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# Relative astrometric and photometric measurements of visual binaries made with the Nice 76-cm refractor in 2008

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We present relative astrometric and photometric measurements of visual binaries made in 2008, with the 76-cm refractor of Côte d’Azur Observatory. Our observing list contains orbital couples as well as binaries whose motion is still uncertain. Three different techniques were used for obtaining measurements: Lucky imaging, speckle interferometry and the Direct Vector Autocorrelation method. We obtained 2420 new measurements of the relative position of 2225 objects, with angular separations in the range  $0''.07$  —  $11''.5$ , and an average accuracy of  $0''.02$ . The mean error on the position angles is  $0^\circ.6$ . We managed to observe faint systems ( $m_V \approx 12$ ) with large magnitude difference (up to  $\Delta m_V \approx 5$ ). We have thus been able to measure many systems containing red dwarf stars that had been poorly monitored since their discovery. We also measured the difference of magnitude of the two components of 376 objects with an estimated error of 0.1 mag. Finally, we provide a list of 33 newly discovered components of multiple or binary systems, which is a significant complement to our GII catalog.

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## 1 Introduction

This paper presents the observations of binary stars made in 2008 with the 76-cm refractor telescope (“Grand Equatorial de l’Observatoire de la Côte d’Azur”). The Lucky imaging method (basically a shift-and-add method applied to a selection of the best images) that was mainly used in 2007 (Gili & Agati, 2009) was progressively replaced in 2008 by other methods based on speckle interferometry. Data acquisition was first done with an EMCCD ANDOR LUCA detector and later by an ANDOR iXon DV885 that was acquired in July 2008 (see ANDOR, 2012). The DV885 detector has a more elaborated cooling system than the LUCA detector. Another advantage is the higher reading frequency of the DV885. As a result, our observations gained in sensitivity and velocity through the year 2008.

We briefly describe our observations in Sect. 2 and our list of targets in Sect. 3. Then we present and discuss the relative astrometric and photometric measurements in Sect. 4.

## 2 Instrumentation and observations

### 2.1 Description of the detectors LUCA and DV885

The observations presented here were carried with two EMCCD (Electron Multiplying CCD) detectors of ANDOR Technology: a LUCA and an IXON DV885. In the first semester 2008, the LUCA detector was used of the 76-cm refractor for the observations and measurements of binaries. During the summer, it was replaced by the DV885 detector and was then used as an acquiring tool on the  $F/7.2$  25-cm Zeiss finder scope of the 76-cm refractor. The LUCA detector was installed at the direct focus of the finder scope, with a resulting field of view of  $12''3 \times 9''3$ . The good sensitivity of the LUCA detector allowed the pointing of stars as faint as  $m_V \approx 14$ . During the same period, we also installed two webcams in front of the graduated right-ascension and declination circles. Since then, the pointing of stars could be easily interactively controlled from the screen of a computer transformed into a dashboard. A single person could then do the job. This allowed us to observe typically twenty binaries per hour.

The main characteristics of the two detectors used for our observations in 2008 are given in Table 1. For each one, we indicate its full format in pixels (Col. 2), the pixel size in  $\mu\text{m}$  (Col. 3), the digitization depth in Col. 4, i.e. the number of bits per pixels used for encod-

ing the output values, the frequency rate (Col. 5) used for reading out the pixel data, the theoretical quantum efficiency of the detector (Col. 6), the cooling temperature that was used during our observations (Col. 7) and some comments (Col. 7), concerning the pattern method used for reading out the data. The mention “interleaved” means that the pixel electronic charges can be transferred from the sensitive matrix of the CCD to a masked interleaved matrix available on the same CCD chip. The mention “non-interleaved” is reported in Col. 7 in the absence of a masked CCD. The quantum efficiency values in Col. 6 are those given by the constructor for wavelengths in the range 550–720 nm, but they are unfortunately much smaller in practice.

For the LUCA detector, the read-out noise is 25 electrons in conventional mode and less than one electron in electron-multiplying (EM) mode. It works in interleaved mode and the images are transferred to the computer through a USB link.

For the IXON DV885, the image transfer is made with a dedicated link between the detector and a CCI-22 controller board installed on a PCI slot of the computer, which allows a reading frequency up to 27 MHz. This would correspond to an acquisition rate of 27 full-size images per second. In fact, to reduce the noise in the images, we used a lower value of 5.13 MHz for this reading frequency. Like the LUCA, this detector can be used in EM mode, which reduces the read-out-noise of the output register to less than one electron.

Compared to the LUCA, the main advantage of the DV885 for our observations was a lower noise level due to better cooling performances. Indeed the DV885 is endowed with a three-stage Peltier device that allows to cooling the detector down to  $-70^\circ$  without external heat-exchanger, whereas the LUCA detector can be cooled down to  $-20^\circ$  only.

The ANDOR SOLIS software was used for the data acquisition of both detectors. The images were recorded as three-dimensional cubes in the property SIF-format in 32 bits. They were then converted to 16-bit FITS individual images using SOLIS too. We finally processed those images in the frequential or spatial domain with a special version of the REDUC program (Losse, 2012).

## 2.2 Optical setup and observing procedure

The observations reported here were thus made with the “Grande lunette” of OCA Observatory. It is a 19th century 76-cm refractor, with a free aperture diameter of  $D = 74$  cm. The limit of diffraction  $\rho_D = \lambda/D$  is  $0''.16$  with  $\lambda = 570$  nm, which corresponds to the average central wavelength of the filters we used.

For our observing program, we magnified the images with a negative achromatic double lens (“Barlow”) of  $-113$  mm focal length. The astrometric calibration was done using wide well-known couples with a separation of about  $5''$ . Without Barlow, the focal length was

found to be  $17.89 \pm 0.005$  m at the primary focus. With Barlow, the equivalent focal length was  $25.75 \pm 0.2$  m for the LUCA and  $26.93 \pm 0.2$  m for the DV885. This small difference is due to a different mechanical setup for the two detectors in this configuration. The corresponding scales were  $0.0801''/\text{pixel}$  for the LUCA and  $0.0613''/\text{pixel}$  for the DV885. The sampling of both detectors in the Barlow configuration is thus less than  $\rho_D/2$  for  $\lambda = 570$  nm. It then verifies the Nyquist-Shannon theorem in both cases, and allows measurements down to the telescope diffraction limit.

The calibration of the origin of the position angles was done recording star trails caused by the diurnal motion. We used the largest available field for this purpose, which was  $53'' \times 40''$  with the DV885.

Exposure times of elementary frames were set in the range 20–30 msec for all objects, independently of their magnitudes. The standard format of the acquisition window was  $128 \times 128$  pixels which corresponded to a field of view of  $10'' \times 10''$  and  $8'' \times 8''$  for the LUCA and DV885, respectively. For faint objects or wide pairs, a wider field of  $256 \times 256$  pixels on the detector was used with a binning factor of  $2 \times 2$  which thus amounted to  $128 \times 128$  pixels for the elementary frames. The EM gain was set to values in the range 170–250 for the LUCA (the maximum possible value is 255), and to 170 for the DV885. To avoid saturation with bright objects, the EM gain was reduced and sometimes even put to “off”, which corresponded to observing in conventional CCD mode.

For each object, we recorded SIF cubes of 1000 elementary images. In average  $1''.2$  seeing conditions, the typical limiting  $V$  magnitude was close to 14–15 with a binning mode of  $1 \times 1$ .

The original optical setup was rather rudimentary and in a first step no filter was used with the LUCA detector. Later we used successively:

- the IRC (IR-cut), which is a lower-pass filter rejecting all wavelengths above 700 nm;
- the Shott BG39, which is a band-pass between 350 and 600 nm;
- and the AF (anti-fringe or V-block), which is a bandpass 450–650 nm;

The AF filter was mounted on the front window of the DV885 detector. This filter considerably reduced the secondary spectrum of the 76-cm refractor, with no significant loss of energy in the  $V$  band. When combined with the transmission of the lenses and the quantum efficiency response of the detector, the resulting transmission curve of those filters is close to a standard  $V$  filter with a maximum around 570 nm.

Our experimental setup do not have any atmospheric dispersion correction device yet. This correction was not really needed in 2008 since we mostly limited our choice of targets to objects in the celestial northern hemisphere.

**Table 1** Main characteristics of the two ANDOR EMCCD detectors used for our observations.

Name	Format (pixels)	Pixel size ( $\mu\text{m}$ )	Digitization (bits)	Read freq. (MHz)	Quantum Eff. (%)	Cooling temp ( $^{\circ}\text{C}$ )	Comments
LUCA	$658 \times 496$	$10 \times 10$	14	12.5	50	-20	Interleaved
DV885	$1004 \times 1002$	$8 \times 8$	14	27	60-65	-70	Non-interleaved

A basic pre-processing of the elementary frames consisted in subtracting the mean offset corresponding to the same detector setup. For this purpose, series of 1000 offset frames (i.e. short-exposed dark frames) were recorded each night to SIF cubes, with different detector setups.

The FWHM (Full Width at Half Maximum) seeing was estimated with a series of 25 frames obtained with a one-second integration of a single star. Those data were first processed with a shift-and-add procedure in order to cancel the possible drifting motion of the telescope.

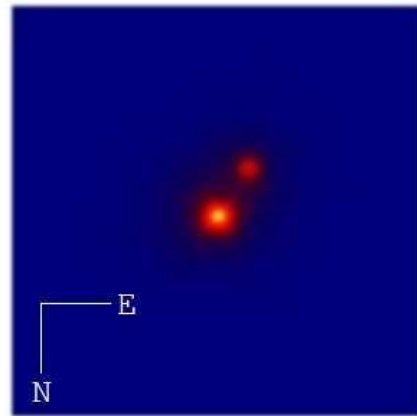
### 2.3 Lucky imaging

In the case of good seeing conditions, shift-and-add processing of a subset of selected good images can lead to high resolution images. Indeed, with a Kolmogorov atmospheric turbulence there is a non-null probability of getting short-exposure frames at the diffraction limit for the instrument. The corresponding FWHM (Full Width at Half Maximum) of those images is then close to  $s_0 = \lambda/D$ , where  $D$  is the diameter of the aperture and  $\lambda$  the central wavelength of the filter used for those observations. Fried (1978) called those images “lucky images” and showed that, in the case of a turbulence characterized with a “Fried parameter”  $r_0$ , the probability of obtaining a such a ‘good image’ was:

$$p(s_0) \approx 5.6 \exp[-0.1557(D/r_0)^2]$$

More precisely, such an image corresponds to the case when the standard deviation of the tilt-corrected wavefront distortion phase is less than one radian over the aperture. This probability is very small for large apertures and decreases exponentially with the seeing, which makes Lucky imaging impossible to implement with medium or poor seeing conditions.

When the FWHM seeing is  $s_0 = 1''$  for  $\lambda = 570$  nm (i.e.  $r_0 = 12$  cm)  $p(s_0) = 1.5 \times 10^{-2}$  only for a 74-cm aperture. Fortunately, a larger selection can be used in practice. We experimentally found that a selection of about 3 to 10% of the best images of our 1000-frame SIF cubes (see Sect. 2) often led to very nice shift-and-add images, with clear Airy rings and a final resolution close to the diffraction limit of the 76-cm refractor (see Fig. 1).



**Fig. 1** Example of Lucky imaging of the binary star WDS16509+4259 A575 ( $\theta = 144^{\circ}$ ,  $\rho = 0.''7$ ,  $\Delta m = 0.6$ ) obtained by the shift-and-add computation of a selection of 60 frames (DV885 iXon detector).

When the “lucky images” were very noisy, we filtered them with wavelets or with an “over-sampling Spline-method” by a factor of 3 using the IRIS software (Buil, 2012).

The final images were then processed with the REDUC software (Losse, 2012) that provided the  $\theta$ ,  $\rho$  and  $\Delta m$  measurements. We could measure couples with very large differences of brightness, up to 4–5 magnitudes (see Sect. 4). Compared to the speckle interferometry (see Sect. 2.4), the main advantage of “lucky imaging” is to provide a full image which is convenient for the determination of the quadrants (where lie the companions) and of the difference of magnitudes between the two components. As we will see in Sect. 2.5, the DVA method can also lead to an independent determination of those two parameters.

### 2.4 Speckle interferometry

The pioneering work of Labeyrie (1970) showed that high resolution information could be extracted from short-exposures by computing the average power spectrum of those exposures. This technique is known as “speckle interferometry”. The first attempt of this kind of processing for our observations was done in December 2007 using some elementary frames that had already been processed with “lucky imaging”. As this

experiment was successful, speckle interferometry became for us the “standard” way of processing in 2008.

Speckle interferometry processing was done with the software REDUC (Losse, 2012), which was kindly specially adapted to our application by F. Losse. For each elementary frame of the 1000-frame SIF cube, this software performed the following steps:

- pre-processing with the subtraction of a mean offset frame,
- Fourier transform using the FFT (Fast-Fourier-Transform) algorithm,
- addition of the square of this Fourier transform to build a mean power spectrum.

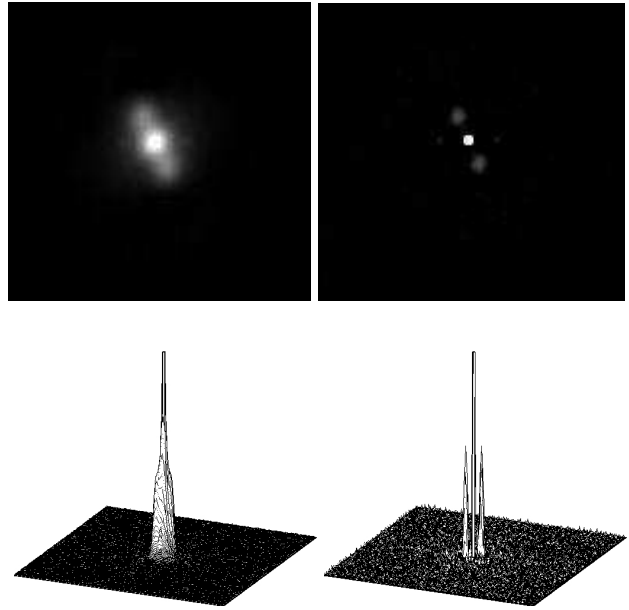
When all the frames were processed in this way, the final step consisted in computing the inverse Fourier transform of the mean power spectrum, which led to the mean auto-correlation of the elementary frames. In the case of a resolved binary star, the autocorrelation exhibits three peaks that are superimposed on a strong central background pattern (see Fig. 2).

In conventional speckle interferometry (Labeyrie, 1970), the power spectrum of the object is “divided” by that of a calibration single star before computing the mean auto-correlation (in fact this division in Fourier domain is implemented as a deconvolution in the direct space). This star needs to be located close to the object and observed just before or after this object in order to have similar atmospheric turbulence conditions. This operation allows the removal from the autocorrelation frame of the central background pattern caused by the atmospheric turbulence.

A drawback of this way of doing is the need of observations of calibration stars. There is a way out and the central background of the auto-correlations can be removed in a simpler manner, by filtering them, for example with wavelet filter using the IRIS software (Buil, 2012) as shown in Fig. 2. We experimentally found another solution, and divided the mean power spectrum of the target with that of the mean offset, before computing the inverse FFT leading to the auto-correlation. In fact this amounts to performing a strioscopic filtering of the auto-correlation.

### 2.5 Direct Vector Autocorrelation method (DVA)

Conventional speckle interferometry, is based on the computation of the mean autocorrelation function of short exposed frames. This function is symmetric relative to the origin and does not contain any information about the location of the companions of the binaries. As a consequence, the speckle measurements of the position angles of binaries have an ambiguity of  $180^\circ$ . To solve this problem, Bagnuolo et al (1992) proposed to compute the direct vector autocorrelation (DVA), that is the “oriented” autocorrelation function that takes



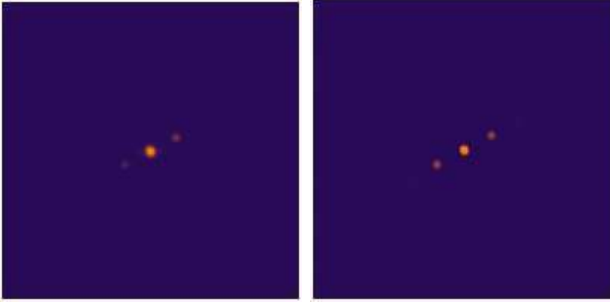
**Fig. 2** Example of speckle interferometry processing of the binary star A1376 ( $\theta = 32^\circ$ ,  $\rho = 0.''4$ ,  $\Delta m=0$ ). Top: raw auto-correlation (left) and filtered version with wavelets (right). Bottom: 3D plots of those images in linear scale. The maxima of the raw and filtered images are 3000 and 300 ADU, respectively. North is to the bottom and East to the left.

into account the brightness level of the vector ends. The DVA allows the quadrant determination and the measurement of  $\Delta m$  when the contrast is not too large (e.g.  $\Delta m < 2$ ). An example of DVA is shown in Fig. 3. Like for auto-correlations, the measurements of  $\rho$  and  $\theta$  in the filtered DVA images are deduced from the positions of the photo-centers of the secondary peaks. The contrast between those peaks leads to a measurement of the magnitude difference  $\Delta m$  between the two components of the binary. Those determinations were done with the REDUC software (Losse, 2012).

## 3 Observing list

Our list of targets basically includes all the visual binaries for which new measurements are needed to improve their orbits, that are accessible with our instrumentation. Among those, we particularly favoured the objects discovered by P. Cousteau (see Cousteau, 1999 and Le Contel et al., 2001), since they are not often observed by other observers because most of them are rather faint and have a small separation. Furthermore they are particularly well suited to the 76-cm refractor and this site, since most of them they were discovered in Nice.

The distribution of the apparent magnitudes  $m_V$  of the primary components of the binaries observed in 2008 is presented in Fig. 4a and the difference of magnitudes  $\Delta m_V$  between the two components in Fig. 4b.



**Fig. 3** Example of DVA processing of the binary star STF2972 ( $\theta = 299^\circ$ ,  $\rho = 0.''8$ ,  $\Delta m = 0.02$ ). DVA file (left) and autocorrelation (right) with the same orientation as Fig. 2. Both files have been filtered with wavelets. In the DVA image, the location of the fainter peak corresponds to the position of the companion. Conversely, the autocorrelation is symmetrical and does not contain any quadrant information. Here the DVA indicates that the companion lies in the 4th quadrant.

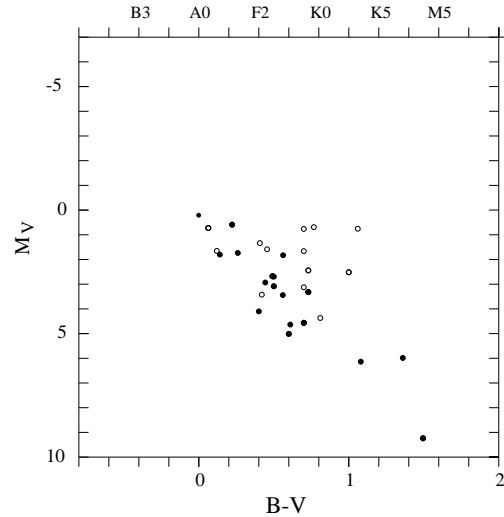
Those data was retrieved from the “Washington Double Star Catalogue” (Mason et al., 2012, hereafter: WDS). The telescope aperture and detector sensitivity led to a limiting magnitude of  $m_V \approx 14$  for the faintest companions, which corresponded to about  $m_V \approx 12$  for the binary systems (see Fig. 4a).

When using a square search box with a 1 arcmin side, we only found 58 objects of this list that have been observed by Hipparcos, from which only 46 were measured with a relative error smaller than 50%. Using the Hipparcos parallaxes, we have been able to compute absolute magnitudes and derive the HR diagram that is displayed in Fig. 5. A large part of the HR diagram is covered by our sample, including some faint and cool main sequence stars. It should be noted that those stars cannot be observed for instance with the speckle camera PISCO (Pupil Interferometry Speckle camera and COronagraph, Prieur et al., 1998) in Merate, although it uses a larger telescope (1-meter in diameter). The reason is that the seeing conditions are worse than in Nice, which leads to a limiting magnitude of  $m_V \approx 11$  only (see Scardia et al., 2011).

#### 4 Relative astrometric and photometric measurements

The relative astrometric and photometric measurements obtained in 2008 are displayed in Table 4.1.

For each binary we successively give its WDS index in Col. 1, the name of the discoverer (Col. 2), the magnitude of the primary ( $m_{VA}$ ) (Col. 3), the difference of magnitudes  $\Delta m_V$  between the two components from the WDS data base (Col. 4), the epoch of observation in Besselian years (Col. 5), the position angle  $\theta$  of the companion in degrees, measured from the North and positive to the East (Col. 6), the angular separation

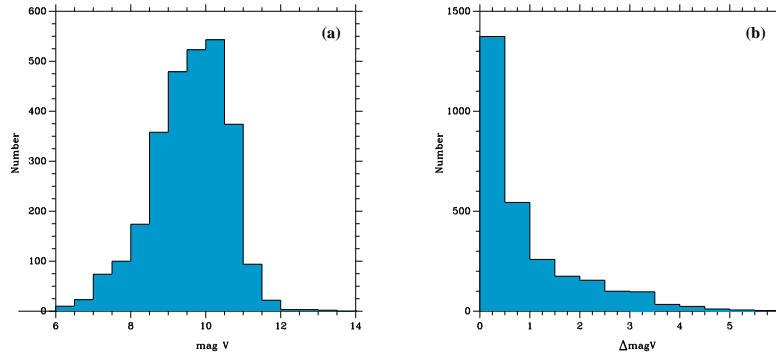


**Fig. 5** HR diagram of the binaries measured in Table 4.1, for which Hipparcos parallaxes were obtained with a relative error smaller than 50% (in open circles, 46 objects) or less than 20% (in filled circles, 30 objects).

$\rho$  in arcseconds between the two components (Col. 7), the measured difference of magnitudes  $\Delta m_F$  between the two components (Col. 8), and the filter  $F$  used in Col. 9 (see Sect. sec:observing-procedure). In Col. 10, the mention ‘(ni)’ is added when the  $\rho$ ,  $\theta$  measurements were not obtained with speckle interferometry (i.e. they were determined with the DVA method or with lucky imaging). The letter ‘b’ indicates that the measurements were obtained in the binning mode with bins of  $2 \times 2$  pixels (see Sect. 2.1). In Col. 10, we also give some other information when the measurements could not be done: ‘S’ for Single star (i.e., not seen as double), ‘NR’ for Non-Resolved, although seen as double, and in some cases an estimate of the upper limit for the separation in arcseconds (e.g.  $< 0.16$  for 00122+4647). In this column, we also indicate our determination of the quadrant and the method used for this determination: ‘ly’ for Lucky imaging (see Sect. 2.3) or ‘dv’ for DVA (Direct vector Autocorrelation, see Sect. 2.5). The quadrants are noted 1Q, 2Q, 3Q and 4Q for the first (North-East), second (South-East), third (South-West) and fourth (North-West) quadrant, respectively. The last three columns of Table 4.1 are dealing with the residuals and will be presented in Sect. 4.2.

Some objects were observed without any filter because they were too faint. This is indicated by the absence of any mention in the filter column (Col. 8). The transmission of the equivalent filter then corresponds to the combination of the quantum efficiency of an EMCCD detector multiplied by the transmission of the optics. The resulting bandpass is 420 nm-wide and centered on 570 nm. It is similar to that of a  $V$  filter.

The difference of magnitudes  $\Delta m_F$  with the filter  $F$  that we used for the observations, was obtained either



**Fig. 4** Distribution of the visual magnitudes of the binary systems observed in 2008 (a) and distribution of the corresponding differences of magnitude  $\Delta m_V$  between the two components (b). These data were extracted from the WDS.

from the Lucky Imaging or the DVA method. This is indicated with 'ly' or 'DVA' in Col. 10, and concerns 376 objects (see Fig. 6b). The average errors are estimated at 0.1 mag. We have added ':' when the measurements had a large uncertainty. In Fig. 6c we have plotted our measurements  $\Delta m_F$  versus the WDS values ( $\Delta m_V$ ). There is a fair correlation between the two. The big scatter shows that the relative photometry of many systems is still poorly known in the literature and that photometric observations are really needed.

The distribution of the 2420 angular separations measured in this paper is displayed in Fig. 6a and shows a maximum for  $\rho \approx 0''.65$ . The largest separation of  $\rho = 10''.96$  was obtained for STT461AB. The smallest separation was measured for MLR615 with  $\rho = 0''.065$ . This is smaller to the diffraction limit of  $\rho_D = \lambda/D$  is  $0''.16$  with our  $V$  filter (i.e.  $\lambda = 570$  nm) and the refractor whose free aperture is  $D = 0.74$  m. Some other objects could be measured under this limit. The closest separations, less than  $0''.10$ , that we obtained in 2008 are listed in Table 3.

Among the 2774 observations, we were able to derive 2420 position measurements. There are 354 cases of unresolved observations. The average errors are estimated at  $0''.02$  and  $0^\circ.6$  for  $\rho$  and  $\theta$  respectively. When the measurements had a large uncertainty, we added ':' after the corresponding values.

#### 4.1 Case of HDS 3080 Aa,Ab, SKF245AC (HIP 106811)

HIP 106811 is a nearby star ( $\pi = 76$  mas) with a large proper motion of 472 mas/yr in right ascension and  $-75$  mas/yr in declination. It is a dwarf M0-type star. Only three observations of HDS 3080 Aa,Ab are reported in the "Fourth Catalogue of Interferometric Measurements of Binary Stars" (Hartkopf et al., 2012, hereafter IC4). It was unresolved with the 6-m Russian BTA telescope (Balega, 1989) which means that  $\rho$  was less than  $0''.05$ . Hipparcos (ESA, 1997) reported a positive detection at  $\rho = 0''.167$ , from which

**Table 3** Closest binaries measured in 2008 with  $\rho < 0''.10$  (which is smaller than the diffraction limit).

WDS	Name	$\rho$ (arcsec)
22394+5503	MLR615	0.065
02415+4053	COU1511	0.077
03284+2248	BAG2Aa,Ab	0.081
19302+5639	A712	0.081
02022+3643	A1813AB	0.083
20454+7000	MLR93	0.084
02183+4120	COU1670	0.097
04100+4235	COU1702	0.100

Söderhjelm (1999) computed an orbit with  $P = 68$  yr, and  $a=1''.5$ . The corresponding ephemerides for the epoch of our observations are  $\theta = 274^\circ$ ,  $\rho = 1''.17$ , but we did not see any companion at (or around) this location and reported 'S' for Single, in Col. 10 of Table 4.1. It should be noted that the Hipparcos measurement is qualified as dubious in the IC4, and reported with the mention 'slit error'. The orbit derived by Söderhjelm from those measurements is therefore likely to be erroneous, which would explain our lack of detection at  $0''.2$ .

We did see a faint companion close to HIP 106811, at a larger distance with  $\rho \approx 3''.1$  and  $\Delta m \approx 4.5$ . We first thought it was a new discovery, but we then found another observation made in 2000 with  $\rho = 2''.7$  and  $\Delta m = 4.5$  that is reported as SKF245AC in the WDS. Our two observations of 2008.587 and 2008.596 are the first confirmation of this new binary. We did not find any other measurement of a companion of HIP 106811 in the literature.

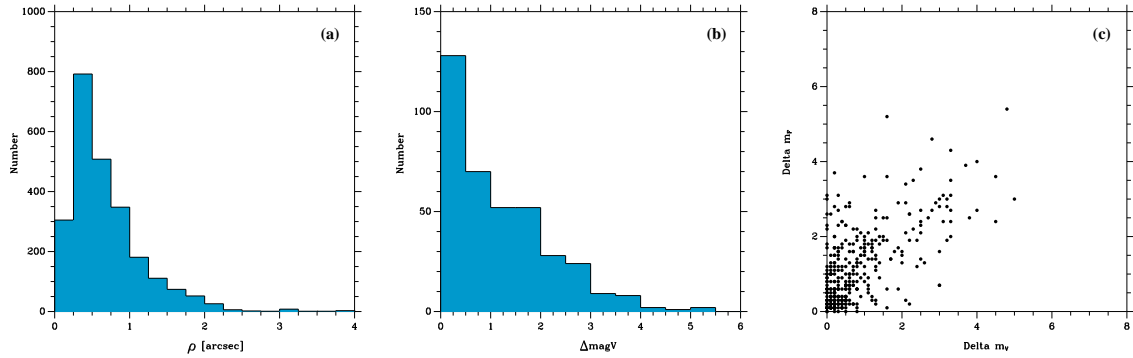
#### 4.2 Comparison with published ephemerides

The ( $O - C$ ) (Observed minus Computed) residuals of the measurements for the systems with a known orbit in Table 4.1 are displayed in Cols. 11 and 12 for the position angle  $\theta$ , and separation  $\rho$ , respectively. A 'Q' was



**Table 2** Measurements of binaries with the Nice 76cm-refractor (short version: beginning only)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
00014+4828	COU1850	10.6	0.1	2008.587	8.6	0.683		IRC	1Q-ly			
00016+6437	MLR79	9.5	3.5	2008.779	243.6	2.061		AF	3Q-dv-b			
00024+1047	A1249AB	9.4	0.5	2008.574	—	—		IRC	S			
00024+5030	COU2350	7.7	1.5	2008.639	116.0	0.446		IRC	2Q-ly			
00031+6942	BU861AB	11.3	0.2	2008.779	177.1	1.541	0.5	AF	dv-b (ni)			
00031+6942	BU861AB	11.3	0.2	2008.779	177.1	1.554		AF	b			
00033+5332	A1500AB	9.8	0.3	2008.639	54.7	0.280		IRC				
00034+6338	CHR121	8.3	1.8	2008.779	—	—		AF	S			
00050+6631	MLR101	8.7	3.2	2008.779	125.7	1.765		AF	2Q-dv			
00054+3348	COU646	10.8	0.0	2008.664	150.1	0.469		IRC				
00055+2736	J865AB	10.7	0.6	2008.710	80.0	1.537		IRC	1Q-dv			
00062+2346	HU401	10.8	0.2	2008.669	36.1	0.870		IRC				
00064+3436	HU1001	9.0	1.7	2008.710	181.2	1.983		IRC	3Q-dv			
00066+4328	COU1351	10.8	0.6	2008.587	41.7	0.965		IRC	1Q-ly			
00071+6309	MLR105Aa	10.5	0.1	2008.779	47.1	0.589		AF	1Q-dv			
00078+6321	HU1002	9.2	0.3	2008.779	280.0	0.449		AF	4Q-dv			
00084+1843	COU246	10.1	0.6	2008.710	252.3	1.626	0.6	IRC	dv (ni)			
00095+1907	COU247	8.3	1.7	2008.574	258.1	0.308		IRC	3Q	-7.5	-0.038	Blm2000
00104+5831	BU253Ba	8.9	0.1	2008.820	31.8	0.454		AF				
00104+5831	BU253Ba	8.9	0.1	2008.820	32.2	0.395:	0.3	AF	dv (ni)			
00108+5846	BU485Ca	8.8	0.7	2008.779	—	—		AF	S			

**Fig. 6** Distribution of the angular separations of the 2420 measurements of Table 4.1 (a), and of the differences of magnitude  $\Delta m_F$  actually measured (b). At right (c), plot of  $\Delta m_F$  versus  $\Delta m_V$ , which was reported in the WDS.

added to  $\theta$  residuals when the quadrants of the measurements were not in agreement with those used for the orbits. The orbital elements used for computing the ephemerides were retrieved from the “Sixth Catalogue of Orbits of Visual Binary Stars” (Hartkopf & Mason, 2009, hereafter OC6). The corresponding authors are given in Col. 13, using the style of the OC6 references.

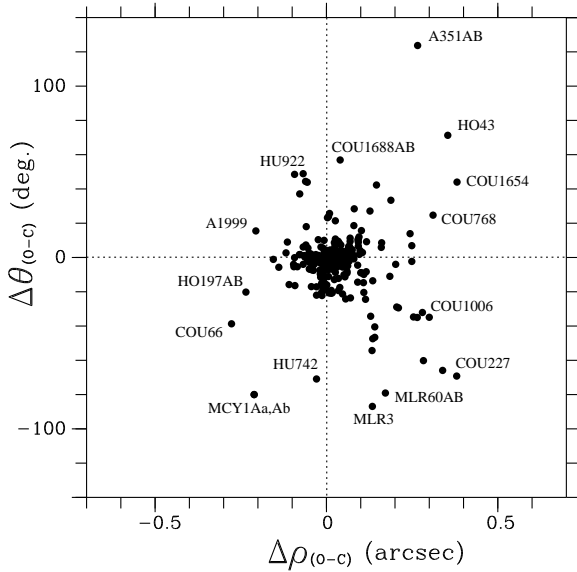
Fig. 7 shows that the 330 corresponding residuals are well centered around the origin, with a rather large scatter that can be explained by the poor quality of many orbits due to a lack of observations. The mean values computed with the residuals of Table 4.1 are  $\langle \Delta \rho_{O-C} \rangle = 0''.03 \pm 0''.09$  and  $\langle \Delta \theta_{O-C} \rangle = -2''.6 \pm 19''.2$ . In both cases, the offsets are much smaller than the standard deviations which provides a validation of our calibration (see Sect. 2.2).

### 4.3 Newly discovered systems

During those observations and later we discovered new components of binary systems, that are listed in Table 4. They represent a significant complement to our GII catalog (GII is the WDS code used for ‘Gili’) with 33 new binaries. Most of them were discovered by chance, when pointing the telescope to known binary systems.

In Table 4, we give for each object the new denomination (Col. 1), the epoch of observation (Col. 2), the coordinates in the WDS format (Col. 3), the visual magnitudes of the two components in Cols. 4 and 5, the  $\theta$ ,  $\rho$ , and  $\Delta m_V$  measurements that we obtained with the 76-cm refractor (Cols. 5, 6 and 7), the telescope used for the discovery in Col. 8 (L76 for the 76-cm Nice refractor, and L25 for the 25-cm Nice refractor), and





**Fig. 7** Residuals of the position measurements of Table 4.1 relative to the published orbits.

some additional information in Col. 9. Those notes indicate the multiple known system to which the discovered companion can be associated (e.g. “in COU1452” for GII 3 AC), or a multiple system close to it.

In Col. 3, the 9-digit WDS name is used when the discovery concerns a new companion for a known binary or multiple system. Otherwise, we computed the coordinates and provided 12 digits for a larger accuracy. The magnitude  $m_{VA}$  of Col. 4 corresponds to the value reported in the WDS for partially known systems or in the Strasbourg SIMBAD data base for entirely new systems. The magnitude  $m_{VB}$  was derived from our measurement reported in Col. 8.

## 5 Conclusion

In this paper, we have presented the measurements obtained in 2008, which was an important epoch for us, when referring to the evolution of the methods used both for our observations and the data processing. Indeed during this year, we acquired a new EMCCD detector, an ANDOR IXON DV885, whose good sensitivity allowed us to take full advantage of speckle techniques.

As a result, we obtained 2420 new position measurements of 2225 visual binaries with the 76-cm refractor in Nice, with an average accuracy of  $0''.02$  for the angular separation and  $0^\circ.6$  for the position angles. We observed faint systems ( $m_V \approx 12$ ) with large magnitude difference (up to  $\Delta m_V = 5$ ). We were thus able to measure red dwarf stars that had been poorly monitored. We also measured the difference of magnitude of the two components for 376 objects with an estimated

error of 0.1 mag. This work is thus a good contribution to the continuing monitoring of long period visual binary systems, which is important for refining systemic stellar masses.

Finally, we also provided a list of 33 newly discovered components of multiple or binary systems, which is a significant complement to our GII catalog.

A speckle camera PISCO2 is now in project, with a filter wheel, a remote focusing system, and an ADC (Atmospheric Dispersion corrector). It will be a simplified version of PISCO that was first developed in 1993 for the 2-meter Bernard Lyot telescope (Pic du Midi, France) and has been in operation on a dedicated 1-meter telescope in Merate (Brera Observatory, Italy) since 2004 (Prieur et al., 1998, Scardia et al., 2011).

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This work has made use of the “Fourth Catalogue of Interferometric Measurements of Binary Stars” (<http://ad.usno.navy.mil/wds/int4>), the “Sixth Catalogue of Orbits of Visual Binary Stars” (<http://ad.usno.navy.mil/wds/orb6>), the Washington Double Star Catalogue maintained at the U.S. Naval Observatory, (<http://ad.usno.navy.mil/wds/wds>), the SIDONIE (Site Informatique des étoiles DOubles de Nice) <http://sidonie.obs-nice.fr> and the SIMBAD data base (<http://simbad.u-strasbg.fr/simbad>) operated by the *Centre de Données Astronomiques de Strasbourg* (France).

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**Table 4** New binary stars discovered in 2008–2010 (complement to GII catalog)

Name	Epoch	Coordinates	$m_{VA}$	$m_{VB}$	$\theta$	$\rho$	$\Delta m_V$	Tel.	Notes
GII 3 AC	2008.475	16476+4255	10.9	13.7	57.3	1.947	2.8	L76	in COU1452
GII 4 AB	2008.587	205304+262932	9.3	11.7	138.0	7.875	2.4	L76	
GII 4 AC	2008.587	205304+262932	9.3	13.8	297.3	11.047	4.5	L25	
GII 5	2008.596	184657+154103	10.5	11.2	100.9	5.319	2.7	L76	Tyc1583-01347-1
GII 6	2008.639	231908+472250	13.0	13.0	96.7	9.759	—	L25	Tyc3640-01655-1
GII 7 AC	2008.639	00282+5028	10.3	12.1	334.0	15.539	1.8	L25	in HU1008
GII 8	2008.648	221130+574213	13.1	14.2	124.1	4.21	—	L25	
GII 9	2008.656	215239+653526	12.8	14.1	340.0	8.53	1.3	L25	
GII10	2008.656	215258+653546	11.1	12.8	173.0	8.89	1.7	L25	
GII11	2008.656	215317+6535	11.2	12.1	53.1	6.13	0.9	L25	
GII12	2008.664	221703+433427	12.6	13.6	105.0	9.18	1.0	L25	close to COU1982
GII13	2008.664	001204+332713	12.5	13.9	59.6	8.45	1.4	L25	close to COU649
GII14 AB	2008.669	195021+372111	11.0	12.4	334.5	9.213	1.4	L25	close to COU2285
GII14 AB	2008.689	195021+372111	11.0	12.4	334.3	9.180	1.4	L25	
GII14 BC	2008.669	195021+372111	12.7	13.7	328.5	2.668	0.0	L76	
GII14 BC	2008.689	195021+372111	12.7	13.7	326.8	2.353	1.0	L76	
GII15	2008.689	201624+323742	12.5	13.3	232.1	9.77	—	L25	close to Tyc2676-00294-1
GII16 AB-C	2008.689	22327+3936	10.0	13.3	238.6	10.32	3.3	L25	in COU1834
GII19	2009.603	214931+512730	12.7	13.3	339.3	5.72	2.0	L76	
GII20 AB-C	2009.605	18475+1537	10.0	12.8	102.6	8.09	2.8	L76	in HU584
GII23	2009.627	1901049+373113	12.1	13.1	330.4	3.83	1.0	L76	Tyc3120-01018-1
GII24 AB-C	2009.627	19452+3829	10.0	15.2	141.2	3.687	5.2	L76	in COU2408
GII25	2009.712	0050156+783845	12.0	13.6	159.2	5.35	1.6	L76	Tyc4497-00266-1
GII26 AB-C	2010.287	13053+6052	9.0	15.0	215.1	3.680	6.0	L76	in MLR 154
GII27	2010.375	135949+092557	11.8	12.3	315.1	0.65	—	L76	Tyc0901-00284-1
GII28 AB-C	2010.600	20044+1715	9.2	14.2	107.3	3.842	5.0	L76	in COU325
GII29 AB-C	2010.600	21138+3711	11.0	12.3	337.2	9.248	1.6	L25	in COU1816
GII30 AB-C	2010.600	21183+4140	10.4	12.3	188.2	12.944	2.7	L25	in COU2302
GII31 AB-C	2010.649	22205+4817	9.6	17.0	97.3	3.852	8.0	L76	in A186
GII32 AB-C	2010.649	21232+4258	10.0	14.5	50.5	5.034	4.5	L76	in COU2304
GII33 Aa	2010.674	19347+2854	8.9	10.7	203.4	0.319	1.8	L76	in COU1031
GII33 Aa-C	2010.674	19347+2854	8.9	14.5	62.6	4.974	5.5	L76	in COU1031
GII34 AB-C	2010.674	19517+4003	9.4	17.1	247.2	3.236	7.7	L76	in COU2531
GII35 AB-C	2010.674	22300+5122	9.9	13.0	193.1	6.064	3.1	L76	in HU1318
GII36 AB-C	2010.674	23199+2844	9.2	15.5	142.0	2.385	6.3	L76	in COU439

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**Table 2** Measurements of binaries with the Nice 76cm-refractor (full version, beginning)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
00014+4828	COU1850	10.6	0.1	2008.587	8.6	0.683		IRC	1Q-ly			
00016+6437	MLR79	9.5	3.5	2008.779	243.6	2.061		AF	3Q-dv-b			
00024+1047	A1249AB	9.4	0.5	2008.574	—	—		IRC	S			
00024+5030	COU2350	7.7	1.5	2008.639	116.0	0.446		IRC	2Q-ly			
00031+6942	BU861AB	11.3	0.2	2008.779	177.1	1.541	0.5	AF	dv-b (ni)			
00031+6942	BU861AB	11.3	0.2	2008.779	177.1	1.554		AF	b			
00033+5332	A1500AB	9.8	0.3	2008.639	54.7	0.280		IRC				
00034+6338	CHR121	8.3	1.8	2008.779	—	—		AF	S			
00050+6631	MLR101	8.7	3.2	2008.779	125.7	1.765		AF	2Q-dv			
00054+3348	COU646	10.8	0.0	2008.664	150.1	0.469		IRC				
00055+2736	J865AB	10.7	0.6	2008.710	80.0	1.537		IRC	1Q-dv			
00062+2346	HU401	10.8	0.2	2008.669	36.1	0.870		IRC				
00064+3436	HU1001	9.0	1.7	2008.710	181.2	1.983		IRC	3Q-dv			
00066+4328	COU1351	10.8	0.6	2008.587	41.7	0.965		IRC	1Q-ly			
00071+6309	MLR105Aa	10.5	0.1	2008.779	47.1	0.589		AF	1Q-dv			
00078+6321	HU1002	9.2	0.3	2008.779	280.0	0.449		AF	4Q-dv			
00084+1843	COU246	10.1	0.6	2008.710	252.3	1.626	0.6	IRC	dv (ni)			
00095+1907	COU247	8.3	1.7	2008.574	258.1	0.308		IRC	3Q	-7.5	-0.038	Bln2000
00104+5831	BU253Ba	8.9	0.1	2008.820	31.8	0.454		AF				
00104+5831	BU253Ba	8.9	0.1	2008.820	32.2	0.395:	0.3	AF	dv (ni)			
00108+5846	BU485Ca	8.8	0.7	2008.779	—	—		AF	S			
00113+5958	A901	9.1	1.4	2008.820	99.6	0.867		AF				
00115+1940	COU248	9.5	3.0	2008.710	321.3:	2.103:		IRC				
00118+2825	BU255	7.9	1.1	2008.669	68.6	0.458		IRC	1Q-ly			
00121+5337	BU1026Aa-B	7.2	1.2	2008.639	308.4	0.332		IRC	4Q-ly	-3.4	-0.002	Hrt1996a
00121+6826	MLR281	8.6	3.4	2008.779	219.8	0.695		AF	3Q-dv			
00122+4647	A802	9.7	0.7	2008.579	—	—		IRC	S			
00122+4647	A802	9.7	0.7	2008.587	—	—		IRC	<0.16			
00132+2023	HDS29	10.8	1.5	2008.669	166.1	0.706		IRC	2Q-ly			
00144+6020	A902	8.7	2.4	2008.820	117.3	0.823		AF				
00151+1907	A2202	9.9	0.2	2008.574	151.8	0.621		IRC				
00161+6649	HU1004	10.4	0.1	2008.820	183.6	0.798		AF				
00161+6649	HU1004	10.4	0.1	2008.820	183.9	0.764:	0.2	AF	dv (ni)			
00162+3331	COU651	10.6	0.2	2008.664	112.5	0.319		IRC				
00174+2306	COU146	10.6	0.2	2008.669	93.0	1.100		IRC	2Q-ly			
00185+2129	COU21	8.9	3.3	2008.669	170.0	1.162		IRC	2Q-ly			
00203+4650	COU1852	10.5	0.3	2008.587	266.1	0.681		IRC	3Q-ly			
00205+4531	A647	7.2	2.4	2008.579	99.1	0.688	1.2	IRC	2Q-ly	-2.1	+0.019	Pru2008
00209+3259	AC1	7.3	1.0	2008.855	289.1	1.815		AF	1Q-dv			
00213+2541	COU348	9.2	3.1	2008.669	97.2	0.657		IRC	2Q-ly			
00220+4033	A1502	10.3	-0.0	2008.579	63.0	0.928		IRC				
00220+4033	A1502	10.3	-0.0	2008.904	245.6	0.912	0.2	AF	3Q-dv-b			
00225+4456	A648	9.2	1.0	2008.579	95.3	0.352		IRC	2Q-ly			
00232+4716	A804AB	9.0	2.2	2008.587	320.7	1.727		IRC	4Q-ly			
00233+1645	HEI16	9.0	1.4	2008.574	—	—		IRC	S			
00245+5632	A908	10.4	0.2	2008.820	231.2	0.442	0.1	AF	dv (ni)			
00245+5632	A908	10.4	0.2	2008.820	236.5	0.437		AF				
00262+3009	COU652	10.3	0.7	2008.855	2.4	1.350		AF	1Q-dv			
00262+5150	BU778	10.7	0.0	2008.639	44.5	1.203		IRC				
00263+6515	MLR80	8.8	1.8	2008.820	5.8:	0.660:		AF				
00267+6426	BU1156	9.9	0.2	2008.820	31.2	0.559		AF	1Q-dv			
00278+5001	HU507AB	10.0	0.5	2008.639	126.2	1.653	0.4	IRC	ly (ni)			
00278+5001	HU507AC	10.0	0.5	2008.639	178.3	1.589	0.7	IRC	ly (ni)			
00278+5001	HU507BC	10.0	0.5	2008.639	244.6	1.423	0.3	IRC	ly (ni)			
00282+5028	HU1008	10.3	0.1	2008.639	237.8	0.458		IRC	3Q-ly			
00283+6344	HU1007	10.2	0.1	2008.820	92.8	0.426		AF	2Q-dv	+0.2	-0.063	Dsl1968
00287+2134	HU601	10.5	0.1	2008.574	305.2	0.625		IRC	4Q-ly			
00288+5541	MLR624	9.3	0.2	2008.779	337.1	0.181		AF	4Q-dv			
00293+4336	COU1353	10.0	2.2	2008.664	172.2	0.738		IRC	2Q-ly			
00298+4915	HU508	9.7	1.6	2008.904	350.5	1.771		AF	4Q-dv-b			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
00298+6904	A649	9.6	0.0	2008.779	322.4	0.371	0.1	AF	dv (ni)			
00308+4732	BU394	8.5	0.3	2008.579	94.0	0.557		IRC		-1.2	-0.038	Zul1997b
00316+5809	BU1226	9.1	1.1	2008.820	175.3	0.346		AF	2Q-dv			
00317+4702	COU1853	10.0	2.3	2008.639	10.4	0.883		IRC	1Q-ly			
00321+6715	MCY1Aa,Ab	10.3	—	2008.820	33.1: 0.241:		1.7	AF	ly-b (ni)	-80.0	-0.211	Doc2008d
00321+6715	MCY1Aa,Ab	10.3	—	2008.820	33.1: 0.241:		1.7	AF	ly-b	-80.0	-0.211	Doc2008d
00321+6715	VYS2AB	10.6	1.6	2008.820	177.3	3.860	0.6	AF	ly-b	-0.1	-0.093	Doc2008d
00334+4739	A911	8.9	0.6	2008.579	133.4	0.646		IRC				
00335+4006	HO3	8.1	1.6	2008.579	160.6	0.280		IRC		+5.6	+0.024	Cve2006e
00336+4509	A912BC	10.3	3.2	2008.639	336.0	0.559:	1.9	IRC	ly (ni)			
00336+4509	A912BC	10.3	3.2	2008.639	338.8	0.489		IRC	4Q-ly			
00337+4310	COU1354	9.0	2.0	2008.664	64.9	0.636		IRC	1Q-ly			
00344+2411	COU350	9.0	1.5	2008.669	141.6	0.965		IRC	2Q-ly			
00344+5853	MLR443	8.7	3.5	2008.779	127.7	1.091		AF	2Q-dv-b			
00346+4209	A1257	9.2	4.9	2008.587	288.5	2.414		IRC	4Q-ly			
00346+4209	A1257	9.2	4.9	2008.904	288.5	2.356		AF	4Q-ly-b			
00350+5610	MLR648	10.5	0.9	2008.779	245.9	1.075		AF	3Q-dv-b			
00352+3351	HU1010	10.8	0.1	2008.855	93.4	1.100	0.1	AF	2Q-dv			
00358+4901	STT15	7.5	0.6	2008.579	318.6	0.271		IRC				
00360+3708	COU850	9.9	0.1	2008.664	128.1	0.340		IRC				
00364+5621	A913	10.0	0.3	2008.765	91.5	0.714	0.6	AF	dv (ni)			
00365+3724	A1505AB	10.1	-0.0	2008.664	—	—		IRC	S			
00365+5831	BU1096AB	10.3	-0.0	2008.765	—	—		AF	S			
00369+6648	MLR288	9.2	3.3	2008.779	71.2	1.386		AF	1Q-dv-b			
00373+5801	BU1097	8.8	1.1	2008.765	254.2	0.500		AF	3Q-dv			
00378+3031	A915	10.4	0.1	2008.855	130.8	0.936		AF	2Q-dv			
00378+4915	HU512	10.6	0.0	2008.904	168.0	0.870	0.3	AF	2Q-dv-b			
00382+3357	COU655	9.1	1.5	2008.664	31.2	0.528		IRC				
00385+4022	COU1050	10.4	-0.0	2008.904	85.5	0.623	0.1	AF	1Q-dv-b			
00390+4037	WOR31	9.8	-0.0	2008.904	99.1	0.275		AF				
00390+4040	BU1159	9.9	0.2	2008.664	—	—		IRC	S			
00393+3359	COU656	11.0	1.0	2008.855	152.0	0.822		AF	2Q-dv			
00393+6046	MLR517	10.2	0.6	2008.765	84.0	0.902		AF	1Q-dv			
00402+4715	BU257	8.1	1.0	2008.904	249.4	0.629	2.0:	AF	3Q-dv			
00408+6051	MLR518	11.2	0.1	2008.779	198.0	1.060	0.1	AF	dv (ni)			
00410+2458	A434	10.7	0.3	2008.574	203.0	0.875		IRC				
00410+5854	MLR444	10.9	0.1	2008.765	152.9	0.756		AF	2Q-dv			
00419+4937	HU515	9.4	1.3	2008.904	93.8	1.150		AF	2Q-dv			
00423+4015	A1507AB	10.0	0.4	2008.579	42.4	0.668		IRC				
00429+2047	A2205	10.3	0.2	2008.574	188.1	0.353		IRC		+1.9	+0.056	Baz1989a
00429+5742	A916	10.1	0.2	2008.779	246.2	0.311		AF	3Q-dv			
00434+4726	A651	9.7	0.5	2008.587	141.7	0.910		IRC		-3.9	+0.017	Sey2002
00434+4726	A651	9.7	0.5	2008.579	141.9	0.912		IRC	2Q	-3.7	+0.019	Sey2002
00434+5750	MLR649	10.9	0.3	2008.820	97.7	1.349	0.2	AF	dv-b (ni)			
00434+5750	MLR649	10.9	0.3	2008.820	98.1	1.400		AF				
00435+5526	MLR650	9.9	0.2	2008.779	76.2	0.381		AF	1Q-dv-b			
00444+6210	MLR26	8.8	0.4	2008.779	60.1	0.201		AF	1Q-dv			
00448+6019	A919AB	9.4	0.1	2008.820	158.6	0.344		AF	2Q-dv			
00453+3448	COU1204	9.7	2.8	2008.855	69.7	0.779		AF	1Q-dv			
00463+4715	COU2002	9.7	0.2	2008.587	—	—		IRC	S			
00463+4715	COU2002	9.7	0.2	2008.639	—	—		IRC	S			
00470+2315	HU413	9.2	0.0	2008.574	310.1	0.347		IRC		-4.0	-0.036	Ole2002c
00479+5555	MLR652	9.9	-0.0	2008.765	354.3	0.338		AF	4Q-dv			
00492+5720	A921AB	9.0	0.5	2008.765	2.1	0.239		AF	1Q-dv:	+42.3	+0.146	Ole1998c
00508+3203	A922	9.6	0.2	2008.855	334.7	0.550		AF	4Q-dv	-4.9	+0.062	Msn2001c
00511+2853	COU447	10.9	0.6	2008.669	39.7	0.855		IRC				
00512+6019	MLR27	10.2	0.1	2008.765	211.9	0.458		AF	3Q-dv			
00516+3925	A1509AB	9.8	0.0	2008.579	24.6	0.638		IRC				
00516+6859	BU781	8.4	0.9	2008.820	22.9	1.033		AF	1Q-dv			
00519+6101	MLR516	10.7	0.3	2008.765	91.5	0.317		AF				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
00520+3154	A924	9.8	0.1	2008.855	132.8	0.277		AF	2Q-dv	-3.5	+0.024	Hrt2009
00521+4326	COU1653	10.0	-0.0	2008.587	193.9	0.152:		IRC				
00530+4935	COU2155	11.0	0.4	2008.904	23.7	0.733	0.3	AF	1Q-dv-b			
00531+6107	BU497BC	9.6	2.7	2008.820	154.4	0.745		AF	2Q-dv			
00542+4318	COU1654	8.4	-0.0	2008.579	90.3:	0.413:	2.6	IRC	2Q-ly	+44.0	+0.381	Sey2002
00544+5432	A1258	9.7	0.2	2008.639	199.8	0.580		IRC	3Q-ly			
00546+1911	STT20AB	6.1	1.1	2008.016	183.6	0.590				-0.6	+0.044	Doc2007d
00549+3827	A1510	10.1	0.3	2008.855	104.8	0.609		AF	2Q-dv			
00549+4924	HU802	7.8	2.2	2008.904	222.0	0.360	0.2	AF	3Q-dv			
00568+6828	MLR290	9.8	-0.0	2008.765	356.0	0.121:		AF				
00579+4054	COU2004	9.8	-0.0	2008.904	358.5:	0.283:		AF				
00581+4751	COU2253	10.5	2.0	2008.904	9.7	0.992		AF	1Q-dv-b			
01011+6022	A926	9.2	0.6	2008.765	345.9	0.386		AF	4Q-dv	+3.5	+0.013	Cve2006e
01014+6103	HU1020	9.1	1.3	2008.820	130.4	1.028		AF	2Q-dv			
01036+6341	MLR87	8.7	0.8	2008.765	19.3	0.267		AF	1Q-dv	-1.4	+0.039	Bdl2007b
01040+3528	HO213	7.8	0.5	2008.855	116.2	0.306		AF	2Q-dv	-0.7	+0.007	Doc2007d
01049+3234	COU660	9.9	3.3	2008.664	49.6	1.167	2.0	IRC	1Q-ly			
01049+3649	A1515	9.7	0.3	2008.855	123.4	0.194:		AF		-3.5	+0.003	Doc2004c
01053+3117	COU549	11.0	1.8	2008.855	272.0	2.007		AF				
01054+4340	COU1657	9.7	-0.0	2008.904	264.9	0.398	0.1	AF	3Q-dv			
01065+5841	A930	9.6	0.2	2008.820	180.0	0.260		AF				
01070+3014	A929Aa-B	10.0	0.1	2008.855	126.5	0.676		AF				
01071+4744	A931	8.8	-0.0	2008.904	268.2:	0.389:	0.2	AF				
01072+3839	A1516AB	8.6	0.3	2008.855	330.5:	0.130:		AF		-9.0	-0.012	Hrt2000a
01076+4446	COU1658	10.6	0.2	2008.904	33.1	0.908	0.1	AF	1Q-dv-b			
01084+4238	COU1356	10.6	-0.0	2008.904	0.7	0.440		AF	1Q-dv-b			
01085+5555	MLR653	10.4	0.1	2008.765	232.3	0.459		AF	3Q-dv			
01097+2348	BU303	7.3	0.2	2008.016	113.9	0.645						
01103+5710	MLR627	9.7	0.2	2008.765	172.7	0.180		AF				
01103+5710	MLR627	9.7	0.2	2008.820	—	—		AF	S:			
01106+3557	BU1162	9.9	0.2	2008.855	129.6	0.309		AF	2Q-dv			
01115+4903	COU2157	10.0	0.6	2008.904	7.2	0.596		AF	1Q-dv-b			
01125+3747	COU1057	9.5	0.4	2008.855	175.5	0.426		AF	2Q-dv			
01128+3700	COU1058	9.7	0.3	2008.855	250.0	0.768		AF	3Q-dv			
01133+4426	A656BC	9.8	2.2	2008.904	117.3	0.661		AF	2Q-dv-b			
01148+6056	BU1100	8.9	1.4	2008.765	358.9	0.290		AF	4Q-dv	+2.8	-0.007	Mr1955b
01151+3112	A1261	9.7	0.4	2008.855	320.1	0.598		AF	4Q-dv			
01157+5918	A935	9.0	0.9	2008.765	347.7	0.283		AF	4Q-dv			
01158+4306	COU1506	10.8	0.2	2008.904	86.4	0.561	0.1	AF	1Q-dv-b			
01164+6204	MLR28	10.7	0.2	2008.765	276.6	0.672	1.2	AF	4Q-dv			
01172+5708	A936	9.5	2.5	2008.765	239.9	0.512		AF	3Q-dv			
01178+4945	HU520	8.8	0.2	2008.904	166.6	0.326	<0.1	AF				
01189+5746	MLR560	9.0	2.5	2008.820	77.8	1.469		AF	1Q-dv			
01193+6200	MLR29	10.0	0.1	2008.765	127.9:	0.244:		AF				
01193+6200	MLR29	10.0	0.1	2008.820	152.7	0.587		AF	2Q-dv			
01198+6856	MLR293	9.3	-0.0	2008.820	—	—		AF	S			
01202+6535	HU1027	10.4	0.1	2008.820	124.8	0.361		AF	2Q-dv:			
01207+6752	MLR294	9.4	1.2	2008.820	—	—		AF	S			
01234+5809	STF115AB	7.1	0.2	2008.820	163.3	0.326	0.4	AF	2Q-dv	+2.1	+0.016	Sod1999
01249+4302	COU1358	9.7	-0.0	2008.904	99.3	0.235		AF				
01252+4317	A1262	9.6	-0.0	2008.904	9.6:	0.164:		AF				
01277+3106	HDS190	8.7	2.3	2008.855	291.1:	0.642:		AF				
01280+5821	A940	10.2	0.0	2008.765	85.6	0.568		AF				
01280+5821	A940	10.2	0.0	2008.765	87.6	0.516	0.3	AF	dv (ni)			
01286+5511	A1264	9.7	0.6	2008.765	319.9	0.201		AF	4Q-dv			
01298+6908	MLR295	10.5	-0.0	2008.765	355.5	0.252		AF	4Q-dv			
01350+4914	COU2553	10.2	-0.0	2008.861	221.9	0.372		AF	3Q-dv			
01353+4250	COU1507	10.5	1.0	2008.861	86.8	0.810		AF	1Q-dv			
01356+6117	JCT2Aa	9.6	0.2	2008.820	—	—		AF	S:			
01357+6409	MLR103	8.8	0.8	2008.765	103.4	0.367		AF	2Q-dv			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
01359+5502	MLR629	10.8	0.1	2008.765	131.4	0.457		AF	2Q-dv			
01365+4018	COU1360	9.7	2.8	2008.904	135.9	0.763		AF	2Q-dv-b			
01373+4015	COU1214	9.6	-0.0	2008.861	171.7	0.340		AF	2Q-dv			
01380+4600	A944AB	9.0	0.3	2008.861	—	—		AF	S			
01393+1638	BU5AB	7.0	2.2	2008.016	103.9	0.565						
01409+4952	HU531AB	9.5	0.5	2008.861	359.5	0.474	0.2	AF	4Q-dv	+10.9	+0.093	Baz1984a
01410+4925	COU2451	11.0	0.2	2008.904	127.0	0.653	0.1	AF	2Q-dv-b			
01414+3408	A1916	10.1	0.3	2008.855	228.1	0.928		AF	3Q-dv			
01430+5807	MLR630	7.9	0.1	2008.765	207.7	0.339		AF	3Q-dv			
01432+6056	MLR106AB	9.6	0.6	2008.820	157.1	0.940		AF	2Q-dv-b			
01437+3705	COU1063	10.1	0.1	2008.855	207.9	0.598		AF	3Q-dv			
01448+5708	B2548	10.0	0.3	2008.765	104.4	0.725	0.6	AF	2Q-dv (ni)			
01450+5707	BU453	10.0	0.4	2008.820	104.1	0.738		AF		-2.4	+0.053	Sul1984
01450+5707	BU453	10.0	0.4	2008.820	105.0	0.705:	0.3	AF	dv	-1.5	+0.020	Sul1984
01461+6349	STF148	9.0	0.6	2008.820	191.7:	0.123:		AF				
01462+3343	HU804	9.1	0.8	2008.855	72.0	0.328		AF	1Q-dv	+1.7	-0.079	Ole2001
01463+4439	A948AB	8.8	1.5	2008.861	134.7	0.350		AF	2Q-dv	-0.3	+0.039	Sey2002
01467+3856	BU736AB	9.7	1.4	2008.855	208.6	0.669		AF	3Q-dv			
01472+4212	A1523	10.1	0.8	2008.861	64.0	0.508	0.1	AF	1Q-dv:			
01472+4833	COU2007	9.5	1.8	2008.861	149.8	0.803		AF	2Q-dv			
01485+4308	COU1662	10.2	2.5	2008.904	302.6	1.616	1.4:	AF	4Q-dv-b			
01487+3746	COU1065	10.6	0.1	2008.855	153.2	0.488		AF	2Q-dv			
01495+5645	A950AB	9.4	0.5	2008.765	289.2	0.258		AF	4Q-dv	+4.4	+0.011	Hei1998
01498+3304	BU1016	10.1	0.2	2008.855	39.9	0.675		AF	1Q-dv			
01511+4525	COU1663	10.0	2.8	2008.904	265.3	1.415		AF	3Q-dv-b			
01512+2439	HO311	8.2	0.4	2008.016	173.7	0.350				+0.6	+0.020	Hrt1989
01513+6021	A951	8.3	1.1	2008.765	225.2	0.466	0.6	AF	3Q-dv			
01532+1526	BU260	8.8	0.2	2008.036	257.9	1.125						
01542+3607	COU858	10.5	1.8	2008.855	273.6	1.046		AF	4Q-dv			
01543+4207	COU1362	11.0	1.0	2008.861	113.5	1.157		AF	2Q-dv-b			
01547+4426	COU1508	10.0	0.5	2008.861	304.4:	0.317:		AF	4Q-dv:			
01551+2847	STF183AB	7.7	2.3	2008.036	146.6	0.329				-2.3	-0.029	Sey2000a
01563+4251	A1524AB	9.4	0.4	2008.861	233.9	0.343		AF	3Q-dv			
01565+5912	MLR486	9.8	0.2	2008.765	186.1	0.519		AF	3Q-dv			
01573+4812	A818	9.5	0.4	2008.861	207.2	0.322		AF	3Q-dv			
01574+4929	COU2158	9.6	-0.0	2008.861	310.2:	0.722:		AF				
01577+3739	COU1218	9.2	0.3	2008.855	353.7	0.392		AF	4Q-dv			
01577+4434	A1526	8.7	0.1	2008.904	—	—		AF	S			
01579+4726	COU2008	9.3	-0.0	2008.904	—	—		AF	NR			
01579+4734	COU2353	9.5	-0.0	2008.861	127.7:	0.107:		AF				
01581+3305	COU860	10.3	-0.0	2008.855	294.2	1.075		AF	4Q-dv			
02002+4332	COU1664	10.0	-0.0	2008.861	260.5	0.359	0.1	AF	3Q-dv			
02009+6025	A956	9.8	0.2	2008.765	312.4	0.450		AF	4Q-dv			
02012+1634	BU515	7.7	3.5	2008.036	—	—			S			
02016+4107	COU1510	9.6	-0.0	2008.861	135.3	0.393		AF	2Q-dv			
02018+4040	A1923	8.8	1.1	2008.904	145.1	0.638	0.7	AF	2Q-dv			
02019+4831	COU2009	10.1	0.3	2008.904	60.8	0.567		AF	1Q-dv			
02021+3347	A1924	10.9	0.3	2008.855	160.1	0.519		AF	2Q-dv			
02021+4530	COU1665	10.6	0.0	2008.904	104.1	0.505		AF	2Q-dv-b			
02022+3643	A1813AB	8.7	0.2	2008.855	140.4:	0.083:		AF		-17.0	-0.044	Hrt2000a
02022+3643	A1813AB-C	8.3	2.9	2008.855	202.4	1.486		AF	3Q-dv	-1.1	-0.155	Nov2006e
02022+6251	MLR303	9.3	2.0	2008.820	122.7	0.803		AF	2Q-dv			
02048+6030	A957	8.5	2.0	2008.765	2.0	0.514		AF	1Q-dv			
02053+6305	MLR304	9.6	0.4	2008.765	353.1:	0.181:		AF				
02071+6957	STF204	9.8	0.2	2008.820	31.0	0.192		AF	1Q-dv			
02076+4103	COU1666	10.0	-0.0	2008.861	261.4	0.328	<0.1	AF	3Q-dv			
02077+3418	A2012	10.2	1.9	2008.855	336.6	0.626		AF	4Q-dv			
02084+4807	COU2259	10.5	1.3	2008.861	325.1	0.610		AF	4Q-dv-b			
02107+4426	COU1667	9.2	-0.0	2008.861	—	—		AF	S			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
02108+3005	COU456	8.7	2.1	2008.855	67.1	0.488		AF	1Q-dv			
02109+2348	HDS292	7.5	2.8	2008.036	172.3:	0.207:						
02120+3349	COU862	10.3	0.2	2008.855	280.5	0.725		AF	4Q-dv			
02122+4034	COU1366	10.0	0.5	2008.861	45.8:	0.375:		AF	1Q-dv			
02122+6132	MLR30	9.7	-0.0	2008.820	52.2:	0.262:		AF				
02128+3722	HO497	9.6	0.4	2008.855	85.9	0.483		AF	1Q-dv			
02134+5753	MLR562	10.6	0.0	2008.820	239.9	0.707		AF	3Q-dv			
02144+3454	HU807	9.4	0.4	2008.855	145.2	0.523		AF	2Q-dv			
02150+3742	COU1368	9.9	0.2	2008.855	14.8	0.604		AF	1Q-dv			
02160+4046	COU1669	8.8	0.2	2008.861	142.3:	0.144:		AF				
02161+3501	HU1036	10.5	0.2	2008.855	158.4	0.529	0.1	AF	2Q-dv			
02172+3729	A206AB	8.4	2.4	2008.855	148.7	0.380		AF	2Q-dv			
02174+6121	STF234AB	8.7	0.7	2008.820	224.4	0.697		AF	3Q-dv	-2.8	-0.050	Sta1983
02182+3920	A207	9.7	0.6	2008.855	352.2	0.550	0.3	AF	4Q-dv	-11.0	+0.185	Sca2001d
02183+4120	COU1670	9.2	0.6	2008.861	187.6:	0.097:		AF				
02186+4017	EGG2Aa	7.9	-0.0	2008.861	—	—		AF	S			
02194+6029	A821	8.5	2.1	2008.820	45.3	0.738		AF	1Q-dv			
02206+6321	HU1037	9.8	0.0	2008.820	335.4	0.468		AF	4Q-dv			
02211+4246	STF248	9.6	0.3	2008.861	215.9	0.553		AF 5	3Q-dv	+0.8	+0.025	Pbx2000b
02218+4343	COU1672	9.7	0.4	2008.861	144.4:	0.150:		AF				
02218+4349	COU1671	10.1	0.6	2008.904	253.7	0.825	0.5	AF	3Q-dv-b			
02222+3340	COU754	10.5	0.6	2008.855	79.1	0.695		AF	1Q-dv			
02243+6421	MLR298	10.6	0.3	2008.820	164.0	0.757		AF	4Q-dv			
02259+3913	A1814	10.9	-0.0	2008.855	35.6	0.590		AF	1Q-dv:			
02267+3207	A964	10.3	0.5	2008.855	93.2	0.284		AF				
02270+4903	COU2161	9.6	0.1	2008.861	173.1	0.336		AF	2Q-dv			
02272+4717	COU2010	10.5	-0.0	2008.861	30.4	0.493		AF	1Q-dv			
02278+4433	COU1674	10.0	0.7	2008.904	116.0	1.423	0.7	AF	2Q-dv-b			
02279+4523	COU2011	8.9	0.6	2008.861	63.3	0.401		AF	1Q-dv			
02282+4109	A659	10.0	0.1	2008.904	273.2	0.573	0.3	AF	4Q-dv			
02288+3215	WOR2	10.1	0.7	2008.855	119.8	0.261	0.2	AF	4Q-dv	+8.9	+0.093	Tam2005
02292+6058	HU1040	10.2	0.5	2008.820	—	—		AF	S			
02307+4441	COU1675	10.8	0.1	2008.904	263.2	0.702	0.1	AF	3Q-dv-b			
02314+4234	A660	8.7	0.3	2008.904	312.0	0.510	0.2	AF	4Q-dv			
02315+6938	MLR379	8.8	2.0	2008.820	90.2	0.397		AF	2Q-dv			
02323+3542	A1927	8.3	2.1	2008.063	193.5	0.897						
02325+4701	COU2012	10.5	-0.0	2008.861	126.3:	0.334:		AF				
02336+6038	A824	11.1	0.4	2008.820	290.4	0.957		AF				
02346+4050	COU1370	10.6	0.1	2008.861	42.5	0.557		AF				
02353+4017	A1818	9.4	0.2	2008.861	24.2	0.290		AF	1Q-dv			
02361+2924	HDS338	7.2	2.5	2008.036	307.3	0.326						
02377+6520	HU1041AB	8.7	0.9	2008.820	276.0:	0.149:		AF				
02379+2003	A2219	9.5	0.1	2008.016	148.2	0.447				+3.9	+0.074	Hei1997
02382+4604	A1278	8.9	0.1	2008.861	125.7:	0.165:		AF		+18.0	-0.059	Hrt2001d
02395+6740	MLR382	9.4	0.8	2008.820	2.1:	0.185:		AF	1Q-dv			
02407+2637	STT43	7.9	1.1	2008.063	349.9	0.723				+3.6	+0.048	Sca2001d
02407+6117	CHR208Aa	7.7	—	2008.820	90.1:	0.361:		AF	2Q-dv			
02410+3905	COU1371Aa	9.7	0.6	2008.063	132.3	0.290						
02410+6539	MLR119Aa	9.6	-0.0	2008.820	—	—		AF	S			
02412+4734	COU2260	8.3	-0.0	2008.861	—	—		AF	S			
02415+4053	COU1511	8.7	-0.0	2008.861	154.9:	0.077:		AF	2Q-dv			
02420+4030	COU1372	8.8	2.2	2008.861	239.4	0.438		AF	3Q-dv			
02438+1606	HEI23	8.8	2.2	2008.071	339.2	1.011						
02446+5643	MLR598	10.3	0.1	2008.820	79.6	0.754		AF	1Q-dv			
02453+3718	COU1220	11.0	0.5	2008.855	101.3	0.770		AF	2Q-dv-b			
02471+3533	BU9AB	6.4	2.2	2008.066	209.2	1.034						
02472+6551	MLR120	9.4	0.5	2008.820	—	—		AF	S			
02480+4600	COU1678	10.6	0.3	2008.861	239.1	0.899	0.3	AF	3Q-dv			
02483+1727	COU672	9.5	-0.0	2008.016	—	—			S			



**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
02488+6721	MLR385	9.2	-0.0	2008.820	—	—		AF	S			
02490+4941	COU2261	10.2	-0.0	2008.861	31.7	0.280		AF				
02502+1802	COU676	9.2	2.6	2008.036	155.9	0.887						
02512+6023	BU1316AB	8.8	0.5	2008.820	301.2	0.339		AF	4Q-dv			
02517+4559	A1281	9.0	1.8	2008.861	137.3	0.637		AF	2Q-dv	+1.7	+0.029	Hrt2009
02520+4831	COU2013	9.1	-0.0	2008.861	280.7	0.246	0.1	AF	4Q-dv			
02530+6028	MLR107Bb	11.0	3.0	2008.820	313.3:	3.367:	0.7:	AF	4Q-dv-b			
02537+6427	MLR307	8.7	2.0	2008.820	210.5	0.545		AF	3Q-dv			
02538+3544	COU866	10.4	0.3	2008.855	197.6	0.893		AF	3Q-dv			
02540+1601	HDS370	7.9	1.9	2008.036	44.7	0.210						
02552+5950	MLR520	8.8	0.1	2008.820	—	—		AF	S			
02557+3028	COU555	8.8	4.0	2008.066	279.5	1.726	4.0		ly (ni)			
02557+3028	COU555	8.8	4.0	2008.066	279.5	1.735						
02557+3028	GII2Bb	13.4	0.4	2008.066	154.7	0.43	0.4		ly (ni)			
02557+3028	GII2Bb	13.4	0.4	2008.066	155.1	0.454						
02558+1036	HEI445	9.8	0.7	2008.071	324.7	1.562						
02558+1909	A2342	9.3	1.1	2008.036	21.7	0.414						
02558+4636	COU2015	9.7	0.3	2008.861	206.4	0.466		AF	3Q-dv			
02574+6246	MLR33	8.5	2.5	2008.820	266.9	0.684		AF	3Q-dv			
02594+4856	COU2163	10.0	3.0	2008.861	33.8	0.585		AF	1Q-dv-b			
03005+3934	A1530	9.3	0.8	2008.066	79.8	0.270						
03006+4753	A1529	8.1	1.6	2008.861	167.3	0.311		AF	2Q-dv			
03012+4852	HU1051	10.3	0.1	2008.861	118.0	0.477		AF	2Q-dv			
03016+6446	HU1050	10.0	0.1	2008.820	137.5	0.355		AF	2Q-dv			
03032+4121	COU1381	8.5	2.3	2008.861	77.4	0.365		AF	1Q-dv			
03046+3238	COU755	9.7	1.0	2008.063	83.9	0.573						
03058+3202	HDS393Aa	8.0	3.2	2008.066	11.4	0.571						
03058+4818	COU2016	9.7	-0.0	2008.861	—	—		AF	S			
03062+6146	MLR35	9.5	0.3	2008.820	173.0:	0.283:		AF				
03078+3652	A1533	10.2	0.1	2008.855	182.9	1.018		AF	3Q-dv			
03081+6120	MLR36	9.2	0.0	2008.820	144.1:	0.318:		AF				
03084+4736	COU2017	9.6	1.4	2008.861	9.5	0.317		AF	1Q-dv			
03094+6451	MLR308	10.7	0.1	2008.820	231.7	0.583		AF	3Q-dv			
03097+6259	MLR37AB	10.3	0.1	2008.820	201.8	0.565		AF	3Q-dv			
03138+3733	COU1075Aa	9.2	2.3	2008.063	41.2	0.851						
03163+1920	A2224	8.2	1.4	2008.036	152.1	0.918						
03166+4943	COU2164Aa,Ab	10.9	0.4	2008.861	70.3	0.798		AF	1Q-dv-b			
03166+4943	ES463AB	9.8	2.4	2008.861	258.5	5.346		AF	3Q-dv-b			
03167+1923	COU360	9.6	2.9	2008.071	256.3	2.037						
03175+4912	COU2262	10.1	1.0	2008.861	1.6	0.751		AF	1Q-dv			
03188+2617	COU559	10.8	0.1	2008.855	96.7	0.680		AF	2Q-dv			
03192+4351	COU1514	10.5	-0.0	2008.861	239.3	0.365		AF	3Q-dv			
03192+4920	COU2263	9.9	0.7	2008.861	317.1:	0.112:		AF	4Q-dv:			
03199+2143	HU433	9.6	1.7	2008.036	264.4	0.198						
03201+4811	COU2019	10.2	0.4	2008.861	259.6:	0.244:		AF	3Q-dv			
03209+2031	HDS418	7.0	3.8	2008.063	—	—			S			
03213+4809	COU2020	10.5	0.5	2008.861	232.6	0.337		AF	3Q-dv			
03221+4440	COU1681	10.0	0.7	2008.861	297.8:	0.304:		AF				
03228+4640	COU2021	10.0	0.7	2008.861	266.9	0.299		AF	3Q-dv			
03251+5601	MLR686	10.4	0.2	2008.820	274.3	0.627		AF	4Q-dv			
03260+4405	COU1683	10.0	-0.0	2008.861	179.2:	0.269:		AF				
03275+1911	A2345	9.7	0.9	2008.071	173.6	0.991						
03278+2411	HDS434	8.0	3.5	2008.063	—	—			S			
03281+4452	COU1861	10.0	-0.0	2008.066	110.7	0.808						
03284+2248	BAG2Aa,Ab	6.0	1.4	2008.855	144.3:	0.081:		AF				
03284+2248	BU878A-B	6.2	4.2	2008.855	60.4	0.705		AF				
03295+2107	HU435	9.5	3.2	2008.855	343.9	0.581		AF	4Q-dv			
03301+1123	HDS437	9.1	2.9	2008.071	1.9	1.145						
03313+6819	MLR454	9.1	4.4	2008.820	178.1	1.006		AF	2Q-dv-b			
03321+4340	COU1688AB	8.7	0.2	2008.066	135.2	0.159				+56.9	+0.040	Baz1993d

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
03344+2428	STF412AB	6.6	0.3	2008.036	354.9	0.714				+0.9	-0.008	Sca2002a
03349+2406	COU467	9.3	2.7	2008.855	91.6	2.004		AF	1Q-dv			
03353+2651	COU688Aa	8.9	2.2	2008.063	198.2	0.472	1.9		ly (ni)			
03353+2651	COU688Aa	8.9	2.2	2008.063	200.2	0.496						
03364+4518	COU1862	8.6	0.8	2008.066	19.6	0.339						
03365+1011	A830	9.9	0.4	2008.071	349.5	0.381						
03437+2339	CHR11	7.9	1.0	2008.036	122.4:	0.692:						
03452+4444	COU2023	9.9	0.2	2008.066	53.2	0.285						
03456+2420	COU560	7.4	1.6	2008.063	330.2:	0.233:						
03463+2529	COU561	9.1	2.1	2008.063	162.5	0.904						
03465+2415	CHR12Aa	7.3	—	2008.036	115.2:	0.239:						
03470+2431	CHR12Aa	6.8	0.1	2008.855	134.1:	0.121:		AF				
03471+2449	BU537	8.7	2.0	2008.855	222.0	0.562		AF				
03481+2409	COU80	9.6	0.9	2008.855	89.5	0.558		AF	1Q-dv			
03483+2223	BU1184	8.4	2.6	2008.855	270.4	0.470		AF	4Q-dv			
03486+2411	BU1105	9.4	1.1	2008.855	144.4:	0.848:		AF	S			
03489+1143	A831	8.5	1.5	2008.071	54.5	0.252				+0.3	+0.031	Sey2002
03494+2456	BOV24	11.0	—	2008.855	171.3	0.408		AF				
03499+4314	COU1691	10.1	0.2	2008.861	319.1	0.395	<0.1	AF	4Q-dv			
03500+2351	BOV25Ca	8.9	—	2008.855	—	—		AF	S-b			
03500+2351	STT64AB	6.8	3.3	2008.855	234.1	3.188	3.5	AF	ly-b (ni)			
03500+2351	STT64AC	6.8	3.7	2008.855	235.5	9.916	3.9	AF	ly-b (ni)			
03503+4403	COU1692	10.0	3.0	2008.066	35.4	0.610						
03509+2309	COU695	10.9	0.3	2008.855	196.8	0.608		AF	3Q-dv-b			
03513+2621	A1830	9.4	-0.0	2008.036	193.1	0.390				+13.9	+0.244	Ole2005d
03524+1836	HDS483	8.0	4.0	2008.071	183.7	0.610						
03538+4237	COU1693	10.3	0.5	2008.861	324.4	0.461	0.3	AF	4Q-dv			
03566+4436	COU1694	10.1	2.4	2008.861	227.5:	0.378:		AF	b			
03581+4548	COU1695	9.3	1.5	2008.066	279.2	0.593						
03583+3245	HO505	9.1	1.7	2008.063	197.9	1.616	1.4		ly (ni)			
03583+3245	HO505	9.1	1.7	2008.063	198.0	1.613						
03594+4321	A1708	9.7	0.4	2008.861	337.8	0.827		AF	4Q-dv-b			
03599+3204	HDS504	9.6	2.3	2008.063	—	—			NR			
04008+1033	HDS506	9.4	2.2	2008.071	173.2	0.652						
04054+2309	COU563	11.0	-0.0	2008.855	109.6:	0.264:		AF				
04057+4537	A997	9.0	2.2	2008.066	189.4	1.320						
04059+4411	COU1699	10.9	0.4	2008.861	85.8	1.127		AF	1Q-dv-b			
04063+4026	COU1701	9.2	1.6	2008.066	113.7	0.506						
04064+4325	A1710	8.2	0.1	2008.861	313.8	0.621	0.1	AF	4Q-dv	+1.0	0.000	Hei1982c
04080+2256	COU152AB	9.6	-0.0	2008.036	37.4	0.297						
04080+2256	COU152AB	9.6	-0.0	2008.036	38.4	0.335						
04080+2256	COU152AB	9.6	-0.0	2008.063	40.4	0.345						
04081+4535	COU2025	8.9	0.7	2008.066	338.0	0.305						
04089+4614	A998	7.9	0.6	2008.861	184.7	0.165		AF		+28.4	+0.081	Pop2000a
04091+1046	HU301	7.9	1.8	2008.071	276.2	0.503						
04091+2839	HO326	9.1	0.1	2008.036	289.5	0.402				-1.2	-0.002	Hrt2008
04100+4235	COU1702	8.9	-0.0	2008.066	356.8:	0.100:				+5.5	-0.054	Cou1999b
04103+4008	COU1521	9.8	1.4	2008.861	267.2:	0.212:		AF	3Q-dv			
04116+4408	COU1704	10.4	2.5	2008.861	165.7	1.035		AF	2Q-dv-b			
04132+2258	HU302	9.8	0.2	2008.063	51.9	0.246				-47.4	+0.135	Erc1984b
04132+2258	HU302	9.8	0.2	2008.112	52.8	0.252				-46.6	+0.141	Erc1984b
04147+4512	A999	9.4	3.1	2008.861	73.6	0.959		AF	1Q-dv-b			
04154+2405	HDS541	8.2	0.4	2008.112	310.7:	0.377:						
04165+4539	COU2026	10.0	1.2	2008.066	160.4	0.436						
04175+1911	A2350	9.5	2.2	2008.071	127.2	0.607						
04182+2248	STF520	8.3	0.2	2008.120	77.7	0.592				-0.4	+0.038	Hrt2001b
04196+2104	HDS553	8.8	3.5	2008.855	23.2	0.921		AF				
04196+3709	COU1396	8.9	3.1	2008.063	16.6	0.784						
04198+4610	COU2028	9.4	0.7	2008.066	321.1	0.438						
04201+4505	COU2029	10.5	-0.0	2008.861	318.0	0.498		AF	4Q-dv-b			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
04201+4921	COU2167	9.7	-0.0	2008.861	198.5	0.519	0.2	AF	3Q-dv			
04204+4527	A1002	10.2	-0.0	2008.861	—	—		AF	S			
04205+4559	A1001	9.2	4.0	2008.066	183.6	3.037						
04227+1503	STT82AB	7.3	1.3	2008.071	336.2	1.277				-1.7	+0.018	Wsi2004a
04240+4248	COU1705	10.0	3.0	2008.861	343.6	0.652	0.7	AF	4Q-dv-b			
04242+1445	HDS564	7.8	3.0	2008.071	239.0	0.357				-1.3	-0.005	Zir2008
04242+1445	HDS564	7.8	3.0	2008.071	244.0	0.375						
04245+3007	HO15	10.0	0.0	2008.063	147.3	0.781						
04246+4024	COU1706	10.0	0.9	2008.861	0.0	0.559		AF	1Q-dv-b			
04256+3210	A1005	9.1	0.7	2008.063	242.8	0.795						
04259+1852	BU1185	8.1	0.8	2008.036	17.6	0.244				-0.6	+0.023	Sod1999
04263+3443	HU609	9.3	0.3	2008.123	313.2	0.194				+6.1	-0.016	Doc1994d
04271+2542	THB1	11.0	0.5	2008.855	—	—		AF	S			
04278+4223	COU1863	10.4	0.1	2008.861	23.4	0.541		AF	1Q-dv			
04280+1004	A2033	7.6	3.0	2008.071	217.1	0.754						
04284+4914	HDS575	8.9	0.5	2008.066	315.6	0.507						
04308+4550	A1007	10.2	0.5	2008.861	156.6	0.292	0.8	AF	2Q-dv			
04310+4159	HDS583	8.5	1.4	2008.066	124.2:	0.168:						
04315+1321	HU1081	9.0	0.9	2008.112	280.6	0.834						
04315+2231	COU265	10.2	0.3	2008.855	236.2	0.536		AF	3Q-dv			
04324+3849	A1839	9.4	0.4	2008.123	271.9	0.722						
04324+3849	A1839	9.4	0.4	2008.123	273.1	0.759						
04328+1600	CHR152	8.9	—	2008.036	216.3:	0.305:						
04340+1510	CHR17	8.9	1.3	2008.036	314.8	0.167				+9.5	+0.034	Cve2008d
04341+3448	HDS594	8.6	2.7	2008.123	279.3	0.309	2.5		ly (ni)			
04347+1130	A2034	9.1	0.4	2008.112	238.3	0.557						
04357+3944	HU1084	8.9	0.3	2008.123	76.4	0.250						
04363+4207	COU1707	9.8	0.1	2008.066	69.0	0.293						
04371+4907	COU2170	10.3	-0.0	2008.861	190.6	0.646		AF	3Q-dv-b			
04378+4442	A1010	8.7	0.8	2008.861	343.4	0.529	0.6	AF	4Q-dv			
04387+1011	A2035	9.9	-0.0	2008.071	124.4	0.257						
04395+2801	HDS600	9.5	1.0	2008.112	154.3:	0.300:						
04395+2801	HDS600	9.5	1.0	2008.112	154.6	0.285						
04399+1631	BU1044	9.2	0.5	2008.036	206.9	0.567						
04410+4302	COU1708AB	10.2	—	2008.861	146.2:	0.669:		AF	b			
04410+4302	COU1708AB	10.2	—	2008.861	146.4	0.701		AF	4Q-dv-b			
04410+4302	COU1708AB	10.2	1.8	2008.861	145.5	0.664		AF	2Q-dv-b			
04414+2014	A2352	9.3	4.5	2008.120	139.1:	0.454:	2.4		ly (ni)			
04415+1642	A2353	9.0	-0.0	2008.036	133.5:	0.221:						
04427+2441	COU82	9.6	1.2	2008.063	359.8	0.561						
04445+3953	COU1524	8.8	0.9	2008.063	209.0	0.207						
04464+4221	COU2031	7.4	-0.0	2008.066	153.9:	0.268:				+8.6	+0.161	Tam2006
04469+4708	COU2032	9.7	2.1	2008.861	241.6	0.990		AF	4Q-dv-b			
04475+4324	A1544AB-C	9.5	0.2	2008.066	21.7	1.378						
04476+2211	HU443	10.4	0.1	2008.855	294.7	0.500		AF	4Q-dv			
04480+4339	COU2033	9.2	-0.0	2008.861	311.7	0.278		AF	4Q-dv			
04486+1256	HDS618	8.1	1.5	2008.071	—	—			S			
04509+4330	COU1711	8.8	1.3	2008.861	228.5:	0.307:		AF				
04512+1104	BU883AB	7.8	0.2	2008.071	170.3	0.208				+0.4	+0.005	Sod1999
04522+3613	HDS628	8.7	3.2	2008.123	338.9	0.822	2.8		ly (ni)			
04522+3613	HDS628	8.7	3.2	2008.123	339.0	0.829						
04539+2246	HDS632	10.0	3.3	2008.120	179.1	0.599						
04542+4935	COU2577Aa	8.5	0.5	2008.066	—	—			S			
04550+1436	HDS634	8.2	0.5	2008.071	—	—			S			
04567+3917	HU1091	9.7	0.2	2008.123	35.6	0.878						
04573+1524	HEI38	9.8	0.4	2008.112	224.9	0.599						
04584+1900	COU709	9.7	1.8	2008.071	242.0	0.546						
04585+4047	COU1717	9.1	0.8	2008.861	121.8	0.258		AF				
04599+4319	A1551AB	9.7	-0.0	2008.861	285.3	0.247		AF	4Q-dv			
05013+2632	BU1238	7.6	3.0	2008.063	16.7	1.548						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
05013+2632	BU1238	7.6	3.0	2008.120	16.7	1.544						
05017+2050	HU445	9.3	0.9	2008.120	133.4	0.375				-0.1	-0.050	Sca2000a
05017+2640	A1844AB	7.1	1.9	2008.063	341.8	0.309				-0.6	+0.015	Msn2005
05017+2640	A1844AB	7.1	1.9	2008.063	341.9	0.319				-0.5	+0.025	Msn2005
05017+2640	A1844AB	7.1	1.9	2008.120	341.4	0.313				-1.6	+0.018	Msn2005
05020+2817	A480	8.4	2.9	2008.063	336.9	0.770						
05044+2938	A1024	8.9	1.1	2008.120	333.6	0.760						
05048+1319	HEI104	9.1	1.1	2008.112	359.1:	0.123:						
05055+4655	A1023	7.3	0.5	2008.861	64.4	0.299	0.3	AF	1Q-dv			
05063+3739	COU1528Aa	9.6	0.5	2008.123	68.9	0.606						
05063+3806	COU1527	9.8	0.5	2008.123	190.3	0.449						
05070+1150	HDS668	9.2	3.8	2008.112	156.1:	0.656:						
05070+1150	HDS668	9.2	3.8	2008.112	156.3:	0.656:						
05070+3004	A1028	9.2	0.6	2008.123	221.4	0.428						
05077+1413	HU1222	9.5	0.2	2008.071	—	—			S			
05078+3723	COU1529	10.0	0.9	2008.123	356.9	0.510	0.9		ly (ni)			
05078+3723	COU1529	10.0	0.9	2008.123	358.0	0.514						
05085+3755	COU1531	8.5	2.0	2008.123	45.4	0.284						
05091+1624	HEI39	9.3	1.3	2008.112	36.7	0.265						
05108+3622	COU1719	9.6	-0.0	2008.123	—	—			S			
05119+3544	COU1401Aa	10.0	0.4	2008.123	46.0	0.315						
05122+1716	A2429	9.1	1.1	2008.071	32.7	0.846						
05126+1024	HDS689	8.7	1.2	2008.112	238.9	0.191						
05147+3236	COU1869	9.4	-0.0	2008.063	139.1	0.326						
05153+4710	A1031	7.2	2.0	2008.066	97.6	0.368				+2.6	-0.051	Zir2008
05167+1826	COU2580Bb	8.5	2.5	2008.112	161.9	0.704	2.4		ly (ni)			
05167+1826	COU2580Bb	8.5	2.5	2008.112	164.3	0.712						
05167+1826	STF670A-Bb	7.7	0.6	2008.112	165.1	2.528						
05172+3755	COU1722Aa	10.0	-0.0	2008.123	164.6	0.202						
05199+4659	COU2581	9.9	0.7	2008.066	152.3	0.333						
05200+2425	COU570	9.8	2.7	2008.120	216.7	1.382						
05208+3329	COU1231	8.8	0.9	2008.150	158.3	0.648						
05213+3529	COU1535	9.6	-0.0	2008.150	107.3	0.416						
05243+3939	BU1317	9.4	0.0	2008.063	18.7	0.696						
05251+1522	HU1226	9.8	0.1	2008.112	52.6	0.614						
05270+2737	HO226AB	8.7	0.1	2008.120	269.0	0.706						
05282+4253	COU2367	9.0	1.0	2008.066	334.1	0.350						
05302+3646	COU1727	9.8	0.1	2008.063	259.5	0.298						
05305+2602	HDS725	9.3	3.4	2008.120	312.9:	0.178:						
05352+3245	COU1538	8.1	2.1	2008.123	165.2	0.980	3.4		ly (ni)			
05352+3245	COU1538	8.1	2.1	2008.123	166.1	0.968						
05355+4514	COU2470	9.9	0.2	2008.066	154.5	0.466						
05394+1150	A2709	9.5	0.4	2008.112	45.1	0.341						
05394+4343	A1564	9.0	0.2	2008.066	150.1	0.224				-8.7	+0.026	Bdl2006a
05394+4948	COU2587	9.9	-0.0	2008.066	130.5	0.397						
05401+3601	HU825	8.3	1.3	2008.123	343.1	0.380						
05406+1506	HEI109	8.4	0.5	2008.112	64.7	0.264						
05418+4828	COU2589	8.0	2.7	2008.066	256.2	0.362						
05420+2814	A1039	9.4	1.3	2008.063	108.9	0.283						
05447+3118	A1040	8.9	0.5	2008.150	87.6	0.885						
05447+3118	A1040	8.9	0.5	2008.150	88.4	0.890	0.7		ly (ni)			
05449+2621	A496	7.9	0.4	2008.120	7.6	0.280						
05449+3735	HU1110	8.9	1.9	2008.150	229.8	0.737						
05460+1048	A2711	9.1	-0.0	2008.071	32.2	0.191						
05472+2153	HU39	9.1	0.1	2008.120	20.9	0.152				-11.5	-0.017	Alz1998a
05472+2837	COU763	8.0	2.3	2008.120	196.9	0.781						
05480+3553	COU1402	9.5	1.0	2008.063	132.3	0.611						
05500+1601	A2438AB	9.4	0.7	2008.071	343.2	0.332						
05505+2027	COU372	8.9	-0.0	2008.063	31.3:	0.551:						
05505+3935	COU2180	9.4	0.3	2008.123	134.8	0.277						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
05505+4442	COU2471	9.9	-0.0	2008.066	178.4	0.468						
05517+3045	A1045	8.3	3.3	2008.150	291.6	1.056	2.7		ly (ni)			
05517+3045	A1045	8.3	3.3	2008.150	292.0	1.040						
05519+3135	COU896	9.6	2.6	2008.150	286.3	1.574						
05519+3135	COU896	9.6	2.6	2008.150	286.7	1.514	1.3		ly (ni)			
05551+1506	HEI111	9.8	0.4	2008.112	347.2	0.285						
05569+2121	CHR214Aa	9.5	0.3	2008.120	127.7	0.275						
05569+2121	HU449AB	9.5	3.2	2008.120	341.7	3.073						
05573+4132	COU2183	9.5	2.7	2008.066	225.5	0.958						
05579+3801	COU1731	9.6	2.0	2008.123	343.7	0.836						
05582+1606	A2440	9.1	1.5	2008.071	7.3	0.285						
05589+3004	COU906	10.0	0.4	2008.123	24.9	0.437						
05591+4557	COU2472	10.0	-0.0	2008.066	46.7	0.405						
05594+1344	A2441	8.6	0.5	2008.071	271.7	0.287						
05598+3603	HDS813	8.2	2.4	2008.150	345.8	0.368						
06001+3056	COU908	9.6	-0.0	2008.123	94.9	0.274						
06003+3643	COU1872	10.0	0.2	2008.063	240.7	0.398						
06006+3005	COU909	9.5	1.2	2008.123	347.9	0.676						
06009+3954	COU2048	9.9	-0.0	2008.150	140.8	0.316						
06022+2356	HDS822	9.2	3.3	2008.126	135.6	0.701						
06033+1108	A2807	8.5	1.1	2008.071	106.8	0.636						
06034+3949	A1950	9.0	1.8	2008.123	—	—			S			
06037+3509	COU1540	8.4	1.8	2008.150	—	—			NR			
06049+3211	HU827	9.8	-0.0	2008.150	81.4	0.282						
06058+3753	COU1732	10.0	0.5	2008.150	154.5	0.359						
06060+2331	HU450	8.8	1.5	2008.126	244.0	0.449						
06071+3228	COU1235BC	10.0	0.8	2008.063	140.3	0.896						
06073+1848	COU471	8.3	1.4	2008.071	161.9	0.371						
06076+2152	COU271	7.8	2.9	2008.126	147.3	0.520						
06084+2709	COU1099	9.7	-0.0	2008.120	7.5	0.305						
06086+2901	COU1100	9.3	1.2	2008.063	114.1	0.483						
06097+1630	A2514	9.3	-0.0	2008.071	102.4	0.309						
06097+2914	A54AB	8.1	1.6	2008.126	332.7	0.585						
06120+3531	HU701	9.5	1.0	2008.104	227.0	0.215						
06140+1216	A2515	9.6	0.2	2008.071	18.3	0.443						
06152+2917	COU1103	8.5	2.0	2008.120	48.6	0.321						
06178+3811	COU1873	9.6	-0.0	2008.104	34.5	0.250						
06181+3423	COU1541	10.0	0.9	2008.123	32.3	1.118						
06198+2025	HU453	9.9	0.8	2008.126	271.9	0.359						
06216+2500	COU718	9.0	1.8	2008.126	203.8	0.353						
06236+1739	A2517	9.1	0.5	2008.071	199.1	0.167						
06237+3220	HU830	9.3	2.1	2008.123	231.1	0.926						
06245+4707	COU2477	8.1	3.6	2008.115	126.3	1.451						
06250+4233	A2356	9.0	0.1	2008.066	82.5	0.886						
06254+3544	HU831	9.8	0.2	2008.123	292.6	0.367						
06283+2441	COU914	9.8	0.9	2008.126	300.3	0.235						
06293+1233	A2726	9.0	0.2	2008.071	124.8	0.600						
06307+3156	COU1408	10.0	3.0	2008.150	185.9	1.624						
06313+2248	COU581	9.5	0.1	2008.120	239.9	0.312						
06348+3901	A2520AB	9.6	1.8	2008.150	38.7	0.322						
06357+2816	A506	8.6	0.3	2008.126	38.8	0.239						
06364+2717	STT149	7.1	1.8	2008.109	286.9	0.715			-3.1	-0.006	Hei1993d	
06364+3006	A217	8.9	0.7	2008.104	76.9	0.180						
06367+2139	A2119	9.8	0.1	2008.120	260.0	0.345						
06370+3338	COU1546	8.6	4.9	2008.150	—	—			NR			
06370+3813	AG116	9.8	0.8	2008.104	33.2	2.354						
06370+3817	COU2059	9.6	0.7	2008.104	128.0	0.357						
06370+3817	COU2059	9.6	0.7	2008.123	135.9	0.301						
06378+4117	COU2373	8.9	2.1	2008.066	43.3	0.475						
06381+1953	A2452	9.3	0.4	2008.112	91.8	0.984						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
06384+2859	MCA27	7.0	0.8	2008.120	—	—			OR-S			
06393+4200	STT150	8.1	0.6	2008.115	13.4	0.279				+8.1	+0.037	Doc2007d
06404+2505	A1053	9.5	0.4	2008.172	332.6	1.026						
06404+4058	STF945	7.2	1.1	2008.115	330.3	0.486						
06412+1948	COU915	9.6	-0.0	2008.112	357.6	0.235						
06412+1948	COU915	9.6	-0.0	2008.150	356.7	0.264						
06418+3041	A218	9.3	0.0	2008.104	44.7	0.252				+10.8	+0.026	Hei1997
06422+2846	COU1105	9.5	-0.0	2008.126	—	—			S			
06431+4509	COU2480	10.0	-0.0	2008.066	84.8	0.271						
06435+2754	A510	9.5	2.5	2008.126	74.3	0.781						
06436+1626	A2358	9.8	-0.0	2008.112	313.8:	0.220:						
06450+1045	A2825	8.8	0.2	2008.112	173.8	0.246						
06455+2922	A122	8.9	0.5	2008.172	28.9	0.452				+0.5	-0.003	Baz1986a
06494+4037	A2360	9.4	0.4	2008.066	265.0	0.171						
06502+3624	COU1738	9.0	0.5	2008.101	170.3:	0.130:						
06503+2409	COU768	8.9	0.8	2008.098	45.3:	0.371:				+24.7	+0.311	Doc2003e
06503+2409	COU768	8.9	0.8	2008.098	115.8:	0.178:						
06504+4318	COU2601	9.8	1.4	2008.066	34.8	0.609						
06512+2133	COU473	9.5	0.3	2008.126	190.5	0.352						
06525+3248	COU1552	9.7	0.6	2008.104	116.2	0.233						
06528+2458	A513AB	9.8	0.2	2008.150	152.4	0.310				-20.3	-0.014	Hei1996c
06532+3826	COU1877	6.5	2.5	2008.101	226.9	0.233:				-6.3	+0.010	Hrt2009
06535+3951	A3039	9.9	0.6	2008.104	—	—			NR			
06538+2828	COU918	9.7	-0.0	2008.126	—	—			S			
06549+1158	A2833	8.3	0.9	2008.112	135.9	0.396						
06565+1940	COU770	9.7	0.4	2008.112	352.8	0.406						
06571+4346	COU2275	9.9	0.2	2008.066	176.4	0.309						
06577+1935	A2459	9.8	-0.0	2008.150	273.9	0.387						
06584+2443	COU921	9.5	-0.0	2008.126	—	—			S			
06589+1847	A2460	9.9	0.7	2008.112	172.1	0.284						
06596+4432	COU2482	9.0	0.2	2008.066	253.9	0.202						
06598+1556	A2461AB	7.2	1.5	2008.112	339.5	0.319						
07001+4211	COU2374	8.2	0.2	2008.115	17.0	0.289						
07010+2927	COU1242	9.2	0.4	2008.120	190.0	0.360						
07021+2148	CHR215	8.0	0.3	2008.150	218.4:	0.146:						
07021+4101	COU2061	9.6	0.3	2008.066	3.1	0.328						
07023+2159	COU924	9.3	3.4	2008.098	312.9	1.315						
07043+3734	MCA29	8.3	1.2	2008.101	187.7	0.234						
07064+1853	COU584	8.8	1.5	2008.150	208.5	0.657						
07074+3532	COU1740	10.0	0.5	2008.104	276.8	0.387						
07076+4244	A2466	9.8	0.3	2008.066	20.9	0.265						
07080+3552	COU2063	9.5	0.2	2008.104	173.0:	0.218:						
07096+3828	COU2064BC	9.7	0.2	2008.104	117.8	0.332						
07096+3828	STF1021A-BC	9.0	0.9	2008.104	12.8	4.194						
07118+1953	COU925	8.2	1.9	2008.112	68.6	0.458						
07118+4601	A1326	9.3	1.3	2008.066	338.2	0.223						
07132+1656	A2523	9.2	2.0	2008.150	40.6	0.840						
07132+1656	A2523	9.2	2.0	2008.150	41.1	0.839						
07151+2553	BU1023	9.4	0.6	2008.120	307.2	0.458						
07153+1849	CHR217	8.6	0.8	2008.112	339.9	0.166						
07154+1904	A2527	8.6	3.3	2008.112	289.5	2.241						
07164+3042	A672	8.8	3.0	2008.101	—	—			S			
07167+1609	HDS1007	7.1	1.5	2008.150	159.0:	0.222:						
07169+3844	COU2066	9.1	2.0	2008.123	202.1	0.719						
07171+2641	CHR218	7.0	0.7	2008.120	228.3:	0.121:						
07181+2405	COU585	8.7	1.1	2008.098	161.4	0.384						
07181+4754	COU2605	9.2	4.3	2008.066	200.1:	0.302:						
07185+3857	COU2067	9.9	2.4	2008.123	317.4	0.690						
07189+2556	HDS1017	8.1	2.9	2008.109	244.7	0.564						
07189+3848	COU2068	10.0	0.2	2008.104	98.6:	0.171:						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
07190+2122	COU88	10.0	0.2	2008.098	158.6	0.436						
07192+2058	HDS1019	8.7	3.5	2008.150	113.0:	0.780:						
07202+4820	HU619AB	9.2	1.5	2008.066	12.8	0.315						
07218+2455	A2737	9.6	1.4	2008.150	244.8	1.344	2.0		3Q-ly			
07218+2455	A2737	9.6	1.4	2008.150	245.4	1.352	1.8		ly (ni)			
07226+2916	HO243	10.6	0.5	2008.109	169.4	2.461						
07227+1417	HEI128	9.1	0.1	2008.112	40.0	0.175						
07231+2918	BU1024AB	9.8	1.4	2008.109	103.4	1.421						
07243+3619	HDS1039	7.4	2.5	2008.101	351.1	0.491						
07251+1956	HU706	9.1	0.4	2008.150	227.3	0.796						
07251+4039	COU2376	10.0	0.3	2008.066	53.8	0.245						
07271+3117	COU1245	9.9	0.7	2008.104	94.5	0.317						
07272+4437	COU2485	9.5	0.3	2008.066	176.1	0.331						
07278+2326	COU949	10.0	3.3	2008.098	201.1	1.194						
07286+3152	HDS1053	9.0	1.7	2008.123	—	—			S			
07291+2348	A2738	8.4	4.2	2008.120	78.3	1.429						
07294+4717	A2046	8.3	1.6	2008.115	246.4	1.437						
07298+3710	HDS1057	8.8	0.6	2008.101	—	—			S			
07303+4959	STF1093	8.8	0.2	2008.115	201.8	0.892				+0.7	+0.021	Hrt2009
07309+3034	A673AB	9.2	0.3	2008.104	355.8	0.387						
07309+4027	COU2187	9.0	1.1	2008.066	226.4	0.435						
07310+3644	COU1885	10.0	1.0	2008.123	353.5	0.415						
07315+3353	COU1886AB	10.0	2.0	2008.123	68.1	0.806						
07321+3353	GII1	10.3	2.1	2008.126	134.2	1.293						
07348+1138	A3049AB	9.1	2.5	2008.112	356.3	0.625						
07352+1721	COU474	9.4	1.3	2008.112	211.7	0.482						
07354+1950	COU475AB	9.2	2.3	2008.150	18.0	1.061						
07354+2426	COU950	10.0	2.7	2008.098	24.7	1.658						
07359+1709	COU476	10.0	0.2	2008.150	95.8	0.397						
07362+1815	A2874	9.2	0.5	2008.112	48.7	0.297						
07374+3852	HU842AB	8.3	1.4	2008.101	75.1	0.449				-1.4	+0.018	Lin2008c
07384+3742	COU2071	9.8	0.8	2008.123	58.0	1.171						
07385+2819	COU1247Aa,Ab	9.6	0.5	2008.098	326.6:	0.333:						
07403+2621	COU1248	9.1	1.0	2008.098	294.3	0.362						
07413+1804	COU771	9.0	3.0	2008.150	210.0	2.206	2.8		ly (ni)			
07413+1804	COU771	9.0	3.0	2008.150	210.1	2.231						
07417+3726	STT177	8.0	1.3	2008.101	151.5	0.551				+3.2	+0.030	Hei1982c
07446+3107	A674	8.2	1.6	2008.101	125.1	1.078						
07461+2107	HO247	7.7	1.5	2008.109	71.5	0.466						
07470+2045	HU845	9.6	0.5	2008.109	139.9	0.708						
07471+1847	COU772	9.0	0.2	2008.112	72.1	0.307						
07476+2528	HO36	9.9	0.1	2008.098	126.0	0.648						
07486+2308	WRH15AB	6.8	0.5	2008.120	34.0	0.289				+0.6	+0.019	Sey2002
07493+3541	COU2074	10.0	-0.0	2008.104	—	—			NR			
07498+2616	HDS1110	7.0	3.1	2008.120	203.8	0.389						
07505+1729	HDS1114	8.6	1.0	2008.150	59.5	0.164						
07506+1944	COU926	9.5	0.2	2008.112	253.7	0.288						
07534+4544	COU2492	7.7	1.7	2008.115	232.5	0.769						
07540+1346	HEI55	9.4	0.1	2008.112	332.3	0.406:						
07545+2610	COU1111Aa	10.0	-0.0	2008.098	156.3	0.367						
07546+3100	A675	9.3	0.4	2008.123	201.2	0.161						
07551+1023	HDS1126	9.5	0.6	2008.112	332.7	0.182						
07555+2422	A2537	9.2	0.4	2008.109	36.2	0.218						
07556+3630	COU2075	8.6	0.4	2008.101	142.3	0.840						
07560+2342	COU929	7.9	0.7	2008.098	9.3	0.275				-5.9	+0.009	Hrt2009
07566+1954	COU930	9.1	0.2	2008.112	328.9	0.605						
07566+1954	COU930	9.1	0.2	2008.112	329.8	0.583						
07580+1741	HDS1133	8.9	2.2	2008.150	281.3	0.521						
08001+2659	COU1112	9.6	-0.0	2008.098	91.6	0.356						
08013+3613	COU1888	9.8	1.7	2008.123	162.2	0.898						



**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
08031+2435	HDS1147	9.1	3.3	2008.120	4.0	0.520						
08033+2616	STT186	7.7	0.2	2008.109	74.0	1.001						
08044+1217	BU581AB	8.5	0.4	2008.112	153.3	0.361				+0.6	-0.003	Hrt2000b
08047+4717	A2050AB	8.5	-0.0	2008.115	—	—			1Q <0.1			
08065+2553	A2541	9.1	0.5	2008.098	4.2	0.523						
08084+3752	HDS1156	7.9	2.9	2008.101	—	—			S			
08091+3714	HU849	9.7	0.1	2008.243	283.4	1.242						
08125+2309	COU587	10.0	2.5	2008.150	316.3	1.060						
08126+2849	COU1114	8.4	1.1	2008.098	212.2:	0.124:						
08127+2613	A2471	8.6	1.5	2008.109	77.2:	0.379:						
08147+2022	COU45	10.0	1.0	2008.150	87.4	0.940						
08147+2022	COU45	10.0	1.0	2008.243	85.7	0.989						
08148+3630	HU1123	8.9	0.5	2008.101	156.2	0.396						
08155+2124	COU279	9.4	-0.0	2008.098	129.5:	0.240:						
08160+1842	HO524Aa-B	7.7	2.8	2008.150	341.6	4.484	4.6		ly (ni)			
08160+1842	JCT3Aa	7.5	-0.0	2008.104	33.6:	0.251:						
08160+1842	JCT3Aa	7.5	-0.0	2008.150	—	—			S			
08182+3531	COU1742	10.0	0.1	2008.243	—	—			S			
08231+2001	HO525AB	9.8	0.1	2008.150	164.9	0.443				+33.4	+0.188	Baz1994
08234+4806	COU2683	8.8	-0.0	2008.115	22.1	0.323						
08240+1503	HEI476	10.0	-0.0	2008.150	—	—			S			
08248+2149	COU281	9.1	0.2	2008.098	120.6	0.372						
08254+3723	HU856	8.7	0.1	2008.101	307.9	0.288				+3.9	+0.061	Bld2007a
08264+3906	COU2080	11.0	0.2	2008.243	306.0	0.489						
08267+2432	A1746BC	8.5	-0.0	2008.098	—	—			S	+5.9	+0.160	Oc2007c
08307+4645	COU2684	7.5	3.1	2008.115	339.2	1.188						
08316+3458	HU716	7.6	1.4	2008.101	52.7	0.282				+0.7	+0.017	Sod1999
08316+3458	HU716	7.6	1.4	2008.243	49.6	0.320				-1.1	+0.048	Sod1999
08326+3227	HU717	9.7	0.2	2008.104	54.6	0.520						
08334+2023	HDS1223	9.2	0.6	2008.150	158.1:	0.444:						
08352+2811	COU1115	10.0	-0.0	2008.098	39.0	0.269						
08352+3232	COU1559	10.5	1.5	2008.243	258.1	1.959						
08397+2005	COU47	7.9	1.7	2008.098	320.8	0.572						
08399+1933	CHR156Dd	6.8	3.0	2008.150	—	—			NR			
08401+2000	CHR28Bb	6.6	—	2008.150	—	—			NR			
08409+2650	COU1116	10.9	-0.0	2008.243	125.4	0.918						
08413+2029	BU585	7.1	1.0	2008.098	77.5	0.361						
08417+2547	COU1117	10.9	0.5	2008.243	217.3	0.748						
08423+2002	COU382	10.4	0.1	2008.243	176.3	0.291	0.2		ly (ni)			
08423+2002	COU382	10.4	0.1	2008.243	177.5	0.244				+1.8	+0.096	Cou1999b
08427+2603	HO354	9.3	1.1	2008.098	186.0	0.957						
08449+1710	COU954	9.8	-0.0	2008.150	55.4:	0.179:						
08481+1836	COU956	9.4	0.3	2008.150	20.7	0.299						
08493+3226	COU1743	10.8	0.4	2008.243	117.6	0.343						
08503+3504	COU1893	10.0	-0.0	2008.104	—	—			NR			
08514+2105	COU588	9.5	0.5	2008.098	332.8	0.396						
08514+2105	COU588	9.5	0.5	2008.150	336.0	0.419						
08525+1629	A2474	9.9	0.5	2008.150	46.8	0.330						
08531+5457	A1584	9.0	1.3	2008.172	82.3	0.641				-1.9	+0.001	Hei1991
08539+1958	COU773	7.3	0.5	2008.150	—	—			S			
08542+3504	COU1894	8.4	2.9	2008.101	287.0	0.708						
08549+2612	A2131AB	6.9	2.1	2008.101	293.8	0.348				-2.7	+0.022	Msn2000a
08557+4141	A2132	8.6	0.2	2008.115	36.9	0.228						
08561+3447	COU1895	10.0	-0.0	2008.104	—	—			NR			
08561+3524	COU1896	8.0	1.8	2008.101	96.8	1.050						
08561+3626	HDS1291	8.4	2.9	2008.101	154.2	0.754						
08570+3715	HU859	8.8	1.6	2008.104	180.6	0.389						
08575+2720	COU1120	10.1	0.2	2008.251	311.6	0.958						
08575+2720	COU1120	10.1	0.2	2008.251	311.7	0.925	1.7		ly (ni)			
08581+2634	A1973	9.4	1.3	2008.251	103.5	1.171						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
08581+2634	A1973	9.4	1.3	2008.251	103.8	1.195	2.5		ly (ni)			
08585+3548	COU1897	6.8	1.9	2008.101	—	—			S			
08587+2523	A1974	9.4	0.1	2008.098	181.4	0.201						
08588+1414	HU861	8.6	0.5	2008.251	23.5	0.224						
08597+2437	COU932	9.7	-0.0	2008.098	132.1:	0.201:						
08597+2437	COU932	9.7	-0.0	2008.150	158.8:	0.285:						
09002+1351	HU862	9.7	0.4	2008.251	51.3	0.544						
09002+1351	HU862	9.7	0.4	2008.251	52.7	0.541	1.7		ly (ni)			
09005+3225	HU718	9.3	0.2	2008.104	44.9	0.272				-5.4	-0.085	Hei1997
09009+2417	COU933	10.1	-0.0	2008.243	137.1	0.425						
09009+2417	COU933	10.1	-0.0	2008.243	137.8	0.373						
09020+1436	HU863	8.8	2.8	2008.251	330.6	0.988						
09025+2117	COU775	10.7	0.0	2008.243	80.6	0.462						
09033+4740	HU720	8.6	0.7	2008.115	135.1	0.745						
09056+2843	A554	8.9	1.9	2008.098	161.9	0.358						
09056+2843	A554	8.9	1.9	2008.101	163.6	0.429						
09062+1552	HDS1323	7.7	1.7	2008.251	356.7	0.192						
09096+1606	A2475	9.8	-0.0	2008.150	178.8	0.385						
09101+3534	TDS6367	10.5	0.1	2008.243	—	—			S			
09136+2526	A1978	9.7	0.7	2008.098	329.4	0.329						
09154+2346	A1979	9.2	0.5	2008.098	169.5	0.297						
09159+2431	A1980Aa-B	9.2	4.3	2008.098	230.7	1.637						
09159+2431	COU934Aa	9.7	0.1	2008.098	325.0	0.306						
09163+3715	COU1744	9.8	0.3	2008.104	352.5	0.518						
09168+2438	A1983	8.9	1.8	2008.101	237.9	1.385						
09170+2030	A2137	10.0	1.2	2008.243	337.5	1.140						
09173+1838	COU383	10.0	0.3	2008.150	42.5	0.851						
09183+1847	COU384	8.2	0.1	2008.150	—	—			S			
09184+3522	STF1333	6.6	0.1	2008.219	49.1	1.948						
09186+2049	HO43	9.3	0.1	2008.098	102.3	0.554				+71.3	+0.354	Baz1989a
09186+2944	A221	9.1	0.3	2008.243	239.8	0.198						
09187+3935	COU2383	11.0	1.7	2008.243	161.0	1.350						
09196+2415	A1984	9.7	0.5	2008.150	334.0:	0.134:						
09239+2754	STT201AB	8.5	1.0	2008.101	206.6	1.278						
09245+1808	A2477	7.5	1.7	2008.251	355.7	0.442				-0.7	-0.031	Msn1998c
09245+1808	A2477	7.5	1.7	2008.284	358.1	0.442				+1.7	-0.031	Msn1998c
09247+2641	HDS1351Aa	8.8	2.1	2008.101	197.6	0.344						
09251+2616	BU1070	9.4	1.1	2008.098	90.9	0.352						
09260+2839	A222	9.1	0.3	2008.098	13.7	0.396				+6.6	+0.067	Hei1997
09263+3109	A4	9.6	1.1	2008.219	37.0	0.898						
09276+3453	HDS1355	9.9	2.5	2008.219	290.4	0.589						
09279+3128	HO366AB	9.4	0.4	2008.104	—	—			S			
09290+1917	COU936	8.4	1.5	2008.251	224.8	0.905						
09311+3417	COU1564	10.2	0.5	2008.243	281.8	0.781						
09338+3231	COU1415	10.4	0.8	2008.243	306.7:	0.393:						
09354+3958	COU2084Aa	7.0	1.8	2008.101	71.4	0.168						
09362+2340	COU478	10.6	0.3	2008.243	41.2	0.871						
09364+1856	COU386AB	8.9	2.4	2008.284	230.9	0.827						
09371+1614	STF1372	8.5	0.1	2008.251	243.3	0.300				-4.1	+0.009	Alz2005a
09371+1614	STF1372	8.5	0.1	2008.284	245.5	0.293				-1.9	+0.002	Alz2005a
09376+1528	A2479	9.2	0.6	2008.251	183.4	0.392				-54.3	+0.133	Hei1978a
09390+3017	COU1254	10.3	0.2	2008.243	89.8	0.558						
09396+1823	COU387	9.5	0.8	2008.251	250.3	0.678						
09423+5328	CHR29	9.3	—	2008.172	—	—			S			
09429+5035	HU629	8.5	0.8	2008.172	193.8	0.385						
09477+1023	HEI490	8.3	0.9	2008.251	232.9	0.311	1.7		ly (ni)			
09477+1023	HEI490	8.3	0.9	2008.251	238.1	0.302						
09477+2036	COU284	8.1	0.2	2008.098	—	—			S			
09499+1947	COU285	9.2	0.9	2008.251	185.7	0.466	2.1		ly (ni)			
09499+1947	COU285	9.2	0.9	2008.251	187.0	0.478						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
09500+1634	STF1385	9.0	1.6	2008.251	328.3	0.950						
09500+1634	STF1385	9.0	1.6	2008.251	330.3	0.957	2.5		ly (ni)			
09506+3331	COU1568	10.5	2.5	2008.243	349.5	0.530						
09512+3629	HO369AB	8.0	1.8	2008.219	105.7	0.350				+1.1	-0.065	Sey2000b
09512+3629	HO369AB	8.0	1.8	2008.284	103.9	0.359				-0.7	-0.056	Sey2000b
09530+2638	COU1123	10.6	-0.0	2008.243	84.7	0.534						
09544+3041	COU1258	9.9	0.8	2008.104	—	—			S			
09577+2540	COU938	9.7	0.2	2008.098	58.3	0.228						
09581+2059	COU286	7.7	2.3	2008.251	204.2	1.770	3.5		ly (ni)			
09581+2059	COU286	7.7	2.3	2008.251	204.5	1.754						
09581+2059	COU286	7.7	2.3	2008.284	203.4	1.761						
09581+3856	COU2086	8.9	0.4	2008.104	0.2:	0.418:						
09587+3853	COU2087	9.3	3.2	2008.219	—	—			NR			
09587+3853	COU2087	9.3	3.2	2008.243	126.3	0.334						
09591+5316	A1346	8.8	0.8	2008.172	180.8	0.512				-0.7	-0.006	Hrt2009
09598+3128	HDS1442	8.7	2.3	2008.219	307.0	0.405						
09599+1610	A2482	9.3	0.8	2008.251	40.3	0.805						
09599+1610	A2482	9.3	0.8	2008.290	38.3	0.825						
09599+1610	A2482	9.3	0.8	2008.290	39.4	0.836	2.2		ly (ni)			
10000+2433	CHR145	8.1	2.3	2008.098	10.4	0.310						
10002+3803	COU2089	9.9	0.1	2008.104	150.4	0.495						
10034+5732	A1347	8.4	1.1	2008.172	—	—			NR			
10040+2521	COU589	10.3	-0.0	2008.243	78.3	0.495						
10056+3105	STF1406	8.4	1.1	2008.219	218.5	0.812						
10056+3105	STF1406	8.4	1.1	2008.240	218.7	0.798						
10083+3136	KUI48AB	6.9	0.3	2008.219	—	—			S			
10091+2531	A1988	10.0	0.2	2008.240	222.8	0.420						
10093+2020	A2145	7.3	0.2	2008.251	44.0:	0.235:				+15.7	+0.102	Ole2004c
10093+2020	A2145	7.3	0.2	2008.284	238.6:	0.141:						
10097+3145	COU1416	9.5	0.7	2008.104	—	—			S			
10099+3646	COU1570	10.0	0.6	2008.219	222.4	0.699						
10099+3646	COU1570	10.0	0.6	2008.243	217.1	0.737						
10111+1531	A2368	9.0	2.6	2008.284	166.2	0.762						
10116+1321	HU874	6.9	1.0	2008.281	—	—			NR			
10121+2118	A2146	9.7	0.1	2008.098	161.5	0.223				-24.2	+0.056	Hei2001
10121+2118	A2146	9.7	0.1	2008.098	162.1	0.237				-23.6	+0.070	Hei2001
10131+2725	STT213	8.6	1.2	2008.281	123.2	1.096				+0.9	+0.055	Sca2008e
10131+2725	STT213	8.6	1.2	2008.290	122.7	1.106	1.6		ly (ni)			
10131+2725	STT213	8.6	1.2	2008.290	123.1	1.108				+0.8	+0.067	Sca2008e
10140+2227	COU169	10.7	0.2	2008.243	335.8	0.565				-6.0	+0.018	Cou1999b
10163+1744	STT215	7.2	0.2	2008.284	177.1	1.458	0.2		ly (ni)			
10163+1744	STT215	7.2	0.2	2008.284	177.8	1.472				-1.6	-0.055	Zae1984
10163+3309	HU634	9.1	1.5	2008.219	168.8	1.974						
10163+3309	HU634	9.1	1.5	2008.219	169.0	1.866	1.9		ly (ni)			
10180+1711	A2369	8.5	1.1	2008.251	295.0	1.056						
10192+2034	STF1423	9.4	0.7	2008.251	330.6	0.702	2.2		ly (ni)			
10192+2034	STF1423	9.4	0.7	2008.251	331.1	0.725						
10227+1521	STT216	7.4	2.9	2008.251	234.6	2.184				-0.4	+0.060	Sca2009c
10227+1521	STT216	7.4	2.9	2008.284	234.7	2.180	2.9		ly (ni)			
10227+1521	STT216	7.4	2.9	2008.284	234.9	2.183				-0.1	+0.059	Sca2009c
10249+3849	COU1745	10.0	0.8	2008.219	83.2	1.695						
10250+2437	STF1429	9.1	0.3	2008.240	160.7	0.759				-0.6	+0.044	Zul1981
10255+3647	HU877	9.1	1.3	2008.240	249.2	1.762						
10261+1821	COU291	9.5	2.1	2008.281	65.4	0.802						
10269+1713	STT217	7.8	0.7	2008.251	149.0	0.740				+1.1	+0.015	Hei1975b
10269+1713	STT217	7.8	0.7	2008.284	148.4	0.755				+0.5	+0.030	Hei1975b
10269+1713	STT217	7.8	0.7	2008.284	148.5	0.772	0.8		ly (ni)			
10269+1931	COU292	8.4	0.4	2008.281	—	—			NR			
10290+3452	A2152AB	9.6	0.5	2008.219	56.7	0.402						
10292+1009	STT220	7.5	1.1	2008.284	98.2	0.578				-14.7	+0.108	Sey2002

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
10292+1009	STT220	7.5	1.1	2008.284	98.4	0.572	1.8		ly (ni)			
10323+2427	HDS1511	7.5	1.6	2008.240	—	—			NR			
10326+2943	COU1126	11.0	0.7	2008.243	197.4	0.400						
10359+3147	A2154	9.8	0.3	2008.219	115.8	0.642						
10376+3446	COU1417	9.1	0.4	2008.219	203.7	0.364						
10389+2712	COU778	9.4	2.5	2008.240	122.2	0.697						
10394+1536	HEI154	10.4	0.6	2008.284	105.1	1.480						
10394+1536	HEI154	10.4	0.6	2008.284	106.7	1.488	2.8		ly (ni)			
10408+2657	COU779	10.5	-0.0	2008.243	87.5	0.379						
10417+1044	STT227	8.3	0.5	2008.281	2.8	0.911						
10420+2701	COU780	9.5	-0.0	2008.243	—	—			NR			
10421+3715	COU1902	9.4	1.4	2008.240	29.9	0.686						
10428+4711	COU2096	10.0	0.7	2008.290	—	—			NR			
10430+3824	COU1903	9.7	-0.0	2008.243	74.0	0.260:						
10454+3831	HO532Aa-B	9.4	2.3	2008.240	61.0	0.658				+4.1	+0.098	Mnt2000a
10471+2812	COU590	10.6	0.5	2008.284	282.7	1.278	1.9		ly (ni)			
10471+2812	COU590	10.6	0.5	2008.284	283.9	1.313						
10477+2733	COU592	10.5	0.3	2008.284	28.5	0.435						
10480+4107	STT229	7.6	0.3	2008.290	264.1	0.691				+1.2	+0.020	Alz1998a
10486+3532	COU1418	10.2	0.3	2008.284	207.3	0.789						
10510+1603	A2372	8.5	1.6	2008.281	101.2:	0.240:						
10520+1606	A2373	8.8	-0.0	2008.251	223.0	0.215:				-3.2	+0.024	Bdl2007a
10520+1606	A2373	8.8	-0.0	2008.281	40.1:	0.137:						
10528+3023	HDS1555	8.7	2.4	2008.219	131.3	0.236						
10529+2209	HU567	10.5	0.2	2008.284	196.8	0.477						
10544+2044	HU568	10.4	0.1	2008.284	352.7	0.675						
10544+2044	HU568	10.4	0.1	2008.284	353.0	0.668	1.5		ly (ni)			
10544+3840	COU1746	10.7	0.2	2008.243	322.9	0.403						
10564+3652	COU1420	9.5	0.5	2008.240	—	—			NR			
10564+3652	COU1420	9.5	0.5	2008.243	—	—			S			
11003+1926	A2376	10.4	0.5	2008.284	5.6:	0.121:						
11008+2913	COU960	9.2	0.0	2008.240	114.6	0.205						
11018+2952	COU961Aa-B	7.2	2.2	2008.219	326.8	1.159						
11018+3641	COU1422	10.2	0.3	2008.243	37.5	0.601						
11023+3049	STF1501	9.9	0.3	2008.328	185.3	1.379						
11050+3825	HO378AB	8.2	0.9	2008.219	236.5	1.058						
11050+3825	HO378AB	8.2	0.9	2008.333	236.5	1.070						
11055+3927	COU1748	9.7	1.2	2008.240	92.4	0.225:						
11055+3927	COU1748	9.7	1.2	2008.243	—	—			S			
11078+3946	COU1749	10.8	0.2	2008.243	111.7	0.553						
11092+2305	COU294	9.4	2.4	2008.281	317.3	1.353						
11098+1009	A2775	8.6	1.3	2008.251	300.5	0.584						
11098+1009	A2775	8.6	1.3	2008.251	301.9	0.556	2.2		ly (ni)			
11098+1009	A2775	8.6	1.3	2008.284	299.5	0.596						
11100+1443	HEI60	9.1	0.8	2008.284	241.3	0.378	1.3		ly (ni)			
11100+1443	HEI60	9.1	0.8	2008.284	243.0	0.393						
11104+1110	HDS1591	8.1	2.8	2008.333	42.2	0.657						
11104+1502	HEI61	10.4	0.1	2008.284	87.2	0.282	2.6		ly (ni)			
11104+1502	HEI61	10.4	0.1	2008.284	88.6	0.295						
11126+2839	COU389	10.0	1.0	2008.281	168.1	0.912						
11144+1531	BU1283	9.8	0.6	2008.333	175.4	0.303						
11151+3735	STT232Aa-B	8.0	0.9	2008.219	245.2	0.605						
11155+4729	HU639	8.4	0.0	2008.290	90.2	0.261						
11158+4227	COU1904	8.3	1.1	2008.290	207.3	0.432	1.4		ly (ni)			
11158+4227	COU1904	8.3	1.1	2008.290	208.7	0.400						
11162+3136	A2157	9.2	3.0	2008.243	1.1	1.363				-60.2 <sup>Q</sup>	+0.283	Pop1996b
11174+4146	A2158	9.1	0.2	2008.290	2.5	0.431						
11174+4146	A2158	9.1	0.2	2008.290	3.5	0.438	1.7		ly (ni)			
11190+1416	STF1527	7.0	1.0	2008.251	159.1	0.311				-0.9	+0.018	Pru2009
11190+1416	STF1527	7.0	1.0	2008.328	162.7	0.315				+1.6	+0.023	Pru2009

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
11203+3603	COU1259	10.4	0.4	2008.243	309.4	0.741						
11221+3705	COU1260BC	9.2	0.4	2008.240	15.4	0.417						
11243+1354	HDS1622	8.5	2.8	2008.281	38.4	0.833						
11271+3546	HDS1626	9.1	2.3	2008.333	96.1	0.217						
11287+3224	COU781	10.8	0.3	2008.243	291.9	0.619						
11294+4206	COU1905	9.1	-0.0	2008.290	188.4:	0.474:	3.1		ly (ni)			
11297+3302	COU782	10.4	0.1	2008.336	53.1	0.815						
11321+1809	HDS1635	8.3	1.2	2008.251	30.4	0.442						
11321+1809	HDS1635	8.3	1.2	2008.281	—	—			S			
11322+3615	HU1134	7.2	0.6	2008.219	112.4:	0.138:				-4.5	+0.091	Hrt2000b
11334+4637	COU1751	9.6	-0.0	2008.290	—	—			S			
11341+1453	HDS1641	8.8	2.7	2008.333	264.2	0.499						
11342+1101	HDS1642	6.6	2.8	2008.251	243.3	1.040	2.7		ly (ni)			
11342+1101	HDS1642	6.6	2.8	2008.251	244.1	1.070						
11361+1251	STF1554	9.4	0.2	2008.251	204.9	0.269						
11361+1251	STF1554	9.4	0.2	2008.281	204.8	0.237						
11365+2502	HDS1645	7.2	2.0	2008.219	345.0	0.249						
11365+2502	HDS1645	7.2	2.0	2008.281	—	—			S			
11379+4949	HU728	8.1	2.0	2008.290	117.1	0.324						
11379+4949	HU728	8.1	2.0	2008.290	120.0	0.332	1.5		ly (ni)			
11379+4949	HU728	8.1	2.0	2008.333	117.3	0.321						
11425+2355	COU390	9.3	2.4	2008.240	—	—			NR			
11425+2355	COU390	9.3	2.4	2008.243	—	—			NR			
11426+1004	HE1503	10.2	0.1	2008.284	348.0	0.544						
11463+3131	COU785	10.3	-0.0	2008.243	284.6	0.532						
11463+3131	COU785	10.3	-0.0	2008.339	282.6	0.513						
11463+3303	A2160	10.3	0.6	2008.284	—	—			NR			
11468+1500	BU602	8.1	1.8	2008.309	124.2	0.546						
11470+2701	HDS1663	9.7	0.2	2008.281	—	—			S			
11486+3800	COU1128	11.8	0.8	2008.339	57.4	1.516						
11487+3937	COU1263	10.8	0.2	2008.243	236.5	0.430						
11499+3645	HDS1669	10.0	0.0	2008.339	—	—			S			
11499+3754	COU1129	10.6	0.2	2008.243	126.9	0.548						
11503+3741	HDS1670AB	11.9	0.6	2008.339	22.5	1.242						
11504+3544	COU964	11.0	1.3	2008.339	—	—			S			
11511+2245	HDS1671	9.2	2.5	2008.333	66.8	0.633						
11517+2344	COU391	11.1	1.1	2008.339	309.1	0.303						
11537+2626	HDS1677	10.5	2.0	2008.284	—	—			NR			
11537+2626	HDS1677	10.5	2.0	2008.336	90.8:	0.940:						
11544+1515	WOR20	11.2	0.2	2008.339	292.3	1.233						
11552+1423	HU1257	9.7	0.2	2008.284	51.8	0.349						
11552+1643	COU51	10.4	-0.0	2008.339	163.4	1.258						
11572+3312	COU939	9.8	-0.0	2008.240	22.1	0.309						
11576+1742	COU296	9.5	4.7	2008.309	233.4	1.583						
11579+2458	A680	10.4	0.0	2008.243	318.7	0.483						
12010+4347	A1779	9.8	1.6	2008.333	22.0	0.535						
12017+4728	COU1752	9.6	1.1	2008.290	—	—			S			
12022+2108	A2163	10.4	0.1	2008.284	348.8	0.698						
12024+1916	A2165	9.3	0.8	2008.284	37.5:	0.323:						
12024+1916	A2165	9.3	0.8	2008.309	—	—			S			
12026+4117	HDS1692	9.0	1.3	2008.333	—	—			S			
12028+2450	HDS1693	8.5	2.7	2008.336	—	—			S			
12042+2407	A682	8.8	1.9	2008.243	—	—			S			
12046+2232	COU92	10.3	0.2	2008.284	107.3	1.090						
12046+2232	COU92	10.3	0.2	2008.284	108.0	1.050	3.7		ly (ni)			
12058+2310	COU93	11.3	0.4	2008.339	155.7	0.899						
12059+2628	HDS1707	9.3	3.9	2008.339	—	—			S			
12062+2924	COU593	10.0	0.2	2008.240	120.0	0.228						
12064+1812	HDS1708	9.0	2.9	2008.336	—	—			S			
12064+1812	HDS1708	9.0	2.9	2008.339	—	—			S			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
12089+2147	HDS1714Aa	9.7	2.2	2008.243	—	—			NR			
12102+1858	A2057	9.8	5.6	2008.284	—	—			NR			
12103+1235	TDS8252	10.9	1.2	2008.336	—	—			S			
12108+3953	STF1606	7.4	0.5	2008.309	158.7	0.462				+1.8	+0.013	Msn1999a
12111+1228	HDS1719	9.4	0.1	2008.309	90.4	0.564						
12111+2257	COU94	9.8	2.4	2008.336	338.0	1.251						
12120+1300	A1780	8.7	2.0	2008.309	315.3	1.284						
12126+3546	STF1613	9.3	0.1	2008.240	7.4	1.192						
12138+2143	HU569	10.1	1.1	2008.336	159.6	1.263						
12138+4643	A1849	9.8	0.1	2008.290	—	—			S			
12138+4643	A1849	9.8	0.1	2008.333	—	—			S			
12143+1149	HU1137	9.4	3.0	2008.336	15.3	1.785						
12154+4008	A1999	9.1	2.2	2008.333	53.8	0.344				+15.5	-0.206	Sey2002
12160+4807	HU736	9.6	0.4	2008.290	186.7	0.324	1.8		ly (ni)			
12160+4807	HU736	9.6	0.4	2008.290	189.5	0.331				-0.8	+0.020	Bdl2006a
12160+4807	HU736	9.6	0.4	2008.333	189.3	0.308				-1.0	-0.003	Bdl2006a
12171+2241	COU179	11.4	0.2	2008.339	6.7	0.625						
12179+1147	HU1138	10.8	0.4	2008.336	1.3	1.304						
12194+1744	A2059	8.3	1.9	2008.309	32.2	0.502						
12200+4337	HDS1736	7.9	3.1	2008.333	25.3:	0.240:						
12232+3257	HDS1744	9.9	1.1	2008.240	266.8	0.196						
12264+3719	COU1424	11.5	0.2	2008.339	5.9	0.594						
12288+3155	COU965	10.0	4.2	2008.284	248.9	0.988						
12291+3123	STT251	8.4	0.9	2008.240	57.0	0.713				-2.9	+0.054	Sca2003c
12291+3123	STT251	8.4	0.9	2008.336	58.0	0.719				-1.9	+0.060	Sca2003c
12291+3123	STT251	8.4	0.9	2008.339	57.7	0.725				-2.2	+0.066	Sca2003c
12306+3431	HDS1759	9.2	1.7	2008.339	207.5:	0.225:						
12316+3201	COU966	10.2	0.8	2008.284	31.3	0.242				+12.0	+0.095	Mnt1999c
12316+3201	COU966	10.2	0.8	2008.336	28.3	0.264				+9.2	+0.117	Mnt1999c
12322+1648	A2060	11.7	0.4	2008.339	224.9	0.652						
12323+2000	HU571	9.6	-0.0	2008.240	139.7:	0.146:						
12328+2301	AG179	9.9	0.7	2008.309	141.6	1.035						
12358+1009	HEI512	11.3	-0.0	2008.339	—	—			S			
12372+2112	STF1663	8.0	1.1	2008.309	69.1	0.648						
12380+1436	HEI62	10.7	1.0	2008.339	255.8	1.627						
12389+1348	HDS1772	9.4	0.3	2008.309	—	—			S			
12409+2708	COU596	8.5	0.2	2008.240	211.0	0.217				+8.5	+0.037	Doc2003e
12418+2943	COU967	10.3	2.4	2008.284	4.3	1.045						
12422+1431	HU892	10.6	0.3	2008.336	181.4	0.635						
12422+2622	A1851	10.1	0.0	2008.284	342.8	0.406	1.7		ly (ni)			
12422+2622	A1851	10.1	0.0	2008.284	344.9	0.412				-0.1	+0.018	Hei1998
12444+2200	HDS1783	7.8	3.2	2008.284	—	—			NR			
12444+2713	COU597	10.4	1.6	2008.243	102.6	0.276						
12452+3106	COU968	10.4	0.7	2008.336	279.7	1.655						
12460+2340	COU394	10.7	1.3	2008.336	106.9	0.768						
12480+1217	HU893	10.6	0.3	2008.339	32.6	1.548						
12501+2408	A563	10.6	0.0	2008.243	186.8	0.431						
12507+2032	HU640	10.2	0.3	2008.243	221.4	0.426				-10.1	+0.051	Baz1984a
12507+2032	HU640	10.2	0.3	2008.284	220.4	0.429				-11.3	+0.054	Baz1984a
12510+3129	HDS1804	8.0	3.4	2008.240	257.6	0.741						
12510+3129	HDS1804	8.0	3.4	2008.240	258.0	0.754						
12524+5017	COU2188	9.1	1.3	2008.333	39.5	0.282						
12526+2342	COU396	10.8	0.2	2008.284	313.5	0.905						
12533+1310	HU894	9.8	0.1	2008.309	144.1	1.212						
12533+4246	COU1579	9.4	0.3	2008.290	126.1	0.148:						
12533+4246	COU1579	9.4	0.3	2008.290	138.0	0.194:	3.1		ly (ni)			
12533+4246	COU1579	9.4	0.3	2008.333	123.3:	0.177:						
12540+1623	HEI162	11.1	0.8	2008.339	134.4	0.959						
12576+3248	COU969	10.1	2.5	2008.284	67.2	0.770	2.7		ly (ni)			
12576+3248	COU969	10.1	2.5	2008.284	67.8	0.760						

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
12582+2431	COU398	11.1	0.1	2008.339	48.5	0.827						
12587+2626	COU479	10.3	1.0	2008.243	154.7	0.883						
12587+2728	STF1699	8.7	0.0	2008.328	8.5	1.710						
12591+4709	HDS1821	8.2	3.2	2008.333	151.2	0.932						
12592+1454	HDS1822	9.5	1.4	2008.309	68.7	0.397						
12595+3004	A1852	9.6	1.4	2008.309	310.7	0.991						
13004+3545	HU1141	10.1	0.5	2008.240	342.7	0.528						
13013+1748	COU297	10.6	0.4	2008.336	176.3	0.172						
13025+2858	A1853	11.3	3.0	2008.339	303.9	1.366						
13026+2318	COU95	8.7	1.6	2008.309	286.9	0.692						
13029+1328	STF1711	9.3	0.1	2008.309	335.4	0.335						
13032+2836	COU399	11.0	0.2	2008.339	304.1	0.595						
13033+3435	COU970	10.1	-0.0	2008.240	—	—			NR			
13049+2438	COU298	11.2	0.5	2008.339	5.0	0.323						
13062+1621	HEI370	11.0	0.2	2008.336	287.1	0.925						
13064+2109	COU11Aa-B	6.1	2.7	2008.309	316.1	1.725						
13069+2502	HDS1835	9.5	3.2	2008.243	203.4	0.561						
13091+2127	HU572	8.7	1.4	2008.243	346.9	0.430						
13093+4649	COU2105	9.4	-0.0	2008.333	—	—			S			
13097+4418	COU1909	9.8	0.3	2008.333	251.4	0.655						
13105+1103	HDS1842	10.8	0.1	2008.336	145.0	0.614						
13119+2312	HDS1847	10.5	0.2	2008.243	—	—			NR			
13120+4703	COU2106	9.7	-0.0	2008.333	91.2	0.262						
13121+2415	HDS1848	6.6	2.8	2008.309	—	—			S			
13137+2949	HO55AB	7.3	4.2	2008.328	—	—			NR			
13141+3156	A1854	10.4	0.2	2008.240	337.7	0.225						
13166+1948	HDS1862Aa	6.6	3.1	2008.309	271.6	0.468						
13198+4747	HU644Aa-B	9.1	0.8	2008.333	92.3	1.452			S			
13202+1534	HDS1870Aa	7.5	2.1	2008.309	268.1	0.407						
13203+1746	A2166	7.8	0.6	2008.281	—	—			S			
13216+1717	COU56	10.2	0.6	2008.336	—	—			S			
13232+4822	COU1912	10.2	0.6	2008.333	153.3	0.435						
13235+2914	HO260	9.6	0.3	2008.328	85.7	1.574						
13254+3548	HU1260	10.7	0.5	2008.240	185.6	0.722						
13258+4430	A1609AB	9.5	0.7	2008.333	30.8	0.468				+0.9	0.000	Hei1991
13266+3235	COU787	10.6	0.2	2008.243	146.4	0.360						
13284+3643	COU1428	10.8	-0.0	2008.240	—	—			NR			
13284+3643	COU1428	10.8	-0.0	2008.243	—	—			S			
13284+3643	COU1428	10.8	-0.0	2008.336	—	—			NR			
13284+3643	COU1428	10.8	-0.0	2008.339	—	—			NR 1Q			
13316+1443	A1790	9.4	3.0	2008.281	178.3	0.310						
13320+3045	COU599	10.7	1.1	2008.336	40.6	1.069						
13329+3454	STT269AB	7.3	0.8	2008.281	221.5	0.309				0.0	+0.012	Hei1997
13329+3454	STT269AB	7.3	0.8	2008.309	221.1	0.293				-0.4	-0.004	Hai1997
13331+4316	COU1754	10.2	0.0	2008.333	—	—			NR			
13336+2944	A1095	9.0	0.3	2008.309	276.5	0.347				-2.9	-0.021	Ole2002a
13342+1516	KU45	10.6	0.0	2008.336	289.9	0.492						
13343+3044	COU600	10.8	0.0	2008.336	59.6	0.538						
13379+4808	ES608AB	10.3	1.2	2008.333	326.7	1.794				+1.6	-0.003	Sey2002
13387+4126	COU1584	11.0	0.2	2008.333	111.4	0.601						
13396+1045	BU612AB	6.3	0.1	2008.281	213.5	0.322				-0.3	+0.015	Msn1999a
13398+3625	COU1264	10.5	0.9	2008.339	—	—			S			
13400+3759	HU897AB	10.5	0.1	2008.339	49.0	0.371						
13425+4002	COU1430	11.0	0.2	2008.333	253.4	0.478						
13465+1545	A2063	9.6	0.3	2008.281	142.5	0.225						
13482+2248	COU401	9.5	-0.0	2008.281	181.1:	0.492:						
13482+2248	COU401	9.5	-0.0	2008.309	—	—			S			
13488+2753	HDS1942	7.4	3.5	2008.328	104.1	0.679						
13514+3441	BU613AB	10.9	-0.0	2008.336	148.2	0.827						
13518+3649	COU1133	10.2	-0.0	2008.336	160.4	0.229						



**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
13519+1008	B2543	7.0	1.4	2008.281	—	—			S			
13527+2116	COU183	10.1	3.7	2008.336	129.9	1.338						
13535+3618	COU1134	10.6	0.8	2008.339	251.4	1.560						
13539+1008	BU614AB	8.1	1.9	2008.328	108.5	0.480				+6.9	+0.249	Zir2002a
13554+5002	COU2689	9.4	2.5	2008.333	326.1	0.659						
13593+3042	COU602	10.6	-0.0	2008.336	124.4	0.394						
14017+3759	COU1433	10.3	-0.0	2008.336	120.1	0.584						
14028+1417	HEI65	9.8	0.1	2008.309	98.8	0.315						
14029+2434	COU301	8.2	3.8	2008.336	127.6	0.887						
14034+1740	A2064	9.6	1.4	2008.309	176.1	1.081						
14040+4314	A1615	10.9	0.0	2008.333	4.2	0.554						
14083+1644	A2065	9.5	1.6	2008.328	341.2	1.651						
14087+3341	HU742	8.8	3.5	2008.309	358.4	0.270				-70.9	-0.029	Pop1972
14105+4823	COU2108	10.0	1.5	2008.423	—	—		BG39	S			
14113+3013	COU605	10.5	0.2	2008.336	162.1	0.258						
14124+2843	STT277AB	8.7	0.1	2008.281	—	—			1Q <0.16			
14124+2843	STT277AB	8.7	0.1	2008.309	—	—			S			
14128+1104	A1099	9.0	0.2	2008.328	—	—			S			
14135+1234	BU224	8.9	0.4	2008.309	104.1	0.530				+0.4	-0.031	Lin1985c
14138+3059	COU606	10.7	0.6	2008.336	—	—			S			
14139+2906	STF1816	7.4	0.3	2008.328	94.5	0.490						
14140+3720	COU1434	10.9	-0.0	2008.336	108.4:	0.540:						
14141+1056	HEI530	9.7	0.5	2008.309	353.3	0.549						
14158+1018	A1101AB	9.7	0.6	2008.309	232.1:	0.235:				-19.3	+0.035	Baz1984a
14158+1018	STF1823AB-c	9.7	0.6	2008.309	148.0	3.884	2.9		2Q-ly b			
14165+3334	HU1266	10.3	0.2	2008.336	136.8	0.275				-24.4	+0.114	Cou1958d
14171+4529	A1617	9.6	0.6	2008.333	275.8	0.456						
14171+5100	A147	8.8	1.3	2008.423	106.3	0.641		BG39				
14175+1722	A2067	9.2	0.1	2008.309	—	—			S			
14175+1722	A2067	9.2	0.1	2008.391	—	—			2-4Q			
14208+4617	COU2194	10.2	-0.0	2008.333	—	—			S			
14220+5107	A148	9.0	0.6	2008.423	188.4	0.562		BG39				
14234+4736	A149AB	9.5	0.4	2008.423	124.8	0.787		BG39				
14241+4331	COU1916	10.6	0.2	2008.333	268.8	0.752						
14260+4213	COU1757	9.6	0.4	2008.333	—	—			S			
14273+3038	A1105	10.5	0.4	2008.440	177.4	1.131		BG39				
14273+3038	A1105	10.5	0.4	2008.440	177.6	1.122		BG39				
14276+2037	HO542	10.3	0.0	2008.440	214.9	1.007		BG39				
14276+2037	HO542	10.3	0.0	2008.440	215.2	1.006		BG39				
14286+1818	COU2508	10.2	-0.0	2008.336	74.5	0.456						
14295+3612	HU1268	9.8	0.1	2008.391	345.4	0.295				+3.2	+0.017	Hrt2008
14301+4737	COU2387	10.5	0.1	2008.423	340.6	0.386	1.3	BG39	ly (ni)			
14301+4737	COU2387	10.5	0.1	2008.423	341.2	0.370		BG39				
14303+4709	COU1917	9.8	-0.0	2008.423	218.1	0.420	0.8	BG39	ly (ni)			
14303+4709	COU1917	9.8	-0.0	2008.423	219.1	0.433		BG39				
14305+2055	COU97	9.1	0.7	2008.391	246.3	0.320	1.6		ly (ni)			
14305+2055	COU97	9.1	0.7	2008.391	250.7:	0.309	1.6		3Q-ly			
14305+2055	COU97	9.1	0.7	2008.421	244.2:	0.324		BG39				
14323+2641	A570	6.6	0.5	2008.443	43.5	0.197:		BG39		-3.2	+0.009	Hei1991
14323+2641	A570	6.6	0.5	2008.443	49.0	0.170	0.3	BG39	ly (ni)			
14323+2641	A570	6.6	0.5	2008.443	49.9	0.167		BG39	b			
14333+2725	A688	10.0	0.3	2008.328	15.4	0.757						
14339+2949	AGC6	9.8	0.5	2008.328	133.3	0.763						
14340+4113	COU1437	9.4	-0.0	2008.423	—	—		BG39	S			
14354+1915	HU574	9.0	0.3	2008.328	—	—			S			
14354+1915	HU574	9.0	0.3	2008.391	—	—			S			
14354+1915	HU574	9.0	0.3	2008.421	127.2:	0.100:		BG39	ly (ni)			
14359+1200	HU1269	9.9	0.5	2008.391	26.7	0.387						
14367+2014	COU98	10.8	0.1	2008.391	180.7	0.243						
14369+4813	A347	8.7	0.3	2008.423	244.6	0.559		BG39		-1.2	-0.017	Doc2004a

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
14376+2809	COU405	10.3	1.0	2008.391	—	—	—	—	S	—	—	—
14411+3205	COU790	9.5	1.5	2008.440	309.2	1.334	2.5	BG39	ly (ni)	—	—	—
14411+3205	COU790	9.5	1.5	2008.440	309.6	1.408	—	BG39	—	—	—	—
14411+3205	COU790	9.5	1.5	2008.440	310.5	1.387	—	BG39	—	—	—	—
14416+2747	COU407	10.0	0.3	2008.328	116.3	0.413	—	—	—	—	—	—
14419+1847	COU185	9.9	2.6	2008.443	303.5	0.886	—	BG39	—	—	—	—
14419+2107	HDS2071	6.7	2.2	2008.443	—	—	—	BG39	S	—	—	—
14426+1929	HU575AB	9.8	0.3	2008.328	164.2	0.640	—	—	—	+0.4	-0.002	Sod1999
14426+1929	HU575AB	9.8	0.3	2008.421	162.4	0.678	0.7	BG39	ly (ni)	-1.1	+0.038	Sod1999
14426+1929	HU575AB	9.8	0.3	2008.421	164.2	0.646	—	BG39	—	+0.7	+0.006	Sod1999
14426+3842	COU1268	10.6	-0.0	2008.440	—	—	—	BG39	S	—	—	—
14432+2246	COU99	9.9	0.5	2008.328	208.3	0.683	—	—	—	—	—	—
14441+3138	COU607	10.2	0.7	2008.421	315.1	0.742	1.8	BG39	ly (ni)	—	—	—
14441+3138	COU607	10.2	0.7	2008.421	315.9	0.739	—	BG39	—	—	—	—
14452+2157	HU905	9.8	1.8	2008.336	290.5	0.171:	—	—	—	—	—	—
14456+1229	HDS2078	10.5	-0.0	2008.443	39.5	0.536	—	BG39	—	—	—	—
14456+1229	HDS2078	10.5	-0.0	2008.443	42.5	0.590	2.2	BG39	ly (ni)	—	—	—
14459+2344	COU100	8.8	0.4	2008.328	—	—	—	—	S	—	—	—
14459+2344	COU100	8.8	0.4	2008.336	182.8:	0.120:	—	—	—	-20.9	+0.014	Doc2009d
14463+3146	HDS2080	9.4	0.6	2008.440	—	—	—	BG39	S	—	—	—
14477+2406	HO263	7.6	3.0	2008.440	—	—	—	BG39	S	—	—	—
14485+2445	COU304	9.3	2.2	2008.336	302.5	0.470	—	—	—	—	—	—
14492+1013	A2983	9.4	0.1	2008.443	—	—	—	BG39	S	—	—	—
14492+4814	HU647	10.0	0.3	2008.423	68.9:	0.254:	1.7	BG39	ly (ni)	—	—	—
14499+3200	COU608	9.2	2.6	2008.440	201.3	1.742	—	BG39	—	—	—	—
14515+4456	STT287	8.4	0.2	2008.423	357.2	0.740	0.4	BG39	ly (ni)	—	—	—
14515+4456	STT287	8.4	0.2	2008.423	357.5	0.746	—	BG39	—	+0.5	-0.051	Hei1997
14524+1757	A2071	9.3	0.6	2008.421	270.2	1.346	0.8	BG39	ly (ni)	—	—	—
14548+2411	COU409Aa	10.7	0.1	2008.336	213.9	0.508	—	—	—	—	—	—
14548+2411	COU409Aa	10.7	0.1	2008.421	213.2	0.490	—	BG39	—	—	—	—
14588+3551	COU1136	9.3	-0.0	2008.328	—	—	—	—	S	—	—	—
14589+2238	HU906	9.6	3.5	2008.336	15.2	0.812	—	—	—	—	—	—
14590+1732	A2072	10.3	0.1	2008.421	236.6	0.685	—	BG39	—	—	—	—
14593+4649	COU1760	9.6	0.9	2008.423	245.7	0.240	1.5	BG39	ly (ni)	-2.0	+0.036	Sey2001
14595+1753	COU188	9.6	0.2	2008.421	221.3	0.354	—	BG39	—	—	—	—
15002+2129	HU907	10.2	0.0	2008.391	—	—	—	—	NR 2-4Q	—	—	—
15045+1950	HU745	7.9	1.6	2008.328	22.3	0.591	—	—	—	—	—	—
15045+1950	HU745	7.9	1.6	2008.391	21.3	0.598	—	—	—	—	—	—
15056+1138	STF1907	9.1	-0.0	2008.443	350.8	0.905	—	BG39	—	—	—	—
15056+1138	STF1907	9.1	-0.0	2008.443	351.1	0.914	—	BG39	—	—	—	—
15077+1649	HEI379	10.2	0.1	2008.391	—	—	—	—	S:	—	—	—
15077+1649	HEI379	10.2	0.1	2008.443	—	—	—	BG39	S	—	—	—
15078+3956	COU1271	9.0	1.0	2008.391	185.1	0.397	—	—	—	-20.6	+0.017	Cou1999b
15078+3956	COU1271	9.0	1.0	2008.391	190.0	0.418	1.8	—	ly (ni)	—	—	—
15078+3956	COU1271	9.0	1.0	2008.423	185.4	0.386	1.7	BG39	ly (ni)	—	—	—
15078+3956	COU1271	9.0	1.0	2008.423	186.6	0.394	—	BG39	—	-19.2	+0.014	Cou1999b
15085+5002	COU2195	10.0	0.3	2008.423	—	—	—	BG39	S	—	—	—
15088+4014	COU1272	9.6	-0.0	2008.423	43.5	0.265	—	BG39	—	—	—	—
15088+4014	COU1272	9.6	-0.0	2008.423	54.2	0.252	1.0	BG39	ly (ni)	—	—	—
15100+2751	COU410	10.5	0.3	2008.391	150.5	0.292	—	—	—	—	—	—
15106+2021	HU144	9.4	1.0	2008.421	—	—	—	BG39	S	—	—	—
15106+2021	HU144	9.4	1.0	2008.443	31.2	0.444	—	BG39	—	—	—	—
15106+2021	HU144	9.4	1.0	2008.443	34.9	0.436	3.6	BG39	ly (ni)	—	—	—
15111+3229	COU792	10.4	0.1	2008.391	88.1	0.573	—	—	—	—	—	—
15116+1007	A1116	8.8	0.2	2008.470	311.0	0.815	—	BG39	4Q	—	—	—
15121+1859	COU189	6.2	2.8	2008.470	141.2	0.477	—	BG39	2Q	—	—	—
15126+2041	COU190	10.7	0.3	2008.440	271.5	1.363	—	BG39	—	—	—	—
15126+2041	COU190	10.7	0.3	2008.440	272.4	1.375	—	BG39	—	—	—	—
15143+1959	COU27AB	10.5	0.5	2008.470	93.0	1.180	—	BG39	2Q	—	—	—

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
15143+1959	COU102CD	10.0	1.0	2008.440	270.0	1.187:		BG39				
15151+3650	STT295	8.8	0.6	2008.328	150.5	0.325						
15151+3650	STT295	8.8	0.6	2008.440	148.3	0.364	1.3	BG39	ly (ni)			
15151+3650	STT295	8.8	0.6	2008.440	149.7	0.314		BG39				
15151+3650	STT295	8.8	0.6	2008.440	150.5	0.332		BG39				
15183+2650	STF1932Aa-B	7.3	0.1	2008.443	82.2	1.615		BG39		-0.7	-0.009	Hei1965c
15186+2356	COU307	9.5	0.1	2008.421	3.7	0.348		BG39		-12.2	+0.035	Cou1999b
15192+4329	A1630	10.1	0.5	2008.423	245.4	0.785		BG39				
15200+2338	COU103	10.1	0.0	2008.443	279.3	0.547		BG39				
15206+1523	HU1160	9.6	0.1	2008.443	—	—		BG39	S			
15206+1523	HU1160	9.6	0.1	2008.467	88.8:	0.295:		BG39		+0.1	+0.032	Hrt2009
15208+4242	A573	8.9	0.9	2008.423	171.8	0.730		BG39				
15208+4242	A573	8.9	0.9	2008.423	172.3	0.760	1.5	BG39	ly (ni)			
15210+2104	HU146	9.5	0.2	2008.328	124.0	0.694						
15233+4022	COU1441	8.6	0.8	2008.423	18.5:	0.318:	1.9	BG39	ly (ni)			
15233+4022	COU1441	8.6	0.8	2008.423	26.4	0.251		BG39				
15236+4022	COU1442	9.6	0.1	2008.423	160.7	0.299		BG39				
15261+1810	STF1940	8.5	0.4	2008.328	330.9	0.408						
15264+4400	STT296AB	7.8	1.3	2008.475	275.3	2.105	1.4	IRC	ly (ni)			
15264+4400	STT296AB	7.8	1.3	2008.475	275.6	2.104		IRC				
15268+2840	COU484	10.2	0.5	2008.421	83.6	0.309		BG39				
15272+1804	A2073	9.9	-0.0	2008.328	—	—			S			
15272+1804	A2073	9.9	-0.0	2008.421	126.2	0.143:		BG39				
15272+4133	COU1443	8.7	1.7	2008.423	173.1	0.489	1.4	BG39	ly (ni)			
15273+1738	A2074	8.6	0.8	2008.328	267.4	0.309				+7.3	+0.042	Baz1976
15273+1738	A2074	8.6	0.8	2008.421	263.9	0.308		BG39		+3.7	+0.040	Baz1976
15273+1738	A2074	8.6	0.8	2008.421	265.6	0.332	1.0	BG39	ly	+5.4	+0.064	Baz1976
15294+4651	A1633	9.8	1.0	2008.423	—	—		BG39	NR 1Q-ly			
15307+3810	HU1163	9.2	0.5	2008.440	167.5	0.221		BG39		+0.6	+0.024	Hrt2000a
15307+3810	HU1163	9.2	0.5	2008.440	170.6	0.166	0.4	BG39	ly (ni)			
15307+3810	HU1163	9.2	0.5	2008.440	170.7	0.207		BG39				
15328+1945	HU577	8.9	0.0	2008.391	16.0	0.341				-0.1	+0.028	Cou1984b
15333+4149	STF1956	8.6	1.3	2008.423	—	—		BG39	NR			
15347+2655	COU798	8.6	-0.0	2008.391	180.9:	0.127:				-17.1	-0.029	Hrt2009
15359+1255	STF1957	8.0	1.5	2008.470	134.8	0.292		BG39	2Q-ly			
15360+3143	COU799	10.8	0.3	2008.440	266.0	1.066	1.4	BG39	ly (ni)			
15360+3143	COU799	10.8	0.3	2008.440	267.3	1.033		BG39				
15360+3948	STT298AB	7.2	1.3	2008.440	176.6	1.032	0.3	BG39	ly	+0.4	-0.003	Sod1999
15360+3948	STT298AB	7.2	1.3	2008.440	176.9	1.036		BG39				
15360+3948	STT298AB	7.2	1.3	2008.473	176.7	1.033		BG39		+0.5	-0.003	Sod1999
15360+3948	STT298AB	7.2	1.3	2008.473	177.0	1.027	0.2	BG39	ly (ni)	+0.8	-0.009	Sod1999
15361+4849	HU652	9.2	0.3	2008.478	184.6	1.129		IRC				
15361+4849	HU652	9.2	0.3	2008.478	184.7	1.124	0.4	IRC	ly (ni)			
15363+4300	COU1444	10.6	0.9	2008.478	309.6	0.993		IRC	4Q-ly			
15376+3427	COU975	10.3	1.1	2008.473	340.8	0.964		BG39	4Q-ly			
15377+4355	COU1589	10.9	0.1	2008.423	12.1	0.832	1.0	BG39	ly (ni)			
15377+4355	COU1589	10.9	0.1	2008.423	13.0	0.811		BG39				
15382+5020	COU2110	9.7	0.4	2008.423	24.8	0.297		BG39				
15382+5020	COU2110	9.7	0.4	2008.423	28.3	0.338		BG39				
15389+3401	COU976	10.5	0.1	2008.473	128.3	1.264		BG39	2Q-ly			
15394+3331	COU800	10.9	0.4	2008.421	249.8	0.787		BG39				
15399+1646	COU2510	9.5	0.6	2008.443	25.1	0.252		BG39				
15402+4041	COU1274	10.0	2.0	2008.475	94.3	0.940	1.6	IRC	ly (ni)			
15402+4041	COU1274	10.0	2.0	2008.475	94.6	0.941		IRC				
15402+4041	COU1274	10.0	2.0	2008.478	94.7	0.958		IRC	2Q-ly			
15404+2123	HU579	9.0	0.3	2008.443	133.6	0.728	2.3	BG39	ly (ni)			
15404+2123	HU579	9.0	0.3	2008.443	134.7	0.706		BG39				
15405+1840	A2076	8.3	0.2	2008.470	184.8	0.731		BG39				
15406+3128	COU613	9.1	1.1	2008.391	358.5	0.212						
15406+3128	COU613	9.1	1.1	2008.421	4.6	0.128:	0.5	BG39	ly (ni)			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
15406+3128	COU613	9.1	1.1	2008.421	5.9	0.191		BG39				
15420+4203	COU1445	8.3	0.6	2008.423	—	—		BG39	S			
15440+2220	COU106	8.7	0.5	2008.421	273.4	0.382	0.7	BG39	ly (ni)			
15440+2220	COU106	8.7	0.5	2008.421	273.9	0.406		BG39				
15444+3942	A1635	9.9	3.3	2008.473	216.6	1.669	2.4	BG39	ly (ni)			
15444+3942	A1635	9.9	3.3	2008.473	217.0	1.670		BG39				
15456+1640	COU2511	9.9	-0.0	2008.391	—	—			S			
15456+1640	COU2511	9.9	-0.0	2008.421	—	—		BG39	S			
15457+5040	HU657	10.2	0.7	2008.423	180.9	0.422	1.1	BG39	ly (ni)	-3.2	+0.045	Doc1991f
15457+5040	HU657	10.2	0.7	2008.423	182.6	0.412		BG39		-1.5	+0.035	Doc1991f
15458+2637	COU615	10.5	-0.0	2008.440	—	—		BG39	S (ni)			
15458+2637	COU615	10.5	-0.0	2008.440	225.1:	0.994:	3.0	BG39	ly (ni)			
15458+2637	COU615	10.5	-0.0	2008.443	208.3:	0.461:		BG39				
15461+4343	HDS2219	10.1	3.3	2008.478	316.6	1.055		IRC				
15461+4343	HDS2219	10.1	3.3	2008.478	317.3	1.020:	3.1	IRC	ly (ni)			
15463+1614	HEI238	10.5	0.2	2008.470	142.6	1.228	2.0	BG39	2Q-ly			
15463+1614	HEI238	10.5	0.2	2008.470	143.0	1.183	2.0	BG39	2Q-ly			
15465+1957	COU66	10.9	0.3	2008.391	102.1	0.608				-38.7	-0.277	Cou1999b
15465+5048	COU2388	9.6	0.1	2008.423	—	—		BG39	S			
15468+1905	A2077	9.6	0.5	2008.443	224.8	0.572	1.4	BG39	ly (ni)			
15468+1905	A2077	9.6	0.5	2008.443	225.5	0.540		BG39				
15482+1925	COU193	9.6	0.6	2008.391	290.3	0.583						
15485+2600	COU616	9.3	0.6	2008.440	159.7	0.752	1.0	BG39	ly (ni)			
15485+2600	COU616	9.3	0.6	2008.440	159.8	0.781		BG39				
15486+4949	COU1918	8.6	1.2	2008.423	176.2	0.254	1.9	BG39	ly (ni)			
15486+4949	COU1918	8.6	1.2	2008.423	183.6	0.220		BG39				
15498+4431	BU621	7.9	1.4	2008.475	26.6	0.682	1.3	IRC	ly (ni)			
15498+4431	BU621	7.9	1.4	2008.475	27.4	0.666		IRC				
15509+1911	A2078	8.9	0.6	2008.500	163.3	1.063	1.6	IRC	ly (ni)			
15509+1911	A2078	8.9	0.6	2008.500	163.4	1.072		IRC				
15522+4653	COU1763	10.5	2.0	2008.475	321.8	0.941		IRC	4Q-ly			
15522+4653	COU1763	10.5	2.0	2008.478	322.3	0.941		IRC	4Q-ly			
15530+1547	HEI239	10.2	0.3	2008.421	126.4	0.994		BG39				
15540+1936	COU67	11.0	0.1	2008.470	217.8	1.622		BG39	3Q-ly			
15542+1659	A2080	8.8	0.4	2008.391	99.1	0.365				-4.2	+0.001	Hrt2008
15544+3500	COU978	10.5	-0.0	2008.497	148.8	1.899		IRC				
15578+2054	A1370	9.4	1.9	2008.421	227.1	0.297:		BG39	3Q-ly			
15578+2054	A1370	9.4	1.9	2008.421	227.2	0.312	2.9	BG39	ly (ni)			
15583+4019	COU1448	11.0	0.3	2008.475	256.5	1.108		IRC	3Q-ly			
15585+4858	HU659	9.4	2.0	2008.423	208.2	0.532		BG39				
15585+4858	HU659	9.4	2.0	2008.423	210.0	0.568	1.3	BG39	ly (ni)			
15596+4440	COU1764	10.3	0.1	2008.475	207.8	1.304		IRC	3Q-ly			
16003+1140	A1639AB	9.8	1.3	2008.443	—	—		BG39	S			
16003+1140	A1639AB	9.8	1.3	2008.470	268.4:	0.324:		BG39	ly (ni)			
16003+1140	A1639AB-C	9.8	1.3	2008.470	326.1	5.921	1.1	BG39	ly (ni)			
16009+1316	STT303AB	7.7	0.4	2008.500	171.5	1.526		IRC	2Q-ly			
16013+4529	A1640	10.6	0.0	2008.475	346.3	0.653		IRC				
16013+4529	A1640	10.6	0.0	2008.475	346.3	0.656	1.1	IRC	ly (ni)			
16019+2458	COU411	10.6	0.8	2008.470	275.9	1.408		BG39	4Q-ly			
16025+2633	COU618	8.8	3.2	2008.421	178.5	0.491		BG39				
16025+2633	COU618	8.8	3.2	2008.421	182.8	0.562:	3.0	BG39	ly (ni)			
16027+1257	HEI240	9.8	0.9	2008.500	116.1	1.254		IRC				
16029+4644	COU1766	8.7	2.2	2008.423	30.7	0.664	2.6	BG39	ly (ni)			
16029+4644	COU1766	8.7	2.2	2008.423	31.6	0.654		BG39				
16049+4045	COU1275	9.0	5.0	2008.475	68.6	2.033		IRC				
16071+1654	BU812	9.1	0.8	2008.443	97.3	0.718		BG39				
16071+1654	BU812	9.1	0.8	2008.443	98.5	0.732	0.8	BG39	ly (ni)			
16072+4613	HDS2274	9.2	1.4	2008.475	41.2	0.286:		IRC				
16079+1425	A1798	8.9	1.3	2008.391	341.6:	0.207:				-5.6	+0.047	Sey2002

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ (")	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ (")	Orbit
16080+4523	BU355AB	7.4	1.4	2008.475	—	—		IRC	S (ni)			
16095+3108	COU979	9.9	0.2	2008.391	57.0	0.394						
16111+2014	COU197	10.3	-0.0	2008.391	47.0	0.482						
16115+1507	A1799	9.5	0.2	2008.421	117.4	0.768		BG39				
16118+3424	STT306	8.5	0.5	2008.473	11.1	0.242		BG39	1Q-ly			
16128+3922	STF2028	9.9	0.7	2008.391	142.6	0.374				+2.4	+0.068	Alz2001b
16128+3922	STF2028	9.9	0.7	2008.473	144.8	0.383		BG39	2Q-ly	+4.6	+0.075	Alz2001b
16136+4546	COU1767	10.4	0.9	2008.475	129.4	0.971		IRC	2Q-ly			
16137+4638	A1642	8.9	0.5	2008.423	182.2	0.747		BG39		-0.2	+0.013	Hrt2001b
16137+4638	A1642	8.9	0.5	2008.423	182.4	0.782	1.2	BG39	ly (ni)			
16137+4638	A1642	8.9	0.5	2008.475	182.1	0.752		IRC				
16137+4638	A1642	8.9	0.5	2008.475	182.2	0.734	1.0	IRC	ly (ni)			
16140+4200	COU1449	9.9	-0.0	2008.423	—	—		BG39	S			
16148+1600	A2083	10.0	0.1	2008.500	153.7	1.161		IRC				
16156+1944	HU480	10.1	1.0	2008.470	261.5	1.632		BG39				
16156+1944	HU480	10.1	1.0	2008.470	261.5	1.641	1.7	BG39	ly (ni)			
16161+2936	A348	9.0	1.9	2008.470	149.1	1.077		BG39	2Q-ly			
16164+4327	COU1450	10.5	1.3	2008.478	61.6	1.313		IRC	1Q-ly			
16166+4001	COU1278	10.5	-0.0	2008.475	334.6	1.233		IRC	4Q-ly			
16168+1447	HDS2301	8.8	2.5	2008.500	53.1	0.981	2.1	IRC	ly (ni)			
16168+1447	HDS2301	8.8	2.5	2008.500	53.8	0.993		IRC				
16169+1948	COU107	9.0	0.6	2008.391	114.4	0.654						
16173+5001	COU2111	10.6	0.0	2008.423	32.8	0.335		BG39				
16178+4918	HU661	10.4	0.1	2008.475	40.2	0.778		IRC				
16178+4918	HU661	10.4	0.1	2008.475	40.5	0.765	0.1	IRC	ly (ni)			
16186+1247	HEI241	9.9	0.5	2008.421	59.7	0.729		BG39				
16186+1247	HEI241	9.9	0.5	2008.421	61.1	0.744	2.3	BG39	ly (ni)			
16188+1724	STF2037	9.8	0.0	2008.500	253.6	1.188		IRC				
16188+1724	STF2037	9.8	0.0	2008.500	253.8	1.174	0.6	IRC	ly (ni)			
16192+2553	COU412	9.5	2.5	2008.421	262.0	0.957		BG39				
16192+4140	STT309	8.7	0.2	2008.423	304.1	0.296		BG39		-1.5	+0.013	Sey2002
16192+4140	STT309	8.7	0.2	2008.423	304.6	0.274	0.2	BG39	ly (ni)			
16198+2647	A225	10.0	0.2	2008.391	—	—			NR 2Q-ly			
16199+2341	COU108	9.9	2.3	2008.470	257.9	0.627		BG39	3Q-ly			
16212+2259	HU481	8.2	1.8	2008.391	285.7	0.284				+25.7	+0.009	Sca2003a
16216+3631	COU982	9.4	-0.0	2008.391	—	—			2Q			
16216+3631	COU982	9.4	-0.0	2008.421	211.6:	0.191:		BG39		-11.2	-0.004	Hrt2009
16220+3908	COU1279	10.7	0.3	2008.473	27.9	1.690		BG39				
16229+3803	COU1281	9.7	-0.0	2008.391	195.5	0.235				+6.5	+0.065	Doc2008j
16235+3321	BU951AB-C	9.3	0.8	2008.522	28.2	1.044		IRC	1Q-ly			
16239+2814	COU486	11.0	0.2	2008.421	224.6	0.577		BG39				
16240+4822	HEN1	10.3	—	2008.478	288.0	0.958	2.1	IRC	ly (ni)			
16240+4822	HEN1	10.3	—	2008.478	288.4	0.951		IRC	4Q-ly			
16248+3925	HU1276	9.1	2.5	2008.473	269.7	0.416		BG39	3Q-ly			
16248+3925	HU1276	9.1	2.5	2008.522	269.6	0.425		IRC	3Q-ly			
16254+3416	COU983	10.0	1.8	2008.522	5.4	1.776		IRC				
16254+3416	COU983	11.2	1.8	2008.497	187.4	1.732		IRC				
16256+2054	COU198	11.0	0.6	2008.470	163.2	1.102		BG39	2Q-ly			
16265+5037	COU2112	10.9	0.2	2008.423	59.2:	0.347:	1.3	BG39	1Q-ly			
16265+5037	COU2112	10.9	0.2	2008.423	71.2:	0.594:	1.1	BG39	ly (ni)			
16265+5037	COU2112	10.9	0.2	2008.475	72.7	0.572	0.2	IRC	ly (ni)			
16268+1203	A1859	9.1	-0.0	2008.467	219.1:	0.230:		BG39				
16272+3521	COU984	10.9	0.2	2008.473	351.7	0.635	0.8	BG39	ly (ni)			
16272+3521	COU984	10.9	0.2	2008.473	352.7	0.614		BG39				
16272+3953	BU814	9.4	0.3	2008.522	—	—		IRC	S			
16272+3953	BU814	9.4	0.3	2008.473	3.5	0.302		BG39	1Q-ly			
16273+2653	A226	9.4	2.5	2008.470	94.3	1.015		BG39	2Q-ly			
16284+3108	COU488Aa	10.0	1.0	2008.421	59.2	0.415		BG39				
16284+3108	COU488Aa	10.0	1.0	2008.421	70.4:	0.416	1.9	BG39	ly (ni)			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
16289+1825	STF2052AB	7.7	0.2	2008.421	121.0	2.223	0.6	BG39	ly (ni)	+0.0	+0.048	Sod1999
16289+1825	STF2052AB	7.7	0.2	2008.421	121.2	2.222		BG39		+0.2	+0.047	Sod1999
16289+1825	STF2052AB	7.7	0.2	2008.470	120.9	2.209	0.3	BG39	ly (ni)	-0.1	+0.033	Sod1999
16289+1825	STF2052AB	7.7	0.2	2008.470	120.9	2.210		BG39		-0.1	+0.034	Sod1999
16296+1635	A2084	10.2	0.0	2008.421	136.0	0.467		BG39				
16301+3353	HU1173	8.9	0.5	2008.473	55.5	0.246		BG39		-7.2	-0.008	Hei1997
16301+3353	HU1173	8.9	0.5	2008.473	60.0	0.242	0.4	BG39	ly (ni)	-1.7	-0.012	Hei1997
16301+3353	HU1173	8.9	0.5	2008.527	54.6	0.256		IRC		-7.1	+0.002	Hei1997
16301+3353	HU1173	8.9	0.5	2008.527	57.6	0.296:	0.2	IRC	ly (ni)	-4.1	0.042	Hei1997
16304+4044	HDS2331	8.0	4.0	2008.475	—	—		IRC	S			
16306+4333	A1861	7.8	3.7	2008.478	173.5	1.333		IRC	2Q-ly			
16309+3804	STF2059	8.8	0.0	2008.497	184.1	0.383		IRC				
16309+3804	STF2059	8.8	0.0	2008.497	185.6	0.383	0.4	IRC	ly (ni)			
16309+3804	STF2059	8.8	0.0	2008.527	4.1	0.384		IRC				
16318+1126	A2783AB	8.5	4.0	2008.470	303.6	1.527		BG39	4Q-ly			
16326+2314	BU817	9.3	0.2	2008.443	327.6	0.954	0.5	BG39	ly (ni)			
16326+2314	BU817	9.3	0.2	2008.443	328.5	0.963		BG39				
16326+2314	BU817	9.3	0.2	2008.467	327.6	0.961		BG39	4Q-ly			
16348+1124	HDS2345	10.4	1.5	2008.443	234.2	0.423		BG39				
16367+4230	COU1451	11.0	0.4	2008.475	0.1	1.117		IRC				
16367+4230	COU1451	11.0	0.4	2008.475	0.1	1.124	0.6	IRC	ly (ni)			
16371+1732	COU311	10.3	-0.0	2008.391	94.1: 0.267:					-15.8	-0.109	Cou1999b
16371+1732	COU311	10.3	-0.0	2008.443	—	—		BG39	S (ni)			
16371+1732	COU311	10.3	-0.0	2008.470	104.2	0.237	0.5	BG39	2Q-ly	-5.7	-0.139	Cou1999b
16376+4510	A1643	10.4	0.3	2008.475	151.3	0.769		IRC				
16376+4510	A1643	10.4	0.3	2008.475	151.5	0.748	0.4	IRC	ly (ni)			
16380+4831	COU1768	10.0	0.6	2008.475	301.7	0.606		IRC	4Q-ly			
16384+3514	COU985	9.4	0.3	2008.391	70.1	0.322				-8.3	+0.116	Doc2000b
16384+3514	COU985	9.4	0.3	2008.473	248.9	0.314		BG39	3Q-ly	-9.9 <sup>Q</sup>	+0.109	Doc2000b
16384+3514	COU985	9.4	0.3	2008.527	238.6	0.314		IRC	3Q-ly	-20.4 <sup>Q</sup>	+0.109	Doc2000b
16386+3820	STF2080AB	9.2	3.8	2008.497	244.8	0.654		IRC				
16386+3820	STF2080AB	9.2	3.8	2008.497	249.0	0.688	2.5	IRC	ly (ni)			
16413+1816	COU2512	10.2	-0.0	2008.443	3.0	0.344		BG39				
16413+3006	A349	10.7	0.2	2008.391	—	—			S (ni)			
16413+3006	A349	10.7	0.2	2008.421	135.6	0.698	1.0	BG39	ly (ni)			
16413+3006	A349	10.7	0.2	2008.421	137.9	0.663		BG39		+2.9	+0.105	Hei1996c
16421+2151	HU487	9.9	-0.0	2008.443	269.2	0.240		BG39				
16422+4112	STF2091	8.4	0.9	2008.478	323.5	0.426	0.4	IRC	ly (ni)			
16422+4112	STF2091	8.4	0.9	2008.478	324.9	0.422		IRC				
16428+3831	COU1283	10.6	0.3	2008.527	59.1	0.790		IRC	1Q-ly			
16438+5133	HU664	8.3	0.8	2008.478	300.8	0.502	0.6	IRC	ly (ni)			
16438+5133	HU664	8.3	0.8	2008.478	302.0	0.498		IRC				
16439+4329	D15	9.0	0.2	2008.478	34.9	0.338		IRC		+0.7	+0.023	Alz2007
16439+4329	D15	9.0	0.2	2008.478	36.3	0.357	0.2	IRC	ly (ni)	+2.1	+0.042	Alz2007
16446+1009	HEI545	10.8	0.3	2008.500	235.9	0.836		IRC	3Q-ly			
16447+3148	COU804	10.5	-0.0	2008.473	—	—		BG39	S			
16450+2928	COU490	8.8	-0.0	2008.421	125.5: 0.118:			BG39		+10.0	-0.007	Doc2008c
16450+3842	COU1284	9.5	-0.0	2008.421	175.5: 0.149:			BG39		+21.4	+0.026	Cou1999b
16453+2435	HDS2376	8.5	3.4	2008.443	—	—		BG39	S			
16455+4446	A1864	10.0	0.2	2008.423	125.7	0.289	0.3	BG39	2Q-ly			
16455+4446	A1864	10.0	0.2	2008.423	128.2	0.296		BG39				
16460+4948	COU1770	11.0	1.5	2008.478	201.1	2.188		IRC	3Q-ly			
16474+2300	HU666	9.1	3.8	2008.522	225.6	0.507		IRC	3Q-ly			
16476+4255	COU1452	10.9	0.2	2008.475	107.4	0.290		IRC				
16476+4255	COU1452	10.9	0.2	2008.475	108.2	0.278	0.3	IRC	ly (ni)			
16476+4255	COU1452	10.9	0.2	2008.478	108.3	0.299		IRC	2Q-ly			
16476+4255	GII3	10.9	0.2	2008.475	57.3	1.947	2.8	IRC	ly (ni)			
16476+4255	GII3	10.9	0.2	2008.478	58.1	1.891		IRC	(ni)			
16486+2516	COU491	10.0	2.2	2008.443	36.6: 0.718:			BG39				
16486+2516	COU491	10.0	2.2	2008.443	39.3: 0.796:		2.6	BG39	ly (ni)			
16492+4559	A1866BC	9.5	0.1	2008.423	249.0	0.248		BG39		+1.7	+0.011	Pop1969b

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
16509+4259	A575	9.6	0.6	2008.475	147.6	0.710		IRC				
16509+4259	A575	9.6	0.6	2008.475	147.7	0.709		IRC	(ni)			
16509+4259	A575	9.6	0.6	2008.475	147.7	0.716	0.9	IRC	ly (ni)			
16518+3151	BU821	9.8	0.6	2008.497	321.6	1.246	1.8	IRC	ly (ni)			
16518+3151	BU821	9.8	0.6	2008.497	321.8	1.263		IRC				
16518+3151	BU821	9.8	0.6	2008.522	—	—		IRC	S (ni)			
16533+4122	COU1286	10.8	0.6	2008.475	316.1	0.849	0.6	IRC	ly (ni)			
16533+4122	COU1286	10.8	0.6	2008.475	316.1	0.855		IRC				
16533+4122	COU1286	10.8	0.6	2008.478	315.6	0.859		IRC	4Q-ly			
16539+2547	COU492	10.2	0.1	2008.443	91.4	0.533		BG39				
16550+3223	COU988	10.4	2.3	2008.497	83.7	1.735	2.2	IRC	ly (ni)			
16565+4108	COU1288	10.6	4.0	2008.475	0.8	1.554	2.7	IRC	ly (ni)			
16565+4108	COU1288	10.6	4.0	2008.475	2.1	1.510		IRC				
16566+1014	HU160	10.1	0.1	2008.500	205.3	0.370	0.4	IRC	ly (ni)			
16566+1014	HU160	10.1	0.1	2008.500	206.4	0.394		IRC				
16576+4935	COU1772	8.9	-0.0	2008.423	77.5	0.316		BG39				
16576+4935	COU1772	8.9	-0.0	2008.423	80.6	0.288	0.7	BG39	ly (ni)			
16578+4344	A1872	9.6	1.1	2008.478	115.5	1.079		IRC	2Q-ly			
16581+1509	STT319	8.2	0.7	2008.467	63.5	0.856		BG39	1Q-ly			
16581+5148	STF2117	9.2	1.4	2008.478	92.0	1.393		IRC	2Q			
16583+3107	COU989	9.7	0.3	2008.391	191.1	0.303						
16584+3943	COU1289	8.4	-0.0	2008.421	—	—		BG39	<0.16 1Q			
16594+1419	STT321	9.0	0.1	2008.467	13.0	0.582		BG39	1Q-ly			
17007+3951	COU1290	10.4	0.1	2008.421	28.5	0.746		BG39				
17043+4445	COU1593	10.6	0.1	2008.475	198.3	0.503		IRC	3Q-ly			
17055+1033	BU357	8.6	1.4	2008.467	306.7	1.449		BG39	4Q-ly			
17063+2631	A228	9.9	0.6	2008.467	6.9	0.466	0.7	BG39	1Q-ly			
17073+4604	COU1773	10.9	0.3	2008.475	22.5	0.898		IRC	1Q-ly			
17075+3810	COU1291	9.3	0.3	2008.391	123.6	0.230				-28.9	+0.205	Doc2003e
17075+3810	COU1291	9.3	0.3	2008.421	122.2	0.262	1.2	BG39	ly (ni)			
17075+3810	COU1291	9.3	0.3	2008.421	123.4	0.285		BG39	2Q-ly	-29.4	+0.210	Doc2003e
17075+5126	COU1921	10.3	0.3	2008.475	284.9	0.529		IRC	4Q-ly			
17076+4108	COU1292	10.0	2.0	2008.475	164.0	0.519		IRC	2Q-ly			
17105+4645	A1645	10.1	-0.0	2008.478	36.9	0.250		IRC				
17105+4645	A1645	10.1	-0.0	2008.478	38.9	0.228	0.2	IRC	ly (ni)			
17109+4044	COU1293	9.7	0.3	2008.478	8.2	0.173	0.1	IRC	ly (ni)			
17109+4044	COU1293	9.7	0.3	2008.478	14.5	0.230		IRC				
17109+4044	COU1293	9.7	0.3	2008.546	9.8	0.197		IRC				
17115+4914	COU1775	9.1	0.6	2008.478	—	—		IRC	S			
17129+2309	COU314	10.6	0.7	2008.527	357.8	1.866	1.2	IRC	ly (ni)			
17129+2309	COU314	10.6	0.7	2008.527	358.2	1.841		IRC				
17134+4944	COU1776	9.6	0.5	2008.478	275.7	0.445	0.7	IRC	ly (ni)			
17134+4944	COU1776	9.6	0.5	2008.478	275.7	0.447		IRC				
17135+2918	COU494	10.0	1.3	2008.467	354.5	1.612	2.7	BG39	ly (ni)			
17135+2918	COU494	10.0	1.3	2008.522	352.1	1.603		IRC	4Q-ly			
17136+1716	A2087	10.5	0.3	2008.391	129.3	0.397				-1.8	-0.010	Mnt2001a
17136+1716	A2087	10.5	0.3	2008.470	129.0	0.409		BG39		-2.1	+0.002	Mnt2001a
17140+2119	COU111	10.7	0.1	2008.527	245.0	0.590		IRC	3Q-ly			
17150+1238	HDS2439	9.3	3.4	2008.500	—	—		IRC	S			
17155+2007	HU489	10.4	0.4	2008.527	33.4	1.003		IRC				
17161+2316	COU315	9.1	-0.0	2008.391	—	—			NR 2Q-ly			
17163+3458	COU1141	10.7	-0.0	2008.391	—	—			NR (ni)			
17163+3458	COU1141	10.7	-0.0	2008.497	135.3	0.532		IRC				
17163+3458	COU1141	10.7	-0.0	2008.546	—	—		IRC	NR			
17174+1939	COU496AB	11.0	1.5	2008.470	172.4	0.816		BG39				
17175+3205	BU629	9.0	1.0	2008.508	337.5	1.183		IRC	4Q-ly			
17177+3537	COU993Aa	8.9	2.4	2008.497	108.3	1.039	1.9	IRC	ly (ni)			
17177+3537	COU993Aa	8.9	2.4	2008.497	108.4	1.061		IRC				
17177+3537	COU993Aa	8.9	2.4	2008.508	107.0	1.073		IRC	2Q-ly			
17182+4952	HU669	10.1	0.1	2008.478	261.6	0.891		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
17184+3240	BU628	9.5	0.1	2008.473	266.4	0.536		BG39	3Q	-1.2	+0.004	Fmr2009c
17192+3221	BU630	9.6	2.0	2008.508	220.5	1.476		IRC	3Q-ly			
17194+2802	COU625	7.2	2.3	2008.467	59.7:	0.274:		BG39				
17194+2802	COU625	7.2	2.3	2008.522	59.3	0.271		IRC	1Q-ly			
17197+3703	COU994	9.0	1.8	2008.391	215.2	0.464						
17212+2542	A232	9.4	0.3	2008.467	124.3	0.395		BG39				
17212+2542	A232	9.4	0.3	2008.522	—	—		IRC	S (ni)			
17221+2310	COU415	8.8	1.1	2008.391	267.3	0.236				+9.0	-0.114	Doc2003e
17221+2310	COU415	8.8	1.1	2008.467	—	—		BG39	S			
17222+2605	HO414AB	9.4	0.3	2008.522	101.2	0.792		IRC				
17224+2056	COU201AB	9.2	0.9	2008.467	260.2	0.532		BG39	3Q-ly			
17224+2056	COU201AB	9.2	0.9	2008.522	254.3	0.521		IRC	3Q-ly			
17228+2428	COU112	10.0	1.8	2008.527	20.5	1.452		IRC	1Q-ly			
17248+3044	BU1250	10.8	0.3	2008.391	115.6	1.969				-0.8	+0.080	Mnt2004b
17249+4701	A2089	9.9	0.2	2008.478	330.5	0.720	0.4	IRC	ly (ni)			
17251+3444	HU922	10.2	0.8	2008.473	52.4	0.247		BG39	1Q-ly	+44.4	-0.061	Hei1982c
17251+3444	HU922	10.2	0.8	2008.473	56.5	0.215	1.2	BG39	ly:(ni)	+48.5	-0.093	Hei1982c
17251+3444	HU922	10.2	0.8	2008.497	51.9:	0.252:		IRC		+43.9	-0.056	Hei1982c
17251+3444	HU922	10.2	0.8	2008.527	45.1	0.230		IRC	1Q-ly	+37.1	-0.078	Hei1982c
17256+4145	COU1296	8.7	2.3	2008.546	355.0	0.435		IRC	4Q-ly			
17268+2625	COU1455	9.3	-0.0	2008.391	359.5	0.289						
17276+2618	COU497	9.5	1.5	2008.522	73.9	1.060		IRC	1Q-ly			
17276+2618	COU497	9.5	1.5	2008.527	73.4	1.057		IRC	1Q-ly			
17276+2624	COU498	10.4	0.0	2008.467	42.7	0.469		BG39				
17276+2624	COU498	10.4	0.0	2008.527	39.0	0.457		IRC	1Q-ly			
17285+3657	COU1143	11.0	0.0	2008.473	240.1	0.370	0.3	BG39	ly (ni)			
17285+3657	COU1143	11.0	0.0	2008.508	235.9	0.379	0.3	IRC	ly (ni)			
17285+3657	COU1143	11.0	0.0	2008.508	237.3	0.399		IRC				
17290+3845	COU1297	10.3	0.4	2008.473	97.3	0.301		BG39				
17290+3845	COU1297	10.3	0.4	2008.497	94.0	0.280		IRC				
17290+3845	COU1297	10.3	0.4	2008.546	91.2	0.313		IRC				
17293+2924	A351AB	9.7	0.2	2008.467	124.3:	0.395:		BG39	(ni)	+123.7	+0.266	Sod1999
17293+2924	A351AB	9.7	0.2	2008.470	—	—		BG39	S			
17293+3758	HO417	9.3	0.1	2008.473	308.3	0.335		BG39				
17293+3758	HO417	9.3	0.1	2008.522	306.4	0.322		IRC				
17293+3758	HO417	9.3	0.1	2008.522	307.2	0.329	0.1	IRC	ly (ni)			
17313+1901	COU499	8.7	-0.0	2008.470	—	—		BG39	S			
17324+2848	A352	8.6	0.8	2008.467	—	—		BG39	S			
17324+2848	A352	8.6	0.8	2008.527	—	—		IRC	S			
17326+3445	HU1181	8.6	0.5	2008.497	—	—		IRC	S			
17326+3445	HU1181	8.6	0.5	2008.563	—	—		IRC	S			
17339+1446	A1877	10.6	0.1	2008.500	55.2	0.578		IRC	1Q-ly			
17340+4429	COU1594	10.6	0.0	2008.478	328.0	0.537		IRC	4Q-ly			
17340+4429	COU1594	10.6	0.0	2008.546	327.4	0.363		IRC				
17345+3935	COU1298	10.3	0.2	2008.391	252.3	0.293						
17359+3205	COU807	10.6	0.0	2008.497	140.6	0.653		IRC				
17359+3205	COU807	10.6	0.0	2008.473	140.7	0.675	2.3	BG39	ly (ni)			
17359+3205	COU807	10.6	0.0	2008.473	141.1	0.646		BG39				
17359+3205	COU807	10.6	0.0	2008.546	142.7	0.655		IRC				
17365+4142	ES636	10.5	0.9	2008.563	124.3	1.975		IRC				
17372+2754	KUI83AB	9.8	0.6	2008.391	328.6	0.208:				-1.2	-0.023	Msn1999a
17372+2754	KUI83AB	9.8	0.6	2008.467	332.0	0.258		BG39	4Q	+0.6	+0.028	Msn1999a
17372+2754	KUI83AB	9.8	0.6	2008.546	332.0	0.220		IRC		+5.5	-0.010	Msn1999a
17374+1233	BU1121	9.2	0.2	2008.470	198.8	0.480		BG39	3Q-ly			
17383+4242	A694	9.8	1.5	2008.563	101.0	1.231		IRC	2Q-ly			
17398+4619	COU1780	9.0	1.0	2008.478	—	—		IRC	S			
17403+5047	COU2114	10.9	0.2	2008.478	184.4	0.364		IRC				
17403+5047	COU2114	10.9	0.2	2008.478	185.3	0.374	0.1	IRC	ly (ni)			
17411+1628	A2091	8.7	1.5	2008.500	268.7	0.832		IRC				
17418+2130	COU114	7.2	0.9	2008.470	228.7:	0.170:		BG39		-21.3	+0.047	Cou1999b



**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
17435+3453	COU997	9.3	1.0	2008.391	—	—			S			
17436+2237	HU1285	8.9	0.3	2008.470	34.0	0.542		BG39		-0.6	+0.011	Sey2002
17436+2237	HU1285	8.9	0.3	2008.470	34.8	0.546	0.0	BG39	ly (ni)	+0.2	+0.015	Sey2002
17445+1900	STF2206	8.8	1.0	2008.500	247.8	1.034		IRC	3Q-ly			
17452+2107	COU630	10.0	-0.0	2008.391	—	—			S			
17452+2107	COU630	10.0	-0.0	2008.470	—	—		BG39	S			
17455+2949	COU632	10.0	2.0	2008.391	310.1	1.026						
17457+1650	A2092	8.6	1.8	2008.596	335.6	0.867		IRC	4Q-ly			
17465+2743	AC7BC	10.2	0.5	2008.527	235.9	1.151		IRC	3Q-ly	-2.0	+0.040	Cou1960b
17471+3235	COU634	9.8	-0.0	2008.473	84.5	0.241	0.6	BG39	ly (ni)			
17471+3235	COU634	9.8	-0.0	2008.473	86.6	0.280		BG39				
17471+3235	COU634	9.8	-0.0	2008.508	72.9:	0.287:		IRC	1Q-ly (ni)			
17471+4215	A697	9.5	0.2	2008.546	302.1	0.453		IRC				
17471+4215	A697	9.5	0.2	2008.563	122.9	0.463		IRC	2Q-ly			
17472+1502	HU1288	8.3	1.1	2008.596	337.4	0.435		IRC				
17487+3536	HU1182	10.1	0.0	2008.473	306.4	0.486	0.2	BG39	ly (ni)	-2.2	+0.000	Sey2002
17487+3536	HU1182	10.1	0.0	2008.473	306.8	0.491		BG39		-1.8	+0.005	Sey2002
17487+3536	HU1182	10.1	0.0	2008.527	306.5	0.495	0.0	IRC	4Q-ly	-2.1	+0.009	Sey2002
17487+3536	HU1182	10.1	0.0	2008.546	305.2	0.479		IRC		-3.4	-0.007	Sey2002
17505+3651	COU1146	7.3	1.6	2008.497	—	—		IRC	S			
17505+3651	COU1146	7.3	1.6	2008.522	—	—		IRC	S			
17506+3932	COU1301	8.5	3.1	2008.497	83.2	1.721	3.1	IRC	ly (ni)			
17506+3932	COU1301	8.5	3.1	2008.497	83.9	1.747		IRC				
17506+3932	COU1301	8.5	3.1	2008.563	82.6	1.744		IRC	1Q-ly			
17519+4256	COU1598	11.0	0.1	2008.546	49.8	0.464		IRC				
17523+4057	A699	9.3	0.7	2008.563	—	—		IRC	S			
17526+2536	A234AB	9.2	0.3	2008.522	—	—		IRC	S			
17529+2941	AC8	9.1	0.6	2008.470	—	—		BG39	S			
17529+2941	AC8	9.1	0.6	2008.522	—	—		IRC	NR			
17531+4212	COU1599	9.8	0.0	2008.563	127.6	0.540	1.2	IRC	ly (ni)			
17531+4212	COU1599	9.8	0.0	2008.563	128.6	0.561		IRC				
17533+2459	A235	8.4	0.9	2008.470	—	—		BG39	S			
17548+3610	COU1303	10.6	-0.0	2008.497	257.4	1.286		IRC	3Q-ly			
17566+3045	COU999	10.0	0.7	2008.527	309.6	1.426		IRC	4Q-ly			
17572+4131	COU1782	9.4	0.8	2008.546	189.9	0.351		IRC	3Q-ly			
17575+1058	BU1299AB	9.3	0.0	2008.500	91.8	0.294		IRC		-3.2	0.000	Doc2007j
17575+1058	BU1299AB	9.3	0.0	2008.500	277.2:	0.244:	0.2	IRC	ly (ni)			
17577+2815	HO424	8.4	2.3	2008.587	21.3	1.412		IRC				
17586+1353	HU1289	9.7	0.4	2008.500	71.7	0.615		IRC				
17591+3228	HU1185	9.8	0.7	2008.473	138.2	0.369	0.7	BG39	ly (ni)	-8.9	+0.100	Hei1975b
17591+3228	HU1185	9.8	0.7	2008.473	138.2	0.371		BG39		-8.9	+0.102	Hei1975b
17594+2929	COU1003Aa	9.2	-0.0	2008.470	—	—		BG39	S			
17594+2929	COU1003Aa	9.2	-0.0	2008.522	—	—		IRC	NR			
18000+2449	COU115	8.8	-0.0	2008.527	293.4:	0.270:		IRC				
18000+2449	COU115	8.8	-0.0	2008.527	296.7	0.315	1.0	IRC	ly (ni)			
18003+2154	A1374	8.9	2.0	2008.527	—	—		IRC	S			
18007+1736	COU810	9.8	0.0	2008.500	—	—		IRC	S			
18007+1736	COU810	9.8	0.0	2008.574	117.3:	0.208:		IRC				
18017+4011	STF2267	8.4	0.4	2008.546	89.5	0.555		IRC				
18030+1500	HDS2542	7.9	1.7	2008.596	—	—		IRC	S			
18032+2603	HO565AB	9.2	-0.0	2008.522	91.5	0.204		IRC	2Q			
18033+3921	STF2275	10.1	0.1	2008.473	118.3	0.255		BG39	2Q-ly	-0.7	+0.005	Pop2000a
18033+3921	STF2275	10.1	0.1	2008.546	112.2	0.268		IRC		-6.9	+0.018	Pop2000a
18035+4032	COU1785	8.7	0.2	2008.563	—	—		IRC	S			
18036+3731	COU1147	11.0	0.3	2008.473	170.4	0.781		BG39				
18036+3731	COU1147	11.0	0.3	2008.473	171.0	0.778	1.1	BG39	ly (ni)			
18036+3731	COU1147	11.0	0.3	2008.508	169.5	0.770		IRC	2Q-ly			
18039+3200	COU1004	10.6	0.3	2008.497	104.6	1.316	1.5	IRC	ly:(ni)			
18039+3200	COU1004	10.6	0.3	2008.497	107.5	1.302		IRC				
18039+3200	COU1004	10.6	0.3	2008.563	106.8	1.307		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
18039+3200	COU1004	10.6	0.3	2008.596	106.8	1.329		IRC				
18043+4206	COU1786	8.3	0.8	2008.478	—	—		IRC	S			
18043+4206	COU1786	8.3	0.8	2008.563	161.8:	0.124:		IRC		+10.4	-0.024	Hrt2009
18054+1624	A2093	9.1	0.8	2008.587	226.0	0.642		IRC	3Q-ly			
18062+3326	HO79	10.8	-0.0	2008.473	43.3	0.267		BG39	1Q-ly			
18062+3326	HO79	10.8	-0.0	2008.473	44.2	0.273	0.9	BG39	ly (ni)			
18062+3326	HO79	10.8	-0.0	2008.563	38.6	0.243		IRC				
18064+4437	COU1926	10.2	-0.0	2008.546	124.0	0.331		IRC				
18075+1940	STT524	7.9	1.0	2008.596	208.2	0.439		IRC	3Q-ly	-1.3	+0.001	Hrt2000c
18086+1838	HU314	8.8	0.4	2008.587	78.3	0.302		IRC	1Q-ly			
18086+1838	HU314	8.8	0.4	2008.596	78.5:	0.330:		IRC	1Q-ly			
18086+1838	HU314	8.8	0.4	2008.596	79.0	0.296	0.2	IRC	ly (ni)			
18090+2335	HU315	10.6	-0.0	2008.527	—	—		IRC	S			
18092+3129	COU812	10.8	0.1	2008.473	260.9	0.662	0.6	BG39	ly (ni)	-17.9	-0.010	Cou1999b
18092+3129	COU812	10.8	0.1	2008.473	262.0	0.652		BG39		-19.0	-0.000	Cou1999b
18092+3129	COU812	10.8	0.1	2008.508	256.6	0.659		IRC	3Q-ly	-22.2	-0.013	Cou1999b
18109+3321	COU1005AB	10.2	0.3	2008.473	140.5	0.238		BG39				
18109+3321	COU1005AB	10.2	0.3	2008.508	145.7:	0.213:		IRC				
18130+3318	COU1006	9.2	2.1	2008.497	135.6	0.428		IRC	2Q-ly	-35.0	+0.265	Cou1999b
18130+3318	COU1006	9.2	2.1	2008.497	138.3	0.441	2.9	IRC	ly (ni)	-32.1	+0.280	Cou1999
18130+3318	COU1006	9.2	2.1	2008.508	135.9	0.417		IRC		-34.7	+0.254	Cou1999b
18130+3318	COU1006	9.2	2.1	2008.508	315.7	0.465	2.1	IRC	ly (ni)	-34.9	+0.300	Cou1999
18132+4315	A576	9.8	0.5	2008.546	282.8	0.398	0.7	IRC	4Q-ly			
18134+1643	HEI170	10.0	0.1	2008.587	132.9	0.343		IRC				
18146+2335	HU318	10.7	0.1	2008.596	332.0	0.684		IRC				
18163+3625	HU1291	9.3	0.7	2008.563	60.2	0.237		IRC	1Q-ly	+1.9	+0.023	Sey2002
18163+3625	HU1291	9.3	0.7	2008.473	60.0	0.268		BG39	1Q-ly	+3.0	+0.041	Sey2002
18163+3625	HU1291	9.3	0.7	2008.508	58.1	0.256		IRC	1Q-ly	-0.3	+0.042	Sey2002
18170+1204	HDS2582	7.9	0.5	2008.579	143.6:	0.111:		IRC				
18172+2640	A241	10.6	0.1	2008.563	105.5	0.672		IRC				
18173+4355	A577	10.4	0.1	2008.546	300.8	0.699		IRC	4Q-ly			
18195+1526	HEI171	10.0	-0.0	2008.574	98.7	0.350		IRC				
18195+3336	COU1010	10.0	1.6	2008.563	160.7	1.156		IRC	2Q-ly			
18197+1016	HU197	8.7	1.0	2008.574	67.5	0.488		IRC	1Q	+0.7	+0.030	Hei1995
18203+2104	HDS2592	7.8	3.6	2008.587	184.1:	0.468:		IRC				
18205+2055	COU202	9.3	0.4	2008.544	288.2:	0.189:		IRC				
18205+2055	COU202	9.3	0.4	2008.574	—	—		IRC	S			
18208+2732	BU640	7.0	5.0	2008.587	140.5	0.758	3.0	IRC	ly (ni)			
18208+2732	BU640	7.0	5.0	2008.587	141.9	0.731		IRC	2Q-ly			
18211+3917	COU1459	11.0	0.5	2008.563	86.1	1.523		IRC	1Q-ly			
18212+3917	COU1460	9.5	0.4	2008.563	158.2	0.443		IRC				
18214+1810	HDS2594	10.7	1.1	2008.596	308.6:	0.329:		IRC				
18217+2356	COU418	9.9	0.3	2008.527	—	—		IRC	S			
18229+1458	HU581	8.8	0.6	2008.579	116.7	0.255		IRC		-4.0	-0.068	Ast1991
18231+4100	COU1602	10.9	-0.0	2008.546	278.0	0.237		IRC				
18232+6139	HU1292	9.6	-0.0	2008.648	135.3	0.338		IRC				
18233+2731	HO83	10.1	0.3	2008.596	110.5	0.827		IRC				
18242+2818	A244	10.5	0.0	2008.527	269.6	0.558		IRC	3Q-ly			
18243+3609	HDS2603	9.6	3.2	2008.508	350.7	0.830		IRC				
18245+1810	COU506	11.5	0.2	2008.579	87.6	1.507		IRC				
18252+5659	MLR537	9.6	0.1	2008.648	55.9	0.582		IRC	1Q-ly			
18253+2605	STF2317BC	12.5	0.2	2008.525	—	—		IRC	S			
18253+2605	STF2317BC	12.5	0.2	2008.587	315.0	1.403		IRC				
18253+4653	BU134	8.0	1.7	2008.639	123.6	1.089		IRC	2Q-ly			
18256+3945	COU1461	10.9	0.5	2008.473	242.3	0.786		BG39	3Q-ly			
18256+3945	COU1461	10.9	0.5	2008.546	241.2	0.774		IRC				
18289+1815	COU507	10.3	2.5	2008.587	149.8	0.945		IRC				
18292+1622	HEI258	10.5	-0.0	2008.574	—	—		IRC	S			
18301+5805	MLR357	10.0	0.2	2008.648	22.2:	0.639:		IRC				
18303+1907	COU508	9.5	2.7	2008.574	252.0	0.871		IRC	3Q-ly			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
18305+2519	A246	10.0	1.0	2008.525	162.1	1.469		IRC	2Q-ly			
18305+6412	MLR62	8.8	2.5	2008.648	7.9	0.993		IRC	1Q-ly			
18309+3417	COU1150Aa	9.8	0.3	2008.508	284.5:	0.235:	0.9	IRC	ly (ni)			
18312+2516	A248	11.0	0.0	2008.525	31.0	0.468		IRC	1Q-ly			
18316+2030	COU119	10.0	0.4	2008.544	228.2	0.664		IRC				
18316+2030	COU119	10.0	0.4	2008.587	225.9	0.675		IRC	3Q-ly			
18319+4119	COU1605	10.9	0.8	2008.563	127.4	0.980		IRC				
18349+2717	COU639	11.0	0.2	2008.544	269.7	0.714		IRC				
18353+2145	COU205	9.4	1.3	2008.574	—	—		IRC	NR			
18358+2522	HDS2637	9.2	0.5	2008.596	299.2:	0.170:		IRC				
18360+1144	STT357	8.1	0.8	2008.579	76.9	0.383	0.2	IRC	1Q-ly	+0.5	+0.022	Val1981d
18361+2452	A249	10.1	0.1	2008.544	96.6	1.029		IRC				
18363+2143	COU206	9.0	-0.0	2008.544	—	—		IRC	S			
18370+1016	HU247	9.9	0.1	2008.579	4.4	0.469		IRC				
18377+6342	HU933	8.8	4.5	2008.648	2.4	0.929		IRC	1Q-ly			
18379+4014	ES1655	10.8	0.8	2008.563	204.8	1.955		IRC				
18383+5353	A1378AB	8.8	0.8	2008.639	116.1	0.399		IRC	2Q-ly			
18386+1632	HO87AB	8.3	0.6	2008.579	81.2	0.409		IRC		-2.2	+0.028	Hrt2000c
18389+2222	COU207	9.0	1.4	2008.525	296.5	1.533		IRC	4Q			
18389+2324	TDT972	10.7	0.5	2008.587	44.7	0.836		IRC				
18398+2759	COU640	10.3	0.3	2008.525	88.8	0.400:		IRC				
18402+5048	COU2515	10.0	0.6	2008.639	274.6	0.347	1.0	IRC	ly (ni)			
18406+2636	COU641	10.3	0.1	2008.525	49.9	0.548		IRC				
18408+2142	HU324	9.4	0.5	2008.527	110.4	0.868		IRC	2Q-ly			
18423+3616	A1381	10.4	0.1	2008.508	96.6	0.438	1.0	IRC	ly (ni)			
18426+2209	COU208	10.9	0.1	2008.587	129.3	0.364		IRC	2Q-ly			
18440+4256	COU1791	10.4	-0.0	2008.546	140.9	0.397		IRC				
18443+2052	HU325	10.2	0.7	2008.587	1.8	0.373		IRC	1Q-ly			
18443+2052	HU325	10.2	0.7	2008.596	4.3	0.373		IRC				
18443+2052	HU325	10.2	0.7	2008.596	6.6:	0.330:		IRC				
18448+5201	HU755	9.7	0.2	2008.639	121.1	0.566		IRC	2Q-ly			
18453+3856	COU1608	10.4	2.1	2008.546	224.5	1.056		IRC	3Q-ly			
18454+3634	HDS2659	7.2	2.4	2008.596	15.4	0.356		IRC				
18461+5212	MLR637	10.4	-0.0	2008.639	98.1	0.767		IRC	2Q-ly			
18461+6121	MLR7	9.9	1.1	2008.648	302.5	1.081		IRC	4Q-ly			
18462+6412	HU937	8.9	1.0	2008.648	330.0	0.994		IRC	4Q-ly	-1.4	+0.012	Bdl2006b
18466+3821	HU1191	8.7	0.8	2008.508	258.0	0.235		IRC	3Q-ly	-3.9	+0.037	Doc2001b
18472+4909	COU2516	9.5	-0.0	2008.631	—	—		IRC	S			
18472+4909	COU2516	9.5	-0.0	2008.639	—	—		IRC	S			
18475+1537	HU584	10.0	0.0	2008.596	4.7	0.345		IRC				
18481+3929	COU1609	10.2	2.0	2008.525	20.0	0.796		IRC				
18486+2330	HU326	9.2	0.3	2008.527	—	—		IRC	S			
18487+3401	HU936	9.7	0.2	2008.527	277.3	1.815		IRC				
18490+3914	COU1610	10.2	0.2	2008.546	319.8	0.379		IRC				
18505+4335	COU1930	10.3	0.2	2008.546	320.0	0.483		IRC	4Q-ly			
18514+2954	TDT1087	11.3	1.0	2008.593	202.8	1.481		IRC	3Q-ly			
18517+1331	STF2409AB	8.5	1.2	2008.579	17.7	1.000		IRC	1Q-ly			
18521+1148	HU199	9.1	0.5	2008.574	164.6	0.887		IRC				
18523+3713	COU1311	10.5	0.7	2008.563	42.8	1.332		IRC	1Q-ly			
18527+5135	COU2517	10.0	0.3	2008.639	—	—		IRC	S			
18527+5842	HDS2678	9.3	3.1	2008.648	192.0:	0.155:		IRC				
18533+4545	COU1931	9.6	-0.0	2008.631	—	—		IRC	S			
18540+3723	BU137AB	8.7	0.3	2008.689	162.5	1.550		IRC	2Q-ly			
18549+4437	COU1932	10.3	0.1	2008.563	115.3	0.858		IRC	2Q-ly			
18551+4051	HEI73	10.9	0.2	2008.563	318.8	0.716		IRC				
18554+6420	MLR59	9.0	3.0	2008.648	285.6	0.802		IRC	4Q-ly			
18555+3215	COU1013	10.9	0.5	2008.563	144.4	0.643		IRC				
18567+2123	HDS2684	8.2	1.4	2008.579	348.3	0.582		IRC	4Q-ly			
18567+2718	COU1015	10.7	-0.0	2008.544	272.9	0.929		IRC				
18586+5210	MLR638	9.0	0.6	2008.639	127.6	0.283		IRC	2Q-ly			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
18587+1936	HU330	10.6	0.3	2008.587	30.6	0.705		IRC				
18589+4218	TDT1161	11.4	0.1	2008.593	179.2	1.176		IRC				
18591+1810	HU331	10.0	0.1	2008.579	22.5	0.573		IRC				
18593+5450	A1387	9.1	1.0	2008.639	350.1	0.335		IRC	4Q-ly			
19009+3232	HO92	10.6	0.3	2008.525	37.9	1.255		IRC	1Q-ly			
19019+1910	STF2437	8.4	0.4	2008.579	7.5	0.572		IRC				
19020+3210	HU1296	9.4	1.5	2008.544	—	—		IRC	S			
19024+3608	COU1613	10.3	-0.0	2008.525	319.6	0.525		IRC				
19024+3608	COU1613	10.3	-0.0	2008.544	321.6	0.537		IRC				
19029+2742	ES480AB	10.1	1.0	2008.587	272.8	2.318		IRC				
19029+2742	ES480AB	10.3	1.3	2008.593	273.2	2.095	1.2	IRC	4Q-ly			
19029+2742	WAK3AC	10.3	1.3	2008.587	355.3	1.122		IRC				
19029+2742	WAK3AC	10.3	1.3	2008.593	355.3	1.062	1.5:	IRC	4Q-ly			
19030+4233	A589	9.5	0.6	2008.669	5.6	0.686		IRC	1Q-ly			
19031+4520	COU1934	10.0	-0.0	2008.631	—	—		IRC	S			
19034+2511	A2991	10.4	0.4	2008.527	78.1	0.733		IRC	1Q-ly			
19036+3705	HDS2702	10.3	0.5	2008.669	274.0	0.197		IRC	4Q-ly			
19038+4040	COU2196	9.9	0.3	2008.669	331.0	0.493		IRC	4Q-ly			
19039+2642	A2992	10.1	0.6	2008.544	46.6	0.229		IRC		-12.9	+0.023	Doc2001e
19042+3859	COU1935	10.6	0.4	2008.689	41.2	1.129	0.9	IRC	1Q-ly			
19045+6248	MLR8	9.5	2.5	2008.648	—	—		IRC	S			
19050+5553	A1389	9.9	-0.0	2008.648	192.2:	0.150:		IRC				
19058+5918	MLR217	8.5	-0.0	2008.648	—	—		IRC	S			
19062+3026	STF2454AB	8.3	1.4	2008.527	288.2	1.320		IRC		-1.0	-0.015	Sta1982b
19066+2646	COU722	10.2	0.1	2008.527	333.9	1.029		IRC	4Q-ly			
19069+4137	COU2197	9.1	-0.0	2008.563	168.1:	0.211:		IRC		+23.2	+0.003	Cou1999b
19072+4451	A703	9.0	0.3	2008.631	186.9	0.575		IRC	3Q-ly			
19074+3230	KUI90CP	10.6	0.8	2008.544	—	—		IRC	S			
19074+3230	KUI90CP	10.6	0.8	2008.546	258.5	0.197:		IRC		-7.3	-0.019	Sgr2000
19074+4705	COU2518	10.9	0.6	2008.639	294.4	0.791		IRC	4Q-ly			
19079+2503	COU419	9.5	3.0	2008.710	29.5	2.514		IRC				
19082+1215	MCA54	8.0	1.2	2008.579	—	—		IRC	NR			
19082+3829	COU1936	10.4	-0.0	2008.546	299.7	0.521		IRC				
19083+2555	COU420	8.7	2.0	2008.587	96.5	1.224		IRC	2Q-ly			
19085+4414	COU2396	10.5	0.4	2008.563	37.3	0.841		IRC				
19089+3404	COU1462	10.2	0.1	2008.525	—	—		IRC	S			
19096+1803	J1300	9.6	1.5	2008.710	342.4	2.221		IRC				
19096+2641	TDS972	11.1	0.2	2008.593	311.0	0.710		IRC				
19100+4225	COU2279	10.6	0.2	2008.664	125.0	0.671		IRC				
19102+1606	HU1298AB	10.0	0.2	2008.574	—	—		IRC	NR			
19103+2820	COU723	10.3	0.2	2008.525	359.3	0.229		IRC	4Q-ly			
19106+5429	A1391	9.2	0.9	2008.639	14.5	0.191		IRC	1Q-ly	+2.7	-0.001	Sca2001c
19107+4136	A590	10.0	0.2	2008.631	159.9	0.477		IRC	2Q-ly			
19110+6224	HU943	9.4	0.5	2008.648	111.1	0.523		IRC	2Q-ly			
19111+3847	SE2BC	8.6	0.8	2008.669	44.4	0.219		IRC		-6.9	+0.008	Bdl2006a
19111+3847	STF2481A-BC	8.6	0.8	2008.664	21.6	4.633		IRC	(ni)			
19111+3847	STF2481A-BC	8.6	0.8	2008.664	21.6	4.633		IRC	ly			
19127+2435	A264AC	8.0	5.5	2008.587	289.0	3.574		IRC	4Q-ly			
19127+2435	MAD7AC	8.0	4.5	2008.587	288.2	3.232		IRC	4Q-ly			
19131+2154	A153	8.7	2.4	2008.574	265.8	0.706		IRC	3Q-ly			
19132+3420	COU1616	10.5	-0.0	2008.546	—	—		IRC	NR			
19132+3420	COU1616	10.5	-0.0	2008.669	—	—		IRC	S			
19132+3420	COU1616	10.5	-0.0	2008.689	135.9:	0.329:		IRC				
19134+2324	A154AB	9.6	0.7	2008.689	359.5	1.068		IRC				
19134+4443	A705BC	9.3	0.7	2008.669	38.8	0.566		IRC				
19134+4443	COU2519Aa	9.2	-0.0	2008.669	71.4	0.252		IRC				
19143+2840	A265AB	10.9	0.0	2008.689	16.6	0.941		IRC				
19147+3258	COU1463	10.9	0.3	2008.525	204.1	0.628		IRC	3Q-ly			
19149+2841	MRZ1	9.8	1.7	2008.689	324.6	1.823		IRC	4Q-ly			
19150+3539	COU1617	10.0	1.3	2008.593	145.5	0.829		IRC	2Q-ly			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
19153+2454	HDS2724	10.4	0.5	2008.574	294.5	0.184		IRC	4Q-ly			
19158+0218	HE1810Aa,Ab	10.7	0.4	2008.579	36.3	1.167		IRC				
19158+5458	A1392	8.8	0.2	2008.639	—	—		IRC	S			
19161+4407	COU2520	10.2	0.6	2008.593	51.5	0.778		IRC				
19163+4018	COU2280	9.8	-0.0	2008.631	264.5	0.270		IRC	3Q-ly			
19165+5003	COU2627	9.9	-0.0	2008.639	21.2	0.237		IRC	1Q-ly			
19172+1853	HU336	10.2	0.2	2008.579	10.7	1.499		IRC				
19176+2900	COU1021	10.5	2.0	2008.587	40.5	2.463		IRC				
19182+2231	COU322	10.4	0.1	2008.527	24.7	0.466		IRC				
19191+6416	MLR64	10.0	0.1	2008.656	43.9	0.485		IRC				
19192+2847	DOO73	9.7	0.5	2008.689	118.4:	0.812:	2.8	IRC	ly (ni)			
19194+1943	COU421BC	10.5	-0.0	2008.574	5.3	0.418		IRC	1Q-ly			
19195+5729	MLR539	9.3	-0.0	2008.648	188.8	0.271	0.2	IRC	ly (ni)			
19195+5729	MLR539	9.3	-0.0	2008.648	189.6	0.256		IRC				
19196+4035	COU2398	9.1	0.5	2008.546	—	—		IRC	S			
19208+1717	COU422	10.7	0.7	2008.587	35.5	0.970		IRC				
19211+1751	HU338	10.1	-0.0	2008.574	139.6:	0.271:		IRC				
19212+6014	A707	10.2	1.5	2008.656	148.8	0.305		IRC				
19216+5223	BU1129	7.7	0.2	2008.639	164.8	0.291		IRC		+2.0	-0.001	Baz1984a
19216+5223	BU1129	7.7	0.2	2008.639	166.9	0.293	0.0	IRC	ly (ni)	+4.1	+0.000	Baz1984a
19219+6306	MLR50	8.6	3.3	2008.765	328.6	1.979	4.3:	AF	dv (ni)			
19223+3758	COU1937	10.6	-0.0	2008.525	231.5	0.359		IRC	3Q-ly			
19223+3758	COU1937	10.6	-0.0	2008.527	239.7	0.308		IRC	3Q-ly			
19223+3758	COU1937	10.6	-0.0	2008.544	243.2	0.349		IRC				
19224+4205	A592	10.1	0.4	2008.631	242.0	0.611		IRC	3Q-ly			
19228+5637	A708	8.5	4.2	2008.648	167.0	0.991		IRC	2Q-ly			
19230+3955	HU1193	9.0	3.4	2008.593	58.9	0.810		IRC	1Q-ly			
19238+3119	A2196BC	10.8	0.4	2008.669	233.5	0.685		IRC	3Q-ly			
19238+3119	AG230A-BC	9.8	1.0	2008.669	69.3	5.460	1.6	IRC	ly (ni)			
19243+2032	HDS2752	9.0	1.7	2008.710	167.1	0.269		IRC				
19243+4038	COU2399	10.4	0.6	2008.669	152.5	0.981		IRC				
19244+2543	COU724	10.1	0.1	2008.596	175.6	0.318		IRC				
19246+3535	COU1618	8.8	2.5	2008.593	29.8	0.883		IRC	1Q-ly			
19251+4431	COU2524	10.0	-0.0	2008.563	354.6	0.161		IRC				
19253+3749	COU2122	10.8	0.1	2008.544	18.6	0.776		IRC				
19255+3515	COU1619	12.0	-0.0	2008.593	2.5	0.988		IRC				
19255+4631	A709	9.9	0.1	2008.639	63.6	0.551		IRC	1Q-ly			
19260+1533	A1647AB	8.2	3.2	2008.710	35.4	1.365		IRC				
19263+4319	COU2525	11.0	0.1	2008.669	344.8	0.539		IRC				
19266+2619	HDS2763	9.0	3.1	2008.710	26.3	0.791		IRC				
19266+2719	STF2525	8.2	0.2	2008.689	290.0	2.105		IRC	4Q-ly	-0.1	+0.006	Hei1984b
19267+4926	COU2628	10.3	0.6	2008.639	95.7	1.113		IRC	2Q-ly			
19270+1606	A1648	9.7	0.2	2008.579	359.3	0.806		IRC				
19270+2109	A2786	10.1	0.0	2008.574	108.1	0.366		IRC	2Q-ly			
19272+2508	COU1025	10.5	1.7	2008.710	330.4	1.734		IRC				
19277+3627	HU1302	10.5	0.3	2008.508	63.1	0.556		IRC				
19279+3955	COU2400	10.2	1.8	2008.508	246.6	0.766		IRC	3Q-ly			
19284+1617	A1650	9.8	0.1	2008.574	—	—		IRC	S			
19284+1829	HU340	9.8	0.5	2008.579	118.1	0.897		IRC				
19288+2305	A160	8.9	0.1	2008.579	110.2:	0.156:		IRC				
19288+4603	HDS2768	8.9	0.5	2008.631	—	—		IRC	S			
19290+1515	A1651	8.4	1.5	2008.710	79.4	0.259		IRC				
19302+5639	A712	7.5	0.5	2008.648	236.0:	0.081:		IRC		-22.0	-0.029	Bdl2006d
19303+6207	HU947	9.2	2.2	2008.648	166.1	0.386		IRC	2Q-ly			
19306+2817	COU1161Aa	9.1	0.5	2008.546	—	—		IRC	NR			
19308+4124	COU2402	9.8	-0.0	2008.546	139.5:	0.142:		IRC				
19308+6337	HU951	10.1	0.3	2008.656	17.0	0.194		IRC		-17.5	+0.039	Baz1984a
19309+3815	COU2203BC	10.3	0.3	2008.563	117.1	0.991		IRC				
19312+2201	A161	9.5	0.5	2008.579	—	—		IRC	S			
19312+4338	A595	9.9	0.9	2008.664	85.8	1.070		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
19313+4729	A713	7.5	0.4	2008.631	298.6	0.255	0.1	IRC	4Q-ly	+0.3	+0.001	Sey2002
19315+4358	A596	8.7	2.6	2008.664	307.5	1.334		IRC	4Q-ly			
19324+3539	COU1940	10.2	0.3	2008.508	218.4	0.707		IRC				
19324+3539	COU1940	10.2	0.3	2008.508	218.8	0.719	0.8	IRC	ly (ni)			
19326+5433	A1399	9.7	0.8	2008.639	75.9	1.555		IRC	1Q-ly			
19329+6601	HU1304	9.5	0.2	2008.656	98.4	0.834		IRC				
19333+2629	COU1028Aa	8.8	0.7	2008.527	53.6	0.293		IRC	1Q-ly			
19335+3305	HU949	9.8	0.1	2008.508	83.8	0.491	0.6	IRC	ly (ni)			
19335+3305	HU949	9.8	0.1	2008.508	84.1	0.468		IRC				
19335+3454	HU950	9.7	0.0	2008.544	318.8	0.384		IRC				
19335+6002	A715	10.1	0.1	2008.656	353.9	0.489		IRC	4Q-ly			
19338+4222	A597	8.3	2.5	2008.631	83.6	1.418		IRC	1Q-ly			
19345+2620	A271	10.6	0.1	2008.527	120.7	0.641		IRC	2Q-ly			
19346+1022	A1186	9.4	0.5	2008.574	81.9	0.269	0.7	IRC	ly (ni)			
19346+1808	STT375	7.7	1.2	2008.710	185.5	0.600		IRC				
19346+1808	STT375	7.7	1.2	2008.710	185.7	0.588	1.4	IRC	dv (ni)			
19351+5038	HU679	8.8	0.9	2008.639	256.4	0.383		IRC	3Q-ly	-1.1	+0.002	Ana2005
19355+2049	COU517	8.3	2.9	2008.710	228.0	0.835		IRC				
19356+4002	A1400	8.2	1.7	2008.546	117.6	0.337		IRC	2Q-ly	-14.4	+0.091	Sey2002
19357+7308	A864	9.2	0.2	2008.656	13.1	0.740		IRC				
19358+2316	A163	10.0	0.1	2008.527	15.2	0.248		IRC		+11.3	+0.069	Baz1981b
19358+2316	A163	10.0	0.1	2008.527	22.5	0.255	0.3	IRC	ly (ni)	+18.6	+0.080	Baz1981b
19360+1416	HEI272	9.8	0.2	2008.579	—	—		IRC	S			
19363+3540	STT377AB	9.4	0.1	2008.596	213.0	0.929		IRC	3Q-ly			
19365+3540	COU1942	10.5	0.7	2008.544	45.6	0.682		IRC				
19370+1927	COU211	11.0	0.4	2008.596	305.2	0.849		IRC				
19371+4108	COU2406	10.5	0.2	2008.631	2.1	0.839		IRC	1Q-ly			
19375+3413	COU1802	9.7	4.3	2008.669	353.3:	1.156:		IRC				
19376+6344	MLR56AB	8.7	-0.0	2008.648	213.0:	0.100:		IRC				
19377+3651	COU2123	10.3	-0.0	2008.546	328.4	0.446		IRC				
19388+1834	COU212	9.5	2.8	2008.596	25.7	0.850		IRC				
19389+3514	HU953	8.8	0.4	2008.544	23.3	0.250		IRC		+48.9	-0.068	Pop2000a
19389+5150	BU656	8.8	0.9	2008.639	270.2	0.902		IRC	4Q-ly			
19393+5802	MLR540	9.1	2.4	2008.648	—	—		IRC	S			
19394+2215	STF2556	7.7	1.2	2008.710	351.7	0.376		IRC		-1.3	+0.014	Ari1999
19394+2215	STF2556	7.7	1.2	2008.710	351.9	0.375	0.4	IRC	dv	-1.1	+0.013	Ari1999
19394+3736	COU2208	10.1	0.9	2008.664	127.7	1.029		IRC				
19399+4634	COU2631	9.6	-0.0	2008.631	228.5	0.237		IRC	3Q-ly			
19400+5545	A1403	9.7	0.4	2008.648	352.8	0.165	0.1	IRC	ly (ni)			
19400+5545	A1403	9.7	0.4	2008.648	355.5	0.174		IRC				
19402+2611	A272AB	9.8	0.7	2008.710	14.2	0.941		IRC				
19406+6240	STF2574	8.9	1.2	2008.648	269.4	0.514		IRC	3Q-ly			
19408+4136	COU2632	9.9	-0.0	2008.563	172.3	0.155		IRC				
19411+5811	A716	9.3	1.7	2008.648	279.0	0.449		IRC	4Q-ly			
19417+3103	A371	9.2	1.2	2008.527	18.6	1.897		IRC	1Q-ly			
19419+2723	STT382	7.3	0.2	2008.710	319.9	0.345	0.4	IRC	dv (ni)			
19419+2723	STT382	7.3	0.2	2008.710	323.1	0.309		IRC				
19421+1533	HU1305	10.1	0.1	2008.574	103.0	0.388		IRC	2Q-ly			
19423+4451	COU2690	10.5	0.4	2008.664	127.2	0.628		IRC				
19429+4043	STT383AB	7.0	1.2	2008.664	15.6	0.815		IRC	1Q-ly			
19429+5501	MLR579	9.8	-0.0	2008.648	—	—		IRC	S:			
19431+2854	A372	9.4	0.9	2008.563	—	—		IRC	S			
19432+2701	BU1132	9.4	0.6	2008.587	30.7	0.563		IRC				
19438+2238	BU657	9.8	0.7	2008.579	131.8	0.872		IRC				
19440+3702	COU2282	10.8	0.1	2008.508	238.5	0.484		IRC	3Q-ly			
19447+4909	COU2634	10.3	1.7	2008.639	43.7	1.409		IRC				
19457+4330	A600	9.5	0.5	2008.563	55.4	0.346		IRC	1Q-ly			
19458+2710	KUI95	12.7	0.9	2008.669	54.7	1.980		IRC		+1.7	-0.077	Sod1999
19458+2710	KUI95	12.7	0.9	2008.669	55.7	1.939	1.3	IRC	ly	+2.7	-0.118	Sod1999
19459+3953	A1404AB	7.6	0.7	2008.538	100.2	0.235		IRC	2Q-ly			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
19463+1648	HEI177	10.9	0.1	2008.574	208.3	0.407		IRC				
19463+1821	HU344	10.3	1.6	2008.587	162.1	0.179		IRC				
19477+4451	COU2691	10.3	0.7	2008.631	209.1	1.052		IRC	3Q-ly			
19479+2414	DA10	8.6	0.8	2008.527	306.3	0.683		IRC	4Q-ly			
19483+3710	STT386	8.5	0.1	2008.664	70.7	0.928		IRC				
19484+4113	COU2527	10.5	0.2	2008.631	107.9	0.544		IRC	2Q-ly			
19484+4117	COU2526	10.0	-0.0	2008.631	232.8	0.248		IRC	3Q-ly			
19487+3519	STT387	7.1	0.8	2008.664	125.1	0.536		IRC	2Q-ly	-0.7	-0.015	Wsi2006b
19489+3202	A375	9.8	0.0	2008.664	338.5	1.178		IRC				
19490+4423	A718BC	8.2	0.5	2008.664	26.1	0.220		IRC				
19493+7409	MLR227	9.7	0.2	2008.656	76.0	0.169	0.5	IRC	ly (ni)			
19493+7409	MLR227	9.7	0.2	2008.656	77.4	0.232		IRC				
19496+1241	A1659	10.3	-0.0	2008.574	—	—		IRC	NR			
19496+1707	HU346	9.3	0.7	2008.579	8.1	0.541		IRC				
19496+1707	HU346	9.3	0.7	2008.710	10.3	0.545		IRC				
19503+3127	COU1468	10.2	0.0	2008.710	148.4	0.769		IRC				
19506+3715	COU2285	10.3	1.3	2008.669	66.8	1.461	1.9	IRC	ly (ni)			
19507+4851	HU684	9.4	-0.0	2008.639	236.4	0.101		IRC				
19514+4044	COU2530	8.9	0.5	2008.631	—	—		IRC	S			
19517+4003	COU2531	9.4	-0.0	2008.669	—	—		IRC	S			
19529+1425	A1660AB-C	9.7	0.1	2008.579	22.2	0.659		IRC				
19530+6352	HU954	9.4	0.1	2008.648	197.2	0.161		IRC				
19530+6352	HU954	9.4	0.1	2008.648	213.6	0.148	0.3	IRC	ly (ni)			
19532+4238	COU2635	8.5	1.9	2008.664	158.2	0.550		IRC	2Q-ly			
19532+6233	MLR12	8.9	0.2	2008.648	221.7	0.689		IRC	3Q-ly			
19533+3418	COU1624	10.8	2.5	2008.508	336.5	1.032		IRC	4Q-ly			
19537+3305	COU1625	10.2	1.3	2008.710	1.5	1.595		IRC				
19539+3257	COU1626	10.0	0.4	2008.527	—	—		IRC	S			
19540+2616	COU1321	10.5	-0.0	2008.527	—	—		IRC	S			
19540+2616	COU1321	10.5	-0.0	2008.587	139.2	0.219		IRC				
19549+5049	HU687	8.5	0.1	2008.639	26.9	0.196		IRC		-5.6	+0.031	Doc1994d
19558+3604	HU1306	10.2	0.0	2008.596	29.1	0.596		IRC				
19559+2500	COU1037	9.6	-0.0	2008.587	160.9	0.101		IRC				
19568+2718	COU1165	10.0	1.7	2008.596	74.5	0.904		IRC				
19571+4939	HDS2839	8.6	2.8	2008.639	80.3	0.591		IRC	1Q-ly			
19577+5118	HU689	8.6	0.4	2008.639	—	—		IRC	S			
19583+2218	A2791	9.3	3.0	2008.574	134.0	0.450	1.6	IRC	2Q-ly			
19592+3724	COU2412	10.3	-0.0	2008.664	72.7	0.421		IRC				
19592+4233	COU2636	10.0	0.2	2008.669	23.4	0.988		IRC	1Q-ly			
19593+2237	COU519	10.6	0.1	2008.579	71.3	0.475		IRC				
19594+2636	A276	9.7	2.2	2008.596	329.5	0.993		IRC	4Q-ly			
19594+3029	COU1471	10.9	0.5	2008.710	167.8	0.448		IRC				
19597+2830	COU1166	10.5	0.1	2008.527	178.3	0.775		IRC	2Q-ly			
20005+1317	A1664	10.3	0.3	2008.579	65.5	0.593		IRC				
20012+4821	A720	10.4	0.1	2008.639	95.7	0.469		IRC				
20012+4821	A720	10.4	0.1	2008.639	96.3	0.472	0.2	IRC	ly (ni)			
20014+6217	MLR13	9.0	0.9	2008.648	51.3	0.250		IRC				
20025+5437	MLR580	8.2	4.3	2008.639	159.0	0.563		IRC	2Q-ly			
20026+2006	HU353	10.3	0.1	2008.538	0.9	0.544	1.0	IRC	ly (ni)			
20035+3837	COU2533	10.9	0.5	2008.669	101.8	0.983		IRC	2Q-ly			
20037+3209	COU1628	10.1	1.1	2008.538	342.6	1.103		IRC	4Q-ly			
20041+3957	COU2534	10.0	-0.0	2008.664	2.6	0.212		IRC				
20043+3033	STF2626	8.8	0.2	2008.710	128.1	0.985	0.6	IRC	dv (ni)			
20051+3814	COU2213	9.7	0.7	2008.669	151.9	1.370		IRC	2Q-ly			
20052+4044	A381	9.8	0.2	2008.631	277.4	0.774	1.5	IRC	4Q-ly			
20053+3307	COU1806	10.6	0.0	2008.710	107.8	1.161		IRC	2Q-dv			
20056+3746	A1414	10.1	0.6	2008.546	34.3	0.273		IRC	1Q-ly			
20073+4811	HDS2867	8.1	1.1	2008.631	119.9	0.353		IRC	2Q-ly			
20078+2646	A279	9.0	5.2	2008.587	31.2	1.481		IRC	1Q-ly			
20079+1621	HEI76	10.1	-0.0	2008.574	—	—		IRC	S			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
20080+4204	A383	10.4	0.1	2008.546	7.3	0.353		IRC				
20082+6109	MLR502	9.1	-0.0	2008.648	—	—		IRC	S			
20087+5320	A1417	8.2	2.8	2008.639	170.4	0.634		IRC	2Q-ly			
20096+4009	COU2414	9.5	-0.0	2008.546	155.2	0.295		IRC				
20096+4009	COU2414	9.5	-0.0	2008.546	159.0	0.309	0.5	IRC	ly (ni)			
20098+3629	COU2413	10.2	0.2	2008.689	92.4	0.847		IRC				
20104+2439	A384	9.9	0.9	2008.710	357.0	1.319		IRC				
20107+4208	COU2637	10.0	3.0	2008.631	118.1	0.553		IRC	2Q-ly			
20110+2834	COU1323	10.4	0.0	2008.689	154.2	0.817		IRC				
20110+2834	COU1323	10.4	0.0	2008.710	153.3	0.808		IRC				
20110+2834	COU1323	10.4	0.0	2008.710	153.5	0.786:	0.1:	IRC	dv (ni)			
20114+2217	COU217AB	10.4	1.0	2008.538	168.9:	1.590		IRC	AC = S			
20124+5354	HDS2880	8.6	0.9	2008.639	—	—		IRC	S ly (ni)			
20130+4433	A723	8.4	2.0	2008.631	—	—		IRC	S			
20133+4214	COU2638	9.8	2.7	2008.669	48.0	1.804		IRC	1Q-ly			
20141+3706	A1419	9.8	2.0	2008.527	30.1	0.460		IRC	1Q-ly			
20143+3657	A1420	9.9	0.2	2008.527	67.7	0.570	0.1	IRC	ly (ni)			
20143+3657	A1420	9.9	0.2	2008.527	68.2	0.564		IRC				
20143+4115	COU2639	11.0	0.1	2008.546	64.0	0.445		IRC				
20144+3129	A1204	9.5	0.0	2008.527	319.5	0.359		IRC				
20144+3129	A1204	9.5	0.0	2008.710	323.1	0.369	0.1	IRC	4Q-dv			
20144+3501	COU2216	10.7	0.2	2008.664	206.6	0.539		IRC	3Q-ly			
20151+4249	A388	10.4	0.2	2008.631	33.9	0.684		IRC				
20153+3316	COU1808	10.1	0.8	2008.689	207.8	1.115		IRC	3Q-ly			
20153+3316	COU1808	10.1	0.8	2008.710	208.3	1.110		IRC				
20153+3316	COU1808	10.1	0.8	2008.710	208.4	1.080:	0.6	IRC	dv (ni)			
20154+6412	MLR60AB	8.7	-0.0	2008.648	173.2	0.249		IRC		-79.1	+0.172	Sey2002
20157+4339	A2095AB	8.9	-0.0	2008.664	335.9	0.267		IRC	4Q-ly	+8.7	+0.023	Lin2004a
20157+4339	A2095AB	8.9	-0.0	2008.664	334.1	0.269	0.5	IRC	ly (ni)	+6.9	+0.025	Lin2004a
20157+4339	STF2659AB-C	8.9	-0.0	2008.664	314.1	3.014	1.8	IRC	ly (ni)			
20167+3629	COU2417	10.1	0.8	2008.538	348.9	0.799		IRC	4Q-ly			
20169+3235	A284	9.9	0.2	2008.689	72.3	0.448		IRC				
20169+3235	A284	9.9	0.2	2008.710	65.5	0.431		IRC				
20177+3914	COU2536	9.7	1.8	2008.593	312.2	1.771		IRC	4Q-ly			
20182+2912	A1205	9.2	0.9	2008.538	94.8	1.130		IRC	2Q-ly	-2.9	-0.014	Wsi2006b
20184+3950	A1424	9.3	3.3	2008.669	45.8	1.086		IRC	1Q-ly			
20188+4244	HO124	9.1	0.9	2008.664	356.4	0.934		IRC	4Q-ly			
20189+3945	COU2537	10.1	0.2	2008.546	293.7	0.779		IRC	4Q-ly			
20191+2915	COU1477	10.8	0.0	2008.587	97.6	0.593		IRC				
20191+2915	COU1477	10.8	0.0	2008.710	96.0	0.611		IRC				
20196+2956	A1207	10.6	0.1	2008.710	351.9	0.601	0.4	IRC	dv (ni)			
20200+3616	BU431	9.0	0.3	2008.538	205.8	0.521		IRC	3Q-ly			
20207+3512	COU2218	10.0	-0.0	2008.664	81.8	0.181		IRC	1Q-ly			
20210+4437	A725	9.5	0.8	2008.631	18.0	0.680		IRC	1Q-ly	-1.9	+0.018	Hrt2009
20217+7345	A870	10.1	1.2	2008.656	189.5:	0.110:	1.7:	IRC	3Q-ly			
20217+7345	A870	10.1	1.2	2008.656	195.5:	0.106:	0.3	IRC	ly (ni)			
20225+4613	A726	9.2	0.5	2008.639	278.0	0.526		IRC	4Q-ly			
20231+3342	COU1949	10.0	-0.0	2008.669	80.8	0.198		IRC	1Q-ly			
20231+3342	COU1949	10.0	-0.0	2008.669	83.2	0.175	0.1	IRC	ly (ni)			
20232+5946	MLR432	9.3	0.5	2008.648	9.5	0.190		IRC				
20233+4807	A727	10.3	0.3	2008.639	59.5	0.892		IRC	1Q-ly			
20239+5232	A1428	8.7	0.7	2008.639	25.3	0.331		IRC				
20243+1909	HU361	8.9	3.8	2008.587	17.6	0.630		IRC				
20244+1213	WOR33Aa	8.6	0.7	2008.579	—	—		IRC	S			
20246+5527	MLR588	7.9	0.4	2008.648	235.4	0.270		IRC	3Q-ly			
20248+2511	COU521	7.5	3.1	2008.689	102.5	0.518		IRC				
20251+6118	MLR503	8.5	0.7	2008.648	183.2	0.197		IRC				
20252+6001	MLR433	7.6	2.1	2008.648	159.9	0.247	0.3	IRC	ly (ni)			
20252+6001	MLR433	7.6	2.1	2008.648	160.1	0.260		IRC				
20253+4355	A291AB	9.9	0.6	2008.664	327.4	0.777		IRC				



**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
20254+4014	MLR1	9.5	0.6	2008.631	208.7	0.389		IRC	3Q-ly			
20254+4014	MLR1	9.5	0.6	2008.631	210.4	0.380		IRC	3Q-ly			
20254+4129	COU2642	10.4	0.1	2008.631	317.9	0.715		IRC	4Q-ly			
20257+5508	A1429	8.6	0.8	2008.779	187.0	0.640		AF	3Q-dv			
20265+3331	COU1954	10.6	0.3	2008.669	—	—		IRC	S			
20274+7245	A871	9.4	0.2	2008.656	184.0	0.325		IRC		-34.3	+0.129	Hei1998
20278+3447	COU2131	10.2	0.0	2008.538	279.8	1.052		IRC	4Q-ly			
20281+3353	COU1956	7.1	2.4	2008.669	239.1	0.402		IRC	3Q-ly			
20282+7333	MLR233	10.7	0.6	2008.656	85.9	1.144		IRC	1Q-ly			
20284+2728	COU725	10.5	0.2	2008.587	59.3	0.506		IRC				
20284+6015	A733	8.8	1.0	2008.779	169.3	1.056		AF				
20284+6015	A733	8.8	1.0	2008.779	169.5	1.044	1.2	AF	dv (ni)			
20288+3628	COU1958	10.3	0.2	2008.538	105.4	0.515		IRC	2Q-ly			
20290+3535	COU1959	9.7	-0.0	2008.546	319.6	0.348		IRC	4Q-ly			
20296+6648	MLR67	10.6	0.1	2008.656	68.7	0.575		IRC				
20302+2651	WOR9AB	10.5	0.1	2008.587	257.8	0.515	0.2	IRC	3Q-ly	+0.2	+0.023	Zir2003
20306+3525	COU1961	10.8	0.1	2008.596	25.8:	0.393:		IRC				
20306+3525	COU1961	10.8	0.1	2008.596	28.5:	0.455:		IRC				
20308+6107	HU761	9.4	0.2	2008.648	307.8	0.509	1.7	IRC	ly (ni)			
20308+6107	HU761	9.4	0.2	2008.648	308.1	0.533		IRC	4Q-ly			
20311+3333	COU1962	9.0	0.5	2008.546	97.4	0.203:		IRC		+1.5	+0.050	Doc2006h
20312+5714	A872	9.9	0.4	2008.648	181.6	0.227		IRC	3Q-ly			
20317+6228	BU671	8.0	1.2	2008.648	315.8	0.435		IRC	4Q-ly			
20322+4648	A736	9.7	0.8	2008.631	349.0	0.610		IRC	4Q-ly			
20328+4418	COU2645	10.2	-0.0	2008.631	300.1	0.177		IRC	4Q-ly			
20329+1357	BU670AB	9.4	0.4	2008.579	6.1	0.808		IRC	1Q-ly			
20331+6109	MLR504	8.9	4.0	2008.648	18.4	0.913		IRC				
20338+4540	A740	9.6	0.3	2008.639	311.1	0.811		IRC	4Q-ly			
20348+1726	COU223	10.2	0.1	2008.579	154.8	0.371:		IRC				
20353+7030	A873	9.6	0.5	2008.656	68.2	0.279		IRC				
20356+5808	A741AB	8.6	3.3	2008.779	156.7	1.238		AF	2Q-dv			
20367+5053	HEI879Aa	8.4	0.8	2008.631	140.4:	0.111:		IRC				
20367+5053	HEI879Aa	8.4	0.8	2008.639	136.7:	0.134:	0.0	IRC	ly (ni)			
20369+6034	MLR505	10.2	0.3	2008.656	143.4	0.566		IRC	2Q-ly			
20373+2703	TDS1086	10.8	0.4	2008.593	133.2	1.512		IRC				
20378+2943	A742BC	10.4	0.5	2008.689	131.6	1.182		IRC	2Q-ly			
20379+4757	HDS2944Ca	8.8	3.6	2008.639	28.5	0.411:		IRC	1Q-ly			
20379+4757	HDS2944Ca	8.8	3.6	2008.639	29.4	0.3743.3		IRC	ly (ni)			
20385+2945	COU1172	11.0	0.1	2008.710	96.1	0.480		IRC				
20394+4318	COU2539	10.5	0.5	2008.631	64.9	0.290		IRC	1Q-ly			
20397+4734	A747AB	8.7	0.3	2008.639	102.4	0.314		IRC	2Q-ly			
20405+4343	COU2540	10.0	0.8	2008.563	—	—		IRC	S			
20405+4343	COU2540	10.0	0.8	2008.669	117.1	0.388		IRC	2Q-ly			
20406+2948	HO137	6.1	3.1	2008.689	352.2	0.750		IRC	4Q-ly			
20406+2948	HO137	6.1	3.1	2008.710	352.1	0.715	2.4	IRC	dv (ni)			
20413+4051	COU2419	10.6	0.8	2008.563	66.6	1.008		IRC	1Q-ly			
20416+3950	COU2290	10.9	0.1	2008.538	—	—		IRC	S			
20416+4424	COU2541	9.7	0.7	2008.669	25.4	0.438		IRC	1Q-ly			
20419+1419	HU1199	8.3	2.5	2008.579	69.1	0.670		IRC				
20419+1931	COU226AB	8.0	0.3	2008.587	34.1	0.353		IRC				
20419+1931	COU226AC	8.0	0.3	2008.587	335.6	9.129	2.7	IRC	ly (ni)			
20420+4015	A1433	9.8	0.5	2008.669	22.7	0.790		IRC	1Q-ly			
20423+5723	BU152	7.2	1.6	2008.779	82.9	1.153		AF	1Q-dv			
20427+5238	A1683	8.5	0.7	2008.639	208.6:	0.129:	0.2	IRC	ly (ni)			
20432+4026	COU2421	9.9	0.7	2008.669	106.5	0.340		IRC	2Q-ly			
20437+3727	COU2291	10.5	0.7	2008.596	224.1	0.927		IRC	3Q-ly			
20437+3727	COU2291	10.5	0.7	2008.689	226.6	0.977		IRC				
20442+3404	TDT2507	11.6	0.0	2008.546	—	—		IRC	S			
20444+2558	COU726	10.9	0.3	2008.710	90.0	1.205		IRC				
20444+4103	COU2423	9.9	0.2	2008.546	179.9	0.254		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
20444+5253	MLR643	9.5	0.4	2008.639	126.9	0.327		IRC	2Q-ly			
20450+1244	BU64AB	9.1	0.6	2008.579	349.8	0.662		IRC		-3.2	+0.006	Bld2007a
20454+7000	MLR93	9.8	-0.0	2008.656	209.6:	0.084:		IRC	ly (ni)			
20466+5951	MLR236	8.6	3.0	2008.779	38.0	1.526		AF	1Q-dv			
20471+2525	BU364	9.1	0.1	2008.710	250.3	0.766	0.1	IRC	dv (ni)			
20472+4427	COU2424	10.6	0.1	2008.563	254.6	0.486		IRC	3Q-ly			
20473+4345	COU2425	10.0	-0.0	2008.563	231.4	0.260		IRC				
20480+3917	A1434AB	7.8	-0.0	2008.596	—	—		IRC	S			
20483+5815	MLR360	9.0	0.6	2008.648	—	—		IRC	S			
20485+1854	HO459	10.5	0.4	2008.587	22.6	0.435		IRC				
20485+7429	MLR238	8.9	-0.0	2008.656	—	—		IRC	S			
20492+4525	COU2646Aa	10.5	0.4	2008.639	263.0	0.372		IRC	3Q-ly			
20501+1707	HEI183	10.6	0.0	2008.579	25.1	0.551		IRC				
20503+5937	MLR239	10.9	0.4	2008.779	285.1	0.848		AF	4Q-dv			
20503+5937	MLR239	10.9	0.4	2008.820	290.3	0.899	2.4	AF	4Q-ly			
20503+5937	MLR239	10.9	0.4	2008.820	291.4	0.890		AF				
20509+5918	MLR240	9.3	0.2	2008.648	22.3	0.244		IRC				
20510+4125	COU2427	10.1	0.1	2008.669	310.6	0.448		IRC	4Q-ly			
20526+3655	A1435	9.5	0.4	2008.546	359.7	0.400		IRC	4Q-ly			
20527+4607	A750	9.1	1.2	2008.631	222.5	0.256		IRC	3Q-ly	-11.1	+0.006	Hei1986b
20527+4607	A750	9.1	1.2	2008.639	218.8	0.244		IRC	3Q-ly	-14.8	-0.006	Hei1986b
20535+2630	COU1177	10.3	0.1	2008.587	9.8	0.243		IRC				
20537+5918	A751	7.7	0.3	2008.648	50.2	0.169		IRC		-16.5	-0.010	Hrt1989
20544+6957	A1216CD	10.4	1.0	2008.656	80.5	0.886		IRC				
20547+2516	COU830	10.5	0.5	2008.689	349.2	1.002		IRC				
20547+2516	COU830	10.5	0.5	2008.710	350.4	1.121		IRC				
20551+2808	COU831	10.3	1.6	2008.710	291.1	1.355		IRC	4Q-dv			
20553+5651	A752	9.4	1.0	2008.779	9.3	1.195	1.0	AF	dv (ni)			
20553+5651	A752	9.4	1.0	2008.779	9.8	1.193		AF				
20559+5906	A754	9.3	0.7	2008.648	2.4	0.929		IRC	1Q-ly			
20564+4308	COU2544	9.0	0.9	2008.563	157.1	0.336		IRC	2Q-ly			
20567+5656	A755	8.7	0.1	2008.648	8.6:	0.138:		IRC				
20567+6237	HDS2983	9.9	2.4	2008.648	—	—		IRC	NR			
20577+1402	A1685AB	10.1	0.3	2008.579	85.0	0.721		IRC				
20577+5849	A756AB	8.3	0.9	2008.779	211.4	0.537		AF	3Q-dv			
20579+4442	COU2649	10.7	0.0	2008.563	137.6	0.535		IRC				
20579+4442	COU2649	10.7	0.0	2008.669	141.2	0.549		IRC				
20581+4043	COU2430	9.5	0.6	2008.664	251.9	0.387		IRC	3Q-ly			
20582+1038	A1215	9.0	0.7	2008.579	205.3	0.438		IRC				
20584+2619	HDS2990	9.9	0.8	2008.596	—	—		IRC	S			
20587+1823	HU363	10.4	0.3	2008.596	98.7	0.779		IRC				
20587+1823	HU363	10.4	0.3	2008.710	100.5	0.799		IRC	2Q-dv			
20593+3155	COU1178	10.9	0.6	2008.689	16.5	1.215		IRC	1Q-ly			
20594+3626	HU764	8.2	1.7	2008.563	190.3	0.380		IRC				
20598+6152	BU472	8.8	0.0	2008.656	12.2	0.772		IRC				
21000+4004	KUI103	10.5	1.9	2008.538	337.6	0.355		IRC	4Q-ly	+1.2	-0.023	Gii2009
21000+4004	KUI103	10.5	1.9	2008.538	338.4	0.333	1.7	IRC	(ni)	2.0	-0.045	Gii2009
21000+4004	KUI103	10.5	1.9	2008.664	338.1	0.365		IRC	4Q-ly	-1.6	-0.020	Gii2009
21004+3022	COU1179	10.5	0.2	2008.538	355.6	0.868		IRC	4Q-ly			
21004+3022	COU1179	10.5	0.2	2008.689	357.3	0.889		IRC	4Q-ly			
21004+3022	COU1179	10.5	0.2	2008.710	357.8	0.802		IRC	4Q-dv			
21004+3411	BU1329AB	8.9	0.2	2008.538	218.3	0.330		IRC				
21004+3411	BU1329AB	8.9	0.2	2008.538	229.2	0.337	0.8	IRC	ly (ni)			
21009+5929	MLR241	10.4	0.1	2008.765	173.0	0.917		AF	2Q-dv			
21010+3959	A1438	8.1	1.3	2008.538	71.8	0.311		IRC				
21015+6643	HU959	8.6	1.0	2008.779	161.3	1.275		AF	2Q-dv			
21022+1426	A1688	9.3	0.1	2008.579	64.4	0.326		IRC				
21025+2958	COU1181	11.0	1.0	2008.689	218.4	0.856	1.6	IRC	ly (ni)			
21025+2958	COU1181	11.0	1.0	2008.710	214.2:	0.826		IRC	3Q-dv			
21026+3041	COU1182	8.6	3.9	2008.710	0.4	1.341		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
21035+5925	MLR243	9.2	1.8	2008.648	212.2	0.223		IRC	3Q-ly			
21040+4225	COU2433	10.0	-0.0	2008.563	46.5	0.369		IRC				
21047+4902	HU590	8.6	0.5	2008.639	81.8	0.193		IRC				
21050+4021	COU2135	9.0	0.3	2008.546	357.3	0.222		IRC				
21050+4125	COU2298	10.2	0.7	2008.664	144.8	0.950		IRC	2Q-ly			
21055+6210	HU765BC	9.3	0.3	2008.656	27.3	0.788		IRC				
21056+6030	A758AB	9.9	0.9	2008.656	124.0	0.360		IRC	2Q-ly	-13.6	+0.135	Hei1998
21061+4001	COU2224	10.0	-0.0	2008.563	—	—		IRC	S			
21063+2251	A2798	9.4	3.0	2008.587	135.1	1.771		IRC	2Q-ly			
21065+4823	BU836CD	10.5	1.0	2008.639	60.5	1.358		IRC	1Q-ly			
21066+3309	COU1329	11.0	-0.0	2008.710	265.7	1.226	0.1	IRC	dv (ni)			
21074+3444	COU1814	11.2	0.1	2008.546	11.4	0.305		IRC				
21076+6214	HU766	8.9	1.6	2008.648	340.6	0.291	1.9	IRC	4Q-ly			
21076+6304	MLR14	8.4	3.1	2008.656	336.2	1.456		IRC	4Q-ly			
21077+6149	MLR506	11.5	0.6	2008.765	143.1	1.105		AF	2Q-dv			
21091+6623	MLR68	10.7	0.1	2008.656	98.4	0.764		IRC				
21097+4820	COU2545	10.7	0.0	2008.639	69.6	0.651		IRC				
21099+4013	COU1968	9.5	-0.0	2008.546	101.8	0.205		IRC				
21112+3332	VKI48	12.0	0.9	2008.546	307.0	1.507		IRC	4Q-ly			
21112+3925	COU1969	9.7	-0.0	2008.538	218.7	0.283		IRC	3Q-ly			
21113+3646	COU1970	10.8	0.0	2008.538	105.1	0.575		IRC	2Q-ly			
21114+5737	MLR590	8.2	1.5	2008.648	187.1	0.173		IRC				
21115+2144	COU227	10.1	1.7	2008.579	110.4	0.497		IRC		-65.9	+0.339	Cou1999b
21115+2144	COU227	10.1	1.7	2008.587	107.3	0.538		IRC	2Q-ly	-69.2	+0.380	Cou1999b
21124+3810	COU1971	10.0	3.0	2008.689	279.2	0.596		IRC	4Q-ly			
21125+2821	HO152	8.9	0.5	2008.587	137.8	0.210		IRC		+7.3	-0.060	Sca2002a
21126+3846	COU2136	9.5	0.9	2008.538	292.5	0.426		IRC	4Q-ly			
21127+4900	COU2652	10.1	0.2	2008.639	336.4	0.653		IRC	4Q-ly			
21133+4655	A884	8.7	0.8	2008.631	293.5	0.424		IRC	4Q-ly			
21137+6424	H148	7.2	0.1	2008.656	236.8	0.343		IRC		-4.0	-0.096	Sca2008a
21139+3830	COU1817	9.5	0.7	2008.563	107.3	0.560		IRC				
21141+5818	STF2783	7.7	0.4	2008.779	356.2	0.674	1.2	AF	dv (ni)			
21141+5818	STF2783	7.7	0.4	2008.779	356.3	0.690		AF				
21142+4211	COU2226	10.2	-0.0	2008.563	—	—		IRC	S			
21145+3437	HU768	9.1	4.2	2008.710	119.9	1.531		IRC	2Q-dv			
21149+3702	COU1818	10.2	2.1	2008.596	29.2	1.409		IRC	1Q-ly			
21149+3702	COU1818	10.2	2.1	2008.596	29.6	1.412		IRC	1Q-ly			
21152+2753	COU531	11.0	0.4	2008.689	143.4	0.904		IRC	2Q-ly			
21152+2753	COU531	11.0	0.4	2008.710	144.6	0.831	0.3	IRC	dv (ni)			
21152+2753	COU531	11.0	0.4	2008.710	144.9	0.868		IRC				
21159+3319	COU1478	11.0	0.9	2008.689	174.5	1.480		IRC	2Q-ly			
21159+3319	COU1478	11.0	0.9	2008.710	175.0	1.399		IRC	2Q-dv			
21182+6136	MLR507	10.0	0.4	2008.648	—	—		IRC	S			
21182+6136	MLR507	10.0	0.4	2008.779	185.3	0.467		AF	3Q-dv			
21184+6334	MLR57	8.6	3.4	2008.648	123.8	0.961		IRC				
21186+3430	HU769	9.7	0.5	2008.538	175.2	0.879	2.3	IRC	2Q-ly			
21194+1816	COU70	10.7	1.2	2008.710	348.7	1.737		IRC				
21194+1816	COU70	10.7	1.2	2008.710	349.3	1.678	1.7	IRC	dv (ni)			
21196+2543	COU728	10.5	0.4	2008.689	49.7	1.541		IRC	1Q-ly			
21209+6117	MLR508	11.4	0.3	2008.765	61.1	0.455		AF	3Q-dv			
21210+2233	COU229	11.0	0.4	2008.587	119.1	0.538		IRC				
21213+6042	STF2795	9.3	0.3	2008.820	301.5	1.720		AF	4Q-dv			
21214+6016	MLR15	9.3	0.3	2008.656	207.4	0.398	0.2	IRC	ly (ni)			
21214+6016	MLR15	9.3	0.3	2008.656	207.6	0.404		IRC				
21217+3436	COU1334	10.9	1.3	2008.689	151.2	0.791		IRC	2Q-ly			
21217+3436	COU1334	10.9	1.3	2008.710	146.8	0.774		IRC	dv (ni)			
21217+3436	COU1334	10.9	1.3	2008.710	148.4	0.769		IRC				
21223+5734	A764AB	8.2	2.5	2008.779	15.9	1.226		AF	1Q-dv	-4.0	+0.202	Hei1995
21230+2725	HEI188	11.0	0.2	2008.587	124.9	1.034		IRC				
21230+2726	COU533	10.5	0.2	2008.563	109.7	0.715		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
21236+1717	HU369	9.2	3.9	2008.587	16.2	0.963		IRC	1Q-ly			
21237+5518	A1892	8.2	1.1	2008.765	349.1	0.759		AF	4Q-dv			
21237+6022	TDT2942	11.9	0.6	2008.820	—	—		AF	S-b			
21244+3607	TDS1125	11.0	1.2	2008.546	11.0	1.345		IRC				
21248+4106	COU2305	10.2	-0.0	2008.546	98.3	0.311		IRC				
21248+4106	COU2305	10.2	-0.0	2008.546	98.4	0.317	0.6	IRC	ly (ni)			
21249+5734	A766	9.8	1.4	2008.765	223.8	0.504	0.9	AF	3Q-dv			
21263+5951	MLR361	10.9	0.1	2008.765	87.7	0.584		AF	1Q-dv			
21268+3050	A1221	9.7	1.9	2008.710	74.3	1.209		IRC	1Q-ly			
21281+4110	COU2231	9.6	-0.0	2008.546	26.4	0.249		IRC				
21281+4110	COU2231	9.6	-0.0	2008.631	28.3	0.232		IRC	1Q-ly			
21284+3447	COU1638	9.6	2.0	2008.689	226.8	1.260		IRC	3Q-ly			
21284+3447	COU1638	9.6	2.0	2008.710	228.4	1.300		IRC	3Q-dv			
21287+5710	BU1142	10.6	0.1	2008.765	3.2	0.364		AF	1Q-dv:			
21301+3050	COU941	8.8	1.5	2008.689	—	—		IRC	S			
21308+4827	A770AB-C	8.8	2.5	2008.631	317.2	1.191		IRC	4Q-ly			
21310+2128	COU232	10.1	0.1	2008.574	213.9	0.636		IRC				
21319+2627	COU731	10.9	0.5	2008.710	104.6	1.253		IRC				
21319+2627	COU731	10.9	0.5	2008.710	105.4	1.176	0.3	IRC	dv (ni)			
21320+3448	COU1480	11.4	1.2	2008.593	200.7	1.773	1.8	IRC	ly (ni)			
21331+4512	COU2308	9.7	-0.0	2008.631	183.6	0.150		IRC	3Q-ly			
21334+3058	COU732Aa	10.3	2.0	2008.546	261.6	0.482		IRC	4Q-ly			
21335+5857	MLR437	11.0	0.1	2008.765	302.4	0.488		AF	4Q-dv			
21335+6413	MLB223	10.0	0.5	2008.779	127.9	1.706		AF	b			
21335+6413	MLB223	10.0	0.5	2008.779	128.1	1.705	0.3	AF	dv-b (ni)			
21336+3905	COU1975	10.1	-0.0	2008.563	—	—		IRC	NR			
21338+6454	HU966	8.7	3.2	2008.765	335.3	0.502		AF	4Q-dv			
21339+6148	STT442	8.6	0.2	2008.656	35.1: 0.125:		0.1	IRC	ly (ni)			
21346+5633	A1893AB	10.3	0.4	2008.765	27.1	0.635		AF	1Q-dv			
21359+6539	MLR83AB	9.6	0.7	2008.656	321.0	0.544		IRC	4Q-ly			
21363+1627	HDS3076	9.4	1.7	2008.574	269.2	0.413		IRC	3Q-ly			
21365+4304	COU2233	9.3	-0.0	2008.563	—	—		IRC	S			
21366+3928	VYS10	10.4	1.8	2008.593	270.6	1.234	1.6	IRC	ly (ni)			
21376+5546	BU686AB	9.4	1.8	2008.765	310.4	0.985		AF	4Q-dv			
21379+2743	HDS3080Aa	10.2	1.6	2008.587	—	—		IRC	S ly (ni)	(273.6)	(1.173)	Sod1999
21379+2743	HDS3080Aa	10.2	1.6	2008.596	—	—		IRC	S ly (ni)	(273.6)	(1.173)	Sod1999
21379+2743	SKF245AC	9.8	4.5	2008.587	18.8	3.182	5.2	IRC	1Q-ly (ni)			
21379+2743	SKF245AC	9.8	4.5	2008.596	17.8	3.114	3.6	IRC	ly (ni)			
21383+2336	HU372	10.2	0.1	2008.587	69.0	0.276		IRC		-2.3	+0.041	Sey2002
21388+5548	BU687AB	8.1	1.4	2008.765	1.4	0.643		AF	1Q-dv			
21391+3356	COU1185	10.0	0.3	2008.689	55.0	1.395		IRC	1Q-ly			
21391+3356	COU1185	10.0	0.3	2008.710	54.1	1.426	1.6	IRC	dv (ni)			
21398+7425	MLR250	11.0	0.4	2008.656	312.0	0.687		IRC	4Q-ly			
21399+6808	STF2823	9.2	0.8	2008.820	253.1	1.419		AF	3Q-dv			
21403+6823	HU968	8.8	1.0	2008.779	146.6	1.243		AF				
21403+6823	HU968	8.8	1.0	2008.779	147.0	1.246		AF	2Q-dv			
21410+2920	STT448	8.9	0.2	2008.596	133.3	0.173		IRC	4Q	-15.0	-0.014	Alz1998
21410+2920	STT448	8.9	0.2	2008.689	141.2: 0.132:			IRC	ly (ni)	-6.7	-0.050	Alz1998a
21410+2920	STT448	8.9	0.2	2008.689	141.2: 0.132:			IRC	ly	-6.7	-0.049	Alz1998a
21410+2920	STT448	8.9	0.2	2008.710	140.6: 0.144:			IRC		-7.2	-0.043	Alz1998a
21424+1750	HU373	8.9	1.5	2008.710	298.9	0.871:	2.0	IRC	dv (ni)			
21425+4832	COU2313	10.0	-0.0	2008.631	53.2	0.379		IRC				
21429+4507	COU2314	10.0	-0.0	2008.631	37.8: 0.340:			IRC				
21431+3149	A1222	10.4	0.2	2008.546	352.0	0.680		IRC				
21431+4122	COU1978	9.8	-0.0	2008.546	82.4	0.224		IRC				
21435+4448	HO167	10.4	1.2	2008.563	200.7	1.130		IRC				
21439+2751	HO166	8.4	0.1	2008.563	327.0	0.183		IRC		-16.0	+0.001	Cou1958d
21445+3933	A1447	10.3	-0.0	2008.689	241.1	0.337:	0.2	IRC	ly (ni)			
21445+3933	A1447	10.3	-0.0	2008.689	242.8	0.375		IRC				
21450+5554	HDS3097	8.9	2.4	2008.765	214.1	0.567		AF	3Q-dv			
21450+5554	HDS3097	8.9	2.4	2008.820	214.1	0.612		AF	3Q-dv			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ (")	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ (")	Orbit
21454+4356	HO168AB	9.6	0.1	2008.500	63.8	0.758	1.1	IRC	1Q-ly			
21455+6745	HU970	9.3	0.5	2008.656	273.2	0.371	0.4	IRC	ly (ni)			
21455+6745	HU970	9.3	0.5	2008.656	273.6	0.384		IRC				
21462+4254	COU1979	9.0	0.4	2008.563	260.5	0.446	1.1	IRC	ly (ni)			
21474+5508	MLR591	9.9	-0.0	2008.648	52.9	0.225		IRC				
21478+6203	HU971AB	9.0	0.7	2008.648	22.7	0.339		IRC				
21492+6312	HEI290	11.2	0.4	2008.765	187.2	1.154		AF	3Q-dv			
21493+3451	COU1483	10.7	0.4	2008.689	130.9	0.690		IRC	2Q-ly			
21493+3451	COU1483	10.7	0.4	2008.710	130.6	0.679		IRC	2Q-dv			
21495+5736	TDT3179	11.4	1.0	2008.820	—	—		AF	S-b			
21498+6514	MLR74	8.0	2.2	2008.656	264.2	0.869		IRC	3Q-ly			
21511+1022	COU2549Aa	9.1	-0.0	2008.574	—	—		IRC	S (ni)			
21511+4209	COU1822	9.7	-0.0	2008.631	—	—		IRC	S			
21511+6650	HU972	9.1	0.4	2008.656	254.1	0.341	0.3	IRC	ly (ni)	-9.1	+0.060	Hei1998
21511+6650	HU972	9.1	0.4	2008.656	255.1	0.341		IRC		-8.1	+0.060	Hei1998
21517+3716	COU1641	11.0	1.0	2008.689	307.9	1.093		IRC	4Q-ly			
21518+5534	HDS3113	10.8	2.8	2008.765	—	—		AF	S			
21531+6458	MLR75	10.4	0.6	2008.656	139.6	1.015		IRC	2Q-ly			
21543+1943	COU432BC	8.8	0.2	2008.710	355.8	0.246	0.1	IRC	dv (ni)			
21543+1943	COU432BC	8.8	0.2	2008.710	359.1	0.221		IRC				
21544+3206	COU1042	10.5	1.7	2008.689	106.9	1.396		IRC	2Q-ly			
21548+4548	COU2137Aa	8.9	0.5	2008.631	223.7	0.243		IRC	3Q-ly			
21554+6540	HU1314	9.8	-0.0	2008.656	211.0	0.119	0.1	IRC	ly (ni)			
21555+1053	BU75AB	8.4	0.2	2008.574	200.8	0.943		IRC		-0.9	-0.011	Hei1996a
21555+6519	STT457	6.0	2.2	2008.820	246.4	1.265		AF	3Q-dv			
21556+6040	MLR509	9.6	1.8	2008.765	273.2	1.529		AF	4Q-dv			
21559+5950	STT537	7.9	3.1	2008.779	23.3	1.889		AF				
21561+2846	COU837	10.8	0.5	2008.587	—	—		IRC	S			
21564+6216	HU973	10.1	0.1	2008.656	123.9	0.241		IRC				
21565+5948	STT458AB	7.2	1.2	2008.820	349.1	0.968		AF	4Q-dv			
21568+5558	A1897	10.0	0.3	2008.779	72.2	0.951	1.6	AF	1Q-dv			
21571+4540	COU2235	10.7	0.2	2008.631	85.1	0.272		IRC	1Q-ly			
21573+3241	A1226	9.3	0.6	2008.563	—	—		IRC	S			
21573+6118	BU275	7.2	1.8	2008.779	170.2	0.434		AF	2Q-dv			
21576+4938	HU772	9.2	0.5	2008.631	148.5	0.359	0.1	IRC	ly (ni)			
21576+4938	HU772	9.2	0.5	2008.631	150.3	0.368		IRC				
21576+6144	MLR63	8.7	1.1	2008.765	219.5	0.970		AF	3Q-dv			
21576+6144	MLR63	8.7	1.1	2008.779	219.3	0.959		AF	3Q-dv			
21579+3616	COU1338	10.7	1.3	2008.689	107.7	1.195		IRC	2Q-ly			
21579+6101	MLR17	8.3	-0.0	2008.648	—	—		IRC	S			
21580+4627	COU2236	9.9	-0.0	2008.639	197.1	0.214		IRC	3Q-ly			
21586+3900	COU1824	11.0	0.3	2008.689	298.7	0.623		IRC	4Q-ly			
21590+1212	HEI410	9.5	-0.0	2008.579	151.3	0.210		IRC				
21591+6358	TDT3275	10.8	0.1	2008.648	—	—		IRC	S			
21591+6400	HU975AB	9.4	0.6	2008.648	30.1	0.312		IRC				
21591+6400	HU975AB-C	8.9	2.1	2008.648	134.7	1.866		IRC				
21593+2641	COU1043	10.7	0.3	2008.563	194.8	0.315		IRC				
21593+4606	COU2138	9.5	0.3	2008.631	350.8	0.198		IRC	4Q-ly	-20.7	+0.008	Mnt2002c
21597+4907	HU774	8.4	0.1	2008.639	181.4	0.196		IRC		-3.6	+0.016	Doc2004b
21598+6033	A779	8.5	1.2	2008.656	252.9	0.274		IRC	3Q-ly			
22005+6054	MLR510	11.1	0.1	2008.765	125.5	0.785	0.2	AF	dv (ni)			
22005+6054	MLR510	11.1	0.1	2008.779	122.5	0.774		AF	2Q-dv			
22005+6054	MLR510AB	11.1	0.1	2008.820	123.2	0.767		AF	b			
22020+3727	A1452	9.5	3.0	2008.689	289.9	1.848		IRC	4Q-ly			
22038+6710	TDS1155	11.4	0.4	2008.820	72.4	0.839		AF	1Q-dv-b			
22039+5949	HDS3132Ab	6.8	3.0	2008.765	143.5	0.486	3.0	AF	ly (ni)			
22039+5949	STT461AB	6.7	4.8	2008.779	297.5	10.965	5.4	AF	ly (ni)			
22043+7311	A894	10.0	0.1	2008.656	148.9	0.432	1.0	IRC	ly (ni)			
22043+7311	A894	10.0	0.1	2008.656	149.4	0.442		IRC	2Q-ly			
22045+1551	BU696AB	8.2	1.7	2008.574	—	—		IRC	S			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
22045+5239	HU776	9.7	0.5	2008.639	—	—		IRC	S			
22045+6319	TDT3324	10.4	0.3	2008.820	—	—		AF	S-b			
22048+6539	HU977	9.1	0.0	2008.656	312.1	0.289	0.6	IRC	ly (ni)			
22048+6539	HU977	9.1	0.0	2008.656	312.6	0.315		IRC				
22052+6305	BU990	9.1	0.6	2008.648	128.8	0.616		IRC	2Q-ly			
22056+5711	BAR57AB	10.7	1.8	2008.779	274.1	1.285		AF	4Q-dv-b			
22061+6048	TDT3338	10.9	0.2	2008.820	184.7:	0.437:		AF				
22067+6534	HDS3140	10.4	0.8	2008.779	—	—		AF	S:			
22075+5631	HDS3141	9.3	0.4	2008.765	328.8	0.521		AF	4Q-dv			
22076+4121	COU1827	10.7	0.2	2008.563	129.0	0.683		IRC				
22077+2622	COU537	8.6	0.2	2008.710	139.3	0.299		IRC		+6.6	+0.093	Doc2003e
22078+5333	MLR592	10.3	0.3	2008.639	20.7	0.494		IRC	1Q-ly			
22079+6337	TDT3360	11.3	0.1	2008.779	220.9	1.793	0.8	AF	3Q-dv			
22080+6100	HDS3143	9.7	1.5	2008.820	—	—		AF	S			
22080+6938	MLR99	10.2	-0.0	2008.656	52.6	0.163		IRC				
22080+6938	MLR99	10.2	-0.0	2008.656	59.8	0.143	0.8	IRC	ly (ni)			
22082+7438	MLR256	9.8	0.2	2008.656	335.7	0.305		IRC				
22086+5917	STF2872BC	8.0	0.0	2008.779	118.2	0.812		AF		$0.0^Q$ -0.004		Sey2002
22086+5917	STF2872BC	8.0	0.0	2008.779	118.8	0.792	0.6	AF	dv	$0.6^Q$ -0.024		Sey2002
22091+5014	COU2658	9.5	0.5	2008.631	208.4	0.261		IRC	3Q-ly			
22091+5014	COU2658	9.5	0.5	2008.639	209.4	0.269		IRC				
22093+5804	MLR557	9.4	2.8	2008.648	301.8	0.924		IRC	4Q-ly			
22100+2203	COU137AB	10.1	-0.0	2008.574	70.8	0.699		IRC				
22100+2308	COU136	9.2	1.6	2008.710	204.9	0.453	0.1	IRC	dv	+0.7	-0.063	Cou1999b
22102+4004	A1455	9.9	0.9	2008.664	117.1	1.042		IRC	2Q-ly			
22104+4619	COU2237	9.6	2.0	2008.631	225.1:	0.359:		IRC				
22107+5830	A624	9.5	2.2	2008.648	11.2	0.746		IRC				
22109+4211	A2494	9.7	-0.0	2008.664	6.0	0.255		IRC				
22110+2429	EGG4	9.5	0.1	2008.710	149.9	0.557	0.3	IRC	dv (ni)			
22110+2429	EGG4	9.5	0.1	2008.710	150.5	0.572		IRC				
22116+4056	A409	9.9	0.1	2008.563	10.2	0.388		IRC				
22117+5743	A625AB	9.6	0.2	2008.648	77.2	0.524		IRC				
22122+5909	MLR439	10.2	0.1	2008.765	253.4	0.725	0.1	AF	3Q-dv			
22127+6013	A626	9.5	0.1	2008.765	106.6	0.860		AF				
22127+6013	A626	9.5	0.1	2008.765	107.2	0.837	0.2	AF	dv (ni)			
22128+4048	A2495AB	8.4	2.2	2008.664	251.3	0.531		IRC	3Q-ly			
22130+5359	MLR594	9.2	0.2	2008.639	4.9	0.254		IRC				
22131+4437	COU1829	9.0	0.9	2008.563	—	—		IRC	S			
22131+4437	COU1829	9.0	0.9	2008.631	—	—		IRC	S			
22138+6710	HDS3156	9.2	3.5	2008.820	—	—		AF	S-b			
22149+6143	HDS3157	8.8	3.6	2008.820	323.5	0.696		AF	b			
22155+5549	MLR611	8.0	0.5	2008.648	135.0	0.374		IRC	2Q-ly			
22155+5549	MLR611	8.0	0.5	2008.765	136.7	0.375		AF	2Q-dv			
22156+5152	HU696	9.3	0.2	2008.631	237.4	0.326		IRC	3Q-ly			
22156+5749	TDT3425	12.0	0.4	2008.820	99.9:	1.026:		AF				
22159+6413	MLR58	9.1	0.7	2008.648	106.0	0.476		IRC	2Q-ly			
22161+6449	MLR76	10.0	0.3	2008.648	58.8	0.340		IRC				
22162+4229	COU1830	10.0	2.5	2008.664	106.8	0.697		IRC				
22168+6549	MLR84	10.2	-0.0	2008.656	—	—		IRC	S			
22172+4331	COU1982	10.3	0.6	2008.664	119.4:	0.570:		IRC				
22174+7157	A782AB	10.0	0.5	2008.656	300.8	0.413		IRC	4Q-ly			
22175+1649	HEI192	9.7	-0.0	2008.574	—	—		IRC	S			
22181+5607	A1460	8.1	5.2	2008.779	195.7	1.459		AF	b			
22186+5434	MLR612	9.1	0.3	2008.639	165.2	0.364		IRC	2Q-ly			
22193+5857	HDS3162	9.1	3.0	2008.820	138.9	0.538		AF	4Q-dv:			
22199+5901	MLR440	11.2	0.2	2008.765	231.9	0.483		AF	3Q-dv			
22207+4434	COU1983	9.5	0.8	2008.563	259.2	0.444		IRC				
22207+4615	COU2141	10.9	0.2	2008.579	27.0	0.871		IRC				
22214+4148	A411	8.8	0.8	2008.563	49.0	0.282		IRC				
22221+5843	MLR441Aa	9.7	2.8	2008.648	154.2	1.238		IRC				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
22225+5805	MLR558	10.6	0.2	2008.765	149.3	0.977		AF				
22239+1637	HEI83	10.3	0.1	2008.574	104.0	0.387		IRC				
22239+2232	HU385	9.1	6.3	2008.587	75.5	1.453		IRC	1Q-ly			
22247+6451	MLR77	9.2	1.8	2008.648	171.8	1.076		IRC	2Q-ly			
22248+2233	HO183AB	9.0	2.5	2008.587	220.6	2.238	2.3	IRC	3Q-ly	-1.7	+0.006	Zir2003
22248+2233	HO183AB	9.0	2.5	2008.710	223.1	2.233		IRC	1Q-dv	+0.8	-0.002	Zir2003
22255+4227	A2498	10.1	0.1	2008.631	342.5	0.606		IRC	4Q-ly			
22257+5631	A1463	8.7	1.1	2008.765	333.8	0.926		AF	4Q-dv			
22265+5743	BAR59AB	11.7	0.1	2008.779	261.9	1.386	1.2	AF	lyb (ni)			
22265+5743	BAR59AB	11.7	0.1	2008.779	262.1	1.382	1.0	AF	dv-b (ni)			
22265+5743	BAR59AB	11.7	0.1	2008.779	262.1	1.392		AF	b			
22268+4033	COU1642	8.5	-0.0	2008.579	97.8	0.190		IRC				
22278+5258	A1465	8.2	3.5	2008.639	156.2	0.851		IRC	2Q-ly			
22280+2046	TDT3534	10.9	0.2	2008.710	265.0	0.904	0.6	IRC	dv (ni)			
22280+2046	TDT3534	10.9	0.2	2008.710	265.5	0.854		IRC				
22284+4729	COU2328	10.9	0.4	2008.904	152.1	0.693	0.4:	AF	2Q-dv-b			
22286+4942	COU2448	10.9	0.4	2008.639	36.5	0.799		IRC				
22289+4528	COU2240	9.7	1.0	2008.579	78.9:	0.314:		IRC				
22290+1420	HU1317	9.9	0.1	2008.574	303.7	0.432		IRC				
22290+2920	J856	9.3	0.2	2008.710	215.0	1.613		IRC				
22290+2920	J856	9.3	0.2	2008.710	216.1	1.573	1.3	IRC	dv (ni)			
22294+6314	HDS3185	10.4	0.2	2008.779	70.9	0.412		AF	1Q-dv-b			
22302+4655	COU2329	10.5	0.3	2008.904	168.2:	0.603:		AF				
22305+6137	HU981	7.6	0.3	2008.765	214.5	0.316		AF	3Q-dv			
22306+4828	COU2330Aa	10.0	0.4	2008.639	84.5	0.377		IRC	1Q-ly			
22307+1758	COU234	9.7	0.6	2008.574	—	—		IRC	S			
22307+3923	A1466	10.9	0.1	2008.689	160.5	0.744	0.4	IRC	ly (ni)			
22307+3923	A1466	10.9	0.1	2008.689	161.5	0.744		IRC				
22307+4856	HU1319	10.4	0.1	2008.904	40.4	0.335		AF	1Q-dv			
22314+5949	TDT3566	11.5	0.1	2008.779	—	—		AF	S-b			
22320+6311	MLR18Aa	9.8	-0.0	2008.648	259.6:	0.213:		IRC	3Q-ly			
22325+7036	MLR262	10.2	0.3	2008.656	120.4	0.682		IRC				
22327+3936	COU1834	10.0	2.1	2008.689	39.7	1.724		IRC	1Q-ly			
22328+4808	COU2331	10.1	-0.0	2008.579	357.2:	0.379:		IRC				
22329+5348	KUI112Aa	11.0	-0.0	2008.639	96.4	0.648		IRC		-2.6	+0.018	Doc2002i
22329+5621	TDT3578	11.2	1.0	2008.820	—	—		AF	S			
22330+4121	COU1988	8.4	2.7	2008.904	351.6	1.881		AF				
22330+6955	STF2924AB	7.8	1.5	2008.765	13.2	0.132		AF	1Q-dv	-9.7	-0.018	Sod1999
22332+3356	HO293	8.3	3.8	2008.710	136.4	1.544		IRC				
22334+3935	COU1835AB	8.2	5.0	2008.689	51.4	1.783		IRC	1Q-ly			
22334+3935	HDS3200Aa	8.8	0.3	2008.669	170.0	0.176	0.4	IRC	ly (ni)			
22334+3935	HDS3200Aa	8.8	0.3	2008.669	173.4	0.196		IRC				
22339+6550	HU983	8.2	0.3	2008.656	—	—		IRC	S			
22340+6440	TDT3586	10.4	0.5	2008.820	136.2	0.782		AF	2Q-dv			
22341+3920	BU707	8.7	4.5	2008.689	—	—		IRC	S			
22343+6342	TDT3595	11.4	0.3	2008.779	—	—		AF	S-b			
22344+2623	COU540	8.9	0.4	2008.563	135.6	0.339		IRC		+1.0	+0.009	Mnt2004a
22357+5413	MLR3	8.5	0.6	2008.639	180.3	0.254		IRC	3Q-ly:	-86.9	+0.134	Msn2001a
22359+3938	A1469CH	10.3	4.3	2008.689	—	—		IRC	S			
22361+7253	BU1092AB	8.3	-0.0	2008.656	31.2	0.296		IRC		+1.3	+0.079	Doc1986b
22366+3744	COU1194	8.1	5.6	2008.664	51.6:	1.910:		IRC				
22368+3123	A1232	8.3	4.0	2008.710	151.9	1.489		IRC				
22369+4712	COU2333	10.5	1.1	2008.904	271.4	1.101		AF	4Q-dv-b			
22373+5420	MLR614	10.3	0.2	2008.639	304.9	0.563		IRC	4Q-ly			
22373+6913	CHR113	7.5	2.0	2008.765	357.2	0.553		AF	4Q-dv			
22375+2356	HU391AB	10.1	0.8	2008.574	326.2	0.224:		IRC		-1.4	+0.065	Hrt2009
22375+3923	HDS3211	10.0	0.4	2008.669	240.0:	0.305:	2.4	IRC	ly (ni)			
22376+2726	HO294	8.2	2.8	2008.710	59.3	1.924		IRC				
22379+6126	TDT3625	11.5	0.4	2008.779	311.9	0.965	0.2	AF	dv-b (ni)			
22379+6126	TDT3625	11.5	0.4	2008.779	312.2	0.999		AF				

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
22388+4419	HO295AB	7.5	0.5	2008.664	155.8:	0.139:		IRC		-1.2	+0.011	Hrt1996a
22390+1850	HU392AB	10.1	0.2	2008.587	344.6	0.486		IRC				
22392+2014	HU393	10.1	0.5	2008.574	224.2	0.852		IRC	3Q-ly			
22393+3353	HDS3217	9.1	2.5	2008.669	158.7:	0.447:	3.8	IRC	ly (ni)			
22393+3353	HDS3217	9.1	2.5	2008.669	162.8	0.468		IRC				
22394+3524	HU779	9.2	3.4	2008.664	137.3	0.425		IRC	2Q-ly			
22394+5503	MLR615	8.7	1.1	2008.648	28.0:	0.065:		IRC				
22397+6124	BU1265BC	10.1	0.1	2008.656	44.2	0.567		IRC				
22410+7228	MLR263	9.4	1.5	2008.656	122.0	0.290		IRC				
22412+1433	HU780AB	10.0	0.2	2008.574	—	—		IRC	S			
22420+1513	HU781	8.6	1.3	2008.587	146.5:	0.216:		IRC				
22426+4550	COU2336	10.6	0.3	2008.904	211.3	0.528		AF	3Q-dv-b:			
22428+6307	TDT3667	11.4	0.2	2008.779	290.9	0.716	0.6	AF	ly-b (ni)			
22428+2348	HJ1800AB-C	9.5	2.1	2008.587	235.2	7.177		IRC	3Q-ly			
22428+2348	HU395AB	10.3	0.1	2008.587	221.1	0.280		IRC	3Q-ly:			
22430+3013	BU1144BC	10.1	-0.0	2008.563	—	—		IRC	S			
22436+4226	COU1989	10.3	1.9	2008.669	3.0	0.371		IRC	1Q-ly			
22438+7141	MLR264	9.9	1.6	2008.656	82.0	0.466		IRC	1Q-ly			
22444+5036	COU2699	10.7	0.1	2008.631	45.7	0.424		IRC	1Q-ly			
22454+5129	HU783	9.2	0.2	2008.631	199.1:	0.176:		IRC				
22458+3043	COU739	10.0	2.2	2008.664	103.2	1.103		IRC				
22463+6616	HU984	10.1	0.2	2008.765	8.0	0.747		AF				
22463+6616	HU984	10.1	0.2	2008.765	8.3	0.739	0.2	AF	dv (ni)			
22465+1944	COU333	9.9	0.1	2008.587	12.4	0.630		IRC	1Q-ly			
22470+4446	A189AB	9.2	0.2	2008.904	27.5	0.977	0.2	AF	1Q-dv			
22475+5833	BU1145AB	9.3	2.4	2008.648	152.9	1.032		IRC	2Q-ly			
22478+6614	MLR85	10.7	0.1	2008.656	34.6	0.941		IRC	1Q-ly			
22479+1259	HU985	9.6	0.3	2008.574	316.8	0.690		IRC		-4.1	+0.023	Sey2002
22482+1858	TDT3712	11.0	0.3	2008.710	164.9	1.851		IRC				
22482+1858	TDT3712	11.0	0.3	2008.710	166.4	1.811	0.3	IRC	dv (ni)			
22495+3622	COU1196	10.6	0.2	2008.563	87.1	0.523		IRC				
22499+4834	A2398	10.0	-0.0	2008.579	348.9	0.192		IRC				
22499+6119	HU986	10.4	0.2	2008.820	115.1	0.807		AF				
22499+6119	HU986	10.4	0.2	2008.820	115.4	0.781	0.1	AF	dv (ni)			
22501+5928	MLR363	10.6	0.2	2008.765	344.0	0.576		AF	4Q-dv			
22503+2432	BU846	8.8	3.6	2008.587	85.3	1.882		IRC	1Q-ly			
22506+5731	TDT3743	11.7	0.1	2008.779	54.4	1.024	0.4	AF	1Q-dv			
22515+5726	A631	10.0	0.2	2008.648	106.2	0.569		IRC				
22518+3943	HO298	8.8	3.3	2008.689	—	—		IRC	S			
22520+5743	A632	8.6	0.7	2008.648	134.1	0.469	1.0	IRC	ly (ni)	-5.5	-0.010	Hei1991
22526+6358	TDS1192	11.9	0.2	2008.779	95.2	0.978		AF	b			
22526+6358	TDS1192	11.9	0.2	2008.779	97.3	0.987	0.5	AF	dv-b (ni)			
22528+2926	COU541	10.4	1.5	2008.669	68.7	1.401		IRC	1Q-ly			
22529+4953	COU2664	10.0	-0.0	2008.579	12.7:	0.226:		IRC				
22531+5001	COU2665	10.2	-0.0	2008.631	83.3	0.345		IRC	1Q-ly			
22535+6607	MLR86Aa	9.8	-0.0	2008.656	31.9	0.476		IRC				
22540+3654	A1476	10.2	0.2	2008.563	100.4	0.729		IRC				
22544+4723	A190	10.2	0.3	2008.631	234.6	0.265		IRC	3Q-ly			
22550+5132	HU785	9.9	0.4	2008.631	279.7:	0.124:		IRC	4Q-ly:	-16.4	-0.092	Ole2005c
22560+5702	A633AB	8.7	2.1	2008.765	231.1	0.643		AF	3Q-dv			
22562+6649	HU988	8.9	1.7	2008.820	172.1	1.026		AF	2Q-dv			
22569+5941	A634	8.1	3.5	2008.820	300.1	2.082		AF	4Q-dv			
22570+2441	COU542Aa	9.3	0.6	2008.563	42.6:	0.194:		IRC		-0.2	-0.036	Doc2001b
22570+2441	COU542Aa	9.3	0.6	2008.689	45.7	0.239		IRC		+2.1	+0.011	Doc2001b
22571+3650	COU1644	10.6	0.1	2008.563	67.4	0.515		IRC				
22574+1958	COU334	8.9	0.9	2008.574	256.0	1.138		IRC				
22574+1958	COU334	8.9	0.9	2008.587	255.2	1.141		IRC	3Q-ly			
22576+1919	HU397	9.4	2.6	2008.710	263.4	1.186		IRC	3Q-dv			
22580+4954	HDS3268	10.8	0.4	2008.904	256.2	0.660	0.1	AF	3Q-dv-b			
22582+4503	COU2450	10.9	0.1	2008.579	328.2	0.463		IRC				



**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
22587+2611	COU543	9.5	-0.0	2008.587	88.2:	0.215:		IRC				
23001+5937	MLR268	8.9	2.3	2008.765	178.6	1.054		AF	2Q-dv			
23009+3522	HU991	10.2	0.9	2008.563	116.9	0.811		IRC		-40.5	+0.141	Baz1985b
23014+4638	A193	9.6	0.2	2008.904	175.8	1.493	1.5	AF	2Q-dv-b			
23015+6041	A635	9.1	2.0	2008.648	38.4	0.949		IRC				
23019+3642	COU843Aa	10.2	-0.0	2008.579	128.7	1.034		IRC				
23020+4800	A194	8.7	0.1	2008.631	100.4	0.171		IRC		-5.6	-0.042	Doc2004f
23024+1837	HU398	9.6	0.5	2008.574	105.3	0.459		IRC		-5.8	+0.015	Baz1981
23024+6413	MLR69	8.6	0.8	2008.656	120.6	0.283		IRC				
23024+6413	MLR69	8.6	0.8	2008.656	129.3:	0.290:	1.3	IRC	ly (ni)			
23027+6408	HU1200	10.2	0.2	2008.820	165.4	0.502		AF	2Q-dv			
23034+4817	COU2337	10.6	0.1	2008.631	163.8	0.491		IRC	2Q-ly			
23036+6445	MLR78	9.2	1.9	2008.656	288.7	0.530		IRC	4Q-ly			
23039+2512	COU142	10.9	0.1	2008.587	7.9	0.509		IRC	1Q-ly			
23040+4835	A195	9.0	1.8	2008.904	32.3	1.773		AF	1Q-dv-b			
23047+2353	COU143	10.8	0.1	2008.669	48.7	0.603		IRC	1Q-ly			
23048+6405	MLR70	7.8	1.6	2008.765	249.9	0.553		AF	3Q-dv			
23052+5815	A636	8.5	2.4	2008.820	78.3	0.927		AF				
23058+4032	COU1490	10.9	0.2	2008.664	76.3	0.515		IRC				
23062+4147	HO194	7.3	2.1	2008.664	58.0	0.470		IRC	1Q-ly			
23067+3302	COU741Aa	10.5	1.6	2008.664	189.6	0.891		IRC	3Q-ly			
23073+6239	TDS1202	10.7	1.0	2008.820	129.8:	0.935:		AF	b			
23074+4625	COU2339	10.9	0.2	2008.904	250.3	0.598:	0.1	AF	dv-b (ni)			
23077+4436	COU1843	10.0	1.1	2008.904	282.2	1.099	0.9:	AF	4Q-dv-b			
23078+6338	HU994	7.2	0.3	2008.765	318.7	0.183		AF	4Q-dv	+6.1	-0.068	Doc1991e
23082+4038	COU1344	10.3	-0.0	2008.631	137.5	0.315		IRC	2Q-ly			
23083+2642	COU438	10.3	0.7	2008.669	65.0	0.848		IRC	1Q-ly			
23087+1533	HU995	9.9	0.8	2008.574	196.7	0.840		IRC				
23088+1058	A1238AB	8.2	0.6	2008.574	120.9	0.302		IRC		+0.1	0.000	Sca2001g
23089+4705	COU2340	9.8	1.6	2008.904	97.1	1.482		AF	2Q-dv-b			
23092+5747	MLR559	11.1	0.0	2008.765	104.0	1.123		AF	2Q-dv			
23099+4447	COU1844	10.2	0.1	2008.664	168.3	0.506		IRC				
23099+4452	COU2341	8.6	1.8	2008.664	23.2	0.911		IRC	1Q-ly			
23107+4509	COU2342	10.8	0.2	2008.639	158.3	0.512		IRC	2Q-ly			
23107+5900	MLR364	10.0	-0.0	2008.765	—	—		AF	S			
23109+1648	J295BC	9.5	3.0	2008.710	—	—		IRC	S			
23109+5807	HDS3303Aa	9.6	0.7	2008.820	4.1:	0.223:		AF				
23110+6251	HDS3304	9.5	1.8	2008.765	162.8	0.822		AF	2Q-dv			
23114+3813	HO197AB	8.5	0.7	2008.579	101.5	0.190		IRC		-20.2	-0.235	Doc1990c
23117+3730	A1480	9.9	0.5	2008.664	223.4	0.749		IRC	3Q-ly			
23130+2414	TDT3938	10.7	-0.0	2008.689	—	—		IRC	S			
23130+4658	COU2343	9.8	-0.0	2008.631	—	—		IRC	S			
23131+4622	A198	10.1	0.0	2008.639	343.4	0.598	0.0	IRC	ly (ni)			
23131+4622	A198	10.1	0.0	2008.639	344.1	0.591		IRC				
23135+3945	COU1493	10.4	-0.0	2008.664	52.3	0.525		IRC				
23141+1010	HDS3308	10.2	0.3	2008.574	—	—		IRC	S			
23142+5000	HU788	9.7	0.6	2008.631	—	—		IRC	S			
23147+4116	A200	8.7	0.5	2008.904	76.7	0.587	0.6	AF	1Q-dv			
23151+4319	A201AB	8.4	1.9	2008.904	23.2	0.529	0.6	AF	1Q-dv			
23151+5341	MLR618	10.5	0.6	2008.639	285.0	1.011		IRC	4Q-ly			
23164+6407	BU992	8.2	0.1	2008.765	19.5	0.269		AF	1Q-dv	-5.4	-0.095	Val1981d
23168+6148	BU853AB	9.8	0.4	2008.820	231.2	0.521		AF	3Q-dv			
23174+6051	LEI30AB	11.6	2.9	2008.779	—	—		AF	S-b			
23182+6150	MLR512AB	10.6	0.1	2008.779	308.9	0.504		AF	4Q-dv			
23190+4726	A639	10.7	0.1	2008.639	102.2	0.786		IRC	2Q-ly			
23207+3855	COU1494	10.4	1.5	2008.689	332.6	1.881		IRC	4Q-ly			
23209+1643	HEI88	9.1	0.8	2008.574	—	—		IRC	S			
23210+4926	COU2700	9.8	1.0	2008.904	60.9	0.854	0.8:	AF	1Q-dv-b			
23212+4219	COU1647	9.3	1.0	2008.904	184.1	1.093		AF	3Q-dv			
23212+6035	A640	10.6	0.2	2008.779	16.7	0.930	0.4	AF	1Q-dv			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{V,A}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
23215+4534	COU2246	10.3	-0.0	2008.587	—	—		IRC	S			
23215+4534	COU2246	10.3	-0.0	2008.587	295.6:	0.726:		IRC	b			
23221+6120	HU997AB	10.3	0.1	2008.779	135.3	0.626		AF	2Q-dv-b			
23231+4109	COU1648	9.7	4.3	2008.587	143.6	2.143		IRC	2Q-b			
23237+3739	A1483	9.5	0.3	2008.664	144.8	0.568		IRC	2Q-ly			
23239+3456	COU1346	9.3	0.3	2008.664	67.0	0.205		IRC	1Q-ly			
23245+5926	MLR442	11.6	0.5	2008.765	169.7	0.617		AF				
23245+5926	MLR442	11.6	0.5	2008.765	170.0	0.605	0.0	AF	dv (ni)			
23253+5321	MLR619	10.3	0.5	2008.639	20.5	0.910		IRC	1Q-ly			
23266+2342	COU338	8.5	0.4	2008.574	—	—		IRC	S			
23269+6414	MLR72	9.3	-0.0	2008.765	357.8	0.169		AF	4Q-dv			
23276+6034	MLR20	10.0	0.0	2008.820	192.6	0.422		AF	3Q-dv			
23282+4200	COU1846	10.4	0.1	2008.579	—	—		IRC	S			
23282+4200	COU1846	10.4	0.1	2008.587	155.1	0.203		IRC				
23284+2251	COU242	9.1	2.7	2008.710	325.1	1.933		IRC	4Q-dv			
23285+3153	J3303	10.9	0.3	2008.710	278.8	1.541	0.4	IRC	dv (ni)			
23285+3153	J3303	10.9	0.3	2008.710	279.5	1.476		IRC				
23285+5524	A1486	9.5	1.1	2008.765	262.8	0.828	2.1	AF	3Q-dv			
23291+4324	A109	10.1	0.2	2008.664	312.9	0.871		IRC				
23292+4042	A1487	9.0	0.5	2008.904	158.8	1.066	0.6	AF	2Q-dv			
23296+2617	A420AB	10.6	0.1	2008.669	108.5	0.596		IRC				
23298+3142	COU544	7.7	3.3	2008.689	262.8	1.052		IRC	3Q-ly			
23298+4740	COU2345	10.7	0.1	2008.587	295.6	0.726		IRC				
23298+4740	COU2345	10.7	0.1	2008.631	296.9	0.735	1.2	IRC	4Q-ly			
23300+5833	BU1149Ia	10.8	0.4	2008.765	287.4	0.336		AF	4Q-dv			
23304+3050	BU1266AB	8.4	0.2	2008.664	—	—		IRC	S			
23307+6419	BU774	8.7	1.0	2008.820	334.1	0.624		AF	4Q-dv			
23309+3920	COU1348	10.1	-0.0	2008.664	34.1:	0.243:		IRC				
23309+5823	BU1151CD	9.7	-0.0	2008.765	293.6	0.403		AF				
23309+5823	BU1151CD	9.7	-0.0	2008.779	291.1	0.390	0.9:	AF	4Q-ly			
23321+5123	COU2669	9.5	3.5	2008.587	342.9	0.823		IRC	4Q-ly			
23322+1942	COU340	9.3	-0.0	2008.574	53.4	0.313		IRC				
23326+4949	A1489	10.3	0.0	2008.579	216.4	0.451		IRC				
23326+6658	MLR100	11.1	0.3	2008.765	21.0	0.915	0.6	AF	1Q-dv			
23332+5724	A641BC	9.0	1.8	2008.779	166.2	0.294		AF				
23333+4643	COU2247	10.9	0.1	2008.904	76.3	0.830	0.1	AF	1Q-dv-b			
23335+5210	A1490	8.2	4.0	2008.639	194.7	0.786		IRC	3Q-ly			
23345+2703	COU440	10.5	0.8	2008.710	234.6	1.821		IRC				
23345+2703	COU440	10.5	0.8	2008.710	236.5	1.808	2.0	IRC	dv (ni)			
23347+1914	COU341	9.5	2.7	2008.710	118.4:	0.850:		IRC				
23348+5018	COU2671	10.1	-0.0	2008.587	99.3	0.292:		IRC				
23351+4908	COU2672	10.2	0.4	2008.904	291.2	0.631	0.2	AF	4Q-dv-b			
23355+5401	MLR620	8.7	0.8	2008.639	224.3	0.574		IRC	3Q-ly			
23358+4729	COU2347	10.8	0.1	2008.639	149.6	0.359		IRC				
23363+5428	A1491	8.7	1.5	2008.639	88.5	0.509		IRC				
23365+5136	COU2673	9.4	0.3	2008.639	106.6	0.362		IRC	2Q-ly			
23375+3308	COU745	10.7	1.0	2008.710	6.8	1.836		IRC				
23375+3308	COU745	10.7	1.0	2008.710	6.8	1.857	1.5	IRC	dv (ni)			
23375+4922	COU2674	8.6	0.8	2008.579	18.3	0.339		IRC	1Q-ly			
23378+6601	HU1324	10.3	0.6	2008.765	0.4	0.359		AF		+9.4	+0.069	Hei1998
23378+6601	HU1324	10.3	0.6	2008.765	358.2	0.352	0.2	AF	dv (ni)			
23378+6813	BU855	9.4	0.5	2008.820	199.8	0.862		AF	3Q-dv			
23379+2510	COU441	10.1	2.4	2008.669	10.6	0.668		IRC				
23382+3250	HU792	9.8	0.3	2008.689	34.7:	0.480:		IRC	1Q-ly:			
23382+5514	A1493	9.4	0.2	2008.820	132.4	0.227		AF		+27.1	+0.127	Doc2007d
23393+4543	A643A,Ba	8.4	0.0	2008.579	132.5	0.255		IRC		-4.0	+0.029	Ole2005c
23394+3301	ES2326	10.9	1.4	2008.710	182.6	1.497		IRC	3Q-dv			
23401+6015	MLR366	10.3	0.5	2008.765	332.9	0.779	0.7	AF	dv (ni)			
23401+6015	MLR366	10.3	0.5	2008.765	333.7	0.817		AF				
23405+6733	BU857	9.0	0.8	2008.779	298.7	1.185	1.4	AF	dv (ni)			

**Table 2** Measurements of binaries with the Nice 76cm-refractor (cont.)

WDS	Name	$m_{VA}$ mag	$\Delta m_V$ mag	Epoch	$\theta$ ( $^\circ$ )	$\rho$ ( $''$ )	$\Delta m_F$ mag	Filter	Notes	$\theta_{O-C}$ ( $^\circ$ )	$\rho_{O-C}$ ( $''$ )	Orbit
23405+6733	BU857	9.0	0.8	2008.779	298.8	1.196		AF				
23409+2022	HO303AB	8.5	2.3	2008.574	184.0	1.151		IRC	3Q	-2.3	+0.249	Hei1995
23411+4613	MLR4	7.7	0.4	2008.579	—	—		IRC	S			
23419+5659	MLR621	10.8	0.2	2008.765	159.8	0.656		AF	2Q-dv			
23424+3903	A1494	9.3	1.5	2008.664	150.9:	0.106:		IRC	ly (ni)	+23.9	+0.006	Sey2002
23429+6351	MLR89	10.8	0.0	2008.765	283.0	0.497		AF	4Q-dv			
23439+2340	COU442	10.7	1.4	2008.669	59.7	1.477		IRC	1Q-ly			
23445+5449	MLR622	9.6	0.2	2008.639	359.3	0.295		IRC	4Q-ly			
23447+4305	COU1999	10.7	0.1	2008.587	337.5	0.406		IRC	4Q-ly			
23451+4751	COU2149	10.3	-0.0	2008.579	—	—		IRC	S			
23454+6102	HU1326	10.3	0.3	2008.779	256.2	0.745		AF	3Q-dv			
23463+6957	MLR278	11.0	0.1	2008.765	132.0	0.486		AF	2Q-dv			
23469+3553	COU845	10.9	0.8	2008.664	123.0	0.505		IRC				
23469+6824	HDS3378	11.4	2.0	2008.779	158.6:	2.874:		AF	b			
23481+6349	BU1152BC	10.2	-0.0	2008.820	97.9	0.815:	0.2	AF	dv (ni)			
23481+6349	BU1152BC	10.2	-0.0	2008.820	98.3	0.828		AF				
23485+3608	COU944	8.9	0.9	2008.579	92.4	0.172		IRC				
23485+3608	COU944	8.9	0.9	2008.664	92.2	0.212		IRC	2Q-ly			
23491+1915	COU343	9.0	-0.0	2008.574	123.4:	0.211:		IRC				
23492+5838	A645	10.3	0.6	2008.779	96.4	0.842	0.7	AF	dv (ni)			
23493+6158	MLR24AB	9.4	0.6	2008.779	305.9	0.485		AF	4Q-dv			
23502+1940	COU344	10.0	0.4	2008.574	324.4	0.178		IRC	4Q	-4.0	+0.027	Msn2001a
23505+5937	HDS3386	8.4	2.7	2008.820	—	—		AF	S			
23506+4705	A793	9.5	0.9	2008.587	—	—		IRC	S			
23515+5913	MLR367	9.8	-0.0	2008.765	326.5	0.711		AF				
23519+4708	COU2349	10.0	2.0	2008.639	217.7	0.705		IRC	3Q-ly			
23520+1252	A1247	9.7	0.3	2008.574	76.6	0.403		IRC		+10.1	+0.092	Sey2002
23524+6929	MLR279	9.8	0.2	2008.779	8.9	0.224		AF	1Q-dv			
23527+2259	BU859	9.8	0.0	2008.669	196.4	0.796		IRC	3Q-ly			
23545+4408	COU1497	10.4	0.1	2008.664	31.5	0.418		IRC				
23553+6048	MLR25	9.2	1.4	2008.765	117.0	0.501		AF	2Q-dv			
23557+4318	COU1498	10.1	1.1	2008.579	7.4:	0.117:		IRC				
23561+2327	HU500	9.5	0.1	2008.669	135.1:	0.131:	0.5	IRC	ly (ni)			
23571+4114	COU1499	10.9	0.6	2008.664	61.0	1.006		IRC	1Q-ly			
23573+2744	A427	9.0	4.5	2008.710	221.8	1.874		IRC	3Q-dv			
23584+1359	HEI197	10.2	0.1	2008.574	113.6	0.608		IRC				
23585+4815	COU2150	10.1	-0.0	2008.579	—	—		IRC	S			
23592+4446	COU1650	10.0	-0.0	2008.664	85.0	0.253		IRC				