Orbital elements of double stars: ADS 1548

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INTERNATIONAL ASTRONOMICAL UNION

COMMISSION G1 (BINARY AND MULTIPLE STAR SYSTEMS)

DOUBLE STARS INFORMATION CIRCULAR No. 194 (FEBRUARY 2018)

NEW ORBITS

ADS α2000δ	Name n	P a	T i	e ω	Ω(2000) Last ob.	2018 2019	Author(s)
1548	A 819 AB	135^{y}4	2011.06	0.548	153°8	39°7 0″161	SCARDIA
01570+3101	2°6587	0″424	50°5	189°7	2017.833	49.4 0.163	et al. (*)
-	HDS 333	49.54	1981.14	0.60	252.6	253.8 0.542	TOKOVININ
02332-5156	7.2665	0.413	57.4	150.9	2018.073	255.7 0.519	
-	COU 691	61.76	1964.53	0.059	68.6	276.2 0.109	DOCOBO
03423+3141	5.8290	0.160	65.2	284.8	2014.9402	282.0 0.099	& LING
-	HDS 546	7.566	2017.921	0.271	64.1	42.5 0.069	TOKOVININ
04180-3826	47.58	0.122	114.6	36.9	2018.073	282.7 0.064	
-	CHR 20	5.734	2003.862	0.066	130.5	233.4 0.043	DOCOBO
04506+1505	62.7834	0.089	116.7	95.0	2015.9104	151.2 0.076	& CAMPO
-	MCA 19 Aa,Ab	16.130	2014.753	0.822	73.8	107.0 0.052	DOCOBO
05272+1758	22.3187	0.075	108.2	138.0	2015.9105	100.7 0.068	et al (**)
-	YSC 148	11.150	2005.960	0.326	355.5	185.7 0.125	DOCOBO
05465+7437	32.2870	0.168	43.0	138.5	2013.8813	224.1 0.129	et al (***)
-	HDS 787	11.874	2011.632	0.243	152.7	76.4 0.078	DOCOBO
05525-0217	30.3183	0.119	58.8	89.0	2016.9591	107.1 0.092	et al (**)
-	FIN 93 Aa,Ab	78.1	2042.89	0.55	164.6	150.5 0.356	TOKOVININ
05536-5640	4.6846	0.313	69.9	117.2	2018.085	151.5 0.358	
-	MCA 25	42.751	1996.438	0.330	4.0	171.1 0.098	DOCOBO
06073+2641	8.4209	0.075	39.8	342.5	2013.8807	174.6 0.099	et al (**)
-	MCA 26	42.841	2020.594	0.074	149.3	333.9 0.069	DOCOBO
06255+2320	8.4032	0.087	82.5	236.8	2013.8834	335.8 0.061	et al (**)

NEW ORBITS (continuation)

ADS α2000δ	Name n	P a	T i	e ω	Ω(2000) Last ob.	2018 2019	Author(s)
- 06502+3624	COU 1738 1.3333	270.0 0.354	2038.58 73.1	0.478 212.9	23.6 2013.8834	189.7 0.188 190.9 0.191	DOCOBO et al (**)
- 07155-7552	I 312 0.720	500 1.297	2012.58 95.9	0.665 94.7	159.4 2018.087	349.4 0.230 347.9 0.262	TOKOVININ
- 07435-2711	B 737 1.8938	190.1 0.230	1972.8 109.2	0.453 137.4	79.9 2018.087	167.1 0.087 163.3 0.089	TOKOVININ
- 09366-2442	FIN 383 45.701	7.88 0.080	2017.41 132.2	0.639 224.2	177.5 2018.073	203.9 0.047 173.3 0.095	TOKOVININ
- 09466-4955	HDS 1414 5.0102	71.9 0.160	2019.2 66.4	0.80 239.9	289.7 2018.087	105.9 0.044 132.8 0.024	TOKOVININ
- 09488-5237	B 1663 1.220	295 1.912	1808.15 103.3	0.40 259.1	125.5 2018.087	328.7 1.197 328.0 1.215	TOKOVININ
- 10121-0241	DEL 3 47.3008	7.611 0.293	2016.875 93.3	0.751 274.1	68.9 2018.087	63.9 0.175 56.6 0.116	TOKOVININ
- 10544+3840	COU 1746 6.1517	58.52 0.224	1972.67 19.2	0.845 22.2	113.2 2012.0999	332.0 0.317 333.6 0.305	LING
- 11101-3822	B 795 3.1304	115 0.514	1982.85 83.2	0.75 192.7	7.8 2016.962	7.4 0.802 7.5 0.811	TOKOVININ
- 13598-0333	HDS 1962 36.5334	9.854 0.072	2018.109 50.7	0.387 235.6	30.3 2015.1716	243.4 0.037 348.1 0.042	DOCOBO et al (**)
- 14020-2108	WSI 79 14.7172	24.46 0.205	2015.22 144.7	0.74 325.1	137.9 2018.087	38.4 0.153 26.6 0.188	TOKOVININ
- 14138+3059	COU 606 13.7143	26.25 0.195	1984.57 138.7	0.312 186.7	58.8 2014.272	93.8 0.197 85.1 0.215	DOCOBO & LING
- 14152-6739	DON 652 2.8324	127.1 0.634	2023.46 78.8	0.90 15.3	84.1 2017.285	281.7 0.192 285.1 0.148	TOKOVININ
- 14453-3609	I 528 AB 10.8977	33.03 0.090	2023.633 61.1	0.649 78.0	176.5 2017.432	138.3 0.065 146.0 0.064	TOKOVININ

NEW ORBITS (continuation)

ADS α**2000**δ	**Name** **n**	**P** **a**	**T** **i**	**e** ω	Ω**(2000)** **Last ob.**	**2018** **2019**	**Author(s)**
-	I 403	225.7	2086.2	0.50	16.7	252.1 0.369	TOKOVININ
15432-4443	1.5950	1.110	78.0	52.0	2017.536	254.8 0.357	
-	B 1841	161.26	2045.345	0.597	165.2	39.3 0.050	TOKOVININ
17011-4204	2.2324	0.151	74.9	30.0	2017.681	43.9 0.047	
-	HDO 269	1700	1999.5	0.949	27.7	234.5 0.105	TOKOVININ
17194-4413	0.2118	0.806	72.4	112.7	2017.536	235.6 0.106	
-	FIN 373	160	1998.2	0.203	288.2	131.8 0.066	TOKOVININ
17221-7007	2.2500	0.140	104.2	55.3	2017.285	129.6 0.071	
-	B 129	356 0	2013.7	0.862	133.0	330.2 0.144	TOKOVININ
17286-2531	1.0113	0.688	52.4	126.5	2017.681	336.8 0.155	
-	I 1323	42.5	2000.85	0.58	138.2	121.5 0.329	TOKOVININ
17297-4947	8.4803	0.224	46.8	167.9	2017.681	123.6 0.336	
-	KUI 84	14.717	1986.75	0.513	171.3	305.6 0.088	DOCOBO
17584+0428	24.4615	0.170	61.1	10.8	2015.5406	327.9 0.148	& LING
-	B 936	87.24	2003.09	0.561	162.1	163.5 0.395	TOKOVININ
18190-4759	4.1267	0.384	103.4	226.9	2015.541	162.8 0.411	
-	B 972	210.8	2010.98	0.681	183.0	195.7 0.065	TOKOVININ
19305-3149	1.7078	0.152	144.8	275.0	2017.373	190.5 0.069	
-	I 120 AB	64.09	1996.49	0.687	118.7	168.3 0.431	TOKOVININ
19491-6149	5.6174	0.324	141.2	139.5	2017.537	166.5 0.440	
-	B 1008 AB	74.20	2020.43	0.580	32.1	237.7 0.047	TOKOVININ
21310-3633	4.8520	0.228	101.6	162.1	2017.827	224.9 0.068	
15986	STF 2900	407.1	2000.07	0.827	180.4	181.0 0.980	TOKOVININ
22237+2051	0.8843	2.030	91.5	220.6	2017.826	180.9 1.030	
-	I 1445	79.7	1999.1	0.857	179.1	350.3 0.330	TOKOVININ
22321-4244	4.5162	0.336	97.6	65.8	2017.433	350.0 0.331	

(*) SCARDIA, PRIEUR, PANSECCHI, ARGYLE, LING, ARISTIDI, ZANUTTA, ABE, BENDJOYA, RIVET, SUAREZ & VERNET
(**) DOCOBO, CAMPO & GÓMEZ
(***) DOCOBO, CAMPO, ANDRADE & HORCH

NEW DOUBLE STARS

Discovered by A. Debackère using LCOGT global telescope network.

- FTN : Faulkes Telescope North T2m, Haleakala, Hawaii, LCOGT
- FTS : Faulkes Telescope South T2m, Siding Spring, Australia, LCOGT
- K93 : T1m, Sutherland, South Africa, LCOGT

STAR	**Precise Coord**	**UCAC4**	**Mag. V band B band**	**Epoch**	θ (°)	ρ (″)	**Obs**
DBR 272	064325.32+225027.1	565-031650	13.4 15.0	2017.145	218.8	3.01	1 K93
DBR 273	064802.28+225116.1	565-032624	14.2 15.0	2017.206	327.2	1.40	1 FTN
DBR 274	065304.97+223627.1	564-033913	12.0 13.2	2017.231	56.6	5.14	1 FTN
DBR 275	065339.06+224515.6	564-034029	11.8 14.0	2017.231	185.9	1.04	1 FTN
DBR 276	065957.60+222734.4	563-037002	11.8 13.0	2017.256	309.2	4.93	1 FTS
DBR 277 AB	071554.24-115914.5	391-024313	13.2 14.1	2017.901	256.4	2.57	1 FTS
DBR 277 AC	071554.24-115914.5	391-024313	13.2 14.3	2017.901	351.9	1.05	1 FTS
DBR 278	071810.55-131117.2	385-027959	11.2 11.5	2017.185	171.5	1.52	2 FTS, FTN
DBR 279	071831.28-131720.5	384-028426	14.4 14.8	2017.147	285.4	1.16	1 FTS
DBR 280	071849.84-130854.2	385-028167	12.9 13.9	2017.147	131.7	2.43	1 FTS
DBR 281	083627.83+211853.0	557-045219	9.2 10.4	2017.208	314.3	5.90	3 FTS, FTN
DBR 282	090139.90-692854.5	103-027299	10.9 12.7	2017.234	1.4	2.61	4 FTS
DBR 283	113812.23-631915.2	134-057430	12.8 13.0	2017.152	285.2	2.17	1 FTS
DBR 284	113819.92-632036.5	134-057489	10.0 11.8	2017.152	67.5	5.46	1 FTS
DBR 285	114610.73-592722.2	153-085119	12.6 12.9	2017.310	33.6	1.98	3 FTS
DBR 286	115408.55+521638.9	712-050672	12.0 12.3	2017.204	358.3	2.49	1 FTN
DBR 287	171113.29-253541.7	323-104038	14.2 16.6	2017.379	116.5	1.66	1 FTN
DBR 288	171122.96-253104.2	323-104135	14.2 15.9	2017.379	340.5	1.99	1 FTN
DBR 289	181220.41+065548.2	485-076417	14.8 15.6	2017.177	241.7	1.28	1 FTS
DBR 290	181828.66-134412.9	382-101606	12.9 13.1	2017.552	84.2	2.57	3 FTN, FTS
DBR 291	181836.45-134719.0	382-101648	12.9 12.9	2017.552	98.9	3.05	3 FTN, FTS
DBR 292	181856.92-134852.2	381-104756	14.1 15.4	2017.552	61.0	2.04	3 FTN, FTS
DBR 293	211659.89+514558.6	709-080831	12.2 12.8	2017.5006	198.8	5.46	1 FTN
DBR 294 AB	212955.47+121104.0	511-137196	12.4 13.8	2017.631	348.1	4.07	1 FTN
DBR 294 AC	212955.47+121104.0	511-137196	12.4 14.8	2017.631	330.6	1.90	1 FTN
DBR 295	213000.92+121249.2	512-132466	14.6 15.4	2017.631	4.8	0.82	1 FTN

(1) The first component of TDT 3998 AB (neglected) has a companion not indexed in the WDS which I called DBR 204 AC.

NEW DOUBLE STARS

Discovered by: Kacper Wierzchos using a CCD camera attached to the 0.2m SCT of the Aravaca Observatory, Spain

STAR	Precise Coord.	Durchmusterung	Mag.	Epoch	θ (°)	ρ (″)
WRS 4	001809.53+861452.3	+85 4	10.9 12.7	2018.0616	53.5	4.53
WRS 5	085342.56+851120.1	+85 129	8.6 12.4	2018.0616	329.7	11.70
WRS 6	131537.56+842649.2	+85 221	10.0 11.2	2018.0863	303.2	5.31
WRS 7	164959.00+862941.6	+86 258	9.7 11.5	2018.0863	111.9	4.29

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Errata in Information Circular No. 193

- In the entry for WDS 01337-1213 (HWE 4), the value of the Ω should be 133.7, rather than 3.1
- In the entry for WDS 08486+0237 (A 2551), the value of the Ω should be 182.1, rather than 45.4

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The deadline for contributions to Information Circular No. 195 is:

June 15th 2018

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