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Orbital elements of double stars: ADS 684 and ADS 11956

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INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26

(DOUBLE STARS)

INFORMATION CIRCULAR No. 158 (FEBRUARY 2006)

NEW ORBITS

ADS α 2000 δ	Name n	P a	T i	e ω	Ω (2000) Last ob.	2006 2007	Author(s)
463 00335+4006	HO 3 5.5784	64 ^y 53 0"388	1984.84 111°6	0.290 143°1	116°5 1996.691	169°5 0"205 163.1 0.225	CVETKOVIC
684 00504+5038	BU 232 AB 1.7914	200.96 0.531	1914.52 31.9	0.621 11.4	64.9 2006.025	250.5 0.85 250.9 0.86	SCARDIA et al. (*)
836 01015+6922	A 2901 0.2373	1517.34 0.990	1950.56 69.3	0.621 330.2	48.4 2001.8352	60.6 0.409 61.0 0.408	NOVAKOVIC
1345 01424-0645	A 1 1.0083	357.02 0.641	2205.28 50.8	0.299 1.9	76.1 2003.9600	249.7 0.818 250.1 0.819	NOVAKOVIC
1380 01461+6349	STF 148 0.5757	625.27 1.081	2013.18 67.6	0.689 121.6	147.9 1997.03	242.3 0.136 252.3 0.137	NOVAKOVIC
1729 02159+0638	A 2013 10.3866	34.66 0.346	2005.69 112.3	0.593 137.6	91.8 2004.9904	282.7 0.130 265.8 0.165	DOCOBO & TAMAZIAN
2799 03503+2535	STT 65 5.9016	61.00 0.411	1998.39 84.3	0.635 340.5	27.3 2004.9906	183.1 0.087 190.0 0.127	DOCOBO & LING
04163-6057	GLE 1 0.7500	480. 0.890	1990.90 34.1	0.630 35.4	92.3 2001.8923	184.4 0.329 187.8 0.336	DOCOBO & LING
3326 04362+0814	A 1840 AB 2.7998	128.58 0.222	2003.60 133.0	0.551 62.8	62.4 1996.869	332.5 0.071 317.5 0.075	CVETKOVIC
04374-0951	RST 3401 2.2583	159.41 0.354	1966.85 143.3	0.473 46.2	96.2 1991.25	273.6 0.420 272.5 0.424	NOVAKOVIC
3434 04478+5318	HU 612 1.1618	309.87 0.502	1903.76 40.3	0.424 200.9	3.8 2004.924	357.6 0.652 358.1 0.655	NOVAKOVIC

NEW ORBITS (continuation)

ADS α2000δ	Name n	P a	T i	e ω	Ω(2000) Last ob.	2006 2007	Author(s)
4020 05255-0033	A 848 0.6736	534.41 0.400	2425.78 66.3	0.315 17.2	19.8 2002.136	174.5 0.295 175.0 0.298	NOVAKOVIC
4229 05386+3030	BU 1240 AB 6.8266	52.74 0.154	1974.93 124.2	0.653 309.1	127.1 2004.095	333.9 0.207 332.3 0.209	RICA
4376 05491+6248	STF 3115 0.3685	976.83 1.350	2131.60 131.8	0.338 159.4	48.8 2003.12	338.6 0.790 337.9 0.787	NOVAKOVIC
5296 06404+4058	STF 945 0.1344	2679.33 2.307	4486.86 72.1	0.534 186.7	67.4 2002.19	328.9 0.471 329.7 0.471	NOVAKOVIC
5726 07036+3941	A 1959 11.3030	31.85 0.259	1988.36 63.3	0.008 147.7	172.3 2004.9911	166.3 0.255 171.4 0.261	DOCOBO & TAMAZIAN
6381 07479-1212	STF 1146 0.6311	570.44 2.409	2054.74 113.9	0.610 149.9	12.5 2003.253	347.4 1.231 346.6 1.200	NOVAKOVIC
6825 08277-0425	A 550 16.9589	21.23 0.099	1981.30 149.6	0.866 82.1	71.6 1996.867	195.9 0.111 190.8 0.125	CVETKOVIC
08585+3548	COU 1897 2.1818	165.00 0.255	1985.80 61.1	0.334 2.3	168.1 2004.9911	241.3 0.107 247.0 0.106	DOCOBO & TAMAZIAN
10059+3412	COU 1569 3.0769	117.00 0.237	1997.78 69.3	0.494 140.1	60.7 2004.9913	253.0 0.135 255.9 0.133	DOCOBO & TAMAZIAN
7730 10205+0626	STF 1426 AB 0.1630	2208.98 1.794	2011.15 61.1	0.484 189.4	127.0 2004.304	310.3 0.921 310.5 0.920	NOVAKOVIC
12064-6543	FIN 367 Aa 3.0963	116.27 0.222	2052.18 112.4	0.470 286.8	155.0 1993.0930	6.1 0.197 4.8 0.201	MANTE
9744 15416+1940	HU 580 AB 16.3860	21.97 0.210	2006.98 83.2	0.084 256.3	70.3 2001.5591	260.7 0.106 276.9 0.050	DOCOBO & LING
11524 18384+0850	HU 198 0.4104	877.14 0.822	2020.98 103.7	0.446 14.1	130.1 2004.2073	131.0 0.462 130.7 0.461	NOVAKOVIC
11956 19019+1910	STF 2437 0.4474	804.60 0.910	2132.95 131.0	0.478 212.1	114.9 2005.662	11.4 0.58 10.8 0.58	SCARDIA et al. (*)

NEW ORBITS (continuation)

ADS α2000δ	Name n	P a	T i	e ω	Ω(2000) Last ob.	2006 2007	Author(s)
21287+7034	LAB 6 Aa 4.3374	83. 0.195	1997.99 87.3	0.732 194.6	46.4 1998.777	44.2 0.123 44.5 0.140	ANDRADE
16731 23241+5732	STT 495 1.2000	300. 0.296	1935.2 71.0	0.980 142.4	138.6 2005.80	121.6 0.364 121.7 0.367	ALZNER

(*) SCARDIA, PRIEUR, PANSECCHI, ARGYLE & BASSO

PAPERS PUBLISHED IN 2005

1. ABT, H. A.: *Observed Orbital Eccentricities*. *Astrophys. J.* **629** (1), 507 (2005).
2. ALZNER, A.: *Micrometer Measurements from 2002.97 to 2004.94*. *The Webb Soc. Double Star Section Cir.* **13**, 6 (2005).
3. ANCONELLI, B. et al.: *Restoration of interferometric images - IV. An algorithm for super-resolution of stellar systems*. *Astron. Astrophys.* **431** (2), 747 (2005).
4. ARGYLE, R.: *Micrometer Measurements from 2004.0 to 2005.0*. *The Webb Soc. Double Star Section Cir.* **13**, 1 (2005).
5. BAKIS, V. et al.: *Astrometric Solution of the Multiple System Xy Leo*. *Astrophys. Space Science* **296** (1-4), 131. (2005).
6. BALEGA, I. I. et al.: *Orbits of new Hipparcos binaries. I*. *Astron. Astrophys.* **433** (2), 591 (2005).
7. BALEGA, Y. Y.; LEUSHIN, V. V. & WEIGELT, G.: *Atmospheric Elemental Abundances for the Components of the Multiple System ADS 11061. 41 Draconis*. *Astron. Reports* **49** (3), 217 (2005)
8. BALEGA, Y. Y.; LEUSHIN, V. V. & KUZNETSOV, M. K.: *Atmospheric Chemical Abundances of the Components of the Quadruple System ADS 11061. 40 Draconis*. *Astron. Reports* **49** (12), 984 (2005)
9. BODEN, A. F.; TORRES, G. & HUMMEL, C. A.: *Testing Stellar Models with an Improved Physical Orbit for 12 Bootis*. *Astrophys. J.* **627** (1), 464 (2005).
10. BODEN, A. F. et al.: *Dynamical Masses for Low-Mass PreMain-Sequence Stars: A Preliminary Physical Orbit for HD 98800 B*. *Astrophys. J.* **635** (1), 442 (2005).
11. BONNELL, I. A. & BATE, M. R.: *Binary systems and stellar mergers in massive star formation*. *Monthly Notices* **362** (3), 915 (2005)
12. BOUY, H. et al.: *A possible third component in the L dwarf binary system DENIS-P J020529.0-115925 discovered with the HUBBLE space telescope*. *Astron. J.* **129** (1), 511 (2005).
13. BRANHAM, R. L.: *Calculating the Apparent Orbit of a Double Star*. *Astrophys. J.* **622** (1), 613 (2005).
14. CARQUILLAT, J.-M.; PRIEUR, J.-L. & UDRY, S.: *Contribution to the study of F-G-K-M binaries. X. HD 54901, HD 120544 and HD 123280, three nearby F-type spectroscopic binaries*. *Astron. Nach.* **326** (1), 31 (2005).
15. CARQUILLAT, J.-M.; PRIEUR, J.-L. & GINESTET, N.: *Contribution to the study of composite spectra X. HD 3210/1, 27395, 39847, 70826 and 218257/8: five new spectroscopic binaries in multiple systems*. *Monthly Notices* **360** (2), 718 (2005)

16. DAVIS, J. et al.: *Orbital parameters, masses and distance to β Centauri determined with the Sydney University Stellar Interferometer and high-resolution spectroscopy.* Monthly Notices **356** (4), 1362 (2005)
17. FEKEL, F. C. & W. HENRY, G. W.: *Chromospherically active stars. XXIV. The giant single-lined binaries HD 37824, HD 181809, and HD 217188.* Astron. J. **129** (3), 1669 (2005).
18. FEKEL, F. C. et al.: *HD 166181 = V815 Herculis, a single-lined spectroscopic multiple system.* Astron. J. **129** (2), 1001 (2005).
19. FRASCA, A. & LANZA, A. F.: *Orbital period variation in close binaries from radial velocity data and magnetic activity cycles - II. HR 1099.* Astron. Astrophys. **429** (1), 309 (2005).
20. GATEWOOD, G.: *An astrometric study of the binary star α Ophiuchi.* Astron. J. **130** (2), 809 (2005).
21. GRIFFIN, R. F.: *Spectroscopic Binary Orbits from Photoelectric Radial Velocities - Paper 180: Zeta Aurigae.* The Observatory **125**, 1 (2005).
22. GRIFFIN, R. F.: *Spectroscopic Binary Orbits from Photoelectric Radial Velocities - Paper 181: HD 49635/6, HD 50730/1, HD 201563, and HD 203340 .* The Observatory **125**, 81 (2005).
23. GRIFFIN, R. F.: *Spectroscopic Binary Orbits from Photoelectric Radial Velocities - Paper 182: 22 Camelopardalis, HD 156051, HR 6890, and HD221757 .* The Observatory **125**, 134 (2005).
24. GRIFFIN, R. F.: *Spectroscopic Binary Orbits from Photoelectric Radial Velocities - Paper 183: HD 98031, HD 112573, and HD197913 .* The Observatory **125**, 253 (2005).
25. GRIFFIN, R. F.: *Spectroscopic Binary Orbits from Photoelectric Radial Velocities - Paper 184: HD 106383, HD 109070, HD 118157, and HD 121213 .* The Observatory **125**, 300 (2005).
26. GRIFFIN, R. F.: *The BY Dra Star HD 77191 is a Spectroscopic Binary, but GQ Leo may not be .* The Observatory **125**, 323 (2005).
27. GRIFFIN, R. F.: *Spectroscopic Binary Orbits from Photoelectric Radial Velocities - Paper 185: HD 15850, HR 2452, HR 5769, and HD 193468 .* The Observatory **125**, 367 (2005).
28. GRIFFIN, R. F.: *Radial-Velocity Observations That Just Missed a Periastron Passage of 34 Leonis.* The Observatory **125**, 388 (2005).
29. HÖNIG, S. F. & TSCHARNUTER, W. M.: *Preliminary orbital elements of four interferometric binary stars.* Astron. J. **129** (3), 1663 (2005).
30. HUBBER, D. A. & WHITWORTH, A. P.: *Binary star formation from ring fragmentation.* Astron. Astrophys. **437** (1), 113 (2005).

31. JANCART, S. et al.: *Astrometric orbits of S_{BO} stars*. *Astron. Astrophys.* **442** (1), 365 (2005).
32. KONACKI, M.: *Precision Radial Velocities of Double-lined Spectroscopic Binaries with an Iodine Absorption Cell*. *Astrophys. J.* **626** (1), 431(2005).
33. KÖNIG, B. et al.: *The young active binary star EK Draconis* *Astron. Astrophys.* **435** (1), 215 (2005).
34. KOUWENHOVEN, M. B. N. et al.: *The primordial binary population - I. A near-infrared adaptive optics search for close visual companions to A star members of Scorpius OB2*. *Astron. Astrophys.* **430** (1), 137 (2005).
35. LAMPENS, P. et al.: *A photometric study of the light variations of the triple system DG Leo*. *Astron. Astrophys.* **438** (1), 201 (2005).
36. LUHMAN, K. L.: *Discovery of a Wide, Low-Mass Binary System in Upper Scorpius*. *Astrophys. J. Lett.* **633** (1), L41 (2005).
37. MAKAROV, V. V. & KAPLAN, G. H.: *Statistical Constraints for Astrometric Binaries with Nonlinear Motion*. *Astron. J.* **129** (5), 2420 (2005).
38. MANSET, N.; BASTIEN, P. & BERTOUT, C.: *Polarimetric variation of binary stars. VI. Orbit-induced variations in the Pre-main-Sequence Binary AK Scorpii*. *Astron. J.* **129** (1), 480 (2005).
39. MAYER, P.: *Triple and Multiple Systems*. *Astrophys. Space Science* **296** (1-4), 113. (2005).
40. MUGRAUER, M. et al.: *Four new wide binaries among exoplanet host stars*. *Astron. Astrophys.* **440** (3), 1051 (2005).
41. NAZÉ, Y. et al.: *Optical spectroscopy of X-Mega targets V. The spectroscopic binary HD 93161 A and its visual companion HD 93161 B*. *Monthly Notices* **359** (2), 688 (2005).
42. OLEVIC, D. & CVETKOVIC, Z.: *Orbital Elements, Dynamical Masses and Parallaxes for Four Double and One Triple Systems*. *Serbian Astron. J.* **170**, 65 (2005).
43. OLEVIC, D. & CVETKOVIC, Z.: *Orbits of Six Binary Stars*. *Rev. Mex. A. A.* **41**, 17 (2005).
44. ORLOV, V. V. & ZHUCHKOV, R. Y.: *Analysis of the Dynamic Stability of Selected Multiple Stars with Weak Hierarchy*. *Astron. Reports* **49** (3), 201 (2005).
45. PAVLOVIĆ, R. & TODOROVIĆ, N.: *Orbits of Seven Edge-On Visual Double Stars*. *Serbian Astron. J.* **170**, 73 (2005).
46. PAVLOVIĆ, R. et al.: *CCD Measurements of Double and Multiple Stars at NAO Rozhen*. *Serbian Astron. J.* **171**, 49 (2005).
47. PHAN-BAO, N. et al.: *Discovery of a widely separated binary system of very low mass stars*. *Astron. Astrophys.* **439** (2), L19 (2005).

48. PLUZHNIK, E. A.: *Differential photometry of speckle-interferometric binary and multiple stars*. *Astron. Astrophys.* **431** (2), 587 (2005).
49. POURBAIX, D. et al.: *Candidate spectroscopic binaries in the Sloan Digital Sky Survey*. *Astron. Astrophys.* **444** (2), 643 (2005).
50. RAMM, D. J.; HEARNshaw, J. B. & SKULJAN, J.: *Spectroscopic Mass Ratios for Two Visual Binaries*. *The Observatory* **125**, 30 (2005).
51. RICHICHI, A.; PERCHERON, I. & KRISTOFOROVA, M.: *CHARM2: An updated Catalog of High Angular Resolution Measurements*. *Astron. Astrophys.* **431** (2), 773 (2005).
52. ROBERTS, L. C. et al.: *Adaptative optics photometry and astrometry of binary stars*. *Astron. J.* **130** (5), 2262 (2005).
53. RUTKOWSKI, A. & WANIAK, W.: *Speckle Observations of Binary Stars with a 0.5 m Telescope*. *Pub. Astron. Soc. of the Pacific* **117** (838), 1362 (2005).
54. SCARDIA, M. et al.: *Speckle observations with PISCO in Merate - I. Astrometric measurements of visual binaries in 2004*. *Monthly Notices* **357** (4), 1255 (2005).
55. SIEGLER, N. et al.: *Discovery of Two Very Low Mass Binaries: Final Results of an Adaptive Optics Survey of Nearby M6.0M7.5 Stars*. *Astrophys. J.* **621** (2), 1023 (2005).
56. SILVESTRI, N. M.; HAWLEY, S. L. & OSWALT, T. D.: *The chromospheric activity and ages of M dwarf stars in wide binary systems*. *Astron. J.* **129** (5), 2420 (2005).
57. SMITH, K. W. et al.: *Close binary companions of the HAeBe stars LkHalpHa 198, Elias 1, HK Ori and V380 Ori*. *Astron. Astrophys.* **431**(1), 307 (2005).
58. SÖDERHJELM, S. & DISCHLER, J.: *Eclipsing binary statistics - Theory and observation*. *Astron. Astrophys.* **442**(3), 1003 (2005).
59. STERZIK, M. F. et al.: *HD 34700 is a T Tauri multiple system*. *Astron. Astrophys.* **434** (2), 671 (2005).
60. TAMAZIAN, V. et al.: *Orbit, Dynamical Mass, and MK Type of Visual Binary WOR 2*. *Astron. J.* **130** (6), 2847 (2005)
61. TOKOVININ, A. et al.: *An old nearby quadruple system Gliese 225.2*. *Astron. Astrophys.* **441** (2), 695 (2005).
62. TOMKIN, J.: *Orbits of Hyades Multiple-Lined Spectroscopic Binaries - Paper 4: The Double-Lined System HDE 284414*. *The Observatory* **125**, 232 (2005).
63. UMBREIT, S. et al.: *The Decay of Accreting Triple Systems as Brown Dwarf Formation Scenario*. *Astrophys. J.* **623** (2), 940 (2005).
64. VALTONEN, M. et al.: *Dynamics of rotating triple systems: statistical escape theory versus numerical simulations*. *Monthly Notices* **364** (1), 91 (2005)

65. ZAPATERO, M. R. & MARTÍN, E. L.: *CCD Search for Wide Metal-Poor Binary Stars: Approaching the Metal-Depleted Substellar Limit*. Rev. Mex. A. A. (SC) **24**, 192 (2005).
66. ZHUCHKOV, R. Y. & ORLOV, V. V.: *Analysis of the Dynamical Instability of Several Multiple Stars with Weak Hierarchy*. Astron. Reports **49** (4), 274 (2005).

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