.3371	2.600	7939.2939	2.588	7953.3007	2.595
7260.2963	2.586	7274.3993	2.587	7939.3233	2.576	7953.3536	2.590
7260.3427	2.575	7274.4585	2.579	7939.5523	2.603	7953.3996	2.584
7261.4649	2.567	7274.4957	2.569	7942.2961	2.576	7953.4433	2.586
7261.5041	2.576	7274.5340	2.564	7942.3275	2.567	7953.4929	2.583
7261.5402	2.569	7927.4697	2.601	7944.3440	2.581	7953.5352	2.578
7261.5723	2.569	7929.4507	2.578	7944.3988	2.583	7953.5772	2.580
7263.2876	2.584	7929.4904	2.589	7944.4501	2.586	7953.6131	2.588
7263.3251	2.578	7929.5316	2.595	7944.5129	2.584	7953.6283	2.597
7263.3587	2.581	7929.5729	2.596	7944.5656	2.590	7954.3268	2.595
7263.3930	2.575	7929.6010	2.599	7944.6151	2.582	7954.3680	2.591
7263.4289	2.569	7930.4148	2.588	7945.5235	2.595	7954.4022	2.586
7263.4643	2.567	7930.4537	2.585	7945.5796	2.590	7956.4897	2.599
7263.4991	2.564	7930.4962	2.590	7945.6245	2.587	7956.5861	2.593
7263.5360	2.579	7930.5347	2.602	7946.3428	2.594	7956.6226	2.589
7264.2680	2.577	7930.5697	2.597	7946.3923	2.586		
7265.2981	2.562	7930.6038	2.600	7946.4396	2.591		
7265.4083	2.559	7931.3600	2.579	7946.4978	2.591		

TABLE 2a. *(continued)*

39 Cru = HR 4823 = HD 110335

HJD	b	HJD	b	HJD	b	HJD	b
8335.3167	4.943	8337.5947	4.961	8339.4863	4.953	8343.5086	4.955
8335.3551	4.945	8337.6234	4.949	8339.5314	4.955	8343.5536	4.957
8335.3928	4.945	8338.2633	4.957	8339.5679	4.956	8343.5940	4.953
8335.4524	4.949	8338.2934	4.951	8339.5985	4.956	8344.4876	4.957
8335.5206	4.957	8338.3257	4.954	8339.6295	4.954	8344.5392	4.955
8335.5565	4.948	8338.3574	4.955	8340.2624	4.950	8344.5855	4.952
8335.5938	4.951	8338.3896	4.951	8340.2960	4.952	8346.5066	4.958
8335.6220	4.951	8338.4252	4.948	8340.3280	4.960	8346.5459	4.953
8336.2652	4.940	8338.4704	4.944	8340.3655	4.957	8346.5836	4.956
8336.2974	4.948	8338.5073	4.948	8340.4024	4.958	8346.6082	4.961
8336.3307	4.950	8338.5434	4.945	8340.4416	4.956	8347.3107	4.950
8336.5261	4.957	8338.5789	4.950	8340.4815	4.957	8347.3585	4.953
8337.2636	4.958	8338.6083	4.945	8340.5222	4.958	8347.4093	4.953
8337.2950	4.958	8338.6340	4.947	8340.5707	4.957	8347.4605	4.951
8337.3277	4.954	8339.2630	4.944	8340.6023	4.956	8347.5183	4.955
8337.3629	4.945	8339.2954	4.939	8341.4748	4.950	8347.5592	4.953
8337.4498	4.958	8339.3308	4.949	8341.5099	4.946	8347.5993	4.954
8337.4854	4.950	8339.3675	4.951	8341.5444	4.944		
8337.5286	4.955	8339.4073	4.950	8343.4022	4.958		
8337.5623	4.954	8339.4470	4.954	8343.4529	4.962		

Lam Cru = HR 4897 = HD 112078

HJD	b	HJD	b	HJD	b	HJD	b
8335.3179	4.566	8337.5960	4.579	8339.4876	4.575	8343.5106	4.568
8335.3564	4.566	8337.6246	4.574	8339.5329	4.572	8343.5555	4.561
8335.3940	4.570	8338.2644	4.558	8339.5694	4.562	8343.5960	4.556
8335.4536	4.562	8338.2945	4.552	8339.5997	4.554	8344.4895	4.555
8335.5217	4.565	8338.3269	4.566	8339.6306	4.555	8344.5410	4.562
8335.5579	4.557	8338.3588	4.568	8340.2637	4.557	8344.5872	4.565
8335.5950	4.557	8338.3908	4.571	8340.2971	4.562	8346.5088	4.575
8335.6234	4.556	8338.4264	4.569	8340.3291	4.563	8346.5476	4.568
8336.2664	4.556	8338.4716	4.557	8340.3668	4.567	8346.5853	4.568
8336.2988	4.550	8338.5086	4.556	8340.4037	4.569	8346.6101	4.565
8336.3320	4.554	8338.5454	4.552	8340.4431	4.559	8347.3125	4.555
8336.5273	4.573	8338.5802	4.552	8340.4828	4.555	8347.3603	4.560
8337.2650	4.579	8338.6095	4.559	8340.5235	4.559	8347.4109	4.558
8337.2961	4.579	8338.6352	4.559	8340.5719	4.559	8347.4624	4.557
8337.3288	4.566	8339.2643	4.557	8340.6035	4.592	8347.5203	4.564
8337.3642	4.534	8339.2967	4.554	8341.4759	4.566	8347.5608	4.564
8337.4509	4.551	8339.3321	4.557	8341.5110	4.564	8347.6013	4.567
8337.4864	4.553	8339.3688	4.556	8341.5455	4.562		
8337.5297	4.554	8339.4088	4.554	8343.4044	4.561		
8337.5635	4.566	8339.4483	4.561	8343.4550	4.572		

Mu Pic = HR 2412 = HD 46860

HJD	b	HJD	b	HJD	b	HJD	b
8272.4949	5.683	8274.4568	5.689	8276.5134	5.689	8281.4114	5.692
8272.5308	5.676	8274.4912	5.683	8276.5440	5.689	8281.4723	5.698
8273.3132	5.739	8274.5230	5.676	8276.5717	5.693	8281.5013	5.693
8273.3496	5.686	8274.5485	5.693	8279.4733	5.689	8281.5322	5.683
8273.3827	5.688	8275.3182	5.695	8279.5195	5.729	8281.5620	5.689
8273.4069	5.692	8275.3496	5.690	8280.3111	5.688	8283.3083	5.685
8273.4308	5.692	8275.3794	5.685	8280.3408	5.690	8285.3096	5.688
8273.4665	5.697	8275.4052	5.689	8280.3726	5.692	8285.3422	5.697
8273.5013	5.699	8275.4300	5.688	8280.4083	5.689	8285.3721	5.692
8273.5313	5.694	8275.4555	5.692	8280.4395	5.690	8285.4025	5.695
8273.5561	5.696	8275.4829	5.688	8280.4893	5.690	8285.4351	5.691
8274.3104	5.694	8275.5122	5.687	8280.5270	5.693	8285.4859	5.694
8274.3524	5.693	8275.5387	5.697	8280.5548	5.685	8285.5148	5.689
8274.3825	5.691	8275.5640	5.681	8281.3092	5.693	8285.5433	5.692
8274.4070	5.683	8276.4650	5.685	8281.3434	5.693		
8274.4319	5.690	8276.4892	5.690	8281.3754	5.689		

TABLE 2b. *Strömgren-b photometry for periodic Be stars observed at ESO. The heliocentric Julian day is with respect to JD 2440000.000.*

Lam Eri = HR 1679 = HD 33328

HJD	b	HJD	b	HJD	b	HJD	b
7170.5695	4.212	7175.6232	4.219	7181.5844	4.217	7186.7017	4.202
7170.6230	4.212	7175.6592	4.211	7181.6191	4.219	7187.5438	4.212
7170.6689	4.219	7175.6919	4.206	7181.6604	4.212	7187.5819	4.212
7171.5899	4.218	7175.7231	4.209	7181.7073	4.216	7187.6176	4.211
7171.6289	4.225	7175.7592	4.204	7182.5501	4.212	7187.6601	4.218
7171.6700	4.230	7176.5534	4.222	7182.5842	4.208	7187.6978	4.212
7171.7074	4.224	7176.5892	4.219	7182.6208	4.208	7188.5564	4.224
7171.7438	4.231	7176.6321	4.219	7182.6604	4.205	7188.5909	4.222
7172.5567	4.219	7176.6644	4.222	7182.6955	4.210	7188.6248	4.219
7172.5994	4.212	7176.7015	4.220	7182.7337	4.208	7188.6642	4.218
7172.6375	4.207	7176.7361	4.214	7183.5458	4.215	7190.5484	4.212
7172.6854	4.212	7177.5484	4.208	7183.5847	4.212	7190.5893	4.217
7172.7297	4.207	7177.5882	4.215	7183.6257	4.216	7190.6370	4.209
7172.7678	4.207	7177.6238	4.206	7183.6718	4.218	7190.6778	4.223
7173.5567	4.208	7177.6611	4.210	7183.7132	4.219	7191.5470	4.216
7173.5946	4.213	7177.7005	4.211	7184.5482	4.207	7191.5998	4.215
7173.6336	4.210	7178.5456	4.203	7184.5892	4.212	7191.6425	4.214
7173.6737	4.206	7178.5922	4.212	7184.6292	4.211	7191.6853	4.214
7173.7116	4.212	7178.6357	4.217	7184.6668	4.208	7193.5482	4.225
7173.7493	4.222	7178.6786	4.225	7184.7033	4.217	7193.5819	4.205
7174.5588	4.220	7178.7163	4.225	7185.5516	4.207	7193.6148	4.214
7174.5944	4.213	7179.5493	4.217	7185.5977	4.208	7193.6583	4.205
7174.6326	4.213	7179.7185	4.205	7185.6310	4.213	7195.5482	4.220
7174.6737	4.214	7180.5467	4.207	7185.6701	4.219	7195.5911	4.217
7174.7082	4.203	7180.6005	4.210	7186.5459	4.220	7195.6514	4.212
7174.7453	4.214	7180.6516	4.206	7186.5858	4.217		
7175.5509	4.213	7180.6953	4.211	7186.6186	4.212		
7175.5838	4.215	7181.5452	4.222	7186.6625	4.208		

Ome Ori = HR 1934 = HD 37490

HJD	b	HJD	b	HJD	b	HJD	b
7170.5674	4.402	7175.5888	4.421	7181.5877	4.432	7186.7059	4.457
7170.6266	4.403	7175.6264	4.423	7181.6222	4.441	7187.5477	4.457
7170.6731	4.411	7175.6623	4.420	7181.6635	4.440	7187.5852	4.460
7170.6788	4.397	7175.6950	4.419	7181.7114	4.448	7187.6207	4.458
7171.5976	4.402	7175.7264	4.427	7182.5533	4.435	7187.6631	4.460
7171.6325	4.402	7175.7629	4.432	7182.5878	4.436	7187.7028	4.454
7171.6733	4.405	7176.5566	4.418	7182.6240	4.442	7188.5598	4.459
7171.7108	4.407	7176.5930	4.414	7182.6636	4.445	7188.5940	4.457
7171.7478	4.409	7176.6353	4.420	7182.6989	4.451	7188.6284	4.455
7172.5603	4.406	7176.6675	4.419	7182.7373	4.446	7188.6679	4.457
7172.6031	4.403	7176.7047	4.421	7183.5494	4.444	7190.5524	4.461
7172.6409	4.403	7176.7399	4.422	7183.5889	4.442	7190.5928	4.459
7172.6932	4.409	7177.5519	4.420	7183.6297	4.448	7190.6409	4.451
7172.7335	4.410	7177.5923	4.426	7183.6759	4.453	7190.6817	4.455
7172.7722	4.417	7177.6277	4.420	7183.7174	4.451	7191.5523	4.470
7173.5606	4.412	7177.6654	4.423	7184.5531	4.440	7191.6039	4.464
7173.5979	4.413	7177.7046	4.431	7184.5924	4.448	7191.6465	4.460
7173.6372	4.418	7178.5502	4.413	7184.6331	4.447	7191.6901	4.456
7173.6770	4.417	7178.5958	4.420	7184.6712	4.450	7193.5515	4.460
7173.7151	4.418	7178.6411	4.425	7184.7068	4.453	7193.5850	4.453
7173.7535	4.426	7178.6825	4.425	7185.5629	4.445	7193.6181	4.464
7174.5623	4.415	7178.7206	4.428	7185.6009	4.448	7193.6622	4.451
7174.5978	4.412	7179.5530	4.421	7185.6343	4.452	7195.5516	4.457
7174.6356	4.414	7180.5505	4.428	7185.6739	4.456	7195.5944	4.454
7174.6769	4.415	7180.6055	4.427	7186.5493	4.463	7195.6551	4.447
7174.7118	4.413	7180.6549	4.430	7186.5900	4.455		
7174.7491	4.430	7180.6989	4.439	7186.6216	4.458		
7175.5544	4.419	7181.5492	4.431	7186.6657	4.455		

TABLE 2b. *(continued)*

FT Cma = HR2492 = HD 48917

HJD	b	HJD	b	HJD	b	HJD	b
7170.5852	5.260	7175.7939	5.259	7181.7760	5.249	7187.7097	5.274
7170.6328	5.254	7175.8297	5.262	7181.8120	5.245	7187.7461	5.277
7170.6863	5.251	7176.5606	5.277	7182.5570	5.263	7187.7793	5.279
7171.6014	5.244	7176.5981	5.274	7182.5913	5.267	7188.5655	5.268
7171.6363	5.255	7176.6387	5.271	7182.6276	5.260	7188.6005	5.266
7171.6769	5.263	7176.6706	5.270	7182.6676	5.260	7188.6332	5.269
7171.7148	5.273	7176.7080	5.267	7182.7026	5.260	7188.6717	5.271
7171.7530	5.282	7176.7435	5.263	7182.7413	5.258	7188.7045	5.276
7171.7541	5.284	7176.7774	5.260	7182.7752	5.255	7188.7425	5.278
7171.7844	5.290	7176.8193	5.256	7182.8094	5.258	7188.7829	5.285
7171.8184	5.290	7177.5566	5.287	7182.8334	5.254	7190.5574	5.301
7172.5644	5.275	7177.5959	5.291	7183.5534	5.266	7190.6009	5.296
7172.6069	5.281	7177.6312	5.284	7183.5933	5.262	7190.6457	5.290
7172.6444	5.278	7177.6691	5.284	7183.6337	5.268	7190.6869	5.292
7172.7005	5.282	7177.7117	5.281	7183.6817	5.266	7190.7258	5.285
7172.7393	5.280	7177.7481	5.276	7183.7232	5.267	7190.7651	5.275
7172.7765	5.267	7177.8004	5.266	7183.7643	5.259	7191.5581	5.286
7172.8069	5.261	7177.8372	5.271	7184.5581	5.250	7191.6093	5.284
7172.8409	5.260	7178.5544	5.267	7184.5961	5.250	7191.6523	5.292
7173.5651	5.312	7178.6012	5.267	7184.6369	5.250	7191.6956	5.292
7173.6010	5.296	7178.6486	5.267	7184.6752	5.255	7191.7351	5.295
7173.6407	5.291	7178.6870	5.267	7184.7108	5.253	7191.7689	5.291
7173.6805	5.279	7178.7255	5.263	7184.7444	5.261	7193.5560	5.302
7173.7188	5.266	7178.7622	5.266	7184.7821	5.266	7193.5897	5.298
7173.7579	5.258	7178.7967	5.252	7185.5670	5.261	7193.6253	5.303
7173.7903	5.252	7178.8215	5.256	7185.6052	5.266	7193.6675	5.289
7173.8233	5.253	7179.5577	5.252	7185.6382	5.273	7193.7025	5.277
7174.5661	5.267	7179.7901	5.245	7185.6796	5.277	7193.7467	5.276
7174.6026	5.266	7179.8163	5.255	7185.7258	5.281	7195.5566	5.287
7174.6390	5.270	7180.5676	5.268	7185.7586	5.273	7195.5986	5.292
7174.6808	5.272	7180.6096	5.270	7185.7917	5.278	7195.6109	5.290
7174.7154	5.276	7180.6631	5.278	7186.5541	5.295	7195.6479	5.293
7174.7537	5.280	7180.7029	5.279	7186.5936	5.289	7195.6594	5.294
7174.7815	5.290	7180.7355	5.272	7186.6256	5.291	7195.6715	5.293
7174.8194	5.289	7180.7636	5.273	7186.6705	5.285	7195.6878	5.292
7175.5583	5.262	7180.8007	5.270	7186.7105	5.285	7195.7054	5.290
7175.5926	5.265	7181.5534	5.259	7186.7492	5.276	7195.7145	5.290
7175.6296	5.265	7181.5918	5.256	7186.7815	5.274	7195.7251	5.289
7175.6658	5.260	7181.6277	5.255	7187.5520	5.273	7195.7395	5.292
7175.6984	5.264	7181.6669	5.252	7187.5894	5.274	7195.7518	5.290
7175.7298	5.267	7181.7159	5.255	7187.6246	5.275	7195.7662	5.291
7175.7673	5.262	7181.7479	5.252	7187.6684	5.276		

TABLE 2b. *(continued)*

19 Mon = HR 2648 = HD 52918

HJD	b	HJD	b	HJD	b	HJD	b
7170.5960	4.885	7175.7059	4.892	7181.6356	4.935	7186.7578	4.941
7170.6424	4.932	7175.7384	4.892	7181.6748	4.922	7187.5616	4.897
7170.6961	4.927	7175.7754	4.908	7181.7234	4.942	7187.5981	4.897
7171.6103	4.932	7175.8021	4.932	7181.7572	4.941	7187.6319	4.917
7171.6448	4.927	7176.5690	4.930	7181.7851	4.928	7187.6759	4.947
7171.6848	4.905	7176.6070	4.931	7182.5648	4.941	7187.7189	4.932
7171.7234	4.901	7176.6462	4.913	7182.5987	4.910	7187.7539	4.897
7171.7629	4.915	7176.6780	4.886	7182.6345	4.898	7188.5731	4.883
7171.7962	4.927	7176.7184	4.891	7182.6748	4.918	7188.6087	4.915
7171.8281	4.925	7176.7514	4.921	7182.7100	4.928	7188.6410	4.939
7172.5749	4.948	7176.7866	4.944	7182.7503	4.913	7188.6793	4.928
7172.6150	4.934	7176.8118	4.938	7182.7833	4.879	7188.7129	4.899
7172.6525	4.903	7177.5656	4.931	7182.8020	4.873	7188.7528	4.872
7172.7092	4.924	7177.6049	4.926	7183.5617	4.904	7190.5659	4.944
7172.7477	4.943	7177.6392	4.902	7183.6014	4.895	7190.6086	4.921
7172.7850	4.939	7177.6780	4.900	7183.6412	4.913	7190.6540	4.912
7172.8157	4.923	7177.7198	4.930	7183.6893	4.924	7190.6950	4.934
7173.5739	4.952	7177.7565	4.944	7183.7330	4.904	7190.7368	4.941
7173.6090	4.917	7177.8091	4.919	7183.7726	4.889	7191.5699	4.920
7173.6489	4.909	7178.5668	4.916	7184.5657	4.924	7191.6167	4.895
7173.6882	4.931	7178.6108	4.910	7184.6045	4.948	7191.6608	4.927
7173.7275	4.955	7178.6566	4.932	7184.6440	4.945	7191.7043	4.948
7173.7667	4.943	7178.6946	4.946	7184.6821	4.919	7191.7434	4.929
7173.7994	4.912	7178.7351	4.936	7184.7183	4.906	7193.5637	4.925
7173.8187	4.904	7178.7715	4.911	7184.7520	4.921	7193.5968	4.937
7174.5744	4.912	7178.7905	4.899	7184.7733	4.929	7193.6332	4.926
7174.6116	4.903	7179.5674	4.902	7185.5763	4.959	7193.6751	4.892
7174.6482	4.929	7179.7841	4.916	7185.6122	4.945	7193.7106	4.886
7174.6889	4.937	7180.5784	4.945	7185.6479	4.928	7193.7579	4.936
7174.7242	4.925	7180.6213	4.956	7185.6871	4.911	7195.5680	4.927
7174.7618	4.902	7180.6712	4.930	7185.7333	4.939	7195.6062	4.902
7174.7899	4.901	7180.7102	4.918	7185.7670	4.948	7195.6201	4.901
7174.8147	4.894	7180.7432	4.919	7186.5654	4.943	7195.6672	4.915
7175.5669	4.902	7180.7736	4.932	7186.6012	4.921	7195.6984	4.931
7175.6008	4.925	7180.7918	4.940	7186.6359	4.907	7195.7187	4.934
7175.6372	4.928	7181.5622	4.965	7186.6785	4.920	7195.7333	4.935
7175.6743	4.908	7181.5995	4.962	7186.7181	4.946		

TABLE 2b. *(continued)*

HR 3135 = HD 65875

HJD	b	HJD	b	HJD	b	HJD	b
7170.5996	6.582	7175.8049	6.581	7181.7262	6.588	7186.7925	6.583
7170.6458	6.584	7175.8409	6.579	7181.7604	6.583	7187.5647	6.589
7170.7028	6.583	7176.5716	6.590	7181.7880	6.584	7187.6006	6.588
7171.6131	6.577	7176.6099	6.587	7181.8210	6.577	7187.6344	6.583
7171.6474	6.576	7176.6487	6.585	7182.5678	6.588	7187.6785	6.588
7171.6876	6.576	7176.6803	6.583	7182.6014	6.587	7187.7216	6.591
7171.7267	6.578	7176.7209	6.580	7182.6372	6.581	7187.7573	6.585
7171.7659	6.575	7176.7542	6.576	7182.6773	6.582	7187.7903	6.587
7171.7991	6.576	7176.7896	6.581	7182.7127	6.577	7188.5765	6.590
7171.8314	6.579	7176.8148	6.577	7182.7539	6.571	7188.6115	6.589
7172.5780	6.573	7177.5688	6.579	7182.7865	6.568	7188.6439	6.585
7172.6177	6.576	7177.6078	6.580	7182.8052	6.569	7188.6821	6.582
7172.6566	6.576	7177.6419	6.577	7182.8431	6.571	7188.7158	6.579
7172.7123	6.583	7177.6816	6.579	7183.5655	6.577	7188.7560	6.580
7172.7503	6.586	7177.7227	6.578	7183.6043	6.566	7190.5697	6.582
7172.7876	6.584	7177.7595	6.576	7183.6442	6.571	7190.6146	6.579
7172.8187	6.584	7177.8128	6.577	7183.6919	6.573	7190.6570	6.578
7172.8529	6.596	7178.5706	6.579	7183.7368	6.573	7190.6983	6.580
7173.5769	6.581	7178.6139	6.577	7183.7761	6.577	7190.7401	6.579
7173.6119	6.578	7178.6599	6.578	7183.8096	6.570	7190.7769	6.590
7173.6513	6.584	7178.6976	6.582	7184.5688	6.575	7191.5731	6.584
7173.6909	6.582	7178.7380	6.579	7184.6082	6.576	7191.6201	6.584
7173.7305	6.588	7178.7750	6.581	7184.6475	6.575	7191.6641	6.586
7173.7693	6.585	7178.7937	6.577	7184.6846	6.579	7191.7078	6.590
7173.8023	6.584	7178.8337	6.575	7184.7211	6.580	7191.7467	6.596
7173.8324	6.588	7179.5710	6.567	7184.7547	6.588	7191.7792	6.587
7174.5771	6.586	7179.7692	6.585	7184.7932	6.585	7193.5667	6.592
7174.6148	6.586	7179.7876	6.579	7184.8125	6.575	7193.6000	6.590
7174.6506	6.591	7179.8305	6.578	7185.5803	6.579	7193.6364	6.595
7174.6916	6.588	7180.5820	6.585	7185.6151	6.581	7193.6781	6.589
7174.7273	6.587	7180.6242	6.579	7185.6497	6.586	7193.7138	6.576
7174.7646	6.587	7180.6741	6.581	7185.6898	6.581	7193.7625	6.580
7174.7930	6.591	7180.7129	6.587	7185.7361	6.583	7195.5709	6.580
7174.8295	6.579	7180.7460	6.584	7185.7698	6.584	7195.6094	6.577
7175.5701	6.589	7180.7780	6.593	7185.8008	6.586	7195.6236	6.575
7175.6035	6.593	7180.7952	6.594	7186.5691	6.588	7195.6700	6.576
7175.6397	6.587	7180.8088	6.593	7186.6042	6.581	7195.7015	6.572
7175.6770	6.584	7181.5655	6.584	7186.6387	6.588	7195.7218	6.577
7175.7084	6.590	7181.6023	6.589	7186.6816	6.586	7195.7363	6.575
7175.7409	6.588	7181.6393	6.588	7186.7209	6.587	7195.7583	6.579
7175.7786	6.585	7181.6772	6.586	7186.7640	6.590		

IU Vel = HR 3593 = HD 77320

HJD	b	HJD	b	HJD	b	HJD	b
7181.6801	6.028	7183.6934	5.997	7185.6916	5.990	7187.6374	6.003
7181.7280	6.005	7183.7384	5.979	7185.7375	6.013	7187.6812	6.003
7181.7620	5.994	7183.7794	5.973	7185.7719	6.023	7187.7228	6.000
7181.7893	5.987	7183.8152	5.980	7185.8024	6.039	7187.7588	6.001
7181.8221	5.980	7183.8355	5.990	7185.8277	6.037	7187.7927	6.008
7181.8513	5.984	7183.8518	5.985	7185.8494	6.046	7187.8235	6.018
7182.5702	5.989	7184.5714	6.033	7185.8667	6.039	7187.8476	6.016
7182.6026	5.991	7184.6096	6.025	7186.5716	6.009	7188.5793	5.979
7182.6381	6.009	7184.6484	6.008	7186.6059	6.018	7188.6129	5.985
7182.6784	6.025	7184.6857	5.990	7186.6406	6.014	7188.6457	5.990
7182.7140	6.030	7184.7270	5.991	7186.6847	6.009	7188.6854	6.001
7182.7556	6.042	7184.7612	5.999	7186.7224	6.005	7188.7172	6.007
7182.7885	6.044	7184.7944	6.007	7186.7650	5.997	7188.7592	6.020
7182.8172	6.046	7184.8179	6.001	7186.7970	5.989	7188.7935	6.011
7182.8473	6.031	7184.8330	6.009	7186.8234	5.985	7188.8194	6.004
7182.8623	6.028	7184.8605	6.007	7186.8407	5.977	7188.8401	6.002
7183.5693	6.012	7185.5824	5.980	7186.8590	5.971		
7183.6057	6.011	7185.6171	5.966	7187.5668	6.014		
7183.6453	6.009	7185.6521	5.978	7187.6041	6.003		

TABLE 2b. *(continued)*

HD 91188

HJD	b	HJD	b	HJD	b	HJD	b
7170.6572	6.606	7176.7273	6.614	7182.7221	6.610	7187.7994	6.641
7171.6567	6.645	7176.7613	6.616	7182.7620	6.614	7187.8288	6.643
7171.6954	6.642	7176.7975	6.614	7182.7945	6.612	7187.8529	6.645
7171.7342	6.638	7176.8439	6.618	7182.8232	6.613	7188.6511	6.617
7171.7745	6.635	7177.6507	6.644	7182.8535	6.608	7188.6915	6.614
7171.8072	6.631	7177.6541	6.643	7183.6118	6.632	7188.7254	6.612
7171.8443	6.632	7177.6889	6.647	7183.6574	6.625	7188.7677	6.612
7171.8584	6.632	7177.7306	6.638	7183.7002	6.615	7188.8002	6.611
7172.6284	6.608	7177.7677	6.627	7183.7459	6.604	7188.8282	6.610
7172.6650	6.617	7177.8276	6.616	7183.7883	6.599	7188.8459	6.614
7172.7201	6.611	7177.8534	6.610	7183.8227	6.611	7188.8633	6.612
7172.7579	6.615	7178.6701	6.618	7183.8438	6.604	7190.6250	6.635
7172.7958	6.620	7178.7060	6.621	7183.8583	6.606	7190.6661	6.653
7172.8300	6.621	7178.7463	6.621	7184.6183	6.629	7190.7117	6.646
7172.8568	6.629	7178.7818	6.631	7184.6546	6.631	7190.7472	6.640
7173.6248	6.609	7178.8117	6.633	7184.6913	6.639	7190.7840	6.643
7173.6595	6.614	7178.8499	6.641	7184.7326	6.646	7190.8087	6.646
7173.7024	6.614	7178.8623	6.640	7184.7664	6.651	7190.8374	6.614
7173.7397	6.615	7179.7487	6.621	7184.7997	6.652	7190.8653	6.616
7173.7783	6.617	7179.7763	6.627	7184.8231	6.649	7191.6304	6.616
7173.8099	6.622	7179.8052	6.623	7184.8438	6.656	7191.6715	6.613
7173.8410	6.623	7179.8398	6.616	7184.8675	6.658	7191.7183	6.614
7174.6232	6.645	7179.8603	6.623	7185.6574	6.625	7191.7564	6.614
7174.6579	6.647	7179.8615	6.624	7185.6968	6.616	7191.7894	6.610
7174.6985	6.631	7180.6426	6.629	7185.7433	6.621	7191.8117	6.616
7174.7356	6.628	7180.6811	6.629	7185.7776	6.622	7191.8294	6.618
7174.7721	6.637	7180.7257	6.623	7185.8084	6.623	7191.8519	6.620
7174.8048	6.629	7180.7531	6.624	7185.8330	6.621	7191.8692	6.619
7174.8375	6.629	7180.7844	6.621	7185.8555	6.627	7193.6450	6.647
7174.8594	6.623	7180.8256	6.619	7186.6475	6.633	7193.6864	6.643
7175.6122	6.625	7180.8478	6.616	7186.6902	6.628	7193.7230	6.632
7175.6470	6.625	7181.6468	6.639	7186.7277	6.620	7193.7745	6.624
7175.6835	6.621	7181.6933	6.649	7186.7700	6.621	7193.8005	6.626
7175.7151	6.633	7181.7340	6.644	7186.8053	6.614	7193.8328	6.632
7175.7506	6.633	7181.7676	6.638	7186.8296	6.613	7193.8638	6.616
7175.7850	6.634	7181.7950	6.643	7186.8469	6.615	7195.8104	6.620
7175.8128	6.641	7181.8271	6.642	7186.8643	6.613	7195.8325	6.621
7175.8486	6.641	7181.8568	6.647	7187.6467	6.633	7195.8540	6.620
7176.6223	6.609	7182.6085	6.609	7187.6865	6.635	7195.8726	6.625
7176.6553	6.617	7182.6441	6.612	7187.7276	6.638		
7176.6868	6.616	7182.6836	6.614	7187.7662	6.638		

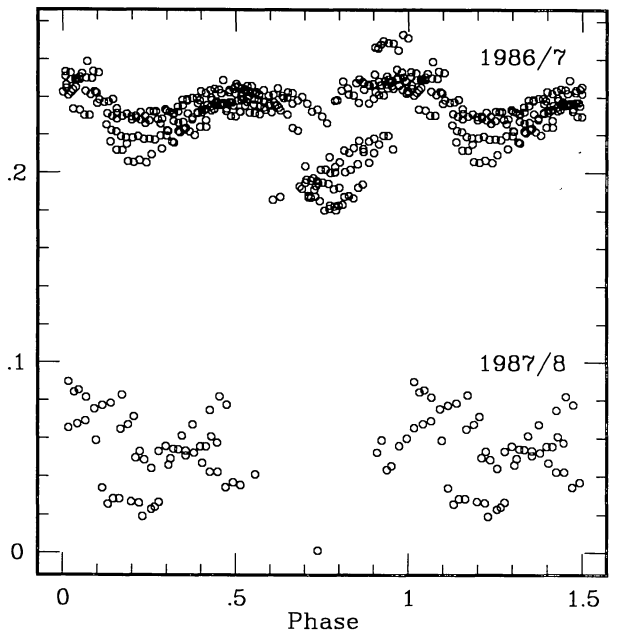

FIGURE 1. Light curves of DX Eri (P = 1.113 d). A long-term trend has been removed for the 1986/7 data. In this and subsequent figures, the scale is in magnitudes.

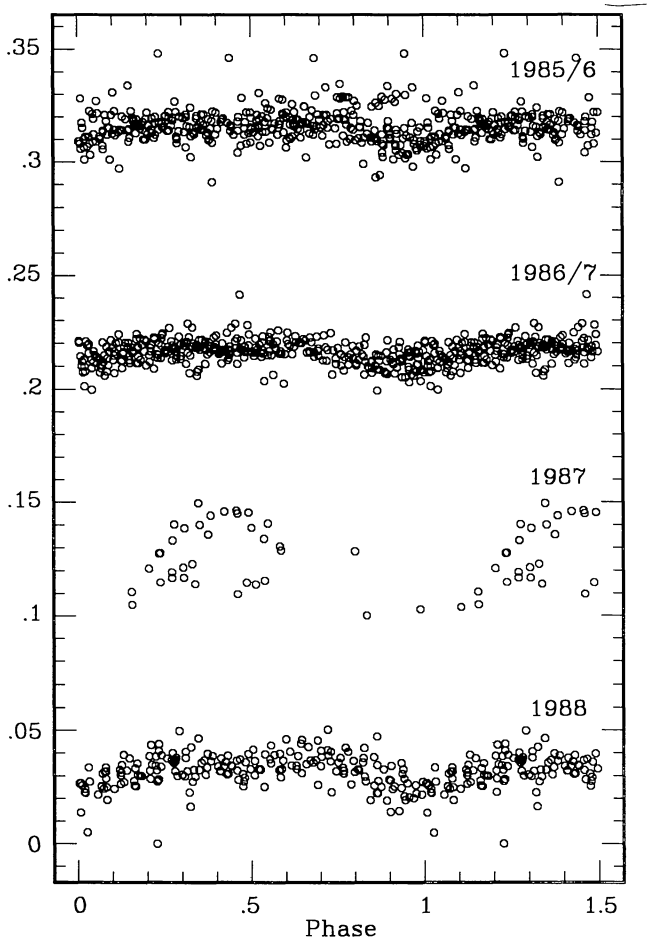

FIGURE 2. Light curves of λ Eri (P = 0.70165 d).

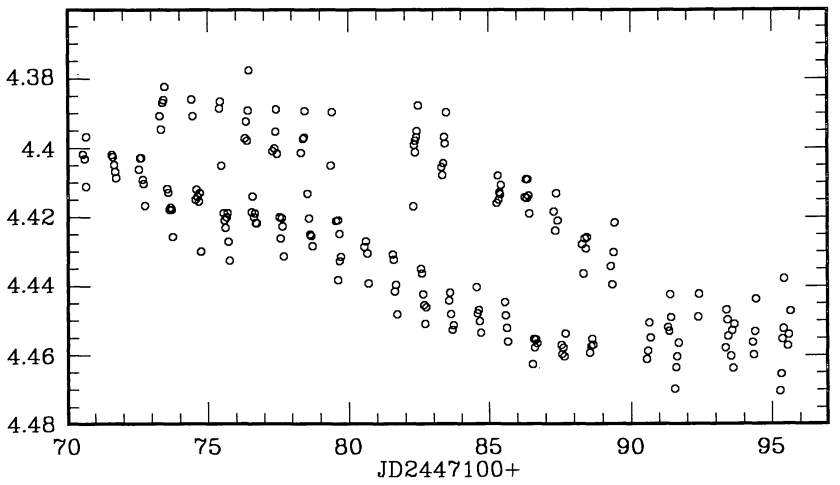

FIGURE 3. Light variations in ω Ori for January 1988 showing a period very close to one day. The top curve is SAAO data, the bottom curve ESO data.

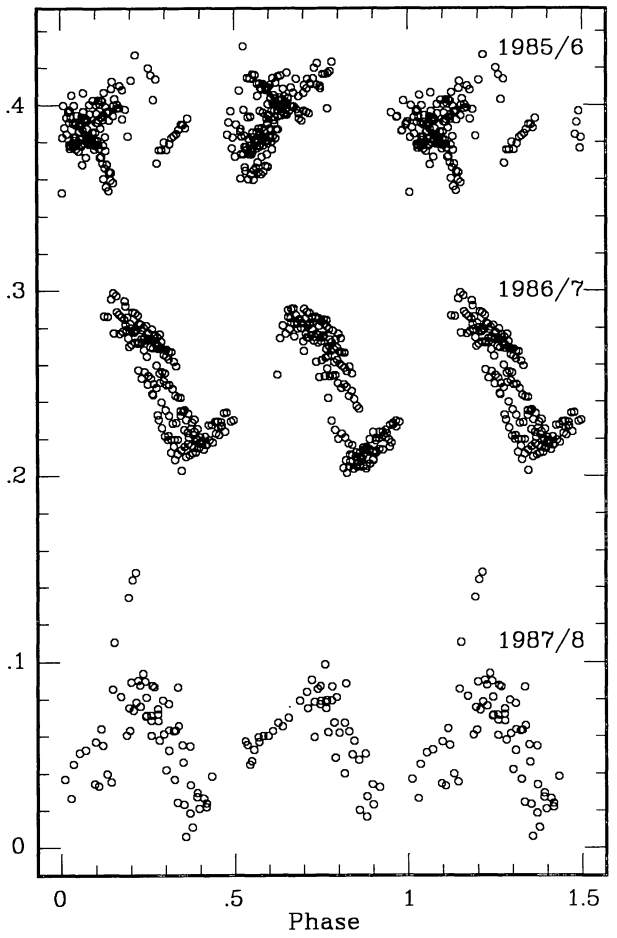

FIGURE 4. Light curves of ω Ori ($P = 1.9616$ d).

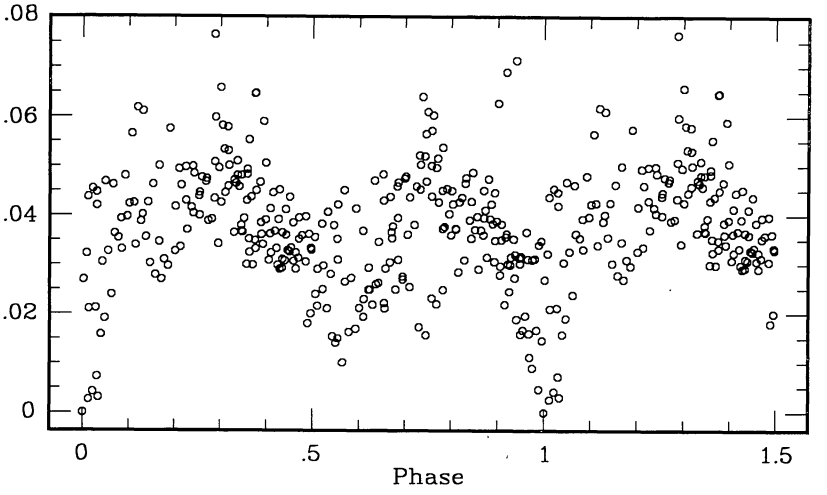

FIGURE 5. Light curves of FT CMa ($P = 2.632$ d).

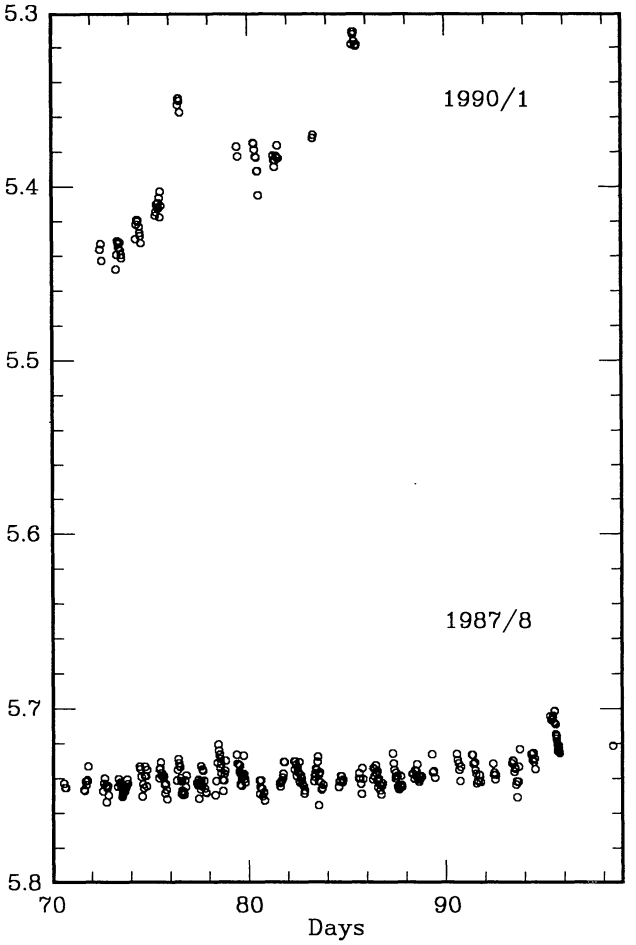

FIGURE 6. Light variations in HP CMa.

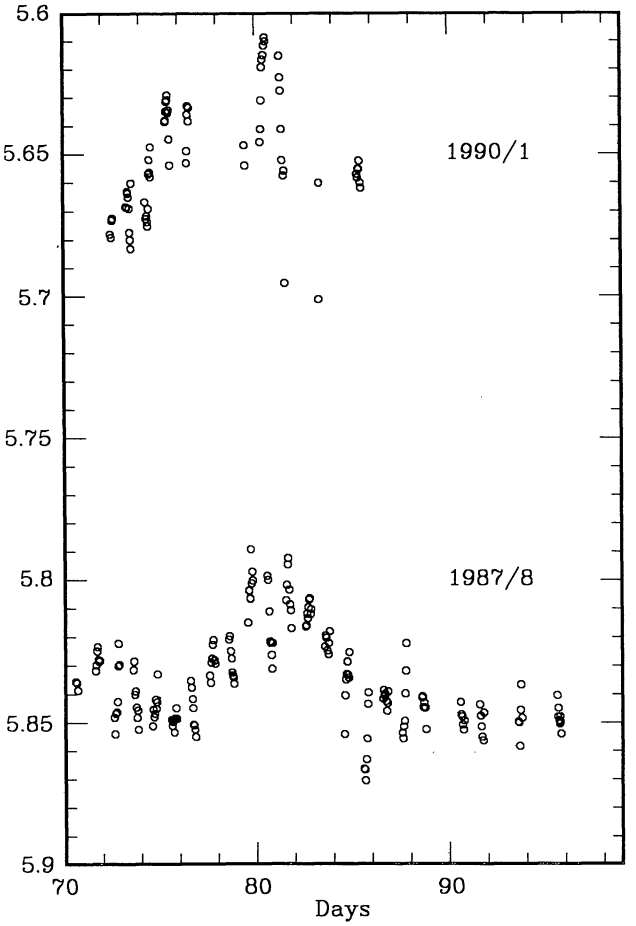

FIGURE 7. Light variations in FV CMa.

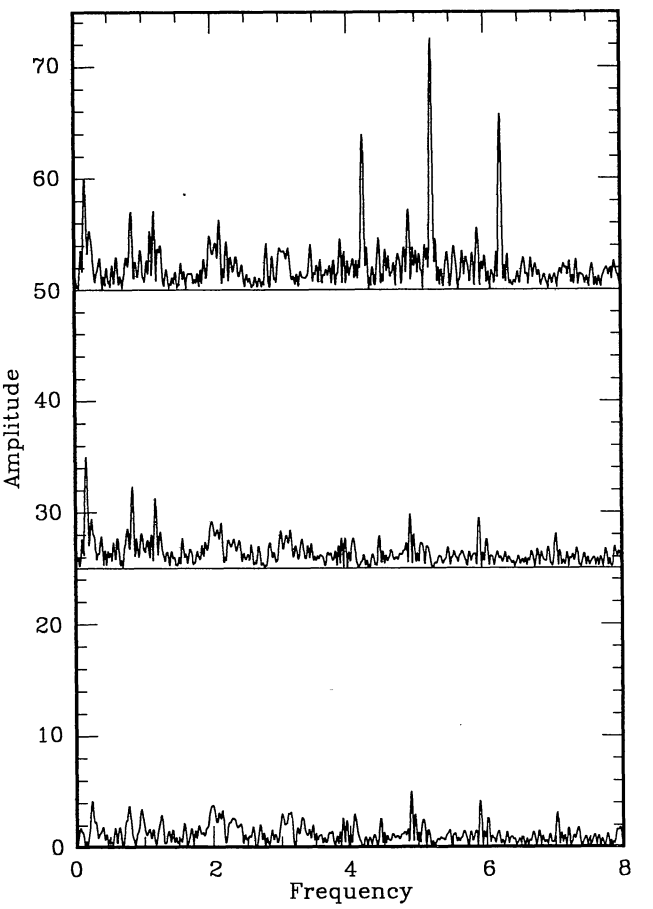

FIGURE 8. Fourier periodograms of 19 Mon. The frequency is in cycles d^{-1} and the semi-amplitude in millimagnitudes. Top panel - the raw data; middle panel - after removing a sinusoid with $P_1 = 0.191$ d; bottom panel - after removing a sinusoids with periods P_1 and $P_2 = 5.95$ d.

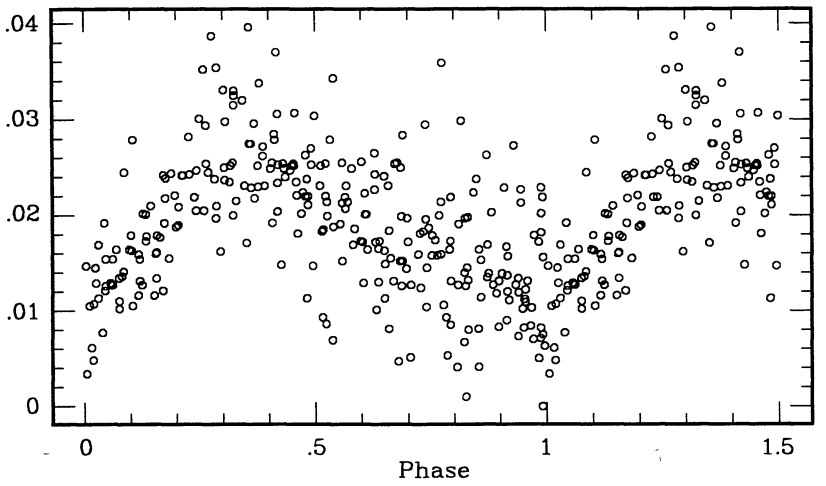

FIGURE 9. Light curves of HR 3135 ($P = 0.855$ d).

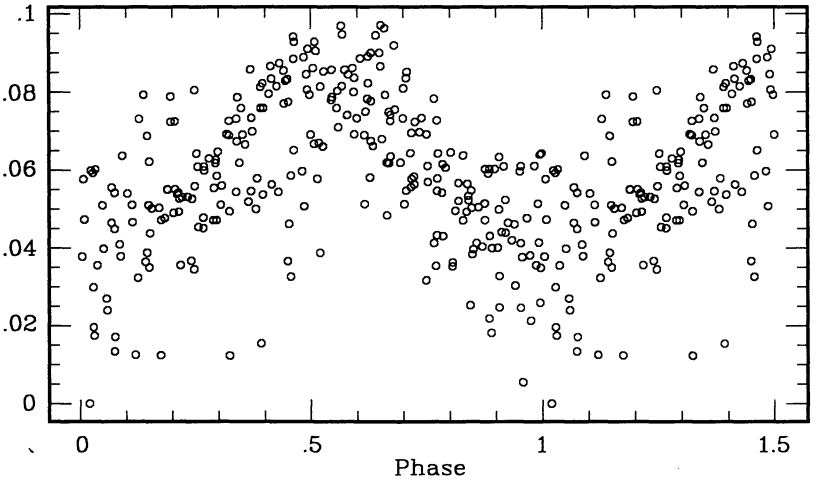

FIGURE 10. Light curves of HR 3593 ($P = 0.612$ d).

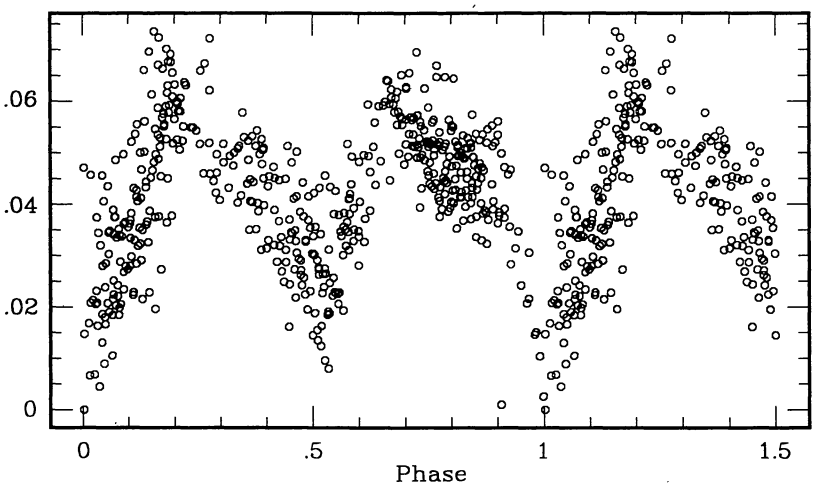

FIGURE 11. Light curves of HD 91188 ($P = 2.924$ d).

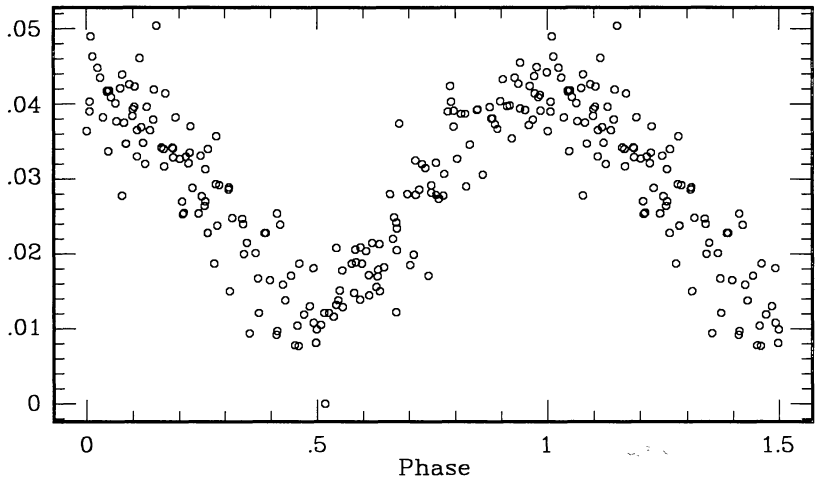

FIGURE 12. Light curves of HR 4618 ($P = 1.292$ d).

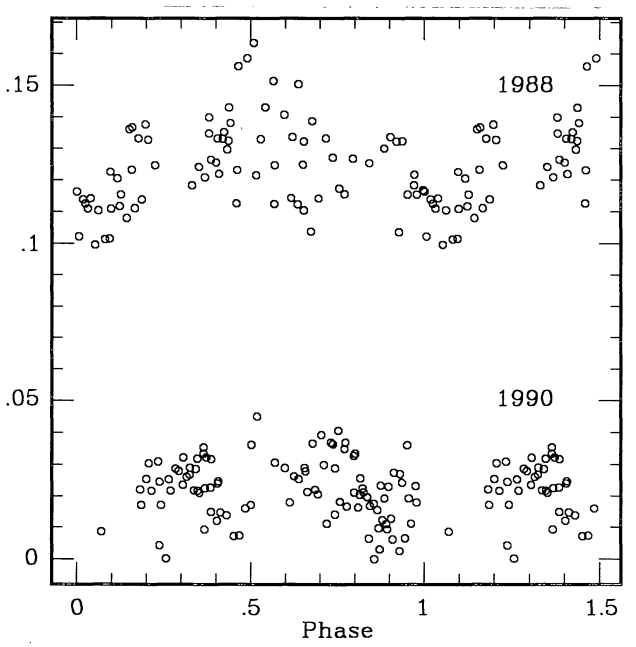

FIGURE 13. Light curves of δ Cen ($P = 1.923$ d).

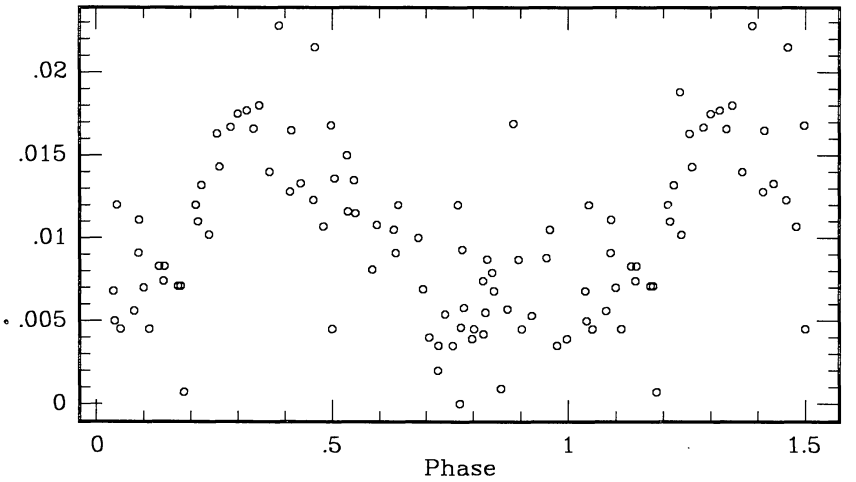

FIGURE 14. Light curves of 39 Cru ($P = 0.772$ d).

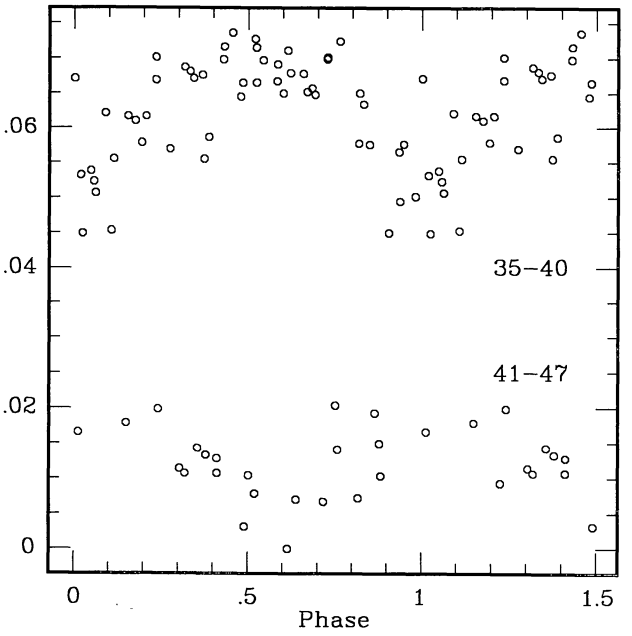

FIGURE 15. Light curves of λ Cru ($P = 0.376$ d).

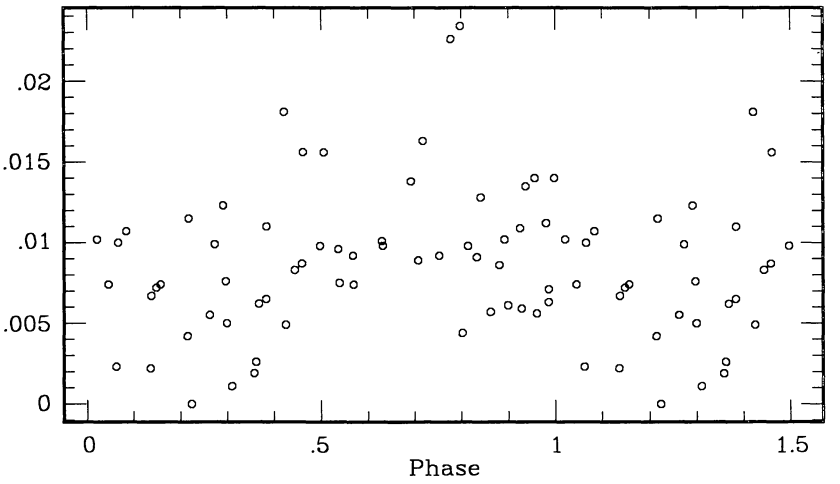

FIGURE 16. Light curves of μ Pic ($P = 0.397$ d).

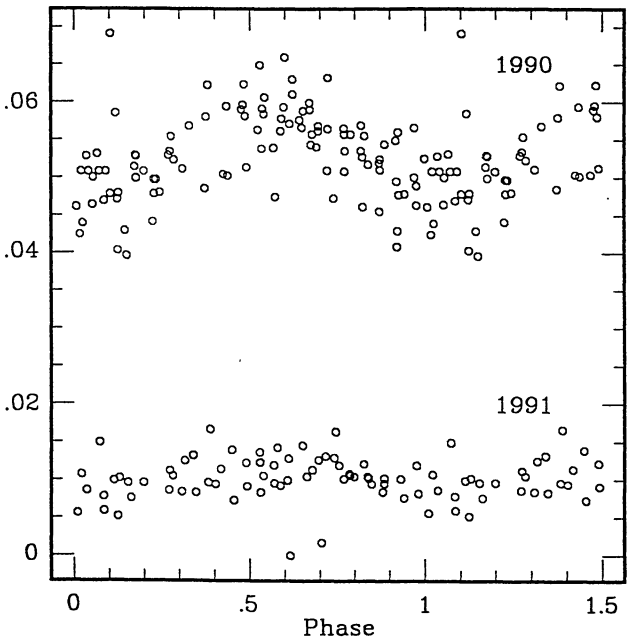

FIGURE 17. Light curves of HR 4221 ($P = 0.870$ d).