



HAL
open science

Measurements of visual binaries with PISCO2 at the Nice 76-cm refractor in 2013-2014

René Gili, Jean-Louis Prieur, Jean-pierre Rivet, Farrokh Vakili, Marco Scardia, Luigi Pansecchi, Robert W. Argyle, Josefina Ling, Luca Piccotti, Eric Aristidi, et al.

► **To cite this version:**

René Gili, Jean-Louis Prieur, Jean-pierre Rivet, Farrokh Vakili, Marco Scardia, et al.. Measurements of visual binaries with PISCO2 at the Nice 76-cm refractor in 2013-2014. *Astronomical Notes / Astronomische Nachrichten*, 2022, 343, pp.e20224008. 10.1002/asna.20224008. hal-03744446

HAL Id: hal-03744446

<https://hal.science/hal-03744446>

Submitted on 2 Aug 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Measurements of visual double stars with PISCO2 at the Nice 76-cm refractor in 2013-2014

R. Gili^{†1}, J.-L. Prieur^{2,3,*}, J.-P. Rivet⁴, F. Vakili⁴, M. Scardia^{5,6}, L. Pansecchi⁶, R.W. Argyle⁷, J.F. Ling⁸, L. Piccotti^{8,9}, E. Aristidi⁴, L. Koechlin^{2,3}, D. Bonneau⁴, L. Maccarini¹⁰, and J. Serot¹¹

¹ Université Côte d’Azur, Observatoire de la Côte d’Azur, CNRS, Unité Mixte de Service Galilée, France

² Université de Toulouse – UPS-OMP – IRAP, Toulouse, France

³ CNRS – IRAP, 14 avenue Edouard Belin, 31400 Toulouse, France

⁴ Université Côte d’Azur, Observatoire de la Côte d’Azur, CNRS, Laboratoire Lagrange, France

⁵ Université Côte d’Azur, Observatoire de la Côte d’Azur - C2PU, Nice, France

⁶ INAF – Osservatorio Astronomico di Brera, Via E. Bianchi 46, 23807 Merate, Italy

⁷ Institute of Astronomy, Madingley Road, Cambridge, CB3 0HA, United Kingdom

⁸ Observatorio Astrónomico R.M. Aller, Avda das Ciencias s/n. Departamento de Matemática Aplicada, Universidad de Santiago de Compostela, 15782, Spain

⁹ Instituto Universitario de Investigación en Matemáticas y Aplicaciones, Universidad de Zaragoza, C. de Pedro Cerbuna, 12, 50009, Zaragoza, Spain

¹⁰ Desio, Monza and Brianza, Italy

¹¹ Institut Pascal – CNRS UMR 6602, Avenue B. Pascal 63178 Aubière, France

Received August 2, 2022; accepted

Key words Stars: double stars: close, visual, binaries, red dwarfs — astrometry — photometry — techniques: speckle interferometry, Lucky imaging, direct vector autocorrelation — instruments: 76-cm refractor

We present relative astrometric and photometric measurements of visual double stars made in 2013-2014, with PISCO2 installed at the 76-cm refractor of Côte d’Azur Observatory in Nice (France). Our observing list contains orbital couples as well as double stars whose motion is still uncertain. Three different techniques were used for obtaining measurements: Lucky Imaging, Speckle Interferometry and the Direct Vector Autocorrelation method. From our observations of 4864 multiple stars, we obtained 4952 new measurements with angular separations in the range $0''.1 - 14''$ and an average accuracy of $0''.015$. The mean error on the position angles is $1^\circ.0$. Most of the position angles were determined without the usual 180° ambiguity with the application of the direct vector autocorrelation technique and/or by inspection of the Lucky images or the long integration files. We managed to routinely monitor faint systems ($m_V \approx 9 - 11$) with large magnitude difference (up to $\Delta m_V \approx 5$). We have thus been able to measure 49 systems containing red dwarf stars that had been poorly monitored since their discovery, from which we estimated the stellar masses thanks to Gaia measurements. We also measured the magnitude difference of the two components of 318 double stars with an estimated error of 0.2 mag. Except for a few objects that have been discussed, our measurements are in good agreement with the ephemerides computed with published orbital elements, even for the double stars whose separation is smaller than the diffraction limit. Thanks to good seeing images and with the use of high-contrast numerical filters, we have also been able to obtain 455 measurements with an angular separation smaller than the diffraction limit of our instrumentation, and consistent with those obtained with larger telescopes. Finally, we report 378 measurements of the 296 new double stars that we found in the files obtained during the observations.

[†]Deceased in October 2018

1 Introduction

This paper presents the results of speckle observations of visual double stars made in 2013-2014 with the PISCO2 instrument (Pupil Interferometry Speckle camera and COronagraph, 2nd Version) installed at the 76-cm refractor telescope of the “Observatoire de la

Côte d’Azur”, (OCA) in Nice (France). In the previous paper (Gili et al., 2021) we reported the observations made in 2011-2012 with the first version of PISCO2. In this paper we present observations made with PISCO2 in its fully operational version.

PISCO2 is a speckle camera that was specially designed for the 76-cm refractor telescope and was described in Gili et al (2014). In 2013-2014, we continued our previous research program which aims at obtaining high angular resolution measurements of dou-

* Corresponding author: jean-louis.prieur@irap.omp.eu

ble stars with sensitive detectors, by using the good image quality of the site and the optics of the large Nice refractor, that often provides diffraction-limited images. The final purpose is to contribute to a better knowledge of the apparent relative motion of long-period binaries so that very accurate orbits could be determined in the future and fundamental parameters such as stellar masses could be inferred from them. The work presented here is the continuation of the program described in Gili & Prieur (2012) and Gili et al. (2020, 2021) that will be referred as Paper I, II, and III, hereafter.

We describe the list of our targets and the conditions of our observations in Sect. 2. We introduce our calibration and data-reduction procedures in Sects. 3–4. We present and discuss our relative astrometric and photometric measurements in Sect. 5. Then in Sect. 6 we compare our measurements with the ephemerides computed with published orbital elements, when available. Finally, we discuss the few cases of the largest residuals, and then focus on the measurements of double stars whose separation is smaller than the diffraction limit of our instrumentation.

2 Observations

2.1 Observing list

Our list of targets is the same as in our previous papers and was presented in Paper I. It basically includes all the visual double stars of the “Washington Double Star Catalog” (Mason et al., 2022, hereafter: WDS) for which new measurements are needed to improve their orbits, and that are accessible with our instrumentation.

The calendar of the observations made in 2013-2014 is reported in Table 1, with the distribution of the observations during those years. We indicate the epoch in the first column and the corresponding number of observations in Col. 2. We then give the night distribution of those observations during the month in Col. 3, the number of nights used for the observations in Col. 4. During that period, the main maintenance works concerned the optics; they consisted in dismantling the main lens and remounting it with new centering wedges, in August 2013.

The distribution of the apparent magnitudes m_V of the double stars observed in 2013-2014 is presented in Fig. 1a and the difference of magnitudes Δm_V between the two components in Fig. 1b. Those data were retrieved from the WDS catalog. 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 double star systems (see Fig. 1a).

Using both the observational data from DR2 GAIA (ESA, 2022), such as the g_{mag} photometric magnitude

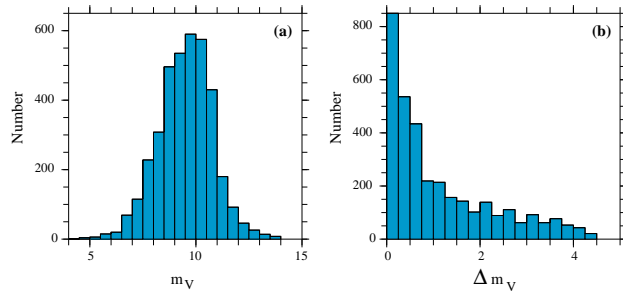


Fig. 1 Distribution of the double star systems observed in 2013-2014: (a) WDS visual magnitudes and (b) WDS magnitude differences Δm_V between the two components.

of the main component, the effective temperature T_{eff} , the galactic interstellar absorption A_{mag} and the parallax π_{gaia} (in milli-arcseconds), we derived G_{mag} , the absolute magnitude in the Gaia bandwidth:

$$G_{\text{mag}} = g_{\text{mag}} - A_{\text{mag}} - 5. \times \log_{10}(1000/\pi_{\text{gaia}}) + 5.$$

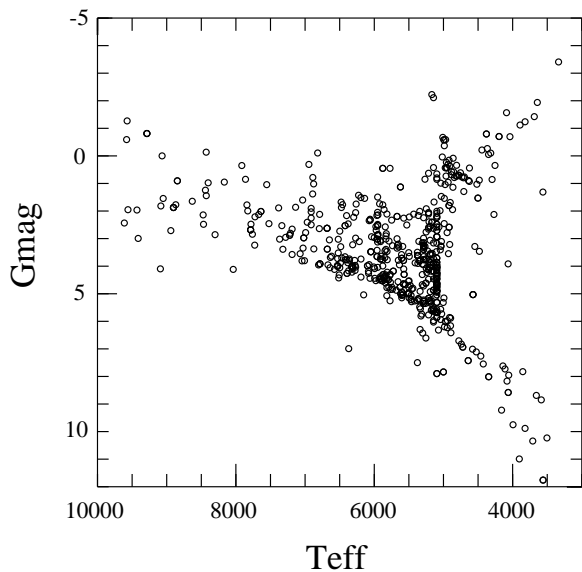
And we were able to construct the color-magnitude diagram of those double systems, which is displayed in Fig. 2. Out of the 641 objects whose parallax was measured by DR2 GAIA (ESA, 2022), we plotted the 629 objects for which the relative uncertainty on the parallax was smaller than 50%.

This plot shows that our observations well sampled most of the main sequence down to the faint red M stars. Indeed this is shown in Table 2, with the list of the 49 systems with red dwarf stars that have been observed in 2013-2014. This list was built from the spectral types found in the WDS catalog, by selecting the K and M stars of luminosity class V of Table 3. However, it should be underlined that the spectral classification of close double stars is still poorly known.

In Table 2, we successively reported the WDS name in Col. 1, the discoverer’s name of the double star system in Col. 2, the spectral type as given in the WDS, with the type of each components for some systems, in Col. 3, the visual magnitudes m_{V1} and m_{V2} of components 1 and 2 in Cols. 4 and 5, respectively, the $B - V$ color index as measured by Hipparcos in Col. 6, and the interstellar galactic absorption A_{absp} of those system, from DR2 GAIA in Col. 7. The Hipparcos parallax π_{Hip} and its error $\sigma_{\pi_{\text{Hip}}}$, the DR2 GAIA parallax π_{gaia} and its error $\sigma_{\pi_{\text{gaia}}}$ are then given in Cols. 8, 9, 10, and 11, respectively. The effective temperature T_{eff} from DR2 GAIA is displayed in Col. 12. The absolute magnitudes of components 1 and 2, M_{V1} and M_{V2} , were then computed from m_{V1} and m_{V2} , by using A_{absp} , and the weighted average of the Hipparcos and GAIA parallaxes. They are given in Cols. 13 and 14, respectively. We finally give \mathfrak{M}_1 and \mathfrak{M}_2 in Cols 15 and 16, respectively, which are some rough estimates of the masses of

Table 1 Calendar of the observations of double stars in 2013-2014.

Month	Nobs.	Night distribution during the month	Nights
2013-01	89	= 22+60+1+6	4
2013-02	177	= 27+40+28+40+42	5
2013-03	192	= 42+43+20+49+10+28	6
2013-04	178	= 21+18+43+49+40+7	6
2013-05	84	= 22+4+27+15+16	5
2013-06	200	= 5+30+30+21+33+23+23+21	8
2013-07	323	= 30+19+34+38+20+20+43+45+31+43	10
2013-08	505	= 40+40+22+37+42+45+45+32+40+42+36+33+31+20	14
2013-09	263	= 28+32+47+20+20+31+52+33	8
2013-10	114	= 52+62	2
2013-11	87	= 2+65+20	3
2013-12	278	= 15+11+51+20+55+21+40+20+31+14	10
Total in 2013	2490		81
2014-01	153	= 15+65+21+31+21	5
2014-02	228	= 21+21+35+20+26+55+50	7
2014-03	259	= 57+7+40+50+50+55	6
2014-04	120	= 54+13+24+29	4
2014-05	292	= 42+43+20+49+30+28+80	7
2014-06	283	= 45+30+52+31+36+43+22+24	8
2014-07	226	= 42+43+25+49+38+29	6
2014-08	237	= 46+43+24+56+40+28	6
2014-09	0		0
2014-10	421	= 69+51+40+61+44+52+63+41	8
2014-11	142	= 36+55+30+21	4
2014-12	147	= 15+59+42+31	4
Total in 2014	2508		65

**Fig. 2** Color-magnitude diagram with the GAIA absolute magnitude G_{mag} vs the effective temperature T_{eff} of the double stars measured in Table 3, for which the GAIA parallaxes have a relative error smaller than 50% (i.e., 629 objects). This diagram was derived from the DR2 GAIA (ESA, 2022) measurements.

the components 1 and 2, assuming that they follow the mass-luminosity relation.

We were able to construct the color-magnitude diagram of the double systems containing a red dwarf, using Table 2 by plotting MV_1 and MV_2 of Cols. 13 and 14 as a function of the color index $B - V$ of Col. 6 (see Fig. 3).

As proposed in Scardia et al. (2008) have used the mass-luminosity relation for class V stars:

$$\log_{10} \mathfrak{M} = -k(M_{\text{bol}} - M_0) \quad (1)$$

where \mathfrak{M} is the mass of the star (in solar mass M_{\odot}), M_{bol} is its absolute bolometric magnitude and k and M_0 are two constants. When fitting the relation (1) to Straizys and Kuriliene (1981)'s data for the stellar class V (in the spectral range B0-M5) we obtained $k = 0.1045$ and $M_0 = 4.60$ mag with a mean residual of 0.19 mag for the bolometric magnitudes. A more elaborated model of the mass-luminosity relation for stars of class V was proposed by Angelov (1993), with a 7th order polynomial instead of the first order polynomial of Eq. 1, but our approximation is simpler and sufficient for our purpose which is only qualitative.

We plotted in Fig. 4 the individual masses that we computed for components 1 and 2 of those systems as a function of the parallax. The errors of our mass values are estimated at about 0.1 solar mass. They strongly

Table 2 List of binary systems observed in 2013-2014 that contain a red dwarf star, with absolute magnitudes and masses of the two components that we derived from the WDS and from GAIA measurements.

WDS	Name	Spectral type	mV ₁	mV ₂	B - V	A _{absp}	π _{Hip}	σ _{π_{Hip}}	π _{gaia}	σ _{π_{gaia}}	T _{eff}	MV ₁	MV ₂	ℳ ₁	ℳ ₂
			(mag)	(mag)	(mag)	(mag)	(mas)	(mas)	(mas)	(mas)	(°K)	(mag)	(mag)	(M _⊙)	(M _⊙)
00014+3937	HLD60	K0V+K1V	9.09	9.77	0.79	—	20.42	1.91	19.27	0.07	5190	5.52	6.20	0.76	0.63
00022+2705	BU733AB	G5Vb+K5V	5.83	8.9	0.70	0.11	80.63	3.03	79.07	0.56	5570	5.44	8.51	0.79	0.33
01076+2257	LDS9112AB	K4V+M3	8.42	14.67	1.12	0.38	48.20	1.06	48.69	0.07	4617	7.24	13.49	0.46	0.08
01267+1123	HDS188	M0V:	12.47	12.61	1.47	—	17.23	5.79	17.98	0.96	5000	8.73	8.87	0.28	0.27
04102+1722	HEI35	K2V+K6V	9.46	10.93	1.07	—	29.88	2.67	—	—	4796	6.84	8.31	0.53	0.34
04258+1800	COU2682	K2V	9.49	10.60	0.40	0.40	20.79	1.83	23.75	0.57	4950	6.70	7.81	0.55	0.42
05020+0959	HDS654	M3V:	11.84	12.83	1.54	—	31.20	8.56	41.92	0.08	4077	9.95	10.94	0.19	0.15
08286+3502	WOR19	M0V	11.51	11.55	1.57	—	51.13	6.64	—	—	—	10.05	10.09	0.20	0.20
08549+2612	A2131AB	G2V+K0V	6.95	9.02	0.67	—	21.70	1.32	23.01	1.11	5691	3.70	5.77	1.21	0.71
10084+1158	HDO127BC	K2V	8.24	13.2	0.89	0.13	42.09	0.79	41.21	0.08	5098	6.45	11.41	0.58	0.18
11035+5432	A1590	K2V	8.95	9.64	0.89	—	24.45	2.26	23.49	0.05	5190	5.81	6.50	0.68	0.57
11235+0701	BAG24Aa,Ab	M0V	10.37	10.37	1.57	0.72	—	—	31.23	0.81	4172	8.56	8.56	0.29	0.29
11374+4728	KU39	K4V	10.68	11.16	1.17	—	27.67	4.29	29.80	0.12	4514	8.05	8.53	0.38	0.34
11402+2609	HDS1652	K1V	8.40	11.24	0.93	—	—	—	7.45	0.36	4909	2.76	5.60	1.44	0.73
11520+4805	HU731	K0V	9.68	9.81	0.98	—	20.16	3.04	23.50	0.05	5143	6.53	6.66	0.59	0.57
11544+1515	WOR20	M0V	11.19	11.40	1.18	—	24.13	5.32	19.84	0.10	4964	7.69	7.90	0.36	0.34
12032+4751	VYS12AB	K4V	10.0	15.8	0.96	—	23.18	1.75	23.21	0.04	4700	6.83	12.63	0.51	0.13
12101+0526	WOR22AB	M0V	12.25	12.67	1.58	—	24.11	5.50	22.88	0.09	4472	9.05	9.47	0.26	0.23
12125+3940	HDS1727	M2V	11.72	13.14	1.46	1.90	34.10	7.62	31.80	0.33	3713	11.14	12.56	0.15	0.11
12422+2622	A1851	K4V	10.08	10.09	1.07	—	24.34	2.48	—	—	—	7.01	7.02	0.49	0.49
13048+5555	WOR23	M0V	11.24	12.21	1.58	—	31.44	3.62	28.96	0.04	4000	8.55	9.52	0.29	0.23
13063+2044	HU739	K4V	9.72	12.11	1.29	0.87	53.78	2.38	50.90	0.04	4122	9.13	11.52	0.29	0.16
13320+3108	WOR24	M0V	11.14	11.37	1.60	—	32.05	2.96	—	—	3906	8.67	8.90	0.28	0.27
13331+4316	COU1754	K8V	10.18	10.21	1.08	0.54	30.52	1.93	32.00	0.10	4634	8.24	8.27	0.33	0.33
13491+2659	STF1785	K4V+K6V	7.36	8.15	1.11	—	73.25	1.33	73.92	0.07	4707	6.70	7.49	0.53	0.42
13514+2620	YSC50Aa,Ab	K6V	11.7	12.1	1.37	—	20.99	2.33	—	—	—	8.31	8.71	0.34	0.31
13514+2620	SKF260AB	K6V	11.0	13.5	1.37	—	20.99	2.33	—	—	—	7.61	10.11	0.41	0.22
14019+1530	ALD112	M2V	11.39	11.52	1.42	—	37.28	5.79	34.37	0.07	3854	9.07	9.20	0.24	0.24
14080+4535	FOX70	K8V	11.11	11.77	1.57	—	17.19	4.16	17.95	0.03	4417	7.38	8.04	0.41	0.35
14127+2349	YSC53	K0V	8.3	12.4	0.96	0.26	30.62	1.16	31.83	0.04	4976	6.07	10.17	0.66	0.25
14540+2335	REU2	M3V	12.24	12.66	0.90	—	97.83	5.99	87.94	0.18	3692	11.97	12.39	0.12	0.11
14562+1745	GH61AC	K5V	11.8	15.	1.34	—	11.64	3.68	16.31	0.29	4080	7.82	11.02	0.39	0.18
15038+4739	STF1909	F7V+K4V	5.20	6.10	0.65	—	78.39	1.03	77.24	1.20	5247	4.66	5.56	0.84	0.69
15360+3948	STT298AB	K2V	7.16	8.44	0.95	—	45.85	0.79	43.99	0.21	5095	5.40	6.68	0.75	0.55
17141-0824	BAR7	K3V	8.64	11.69	0.93	0.15	34.27	2.01	33.80	0.07	4916	6.44	9.49	0.57	0.27
17193-0221	RST4569AB	K3V	10.12	11.13	0.97	0.77	11.48	2.79	12.16	0.27	4893	6.30	7.31	0.59	0.46
17372+2754	KUI83AB	M0V:	9.81	10.40	1.16	—	32.05	2.28	—	—	—	7.34	7.93	0.39	0.34
18500+1519	YSC12AB	F8+M2V	7.6	11.3	0.62	0.75	18.34	0.89	17.35	0.27	5841	4.58	8.28	0.86	0.30
19233-0635	HDS2745	K5V	9.85	13.19	1.09	0.25	31.38	2.27	32.10	0.04	4497	7.63	10.97	0.41	0.18
20302+2651	WOR9AB	M1V	10.50	10.63	1.34	—	43.24	4.37	49.03	0.91	4460	8.91	9.04	0.26	0.25
20396+0458	KUI99AB	K5V	8.28	9.63	1.24	—	53.82	2.21	—	—	4328	6.93	8.28	0.49	0.35
20501+2923	BAG28	K4V	8.32	12.4	1.07	—	48.38	1.77	49.43	0.05	4844	6.79	10.87	0.51	0.19
21000+4004	KUI103	M2V+M0.5V	10.49	12.40	1.51	—	66.21	2.54	66.81	0.09	3626	9.61	11.52	0.22	0.14
21379+2743	SKF245AC	M1V	9.9	15.0	1.50	0.11	76.07	2.53	76.22	0.04	4057	9.42	14.52	0.23	0.07
22234+3228	WOR11	M3.0V	11.59	12.01	1.57	—	62.18	10.01	65.86	0.10	3820	10.68	11.10	0.16	0.15
22281+1215	BU701AB	K0V	7.34	9.62	0.89	—	15.87	1.8	14.59	0.16	4955	3.18	5.46	1.33	0.77
22536+3756	RUC15	G5V+K9V	6.81	9.4	0.73	—	12.30	1.26	14.13	0.05	5248	2.55	5.14	1.58	0.69
23167+3441	HDS3315	K8V	11.25	11.75	1.57	0.78	10.53	1.89	11.80	0.22	4915	7.36	7.86	0.41	0.37
23405+2959	HDS3363	K4V	11.12	13.94	1.07	0.75	16.96	3.02	13.35	0.25	4485	7.54	10.36	0.43	0.22

depend on the errors of the parallaxes. The very small errors given by DR2 GAIA (ESA, 2022) are unfortunately very optimistic.

Another problem concerns the spectral type of the components given by the WDS catalog. For many of those couples, the dynamical mass seems too large for leaving some space for a red dwarf companion (see e.g. Malkov, 2012). This is also true for a triple system with a very small mass for the farthest companion, like WDS 22536+3756 = RUC 15 for which the

third component has a minimum mass M_3 such that $M_3 \sin i = 0.54 M_{\odot}$ (see Pribulla, 2006)

When examining the masses found in Cols 15 and 16, we found an inconsistency with the WDS spectral type reported in Col. 3 of Table 2 for some HDS1652 and BU 701 AB which are only reported as K-type stars only, whereas we found a mass larger than one solar mass for the components 1 of those two systems. We suggest a G+K spectral combination to account for those larger masses.

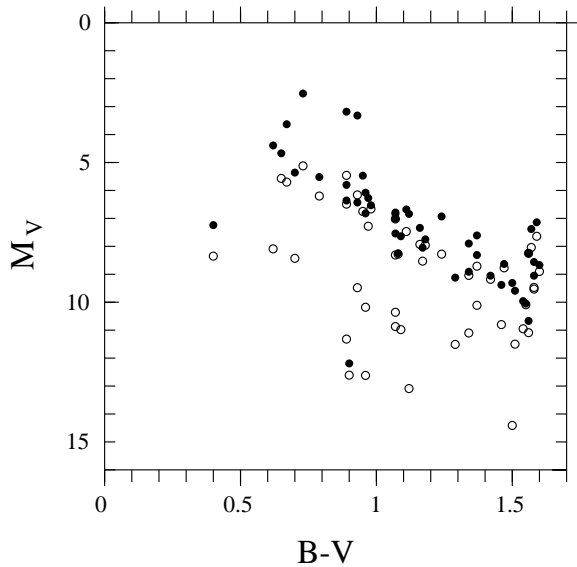


Fig. 3 Color-magnitude diagram with the absolute visual magnitude M_V versus the $B-V$ index of the double stars measured in Table 3 that contain a red dwarf component. The locations of the primary and secondary components are drawn as filled and open circles, respectively.

The subsample of systems containing red dwarfs that we reported in Table 2 should be considered as incomplete, since precise spectral types and luminosity classes are still missing for many double stars in the WDS catalog.

2.2 Optical setup and observing procedure

The observations reported here were made with PISCO2 mounted on the “Grand Equatorial” of OCA Observatory. Since its free aperture diameter is $D = 74$ cm, the limit of diffraction is $\rho_D = \lambda/D = 0''.16$, at $\lambda = 570$ nm, corresponding to the average central wavelength of the filter we used.

When observing a single star, a two-aperture interferometer (with a D separation) placed on top of the telescope will generate a set of fringes angularly separated by λ/D in the image plane. When observing a double star made of two equal sources of light, with a two-aperture interferometer, two sets of fringes will superimpose in the image plane. If the angular separation of the two stellar components is equal to half of the angular interfringe, the two sets of fringes cancel in the composite image. The smallest angular separation that can be measured for double stars with a two-aperture interferometer is then $\lambda/2D$, i.e. $0''.008$ when $D = 7$ meters (Michelson, 1890), or $0''.08$ when $D = 70$ cm. This explains why we could resolve double

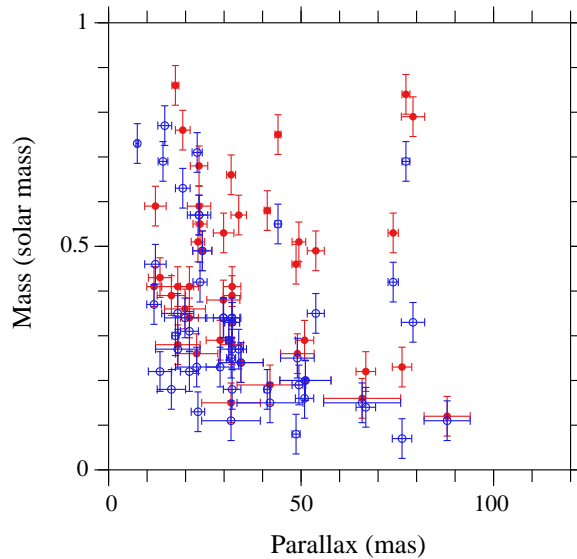


Fig. 4 Mass versus parallax diagram of the double stars measured in Table 3 that contain a red dwarf component. The masses M_1 and M_2 of the components 1 and 2 are drawn as red and blue circles, respectively.

stars closer than the diffraction limit of our instrument (see Sect.6.3).

The PISCO2 instrument (Gili et al., 2014) was used with an ANDOR iXon DV897 EMCCD camera (ANDOR, 2022) that was controlled by a dedicated acquisition and real time processing program `BuildSpeck1` that was developed by J.-L. Prieur.

The instrumental setup and the observing procedure was the same as for the observations presented in Paper III. We invite the reader to look at this paper for more details.

All the files obtained during the observations were then examined and processed by R. Gili using various programs from the IRIS software (Buil, 2022), the REDUC software (Losse, 2022), and the program `Gdpisco` developed by J.-L. Prieur. In that program, some high contrast numerical filters that were implemented in 2013-2014 thanks to R. Gili’s suggestions. Those files were re-processed in 2021 and 2022 by J.-L. Prieur in order to obtain another independent confirmation of those results. A systematic search was also done in the WDS catalog and all our measurements were compared with other values obtained by observers in this catalog. We have found a very good agreement for the position angle measurements in general, but we found some discrepant values for the angular separation, with a factor of two as the difference. This may be due to bad binning value that was noted during the observations. We have corrected them when we found them, but some other cases may exist that we have not found. Unfortunately,

R. Gili is deceased and cannot give us explanations about this problem any longer.

3 Scale and position angle calibration

The astrometric calibration of the magnification scale of PISCO2 was done with a calibration grating mask (see Paper II). The scale value was found to be $0''.0738/\text{pixel}$ when the frames were not binned ($x_{\text{bin}}=1$, $y_{\text{bin}}=1$). In that case, the diffraction limit in V of $0''.16$ (see Sect. 2.2) corresponds to 2.16 pixels, which is in agreement with Shannon’s sampling criteria (i.e. the diffraction diameter is sampled by more than two pixels).

The calibration of the origin of the position angles was done recording star trails caused by the diurnal motion. The orientation of our images on the detector was approximately conventional, with North to the bottom, and East to the right. After measuring a series of star trail images, we found: $\theta_{\text{sky}} = 90.99 + \theta_{\text{frame}}$, where θ_{sky} and θ_{frame} are the angular positions on the sky and on the EMCCD frame in degrees, respectively.

4 Data reduction procedure

Most of the high angular resolution observations presented here have been obtained with the “speckle interferometry” technique that was derived from the pioneering work of Labeyrie (1970). More precisely, we have used the method described in Worden et al. (1977), which works with a “flattened” autocorrelation, and is routinely used for PISCO (see Scardia et al., 2019, for instance). The whole processing was done in two steps: real-time processing with the `BuildSpeck1` program and post-processing with programs like `Gdpisco` (see Paper III for more details).

The 180° -ambiguity of speckle measurements related to the position angles of double stars was mostly solved by the direct vector autocorrelation (DVA) method, as proposed by Bagnuolo et al (1992), which computes the “oriented” autocorrelation function and takes into account the brightness level of the vector ends. The DVA both allows the quadrant determination and the measurement of Δm when the contrast is not too large (e.g. $\Delta m < 2$).

In the case of good seeing conditions, we obtained high resolution images with the Lucky Imaging method implemented in the REDUC software (Losse, 2022). This method was described in Paper I, and consists of shift-and-add processing a subset of selected good images. We could measure couples with very large differences of brightness, up to 3–4 magnitudes (see Sect. 5). Compared to the speckle interferometry, the main advantage of “Lucky imaging” is to provide a full image

which is convenient for the determination of the quadrants (where the companion stands) and of the difference of magnitudes between the two components.

5 Relative astrometric and photometric measurements

The relative astrometric and photometric measurements that we obtained with PISCO2 in 2013-2014 are displayed in Table 3 (In the printed version of this paper, only the beginning of this table is printed; the full version is only available in the electronic version). They concern 4864 visual double stars or multiple objects, with 4952 position measurements and 567 cases of unresolved observations.

In this table, for each object we successively give its WDS name in Col. 1, the official double star designation in Col. 2 (sequence is “discoverer-number”, with its components if that is the case), the epoch of observation in Besselian years (Col. 3), the binning factor used by the detector when acquiring the image (Col. 4), the angular separation ρ (Col. 5) between the two components with its error (Col. 6) in arcseconds, and the position angle θ (Col. 7) with its error (Col. 8) in degrees, measured from the North and positive to the East, the measured difference of magnitudes Δm between the two components (Col. 9), and some notes in Col. 10 (‘NDg’ or ‘NDp’ for new doubles, and ‘NR’ for ‘Not Resolved’).

The ($O - C$) (Observed minus Computed) residuals of the measurements for the systems with a known orbit are displayed in Cols. 12 and 13 for the residuals in angular separation and position angle, respectively. The orbital elements used for computing the ephemerides were retrieved from the “Sixth Catalogue of Orbits of Visual Binary Stars” (Hartkopf et al., 2001, and Matson et al., 2022, hereafter OC6). The corresponding authors are given in Col. 11, using the style of the OC6 references.

The difference of magnitudes Δm with the wide-band filter that we used for the observations (see Paper I), was obtained either from the Lucky Imaging or the DVA method, is reported in Col. 9, and concerns 318 objects (see Fig. 5b). By comparing the measurements obtained for the same objects, we estimated the average (internal) errors at about 0.2 mag.

The distribution of the 4952 angular separations measured in this paper is displayed in Fig. 5a and shows a maximum for $\rho \approx 0''.4$. The largest separation of $\rho = 14''.5$ was obtained for HJ477AC. The smallest separation was measured for COU773 with $\rho = 0''.08$. This is smaller than the diffraction limit $\rho_D = \lambda/D = 0''.16$, with our V filter (i.e. $\lambda = 570$ nm) and our refractor whose free aperture is $D = 0.74$ m. The residuals of our measurements with published orbits will be discussed in Sect. 6.

Table 3 Table of binary measurements obtained with PISCO2 in 2013-2014 and O-C residuals with published orbits (begin). The full table is only available in the electronic version as an attached document.

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ ($^\circ$)
00002+3613	TDS1236	2013.944	1	0.480	0.009	152.8*	0.7					
00002+3613	TDS1236	2014.877	1	0.467	0.009	151.8	0.8					
00004+2749	TDS1238	2013.963	1	0.834	0.007	266.2*	0.8					
00005+2031	COU444	2013.924	1	0.693	0.007	39.5	0.3	3.25				
00010+2721	DAM361Aa,Ab	2013.927	1	1.442	0.007	358.3	0.3	2.26				
00010+2721	DAM361	2013.927	1	5.372	0.571	218.8	5.5					
00011+2502	POU5882	2013.927	1	1.302	0.007	42.8	0.3	0.39				
00014+3937	HLD60	2013.867	1	1.309	0.013	168.5*	0.3			Izm2019	-0.00	0.9
00014+3937	HLD60	2014.828	1	1.322	0.015	167.5*	0.3			Izm2019	0.01	0.3
00014+4828	COU1850AB	2014.831	1	0.684	0.020	7.9*	0.8					
00014+4828	COU1850Aa,Ab	2014.831	1	0.126	0.052	111.9	4.9					
00022+2705	BU733AB	2013.818	1	0.520	0.011	313.8*	0.3			Sod1999	0.01	-5.0
00022+2705	BU733AB	2013.818	1	0.527	0.007	312.1*	0.4			Sod1999	0.01	-6.7
00022+2705	BU733AB	2014.869	1	0.432	0.038	352.0	5.3			Sod1999	0.06	1.3
00022+2705	BU733AB	2014.869	1	0.424	0.009	349.7	1.8			Sod1999	0.05	-1.0
00022+2705	BU733AB	2014.877	1	0.449	0.024	347.2	2.8			Sod1999	0.08	-3.8
00022+2705	BU733AB	2014.877	1	0.462	0.030	357.6	7.6			Sod1999	0.09	6.6

Notes: In column 7, the superscript * indicates that the position angle θ could be determined without the 180° ambiguity. In column 13, the superscript Q indicates that our θ measurement quadrant was not compatible with the quadrant used for computing the orbit.

A superscript * was added to θ measurements in Col. 7 when we could determine the quadrants of the measurements, i.e., when our observations allowed us to solve the 180° ambiguity of the autocorrelation frames. When this was not possible, we used the quadrant of the last observations from the WDS catalog. Eventually when such observations were missing, we assumed that the quadrant was equal to 1 or 2 (i.e. the companion was lying in the $[0^\circ, 90^\circ]$ or $[90^\circ, 180^\circ]$ sectors).

A superscript Q was added to θ residuals in Col. 13 when the quadrants of our measurements were not in agreement with those used for the orbits.

The average errors determined by our *Gdpisco* program are $0''.015 \pm 0''.122$ and $1^\circ.0 \pm 1^\circ.8$ for ρ and θ respectively. Those errors were computed for each measurement by estimating the uncertainties on the background estimation and are consistent with the variations seen in repeat measurements of the same systems. Indeed the background removal on the autocorrelation spots is the critical step of the measurement procedure. Since the frame scale was $0''.0738/\text{pixel}$, those values indicate that the location of the secondary peaks of the autocorrelations was determined with a mean accuracy of about 1/5th of a pixel.

During his observations, R. Gili found some new stellar components around double stars that were previously known. This concerns 121 measurements of 81 new double stars that we discovered in 2013-2014, and

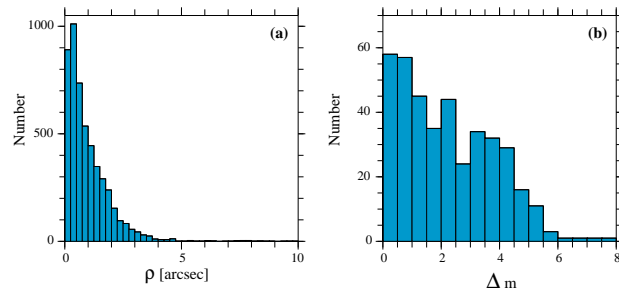


Fig. 5 Distribution of the double star systems observed in 2013-2014: (a) angular separations of the measurements (with a limited range in angular separation for better visibility, since there are very few large separations), and (b) differences of magnitude Δm measured with Lucky Imaging and direct vector methods.

it is indicated by 'NDg' in Col. 10 of Table 3. The subset of those measurements is reported in Table 4. This table has the same column description as Table 3, which was described in the beginning of this section. Some of them have been monitored since their discovery and are included in the list of René Gili's new double stars discoveries (Gili, 2016). In Table 4, they correspond to the objects whose names start with GII. More observations are required to confirm the other new couples of this table.

We also found 215 new components during the processing stage, mainly very close components that were not seen by R. Gili during the observations. In agreement with the current denomination adopted by the WDS, we noted the corresponding couples as 'Aa,Ab' or 'AC' in Col. 2 of Table 3, with the mention 'NDp' in Col. 10 of this table. Some of these observed many times but most of them they will have to be confirmed by new observations. We encourage other observers to confirm our discovery.

6 Residuals with published orbits

6.1 Comparison with published ephemerides

The residuals from published orbits that have been computed with our measurements of Table 3 are plotted in Fig. 7a. Among those 486 residuals, this plot gives the names of ten objects with the largest residuals, that will be discussed in Sect. 6.2. The other residuals are well centered around the origin, with a rather large scatter.

The mean values computed with the residuals of Table 3 are $\langle \Delta\rho_{O-C} \rangle = 0''.008 \pm 0''.053$ and $\langle \Delta\theta_{O-C} \rangle = -0^\circ.02 \pm 3^\circ.5$ (after rejecting the outliers). In both cases, the offsets are very close to zero, with absolute values much smaller than the standard deviations which provides a validation of our calibration (see Sect. 2.2). The rather large standard deviation that can be explained by the poor quality of many orbits due to their old age and the lack of observations. Indeed we have checked that our measurements are in good agreement with the observations reported in the "Fourth Catalogue of Interferometric Measurements of Binary Stars" (Hartkopf et al., 2001, and Hartkopf et al., 2020, hereafter IC4), when they were present in this catalog.

The measurements with the largest residuals of Table 3, such that $\Delta\rho > 0''.1$ or $\Delta\theta_{O-C} > 10^\circ$, are reported in Table 5. Some examples of autocorrelations of those double stars are shown in Fig. 6. The content of this table has the same notation as Table 3. In the last column, we added the other measurements that are reported in the IC4 or the WDS catalog for similar epochs. These are in fair agreement with ours.

In Table 5, we see that our measurements are in fair agreement with the published orbits, as we will see in the next section. However most of those objects have been poorly monitored until now, and their orbits still need additional measurements to be more precise.

If we consider the best orbits only, for instance the orbits of Grade 1 in OC6, the plot of the residuals of Table 3 becomes much more concentrated (see Fig. 7b). This shows that the dispersion of Fig. 7a is caused by the poor quality of most of the orbits.

6.2 Discussion on the objects with the largest residuals

We discuss here the cases of the measurements with largest residuals, that appear as outliers in Fig. 7a, i.e., A700, A1061AB, A2157, A2479, AG331, BU1235, COU206, COU1006, COU1212 and WOR23.

The case of A700 is particular and was already discussed in Paper III. The relative motion of the pair suggests that it is an optical double star rather than a physical binary. A rectilinear solution was computed by Parent et al. (2017).

For the other objects of that list, the orbits are poorly known, with Grades of 4 or 5. Their observations are scarce in the IC4 or the WDS, and only small arcs of orbits have been monitored until now. As shown in Col. 11 of Table 5, our measurements are consistent with the others that are reported in the IC4 or the WDS, for similar epochs, when available. Clearly more measurements are needed for obtaining reliable orbits of those objects.

6.3 Measurements under the diffraction limit

In Table 3, there are 455 measurements with an angular separation smaller than $0''.16$, which is the diffraction limit of our instrumentation (see Sect. 2.2). Some examples of autocorrelations of those double stars that have been processed with our high contrast numerical filters are shown in Fig. 9. As expected the autocorrelation peaks are not clearly divided, although the central peak is elongated. Our measurement was made by assuming that the lateral peaks were located on the very edges of that elongated peak.

When an orbit was known, we reported those measurements and the corresponding residuals in Table 6, with the same notation as in Table 3. The mean value of the angular separation from the 58 measurements of this table is $\langle \rho \rangle = 0''.119 \pm 0''.024$. With a scale of $0''.0738/\text{pixel}$ (see Sect. 3), this value corresponds to 1.8 pixels on the autocorrelation frames. The location of the autocorrelation peaks could be estimated with an average error of $0''.016$ (see Sect. 5). Hence the average error on the position angle corresponds to the angle of $0''.016$ seen at the distance of $0''.133$, which is therefore: $\arctan(0.016/0.133) \approx 7^\circ$.

The residuals from published orbits of the measurements of Table 6 are plotted in Fig. 8. We notice the presence of three outliers, A1061AB, BU1235, and COU206, that have been discussed in the previous section.

The mean values computed with the 58 residuals of Table 6 are $\langle \Delta\rho_{O-C} \rangle = -0''.008 \pm 0''.052$ and $\langle \Delta\theta_{O-C} \rangle = 1^\circ.0 \pm 15^\circ.8$ (after rejecting the outliers). Our measurements under the diffraction limit are therefore in good agreement with the ephemerides of published orbits, even though the uncertainties are

Table 4 Table of measurements of the new double stars discovered by R. Gili during his observations: (121) new measurements of the 81 'NDg' objects of Table 3 (begin.).

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes
00026+1841	HDS2AC	2013.818	1	2.045	0.010	156.7*	0.3		
00037+1851	XMI104BC	2013.924	1	0.982	0.007	176.5	0.3	3.43	
00084+1843	COU246Aa,Ab	2014.973	1	0.248	0.007	195.0	1.1		
00115+3556	HDS24Aa,Ab	2013.946	1	0.102	0.017	121.7	4.9		
00124+4558	HDS27AC	2014.976	1	1.390	0.015	126.3	0.5		
00175+2200	COU73Aa,Ab	2013.944	1	0.106	0.050	48.0	7.3		
00310+2839	CTU1AC	2013.944	1	1.338	0.007	53.3*	0.3		
00495+4018	HDS110Aa,Ab	2014.976	1	0.108	0.042	126.4	7.1		
00495+4018	HDS110Aa,Ab	2014.976	1	0.128	0.042	130.1	7.1		
01042+2256	GIC19Aa,Ab	2013.927	1	1.205	0.007	266.1	0.3	0.29	
01076+2257	LDS9112Aa,Ab	2013.927	1	1.474	0.007	72.9	0.3	4.38	
01291+1040	XMI205BC	2013.966	1	0.921	0.007	213.7	0.3	6.27	
02270+1952	A2328AC	2013.835	1	1.247	0.007	95.4	0.3		
02270+1952	A2328AC	2013.836	1	1.244	0.007	95.6	0.3	3.31	
02480+1604	TDS96Aa,Ab	2014.059	1	0.187	0.011	186.1	3.6		
04112+5555	HDS531AC	2014.973	1	1.787	0.010	75.3	0.3		
04112+5555	HDS531AD	2014.973	1	3.068	0.017	80.7	0.3	1.43	
04362+0814	A1840AC	2013.111	1	3.250	0.028	114.2	0.8		
05116+1132	HEI459AC	2014.149	1	3.190	0.027	279.9*	9.7		GII76AC
05116+1132	HEI459AC	2014.149	1	3.105	0.018	280.4	0.3		
05287+2317	COU84AC	2013.130	1	4.579	0.070	111.4	0.3		
05287+2317	COU84AC	2013.130	1	4.632	0.023	111.4	0.3		
05287+2317	COU84AC	2013.136	1	4.607	0.023	111.4*	0.3	4.33	
05512+2235	COU373AC	2014.059	1	2.531	0.036	189.3*	0.5		
05529+2800	COU899Aa,Ab	2013.111	1	0.215	0.027	155.0*	2.3		
05529+2800	COU899Aa,Ab	2014.059	1	0.229	0.017	160.7	2.3	0.10	
05563+2005	COU375AC	2013.106	1	4.147	0.021	41.1*	0.3	2.96	
05563+2005	COU375AD	2013.108	2	8.360	0.042	140.9*	0.3	1.63	
06347+2605	J1093AC	2014.182	1	1.839	0.011	267.6	0.5		
06347+2605	J1093AC	2014.857	1	1.841	0.013	267.6*	0.3		
06564+1029	HEI712AC	2014.149	1	3.148	0.025	339.5*	1.3		
07032+3457	GII82Aa,Ab	2014.201	1	0.328	0.007	174.6	0.3	0.35	Close to COU1739
07032+3457	GII82Aa,Ab	2014.201	1	0.303	0.024	176.0	2.0		
07032+3457	GII82Aa,Ab	2014.206	1	0.327	0.007	174.7	0.3	0.46	
07271+2718	COU1108AC	2013.158	1	3.575	0.037	14.1	1.7		
08002+1557	GII81AC	2014.206	1	0.217	0.007	33.9	0.3	0.57	Close to A2885
08452+1941	BOV54AC	2013.158	1	5.277	0.026	287.0	0.3	1.75	
08536+1210	GII38Ba,Bb	2013.205	1	0.234	0.007	348.6	0.3	0.03	HEI480
08536+1210	GII38AC	2013.205	1	1.520	0.008	271.0	0.3	4.15	HEI480
09007+3208	COU1253AC	2014.513	1	1.714	0.021	47.9	0.4		
09062+3314	GII37Ba,Bb	2013.158	1	0.286	0.007	264.3*	0.3		Close to COU1560
09062+3314	GII37Ba,Bb	2014.201	1	0.344	0.007	266.6	0.3	0.10	
09509+2016	GII80Ba,Bb	2014.198	1	0.235	0.007	234.7	0.3	0.09	Close to COU49
09509+2016	GII80Ba,Bb	2014.206	1	0.208	0.007	238.8	0.3	0.11	
10353+7140	GII59AC	2013.298	2	6.955	0.035	153.9	0.3	0.58	
11062+1018	GII58AC	2013.287	1	1.835	0.009	343.9	0.3	4.26	
11062+1018	GII58AC	2013.287	1	1.815	0.013	343.7*	0.4		
11062+1018	GII58AC	2013.295	1	1.867	0.010	343.3	0.3		
11062+1018	GII58AC	2013.297	1	1.811	0.009	344.3	0.3	4.41	
11062+1018	GII58AC	2014.273	1	1.765	0.023	343.3*	0.3		Close to TDS7663
11322+3615	HU1134AC	2014.240	1	2.951	0.015	277.8*	0.3		
11323+2527	GII83AC	2014.248	1	1.027	0.007	173.1*	0.3		
11323+2527	GII83AC	2014.250	1	1.072	0.007	172.2*	0.7		Close to TDS7612
11372+0450	HEI852AC	2013.585	1	0.897	0.013	65.9	0.8		
11539+2020	HU1256AC	2013.347	1	1.433	0.016	348.1*	0.7		
11539+2020	HU1256AC	2013.347	1	1.433	0.025	347.4	0.7		
13064+2217	WSI104AC	2013.645	1	0.460	0.007	38.0	0.3		
13276+2116	GII60AC	2013.339	1	2.855	0.023	127.4*	0.3		
13276+2116	GII60AC	2014.333	1	2.920	0.015	127.9	0.3		
13276+2116	GII60AC	2014.333	1	2.895	0.014	128.0	0.3		
14113+3013	COU605AC	2013.451	2	2.025	0.046	126.1	0.5		
14178+4845	HJ2710AB	2014.428	1	1.160	0.027	7.6	2.3		
14178+4845	HJ2710AB	2014.428	1	1.160	0.011	8.5	1.0		
14269+5602	HDS2037AC	2014.404	1	1.807	0.017	14.0	0.4		
14562+1745	GII61AC	2013.429	1	1.824	0.010	195.0*	0.3		Close to HDS2108
14562+1745	GII61AC	2013.432	1	1.851	0.009	196.6*	0.5		
14562+1745	GII61AC	2013.451	1	1.741	0.009	195.9	0.3	4.23	
14562+1745	GII61AC	2013.454	1	1.717	0.009	196.6*	0.5		

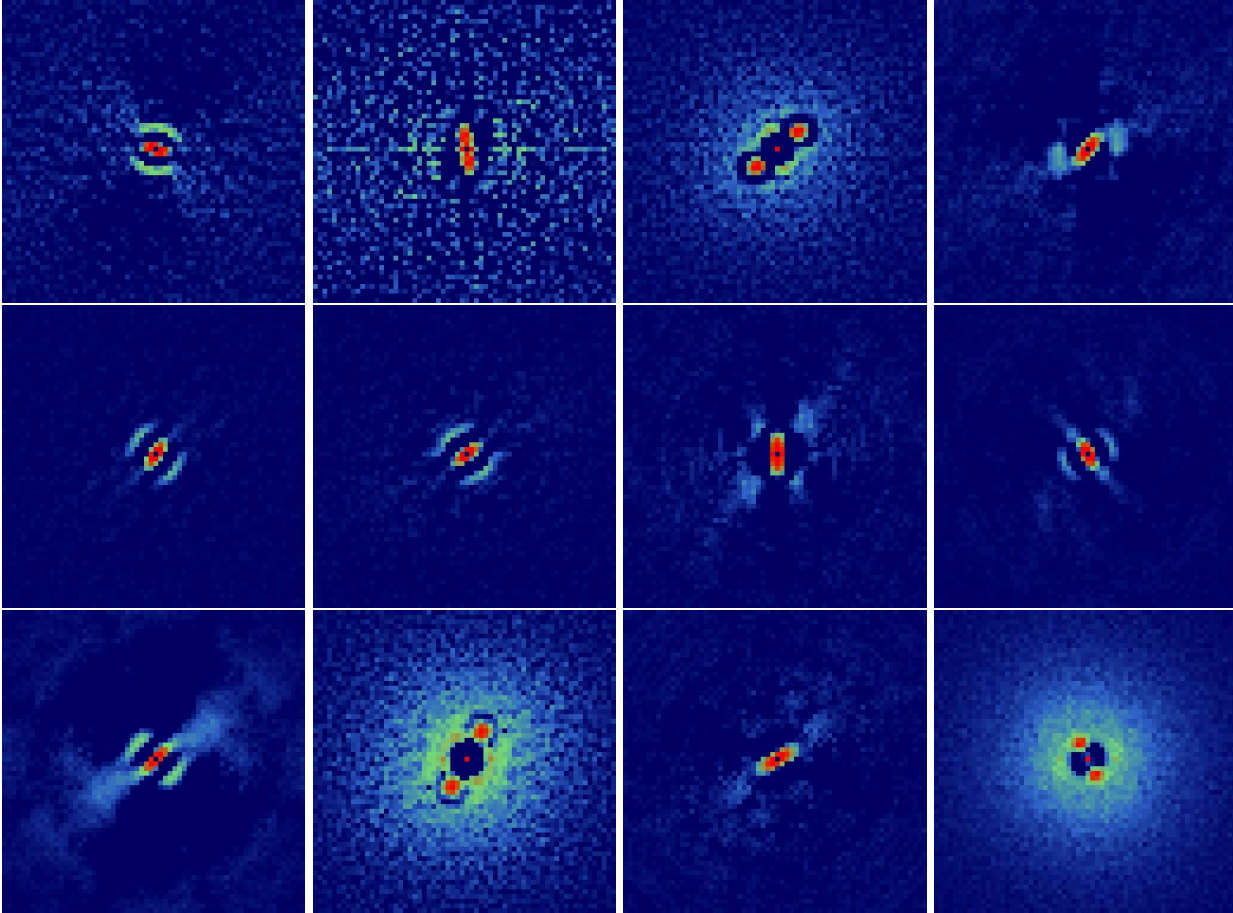


Fig. 6 Autocorrelations of some double stars with large residuals from Table 5. From left to right and top to bottom: A1061, A1835, A1913, A1999, A2069 (2013, 2014), A2146, BU1058, COU321, COU1006, COU2138, and COU966. North direction is to the bottom and East to the right.

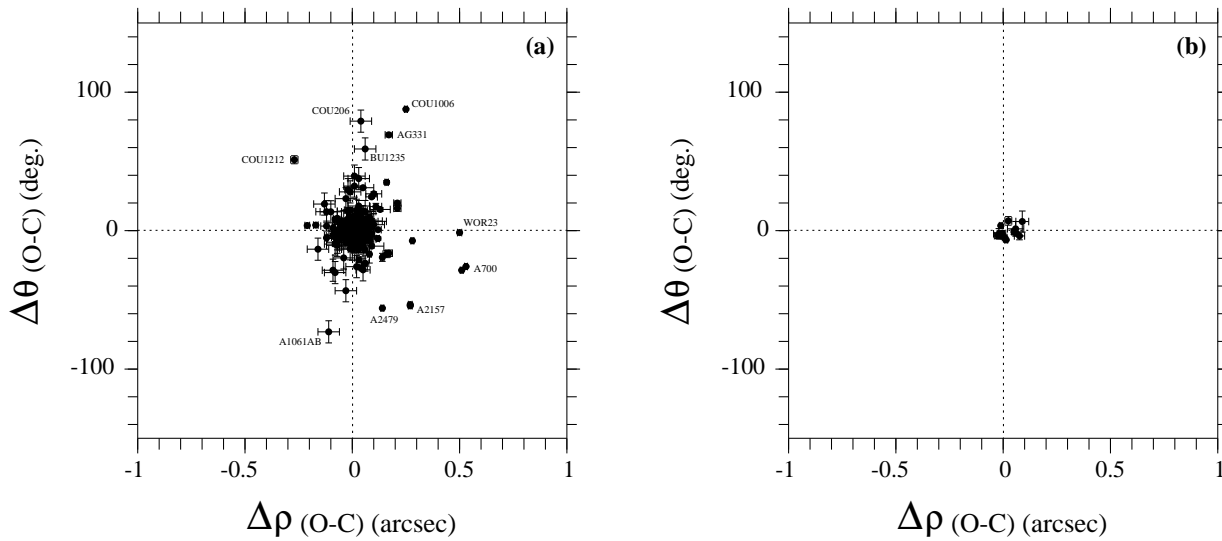


Fig. 7 Residuals from published orbits of our measurements reported in Table 3: (a) with all orbits, and (b) with the best orbits only (i.e., of Grade 1 in OC6).

Table 4 Table of measurements of new double stars discovered by R. Gili in 2013-2014 (cont.)

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes
14562+1745	GII61AC	2013.456	1	1.704	0.009	194.2	0.3	4.02	
14562+1745	GII61AC	2014.404	1	1.793	0.009	194.9*	0.3		
15371+2646	GII40AC	2013.432	1	2.100	0.011	240.8*	0.3		Close to HDS2199
15371+2646	GII40AC	2013.451	2	2.126	0.022	242.7	0.3		
15371+2646	GII40AC	2013.454	1	2.136	0.013	241.5	0.3		
15371+2646	GII40AC	2014.412	1	2.089	0.010	242.9	0.3		
15371+2646	GII40AC	2014.420	1	2.080	0.010	242.9	0.7		
15484+3931	COU1446AC	2014.393	1	7.836	0.039	159.4*	0.3		
16192+2553	COU412Aa,Ab	2014.421	1	0.351	0.023	292.1*	1.7		
16199+3943	KUI72AC	2014.434	1	3.147	0.032	125.1	0.3		
16268+1203	A1859AC	2013.106	1	1.736	0.009	23.9	0.5		
16385+3006	TDT16AC	2013.498	1	0.967	0.014	72.1	1.0		
17168+0133	TDT296AC	2013.566	1	3.652	0.021	19.4*	0.3		
17284-0201	RST4571Aa,Ab	2013.588	1	0.243	0.007	62.9	5.6		
17284-0201	RST4571Aa,Ab	2013.612	1	0.258	0.007	60.2	6.3	1.25	
17284-0201	RST4571Aa,Ab	2013.614	2	0.235	0.007	68.3*	0.3		
17357+0409	A2985AC	2013.555	1	3.286	0.016	178.7	0.3		
17532+3243	GII43Aa,Ab	2013.555	1	0.223	0.018	9.9	1.8		Close to COU998
17532+3243	GII43Aa,Ab	2014.443	2	0.224	0.014	16.8*	1.2		
17539+1413	TDT563Aa,Ab	2013.585	1	0.522	0.010	107.0*	0.3		
17549+2713	TDT568AC	2013.645	1	1.813	0.012	90.2	0.4		
18349+0556	GII66AC	2013.626	1	3.097	0.015	133.0	0.3		Close to TDT945
18349+0556	GII66AC	2014.767	1	3.114	0.016	132.9	0.3	3.31	
18416-0522	GII65	2013.613	1	1.992	0.010	357.5*	0.3	1.92	Close to TDT1001
18427+0742	HEI870Aa,Ab	2013.580	1	0.907	0.007	246.1*	0.3		
18427+0742	HEI870Aa,Ab	2013.585	1	0.883	0.007	245.5*	0.3		
18486+3132	TDT1063AC	2013.640	1	1.089	0.012	141.7	1.8		
18597+2949	COU1019AC	2013.730	1	5.757	0.029	51.5	0.3		
19037+1133	GII63Aa,Ab	2013.610	1	0.472	0.007	137.5	0.9		Close to HEI567
19037+1133	GII63AC	2013.598	2	5.259	0.026	117.1	0.3	4.22	
19037+1133	GII63AC	2013.611	1	5.302	0.027	117.1	0.3	4.50	
19082+1215	MCA54AC	2013.566	1	1.138	0.028	101.2	1.7		
19345+0037	BAL1206Aa,Ab	2013.610	1	0.585	0.018	288.7*	1.9		
20014+1045	TOK34AC	2013.643	1	3.587	0.018	175.0	0.3	2.25	
20014+1045	TOK34AC	2013.643	1	3.565	0.018	175.4	0.3		
20168+3206	COU1476AC	2014.601	1	3.013	0.293	156.7	3.3		
20188+3507	A286AC	2014.620	1	4.414	0.022	59.4	0.3		
20227+2837	COU1169AC	2013.946	1	1.711	0.009	175.3	0.3		
20348+1726	COU223AC	2013.678	1	1.318	0.008	287.7*	0.3		
21451+3424	COU1186AC	2013.946	1	1.716	0.009	174.9	0.3		
21531+4826	GII87AC	2014.831	1	6.262	0.031	31.2	0.3	3.78	Close to COU2319
21585+2601	COU838AC	2013.542	1	1.649	0.008	122.2	0.7	0.04	
22454+5129	HU783AC	2014.814	1	4.033	0.020	103.9	0.3		
22569+3935	GII89Aa,Ab	2014.552	1	0.240	0.007	260.4	1.0		Close to COU1841
22595+4355	COU2146AC	2014.776	1	3.628	0.018	145.2	0.3		
22595+4355	COU2146AC	2014.776	1	3.632	0.018	325.1	0.3		
23022+1832	HDS3279AC	2014.814	1	0.691	0.022	121.9	2.3		
23022+1832	HDS3279AD	2014.814	1	1.657	0.025	163.1	2.3		
23022+1832	HDS3279AD	2014.814	1	1.662	0.008	163.4	0.4		
23033+1129	GII71Aa,Ab	2013.818	1	0.220	0.047	24.4	7.5		Close to ROE132
23033+1129	GII71Aa,Ab	2013.820	1	0.149	0.050	32.7	8.0	0.69	
23040+2414	TDT3870AC	2014.828	1	4.283	0.025	85.7*	0.3		
23504+3926	COU1200Aa,Ab	2013.946	1	0.177	0.007	83.0	1.1		

larger in this case (as shown above, the expected average errors are $0''.02$ for ρ , and 7° for θ). Those measurements have been made possible by good observations obtained with good seeing conditions, and by the use of efficient high contrast filters (see Paper III).

7 Conclusion

In 2013-2014, we obtained 4952 new position measurements of 4864 visual double stars or multiple systems with the 76-cm refractor in Nice. The average accuracy is estimated at $0''.015$ for the angular separations and $1^\circ.0$ for the position angles. We have been able to routinely monitor faint systems $m_V = 9 - 11$ even for the objects with a large magnitude difference (up

Table 5 Measurements made in 2013-2014 with large residuals: values with $|\rho_{O-C}| > 0''.1$ or $|\theta_{O-C}| > 10^\circ$.

WDS	Name	Epoch	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Orbit	$\Delta\rho_{(O-C)}$ ($''$)	$\Delta\theta_{(O-C)}$ ($^\circ$)	Grade	Other measurements ρ ($''$) θ ($^\circ$)
00167+3629	STT4	2014.976	0.170	0.023	25.7	3.4	Alz2000a	0.01	-12.9	2	[IC4-2007: 0.23 99.7]
00583+2124	BU302	2014.976	0.320	0.018	220.4	2.9	Cve2006e	0.14	-19.3	4	[IC4-2008: 0.30 206.6]
01105+3917	COU1212	2013.944	0.269	0.017	174.3*	2.9	Cou1999b	-0.27	51.2 ^Q	5	[WDS-1995: 0.2 286]
01345+3440	A1913AB	2013.941	0.422	0.008	129.5* 0.3	Baz1987d	0.16	34.9 ^Q	4	[IC4-2009: 0.40 313.9]	
01462+3343	HU804	2013.944	0.300	0.027	76.1* 3.6	Ole2001	-0.12	3.3	5	[IC4-2009: 0.28 68.8]	
01570+3101	A819	2013.963	0.140	0.050	0.6* 8.0	Hrt2009	-0.10	12.6	3	[IC4-2007: 0.18 315.3]	
03023+1820	A2414	2013.015	0.525	0.017	68.3* 2.3	Hei1997	0.17	-16.3	5	[IC4-2009: 0.524 67.8]	
04216+0658	A1835	2013.013	0.207	0.019	9.3 1.5	Zir2010	-0.00	-13.5	4	[IC4-1996: 0.159 350.3]	
04245+2244	BU1235	2013.016	0.125	0.050	327.2 8.0	Zir2010	0.06	59.0	4	[IC4-1996: 0.239 62.3]	
04445+3953	COU1524	2014.119	0.098	0.050	62.7 8.0	Doc2019f	-0.03	23.1 ^Q	4	[IC4-2011: 0.146 62.3]	
06105+2300	BU1058	2014.182	0.082	0.050	208.6* 8.0	FMR2014b	-0.07	-10.6 ^Q	4	[IC4-2011: 0.104 229.4]	
06200+2826	BU895AB	2013.044	0.182	0.007	164.1 5.8	Hrt2000c	0.06	-23.5	2	[IC4-2008: 0.24 158.9]	
06594+2514	A1061AB	2014.146	0.083	0.050	73.2 8.0	USN2002	-0.11	-73.1	5	[IC4-1999: 0.62 42.4]	
07123+1839	AG331	2013.169	0.266	0.017	213.7* 1.4	Izm2019	0.17	69.2	5	[IC4-2000: 0.39 201.3]	
08095+3213	STF1187AB	2014.248	3.077	0.015	21.2 0.3	Ole2001	0.13	0.7	5	[IC4-2004: 0.164 141.8]	
08183+3859	STF1211AB	2014.248	0.317	0.027	178.1* 1.7	Hei1996c	-0.01	14.8	5	[IC4-2004: 0.218 272]	
08423+2002	COU382	2013.158	0.331	0.017	356.1* 2.2	Cou1999b	0.21	16.1 ^Q	5	[IC4-2008: 0.244 177]	
08423+2002	COU382	2014.198	0.325	0.017	356.8* 1.5	Cou1999b	0.21	19.9 ^Q	5	[IC4-2008: 0.244 177]	
08539+1958	COU773	2014.198	0.079	0.050	74.2 8.0	Cou1999b	-0.10	13.6	4	[IC4-2007: 0.165 62.2]	
08585+3548	COU1897	2013.196	0.142	0.015	305.7 2.9	Doc2013b	0.06	13.8	3	[IC4-2010: 0.09 267.5]	
09376+1528	A2479	2014.198	0.412	0.007	191.4* 0.5	Hei1978a	0.14	-56.0	5	[IC4-2008: 0.392 183.4]	
09477+2036	COU284	2013.287	0.139	0.024	340.1 1.8	Doc2019c	0.06	-25.0 ^Q	4	[IC4-1997: 0.120 46.2]	
10121+2118	A2146	2013.287	0.113	0.050	179.9 8.0	Hei2001	-0.08	-30.3	4	[IC4-2008: 0.237 162.1]	
11162+3136	A2157	2013.221	1.335	0.009	2.5* 0.3	Pop1996b	0.27	-54.3 ^Q	5	[IC4-2008: 1.363 1.1]	
11162+3136	A2157	2014.333	1.344	0.009	2.4* 0.3	Pop1996b	0.27	-53.4 ^Q	5	[IC4-2008: 1.363 1.1]	
11265+0806	A2575	2013.287	0.418	0.017	49.0* 2.6	USN2002	0.16	-16.9	5	[IC4-2010: 0.42 46.1]	
11374+4728	KU39	2014.333	1.198	0.007	138.7* 0.3	WSI2006b	0.28	-7.3	5	[IC4-2010: 1.133 129.4]	
11518+5032	HU730	2014.333	0.255	0.047	117.2 1.4	USN2002	0.09	15.1	5	[WDS-2019: 0.2 111]	
11541+7155	A75	2014.344	0.338	0.017	25.8 1.2	Hei1996a	0.12	-5.7	4	[IC4-1991: 0.143 179.]	
12154+4008	A1999	2014.324	0.107	0.050	142.8* 8.0	FMR2013d	-0.12	13.7	5	[IC4-2010: 0.22 64.0]	
12316+3201	COU966	2014.273	0.219	0.027	25.7* 1.1	Mnt1999c	0.09	24.4	5	[IC4-2008: 0.264 28.3]	
12316+3201	COU966	2014.333	0.278	0.037	27.7* 1.5	Mnt1999c	0.10	26.6	5	[IC4-2008: 0.264 28.3]	
13048+5555	WOR23	2014.344	1.987	0.010	161.7* 0.3	Izm2019	0.50	-1.4	5	[WDS-2017: 2.0 163.]	
13081+2657	STT260	2014.341	0.311	0.007	216.9 0.3	Zir2008	-0.02	-37.9 ^Q	3	[IC4-1991: 0.122 218.]	
13482+2248	COU401	2013.339	0.145	0.050	134.9 8.0	Doc2010h	-0.09	-28.6 ^Q	4	[IC4-2008: 0.492 181.1]	
14138+3059	COU606	2013.413	0.170	0.007	339.4* 1.6	Doc2018a	0.06	-14.0 ^Q	3	[IC4-2005: 0.162 347]	
14142+2642	STF1817	2013.429	0.107	0.026	322.2 3.5	Zir2014a	-0.13	-13.4	5	[IC4-2010: 0.17 335.8]	
14267+1625	A2069	2013.432	0.095	0.015	147.1 8.0	Sca2001g	-0.02	29.6	2	[IC4-2006: 0.206 192.8]	
14267+1625	A2069	2014.434	0.112	0.018	131.6 8.0	Sca2001g	-0.01	28.0	2	[IC4-2006: 0.206 192.8]	
15078+3956	COU1271	2014.393	0.418	0.007	194.7* 0.4	Cou1999b	0.04	-26.8	5	[IC4-2010: 0.339 183.1]	
16229+3803	COU1281	2014.421	0.132	0.007	211.5* 8.0	Doc2012h	0.05	-11.0	3	[IC4-2008: 0.198 195.4]	
16229+3803	COU1281	2014.429	0.154	0.008	204.6 6.4	Doc2012h	0.08	-17.0	3	[IC4-2008: 0.198 195.4]	
16450+3842	COU1284	2014.429	0.146	0.050	346.8* 8.0	Cou1999b	0.03	37.6	5	[IC4-2008: 0.177 356]	
17141-0824	BAR7	2013.569	1.499	0.007	49.8* 0.3	Cve2008a	-0.12	-5.2	5	[IC4-2013: 1.488 50.0]	
17161+2316	COU315	2014.543	0.100	0.050	117.2 8.0	Doc2010h	0.01	32.2 ^Q	4	[IC4-2008: 0.125 132.6]	
17313+1901	COU499	2013.563	0.094	0.050	329.0 8.0	Tok2017c	0.00	-13.4	5	[IC4-2015: 0.093 333.0]	
17584+0428	KUI84	2013.555	0.156	0.033	371.5* 2.9	Doc2018a	0.05	-28.3	3	[IC4-2015: 0.082 145.1]	
18063+3824	HU1186	2014.544	0.130	0.020	129.5* 2.3	USN2006b	0.03	-13.4	3	[IC4-2009: 0.30 123.3]	
18130+3318	COU1006	2014.544	0.490	0.007	332.1* 0.5	Cou1999b	0.25	87.7	5	[IC4-2009: 0.430 320.2]	
18178+4351	A578Aa,Ab	2014.628	0.330	0.027	243.7* 2.3	Ole2001	0.11	17.4	4	[IC4-2010: 0.31 245.5]	
18224+4545	A700	2014.639	0.639	0.017	128.4* 0.3	Hei1998	0.51	-28.6	5	[IC4-2013: 0.623 127.9]	
18363+2143	COU206	2013.645	0.096	0.050	149.1* 8.0	Doc2010h	0.04	79.1	4	[IC4-2007: 0.045 289.1]	
19069+4137	COU2197	2014.582	0.262	0.050	320.1 0.5	Doc2016g	0.09	31.0	5	[IC4-2008: 0.211 168.1]	
19180+2012	COU321	2013.725	0.107	0.050	140.7 8.0	Doc2003e	-0.04	-19.7	4	[IC4-1998: 0.087 132.8]	
19356+4002	A1400	2014.628	0.385	0.007	122.4* 0.3	USN2002	0.14	-25.9	5	[IC4-2009: 0.35 122.5]	
19458+2710	KUI95AB	2013.643	2.204	0.011	59.3* 0.3	Sod1999	-0.17	4.0	5	[IC4-2008: 1.939 55.7]	
19458+2710	KUI95AB	2014.571	2.217	0.011	59.3* 0.3	Sod1999	-0.21	3.7	5	[IC4-2008: 1.939 55.7]	
19474-0148	A2993	2013.629	0.098	0.050	293.9 8.0	Hrt2014b	-0.02	14.1	3	[IC4-2014: 0.109 276.8]	
19514+4044	COU2530	2014.615	0.107	0.050	119.2 8.0	Tok2019e	-0.01	-13.1	4	[IC4-2008: 0.091 53.4]	
20550+2805	BU367	2014.833	0.182	0.007	176.3 2.0	Sca2003e	0.03	-21.1	2	[IC4-2012: 0.232 160.4]	
21410+2920	STT448	2013.818	0.136	0.050	125.0 8.0	Alz2020c	0.01	39.4	3	[IC4-2008: 0.144 140.6]	
21410+2920	STT448	2014.833	0.100	0.050	31.2 8.0	Alz2020c	-0.03	-43.4	3	[IC4-2008: 0.144 140.6]	
21593+4606	COU2138	2014.795	0.137	0.050	123.1 8.0	Doc2012c	0.02	14.7	4	[IC4-2008: 0.198 350.8]	
22375+2356	HU391	2013.818	0.320	0.057	2.5* 1.4	Gur2018	0.09	-11.2	4	[IC4-2009: 0.242 338.2]	
23209+1643	HEI88	2013.818	0.254	0.027	196.4 2.7	Cve2011a	0.02	11.9 ^Q	3	[WDS-2020: 0.2 211]	
23502+1940	COU344	2013.818	0.162	0.050	147.3* 4.0	Msn2001a	0.03	17.8 ^Q	5	[IC4-2008: 0.178 324.4]	
23502+1940	COU344	2014.870	0.175	0.050	139.0 4.0	Msn2001a	0.05	14.1 ^Q	5	[IC4-2008: 0.178 324.4]	

Table 6 Measurements and residuals of the closest binaries observed in 2013-2014, with $\rho < 0''.16$ (i.e. smaller than the diffraction limit), for the objects having a known orbit.

WDS	Name	Epoch	ρ ($''$)	θ ($^\circ$)	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
00055+3406	HU1201	2014.828	0.147	310.6	Zir2003	-0.01	3.8
00274+3054	HDS62	2013.946	0.080	314.0	Ren2013	0.05	3.3
01570+3101	A819	2013.963	0.140	0.6*	Hrt2009	-0.10	12.6
03423+3141	COU691	2014.976	0.147	269.5	Doc2010d	0.06	-6.0
04245+2244	BU1235	2013.016	0.125	327.2	Zir2010	0.06	59.0
04445+3953	COU1524	2014.119	0.098	62.7	Doc2019f	-0.03	23.1 ^Q
05048+1319	HEI104	2014.149	0.090	195.5	Tok2019c	-0.02	8.6
06105+2300	BU1058	2014.182	0.082	206.5*	FMR2014b	-0.07	-10.6 ^Q
06503+2409	COU768	2013.172	0.117	60.70	Doc2003e	-0.03	0.6 ^Q
06503+2409	COU768	2014.201	0.111	44.1	Doc2003e	-0.01	-7.1 ^Q
06594+2514	A1061AB	2014.146	0.083	73.2	USN2002	-0.11	-73.1
08539+1958	COU773	2014.198	0.079	74.2	Cou1999b	-0.10	13.6
08585+3548	COU1897	2013.196	0.142	305.7	Doc2013b	0.06	13.8
09179+2834	STF3121	2014.182	0.151	176.8*	Sod1999	-0.04	6.5 ^Q
09477+2036	COU284	2013.287	0.139	149.0	Doc2019c	0.02	-26.0 ^Q
10121+2118	A2146	2013.287	0.113	179.9	Hei2001	-0.08	-30.3
10264+2545	HDS1500	2014.308	0.105	286.5	Tok2019c	-0.03	-2.5
10596+1800	HDS1568	2013.287	0.100	316.7	Tok2019d	0.03	-9.0
11322+3615	HU1134AB	2014.240	0.117	115.1	Hrt2000b	0.01	-6.2 ^Q
11518+5032	HU730	2014.308	0.085	92.5	USN2002	-0.08	-9.7
12154+4008	A1999	2014.324	0.107	142.8*	FMR2013d	-0.12	13.7
12409+2708	COU596	2014.273	0.130	197.1*	Doc2013a	-0.05	-3.7
12508+0806	HDS1803	2013.295	0.132	49.8*	Tok2018e	-0.07	-8.4
13482+2248	COU401	2013.339	0.145	134.9	Doc2010h	-0.09	-28.6 ^Q
14124+2843	STT277	2013.429	0.151	36.6*	Ole2002d	0.10	4.3 ^Q
14142+2642	STF1817	2013.429	0.107	322.2	Zir2014a	-0.13	-13.4
14267+1625	A2069	2013.432	0.095	147.1	Sca2001g	-0.02	29.6
14267+1625	A2069	2014.434	0.112	131.6	Sca2001g	-0.01	28.0
15106+2021	HU144	2014.434	0.148	314.5	Tok2020g	0.06	5.8
15379+5005	HDS2203	2014.412	0.107	296.1	Cve2013b	0.00	8.1 ^Q
15420+4203	COU1445	2014.429	0.136	200.9	Doc2013e	0.02	-7.7
16229+3803	COU1281	2014.421	0.132	211.5*	Doc2012h	0.05	-11.0
16229+3803	COU1281	2014.429	0.154	204.6	Doc2012h	0.08	-17.0
16450+3842	COU1284	2014.429	0.146	346.9*	Cou1999b	0.03	37.6
17161+2316	COU315	2014.543	0.100	117.2	Doc2010h	0.01	32.2 ^Q
17313+1901	COU499	2013.563	0.094	329.0	Tok2017c	0.00	-13.4
17529+2941	AC8	2014.546	0.111	304.4	Zir2014a	0.04	-7.7
17533+2459	A235	2013.645	0.102	49.0*	Hrt2014b	-0.08	-3.5
17563+0259	A2189	2013.588	0.122	97.9	Doc2018l	0.01	-0.9 ^Q
17584+0428	KUI84	2013.555	0.156	371.5*	Doc2018a	0.05	-28.3
18063+3824	HU1186	2014.544	0.130	129.5*	USN2006b	0.03	-13.4
18121+4644	COU2118	2014.639	0.129	274.0*	Cou1999b	-0.01	-0.2 ^Q
18126+1224	HDS2570	2013.640	0.086	320.0	Tok2020g	-0.01	3.7
18181-0120	HDS2587Aa,Ab	2013.643	0.086	318.7	Tok2018e	-0.01	2.4
18363+2143	COU206	2013.645	0.096	149.1*	Doc2010h	0.04	79.1
19180+2012	COU321	2013.725	0.107	140.7	Doc2003e	-0.04	-19.7
19313+4729	A713	2014.637	0.126	304.0*	Zas2012c	-0.06	-6.0
19474-0148	A2993	2013.629	0.098	293.9	Hrt2014b	-0.02	14.1
19514+4044	COU2530	2014.615	0.107	119.2	Tok2019e	-0.01	-13.1
20311+1548	A1675	2014.833	0.154	311.0	Hrt2001b	-0.01	4.8
21125+2821	HO152	2014.659	0.111	145.5*	Doc2016g	-0.05	-0.7
21410+2920	STT448	2013.818	0.136	125.0	Alz2020c	0.01	39.4
21410+2920	STT448	2014.833	0.100	31.2	Alz2020c	-0.03	-43.4
21510+2911	A889	2013.818	0.151	328.8	Baz1984b	0.04	9.7 ^Q
21593+4606	COU2138	2014.795	0.137	123.1	Doc2012c	0.02	14.7
23199+2844	COU439	2014.774	0.130	3.6	Doc2017e	-0.01	2.0
23424+3903	A1494	2013.946	0.136	173.0	Gur2020	0.03	9.4 ^Q
23424+3903	A1494	2013.946	0.148	172.0	Gur2020	0.04	8.4 ^Q

Notes: In column 5, the superscript * indicates that the position angle θ could be determined without the 180° ambiguity.

In column 8, the superscript ^Q indicates that our θ measurement quadrant was not compatible with the quadrant used for computing the orbit.

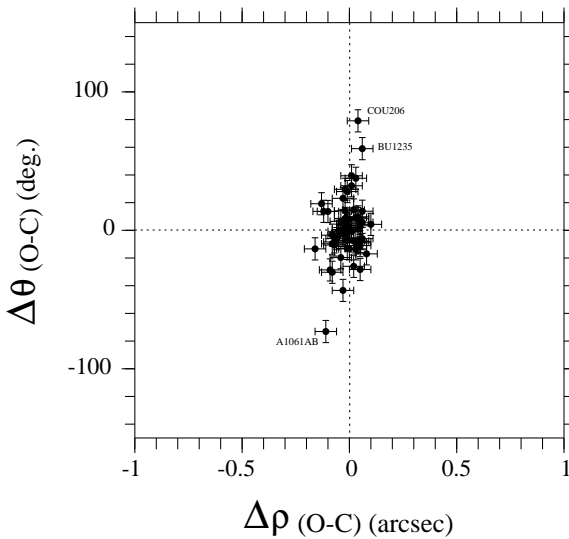


Fig. 8 Residuals from published orbits of our measurements with angular separations smaller than the diffraction limit (from Table 6, with all orbits).

to $\Delta m_V = 4.5$). and the color-magnitude diagram of our observations shows that we have thus been able to measure red dwarf stars that had been poorly monitored until now. We have thus been able to measure 49 systems containing red dwarf stars that had been poorly monitored since their discovery, from which we estimated the stellar masses thanks to Gaia measurements.

By using the Direct Vector Autocorrelation method, we have measured the difference of magnitude of the two components for 326 objects with an estimated error of 0.2 mag. Thanks to good seeing images and with the use of high-contrast numerical filters, we have also been able to obtain 455 measurements with an angular separation smaller than the diffraction limit of our instrumentation, and consistent with those obtained with larger telescopes. We also report 378 measurements of the 296 new double stars that we found in the files obtained during the observations.

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. It validates the technical and data processing investment that we have made in the preceding years. This work is fully integrated in the observation efforts of the Commission G1, “Binary and Multiple Star Systems” of the International Astronomical Union. Our measurements will be added to the worldwide database of this Commission G1, which is currently maintained by the U.S. Naval Observatory.

Acknowledgements. We are indebted to the directors of Observatoire de la Côte d’Azur for allowing us to use the

76-cm refractor and to the staff from this Observatory for their technical support. We thank G. Morlet for writing a program dedicated to the 76-cm refractor, that was used for pointing stars with the telescope. We are grateful to F. Losse for adapting the REDUC software for our needs. and to C. Buil for providing his IRIS software to the amateur community (Buil, 2022).

This work has made use of the “Fourth Catalogue of Interferometric Measurements of Binary Stars” (<http://www.astro.gsu.edu/wds/int4.html>), the “Sixth Catalogue of Orbits of Visual Binary Stars” (<http://www.astro.gsu.edu/wds/orb6.html>), the Washington Double Star Catalogue maintained at the U.S. Naval Observatory, (<http://www.astro.gsu.edu/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).

References

- ANDOR, 2022, ANDOR technology
<http://www.andor-tech.com>
- Angelov, T., 1993, *Bull. Astron. Belgrade* n. 148, 1
- Bagnuolo, W.G., Mason, B.D., Barry, D.J., Hartkopf, W.I., McAlister, H.A., 1992, *AJ* 103, 1399
- Buil, C., 2022, IRIS software
<http://www.astrosurf.com/buil/us/iris/iris.htm>
- ESA, 1997, *The Hipparcos and Tycho Catalogues*, ESA SP-1200, ESA Publications Division, Noordwijk
- ESA, 2022, *Gaia Archive DR2, 2nd release*, <http://gea.esac.esa.int/archive/>
- Gili, R., 2016, “New double stars discovered by R. Gili with PISCO2”, *IAU Commission G1 - Double Stars Inf. Circ.* 190, 4
- Gili, R., Prieur J.-L., 2012, *Astron. Nach.*, 333, 727–735 (Paper I)
- Gili, R., Prieur J.-L., Rivet, J.-P., Vakili, F., Koechlin, L., Bonneau, D., 2014, *The Observatory*, 134, 267
- Gili R., Prieur J.-L., Rivet J.-P., Scardia M., Pansechi L., Argyle R.W., Ling J.F., Piccotti L., Aristidi E., Koechlin L., Bonneau D., Maccarini L., 2020, *Astron. Nach.*, 341, 441 (Paper II)
- Gili R., Prieur J.-L., Rivet J.-P., Farrokh V., Scardia M., Pansechi L., Argyle R.W., Ling J.F., Piccotti L., Aristidi E., Koechlin L., Bonneau D., Maccarini L., Serot J., 2021, *Astron. Nach.*, in press (Paper III)
- Hartkopf, W.I., Mason, B.D., McAlister, H.A., 2020, “Fourth Catalogue of Interferometric Measurements of Binary Stars” <http://www.astro.gsu.edu/wds/int4.html> (IC4)
- Labeyrie A., 1970, *A&A*, 6, 85
- Losse, F., 2022, REDUC, data processing software <http://www.astrosurf.com/hfosaf/>
- Malkov, O. Yu., 2012 *A&A* 546, 69
- Mason, B.D., Wycoff, G.L., Hartkopf, W.I., 2022, “Washington Double Star Catalogue” <http://www.astro.gsu.edu/wds/> (WDS)
- Matson, R.A., Williams, S.J., Hartkopf, W.I., Mason, B.D., 2022, “Sixth Catalogue of Orbits of Visual Binary Stars” <http://www.astro.gsu.edu/wds/orb6.html> (OC6)

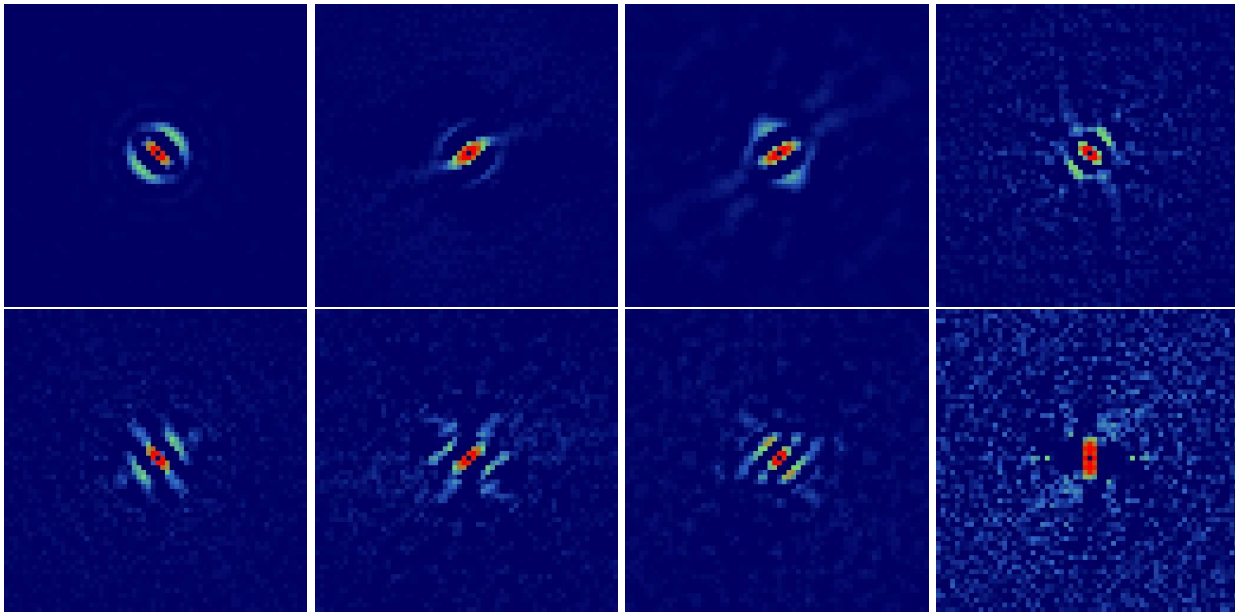


Fig. 9 Autocorrelations of some double stars with separations smaller than the diffraction limit from Table 6. From left to right and top to bottom: A435, A713, AC8, COU768 (2013), COU768 (2014), HDS1568, HDS2570, and KUI84. North direction is to the bottom and East to the right.

Michelson, A.A., 1890, *Philosophical Magazine*, 5th series
30, pp. 1-20

Parent, I., Vaughn, S., Conover, E., et al., 2017, *JDSO*, 13,
384-390

Pribulla, T., 2006, *AJ* 131, 296

Prieur, J.-L., Koechlin, L., André, C., Gallou, G., Lucuix,
C., 1998, *Experimental Astronomy*, vol 8, Issue 4, 297

Scardia M., Prieur J.-L., Pansecchi L., Argyle R.W., 2008,
Astron. Nachr., 329, 4, 379

Scardia M., Rivet J.-P., Prieur J.-L., Pansechi L., Argyle
R.W., Ling J., Aristidi E., Zanutta A., Vernet D., Abe
L., Bendjoya P., Dimur C., Suarez O. 2019, *Astron.*
Nachr., 340, 771

Straizys, V., Kuriliene, G., 1981, *Astrophys. Space Sci.* 80,
353

Worden, S.P., Murray, K.S., Schmidt, G.D., Angel, J.R.P.,
1977, *Icarus* 32, 450

Table 3 Table of binary measurements obtained with PISCO2 in 2013-2014 and O-C residuals with published orbits (begin.)

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
00002+3613	TDS1236	2013.944	1	0.480	0.009	152.8*	0.7					
00002+3613	TDS1236	2014.877	1	0.467	0.009	151.8	0.8					
00004+2749	TDS1238	2013.963	1	0.834	0.007	266.2*	0.8					
00005+2031	COU444	2013.924	1	0.693	0.007	39.5	0.3	3.25				
00010+2721	DAM361Aa,Ab	2013.927	1	1.442	0.007	358.3	0.3	2.26	NDp			
00010+2721	DAM361AB	2013.927	1	5.372	0.571	218.8	5.5					
00014+3937	HLD60	2013.867	1	1.309	0.013	168.5*	0.3			Izm2019	-0.00	0.9
00014+3937	HLD60	2014.828	1	1.322	0.015	167.5*	0.3			Izm2019	0.01	0.3
00014+4828	COU1850AB	2014.831	1	0.684	0.020	7.9*	0.8					
00014+4828	COU1850Aa,Ab	2014.831	1	0.126	0.052	111.9	4.9		NDp			
00022+2705	BU733AB	2013.818	1	0.520	0.011	313.8*	0.3			Sod1999	0.01	-5.0
00022+2705	BU733AB	2013.818	1	0.527	0.007	312.1*	0.4			Sod1999	0.01	-6.7
00022+2705	BU733AB	2014.869	1	0.432	0.038	352.0	5.3			Sod1999	0.06	1.3
00022+2705	BU733AB	2014.869	1	0.424	0.009	349.7	1.8			Sod1999	0.05	-1.0
00022+2705	BU733AB	2014.877	1	0.449	0.024	347.2	2.8			Sod1999	0.08	-3.8
00022+2705	BU733AB	2014.877	1	0.462	0.030	357.6	7.6			Sod1999	0.09	6.6

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
00022+2705	BU733AB	2014.921	1	0.393	0.016	359.9	3.1			Sod1999	0.02	7.0
00022+2705	BU733AB	2014.923	1	0.427	0.007	351.5	0.7			Sod1999	0.06	-1.4
00023+3257	HO209	2013.911	1	1.396	0.007	347.9*	0.3					
00024+5030	COU2350	2014.831	1	0.461	0.007	115.8*	0.4					
00026+1841	HDS2Aa,Ab	2013.818	1	0.167	0.014	180.6	0.4					
00026+1841	HDS2AC	2013.818	1	2.045	0.010	156.7*	0.3		NDg			
00027+3433	TDS1266	2013.963	1	—	—	—	—		NR			
00029+4715	A800	2014.850	1	1.643	0.008	114.3	0.3					
00037+1851	XMI104BC	2013.924	1	0.982	0.007	176.5	0.3	3.43	NDg			
00043+3705	TDS1281	2013.946	1	1.506	0.008	336.5*	0.3					
00047+3547	HU800	2013.941	1	0.202	0.010	63.4*	0.7					
00048+3810	BU862	2013.946	1	0.866	0.023	28.3	1.2			Cou1986b	0.04	0.8
00048+3810	BU862	2013.946	1	0.879	0.007	27.0*	0.3			Cou1986b	0.05	-0.5
00048+3810	BU862	2014.973	1	0.882	0.007	27.8	0.3			Cou1986b	0.05	-0.1
00048+4358	A203	2014.850	1	1.914	0.010	348.9	0.3					
00049+3005	A1250	2013.946	1	0.890	0.008	43.3	0.8					
00049+3005	A1250	2013.946	1	0.872	0.010	42.2*	0.3					
00053+3533	COU746	2013.911	1	0.584	0.011	105.0*	0.3					
00054+3348	COU646	2014.828	1	0.494	0.007	330.1*	0.7	0.49				
00055+3406	HU1201	2014.828	1	0.147	0.050	310.6	8.0			Zir2003	-0.01	3.8
00061+4025	HDS6	2014.552	1	0.426	0.011	48.7	2.0					
00061+4025	HDS6	2014.831	1	0.398	0.017	51.1*	1.4					
00061+4025	HDS6	2014.831	1	0.429	0.027	52.5	1.9					
00062+2346	HU401	2014.853	1	0.888	0.007	36.1	0.3					
00066+4328	COU1351	2014.976	1	0.956	0.007	41.2	0.3					
00073+2058	HDS12	2013.818	1	2.090	0.010	5.7*	0.3					
00073+2058	HDS12	2014.831	1	2.328	0.012	4.5*	0.3					
00077+3711	A1501	2013.946	1	0.940	0.007	239.9	1.1					
00077+3711	A1501	2013.946	1	0.956	0.007	238.8*	0.3					
00084+1843	COU246Aa,Ab	2014.973	1	0.248	0.007	195.0	1.1		NDg			
00084+1843	COU246AB	2014.973	1	1.665	0.068	250.8	2.0	2.29				
00084+1843	COU246AB	2014.973	1	1.708	0.009	250.6	0.3					
00084+1843	COU246AB	2014.973	2	1.698	0.009	251.2	0.3	1.71				
00085+3456	HDS17	2013.941	1	0.162	0.007	44.5	0.3			AIW2014b	0.03	-4.8
00086+3228	COU647	2013.944	1	0.248	0.007	32.8	1.0					
00086+3228	COU647	2013.944	1	0.251	0.007	32.8	1.2					
00088+4955	ROE82	2014.853	1	0.863	0.008	283.5	0.3					
00090+2339	HU402	2013.941	1	0.579	0.007	67.4*	0.3					
00095+1907	COU247	2013.818	1	0.336	0.017	227.3*	0.4			Doc2012i	-0.01	-6.8
00095+1907	COU247	2014.828	1	0.360	0.018	220.5	0.9			Doc2012i	0.00	-9.9
00097+4242	COU1047	2014.828	1	1.244	0.007	259.2*	0.3					
00103+4920	COU1851	2014.976	1	0.686	0.010	170.6	0.3					
00108+5113	COU2251	2014.831	1	1.072	0.010	211.2*	0.3					
00110+2843	J867	2013.818	1	1.315	0.009	190.2*	0.3					
00110+2908	COU346	2013.818	1	0.294	0.007	305.0*	0.8					
00112+3331	COU648	2013.941	1	0.435	0.007	129.9*	0.3					
00113+1435	LDS1072	2013.924	1	0.756	0.007	271.7	0.3	0.57				
00113+2953	MLB631	2013.927	1	1.336	0.007	270.6	0.3	0.38				
00115+1940	COU248	2014.973	1	1.969	0.018	318.7	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
00115+2936	HO1	2013.818	1	1.255	0.007	158.5*	0.3					
00115+2949	MLB441	2013.927	1	0.975	0.007	318.8	0.3	0.93				
00115+3556	HDS24Aa,Ab	2013.946	1	0.102	0.017	121.7	4.9		NDg			
00115+3556	HDS24AB	2013.552	1	0.511	0.036	352.7	6.1					
00115+3556	HDS24AB	2013.946	1	0.523	0.007	348.5	0.3					
00115+3556	HDS24AB	2013.946	1	0.500	0.007	349.1*	0.6					
00118+2825	BU255	2013.946	1	0.459	0.015	68.3	2.2			Zir2015a	0.01	1.5
00118+2825	BU255	2013.946	1	0.448	0.007	64.9*	1.1			Zir2015a	-0.00	-1.9
00121+3328	COU649	2013.944	1	0.545	0.007	351.9*	0.3					
00124+4558	HDS27AB	2014.976	1	0.175	0.040	132.0	7.4					
00124+4558	HDS27AC	2014.976	1	2.024	0.018	121.4	0.3		NDg			
00126+2143	BAG19Aa,Ab	2013.941	1	0.471	0.007	39.1*	1.0					
00132+2023	HDS29	2013.946	1	0.759	0.007	165.0*	0.6					
00132+3714	TDS1346	2013.963	1	—	—	—	—		NR			
00136+4412	A1254	2014.921	1	1.240	0.007	271.7	0.3					
00139+1518	LDS1074Aa,Ab	2013.924	1	0.134	0.050	202.9	8.0	0.05	NDp			
00139+1518	LDS1074AC	2013.924	1	0.776	0.007	237.4	0.3	3.53	NDp			
00151+1358	LDS1075	2013.919	1	1.300	0.007	174.5	0.3	4.56				
00153+3031	TDS1363	2013.946	1	—	—	—	—		NR			
00158+3526	TDS1370	2013.963	1	—	—	—	—		NR			
00158+3718	TDS1369	2013.963	1	0.796	0.007	281.5*	0.3					
00162+1903	J217	2014.921	1	1.681	0.008	184.0	0.3					
00162+3331	COU651	2013.944	1	0.309	0.007	107.8*	0.4					
00162+3331	COU651	2014.973	1	0.310	0.015	108.2	0.6					
00166+2434	HU405	2013.941	1	1.226	0.007	294.5*	0.3					
00167+3629	STT4	2014.976	1	0.170	0.023	25.7	3.4			Alz2000a	0.01	-12.9
00172+3317	J869	2013.911	1	1.629	0.008	246.8*	0.3					
00172+5034	BU776	2014.976	1	1.188	0.007	197.3	0.3					
00174+2306	COU146	2014.921	1	1.109	0.007	91.3	0.3					
00174+3303	ES2274	2013.944	1	1.872	0.009	173.9*	0.3					
00175+2200	COU73AB	2013.944	1	1.551	0.018	227.2*	0.3					
00175+2200	COU73Aa,Ab	2013.944	1	0.106	0.050	48.0	7.3		NDg			
00175+4434	COU1501	2014.828	1	0.432	0.007	282.7*	0.3					
00175+4514	ES1294	2014.976	1	1.107	0.007	226.8	0.3					
00176+3946	COU1048	2013.946	1	0.456	0.007	310.6*	0.3					
00183+3118	TDS11	2013.944	1	—	—	—	—		NR			
00195+3544	POP35	2013.911	1	0.731	0.007	297.2	0.3					
00196+4900	COU2001	2014.828	1	1.398	0.007	26.9*	0.3					
00197+3501	POP36	2013.941	1	0.651	0.007	102.9*	0.3					
00205+4531	A647	2014.850	1	0.683	0.008	96.3	0.3			Pru2008	-0.02	1.0
00211+3539	HU1202	2013.911	1	1.098	0.007	196.5*	0.3					
00213+2541	COU348	2013.963	1	0.651	0.007	97.0*	0.3					
00214+2744	COU347	2013.911	1	0.437	0.007	50.0*	1.0					
00216+4856	HU505	2014.831	1	1.790	0.009	134.4*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
00224+2956	TDS1425	2013.944	1	—	—	—	—			NR		
00225+4456	A648	2014.831	1	0.342	0.007	96.2*	0.3					
00230+2735	TDS16	2013.963	1	1.357	0.009	121.4*	0.3					
00233+1645	HEI16	2014.831	1	0.305	0.007	21.1*	5.0					
00240+4912	HDS55	2014.921	1	0.149	0.046	313.6	1.8					
00241+2430	TDS1442	2013.963	1	—	—	—	—			NR		
00244+3629	HO491	2013.946	1	1.240	0.007	206.8*	0.3					
00244+4342	TDS1444	2014.921	1	1.106	0.007	359.0	0.3					
00251+1824	HJ621	2013.965	1	0.875	0.007	6.8	0.3	1.07				
00256+3629	HO210	2013.946	1	0.980	0.007	77.2*	0.3					
00262+5150	BU778	2014.976	1	1.210	0.007	45.7	0.3					
00269+2356	TDS1466	2013.963	1	0.310	0.027	196.4*	1.2					
00269+2356	TDS1466	2013.963	1	0.290	0.029	194.6	1.5					
00269+2356	TDS1466	2014.828	1	0.300	0.021	196.3*	2.3					
00270+3058	COU653	2013.911	1	0.443	0.007	251.9*	0.4					
00274+3054	HDS62	2013.946	1	0.080	0.050	314.0	8.0			Ren2013	0.05	3.3
00279+2334	BU779	2013.946	1	0.621	0.008	245.0*	0.3					
00279+2334	BU779	2013.946	1	0.590	0.023	245.8	1.8					
00282+5028	HU1008	2014.976	1	0.466	0.007	239.2	0.3					
00286+4527	COU1651	2014.828	1	2.125	0.061	185.5*	0.6					
00286+4527	COU1651	2014.828	1	2.183	0.067	184.5	1.7					
00287+2134	HU601	2014.850	1	0.671	0.015	308.0	0.6					
00287+3718	A1504	2014.973	1	0.609	0.007	44.5	0.3			Zir2014a	0.02	-0.2
00290+4825	HDS64	2014.921	1	0.261	0.050	113.6	2.0					
00290+4825	HDS64	2014.921	1	0.207	0.058	111.3	3.9					
00291+1119	A805	2013.965	1	0.714	0.007	304.5	0.3	3.77				
00293+4336	COU1353	2014.973	1	0.745	0.007	170.3	0.6					
00295+1501	HEI200	2014.850	1	0.778	0.020	61.9	2.2					
00296+2807	HAU1	2013.924	1	1.960	0.010	47.1	0.3	0.19				
00296+2807	WSI38AB	2013.924	1	0.652	0.017	101.55	2.3	0.15				
00296+2807	WSI38AC	2013.924	1	1.937	0.017	46.13	2.3	0.21				
00297+2018	J168	2013.911	1	1.508	0.017	353.2*	0.3					
00297+2018	J168	2013.911	1	1.478	0.008	352.9*	0.3					
00307+1752	J584	2013.924	1	0.543	0.007	172.9	0.3	2.54				
00308+4732	BU394	2014.831	1	0.735	0.007	277.1*	0.3			Zul1997b	-0.03	0.1
00309+4917	ES1129	2014.921	1	1.218	0.007	264.7	0.3					
00310+2839	CTU1AB	2013.941	1	0.889	0.007	225.0*	0.3					
00310+2839	CTU1AC	2013.944	1	1.338	0.007	53.3*	0.3			NDg		
00317+1929	HDS70	2014.973	1	0.306	0.016	67.8	1.9					
00318+2346	COU74	2013.946	1	2.053	0.010	6.7*	0.3					
00321+5000	COU2151	2014.831	1	0.162	0.045	111.4	8.0					
00321+5000	COU2151	2014.831	1	0.133	0.044	106.6	8.0					
00326+0729	MCT1	2013.015	1	0.752	0.055	328.6	5.3					
00327+3851	HDS73	2013.941	1	0.170	0.018	69.2	3.5					
00328+1943	COU249	2014.850	1	1.227	0.007	286.7	0.3					
00329+5004	COU2152	2014.828	1	0.619	0.011	252.1*	1.7					
00329+5004	COU2152	2014.828	1	0.596	0.017	251.4	1.2					
00330+5151	HU510	2014.976	1	1.626	0.008	129.9	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
00336+4509	A912	2014.831	1	0.478	0.007	338.9*	0.4					
00337+4310	COU1354	2014.976	1	0.655	0.015	65.0	1.4					
00341+2524	SKF220	2013.911	1	1.502	0.008	102.5*	0.3					
00345+3015	COU654	2014.831	1	0.282	0.007	209.4*	0.7					
00349+2627	COU548	2013.946		0.109	0.050	145.9*	8.0					
00353+2456	TDS1533	2014.921	1	0.610	0.007	24.6	0.8					
00355+2724	LDS866	2013.927	1	1.382	0.007	279.3	0.3	0.82				
00356+4127	COU1203	2014.850	1	1.203	0.007	215.8	0.3					
00358+4901	STT15	2014.976	1	0.182	0.011	329.8	0.9					
00359+2914	ES314	2013.919	1	1.266	0.007	204.0	0.3	5.24				
00361+2821	SKF221	2013.941	1	1.389	0.010	35.0*	0.3					
00364+3330	HDS84	2013.963	1	0.258	0.007	34.2	1.2					
00365+3724	A1505	2014.973	1	0.243	0.032	34.0	1.6					
00366+5042	COU2153	2014.828	1	0.458	0.007	3.5*	0.4					
00374+3635	COU851	2014.921	1	0.384	0.007	212.8	0.3					
00378+4915	HU512	2014.828	1	0.914	0.007	167.7*	0.3					
00380+2510	HO305AB	2013.965	1	0.936	0.007	195.8	0.3	1.95				
00380+2510	HO305AC	2013.965	1	3.380	0.017	204.3	0.3	3.79				
00382+3357	COU655	2014.831	1	0.525	0.007	213.8*	0.3					
00385+4022	COU1050	2014.973	1	0.634	0.010	94.2	0.3					
00390+4037	WOR31	2014.831	1	0.250	0.007	123.1*	0.4					
00390+4040	BU1159	2014.976	1	0.218	0.007	162.7	2.3					
00391+5128	HU513	2014.921	1	1.003	0.007	212.0	0.3					
00403+5121	HEI613	2014.921	1	1.981	0.010	182.7	0.9					
00404+2504	COU75	2013.946	1	0.414	0.007	237.4*	0.5					
00405+3627	COU1051	2013.911	1	0.461	0.007	89.0*	0.3					
00410+2458	A434	2013.963	1	0.892	0.007	202.8*	0.3					
00415+1731	A2204	2014.921	1	1.118	0.007	339.9	0.3					
00423+2919	COU658	2013.946	1	0.659	0.007	127.7*	0.3					
00423+4015	A1507	2014.976	1	0.689	0.007	224.0	0.3					
00423+4015	A1507	2014.976	1	0.729	0.020	225.1	0.4					
00428+2924	A917	2013.911	1	1.291	0.012	119.3*	0.4					
00429+2047	A2205	2014.973	1	0.315	0.010	187.2	0.3			Msn2017a	-0.05	3.1 ^Q
00429+2240	SKF229AB	2013.965	1	0.475	0.007	337.6	0.3	3.51				
00429+2240	SKF229CD	2013.965	1	0.959	0.007	342.5	0.3	0.27				
00434+3907	HEI201Aa,Ab	2013.911	1	0.155	0.048	93.1	4.4	0.06	NDp			
00434+3907	HEI201AB	2014.921	1	0.907	0.009	80.7	0.3					
00434+4726	A651	2014.976	1	0.934	0.007	141.3	0.3			USN2002	0.04	-1.4
00434+4726	A651	2014.976	1	0.933	0.007	141.3	0.3			USN2002	0.04	-1.4
00449+4925	COU2154	2014.831	1	1.094	0.007	319.3*	0.3					
00453+3448	COU1204	2013.946	1	0.784	0.007	69.1*	0.3					
00457+2327	LDS3197	2013.965	1	0.612	0.007	62.2	0.3	0.86				
00463+4324	BU866	2014.921	1	1.504	0.008	78.9	0.3					
00463+4715	COU2002	2014.831	1	—	—	—	—		NR			
00467+3945	COU1205	2013.941	1	0.908	0.007	95.4*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
00469+1232	A920	2013.013	1	1.927	0.010	227.9	0.4					
00470+2315	HU413	2014.831	1	0.313	0.007	323.8*	0.6			Ole2003d	-0.06	-0.0
00479+2305	J636	2013.944	1	1.897	0.009	262.3*	0.3					
00487+3202	TDS1626	2013.946	1	1.180	0.007	159.7*	0.3					
00490+4435	MCT2	2014.921	1	1.028	0.007	256.4	0.3					
00493+3508	COU1208	2013.944	1	1.132	0.007	252.0*	0.3					
00493+3743	TDS1630	2013.963	1	—	—	—	—		NR			
00495+1640	J924	2013.925	1	0.674	0.007	309.0	0.3	0.36				
00495+4018	HDS110Aa,Ab	2014.976	1	0.108	0.042	126.4	7.1		NDg			
00495+4018	HDS110Aa,Ab	2014.976	1	0.128	0.042	130.1	7.1		NDg			
00495+4018	HDS110AB	2014.976	1	0.555	0.022	13.4	2.1					
00495+4018	HDS110AB	2014.976	1	0.561	0.019	17.5	2.1					
00497+2958	MLB633	2013.925	1	0.993	0.007	19.8	0.3	1.44				
00501+2529	A436	2013.941	1	—	—	—	—		NR			
00504+5038	BU232	2014.976	1	0.888	0.007	253.2	1.1			Sca2008a	0.03	-1.4
00504+5038	BU232	2014.976	1	0.889	0.007	253.6	0.3			Sca2008a	0.03	-1.4
00505+2450	LDS3203	2013.944	1	1.006	0.017	321.3*	0.7					
00505+2450	LDS3203	2013.944	1	1.016	0.017	320.1	0.8					
00508+3203	A922	2013.941	1	0.564	0.007	156.1*	0.6					
00511+2853	COU447	2013.946	1	0.880	0.007	38.1*	0.3					
00516+2338	HU414	2013.911	1	1.355	0.007	112.5*	0.3					
00516+3925	A1509	2013.944	1	0.659	0.010	27.5*	0.4					
00520+3154	A924	2013.941	1	0.305	0.007	129.7*	0.6			Hrt2009	0.02	1.4 ^Q
00521+4326	COU1653	2014.921	1	0.107	0.050	37.7	8.0					
00521+4326	COU1653	2014.921	1	0.114	0.050	36.5	8.0					
00524+2910	MLB513	2014.017	1	3.660	0.018	358.8	0.3	3.32				
00524+2910	MLB513	2014.015	2	3.649	0.036	3.3	0.3	1.88				
00536+1911	COU252	2014.976	1	0.275	0.012	98.8	0.7					
00536+1911	COU252	2014.976	1	0.268	0.032	97.6	2.2					
00546+1911	STT20	2014.976	1	0.604	0.007	178.6	0.3			Doc2014a	0.01	0.7
00554+3040	BU500	2013.944	1	0.469	0.007	123.0*	0.3					
00559+2817	TDS33	2013.946	1	1.830	0.009	236.4*	0.3					
00561+3352	HU1207	2013.941	1	0.350	0.007	186.1*	1.6	0.06				
00561+3352	HU1207	2013.941	1	0.354	0.038	187.2	1.9					
00562+2929	BRT4	2013.965	1	0.704	0.007	195.1	0.3	0.83				
00562+4639	HDS124	2014.921	1	0.113	0.050	132.7	8.0					
00562+4639	HDS124	2014.921	1	0.128	0.050	124.7	8.0					
00566+1040	STF76	2013.965	1	0.496	0.007	199.6	0.3	2.09				
00567+3417	COU659	2013.911	1	1.057	0.027	215.1*	1.4					
00567+3417	COU659	2013.911	1	1.068	0.020	213.9	1.5					
00583+2124	BU302	2014.976	1	0.320	0.008	220.4	2.9			Cve2006e	0.14	-19.3
00584+3831	TDS1692	2013.946	1	—	—	—	—		NR			
00585+4843	COU2254	2014.973	1	0.381	0.007	341.5	0.7					
00586+2042	TDS1698	2013.944	1	—	—	—	—		NR			
00588+2441	AG10AB	2014.015	1	2.046	0.011	113.8	2.3	0.82				
01004+1803	BRT1927	2014.976	1	1.948	0.019	171.8	0.4	0.02				
01004+1803	BRT1927	2014.976	1	1.948	0.010	171.4	0.3					
01004+1803	BRT1927	2014.976	1	1.953	0.020	171.7	0.4	0.02				

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
01006+4719	MAD1	2014.976	1	0.835	0.007	1.9	0.3			Lin2012a	0.07	2.5
01014+3535	COU854	2013.941	1	0.185	0.007	196.4	2.1			Hrt2009	0.04	8.4 ^Q
01021+2512	TDS1732	2013.946	1	—	—	—	—		NR			
01021+3658	TDS1731	2013.944	1	—	—	—	—		NR			
01029+5148	BU1161	2014.921	1	0.331	0.010	22.7	0.3					
01037+5026	HU517	2014.921	1	0.599	0.007	30.9	0.5					
01038+2232	J874	2013.944	1	2.411	0.012	299.8*	0.3					
01040+3528	HO213	2013.941	1	0.303	0.007	119.4*	1.6			Doc2007d	0.00	-1.7
01042+2256	GIC19AB	2013.927	1	7.810	0.489	223.1	3.1					
01042+2256	GIC19Aa,Ab	2013.927	1	1.205	0.007	266.1	0.3	0.29	NDg			
01042+5038	HU518AB	2014.921	1	0.625	0.027	339.8	1.3					
01042+5038	HU518CD	2014.921	1	0.560	0.019	300.2	0.3					
01042+5038	HU518CD	2014.921	1	0.570	0.027	300.4	0.3					
01046+2558	COU253	2013.946	1	0.991	0.007	96.5*	0.3					
01047+3854	A1514CD	2014.976	1	1.662	0.230	299.6	1.2					
01047+3854	A1514CD	2014.976	1	1.423	0.218	299.6	2.7					
01049+3649	A1515	2013.946	1	0.167	0.028	131.5*	3.0			Doc2009g	0.00	-2.3 ^Q
01054+4340	COU1657	2014.973	1	0.295	0.027	265.9	2.8					
01070+3014	A929	2013.867	1	0.664	0.007	126.5*	0.3					
01071+4744	A931	2013.867	1	—	—	—	—		NR			
01072+3839	A1516	2013.946	1	0.193	0.009	208.4*	2.9			Doc2017i	0.04	4.4 ^Q
01073+3805	TDS1778	2013.944	1	—	—	—	—		NR			
01076+2257	LDS9112AB	2013.925	1	10.857	0.054	318.7	0.3	2.41				
01076+2257	LDS9112Aa,Ab	2013.927	1	1.474	0.007	72.9	0.3	4.38	NDg			
01076+2257	LDS6410	2013.925	1	1.459	0.007	220.4	0.3	2.67				
01076+2257	LDS6410	2013.966	1	1.459	0.007	221.6	0.3	2.85				
01080+2254	VYS3	2013.925	1	0.514	0.007	281.3	0.3	1.05				
01087+3930	ES1946	2013.995	1	0.728	0.007	137.0	0.3	2.32				
01088+3024	HDS149	2013.941	1	0.383	0.027	186.2*	1.2					
01096+4010	A1517	2013.867	1	1.907	0.010	256.9	0.7					
01096+4010	A1517	2013.867	1	1.903	0.015	257.7	0.6					
01096+4010	A1517	2013.870	1	1.973	0.010	258.1	0.3	4.09				
01099+4011	AG15	2013.867	1	2.800	0.014	69.4*	0.3					
01100+5153	HU519	2014.921	1	0.379	0.018	130.1	2.3					
01105+3917	COU1212	2013.944	1	0.269	0.017	174.3*	2.9			Cou1999b	-0.27	51.2 ^Q
01106+3557	BU1162	2013.946	1	0.266	0.007	132.3*	0.5					
01106+5101	BU235	2014.921	1	0.824	0.007	139.8	0.3					
01108+5141	DOO3	2014.921	1	0.963	0.007	354.3	0.3					
01112+4113	A655	2014.973	1	0.223	0.019	185.1	1.2			Cve2006e	-0.07	8.9 ^Q
01113+0750	HDS156	2013.995	1	1.677	0.008	106.9	0.3	3.59				
01121+3707	TDS1799	2013.963	1	—	—	—	—		NR			
01125+3747	COU1057	2013.941	1	0.433	0.017	175.1*	0.8					
01125+3747	COU1057	2013.941	1	0.421	0.018	173.9	1.6					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
01126+3507	COU855	2013.941	1	1.697	0.022	144.9*	0.3					
01126+3507	COU855	2013.941	1	1.714	0.027	143.2	1.2					
01127+3536	DOO27	2013.963	1	1.457	0.010	203.0*	0.3					
01128+3700	COU1058	2013.946	1	0.794	0.007	249.2*	0.3					
01131+2942	A1260	2014.973	1	0.223	0.007	63.0	1.0			Msn2017a	-0.00	0.4
01133+4426	A656	2013.867	1	0.656	0.007	117.7*	0.6					
01135+4740	COU1857	2013.867	1	0.801	0.007	237.2*	0.4					
01147+4829	COU1858	2013.867	1	0.387	0.039	77.9*	2.9					
01147+4829	COU1858	2013.867	1	0.400	0.017	77.7	0.7					
01151+3112	A1261	2013.946	1	0.631	0.017	320.4	0.9					
01151+3112	A1261	2013.946	1	0.596	0.011	320.0	0.3					
01152+1949	J224	2013.995	1	0.965	0.007	263.5	0.3	3.53				
01152+2553	TDS1816	2013.944	1	—	—	—	—		NR			
01154+3639	TDS1819	2013.963	1	—	—	—	—		NR			
01162+4429	A657	2014.921	1	1.559	0.008	149.8	0.3					
01178+4153	COU1357	2014.973	1	0.808	0.013	301.3	0.4					
01178+4901	STF102	2014.921	1	0.489	0.007	272.4	0.3					
01180+3750	COU856	2013.941	1	1.187	0.008	22.9*	0.3					
01181+4707	A937	2014.921	1	0.342	0.007	218.0	0.7					
01181+4707	A937	2014.973	1	0.292	0.007	213.7	0.6					
01181+4707	A937	2014.973	1	0.303	0.009	217.6	1.2					
01187+3345	COU663	2013.946	1	0.339	0.037	181.9*	0.9					
01187+3345	COU663	2013.946	1	0.370	0.037	179.3	1.5					
01191+3139	TDS47	2013.946	1	1.296	0.009	182.5*	0.3					
01191+3139	TDS47	2013.946	1	1.302	0.010	182.6	0.4					
01191+5021	COU2005	2014.921	1	0.138	0.050	201.4	2.4					
01191+5021	COU2005	2014.921	1	0.131	0.024	201.1	4.4					
01194+0731	HEI834	2013.015	1	1.060	0.009	277.2*	0.5					
01194+4857	HU521	2013.867	1	0.287	0.029	112.6*	1.9					
01194+4857	HU521	2013.867	1	0.286	0.010	113.0	0.7					
01203+3740	HDS173AB	2013.941	1	0.128	0.041	303.1	7.6					
01208+1813	A2212	2013.015	1	1.320	0.007	214.3*	0.3					
01210+3042	MLB678	2013.944	1	1.675	0.008	151.2*	0.3					
01214+3440	POP54	2013.944	1	1.300	0.007	46.7*	0.3					
01217+3238	COU665	2013.946	1	1.086	0.007	172.6*	0.3					
01219+2745	MLB598	2013.927	1	1.168	0.007	90.9	0.3	2.16				
01221+0939	HEI428	2013.015	1	1.190	0.007	340.4*	0.3					
01222+4208	HDS178Aa,Ab	2014.973	1	0.156	0.050	132.8	8.0		NDp			
01222+4208	HDS178Aa,Ab	2014.973	1	0.177	0.040	132.4	3.2		NDp			
01222+4208	HDS178AB	2014.973	1	0.387	0.025	36.7	1.2					
01244+3653	HDS181	2013.946	1	0.317	0.012	354.1	0.3					
01249+4302	COU1358	2013.867	1	0.137	0.050	87.5	8.0					
01249+4302	COU1358	2013.867	1	0.131	0.050	88.1	8.0					
01251+4537	A939	2014.973	1	0.198	0.007	196.6	0.7			Msn2014b	-0.01	-3.5
01252+4317	A1262	2013.867	1	0.109	0.050	210.1*	4.2					
01255+3847	TDS50	2013.944	1	—	—	—	—		NR			
01256+3533	TDS51	2013.946	1	—	—	—	—		NR			
01258+2733	COU666	2013.944	1	0.415	0.007	145.4*	0.8					
01260+4326	POP178	2014.973	1	1.383	0.007	265.5	0.3					
01265+1812	HDS187	2013.015	1	—	—	—	—		NR			
01267+1123	HDS188	2013.015	1	0.663	0.007	171.0*	0.4					
01267+1123	HDS188	2013.015	1	0.689	0.007	169.1	0.8					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
01268+3633	A1908	2013.963	1	1.621	0.008	345.8*	0.3					
01277+3106	HDS190	2013.941	1	0.114	0.050	321.6	8.0					
01283+4247	AC14	2013.867	1	0.772	0.007	91.7*	0.4					
01285+0338	A2316	2013.995	1	0.779	0.007	66.1	0.3	3.10				
01290+3921	TDS1890	2013.963	1	—	—	—	—			NR		
01291+1040	XMI205BC	2013.966	1	0.921	0.007	213.7	0.3	6.27		NDg		
01292+2004	A2214	2013.946	1	0.726	0.030	212.9	2.2					
01292+2004	A2214	2013.946	1	0.723	0.007	213.3*	0.3					
01296+2156	A1909	2013.834	1	1.941	0.010	122.9*	0.3					
01297+2250	A1910	2013.941	1	0.168	0.027	175.3*	1.3			Hrt1996a	-0.03	-3.9
01299+4547	COU1659	2013.867	1	0.369	0.007	30.3*	1.2					
01299+4729	ES1210Aa,Ab	2014.921	1	0.143	0.050	104.6	8.0			NDp		
01299+4729	ES1210AB	2014.921	1	1.596	0.008	184.3	0.4					
01299+4729	ES1210AB	2014.921	1	1.592	0.008	184.6	0.4					
01305+0258	A2318	2013.995	1	0.615	0.007	161.0	0.3	3.84				
01322+1142	A2215	2013.015	1	1.672	0.008	357.4*	0.3					
01325+1417	LDS1102	2013.927	1	1.546	0.008	0.3	0.3	5.11				
01328+3551	A1911	2014.976	1	0.365	0.007	351.4	0.7					
01328+3551	A1911	2014.976	1	0.303	0.007	356.9	0.6					
01336+3023	HDS207	2013.946	1	0.128	0.031	131.1	5.5					
01336+3526	ES2142	2013.995	1	0.730	0.007	252.5	0.3	0.90				
01338+2851	LDS1104AB	2013.927	1	9.523	0.017	224.0	1.3	0.80				
01338+2851	LDS1104AC	2013.927	1	8.612	0.027	226.8	1.3	2.09				
01338+2851	LDS1104AD	2013.927	1	8.140	0.037	245.7	2.3	3.43				
01338+2851	LDS1104AE	2013.927	1	10.111	0.047	100.3	2.3	4.08				
01339+2917	TDS1916	2013.963	1	—	—	—	—			NR		
01345+3440	A1913AB	2013.941	1	0.422	0.008	129.5*	1.3			Baz1987d	0.16	34.9 ^Q
01347+3841	ES1608	2013.941	1	1.459	0.007	50.3*	0.3					
01348+2935	BRT5Ba,Bb	2013.927	1	0.646	0.007	214.5	0.3	1.62		NDp		
01348+2935	BRT5AB	2013.927	1	6.421	0.027	215.4	0.5	0.49				
01348+4656	A943	2013.867	1	0.411	0.017	215.7*	0.8					
01348+4656	A943	2013.867	1	0.433	0.017	216.3	0.9					
01349+2532	TDS1920	2013.944	1	0.459	0.007	68.3*	1.1					
01349+3114	TDS1919	2013.963	1	—	—	—	—			NR		
01350+2753	MLB634	2013.927	1	1.151	0.007	349.8	0.3	0.10				
01350+4914	COU2553	2014.973	1	0.351	0.007	220.7	0.7					
01356+3447	A1914	2013.995	1	0.656	0.007	287.7	0.3	3.88				
01361+0840	HEI429	2013.015	1	0.925	0.007	89.7*	0.3					
01363+0419	BU869	2013.995	1	0.891	0.007	198.6	0.3	2.68				
01364+1311	HEI306	2013.834	1	—	—	—	—			NR		
01365+4336	ES1495	2013.867	1	1.292	0.007	66.1*	0.3					
01371+3111	TDS1932	2013.963	1	—	—	—	—			NR		
01372+4843	A817	2013.867	1	0.452	0.007	23.9*	0.6					
01373+4015	COU1214	2014.976	1	0.329	0.007	173.5	2.3					
01373+4015	COU1214	2014.976	1	0.331	0.018	171.1	2.0					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
01374+1955	A2319	2013.015	1	0.985	0.007	202.3*	0.3					
01374+3837	TDS1935	2013.963	1	—	—	—	—		NR			
01379+2753	MLB516	2013.944	1	1.777	0.009	239.6	0.3					
01379+2753	MLB516	2013.944	1	1.796	0.009	239.1*	0.3					
01379+2753	MLB516	2014.921	1	1.784	0.009	239.1	0.3					
01383+2232	J587	2013.834	1	1.791	0.009	30.5*	0.3					
01385+3448	COU1059	2014.973	1	0.326	0.007	132.9	1.1					
01388+3453	COU1060	2014.976	1	0.533	0.028	189.7	0.6					
01388+3453	COU1060	2014.976	1	0.553	0.018	189.7	1.1					
01388+3453	COU1060	2014.976	1	0.534	0.015	188.9	0.6					
01390+4350	COU1660	2013.867	1	0.503	0.007	25.8*	0.5					
01391+2656	BU508	2013.834	1	0.591	0.007	51.6*	0.3					
01396+1939	COU255	2013.834	1	1.294	0.007	195.1*	0.3					
01397+2853	TDS1944	2013.963	1	—	—	—	—		NR			
01400+2611	UC16	2013.927	1	1.287	0.007	232.0	0.3	0.98				
01403+2802	TDS57	2013.963	1	—	—	—	—		NR			
01403+3844	BU1167	2013.867	1	1.493	0.007	51.5*	0.3					
01405+1508	J927	2013.966	1	0.671	0.007	245.9	0.3	0.45				
01410+4925	COU2451	2014.921	1	0.699	0.007	126.7	0.5					
01411+1817	A2321	2013.995	1	1.192	0.007	235.1	0.3	2.24				
01411+1817	A2321	2013.966	1	1.185	0.007	235.1	0.3	2.01				
01412+3524	COU1061	2013.944	1	1.551	0.008	280.4*	0.3					
01413+4650	COU2006	2014.973	1	0.669	0.007	69.9	0.3					
01417+3333	TDS1956	2013.963	1	—	—	—	—		NR			
01421+3559	TDS59	2013.946	1	1.022	0.007	159.2*	0.3					
01425+3329	TDS1961	2013.963	1	—	—	—	—		NR			
01431+3426	COU668	2013.941	1	0.689	0.007	253.0*	0.3					
01432+0520	A2008Aa,Ab	2013.015	1	0.103	0.050	106.8	8.0		NDp			
01432+0520	A2008AB	2013.015	1	0.354	0.017	350.3*	2.7					
01436+3432	TDS1966	2013.963	1	—	—	—	—		NR			
01437+3705	COU1063	2013.946	1	0.620	0.007	208.1*	0.3					
01439+2821	TDS1972	2013.946	1	—	—	—	—		NR			
01441+3057	A947	2013.996	1	0.827	0.007	6.3	0.3	2.51				
01445+3957	STF149	2013.946	1	1.450	0.007	81.8*	0.3					
01450+2703	COU750	2013.834	1	0.277	0.007	28.4*	1.0			Doc2005c	-0.09	-3.2
01451+2844	HDS232	2013.834	1	—	—	—	—		NR			
01454+3521	TDS1990	2013.938	1	—	—	—	—		NR			
01462+3343	HU804	2013.944	1	0.300	0.027	76.1*	3.6			Ole2001	-0.12	3.3
01463+4439	A948	2013.867	1	0.249	0.007	146.4*	1.4			USN2002	-0.08	8.2
01465+2936	COU451	2013.834	1	0.228	0.015	80.3*	0.5					
01465+4335	A1522	2014.921	1	1.675	0.008	94.9	0.3					
01465+5024	HU532	2014.976	1	0.112	0.050	341.8	8.0					
01469+2550	TDS2001	2013.963	1	—	—	—	—		NR			
01472+4833	COU2007	2013.867	1	0.778	0.007	150.7*	0.3					
01480+5021	HU534	2014.921	1	0.782	0.007	72.3	0.3					
01484+2713	J642	2013.963	1	1.841	0.009	132.9*	0.3					
01485+4308	COU1662	2013.867	1	1.526	0.008	304.6*	0.3					
01486+1618	BU510	2013.834	1	1.607	0.008	313.8*	0.3					
01487+3746	COU1065	2013.938	1	0.491	0.007	156.0*	0.3					
01489+4215	POP125	2014.921	1	1.553	0.008	47.6	0.3					
01492+2815	A2009	2013.834	1	0.853	0.007	321.7*	0.3					
01497+1550	HEI20	2013.015	1	0.848	0.007	117.4*	0.3					
01498+3304	BU1016	2013.938	1	0.692	0.010	39.9*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
01508+4024	HDS248	2014.921	1	0.392	0.017	30.6	1.9					
01508+4024	HDS248	2014.921	1	0.402	0.017	31.9	1.1					
01510+2551	COU452	2013.834	1	0.200	0.019	175.1*	1.9					
01511+3747	ES159	2013.996	1	1.506	0.008	7.3	0.3	4.53				
01512+2439	HO311	2013.938	1	0.374	0.007	177.2*	0.5			Hrt1989	-0.00	0.5 ^Q
01512+3245	TDS2024	2013.946	1	—	—	—	—		NR			
01515+4117	HDS252	2014.976	1	1.111	0.007	262.1	1.1					
01532+3744	TDS2038	2013.941	1	—	—	—	—		NR			
01535+4437	STF3113	2014.921	1	0.641	0.007	280.5	0.6					
01542+3607	COU858	2013.944	1	1.047	0.007	277.0*	0.3					
01543+3935	TDS64	2013.963	1	0.785	0.007	83.5*	0.3					
01547+3801	A1811	2013.941	1	1.477	0.007	92.6*	0.3					
01548+1728	A2323AB	2013.834	1	1.717	0.009	147.5*	0.3					
01548+1728	A2323Aa,Ab	2013.834	1	0.128	0.050	125.8	7.6		NDp			
01551+2847	STF183	2013.834	1	0.307	0.013	141.5*	0.5			USN2000b	-0.05	-2.2
01557+3620	HU1033	2013.867	1	1.258	0.007	216.0*	0.3					
01559+3803	TDS2057	2013.963	1	—	—	—	—		NR			
01563+2520	COU453	2014.976	1	0.698	0.007	281.7	0.4					
01563+2729	COU752	2013.944	1	1.863	0.011	171.3*	0.4					
01563+2729	COU752	2013.944	1	1.847	0.018	170.0	0.9					
01563+2729	COU752	2013.944	1	1.846	0.016	170.4	0.8					
01563+4251	A1524	2014.976	1	0.334	0.007	55.4	0.5					
01568+3931	ALI1022	2013.938	1	0.239	0.007	35.7	4.1					
01570+3101	A819	2013.963	1	0.140	0.050	0.6*	8.0			Hrt2009	-0.10	12.6
01573+4812	A818	2014.976	1	0.325	0.008	206.0	1.9					
01577+3739	COU1218	2013.944	1	0.387	0.007	354.3*	1.4					
01577+4434	A1526	2013.867	1	0.180	0.007	186.0*	2.1			Cve2010e	0.08	9.8
01579+3753	TDS2066	2013.946	1	—	—	—	—		NR			
01581+3041	TDS2070	2013.963	1	0.703	0.007	244.0*	0.4					
01581+3305	COU860	2013.941	1	1.094	0.007	293.2	0.3					
01581+3444	COU859AB	2013.941	1	0.271	0.013	9.5*	0.8					
01581+3444	COU859AC	2013.944	1	0.699	0.010	176.7	1.0		NDg			
01581+3953	MLB814	2013.996	1	1.186	0.007	329.9	0.3	4.96				
01584+2547	A2011	2013.966	1	0.613	0.007	294.9	0.3	3.08				
01585+1048	YSC85	2013.015	1	—	—	—	—		NR			
01585+3804	TDS2075	2013.946	1	—	—	—	—		NR			
01586+3334	HDS267	2013.938	1	0.238	0.038	172.7*	1.0					
01588+3826	TDS2077	2013.963	1	—	—	—	—		NR			
01593+2450	STF194	2013.941	1	1.261	0.007	279.1*	0.3					
01596+3044	COU669	2013.941	1	1.019	0.007	288.8*	0.3					
02002+4332	COU1664	2014.976	1	0.356	0.007	258.1	0.7					
02005+2742	J646	2014.017	1	3.151	0.016	108.3	0.3	3.78				
02005+2742	J646	2014.850	1	3.166	0.016	108.6	0.3	3.13				
02005+3958	HDS268AB	2013.946	1	0.903	0.010	19.4*	0.5					
02005+3958	HDS268Aa,Ab	2013.946	1	0.113	0.047	123.0	7.9		NDp			
02006+2753	J3257	2013.966	1	1.037	0.007	51.4	0.3	3.02				
02010+1354	LDS1123AB	2013.966	1	2.439	0.008	111.7	1.3	1.21				
02010+1354	LDS1123AC	2013.966	1	7.391	0.018	238.5	2.3	2.02				
02010+1354	LDS1123AD	2013.966	1	1.613	0.008	122.6	1.3	2.37				
02012+3147	ES2405	2014.015	2	4.142	0.041	270.1	0.3	3.63				
02012+3147	ES2405	2014.017	1	4.218	0.021	272.6	0.3	4.10				

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
02021+4530	COU1665	2014.921	1	0.474	0.010	108.1	0.4					
02022+3643	A1813AB,C	2013.946	1	1.571	0.016	199.4	1.1			Izm2019	-0.04	-1.3
02022+3643	A1813AB,C	2013.946	1	1.567	0.008	200.6*	0.3			Izm2019	-0.05	-0.1
02022+3643	A1813AB,C	2013.946	1	1.565	0.015	200.1	1.4			Izm2019	-0.05	-0.6
02035+3422	A1925AB	2013.996	1	0.655	0.007	230.3	0.3	3.41				
02035+3422	A1925AC	2013.996	1	3.174	0.016	154.2	0.3	7.23				
02043+3924	COU1365	2013.941	1	0.187	0.013	126.4*	1.8					
02045+1230	CHE37	2014.015	2	3.591	0.038	43.9	0.3	0.02				
02045+1230	CHE37	2014.015	2	3.470	0.037	46.2	0.3	0.29				
02053+4408	HDS279	2014.921	1	0.244	0.013	131.8	2.5					
02055+1029	HEI436	2013.015	1	1.987	0.028	55.3*	1.3					
02055+1029	HEI436	2013.015	1	2.001	0.038	53.5	1.9					
02055+3018	COU455	2013.941	1	0.328	0.007	111.8*	0.9					
02062+2207	COU149	2013.834	1	0.327	0.033	239.9*	1.1					
02063+4936	COU2561	2014.976	1	0.770	0.013	125.5	0.3					
02064+3854	A1926	2013.867	1	1.057	0.007	146.9*	0.3					
02065+2650	COU353	2013.938	1	0.562	0.007	88.7*	1.9					
02068+2542	HO312Aa,Ab	2013.834	1	0.106	0.047	133.0	7.9		NDp			
02068+2542	HO312AB	2013.834	1	1.734	0.009	161.5	0.7					
02068+2542	HO312AB	2013.834	1	1.699	0.008	342.2	0.3					
02076+2040	CHE53	2014.015	2	3.839	0.019	0.2	0.3	0.21				
02077+3418	A2012	2013.946	1	0.573	0.007	339.0*	0.3					
02077+3418	A2012	2013.946	1	0.565	0.021	337.7	4.0					
02084+4807	COU2259	2014.976	1	0.539	0.008	327.5	0.7					
02087+1045	HEI437	2013.834	1	1.515	0.008	351.1*	0.3					
02090+3540	COU1067	2013.867	1	0.127	0.047	42.3	7.1					
02099+3449	HU1034	2013.941	1	0.377	0.009	289.3*	0.7					
02103+3509	COU1068	2013.867	1	1.153	0.007	245.5*	0.3					
02108+3005	COU456	2013.944	1	0.475	0.007	71.1*	1.0					
02109+2348	HDS292	2013.946	1	0.103	0.050	148.0	7.7					
02112+2604	BRT3260	2014.017	1	2.040	0.010	185.5	0.3	2.83				
02112+2604	BRT3260	2014.015	2	2.053	0.021	173.2	0.3	0.78				
02120+3349	COU862	2013.947	1	0.666	0.008	279.8*	0.3					
02121+3946	MLB916	2013.996	1	0.769	0.007	312.1	0.3	2.08				
02123+1411	LDS1125	2013.966	1	1.019	0.007	5.9	0.3	4.41				
02123+2357	STF226	2014.921	1	1.726	0.009	231.4	0.3					
02128+3722	HO497	2013.963	1	0.490	0.007	88.0*	0.5					
02129+2244	COU150	2013.944	1	0.128	0.050	144.0	8.0					
02129+2244	COU150	2013.944	1	0.106	0.050	141.6	8.0					
02130+3129	TDS2161	2013.963	1	0.875	0.010	230.4*	0.5					
02133+2852	MLB636	2013.996	1	0.704	0.017	269.1	0.5					
02134+4124	COU1668	2014.921	1	1.274	0.018	157.6	0.3					
02134+4124	COU1668	2014.921	1	1.260	0.018	157.9	0.6					
02140+4729	STF228	2014.921	1	0.713	0.007	299.6	0.5			Pru2017	-0.01	0.7
02144+3454	HU807	2013.938	1	0.502	0.007	145.4*	0.6					
02145+3650	COU1367	2013.947	1	0.783	0.009	21.1*	0.3					
02154+5044	HU535	2014.921	1	1.401	0.007	49.0	0.3					
02160+4046	COU1669	2014.921	1	0.148	0.048	125.4	7.5					
02161+3109	COU670	2013.944	1	0.844	0.007	132.5*	0.3					
02164+2703	TDS2187	2013.938	1	—	—	—	—		NR			
02172+3729	A206	2013.947	1	0.315	0.009	154.8*	0.3					
02172+3729	A206	2013.947	1	0.348	0.007	154.4	1.5					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
02182+3920	A207	2013.941	1	0.584	0.009	353.8*	0.3			Sca2020f	-0.01	-2.9
02184+2757	COU354	2013.941	1	0.720	0.007	147.3*	0.3					
02199+3047	A960	2013.938	1	1.086	0.007	316.8*	0.3					
02202+2949	A961	2013.947	1	0.332	0.011	90.6	1.0			Nov2007b	0.07	4.5 ^Q
02202+2949	A961	2013.947	1	0.305	0.007	92.5*	0.6			Nov2007b	0.05	6.4 ^Q
02202+2949	A961	2013.947	1	0.328	0.010	91.4	1.2			Nov2007b	0.07	5.3 ^Q
02206+3748	LDS3370	2013.938	2	—	—	—	—		NR			
02209+4758	COU2159	2014.921	1	1.266	0.015	98.0	0.4					
02209+4758	COU2159	2014.921	1	1.254	0.019	98.4	0.8					
02212+2136	HU425	2013.944	1	0.652	0.007	145.6*	0.3					
02216+3840	COU1369	2013.944	1	0.967	0.007	88.9*	0.3					
02217+2631	A2014	2013.834	1	1.193	0.007	31.6*	0.3					
02218+0058	A2326	2013.996	1	1.442	0.010	58.7	0.3					
02218+3830	STT40	2013.941	1	0.682	0.007	48.2*	0.8					
02218+4343	COU1672	2014.976	1	0.142	0.021	138.9	3.6					
02218+4349	COU1671	2014.976	1	0.872	0.007	255.3	0.6					
02228+4331	COU1673Aa,Ab	2014.976	1	0.125	0.021	136.9	0.3		NDp			
02228+4331	COU1673AB	2014.976	1	0.848	0.014	166.2	0.8					
02229+0221	BAL1254	2013.996	1	1.221	0.007	18.1	0.3	2.53				
02229+3445	COU1069	2013.947	1	0.383	0.007	298.6*	0.8					
02239+3330	BU876	2013.947	1	1.191	0.007	241.2	0.3					
02239+3330	BU876	2013.947	1	1.190	0.019	243.2	1.2					
02245+2931	MLB517	2013.996	1	0.704	0.007	25.1	0.3	1.51				
02248+1414	A2605	2014.058	1	0.117	0.050	140.3	0.9					
02248+1414	A2605	2014.058	1	0.117	0.022	140.3	0.9					
02249+3039	HDS314	2013.944	1	0.357	0.007	264.6*	0.3					
02250+2529	COU357	2013.944	1	0.256	0.007	118.1*	1.2					
02250+2529	COU357	2014.058	1	0.315	0.012	119.3*	0.3					
02255+2745	COU458	2013.835	1	1.247	0.007	300.0*	0.3					
02258+3917	HDS317	2013.941	1	0.474	0.007	142.1*	0.4					
02265+2710	COU459	2013.835	1	1.011	0.007	231.2*	0.3					
02267+3207	A964	2013.938	1	0.233	0.007	75.7*	0.5					
02267+4132	POP162	2014.976	1	1.607	0.048	193.1	3.4					
02270+1952	A2328AB	2013.835	1	0.354	0.013	78.6	0.6					
02270+1952	A2328AB	2013.836	1	0.348	0.007	77.6	0.3	0.71				
02270+1952	A2328AC	2013.835	1	1.247	0.007	95.4	0.3		NDg			
02270+1952	A2328AC	2013.836	1	1.244	0.007	95.6	0.3	3.31	NDg			
02278+0426	A2329	2013.015	1	0.317	0.007	306.9*	0.4			Ana2007	-0.01	3.6
02279+3406	ES323AB	2014.015	1	3.308	0.017	190.3	1.3	1.13				
02282+3850	A1815	2013.947	1	1.802	0.009	155.9	0.6					
02282+3850	A1815	2013.947	1	1.819	0.009	155.6	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
02285+0436	A2331	2013.015	1	1.414	0.007	144.5	0.4					
02288+3215	WOR2	2013.938	1	0.275	0.007	276.6*	0.3			Tam2005	-0.02	-5.0
02289+3442	COU1070	2013.944	1	0.149	0.050	141.1*	8.0					
02289+3442	COU1070	2013.944	1	0.155	0.050	140.9	8.0					
02292+2904	A965	2013.835	1	1.886	0.009	213.6*	0.3					
02297+0453	A2017	2013.996	1	0.599	0.007	64.9	0.3	3.46				
02300+0632	A2019	2013.015	1	1.353	0.007	251.1*	0.3					
02310+3456	COU1071	2013.938	1	1.877	0.009	56.2*	1.4					
02310+3456	COU1071	2013.938	1	1.860	0.018	57.7*	0.8					
02311+1214	HEI442	2013.835	1	2.100	0.010	343.7*	0.3					
02322+0901	HDS331	2013.015	1	0.688	0.007	328.9*	0.3					
02323+2834	A2020Aa,Ab	2013.941	1	0.109	0.028	138.3	2.4	0.14	NDp			
02323+2834	A2020AB	2013.941	1	3.318	0.017	37.4*	0.3					
02323+2834	A2020AB	2013.941	1	3.320	0.017	38.2	0.3					
02328+3515	ES271	2013.947	1	1.266	0.007	66.7*	0.5					
02333+3646	COU1219	2013.947	1	1.137	0.007	70.6*	0.3					
02344+1148	HLD63	2013.835	1	1.380	0.007	290.9*	0.3					
02344+2040	A2218	2013.944	1	2.100	0.010	114.9*	0.3					
02346+2028	TDS2289	2014.059	1	0.469	0.007	133.6*	0.5					
02363+2834	A2022	2013.947	1	0.965	0.019	324.8	1.6					
02363+2834	A2022	2013.947	1	0.987	0.007	325.2	0.3					
02367+2908	COU460	2013.835	1	0.149	0.050	105.4	8.0					
02367+2908	COU460	2013.835	1	0.160	0.043	101.3	8.0					
02372+3024	COU671	2013.947	1	0.633	0.007	111.2*	0.3					
02378+2308	HDS342	2014.058	1	—	—	—	—		NR			
02379+2003	A2219	2013.947	1	0.474	0.029	149.2	1.1			Msn2017a	0.02	2.4
02379+2003	A2219	2013.947	1	0.452	0.007	147.6*	0.8			Msn2017a	-0.00	0.8
02379+3830	ALI755	2014.015	2	8.899	0.044	345.7	0.3	1.76				
02379+3855	HDS343	2013.944	1	1.090	0.007	352.3	0.3					
02379+3855	HDS343	2013.944	1	1.083	0.016	352.0	1.1					
02383+1146	A2335	2013.015	1	1.323	0.007	317.8*	0.4					
02391+1430	LV16	2013.996	1	0.990	0.007	31.5	0.3	3.69				
02393+2552	A2023	2013.938	1	0.512	0.007	228.4*	0.4					
02393+2552	A2023	2013.938	1	0.492	0.007	228.9	1.1					
02399+3403	YR22	2013.944	1	—	—	—	—		NR			
02399+3848	ES1956AB	2013.948	1	1.950	0.010	217.2	1.3	0.64				
02399+3848	ES1956AC	2013.948	1	3.576	0.010	86.9	1.3	1.21				
02400+2106	TDS2327	2014.059	1	1.349	0.007	336.9*	0.3					
02405+3600	HDS349	2013.944	1	0.123	0.050	158.9	8.9					
02406+3420	WNO43	2013.947	1	0.686	0.007	61.5*	0.3					
02410+3905	COU1371	2013.944	1	0.195	0.007	132.0*	2.1					
02412+1123	HEI443	2013.015	2	3.379	0.017	217.6*	0.3					
02415+2518	LDS1134	2013.966	1	0.982	0.007	171.2	0.3	1.39				
02420+3255	COU863AB	2013.944	1	0.695	0.057	176.9*	0.7					
02420+3255	COU863Aa,Ab	2013.944	1	0.117	0.030	115.9	5.6		NDp			
02421+1351	LDS3416	2013.966	1	1.715	0.010	33.8	0.4					
02428+3826	ES231	2013.996	1	0.737	0.007	83.3	0.3	1.49				
02430+2014	A2220	2013.944	1	1.821	0.009	226.1	0.3					
02438+1606	HEI23	2014.059	1	0.986	0.007	341.1*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
02438+1606	HEI23	2014.059	1	0.986	0.007	341.1*	0.3					
02448+3129	A826	2013.996	1	0.719	0.007	164.6	0.3	1.92				
02453+3718	COU1220	2013.947	1	0.773	0.007	96.5	0.5					
02455+0133	HLD64	2013.996	1	0.827	0.007	219.3	0.3	2.95				
02463+2105	OCC9025	2013.947	1	0.452	0.007	300.1	0.3					
02471+0417	HEI624	2013.015	1	0.928	0.024	244.2*	1.1					
02473+1717	A2222CD	2014.059	1	0.488	0.009	288.1	0.9					
02473+1717	A2222CD	2014.059	1	0.482	0.007	287.1	0.3	3.73				
02473+1717	A2222CD	2014.059	1	0.488	0.009	288.1	0.9					
02478+3102	COU550	2013.947	1	1.912	0.010	346.4*	0.3					
02478+3102	COU550	2013.944	1	1.928	0.010	346.9*	0.4					
02478+3103	BU262	2013.947	1	1.720	0.015	51.8	0.7					
02478+3103	BU262	2013.947	1	1.719	0.009	50.7*	0.3					
02479+1737	A2223	2014.059	1	1.996	0.010	60.0*	0.3					
02480+1604	TDS96Aa,Ab	2014.059	1	0.187	0.011	186.1	3.6		NDg			
02483+1727	COU672	2014.059	1	0.317	0.021	201.5*	1.5					
02483+2213	COU551	2013.944	1	1.640	0.008	297.5*	0.3					
02489+3714	COU1073	2013.947	1	1.599	0.008	318.9*	0.3					
02497+3721	ES2553	2013.996	1	1.027	0.007	177.3	0.3	3.04				
02497+3721	ES2553	2013.996	1	1.018	0.007	177.3	0.3	3.04				
02501+3217	COU674	2014.976	1	1.932	0.010	281.6	0.3					
02506+2629	COU553	2014.976	1	0.534	0.007	126.0	0.5					
02510+3510	COU865	2014.976	1	0.184	0.016	128.0	2.9					
02523+3617	MET16	2013.996	1	0.772	0.007	12.3	0.3	5.87				
02549+3857	COU1222	2014.976	1	0.731	0.010	139.6	1.1					
02553+1915	CVN4	2013.015	1	—	—	—	—		NR			
02554+2005	CVN5	2013.015	1	—	—	—	—		NR			
02555+4254	COU1377Aa,Ab	2014.976	1	0.129	0.050	149.9	8.0		NDp			
02555+4254	COU1377AB	2014.976	1	1.001	0.007	2.6	0.4					
02563+2124	J232	2013.996	1	0.712	0.007	131.3	0.3	0.90				
02574+1442	HU1048	2013.996	1	0.542	0.007	311.7	0.3	3.92				
02582+2030	CVN8	2013.015	1	1.117	0.025	342.9	0.6					
02582+2030	CVN8	2013.015	1	1.038	0.045	343.6	0.7					
02582+2030	CVN8	2013.944	1	1.117	0.017	344.1*	0.5					
02585+2328	COU679	2013.944	1	1.570	0.008	223.1*	0.3					
02587+3338	TDS2400	2014.059	1	0.779	0.007	153.9*	0.3					
02596+3835	COU1074	2014.976	1	1.756	0.009	155.2	0.3					
03002+1853	COU2566	2014.059	1	0.820	0.017	58.4*	0.4					
03002+1853	COU2566	2014.059	1	0.811	0.017	58.4	0.3					
03009+2139	HU431	2013.944	1	0.996	0.007	21.0*	0.3					
03016+2549	HDS386	2014.059	1	0.296	0.007	221.5	2.4					
03017+3455	COU868	2014.059	1	1.188	0.007	174.5*	0.3					
03022+2326	COU681	2014.059	1	0.689	0.007	115.0*	0.3					
03023+1820	A2414	2013.015	1	0.525	0.017	68.3*	2.3		Hei1997		0.17	-16.3
03026+0025	A1930	2013.996	1	0.897	0.007	137.0	0.3	4.51				
03036+3627	COU869	2013.996	1	0.793	0.007	106.6	0.3	3.20				
03080+3557	HO499	2013.944	1	1.884	0.009	234.7*	0.3					
03087+1736	COU2680	2013.015	1	1.426	0.105	243.7	1.3					
03090+1740	COU358	2013.067	1	2.074	0.010	111.5*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
03091+1207	HDS401	2013.067	1	0.510	0.013	344.8*	1.4					
03099+3332	COU682	2013.947	1	1.276	0.008	138.3*	0.4					
03103+4732	COU2018	2014.976	1	1.089	0.007	76.9	0.4					
03130+3254	LDS9146AB	2013.996	1	1.700	0.008	73.1	0.3	4.38				
03130+3254	LDS9146AC	2013.996	1	3.883	0.019	138.1	0.3	4.23				
03137+3508	COU870AB	2013.996	1	0.574	0.007	93.7	0.3	2.69				
03137+3508	COU870AC	2013.996	1	3.069	0.015	149.9	0.3	4.01				
03143+0911	A828	2013.015	1	1.218	0.007	205.5*	0.3					
03143+0911	A828	2013.015	1	1.227	0.007	204.3	0.7					
03150+3543	HO502	2013.947	1	0.863	0.007	16.3*	0.4					
03159+3805	WEY1	2013.947	1	0.956	0.007	258.6*	0.3					
03159+3805	WEY1	2013.948	1	0.958	0.007	258.9	0.3	0.82				
03166+2528	COU558	2014.059	1	0.539	0.007	87.7*	0.7					
03194+5025	COU2264	2014.976	1	1.263	0.008	92.0	0.3					
03194+5025	COU2264	2014.976	1	1.266	0.016	92.1	0.6					
03199+2143	HU433	2013.015	1	0.243	0.012	258.9	1.3					
03199+2143	HU433	2013.015	1	0.223	0.007	259.1	0.5					
03208+2311	OCC771	2013.015	1	0.159	0.007	157.9	1.1					
03216+2145	HU434	2013.067	1	0.338	0.008	214.9*	0.6					
03218+3540	ES2558	2013.996	1	1.168	0.007	236.6	0.3	4.21				
03220+3546	COU1078	2013.996	1	0.610	0.007	149.9	0.3	4.13				
03231+3234	COU756	2014.059	1	1.514	0.008	244.1*	0.3					
03233+0711	HEI631	2013.067	1	1.450	0.007	101.8*	0.3					
03233+1634	A2343	2013.996	1	0.830	0.007	15.8	0.3	3.22				
03236+0453	BU1178	2013.067	1	0.979	0.008	357.1*	1.7					
03236+0453	BU1178	2013.067	1	0.968	0.011	355.9	1.8					
03236+2525	COU463	2014.059	1	1.468	0.007	236.2*	0.4					
03250+0537	HEI632	2013.016	1	0.869	0.011	111.3*	0.9					
03252+3837	COU1383	2014.976	1	0.748	0.007	283.0	0.3					
03258+3044	A979	2014.059	1	1.727	0.009	269.4*	0.3					
03279+3229	TDS114	2014.059	1	0.945	0.007	167.2*	0.3					
03280+2028	COU260	2014.059	1	0.235	0.007	24.4	0.3	0.42				
03280+2028	COU260	2014.059	1	0.242	0.007	22.4*	2.1					
03291+4632	COU2022	2014.976	1	1.022	0.007	228.9	0.3					
03298+5001	COU2265	2014.976	1	0.702	0.007	283.3	0.3					
03308+3319	COU871	2014.976	1	1.298	0.007	199.4	0.3					
03324+1222	HDS448	2013.016	1	0.311	0.026	293.7	3.1					
03325+2615	COU686	2014.976	1	1.551	0.022	338.5	0.5					
03337+2351	COU465	2013.016	1	0.313	0.027	202.1*	1.1					
03353+2651	COU688	2014.976	1	0.487	0.025	200.6	0.5					
03359+0934	HDS455	2013.016	1	0.152	0.050	347.1	8.3					
03359+0934	HDS455	2013.016	1	—	—	—	—		NR			
03365+1011	A830	2013.013	1	0.296	0.007	169.4*	1.8			Zir2012b	0.01	2.2 ^Q
03368+1338	HEI213	2013.013	1	0.824	0.022	214.7*	1.0					
03370+1632	HEI29	2013.013	1	0.774	0.008	77.0*	0.3					
03374+2632	COU690	2013.996	1	0.683	0.007	173.4	0.3	2.29				
03375+4321	A1536	2014.976	1	1.296	0.009	227.3	0.3					
03375+4321	A1536	2014.976	1	1.286	0.007	227.6	0.3					
03376+2121	PAT1	2013.016	1	0.170	0.044	150.0	6.7					
03376+2121	PAT1	2013.016	1	—	—	—	—		NR			
03380+1629	HEI30	2013.013	1	0.911	0.007	16.5*	0.3					
03385+1336	YR10Aa,Ab	2013.013	1	0.183	0.027	78.8	3.1					
03385+1336	YR10Aa,Ab	2013.013	1	0.229	0.007	64.3	3.1					
03396+1823	TOK14	2013.996	1	1.668	0.008	244.9	0.3	6.66				

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
03397+1611	HU1064	2013.013	1	0.142	0.048	145.3	6.8					
03397+1611	HU1064	2013.013	1	0.138	0.050	145.3	8.0					
03402+1503	HU1065	2013.996	1	0.480	0.007	343.2	0.3	2.23				
03404+2124	HU813	2013.996	1	1.972	0.010	274.2	0.3	8.21				
03407+0643	A1934	2013.013	1	0.224	0.027	118.2	1.7					
03408+4151	HDS467	2014.976	1	0.557	0.007	335.3	0.3					
03423+3141	COU691	2014.976	1	0.147	0.050	269.5	8.0		Doc2010d		0.06	-6.0
03428+0754	STT61	2013.111	1	1.339	0.007	128.2*	0.3					
03434+2314	BOV2	2013.996	1	2.683	0.013	140.3	0.3					
03435+2340	BOV3	2013.996	1	0.684	0.007	186.9	0.3	5.46				
03436+2414	BOV4	2014.059	1	1.846	0.009	270.6	0.3	0.34				
03438+3520	ES233	2013.996	1	5.604	0.028	167.1	0.3					
03439+4148	COU1518	2014.976	1	0.934	0.007	176.9	0.3					
03439+4148	COU1518	2014.976	1	0.931	0.007	176.4	0.5					
03445+2410	BOV6	2014.059	1	0.383	0.007	128.4	0.7					
03450+0504	A1828	2013.111	1	0.117	0.020	153.6*	1.3					
03453+2517	BOV7	2013.996	1	1.094	0.007	32.7	0.3					
03456+4351	COU1690	2014.976	1	0.457	0.007	62.6	1.5					
03457+2345	BOV8	2013.016	1	—	—	—	—		NR			
03457+2345	BOV8	2014.059	1	0.552	0.007	180.1	0.3	3.22				
03460+2344	BOV10	2014.059	1	0.301	0.007	217.2	0.3	2.42				
03463+2529	COU561	2014.976	1	2.077	0.010	160.1	0.3					
03468+2255	BOV16	2013.013	1	—	—	—	—		NR			
03473+2344	BOV17	2013.016	1	—	—	—	—		NR			
03489+1143	A831	2013.111	1	0.202	0.010	63.1*	0.5		USN2002		0.00	-6.9
03509+0843	HEI453	2013.013	1	1.269	0.014	131.1*	0.7					
03509+0843	HEI453	2013.013	1	1.255	0.049	130.9	1.1					
03528+0145	A2347	2013.996	1	0.677	0.007	257.0	0.3	4.70				
03530+0902	HEI454	2013.013	1	—	—	—	—		NR			
03530+0902	HEI454	2013.016	1	—	—	—	—		NR			
03540+2822	COU697	2014.059	1	1.179	0.007	226.7*	0.5					
03563+3341	COU875AB	2013.996	1	0.686	0.017	341.1	1.3	2.17				
03563+3341	COU875AC	2013.996	1	2.478	0.027	30.5	2.3	2.97				
03563+3341	COU875AD	2013.996	1	1.362	0.037	218.7	2.3	4.73				
03578+1515	HEI32	2013.111	1	1.382	0.007	154.3*	0.4					
03596+0436	YSC21	2013.111	1	—	—	—	—		NR			
03599+3047	ES329	2013.996	1	1.089	0.007	266.9	0.3	2.84				
04004+2250	COU365	2013.013	1	1.315	0.008	170.9*	0.3					
04004+2250	COU365	2013.013	1	1.317	0.024	171.1	0.3					
04005+1935	KOH1	2013.111	1	0.689	0.017	185.3*	1.9					
04009+2312	STF479	2014.119	1	7.500	0.038	126.9*	0.3					
04018+1000	HDS509	2014.119	1	0.731	0.007	50.3*	0.3					
04019+1442	HEI33	2013.013	1	1.173	0.010	205.5*	0.3					
04019+1442	HEI33	2013.013	1	1.175	0.015	206.3	1.3					
04020+1755	COU366	2013.016	1	1.265	0.009	301.1*	0.7					
04020+1755	COU366	2013.013	1	1.255	0.030	300.8*	0.7					
04021+2321	AG77	2014.119	1	1.592	0.008	353.2*	0.3					
04022+1532	HEI34	2013.111	1	0.395	0.007	204.6*	1.4					
04022+2808	STF481	2014.119	1	2.684	0.013	106.0	0.3					
04038+2824	COU701	2014.119	1	1.629	0.008	209.7*	0.3					
04047+1731	YSC22	2013.016	1	0.410	0.007	94.9*	0.9					
04057+0743	HDS518	2013.111	1	0.244	0.007	11.4	1.1					
04066+2331	COU564Aa,Ab	2013.013	1	0.109	0.050	158.4	8.0		NDp			
04066+2331	COU564AB	2013.013	1	1.675	0.015	0.4*	0.8					
04066+2331	COU564AB	2013.013	1	1.683	0.017	359.5*	0.7					
04080+2256	COU152	2013.996	1	0.349	0.007	20.9	0.3	4.07				
04099+1552	YSC24	2013.013	1	0.517	0.032	287.9*	2.7					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
04102+1722	HEI35	2013.016	1	0.435	0.007	333.9*	0.6					
04111+0832	YSC28	2013.111	1	0.851	0.007	223.7	0.4					
04111+0832	YSC28	2013.111	1	—	—	—	—		NR			
04112+5555	HDS531AB	2014.973	1	0.479	0.007	173.1	0.3					
04112+5555	HDS531AC	2014.973	1	1.787	0.010	75.3	0.3			NDg		
04112+5555	HDS531AD	2014.973	1	3.068	0.017	80.7	0.3	1.43		NDg		
04118+2559	A1298	2014.119	1	1.137	0.007	170.3*	0.3					
04131+2726	MLB685	2014.119	1	2.279	0.039	215.3*	1.5					
04134+1335	HEI216	2013.013	1	1.176	0.016	147.9*	0.8					
04144+1438	PAT2	2013.016	1	—	—	—	—		NR			
04152+2206	COU153	2013.013	1	1.013	0.007	308.4*	0.9					
04160+1208	HEI319	2013.016	1	1.153	0.011	135.4*	0.4					
04170+1941	HO328	2013.111	1	0.449	0.007	359.5*	0.3			Hei1978a	0.02	1.0
04182+2317	PAT3	2013.016	1	0.143	0.020	147.7	1.3					
04182+2317	PAT3	2013.016	1	—	—	—	—		NR			
04187+0445	A1939	2013.013	1	0.725	0.007	119.2*	0.3			Zir2012b	0.05	1.1 ^Q
04197+3643	ES168	2013.996	1	1.257	0.007	275.9	0.3	3.00				
04216+0658	A1835	2013.013	1	0.207	0.019	9.3	1.5			Zir2010	-0.00	-13.5
04227+1503	STT82	2013.130	1	1.228	0.007	332.1*	0.3			Izm2019	-0.02	0.7
04227+1503	STT82	2014.119	1	1.242	0.007	331.3*	0.3			Izm2019	-0.00	0.8
04230+0924	YSC31Aa,Ab	2013.016	1	0.128	0.047	128.6	6.9			NDp		
04230+0924	YSC31AB	2013.013	1	0.436	0.013	95.4	2.0					
04230+0924	YSC31AB	2013.016	1	0.403	0.018	91.2	1.0					
04230+0924	YSC31AB	2013.016	1	0.393	0.007	90.7	0.4					
04230+0924	YSC31AB	2013.111	1	0.444	0.027	96.8*	4.7					
04233+1123	STF535	2014.119	1	1.120	0.007	270.6*	0.3			Izm2019	-0.01	-0.3
04240+2132	HU303	2014.119	1	2.257	0.011	204.9*	0.3					
04245+2244	BU1235	2013.016	1	0.125	0.050	327.2	8.0			Zir2010	0.06	59.0
04248+1552	HDS566	2013.016	1	0.424	0.014	345.0*	1.2					
04256+1838	COU2681Aa,Ab	2013.130	1	0.201	0.016	170.9	2.1			NDp		
04256+1838	COU2681AB	2013.130	1	1.147	0.010	269.8*	0.5					
04256+1838	COU2681AB	2014.250	1	1.066	0.007	252.7*	0.6					
04258+1800	COU2682	2013.111	1	0.248	0.007	346.5*	1.4			Tok2014a	0.00	3.0
04268+1240	WOR15	2013.016	1	0.472	0.012	178.9*	0.3			Zir2010	-0.04	2.3 ^Q
04296+2321	COU566	2013.111	1	0.689	0.013	160.1*	0.3					
04298+1741	COU567	2013.016	1	0.114	0.050	148.4*	7.1					
04308+0427	A1838	2013.130	1	0.976	0.007	151.4*	0.4					
04308+2113	KOH12	2013.111	1	0.292	0.007	177.9	0.9					
04315+1321	HU1081	2013.136	1	0.832	0.007	279.1*	0.4					
04315+2231	COU265	2014.119	1	0.424	0.010	53.1*	2.7					
04324+1038	HDS588	2013.996	1	0.655	0.007	249.2	0.3	3.70				
04334+1949	A2351Aa,Ab	2013.111	1	0.112	0.050	130.3	7.9			NDp		
04334+1949	A2351AB	2013.111	1	1.001	0.010	175.1*	0.7					
04334+1949	A2351AB	2013.111	1	0.999	0.020	173.0	1.8					
04354+1752	LEI18	2014.132	1	0.207	0.013	45.0	1.3					
04356+1206	TOK17AB	2013.136	1	1.241	0.007	15.8	0.6					
04356+1206	TOK17Aa,Ab	2013.136	1	0.118	0.012	123.0	4.5			NDp		
04359+1631	BU1031CD	2013.136	1	0.145	0.064	293.5	14.4					
04359+1631	BU1031CD	2013.130	1	—	—	—	—		NR			
04362+0814	STT87AB,C	2013.111	1	6.043	0.030	236.7*	0.3					
04362+0814	A1840AB	2013.111	1	0.187	0.007	181.2*	1.3			Hrt2010a	0.03	-1.7 ^Q
04362+0814	A1840AC	2013.111	1	3.250	0.028	114.2	0.8			NDg		
04375+1418	HDS597AB	2013.996	1	1.080	0.007	80.0	0.3	3.20				
04375+1418	HDS597AC	2013.996	1	4.511	0.023	19.2	0.3	4.31				

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
04375+1418	HDS597CD	2013.996	1	0.907	0.007	31.5	0.3	2.37				
04392+1724	COU37	2013.016	1	0.432	0.007	261.0*	0.3					
04407+1905	COU367	2013.996	1	0.659	0.007	48.6	0.3	3.57				
04418+2658	KOH21	2013.996	1	1.204	0.007	240.8	0.3	7.58				
04424+0559	A1940Aa,Ab	2013.106	1	0.152	0.015	146.7	4.3			NDp		
04424+0559	A1940AB	2013.106	1	1.656	0.008	204.7*	0.3					
04424+0559	A1940AB	2013.106	1	1.648	0.008	204.3	0.4	0.08				
04429+2038	HO332	2013.136	1	1.345	0.007	308.8*	0.3					
04431+2015	HO333AB	2013.106	1	1.959	0.010	152.6*	0.3					
04435+1220	HU1219	2014.119	1	—	—	—	—			NR		
04443+2017	KOH22	2013.996	1	1.546	0.008	159.1	0.3	5.63				
04444+1952	KOH23	2013.016	1	0.350	0.007	5.9	3.8					
04444+1952	KOH23	2013.111	1	0.269	0.011	353.1	3.0					
04445+3953	COU1524	2014.119	1	0.098	0.050	62.7	8.0			Doc2019f	-0.03	23.1 ^Q
04458+2840	COU706	2013.996	1	0.931	0.007	124.1	0.3	5.38				
04460+2619	COU707	2014.059	1	0.393	0.007	202.4*	2.0					
04464+2950	MLB686	2014.146	1	2.245	0.012	241.6*	0.3					
04479+2755	KOH26	2014.059	1	0.606	0.016	264.9*	0.9					
04490+1552	HDS619	2013.136	1	0.202	0.015	308.6	1.5					
04491+3301	COU1086	2014.059	1	1.765	0.009	79.0*	0.3					
04500+2230	KOH27AB,C	2013.996	1	1.359	0.007	118.6	0.3	5.47				
04504+0934	A2039AB	2013.016	1	0.498	0.007	205.9	0.5					
04504+0934	A2039BC	2013.016	1	0.182	0.010	326.6	1.9					
04507+0418	A1942	2013.106	1	1.175	0.007	44.0*	0.3					
04512+1104	BU883AB	2013.130	1	0.243	0.025	224.2*	3.8			Sod1999	-0.02	-2.3
04512+1104	BU883AB	2014.132	1	0.233	0.017	232.7	2.1			Sod1999	-0.02	-3.6
04512+1104	BU883AB	2014.132	1	0.252	0.017	234.3	2.0			Sod1999	-0.01	-2.0
04512+3408	COU1087	2014.059	1	1.286	0.007	239.6*	0.3					
04514+0550	HEI842	2013.106	1	2.024	0.010	113.5*	0.4					
04514+1553	HDS627Aa,Ab	2013.016	1	0.119	0.050	141.4	8.0			NDp		
04514+1553	HDS627AB	2013.016	1	1.125	0.007	245.6	0.4					
04518+1758	KOH28	2013.130	1	—	—	—	—			NR		
04518+1758	KOH28	2013.130	1	0.152	0.050	170.9	7.6					
04522+0442	HDS629Aa,Ab	2013.136	1	0.130	0.050	131.1	7.1			NDp		
04522+0442	HDS629Aa,Ab	2013.136	1	0.143	0.050	130.0	7.5			NDp		
04522+0442	HDS629AB	2013.136	1	0.568	0.007	264.1*	0.9					
04536+1309	HEI320	2014.149	1	3.067	0.015	341.2*	0.3					
04538+3325	COU884	2014.059	1	0.959	0.007	163.9*	0.3					
04541+0936	HEI644	2013.130	1	1.669	0.008	273.2*	0.3					
04561+0908	BU404	2013.130	1	1.727	0.009	291.3*	0.3					
04562+1359	YR12AB	2014.149	1	0.444	0.024	175.8	0.6					
04562+1359	YR12AB	2014.149	1	0.439	0.007	171.8	1.5					
04562+1359	YR12Aa,Ab	2014.149	1	0.207	0.018	35.1	1.6			NDp		
04567+1521	KOH34	2013.111	1	—	—	—	—			NR		
04571+3413	HO16	2014.119	1	0.297	0.019	43.5	1.1					
04572+2457	HDS643	2014.059	1	0.359	0.010	331.9	1.0					
04574+2101	COU708	2014.119	1	3.319	0.038	105.1*	1.1					
04575+2014	KOH37	2013.996	1	1.100	0.007	206.3	0.3	4.91				
04576+1208	HEI458	2014.146	1	2.624	0.017	2.3*	0.3					
04576+1208	HEI458	2014.146	1	2.641	0.018	2.0	0.3					
04581+2618	COU758	2014.132	1	0.375	0.007	147.9*	0.3					
04584+1900	COU709	2014.132	1	0.583	0.007	239.7*	0.7					
04590+1341	HDS645	2013.016	1	0.218	0.022	155.6*	1.4					
04595+2516	COU568	2014.059	1	0.817	0.008	159.4*	0.5					
04595+3802	COU1400	2014.132	1	2.376	0.053	133.7	0.4					
04596+3135	HO222	2014.119	1	1.706	0.009	213.0*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
05000+3244	COU887	2014.132	1	3.429	0.017	84.6*	0.3					
05004+1505	MET44Aa,Ab	2014.149	1	0.425	0.011	35.2	1.8	0.06	NDp			
05004+1505	MET44AC	2014.149	1	3.027	0.015	136.7*	0.3					
05004+1505	MET44AC	2014.149	1	2.999	0.041	136.7	1.1					
05010+1430	D6	2014.146	1	1.142	0.007	100.7*	0.3					
05014+1956	HDS653Aa,Ab	2013.016	1	0.168	0.050	134.5	8.0		NDp			
05014+1956	HDS653AB	2013.016	1	0.584	0.015	166.3*	0.3					
05014+1956	HDS653AB	2013.016	1	0.593	0.009	164.1	0.9					
05016+0840	HEI645	2013.016	1	0.711	0.007	175.4*	0.4					
05016+0840	HEI645	2013.016	1	0.712	0.036	174.0	1.0					
05017+2050	HU445	2013.136	1	0.246	0.007	325.2*	1.0			Tok2020g	-0.03	0.2
05017+2640	A1844	2014.146	1	0.320	0.016	31.4*	1.5			Msn2005	-0.01	-2.2
05020+0959	HDS654	2013.106	1	1.342	0.012	149.2*	0.3					
05020+0959	HDS654	2013.106	1	1.346	0.038	148.5	1.8					
05025+3748	J935Aa,Ab	2013.965	1	0.838	0.007	104.3	0.3	1.21	NDp			
05025+3748	J935AB	2014.119	1	3.280	0.039	46.8*	0.6					
05030+1931	A2428AB,C	2013.130	1	3.338	0.017	293.4*	0.3					
05030+1931	A2428AB,C	2014.132	1	3.315	0.017	293.6*	0.3					
05038+0638	YSC33Aa,Ab	2013.016	1	0.140	0.015	136.7	0.5		NDp			
05038+0638	YSC33AB	2013.013	0	0.935	0.017	159.3	0.3					
05038+0638	YSC33AB	2013.016	1	0.902	0.017	158.7*	2.3					
05038+0638	YSC33AB	2013.136	1	0.905	0.017	157.8	2.3					
05039+3353	HU1221AB	2014.059	1	3.724	0.019	37.5	0.3	1.47				
05039+3353	HU1221BC	2014.059	1	1.081	0.007	65.3	0.3	1.75				
05043+3428	COU1230	2014.059	1	0.309	0.024	87.8*	1.0					
05044+2139	COU154AB	2013.130	1	0.151	0.050	331.8	8.0					
05044+2139	COU154AB	2014.149	1	0.140	0.050	299.6*	8.0					
05044+2139	COU154AC	2014.149	1	2.723	0.014	196.6*	0.3					
05044+2139	COU154AC	2014.149	1	2.738	0.014	196.7*	0.3					
05044+2938	A1024	2014.132	1	0.783	0.007	333.0*	0.3					
05045+0545	A2043Aa,Ab	2013.106	1	0.145	0.050	127.9	8.0		NDp			
05045+0545	A2043AB	2013.106	1	1.573	0.008	179.8*	0.3					
05045+0545	A2043AB	2013.106	1	1.570	0.010	178.7	0.3					
05048+1319	HEI104	2014.149	1	0.090	0.050	195.5	8.0			Tok2019c	-0.02	8.6
05050+2959	A1026	2014.059	1	1.126	0.007	39.9*	0.3					
05053+2740	A1845	2014.119	1	2.027	0.011	139.3*	0.3					
05056+2304	STT97	2013.106	1	0.319	0.023	149.7	0.7					
05056+2304	STT97	2013.106	1	0.340	0.007	148.5*	0.8					
05058+3551	HO223Aa,Ab	2014.119	1	0.147	0.050	126.5	8.0		NDp			
05058+3551	HO223AB	2014.119	1	2.030	0.010	56.5	1.7					
05058+3551	HO223AB	2014.119	1	2.020	0.017	58.0	1.7					
05066+1752	BRT2323	2014.119	1	3.207	0.016	286.2*	0.3					
05067+1405	HEI105	2013.106	1	0.927	0.007	122.3*	0.3					
05070+1150	HDS668AB	2013.016	1	0.573	0.013	206.4	1.1					
05070+1150	HDS668AB	2013.016	1	0.565	0.013	208.2	2.9					
05072+2224	COU155	2013.130	1	0.182	0.025	338.8	1.1					
05074+2712	J14	2014.146	1	2.617	0.013	232.5*	0.3					
05074+2712	J14	2014.132	1	2.620	0.013	233.6*	0.3					
05078+3024	JOY5	2014.059	1	1.487	0.007	253.7*	0.3					
05082+2149	COU156	2013.130	1	0.684	0.012	82.7*	0.3					
05083+2214	ARU2	2014.146	1	—	—	—	—		NR			
05087+2501	TDS3080	2014.059	1	0.425	0.007	67.7*	1.1					
05089+2453	COU83	2014.059	1	0.311	0.007	133.3*	0.7					
05092+1629	HEI40	2013.106	1	0.939	0.009	180.4*	0.5					
05096+2420	SKF399	2014.149	1	2.734	0.014	282.8*	0.3					
05096+3452	HDS679	2014.059	1	0.399	0.007	36.8*	0.4					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(O-C)$ ($''$)	$\Delta\theta(O-C)$ ($^\circ$)
05098+2802	BU1047	2014.059	1	0.297	0.007	89.7*	0.5					
05099+2059	COU157	2013.106	1	0.350	0.016	257.6*	1.2					
05101+2645	COU569	2014.059	1	—	—	—	—		NR			
05102+2208	HDS683	2014.149	1	0.151	0.050	9.8*	8.0					
05111+3643	COU1720	2014.132	1	1.906	0.010	186.4*	1.3					
05111+3643	COU1720	2014.132	1	1.901	0.018	187.0	1.5					
05112+2814	MET45	2014.146	1	0.538	0.007	218.5*	0.6					
05115+3938	COU1868	2014.132	1	0.489	0.007	190.5*	0.3					
05116+1132	HEI459AB	2014.149	1	0.340	0.007	81.3	0.8		Triple			
05116+1132	HEI459AB	2014.149	1	0.332	0.018	82.2	2.6					
05116+1132	HEI459AC	2014.149	1	3.190	0.027	279.9*	9.7		NDg			
05116+1132	HEI459AC	2014.149	1	3.105	0.018	280.4	0.3		NDg			
05123+1027	HEI460	2014.149	1	1.545	0.008	1.9*	0.3					
05123+1027	HEI460	2014.149	1	1.548	0.010	1.6	0.4					
05126+2615	A210	2014.146	1	—	—	—	—		NR			
05131+1830	COU369	2013.016	1	0.172	0.023	85.5	2.2					
05131+2424	COU468	2014.146	1	0.610	0.007	34.6*	0.7					
05131+2424	COU468	2014.146	1	0.611	0.014	35.2	0.7					
05138+3323	HU1223	2014.059	1	0.547	0.007	197.8*	0.3					
05145+3236	COU891	2014.059	1	1.162	0.007	16.0*	0.3					
05145+3305	COU889	2014.059	1	0.798	0.007	50.9*	0.5					
05145+3305	COU889	2014.059	1	0.807	0.007	51.8	0.9					
05148+1232	HU1224	2013.136	1	1.041	0.007	115.3*	0.3			Izm2019	0.02	1.1
05152+1953	J1044	2014.146	1	2.781	0.066	234.1*	1.8					
05167+1823	A2430Aa,Ab	2014.132	1	0.145	0.050	83.7	8.0		NDp			
05167+1823	A2430AB	2014.132	1	1.140	0.008	133.7*	0.6					
05167+1823	A2430AB	2014.146	1	1.161	0.007	134.8*	0.3					
05167+1823	A2430AB	2014.132	1	1.140	0.008	133.7*	0.6					
05167+1826	STF670AB	2014.149	1	2.545	0.013	165.2*	0.3					
05167+1826	COU2580Ba,Bb	2014.149	1	0.720	0.007	162.8	0.3					
05167+1826	COU2580Ba,Bb	2014.149	1	0.712	0.007	162.8	0.3	1.81				
05175+2250	HO334	2014.146	1	2.286	0.012	191.2	0.3					
05191+1430	HEI41	2013.130	1	0.325	0.007	100.0*	0.7					
05195+3809	COU1870	2014.132	1	0.463	0.007	19.8*	0.3					
05216+0739	A2640	2013.130	1	0.132	0.024	142.6	4.2					
05216+0739	A2640	2013.130	1	0.132	0.044	142.6*	4.2					
05216+1020	HDS704	2014.132	1	0.405	0.017	324.2*	0.3					
05216+1020	HDS704	2014.132	1	0.379	0.007	323.0	1.6					
05216+1020	HDS704	2014.146	1	0.387	0.014	328.2*	0.4					
05217+1854	HDS705	2014.146	1	0.184	0.010	28.1*	1.1					
05218+3434	COU1536	2014.132	1	1.326	0.007	48.0*	0.3					
05229+3806	COU2038	2014.132	1	0.584	0.007	146.1*	0.3					
05230+2034	COU160	2013.106	1	1.692	0.014	329.1*	0.3					
05230+2034	COU160	2013.106	1	1.720	0.033	328.6	0.8					
05236+0926	HEI461	2013.136	1	—	—	—	—		NR			
05240+2458	STF694	2014.146	1	1.399	0.007	194.6*	0.3					
05243+1423	HDS709	2014.146	1	—	—	—	—		NR			
05246+0910	A2703	2013.136	1	0.145	0.050	0.9	8.0					
05248+2959	COU712	2014.149	1	2.314	0.012	182.6*	0.4					
05248+2959	COU712	2014.149	1	2.310	0.012	182.2	0.4					
05250+2959	COU713	2014.149	1	2.722	0.020	109.5*	0.6					
05255+3314	COU1091	2014.059	1	1.320	0.007	267.6*	0.3					
05269+3017	A1033	2014.059	1	0.389	0.007	145.4*	0.7					
05270+3446	HDS715	2014.059	1	0.676	0.007	303.9*	0.3					
05275+1830	A2432	2013.106	1	1.139	0.007	292.6*	0.3					
05278+2608	COU572	2014.149	1	1.250	0.007	312.3	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
05279+2318	COU573Aa,Ab	2013.169	1	0.160	0.015	11.1	0.8					
05279+2318	COU573AB	2013.169	1	4.627	0.023	111.9*	0.3					
05285+1637	HEI218	2013.106	1	1.078	0.009	109.3*	0.3					
05287+2317	COU84AB	2013.130	1	0.202	0.12	3.0	5.0					
05287+2317	COU84AB	2013.169	2	0.229	0.10	0.8*	4.1					
05287+2317	COU84AC	2013.130	1	4.579	0.070	111.4	0.3					
05287+2317	COU84AC	2013.130	1	4.632	0.023	111.4	0.3					
05287+2317	COU84AC	2013.136	1	4.607	0.023	111.4*	0.3	4.33				
05290+3746	BU890	2014.132	1	1.314	0.007	286.1*	0.3					
05294+1152	HER1	2014.149	1	1.450	0.007	350.9*	0.4					
05294+3126	A1035	2014.132	1	1.833	0.009	120.2*	0.3					
05298+1825	A2433	2014.149	1	1.384	0.007	255.3	0.3					
05302+3819	COU2040	2014.132	1	0.936	0.007	96.9*	0.3					
05307+1154	A2705	2014.132	1	1.052	0.007	250.1*	0.3					
05307+1154	A2705	2014.146	1	1.049	0.007	250.1*	0.3					
05310+0440	A2646	2013.106	1	0.116	0.050	109.3*	8.2					
05311+2116	COU267	2013.106	1	0.606	0.013	68.4*	0.6					
05319+2141	COU268	2013.106	1	0.724	0.007	166.6*	0.6					
05349+2553	HDS741	2014.146	1	0.523	0.007	274.9*	1.4					
05350+1544	HEI43	2013.136	1	1.729	0.009	350.1*	0.3					
05350+1544	HEI43	2013.136	1	1.725	0.016	350.2	1.0					
05350+1838	A2354	2013.130	1	0.487	0.007	311.1*	0.3					
05351+3056	BU1267	2014.059	1	0.390	0.011	169.6*	0.8					
05354-0525	CHR249Aa,Ab	2013.204	1	0.351	0.017	292.3	7.6					
05354+2054	COU269	2013.130	1	0.745	0.007	10.4*	0.3					
05357+2054	COU270	2013.106	1	0.748	0.007	43.0*	0.3					
05358+2026	HDS747	2014.149	1	0.227	0.015	35.8	1.0					
05358+2455	COU575	2014.059	1	0.554	0.007	336.9*	0.3					
05360+0807	A2650	2013.136	1	0.325	0.007	221.3*	0.5					
05360+0807	A2650	2013.136	1	0.331	0.007	223.7	2.9					
05360+2616	HDS748Aa,Ab	2014.059	1	0.111	0.013	127.1	3.7					
05360+2616	HDS748AB	2014.059	1	0.390	0.022	7.5*	1.6					
05363+1836	COU469	2014.132	1	2.967	0.015	91.3*	0.3					
05363+1836	COU469	2014.132	1	2.970	0.049	91.0	0.8					
05372+0446	A2651	2013.130	1	0.602	0.007	185.5*	0.3					
05372+0446	A2651	2013.130	1	0.600	0.010	185.4	0.5					
05383+2655	A490	2014.059	1	0.318	0.011	18.8*	1.3					
05384+1808	COU470	2013.130	1	1.104	0.007	181.4*	0.3					
05384+1808	COU470	2013.130	1	1.081	0.009	181.6	0.5					
05384+1808	COU470	2013.130	1	1.087	0.011	181.8	0.5					
05388+1000	HEI665	2014.149	1	1.159	0.007	343.7*	0.3					
05395+2306	A2108	2013.130	1	0.982	0.007	356.4*	0.3					
05399+3005	COU1093Aa,Ab	2014.059	1	0.131	0.050	125.4	8.0					
05399+3005	COU1093AB	2014.059	1	1.210	0.007	184.8	0.3					
05399+3005	COU1093AB	2014.059	1	1.217	0.007	184.5	0.3					
05400+2246	A2109	2014.149	1	0.565	0.007	266.1*	0.3					
05401+3601	HU825	2013.171	1	0.386	0.007	346.3	0.4					
05401+3601	HU825	2013.171	1	0.384	0.007	346.0	0.7					
05405+2754	COU760	2014.059	1	1.377	0.007	334.3*	0.3					
05408+2700	HDS758	2014.149	1	0.365	0.007	239.5*	0.5					
05416+1913	STF770	2013.158	1	1.102	0.007	331.6*	0.3					
05417+1614	HEI322Aa,Ab	2013.106	1	0.184	0.013	178.3*	4.0					
05417+1614	HEI322AB	2013.106	1	3.044	0.015	277.7*	0.3					
05417+1614	HEI322AB	2014.132	1	3.046	0.015	278.2*	0.3					
05420+2814	A1039	2014.146	1	0.167	0.011	105.9*	1.0					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
05421+2135	A2110AB	2013.130	1	0.514	0.013	123.2*	0.9					
05421+2135	A2110AB	2013.130	1	0.476	0.007	124.2*	0.4					
05421+2135	A2110CD	2013.130	1	1.578	0.008	217.6*	0.3					
05424+1259	A116	2014.146	1	1.599	0.008	291.2*	0.3					
05431+1831	A2435AB	2013.136	1	0.784	0.007	107.2*	0.5					
05431+1831	A2435Aa,Ab	2013.136	1	0.146	0.010	111.5	6.0			NDp		
05432+2125	HU105	2014.149	1	2.027	0.010	196.5*	0.3					
05436+1300	A117	2014.133	1	0.863	0.007	248.2*	0.3					
05441+2522	COU715	2013.106	1	1.514	0.008	330.6	0.3					
05441+2522	COU715	2013.106	1	1.505	0.024	331.0*	0.4					
05449+2621	A496	2014.146	1	0.268	0.021	4.5*	0.6					
05450+2255	HU38	2014.146	1	0.461	0.007	133.8*	0.3					
05452+2425	HDS770	2014.146	1	—	—	—	—			NR		
05452+3848	COU2046	2013.171	1	1.457	0.007	193.2*	0.3					
05458+2208	COU370	2014.149	1	1.441	0.007	301.5*	0.3					
05458+3306	COU1095	2014.133	1	1.624	0.387	334.7	3.1					
05460+1048	A2711	2013.158	1	0.121	0.050	20.4	8.0					
05460+1048	A2711	2013.169	1	0.137	0.050	17.0	8.0					
05460+1048	A2711	2013.172	1	0.114	0.050	21.1	8.0					
05460+2345	HDS776	2013.169	1	0.478	0.013	142.8*	0.7					
05461+1921	COU576	2013.169	1	1.348	0.007	231.6*	0.4					
05462+2024	COU371	2013.136	1	0.677	0.020	60.0*	2.1					
05465+2536	COU716	2014.149	1	1.497	0.007	37.8*	0.3					
05474+2939	BU560	2014.146	1	1.691	0.008	124.8*	0.3			Izm2019	-0.00	0.2
05476+2056	BU91	2013.169	1	1.523	0.008	88.3*	0.3					
05477+1744	BU892	2014.059	1	1.080	0.017	283.3	0.3					
05477+1744	BU892	2014.059	1	1.086	0.017	283.2*	0.3					
05482+0537	HEI843	2013.169	1	0.651	0.007	253.1*	1.2					
05484+3434	COU1403	2013.171	1	0.506	0.007	12.3*	0.3					
05494+3611	HU1233	2013.171	1	0.693	0.010	32.6*	0.3					
05497+2343	COU764	2013.169	1	0.485	0.007	325.5*	0.8					
05500+1601	A2438AB	2013.169	1	0.320	0.027	343.3*	1.0					
05500+1601	A2438AB	2013.172	1	0.274	0.037	345.6	1.0					
05500+2551	COU765	2014.149	1	1.777	0.009	355.4*	0.3					
05508+1427	KU23	2013.158	1	0.859	0.007	109.3*	0.3					
05512+2235	COU373AB	2013.169	1	—	—	—	—			NR		
05512+2235	COU373AC	2014.059	1	2.531	0.036	189.3*	0.5			NDg		
05512+3307	COU1233	2014.059	1	0.921	0.007	91.2*	0.3					
05513+4138	COU2273	2013.171	1	0.373	0.007	345.5*	0.3					
05526+2241	COU374	2013.136	1	1.432	0.019	125.8*	0.4					
05529+2800	COU899Aa,Ab	2013.106	1	0.272	0.027	158.6*	2.3			NDg		
05529+2800	COU899Aa,Ab	2013.111	1	0.215	0.027	155.0*	2.3			NDg		
05529+2800	COU899Aa,Ab	2014.059	1	0.229	0.017	160.7	2.3	0.10		NDg		
05529+2800	COU899AB	2013.106	1	0.939	0.017	239.3	2.4					
05529+2800	COU899AB	2014.059	1	0.995	0.007	232.2*	2.3					
05529+2907	COU898Aa,Ab	2014.149	1	0.115	0.047	180.8	7.7			NDp		
05529+2907	COU898AB	2014.059	1	0.550	0.017	94.1	0.9					
05530+1621	HDS790	2014.146	1	0.148	0.047	195.0	7.8					
05539+2857	COU900	2013.106	1	0.156	0.015	267.3*	1.0					
05549+3836	COU2181	2013.171	1	0.993	0.007	328.9*	0.3					
05550+3407	COU1539	2014.059	1	0.415	0.007	115.0*	0.4					
05562+2520	COU902	2014.059	1	0.554	0.007	26.9*	0.7					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
05563+2005	COU375Aa,Ab	2014.059	1	0.137	0.015	138.8	2.9		NDp			
05563+2005	COU375AB	2013.106	1	1.167	0.024	126.0*	0.6					
05563+2005	COU375AB	2014.059	1	1.179	0.007	125.4*	0.3					
05563+2005	COU375AB	2014.059	1	1.182	0.010	125.9	0.3					
05563+2005	COU375AC	2013.106	1	4.147	0.021	41.1*	0.3	2.96	NDg			
05563+2005	COU375AD	2013.108	2	8.360	0.042	140.9*	0.3	1.63	NDg			
05570+1342	HEI326	2014.149	1	1.449	0.007	338.2*	0.3					
05571+1014	HDS806	2014.146	1	0.490	0.035	155.0*	0.8					
05573+1127	A2805	2014.146	1	1.379	0.018	170.3	1.7					
05573+4201	COU2182	2013.171	1	0.465	0.007	157.6*	0.3					
05574+2545	COU903	2014.149	1	1.799	0.009	45.9*	0.3					
05582+2055	COU376	2013.136	1	0.785	0.007	300.4*	0.3					
05595+1048	HEI673	2014.149	1	0.670	0.018	246.6*	1.6					
06005+1505	HEI46	2013.136	1	0.505	0.007	57.5*	0.9					
06009+2356	COU717	2013.130	1	1.385	0.013	40.8	0.8					
06009+2356	COU717	2013.130	1	1.393	0.010	41.1	0.9					
06013+2927	A119	2014.146	1	0.570	0.007	201.3*	0.5					
06016+0959	HEI675	2013.130	1	0.274	0.007	86.7	0.9					
06019+3014	COU910	2013.106	1	1.213	0.007	280.9*	0.3					
06020+1030	HEI677	2014.149	1	0.436	0.023	273.8	2.7					
06029+2553	A120	2014.059	1	0.368	0.007	177.1*	0.6					
06037+3301	COU1096	2014.059	1	1.196	0.007	63.1*	0.3					
06059+1636	A2513	2014.149	1	1.097	0.007	299.2*	0.3					
06065+1045	STF840	2013.169	1	0.283	0.007	103.0*	0.3					
06066+1511	HU1238	2014.146	1	1.039	0.007	300.3*	1.0					
06072+4343	COU2184	2013.171	1	0.886	0.010	82.2*	0.6					
06076+2152	COU271	2013.136	1	0.319	0.007	160.1*	0.3					
06081+3246	COU1236	2013.106	1	0.705	0.044	160.0	2.0					
06084+2709	COU1099	2014.182	1	0.249	0.037	194.8*	0.6					
06087+1724	STF849	2013.136	1	0.926	0.007	238.6*	0.7					
06087+4002	COU2051	2013.171	1	1.362	0.007	230.3*	0.3					
06093+2424	COU85	2014.146	1	—	—	—	—		NR			
06096+0540	HDS839BC	2013.169	1	0.196	0.007	326.4	0.7					
06097+3212	COU1237	2013.106	1	0.543	0.007	291.1	1.7					
06097+3212	COU1237	2013.111	1	0.593	0.007	292.4	0.3	2.32				
06097+3212	COU1237	2013.111	1	0.559	0.007	287.2*	0.5					
06097+3212	COU1237	2013.113	1	0.575	0.007	293.4*	0.3	2.50				
06101+1346	HEI327	2013.111	1	1.647	0.009	186.2*	0.3					
06103+4157	COU2053	2014.133	1	1.515	0.020	155.8	0.8					
06105+2300	BU1058	2014.182	1	0.082	0.050	208.6*	8.0			FMR2014b	-0.07	-10.6 ^Q
06117+2846	A55	2014.146	1	0.394	0.013	82.0*	0.9					
06123+0827	A2808Aa,Ab	2013.111	1	0.170	0.050	126.3	8.0		NDp			
06123+0827	A2808AB	2013.111	1	1.630	0.014	1.5*	0.7					
06124+2359	J1102	2014.149	1	2.365	0.012	204.2*	0.3					
06127+2159	COU273	2013.136	1	1.297	0.007	145.6*	0.3					
06133+0936	HDS851	2013.169	1	0.437	0.008	136.6*	0.3					
06133+1009	HEI684	2013.111	1	0.774	0.010	80.9*	0.3					
06133+2902	A56	2014.146	1	1.083	0.007	58.2*	0.3					
06143+1229	HEI467	2013.111	1	0.795	0.010	88.2*	0.3					
06151+2528	COU577	2014.146	1	2.147	0.011	33.1*	0.3					
06153+1652	HEI117	2014.182	1	0.923	0.007	94.4*	0.3					
06156+1409	YR24	2013.136	1	0.413	0.019	70.4	1.5					
06160+2347	COU578	2013.136	1	0.365	0.007	36.0*	0.9					
06160+2347	COU578	2014.182	1	0.333	0.013	37.3*	1.9					
06172+1824	COU579	2013.169	1	0.990	0.012	343.3*	0.6					
06172+3312	COU1406Aa,Ab	2013.171	1	0.224	0.030	35.1	3.0		NDp			
06172+3312	COU1406AB	2013.171	1	1.877	0.038	335.5*	0.6					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
06177+0831	HDS861	2013.111	1	0.132	0.044	131.1*	8.1					
06186+2151	HU451	2013.111	1	0.520	0.007	349.1*	0.3					
06188+1110	A2809	2013.136	1	0.108	0.047	114.4	7.8					
06188+1110	A2809	2013.136	1	—	—	—	—		NR			
06191+1037	A2810	2013.136	1	0.444	0.007	254.1*	0.6					
06198+2025	HU453	2014.146	1	0.346	0.008	268.7*	0.8					
06199+3925	COU1736	2013.171	1	1.752	0.009	245.6*	0.3					
06200+2826	STF888AB,C	2013.043	1	2.895	0.014	262.9*	0.3					
06200+2826	STF888AB,C	2013.044	1	2.889	0.014	263.0	0.3					
06200+2826	BU895AB	2013.044	2	0.182	0.017	164.1	5.8			Hrt2000c	0.06	-23.5
06200+2826	BU895AC	2013.044	2	2.914	0.027	82.3	5.0					
06203+1159	J345	2014.182	1	1.200	0.007	333.6*	0.3					
06207+1832	A2516	2014.182	1	0.754	0.007	107.0*	0.3					
06217+4110	COU2054	2013.171	1	0.845	0.007	263.3*	0.3					
06218+1317	HEI469	2013.111	1	1.114	0.015	177.1*	0.8					
06223+2535	COU719	2014.146	1	2.973	0.015	19.3*	0.3					
06234+1432	A2720	2014.146	1	1.173	0.007	49.9*	0.4					
06258+3926	COU2056	2013.171	1	0.150	0.045	88.4	3.3					
06261+1601	HEI48	2014.182	1	1.717	0.009	345.9*	0.4					
06267+3934	COU2057	2013.171	1	1.649	0.008	335.3*	0.3					
06269+0409	HEI699	2013.136	1	0.483	0.007	170.3*	0.3					
06276+2652	COU1104	2013.171	1	1.091	0.010	331.5*	0.4					
06277+1822	COU41	2013.111	1	1.229	0.007	40.5*	0.3					
06283+1640	HEI118	2013.136	1	0.928	0.019	16.7*	2.3					
06283+2441	COU914	2014.182	1	0.182	0.041	126.0*	0.4					
06290+2013	BU1192Ba,Bb	2013.136	1	0.221	0.010	318.0	0.8					
06290+2013	BU1192Ba,Bb	2013.136	1	0.224	0.007	315.1*	3.2					
06291+3928	HDS883	2013.171	1	—	—	—	—		NR			
06308+3811	COU1874	2013.171	1	0.621	0.007	155.4*	0.5					
06313+2248	COU581	2013.158	1	0.217	0.014	244.2	3.9					
06318+2124	TDS254	2013.169	1	0.824	0.007	107.3*	0.3					
06318+3131	A2117	2013.158	1	1.519	0.008	51.8*	0.3					
06340+3155	COU1409	2013.171	1	1.152	0.007	326.3*	0.3					
06345+3225	COU1544	2013.171	1	0.344	0.012	350.9*	0.4					
06347+2605	J1093Aa,Ab	2014.182	1	0.334	0.016	30.9	3.2		NDp			
06347+2605	J1093AB	2014.182	1	—	—	—	—		NR			
06347+2605	J1093AC	2014.182	1	1.839	0.011	267.6	0.5		NDg			
06347+2605	J1093AC	2014.857	1	1.841	0.013	267.6*	0.3		NDg			
06351+0614	HEI845	2013.158	1	1.173	0.007	28.0*	0.3					
06364+2717	STT149	2013.172	1	0.721	0.007	281.3*	0.4			Hei1993d	-0.01	-3.3
06378+1442	HEI219	2013.169	1	1.131	0.010	324.2*	0.3					
06379+0855	A2822	2013.131	1	0.725	0.007	122.5*	0.4					
06382+0557	COU3AB	2013.112	1	2.609	0.027	32.4*	0.3	0.27				
06382+0557	COU3BC	2013.112	1	1.124	0.027	181.1*	2.3	0.38				
06410+2045	COU582	2013.130	1	0.952	0.018	327.5	6.3	3.83				
06410+2045	COU582	2013.136	1	1.092	0.018	330.3*	0.4					
06411+3826	COU1737Aa,Ab	2014.201	1	0.139	0.050	58.2	8.0		NDp			
06411+3826	COU1737AB	2014.201	1	1.285	0.010	110.0*	0.3					
06412+3634	COU1876	2013.172	1	0.666	0.017	106.9*	1.0					
06416+0413	A2933Aa,Ab	2013.158	1	0.139	0.050	128.7	8.0		NDp			
06416+0413	A2933AB	2013.158	1	1.466	0.007	183.9*	0.3					
06426+1937	A2455	2014.146	1	2.937	0.015	298.1*	0.3					
06427+1146	HDS931	2013.136	1	0.475	0.007	34.2*	0.8					
06435+3319	COU1238	2014.201	1	2.610	0.013	57.0*	0.3					
06436+1109	J697	2014.146	1	1.945	0.010	181.7*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
06436+1626	A2358	2014.182	1	0.111	0.050	298.7	8.0					
06439+3448	COU1551	2013.172	1	0.585	0.007	343.0*	0.8					
06440+3921	COU2274	2014.201	1	0.912	0.013	2.1*	0.4					
06442+0612	A2729	2013.136	1	0.406	0.010	318.2*	0.9					
06443+2822	A511	2014.146	1	1.559	0.008	158.1*	0.3					
06444+1005	J1106	2014.182	1	1.465	0.007	249.1*	0.3					
06448+3848	A2521	2014.201	1	0.875	0.007	130.6*	0.3					
06455+2922	A122	2014.149	1	0.468	0.007	26.2*	0.3			Sca2020d	0.02	0.5
06461+2233	COU472	2013.111	1	1.892	0.013	82.8*	0.3					
06462+3221	COU1410	2013.172	1	1.616	0.011	312.5*	0.3					
06473+1008	J2027	2014.149	1	4.689	0.023	267.7	0.3	0.87				
06473+2450	HDS941	2014.146	1	0.234	0.044	50.3*	5.1					
06473+2450	HDS941	2014.146	1	0.207	0.024	51.8	2.4					
06478+1607	HEI221	2013.136	1	0.661	0.012	66.9*	1.2					
06483+1258	J1055	2014.149	1	2.874	0.014	147.4*	0.3					
06487+1913	COU917	2013.169	1	1.494	0.018	268.1*	0.4					
06495+0543	TDS4175	2013.169	1	0.202	0.036	149.1	2.4					
06498+2653	TDS286	2014.182	1	0.956	0.007	326.9*	0.3					
06500+1442	HO239AB	2013.169	1	0.533	0.007	149.0*	0.4					
06500+2549	COU767	2014.149	1	3.551	0.018	167.3*	0.3					
06502+3624	COU1738	2014.201	1	0.179	0.016	181.2	5.1			Doc2018c	0.00	-3.6
06503+2409	COU768	2013.172	1	0.117	0.050	60.7	8.0			Doc2003e	-0.03	0.6 ^Q
06503+2409	COU768	2014.201	1	0.111	0.017	44.1	2.2			Doc2003e	-0.01	-7.1 ^Q
06508+1614	A2458	2013.111	1	0.461	0.007	134.2*	0.9					
06512+2133	COU473	2013.169	1	0.311	0.013	193.1*	1.4					
06514+1929	J1098	2014.146	1	2.027	0.015	16.7	0.3					
06514+1929	J1098	2014.149	1	2.004	0.010	15.9*	0.3					
06529+1019	HEI711	2013.169	1	1.121	0.007	91.6*	0.3					
06535+1606	HEI121	2013.169	1	1.142	0.007	84.4*	0.7					
06544+1835	COU42	2014.149	1	2.969	0.015	315.7*	0.3					
06548+1648	HEI122	2014.149	1	1.101	0.007	204.0*	0.3					
06551+2323	COU919	2013.111	1	0.712	0.010	246.4*	0.8					
06552+2721	COU946	2013.941	1	0.942	0.007	150.2*	0.3					
06553+3146	A220	2013.172	1	0.853	0.011	51.8*	0.3					
06553+3146	A220	2013.172	1	0.854	0.007	51.6*	0.3					
06559+1829	COU769	2014.149	1	2.624	0.013	135.6*	0.3					
06562+1430	A2834	2014.182	1	2.618	0.014	268.7	0.3					
06562+1430	A2834	2014.182	1	2.619	0.018	268.7	0.3					
06563+2151	J1099	2014.182	1	1.475	0.007	52.0	0.3	0.76				
06563+2151	J1099	2014.182	1	1.498	0.007	52.1	0.3					
06563+2151	J1099	2014.201	1	1.491	0.007	52.2*	0.3					
06564+1029	HEI712AB	2014.149	1	0.807	0.007	168.5*	0.4					
06564+1029	HEI712AB	2014.182	1	0.813	0.009	169.1*	0.5					
06564+1029	HEI712AC	2014.149	1	3.148	0.025	339.5*	1.3			NDg		
06565+1940	COU770	2014.149	1	0.411	0.007	353.4*	0.4					
06565+3611	COU1878	2014.201	1	1.672	0.008	176.6*	0.3					
06567+3635	COU1879	2014.201	1	0.743	0.007	159.1*	0.6					
06568+2059	COU920	2013.158	1	1.607	0.013	203.1*	0.3					
06571+3217	COU1412	2013.158	1	0.276	0.037	71.0	6.0					
06577+1935	A2459	2014.146	1	0.351	0.007	89.5*	0.5					
06581+2817	COU947	2014.201	1	0.124	0.050	273.8	1.3					
06589+2036	COU922	2013.136	1	1.421	0.007	43.3*	0.3					
06592+1843	BU899	2014.146	1	0.757	0.007	262.1*	0.3					
06594+2514	A1061AB	2014.146	1	0.083	0.050	73.2	8.0			USN2002	-0.11	-73.1
07010+2614	COU948	2014.201	1	1.041	0.009	242.7*	0.3					
07010+2927	COU1242	2013.172	1	0.359	0.012	191.9*	1.3					
07017+1220	HEI470	2013.169	1	0.444	0.007	99.6*	0.8					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
07024+1808	J358	2014.146	1	4.230	0.021	170.4*	0.3					
07028+1305	HO342	2014.146	1	1.193	0.007	88.0*	0.3					
07031+0618	HEI846	2013.136	1	1.713	0.019	130.6*	0.5					
07032+3457	COU1739AB	2014.201	1	1.325	0.007	75.9	0.3					
07032+3457	COU1739AB	2014.206	1	1.337	0.007	76.0	0.3	1.37				
07032+3457	GII82Aa,Ab	2014.201	1	0.328	0.007	174.6	0.3	0.35	NDg			
07032+3457	GII82Aa,Ab	2014.201	1	0.303	0.024	176.0	2.0		NDg			
07032+3457	GII82Aa,Ab	2014.206	1	0.327	0.007	174.7	0.3	0.46	NDg			
07033+2548	COU583Aa,Ab	2014.201	1	0.172	0.050	135.1	7.4		NDp			
07033+2548	COU583AB	2014.201	1	3.701	0.019	51.2*	0.3					
07033+2548	COU583AB	2014.201	1	3.697	0.018	51.1	0.3					
07035+3415	HU704	2013.172	1	0.274	0.007	74.6*	0.9					
07041+0406	TDS4443	2013.169	1	—	—	—	—		NR			
07046+1550	A2464	2013.172	1	0.704	0.007	41.0	0.3					
07046+1550	A2464	2013.169	1	0.700	0.007	41.8*	0.3					
07057+2100	BU900	2014.146	1	1.814	0.009	266.2	0.3					
07057+2142	HU454	2014.146	1	2.088	0.010	218.9*	0.3					
07065+3736	COU2062	2013.172	1	0.313	0.007	243.6*	0.5					
07083+1638	HEI125	2013.111	1	0.292	0.007	218.2*	1.9					
07087+1739	HDS992	2014.146	1	0.311	0.010	58.8*	0.6					
07094+3000	COU1107	2013.158	1	0.830	0.007	209.1*	0.3					
07095+1609	HEI127	2013.169	1	1.480	0.007	101.0*	0.3					
07104+0618	A2846	2013.169	1	0.619	0.007	356.4*	1.3					
07104+0618	A2846	2013.172	1	0.626	0.007	357.0	1.3					
07118+1953	COU925	2014.182	1	0.493	0.007	64.8*	1.0					
07121+0622	A2847	2013.158	1	0.438	0.007	130.8*	0.3					
07121+3403	COU1881	2013.172	1	1.378	0.008	3.7*	0.7					
07122+1321	HEI337	2013.112	1	1.127	0.030	332.5	0.5					
07123+1839	AG331	2013.169	1	0.266	0.017	213.7*	1.4		Izm2019		0.17	69.2
07128+2713	STF1037	2014.146	1	0.941	0.007	306.4*	0.3		Sca2015b		-0.02	-0.1
07138+1756	A2525	2014.182	1	0.961	0.007	104.2*	0.3					
07138+1858	A2524	2014.182	1	2.912	0.015	305.0*	0.3					
07139+3808	COU2065	2013.172	1	0.981	0.007	108.8*	0.3					
07143+1546	A2526	2013.112	1	0.453	0.007	151.4*	0.3					
07147+1000	A2849	2013.169	1	1.272	0.007	49.9*	0.3					
07151+0851	A2850	2013.112	1	0.958	0.007	29.7*	0.3					
07154+1904	A2527	2014.146	1	2.227	0.011	289.0	0.3					
07176+0918	STF170	2013.112	1	0.347	0.007	129.8*	0.4		Sca2018e		0.01	0.6 ^Q
07181+1035	HEI725	2014.149	1	1.139	0.007	349.3*	0.3					
07184+1305	HEI222	2013.169	1	0.962	0.007	255.8*	0.3					
07185+0550	A2859AB	2013.169	1	0.576	0.009	110.9*	0.3					
07185+0550	A2859AB	2013.172	1	0.561	0.007	112.3	0.3					
07190+2122	COU88	2014.182	1	0.374	0.007	160.3*	0.6					
07194+2201	HDS1023	2014.146	1	0.714	0.007	69.2*	0.3					
07197+1343	A2860	2013.172	1	0.528	0.007	102.8	0.3					
07197+1343	A2860	2013.169	1	0.544	0.007	102.6*	0.3					
07210+1305	HDS1032	2013.112	1	0.129	0.050	326.7	8.0					
07210+1305	HDS1032	2013.112	1	0.117	0.050	332.7	8.0					
07215+3740	YSC35	2013.172	1	—	—	—	—		NR			
07219+0838	HEI726	2013.112	1	1.180	0.010	167.2*	0.3					
07222+0837	GII45	2014.659	1	1.458	0.032	9.9*	0.5					
07226+1356	HDS1035	2014.146	1	0.589	0.007	174.8*	1.1					
07237+0953	HEI727	2013.136	1	1.038	0.007	73.6*	0.3					
07243+1109	HEI471	2013.136	1	1.828	0.011	347.9*	0.4					
07246+3749	BU1414	2014.201	1	2.062	0.010	251.0*	0.3					
07247+1937	J2814	2014.149	1	0.669	0.007	335.7*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
07260+2205	AG140	2014.149	1	2.204	0.011	176.3*	0.3					
07267+0424	A2866	2013.169	1	0.736	0.007	140.7*	0.3					
07271+2718	COU1108AB	2013.158	1	1.818	0.028	196.2	2.3					
07271+2718	COU1108AB	2013.158	1	1.777	0.031	199.0	2.8					
07271+2718	COU1108AC	2013.158	1	3.575	0.037	14.1	1.7		NDg			
07278+3946	A2467	2014.201	1	1.460	0.007	52.4*	0.3					
07279+4140	COU2377	2013.172	1	0.441	0.007	9.5*	0.3					
07282+3746	COU2070	2013.172	1	0.325	0.007	109.2*	0.3					
07282+3944	COU2378	2013.172	1	1.340	0.007	247.9*	0.3					
07287+2151	OCC9029	2014.146	1	0.271	0.007	140.4*	0.9					
07292+1253	A2868	2014.146	1	0.697	0.007	18.6*	0.4					
07297+3411	COU1884	2013.172	1	1.227	0.007	181.2*	0.4					
07303+2753	A3	2014.182	1	2.403	0.012	255.7*	0.3					
07303+2753	A3	2014.198	1	2.402	0.012	255.8*	0.3					
07304+1352	STF1102	2014.185	1	7.707	0.039	46.6	0.3					
07304+1352	STF1102	2014.185	1	7.701	0.039	45.7	0.3					
07304+2527	A2528	2014.182	1	2.182	0.011	137.8	0.3					
07310+3644	COU1885	2014.201	1	0.419	0.007	353.1*	0.7					
07315+3353	COU1886	2013.158	1	0.799	0.007	69.1*	0.3					
07321+3353	GIII	2014.201	1	1.205	0.009	130.8*	0.3					
07328+2125	COU379	2013.158	1	2.000	0.020	260.2*	0.5					
07332+1709	A2872	2014.149	1	2.359	0.012	97.4*	0.3					
07344+2009	COU380	2014.149	1	1.678	0.008	264.5*	0.3					
07345+1218	STF1116	2013.204	1	1.766	0.009	96.8*	0.3					
07345+2841	COU1110Aa,Ab	2014.149	1	0.230	0.027	125.8	1.7		NDp			
07345+2841	COU1110AB	2014.149	1	3.246	0.016	308.2	0.3					
07348+1138	A3049Aa,Ab	2014.149	1	0.117	0.050	106.6	8.0		NDp			
07348+1138	A3049AB	2013.169	1	0.549	0.022	358.0*	1.1					
07348+1138	A3049AB	2013.172	1	0.532	0.050	356.2	0.3					
07348+1138	A3049AB	2014.149	1	0.573	0.037	357.1*	1.0					
07348+1138	A3049AB	2014.149	1	0.578	0.027	356.0	0.7					
07352+1721	COU474	2014.182	1	0.481	0.007	209.5*	0.3					
07359+1709	COU476	2013.158	1	0.303	0.008	98.9*	1.1					
07361+3650	ES2157	2014.201	1	1.221	0.007	222.9*	0.3					
07362+1815	A2874	2014.182	1	0.253	0.018	51.2*	1.0					
07367+2312	COU90	2014.149	1	3.271	0.016	188.4*	0.3					
07370+1213	HEI340	2013.169	1	0.892	0.007	257.6	0.9					
07374+3852	HU842	2013.172	1	0.412	0.007	80.8*	0.4			Lin2010c	-0.02	0.9
07384+1737	SLE434	2014.185	1	—	—	—	—		NR			
07385+2819	COU1247	2014.182	1	—	—	—	—		NR			
07403+2621	COU1248	2014.201	1	0.337	0.008	289.6*	0.4					
07404+0603	HEI850	2013.169	1	1.196	0.007	8.4*	0.9					
07408+2315	HU457	2014.185	1	2.650	0.021	324.9*	0.4					
07408+2315	HU457	2014.185	1	2.611	0.038	323.5*	0.9					
07408+2315	HU457	2014.185	2	2.595	0.015	325.9	0.7					
07414+2312	AG142	2014.239	1	1.731	0.009	20.9*	0.3					
07424+3936	ES1731	2014.201	1	1.303	0.007	280.5*	0.3					
07429+3923	COU2073	2013.172	1	0.205	0.036	177.3*	1.0					
07453+2802	BRT14GH	2014.201	1	—	—	—	—		NR			
07453+2802	BU580CD	2014.182	1	1.373	0.007	132.3*	0.3					
07455+2006	BAR33	2013.158	1	1.644	0.010	344.3*	0.4					
07455+2559	HO246Aa,Ab	2014.239	1	0.117	0.050	127.1	8.0		NDp			
07455+2559	HO246AB	2014.239	1	2.584	0.013	227.7*	0.4					
07461+2107	HO247	2014.198	1	0.482	0.007	259.6*	0.9			USN1999b	-0.04	1.3
07467+2001	RED9	2013.169	1	—	—	—	—		NR			
07471+1847	COU772	2013.158	1	0.284	0.007	72.9	0.4					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
07472+3402	COU1553	2014.201	1	2.786	0.014	202.7*	0.3					
07476+0455	HDS1102	2013.169	1	0.368	0.022	300.8*	0.8					
07481+4049	COU2380	2013.172	1	0.962	0.007	356.6*	0.3					
07481+4049	COU2380	2013.172	1	0.967	0.011	356.0	0.3					
07487+1246	HEI133	2014.182	1	—	—	—	—		NR			
07495+3924	HDS1108	2014.201	1	0.181	0.018	72.8*	2.9					
07495+3924	HDS1108	2014.201	1	0.107	0.050	73.8	6.1					
07495+3924	HDS1108	2014.201	1	0.145	0.050	68.4*	8.0					
07505+1205	HEI342	2013.169	1	0.949	0.007	317.9*	0.3					
07506+0650	A2743	2013.169	1	0.584	0.007	201.4*	0.5					
07506+1944	COU926	2013.158	1	0.210	0.014	250.2*	1.5					
07519+1515	HEI53	2013.158	1	0.151	0.050	139.8	8.0					
07519+1820	COU43	2013.158	1	1.469	0.007	119.7*	0.3					
07522+4109	YR25	2013.172	1	0.162	0.050	3.7*	7.7					
07522+4109	YR25	2013.172	1	0.107	0.050	356.7	7.7					
07532+0811	A2952	2013.169	1	0.347	0.007	57.7*	0.6					
07532+0811	A2952	2013.169	1	0.339	0.018	57.7	0.7					
07536+1531	HEI54	2014.182	1	0.472	0.007	118.1*	1.0					
07542+4042	COU2493	2013.172	1	1.917	0.030	171.3*	0.3					
07545+2610	COU1111	2013.158	1	0.334	0.007	158.4*	1.2					
07546+2513	A2536	2014.182	1	0.936	0.007	306.3*	0.3					
07546+3100	A675	2013.172	1	—	—	—	—		NR			
07557+1240	J46	2014.198	1	2.598	0.015	286.1*	0.3					
07560+2342	COU929	2014.182	1	0.215	0.007	27.3*	1.6			Hrt2009	-0.02	-1.1
07566+1954	COU930	2013.158	1	0.585	0.007	328.3*	0.5					
07571+1659	A2883	2013.169	1	0.984	0.007	15.6*	0.3					
07580+1741	HDS1133	2014.201	1	0.451	0.007	281.9*	0.5					
07583+1321	HEI136	2013.205	1	1.303	0.010	84.6*	0.3					
07595+1409	TDS5417	2013.169	1	0.663	0.007	76.3*	0.3					
07598+1341	STF1170	2014.198	1	2.376	0.012	107.4*	0.3					
08001+0633	DOO46	2013.169	1	1.443	0.007	316.5*	0.3					
08001+0633	DOO46	2013.205	1	1.449	0.010	317.4*	0.3					
08001+2659	COU1112	2014.182	1	0.298	0.007	84.5*	0.3					
08002+1557	A2885AB	2014.201	1	2.344	0.012	73.7*	0.3					
08002+1557	A2885AB	2014.206	1	2.296	0.011	74.1	0.3	3.07				
08002+1557	GII81AC	2014.206	1	0.217	0.007	33.9	0.3	0.57	NDg			
08005+2900	OSO20	2013.158	1	1.761	0.009	49.0	0.3	4.54				
08005+2900	OSO20	2013.198	1	1.768	0.009	53.3	0.3	4.17				
08008+1042	A2955	2014.198	1	0.578	0.007	24.3*	0.6					
08011+2201	COU931	2014.182	1	3.571	0.018	265.7*	0.3					
08015+2355	A2540	2013.205	1	1.289	0.007	169.2	0.3					
08023+1008	J732	2014.198	1	2.568	0.013	191.6*	0.3					
08033+2616	STF186	2013.196	1	0.990	0.007	73.6*	0.3					
08034+1340	HU848Aa,Ab	2014.239	1	0.103	0.050	108.3	8.0			NDp		
08034+1340	HU848AB	2014.239	1	1.763	0.009	154.1*	0.3					
08051+2827	AG337	2014.248	1	2.686	0.013	104.2*	0.3					
08062+3213	COU1555	2013.158	1	0.269	0.009	256.0	0.3					
08070+2053	HO351	2014.239	1	2.310	0.012	238.9*	0.3					
08073+1213	HEI473	2014.182	1	1.915	0.010	211.8*	0.3					
08074+1145	J1002	2014.239	1	2.246	0.011	118.7*	0.3					
08091+2928	COU1249	2014.182	1	2.443	0.012	69.0*	0.3					
08092+1202	J376	2014.239	1	2.139	0.011	283.4*	0.3					
08095+3213	STF1187AB	2014.248	1	3.077	0.015	21.2	0.3			Ole2001	0.12	0.7
08095+3213	CHR190Aa,Ab	2014.248	1	0.179	0.037	146.3*	5.6					
08095+3213	CHR190Aa,Ab	2014.248	1	0.201	0.027	147.7	2.1					
08097+3732	COU2077	2014.201	1	0.699	0.024	166.1	1.7					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
08106+3442	POP109	2014.248	1	1.824	0.027	20.2	1.0					
08107+4148	COU2496	2013.196	1	0.692	0.007	167.1*	0.7					
08108+3443	HDS1164	2014.201	1	0.383	0.007	199.2*	0.3					
08118+1327	HU851Aa,Ab	2014.182	1	0.308	0.007	131.1	1.9			NDp		
08118+1327	HU851AB	2014.182	1	1.832	0.009	242.0	0.4					
08136+1051	STF1202	2014.239	1	2.632	0.013	304.9*	0.3					
08136+2543	FOX13	2013.158	1	1.856	0.009	151.1*	0.3					
08138+1538	PRT3	2014.248	1	1.470	0.007	340.1*	0.3					
08140+3902	HDS1173Aa,Ab	2013.196	1	0.134	0.045	117.6	4.9			NDp		
08140+3902	HDS1173AB	2013.196	1	0.516	0.010	269.5	1.3					
08142+0658	J377	2013.169	1	1.753	0.032	353.0*	0.7					
08147+3311	HU624	2014.248	1	1.050	0.007	247.1*	0.3					
08160+1842	HO524AB	2013.158	1	4.384	0.022	341.8*	0.3					
08160+1842	JCT3Aa,Ab	2013.158	1	—	—	—	—			NR		
08160+1842	JCT3Aa,Ab	2014.182	1	—	—	—	—			NR		
08175+3250	HU625	2013.221	1	1.765	0.009	355.6*	0.3					
08177+2230	GRV757	2014.185	2	9.439	0.047	303.5*	0.3					
08182+3531	COU1742	2013.196	1	0.150	0.041	106.2	7.3					
08183+3859	STF1211AB	2014.248	1	0.317	0.027	178.1*	1.7			Hei1996c	-0.01	14.8
08191+1810	COU952	2014.182	1	0.126	0.050	46.5	8.0					
08202+1700	STF1214AB	2014.185	2	4.970	0.025	0.2	0.3	5.06				
08202+1700	BU1320BC	2014.185	2	0.655	0.015	162.7	0.3	0.08				
08206+3148	COU1558	2013.158	1	1.125	0.007	56.7*	0.3					
08209+1149	HEI475	2013.169	1	1.160	0.007	249.2*	0.3					
08213+3851	COU2078	2014.201	1	0.459	0.008	85.4*	0.3					
08214+3923	HDS1187	2014.248	1	—	—	—	—			NR		
08216+3616	HU852Aa,Ab	2014.248	1	0.215	0.026	144.8	3.4			NDp		
08216+3616	HU852AB	2014.248	1	1.959	0.013	1.6*	0.3					
08223+3814	COU2079	2014.201	1	0.804	0.007	208.1*	0.4					
08224+1309	HU855	2013.169	1	1.018	0.007	250.6*	0.9					
08237+0732	A2960	2013.169	1	0.238	0.018	105.1*	2.3					
08237+0732	A2960	2013.172	2	0.215	0.019	106.5	2.6					
08239+1038	A2961Aa,Ab	2014.239	1	0.125	0.050	113.2	8.0			NDp		
08239+1038	A2961AB	2014.239	1	1.223	0.007	264.5*	0.7					
08240+1503	HEI476	2014.182	1	—	—	—	—			NR		
08243+0842	HEI742	2013.205	1	0.991	0.007	261.3*	0.3					
08250+2156	BRT2384	2014.185	2	3.866	0.041	253.4*	1.1					
08263+3310	HDS1200	2014.201	1	0.355	0.007	322.6*	0.3					
08264+3906	COU2080Aa,Ab	2013.196	1	0.140	0.021	105.5	4.3			NDp		
08264+3906	COU2080AB	2013.196	1	0.433	0.018	122.3*	0.8					
08268+1006	BRT1248	2014.185	2	2.922	0.044	354.1*	0.6					
08268+1610	HEI143	2014.182	1	2.080	0.010	277.4*	0.3					
08273+3802	HDS1205	2013.196	1	0.748	0.007	86.3*	0.3					
08280+1619	A2545Aa,Ab	2014.248	1	0.145	0.019	128.6	4.2			NDp		
08280+1619	A2545AB	2014.248	1	2.762	0.014	191.0*	0.3					
08283+3338	SEI500	2014.248	1	—	—	—	—			NR		
08286+3502	WOR19	2013.196	1	0.502	0.007	195.5*	0.3			FMR2012j	-0.01	1.3
08286+3502	WOR19	2014.201	1	0.485	0.007	185.7*	0.3			FMR2012j	-0.02	-1.2
08301+0513	A2893	2013.169	1	0.673	0.007	172.8*	0.4					
08317+1924	BEU12	2013.161	1	1.893	0.009	239.3	0.3	4.63				
08317+3922	HDS1219	2014.248	1	0.246	0.066	118.4*	4.8					
08320+0500	A2894	2013.169	1	1.131	0.007	349.7*	0.3					
08320+0500	A2894	2013.172	1	1.104	0.007	350.4	0.3					
08340+1035	A2896Aa,Ab	2014.182	1	0.264	0.013	124.3	0.5			NDp		
08340+1035	A2896AB	2014.182	1	2.318	0.012	346.2	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
08352+2811	COU1115	2013.196	1	0.254	0.012	40.7	0.8					
08360+2050	BOV29	2013.169	1	—	—	—	—		NR			
08360+2050	BOV29	2013.205	1	—	—	—	—		NR			
08363+3352	COU1892Aa,Ab	2013.158	1	0.125	0.050	168.9	7.1		NDp			
08363+3352	COU1892AB	2013.158	1	0.694	0.008	61.1*	0.5					
08363+3352	COU1892AB	2013.158	1	0.686	0.009	60.3	1.5					
08375+1906	BOV32	2013.158	1	—	—	—	—		NR			
08375+1906	BOV32	2014.182	1	—	—	—	—		NR			
08382+1158	HU858	2014.239	1	0.727	0.007	153.7*	0.3					
08382+2341	A2127	2014.248	1	2.776	0.014	147.7*	0.3					
08396+1926	BOV39	2013.161	1	—	—	—	—		NR			
08397+2005	COU47	2014.239	1	0.578	0.007	139.7*	0.8					
08399+1933	BU584Aa,Ab	2014.239	1	0.157	0.043	100.7	6.8		NDp			
08399+1933	BU584AB	2014.239	1	0.584	0.007	240.6*	0.3					
08403+1947	BOV41	2014.182	1	0.117	0.050	69.0*	7.5					
08404+2006	PAT46	2014.248	1	—	—	—	—		NR			
08411+1904	BOV48	2014.182	1	0.382	0.007	122.5*	0.4					
08413+1156	HEI347	2013.169	1	1.325	0.007	93.4*	0.3					
08413+1916	KU32	2014.198	1	2.156	0.011	165.8*	0.3					
08415+1852	BOV49AC	2014.182	1	—	—	—	—		NR			
08417+2547	COU1117	2013.196	1	0.750	0.014	217.4*	0.8					
08423+2002	COU382	2013.158	1	0.331	0.017	356.1*	2.2			Cou1999b	0.21	16.1 ^Q
08423+2002	COU382	2014.198	1	0.325	0.017	356.8*	1.5			Cou1999b	0.21	19.9 ^Q
08437+1654	A2546	2014.201	1	1.190	0.007	219.3*	0.3					
08452+1523	HU1251	2013.218	1	0.810	0.007	277.0*		1.2				
08452+1523	HU1251	2013.218	1	0.811	0.007	277.5	0.8					
08452+1941	BOV54Aa,Ab	2013.158	1	0.103	0.050	119.4	12.8		NDp			
08452+1941	BOV54AB	2013.158	1	0.439	0.007	235.3*	0.9					
08452+1941	BOV54AB	2014.182	1	0.448	0.008	237.5*	0.3					
08452+1941	BOV54AB	2014.182	1	0.443	0.007	237.4	0.3					
08452+1941	BOV54AC	2013.158	1	5.277	0.026	287.0	0.3	1.75	NDg			
08459+2901	A553	2014.182	1	2.458	0.012	76.1*	0.3					
08463+3754	TDS6087	2014.248	1	—	—	—	—		NR			
08481+1836	COU956	2014.198	1	0.266	0.007	22.6	1.1					
08493+3226	COU1743	2013.196	1	0.294	0.031	111.3*	1.3					
08503+3504	COU1893	2013.196	1	0.267	0.019	130.5*	1.7					
08505+2308	AG157	2014.239	1	2.270	0.011	75.8*	0.3					
08507+0752	VDK3	2013.205	1	1.285	0.007	175.5*	0.3			Izm2019	-0.01	1.4
08507+1800	A2473	2013.218	1	0.264	0.007	88.0	0.7			Doc2016d	0.04	-1.6
08514+2105	COU588	2013.218	1	0.392	0.009	153.4*	0.6					
08515+1208	STF1287	2014.239	1	2.178	0.011	86.2*	0.3					
08517+2458	TDS496	2014.248	1	1.043	0.007	346.5*	0.3					
08524+0520	A2900	2013.205	1	0.666	0.015	314.3*	1.0					
08525+1629	A2474	2014.198	1	0.345	0.007	233.6*	1.3					
08526+3739	TDS6154	2014.248	1	—	—	—	—		NR			
08526+4212	COU2618	2013.196	1	0.384	0.007	338.2*	2.3					
08536+1210	GHI38Ba,Bb	2013.205	1	0.234	0.007	348.6	0.3	0.03	NDg			
08536+1210	GHI38AC	2013.205	1	1.520	0.008	271.0	0.3	4.15	NDg			
08536+2656	COU1119	2014.182	1	2.535	0.013	276.7*	0.3					
08537+2909	COU1251	2013.158	1	0.654	0.017	180.6*	0.4					
08537+2909	COU1251	2014.198	1	0.657	0.018	180.7*	1.1					
08539+1958	COU773	2014.198	1	0.079	0.050	74.2	8.0			Cou1999b	-0.10	13.6
08542+1935	HDS1286	2014.201	1	0.862	0.007	353.2*	0.3					
08547+1637	AG338	2014.201	1	2.074	0.010	167.0*	0.3			Izm2019	0.07	-1.5
08549+2612	A2131	2014.198	1	0.214	0.007	334.6*	1.2			Msn2000a	-0.04	-5.1
08551+1347	HEI149	2013.205	1	1.169	0.010	261.9	0.3					
08551+1347	HEI149	2013.205	2	1.203	0.012	263.1	0.3	0.95				

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
08557+2000	COU774	2014.182	1	2.861	0.014	22.8*	0.3					
08561+3447	COU1895	2013.196	1	0.166	0.030	115.8	3.2					
08561+3524	COU1896	2014.201	1	1.028	0.007	96.3*	0.3					
08571+1045	A2968	2014.198	1	1.171	0.007	133.1*	0.3					
08575+2720	COU1120	2014.198	1	0.982	0.007	312.9*	0.3					
08585+3548	COU1897	2013.196	1	0.142	0.050	305.7	8.0			Doc2013b	0.06	13.8
08587+2523	A1974	2013.218	1	0.215	0.011	174.0*	2.1					
08589+3338	TDS6234	2014.248	1	—	—	—	—		NR			
08596+3307	COU1252	2013.158	1	1.643	0.008	346.3*	0.3					
09002+1351	HU862	2014.198	1	0.541	0.007	53.7*	0.4					
09005+3225	HU718	2013.196	1	0.224	0.008	42.4	0.3			FMR2015b	-0.02	2.2
09007+3208	COU1253AB	2014.201	1	0.738	0.007	10.4*	0.3					
09007+3208	COU1253AC	2014.513	1	1.714	0.021	47.9	0.4			NDg		
09008+0448	HDS1307Aa,Ab	2013.205	1	0.146	0.050	121.4	8.0			NDp		
09008+0448	HDS1307AB	2013.205	1	0.602	0.013	36.3	1.3					
09009+2417	COU933	2014.248	1	0.393	0.007	138.9*	1.5					
09025+2117	COU775	2014.182	1	0.453	0.007	78.8*	0.4					
09043+4008	COU2498	2013.196	1	0.832	0.007	245.1*	0.5					
09050+2622	TDS6299	2014.248	1	—	—	—	—		NR			
09051+1029	J77	2014.182	1	0.878	0.007	133.7*	0.3					
09062+3314	GII37Ba,Bb	2013.158	1	0.286	0.007	264.3*	0.3			NDg		
09062+3314	GII37Ba,Bb	2014.201	1	0.344	0.007	266.6	0.3	0.10		NDg		
09062+3314	COU1560	2013.158	1	1.239	0.022	298.7*	1.7					
09062+3314	COU1560	2014.201	1	1.394	0.007	295.6	0.3					
09077+1000	HEI482	2014.198	1	1.118	0.007	109.4*	0.4					
09077+1040	CHR257	2014.239	1	0.158	0.050	112.2	7.7					
09077+1040	CHR257	2014.239	1	0.156	0.050	111.7	8.0					
09082+1157	HU866	2014.198	1	2.531	0.024	7.5*	0.3					
09090+0536	HDS1330Aa,Ab	2013.205	1	0.116	0.037	118.9	5.0			NDp		
09090+0536	HDS1330AB	2013.205	1	0.365	0.007	241.3	2.7					
09094+2203	WRH16	2013.218	1	—	—	—	—		NR			
09094+2203	WRH16	2014.248	1	—	—	—	—		NR			
09095+1321	HU867	2014.198	1	2.276	0.013	181.4*	0.3					
09096+1606	A2475	2013.158	1	0.383	0.007	174.5*	0.4					
09118+3355	TDS6384	2014.201	1	—	—	—	—		NR			
09123+1500	FIN347	2014.239	1	0.148	0.050	127.8	8.0					
09124+2653	A1977	2013.158	1	0.259	0.018	146.3*	1.8					
09124+3621	ES296	2014.248	1	1.423	0.009	228.1*	1.2					
09127+1632	STF1322	2013.218	1	1.810	0.017	52.6*	1.3					
09129+2420	TDS6396Aa,Ab	2013.196	1	0.165	0.018	303.4	0.8					
09129+2420	BRT155AB	2013.198	1	4.506	0.023	269.4	0.3	1.75				
09129+2420	BRT155AB	2014.182	1	4.511	0.023	269.4*	0.3					
09136+2526	A1978	2013.196	1	0.298	0.007	324.0*	0.4					
09141+3333	HO42	2014.248	1	1.749	0.018	182.6*	0.3					
09149+0427	HEI350	2013.205	1	0.710	0.007	36.7*	0.5			Tok2020g	-0.02	-0.1
09155+2755	STF1327	2014.182	1	2.125	0.011	358.4*	0.3					
09159+2431	COU934	2013.196	1	1.574	0.008	230.9*	0.3					
09159+2431	COU934	2013.198	1	1.566	0.008	231.2*	0.3	3.57				
09163+3715	COU1744	2014.248	1	0.455	0.032	174.9*	1.3					
09163+3715	COU1744	2014.248	1	0.451	0.007	175.6	0.3					
09168+2438	A1983	2014.272	1	1.358	0.007	238.2*	0.3					
09168+4040	COU19AB	2014.201	1	7.893	0.039	219.0*	0.3					
09168+4040	COU19BC	2014.201	1	2.383	0.041	347.7*	0.7					
09169+1226	HDS1340	2013.205	1	0.184	0.024	136.0	7.6					
09169+1226	HDS1340	2014.182	1	0.165	0.018	165.0	3.0					
09169+1226	HDS1340	2014.182	1	0.157	0.010	164.7	3.0					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
09173+1838	COU383	2014.198	1	0.795	0.007	222.6	0.6					
09173+1838	COU383	2014.198	1	0.789	0.007	223.1*	0.3					
09176+3641	ES1734	2014.272	1	2.467	0.012	69.6*	0.3					
09179+2834	STF3121	2014.182	1	0.151	0.050	176.8*	8.0			Sod1999	-0.04	6.5 ^Q
09185+1547	HEI150	2013.205	1	0.325	0.007	261.3*	0.7					
09186+2049	HO43	2013.218	1	0.571	0.007	97.9*	0.3			Tok2016e	-0.02	-0.7
09187+3935	COU2383	2014.201	1	1.315	0.009	160.5*	0.3					
09196+2415	A1984	2014.248	1	0.128	0.050	8.9	8.0					
09208+1538	A2476	2014.198	1	0.376	0.010	156.3*	0.6					
09233+0921	HEI487	2013.205	1	2.134	0.144	101.5	10.4					
09233+2211	AG165	2013.218	1	1.362	0.008	15.5*	0.7					
09233+3458	TDS6523	2014.248	1	—	—	—	—			NR		
09239+4420	HEI351	2014.201	1	—	—	—	—			NR		
09240+3201	COU1563	2014.201	1	2.465	0.012	34.1*	0.3					
09245+1808	A2477	2013.205	1	0.451	0.007	3.8*	0.9			FMR2014a	0.02	1.4
09247+3641	VBS16	2014.272	1	1.627	0.008	282.0*	0.3					
09251+2616	BU1070	2014.248	1	0.385	0.011	92.9*	0.6					
09252+1449	HU869	2013.218	1	0.718	0.007	91.6*	0.5					
09256+3941	YSC4	2014.201	1	0.322	0.010	297.3*	1.1					
09260+2839	A222	2014.198	1	0.380	0.011	7.2*	0.7			Hrt2014b	-0.02	0.2
09262+2838	A223	2014.198	1	2.545	0.013	9.0*	0.3					
09263+3109	A4	2013.218	1	0.876	0.013	33.2*	0.6					
09276+3453	HDS1355	2014.272	1	0.529	0.010	291.9*	0.3					
09276+3453	HDS1355	2014.272	2	0.546	0.007	291.9*	0.3					
09288+1235	TDS6589	2014.272	1	—	—	—	—			NR		
09290+1917	COU936	2014.248	1	0.946	0.007	226.0*	0.3					
09305+1516	HEI151	2013.284	1	—	—	—	—			NR		
09325+1345	BAR36	2013.287	1	1.768	0.009	197.3*	0.3					
09327+1549	HEI152	2013.205	1	0.714	0.021	351.3	0.6					
09329+3340	TDS6642	2014.248	1	—	—	—	—			NR		
09335+2704	TDS6651	2014.272	1	1.162	0.007	267.8*	0.3					
09338+3231	COU1415	2013.158	1	0.134	0.050	309.1	7.6					
09347+1627	A2478	2014.198	1	1.151	0.007	40.2*	0.3					
09349+0515	A2757	2013.284	1	0.317	0.007	51.3*	1.7			Lin2017b	-0.00	-5.5
09354+2821	TDS6668	2014.272	1	1.557	0.008	245.1*	0.3					
09354+3958	COU2084	2013.218	1	0.191	0.036	88.6	1.7					
09357+1836	COU385	2013.287	1	0.740	0.007	153.2*	0.3					
09358+2926	A343	2014.198	1	1.120	0.007	174.9*	0.3					
09362+2340	COU478	2014.248	1	0.866	0.007	42.6*	0.3					
09364+1856	COU386AB	2013.205	1	0.827	0.007	231.4*	0.4					
09364+1856	COU386AB	2013.158	1	0.818	0.007	231.7*	0.4					
09366+0503	A2758	2013.287	1	0.315	0.007	207.9*	3.1					
09371+1614	STF1372	2013.287	1	0.275	0.007	247.0	0.3			Alz2005a	-0.04	-3.0
09373+0701	HEI751	2013.284	1	2.004	0.010	154.9*	0.3					
09374+2522	HO368	2014.201	1	1.366	0.007	112.0*	0.3					
09376+1528	A2479	2014.198	1	0.412	0.007	191.4*	0.5			Hei1978a	0.14	-56.0
09377+1153	HJ165	2014.239	1	2.332	0.012	348.6*	0.3					
09391+1425	HDS1391	2013.205	1	0.842	0.007	316.9*	0.4					
09396+1823	COU387	2014.198	1	0.705	0.011	256.5*	1.0					
09399+3132	COU1565	2014.201	1	2.292	0.011	237.5*	0.3					
09415+1753	A2481	2014.248	1	0.368	0.010	342.1*	0.4					
09417+2755	TDS6748	2014.272	1	—	—	—	—			NR		
09426+1958	COU283	2014.248	1	0.585	0.007	51.1*	0.4					
09428+4350	COU2502	2014.201	1	1.885	0.009	135.4*	0.3					
09435+0612	A2761	2013.284	1	1.049	0.007	249.3*	0.4					
09437+3229	COU1567	2013.276	1	0.963	0.007	259.7	0.6					
09437+3625	HDS1403	2014.272	1	2.739	0.014	168.5*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
09444+4047	A2053	2013.218	1	0.931	0.008	85.5*	0.3					
09460+7643	STF1373	2013.298	1	2.041	0.010	137.8*	0.3					
09462+3110	HDS1412Aa,Ab	2014.201	1	0.106	0.007	103.3	4.7		NDp			
09462+3110	HDS1412AB	2014.201	1	2.701	0.014	250.1*	0.3					
09462+3110	HDS1412AB	2014.201	1	2.714	0.021	250.2	0.5					
09473+0833	TDS553	2013.284	1	—	—	—	—		NR			
09476+1351	HEI58	2014.198	1	2.377	0.018	344.8*	0.3					
09477+1023	HEI490	2013.287	1	0.255	0.007	237.3*	1.0					
09477+2036	COU284	2013.287	1	0.139	0.050	149.0	8.0			Doc2019c	0.02	-26.0 ^Q
09481+3116	COU1255Ba,Bb	2014.201	1	0.179	0.050	129.6	8.0		NDp			
09481+3116	COU1255Aa,Ab	2014.201	1	0.989	0.013	351.5	2.3		NDp			
09481+3116	COU1255AB	2014.201	1	2.514	0.013	32.6*	0.3					
09482+1205	TDS6821	2014.272	1	—	—	—	—		NR			
09483+2336	TDS6823	2013.284	1	—	—	—	—		NR			
09497+3734	ES1736	2014.248	1	1.247	0.007	113.1*	0.3					
09498+1106	TOK24	2013.287	1	—	—	—	—		NR			
09498+1106	TOK24	2013.339	1	1.910	0.018	139.8	1.3					
09498+2111	KUI44	2013.205	1	—	—	—	—		NR			
09499+1947	COU285	2013.284	1	0.454	0.007	188.0*	0.5					
09500+1634	STF1385	2013.276	1	0.962	0.007	326.6*	0.3					
09509+2016	COU49AB	2014.198	1	2.399	0.012	358.0*	0.3					
09509+2016	COU49AB	2014.201	1	2.386	0.012	357.5	0.3					
09509+2016	COU49AB	2014.206	1	2.312	0.012	353.3	0.3	2.97				
09509+2016	GII80Ba,Bb	2014.198	1	0.235	0.007	234.7	0.3	0.09	NDg			
09509+2016	GII80Ba,Bb	2014.206	1	0.208	0.007	238.8	0.3	0.11	NDg			
09513+6037	STF1381	2013.298	1	0.851	0.007	187.3*	0.3			Izm2019	0.03	0.7
09521+1628	STF1390	2014.239	1	2.249	0.011	207.4*	0.3					
09521+2220	TDS6865	2014.248	1	—	—	—	—		NR			
09524+2659	STF1389	2014.239	1	2.452	0.012	289.8*	0.3			Lin2016a	-0.05	-0.5
09534+1109	TDS6882	2013.284	1	—	—	—	—		NR			
09535+1657	CHR219	2013.287	1	0.220	0.018	71.6	0.7			Tok2019c	-0.04	-0.5
09537+1445	HEI153	2014.198	1	2.943	0.024	121.3*	0.3					
09542+3217	ES2348AB	2014.272	1	1.970	0.022	316.9*	0.3					
09542+3217	ES2348AC	2014.272	1	1.677	0.033	62.0	1.3					
09542+3217	ES2348AC	2014.272	1	1.694	0.077	63.8	1.7					
09547+0823	TDS6893AB	2013.284	1	3.927	0.020	141.1	0.3	2.03				
09547+0823	TDS6893Aa,Ab	2013.284	1	—	—	—	—		NR			
09556+0806	AG170	2013.295	1	1.724	0.009	43.8*	0.3					
09563+1404	TDS560	2013.287	1	—	—	—	—		NR			
09567+2503	STF1397	2014.201	1	1.097	0.007	98.2*	0.3					
09577+2540	COU938	2014.198	1	0.115	0.007	63.8	2.6					
09569+1946	COU388	2014.198	1	1.624	0.008	61.3*	0.4					
09571+7004	TDS561	2013.298	1	0.838	0.007	104.8*	0.3					
09577+2540	COU938	2014.198	1	0.115	0.050	63.8	7.6					
09581+2059	COU286	2014.239	1	1.815	0.009	205.4	0.3					
09581+3856	COU2086AB	2014.239	1	—	—	—	—		NR			
09587+3853	COU2087	2014.239	1	0.206	0.015	123.1	1.5					
09593+3746	COU2088	2014.275	2	0.446	0.007	131.7	0.4					
09593+3746	COU2088	2014.275	1	0.441	0.010	132.8*	0.5					
10002+3803	COU2089	2014.248	1	0.404	0.008	154.2	0.8					
10002+3803	COU2089	2014.248	2	0.387	0.050	154.1	1.4					
10002+3803	COU2089	2014.248	2	0.429	0.032	153.5	0.3					
10023+2621	COU1125	2014.198	1	2.757	0.014	250.9*	0.3					
10027+1940	BRT2403	2014.272	1	3.095	0.040	340.5*	0.8					
10028+0106	HDS1451	2013.295	1	0.464	0.007	156.5*	1.2					
10032+0623	TDS6987	2013.287	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
10044+6023	TDS7000	2013.298	1	—	—	—	—			NR		
10057+2918	ES430	2013.276	1	1.822	0.009	168.5*	0.3					
10066+2602	TDS569	2014.275	1	2.306	0.012	90.0*	0.3					
10072+0016	A2563	2013.295	1	0.830	0.009	135.9*	1.1					
10073+2215	COU166	2014.198	1	2.420	0.012	159.6*	0.3					
10073+2215	COU166	2014.272	1	2.385	0.012	340.2*	0.3					
10083+1131	TDS7052	2014.272	1	—	—	—	—			NR		
10083+3136	KUI148	2014.239	1	0.190	0.017	173.4	1.4			Hrt1996a	-0.02	4.5
10084+1158	HDO127BC	2014.199	1	2.047	0.010	274.4	0.3					
10085+0700	TDS7059	2013.284	1	—	—	—	—			NR		
10085+6243	TDS7058	2013.298	1	—	—	—	—			NR		
10091+2531	A1988	2013.276	1	0.375	0.007	224.3*	0.7					
10091+2531	A1988	2014.275	1	0.371	0.007	227.4	0.4					
10091+2531	A1988	2014.275	2	0.394	0.009	228.9*	0.3					
10092+2116	A2144	2014.239	1	2.670	0.013	286.7*	0.3					
10092+2147	COU168	2013.287	1	0.949	0.007	50.4*	0.6					
10097+3145	COU1416	2013.276	1	0.487	0.007	271.2*	0.3					
10109+3628	HDS1466	2014.308	2	0.581	0.007	175.1*	0.3					
10109+3628	HDS1466	2014.308	1	0.595	0.007	176.1*	0.9					
10110+4040	HDS1467	2014.239	1	0.213	0.018	319.2*	1.5					
10110+7508	KUI147	2013.298	1	1.900	0.010	120.8*	0.3			Izm2019	-0.02	-0.5
10111+1531	A2368	2013.284	1	0.767	0.007	166.5*	0.6					
10120+2740	TDS7099	2013.276	1	0.511	0.013	202.9*	1.0					
10121+2118	A2146	2013.287	1	0.113	0.050	179.9	8.0			Hei2001	-0.08	-30.3
10122+2854	TDS7103	2014.272	1	—	—	—	—			NR		
10123+1143	J2074	2014.199	1	2.173	0.013	12.6*	0.7					
10123+1621	STF1413	2013.284	1	1.827	0.009	90.3*	0.3					
10125+1942	COU288	2014.248	1	0.630	0.028	3.9*	2.1					
10125+1942	COU288	2014.248	1	0.647	0.007	2.4	0.8					
10134+2800	TDS7118	2013.276	1	—	—	—	—			NR		
10138+6121	TDS7127	2013.298	1	—	—	—	—			NR		
10140+2227	COU169	2013.205	1	0.511	0.007	150.3*	0.3					
10140+2227	COU169	2014.199	1	0.534	0.007	148.6*	0.6					
10140+2449	HJ477Aa,Ab	2014.275	1	0.159	0.014	122.6	3.8			NDp		
10140+2449	HJ477AB	2014.275	1	2.655	0.013	123.2*	0.3					
10140+2449	HJ477AB	2014.275	2	2.691	0.015	123.6	0.3	0.70				
10140+2449	HJ477AC	2014.275	2	14.524	0.073	358.6	0.3	3.88				
10144+2557	TDS7135	2014.272	1	—	—	—	—			NR		
10144+2638	TDS7134	2013.276	1	—	—	—	—			NR		
10144+2638	TDS7134	2014.272	1	—	—	—	—			NR		
10146+1753	L10	2013.284	1	1.149	0.007	353.8*	0.3					
10148-0017	A2566	2013.295	1	1.672	0.010	93.4*	0.3					
10151+1907	STF1417	2014.239	1	2.353	0.012	257.3*	0.3					
10156+2504	FOX14	2014.272	1	2.904	0.015	185.6*	0.3					
10162+6406	MLR143	2013.298	1	0.731	0.010	284.4	0.7					
10169+0225	YSC38	2013.295	1	0.969	0.007	268.1*	0.3					
10169+2229	A2148	2013.287	1	0.193	0.007	166.8	1.4					
10173+1210	J1126	2014.272	1	2.201	0.011	307.1*	0.3					
10178+2000	A2149Aa,Ab	2014.239	1	0.215	0.030	97.0	3.9			NDp		
10178+2000	A2149Aa,Ab	2014.239	1	0.221	0.031	96.1	4.2			NDp		
10178+2000	A2149AB	2014.239	1	1.578	0.008	301.1*	0.3					
10178+2000	A2149AB	2014.239	1	1.599	0.010	300.6	0.3					
10182+0731	YSC92	2013.205	1	—	—	—	—			NR		
10182+0805	A2765	2013.287	1	0.418	0.007	33.6*	0.4					
10183+0841	YSC93	2013.287	1	—	—	—	—			NR		
10186+3612	TDS7170	2014.275	1	—	—	—	—			NR		
10186+3907	STF1420	2014.239	1	2.165	0.011	318.6*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
10192+2034	STF1423	2013.295	1	0.691	0.007	320.0*	0.5			WSI2004a	0.05	2.4
10192+2034	STF1423	2014.308	2	0.704	0.007	317.3*	0.3			WSI2004a	0.07	2.2
10192+2034	STF1423	2014.308	1	0.691	0.007	317.2*	0.6			WSI2004a	0.06	2.1
10199+2834	TDS578	2013.276	1	1.242	0.008	203.5*	0.3					
10203+1753	COU290	2013.284	1	0.418	0.012	122.2*	1.6					
10203+1753	COU290	2014.308	1	0.409	0.007	122.3*	0.4					
10204+0310	HDS1485	2013.295	1	0.214	0.037	324.8*	1.8					
10205+0626	STF1426AB	2013.284	1	0.919	0.008	312.1*	0.3			Izm2019	0.00	0.7
10205+0626	STF1426AB	2013.287	1	0.912	0.007	311.6	0.3	0.51		Izm2019	-0.00	0.2
10205+0626	STF1426AC	2013.287	1	7.846	0.039	188.9	0.3	2.33				
10207+3719	ES1639	2014.272	1	2.243	0.011	132.4*	0.3					
10210+1809	COU50	2013.287	1	0.181	0.050	357.0	1.2					
10212+2642	HDS1488	2014.199	1	—	—	—	—		NR			
10213+1859	TDS7209	2014.275	1	—	—	—	—		NR			
10218+6105	TDS7217	2013.298	1	—	—	—	—		NR			
10219+3107	MLB844	2014.239	1	2.820	0.014	194.8*	0.3					
10221+6055	TDS7220	2013.298	1	—	—	—	—		NR			
10234+2630	A1990	2013.276	1	1.466	0.007	289.7*	0.4					
10245+1546	TDS7252	2013.284	1	—	—	—	—		NR			
10249+0431	HDS1497	2013.205	1	0.459	0.007	73.9*	0.6					
10250+2437	STF1429	2013.221	1	0.807	0.007	157.7	0.4			Zul1981	0.06	-0.3
10254-4136	TDS7258	2013.221	1	1.414	0.010	99.5*	0.3					
10256+0302	HEI761	2013.295	1	1.176	0.007	172.5*	0.3					
10257+2944	TDS7264	2013.276	1	—	—	—	—		NR			
10258+3237	ES432	2014.275	1	2.913	0.015	163.3*	0.3					
10260+0256	A2570	2013.295	1	0.173	0.013	297.7	0.7			Tok2019c	0.03	4.0
10261+1821	COU291	2013.221	1	0.819	0.008	65.9*	0.6					
10261+4246	A2150	2014.239	1	2.678	0.013	320.4*	0.3					
10262+3628	ES302	2014.275	1	3.028	0.015	345.1*	0.3					
10262+6038	HU1130	2013.298	1	1.052	0.010	136.4*	0.3					
10264+2545	HDS1500	2014.308	1	0.105	0.050	286.5	8.0			Tok2019c	-0.03	-2.5
10265+3418	TDS7272	2014.275	1	—	—	—	—		NR			
10266+3401	LDS1242	2014.275	2	2.204	0.015	176.3	0.3	4.26				
10268+3351	TDS7275	2014.308	1	—	—	—	—		NR			
10269+1713	STT217	2014.248	1	0.773	0.007	149.3*	0.5			Sca2015b	-0.01	0.9
10269+1931	COU292	2013.287	1	0.171	0.018	49.5*	1.6			Doc2013e	-0.03	-8.5
10270+6051	HU1131	2013.298	1	0.832	0.007	198.7*	0.6					
10271+3143	A2151	2014.248	1	1.182	0.007	75.1*	0.3					
10273+3054	TDS7282	2013.276	1	1.578	0.016	155.1	0.3	1.95				
10273+3054	TDS7282	2013.276	1	1.576	0.016	157.0	0.3	3.50				
10273+3054	TDS7282	2014.248	1	1.592	0.016	157.5*	0.6					
10275+0334	STT218	2013.295	1	0.362	0.007	167.1*	0.9			USN2002	-0.02	-6.4
10291+6017	TDS7292	2013.298	1	—	—	—	—		NR			
10299+3025	TDS7300	2014.275	1	—	—	—	—		NR			
10301+3502	HDS1509	2014.248	1	0.155	0.050	294.8*	8.0					
10305+1444	J736	2014.272	1	2.524	0.013	25.1*	0.3					
10312+0847	TDS7313	2013.205	1	—	—	—	—		NR			
10308+1450	TDS7307	2013.284	1	—	—	—	—		NR			
10315+7035	TDS7316	2013.298	1	—	—	—	—		NR			
10316+1441	J737	2014.272	1	2.091	0.015	116.2*	0.3					
10320+0831	YSC39	2013.205	1	0.808	0.014	38.7*	1.2					
10326+2943	COU1126	2014.199	1	0.424	0.007	193.9*	0.5					
10335+1120	BU1426	2014.275	1	2.665	0.013	21.3	0.3					
10335+1120	BU1426	2014.275	1	2.679	0.013	21.3*	0.3					
10343+1802	YSC40	2013.287	1	0.395	0.007	236.7*	0.6					
10343+1802	YSC40	2014.272	1	0.368	0.007	236.9*	1.4					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
10344+1729	BRT2288	2014.275	1	2.911	0.021	14.8*	0.6					
10353+3041	TDS7356	2014.308	1	—	—	—	—		NR			
10353+7140	TDS7355Aa,Ab	2013.298	1	0.189	0.013	164.0	1.2		NDp			
10353+7140	TDS7355AB	2013.298	1	0.445	0.007	229.0*	2.9					
10353+7140	GII59AC	2013.298	2	6.955	0.035	153.9	0.3	0.58	NDg			
10357+2605	TDS7363	2014.248	2	0.484	0.009	179.3	0.3					
10357+2605	TDS7363	2014.248	1	0.504	0.007	180.8	0.7					
10357+2605	TDS7363	2014.248	1	0.495	0.007	180.8	0.3					
10358+2902	TDS596	2014.308	1	1.542	0.008	279.7*	0.3					
10359+7142	TDS7367	2013.298	1	0.625	0.007	259.5*	0.3					
10361+2009	TDS7369	2013.276	1	—	—	—	—		NR			
10362+0041	J84	2013.295	1	0.455	0.007	205.6*	0.3					
10367+1522	DAE3BC	2013.205	1	—	—	—	—		NR			
10376+3446	COU1417	2014.272	1	0.334	0.007	213.5*	1.3					
10380+2529	A1768	2014.239	1	2.578	0.013	87.0*	0.3					
10385+3114	TDS7389	2013.221	1	0.629	0.018	316.4*	0.4					
10389+0721	J79	2013.284	1	1.549	0.008	132.3*	0.3					
10394+1536	HEI154Aa,Ab	2013.363	1	0.300	0.028	135.6	5.5		NDp			
10394+1536	HEI154AB	2013.295	1	1.429	0.030	106.0*	0.5					
10401+2241	TDS598	2013.276	1	1.035	0.007	304.5*	0.3					
10408+2657	COU779	2014.248	1	0.319	0.026	89.6*	0.9					
10408+2657	COU779	2014.248	1	0.368	0.013	87.9	0.3					
10409+1707	COU174	2014.248	1	2.162	0.011	188.2*	0.3					
10410-0007	TDS7412	2013.295	1	—	—	—	—		NR			
10420+3005	TDS7425	2014.272	1	1.945	0.020	177.7*	0.7					
10421+1617	A2483Aa,Ab	2014.239	1	0.130	0.050	273.9	2.8		NDp			
10421+1617	A2483AB	2014.239	1	2.015	0.010	224.8*	0.3					
10421+3715	COU1902	2014.240	1	0.686	0.007	32.2*	0.8					
10425+3704	HU882	2014.308	1	3.191	0.016	282.0*	0.3					
10430+3824	COU1903	2014.240	1	0.129	0.050	270.5	0.4					
10442+3955	YR26	2014.308	1	0.470	0.014	209.3	1.1					
10454+1814	TDS7454	2013.221	1	—	—	—	—		NR			
10454+3831	CHR191	2014.240	1	0.680	0.007	234.5*	0.7					
10466+0051	RST5350	2013.295	1	0.526	0.007	189.5*	1.4					
10469+0049	RST5351	2013.295	1	0.881	0.010	343.4*	0.9					
10471+2812	COU590	2014.308	1	1.278	0.007	282.5*	0.3					
10472+2605	COU591	2014.308	1	0.444	0.017	6.9*	1.1					
10472+2605	COU591	2014.308	1	0.438	0.017	6.7	0.5					
10473+2235	STT228	2013.221	1	0.661	0.007	169.4*	0.3		PkO2018b		0.02	-0.2
10474-0053	RST4931	2013.295	1	0.827	0.010	129.1*	0.4					
10474+0236	HDS1542	2013.295	1	0.612	0.007	73.0*	0.7		Hor2020		0.05	1.6 ^Q
10488+2317	TDS7480	2013.221	1	—	—	—	—		NR			
10491+7652	HDS1546	2013.298	1	0.108	0.050	137.1*	8.0					
10496+1630	A2370	2014.240	1	2.787	0.014	331.9*	0.3					
10507+3254	COU1127	2014.248	1	1.305	0.007	240.6*	0.3					
10507+3254	COU1127	2014.248	1	1.293	0.010	239.7	1.2					
10520+1606	A2373	2013.205	1	0.201	0.010	222.1*	1.3		USN2007a		-0.00	1.5
10527+2312	HO376	2014.248	1	3.010	0.015	217.1*	0.3					
10528+3023	HDS1555	2014.240	1	0.179	0.050	128.0	8.0					
10529+2209	HU567	2013.205	1	0.452	0.007	196.6*	0.5					
10529+2209	HU567	2014.248	1	0.461	0.007	198.2*	0.5					
10529+2209	HU567	2014.248	2	0.456	0.007	202.7	0.5					
10533+7152	TDS7534	2013.298	1	0.558	0.019	27.4*	1.0					
10539+1706	HDS1559	2013.287	1	0.491	0.007	333.8*	0.3					
10543+0737	HDS1560	2013.205	1	0.570	0.008	237.6*	2.1					
10544+2044	HU568	2013.205	1	0.692	0.010	353.9*	0.3					
10544+2044	HU568	2013.205	1	0.692	0.013	354.3	0.7					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
10545+4730	STF1483	2014.341	1	2.392	0.012	242.5*	0.3					
10548+2345	BU597	2013.314	1	1.033	0.007	45.1*	0.3					
10554+6841	MLR324	2013.298	1	0.837	0.007	283.9*	0.3					
10564+3652	COU1420	2014.248	1	0.138	0.050	290.9	8.0					
10565+2633	TDS608	2014.273	1	1.647	0.008	264.5*	0.3					
10579+8544	STF1455	2013.298	1	1.979	0.010	177.8*	0.3					
10585+1711	A2375	2013.205	1	0.510	0.007	173.7*	0.3			Doc2009g	0.03	1.7
10596+1800	HDS1568	2013.287	1	0.100	0.050	316.7	8.0			Tok2019d	0.03	-9.0
10596+3013	LDS4042	2014.273	2	2.034	0.059	204.6*	1.3					
11003+1926	A2376	2013.205	1	0.162	0.047	188.4*	7.4					
11003+2241	TDS7602	2013.295	1	0.610	0.007	115.9*	0.3					
11003+2241	TDS7602	2014.248	1	0.601	0.011	114.9*	0.5					
11004+3605	HO46	2014.273	1	2.522	0.013	281.1*	0.4					
11005+4637	ES921Aa,Ab	2014.332	1	0.137	0.050	113.9	7.4			NDp		
11005+4637	ES921AB	2014.333	1	2.407	0.012	178.8*	0.3					
11006+0629	TDS7608	2013.205	1	—	—	—	—			NR		
11008+2913	COU960	2014.308	2	0.222	0.007	115.7	0.4					
11008+2913	COU960	2014.308	1	0.218	0.007	115.8	1.5					
11008+3913	YSC5	2014.240	1	0.423	0.027	91.6*	0.5					
11008+3913	YSC5	2014.248	1	0.493	0.018	90.3*	0.3					
11008+3913	YSC5	2014.273	1	0.454	0.027	91.4*	0.3					
11009+4036	COU1747	2014.308	1	0.829	0.007	314.6*	0.3					
11013+4542	A1995	2014.308	1	0.617	0.007	305.4*	0.4					
11018+1903	HDS1575	2013.276	1	0.279	0.007	105.7*	0.4					
11023+3049	STF1501	2013.221	1	1.333	0.007	184.9*	0.3					
11030+4033	ES1398	2014.333	1	2.757	0.020	334.9*	0.3					
11032+2142	COU175	2013.339	1	1.128	0.010	294.1*	0.3					
11035+5432	A1590	2014.343	1	1.462	0.007	329.5*	0.3			Izm2019	-0.02	-0.2
11036+1851	J1262	2014.240	1	2.351	0.012	175.9*	0.3					
11040+0338	STF1504	2013.295	1	1.176	0.007	123.3*	0.3					
11040+2309	HO48	2014.333	1	1.863	0.009	355.9*	0.3					
11045+3159	COU962	2014.248	1	2.461	0.012	241.6*	0.3					
11046+5058	COU2505	2014.308	2	0.502	0.007	252.5	0.3					
11046+5058	COU2505	2014.308	1	0.504	0.007	252.6*	0.3					
11050+3825	HO378	2014.341	1	1.082	0.007	236.8*	0.3			Izm2019	0.02	0.1
11055+3927	COU1748	2013.314	1	0.184	0.016	81.2*	2.9					
11056+5448	A1591	2014.343	1	0.197	0.045	107.8*	2.4			Hei1976	0.01	-4.3
11056+5448	A1591	2014.343	2	0.226	0.037	105.3*	1.5			Hei1976	0.04	-6.8
11058+7440	MLR423	2013.298	1	0.739	0.007	214.9*	0.9					
11062+1018	TDS7663	2013.287	1	0.116	0.050	111.0	8.0					
11062+1018	GII58AC	2013.287	1	1.835	0.009	343.9	0.3	4.26	NDg			
11062+1018	GII58AC	2013.287	1	1.815	0.013	343.7*	0.4		NDg			
11062+1018	GII58AC	2013.295	1	1.867	0.010	343.3	0.3		NDg			
11062+1018	GII58AC	2013.297	1	1.811	0.009	344.3	0.3	4.41	NDg			
11062+1018	GII58AC	2014.273	1	1.765	0.023	343.3*	0.3		NDg			
11068+2513	TDS7670	2014.333	1	2.353	0.012	178.5*	0.3					
11075+3857	HDS1585	2014.333	1	0.329	0.016	200.7*	0.9					
11078+3946	COU1749	2013.314	1	0.525	0.007	109.0*	0.7					
11080+1012	J81	2013.287	1	1.898	0.009	137.5*	0.3					
11080+2659	TDS7688	2013.276	1	0.539	0.008	193.2*	0.5					
11089+7627	HU886	2013.298	1	1.142	0.007	353.2*	0.5					
11092+2305	COU294	2013.221	1	1.335	0.007	317.5*	0.4					
11093+5157	TDS7700	2014.308	2	0.757	0.008	51.5	0.3					
11093+5157	TDS7700	2014.308	1	0.751	0.011	51.1	0.4					
11095+3805	ES1642	2013.314	1	1.249	0.007	45.1*	0.3					
11098+1009	A2775	2013.287	1	0.575	0.007	302.0*	0.7					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ ($^\circ$)
11100+1054	J82	2014.273	1	2.217	0.011	110.8*	0.3					
11100+1443	HEI60	2013.221	1	0.402	0.007	238.2*	1.1					
11100+2138	COU176	2013.205	1	0.801	0.008	75.8*	0.3					
11104+1502	HEI61	2013.276	1	0.266	0.007	80.5*	1.6					
11106+6954	A1087	2014.343	1	0.402	0.007	79.1*	0.6					
11107+3110	HJ2562	2013.221	1	0.992	0.007	226.5*	0.3			Izm2019	-0.08	-4.2
11107+3110	HJ2562	2014.341	1	0.999	0.007	224.9*	0.3			Izm2019	-0.08	-4.7
11117+7239	HDS1594	2013.298	1	0.570	0.023	349.0*	1.4					
11125+5107	TDS622	2014.308	1	1.513	0.008	142.1*	0.3					
11126+2839	COU389	2013.221	1	0.942	0.008	167.6*	0.3					
11129+3130	HEI12	2014.248	1	2.374	0.039	119.7*	0.5					
11131+1646	COU295	2013.205	1	0.170	0.020	147.8*	1.7					
11133+3327	HO254	2014.248	1	2.662	0.020	163.4*	0.3					
11134+7737	MLR526	2013.298	1	0.713	0.007	311.2*	0.3					
11136+5525	A1353	2014.343	1	0.571	0.007	210.2*	0.3			Doc2015f	0.01	0.8
11137+2008	STF1517	2013.221	1	0.665	0.007	137.0*	0.3			FMR2015b	-0.02	0.4 ^Q
11142+4044	SHN20	2014.308	1	0.553	0.024	98.8	1.9					
11144+6732	MLR144	2014.343	1	0.120	0.050	185.1	8.0					
11152-3827	SKF1216	2013.927	1	0.813	0.007	271.3	0.3	0.85				
11152+6731	MLR145	2014.343	1	0.988	0.007	241.1*	0.3					
11158+4227	COU1904	2014.341	1	0.386	0.037	211.8	0.6					
11158+4227	COU1904	2014.341	2	0.407	0.037	211.6*	0.3					
11162+3136	A2157	2013.221	1	1.335	0.009	2.5*	0.3			Pop1996b	0.27	-54.3 ^Q
11162+3136	A2157	2014.333	1	1.344	0.009	2.4*	0.3			Pop1996b	0.27	-53.4 ^Q
11163+0915	HDS1606	2013.287	1	0.500	0.007	260.2	3.0					
11171+5003	TDS7775	2014.308	1	—	—	—	—		NR			
11171+7643	MLR325	2013.298	1	0.115	0.050	313.8*	15.1					
11171+7643	MLR325	2013.298	1	0.106	0.050	305.8	8.0					
11171+7643	MLR325	2013.298	1	0.177	0.050	297.0*	8.0					
11174+4146	A2158	2014.240	1	0.432	0.007	3.7*	0.4					
11175+7221	MLR424	2013.298	1	0.627	0.007	122.0*	0.3					
11182+1638	A2379BC	2013.221	1	0.409	0.007	107.6*	1.8					
11190+1416	STF1527	2013.205	1	0.281	0.007	221.7*	0.6			Tok2012b	-0.03	0.0
11208+2402	TDS7805AB	2013.276	1	0.841	0.007	319.5*	0.5					
11210+5048	TDS7809	2014.333	1	—	—	—	—		NR			
11214+6213	MLR146	2014.343	1	0.811	0.007	39.6*	0.3					
11215+0441	J1013	2013.287	1	0.136	0.050	282.9	8.0					
11221+3705	COU1260	2014.341	2	0.365	0.010	14.4*	0.3					
11221+3705	COU1260	2014.341	1	0.379	0.007	15.0	0.4					
11223+3912	TDS7827	2014.333	1	0.571	0.007	325.6*	0.3					
11230+0408	A2776AB	2013.205	1	0.162	0.017	235.0*	0.9			Hrt2010a	-0.01	-3.5 ^Q
11235+0701	BAG24Aa,Ab	2013.287	1	0.185	0.018	152.8	1.5					
11237+6405	HDS1620	2014.343	1	0.514	0.007	243.5	0.8					
11237+6405	HDS1620	2014.343	1	0.514	0.007	243.5*	0.3					
11250+4939	TDS7849	2014.333	1	—	—	—	—		NR			
11258+5527	MLR601	2014.343	1	1.053	0.007	55.7*	0.3					
11259+4908	KU37	2014.333	1	1.906	0.010	325.0*	0.3					
11260+1213	YSC41Aa,Ab	2013.205	1	0.353	0.013	83.9	1.4			NDp		
11260+1213	YSC41AB	2013.205	1	1.217	0.007	278.7*	0.3					
11263+1839	ZUC9	2014.333	1	—	—	—	—		NR			
11265+0806	A2575	2013.287	1	0.418	0.017	49.0*	2.6			USN2002	0.16	-16.9
11267+6654	HU1133	2013.298	1	0.814	0.007	345.8*	0.3					
11272+5459	MLR703	2014.343	1	—	—	—	—		NR			
11275+4806	TDS7864	2014.341	1	—	—	—	—		NR			
11277+4410	A1848	2014.341	1	0.576	0.007	195.3*	0.4					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
11287+3224	COU781	2013.221	1	0.621	0.012	287.7*	1.0					
11290+0105	RST5354	2013.295	1	0.834	0.007	287.1*	0.4					
11293+3025	L11	2013.221	1	1.020	0.007	280.4*	0.3			RAO2015	-0.00	-1.6
11294+2633	TDS7887	2013.276	1	—	—	—	—		NR			
11294+4206	COU1905	2013.314	1	—	—	—	—		NR			
11297+3302	COU782	2013.221	1	0.779	0.007	53.7*	0.4					
11299+6313	TDS7891	2013.298	1	0.382	0.012	158	0.3					
11299+6313	TDS7891	2014.344	1	0.368	0.007	162.0*	0.3					
11301+2237	A2484	2013.339	1	0.535	0.007	160.3*	0.3					
11308+4117	STT234	2014.240	2	0.463	0.007	176.6	0.3			Doc2009g	0.01	-1.6
11308+4117	STT234	2014.240	1	0.458	0.007	176.4*	0.5			Doc2009g	0.01	-1.8
11309+4345	YSC42	2014.308	1	—	—	—	—		NR			
11312+2732	A559Aa,Ab	2014.240	1	0.119	0.050	110.6	8.0		NDp			
11312+2732	A559AB	2014.240	1	2.401	0.018	152.7*	0.3					
11312+2732	A559AB	2014.240	1	2.390	0.022	152.5	0.3					
11314+2241	TDS7906	2013.287	1	1.878	0.044	243.2*	0.5					
11314+2241	TDS7906	2013.295	1	1.869	0.009	241.3*	0.3					
11321+1809	HDS1635	2013.221	1	—	—	—	—		NR			
11322+3615	HU1134AB	2014.240	1	0.117	0.012	115.1	3.9			Hrt2000b	0.01	-6.2 ^Q
11322+3615	HU1134AC	2014.240	1	2.951	0.015	277.8*	0.3		NDg			
11323+2527	TDS7912	2014.248	1	0.176	0.018	130.9	1.6					
11323+2527	GII83AC	2014.248	1	1.027	0.007	173.1*	0.3		NDg			
11323+2527	GII83AC	2014.250	1	1.072	0.007	172.2*	0.7		NDg			
11323+3323	ES2284	2014.341	1	3.082	0.015	76.0*	0.3					
11323+7552	TDS7911	2013.298	1	—	—	—	—		NR			
11330+0938	A2576	2013.339	1	0.547	0.016	258.6*	0.3			Sca2016a	0.00	-2.3
11334+4637	COU1751	2014.341	1	0.150	0.050	146.7*	8.0					
11336+3702	HJ502	2014.341	1	1.308	0.008	285.8*	0.3					
11338+2938	HDS1640	2014.273	1	2.116	0.011	129.0*	0.3					
11342+1101	YSC43	2013.205	1	1.122	0.007	245.7*	0.3					
11350+3348	A2159	2013.221	1	0.108	0.050	240.8*	4.0					
11350+3348	A2159	2014.308	1	0.114	0.050	269.2	8.0					
11350+3348	A2159	2014.308	1	0.142	0.026	269.0	3.5					
11352+3524	HU887	2014.341	1	1.293	0.007	304.7*	0.3					
11354+6438	MLR147	2013.298	1	0.311	0.008	120.5*	0.8					
11355+3452	HDS1644	2013.314	1	0.108	0.050	115.8	8.3					
11355+3452	HDS1644	2014.240	1	0.173	0.050	83.2	7.6					
11355+3452	HDS1644	2014.240	1	0.173	0.043	89.5	1.8					
11366+0834	HEI502	2013.339	1	0.991	0.007	331.3*	0.3					
11370+5700	HDS1646Aa,Ab	2014.343	1	0.120	0.050	124.9	8.0		NDp			
11370+5700	HDS1646AB	2014.343	1	0.612	0.007	65.1*	0.4					
11371+4040	A1996	2014.333	1	2.005	0.010	9.9*	0.3					
11372+0450	HEI852AB	2013.287	1	0.154	0.050	100.0	8.0					
11372+0450	HEI852AC	2013.585	1	0.897	0.013	65.9	0.8		NDg			
11374+4728	KU39	2014.333	1	1.198	0.007	138.7*	0.3			WSI2006b	0.28	-7.3
11378+7508	TDS7966	2013.298	1	—	—	—	—		NR			
11383-0029	RST5357	2013.295	1	0.858	0.007	216.1*	0.3					
11386+7511	MLR425	2013.298	1	1.936	0.010	247.1*	0.3					
11387+4450	TDS7974	2014.341	1	—	—	—	—		NR			
11391+3225	ES2412	2014.273	1	2.372	0.014	321.0*	0.3					
11394+0856	A2577	2013.339	1	0.199	0.048	133.3	7.5					
11395+2518	A678	2013.221	1	1.172	0.007	218.7*	0.3					
11402+2609	HDS1652	2013.276	1	0.497	0.007	267.6*	0.8					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
11404+0057	A2578Aa,Ab	2013.295	1	0.104	0.050	134.8	8.0			NDp		
11404+0057	A2578AB	2013.295	1	0.590	0.010	129.7	1.2					
11406+6219	MLR148	2014.344	1	0.463	0.007	159.1*	0.8					
11411+1536	BRT1274	2014.273	1	2.817	0.014	328.3*	0.3					
11412+2719	MLB645	2014.341	1	2.205	0.018	152.1*	0.4					
11416+7056	A74	2013.298	1	1.321	0.007	303.2*	0.3					
11417+5627	MLR552	2014.344	1	1.743	0.009	49.7*	0.3					
11421+4953	TDS8000	2014.308	1	—	—	—	—			NR		
11425+2355	COU390	2013.287	1	0.255	0.047	257.1*	1.4			Tok2016e	-0.05	-4.8 ^Q
11425+2355	COU390	2014.240	1	0.342	0.033	267.4	0.3			Tok2016e	0.02	0.4 ^Q
11426+1004	HEI503	2013.287	1	0.541	0.007	168.6*	0.3					
11428+2105	HU888	2013.221	1	0.531	0.016	177.2*	0.6					
11428+2105	HU888	2013.221	1	0.523	0.024	177.5	1.0					
11428+3837	TDS8004	2014.341	1	—	—	—	—			NR		
11430+5156	HDS1654	2014.308	1	0.298	0.020	127.1*	1.6					
11430+5156	HDS1654	2014.308	1	0.359	0.024	129.2*	1.8					
11436+1808	COU26	2014.273	1	2.597	0.013	275.0*	0.3					
11447+5340	HDS1657Aa,Ab	2014.344	1	0.131	0.050	95.9	8.0			NDp		
11447+5340	HDS1657AB	2014.344	1	1.311	0.013	98.5*	0.3					
11447+5340	HDS1657AB	2014.344	1	1.321	0.011	98.0	0.9					
11459+1122	J1017Aa,Ab	2013.339	1	0.139	0.017	130.2	3.3			NDp		
11459+1122	J1017AB	2013.339	1	0.632	0.007	147.0	0.9					
11460+0746	A2778	2013.347	1	0.437	0.009	193.3*	1.4					
11460+2843	SKF178	2014.273	1	1.999	0.032	200.6	1.6					
11463+3131	COU785	2013.221	1	0.494	0.007	278.8*	0.7					
11468+1500	BU602	2013.347	1	0.539	0.007	129.1*	0.8			Lin2019b	0.01	3.1
11473+1027	YSC94Aa,Ab	2013.287	1	0.163	0.050	136.9	8.0			NDp		
11473+1027	YSC94AB	2013.287	1	0.727	0.007	247.8*	0.6					
11475+2002	HDS1665	2013.221	1	1.001	0.007	133.4*	0.3					
11476+1514	TDS646	2013.221	1	0.739	0.007	171.6*	0.3					
11478+1254	MET57	2013.295	1	0.106	0.050	315.1	8.0					
11478+5118	TDS647	2014.333	1	—	—	—	—			NR		
11486+1417	BU603	2013.339	1	1.000	0.007	333.1*	0.3			WSI2015	-0.03	1.0
11489+3342	KU40	2014.273	1	2.936	0.015	184.7*	0.3					
11491+5036	TDS8047	2014.333	1	—	—	—	—			NR		
11499-0012	ARU9	2013.295	1	—	—	—	—			NR		
11499+3645	HDS1669	2014.240	1	0.139	0.050	92.4*	8.0					
11499+3754	COU1129	2014.273	1	0.525	0.013	121.7*	0.4					
11499+3754	COU1129	2014.273	2	0.549	0.007	121.8	0.3					
11500+3916	TDS8056	2014.308	1	—	—	—	—			NR		
11502+1301	YSC95Aa,Ab	2013.287	1	0.165	0.014	137.9	0.3			NDp		
11502+1301	YSC95AB	2013.287	1	0.509	0.012	36.6	0.9					
11510+3653	HU889	2014.333	1	0.965	0.007	295.0*	0.3					
11512+3629	TDS8069	2014.341	2	0.297	0.018	150.5*	0.3					
11512+3629	TDS8069	2014.341	1	0.311	0.007	155.3	1.1					
11512+3841	COU1130	2014.273	1	2.274	0.011	327.2*	0.3					
11515+3852	TDS8076	2014.341	1	—	—	—	—			NR		
11518+5032	HU730	2014.308	2	0.192	0.060	110.9	1.9			USN2002	0.03	8.7
11518+5032	HU730	2014.308	2	0.085	0.050	92.5	8.0			USN2002	-0.08	-9.7
11518+5032	HU730	2014.333	1	0.255	0.047	117.2	1.4			USN2002	0.09	15.1

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
11520+4805	HU731	2014.333	1	1.176	0.007	308.0*	0.3			Hrt2008	0.01	0.0
11524+1428	HDS1675	2013.339	1	—	—	—	—		NR			
11525+2243	TDS8089	2013.221	1	—	—	—	—		NR			
11537+7345	BU794	2014.344	1	0.524	0.007	62.7*	0.3			Sod1999	0.01	2.2
11539+1402	YSC96	2013.287	1	0.115	0.050	297.3	8.0					
11539+2020	HU1256AC	2013.347	1	1.433	0.016	348.1*	0.7		NDg			
11539+2020	HU1256AC	2013.347	1	1.433	0.025	347.4	0.7		NDg			
11540+2239	TDS8101	2013.295	1	—	—	—	—		NR			
11541+7155	A75	2014.344	1	0.338	0.007	25.8	1.2			Hei1996a	0.12	-5.7
11541+7155	A75	2014.344	2	0.297	0.015	24.3*	0.6			Hei1996a	0.08	-7.2
11544+1515	WOR20	2013.221	1	1.222	0.031	289.9*	0.3					
11544+1515	WOR20	2014.333	1	1.200	0.017	288.7*	1.2					
11552+1423	HU1257	2013.339	1	—	—	—	—		NR			
11552+1643	COU51Aa,Ab	2013.339	1	0.238	0.007	14.2	1.2	0.07	NDp			
11552+1643	COU51AB	2013.363	1	1.222	0.009	162.8*	0.6					
11555+7229	MLR426	2013.298	1	0.134	0.050	312.1	7.8					
11561+0059	TDS8123	2013.295	1	—	—	—	—		NR			
11561+2015	BRT2289	2013.295	1	1.542	0.008	265.6*	0.3					
11561+2906	TDS8122	2014.341	1	—	—	—	—		NR			
11568+0521	CHR220	2013.339	1	0.126	0.050	113.2*	8.0					
11569+4021	STF1586	2014.240	1	1.482	0.007	254.7*	0.3					
11571+4908	HU732	2014.333	1	1.396	0.007	356.0*	0.3					
11574+3257	TDS8140	2014.341	1	—	—	—	—		NR			
11579+2724	A561	2014.273	1	2.233	0.011	9.0*	0.3					
11581+8038	HDS1685	2013.298	1	0.287	0.020	304.2*	0.8					
11587+2636	TDS8145	2014.333	1	—	—	—	—		NR			
11588+5934	WOR21	2014.344	1	—	—	—	—		NR			
11590+3313	TDS8148	2014.341	1	—	—	—	—		NR			
11591+2643	TDS8150	2014.333	1	—	—	—	—		NR			
11598+5324	STT243	2014.344	1	1.210	0.009	8.7*	0.3					
11599+0749	TDS8156	2013.287	1	—	—	—	—		NR			
12003+2714	TDS8158	2014.324	1	—	—	—	—		NR			
12006+1820	HDS1688Aa,Ab	2013.295	1	0.112	0.050	141.5	8.0		NDp			
12006+1820	HDS1688Aa,Ab	2014.240	1	0.125	0.050	99.1	8.0		NDp			
12006+1820	HDS1688AB	2013.295	1	0.449	0.024	25.1*	3.1					
12006+1820	HDS1688AB	2014.240	1	0.449	0.015	6.9*	1.4					
12006+4337	STF1589	2014.341	1	2.215	0.011	158.6*	0.3					
12010+1719	TDS8164	2013.287	1	—	—	—	—		NR			
12014+1119	HU890	2013.339	1	1.517	0.008	68.0*	0.3					
12021+0511	TDS8183	2013.287	1	—	—	—	—		NR			
12022+2108	A2163	2013.366	1	0.691	0.007	169.5*	0.3					
12023+2047	A2164	2013.287	1	1.463	0.007	120.6*	0.3					
12026+4117	HDS1692	2014.240	1	0.103	0.050	31.0	8.0					
12032+4653	TDS8194Aa,Ab	2014.324	1	0.190	0.050	115.5	8.0		NDp			
12032+4653	TDS8194AB	2014.324	1	1.641	0.048	346.3	0.3					
12032+4653	TDS8194AB	2014.324	1	1.605	0.036	345.5	0.6					
12032+4751	VYS12Aa,Ab	2014.333	1	0.366	0.016	29.1	1.1		NDp			
12032+4751	VYS12AB	2014.333	1	2.703	0.014	180.3	0.3					
12033+2902	LDS1275	2014.273	1	—	—	—	—		NR			
12039+5003	TDS8202	2014.324	1	1.401	0.007	95.5*	0.3					
12042+2407	A682	2014.240	1	0.199	0.008	178.6*	2.4			FMR2015a	0.01	-1.0

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
12045+4648	COU1575	2014.324	1	1.393	0.007	259.7*	0.3					
12046+2232	COU92	2013.366	1	1.053	0.007	107.4*	0.3					
12047+0046	RST5363	2013.295	1	0.228	0.009	33.5*	1.6					
12050+5651	HDS1701	2014.344	1	2.097	0.024	320.7*	0.4					
12052+0824	TDS8217	2013.363	1	—	—	—	—		NR			
12054+2803	TDS8221	2014.341	1	—	—	—	—		NR			
12056+5659	A1358	2014.344	1	0.547	0.010	48.6*	0.4					
12056+6848	STF1599AB	2013.298	1	—	—	—	—		NR			
12058+2310	COU93	2013.287	1	0.891	0.007	155.9*	0.3					
12058+2310	COU93	2013.287	1	0.894	0.011	155.6*	0.4					
12060+2312	WSI103	2013.363	1	—	—	—	—		NR			
12060+6842	STF3123AB	2013.298	1	0.259	0.007	197.7*	1.0			Hrt1996a	-0.03	-3.4
12061+7022	A76	2013.298	1	1.087	0.009	292.5*	0.3					
12063+3132	TDS8223	2014.333	1	—	—	—	—		NR			
12064+1812	HDS1708Aa,Ab	2013.287	1	0.129	0.050	136.6	8.0		NDp			
12064+1812	HDS1708AB	2013.287	1	0.414	0.007	307.8*	0.3					
12068+4514	COU1576Aa,Ab	2014.333	1	0.111	0.050	116.2	8.0		NDp			
12068+4514	COU1576AB	2014.333	1	1.009	0.007	179.5*	0.3					
12068+4514	COU1576AB	2014.333	1	1.015	0.022	179.4	0.4					
12074+3913	BAR40	2014.273	1	1.418	0.007	131.2*	0.3					
12076+4813	COU1907	2014.324	1	2.901	0.015	358.4*	0.3					
12081+0308	TDS8237	2013.295	1	—	—	—	—		NR			
12083+6353	HDS1712Aa,Ab	2014.371	1	0.270	0.022	107.0	1.6		NDp			
12083+6353	HDS1712AB	2014.371	1	2.225	0.020	354.6*	0.5					
12085+1651	TDS8244	2013.295	1	—	—	—	—		NR			
12092+5013	COU2102	2014.324	1	0.392	0.007	122.8*	0.7					
12093+1525	A2056	2013.366	1	0.584	0.007	306.2*	0.4					
12101+0526	WOR22	2013.287	1	1.443	0.012	329.4*	0.6					
12122+0518	J429	2013.363	1	2.314	0.797	312.1	9.3					
12125+3940	HDS1727	2014.273	1	0.483	0.012	336.4	1.0					
12125+3940	HDS1727	2014.273	1	0.502	0.012	336.4*	0.3					
12154+4008	A1999	2014.324	1	0.107	0.050	142.8*	8.0			FMR2013d	-0.12	13.7
12156+3550	TDS8287	2014.273	1	—	—	—	—		NR			
12160+4807	HU736	2014.333	1	0.354	0.007	184.5	0.3			USN2006a	0.03	0.8
12160+4807	HU736	2014.333	2	0.357	0.007	184.5*	0.3			USN2006a	0.03	0.8
12171+0143	A2487	2013.295	1	1.875	0.011	177.3*	0.3					
12171+2241	COU179	2013.363	1	0.646	0.021	187.3*	1.1					
12175+0636	BU796	2013.295	1	—	—	—	—		NR			
12177+0002	A2582	2013.295	1	0.386	0.007	63.6*	0.5					
12185+5037	COU2103	2014.324	1	2.528	0.013	136.4*	0.3					
12189+5622	STF1630	2014.344	1	2.525	0.013	170.4*	0.3					
12197+6229	MLR151	2014.344	2	0.373	0.009	82.0*	0.7					
12197+6229	MLR151	2014.344	1	0.381	0.007	78.7	0.3					
12204+0035	RST5366	2013.295	1	0.726	0.010	1.5*	1.4					
12215+5014	HDS1741	2014.324	2	0.254	0.010	24.6*	0.6					
12215+5014	HDS1741	2014.324	1	0.213	0.032	25.5*	2.2					
12215+5014	HDS1741	2014.324	1	0.258	0.007	25.4	0.4					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
12226+1819	TDS8355	2014.273	2	0.541	0.007	81.1*	0.3					
12226+1819	TDS8355	2014.273	1	0.539	0.007	79.3*	0.5					
12228+6811	A1089	2014.344	1	0.900	0.007	288.4*	0.3					
12228+6811	A1089	2014.371	1	0.883	0.007	287.9*	0.3					
12232+3257	HDS1744	2014.333	1	0.147	0.050	274.2	8.0					
12232+3257	HDS1744	2014.333	1	0.168	0.048	274.9*	5.2					
12243+5433	A1598	2014.371	1	2.331	0.012	226.8*	0.3					
12252+1424	TDS8372	2013.363	1	—	—	—	—		NR			
12252+4655	YSC98	2014.333	1	0.111	0.050	191.6	8.0					
12264+3719	COU1424	2014.324	1	0.630	0.007	6.0*	0.5					
12275+0519	TDS8391	2013.366	1	—	—	—	—		NR			
12277+1213	TDS663	2013.363	1	—	—	—	—		NR			
12280+2158	COU53	2014.273	1	2.558	0.013	214.8*	0.3					
12284+6528	HDS1756	2014.344	1	0.200	0.050	160.3*	1.1					
12284+6528	HDS1756	2014.344	1	0.121	0.050	153.6	8.0					
12285+2953	ES436	2014.273	1	1.982	0.010	135.4*	0.3					
12286+1021	TDS8401	2013.295	1	—	—	—	—		NR			
12289+2555	BU1080BC	2014.273	1	1.450	0.007	357.4	0.3					
12290+0826	WSI113	2013.295	1	—	—	—	—		NR			
12290+0826	WSI113	2013.366	1	—	—	—	—		NR			
12306+0943	STF1647	2013.366	1	1.306	0.007	249.2*	0.5			Izm2019	0.02	1.6
12316+3201	COU966	2014.273	1	0.219	0.027	25.7*	1.1			Mnt1999c	0.09	24.4
12316+3201	COU966	2014.333	1	0.278	0.037	27.7*	1.5			Mnt1999c	0.10	26.6
12320+5853	ES1789	2014.371	1	1.689	0.008	203.5*	0.3					
12322+1648	A2060	2014.341	1	0.656	0.007	225.4*	0.8					
12322+4300	COU1577	2014.324	1	0.616	0.007	28.0*	0.3					
12322+4300	COU1577	2014.324	1	0.641	0.007	28.2*	0.3					
12329+5448	A1600Aa,Ab	2014.344	1	0.120	0.050	137.3	8.0		NDp			
12329+5448	A1600AB	2014.344	1	0.891	0.007	8.2*	0.3					
12329+5448	A1600AB	2014.344	1	0.896	0.010	7.8	0.9					
12335+0901	REU1	2013.295	1	0.759	0.011	333.9*	1.7			Sca2019b	0.03	-3.8
12349+2727	YSC99Aa,Ab	2014.273	1	0.139	0.050	130.2	8.0		NDp			
12349+2727	YSC99AB	2014.273	1	0.426	0.018	276.8*	0.7					
12358+1408	HEI159	2013.363	1	0.317	0.007	319.5*	1.6					
12362+5650	A1601Aa,Ab	2014.371	1	0.118	0.050	125.4	8.0		NDp			
12362+5650	A1601AB	2014.371	1	2.444	0.012	76.0	0.3					
12372+2112	STF1663	2014.341	1	0.637	0.007	67.8*	0.3			Zir2013a	0.00	-0.4
12374+2322	COU392	2014.273	1	2.096	0.010	337.0*	0.3					
12374+2322	COU392	2014.371	1	—	—	—	—		NR			
12376+6623	MLR152	2014.344	1	0.153	0.050	309.0	8.0					
12381+2812	TDS8463	2014.273	1	—	—	—	—		NR			
12388+4138	COU1908	2014.324	1	2.553	0.013	76.9*	0.3					
12389+1348	HDS1772	2013.295	1	0.118	0.050	146.1	8.0					
12394+1918	TDS8472	2013.363	1	—	—	—	—		NR			
12397+4737	TDS8476	2014.333	1	—	—	—	—		NR			
12400+1239	HDS1774Aa,Ab	2013.295	1	0.153	0.043	139.7	6.9		NDp			
12400+1239	HDS1774AB	2013.295	1	0.418	0.011	49.8*	0.9					
12406+1513	TDS8482	2014.273	1	—	—	—	—		NR			
12406+5629	MLB169	2014.371	1	1.906	0.010	309.5*	0.3					
12409+2708	COU596	2014.273	1	0.173	0.015	197.2	6.4			Doc2013a	-0.01	-3.6
12409+2708	COU596	2014.273	2	0.130	0.071	197.1*	8.0			Doc2013a	-0.05	-3.7
12418+2943	COU967	2014.341	1	1.066	0.021	3.5*	0.5					
12422+1431	HU892	2013.363	1	0.613	0.013	184.6*	0.3					
12422+1431	HU892	2013.363	1	0.619	0.007	184.6	0.8					
12422+2622	A1851	2014.333	2	0.316	0.007	28.6*	0.3			Hei1998	0.01	-0.4
12422+2622	A1851	2014.333	1	0.300	0.007	28.2*	0.4			Hei1998	-0.01	-0.8

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
12433+3333	TDS8499Aa,Ab	2014.324	1	0.111	0.050	93.8	8.0		NDp			
12433+3333	TDS8499AB	2014.324	1	0.518	0.010	31.7*	2.9					
12449+4326	A1783	2014.325	1	1.819	0.009	214.2*	0.3					
12451+6438	HDS1786Aa,Ab	2014.371	1	0.158	0.024	104.0	1.2		NDp			
12451+6438	HDS1786AB	2014.371	1	0.437	0.015	239.9*	1.2					
12454+0331	J432	2013.295	1	1.170	0.007	247.9*	0.3					
12465+4054	HDS1792	2014.333	1	—	—	—	—		NR			
12473+3357	AG181	2014.341	1	2.210	0.011	341.2*	0.3					
12480+3420	AG182	2014.341	1	2.356	0.012	190.5*	0.3					
12481+3940	TDS8528	2014.341	1	0.979	0.028	117.5*	1.0					
12486+2446	COU395	2014.325	1	2.186	0.011	70.3*	0.3					
12487+6019	YSC46	2014.371	1	0.762	0.050	284.6	0.6					
12487+7209	MLR327	2014.344	1	0.177	0.019	287.5*	1.3					
12490+3556	COU1426	2014.325	1	1.118	0.024	203.2*	1.4					
12507+2032	HU640	2013.363	1	0.449	0.007	57.8*	1.1		Hrt2014b		0.03	-0.5 ^Q
12508+0806	HDS1803	2013.295	1	0.132	0.050	49.8*	8.0		Tok2018e		-0.07	-8.4
12510+5959	HU1140	2014.344	1	0.635	0.007	259.9*	0.3					
12516+0911	HEI771	2013.295	1	1.241	0.016	247.4*	1.0					
12519+2647	HDS1805	2014.333	1	0.497	0.008	184.1*	0.6					
12524+5017	COU2188	2014.325	1	0.300	0.009	45.7*	0.9					
12526+2342	COU396AB	2013.363	1	0.890	0.007	316.0*	0.4					
12533+4246	COU1579	2014.325	2	0.236	0.010	141.2*	0.4		Doc2013a		0.01	1.3
12533+4246	COU1579	2014.325	1	0.252	0.007	141.3*	0.7		Doc2013a		0.02	1.4
12542+1119	HDS1810	2013.295	1	0.375	0.007	331.2*	0.5					
12544+4251	TDS8577	2014.333	1	—	—	—	—		NR			
12550+4236	COU1580	2014.333	1	0.442	0.007	288.1*	0.3					
12554+6953	A1092	2014.344	1	0.333	0.007	169.4*	0.3		Baz1959		0.08	-4.2
12556+5706	MLR553	2014.344	1	0.500	0.007	184.7*	0.3					
12561+2011	TDS8597	2013.363	1	—	—	—	—		NR			
12563+4300	A2000	2014.325	1	1.018	0.007	48.1*	0.3					
12569+5744	MLR500AB	2014.344	1	0.106	0.050	254.0*	1.4					
12575+2457	COU397	2014.325	1	0.705	0.007	59.4*	0.3					
12576+3248	COU969	2014.333	1	0.757	0.007	67.3*	0.3					
12579+4948	HU641	2014.333	1	—	—	—	—		NR			
12584+4033	HDS1819	2014.325	1	—	—	—	—		NR			
12586+4951	HEI163	2014.341	1	0.989	0.007	235.0*	0.3					
13004+3545	HU1141	2014.333	1	0.486	0.007	344.6*	0.3					
13006+1822	BU112	2014.341	1	2.113	0.011	298.6*	0.3					
13007+5622	BU1082	2014.371	1	0.883	0.007	293.8*	0.4		Dru2014		0.02	-2.1 ^Q
13008+1223	BEU16	2013.295	1	—	—	—	—		NR			
13013+1748	COU297	2013.363	1	0.252	0.007	188.4	0.9					
13018+6746	MLR153Aa,Ab	2014.371	1	0.153	0.021	111.5	2.4		NDp			
13018+6746	MLR153AB	2014.371	1	1.631	0.038	236.7	1.3					
13025+1533	BAR6	2014.341	1	2.998	0.015	42.0*	0.3					
13026+2318	COU95	2013.363	1	0.703	0.007	286.1*	0.5					
13032+2836	COU399	2014.341	1	0.592	0.009	303.8*	0.4					
13041+5227	MLR704	2014.344	1	0.421	0.007	39.3*	0.8					
13042+5615	MLR554	2014.344	1	0.598	0.007	144.6*	0.3					
13047+0927	HDS1829	2013.363	1	0.330	0.010	165.1*	0.5					
13048+5555	WOR23	2014.344	1	1.987	0.010	161.7*	0.3		Izm2019		0.50	-1.4
13048+7302	BU799	2014.371	1	1.359	0.007	266.7*	0.3		Izm2019		-0.01	0.2
13050+6436	HU1258	2014.344	1	0.248	0.011	114.7*	1.1					
13051+6246	MLB351	2014.371	1	2.602	0.013	163.5	0.3					
13053+6052	MLR154	2014.344	1	3.191	0.016	211.5*	0.3					
13055+3708	HDS1830	2014.333	1	0.475	0.010	152.1*	1.2					
13055+5059	HU643	2014.325	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(O-C)$ (")	$\Delta\theta(O-C)$ (°)
13062+1621	HEI370	2013.363	1	1.004	0.008	286.6*	0.3					
13062+2902	HJ2638A,BC	2014.333	1	6.024	0.030	222.0	0.3					
13062+2902	BU1083BC	2014.333	1	0.396	0.007	251.9*	0.3	0.18				
13063+2044	HU739	2013.363	1	1.500	0.010	201.2*	0.3			Izm2019	-0.02	-0.7
13064+1156	HU1143	2013.295	1	1.072	0.007	91.3*	0.3					
13064+2217	WSI104AB	2013.363	1	0.102	0.050	162.6	8.0					
13064+2217	WSI104AC	2013.645	1	0.460	0.007	38.0	0.3		NDg			
13068+4022	A2062	2014.341	1	0.653	0.007	300.4*	0.3					
13079+0120	BRF3	2013.295	1	1.210	0.007	27.8*	0.3					
13081+2657	STT260	2014.341	1	0.311	0.017	216.9	0.7			Zir2008	-0.02	-37.9 ^Q
13097+4418	COU1909	2014.341	1	0.663	0.007	252.2*	0.3					
13097+6630	MLR155	2014.344	1	1.527	0.008	119.2*	0.3					
13099+6521	MLR156	2014.344	1	1.753	0.009	106.3*	0.3					
13103+6410	MLR157	2014.344	1	0.165	0.050	193.4*	8.0					
13105+1103	HDS1842	2013.363	1	0.570	0.010	141.0*	0.3					
13119+2312	HDS1847	2014.341	1	—	—	—	—		NR			
13120+4703	COU2106	2014.325	1	0.195	0.064	274.4*	1.7					
13125+2050	COU55	2014.325	1	2.252	0.022	127.1*	0.3					
13126+5827	BU1434BC	2014.371	1	2.102	0.011	286.5*	0.3					
13128+6214	MLR158	2014.371	1	1.027	0.007	42.0*	0.3					
13138+4306	ES1249	2014.341	1	2.203	0.011	211.4*	0.3					
13143+1320	LAW2	2013.363	1	—	—	—	—		NR			
13151+1324	TDS8750	2013.363	1	3.165	0.016	218.2*	0.3					
13162+7407	MLR330	2014.344	1	0.133	0.050	281.4*	8.0					
13180+7010	MLR159	2014.371	1	2.529	0.013	199.1*	0.3					
13202+1534	HDS1870	2014.404	1	0.838	0.008	268.8*	0.4					
13213+3945	ES1546	2014.341	1	3.027	0.015	221.4*	0.3					
13214+2435	HEI772	2014.341	1	2.779	0.014	147.7*	0.3					
13216+1717	COU56AB	2013.364	1	0.259	0.017	9.5*	6.4					
13216+1717	COU56AB	2014.325	2	0.240	0.023	20.3*	1.8					
13216+1717	COU56AB	2014.325	1	0.280	0.007	17.5*	0.6					
13216+1717	COU56AB	2014.333	1	0.244	0.017	23.2	6.5					
13216+1717	COU56AB	2014.333	1	0.266	0.007	19.0	1.1					
13216+1717	COU56AB	2014.333	2	0.245	0.015	21.3	0.9					
13225+4242	COU1581	2014.404	1	0.351	0.007	158.0*	0.6					
13229+6546	MLR529	2014.344	1	0.140	0.050	136.9	8.0					
13229+6546	MLR529	2014.344	1	0.143	0.047	132.5	8.0					
13234+5754	HDS1879	2014.371	1	—	—	—	—		NR			
13238+3831	HU1259	2014.325	1	—	—	—	—		NR			
13238+3831	HU1259	2014.341	1	—	—	—	—		NR			
13249+0708	TDS8816	2013.364	1	0.857	0.007	335.0*	0.4					
13268+5043	COU2190	2014.325	1	0.431	0.010	217.4*	1.4					
13268+5043	COU2190	2014.325	1	0.416	0.018	217.4	1.7					
13268+5043	COU2190	2014.325	1	0.458	0.014	218.2	1.1					
13276+2116	TOK46AB	2014.333	1	0.131	0.050	161.2	8.0					
13276+2116	TOK46AB	2014.333	1	0.169	0.050	178.3	8.0					
13276+2116	TOK46AB	2013.339	1	0.182	0.050	169.2	8.0					
13276+2116	GII60AC	2013.339	1	2.855	0.023	127.4*	0.3		NDg			
13276+2116	GII60AC	2014.333	1	2.920	0.015	127.9	0.3		NDg			
13276+2116	GII60AC	2014.333	1	2.895	0.014	128.0	0.3		NDg			
13284+1543	STT266	2013.418	1	2.015	0.010	357.1*	0.3			Izm2019	0.02	-0.2
13284+3643	COU1428	2013.429	1	0.387	0.007	65.6*	2.0					
13284+3643	COU1428	2014.326	2	0.374	0.015	70.8	1.4					
13284+3643	COU1428	2014.326	1	0.382	0.017	70.1	0.7					
13284+3643	COU1428	2014.333	1	0.389	0.008	71.6	1.1					
13289+6423	MLR160	2014.344	1	0.438	0.007	216.3*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
13292+0746	TDS8846Aa,Ab	2013.339	1	0.118	0.007	124.0	0.7		NDp			
13292+0746	TDS8846AB	2013.339	1	0.440	0.007	45.7*	0.8					
13293+4847	COU1914	2014.333	1	0.498	0.007	182.9*	0.8					
13305+0729	A1789	2013.339	1	0.199	0.007	344.1*	0.9			Doc2020d	0.01	-6.5 ^Q
13315+5725	MLR555	2014.344	1	0.556	0.007	169.7*	0.5					
13320+3108	WOR24	2014.333	1	0.367	0.007	48.9*	0.5			Doc2000b	-0.01	1.7
13326+6520	MLR161	2014.371	1	1.132	0.007	315.8*	0.3					
13328+1649	VYS6	2014.333	1	2.773	0.014	53.3*	0.3			Hei1990d	-0.00	0.9
13331+4316	COU1754	2014.404	1	0.260	0.024	162.7*	1.7					
13331+7303	HDS1900	2014.371	1	0.200	0.024	78.5*	3.5					
13333+4526	A1610	2014.333	1	0.952	0.007	267.8*	0.3					
13334+0919	HDS1902	2013.339	1	0.145	0.050	313.1	4.0					
13334+5108	COU2386	2014.412	1	1.166	0.007	199.9*	0.3					
13338+1339	HEI164	2013.339	1	0.563	0.011	103.6*	0.9					
13342+1516	KU45	2014.333	1	0.445	0.007	288.3*	0.3					
13348+6515	MLR162Aa,Ab	2014.344	1	0.141	0.015	140.6	1.4		NDp			
13348+6515	MLR162AB	2014.344	1	2.375	0.014	303.4*	0.3					
13353+1749	COU57	2013.339	1	0.790	0.007	308.9*	0.3					
13377+5028	BU934	2014.412	1	1.251	0.007	263.4*	0.3					
13378+2819	HJ3341	2014.412	1	2.360	0.012	190.7*	0.3					
13383+2930	HDS1913	2014.333	1	2.412	0.012	139.4*	0.3					
13384+6758	MLR163	2014.344	1	—	—	—	—		NR			
13387+3823	COU1429Aa,Ab	2014.404	1	0.120	0.050	132.5	8.0		NDp			
13387+3823	COU1429AB	2014.404	1	0.663	0.007	63.4*	0.7					
13387+3823	COU1429AB	2014.404	1	0.655	0.010	64.3	0.9					
13387+4126	COU1584Ba,Bb	2014.333	1	0.586	0.008	109.5*	1.0					
13396+1045	BU612AB	2013.364	1	0.274	0.010	237.6	0.8					
13433+4023	COU1431	2014.393	1	1.134	0.007	343.9*	0.3					
13439+3133	ES309	2014.412	1	1.668	0.008	143.9*	0.3					
13442+5921	HU1261	2014.344	1	1.055	0.007	101.2*	0.3					
13446+3224	COU788	2013.418	1	1.678	0.010	298.0*	0.3					
13446+5142	KUI64	2014.404	1	0.542	0.035	49.7*	2.3					
13446+7338	MLR331	2014.344	1	0.469	0.007	23.7*	0.3					
13457+2231	YSC49	2013.339	1	0.159	0.030	124.5*	1.7					
13465+1545	A2063	2013.339	1	0.199	0.007	136.7*	0.4					
13477+2128	HDS1939Aa,Ab	2013.339	1	0.197	0.011	122.5	1.0		NDp			
13477+2128	HDS1939AB	2013.339	1	1.293	0.007	149.1*	0.3					
13477+2128	HDS1939AB	2013.339	1	1.306	0.012	150.6	0.6					
13482+2248	COU401	2013.339	1	0.145	0.050	134.9	8.0			Doc2010h	-0.09	-28.6 ^Q
13488+2753	HDS1942Aa,Ab	2014.412	1	0.152	0.050	137.6	8.0		NDp			
13488+2753	HDS1942AB	2014.412	1	0.619	0.007	103.0*	0.3					
13488+2753	HDS1942AB	2014.412	1	0.607	0.016	103.1	1.3					
13491+2659	STF1785	2014.412	1	2.975	0.015	185.1*	0.3			Izm2019	0.00	0.5
13493+3140	COU601	2014.412	1	1.337	0.015	301.2	0.3					
13499+7458	MLR332	2014.344	1	0.527	0.007	244.6*	0.3					
13509+3555	COU1132	2014.428	1	0.779	0.007	147.9*	0.4					
13512+2948	A685	2013.432	1	0.771	0.007	22.5*	0.4					
13512+2948	A685	2014.431	1	0.776	0.007	21.2*	0.3					
13514+2620	YSC50Aa,Ab	2013.429	1	0.311	0.011	215.4*	1.1					
13514+2620	YSC50Aa,Ab	2013.432	1	0.308	0.007	212.0*	0.4					
13514+2620	YSC50Aa,Ab	2014.404	1	0.249	0.013	217.6*	1.5					
13514+2620	SKF260AB	2013.432	1	2.959	0.273	1.9*	0.6					
13514+3441	BU613	2014.434	1	0.807	0.007	328.8*	0.3					
13518+3649	COU1133	2014.431	1	0.177	0.050	339.9*	1.3					
13525+2544	A568	2014.428	1	2.576	0.013	321.4*	0.3					
13537+4104	POP153	2014.393	1	1.032	0.007	168.0*	0.5					
13539+1008	BU614AB	2013.364	1	0.432	0.018	102.0*	0.7					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
13542+0802	TDS9025	2013.364	1	1.457	0.030	182.0*	0.9					
13544+2955	STT272Aa,Ab	2013.413	1	0.131	0.050	139.7	8.0		NDp			
13544+2955	STT272AB	2013.413	1	1.377	0.015	356.6*	0.7					
13553+3328	ES2474	2014.428	1	2.889	0.014	331.1*	0.3					
13553+5716	MLR556	2014.371	1	1.317	0.022	337.6*	0.4					
13563+0517	STT273	2013.366	1	0.993	0.007	112.4*	0.4					
13571+3426	BU937	2014.412	1	1.055	0.007	135.6*	0.3					
13578+0610	YSC51	2013.366	1	0.234	0.018	142.6*	2.2					
13587+1711	COU58	2014.393	1	1.381	0.010	2.5*	0.3					
13593+1238	TDS9057	2013.366	1	—	—	—	—		NR			
13593+3042	COU602	2013.429	1	0.417	0.011	305.9*	1.1					
13593+3042	COU602	2014.404	1	0.410	0.007	306.0*	1.3					
13593+3042	COU602	2014.404	1	0.411	0.007	304.7	0.5					
13599+2810	HDS1964	2013.429	1	1.261	0.007	309.7*	0.4					
13599+2810	HDS1964	2013.432	1	1.227	0.011	309.3*	0.3					
14001+0416	HDS1965	2013.366	1	0.135	0.050	315.4*	8.0					
14002+2826	A687	2013.413	1	1.187	0.007	132.1*	0.3					
14006+4741	HEI4	2014.412	1	2.438	0.061	185.3*	0.9					
14012+2522	A569	2014.431	1	0.578	0.007	148.3*	0.3					
14017+3759	COU1433	2014.393	1	0.527	0.022	120.0	1.1					
14019+1530	ALD112	2013.432	1	1.630	0.008	164.3*	0.3			Izm2019	0.01	0.2 ^Q
14019+3349	COU971	2014.404	1	2.704	0.032	25.6*	0.7					
14020+5713	A1097	2014.371	1	0.397	0.017	261.4*	0.8			Sca2000a	-0.03	7.2
14024+1232	HEI525	2013.366	1	0.151	0.019	351.8*	1.2					
14025+6706	HU1148	2014.371	1	0.256	0.014	145.7*	2.0					
14028+1417	HEI65	2013.418	1	0.280	0.007	95.6*	0.3					
14028+1417	HEI65	2013.432	1	0.314	0.007	95.0*	0.5					
14029+2434	COU301Aa,Ab	2014.393	1	0.172	0.012	113.1	3.2	0.18	NDp			
14029+2434	COU301AB	2013.413	1	0.849	0.009	123.8*	0.3					
14029+2434	COU301AB	2014.393	1	0.825	0.017	124.3	0.5					
14034+2409	COU302AB	2014.434	1	0.858	0.007	175.2*	0.4					
14037+1914	LDS5806	2014.428	1	2.080	0.010	296.4	0.3					
14037+1914	LDS5806	2014.428	1	2.003	0.010	298.5*	0.3					
14040+4314	A1615	2014.434	1	0.541	0.009	2.9*	0.3					
14042+2046	J1128	2013.418	1	0.410	0.007	172.2*	0.5					
14043+4507	ES1156	2014.412	1	2.617	0.013	81.0*	0.3					
14048+3243	COU603	2013.413	1	0.697	0.007	56.0*	0.4					
14049+2916	COU604	2013.429	1	0.641	0.007	329.9*	0.3					
14055+6734	MLR165	2014.437	1	1.895	0.009	19.9*	0.3					
14059-7354	HEI526	2013.067	1	2.415	0.012	111.2*	0.3					
14059+3848	HU1263	2014.404	1	0.283	0.039	195.3	1.3					
14065+1724	COU2506	2014.393	1	2.146	0.011	335.6*	0.3					
14075+1115	HEI527	2013.366	1	1.779	0.013	307.8*	0.3					
14080+4535	FOX70	2014.428	1	1.807	0.009	223.4*	0.3					
14082+3645	STT276	2014.404	1	0.438	0.007	208.6*	0.3					
14087+3341	HU742	2013.432	1	0.263	0.039	346.0*	1.2			FMR2012h	-0.04	5.1
14087+3341	HU742	2014.404	2	0.327	0.037	339.6*	0.5			FMR2012h	0.01	1.2
14104+3932	HDS1986	2014.428	2	0.935	0.009	47.0	0.3					
14104+3932	HDS1986	2014.434	1	0.908	0.007	47.8*	0.3					
14105+4823	COU2108	2014.404	2	0.547	0.007	322.1*	0.3					
14105+4823	COU2108	2014.434	1	0.549	0.007	322.3*	0.5					
14106+0528	HDS1987	2013.366	1	0.919	0.007	262.6*	0.3					
14109+1513	HDS1989	2013.366	1	0.439	0.007	346.8*	0.5					
14109+1513	HDS1989	2014.393	1	0.357	0.007	353.3*	0.4					
14113+3013	COU605AB	2013.429	1	0.246	0.041	341.3*	1.1					
14113+3013	COU605AC	2013.451	2	2.025	0.046	126.1	0.5		NDg			

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
14116+2802	STF1810	2014.412	1	2.344	0.012	184.1*	0.3					
14122+2722	J1125	2014.404	1	0.682	0.007	95.8*	0.3					
14124+2843	STT277	2013.429	1	0.151	0.050	36.6*	8.0			Ole2002d	0.10	4.3 ^Q
14127+2233	HDS1993	2013.429	1	0.154	0.022	202.9*	4.6					
14127+2349	YSC53Aa,Ab	2013.366	1	0.141	0.050	136.9	0.4		NDp			
14127+2349	YSC53Aa,Ab	2013.366	1	0.227	0.041	134.8	3.9		NDp			
14127+2349	YSC53Aa,Ab	2014.393	1	0.187	0.012	107.6	4.7		NDp			
14127+2349	YSC53Aa,Ab	2014.393	1	0.187	0.009	103.9	5.1		NDp			
14127+2349	YSC53AB	2013.366	1	1.153	0.020	130.8	0.3					
14127+2349	YSC53AB	2014.393	1	1.111	0.026	129.5	0.5					
14127+2547	COU480	2014.393	1	2.071	0.010	72.7*	0.3					
14131+5520	STF1820	2014.371	1	2.720	0.014	121.8*	0.3			Izm2019	-0.04	-0.3
14131+6101	HU1265	2014.437	1	0.728	0.007	308.8*	0.3					
14133+5813	MLR531	2014.371	1	0.887	0.024	221.0*	1.3					
14136+5522	HDS1995	2014.371	1	0.218	0.023	136.0*	2.7					
14138+1720	YSC54	2013.429	1	0.912	0.007	359.6*	0.5					
14138+3059	COU606	2013.413	1	0.170	0.007	339.4*	1.6			Doc2018a	0.06	-14.0 ^Q
14138+3059	COU606	2014.404	1	0.163	0.017	336.3	2.7			Doc2018a	0.06	7.3 ^Q
14140+3720	COU1434	2014.404	1	0.526	0.012	285.0*	0.3					
14142+2642	STF1817	2013.429	1	0.107	0.050	322.2	8.0			Zir2014a	-0.13	-13.4
14142+6910	MLR167	2014.371	1	0.324	0.027	301.8*	4.3					
14144+3412	ES2416	2014.412	1	1.914	0.010	11.7*	0.3					
14156+3941	HDS2002Aa,Ab	2013.413	1	0.113	0.050	142.9	8.0		NDp			
14156+3941	HDS2002AB	2013.413	1	0.579	0.010	101.7*	0.8					
14160+5247	A1616	2014.371	1	1.638	0.008	84.4*	0.3					
14164+2539	HDS2006	2013.432	1	0.697	0.007	247.6*	0.8					
14165+3334	HU1266	2013.413	1	0.209	0.007	157.1	1.3			Doc2012e	-0.03	5.5
14165+3334	HU1266	2014.434	2	0.250	0.007	159.3	0.7			Doc2012e	0.02	4.5
14167+4055	COU1756	2014.428	1	1.041	0.007	41.9*	0.3					
14169+3141	TDS9151	2013.432	1	0.138	0.050	219.4	8.0					
14171+4529	A1617	2014.404	1	0.475	0.014	280.7*	1.2					
14171+5433	BU1271Aa,Ab	2014.437	1	0.110	0.050	121.8	8.0		NDp			
14171+5433	BU1271AB	2014.437	1	1.709	0.009	354.1	0.5					
14174+3245	VYS13	2014.412	1	2.649	0.013	122.4*	0.3					
14178+4845	BU1272Aa,Ab	2014.428	1	0.148	0.013	114.5	3.8		NDp			
14178+4845	HJ2710AB	2014.428	1	1.160	0.027	7.6	2.3		NDg			
14178+4845	HJ2710AB	2014.428	1	1.160	0.011	8.5	1.0		NDg			
14178+4845	BU1272AB	2014.428	1	1.361	0.007	137.3*	0.3					
14178+4845	BU1272AB	2014.428	1	1.356	0.027	137.7*	1.3					
14179+6914	A1102	2014.371	1	0.448	0.007	78.2*	0.7			Msn2017a	-0.02	-3.3
14184+3412	HU901	2014.434	1	0.621	0.007	35.7*	0.3					
14185+0917	HDS2015	2013.366	1	0.445	0.010	331.7*	0.5					
14185+4755	BU1273	2014.442	1	1.309	0.007	176.8*	0.3					
14187+6409	MLR168	2014.437	1	0.283	0.009	88.3	0.7					
14187+6409	MLR168	2014.437	1	0.230	0.009	85.6*	2.8					
14204+5141	ES19	2014.412	1	1.746	0.009	48.0*	0.3					
14208+4617	COU2194	2014.404	1	0.116	0.050	79.2	8.0					
14211+6748	HDS2019	2014.437	1	1.235	0.007	206.0	0.3					
14213+3050	COU482	2013.432	1	0.638	0.007	121.0*	0.6					
14216+1315	HEI531	2013.451	2	1.337	0.018	103.4*	0.3					
14220+5107	A148	2014.442	1	0.527	0.007	190.2*	0.8					
14229+4307	BRT115	2014.434	1	2.060	0.010	51.5*	0.3					
14236+2009	COU184	2014.445	1	0.939	0.007	292.0*	0.5					
14237+6103	HU1150	2014.371	1	1.414	0.007	256.5*	0.3					
14241+4331	COU1916	2013.413	1	0.755	0.007	268.2*	0.3					
14244+1813	COU62	2014.393	1	2.418	0.012	201.6*	0.3					
14244+1813	COU62	2014.412	1	2.422	0.012	201.4*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
14249+3730	HDS2029	2014.404	1	0.141	0.029	283.8*	2.0					
14262+2154	HDS2032	2013.429	1	0.156	0.050	221.6	8.0					
14267+1625	A2069	2013.432	1	0.095	0.015	147.1	8.0			Sca2001g	-0.02	29.6
14267+1625	A2069	2014.434	1	0.112	0.050	131.6	8.0			Sca2001g	-0.01	28.0
14269+5602	HDS2037AB	2014.371	1	0.189	0.043	132.4*	7.0					
14269+5602	HDS2037AC	2014.404	1	1.807	0.017	14.0	0.4		NDg			
14271+4105	A1619	2014.428	1	2.162	0.011	60.8*	0.3					
14273+3038	A1105	2014.445	1	1.103	0.007	176.6*	0.3					
14276+2037	HO542	2013.448	2	0.992	0.012	148.6*	0.3					
14277+2842	TDS750Aa,Ab	2013.413	1	0.134	0.050	135.4	8.0		NDp			
14277+2842	TDS750AB	2013.413	1	1.082	0.007	299.2*	0.3					
14277+2842	TDS750AB	2013.413	1	1.071	0.011	298.2	0.6					
14277+5820	HDS2039	2014.437	1	0.706	0.007	112.8*	0.3					
14277+6453	MLR169	2014.371	1	2.173	0.011	216.7*	0.3					
14286+1818	COU2508	2013.429	1	0.482	0.007	246.2*	1.0					
14288+5430	A1620	2014.371	1	1.336	0.007	227.4*	0.4					
14289+4226	COU1758	2014.393	1	0.522	0.007	148.6*	0.4					
14290+5341	A1621Aa,Ab	2014.371	1	0.145	0.050	131.5	8.0		NDp			
14290+5341	A1621AB	2014.371	1	2.768	0.018	196.1	0.3					
14291+6917	MLR170	2014.437	1	—	—	—	—		NR			
14294+1958	TDS9213	2014.445	1	1.417	0.007	9.7*	0.3					
14295+3612	HU1268	2014.404	1	0.325	0.008	341.8*	0.3			Hrt2008	0.02	5.7
14295+3759	COU1436	2014.428	1	0.939	0.007	43.3*	0.3					
14298+1550	HEI532	2013.429	1	1.736	0.010	252.4*	0.3					
14301+4737	COU2387	2014.428	1	0.404	0.007	344.0*	0.5					
14303+4709	COU1917	2014.393	1	0.451	0.007	220.7*	0.6					
14305+2055	COU97	2014.404	1	0.269	0.015	252.5*	1.4					
14311+2801	COU404Aa,Ab	2014.420	1	0.170	0.050	112.2	8.0		NDp			
14311+2801	COU404AB	2014.420	1	1.334	0.007	176.9*	0.3					
14313+3955	HDS2050	2014.404	1	—	—	—	—		NR			
14314+6844	MLR171	2014.437	1	—	—	—	—		NR			
14316+3244	TDS9230	2013.429	1	0.482	0.013	177.7*	1.1					
14317+3554	COU1267	2014.434	1	0.729	0.007	240.9*	0.6					
14322+6755	MLR172	2014.437	1	1.455	0.007	234.4*	0.3					
14326+5355	MLR569	2014.437	1	0.920	0.007	209.6*	0.4					
14333+2725	A688	2013.462	1	0.772	0.007	16.0*	0.5					
14336+3535	STF1858	2014.412	1	3.050	0.015	38.1*	0.3			Izm2019	0.05	0.6
14340+4113	COU1437	2014.404	1	—	—	—	—		NR			
14340+4500	COU1587	2014.393	1	0.779	0.007	26.7*	0.6					
14345+0540	J1122	2013.451	2	1.563	0.016	83.8*	0.4					
14347+5756	HDS2058	2014.437	1	0.396	0.010	30.7*	0.3					
14353+4302	YSC55	2014.404	1	0.493	0.008	308.9*	1.2					
14354+1915	HU574	2014.445	1	0.121	0.050	117.4	8.0					
14356+1554	HEI233	2013.413	1	1.125	0.007	184.1*	0.5					
14362+0825	HEI780	2013.451	2	1.925	0.019	298.7*	0.3					
14363+1924	STF3087	2014.412	1	2.349	0.012	42.3*	0.3					
14367+2014	COU98	2013.413	1	0.173	0.050	169.4*	8.0					
14369+4813	A347	2014.393	1	0.562	0.007	58.5*	0.3			Doc2017k	0.01	-0.3 ^Q
14372+5214	MLR682	2014.437	1	0.811	0.007	291.3*	0.3					
14374+3924	TDS9249	2014.434	1	—	—	—	—		NR			
14376+2809	COU405AB	2014.420	1	0.165	0.007	325.6*	0.3	0.00				
14376+2809	COU405AC	2014.428	1	1.515	0.028	103.2*	0.3					
14376+2809	COU405AC	2014.434	1	1.509	0.017	102.4	0.8					
14376+2809	COU405AC	2014.434	1	1.517	0.028	104.2*	0.3					
14376+2809	COU405AC	2014.445	1	1.472	0.010	103.9*	0.7					
14393+2648	A571	2014.442	1	1.824	0.009	109.2*	0.3					
14397+5119	DOO9	2014.412	1	2.579	0.068	107.6*	0.6					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(O-C)$ (")	$\Delta\theta(O-C)$ (°)
14403+3331	COU789	2014.442	1	0.996	0.008	217.5*	0.9					
14405+4633	A1622Aa,Ab	2014.467	1	0.182	0.034	138.4*	6.9		NDp			
14405+4633	A1622Aa,Ab	2014.467	1	0.192	0.037	134.8	6.7	0.14	NDp			
14405+4633	A1622AB	2014.467	1	2.024	0.010	251.6*	0.3					
14405+4633	A1622AB	2014.467	1	2.025	0.013	251.5	0.4					
14411+3205	COU790	2013.429	1	1.357	0.010	308.8*	0.3					
14413+5239	A1623	2014.437	1	1.956	0.010	241.1*	0.3					
14415+4953	TDS9271	2014.412	1	2.197	0.011	21.2*	0.3					
14416+2747	COU407	2013.413	1	0.403	0.009	112.1*	1.4					
14416+5124	STF1871	2014.393	1	1.880	0.009	311.8*	0.3			Izm2019	0.00	-0.2
14419+1847	COU185	2014.420	1	0.888	0.007	304.5*	0.4					
14426+1929	HU575	2013.429	1	0.475	0.010	139.9*	0.5			Sod1999	0.00	-0.6
14426+1929	HU575	2014.429	1	0.399	0.007	131.9*	0.6			Sod1999	-0.04	-1.7
14426+3842	COU1268	2014.404	1	0.202	0.014	154.9	2.0					
14432+2246	COU99	2013.413	1	0.638	0.007	206.3*	0.5					
14441+3138	COU607	2014.412	1	0.724	0.007	315.9*	0.4					
14443+4058	COU1438	2014.420	1	0.591	0.007	200.9*	0.6					
14443+4058	COU1438	2014.429	1	0.582	0.018	202.3*	0.3					
14448+4706	COU1759Aa,Ab	2014.412	1	0.170	0.050	111.3	8.0		NDp			
14448+4706	COU1759AB	2014.412	1	2.387	0.012	92.1*	0.3					
14452+2157	HU905	2013.413	1	0.187	0.015	283.6	1.8					
14459+2344	COU100	2013.413	1	—	—	—	—		NR			
14459+2344	COU100	2014.404	1	—	—	—	—		NR			
14461+1508	YSC106	2013.429	1	—	—	—	—		NR			
14461+1508	YSC106	2013.432	1	—	—	—	—		NR			
14463+3146	HDS2080	2014.445	1	—	—	—	—		NR			
14476+3323	TDS9309	2013.432	1	—	—	—	—		NR			
14477+2406	HO263	2014.445	1	0.186	0.050	135.8	6.7					
14477+2406	HO263	2014.445	2	0.183	0.027	132.9	0.3	2.09				
14481+6636	HU1152	2014.437	1	1.036	0.008	48.4*	0.3					
14485+2445	COU304	2014.393	1	0.421	0.029	296.7*	2.3					
14491+0756	HDS2089	2013.451	2	0.930	0.016	193.9*	0.3					
14492+4814	HU647	2014.429	1	0.162	0.050	279.0*	8.0					
14494+6733	MLR173	2014.437	1	0.314	0.027	327.5*	2.9					
14499+3200	COU608	2013.454	1	1.740	0.009	202.0*	0.3					
14504+2315	TDS9321	2013.462	1	—	—	—	—		NR			
14504+6751	MLR174	2014.437	1	1.371	0.007	292.8*	0.3					
14506+4326	HDS2094	2014.404	1	0.420	0.015	28.3*	2.7					
14513+3729	TDS9324	2014.434	1	—	—	—	—		NR			
14515+4456	STT287	2014.412	1	0.640	0.007	2.0*	0.3			Hei1997	-0.09	1.6
14521+4629	HDS2097	2014.404	1	0.475	0.007	45.5*	0.6					
14523+4437	TDS9330	2014.434	1	—	—	—	—		NR			
14525+1844	BU31AB	2013.448	2	2.000	0.020	220.8*	0.3			Hrt2014a	0.00	0.1
14531+6534	MLR175	2014.437	1	0.224	0.030	195.5	2.8					
14533+2204	TDS9335	2014.445	1	—	—	—	—		NR			
14540+2335	REU2	2013.413	1	1.004	0.007	93.3*	0.4			Msn2018a	-0.00	-0.7
14540+2335	REU2	2013.418	1	1.014	0.014	92.3*	0.6			Msn2018a	0.01	-1.6
14540+2335	REU2	2014.393	1	0.933	0.024	92.6*	0.8			Msn2018a	-0.03	0.6
14546+2252	COU408Aa,Ab	2013.448	2	0.267	0.463	95.9	4.8		NDp			
14546+2252	COU408AB	2013.452	1	1.897	0.009	173.8	0.3	3.04				
14546+2252	COU408AB	2013.463	1	1.809	0.009	174.2	0.3	3.71				
14548+1535	HEI234	2014.420	1	1.269	0.007	321.3*	0.3					
14548+2411	COU409	2013.432	1	0.473	0.007	214.5*	1.1					
14549+1648	TDS9340	2014.445	1	—	—	—	—		NR			
14553+6914	HDS2105Aa,Ab	2014.437	1	0.129	0.050	136.4	8.0					
14553+6914	HDS2105AB	2014.437	1	1.745	0.009	152.3	0.3					
14553+6914	HDS2105AB	2014.437	1	1.776	0.012	152.5	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
14558+3939	A1627	2014.393	1	0.303	0.089	20.7*	6.2			Baz1993a	0.07	6.7 ^Q
14562+1704	COU187	2013.462	1	2.035	0.037	227.0*	0.5					
14562+1745	HDS2108AB	2013.448	2	—	—	—	—		NR			
14562+1745	HDS2108AB	2014.410	1	—	—	—	—		NR			
14562+1745	HDS2108AB	2014.762	1	—	—	—	—		NR			
14562+1745	GII61AC	2013.429	1	1.824	0.010	195.0*	0.3		NDg			
14562+1745	GII61AC	2013.432	1	1.851	0.009	196.6*	0.5		NDg			
14562+1745	GII61AC	2013.432	1	1.840	0.022	195.4	0.9					
14562+1745	GII61AC	2013.451	1	1.741	0.009	195.9	0.3	4.23	NDg			
14562+1745	GII61AC	2013.454	1	1.717	0.009	196.6*	0.5		NDg			
14562+1745	GII61AC	2013.456	1	1.704	0.009	194.2	0.3	4.02	NDg			
14562+1745	GII61AC	2014.404	1	1.793	0.009	194.9*	0.3		NDg			
14562+1745	GII61AC	2014.913	1	1.849	0.009	194.2	0.3					
14565+1706	YSC7	2014.412	1	0.441	0.007	349.4*	0.6					
14571+5136	TDS9350	2014.420	1	0.902	0.007	303.0*	0.3					
14573+5832	HDS2111Aa,Ab	2014.437	1	0.104	0.016	116.5	5.8		NDp			
14573+5832	HDS2111AB	2014.437	1	0.349	0.029	273.2*	0.6					
14575+3124	HDS2112	2013.448	2	0.802	0.012	336.7*	0.6					
14579+3130	ES2475	2014.445	1	2.797	0.014	222.1*	0.3					
14584+1508	OL187	2014.467	1	1.756	0.009	81.4*	0.3					
14589+2238	HU906	2014.429	1	0.788	0.007	15.7*	0.3					
14590+1732	A2072	2014.420	1	0.692	0.007	236.0*	0.4					
14593+6035	MLR46	2014.437	1	1.613	0.008	293.2*	0.3					
14595+1753	COU188	2013.429	1	0.258	0.007	227.8*	0.6					
14595+1753	COU188	2014.434	2	0.258	0.009	228.5*	1.0					
14595+3657	COU1269	2014.404	1	—	—	—	—		NR			
14597+1459	SKF239	2013.418	1	1.495	0.021	158.2*	0.9					
15002+2129	HU907	2014.393	2	0.190	0.037	284.3*	1.5			Lin2019d	-0.00	-5.8
15002+2129	HU907	2013.429	1	0.164	0.033	286.5	1.1			Lin2019d	-0.03	-1.5
15004+5537	HDS2117Aa,Ab	2014.437	1	0.102	0.050	122.1	8.0		NDp			
15004+5537	HDS2117AB	2014.437	1	0.698	0.007	167.5*	0.3					
15004+5537	HDS2117AB	2014.437	1	0.719	0.007	166.1	0.4					
15005+3741	COU1270	2014.412	1	0.498	0.017	235.0*	0.5					
15009+4526	HDS2118Aa,Ab	2014.434	1	0.117	0.050	108.3	8.0		NDp			
15009+4526	HDS2118AB	2014.434	1	1.962	0.010	166.6*	0.3					
15009+4526	HDS2118AB	2014.434	1	1.967	0.010	166.7	0.3					
15009+5745	MLR602	2014.437	1	0.128	0.050	213.4	8.0					
15010+4543	HDS2119	2014.429	1	0.187	0.050	128.9*	8.0					
15027+4554	ES1086	2014.467	1	2.406	0.012	266.8*	0.3					
15034+3319	COU791	2014.429	1	1.237	0.007	17.7*	0.3					
15034+3342	TDS9384	2013.429	1	0.431	0.007	107.0*	1.5					
15038+2006	HU744	2014.420	1	0.933	0.007	352.9*	0.3					
15038+3718	TDS9391	2014.445	1	1.008	0.007	315.6*	0.3					
15038+4739	STF1909	2014.467	1	1.055	0.007	64.7*	0.3			Izm2019	-0.02	-0.6
15042+3641	HDS2124	2014.404	1	0.174	0.074	277.7*	5.1					
15056+2949	TDS9399	2014.445	1	—	—	—	—		NR			
15062+5225	HDS2126	2014.437	1	0.573	0.007	289.5*	0.5					
15069+1406	YSC56Aa,Ab	2013.429	1	0.109	0.050	149.8	8.0		NDp			
15069+1406	YSC56AB	2013.429	1	0.712	0.007	298.7*	0.9					
15070+4139	COU1439	2014.393	1	2.207	0.011	51.2*	0.3					
15075+5516	HU143	2014.437	1	0.380	0.007	315.6*	0.3					
15077+1649	HEI379	2013.451	2	—	—	—	—		NR			
15077+1649	HEI379	2014.404	1	—	—	—	—		NR			
15077+4632	COU1761	2014.412	1	1.153	0.007	266.0*	0.3					
15078+3956	COU1271	2014.393	1	0.418	0.007	194.7*	0.4			Cou1999b	0.04	-26.8
15085+5002	COU2195	2014.429	1	0.165	0.050	13.8	8.0					
15088+4014	COU1272	2014.420	1	0.235	0.015	239.9*	2.9					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
15091+3042	TDS9417	2013.429	1	—	—	—	—		NR			
15092+2809	A690Aa,Ab	2014.434	1	0.122	0.050	113.7	8.0		NDp			
15092+2809	A690AB	2013.454	1	0.227	0.018	10.7	0.6					
15100+2751	COU410	2013.429	1	0.251	0.027	155.8*	0.3					
15100+2751	COU410	2014.434	1	0.280	0.037	151.4*	1.4					
15105+4800	HDS2131	2014.393	1	0.155	0.050	134.8*	8.0					
15106+2021	HU144	2014.434	1	0.148	0.050	314.5	8.0			Tok2020g	0.06	5.8
15108+3905	HJ568	2014.467	1	—	—	—	—		NR			
15109+1749	COU64	2014.420	1	1.089	0.007	201.8*	0.3					
15111+2912	TDS9435	2013.448	2	—	—	—	—		NR			
15111+3229	COU792	2013.429	1	0.562	0.007	85.5*	1.0					
15120+1606	TDS9443	2014.445	1	—	—	—	—		NR			
15121+1859	COU189	2014.404	1	0.492	0.007	142.1*	0.8					
15126+2041	COU190	2013.462	1	1.351	0.010	271.1*	0.3					
15126+4544	MCT8	2014.412	1	0.464	0.089	224.5	7.1					
15135+5402	MLR635	2014.437	1	2.182	0.011	307.6*	0.3					
15136+3453	HO60	2014.393	1	0.226	0.015	66.4*	1.7			Doc2017f	0.01	2.5
15138+2536	COU306	2014.412	1	2.489	0.040	245.0*	0.6					
15143+1959	COU27Aa,Ab	2014.412	1	0.204	0.007	121.6	2.1		NDp			
15143+1959	COU27AB	2013.448	2	—	—	—	—		NR			
15143+1959	COU27AB	2014.412	1	—	—	—	—		NR			
15143+1959	COU102Aa,Ab	2013.448	2	0.214	0.035	151.1	6.6		NDp			
15143+1959	COU102AB	2013.448	2	1.159	0.015	94.1*	0.3					
15149+3818	STF1926Aa,Ab	2014.467	1	0.110	0.050	137.9	8.0		NDp			
15149+3818	STF1926AB	2014.467	1	0.376	0.013	229.8*	2.6					
15152+3103	TDS9466	2013.462	1	—	—	—	—		NR			
15154+3558	HU1273	2014.420	1	0.123	0.050	83.3*	8.0					
15157+6912	A1118	2014.437	1	0.827	0.007	58.2*	0.3					
15158+4153	POP118	2014.467	1	2.728	0.014	344.2*	0.3					
15163+1706	COU2509	2013.451	2	0.702	0.012	68.4*	0.7					
15163+3831	COU1137	2014.445	1	0.630	0.007	47.4*	0.3					
15175+2619	COU483	2013.429	1	0.738	0.007	175.6*	0.6					
15175+4804	COU1762	2014.429	1	1.132	0.007	71.7*	0.3					
15178+4611	ES1252	2014.412	1	1.548	0.008	17.1*	0.3					
15181+3245	COU794	2013.462	1	—	—	—	—		NR			
15181+3245	COU794	2014.404	1	0.148	0.050	97.3	8.0					
15181+3245	COU794	2014.393	1	—	—	—	—		NR			
15186+2356	COU307	2013.429	1	0.321	0.007	182.4	0.3			Lin2017c	-0.03	2.6 ^Q
15186+2356	COU307	2014.393	2	0.304	0.034	178.3*	0.7			Lin2017c	-0.05	-0.5 ^Q
15186+2842	TDS9476	2013.451	2	—	—	—	—		NR			
15188+3627	HDS2152Aa,Ab	2014.420	1	0.159	0.050	114.6	8.0		NDp			
15188+3627	HDS2152AB	2014.420	1	1.122	0.007	222.9*	0.6					
15192+4329	A1630	2014.445	1	0.793	0.007	244.3*	0.3					
15195+1621	TDS9485	2013.462	1	0.827	0.007	240.0*	0.3					
15195+2515	COU308	2013.454	1	1.394	0.008	355.3*	0.3					
15200+2338	COU103	2014.404	1	0.550	0.007	283.4*	0.4					
15200+4603	A1631AB	2014.420	1	0.737	0.010	251.6*	1.0					
15200+4603	A1631AC	2014.420	1	4.264	0.021	32.8*	0.3					
15202+5824	MLR533	2014.437	1	0.213	0.015	311.3	2.2					
15204+5309	HU147	2014.437	1	0.562	0.007	285.7*	0.3					
15205+3320	TDS9494	2013.448	2	—	—	—	—		NR			
15206+1523	HU1160	2013.451	2	0.331	0.018	156.4*	0.8			Hrt2009	-0.02	4.2
15206+4656	HDS2155Aa,Ab	2014.429	1	0.150	0.013	122.5	4.2		NDp			
15206+4656	HDS2155AB	2014.420	1	0.990	0.007	195.5	0.3					
15206+4656	HDS2155AB	2014.429	1	1.001	0.007	194.5	0.9					
15210+2104	HU146	2014.445	1	0.697	0.007	123.1*	0.6			Zir2015a	-0.02	-0.8
15211+1640	A2229	2014.434	1	1.553	0.008	223.8*	0.3					
15211+4419	ES625	2014.420	1	1.824	0.009	248.7*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(O-C)$ (")	$\Delta\theta(O-C)$ (°)
15216+0942	TDS9497	2013.451	2	—	—	—	—			NR		
15223+2455	COU309	2013.448	2	1.805	0.044	341.0*	0.5					
15223+4203	COU1440	2014.445	1	0.922	0.010	353.1*	0.3					
15224+3210	COU795	2013.454	1	0.676	0.041	145.1*	1.9					
15226+0720	TDS9498	2013.451	2	0.634	0.015	35.2*	0.3					
15226+7254	HDS2163	2014.437	1	0.226	0.017	177.4*	0.7			Cve2015b	-0.00	5.1
15232+1701	TDS9503	2014.434	1	—	—	—	—			NR		
15232+2628	TDS772	2013.462	1	1.030	0.014	356.8*	0.4					
15232+7258	MLR190	2014.437	1	1.321	0.007	218.9*	0.3					
15233+3619	A1367	2014.445	1	0.659	0.007	154.1*	0.6					
15233+4022	COU1441	2014.393	1	0.228	0.025	30.7*	0.6					
15236+4022	COU1442	2014.404	1	0.201	0.017	329.0	1.9					
15245+3726	HEI783	2014.412	1	1.755	0.056	361.2*	3.4					
15255+1546	HEI381	2013.432	1	—	—	—	—			NR		
15255+1546	HEI381	2014.429	1	—	—	—	—			NR		
15257+2638	STF1941	2013.429	1	1.395	0.007	213.3*	0.3					
15259+6032	MLR346	2014.437	1	0.271	0.019	47.6*	1.0					
15261+1810	STF1940	2014.429	1	0.394	0.007	330.5*	0.3					
15262+1418	HEI236	2013.448	2	0.558	0.025	104.2	0.4					
15262+1418	HEI236	2013.448	2	0.496	0.035	104.0*	0.9					
15264+4400	STT296	2014.467	1	2.100	0.010	274.2*	0.3			PkO2018b	-0.03	0.1
15268+2840	COU484	2013.429	1	0.302	0.007	259.8*	0.3					
15268+2840	COU484	2014.404	2	0.360	0.047	263.2*	0.4					
15269+2955	TDS9520	2013.462	1	—	—	—	—			NR		
15272+4133	COU1443	2014.404	1	0.480	0.007	171.3*	0.7					
15273+1738	A2074	2014.420	1	0.322	0.007	269.1*	1.1			Baz1976	0.04	4.4
15273+1738	A2074	2014.429	2	0.342	0.010	266.5*	0.4			Baz1976	0.06	1.8
15279+2902	TDS9523	2013.451	2	—	—	—	—			NR		
15290+5027	HU651Aa,Ab	2014.412	1	0.101	0.050	303	8.0			NDp		
15290+5027	HU651AB	2014.412	1	0.929	0.007	359.6*	0.3					
15290+5027	HU651AB	2014.412	1	0.947	0.016	359.0	0.5					
15294+4651	A1633	2014.445	1	0.145	0.050	81.4*	8.0					
15307+2805	COU796	2013.429	1	0.412	0.007	114.9*	0.9					
15307+2805	COU796	2014.467	1	0.430	0.021	112.2*	3.0					
15307+3810	HU1163	2014.393	1	0.247	0.014	357.5	0.5			Hrt2000a	0.02	-2.6 ^Q
15328+1945	HU577	2013.454	1	0.325	0.010	22.7*	0.5			Cou1984b	-0.01	1.4
15331+3113	COU611	2014.420	1	0.680	0.007	97.1*	0.3					
15331+3113	COU611	2014.429	1	0.675	0.007	95.8*	0.3					
15337+0921	YSC108	2013.454	1	0.210	0.043	48.5	8.4					
15339+3755	BEU20	2014.404	1	0.813	0.007	99.8*	0.3					
15340+3320	COU797	2013.462	1	1.786	0.009	201.8*	0.3					
15347+2655	COU798	2014.420	1	0.247	0.050	214.7*	4.4			Doc2010h	0.04	8.2
15347+2655	COU798	2014.429	2	0.238	0.050	211.3*	9.1			Doc2010h	0.03	4.7
15347+2938	TDS9550	2014.445	1	—	—	—	—			NR		
15352+1456	LEO33	2013.462	1	1.534	0.008	259.6*	0.3					
15354+0908	HDS2190	2013.451	2	0.204	0.034	265.9*	7.2					
15354+0908	HDS2190	2013.454	2	0.143	0.050	261.5	8.0					
15354+0908	HDS2190	2013.462	1	0.157	0.040	250.4*	6.5					
15354+0908	HDS2190	2013.462	1	0.179	0.024	227.4*	8.1					
15358+2823	HO63	2013.451	2	1.528	0.022	310.4	0.4					
15358+2823	HO63	2014.434	1	1.514	0.018	310.5*	0.3					
15358+2823	HO63	2014.434	1	1.528	0.008	310.7*	0.3					
15359+1255	STF1957	2013.498	1	0.278	0.013	131.6*	2.0			Izm2019	0.03	5.6
15360+3948	STT298	2014.434	1	1.186	0.007	184.4	0.3			Izm2019	0.02	0.7
15361+2517	HDS2192	2014.429	1	0.154	0.050	128.3	8.0					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(O-C)$ ($''$)	$\Delta\theta(O-C)$ ($''$)
15361+4849	HU652	2014.434	1	1.166	0.010	185.8*	0.6					
15370+6426	HU1168	2014.437	1	0.568	0.007	111.6*	0.3			Doc2009g	0.06	0.2 ^Q
15371+2646	HDS2199AB	2013.454	1	0.223	0.011	373.1	1.9					
15371+2646	HDS2199AB	2014.393	1	—	—	—	—		NR			
15371+2646	HDS2199AB	2014.404	2	0.207	0.017	344.6*	1.8					
15371+2646	HDS2199AB	2014.412	2	0.200	0.013	348.5	2.6					
15371+2646	GII40AC	2013.432	1	2.087	0.010	241.5	0.3	0.03				
15371+2646	GII40AC	2013.432	1	2.100	0.011	240.8*	0.3		NDg			
15371+2646	GII40AC	2013.451	2	2.126	0.022	242.7	0.3		NDg			
15371+2646	GII40AC	2013.454	1	2.136	0.013	241.5	0.3		NDg			
15371+2646	GII40AC	2014.412	1	2.089	0.010	242.9	0.3		NDg			
15371+2646	GII40AC	2014.420	1	2.080	0.010	242.9	0.7		NDg			
15376+2110	HU578	2013.432	1	1.176	0.007	136.0*	0.3					
15379+5005	HDS2203	2014.412	1	0.107	0.050	296.1	8.0			Cve2013b	0.00	8.1 ^Q
15382+3615	STF1964CD	2014.412	1	1.565	0.008	20.7*	0.3			Dru1995	0.05	1.2
15382+5020	COU2110	2014.393	1	0.529	0.018	210.8*	0.6					
15383+4842	HDS2204Aa,Ab	2014.412	1	0.131	0.050	114.9	8.0		NDp			
15383+4842	HDS2204AB	2014.412	1	0.406	0.007	57.8*	0.3					
15389+3401	COU976	2014.393	1	1.227	0.007	127.6*	0.3					
15390+2545	COU612	2013.432	1	0.249	0.009	343.1*	1.7			Doc2011h	-0.04	-5.0 ^Q
15390+2545	COU612	2014.412	2	0.296	0.007	346.9*	0.3			Doc2011h	0.01	1.2 ^Q
15394+3331	COU800	2014.420	1	0.737	0.007	253.4*	0.3					
15399+1646	COU2510	2013.432	1	0.159	0.050	33.8	8.0					
15399+1646	COU2510	2014.434	1	0.196	0.050	35.3	8.0					
15399+2423	TDS9583	2014.445	1	—	—	—	—		NR			
15402+4041	COU1274	2014.429	1	0.943	0.007	94.9*	0.3					
15405+1840	A2076	2013.432	1	0.734	0.007	5.7*	0.3			Zir2014a	0.01	0.5 ^Q
15406+3128	COU613AB	2013.432	1	0.124	0.050	9.7	8.0					
15406+3128	COU613AB	2013.432	1	0.120	0.050	8.4	8.0					
15406+3128	COU613AB	2014.434	1	0.170	0.024	25.0*	3.2					
15406+3128	COU613AB	2014.434	1	0.179	0.050	23.1*	8.0					
15418+3054	HDS2217	2013.462	1	0.128	0.050	178.2	8.0					
15418+3054	HDS2217	2014.429	1	—	—	—	—		NR			
15418+3054	HDS2217	2014.445	1	—	—	—	—		NR			
15420+4203	COU1445	2014.429	1	0.136	0.050	200.9	8.0			Doc2013e	0.02	-7.7
15422+7256	MLR192	2014.437	1	1.007	0.007	67.2*	0.3					
15424+6113	MLR48	2014.437	1	0.266	0.011	104.1*	1.0					
15440+2220	COU106	2013.448	2	0.518	0.012	85.8*	0.3					
15440+2220	COU106	2013.448	2	0.516	0.068	86.7	2.0					
15451+2936	COU614	2013.432	1	0.299	0.007	213.6*	0.6					
15451+2936	COU614	2014.420	1	0.299	0.007	219.5*	1.0					
15456+1640	COU2511	2013.432	1	0.101	0.050	18.9	8.0					
15456+1640	COU2511	2014.429	1	—	—	—	—		NR			
15457+5040	HU657	2014.412	1	0.488	0.009	178.5*	0.6			Doc2012k	0.01	1.1
15463+1614	HEI238	2013.454	1	1.187	0.010	141.8*	0.3					
15458+2637	COU615	2013.451	2	1.039	0.015	126.8*	1.3					
15463+1614	HEI238	2013.454	1	1.187	0.010	141.8*	0.3					
15465+1957	COU66	2014.412	1	0.500	0.007	82.9*	0.3			FMR2013e	-0.02	-2.0
15468+1905	A2077	2014.420	1	0.531	0.007	224.8*	0.3					
15468+1905	A2077	2014.429	1	0.537	0.009	225.7*	0.4					
15473+7327	MLR193	2014.437	1	0.581	0.007	3.5*	0.5					
15474+1851	COU192Aa,Ab	2013.498	1	0.127	0.050	163.8	8.0		NDp			
15474+1851	COU192AB	2013.498	1	1.916	0.036	187.6*	0.9					
15474+2828	TDS9623	2013.462	1	—	—	—	—		NR			
15478+3301	HDS2225	2013.462	1	0.140	0.050	354.4	8.0					
15478+3301	HDS2225	2014.445	1	0.258	0.050	327.4*	8.0					
15479+4159	A1638	2014.393	1	0.176	0.023	233.3	5.9					
15482+1925	COU193	2013.498	1	0.529	0.007	281.5*	1.1					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
15484+3931	COU1446AC	2014.393	1	7.836	0.039	159.4*	0.3		NDg			
15486+4949	COU1918	2014.420	2	0.201	0.027	155.8*	1.4					
15486+4949	COU1918	2014.420	1	0.150	0.050	155.0	8.0					
15488+3241	COU801	2013.432	1	1.483	0.007	196.5*	0.3					
15493+6032	HU912	2014.437	1	0.325	0.007	141.0*	1.7			Hei1996c	-0.01	3.3
15501+3046	HDS2230Aa,Ab	2013.454	1	0.201	0.016	15.8	1.3		NDp			
15501+3046	HDS2230AB	2013.454	1	1.788	0.013	313.3*	0.6					
15509+1911	A2078	2013.508	1	1.114	0.007	165.8*	0.3					
15509+1911	A2078	2013.508	1	1.109	0.007	165.7*	0.3					
15509+6842	A1133	2014.437	1	1.260	0.007	231.3*	0.3					
15510+4228	BU810	2014.434	1	1.592	0.008	83.7*	0.3					
15512+3836	COU1447	2014.393	1	2.331	0.012	296.8*	0.3					
15514+1359	TDS9663	2013.451	2	—	—	—	—		NR			
15520+4238	BAR41	2014.434	1	—	—	—	—		NR			
15522+4653	COU1763	2014.412	1	0.934	0.014	322.2*	0.4					
15527+3444	HEI789	2014.445	1	2.701	0.048	106.0*	0.6					
15528+4808	J1031	2014.412	1	0.917	0.007	158.1*	0.3					
15530+1547	HEI239	2014.429	1	0.960	0.007	126.2*	0.3					
15536+5904	MLR534	2014.437	1	0.117	0.050	307.4	8.0					
15540+1936	COU67	2014.513	1	1.619	0.008	218.6*	0.3					
15540+1936	COU67	2014.513	1	1.627	0.008	218.4*	0.3					
15540+2754	COU802Aa,Ab	2014.412	1	0.137	0.050	122.1	8.0		NDp			
15540+2754	COU802AB	2014.412	1	3.002	0.030	126.5*	0.3					
15540+2754	COU802AB	2014.412	1	2.998	0.021	126.7	0.3					
15540+5301	TDS791	2014.437	1	0.407	0.029	287.3*	0.5					
15542+1659	A2080	2013.448	2	0.392	0.015	101.8*	0.5			Hrt2008	0.02	-3.6
15542+1659	A2080	2014.429	1	0.364	0.007	102.3*	0.3			Hrt2008	0.01	-3.5
15544+3500	COU978	2014.420	1	1.930	0.010	149.5*	0.3					
15544+3500	COU978	2014.429	1	1.926	0.010	149.4*	0.3					
15544+5337	TDS792	2014.437	1	0.768	0.007	13.8*	0.3					
15554+1552	HEI855	2014.445	1	2.550	0.038	90.0*	0.4					
15559+1555	ALD12	2014.513	1	1.875	0.009	48.7*	0.3					
15570+2345	TDS9701Aa,Ab	2013.498	1	0.168	0.050	169.8	8.0		NDp			
15570+2345	TDS9701Aa,Ab	2014.420	1	—	—	—	—		NR			
15570+2345	TDS9701Aa,Ab	2014.445	1	—	—	—	—		NR			
15570+2345	TDS9701AB	2014.445	1	0.545	0.043	146.8	56.4					
15574+1527	ALD3	2013.451	2	1.688	0.021	30.6*	0.7					
15574+1527	ALD3	2013.451	2	1.686	0.022	30.3	0.7					
15590+5435	TDS9709	2014.437	1	—	—	—	—		NR			
15595+2555	JEF2	2013.432	1	0.465	0.009	139.5*	1.6					
15597+2332	TDS9717	2013.498	1	1.093	0.010	256.0*	0.6					
15599+4306	ES1555	2014.513	1	2.208	0.011	70.9*	0.3					
16000+2010	HDS2253	2014.420	1	—	—	—	—		NR			
16000+2010	HDS2253	2014.429	1	—	—	—	—		NR			
16001+3625	COU1138	2014.420	1	0.205	0.012	326.8	9.8					
16001+3625	COU1138	2014.429	1	0.211	0.010	339.9*	1.6					
16001+3625	COU1138	2014.429	1	0.151	0.050	336.1*	8.0					
16003+1140	A1639AB	2013.462	1	0.244	0.018	85.8*	2.9			Zir2012b	0.01	-5.0
16003+1140	A1639AB	2013.462	1	0.275	0.007	90.3	1.3			Zir2012b	0.04	0.0
16003+1140	A1639AB,C	2013.463	1	6.017	0.030	146.1	0.3	1.21				
16003+2254	TDS9721	2014.445	1	—	—	—	—		NR			
16013+3714	SKF240	2014.429	1	—	—	—	—		NR			
16013+4529	A1640	2014.425	1	0.674	0.007	345.4*	0.3					
16019+2458	COU411	2013.448	2	1.388	0.015	276.4*	0.3					
16025+2633	COU618Aa,Ab	2013.454	1	0.187	0.017	16.4	1.2	0.29	NDp			
16025+2633	COU618AB	2013.454	1	0.579	0.013	178.1*	0.6					
16026+2637	HDS2262	2013.432	1	0.365	0.007	265.3*	2.2					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(O-C)$ (")	$\Delta\theta(O-C)$ (°)
16026+4658	COU1765	2014.434	1	0.807	0.007	100.5*	0.3					
16029+4644	COU1766	2014.434	1	0.623	0.007	32.2*	0.3					
16038+1406	HDS2265	2013.432	1	0.294	0.069	355.8	3.2			Tok2018e	0.02	-7.4
16038+1406	HDS2265	2013.432	2	0.215	0.037	359.6	0.3			Tok2018e	0.01	-3.6
16042+4045	A1641	2014.513	1	—	—	—	—		NR			
16043+3230	HDS2267	2013.448	2	0.417	0.021	327.9	0.6					
16044+6509	TDS9747	2014.437	1	—	—	—	—		NR			
16048+2028	COU194	2014.445	1	1.874	0.009	159.6*	0.3					
16050+1605	TDS801	2013.451	2	1.514	0.015	81.2*	0.3					
16053+5810	KUI71	2014.437	1	0.617	0.007	12.2*	0.3					
16058+2308	TDS9753	2013.498	1	0.642	0.013	42.0*	2.1					
16058+2308	TDS9753	2013.498	1	0.645	0.015	42.5	2.4					
16059+1041	HDS2273	2013.451	2	0.844	0.024	230.3*	0.3					
16062+1809	COU2389	2013.508	1	1.129	0.011	237.0*	0.9					
16064+1830	COU195	2013.509	1	1.532	0.008	262.5*	0.3					
16069+2350	TDS9762	2013.509	1	—	—	—	—		NR			
16072+1848	COU196	2013.509	1	—	—	—	—		NR			
16072+4613	HDS2274	2014.420	1	—	—	—	—		NR			
16079+1425	A1798	2013.454	1	0.180	0.040	346.9*	5.0			USN2002	0.03	8.2
16087+2212	HDS2277Aa,Ab	2013.448	2	0.151	0.050	154.6	8.0		NDp			
16087+2212	HDS2277AB	2013.448	2	1.256	0.015	81.5*	0.3					
16089+3758	COU1276	2014.434	1	3.340	0.017	52.6*	0.3					
16095+3108	COU979	2013.462	1	0.387	0.007	63.4*	0.6					
16096+2658	HDS2282	2014.445	1	0.430	0.017	52.7*	0.7					
16105+1828	TDS9782	2013.509	1	0.970	0.007	133.3*	0.3					
16107+4019	COU1277	2014.524	1	0.688	0.007	350.1*	0.3					
16108+2044	HU479	2013.448	2	3.823	0.019	260.6*	0.3					
16109+6554	MLR179	2014.437	1	0.162	0.050	323.2*	8.0					
16111+2014	COU197	2013.432	1	0.479	0.007	50.8*	0.3					
16112+2111	TDS804	2013.451	2	1.911	0.035	298.0*	0.3					
16126+2623	COU485	2014.524	1	0.829	0.013	329.7*	1.1					
16128+3922	STF2028	2014.429	1	0.463	0.007	145.9*	0.3			Hrt2014b	-0.00	0.0
16135+3202	HDS2293Aa,Ab	2013.432	1	0.111	0.035	175.7	5.6		NDp			
16135+3202	HDS2293AB	2013.432	1	0.430	0.012	126.2*	2.1					
16135+3202	HDS2293AB	2014.420	1	0.328	0.018	115.2*	0.8					
16136+4546	COU1767	2014.420	1	0.943	0.007	129.9*	0.4					
16136+4546	COU1767	2014.429	1	0.973	0.007	129.7*	0.3					
16137+4638	A1642	2014.513	1	0.802	0.007	181.5*	0.3			Hrt2001b	0.03	0.8
16137+4638	A1642	2014.524	1	0.818	0.007	180.8*	0.3			Hrt2001b	0.04	0.1
16140+4200	COU1449Aa,Ab	2014.429	1	0.150	0.050	124.5	8.0		NDp			
16140+4200	COU1449AB	2014.429	1	0.481	0.007	135.2	0.8					
16143+2042	YSC58	2013.454	1	—	—	—	—		NR			
16145+0531	STF2023	2013.509	1	1.922	0.010	225.0*	0.4					
16156+0613	TDS9813	2013.462	1	1.649	0.008	113.8*	0.3					
16156+1944	HU480	2013.451	2	1.614	0.016	262.5*	0.3					
16160+1120	HEI541	2013.498	1	0.399	0.027	171.8	8.3					
16161+2936	A348	2013.451	2	2.127	0.018	150.2*	0.3					
16168+1447	HDS2301	2013.454	1	1.007	0.007	55.7*	0.6					
16169+1948	COU107	2013.448	2	0.648	0.024	114.2	0.6					
16172+3341	COU980	2013.451	2	0.517	0.015	340.6	0.7					
16172+3341	COU980	2014.445	1	0.529	0.007	337.9*	0.3					
16173+5001	COU2111	2014.420	1	0.297	0.012	38.9	2.5					
16178+4918	HU661	2014.434	1	0.785	0.007	220.9*	0.4					
16181+2551	STF2035	2014.524	1	2.604	0.013	35.3*	0.3					
16181+2551	STF2035	2014.513	1	2.578	0.013	35.8*	0.3					
16182+3857	HU1275	2014.445	1	2.891	0.014	168.9*	0.3					
16188+3154	HU1172	2013.451	2	3.396	0.025	327.0*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
16192+2553	COU412Aa,Ab	2014.421	1	0.351	0.023	292.1*	1.7		NDg			
16192+2553	COU412AB	2013.451	2	0.950	0.015	264.4*	0.3					
16192+2553	COU412AB	2014.421	1	0.939	0.007	263.4*	0.3					
16192+4140	STT309	2014.445	1	0.286	0.007	312.2*	0.8			USN2002	0.01	0.5
16194+2708	TDS9838	2013.462	1	—	—	—	—		NR			
16199+2238	LAW4Aa,Ab	2013.454	1	0.232	0.032	21.0*	2.8					
16199+2238	LAW4Aa,Ab	2013.462	1	—	—	—	—		NR			
16199+2341	COU108Aa,Ab	2013.498	1	0.162	0.050	250.7	0.9		NDp			
16199+2341	COU108AB	2013.498	1	0.610	0.017	256.2*	0.4					
16199+2341	COU108AB	2014.434	1	0.630	0.007	257.4*	0.4					
16199+3943	KUI72AC	2014.434	1	3.147	0.032	125.1	0.3			NDg		
16212+2259	HU481	2014.524	1	0.385	0.009	253.1*	1.1			Hrt2010a	0.03	0.4
16213+7434	HDS2310	2014.437	1	0.217	0.030	103.9*	2.1					
16221+2218	HU482Aa,Ab	2013.509	1	0.110	0.008	158.0	3.5		NDp			
16221+2218	HU482AB	2013.463	1	1.604	0.008	145.5	0.3	3.81				
16221+2218	HU482AB	2013.509	1	1.649	0.008	146.2*	0.3					
16235+4935	HDS2314	2014.429	1	—	—	—	—		NR			
16229+3803	COU1281	2014.421	1	0.132	0.007	211.5*	8.0			Doc2012h	0.05	-11.0
16229+3803	COU1281	2014.429	2	0.154	0.008	204.6	6.4			Doc2012h	0.08	-17.0
16232+2204	TDS9873	2013.509	1	—	—	—	—		NR			
16233+3251	COU619	2014.434	1	0.482	0.010	10.1*	1.0					
16239+2814	COU486	2013.454	1	0.468	0.013	219.9*	1.4					
16239+2814	COU486	2013.462	1	0.527	0.011	220.4	0.8					
16239+2814	COU486	2013.462	1	0.562	0.007	219.1*	1.1					
16239+2814	COU486	2014.513	1	0.524	0.010	220.2	0.5					
16248+3925	HU1276	2014.524	1	0.444	0.017	277.8*	2.1					
16252+4652	YSC60	2014.445	1	0.688	0.007	297.2*	0.6					
16256+2054	COU198	2014.524	1	—	—	—	—		NR			
16257+4921	COU1920	2014.513	1	0.734	0.007	63.0*	0.4					
16261+3524	HDS2321	2014.429	1	0.489	0.025	265.8*	1.2					
16262+2816	COU487	2014.434	1	0.749	0.007	201.5*	0.3					
16267+0520	HDS2324	2013.454	1	0.513	0.007	27.7	0.5					
16268+1203	A1859AB	2013.509	1	0.251	0.017	35.5	2.8					
16268+1203	A1859AC	2013.106	1	1.736	0.009	23.9	0.5		NDg			
16273+2653	A226Aa,Ab	2014.543	1	0.111	0.050	131.9	8.0		NDp			
16273+2653	A226AB	2013.451	2	1.016	0.015	93.3*	0.3					
16273+2653	A226AB	2014.543	1	1.028	0.007	93.5*	0.3					
16278+2054	STH3Aa,Ab	2014.513	1	0.242	0.050	129.4	8.0		NDp			
16278+2054	STH3AB	2014.513	1	2.117	0.011	285.3	0.4					
16284+3108	COU488Aa,Ab	2013.462	1	0.419	0.018	66.4*	2.2					
16284+3108	COU488Aa,Ab	2014.421	1	0.472	0.016	58.1*	1.4					
16284+3108	COU488Aa,Ab	2014.429	1	0.460	0.045	49.8	8.1					
16287+3714	COU1140	2014.434	1	0.791	0.007	351.9*	0.3					
16306+4333	A1861	2014.546	1	1.331	0.007	174.2*	0.3					
16309+3804	STF2059	2014.546	1	0.327	0.007	182.3*	1.0			Zir2014a	0.01	1.4
16312+3849	COU1282	2014.434	1	2.562	0.013	272.3*	0.3					
16316+3148	COU620	2014.434	1	2.416	0.012	159.7*	0.3					
16317+1919	STF2058	2013.498	1	2.037	0.010	352.6*	0.3					
16319+2313	HU484	2014.513	1	2.461	0.015	208.7*	0.5					
16326+1315	TDS9961	2013.509	1	—	—	—	—		NR			
16326+2314	BU817	2013.555	1	0.933	0.007	328.6*	0.3					
16332+3054	STF2061	2014.543	1	2.366	0.012	28.5*	0.3					
16348+1124	HDS2345	2013.454	1	0.366	0.007	237.2*	1.5					
16348+2019	TDS9977	2014.546	1	—	—	—	—		NR			
16359+2933	COU621AB	2013.451	2	0.738	0.015	248.1*	0.3					
16359+2933	COU621AB	2013.451	2	0.730	0.019	247.5*	1.9					
16366+0844	TDT3	2014.628	1	—	—	—	—		NR			
16367+4230	COU1451	2014.524	1	1.121	0.007	1.4*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
16368+2632	COU489	2013.541	1	0.732	0.007	331.4*	0.3					
16371+1732	COU311	2013.451	1	—	—	—	—		NR			
16371+1732	COU311	2014.429	1	—	—	—	—		NR			
16377+2130	TDT9	2013.454	1	0.371	0.007	206.5*	0.8					
16377+2130	TDT9	2013.498	1	0.355	0.021	204.5*	1.5					
16377+2130	TDT9	2014.524	1	0.397	0.007	206.8*	0.9					
16381+3935	HDS2355	2014.546	1	0.630	0.012	323.9*	0.7					
16384+3514	COU985	2014.513	1	0.353	0.007	256.6*	0.3			Doc2019h	0.02	-2.2
16385+3006	TDT16AB	2013.454	1	0.227	0.019	193.0	2.4					
16385+3006	TDT16AC	2013.498	1	0.967	0.014	72.1	1.0		NDg			
16391+2919	TDT19	2013.454	1	—	—	—	—		NR			
16391+2919	TDT19	2013.541	1	—	—	—	—		NR			
16395+2244	HU486	2013.498	1	1.314	0.007	164.6*	0.3					
16412+1714	HDS2366	2014.524	1	0.602	0.007	94.4*	0.3					
16413+3006	A349	2013.541	1	0.672	0.007	132.2*	0.6			Hrt2014b	0.01	-0.9
16414+3016	HDS2368	2013.541	1	0.866	0.008	155.6*	0.3					
16415+4436	HDS2369	2014.429	1	0.549	0.008	60.8*	0.3					
16421+2151	HU487	2014.434	1	0.226	0.017	274.1*	0.3					
16422+3753	HDS2372	2014.434	1	0.183	0.010	233.3	2.1					
16422+3753	HDS2372	2014.434	1	0.148	0.050	244.1	4.0					
16429+4814	COU1769	2014.513	1	0.556	0.007	2.7*	0.3					
16429+4814	COU1769	2014.524	1	0.571	0.007	2.1*	0.8					
16438+5133	HU664	2014.524	1	0.496	0.007	302.9*	0.5					
16439+4329	D15	2014.543	1	0.522	0.007	344.2*	0.3			Alz2007	0.03	0.6
16441+1409	TDT58	2013.509	1	—	—	—	—		NR			
16446+1009	HEI545	2013.555	1	0.877	0.010	235.5*	0.3					
16446+1009	HEI545	2013.555	1	0.863	0.007	235.6	0.3					
16447+3148	COU804	2013.541	1	0.198	0.047	32.9	7.8					
16447+3148	COU804	2014.429	1	0.197	0.020	15.0	0.3					
16450+2928	COU490	2014.434	1	—	—	—	—		NR			
16450+3355	POP5	2014.434	1	0.736	0.007	139.3*	0.3					
16450+3842	COU1284	2014.429	1	0.146	0.050	346.9*	8.0			Cou1999b	0.03	37.6
16453+2435	HDS2376	2013.541	1	0.656	0.007	253.2*	0.3					
16468+0821	A2784	2013.509	1	0.365	0.007	165.8*	0.3			Sca2017d	-0.02	-0.9
16469+2701	A227	2014.546	1	2.069	0.010	237.7*	0.3					
16472+2133	HU665Aa,Ab	2014.546	1	0.116	0.021	126.6	2.9		NDp			
16472+2133	HU665AB	2014.546	1	2.511	0.013	139.6*	0.3					
16474+2300	HU666	2014.543	1	0.787	0.007	228.4*	0.3					
16476+2106	TDT90	2013.498	1	0.982	0.012	75.4*	0.3					
16476+2106	TDT90	2013.498	1	0.956	0.014	73.5	1.5					
16476+4255	COU1452AB	2014.513	2	0.262	0.011	102.5*	0.5					
16476+4255	GII3AC	2014.513	2	1.687	0.019	51.8*	0.3					
16486+2516	COU491	2014.546	1	0.768	0.007	42.9*	0.3					
16505+3800	COU1285	2014.514	1	1.685	0.008	227.7*	0.3					
16505+3800	COU1285	2014.524	1	1.747	0.009	228.1*	0.3					
16509+4259	A575	2014.575	1	0.706	0.007	149.0*	0.3					
16510+4605	A1867	2014.524	1	1.851	0.009	266.4*	0.3					
16511+0924	STF2106	2013.566	1	0.766	0.007	172.5*	0.3			Sca2001g	-0.02	0.9
16529+4608	A1869Aa,Ab	2014.543	1	0.367	0.007	33.0	2.0	0.10	NDp			
16529+4608	A1869AB	2014.543	1	2.131	0.012	220.8	0.5					
16541+0826	HEI857	2013.569	1	0.565	0.007	140.2*	1.0					
16550+3223	COU988	2014.546	1	1.644	0.008	86.3*	0.3					
16556+3551	TDT147	2014.546	1	0.508	0.007	237.8*	0.3					
16557+1544	HEI70	2013.509	1	1.304	0.007	316.6*	0.3					
16557+3511	RUC9Aa,Ab	2014.546	1	0.137	0.050	130.7	8.0		NDp			
16557+3511	RUC9AB	2014.546	1	1.463	0.030	348.4	0.9					
16563+1852	TDT152	2013.555	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
16565+1032	TDT155	2013.566	1	—	—	—	—		NR			
16565+4108	COU1288Aa,Ab	2014.524	1	0.175	0.050	128.3	8.0		NDp			
16565+4108	COU1288AB	2014.524	1	1.507	0.008	2.8*	0.3					
16565+4108	COU1288AB	2014.524	1	1.535	0.018	2.8	0.8					
16566+1014	HU160	2013.563	1	0.328	0.007	204.5*	0.5					
16569+1540	HEI71	2014.571	1	1.252	0.007	256.3*	0.3					
16578+1317	HDS2399	2013.509	1	0.384	0.026	335.1	2.9			Tok2018e	0.03	2.2
16581+0902	HDS2401	2013.582	1	0.289	0.014	20.6*	1.2					
16584+3210	COU990	2014.514	1	2.259	0.011	134.8*	0.3					
16584+3210	COU990	2014.524	1	2.236	0.011	134.9	0.3	2.80				
16584+3210	COU990	2014.524	1	2.236	0.011	134.7*	0.3					
16584+4753	HU667	2014.543	1	2.423	0.012	163.9*	0.3					
16585+2351	TDT163	2013.509	1	—	—	—	—		NR			
16586+2637	TDS846	2013.541	1	1.258	0.007	76.3*	0.3					
16588+0358	STF3107	2013.566	1	1.456	0.007	72.5*	0.3			Izm2019	0.04	1.9
16594+1419	STT321	2013.541	1	0.577	0.007	15.1*	0.3					
16598+1319	HU1279	2013.555	1	1.757	0.009	156.8*	0.3					
17006+2026	COU200	2013.509	1	1.488	0.046	132.6*	0.5					
17007+3951	COU1290	2014.514	1	0.712	0.007	29.1*	0.5					
17011-0634	J2503	2013.569	1	1.549	0.019	163.0*	0.3					
17012+0627	HDS2409	2013.593	1	0.303	0.007	38.8	2.0					
17015+1412	TDT182	2013.566	1	—	—	—	—		NR			
17020+0827	STF2114	2013.566	1	1.353	0.007	197.2*	0.5					
17022-0212	TDT185	2013.569	1	1.795	0.009	219.4*	0.4					
17024+1815	TDT188	2013.541	1	—	—	—	—		NR			
17031+2640	TDT190	2014.546	1	0.656	0.007	68.0*	0.3					
17034+0902	YSC9	2013.509	1	—	—	—	—		NR			
17034+0902	YSC9	2013.555	1	—	—	—	—		NR			
17034+0902	YSC9	2013.563	1	—	—	—	—		NR			
17034+0902	YSC9	2013.563	1	0.253	0.007	85.7*	1.9					
17035+1345	TDT192	2013.582	1	—	—	—	—		NR			
17039+1941	BU822	2013.511	1	1.539	0.008	223.7	0.3					
17042+1834	TDT197	2013.593	1	0.415	0.012	91.7*	1.0					
17044+2418	TDT198	2013.541	1	—	—	—	—		NR			
17046-0339	RST4565	2013.582	1	0.815	0.007	164.4*	0.5					
17050+0724	TDT204	2013.561	1	0.644	0.009	151.1*	0.3					
17051+1353	HDS2417	2013.566	1	0.151	0.050	198.2	8.0					
17051+1353	HDS2417	2013.569	1	0.165	0.043	202.1	7.6					
17051+1353	HDS2417	2013.588	1	0.121	0.050	205.8	8.0					
17059+0150	TDT211	2013.566	1	—	—	—	—		NR			
17063+2631	A228	2014.543	1	0.558	0.007	7.0*	0.3					
17066+0039	TOK52	2013.569	1	0.981	0.013	168.4*	0.4					
17066+1727	BAR42	2013.563	1	1.982	0.017	3.9*	0.3					
17068+0334	TDT218	2013.569	1	—	—	—	—		NR			
17073+4604	COU1773	2014.571	1	0.916	0.007	23.5*	0.3					
17073+4604	COU1773	2014.571	1	0.906	0.007	22.9	0.3	1.06				
17073+4604	COU1773	2014.571	1	0.909	0.007	23.7	0.3	1.00				
17075+3810	COU1291	2014.514	1	0.299	0.016	127.3*	0.3			Doc2011a	0.01	-0.5 ^Q
17075+3810	COU1291	2014.524	1	0.279	0.007	129.9*	0.8			Doc2011a	-0.01	2.0 ^Q
17081+1447	TDT224	2013.542	1	—	—	—	—		NR			
17086+0951	HU167	2013.498	1	0.801	0.015	90.7*	0.8					
17087+2725	TDT229Aa,Ab	2013.542	1	0.133	0.050	178.4	8.0		NDp			
17087+2725	TDT229AB	2013.542	1	1.052	0.007	177.3*	0.3					
17087+2725	TDT229AB	2013.542	1	1.049	0.008	177.0	0.3					
17087+4738	HDS2420	2014.543	1	0.165	0.007	275.9*	1.6					
17088+4856	COU1774	2014.524	1	0.604	0.007	100.5*	0.4					
17093+3339	TDT236	2014.546	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
17094+2654	TDT237	2014.546	1	—	—	—	—		NR			
17095+4238	COU1453Aa,Ab	2014.524	1	0.182	0.009	133.7	0.3		NDp			
17095+4238	COU1453AB	2014.514	1	2.460	0.012	226.1*	0.3					
17095+4238	COU1453AB	2014.524	1	2.540	0.013	226.3	0.3					
17100+1900	TDT242	2013.542	1	—	—	—	—		NR			
17100+3902	TDT241	2014.546	1	—	—	—	—		NR			
17107+1651	HEI167	2013.498	1	0.387	0.009	92.0*	0.7					
17107+1651	HEI167	2013.498	1	0.407	0.007	93.4	0.5					
17107+1651	HEI167	2013.509	1	0.401	0.007	94.1*	0.7					
17107+2104	TDT251	2013.509	1	0.487	0.013	122.8*	1.2					
17110+0302	HDS2426	2013.588	1	0.880	0.007	196.6*	0.7					
17110+1622	HEI168	2013.542	1	0.773	0.012	64.6*	0.3					
17115+4914	COU1775	2014.543	1	0.116	0.050	119.6	8.0					
17117+3750	TDT260	2014.546	1	—	—	—	—		NR			
17119+1044	TDS856	2013.563	1	—	—	—	—		NR			
17121+4540	KUI79	2014.514	1	0.863	0.007	205.8*	0.3			Hrt1996a	0.00	0.4
17121+4540	KUI79	2014.524	1	0.871	0.007	204.6*	0.3			Hrt1996a	0.01	-0.6
17122+0946	HU170	2013.555	1	1.845	0.009	267.9	0.4					
17122+0946	HU170	2013.555	1	1.833	0.010	267.6*	0.3					
17128+3647	COU992	2014.524	1	2.629	0.017	289.3*	0.4					
17128+3647	COU992	2014.546	1	2.629	0.013	288.8*	0.3					
17129+2309	COU314	2013.511	1	1.858	0.009	0.2*	0.3					
17130+0745	STT325	2013.588	1	0.300	0.013	293.4*	0.4			FMR2012h	-0.05	0.1
17132+2820	TDT266	2013.542	1	—	—	—	—		NR			
17136-0917	BU1247	2013.569	1	1.519	0.008	341.8*	0.3					
17136+0405	HEI895	2013.561	1	0.866	0.010	194.1*	0.5					
17136+1716	A2087	2013.498	1	0.430	0.010	314.3*	1.3			Mnt2001a	-0.02	0.5 ^Q
17140+2119	COU111Aa,Ab	2013.596	1	0.147	0.050	8.6	8.0		NDp			
17140+2119	COU111AB	2013.596	1	0.615	0.008	251.1*	0.6					
17140+2119	COU111AB	2013.596	1	0.613	0.007	252.8	1.6					
17141-0824	BAR7	2013.569	1	1.499	0.007	49.8*	0.3			Cve2008a	-0.12	-5.2
17141+0616	TDT277	2013.563	1	—	—	—	—		NR			
17142+0622	A1147	2013.509	1	0.169	0.050	356.8	8.0					
17150+1238	HDS2439	2013.498	1	0.373	0.009	167.0*	0.3					
17155+2007	HU489	2013.561	1	1.032	0.007	34.8*	0.3					
17157-0949	A2592AB	2013.585	1	0.169	0.015	133.4*	1.3			Tok2015c	-0.01	10.0
17158+4016	COU1294	2014.546	1	0.985	0.007	263.3*	0.3					
17160+1702	TDT294	2013.542	1	0.572	0.007	77.8*	0.7					
17161+2316	COU315	2014.543	1	0.100	0.050	117.2	8.0			Doc2010h	0.01	32.2 ^Q
17166+1440	BU1200	2013.588	1	0.579	0.021	338.3*	2.0					
17168+0133	TDT296Aa,Ab	2013.566	1	0.167	0.050	142.8	8.0		NDp			
17168+0133	TDT296AC	2013.566	1	3.652	0.021	19.4*	0.3		NDg			
17171+0726	A1148	2013.555	1	2.010	0.010	348.0*	0.3					
17171+4034	COU1295	2014.514	1	0.267	0.020	55.0	2.0					
17174+1319	HDS2444	2013.509	1	0.126	0.050	307.8	8.0					
17174+1939	COU496Aa,Ab	2013.596	1	0.182	0.050	13.7	8.0		NDp			
17174+1939	COU496AB	2013.596	1	0.827	0.011	169.3	0.7					
17176+1025	HDS2445	2013.555	1	0.229	0.007	261.6*	1.4			Tok2017b	-0.02	-2.3
17182+1559	HEI246	2013.585	1	1.131	0.007	42.4*	0.3					
17184+3240	BU628	2014.543	1	0.537	0.011	262.9*	0.4			FMR2012a	-0.02	-1.2
17193-0221	RST4569	2013.582	1	—	—	—	—		NR			
17193-0221	RST4569	2013.588	1	0.186	0.009	85.7	7.6					
17193-0221	RST4569	2013.593	1	0.130	0.050	94.3	8.0					
17197+1947	TDT309	2013.542	1	0.176	0.040	98.2	7.3					
17200-0232	A2684	2013.569	1	0.317	0.007	226.8*	0.6					
17200+0635	TDS862	2013.563	1	—	—	—	—		NR			
17205+4739	A2088	2014.571	1	0.338	0.007	7.9*	1.1					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
17207-0706	A2593	2013.569	1	0.261	0.008	165.7*	0.8			Msn2014a	-0.01	-0.9 ^Q
17208-0902	A28	2013.585	1	2.027	0.010	35.9*	0.3					
17210-0014	RST5079Aa,Ab	2013.588	1	0.114	0.050	119.2	8.0		NDp			
17210-0014	RST5079AB	2013.588	1	1.294	0.007	62.4*	0.3					
17212+2542	A232	2014.543	1	0.350	0.007	127.1*	1.2					
17214+0042	RST5429	2013.566	1	1.525	0.008	303.7*	0.4					
17214+0206	TDT318	2013.582	1	0.439	0.007	16.5*	0.3					
17215+2845	KUI80	2013.542	1	0.627	0.009	171.4*	0.4					
17219+1230	HDS2451	2013.509	1	0.386	0.007	80.7*	0.3					
17221+0500	BU959	2013.946	1	0.818	0.010	197.7	1.3					
17221+0500	BU959	2013.946	1	0.825	0.007	196.1*	0.3					
17221+2310	COU415	2013.561	1	0.232	0.010	236.1*	1.5			Msn2011c	-0.02	-2.0
17224+1447	TDT322	2013.555	1	1.424	0.014	188.1*	0.3					
17224+2056	COU201	2013.498	1	0.503	0.007	257.6*	1.0					
17224+3646	J1131	2014.571	1	1.673	0.008	77.2*	0.3					
17228-0344	HDS2453	2013.588	1	0.298	0.035	254.0	2.7					
17229+1628	STF2157AB,C	2014.543	1	3.366	0.017	208.3*	0.3					
17233+0936	HEI797	2013.588	1	1.258	0.007	334.6*	0.3					
17234+0706	TDT333	2013.561	1	0.390	0.010	70.7*	0.8					
17236+0149	J2505	2013.566	1	1.645	0.010	317.7*	0.3					
17237-0539	RST4570	2013.582	1	1.272	0.007	73.9*	0.3					
17238+2155	HU671	2013.509	1	0.883	0.007	261.7	0.3					
17238+2155	HU671	2013.509	1	0.886	0.007	262.5*	0.3					
17240-0921	RST3972	2013.585	1	0.176	0.035	266.3*	0.4					
17244+0242	TDS865	2013.566	1	1.028	0.007	145.0*	0.3					
17250+1350	HU1281	2013.555	1	1.897	0.009	102.8*	0.3					
17251+0716	A1149	2013.498	1	1.032	0.007	125.0*	0.3					
17251+0716	A1149	2013.498	1	1.018	0.007	125.0*	0.3					
17254-0850	HDS2460	2013.569	1	0.108	0.050	340.5	8.0					
17255+0030	RST5432	2013.585	1	0.195	0.029	187.4	0.5			Hrt2009	-0.04	2.8
17256-0154	RST5081	2013.582	1	0.724	0.007	290.7*	0.4					
17260-0745	RST3975Aa,Ab	2013.569	1	0.156	0.050	165.5	8.0		NDp			
17260-0745	RST3975AB	2013.569	1	1.028	0.014	29.7*	1.2					
17260-0206	TDT347	2013.593	1	—	—	—	—		NR			
17266+2714	HDS2462Aa,Ab	2014.524	1	0.123	0.050	326.7	8.0		NDp			
17266+2714	HDS2462AB	2014.524	1	0.312	0.012	354.3*	0.5					
17268-0104	RST5082	2013.582	1	1.462	0.007	104.5*	0.3					
17268+2625	COU1455	2014.543	1	0.281	0.007	357.5*	0.8					
17269+0219	A2243	2013.612	1	1.975	0.010	301.2*	0.3					
17272+2250	TDT363	2013.555	1	1.572	0.010	189.8*	0.3					
17272+3235	TDT362	2013.542	1	0.231	0.015	342.6*	1.8					
17275+3847	ES2014	2014.571	1	1.650	0.008	93.0*	0.3					
17276+0501	HDS2465	2013.566	1	0.303	0.075	300.6*	2.9					
17276+2618	COU497	2014.571	1	1.071	0.007	76.0*	0.3					
17282+0558	TDT368	2013.563	1	0.725	0.018	303.6*	1.7					
17284-0201	RST4571Aa,Ab	2013.588	1	0.243	0.007	62.9	5.6		NDg			
17284-0201	RST4571Aa,Ab	2013.612	1	0.258	0.007	60.2	6.3	1.25	NDg			
17284-0201	RST4571Aa,Ab	2013.614	2	0.235	0.007	68.3*	0.3		NDg			
17284-0201	RST4571AB	2013.588	1	1.862	0.009	105.9*	0.3					
17284-0201	RST4571AB	2013.590	1	1.878	0.009	105.7	0.3	1.24				
17284-0201	RST4571AB	2013.593	1	1.900	0.015	105.9	0.3					
17284-0201	RST4571AB	2013.595	1	1.913	0.010	106.6	0.3	1.82				
17284-0201	RST4571AB	2013.612	1	1.834	0.009	106.7*	0.3					
17284-0201	RST4571AB	2013.613	1	1.872	0.019	106.4	0.3	1.21				

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
17285+0224	A2246	2013.596	1	0.446	0.008	114.8*	0.3					
17285+3657	COU1143	2014.601	1	0.402	0.009	243.1*	2.0					
17292-0129	RST5083	2013.582	1	1.025	0.007	349.5*	0.4					
17292+0025	RST5434	2013.566	1	1.541	0.008	161.4*	0.3					
17292+1543	HEI169	2013.542	1	0.683	0.032	223.6*	2.9					
17293-0959	STF2171	2013.582	1	1.464	0.007	59.7*	0.3					
17293+0811	HU176	2013.596	1	0.311	0.008	149.0*	1.5					
17293+0811	HU176	2013.596	1	0.303	0.018	149.7	1.0					
17293+2924	A351	2014.571	1	0.415	0.008	51.6*	0.6		Sod1999		0.02	-1.2
17293+3758	HO417	2014.582	1	0.295	0.007	305.3*	0.7					
17297-0801	RST3977	2013.585	1	0.314	0.007	307.8*	1.3					
17299+1558	HDS2471Aa,Ab	2013.596	1	0.320	0.010	10.2	0.7					
17299+1558	HDS2471Aa,Ab	2014.524	1	0.360	0.015	301.0*	0.4					
17299+2147	TDT382	2013.555	1	0.337	0.007	287.9	1.1					
17304-0104	STF2173	2013.615	1	0.813	0.007	149.6*	0.3		Hei1994a		0.00	0.6
17305-1006	RST3978	2013.569	1	0.180	0.035	74.3*	3.1		Tok2015c		-0.08	-4.8 ^Q
17305+0535	HEI389	2013.498	1	2.027	0.024	97.8*	1.9					
17308+0349	A2247	2013.615	1	0.359	0.007	355.9*	0.4					
17309-1055	RST3979	2013.569	1	0.469	0.008	258.3*	0.6					
17309+1512	HDS2473	2013.561	1	0.546	0.010	144.3*	0.6					
17312+4903	COU1778	2014.582	1	0.393	0.007	194.2*	0.6					
17313+1901	COU499	2013.563	1	0.094	0.050	329.0	8.0		Tok2017c		0.00	-13.4
17313+4751	COU1779	2014.524	1	1.594	0.008	221.1	0.3					
17314+0243	A2386	2013.615	1	—	—	—	—		NR			
17315-0105	RST5087	2013.582	1	1.559	0.008	100.2*	0.3					
17317-0959	HDS2474	2013.585	1	0.149	0.050	151.1	8.0					
17318-0055	RST5088	2013.610	1	1.178	0.007	57.6*	0.3					
17319+0701	TDT398	2013.561	1	1.623	0.008	64.9*	0.3					
17320-0042	TDT399	2013.588	1	—	—	—	—		NR			
17320+0249	STT331	2013.566	1	0.992	0.009	352.3*	0.3					
17320+0249	STT331	2013.566	2	1.010	0.010	352.3	0.3	1.10				
17321-0912	A2594	2013.582	1	0.818	0.007	300.0*	0.3					
17324+2848	A352	2014.544	1	—	—	—	—		NR			
17326-0602	TDT404	2013.588	1	—	—	—	—		NR			
17327+0251	HDS2475	2013.585	1	0.136	0.050	226.3*	8.0					
17330+0913	HDS2477	2013.596	1	0.453	0.028	136.4	1.4					
17330+0913	HDS2477	2013.610	1	0.410	0.008	137.4*	1.0					
17330+2316	COU113	2014.601	1	1.235	0.017	71.9*	1.3					
17332+0734	A1153	2013.498	1	1.044	0.007	104.3*	0.3					
17332+0734	A1153	2013.498	1	1.053	0.007	104.8*	0.3					
17332+3520	A1878	2014.544	1	2.911	0.015	284.1*	0.3					
17337+1451	WSI3Aa,Ab	2013.542	1	0.106	0.050	150.9	8.0		NDp			
17337+1451	WSI3AB	2013.542	1	0.561	0.013	33.3	1.3					
17337+4942	HU1282	2014.582	1	0.562	0.007	141.9*	0.4					
17338+3131	TDT415	2014.546	1	—	—	—	—		NR			
17339+1446	A1877	2013.610	1	0.586	0.007	57.0*	0.3					
17339+1747	COU627	2014.443	1	2.178	0.011	144.9*	0.3					
17340+4429	COU1594	2014.571	1	0.545	0.007	329.6*	0.3					
17341+2304	TDS871	2013.555	1	0.836	0.007	356.4*	0.3					
17344+0032	RST5438	2013.566	1	1.359	0.008	76.3*	0.7					
17345+3935	COU1298	2014.582	1	0.290	0.011	250.3*	0.9					
17346+0935	YSC63Aa,Ab	2013.561	1	0.522	0.015	296.9	1.5					
17346+0935	YSC63Aa,Ab	2013.563	1	0.398	0.010	280.8*	0.5					
17347+0922	TDS873	2013.585	1	0.989	0.007	356.7*	0.4					
17347+1304	HEI549	2013.498	1	0.651	0.012	25.1*	0.5					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
17348+0130	J2507	2013.566	1	1.406	0.007	235.6*	0.3					
17348+0601	HDS2481	2013.563	1	—	—	—	—		NR			
17351-0036	HDS2484	2013.569	1	—	—	—	—		NR			
17351-0036	HDS2484	2013.569	1	0.799	0.009	199.9	0.7					
17351-0036	SKF918AC	2013.566	1	3.272	0.016	308.8*	0.3					
17351-0036	SKF918AC	2013.569	1	3.218	0.016	308.3*	0.3					
17351-0036	SKF918AC	2013.570	1	3.217	0.016	308.6	0.3	5.36				
17351-0036	HDS2484	2013.566	1	0.759	0.054	200.7*	0.3					
17351-0036	HDS2484	2013.570	1	0.818	0.037	198.1	0.3	4.14				
17352+0228	TDS874	2013.593	1	1.130	0.007	317.6*	0.3					
17354+1322	A1879	2013.555	1	0.530	0.018	110.0*	0.5					
17354+1322	A1879	2013.610	1	0.500	0.013	111.5*	0.3					
17354+3443	COU995	2014.582	1	0.399	0.007	335.2*	0.4					
17357+0409	STF2187AB,C	2013.555	1	3.275	0.016	178.4*	0.3					
17357+0409	A2985AB	2013.555	1	0.308	0.007	344.2*	0.4					
17357+0409	A2985AB	2013.555	1	0.314	0.007	344.6	0.6					
17357+0409	A2985AC	2013.555	1	3.286	0.016	178.7	0.3		NDg			
17358+0608	TDT424	2013.561	1	0.322	0.008	275.3*	0.4					
17359+3205	COU807	2014.571	1	0.655	0.007	141.8*	0.3					
17359+3801	COU1299	2014.443	1	1.547	0.121	117.9	9.2					
17361-0257	TDT429	2013.585	1	—	—	—	—		NR			
17362+0207	TDT430	2013.588	1	0.835	0.007	85.4*	0.3					
17364+2503	COU500	2014.546	1	0.602	0.007	160.1*	0.3					
17365+4543	COU1595	2014.601	0	0.513	0.008	267.1*	0.6					
17366+0723	A1156	2013.563	1	0.230	0.007	350.6	0.3			Doc2015b	0.02	4.2
17366+4827	COU1922	2014.524	2	0.370	0.007	83.3*	0.3			Doc2008f	0.01	-1.5
17366+4827	COU1922	2014.524	1	0.379	0.007	81.5	1.1			Doc2008f	0.02	-3.3
17368+1034	STT333	2013.593	1	—	—	—	—		NR			
17372+0507	TDT437	2013.563	1	—	—	—	—		NR			
17372+1809	TDT436	2013.561	1	0.115	0.050	184.0	8.0					
17372+2754	KUI83	2013.542	1	0.190	0.046	218.4*	8.2			Jte2018	-0.07	-5.7
17372+2754	KUI83	2014.524	2	0.281	0.070	211.5*	4.9			Jte2018	-0.00	3.1
17372+3124	TDT435	2014.546	1	—	—	—	—		NR			
17373+2803	TDT438	2014.582	1	—	—	—	—		NR			
17374+1233	BU1121	2013.593	1	0.464	0.007	195.5*	0.9					
17375+1616	HEI249	2013.542	1	1.569	0.008	233.6*	0.3					
17384-0519	BAZ8	2013.582	1	1.221	0.007	126.1*	0.3					
17387+0613	A1157	2013.498	1	1.310	0.007	268.6*	0.5					
17390+0240	WSI88	2013.566	1	0.172	0.007	188.7	0.8					
17391-0531	HDS2494	2013.569	1	0.118	0.050	53.5	8.0					
17393+2617	COU628	2014.571	1	1.135	0.007	308.9*	0.3					
17393+4715	HDS2495	2014.544	1	—	—	—	—		NR			
17394+1107	TDT453	2013.563	1	0.582	0.007	24.6*	0.5					
17397-0119	A1159Aa,Ab	2013.585	1	0.176	0.050	135.7	8.0			NDp		
17397-0119	A1159AB	2013.585	1	2.416	0.012	284.4*	0.3	4.01				
17397-0119	A1159AB	2013.585	1	2.427	0.012	284.3	0.3					
17397-0119	A1159AB	2013.585	1	2.432	0.012	284.6	0.3					
17398+4619	COU1780	2014.544	1	—	—	—	—		NR			
17399+0748	HDS2499	2013.561	1	0.661	0.007	241.4*	0.3					
17400-0038	BU631	2013.610	1	0.257	0.015	82.5*	1.6			Hei1996a	-0.04	1.6
17403+5047	COU2114	2014.582	1	0.389	0.007	184.4*	0.5					
17407-0043	A1160	2013.610	1	1.671	0.008	16.7*	0.3					
17408-0521	A2685	2013.588	1	1.122	0.007	194.8*	0.5					
17411+1628	A2091	2013.593	1	0.829	0.007	269.4	0.3					
17411+1628	A2091	2013.593	1	0.827	0.007	269.7*	0.3					
17414+4128	A696	2014.601	1	2.041	0.010	306.1*	0.3					
17415+3752	COU996Aa,Ab	2014.443	1	0.130	0.021	134.4	0.4			NDp		
17415+3752	COU996AB	2014.443	1	1.575	0.008	321.9*	0.3					
17415+3752	COU996AB	2014.443	1	1.563	0.008	322.3	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
17417+0109	A2249	2013.632	1	1.442	0.007	303.2*	0.3					
17417+0458	BAL3011	2013.563	1	—	—	—	—		NR			
17419-0944	HDS2503	2013.588	1	0.165	0.007	149.9	2.6					
17420+1038	HDS2504	2013.632	1	0.168	0.012	213.6*	1.8					
17420+1557	BU1251	2013.615	1	1.468	0.007	104.2	0.3			Baz1991a	0.09	2.5
17421+2103	A1371	2014.544	1	0.142	0.050	112.5	8.0					
17429+2019	COU29	2014.443	1	2.624	0.061	11.5*	0.5					
17430+0547	HDS2506	2013.582	1	0.466	0.007	125.0*	0.8			Tok2019c	0.02	3.2
17430+1215	HU1283	2013.615	1	0.465	0.021	7.8*	0.7					
17430+1215	HU1283	2013.615	1	0.472	0.008	7.7	0.7					
17433+4345	D16	2014.571	1	0.992	0.007	148.6*	0.3					
17435+3453	COU997	2014.582	1	—	—	—	—		NR			
17436+0856	TDT479	2013.593	1	1.454	0.013	341.6	0.6					
17436+1257	HU1284	2013.563	1	1.054	0.007	70.4*	0.3					
17436+2237	HU1285	2014.601	1	0.532	0.007	211.2*	0.4			USN2002	0.03	-1.1
17439+0551	STF2200	2013.593	1	1.570	0.008	163.6*	0.3					
17443-0632	RST4573	2013.612	1	1.767	0.009	302.9*	0.3					
17445+1900	STF2206	2013.615	1	1.049	0.007	248.7*	0.3					
17448-0027	RST5093	2013.566	1	1.712	0.009	55.0*	0.3					
17448+0512	TDT484	2013.563	1	—	—	—	—		NR			
17449+5003	TDT485	2014.601	1	—	—	—	—		NR			
17452+2107	COU630	2014.524	1	0.177	0.050	303.9*	8.0					
17453+0244	HEI798	2013.626	1	1.953	0.010	103.0*	0.3					
17453+1750	TDT488	2013.555	1	0.731	0.035	180.6*	0.8					
17454+4540	COU1597	2014.443	1	1.024	0.007	301.0*	0.7					
17455+2949	COU632	2014.582	1	1.052	0.007	307.5*	0.3					
17456-0424	A31	2013.585	1	1.140	0.009	4.1*	0.8					
17456-0330	A32	2013.569	1	0.736	0.007	212.8*	0.3					
17456+1553	HU1287	2013.593	1	1.945	0.010	62.3*	0.3					
17457-0713	RST4574	2013.569	1	0.660	0.019	262.8*	1.0					
17457+1650	A2092	2013.542	1	0.832	0.007	336.3*	0.4					
17457+1743	STF2205	2013.615	1	0.981	0.007	7.1*	0.3			Izm2019	0.05	-0.5
17461+1343	TDT496	2013.561	1	1.505	0.008	332.6*	0.3					
17461+1343	TDT496	2013.561	1	1.484	0.008	332.7	0.3					
17462+3853	COU1300	2014.546	1	0.751	0.007	124.6*	0.3					
17464+3553	TDT497	2014.524	1	0.747	0.007	261.2*	0.3					
17465+2743	AC7	2014.546	1	0.755	0.007	277.9*	0.3					
17466-0354	A33	2013.582	1	0.770	0.008	220.6*	0.3					
17468+0534	A1161	2013.626	1	0.794	0.007	284.9*	0.3					
17469+0630	A1162	2013.610	1	1.832	0.009	163.4*	0.3					
17470+3750	COU1144	2014.571	1	0.920	0.007	282.4*	0.4					
17471+1742	STF2215	2013.615	1	0.482	0.007	250.0*	0.3			Cve2006e	0.02	1.0
17471+3235	COU634	2014.601	1	0.243	0.023	81.4	0.7					
17471+4215	A697	2014.544	1	0.438	0.007	127.4*	0.3					
17472-0617	RST4575	2013.569	1	0.310	0.007	90.2*	0.3					
17472+1502	HU1288	2013.585	1	0.460	0.007	161.3*	0.4			Zir2015a	0.02	1.5
17473+2241	COU633Aa,Ab	2014.571	1	0.173	0.044	140.4	6.9		NDp			
17473+2241	COU633AB	2014.571	1	2.959	0.015	236.7*	0.3					
17481+0135	A2185	2013.632	1	0.663	0.007	180.6*	0.5					
17482+4944	COU1923	2014.601	1	0.541	0.007	281.9*	0.3					
17483+1547	J753	2013.626	1	1.980	0.010	273.6*	0.3					
17487+3536	HU1182	2014.524	1	0.422	0.007	301.1*	1.1			USN2002	-0.01	-0.8
17489+1633	TDT519	2013.561	1	1.008	0.007	221.5*	0.3					
17490+3704	COU1145	2014.443	1	0.257	0.015	300.1	0.9			Hrt1996a	0.09	4.9 ^Q
17494+0534	TDS886	2013.563	1	2.053	0.010	296.8*	0.3					
17500+0031	A2186	2013.615	1	0.201	0.018	249.6*	1.4			Zir2013d	-0.04	-3.5
17501+0214	A2187	2013.566	1	0.520	0.007	322.8*	0.5					
17503-0335	RST4577	2013.569	1	0.278	0.007	116.0*	0.4					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ ($^\circ$)
17505+3651	COU1146	2014.443	1	0.142	0.050	146.3	8.0					
17505+4907	COU1924	2014.582	1	0.590	0.007	248.6*	0.3					
17506+0714	STT337	2013.555	1	0.570	0.013	165.1*	0.6			Doc2015f	0.01	-0.1
17506+1517	FOX22	2013.626	1	0.979	0.007	339.7*	0.3					
17507+3339	COU635	2014.443	1	2.567	0.013	254.8*	0.3					
17510+1821	HDS2517	2013.643	1	0.461	0.026	212.8*	0.3					
17512+0741	A1163	2013.498	1	1.145	0.007	103.4*	0.3					
17512+0804	TDT535	2013.563	1	—	—	—	—		NR			
17513+1723	TDT536	2013.585	1	1.057	0.007	61.1*	0.3					
17513+1723	TDT536	2013.610	1	1.061	0.007	60.6*	0.3					
17513+1723	TDT536	2013.611	1	1.068	0.007	60.5	0.3	1.02				
17516+4555	A1883	2014.524	1	0.550	0.007	41.3*	0.3					
17518-0046	RST5094	2013.615	1	0.706	0.007	95.9*	0.3					
17519-0329	LEO14	2013.585	1	1.114	0.007	75.3*	0.3					
17519+0724	A1164	2013.580	1	0.396	0.007	44.4*	0.7					
17519+4256	COU1598	2014.571	1	0.441	0.010	231.0*	0.4					
17520+1449	TDT542	2013.542	1	—	—	—	—		NR			
17520+1520	STT338	2013.640	1	0.830	0.007	164.6*	0.3			Pru2012	0.00	0.1
17524+1708	TDT550	2013.563	1	—	—	—	—		NR			
17525-0359	RST4578Aa,Ab	2013.569	1	0.125	0.050	151.2	8.0		NDp			
17525-0359	RST4578AB	2013.569	1	2.179	0.011	15.3*	0.3					
17525-0359	RST4578AB	2013.569	1	2.203	0.011	14.2	0.7					
17526-0519	HO422	2013.580	1	0.203	0.030	7.2*	0.8					
17529+2941	AC8	2014.546	1	0.111	0.050	304.4	8.0			Zir2014a	0.04	-7.7
17530-0755	STF3128	2013.569	1	1.259	0.007	50.3*	0.3			Izm2019	0.01	0.6
17531-0852	HDS2523	2013.580	1	0.242	0.013	247.3	1.0					
17532+3243	COU998AB	2013.542	1	1.649	0.008	121.4*	3.4					
17532+3243	COU998AB	2013.555	1	1.682	0.038	122.0*	3.4					
17532+3243	COU998AB	2013.561	1	1.641	0.008	119.9*	3.3					
17532+3243	COU998AB	2014.443	1	1.631	0.038	122.1*	0.3					
17532+3243	GII43Aa,Ab	2013.555	1	0.223	0.018	9.9	1.8		NDg			
17532+3243	GII43Aa,Ab	2013.561	1	0.170	0.050	24.3*	8.0					
17532+3243	GII43Aa,Ab	2014.443	2	0.224	0.014	16.8*	1.2		NDg			
17533+0523	TDT557	2013.555	1	—	—	—	—		NR			
17533+2459	A235	2013.645	1	0.102	0.050	49.0*	8.0			Hrt2014b	-0.08	-3.5
17533+4329	TDT556	2014.571	1	0.747	0.007	256.6*	0.3					
17535-0355	TOK54	2013.588	1	0.151	0.050	126.4	8.0					
17536+4234	COU1600	2014.601	1	0.685	0.007	251.2*	0.3					
17539+0701	HEI865	2013.563	1	1.757	0.009	358.4*	0.5					
17539+1413	TDT563Aa,Ab	2013.585	1	0.522	0.010	107.0*	0.3		NDg			
17542+1108	FIN381	2013.626	1	—	—	—	—		NR			
17543+0328	A2188	2013.615	1	—	—	—	—		NR			
17548-0150	RST5096	2013.569	1	0.466	0.007	166.0*	0.8					
17549+2713	TDT568AB	2013.645	1	—	—	—	—		NR			
17549+2713	TDT568AC	2013.645	1	1.813	0.012	90.2	0.4		NDg			
17553+3532	A2987	2014.524	1	1.390	0.007	59.3*	0.3					
17554+1352	HEI553	2013.632	1	0.635	0.007	208.5*	0.6					
17555+4108	COU1601Aa,Ab	2014.615	1	0.527	0.007	62.6*	0.3					
17556-0503	RST5545Aa,Ab	2013.569	1	0.123	0.050	155.8	8.0		NDp			
17556-0503	RST5545AB	2013.569	1	1.027	0.010	283.3*	0.3					
17556+0204	HDS2527	2013.566	1	0.100	0.050	137.5	8.0					
17556+2508	COU503	2013.593	1	0.363	0.007	114.8*	0.8					
17561+2319	TDT581	2013.593	1	—	—	—	—		NR			
17563+0259	A2189	2013.588	1	0.122	0.050	97.9	8.0			Doc2018l	0.01	-0.9 ^Q
17563+0259	A2189	2013.612	1	0.172	0.041	96.3*	2.2			Doc2018l	0.06	-2.6 ^Q
17563+4705	COU1781	2014.601	1	0.482	0.007	181.3*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
17564-0845	RST3988	2013.569	1	0.847	0.007	36.3*	0.3					
17566+0103	RST5444	2013.561	1	1.399	0.011	255.1*	0.4					
17566+1305	TDT588	2013.566	1	—	—	—	—		NR			
17566+2346	TDT587	2013.593	1	—	—	—	—		NR			
17566+3045	COU999	2014.628	1	1.435	0.007	311.5*	0.3					
17567+0447	HEI255	2013.555	1	0.421	0.007	68.8*	1.6					
17569+3236	HU1184	2014.571	1	0.914	0.007	204.0*	0.4					
17571+0004	STF2244	2013.640	1	0.659	0.007	99.8*	0.6			Msn2017e	0.01	0.5
17571+1547	MCT10	2013.566	1	1.159	0.009	279.6*	0.3					
17571+1547	MCT10	2013.585	1	1.159	0.008	281.6*	0.7					
17572+3541	HO73	2014.628	1	1.942	0.010	213.8*	0.3					
17573+1607	HEI256	2013.580	1	2.148	0.011	350.0*	0.3					
17575+1058	BU1299	2013.626	1	0.263	0.007	102.5*	0.8			Doc2007j	-0.05	2.1
17575+3942	COU1457	2014.524	1	1.928	0.010	7.1*	0.3					
17577+2815	HO424	2014.544	1	1.453	0.007	202.7*	0.3					
17578+0253	HDS2532	2013.588	1	0.179	0.010	193.2	2.2					
17578+0253	HDS2532	2013.640	1	0.218	0.030	191.7*	1.4					
17580+1141	TDS892	2013.582	1	0.782	0.009	285.0*	0.4					
17581+0829	J2510	2013.610	1	1.435	0.007	52.5*	0.3					
17583+1302	TDT603	2013.582	1	—	—	—	—		NR			
17583+3329	HO74AB	2014.546	1	3.229	0.016	123.8*	0.3					
17583+3329	COU1001Aa,Ab	2014.546	1	0.472	0.007	220.1*	0.3					
17584+0428	KUI84	2013.555	1	0.156	0.033	371.5*	8.0			Doc2018a	0.05	-28.3
17586+1353	HU1289	2013.588	1	0.629	0.007	71.6*	0.3					
17587+3538	COU1002	2014.628	1	0.833	0.007	165.0*	0.5					
17589-0331	HDS2536	2013.580	1	0.224	0.007	5.7*	2.4					
17589+2620	COU808	2014.615	1	0.943	0.015	155.4*	0.9					
17590+4811	COU1925	2014.546	1	0.195	0.007	38.2*	1.5					
17591+3228	HU1185	2013.593	1	0.368	0.007	143.1*	0.5			Doc2012i	-0.02	0.9
17591+3228	HU1185	2014.601	1	0.394	0.007	143.3*	0.5			Doc2012i	0.00	0.4
17592+3926	COU1458	2014.546	1	0.362	0.007	76.8*	1.2					
17592+4115	COU1783	2014.601	1	2.842	0.014	47.4*	0.3					
17593+4902	YSC64	2014.582	1	0.545	0.007	41.1*	0.7					
17594-0344	RST4580	2013.582	1	0.841	0.007	35.2*	0.3					
17594+2929	COU1003	2014.571	1	—	—	—	—		NR			
17598+1040	TDS896	2013.585	1	—	—	—	—		NR			
17598+5039	COU2390	2014.582	1	0.149	0.059	178.6	8.0					
17599-0525	A34	2013.580	1	1.408	0.010	289.8*	0.3					
18000+2449	COU115	2014.546	1	0.279	0.007	296.5*	0.3					
18001+0537	TDT623Aa,Ab	2013.612	1	0.123	0.050	279.8	8.0		NDp			
18001+0537	TDT623AB	2013.582	1	—	—	—	—		NR			
18001+0537	TDT623AB	2013.589	1	0.315	0.007	238.7	0.3	1.30				
18001+0537	SKF1859AB,C	2013.582	1	3.772	0.019	183.7	0.3	3.42				
18001+0537	SKF1859AB,C	2013.585	1	3.758	0.019	183.5	0.3	3.59				
18001+0537	SKF1859AB,C	2013.612	1	3.783	0.019	182.9*	0.3					
18001+0537	SKF1859AB,C	2013.612	1	3.767	0.021	183.3	0.4					
18003+2154	A1374	2013.593	1	0.418	0.010	218.8*	0.6			Mdz2017	-0.02	0.3
18003+2154	A1374	2013.593	1	0.457	0.007	217.3*	0.3			Mdz2017	0.02	-1.2
18003+2154	A1374	2013.645	1	0.459	0.007	219.3*	0.4			Mdz2017	0.02	0.8
18004+2112	A1375	2014.544	1	1.778	0.009	92.2*	0.3					
18005+1734	COU809	2014.524	1	2.131	0.011	205.4*	0.3					
18006+3014	J1127	2014.620	1	2.908	0.015	337.6	0.3					
18007+1736	COU810	2013.580	1	0.160	0.050	96.6	8.0					
18008-0552	RST5546	2013.580	1	0.954	0.007	130.0*	0.5					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18008+0518	TDT634	2013.610	1	1.644	0.008	251.6*	0.3					
18009-1012	HU236	2013.580	1	0.151	0.050	155.8	* 2.1					
18009+2432	TDT636	2013.593	1	—	—	—	—		NR			
18015-1014	BU47	2013.580	1	0.627	0.007	74.6*	0.3			Hrt2013c	0.02	0.5
18015+0331	BU1202	2013.561	1	0.656	0.007	343.9*	0.3					
18015+4019	HO77	2014.639	1	2.015	0.010	312.2	0.3					
18018+1254	HEI554	2013.588	1	2.593	0.013	14.3*	0.3					
18020+1245	HDS2538	2013.626	1	0.423	0.019	210.2*	0.5					
18020+3047	COU811	2014.524	1	2.170	0.011	153.1*	0.3					
18024+0944	TDS897	2013.610	1	1.341	0.007	331.0*	0.3					
18025-0719	RST3992	2013.569	1	0.559	0.009	235.8*	1.2					
18025+4414	BU1127	2014.544	1	0.703	0.007	48.0*	0.3					
18026+0325	HDS2539	2013.561	1	0.356	0.007	131.5*	0.3					
18027-0236	RST4581	2013.569	1	0.596	0.007	36.9*	1.0					
18028+0137	BU635BC	2013.612	1	1.463	0.007	122.1*	0.3					
18030-0237	A35Aa,Ab	2013.612	1	0.183	0.050	275.9	8.0		NDp			
18030-0237	A35Aa,Ab	2013.612	1	0.106	0.050	286.4	8.0		NDp			
18030-0237	A35AB	2013.612	1	1.370	0.016	299.5	1.5					
18030+1500	HDS2542	2013.593	1	0.117	0.050	329.1	8.0					
18031-0811	STF2262	2013.632	1	1.526	0.008	286.8*	0.3			Sod1999	-0.04	0.4
18032+2603	HO565	2014.544	1	0.145	0.050	102.6*	8.0					
18032+2603	HO565	2014.615	1	0.136	0.050	110.7	8.0					
18033+1152	TDT655	2013.585	1	0.427	0.007	281.1*	1.8					
18033+3921	STF2275	2014.582	1	0.301	0.007	301.2*	1.1			Pop2000a	0.00	-2.5
18034+0447	A1165	2013.610	1	1.223	0.007	33.0*	0.3					
18035-0205	TDS900	2013.583	1	—	—	—	—		NR			
18036+3731	COU1147	2014.571	1	0.741	0.021	174.9*	1.0					
18039+3200	COU1004	2014.615	1	1.339	0.007	108.8*	0.3					
18041+5053	COU2391	2014.601	1	2.285	0.032	276.9*	0.4					
18042+1613	GCB30	2013.566	1	1.312	0.029	338.8*	0.3					
18043+4206	COU1786	2014.582	1	0.252	0.007	186.7	2.6					
18044+0337	A2257	2013.561	1	0.193	0.022	34.9*	1.0			Doc2008a	0.03	3.4
18045+2255	TDT664	2013.542	1	—	—	—	—		NR			
18046+1240	HDS2545	2013.626	1	—	—	—	—		NR			
18047+4650	COU2115Aa,Ab	2014.628	1	0.113	0.050	113.9	8.0			NDp		
18047+4650	COU2115AB	2014.628	1	0.668	0.008	38.2*	3.2					
18050+2127	STT534	2014.639	1	2.246	0.011	268.6*	0.3					
18054-0019	A1166	2013.585	1	0.616	0.007	91.0*	0.3					
18054+1624	A2093	2013.593	1	0.638	0.007	229.4*	0.3					
18054+4306	COU1787	2014.615	1	0.399	0.023	327.6*	9.3					
18055+0311	HEI257	2013.613	1	1.821	0.009	331.5*	0.3					
18056+1242	J1220	2013.610	1	1.512	0.010	309.2*	0.3					
18058+2127	STT341	2013.555	1	0.424	0.007	92.6*	0.4			Hei1982b	0.02	-0.6
18060+2415	TDT680	2013.542	1	0.447	0.007	286.2*	0.6					
18061-0819	HDS2551	2013.613	1	0.199	0.016	87.2	0.8					
18061+5116	COU2514	2014.628	1	—	—	—	—		NR			
18062+3326	HO79	2014.628	1	0.190	0.049	50.8*	4.0					
18063+3824	HU1186	2014.544	1	0.130	0.020	129.5*	2.3			USN2006b	0.03	-13.4
18064+4437	COU1926	2014.582	1	0.317	0.021	123.8*	0.6					
18065-0109	HDS2552	2013.569	1	—	—	—	—		NR			
18065-0109	HDS2552	2013.583	1	0.192	0.007	321.5	8.3					
18065-0109	HDS2552	2013.613	1	0.193	0.010	340.0	8.7					
18065-0109	HDS2552	2013.626	1	0.151	0.050	315.2*	8.0					
18066+5001	STF2290AB	2014.601	1	4.070	0.020	352.7*	0.3					
18066+5001	COU2276	2014.601	1	0.233	0.007	3.6*	1.7					
18067+1359	AG358AB	2013.632	1	3.515	0.018	330.3*	0.3					
18067+1359	AG358AB	2013.633	1	3.614	0.018	329.8	0.3	1.35				

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18067+1359	COU8BC	2013.632	1	0.872	0.007	120.8*	0.3					
18067+1359	COU8BC	2013.633	1	0.890	0.007	121.0	0.3	0.36				
18069+0159	BAL1498	2013.615	1	2.984	0.015	254.8*	0.3					
18073+0617	TDT694	2013.613	1	—	—	—	—		NR			
18073+2429	TDT693	2013.645	1	0.475	0.007	251.4*	1.0					
18075+1415	TDS905	2013.626	1	1.252	0.007	295.4*	0.3					
18075+1940	STT524	2013.643	1	0.444	0.007	207.6*	0.7			Hrt2000c	-0.02	0.2
18076+1225	HEI556	2013.555	1	1.779	0.010	293.2*	0.3					
18081-0707	RST3997	2013.580	1	1.275	0.021	82.3	0.6					
18081+0213	BU636Aa,Ab	2013.613	1	0.112	0.050	168.1	8.0		NDp			
18081+0213	BU636AB	2013.613	1	1.439	0.015	119.8*	0.3					
18081+1114	TDT700	2013.610	1	—	—	—	—		NR			
18082+1346	TDS906	2013.588	1	1.234	0.007	29.4*	0.3					
18085+1014	ROE97	2013.555	1	1.047	0.007	152.0*	0.3					
18085+2113	TDT703	2013.593	1	—	—	—	—		NR			
18086-0948	HDS2557	2013.580	1	0.602	0.008	251.8*	0.6					
18086+1245	HDS2556	2013.632	1	0.531	0.007	123.5	0.3					
18086+1700	HDS2555	2013.629	1	0.461	0.007	113.2*	2.4					
18086+1838	HU314	2013.615	1	0.246	0.008	70.0*	0.4			Zir2015a	-0.04	-4.1
18087+2402	TDT705	2014.546	1	—	—	—	—		NR			
18088+2434	COU504	2014.524	1	2.166	0.011	75.2*	0.3					
18089+1239	TDT708	2013.588	1	—	—	—	—		NR			
18090+0447	TDT710	2013.555	1	1.148	0.007	273.5*	0.3					
18090+2335	HU315	2013.670	1	0.327	0.008	36.2	1.0					
18092-0817	RST3998	2013.580	1	0.348	0.009	159.8*	0.8					
18092-0817	RST3998	2013.640	1	0.365	0.007	161.2*	0.5					
18092+3129	COU812	2014.582	1	0.666	0.007	265.0*	0.3			Lin2020	0.01	1.3
18093+3836	HEI557	2014.571	1	1.757	0.009	280.6*	0.3					
18094+2415	TDT712	2013.645	1	—	—	—	—		NR			
18094+3432	HU1187	2014.637	1	2.079	0.010	76.8*	0.3					
18096+0400	STF2281	2013.640	1	0.682	0.007	286.4*	0.3			Sod1999	-0.01	2.0
18096+0609	STF2283	2013.566	1	0.567	0.007	53.9*	0.3			Izm2019	-0.03	1.0
18096+0609	STF2283	2013.585	1	0.576	0.007	53.7*	0.3			Izm2019	-0.02	0.8
18097+2107	COU117	2014.524	1	2.390	0.012	227.9*	0.3					
18099-0755	HDS2561	2013.585	1	0.871	0.007	17.8*	0.4					
18101+1629	STF2289	2013.632	1	1.258	0.007	218.5*	0.4			Izm2019	0.04	-0.4
18104+5104	COU2392	2014.601	1	0.637	0.007	146.1*	0.3					
18105+2536	TDT723	2014.628	1	—	—	—	—		NR			
18106+0738	HDS2562Aa,Ab	2013.640	1	0.153	0.050	37.7	8.0		NDp			
18106+0738	HDS2562AB	2013.640	1	0.940	0.007	245.1*	0.6					
18106+0738	HDS2562AB	2013.640	1	0.943	0.011	244.9	0.8					
18108-0710	RST3999	2013.583	1	0.215	0.033	176.3	2.8					
18109+0941	TDT726	2013.588	1	—	—	—	—		NR			
18109+3321	COU1005AB	2013.542	1	0.279	0.012	335.6*	1.0					
18109+3321	COU1005AB	2014.546	1	0.189	0.048	327.7*	6.0					
18109+3321	COU1005AB,C	2013.542	1	1.777	0.038	26.4	1.4					
18109+3321	COU1005AB,C	2014.546	1	1.832	0.009	26.4*	0.3					
18110-0000	RST5106	2013.566	1	1.908	0.010	4.1*	0.3					
18110+5038	HDS2564	2014.544	1	0.341	0.019	306.2*	1.1					
18112+1614	TDT728	2013.610	1	—	—	—	—		NR			
18113+1713	HU317	2013.610	1	1.491	0.007	204.9*	0.3					
18114+1030	TDT729	2013.615	1	—	—	—	—		NR			
18114+2519	A238	2013.542	1	0.624	0.007	72.4*	0.3					
18115+1020	TDT730	2013.629	1	—	—	—	—		NR			
18117-0023	TDT732	2013.615	1	—	—	—	—		NR			
18118+4955	COU2393	2014.571	1	1.855	0.009	78.0*	0.3					
18119-0104	RST5107	2013.569	1	0.359	0.007	157.4*	0.7					
18119+0928	TDT733	2013.629	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18119+4733	COU2117	2014.601	1	0.419	0.007	295.7*	1.3					
18121+2739	STF2292	2014.620	1	0.877	0.007	274.9*	0.4					
18121+2739	STF2292	2013.645	1	0.879	0.007	275.5*	0.3					
18121+3459	TDT734	2014.615	1	—	—	—	—		NR			
18121+4644	COU2118	2014.639	1	0.129	0.050	274.0*	8.0			Cou1999b	-0.01	-0.2 ^Q
18122+0814	HDS2568Aa,Ab	2013.640	1	0.176	0.050	39.0	8.0		NDp			
18122+0814	HDS2568AB	2013.640	1	0.608	0.007	263.0*	0.5					
18123+0154	A2260	2013.632	1	1.968	0.010	106.8*	0.3					
18123+0154	A2260	2013.643	1	1.982	0.010	107.2*	0.3					
18124-0718	A36	2013.588	1	1.306	0.008	207.2*	0.3					
18124+0415	A353	2013.610	1	1.672	0.008	17.4*	0.3					
18126-0329	A83	2013.613	1	0.756	0.007	303.3*	0.3					
18126+1224	HDS2570	2013.640	1	0.086	0.050	320.0	8.0			Tok2020g	-0.01	3.7
18126+3836	BU1091	2014.544	1	0.752	0.007	319.6*	0.3			Zir2012b	0.00	0.3
18128+0549	STT345	2013.610	1	1.486	0.010	67.1*	0.3					
18129+0228	HEI559	2013.566	1	0.785	0.007	172.6*	0.3					
18130+3318	COU1006	2014.544	1	0.490	0.007	332.1*	0.5			Cou1999b	0.25	87.7
18131-0747	RST4001	2013.583	1	1.883	0.009	277.9*	0.3					
18131-0528	RST4582	2013.569	1	0.647	0.007	324.6*	0.6					
18131+2602	LWR14	2013.542	1	—	—	—	—		NR			
18131+2602	LWR14	2013.646	1	—	—	—	—		NR			
18132+4315	A576	2014.639	1	0.402	0.007	282.2*	0.3					
18133-0324	RST4583	2013.580	1	0.389	0.010	85.1*	0.5					
18133+0906	HDS2573	2013.613	1	0.831	0.007	164.2*	0.3					
18134+1643	HEI170	2013.555	1	0.340	0.020	135.4*	1.6					
18136+0946	HDS2574	2013.632	1	0.515	0.016	312.9	0.8					
18139+0332	TDT750	2013.615	1	0.728	0.007	96.9*	0.3					
18140+0922	TDT753	2013.555	1	0.577	0.007	9.8*	0.4					
18140+1901	HEI801	2014.615	1	2.471	0.012	173.2*	0.3					
18142+0545	TDT756Aa,Ab	2013.615	1	0.213	0.007	39.4	1.0		NDp			
18142+0545	TDT756AB	2013.615	1	0.680	0.013	91.9*	0.8					
18145+1419	TDT758	2013.610	1	—	—	—	—		NR			
18145+3249	HU927	2014.628	1	0.362	0.007	101.3*	0.7					
18145+3313	COU1007	2014.582	1	0.266	0.034	35.9*	1.0					
18146+0011	STF2294	2013.640	1	1.340	0.007	93.0*	0.3			Sca2015b	0.02	-0.4
18149+0859	HU196	2013.632	1	—	—	—	—		NR			
18154+1001	HEI800	2013.640	1	0.335	0.007	84.0*	0.4					
18154+1850	TDT761	2013.615	1	0.544	0.007	129.2*	0.7					
18160-1006	HU58	2013.580	1	0.678	0.007	127.4*	0.3					
18160+1158	TDT765	2013.566	1	1.013	0.007	172.8*	0.3					
18160+1427	TDT764	2013.615	1	—	—	—	—		NR			
18161+4729	COU2120	2014.601	1	3.297	0.016	106.4*	0.3					
18163+1401	TDT770	2013.629	1	—	—	—	—		NR			
18163+2301	TDT769Aa,Ab	2013.670	1	0.146	0.050	136.3	8.0		NDp			
18163+2301	TDT769AB	2013.670	1	—	—	—	—		NR			
18163+2301	TDT769AC	2014.639	1	1.952	0.019	285.8*	0.7					
18163+3625	HU1291	2014.544	1	0.303	0.007	53.1*	0.3			Hrt2014b	0.03	0.9
18165+0637	TDS912	2013.613	1	1.232	0.007	198.6*	0.4					
18165+2249	HU319Aa,Ab	2014.628	1	0.182	0.021	126.0	2.3		NDp			
18165+2249	HU319AB	2014.544	1	0.239	0.021	127.8*	1.8					
18165+2249	HU319AB	2014.628	2	0.266	0.012	125.4*	1.1					
18165+2249	HU319AC	2014.628	1	2.764	0.014	200.5*	0.3					
18166-0058	RST5109	2013.629	1	2.049	0.010	114.2*	0.3					
18166-0058	RST5109	2013.629	1	2.050	0.010	113.8	0.3	4.66				
18166-0058	RST5109	2013.643	1	2.016	0.010	114.4	0.3	4.38				
18167+3623	COU1304	2014.637	1	1.396	0.007	81.6*	0.3					
18169+2647	A240	2014.658	1	2.385	0.012	349.5*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18171+1527	TDT774	2013.632	1	—	—	—	—		NR			
18171+3453	COU12	2014.546	1	2.009	0.029	29.7*	0.4					
18172+0735	J2514	2013.613	1	1.765	0.009	302.3*	0.3					
18172+1955	TDT775	2013.640	1	0.927	0.007	156.0*	0.3					
18174-0946	HDS2584	2013.613	1	0.678	0.010	351.8*	0.3					
18177+2642	TDT779	2013.670	1	—	—	—	—		NR			
18178+4351	A578Aa,Ab	2014.628	1	0.330	0.027	243.7*	2.3			Ole2001	0.11	17.4
18178+4351	A578AB	2014.628	1	1.839	0.009	167.1*	0.3					
18181-0943	RST4584	2013.569	1	1.046	0.009	118.4*	0.3					
18181-0920	TDT782	2013.585	1	—	—	—	—		NR			
18181-0120	HDS2587Aa,Ab	2013.643	1	0.086	0.050	318.7	8.0			Tok2018e	-0.01	2.4
18181-0120	HDS2587AC	2013.643	1	1.832	0.020	167.4	1.0			NDp		
18182+4509	HDS2588	2014.582	1	0.364	0.007	31.1	0.7					
18184+0716	HEI868	2013.566	1	—	—	—	—		NR			
18184+0716	HEI868	2013.583	1	—	—	—	—		NR			
18184+0716	HEI868	2013.585	1	—	—	—	—		NR			
18184+1124	TDT784	2013.629	1	—	—	—	—		NR			
18186+0402	HEI897	2013.629	1	1.117	0.013	255.8*	0.3					
18186+2557	TDT788	2013.593	1	—	—	—	—		NR			
18187+1028	HEI802	2013.643	1	1.176	0.007	218.6*	0.3					
18188-0929	RST4585	2013.569	1	0.707	0.007	17.3*	0.3					
18188+0501	TDS914	2013.615	1	0.755	0.007	354.2*	0.5					
18191+2935	A242	2013.593	1	1.320	0.007	304.8*	0.3					
18195+1526	HEI171	2013.640	1	0.397	0.007	97.6*	0.6					
18197+1016	HU197	2013.555	1	0.497	0.007	59.9*	0.4			Hrt2010a	-0.01	-1.9
18199+0801	TDT800	2013.610	1	0.874	0.007	175.5*	0.3					
18200+2120	AG221	2013.645	1	1.776	0.009	12.6*	0.3					
18201-0759	STF2303	2013.629	1	1.551	0.008	70.3*	0.3					
18203+2104	HDS2592	2013.555	2	0.167	0.060	175.4*	7.0					
18203+2104	HDS2592	2013.561	1	0.212	0.010	184.2*	0.9					
18204-1011	HER2	2013.580	1	1.049	0.010	16.6*	0.5					
18205+2055	COU202	2013.593	1	0.193	0.007	113.8*	1.1					
18206+0729	TDT807	2013.615	1	—	—	—	—		NR			
18208+3639	COU1306	2014.582	1	0.431	0.007	41.8*	0.3					
18211+3917	COU1459	2014.546	1	0.421	0.007	342.2*	0.6					
18213-0047	RST5111	2013.566	1	1.425	0.008	84.3*	0.3					
18213+2409	COU505	2014.601	1	1.078	0.007	318.4*	0.3					
18215+1257	OL173	2013.629	1	1.660	0.008	23.1*	0.3					
18215+2603	A243	2014.637	1	2.163	0.011	69.7*	0.3					
18216+0919	J2515	2013.580	1	1.100	0.007	9.9*	0.5					
18216+2030	HO430	2014.639	1	2.427	0.012	193.6*	0.3					
18217+0521	TDS918	2013.629	1	1.242	0.007	138.7*	0.3					
18217+2356	COU418	2014.544	1	0.145	0.050	276.5*	1.8					
18222+1413	AG222	2013.615	1	1.432	0.007	146.4*	0.3					
18223+2633	TDT819	2013.645	1	—	—	—	—		NR			
18224-0505	RST4586	2013.569	1	—	—	—	—		NR			
18224-0505	RST4586	2013.580	1	—	—	—	—		NR			
18224+0957	HU238	2013.643	1	0.913	0.007	162.1*	0.3					
18224+4545	A700	2014.639	1	0.639	0.007	128.4*	0.3			Hei1998	0.51	-28.6
18226+0701	TDT823	2013.613	1	—	—	—	—		NR			
18227+0420	TDT825	2013.610	1	—	—	—	—		NR			
18229+1242	TDS919	2013.615	1	1.260	0.007	276.0*	0.3					
18229+1458	HU581	2013.643	1	0.289	0.008	121.3*	1.0			AST1991	-0.03	-0.7
18231+4100	COU1602	2014.601	1	0.245	0.007	287.4*	0.8					
18234+2327	STF2314	2014.658	1	2.572	0.013	330.3*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
18234+3449	ES2232	2014.637	1	2.773	0.014	193.3*	0.3					
18236+0525	TDT829	2013.629	1	0.562	0.007	158.4*	0.4					
18236+3356	COU1011	2014.582	1	1.479	0.074	111.2*	1.3					
18237+0624	TDT830	2013.615	1	—	—	—	—		NR			
18240+1053	ARU15	2013.569	1	0.293	0.026	214.7	2.3					
18241+0552	TDT834	2013.629	1	—	—	—	—		NR			
18241+4054	COU1603	2014.582	1	0.306	0.014	81.5*	0.7					
18242+2818	A244	2014.628	1	0.582	0.007	270.4*	0.3					
18242+4228	COU1788Aa,Ab	2014.601	1	0.125	0.050	124.4	8.0		NDp			
18242+4228	COU1788AB	2014.601	1	2.979	0.015	142.0	0.3					
18243-0405	YSC67	2013.569	1	0.341	0.032	359.8	1.0					
18243+0933	TDT839	2013.632	1	0.656	0.013	24.0*	2.3					
18243+1337	TDT838	2013.632	1	—	—	—	—		NR			
18244+0835	TDT841	2013.640	1	0.497	0.007	115.6	0.4					
18245+1810	COU506	2014.639	1	1.382	0.007	92.6*	0.3					
18245+1810	COU506	2014.642	1	1.372	0.007	93.2	0.3	2.19				
18246-0058	TDT844	2013.640	1	—	—	—	—		NR			
18249+1932	TDT845	2013.555	1	—	—	—	—		NR			
18250-0517	RST4587	2013.580	1	0.395	0.009	329.1*	2.6					
18250+0625	TDT846	2013.632	1	—	—	—	—		NR			
18252+0650	TDT849	2013.610	1	—	—	—	—		NR			
18252+2254	TDT848	2013.670	1	—	—	—	—		NR			
18253+2805	HDS2604	2013.593	1	0.711	0.007	210.3*	0.7					
18254+0707	TDT853	2013.613	1	—	—	—	—		NR			
18254+0736	TDT852	2013.632	1	—	—	—	—		NR			
18254+1932	TDT851	2013.643	1	—	—	—	—		NR			
18256+0956	TDT856	2013.632	1	—	—	—	—		NR			
18256+3945	COU1461	2014.571	1	0.766	0.007	243.5*	0.3					
18257+0846	TDT859	2013.640	1	—	—	—	—		NR			
18257+2639	COU815	2014.658	1	1.539	0.008	144.4*	0.3					
18257+2828	TDT858	2013.670	1	—	—	—	—		NR			
18260+0648	J2516	2013.555	1	1.661	0.030	158.6	0.3					
18260+0948	TDT862	2013.643	1	—	—	—	—		NR			
18261+0047	BU1203	2013.643	1	0.516	0.014	156.2*	0.7			Pop1996b	0.03	-0.7
18261+0918	TDS920	2013.632	1	—	—	—	—		NR			
18262+0435	TDT866	2013.613	1	0.542	0.007	273.9*	0.4					
18268+4822	COU2277	2014.601	1	0.217	0.030	139.6*	0.8					
18269+0625	STT350	2013.643	1	1.865	0.009	166.2*	0.3					
18271-0853	HDS2608	2013.580	1	0.118	0.050	344.3	4.5					
18272+0012	STF2316	2013.678	1	3.747	0.019	321.1*	0.3					
18276+0633	BU464	2013.640	1	1.066	0.007	105.0*	0.3					
18277+0631	TDT888	2013.678	1	—	—	—	—		NR			
18278+0908	TDT890	2013.678	1	1.387	0.030	0.1*	0.6					
18278+2442	STF2320	2013.593	1	1.091	0.015	358.9*	0.8					
18279+0124	HDS2614	2013.566	1	0.672	0.009	330.7*	0.5					
18280+0618	TDS923	2013.629	1	—	—	—	—		NR			
18280+0620	TDT895	2013.640	1	—	—	—	—		NR			
18280+1417	TDT894	2013.615	1	1.459	0.008	135.6*	0.3					
18285+2010	COU203	2014.601	1	0.473	0.007	61.1*	0.4					
18287+1614	HU320	2013.645	1	2.003	0.010	143.9*	0.3					
18289+0943	TDT900	2013.583	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18289+1815	COU507	2014.601	1	0.929	0.007	153.0*	0.3					
18290+2301	TDT903	2013.670	1	—	—	—	—		NR			
18291+0408	A581	2013.555	1	0.390	0.007	138.0*	1.3					
18292+1622	HEI258	2013.566	1	—	—	—	—		NR			
18292+1622	HEI258	2013.569	1	—	—	—	—		NR			
18297+4400	COU1789	2014.582	1	0.390	0.007	275.3*	1.4					
18298+3803	HU1189	2014.620	1	1.367	0.007	210.2*	0.3					
18303+1907	COU508	2013.588	1	0.891	0.007	250.7*	0.3					
18305-1052	HDS2623	2013.613	1	0.185	0.007	22.8*	1.2					
18306+4429	COU1928	2014.628	1	0.546	0.007	273.0*	0.3					
18307-0541	RST4588	2013.585	1	1.060	0.007	220.6*	0.4					
18309+3417	COU1150	2014.544	1	0.210	0.009	273.9*	2.8					
18310+2424	TDT923	2013.593	1	0.813	0.007	329.0*	0.5					
18310+0712	TDT924	2013.678	1	0.587	0.007	316.9*	0.7					
18310+0712	TDT924	2013.629	1	0.598	0.007	316.7*	0.3					
18311+4527	HDS2626Aa,Ab	2014.637	1	0.114	0.015	116.8	3.2		NDp			
18311+4527	HDS2626AB	2014.637	1	0.401	0.019	172.9*	0.8					
18311+4527	HDS2626AB	2014.637	1	0.437	0.007	172.3	1.7					
18312+2516	A248	2014.658	1	0.483	0.010	34.4*	0.6					
18314+0545	TDT925	2013.615	1	—	—	—	—		NR			
18314+0802	HDS2627	2013.615	1	0.461	0.007	211.2*	0.3					
18316-0353	A87AB	2013.616	1	1.782	0.009	293.9	0.3	1.08				
18316-0353	A87AC	2013.616	1	4.094	0.020	180.4	0.3	4.61				
18316-0353	A87CD	2013.616	1	4.534	0.023	315.3	0.3	1.22				
18316+1203	HU244	2013.626	1	1.292	0.007	254.1*	0.3					
18316+2030	COU119	2014.525	2	0.687	0.007	228.9	0.4					
18316+2030	COU119	2014.525	1	0.675	0.007	228.9*	0.3					
18316+2030	COU119	2013.593	1	0.678	0.014	228.1*	0.7					
18318+2321	TDT928	2013.670	1	—	—	—	—		NR			
18319+3538	COU1151	2014.544	1	1.292	0.007	278.2*	0.3					
18319+4119	COU1605	2014.571	1	0.965	0.007	310.6*	0.3					
18321+1359	J1133	2013.566	1	2.232	0.023	124.5*	0.4					
18322-0750	BU419	2013.626	1	1.195	0.010	31.8*	0.3					
18325-0120	RST5117	2013.585	1	1.873	0.009	252.5*	0.3					
18325+0036	RST5450	2013.566	1	0.703	0.007	252.6*	0.4					
18327+1741	TDT934	2013.626	1	0.792	0.007	126.8*	0.4					
18331-1042	HDS2632Aa,Ab	2013.585	1	0.145	0.023	137.5	0.6		NDp			
18331-1042	HDS2632AB	2013.585	1	0.559	0.012	19.6*	0.7					
18334-0458	AGE9	2013.632	1	4.480	0.022	301.6	0.3	3.89				
18337+4247	COU1790	2014.525	1	1.344	0.007	246.8*	0.3					
18338+1400	HEI395	2013.588	1	0.382	0.007	270.5*	0.4					
18338+1744	WAK21CD	2014.658	1	0.480	0.007	262.6	0.3	0.75				
18338+1744	STF2339AB,CD	2014.658	1	1.532	0.009	276.6*	0.3					
18338+1911	TDT936	2013.588	1	0.792	0.007	348.8*	0.3					
18343+2101	TDT939	2013.588	1	0.496	0.007	180.3*	0.5					
18344+0405	TDT940	2013.626	1	—	—	—	—		NR			
18346+3608	HU1293	2014.639	1	1.083	0.007	76.4*	0.3					
18347+3548	HDS2635	2014.544	1	—	—	—	—		NR			
18348-0256	RST4589	2013.569	1	1.139	0.007	88.0*	0.3					
18349-0655	RST4590	2013.569	1	0.883	0.007	33.1*	0.4					
18349+0556	GII66AC	2013.626	1	3.097	0.015	133.0	0.3		NDg			
18349+0556	GII66AC	2014.767	1	3.114	0.016	132.9	0.3	3.31	NDg			
18349+2717	COU639	2014.571	1	0.756	0.007	272.4*	0.3					
18350+2844	STF2344	2013.645	1	1.521	0.008	175.4*	0.3					
18351+0003	RST5120	2013.569	1	0.196	0.010	209.1*	0.5					
18353+2145	COU205	2013.555	1	0.145	0.050	160.7*	8.0					
18353+2145	COU205	2014.601	1	0.132	0.050	147.8*	8.0					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18355+2336	STT359	2014.628	1	0.750	0.007	4.7*	0.3			Sca2009a	0.00	0.3
18357+0239	TDT950	2013.640	1	—	—	—	—		NR			
18360+1144	STT357	2013.555	1	0.409	0.007	73.3*	0.3			Sca2011a	0.04	-0.2
18363+0516	A355	2013.613	1	1.259	0.007	143.2*	0.3					
18363+2143	COU206	2013.645	1	0.096	0.050	149.1*	8.0			Doc2010h	0.04	79.1
18368+2120	HU323	2013.555	1	0.217	0.010	142.5*	1.8					
18372+1839	TDT961	2013.670	1	0.786	0.007	332.4*	0.3					
18374+0830	TDT962	2013.632	1	—	—	—	—		NR			
18380+0800	A356	2013.613	1	1.047	0.007	222.9*	0.3					
18382+0410	TDT968	2013.678	1	—	—	—	—		NR			
18384+2842	STF2356	2013.595	1	1.122	0.007	62.8	0.3	0.91				
18385+3503	COU1308	2014.582	1	0.416	0.007	29.0*	0.4					
18386-0235	WAM4	2013.640	1	1.385	0.007	92.2*	0.3					
18386+1632	HO87	2013.580	1	0.456	0.007	89.4*	0.7			Msn2019	0.03	-0.1
18386+1632	HO87	2014.637	1	0.427	0.007	90.5*	0.3			Msn2019	-0.00	-0.2
18386+3043	STF2358	2014.637	1	2.490	0.012	224.2*	0.3					
18387+2847	L25	2014.658	1	1.261	0.007	251.8*	0.3					
18390+1027	J1266	2013.629	1	2.046	0.010	29.8*	0.3					
18391+0803	TDT973	2013.555	1	0.709	0.007	298.6*	0.7					
18396+4056	COU1607	2014.571	1	—	—	—	—		NR			
18397+3800	MET86Aa,Ab	2014.639	1	0.151	0.050	110.0	8.0		NDp			
18397+3800	MET86AB	2014.639	1	1.813	0.010	324.5*	0.3					
18398+2800	COU640	2013.645	1	0.441	0.007	89.5*	0.4					
18398+2800	COU640	2014.658	1	0.432	0.007	269.8*	0.3					
18400+1146	TDT984	2013.643	1	—	—	—	—		NR			
18402+5048	COU2515	2014.582	1	0.384	0.007	275.0*	1.3					
18403+3425	HDS2645Aa,Ab	2014.637	1	0.229	0.015	108.8	1.8		NDp			
18403+3425	HDS2645AB	2014.637	1	1.869	0.009	19.0	0.3					
18403+3425	HDS2645AB	2014.637	1	1.863	0.009	19.2	0.3					
18405+3139	HO437	2013.593	1	0.277	0.016	136.2*	0.7					
18406+2636	COU641	2014.628	1	0.568	0.007	52.5	0.3					
18406+2636	COU641	2014.628	1	0.567	0.007	52.1*	0.3					
18407+4336	TDT990	2014.525	1	0.298	0.047	131.2*	2.6					
18408+4904	COU2394	2014.628	1	0.624	0.007	218.9*	0.4					
18410+4848	COU2395	2014.525	1	0.618	0.007	315.5*	0.4					
18412+0645	J1273	2013.613	1	1.776	0.015	173.7*	0.4					
18412+2111	TDT994	2013.670	1	—	—	—	—		NR			
18416-0522	TDT1001	2013.613	1	—	—	—	—		NR			
18416-0525	GII65	2013.613	1	1.992	0.010	357.5*	0.3	1.92	NDg			
18420+2516	TDS934	2013.670	1	1.308	0.007	202.9*	0.4					
18422+0739	HEI869	2013.583	1	1.956	0.010	224.6*	0.3					
18423+3616	A1381	2014.639	1	0.339	0.007	94.8*	1.3					
18425+0334	J464AC	2013.580	1	3.404	0.017	134.5*	0.3					
18425+0334	J464AC	2013.632	1	3.324	0.062	134.9*	0.3					
18425+0334	J464AC	2013.643	1	3.432	0.017	134.6*	0.3					
18426+2209	COU208	2014.582	1	0.328	0.013	123.8*	1.1					
18427+0742	HEI870Aa,Ab	2013.580	1	0.907	0.007	246.1*	0.3		NDg			
18427+0742	HEI870Aa,Ab	2013.585	1	0.883	0.007	245.5*	0.3		NDg			
18427+0742	HEI870AB	2013.555	1	1.633	0.033	347.2*	1.1					
18427+0742	HEI870AB	2013.583	1	1.654	0.008	348.6*	0.3					
18432+3822	HDS2651	2014.658	1	0.475	0.007	49.3*	0.5					
18433+1847	COU816	2014.544	1	0.214	0.009	293.0*	2.0					
18436+0337	TDT1019	2013.626	1	0.398	0.007	132.4*	0.3					
18437-0014	A858	2013.610	1	1.168	0.008	326.9*	0.3					
18437+3141	A253	2014.601	1	0.725	0.007	132.1*	0.3			Baz1987d	0.09	-3.0

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
18439+0237	STF2369	2013.610	1	0.256	0.007	34.4*	0.3			Izm2019	-0.05	-3.1
18439+0346	TDS939	2013.626	1	1.283	0.007	68.0*	0.3					
18442+2231	COU209	2014.525	1	2.088	0.010	38.0*	0.3					
18442+3000	TDT1022	2014.628	1	0.569	0.007	127.6*	0.3					
18443+2052	HU325	2014.639	1	0.399	0.013	5.5*	1.1					
18445-0737	RST4595	2013.629	1	2.075	0.038	74.4	0.4					
18448+2704	TDT1029	2013.670	1	—	—	—	—		NR			
18449+0253	HEI562	2013.596	1	0.381	0.010	252.5*	1.5					
18449+2234	HDS2655	2014.544	1	0.382	0.007	200.3*	2.6					
18454+3634	HDS2659	2014.637	1	—	—	—	—		NR			
18455+0530	FIN332	2013.596	1	2.652	0.020	121.1*	0.3					
18456+0142	A2262	2013.596	1	1.180	0.007	325.8*	0.3					
18456+0754	TDT1038	2013.615	1	—	—	—	—		NR			
18459+3657	COU1309	2014.601	1	0.485	0.007	179.2*	0.5					
18461+1000	J1215	2013.596	1	1.778	0.011	127.7*	0.3					
18461+1328	TDT1042	2013.640	1	0.681	0.007	269.7*	0.3					
18462+0019	TDT1044	2013.615	1	0.475	0.007	184.3*	1.3					
18462+1001	HEI804	2013.512	1	1.838	0.009	127.7*	0.4					
18463+0821	TDT1045	2013.615	1	0.723	0.022	301.5*	0.4					
18464+0259	BAL1970	2013.678	1	2.808	0.014	252.7*	0.3					
18464+2815	TDT1047	2013.593	1	0.545	0.008	225.6*	0.9					
18465+3414	COU1153	2014.582	1	0.401	0.007	113.9*	0.3					
18466-0807	RST4597	2013.626	1	0.388	0.007	312.4*	0.7					
18466-0149	RST5125	2013.569	1	0.699	0.007	191.7*	0.7					
18466+4042	HDS2663	2014.639	1	—	—	—	—		NR			
18468+0443	TDT1051	2013.678	1	1.630	0.008	168.1*	0.3					
18471-0939	J106AC	2013.626	1	4.356	0.022	151.1	0.3	1.75				
18471-0939	RST4598	2013.626	1	1.652	0.008	243.4	0.3	2.43				
18471-0226	A2687	2013.632	1	1.188	0.007	337.6*	0.3					
18472+4909	COU2516	2014.571	1	—	—	—	—		NR			
18473+0136	TDT1055	2013.640	1	—	—	—	—		NR			
18475+1537	HU584	2013.645	1	0.272	0.007	183.9*	1.1					
18476+3248	COU1154	2014.601	1	0.576	0.007	55.1*	0.3					
18477+0916	HU252Aa,Ab	2013.512	1	0.140	0.050	175.4	8.0		NDp			
18477+0916	HU252AB	2013.512	1	0.443	0.007	154.9*	0.3					
18478+1022	TDT1058	2013.640	1	0.432	0.007	212.2*	0.5					
18478+4246	COU1793	2014.525	1	1.168	0.007	323.2*	0.3					
18480-1009	HDS2665	2013.632	1	0.402	0.012	73.8*	1.5			Tok2019h	0.02	-8.1
18480+0841	HU253	2013.596	1	0.727	0.007	310.7*	0.3					
18481+0203	J2530	2013.596	1	1.391	0.007	230.7*	0.5					
18481+3929	COU1609	2014.658	1	0.818	0.007	200.8*	0.5					
18486+2330	HU326	2013.645	1	—	—	—	—		NR			
18486+2330	HU326	2014.637	1	0.110	0.050	253.2*	8.0					
18486+3132	TDT1063AB	2013.593	1	0.202	0.043	105.2	7.0					
18486+3132	TDT1063AB	2014.571	1	0.147	0.050	106.0*	8.0					
18486+3132	TDT1063AC	2013.640	1	1.089	0.012	141.7	1.8		NDg			
18488+2603	TDT1066	2013.670	1	—	—	—	—		NR			
18489-1027	RST4599	2013.632	1	1.040	0.032	124.7*	0.3					
18489-0627	A91	2013.632	1	0.827	0.007	100.7*	0.4					
18489-0547	RST4600	2013.569	1	—	—	—	—		NR			
18490+0018	A2263	2013.678	1	1.479	0.007	102.1*	0.3					
18490+0732	J808	2013.512	1	1.531	0.010	342.5*	0.6					
18490+3914	COU1610	2014.639	1	0.797	0.007	200.3*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
18491+2319	TDT1070	2013.670	1	—	—	—	—		NR			
18497+1041	STF2402	2013.512	1	1.480	0.007	208.3*	0.3			Izm2019	0.03	0.2
18500+1519	YSC12	2013.569	1	0.472	0.044	49.8	4.0			Tok2018e	-0.01	-2.7
18500+1519	YSC12	2013.594	1	0.474	0.008	55.5*	0.4			Tok2018e	-0.01	3.1
18500+1519	YSC12	2013.610	1	0.444	0.012	48.4	0.7			Tok2018e	-0.04	-4.0
18500+1519	YSC12	2013.640	1	0.482	0.007	52.1	1.6			Tok2018e	-0.00	-0.2
18502+1131	BU265	2013.512	1	1.422	0.007	227.9*	0.3					
18502+1227	J1226	2013.643	1	2.165	0.011	242.1*	0.3					
18503+1228	J468Aa,Ab	2013.675	1	0.137	0.050	102.9	8.0			NDp		
18503+1228	J468AB	2013.643	1	1.849	0.009	53.8*	0.3					
18503+1228	J468AB	2013.644	1	1.899	0.009	52.2	0.3	3.35				
18503+1228	J468AB	2013.675	1	1.879	0.014	53.1	0.3					
18503+1228	J468AC	2013.644	1	9.758	0.049	320.8	0.3	4.45				
18505+4335	COU1930	2014.571	1	0.434	0.007	323.8*	0.6					
18506+1351	J108	2013.678	1	1.996	0.010	77.2*	0.3					
18508-0759	BU970	2013.615	1	1.613	0.008	106.8*	0.3					
18508+2936	TDT1082	2014.658	1	—	—	—	—		NR			
18509+1109	BRT1312	2013.585	1	3.127	0.016	145.8	0.3					
18509+2058	COU317	2013.512	1	1.513	0.009	93.8*	0.3					
18510-0238	RST4605	2013.585	1	0.799	0.007	117.0*	0.3					
18511+1129	J2533	2013.585	1	1.773	0.014	249.8*	0.6					
18512-0037	A860	2013.613	1	0.120	0.050	257.5	8.0					
18512+1130	J2534	2013.678	1	1.769	0.017	249.1*	0.8					
18512+4644	HDS2674	2014.637	1	0.157	0.050	117.7	8.0					
18517+2041	J809	2013.512	1	1.600	0.008	31.5*	0.3					
18518+3105	COU1012	2013.588	1	0.435	0.007	239.6*	0.7					
18518+3105	COU1012	2013.588	1	0.444	0.007	239.0	0.5					
18518+3105	COU1012	2014.525	1	0.432	0.007	238.2*	0.6					
18518+3105	COU1012	2014.601	1	0.439	0.007	238.3*	0.6					
18521-0700	HDS2676	2013.629	1	0.142	0.050	162.9*	8.0					
18521+2431	COU510	2014.544	1	0.147	0.050	171.8*	8.0					
18522+1302	TDT1094	2013.596	1	—	—	—	—		NR			
18523+3713	COU1311	2014.615	1	1.327	0.007	226.8*	0.3					
18525+2632	HDS2677	2013.588	1	1.011	0.007	77.4	0.3					
18526+0212	TDS951	2013.640	1	0.675	0.007	112.5*	0.7					
18526+1400	STF2412	2013.512	1	1.453	0.007	55.7*	0.3					
18526+4508	KOI42	2014.637	1	1.675	0.008	36.4*	0.3					
18527+2112	TDT1103	2013.670	1	—	—	—	—		NR			
18527+5135	COU2517	2014.601	1	0.928	0.007	109.9*	0.4					
18528+3125	A257	2014.658	1	0.739	0.007	81.3*	0.3					
18529+1248	TDT1108Aa,Ab	2013.678	1	0.193	0.050	134.5	8.0			NDp		
18529+1248	TDT1108AB	2013.678	1	0.751	0.008	347.6	0.3					
18532+0413	A358Aa,Ab	2013.512	1	0.102	0.050	157.0	8.0			NDp		
18532+0413	A358AB	2013.512	1	1.580	0.015	109.9*	0.3					
18532+0413	A358AB	2013.512	1	1.589	0.020	109.6	0.4					
18533+2523	STT364	2014.615	1	—	—	—	—		NR			
18533+4545	COU1931	2014.582	1	0.131	0.007	118.4	3.2					
18534+2553	A2989	2014.544	1	0.340	0.007	198.3*	0.3			USN2002	0.06	-1.9
18537-0533	A93	2013.580	1	1.014	0.007	155.2*	0.3			Izm2019	0.01	0.4
18538+1334	J1188	2013.610	1	2.021	0.010	196.1*	0.3					
18538+1334	J1188	2013.626	1	2.018	0.010	195.6*	0.3					
18541-0607	RST4606	2013.580	1	0.307	0.007	270.5*	0.7					
18541+0112	RST5457	2013.566	1	1.693	0.008	209.6*	0.3					
18545+3243	TDT1122	2013.588	1	—	—	—	—		NR			
18549+0716	J1275	2013.645	1	2.389	0.012	197.8	0.3	2.10				
18549+0716	J1275	2013.645	1	2.385	0.012	198.5*	0.3					
18549+0716	J1275	2013.678	1	2.393	0.012	198.1	0.3	1.57				

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
18549+4437	COU1932	2014.639	1	0.878	0.007	297.6*	0.3					
18550-1013	RST4607	2013.613	1	1.018	0.010	126.0*	0.5					
18553+1144	ROE113	2013.645	1	1.661	0.008	186.1*	0.3					
18554-1008	RST4608	2013.613	1	0.529	0.007	187.0*	0.4					
18554+1331	BU647	2013.645	1	1.303	0.007	6.5*	0.3					
18554+2324	COU511	2014.658	1	0.748	0.007	190.8*	0.3					
18555+3215	COU1013	2013.588	1	0.644	0.008	146.1*	0.4					
18558+1839	TDT1132	2013.629	1	—	—	—	—		NR			
18559+0323	A2193	2013.566	1	0.928	0.018	356.8*	0.3					
18562-0619	RST4609	2013.615	1	1.425	0.007	305.1*	0.3					
18562-0034	BU972	2013.613	1	1.112	0.007	2.2*	0.8					
18564+2944	COU1014	2014.525	1	0.247	0.024	43.7*	1.8					
18567+2123	HDS2684	2013.670	1	0.576	0.018	350.4*	0.4					
18567+2718	COU1015	2014.658	1	0.954	0.007	272.6*	0.3					
18568+0013	RST5458	2013.566	1	0.796	0.007	322.4*	0.6					
18570-0333	RST4610	2013.580	1	0.527	0.007	311.0*	0.3					
18571+3451	HDS2685	2014.544	1	0.504	0.013	200.9*	1.4					
18572+1450	HU676	2013.670	1	1.160	0.007	78.5	0.3					
18574-0219	RST4611	2013.629	1	1.636	0.008	127.8*	0.3					
18574+4131	KOI227	2014.601	1	—	—	—	—		NR			
18576-1001	HDS2688	2013.585	1	0.286	0.018	193.9*	0.4					
18576+3209	A260	2014.544	1	0.897	0.007	244.8*	0.3					
18577+4323	COU1794	2014.525	1	1.802	0.009	34.0*	0.3					
18579+4214	COU1795	2014.639	1	0.405	0.008	308.0*	0.3					
18581-0832	TDT1152	2013.632	1	—	—	—	—		NR			
18582+4858	KOI258Aaa,Aab	2013.703	1	0.144	0.050	44.0	8.0		NDp			
18582+4858	KOI258Aaa,Aab	2014.571	1	0.105	0.038	130.1	8.0		NDp			
18582+4858	KOI258Aa,Ab	2013.253	1	0.439	0.007	78.0	0.3	1.19				
18582+4858	KOI258Aa,Ab	2013.703	1	0.415	0.007	79.4	0.3	1.07				
18582+4858	KOI258Aa,Ab	2014.571	1	0.446	0.007	78.8	0.3	2.44				
18582+4858	KOI258AB	2013.253	1	1.010	0.007	71.4	0.3	3.11				
18582+4858	KOI258AB	2013.703	1	1.006	0.007	73.5	0.3					
18582+4858	KOI258AB	2013.703	1	1.014	0.008	73.0	0.6					
18582+4858	KOI258AB	2013.705	1	1.012	0.007	73.1	0.3	3.42				
18582+4858	KOI258AB	2013.705	1	1.015	0.007	73.1	0.3	3.42				
18582+4858	KOI258AB	2014.571	1	1.021	0.010	73.0	0.4					
18583+0102	J1268	2013.566	1	1.675	0.008	192.4*	0.3					
18583+0347	HDS2690	2013.613	1	0.297	0.007	45.8	3.4					
18585+1518	TDT1157	2013.640	1	—	—	—	—		NR			
18585+1855	TDT1156	2013.670	1	—	—	—	—		NR			
18585+2515	A2990Aa,Ab	2014.637	1	0.156	0.050	121.1	8.0		NDp			
18585+2515	A2990AB	2014.637	1	2.799	0.014	141.6	0.3					
18587+1936	HU330	2013.512	1	0.692	0.007	33.1*	0.3					
18587+2744	COU817	2014.615	1	1.074	0.007	199.3*	0.3					
18590+0330	VOU39AB	2013.580	1	0.838	0.009	98.5	0.6					
18590+0330	VOU39BC	2013.580	1	0.176	0.013	176.5*	1.2					
18591+1810	HU331	2014.658	1	0.556	0.007	207.7*	0.4					
18591+2230	HU332	2013.512	1	0.543	0.013	265.9*	0.7			Lin2020	0.03	-0.7
18595-0527	RST4612Aa,Ab	2013.615	1	0.112	0.050	136.6	8.0		NDp			
18595-0527	RST4612AB	2013.615	1	1.573	0.041	141.3*	0.6					
18596+0123	RST5459	2013.580	1	0.674	0.010	359.1*	0.4					
18597+2949	COU1019AB	2013.730	1	0.356	0.007	350.2*	0.6					
18597+2949	COU1019AC	2013.730	1	5.757	0.029	51.5	0.3		NDg			
19000+4100	COU1798	2014.582	1	0.663	0.007	345.6*	0.3					
19002+1303	HU677	2013.596	1	1.673	0.008	42.0*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
19005+2716	TDT1178	2013.725	1	0.841	0.007	334.6*	0.3					
19007-1038	RST4613	2013.585	1	1.466	0.007	273.9*	0.4					
19009+3232	HO92	2013.665	1	1.275	0.008	40.1*	0.3					
19011-0559	RST4614	2013.643	1	2.015	0.010	113.9*	0.3					
19011+2009	COU319Aa,Ab	2014.544	1	0.156	0.050	132.3	8.0		NDp			
19011+2009	COU319AB	2014.544	1	2.058	0.012	79.9	0.3					
19012-1009	HU71	2013.615	1	0.738	0.015	350.1*	0.6					
19014-0057	TDS959	2013.626	1	0.835	0.007	140.4*	0.3					
19014-0057	TDS959	2013.643	1	0.847	0.007	140.6*	0.7					
19016+3253	HU1295AB	2014.571	1	0.266	0.011	223.5*	0.6					
19017+2409	TDT1188	2013.725	1	—	—	—	—		NR			
19019+1910	STF2437	2013.722	1	0.604	0.012	6.8*	0.3			Sca2008c	0.04	0.4
19020+0846	HWE45CD	2013.598	2	3.351	0.017	260.7	0.3	0.29				
19020+0846	BU973	2013.598	2	1.630	0.015	347.9	0.3	2.24				
19020+3210	HU1296	2014.544	1	0.113	0.050	156.1	8.0					
19021-0049	TDT1192	2013.632	1	—	—	—	—		NR			
19021+1426	HO93	2013.512	1	1.126	0.007	327.2*	0.3					
19022-0643	A41	2013.613	1	0.445	0.009	165.1*	0.3					
19024+3608	COU1613	2014.639	1	0.469	0.007	319.8*	0.3					
19026-0621	A42	2013.613	1	0.926	0.007	236.9*	0.3					
19027-0628	TDT1196	2013.640	1	0.334	0.007	180.3	0.3					
19028+0146	A2195	2013.615	1	2.004	0.010	39.1	0.3					
19030-0423	RST4615	2013.613	1	0.720	0.007	187.4*	1.1					
19031+4520	COU1934	2014.571	1	0.106	0.050	150.6	8.0					
19031+4520	COU1934	2014.571	1	0.105	0.050	150.2	8.0					
19034+0432	TDS962	2013.629	1	1.001	0.007	138.1*	0.4					
19036+2634	TDT1202	2013.725	1	—	—	—	—		NR			
19037+1133	GII63Aa,Ab	2013.598	2	0.512	0.015	145.4	0.3	1.99				
19037+1133	GII63Aa,Ab	2013.610	1	0.472	0.007	137.5	0.9		NDg			
19037+1133	GII63Aa,Ab	2013.611	1	0.492	0.007	137.3	0.3	1.90				
19037+1133	GII63Aa,Ab	2013.615	1	0.463	0.019	138.9	0.5					
19037+1133	GII63Aa,Ab	2013.615	1	0.471	0.007	138.6	0.5					
19037+1133	HEI567AB	2013.596	2	1.935	0.015	167.9	0.3					
19037+1133	HEI567AB	2013.598	2	2.003	0.015	167.2	0.3	1.31				
19037+1133	HEI567AB	2013.610	1	1.977	0.010	168.1	0.3					
19037+1133	HEI567AB	2013.611	1	1.991	0.010	168.6	0.3	1.32				
19037+1133	HEI567AB	2013.615	1	1.963	0.010	167.9	0.3					
19037+1133	GII63AC	2013.598	2	5.259	0.026	117.1	0.3	4.22	NDg			
19037+1133	GII63AC	2013.611	1	5.302	0.027	117.1	0.3	4.50	NDg			
19038+4040	COU2196	2014.615	1	0.500	0.007	332.1*	0.3	0.55				
19039-0109	RST5129	2013.626	1	1.608	0.008	303.6*	0.3					
19039+2642	A2992	2014.658	1	0.258	0.022	231.4*	0.4			Doc2009g	0.07	0.4 ^Q
19039+2642	A2992	2013.588	1	0.178	0.025	225.1*	2.1			Doc2009g	-0.01	-7.5 ^Q
19044-0541	HDS2704	2013.632	1	0.281	0.007	213.3*	2.2					
19044+0542	HEI899	2013.678	1	1.849	0.009	237.2*	0.3					
19044+0542	HEI899	2013.678	1	1.849	0.009	237.2*	0.3					
19048+1135	TDT1214	2013.670	1	0.672	0.007	304.6*	0.4					
19050+1302	J478	2013.725	1	2.009	0.010	349.2*	0.3					
19053-0610	BU974	2013.585	1	1.063	0.007	74.6*	0.3					
19053+1504	HEI267	2013.588	1	0.873	0.013	224.7*	0.7					
19055+3352	HU940	2014.544	1	0.472	0.007	191.0*	0.5			Doc2009g	-0.00	0.5
19056+2724	HDS2709	2014.639	1	0.368	0.007	37.9*	1.0					
19056+2724	HDS2709	2014.639	1	0.376	0.010	39.1	1.4					
19057+2717	HO95	2014.637	1	0.186	0.048	132.9	7.3					
19059+2321	TDT1221	2013.670	1	—	—	—	—		NR			
19061+3549	COU1614	2013.703	1	0.573	0.010	120.5*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
19062+3026	STF2454	2013.588	1	1.325	0.010	290.2*	0.3			Msn2014b	-0.03	0.7
19062+3026	STF2454	2013.589	1	1.315	0.007	290.5	0.3	1.48		Msn2014b	-0.04	1.0
19063+0100	TDT1226	2013.678	1	0.869	0.007	113.9*	0.4					
19066+3355	ZUL1	2013.703	1	—	—	—	—		NR			
19068+1854	J1142	2013.645	1	1.282	0.007	284.8*	0.3					
19069-1009	RST4616	2013.580	1	0.402	0.007	82.5*	0.4					
19069+4137	COU2197	2014.582	1	0.262	0.050	320.1	0.5			Doc2016g	0.05	31.0
19072+0140	TDT1235	2013.632	1	—	—	—	—		NR			
19072+0909	TDT1234	2013.583	1	—	—	—	—		NR			
19072+4451	A703Aa,Ab	2014.639	1	0.127	0.050	111.1	8.0			NDp		
19072+4451	A703AB	2014.639	1	0.583	0.007	188.0*	0.5					
19072+4451	A703AB	2014.639	1	0.578	0.007	189.6	0.9					
19074+0811	A361	2013.512	1	0.346	0.007	60.0*	2.2					
19074+3230	KUI90Ca,Cb	2013.588	1	—	—	—	—		NR			
19074+3230	KUI90Ca,Cb	2013.703	1	0.213	0.010	214.6	1.5					
19074+3230	KUI90Ca,Cb	2014.571	1	0.231	0.008	269.8	0.9					
19074+3601	COU1615	2014.582	1	0.410	0.007	94.1*	0.3					
19074+4705	COU2518	2014.615	1	0.799	0.007	294.5*	0.3					
19076+0730	TDT1238	2013.678	1	0.880	0.007	223.1*	0.3					
19078+0147	HDS2712	2013.580	1	0.275	0.007	25.5*	0.8					
19081+0932	J813	2013.585	1	1.227	0.014	4.4*	0.9					
19081+2344	TDT1242	2013.725	1	—	—	—	—		NR			
19082-0520	RST4618	2013.583	1	0.114	0.050	286.3*	2.0					
19082+1215	MCA54AB	2013.580	1	0.133	0.050	190.9	8.6					
19082+1215	MCA54AB	2013.583	1	0.181	0.058	203.9	8.6					
19082+1215	MCA54AB	2013.722	1	0.199	0.061	197.5	8.8					
19082+1215	MCA54AC	2013.566	1	1.138	0.028	101.2	1.7			NDg		
19082+3829	COU1936	2014.658	1	0.509	0.007	303.6*	0.3					
19083+2555	COU420	2014.637	1	1.258	0.007	99.3*	0.3					
19085+1710	TDT1247	2013.670	1	—	—	—	—		NR			
19089+1914	HO636	2014.615	1	0.520	0.039	47.0	1.6					
19089+3404	COU1462	2014.571	1	0.224	0.007	32.3*	0.9					
19091+1259	TDT1251	2013.678	1	1.382	0.007	209.1*	0.3					
19092+1152	STF2464	2013.629	1	1.188	0.007	28.3*	0.3					
19092+2656	HO444	2013.646	1	1.319	0.007	66.4*	0.3					
19093+2308	TDT1255	2013.722	1	—	—	—	—		NR			
19096-1053	HDS2717	2013.583	1	0.561	0.007	327.7*	0.6					
19096+1803	J1300	2013.646	1	2.280	0.011	345.2*	0.3					
19097+1306	TDT1263	2013.640	1	0.576	0.007	318.6*	0.3					
19099+2858	TDS973	2013.725	1	1.013	0.007	133.6*	0.3					
19100+1016	TDT1266	2013.615	1	—	—	—	—		NR			
19100+1740	HEI268	2013.665	1	1.976	0.010	37.9*	0.4					
19100+4225	COU2279	2014.582	1	0.700	0.007	126.0*	0.3					
19101+3252	COU1313	2013.588	1	0.230	0.010	230.0*	0.3					
19102+1606	HU1298AB	2013.610	1	0.192	0.007	13.2*	1.7					
19102+1606	HU1298AB,C	2013.610	1	3.162	0.023	263.6*	0.4					
19102+2737	BRT189	2013.665	1	—	—	—	—		NR			
19103-1057	RST4620	2013.585	1	0.901	0.007	326.3*	0.8					
19103+2820	COU723	2014.582	1	0.124	0.050	6.1*	8.0					
19104+2320	COU120	2013.730	1	0.114	0.050	231.4*	8.0					
19107+4136	A590	2014.639	1	0.462	0.007	164.6*	0.3					
19108+3726	COU1799	2014.544	1	1.419	0.007	193.0*	0.3					
19108+4720	KOI98	2014.658	1	0.300	0.024	145.4	1.6					
19110-0726	A95	2013.585	1	0.193	0.017	28.6*	0.6			Doc2017f	-0.05	-0.2

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
19114+2116	A151	2013.512	1	0.575	0.007	336.4*	0.3					
19117+1753	HU333	2013.678	1	1.931	0.020	82.8	0.8					
19118+1809	HU334Aa,Ab	2013.596	1	0.204	0.050	5.8	8.0		NDp			
19118+1809	HU334AB	2013.596	1	1.606	0.008	248.8*	0.7					
19118+1809	HU334AB	2013.596	1	1.603	0.008	250.2	0.3	2.72				
19120-1035	RST4621	2013.583	1	0.918	0.007	171.8*	0.5					
19121+0254	AST1	2013.610	1	—	—	—	—		NR			
19123+2113	COU320	2013.730	1	0.215	0.007	115.3*	1.6					
19123+3321	COU1314	2014.658	1	1.133	0.007	65.1*	0.3					
19126+1651	BU139	2013.585	1	0.613	0.007	137.1*	1.0			Zir2013a	0.01	1.0
19127+2435	HDS2720Aa,Ab	2013.724	1	0.219	0.007	60.4*	0.3	0.99				
19127+2435	HDS2720Aa,Ab	2013.732	1	0.230	0.007	63.3	0.4					
19127+2435	HDS2720Aa,Ab	2014.571	1	0.204	0.013	70.0	8.7					
19127+2435	HDS2720Aa,Ab	2014.582	2	0.183	0.021	72.3*	1.6					
19127+2435	A264AB	2013.724	1	3.491	0.017	106.4	0.3	3.98				
19127+2435	A264AB	2013.725	1	3.475	0.019	107.6	0.3			Izm2019	0.08	-1.3
19127+2435	A264AB	2013.730	1	3.481	0.017	106.3	0.3					
19127+2435	A264AB	2013.732	1	3.469	0.017	106.1	0.3					
19127+3246	COU1315	2014.615	1	0.894	0.007	65.7*	0.3					
19128-0252	TDT1297	2013.626	1	—	—	—	—		NR			
19129+3510	HU942	2014.639	1	1.711	0.009	278.1*	0.3					
19130+1708	TDT1300	2013.629	1	—	—	—	—		NR			
19130+1908	STF2482	2013.670	1	1.681	0.008	342.2*	0.3					
19131+2154	A153	2013.512	1	0.694	0.011	265.3*	0.4					
19131+2154	A153	2014.571	1	0.694	0.007	265.7*	0.3					
19132-0327	A97BC	2013.613	1	0.852	0.008	219.5*	1.1					
19132-0327	A97BC	2013.613	1	0.844	0.007	218.6	0.3					
19132-0327	A97BC	2013.613	1	0.844	0.007	223.1	0.3					
19132-0327	A97BC,D	2013.613	1	7.368	0.037	240.6	0.3	1.85				
19132+3420	COU1616	2014.582	1	0.230	0.035	134.6*	2.1					
19134+2111	J1150	2013.725	1	1.917	0.010	248.5	0.3	1.58				
19134+2111	J1150	2013.725	1	1.911	0.010	248.9	0.3	1.53				
19134+2111	J1150	2013.725	1	1.903	0.010	248.0*	0.3					
19134+2323	A154	2013.670	1	1.061	0.009	0.7*	0.5					
19134+2926	COU1157	2014.615	1	0.105	0.058	98.4*	8.0					
19134+4443	COU2519	2014.637	1	0.472	0.007	81.9*	0.3					
19136-1021	RST5547	2013.583	1	0.493	0.007	156.6*	0.4					
19137+2422	J814	2013.670	1	1.942	0.010	236.7*	0.5					
19138-1020	RST4623	2013.583	1	0.408	0.007	359.8	0.5					
19138+0753	HEI872	2013.646	1	1.752	0.009	269.7*	0.3					
19141+0820	HEI809	2013.678	1	2.074	0.010	83.5*	0.3					
19143-0843	A98	2013.613	1	1.477	0.011	55.6*	0.5					
19143+2840	A265	2013.670	1	—	—	—	—		NR			
19147+3258	COU1463	2014.658	1	0.618	0.007	209.1*	0.5					
19148+0100	TDT1315	2013.640	1	1.716	0.009	349.3*	0.3					
19148+0100	J1036	2013.610	1	1.499	0.263	348.2*	2.6					
19150+3310	COU1464	2014.601	1	3.056	0.015	103.0*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
19152+0133	HDS2723	2013.626	1	0.106	0.050	213.6	8.0					
19153+2454	HDS2724	2013.730	1	0.539	0.027	274.7*	0.6					
19154-0737	RST4625	2013.613	1	0.650	0.007	155.8*	0.5					
19156+1407	TDT1328	2013.629	1	—	—	—	—		NR			
19158+0218	HEI810	2013.626	1	1.623	0.008	66.4*	0.3					
19160+1610	STT368	2013.678	1	1.169	0.007	218.5*	0.3					
19161+0955	J2543	2013.613	1	0.895	0.007	15.3*	0.3					
19161+0955	J2543	2013.629	1	0.907	0.007	15.5*	0.7					
19165+5003	COU2627	2014.639	1	0.181	0.050	25.8	8.0					
19167+2417	A156	2013.646	1	0.304	0.011	47.5*	2.2					
19172+0143	B2875	2013.678	1	—	—	—	—		NR			
19173-0817	TDT1353	2013.629	1	0.951	0.007	113.9*	0.3					
19175+2638	A267	2013.725	1	0.324	0.010	179.1*	1.3					
19175+4831	TDT1356	2014.639	1	1.459	0.007	58.5*	0.3					
19177+1015	A1176	2013.512	1	1.323	0.007	105.6*	0.3					
19177+1147	A1177	2013.626	1	0.852	0.007	17.8*	0.3					
19180+2012	COU321	2013.725	1	0.107	0.050	140.7	8.0		Doc2003e		-0.04	-19.7
19182+2231	COU322	2014.615	1	0.466	0.007	27.4*	0.3					
19185+1625	HEI175	2013.722	1	1.639	0.008	164.4*	0.3					
19189+4330	COU2523Aa,Ab	2014.637	1	0.156	0.050	108.1	8.0		NDp			
19189+4330	COU2523AB	2014.637	1	2.645	0.013	260.0*	0.3					
19192-1047	TDT1372	2013.629	1	—	—	—	—		NR			
19194-0136	HDS2734	2013.583	1	0.318	0.007	242.0*	0.7					
19194+1943	COU421	2013.722	1	0.431	0.007	182.9*	0.5					
19195+4124	COU2397	2014.639	1	0.415	0.007	241.9*	0.8					
19196+4035	COU2398	2014.658	1	—	—	—	—		NR			
19201+1936	TDT1380	2013.643	1	—	—	—	—		NR			
19201+2849	COU1022	2014.582	1	0.143	0.050	127.8	8.0					
19204-1034	HU72	2013.626	1	1.018	0.024	71.2	0.6					
19204+0840	TDT1384	2013.616	1	—	—	—	—		NR			
19204+2545	TDT1383	2013.670	1	1.611	0.008	55.2*	0.3					
19204+2631	COU1023	2014.637	1	0.227	0.026	137.6*	0.5					
19205+3831	KOI300	2014.658	1	—	—	—	—		NR			
19206+0256	HWE47	2013.629	1	0.554	0.007	305.9*	0.3					
19208+0722	TDT1390	2013.640	1	—	—	—	—		NR			
19208+3711	COU1801	2014.571	1	0.345	0.007	338.9*	0.7					
19211+1751	HU338	2013.725	1	0.281	0.007	151.8*	1.0					
19218-0209	TDT1399	2013.640	1	—	—	—	—		NR			
19222-0735	A102	2013.629	1	0.170	0.021	247.7	1.7		Lin2012a		-0.02	-7.1
19231-0653	RST4627	2013.613	1	0.667	0.007	197.3*	0.3					
19232-1000	HU73	2013.626	1	1.086	0.007	222.9*	0.3					
19233-0910	RST4039	2013.613	1	1.211	0.007	46.1*	0.3					
19233-0635	HDS2745Aa,Ab	2013.613	1	0.138	0.033	121.2	4.8		NDp			
19233-0635	HDS2745AB	2013.613	1	1.235	0.007	15.9*	0.3					
19233+0911	J2547	2013.512	1	1.945	0.010	275.4*	0.3					
19235+0426	TDT1417	2013.632	1	0.572	0.017	82.8*	0.7					
19235+2234	TDT1416	2013.670	1	—	—	—	—		NR			
19237+3710	COU1938	2014.582	1	0.455	0.007	125.7*	0.3					
19238+3832	COU2201	2014.658	1	0.244	0.025	131.8*	1.5					
19240+1507	J2964	2013.610	1	1.225	0.007	291.6*	0.3					
19242+1004	TDT1427	2013.640	1	—	—	—	—		NR			
19243+2032	HDS2752	2013.725	1	0.209	0.023	148.5*	2.9					
19243+3156	COU1160	2013.665	1	0.558	0.007	193.3*	0.5					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
19244+2543	COU724	2014.615	1	0.309	0.015	177.4*	0.9					
19246+0524	HDS2755	2013.632	1	0.658	0.007	171.9*	0.3					
19246+0629	HDS2754	2013.596	1	0.216	0.049	2.9	1.8					
19246+0630	TDT1435	2013.596	1	0.665	0.007	331.8*	0.3					
19247+0833	WSI108	2013.678	1	0.142	0.050	332.0	8.0					
19247+1005	HDS2756	2013.730	1	0.166	0.016	5.1	6.3					
19251+1346	J1305	2013.610	1	1.611	0.008	161.4*	0.3					
19251+1839	HU339	2013.670	1	0.839	0.007	244.7*	0.3					
19251+2213	COU513	2013.512	1	0.251	0.007	359.1	0.3					
19251+4431	COU2524	2014.571	1	0.221	0.036	11.6*	2.7					
19253-0503	RST4628	2013.616	1	1.219	0.007	116.7*	0.3					
19253+0739	A364	2013.616	1	1.300	0.007	49.5*	0.3					
19253+3749	COU2122	2014.639	1	0.798	0.007	200.3*	0.3					
19255+0325	A2271Aa,Ab	2013.610	1	0.103	0.050	129.7	8.0			NDp		
19255+0325	A2271AB	2013.610	1	2.074	0.013	269.1*	0.3					
19256+0758	A365	2013.616	1	1.353	0.008	154.9*	0.3					
19257+0314	HEI811	2013.613	1	1.531	0.008	257.1*	0.3					
19257+0600	TDT1449	2013.632	1	—	—	—	—			NR		
19258+2328	DOO74	2013.643	1	1.346	0.012	256.8*	0.3					
19261+0955	TDT1457	2013.626	1	0.697	0.010	297.4*	0.3					
19263+4319	COU2525	2014.639	1	0.497	0.015	165.4*	0.3					
19264+1139	HEI571	2013.629	1	1.911	0.010	352.1*	0.3					
19264+3305	COU1317	2013.665	1	0.452	0.007	291.7*	1.3					
19264+2241	GII50	2013.703	1	0.362	0.007	187.8*	0.7					
19266+2619	HDS2763Aa,Ab	2014.637	1	0.128	0.050	299.1*	8.0			NDp		
19266+2619	HDS2763AB	2014.637	1	0.774	0.013	208.9*	0.7					
19267-0638	RST4629	2013.583	1	0.679	0.007	89.1*	0.6					
19268+3457	POP33	2013.665	1	0.869	0.007	231.6*	0.7					
19269+2245	CON37AB	2013.647	1	1.522	0.008	322.2	0.3	2.00				
19270-0305	HO106	2013.626	1	—	—	—	—			NR		
19270+2109	A2786	2014.659	1	0.352	0.008	107.7*	0.3					
19272+2508	COU1025	2013.703	1	1.707	0.018	150.5	0.5					
19272+2508	COU1025	2013.703	1	1.722	0.009	151.2*	0.3					
19272+4307	A593	2014.639	1	0.675	0.016	355.2*	0.8					
19273+2507	BKO407	2013.703	1	2.068	0.10	11.6*	0.3	0.31				
19273+2507	BKO407	2014.582	1	1.992	0.010	11.8*	1.3					
19274+2510	COU1026	2013.703	1	1.987	0.010	12.5*	0.3					
19276+2009	COU514	2013.596	1	0.516	0.007	87.2*	0.5					
19282-0303	TDS996	2013.640	1	1.302	0.007	222.6*	0.4					
19282+1507	TDT1476	2013.629	1	0.718	0.007	151.5*	0.3					
19283+1232	A1649	2013.643	1	1.511	0.011	25.3*	0.3					
19284+1046	TDT1482	2013.678	1	0.804	0.007	315.8*	0.4					
19284+2734	TDT1480	2013.665	1	0.664	0.007	168.3*	0.8					
19286-0344	A2596	2013.632	1	0.286	0.007	247.2*	0.9					
19288+2305	A160	2014.637	1	0.128	0.050	113.7*	8.0					
19294-0703	KUI91AB	2013.583	1	1.617	0.016	225.3	0.8					
19294-0125	RST5137	2013.632	1	1.758	0.035	121.6*	0.3					
19300+2918	COU1318	2013.722	1	0.365	0.007	201.9*	0.7					
19301-0735	RST4630	2013.632	1	0.338	0.023	288.7*	1.6					
19303+2255	COU515	2014.628	1	1.163	0.007	285.2*	0.3					
19305+1151	HEI573	2013.678	1	0.883	0.007	225.7*	0.3					
19305+2714	A269	2013.722	1	0.635	0.007	208.1*	0.3					
19306+2817	COU1161	2013.722	1	0.159	0.050	15.5	8.0					
19306+2817	COU1161	2014.628	1	0.175	0.049	314.4	3.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
19308+4124	COU2402	2014.601	1	0.156	0.050	127.9	8.0					
19310+4210	COU2403	2014.628	1	0.368	0.009	36.8*	1.1					
19311+0829	TDT1516	2013.678	1	0.794	0.015	358.4*	8.0					
19312+1951	J1309	2013.665	1	2.665	0.022	233.0*	1.2					
19313+4729	A713	2014.637	1	0.126	0.017	304.0*	8.0			Zas2012c	-0.06	-6.0
19319+3323	COU1621	2014.637	1	2.052	0.010	296.0*	0.3					
19321+3416	COU1622	2014.639	1	0.807	0.007	34.2*	0.3					
19326+0435	TDS999	2013.640	1	0.945	0.007	343.2*	0.3					
19326+3649	COU2204	2014.582	1	0.272	0.007	235.1*	1.3					
19332-0403	RST4631	2013.616	1	1.542	0.009	199.9*	0.3					
19332+0151	TDT1538	2013.678	1	—	—	—	—		NR			
19333+2629	COU1028	2014.571	1	0.333	0.007	73.1*	1.4					
19334+3551	COU1941	2014.659	1	0.524	0.007	219.6*	0.4					
19343+0021	HDS2779	2013.583	1	0.285	0.007	212.9*	0.4					
19345+0037	BAL1206Aa,Ab	2013.610	1	0.585	0.018	288.7*	1.9		NDg			
19345+0037	BAL1206AB	2013.610	1	2.034	0.010	10.8*	0.3					
19345+0037	BAL1206AB	2013.610	1	2.051	0.011	9.9	0.4					
19345+2620	A271	2014.639	1	0.644	0.007	304.2*	0.3					
19346+1022	A1186	2013.678	1	0.229	0.023	94.5*	0.9					
19347+2854	GII33Aa,Ab	2013.703	1	0.321	0.007	202.3	1.9					
19347+2854	GII33Aa,Ab	2013.703	1	0.262	0.009	202.9*	1.1					
19347+2854	GII33Aa,Ab	2013.703	1	0.308	0.014	201.6	2.9					
19347+2854	GII33Aa,Ab	2013.703	1	0.337	0.009	201.9	1.1					
19347+2854	GII33Aa,Ab	2013.711	1	0.360	0.012	196.5	1.3					
19347+2854	GII33Aa,Ab	2014.637	1	0.354	0.007	205.1*	0.5					
19347+2854	COU1031AB	2013.703	1	1.806	0.029	240.4	2.3					
19347+2854	COU1031AB	2013.703	1	1.791	0.032	239.8	2.6					
19347+2854	COU1031AB	2013.711	1	1.799	0.010	240.3	0.6					
19347+2854	COU1031AB	2014.637	1	1.782	0.009	240.5*	0.4					
19348+3751	COU2205	2014.571	1	0.280	0.007	266.6*	0.9					
19351-0547	RST4634	2013.626	1	1.443	0.009	132.1*	0.3					
19351+5038	HU679	2014.620	1	0.382	0.020	269.1*	0.3		Ana2005	-0.01	2.6	
19352+0825	BAG27	2013.610	1	0.176	0.011	115.8*	1.0					
19352+1818	J1077	2013.643	1	2.407	0.012	16.7*	0.3					
19355+0544	TDT1564	2013.596	1	—	—	—	—		NR			
19355+3641	COU2206	2014.601	1	0.644	0.008	316.0*	0.3					
19356+4002	A1400	2014.628	1	0.385	0.007	122.4*	0.3			USN2002	0.14	-25.9
19358+2316	A163	2013.722	1	0.218	0.010	20.1	1.2			Sca2019d	-0.01	4.9
19364+1938	COU210AB	2014.620	1	0.590	0.007	216.4*	0.3					
19364+1938	COU210AB	2014.620	1	0.587	0.013	215.7	0.4					
19364+1938	COU210AC	2014.620	1	1.650	0.026	113.5	0.9					
19365+2400	COU1033	2014.571	1	0.139	0.050	171.4*	8.0					
19370+1927	COU211	2013.730	1	0.753	0.007	305.7*	0.4					
19370+1927	COU211	2014.601	1	0.751	0.007	304.3*	0.3					
19371+4108	COU2406	2014.615	1	0.848	0.007	4.2*	0.3					
19374+3026	COU1319	2014.620	1	2.610	0.035	317.6*	0.8					
19375+0553	HEI874	2013.596	1	2.523	0.027	188.8*	0.8					
19375+0553	HEI874	2013.596	1	2.501	0.013	189.0	0.7					
19376-0242	HDS2782	2013.583	1	0.276	0.017	212.9	7.1					
19377+2924	HDS2783	2013.730	1	0.151	0.050	210.8	8.0					
19377+3651	COU2123	2014.615	1	0.448	0.013	333.9*	0.3					
19379+0130	HEI176	2013.678	1	0.255	0.010	140.9	0.6					
19379+0130	HEI176	2013.678	1	0.243	0.011	140.9*	1.0					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
19379+2248	A164	2014.628	1	0.243	0.015	254.2*	1.2					
19380-0535	A106	2013.629	1	0.830	0.007	244.3*	0.3					
19381-0232	RST5139	2013.583	1	0.193	0.041	171.0*	2.5					
19384+0021	BU249	2013.678	1	0.828	0.007	106.5*	0.3					
19384+0021	BU249	2013.680	1	0.845	0.007	106.3*	0.3					
19386+2953	COU1162	2013.703	1	0.714	0.007	126.6*	0.3					
19386+3730	COU2207	2013.665	1	0.173	0.050	93.7*	8.0					
19387+2517	J1139	2013.722	1	1.295	0.007	216.6*	0.3					
19388-0333	A107	2013.629	1	0.453	0.007	264.6*	0.6					
19388+1834	COU212Aa,Ab	2014.582	1	0.145	0.050	135.6	8.0		NDp			
19388+1834	COU212AB	2014.582	1	0.851	0.007	207.9*	0.9					
19389+1626	RAS11	2013.610	1	—	—	—	—		NR			
19390+1030	AGE10	2013.730	1	—	—	—	—		NR			
19390+3559	COU1943	2014.571	1	0.279	0.007	164.0*	0.6					
19391+3500	COU1944	2014.601	1	0.529	0.007	340.4*	0.4					
19392-0029	RST5140	2013.610	1	0.526	0.007	22.7*	0.3					
19392+2255	COU518	2013.725	1	0.607	0.007	103.8*	0.7					
19392+3556	HDS2789	2014.639	1	—	—	—	—		NR			
19399+0827	A1189	2013.632	1	0.569	0.007	91.2*	0.6					
19399+4634	COU2631	2014.628	1	0.145	0.050	248.7*	8.0					
19400+2712	COU822	2013.725	1	0.156	0.050	146.6*	8.0					
19404+3118	COU1164	2014.637	1	0.398	0.015	327.5*	1.3					
19408+4136	COU2632AB	2014.615	1	0.108	0.013	155.0	3.9					
19408+4136	COU2632AC	2014.615	1	3.206	0.016	85.9	0.3					
19411+1349	KUI93	2013.678	1	0.193	0.010	137.3*	1.3			Zas2017	-0.00	1.6 ^Q
19420+3541	HU680	2014.639	1	0.367	0.007	169.6*	1.8			Sod1999	0.01	3.3
19420+4015	KUI94	2014.637	1	0.475	0.007	161.6*	0.6					
19421+1533	HU1305	2014.659	1	0.434	0.007	101.9*	0.9					
19422-1015	RST4639	2013.629	1	0.739	0.007	20.4*	0.3					
19426+0621	TDT1661	2013.640	1	—	—	—	—		NR			
19429+2822	HDS2797	2013.646	1	—	—	—	—		NR			
19431+2854	A372	2013.725	1	0.134	0.050	194.9	8.0					
19432+0624	TDS1008	2013.640	1	1.365	0.007	99.5*	0.3					
19438-0945	RST4640	2013.629	1	0.632	0.007	125.1*	0.3					
19439+3105	BRT268AC	2013.665	1	4.535	0.028	132.4*	0.4					
19440+3702	COU2282	2014.615	1	0.466	0.011	239.4*	0.5					
19444+1929	BAZ9	2013.678	1	1.108	0.007	161.1*	0.3					
19445+4350	COU2633	2014.629	1	0.476	0.007	338.6*	0.3					
19449+1047	AGC10AB	2013.725	1	0.182	0.039	137.3	2.3					
19449+1047	AGC10AC	2013.725	1	4.090	0.020	96.2	0.3					
19452+3829	COU2408	2014.620	1	1.061	0.007	145.8*	0.3					
19457+3726	COU2283	2014.639	1	0.159	0.050	138.6	8.0					
19457+4330	A600	2014.620	1	0.346	0.008	62.1*	0.6					
19458+2710	KUI95AB	2013.643	1	2.204	0.011	59.3*	0.3			Sod1999	-0.17	4.0
19458+2710	KUI95AB	2014.571	1	2.217	0.011	59.3*	0.3			Sod1999	-0.21	3.7
19458+2720	HEI815	2013.730	1	2.066	0.010	297.0*	0.3					
19460-1039	HU76	2013.629	1	0.900	0.007	264.2*	0.3					
19461-0318	A2597	2013.632	1	0.161	0.050	142.0*	8.0					
19471-0809	A108	2013.632	1	0.253	0.007	106.8*	0.3			Doc2017l	-0.06	1.1
19474-0148	A2993	2013.629	1	0.098	0.050	293.9	8.0			Hrt2014b	-0.02	14.1
19477-0154	A717	2013.632	1	0.188	0.050	122.3*	8.0					
19478+3833	A1405	2014.637	1	0.309	0.007	187.2*	1.3					
19479+1806	J1187	2013.646	1	1.266	0.007	196.6*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
19480+1541	HEI75	2013.646	1	0.607	0.007	31.2*	0.7					
19481+2811	TDT1766	2013.722	1	—	—	—	—		NR			
19484+4113	COU2527	2014.582	1	0.561	0.007	110.8*	0.6					
19484+4117	COU2526	2014.601	1	0.156	0.050	246.6*	8.0					
19486+3450	HU682	2014.639	1	0.263	0.025	119.5*	8.0					
19487+2200	TDS1015	2013.703	1	—	—	—	—		NR			
19501+2348	COU121	2014.629	1	0.362	0.014	240.3*	8.0					
19502–1000	RST4643Aa,Ab	2013.632	1	0.110	0.050	126.1	8.0		NDp			
19502–1000	RST4643AB	2013.632	1	1.497	0.007	262.9	0.3					
19502–1000	RST4643AB	2013.632	1	1.494	0.007	263.5	0.3					
19503+2741	TDT1791	2013.722	1	—	—	—	—		NR			
19503+3127	COU1468	2014.629	1	0.767	0.007	148.7*	0.3					
19504–1033	RST4644	2013.632	1	0.441	0.007	225.7*	1.3					
19504+2409	COU1034	2013.643	1	0.291	0.007	211.5*	0.8					
19504+2409	COU1034	2013.643	1	0.264	0.022	211.0	1.1					
19504+2409	COU1034	2014.601	1	0.274	0.024	210.8*	1.4					
19506+3715	COU2285	2013.703	1	1.524	0.008	67.4*	0.3					
19506+3715	COU2285	2014.571	1	1.523	0.008	67.6*	0.3					
19507+4851	HU684	2014.637	1	—	—	—	—		NR			
19508+3906	COU2528	2014.615	1	0.595	0.007	167.4*	0.6					
19514–0514	RST4645	2013.632	1	1.106	0.007	140.6*	0.3					
19514+4044	COU2530	2014.615	1	0.107	0.050	119.2	8.0			Tok2019e	–0.01	–13.1
19517+2239	TDT1806	2013.643	1	—	—	—	—		NR			
19517+2239	TDT1806	2013.646	1	—	—	—	—		NR			
19520–1021	BU148	2013.629	1	0.647	0.014	224.7*	0.3			Lin2004b	0.07	3.1
19522+1951	HU351	2013.665	1	2.017	0.010	157.8*	0.4					
19529+1425	A1660	2013.725	1	0.665	0.016	205.1*	1.3					
19530+3825	COU2532	2013.703	1	0.344	0.007	155.2*	0.5					
19530+3825	COU2532	2014.571	1	0.377	0.007	154.5*	0.4					
19532+4238	COU2635	2014.601	1	0.577	0.008	158.1*	1.2					
19534+2923	J25	2013.722	1	1.612	0.008	0.6*	0.3					
19539–0858	RST4050	2013.629	1	0.877	0.007	153.6*	0.3					
19539+3257	COU1626	2013.665	1	0.121	0.050	119.1*	8.0					
19540+2616	COU1321	2014.615	1	0.227	0.017	136.3*	0.7					
19543+1713	COU324	2013.665	1	0.976	0.007	51.1*	0.7					
19549+1909	J1145	2013.730	1	1.489	0.007	311.9*	0.3					
19549+2513	A275	2014.629	1	0.244	0.017	92.7*	1.0					
19549+2513	A275	2014.637	1	0.233	0.019	90.9	1.8					
19550+0441	BAL2954	2013.678	1	2.337	0.012	4.5*	0.3					
19553+3146	COU1469	2014.601	1	—	—	—	—		NR			
19554+2341	COU1036	2014.601	1	0.341	0.007	196.9*	1.4					
19555+0841	J1184	2013.646	1	2.004	0.010	166.6*	0.3					
19555+1944	FOX90	2013.678	1	0.810	0.007	49.9*	0.3					
19558+3604	HU1306	2014.620	1	0.604	0.007	212.8*	0.3					
19559+2500	COU1037	2014.637	1	0.217	0.015	153.2	0.3			Doc2010h	0.05	2.8
19566+2206	COU30	2013.643	1	2.443	0.012	129.5*	0.3					
19566+2913	COU1470	2013.643	1	0.382	0.007	238.3*	1.0					
19568+2718	COU1165	2013.725	1	0.900	0.007	76.6*	0.3					
19570+2206	BOW9	2013.643	1	—	—	—	—		NR			
19573+0256	J2600	2013.678	1	1.568	0.008	57.6*	0.3					
19575+1408	A1662	2013.730	1	0.356	0.007	15.7*	2.8					
19575+2018	BU425	2013.665	1	1.359	0.007	239.8*	0.3					
19576+1524	A1663	2013.665	1	1.363	0.007	237.4	0.6					
19579+2715	AC16	2013.722	1	0.362	0.007	231.7*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
19583+2208	AG244	2013.722	1	1.533	0.008	273.1*	0.3					
19583+3333	HO582	2013.703	1	0.579	0.007	314.2*	0.5					
19584+0852	J818	2013.632	1	1.508	0.008	19.5*	0.4					
19585+2534	TDT1889	2013.730	1	0.784	0.007	217.2*	0.5					
19591+3809	COU2411	2014.629	1	0.389	0.013	49.4*	0.9					
19592+3724	COU2412	2014.615	1	0.415	0.008	257.8*	0.3					
19593+2237	COU519	2013.730	1	0.557	0.010	250.4*	1.2					
19593+4546	HDS2846Aa,Ab	2014.637	1	0.123	0.008	118.6	2.3		NDp			
19593+4546	HDS2846AB	2014.637	1	0.779	0.007	235.5*	0.3					
19597+3150	BU1133	2014.773	1	1.124	0.007	343.6*	0.3					
19599+1637	J1203	2013.643	1	2.117	0.021	351.5*	0.3					
20000+1911	RUC13	2013.722	1	1.858	0.010	63.6*	0.7					
20001+1737	HO638	2014.773	1	—	—	—	—		NR			
20001+3423	HU1308	2014.615	1	0.450	0.007	31.1*	0.3					
20008+2533	BRT206	2013.725	1	1.844	0.084	110.6*	0.9					
20009-0230	RST5150	2014.659	1	0.485	0.007	119.4*	0.4					
20010+3742	BU1289	2014.773	1	0.654	0.007	54.2*	0.3					
20014+1045	TOK34Aa,Ab	2013.679	2	0.263	0.082	327.6	8.3	3.21				
20014+1045	TOK34AC	2013.643	1	3.587	0.018	175.0	0.3	2.25	NDg			
20014+1045	TOK34AC	2013.643	1	3.565	0.018	175.4	0.3		NDg			
20014+1045	STF2613AB	2013.678	1	3.593	0.018	355.0	0.3			Izm2019	0.04	0.2
20014+1045	STF2613AB	2013.679	1	3.622	0.018	355.0	0.3	0.85				
20014+3206	COU1472	2014.776	1	1.226	0.007	190.8*	0.3					
20016+3435	COU1947	2014.615	1	0.327	0.010	90.9*	0.5					
20020+3840	A1411	2013.703	1	1.325	0.010	203.0*	0.3					
20020+3840	A1411	2013.703	1	1.331	0.015	204.0	1.1					
20023+2009	COU215	2014.575	1	0.295	0.007	269.4*	0.3					
20023+3625	COU2210	2014.637	1	0.227	0.013	291.8*	3.3					
20026+2006	HU353	2014.659	1	0.534	0.016	3.3*	1.1					
20027+2939	COU1473	2013.730	1	0.595	0.007	344.9*	0.3					
20036+3220	A380	2014.637	1	0.410	0.009	206.6*	0.5					
20037+3209	COU1628	2014.795	1	1.111	0.007	346.2*	0.3					
20039+2034	COU216	2014.659	1	0.469	0.007	218.2*	0.6					
20039+2351	COU520Aa,Ab	2014.773	1	0.113	0.050	48.8	8.0		NDp			
20039+2351	COU520AB	2014.773	1	1.562	0.008	145.1*	0.3					
20041+3957	COU2534	2014.629	1	0.154	0.050	7.3	8.0					
20044+1715	COU325	2014.571	1	0.804	0.007	224.6*	0.3					
20048+1606	J3049	2013.722	1	1.968	0.010	268.9*	0.3					
20050+3707	COU2212	2014.639	1	0.506	0.015	198.2*	0.6					
20056+3935	COU2535	2014.776	1	2.011	0.016	135.5*	0.3					
20057+2412	BAR52	2013.730	1	1.003	0.007	156.4*	0.5					
20059+3247	COU1807	2014.637	1	0.167	0.050	298.8*	8.0					
20063+3148	COU1322	2014.620	1	0.160	0.050	286.4*	8.0					
20067+3455	A278	2014.620	1	1.687	0.008	295.2*	0.3					
20069+3438	COU2124	2014.639	1	0.370	0.007	37.2*	1.4					
20073+3534	COU2125	2014.773	1	—	—	—	—		NR			
20075+3535	COU2126	2014.773	1	0.703	0.007	338.1*	0.3					
20082+2105	J1168	2013.703	1	0.884	0.007	193.1*	0.3					
20083+3519	COU2127	2014.773	1	0.224	0.011	47.1*	4.0					
20093+2004	HU355	2013.725	1	1.141	0.007	353.2	0.3	2.92				
20093+2004	HU355	2013.725	1	1.131	0.019	353.6	0.4					
20093+2503	BAR53	2013.722	1	1.017	0.007	295.6*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
20096+4009	COU2414	2014.615	1	0.315	0.013	155.6*	1.3					
20102+2536	FOX33	2013.730	1	1.136	0.007	101.5*	0.6					
20102+2536	FOX33	2013.733	1	1.121	0.009	102.1*	0.3					
20107+4208	COU2637	2014.601	1	0.486	0.007	120.9*	0.7					
20110+2834	COU1323	2014.776	1	0.820	0.007	333.7*	0.3					
20118+3108	COU1474Aa,Ab	2014.639	1	1.472	0.025	82.7	1.4		NDp			
20118+3108	COU1474AB	2014.639	1	3.032	0.015	59.5*	0.3					
20118+3936	COU2415	2014.637	1	0.361	0.007	157.5*	1.2					
20120+3333	COU1631	2014.784	1	0.426	0.010	329.1*	0.5					
20123+2248	COU123	2014.601	1	0.196	0.040	236.9*	3.8					
20126+1553	BKO530	2013.725	1	1.055	0.007	171.7	0.3	3.78				
20135+3526	COU2214	2014.615	1	1.143	0.007	210.5*	0.3					
20139+3545	COU2215	2014.795	1	0.689	0.008	74.9*	0.3					
20140+3031	COU1475	2013.703	1	0.203	0.019	261.0	0.7					
20140+3031	COU1475	2014.601	1	0.171	0.024	266.6*	1.5					
20141+3706	A1419	2014.639	1	0.449	0.018	35.1*	0.3					
20143+3657	A1420	2014.637	1	0.582	0.007	250.8*	0.3					
20151+1143	J604	2013.678	1	0.646	0.013	234.6*	0.3					
20151+3742	COU2416	2014.615	1	0.342	0.017	128.2*	0.3		Doc2013g	0.07	-3.6	
20164+2309	COU218	2014.601	1	0.346	0.018	219.4*	0.4					
20167+2729	COU1168	2013.730	1	0.302	0.011	204.3*	0.7					
20167+3629	COU2417	2014.620	1	0.801	0.007	350.6*	0.3					
20168+0111	HDS2890	2013.678	1	0.144	0.016	313.2	2.4					
20168+3206	COU1476AB	2014.601	1	0.133	0.013	9.1*	3.9					
20168+3206	COU1476AC	2014.601	1	3.013	0.293	156.7	3.3		NDg			
20169+3235	A284	2014.639	1	0.447	0.007	253.1*	0.6					
20175+2909	POP1229	2014.795	1	—	—	—	—		NR			
20182+1511	A1670	2013.678	1	0.390	0.007	215.8*	1.5					
20187+3315	STT405	2014.637	1	0.800	0.007	150.1*	0.4					
20187+4113	COU2640	2014.615	1	0.487	0.007	264.9*	0.3					
20188+3507	A286AB	2014.620	1	0.117	0.007	220.9	1.3					
20188+3507	A286AC	2014.620	1	4.414	0.022	59.4	0.3		NDg			
20188+3507	BU986AB,C	2014.620	1	4.454	0.045	239.5*	0.3					
20189+3325	COU1948	2014.601	1	0.132	0.050	339.5*	8.0					
20189+3945	COU2537	2014.659	1	0.762	0.007	294.6*	0.3					
20191+3648	COU2286	2014.637	1	0.483	0.007	119.6*	0.6					
20196+2956	A1207	2014.795	1	0.647	0.013	351.2*	0.6					
20198+3509	COU2217	2014.773	1	1.036	0.007	27.5*	0.3					
20199+3725	COU2287	2014.637	1	0.162	0.050	309.2*	8.0					
20207+1601	YSC70	2013.643	1	0.537	0.013	158.5*	1.4					
20207+4031	TDT2183	2013.665	1	—	—	—	—		NR			
20207+4031	TDT2183	2014.795	1	—	—	—	—		NR			
20215+3035	BU1259	2014.637	1	—	—	—	—		NR			
20222+3115	A1208	2014.659	1	0.235	0.017	340.9*	1.0					
20227+2837	COU1169AB	2013.643	1	0.275	0.013	59.3*	2.7					
20227+2837	COU1169AC	2013.946	1	1.711	0.009	175.3	0.3		NDg			
20231+3342	COU1949	2014.601	1	0.243	0.017	84.4	2.2					
20235+1811	J839	2013.733	1	2.111	0.011	347.2*	0.3					
20236+3854	TDT2232Aa,Ab	2014.639	1	0.145	0.050	114.8	8.0		NDp			
20236+3854	GII51AC	2014.639	1	3.172	0.019	355.9*	0.3					
20238+1301	TDT2235	2013.733	1	—	—	—	—		NR			
20239+3426	COU1950	2014.773	1	1.057	0.007	264.9*	0.3					
20242+3720	COU2288	2014.601	1	0.370	0.010	97.8*	0.9					
20244+1213	WOR33Aa,Ab	2013.643	1	0.596	0.007	132.3*	0.3					
20244+1213	A1209AB	2013.643	1	1.872	0.009	324.2*	0.3					
20244+2417	COU125	2014.620	1	0.271	0.021	119.6*	1.4					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
20245+2401	TDT2245	2013.733	1	—	—	—	—		NR			
20248+2511	COU521	2014.639	1	0.504	0.011	279.9*	1.4					
20249+1309	J841	2013.678	1	0.154	0.050	132.8	8.1					
20249+3858	COU2418	2014.773	1	2.043	0.010	330.5*	0.3					
20254+4014	MLR1	2014.659	1	0.393	0.011	212.3*	0.6					
20255+3553	A47	2013.665	1	1.531	0.008	176.7*	0.3					
20260+3512	COU2129	2014.773	1	0.133	0.050	162.9*	8.0					
20262+3547	COU2130	2014.795	1	0.485	0.023	60.5	2.3					
20273+3357	COU1955	2013.665	1	0.379	0.007	346.9*	0.3					
20273+3357	COU1955	2014.601	1	0.413	0.007	349.7*	1.2					
20275+1454	A1674AB	2013.678	1	1.277	0.021	352.9	0.6	2.08				
20275+1454	A1674AB	2013.679	1	1.258	0.007	353.2	0.3	1.93				
20275+1454	A1674AC	2013.679	1	8.376	0.042	114.3	0.3	3.34				
20275+1454	A1674CD	2013.678	1	1.302	0.007	173.6*	0.3					
20275+1454	A1674CD	2013.679	1	1.296	0.007	171.8	0.3	0.55				
20276+0745	J1297	2013.678	1	1.053	0.007	2.9*	0.3					
20278+3447	COU2131AB	2014.601	1	1.061	0.007	280.3	0.3					
20278+3447	COU2131AB	2014.602	1	1.072	0.007	280.5	0.3	2.05				
20278+3447	COU2131AB	2014.659	1	1.058	0.007	280.6*	0.3					
20281+1654	HEI180	2013.725	1	1.032	0.007	167.7*	0.3					
20281+1654	HEI180	2013.725	1	1.052	0.007	166.9	0.3	2.12				
20288+2735	TDS1076	2013.733	1	0.950	0.007	292.8*	0.3					
20290+2658	A394	2013.834	1	0.722	0.007	286.4*	0.3					
20290+3535	COU1959	2014.659	1	0.372	0.007	322.9*	0.9					
20300+4149	J130	2014.771	1	2.522	0.013	264.5*	0.3					
20302+2651	WOR9	2013.643	1	0.526	0.007	239.4*	0.4			Zir2003	0.03	4.4
20302+2651	WOR9	2014.771	1	0.522	0.007	235.2*	0.3			Zir2003	0.02	5.0
20302+2651	WOR9	2014.771	1	0.526	0.007	234.6	0.3			Zir2003	0.02	4.4
20306+3525	COU1961	2014.771	1	0.461	0.007	205.8*	0.4					
20311+1548	A1675	2014.833	1	0.154	0.050	311.0	8.0			Hrt2001b	-0.01	4.8
20311+3333	COU1962	2014.659	1	0.261	0.023	293.5*	1.0			Doc2020e	0.02	0.2
20321+3558	COU2133Aa,Ab	2014.776	1	0.116	0.050	118.9	8.0			NDp		
20321+3558	COU2133AB	2014.776	1	2.398	0.034	28.5*	1.0					
20324+4118	HER3	2014.776	1	0.935	0.007	54.9*	0.3					
20327+3711	TDT2352	2013.730	1	—	—	—	—			NR		
20328+4418	COU2645	2014.773	1	0.145	0.010	109.8*	2.4					
20329+1142	J1	2013.725	1	2.088	0.010	55.6*	0.3			Ole2003d	-0.01	0.8
20329+1906	COU2644	2013.725	1	0.793	0.007	288.5*	0.3					
20329+3056	COU1326	2014.773	1	0.381	0.010	263.2*	0.7					
20331+2324	A2792	2014.795	1	0.164	0.050	298.0*	8.0					
20331+4113	WS166	2014.776	1	1.525	0.008	146.6*	0.3					
20337+3835	A1431	2014.833	1	0.891	0.007	29.3	0.5					
20342+2449	COU126	2013.665	1	0.861	0.007	91.9*	0.3					
20346+2914	TDT2388	2013.733	1	6.365	0.032	313.3	0.3	2.34				
20348+1726	COU223AB	2014.620	1	0.379	0.007	156.5*	1.2					
20348+1726	COU223AB	2014.620	1	0.400	0.008	159.2*	0.6					
20348+1726	COU223AC	2013.678	1	1.318	0.008	287.7*	0.3			NDg		

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
20351+3031	COU1327	2014.776	1	2.696	0.013	8.3*	0.3					
20355+2739	COU1171	2013.725	1	0.542	0.007	103.0*	0.3					
20355+2739	COU1171	2014.814	1	0.530	0.007	102.8*	0.3					
20355+3241	COU1632	2014.771	1	0.631	0.007	251.7*	0.3					
20365+2342	A2793	2014.833	1	0.865	0.007	209.3	0.3					
20375+4233	A398	2014.795	1	1.731	0.009	21.8*	0.3					
20376+1835	COU224	2014.620	1	0.426	0.007	322.2*	0.4					
20376+3138	COU1328	2014.771	1	2.843	0.024	35.5*	0.6					
20381+2953	A744	2013.733	1	0.728	0.007	273.0*	0.3					
20385+2945	COU1172	2013.725	1	0.334	0.007	96.9*	0.8					
20386+2007	COU225	2014.771	1	0.256	0.013	284.7*	0.6					
20395+1857	HU362	2014.795	1	0.644	0.017	313.3	0.5					
20396+0458	KUI99AB	2013.678	1	0.661	0.017	311.3*	0.6			Tok2017a	-0.03	2.5
20400+2405	A2794	2014.828	1	1.710	0.009	160.4*	0.3					
20400+2835	TDS1088	2013.733	1	—	—	—	—		NR			
20402+3953	MLB885	2014.828	1	1.638	0.015	252.5*	1.3					
20403+2520	J511	2014.831	1	1.977	0.010	9.0*	0.3					
20406+2156	A2795	2014.831	1	0.213	0.007	229.7*	0.7					
20406+2948	HO137Aa,Ab	2014.833	1	0.120	0.050	43.1	8.0		NDp			
20406+2948	HO137AB	2014.833	1	0.796	0.009	357.7	0.4					
20409-0036	A874	2013.678	1	1.855	0.026	345.0*	0.3					
20412+2023	COU423	2013.730	1	0.374	0.007	160.4*	0.4					
20412+2703	COU1038	2014.771	1	1.151	0.007	89.1*	0.3					
20414+3515	COU1964	2014.795	1	1.001	0.008	129.6*	0.5					
20416+3950	COU2290	2014.828	1	0.542	0.007	41.8*	0.3					
20419+1931	COU226	2013.733	1	0.349	0.007	216.5*	0.7					
20421+4125	COU2420	2014.828	1	0.504	0.010	86.8*	0.3					
20424+3455	COU1965	2014.831	1	0.348	0.011	277.1*	0.8					
20432+4026	COU2421	2014.831	1	0.269	0.007	109.8*	1.8					
20440+3839	COU2292	2014.659	1	0.329	0.007	239.6*	1.1					
20444+2558	COU726	2014.814	1	1.213	0.007	273.1*	0.4					
20444+4103	COU2423	2014.620	1	0.295	0.014	179.9*	0.7					
20445+3409	HU690	2014.833	1	0.480	0.007	279.7	0.3					
20448+2311	BU1302Aa,Ab	2014.776	1	0.109	0.018	119.2	2.9		NDp			
20448+2311	BU1302AB	2014.776	1	2.292	0.011	137.8*	0.3					
20448+2311	BU1302AB	2014.776	1	2.280	0.011	138.0	0.3					
20449+1219	STF2723	2013.818	1	1.010	0.007	138.4*	0.3			Izm2019	-0.02	0.7
20450+1244	BU64	2013.818	1	0.675	0.007	173.6*	0.3			USN2007a	0.02	-1.3 ^Q
20451+3529	COU1809	2013.730	1	0.721	0.007	98.8*	0.3					
20456+1714	COU425	2014.659	1	0.666	0.007	327.3*	0.6					
20456+2442	AG264	2013.834	1	2.032	0.017	359.1*	0.3					
20458+2416	A173	2013.834	1	0.986	0.007	127.7*	0.4					
20463+3846	COU2220	2013.730	1	—	—	—	—		NR			
20464+3511	COU1810	2014.659	1	0.124	0.050	176.9*	8.0					
20466+1915	COU426	2013.725	1	0.269	0.018	157.8*	0.9					
20471+1918	HO141	2013.678	1	1.596	0.008	293.7*	0.3					
20471+1918	HO141	2013.678	1	1.596	0.008	293.7*	0.3					
20471+2355	A2796Aa,Ab	2014.795	1	0.184	0.050	96.6	8.0		NDp			
20471+2355	A2796AB	2013.850	1	1.694	0.008	309.9*	0.8					
20471+2355	A2796AB	2014.795	1	1.768	0.012	311.9*	0.5					
20471+2525	BU364	2013.725	1	0.753	0.007	251.9*	0.3			Izm2019	-0.00	-0.1 ^Q
20472+4427	COU2424	2014.828	1	0.515	0.007	255.4*	0.6					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
20473+4345	COU2425	2014.620	1	0.172	0.010	237.8*	3.5					
20477+2339	BKO855	2013.725	1	2.640	0.013	233.1	0.3	3.28				
20477+2339	BKO855	2013.725	1	2.573	0.013	232.6	0.3					
20477+3258	COU1634	2014.831	1	0.387	0.017	59.1*	1.9					
20481+2727	BU66	2013.733	1	1.065	0.007	169.2*	0.3					
20482+2622	COU827	2013.834	1	0.550	0.009	148.0*	0.3					
20490+2637	COU828	2014.833	1	0.902	0.007	188.2	0.5					
20490+3619	COU1811	2013.730	1	0.733	0.007	254.8*	0.7					
20490+3925	TDT2560	2014.828	1	—	—	—	—		NR			
20492+4525	COU2646	2014.814	1	0.384	0.007	265.7*	0.3					
20494+1124	J194	2013.733	1	0.601	0.007	318.0*	0.4			Sod1999	0.02	2.5
20495+4035	COU2426	2014.620	1	1.251	0.007	328.1*	0.3					
20501+1707	HEI183	2013.834	1	0.548	0.007	24.7*	0.3					
20501+2923	BAG28	2013.834	1	1.042	0.007	327.1	0.5					
20501+4635	ES671	2014.776	1	1.624	0.008	90.9*	0.3					
20506+3055	BU67Aa,Ab	2013.850	1	0.131	0.050	136.5	8.0			NDp		
20506+3055	BU67AB	2013.850	1	1.526	0.008	309.9	0.3					
20506+3055	BU67AB	2013.850	1	1.528	0.014	310.5*	0.3					
20510+4125	COU2427	2014.771	1	0.461	0.007	312.3*	0.3					
20519+4140	COU2428	2014.776	1	0.731	0.007	113.0*	0.3					
20524+2008	HO144	2013.818	1	0.419	0.007	349.2*	0.6			Lin2012a	0.06	1.8
20526+3655	A1435	2014.776	1	0.424	0.007	3.7*	0.3					
20527+4607	A750	2014.795	1	—	—	—	—		NR			
20528+3646	COU2221	2014.831	1	0.281	0.007	29.9*	1.9					
20528+4551	COU2647	2014.620	1	0.372	0.007	224.7*	1.1					
20530+4258	COU2542	2014.828	1	0.109	0.050	198.5	8.0					
20535+2630	COU1177	2014.659	1	0.218	0.044	12.9*	1.5					
20536+3514	HO146	2014.833	1	0.376	0.011	45.5	1.2					
20547+2516	COU830	2013.730	1	1.030	0.007	168.7*	0.3					
20548+3242	STT418	2014.773	1	0.974	0.007	283.8*	0.3			Izm2019	0.01	0.1
20549+3709	COU2295	2014.659	1	0.435	0.007	359.6*	1.4					
20550+2805	BU367	2014.833	1	0.182	0.007	176.3	2.0			Sca2003e	0.03	-21.1
20556+3809	COU2222	2014.773	1	0.735	0.012	289.3*	0.7					
20564+4308	COU2544	2014.773	1	0.359	0.007	160.2*	0.7					
20565+2712	COU832	2014.833	1	1.275	0.007	260.3	0.5					
20568+3348	COU1812	2014.814	1	1.102	0.007	104.3*	0.3					
20570+1758	COU427	2013.834	1	1.508	0.008	221.2*	0.3					
20576+4058	A400	2014.828	1	1.893	0.009	249.0*	0.3					
20577+3943	COU2429	2014.620	1	0.772	0.007	208.9*	0.3					
20579+4442	COU2649	2014.833	1	0.559	0.021	142.8	0.7					
20581+4043	COU2430	2014.776	1	0.416	0.007	253.6*	0.6					
20582+0356	BAR13	2013.678	1	1.632	0.008	86.8*	0.3					
20584+2619	HDS2990	2014.773	1	0.147	0.050	280.2	8.0					
20586+1313	TDT2669	2013.733	1	—	—	—	—		NR			
20587+1823	HU363	2013.834	1	0.798	0.007	101.5*	0.4					
20592+3314	COU1637	2013.730	1	0.179	0.043	353.0	8.0					
20592+3314	COU1637	2014.773	1	0.145	0.050	179.0	8.0					
20592+3435	POP27	2014.795	1	1.499	0.007	155.9*	0.3					
20594+3651	TDT2678	2014.828	1	—	—	—	—		NR			
20596+1642	TDT2679	2013.733	1	—	—	—	—		NR			
20599+4016	HDS2989	2014.828	1	0.176	0.013	146.0*	1.2					
20599+4525	HEI15	2014.776	1	0.866	0.007	321.3*	0.3					
21000+3740	COU2297	2014.814	1	0.257	0.007	237.2*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
21000+4004	KUI103	2013.643	1	0.728	0.007	44.3*	0.3			Doc2016b	0.00	-0.5
21000+4004	KUI103	2013.644	1	0.726	0.007	43.9	0.3	2.21		Doc2016b	-0.00	-0.9
21000+4004	KUI103	2014.601	1	0.789	0.007	50.6*	0.3			Doc2016b	0.01	-0.7
21000+4004	KUI103	2014.771	1	0.801	0.007	51.2	0.3			Doc2016b	0.02	-1.2
21000+4004	KUI103	2014.772	1	0.793	0.007	51.1*	0.3			Doc2016b	0.01	-1.2
21008+2057	A176	2014.776	1	0.265	0.022	357.6*	0.7					
21010+3959	A1438	2014.776	1	0.309	0.017	256.7*	0.3					
21019+2340	COU128	2014.620	1	0.127	0.050	144.8*	8.0					
21022+1426	A1688	2013.834	1	0.287	0.007	64.0*	1.2					
21023+2819	COU524	2014.833	1	1.342	0.013	257.6	0.4					
21024+2523	TDS1112	2013.834	1	1.205	0.012	32.2*	0.3					
21026+2141	BU69	2013.733	1	0.378	0.007	1.6*	1.0			Zir2014a	-0.00	-0.7
21040+4225	COU2433	2014.814	1	0.331	0.013	231.5*	1.0					
21047+4902	HU590	2014.795	1	0.148	0.050	90.7*	8.0					
21048+4144	COU2434	2014.620	1	1.013	0.010	186.6*	0.5					
21050+1243	A1690	2013.818	1	0.364	0.007	120.3*	1.8					
21050+4021	COU2135	2014.814	1	0.198	0.029	351.0*	1.7					
21050+4125	COU2298	2014.852	1	0.971	0.007	145.1	0.4					
21052+1936	HDS3005	2013.730	1	0.252	0.018	14.1*	1.3					
21054+4058	TDT2732	2014.828	1	—	—	—	—		NR			
21061+2801	COU525	2013.818	1	1.024	0.011	168.3*	0.6					
21061+4001	COU2224	2014.620	1	0.363	0.007	67.2*	1.7					
21065+2655	COU527	2014.659	1	0.666	0.007	309.5*	0.3					
21066+3309	COU1329	2013.730	1	1.294	0.007	79.3	0.4					
21067+2321	TDT2755	2013.733	1	0.869	0.007	214.2*	0.3					
21067+3455	HU691	2014.852	1	0.361	0.010	313.2	1.0					
21068+2306	HU364	2014.833	1	0.142	0.050	91.8	8.0					
21070+3001	J1319	2014.831	1	1.689	0.008	205.7*	0.3					
21072+3958	TDT2765	2014.828	1	—	—	—	—		NR			
21074+3444	COU1814	2014.795	1	0.332	0.013	195.3	1.5					
21077+3255	COU1330	2014.773	1	0.400	0.007	221.9*	1.1					
21081+2615	J1328	2013.730	1	1.024	0.007	147.2*	0.3					
21083+2913	COU1331	2014.659	1	0.358	0.027	36.7	2.6					
21083+2913	COU1331	2014.659	2	0.336	0.027	37.3*	2.3					
21084+5118	COU2693	2014.773	1	0.544	0.007	310.6*	0.3					
21089+1715	HEI185	2014.776	1	0.109	0.050	35.0	8.0					
21089+1748	HU365	2014.858	1	1.051	0.007	19.0*	0.3					
21091+1906	COU329	2014.831	1	0.622	0.007	278.4*	0.3					
21091+2922	COU1332	2014.814	1	0.160	0.044	199.7*	7.7					
21093+3131	COU1333	2014.852	1	0.615	0.007	257.1	0.3					
21096+2632	COU529	2014.659	1	0.398	0.007	216.5*	0.7					
21097+3856	COU1967	2014.833	1	0.828	0.019	191.3	0.6					
21099+4013	COU1968	2014.833	1	0.151	0.050	103.9	8.0					
21100+4901	HDS3016	2014.828	1	0.316	0.007	24.5*	0.3					
21100+4901	HDS3016	2014.828	1	0.294	0.007	23.8	0.3					
21105+4742	BU159	2014.852	1	1.224	0.022	313.3	0.3					
21107+1334	HEI186	2013.733	1	—	—	—	—		NR			
21109+2925	BAG29	2013.730	1	0.261	0.007	137.6*	0.6			Bag2010	0.00	3.0
21111+1704	HEI187	2014.795	1	1.176	0.007	255.4*	0.3					
21112+3925	COU1969	2014.795	1	0.261	0.010	224.7*	1.4					
21113+3646	COU1970	2014.776	1	0.567	0.007	105.9*	0.3					
21115+2144	COU227	2014.776	1	0.498	0.015	121.7*	0.5			FMR2012b	-0.02	2.0

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
21117+4849	COU2651	2014.828	1	0.907	0.007	13.4*	0.3					
21119+2524	COU643	2014.620	1	0.126	0.050	109.7	8.0					
21124+3810	COU1971	2014.814	1	0.603	0.007	283.1*	0.3					
21125+2821	HO152	2014.659	1	0.111	0.059	145.5*	8.0			Doc2016g	-0.05	-0.7
21125+3720	FOX41	2014.776	1	0.892	0.007	128.2*	0.4					
21129+2350	TDT2828	2013.834	1	—	—	—	—		NR			
21131+1028	BU1501	2013.834	1	1.046	0.011	210.4*	0.3					
21133+4655	A884	2014.831	1	0.435	0.007	292.1*	0.4			Lin2020	0.00	0.2 ^Q
21138+2025	TDT2838	2013.834	1	0.508	0.007	192.7*	1.1					
21139+3830	COU1817	2014.795	1	0.555	0.007	109.4*	0.4					
21142+4211	COU2226	2014.833	1	0.312	0.011	120.1	0.9					
21147+2034	TDT2853	2013.733	1	—	—	—	—		NR			
21151+4227	COU2228	2014.659	1	0.477	0.007	27.8*	0.6					
21151+4227	COU2228	2014.828	1	0.458	0.007	27.8*	0.6					
21151+4257	COU2300	2014.814	1	0.327	0.007	263.0*	0.6					
21153+4017	A1440	2014.795	1	1.173	0.007	211.4*	0.3					
21169+4009	COU1972	2014.814	1	—	—	—	—		NR			
21171+4001	A1441	2014.833	1	0.173	0.013	272.8	1.1					
21174+2135	COU228	2013.834	1	0.723	0.007	47.3*	0.3					
21176+2915	COU835	2014.828	1	0.370	0.015	238.3*	0.8					
21176+4350	COU2301	2014.831	1	0.477	0.007	249.1*	0.3					
21183+3456	BU289	2014.852	1	0.809	0.007	127.1	0.4					
21183+4140	COU2302	2014.814	1	1.297	0.007	63.2*	0.3					
21183+4934	COU2654	2014.828	1	1.143	0.007	227.2*	0.3					
21187+2118	HDS3033	2013.730	1	—	—	—	—		NR			
21199+4307	COU2439	2014.852	1	0.764	0.007	264.9	0.4					
21209+2720	COU729	2014.831	1	0.153	0.050	317.7*	8.0					
21210+2233	COU229	2014.833	1	0.472	0.007	118.2	0.3					
21212+4003	COU2230	2014.852	1	0.384	0.010	80.9	0.5					
21213+1519	TDT2917	2013.733	1	0.846	0.007	201.8*	0.3					
21217+3436	COU1334	2014.795	1	0.822	0.007	148.8*	0.3					
21222+1114	J2605	2013.834	1	1.703	0.011	223.6*	0.8					
21226+3744	COU1820	2013.867	1	1.316	0.007	319.4	0.5					
21230+2725	HEI188	2013.867	1	0.700	0.007	289.4*	0.3					
21232+4258	COU2304	2014.776	1	0.409	0.014	154.2*	0.7					
21235+1728	COU428	2014.814	1	0.967	0.007	132.8*	0.8					
21237+2016	COU230	2013.867	1	0.908	0.018	187.0*	0.8					
21238+4710	A765	2014.828	1	0.467	0.008	26.5*	0.3					
21240+2445	COU231	2014.833	1	0.477	0.007	122.7	0.3					
21243+3740	WSI7	2014.795	1	—	—	—	—		NR			
21245+3015	A1219	2013.730	1	1.477	0.007	312.4*	0.3					
21248+4106	COU2305	2014.776	1	0.305	0.017	281.4*	0.5					
21248+4106	COU2305	2014.776	1	0.333	0.017	279.0*	0.3					
21252+1828	COU430	2014.831	1	0.570	0.007	234.0*	0.4					
21252+3129	A1220	2014.877	1	1.624	0.013	158.9	0.3					
21253+2928	COU940	2014.831	1	0.329	0.007	262.7*	1.1					
21256+4138	A618	2014.833	1	0.543	0.009	277.5	1.1					
21259+2229	TDT2960	2013.733	1	—	—	—	—		NR			
21260+2422	COU534	2013.733	1	0.267	0.007	101.1*	0.9					
21260+2422	COU534	2014.773	2	0.229	0.007	276.8*	0.7					
21265+3315	HJ935	2013.730	1	1.708	0.009	52.1*	0.3					
21268+3731	COU1821	2014.828	1	0.663	0.007	96.0*	0.3					
21268+4228	A619	2014.852	1	0.748	0.007	58.5	0.6					
21281+4110	COU2231	2014.773	1	0.142	0.050	35.3*	8.0					
21291+1211	BAR56	2013.733	1	1.291	0.007	42.7*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
21297+4732	A767	2014.776	1	1.268	0.007	171.1*	0.3					
21301+3050	COU941	2014.771	1	0.110	0.007	299.7	0.3					
21302+4143	COU1973	2014.828	1	0.807	0.007	196.1*	0.3					
21303+4740	COU2440	2014.773	1	0.498	0.007	179.2*	0.6					
21308+3446	COU1479	2014.814	1	0.744	0.009	143.2*	0.3					
21308+4827	A770AB,C	2014.852	1	1.138	0.007	137.9	0.3					
21308+4827	A770AB,C	2014.852	1	1.142	0.007	138.0	0.3					
21310+2128	COU232	2014.771	1	0.632	0.007	213.6*	0.3					
21314+4821	COU2441	2014.773	1	0.165	0.050	304.3*	8.0					
21315+4817	A771	2014.831	1	—	—	—	—			NR		
21316+3535	TDS1132	2013.730	1	—	—	—	—			NR		
21321+3949	COU1974	2014.771	1	0.176	0.040	136.2*	6.3					
21321+4828	COU2442	2014.795	1	0.180	0.020	299.8	2.8					
21322+3349	HEI882	2014.776	1	1.996	0.013	182.6*	0.3					
21327+2954	HEI190	2013.867	1	1.897	0.009	259.9*	0.3					
21328+1612	HEI80	2014.814	1	—	—	—	—			NR		
21328+3904	A1443	2014.828	1	0.204	0.007	248.6*	0.6					
21330+2408	HDS3065	2013.733	1	—	—	—	—			NR		
21331+4512	COU2308	2014.831	1	0.110	0.050	176.7*	8.0					
21334+3058	COU732	2014.771	1	0.505	0.007	264.7*	0.3					
21336+3905	COU1975	2014.795	1	0.320	0.007	330.1*	0.8					
21336+3905	COU1975	2014.828	1	0.277	0.008	330.5*	0.6					
21339+4833	YR3	2014.833	1	0.298	0.007	214.8	0.8					
21339+4833	YR3	2014.833	1	0.294	0.009	214.4	0.6					
21340+3844	COU1976	2014.831	1	0.397	0.007	29.8*	0.8					
21341+4718	HDS3072	2014.833	1	0.323	0.035	49.0	2.4					
21362+4253	HO463	2014.773	1	0.511	0.007	180.1*	0.5					
21367+3624	HLD46	2014.833	1	1.692	0.008	198.4	0.3					
21367+3624	HLD46	2014.852	1	1.694	0.017	197.8	0.7					
21368+3217	COU1184	2014.773	1	0.237	0.017	157.7*	0.3					
21372+4527	COU2310	2014.828	1	0.440	0.007	198.0*	0.3					
21379+2743	SKF245AC	2013.730	1	3.324	0.017	18.7*	0.3					
21379+2743	HDS3080	2014.773	1	3.344	0.017	16.9*	0.3					
21380+4153	A402	2014.877	1	0.876	0.007	46.1	0.9					
21384+1858	TDT3075	2013.733	1	—	—	—	—			NR		
21386+4747	COU2311	2014.852	1	0.960	0.007	240.6	0.6					
21391+3356	WSI120	2013.730	1	0.152	0.050	19.3	8.0					
21391+3356	COU1185AB	2013.732	1	1.423	0.007	54.8	0.4					
21391+3356	COU1185AB	2014.795	1	1.418	0.007	55.8*	0.3					
21393+4625	COU2312	2014.814	1	0.337	0.008	164.0*	0.4					
21398+2352	TDT3095	2013.834	1	—	—	—	—			NR		
21399+2737	HDS3083	2014.795	1	0.250	0.017	308.8	0.5			Bag2010	0.05	-0.7 ^Q
21409+1355	TDT3105	2014.833	1	—	—	—	—			NR		
21409+1355	TDT3105	2013.834	1	—	—	—	—			NR		
21410+2920	STT448	2013.818	1	0.136	0.050	125.0	8.0			Alz2020c	0.01	39.4
21410+2920	STT448	2014.833	1	0.100	0.050	31.2	8.0			Alz2020c	-0.03	-43.4
21415+5035	COU2444	2014.814	1	0.564	0.007	340.2*	0.7					
21415+5035	COU2444	2014.828	1	0.573	0.007	339.9*	0.3					
21419+3612	COU1336	2014.833	1	1.489	0.007	177.9	0.3					
21425+4832	COU2313	2014.831	1	0.405	0.007	234.8*	0.3					
21427+2102	J614	2013.818	1	1.902	0.010	307.2*	0.4					
21429+5053	COU2548	2014.831	1	1.075	0.007	348.1*	0.3					
21431+4122	COU1978	2014.771	1	0.245	0.017	267.1*	0.7					
21434+3817	KUI109	2013.549	1	1.914	0.010	141.8	0.6					
21434+3817	KUI109	2013.549	1	1.909	0.010	142.0	0.3					
21434+3817	KUI109	2014.877	1	1.889	0.009	141.5	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
21435+2721	A299AB	2013.818	1	1.128	0.007	64.0*	0.3					
21444+4610	COU2315	2014.814	1	0.294	0.007	101.4	0.4					
21451+3424	COU1186AB	2013.867	1	0.354	0.012	227.0	1.2					
21451+3424	COU1186AC	2013.946	1	1.716	0.009	174.9	0.3		NDg			
21461+3534	COU1337	2014.828	1	0.297	0.007	111.9*	0.4					
21462+4254	COU1979	2014.773	1	—	—	—	—		NR			
21465+2210	HDS3101	2013.732	1	—	—	—	—		NR			
21466+1929	COU431	2014.773	1	0.488	0.007	184.1*	0.3					
21466+3815	COU1639	2014.771	1	1.996	0.010	211.6*	0.3					
21472+2409	HDS3103	2013.733	1	0.633	0.010	117.0*	0.8					
21477+4759	COU2316Aa,Ab	2014.771	1	0.144	0.027	112.6	2.2		NDp			
21477+4759	COU2316AB	2014.771	1	0.633	0.021	185.2*	1.4					
21481+3911	TDT3162	2013.867	1	1.942	0.010	146.6*	0.3					
21491+3401	TDT3175	2014.828	1	—	—	—	—		NR			
21492+4702	COU2317	2014.773	1	0.325	0.020	110.7*	1.7					
21493+3451	COU1483	2014.814	1	0.698	0.007	130.7*	0.3					
21498+3455	COU1484	2014.833	1	0.455	0.010	347.7	0.4					
21501+1717	COU14	2013.732	1	0.305	0.007	56.7*	0.3			Mut2010b	0.02	0.1
21501+1717	COU14	2014.773	1	0.306	0.030	67.3*	1.2			Mut2010b	0.07	1.8
21501+1717	COU14	2014.773	1	0.285	0.007	64.3	1.1			Mut2010b	0.05	-1.2
21503+3451	ES2200	2013.867	1	1.038	0.018	183.8*	1.7					
21507+3621	COU1640Aa,Ab	2014.771	1	0.144	0.050	51.4	8.0		NDp			
21507+3621	COU1640AB	2014.771	1	2.636	0.013	18.9*	0.3					
21510+2911	A889	2013.818	1	0.151	0.050	328.8	8.0			Baz1984b	0.04	9.7 ^Q
21511+4209	COU1822	2014.795	1	—	—	—	—		NR			
21513+4456	COU2318	2014.831	1	0.736	0.007	109.0*	0.3					
21521+2748	HO171	2013.818	1	0.740	0.007	341.5*	0.4					
21531+3408	TDT3216	2014.828	1	—	—	—	—		NR			
21531+4826	COU2319AB	2014.831	1	0.844	0.007	57.3	0.3	1.74				
21531+4826	COU2319AB	2014.831	1	0.842	0.007	58.5*	0.3					
21531+4826	COU2319AC	2014.831	1	2.355	0.031	88.1	0.5					
21531+4826	GII87AC	2014.831	1	6.262	0.031	31.2	0.3	3.78	NDg			
21535+4716	COU2320	2014.852	1	1.094	0.010	190.5	0.3					
21539+4839	COU2321	2014.771	1	0.660	0.007	73.3*	0.3					
21543+1943	COU432	2013.730	1	0.174	0.010	168.0*	8.7					
21543+1943	COU432	2013.733	1	0.180	0.007	164.6*	7.9					
21543+1943	COU432	2014.814	1	0.196	0.012	174.0	8.4					
21547+4730	A890	2014.814	1	—	—	—	—		NR			
21548+4548	COU2137Aa,Ab	2014.852	1	0.244	0.007	226.7	0.5					
21548+4548	STF2846AB	2014.852	1	3.572	0.018	265.3	0.3					
21553+2850	COU836	2013.730	1	1.245	0.007	160.7*	0.3					
21565+1940	HU382	2013.733	1	0.280	0.012	216.4*	0.9					
21566+3421	BU1214	2013.867	1	1.466	0.007	207.2*	0.3					
21571+4540	COU2235	2014.795	1	0.263	0.024	94.2*	1.0					
21572+1047	A622	2013.818	1	—	—	—	—		NR			
21576+4938	HU772	2014.852	1	0.380	0.009	332.2	0.8					
21577+2015	STF2849	2013.818	1	1.676	0.008	244.1*	0.3					
21580+4627	COU2236	2014.795	1	0.252	0.010	194.3*	1.2					
21585+2601	COU838AB	2013.730	1	0.135	0.013	276.4*	1.4					
21585+2601	COU838AC	2013.542	1	1.649	0.008	122.2	0.7	0.04	NDg			
21585+2725	A304	2013.818	1	0.503	0.007	127.8*	0.3					
21586+3900	COU1824	2014.828	1	0.620	0.007	299.9*	0.3					
21588+2427	COU839	2014.852	1	0.345	0.028	95.4	2.3					
21588+2427	COU839	2014.552	1	0.319	0.024	92.8	3.3					
21590+3839	COU1339	2014.831	1	1.413	0.007	260.6*	0.3					
21590+4807	COU2446	2014.828	1	0.385	0.007	54.5*	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
21593+3516	COU1340	2013.730	1	0.154	0.050	189.9*	8.0					
21593+4606	COU2138	2014.795	1	0.137	0.050	123.1	8.0			Doc2012c	0.02	14.7
21594+1719	COU433	2014.831	1	0.622	0.015	118.4*	0.6					
22002+4756	A778	2014.877	1	0.350	0.008	219.5	1.0					
22002+4756	A778	2014.877	1	0.321	0.024	220.1	2.6					
22007+4722	COU2447	2014.814	1	0.256	0.007	125.2*	0.4					
22011+3915	A1451	2013.867	1	0.161	0.007	13.1	7.1					
22025+2612	A307	2014.828	1	0.403	0.007	128.5*	0.4			Izm2019	-0.07	0.2
22029+3436	COU445	2014.814	1	0.875	0.007	213.5*	0.3					
22032+2729	COU434	2014.831	1	0.937	0.007	91.8*	0.3					
22039+2406	J1246	2013.733	1	3.043	0.015	9.1	0.3	1.35				
22040+3841	COU1341	2014.814	1	1.590	0.008	271.2*	0.3					
22043+2401	J1224BC	2013.818	1	1.556	0.012	0.2*	0.4					
22044+1339	STF2854	2013.834	1	1.641	0.009	83.8*	0.3					
22044+3343	COU734	2013.867	1	0.603	0.007	303.0	0.3					
22044+3343	COU734	2013.867	1	0.596	0.013	302.7	2.0					
22050+4010	ES1695	2014.776	1	1.210	0.007	217.6*	0.3					
22051+5142	HDS3134Aa,Ab	2014.852	1	0.125	0.024	107.0	2.1		NDp			
22051+5142	HDS3134AB	2014.852	1	1.013	0.007	354.4	0.3					
22052+2952	A893	2013.818	1	0.199	0.007	228.8*	0.3			FMR2014a	-0.03	-4.8
22059+4522	A183	2014.814	1	0.737	0.007	245.7*	0.3					
22063+2656	COU435	2013.834	1	1.411	0.007	191.9*	0.3					
22063+3938	COU1485	2014.776	1	0.531	0.007	63.0*	0.3					
22069+2434	TDT3349	2013.733	1	—	—	—	—		NR			
22070+4559	COU2139	2014.776	1	0.617	0.007	117.3*	0.5					
22075+2538	A308	2014.877	1	0.201	0.010	129.0	1.1			Hrt2009	0.03	-6.5 ^Q
22075+2538	A308	2014.877	1	0.187	0.010	131.9	0.7			Hrt2009	0.01	-3.6 ^Q
22077+2622	COU537	2013.834	1	0.241	0.007	147.6*	0.5			Doc2012g	0.00	-0.0 ^Q
22091+1829	COU233	2014.831	1	1.569	0.010	354.6*	0.3					
22091+5014	COU2658	2014.852	1	0.301	0.012	212.4	2.0					
22091+5047	BU375	2014.852	1	1.000	0.007	302.4	0.5					
22094+2233	STF2868	2013.818	1	1.086	0.007	352.7*	0.3					
22100+2203	COU137	2013.818	1	0.723	0.009	252.9*	0.5					
22100+2308	COU136	2013.730	1	0.454	0.007	202.1	0.3			Doc2016h	-0.01	0.9 ^Q
22100+2308	COU136	2014.771	1	0.435	0.007	201.4	0.8			Doc2016h	-0.03	1.0 ^Q
22100+2308	COU136	2014.771	1	0.441	0.007	201.6*	0.5			Doc2016h	-0.02	1.2 ^Q
22104+4619	COU2237	2014.771	1	—	—	—	—		NR			
22105+1918	TDS1162	2013.733	1	1.381	0.007	188.8*	0.3					
22106+3544	COU1188	2014.776	1	0.445	0.007	40.9*	0.3					
22109+2717	COU538	2014.776	1	—	—	—	—		NR			
22115+5110	COU2660	2014.814	1	0.666	0.007	248.0*	0.3					
22116+3727	COU1486	2014.833	1	0.561	0.007	33.4	0.5					
22116+4056	A409	2014.852	1	0.408	0.007	13.2	0.4					
22124+2712	HDS3151	2013.818	1	0.166	0.050	321.2	8.0					
22126+3013	WAK2	2013.867	1	0.899	0.007	280.4*	0.3					
22127+3540	COU1189	2013.867	1	0.867	0.007	190.4*	0.3					
22129+5058	HU695	2014.852	1	0.840	0.007	17.0	0.3					
22141+4623	COU2238	2014.771	1	1.355	0.016	244.1*	0.8					
22141+4623	COU2238	2014.833	1	1.331	0.020	245.0	0.8					
22156+4352	COU1981	2014.771	1	0.368	0.007	6.6	0.3					
22156+4352	COU1981	2014.771	1	0.354	0.007	5.0*	1.2					
22158+4354	HO180	2013.919	2	0.819	0.015	239.8*	0.6					
22162+4229	COU1830Aa,Ab	2014.831	1	0.246	0.007	22.2	0.5		NDp			
22162+4229	COU1830AB	2014.831	1	0.700	0.007	287.5*	0.4					
22164+3438	COU1191	2013.867	1	0.466	0.007	206.7*	0.4					
22166+5036	COU2325	2014.814	1	—	—	—	—		NR			

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
22175+1649	HEI192	2014.776	1	0.135	0.050	126.7	8.0					
22195+2531	COU436	2013.834	1	0.330	0.007	258.2*	0.3					
22202+2931	BU1216	2014.776	1	0.948	0.007	276.7*	0.4			Izm2019	0.05	-0.7
22204+2729	TDT3470	2013.834	1	—	—	—	—		NR			
22205+4817	A186	2013.834	1	1.004	0.012	9.7	0.5					
22205+4817	A186	2014.771	1	0.985	0.007	10.3	0.3					
22205+4817	A186	2014.771	1	0.987	0.007	10.5	0.3					
22205+4817	A186	2014.771	1	0.990	0.007	10.3*	0.3					
22208+4446	COU2140	2014.795	1	0.602	0.007	85.3*	0.5					
22212+1054	A628	2013.818	1	1.294	0.007	225.4*	0.3					
22214+4148	A411	2014.877	1	0.211	0.044	56.7	6.4					
22214+4646	COU2326	2014.771	1	0.443	0.012	281.5*	0.7					
22224+4526	HDS3170	2014.795	1	0.129	0.007	118.4*	2.3					
22229+4637	COU2142	2014.774	1	0.570	0.007	118.0*	0.5					
22234+3228	WOR11	2013.730	1	1.329	0.007	246.3*	0.3			Cve2011b	-0.03	1.2
22234+3228	WOR11	2014.771	1	1.304	0.008	250.1*	0.4			Cve2011b	-0.03	2.0
22237+2051	STF2900	2013.834	1	0.751	0.007	181.5*	0.3			Tok2018b	-0.00	0.2
22237+2051	COU139	2013.834	1	0.323	0.025	87.8*	0.6					
22239+1637	HEI83	2013.818	1	0.731	0.007	109.6*	0.4					
22239+2232	HU385	2013.867	1	1.452	0.007	79.9	0.9					
22242+2712	HJ1760	2013.924	1	1.108	0.007	336.0	0.3	2.11				
22242+2712	HJ1760	2013.924	1	1.111	0.007	335.9	0.3	2.00				
22243+4850	HDS3175	2014.831	1	—	—	—	—		NR			
22247+1914	HU493	2014.852	1	0.829	0.007	171.3	0.3					
22255+4227	A2498	2014.774	1	0.606	0.007	346.8*	0.8					
22257+4353	COU1984	2014.771	1	0.877	0.007	286.9*	0.3					
22260+4328	COU1985	2014.774	1	—	—	—	—		NR			
22262+4228	COU1832	2014.776	2	1.018	0.010	156.1*	0.3					
22262+4228	COU1832	2014.776	1	1.035	0.007	156.2	0.3					
22262+4228	COU1832	2014.776	1	1.035	0.007	156.0	0.3					
22263+4308	COU1986	2014.771	1	0.514	0.023	11.2*	1.9					
22265+4332	HDS3180	2014.776	1	0.365	0.015	176.3*	1.0					
22268+4033	COU1642	2014.552	1	0.183	0.007	101.1	1.4					
22268+4033	COU1642	2014.852	1	0.158	0.027	99.2	1.0					
22269+2653	COU539	2013.818	1	0.573	0.007	195.6*	0.6					
22271+4507	COU2239	2014.831	1	0.798	0.009	148.8*	0.3					
22273+3822	COU1643	2014.833	1	0.401	0.034	346.6	0.9					
22281+1215	BU701	2013.818	1	0.971	0.007	181.7*	0.3			Cve2005	-0.00	1.8
22282+4204	COU1833	2014.774	1	0.323	0.012	284.2*	1.0					
22285+3343	COU942	2013.730	1	0.261	0.013	151.1	1.1					
22286+4942	COU2448	2014.833	1	0.804	0.008	38.5	0.3					
22287+3514	POP99	2013.867	1	1.762	0.009	288.1*	0.3					
22289+4528	COU2240	2014.774	1	0.371	0.017	80.8*	0.3					
22291+4319	COU1987	2014.814	1	2.128	0.011	73.6*	0.3					
22295+2959	COU735	2013.818	1	0.697	0.019	210.0*	0.3					
22301+2745	TDT3551	2013.834	1	0.535	0.007	236.0*	0.3					
22302+2228	HU388	2014.795	1	0.532	0.007	241.9*	0.3			Doc2008c	-0.01	1.1 ^Q
22302+2259	COU140	2014.833	1	0.666	0.010	105.6	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
22302+4655	COU2329	2014.795	1	0.470	0.012	141.2*	0.3					
22303+1810	COU331	2014.776	1	0.440	0.007	177.7*	0.5					
22305+2232	VOU38	2013.730	1	0.112	0.050	217.6*	8.0					
22306+4828	COU2330	2014.814	1	0.374	0.007	85.9*	0.3					
22307+1758	COU234	2013.730	1	0.199	0.018	0.5*	2.0			Doc2012c	-0.01	-0.1 ^Q
22307+1758	COU234	2014.774	2	0.163	0.023	5.1*	2.2			Doc2012c	-0.06	6.8 ^Q
22307+3729	ES2072	2013.867	1	1.692	0.008	272.6*	0.3					
22308+4007	A1467	2014.776	1	0.328	0.014	268.3*	1.1					
22314+1332	TDT3567	2013.834	1	—	—	—	—			NR		
22322+4927	COU2449	2014.774	1	—	—	—	—			NR		
22323+2319	HDS3198	2013.867	1	—	—	—	—			NR		
22325+3500	POP39	2013.867	1	0.618	0.007	94.0*	0.5					
22328+2625	HO475	2013.834	1	1.095	0.007	306.6*	0.5					
22328+4808	COU2331	2014.795	1	0.411	0.007	187.1*	0.8					
22329+4923	HU1320	2014.831	1	0.177	0.007	212.6*	0.5			Cou1972c	0.05	-9.2 ^Q
22334+3808	COU1343AB	2013.867	1	—	—	—	—			NR		
22334+3808	COU1343AB	2014.771	1	0.620	0.007	130.8*	0.3					
22337+4233	COU1836	2014.831	1	0.342	0.013	309.8*	1.2					
22339+4032	COU1837	2014.833	1	0.187	0.027	3.4	2.6					
22339+4529	COU2241	2014.795	1	1.458	0.007	66.2*	0.3					
22341+3823	COU1488	2013.730	1	0.334	0.008	49.0*	0.5					
22344+2623	COU540	2013.730	1	0.329	0.007	325.4*	1.8			Mnt2004a	-0.01	5.9
22344+2623	COU540	2014.771	2	0.347	0.007	324.5*	0.3			Mnt2004a	0.01	4.1
22357+4156	COU1839	2014.776	1	0.354	0.008	199.3*	0.9					
22358+1943	HDS3209	2013.834	1	0.673	0.015	25.0*	0.7					
22358+1943	HDS3209	2013.834	1	0.673	0.018	26.0	1.1					
22358+4713	COU2332	2014.833	1	0.148	0.050	19.6	8.0					
22365+3831	COU1193	2014.552	1	1.027	0.007	90.5	0.3					
22365+3831	COU1193	2014.853	1	1.027	0.007	90.6	0.3					
22365+3831	COU1193	2014.853	1	1.007	0.007	90.6	0.5					
22365+3831	COU1193	2014.853	1	1.038	0.009	91.5	0.3					
22369+4712	COU2333	2014.831	1	1.125	0.007	271.6*	0.3					
22372+2645	COU737	2013.818	1	—	—	—	—			NR		
22373+4653	COU2334	2014.833	1	0.512	0.007	113.8	0.6					
22375+2356	HU391	2013.818	1	0.320	0.057	2.5*	1.4			Gur2018	0.09	-11.2
22379+1131	J165	2013.818	1	2.026	0.010	137.3*	0.3					
22388+4419	HO295	2014.552	1	0.297	0.007	334.1	0.9			Tok2017a	0.00	0.1
22388+4419	HO295	2014.853	1	0.318	0.024	332.3	3.2			Tok2017a	0.01	-1.9
22390+1850	HU392	2013.818	1	0.506	0.007	347.7*	0.4					
22392+2014	HU393	2013.818	1	0.912	0.013	226.3*	0.4					
22396+3511	HU778	2014.795	1	—	—	—	—			NR		
22398+3641	COU1044	2014.833	1	0.481	0.007	114.3	0.5					
22405+2939	CHE343	2013.924	1	1.097	0.007	45.6	0.3	3.80				
22407+4851	COU2662	2014.771	1	0.658	0.021	220.9*	1.1					
22412+1433	HU780	2013.818	1	0.103	0.050	9.9	8.0					
22413+1212	TDT3655Aa,Ab	2013.834	1	0.118	0.050	117.8	8.0			NDp		
22413+1212	TDT3655AB	2013.834	1	0.838	0.010	180.4*	0.3					
22413+1311	STF2931	2013.924	1	0.715	0.007	149.2	0.3	0.99				
22414+1755	J207	2013.924	1	0.598	0.007	184.3	0.3	2.54				
22421+2013	HDS3221	2014.828	1	0.641	0.007	88.0*	0.6					
22426+4550	COU2336	2014.776	1	0.472	0.007	210.9*	0.4					
22428+2348	HU395	2014.795	1	0.170	0.042	202.2*	6.4					
22430+3013	BU1144BC	2014.833	1	0.196	0.007	263.7	0.7					
22430+4245	COU2243	2014.776	1	0.567	0.007	142.1*	0.4					
22430+4911	COU2698	2014.828	1	0.689	0.011	121.1	0.4					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
22431+4710	STT476	2014.853	1	0.483	0.007	301.5	0.7					
22436+4226	COU1989	2014.795	1	0.429	0.015	4.2*	1.1					
22438+1750	J209	2013.927	1	0.934	0.007	46.1	0.3	2.35				
22438+1750	J209	2013.927	1	0.939	0.007	46.0	0.3	2.31				
22444+5036	COU2699	2014.831	1	0.422	0.007	46.8*	0.4					
22454+5129	HU783AB	2014.814	1	0.136	0.050	204.3*	8.0					
22454+5129	HU783AC	2014.814	1	4.033	0.020	103.9	0.3		NDg			
22457+2924	HO481	2013.943	1	0.470	0.007	286.4*	0.5					
22458+3043	COU739Aa,Ab	2014.850	1	0.162	0.050	263.1	8.0		NDp			
22458+3043	COU739AB	2014.850	1	1.130	0.007	284.0	0.4					
22460+2142	HDS3232	2013.834	1	—	—	—	—		NR			
22465+1944	COU333	2014.833	1	0.661	0.007	17.0	0.4					
22474+1749	WSI93	2013.834	1	0.204	0.031	145.7	4.6			Tok2017c	-0.01	-3.5
22474+1749	WSI93	2014.776	1	—	—	—	—		NR			
22475+2020	TDS1184	2013.834	1	0.827	0.007	353.1*	0.3					
22485+3106	BU1146	2013.943	1	0.204	0.011	68.1*	1.7			Doc2017i	-0.03	-4.7
22489+1037	TDT3722	2013.834	1	—	—	—	—		NR			
22495+3622	COU1196	2014.795	1	0.522	0.007	267.1*	0.5					
22496+2421	COU437	2013.818	1	1.627	0.015	277.7*	0.6					
22497+5007	COU2663	2014.771	1	0.638	0.007	112.7*	0.4					
22499+4834	A2398	2014.833	1	0.154	0.050	341.3	8.0					
22502+2229	COU237	2014.774	1	2.443	0.025	104.7*	0.3					
22507+5107	HLD54	2014.828	1	1.880	0.009	17.2*	0.3					
22508+2404	TDT3747	2013.834	1	—	—	—	—		NR			
22513+2120	COU238	2014.776	1	0.756	0.007	341.7*	0.3					
22514+2623	HO482	2013.818	1	0.517	0.007	16.7*	0.5			Pru2014	-0.03	0.4
22514+2623	HO482	2014.945	1	0.509	0.012	14.7	0.6			Pru2014	-0.04	-1.1
22514+2623	HO482	2014.945	1	0.522	0.007	16.8	0.3			Pru2014	-0.03	0.9
22514+2623	HO482	2014.945	1	0.590	0.044	13.8	1.5			Pru2014	0.04	-2.0
22518+3943	HO298	2013.943	1	0.249	0.016	36.3	2.5					
22527+4347	COU2244	2014.776	1	0.188	0.023	289.9*	3.3					
22528+2926	COU541	2013.818	1	1.404	0.007	67.7*	0.3					
22529+4953	COU2664	2014.774	1	0.183	0.048	196.6*	4.5					
22531+5001	COU2665	2014.795	1	0.320	0.007	89.7*	0.3					
22536+3756	RUC15Aa,Ab	2013.730	1	0.101	0.011	180.8	2.8		NDp			
22536+3756	RUC15AB	2013.730	1	1.672	0.023	79.6	0.3					
22536+3756	RUC15AB	2013.730	1	1.663	0.024	79.6	0.4					
22537+4445	BU382	2014.877	1	0.729	0.011	243.9	0.6			Sca2014a	0.01	3.5
22540+3654	A1476	2013.867	1	0.708	0.007	282.2*	0.3					
22541+2236	TDT3774	2013.834	1	—	—	—	—		NR			
22541+4433	HDS3256	2014.828	1	0.638	0.016	294.7*	0.4					
22544+4723	A190	2014.552	1	0.247	0.035	250.6	2.3					
22544+4723	A190	2015.043	1	0.180	0.015	250.9	1.2					
22548+4908	COU2666	2013.867	1	1.021	0.007	139.3	0.3					
22548+4908	COU2666	2013.867	1	1.039	0.009	138.9*	0.3					
22553+4028	COU1840	2014.776	1	0.269	0.007	63.6*	0.8					
22553+4354	COU2245	2014.814	1	0.492	0.007	212.4*	0.6					
22563+4247	A416	2014.828	1	0.411	0.007	335.2*	0.6					
22564+2257	COU240	2013.943	1	0.785	0.007	293.5*	0.3					
22567+3355	COU740	2014.771	1	2.202	0.011	108.5*	0.3					
22569+3935	GH89Aa,Ab	2014.552	1	0.240	0.007	260.4	1.0		NDg			
22569+3935	COU1841AB	2014.850	1	1.689	0.009	227.8	0.3					

WDS	Name	Epoch	Bin.	ρ ($''$)	σ_ρ ($''$)	θ ($^\circ$)	σ_θ ($^\circ$)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ ($''$)	$\Delta\theta(\text{O-C})$ ($^\circ$)
22570+2441	COU542	2013.730	1	0.138	0.050	106.4*	8.9					
22570+2441	COU542	2013.732	1	0.170	0.007	94.8	8.5					
22570+2441	COU542	2014.771	1	0.156	0.050	120.7	8.2					
22570+2441	COU542	2014.771	2	0.122	0.050	121.2	8.7					
22571+3650	COU1644	2014.795	1	0.512	0.007	70.8*	0.3					
22574+1958	COU334	2014.814	1	1.155	0.007	256.4*	0.3					
22576+3909	TDT3814	2014.828	1	0.640	0.007	139.9*	0.3					
22578+2339	HDS3265	2013.943	1	1.042	0.007	253.8	0.4					
22578+4336	COU2145	2014.771	1	0.227	0.027	237.1*	2.8					
22578+4336	COU2145	2014.771	1	0.227	0.027	237.1	2.8					
22578+4713	A2399Aa,Ab	2014.833	1	0.178	0.021	99.5	1.3		NDp			
22578+4713	A2399AB	2014.833	1	1.228	0.007	262.0	0.6					
22579+1337	HU989	2013.818	1	0.205	0.007	68.2*	1.3			Hei1998	-0.02	2.8
22580+4954	HDS3268	2014.948	1	0.821	0.017	241.9	1.3					
22580+4954	HDS3268	2014.945	1	0.814	0.018	241.2	0.6					
22582+4503	COU2450	2014.771	1	0.501	0.015	334.4*	0.3					
22587+2611	COU543	2013.943	1	0.128	0.050	75.6*	8.0					
22587+2611	COU543	2013.943	1	0.149	0.050	73.6	8.0	0.18				
22587+2611	COU543	2014.771	1	0.122	0.050	75.3	8.0					
22587+2611	COU543	2014.771	1	0.147	0.050	73.3	8.0					
22590+4617	A192	2014.831	1	0.303	0.009	223.7	2.8					
22590+4617	A192	2014.831	1	0.361	0.007	225.5*	2.4					
22594+4017	HLD55	2013.867	1	1.549	0.008	201.0*	0.3					
22595+4355	COU2146AB	2014.776	1	0.148	0.050	300.3	8.0					
22595+4355	COU2146AB	2014.776	1	0.150	0.050	300.3	8.0					
22595+4355	COU2146AC	2014.776	1	3.628	0.018	145.2	0.3		NDg			
22595+4355	COU2146AC	2014.776	1	3.632	0.018	325.1	0.3		NDg			
22599+3743	COU1842	2014.774	1	—	—	—	—		NR			
23009+3522	HU991	2013.941	1	0.934	0.007	302.1*	2.5			Sca2017d	0.04	0.9
23009+3522	HU991	2014.795	1	0.945	0.007	302.3*	2.3			Sca2017d	0.03	0.7
23013+4430	COU1991	2013.867	1	0.531	0.012	283.5*	0.7					
23015+3516	COU842	2014.833	1	0.675	0.007	52.9	1.0					
23016+4022	COU1489	2014.771	1	0.570	0.007	15.5*	0.3					
23020+4800	A194	2014.795	1	0.179	0.050	284.8	1.8			Doc2017e	0.09	6.9
23022+1832	HDS3279Aa,Ab	2014.814	1	0.157	0.016	122.4	2.0		NDp			
23022+1832	HDS3279AB	2014.814	1	0.380	0.012	36.3	1.3					
23022+1832	HDS3279AC	2014.814	1	0.691	0.022	121.9	2.3		NDg			
23022+1832	HDS3279AD	2014.814	1	1.657	0.025	163.1	2.3		NDg			
23022+1832	HDS3279AD	2014.814	1	1.662	0.008	163.4	0.4		NDg			
23024+1837	HU398	2014.776	1	0.455	0.007	292.2*	0.4			Hrt2014b	-0.02	1.6
23028+5025	HDS3281Aa,Ab	2014.795	1	0.140	0.050	112.2	8.0		NDp			
23028+5025	HDS3281AB	2014.795	1	1.348	0.010	147.8*	0.3					
23033+1129	GII71Aa,Ab	2013.818	1	0.220	0.047	24.4	7.5		NDg			
23033+1129	GII71Aa,Ab	2013.820	1	0.149	0.050	32.7	8.0	0.69	NDg			
23033+1129	ROE132	2013.818	1	1.125	0.007	72.1*	0.3					
23033+1129	ROE132	2013.820	1	1.131	0.007	72.8	0.3	1.70				
23034+4817	COU2337	2014.814	1	0.494	0.007	166.2*	0.5					
23038+2309	AG289	2013.941	1	2.009	0.010	219.8*	0.3					
23039+2512	COU142	2014.831	1	0.528	0.007	9.1*	0.6					
23039+3510	ES2134	2013.943	1	1.549	0.008	120.5*	0.3					
23040+2414	TDT3870AB	2014.828	1	0.184	0.035	123.5	2.0					
23040+2414	TDT3870AB	2014.828	1	0.204	0.021	122.4*	4.3					
23040+2414	TDT3870AC	2014.828	1	4.283	0.025	85.7*	0.3		NDg			
23043+3744	COU1197	2013.941	1	0.422	0.007	165.2*	0.4					
23047+2353	COU143	2014.771	1	0.604	0.007	49.6*	0.3					
23055+3622	TDT3878	2014.814	1	—	—	—	—		NR			
23055+4643	A196	2013.867	1	0.466	0.008	313.2*	0.8					
23058+4032	COU1490	2014.776	1	0.535	0.007	75.3*	0.3					
23060+4219	WOR13	2014.771	1	0.672	0.007	140.3	0.3					
23060+4219	WOR13	2014.771	1	0.663	0.019	140.0*	0.3					
23064+1235	HDS3291	2013.818	1	0.433	0.007	327.8*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
23091+4153	COU1492	2014.776	1	0.914	0.007	255.9*	0.3					
23096+2416	HO620	2013.927	1	1.303	0.007	103.2	0.3	3.61				
23099+4447	COU1844	2014.814	1	0.517	0.007	347.9*	0.9					
23102+3540	COU1198	2013.941	1	0.525	0.007	257.9*	0.6					
23103+3229	BU385	2014.776	1	0.697	0.007	83.7*	0.3			Lin2010c	0.02	-0.8
23107+4509	COU2342	2014.795	1	0.531	0.007	162.0*	0.3					
23109+1648	J295	2013.818	1	2.179	0.011	140.0*	0.3					
23114+3813	HO197	2014.828	1	—	—	—	—		NR			
23123+4449	A197	2014.945	1	0.435	0.028	159.9	2.2					
23125+1233	LAS1	2013.927	1	1.442	0.027	199.2	2.3	3.63				
23125+1233	LAS1	2013.927	1	1.438	0.037	198.9	2.3	4.01				
23130+2345	MET97Aa,Ab	2013.818	1	0.125	0.050	178.6	8.0		NDp			
23130+2345	MET97AB	2013.818	1	1.445	0.007	53.3	0.4					
23130+2345	MET97AB	2013.818	1	1.424	0.007	53.8	0.4					
23130+4658	COU2343	2014.814	1	—	—	—	—		NR			
23131+4622	A198	2014.853	1	0.584	0.010	344.7	0.6					
23133+3815	TDT3940	2013.943	1	—	—	—	—		NR			
23135+3945	COU1493	2013.943	1	0.499	0.007	229.8*	0.6					
23135+3945	COU1493	2014.776	1	0.468	0.007	229.9*	0.3					
23138+4348	COU1992	2014.776	1	0.390	0.007	324.5*	0.4					
23140+2414	HO299	2013.941	1	1.062	0.007	71.6*	0.3					
23146+2555	COU335Aa,Ab	2014.774	1	0.123	0.050	338.6	2.0		NDp			
23146+2555	COU335AB	2014.774	1	0.371	0.007	346.9*	2.5					
23147+4116	A200	2014.828	1	0.593	0.009	76.4*	0.3					
23151+4319	A201	2014.828	1	0.531	0.007	21.3*	0.7					
23160+1552	SMA184	2013.919	1	1.283	0.007	177.7	0.3	2.40				
23163+1324	BRT1366	2013.924	1	0.587	0.007	181.0	0.3	0.38				
23164+3441	TDT3960	2013.943	1	—	—	—	—		NR			
23167+1937	HDS3316	2014.552	1	0.230	0.021	204.7	3.0			Bag2006	-0.03	0.2
23167+3441	HDS3315	2013.943	1	0.219	0.007	202.5*	0.3			Cve2014	-0.02	-1.5
23168+4813	COU2667	2013.867	1	1.058	0.007	113.0*	0.4					
23176+1818	HU400	2014.774	1	0.381	0.007	73.0*	0.6			Sca2002d	0.01	-3.2
23176+3315	HU790	2013.963	1	1.160	0.007	310.9*	0.3					
23183+3632	TDT3972	2013.941	1	—	—	—	—		NR			
23198+4243	COU1646Aa,Ab	2013.867	1	0.136	0.007	89.4	1.4		NDp			
23198+4243	COU1646AB	2013.867	1	0.267	0.030	75.1	2.0					
23199+2844	COU439	2014.774	1	0.130	0.050	3.6	8.0			Doc2017e	-0.01	2.0
23199+2844	COU439	2013.818	1	0.160	0.033	1.6	3.8			Doc2017e	0.02	5.7
23199+2844	GHI36AB,C	2013.818	1	2.553	0.013	139.8*	0.3					
23199+3444	COU742Aa,Ab	2013.867	1	0.142	0.015	28.0	7.7		NDp			
23199+3444	COU742AB	2013.867	1	0.240	0.039	19.3	1.2					
23206+3621	POP68	2013.941	1	1.247	0.007	142.3*	0.3					
23207+4739	COU2668	2014.774	1	0.674	0.007	15.6*	0.3					
23209+1643	HEI88	2013.818	1	0.254	0.047	196.4	0.7			Cve2011a	0.02	11.9 ^Q
23209+1643	HEI88	2014.814	1	0.283	0.047	190.1*	1.7			Cve2011a	0.04	2.0
23209+4344	COU1993	2013.867	1	1.999	0.015	214.1*	0.3					
23210+4926	COU2700	2014.828	1	1.035	0.007	58.2*	0.5					
23213+3835	HDS3325	2014.795	1	0.244	0.053	308.2	1.5					
23215+4534	COU2246	2014.774	1	0.168	0.021	89.6*	0.9					
23225+2316	TDT4004	2013.924	1	1.175	0.007	346.4	0.3	0.67				
23228+1843	J3193	2013.924	1	1.162	0.007	211.4	0.3	1.08				

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
23237+3739	A1483	2013.943	1	0.551	0.007	325.0*	0.3					
23237+4425	COU1994	2014.774	1	0.999	0.007	43.6*	0.3					
23239+3456	COU1346	2013.943	1	0.160	0.048	54.2*	6.9					
23239+3456	COU1346	2014.795	1	0.138	0.018	61.0*	4.5					
23249+3521	COU1347	2014.831	1	0.556	0.007	106.4*	0.3					
23255+4347	COU1995Aa,Ab	2013.867	1	0.123	0.050	104.5	8.0		NDp			
23255+4347	COU1995Aa,Ab	2014.828	1	0.151	0.050	123.7	8.0		NDp			
23255+4347	COU1995AB	2013.867	1	0.323	0.057	0.2	0.5					
23255+4347	COU1995AB	2014.795	1	0.247	0.059	300.0	0.3					
23255+4347	COU1995AB	2014.828	1	0.204	0.048	305.5*	0.8					
23257+2457	HDS3335	2013.941	1	0.751	0.010	20.1*	0.3					
23257+3436	COU743	2014.774	1	1.122	0.007	23.7*	0.3					
23258+1020	LDS5085	2013.924	1	0.415	0.007	215.5	0.3	2.46				
23260+2344	COU337	2013.924	1	0.623	0.007	335.2	0.3	3.24				
23265+4659	COU2344	2014.828	1	0.587	0.007	107.2*	0.3					
23266+4520	YR17	2013.867	1	0.407	0.023	216.9*	0.7					
23267+1509	AG426	2013.927	1	1.513	0.028	252.9	2.3	2.40				
23267+4103	COU1845Aa,Ab	2014.814	1	0.134	0.024	124.2	2.1		NDp			
23267+4103	COU1845AB	2014.814	1	0.941	0.007	359.9*	0.3					
23267+4103	COU1845AB	2014.814	1	0.957	0.012	359.3	0.5					
23282+4200	COU1846	2014.814	1	0.128	0.050	152.7*	8.0					
23282+4200	COU1846	2014.814	1	0.179	0.046	157.7	6.8					
23284+1604	EGG5	2013.919	1	1.016	0.007	177.0	3.3	4.43				
23284+1604	EGG5	2013.924	1	1.035	0.007	176.9	3.3	4.37				
23288+1512	HU998	2014.831	1	0.399	0.007	176.2*	0.3					
23288+4225	COU1847	2013.867	1	0.128	0.050	51.2	8.0					
23288+4225	COU1847	2014.774	1	0.172	0.050	46.8	8.0					
23298+4740	COU2345	2014.795	1	0.759	0.007	299.1*	0.3					
23300+1542	HEI90	2014.814	1	0.254	0.007	107.3*	0.6					
23309+3920	COU1348	2013.941	1	0.205	0.015	29.8	1.9					
23317+1956	WIR1C	2013.927	1	0.871	0.007	79.6	0.3	2.15				
23321+5123	COU2669	2014.850	1	0.872	0.007	342.5	0.4					
23322+1942	COU340	2014.795	1	0.292	0.007	54.6*	0.5					
23322+3600	TDT4087	2013.943	1	—	—	—	—		NR			
23326+3127	WNC6	2013.963	1	1.693	0.008	154.4*	0.3					
23326+4949	A1489	2014.828	1	0.463	0.010	40.9*	0.3					
23333+4643	COU2247	2014.850	1	0.913	0.007	70.8	0.3					
23336+4057	COU1848	2014.795	1	0.557	0.007	293.1*	0.4					
23338+4508	A791	2014.850	1	1.199	0.007	168.4	0.3					
23339+2342	COU144	2014.795	1	0.301	0.007	50.0*	0.3					
23339+4938	COU2670	2013.867	1	0.506	0.007	108.3*	0.5					
23340+3120	BU720	2014.795	1	0.568	0.007	103.7*	0.3			Mut2010e	-0.00	-0.1
23347+1914	COU341	2014.831	1	0.784	0.007	119.2*	0.6					
23348+5018	COU2671	2014.814	1	0.210	0.021	296.3*	1.5					
23351+4908	COU2672	2013.867	1	0.715	0.015	111.2*	0.3					
23352+4313	A2799Aa,Ab	2014.828	1	0.112	0.050	2.9	8.0		NDp			
23352+4313	A2799AB	2014.828	1	1.476	0.007	205.0*	0.3					
23352+4732	COU2346	2014.814	1	0.705	0.007	27.7*	0.3					
23358+4729	COU2347	2014.828	1	0.340	0.008	153.8*	0.8					
23365+5136	COU2673	2014.831	1	0.350	0.007	107.1*	0.6					
23368+2346	HU498	2014.976	1	0.677	0.007	296.1	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
23371+3927	A1492	2013.941	1	1.638	0.008	211.4*	0.3					
23372+3741	COU1045	2014.976	1	1.468	0.007	43.1	0.3					
23375+4922	COU2674	2014.831	1	0.296	0.007	21.8*	5.5					
23375+4922	COU2674	2014.815	1	0.291	0.010	20.3*	4.4					
23377+4741	COU2248	2014.828	1	0.208	0.013	287.9*	2.2					
23377+4741	COU2248	2014.828	1	0.208	0.013	287.9	2.2					
23379+2510	COU441	2013.946	1	0.716	0.007	11.4*	0.4					
23382+3250	HU792	2013.943	1	—	—	—	—		NR			
23389+2101	LDS5108	2013.919	1	2.418	0.042	139.1	2.3	1.31				
23392+4407	A2500Aa,Ab	2014.853	1	0.142	0.050	102.5	8.0		NDp			
23392+4407	A2500AB	2014.853	1	1.915	0.010	164.7	0.3					
23392+4407	A2500AB	2014.853	1	1.909	0.010	165.1	0.3					
23393+2116	COU33	2013.919	1	1.026	0.007	255.2	0.3	2.09				
23393+4543	A643	2014.973	1	0.216	0.007	309.7	0.9			Rbr2018	-0.03	2.0 ^Q
23393+4543	A643	2014.831	1	0.218	0.007	305.6*	2.1			Rbr2018	-0.03	-2.3 ^Q
23397+1403	HEI298	2013.924	1	0.509	0.007	315.4	0.3	0.22				
23402+2641	MLB730AB	2013.927	1	0.781	0.007	128.1	2.3	0.46				
23402+2641	MLB730CD	2013.927	1	1.534	0.007	124.1	2.3	1.03				
23402+2641	MLB730CE	2013.927	1	1.472	0.007	112.2	2.3	1.90				
23403+1945	HO302	2013.924	1	1.232	0.007	71.7	0.3	2.87				
23405+2959	HDS3363Aa,Ab	2013.941	1	0.121	0.019	105.3	1.9		NDp			
23405+2959	HDS3363AB	2013.941	1	0.877	0.009	236.4*	0.5					
23405+2959	HDS3363AB	2013.941	1	0.853	0.022	236.6	0.9					
23411+4308	COU1996	2013.867	1	—	—	—	—		NR			
23411+4308	COU1996	2014.795	1	0.179	0.021	125.3	1.9					
23413+4547	COU1998	2014.828	1	0.503	0.007	249.6*	0.8					
23420+1656	HEI195	2013.818	1	1.497	0.009	338.6*	0.3					
23420+3951	TDT4152	2013.944	1	0.706	0.007	96.3*	0.6					
23424+3903	A1494	2013.946	2	0.136	0.050	173.0	8.0			Gur2020	0.03	9.4 ^Q
23424+3903	A1494	2013.946	2	0.148	0.050	172.0	8.0			Gur2020	0.04	8.4 ^Q
23425+4301	HDS3369	2014.828	1	—	—	—	—		NR			
23429+4405	VKI45	2014.853	1	2.144	0.011	202.0	0.3					
23433+3431	TDT4160	2013.944	1	1.400	0.007	159.4*	0.3					
23435+1652	HEI196	2014.976	1	0.849	0.009	167.5	0.3					
23436+2506	BU994	2013.946	1	1.413	0.007	315.4*	0.3					
23439+2340	COU442	2013.818	1	1.498	0.007	57.9*	0.5					
23443+3620	HDS3373	2013.946	1	0.641	0.007	247.4*	0.9					
23447+4305	COU1999	2014.795	1	0.396	0.007	340.2*	1.7					
23451+4751	COU2149Aa,Ab	2013.867	1	0.159	0.037	66.1	11.2		NDp			
23451+4751	COU2149AB	2013.867	1	0.317	0.015	220.7*	0.7					
23461+5040	HDS3377	2014.815	1	0.440	0.007	214.8*	1.6					
23467+4806	COU2348	2013.867	1	0.923	0.007	71.0*	0.3					
23469+3553	COU845	2013.944	1	0.487	0.007	120.6*	0.5					
23469+4032	ES1705	2014.853	1	1.232	0.007	275.4	0.3					
23470+3538	COU943	2013.941	1	1.023	0.007	100.8*	0.4					
23476+4650	BU995	2014.973	1	0.791	0.007	244.9	0.7					
23486+3616	B2547	2013.941	1	0.182	0.047	35.4*	6.7					
23486+3616	B2547	2013.944	1	0.169	0.044	34.0	6.6					
23486+3616	B2547	2014.831	1	0.148	0.050	26.4	8.0					
23491+1915	COU343	2014.795	1	0.136	0.015	295.0*	3.2					
23493+5100	HDS3383	2014.815	1	0.103	0.016	162.2*	3.8					
23498+2741	A424	2014.552	1	0.160	0.007	164.6	2.3			Sca2002b	-0.01	-4.1
23502+1940	COU344	2013.818	1	0.162	0.050	147.3*	4.0			Msn2001a	0.03	17.8 ^Q
23502+1940	COU344	2014.870	1	0.175	0.050	139.0	4.0			Msn2001a	0.05	14.1 ^Q
23504+2620	COU545	2013.818	1	0.746	0.007	315.7*	0.3					

WDS	Name	Epoch	Bin.	ρ (")	σ_ρ (")	θ (°)	σ_θ (°)	Δm	Notes	Orbit	$\Delta\rho(\text{O-C})$ (")	$\Delta\theta(\text{O-C})$ (°)
23504+3926	COU1200Aa,Ab	2013.946	1	0.177	0.007	83.0	1.1		NDg			
23504+3926	COU1200AB	2013.867	1	1.687	0.097	176.1*	1.5					
23504+3926	COU1200AB	2013.867	1	1.686	0.053	176.4	0.6					
23504+3926	COU1200AB	2013.946	1	1.711	0.009	175.1*	0.3					
23505+4703	A792	2014.850	1	0.666	0.007	266.1	0.7					
23505+5023	ES926	2014.976	1	1.963	0.010	151.7	0.3					
23506+4705	A793	2014.828	1	0.144	0.031	127.8	0.9					
23509+4730	A794BC	2014.877	1	0.815	0.033	13.4	2.1					
23509+4730	A794BC	2014.877	1	0.776	0.027	13.2	2.5					
23511+3147	A1246	2013.946	1	0.951	0.015	93.0	2.3					
23511+3147	A1246	2013.946	1	0.958	0.018	92.3	2.9					
23511+3147	A1246	2013.946	1	0.948	0.007	92.9*	2.3					
23516+2302	COU245	2013.818	1	1.745	0.009	52.5*	0.3					
23516+4205	STT510	2014.973	1	0.610	0.007	120.5	0.3			Nov2006e	0.01	0.5 ^Q
23518+4304	ES1476	2014.976	1	1.630	0.016	62.6	0.5					
23519+4334	COU1496	2014.831	1	0.858	0.007	224.6*	0.6					
23519+4708	COU2349	2014.815	1	0.718	0.007	220.4*	0.3					
23528+3841	A1496	2013.963	1	0.417	0.007	154.0*	0.7					
23536+1207	VYS11	2013.919	1	0.934	0.007	165.6	0.3	1.27				
23539+1207	BKO978	2013.919	1	1.331	0.007	226.1	0.3	1.95				
23545+2533	OCC9031	2013.944	1	0.107	0.050	5.3	8.0					
23545+4408	COU1497	2014.815	1	0.430	0.007	208.1*	0.6					
23557+4318	COU1498	2013.867	1	0.154	0.018	197.1*	3.3					
23560+2815	A425	2013.963	1	1.870	0.009	161.7*	0.3					
23561+2327	HU500	2013.941	1	—	—	—	—		NR			
23561+2327	HU500	2014.853	1	0.168	0.050	87.6*	8.0					
23561+2520	A426	2013.941	1	0.362	0.007	287.0*	0.4			Hrt2001b	-0.04	-4.3
23561+2520	A426	2014.828	1	0.381	0.007	285.0*	0.4			Hrt2001b	-0.02	-5.5
23561+4648	COU2000	2014.976	1	1.329	0.007	210.2	0.3					
23564+4439	J1358	2014.831	1	3.190	0.016	167.5*	0.3					
23570+4637	HDS3397	2014.828	1	0.329	0.017	300.8	0.3					
23571+4114	COU1499	2014.815	1	1.013	0.017	62.2*	0.3					
23573+2744	A427	2013.963	1	1.873	0.009	221.8*	0.3					
23577+4209	YR32	2014.853	1	0.114	0.050	244.0	3.6					
23578+3838	MCT14	2013.941	1	0.457	0.049	229.0*	3.0					
23578+3838	MCT14	2013.944	1	0.517	0.041	231.9*	1.5					
23581+4340	COU1649	2014.815	1	—	—	—	—		NR			
23585+4815	COU2150	2014.828	1	0.135	0.050	302.0	8.0					
23586+3949	TDS1231	2013.963	1	—	—	—	—		NR			
23588+4647	HEI415	2013.867	1	1.083	0.007	50.9*	0.7					
23592+4446	COU1650	2014.828	1	0.246	0.011	91.1*	0.7					
23594+3934	TDS1233	2013.963	1	0.696	0.007	285.0*	0.8					

Notes: In column 7, the superscript * indicates that the position angle θ could be determined without the 180° ambiguity. In column 13, the superscript ^Q indicates that our θ measurement quadrant was not compatible with the quadrant used for computing the orbit.