

INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26

(DOUBLE STARS)

INFORMATION CIRCULAR No. 143 (FEBRUARY 2001)

NEW ORBITS

ADS α 2000 δ	Name n	P a	T i	e ω	Ω (2000) Last ob.	2001 2002	Author
277 00206+4531	A 647 1°1250	320 ^y 00 0"810	1873.0 125°0	0.200 128°0	36°7 –	104°6 0"573 103.3 0.577	HEINTZ
01014+3535	COU 854 6.0280	59.72 0.139	2004.09 152.7	0.161 6.8	62.5 1996.6909	79.6 0.117 72.1 0.117	MASON & HARTKOPF
884 01048+0135	A 2310 2.7385	131.46 0.249	1930.27 117.7	0.444 326.2	122.7 1996.6963	316.5 0.326 315.9 0.328	DOCOBO
01061-4643	SLR 1 AB 1.8462	195.0 1.0600	2003.9 134.3	0.660 294.3	137.8 1999.77	240.5 0.273 225.0 0.260	ARGYLE & ALZNER
2034 02407+2637	STT 43 0.7627	472.44 1.317	1857.94 114.1	0.225 116.9	219.4 1999.831	354.6 0.784 353.7 0.778	HARTKOPF & MASON
3573 04599+5327	A 1303 2.5307	142.25 0.198	2030.31 133.1	0.486 210.9	1.2 1996.866	282.5 0.150 279.8 0.147	SCARDIA
3857 05164-0139	A 844 2.8892	124.59 0.239	2007.04 61.3	0.363 48.7	181.3 1999.818	186.3 0.159 189.3 0.154	HARTKOPF & MASON
06159+0110	RST 5225 12.2658	29.35 0.167	1965.94 19.8	0.387 205.4	180.3 1997.825	142.2 0.166 152.1 0.180	HARTKOPF & MASON
06502+3624	COU 1738 7.4611	48.25 0.108	2008.01 50.0	0.583 268.2	12.7 1996.8718	169.4 0.093 174.9 0.089	MANTE
06532+3826	COU 1877 2.2242	161.86 0.559	2009.12 46.7	0.594 93.1	175.4 1999.8319	190.6 0.293 195.4 0.272	MASON & HARTKOPF
5925 07148-1529	BU 575 AB 0.8933	402.96 0.855	1620.49 57.5	0.393 79.4	267.2 1998.203	286.1 0.508 287.4 0.498	HARTKOPF & MASON

NEW ORBITS (continuation)

ADS α 2000 δ	Name n	P a	T i	e ω	Ω (2000) Last ob.	2001 2002	Author
5958 07176+0918	STT 170 1.0141	355.00 1.595	2014.00 106.5	0.420 105.0	94.4 –	55.4 0.415 51.2 0.385	HEINTZ
7677 10121+2118	A 2146 3.7113	97.00 0.224	2002.00 33.0	0.255 110.0	33.1 –	139.1 0.142 146.5 0.143	HEINTZ
8639 12429+0516	A 1062 0.2849	1263.73 1.915	1953.73 85.0	0.983 262.7	23.0 1999.408	34.0 0.455 34.1 0.459	LING
8727 12597-0349	CHR 39 Aa 45.3296	7.84 0.079	1995.79 19.5	0.374 11.7	185.4 1996.1840	44.3 0.098 75.4 0.079	MASON & HARTKOPF
9071 13577+5200	A 1614 1.1960	301.00 0.981	1913.20 152.0	0.770 138.0	70.5 –	125.9 1.395 125.6 1.402	HEINTZ
10403 17136+1716	A 2087 AB 1.1984	300.41 0.464	1969.64 59.5	0.666 208.7	143.7 1997.2716	125.8 0.337 126.6 0.347	MANTE
10683 17394-1546	HU 181 1.7143	209.66 0.644	1912.36 73.5	0.676 340.5	229.3 1998.614	41.1 0.957 41.3 0.962	HARTKOPF & MASON
18068-4325	HJ 5014 0.8000	450.00 2.040	1854.70 123.1	0.650 282.7	85.8 1999.79	6.7 1.695 6.2 1.698	ARGYLE & ALZNER
11089 18078+2606	CHR 67 Aa 22.7396	15.83 0.192	1986.27 47.2	0.936 295.9	197.9 1997.4574	349.6 0.136 28.4 0.028	MASON & HARTKOPF
18280+0612	CHR 71 18.5330	19.42 0.073	1980.24 136.0	0.228 61.8	137.7 1997.4630	32.5 0.043 1.3 0.053	MASON & HARTKOPF
11680 18466+3821	HU 1191 24.5868	14.64 0.191	1996.64 149.3	0.462 303.9	84.0 1998.673	352.9 0.211 338.8 0.230	DOCOBO & LING
11897 18575+5814	STF 2438 1.5571	231.25 0.476	1882.73 149.0	0.900 43.9	219.8 1999.990	359.7 0.843 359.5 0.842	HARTKOPF & MASON
12033 19055+3352	Hu 940 3.3645	107.00 0.320	1940.40 128.5	0.775 23.0	34.0 –	195.8 0.522 195.3 0.519	HEINTZ

NEW ORBITS (continuation)

ADS α 2000 δ	Name n	P a	T i	e ω	Ω (2000) Last ob.	2001 2002	Author
22307+1758	COU 234 2.6866	134.00 0.333	1992.00 110.7	0.523 197.0	127.1 1995.931	214.8 0.075 199.9 0.081	DOCOBO & LING
22357+5413	MLR 3 3.2879	109.49 0.276	2211.22 64.5	0.645 318.9	177.8 1996.6962	217.4 0.114 223.9 0.112	MASON & HARTKOPF
22570+2441	COU 542 11.4723	31.38 0.182	1987.46 17.8	0.397 179.0	14.0 1998.679	1.9 0.250 7.1 0.253	DOCOBO & LING
23502+1940	COU 344 1.8680	192.72 0.239	2017.49 137.7	0.404 236.0	160.1 1996.5403	349.6 0.173 347.1 0.170	MASON & HARTKOPF

NEW DOUBLE STARS

Observed by: W. D Heintz with CCD at the 26-inch refractor. The primaries in these double stars are variable ones

STAR	BD	Mgn	Coord. 2000	Epoch	θ	ρ	nights
HEI 914	-	10.5 - 11.0	00 27.5 + 53 35	1999.98	217 ⁰	5"88	2
HEI 915	-	10.5 - 11.2	05 31.9 + 22 20	2000.06	93.9	6.80	5
HEI 916	-19 1728	10v - 12.5	07 10.6 - 19 50	2000.23	156.3	6.69	2
HEI 917	-	11.3 - 14.5	23 02.6 + 46 50	1999.94	147.6	10.93	4
HEI 918	+65 179	8.7 - 13.6	01 34.8 + 65 48	2000.06	257.0	2.95	3

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ANNOUNCEMENT

During the past several years, we have made significant changes in the Washington Double Star databases which we want to bring to your attention:

- Completion of the 5th Orbit Catalog. This project, begun by Charles Worley before his untimely death, has now reached a stage where we are making it available to the public. The Catalog consists of 1261 orbits of 1226 systems. An objective grading of orbits has been made, based on the scale established by Worley & Heintz in the 4th Catalog. This grading procedure is thoroughly explained. The orbit catalog also contains more accurate coordinates and photometry, multiple cross-references, catalog statistics, notes to individual systems, ephemerides, and GIF files of the orbits (with all published measures and their respective O-C lines plotted). While the online version will be continuously updated and maintained, a CD version of the 5th Catalog is currently being produced. To make sure you are on the mailing list for this CD, please send your current mailing address to “bdm@draco.usno.navy.mil” .
- It has been created a list of systems with well-defined orbits which may be useful for scale calibration. A link to this list is given in the Fifth Orbit Catalog.
- There are also a list of over 6,000 “neglected doubles” - binaries which have either never been confirmed or not been observed for over 20 years. All objects are brighter than $V=11$, with separations $\geq 3''$ and $\Delta m \leq 3$. Three observing lists (northern, equatorial, and southern) are linked to the WDS website
- The WDS is larger and more complete than ever. It consists of 84,084 systems (from 548,816 individual means). This is 7.7% more systems (and 22% more means) than contained in the WDS 1996.0. Changes include many contributions from speckle interferometry groups, double star measures from Hipparcos and Tycho-2, and contributions from the Webb Society. The largest single collection of data comes from the inclusion of the Washington Fundamental Catalogs (a collection of 144 astrophysical and transit circle catalogs) which contain over 36,000 double star measures. The online WDS continues to be updated on a nightly basis.
- The data request software has been completely re-written and now includes elements and ephemerides from the 5th Orbit Catalog as well as measures from the (previously unavailable) Delta-m Catalog. We also can provide custom made observing lists.
- The “Double Star Library” (the IAU Commission 26 web page) has moved from CHARA/GSU to the USNO.

For details on these and other changes (and anticipated changes) in the double star databases please inspect the main WDS web page:

<http://ad.usno.navy.mil/ad/wds/wds.html>

Brian D. Mason & William I. Hartkopf
U.S. Naval Observatory

The deadline for contributions to Information Circular No. 144 is:

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J. A. Docobo (oadoco@usc.es)

J. F. Ling (oafana@usc.es)

Fax: (81) 59 70 54

Observatorio Astronómico "R. M. Aller"

P. O. Box 197

<http://www.usc.es/astro>

Universidade de Santiago de Compostela

SPAIN

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