# Speckle interferometry at the Blanco and SOAR telescopes in 2008 and 2009

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## ABSTRACT

The results of speckle interferometric measurements of binary and multiple stars conducted in 2008 and 2009 at the Blanco and SOAR 4-m telescopes in Chile are presented. A total of 1898 measurements of 1189 resolved pairs or sub-systems and 394 observations of 285 unresolved targets are listed. We resolved for the first time 48 new pairs, 21 of which are new sub-systems in close visual multiple stars. Typical internal measurement precision is 0.3 mas in both coordinates, typical companion detection capability is $\Delta m \sim 4.2$ at $0\farcs15$ separation. These data were obtained with a new electron-multiplication CCD camera; data processing is described in detail, including estimation of magnitude difference, observational errors, detection limits, and analysis of artifacts. We comment on some newly discovered pairs and objects of special interest.

*Subject headings:* stars: binaries

## 1. Introduction

Speckle interferometry at 4-m telescopes has provided the bulk of binary star measurements over the last two decades, giving material for calculation of orbits and other studies. Unfortunately, access to 4-m telescopes has been intermittent, especially in the southern hemisphere (speckle data from the WIYN telescope were published by Horch et al. (1999, 2002)). Here we present the results of two observing programs carried out in 2008-2009 to help rectify this problem. We concentrate on the technique and measurement results, leaving the exploitation of these data sets for further publications.

Continued measurements of visual binary stars are needed for many reasons. One of the most obvious, yet most difficult tasks is to establish the orbital elements of known binaries. Long orbital periods where only a short arc is covered, on the one hand, and the lack of continuous coverage of fast systems, on the other hand, prevent calculation of orbits or cause erroneous orbits to be published. Although stellar masses derived solely from visual orbits are typically of inferior accuracy compared to other techniques, reliable orbital elements are needed nevertheless in order to be able to predict stellar positions and to study individual systems of astrophysical importance (including those with planetary companions). Multiplicity affects stellar evolution in many different ways, as illustrated e.g. by the dramatic story of the quadruple system Regulus (Rappaport et al. 2009).

Modern hydrodynamical simulations open the way to understanding the formation of binary and multiple systems (e.g. Bate 2008), so good observational data on multiplicity statistics become

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critical for further progress. The current census of stellar multiplicity is incomplete even in the solar neighborhood. In updating the seminal work of Duquennoy & Mayor (1991), Raghavan (2009) determined that the fraction of triple and higher-order multiples among G-type dwarfs within 25 pc of the Sun was underestimated by as much as two times. These additional triples and quadruples were found around systems which were previously considered binary; i.e., the number of singles remained essentially fixed. For a well studied group, the best location to find new companions is around double or higher order multiple systems and not single stars. Therefore, we also searched for new close sub-systems in wide visual binaries, focusing on binaries in the solar vicinity.

Relative orientation of the orbits in triple stars is an indicator of their formation mechanisms and dynamical evolution (Sterzik & Tokovinin 2002; Fabrycky & Tremaine 2007). One of the goals of the present program was to increase the number of multiple stars with known sense of relative orbital motion in sub-systems by getting additional observations.

In any statistical study, it is important not only to detect new companions, but also to establish the detection limits, so that an absence of companions can be translated into constraints on their parameters. The linearity of the detector allows us to here establish reliable detection limits for each observation, through careful data analysis and modeling. Owing to the new detector and data processing, our observations reach larger magnitude difference than previous speckle measurements. We also provide relative photometry of the components.

Speckle interferometry at the Southern Astrophysical Research (SOAR) telescope was started in 2007 with tests of a new high-resolution camera (Tokovinin & Cantarutti 2008). In the near future, this camera will work jointly with the adaptive-optics system to reach diffraction-limited resolution on faint targets in the visible. Meanwhile, it was used as a stand-alone instrument.

Observing time for the USNO intensified CCD speckle camera at the Blanco 4-m telescope at CTIO was allocated in July 2008 to cover several programs, ranging from orbit calculation and improvement, to observation of nearby faint red and white dwarfs and subdwarfs, and also to the completion of a speckle survey of nearby G dwarfs. However, owing to new export regulations, the equipment could not be sent to CTIO in time for the run, despite all efforts of the NOAO administration. The new camera had to be used instead. For a number of reasons, it was not possible to reach the faintest targets with this new camera, so the program had to be modified "on the fly". The nearby, faint targets had to be abandoned and to preserve uniformity of the sample, most of the nearby G dwarfs were also dropped. Further, failure of the Blanco atmospheric dispersion corrector (ADC) restricted observing to a smaller than desired region around the zenith. Nevertheless, a large number of useful measurements were obtained.

We present the observational technique in Sect. 2, starting with the instrument description and then detailing various data processing steps (Fig. 1). A new method of establishing the detection limits is described and some effects which can lead to false detections are studied. The main results are presented in Sect. 3, including comments on some objects of interest and new discoveries.

## 2. Observations and data analysis

### 2.1. Speckle camera

The observations reported in this paper were obtained with the *high-resolution camera* (HRCam) – a fast imager designed to work at the SOAR telescope, either with the SOAR Adaptive Module or as a stand-alone instrument. The HRCam is described by Tokovinin & Cantarutti (2008); here we recall its main features.

HRCam uses a CCD detector with internal electron multiplication – an EMCCD. The *Luca* camera from Andor[1] was chosen for its low cost, fast frame rate, and simple signal interface via a USB port. The CCD has 658x496 10-micron pixels. It is cooled thermoelectrically to $-20°$C, resulting in a very low dark current for the short exposure time used here (except in a small number of *hot pixels*). We used an EM gain of 44, so the readout noise of 14 electrons is effectively reduced to 0.3 el. The quantum efficiency of this detector is around 0.5.

HRCam consists of the detector, mechanical structure, filter wheel, and optics. The $f/16$ beam

[1] http://www.andor.com

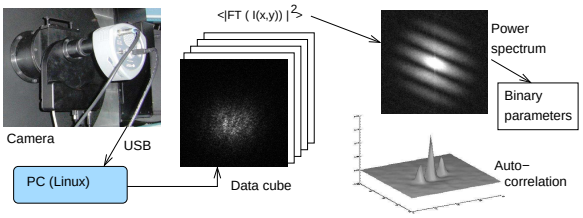


Fig. 1.— Schematic representation of data acquisition and processing.

coming from SOAR is collimated by a 50-mm negative achromat (Barlow lens) and refocused by a 100-mm positive lens, doubling the effective telescope focal length and providing a pixel scale of 15 mas. At the Blanco $f/8$ telescope, we replaced the negative lens by a positive achromat with 25-mm focal length to get adequate sampling.

HRCam has no corrector for atmospheric dispersion. Most observations were obtained through a Strömgren $y$ filter, while brighter stars were also observed through an H$\alpha$ interference filter, especially at large zenith distances. A few observations were taken through standard wide-band $V$, $R$ or $I$ filters. Table 1 lists the central wavelength and bandpass of each filter as measured (except for the $I$-filter where the bandpass is determined by the detector cutoff in the red)[2].

The camera software developed by R. Cantarutti works on a PC computer under the Linux operating system. All basic functionality is provided, including the filter wheel and detector control and connection to the telescope control system. We used the detector in free-run continuous mode. The central region of 200×200 pixels may be read out with exposure time of 20 ms at a rate of 31.8 ms per frame, or a larger 400×400 region may be read at a 43.1 ms frame rate. The required number (typically 400) of frames is grabbed during $13-17$ seconds and written to the disk. Immediately after the acquisition, a quick-look power spectrum is calculated and displayed, showing the quality of the data and the fringes for resolved binaries.

[2]The filter transmision curves are given in the instrument Manual, http://www.ctio.noao.edu/new/Telescopes/SOAR/Instruments/SAM/archive/hrcaminst.pdf

### 2.2. Observing procedure

Observing runs are listed in Table 2. As noted above, the use of HRCam at the Blanco telescope was not foreseen. The software was not interfaced to the telescope, so information missing in the FITS headers (acquisition time, object coordinates, zenith distance) was retrieved later using our logbook. A few object identification errors were corrected *post factum*, but some may still remain undetected. We planned to use the ADC of the Blanco telescope, but found it to be nonoperational, so the dispersion remained uncorrected and the program was restricted to smaller zenith distances. All 5 nights of the Blanco run were clear, with variable seeing.

The SOAR telescope is located at the Cerro Pachón mountain. The shape of its thin 4.1-m mirror is controlled actively using a bright star at the beginning of the night and using look-up tables for the rest of the night. HRCam was installed at

Table 1: Filter information

| Filter | Central Wavelength (nm) | FWHM, (nm) |
|---|---|---|
| $V$ | 517.2 | 84.2 |
| $y$ | 550.7 | 21.6 |
| $R$ | 596.1 | 121.2 |
| H$\alpha$ | 657.3 | 5.04 |
| $I$ | 774.4 | — |

Table 2: Observing runs

| Run | Dates | Pixel Scale (mas) | $N_{dat}$ |
|---|---|---|---|
| Blanco08 | 14-18 Jul 2008 | 16.35 | 2131 |
| SOAR08a | 8 Aug 2008 | 15.23 | 328 |
| SOAR08b | 6-8 Oct 2008 | 15.23 | 985 |
| SOAR09 | 4-6 Apr 2009 | 15.23 | 1416 |

the Nasmyth focus and received the light after 3 reflections. SOAR has an alt-azimuth mount; field rotation at the Nasmyth focus is compensated by counter-rotating the instrument. The position angle of the rotator is recorded in the headers for subsequent calculation of angles on the sky.

In preparation for the SOAR runs, we tested the system during a technical night on August 8, 2008. Some useful data were collected during this night, mostly on binaries with known orbits. During the two scheduled 3-night runs in October 2008 and April 2009, the sky was clear, the wind speed was low, and the seeing was generally good, with the width of the best long-exposure images as small as $0''.70$.

Efficient use of the allocated telescope time required good preparation of the observing program and a substantial effort on the part of the telescope operators. For example, during the April run, we observed 551 objects on 3 nights, spending less than 3.5 minutes per star on the average. Each observation included telescope slew, object acquisition, data recording, and quick-look analysis. We recorded at least two data cubes of each object and analyzed each cube independently. This strategy helped to verify new companion detections and to estimate observational errors. The last column of Table 2 lists the total number $N_{dat}$ of data cubes taken during each run.

The faintest stars observed were around $V = 10^m$, with a few exceptions. For example, the components of DON 93 BC, $V = 12^m$ and $13.1^m$ at $0''.76$ separation, were measured reliably with an accuracy of 1 mas under good seeing. Companions of $V \sim 13^m$ were measured routinely if the primary star was brighter than $9^m$. Paradoxically, the presence of a bright primary increases the sensitivity for the secondary because the speckle signal is proportional to the product of photon fluxes from both companions. For faint stars, sensitivity could be gained at the expense of resolution by increasing the exposure time (up to 100 ms) and by observing in wide-band filters. This last resource was, unfortunately, not available to us because it requires a working compensator for atmospheric dispersion.

### 2.3. Calculation and modeling of the power spectra

Each data cube typically contains $K = 400$ images of 200×200 or 400×400 format, with 14 bits per pixel. The average dark frame (with the same exposure time), called *bias*, is subtracted from each image to remove the fixed offset of ∼505 analog-to-digital units (ADU) and the dark current. The average bias is stable to within 1 ADU. Pixels in the bias frame which are more than 10 ADU above the average level are identified as "hot"; these pixels in the images are replaced by the average of neighboring pixels. Finally, all pixels below 17 ADU (twice the readout noise) are set to zero in order to reduce the influence of remaining pattern and readout noise. The optimum threshold value was selected after some trials and then applied to all data. Single photons produce signals well above this threshold. Despite the thresholding and the very low dark current, each 200×200 frame contains some 40 photon events at random locations, apparently created in the electron-multiplication process. This additional background is the main factor which prevents observing very faint stars with long accumulation times. For a subset of bright stars observed without EM gain, only a fixed bias of 505 ADU was subtracted, without any thresholding.

The power spectrum (PS) of an image cube is calculated by summing the square modulus of the Fourier Transform of each image,

$$P(f_x, f_y) = \frac{C}{K} \sum_{i=1}^{K} |\tilde{I}_i(f_x, f_y)|^2 \ . \qquad (1)$$

The spatial frequencies $f_x, f_y$ correspond to the elements of square discrete arrays. The normalization constant, $C$, is determined from the condition $P(0, 0) = 1$. In the following, it is convenient to use normalized frequencies $\kappa = f/f_c$, where $f_c = D/\lambda$ is the cutoff frequency, $D$ is the telescope diameter and $\lambda$ is the central wavelength of the filter passband.

It is well known that the PS of a single bright star $P_0(f_x, f_y)$ contains two components: a strong signal at low spatial frequencies $f < r_0/\lambda$ which corresponds to the seeing-limited image ($r_0$ is the Fried parameter) and a high-frequency component extending up to $f_c$ and produced by the speckle structure. An additive component $P_{noise}$ is pro-

duced by the photon noise. It is easily estimated by averaging the PS values at $f > f_c$. This additive term is then subtracted from the PS.

Knowledge of the *speckle transfer function* (STF) $P_0$ is needed for fitting a binary-star model to the data (see below). Single reference stars are sometimes observed for this purpose. However, the STF is not stable in time and depends on such factors as seeing conditions, atmospheric dispersion (AD), telescope aberrations, vibrations, etc. For each PS, we describe the STF in the high-frequency zone by an empirical model, obviating the need for a reference star and accounting for the changing conditions automatically. The bias term $P_{noise}$ is subtracted from $P(f_x, f_y)$, then the PS is averaged azimuthally, leading to the one-dimensional function $\overline{P}(\kappa)$. A very simple 2-parameter model

$$\log_{10} P_r(\kappa) \approx \log_{10}[\overline{T}_{AD}(\kappa) T_0(\kappa)] + p_0 + p_1 \kappa \quad (2)$$

is fitted in the range $\kappa_{\min} < \kappa < \kappa_{\max}$. Typically, we select $\kappa_{\min} = 0.2$ and $\kappa_{\max} = 0.8$, but for the noisy data the upper limit is reduced. Here $T_0(\kappa) = 2/\pi[\arccos\kappa - \kappa\sqrt{1-\kappa^2}]$ is the diffraction-limited transfer function of an ideal telescope (the central obstruction is ignored), and $\overline{T}_{AD}(\kappa)$ is the azimuthally-averaged deterministic blur $T_{AD}(f_x, f_y)$ caused by the atmospheric dispersion (AD),

$$T_{AD}(\mathbf{f}) \approx \exp[-2\pi^2(\mathbf{fx}/2.506)^2]. \quad (3)$$

The AD blur is represented by a Gaussian function. The length of the blur vector $|\mathbf{x}| = [n(\lambda_1) - n(\lambda_2)]/p \ \tan z$ (in pixels) is known for the zenith distance $z$, refractive index of air $n(\lambda)$, filter bandwidth limits $\lambda_1$ and $\lambda_2$, and the pixel size $p$. The direction of the vector $\mathbf{x}$ is known from the calculated parallactic angle and the detector orientation. Figure 2 illustrates power-spectrum modeling.

The parameter $p_0$ shows the level of the high-frequency component of the PS extrapolated to zero frequency. The theoretical PS model predicts that $(D/r_0)^{-2} = 0.435\,10^{p_0}$, leading to an estimate of the seeing conditions relevant to each data cube from the $p_0$ values. These seeing estimates match quite well the half-width of the re-centered long-exposure images calculated from the data cubes. The second parameter, $p_1$, shows how fast the high-frequency component of the PS is decreasing. For an ideal speckle pattern $p_1 = 0$, but in reality finite exposure time, finite bandwidth and other factors lead to $p_1 < 0$.

The *synthetic* STF is thus calculated as

$$P_{0,syn}(\mathbf{f}) = T_{AD}(\mathbf{f}) T_0(f) 10^{p_0 + p_1(f/f_c)} \quad (4)$$

for the selected frequency range and $f = |\mathbf{f}|$. Alternatively, we use the azimuthally-averaged observed PS $\overline{P}(f)$ as a reference, with an additional multiplier $T_{AD}(\mathbf{f})/\overline{T}_{AD}(f)$ to account for the AD. For binaries with separations above $0\farcs1$ the radially-averaged reference is normally chosen, while synthetic reference is used for closer binaries.

### 2.4. Fitting parameters of binary and triple stars

The PS of a binary star shows characteristic fringes. It is more practical, nevertheless, to detect companions in the auto-correlation functions (ACFs) calculated from the PS by Fourier transform. The two-component structure of the PS is carried to the ACF which consists of a wide seeing pedestal and three narrow peaks (in the case of binary star). The pedestal can be removed by setting to zero the PS at low spatial frequencies, e.g. at $f < 0.2 f_c$. Such crude filtering leads to "ringing" in the ACF. To avoid it, we divide the PS by its azimuthal average $\overline{P}(f)$ at low frequencies where it exceeds the extrapolated level of the speckle signal, $10^{p_0}$, and apply additional Gaussian damping to further reduce the low frequencies. The *filtered* ACFs are then computed from the filtered PS and are used together with the PSs for binary-star analysis.

The parameters of a binary star are the time of observation, $T$, separation, $\rho$, position angle, $\theta$, and magnitude difference, $\Delta m$. The first number is arbitrarily precise, the next two numbers are combined in a 2-dimensional vector $\mathbf{r} = (\rho\cos\theta, \rho\sin\theta)$. The observed power spectrum $P(\mathbf{f})$ (after subtraction of $P_{noise}$) is fitted by a model

$$P_{mod}(\mathbf{f}) = P_0(\mathbf{f}) \ [A + B\cos(2\pi\mathbf{fr})] \ , \quad (5)$$

where $P_0(\mathbf{f})$ is the STF and the coefficients $A$ and $B$ are related to the magnitude difference. The

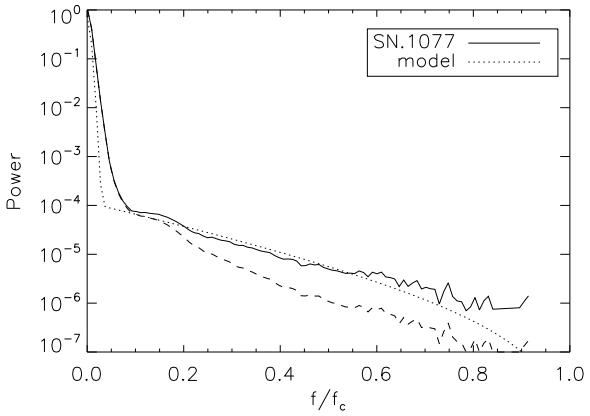


Fig. 2.— Example of a power spectrum. Azimuthally averaged $P(f)$ is plotted in dashed line (raw) and in full line after division by $\overline{T}_{AD}(f)$. The model (2) is plotted in dotted line. Observations at SOAR in the $y$ filter, zenith distance $z = 50\overset{\circ}{.}7$.

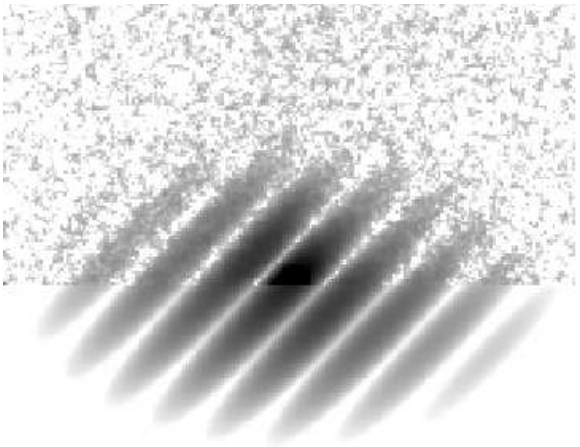

Fig. 3.— The PS of binary star FOX 102AB ($\rho = 0''.17$, $\Delta m = 0.45$) is displayed, replaced by the fitted model (5) with synthetic STF in the lower half. The intensity scaling is inverse logarithmic from $10^{-6}$ to $10^{-3}$. The AD blur in the $y$-filter was 3.4 pixels ($z = 38°$) in approximately vertical direction, causing elongation of the PS.

position angle is determined only modulo 180°, so a change of quadrant is always possible.

Fitting of the model (5) to the PS is done by the Levenberg-Marquardt method in the frequency range $\kappa_{min} < \kappa < \kappa_{max}$ over the upper half-plane $\kappa_y \geq 0$, due to the symmetry. The error of the measured PS at each point $j$, $\sigma_j^2 = (P_j + P_{noise})/K$ is taken into account ($K$ – number of images in the data cube). The quality of the fit is evaluated by the normalized sum of residuals $\chi^2/N = (1/N)\ \sum_j (P_j - P_{mod,j})^2/\sigma_j^2$, $N$ being the total number of the fitted points in the frequency plane. For noisy data, we obtain $\chi^2/N \sim 1$, but for bright stars the un-modeled systematic features of the STF (e.g. details caused by telescope aberrations) dominate the residuals, leading to $\chi^2/N$ values up to 20. Figure 3 shows the example of a binary-star PS and its fitted model. The fact that AD is explicitly included in the model helps to distinguish true close companions from the elongation of speckles produced by the AD.

A model of a resolved triple star is fitted in a similar way, but the number of parameters is larger. Initial values of the fitted parameters are determined by clicking on the companion(s) on the displayed ACF. In the data table we list positions and magnitude differences of triple-star pairs relative to the brightest component, not the photocenters of close sub-systems. For example, the measurements of J01198−0031 = STF 113 A,BC at $1''.67$ in fact refer to the pairing (A,B), not to the center of the inner sub-system FIN 337 BC. Accordingly, in the data tables we designate the wide pair as STF 113 AB. The quadrants in a triple system can be changed jointly, but not individually. When the quadrant of the slowly moving outer pair is known from previous observations, the quadrant of the inner pair can be established without ambiguity.

The fitting program provides estimates of the parameter errors. Yet another estimate comes from the variance of $N$ measurements obtained on the same night in the same filter, $\sigma_x^2 = (N - 2)^{-1} \sum_N (x - \overline{x})^2$. Mostly, $N = 2$ (two data cubes). We adopt the larger of these two errors and list them in the data table. For 1846 measurements with $N \geq 2$, the median errors of companion positions are 0.3 mas in both radial and tangential directions, while 75% of the errors are smaller than

0.8 mas. For a subset of 49 measurements with $N \geq 4$ where the estimates of the variance are more reliable, the median errors in tangential and radial directions are 0.5 mas and 0.6 mas, respectively. The error in separation exceeds 7.5 mas (half-pixel) in only 16 cases where the companions are either close or very faint. The listed errors are *internal*, they do not take into account calibration uncertainties or other systematic effects. During the Blanco run, some bright pairs were observed repeatedly, and the argeement between these measurements is quite good. For example, A 417 (WDS 23052−0742) shows the scatter $\sigma_\rho = 0.30$ mas and $\rho\sigma_\theta = 0.23$ mas from 6 measurements over 4 nights in two filters.

### 2.5. Calibration

Accurate knowledge of the detector pixel scale and orientation is needed to convert binary-star parameters from fitted values in pixels to absolute positions on the sky. Speckle measurements at the Mayall 4-m telescope at Kitt Peak National Observatory were calibrated by means of a double-slit mask (Hartkopf et al. 2000), while speckle data at the Blanco telescope were traditionally tied to this calibration by observing common pairs. Originally, we intended to observe many binaries with known orbits to calibrate our runs. However, it turned out that the quality of the available binary star orbits is not adequate. By calibrating against orbits, we relate modern precise measurements to the historical data of much lower accuracy which may also contain systematic errors.

A comparison between the Blanco08 and SOAR08b runs has revealed a disagreement of the pixel scale at the 3.5% level, despite independent calibration of each run with $\sim$ 100 orbits. In the face of this discrepancy, we calibrated the SOAR09 run by projecting into the telescope a fringe pattern formed by two coherent point sources attached to the telescope spider. The baseline of this interferometer $b = 0.4999$ m was accurately measured, the wavelength of the green laser $\lambda = 532.2$ nm is known, so the fringe period $\lambda/b = 0\farcs2196$ is known as well. About 30 fringes fit into the 400×400 pixel field. The position of the fringe peak in the PS of these data cubes is found by a simple centroid, leading to the determination of the pixel scale and detector orientation.

The results for each of the 8 series of fringe measurements are very consistent internally, but do show a spread between the series amounting to 0.5% in scale and $0\fdg2$ in angle. We attribute these differences to small imperfections in the fringe pattern caused by optical defects and aberrations in the beam path. The pixel scale of 15.23 mas is finally adopted for all SOAR runs. We measured also the effective pixel size of the HRCam detector (through its optics) by illuminating the device with a laser and determining the angle between the beams diffracted back by the pixel grid. The nominal projected pixel size of $5.00 \pm 0.025\,\mu$m was confirmed. Using the effective focal length of the SOAR known from its optical prescription, $F = 67.834$ m, we obtain the pixel scale of 15.20 mas in agreement with the laser calibration.

The detector orientation in the SOAR09 run was independently checked by observing stars at large zenith distances with wide filters. The resulting PS is elongated perpendicularly to the AD direction which itself is known. The elongation angle is determined by correlating the observed and modeled PSs in a certain range of spatial frequencies and finding the angle where the correlation reaches maximum. It turned out that most consistent results are obtained by considering the mid-range spatial frequencies between 0.1 and $0.3 f_c$, while at higher frequencies the direction of the elongation is possibly affected by telescope vibrations (see below). The resulting detector angle determined from AD is $1\fdg32 \pm 0\fdg1$, to be compared to $1\fdg37 \pm 0\fdg1$ measured from fringes and $1\fdg52 \pm 0\fdg2$ from orbits. In this case, all three methods agree very well.

The pixel scale of the Blanco run was adjusted using 107 binaries measured also in October 2008 (Fig. 4). The unweighted rms difference $\rho_{Blanco} - \rho_{SOAR}$ after adjustment is only 3.5 mas. A similar level of agreement is seen between other pairs of runs. This is the upper limit for the *external* measurement errors (part of the difference is caused by the motion of binaries between the runs). In contrast, the residuals in $\rho$ to the orbits (Fig. 5) show a large scatter for the whole data set and for the individual runs, precluding accurate scale calibration. Calibration only with the orbits of grade 1 does not help. The rms scatter of the O−C residuals in $\rho$ in Fig. 4b is still 8.3 mas for 32 points with $\rho < 0\farcs4$, much larger than the difference between the runs. The residuals to or-

bits in the tangential direction are around 5 mas.

The detector orientation changes slightly at each installation of the camera, so it has to be calibrated for each run. Considering the comparisons with orbits, the difference in $\theta$ between wide binaries measured commonly in pairs of runs, and the secure angular offset determined for the SOAR09 run, we adjusted the offsets in $\theta$ iteratively to reach mutual consistency between all runs. The remaining average differences in $\theta$ between any pair of runs are less than $0\overset{\circ}{.}2$, while the pixel scales are consistent to within 0.2% or better. We believe that the absolute calibration errors do not exceed 1% in scale and $0\overset{\circ}{.}5$ in angle, and that they are likely smaller. The data presented in this paper are possibly the most accurate measurements of southern binaries done so far.

### 2.6. Relative photometry of binary components

The contrast of fringes in the PS $\beta = B/A$ (or the ratio of peaks in the ACF $\beta/2$) is related to the magnitude difference between binary components $\Delta m$,

$$\Delta m = -2.5 \log_{10}[(1 - \sqrt{1-\beta^2})/\beta] \ . \qquad (6)$$

For small $\Delta m$, the slope of this relation is shallow, leading to a larger error of relative photometry. Moreover, as the fringe contrast is often under-estimated, the $\Delta m$ is over-estimated. The positive bias on $\Delta m$ becomes significant for faint stars, where the PS models fail. It is likely that the background photons cause this effect, given that PS is related to the intensity in a non-linear way (Eq. 1). For faint stars, the slope of the PS models $|p_1|$ is systematically less than normal, indicating that something is wrong.

We compared our speckle photometry with that of Hipparcos (ESA 1997), using only the Strömgren $y$ data as that filter most closely matched the Hipparcos $Hp$ filter. We found that the positive bias on $\Delta y$ is strongly correlated with the signal-to-noise ratio $\delta$, which we define here as the ratio of the speckle signal to the photon-noise bias at 1/2 of the cutoff frequency,

$$\delta = T_0(0.5)\ 10^{p_0+0.5p_1}/P_{noise} \ . \qquad (7)$$

Figure 6 shows such correlation for the Blanco run. Observations with $\delta < 0.25$ are marked by colons

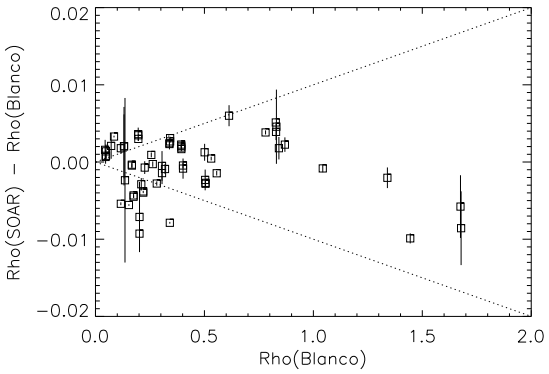


Fig. 4.— Inter-comparison of separations measured in the Blanco08 and SOAR08b runs on 107 common pairs. The dotted lines show ±1% deviations in the pixel scale. The estimated measurement errors are shown by the vertical lines.

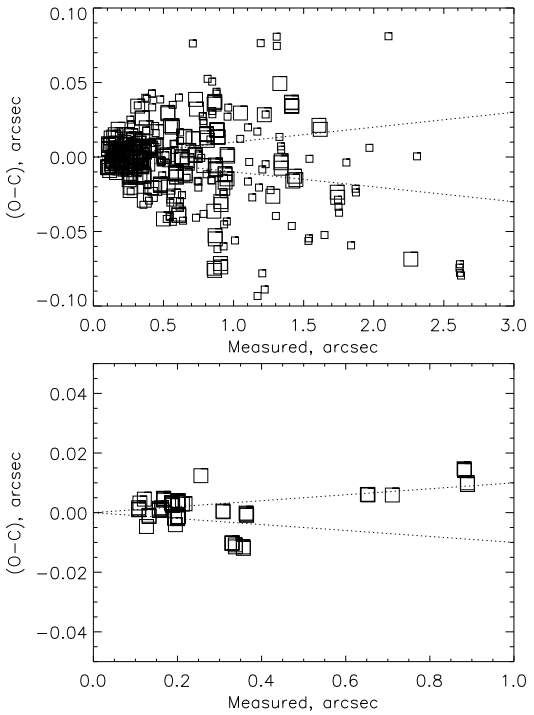


Fig. 5.— Residuals (O−C) in separation with respect to orbits. In the upper panel, the whole data set (432 points) is plotted, with orbits of grades 3 and higher as larger squares. The two dotted lines indicate ±1% range in the pixel scale. In the lower panel, only the 64 points with orbits of grade 1 are retained.

in the data table. These biased estimates are still useful as upper limits, especially for close pairs where no other photometry is available.

Another reason for $\Delta m$ over-estimation is the loss of correlation between speckle patterns of wide binary components (anisoplanatism). We implemented an alternative scheme for estimating $\Delta m$ directly from average re-centered images, provided that the binary is resolved ($\rho$ larger than the half-width of long-exposure image). The relative position of the components is already known from the PS fitting, so we have to determine only the true quadrant and $\Delta m$. The quadrant is selected by comparing two point-spread functions (PSFs) obtained by de-convolving the average image from the binary. For the wrongly selected quadrant, the PSF has a negative lobe opposite to the companion, so we select the quadrant with the least negative PSF. The de-convolved PSFs are then computed for a grid of $\Delta m$ values from 0 to the $\Delta m$ estimated from speckle. The final $\Delta m$ value is the one which gives the most symmetrical PSF, when the secondary component disappears. This procedure is applied automatically to all data, but in some cases (wrong quadrant choice for $\Delta m \sim 0$ or large $\Delta m$) it fails. In the following, we call this method *resolved photometry* and mark such $\Delta m$ estimates to distinguish them from the standard speckle photometry of closer pairs.

Figure 7 compares $\Delta y$ measured by speckle (only data with $\delta > 0.25$) and by resolved photometry with the Hipparcos photometry, for the whole data set. These plots help to evaluate the accuracy of our photometry. Despite some remaining deviant points, the overall agreement is evident. Wide pairs without resolved photometry suffer from the positive $\Delta y$ bias caused by anisoplanatism. As this bias is variable, depending on high-altitude turbulence, we do not attempt to quantify it.

Quantitative evaluation of the bias and precision of our photometry is given in Table 3. We compare speckle photometry of close ($\rho < 1''$) pairs with good S/N ($\delta > 0.25$) and resolved photometry of wide pairs with magnitude differences $\Delta Hp$ measured by Hipparcos (first two lines) and with magnitude differences $\Delta V$ derived from the Tycho data by Fabricius & Makarov (2000) (last two lines). Each line lists the number $N$ of pairs in common, median and average difference between $\Delta m$'s, and the rms dispersion of the difference. The speckle photometry has a small positive bias, while the resolved photometry is essentially unbiased. The speckle photometry bias is larger in comparison with the Tycho $\Delta V$ than with $\Delta Hp$ because only pairs wider than $0\farcs3$ are considered by Fabricius & Makarov (2000), hence larger contribution of anisoplanatism. When we compare our $\Delta y$ with $\Delta Hp$ only for pairs with $0\farcs3 < \rho < 1''$, a similar positive bias of $0.2^m$ appears, but the rms scatter becomes smaller, around $0.20^m$. The Hipparcos photometry of close pairs with $\rho < 0\farcs2$ (below the resolution limit of the Hipparcos telescope) is suspect, as can be seen in the lower plot of Fig. 7. We estimate that intrinsic random errors of our photometry (both speckle and resolved) are around $0.2^m$ r.m.s., but in a few cases the disagreement between our and published photometry is much larger.

### 2.7. Detection limits

Binary companions are detected as symmetric spikes in the filtered ACF. Fluctuations in the ACF caused by photon noise, residual speckle statistics, etc. prevent detection of faint companions. The rms fluctuations in the annuli of 2-pixel width around the central peak are calculated for each ACF; this $\sigma(\rho)$ curve is translated to the detection limit $\Delta m_3(\rho)$ by assuming that all companions above $3\sigma$ are detectable. Of course, the annulus containing the actual companion will have enhanced fluctuations and lower $\Delta m_3$. However, as shown in Fig. 8, a simple linear model can be fitted to the $\Delta m_3(\rho)$ curve by excluding the companion zone. Typically, the slope of the curve changes abruptly at some distance $\rho^* \sim 0.15''$, so we approximate it by two linear segments intersecting at $\rho^*$. Such 2-segment linear models are fitted to all data.

Table 3: Comparisons of relative photometry

| Data | $N$ | Med. (mag) | Aver. (mag) | r.m.s. (mag) |
|---|---|---|---|---|
| Sp. $\Delta y - \Delta Hp$ | 303 | 0.13 | 0.11 | 0.34 |
| Res. $\Delta y - \Delta Hp$ | 162 | 0.04 | 0.08 | 0.42 |
| Sp. $\Delta y - \Delta V_{\rm Tyc}$ | 206 | 0.23 | 0.28 | 0.30 |
| Res. $\Delta y - \Delta V_{\rm Tyc}$ | 132 | 0.02 | 0.05 | 0.19 |

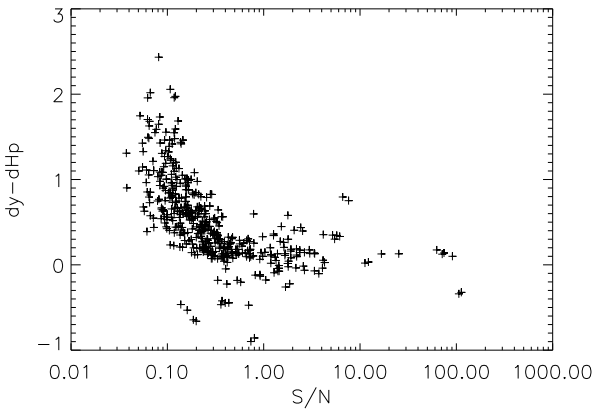


Fig. 6.— Comparison of the magnitude difference $\Delta y$ measured by speckle at Blanco with magnitude difference $\Delta Hp$ measured by Hipparcos for common pairs with $\rho < 0\farcs8$, as a function of the signal-to-noise ratio $\delta$.

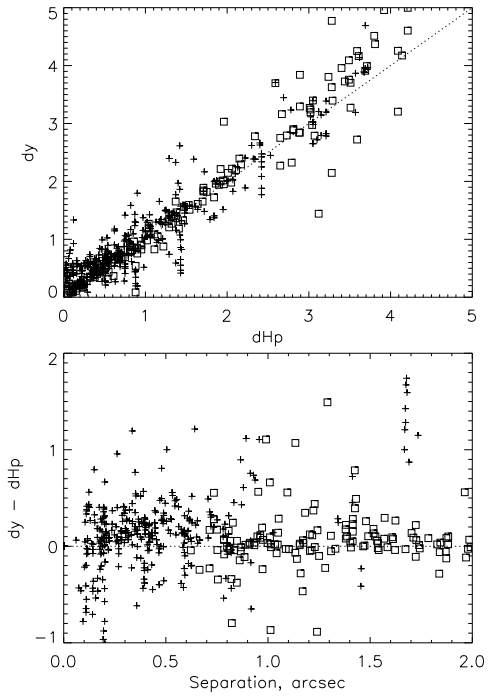


Fig. 7.— Comparison of the magnitude difference $\Delta y$ measured by speckle (crosses, $\delta > 0.25$) and by resolved photometry (squares) with magnitude difference $\Delta Hp$ measured by Hipparcos for the whole data set. Top: common pairs with $\rho < 1''$, bottom: $\Delta y - \Delta Hp$ as a function of separation $\rho$.

The detection threshold was checked by simulating fake companions. A real ACF of a single star (or a binary de-convolved from a faint companion) was used as a model of the speckle PSF, then companions were generated with separations from $0\farcs1$ to $1''$ and $\Delta m$ in the $(-1.0, +0.5)$ interval around $\Delta m_3$. About 10 representative cases were tested in this way, with 100 trial companions each (Fig. 9). Our general conclusion is that the $5\sigma$ line $\Delta m_5 = \Delta m_3 - 0.55$ corresponds to certain detection, companions in the region between $\Delta m_5$ and $\Delta m_3$ are detected fairly frequently, and companions with $\Delta m > \Delta m_3$ remain undetected, with few exceptions.

Figure 10 compares the detection limits estimated by the above procedure with the actually measured $\Delta m$. Only data with good signal-to-noise $\delta > 0.25$ and $\rho > 0\farcs15$ are selected. Positive bias in $\Delta m$ inherent to speckle photometry is also relevant to the detection limits which are over-estimated by the same amount. For wide companions with $\rho > 1''$ anisoplanatism becomes important, making our formal detection limits optimistic. The same is true for the noisy data with $\delta < 0.25$. We list the $\Delta m_5$ detection limits for unresolved targets at separations of $0\farcs15$ and $1''$ and mark cases with $\delta < 0.25$ by colons. The actual detection limits for companions closer than $0.1''$ cannot be established by the above simple analysis, as they depend on a number of artifacts discussed in the next sub-section. Median detection limits $\Delta m_5$ for the whole data set are $4.22^m$ and $5.33^m$ at $0\farcs15$ and $1''$, respectively. For the best 25% of data, these limits exceed $4.67^m$ and $6.08^m$.

### 2.8. Artifacts and false companions

In all data sets, most ACFs are round, but some ACFs show symmetric enhancements near the first diffraction ring which can be mistaken for a binary companion with $\Delta m \sim 3$. In the case of binary stars, these false details appear around the secondary peaks as well, distinguishing them from true triple systems where the secondary peaks are doubled, not tripled.

These false peaks have some common features. First, their separation from the center, typically from 45 mas to 75 mas, is larger in the H$\alpha$ filter than in the y filter, while the intensity of the peaks is also larger in H$\alpha$. Secondly, the peaks are al-

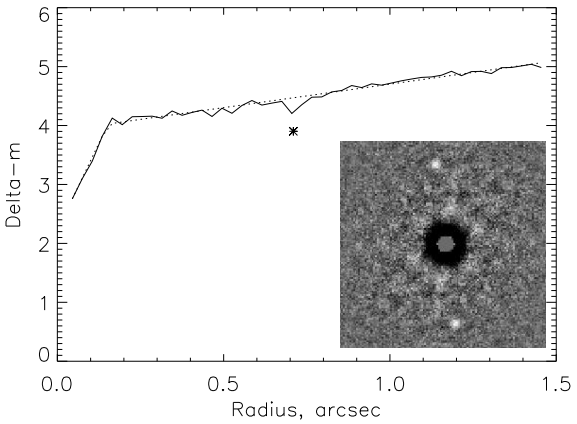


Fig. 8.— Fluctuations in the filtered ACF of a faint binary star are calculated, translated to the $3\sigma$ detection limit $\Delta m_3$ and plotted as a function of radius. The asterisk marks $(\rho, \Delta m)$ of the actual binary companion. Approximation of the curve by two linear segments is plotted as a dotted line. The insert shows a fragment of the ACF, with the central peak masked.

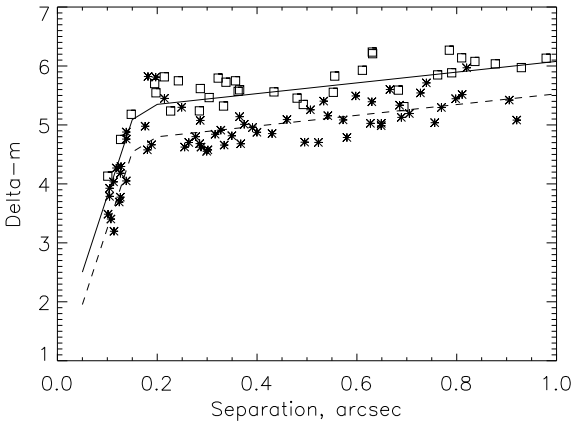


Fig. 9.— Verification of the companion detection limit (example). Solid and dashed lines indicate the $\Delta m_3$ and $\Delta m_5$ curves, respectively. Positive detections are plotted as asterisks, failed detections as squares.

most always oriented vertically, along the AD direction. Yet, they are not caused by the AD because the separation does not depend on the spectral bandwidth and the zenith distance (the peaks are seen even near the zenith). Third, the separation, orientation, and intensity of the peaks is variable. In two data cubes of the same star, one may have the false peaks while the other does not. When we split the data cube into 10 segments and calculate the PS for each segment, the variability of the peaks on a time scale of seconds becomes even more apparent. However, the peaks often appear persistently in the ACFs of different objects observed one after another in the same part of the sky.

The persistent nature of these peaks means that they are not caused by random fluctuations of speckles and do not disappear when more data are averaged. Having at least two data cubes for each object and examining data on other objects observed before and after the star usually helps to identify and reject false companions, despite their striking resemblance to real binaries in some cases.

The properties of the false peaks indicate that they are likely caused by variable optical aberrations with characteristic size of 2 m, or $\frac{1}{2}$ of the telescope diameter. We simulated speckle data by adding a sinusoidal wave-front aberration with $\frac{D}{2}$ period to the atmospheric distortions. Some characteristics of the false peaks (Fig. 11, right) could be reproduced. The intensity of the false peaks is larger in H$\alpha$ than in y, and it decreases with degrading seeing. Orientation of the peaks in the vertical direction suggests that optical aberrations such as astigmatism could play some role, but our simulations show that the STF can be affected only by a fairly large amount of defocus and astigmatism causing visible elongation of the seeing-limited PSF. Even then the astigmatism produces an elongation of speckles, rather than their tripling. Air stratification in the dome can possibly cause this optical effect, but its exact nature remains mysterious. Such false peaks could explain previous detections of speckle companions which turned out to be bogus. See the discussion of false speckle companions by McAlister et al. (1993).

Sometimes speckle peaks in the ACF are also elongated at a large angle with respect to the AD. This blur could be caused by telescope aberrations

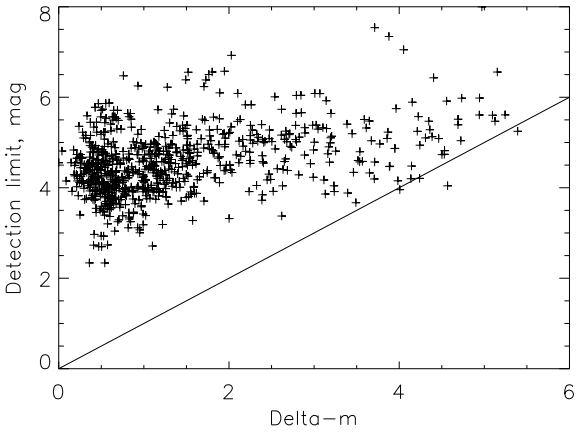


Fig. 10.— Comparison of the measured $\Delta m$ (horizontal axis) with the detection limits (vertical axis). Only those 777 pairs with $\rho > 0\farcs15$ and valid speckle photometry are plotted.

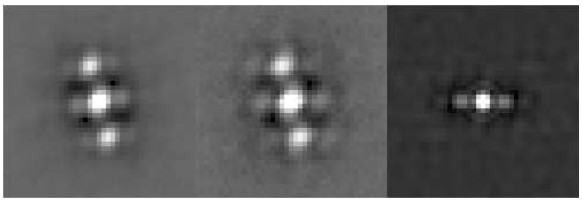

Fig. 11.— Illustration of false peaks in the ACFs. Central $0\farcs6 \times 0\farcs6$ portions of the filtered ACFs of the binary star BU 368AB ($\rho = 0\farcs12$) observed in August 2008 in the filters $y$ (left) and H$\alpha$ (center) are shown. The right panel shows the simulated ACF of a single star in H$\alpha$ with optical aberrations of $\frac{D}{2}$ period and amplitude 0.8 $\mu$m, under $0\farcs8$ seeing, and on the same scale. All images have the same square-root intensity stretch from minimum (black) to 0.5 of the ACF maximum (white).

or tracking errors. Although tracking errors are usually slow (typical frequency 1 Hz), their amplitude can be large enough to degrade the resolution in a 20-ms exposure. Alternatively, speckles can be elongated by fast turbulence. Instrumental elongation of speckles is indistinguishable from the effect of a close binary companion at the limit of resolution ($\sim 30$ mas), so only the examination of data on stars observed before or after can help to distinguish an authentic close binary from an artifact.

Clearly, detection and measurement of close binary companions are complicated by the artifacts and involve an element of human judgment and error. The detection limits cannot be formalized, as was done for wider companions. We cannot exclude the possibility that some of the measurements presented below are affected by the artifacts, despite all efforts to understand and eliminate them.

## 3. Results

### 3.1. Data tables

Table 4 lists 1898 measurements of 1189 resolved known and new binary stars and subsystems. Its columns contain (1) the WDS (Mason et al. 2001a) designation, (2) the "discoverer designation" as adopted in the WDS, (3) an alternative name, mostly from the Hipparcos catalog, (4) Besselian epoch of observation, (5) filter, (6) number of individual data cubes, (7,8) position angle $\theta$ in degrees and internal measurement error in tangential direction $\rho\sigma_\theta$ in mas, (9,10) separation $\rho$ and its internal error $\sigma_\rho$ in mas, and (11) magnitude difference $\Delta m$. An asterisk follows the value if $\Delta m$ and the true quadrant are determined from the resolved photometry; a colon indicates that the data are noisy and $\Delta m$ is likely overestimated. We decided not to mark with colons the $\Delta m$ values of wide pairs over-estimated only due to anisoplanatism (when no resolved photometry is available), to avoid confusion with the low S/N cases. Note that in the cases of multiple stars, the positions and photometry refer to the pairings between individual stars, not with photo-centers of sub-systems.

For stars with known orbital elements, columns (12–14) of Table 4 list the residuals to the ephemeris position and the reference to the or-

bit from the $6^{th}$ *Orbit Catalog* (Hartkopf, Mason, & Worley 2001). In those cases where multiple orbits for the same system are present in the catalog, the orbit with the smallest residuals is selected. An asterisk in the final column indicates that a note concerning this system may be found in Table 7.

Table 5 contains the data on 285 unresolved stars, some of which are listed as binaries in the WDS or resolved here in other runs. Columns (1) through (6) are the same as in Table 4 (although Column (2) also includes Bayer designations, HD numbers, or other names for objects without discoverer designations). Columns (7,8) give the $5\sigma$ detection limits $\Delta m_5$ at $0\farcs15$ and $1''$ separations determined by the procedure described above. When two or more data cubes are processed, the best detection limits are listed. Noisy data with $\delta < 0.25$ are marked by colons to indicates that the actual detection limits are smaller. As in Table 4, the final column indicates a note to the system.

New discoveries are repeated in Table 6 in the same format as measurements in Table 4 – a total of 48 pairs. Figure 13 shows ACFs of 20 newly resolved triple systems.

### 3.2. Comments on individual objects

Notes to some objects in Tables 4, 5, and 6 are given in Table 7. These notes include miscellaneous information such as additional components, discovery history, etc. The WDS (Mason et al. 2001a) and the Multiple-Star Catalog (Tokovinin 1997) were extensively consulted, among other sources. Each system is identified by its WDS designation and an alternate name. Cases where deviations from the orbits are quite large are also indicated. The definition of unacceptably large residuals is subjective; we consider as such orbits which deviate from our measurements by more that 20° in $\theta$ or by more than 50% in $\rho$. There are 131 such cases out of 544 systems with orbits. The 24% fraction of *bad orbits* demonstrates that more measurements of southern binaries are needed.

In this sub-section we give more lengthy comments on a few selected cases.

**02053-2425 = HIP 9774 = I 454:** The brightest companion of I 454 (also known as ADS 1652) is a double-lined spectroscopic binary with period 2.6 yr and eccentric orbit, $e = 0.78$ (Tokovinin, unpublished). The estimated semi-major axis of this pair is 47 mas. The system passed through periastron in May-June 2008 and was marginally resolved in July 2008 at Blanco. In October 2008 the separation was closer, below the diffraction limit of the 4-m telescope. Nevetheless, we were able to fit consistently a triple-star model to 7 power spectra recorded in October. As our estimated $\Delta m \sim 1^m$ is larger than the spectroscopically estimated $\Delta m \sim 0.3^m$, it is possible that the actual separations were even smaller than those listed in Table 6. Component C = HIP 9769 of this multiple system was also observed here and found to be single.

**02225-2349 = HIP 11072 = $\kappa$ For = TOK 40:** The companion was first resolved in 2007 (Tokovinin & Cantarutti 2008). New measurements are roughly compatible with the 26.5-yr astrometric orbit of Gontcharov & Kiyaeva (2002) if we adjust the semi-major axis to $0\farcs65$ and the node position angle to 120°. New photometry ($\Delta y = 5.0$, $\Delta \mathrm{H}\alpha = 4.3$) shows that the companion is not as faint as measured initially, and that it is redder than the primary star. It will be very useful to measure the relative brightness of the companions in the near-IR with adaptive optics.

**05086-1810 = HIP 23932 = WSI 72:** Speculated to be a close binary by Henry et al. (2002), it was first resolved in 2006 with the USNO speckle camera on the Blanco 4m by Mason et al. (2010b) at about the same position angle and twice the separation measured here.

**05354-0555 = HIP 26241 = CHR 250Aa,Ab:** New measurements confirm slow rectilinear motion of this pair due either to a long-period orbit or to Ab being an unrelated background star, in agreement with the conclusions of Mason et al. (2009). Our photometry indicates that CHR 250Ab is bright, V$\sim 6^m$.

**06003-3102 = HIP 28442C = GJ 225.2C = TOK 9CE:** The E companion in this nearby quadruple system was discovered with adaptive optics in 2004 (Tokovinin et al. 2005). In that paper, a tentative astrometric orbit with 23.7-yr period was proposed, and an unusually "blue" $J - K$ color of E was noted. The component E was marginally resolved in the visible during the first speckle run at SOAR (Tokovinin & Cantarutti 2008). In the present data, the companion

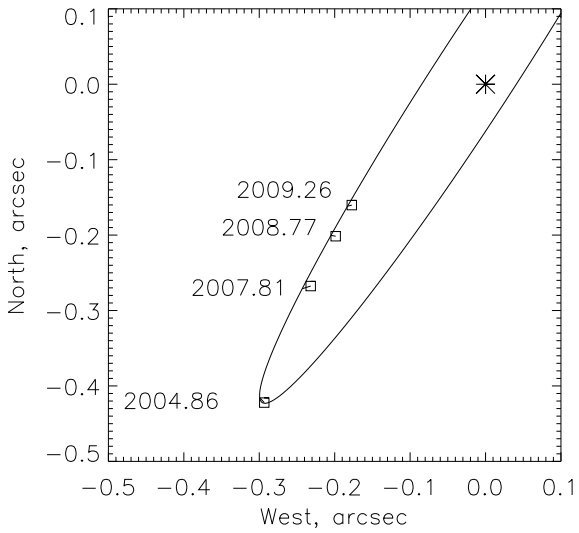


Fig. 12.— Observed motion of the E component (squares) relative to the C component (big star) in the CE sub-system of the visual quadruple star GJ 225.2 The separation decreases from 0.″514 in 2004.86 to 0.″239 in 2009.26. The line shows a possible orbit with 23.7-year period.

is seen reliably above the detection limit, and its magnitude difference is measured consistently as $\Delta y = 4.5^m$. All 4 position measurements available to date show retrograde orbital motion (Fig. 12) which does not follow the preliminary astrometric orbit suggested by Tokovinin et al. (2005), but is still compatible with a 24-year orbital period. Within a few years, the orbit can be established more firmly and we will be able to address the properties of this apparently peculiar companion. New observations of the other sub-system AB confirm its orbital elements.

**06410+0954 = HIP 31978 = 15 Mon = CHR 168Aa,Ab:** The most recent orbit of Gies et al. (1997) is clearly in error. This system has been the subject of regular observation by both speckle interferometry and HST-FGS. A new orbit is currently in preparation.

**07523-2626 = HIP 3840 = V402 Pup = WSI 54:** This $9.23^m$ star of spectral type O6e belongs to the open cluster NGC 2467. Mason et al. (2009) have resolved it into a close pair WSI 54 and measured in 2006.194 the position angle 231.8° and the separation 0.″091. Our observations clearly show three stars in a tight linear configuarion (Fig. 13). The outer companion matches the WSI 54 pair best, the inner companion has a separation 2 times smaller and a similar flux. This detection is based on 3 independent data cubes, the companions are not aligned with the AD, so we are confident that this is not an artifact. Further observations will reveal whether this is a dynamically unstable system (trapezium), an unusual multiple with orbits in resonance, or a chance projection of a binary and a single star, more probable in a cluster than in the field.

**17248-5913 = HIP 85216 = I 385 + WSI 85:** Quite unexpectedly this star, previously considered as a binary, turned out to be a spectacular triple with components of comparable magnitude and separation (trapezium-type); see Fig. 13. During the 0.72-yr time between the Blanco and SOAR09 runs, the relative position of both companions changed only slightly; the magnitude differences remained stable as well. Comparing our measurements with published data, we identify the wider companion at 122°, 0.″39 with the previously known component B and designate the new companion at 270°, 0.″26 as D. The distant companion C at 210°, 17″ (also seen in the 2MASS images) is $5^m$ fainter than A and has moved only slightly since its discovery in 1901. Therefore, C likely belongs to this system.

The AB pair has revolved by 64° over the 110 years since its discovery by Innes (1905), suggesting an orbital period of ∼ 600 yr; this corresponds also to the dynamically estimated period at a distance of 211 pc measured by Hipparcos. The projected separation of AD (55 AU) means that its orbital period should be of the order of 300 yr.

The component D was noted in the only previous speckle observation by Hartkopf et al. (1993), but it was not accepted as real at that time. Remeasurement of the correlation peak corresponding to AD yields 0.″199, 270.°18 on 1990.3496. It seems that the pair AD is slowly opening up. The AD was not resolved visually at a 1-m telescope by Holden (1977a). The Hipparcos measured the relative position of AB at 118°, 0.″452 in disagreement with all other data, as though the light center of AD was measured instead of A. The mysterious new companion D deserves futher observations.

**17535-0355 = HD 162905 = V2610 Oph = TOK 54:** According to Pribulla et al. (2009), this is a close quadruple system composed of two

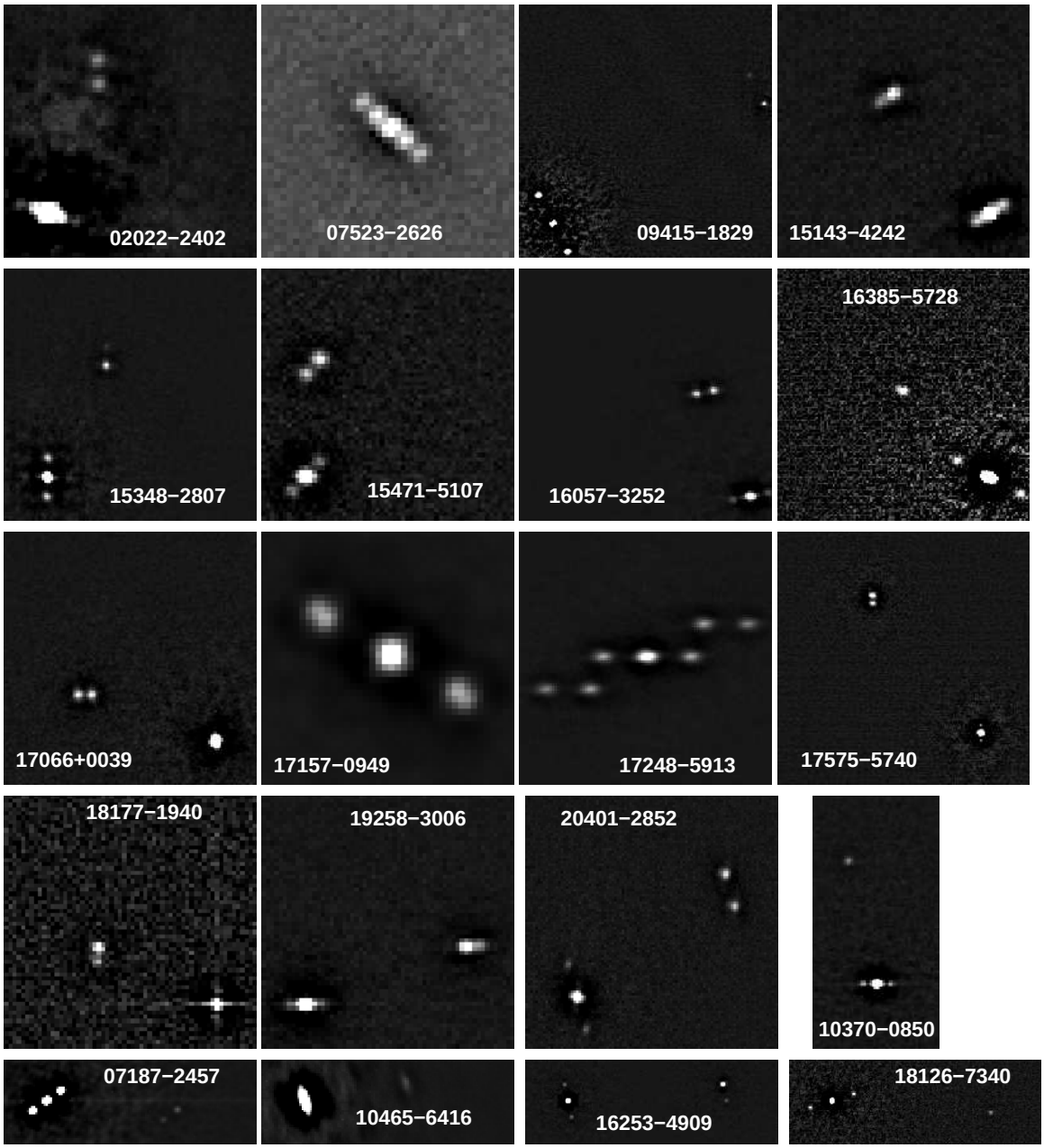


Fig. 13.— ACFs of 20 triple stars with newly resolved components. Each panel shows a fragment of the filtered ACF including the central peak and some or all companion peaks, in arbitrary intensity stretch and with detector lines horizontal (not necessarily North up).

double-lined binaries with periods 8.47 and 0.425 days (the latter is also eclipsing) orbiting each other. All components are dwarfs of spectral types F to G. The outer system is resolved here for the first time. The authors estimate $\Delta m = 0.27^m$; our measurement $\Delta y = 1^m$ is biased by the low S/N. Some other eclipsing binaries discovered to be spectroscopic multiples by the same team were also observed at SOAR in April 2009 and found unresolved. However, one of those, HDS 238, has a visual companion at $3\farcs2$ listed in the WDS, too wide to be measured here.

**18455+0530 = HIP 92027 = STF 2375AB, FIN 332Aa,Ab & FIN 332Ba,Bb:** New orbits, based on new reductions of historical interferometric measures and new measures, are in process for this complex multiple system (Mason et al. 2010a).

**20401-2852 = HD 196718 = SEE 423:** This triple system ($V = 8.70$, F5V) was first resolved in 1897 at $(0\farcs92, 20°)$. Three observations of this pair are listed in Aitken's (1932) catalog under #14115, showing slow direct motion. Holden (1977b) measured in 1976.8 $(0\farcs76, 32°)$ and $\Delta m = 0.5$. However, a larger separation of $(1\farcs112, 33°)$ was measured by the Tycho experiment on 1991.68 (ESA 1997). One year later, in 1992.4552, Hartkopf et al. (1996) found the pair at a very different position, $(0\farcs34, 271°)$. We see now that this system is a visual triple (Fig. 13), with the wide pair AB at $(1\farcs15, 38°)$ matching the Tycho result and corresponding to SEE 423. The closer pair BC is fainter than A by $0.64^m$ (Tycho) and was apparently measured for the first time in 1992 by Hartkopf et al. (1996). The triple nature of SEE 423 clarifies some, but not all contradictions in the existing data. The wider (and the brightest) component was not seen by speckle in 1992 as it was outside the field-of-view. However, why did Holden and other visual observers not resolved the sub-system BC with nearly equal components? Also, why is the measured separation of the wide pair so discordant, ranging from $0\farcs76$ (Holden) to $1\farcs15$ (this work)?

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*Facilities:* Blanco, SOAR.

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TABLE 4

MEASUREMENTS OF KNOWN AND NEW BINARY STARS

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00006−5306 | HJ 5437 | HIP 50 | 8.7697 | y | 2 | 332.7 | 0.2 | 1.4904 | 0.7 | 3.4 | * | | | | |
| 00008+1659 | BAG 18 | HIP 68 | 8.5378 | y | 1 | 6.8 | 6.0 | 0.6112 | 6.1 | 4.6 | | | | | |
| 00008−3244 | I 1478 | HD 224811 | 8.5459 | y | 2 | 328.6 | 0.3 | 0.3766 | 0.3 | 1.1 | : | | | | |
| 00028+0208 | BU 281 AB | HIP 223 | 8.5379 | y | 5 | 161.9 | 0.2 | 1.5689 | 1.0 | 2.0 | * | | | | * |
| | | | 8.7672 | y | 2 | 161.7 | 0.5 | 1.5709 | 0.2 | 2.2 | * | | | | |
| 00039−5750 | I 700 | HIP 306 | 8.5459 | y | 2 | 144.1 | 0.2 | 0.2965 | 0.2 | 0.8 | : | | | | |
| 00059+1805 | STF 3060 AB | HIP 495 | 8.5377 | y | 2 | 133.6 | 1.5 | 3.4185 | 1.5 | 0.3 | * | | | | * |
| 00059−3020 | RST 5180 AB | HD 117 | 8.5459 | y | 2 | 340.3 | 0.3 | 0.3274 | 0.3 | 1.2 | : | | | | * |
| 00090−5400 | HDO 181 | HIP 730 | 8.5379 | y | 2 | 35.4 | 0.3 | 0.3236 | 0.1 | 1.8 | | −3.4 | −0.013 | Alz2000b | |
| | | | 8.5379 | Hα | 2 | 35.4 | 0.2 | 0.3228 | 0.2 | 2.0 | | −3.4 | −0.013 | Alz2000b | |
| | | | 8.5431 | y | 2 | 35.5 | 0.4 | 0.3228 | 0.4 | 1.7 | : | −3.3 | −0.013 | Alz2000b | |
| | | | 8.5431 | Hα | 2 | 35.3 | 0.7 | 0.3223 | 0.8 | 2.2 | : | −3.5 | −0.014 | Alz2000b | |
| | | | 8.5486 | y | 3 | 35.3 | 0.1 | 0.3237 | 0.3 | 1.6 | | −3.5 | −0.013 | Alz2000b | |
| | | | 8.6059 | y | 2 | 35.2 | 0.1 | 0.3241 | 0.2 | 1.6 | | 9.8 | −0.060 | Sey2001 | |
| 00098−3347 | SEE 3 | HIP 794 | 8.5459 | y | 2 | 116.1 | 0.3 | 0.7827 | 0.3 | 1.5 | : | 38.5 | 0.100 | Csa1983a | * |
| | | | 8.5459 | Hα | 2 | 116.1 | 0.7 | 0.7819 | 0.7 | 1.5 | : | 38.5 | 0.099 | Csa1983a | |
| | | | 8.5486 | y | 3 | 116.1 | 0.5 | 0.7830 | 0.7 | 1.7 | : | 38.5 | 0.100 | Csa1983a | |
| 00115−5545 | HDS 25 | HIP 927 | 8.5459 | y | 2 | 77.5 | 0.4 | 0.1775 | 0.2 | 1.0 | | | | | |
| 00121−5832 | RST 4739 | HIP 975 | 8.5431 | y | 2 | 134.8 | 0.6 | 0.3191 | 0.6 | 1.4 | : | | | | * |
| | | | 8.7697 | y | 2 | 133.9 | 0.1 | 0.3182 | 0.1 | 0.4 | | | | | |
| 00126−1142 | RST 3343 | HIP 1005 | 8.5432 | y | 2 | 253.0 | 0.4 | 0.2799 | 0.3 | 1.0 | : | −7.6 | −0.036 | Hei1998 | |
| | | | 8.5487 | y | 3 | 253.1 | 0.2 | 0.2801 | 0.2 | 0.7 | : | −7.5 | −0.036 | Hei1998 | |
| | | | 8.6059 | y | 2 | 253.1 | 0.1 | 0.2803 | 0.1 | 0.4 | | −7.6 | −0.036 | Hei1998 | |
| 00143−2732 | HDS 33 | HIP 1144 | 8.5432 | y | 4 | 116.2 | 0.4 | 0.1737 | 0.5 | 1.4 | : | | | | |
| 00149−3209 | B 1024 | HIP 1190 | 8.5431 | y | 2 | 74.3 | 0.4 | 0.4102 | 0.4 | 1.0 | : | | | | |
| 00174+0853 | A 1803 AB | HIP 1392 | 8.7672 | y | 2 | 307.2 | 0.1 | 0.1623 | 0.4 | 1.1 | | −4.3 | −0.001 | Lin1984b | * |
| 00202−3554 | I 701 | HIP 1610 | 8.5431 | y | 2 | 57.4 | 0.4 | 0.6482 | 0.4 | 1.4 | : | | | | |
| 00206+1219 | BU 1015 | HIP 1646 | 8.5378 | y | 2 | 102.2 | 0.2 | 0.4780 | 0.2 | 0.8 | | −3.6 | 0.018 | Sca2000b | |
| | | | 8.5378 | Hα | 2 | 102.2 | 0.3 | 0.4780 | 1.0 | 1.2 | : | −3.6 | 0.018 | Sca2000b | |
| | | | 8.5460 | y | 2 | 102.1 | 0.4 | 0.4789 | 0.4 | 1.0 | | −3.6 | 0.019 | Sca2000b | |
| | | | 8.5460 | Hα | 2 | 102.2 | 0.6 | 0.4787 | 0.6 | 1.4 | : | −3.5 | 0.019 | Sca2000b | |
| 00219−2300 | RST 5493 BC | HIP 1732 | 8.7672 | y | 2 | 89.9 | 0.5 | 0.2106 | 0.1 | 0.6 | : | | | | |
| 00271−0753 | A 431 | HIP 2143 | 8.5432 | y | 2 | 8.9 | 0.4 | 0.2043 | 0.3 | 1.0 | : | −1.1 | −0.005 | Sca1981a | * |
| | | | 8.5487 | y | 3 | 9.0 | 0.2 | 0.2051 | 0.6 | 0.6 | | −1.0 | −0.004 | Sca1981a | |
| | | | 8.6060 | y | 2 | 9.0 | 0.3 | 0.2043 | 0.3 | 1.0 | : | −0.8 | −0.005 | Sca1981a | |
| 00282−5437 | I 44 | HIP 2226 | 8.5431 | y | 4 | 262.5 | 2.7 | 0.4524 | 1.6 | 2.2 | : | | | | |
| 00284−2020 | B 1909 | HIP 2237 | 8.5432 | y | 2 | 294.4 | 0.1 | 0.1967 | 0.3 | 0.5 | : | −5.7 | −0.023 | Sod1999 | |
| | | | 8.5432 | Hα | 2 | 294.4 | 0.1 | 0.1966 | 0.1 | 0.6 | | −5.7 | −0.023 | Sod1999 | |
| | | | 8.5487 | y | 3 | 294.5 | 0.1 | 0.1961 | 0.8 | 0.6 | | −5.7 | −0.024 | Sod1999 | |
| | | | 8.6060 | y | 2 | 295.1 | 0.0 | 0.1975 | 0.1 | 0.3 | | −5.6 | −0.022 | Sod1999 | |
| | | | 8.7672 | y | 2 | 296.9 | 0.0 | 0.1997 | 0.1 | 0.2 | | −5.2 | −0.018 | Sod1999 | |
| | | | 8.7672 | Hα | 2 | 296.9 | 0.0 | 0.2001 | 0.0 | 0.2 | | −5.2 | −0.018 | Sod1999 | |
| 00310−1005 | BU 1158 BC | HIP 2444 | 8.5487 | y | 3 | 314.3 | 0.6 | 0.3491 | 0.2 | 0.8 | : | −46.7 | 0.216 | Baz1991a | * |
| 00315−6257 | I 260 CD | HIP 2487 | 8.6059 | y | 2 | 250.7 | 0.4 | 0.3286 | 0.2 | 1.5 | | 5.0 | 0.002 | Msn2001c | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | [O−C]$_\theta$ (deg) | [O−C]$_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.6059 | Hα | 2 | 250.7 | 0.2 | 0.3286 | 0.2 | 1.2 | | 4.9 | 0.002 | Msn2001c | |
| | | | 8.6059 | y | 1 | 250.7 | 0.2 | 0.3285 | 0.2 | 1.4 | | 4.9 | 0.001 | Msn2001c | |
| | | | 8.6059 | Hα | 2 | 250.6 | 0.2 | 0.3286 | 0.2 | 1.3 | | 4.9 | 0.002 | Msn2001c | |
| 00321−0511 | A 111 AB | HIP 2533 | 8.5487 | y | 3 | 120.8 | 0.4 | 0.1636 | 0.5 | 1.2 | : | 2.7 | −0.019 | Zul1971 | * |
| | | | 8.7698 | y | 1 | 117.5 | 0.1 | 0.1651 | 0.1 | 0.5 | | 2.5 | −0.020 | Zul1971 | |
| 00321−1813 | B 1910 | HIP 2527 | 8.5432 | y | 2 | 15.7 | 0.1 | 0.1305 | 0.1 | 0.6 | : | | | | |
| 00324+0657 | MCA 1 Aa,Ab | HIP 2548 | 8.7672 | Hα | 2 | 268.4 | 0.6 | 0.2217 | 0.2 | 1.9 | | −1.9 | 0.038 | Msn1997a | * |
| 00335−5520 | I 45 AB | HIP 2642 | 8.5431 | y | 2 | 205.1 | 0.8 | 0.6721 | 2.1 | 1.8 | * | | | | * |
| 00345−0433 | D 2 AB | HIP 2713 | 8.5432 | y | 2 | 173.1 | 0.9 | 0.0486 | 0.3 | 0.7 | | 76.2 | −0.212 | Sey2002 | * |
| | | | 8.5487 | y | 3 | 175.2 | 0.5 | 0.0480 | 0.8 | 0.6 | | 78.3 | −0.212 | Sey2002 | |
| | | | 8.6060 | y | 2 | 180.9 | 0.0 | 0.0491 | 0.2 | 0.6 | | 83.9 | −0.213 | Sey2002 | |
| | | | 8.6060 | Hα | 2 | 181.3 | 0.4 | 0.0524 | 0.3 | 1.0 | | 84.4 | −0.209 | Sey2002 | |
| | | | 8.7698 | y | 2 | 183.2 | 0.1 | 0.0494 | 0.4 | 0.7 | | 86.0 | −0.216 | Sey2002 | |
| 00352−0336 | HO 212 AB | HIP 2762 | 8.5405 | y | 2 | 192.9 | 0.1 | 0.1566 | 0.2 | 1.3 | | −0.6 | −0.001 | Msn2005 | * |
| | | | 8.5405 | Hα | 2 | 192.8 | 0.2 | 0.1570 | 0.1 | 1.1 | | −0.6 | −0.001 | Msn2005 | |
| | | | 8.5488 | y | 3 | 192.9 | 0.8 | 0.1570 | 0.2 | 1.4 | | −1.0 | −0.001 | Msn2005 | |
| | | | 8.6060 | y | 2 | 196.0 | 0.2 | 0.1622 | 0.1 | 1.3 | | −0.6 | −0.002 | Msn2005 | |
| | | | 8.6060 | Hα | 2 | 196.0 | 0.1 | 0.1628 | 0.1 | 1.2 | | −0.6 | −0.001 | Msn2005 | |
| 00363−3818 | RST 5183 | HIP 2863 | 8.5461 | y | 2 | 108.3 | 0.6 | 0.6702 | 0.4 | 1.4 | : | | | | * |
| 00373−2446 | BU 395 | HIP 2941 | 8.5406 | y | 2 | 85.9 | 0.1 | 0.3295 | 0.0 | 0.4 | | 4.3 | 0.010 | Pbx2000b | |
| | | | 8.5406 | Hα | 2 | 85.9 | 0.1 | 0.3294 | 0.1 | 0.3 | | 4.3 | 0.010 | Pbx2000b | |
| | | | 8.5488 | y | 3 | 86.0 | 0.1 | 0.3302 | 0.1 | 0.4 | | 4.4 | 0.010 | Pbx2000b | |
| | | | 8.6060 | y | 2 | 86.5 | 0.0 | 0.3374 | 0.0 | 0.4 | | 4.1 | 0.011 | Pbx2000b | |
| | | | 8.6060 | Hα | 2 | 86.5 | 0.2 | 0.3381 | 0.2 | 0.4 | | 4.1 | 0.011 | Pbx2000b | |
| | | | 8.7672 | y | 2 | 88.1 | 0.1 | 0.3562 | 0.0 | 0.4 | | 3.7 | 0.012 | Pbx2000b | |
| | | | 8.7672 | Hα | 2 | 88.0 | 0.0 | 0.3567 | 0.0 | 0.3 | | 3.7 | 0.012 | Pbx2000b | |
| 00417−2446 | B 10 | HD 3930 | 8.5406 | y | 2 | 168.4 | 0.5 | 0.0946 | 0.2 | 1.2 | : | | | | |
| 00424+0410 | STT 18 AB | HIP 3326 | 8.7672 | y | 2 | 207.7 | 0.1 | 1.9694 | 1.1 | 1.7 | * | 0.4 | −0.005 | Hrt2001b | * |
| 00426−0652 | RST 4154 AB | HD 4019 | 8.5406 | y | 2 | 196.8 | 0.3 | 0.1995 | 1.2 | 1.1 | : | | | | * |
| 00427−3828 | HDO 182 | HIP 3356 | 8.5461 | y | 2 | 19.6 | 0.0 | 0.7205 | 0.3 | 0.7 | | | | | |
| | | | 8.5461 | Hα | 2 | 19.6 | 0.3 | 0.7207 | 0.4 | 0.6 | | | | | |
| 00427−6537 | I 440 | HIP 3351 | 8.6059 | y | 2 | 270.3 | 0.1 | 0.3986 | 0.1 | 0.7 | | 1.6 | −0.080 | Lin2004a | |
| | | | 8.6059 | Hα | 2 | 270.2 | 0.3 | 0.3989 | 0.3 | 0.7 | | 1.5 | −0.080 | Lin2004a | |
| | | | 8.7697 | y | 2 | 270.0 | 0.1 | 0.3986 | 0.1 | 0.7 | | 1.3 | −0.081 | Lin2004a | |
| 00462−2214 | RST 4155 | HIP 3606 | 8.7672 | y | 2 | 334.8 | 0.1 | 0.1297 | 0.1 | 0.5 | | −8.8 | −0.008 | Hei1984a | |
| 00465−0131 | RST 4157 | HD 4424 | 8.5406 | y | 3 | 113.5 | 0.6 | 0.0516 | 1.5 | 0.8 | : | | | | |
| 00479−2921 | I 261 | HIP 3733 | 8.5460 | y | 2 | 52.5 | 0.4 | 0.2043 | 0.4 | 2.0 | : | | | | |
| 00517−5009 | B 1414 | HIP 4035 | 8.5461 | y | 2 | 43.4 | 0.2 | 0.6636 | 0.4 | 0.8 | : | | | | |
| 00521−1314 | HU 201 | HIP 4066 | 8.7698 | y | 2 | 115.7 | 0.4 | 0.8852 | 0.6 | 0.4 | * | −2.6 | 0.061 | Sta1977b | |
| 00522−2237 | STN 3 AB | HIP 4072 | 8.7672 | y | 2 | 243.2 | 0.0 | 1.9789 | 0.1 | 0.8 | * | | | | * |
| 00533+0405 | A 2307 | HIP 4176 | 8.7698 | y | 2 | 194.5 | 0.1 | 0.0828 | 1.6 | 1.3 | | 20.8 | 0.015 | Sey1999b | * |
| 00533−4530 | B 644 | HIP 4177 | 8.5461 | y | 2 | 348.1 | 0.1 | 0.2832 | 0.3 | 0.5 | | 2.0 | −0.039 | Sey2002 | |
| | | | 8.5488 | y | 2 | 348.2 | 0.5 | 0.2835 | 0.5 | 1.3 | : | 2.2 | −0.039 | Sey2002 | |
| 00574−3957 | B 1419 | HIP 4483 | 8.5461 | y | 2 | 229.1 | 0.2 | 0.3700 | 0.2 | 0.8 | : | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00576−4115 | RST 1201 | HIP 4493 | 8.5461 | y | 2 | 52.5 | 0.6 | 0.8215 | 0.4 | 2.4 : | | | | |
| 00593−0040 | A 1902 | HIP 4619 | 8.5405 | y | 2 | 207.7 | 0.4 | 0.3604 | 0.1 | 1.2 | −0.8 | 0.013 | Doc2000g | |
| | | | 8.5488 | y | 3 | 207.7 | 0.2 | 0.3594 | 0.5 | 1.2 | −0.8 | 0.012 | Doc2000g | |
| | | | 8.6060 | y | 2 | 207.8 | 0.3 | 0.3596 | 0.2 | 1.2 | −0.6 | 0.012 | Doc2000g | |
| | | | 8.6060 | Hα | 2 | 207.8 | 0.2 | 0.3604 | 0.2 | 1.1 | −0.7 | 0.013 | Doc2000g | |
| 00596−0111 | A 1903 AB | HIP 4641 | 8.5405 | y | 2 | 12.5 | 0.3 | 0.4016 | 0.3 | 1.1 : | −4.6 | 0.052 | Doc2007f | * |
| | | | 8.5488 | y | 3 | 12.5 | 0.6 | 0.4020 | 1.3 | 1.4 : | −4.6 | 0.053 | Doc2007f | |
| | | | 8.7727 | y | 1 | 12.8 | 0.3 | 0.4011 | 0.3 | 0.8 | −4.9 | 0.052 | Doc2007f | |
| 01024+0504 | HDS 135 AB | HIP 4849 | 8.7699 | y | 2 | 96.7 | 0.3 | 0.5798 | 0.3 | 2.0 | −2.2 | −0.000 | Bag2006 | |
| 01028+0214 | A 2308 | HIP 4886 | 8.7699 | y | 2 | 288.3 | 0.3 | 0.3546 | 0.3 | 1.0 : | −1.2 | 0.096 | Baz1984a | |
| 01037−3024 | B 649 | HIP 4974 | 8.5460 | y | 2 | 237.6 | 0.4 | 0.8325 | 1.0 | 1.3 : | | | | |
| 01048+0135 | A 2310 | HIP 5064 | 8.7726 | y | 2 | 315.7 | 1.2 | 0.3261 | 0.4 | 1.2 : | 4.1 | −0.010 | Doc2001a | |
| 01061−4643 | SLR 1 AB | HIP 5165 | 8.5461 | y | 2 | 120.9 | 0.2 | 0.3720 | 0.1 | 0.3 | −27.9 | −0.041 | Ary2001a | * |
| | | | 8.5461 | Hα | 2 | 120.9 | 0.1 | 0.3718 | 0.1 | 0.0 | −27.9 | −0.041 | Ary2001a | |
| | | | 8.5488 | y | 3 | 120.9 | 0.0 | 0.3720 | 0.0 | 0.4 | −27.9 | −0.041 | Ary2001a | |
| | | | 8.6059 | Hα | 2 | 120.5 | 0.0 | 0.3749 | 0.0 | 0.3 | −28.0 | −0.039 | Ary2001a | |
| 01063−0016 | HDS 141 | HIP 5181 | 8.5405 | y | 2 | 13.0 | 0.2 | 0.2379 | 0.7 | 0.8 | | | | |
| 01071−0036 | BAG 12 AC | HIP 5245 | 8.7673 | y | 2 | 160.6 | 3.2 | 1.3007 | 8.9 | 5.8 : | | | | * |
| 01071−0036 | HDS 144 AB | HIP 5245 | 8.6061 | y | 5 | 188.3 | 2.8 | 0.2289 | 5.5 | 2.6 : | | | | * |
| | | | 8.7673 | y | 2 | 184.8 | 0.3 | 0.2377 | 5.8 | 2.8 : | | | | |
| 01078−4129 | RST 3352 | HIP 5300 | 8.5461 | y | 2 | 140.6 | 0.1 | 0.1403 | 0.0 | 1.3 | 1.9 | 0.005 | Sod1999 | |
| | | | 8.5461 | Hα | 2 | 140.4 | 0.2 | 0.1400 | 0.1 | 1.0 | 1.8 | 0.004 | Sod1999 | |
| | | | 8.5488 | y | 3 | 140.6 | 0.1 | 0.1403 | 0.1 | 1.3 | 1.9 | 0.005 | Sod1999 | |
| 01084−5515 | RST 1205 AB | HIP 5348 | 8.6059 | Hα | 3 | 108.7 | 0.3 | 0.5488 | 0.8 | 2.8 | −1.7 | 0.030 | Lin2004a | * |
| 01089−2937 | I 262 | HIP 5383 | 8.5460 | y | 2 | 83.8 | 1.2 | 0.5192 | 1.2 | 1.9 : | | | | |
| 01094−5636 | HU 1342 | HIP 5428 | 8.6059 | Hα | 2 | 329.9 | 0.6 | 0.3767 | 1.7 | 1.2 : | −1.7 | −0.018 | Hei1984a | |
| | | | 8.6059 | y | 2 | 329.9 | 0.5 | 0.3763 | 0.8 | 1.0 | −1.6 | −0.018 | Hei1984a | |
| 01127−4946 | HDS 159 | HIP 5656 | 8.5461 | y | 2 | 113.1 | 0.3 | 0.5084 | 0.2 | 1.1 : | | | | |
| 01144−0755 | WSI 70 Aa,Ab | HIP 5799 | 8.5405 | y | 2 | 111.7 | 2.3 | 0.1690 | 2.7 | 4.5 | | | | * |
| 01158+0947 | A 2102 | HIP 5898 | 8.7699 | y | 2 | 117.9 | 1.3 | 0.3258 | 0.4 | 2.6 | −18.0 | −0.109 | Ole2002c | * |
| | | | 8.7699 | Hα | 2 | 118.1 | 0.3 | 0.3257 | 0.6 | 2.2 | −17.8 | −0.110 | Ole2002c | |
| 01158−6853 | I 27 CD | HIP 5842 | 8.6059 | y | 3 | 308.5 | 1.6 | 1.0494 | 0.8 | 0.7 * | 2.1 | −0.029 | Sod1999 | * |
| 01187−2630 | SEE 11 | HIP 6136 | 8.7699 | y | 2 | 299.9 | 0.2 | 1.4659 | 0.1 | 0.4 * | | | | |
| 01196−0520 | A 313 | HIP 6211 | 8.5406 | y | 2 | 319.3 | 0.5 | 0.2080 | 0.2 | 0.9 | −7.5 | −0.008 | Sey1999a | |
| | | | 8.5488 | y | 3 | 319.3 | 0.3 | 0.2078 | 0.5 | 1.3 : | −7.5 | −0.008 | Sey1999a | |
| | | | 8.6060 | y | 2 | 318.9 | 0.2 | 0.2073 | 0.2 | 1.0 | −7.7 | −0.008 | Sey1999a | |
| 01198−0031 | FIN 337 BC | HIP 6226 | 8.5405 | y | 1 | 25.9 | 0.1 | 0.1310 | 0.1 | 1.1 | 11.3 | 0.003 | Msn1999c | * |
| | | | 8.5405 | y | 2 | 27.1 | 0.0 | 0.1310 | 2.9 | 0.8 | 12.5 | 0.003 | Msn1999c | |
| | | | 8.5487 | y | 5 | 24.6 | 4.2 | 0.1354 | 9.8 | 0.8 | 9.9 | 0.008 | Msn1999c | |
| | | | 8.6060 | y | 2 | 29.8 | 3.5 | 0.1361 | 5.5 | 0.8 | 14.5 | 0.008 | Msn1999c | |
| | | | 8.6061 | y | 2 | 29.0 | 5.8 | 0.1297 | 3.3 | 0.9 | 13.8 | 0.002 | Msn1999c | |
| | | | 8.6061 | Hα | 2 | 29.2 | 12.5 | 0.1300 | 8.0 | 0.8 | 14.0 | 0.002 | Msn1999c | |
| | | | 8.7673 | y | 2 | 25.5 | 9.6 | 0.1331 | 4.1 | 0.8 | 8.7 | 0.005 | Msn1999c | |
| 01198−0031 | STF 113 AB | HIP 6226 | 8.5487 | y | 5 | 18.8 | 3.7 | 1.6781 | 3.7 | 2.3 | | | | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.6060 | y | 2 | 19.1 | 3.9 | 1.6735 | 8.5 | 1.8 | | | | | |
| | | | 8.6061 | y | 2 | 19.0 | 0.0 | 1.6675 | 0.0 | 1.5 | | | | | |
| | | | 8.6061 | Hα | 2 | 18.9 | 2.3 | 1.6721 | 6.1 | 1.9 | | | | | |
| | | | 8.7673 | y | 2 | 18.6 | 10.0 | 1.6695 | 3.0 | 1.7 | | | | | |
| 01200−1549 | HJ 2036 | HIP 6234 | 8.7699 | y | 2 | 339.2 | 0.4 | 2.3086 | 0.5 | 0.3 | * | −0.4 | 0.000 | Ole2002c | |
| 01218−2408 | SEE 13 | HIP 6367 | 8.6060 | y | 2 | 175.4 | 0.4 | 1.2290 | 0.5 | 0.4 | * | 0.1 | −0.028 | Hrt2001b | |
| 01220−6943 | I 263 | HIP 6377 | 8.6059 | Hα | 3 | 277.8 | 0.3 | 0.4341 | 0.1 | 0.8 | | 4.9 | −0.093 | Msn1999a | |
| | | | 8.7699 | y | 1 | 277.7 | 0.1 | 0.4319 | 0.1 | 0.8 | | 4.7 | −0.095 | Msn1999a | |
| | | | 8.7699 | Hα | 1 | 277.8 | 0.1 | 0.4331 | 0.1 | 0.7 | | 4.8 | −0.094 | Msn1999a | |
| 01243−0655 | BU 1163 | HIP 6564 | 8.5406 | y | 2 | 219.9 | 0.0 | 0.2811 | 0.3 | 0.5 | | −0.3 | −0.002 | Sod1999 | |
| | | | 8.5406 | Hα | 2 | 219.9 | 0.1 | 0.2811 | 0.1 | 0.5 | | −0.3 | −0.002 | Sod1999 | |
| | | | 8.5462 | y | 2 | 220.0 | 0.0 | 0.2809 | 0.1 | 0.5 | | −0.2 | −0.003 | Sod1999 | |
| | | | 8.5462 | Hα | 2 | 220.0 | 0.1 | 0.2807 | 0.0 | 0.5 | | −0.2 | −0.003 | Sod1999 | |
| | | | 8.5488 | y | 3 | 219.9 | 0.1 | 0.2812 | 0.1 | 0.6 | | −0.3 | −0.003 | Sod1999 | |
| | | | 8.6060 | y | 2 | 219.9 | 0.1 | 0.2841 | 0.0 | 0.5 | | −0.2 | −0.002 | Sod1999 | |
| | | | 8.6060 | Hα | 2 | 219.9 | 0.0 | 0.2845 | 0.1 | 0.5 | | −0.2 | −0.002 | Sod1999 | |
| 01245−2519 | B 18 | HIP 6581 | 8.5406 | y | 2 | 329.2 | 0.2 | 0.1701 | 0.2 | 0.8 | : | | | | |
| 01259−4754 | RST 33 | HIP 6693 | 8.7699 | y | 2 | 297.8 | 0.2 | 1.0869 | 0.1 | 1.6 | * | −6.1 | 0.046 | Sca1990b | |
| 01262−3828 | I 711 | HIP 6704 | 8.5461 | y | 2 | 211.4 | 0.8 | 0.5568 | 1.1 | 1.6 | : | | | | |
| 01262−6751 | DON 17 | HIP 6703 | 8.7699 | y | 3 | 287.5 | 0.2 | 1.2500 | 0.7 | 1.0 | * | −5.2 | 0.118 | Hei1991 | |
| 01276−2520 | I 444 | HD 8933 | 8.5406 | y | 2 | 98.6 | 0.2 | 0.5575 | 0.4 | 0.7 | : | | | | |
| 01277+0521 | BU 1164 AB | HIP 6815 | 8.7699 | Hα | 2 | 321.6 | 0.2 | 0.0465 | 0.1 | 0.9 | | −24.6 | −0.016 | Sta1985 | * |
| 01316−5322 | I 264 AB | HIP 7111 | 8.6062 | y | 2 | 31.5 | 0.2 | 0.8149 | 0.3 | 0.5 | * | −0.7 | −0.052 | Sey2002 | * |
| 01334−4354 | HDS 205 | HIP 7254 | 8.5461 | y | 2 | 180.6 | 0.1 | 0.1468 | 0.1 | 1.1 | | | | | |
| | | | 8.7699 | y | 2 | 183.4 | 0.1 | 0.1478 | 0.2 | 1.1 | | | | | |
| | | | 8.7699 | Hα | 2 | 183.5 | 0.1 | 0.1479 | 0.1 | 1.0 | | | | | |
| 01337−1213 | HWE 4 | HIP 7274 | 8.5406 | y | 2 | 332.6 | 0.1 | 0.8795 | 0.1 | 0.7 | | −0.3 | −0.042 | Val1981b | |
| | | | 8.5488 | y | 3 | 332.7 | 1.2 | 0.8782 | 0.4 | 1.2 | : | −0.2 | −0.044 | Val1981b | |
| 01343−0827 | A 314 | HIP 7324 | 8.5406 | y | 2 | 11.3 | 0.2 | 0.3393 | 0.2 | 1.2 | | 4.0 | 0.004 | Lin2004a | |
| | | | 8.5488 | y | 3 | 11.3 | 0.2 | 0.3394 | 0.4 | 1.3 | : | 4.0 | 0.004 | Lin2004a | |
| | | | 8.6060 | y | 4 | 11.5 | 1.0 | 0.3404 | 1.1 | 1.7 | : | 4.3 | 0.004 | Lin2004a | |
| | | | 8.7727 | y | 2 | 10.9 | 0.2 | 0.3418 | 0.6 | 1.1 | | 3.8 | 0.004 | Lin2004a | |
| 01350−2955 | BU 1000 AC | HIP 7372 | 8.7673 | y | 2 | 346.1 | 5.5 | 1.8873 | 2.0 | 3.7 | | | | | * |
| 01350−2955 | DAW 31 AB | HIP 7372 | 8.5407 | Hα | 2 | 319.6 | 0.1 | 0.2025 | 0.1 | 0.4 | | −1.8 | 0.001 | Msn1999c | * |
| | | | 8.5489 | y | 4 | 319.9 | 0.3 | 0.2021 | 0.2 | 0.9 | : | −1.9 | 0.001 | Msn1999c | |
| | | | 8.6060 | y | 2 | 322.7 | 0.1 | 0.2001 | 0.1 | 1.0 | | −2.3 | 0.002 | Msn1999c | |
| | | | 8.6061 | y | 2 | 322.7 | 0.1 | 0.2001 | 0.1 | 0.9 | | −2.3 | 0.002 | Msn1999c | |
| | | | 8.6061 | Hα | 2 | 322.7 | 0.1 | 0.2004 | 0.1 | 0.7 | | −2.3 | 0.002 | Msn1999c | |
| | | | 8.7673 | y | 2 | 331.0 | 0.0 | 0.1928 | 0.1 | 0.5 | | −3.5 | 0.002 | Msn1999c | |
| | | | 8.7673 | y | 2 | 330.7 | 3.1 | 0.1950 | 4.5 | 0.6 | | −3.8 | 0.004 | Msn1999c | |
| 01361−2954 | HJ 3447 | HIP 7463 | 8.5489 | y | 3 | 181.8 | 0.1 | 0.7806 | 0.3 | 1.4 | | −1.8 | −0.027 | Cve2006e | |
| | | | 8.6060 | y | 2 | 182.0 | 0.1 | 0.7805 | 0.7 | 1.5 | | −1.7 | −0.027 | Cve2006e | |
| | | | 8.7673 | y | 1 | 182.2 | 0.0 | 0.7844 | 0.0 | 1.4 | * | −1.7 | −0.024 | Cve2006e | |
| | | | 8.7673 | Hα | 2 | 182.2 | 0.1 | 0.7857 | 0.1 | 1.2 | * | −1.7 | −0.022 | Cve2006e | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01376−0924 | KUI 7 | HIP 7580 | 8.5462 | y | 2 | 124.5 | 0.0 | 0.1038 | 0.0 | 1.1 | | 1.7 | 0.005 | Tok1993 | |
| | | | 8.5462 | Hα | 2 | 124.5 | 0.1 | 0.1036 | 0.1 | 1.1 | | 1.6 | 0.005 | Tok1993 | |
| | | | 8.6060 | y | 2 | 124.0 | 0.1 | 0.1017 | 0.1 | 1.2 | | 1.7 | 0.005 | Tok1993 | |
| | | | 8.6060 | Hα | 2 | 124.0 | 0.2 | 0.1023 | 0.1 | 1.0 | | 1.7 | 0.005 | Tok1993 | |
| | | | 8.7727 | Hα | 2 | 122.4 | 0.1 | 0.0963 | 1.0 | 1.0 | | 1.8 | 0.003 | Tok1993 | |
| | | | 8.7727 | y | 1 | 122.8 | 0.1 | 0.0984 | 0.1 | 1.2 | | 2.2 | 0.005 | Tok1993 | |
| 01417−1119 | STF 147 | HIP 7916 | 8.7673 | y | 2 | 109.8 | 0.2 | 0.1623 | 0.2 | 1.1 | | | | | |
| | | | 8.7673 | Hα | 2 | 109.8 | 0.1 | 0.1625 | 0.0 | 1.0 | | | | | |
| 01424−0645 | A 1 | HIP 7968 | 8.7673 | y | 2 | 250.9 | 0.0 | 0.8345 | 0.1 | 0.1 | * | −0.5 | −0.011 | Sca2006b | * |
| 01437+0934 | BU 509 | HIP 8078 | 8.7727 | y | 2 | 50.1 | 0.4 | 0.6887 | 0.6 | 0.8 | * | −4.8 | −0.085 | Hei1988d | |
| 01477−4358 | I 52 | HIP 8353 | 8.6062 | y | 2 | 210.6 | 0.2 | 0.4695 | 0.2 | 0.9 | : | −1.2 | −0.058 | Hei1991 | |
| | | | 8.7700 | y | 2 | 210.3 | 0.1 | 0.4703 | 0.1 | 0.6 | | −1.4 | −0.058 | Hei1991 | |
| 01497−1414 | HU 422 | HIP 8504 | 8.7699 | y | 2 | 29.4 | 0.1 | 0.3033 | 0.3 | 0.4 | | 2.2 | 0.014 | Doc1999b | |
| 01528−0447 | RST 4188 | HD 11488 | 8.5462 | y | 4 | 33.1 | 0.2 | 0.4226 | 0.2 | 0.9 | : | 2.2 | −0.055 | Hei1996a | |
| 01554+0257 | A 2407 | HIP 8958 | 8.7673 | y | 2 | 317.6 | 0.3 | 0.5792 | 1.0 | 1.6 | | 3.1 | 0.061 | Mnt2005c | |
| 01559+0151 | STF 186 | HIP 8998 | 8.7673 | y | 2 | 65.5 | 0.2 | 0.8681 | 0.1 | 0.1 | * | −3.5 | 0.051 | Mro1977 | * |
| | | | 8.7726 | Hα | 2 | 65.4 | 0.1 | 0.8701 | 0.6 | 0.5 | | −3.5 | 0.053 | Mro1977 | |
| 01583−8218 | I 311 | HIP 9191 | 8.7726 | y | 2 | 53.2 | 1.7 | 2.0754 | 2.9 | 0.8 | * | | | | |
| 02009−4350 | I 265 | HIP 9408 | 8.6062 | y | 2 | 223.6 | 0.3 | 0.5668 | 0.4 | 1.4 | : | −3.8 | 0.044 | Sey2002 | |
| 02020+0246 | STF 202 AB | HIP 9487 | 8.7700 | Hα | 2 | 267.2 | 0.1 | 1.8384 | 1.0 | 0.8 | * | 1.7 | 0.059 | Sca1983f | * |
| 02022−2402 | HDS 272 AB | HIP 9497 | 8.7674 | y | 2 | 340.4 | 2.0 | 0.5046 | 4.4 | 4.7 | | | | | * |
| | | | 8.7674 | Hα | 2 | 340.0 | 0.0 | 0.5032 | 0.0 | 3.9 | | | | | |
| 02022−2402 | TOK 41 Ba,Bb | HIP 9497 | 8.7674 | y | 2 | 3.6 | 3.4 | 0.0886 | 3.4 | 0.3 | | | | | * |
| | | | 8.7674 | Hα | 2 | 6.5 | 2.9 | 0.0914 | 7.0 | 0.2 | | | | | |
| 02038−0020 | TOK 38 Aa,Ab | HIP 9631 | 8.6061 | y | 2 | 104.3 | 0.9 | 0.0417 | 0.1 | 1.4 | | | | | |
| | | | 8.6061 | Hα | 2 | 107.8 | 1.4 | 0.0446 | 0.2 | 1.6 | | | | | |
| | | | 8.6062 | y | 2 | 104.3 | 0.5 | 0.0425 | 0.1 | 1.5 | | | | | |
| | | | 8.6062 | Hα | 2 | 101.7 | 2.6 | 0.0459 | 0.6 | 1.8 | | | | | |
| | | | 8.7675 | Hα | 3 | 102.6 | 3.0 | 0.0453 | 1.9 | 1.7 | | | | | |
| 02039−4525 | RST 2272 | HIP 9642 | 8.5407 | y | 2 | 233.8 | 2.7 | 1.4249 | 2.8 | 5.0 | * | | | | * |
| | | | 8.7700 | y | 2 | 233.8 | 0.6 | 1.4255 | 0.5 | 4.6 | * | | | | |
| 02057−2423 | I 454 AB | HIP 9774 | 8.5406 | y | 2 | 153.5 | 3.0 | 0.8575 | 5.5 | 2.8 | : | | | | * |
| | | | 8.5406 | Hα | 2 | 153.5 | 2.1 | 0.8568 | 5.1 | 2.6 | : | | | | |
| | | | 8.7674 | y | 2 | 153.3 | 0.5 | 0.8500 | 2.2 | 2.3 | | | | | |
| | | | 8.7727 | y | 3 | 153.2 | 1.4 | 0.8457 | 1.7 | 2.4 | : | | | | |
| | | | 8.7727 | y | 2 | 153.4 | 0.8 | 0.8484 | 0.9 | 2.4 | : | | | | |
| 02057−2423 | WSI 71 Aa,Ab | HIP 9774 | 8.5406 | y | 2 | 146.7 | 3.5 | 0.0397 | 1.0 | 1.7 | : | | | | * |
| | | | 8.5406 | Hα | 2 | 143.0 | 6.5 | 0.0437 | 9.7 | 2.5 | : | | | | |
| | | | 8.7674 | y | 2 | 184.5 | 0.7 | 0.0266 | 0.7 | 1.0 | | | | | |
| | | | 8.7727 | y | 3 | 206.0 | 4.9 | 0.0248 | 7.7 | 1.7 | : | | | | |
| | | | 8.7727 | y | 2 | 190.9 | 0.9 | 0.0217 | 1.9 | 1.3 | : | | | | |
| 02087−1005 | HU 16 | HD 13191 | 8.7728 | y | 2 | 27.8 | 0.3 | 0.9298 | 0.3 | 1.0 | * | −12.3 | 0.179 | Sey2002 | * |
| 02128−0224 | TOK 39 Aa,Ab | HIP 10305 | 8.6061 | Hα | 2 | 115.5 | 0.4 | 0.0200 | 0.9 | 1.6 | | | | | * |
| 02158−1814 | HTG 1 | HIP 10542 | 8.7727 | y | 2 | 154.0 | 0.2 | 1.8406 | 0.3 | 0.7 | * | 0.4 | 0.120 | Sod1999 | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 02159+0638 | A 2013 | HIP 10552 | 8.7728 | y | 2 | 240.4 | 0.3 | 0.1654 | 0.2 | 0.8 | −0.6 | 0.009 | Doc2006i | |
| 02193−0259 | JOY 1 Aa,Ab | HIP 10826 | 8.7675 | y | 2 | 102.3 | 0.4 | 0.5144 | 0.3 | 1.3 : | 0.2 | −0.002 | Sca2001f | * |
| 02198−3527 | HJ 3494 | HIP 10864 | 8.7727 | y | 2 | 245.1 | 0.1 | 2.2418 | 0.4 | 0.2 * | 2.1 | 0.241 | Hei1982c | |
| 02225−2349 | TOK 40 | HIP 11072 | 8.5406 | y | 2 | 114.9 | 4.1 | 0.5034 | 1.2 | 5.1 | | | | * |
| | | | 8.5407 | H$\alpha$ | 2 | 114.7 | 0.6 | 0.5009 | 0.7 | 4.2 | | | | |
| | | | 8.6061 | y | 2 | 115.2 | 3.2 | 0.5003 | 2.6 | 5.1 | | | | |
| | | | 8.6061 | H$\alpha$ | 2 | 115.2 | 0.6 | 0.5013 | 1.5 | 4.2 | | | | |
| | | | 8.6061 | y | 2 | 115.5 | 1.5 | 0.5021 | 3.6 | 4.9 | | | | |
| | | | 8.7674 | y | 2 | 116.7 | 0.6 | 0.5011 | 0.6 | 4.9 | | | | |
| | | | 8.7674 | H$\alpha$ | 4 | 116.8 | 0.7 | 0.5021 | 0.9 | 4.3 * | | | | |
| 02232−2952 | BU 738 | HIP 11131 | 8.7727 | y | 2 | 211.7 | 0.2 | 1.8047 | 0.1 | 0.4 * | −0.4 | 0.006 | Hei1998 | |
| 02278+0426 | A 2329 | HIP 11452 | 8.7700 | y | 2 | 275.1 | 0.3 | 0.4182 | 0.2 | 0.6 | 0.4 | 0.000 | Ana2001 | |
| 02332−5156 | HDS 333 | HIP 11877 | 8.7700 | y | 2 | 239.9 | 0.3 | 0.6183 | 0.3 | 2.4 | | | | |
| 02371−1112 | HU 1216 | HIP 12204 | 8.7728 | y | 3 | 30.0 | 0.1 | 0.6244 | 0.3 | 1.6 | −8.4 | 0.086 | Hei1998 | |
| 02384−0125 | A 450 | HIP 12301 | 8.7728 | y | 3 | 185.7 | 0.4 | 0.3307 | 0.5 | 1.8 | −1.8 | −0.000 | Sey2002 | |
| 02396−1152 | FIN 312 | HIP 12390 | 8.7727 | H$\alpha$ | 2 | 348.9 | 0.0 | 0.1106 | 0.2 | 0.7 | 1.2 | −0.003 | Sod1999 | |
| 02399+0009 | A 1928 | HIP 12421 | 8.7700 | y | 2 | 39.9 | 0.2 | 0.0695 | 3.0 | 1.5 | 3.2 | −0.002 | Doc2001f | |
| 02405−2408 | SEE 19 | HIP 12466 | 8.5489 | y | 3 | 252.5 | 0.5 | 0.1380 | 0.6 | 1.4 : | −7.1 | −0.039 | Lin2003b | |
| | | | 8.6062 | y | 2 | 252.2 | 0.2 | 0.1377 | 0.4 | 0.8 : | −7.3 | −0.039 | Lin2003b | |
| 02415−7128 | B 1923 | HIP 12548 | 8.7700 | y | 2 | 196.4 | 0.2 | 0.2503 | 0.3 | 1.3 | | | | * |
| | | | 8.7700 | H$\alpha$ | 2 | 196.5 | 0.2 | 0.2509 | 0.5 | 1.2 | | | | |
| 02434−6643 | FIN 333 | HIP 12717 | 8.7700 | y | 2 | 215.0 | 0.1 | 0.4177 | 0.1 | 0.5 | −1.0 | −0.041 | Sod1999 | |
| | | | 8.7700 | H$\alpha$ | 2 | 215.0 | 0.1 | 0.4180 | 0.1 | 0.3 | −1.0 | −0.041 | Sod1999 | |
| 02442−2530 | FIN 379 Aa,Ab | HIP 12780 | 8.6061 | y | 2 | 339.1 | 0.2 | 0.0514 | 0.1 | 0.5 | −2.0 | −0.303 | Hng2005 | * |
| | | | 8.6061 | H$\alpha$ | 2 | 338.9 | 0.1 | 0.0505 | 0.6 | 0.1 | −2.2 | −0.304 | Hng2005 | |
| | | | 8.6062 | y | 2 | 339.3 | 0.1 | 0.0506 | 0.4 | 0.4 | −1.9 | −0.304 | Hng2005 | |
| 02449+1007 | TOK 1 Aa,Ab | HIP 12828 | 8.7701 | H$\alpha$ | 2 | 185.7 | 2.3 | 0.1099 | 1.2 | 3.5 | | | | * |
| 02456−7114 | HDS 357 | HIP 12884 | 8.7700 | H$\alpha$ | 2 | 71.4 | 1.8 | 0.3307 | 0.7 | 3.5 | | | | * |
| 02460−0457 | BU 83 | HIP 12912 | 8.7675 | y | 2 | 15.0 | 0.1 | 0.9480 | 0.4 | 2.0 * | 0.9 | 0.127 | Ole2002d | |
| 02493−1033 | STF 315 | HIP 13168 | 8.7675 | y | 2 | 164.1 | 0.1 | 1.3869 | 0.2 | 1.0 * | | | | |
| 02512+0141 | A 2338 | HIP 13302 | 8.7728 | y | 2 | 328.6 | 2.2 | 0.0972 | 0.5 | 1.6 : | −24.3 | −0.121 | Ole2002c | * |
| 02517−5234 | HU 1562 | HIP 13341 | 8.6062 | y | 2 | 48.3 | 0.5 | 0.3466 | 0.6 | 1.2 : | −1.2 | 0.039 | Hei1979b | |
| 02572+0153 | A 2413 | HIP 13773 | 8.7701 | y | 2 | 155.9 | 0.1 | 0.5332 | 0.2 | 0.5 | −2.1 | 0.021 | Sca2001d | |
| 02572−2458 | BEU 4 Ca,Cb | HIP 13769 | 8.7674 | y | 2 | 279.2 | 0.3 | 0.0453 | 0.2 | 0.4 | | | | * |
| | | | 8.7674 | H$\alpha$ | 2 | 277.7 | 0.5 | 0.0472 | 0.2 | 0.4 | | | | |
| 02572−2458 | BU 741 AB | HIP 13772 | 8.6062 | y | 2 | 341.6 | 0.1 | 0.9364 | 0.3 | 0.8 | 0.3 | −0.136 | Sca2002c | * |
| | | | 8.7674 | y | 2 | 341.6 | 0.0 | 0.9341 | 0.1 | 0.1 * | 0.2 | −0.138 | Sca2002c | |
| 03003−1118 | A 2611 | HD 18740 | 8.7675 | y | 2 | 40.4 | 0.8 | 0.1865 | 0.3 | 1.2 | −55.2 | 0.105 | Baz1988d | * |
| 03014+0615 | HDS 385 | HIP 14075 | 8.7676 | y | 2 | 199.4 | 0.1 | 0.1129 | 0.2 | 0.4 | −1.0 | 0.004 | Bag2005 | |
| 03019−1633 | RST 2292 BC | HIP 14101 | 8.7675 | y | 2 | 137.7 | 0.5 | 0.7305 | 1.1 | 1.4 : | | | | * |
| 03035+2304 | HDS 389 | HIP 14230 | 8.7701 | H$\alpha$ | 2 | 8.3 | 0.3 | 0.1781 | 0.2 | 1.5 | −0.8 | 0.002 | Bag2005 | |
| 03035−1059 | BU 1174 | HIP 14235 | 8.7675 | y | 2 | 235.2 | 0.4 | 0.6279 | 0.7 | 4.0 | | | | |
| 03096+0512 | A 2030 | HIP 14676 | 8.7676 | y | 2 | 12.6 | 0.2 | 0.2692 | 0.1 | 0.5 | −2.1 | 0.007 | Sta1978b | |
| 03124−4425 | JC 8 AB | HIP 14913 | 8.7728 | H$\alpha$ | 2 | 161.3 | 0.2 | 0.6815 | 0.0 | 0.6 | −0.8 | −0.006 | Sod1999 | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03140+0044 | STF 367 | HIP 15058 | 8.7676 | y | 2 | 132.8 | 0.4 | 1.2222 | 0.4 | 0.4 | * | 2.5 | 0.089 | Hei1963a | |
| 03184−0056 | AC 2 AB | HIP 15383 | 8.7728 | Hα | 2 | 258.2 | 0.1 | 1.2287 | 0.9 | 2.8 | * | 1.5 | 0.005 | Pop1997f | * |
| 03184−2231 | SEE 23 | HIP 15382 | 8.6062 | y | 2 | 98.7 | 0.0 | 0.3370 | 0.1 | 1.5 | | −3.1 | 0.048 | Sey2002 | |
| | | | 8.7675 | y | 2 | 98.8 | 0.0 | 0.3362 | 0.0 | 1.5 | | −3.2 | 0.048 | Sey2002 | |
| 03217+0845 | STF 380 | HD 20837 | 8.7701 | y | 2 | 9.8 | 0.4 | 0.9519 | 0.2 | 1.0 | * | 1.2 | 0.043 | Pop1996b | |
| 03223−4119 | I 151 | HIP 15703 | 8.7701 | y | 2 | 185.2 | 0.0 | 0.8896 | 0.2 | 0.2 | * | | | | |
| 03236−4005 | I 468 | HIP 15799 | 8.7701 | y | 2 | 113.3 | 0.4 | 2.2646 | 0.4 | 4.8 | * | −34.5 | 0.690 | Sod1999 | * |
| 03266−5310 | HDS 431 | HIP 16039 | 8.7728 | y | 2 | 9.2 | 3.9 | 0.7227 | 5.7 | 4.0 | : | | | | |
| 03272+0944 | HDS 433 | HIP 16083 | 8.7701 | Hα | 3 | 126.6 | 0.6 | 0.1914 | 0.6 | 3.3 | | 23.8 | −0.128 | FMR2007a | * |
| 03307−1926 | HDS 441 | HIP 16348 | 8.7675 | y | 2 | 200.8 | 0.2 | 0.1428 | 0.1 | 0.2 | | | | | |
| 03339−3105 | B 52 | HIP 16628 | 8.6063 | y | 2 | 322.9 | 0.1 | 0.2669 | 0.1 | 1.0 | | −1.8 | 0.017 | Hei1996c | |
| | | | 8.7701 | y | 2 | 323.0 | 0.1 | 0.2621 | 0.0 | 1.0 | | −2.0 | 0.019 | Hei1996c | |
| 03390−4546 | HDS 462 | HIP 17029 | 8.7728 | y | 2 | 358.1 | 0.3 | 0.7073 | 0.3 | 1.6 | : | | | | |
| 03454−2752 | BU 1003 | HIP 17544 | 8.7728 | y | 2 | 232.1 | 0.6 | 1.1817 | 0.6 | 3.4 | * | 0.2 | 0.023 | Nov2006c | |
| 03494−1956 | RST 2324 | BD−20 716 | 8.7675 | y | 2 | 216.7 | 0.1 | 0.2433 | 0.1 | 0.8 | | 270.0 | 0.084 | Ole2005d | * |
| 03544−4021 | FIN 344 AB | HIP 18262 | 8.7701 | y | 2 | 189.8 | 0.6 | 0.0317 | 0.0 | 0.9 | | | | | * |
| | | | 8.7701 | Hα | 1 | 187.0 | 0.1 | 0.0359 | 0.1 | 1.6 | | | | | |
| 03545+0510 | A 1831 BC | HIP 18264 | 8.7676 | y | 2 | 223.6 | 0.5 | 0.1666 | 0.6 | 0.5 | | −15.7 | −0.004 | Ole1998a | * |
| 03590+0947 | HU 27 | HIP 18618 | 8.7701 | y | 2 | 328.5 | 0.8 | 0.3961 | 0.7 | 0.8 | | −1.4 | 0.030 | Lin2004a | |
| 03596−1019 | HU 29 | HIP 18655 | 8.7731 | y | 2 | 310.9 | 0.1 | 0.4277 | 0.2 | 0.3 | | −1.5 | −0.005 | Cve2006c | |
| 04002+0818 | A 1936 BC | BD+07 582B | 8.7731 | y | 2 | 309.5 | 1.3 | 0.3485 | 0.6 | 1.0 | : | 78.4 | 0.182 | Hei1998 | * |
| 04008+0505 | A 1937 | HIP 18734 | 8.7702 | y | 2 | 98.3 | 0.5 | 0.0643 | 0.8 | 0.3 | | 20.9 | −0.027 | Bdl2006a | * |
| 04017−5712 | HDS 508 | HIP 18802 | 8.7729 | y | 2 | 349.4 | 0.9 | 0.9663 | 1.9 | 3.7 | : | | | | |
| 04021−3429 | BU 1004 AB | HIP 18824 | 8.6063 | y | 2 | 61.9 | 0.3 | 1.2166 | 0.3 | 0.8 | * | 8.2 | 0.398 | Jas1997 | * |
| | | | 8.7676 | y | 2 | 61.6 | 0.1 | 1.2135 | 0.2 | 0.7 | * | 8.4 | 0.402 | Jas1997 | |
| 04024−2832 | DAW 79 | HIP 18839 | 8.6063 | y | 2 | 329.3 | 0.8 | 0.3524 | 0.3 | 1.2 | : | 25.8 | −0.022 | Sca1993 | |
| 04049−3527 | I 152 AB | HIP 19052 | 8.7677 | y | 2 | 78.1 | 0.0 | 1.0243 | 0.0 | 0.5 | | | | | * |
| 04049−3527 | CHR 224 BC | HIP 19052B | 8.7677 | y | 2 | 63.8 | 2.9 | 0.0749 | 9.3 | 2.4 | | | | | * |
| 04069−3323 | HDS 520 | HIP 19198 | 8.7677 | y | 2 | 350.6 | 0.6 | 1.7233 | 0.6 | 3.9 | * | | | | |
| 04070−1000 | HDS 521 | HIP 19206 | 8.7702 | y | 2 | 323.3 | 0.1 | 0.2084 | 0.0 | 1.4 | | −0.7 | 0.005 | Bag2006 | |
| 04093−0756 | A 469 | HIP 19399 | 8.7702 | y | 2 | 320.4 | 0.1 | 0.2226 | 0.0 | 0.4 | | −2.6 | 0.010 | Baz1981b | |
| | | | 8.7702 | Hα | 1 | 320.4 | 0.1 | 0.2234 | 0.1 | 0.4 | | −2.5 | 0.011 | Baz1981b | |
| 04093−2025 | RST 2333 | HD 26347 | 8.7731 | y | 2 | 180.2 | 0.2 | 0.2923 | 0.3 | 0.4 | | −9.0 | 0.025 | Ole2005d | |
| 04107−0452 | A 2801 | HIP 19508 | 8.7702 | y | 2 | 47.1 | 0.4 | 0.0995 | 0.3 | 0.8 | | −22.6 | 0.026 | Baz1986a | * |
| 04119+2338 | CHR 14 | HIP 19591 | 8.7732 | y | 2 | 11.0 | 1.8 | 0.2703 | 2.6 | 1.9 | : | −20.4 | 0.048 | Ole2003a | * |
| 04123+0939 | STT 74 | HD 26547 | 8.7731 | y | 2 | 113.7 | 0.3 | 0.3361 | 0.2 | 1.3 | | 6.9 | 0.075 | Alz2003a | |
| 04130−2832 | HWE 10 | HIP 19684 | 8.7677 | y | 2 | 52.7 | 0.1 | 1.4726 | 0.0 | 0.1 | * | | | | |
| 04136+0743 | A 1938 | HIP 19719 | 8.7702 | Hα | 2 | 296.9 | 0.1 | 0.1212 | 0.0 | 0.8 | | −2.1 | −0.005 | Hrt1996a | |
| 04142−4608 | RST 2338 | HIP 19758 | 8.7728 | y | 2 | 293.4 | 0.1 | 0.2617 | 0.2 | 1.4 | | −0.2 | 0.003 | Sod1999 | |
| 04163−6057 | GLE 1 | HIP 19917 | 8.7729 | Hα | 2 | 195.2 | 0.1 | 0.3164 | 0.1 | 0.8 | | 1.5 | −0.034 | Doc2006b | |
| 04199+1631 | STT 79 | HIP 20215 | 8.7731 | Hα | 2 | 345.8 | 0.1 | 0.4517 | 0.1 | 1.3 | | −3.2 | −0.016 | Sod1999 | |
| 04205−0119 | RST 4769 | HIP 20257 | 8.7731 | y | 2 | 34.1 | 0.1 | 0.1153 | 0.1 | 0.2 | | 18.7 | −0.259 | Hei1997 | * |
| 04215−2055 | B 1935 AB | HIP 20342 | 8.7677 | y | 2 | 135.2 | 0.2 | 0.2884 | 0.1 | 1.5 | | | | | * |
| 04215−2544 | BU 744 AB | HIP 20347 | 8.7677 | y | 2 | 178.6 | 0.1 | 0.2671 | 0.0 | 0.3 | | 4.1 | 0.014 | Sca1991c | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | [O−C]$_\theta$ (deg) | [O−C]$_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04227+1503 | STT 82 AB | HIP 20440 | 8.7731 | Hα | 2 | 335.1 | 0.2 | 1.2799 | 0.1 | 1.2 | * | −2.2 | 0.026 | WSI2004a | * |
| 04239+0928 | HU 304 | HIP 20522 | 8.7676 | Hα | 2 | 18.7 | 0.0 | 0.2607 | 0.2 | 0.2 | | −0.9 | −0.003 | Hrt2000b | |
| 04242+1445 | HDS 564 | HIP 20553 | 8.7676 | y | 2 | 239.8 | 0.6 | 0.3755 | 0.6 | 3.1 | | | | | |
| 04256+1556 | FIN 342 Aa,Ab | HIP 20661 | 8.7731 | Hα | 2 | 170.1 | 0.3 | 0.0840 | 0.3 | 0.3 | | −2.3 | −0.005 | Sod1999 | * |
| 04257−0214 | BU 403 | HIP 20673 | 8.7702 | y | 2 | 84.7 | 0.1 | 1.0149 | 0.5 | 2.0 | * | | | | |
| 04259+1852 | BU 1185 | HIP 20686 | 8.7732 | Hα | 2 | 15.6 | 0.2 | 0.1871 | 0.4 | 0.9 | | −0.8 | −0.009 | Sod1999 | |
| | | | 8.7732 | y | 1 | 15.3 | 0.2 | 0.1878 | 0.2 | 1.0 | | −1.1 | −0.008 | Sod1999 | |
| 04269−2405 | BU 311 | HIP 20765 | 8.7731 | Hα | 2 | 148.4 | 0.1 | 0.4444 | 0.3 | 0.3 | | 0.9 | −0.016 | Sca2003b | |
| 04275−1707 | HU 440 | HIP 20806 | 8.7677 | y | 2 | 316.4 | 0.6 | 1.8824 | 0.2 | 2.8 | * | | | | * |
| 04275−2427 | I 413 | HIP 20807 | 8.7731 | y | 2 | 323.5 | 0.1 | 0.6659 | 0.1 | 0.9 | | 5.9 | −0.086 | Hei1993d | |
| 04286+1558 | MCA 15 | HIP 20885 | 8.7676 | Hα | 4 | 3.3 | 1.7 | 0.0750 | 2.7 | 2.7 | | 40.5 | 0.050 | Trr1997c | * |
| 04290+1610 | HU 1080 | HIP 20916 | 8.7676 | Hα | 2 | 73.1 | 0.1 | 0.1898 | 0.2 | 0.6 | | −1.4 | −0.003 | Sod1999 | * |
| 04340−5503 | B 2092 AB | HIP 21281 | 8.7729 | Hα | 2 | 186.7 | 0.1 | 0.1826 | 0.1 | 1.0 | | 0.0 | 0.022 | Sod1999 | |
| 04362+0814 | A 1840 AB | HIP 21434 | 8.7702 | Hα | 3 | 17.3 | 0.2 | 0.1502 | 0.2 | 0.6 | : | 22.8 | 0.047 | Bdl2006a | * |
| 04374−0951 | RST 3401 | HIP 21536 | 8.7702 | y | 1 | 262.0 | 0.1 | 0.3974 | 0.1 | 0.9 | | −8.6 | −0.035 | Nov2006 | |
| 04375+1509 | CHR 153 | HIP 21543 | 8.7676 | Hα | 2 | 122.7 | 0.8 | 0.4702 | 1.3 | 3.0 | | −11.5 | 0.094 | Ole2003b | |
| 04382−1418 | KUI 18 | HIP 21594 | 8.7702 | Hα | 2 | 358.3 | 0.2 | 1.1036 | 0.2 | 3.4 | * | −0.7 | −0.020 | Hrt1996a | |
| 04395−4507 | I 1489 | HIP 21698 | 8.7728 | y | 2 | 93.7 | 0.2 | 0.1809 | 0.4 | 1.1 | | −17.0 | 0.056 | Sod1999 | |
| 04397+0952 | HDS 601 Aa,Ab | HIP 21710 | 8.7676 | y | 2 | 244.3 | 3.5 | 0.2608 | 2.2 | 3.5 | | | | | * |
| 04422+0259 | A 2424 | HIP 21880 | 8.7703 | Hα | 2 | 54.0 | 0.3 | 0.0604 | 0.1 | 0.5 | | 3.0 | −0.054 | WRH1976a | * |
| 04447−4725 | HDS 611 | HIP 22062 | 8.7729 | y | 2 | 156.9 | 1.5 | 1.2421 | 1.5 | 4.3 | * | | | | |
| | | | 8.7729 | Hα | 1 | 157.0 | 1.4 | 1.2454 | 1.4 | 3.7 | : | | | | |
| | | | 8.7729 | y | 1 | 157.0 | 2.3 | 1.2399 | 2.3 | 3.2 | * | | | | |
| 04492−3126 | HDS 620 | HIP 22395 | 8.7702 | y | 3 | 151.7 | 0.6 | 0.3960 | 1.1 | 3.9 | | | | | |
| | | | 8.7702 | Hα | 2 | 151.7 | 0.6 | 0.3956 | 0.7 | 3.2 | | | | | |
| 04496+0212 | A 2621 | HIP 22428 | 8.7703 | Hα | 2 | 125.7 | 0.6 | 0.1166 | 0.1 | 0.4 | | 3.4 | −0.000 | Sey1999b | |
| 04496−5353 | I 342 | HIP 22431 | 8.7729 | y | 2 | 133.8 | 0.2 | 3.1466 | 0.3 | 0.5 | * | −0.8 | 0.009 | Nov2006c | * |
| 04505+0103 | A 2622 | HD 30763 | 8.7703 | y | 2 | 252.4 | 0.1 | 0.2917 | 0.1 | 1.1 | | 11.6 | 0.070 | Sca2003a | |
| 04512+1104 | BU 883 AB | HIP 22550 | 8.7703 | Hα | 2 | 180.8 | 0.0 | 0.2180 | 0.1 | 0.2 | | 0.6 | −0.003 | Sod1999 | * |
| 04515−3454 | FIN 320 | HIP 22573 | 8.7702 | y | 2 | 169.8 | 0.1 | 0.0859 | 0.1 | 0.8 | | 54.4 | −0.046 | Hei1993d | * |
| 04518+1339 | BU 552 AB | HIP 22607 | 8.7676 | y | 1 | 252.5 | 0.2 | 0.6702 | 0.2 | 2.5 | * | 1.6 | 0.006 | Sod1999 | * |
| | | | 8.7676 | Hα | 2 | 252.2 | 0.6 | 0.6685 | 0.6 | 2.1 | | 1.4 | 0.004 | Sod1999 | |
| 04545−0314 | RST 5501 | HIP 22812 | 8.7702 | Hα | 2 | 212.9 | 0.1 | 0.1368 | 0.1 | 0.2 | | −47.6 | −0.006 | Sey2002 | * |
| 04584−0344 | HDS 644 | HIP 23116 | 8.7702 | Hα | 2 | 330.2 | 0.7 | 0.5848 | 0.6 | 2.1 | * | | | | |
| 04590−1623 | BU 314 AB | HIP 23166 | 8.7677 | y | 2 | 321.0 | 0.1 | 0.8592 | 0.1 | 1.6 | * | 0.8 | 0.036 | Sod1999 | * |
| 05005+0506 | STT 93 | HIP 23277 | 8.7732 | Hα | 2 | 243.7 | 0.3 | 1.5338 | 0.2 | 0.7 | * | −0.5 | 0.057 | Sey1999a | |
| | | | 9.2650 | y | 2 | 243.9 | 1.5 | 1.5383 | 0.4 | 0.7 | * | −0.3 | 0.056 | Sey1999a | |
| 05010−1112 | A 2629 | HIP 23326 | 8.7703 | y | 2 | 189.6 | 0.1 | 0.1411 | 0.1 | 0.2 | | 2.4 | −0.008 | Sca2006c | |
| 05017+2050 | HU 445 | HIP 23396 | 8.7732 | Hα | 2 | 133.6 | 0.3 | 0.3775 | 0.5 | 0.8 | : | −0.9 | −0.048 | Sca2000a | |
| 05019−7638 | RST 2368 | HIP 23413 | 8.7729 | y | 1 | 147.1 | 0.8 | 0.7888 | 0.8 | 2.6 | | | | | |
| | | | 8.7729 | Hα | 2 | 147.2 | 0.7 | 0.7883 | 0.7 | 2.3 | : | | | | |
| 05025−2115 | DON 91 AB | HIP 23452 | 8.7677 | y | 4 | 311.4 | 0.1 | 0.8073 | 0.1 | 2.2 | * | 3.6 | 0.011 | Sod1999 | * |
| 05043−0602 | A 481 | HIP 23586 | 9.2650 | Hα | 2 | 287.8 | 0.2 | 0.4563 | 0.3 | 1.4 | | −3.6 | −0.010 | Sey2002 | |
| 05059−1355 | A 3009 | HIP 23716 | 8.7703 | y | 2 | 266.1 | 0.1 | 1.1711 | 0.1 | 1.6 | * | −2.0 | 0.093 | Erc1985a | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05069−2135 | DON 93 BC | BD−21 1074B | 8.7677 | y | 2 | 328.8 | 0.4 | 0.7615 | 0.2 | 1.1 | : | | | | * |
| 05073−8352 | HDS 669 | HIP 23824 | 8.7729 | Hα | 2 | 124.1 | 1.1 | 0.1812 | 1.0 | 2.4 | | | | | |
| 05079+0830 | STT 98 | HIP 23879 | 8.7732 | Hα | 2 | 301.3 | 0.2 | 0.8614 | 0.3 | 0.8 | * | −1.0 | −0.034 | Baz1969b | * |
| | | | 9.2650 | y | 2 | 300.7 | 0.4 | 0.8656 | 0.8 | 1.8 | | −0.7 | −0.036 | Baz1969b | |
| | | | 9.2650 | Hα | 2 | 300.7 | 0.2 | 0.8664 | 0.1 | 0.8 | * | −0.7 | −0.035 | Baz1969b | |
| 05081+2416 | HDS 674 Aa,Ab | HIP 23900 | 8.7732 | Hα | 2 | 199.4 | 0.3 | 0.3950 | 0.3 | 2.7 | | | | | * |
| 05086−1810 | WSI 72 | HIP 23932 | 8.7677 | y | 2 | 47.8 | 0.9 | 0.0518 | 0.4 | 0.0 | : | | | | |
| 05089+0313 | A 2636 | HIP 23957 | 8.7732 | Hα | 2 | 349.2 | 0.3 | 0.3568 | 0.5 | 1.3 | : | 1.3 | 0.032 | Sca1982f | |
| 05103−0736 | A 484 | HIP 24076 | 8.7678 | Hα | 2 | 311.6 | 0.3 | 0.1788 | 0.1 | 0.2 | | 4.4 | −0.059 | Hei1993d | |
| 05117+0031 | HU 33 | HIP 24196 | 8.7732 | Hα | 2 | 341.6 | 0.2 | 0.1544 | 0.1 | 1.0 | | −1.6 | 0.004 | Ana2004 | * |
| 05135+0158 | STT 517 AB | HIP 24349 | 8.7732 | Hα | 2 | 239.0 | 0.1 | 0.6650 | 0.2 | 0.4 | * | −1.9 | 0.014 | Msn1999a | * |
| 05164−0139 | A 844 | HIP 24580 | 8.7678 | Hα | 2 | 198.5 | 0.2 | 0.1957 | 0.1 | 0.7 | | −22.8 | 0.096 | Hrt2001a | * |
| 05165−2106 | DON 97 | HIP 24592 | 8.7677 | y | 2 | 200.8 | 0.1 | 0.3961 | 0.1 | 1.8 | | 21.5 | 0.177 | Sey2002 | * |
| 05190−2159 | RST 2375 | HIP 24800 | 8.7703 | y | 2 | 12.6 | 0.3 | 0.1746 | 0.1 | 0.9 | | 10.6 | −0.004 | Sey2002 | |
| 05204−3237 | JSP 73 | HIP 24912 | 8.7703 | y | 2 | 165.1 | 0.1 | 0.9750 | 0.3 | 2.0 | * | | | | |
| 05226+0236 | A 2641 | HIP 25119 | 8.7732 | Hα | 2 | 160.1 | 0.5 | 1.1696 | 0.5 | 2.3 | * | 0.5 | −0.018 | Sod1999 | |
| 05234−3640 | I 275 | HIP 25190 | 8.7703 | y | 2 | 223.5 | 0.1 | 0.7995 | 0.1 | 0.6 | * | | | | |
| 05239−0052 | A 847 BC | HIP 25240 | 8.7677 | Hα | 2 | 316.9 | 0.2 | 0.1384 | 0.1 | 0.3 | | 11.2 | 0.089 | Hrt2000b | * |
| 05245−0224 | DA 5 AB | HIP 25281 | 9.2650 | Hα | 2 | 77.1 | 0.3 | 1.7848 | 0.9 | 1.4 | * | | | | * |
| 05248−5219 | I 345 AB | HIP 25303 | 8.7729 | Hα | 2 | 214.7 | 0.1 | 0.2391 | 0.1 | 0.7 | | −52.1 | 0.055 | Alz2001a | * |
| 05255−0033 | A 848 | HIP 25365 | 8.7704 | Hα | 2 | 175.4 | 0.1 | 0.3151 | 0.1 | 1.0 | | −0.5 | 0.010 | Nov2006 | |
| 05276−2055 | SEE 53 | HIP 25531 | 8.7703 | y | 2 | 82.6 | 0.1 | 0.1958 | 0.2 | 0.8 | | 61.7 | −0.048 | Doc1996a | * |
| 05289−0318 | DA 6 | HIP 25667 | 8.7703 | y | 2 | 282.9 | 0.1 | 0.1647 | 0.3 | 0.4 | | −16.9 | 0.024 | Lin2006 | |
| 05330−2415 | DAW 85 | HIP 26003 | 8.7703 | y | 2 | 316.4 | 0.1 | 0.3016 | 0.1 | 1.2 | | 1.0 | 0.012 | Hei1993d | |
| 05336−5104 | HU 1566 | HIP 26067 | 8.7729 | y | 2 | 52.5 | 0.6 | 1.7231 | 0.2 | 0.3 | * | −0.7 | 0.106 | Erc1985a | |
| 05352−4657 | RST 141 | HIP 26217 | 8.7729 | y | 2 | 264.0 | 0.2 | 0.5322 | 0.6 | 1.4 | : | −20.1 | 0.184 | Hei1979b | * |
| 05354−0555 | CHR 250 Aa,Ab | HIP 26241 | 8.7678 | Hα | 2 | 110.3 | 1.2 | 0.1385 | 0.2 | 3.2 | | | | | * |
| | | | 8.7678 | y | 2 | 110.2 | 1.1 | 0.1339 | 1.6 | 3.4 | | | | | |
| 05354−3316 | HU 1393 | HIP 26245 | 8.7703 | y | 2 | 308.9 | 0.1 | 0.2433 | 0.3 | 1.3 | | | | | |
| 05387−0236 | BU 1032 AB | HIP 26549 | 8.7704 | Hα | 2 | 91.3 | 0.1 | 0.2568 | 0.1 | 1.3 | | 1.6 | 0.012 | Hrt1996a | * |
| 05417−0254 | BU 1052 | HIP 26820 | 9.2650 | Hα | 2 | 186.2 | 0.1 | 0.6107 | 0.5 | 1.0 | | −2.2 | −0.039 | Baz1991a | |
| 05418−5000 | HU 1568 | HIP 26830 | 8.7729 | y | 2 | 154.7 | 0.3 | 0.5205 | 0.1 | 0.5 | | | | | |
| 05429−0648 | A 494 AB | HIP 26926 | 8.7678 | Hα | 2 | 179.9 | 0.0 | 0.0882 | 0.0 | 0.8 | | −1.9 | −0.003 | Msn1999c | * |
| 05474−1032 | MCA 22 | HIP 27341 | 8.7678 | Hα | 2 | 278.4 | 1.2 | 0.1004 | 0.6 | 1.7 | | | | | * |
| | | | 9.2650 | Hα | 2 | 279.1 | 0.6 | 0.1089 | 0.7 | 1.1 | | | | | |
| 05482+0137 | A 2657 | HIP 27410 | 8.7732 | Hα | 2 | 225.3 | 0.2 | 0.1697 | 0.5 | 0.6 | : | −2.1 | 0.006 | Doc1993b | |
| 05508−2907 | B 1491 | HIP 27609 | 8.7703 | y | 2 | 328.4 | 0.4 | 2.1488 | 0.4 | 3.6 | * | | | | |
| 05508−3945 | I 1494 AB | HIP 27611 | 8.7703 | y | 2 | 269.8 | 0.1 | 0.3830 | 0.1 | 0.4 | | | | | * |
| 05525−0217 | HDS 787 | HIP 27758 | 8.7704 | Hα | 2 | 317.6 | 0.3 | 0.1225 | 0.7 | 1.3 | | | | | |
| | | | 8.7704 | y | 2 | 317.8 | 0.4 | 0.1232 | 0.2 | 1.4 | | | | | |
| | | | 9.2650 | Hα | 2 | 326.6 | 0.1 | 0.1120 | 0.6 | 1.2 | | | | | |
| 05580−5212 | HU 1570 | HIP 28240 | 8.7730 | y | 2 | 344.5 | 0.2 | 0.9290 | 0.4 | 0.8 | | −4.8 | 0.061 | Hei1996c | |
| 05598−4814 | HDS 814 | HIP 28393 | 8.7704 | y | 2 | 167.2 | 1.3 | 0.3700 | 1.3 | 3.9 | | | | | * |
| 06003−3102 | HU 1399 AB | HIP 28442 | 8.7704 | y | 2 | 117.9 | 0.1 | 0.7502 | 0.2 | 1.1 | | −1.3 | 0.016 | Tok2005 | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 9.2595 | y | 2 | 117.1 | 0.6 | 0.7486 | 1.0 | 1.5 | : | −1.4 | 0.019 | Tok2005 | |
| | | | 9.2650 | y | 2 | 117.1 | 0.6 | 0.7441 | 0.2 | 1.3 | | −1.4 | 0.015 | Tok2005 | |
| 06003−3102 | TOK 9 CE | HIP 28442 | 8.7704 | y | 3 | 135.4 | 2.7 | 0.2829 | 3.2 | 4.5 | | | | | * |
| | | | 9.2595 | y | 3 | 132.0 | 5.0 | 0.2389 | 3.1 | 4.5 | : | | | | |
| | | | 9.2595 | y | 2 | 132.2 | 5.5 | 0.2417 | 4.1 | 4.5 | | | | | |
| | | | 9.2651 | y | 4 | 132.2 | 3.2 | 0.2349 | 3.1 | 4.5 | | | | | |
| 06024+0939 | A 2715 AB | HIP 28614 | 8.7705 | Hα | 2 | 22.6 | 0.1 | 0.3882 | 0.1 | 1.5 | | −0.4 | 0.007 | Fek2002 | * |
| 06048−4828 | DUN 23 | HIP 28796 | 8.7704 | y | 1 | 123.7 | 0.0 | 2.6149 | 0.0 | 0.4 | * | 0.7 | 0.071 | Sca2001b | * |
| | | | 8.7704 | y | 1 | 123.9 | 0.0 | 2.6225 | 0.0 | 2.0 | | 0.9 | 0.079 | Sca2001b | |
| | | | 9.2651 | y | 1 | 123.9 | 0.0 | 2.6113 | 0.0 | 0.4 | * | 0.7 | 0.073 | Sca2001b | |
| | | | 9.2651 | Hα | 2 | 123.9 | 0.2 | 2.6148 | 1.3 | 0.5 | * | 0.7 | 0.077 | Sca2001b | |
| 06098−2246 | RST 3442 | HIP 29234 | 8.7705 | y | 2 | 53.5 | 0.0 | 0.2355 | 0.0 | 0.2 | | −1.2 | 0.000 | Hrt1996a | * |
| 06099−2538 | B 100 | HIP 29241 | 8.7705 | y | 3 | 66.3 | 0.5 | 1.6237 | 0.4 | 3.8 | * | | | | |
| 06122−3645 | RST 4800 | HIP 29443 | 8.7704 | y | 2 | 256.1 | 0.2 | 0.1106 | 1.0 | 0.9 | : | −71.2 | −0.078 | Sey2002 | * |
| 06145+1754 | KUI 24 | HIP 29616 | 9.2622 | Hα | 2 | 142.2 | 0.6 | 0.3534 | 0.3 | 0.6 | | | | | * |
| | | | 9.2622 | y | 2 | 142.2 | 0.1 | 0.3521 | 0.8 | 0.6 | | | | | |
| 06154−0902 | A 668 | HIP 29705 | 8.7678 | Hα | 2 | 331.1 | 0.2 | 0.2151 | 0.2 | 0.9 | | −2.0 | 0.002 | Hrt1996a | |
| | | | 8.7705 | y | 2 | 331.2 | 0.1 | 0.2143 | 0.1 | 0.8 | | −1.9 | 0.001 | Hrt1996a | |
| 06159+0110 | RST 5225 | HIP 29746 | 9.2649 | y | 2 | 198.5 | 0.0 | 0.2263 | 0.2 | 0.8 | | −2.0 | −0.003 | Hrt2001a | * |
| | | | 9.2649 | Hα | 2 | 198.4 | 0.1 | 0.2272 | 0.1 | 0.7 | | −2.1 | −0.002 | Hrt2001a | |
| 06171+0957 | FIN 331 Aa,Ab | HIP 29850 | 9.2649 | Hα | 2 | 305.0 | 0.1 | 0.0990 | 0.4 | 0.3 | | 0.1 | −0.003 | Hrt1996a | * |
| 06173+0506 | CAT 1 Aa,Ab | HIP 29860 | 8.7733 | Hα | 2 | 48.3 | 2.6 | 0.8474 | 1.3 | 4.5 | * | 0.5 | −0.049 | Cat2006 | * |
| | | | 9.2649 | Hα | 2 | 42.9 | 0.9 | 0.8560 | 0.9 | 4.4 | * | −6.4 | −0.048 | Cat2006 | |
| | | | 9.2649 | y | 1 | 42.7 | 2.3 | 0.8571 | 2.3 | 5.2 | | −6.6 | −0.047 | Cat2006 | |
| 06214+0216 | A 2667 | HIP 30217 | 8.7732 | Hα | 2 | 258.5 | 0.1 | 0.3320 | 0.2 | 1.2 | | 3.6 | 0.013 | Sey2000a | * |
| 06253+0130 | FIN 343 | HIP 30547 | 8.7732 | Hα | 2 | 289.4 | 0.2 | 0.1166 | 0.6 | 0.8 | | −15.9 | −0.009 | Ole2002c | |
| 06274−2544 | B 114 | HIP 30733 | 8.7705 | y | 2 | 0.9 | 0.2 | 0.6546 | 0.2 | 0.5 | | 0.2 | 0.071 | Cve2006c | |
| 06290+2013 | BTZ 1 Aa,Ab | HIP 30883 | 8.7733 | Hα | 2 | 110.9 | 0.1 | 0.0605 | 0.1 | 0.2 | | −23.1 | −0.021 | Msn1997a | * |
| | | | 9.2622 | Hα | 2 | 113.8 | 0.1 | 0.0609 | 0.0 | 0.1 | | −23.4 | 0.008 | Msn1997a | |
| 06290+2013 | BU 1192 Ba,Bb | BD+20 1441B | 8.7733 | y | 2 | 321.3 | 0.6 | 0.2225 | 0.5 | 1.1 | | | | | * |
| 06298−5014 | HDO 195 CD | HIP 30953 | 8.7704 | y | 2 | 148.8 | 0.1 | 0.3921 | 0.1 | 0.5 | | 8.0 | 0.014 | Sod1999 | * |
| 06298−5014 | R 65 AB | HIP 30953 | 8.7704 | y | 2 | 261.1 | 0.0 | 0.6187 | 0.2 | 0.4 | | −0.6 | −0.019 | Hei1978c | * |
| 06300+1754 | STT 141 | HD 45757 | 9.2622 | y | 2 | 144.6 | 4.3 | 2.2507 | 4.2 | 4.7 | * | | | | * |
| 06314+0749 | A 2817 | HIP 31089 | 8.7732 | y | 2 | 263.6 | 0.5 | 0.1817 | 0.2 | 0.7 | | 3.8 | −0.015 | Pop1969b | * |
| | | | 9.2650 | y | 2 | 269.9 | 0.4 | 0.1731 | 0.4 | 0.7 | | 6.1 | −0.017 | Pop1969b | |
| 06319−0938 | A 670 | HD 46244 | 8.7705 | y | 2 | 173.8 | 0.2 | 0.3367 | 0.1 | 0.8 | | −11.0 | 0.006 | Sey2002 | |
| 06336−1207 | HU 43 | HD 46543 | 8.7705 | y | 2 | 306.8 | 0.1 | 0.7697 | 0.1 | 0.7 | * | −3.9 | 0.002 | Hei1993d | |
| 06342−1057 | HDS 898 | HIP 31332 | 8.7705 | y | 2 | 25.6 | 0.8 | 1.0421 | 0.7 | 2.0 | * | | | | |
| 06345−1114 | HO 234 | HIP 31356 | 8.7705 | y | 2 | 1.3 | 0.1 | 0.6171 | 0.2 | 0.4 | | 1.2 | 0.030 | FMR2007c | |
| 06359−3605 | FIN 19 | HIP 31509 | 8.7704 | Hα | 2 | 0.5 | 0.1 | 0.1905 | 0.1 | 1.1 | | 1.4 | 0.010 | Sod1999 | |
| 06362−3608 | RST 4816 | HIP 31547 | 8.7704 | Hα | 2 | 4.0 | 0.1 | 0.1009 | 0.1 | 0.6 | | | | | * |
| | | | 9.2651 | y | 2 | 352.8 | 0.1 | 0.1113 | 0.0 | 0.7 | | | | | |
| 06380−6132 | I 5 | HIP 31711 | 8.7730 | Hα | 2 | 110.9 | 0.1 | 0.3328 | 0.2 | 1.9 | | | | | |
| 06410+0954 | CHR 168 Aa,Ab | HIP 31978 | 8.7705 | Hα | 4 | 74.6 | 0.7 | 0.1004 | 1.0 | 1.6 | | 67.2 | 0.040 | Gie1997 | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 9.2622 | Hα | 2 | 75.6 | 0.2 | 0.1034 | 2.5 | 1.6 | | 67.0 | 0.044 | Gie1997 | |
| | | | 9.2622 | y | 2 | 74.9 | 0.7 | 0.1032 | 0.1 | 1.8 | | 66.3 | 0.043 | Gie1997 | |
| 06415−6528 | HDS 925 | HIP 32035 | 8.7730 | Hα | 2 | 307.9 | 1.1 | 0.6470 | 1.1 | 3.2 | : | | | | |
| | | | 8.7730 | y | 1 | 307.6 | 1.5 | 0.6462 | 1.5 | 3.9 | | | | | |
| 06425−4234 | I 283 | HIP 32111 | 8.7704 | y | 2 | 192.7 | 0.3 | 2.3531 | 0.5 | 2.8 | * | | | | |
| | | | 9.2595 | y | 2 | 193.0 | 1.1 | 2.3546 | 0.9 | 3.8 | * | | | | |
| | | | 9.2651 | y | 2 | 192.9 | 0.4 | 2.3509 | 1.1 | 3.3 | * | | | | |
| 06439−5434 | HDS 934 | HIP 32242 | 8.7704 | y | 2 | 357.9 | 0.2 | 0.1503 | 0.2 | 0.5 | | | | | |
| 06478+0020 | STT 157 | HIP 32572 | 8.7732 | Hα | 3 | 169.0 | 0.2 | 0.5071 | 0.3 | 0.5 | : | 11.9 | 0.121 | Hei1973b | |
| 06481−0948 | A 1056 | HD 49437 | 8.7705 | y | 2 | 255.6 | 0.1 | 0.3255 | 0.2 | 0.5 | | −20.6 | 0.087 | Sca1983f | * |
| 06485−1226 | A 2935 | HD 49572 | 8.7705 | y | 2 | 153.4 | 0.1 | 0.2222 | 0.3 | 0.4 | | −75.3 | 0.003 | Ole2005d | * |
| 06487+0737 | A 2731 AB | HIP 32650 | 8.7732 | y | 2 | 64.2 | 0.9 | 1.3085 | 0.4 | 1.3 | * | −1.8 | −0.074 | Hei1998 | * |
| | | | 9.2622 | y | 2 | 64.5 | 0.2 | 1.3076 | 0.9 | 1.4 | * | −1.7 | −0.080 | Hei1998 | |
| 06494−3325 | RST 2433 | HIP 32709 | 8.7730 | y | 2 | 220.8 | 0.4 | 1.5260 | 0.6 | 0.2 | * | | | | |
| 06545−2734 | B 706 | HIP 33197 | 8.7705 | y | 2 | 290.5 | 0.3 | 0.7199 | 0.3 | 0.5 | | 3.9 | −0.296 | Dom1979a | * |
| 06573−3530 | I 65 | HIP 33451 | 8.7730 | Hα | 2 | 343.5 | 0.0 | 0.1162 | 0.1 | 0.4 | | 9.2 | 0.006 | Doc2002i | |
| 06575+0253 | A 2681 | HIP 33474 | 9.2622 | y | 2 | 316.3 | 0.1 | 0.4460 | 0.2 | 0.5 | | 3.2 | 0.062 | Ari1999 | |
| | | | 9.2649 | y | 2 | 316.3 | 0.1 | 0.4457 | 0.2 | 0.4 | | 3.1 | 0.062 | Ari1999 | |
| 07003−2207 | FIN 334 Aa,Ab | HIP 33721 | 9.2595 | y | 2 | 338.7 | 0.2 | 0.1038 | 0.1 | 0.6 | | 12.9 | −0.014 | Ole2002d | * |
| 07013−0906 | A 671 | BD−08 1674 | 9.2622 | y | 2 | 14.0 | 0.1 | 0.3132 | 0.1 | 0.6 | | −4.2 | −0.009 | Ole2005d | |
| 07015−0942 | A 3042 AB | HD 52590 | 9.2622 | y | 2 | 198.4 | 0.1 | 0.1072 | 0.1 | 1.1 | | −35.2 | −0.185 | Ole2001 | * |
| 07029−1313 | HDS 980 | HIP 33973 | 9.2623 | y | 2 | 218.8 | 0.3 | 0.4885 | 0.3 | 3.1 | | | | | |
| | | | 9.2623 | Hα | 2 | 218.6 | 0.5 | 0.4897 | 0.5 | 2.8 | | | | | |
| 07043−0303 | A 519 | HIP 34110 | 9.2622 | y | 2 | 259.9 | 0.3 | 0.0787 | 0.7 | 1.0 | | 42.4 | −0.004 | Doc2001e | * |
| 07113−1032 | A 2122 | HIP 34702 | 9.2623 | y | 2 | 14.3 | 0.2 | 0.0846 | 0.2 | 0.4 | | 5.7 | 0.017 | Sey2002 | |
| 07143−2621 | FIN 323 | HIP 34981 | 9.2595 | y | 2 | 336.4 | 0.0 | 0.1094 | 0.0 | 0.3 | | 3.9 | −0.105 | Ole2004b | * |
| 07171−1202 | A 2123 AB | HIP 35261 | 9.2623 | y | 2 | 352.4 | 0.3 | 0.4068 | 0.1 | 0.7 | | −0.4 | 0.025 | Hrt2000c | * |
| 07175−4659 | I 7 | HIP 35296 | 9.2651 | Hα | 2 | 204.8 | 0.2 | 0.7547 | 0.2 | 0.9 | * | −2.4 | −0.130 | Hei1995 | |
| 07176+0918 | STT 170 | HIP 35310 | 9.2650 | Hα | 2 | 340.5 | 0.2 | 0.2428 | 0.2 | 0.3 | | −5.5 | −0.011 | Doc2007e | |
| 07185−5721 | HDS 1013 Aa,Ab | HIP 35374 | 9.2651 | y | 2 | 211.2 | 0.1 | 0.3355 | 0.1 | 0.7 | | | | | * |
| 07187−2457 | FIN 313 Aa,Ab | HIP 35415 | 9.2595 | y | 2 | 126.7 | 0.9 | 0.1247 | 0.6 | 0.8 | | | | | * |
| 07187−2457 | TOK 42 Aa,E | HIP 35415 | 9.2595 | y | 2 | 87.6 | 0.4 | 0.9480 | 1.3 | 4.4 | | | | | * |
| 07294−1500 | STF 1104 AB | HIP 36395 | 9.2623 | y | 2 | 31.5 | 0.0 | 1.8434 | 0.4 | 1.3 | * | −2.2 | 0.154 | WSI2004a | * |
| 07305+0743 | A 2869 | HIP 36487 | 9.2650 | Hα | 2 | 126.4 | 0.5 | 0.1766 | 0.4 | 0.6 | : | 29.8 | −0.088 | Ole1998c | * |
| 07352−1733 | HDS 1072 | HIP 36901 | 9.2595 | y | 2 | 285.4 | 1.0 | 0.5824 | 1.5 | 4.3 | | | | | |
| 07374−3458 | FIN 324 AB | HIP 37096 | 8.7730 | Hα | 2 | 162.1 | 0.1 | 0.2316 | 0.1 | 1.5 | | | | | * |
| | | | 9.2595 | y | 2 | 159.1 | 0.0 | 0.2225 | 0.1 | 1.5 | | | | | |
| 07378−0236 | A 534 AB-C | HIP 37134 | 9.2622 | y | 2 | 303.4 | 1.4 | 1.4308 | 0.5 | 3.2 | * | | | | * |
| 07411−0124 | A 1968 | HD 61809 | 9.2622 | y | 2 | 315.4 | 0.3 | 0.2969 | 0.2 | 0.7 | | 52.5 | 0.090 | Sca1983b | * |
| 07417+0942 | STF 1130 | HIP 37484 | 9.2650 | y | 3 | 36.5 | 1.2 | 0.4498 | 0.3 | 0.8 | | −10.7 | 0.013 | Msn1999a | |
| 07448−3344 | STN 9001 | HIP 37781 | 8.7730 | Hα | 2 | 25.8 | 0.1 | 1.1586 | 0.1 | 0.7 | : | | | | |
| | | | 8.7730 | y | 1 | 25.8 | 0.1 | 1.1557 | 0.1 | 0.1 | * | | | | |
| | | | 9.2595 | y | 2 | 24.7 | 14.0 | 1.1518 | 0.9 | 1.1 | : | | | | |
| 07479−1212 | STF 1146 | HIP 38048 | 9.2623 | y | 2 | 344.0 | 0.1 | 1.2048 | 0.4 | 1.7 | * | −0.7 | 0.075 | Nov2006 | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07508+0317 | A 2880 | HIP 38300 | 9.2650 | H$\alpha$ | 2 | 142.3 | 0.1 | 0.1419 | 0.0 | 0.3 | | −4.2 | 0.002 | Hrt2000a | |
| 07518−1354 | BU 101 | HIP 38382 | 9.2623 | y | 2 | 311.8 | 0.5 | 0.0431 | 1.4 | 0.5 | | 34.5 | −0.157 | Pbx2000b | * |
| 07523−2626 | WSI 54 AB | HIP 38430 | 9.2595 | y | 3 | 226.1 | 2.2 | 0.0902 | 1.9 | 1.8 | : | | | | * |
| 07523−2626 | WSI 54 AC | HIP 38430 | 9.2595 | y | 3 | 226.8 | 2.9 | 0.0450 | 0.2 | 1.3 | : | | | | * |
| 07560+2342 | COU 929 | HIP 38755 | 9.2596 | H$\alpha$ | 2 | 16.1 | 0.2 | 0.2742 | 0.2 | 0.9 | | −30.8 | 0.105 | Msn1997a | * |
| 07573+0108 | STT 185 | HIP 38870 | 9.2650 | H$\alpha$ | 2 | 11.5 | 0.1 | 0.3138 | 0.1 | 0.3 | | −4.5 | −0.064 | Hrt2001b | |
| 08017−0836 | A 1580 | HIP 39264 | 9.2596 | y | 2 | 289.9 | 0.1 | 0.2923 | 0.1 | 1.3 | | −2.7 | 0.053 | Cve2006e | * |
| 08024+0409 | STF 1175 | HIP 39325 | 9.2596 | y | 2 | 282.8 | 0.3 | 1.4153 | 0.2 | 1.7 | * | −4.2 | 0.047 | Ole2001 | |
| 08031−0625 | A 1581 | HIP 39383 | 9.2596 | y | 2 | 298.8 | 0.3 | 1.4029 | 0.6 | 0.4 | * | −15.1 | 0.783 | Hei1967a | * |
| 08088−7638 | RST 1381 | HIP 39887 | 9.2651 | y | 2 | 110.9 | 0.4 | 0.7841 | 0.4 | 0.9 | * | | | | |
| 08095−4720 | WSI 55 Ba,Bb | HD 68243 | 9.2624 | y | 3 | 306.5 | 8.3 | 0.0370 | 4.5 | 1.8 | | | | | * |
| 08125−4616 | CHR 143 Aa,Ab | HIP 40183 | 9.2624 | y | 2 | 331.0 | 1.5 | 0.0554 | 0.7 | 0.7 | | | | | * |
| | | | 9.2624 | H$\alpha$ | 1 | 331.2 | 0.0 | 0.0557 | 0.0 | 0.6 | | | | | |
| 08125−4616 | SEE 96 Aa,B | HIP 40183 | 9.2624 | y | 2 | 274.6 | 0.0 | 0.6236 | 1.5 | 1.0 | | | | | * |
| | | | 9.2624 | H$\alpha$ | 1 | 274.7 | 0.0 | 0.6260 | 0.0 | 1.0 | | | | | |
| 08250−4246 | CHR 226 Aa,Ab | HIP 41250 | 9.2623 | y | 2 | 270.5 | 0.7 | 0.0537 | 1.1 | 0.8 | | | | | * |
| | | | 9.2623 | H$\alpha$ | 2 | 271.3 | 1.9 | 0.0510 | 0.5 | 0.8 | | | | | |
| 08250−4246 | RST 4888 Aa,B | HIP 41250 | 9.2623 | y | 2 | 103.9 | 0.0 | 0.5305 | 0.1 | 1.2 | | | | | * |
| | | | 9.2623 | H$\alpha$ | 2 | 103.8 | 2.2 | 0.5332 | 1.2 | 1.1 | | | | | |
| 08251−4910 | RST 321 | HIP 41261 | 9.2624 | y | 2 | 135.1 | 0.2 | 0.3494 | 0.2 | 0.9 | | −3.5 | 0.036 | Wor1981 | |
| 08263−3904 | B 1605 Ba,Bb | HIP 41361 | 9.2623 | y | 2 | 152.2 | 0.1 | 0.1516 | 0.0 | 0.4 | | | | | * |
| 08270−5242 | B 1606 | HIP 41426 | 9.2624 | y | 2 | 179.9 | 1.1 | 0.0704 | 0.4 | 1.0 | | −55.3 | −0.021 | Fin1963c | * |
| 08275−5501 | FIN 116 | HIP 41464 | 9.2624 | y | 2 | 238.1 | 0.0 | 0.2248 | 0.0 | 0.3 | | 26.9 | 0.044 | Mnt2003b | * |
| 08276−2051 | B 2179 | HIP 41475 | 9.2623 | y | 2 | 218.8 | 0.1 | 0.4350 | 0.2 | 1.3 | | | | | * |
| 08289−1552 | RST 4403 | HIP 41609 | 9.2623 | y | 3 | 268.9 | 3.4 | 1.2910 | 3.4 | 4.8 | * | | | | |
| 08291−4756 | FIN 315 Aa,Ab | HIP 41616 | 9.2624 | y | 2 | 195.5 | 0.1 | 0.1005 | 0.2 | 1.5 | | | | | * |
| 08315−1935 | I 489 | HIP 41817 | 9.2623 | y | 2 | 295.6 | 0.2 | 0.3442 | 0.6 | 0.9 | | 3.9 | 0.041 | Zul1997b | |
| 08331−2436 | BU 205 AB | HIP 41949 | 9.2623 | y | 2 | 297.4 | 0.4 | 0.5620 | 0.7 | 0.5 | | 3.3 | −0.021 | Hei1979b | * |
| 08345−3236 | FIN 335 | HIP 42075 | 9.2624 | y | 2 | 159.6 | 0.1 | 0.1640 | 0.1 | 0.6 | | −5.2 | 0.011 | Sod1999 | |
| 08380−0844 | HDS 1242 | HIP 42345 | 9.2596 | y | 2 | 3.3 | 0.2 | 0.2069 | 0.3 | 1.3 | | | | | |
| 08391−2240 | BU 208 AB | HIP 42430 | 9.2623 | y | 2 | 37.2 | 0.6 | 1.1416 | 0.2 | 1.3 | * | −4.3 | 0.150 | Hei1990c | * |
| 08394−3636 | I 314 | HIP 42455 | 9.2623 | y | 2 | 243.5 | 0.1 | 0.7318 | 0.5 | 2.1 | | −0.2 | 0.043 | Hei1968a | |
| 08398−6604 | HDS 1245 | HIP 42496 | 9.2652 | y | 2 | 329.3 | 1.7 | 0.1735 | 1.4 | 2.4 | : | | | | |
| 08421−5245 | B 1624 | HIP 42695 | 9.2624 | y | 2 | 189.9 | 0.6 | 0.1482 | 0.1 | 1.4 | | 71.8 | −0.119 | Msn1999a | * |
| 08431−1225 | RST 3603 | HIP 42790 | 9.2596 | y | 2 | 330.2 | 0.1 | 0.3671 | 0.3 | 0.5 | | 15.9 | −0.050 | Hei1996c | |
| 08461+0748 | J 735 | HIP 43036 | 9.2596 | y | 2 | 339.2 | 2.1 | 2.7957 | 2.6 | 0.2 | * | | | | |
| 08462−1422 | HU 120 | HIP 43038 | 9.2596 | y | 2 | 314.1 | 0.1 | 0.4051 | 0.1 | 0.5 | | 11.3 | −0.009 | Baz1981b | |
| 08474−1703 | BU 586 | HIP 43152 | 9.2623 | y | 2 | 216.3 | 0.1 | 0.1984 | 0.1 | 1.4 | | −2.2 | −0.017 | Mnt2003c | * |
| 08486+0237 | A 2551 | HD 75192 | 9.2596 | y | 2 | 88.9 | 0.2 | 0.1507 | 0.3 | 1.5 | | −7.2 | −0.008 | Msn2001c | |
| 08495+0852 | BU 1068 AB | HIP 43317 | 9.2596 | y | 2 | 323.3 | 0.3 | 0.3591 | 0.3 | 1.5 | | 25.3 | 0.153 | Hei1996c | * |
| 08538−4731 | FIN 316 | HIP 43671 | 9.2624 | y | 2 | 326.6 | 0.0 | 0.0802 | 0.1 | 0.7 | | 5.6 | −0.006 | Sod1999 | * |
| 08542−0229 | A 1754 | HD 76119 | 9.2597 | y | 2 | 123.6 | 0.5 | 0.3553 | 0.2 | 0.9 | : | −47.1 | 0.240 | Hei1998 | * |
| 08563−3707 | RST 2593 | HIP 43880 | 9.2624 | y | 3 | 340.1 | 0.6 | 0.9712 | 0.4 | 3.7 | * | | | | |
| | | | 9.2624 | H$\alpha$ | 2 | 340.0 | 0.3 | 0.9733 | 0.9 | 3.3 | * | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08574−5140 | HDS 1297 | HIP 43983 | 9.2624 | y | 2 | 101.7 | 2.3 | 0.6339 | 4.0 | 4.0 | : | | | | |
| 09001−1228 | HU 225 AB | HIP 44190 | 9.2652 | y | 2 | 256.8 | 0.1 | 0.4472 | 0.1 | 0.4 | | −1.8 | −0.008 | Doc1996c | * |
| | | | 9.2652 | Hα | 2 | 256.8 | 0.1 | 0.4477 | 0.1 | 0.4 | | −1.8 | −0.008 | Doc1996c | |
| 09071−6146 | HDS 1326 | HIP 44745 | 9.2654 | y | 2 | 199.9 | 1.5 | 0.6625 | 1.0 | 3.0 | | | | | |
| 09099−3022 | B 1113 BC | HIP 45001 | 9.2625 | y | 2 | 275.0 | 0.1 | 0.3458 | 0.5 | 0.7 | | | | | * |
| 09100−2845 | B 179 | HIP 45003 | 9.2652 | y | 2 | 160.1 | 0.2 | 0.4197 | 0.2 | 0.5 | | −3.3 | −0.035 | Hei1993d | |
| 09125−4032 | B 1115 | HIP 45191 | 9.2624 | y | 2 | 160.9 | 0.2 | 0.1594 | 0.2 | 0.7 | | 58.7 | −0.317 | Sey2002 | * |
| 09125−4337 | HJ 4188 AB | HIP 45189 | 9.2624 | y | 2 | 280.4 | 0.4 | 2.8617 | 0.5 | 0.8 | * | | | | * |
| | | | 9.2624 | Hα | 2 | 280.4 | 0.0 | 2.8678 | 0.0 | 0.9 | * | | | | |
| 09128−6055 | HDO 207 AB | HIP 45214 | 9.2654 | Hα | 2 | 87.0 | 0.1 | 0.1532 | 0.3 | 0.5 | | −25.9 | 0.039 | Hei1996c | * |
| 09149+0427 | HEI 350 | HIP 45383 | 9.2597 | y | 2 | 54.4 | 4.3 | 0.7705 | 1.7 | 4.2 | | 77.4 | 0.506 | Hei1994a | * |
| 09167−0621 | KUI 40 | HIP 45527 | 9.2652 | y | 2 | 285.5 | 1.4 | 1.3978 | 1.4 | 5.9 | * | | | | * |
| 09173−6841 | FIN 363 AB | HIP 45571 | 9.2654 | Hα | 2 | 158.8 | 0.1 | 0.0947 | 0.9 | 0.6 | | −66.1 | −0.005 | Sod1999 | * |
| 09174−7454 | I 12 AB | HIP 45581 | 9.2654 | Hα | 2 | 260.8 | 0.3 | 0.3149 | 0.3 | 1.0 | | | | | * |
| 09193−5856 | HDS 1342 | HIP 45726 | 9.2653 | Hα | 2 | 167.0 | 1.1 | 0.9978 | 1.1 | 4.2 | * | | | | |
| 09207−0742 | A 1082 AB | HD 80615 | 9.2652 | y | 2 | 213.6 | 0.1 | 0.4098 | 0.3 | 1.0 | | 30.0 | −0.087 | Hei1993d | * |
| 09228−0950 | A 1342 AB | HIP 45999 | 9.2597 | y | 2 | 192.9 | 0.1 | 0.1521 | 0.3 | 1.1 | | −14.0 | −0.010 | FMR2006d | * |
| 09243−3926 | FIN 348 | HIP 46114 | 9.2624 | y | 2 | 275.6 | 0.0 | 0.1711 | 0.0 | 0.5 | | −31.8 | −0.071 | Msn2001c | * |
| 09252−1258 | WSI 73 | HIP 46191 | 9.2597 | y | 2 | 274.8 | 0.6 | 0.1783 | 0.9 | 1.1 | : | | | | * |
| 09264−4215 | B 1122 | HIP 46290 | 9.2624 | y | 2 | 228.5 | 0.1 | 0.1561 | 0.0 | 0.3 | | −11.0 | 0.045 | Sey2002 | * |
| 09272−0913 | A 1588 AB | HIP 46365 | 9.2597 | y | 2 | 195.3 | 0.0 | 0.4304 | 0.0 | 0.4 | | | | | * |
| 09273+0614 | STF 1355 | HIP 46367 | 9.2597 | y | 2 | 352.5 | 0.1 | 1.8818 | 0.2 | 0.1 | * | | | | |
| 09276−3500 | B 2215 | HIP 46396 | 9.2625 | y | 2 | 339.3 | 3.3 | 0.0378 | 1.0 | 1.6 | | | | | * |
| | | | 9.2625 | Hα | 2 | 344.4 | 1.8 | 0.0443 | 2.3 | 1.8 | | | | | |
| 09278−0604 | B 2530 | HIP 46404 | 9.2652 | y | 2 | 327.3 | 0.1 | 0.2640 | 0.2 | 1.6 | | −5.1 | −0.038 | Sod1999 | |
| 09285+0903 | STF 1356 | HIP 46454 | 9.2653 | Hα | 2 | 101.3 | 0.1 | 0.7265 | 0.1 | 1.0 | | −0.5 | 0.001 | vDl1976 | |
| | | | 9.2653 | y | 1 | 101.3 | 0.1 | 0.7258 | 0.1 | 1.1 | | −0.5 | −0.000 | vDl1976 | |
| 09293−4432 | HDS 1360 Aa,Ab | HIP 46523 | 9.2624 | y | 2 | 165.5 | 0.2 | 0.4670 | 0.4 | 3.0 | | | | | * |
| | | | 9.2624 | Hα | 2 | 165.4 | 0.3 | 0.4682 | 0.3 | 2.7 | | | | | |
| | | | 9.2652 | y | 2 | 165.4 | 0.4 | 0.4660 | 0.4 | 3.0 | | | | | |
| | | | 9.2652 | Hα | 3 | 165.4 | 0.7 | 0.4669 | 0.3 | 2.7 | | | | | |
| 09327+0152 | FIN 349 | HIP 46840 | 9.2652 | Hα | 2 | 141.4 | 0.2 | 0.1104 | 0.3 | 0.6 | | 6.6 | −0.020 | Hrt2000b | |
| 09361−6354 | HDS 1384 | HIP 47120 | 9.2654 | y | 2 | 190.3 | 2.4 | 0.9523 | 2.3 | 3.8 | * | | | | |
| 09387−3937 | I 202 | HIP 47328 | 9.2625 | y | 2 | 158.5 | 0.2 | 0.4121 | 0.1 | 2.0 | | −19.5 | −0.772 | Sey2002 | * |
| | | | 9.2652 | Hα | 2 | 158.3 | 0.1 | 0.4114 | 0.1 | 1.8 | | −19.6 | −0.773 | Sey2002 | |
| 09407−5759 | B 780 | HIP 47479 | 9.2653 | Hα | 2 | 278.2 | 0.1 | 0.1448 | 0.1 | 0.3 | | −1.6 | −0.011 | Sod1999 | |
| 09415−1829 | TOK 43 Aa,Ab | HIP 47537 | 9.2652 | y | 2 | 29.8 | 6.3 | 0.4365 | 1.4 | 2.1 | | | | | * |
| | | | 9.2652 | V | 2 | 28.2 | 4.4 | 0.4436 | 1.7 | 2.4 | | | | | |
| 09442−2746 | FIN 326 | HIP 47758 | 9.2652 | y | 2 | 41.9 | 0.0 | 0.1090 | 0.0 | 0.2 | | 1.2 | −0.007 | Msn1999c | |
| | | | 9.2652 | R | 2 | 42.0 | 0.1 | 0.1092 | 0.1 | 0.2 | | 1.3 | −0.006 | Msn1999c | |
| | | | 9.2652 | I | 2 | 42.0 | 0.2 | 0.1081 | 0.5 | 0.5 | | 1.4 | −0.008 | Msn1999c | |
| 09488−5237 | B 1663 | HIP 48133 | 9.2653 | Hα | 2 | 335.2 | 1.2 | 1.0373 | 1.2 | 3.5 | * | | | | |
| | | | 9.2653 | y | 2 | 335.2 | 2.1 | 1.0353 | 1.3 | 3.6 | * | | | | |
| 09495−1033 | A 1344 | BD−08 2935 | 9.2597 | y | 2 | 283.8 | 0.5 | 0.2072 | 0.5 | 1.3 | : | 67.6 | 0.036 | Hei1986b | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09522+0807 | A 2762 | HIP 48412 | 9.2597 | y | 2 | 258.8 | 3.9 | 0.4889 | 1.6 | 3.4 | | | | | |
| 09525−0806 | AC 5 AB | HIP 48437 | 9.2597 | y | 2 | 51.0 | 0.2 | 0.5631 | 0.3 | 0.7 | | 0.8 | −0.021 | Hei1982c | * |
| 09551−2632 | I 843 AB | HIP 48645 | 9.2652 | y | 2 | 130.1 | 0.1 | 0.9276 | 0.3 | 0.7 | * | −3.7 | 0.022 | Sey2002 | * |
| | | | 9.2652 | V | 2 | 130.2 | 0.1 | 0.9289 | 0.1 | 0.9 | * | −3.7 | 0.024 | Sey2002 | |
| 10000+2433 | CHR 145 | HIP 49018 | 9.2625 | y | 3 | 189.7 | 1.2 | 0.2861 | 2.1 | 2.6 | | | | | * |
| 10043−2823 | I 292 | HIP 49336 | 9.2626 | y | 2 | 305.7 | 0.4 | 0.7095 | 0.3 | 0.6 | | −4.0 | −0.075 | Sey2000a | * |
| 10050−5119 | HU 1594 | HIP 49394 | 9.2597 | H$\alpha$ | 2 | 322.4 | 0.1 | 0.1413 | 0.1 | 0.4 | | 7.9 | −0.040 | Sey2002 | |
| 10062−4722 | I 173 | HIP 49485 | 9.2597 | y | 2 | 5.8 | 0.2 | 0.9621 | 0.5 | 1.8 | * | −0.9 | −0.033 | JDH1960 | |
| 10116+1321 | HU 874 | HIP 49929 | 9.2625 | y | 2 | 282.7 | 0.4 | 0.1740 | 0.5 | 1.4 | | 2.7 | 0.066 | Hrt1996a | |
| 10120−2836 | B 194 | HIP 49967 | 9.2626 | y | 2 | 192.2 | 0.0 | 0.1256 | 0.1 | 0.5 | | −22.7 | −0.005 | Sey2002 | * |
| 10161−5954 | HU 1597 | HIP 50287 | 9.2598 | y | 2 | 141.4 | 0.1 | 0.2963 | 0.2 | 0.4 | | 17.9 | −0.057 | Lin1990b | |
| 10163−2859 | I 851 | HIP 50309 | 9.2626 | y | 2 | 236.6 | 0.1 | 0.3826 | 0.3 | 0.5 | | 7.5 | 0.037 | Hei1969b | |
| 10183−0326 | RST 4454 AB | HD 89334 | 9.2625 | y | 2 | 42.7 | 0.9 | 0.2982 | 0.6 | 1.1 | : | −18.3 | 0.269 | Hei1997 | * |
| 10196−5724 | FIN 162 | HD 89714 | 9.2597 | y | 2 | 176.9 | 0.5 | 0.4082 | 0.4 | 1.1 | : | | | | * |
| 10205+0626 | STF 1426 AB | HIP 50637 | 9.2625 | y | 2 | 310.6 | 1.6 | 0.9320 | 0.9 | 1.7 | | −0.5 | 0.014 | Nov2006 | * |
| 10217−0946 | BU 25 | HIP 50747 | 9.2625 | y | 2 | 133.1 | 2.3 | 1.5848 | 2.7 | 0.7 | * | | | | |
| 10227+1521 | STT 216 | HIP 50829 | 9.2625 | y | 2 | 233.8 | 12.7 | 2.1769 | 9.3 | 5.9 | * | 1.9 | 0.144 | Hei1978a | * |
| 10275+0334 | STT 218 | HIP 51204 | 9.2653 | H$\alpha$ | 3 | 158.8 | 0.2 | 0.3897 | 0.6 | 2.0 | | −5.5 | 0.002 | Sey2002 | |
| 10282−2548 | B 199 AC | HIP 51255 | 9.2626 | y | 2 | 173.9 | 0.5 | 1.1796 | 2.7 | 3.9 | | | | | * |
| 10282−2548 | FIN 308 AB | HIP 51255 | 9.2626 | y | 2 | 94.8 | 0.3 | 0.1489 | 0.9 | 0.7 | | 11.5 | 0.002 | Doc1991e | * |
| 10311−2411 | B 201 Aa,B | HIP 51501 | 9.2626 | y | 2 | 67.2 | 2.2 | 1.9632 | 2.2 | 4.4 | * | | | | * |
| 10328+0918 | WRH 19 | HIP 51624 | 9.2653 | H$\alpha$ | 2 | 98.3 | 7.7 | 0.0461 | 1.8 | 1.5 | | | | | * |
| 10361−2641 | BU 411 | HIP 51885 | 9.2626 | y | 2 | 306.9 | 0.4 | 1.3301 | 0.7 | 1.1 | * | −0.8 | −0.049 | Sca2001b | |
| 10370−0850 | A 556 Aa,B | HIP 51966 | 9.2626 | y | 3 | 194.4 | 3.0 | 0.9133 | 1.2 | 3.4 | | 0.1 | 0.146 | Pop1978 | * |
| 10370−0850 | TOK 44 Aa,Ab | HIP 51966 | 9.2626 | y | 3 | 268.8 | 2.7 | 0.0973 | 0.3 | 3.0 | | | | | * |
| 10373−4814 | SEE 119 | HIP 51986 | 9.2597 | H$\alpha$ | 2 | 293.3 | 0.2 | 0.3770 | 0.1 | 1.5 | | 2.6 | −0.018 | Doc2005f | * |
| 10374−5149 | RST 499 | HIP 51996 | 9.2597 | y | 3 | 107.3 | 0.6 | 2.1067 | 0.4 | 0.6 | * | | | | |
| 10375−0932 | RST 3708 | HD 92015 | 9.2626 | y | 2 | 351.3 | 1.8 | 0.4728 | 1.8 | 2.4 | : | −67.7 | 0.245 | Hei1991 | * |
| 10387+0544 | STF 1457 | HIP 52097 | 9.2625 | y | 2 | 331.9 | 0.6 | 1.8281 | 2.8 | 0.5 | * | | | | |
| 10397+0851 | STT 224 AB | HIP 52187 | 9.2653 | H$\alpha$ | 2 | 141.4 | 0.3 | 0.5125 | 0.4 | 1.3 | : | −7.3 | −0.063 | Hei1984b | * |
| | | | 9.2653 | y | 2 | 141.4 | 0.5 | 0.5122 | 0.5 | 1.3 | | −7.3 | −0.063 | Hei1984b | |
| | | | 9.2653 | H$\alpha$ | 2 | 141.4 | 0.3 | 0.5137 | 0.3 | 1.3 | : | −7.2 | −0.062 | Hei1984b | |
| 10415−2705 | B 203 | HIP 52325 | 9.2626 | y | 3 | 15.3 | 1.3 | 0.9904 | 3.3 | 3.7 | * | | | | |
| 10419−7811 | HDS 1530 | HIP 52351 | 9.2654 | y | 3 | 134.3 | 3.0 | 0.1278 | 2.1 | 1.5 | : | | | | |
| 10426+0335 | A 2768 | HIP 52401 | 9.2653 | H$\alpha$ | 2 | 251.0 | 0.4 | 0.5932 | 0.2 | 1.6 | | 0.0 | 0.032 | Hrt1989 | |
| 10444−6000 | HDS 1534 Aa,Ab | HIP 52526 | 9.2598 | y | 2 | 325.4 | 1.0 | 1.0089 | 1.0 | 4.3 | * | | | | * |
| | | | 9.2598 | H$\alpha$ | 2 | 325.4 | 1.6 | 1.0124 | 1.6 | 2.7 | * | | | | |
| 10446+0530 | A 2771 | HIP 52547 | 9.2625 | y | 2 | 124.5 | 0.8 | 0.3730 | 0.7 | 1.3 | : | −41.8 | 0.099 | Hei1997 | * |
| 10452−5944 | WSI 56 | CP−59 2636 | 9.2598 | y | 2 | 238.4 | 1.4 | 0.2790 | 0.5 | 1.5 | : | | | | * |
| 10465−6416 | FIN 364 AB | HIP 52701 | 9.2654 | H$\alpha$ | 4 | 101.9 | 1.5 | 0.0403 | 2.3 | 0.7 | | −17.8 | −0.131 | Mnt2003c | * |
| 10465−6416 | TOK 45 AC | HIP 52701 | 9.2654 | H$\alpha$ | 4 | 11.6 | 4.5 | 0.7475 | 3.7 | 3.9 | | | | | * |
| 10526+0500 | A 2773 | HIP 53165 | 9.2625 | y | 2 | 347.7 | 0.9 | 1.6729 | 2.5 | 1.5 | * | | | | |
| 10529−1717 | HDS 1556 | HIP 53206 | 9.2626 | y | 2 | 101.1 | 0.4 | 0.1941 | 0.4 | 0.5 | | | | | |
| 10557+0044 | BU 1076 | HIP 53423 | 9.2653 | H$\alpha$ | 2 | 53.9 | 0.4 | 1.1597 | 0.8 | 2.8 | * | 5.5 | 0.066 | Mrl1970a | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10592−8133 | I 212 | HIP 53700 | 9.2654 | y | 2 | 354.6 | 0.1 | 0.2945 | 0.3 | 0.4 | | 34.1 | −0.084 | Sey2002 | * |
| 11000−0328 | STF 1500 | HIP 53765 | 9.2599 | y | 2 | 300.3 | 0.1 | 1.3807 | 0.7 | 0.5 | * | | | | |
| 11014−1204 | HDS 1572 | HIP 53879 | 9.2598 | y | 2 | 144.7 | 0.3 | 0.2196 | 0.1 | 1.6 | | | | | |
| 11020−7329 | HDS 1576 | HIP 53921 | 9.2654 | y | 2 | 225.4 | 1.7 | 0.3715 | 2.1 | 4.2 | | | | | |
| | | | 9.2654 | Hα | 2 | 225.7 | 0.9 | 0.3690 | 1.9 | 3.5 | | | | | |
| 11042−5828 | JSP 459 Aa,B | HD 96118 | 9.2598 | y | 2 | 122.4 | 2.5 | 2.2861 | 2.4 | 5.3 | * | | | | * |
| 11053−2718 | FIN 47 AB | HIP 54204 | 9.2654 | Hα | 2 | 48.3 | 0.0 | 0.1387 | 0.1 | 0.1 | | −0.2 | −0.016 | Msn1999a | * |
| 11068−7050 | B 2006 | HD 96705 | 9.2654 | y | 2 | 283.2 | 1.4 | 0.1210 | 1.5 | 0.5 | | 0.5 | −0.005 | Hei1997 | |
| 11080−6457 | HDS 1588 | HIP 54405 | 9.2654 | y | 2 | 350.4 | 0.5 | 0.5936 | 0.6 | 2.2 | | | | | |
| 11101−3822 | B 795 | HIP 54577 | 9.2598 | y | 2 | 6.1 | 0.3 | 0.6923 | 0.3 | 2.0 | : | | | | |
| 11102−1122 | HDS 1590 | HIP 54580 | 9.2598 | y | 2 | 351.3 | 0.3 | 0.1361 | 0.1 | 0.4 | | | | | |
| 11125−1830 | BU 220 | HIP 54742 | 9.2655 | y | 2 | 317.7 | 0.1 | 0.2968 | 0.1 | 1.1 | | 5.7 | 0.136 | Hei1995 | * |
| 11175−5906 | RST 4472 BC | HIP 55149 | 9.2598 | y | 2 | 31.5 | 5.2 | 0.2942 | 2.8 | 2.9 | | | | | * |
| 11175−5906 | R 163 AB | HIP 55149 | 9.2598 | y | 2 | 58.2 | 0.0 | 1.6129 | 0.2 | 1.7 | | | | | * |
| 11190+1416 | STF 1527 | HIP 55254 | 9.2599 | y | 1 | 353.3 | 0.1 | 0.3266 | 0.1 | 1.2 | | 0.4 | −0.576 | WSI2006b | * |
| 11221−2447 | I 507 AB | HIP 55505 | 9.2654 | y | 2 | 4.2 | 0.1 | 0.7139 | 0.1 | 0.7 | * | −0.4 | −0.122 | Tok1999b | * |
| | | | 9.2654 | V | 1 | 4.2 | 0.1 | 0.7144 | 0.1 | 0.9 | | −0.4 | −0.122 | Tok1999b | |
| | | | 9.2654 | R | 2 | 4.3 | 0.1 | 0.7140 | 0.5 | 0.3 | * | −0.3 | −0.122 | Tok1999b | |
| 11230+0408 | A 2776 AB | HIP 55574 | 9.2599 | y | 2 | 234.5 | 0.2 | 0.1498 | 0.1 | 0.5 | | 5.7 | 0.035 | Zul1991b | * |
| 11243+1354 | HDS 1622 | HIP 55661 | 9.2599 | y | 2 | 37.2 | 1.3 | 0.8330 | 1.3 | 3.2 | | | | | |
| 11268−5310 | I 883 | HIP 55849 | 9.2598 | y | 2 | 226.3 | 0.2 | 0.2239 | 0.2 | 0.6 | | 16.1 | −0.115 | Hng2005 | * |
| 11272−1539 | HU 462 | HIP 55875 | 9.2655 | y | 2 | 133.8 | 0.1 | 0.4173 | 0.2 | 0.6 | | 0.4 | 0.021 | WSI2006b | |
| 11279−0142 | RST 4944 | HIP 55941 | 9.2599 | Hα | 2 | 242.4 | 0.2 | 0.1490 | 0.6 | 2.4 | | 5.9 | 0.033 | Sey2002 | |
| 11286−4508 | I 885 | HIP 56004 | 9.2598 | y | 2 | 151.6 | 0.5 | 0.6507 | 0.5 | 2.0 | | 6.2 | 0.108 | Sey2002 | |
| 11321−0332 | RST 4480 BC | BD−02 3365 | 9.2599 | y | 2 | 314.7 | 1.6 | 0.5070 | 0.8 | 1.7 | : | | | | * |
| 11368−1221 | BU 456 | HIP 56641 | 9.2599 | y | 2 | 159.1 | 0.1 | 1.1335 | 0.1 | 0.2 | * | 2.2 | 0.028 | Sca1982f | |
| 11441−0448 | RST 5524 | HIP 57232 | 9.2599 | y | 2 | 173.9 | 0.1 | 0.2063 | 0.2 | 0.3 | | 1.1 | 0.009 | Zir2002c | |
| 11446−4925 | RST 9004 AB | HIP 57269 | 9.2598 | y | 2 | 115.5 | 0.8 | 0.1795 | 0.4 | 1.7 | : | −63.0 | 0.045 | Hei1986b | * |
| 11523−2650 | RST 1619 | HIP 57880 | 9.2654 | V | 2 | 61.7 | 1.0 | 1.3815 | 1.0 | 3.2 | * | | | | |
| | | | 9.2654 | R | 2 | 61.7 | 0.4 | 1.3797 | 0.4 | 3.2 | * | | | | |
| 11525−1408 | HDS 1676 | HIP 57894 | 9.2599 | y | 2 | 111.0 | 0.1 | 0.2078 | 0.1 | 1.3 | | | | | |
| 11532−1540 | A 2579 | HIP 57955 | 9.2655 | y | 2 | 38.6 | 0.1 | 0.4046 | 0.2 | 0.6 | | 2.9 | 0.061 | Baz1981b | |
| 11544−3745 | HWE 71 | HIP 58057 | 9.2598 | y | 2 | 97.6 | 0.1 | 0.2802 | 0.1 | 1.9 | | | | | |
| 12018−3439 | I 215 | HIP 58669 | 9.2626 | y | 2 | 63.6 | 0.0 | 0.3621 | 0.8 | 1.0 | | 24.5 | 0.146 | Hei1997 | * |
| 12036−3901 | SEE 143 | HIP 58799 | 9.2626 | y | 2 | 41.4 | 0.3 | 0.6088 | 0.2 | 0.7 | | 1.6 | 0.036 | Sod1999 | |
| | | | 9.2626 | Hα | 2 | 41.4 | 0.4 | 0.6097 | 0.5 | 0.6 | | 1.7 | 0.037 | Sod1999 | |
| 12064−6543 | FIN 367 Aa,Ab | HIP 59050 | 9.2627 | y | 2 | 307.2 | 0.3 | 0.1204 | 0.5 | 0.8 | | −46.0 | −0.056 | Ole2004b | * |
| 12158−2321 | BU 920 | HIP 59801 | 9.2599 | y | 2 | 305.1 | 0.1 | 1.8732 | 0.3 | 1.5 | * | 199.3 | 1.125 | Bsp1961 | * |
| 12199−0040 | MCA 37 | HIP 60129 | 8.5395 | y | 2 | 334.0 | 0.3 | 0.1394 | 0.5 | 2.3 | | −0.9 | 0.004 | Sod1999 | * |
| | | | 8.5395 | Hα | 2 | 334.6 | 0.1 | 0.1327 | 0.4 | 2.2 | | −0.2 | −0.002 | Sod1999 | |
| 12247−2004 | B 1716 | HIP 60545 | 9.2599 | y | 2 | 227.4 | 0.1 | 0.7064 | 0.2 | 0.5 | | | | | |
| 12254−1320 | RST 3788 | HIP 60620 | 9.2600 | y | 2 | 308.8 | 1.8 | 2.6822 | 1.8 | 5.0 | * | | | | |
| 12268−0536 | A 78 | HIP 60727 | 9.2655 | y | 2 | 71.9 | 0.1 | 0.2458 | 0.1 | 1.2 | | −5.6 | −0.045 | Sey2002 | |
| 12274−2843 | B 228 | HIP 60775 | 9.2600 | y | 2 | 114.4 | 0.1 | 0.1986 | 0.1 | 0.4 | | −5.4 | −0.013 | FMR2006b | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12283−6146 | RST 4499 BC | HIP 60845 | 9.2627 | y | 2 | 215.0 | 0.5 | 0.2294 | 0.4 | 0.7 | | 13.2 | −0.029 | Hei1997 | * |
| 12301−1324 | BU 28 AB | HIP 60994 | 9.2600 | y | 2 | 342.1 | 0.7 | 2.1052 | 0.3 | 3.0 | * | 0.8 | −0.081 | Sod1999 | * |
| 12313−4130 | I 82 | HIP 61101 | 8.5421 | y | 3 | 10.9 | 1.1 | 0.7368 | 1.5 | 2.4 | : | | | | |
| | | | 9.2626 | y | 3 | 10.8 | 0.3 | 0.7354 | 0.8 | 1.2 | | | | | |
| 12342−1812 | LV 5 | HIP 61345 | 9.2599 | y | 2 | 314.3 | 0.1 | 0.9617 | 0.1 | 2.2 | * | | | | |
| 12357−1650 | FIN 368 Aa,Ab | HIP 61463 | 9.2599 | y | 2 | 115.8 | 0.4 | 0.1325 | 0.3 | 1.7 | | | | | * |
| 12362−4650 | RST 5526 | HIP 61517 | 8.5421 | y | 3 | 126.5 | 1.5 | 0.4217 | 2.1 | 2.2 | : | | | | |
| 12392−4022 | B 1215 | HIP 61729 | 9.2626 | y | 2 | 164.3 | 0.2 | 0.2023 | 0.2 | 0.5 | | 42.4 | 0.097 | Hei1986b | * |
| 12396−3717 | DAW 63 | HIP 61775 | 9.2626 | y | 2 | 89.4 | 0.2 | 0.3633 | 0.3 | 1.0 | : | 1.3 | 0.028 | Hei1996c | |
| 12417−0127 | STF 1670 AB | HIP 61941 | 9.2600 | H$\alpha$ | 2 | 28.2 | 0.1 | 1.2192 | 0.5 | 0.1 | * | −0.4 | −0.009 | Sca2007c | * |
| 12444+2200 | HDS 1783 | HIP 62162 | 9.2655 | H$\alpha$ | 2 | 264.3 | 1.0 | 0.1900 | 1.0 | 3.1 | : | | | | |
| 12446−5717 | FIN 65 AB | HIP 62179 | 9.2626 | y | 2 | 91.2 | 0.2 | 0.2657 | 0.5 | 1.2 | | −5.5 | 0.021 | Ole2004b | * |
| 12452−4656 | HDS 1787 | HIP 62228 | 8.5421 | y | 5 | 304.3 | 1.3 | 0.0733 | 1.3 | 2.0 | : | | | | |
| | | | 9.2626 | y | 2 | 303.1 | 0.1 | 0.0737 | 0.3 | 0.4 | | | | | |
| 12485−1543 | WSI 74 Aa,Ab | HIP 62505 | 8.5394 | y | 4 | 154.3 | 2.3 | 0.0461 | 0.9 | 1.3 | | | | | * |
| | | | 9.2599 | y | 3 | 99.0 | 0.3 | 0.0757 | 0.4 | 1.5 | | | | | |
| 12505−4154 | I 909 | HD 111566 | 8.5421 | y | 3 | 242.3 | 3.2 | 0.5684 | 3.2 | 2.5 | : | | | | |
| 12533+2115 | STF 1687 AB | HIP 62886 | 9.2655 | H$\alpha$ | 2 | 189.1 | 2.5 | 1.1340 | 0.3 | 3.0 | * | −5.4 | 0.099 | Hei1997 | * |
| 12563−5729 | FIN 62 | HIP 63136 | 9.2626 | y | 2 | 85.7 | 2.0 | 2.0320 | 6.9 | 0.2 | * | | | | |
| 12567−4741 | I 83 | HIP 63182 | 8.5420 | y | 5 | 233.2 | 1.1 | 0.8488 | 1.3 | 2.0 | : | 0.6 | −0.029 | Sca2002c | |
| | | | 9.2626 | y | 2 | 233.4 | 0.0 | 0.8482 | 0.6 | 0.2 | * | 0.5 | −0.031 | Sca2002c | |
| 12597−0349 | CHR 39 Aa,Ab | HIP 63414 | 9.2600 | y | 2 | 56.7 | 0.4 | 0.0923 | 0.5 | 2.4 | | 5.4 | −0.003 | Mnt2005a | * |
| | | | 9.2600 | H$\alpha$ | 2 | 57.0 | 0.8 | 0.0906 | 0.5 | 2.1 | | 5.7 | −0.005 | Mnt2005a | |
| 13038−2035 | BU 341 | HIP 63738 | 9.2600 | y | 2 | 131.6 | 0.1 | 0.6058 | 0.1 | 0.3 | | | | | |
| 13040−1738 | BU 798 | HIP 63754 | 9.2600 | y | 2 | 174.1 | 0.1 | 0.4514 | 0.1 | 0.6 | | | | | |
| 13064+2109 | CHR 150 Aa,Ab | HIP 63948 | 9.2601 | H$\alpha$ | 2 | 286.3 | 3.2 | 0.0390 | 1.5 | 1.5 | | | | | * |
| 13064+2109 | COU 11 Aa,B | HIP 63948 | 9.2601 | y | 2 | 315.8 | 0.4 | 1.7259 | 0.5 | 2.8 | * | | | | * |
| | | | 9.2601 | H$\alpha$ | 2 | 315.9 | 0.0 | 1.7343 | 0.0 | 3.9 | | | | | |
| 13081−6518 | CHR 247 Aa,Ab | HIP 64094 | 8.5448 | H$\alpha$ | 2 | 112.1 | 0.1 | 0.0312 | 0.3 | 0.7 | | | | | * |
| | | | 9.2627 | y | 2 | 101.8 | 0.2 | 0.0347 | 2.9 | 0.7 | | | | | |
| | | | 9.2627 | H$\alpha$ | 2 | 90.2 | 0.6 | 0.0415 | 1.1 | 0.5 | | | | | |
| 13099−0532 | MCA 38 Aa,Ab | HIP 64238 | 9.2601 | H$\alpha$ | 2 | 346.9 | 0.2 | 0.4215 | 0.3 | 2.4 | | | | | * |
| 13106−3128 | RST 1706 | HIP 64292 | 9.2627 | y | 2 | 160.6 | 0.7 | 0.1365 | 0.3 | 2.2 | : | | | | |
| 13108−2411 | HU 1500 | HIP 64303 | 9.2600 | y | 2 | 40.4 | 0.3 | 2.4987 | 0.9 | 4.1 | * | | | | |
| 13117−2633 | FIN 305 | HIP 64375 | 9.2600 | y | 2 | 98.5 | 0.0 | 0.1767 | 0.0 | 0.2 | | 0.0 | −0.019 | Fin1968a | |
| 13123−5955 | SEE 170 AB | HIP 64425 | 9.2627 | y | 2 | 111.0 | 0.5 | 0.2657 | 0.1 | 1.8 | | −1.1 | 0.023 | Fin1964b | * |
| 13126−6034 | WSI 75 Aa,Ab | HD 114566 | 8.5448 | V | 2 | 75.9 | 9.7 | 0.1089 | 9.1 | 2.9 | | | | | * |
| 13137−6248 | HDS 1852 | HIP 64537 | 9.2627 | y | 2 | 111.9 | 0.4 | 0.1355 | 1.4 | 1.0 | : | | | | |
| 13138−6335 | WSI 57 | HD 114737 | 8.5448 | y | 2 | 234.3 | 0.8 | 0.1940 | 0.8 | 2.4 | : | | | | * |
| | | | 8.5448 | H$\alpha$ | 2 | 234.4 | 1.3 | 0.1896 | 1.4 | 2.5 | : | | | | |
| | | | 9.2627 | y | 2 | 234.4 | 0.6 | 0.1931 | 1.8 | 2.4 | | | | | |
| 13142−1634 | RST 3827 | HIP 64573 | 9.2601 | y | 2 | 259.5 | 0.0 | 1.5372 | 0.5 | 0.2 | * | | | | |
| 13145−2417 | FIN 297 AB | HIP 64603 | 8.5394 | y | 2 | 357.5 | 0.1 | 0.2398 | 0.0 | 0.3 | | 3.1 | 0.006 | Mnt2004c | * |
| | | | 8.5394 | H$\alpha$ | 2 | 357.4 | 0.1 | 0.2396 | 0.1 | 0.5 | | 3.0 | 0.006 | Mnt2004c | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13147−6335 | MLO 3 Aa,B | HIP 64624 | 8.5448 | y | 2 | 38.1 | 0.1 | 1.6901 | 0.1 | 2.9 | | | | | * |
| | | | 8.5448 | Hα | 2 | 38.3 | 2.3 | 1.6876 | 2.0 | 3.0 | : | | | | |
| | | | 9.2627 | y | 2 | 38.2 | 3.8 | 1.6805 | 5.1 | 3.6 | | | | | |
| 13147−6335 | WSI 58 Aa,Ab | HIP 64624 | 8.5448 | y | 2 | 277.8 | 2.0 | 0.2471 | 6.4 | 2.3 | | | | | * |
| | | | 8.5448 | Hα | 2 | 278.3 | 0.3 | 0.2450 | 3.2 | 2.4 | : | | | | |
| | | | 9.2627 | y | 2 | 279.9 | 0.8 | 0.2546 | 0.7 | 2.5 | | | | | |
| 13149−1122 | RST 3829 Aa,Ab | HIP 64638 | 9.2601 | y | 2 | 146.5 | 0.1 | 0.5983 | 0.1 | 1.8 | | 18.2 | −0.337 | Hei1997 | * |
| 13169−3436 | I 1567 | HIP 64804 | 9.2627 | y | 2 | 156.4 | 0.1 | 0.2079 | 0.2 | 1.1 | | −16.1 | 0.087 | Hei1986a | * |
| 13175−0041 | FIN 350 | HIP 64838 | 9.2601 | y | 2 | 305.5 | 0.5 | 0.0383 | 0.2 | 0.4 | | −19.1 | −0.012 | Hrt1996a | |
| 13175−4033 | I 425 | HIP 64835 | 9.2627 | y | 2 | 347.8 | 0.2 | 0.2968 | 0.6 | 1.2 | : | | | | * |
| 13226−6059 | FIN 208 AB | HIP 65271 | 9.2627 | y | 2 | 142.3 | 0.4 | 0.1245 | 0.2 | 2.8 | | | | | * |
| 13237−0043 | A 2489 | HIP 65360 | 9.2655 | y | 3 | 190.3 | 0.7 | 0.9328 | 0.3 | 0.5 | * | −1.8 | 0.046 | WSI2004a | |
| 13254−5947 | WSI 76 | HIP 65492 | 8.5448 | y | 2 | 186.8 | 1.1 | 0.0949 | 1.1 | 2.6 | : | | | | |
| | | | 9.2627 | y | 5 | 185.3 | 2.0 | 0.1022 | 7.4 | 3.2 | : | | | | |
| 13275+2116 | TOK 46 | HD 117078 | 9.2601 | y | 4 | 23.7 | 1.1 | 0.0996 | 5.5 | 1.9 | : | | | | * |
| 13291+1128 | BU 113 | HIP 65780 | 9.2601 | y | 3 | 266.0 | 0.7 | 1.7028 | 1.9 | 2.1 | * | | | | |
| 13305+0729 | A 1789 | HIP 65897 | 9.2601 | y | 2 | 177.3 | 0.2 | 0.1917 | 0.1 | 0.5 | | 6.0 | −0.015 | Hei1998 | |
| 13310−3924 | SEE 179 | HIP 65936 | 9.2627 | Hα | 2 | 64.4 | 0.0 | 0.1908 | 0.0 | 0.4 | | 11.5 | −0.004 | Fin1964b | |
| 13317−0219 | HDS 1895 | HIP 65982 | 8.5395 | y | 2 | 112.9 | 0.2 | 0.1416 | 0.2 | 1.4 | | | | | * |
| | | | 8.5395 | Hα | 2 | 113.1 | 0.3 | 0.1419 | 0.3 | 1.2 | : | | | | |
| | | | 9.2655 | y | 2 | 140.8 | 0.2 | 0.1426 | 0.1 | 1.4 | | | | | |
| 13320−6519 | FIN 369 | HIP 66005 | 9.2627 | y | 2 | 254.0 | 0.2 | 0.0773 | 1.1 | 0.5 | | 67.5 | −0.109 | Ole2004b | * |
| 13325−6914 | I 298 | HIP 66057 | 9.2627 | y | 2 | 158.4 | 0.7 | 0.5532 | 0.4 | 1.7 | | 1.4 | 0.024 | Sey2002 | |
| 13342−1623 | RST 3844 | HIP 66203 | 9.2601 | y | 2 | 261.8 | 0.1 | 0.1461 | 0.2 | 0.4 | | −2.1 | −0.065 | Sey2002 | |
| 13343−0019 | STF 1757 AB | HIP 66212 | 9.2655 | y | 2 | 133.1 | 0.5 | 1.8702 | 1.7 | 0.9 | * | −0.2 | 0.020 | Hei1988d | * |
| | | | 9.2655 | Hα | 2 | 133.1 | 0.7 | 1.8728 | 0.3 | 0.8 | * | −0.2 | 0.022 | Hei1988d | |
| 13347−1313 | BU 932 AB | HIP 66247 | 9.2655 | Hα | 2 | 62.2 | 0.1 | 0.4089 | 0.3 | 1.0 | | 1.1 | −0.006 | Sta1980a | * |
| 13372−6142 | I 365 AB | HIP 66438 | 9.2627 | y | 2 | 203.6 | 0.3 | 0.3218 | 0.3 | 0.7 | | −0.5 | −0.009 | Sod1999 | * |
| 13377−2337 | RST 2856 | BD−22 3633 | 8.5394 | y | 2 | 103.5 | 3.1 | 0.3690 | 3.1 | 2.1 | : | −89.1 | 0.169 | Hei1997 | * |
| 13396+1045 | BU 612 AB | HIP 66640 | 8.5476 | y | 2 | 214.3 | 0.1 | 0.3082 | 0.1 | 0.4 | | −0.6 | −0.001 | Msn1999a | * |
| | | | 8.5476 | Hα | 2 | 214.3 | 0.1 | 0.3084 | 0.2 | 0.4 | | −0.6 | −0.000 | Msn1999a | |
| 13437−4204 | FIN 353 AB | HIP 66984 | 9.2627 | y | 2 | 50.1 | 0.8 | 0.0848 | 1.4 | 0.8 | | | | | * |
| | | | 9.2627 | Hα | 2 | 50.7 | 0.2 | 0.0848 | 0.4 | 0.7 | | | | | |
| 13437−4204 | RST 1741 AC | HIP 66984 | 9.2627 | y | 2 | 73.0 | 0.1 | 0.9571 | 1.2 | 2.8 | | | | | * |
| | | | 9.2627 | Hα | 2 | 73.0 | 0.2 | 0.9592 | 0.5 | 2.8 | | | | | |
| 13453+0903 | BU 115 AB | HIP 67115 | 9.2601 | y | 2 | 255.7 | 0.3 | 1.6082 | 1.1 | 2.9 | * | | | | * |
| | | | 9.2601 | Hα | 1 | 255.8 | 0.3 | 1.6120 | 0.3 | 2.9 | * | | | | |
| 13461+0507 | STF 1781 | HIP 67186 | 9.2601 | y | 3 | 188.7 | 0.3 | 0.9233 | 0.3 | 0.1 | * | −0.8 | 0.022 | Alz2007 | * |
| 13472−0943 | KUI 65 | HIP 67271 | 8.5395 | y | 2 | 197.5 | 0.2 | 0.1035 | 0.4 | 2.0 | | | | | |
| | | | 8.5395 | Hα | 2 | 197.3 | 0.7 | 0.1032 | 0.7 | 2.2 | | | | | |
| 13501−4451 | DON 624 | HIP 67527 | 9.2628 | y | 2 | 119.1 | 0.9 | 1.0948 | 0.7 | 4.0 | * | | | | |
| 13513−2423 | WSI 77 | HIP 67620 | 9.2601 | y | 2 | 176.9 | 0.2 | 0.1437 | 0.2 | 3.4 | | | | | * |
| | | | 9.2601 | Hα | 2 | 177.0 | 0.4 | 0.1429 | 0.2 | 2.8 | | | | | |
| 13520−3137 | BU 343 | HIP 67696 | 9.2627 | y | 2 | 213.5 | 0.2 | 0.5221 | 0.0 | 1.3 | | 31.8 | 0.024 | Sey2002 | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13527−1843 | WSI 78 | HIP 67744 | 8.5395 | y | 2 | 100.8 | 2.0 | 0.0302 | 1.6 | 0.9 | | | | | * |
| | | | 9.2601 | y | 2 | 114.9 | 0.0 | 0.0366 | 0.1 | 0.7 | | | | | |
| | | | 9.2601 | Hα | 2 | 115.7 | 0.2 | 0.0392 | 0.5 | 1.4 | | | | | |
| 13535−3540 | HWE 28 AB | HIP 67819 | 9.2627 | y | 2 | 312.0 | 0.3 | 1.0098 | 1.0 | 0.1 | * | −3.5 | 0.056 | Lin1998a | * |
| 13539−1440 | RST 3852 | HIP 67850 | 9.2655 | y | 1 | 350.2 | 0.1 | 0.2191 | 0.1 | 0.7 | | 45.9 | −0.051 | Hei1986b | * |
| 13563+0517 | STT 273 AB | HIP 68081 | 9.2601 | y | 2 | 111.9 | 0.4 | 1.0132 | 0.2 | 0.2 | * | | | | * |
| 13574−6229 | FIN 370 | HIP 68170 | 9.2627 | y | 2 | 178.8 | 0.1 | 0.1044 | 0.3 | 0.4 | | −13.8 | −0.004 | Mnt2004b | |
| | | | 9.2627 | Hα | 2 | 178.9 | 0.4 | 0.1046 | 0.4 | 0.6 | | −13.7 | −0.004 | Mnt2004b | |
| 13583+0213 | A 2167 | HIP 68250 | 9.2601 | y | 2 | 99.7 | 0.2 | 0.2000 | 0.3 | 0.6 | | 43.5 | 0.047 | Baz1994 | * |
| 14020−2108 | WSI 79 | HIP 68552 | 8.5394 | y | 4 | 149.5 | 2.0 | 0.2977 | 3.3 | 2.8 | : | | | | * |
| 14025−2440 | B 263 | HIP 68587 | 9.2628 | y | 2 | 56.2 | 0.1 | 0.2347 | 0.2 | 2.1 | | | | | * |
| 14030−3141 | BU 1197 | HIP 68641 | 9.2628 | y | 2 | 221.1 | 0.1 | 2.4068 | 0.7 | 1.4 | * | | | | |
| 14037+0829 | BU 1270 | HIP 68697 | 9.2629 | y | 2 | 332.3 | 0.1 | 0.2556 | 0.1 | 0.4 | | −1.2 | −0.012 | Bdl2006b | |
| 14038−6022 | RBT 1 Aa,Ab | HIP 68702 | 9.2602 | Hα | 2 | 300.8 | 1.2 | 0.0329 | 0.4 | 0.4 | | 168.3 | 0.003 | Dvs2005 | * |
| | | | 9.2602 | y | 2 | 305.5 | 4.0 | 0.0323 | 0.9 | 0.2 | | 173.0 | 0.002 | Dvs2005 | |
| 14038−6022 | VOU 31 Aa,B | HIP 68702 | 9.2602 | Hα | 2 | 210.7 | 1.7 | 0.4997 | 0.4 | 3.0 | | | | | * |
| | | | 9.2602 | y | 2 | 210.3 | 1.3 | 0.5028 | 2.8 | 3.0 | | | | | |
| 14040−4437 | I 939 AB | HIP 68717 | 8.5422 | y | 2 | 191.0 | 0.4 | 0.7408 | 0.4 | 1.3 | : | | | | * |
| | | | 9.2602 | y | 2 | 191.5 | 0.3 | 0.7404 | 0.2 | 0.5 | | | | | |
| 14077−4952 | SLR 19 | HIP 69012 | 9.2602 | y | 2 | 322.5 | 0.1 | 1.1735 | 0.5 | 0.3 | * | 1.7 | −0.196 | Sca2001e | |
| 14109+1513 | HDS 1989 Aa,Ab | HIP 69281 | 9.2629 | y | 2 | 179.4 | 0.6 | 0.4543 | 0.6 | 2.4 | | | | | * |
| 14142−0831 | BU 939 AB | HIP 69541 | 8.5449 | y | 2 | 38.6 | 0.3 | 0.4806 | 0.3 | 0.5 | | −3.3 | 0.004 | Pop1996b | * |
| | | | 8.5449 | Hα | 2 | 38.6 | 0.6 | 0.4803 | 0.4 | 0.9 | : | −3.3 | 0.004 | Pop1996b | |
| 14150−6142 | COO 167 A,Ba | HIP 69628 | 8.5369 | y | 1 | 156.8 | 0.0 | 2.7572 | 0.0 | 2.8 | | | | | * |
| 14150−6142 | WSI 59 Ba,Bb | HIP 69628 | 8.5368 | y | 2 | 65.8 | 0.8 | 0.2135 | 0.8 | 2.7 | | | | | * |
| | | | 8.5369 | y | 1 | 64.3 | 0.0 | 0.2193 | 0.0 | 2.5 | | | | | |
| | | | 9.2602 | y | 2 | 65.5 | 0.6 | 0.2126 | 0.6 | 2.5 | | | | | |
| 14152−6739 | DON 652 | HIP 69643 | 9.2602 | y | 2 | 272.8 | 1.6 | 0.5005 | 1.6 | 3.5 | | | | | |
| 14153+0308 | STF 1819 | HIP 69653 | 9.2629 | y | 2 | 179.4 | 0.3 | 0.9088 | 0.5 | 0.1 | * | −1.3 | 0.030 | Hou1987 | |
| | | | 9.2629 | Hα | 2 | 179.3 | 0.1 | 0.9108 | 0.1 | 0.1 | * | −1.4 | 0.032 | Hou1987 | |
| 14160−0704 | HU 138 | HIP 69700 | 8.5449 | y | 2 | 27.0 | 0.2 | 0.5774 | 0.3 | 0.8 | : | 0.1 | −0.008 | Doc1990d | |
| 14182−2731 | HDS 3407 CD | HIP 69894 | 8.5367 | y | 2 | 207.1 | 0.3 | 0.4352 | 0.3 | 1.2 | : | | | | * |
| | | | 9.2628 | y | 2 | 206.6 | 0.1 | 0.4355 | 0.4 | 0.7 | | | | | |
| 14182−2731 | SEE 502 AB | HIP 69894 | 8.5367 | y | 2 | 289.0 | 0.2 | 0.6717 | 0.2 | 0.9 | : | | | | * |
| | | | 9.2628 | y | 2 | 288.7 | 0.1 | 0.6703 | 0.2 | 0.7 | | | | | |
| 14188−5841 | I 523 | HIP 69949 | 8.5422 | y | 2 | 74.3 | 0.4 | 0.2805 | 0.4 | 1.0 | : | | | | |
| 14262−4523 | I 402 | HIP 70576 | 8.5422 | y | 2 | 179.6 | 0.1 | 0.2311 | 0.1 | 0.2 | | −2.4 | −0.008 | Hei1986b | * |
| | | | 8.5422 | Hα | 2 | 179.6 | 0.1 | 0.2308 | 0.1 | 0.5 | | −2.4 | −0.009 | Hei1986b | |
| 14277−4113 | COO 171 AC | HIP 70707 | 8.5422 | V | 1 | 143.4 | 0.0 | 3.7546 | 0.0 | 4.5 | : | | | | * |
| 14277−4113 | I 1243 AB | HIP 70707 | 8.5422 | V | 1 | 268.9 | 1.6 | 0.2474 | 1.7 | 2.2 | : | −6.3 | −0.011 | Sey2002 | * |
| | | | 8.5422 | y | 1 | 266.5 | 6.0 | 0.2446 | 6.1 | 2.9 | : | −8.7 | −0.014 | Sey2002 | |
| | | | 8.5422 | V | 1 | 264.3 | 0.0 | 0.2518 | 0.0 | 3.8 | : | −10.9 | −0.007 | Sey2002 | |
| 14295−3702 | HDS 2045 Aa,Ab | HIP 70868 | 8.5421 | y | 3 | 214.1 | 1.1 | 0.0523 | 0.8 | 1.5 | : | | | | * |
| | | | 9.2602 | y | 2 | 353.4 | 0.0 | 0.0712 | 0.1 | 0.1 | | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14310−0548 | RST 4529 | HIP 70973 | 8.5449 | y | 2 | 347.3 | 0.1 | 0.3024 | 0.1 | 0.6 | | 0.1 | −0.000 | Doc2000b | |
| | | | 8.5449 | Hα | 2 | 347.3 | 0.2 | 0.3023 | 0.1 | 0.6 | | 0.0 | −0.000 | Doc2000b | |
| 14313−1538 | BU 117 AB | HIP 71006 | 9.2628 | y | 2 | 74.6 | 0.0 | 1.5420 | 0.3 | 0.9 | * | | | | * |
| 14330−4224 | HDS 2054 | HIP 71140 | 8.5422 | y | 2 | 106.5 | 1.4 | 0.0368 | 1.0 | 1.1 | : | | | | |
| | | | 9.2602 | y | 2 | 107.7 | 0.5 | 0.0339 | 0.1 | 0.7 | | | | | |
| 14369−0417 | HDS 2061 | HIP 71462 | 9.2629 | y | 3 | 160.2 | 0.9 | 0.7347 | 0.9 | 4.0 | * | | | | |
| 14373−4608 | FIN 318 Aa,Ab | HIP 71500 | 8.5367 | y | 2 | 313.0 | 0.0 | 0.1846 | 0.1 | 0.2 | | −4.1 | −0.002 | Ole2004b | * |
| | | | 8.5422 | y | 2 | 313.0 | 0.1 | 0.1837 | 0.1 | 0.1 | | −4.1 | −0.003 | Ole2004b | |
| | | | 8.5422 | Hα | 2 | 313.0 | 0.1 | 0.1841 | 0.4 | 0.4 | | −4.1 | −0.003 | Ole2004b | |
| 14375+0217 | A 2227 Aa,B | HIP 71510 | 9.2629 | y | 2 | 127.1 | 2.7 | 1.3541 | 2.8 | 5.2 | | | | | * |
| 14375+0217 | CHR 42 Aa,Ab | HIP 71510 | 9.2629 | y | 2 | 168.4 | 0.6 | 0.1852 | 0.8 | 2.1 | | 177.6 | 0.001 | Hrt2000a | * |
| 14383−4954 | FIN 371 | HIP 71577 | 8.5422 | y | 2 | 244.6 | 0.3 | 0.0785 | 0.5 | 1.3 | : | | | | |
| 14388−2233 | HDS 2066 | HIP 71619 | 9.2628 | y | 3 | 69.7 | 1.3 | 0.7352 | 2.7 | 4.2 | * | | | | |
| 14411−2237 | RST 2917 | HIP 71792 | 8.5450 | y | 2 | 159.8 | 0.1 | 0.3577 | 0.4 | 1.3 | | −3.5 | −0.009 | Sey2002 | |
| | | | 8.5450 | Hα | 2 | 159.7 | 0.1 | 0.3573 | 0.1 | 0.8 | | −3.6 | −0.009 | Sey2002 | |
| 14462−2111 | FIN 309 | HIP 72217 | 8.5367 | y | 2 | 12.6 | 0.1 | 0.0661 | 0.5 | 0.2 | | −55.9 | −0.101 | Sod1999 | * |
| | | | 8.5423 | y | 2 | 12.9 | 0.4 | 0.0660 | 0.4 | 0.5 | : | −55.7 | −0.101 | Sod1999 | |
| | | | 8.5476 | y | 2 | 13.9 | 0.0 | 0.0665 | 0.2 | 0.0 | | −54.8 | −0.100 | Sod1999 | |
| | | | 9.2628 | y | 2 | 70.0 | 0.1 | 0.1193 | 0.1 | 0.2 | | −13.6 | −0.064 | Sod1999 | |
| 14463+0939 | STF 1879 AB | HIP 72221 | 9.2629 | y | 1 | 83.4 | 0.1 | 1.7393 | 0.1 | 0.7 | * | −0.7 | 0.024 | Msn1999a | * |
| | | | 9.2629 | Hα | 2 | 83.4 | 0.8 | 1.7428 | 0.1 | 0.6 | * | −0.7 | 0.027 | Msn1999a | |
| 14464−0723 | STF 1876 AB | HD 130089 | 9.2629 | y | 2 | 110.9 | 0.7 | 1.3019 | 0.2 | 0.2 | * | 0.2 | 0.039 | Sey2002 | * |
| 14485−1720 | BU 346 | HIP 72423 | 9.2628 | y | 2 | 275.7 | 0.4 | 2.6205 | 0.1 | 0.5 | * | | | | * |
| 14485−3551 | B 2024 AB | HIP 72427 | 8.5422 | y | 2 | 98.1 | 0.4 | 0.0370 | 0.6 | 1.9 | : | | | | * |
| 14488−3533 | RST 2925 | HIP 72445 | 9.2602 | y | 2 | 300.5 | 0.5 | 0.4933 | 0.4 | 1.8 | : | | | | |
| 14489+0557 | STF 1883 | HIP 72447 | 8.5476 | y | 2 | 279.6 | 0.1 | 0.9399 | 0.1 | 0.5 | | 0.8 | 0.013 | Sey2000b | |
| | | | 8.5476 | Hα | 2 | 279.6 | 0.2 | 0.9391 | 0.1 | 0.1 | * | 0.8 | 0.012 | Sey2000b | |
| 14492+1013 | A 2983 | HIP 72479 | 8.5476 | y | 2 | 159.7 | 0.7 | 0.0555 | 0.4 | 0.4 | : | −4.1 | −0.009 | Sod1999 | * |
| | | | 8.5476 | Hα | 2 | 162.9 | 0.7 | 0.0692 | 0.8 | 1.0 | : | −1.0 | 0.005 | Sod1999 | |
| | | | 9.2629 | Hα | 3 | 214.2 | 0.4 | 0.0735 | 0.5 | 0.7 | : | −2.2 | −0.003 | Sod1999 | |
| | | | 9.2629 | y | 2 | 214.1 | 0.2 | 0.0690 | 0.4 | 0.6 | | −2.3 | −0.008 | Sod1999 | |
| 14492−1050 | HU 141 | HIP 72478 | 8.5423 | y | 2 | 306.4 | 1.0 | 0.3926 | 0.6 | 1.8 | : | | | | |
| 14494−6714 | DON 680 | HIP 72493 | 8.5369 | y | 2 | 243.5 | 0.4 | 2.1164 | 1.5 | 2.7 | * | | | | |
| | | | 9.2602 | y | 2 | 243.5 | 0.3 | 2.1309 | 0.7 | 2.3 | * | | | | |
| 14501−4151 | I 1256 | HD 130543 | 8.5422 | y | 2 | 120.2 | 0.5 | 0.3283 | 0.4 | 1.3 | : | | | | |
| 14511−3706 | I 529 | HIP 72639 | 9.2602 | y | 2 | 37.8 | 0.2 | 1.1550 | 0.1 | 0.6 | * | −5.3 | 0.075 | Dom1978 | |
| 14525+1844 | BU 31 AB | HIP 72764 | 9.2629 | y | 2 | 219.7 | 1.1 | 1.9851 | 1.1 | 1.8 | * | | | | * |
| 14531−4638 | I 952 | HIP 72821 | 9.2602 | y | 2 | 144.7 | 0.1 | 0.6922 | 0.1 | 1.5 | * | | | | |
| 14534+1542 | STT 288 | HIP 72846 | 9.2629 | Hα | 4 | 161.4 | 0.5 | 1.1026 | 0.9 | 0.7 | * | −0.3 | 0.015 | Hei1998 | |
| 14542−6625 | HJ 4707 | HIP 72921 | 9.2602 | y | 2 | 274.6 | 0.5 | 1.0476 | 0.2 | 0.5 | * | 0.8 | −0.010 | Msn1999a | |
| 14545−3921 | I 1578 | HIP 72950 | 8.5422 | y | 2 | 6.7 | 0.6 | 0.4009 | 1.5 | 1.9 | : | | | | |
| 14565+0255 | A 2172 | HD 131954 | 9.2629 | y | 2 | 132.4 | 0.1 | 0.1635 | 0.1 | 0.9 | | 9.5 | 0.023 | Sey2002 | |
| 14565−3438 | I 227 AB | HIP 73108 | 8.5422 | y | 2 | 104.4 | 0.5 | 0.3704 | 0.5 | 1.4 | : | 2.1 | −0.039 | Ltg1961c | * |
| | | | 9.2602 | y | 2 | 103.6 | 0.1 | 0.3806 | 0.1 | 0.4 | | 2.0 | −0.038 | Ltg1961c | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14567−6247 | FIN 372 | HIP 73129 | 9.2602 | y | 2 | 4.6 | 0.0 | 0.1029 | 0.2 | 0.3 | −1.4 | −0.101 | Mnt2003a | * |
| 14575−2125 | H N 28 BC | HIP 73184 | 8.5367 | y | 4 | 247.6 | 2.7 | 0.0635 | 3.1 | 1.8 : | −3.1 | −0.010 | Frv1999 | * |
| | | | 9.2628 | y | 2 | 341.7 | 2.5 | 0.0428 | 1.0 | 1.5 | 5.8 | −0.005 | Frv1999 | |
| 14581−4852 | WSI 80 | HIP 73241 | 8.5368 | y | 3 | 132.9 | 1.7 | 0.2984 | 1.6 | 4.3 | | | | * |
| | | | 9.2602 | y | 2 | 129.0 | 0.5 | 0.3178 | 0.5 | 4.4 | | | | |
| | | | 9.2602 | Hα | 2 | 129.2 | 0.4 | 0.3166 | 0.5 | 3.7 | | | | |
| 14587−2739 | BU 239 | HIP 73284 | 8.5422 | y | 2 | 6.6 | 0.3 | 0.4896 | 0.1 | 0.6 | −1.8 | 0.003 | Lin1998a | |
| | | | 8.5422 | Hα | 2 | 6.6 | 0.1 | 0.4894 | 0.1 | 0.6 | −1.8 | 0.003 | Lin1998a | |
| | | | 9.2628 | y | 2 | 6.9 | 0.0 | 0.4863 | 0.2 | 0.5 | −2.1 | 0.002 | Lin1998a | |
| 14589+0636 | WSI 81 | HIP 73314 | 9.2629 | y | 2 | 49.9 | 0.2 | 0.1268 | 0.5 | 0.8 | | | | * |
| 14592−4206 | HDS 2116 Aa,Ab | HIP 73334 | 9.2603 | Hα | 2 | 156.8 | 0.4 | 0.1176 | 0.1 | 1.3 | | | | * |
| | | | 9.2603 | y | 2 | 156.8 | 0.1 | 0.1164 | 0.3 | 1.4 | | | | |
| 14598−2201 | TOK 47 | HIP 73385 | 9.2628 | y | 2 | 171.7 | 1.5 | 0.0400 | 0.3 | 1.7 | | | | * |
| 15035−4035 | I 1262 | HIP 73667 | 9.2603 | y | 2 | 22.1 | 0.1 | 0.3656 | 0.1 | 0.6 | −7.7 | 0.023 | Hei1996a | |
| 15041−0653 | HO 391 AB | HIP 73717 | 9.2657 | y | 2 | 62.4 | 0.3 | 1.0522 | 0.3 | 3.7 * | | | | * |
| 15042−1530 | RST 3906 | HIP 73724 | 8.5423 | y | 2 | 154.7 | 0.5 | 0.1540 | 0.7 | 1.5 : | 67.9 | 0.024 | Hei1981a | * |
| 15047−5625 | RST 2937 | HD 133044 | 8.5422 | y | 2 | 172.4 | 0.9 | 0.0580 | 0.9 | 1.7 : | | | | |
| | | | 9.2603 | y | 2 | 171.9 | 0.1 | 0.0640 | 0.2 | 0.3 | | | | |
| 15055−0701 | BU 119 AB | HIP 73846 | 9.2604 | y | 2 | 275.3 | 0.3 | 2.2584 | 0.4 | 0.7 * | | | | * |
| 15071−0217 | A 689 | HIP 73982 | 8.5423 | y | 2 | 331.5 | 1.3 | 0.2566 | 0.9 | 2.0 : | −2.7 | 0.008 | Baz1987d | |
| | | | 9.2658 | y | 2 | 330.9 | 0.1 | 0.2666 | 0.1 | 1.5 | −2.6 | 0.009 | Baz1987d | |
| 15088−0610 | RST 4534 AB | HIP 74116 | 9.2604 | y | 2 | 13.4 | 0.1 | 0.4521 | 0.2 | 0.5 | | | | * |
| 15088−4517 | SEE 219 AB | HIP 74117 | 8.5477 | y | 2 | 64.9 | 0.1 | 0.1207 | 0.0 | 0.8 | 18.7 | −0.025 | Doc2007d | * |
| | | | 8.5477 | Hα | 2 | 64.9 | 0.0 | 0.1204 | 0.1 | 0.8 | 18.7 | −0.025 | Doc2007d | |
| | | | 8.5477 | y | 2 | 65.0 | 0.0 | 0.1206 | 0.1 | 0.9 | 18.7 | −0.025 | Doc2007d | |
| | | | 8.5477 | Hα | 2 | 64.9 | 0.0 | 0.1203 | 0.1 | 0.8 | 18.7 | −0.026 | Doc2007d | |
| 15097−3349 | B 1265 | HD 134216 | 8.5450 | y | 2 | 315.6 | 0.5 | 0.8540 | 0.3 | 1.5 : | | | | |
| 15106+2021 | HU 144 | HIP 74259 | 9.2604 | y | 2 | 291.4 | 0.9 | 0.1027 | 0.6 | 1.8 | | | | |
| 15115−5443 | RST 2942 | HD 134317 | 8.5477 | y | 3 | 167.7 | 2.4 | 0.7805 | 1.9 | 3.0 : | | | | |
| 15122−1948 | B 2351 Aa,Ab | HIP 74392 | 8.5395 | y | 2 | 351.5 | 0.1 | 0.1559 | 0.1 | 1.4 | −0.8 | −0.002 | Msn1999a | * |
| | | | 8.5395 | Hα | 1 | 351.5 | 0.1 | 0.1561 | 0.1 | 1.5 | −0.8 | −0.001 | Msn1999a | |
| | | | 8.5450 | y | 2 | 351.6 | 0.0 | 0.1562 | 0.1 | 1.5 | −0.7 | −0.001 | Msn1999a | |
| | | | 8.5450 | Hα | 2 | 351.6 | 0.1 | 0.1561 | 0.1 | 1.5 | −0.7 | −0.001 | Msn1999a | |
| | | | 9.2658 | y | 2 | 344.8 | 0.1 | 0.1530 | 0.1 | 1.4 | −0.9 | −0.001 | Msn1999a | |
| 15143−4242 | B 1273 Aa,B | HD 134976 | 8.5477 | y | 2 | 130.9 | 4.2 | 0.5534 | 0.2 | 1.3 : | | | | * |
| | | | 9.2603 | y | 2 | 130.0 | 0.4 | 0.5534 | 3.2 | 1.1 | | | | |
| 15143−4242 | WSI 82 Aa,Ab | HD 134976 | 8.5477 | y | 2 | 30.6 | 0.0 | 0.0561 | 0.1 | 1.8 : | | | | * |
| | | | 9.2603 | y | 2 | 35.2 | 0.9 | 0.0572 | 3.8 | 1.5 | | | | |
| 15317+0053 | TOK 48 | HIP 76031 | 9.2604 | y | 2 | 67.9 | 2.0 | 0.0382 | 0.2 | 1.2 | | | | * |
| 15155−4913 | I 960 | HD 135132 | 8.5477 | y | 2 | 113.7 | 0.6 | 0.8534 | 0.5 | 1.2 : | | | | |
| 15160−0454 | STF 3091 AB | HIP 74703 | 9.2604 | y | 2 | 227.2 | 0.0 | 0.5493 | 0.2 | 0.5 | 1.2 | −0.021 | Msn1999c | * |
| 15161−4129 | HDS 2147 | HIP 74707 | 8.5477 | y | 2 | 28.8 | 0.1 | 0.2620 | 0.1 | 1.8 | | | | |
| | | | 8.5477 | Hα | 2 | 28.7 | 0.5 | 0.2612 | 0.1 | 2.3 | | | | |
| 15171−5948 | I 9003 | HD 135290 | 8.5477 | y | 2 | 58.7 | 0.8 | 0.5479 | 0.8 | 2.0 : | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15197−2416 | HJ 4756 | HIP 75012 | 8.5450 | y | 2 | 247.3 | 0.1 | 0.6114 | 0.2 | 0.6 | | | | | |
| 15226−4755 | SLR 20 | HIP 75255 | 9.2603 | y | 2 | 22.6 | 0.0 | 0.7505 | 0.2 | 0.5 | * | 7.0 | 0.199 | Hei1993d | * |
| 15227−4441 | COP 2 AB | HIP 75264 | 8.5477 | y | 2 | 119.9 | 0.1 | 0.2688 | 0.1 | 1.5 | | −4.9 | −0.022 | Zir2007 | * |
| | | | 8.5477 | H$\alpha$ | 2 | 119.9 | 0.1 | 0.2685 | 0.1 | 1.3 | | −4.9 | −0.022 | Zir2007 | |
| | | | 8.5477 | y | 2 | 119.8 | 0.0 | 0.2686 | 0.1 | 1.5 | | −4.9 | −0.022 | Zir2007 | |
| | | | 9.2603 | y | 2 | 117.5 | 0.1 | 0.2639 | 0.0 | 1.5 | | −5.2 | −0.025 | Zir2007 | |
| 15228−6022 | RST 5014 AB | HD 136286 | 8.5477 | y | 2 | 283.6 | 1.1 | 0.7724 | 0.4 | 1.4 | : | | | | * |
| 15234−5919 | HJ 4757 | HIP 75323 | 8.5477 | y | 2 | 3.6 | 0.1 | 0.8197 | 0.5 | 0.8 | | 2.2 | 0.066 | Lin2005a | |
| | | | 8.5477 | H$\alpha$ | 2 | 3.6 | 0.2 | 0.8202 | 0.3 | 0.4 | | 2.2 | 0.066 | Lin2005a | |
| | | | 8.5477 | y | 2 | 3.6 | 0.1 | 0.8203 | 0.3 | 0.8 | | 2.2 | 0.066 | Lin2005a | |
| | | | 9.2603 | y | 2 | 3.1 | 0.0 | 0.8210 | 0.2 | 0.5 | * | 2.4 | 0.070 | Lin2005a | |
| | | | 9.2603 | H$\alpha$ | 2 | 3.0 | 0.2 | 0.8229 | 0.2 | 0.1 | * | 2.4 | 0.072 | Lin2005a | |
| 15246−4835 | B 1288 AB | HIP 75427 | 8.5477 | y | 2 | 2.8 | 0.1 | 0.0474 | 1.1 | 0.1 | | 12.2 | −0.034 | Sey2002 | * |
| | | | 9.2603 | y | 2 | 10.4 | 1.1 | 0.0440 | 0.3 | 0.0 | | 17.4 | −0.034 | Sey2002 | |
| 15249−2322 | I 1269 | HIP 75454 | 8.5450 | y | 2 | 200.3 | 0.4 | 0.6783 | 0.2 | 1.0 | : | | | | |
| 15251−2340 | RST 2957 | HIP 75478 | 8.5450 | y | 2 | 272.8 | 0.3 | 0.3091 | 0.3 | 0.9 | : | | | | |
| | | | 9.2604 | y | 2 | 273.0 | 0.2 | 0.3040 | 0.0 | 0.3 | | | | | |
| 15251−3810 | RST 2955 | HIP 75476 | 8.5451 | y | 2 | 201.7 | 0.5 | 0.0386 | 0.2 | 0.5 | | | | | |
| | | | 9.2603 | y | 2 | 205.9 | 0.0 | 0.0439 | 0.0 | 0.0 | | | | | |
| 15252−4659 | RST 767 | HIP 75483 | 9.2603 | y | 2 | 333.4 | 0.5 | 0.6410 | 0.7 | 1.3 | | −10.3 | 0.125 | Csa1975c | |
| 15273+0942 | A 1120 | HIP 75645 | 9.2658 | y | 2 | 327.7 | 0.2 | 0.2889 | 0.3 | 1.0 | | −0.7 | 0.050 | Sta1978c | |
| 15282+0251 | A 2175 | HIP 75724 | 9.2658 | y | 2 | 209.5 | 0.1 | 0.2373 | 0.1 | 0.5 | | 2.7 | −0.015 | Bdl2006b | |
| 15288−3129 | I 239 | HIP 75772 | 8.5450 | y | 2 | 287.1 | 0.1 | 0.3020 | 0.1 | 1.2 | | | | | |
| | | | 8.5450 | H$\alpha$ | 2 | 287.2 | 0.2 | 0.3018 | 0.3 | 1.4 | | | | | |
| 15290−2852 | BU 1114 AB | HIP 75790 | 9.2604 | y | 2 | 317.0 | 0.1 | 0.4280 | 0.1 | 0.9 | | | | | * |
| 15308−0746 | RST 4543 | HIP 75962 | 9.2604 | y | 2 | 331.4 | 0.2 | 1.0346 | 0.2 | 0.6 | * | | | | |
| 15313−3349 | B 2036 AB | HIP 76001 | 8.5450 | y | 2 | 1.1 | 0.9 | 0.3313 | 3.4 | 0.6 | | | | | * |
| | | | 8.5450 | H$\alpha$ | 2 | 0.4 | 1.2 | 0.3332 | 0.3 | 0.9 | : | | | | |
| | | | 9.2603 | y | 2 | 1.9 | 3.5 | 0.3374 | 1.1 | 0.4 | | | | | |
| 15313−3349 | HWE 78 AC | HIP 76001 | 8.5450 | y | 2 | 121.6 | 0.8 | 1.4559 | 3.7 | 1.9 | | | | | * |
| | | | 8.5450 | H$\alpha$ | 2 | 121.6 | 3.1 | 1.4545 | 5.0 | 1.9 | : | | | | |
| | | | 9.2603 | y | 2 | 121.1 | 2.4 | 1.4547 | 4.4 | 1.7 | | | | | |
| 15317+0053 | TOK 48 | HIP 76031 | 9.2604 | y | 2 | 67.9 | 2.0 | 0.0382 | 0.2 | 1.2 | | | | | * |
| | | | 9.2604 | H$\alpha$ | 2 | 69.6 | 2.2 | 0.0416 | 0.2 | 1.0 | | | | | |
| | | | 9.2658 | H$\alpha$ | 1 | 85.4 | 0.1 | 0.0374 | 0.1 | 1.0 | | | | | |
| | | | 9.2658 | y | 2 | 91.6 | 5.5 | 0.0393 | 2.5 | 1.1 | | | | | |
| 15332−2429 | CHR 232 Aa,Ab | HIP 76143 | 9.2604 | y | 2 | 161.1 | 0.6 | 0.0658 | 0.2 | 1.7 | | | | | * |
| 15332−2429 | SEE 238 Ba,Bb | HIP 76143 | 8.5450 | y | 2 | 174.8 | 0.2 | 0.0867 | 0.5 | 1.9 | | 63.6 | −0.149 | Hei1988d | * |
| 15339−1700 | HDS 2185 | HIP 76203 | 9.2604 | y | 2 | 92.2 | 0.1 | 0.2924 | 0.1 | 1.7 | | | | | |
| 15348−2808 | RST 1847 Aa,B | HIP 76275 | 9.2657 | y | 2 | 333.5 | 3.2 | 0.9152 | 1.2 | 2.5 | | | | | |
| | | | 9.2657 | R | 2 | 333.5 | 1.8 | 0.9160 | 1.8 | 2.2 | | | | | |
| | | | 9.2657 | I | 2 | 333.5 | 0.8 | 0.9175 | 1.0 | 1.8 | | | | | |
| 15348−2808 | TOK 49 Aa,Ab | HIP 76275 | 9.2657 | y | 2 | 181.0 | 0.3 | 0.1376 | 4.5 | 2.3 | | | | | * |
| | | | 9.2657 | R | 2 | 180.4 | 6.3 | 0.1364 | 1.6 | 2.2 | | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 9.2657 | I | 2 | 180.8 | 0.3 | 0.1362 | 0.2 | 1.7 | | | | | |
| 15351−4110 | HJ 4786 | HIP 76297 | 8.5451 | y | 2 | 275.9 | 0.1 | 0.8072 | 0.0 | 0.4 | | −1.3 | −0.015 | Hei1990c | * |
| | | | 8.5451 | Hα | 2 | 275.8 | 0.0 | 0.8068 | 0.2 | 0.2 | | −1.3 | −0.015 | Hei1990c | |
| | | | 8.5451 | y | 2 | 275.8 | 0.0 | 0.8074 | 0.2 | 0.4 | | −1.3 | −0.015 | Hei1990c | |
| | | | 9.2603 | y | 2 | 275.7 | 0.0 | 0.8107 | 0.1 | 0.1 | * | −1.3 | −0.013 | Hei1990c | |
| | | | 9.2603 | Hα | 2 | 275.8 | 0.1 | 0.8125 | 0.3 | 0.1 | * | −1.3 | −0.011 | Hei1990c | |
| 15355−4751 | HDS 2191 | HIP 76328 | 9.2603 | y | 2 | 200.2 | 0.1 | 0.1474 | 0.2 | 1.0 | | | | | |
| 15358−5654 | RST 2964 | HIP 76361 | 8.5477 | y | 2 | 222.7 | 0.5 | 0.4244 | 0.4 | 1.3 | : | | | | |
| 15363−3851 | B 1299 | HIP 76405 | 8.5451 | y | 2 | 347.3 | 0.2 | 0.3815 | 0.5 | 1.3 | : | | | | |
| | | | 8.5451 | Hα | 2 | 347.4 | 0.5 | 0.3812 | 0.5 | 1.3 | : | | | | |
| 15375−3132 | I 242 | HIP 76499 | 9.2657 | y | 2 | 39.2 | 0.3 | 1.9917 | 0.4 | 0.2 | * | | | | |
| 15420+0027 | A 2176 | HIP 76892 | 9.2604 | y | 2 | 188.8 | 0.1 | 0.2150 | 0.1 | 0.6 | | 1.8 | −0.001 | Bdl2006b | * |
| 15428−1601 | BU 35AB | HIP 76954 | 9.2604 | y | 2 | 108.6 | 0.2 | 1.7117 | 0.0 | 1.6 | * | | | | * |
| 15430−3442 | SEE 245 | HD 140075 | 8.5451 | y | 2 | 341.2 | 0.1 | 0.5978 | 0.2 | 0.7 | : | | | | |
| | | | 8.5451 | Hα | 2 | 341.2 | 0.7 | 0.5981 | 0.7 | 1.1 | : | | | | |
| 15442−4913 | I 1274 | HD 140147 | 8.5477 | y | 2 | 15.9 | 1.3 | 0.2031 | 0.7 | 1.3 | : | | | | |
| 15443−5419 | I 1099 | HIP 77073 | 8.5478 | y | 2 | 25.2 | 0.4 | 0.4706 | 0.3 | 0.6 | | | | | |
| 15453−5841 | FIN 234 AB | HIP 77160 | 8.5478 | y | 2 | 168.0 | 0.8 | 0.0461 | 0.2 | 1.1 | | | | | * |
| 15454−3738 | B 846 | HIP 77167 | 8.5479 | y | 2 | 181.7 | 0.2 | 0.4213 | 0.5 | 0.9 | : | | | | |
| 15457−5559 | I 546 | HIP 77187 | 8.5478 | y | 2 | 265.8 | 0.3 | 0.7712 | 0.3 | 1.4 | : | | | | |
| 15462−2804 | BU 620 AB | HIP 77235 | 9.2604 | y | 2 | 172.9 | 0.2 | 0.6207 | 0.1 | 0.6 | * | | | | * |
| | | | 9.2604 | Hα | 2 | 172.9 | 0.2 | 0.6222 | 0.0 | 0.4 | | | | | |
| 15468−5808 | I 974 | HIP 77294 | 8.5478 | y | 2 | 180.4 | 0.1 | 0.4001 | 0.1 | 0.5 | | | | | |
| 15469−4415 | I 245 | HD 140704 | 8.5478 | y | 2 | 331.9 | 0.1 | 0.8125 | 0.1 | 1.2 | | | | | |
| 15470−5222 | I 975 | HD 140622 | 8.5478 | y | 2 | 161.9 | 0.6 | 0.4463 | 1.3 | 1.3 | : | | | | |
| 15471−5107 | B 1790 A,Ba | HD 140662 | 8.5478 | y | 2 | 84.4 | 5.6 | 0.4313 | 0.3 | 2.4 | : | | | | * |
| | | | 9.2603 | y | 2 | 84.3 | 3.2 | 0.4290 | 2.6 | 1.1 | : | | | | |
| 15471−5107 | WSI 83 Ba,Bb | HD 140662B | 8.5478 | y | 2 | 51.5 | 5.2 | 0.0763 | 3.4 | 0.5 | : | | | | * |
| | | | 9.2603 | y | 2 | 48.0 | 0.6 | 0.0725 | 3.4 | 0.4 | : | | | | |
| 15489+2314 | HDS 2227 | HIP 77459 | 9.2604 | y | 2 | 283.0 | 2.5 | 0.6272 | 2.4 | 4.1 | | | | | |
| 15492−4147 | HDS 2228 | HIP 77481 | 8.5478 | y | 2 | 312.3 | 0.1 | 0.3139 | 0.2 | 1.6 | | | | | |
| | | | 8.5478 | Hα | 2 | 312.2 | 0.8 | 0.3145 | 0.4 | 1.8 | : | | | | |
| 15496−0326 | CHR 259 | HIP 77516 | 9.2658 | Hα | 2 | 173.5 | 0.3 | 0.2059 | 0.5 | 1.9 | | 46.6 | −0.188 | Gon2003 | * |
| | | | 9.2658 | y | 2 | 173.6 | 0.1 | 0.2051 | 0.2 | 1.9 | | 46.6 | −0.189 | Gon2003 | |
| 15509−3503 | SEE 250 | HIP 77631 | 8.5479 | y | 2 | 123.8 | 0.5 | 0.3694 | 0.5 | 1.3 | : | | | | |
| 15513−0305 | CHR 51 | HIP 77660 | 8.5371 | y | 2 | 247.4 | 0.4 | 0.3102 | 0.7 | 2.7 | | 15.0 | 0.241 | Mnt2004a | * |
| | | | 8.5371 | Hα | 2 | 247.5 | 0.2 | 0.3102 | 0.2 | 2.2 | | 15.0 | 0.240 | Mnt2004a | |
| | | | 9.2658 | y | 2 | 246.8 | 0.6 | 0.3202 | 0.3 | 2.7 | | 22.4 | 0.216 | Mnt2004a | |
| | | | 9.2658 | Hα | 4 | 246.7 | 0.3 | 0.3207 | 0.5 | 2.2 | | 22.3 | 0.217 | Mnt2004a | |
| 15529−4937 | I 1278 | HIP 77778 | 8.5478 | y | 2 | 337.5 | 0.4 | 0.2937 | 0.3 | 1.0 | : | | | | |
| 15535−4729 | HDS 2238 | HIP 77832 | 8.5478 | y | 2 | 295.5 | 0.5 | 0.2896 | 1.2 | 1.2 | : | | | | |
| 15548−6554 | NZO 65 | HIP 77921 | 9.2603 | y | 2 | 304.9 | 0.2 | 0.3068 | 0.1 | 0.4 | | | | | |
| 15550−1923 | HU 1274 | HIP 77939 | 9.2658 | y | 2 | 116.5 | 0.1 | 0.4751 | 0.3 | 2.0 | | | | | * |
| 15557−2645 | I 977 | HIP 78002 | 8.5479 | y | 2 | 250.2 | 0.1 | 0.4402 | 0.1 | 0.7 | | −13.6 | 0.024 | Hei1982c | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5479 | Hα | 2 | 250.3 | 0.2 | 0.4400 | 0.2 | 0.8 : | −13.6 | 0.024 | Hei1982c | |
| 15574−3611 | HDS 2247 | HIP 78142 | 8.5479 | y | 2 | 171.9 | 0.1 | 0.3352 | 0.1 | 1.9 | | | | |
| | | | 8.5479 | Hα | 2 | 171.9 | 0.2 | 0.3352 | 0.2 | 2.6 | | | | |
| 16003+1140 | A 1639 AB | HIP 78394 | 9.2605 | y | 2 | 84.0 | 0.8 | 0.2373 | 0.6 | 1.5 : | | | | * |
| 16003−2237 | LAB 3 | HIP 78401 | 8.5370 | y | 2 | 1.2 | 0.1 | 0.1656 | 0.1 | 1.9 | −2.9 | 0.013 | Hrt1996a | |
| | | | 8.5370 | Hα | 2 | 1.2 | 0.1 | 0.1666 | 1.2 | 2.4 | −2.9 | 0.014 | Hrt1996a | |
| 16016−7843 | HDS 2259 | HIP 78505 | 9.2656 | y | 2 | 336.2 | 0.3 | 0.2703 | 0.3 | 1.6 | | | | |
| | | | 9.2656 | Hα | 2 | 336.0 | 0.4 | 0.2719 | 1.0 | 1.4 : | | | | |
| 16035−5747 | SEE 258 AB | HIP 78662 | 9.2656 | Hα | 2 | 234.8 | 0.0 | 0.4382 | 0.0 | 0.2 | −2.4 | 0.019 | Sod1999 | |
| 16038+1406 | HDS 2265 | HIP 78688 | 9.2605 | y | 2 | 357.9 | 1.9 | 0.4991 | 2.8 | 3.2 : | | | | |
| 16044−1122 | STF 1998 AB | HD 144069 | 8.5370 | y | 3 | 351.1 | 0.3 | 0.8815 | 0.5 | 0.5 | −0.8 | −0.015 | Sod1999 | * |
| | | | 8.5479 | y | 2 | 351.1 | 0.3 | 0.8826 | 0.1 | 0.6 | −0.8 | −0.014 | Sod1999 | |
| | | | 8.5479 | Hα | 2 | 351.1 | 0.1 | 0.8824 | 0.3 | 0.5 | −0.8 | −0.014 | Sod1999 | |
| | | | 8.5479 | y | 2 | 351.1 | 0.1 | 0.8822 | 0.2 | 0.7 | −0.8 | −0.014 | Sod1999 | |
| | | | 8.6052 | y | 3 | 351.3 | 0.1 | 0.8891 | 0.5 | 0.6 | −0.7 | −0.010 | Sod1999 | |
| | | | 8.6052 | Hα | 1 | 351.3 | 0.0 | 0.8897 | 0.0 | 0.6 | −0.7 | −0.009 | Sod1999 | |
| 16046−6024 | JSP 682 | CD−60 6050 | 8.5451 | V | 2 | 139.4 | 3.3 | 3.3337 | 3.0 | 1.3 * | | | | |
| 16048−4044 | I 1284 | HIP 78765 | 8.5478 | y | 2 | 230.8 | 0.1 | 0.1060 | 0.1 | 0.9 | | | | |
| 16054−1948 | MCA 42 CE | HIP 78821 | 9.2630 | Hα | 2 | 312.6 | 1.9 | 0.1036 | 0.7 | 2.1 | −80.6 | −0.020 | Sey2002 | * |
| | | | 9.2630 | y | 2 | 312.9 | 0.1 | 0.1034 | 1.0 | 2.3 | −80.3 | −0.021 | Sey2002 | |
| 16055−3214 | B 1314 | HIP 78830 | 8.5479 | y | 2 | 163.9 | 0.3 | 0.1642 | 0.3 | 1.0 : | | | | |
| 16057−0617 | BU 948 Aa,B | HIP 78849 | 8.5371 | y | 2 | 89.4 | 0.5 | 0.8003 | 0.5 | 2.4 | | | | * |
| | | | 8.5479 | y | 4 | 89.4 | 0.4 | 0.8008 | 0.3 | 2.3 | | | | |
| | | | 8.5480 | Hα | 2 | 89.7 | 2.7 | 0.7941 | 3.1 | 2.1 | | | | |
| | | | 8.6052 | Hα | 2 | 89.5 | 0.4 | 0.8082 | 3.5 | 2.4 : | | | | |
| | | | 8.6052 | y | 2 | 89.4 | 2.7 | 0.8073 | 0.5 | 2.5 : | | | | |
| | | | 9.2630 | y | 2 | 87.2 | 2.0 | 0.7827 | 2.6 | 1.9 | | | | |
| 16057−0617 | FIN 384 Aa,Ab | HIP 78849 | 8.5480 | Hα | 2 | 242.5 | 3.0 | 0.0354 | 0.8 | 1.5 | 100.3 | 0.002 | Msn2001c | * |
| | | | 8.6052 | Hα | 2 | 229.9 | 4.5 | 0.0270 | 4.8 | 1.9 : | 95.3 | −0.001 | Msn2001c | |
| | | | 8.6052 | y | 2 | 223.5 | 4.6 | 0.0240 | 2.0 | 1.1 : | 88.9 | −0.004 | Msn2001c | |
| | | | 9.2630 | y | 2 | 330.0 | 1.0 | 0.0408 | 3.1 | 0.1 | 6.0 | −0.016 | Msn2001c | |
| 16057−3252 | SEE 264 A,Ba | HIP 78842 | 8.5479 | y | 2 | 31.9 | 0.1 | 0.7488 | 0.3 | 2.0 : | 37.7 | 0.157 | Hei1988d | * |
| | | | 9.2630 | y | 2 | 20.3 | 0.6 | 0.7432 | 0.4 | 1.7 | 29.2 | 0.143 | Hei1988d | |
| | | | 9.2630 | Hα | 2 | 20.1 | 0.7 | 0.7458 | 0.2 | 1.5 | 29.0 | 0.146 | Hei1988d | |
| 16057−3252 | WSI 84 Ba,Bb | HIP 78842 | 8.5479 | y | 2 | 124.4 | 1.8 | 0.1281 | 2.5 | 0.1 : | | | | * |
| | | | 9.2630 | Hα | 2 | 103.9 | 1.3 | 0.1202 | 0.1 | 0.0 | | | | |
| | | | 9.2630 | y | 2 | 103.1 | 1.6 | 0.1178 | 0.0 | 0.0 | | | | |
| 16059+1041 | HDS 2273 Aa,Ab | HIP 78864 | 9.2605 | y | 2 | 28.1 | 0.5 | 0.4438 | 1.0 | 1.4 | | | | * |
| 16065−4027 | RST 1876 | HIP 78915 | 8.5478 | y | 2 | 87.5 | 0.1 | 0.2007 | 0.1 | 1.1 | | | | |
| | | | 8.5478 | Hα | 2 | 87.6 | 0.2 | 0.2007 | 0.2 | 1.4 | | | | |
| 16077−2125 | MCA 43 | HIP 79020 | 8.5479 | y | 2 | 138.2 | 0.1 | 0.0483 | 1.0 | 1.3 | | | | |
| | | | 9.2630 | y | 2 | 142.8 | 0.5 | 0.0556 | 3.1 | 1.3 | | | | |
| 16080−4038 | I 1288 | HD 144530 | 8.5478 | y | 2 | 268.9 | 0.2 | 0.6907 | 0.3 | 1.1 : | | | | |
| 16085−1006 | BU 949 | HIP 79071 | 8.5479 | y | 2 | 199.0 | 0.1 | 0.3485 | 0.3 | 0.7 | −1.3 | −0.030 | WRH1940 | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5479 | H$\alpha$ | 2 | 199.0 | 0.1 | 0.3485 | 0.1 | 0.7 | −1.3 | −0.030 | WRH1940 | |
| 16090−0939 | WSI 85 | HIP 79122 | 8.5370 | y | 4 | 134.4 | 1.7 | 0.1423 | 1.3 | 3.8 | | | | * |
| | | | 9.2631 | y | 2 | 135.7 | 0.6 | 0.1294 | 3.0 | 3.7 | | | | |
| | | | 9.2631 | H$\alpha$ | 2 | 134.7 | 0.8 | 0.1254 | 0.8 | 3.2 | | | | |
| 16094−3103 | I 557 | HD 144926 | 8.5479 | y | 2 | 6.5 | 0.1 | 0.1477 | 0.2 | 0.8 | | | | |
| 16115+0943 | FIN 354 | HIP 79337 | 9.2631 | H$\alpha$ | 1 | 263.6 | 0.1 | 0.1123 | 0.1 | 0.7 | 1.5 | −0.027 | Ole2004b | |
| | | | 9.2631 | y | 1 | 263.3 | 0.1 | 0.1124 | 0.1 | 0.7 | 1.2 | −0.027 | Ole2004b | |
| 16120−1928 | BU 120 Aa,B | HIP 79374 | 9.2630 | y | 2 | 1.2 | 5.0 | 1.3419 | 9.6 | 1.3 | | | | * |
| | | | 9.2630 | H$\alpha$ | 1 | 1.3 | 0.0 | 1.3434 | 0.0 | 1.3 | | | | |
| 16120−1928 | CHR 146 Aa,Ab | HIP 79374 | 9.2630 | y | 2 | 162.3 | 9.0 | 0.0545 | 10.5 | 2.2 | | | | * |
| | | | 9.2630 | H$\alpha$ | 1 | 163.5 | 0.0 | 0.0481 | 0.0 | 2.7 | | | | |
| 16122−0007 | A 2179 | HIP 79391 | 8.5423 | y | 3 | 78.3 | 1.6 | 0.8644 | 1.6 | 2.9 : | | | | |
| 16143−1025 | RST 3936 AB | HIP 79588 | 8.5423 | y | 2 | 278.5 | 0.2 | 0.2102 | 0.2 | 1.3 : | | | | * |
| 16161−3037 | I 1586 | HIP 79706 | 8.5423 | y | 2 | 207.5 | 2.4 | 0.3528 | 2.1 | 2.1 : | | | | |
| 16170−5342 | I 987 | HIP 79787 | 9.2630 | H$\alpha$ | 2 | 263.2 | 0.4 | 0.4969 | 0.2 | 2.2 | −10.3 | 0.052 | Hei1985c | |
| 16193−3529 | SEE 272 | HIP 79962 | 8.5423 | y | 2 | 293.2 | 0.2 | 0.1239 | 0.1 | 0.5 : | | | | |
| | | | 8.5423 | H$\alpha$ | 2 | 293.5 | 0.4 | 0.1240 | 0.4 | 1.0 : | | | | |
| 16193−4240 | SEE 271 | HIP 79963 | 8.5424 | y | 2 | 102.1 | 0.1 | 0.3850 | 0.1 | 1.1 | −1.8 | 0.019 | Sey2001 | |
| | | | 8.5424 | H$\alpha$ | 2 | 102.1 | 0.2 | 0.3851 | 0.6 | 1.1 | −1.8 | 0.019 | Sey2001 | |
| 16212+2259 | HU 481 | HIP 80117 | 9.2631 | y | 2 | 275.1 | 0.5 | 0.3065 | 0.5 | 2.0 | 19.9 | 0.014 | Sca2003a | * |
| 16224−3220 | JSP 691 | HIP 80199 | 9.2630 | y | 2 | 25.5 | 0.3 | 0.5275 | 0.2 | 1.0 | 60.4 | 0.163 | Hei1981a | * |
| 16245−3734 | B 868 AB | HIP 80390 | 8.5424 | y | 2 | 114.1 | 0.6 | 0.0361 | 0.4 | 0.5 | | | | * |
| | | | 9.2630 | y | 2 | 88.9 | 1.1 | 0.0232 | 0.7 | 0.8 | | | | |
| | | | 9.2630 | H$\alpha$ | 2 | 86.0 | 0.2 | 0.0195 | 5.4 | 1.4 | | | | |
| 16253−4909 | COO 197 Aa,B | HIP 80448 | 9.2630 | y | 2 | 97.2 | 6.5 | 2.2556 | 0.6 | 1.9 | 22.9 | 0.597 | Mro1976a | * |
| 16253−4909 | TOK 50 Aa,Ab | HIP 80448 | 9.2630 | y | 2 | 193.0 | 6.4 | 0.2286 | 1.3 | 3.6 | | | | * |
| 16258−2955 | I 94 | HIP 80490 | 8.5423 | y | 2 | 187.4 | 1.1 | 0.6856 | 1.9 | 2.2 : | | | | |
| 16263−0943 | RST 3945 | HD 148131 | 9.2631 | y | 2 | 343.5 | 0.3 | 0.2459 | 0.3 | 0.6 | 4.6 | 0.030 | Hei1997 | |
| 16278−0822 | RST 3949 | HIP 80628 | 8.5371 | y | 2 | 203.5 | 0.7 | 0.6887 | 0.4 | 4.2 | | | | * |
| 16283−1613 | RST 3950 | HIP 80677 | 8.5423 | y | 2 | 72.6 | 1.5 | 0.2515 | 0.6 | 1.7 : | −5.5 | 0.061 | Hei1997 | |
| 16289+1825 | STF 2052 AB | HIP 80725 | 9.2631 | H$\alpha$ | 2 | 120.5 | 0.6 | 2.2644 | 3.4 | 0.2 * | −0.1 | 0.071 | Sod1999 | * |
| 16309+0159 | STF 2055 AB | HIP 80883 | 8.5371 | y | 2 | 35.4 | 0.3 | 1.4131 | 0.1 | 1.8 | −0.5 | −0.037 | Hei1993b | * |
| | | | 8.5371 | H$\alpha$ | 2 | 35.4 | 0.0 | 1.4127 | 0.1 | 1.5 | −0.5 | −0.037 | Hei1993b | |
| | | | 8.5480 | y | 2 | 35.4 | 0.0 | 1.4152 | 0.1 | 1.2 * | −0.4 | −0.034 | Hei1993b | |
| | | | 8.5480 | H$\alpha$ | 2 | 35.4 | 0.1 | 1.4150 | 0.3 | 1.3 * | −0.4 | −0.035 | Hei1993b | |
| | | | 9.2605 | y | 2 | 35.9 | 0.1 | 1.4145 | 0.1 | 1.1 * | −0.6 | −0.034 | Hei1993b | |
| 16318−0216 | A 693 | HIP 80949 | 8.5423 | y | 2 | 145.0 | 0.9 | 0.1201 | 1.0 | 1.6 : | 19.8 | −0.020 | Baz1991a | * |
| | | | 9.2631 | y | 2 | 140.4 | 0.3 | 0.1216 | 0.4 | 0.5 | 18.7 | −0.020 | Baz1991a | |
| 16318−0701 | STF 3105 | HIP 80954 | 9.2631 | y | 2 | 184.3 | 0.1 | 0.5233 | 0.3 | 0.7 | 0.8 | 0.042 | Hei1996c | |
| 16385−5728 | RST 869 Aa,B | HIP 81478 | 9.2630 | y | 2 | 45.8 | 5.5 | 0.8927 | 3.8 | 3.7 | | | | * |
| 16385−5728 | TOK 51 Aa,Ab | HIP 81478 | 9.2630 | y | 2 | 62.2 | 0.6 | 0.2675 | 1.0 | 4.0 | | | | * |
| 16391−3713 | FIN 340 AB | HIP 81523 | 8.5424 | y | 2 | 149.1 | 0.1 | 0.1261 | 0.1 | 0.4 : | | | | * |
| | | | 8.5424 | H$\alpha$ | 2 | 149.0 | 0.5 | 0.1260 | 1.1 | 1.1 : | | | | |
| | | | 9.2630 | y | 2 | 152.2 | 0.1 | 0.1162 | 0.1 | 0.2 | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16399−3516 | LPO 58 | HIP 81603 | 9.2630 | y | 2 | 134.7 | 0.5 | 0.8279 | 0.3 | 2.4 | * | | | | |
| 16406+0413 | CHR 56 Aa,Ab | HIP 81634 | 9.2605 | y | 2 | 279.5 | 2.8 | 0.0411 | 1.7 | 1.9 | | | | | * |
| 16408−6027 | B 1818 | HIP 81657 | 9.2656 | Hα | 2 | 35.7 | 0.5 | 1.6218 | 0.3 | 2.8 | * | | | | |
| 16425−3705 | R 283 | HIP 81803 | 8.5423 | y | 2 | 249.8 | 0.4 | 0.7705 | 0.5 | 1.7 | : | 3.5 | 0.205 | Hei1990c | |
| | | | 8.5423 | Hα | 2 | 249.8 | 1.2 | 0.7698 | 0.9 | 2.0 | : | 3.5 | 0.204 | Hei1990c | |
| | | | 9.2630 | y | 2 | 249.5 | 0.4 | 0.7769 | 0.8 | 1.2 | * | 4.0 | 0.217 | Hei1990c | |
| 16430−6056 | HJ 4874 AB | HIP 81836 | 8.5451 | y | 2 | 299.3 | 0.3 | 3.3028 | 1.3 | 0.1 | * | | | | * |
| 16438−5330 | FIN 251 AB | HD 150446 | 8.5424 | y | 2 | 289.5 | 1.4 | 0.3740 | 3.6 | 1.8 | : | | | | * |
| 16443−5834 | FIN 250 | HIP 81937 | 8.5424 | y | 2 | 145.2 | 1.3 | 0.2976 | 0.7 | 1.4 | : | | | | |
| 16453−3848 | RST 1900 | HIP 82021 | 8.5396 | y | 3 | 236.4 | 1.9 | 0.6764 | 2.5 | 2.3 | : | | | | |
| 16458−0046 | A 1141 | HIP 82062 | 8.5371 | y | 2 | 5.9 | 0.4 | 0.1943 | 0.3 | 0.9 | | −2.2 | 0.008 | Hei1982c | |
| | | | 8.5425 | y | 2 | 6.2 | 1.5 | 0.1946 | 2.3 | 2.0 | : | −2.0 | 0.008 | Hei1982c | |
| 16475−4528 | HDO 260 | HIP 82193 | 8.5424 | y | 2 | 356.0 | 0.7 | 0.5282 | 0.7 | 1.7 | : | | | | |
| 16507−4127 | HDS 2387 | HIP 82424 | 8.5424 | y | 2 | 91.7 | 1.0 | 0.3048 | 3.5 | 1.8 | : | | | | |
| 16511+0924 | STF 2106 | HIP 82460 | 9.2605 | y | 2 | 172.8 | 0.1 | 0.7511 | 0.6 | 1.3 | | 0.4 | −0.002 | Sca2001g | |
| | | | 9.2605 | Hα | 1 | 172.9 | 0.1 | 0.7522 | 0.1 | 1.0 | * | 0.4 | −0.000 | Sca2001g | |
| 16514−2450 | B 2397 | HIP 82474 | 8.5425 | y | 2 | 200.7 | 0.3 | 0.1509 | 0.3 | 1.3 | : | | | | |
| 16534−2025 | WSI 86 | HIP 82621 | 8.5370 | y | 2 | 167.0 | 5.0 | 0.3593 | 2.9 | 5.4 | | | | | |
| 16544−3806 | HDS 2392 | HIP 82709 | 9.2630 | y | 2 | 125.0 | 0.6 | 0.0855 | 1.7 | 3.4 | | | | | |
| | | | 9.2630 | Hα | 2 | 119.1 | 3.4 | 0.0775 | 0.4 | 2.2 | | | | | |
| 16545−2734 | B 322 | HD 152454 | 8.5425 | y | 3 | 52.1 | 1.0 | 0.2328 | 1.0 | 1.6 | : | | | | |
| 16555−0820 | KUI 75 AB | HIP 82817 | 8.5370 | y | 2 | 96.9 | 0.3 | 0.2116 | 0.9 | 1.1 | : | −1.9 | −0.003 | Sod1999 | * |
| 16555−2134 | BU 241 | HIP 82822 | 8.5425 | y | 2 | 22.5 | 0.2 | 0.3147 | 0.2 | 0.9 | : | | | | |
| | | | 8.5425 | Hα | 2 | 22.6 | 0.9 | 0.3150 | 1.5 | 1.3 | : | | | | |
| 16563−4040 | HDS 2394 | HIP 82876 | 8.5424 | y | 2 | 307.3 | 0.6 | 0.2531 | 0.6 | 1.7 | : | | | | * |
| 16589−3737 | SEE 315 | HIP 83100 | 8.5424 | y | 2 | 205.4 | 0.3 | 0.1884 | 0.3 | 1.0 | : | −11.8 | 0.001 | Sta1981a | |
| 17011−4204 | B 1841 | HIP 83266 | 8.5424 | y | 3 | 15.7 | 0.9 | 0.0872 | 2.6 | 2.1 | : | | | | |
| | | | 9.2606 | y | 2 | 17.1 | 0.1 | 0.0844 | 0.2 | 1.5 | | | | | |
| 17014−2639 | HDS 2410 | HIP 83296 | 8.5425 | y | 2 | 66.9 | 1.9 | 0.0461 | 0.5 | 1.2 | : | | | | * |
| | | | 9.2606 | y | 2 | 48.4 | 0.0 | 0.0552 | 0.2 | 0.1 | | | | | |
| 17018−5108 | I 1306 | HIP 83321 | 8.5424 | y | 2 | 14.1 | 0.2 | 0.2580 | 0.2 | 0.9 | : | −9.4 | 0.157 | Ole2004b | * |
| | | | 9.2631 | Hα | 2 | 14.2 | 0.0 | 0.2561 | 0.4 | 0.2 | | −12.5 | 0.187 | Ole2004b | |
| 17031−5314 | HDS 2412 Aa,Ab | HIP 83431 | 8.5395 | y | 3 | 205.5 | 0.6 | 0.5756 | 0.4 | 3.4 | | | | | * |
| | | | 8.5396 | Hα | 2 | 205.6 | 0.6 | 0.5746 | 0.3 | 2.8 | | | | | |
| | | | 9.2631 | y | 2 | 201.8 | 0.3 | 0.5842 | 0.2 | 3.2 | | | | | |
| | | | 9.2631 | Hα | 2 | 201.8 | 0.2 | 0.5859 | 0.2 | 2.8 | | | | | |
| 17031−5833 | I 997 | HIP 83429 | 8.5424 | y | 2 | 157.4 | 0.7 | 0.6026 | 0.7 | 1.6 | : | | | | |
| 17062−3838 | SEE 318 | HIP 83687 | 9.2657 | y | 3 | 351.7 | 0.3 | 1.0476 | 0.1 | 0.3 | * | −2.6 | 0.138 | Zul1987 | |
| 17066+0039 | BU 823 A,Ba | HIP 83716 | 9.2659 | y | 3 | 160.6 | 3.6 | 0.9573 | 0.8 | 2.4 | | −4.2 | −0.026 | Hrt2000c | * |
| 17066+0039 | TOK 52 Ba,Bb | HIP 83716 | 9.2659 | y | 3 | 181.6 | 5.2 | 0.0993 | 1.5 | −0.1 | | | | | * |
| 17081−4137 | I 407 | HIP 83845 | 8.5424 | y | 2 | 98.6 | 0.5 | 0.0959 | 2.2 | 1.4 | : | | | | |
| | | | 9.2606 | y | 2 | 95.9 | 0.0 | 0.0990 | 0.1 | 0.8 | | | | | |
| 17082−0105 | A 1145 | HIP 83853 | 8.5425 | y | 2 | 347.1 | 0.7 | 0.6549 | 0.9 | 2.6 | : | −0.8 | 0.013 | WSI2006b | * |
| | | | 9.2605 | y | 2 | 346.6 | 0.1 | 0.6561 | 0.1 | 2.1 | | −0.7 | 0.011 | WSI2006b | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17096−4302 | B 1848 | HD 154809 | 8.5424 | y | 2 | 98.2 | 2.2 | 0.2002 | 4.4 | 2.0 | : | | | | |
| 17104−1544 | BU 1118 AB | HIP 84012 | 8.5370 | y | 2 | 235.8 | 0.0 | 0.5898 | 0.3 | 0.6 | | −0.2 | 0.011 | Doc2007d | * |
| | | | 8.5425 | y | 2 | 235.8 | 0.0 | 0.5909 | 0.2 | 0.8 | | −0.3 | 0.012 | Doc2007d | |
| | | | 8.5425 | Hα | 2 | 235.7 | 0.6 | 0.5905 | 0.6 | 0.4 | | −0.3 | 0.011 | Doc2007d | |
| | | | 8.5480 | y | 2 | 235.8 | 0.2 | 0.5900 | 0.2 | 0.7 | | −0.2 | 0.011 | Doc2007d | |
| | | | 8.5480 | Hα | 2 | 235.8 | 0.0 | 0.5899 | 0.0 | 0.5 | | −0.2 | 0.011 | Doc2007d | |
| | | | 8.5480 | y | 2 | 235.8 | 0.1 | 0.5904 | 0.1 | 0.6 | | −0.2 | 0.011 | Doc2007d | |
| | | | 8.5480 | Hα | 2 | 235.8 | 0.1 | 0.5899 | 0.1 | 0.3 | | −0.2 | 0.011 | Doc2007d | |
| | | | 8.6052 | Hα | 1 | 235.8 | 0.1 | 0.5929 | 0.1 | 0.2 | | −0.2 | 0.014 | Doc2007d | |
| | | | 8.6052 | y | 3 | 235.8 | 0.1 | 0.5929 | 0.3 | 0.4 | | −0.2 | 0.014 | Doc2007d | |
| | | | 9.2606 | y | 2 | 235.1 | 0.2 | 0.5902 | 0.1 | 0.7 | | −0.5 | 0.010 | Doc2007d | |
| 17113−4611 | RST 5541 | HIP 84128 | 8.5424 | y | 2 | 90.7 | 0.5 | 0.1305 | 1.0 | 1.3 | : | | | | |
| 17115−1630 | HU 169 | HIP 84092 | 8.5397 | y | 2 | 196.7 | 0.1 | 0.2301 | 0.3 | 0.9 | | −17.0 | −0.013 | Msn1999c | |
| | | | 8.5397 | Hα | 2 | 196.8 | 0.9 | 0.2297 | 0.3 | 1.1 | : | −16.9 | −0.013 | Msn1999c | |
| 17141−0824 | BAR 7 | HIP 84303 | 9.2658 | y | 2 | 53.7 | 1.0 | 1.4795 | 0.5 | 3.3 | * | −5.5 | −0.111 | Nov2006c | |
| 17156−1018 | BU 957 | HIP 84423 | 9.2658 | y | 2 | 180.4 | 0.1 | 0.1484 | 0.0 | 0.3 | | −8.5 | −0.179 | Hei1984b | * |
| 17156−3836 | FIN 355 | HIP 84425 | 9.2606 | y | 2 | 21.4 | 0.1 | 0.3305 | 0.0 | 1.6 | | −6.4 | 0.207 | Sod1999 | * |
| 17157−0949 | A 2592 A,Ba | HIP 84430 | 9.2658 | y | 2 | 152.1 | 0.5 | 0.1766 | 1.5 | 1.1 | | −12.2 | −0.034 | Hei1996c | * |
| | | | 9.2658 | Hα | 2 | 152.9 | 0.5 | 0.1774 | 0.9 | 1.3 | | −11.4 | −0.033 | Hei1996c | |
| 17157−0949 | TOK 53 Ba,Bb | HIP 84430 | 9.2658 | y | 2 | 140.9 | 0.1 | 0.0328 | 0.2 | 0.2 | | | | | * |
| | | | 9.2658 | Hα | 2 | 130.9 | 0.8 | 0.0365 | 0.0 | 0.2 | | | | | |
| 17158−3344 | SEE 322 | HIP 84444 | 8.5398 | y | 2 | 282.0 | 0.1 | 0.1959 | 0.2 | 0.7 | | | | | |
| | | | 8.5398 | Hα | 2 | 282.0 | 0.3 | 0.1960 | 0.8 | 1.0 | : | | | | |
| 17173−3010 | BU 1119 | HIP 84576 | 8.5398 | y | 2 | 232.6 | 0.1 | 0.3494 | 0.1 | 1.2 | | | | | |
| | | | 8.5398 | Hα | 2 | 232.6 | 0.3 | 0.3495 | 0.3 | 1.6 | | | | | |
| 17178−3406 | B 1333 | HIP 84613 | 8.5398 | y | 2 | 349.1 | 0.8 | 0.1578 | 0.3 | 1.1 | : | | | | |
| 17181−3810 | SEE 324 | HIP 84634 | 8.5398 | y | 2 | 182.2 | 0.1 | 0.0779 | 0.3 | 0.6 | | | | | |
| | | | 8.5398 | Hα | 2 | 181.2 | 0.5 | 0.0751 | 0.6 | 0.7 | | | | | |
| | | | 9.2606 | y | 2 | 174.9 | 0.1 | 0.0753 | 0.1 | 0.5 | | | | | |
| 17184−3224 | VOU 27 | HD 156324 | 8.5398 | y | 2 | 162.5 | 0.4 | 0.3638 | 0.7 | 1.4 | : | | | | |
| 17185−3848 | RST 1947 | HIP 84666 | 8.5398 | y | 2 | 230.3 | 0.7 | 0.3558 | 0.8 | 2.2 | : | | | | |
| 17188−5734 | RST 916 | HD 156050 | 8.5399 | y | 2 | 213.8 | 1.4 | 0.4040 | 1.4 | 2.1 | : | | | | |
| 17189−3221 | I 590 | HD 156424 | 8.5398 | y | 2 | 50.1 | 0.6 | 0.3543 | 1.2 | 2.3 | : | | | | |
| 17190−3459 | MLO 4 AB | HIP 84709 | 8.5396 | y | 2 | 196.9 | 1.0 | 1.4447 | 0.6 | 1.8 | | −2.1 | 0.012 | Sod1999 | * |
| | | | 8.7694 | y | 2 | 195.3 | 0.2 | 1.4348 | 0.1 | 1.0 | * | −2.1 | 0.010 | Sod1999 | |
| | | | 9.2606 | y | 2 | 192.0 | 0.1 | 1.4223 | 0.3 | 1.0 | * | −1.9 | 0.013 | Sod1999 | |
| 17194−4413 | HDO 269 | HIP 84748 | 8.5399 | y | 2 | 40.6 | 0.1 | 0.0871 | 0.3 | 0.4 | | | | | |
| | | | 8.5399 | Hα | 2 | 40.7 | 0.8 | 0.0867 | 0.2 | 0.7 | | | | | |
| | | | 9.2606 | y | 2 | 41.6 | 0.0 | 0.0895 | 0.1 | 0.3 | | | | | |
| 17195−5004 | FIN 356 | HIP 84759 | 8.5399 | y | 2 | 99.8 | 0.1 | 0.0739 | 0.4 | 0.4 | | | | | |
| | | | 8.5399 | Hα | 2 | 99.9 | 0.2 | 0.0728 | 0.1 | 0.3 | | | | | |
| | | | 9.2631 | Hα | 2 | 95.3 | 0.9 | 0.0720 | 0.0 | 0.1 | | | | | |
| 17202−7003 | I 104 | HIP 84827 | 9.2631 | y | 2 | 127.3 | 0.5 | 0.7071 | 0.5 | 3.2 | * | | | | |
| | | | 9.2631 | Hα | 2 | 127.3 | 0.4 | 0.7089 | 0.8 | 1.4 | | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17207−0706 | A 2593 | HIP 84866 | 9.2659 | y | 3 | 358.6 | 0.3 | 0.2636 | 0.4 | 0.8 | 3.0 | 0.014 | Hei1986a | |
| 17207−5625 | FIN 255 AB | HD 156412 | 8.5399 | y | 2 | 107.9 | 1.7 | 0.3519 | 1.7 | 2.5 : | | | | * |
| 17208−4240 | I 410 | HIP 84879 | 9.2657 | y | 2 | 278.5 | 0.2 | 2.9510 | 0.2 | 1.9 * | | | | * |
| 17221−7007 | FIN 373 | HIP 84979 | 9.2631 | Hα | 2 | 227.9 | 0.7 | 0.0351 | 0.9 | 1.3 | 72.4 | −0.058 | Ole2003a | * |
| 17227−3812 | I 1317 | HIP 85022 | 8.5398 | y | 2 | 246.6 | 0.6 | 0.3184 | 0.2 | 1.6 | | | | |
| | | | 8.5398 | Hα | 2 | 246.7 | 0.8 | 0.3183 | 0.8 | 1.7 : | | | | |
| 17237−4510 | I 593 | HD 157131 | 8.5399 | y | 2 | 282.5 | 0.7 | 0.8130 | 1.0 | 1.3 : | | | | |
| 17240−0921 | RST 3972 | HIP 85141 | 8.6052 | y | 3 | 216.9 | 0.1 | 0.1447 | 0.2 | 0.6 | −3.6 | −0.016 | Sod1999 | |
| | | | 8.6052 | Hα | 2 | 216.6 | 0.2 | 0.1444 | 0.2 | 0.7 : | −3.9 | −0.016 | Sod1999 | |
| 17248−5913 | I 385 AB | HIP 85216 | 8.5399 | y | 2 | 122.8 | 3.2 | 0.3909 | 1.0 | 1.0 | | | | * |
| | | | 8.5399 | Hα | 2 | 122.4 | 4.6 | 0.3914 | 3.2 | 1.3 : | | | | |
| | | | 8.5399 | y | 1 | 122.5 | 0.0 | 0.3915 | 0.0 | 0.6 : | | | | |
| | | | 9.2631 | y | 2 | 121.5 | 1.4 | 0.3929 | 0.5 | 0.4 | | | | |
| | | | 9.2631 | Hα | 2 | 121.3 | 0.0 | 0.3948 | 0.5 | 0.5 | | | | |
| | | | 9.2656 | Hα | 2 | 121.4 | 1.8 | 0.3939 | 0.3 | 0.5 | | | | |
| | | | 9.2656 | y | 2 | 121.0 | 1.9 | 0.3945 | 0.3 | 0.6 | | | | |
| 17248−5913 | WSI 87 AD | HIP 85216 | 8.5399 | y | 2 | 270.1 | 0.2 | 0.2673 | 2.4 | 1.0 | | | | * |
| | | | 8.5399 | Hα | 2 | 269.6 | 3.0 | 0.2675 | 3.1 | 1.3 : | | | | |
| | | | 8.5399 | y | 1 | 270.0 | 0.0 | 0.2620 | 0.0 | 0.5 : | | | | |
| | | | 9.2631 | y | 2 | 270.9 | 0.8 | 0.2623 | 1.0 | 0.4 | | | | |
| | | | 9.2631 | Hα | 2 | 270.6 | 1.8 | 0.2626 | 1.8 | 0.5 | | | | |
| | | | 9.2656 | Hα | 2 | 271.0 | 0.4 | 0.2625 | 1.2 | 0.5 | | | | |
| | | | 9.2656 | y | 2 | 271.4 | 0.4 | 0.2620 | 2.2 | 0.5 | | | | |
| 17258−1918 | RST 5542 AB | HD 157733 | 8.5397 | y | 2 | 289.4 | 0.7 | 0.1216 | 1.0 | 1.5 : | | | | * |
| 17266−4755 | HDS 2463 | HIP 85358 | 8.5399 | y | 2 | 245.1 | 0.8 | 0.2216 | 0.4 | 1.1 : | | | | |
| 17272−2957 | B 340 | HIP 85413 | 8.5398 | y | 3 | 303.0 | 0.9 | 0.6255 | 1.9 | 2.1 : | | | | |
| 17278−1211 | HU 234 AB | HIP 85455 | 9.2605 | y | 2 | 203.8 | 0.3 | 0.4548 | 0.3 | 2.7 | | | | * |
| 17283−2058 | A 2244 | HIP 85491 | 8.5372 | y | 2 | 164.4 | 0.2 | 0.1249 | 0.5 | 0.8 | 6.0 | −0.049 | Msn1999c | |
| | | | 8.5397 | y | 2 | 164.7 | 0.5 | 0.1252 | 0.6 | 0.8 : | 6.3 | −0.049 | Msn1999c | |
| | | | 8.6052 | y | 2 | 165.2 | 0.3 | 0.1244 | 0.2 | 0.6 : | 6.5 | −0.049 | Msn1999c | |
| | | | 8.6052 | Hα | 2 | 165.2 | 0.5 | 0.1247 | 1.2 | 0.9 : | 6.5 | −0.049 | Msn1999c | |
| 17286−2531 | BU 129 | HIP 85521 | 8.5397 | y | 2 | 158.2 | 0.1 | 0.1512 | 0.0 | 0.3 | −4.9 | −0.022 | Sey2002 | |
| | | | 8.5398 | Hα | 2 | 158.2 | 0.1 | 0.1513 | 0.1 | 0.6 | −5.0 | −0.022 | Sey2002 | |
| | | | 8.6052 | y | 2 | 158.8 | 0.1 | 0.1496 | 0.1 | 0.4 | −4.7 | −0.022 | Sey2002 | |
| 17289−2936 | B 341 | HD 158154 | 8.5398 | y | 2 | 247.5 | 0.2 | 0.3997 | 0.3 | 0.9 : | | | | |
| 17290−2420 | RST 3105 | HIP 85548 | 9.2658 | y | 3 | 320.4 | 2.7 | 0.4551 | 2.4 | 4.4 | | | | |
| 17294−3831 | B 342 | HIP 85589 | 8.5398 | y | 2 | 109.3 | 0.1 | 0.4170 | 0.2 | 0.5 | | | | |
| | | | 8.5398 | Hα | 2 | 109.3 | 0.2 | 0.4171 | 0.3 | 0.6 | | | | |
| 17296−4236 | B 1859 | HD 158157 | 8.5399 | y | 2 | 316.9 | 0.8 | 0.2383 | 2.1 | 1.8 : | | | | |
| 17297−4947 | I 1323 | HIP 85610 | 8.5399 | y | 2 | 88.0 | 0.4 | 0.1867 | 0.3 | 0.6 | | | | |
| 17300−4134 | RST 1961 | HD 158217 | 8.5398 | y | 2 | 301.0 | 0.5 | 0.4568 | 0.9 | 1.7 : | | | | |
| 17303−5159 | RST 931 | HIP 85656 | 8.5399 | y | 2 | 340.3 | 0.5 | 0.4923 | 1.0 | 1.1 : | | | | |
| | | | 8.5399 | Hα | 2 | 340.1 | 6.5 | 0.4915 | 6.4 | 1.6 : | | | | |
| 17304−0104 | STF 2173 | HIP 85667 | 8.5372 | y | 2 | 158.1 | 0.2 | 0.6515 | 0.3 | 0.6 | −0.5 | −0.006 | Hei1994a | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5480 | y | 2 | 158.1 | 0.2 | 0.6525 | 0.3 | 0.5 | −0.5 | −0.006 | Hei1994a | |
| | | | 8.5480 | Hα | 2 | 158.1 | 0.1 | 0.6526 | 0.1 | 0.3 | −0.5 | −0.006 | Hei1994a | |
| | | | 9.2605 | y | 2 | 156.4 | 0.2 | 0.7108 | 0.7 | 0.1 * | −0.4 | −0.006 | Hei1994a | |
| 17305−1006 | RST 3978 | HIP 85675 | 9.2659 | y | 3 | 30.7 | 0.4 | 0.0972 | 1.0 | 2.6 | | | | * |
| 17305−1446 | HU 177 | HIP 85679 | 8.5397 | y | 2 | 188.5 | 0.5 | 0.2217 | 0.8 | 1.5 : | −29.2 | 0.004 | Sey2002 | * |
| | | | 8.5397 | Hα | 2 | 188.2 | 3.8 | 0.2234 | 2.5 | 1.7 : | −29.6 | 0.005 | Sey2002 | |
| | | | 8.6052 | y | 2 | 188.5 | 0.9 | 0.2233 | 0.6 | 1.1 : | −29.2 | 0.005 | Sey2002 | |
| 17308−3726 | B 912 | HIP 85700 | 8.5398 | y | 2 | 165.5 | 0.1 | 0.2483 | 0.2 | 0.6 | 11.4 | −0.044 | Hrt2001b | |
| | | | 8.5398 | Hα | 2 | 165.6 | 0.3 | 0.2480 | 0.3 | 0.7 : | 11.4 | −0.045 | Hrt2001b | |
| 17309−5621 | FIN 257 | CD−56 6888 | 8.5399 | y | 2 | 228.2 | 1.1 | 0.2023 | 1.7 | 1.9 : | | | | |
| 17315−4156 | I 1324 | HIP 85763 | 9.2657 | y | 2 | 38.8 | 0.4 | 1.4060 | 1.4 | 0.7 * | | | | |
| 17315−6026 | I 600 | HIP 85765 | 8.5399 | y | 2 | 152.8 | 0.4 | 0.4792 | 0.5 | 0.9 | 18.2 | 0.138 | Ruy1995 | * |
| | | | 8.5399 | Hα | 2 | 153.2 | 1.0 | 0.4731 | 2.2 | 1.2 : | 18.6 | 0.132 | Ruy1995 | |
| 17317−4845 | SEE 331 | HD 158426 | 8.5399 | y | 2 | 47.6 | 0.3 | 0.5206 | 0.2 | 0.5 | | | | |
| | | | 8.5399 | Hα | 2 | 47.6 | 0.3 | 0.5198 | 0.6 | 0.6 | | | | |
| 17335−4224 | B 1862 | HIP 85919 | 8.5399 | y | 2 | 328.7 | 0.2 | 0.2187 | 0.2 | 1.3 | | | | |
| | | | 8.5399 | Hα | 2 | 328.7 | 0.3 | 0.2192 | 0.4 | 1.0 : | | | | |
| 17336−3706 | TNG 1 Aa,Ab | HIP 85927 | 8.5398 | y | 2 | 285.6 | 0.7 | 0.0317 | 0.3 | 0.6 | −0.4 | 0.003 | Tng2006 | * |
| | | | 8.5398 | Hα | 2 | 291.3 | 1.3 | 0.0333 | 0.4 | 0.7 | 5.3 | 0.004 | Tng2006 | |
| | | | 9.2606 | y | 2 | 85.5 | 0.2 | 0.0425 | 0.1 | 0.5 | −0.9 | −0.003 | Tng2006 | |
| | | | 9.2606 | Hα | 2 | 85.7 | 0.1 | 0.0435 | 0.1 | 0.5 | −0.7 | −0.001 | Tng2006 | |
| 17339−5150 | RST 940 | HD 158782 | 8.5399 | y | 2 | 311.4 | 0.8 | 0.1352 | 0.5 | 1.0 : | | | | |
| 17342−1910 | B 1863 | HIP 85965 | 8.5397 | y | 2 | 133.8 | 3.0 | 0.2173 | 6.0 | 3.7 : | | | | * |
| 17366+0723 | A 1156 | HIP 86174 | 9.2659 | y | 2 | 349.3 | 0.5 | 0.2130 | 0.3 | 0.6 | 1.9 | −0.047 | Doc1991b | |
| 17368−2057 | HU 751 | HD 159663 | 8.5397 | y | 2 | 295.3 | 0.2 | 0.2617 | 0.6 | 0.9 : | 3.8 | −0.013 | Sey2002 | |
| | | | 8.6052 | y | 2 | 295.4 | 0.3 | 0.2622 | 0.2 | 0.5 | 3.9 | −0.013 | Sey2002 | |
| | | | 8.6052 | Hα | 2 | 295.4 | 0.4 | 0.2629 | 0.4 | 0.8 : | 3.8 | −0.013 | Sey2002 | |
| 17375−3747 | B 915 AB | HD 159632 | 8.5453 | y | 2 | 310.5 | 0.1 | 0.2649 | 0.1 | 0.4 | 2.3 | −0.008 | Sey2002 | * |
| | | | 8.5453 | Hα | 2 | 310.5 | 0.2 | 0.2650 | 0.3 | 0.8 : | 2.3 | −0.008 | Sey2002 | |
| | | | 9.2657 | y | 2 | 318.0 | 0.5 | 0.2640 | 0.2 | 0.5 | 9.0 | −0.011 | Sey2002 | |
| 17390+0240 | WSI 88 | HIP 86374 | 8.5372 | y | 2 | 2.9 | 1.0 | 0.1771 | 0.7 | 2.8 | | | | * |
| | | | 9.2605 | y | 2 | 3.8 | 0.5 | 0.1797 | 0.3 | 2.6 | | | | * |
| | | | 9.2605 | Hα | 2 | 4.9 | 0.7 | 0.1797 | 0.4 | 2.5 | | | | |
| 17400−0038 | BU 631 | HIP 86463 | 9.2659 | y | 2 | 86.7 | 0.0 | 0.2671 | 0.2 | 0.3 | 2.3 | −0.014 | Hei1996a | |
| 17415−5348 | HDS 2502 | HIP 86569 | 9.2631 | y | 2 | 1.5 | 0.2 | 0.1961 | 0.4 | 0.6 | | | | |
| 17424−4618 | HDS 2505 | HIP 86658 | 8.5453 | y | 2 | 318.7 | 0.2 | 0.4308 | 0.1 | 0.9 | | | | * |
| | | | 8.5453 | Hα | 2 | 318.8 | 0.2 | 0.4309 | 0.2 | 1.0 : | | | | |
| 17432−4119 | RST 5441 | HD 160685 | 8.5453 | y | 2 | 18.0 | 0.1 | 0.0869 | 0.1 | 0.7 | | | | |
| | | | 9.2606 | y | 2 | 17.6 | 0.1 | 0.0911 | 0.1 | 0.4 | | | | |
| 17443−7213 | HDO 275 | HIP 86815 | 9.2631 | y | 1 | 88.8 | 0.1 | 0.6495 | 0.1 | 0.6 | −17.6 | −0.010 | Hei1978c | |
| | | | 9.2631 | Hα | 2 | 88.8 | 0.1 | 0.6499 | 0.3 | 0.6 | −17.7 | −0.010 | Hei1978c | |
| 17447−4244 | FIN 341 | HIP 86847 | 8.5453 | y | 2 | 168.7 | 0.2 | 0.0792 | 0.0 | 1.3 | | | | |
| | | | 8.5453 | Hα | 2 | 168.6 | 0.1 | 0.0753 | 0.5 | 1.1 | | | | |
| | | | 9.2606 | y | 2 | 173.6 | 0.0 | 0.0969 | 0.2 | 1.3 | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17449−4809 | I 1602 | HD 160901 | 8.5453 | y | 2 | 304.8 | 0.2 | 0.1839 | 0.1 | 0.4 | | | | | |
| | | | 8.5453 | Hα | 2 | 304.7 | 0.2 | 0.1837 | 0.8 | 0.7 | : | | | | |
| 17471−3807 | I 1336 | HIP 87042 | 8.5453 | y | 2 | 232.4 | 0.1 | 0.1427 | 0.1 | 1.0 | | −15.4 | −0.008 | Hei1986b | |
| | | | 8.5453 | Hα | 2 | 232.4 | 0.1 | 0.1428 | 0.4 | 1.1 | | −15.5 | −0.007 | Hei1986b | |
| 17479−4433 | RST 5442 | HIP 87104 | 8.5453 | y | 2 | 105.3 | 0.6 | 0.6146 | 0.4 | 2.7 | | | | | |
| 17506+0714 | STT 337 | HIP 87325 | 9.2659 | y | 2 | 163.9 | 0.7 | 0.5442 | 0.2 | 0.6 | | −1.6 | 0.040 | Doc1990a | |
| | | | 9.2659 | Hα | 3 | 164.2 | 1.5 | 0.5450 | 0.3 | 0.6 | | −1.3 | 0.041 | Doc1990a | |
| 17530−0755 | STF 3128 AB | HIP 87533 | 9.2659 | y | 2 | 50.5 | 0.2 | 1.2050 | 0.5 | 2.3 | * | 3.1 | 0.009 | Ole1993 | * |
| 17531−1339 | HU 189 | HIP 87544 | 9.2659 | y | 2 | 253.9 | 0.3 | 1.5164 | 0.3 | 1.9 | * | | | | |
| | | | 9.2659 | y | 2 | 253.9 | 0.1 | 1.5170 | 0.7 | 1.8 | * | | | | |
| 17533+2459 | A 235 | HIP 87565 | 9.2660 | y | 2 | 319.4 | 1.4 | 0.0881 | 3.1 | 1.1 | | −11.5 | 0.008 | Hei1993d | |
| 17533−3444 | BU 1123 | HIP 87567 | 9.2657 | y | 2 | 257.2 | 0.1 | 0.3217 | 0.1 | 0.4 | | −21.2 | 0.105 | Doc1991b | * |
| 17534−3454 | SEE 342 | HIP 87569 | 8.7694 | y | 2 | 208.4 | 0.3 | 0.3960 | 0.2 | 0.4 | | | | | * |
| | | | 9.2606 | y | 2 | 207.9 | 0.1 | 0.3960 | 0.2 | 0.3 | | | | | |
| 17535−3454 | RST 3986 | HD 320865 | 8.7694 | y | 2 | 73.9 | 1.5 | 0.9290 | 3.2 | 3.0 | : | | | | * |
| | | | 9.2606 | y | 2 | 73.5 | 0.7 | 0.9304 | 1.5 | 2.9 | * | | | | |
| 17535−0355 | TOK 54 | V2610 Oph | 9.2605 | y | 3 | 149.1 | 1.3 | 0.1138 | 0.8 | 0.9 | : | | | | * |
| | | | 9.2659 | y | 2 | 147.6 | 1.0 | 0.1074 | 3.6 | 1.0 | : | | | | |
| 17541−4821 | B 1870 | HIP 87635 | 8.5453 | y | 2 | 77.1 | 0.2 | 0.0845 | 0.6 | 0.9 | : | | | | |
| | | | 9.2631 | y | 2 | 72.4 | 0.6 | 0.0837 | 0.1 | 0.7 | | | | | |
| 17554−3851 | I 1345 | HD 162944 | 8.5453 | y | 2 | 185.6 | 0.4 | 0.4384 | 0.3 | 1.7 | : | | | | |
| 17555−4759 | B 1873 | HD 162842 | 8.5453 | y | 2 | 350.2 | 0.3 | 0.1712 | 0.2 | 1.3 | : | | | | |
| 17563+0259 | A 2189 | HIP 87811 | 9.2605 | y | 2 | 265.3 | 0.1 | 0.0904 | 0.6 | 1.0 | | −4.7 | 0.005 | Doc2006f | |
| 17564+1820 | MCA 49 Aa,Ab | HIP 87823 | 9.2659 | y | 2 | 90.0 | 9.4 | 0.1047 | 5.9 | 1.8 | | | | | * |
| | | | 9.2660 | Hα | 2 | 91.6 | 1.0 | 0.0924 | 4.2 | 2.0 | : | | | | |
| 17564+1820 | STF 2245 Aa,B | HIP 87823 | 9.2659 | y | 2 | 291.2 | 3.2 | 2.6476 | 7.3 | 2.7 | | | | | * |
| 17571+0004 | STF 2244 | HIP 87875 | 9.2659 | y | 2 | 98.3 | 0.2 | 0.6353 | 0.0 | 0.5 | | −1.7 | 0.104 | Hei1997 | |
| | | | 9.2659 | Hα | 2 | 98.3 | 0.1 | 0.6371 | 0.1 | 0.5 | | −1.7 | 0.106 | Hei1997 | |
| 17575−5740 | HJ 4992 A,Ba | HIP 87914 | 9.2632 | y | 2 | 39.5 | 8.2 | 2.6245 | 0.6 | 2.2 | | | | | * |
| | | | 9.2656 | y | 2 | 39.6 | 1.8 | 2.6259 | 3.3 | 2.8 | | | | | |
| 17575−5740 | TOK 55 Ba,Bb | HIP 87914 | 9.2632 | y | 2 | 179.3 | 6.2 | 0.1156 | 5.8 | 0.4 | | | | | * |
| | | | 9.2632 | y | 2 | 180.5 | 0.5 | 0.1102 | 0.9 | 0.8 | | | | | |
| | | | 9.2656 | y | 2 | 181.1 | 0.7 | 0.1145 | 4.6 | 0.2 | | | | | |
| 17584+0428 | KUI 84 | HIP 87991 | 9.2605 | y | 2 | 358.0 | 1.1 | 0.2550 | 1.4 | 1.2 | : | −0.1 | 0.014 | Doc2005f | * |
| 17584−5510 | RST 956 | HIP 87988 | 8.5452 | y | 2 | 200.4 | 0.1 | 0.4976 | 0.1 | 0.8 | | | | | |
| | | | 8.5452 | Hα | 2 | 200.4 | 0.7 | 0.4970 | 0.2 | 0.8 | : | | | | |
| 18003+0422 | WSI 65 | HIP 88149 | 8.7721 | Hα | 2 | 160.0 | 0.6 | 0.1308 | 1.7 | 2.8 | | | | | * |
| | | | 9.2634 | Hα | 2 | 161.4 | 0.8 | 0.1363 | 1.1 | 3.1 | | | | | |
| | | | 9.2634 | y | 2 | 161.3 | 0.4 | 0.1317 | 2.3 | 2.7 | | | | | |
| 18018+0118 | BU 1125 AB | HIP 88290 | 9.2661 | Hα | 2 | 138.6 | 0.2 | 0.5086 | 0.2 | 2.7 | | −1.4 | −0.083 | Pop2000a | * |
| 18024+2050 | TOK 56 | HIP 88331 | 9.2607 | Hα | 2 | 301.9 | 1.2 | 0.0532 | 0.2 | 1.1 | | | | | * |
| 18031−0811 | STF 2262 AB | HIP 88404 | 8.7722 | Hα | 2 | 284.9 | 0.2 | 1.6183 | 0.5 | 0.8 | * | 0.5 | −0.020 | Sod1999 | * |
| | | | 9.2633 | y | 2 | 285.0 | 0.9 | 1.6089 | 0.1 | 0.7 | * | 0.5 | −0.022 | Sod1999 | |
| 18044+0337 | A 2257 | HD 165110 | 9.2661 | y | 2 | 29.8 | 1.6 | 0.1586 | 0.3 | 1.2 | : | 1.2 | −0.001 | Doc2007b | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18044−5953 | RST 5099 | HIP 88510 | 8.5452 | y | 2 | 213.5 | 0.3 | 0.0464 | 0.5 | 0.5 : | 65.8 | −0.123 | Hei1988d | * |
| | | | 8.7724 | y | 2 | 222.5 | 0.4 | 0.0471 | 0.7 | 0.6 | 72.6 | −0.115 | Hei1988d | |
| | | | 8.7724 | Hα | 2 | 226.4 | 0.4 | 0.0545 | 0.3 | 0.7 : | 76.5 | −0.107 | Hei1988d | |
| | | | 9.2632 | y | 2 | 250.7 | 0.3 | 0.0602 | 0.1 | 0.0 | 95.5 | −0.084 | Hei1988d | |
| 18045−4627 | HU 1525 | HD 164660 | 8.5453 | y | 2 | 308.5 | 0.2 | 0.4460 | 0.3 | 1.5 | | | | |
| | | | 8.5453 | Hα | 2 | 308.5 | 0.6 | 0.4451 | 0.9 | 1.6 : | | | | |
| 18060−5528 | RST 962 | HIP 88659 | 8.5452 | y | 2 | 33.5 | 0.3 | 0.4299 | 0.3 | 1.6 : | | | | |
| 18065−4931 | I 622 | HIP 88699 | 8.5452 | y | 2 | 44.1 | 0.2 | 0.6250 | 0.5 | 1.4 : | | | | |
| 18068−4325 | HJ 5014 | HIP 88726 | 8.7723 | y | 2 | 3.9 | 0.3 | 1.7485 | 0.2 | 0.1 * | 1.0 | 0.034 | Ary2001a | |
| | | | 8.7723 | Hα | 2 | 4.0 | 0.1 | 1.7525 | 0.0 | 0.1 * | 1.0 | 0.038 | Ary2001a | |
| | | | 9.2660 | y | 2 | 3.6 | 0.2 | 1.7451 | 0.2 | 0.1 * | 0.9 | 0.029 | Ary2001a | |
| 18071−4949 | I 1350 | HIP 88755 | 8.5452 | y | 2 | 210.0 | 0.1 | 0.6254 | 0.1 | 1.1 | | | | |
| | | | 8.5452 | Hα | 2 | 210.0 | 0.3 | 0.6250 | 0.3 | 1.0 : | | | | |
| 18092−2211 | RST 3157 | HIP 88932 | 9.2660 | y | 2 | 88.6 | 0.1 | 0.1793 | 0.1 | 0.5 | −3.9 | −0.079 | Hei1990c | * |
| 18093−2607 | HDS 2560 Aa,Ab | HIP 88937 | 9.2660 | y | 2 | 338.5 | 0.3 | 1.3257 | 0.3 | 3.1 * | | | | * |
| 18096+0400 | STF 2281 AB | HIP 88964 | 8.7721 | Hα | 2 | 289.3 | 0.1 | 0.6294 | 0.4 | 1.3 | 1.4 | 0.003 | Sod1999 | * |
| | | | 9.2634 | y | 2 | 288.9 | 0.3 | 0.6336 | 0.4 | 1.5 | 1.4 | 0.001 | Sod1999 | |
| | | | 9.2634 | Hα | 2 | 288.8 | 0.1 | 0.6344 | 0.2 | 0.9 * | 1.4 | 0.002 | Sod1999 | |
| 18099−0755 | HDS 2561 | HIP 88996 | 9.2634 | y | 2 | 18.7 | 1.5 | 0.8371 | 2.0 | 3.9 * | | | | |
| 18101−2346 | RST 5104 | HD 166107 | 8.5426 | y | 2 | 155.6 | 1.3 | 0.2528 | 1.4 | 2.1 : | | | | |
| 18103−2913 | HO 428 | HD 166080 | 8.5426 | y | 2 | 90.5 | 0.3 | 0.4406 | 0.3 | 1.1 : | −1.2 | −0.021 | Sey2002 | |
| 18108−3529 | B 1352 | HIP 89076 | 9.2660 | y | 2 | 200.7 | 0.2 | 0.2287 | 0.1 | 0.4 | 10.2 | −0.054 | Sey2002 | |
| 18112−1951 | BU 132 Aa,B | HIP 89114 | 8.7694 | y | 2 | 188.8 | 6.1 | 1.3912 | 1.2 | 0.9 | | | | * |
| | | | 8.7694 | Hα | 2 | 188.7 | 5.5 | 1.4000 | 0.2 | 0.8 | | | | |
| | | | 9.2634 | y | 2 | 188.4 | 5.9 | 1.3917 | 0.7 | 0.8 | | | | |
| 18112−1951 | TOK 57 Aa,Ab | HIP 89114 | 8.7694 | y | 2 | 122.0 | 3.5 | 0.0396 | 4.3 | 2.3 | | | | * |
| | | | 8.7694 | Hα | 2 | 105.5 | 2.8 | 0.0492 | 3.5 | 3.4 | | | | |
| | | | 9.2634 | y | 2 | 27.9 | 7.1 | 0.0600 | 0.6 | 3.7 | | | | |
| 18123+0154 | A 2260 | HIP 89207 | 9.2661 | y | 2 | 107.3 | 2.0 | 2.0122 | 1.1 | 3.7 * | | | | |
| 18126−7340 | HDO 284 Aa,B | HIP 89234 | 8.7724 | Hα | 3 | 267.9 | 5.7 | 2.3102 | 0.4 | 4.7 | | | | * |
| | | | 9.2632 | Hα | 2 | 268.0 | 6.5 | 2.2985 | 10.7 | 4.1 | | | | |
| 18126−7340 | TOK 58 Aa,Ab | HIP 89234 | 8.7724 | Hα | 3 | 108.3 | 1.6 | 0.3247 | 5.4 | 3.8 | | | | * |
| | | | 9.2632 | Hα | 2 | 109.9 | 0.7 | 0.3149 | 2.9 | 3.6 | | | | |
| | | | 9.2632 | Hα | 2 | 110.3 | 0.8 | 0.3126 | 0.7 | 3.6 | | | | |
| 18130−3910 | I 1018 | HIP 89269 | 8.7723 | y | 2 | 327.5 | 1.5 | 1.1516 | 1.9 | 4.0 * | | | | |
| 18136−3158 | B 1353 | HIP 89330 | 8.5426 | y | 3 | 103.1 | 0.4 | 0.0882 | 1.8 | 1.4 : | | | | |
| | | | 9.2660 | y | 2 | 105.1 | 0.3 | 0.0946 | 0.3 | 1.1 | | | | |
| 18146+0011 | STF 2294 | HIP 89393 | 9.2661 | y | 2 | 93.0 | 0.1 | 1.3313 | 0.2 | 0.3 * | −0.2 | 0.129 | Luy1934a | |
| 18146−3654 | B 935 | HIP 89399 | 8.5426 | y | 2 | 172.1 | 2.2 | 0.1206 | 0.8 | 1.4 : | | | | |
| 18150−5018 | I 429 | HD 166839 | 8.5426 | y | 2 | 147.9 | 0.5 | 0.0756 | 1.0 | 1.3 : | | | | |
| | | | 9.2632 | y | 2 | 148.7 | 0.2 | 0.0708 | 0.2 | 0.0 | | | | |
| 18151−5751 | HJ 5029 | HIP 89430 | 8.7724 | Hα | 2 | 82.3 | 0.8 | 1.9168 | 0.3 | 1.4 : | | | | * |
| | | | 9.2632 | y | 2 | 82.1 | 0.7 | 1.9084 | 0.1 | 0.4 * | | | | |
| 18152−2044 | TOK 59 | HIP 89439 | 8.6055 | y | 2 | 76.4 | 1.5 | 1.2709 | 1.4 | 5.2 * | | | | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.6055 | Hα | 4 | 76.3 | 2.6 | 1.2728 | 2.5 | 5.4 | * | | | | |
| 18164−4028 | I 1020 | HIP 89552 | 8.5426 | y | 2 | 275.3 | 0.3 | 0.4408 | 0.3 | 1.1 | : | | | | |
| 18168−2500 | BU 285 AB | HD 167574 | 8.5397 | V | 2 | 313.6 | 1.8 | 1.5879 | 1.8 | 2.4 | : | | | | * |
| 18171−4336 | HDS 2583 | HIP 89599 | 8.5426 | y | 2 | 127.8 | 1.2 | 0.0570 | 2.6 | 1.7 | : | | | | |
| | | | 9.2660 | y | 2 | 124.5 | 1.3 | 0.0543 | 1.5 | 0.6 | | | | | |
| 18176−2752 | B 386 | HD 167702 | 8.5426 | y | 2 | 306.7 | 0.9 | 0.7087 | 0.8 | 1.5 | : | | | | |
| 18177−1940 | BU 246 A,Ba | HIP 89647 | 8.5425 | y | 2 | 117.1 | 1.5 | 0.5070 | 0.2 | 1.9 | : | | | | * |
| | | | 8.6054 | y | 2 | 116.5 | 0.6 | 0.5126 | 2.9 | 0.7 | | | | | |
| | | | 8.6054 | Hα | 2 | 116.3 | 2.7 | 0.5097 | 1.5 | 0.6 | | | | | |
| 18177−1940 | WSI 89 Ba,Bb | HIP 89647 | 8.5425 | y | 2 | 5.3 | 0.1 | 0.0550 | 5.6 | 0.8 | : | | | | * |
| | | | 8.6054 | y | 2 | 0.7 | 0.4 | 0.0590 | 1.1 | 1.0 | | | | | |
| | | | 8.6054 | Hα | 2 | 8.7 | 0.7 | 0.0541 | 3.3 | 1.0 | | | | | |
| 18187−1837 | BU 639 AB | HD 168021 | 8.5425 | y | 2 | 139.6 | 0.4 | 0.4967 | 0.4 | 2.0 | : | | | | * |
| 18190−4759 | B 936 | HIP 89752 | 8.7723 | y | 2 | 0.1 | 0.5 | 0.1441 | 0.7 | 1.2 | | | | | |
| | | | 8.7723 | Hα | 1 | 0.1 | 0.4 | 0.1449 | 0.4 | 0.8 | : | | | | |
| | | | 9.2660 | y | 2 | 357.2 | 0.6 | 0.1626 | 0.1 | 0.6 | | | | | |
| 18191−3509 | OL 18 | HIP 89766 | 8.7723 | y | 2 | 292.8 | 0.3 | 0.7559 | 0.7 | 1.3 | * | | | | |
| | | | 9.2660 | y | 2 | 292.9 | 0.3 | 0.7670 | 0.1 | 0.8 | | | | | |
| 18197+1016 | HU 197 | HIP 89806 | 9.2661 | y | 2 | 67.0 | 0.5 | 0.4998 | 0.4 | 1.5 | | 1.4 | 0.042 | Hei1995 | |
| 18236−2610 | HO 566 | HIP 90128 | 8.6053 | y | 3 | 144.8 | 0.1 | 0.5427 | 0.4 | 1.1 | | 3.8 | 0.088 | Msn2001c | |
| | | | 8.6054 | Hα | 2 | 144.8 | 0.3 | 0.5441 | 0.2 | 1.0 | | 3.8 | 0.090 | Msn2001c | |
| 18237+2146 | TOK 60 Aa,Ab | HIP 90139 | 9.2607 | Hα | 2 | 280.1 | 0.4 | 0.0420 | 0.3 | 1.6 | | | | | * |
| 18238−1930 | LEO 16 | HIP 90153 | 9.2634 | y | 2 | 80.9 | 0.2 | 1.1827 | 0.2 | 0.1 | * | | | | |
| | | | 9.2634 | y | 2 | 80.9 | 0.5 | 1.1825 | 0.4 | 0.1 | * | | | | |
| 18250−0135 | AC 11 | HIP 90253 | 9.2661 | y | 3 | 354.8 | 0.3 | 0.9063 | 0.2 | 0.9 | | 0.1 | 0.071 | Hei1995 | |
| | | | 9.2661 | Hα | 1 | 354.8 | 0.1 | 0.9086 | 0.1 | 0.9 | | 0.1 | 0.073 | Hei1995 | |
| 18261+0047 | BU 1203 | HIP 90347 | 9.2661 | y | 3 | 154.3 | 0.1 | 0.4911 | 0.1 | 0.8 | | −0.9 | 0.013 | Pop1996b | |
| 18272+0012 | STF 2316 Aa,Ab | HIP 90441 | 9.2607 | Hα | 2 | 271.2 | 2.1 | 0.0410 | 1.9 | 1.9 | | | | | |
| 18280+0612 | CHR 71 | HIP 90497 | 8.7721 | Hα | 2 | 280.8 | 0.1 | 0.0763 | 0.2 | 0.2 | | 8.5 | 0.003 | Msn2001a | |
| | | | 9.2661 | Hα | 2 | 274.2 | 0.6 | 0.0675 | 0.5 | 0.0 | | 8.4 | −0.004 | Msn2001a | |
| 18282−5230 | B 1362 | HIP 90519 | 8.5426 | y | 2 | 238.4 | 0.7 | 0.1112 | 0.7 | 1.6 | : | | | | |
| 18289−2503 | H N 125 | HIP 90574 | 9.2634 | y | 2 | 105.7 | 0.1 | 2.5349 | 0.1 | 0.1 | * | | | | |
| 18303−2533 | B 394 | HD 170398 | 8.5426 | y | 2 | 197.1 | 0.8 | 0.1792 | 1.0 | 1.7 | : | | | | |
| 18305−2848 | HDS 2624 | HIP 90715 | 8.5426 | y | 2 | 183.1 | 1.0 | 0.0465 | 1.0 | 1.4 | : | | | | |
| | | | 9.2634 | y | 3 | 160.6 | 0.8 | 0.0412 | 0.4 | 0.1 | | | | | |
| 18319−5934 | I 633 | HIP 90841 | 8.5426 | y | 2 | 334.0 | 0.8 | 0.5210 | 0.8 | 1.6 | : | | | | |
| 18323−1439 | CHR 73 | HIP 90884 | 8.7722 | Hα | 2 | 22.8 | 0.2 | 0.0522 | 0.6 | 1.4 | | −39.0 | −0.001 | Ole2005d | * |
| | | | 9.2660 | y | 1 | 357.5 | 0.1 | 0.0399 | 0.1 | 1.8 | | −41.4 | −0.014 | Ole2005d | |
| | | | 9.2660 | Hα | 2 | 358.5 | 0.4 | 0.0433 | 2.9 | 1.8 | | −40.4 | −0.011 | Ole2005d | |
| 18331−1042 | HDS 2632 | HIP 90943 | 9.2634 | y | 2 | 12.9 | 0.9 | 0.5139 | 3.2 | 4.0 | : | | | | * |
| 18338+1744 | HU 322 AB | HIP 90996 | 9.2607 | y | 2 | 91.3 | 0.7 | 0.0561 | 0.3 | 0.5 | | | | | * |
| | | | 9.2607 | Hα | 2 | 91.3 | 0.3 | 0.0570 | 0.4 | 0.0 | | | | | |
| | | | 9.2607 | y | 2 | 81.0 | 0.3 | 0.0481 | 6.2 | 1.7 | | | | | |
| 18338+1744 | STF 2339 AC | HIP 90996 | 9.2607 | y | 2 | 276.4 | 0.3 | 1.6218 | 0.0 | 3.5 | | | | | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | [O−C]$_\theta$ (deg) | [O−C]$_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18338+1744 | WAK 21 CD | HIP 90996 | 9.2607 | y | 2 | 261.2 | 0.4 | 0.4651 | 0.4 | 1.2 | | | | | * |
| 18359+1659 | STT 358 AB | HIP 91159 | 9.2607 | H$\alpha$ | 2 | 150.7 | 0.7 | 1.6772 | 0.6 | 0.1 | * | 1.1 | 0.137 | Hei1995 | * |
| 18368−2617 | RST 3187 | HIP 91253 | 8.5427 | y | 2 | 224.5 | 0.3 | 0.2227 | 0.3 | 1.0 | : | | | | |
| | | | 9.2634 | y | 2 | 226.9 | 0.0 | 0.2141 | 0.1 | 0.6 | | | | | |
| 18378−5324 | FIN 268 | HD 171437 | 8.5481 | y | 2 | 224.6 | 0.4 | 0.2535 | 0.8 | 1.5 | : | | | | |
| 18384+0850 | HU 198 | HIP 91389 | 9.2661 | y | 2 | 128.4 | 0.3 | 0.5122 | 0.2 | 0.8 | | −1.6 | 0.053 | Nov2006 | |
| 18384−0312 | A 88 AB | HIP 91394 | 8.5372 | y | 2 | 15.9 | 0.1 | 0.1073 | 0.1 | 0.4 | | 0.7 | −0.001 | Hrt1989 | * |
| | | | 8.5427 | y | 4 | 15.5 | 0.3 | 0.1075 | 0.2 | 0.5 | | 0.4 | −0.001 | Hrt1989 | |
| | | | 8.5480 | y | 2 | 15.7 | 0.1 | 0.1080 | 0.2 | 0.2 | | 0.7 | −0.001 | Hrt1989 | |
| | | | 8.5480 | H$\alpha$ | 1 | 15.6 | 0.1 | 0.1073 | 0.1 | 0.3 | | 0.7 | −0.002 | Hrt1989 | |
| 18389−2103 | WSI 90 | HIP 91438 | 8.5372 | y | 2 | 241.9 | 11.7 | 0.0481 | 3.3 | 2.5 | | | | | * |
| | | | 8.5425 | y | 1 | 262.4 | 0.4 | 0.0366 | 0.4 | 2.2 | : | | | | |
| | | | 8.5425 | H$\alpha$ | 1 | 256.9 | 0.4 | 0.0463 | 0.4 | 2.1 | | | | | |
| | | | 9.2634 | y | 2 | 137.7 | 0.4 | 0.0376 | 0.1 | 2.4 | | | | | |
| | | | 9.2634 | H$\alpha$ | 1 | 151.5 | 0.1 | 0.0411 | 0.1 | 2.0 | | | | | |
| 18429−3917 | I 1379 | HIP 91777 | 8.5427 | y | 2 | 143.6 | 0.3 | 0.1252 | 0.6 | 0.9 | : | | | | |
| 18434−5546 | B 398 AB | HIP 91837 | 8.5426 | y | 3 | 103.8 | 1.0 | 0.0714 | 1.3 | 2.1 | : | −29.6 | −0.084 | Hei1978c | * |
| | | | 8.7723 | H$\alpha$ | 3 | 99.8 | 0.8 | 0.0726 | 0.5 | 0.9 | : | −32.2 | −0.077 | Hei1978c | |
| | | | 9.2632 | y | 2 | 84.3 | 0.8 | 0.0642 | 0.6 | 1.2 | | −44.2 | −0.072 | Hei1978c | |
| 18439−0013 | A 859 | HIP 91886 | 8.5427 | y | 4 | 11.5 | 0.9 | 0.2459 | 1.1 | 1.5 | : | | | | |
| 18440−2237 | RST 5453 | HD 172966 | 8.5481 | y | 2 | 207.9 | 0.4 | 0.3119 | 0.2 | 0.9 | : | | | | |
| 18447−2548 | SEE 358 | HIP 91967 | 9.2634 | y | 2 | 65.2 | 0.3 | 1.2640 | 0.9 | 0.5 | * | | | | |
| 18448−3323 | OL 20 | HIP 91978 | 8.5427 | y | 3 | 285.0 | 0.5 | 0.1377 | 0.6 | 1.3 | : | | | | |
| 18450−5122 | RST 5452 | HD 172841 | 8.5426 | y | 2 | 259.2 | 1.6 | 0.1228 | 6.0 | 2.4 | : | | | | |
| 18455+0530 | FIN 332 Aa,Ab | HIP 92027 | 8.5371 | y | 2 | 313.4 | 0.4 | 0.1666 | 0.5 | 0.5 | | 0.5 | 0.001 | Msn2003 | * |
| | | | 8.5371 | y | 2 | 315.4 | 0.9 | 0.1691 | 0.4 | 1.3 | | 2.4 | 0.004 | Msn2003 | |
| | | | 8.7721 | H$\alpha$ | 2 | 314.8 | 4.0 | 0.1586 | 1.8 | 1.3 | : | −34.2 | 0.105 | Msn2003 | |
| | | | 9.2607 | y | 2 | 313.1 | 0.1 | 0.1652 | 0.2 | 0.5 | | 0.6 | 0.002 | Msn2003 | |
| | | | 9.2607 | y | 2 | 311.5 | 0.4 | 0.1594 | 0.3 | 1.3 | | −0.9 | −0.004 | Msn2003 | |
| 18455+0530 | FIN 332 Ba,Bb | HIP 92027 | 8.5371 | y | 2 | 41.8 | 2.4 | 0.0325 | 0.7 | 0.5 | | 50.7 | −0.017 | Msn2003 | * |
| 18455+0530 | STF 2375 Aa,Ba | HIP 92027 | 8.5371 | y | 2 | 119.0 | 3.2 | 2.5048 | 9.6 | 2.3 | | | | | * |
| | | | 8.7721 | H$\alpha$ | 2 | 119.2 | 3.2 | 2.5183 | 3.5 | 1.3 | : | | | | |
| | | | 9.2607 | y | 2 | 119.2 | 3.0 | 2.5071 | 5.4 | 2.5 | | | | | |
| 18456−2651 | I 1382 | HD 173299 | 8.5481 | y | 2 | 19.7 | 0.2 | 0.3804 | 0.2 | 0.7 | : | | | | |
| 18463−2721 | B 405 | HIP 92104 | 8.5481 | y | 2 | 146.8 | 0.3 | 0.5276 | 0.1 | 0.8 | | −2.7 | −0.002 | Msn1999c | |
| 18465−0058 | MCA 53 Aa,Ab | HIP 92117 | 8.7722 | H$\alpha$ | 3 | 111.3 | 8.8 | 0.0414 | 3.0 | 2.4 | | | | | |
| | | | 9.2634 | H$\alpha$ | 2 | 100.8 | 8.5 | 0.0466 | 6.2 | 1.3 | | | | | |
| | | | 9.2634 | y | 2 | 107.1 | 7.9 | 0.0470 | 5.6 | 1.5 | | | | | |
| 18472−5103 | I 1383 | HD 173310 | 8.5481 | y | 2 | 246.5 | 1.1 | 0.6452 | 0.2 | 0.8 | : | | | | |
| 18480−1009 | HDS 2665 | HIP 92250 | 8.7722 | y | 2 | 57.5 | 1.5 | 0.5651 | 4.0 | 3.7 | | | | | |
| 18480−1814 | RST 3198 | HIP 92245 | 8.5427 | y | 2 | 154.0 | 0.2 | 0.4484 | 0.2 | 1.3 | : | | | | |
| 18512−0037 | A 860 | HD 174588 | 8.5482 | y | 3 | 259.6 | 0.8 | 0.1652 | 0.8 | 1.3 | : | | | | |
| 18516−6054 | RST 5126 | HIP 92547 | 8.5426 | y | 3 | 324.3 | 1.0 | 0.0725 | 3.2 | 1.9 | : | | | | |
| | | | 9.2632 | y | 2 | 333.8 | 0.1 | 0.0735 | 0.9 | 1.0 | | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18521−0700 | HDS 2676 | HIP 92601 | 8.5481 | y | 3 | 172.9 | 0.2 | 0.1982 | 0.3 | 1.3 | | | | |
| 18531−2745 | I 1031 | HD 174742 | 8.5427 | y | 2 | 336.6 | 0.7 | 0.3919 | 0.7 | 2.0 : | | | | |
| 18537−0533 | A 93 | HIP 92726 | 9.2661 | y | 3 | 152.9 | 0.4 | 1.0010 | 0.3 | 1.2 * | −3.7 | 0.112 | Hei1998 | * |
| 18541−0607 | RST 4606 | HD 175106 | 8.5482 | y | 3 | 86.2 | 0.8 | 0.3485 | 0.4 | 1.1 : | | | | |
| 18542−1338 | A 1891 | HIP 92763 | 8.5427 | y | 2 | 255.9 | 0.3 | 0.3735 | 0.3 | 1.0 : | | | | |
| 18563−3552 | B 955 | HD 175323 | 8.5481 | y | 2 | 102.3 | 0.2 | 0.3123 | 0.1 | 0.6 : | | | | |
| 18564−6149 | HJ 5069 AB | HIP 92964 | 8.5426 | y | 2 | 83.6 | 0.7 | 0.4438 | 0.7 | 1.6 : | | | | * |
| 18594−1250 | KUI 89 | HIP 93225 | 8.5427 | y | 2 | 138.4 | 0.1 | 0.2064 | 0.1 | 0.9 | 13.0 | 0.015 | Msn1999c | |
| | | | 8.5427 | Hα | 2 | 138.4 | 0.1 | 0.2063 | 0.1 | 1.0 | 12.9 | 0.015 | Msn1999c | |
| 19021−3917 | B 420 | HIP 93465 | 8.5481 | y | 2 | 110.2 | 0.3 | 0.4990 | 0.6 | 1.3 : | | | | |
| 19026−2953 | HDO 150 AB | HIP 93506 | 8.5372 | y | 2 | 27.9 | 0.0 | 0.2014 | 0.0 | 0.3 | −2.2 | −0.004 | Msn1999a | * |
| | | | 8.5427 | y | 2 | 27.7 | 0.0 | 0.2010 | 0.0 | 0.3 | −2.3 | −0.004 | Msn1999a | |
| | | | 8.5427 | Hα | 2 | 27.7 | 0.0 | 0.2008 | 0.1 | 0.0 | −2.2 | −0.004 | Msn1999a | |
| | | | 8.5454 | y | 2 | 27.6 | 0.1 | 0.2011 | 0.0 | 0.2 | −2.3 | −0.004 | Msn1999a | |
| | | | 8.5454 | Hα | 2 | 27.6 | 0.0 | 0.2009 | 0.1 | 0.1 | −2.3 | −0.004 | Msn1999a | |
| 19027−0043 | STF 2434 BC | HIP 93519 | 8.5482 | y | 3 | 278.8 | 0.8 | 0.6850 | 0.8 | 2.1 : | 16.4 | 0.175 | Alz1998a | * |
| 19029−5413 | I 1390 | HIP 93524 | 8.5481 | y | 2 | 254.3 | 0.2 | 0.0692 | 0.2 | 0.9 : | 77.6 | −0.106 | Sey2002 | * |
| | | | 9.2633 | y | 2 | 269.6 | 1.4 | 0.0527 | 1.2 | 0.2 | 89.7 | −0.124 | Sey2002 | |
| 19035−6845 | FIN 357 | HIP 93574 | 8.7724 | Hα | 2 | 125.6 | 0.1 | 0.1878 | 0.2 | 0.6 | 29.8 | 0.011 | Fin1969c | * |
| 19040−3804 | I 1391 | HIP 93625 | 8.5481 | y | 2 | 56.3 | 0.2 | 0.0892 | 0.2 | 0.9 : | −8.1 | −0.059 | Hei1973b | * |
| | | | 9.2633 | y | 2 | 66.3 | 0.1 | 0.1020 | 0.1 | 0.6 | −4.4 | −0.056 | Hei1973b | |
| 19043−2132 | H N 126 | HIP 93661 | 9.2633 | y | 2 | 187.9 | 0.3 | 1.2642 | 0.3 | 0.2 * | −0.5 | 0.022 | Hei1998 | |
| 19064−3704 | HJ 5084 | HIP 93825 | 8.5400 | y | 3 | 18.7 | 0.1 | 1.3398 | 1.2 | 0.1 * | −0.9 | 0.008 | Hei1986b | |
| | | | 8.7694 | y | 2 | 17.5 | 0.1 | 1.3378 | 0.5 | 0.1 * | −1.0 | 0.004 | Hei1986b | |
| | | | 9.2633 | y | 3 | 15.2 | 0.1 | 1.3401 | 2.1 | 0.1 * | −0.9 | 0.003 | Hei1986b | |
| 19069−1009 | RST 4616 | HD 177882 | 8.5481 | y | 3 | 84.2 | 0.4 | 0.3800 | 0.4 | 1.1 : | | | | |
| 19070+1104 | HEI 568 | HIP 93867 | 8.5373 | y | 2 | 271.5 | 0.1 | 0.3092 | 0.2 | 1.0 | | | | * |
| | | | 8.5373 | Hα | 2 | 271.6 | 0.1 | 0.3090 | 0.1 | 1.1 | | | | |
| 19082−0520 | RST 4618 | HIP 93991 | 8.5427 | y | 4 | 91.7 | 0.5 | 0.1402 | 1.2 | 1.3 : | | | | |
| 19105−5813 | B 2468 | HIP 94181 | 9.2632 | y | 2 | 286.3 | 0.5 | 0.1827 | 0.4 | 1.8 : | | | | |
| 19110−0726 | A 95 | HIP 94241 | 8.5427 | y | 2 | 36.5 | 0.3 | 0.2591 | 0.3 | 0.9 | −2.8 | 0.013 | Hei1996c | |
| 19118−5319 | FIN 68 | HIP 94310 | 9.2633 | y | 2 | 220.2 | 0.7 | 0.4653 | 0.3 | 1.6 * | | | | |
| 19120−1035 | RST 4621 AB | HD 179194 | 8.5481 | y | 3 | 169.3 | 0.6 | 0.9220 | 0.5 | 2.3 | | | | * |
| 19124−3304 | OL 22 | HIP 94367 | 8.5481 | y | 2 | 46.7 | 0.1 | 0.5311 | 0.2 | 0.4 | 1.0 | −0.028 | Sey2000b | |
| | | | 8.7695 | y | 2 | 46.9 | 0.1 | 0.5315 | 0.1 | 0.4 | 1.1 | −0.029 | Sey2000b | |
| 19136−1021 | RST 5547 | HIP 94464 | 8.5481 | y | 3 | 156.7 | 0.3 | 0.5039 | 0.7 | 2.2 | | | | |
| 19148−5800 | B 1891 | HIP 94570 | 9.2633 | y | 2 | 301.4 | 0.9 | 0.8713 | 0.4 | 2.3 * | | | | |
| 19155−2515 | B 430 | HIP 94643 | 8.5400 | y | 2 | 109.8 | 0.0 | 0.1535 | 0.1 | 0.2 | −1.8 | 0.013 | Hrt2001b | * |
| | | | 8.5400 | Hα | 2 | 109.9 | 0.0 | 0.1534 | 0.1 | 0.8 | −1.7 | 0.013 | Hrt2001b | |
| | | | 8.7695 | y | 2 | 110.2 | 0.1 | 0.1479 | 0.1 | 0.3 | −2.0 | 0.014 | Hrt2001b | |
| 19155−3212 | B 1380 | HD 179860 | 8.5454 | y | 2 | 290.4 | 0.1 | 0.2102 | 0.2 | 0.4 | | | | |
| | | | 8.5454 | Hα | 2 | 290.3 | 0.2 | 0.2096 | 0.2 | 0.6 : | | | | |
| 19172−6640 | GLE 3 | HIP 94789 | 8.7724 | Hα | 2 | 339.7 | 0.1 | 0.5197 | 0.1 | 0.8 | −1.9 | 0.004 | Doc2007d | |
| 19190−3317 | I 253 | HIP 94926 | 8.7695 | y | 2 | 144.7 | 0.0 | 0.2670 | 0.1 | 0.2 | −1.3 | 0.096 | [B__1954 | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19200−1435 | RST 4037 | HD 181191 | 8.5400 | y | 2 | 225.5 | 1.7 | 0.2042 | 0.5 | 1.6 : | | | | |
| 19205−5939 | B 968 | HIP 95065 | 8.5455 | y | 2 | 263.9 | 0.4 | 0.6537 | 1.0 | 1.0 : | | | | |
| 19206−3959 | HDS 2736 | HIP 95072 | 8.5454 | y | 2 | 224.3 | 0.1 | 0.3174 | 0.1 | 1.1 | | | | |
| | | | 8.5454 | Hα | 2 | 224.2 | 0.7 | 0.3171 | 0.2 | 1.3 : | | | | |
| 19222−0735 | A 102 AB | HD 181782 | 8.5482 | y | 3 | 64.7 | 0.2 | 0.1642 | 0.2 | 0.6 | | | | * |
| 19229−4141 | B 1383 | HD 181621 | 8.5455 | y | 2 | 236.0 | 0.7 | 0.2943 | 0.3 | 1.4 : | | | | |
| 19244−4302 | TDT 1433 | HD 181978 | 8.5455 | y | 2 | 2.6 | 0.1 | 0.3595 | 0.5 | 0.7 : | | | | |
| 19247−5323 | FIN 271 | HD 181792 | 8.5455 | y | 2 | 119.2 | 0.5 | 0.3967 | 0.3 | 1.0 : | | | | |
| 19253−2431 | FIN 327 | HIP 95477 | 8.5372 | y | 2 | 81.8 | 0.3 | 0.0883 | 0.2 | 0.6 | 0.8 | −0.003 | Msn1999c | |
| | | | 8.5400 | y | 2 | 81.4 | 0.1 | 0.0889 | 0.2 | 0.6 | 0.5 | −0.002 | Msn1999c | |
| | | | 8.5400 | Hα | 2 | 81.6 | 0.7 | 0.0879 | 0.1 | 0.5 | 0.6 | −0.003 | Msn1999c | |
| | | | 8.7667 | y | 2 | 81.1 | 0.1 | 0.0959 | 0.1 | 0.6 | 0.8 | −0.004 | Msn1999c | |
| | | | 8.7667 | Hα | 2 | 81.2 | 0.1 | 0.0959 | 0.1 | 0.5 | 0.9 | −0.004 | Msn1999c | |
| 19258−3006 | I 1401 A,Ba | HD 182433 | 8.5400 | y | 2 | 108.5 | 2.7 | 0.6130 | 1.0 | 0.8 | | | | * |
| | | | 8.6055 | y | 2 | 108.5 | 0.3 | 0.6186 | 0.1 | 0.8 : | | | | |
| | | | 8.6055 | Hα | 2 | 108.5 | 0.0 | 0.6190 | 5.5 | 1.1 : | | | | |
| | | | 8.7695 | y | 2 | 108.3 | 3.3 | 0.6190 | 1.0 | 0.8 | | | | |
| | | | 9.2633 | y | 3 | 108.5 | 1.1 | 0.6151 | 2.9 | 0.8 | | | | |
| 19258−3006 | WSI 91 Ba,Bb | HD 182433B | 8.5400 | y | 2 | 104.8 | 6.0 | 0.0443 | 1.3 | 0.9 | | | | * |
| | | | 8.6055 | y | 2 | 92.0 | 3.0 | 0.0441 | 2.7 | 0.9 : | | | | |
| | | | 8.6055 | Hα | 2 | 88.2 | 6.7 | 0.0463 | 5.6 | 0.8 : | | | | |
| | | | 8.7695 | y | 2 | 95.1 | 3.4 | 0.0459 | 0.1 | 1.0 | | | | |
| | | | 9.2633 | y | 3 | 90.1 | 2.0 | 0.0455 | 3.3 | 0.7 | | | | |
| 19282−1209 | SCJ 22 | HIP 95722 | 8.5482 | y | 3 | 275.9 | 0.1 | 0.9399 | 0.1 | 0.3 * | −2.5 | 0.019 | Doc2004e | |
| | | | 9.2661 | y | 2 | 277.1 | 0.1 | 0.9537 | 0.4 | 0.4 * | −2.7 | 0.017 | Doc2004e | |
| 19294−0703 | KUI 91 Aa,B | HIP 95820 | 8.5482 | y | 3 | 224.4 | 4.2 | 1.5763 | 4.3 | 6.4 * | | | | * |
| | | | 9.2661 | y | 2 | 224.3 | 1.8 | 1.5748 | 1.7 | 6.0 * | | | | |
| | | | 9.2661 | Hα | 2 | 224.1 | 2.1 | 1.5816 | 3.6 | 6.8 | | | | |
| 19294−4057 | B 1385 | HD 183023 | 8.5454 | y | 2 | 272.4 | 0.2 | 0.1643 | 0.1 | 1.3 | | | | |
| 19296−1239 | HU 75 | HIP 95847 | 9.2661 | y | 2 | 60.8 | 0.1 | 0.1574 | 0.1 | 1.1 | −34.4 | 0.034 | Sca2003d | * |
| 19305−3149 | B 972 | HD 183353 | 8.5400 | y | 3 | 303.7 | 1.3 | 0.0444 | 0.2 | 0.5 : | | | | |
| | | | 9.2633 | y | 3 | 289.0 | 0.5 | 0.0407 | 0.6 | 0.2 | | | | |
| 19305−4826 | I 254 | HIP 95925 | 8.5455 | y | 2 | 27.9 | 0.1 | 0.6039 | 0.1 | 0.5 | | | | |
| | | | 8.5455 | Hα | 2 | 27.9 | 0.2 | 0.6036 | 0.4 | 0.6 | | | | |
| 19320−1649 | HLD 152 AB | HD 183820 | 8.5400 | y | 2 | 268.7 | 0.2 | 0.3662 | 0.2 | 1.1 : | | | | * |
| 19358−4509 | B 977 | HD 184288 | 8.5455 | y | 2 | 49.2 | 0.3 | 0.6327 | 0.4 | 1.5 : | | | | |
| 19360−3648 | I 651 | HIP 96398 | 8.5454 | y | 2 | 142.7 | 0.1 | 0.8258 | 0.3 | 0.9 | | | | |
| | | | 8.5454 | Hα | 2 | 142.7 | 0.2 | 0.8251 | 0.2 | 1.0 : | | | | |
| 19377−4128 | VOU 34 | HIP 96545 | 8.5455 | y | 2 | 146.8 | 0.1 | 0.0779 | 0.1 | 0.4 | | | | |
| | | | 9.2633 | y | 2 | 144.4 | 0.1 | 0.0923 | 0.1 | 0.5 | | | | |
| 19398−2326 | SEE 389 | HIP 96729 | 8.5400 | y | 2 | 322.1 | 0.0 | 0.1163 | 0.1 | 0.7 | −23.5 | 0.057 | Doc1994a | * |
| | | | 8.5400 | Hα | 2 | 322.0 | 0.1 | 0.1162 | 0.1 | 0.8 | −23.6 | 0.057 | Doc1994a | |
| | | | 8.7667 | y | 2 | 321.5 | 0.1 | 0.1109 | 0.2 | 0.8 | −22.6 | 0.047 | Doc1994a | |
| | | | 8.7667 | Hα | 2 | 321.4 | 0.2 | 0.1103 | 0.2 | 0.7 | −22.8 | 0.046 | Doc1994a | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | [O−C]$_\theta$ (deg) | [O−C]$_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19401−3137 | FIN 13 | HIP 96750 | 8.5400 | y | 2 | 80.2 | 0.4 | 0.6473 | 0.5 | 1.4 : | | | | |
| 19407−0037 | CHR 88 Aa,Ab | HIP 96807 | 9.2661 | Hα | 2 | 346.4 | 0.2 | 0.0859 | 0.6 | 1.7 | −23.5 | −0.000 | Hrt2000a | * |
| 19426−5901 | I 119 | HIP 96955 | 8.7724 | Hα | 2 | 149.8 | 0.2 | 2.3660 | 0.1 | 0.9 * | | | | |
| | | | 9.2632 | y | 2 | 149.7 | 0.6 | 2.3702 | 0.4 | 1.1 * | | | | |
| 19437−5645 | RST 4046 | HD 185748 | 8.5455 | y | 2 | 253.5 | 0.4 | 0.2993 | 0.3 | 1.0 : | | | | |
| 19445−3751 | HDS 2801 | HIP 97133 | 8.5454 | y | 2 | 143.1 | 0.2 | 0.1753 | 0.2 | 1.5 | | | | |
| 19448−5210 | HU 1608 | HD 186045 | 8.5455 | y | 2 | 41.0 | 0.3 | 0.3069 | 0.6 | 1.0 : | | | | |
| 19471−0809 | A 108 | HIP 97350 | 8.5482 | y | 3 | 101.3 | 0.2 | 0.3059 | 0.5 | 0.9 | −3.9 | 0.002 | Doc1995c | |
| 19471−1953 | BU 146 | HIP 97348 | 8.5400 | y | 2 | 233.8 | 0.2 | 0.5564 | 0.2 | 1.3 : | 67.8 | 0.027 | Sey2002 | * |
| | | | 8.7667 | y | 2 | 234.2 | 0.3 | 0.5549 | 0.2 | 1.2 | 67.7 | 0.022 | Sey2002 | |
| | | | 9.2633 | y | 2 | 235.1 | 0.1 | 0.5539 | 0.2 | 1.3 | 67.8 | 0.014 | Sey2002 | |
| 19474−0148 | A 2993 | HIP 97367 | 9.2661 | y | 2 | 295.5 | 0.1 | 0.1416 | 0.4 | 0.6 | 42.4 | 0.025 | Hei1991 | * |
| 19491−6149 | I 120 AB | HIP 97508 | 9.2632 | y | 2 | 189.1 | 0.1 | 0.3159 | 0.2 | 0.4 | −3.3 | −0.033 | Hei1996c | * |
| 19496−5525 | I 658 | HIP 97548 | 9.2633 | y | 3 | 135.4 | 1.8 | 1.1679 | 1.6 | 1.0 * | −5.8 | −0.041 | Hei1973c | |
| 19498−6454 | HJ 5140 | HIP 97564 | 8.7724 | Hα | 2 | 252.5 | 0.2 | 1.3062 | 0.1 | 0.2 * | | | | * |
| | | | 9.2632 | Hα | 2 | 252.4 | 0.4 | 1.3027 | 1.8 | 0.1 * | | | | |
| 19520−1021 | BU 148 AB | HIP 97766 | 8.5482 | y | 3 | 228.9 | 0.2 | 0.6394 | 0.1 | 0.7 | 2.3 | 0.042 | Lin2004b | * |
| 19531−1436 | CHR 90 | HIP 97849 | 9.2662 | y | 2 | 204.2 | 0.2 | 0.2475 | 0.3 | 2.5 | −40.8 | −0.017 | Cve2006c | * |
| 19531−2528 | B 454 | HIP 97851 | 8.5400 | y | 2 | 318.4 | 0.1 | 0.0561 | 0.3 | 0.0 | −13.9 | −0.092 | Csa1983c | * |
| | | | 8.5400 | Hα | 2 | 317.8 | 0.5 | 0.0573 | 0.1 | 0.0 | −14.6 | −0.091 | Csa1983c | |
| | | | 8.7667 | y | 2 | 321.6 | 0.1 | 0.0694 | 0.4 | 0.4 | −11.1 | −0.085 | Csa1983c | |
| | | | 9.2633 | y | 3 | 324.0 | 0.1 | 0.0762 | 0.1 | 0.4 | −9.2 | −0.092 | Csa1983c | |
| 19534−3016 | I 1406 AB | HD 187887 | 8.5483 | y | 3 | 202.9 | 1.0 | 0.4216 | 0.6 | 1.3 : | | | | * |
| 19550−3612 | HDS 2838 | HIP 98008 | 8.5428 | y | 4 | 268.9 | 0.5 | 0.1562 | 0.5 | 1.8 : | | | | |
| 19553−0644 | STF 2597 AB | HIP 98038 | 8.5429 | y | 2 | 101.0 | 0.3 | 0.5719 | 0.5 | 1.4 | −0.5 | −0.008 | Hrt1996a | * |
| 19573+0513 | A 604 | HIP 98203 | 8.7667 | y | 3 | 19.5 | 0.9 | 0.1086 | 0.6 | 0.8 : | 24.8 | 0.024 | Hei1991 | * |
| 19574−4100 | I 1408 | HD 188533 | 8.5483 | y | 3 | 94.2 | 0.5 | 0.4484 | 0.7 | 1.7 : | | | | |
| 19580+0456 | A 606 | HIP 98272 | 8.7668 | y | 2 | 336.5 | 0.2 | 0.5768 | 0.9 | 0.8 | −1.2 | 0.116 | Zae1982 | |
| 19581−4808 | HDS 2842 | HIP 98274 | 8.7724 | Hα | 2 | 162.8 | 1.0 | 0.1008 | 4.4 | 1.9 : | | | | |
| | | | 9.2633 | y | 2 | 168.4 | 0.5 | 0.1000 | 0.7 | 2.7 | | | | |
| 19598−0957 | HO 276 | HIP 98416 | 8.5372 | y | 2 | 80.8 | 0.1 | 0.1993 | 0.1 | 1.5 | 3.6 | 0.004 | Pbx2000b | * |
| | | | 8.7724 | Hα | 2 | 87.8 | 0.2 | 0.2139 | 0.1 | 1.4 | −0.5 | 0.010 | Hrt1996a | |
| | | | 9.2662 | y | 2 | 100.3 | 0.1 | 0.2319 | 0.1 | 1.6 | 2.3 | 0.000 | Pbx2000b | |
| 20012−3835 | HDO 294 | HIP 98556 | 8.7726 | y | 2 | 29.6 | 0.2 | 1.1936 | 0.1 | 1.5 | −3.8 | −0.075 | Dom1978 | |
| 20014−5601 | B 460 | HD 189143 | 8.5482 | y | 3 | 57.3 | 0.6 | 0.5017 | 0.6 | 1.6 : | | | | |
| 20022−4556 | HDS 2854 | HIP 98648 | 8.5483 | y | 3 | 327.0 | 0.2 | 0.1326 | 0.3 | 1.3 | | | | |
| 20045−4457 | HDS 2862 | HIP 98859 | 8.5428 | y | 2 | 1.8 | 0.3 | 0.3664 | 0.3 | 1.1 : | | | | |
| 20057−3743 | HDS 2865 | HIP 98979 | 8.5428 | y | 4 | 350.1 | 0.6 | 0.1736 | 0.4 | 1.2 : | | | | |
| 20064−3829 | RST 2132 | HD 190442 | 8.5483 | y | 3 | 118.5 | 0.7 | 0.4234 | 0.9 | 1.1 : | | | | |
| 20067−2822 | SEE 405 | HIP 99057 | 8.5483 | y | 3 | 239.7 | 0.2 | 0.2699 | 0.2 | 1.0 : | | | | |
| 20073−5127 | RST 1059 | HIP 99114 | 8.5428 | y | 4 | 190.6 | 0.7 | 0.1214 | 0.4 | 1.2 : | | | | |
| 20111−5731 | HDO 295 | HIP 99453 | 8.5428 | y | 2 | 280.6 | 0.3 | 0.4216 | 0.3 | 1.4 : | | | | |
| 20113−5613 | I 1414 | HD 191154 | 8.5482 | y | 3 | 124.9 | 0.3 | 0.8261 | 0.3 | 1.0 : | | | | * |
| 20123−0806 | BU 1205 | HIP 99558 | 8.5428 | y | 4 | 211.8 | 0.5 | 0.2473 | 0.6 | 1.7 : | −51.1 | 0.079 | Hei1997 | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20138−3602 | I 299 | HIP 99694 | 8.5483 | y | 3 | 26.0 | 0.3 | 0.5640 | 0.3 | 1.1 : | | | | |
| 20139−5019 | HU 1613 | HIP 99703 | 8.5482 | y | 3 | 140.4 | 0.2 | 0.7378 | 0.3 | 0.8 | | | | |
| 20168−0329 | RST 4659 | HIP 99956 | 8.7724 | H$\alpha$ | 2 | 6.1 | 0.3 | 1.8164 | 0.3 | 1.9 * | | | | |
| 20169−3236 | STN 64 | HIP 99966 | 8.7695 | y | 2 | 295.5 | 0.1 | 1.7476 | 0.3 | 0.4 * | | | | |
| 20202−3435 | I 1416 | HIP 100266 | 8.5428 | y | 2 | 305.1 | 0.3 | 0.2629 | 0.3 | 1.4 : | 3.6 | 0.058 | B__1961d | |
| | | | 8.7695 | y | 2 | 304.6 | 0.1 | 0.2626 | 0.0 | 1.2 | 3.4 | 0.064 | B__1961d | |
| 20210−1447 | BAR 12 Ba,Bb | HIP 100325 | 8.7724 | H$\alpha$ | 2 | 64.0 | 0.3 | 0.5496 | 0.6 | 2.5 | | | | * |
| 20217−3637 | HDS 2908 | HIP 100417 | 8.5428 | y | 2 | 125.4 | 0.7 | 0.0363 | 0.6 | 1.2 : | | | | * |
| | | | 8.7695 | y | 2 | 146.4 | 0.1 | 0.0235 | 4.4 | 1.0 | | | | |
| | | | 8.7695 | H$\alpha$ | 2 | 151.2 | 3.7 | 0.0310 | 1.8 | 1.6 | | | | |
| 20239−4225 | BU 763 AB | HIP 100591 | 8.5428 | y | 2 | 317.0 | 0.1 | 0.1884 | 0.2 | 1.1 | −9.0 | −0.130 | Sey2002 | * |
| 20240−4231 | DON 984 | HD 193831 | 8.5483 | y | 3 | 257.8 | 0.8 | 0.9408 | 0.8 | 2.4 : | | | | |
| 20249−5556 | FIN 277 | HIP 100699 | 8.5428 | y | 4 | 88.7 | 0.5 | 0.1573 | 0.8 | 1.9 : | | | | |
| 20263−1505 | RST 4065 | HD 194471 | 8.5484 | y | 3 | 55.7 | 0.3 | 0.3415 | 0.2 | 0.9 : | | | | |
| 20267−4334 | I 1420 | HIP 100836 | 8.5483 | y | 3 | 345.7 | 0.2 | 0.4768 | 0.2 | 0.8 : | 1.3 | −0.039 | Zir2001 | |
| 20269−3724 | R 321 | HIP 100852 | 8.7726 | H$\alpha$ | 2 | 127.9 | 0.1 | 1.5415 | 0.1 | 1.8 * | 0.6 | 0.002 | Hei1988d | |
| 20275−4838 | I 663 | HIP 100901 | 8.5482 | y | 3 | 70.7 | 2.0 | 0.7694 | 0.6 | 1.8 : | | | | |
| 20291−4826 | I 1421 | HIP 101053 | 8.5482 | y | 3 | 341.0 | 0.6 | 0.3790 | 0.9 | 1.2 : | | | | |
| 20311−1503 | FIN 336 | HIP 101221 | 8.5428 | y | 2 | 122.5 | 0.1 | 0.1502 | 0.1 | 0.9 | −27.2 | 0.035 | Ole2003c | * |
| | | | 8.6056 | y | 2 | 122.8 | 0.1 | 0.1506 | 0.0 | 0.9 | −27.2 | 0.036 | Ole2003c | |
| | | | 8.6056 | H$\alpha$ | 2 | 122.8 | 0.2 | 0.1511 | 0.2 | 1.3 | −27.2 | 0.036 | Ole2003c | |
| 20312+0513 | AG 257 | HIP 101236 | 8.7723 | y | 2 | 72.7 | 1.5 | 1.7008 | 0.9 | 1.8 : | | | | * |
| 20322−4521 | RST 5470 AB | HIP 101319 | 8.5428 | y | 4 | 131.9 | 1.2 | 0.2385 | 0.9 | 1.7 : | | | | * |
| 20325−1637 | SEE 512 | HIP 101357 | 8.5428 | y | 4 | 137.3 | 0.3 | 0.1736 | 0.3 | 0.9 : | −20.2 | 0.066 | Sey1999a | * |
| | | | 8.6056 | y | 2 | 137.4 | 0.0 | 0.1755 | 0.1 | 0.3 | −19.8 | 0.067 | Sey1999a | |
| 20343−1542 | RST 5551 | HD 195839 | 8.5484 | y | 3 | 110.0 | 0.7 | 0.3329 | 1.3 | 1.4 : | | | | |
| 20347−6319 | HU 1615 | HIP 101543 | 8.7726 | H$\alpha$ | 2 | 86.1 | 0.2 | 0.1499 | 0.2 | 0.6 : | −39.2 | 0.025 | Sey2002 | * |
| 20393−1457 | HU 200 AB | HIP 101923 | 8.7668 | y | 2 | 117.8 | 0.0 | 0.3319 | 0.1 | 0.5 | −2.1 | 0.005 | Hei1998 | * |
| | | | 8.7668 | H$\alpha$ | 2 | 117.8 | 0.0 | 0.3323 | 0.1 | 0.4 | −2.1 | 0.006 | Hei1998 | |
| 20396+0458 | BAG 14 Aa,Ab | HIP 101955 | 8.5373 | y | 2 | 34.1 | 2.6 | 0.1415 | 1.3 | 1.8 | −1.6 | 0.011 | Mlg2007 | * |
| | | | 8.5373 | H$\alpha$ | 2 | 34.4 | 1.8 | 0.1368 | 9.0 | 1.6 : | −1.3 | 0.006 | Mlg2007 | |
| 20396+0458 | KUI 99 Aa,B | HIP 101955 | 8.5373 | y | 2 | 311.3 | 1.4 | 0.7289 | 2.3 | 1.7 | 4.1 | −0.036 | Sod1999 | * |
| | | | 8.5373 | H$\alpha$ | 2 | 311.1 | 2.5 | 0.7355 | 2.1 | 1.4 : | 3.8 | −0.030 | Sod1999 | |
| 20401−2852 | SEE 423 AB | HD 196718 | 8.5483 | y | 3 | 38.2 | 3.0 | 1.1572 | 2.6 | 1.9 : | | | | * |
| | | | 8.6055 | y | 2 | 38.4 | 0.0 | 1.1602 | 0.0 | 1.4 : | | | | |
| 20401−2852 | SEE 423 BC | | 8.5483 | y | 3 | 105.2 | 1.9 | 0.1993 | 2.3 | 0.2 : | | | | * |
| | | | 8.6055 | y | 2 | 105.2 | 3.8 | 0.2035 | 2.2 | 0.3 : | | | | |
| 20403−5114 | HU 1617 | HIP 102006 | 8.5401 | y | 2 | 270.2 | 0.2 | 0.1133 | 0.6 | 1.2 | | | | |
| 20432−2049 | CHR 222 | HD 197256 | 8.5456 | y | 2 | 122.5 | 0.5 | 0.1547 | 0.3 | 0.9 : | | | | |
| 20449+1219 | STF 2723 AB | HIP 102390 | 8.5373 | y | 2 | 135.5 | 0.7 | 1.0432 | 0.3 | 1.6 | | | | * |
| | | | 8.7722 | y | 2 | 135.5 | 0.4 | 1.0424 | 0.4 | 1.8 | | | | |
| | | | 8.7722 | H$\alpha$ | 2 | 135.5 | 0.6 | 1.0434 | 0.5 | 1.7 : | | | | |
| 20464−1653 | HU 271 | HD 197782 | 8.5456 | y | 2 | 99.8 | 0.5 | 0.3200 | 0.4 | 1.1 : | | | | |
| 20476−4534 | I 1427 | HIP 102604 | 8.5401 | y | 2 | 210.5 | 0.3 | 0.5899 | 0.2 | 0.8 : | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20486−1333 | RST 4069 | HD 198128 | 8.5456 | y | 2 | 178.9 | 0.2 | 0.2541 | 0.3 | 0.8 : | | | | |
| 20507−3116 | B 997 | HIP 102892 | 8.7726 | Hα | 2 | 180.4 | 0.4 | 0.1317 | 0.3 | 1.5 : | −9.5 | −0.022 | Hei1995 | |
| 20514−0538 | STF 2729 AB | HIP 102945 | 8.6056 | y | 2 | 24.7 | 0.2 | 0.8646 | 0.0 | 0.9 * | −1.0 | 0.075 | Hei1998 | * |
| | | | 8.7668 | y | 2 | 24.6 | 0.2 | 0.8612 | 0.0 | 1.2 | −1.2 | 0.074 | Hei1998 | |
| 20527−0859 | MCA 64 | HIP 103045 | 8.6055 | y | 2 | 135.9 | 0.2 | 0.0611 | 0.1 | 0.6 | | | | |
| | | | 8.6056 | Hα | 2 | 135.4 | 0.6 | 0.0615 | 0.1 | 0.5 | | | | |
| | | | 8.6056 | y | 2 | 136.5 | 0.0 | 0.0614 | 0.0 | 0.5 | | | | |
| | | | 8.6056 | Hα | 2 | 136.1 | 1.1 | 0.0633 | 0.3 | 0.5 | | | | |
| | | | 8.7668 | y | 2 | 137.4 | 0.1 | 0.0532 | 0.5 | 0.5 | | | | |
| | | | 8.7668 | Hα | 2 | 137.7 | 0.0 | 0.0547 | 0.3 | 0.5 | | | | |
| 20539−3658 | B 507 | HD 198775 | 8.5401 | y | 2 | 214.6 | 0.4 | 0.5185 | 0.4 | 1.3 : | | | | |
| 20539−5535 | B 505 | HIP 103140 | 8.5401 | y | 2 | 297.8 | 5.8 | 0.0320 | 2.7 | 1.7 | | | | |
| 20548−4636 | I 1429 | HIP 103230 | 8.5401 | y | 2 | 142.9 | 0.3 | 0.8742 | 0.2 | 1.1 | | | | |
| 20555−1147 | HU 81 | HD 199142 | 8.5456 | y | 2 | 54.8 | 0.2 | 0.2563 | 0.2 | 1.1 : | | | | |
| 20562−3146 | B 1001 | HD 199147 | 8.5401 | y | 2 | 223.0 | 0.2 | 0.2416 | 0.1 | 0.9 : | 82.1 | −0.041 | Sey2002 | * |
| 20564−5916 | I 129 AB | HIP 103361 | 8.7726 | y | 2 | 335.9 | 0.9 | 2.5902 | 0.3 | 1.8 * | | | | * |
| 20591+0418 | STF 2737 AB | HIP 103569 | 8.7723 | y | 2 | 284.2 | 0.1 | 0.5729 | 0.2 | 0.6 | 0.3 | 0.023 | Zel1965 | * |
| 20591−1313 | HU 83 | HIP 103574 | 8.5456 | y | 2 | 83.7 | 0.2 | 0.2562 | 0.3 | 0.5 | −8.5 | 0.025 | Hei1965c | |
| | | | 8.7668 | y | 2 | 84.1 | 0.5 | 0.2571 | 0.1 | 0.6 | −8.6 | 0.026 | Hei1965c | |
| 20597−5211 | I 669 | HIP 103620 | 8.5401 | y | 2 | 63.2 | 0.3 | 0.2813 | 0.2 | 0.7 | | | | |
| | | | 8.7696 | y | 2 | 63.0 | 0.1 | 0.2785 | 0.2 | 0.7 | | | | |
| 21031+0132 | STF 2744 AB | HIP 103892 | 8.7669 | y | 2 | 113.6 | 0.3 | 1.2760 | 0.1 | 0.6 * | 5.5 | 0.064 | Pop1969b | |
| 21032−2744 | SEE 435 | HIP 103902 | 8.5401 | y | 2 | 294.8 | 0.1 | 0.2950 | 0.1 | 1.5 | | | | |
| | | | 8.5401 | Hα | 2 | 294.9 | 0.2 | 0.2951 | 0.1 | 1.4 | | | | |
| 21038−2419 | SEE 436 | HIP 103957 | 8.5429 | y | 4 | 99.4 | 0.9 | 0.1819 | 0.9 | 1.4 : | | | | |
| 21041+0300 | WSI 6 | HIP 103987 | 8.5374 | y | 2 | 165.3 | 0.3 | 0.0724 | 4.0 | 2.2 | | | | * |
| | | | 8.5374 | Hα | 2 | 168.0 | 1.8 | 0.0836 | 0.9 | 2.0 | | | | |
| 21041−0549 | MCA 66 Aa,Ab | HIP 103981 | 8.7668 | y | 2 | 63.2 | 0.1 | 0.2604 | 0.1 | 2.4 | | | | * |
| | | | 8.7668 | Hα | 2 | 63.4 | 0.2 | 0.2608 | 0.2 | 3.0 | | | | |
| | | | 8.7668 | Hα | 2 | 63.8 | 0.0 | 0.2589 | 0.0 | 3.1 | | | | |
| 21041−0549 | STF 2745 AB | HIP 103981 | 8.7668 | Hα | 2 | 196.3 | 0.1 | 2.4529 | 0.1 | 3.5 | | | | * |
| 21042−5520 | RST 5552 AB | HD 200192 | 8.5401 | y | 2 | 318.6 | 0.3 | 0.7744 | 0.6 | 1.0 : | | | | * |
| 21044−1951 | FIN 328 | HIP 104019 | 8.6056 | y | 2 | 168.1 | 0.1 | 0.2876 | 0.1 | 2.3 | −4.0 | 0.010 | Msn1999a | |
| | | | 8.7724 | Hα | 2 | 166.3 | 0.2 | 0.2917 | 0.3 | 2.0 | −4.2 | 0.011 | Msn1999a | |
| 21047+0332 | SE 3 BC | HIP 104047 | 8.5374 | y | 2 | 124.7 | 0.5 | 0.5890 | 0.6 | 1.0 : | | | | * |
| | | | 8.7669 | y | 2 | 125.0 | 0.2 | 0.5925 | 0.2 | 0.7 | | | | |
| 21051+0757 | HDS 3004 | HIP 104075 | 8.7669 | y | 2 | 27.9 | 7.7 | 0.2256 | 1.2 | 4.0 | | | | |
| | | | 8.7669 | Hα | 3 | 29.5 | 1.8 | 0.2212 | 1.1 | 3.7 | | | | |
| 21058−5744 | HU 1625 | HIP 104129 | 8.5402 | y | 2 | 253.6 | 0.2 | 0.1706 | 0.3 | 1.0 : | | | | |
| 21070−1241 | RST 4693 | HD 200950 | 8.5456 | y | 2 | 51.4 | 0.3 | 0.3073 | 0.2 | 0.7 | | | | |
| 21073−5702 | HDS 3009 | HIP 104256 | 8.7696 | y | 3 | 255.0 | 0.5 | 0.1477 | 0.5 | 2.2 : | | | | |
| 21074−0814 | BU 368 AB | HIP 104272 | 8.5429 | y | 4 | 282.8 | 0.5 | 0.1190 | 0.5 | 1.1 : | 0.2 | 0.045 | Pal2005b | * |
| | | | 8.6057 | y | 2 | 283.0 | 0.3 | 0.1182 | 0.1 | 0.8 | 0.3 | 0.045 | Pal2005b | |
| | | | 8.6057 | Hα | 2 | 282.8 | 0.1 | 0.1184 | 0.1 | 0.7 | 0.1 | 0.045 | Pal2005b | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21080+0509 | STT 527 | HIP 104324 | 8.7723 | y | 2 | 114.9 | 0.2 | 0.3515 | 0.3 | 1.1 | | 4.0 | −0.011 | Pop1995d | |
| 21092−2447 | I 1435 | HD 201288 | 8.5456 | y | 2 | 45.3 | 0.6 | 0.4185 | 0.3 | 1.2 | : | | | | |
| 21094−7310 | I 379 AB | HIP 104440 | 8.7696 | y | 2 | 194.4 | 0.4 | 0.2900 | 1.4 | 3.2 | | | | | * |
| 21114−5220 | HU 1626 | HIP 104604 | 8.7696 | y | 2 | 118.0 | 0.1 | 1.1116 | 0.3 | 1.7 | * | −0.0 | 0.002 | Sey2002 | * |
| 21120−5916 | B 518 | HD 201428 | 8.5402 | y | 2 | 140.9 | 0.5 | 0.3114 | 1.0 | 1.2 | : | | | | |
| 21135+0713 | BU 270 AB | HIP 104767 | 8.7723 | y | 2 | 346.8 | 0.3 | 0.5662 | 0.2 | 1.7 | | −0.5 | −0.035 | Hei1979b | * |
| 21143−3835 | B 520 AB | HIP 104835 | 8.5401 | y | 2 | 252.3 | 0.1 | 0.8117 | 0.2 | 1.1 | | | | | * |
| 21143−5831 | B 519 | HIP 104836 | 8.5402 | y | 2 | 28.8 | 0.6 | 0.6380 | 0.3 | 1.1 | : | | | | |
| 21145+1000 | STT 535 AB | HIP 104858 | 8.7723 | H$\alpha$ | 2 | 5.9 | 0.1 | 0.1262 | 0.1 | 0.2 | | −0.1 | 0.005 | Hrt1996a | * |
| 21147−0050 | A 883 AB | HIP 104878 | 8.5429 | y | 4 | 308.9 | 0.5 | 0.1561 | 0.5 | 1.4 | : | −2.3 | −0.015 | Hei1998 | * |
| 21158−5316 | FIN 329 | HIP 104978 | 8.5401 | y | 2 | 64.6 | 0.0 | 0.1395 | 0.0 | 0.2 | | 32.1 | 0.052 | Hei1973b | * |
| | | | 8.5401 | H$\alpha$ | 2 | 64.6 | 0.1 | 0.1396 | 0.1 | 0.3 | | 32.1 | 0.052 | Hei1973b | |
| | | | 8.6057 | y | 2 | 64.3 | 0.0 | 0.1388 | 0.0 | 0.2 | | 33.2 | 0.052 | Hei1973b | |
| 21167−2249 | B 522 | HD 202469 | 8.5456 | y | 2 | 289.0 | 0.3 | 0.5565 | 0.8 | 1.6 | : | | | | |
| 21186+1134 | BU 163 AB | HIP 105200 | 8.7723 | y | 2 | 78.5 | 0.6 | 0.7878 | 0.6 | 2.0 | | −0.4 | 0.007 | Fek1997 | * |
| 21193−0935 | RST 4082 | HIP 105258 | 8.5429 | y | 4 | 250.1 | 0.8 | 0.1222 | 2.0 | 1.7 | : | | | | |
| 21198−2621 | BU 271 AB | HIP 105312 | 8.7725 | H$\alpha$ | 2 | 297.5 | 0.1 | 0.9243 | 0.1 | 2.6 | | 6.7 | −0.475 | Jas1997 | * |
| 21200−2718 | BU 252 | HIP 105324 | 8.7725 | y | 2 | 88.3 | 0.2 | 2.1538 | 0.3 | 0.1 | * | | | | |
| 21214+1020 | A 617 | HIP 105431 | 8.5373 | y | 2 | 79.1 | 0.1 | 0.1327 | 0.1 | 0.4 | | 0.7 | 0.001 | Sod1999 | * |
| | | | 8.5373 | H$\alpha$ | 2 | 79.0 | 0.2 | 0.1322 | 0.1 | 0.5 | | 0.6 | 0.001 | Sod1999 | |
| 21247−0420 | HDS 3050 | HIP 105715 | 8.5430 | y | 2 | 294.9 | 1.2 | 0.1219 | 1.4 | 2.1 | : | | | | |
| 21251+0923 | BU 164 AB | HIP 105747 | 8.7723 | y | 2 | 139.1 | 1.0 | 0.0821 | 1.7 | 0.7 | | | | | * |
| 21255+0203 | A 2289 AB | HIP 105792 | 8.7723 | y | 3 | 281.5 | 0.7 | 0.0442 | 1.1 | 1.1 | | −43.3 | −0.113 | Sey2002 | * |
| 21273−3218 | B 1007 | HIP 105940 | 8.5403 | y | 2 | 318.2 | 0.6 | 0.1164 | 0.7 | 0.8 | : | −0.1 | −0.081 | Hei1978c | |
| | | | 8.7669 | y | 2 | 318.5 | 0.1 | 0.1182 | 0.1 | 0.7 | | −0.2 | −0.079 | Hei1978c | |
| 21274−0701 | HDS 3053 | HIP 105947 | 8.5430 | y | 4 | 151.5 | 0.8 | 0.2102 | 0.8 | 2.0 | : | −2.7 | 0.033 | Bag2006 | |
| | | | 8.7669 | y | 2 | 152.5 | 0.1 | 0.2073 | 0.1 | 1.5 | | −3.8 | 0.036 | Bag2006 | |
| | | | 8.7669 | H$\alpha$ | 2 | 152.6 | 0.2 | 0.2084 | 0.4 | 1.4 | | −3.6 | 0.037 | Bag2006 | |
| 21304−6028 | HU 1630 | HIP 106178 | 8.5458 | V | 2 | 231.7 | 1.2 | 2.7471 | 1.2 | 0.8 | * | | | | |
| 21310−3633 | B 1008 AB | HIP 106224 | 8.5403 | y | 2 | 23.4 | 0.1 | 0.1876 | 0.1 | 0.4 | | | | | * |
| | | | 8.5485 | y | 2 | 23.3 | 0.1 | 0.1874 | 0.1 | 0.5 | | | | | |
| 21318−3534 | B 1392 | HD 204766 | 8.5403 | y | 2 | 102.0 | 0.2 | 0.4762 | 0.1 | 0.6 | | | | | |
| 21364−4041 | I 1444 | HIP 106676 | 8.5402 | y | 2 | 157.9 | 0.6 | 0.2854 | 0.2 | 0.6 | : | | | | |
| 21368−3043 | VOU 35 | HIP 106701 | 8.5429 | y | 2 | 207.7 | 1.3 | 0.0719 | 1.7 | 1.5 | : | | | | |
| | | | 8.7669 | y | 2 | 202.4 | 0.1 | 0.0740 | 0.1 | 0.3 | | | | | |
| 21378−0751 | MCA 68 | HIP 106786 | 8.7669 | H$\alpha$ | 2 | 252.4 | 8.8 | 0.0408 | 11.3 | 2.3 | | | | | |
| | | | 8.7669 | y | 2 | 258.5 | 5.7 | 0.0425 | 1.4 | 2.2 | | | | | |
| 21395−0003 | BU 1212 AB | HIP 106942 | 8.5430 | y | 4 | 284.9 | 0.4 | 0.5050 | 0.5 | 1.2 | : | −0.6 | −0.001 | Hei1994a | * |
| | | | 8.5485 | y | 2 | 284.9 | 0.1 | 0.5049 | 0.2 | 0.9 | | −0.5 | −0.001 | Hei1994a | |
| | | | 8.7668 | y | 2 | 285.1 | 0.1 | 0.5022 | 0.1 | 0.8 | | −0.6 | −0.002 | Hei1994a | |
| 21400−5222 | HDS 3084 | HIP 106978 | 8.5402 | y | 2 | 349.6 | 0.1 | 0.1092 | 0.1 | 0.3 | | | | | |
| | | | 8.5402 | H$\alpha$ | 2 | 349.5 | 0.1 | 0.1095 | 0.1 | 0.4 | | | | | |
| | | | 8.5484 | y | 2 | 349.6 | 0.1 | 0.1095 | 0.4 | 0.5 | | | | | |
| 21429−0225 | A 180 | HIP 107212 | 8.5457 | y | 2 | 55.1 | 0.4 | 0.5945 | 0.1 | 0.6 | | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5457 | Hα | 2 | 55.2 | 0.3 | 0.5945 | 0.3 | 0.8 : | | | | |
| 21429−4826 | RST 5556 | HIP 107208 | 8.5402 | y | 2 | 289.8 | 0.5 | 0.4810 | 0.5 | 1.9 : | | | | |
| 21459−1759 | RST 3289 | HIP 107454 | 8.7725 | y | 2 | 62.0 | 1.3 | 1.7060 | 1.3 | 3.1 * | | | | |
| 21466−5742 | FIN 283 | HIP 107522 | 8.5402 | y | 2 | 339.8 | 0.2 | 0.1495 | 0.3 | 0.7 | 3.4 | 0.000 | Sod1999 | |
| 21477−3054 | FIN 330 AB | HIP 107608 | 8.5403 | y | 2 | 116.5 | 1.1 | 0.0278 | 0.6 | 0.4 | 57.3 | −0.034 | Ole2003c | * |
| | | | 8.5403 | Hα | 2 | 121.3 | 0.1 | 0.0357 | 1.4 | 0.8 | 62.1 | −0.026 | Ole2003c | |
| | | | 8.5485 | y | 2 | 115.9 | 0.0 | 0.0264 | 0.3 | 0.4 | 56.8 | −0.036 | Ole2003c | |
| | | | 8.7669 | y | 2 | 92.7 | 0.2 | 0.0302 | 0.2 | 0.3 | 36.4 | −0.038 | Ole2003c | |
| | | | 8.7698 | y | 2 | 90.9 | 0.0 | 0.0310 | 0.3 | 0.3 | 34.6 | −0.037 | Ole2003c | |
| | | | 8.7698 | Hα | 2 | 91.0 | 0.5 | 0.0302 | 1.0 | 0.7 | 34.7 | −0.038 | Ole2003c | |
| 21492−3538 | B 1013 | HIP 107715 | 8.5403 | y | 2 | 124.5 | 0.1 | 0.1905 | 0.4 | 0.4 | | | | |
| 21504−5818 | HDS 3109 | HIP 107806 | 8.7696 | y | 2 | 308.7 | 0.4 | 0.1832 | 0.2 | 0.5 | | | | |
| 21508−2032 | SEE 460 | HIP 107839 | 8.5429 | y | 5 | 165.9 | 0.5 | 0.4933 | 0.6 | 1.3 : | | | | |
| | | | 8.5485 | y | 2 | 166.0 | 0.1 | 0.4934 | 0.1 | 0.5 | | | | |
| 21533−4650 | FIN 374 | HD 207852 | 8.5402 | y | 2 | 313.9 | 0.3 | 0.0830 | 0.3 | 0.7 | | | | |
| | | | 8.5402 | Hα | 2 | 313.7 | 0.3 | 0.0782 | 1.3 | 0.6 | | | | |
| | | | 8.5485 | y | 2 | 313.7 | 0.4 | 0.0850 | 0.1 | 0.6 | | | | |
| | | | 8.7696 | y | 2 | 313.2 | 0.1 | 0.0883 | 0.0 | 0.5 | | | | |
| 21536−1019 | FIN 358 | HIP 108058 | 8.6058 | y | 2 | 125.7 | 0.2 | 0.1267 | 0.3 | 1.5 | −2.8 | −0.013 | Msn2001c | * |
| | | | 8.7669 | y | 2 | 125.8 | 0.2 | 0.1250 | 0.1 | 1.5 | −2.9 | −0.014 | Msn2001c | |
| 21552−6153 | HDO 296 | HIP 108195 | 8.6057 | y | 2 | 105.1 | 0.0 | 0.3464 | 0.0 | 0.3 | −7.8 | 0.032 | Fin1969c | |
| 21555+1053 | BU 75 AB | HIP 108228 | 8.5374 | Hα | 2 | 21.2 | 0.5 | 0.9535 | 0.3 | 1.0 : | −0.4 | −0.000 | Hei1996a | * |
| | | | 8.7723 | y | 2 | 21.2 | 0.5 | 0.9582 | 1.5 | 1.1 | −0.6 | 0.001 | Hei1996a | |
| 21577−0038 | A 891 | HIP 108406 | 8.5457 | y | 2 | 76.3 | 0.7 | 0.6214 | 0.2 | 0.8 | | | | |
| | | | 8.5457 | Hα | 2 | 76.3 | 0.5 | 0.6205 | 0.5 | 1.0 : | | | | |
| 21579−5500 | FIN 307 | HIP 108431 | 8.5375 | y | 2 | 27.4 | 2.5 | 0.0430 | 0.6 | 0.6 | 8.7 | −0.010 | Chu1965 | * |
| | | | 8.5375 | Hα | 2 | 26.0 | 1.0 | 0.0445 | 0.4 | 0.6 | 7.3 | −0.008 | Chu1965 | |
| | | | 8.5402 | y | 2 | 28.9 | 0.5 | 0.0434 | 0.1 | 0.7 | 9.9 | −0.010 | Chu1965 | |
| | | | 8.5402 | Hα | 2 | 28.7 | 0.2 | 0.0447 | 0.0 | 0.7 | 9.7 | −0.008 | Chu1965 | |
| | | | 8.5484 | y | 2 | 28.3 | 0.3 | 0.0425 | 0.2 | 0.6 | 8.6 | −0.011 | Chu1965 | |
| | | | 8.6057 | y | 2 | 36.8 | 0.1 | 0.0465 | 0.6 | 0.5 | 12.2 | −0.008 | Chu1965 | |
| | | | 8.6057 | Hα | 2 | 37.5 | 0.0 | 0.0481 | 0.0 | 0.4 | 12.8 | −0.007 | Chu1965 | |
| | | | 8.7696 | y | 2 | 49.7 | 0.3 | 0.0591 | 0.2 | 0.5 | 12.5 | −0.002 | Chu1965 | |
| 22000−4032 | HDS 3124 | HIP 108599 | 8.5403 | y | 2 | 125.6 | 0.2 | 0.1553 | 0.2 | 1.7 | | | | |
| 22003−2330 | I 674 | HD 208955 | 8.5456 | y | 2 | 114.9 | 2.1 | 0.0478 | 1.0 | 1.3 : | | | | |
| 22018−0952 | RST 4095 | HIP 108757 | 8.5457 | y | 2 | 186.0 | 0.3 | 0.1704 | 0.4 | 0.7 | | | | |
| 22038−0248 | HO 469 AB | HD 209473 | 8.5457 | y | 2 | 48.8 | 0.5 | 0.4798 | 0.3 | 1.3 : | | | | * |
| 22045−5232 | RST 1119 | HIP 108965 | 8.5402 | y | 2 | 121.5 | 0.4 | 0.6919 | 0.4 | 2.2 : | | | | |
| 22056−5858 | B 548 | HIP 109060 | 8.5402 | y | 2 | 205.7 | 0.5 | 0.2319 | 0.3 | 1.0 | | | | |
| 22116−3428 | BU 769 Aa,B | HIP 109561 | 8.5403 | y | 2 | 356.0 | 1.7 | 0.8276 | 0.0 | 1.0 | | | | * |
| | | | 8.5403 | Hα | 2 | 356.1 | 0.9 | 0.8304 | 3.1 | 1.9 | | | | |
| | | | 8.5485 | y | 2 | 355.9 | 0.0 | 0.8288 | 1.1 | 1.1 | | | | |
| | | | 8.7698 | y | 2 | 355.3 | 0.0 | 0.8327 | 0.0 | 1.3 | | | | |
| | | | 8.7698 | Hα | 2 | 355.5 | 3.0 | 0.8349 | 3.7 | 1.7 | | | | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22116−3428 | CHR 230 Aa,Ab | HIP 109561 | 8.5403 | y | 2 | 133.2 | 3.2 | 0.0467 | 1.3 | 0.9 | | | | | * |
| | | | 8.5403 | Hα | 2 | 133.8 | 0.7 | 0.0455 | 2.4 | 1.2 | | | | | |
| | | | 8.5485 | y | 2 | 133.2 | 0.1 | 0.0517 | 2.0 | 1.5 | | | | | |
| | | | 8.7698 | y | 2 | 137.0 | 0.0 | 0.0433 | 0.0 | 1.7 | | | | | |
| | | | 8.7698 | Hα | 2 | 137.4 | 0.1 | 0.0432 | 0.0 | 2.1 | | | | | |
| 22134−3729 | B 2056 | HD 210767 | 8.5403 | y | 2 | 188.9 | 0.2 | 0.1271 | 0.1 | 1.5 | | | | | |
| | | | 8.5485 | y | 2 | 189.0 | 0.1 | 0.1269 | 0.1 | 1.5 | | | | | |
| 22150−3210 | B 1397 | HD 211025 | 8.5403 | y | 3 | 5.3 | 0.1 | 0.2301 | 0.3 | 1.0 | | | | | |
| 22152−0535 | A 2599 AB | HIP 109874 | 8.6058 | y | 2 | 279.9 | 0.2 | 0.6973 | 0.2 | 2.3 | | | | | * |
| | | | 8.7670 | y | 2 | 279.7 | 0.2 | 0.6960 | 0.2 | 2.3 | | | | | |
| | | | 8.7670 | Hα | 2 | 279.7 | 0.4 | 0.6968 | 0.4 | 2.9 | * | | | | |
| 22156−4121 | CHR 187 | HIP 109908 | 8.5402 | y | 2 | 56.5 | 0.1 | 0.1256 | 0.3 | 2.3 | | | | | |
| | | | 8.5402 | Hα | 2 | 56.2 | 0.7 | 0.1275 | 0.4 | 2.5 | | | | | |
| | | | 8.5485 | y | 2 | 56.4 | 0.1 | 0.1266 | 0.1 | 2.1 | | | | | |
| 22161−0705 | HDS 3158 | HIP 109951 | 8.7670 | y | 2 | 105.8 | 0.7 | 0.3889 | 0.2 | 2.0 | | | | | |
| | | | 8.7670 | Hα | 2 | 105.7 | 0.5 | 0.3896 | 0.7 | 1.7 | : | | | | |
| 22180−6249 | I 20 | HIP 110088 | 8.6057 | y | 2 | 189.2 | 0.1 | 0.6181 | 0.2 | 0.9 | | −1.2 | −0.010 | Lin2004a | |
| 22183−5338 | HDO 298 | HIP 110109 | 8.5375 | y | 2 | 224.5 | 17.4 | 2.1109 | 9.4 | 6.8 | | | | | * |
| | | | 8.5458 | y | 2 | 224.4 | 3.7 | 2.1047 | 3.8 | 6.4 | | | | | |
| | | | 8.5458 | Hα | 2 | 224.4 | 3.7 | 2.1034 | 3.8 | 6.2 | | | | | |
| 22198−5535 | RST 2196 | HIP 110234 | 8.5402 | y | 2 | 216.1 | 0.8 | 0.9778 | 0.9 | 3.2 | | | | | |
| 22220−3431 | B 557 | HIP 110419 | 8.5403 | y | 2 | 255.6 | 0.2 | 0.1467 | 0.3 | 0.3 | | | | | |
| | | | 8.5403 | Hα | 2 | 255.6 | 0.1 | 0.1469 | 0.2 | 0.5 | | | | | |
| | | | 8.5485 | y | 2 | 255.6 | 0.2 | 0.1468 | 0.1 | 0.6 | | | | | |
| 22228−2937 | HDS 3172 | HIP 110483 | 8.7698 | y | 2 | 323.5 | 0.6 | 0.0619 | 1.1 | 2.2 | | | | | |
| 22237+2051 | STF 2900 AB | HIP 110548 | 8.7670 | y | 2 | 1.9 | 0.5 | 0.4267 | 2.2 | 3.2 | | | | | |
| | | | 8.7670 | Hα | 2 | 2.0 | 0.3 | 0.4273 | 1.1 | 2.7 | | | | | |
| 22241−0450 | BU 172 AB | HIP 110578 | 8.5376 | y | 2 | 41.5 | 0.2 | 0.3942 | 0.2 | 0.5 | | −2.0 | −0.005 | Doc2007d | |
| | | | 8.5376 | Hα | 2 | 41.4 | 0.2 | 0.3935 | 0.4 | 0.5 | | −2.1 | −0.006 | Doc2007d | |
| | | | 8.5430 | y | 2 | 41.4 | 0.2 | 0.3936 | 0.2 | 0.7 | | −2.1 | −0.006 | Doc2007d | |
| | | | 8.5460 | y | 2 | 41.4 | 0.2 | 0.3938 | 0.1 | 0.6 | | −2.0 | −0.006 | Doc2007d | |
| | | | 8.5460 | Hα | 2 | 41.4 | 0.2 | 0.3932 | 0.2 | 0.8 | : | −2.1 | −0.006 | Doc2007d | |
| | | | 8.5485 | y | 2 | 41.4 | 0.1 | 0.3940 | 0.0 | 0.4 | | −2.1 | −0.006 | Doc2007d | |
| | | | 8.6057 | y | 2 | 41.4 | 0.1 | 0.3954 | 0.1 | 0.4 | | −1.9 | −0.005 | Doc2007d | |
| | | | 8.6057 | Hα | 2 | 41.5 | 0.1 | 0.3962 | 0.1 | 0.4 | | −1.9 | −0.004 | Doc2007d | |
| | | | 8.7669 | y | 2 | 41.0 | 0.0 | 0.3959 | 0.2 | 0.4 | | −2.1 | −0.006 | Doc2007d | |
| 22266−1645 | SHJ 345 AB | HIP 110778 | 8.6056 | y | 2 | 33.9 | 0.2 | 1.3376 | 0.2 | 0.2 | * | 0.6 | −0.009 | Hle1994 | * |
| | | | 8.6056 | Hα | 2 | 33.9 | 0.1 | 1.3399 | 0.3 | 0.3 | * | 0.7 | −0.007 | Hle1994 | |
| | | | 8.7698 | y | 2 | 34.2 | 0.1 | 1.3272 | 0.2 | 0.1 | * | 0.3 | −0.016 | Hle1994 | |
| 22268−4537 | HU 1334 | HIP 110795 | 8.5402 | y | 2 | 248.7 | 0.6 | 0.3299 | 0.2 | 0.6 | | | | | |
| 22281−1153 | RST 4105 | HIP 110902 | 8.5429 | y | 4 | 115.7 | 1.3 | 0.2567 | 1.3 | 2.0 | : | | | | |
| 22294−2840 | SEE 474 AB | HIP 111015 | 8.5429 | y | 2 | 271.1 | 6.6 | 0.5999 | 6.7 | 4.8 | : | | | | * |
| | | | 8.5485 | y | 4 | 271.6 | 2.6 | 0.6057 | 1.4 | 4.7 | | | | | |
| 22300+0426 | STF 2912 | HIP 111062 | 8.7696 | Hα | 2 | 117.3 | 0.2 | 0.1325 | 0.1 | 1.5 | | −5.0 | 0.004 | Sod1999 | * |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | [O−C]$_\theta$ (deg) | [O−C]$_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22321−4244 | I 1455 | HIP 111223 | 8.5402 | y | 2 | 353.6 | 0.2 | 0.2819 | 0.1 | 0.6 : | | | | |
| | | | 8.5402 | Hα | 2 | 353.7 | 0.5 | 0.2811 | 1.0 | 1.0 : | | | | |
| | | | 8.5485 | y | 2 | 353.7 | 0.1 | 0.2814 | 0.4 | 0.7 : | | | | |
| 22333−3844 | SEE 475 | HD 213603 | 8.5404 | y | 2 | 302.9 | 1.1 | 0.4414 | 1.1 | 3.7 : | | | | * |
| 22342−1841 | HU 389 | HIP 111406 | 8.5486 | y | 3 | 297.7 | 0.2 | 0.1764 | 0.4 | 0.7 : | 8.1 | 0.010 | Sey2002 | |
| 22378−5004 | HDS 3214 | HIP 111714 | 8.5404 | y | 2 | 182.9 | 0.2 | 0.1153 | 1.0 | 0.8 : | | | | |
| 22384−0754 | A 2695 | HIP 111761 | 8.5430 | y | 4 | 251.4 | 0.2 | 0.0915 | 0.2 | 1.5 | −29.6 | −0.018 | Ole2004a | * |
| | | | 8.6058 | y | 2 | 251.4 | 0.1 | 0.0930 | 0.3 | 1.4 | −29.7 | −0.017 | Ole2004a | |
| 22385+0218 | HO 479 | HIP 111775 | 8.7696 | y | 2 | 60.7 | 0.2 | 0.3596 | 0.6 | 1.6 | −21.2 | −0.208 | Hei1997 | * |
| 22400+0113 | A 2099 | HIP 111900 | 8.7696 | y | 2 | 163.1 | 0.2 | 0.7860 | 0.3 | 1.3 | −0.8 | 0.039 | Doc1997c | |
| 22401−1558 | HU 288 | HIP 111911 | 8.5486 | y | 3 | 243.7 | 0.2 | 0.4644 | 0.2 | 0.8 : | | | | |
| 22406+0632 | HU 494 | HIP 111947 | 8.7696 | y | 2 | 333.1 | 0.3 | 0.4860 | 0.5 | 0.6 : | −7.8 | 0.129 | Hei1996c | * |
| 22409+1433 | HO 296 AB | HIP 111974 | 8.5377 | y | 2 | 77.1 | 0.1 | 0.3636 | 0.1 | 1.0 | −0.3 | 0.000 | Sod1999 | * |
| | | | 8.5377 | Hα | 2 | 77.0 | 0.1 | 0.3633 | 0.2 | 1.1 | −0.4 | 0.000 | Sod1999 | |
| | | | 8.5460 | y | 2 | 77.0 | 0.1 | 0.3643 | 0.1 | 1.0 | −0.3 | 0.001 | Sod1999 | |
| | | | 8.5460 | Hα | 2 | 77.1 | 0.1 | 0.3644 | 0.1 | 1.1 | −0.3 | 0.001 | Sod1999 | |
| 22438+0353 | WSI 92 | HIP 112229 | 8.5376 | y | 2 | 118.8 | 2.9 | 1.0154 | 3.1 | 4.7 | | | | * |
| 22443−6030 | HDS 3227 | HIP 112259 | 8.5404 | y | 2 | 61.5 | 0.1 | 0.0576 | 0.5 | 0.0 | | | | |
| | | | 8.5404 | Hα | 2 | 61.1 | 0.6 | 0.0589 | 0.2 | 0.6 | | | | |
| 22451−0240 | A 2696 BC | HIP 112325 | 8.7670 | y | 2 | 79.1 | 1.0 | 0.6145 | 0.3 | 1.3 : | | | | * |
| 22473−1609 | HU 291 | HIP 112504 | 8.7698 | y | 2 | 326.9 | 0.4 | 2.6799 | 0.4 | 2.3 * | | | | |
| 22474+1749 | WSI 93 | HIP 112506 | 8.5377 | y | 1 | 110.0 | 1.7 | 0.3054 | 1.7 | 3.2 | | | | * |
| | | | 8.5377 | Hα | 3 | 111.2 | 1.7 | 0.3053 | 0.6 | 2.9 : | | | | |
| | | | 8.7670 | y | 2 | 111.5 | 0.8 | 0.3049 | 0.8 | 3.1 | | | | |
| | | | 8.7670 | Hα | 2 | 111.3 | 0.6 | 0.3039 | 1.3 | 2.7 | | | | |
| 22478−0414 | STF 2944 | HIP 112559 | 8.6058 | y | 2 | 299.2 | 0.2 | 1.9614 | 0.6 | 0.3 * | | | | |
| | | | 8.7670 | y | 2 | 299.2 | 0.3 | 1.9554 | 0.1 | 0.3 * | | | | |
| 22500−3248 | HDO 301 | HIP 112746 | 8.5404 | y | 2 | 79.5 | 0.0 | 0.2193 | 0.0 | 0.3 | −9.1 | −0.030 | Fin1964d | |
| | | | 8.5404 | Hα | 2 | 79.5 | 0.1 | 0.2192 | 0.2 | 0.3 | −9.1 | −0.030 | Fin1964d | |
| | | | 8.5486 | y | 3 | 79.4 | 0.0 | 0.2191 | 0.1 | 0.2 | −9.0 | −0.030 | Fin1964d | |
| | | | 8.7698 | y | 2 | 77.6 | 0.1 | 0.2153 | 0.1 | 0.2 | −9.4 | −0.032 | Fin1964d | |
| 22508−6543 | HDS 3246 | HIP 112816 | 8.7697 | y | 4 | 273.5 | 1.4 | 0.2775 | 1.6 | 3.4 : | | | | |
| 22535−1137 | MCA 73 | HIP 113031 | 8.5430 | y | 4 | 316.0 | 0.5 | 0.0459 | 0.2 | 0.4 | −32.3 | 0.010 | Msn1997a | * |
| | | | 8.6057 | y | 2 | 315.8 | 0.1 | 0.0471 | 0.8 | 0.7 | −35.1 | 0.012 | Msn1997a | |
| | | | 8.6057 | Hα | 2 | 316.9 | 0.4 | 0.0491 | 0.2 | 0.8 | −33.9 | 0.014 | Msn1997a | |
| | | | 8.6058 | y | 2 | 317.0 | 0.6 | 0.0478 | 0.0 | 0.7 | −33.9 | 0.012 | Msn1997a | |
| | | | 8.6058 | Hα | 2 | 318.9 | 0.5 | 0.0489 | 0.3 | 0.9 | −32.0 | 0.013 | Msn1997a | |
| | | | 8.7670 | y | 2 | 319.5 | 0.0 | 0.0429 | 0.1 | 0.6 | −38.4 | 0.009 | Msn1997a | |
| | | | 8.7670 | Hα | 2 | 316.6 | 0.4 | 0.0443 | 0.5 | 0.7 | −41.3 | 0.011 | Msn1997a | |
| 22543−1245 | RST 4114 | HD 216591 | 8.5486 | y | 3 | 242.3 | 0.8 | 0.2592 | 0.4 | 1.9 : | | | | |
| 22550−4056 | I 1460 | HIP 113171 | 8.5404 | y | 2 | 351.6 | 0.1 | 0.2908 | 0.3 | 0.8 | | | | |
| 22552−0459 | BU 178 | HIP 113184 | 8.6057 | Hα | 2 | 322.3 | 0.3 | 0.6544 | 0.2 | 2.3 | −1.0 | −0.125 | Baz1981b | |
| | | | 8.6057 | y | 2 | 322.3 | 0.1 | 0.6527 | 0.3 | 1.9 | −1.0 | −0.126 | Baz1981b | |
| | | | 8.6057 | y | 2 | 322.4 | 0.1 | 0.6532 | 0.2 | 2.0 | −0.9 | −0.126 | Baz1981b | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22553−4828 | I 22 AB | HIP 113191 | 8.5375 | y | 2 | 174.6 | 0.1 | 0.4075 | 0.3 | 0.5 | | | | * |
| | | | 8.5375 | Hα | 2 | 174.5 | 0.2 | 0.4071 | 0.7 | 0.6 | | | | |
| | | | 8.7697 | y | 2 | 174.6 | 0.0 | 0.4148 | 0.0 | 0.4 | | | | |
| 22586+0921 | STT 536 AB | HIP 113445 | 8.7696 | y | 2 | 166.1 | 0.1 | 0.3287 | 0.2 | 0.4 | −0.3 | 0.002 | Sod1999 | * |
| | | | 8.7697 | Hα | 2 | 166.2 | 0.1 | 0.3287 | 0.1 | 0.4 | −0.2 | 0.002 | Sod1999 | |
| 22586−4531 | HU 1335 | HIP 113454 | 8.5404 | y | 2 | 158.0 | 0.1 | 0.1750 | 0.1 | 0.7 | −6.7 | 0.004 | Hei1984a | |
| | | | 8.5486 | y | 3 | 158.0 | 0.5 | 0.1748 | 0.3 | 1.0 : | −6.8 | 0.004 | Hei1984a | |
| | | | 8.6057 | y | 2 | 158.8 | 0.3 | 0.1742 | 0.1 | 0.6 | −6.9 | 0.005 | Hei1984a | |
| | | | 8.7697 | y | 2 | 161.0 | 0.1 | 0.1705 | 0.1 | 0.6 | −7.2 | 0.003 | Hei1984a | |
| 23027−3946 | I 1463 | HIP 113795 | 8.5404 | y | 2 | 50.0 | 0.2 | 0.3929 | 0.2 | 0.6 : | | | | |
| 23029−1320 | HDS 3283 | HIP 113810 | 8.5486 | y | 3 | 313.6 | 0.3 | 0.1131 | 0.4 | 0.8 : | | | | |
| 23042−5501 | I 259 | HIP 113921 | 8.5404 | y | 2 | 97.3 | 0.2 | 0.5224 | 0.2 | 0.6 | | | | |
| 23052−0742 | A 417 AB | HIP 113996 | 8.5376 | y | 2 | 28.9 | 0.1 | 0.1865 | 0.4 | 0.3 | −0.8 | −0.003 | Hrt1996a | * |
| | | | 8.5376 | Hα | 2 | 28.8 | 0.2 | 0.1863 | 0.2 | 0.4 | −0.8 | −0.003 | Hrt1996a | |
| | | | 8.5430 | y | 2 | 28.9 | 0.1 | 0.1865 | 0.1 | 0.4 | −0.9 | −0.003 | Hrt1996a | |
| | | | 8.5460 | y | 2 | 29.0 | 0.1 | 0.1865 | 0.1 | 0.3 | −0.8 | −0.003 | Hrt1996a | |
| | | | 8.5460 | Hα | 2 | 29.0 | 0.1 | 0.1866 | 0.1 | 0.3 | −0.8 | −0.003 | Hrt1996a | |
| | | | 8.5486 | y | 2 | 28.9 | 0.0 | 0.1872 | 0.1 | 0.2 | −0.9 | −0.003 | Hrt1996a | |
| | | | 8.6057 | y | 2 | 29.7 | 0.1 | 0.1886 | 0.1 | 0.3 | −0.8 | −0.002 | Hrt1996a | |
| 23057−6005 | HDS 3290 | HIP 114039 | 8.5404 | y | 2 | 263.1 | 0.2 | 0.3261 | 0.3 | 0.7 : | | | | |
| 23099−2227 | RST 3320 | HIP 114375 | 8.5431 | y | 2 | 142.8 | 0.1 | 0.1768 | 0.0 | 1.1 | −39.2 | −0.074 | Sey2002 | * |
| | | | 8.5431 | Hα | 2 | 142.8 | 0.1 | 0.1765 | 0.3 | 1.8 | −39.2 | −0.074 | Sey2002 | |
| | | | 8.5486 | y | 3 | 142.7 | 0.1 | 0.1769 | 0.0 | 1.1 | −39.3 | −0.074 | Sey2002 | |
| 23100−4252 | DON 1042 | HIP 114382 | 8.7697 | y | 2 | 286.3 | 0.2 | 0.6161 | 0.2 | 3.1 | | | | |
| 23125−2349 | HDS 3306 | HIP 114568 | 8.5403 | y | 3 | 46.8 | 0.3 | 0.7872 | 0.2 | 0.6 | | | | |
| 23126+0241 | A 2298 AB | HIP 114576 | 8.7725 | y | 2 | 95.2 | 0.1 | 0.1305 | 0.1 | 0.6 | 1.1 | 0.000 | Pbx2000b | * |
| 23135−0854 | A 418 | HIP 114643 | 8.5430 | y | 4 | 35.7 | 3.1 | 0.7553 | 2.9 | 2.6 : | | | | |
| 23159−0905 | BU 1220 BC | HD 219430 | 8.5430 | V | 2 | 103.6 | 4.1 | 0.6315 | 4.2 | 1.8 : | −0.3 | 0.025 | Zir2007 | * |
| 23171−1349 | BU 182 AB | HIP 114962 | 8.5430 | V | 2 | 226.8 | 1.1 | 0.7871 | 1.2 | 1.2 : | 1.0 | 0.220 | Hei1991 | * |
| | | | 8.7725 | y | 2 | 226.7 | 0.2 | 0.7855 | 0.3 | 0.7 | 0.9 | 0.221 | Hei1991 | |
| 23175+1652 | HLD 171 AB | HIP 115002 | 8.7725 | y | 2 | 25.7 | 2.7 | 2.2360 | 6.3 | 3.0 : | | | | * |
| 23175+1652 | HU 497 BC | HIP 115002 | 8.7725 | y | 2 | 75.9 | 0.2 | 0.2220 | 0.3 | −0.0 : | −10.2 | −0.082 | Lin2007a | * |
| 23176−0131 | BU 79 AB | HIP 115012 | 8.7725 | y | 2 | 11.4 | 0.2 | 1.6489 | 0.2 | 1.2 * | −0.2 | 0.052 | WSI2004b | * |
| 23189+0524 | BU 80 AB | HIP 115112 | 8.7670 | y | 2 | 47.2 | 0.4 | 0.5136 | 0.1 | 1.2 | | | | |
| | | | 8.7670 | Hα | 2 | 47.2 | 0.2 | 0.5149 | 0.1 | 1.0 | | | | |
| 23191−1328 | MCA 74 Aa,Ab | HIP 115126 | 8.5375 | y | 2 | 164.3 | 0.2 | 0.2183 | 0.3 | 3.1 | −4.4 | 0.006 | Msn1999c | * |
| | | | 8.5375 | Hα | 2 | 164.4 | 0.4 | 0.2183 | 0.2 | 2.9 | −4.2 | 0.006 | Msn1999c | |
| | | | 8.6058 | Hα | 2 | 166.5 | 0.3 | 0.2204 | 0.5 | 3.0 | −4.3 | 0.009 | Msn1999c | |
| | | | 8.6058 | y | 2 | 166.4 | 0.5 | 0.2192 | 0.7 | 3.2 | −4.4 | 0.007 | Msn1999c | |
| 23208−5018 | RST 5560 AB | HIP 115272 | 8.6058 | y | 2 | 232.4 | 0.5 | 1.3133 | 1.4 | 3.1 * | | | | * |
| | | | 8.7697 | y | 2 | 232.1 | 0.2 | 1.3090 | 0.2 | 2.8 * | | | | |
| 23210+1715 | WSI 11 | HIP 115288 | 8.5377 | Hα | 1 | 184.5 | 0.3 | 0.1143 | 0.4 | 2.4 | | | | * |
| 23227−1502 | HU 295 | HIP 115404 | 8.5430 | y | 2 | 279.3 | 0.1 | 0.3412 | 0.1 | 1.2 | −0.1 | −0.002 | Sey1999b | |
| | | | 8.5430 | Hα | 2 | 279.3 | 0.2 | 0.3408 | 0.2 | 1.2 | −0.1 | −0.002 | Sey1999b | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.7725 | y | 2 | 279.8 | 0.1 | 0.3334 | 0.1 | 1.2 | 0.0 | −0.008 | Sey1999b | |
| 23237−2835 | HDS 3330 | HIP 115490 | 8.5404 | y | 2 | 225.1 | 0.5 | 0.2539 | 0.2 | 0.9 : | | | | |
| 23257−4254 | I 144 | HIP 115647 | 8.5404 | y | 2 | 178.6 | 0.2 | 0.3469 | 0.1 | 0.9 | | | | * |
| 23270−1515 | HU 297 | HIP 115742 | 8.5430 | y | 4 | 242.1 | 2.3 | 0.2600 | 2.4 | 2.5 : | | | | |
| 23273+0427 | A 2400 | HIP 115779 | 8.7670 | y | 2 | 331.7 | 3.0 | 0.6142 | 2.2 | 4.1 | | | | |
| | | | 8.7670 | Hα | 2 | 331.6 | 2.2 | 0.6140 | 2.2 | 3.7 : | | | | |
| 23282−5626 | I 23 | HIP 115848 | 8.5404 | y | 2 | 353.5 | 0.1 | 0.7989 | 0.1 | 1.5 | | | | |
| | | | 8.5404 | Hα | 2 | 353.5 | 0.2 | 0.7988 | 0.5 | 1.3 | | | | |
| 23299−2035 | HU 599 AB | HIP 115981 | 8.5431 | y | 4 | 344.0 | 1.3 | 0.2238 | 0.9 | 1.6 : | | | | * |
| | | | 8.5486 | y | 3 | 344.2 | 0.2 | 0.2227 | 0.2 | 0.9 : | | | | |
| 23322+0705 | HU 298 | HIP 116164 | 8.5376 | y | 2 | 47.9 | 0.4 | 0.1676 | 0.3 | 0.3 | −0.5 | −0.004 | Hrt2000c | |
| | | | 8.5376 | Hα | 2 | 48.0 | 0.2 | 0.1671 | 0.3 | 0.5 | −0.4 | −0.005 | Hrt2000c | |
| | | | 8.5460 | y | 2 | 48.1 | 0.5 | 0.1671 | 0.3 | 0.7 | −0.4 | −0.005 | Hrt2000c | |
| | | | 8.5460 | Hα | 2 | 48.2 | 0.2 | 0.1670 | 0.4 | 0.5 | −0.3 | −0.005 | Hrt2000c | |
| | | | 8.7672 | Hα | 2 | 50.3 | 0.1 | 0.1666 | 0.1 | 0.2 | −0.4 | −0.004 | Hrt2000c | |
| 23326−4520 | RST 3325 | HIP 116193 | 8.5459 | y | 2 | 286.1 | 0.2 | 0.1530 | 0.5 | 1.0 : | | | | |
| 23330−1943 | HU 299 | HD 221532 | 8.5460 | y | 2 | 289.3 | 0.2 | 0.7877 | 0.5 | 1.0 : | | | | |
| 23353−5730 | I 25 | HIP 116407 | 8.5431 | y | 4 | 21.9 | 1.0 | 0.7544 | 1.0 | 1.9 : | | | | |
| 23363−0707 | BU 721 AB | HIP 116488 | 8.5432 | y | 2 | 133.7 | 0.4 | 0.3103 | 0.4 | 1.1 : | | | | * |
| 23374+0737 | FOX 102 AB | HIP 116571 | 8.7670 | y | 2 | 48.7 | 0.2 | 0.1762 | 0.3 | 0.4 | | | | |
| 23384−2922 | B 606 | HIP 116649 | 8.5459 | y | 2 | 347.1 | 0.3 | 0.1925 | 0.2 | 0.9 : | | | | |
| 23384−3147 | B 607 | HIP 116659 | 8.5459 | y | 2 | 142.5 | 0.6 | 0.3482 | 0.4 | 1.1 : | | | | |
| 23401+1258 | HU 1325 | HIP 116787 | 8.5378 | y | 2 | 26.1 | 0.8 | 0.8419 | 1.3 | 2.0 : | 2.4 | 0.016 | Sca2003a | |
| | | | 8.7725 | y | 2 | 26.3 | 0.7 | 0.8437 | 0.7 | 1.7 : | 2.3 | 0.016 | Sca2003a | |
| 23444−7029 | WSI 94 | HIP 117105 | 8.5379 | y | 2 | 90.8 | 2.8 | 0.0463 | 1.2 | 2.0 | | | | * |
| 23449−3820 | B 613 | HIP 117141 | 8.5431 | y | 4 | 148.1 | 0.8 | 0.1990 | 0.8 | 1.5 : | | | | |
| 23452+0814 | WSI 95 Aa,Ab | HIP 117164 | 8.5378 | y | 2 | 194.0 | 5.2 | 1.1558 | 5.6 | 4.8 * | | | | * |
| 23456−5817 | B 1020 | HIP 117183 | 8.5431 | y | 2 | 213.3 | 1.0 | 0.3360 | 1.2 | 2.0 : | | | | |
| 23466−1245 | BU 726 | HIP 117262 | 8.5460 | y | 2 | 296.3 | 0.4 | 0.7274 | 0.2 | 1.5 | | | | |
| 23474−7118 | FIN 375 Aa,Ab | HIP 117326 | 8.6057 | y | 2 | 226.0 | 1.1 | 0.1283 | 0.4 | 2.6 | 33.2 | −0.043 | Ole2004a | * |
| | | | 8.6057 | Hα | 2 | 226.0 | 0.7 | 0.1258 | 0.3 | 2.5 | 33.2 | −0.045 | Ole2004a | |
| 23497−4805 | HDS 3384 | HIP 117504 | 8.5459 | y | 2 | 19.2 | 0.2 | 0.4805 | 0.2 | 1.2 | | | | |
| 23501−3720 | HDS 3385 | HIP 117525 | 8.5431 | y | 2 | 236.2 | 1.0 | 0.3248 | 1.3 | 1.8 : | | | | |
| 23506−5142 | SLR 14 | HIP 117570 | 8.5486 | y | 3 | 75.3 | 0.7 | 0.8693 | 0.9 | 1.4 : | −1.7 | 0.007 | Doc2007f | |
| | | | 8.6057 | y | 2 | 75.4 | 0.1 | 0.8727 | 0.1 | 0.3 * | −1.6 | 0.010 | Doc2007f | |
| | | | 8.6058 | y | 2 | 75.4 | 1.2 | 0.8720 | 1.8 | 0.3 * | −1.5 | 0.009 | Doc2007f | |
| | | | 8.6059 | Hα | 2 | 75.4 | 0.2 | 0.8723 | 0.1 | 0.3 * | −1.6 | 0.009 | Doc2007f | |
| | | | 8.7697 | y | 2 | 74.7 | 0.4 | 0.8716 | 0.1 | 0.7 | −1.8 | 0.006 | Doc2007f | |
| 23518−0637 | A 2700 | HIP 117666 | 8.5487 | y | 3 | 190.7 | 0.3 | 0.2260 | 0.8 | 0.9 : | −0.4 | 0.006 | Doc1998b | |
| | | | 8.7725 | y | 2 | 187.5 | 0.2 | 0.2253 | 0.2 | 0.3 : | −2.2 | 0.007 | Doc1998b | |
| 23529−0309 | FIN 359 | HIP 117761 | 8.5487 | y | 3 | 15.4 | 0.1 | 0.0649 | 0.1 | 0.2 | 3.1 | −0.003 | Doc1997a | |
| | | | 8.7725 | Hα | 2 | 11.9 | 0.1 | 0.0654 | 0.1 | 0.1 | 3.1 | 0.001 | Doc1997a | |
| 23568+0444 | A 2100 | HIP 118054 | 8.5378 | y | 2 | 266.1 | 0.1 | 0.3426 | 0.1 | 1.2 | −0.7 | 0.007 | Msn1997a | |
| | | | 8.5378 | Hα | 2 | 266.1 | 0.5 | 0.3425 | 0.2 | 1.1 | −0.7 | 0.006 | Msn1997a | |

TABLE 4—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filt | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | $[O-C]_\theta$ (deg) | $[O-C]_\rho$ ($''$) | Reference code* | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.7672 | y | 2 | 265.6 | 0.1 | 0.3453 | 0.1 | 1.1 | −0.8 | 0.007 | Msn1997a | |
| | | | 8.7672 | H$\alpha$ | 1 | 265.6 | 0.1 | 0.3456 | 0.1 | 1.0 | −0.8 | 0.007 | Msn1997a | |
| 23586−1408 | RST 4136 AB | HIP 118205 | 8.5432 | y | 2 | 211.8 | 0.2 | 0.1322 | 0.2 | 0.9 : | −10.5 | 0.034 | Msn1999c | * |
| | | | 8.5487 | y | 3 | 211.8 | 0.2 | 0.1321 | 0.1 | 0.8 | −10.5 | 0.034 | Msn1999c | |
| | | | 8.6058 | y | 2 | 211.8 | 0.1 | 0.1331 | 0.4 | 0.8 | −10.1 | 0.034 | Msn1999c | |
| | | | 8.6058 | H$\alpha$ | 2 | 212.0 | 0.2 | 0.1323 | 1.6 | 0.8 : | −9.8 | 0.033 | Msn1999c | |
| 23587−0333 | BU 730 | HIP 118209 | 8.7725 | H$\alpha$ | 2 | 321.1 | 1.0 | 0.7817 | 0.9 | 4.6 | −1.1 | −0.109 | Sey2002 | |

* The complete list of references may be found at http://ad.usno.navy.mil/Webtextfiles/wdsnewref.txt .

TABLE 5

UNRESOLVED STARS

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | 5$\sigma$ Detection Limit $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| 00024+1100 | HD 224983 | HIP 184 | 8.5378 | y | 2 | 4.06 | 4.63 | | |
| 00059+1814 | LTT 10019 | HIP 493 | 8.5377 | y | 2 | 4.03 | 4.49 | | |
| 00063−4905 | HDO 180 | HIP 522 | 8.5379 | y | 2 | 4.60 | 6.19 | | * |
| 00084+0637 | HD 377 | HIP 682 | 8.5378 | y | 2 | 4.60 | 5.46 | | |
| 00113−1528 | 6 Cet | HIP 910 | 8.5379 | y | 2 | 4.96 | 6.19 | | |
| 00116+1020 | HD 727 | HIP 943 | 8.5378 | y | 2 | 3.99 | 4.55 | | |
| 00117−3508 | the Scl | HIP 950 | 8.5379 | y | 2 | 4.76 | 6.27 | | |
| 00125+1434 | LN Peg | HIP 999 | 8.5378 | y | 2 | 3.66 | 4.19 | | |
| 00174+0853 | STF 22 C | HIP 1392 | 8.7672 | y | 2 | 4.06 | 5.84 | | * |
| 00201−6452 | zet Tuc | HIP 1599 | 8.5379 | y | 2 | 4.60 | 6.01 | | |
| 00258−7715 | bet Hyi | HIP 2021 | 8.5379 | y | 2 | 4.41 | 6.03 | | |
| | | | 8.7726 | H$\alpha$ | 6 | 4.95 | 6.15 | | |
| 00291−0742 | MLR 2 | HIP 2275 | 8.5487 | y | 3 | 3.71 | 4.20 | : | |
| 00327−6302 | B 8 A | HIP 2578 | 8.7697 | y | 2 | 4.64 | 6.59 | | * |
| 00327−6302 | B 8 B | HIP 2578 | 8.7697 | H$\alpha$ | 2 | 4.75 | 6.72 | | * |
| 00345−5222 | GJ 9017 | HIP 2711 | 8.5405 | y | 2 | 4.73 | 6.52 | | |
| 00366−4908 | LDS 21 A | HIP 2888 | 8.5405 | y | 2 | 4.67 | 6.25 | | |
| 00374−3717 | I 705 | HIP 2944 | 8.5405 | y | 2 | 4.68 | 6.43 | | |
| | | | 8.5460 | y | 2 | 4.69 | 5.53 | | |
| 00404−5927 | GJ 29 | HIP 3170 | 8.5405 | y | 3 | 4.91 | 6.14 | | |
| 00406−2348 | GJ 9019 | HIP 3185 | 8.5405 | y | 2 | 4.94 | 6.57 | | |
| 00425−6528 | rho Tuc | HIP 3330 | 8.5380 | y | 2 | 4.47 | 5.96 | | |
| 00450−5343 | LTT 420 | HIP 3527 | 8.5405 | y | 2 | 4.78 | 6.30 | | |
| 00458−4733 | HDO 183 A | HIP 3583 | 8.5405 | y | 2 | 4.48 | 6.65 | | |
| 00501−1039 | phi 2 Cet | HIP 3909 | 8.5405 | y | 2 | 4.78 | 6.73 | | |
| 00518−0810 | RST 4160 AB | HIP 4044 | 8.5406 | y | 2 | 4.17 | 5.04 | | * |
| 00550−7418 | HD 5499 | HIP 4291 | 8.5380 | y | 2 | 4.14 | 5.49 | | |
| 00552−1658 | LTT 517 | HIP 4310 | 8.5405 | y | 2 | 4.44 | 5.49 | | |
| 00558−1832 | B 645 | HIP 4354 | 8.5406 | y | 2 | 4.51 | 5.69 | | * |
| 00564−6357 | LTT 536 | HIP 4395 | 8.5380 | y | 2 | 4.32 | 5.54 | | |
| 00594+0047 | STF 80 A | HIP 4624 | 8.7699 | y | 4 | 4.41 | 6.08 | | |
| 01013−6052 | HD 6107 | HIP 4772 | 8.5405 | y | 2 | 4.44 | 5.13 | | |
| | | | 8.5405 | H$\alpha$ | 2 | 4.41 | 5.20 | | |
| 01101−1425 | HDS 153 | HIP 5475 | 8.5406 | y | 2 | 3.99 | 4.86 | | * |
| 01137+0735 | BU 1029 B | HIP 5743 | 8.7673 | H$\alpha$ | 2 | 4.22 | 6.36 | | * |
| | | | 8.7673 | y | 3 | 3.71 | 5.52 | | |
| 01152−4532 | nu Phe | HIP 5862 | 8.5405 | y | 2 | 4.61 | 6.60 | | |
| 01234−7637 | HD 8813 | HIP 6494 | 8.5380 | y | 3 | 3.97 | 4.74 | | |
| 01425−5344 | GJ 3109 | HIP 7978 | 8.5407 | y | 2 | 5.11 | 6.27 | | |
| 01560−5137 | HJ 3473 A | HIP 9007 | 8.5407 | y | 2 | 5.13 | 6.36 | | * |
| 01583−5056 | HD 12190 | HIP 9189 | 8.6062 | H$\alpha$ | 2 | 4.06 | 4.73 | | |
| | | | 8.6062 | y | 1 | 4.79 | 6.17 | | |
| 02032+0008 | 60 Cet | HIP 9589 | 8.6061 | H$\alpha$ | 2 | 4.86 | 6.64 | | |
| | | | 8.6061 | y | 2 | 4.82 | 6.82 | | |
| 02056−2423 | HIP 9769 | HIP 9769 | 8.7727 | y | 4 | 4.77 | 5.65 | | |
| 02128−0224 | TOK 39 Aa,Ab | HIP 9679 | 8.6062 | H$\alpha$ | 2 | 4.77 | 6.25 | : | |
| | | | 8.7675 | H$\alpha$ | 2 | 3.85 | 6.55 | | |
| 02259−1217 | rho Cet | HIP 11345 | 8.7674 | y | 2 | 4.22 | 6.80 | | |
| | | | 8.7675 | H$\alpha$ | 2 | 3.82 | 6.11 | | |
| 02361+0653 | GKI 1 AB | HIP 12114 | 8.7700 | H$\alpha$ | 2 | 4.66 | 6.76 | | * |
| 02370−3435 | HDS 268 | HIP 12186 | 8.5407 | y | 2 | 5.06 | 6.48 | | |
| | | | 8.5407 | H$\alpha$ | 2 | 4.70 | 6.11 | | |
| 02412−0042 | STF 295 A | HIP 12530 | 8.5461 | y | 2 | 4.88 | 6.61 | | * |
| 02412−0042 | STF 295 B | HIP 12530 | 8.5461 | y | 2 | 3.34 | 3.74 | : | * |
| 02442−2530 | FIN 379 Aa,Ab | HIP 12780 | 8.7674 | y | 2 | 4.73 | 6.28 | | |
| | | | 8.7674 | H$\alpha$ | 2 | 4.78 | 6.93 | | |
| 02451−1834 | tau 1 Eri | HIP 12843 | 8.6061 | H$\alpha$ | 1 | 4.88 | 7.15 | | |

TABLE 5—*Continued*

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | 5$\sigma$ Detection Limit $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | | 8.6061 | y | 1 | 4.83 | 6.99 | | |
| 02568−3609 | HDS 378 Aa,Ab | HIP 13725 | 8.7727 | y | 3 | 4.11 | 4.82 | | * |
| 03182−6230 | BNU 2 Aa,Ab | HIP 15371 | 8.7700 | H$\alpha$ | 2 | 4.86 | 6.80 | | * |
| 03244−1539 | A 2909 AB | HIP 15868 | 8.6063 | y | 2 | 4.55 | 5.76 | | * |
| | | | 8.7675 | y | 2 | 4.61 | 6.88 | | |
| 03294−6256 | HJ 3580 A | HIP 16245 | 8.7700 | H$\alpha$ | 2 | 4.82 | 6.81 | | |
| 03449+2407 | HL 7 A | HIP 17499 | 8.7701 | H$\alpha$ | 2 | 4.36 | 6.41 | | |
| 03474+2407 | STF A 8 A | HIP 17702 | 8.7701 | H$\alpha$ | 2 | 4.49 | 6.60 | | |
| 04287+1552 | MKT 13 Aa,Ab | HIP 20894 | 8.7676 | H$\alpha$ | 2 | 3.34 | 6.07 | | * |
| 04496−5353 | I 342 A | HIP 22431 | 8.7729 | y | 2 | 4.84 | 5.17 | | * |
| 04496−5353 | I 342 B | HIP 22431 | 8.7729 | y | 2 | 3.94 | 4.43 | | * |
| 04598−1016 | 63 Eri | HIP 23221 | 8.7703 | H$\alpha$ | 2 | 6.01 | 6.98 | | |
| 05145−0812 | BU 555 BC | HIP 24436 | 8.7678 | H$\alpha$ | 2 | 3.57 | 5.76 | | * |
| | | | 9.2650 | H$\alpha$ | 2 | 4.51 | 6.05 | | |
| 05223−0840 | V1261 Ori | HIP 25092 | 8.7678 | H$\alpha$ | 2 | 5.08 | 6.23 | | |
| 05319−0718 | ups Ori | HIP 25923 | 8.7678 | H$\alpha$ | 1 | 3.16 | 6.48 | | |
| 06032+1922 | HDS 823 Aa,Ab | HIP 28671 | 9.2622 | y | 2 | 2.92 | 3.20 | | * |
| 06094+1711 | HDS 838 | HIP 29186 | 9.2622 | y | 3 | 3.24 | 3.83 | | * |
| 06165−3508 | kap Col | HIP 29807 | 9.2594 | y | 2 | 5.31 | 6.44 | | |
| | | | 9.2595 | H$\alpha$ | 1 | 5.27 | 6.57 | | |
| 06288−0702 | CHR 167 Ca,Cb | HIP 30867 | 8.7705 | y | 2 | 4.94 | 7.12 | | * |
| | | | 8.7731 | H$\alpha$ | 2 | 4.85 | 6.88 | | |
| 06328−1110 | CHR 129 | HIP 31205 | 8.7705 | y | 2 | 6.12 | 7.12 | | * |
| 07092+1903 | CHR 216 | HIP 34524 | 9.2596 | y | 3 | 3.12 | 3.78 | | * |
| 07181+1632 | STF 1061 A | HIP 35350 | 9.2596 | y | 2 | 4.67 | 6.00 | | |
| | | | 9.2596 | H$\alpha$ | 2 | 4.60 | 6.58 | | |
| 07256+0734 | HD 58368 | HIP 36042 | 9.2650 | y | 3 | 4.36 | 5.43 | | |
| 07277+2127 | MCA 30 Aa,Ab | HIP 36238 | 9.2596 | H$\alpha$ | 2 | 4.47 | 6.02 | | * |
| | | | 9.2596 | y | 1 | 4.40 | 5.46 | | |
| 07328+2253 | STF 1108 A | HIP 36690 | 9.2596 | y | 2 | 4.06 | 5.10 | | |
| 07383−2522 | B 731 | HIP 37173 | 9.2595 | y | 2 | 5.18 | 7.13 | | * |
| 07430−4511 | GJ 284 | HIP 37606 | 9.2651 | y | 2 | 4.91 | 6.98 | | * |
| | | | 9.2651 | H$\alpha$ | 2 | 4.66 | 6.85 | | |
| 08095−4720 | WSI 55 Ba,Bb | HIP 68243 | 9.2624 | H$\alpha$ | 2 | 4.51 | 7.03 | | |
| 08263−3904 | TOK 6A | HIP 41361 | 9.2623 | y | 2 | 4.72 | 7.09 | | * |
| 08326−1502 | B 2528 | HIP 41893 | 9.2623 | y | 3 | 5.32 | 6.48 | | * |
| | | | 9.2623 | H$\alpha$ | 2 | 4.74 | 6.18 | | |
| 08585+1151 | HJ 110 A | HIP 44066 | 9.2596 | H$\alpha$ | 2 | 4.36 | 6.20 | | * |
| 09008+0448 | HDS 1307 | HIP 44260 | 9.2597 | y | 3 | 3.38 | 3.91 | | * |
| 09099−3022 | H N 96 A | HIP 45001 | 9.2625 | y | 2 | 4.90 | 7.43 | | * |
| 09110−5858 | V357 Car | HIP 45080 | 9.2653 | H$\alpha$ | 2 | 4.45 | 6.75 | | |
| 09412+0954 | HMM 1 Aa,Ab | HIP 47508 | 9.2597 | H$\alpha$ | 2 | 5.19 | 6.61 | | * |
| 11042−5828 | HLN 22 Aa,Ab | HD 96118 | 9.2598 | y | 2 | 4.79 | 5.45 | | * |
| 11330−3151 | HD 100407 | HIP 56343 | 9.2598 | H$\alpha$ | 2 | 4.77 | 6.81 | | * |
| 11354−3233 | GJ 433 | HIP 56528 | 8.5394 | y | 2 | 4.56 | 5.31 | | |
| | | | 8.5394 | H$\alpha$ | 2 | 4.79 | 5.28 | | |
| 11510−0520 | MCA 36 | HIP 57791 | 9.2599 | y | 2 | 5.14 | 6.55 | | * |
| | | | 9.2599 | H$\alpha$ | 1 | 4.76 | 6.52 | | |
| 11514+1148 | HDS 1672 | HIP 57821 | 9.2599 | y | 2 | 4.16 | 5.94 | | * |
| | | | 9.2655 | H$\alpha$ | 2 | 4.54 | 5.96 | | |
| 12011+1300 | AG Vir | HIP 58605 | 9.2600 | y | 3 | 3.69 | 4.98 | | * |
| 12264−4316 | HDS 1750 | HIP 60701 | 8.5421 | y | 3 | 3.23 | 3.30 | : | * |
| 12297−0320 | TOK 27 | HIP 60956 | 9.2600 | y | 2 | 4.77 | 5.13 | | * |
| 12347−4440 | B 1718 A | HIP 61379 | 8.5476 | y | 2 | 5.27 | 6.36 | | * |
| 12419+1014 | rho Vir | HIP 61960 | 9.2600 | y | 2 | 4.08 | 5.12 | | |
| 12590−0950 | B 2541 | HIP 63366 | 8.5395 | y | 4 | 4.70 | 5.12 | | * |
| 13038−0510 | PX Vir | HIP 63742 | 8.5395 | y | 2 | 4.29 | 4.63 | | |

TABLE 5—*Continued*

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5395 | H$\alpha$ | 3 | 3.92 | 4.23 | : | |
| 13105−0410 | PY Vir | BD−03 3149 | 9.2601 | y | 4 | 3.66 | 4.19 | | |
| 13121−3748 | GJ 9432 | HIP 64408 | 8.5393 | y | 3 | 5.08 | 6.26 | | |
| 13233−6014 | HD 116186 | HIP 65321 | 8.5448 | V | 2 | 3.64 | 4.91 | | |
| 13513−2423 | WSI 53 | HIP 67620 | 8.5394 | y | 1 | 5.27 | 5.87 | | * |
| 14133−0827 | CHR 221 | HIP 69466 | 8.5449 | y | 2 | 4.71 | 6.09 | | * |
| 14160−0600 | iot Vir | HIP 69701 | 9.2629 | H$\alpha$ | 2 | 4.40 | 7.07 | | |
| 14170−1626 | TDS 9152 Aa,Ab | HD 124989 | 8.5449 | y | 2 | 4.03 | 4.86 | | * |
| 14190−2549 | BU 1246 A | HIP 69965 | 8.5367 | y | 2 | 4.87 | 6.06 | | |
| 14225−2518 | RST 5534 | HD 125821 | 8.5450 | y | 2 | 3.69 | 4.29 | : | * |
| 14226−0746 | STF 1833 AB | HIP 70269 | 8.5476 | y | 4 | 4.68 | 5.70 | | |
| 14234+0827 | BU 1111 BC | HIP 70327 | 8.5476 | y | 2 | 4.78 | 6.45 | | * |
| | | | 8.5476 | H$\alpha$ | 2 | 4.98 | 6.35 | | |
| 14282−2929 | FIN 306 AB | HIP 70753 | 9.2628 | y | 2 | 4.96 | 7.02 | | * |
| | | | 9.2628 | H$\alpha$ | 2 | 4.54 | 6.87 | | |
| 14396−6050 | RHD 1 B | HIP 71681 | 8.5368 | y | 2 | 5.05 | 6.66 | | * |
| 14396−6050 | RHD 1 A | HIP 71683 | 8.5368 | y | 2 | 4.69 | 6.23 | | * |
| 14453−3609 | I 528 AB | HIP 72140 | 8.5422 | y | 2 | 3.71 | 3.81 | : | * |
| 14467−6128 | BP Cir | HIP 72264 | 8.5368 | y | 2 | 4.39 | 5.22 | | |
| 14481+1357 | EL Boo | HIP 72391 | 9.2629 | y | 2 | 2.87 | 3.52 | | |
| 14485−1720 | BU 346 A | HIP 72423 | 9.2628 | y | 1 | 4.57 | 6.49 | | * |
| 14485−1720 | BU 346 B | HIP 72423 | 9.2628 | y | 1 | 4.54 | 6.31 | | * |
| 14485−3551 | B 2024 AB | HIP 72427 | 9.2602 | y | 2 | 4.99 | 7.09 | | |
| 14492−5924 | FIN 298 AB | HIP 72482 | 8.5422 | y | 2 | 4.38 | 4.64 | | * |
| 14494−6714 | DON 680 A | HIP 72493 | 8.5369 | y | 1 | 4.22 | 5.00 | | |
| 14526−3035 | LTT 5904 | HIP 72772 | 8.5368 | y | 2 | 4.70 | 6.11 | | |
| | | | 8.5368 | H$\alpha$ | 1 | 4.31 | 5.54 | | |
| 15123−5206 | DUN 176 A | HIP 74395 | 8.5368 | y | 2 | 4.80 | 6.31 | | |
| 15210−1522 | MCA 41 | HIP 75112 | 8.5450 | y | 2 | 4.13 | 5.30 | | * |
| 15218−4819 | GJ 582 | HIP 75181 | 8.5368 | y | 2 | 4.66 | 6.07 | | |
| 15221−4756 | GJ 3901 | HIP 75206 | 8.5368 | y | 2 | 4.49 | 6.17 | | |
| 15319−1541 | VZ Lib | HIP 76050 | 9.2604 | y | 3 | 3.98 | 4.68 | | * |
| | | | 9.2657 | y | 1 | 3.98 | 4.68 | : | |
| | | | 9.2657 | R | 2 | 3.96 | 5.40 | | |
| 15355−1447 | WRH 20 Aa,Ab | HIP 76333 | 9.2604 | y | 2 | 4.71 | 7.19 | | * |
| | | | 9.2604 | H$\alpha$ | 1 | 4.52 | 6.67 | | |
| 15362−3306 | FIN 231 | HIP 76395 | 8.5450 | y | 2 | 5.24 | 6.28 | | * |
| 15377−2432 | TDS 9564 | HD 139221 | 8.5450 | y | 2 | 3.76 | 4.10 | : | * |
| 15412−4440 | GJ 594 | HIP 76829 | 8.5368 | y | 2 | 4.85 | 6.37 | | |
| 15451−3506 | SEE 248 | HIP 77150 | 8.5479 | y | 2 | 4.54 | 5.19 | | * |
| 15453−5841 | FIN 234 AB | HIP 77160 | 9.2603 | y | 2 | 4.33 | 6.06 | | |
| 15467−3441 | B 847 | HIP 77286 | 8.5479 | y | 2 | 5.33 | 6.33 | | * |
| 15467−4314 | I 1276 | HIP 77282 | 8.5478 | y | 2 | 4.52 | 5.24 | | * |
| 15470−3635 | HDS 2223 | HIP 77308 | 8.5479 | y | 2 | 4.02 | 4.65 | | * |
| 15559−0210 | STF 1985 A | HIP 78024 | 8.5371 | y | 4 | 4.48 | 5.12 | | * |
| 15578−4100 | SEE 252 AB | HD 142754 | 8.5478 | y | 2 | 4.22 | 4.90 | | * |
| 15582−1417 | FX Lib | HIP 78207 | 8.5370 | y | 2 | 5.00 | 6.70 | | |
| | | | 8.5480 | y | 2 | 5.00 | 6.70 | | |
| | | | 8.5480 | H$\alpha$ | 2 | 4.88 | 6.98 | | |
| 16035−5747 | SEE 258 AB | HIP 78662 | 8.5478 | y | 2 | 4.04 | 4.56 | | * |
| 16102−4008 | I 1082 AB | HIP 79230 | 8.5424 | y | 2 | 4.52 | 4.85 | | * |
| 16133+1332 | CHR 52 Aa,Ab | HIP 79492 | 8.5371 | y | 2 | 4.05 | 4.42 | | * |
| | | | 8.5371 | H$\alpha$ | 1 | 3.76 | 4.05 | | |
| | | | 8.5371 | y | 2 | 4.05 | 4.42 | | |
| | | | 9.2605 | y | 4 | 4.15 | 5.56 | | |
| 16205−2007 | B 1808 AB | HIP 80062 | 8.5423 | y | 2 | 3.42 | 3.53 | : | * |
| 16240−3912 | GJ 9559 | HIP 80337 | 8.5396 | y | 2 | 5.00 | 5.93 | | |

TABLE 5—*Continued*

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | 5$\sigma$ Detection Limit $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| 16247−2942 | H N 39 | HIP 80399 | 8.5396 | y | 6 | 5.12 | 5.53 | | * |
| 16270−1827 | chi Oph | HIP 80569 | 8.5370 | y | 2 | 5.04 | 6.30 | | |
| | | | 8.5370 | H$\alpha$ | 2 | 4.91 | 6.10 | | |
| 16285−7005 | zet TrA | HIP 80686 | 8.5369 | y | 5 | 4.73 | 6.08 | | * |
| 16303−1240 | GJ 628 | HIP 80824 | 8.5370 | V | 1 | 3.69 | 4.10 | : | |
| | | | 8.5370 | y | 2 | 3.51 | 3.79 | : | |
| 16334−7854 | gam Aps | HIP 81065 | 8.5369 | y | 2 | 4.40 | 5.67 | | |
| | | | 8.5369 | H$\alpha$ | 1 | 4.75 | 5.72 | | |
| | | | 9.2656 | H$\alpha$ | 2 | 4.13 | 6.72 | | |
| 16335−1410 | HDS 2341 | HIP 81067 | 8.5423 | y | 2 | 3.31 | 3.38 | : | * |
| 16372−1034 | zet Oph | HIP 81377 | 8.5370 | y | 2 | 4.89 | 6.38 | | |
| | | | 8.5370 | H$\alpha$ | 2 | 4.86 | 6.14 | | |
| 16435−0807 | WRH 26 | HIP 81882 | 8.5423 | y | 2 | 3.65 | 3.80 | : | * |
| 16439−2649 | HD 150698 | HIP 81910 | 8.5369 | y | 1 | 4.86 | 5.58 | | |
| | | | 8.5369 | H$\alpha$ | 1 | 4.52 | 5.15 | | |
| 16459−3953 | HDS 2380 | HIP 82077 | 8.5424 | y | 2 | 3.75 | 3.90 | : | * |
| 16478−4356 | I 1595 | HD 151183 | 8.5424 | y | 2 | 3.31 | 3.43 | : | * |
| 16542−4150 | CHR 252 Aa,Ab | HIP 82691 | 9.2630 | y | 2 | 4.77 | 6.89 | | * |
| 16569−6057 | COO 203 A | HIP 82930 | 8.5452 | y | 2 | 3.92 | 4.46 | | |
| 17056−4106 | HLN 41 | HIP 83607 | 8.5424 | y | 2 | 3.42 | 3.48 | : | * |
| 17094−3445 | HDS 2422 | HIP 83935 | 8.5425 | y | 2 | 3.65 | 3.76 | : | * |
| 17146+1423 | CHR 139 Aa,Ab | HIP 84345 | 9.2605 | y | 2 | 4.20 | 6.24 | | * |
| 17181−2404 | GJ 665.1 | HIP 84636 | 8.5369 | y | 2 | 4.74 | 6.02 | | |
| 17190−3460 | SEE 509 C | LTT 6889 | 8.5396 | y | 2 | 3.38 | 3.53 | : | |
| 17190−3849 | HDS 2447 A | HIP 84716 | 8.5396 | y | 1 | 2.90 | 3.02 | : | * |
| 17191−4638 | BSO 13 A | HIP 84720 | 8.5396 | y | 4 | 5.13 | 5.92 | | * |
| 17198−3606 | WSI 61 Ba,Bb | HD 319703B | 8.5396 | y | 2 | 2.99 | 3.20 | : | * |
| 17206−1920 | A 2241 A | HIP 84856 | 8.5370 | y | 2 | 4.81 | 5.67 | | |
| 17208−4240 | I 410 A | HIP 84879 | 9.2657 | y | 1 | 4.24 | 5.69 | | * |
| 17208−4240 | I 410 B | HIP 84879 | 9.2657 | y | 2 | 3.56 | 4.12 | | * |
| 17210−2107 | DON 832 | HIP 84893 | 8.5396 | y | 2 | 4.88 | 5.63 | | * |
| | | | 8.5396 | H$\alpha$ | 2 | 5.35 | 5.91 | | |
| | | | 8.5425 | y | 2 | 4.88 | 5.63 | | |
| | | | 8.5425 | H$\alpha$ | 2 | 5.35 | 5.91 | | |
| 17314+0243 | A 2386 | HIP 85749 | 8.5372 | y | 2 | 4.88 | 5.72 | | * |
| | | | 9.2605 | y | 2 | 4.54 | 6.65 | | |
| 17337+1451 | WSI 3 | HIP 85934 | 8.5371 | y | 3 | 4.82 | 5.42 | | * |
| | | | 8.5371 | H$\alpha$ | 1 | 5.19 | 6.06 | | |
| 17352−4841 | GJ 680 | HIP 86057 | 8.5480 | y | 4 | 3.15 | 3.55 | : | |
| 17393+0333 | GJ 688 | HIP 86400 | 8.5372 | y | 2 | 4.42 | 5.12 | | |
| 17404−4925 | lam Ara | HIP 86486 | 8.5397 | y | 2 | 4.28 | 5.02 | | |
| 17434−2141 | 58 Oph | HIP 86736 | 8.5396 | y | 2 | 5.08 | 5.53 | | |
| | | | 8.5425 | y | 2 | 5.08 | 5.53 | | |
| | | | 8.5425 | H$\alpha$ | 2 | 4.68 | 5.13 | | |
| 17441−5150 | mu Ara | HIP 86796 | 8.5397 | y | 2 | 3.04 | 3.92 | | |
| 17449−5733 | HLN 44 Aa,Ab | HIP 86871 | 8.5452 | y | 2 | 5.10 | 6.13 | | * |
| 17511−2724 | HD 162236 | HIP 87369 | 8.5397 | y | 2 | 3.06 | 3.12 | : | |
| 17575−5740 | HJ 4992 A | HIP 87914 | 9.2632 | y | 2 | 3.89 | 5.08 | | * |
| 17592−3656 | HJ 5000 A | HIP 88069 | 8.5397 | y | 2 | 3.89 | 4.07 | : | * |
| 18034+0825 | GC 24579 | HIP 88436 | 9.2661 | y | 2 | 4.34 | 5.53 | | |
| 18055+0230 | STF 2272 A | HIP 88601 | 9.2634 | H$\alpha$ | 2 | 4.73 | 6.19 | | * |
| 18064−3601 | GJ 702.1 | HIP 88694 | 8.5397 | y | 2 | 4.16 | 4.70 | | |
| | | | 8.5397 | H$\alpha$ | 2 | 4.22 | 4.75 | | |
| 18126−7340 | HDO 284 B | HIP 89234 | 9.2632 | y | 1 | 3.12 | 3.82 | | * |
| 18197−4542 | CHR 148 | HIP 89808 | 8.7723 | H$\alpha$ | 1 | 4.70 | 5.55 | | * |
| | | | 9.2660 | y | 2 | 4.57 | 6.77 | | |
| | | | 9.2660 | H$\alpha$ | 2 | 4.35 | 6.27 | | |

TABLE 5—*Continued*

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | 5$\sigma$ Detection Limit $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| 18202−4555 | GJ 4050 | HIP 89855 | 8.5397 | y | 2 | 3.97 | 4.18 | : | |
| 18232−6130 | GLE 2 | HIP 90098 | 8.7724 | H$\alpha$ | 2 | 4.88 | 6.27 | | * |
| | | | 9.2632 | y | 2 | 4.42 | 6.70 | | |
| 18272+0012 | STF 2316 Aa,Ab | HIP 90441 | 8.5372 | y | 2 | 4.73 | 5.87 | : | * |
| | | | 8.5372 | H$\alpha$ | 1 | 4.66 | 5.71 | : | |
| | | | 8.7721 | H$\alpha$ | 2 | 4.84 | 6.47 | | |
| | | | 9.2607 | y | 1 | 4.40 | 6.63 | | |
| 18277−3207 | I 1023 | HD 169788 | 8.5426 | y | 2 | 3.83 | 3.98 | : | * |
| 18280−2525 | WFC 208 A | HIP 90496 | 8.7694 | y | 2 | 4.97 | 7.38 | | |
| 18352−0815 | alp Sct | HIP 91117 | 8.7722 | H$\alpha$ | 2 | 4.72 | 6.60 | | |
| 18363−3220 | HDS 2640 | HIP 91206 | 9.2660 | y | 3 | 5.00 | 5.62 | | * |
| 18367+0640 | CHR 76 Aa,Ab | HIP 91237 | 8.7721 | H$\alpha$ | 2 | 4.84 | 5.96 | | * |
| | | | 9.2607 | y | 1 | 4.55 | 6.44 | | |
| 18389−2103 | WSI 88 | HIP 91438 | 8.6055 | y | 2 | 4.99 | 6.88 | | |
| | | | 8.7694 | y | 2 | 4.92 | 7.19 | | |
| 18423−0720 | HDS 2649 | HIP 91728 | 8.5427 | y | 2 | 4.62 | 4.90 | | * |
| 18455+0530 | FIN 332 Ba,Bb | | 9.2607 | y | 2 | 4.07 | 5.68 | | |
| 18465−0058 | MCA 53 Aa,Ab | HIP 92117 | 8.5427 | y | 2 | 4.60 | 5.14 | | * |
| 18494−3502 | B 2463 | HD 173919 | 8.5481 | y | 2 | 4.23 | 5.06 | | * |
| 18542−2254 | TDT 1120 | | 8.5481 | y | 2 | 4.31 | 5.33 | | * |
| 19026+1434 | NLTT 47341 | HIP 93509 | 8.5373 | y | 2 | 4.28 | 4.73 | | |
| | | | 8.5373 | H$\alpha$ | 1 | 4.10 | 4.52 | | |
| | | | 8.5373 | y | 3 | 4.28 | 4.73 | | |
| 19029−0342 | A 3105 | HIP 93526 | 8.5427 | y | 2 | 4.91 | 5.69 | | * |
| 19032−5660 | HD 176354 | HIP 93547 | 8.5400 | y | 2 | 4.41 | 5.40 | | |
| 19098−1948 | B 427 | HIP 94144 | 8.5427 | y | 2 | 4.68 | 5.25 | | * |
| | | | 8.7695 | y | 2 | 5.06 | 6.96 | | |
| | | | 9.2633 | y | 2 | 4.77 | 7.00 | | |
| | | | 9.2633 | H$\alpha$ | 1 | 4.66 | 6.82 | | |
| 19098−2101 | FIN 311 AB | HIP 94141 | 8.5427 | y | 2 | 4.98 | 5.91 | | * |
| | | | 9.2633 | H$\alpha$ | 2 | 4.71 | 7.36 | | |
| | | | 9.2633 | y | 2 | 4.72 | 7.39 | | |
| 19126+1651 | STTA 177 C | HIP 94371 | 8.5373 | y | 2 | 3.31 | 3.77 | | |
| 19269−2945 | HD 182681 | HIP 95619 | 8.6055 | y | 2 | 5.07 | 7.09 | | |
| 19294−0703 | TOK 4 Aa,Ab | HIP 95820 | 8.7667 | y | 2 | 5.15 | 6.01 | | * |
| | | | 8.7667 | H$\alpha$ | 2 | 4.88 | 5.78 | | |
| 19369−0702 | kap Aql | HIP 96483 | 8.7667 | H$\alpha$ | 2 | 5.13 | 5.96 | | |
| | | | 8.7667 | y | 2 | 5.44 | 6.25 | | |
| 19399−2204 | I 656 | HIP 96741 | 8.5400 | y | 2 | 4.33 | 5.24 | | * |
| 19488−4931 | HDS 2818 | HIP 97481 | 8.5455 | y | 2 | 4.58 | 5.73 | | * |
| 19587−4151 | TDT 1895 | HIP 98334 | 8.5428 | y | 2 | 3.67 | 3.86 | : | * |
| 20096+1648 | STF 2634 AB | HIP 99316 | 8.5373 | y | 2 | 3.74 | 4.28 | | * |
| 20111+1611 | GIC 163 A | HIP 99452 | 8.5373 | y | 2 | 4.08 | 4.78 | | |
| 20112−3606 | HJ 5173 A | HIP 99461 | 8.5401 | y | 2 | 4.85 | 6.32 | | |
| 20153−2702 | GJ 785 | HIP 99825 | 8.5372 | y | 2 | 4.77 | 6.09 | | |
| 20210−1447 | BLA 7 Aa,Ab | HIP 100345 | 8.7668 | y | 2 | 4.93 | 7.09 | | * |
| | | | 8.7668 | H$\alpha$ | 2 | 4.95 | 7.10 | | |
| | | | 8.7724 | H$\alpha$ | 1 | 5.07 | 6.84 | | |
| 20224−5630 | FIN 276 | HIP 100462 | 8.5482 | y | 4 | 4.18 | 4.85 | | * |
| 20296−4609 | I 1422 | HD 194834 | 8.5428 | y | 2 | 4.17 | 4.33 | : | * |
| 20384−2100 | RST 9008 | HIP 101858 | 8.5428 | y | 2 | 4.30 | 4.52 | | * |
| 20400−6033 | phi 2 Pav | HIP 101983 | 8.5400 | y | 2 | 4.50 | 6.11 | | |
| 20414−3136 | HD 196917 | HIP 102092 | 8.6055 | y | 2 | 4.83 | 6.93 | | |
| 20452−3120 | LDS 720 A | HIP 102409 | 8.5401 | y | 3 | 4.32 | 4.93 | | * |
| 20461−2516 | GJ 805 | HIP 102485 | 8.5374 | y | 2 | 5.69 | 7.08 | | |
| | | | 8.5429 | y | 2 | 5.69 | 7.08 | | |
| | | | 8.5429 | H$\alpha$ | 2 | 5.40 | 6.45 | | |

TABLE 5—*Continued*

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | 5$\sigma$ Detection Limit $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5457 | y | 2 | 5.69 | 7.08 | | |
| | | | 8.5457 | H$\alpha$ | 2 | 5.40 | 6.45 | | |
| | | | 8.5484 | y | 2 | 5.69 | 7.08 | | |
| | | | 8.5484 | H$\alpha$ | 2 | 5.40 | 6.45 | | |
| 20477−0930 | eps Aqr | HIP 102618 | 8.7668 | y | 2 | 5.07 | 7.10 | | |
| | | | 8.7668 | H$\alpha$ | 1 | 4.89 | 6.74 | | |
| 20568−2618 | GJ 811 | HIP 103389 | 8.5374 | y | 2 | 5.33 | 6.88 | | * |
| | | | 8.5429 | y | 2 | 5.33 | 6.88 | | |
| | | | 8.5429 | H$\alpha$ | 2 | 4.93 | 6.74 | | |
| | | | 8.5457 | y | 3 | 5.33 | 6.88 | | |
| | | | 8.5458 | H$\alpha$ | 2 | 4.93 | 6.74 | | |
| | | | 8.5484 | y | 2 | 5.33 | 6.88 | | |
| | | | 8.5484 | H$\alpha$ | 2 | 4.93 | 6.74 | | |
| 21004−5116 | HD 199623 | HIP 103673 | 8.5374 | y | 2 | 5.12 | 6.25 | | |
| | | | 8.5458 | y | 2 | 5.12 | 6.25 | | |
| | | | 8.5458 | H$\alpha$ | 2 | 4.98 | 5.98 | | |
| 21047+0332 | SE 3 Aa,Ab | HIP 104047 | 8.5374 | y | 2 | 4.50 | 5.33 | | * |
| | | | 8.7669 | y | 2 | 4.28 | 5.74 | | |
| 21099−2424 | HDS 3015 | HIP 104476 | 8.5429 | y | 2 | 3.39 | 3.54 | : | * |
| | | | 8.7725 | H$\alpha$ | 1 | 3.74 | 4.37 | | |
| | | | 8.7725 | y | 2 | 4.26 | 5.24 | | |
| 21210+0217 | TDT 2913 | | 8.5374 | y | 1 | 3.53 | 3.55 | : | * |
| 21214−5145 | HD 203021 | HIP 105439 | 8.5374 | y | 2 | 4.88 | 5.87 | | |
| | | | 8.5374 | H$\alpha$ | 1 | 4.74 | 5.63 | | |
| | | | 8.5458 | y | 2 | 4.88 | 5.87 | | |
| | | | 8.5458 | H$\alpha$ | 2 | 4.74 | 5.63 | | |
| 21247−6814 | GJ 1262 | HIP 105712 | 8.5375 | y | 2 | 4.35 | 5.24 | | |
| 21252−0945 | 19 Aqr | HIP 105761 | 8.6056 | y | 2 | 4.81 | 6.46 | | |
| 21264−6522 | gam Pav | HIP 105858 | 8.5375 | y | 2 | 4.89 | 6.08 | | |
| 21316−0534 | H 5 76 A | HIP 106278 | 8.7669 | y | 2 | 4.66 | 6.99 | | |
| | | | 8.7669 | H$\alpha$ | 2 | 4.82 | 7.10 | | |
| 21349−2005 | 37 Cap | HIP 106559 | 8.5374 | y | 2 | 5.22 | 6.68 | | |
| | | | 8.5429 | y | 2 | 5.22 | 6.68 | | |
| | | | 8.5429 | H$\alpha$ | 2 | 4.86 | 6.36 | | |
| | | | 8.5457 | y | 2 | 5.22 | 6.68 | | |
| | | | 8.5457 | H$\alpha$ | 2 | 4.86 | 6.36 | | |
| | | | 8.5484 | y | 2 | 5.22 | 6.68 | | |
| | | | 8.5484 | H$\alpha$ | 2 | 4.86 | 6.36 | | |
| 21378−0751 | MCA 68 | HIP 106786 | 8.6056 | y | 2 | 4.88 | 6.44 | | * |
| 21391−3341 | HD 205872 | HIP 106907 | 8.5374 | y | 2 | 4.66 | 5.98 | | |
| 21400+0911 | CHR 105 | HIP 106981 | 8.7669 | y | 2 | 3.97 | 6.02 | | * |
| | | | 8.7669 | H$\alpha$ | 2 | 4.50 | 5.95 | | |
| 21449−3302 | I 1051 A | HIP 107380 | 8.7669 | y | 2 | 5.21 | 7.46 | | |
| 21479−4500 | I 1446 | HD 207108 | 8.5402 | y | 2 | 4.64 | 5.35 | | * |
| 21483−4718 | BSO 15 A | HIP 107649 | 8.5374 | y | 2 | 4.77 | 5.81 | | |
| | | | 8.5374 | H$\alpha$ | 1 | 4.56 | 5.75 | | |
| 21499−2509 | B 540 | HIP 107765 | 8.5456 | y | 2 | 3.72 | 4.32 | : | * |
| 22034−5647 | SOZ 1 A | HIP 108870 | 8.5375 | y | 2 | 4.83 | 6.11 | | * |
| 22101−3233 | tau PsA | HIP 109422 | 8.5374 | y | 2 | 5.00 | 6.06 | | |
| 22146−1549 | GJ 851.3 | HIP 109822 | 8.5374 | y | 2 | 4.66 | 5.36 | | |
| 22168−0747 | the Aqr | HIP 110003 | 8.6058 | y | 2 | 4.98 | 6.50 | | |
| 22215+1212 | IN Peg | HIP 110386 | 8.5377 | y | 2 | 4.44 | 5.82 | | |
| 22232+0928 | LTT 16548 | HIP 110508 | 8.5377 | y | 2 | 4.16 | 4.64 | | |
| 22249−5748 | I 383 A | HIP 110649 | 8.5375 | y | 2 | 4.66 | 5.99 | | |
| 22253+0123 | pi Aqr | HIP 110672 | 8.5376 | y | 2 | 4.63 | 5.90 | | |
| | | | 8.5376 | H$\alpha$ | 1 | 4.55 | 5.62 | | |
| 22347−2042 | ups Aqr | HIP 111449 | 8.5375 | y | 2 | 5.06 | 6.09 | | |

TABLE 5—*Continued*

| WDS (2000) | Discoverer Designation or other name | Hipparcos or other name | Epoch +2000 | Filter | N | 5$\sigma$ Detection Limit $\Delta m(0\farcs15)$ (mag) | 5$\sigma$ Detection Limit $\Delta m(1'')$ (mag) | $\Delta m$ flag | Note |
|---|---|---|---|---|---|---|---|---|---|
| 22351+1153 | LTT 16623 | HIP 111473 | 8.5377 | y | 2 | 3.74 | 4.11 | | |
| 22388−2037 | HJ 3126 A | HIP 111802 | 8.5375 | y | 2 | 4.03 | 4.35 | : | * |
| 22399+0407 | V403 Peg | HIP 111888 | 8.5376 | y | 2 | 4.19 | 4.70 | | |
| 22408−0333 | KUI 114 | HIP 111965 | 8.5376 | y | 4 | 4.97 | 6.01 | | * |
| | | | 8.6057 | H$\alpha$ | 2 | 4.05 | 5.51 | | |
| | | | 8.6058 | y | 2 | 4.78 | 6.16 | | |
| 22421−0506 | HDS 3222 Aa,Ab | HIP 112078 | 8.5430 | y | 2 | 4.88 | 6.12 | | * |
| | | | 8.5486 | y | 2 | 4.88 | 6.12 | | |
| 22479−5705 | B 2059 | HIP 112561 | 8.5404 | y | 2 | 3.68 | 4.24 | | * |
| 22514+1358 | STT 597 A | HIP 112870 | 8.5377 | y | 2 | 3.95 | 4.55 | | |
| 22536−4836 | tau 1 Gru | HIP 113044 | 8.5375 | y | 2 | 4.83 | 5.92 | | |
| 22553−4828 | B 2506 CD | HIP 113190 | 8.5404 | y | 2 | 4.83 | 5.71 | | * |
| 22583−0224 | CHR 116 | HIP 113421 | 8.5376 | y | 2 | 4.51 | 5.61 | | * |
| | | | 8.5376 | H$\alpha$ | 2 | 4.49 | 5.46 | | |
| 23017+0428 | HD 217578 | HIP 113699 | 8.5376 | y | 2 | 4.83 | 5.74 | | |
| 23019−0351 | GJ 886 AB | HIP 113718 | 8.5376 | y | 2 | 4.37 | 4.97 | | |
| 23039+0349 | bet Psc | HIP 113889 | 8.5376 | y | 2 | 4.81 | 6.10 | | |
| 23046−2611 | B 587 | HIP 113954 | 8.5404 | y | 2 | 4.35 | 5.04 | | * |
| 23051+1634 | LTT 16778 | HIP 113994 | 8.5377 | y | 2 | 4.44 | 5.39 | | |
| 23055+1427 | LTT 16779 | HIP 114028 | 8.5377 | y | 2 | 4.12 | 4.97 | | |
| 23065+1955 | LTT 16785 | HIP 114096 | 8.5377 | y | 2 | 3.06 | 4.58 | | |
| | | | 8.5377 | H$\alpha$ | 1 | 4.70 | 5.47 | | |
| 23100+1426 | STF 2986 A | HIP 114378 | 8.5377 | y | 2 | 4.35 | 5.40 | | |
| 23114−4259 | B 594 | HD 218812 | 8.5404 | y | 2 | 4.21 | 5.07 | | * |
| | | | 8.5486 | y | 3 | 4.21 | 5.07 | | |
| | | | 8.7697 | y | 3 | 4.43 | 5.67 | | |
| 23138+1522 | HD 219172 | HIP 114670 | 8.5377 | y | 2 | 4.13 | 4.77 | | |
| 23141−6242 | LTT 9415 | HIP 114699 | 8.5375 | y | 2 | 4.71 | 5.46 | | |
| | | | 8.5375 | H$\alpha$ | 1 | 4.60 | 5.38 | | |
| 23170−6200 | GJ 1282 | HIP 114948 | 8.5375 | y | 2 | 4.58 | 5.74 | | |
| 23172+0317 | gam Psc | HIP 114971 | 8.5376 | y | 2 | 4.76 | 6.16 | | |
| 23265+0839 | NLTT 56864 | HIP 115697 | 8.5376 | y | 2 | 4.09 | 4.76 | | |
| 23295−6045 | HD 221070 | HIP 115948 | 8.5459 | y | 2 | 3.85 | 4.36 | | |
| 23315−2857 | B 602 | HIP 116105 | 8.5459 | y | 2 | 4.05 | 4.71 | | * |
| 23333−7723 | GJ 4340 | HIP 116250 | 8.5379 | y | 2 | 4.13 | 5.68 | | |
| 23336+1749 | HO 655 A | HIP 116277 | 8.5378 | y | 2 | 4.06 | 4.74 | | |
| 23354+0214 | LTT 16941 | HIP 116410 | 8.5379 | y | 2 | 4.32 | 5.04 | | |
| 23356+1436 | HD 221866 | HIP 116434 | 8.5378 | y | 2 | 4.27 | 4.93 | | |
| 23357−2729 | SEE 492 | HIP 116436 | 8.7698 | y | 2 | 4.94 | 7.30 | | * |
| | | | 8.7698 | H$\alpha$ | 1 | 4.85 | 6.54 | | |
| 23388−2816 | B 608 | HIP 116691 | 8.5431 | y | 2 | 3.55 | 3.83 | : | * |
| 23398−1413 | 102 Aqr | HIP 116758 | 8.6058 | y | 2 | 5.02 | 6.43 | | |
| | | | 8.6058 | H$\alpha$ | 2 | 4.55 | 6.00 | | |
| 23399+0538 | BUP 240 A | HIP 116771 | 8.5378 | y | 2 | 4.76 | 6.01 | | |
| 23429+0014 | HD 222697 | HIP 116984 | 8.5379 | y | 2 | 3.98 | 4.53 | | |
| 23463+0947 | LTT 17002 | HIP 117236 | 8.5378 | y | 2 | 4.53 | 5.37 | | |
| 23479+0411 | LTT 17005 | HIP 117367 | 8.5378 | y | 2 | 4.27 | 5.10 | | |
| 23490+0026 | LTT 17013 | HIP 117457 | 8.5379 | y | 2 | 4.04 | 4.65 | | |
| 23501+0253 | WOR 29 A | HIP 117526 | 8.5379 | y | 2 | 4.37 | 5.25 | | |
| 23511+0214 | HD 223617 | HIP 117607 | 8.7672 | y | 1 | 4.05 | 6.37 | | |
| 23537−4926 | I 1476 | HIP 117817 | 8.5431 | y | 2 | 3.82 | 3.96 | : | * |
| 23555+0330 | LTT 17049 | HIP 117953 | 8.5379 | y | 3 | 4.27 | 5.01 | | |

TABLE 6

NEWLY RESOLVED BINARY AND MULTIPLE STARS

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filter | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01144−0755 | WSI 70 Aa,Ab | HIP 5799 | 8.5405 | y | 2 | 111.7 | 2.3 | 0.1690 | 2.7 | 4.5 | * |
| 02022−2402 | TOK 41 Ba,Bb | HIP 9497 | 8.7674 | y | 2 | 3.6 | 3.4 | 0.0886 | 3.4 | 0.3 | * |
| | | | 8.7674 | H$\alpha$ | 2 | 6.5 | 2.9 | 0.0914 | 7.0 | 0.2 | |
| 02057−2423 | WSI 71 Aa,Ab | HIP 9774 | 8.5406 | y | 2 | 146.7 | 3.5 | 0.0397 | 1.0 | 1.7 : | * |
| | | | 8.5406 | H$\alpha$ | 2 | 143.0 | 6.5 | 0.0437 | 9.7 | 2.5 : | |
| | | | 8.7674 | y | 2 | 184.5 | 0.7 | 0.0266 | 0.7 | 1.0 | |
| | | | 8.7727 | y | 3 | 206.0 | 4.9 | 0.0248 | 7.7 | 1.7 : | |
| | | | 8.7727 | y | 2 | 190.9 | 0.9 | 0.0217 | 1.9 | 1.3 : | |
| 05086−1810 | WSI 72 | HIP 23932 | 8.7677 | y | 2 | 47.8 | 0.9 | 0.0518 | 0.4 | 0.0 : | |
| 07187−2457 | TOK 42 Aa,E | HIP 35415 | 9.2595 | y | 2 | 87.6 | 0.4 | 0.9480 | 1.3 | 4.4 | * |
| 07523−2626 | WSI 54 AC | HIP 38430 | 9.2595 | y | 3 | 226.8 | 2.9 | 0.0450 | 0.2 | 1.3 : | * |
| 09252−1258 | WSI 73 | HIP 46191 | 9.2597 | y | 2 | 274.8 | 0.6 | 0.1783 | 0.9 | 1.1 : | * |
| 09415−1829 | TOK 43 Aa,Ab | HIP 47537 | 9.2652 | y | 2 | 29.8 | 6.3 | 0.4365 | 1.4 | 2.1 | * |
| | | | 9.2652 | V | 2 | 28.2 | 4.4 | 0.4436 | 1.7 | 2.4 | |
| 10370−0850 | TOK 44 Aa,Ab | HIP 51966 | 9.2626 | y | 3 | 268.8 | 2.7 | 0.0973 | 0.3 | 3.0 | * |
| 10465−6416 | TOK 45 AC | HIP 52701 | 9.2654 | H$\alpha$ | 4 | 11.6 | 4.5 | 0.7475 | 3.7 | 3.9 | * |
| 12485−1543 | WSI 74 Aa,Ab | HIP 62505 | 8.5394 | y | 4 | 154.3 | 2.3 | 0.0461 | 0.9 | 1.3 | * |
| | | | 9.2599 | y | 3 | 99.0 | 0.3 | 0.0757 | 0.4 | 1.5 | |
| 13126−6034 | WSI 75 Aa,Ab | HD 114566 | 8.5448 | V | 2 | 75.9 | 9.7 | 0.1089 | 9.1 | 2.9 | * |
| 13254−5947 | WSI 76 | HIP 65492 | 8.5448 | y | 2 | 186.8 | 1.1 | 0.0949 | 1.1 | 2.6 : | |
| | | | 9.2627 | y | 5 | 185.3 | 2.0 | 0.1022 | 7.4 | 3.2 : | |
| 13275+2116 | TOK 46 | HD 117078 | 9.2601 | y | 4 | 23.7 | 1.1 | 0.0996 | 5.5 | 1.9 : | * |
| 13513−2423 | WSI 77 | HIP 67620 | 9.2601 | y | 2 | 176.9 | 0.2 | 0.1437 | 0.2 | 3.4 | * |
| | | | 9.2601 | H$\alpha$ | 2 | 177.0 | 0.4 | 0.1429 | 0.2 | 2.8 | |
| 13527−1843 | WSI 78 | HIP 67744 | 8.5395 | y | 2 | 100.8 | 2.0 | 0.0302 | 1.6 | 0.9 | * |
| | | | 9.2601 | y | 2 | 114.9 | 0.0 | 0.0366 | 0.1 | 0.7 | |
| | | | 9.2601 | H$\alpha$ | 2 | 115.7 | 0.2 | 0.0392 | 0.5 | 1.4 | |
| 14020−2108 | WSI 79 | HIP 68552 | 8.5394 | y | 4 | 149.5 | 2.0 | 0.2977 | 3.3 | 2.8 : | * |
| 14581−4852 | WSI 80 | HIP 73241 | 8.5368 | y | 3 | 132.9 | 1.7 | 0.2984 | 1.6 | 4.3 | * |
| | | | 9.2602 | y | 2 | 129.0 | 0.5 | 0.3178 | 0.5 | 4.4 | |
| | | | 9.2602 | H$\alpha$ | 2 | 129.2 | 0.4 | 0.3166 | 0.5 | 3.7 | |
| 14589+0636 | WSI 81 | HIP 73314 | 9.2629 | y | 2 | 49.9 | 0.2 | 0.1268 | 0.5 | 0.8 | * |
| 14598−2201 | TOK 47 | HIP 73385 | 9.2628 | y | 2 | 171.7 | 1.5 | 0.0400 | 0.3 | 1.7 | * |
| 15143−4242 | WSI 82 Aa,Ab | HD 134976 | 8.5477 | y | 2 | 30.6 | 0.0 | 0.0561 | 0.1 | 1.8 : | * |
| | | | 9.2603 | y | 2 | 35.2 | 0.9 | 0.0572 | 3.8 | 1.5 | |
| 15317+0053 | TOK 48 | HIP 76031 | 9.2604 | y | 2 | 67.9 | 2.0 | 0.0382 | 0.2 | 1.2 | * |
| | | | 9.2604 | H$\alpha$ | 2 | 69.6 | 2.2 | 0.0416 | 0.2 | 1.0 | |
| | | | 9.2658 | H$\alpha$ | 1 | 85.4 | 0.1 | 0.0374 | 0.1 | 1.0 | |
| | | | 9.2658 | y | 2 | 91.6 | 5.5 | 0.0393 | 2.5 | 1.1 | |
| 15348−2807 | TOK 49 Aa,Ab | HIP 76275 | 9.2657 | y | 2 | 181.0 | 0.3 | 0.1376 | 4.5 | 2.3 | * |
| | | | 9.2657 | R | 2 | 180.4 | 6.3 | 0.1364 | 1.6 | 2.2 | |
| | | | 9.2657 | I | 2 | 180.8 | 0.3 | 0.1362 | 0.2 | 1.7 | |
| 15471−5107 | WSI 83 Ba,Bb | HD 140662B | 8.5478 | y | 2 | 51.5 | 5.2 | 0.0763 | 3.4 | 0.5 : | * |
| | | | 9.2603 | y | 2 | 48.0 | 0.6 | 0.0725 | 3.4 | 0.4 : | |
| 16057−3252 | WSI 84 Ba,Bb | HIP 78842 | 8.5479 | y | 2 | 124.4 | 1.8 | 0.1281 | 2.5 | 0.1 : | * |
| | | | 9.2630 | H$\alpha$ | 2 | 103.9 | 1.3 | 0.1202 | 0.1 | 0.0 | |
| | | | 9.2630 | y | 2 | 103.1 | 1.6 | 0.1178 | 0.0 | 0.0 | |
| 16090−0939 | WSI 85 | HIP 79122 | 8.5370 | y | 4 | 134.4 | 1.7 | 0.1423 | 1.3 | 3.8 | * |
| | | | 9.2631 | y | 2 | 135.7 | 0.6 | 0.1294 | 3.0 | 3.7 | |
| | | | 9.2631 | H$\alpha$ | 2 | 134.7 | 0.8 | 0.1254 | 0.8 | 3.2 | |
| 16253−4909 | TOK 50 Aa,Ab | HIP 80448 | 9.2630 | y | 2 | 193.0 | 6.4 | 0.2286 | 1.3 | 3.6 | * |
| 16385−5728 | TOK 51 Aa,Ab | HIP 81478 | 9.2630 | y | 2 | 62.2 | 0.6 | 0.2675 | 1.0 | 4.0 | * |
| 16534−2025 | WSI 86 | HIP 82621 | 8.5370 | y | 2 | 167.0 | 5.0 | 0.3593 | 2.9 | 5.4 | |
| 17066+0039 | TOK 52 Ba,Bb | HIP 83716 | 9.2659 | y | 3 | 181.6 | 5.2 | 0.0993 | 1.5 | −0.1 | * |
| 17157−0949 | TOK 53 Ba,Bb | HIP 84430 | 9.2658 | y | 2 | 140.9 | 0.1 | 0.0328 | 0.2 | 0.2 | * |
| | | | 9.2658 | H$\alpha$ | 2 | 130.9 | 0.8 | 0.0365 | 0.0 | 0.2 | |
| 17248−5913 | WSI 87 AD | HIP 85216 | 8.5399 | y | 2 | 270.1 | 0.2 | 0.2673 | 2.4 | 1.0 | * |
| | | | 8.5399 | H$\alpha$ | 2 | 269.6 | 3.0 | 0.2675 | 3.1 | 1.3 : | |

TABLE 6—*Continued*

| WDS (2000) | Discoverer Designation | Other name | Epoch +2000 | Filter | N | $\theta$ (deg) | $\rho\sigma_\theta$ (mas) | $\rho$ ($''$) | $\sigma\rho$ (mas) | $\Delta m$ (mag) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8.5399 | y | 1 | 270.0 | 0.0 | 0.2620 | 0.0 | 0.5 : | |
| | | | 9.2631 | y | 2 | 270.9 | 0.8 | 0.2623 | 1.0 | 0.4 | |
| | | | 9.2631 | H$\alpha$ | 2 | 270.6 | 1.8 | 0.2626 | 1.8 | 0.5 | |
| | | | 9.2656 | H$\alpha$ | 2 | 271.0 | 0.4 | 0.2625 | 1.2 | 0.5 | |
| | | | 9.2656 | y | 2 | 271.4 | 0.4 | 0.2620 | 2.2 | 0.5 | |
| 17390+0240 | WSI 88 | HIP 86374 | 8.5372 | y | 2 | 2.9 | 1.0 | 0.1771 | 0.7 | 2.8 | * |
| | | | 9.2605 | y | 2 | 3.8 | 0.5 | 0.1797 | 0.3 | 2.6 | |
| | | | 9.2605 | H$\alpha$ | 2 | 4.9 | 0.7 | 0.1797 | 0.4 | 2.5 | |
| 17535−0355 | TOK 54 | V2610 Oph | 9.2605 | y | 3 | 149.1 | 1.3 | 0.1138 | 0.8 | 0.9 : | * |
| | | | 9.2659 | y | 2 | 147.6 | 1.0 | 0.1074 | 3.6 | 1.0 : | |
| 17575−5740 | TOK 55 Ba,Bb | HIP 87914 | 9.2632 | y | 2 | 179.3 | 6.2 | 0.1156 | 5.8 | 0.4 | * |
| | | | 9.2632 | y | 2 | 180.5 | 0.5 | 0.1102 | 0.9 | 0.8 | |
| | | | 9.2656 | y | 2 | 181.1 | 0.7 | 0.1145 | 4.6 | 0.2 | |
| 18024+2050 | TOK 56 | HIP 88331 | 9.2607 | H$\alpha$ | 2 | 301.9 | 1.2 | 0.0532 | 0.2 | 1.1 | * |
| 18112−1951 | TOK 57 Aa,Ab | HIP 89114 | 8.7694 | y | 2 | 122.0 | 3.5 | 0.0396 | 4.3 | 2.3 | * |
| | | | 8.7694 | H$\alpha$ | 2 | 105.5 | 2.8 | 0.0492 | 3.5 | 3.4 | |
| | | | 9.2634 | y | 2 | 27.9 | 7.1 | 0.0600 | 0.6 | 3.7 | |
| 18126−7340 | TOK 58 Aa,Ab | HIP 89234 | 8.7724 | H$\alpha$ | 3 | 108.3 | 1.6 | 0.3247 | 5.4 | 3.8 | * |
| | | | 9.2632 | H$\alpha$ | 2 | 109.9 | 0.7 | 0.3149 | 2.9 | 3.6 | |
| | | | 9.2632 | H$\alpha$ | 2 | 110.3 | 0.8 | 0.3126 | 0.7 | 3.6 | |
| 18152−2044 | TOK 59 | HIP 89439 | 8.6055 | y | 2 | 76.4 | 1.5 | 1.2709 | 1.4 | 5.2 * | * |
| | | | 8.6055 | H$\alpha$ | 4 | 76.3 | 2.6 | 1.2728 | 2.5 | 5.4 * | |
| 18177−1940 | WSI 89 Ba,Bb | HIP 89647 | 8.5425 | y | 2 | 5.3 | 0.1 | 0.0550 | 5.6 | 0.8 : | * |
| | | | 8.6054 | y | 2 | 0.7 | 0.4 | 0.0590 | 1.1 | 1.0 | |
| | | | 8.6054 | H$\alpha$ | 2 | 8.7 | 0.7 | 0.0541 | 3.3 | 1.0 | |
| 18237+2146 | TOK 60 Aa,Ab | HIP 90139 | 9.2607 | H$\alpha$ | 2 | 280.1 | 0.4 | 0.0420 | 0.3 | 1.6 | * |
| 18389−2103 | WSI 90 | HIP 91438 | 8.5372 | y | 2 | 241.9 | 11.7 | 0.0481 | 3.3 | 2.5 | * |
| | | | 8.5425 | y | 1 | 262.4 | 0.4 | 0.0366 | 0.4 | 2.2 : | |
| | | | 8.5425 | H$\alpha$ | 1 | 256.9 | 0.4 | 0.0463 | 0.4 | 2.1 | |
| | | | 9.2634 | y | 2 | 137.7 | 0.4 | 0.0376 | 0.1 | 2.4 | |
| | | | 9.2634 | H$\alpha$ | 1 | 151.5 | 0.1 | 0.0411 | 0.1 | 2.0 | |
| 19258−3006 | WSI 91 Ba,Bb | HD 182433B | 8.5400 | y | 2 | 104.8 | 6.0 | 0.0443 | 1.3 | 0.9 | * |
| | | | 8.6055 | y | 2 | 92.0 | 3.0 | 0.0441 | 2.7 | 0.9 : | |
| | | | 8.6055 | H$\alpha$ | 2 | 88.2 | 6.7 | 0.0463 | 5.6 | 0.8 : | |
| | | | 8.7695 | y | 2 | 95.1 | 3.4 | 0.0459 | 0.1 | 1.0 | |
| | | | 9.2633 | y | 3 | 90.1 | 2.0 | 0.0455 | 3.3 | 0.7 | |
| 20401−2852 | SEE 423 BC | | 8.5483 | y | 3 | 105.2 | 1.9 | 0.1993 | 2.3 | 0.2 : | * |
| | | | 8.6055 | y | 2 | 105.2 | 3.8 | 0.2035 | 2.2 | 0.3 : | |
| 22438+0353 | WSI 92 | HIP 112229 | 8.5376 | y | 2 | 118.8 | 2.9 | 1.0154 | 3.1 | 4.7 | * |
| 22474+1749 | WSI 93 | HIP 112506 | 8.5377 | y | 1 | 110.0 | 1.7 | 0.3054 | 1.7 | 3.2 | * |
| | | | 8.5377 | H$\alpha$ | 3 | 111.2 | 1.7 | 0.3053 | 0.6 | 2.9 : | |
| | | | 8.7670 | y | 2 | 111.5 | 0.8 | 0.3049 | 0.8 | 3.1 | |
| | | | 8.7670 | H$\alpha$ | 2 | 111.3 | 0.6 | 0.3039 | 1.3 | 2.7 | |
| 23444−7029 | WSI 94 | HIP 117105 | 8.5379 | y | 2 | 90.8 | 2.8 | 0.0463 | 1.2 | 2.0 | * |
| 23452+0814 | WSI 95 Aa,Ab | HIP 117164 | 8.5378 | y | 2 | 194.0 | 5.2 | 1.1558 | 5.6 | 4.8 * | * |

Table 7: Notes to individual systems

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 00028+0208 | BU 281 AB | C at 44″ is optical |
| 00059+1805 | STF 3060 AB | CPM in WDS |
| 00059−3020 | RST 5180 AB | dy=1.2, dm(WDS)=0.2. The status of C at 5″ is unknown. |
| 00063−4905 | HDO 180 | Companion at 4″, outside field. A has a planetary companion. |
| 00098−3347 | SEE 3 | Bad orbit. |
| 00121−5832 | RST 4739 | dm(Blanco) too large, WDS: dm=0.17mag |
| 00174+0853 | A 1803 AB | WDS lists 3 more companions, but only C at 3.4″ is physical (MSC). Two orbits for AB. C component itself is unresolved. |
| 00271−0753 | A 431 | dy=0.6, dm(WDS)=0.11. |
| 00310−1005 | BU 1158 BC | The orbit by Baz1991a does not match, predicting 0.13″ separation. Component A at 79″ is optical. On 2008.5460 we obtained a very different measure (356.2°, 0.0475″, $\Delta y = 0.8$), presumably pointing a wrong object (maybe the component A?). |
| 00315−6257 | I 260 CD | AB at 27″ from CD is physical (MSC) in this system beta 1,2 Tuc containing 6 known components. |
| 00321−0511 | A 111 AB | Companion C at 2.5″ physical. D at 113″ is listed, likely optical. |
| 00324+0657 | MCA 1 Aa,Ab | Companion B at 27″ is physical (MSC). The 0.03″ occultation companion is not seen. |
| 00327−6302 | B 8 | Unresolved in y-filter, false resolution in H-alpha is artifact. |
| 00335−5520 | I 45 AB | Companion C at 6.7″ is physical, estimated period of AB is 500yr (MSC) |
| 00345−0433 | D 2 AB | Bad orbit. The system appears to be near periastron. C at 19″ is physical, SB1 P=80.7d (MSC), D at 204″ optical? |
| 00352−0336 | HO 212 AB | C at 24″ is optical? |
| 00363−3818 | RST 5183 | One of the components is an SB, no orbit (MSC) |
| 00424+0410 | STT 18 AB | Companion C at 46″ is optical |
| 00426−0652 | RST 4154 AB | Companion C at 2″ can be physical |
| 00518−0810 | RST 4160 AB | The AB pair is unresolved, WDS lists last measure 0.2″ in 1980, dm=0.5. Companion C at 8″ is physical |
| 00522−2237 | STN 3 AB | Companion C is optical |
| 00533+0405 | A 2307 | Bad orbit |
| 00558−1832 | B 645 | Unresolved. dm=0.3, last measure in 1959 at 0.2″ separation. |
| 00596−0111 | A 1903 AB | Companion C at 6″ is physical (MSC). |
| 01061−4643 | SLR 1 AB | Bad orbit. C at 58″ is optical. |
| 01071−0036 | HDS 144 AB | Companion C at 1.1″ (V=13mag). Estimated period of AB 40yr (MSC). |
| 01084−5515 | RST 1205 AB | Companion C at 7″ is physical, A is SB2, P=1.67d (MSC). |
| 01101−1425 | HDS 153 | Unresolved Hipparcos binary of 0.1″, dm=0.9. No confirming observations since 1991. |
| 01137+0735 | BU 1029 BC | Companion A at 23″ is physical (MSC). The 1.8″ system BC is not resolved, either because of the large dm=5.9 or because companion C is outside the field. |
| 01144−0755 | WSI 70 Aa,Ab | New pair, this is the A component of STFA 3. Estimated period of Aa,Ab is 6yr. |
| 01158+0947 | A 2102 | Bad orbit. |
| 01158−6853 | I 27 CD | Quadruple system kappa Tuc. The pair AB at 318″ is physical (MSC). |
| 01198−0031 | FIN 337 BC | Triple with STF 113A, BC. Residuals to the BC orbit are irregular, possibly due to a subsystem? |
| 01277+0521 | BU 1164 AB | Companion C at 140″ is optical. |
| 01316−5322 | I 264 AB | Companion C at 40″, physical? |
| 01350−2955 | BU 1000 AB-C | Known triple with DAW 31 AB (0.2″), which itself contains an eclipsing binary (MSC). |
| 01424−0645 | A 1 | The quadrant is changed to match the orbit, so dm=-0.11. |
| 01559+0151 | STF 186 | The quadrant is changed to match the orbit, dm=-0.08. |
| 01560−5137 | HJ 3473 A | The A component of this 4.9″ pair is unresolved here. |
| 02020+0246 | STF 202 AB | Companions C,D are optical (MSC). |
| 02022−2402 | HDS 271 AB | New triple with subsystem TOK 41 Ba,Bb (0.09″), estimated period 13yr. |
| 02039−4525 | RST 2272 | The primary component is an SB2 without orbit (MSC), it is not resolved here. |
| 02057−2423 | I 454 AB | New triple with subsystem WSI 71 Aa,Ab (0.04″) and B component at 0.86″. See text for detailed discussion. |
| 02087−1005 | HU 16 | Bad orbit. |
| 02128−0224 | TOK 39 Aa,Ab | This 94-day SB2 was resolved in 2007. The resolution in August 2008 could be marginal (or artifact), unresolved in October 2008. Companions B at 16.6″ is physical (MSC), C at 173″ is likely optical. |
| 02193−0259 | JOY 1 Aa,Ab | Companions B and D are listed in the WDS. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 02225−2349 | TOK 40 | Kappa Fornax was first resolved in 2007. Astrometric orbit. See the text. |
| 02361+0653 | GKI 1 AB | The unresolved astrometric companion at 3.2″ is too faint, dm=10.8? Companion A at 165″ is physical (MSC). |
| 02412−0042 | STF 295 | Components A,B were observed individually, found unresolved. |
| 02415−7128 | B 1923 | One of the components is SB. Estimated priod of AB is 70yr (MSC). |
| 02442−2530 | FIN 379 Aa,Ab | Bad orbit. In October 2008 the pair closed down below the resolution limit, it opened up again in September 2009 (new unpublished observation at SOAR). Companion B at 12″. |
| 02449+1007 | TOK 1 Aa,Ab | Companion C at 158″ is optical. |
| 02456−7114 | HDS 357 | Estimated period 100yr, eclipsing subsystem CN Hyi (MSC). |
| 02512+0141 | A 2338 | Bad orbit. |
| 02568−3609 | HDS 378 Aa,Ab | The Hipparcos pair Aa,Ab (0.3″, dm=1.3) is unresolved, no other confirming observations since 1991. CPM companion B at 27″. |
| 02572−2458 | BEU 4 Ca,Cb | Known quadruple with BU 741 AB (0.9″) at 29″ from BEU 4Ca,Cb (0.05″) |
| 03003−1118 | A 2611 | Bad orbit. |
| 03019−1633 | RST 2292 BC | Pair AB at 7.5″ from BC, physical (MSC). Estimated period of BC is 40yr (MSC), which might explain the large change in $\rho$ since the last measure in 2002.8: (138°, 1.30″) . |
| 03182−6230 | BNU 2 Aa,Ab | This pair is likely bogus, unresolved here, no other confirmations. |
| 03184−0056 | AC 2 AB | The white dwarf component C at 53″ is CPM (MSC). |
| 03236−4005 | I 468 | Bad orbit. |
| 03244−1539 | A 2909 AB | AB is unresolved, the orbit by Mlr1955a predicts 0.14″. Companion C at 17″ is physical. |
| 03272+0944 | HDS 433 | Chi Tau. Bad orbit. A is 7.1-d SB2 with additional 145-d system (MSC). Despite the estimated separation of 0.02″, this SB is not resolved here. |
| 03494−1956 | RST 2324 | Bad orbit. |
| 03544−4021 | FIN 344 AB | Companion C at 23″, status unknown. Estimated period of AB is 25yr (MSC). Spectral types K0III+A3V explain why magnitude difference in Halpha is larger than in y. |
| 03545+0510 | A 1831 BC | Companion A = HIP 18265 is at 59″ from BC, optical. |
| 04002+0818 | A 1936 BC | Bad orbit. Companion A at 4.1″, physical (MSC). |
| 04008+0505 | A 1937 | Bad orbit. |
| 04021−3429 | BU 1004 AB | Bad orbit. Companion D at 64″ physical? |
| 04049−3527 | I 152 AB | Known triple with CHR 224AC (0.08″)? WDS lists C at 1.3″ from A. Do we see a new 0.075″ subsystem? |
| 04107−0452 | A 2801 | Bad orbit. |
| 04119+2338 | CHR 14 | Bad orbit. A is 2.4-d SB1 (MSC). |
| 04205−0119 | RST 4769 | Bad orbit |
| 04215−2055 | B 1935 AB | Companion C at 59″ is CPM. |
| 04215−2544 | BU 744 AB | Companion C at 45″ physical, common RV (MSC). Companion D is optical. |
| 04227+1503 | STT 82 AB | Companion C at 62″ is CPM, just another member of Hyades? A is SB1, P=4d (MSC). |
| 04256+1556 | FIN 342 Aa,Ab | Companion B at 130″ is optical? |
| 04275−1707 | HU 440 | Component A is suspected eclipsing variable HH Eri (MSC). |
| 04286+1558 | MCA 15 | Aa,Ab = MKT 13 at 337″ is physical (MSC). We cannot exclude the possibility that our measurement is an artifact because the position angle coincides with the direction of atmospheric dispersion. Several weak fringes are seen in the power spectrum, however, and the position agrees well with the orbit. |
| 04287+1552 | MKT 13 Aa,Ab | This pair is not resolved. Component B at 337″ is MCA 15, see above. |
| 04290+1610 | HU 1080 | Companion B is 21-d SB1 (MSC), a 2-mas wobble may be detectable in the AB motion. |
| 04362+0814 | A 1840 AB | Bad orbit by Bdl2006a. Companion C at 6″ is physical (MSC). |
| 04397+0952 | HDS 601 Aa,Ab | The nearby pair GJ 173.1, first measured by Hipparcos at 0.75″, is closing down to 0.26″. Estimated period of Aa,Ab is 45yr, the A component is a 610-d SB1 unresolved here. Companion C at 34″ is physical (MSC). |
| 04422+0259 | A 2424 | Bad orbit. |
| 04496−5353 | I 342 | Components A,B of this 3.1″ pair are unresolved when observed separately. |
| 04512+1104 | BU 883 AB | Companion C at 15″ is optical? |
| 04515−3454 | FIN 320 | Bad orbit. |
| 04518+1339 | BU 552 AB | Both A and B are SB2 (MSC). The status of C at 49″ is not known. |
| 04545−0314 | RST 5501 | Bad orbit. |
| 04590−1623 | BU 314 AB | Companion C at 53″ is optical. |
| 05025−2115 | DON 91 AB | The status of companion C at 10.4″ is not known. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 05069−2135 | DON 93 BC | Companion A at 8.2″ is physical, estimated period of BC is 60yr (MSC). The BC pair at 12mag and 13.1mag is quite faint, but resolved here. |
| 05079+0830 | STT 98 | Another 2.8″ pair STT 643 at 343″ distance has common PM, velocity and parallax (MSC). |
| 05081+2416 | HDS 674 Aa,Ab | Companions B at 14″ and C at 36″ are physical, Aa is also a 58-d SB1 (MSC) |
| 05117+0031 | HU 33 | V1075 Ori. A is a 25-d SB2 (MSC). |
| 05135+0158 | STT 517 AB | Quadrant secure, despite orbit. The status of companion C at 6.8″ is unknown (MSC). |
| 05145−0812 | BU 555 BC | The close pair BC is unresolved in 2008 and 2009. The component B is 10-d SB2, A at 9″ is physical (MSC). |
| 05164−0139 | A 844 | Bad orbit. |
| 05165−2106 | DON 97 | Bad orbit. |
| 05239−0052 | A 847 BC | Bad orbit. Companion A at 3″ is physical and it is a 22-d SB2 (MSC). |
| 05245−0224 | DA 5 AB | The close pair MCA 18 Aa,Ab (9.4-yr period) is unresolved. Four components (MSC). |
| 05248−5219 | I 345 AB | Bad orbit. Companion C at 38″ is physical (MSC). |
| 05276−2055 | SEE 53 | Bad orbit. |
| 05352−4657 | RST 141 | Bad orbit. |
| 05354−0555 | CHR 250 Aa,Ab | Orion Trapezium, many visual components listed in the WDS. |
| 05387−0236 | BU 1032 AB | Companion C at 11″ is physical, other components listed. sigma Ori cluster. |
| 05429−0648 | A 494 AB | Pair CD at 102″ from AB is optical (MSC). |
| 05474−1032 | MCA 22 | Period 70yr estimated, the component A is 3.4-d SB2 (MSC). |
| 05508−3945 | I 1494 AB | Companion C at 3.7″ is physical, estimated period of AB is 140yr (MSC) |
| 05598−4814 | HDS 814 | Both components have planetary satellites, the estimated period of AB is 90yr (MSC). The wobble in the motion of AB may be detectable, leading to the measurement of the inclination of planetary orbits. |
| 06003−3102 | HU 1399 AB | and TOK 9CE, see detailed comments in the text. |
| 06024+0939 | A 2715 AB | Both components are SBs, companion C at 18″ is optical (MSC). |
| 06032+1922 | HDS 823 Aa,Ab | The Hipparcos pair (0.1″, dm=2.1) is unresolved. Component C at 7″ is physical. |
| 06048−4828 | DUN 23 | The magnitude difference is around 3mag. One deviant measurement dy=3.84 is likely caused by truncation of the companion in this wide pair. On 2008.76 the B component appeared as a close binary (36mas, 131deg, dy=3.8), but we consider this resolution as artifact. |
| 06094+1711 | HDS 838 | Companion at 3.2″, outside the field. Eclipsing binary, SB3, is on T.Pribulla's program. |
| 06098−2246 | RST 3442 | Companion A is a 85-d SB1 (MSC). |
| 06122−3645 | RST 4800 | Bad orbit. |
| 06145+1754 | KUI 24 | Companion A is 24-d SB2, estimated period of AB is 240yr (MSC). |
| 06159+0110 | RST 5225 | Companion A is 2.2-d SB2 (MSC). |
| 06171+0957 | FIN 331 Aa,Ab | Companion B at 63″ is optical, other components are listed in the WDS as well. |
| 06173+0506 | CAT 1 Aa,Ab | Companions C at 59″ and D at 69″ are optical, E at 104″ is CPM. Fast change in position angle contradicts the orbit: is there a subsystem? |
| 06214+0216 | A 2667 | Companion A is SB, without orbit (MSC). |
| 06288−0702 | CHR 167 Ca,Cb | The close pair Ca,Cb is unresolved, likely bogus (no confirming observations). The pair AB at 10″ is physical, making beta Mon at leat triple (MSC). |
| 06290+2013 | BTZ 1 Aa,Ab | Bad orbit for this resolved 10-yr SB1. The companion A at 113″ from Ba,Bb is physical (MSC) |
| 06298−5014 | HDO 195 CD | Quadruple. The pair AB = R 65 (0.61″, P=53yr) at 12″ from CD is physical (MSC). |
| 06300+1754 | STT 141 | The 0.05″ occultation companion to B is not seen here (MSC). |
| 06314+0749 | A 2817 | Companion A is an SB (MSC). |
| 06328−1110 | CHR 129 | This 1.6″ pair is unresolved here, likely bogus (no confirmations since 1985). |
| 06362−3608 | RST 4816 | Fast retrograde motion? |
| 06410+0954 | CHR 168 Aa,Ab | Bad orbit. Cluster NGC 2264, many "physical" components (MSC). |
| 6425−4234 | I 283 | One resolved measurement dy=3.84 can be an overestimate due to truncation. |
| 06481−0948 | A 1056 | Bad orbit. |
| 06485−1226 | A 2935 | Bad orbit. |
| 06487+0737 | A 2731 AB | Component C at 27″ is CPM, seen on 2MASS images. |
| 06545−2734 | B 706 | Bad orbit. |
| 07003−2207 | FIN 334 Aa,Ab | Companion B at 13″, status uncertain. |
| 07015−0942 | A 3042 AB | Bad orbit. Companions C,D at 11″ may be physical. |
| 07043−0303 | A 519 | Bad orbit. |
| 07092+1903 | CHR 216 | Unresolved in 2009, last resolution in 2000 (0.1″, dm=1.4). |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 07143−2621 | FIN 323 | Bad orbit. A spectroscopic subsystem was suspected (MSC). |
| 07171−1202 | A 2123 AB | Companion C at 16″ is physical (MSC). |
| 07185−5721 | HDS 1013 Aa,Ab | Known quadruple with RST 244 Ba,Bb at 2.5″ from Aa,Ab. Both pairs have estimated periods of 50-100yr (MSC). |
| 07187−2457 | FIN 313 Aa,Ab | New triple with outer companion E at 0.95″. Member of the young cluster NGC2362. E may be just another cluster member, as other 3 companions listed in WDS under the name HJ 3948. Ab is a 1.3-d eclipsing system, while Aa is 155-d SB (MSC). |
| 07277+2127 | MCA 30 Aa,Ab | The close subsystem is unresolved, its orbit by Msn1997a predicts separation 0.06″. Companion D at 4″ is physical (MSC). |
| 07294−1500 | STF 1104 AB | The component C at 20″ is physical, components D,E are optical (MSC). The long-period orbit, after correction, may be used for calibration. |
| 07305+0743 | A 2869 | Bad orbit. |
| 07374−3458 | FIN 324 AB | Only one companion (presumably C) is seen, closing down and in retrograde motion. The estimated period of the close pair AB is 10yr (MSC), it could be below the diffraction limit. |
| 07378−0236 | A 534 AB-C | The subsystem B 2525 AB is unresolved, its estimated period is 30yr (MSC). |
| 07383−2522 | B 731 | Unresolved, last measurement in 1966 (0.2″, dm=0.2). |
| 07411−0124 | A 1968 | Bad orbit. |
| 07430−4511 | GJ 284 | A nearby G-dwarf resolved in 2001 and 2006 (Mason et al. 2010b) at very different positions was not resolved here. Orbital motion may be the culprit. |
| 07518−1354 | BU 101 | Bad orbit. |
| 07523−2626 | WSI 54 AB | New triple, with 3 companions in a tight linear configuration (a trapezium?). See the text. |
| 07560+2342 | COU 929 | Bad orbit. Double lines were seen, so a combined visual-spectroscopic orbit is possible. |
| 08017−0836 | A 1580 | Companion A is 1.8d Algol V635Mon (MSC). |
| 08031−0625 | A 1581 | Bad orbit. |
| 08095−4720 | WSI 55 Ba,Bb | Marginal resolution in the y-filter, unresolved in the Halpha filter. Multiple system gamma 2 Vel with 6 components (MSC). |
| 08125−4616 | CHR 143 Aa,Ab | Known triple with SEE 96 AB (0.6″). Estimated period of CHR 143 is 10yr, orbit may be computed (MSC). |
| 08250−4246 | CHR 226 Aa,Ab | Known triple with RST 4888 AB (0.4″). Estimated period of CHR 226 is 40yr, it may also contain an eclipsing subsystem (MSC). |
| 08263−3904 | B 1605 A | HIP 41361 is unresolved because TOK 6AD is outside the field, at 5″. |
| 08263−3904 | B 1605 Ba,Bb | AB at 8.2″ is physical, A is 1.25-d eclipsing pair NO Pup, unresolved (MSC). |
| 08270−5242 | B 1606 | Bad orbit. |
| 08275−5501 | FIN 116 | Bad orbit. |
| 08276−2051 | B 2179 | The A component is 4.6-d SB2 and eclipsing binary VV Pyx, B may be a binary, too (MSC). |
| 08291−4756 | FIN 315 Aa,Ab | Companion B at 3″ is physical (MSC), C at 19″ is optical. Orbit by Cvetkovic, 2009. |
| 08326−1502 | B 2528 | Unresolved, last observation in 1942 (0.3″, dm=2.1). |
| 08331−2436 | BU 205 AB | Companion C at 30″, status unknown. |
| 08391−2240 | BU 208 AB | The distant companion C is optical. The companion A possibly contains an astrometric subsystem, but it is not resolved here (MSC). |
| 08421−5245 | B 1624 | Bad orbit. |
| 08474−1703 | BU 586 | Composite spectrum K0III+A2, a premature orbit with 962yr period was computed. |
| 08495+0852 | BU 1068 AB | Bad orbit. Companion C at 18″ is physical. |
| 08538−4731 | FIN 316 | Companion A is a 9-day SB2 (MSC). |
| 08542−0229 | A 1754 | Bad orbit. |
| 08585+1151 | HIP 44066 | This star, reported to be a 0.1″ occultation binary, is unresolved here. The component B at 11.3″ is physical (MSC). |
| 09001−1228 | HU 225 AB | Status of companion C at 5.2″ is uncertain (MSC). |
| 09008+0448 | HDS 1307 | AB is unresolved, last measurement in 2000 (0.5″, dm=3.7). The component C at 12″ is CPM. |
| 09099−3022 | B 1113 BC | Aa,Ab at 18″ from BC is physical (MSC). |
| 09099−3022 | B 1113 A | The A component (HIP 45001, measured previously at 0.17″) was observed separately and found unresolved. |
| 09125−4032 | B 1115 | Bad orbit. |
| 09125−4337 | HJ 4188 AB | The subsystem FIN 317 Aa,Ab is unresolved here, but was resolved in 2006.19. Estimated period of Aa,Ab is 50yr (MSC). |
| 09128−6055 | HDO 207 AB | Bad orbit. The subsystem CHR 144 Aa,Ab is unresolved and has never been confirmed - bogus? |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 09149+0427 | HEI 350 | Bad orbit. |
| 09167−0621 | KUI 40 | Aa,Ab is 922-d SB1, estimated separation 0.04″, not resolved here. |
| 09173−6841 | FIN 363 AB | Bad orbit in disagreement with the Hipparcos parallax. Companion C at 18″ is optical (MSC). |
| 09174−7454 | I 12 AB | Companion C at 7″ is physical, D is optical (MSC). |
| 09207−0742 | A 1082 AB | Bad orbit. |
| 09228−0950 | A 1342 AB | Companion C at 2″ is physical. |
| 09243−3926 | FIN 348 | Bad orbit. A spectroscopic system is suspected, but RV variations could be due to the visual orbit (MSC). |
| 09252−1258 | NLTT 21709 | Nearby G-dwarf first resolved in 2001 (Mason et al. 2010b) is confirmed here at about the same position and a little wider. |
| 09264−4215 | B 1122 | Bad orbit. |
| 09272−0913 | A 1588 AB | Companion C at 11″ is physical, estimated period of AB is 200yr (MSC). |
| 09276−3500 | B 2215 | Astrometric and spectroscopic subsystem (771d) is unresolved here, same as B 2215? (MSC). |
| 09293−4432 | HDS 1360 Aa,Ab | Companion B at 108″ is physical (MSC). |
| 09387−3937 | I 202 | Bad orbit. |
| 09412+0954 | HMM 1 Aa,Ab | Unresolved, the interferometric orbit by Hmm2001 predicts separation 0.004″. The Ac component at 0.6″ is not seen either. |
| 09415−1829 | BU 214 AB | Triple with the new subsystem TOK 43 Aa,Ab (0.44″). The companion B at 3″ is seen, but not measured here. |
| 09495−1033 | A 1344 | Bad orbit. |
| 09525−0806 | AC 5 AB | Component C at 38″ is optical. |
| 09551−2632 | I 843 AB | Companion C at 6″ is physical. PMS star, spectral type K1V. |
| 10000+2433 | CHR 145 | DH Leo, GJ 3580. A is 1-d SB2, estimated period of AB is 15y, orbit soon? (MSC). |
| 10043−2823 | I 292 | Component A is SB2, no orbit (MSC). A good calibrator! |
| 10120−2836 | B 194 | Bad orbit. |
| 10183−0326 | RST 4454 AB | Bad orbit, predicts 0.03″. The component C at 20″ may be physical. |
| 10196−5724 | FIN 162 | Component A is 1.6-d eclipsing binary HP Car (MSC). |
| 10205+0626 | STF 1426 AB | The component C at 8″ is physical (MSC), D at 34″ is listed as well. Potential calibrator. |
| 10227+1521 | STT 216 | Large separation error, faint companion. |
| 10282−2548 | B 199 AB-C | Known triple with FIN 308 AB (0.15″). The position angle of FIN 308 is different by ∼180deg from the ephemeris, but quadrant reversal is not allowed by the wide subsystem. |
| 10311−2411 | B 201 Aa,B | The subsystem CHR 132 Aa,Ab is unresolved here and in 2006, bogus? |
| 10328+0918 | WRH 19 | The occultation binary is resolved here, an SB subsystem is suspected (MSC). |
| 10370−0850 | TOK 44 Aa,Ab | Triple with new subsystem TOK 44 Aa,Ab (0.1″) comprising the primary of A 556 AB. Estimated period of Aa,Ab is 5yr. |
| 10373−4814 | SEE 119 | The component A is 10-day SB2 (MSC). |
| 10375−0932 | RST 3708 | Bad orbit. Both new and old measures can be fitted by a different orbit. |
| 10397+0851 | STT 224 AB | Component C at 2″ can be physical. |
| 10444−6000 | HDS 1534 Aa,Ab | QZ Car. Components B (7.3″) and C (8.8″) are members of the cluster Collinder 228. Aa,Ab contains spectroscopic subsystems with 6d and 20.7d periods on 50-yr orbit (MSC). |
| 10446+0530 | A 2771 | Bad orbit. |
| 10452−5944 | WSI 56 | This confirms the new pair first reported in Mason et al. (2009). |
| 10465−6416 | FIN 364AB | Bad orbit? It predicts 0.17″. New triple with component C at 0.74″, estimated period of AB-C is 300yr. Cluster IC 2603. A is a 5.5-d SB1 (MSC). |
| 10592−8133 | I 212 | Bad orbit. |
| 11042−5828 | JSP 459 Aa,B | The inner pair HLN 22 Aa,Ab is unresolved, last measure in 1967 (0.2″, dm=0). |
| 11053−2718 | FIN 47 AB | Companion C at 18″, status unknown. |
| 11125−1830 | BU 220 | Bad orbit. |
| 11175−5906 | RST 4472 BC | Known triple with R 163A- BC (1.6″). The dy=2.9 measured for BC is much larger than dm=1 given in WDS. The quadrant of BC matches that of A- BC. |
| 11190+1416 | STF 1527 | Bad orbit. |
| 11221−2447 | I 507 AB | Young quadruple HD 98800. Close subsystem BOD 1 Ba,Bb is unresolved, A is a 262-d SB1 (MSC). Wobble in the AB motion may be detectable. The AB orbit may be improved. |
| 11230+0408 | A 2776 AB | Component C at 6″ is physical (MSC). |
| 11268−5310 | I 883 | Bad orbit. |
| 11321−0332 | RST 4480 BC | Component A at 11″ is physical, estimated period of BC is 60yr, orbit soon? (MSC). |
| 11330−3151 | HJ 4449 A | A nearby G-dwarf resolved in 2001 (Mason et al. 2010b) was not resolved here. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 11446−4925 | RST 9004 AB | Bad orbit. Companion C at 11″ is physical? |
| 11510−0520 | MCA 36 | This pair is not resolved, as well as the inner 0.02″ occultation system. Estimated period of MCA 36 is 35yr. (MSC). |
| 11514+1148 | HDS 1672 | This Hipparcos binary (0.1″, dm=3.7 in 2000) is not resolved here. |
| 12011+1300 | AG Vir | Triple SB, periods 0.6d and 40y. The outer system has predicted separation 0.09″, dm=3.2, unresolved here (MSC). |
| 12018−3439 | I 215 | Bad orbit. A is SB2 without computed orbit (MSC). |
| 12064−6543 | FIN 367 Aa,Ab | Bad orbit. Component B at 9″ is physical (MSC). |
| 12158−2321 | BU 920 | Bad orbit. The quadrant from resolved photometry is correct. |
| 12199−0040 | MCA 37 | Triple eta Vir. A is a 71-d SB2 resolved interferometrically (MSC). |
| 12264−4316 | HDS 1750 | Unresolved Hipparcos binary (0.1″, dm=0.4 in 1991), not confirmed so far. |
| 12283−6146 | RST 4499 BC | Companion A at 2″ is physical, on a 2520-yr orbit around BC. SB subsystem suspected (MSC). |
| 12297−0320 | HIP 60956 | Companion A at 5″ is detected in 2MASS images, probably outside field here. A is also a 26-day SB (MSC). |
| 12301−1324 | BU 28 AB | Components C,D are listed in WDS, status unknown |
| 12347−4440 | B 1718 | WDS lists a companion at 1″, dm=6.5, never confirmed. It is below the detection limit here. |
| 12357−1650 | FIN 368 Aa,Ab | Companion B at 12″ is physical, estimated period of FIN 368 is 20yr, orbit soon? (MSC). |
| 12392−4022 | B 1215 | Bad orbit. |
| 12417−0127 | STF 1670 AB | Other components C - F are likely optical. |
| 12446−5717 | FIN 65 AB | Components C (12″) and D (4.5″) are listed in WDS. |
| 12485−1543 | HDS 1795 A | Nearby triple GJ 1165 resolved previously in 2001 and 2006 (Mason et al. 2010b), the pair exhibited significant orbital motion here. Estimated orbital period is 2yr. Companion B at 2.7″ is physical (MSC). |
| 12533+2115 | STF 1687 AB | Quadruple. C at 28″ is physical. Component A is a 8-yr SB, estimated separation 0.07″, unresolved here (MSC). |
| 12590−0950 | B 2541 | Unresolved, last measure in 1983 (0.8″, dm=5), likely below the detection limit because dm=5. |
| 12597−0349 | CHR 39 Aa,Ab | Companion B at 21″ is physical (MSC). |
| 13064+2109 | CHR 150 Aa,Ab | Known triple with COU 11 AB (1.7″). Estimated period of CHR 150 is 12yr, orbit soon? (MSC). |
| 13081−6518 | CHR 247 Aa,Ab | Wolf-Rayet multiple theta Mus, first resolved in Hartkopf et al. (1999), is confirmed here. The component B at 5″ is likely optical, A is 18-day SB2 (MSC). Estimated period of CHR 247 is 30yr, retrograde motion. |
| 13099−0532 | MCA 38 Aa,Ab | Companions B at 7″ and C at 71″ are physical (MSC). |
| 13123−5955 | SEE 170 AB | Companion C at 2″ is physical, D at 50″ is optical, A is 0.6-d eclipsing binary V831 Cen (MSC). |
| 13126−6034 | WSI 75 Aa,Ab | New close companion to VOU 18. |
| 13138−6335 | WSI 57 | The measurements confirm the new pair first reported in Mason et al. (2009). |
| 13145−2417 | FIN 297 AB | Companion C at 12″ is physical (MSC). |
| 13147−6335 | MLO 3 | Known triple with WSI 58 Aa,Ab (0.25″) which was first resolved in 2001 (Mason et al. 2009) and is confirmed here. Quadrant is set to match the wide pair. |
| 13149−1122 | RST 3829 Aa,Ab | Bad orbit. The pair BC is optical to Aa,Ab. |
| 13169−3436 | I 1567 | Bad orbit. |
| 13175−4033 | I 425 | Suspected SB subsystem. estimated period of I 425 is 130yr, it is closing down (MSC). |
| 13226−6059 | FIN 208 AB | Variable V790 Cen. The measured dy=2.8 is much larger than 0.7mag listed in WDS. Companion C = HR 5034 at 60″ is physical. Estimated period of FIN 208 is 20yr (MSC). |
| 13275+2116 | TOK 46 | This is a newly resolved quadruple, with two SBs orbiting each other with 36-yr period (MSC). |
| 13317−0219 | HDS 1895 | Fast motion, estimated period 10yr. A is a 3.25-yr SB1, could be the same system (MSC)? |
| 13320−6519 | FIN 369 | Bad orbit. |
| 13343−0019 | STF 1757 AB | Components C,D are likely optical. |
| 13347−1313 | BU 932 AB | Companion C at 26″ may be optical. |
| 13372−6142 | I 365 AB | Companion C is optical. |
| 13377−2337 | RST 2856 | Bad orbit. |
| 13396+1045 | BU 612 AB | Companion C is optical. |
| 13437−4204 | FIN 353 AB | Known triple with RST 1741 AB-C (0.96″). Estimated period of FIN 353 is 80yr, it is closing down (MSC). |
| 13453+0903 | BU 115 AB | The component C at 108″ is likely optical. |
| 13461+0507 | STF 1781 | Both components are close binaries, B is eclipsing HT Vir (MSC). |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 13513−2423 | WSI 77 | A nearby G-dwarf first resolved in 2006 at 0.33″ separation (Mason et al. 2010b). The pair was not resolved at Blanco in 2008, but resolved at SOAR in 2009 (0.14″, dm=3). The large dm may be the reason for nonresolution at Blanco. |
| 13520−3137 | BU 343 | Bad orbit. |
| 13527−1843 | WSI 78 | Fast motion. This spectroscopic triple with outer period 6.25yr is resolved here for the first time (MSC). The primary is DL Vir. |
| 13535−3540 | HWE 28 AB | Companion C at 28″ may be physical. |
| 13539−1440 | RST 3852 | Bad orbit. |
| 13563+0517 | STT 273 AB | Companion C at 240″, status unknown. |
| 13583+0213 | A 2167 | Bad orbit. |
| 14020−2108 | LTT 5473 | Nearby G-dwarf resolved previously in 2001 and 2006 (Mason et al. 2010b). The pair continues to show steady retrograde motion. |
| 14025−2440 | B 263 | Component A is 1150-d SB1, estimated period of AB is 100yr (MSC). |
| 14038−6022 | RBT 1 Aa,Ab | Known triple beta Cen with VOU 31 AB (0.7″), see MSC. The quadrant as determined from the wide pair does not match the orbit of Aa,Ab. Estimated period of AB is 300yr. |
| 14040−4437 | I 939 AB | Companion C at 8″ is physical, estimated period of AB is 200yr, motion direct (MSC). |
| 14109+1513 | HDS 1989 Aa,Ab | Companion B at 24″ is CPM (LDS 1406). |
| 14133−0827 | CHR 221 | Bogus binary? Unresolved, no confirmation since discovery in 1996. |
| 14142−0831 | BU 939 AB | Companion C at 88″, status unknown. |
| 14150−6142 | COO 167 | Known triple with WSI 55 Ba,Bb (0.22″). The Ba,Bb pair was first reported in Mason et al. (2009). |
| 14170−1626 | TDS 9152 | Tycho pair (0.4″, dm=0.2 in 1991) is unresolved here, no other confirmations. Is this a member of the HJ 1249 5″ binary? |
| 14182−2731 | SEE 502 AB | Quadruple with HDS 3407CD = WSI 56 Ba,Bb (0.44″) at 3.2″. Estimated periods are 700yr (AB) and 300yr (CD) (MSC). The wide pair Aa-Ba is seen, but not fitted, hence no measure. |
| 14225−2518 | RST 5534 | Unresolved, last observation in 1951 (0.2″, dm=0). |
| 14234+0827 | BU 1111 BC | The orbit of BC by Sod1999 predicts 0.19″, but the pair is unresolved here. Companion A at 6″ is physical (MSC). |
| 14262−4523 | I 402 | Component A is dubious SB (MSC). |
| 14277−4113 | I 1243 AB | Known triple with COO 171 AB-C at 3.4″. |
| 14282−2929 | FIN 306 AB | Close pair AB is unresolved here. Last measure in 1989 (0.1″, dm=0). Estimated period of AB is 15yr, more speckle data are needed! Companions C at 4″ and D at 140″ are physical (MSC). |
| 14295−3702 | HDS 2045 Aa,Ab | Companion B at 12″ is physical (2MASS). Fast orbital motion! |
| 14313−1538 | BU 117 AB | Status of C at 107″ is unknown. |
| 14373−4608 | FIN 318 Aa,Ab | Companion B at 19″ is HIP 71502, physical (MSC). |
| 14375+0217 | A 2227 AB | Known triple with CHR 42 Aa,Ab (0.19″). The quadrant of CHR 42, set by the wide pair, does not match the orbit. |
| 14396−6050 | RHD 1 | 80-year binary with HIP 71681, triple system alpha Cen. The components A and B are not resolved here, lack of subsystems is confirmed by precise radial velocity monitoring for planets. |
| 14453−3609 | I 528 AB | The AB pair is unresolved, last measure in 1993 (0.1″, dm=0.2). Faint component C at 4.5″ is listed in the WDS, status unknown. |
| 14462−2111 | FIN 309 | Bad orbit, predicts 0.18″ separation. Fast motion through periastron! |
| 14463+0939 | STF 1879 AB | Components C,D are likely optical. |
| 14464−0723 | STF 1876 AB | Companion C at 50″ is optical. |
| 14485−1720 | BU 346 | Components A and B of this wide pair are unresolved into subsystems. |
| 14485−3551 | B 2024 AB | Marginal resolution in 2008, unresolved in April 2009. Companion C at 10″ is physical |
| 14492+1013 | A 2983 | Fast motion though periastron is well captured by the orbit. |
| 14492−5924 | FIN 298 AB | AB is unresolved, last measure in 1993 (0.1″, dm=0). C at 37″ is physical. |
| 14525+1844 | BU 31 AB | Companion C at 8″ is physical. |
| 14565−3438 | I 227 AB | Companion C at 6.5″ is physical (MSC). |
| 14567−6247 | FIN 372 | Bad orbit. |
| 14575−2125 | H N 28 BC | Same as GJ 570 BC. Nearby quadruple, physical components B at 22″ (2130-yr orbit) and a T-dwarf D at 258″ (MSC). New observation of BC disagrees with the orbit. |
| 14581−4852 | WSI 80 | A nearby G-dwarf GJ 9504 first resolved in 2006 (Mason et al. 2010b) and confirmed here. |
| 14589+0636 | WSI 81 | A nearby G-dwarf first resolved in 2006 at 0.075″ separation, then again in 2008 at 0.128″ (Mason et al. 2010b). |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 14592−4206 | HDS 2116 Aa,Ab | Multiple system kappa Cen. Companion B at 4″ is physical. Estimated period of Aa,Ab is 20yr, orbit soon? (MSC). |
| 14598−2201 | Ci 18,1988 | New pair. |
| 15041−0653 | HO 391 AB | Companion C is optical. |
| 15042−1530 | RST 3906 | Bad orbit. |
| 15055−0701 | BU 119 AB | Companion C is optical. |
| 15088−0610 | RST 4534 AB | Companion C at 6.9″ is physical, estimated period of AB is 170yr (MSC). |
| 15088−4517 | SEE 219 AB | Bad orbit. Companion A contains eclipsing subsystem. Companion C at 6.7″ is listed, status unknown (MSC). |
| 15122−1948 | B 2351 Aa,Ab | The 2″ pair BC = BU 618 at 57″ from Aa,Ab = iota Lib is physical (MSC). |
| 15143−4242 | B 1273 AB | Triple with new subsystem WSI 82 Aa,Ab (0.06″). Component C at 23″ is likely optical. |
| 15160−0454 | STF 3091 AB | Companion C at 12.5″ is optical. Companions D,E are likely optical. |
| 15210−1522 | MCA 41 | Unresolved, possibly bogus. No confirmations since discovery in 1980. |
| 15226−4755 | SLR 20 | Bad orbit. |
| 15227−4441 | COP 2 AB | Companion C at 25″ is optical, A is 4.6-d SB2 (MSC). |
| 15228−6022 | RST 5014 AB | Companion C at 11″ is likely physical. |
| 15246−4835 | B 1288 AB | Bad orbit. Companion C at 9″ can be physical (MSC). |
| 15290−2852 | BU 1114 AB | Companion C at 10″ is physical, estimated period of AB is 200yr (MSC). |
| 15313−3349 | B 2036 AB | Known triple with HWE 78 AB-C (1.5″). Estimated period of AB is 70yr, orbit soon? (MSC). Companion D at 6.6″ is listed as well, found with AO, status unknown. |
| 15317+0053 | TOK 48 | New pair. Motion detected? Measurements could be affected by vibrations. The resolved system may correspond to the 1.7-year astrometric orbit. |
| 15319−1541 | VZ Lib | Spectroscopic quadruple (MSC). The outer system has predicted separation 0.02″, unresolved here. |
| 15332−2429 | SEE 238 Ba,Bb | This is a visual quadruple with CHR 232 Aa,Ab. The two pairs of very similar magnitude are located at 9″, 301deg from each other. Our two measurements of SEE 238 do not agree with its orbit, and we cannot exclude that CHR 232 Aa,Ab was measured instead. |
| 15348−2807 | RST 1847 | The new subsystem TOK 49 Aa,Ab (0.14″) is triple with AB = RST 1847, at 0.91″. Estimated period of Aab is 16yr. |
| 15351−4110 | HJ 4786 | gamma Lup. The component A is 2.8-d SB1 (MSC). |
| 15355−1447 | WRH 20 Aa,Ab | The close pair is unresolved (bogus?), companion B at 42″ is likely physical. |
| 15362−3306 | FIN 231 | Unresolved, last measure in 1933 (0.2″, dm=0). |
| 15377−2432 | TDS 9564 | Unresolved Tycho binary (0.4″, dm=0 in 1991), never confirmed. |
| 15420+0027 | A 2176 | Both components are SBs (MSC). |
| 15428−1601 | BU 35 AB | Companion C at 120″ is optical. |
| 15451−3506 | SEE 248 | Unresolved, last measure in 1927 (0.1″, dm=0.3). |
| 15453−5841 | FIN 234 AB | Near periastron! Resolved in 2008, unresolved in April 2009. The separation was around 0.20″ from 1983 to 1993. Estimated period of AB is 300yr, but it can be shorter. The component C = HIP 77156 at 32″ from AB is physical (MSC). |
| 15462−2804 | BU 620 AB | CHR 50 Aa,Ab is unresolved here, but was seen in 2006. Estimated period of CHR 50 is 30yr. Companion C at 50″ is physical (MSC). |
| 15467−3441 | B 847 | Unresolved, last measure in 1937 (0.1″, dm=0.4). |
| 15467−4314 | I 1276 | Unresolved, last measure in 1935 (0.2″, dm=0.4). |
| 15470−3635 | HDS 2223 | Unresolved Hipparcos binary (0.1″, dm=0.3 in 1991), never confirmed. |
| 15471−5107 | B 1790 | Triple with new subsystem WSI 83 Ba,Bb (0.08″). |
| 15496−0326 | CHR 259 | Bad orbit. |
| 15513−0305 | CHR 51 | Bad orbit, predicts 0.08″ separation. |
| 15550−1923 | HU 1274 | Companion C at 50″ is physical (MSC). Component A is 25-d SB1 (MSC). |
| 15559−0210 | STF 1985A | The A component is unresolved, AB is not seen. |
| 15578−4100 | SEE 252 AB | Companion C at 19″ is physical. AB is unresolved here, never confirmed, bogus? |
| 16003+1140 | A 1639 AB | Companion C at 6″ is physical, the estimated period of AB is 130yr, motion direct (MSC). |
| 16035−5747 | SEE 258 AB | iota Nor. Companion C at 10.9″ is physical (MSC). Despite small magnitude difference and separation of 0.43″ predicted by the orbit of Sod1999, the pair was not resolved at Blanco in 2008 (a wrong pointing?), but was measured in 2009. |
| 16044−1122 | STF 1998 AB | xi Sco, 5 physical components (MSC). |
| 16054−1948 | MCA 42 CE | beta Sco. Bad orbit. AB at 14″ from CE is physical. A is 6.8-d SB2, 5 components total (MSC). |
| 16057−0617 | BU 948 AB | Known triple with FIN 384 Aa,Ab.Companions C,D are optical (MSC). Bad orbit of FIN 384, fast motion, very close, uncertain measures? |
| 16057−3252 | SEE 264 AB | Quadruple with new subsystem WSI 84 Bb,Bb (0.13″) and physical companion C at 9.6″ (MSC). Bad orbit of AB. Estimated period of Bab is 10yr. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 16059+1041 | HDS 2273 Aa,Ab | Companion B at 225″ is physical. Aa and Ab are SBs, 5 components total (MSC). |
| 16090−0939 | WSI 85 | New pair observed by request from F.Fekel. |
| 16102−4008 | I 1082 AB | AB is unresolved, last measure in 1964 (0.1″, dm=0.5). Companion C at 2.7″ is possibly physical. |
| 16120−1928 | BU 120 AB | nu Sco, 7 components in MSC. Resolved triple with CHR 146 Aa,Ab (0.05″). Quadrant is set to match the wide system. Estimated period of CHR 146 is 6yr, orbit soon? |
| 16133+1332 | CHR 52 Aa,Ab | GJ 615.1 AB. CHR 52 is unresolved in 2008 and 2009, never confirmed, bogus? The radial velocity of C is stable over long time. The component B is at 4″ in a 1354-yr premature orbit around A. The component C at 206″ is optical (MSC). |
| 16143−1025 | RST 3936 AB | Companion C at 22″ is optical? |
| 16205−2007 | B 1808 AB | AB is unresolved, last measure in 1990 (0.2″, dm=0.4). C at 13″ optical? |
| 16212+2259 | HU 481 | Bad orbit. |
| 16224−3220 | JSP 691 | Bad orbit. |
| 16245−3734 | B 868 AB | Fast motion, periastron? Companion C at 4.5″ is listed in WDS. |
| 16247−2942 | H N 39 | Component at 4.2″ is outside field, the primary is unresolved. |
| 16253−4909 | COO 197 AB | Bad orbit. New triple with subsystem TOK 50 Aa,Ab (0.23″), estimated period 30yr. |
| 16278−0822 | RST 3949 | Component A is 27-d SB2. Estimated period of AB is 30yr, orbit soon? (MSC). |
| 16285−7005 | HIP 80686 | zeta TrA, GJ 624. Suspected spectroscopic triple unresolved here, A is 13-d SB2 (MSC). |
| 16289+1825 | STF 2052 AB | Companion C at 143″ is optical. |
| 16309+0159 | STF 2055 AB | Companion C at 119″ is physical, D at 308″ is optical (MSC). Good calibration binary? |
| 16318−0216 | A 693 | Bad orbit. |
| 16335−1410 | HDS 2341 | Unresolved Hiparcos binary (0.2″, dm=0.4 in 1991), never confirmed. |
| 16385−5728 | RST 869 | New triple with subsystem TOK 51 Aa,Ab (0.27″), estimated period 30yr. The quadrant is set to match the wide pair. This is a PMS multiple system. |
| 16391−3713 | FIN 340 AB | Companion C at 35″ is likely optical. Estimated period of FIN 340 is 18yr, orbit soon? (MSC). |
| 16406+0413 | CHR 56 Ba,Bb | Component A = HIP 81641 at 70″ is physical. Estimated period of CHR 56 is 25yr (MSC). |
| 16430−6056 | HJ 4874 AB | Component C at 18″ with uncertain status is listed in WDS. |
| 16435−0807 | WRH 26 | Unresolved, last measure in 1978 (0.2″, dm=0.4). |
| 16438−5330 | FIN 251 AB | The subsystem CHR 147 Aa,Ab is unresolved here, never confirmed, bogus? |
| 16459−3953 | HDS 2380 | Unresolved Hiparcos binary (0.1″, dm=0.1 in 1991), never confirmed. |
| 16478−4356 | I 1595 | Unresolved, last measure in 1991 (0.2″, dm=0). |
| 16542−4150 | CHR 252 Aa,Ab | Marginal resolution in 2009.26 (0.07, 114deg, dm=2.6) in Ha only is considered as artifact, unresolved in y-filter. Last measure in 1996. NGC 6231 cluster, Companion B at 13″ is another cluster member? MSC lists Aa as a 5.7-d SB2. |
| 16555−0820 | KUI 75 AB | Quintuple system GJ 644+643. Companions C at 72″ and D at 221″ are physical, B is a 3-d SB2 (MSC). |
| 16563−4040 | HDS 2394 | Also CHR 210. Component A is a 4-d SB1. Member of NGC 6231 cluster. (MSC). |
| 17014−2639 | HDS 2410 | Fast orbital motion. |
| 17018−5108 | I 1306 | Bad orbit, predicts 0.1″ separation. |
| 17031−5314 | HDS 2412 Aa,Ab | Companion B at 25″ is optical? |
| 17056−4106 | HLN 41 | Unresolved, last measure in 1969 (0.2″, dm=0). |
| 17066+0039 | BU 823 AB | New triple with subsystem TOK 52 Ba,Bb (0.1″). Companion C at 173″ is optical, different RV (MSC). Estimated period of Ba,Bb is 10yr. |
| 17082−0105 | A 1145 | Component A is SB (MSC). |
| 17094−3445 | HDS 2422 | Unresolved Hiparcos binary (0.1″, dm=0.9 in 1991), never confirmed. |
| 17104−1544 | BU 1118 AB | Calibration binary? Companions C,D are likely optical. |
| 17146+1423 | CHR 139 Aa,Ab | CHR 193 is unresolved in 2009, bogus? Last measure in 1991 (0.2″). B component at 5″ is physical, a premature orbit of AB is computed. Companion B is also a 52-d SB1 (MSC). |
| 17156−1018 | BU 957 | Bad orbit. |
| 17156−3836 | FIN 355 | Bad orbit. |
| 17157−0949 | A 2592 | New triple with close subsystem TOK 53 Ba,Bb (0.03″), estimated period 10yr. |
| 17189−3221 | I 590 | The new measure is very different from the previous measures. It matches closely (but not exactly) the pair 17173−3010 = BU 1119 observed just before. Although a pointing error was possible, the fluxes and magnitude differences do not coincide, so we attribute this measure to I 590. |
| 17190−3459 | MLO 4 AB | Nearby triple GJ 667 A BC. The component C at 31″ is physical, unresolved here (MSC). |
| 17190−3849 | WSI 61 Aa,Ab | The new pair reported in Mason et al. (2009) was not resolved here, possibly because the secondary was too faint. |
| 17191−4638 | BSO 13 AB | GJ 666 AB. The component A is unresolved here, orbit 693yr. Component C at 42″ is optical (MSC). |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 17198−3606 | WSI 62 | The new pair first reported in Mason et al. (2009) was not resolved here, possibly because the secondary was too faint. |
| 17207−5625 | FIN 255 AB | Companion C at 25″ is physical. |
| 17208−4240 | I 410 | Components A,B are unresolved. |
| 17210−2107 | DON 832 | Companion at 4.2″ is outside the field. |
| 17221−7007 | FIN 373 | Bad orbit. |
| 17248−5913 | I 385 AB | Spectacular Trapezium. The new component is designated D (WSI 87 AD), because C at 17″ already exists. See the text. |
| 17258−1918 | RST 5542 AB | Companion C at 3″ can be optical. |
| 17278−1211 | HU 234 AB | Companion C at 6″ is physical, estimated period of AB is 400yr, motion direct (MSC). |
| 17305−1446 | HU 177 | Bad orbit. |
| 17305−1006 | RST 3978 | Component A is 10-d SB1. Estimated period of AB is 100yr, orbit soon? (MSC). |
| 17314+0243 | A 2386 | Marginal resolution in April 2009 in H-alpha only, considered to be artifact. Twice unresolved. The existence of the pair A 2386 is thus questionable, although the variability of its components may contribute to the nonresolution. A is 418-d SB1 with composite spectrum G8III+A7V and astrometric orbit by Hipparcos. Its estimated separation is 17mas (MSC). |
| 17315−6026 | I 600 | Bad orbit. |
| 17336−3706 | TNG 1 Aa,Ab | lambda Sco. Fast motion is captured by the orbit, A is 6-day eclipsing and SB (MSC). |
| 17337+1451 | WSI 3 | Unresolved in 2008, last measure in 2005 (0.5″, dm unknown). |
| 17342−1910 | B 1863 | WDS lists the last measurement in 1937. Large magnitude difference may explain the lack of subsequent visual resolutions, but then it is not clear how the discovery observations could resolve the system. |
| 17375−3747 | B 915 AB | The angle has changed by 9.5deg in 1 year, much faster than predicted by the orbit. Companion C at 14″ is physical. |
| 17390+0240 | WSI 88 | New system WSI 88 (G-dwarf). This is HD 160295. |
| 17424−4618 | HDS 2505 | Companion A is a 0.5-d eclipsing binary V86 Ara (MSC). |
| 17449−5733 | HLN 44 Aa,Ab | The close system HLN 44 Aa,Ab is unresolved, last measure in 1969 (0.2″, dm=0). The component B at 32″ is likely optical. |
| 17530−0755 | STF 3128 AB | Companion C at 93″ is optical? |
| 17533−3444 | BU 1123 | Bad orbit. |
| 17534−3454 | SEE 342 | The pair RST 3986 at 52″ is either physical, or simply another member of cluster NGC 6475 (MSC). RST 3986 has changed separation to 0.9″ since its last measure in 1983.72 (82.2°, 0.51″). Estimated period of SEE 342 is 170yr. |
| 17535−0355 | V2610 Oph | Newly resolved pair TOK 54, T. Pribulla's program. Estimated period 20yr. |
| 17564+1820 | MCA 49 Aa,Ab | Known triple with STF 2245 AB (2.6″). Estimated period of MCA 49 is 40yr (MSC). |
| 17575−5740 | HJ 4992 AB | Triple with new subsystem TOK 55 Ba,Bb (0.11″) at 2.6″ from A, which is itself unresolved. Estimated period of Ba,Bb is 10yr. |
| 17584+0428 | KUI 84 | Nearby triple GJ 9609. B is 34-d SB2 (MSC). |
| 17592−3656 | HJ 5000A | A is 3.3-d eclipsing SB2 V1647 Sgr, unresolved here. Companion B at 7.6″ is physical (MSC). |
| 18003+0422 | WSI 66 | These measures confirm the new pair resolved in Mason et al. (2009). |
| 18018+0118 | BU 1125 AB | No trace of component C at 0.4″, which most likely is bogus, to be removed from WDS. |
| 18024+2050 | HIP 88331 | The quadruple system V820 Her is resolved here for the first time. Its inner subsystems have periods 0.6d and 12d (MSC). Estimated period of the resolved outer system is 11yr. |
| 18031−0811 | STF 2262 AB | tau Oph. A is 184-d SB1, companion C at 100″ is optical (MSC). |
| 18044−5953 | RST 5099 | Fast motion, bad orbit. |
| 18055+0230 | HIP 88601 | The A component of 70 Oph = STF 2272 is unresolved, companion B is outside the field. |
| 18092−2211 | RST 3157 | Bad orbit. |
| 18093−2607 | HDS 2560 Aa,Ab | Companion B at 17″ is optical. A is a 38-d SB1, estimated period of Aa,Ab is 300yr (MSC). |
| 18096+0400 | STF 2281 AB | Companion C at 68″ is optical (MSC). |
| 18112−1951 | BU 132 | Triple with new subsystem TOK 57 Aa,Ab (0.04″) in fast motion, Estimated period of Aa,Ab is 3yr (MSC). The quadrant is set to match the wide pair. An occulation subsystem Ba with 0.024″ separation is listed, probably it is identical to Aa,Ab seen here. AB is in slow retrograde motion, estimated period 800yr. |
| 18126−7340 | HDO 284 AB | New triple with subsystem TOK 58 Aa,Ab (0.31″) at 2.3″ from B, which is itself single. The quadrant is set to match the wide pair. Estimated period of Aa,Ab is 30yr. |
| 18151−5751 | HJ 5029 | Estimated period 700yr, retrograde motion. |
| 18152−2044 | TOK 59 | New pair from the O-star program. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 18168−2500 | BU 285 AB | Companion C at 60″ is likely optical. |
| 18177−1940 | BU 246 | New triple with subsystem WSI 89 Ba,Bb (0.06″). The quadrant is set to match the wide pair. Estimated period of Ba,Bb is 20yr. |
| 18187−1837 | BU 639 AB | The pair CD at 17″ is physical, E at 145″ is physical as well? |
| 18197−4542 | CHR 148 | Unresolved in 2008 and 2009, never confirmed, a bogus binary? This is SB1 with 120-d period and estimated separation of 0.015″. |
| 18232−6130 | GLE 2 | Marginal resolution in H-alpha (2009.2632: 252deg, 41mas, dm=1.5), considered artifact. Twice unresolved, so the resolution is considered bogus. The component A is 2214-d SB1 with K4III primary and massive, yet invisible, companion. Estimated separation of Aa,Ab is 0.055″. Companion C at 3.4″ is physical (MSC). |
| 18237+2146 | TOK 60 Aa,Ab | New binary or artifact? The resolution in 2009.261 (0.042″, 280deg, dm=1.6) in Halpha is most likely bogus. The angle of the "binary" is roughly perpendicular to the atmospheric dispersion, but only one "fringe" is seen in the power spectrum. Detection limits are dm=4.55 and 7.06 at 0.15″ and 1″, respectively. |
| 18272+0012 | STF 2316 Aa,Ab | The close subsystem STF 2316Aa,Ab is unresolved, except on one occasion. The component A is triple SB with periods 1.9d and 386d, the 386-d pair has estimated separation of 0.027″ and magnitude difference 0.3. Companion B at 3.8″ is physical (MSC). |
| 18277−3207 | I 1023 | Unresolved, last measure in 1929 (0.1″, dm=0.2). |
| 18323−1439 | CHR 73 | Bad orbit, fast motion. |
| 18331−1042 | HDS 2632 | Hipparcos resolved this pair at 2.8″, now it has closed down to 0.5″. |
| 18338+1744 | HU 322 AB | Resolved quadruple. AB(0.056″) and CD(0.4″) at 1.6″, physical. Estimated periods are 120yr (AB) and 330yr (CD). Orbit of AB soon, fast motion through periastron. |
| 18359+1659 | STT 358 AB | Component C at 200″ is optical. MSC lists another physical component at 35″. Calibrator binary? |
| 18363−3220 | HDS 2640 | Unresolved Hipparcos binary (0.2″, dm=0.25 in 1991), never confirmed. |
| 18367+0640 | CHR 76 Aa,Ab | The close pair CHR 76 Aa,Ab is unresolved in 2008 and 2009, bogus? Last measure in 1987 (0.2″, dm unknown). The WDS components B,C,D,E are optical. |
| 18384−0312 | A 88 AB | The companion C at 18″ is likely optical (MSC). |
| 18389−2103 | WSI 90 | The 0.05″ new pair is definitely resolved in both filters, but not on all pointings. Fast motion expected because the projected separation is only 0.5 AU. |
| 18423−0720 | HDS 2649 | Unresolved Hipparcos binary (0.1″, dm=0.5 in 1991), never confirmed. |
| 18434−5546 | B 398 AB | Bad orbit. Fast retrograde motion through periastron? |
| 18455+0530 | FIN 332 Aa,Ab | Quadruple: Aa,Ab at 2.5″ from Ba,Bb, which was unresolved in 2009. See the text. |
| 18465−0058 | MCA 53 Aa,Ab | Aa,Ab is unresolved on Blanco, uncertain resolutions in the y and Halpha filters at SOAR. Orbital motion and spending portions of its orbit closer than 30mas would explain the result and is consistent with published resolutions and nonresolutions. Estimated orbital period of MCA 53 is 13yr. Component A is 4.7-day SB2. Companion B at 12″ must be physical. |
| 18494−3502 | B 2463 | Unresolved, last measure in 1060 (0.2″, dm=0.1). |
| 18537−0533 | A 93 | Component A is a 50-d SB1 (MSC). A 1-mas wobble caused by the motion of Aa,Ab should be detectable by speckle. |
| 18542−2254 | TDT 1120 | Unresolved Tycho binary (0.4″, dm=0 in 1991), never confirmed. |
| 18564−6149 | HJ 5069 AB | Companion C at 14″ is optical? |
| 19026−2953 | HDO 150 AB | zeta Sgr. Companion C at 72″ can be physical (MSC). |
| 19027−0043 | STF 2434 BC | Companion A at 27″ is optical |
| 19029−0342 | A 3105 | Unresolved in 2008, last measure in 1962 (0.1″, dm=0). |
| 19029−5413 | I 1390 | Bad orbit. |
| 19035−6845 | FIN 357 | Bad orbit. |
| 19040−3804 | I 1391 | Bad orbit. |
| 19070+1104 | HEI 568 | Companion A is SB1 and eclipsing 1.3-d binary. Estimated period of AB is 120yr, retrograde motion (MSC). |
| 19098−1948 | B 427 | Unresolved in 2008 and 2009, while the orbit by Vor1934 predicts 0.13″ separation. |
| 19098−2101 | FIN 311 AB | Systems AB (0.1″) and AB-C (0.3″) are unresolved here, also unresolved in 2006. Their estimated periods are 15yr and 75yr, respectively. The marginal resolution in Halpha on 2008.77 (286deg, 37mas, dm=2.7) is not accepted as real. |
| 19120−1035 | RST 4621 AB | Companion C at 18″ is likely physical. |
| 19155−2515 | B 430 | The subsystem Bab is a 10.8-d SB2, AB has combined visual-spectroscopic orbit (MSC). |
| 19190−3317 | I 253 | Bad orbit. |
| 19222−0735 | A 102 AB | Companion C at 5.5″ is physical, estimated period of AB is 150yr, it closes down (MSC). |
| 19258−3006 | I 1401 AB | New triple with subsystem WSI 91 Ba,Bb (0.04″). The quadrant is set to match the wide pair. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 19294−0703 | KUI 91 | Cepheid U Aql. Companion C at 35″ is physical, A is 1856-d SB1, astrometric effect should be detectable in the motion of AB (MSC). The 0.074″ subsystem Aa,Ab announced by Ismailov (1992) is likely bogus. Marginal resolution in Ha: 2009.27 (303deg. 47.5mas dm=1.3) is considered artifact. |
| 19296−1239 | HU 75 | Bad orbit. |
| 19320−1649 | HLD 152 AB | Companion C at 35″ is optical. |
| 19398−2326 | SEE 389 | Bad orbit. |
| 19399−2204 | I 656 | Unresolved in 2008, last measure in 1983 (0.1″, dm=0.2). |
| 19407−0037 | CHR 88 Aa,Ab | Bad orbit wich contradicts the Hipparcos parallax. Companion B at 40″ is physical (MSC). |
| 19471−1953 | BU 146 | Bad orbit. |
| 19474−0148 | A 2993 | Bad orbit. |
| 19488−4931 | HDS 2818 | Unresolved Hipparcos binary (0.2″, dm=1.1 in 1991), never confirmed. |
| 19491−6149 | I 120 AB | Companion C at 14″ is physical (MSC). |
| 19498−6454 | HJ 5140 | Looks like triple in Halpha, but this is a “disk” artifact. |
| 19520−1021 | BU 148 AB | Companion C at 30″ is optical. |
| 19531−1436 | CHR 90 | The visual orbit with 73.5-yr period is bad. Eclipse timimg indicates period 38.4yr (Mayer 1997). Companion A is 1.2-d SB2 and eclipsing binary V505 Sgr (MSC). |
| 19531−2528 | B 454 | Bad orbit. |
| 19534−3016 | I 1406 AB | Companion C at 6″ is optical? |
| 19553−0644 | STF 2597 AB | Status of companion C at 14″ is unknown. A is SB2 without orbit (MSC). |
| 19573+0513 | A 604 | Bad orbit. |
| 19587−4151 | TDT 1895 | Unresolved Tycho binary (0.5″, dm=0.1 in 1991), never confirmed. |
| 19598−0957 | HO 276 | Residuals to the orbit are a bit irregular, is there a subsystem? |
| 20096+1648 | STF 2634 AB | Unresolved because B at 4″ is outside the field. |
| 20113−5613 | I 1414 | Component B is SB2, no orbit. Estimated period of AB is 220yr (MSC). |
| 20123−0806 | BU 1205 | Bad orbit. |
| 20210−1447 | BAR 12 Ba,Bb | Member of the beta Cap multiple system with 6 components (MSC). Aa,Ab = BLA 7 is unresolved, the orbit by Msn1994 predicts separation 0.08″. |
| 20217−3637 | HDS 2908 | A very close pair in fast orbital motion. |
| 20224−5630 | FIN 276 | Unresolved in 2008, last measure in 1931 (0.2″, dm=0). |
| 20239−4225 | BU 763 AB | Bad orbit. Companion C at 15″ with unknown status. |
| 20296−4609 | I 1422 | Unresolved in 2008, last measure in 1936 (0.1″, dm=0.1). |
| 20311−1503 | FIN 336 | Bad orbit. |
| 20312+0513 | AG 257 | Component A is 0.5-d eclipsing system MR Del. Estimated orbital period of AB is 500yr (MSC). |
| 20322−4521 | RST 5470 AB | Companion C at 6″ is physical, estimated period of AB is 100yr (MSC). |
| 20325−1637 | SEE 512 | Bad orbit. |
| 20347−6319 | HU 1615 | Bad orbit. |
| 20384−2100 | RST 9008 | Unresolved in 2008, last measure in 1969 (0.1″, dm=0). |
| 20393−1457 | HU 200 AB | Component A contains a 0.052″ occultation subsystem, not seen here (MSC). |
| 20396+0458 | BAG 14 Aa,Ab | GJ 795, resolved triple with KUI 99, both visual orbits are confirmed here (MSC). |
| 20401−2852 | SEE 423 AB | Triple with system AB at 1.16″ and new 0.2″ pair BC. Resolved photometry gives delta m(A, BC) of 0.8. See text. |
| 20449+1219 | STF 2723 AB | B 2910 Aa,Ab is unresolved. Companion C at 37″ is likely physical (MSC). Last speckle resolution of Aa,Ab dates 2005.9 (0.11″), estimated period of Aa,Ab is 50yr, so the negative result here is unexplained. |
| 20452−3120 | LDS 720 | GJ 803. The component A is unresolved here, BC is a 209-yr visual binary at 78 arcmin from A (MSC). |
| 20514−0538 | STF 2729 AB | Components C,D are optical. |
| 20562−3146 | B 1001 | Bad orbit. |
| 20564−5916 | I 129 AB | Companion C at 38″ is optical. |
| 20568−2618 | HIP 103389 | The star was unresolved at Blanco on 4 nights and marginally resolved at SOAR in 2008.60 in two filters (0.07″, 70deg, dm 3), but this is an artifact. |
| 20591+0418 | STF 2737 AB | Companion C at 11″ is physical, on a premature 5243-yr orbit around AB. A is 2-day SB1 (MSC). |
| 21041+0300 | WSI 6 | A is a 377-d SB1, estimated period of AB is 13yr, orbit soon? (MSC). The orientation of Aa,Ab orbit can be determined by speckle astrometry, the expected amplitude of the wobble is few mas. These measures confirm the new pair first reported in Mason et al. (2001b). |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 21041−0549 | MCA 66 Aa,Ab | Triple with STF 2745B at 2.5″. Estimated period of Aa,Ab is 20yr, orbit soon? (MSC). The component B is HR 8058, physical. |
| 21042−5520 | RST 5552 AB | Companion C at 13″ is physical. |
| 21047+0332 | SE 3 Aa,Ab | Known quadruple: Aa,Ab and BC at 3.3″ from Aa,Ab, physical. The quadrant of Aa,Ab is set to match the wide AB pair. The orbit of Hei1988 predicts 0.30″ separation for BC, which is unresolved here |
| 21074−0814 | BU 368 AB | Bad orbit. Companion C at 15″ is optical. |
| 21094−7310 | I 379 AB | GJ 818.1 A BC. Companion C at 7″ is physical (MSC). AB has a 5.9-yr astrometric orbit (Goldin, 2006), frequent speckle data are needed! |
| 21099−2424 | HDS 3015 | Unresolved Hipparcos binary (0.1″, dm=0.6 in 1991), never confirmed. |
| 21114−5220 | HU 1626 | A is a 0.9-d eclipsing binary BR Ind (MSC). |
| 21135+0713 | BU 270 AB | Companion C at 32″ is optical, but D = HD 202093 at 184″ is physical (MSC). |
| 21143−3835 | B 520 AB | Companion C at 10″ is physical, estimated period of AB is 3300yr (MSC). A good calibration binary? |
| 21145+1000 | STT 535 AB | delta Equ. Interferometric orbit by Muterspaugh el al. (2005) should replace the orbit by Hrt1996a in VB6. |
| 21147−0050 | A 883 AB | Companion C at 22″ is physical and suspected SB, other companions are optical (MSC). |
| 21158−5316 | FIN 329 | Bad orbit. |
| 21186+1134 | BU 163 AB | Companion C at 29″ is likely optical, A is a 4-d SB2 (MSC). |
| 21198−2621 | BU 271 AB | GJ 825.4. Bad orbit. A is a 21-d SB1. Components C,D,E are optical (MSC). |
| 21210+0217 | TDT 2913 | Unresolved Tycho binary (2.3″, dm=0.2 in 1991) observed in 6″ field. |
| 21214+1020 | A 617 | Component B is a 2.2-d SB1 (MSC). |
| 21251+0923 | BU 164 AB | Companion C at 26″ is physical, estimated period of AB is 70yr, motion retrograde, orbit soon? (MSC). |
| 21255+0203 | A 2289 AB | Bad orbit, predicts 0.16″ separation. Companion C at 15″ is physical (MSC). |
| 21310−3633 | B 1008 AB | Companion C at 41″ is optical. |
| 21378−0751 | MCA 68 | The pair was not resolved at SOAR in August 2008, but is resolved in October 2008. An astrometric orbit for this infrequently resolved pair has been computed by Gontcharov and Kiyaeva (2002b). |
| 21395−0003 | BU 1212 AB | Companion C at 36″ is optical, A is a 5.9-d SB1 (MSC). |
| 21400+0911 | CHR 105 | Unresolved in 2008.77, but was resolved in 2005.85 at 0.11″. The component A is a spectroscopic triple with 2.63-day eclipsing pair Aa1,Aa2 = EE Peg and 1464-day outer pair Aa,Ab. The wobble caused by Aa,Ab may be detectable in the motion of AB. Estimated period of AB = CHR 105 is 85yr (MSC). |
| 21477−3054 | FIN 330 AB | Bad orbit, fast retrograde motion. Companion C at 33″ is optical |
| 21479−4500 | I 1446 | Unresolved in 2008. Last measure in 1943 (0.4″, dm=1.0). |
| 21499−2509 | B 540 | Unresolved in 2008. Last measure in 1964 (0.1″, dm=0.2). |
| 21536−1019 | FIN 358 | The component A is a suspected occultation binary with 0.02″ separation (MSC). |
| 21555+1053 | BU 75 AB | Companion C at 37″ is optical. |
| 21579−5500 | FIN 307 | Bad orbit, fast motion. |
| 22034−5647 | HIP 108870 | Unresolved here. A 0.7″ pair of T-dwarfs at 402″ is physical (MSC). |
| 22038−0248 | HO 469 AB | Companion C at 55″ is optical. |
| 22116−3428 | BU 769 AB | Known triple with CHR 230 Aa,Ab (0.04″). The quadrant of CHR 230 is set to match the wide pair. Estimated periods 1300yr and 110yr, Aa,Ab is in direct motion (MSC). |
| 22152−0535 | A 2599 AB | The subsystem MSN 1 Aa,Ab is unresolved. |
| 22183−5338 | HDO 298 | It is not clear if this is HDO 298 or another, new companion? |
| 22266−1645 | SHJ 345 AB | Companions C,D are likely optical. |
| 22294−2840 | SEE 474 AB | Companion C at 34″ is optical. |
| 22300+0426 | STF 2912 | The 372-d SB subsystem is spurious (MSC). Our measurement dy=1.49 agrees with dV=1.43 measured by Rakos (1982) and dHp=1.54. |
| 22333−3844 | SEE 475 | WDS lists the last (and only) observation in 1896, so this system is revisited after more than a 100-yr gap! |
| 22384−0754 | A 2695 | Bad orbit, A is suspected SB (MSC). |
| 22385+0218 | HO 479 | Bad orbit. |
| 22388−2037 | GJ 867 AC | Companion B = FK Aqr at 24″ is physical, A is 40d SB2 with predicted separation 5 mas, unresolved here (MSC). |
| 22406+0632 | HU 494 | Bad orbit. |

Table 7: (continued)

| WDS (2000) | Discoverer Designation or other name | Note |
|---|---|---|
| 22408−0333 | KUI 114 | Orbit by Sod1999 predicts 0.014-0.031″ separation, the pair is unresolved in 2008. A is a dubious occultation binary (MSC). |
| 22409+1433 | HO 296 AB | Companion C at 72″ is optical, D at 270″ is physical (MSC). |
| 22421−0506 | HDS 3222 Aa,Ab | Unresolved Hipprcos binary (0.1″, dm=0.3 in 1991), never confirmed. The components B,C are optical. |
| 22438+0353 | WSI 92 | New pair, previously unobserved G-dwarf. |
| 22451−0240 | A 2696 BC | HIP 112325, CPM with HIP 112326 at 20″ (MSC). Hipparcos data are unreliable for this pair. |
| 22474+1749 | WSI 93 | New pair, nearby high proper motion star NLTT 54852. |
| 22479−5705 | B 2059 | Unresolved in 2008, last measure in 1991 (0.2″, dm=0.2). |
| 22535−1137 | MCA 73 | Bad orbit. A is a 3.4-d SB2 (MSC). |
| 22553−4828 | B 2506CD | Unresolved in 2008, last measure in 1964 (0.1″, dm=0.2). AB = I 22 at 93″ is physical. |
| 22553−4828 | I 22 AB | The pair CD at 93″ is observed and found unresolved. |
| 22583−0224 | CHR 116 | Unresolved in 2008, last measure in 1997 (0.3″, dm unknown). |
| 22586+0921 | STT 536 AB | Companions C,D are optical, A is a suspected eclipsing system, but has constant radial velocity (MSC). |
| 23046−2611 | B 587 | Unresolved in 2008, last measure in 1931 (0.1″, dm=0.5). |
| 23052−0742 | A 417 AB | Companion C = HIP 114006 at 255″ is optical (MSC). |
| 23099−2227 | RST 3320 | Bad orbit. |
| 23114−4259 | B 594 | Unresolved in 2008, the orbit by Nrr1983 predicts 0.08″ separation, dm=0.4. |
| 23126+0241 | A 2298 AB | Companion C at 50″ is optical, A is 110-d SB1, with potentially detectable ∼2mas astrometric effect (MSC). |
| 23159−0905 | BU 1220 BC | Companion A at 49″ is physical (MSC). |
| 23171−1349 | BU 182 AB | Companion E is physical, C,D, are optical (MSC). Ambiguous orbital solution, corrections are needed. |
| 23175+1652 | HLD 171A-BC | Resolved triple with HU 497 BC (0.22″). MSC. |
| 23176−0131 | BU 79 AB | Companion C at 16″, status unknown. |
| 23191−1328 | MCA 74 Aa,Ab | Companion B at 12″ is physical (MSC). |
| 23208−5018 | RST 5560 AB | Companion C = HIP 115269 at 17″ is physical, A is suspected SB. Estimated period of AB is longer than 200yr (MSC). |
| 23210+1715 | WSI 11 | These measures confirm the new pair first reported in Mason et al. (2001b). |
| 23257−4254 | I 144 | A is a 3.8-d eclipsing binary DP Gru. Estimated period of AB is 1000yr (MSC). |
| 23299−2035 | HU 599 AB | Companion C at 20″ is physical, estimated period of AB is 240yr (MSC). |
| 23315−2857 | B 602 | Unresolved in 2008, last measure in 1932 (0.2″, dm=0.3). |
| 23357−2729 | SEE 492 | Nearby G-dwarf, unresolved. |
| 23363−0707 | BU 721 AB | Companion C at 22″, status unknown. |
| 23388−2816 | B 608 | Unresolved in 2008, last measure in 1929 (0.1″, dm=0.5). |
| 23444−7029 | WSI 94 | New pair, nearby high proper motion star NLTT 57815. |
| 23452+0814 | WSI 95 Aa,Ab | New pair, previously unobserved G-dwarf. This is the A component of STF 3035 (28″, CPM). |
| 23474−7118 | FIN 375 Aa,Ab | Bad orbit. Companion B at 8″ is optical? |
| 23537−4926 | I 1476 | Unresolved in 2008, last measure in 1932 (0.2″, dm=0.1). |
| 23586−1408 | RST 4136 AB | Bad orbit? Companion C at 12″ is likely optical. |