

## INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26

## (DOUBLE STARS)

## INFORMATION CIRCULAR No. 146 (FEBRUARY 2002)

## NEW ORBITS

ADS $\alpha$ 2000 $\delta$	Name n	P a	T i	e $\omega$	$\Omega$ (2000) Last ob.	2002 2003	Author(s)
492 00357+3429	HU 1011 0°7599	473 <sup>y</sup> 78 0"387	2278.94 134°6	0.479 260°9	155°7 1997.689	95°3 0"42 94.9 0.42	OLEVIC & JOVANOVIC
2616 03344+2428	STF 412 AB 0.6894	522.16 0.625	1911.62 157.2	0.679 238.1	13.0 2000.107	356.2 0.70 355.8 0.70	SCARDIA et al. (*)
04142+2813	V 773 Tau 2.8800	125.00 0.249	1998.62 63.8	0.643 299.4	101.1 2001.841	97.4 0.104 102.5 0.114	DOCBO et al. (**)
04148+2813	FO Tau 1.8557	194.00 0.219	2023.12 38.7	0.449 206.9	83.8 2001.841	208.7 0.144 211.7 0.143	DOCBO et al. (**)
04220+2658	FS Tau 1.3284	271.00 0.272	2035.73 19.7	0.168 138.0	18.0 2001.110	94.7 0.231 96.4 0.230	DOCBO et al. (**)
04271+2542	DF Tau 3.8793	92.80 0.134	1982.10 135.4	0.513 318.4	3.7 1996.923	271.3 0.109 267.7 0.112	DOCBO & TAMAZIAN
04295+2617	FW Tau 1.4876	242.00 0.180	2005.30 23.0	0.752 114.2	161.0 1997.208	226.0 0.048 239.6 0.045	DOCBO & TAMAZIAN
4647 06041+1101	J 335 1.4917	241.34 0.811	2095.90 116.3	0.765 318.9	81.5 1991.87	277.6 1.209 277.4 1.210	OLEVIC & JOVANOVIC
06073+2641	MCA 25 17.0438	21.12 0.100	1991.58 60.5	0.871 257.3	124.7 1995.9187	189.5 0.100 193.8 0.097	MANTE I
06073+2641	MCA 25 8.2846	43.45 0.109	2001.51 62.0	0.0.000 0.3	3.5 1995.9187	5.6 0.108 9.5 0.106	MANTE II
6584 08062+0201	J 420 1.6579	217.14 2.197	1955.41 105.1	0.843 134.8	173.8 1991.51	203.1 1.482 202.6 1.517	OLEVIC I

**NEW ORBITS (continuation)**

<b>ADS <math>\alpha 2000\delta</math></b>	<b>Name n</b>	<b>P a</b>	<b>T i</b>	<b>e <math>\omega</math></b>	<b><math>\Omega(2000)</math> Last ob.</b>	<b>2002</b>	<b>Author(s) 2003</b>
6584	J 420	168.45	1954.17	0.778	176.0	199.8 1.55	OLEVIC II
08062+0201	2.1372	1.921	104.0	136.4	1991.51	199.3 1.58	
	CHR 130	13.23	1985.53	0.252	162.8	164.3 0.091	OLEVIC
08403+1921	27.2218	0.100	82.5	281.9	1997.13	168.6 0.083	
	MCA 35	8.00	1998.35	0.677	30.6	265.8 0.059	MANTE
11159+1318	44.9944	0.042	36.7	65.0	1993.1969	279.4 0.056	
8387	A 1088	135.97	2011.68	0.896	22.8	343.0 0.118	OLEVIC &
12006+6911	2.6477	0.447	77.7	72.4	1993.20	346.5 0.119	JOVANOVIC
	COU 596	33.30	1988.99	0.956	54.0	207.0 0.183	DOCOBO
12409+2708	10.8108	0.108	132.1	40.3	1997.126	206.3 0.185	& LING
8943	A 1095	187.53	2049.28	0.471	109.1	272.0 0.391	OLEVIC &
13336+2944	1.9197	0.331	37.8	298.2	1999.41	273.0 0.388	JOVANOVIC
9047	BU 614 AB	196.72	2013.84	0.568	114.1	113.5 0.348	ZIRM
13539+1008	1.8300	0.586	107.7	77.8	1995.42	112.1 0.334	
10140	BU 953 AB	206.30	1898.50	0.425	142.6	80.0 0.24	SCARDIA
16366+6948	1.7450	0.407	111.9	258.8	1998.679	78.2 0.24	et al. (*)
	STA 1	6.88	1986.03	0.159	22.1	19.5 0.091	OLEVIC &
17088+6543	52.3325	0.096	66.8	272.2	1994.71	42.3 0.082	JOVANOVIC
	MLR 571	85.96	2004.31	0.417	1.0	248.9 0.077	ZIRM
17335+5734	4.1880	0.133	162.7	136.6	1997.1267	237.9 0.076	
	COU 1785	36.70	1997.07	0.362	54.2	278.3 0.028	DOCOBO
18035+4032	9.8093	0.135	80.3	171.5	1995.611	333.5 0.021	& LING
	COU 321	354.12	1995.28	0.776	142.2	283.4 0.044	DOCOBO
19180+2012	1.0166	0.484	101.0	188.4	1998.679	265.2 0.036	& LING
	DJU 4	862.97	2746.74	0.384	65.5	246.0 1.215	POPOVIC &
19535+2405	0.4172	1.183	80.7	96.3	1993.0	246.0 1.226	OLEVIC
13734	J 838	239.84	1967.51	0.784	103.0	114.2 6.029	OLEVIC
20210+1028	1.5010	7.451	77.6	258.1	1995.	114.5 6.67	

## NEW ORBITS (continuation)

<b>ADS <math>\alpha 2000\delta</math></b>	<b>Name n</b>	<b>P a</b>	<b>T i</b>	<b>e <math>\omega</math></b>	<b><math>\Omega(2000)</math> Last ob.</b>	<b>2002</b>	<b>Author(s) 2003</b>
14748	HO 152	227.60	2022.68	0.326	137.1	122.5 0.25	SCARDIA
21125+2821	1.5817	0.388	68.3	26.7	1998.679	123.8 0.26	et al. (*)
15236	HU 280	166.85	1814.98	0.075	132.4	345.5 0.18	SCARDIA
21423+0555	2.1576	0.231	53.6	177.9	1998.663	347.8 0.17	et al. (*)
22180-6249	I 20 AB 0.3663	982.79 1.157	1965.84 123.0	0.526 115.2	4.2 1996.820	194.5 0.592 193.8 0.598	LING
16116	HU 391 AB	200.34	2004.23	0.651	208.2	310.5 0.142	ZIRM
22375+2356	1.7969	0.751	59.1	120.7	1994.90	329.1 0.152	
16666	STF 3001 AB	1540.00	1678.51	0.409	66.3	220.2 3.268	DOCBO &
23186+6807	0.2337	3.084	9.1	31.7	2000.513	220.4 3.273	ANDRADE

(\*) SCARDIA, PRIEUR, KOECHLIN and ARISTIDI

(\*\*) DOCBO, TAMAZIAN and WOITAS

## ANNOUNCEMENTS

For a variety of reasons, there exist a large subset of measures contained in the WDS database which have not been published. To make these data available to the astronomical community we have made them accessible from the main WDS web page:

[<http://ad.usno.navy.mil/wds/wdstext.html#unpublished>](http://ad.usno.navy.mil/wds/wdstext.html#unpublished).

It is anticipated that this section will expand substantially as the data contained in the WDS are collated.

Nils Wieth-Knudsen measures:

In late 2001, Inger Wieth-Knudsen made available to the U.S. Naval Observatory the original measurement cards Dr. Nils Wieth-Knudsen made towards the end of his distinguished career. The original cards are cataloged in the James Melville Gillis Library of the U.S. Naval Observatory. The 471 measures recorded on these cards are grouped into 211 means of 59 systems, and include 33 measures of differential magnitude. Made with both 10 and 30 inch telescopes, the observation dates range from 1961.32 to 1989.34 and the measured separations range from 0.46 to 28.97 arcseconds. These measures are accessible at:

[<http://ad.usno.navy.mil/wds/unpublished/wieth-knudsen.html>](http://ad.usno.navy.mil/wds/unpublished/wieth-knudsen.html).

Walt Sanders measures:

Over the past years Walt Sanders has (and is) continuing his observing of primarily wide M dwarf stars with a filar micrometer on the Lick 36-inch refractor. This continues the work described in The Astronomical Journal (volume 71, page 1008; December 1966). As of January 1, 2002 it consisted of 219 measures averaged into 99 means of 69 pairs, with observation dates from 1996.32 to 1998.70 (thusfar, observations continue) and the measured separations range from 3.2 to 122.9. In three cases no separation is measured, but the position angle is. These measures are accessible at:

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

Also, in what (by some) could be more properly characterized as a labor of love, a web page has been constructed giving an overview of the history of double star research at the U.S. Naval Observatory. The history surveys the three major programs (micrometry, photography, and speckle interferometry) and also provides numerous pictures, statistics, a discussion of some binary discoveries, supplementary documents (obituaries, professional summaries, etc.), and notes to some of the more colorful characters that have been at the USNO over the years. This web page is:

<[http://ad.usno.navy.mil/wds/ds\\_history.html](http://ad.usno.navy.mil/wds/ds_history.html)>.

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

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“The Tycho Double Star Catalogue” by Fabricius C, Hg E, Makarov V V, Mason B D,  
Wycoff G L & Urban S E

I would like to draw your attention to the Tycho Double Star Catalogue, TDSC, which has just been accepted for publication by A&A, and the corresponding files will become available from CDS.

**Abstract:** We report the discovery of 13251 visual double stars, mostly with separations between 0.3 and 1 arcsec, from a dedicated re-reduction of the Tycho data from the star mapper of the ESA Hipparcos satellite. The new doubles are combined with 18160 WDS systems identified in the Tycho-2 Catalogue, and 1220 new Tycho-2 doubles, to form the Tycho Double Star Catalogue, TDSC, a catalogue of absolute astrometry and BT, VT photometry for 66219 components of 32631 double and multiple star systems. We also include results for 32263 single components for systems unresolved in TDSC, and a supplement gives Hipparcos and Tycho-1 data for 4777 additional components. The TDS thus contains a total of 103259 entries. Cross identifications are given to WDS, HD, Hipparcos and Tycho-2.

Claus Fabricius

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The deadline for contributions to Information Circular No. 147 is:

June 15th 2002

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