OBSERVATORIO ASTRONOMICO RAMON MARIA ALLER

INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26 (DOUBLE STARS)
INFORMATION CIRCULAR No. 143 (FEBRUARY 2001)

NEW ORBITS

ADS / RA 2000 DEC	Name / n (deg)	P (yr) / a (")	T / i (deg)	e / w (deg)	W(2000) / Last ob.	2001 / 2002	Author
277	A 647	320.00	1873.0	0.200	36.7	104.6	0.573 HEINTZ
00206+4531	1.1250	0.810	125.0	128.0	--	103.3	0.577
	COU 854	59.72	2004.09	0.161	62.5	79.6	0.117 MASON &
01014+3535	6.0280	0.139	152.7	6.8	1996.6909	72.1	0.117 HARTKOPF
884	A 2310	131.46	1930.27	0.444	122.7	316.5	0.326 DOCOBO
01048+0135	2.7385	0.249	117.7	326.2	1996.6963	315.9	0.328
	SLR 1 AB	195.0	2003.9	0.660	137.8	240.5	0.273 ARGYLE
01061-4643	1.8462	1.0600	134.3	294.3	1999.77	225.0	0.260 & ALZNER
2034	STT 43	472.44	1857.94	0.225	219.4	354.6	0.784 HARTKOPF
02407+2637	0.7627	1.317	114.1	116.9	1999.831	353.7	0.778 & MASON
3573	A 1303	142.25	2030.31	0.486	1.2	282.5	0.150 SCARDIA
04599+5327	2.5307	0.198	133.1	210.9	1996.866	279.8	0.147
3857	A 844	124.59	2007.04	0.363	181.3	186.3	0.159 HARTKOPF
05164-0139	2.8892	0.239	61.3	48.7	1999.818	189.3	0.154 & MASON
	RST 5225	29.35	1965.94	0.387	180.3	142.2	0.166 HARTKOPF
06159+0110	12.2658	0.167	19.8	205.4	1997.825	152.1	0.180 & MASON
	COU 1738	48.25	2008.01	0.583	12.7	169.4	0.093 MANTE
06502+3624	7.4611	0.108	50.0	268.2	1996.8718	174.9	0.089
	COU 1877	161.86	2009.12	0.594	175.4	190.6	0.293 MASON &
06532+3826	2.2242	0.559	46.7	93.1	1999.8319	195.4	0.272 HARTKOPF
5925	BU 575 AB	402.96	1620.49	0.393	267.2	286.1	0.508 HARTKOPF
07148-1529	0.8933	0.855	57.5	79.4	1998.203	287.4	0.498 & MASON
5958	STT 170	355.00	2014.00	0.420	94.4	55.4	0.415 HEINTZ
07176+0918	1.0141	1.595	106.5	105.0	--	51.2	0.385

7677	A 2146	97.00	2002.00	0.255	33.1	139.1	0.142	HEINTZ
10121+2118	3.7113	0.224	33.0	110.0	--	146.5	0.143	
8639	A 1062	1263.73	1953.73	0.983	23.0	34.0	0.455	LING
12429+0516	0.2849	1.915	85.0	262.7	1999.408	34.1	0.459	
8727	CHR 39 Aa	7.84	1995.79	0.374	185.4	44.3	0.098	MASON &
12597-0349	45.3296	0.079	19.5	11.7	1996.1840	75.4	0.079	HARTKOPF
9071	A 1614	301.00	1913.20	0.770	70.5	125.9	1.395	HEINTZ
13577+5200	1.1960	0.981	152.0	138.0	--	125.6	1.402	
10403	A 2087 AB	300.41	1969.64	0.666	143.7	125.8	0.337	MANTE
17136+1716	1.1984	0.464	59.5	208.7	1997.2716	126.6	0.347	
10683	HU 181	209.66	1912.36	0.676	229.3	41.1	0.957	HARTKOPF
17394-1546	1.7143	0.644	73.5	340.5	1998.614	41.3	0.962	& MASON
	HJ 5014	450.00	1854.70	0.650	85.8	6.7	1.695	ARGYLE
18068-4325	0.8000	2.040	123.1	282.7	1999.79	6.2	1.698	& ALZNER
11089	CHR 67 Aa	15.83	1986.27	0.936	197.9	349.6	0.136	MASON &
18078+2606	22.7396	0.192	47.2	295.9	1997.4574	28.4	0.028	HARTKOPF
	CHR 71	19.42	1980.24	0.228	137.7	32.5	0.043	MASON &
18280+0612	18.5330	0.073	136.0	61.8	1997.4630	1.3	0.053	HARTKOPF
11680	HU 1191	14.64	1996.64	0.462	84.0	352.9	0.211	DOCOBO
18466+3821	24.5868	0.191	149.3	303.9	1998.673	338.8	0.230	& LING
11897	STF 2438	231.25	1882.73	0.900	219.8	359.7	0.843	HARTKOPF
18575+5814	1.5571	0.476	149.0	43.9	1999.990	359.5	0.842	& MASON
12033	Hu 940	107.00	1940.40	0.775	34.0	195.8	0.522	HEINTZ
19055+3352	3.3645	0.320	128.5	23.0	--	195.3	0.519	
	COU 234	134.00	1992.00	0.523	127.1	214.8	0.075	DOCOBO
22307+1758	2.6866	0.333	110.7	197.0	1995.931	199.9	0.081	& LING
	MLR 3	109.49	2211.22	0.645	177.8	217.4	0.114	MASON &
22357+5413	3.2879	0.276	64.5	318.9	1996.6962	223.9	0.112	HARTKOPF
	COU 542	31.38	1987.46	0.397	14.0	1.9	0.250	DOCOBO
22570+2441	11.4723	0.182	17.8	179.0	1998.679	7.1	0.253	& LING
	COU 344	192.72	2017.49	0.404	160.1	349.6	0.173	MASON &
23502+1940	1.8680	0.239	137.7	236.0	1996.5403	347.1	0.170	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	theta	rho	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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5. BODEN A. F. et al.: "The Visual Orbit and Evolutionary State of 12 Bootis". Astrophys. J. 536 (2), 880 (2000).

6. BRUMMELAAR T. et al.: "Binary stars differential photometry using the adaptative optics system at Mount Wilson Observatory". Astron. J. 119 (5), 2403 (2000).

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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:

1. 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" .

2. 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.

3. 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 > 3. and Delta m < 3. Three observing lists (northern, equatorial, and southern) are linked to the WDS website

4. 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 astrographic and transit circle catalogs) which contain over 36,000 double star measures. The online WDS continues to be updated on a nightly basis.

5. 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.

6. 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

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

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