



Orbital elements of double stars: ADS 5514, 10235 and KUI 102

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INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26

(DOUBLE STARS)

INFORMATION CIRCULAR No. 149 (FEBRUARY 2003)

NEW ORBITS

ADS α 2000 δ	Name n	P a	T i	e ω	Ω (2000) Last ob.	2003 2004	Author(s)
2963 04100+8042	STF 460 0°9667	372 ^u 42 0"860	2053.68 31°0	0.124 118°5	82°9 1999.8915	136°5 0"72 137.8 0.72	SCARDIA
04119+2338	CHR 14 12.5122	28.77 0.231	1993.01 63.3	0.602 57.6	170.0 2000.7678	10.5 0.284 13.5 0.279	OLEVIC & CVETKOVIC
04123+0939	STT 74 1.9459	185. 0.510	2006.20 96.	0.390 314.	102.8 1993.10	113.6 0.154 111.8 0.174	ALZNER
3230 04269-2405	BU 311 0.6036	596.45 1.029	1980.98 62.0	0.532 345.0	124.3 1999.7655	140.9 0.48 142.0 0.48	SCARDIA & BRUZZI
3472 04505+0103	A 2622 2.2718	158.46 0.250	1988.44 123.8	0.022 163.4	79.5 1993.0924	249.3 0.24 247.9 0.24	SCARDIA
04464+4221	COU 2031 17.1021	21.05 0.166	1987.72 84.8	0.233 171.8	148.7 1998.109	154.6 0.119 159.1 0.076	MANTE
5514 06531+5927	STF 963 AB 0.8930	403.15 0.695	1959.58 64.6	0.526 167.5	48.2 1997.079	310.4 0.24 313.2 0.24	SCARDIA et al. (*)
07143-2621	FIN 323 1.8529	194.29 0.195	1972.81 73.1	0.577 50.6	151.4 1996.1752	330.0 0.192 330.4 0.196	OLEVIC & CVETKOVIC
8569 12291+3123	STT 251 0.6660	540.56 0.553	1894.33 33.4	0.855 96.0	165.1 1997.29	58.8 0.64 59.0 0.65	SCARDIA
14373-4608	FIN 318 Aa 3.9925	90.17 0.195	1975.81 113.5	0.703 85.3	0.6 1993.0989	138.3 0.159 136.6 0.158	OLEVIC & CVETKOVIC
14567-6247	FIN 372 9.9365	36.23 0.147	1992.96 115.2	0.398 191.4	7.3 1996.1814	21.3 0.156 18.2 0.170	MANTE

NEW ORBITS (continuation)							
ADS α 2000 δ	Name n	P a	T i	e ω	Ω (2000) Last ob.	2003 2004	Author(s)
9769 15396+7959	STF 1989 1.9655	183.16 0.530	1901.57 121.8	0.943 300.1	164.0 2001.3589	24.4 0.71 24.2 0.71	SCARDIA
16115+0943	FIN 354 5.8305	61.74 0.117	2026.00 93.5	0.127 234.2	82.9 1992.3075	274.1 0.031 270.3 0.044	OLEVIC & CVETKOVIC
10017 16212+2259	HU 481 3.1582	113.99 0.466	1998.30 143.3	0.595 7.0	10.9 1996.540	306.2 0.20 295.2 0.21	SCARDIA
10235 16518+2840	STF 2107 AB 1.3415	268.35 0.992	1895.66 28.6	0.570 251.2	43.5 2001.3427	99.1 1.38 99.6 1.38	SCARDIA et al. (*)
17018-5108	I 1306 5.7795	62.29 0.255	2011.00 83.6	0.670 107.7	19.5 1992.4550	17.1 0.224 17.8 0.213	OLEVIC & CVETKOVIC
17221+2310	COU 415 1.5231	236.36 0.532	2224.65 153.8	0.696 161.3	175.6 1995.4369	273.2 0.288 270.0 0.299	DOCOBO & LING
17221-7007	FIN 373 9.5640	37.64 0.144	1994.42 73.4	0.674 263.2	112.7 1992.4496	133.3 0.121 136.2 0.118	OLEVIC & CVETKOVIC
19089+3404	COU 1462 15.3912	23.39 0.313	2017.25 83.6	0.682 272.7	38.6 2000.7667	78.1 0.088 99.6 0.066	DOCOBO & LING
20216+1930	COU 327 AB 5.7361	62.76 0.137	2048.14 80.3	0.576 309.3	65.9 1994.7236	203.6 0.046 209.8 0.053	DOCOBO & LING
21001+0731	KUI 102 6.1307	58.72 0.290	1959.07 130.0	0.294 137.7	11.1 1999.7279	1.2 0.31 357.7 0.30	SCARDIA et al. (*)
16914 23401+1258	HU 1325 1.1292	318.80 0.860	1953.51 17.9	0.423 99.9	173.5 1995.86	17.7 0.79 18.8 0.80	SCARDIA

(*) SCARDIA, PRIEUR, KOEHLIN and ARISTIDI

PAPERS PUBLISHED IN 2002

1. ARGYLE, R. W.; ALZNER, A. & HORCH, E. P. : *Orbits for five southern visual binaries*. Astron. Astrophys. **384**, 171 (2002).
2. ARGYLE, R. W. & COURTOU, J-F. : *Micrometric measurements of double stars from 2001.0 to 2002.0*. The Webb Soc. Double Star Section Circ. **10**, 3 (2002).
3. BALEGA, I. I. et al.: *Speckle interferometry of nearby multiple stars*. Astron. Astrophys. **385**, 87 (2002).
4. BALEGA, Y. Y. et al.: *The Spectroscopic and Interferometric Orbit of Gliese 150.2*. Astron. Letters **28**(11), 773 (2002).
5. BARTKEVICCIUS, A. & GUDAS, A.: *GAIA and Population II Visual Binaries*. Astrophys. Space Science **280**, 125 (2002).
6. CARQUILLAT, J. M. et al.: *Contribution to the search for binaries among Am stars - III. HD 7119: a double-lined spectroscopic binary and a triple system*. Monthly Notice **336** (3), 1043 (2002).
7. CLOSE , L. M. et al.: *An Adaptive Optics Survey of M8M9 Stars: Discovery of Four Very Low Mass Binaries with at Least One System Containing a Brown Dwarf Companion*. Astrophys. J. Lett. **567** (1), L53 (2002).
8. DEMERS, H. et al.: *The Quadruple Wolf-Rayet System GP Cephei: Spectral Types, Masses, Mass-Loss Rate, and Colliding Winds*. Astrophys. J. **577** (1), 409 (2002).
9. DOMMANGET, J. & MORLET, G. *Composantes découvertes par Hipparcos dans des systèmes connus / Components discovered by Hipparcos in known systems*. Observations et Travaux. **54**, 2 (2002)
10. DOMMANGET, J. & NYS, O. : *Catalogue des Composantes d'étoiles doubles et multiples (CCDM) - Seconde édition / Catalogue of the components of Double and Multiple Stars (CCDM) - Second edition*. Observations et Travaux, **54**, 5 (2002)
11. DOUGLAS, R. G. et al.: *Tomographic Separation of Composite Spectra. X. The Massive Close Binary HD 101131* . Astrophys. J. **574** (2), 957 (2002).
12. FABRICIUS, C. et al.: *The Tycho double star catalogue*. Astron. Astrophys. **384**, 180 (2002).
13. FEKEL, F. C. et al.: *The quadruple system μ Orionis: Three-Dimensional orbit and physical parameters*. Astron. J. **123** (3), 1723 (2002).
14. FERNANDES, J.; MOREL, P. & LEBRETON, Y.: *A calibration of the 85 Peg binary system*. Astron. Astrophys. **392**, 529 (2002).

15. GONTCHAROV, G. A. & KIYAEVA, O. V. : *Astrometric Orbits from a Direct combination of Ground-Based Catalogs with the Hipparcos Catalog*. Astron. Letters **28**(4), 261 (2002).
16. GONTCHAROV, G. A. & KIYAEVA, O. V.: *Photocentric orbits from a direct combination of ground-based astrometry with Hipparcos - I. Comparison with known orbits*. Astron. Astrophys. **391**, 647 (2002).
17. GOULD, A. & SALIM, S.: *Searching for Failed Supernovae with Astrometric Binaries* . Astrophys. J. **572** (2), 944 (2002).
18. GRIFFIN, R.E.M. & GRIFFIN, R. F.: *Composite spectra Paper 11: α Equulei, an astrometric binary with an Am secondary* . Monthly Notice **330** (2), 288 (2002).
19. HAN, I. & GATEWOOD, G.: *A Precise Orbit Determination of chi 1 Orionis from Astrometric and Radial Velocity Data*. Publ. Astron. Soc. Pacific, **114**, 224 (2002).
20. HARVIN, J. A. et al.: *Tomographic Separation of Composite Spectra. VIII. The Physical Properties of the Massive Compact Binary in the Triple Star System HD 36486 (δ Orionis A)* . Astrophys. J. **565** (2), 1216 (2002).
21. HORCH, E. P. et al.: *Speckle observations of binary stars with the WIYN Telescope. II. Relative astrometry measures during 1998-2000*. Astron. J. **123** (6), 3442 (2002).
22. HORCH, E. P. et al.: *Speckle observations of binary stars with the WIYN Telescope. III. A partial survey of A, F and G dwarfs*. Astron. J. **124** (4), 2245 (2002).
23. LOWRANCE, P. J.; KIRKPATRICK, J. D. & BEICHMAN, C. A : *A Distant Stellar Companion in the ν Andromedae System*. Astrophys. J. Lett. **572** (1), L79 (2002).
24. MAKAROV, V. V.: *The Rate of Visual Binaries among the Brightest X-Ray Stars* . Astrophys. J. Lett. **576** (1), L61 (2002).
25. MARCHENKO, S. V. et al.: *Massive Binary WR 112 and Properties of Wolf-Rayet Dust* . Astrophys. J. Lett. **565** (1), L59 (2002).
26. MASON, B. D. et al.: *Speckle interferometry at the US Naval Observatory. VIII*. Astron. J. **124** (4), 2254 (2002).
27. MASSEY, P.; PENNY, L. R. & VUKOVICH, J. : *Orbits of Four Very Massive Binaries in the R136 Cluster*. Astrophys. J. **565** (2), 982 (2002).
28. MORLET, G.; SALAMAN, M. & GILI, R.: *Nice Observatory CCD measurements of visual double stars (4th series)*. Astron. Astrophys. **396**, 933 (2002).
29. PAARDEKOOPER, S. J. et al.: *On the variability of the visual binary WR 86 - WC7 with a β Cephei companion*. Astron. Astrophys. **384**, 1012 (2002).
30. PENNY, L. R. et al.: *Tomographic Separation of Composite Spectra. IX. The Massive Close Binary HD 115071* . Astrophys. J. **575** (2), 1050 (2002).

31. POURBAIX, D.: *Precision and accuracy of the orbital parameters derived from 2D & 1D space observations of visual or astrometric binaries*. Astron. Astrophys. **385**, 686 (2002).
32. POURBAIX, D. et al.: *Constraining the difference in convective blueshift between the components of α Centauri with precise radial velocities*. Astron. Astrophys. **386**, 280 (2002).
33. PRIEUR, J. L. et al.: *High Angular Resolution Observations of Late-Type Stars*. Astrophys. J. Suppl. Ser. **139** (1), 249 (2002).
34. PRIEUR, J. L. et al.: *Speckle Observations of Composite Spectrum Stars with PISCO in 1993-1998*. Astrophys. J. Suppl. Ser. **142** (1), 95 (2002).
35. RICHICHI, A. ; CALAMI, G. & STECKLUM, B.: *New binary stars discovered by lunar occultations. VI*. Astron. Astrophys. **282**, 178 (2002).
36. RUBINOV, A. V.; PETROVA, A. V. & ORLOV, V. V.: *Dynamical Evolution of Multiple Stars*. Astron. Reports **46** (11), 942 (2002).
37. SEYMOUR, D. M. et al.: *Binary star orbits. II. Preliminary first orbits for 117 systems*. Astron. J. **123** (2), 1023 (2002).
38. SHATSKY, N. & TOKOVININ, A. A.: *The mass ratio distribution of B-type visual binaries in the Sco OB2 association*. Astron. Astrophys. **382**, 92 (2002).
39. SILVESTRI, N. M.; OSWALT, T. D. & HAWLEY, S. L.: *Wide binary systems and the nature of high-velocity white dwarfs*. Astron. J. **124** (2), 1118 (2002).
40. SMEKHOV, M. G. : *Spectroscopic Components in the Multiple Systems ADS 10683 and ADS 11791*. Astron. Letters **28**(6), 393 (2002).
41. STERZIK, M. F. & TOKOVININ, A. A.: *Relative orientation of orbits in triple stars*. Astron. Astrophys. **384**, 1030 (2002).
42. TAMAZIAN, V. S. et al.: *Preliminary Orbits and System Masses for Five Binary T Tauri Stars*. Astrophys. J. **578** (2), 925 (2002).
43. THEVENIN, F. et al.: *Asteroseismology and calibration of α Cen binary system*. Astron. Astrophys. **392**, L9 (2002).
44. TOKOVININ, A. A. & SMEKHOV, M. G.: *Statistics of spectroscopic sub-systems in visual multiple stars*. Astron. Astrophys. **382**, 118 (2002).
45. TORRES, G. et al.: *Testing models of stellar evolution for metal-poor stars: an interferometric-spectroscopic orbit for the binary HD 195987*. Astron. J. **124** (3), 1716 (2002).

ANNOUNCEMENT

PUBLICATIONS BY J. DOMMANGET

a) Related to the preparation and publication of the second edition of the CCDM (See: Information Circular n 148)

- DOMMANGET, J. & NYS, O. -1994 *Catalogue des Composantes d'étoiles Doubles et Multiples (CCDM) - première édition / Catalogue of the components of Double and Multiple Stars (CCDM) - first edition*. Comm. de l'Obs. R. de Belg., Série A, 115, pp.26 (Released at CDS, Strasbourg - ref.: I -211).
- DOMMANGET, J. & NYS, O. -1994 *Erreurs relevées dans le catalogue Index 1961,0*. Bull. d'Inform. du Centre de Données Astron., Strasbourg, 45, pp.7-17.
- DOMMANGET, J. & NYS, O. -1995 *Catalogue d'Entrée HIPPARCOS (HIC): corrections et données complémentaires*. Bull. d'Inform. du Centre de Données Astron., Strasbourg, 46, pp.13-22.
- DOMMANGET, J. & NYS, O. -1996 *Catalogue d'Entrée HIPPARCOS (HIC): corrections et données complémentaires II*. Bull. d'Inform. du Centre de Données Astron., Strasbourg, 48, pp.19-33.
- DOMMANGET, J. - 1998 *Le catalogue Hipparcos et le catalogue Tycho - Analyse des résultats concernant les étoiles doubles visuelles*. Bulletin de la Commission des étoiles doubles de la SAF, 34, pp.11-20.
- DOMMANGET, J. - 2000 *The Hipparcos catalogue and the Tycho Catalogue - Analysis of the results for the visual double stars*. The Observatory, 120, n 1156, pp.202-210.
- DOMMANGET, J. & NYS, O. -2000 *Histoire d'un Catalogue, le CCDM*. Observations et Travaux, 52, pp. 26-31.
- DOMMANGET, J. & NYS, O. - 2000 *The visual double stars observed by the Hipparcos satellite*. Astronomy & Astrophysics, 363, pp. 991-994 (+ errata: 364, pp.927-930), (Released at CDS, Strasbourg - ref.: I -260).
- DOMMANGET, J. - 2000 *La situation du CCDM et sa complétude*. Bulletin de la Commission des étoiles doubles de la SAF, 36, 2000, pp. 36-40.
- DOMMANGET, J. - 2000/2001 *Apports de la Mission Hipparcos à la connaissance des binaires*. Ciel et Terre, 117, pp.148-154, 2001; Bulletin de la Commission des étoiles doubles de la SAF, 37, pp. 11-24.
- DOMMANGET, J. & MORLET, G. - 2002 *Composantes découvertes par Hipparcos dans des systèmes connus / Components discovered by Hipparcos in known systems*. Observations et Travaux, 54, pp.2-4.

- DOMMANGET, J. & NYS, O. - 2002 *Catalogue des Composantes d'étoiles doubles et multiples (CCDM) - Seconde édition / Catalogue of the components of Double and Multiple Stars (CCDM) - Second edition*. Observations et Travaux, 54, pp.5-29 (Released at CDS, Strasbourg - ref.: I -274).

b) General:

- DOMMANGET J. -1999 *Cette mesure d'étoile double est-elle vraiment utile?*. Bulletin de la Commission des étoiles doubles de la SAF, 35, pp.17-23; Ciel et Terre, 116 (3), pp. 34-37.
- DOMMANGET, J. - 2002 *Seeing? Comprends pas....* Ciel et Terre, 118, pp.14-17.

RECTIFICATION

In 1992 J. C Thorel resolved A(BD +60 274) component of STI 237 multiple system. It was named JCT2 Aa. According with the new designation made for this system in the WDS in 2002, this component should be JCT2 Fa, not JCT2 Aa.

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The deadline for contributions to Information Circular No. 150 is:

June 15th 2003

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