

INTERNATIONAL ASTRONOMICAL UNION  
 COMMISSION G1 (BINARY AND MULTIPLE STAR SYSTEMS)  
 DOUBLE STARS INFORMATION CIRCULAR No. 207 (JUNE 2022)

NEW ORBITS

WDS HIP	Name ADS	P(yr) $\sigma_P$	T(yr) $\sigma_T$	e $\sigma_e$	a(") $\sigma_a$	i(°) $\sigma_i$	$\Omega$ (°) $\sigma_\Omega$	$\omega$ (°) $\sigma_\omega$	2022 2023	Author(s) Last obs.
00321-1813 2757	B 1910 –	86.37 3.25	1992.00 0.33	0.593 0.020	0.137 0.005	36.6 4.0	250.6 8.2	156.7 9.6	215.1 0.187 216.5 0.190	TOK 2019.537
00460-3043 3952	HDS 100AB –	50.91 ...	2026.66 ...	0.800 ...	0.158 ...	103.8 ...	17.9 ...	251.5 ...	223.5 0.064 217.6 0.065	TOK 2021.754
01065-2003 –	B 1028 –	300.0 ...	2012.44 ...	0.239 ...	0.298 ...	112.2 ...	144.3 ...	90.0 ...	11.7 0.111 8.7 0.115	TOK 2020.927
01432+0520 –	A 2008 1355	194.36 ...	2050.083 ...	0.500 ...	0.376 ...	126.5 ...	131.3 ...	247.8 ...	340.7 0.287 339.1 0.286	TOK 2018.562
01559-2150 9006	DON 27 –	460.0 ...	2017.675 ...	0.587 ...	0.588 ...	117.6 ...	43.0 ...	77.1 ...	306.6 0.115 299.0 0.118	TOK 2021.569
03501+4458 17932	YR 23 –	47.73 1.00	2038.43 0.80	0.616 0.015	0.368 0.007	123.3 1.5	62.1 1.5	285.1 1.5	282.5 0.393 279.6 0.396	D et al. 2022.2843
05078+1759 –	CRC 48 –	40.0 ...	2015.462 ...	0.845 ...	0.830 ...	88.3 ...	286.1 ...	122.4 ...	273.8 0.136 277.3 0.202	TOK 2022.195
05275-7723 25526	HDS 719AB –	80.0 ...	2014.10 ...	0.200 ...	0.156 ...	86.6 ...	19.1 ...	90.6 ...	196.5 0.106 197.0 0.115	TOK 2022.197
05276-2055 25531	SEE 53 –	81.00 1.00	2073.59 0.05	0.421 0.005	0.1967 0.0020	22.3 2.5	138.8 10.0	183.4 10.0	120.6 0.262 122.7 0.265	D et al. 2022.1946
05330-2415 36745	DAW 85 –	65.72 0.20	2065.65 0.75	0.750 0.010	0.308 0.004	147.9 5.0	111.7 10.0	12.0 10.0	292.9 0.498 291.8 0.505	D et al. 2020.9288
05474-1032 27341	MCA 22 –	31.74 0.50	2036.41 0.10	0.932 0.009	0.092 0.002	36.9 10.0	112.0 10.0	0.0 15.0	293.3 0.177 294.2 0.175	D et al. 2022.0488

**NEW ORBITS (continuation)**

<b>WDS</b>	<b>Name</b>	<b>P(yr)</b>	<b>T(yr)</b>	<b>e</b>	<b>a(")</b>	<b>i(°)</b>	<b>Ω(°)</b>	<b>ω(°)</b>	<b>2022</b>	<b>Author(s)</b>	
<b>HIP</b>	<b>ADS</b>	$\sigma_P$	$\sigma_T$	$\sigma_e$	$\sigma_a$	$\sigma_i$	$\sigma_\Omega$	$\sigma_\omega$	<b>2023</b>	<b>Last obs.</b>	
06237-3319	TOK 823Aa,Ab	4.65	2022.097	0.674	0.043	133.2	27.0	163.2	261.7	0.012	TOK
30410	–	0.30	0.028	0.027	0.001	5.6	8.5	14.2	69.3	0.042	2022.195
06298-5014	R 65AB	53.03	1968.37	0.968	0.414	157.1	185.9	96.5	311.2	0.096	TOK
30953	–	0.28	0.28	0.002	0.011	3.6	14.9	13.9	296.8	0.187	2022.287
07043-0303	A 519AB	43.83	2006.745	0.527	0.285	98.3	95.9	356.4	279.7	0.370	TOK
34110	5752	0.31	0.311	0.014	0.003	0.4	0.2	1.9	279.1	0.387	2022.195
07185-5721	HDS 1013Aa,Ab	59.02	1998.708	0.227	0.361	22.6	178.4	124.8	99.0	0.398	TOK
35374	–	1.73	0.543	0.010	0.009	2.5	5.6	2.7	103.5	0.403	2022.129
07303-5657	FIN 105	200.94	2040.22	0.487	0.319	129.5	81.1	111.30	62.9	0.216	D et al.
–	–	2.50	1.50	0.065	0.020	3.0	5.0	5.0	60.6	0.208	2022.1292
07374-3458	FIN 324 AB,C	79.06	2095.80	0.656	0.323	153.2	256.8	30.0	126.6	0.187	D et al.
37096	–	2.00	0.50	0.005	0.003	5.0	5.0	5.0	118.4	0.211	2021.8929
07522-4035	TOK 195	7.104	2011.62	0.351	0.066	82.1	93.6	148.5	87.3	0.069	TOK
38414	–	0.116	0.67	0.054	0.004	2.1	1.8	28.8	91.9	0.084	2022.129
07548-6613	TOK 830	6.81	2021.70	0.374	0.051	146.9	126.4	116.1	329.9	0.032	TOK
38645	–	1.19	0.13	0.054	0.004	5.2	16.0	29.8	263.1	0.046	2022.047
08085-5237	B 1586	250.0	2018.894	0.871	0.356	74.3	266.4	114.2	92.1	0.077	TOK
39850	–	...	...	...	...	...	...	...	95.9	0.084	2022.129
08280-3507	FIN 314Aa,Ab	35.41	1999.37	0.928	0.086	51.8	95.9	122.3	57.0	0.124	TOK
41515	–	1.09	2.52	0.064	0.038	29.5	32.5	29.8	58.2	0.122	2022.129
08286+3502	WOR 19	49.87	2000.38	0.180	0.614	135.5	70.7	133.9	125.3	0.560	S et al.
41554	–	0.19	2.1	0.014	0.041	5.0	4.9	9.3	119.4	0.580	2022.163
08539+0149	A 2554	44.11	2021.762	0.492	0.211	159.5	139.9	189.8	304.5	0.107	TOK
43676	7074	0.26	0.034	0.004	0.001	1.6	5.3	5.8	279.1	0.110	2021.960
09275-5806	CHR 240	1.4164	2023.8894	0.3761	0.0335	131.19	81.63	327.71	262.7	0.043	D et al.
46388	–	0.0049	0.0210	0.0018	0.0001	2.65	1.03	0.55	305.7	0.034	2022.2843
09505+0421	RAO 90BaBb	20.000	2025.355	0.9366	0.2500	89.60	81.58	255.39	126.9	0.003	D et al.
48273	–	0.70	0.20	0.001	0.003	0.3	1.5	1.5	255.7	0.019	2018.9727

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<b>WDS</b>	<b>Name</b>	<b>P(yr)</b>	<b>T(yr)</b>	<b>e</b>	<b>a(")</b>	<b>i(°)</b>	<b>Ω(°)</b>	<b>ω(°)</b>	<b>2022</b>	<b>Author(s)</b>	
<b>HIP</b>	<b>ADS</b>	$\sigma_P$	$\sigma_T$	$\sigma_e$	$\sigma_a$	$\sigma_i$	$\sigma_\Omega$	$\sigma_\omega$	<b>2023</b>	<b>Last obs.</b>	
10000+2433	CHR 145	45.59	2049.11	0.813	0.505	95.1	17.7	91.4	150.7	0.108	D et al.
86590	–	0.75	0.25	0.019	0.033	1.0	1.0	1.0	140.5	0.095	2021.1598
10430-0913	WSI 112	35.0	2001.05	0.228	0.554	131.2	102.2	125.2	124.2	0.610	TOK
–	–	...	...	...	...	...	...	...	118.8	0.621	2021.960
11068-7050	B 2006	146.85	2120.75	0.114	0.299	71.3	166.2	0.0	324.4	0.214	D et al. [I]
–	–	2.50	2.00	0.003	0.004	1.0	1.0	1.0	325.8	0.222	2021.3160
11068-7050	B 2006	61.59	2031.51	0.583	0.256	74.9	158.8	263.6	325.9	0.195	D et al. [II]
–	–	1.20	0.80	0.004	0.004	1.0	1.0	1.5	328.1	0.195	2021.3160
11095-5609	HU 1481	500.0	2038.15	0.683	0.456	62.1	132.9	141.3	189.7	0.104	TOK
–	–	...	...	...	...	...	...	...	194.7	0.098	2022.195
11100-1017	TOK 894Aa,Ab	3.266	2021.267	0.000	0.047	62.1	45.4	0.0	116.3	0.023	TOK
54569	–	0.047	0.050	0.000	0.002	4.7	4.1	0.0	230.6	0.047	2022.208
11170-5537	FIN 181	140.3	1951.18	0.650	0.326	132.8	48.8	103.2	119.0	0.376	TOK
5513	–	...	...	...	...	...	...	...	118.0	0.377	2021.316
11253-8457	BRC 4Aa,Ab	8.98	2023.17	0.213	0.062	81.7	184.2	269.6	7.5	0.051	TOK
–	–	0.64	0.15	0.100	0.002	1.5	1.2	5.6	40.8	0.012	2022.288
11431-3601	I 1546	127.4	2027.68	0.200	0.215	113.7	97.3	205.5	276.9	0.175	TOK
–	–	...	...	...	...	...	...	...	275.2	0.173	2018.236
12114-1647	S 634 AaAb	0.5792	2022.7844	0.2911	0.0261	139.44	234.22	103.59	195.8	0.028	D et al.
59426	8444 AaAb	0.0005	0.0060	0.0009	0.0010	1.50	1.50	0.50	126.0	0.025	2021.2451
12206-2213	BU 605CD	1100.0	2044.9	0.516	1.411	64.1	122.0	153.6	271.9	0.493	TOK
–	–	...	...	...	...	...	...	...	272.8	0.499	2022.217
12309-3041	I 514	60.8	2020.93	0.659	0.115	99.0	121.8	134.6	302.9	0.043	TOK
61064	–	5.5	0.67	0.073	0.010	5.4	4.3	14.3	298.5	0.048	2022.208
12446-5717	FIN 65AB	107.1	1947.05	0.457	0.296	111.3	242.4	110.6	257.5	0.316	TOK
62179	–	4.5	0.90	0.053	0.010	1.8	1.1	4.5	256.5	0.318	2022.195
13140-4849	RST 628	293.4	2012.76	0.706	0.243	159.2	155.3	77.7	3.4	0.099	TOK
64558	–	84.7	0.42	0.056	0.045	10.3	33.4	36.0	358.8	0.104	2021.316

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<b>WDS HIP</b>	<b>Name ADS</b>	<b>P(yr) <math>\sigma_P</math></b>	<b>T(yr) <math>\sigma_T</math></b>	<b>e <math>\sigma_e</math></b>	<b>a(") <math>\sigma_a</math></b>	<b>i(°) <math>\sigma_i</math></b>	<b><math>\Omega</math>(°) <math>\sigma_\Omega</math></b>	<b><math>\omega</math>(°) <math>\sigma_\omega</math></b>	<b>2022 2023</b>	<b>Author(s) Last obs.</b>
13248-3438 —	I 220 —	700.0 ...	2034.22 ...	0.900 ...	0.464 ...	68.2 ...	183.0 ...	357.2 ...	40.8 0.074 44.5 0.066	TOK 2022.208
13317-0219 65982	HDS 1895 —	3.2431 ...	2023.532 ...	0.5406 ...	0.0945 ...	5.00 ...	194.29 ...	114.59 ...	132.4 0.145 186.0 0.095	D et al. 2021.1602
13356-3721 66325	B 811 —	300.0 ...	2116.2 ...	0.870 ...	0.772 ...	96.3 ...	85.4 ...	261.2 ...	343.9 0.148 342.1 0.148	TOK 2021.319
13535+1257 67808	BEU 18 —	7.408 0.144	2023.55 0.29	0.529 0.050	0.183 0.004	127.7 2.6	3.4 7.6	165.9 16.5	342.3 0.188 280.1 0.074	TOK 2022.130
14023-5233 68575	RST2884 —	75.31 3.72	1978.7 4.2	0.365 0.069	0.212 0.024	115.5 4.2	179.1 6.9	207.2 24.1	158.7 0.230 157.0 0.222	TOK 2018.162
14063-2635 68821	BU 938 9106	500.0 ...	2029.32 ...	0.489 ...	0.814 ...	95.4 ...	121.4 ...	11.5 ...	122.0 0.420 121.7 0.420	TOK 2018.162
14275-3527 70693	TOK 724 —	3.946 ...	2018.751 ...	0.640 ...	0.040 ...	88.6 ...	137.4 ...	228.6 ...	279.0 0.002 136.6 0.023	TOK 2022.209
14428-7256 —	B 2771 —	80.0 ...	2022.76 ...	0.700 ...	0.468 ...	47.2 ...	57.3 ...	189.1 ...	225.5 0.144 249.4 0.138	TOK 2022.198
14494-6714 72493	DON 680 —	229.7 23.5	1941.0 5.4	0.412 0.026	1.854 0.049	99.2 0.8	60.0 0.7	13.3 14.6	242.0 2.401 241.8 2.417	TOK 2022.307
14516-4335 72683	FIN 319 —	10.877 0.031	2020.633 0.032	0.793 0.008	0.086 0.002	33.2 3.3	118.5 6.6	342.6 7.7	249.0 0.078 263.2 0.111	TOK 2022.198
14554+0010 —	A 2171 9436	131.3 4.6	2021.4 9.5	0.065 0.050	0.295 0.014	104.4 1.5	111.5 2.2	97.7 29.6	347.5 0.082 339.4 0.090	TOK 2022.198
14589+0636 —	WSI 81 —	5.456 0.009	2016.658 0.014	0.405 0.004	0.095 0.001	154.8 1.8	45.7 3.8	329.4 4.2	92.6 0.054 331.9 0.081	TOK 2022.288
15051-4308 73804	B 1261 —	200.0 ...	2024.27 ...	0.498 ...	0.471 ...	78.6 ...	263.4 ...	69.0 ...	279.2 0.142 283.2 0.122	TOK 2022.198
15282+0251 75724	A 2175 9654	179.6 15.3	1932.6 3.3	0.377 0.044	0.253 0.021	65.2 2.2	180.4 2.2	246.4 11.5	223.8 0.194 225.1 0.191	TOK 2021.319

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<b>HIP</b>	<b>ADS</b>	$\sigma_P$	$\sigma_T$	$\sigma_e$	$\sigma_a$	$\sigma_i$	$\sigma_\Omega$	$\sigma_\omega$	<b>2023</b>	<b>Last obs.</b>	
15282-0921	BAG 25 AaAb	2.4362	2024.3118	0.9733	0.1050	55.72	96.52	72.64	314.4	0.053	D et al.
75718	–	0.0018	0.0222	0.0017	0.0025	0.48	1.48	1.36	336.3	0.128	2021.3187
15363-3851	B 1299	97.1	1975.8	0.543	0.271	137.1	156.2	186.2	153.9	0.418	TOK
76405	–	3.1	2.0	0.040	0.005	5.3	5.9	11.4	152.9	0.418	2022.198
15394-1355	HDS2210	41.17	2010.93	0.069	0.173	108.5	353.4	155.8	111.9	0.062	TOK
76676	–	0.95	2.75	0.025	0.004	1.0	1.2	24.7	87.6	0.056	2022.283
15505-0215	RST5032	110.9	2015.4	0.533	0.205	130.7	105.5	106.3	288.4	0.123	TOK
77594	–	11.6	1.1	0.080	0.010	5.2	13.9	16.0	283.7	0.130	2022.130
16271-1205	HU 158	260.3	2001.6	0.717	0.306	108.7	137.0	181.7	168.8	0.116	TOK
80576	10064	52.3	2.4	0.053	0.034	2.5	2.7	5.2	166.8	0.125	2022.307
16514-2450	B 2397	67.8	2022.56	0.090	0.155	120.0	19.3	81.6	312.2	0.075	TOK
82474	–	3.0	3.7	0.019	0.004	1.4	1.6	23.3	300.3	0.071	2022.288
16531-8136	HDS2388	70.0	2023.67	0.404	0.180	141.2	68.0	90.8	4.2	0.089	TOK
82592	–	...	...	...	...	...	...	...	348.3	0.084	2022.198
16534-2025	WSI 86	14.30	2014.87	0.478	0.265	134.8	11.2	23.5	174.3	0.376	TOK
82621	–	0.15	0.18	0.011	0.006	2.4	3.5	6.7	166.1	0.355	2021.568
16573-5344	SYU 11Aa,Ab	9.432	2024.211	0.532	0.089	20.0	128.7	20.9	8.6	0.103	TOK
–	–	0.425	0.275	0.080	0.003	0.0	80.6	86.1	40.5	0.073	2022.195
17151-2750	ELP 40	19.69	2009.12	0.235	0.117	141.6	37.6	7.8	179.8	0.123	TOK
–	–	0.73	0.94	0.038	0.006	4.8	9.2	25.2	165.7	0.110	2022.195
17304-0104	STF 2173	46.52	2055.36	0.171	0.9679	99.5	331.8	146.7	81.6	0.180	D et al.
85667	10598	1.50	0.50	0.004	0.0011	0.5	0.5	2.5	42.9	0.182	2021.2454
17368-2057	HU 751	262.0	1965.5	0.446	0.360	68.8	135.2	23.9	303.9	0.352	TOK
–	10657	51.0	4.3	0.079	0.028	2.4	1.4	10.0	304.3	0.358	2022.390
17375-3747	B 915AB	123.7	2033.8	0.127	0.274	66.3	138.6	253.6	331.7	0.220	TOK
–	–	5.6	3.6	0.065	0.005	1.1	2.4	15.0	333.5	0.212	2020.201
17460-3435	HDS2510AB	41.39	2012.125	0.281	0.132	63.9	62.1	124.9	281.9	0.085	TOK
86947	–	...	...	...	...	...	...	...	291.5	0.078	2022.195

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		$\sigma_P$	$\sigma_T$	$\sigma_e$	$\sigma_a$	$\sigma_i$	$\sigma_\Omega$	$\sigma_\omega$	2023	Last obs.	
17539-3445	B 1871	114.6	1959.1	0.700	0.199	109.1	83.9	146.1	94.4	0.297	TOK
87616	–	...	...	...	...	...	...	...	94.1	0.298	2021.565
18229-2524	B 389	92.6	1993.63	0.472	0.326	114.5	194.8	158.2	223.3	0.295	TOK
–	11290	...	...	...	...	...	...	...	221.6	0.307	2021.729
18453-3529	B 943	237.1	1942.8	0.389	0.376	136.1	79.9	18.6	268.3	0.476	TOK
92018	–	...	...	...	...	...	...	...	267.6	0.479	2017.680
19074+0811	A 361	189.8	1979.8	0.822	0.321	126.8	95.5	254.5	55.7	0.346	TOK
–	12054	27.3	3.6	0.065	0.049	9.4	10.2	8.0	55.1	0.348	2018.485
19174+0115	A 2267AB	267.0	2196.8	0.200	0.547	96.4	167.6	13.8	350.6	0.561	TOK
–	12267	...	...	...	...	...	...	...	350.5	0.567	2018.253
19188+1736	HU 337	207.4	2059.4	0.300	0.256	109.6	70.3	79.8	77.2	0.232	TOK
94911	12301	...	...	...	...	...	...	...	76.6	0.232	2022.390
19216+5223	BU 1129	147.5	1975.56	0.961	0.205	150.3	49.6	255.1	342.3	0.324	S et al.
95156	12366	...	...	...	...	...	...	...	342.1	0.326	2021.745
19305-4826	I 254	152.3	1980.0	0.879	0.519	80.2	34.4	167.2	29.8	0.766	TOK
95925	–	36.3	3.2	0.066	0.020	4.5	0.9	11.0	29.9	0.776	2017.431
19474-0148	A 2993AB	65.2	2028.2	0.645	0.141	126.9	166.0	40.0	227.2	0.070	TOK
97367	12294	2.2	1.5	0.071	0.007	3.9	8.2	8.4	216.6	0.068	2021.751
19512-7248	TOK 697Aa,Ab	2.821	2017.804	0.491	0.039	73.7	43.1	90.6	308.9	0.016	TOK
97690	–	0.027	0.034	0.071	0.002	3.7	3.0	3.4	35.9	0.034	2022.308
19598-0957	HO 276	4.8705	2026.6230	0.6015	0.1518	17.32	154.19	132.15	357.9	0.082	D et al.
98416	–	0.0030	0.0010	0.0035	0.0004	1.50	8.00	8.00	75.5	0.191	2019.3734
20001+0338	A 2393	500.0	2000.41	0.859	0.265	117.0	245.3	130.4	3.4	0.070	TOK
–	13220	...	...	...	...	...	...	...	1.0	0.071	2022.390
20157+4339	A 2095	382.3	2031.82	0.227	0.333	94.5	154.0	15.5	154.2	0.259	L et al.
–	13611	...	...	...	...	...	...	...	154.1	0.259	2021.5511
20289-1749	SHJ 323AB	346.6	1961.6	0.959	2.474	109.8	152.8	125.5	189.2	1.766	TOK
101027	13887	18.2	1.2	0.008	0.150	1.5	2.9	3.3	189.0	1.787	2018.400

**NEW ORBITS (continuation)**

<b>WDS HIP</b>	<b>Name ADS</b>	<b>P(yr)</b> $\sigma_P$	<b>T(yr)</b> $\sigma_T$	<b>e</b> $\sigma_e$	<b>a(")</b> $\sigma_a$	<b>i(°)</b> $\sigma_i$	<b><math>\Omega</math>(°)</b> $\sigma_\Omega$	<b><math>\omega</math>(°)</b> $\sigma_\omega$	<b>2022 2023</b>	<b>Author(s) Last obs.</b>
20400-2940 –	RST2151 –	83.8 2.8	1985.9 5.9	0.186 0.078	0.192 0.022	123.6 12.1	39.5 10.2	168.7 27.4	56.5 0.206 54.5 0.211	TOK 2021.637
20442-7759 102348	HDS2951 –	81.7 47.3	2019.01 0.20	0.857 0.065	0.107 0.037	46.9 7.5	107.3 14.9	121.2 16.0	338.9 0.038 349.3 0.045	TOK 2022.308
20451-2346 –	I 666 14224	212.9 16.3	1987.43 0.45	0.752 0.015	0.475 0.023	57.4 2.0	169.7 1.2	2.9 2.2	331.2 0.486 331.8 0.496	TOK 2018.400
21041-0549 103981	MCA 66Aa,Ab –	84.2 4.6	1985.79 0.52	0.668 0.027	0.193 0.002	122.5 3.2	51.8 2.0	183.4 4.6	53.6 0.317 52.9 0.319	TOK 2021.330
21210-5229 105404	CVN 66Aa,Ab –	3.347 0.002	2020.577 0.010	0.625 0.010	0.055 0.001	42.8 2.9	249.0 0.9	356.6 1.1	60.5 0.088 86.4 0.074	TOK 2022.308
21274-0701 105947	HDS 3053 –	20.65 0.30	2036.43 0.25	0.363 0.005	0.165 0.002	50.5 1.0	153.8 1.0	148.0 1.0	92.4 0.137 105.6 0.156	D et al. 2020.8339
21278-5922 105976	TOK 731 –	12.45 1.06	2022.53 0.12	0.624 0.034	0.059 0.003	25.0 0.0	195.6 29.5	133.7 33.7	257.6 0.027 30.9 0.028	TOK 2022.390
21536-1019 108058	FIN 358 –	142.3 45.3	1988.8 7.3	0.239 0.146	0.177 0.046	72.4 2.3	292.0 1.1	144.4 26.9	161.5 0.071 166.4 0.067	TOK 2022.390
22173-0847 –	BEU 22Ba,Bb –	65.8 7.1	2023.08 0.30	0.503 0.022	0.889 0.056	66.2 0.7	324.6 0.7	114.4 6.7	64.4 0.184 100.9 0.237	TOK 2022.390
22220-3431 110419	B 557Aa,Ab –	106.21 3.13	2020.01 0.03	0.898 0.003	0.359 0.009	112.2 0.4	189.1 0.8	73.2 0.5	6.3 0.109 1.6 0.140	TOK 2021.568
22553-4828 113191	I 22AB –	151.9 2.7	2001.60 0.17	0.734 0.016	0.805 0.017	86.8 0.3	174.8 0.1	263.8 0.2	177.6 0.609 177.8 0.612	TOK 2017.601
23353-6434 –	TOI 131Aa,Ab –	27.83 ...	2019.55 ...	0.627 ...	0.181 ...	66.9 ...	15.6 ...	251.9 ...	14.4 0.131 20.6 0.158	TOK 2022.390
23397-0044 116756	YR 18 –	82.1 ...	2023.51 ...	0.382 ...	0.291 ...	120.4 ...	91.7 ...	317.2 ...	131.4 0.123 121.2 0.138	TOK 2021.732

**NEW ORBITS (continuation)**

<b>WDS</b>	<b>Name</b>	<b>P(yr)</b>	<b>T(yr)</b>	<b>e</b>	<b>a(")</b>	<b>i(°)</b>	<b>Ω(°)</b>	<b>ω(°)</b>	<b>2022</b>	<b>Author(s)</b>	
<b>HIP</b>	<b>ADS</b>	$\sigma_P$	$\sigma_T$	$\sigma_e$	$\sigma_a$	$\sigma_i$	$\sigma_\Omega$	$\sigma_\omega$	<b>2023</b>	<b>Last obs.</b>	
23449-3820	B 613	86.41	1997.29	0.898	0.178	125.0	142.7	193.5	140.9	0.296	TOK
117141	–	3.06	1.67	0.013	0.008	5.5	14.3	25.8	140.5	0.300	2019.537

TOK = TOKOVININ

D et al. = DOCOBO, CAMPO, MÉNDEZ & COSTA

S et al. = SCARDIA, PRIEUR, PANSECCHI, LING, ARGYLE, ARISTIDI, ZANUTTA, ABE, BENDJOYA, RIVET, VERNET & MACCARINI

L et al. = LING, SCARDIA, PRIEUR, PANSECCHI, ARGYLE, ARISTIDI, ZANUTTA, ABE, BENDJOYA, RIVET, VERNET & MACCARINI

**NORAYR MELIKYAN (1948 - 2022)**

Prof. Norayr (Norik) Melikyan, one of the well known astronomers in the field of flare stars study and Leading Researcher of the Byurakan Astrophysical Observatory (BAO, Armenia), passed away on February 16, 2022 at age 73, after short illness.

Prof. Melikyan was born on December 27, 1948 in Artashat (Armenia). After graduating from the Faculty of Physics of the Yerevan State University (Armenia) in 1974, he began to work at BAO as an assistant astronomer on flare stars study both in the clusters and in the general stellar field. After obtaining his Ph.D. degree in 1984, the field of his scientific interests became much wider including new types of variable or non-stationary stellar objects such as T Tau stars, cataclysmic variables, Herbig-Haro objects, Mira variables, etc, especially those belonging to the binary systems. He has published around 150 scientific papers in AJ, ApJ, A&A, PASP, Astrophysics, etc. as well as participated with valuable contributions in a large number of scientific Symposia and Meetings worldwide. Prof. Melikyan was a member of the International Astronomical Union (1994), the European Astronomical Society (1992), and founding member of the Armenian Astronomical Society (2001). In 2006 he was appointed the Deputy Director of the BAO and was a member of the BAO Scientific Council since 1994. In recent years, he was actively engaged in a scientific collaboration project with the Astronomical Observatory R. M. Aller of the University of Santiago de Compostela (OARMA), where the speckle-interferometry camera of OARMA was moved to in 2011 under agreement between OARMA and BAO. The camera was attached to the 2.6m telescope of BAO for speckle astrometric observations of binaries as well as for photometric and spectroscopic observations with the same telescope. Several OARMA young researchers have completed their scientific research with long-term stays and observational runs in BAO.



Norik will be much missed by all who knew him. He is survived by his wife Marine, son Davit and daughter Astgik.

Rest in peace.

V. S. Tamazian

J. A. Docobo

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The deadline for contributions to Information Circular No. 208 is:

October 15th 2022

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ISSN: 1024-7769