

Double Star Measures Using the Video Drift Method - VIII

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Abstract: Position angles and separations for 206 multiple star systems are presented using the video drift method.

Introduction

This is Paper VIII in our continuing series on double star measurements using the video drift method first proposed by Nugent and Iverson 2011. We continue our practice of preferentially measuring multiple star systems listed in the Washington Double Star Catalog (WDS) that have not been measured for a minimum of 10-15 years and have less than 10 measurements.

Methodology

The methods used in this paper are the same as the methods used in our previous paper (Nugent and Iverson, 2016). All measurements were made with a pair of Meade 14-inch LX-200 telescopes (focal length 3556 mm at f/10, scale factor 0.6"/pixel). Astronomical video data collection systems require a onetime aspect ratio calibration. The reader is referred to our previous discussion of the problem and calibration procedure (Nugent and Iverson, 2014).

For systems in which either the primary and/or secondary star is faint, image enhancement techniques were employed. Iverson used a variation of the drift method employing an integrating video camera (Iverson and Nugent 2015) while Nugent used a Collins I³ image intensifier with a non-integrating camera. The faintest system measured in Table 1 had primary/secondary magnitudes of +10.8, +15.5. Twelve systems had WDS magnitudes in the +14.0 to +15.5 range.

Acknowledgements

This research makes use of the *Washington Double Star Catalog* maintained at the US Naval Observatory.

References

- Iverson, E. and Nugent, R., 2015, *Journal of Double Star Observations*, **11**, 91 - 97.
- Nugent, R. and Iverson, E., 2011, *Journal of Double Star Observations*, **7**, 185 - 194.
- Nugent, R. and Iverson, E., 2014, *Journal of Double Star Observations*, **10**, 214 - 222.
- Nugent, R. and Iverson, E., 2016, *Journal of Double Star Observations*, **12**, 511 - 518.

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Table 1. Results of 206 double stars using the video drift method.

WDS	Designation	PA°	σ -PA	Sep"	σ -Sep	Date	(x,y) pairs	Mag Pri	Mag Sec	Drifts	Nights
00057+1750	STF3061	148.6	1.0	7.8	0.13	2015.918	3198	8.40	8.51	5	1
00099+0827	STF 4	276.0	1.5	5.2	0.17	2015.918	2291	9.51	9.60	8	1
00174+1631	STF 20	233.3	0.7	11.9	0.14	2015.918	3112	8.87	9.67	5	1
00305+2208	HJ 1027	218.2	0.4	18.4	0.12	2015.918	3225	10.41	10.51	5	1
00310-1005	HJ 1981A,BC	88.7	0.1	78.4	0.15	2015.956	2522	6.91	8.43	5	1
01178-1220	STF 110	352.8	0.9	7.0	0.10	2015.915	6321	8.76	9.18	10	2
01220-0927	HJ 2039AB,C	244.7	0.1	51.4	0.11	2015.956	5538	9.17	10.64	10	2
01256+3133	STT 30AC	105.6	0.1	56.7	0.12	2015.918	3131	8.09	8.06	5	1
01295+3054	BUP 20	257.6	0.1	87.1	0.13	2015.918	2854	8.06	9.79	5	1
01301-1215	GAL 44	5.0	2.3	8.8	0.28	2015.718	9022	10.15	11.6	2	1
01307-1227	GAL 309	343.3	0.6	14.0	0.13	2015.718	3093	9.27	10.3	5	1
01348+2935	MLB1058AC	35.6	0.1	79.8	0.12	2015.918	3107	10.23	10.06	5	1
01413+1007	STF 146	306.3	0.3	24.2	0.14	2015.956	2978	8.87	9.04	5	1
01434-0705	STF 150	196.1	0.3	35.7	0.18	2015.956	3062	7.73	8.19	5	1
01434-1127	GAL 312	326.2	0.2	43.5	0.15	2015.718	2952	9.15	10.74	5	1
01510+2107	STF 175AB	360.0	0.1	28.0	0.09	2015.956	6637	8.99	9.36	8	1
02042-1039	GAL 318	281.5	0.3	32.6	0.18	2015.915	2863	11.25	11.47	5	1
02097+2021	STF 221AB	145.2	0.9	8.5	0.12	2015.956	3249	8.13	9.45	5	1
02147+3024	STF 232	66.2	1.3	6.5	0.12	2015.918	3580	7.82	7.90	5	1
02233+1525	AG 38AB	260.7	0.2	34.8	0.14	2015.956	2950	8.87	9.41	5	1
02391+1430	BU 1315AC	57.9	0.1	83.0	0.15	2015.956	2612	8.66	9.73	5	1
02410+3450	AG 44	287.5	0.8	9.9	0.12	2015.918	3688	9.64	9.7	5	1
02497+1209	AG 54AB	2.0	0.2	29.6	0.14	2015.956	3150	9.59	9.75	5	1
02535-1151	GAL 79	353.7	1.4	5.6	0.16	2015.915	3185	10.59	10.81	5	1
03003+1432	AG 60	159.4	1.1	6.4	0.12	2015.956	3139	9.56	10.0	5	1
03018+1051	STF 338	201.9	0.4	19.6	0.12	2015.956	3071	9.20	9.49	5	1
03280+2028	STF 394AB	163.2	1.2	6.9	0.12	2015.956	3261	7.05	8.16	5	1
03345+1948	STF 414	185.9	0.9	7.5	0.13	2015.956	3249	8.15	8.28	5	1
03463-1235	GAL 355	346.5	0.3	31.9	0.18	2015.912	3052	10.57	11.81	5	1
03597-1301	GAL 361	329.9	0.3	32.7	0.17	2015.912	3005	11.42	11.62	5	1
04140-1222	GAL 364	46.2	0.5	20.9	0.16	2015.912	3010	11.36	11.43	5	1
04198+2344	STF 523AB	163.8	0.7	10.4	0.13	2015.956	3220	7.58	9.86	5	1
04233-0500	HJ 342AB	234.4	0.5	17.3	0.16	2015.915	2879	7.76	9.58	5	1
04233-0500	HJ 342AC	79.8	0.6	22.3	0.23	2015.912	8530	7.76	13.5	2	1

Table 1 continues on next page.

Double Star Measures Using the Video Drift Method - VIII

Table 1 (continued). Results of 206 double stars using the video drift method.

WDS	Designation	PA°	σ -PA	Sep"	σ -Sep	Date	(x,y) pairs	Mag Pri	Mag Sec	Drifts	Nights
04240+2418	STF 534AB	289.1	0.3	28.9	0.13	2015.956	3146	6.36	7.94	5	1
04352-0944	STF 570	259.8	0.6	12.8	0.14	2015.915	3038	6.71	7.64	5	1
04433-0937	STF 588AC	267.8	0.2	45.4	0.15	2015.915	2770	8.13	10.62	5	1
05301+2933	STF 719AC	352.6	0.6	14.2	0.14	2015.956	3513	7.50	9.39	5	1
05413+2929	STF 764	14.5	0.3	25.7	0.13	2015.956	3490	6.38	7.08	5	1
08221-0348	ABH 71AD	234.3	0.2	47.5	0.19	2015.247	8256	10.88	13.27	3	1
08221-0348	ABH 71AE	188.9	0.2	66.9	0.21	2015.247	9916	10.88	15.38	3	1
08221-0348	ABH 71AF	29.2	0.5	36.8	0.30	2015.247	8133	10.88	15.49	2	1
08221-0348	HJ 90AB	157.0	0.6	15.8	0.15	2015.247	3005	10.88	11.76	5	1
08221-0348	HJ 90AC	345.9	0.3	42.5	0.18	2015.247	3003	10.88	11.60	5	1
09571-0121	A 1766AB,C	1.8	0.5	17.3	0.16	2015.247	10673	8.96	14.31	4	1
15353-0545	BRT 458	30.2	3.1	4.6	0.27	2016.501	1473	11.62	12.2	2	1
15370-2748	BRT3022	197.6	2.1	5.4	0.19	2016.501	1627	11.98	13.11	2	1
15382-3059	HJ 2787	134.7	1.5	15.3	0.39	2016.501	1715	10	10.5	2	1
15383-2901	SWR 179	78.4	2.0	15.4	0.48	2016.501	1649	12.2	12.4	2	1
15385-1556	UC 3035	252	1.9	22.2	0.73	2016.501	1472	14.36	14.54	2	1
15399-2235	ARA1808	240.5	2.3	13.2	0.45	2016.501	1589	12.4	12.8	2	1
15404-1919	ARA 702	97.1	2.4	7.9	0.34	2016.501	1558	12.5	13.4	2	1
15412-2603	J 3235	336.6	1.7	10.7	0.30	2016.501	1677	11.38	11.3	2	1
15414-0647	J 3251AB	65.4	0.8	40.1	0.47	2016.501	1359	11.07	12.64	2	1
15418-2607	J 1614	342.2	1.7	10.4	0.32	2016.501	1676	11.5	11.8	2	1
15420-3043	HJ 2789AB	303.4	0.8	29.3	0.39	2016.501	1627	9.48	10.65	2	1
15420-3043	DAW 211BC	94	2.8	7.2	0.47	2016.501	835	10.65	13.3	1	1
15452-2239	SWR 181	108.8	0.7	31.2	0.37	2016.501	1500	10.93	11.36	2	1
15455-2830	CPO 442	357.5	1.3	11.4	0.35	2016.501	1736	10.62	10.65	2	1
15457-1443	HU 478AC	261.2	0.4	63.8	0.43	2016.501	1310	9.8	11.32	2	1
15457-1511	GLP 11	203.9	0.9	19.9	0.28	2016.501	2302	10.84	11.58	3	1
15506-2043	RSS 387	209.3	1.1	22.5	0.41	2016.501	1552	10.23	12.86	2	1
15510-2503	B 2792	62.7	1.0	13.0	0.25	2016.501	1556	9.29	13.2	2	1
15511+0538	UC 214	177.2	1.2	16.4	0.49	2016.501	1490	13.73	14.35	2	1
15521-0554	HJ 1279	181.7	0.7	17.4	0.36	2016.501	2001	10	13	3	1
16002+1412	AG 348BC	170.2	0.2	40.5	0.12	2015.529	3152	10.39	10.41	5	1
16002+1412	CLL 9AB	66.1	0.1	63.6	0.13	2015.529	2741	8.99	10.39	5	1
16002+1412	CLL 9AC	102.2	0.1	66.4	0.13	2015.529	2688	8.99	10.74	5	1
16004+1437	STF1995	318.5	0.5	14.2	0.12	2015.529	3083	9.28	10.1	5	1
16107-1947	J 2665AB	311.8	2.3	6.6	0.28	2016.499	1577	11.8	13.3	2	1
16107-1947	J 2665AC	81.7	1.2	17.9	0.38	2016.499	1558	11.8	12.23	2	1

Table 1 continues on next page.

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Table 1 (continued). Results of 206 double stars using the video drift method.

WDS	Designation	PA°	σ -PA	Sep"	σ -Sep	Date	(x,y) pairs	Mag Pri	Mag Sec	Drifts	Nights
16116-2050	UC 3130	29.4	0.9	19.9	0.28	2016.499	1601	11.43	11.82	2	1
16122-2355	B 2801AB	185.6	0.9	12.2	0.22	2016.499	1624	8	14	2	1
16148-2114	J 1590	245.9	2.0	9.4	0.32	2016.499	1601	10.5	10.6	2	1
16164-2503	HDS2300	176.6	1.1	13.9	0.28	2016.499	1609	8.43	11.73	2	1
16167-2514	B 2806	34.9	0.8	12.6	0.20	2016.499	1614	8.92	13.1	2	1
16202-1825	HLD 128AC	339.1	0.2	94.7	0.28	2016.499	1417	9.32	13.12	2	1
16224-3115	FAB 14	271.2	0.6	18.2	0.35	2016.499	1654	8.39	11.75	2	1
16229-3104	HJ 4847	223.5	0.9	15.3	0.25	2016.499	1719	9.66	9.82	2	1
16231-1845	UC 3160	53.1	0.2	68.9	0.34	2016.499	1384	9.68	10.68	2	1
16260-1407	LMP 13AB,C	260.6	0.2	91.9	0.36	2016.499	1188	10.06	11.88	2	1
16290-0104	BAL 888	169	1.2	19.6	0.40	2016.501	1473	10.38	12.74	2	1
16299-2145	ARA1494	86.2	1.9	8.8	0.39	2016.501	1570	12.2	13.7	2	1
16300-2225	ARA1811	146.8	1.7	12.9	0.39	2016.501	1600	12.45	12.8	2	1
16306-1432	LDS4673	90.1	0.3	74.9	0.58	2016.501	1234	9.97	14.43	2	1
16307-2127	JKS 11	326.6	0.6	25.2	0.27	2016.499	1558	10.39	11.18	2	1
16308-1308	STF2050AC	294.9	0.1	140.7	0.40	2016.501	924	8.33	9.32	2	1
16308-1308	SIN 126AD	44.2	0.2	81.3	0.33	2016.501	1273	9.72	12.92	2	1
16310-1953	UC 3180	358	0.9	33.7	0.66	2016.499	1570	13.4	13.91	2	1
16310-2046	UC 3181	31.1	2.4	19.0	0.73	2016.501	1543	11.8	14.4	2	1
16323+0009	BU 9013AB	114	3.4	10.0	0.69	2016.501	1459	12.7	14	2	1
17199-1121	STF 2148	219.7	1.4	5.7	0.13	2015.562	3133	9.18	9.88	5	1
17348-1115	HJ 4964	224.2	0.2	54.9	0.16	2015.562	2807	5.54	9.88	5	1
17362+0637	STF2188	202.8	1.4	5.5	0.13	2015.529	3065	9.22	9.98	5	1
17593-0651	STF2250AB	343.4	1.1	7.8	0.14	2015.562	3075	8.79	9.24	5	1
18004-1521	FOX 212	9.1	0.8	20.1	0.30	2016.499	1539	9.68	11.83	2	1
18004-2258	ARA1834	223.7	1.1	15.1	0.30	2016.499	1611	9.91	12.8	2	1
18006-1506	FOX 213	318	1.2	12.5	0.28	2016.499	1529	10.59	12.4	2	1
18009-1858	HJ 2815	103.5	0.9	14.4	0.24	2016.499	1521	9.16	12.2	2	1
18011-1804	A 2256AB,E	123.8	0.8	21.9	0.37	2016.499	1495	8.4	12.4	2	1
18011-2252	ARA1835	303.5	2.5	9.8	0.46	2016.499	1611	12.6	12.8	2	1
18013-1522	FOX 214AB	252.8	0.6	30.3	0.40	2016.499	1413	8.61	11.39	2	1
18015-2221	ARA1836	19.6	2.0	8.4	0.32	2016.499	1634	11.4	12.4	2	1
18018-2208	ARA1837	289.3	1.1	12.8	0.27	2016.499	1584	11.1	12.2	2	1
18021-2820	BRT3055	47.9	2.7	4.9	0.31	2016.499	1687	12.62	12.61	2	1
18022-2318	B 2851	155.7	1.3	10.5	0.24	2016.499	1641	10.2	11.4	2	1
18028+0137	BU 635AB	301.2	0.1	68.7	0.14	2016.592	2610	8.63	9.93	5	1

Table 1 continues on next page.

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Table 1 (continued). Results of 206 double stars using the video drift method.

WDS	Designation	PA°	σ -PA	Sep"	σ -Sep	Date	(x,y) pairs	Mag Pri	Mag Sec	Drifts	Nights
18030-2233	ARA1838AB	137.5	2.1	8.3	0.47	2016.501	1595	10.95	11.8	2	1
18030-2233	ABH 93AE	159.1	0.9	40.7	0.62	2016.501	1549	10.95	14.43	2	1
18030-2233	ABH 93AF	185.8	0.5	66.0	0.48	2016.501	1580	10.95	12.68	2	1
18030-2233	ABH 93AG	221.6	1.3	24.9	0.50	2016.501	1543	10.95	13	2	1
18030-2233	ABH 93AH	255.3	1.1	28.4	0.58	2016.501	1497	10.95	12.9	2	1
18030-2233	ABH 93AI	233.8	0.6	73.3	0.66	2016.501	1348	10.95	15.11	2	1
18030-2233	ABH 93AJ	283.6	0.3	104.1	0.49	2016.501	1191	10.95	13.71	2	1
18039-1832	ARA 450	65.8	1.7	8.0	0.26	2016.501	1555	9.11	11.69	2	1
18045-1505	HJ 5013	333.9	1.5	12.7	0.31	2016.501	1536	10.47	12.5	2	1
18060+0434	STTA165AB	141.1	0.1	66.7	0.19	2016.641	2724	8.51	8.52	5	1
18162+0434	STTA167	73.9	0.2	52.7	0.15	2016.641	2671	8.00	9.07	5	1
18286+0451	SLE 179AD	209.5	0.0	251.7	0.20	2016.641	9615	7.68	12.22	2	1
18286+0451	SLE 179AE	225.7	0.0	304.1	0.29	2016.641	9626	7.68	12.41	2	1
18286+0451	SLE 179AF	232.6	0.0	288.5	0.22	2016.641	9625	7.68	12.83	2	1
18286+0451	STTA168AB	161.5	0.2	47.2	0.15	2016.641	2950	7.68	8.80	5	1
18286+0451	STTA168AC	217.1	0.0	244.2	0.13	2016.641	3829	7.68	9.34	8	1
18423-0903	H 5 36AC	130.9	0.2	52.3	0.17	2015.562	2800	4.73	10.56	5	1
18487-0600	STF2391AB	331.6	0.2	37.7	0.17	2016.666	2972	6.52	9.59	5	1
18487-0600	STF2391BC	124.3	0.8	14.4	0.19	2016.666	9051	9.59	14.3	2	1
18490-0828	ABH 105AD	156.5	0.3	43.8	0.22	2016.666	9331	7.81	12.62	2	1
18490-0828	ABH 105AE	275.4	0.2	72.2	0.23	2016.666	9160	7.81	12.93	2	1
18490-0828	STF2388AB	344.0	0.2	53.6	0.17	2016.666	2962	7.81	10.94	5	1
18490-0828	STF2388BC	17.6	0.4	21.1	0.16	2016.666	3008	10.94	11.24	5	1
18497-0555	H 6 50AB	358.2	0.5	24.8	0.22	2016.666	9030	6.15	12.5	2	1
18497-0555	H 6 50AC	170.7	0.1	111.8	0.18	2016.666	2877	6.15	8.23	5	1
18509-0821	J 1638	263.8	1.0	7.9	0.14	2015.562	3022	11.20	11.2	5	1
19249+0150	H 6 47	94.7	0.1	96.5	0.16	2016.679	2294	7.99	9.03	5	1
19305+1135	AG 384	159.7	0.4	22.5	0.14	2016.603	3047	9.91	9.43	5	1
19313-0207	STF2535AC	296.5	0.3	24.4	0.16	2015.704	2558	7.22	10.51	5	1
19354+1156	AG 386	315.5	0.3	27.7	0.16	2016.660	2931	8.13	10.48	5	1
19395+0431	BAL2949	237.5	0.4	17.9	0.14	2016.641	2946	10.55	11.01	5	1
20014+0657	STF2612AB	54.0	0.1	42.5	0.11	2016.641	5648	8.29	9.87	10	2
20014+0657	STF2612BC	40.8	0.4	26.9	0.17	2016.641	18135	9.9	12.3	10	2
20038+1436	HJ 1469	215.1	0.2	17.6	0.07	2016.660	9196	10.08	10.26	15	3
20048+1554	STT 397	179.2	0.2	46.1	0.15	2016.603	3178	7.40	9.60	5	1
20066+0735	GMC 6AD	315.6	0.2	33.8	0.12	2016.660	25403	7.12	13.9	6	2

Table 1 continues on next page.

Double Star Measures Using the Video Drift Method - VIII

Table 1 (continued). Results of 206 double stars using the video drift method.

WDS	Designation	PA°	σ -PA	Sep"	σ -Sep	Date	(x,y) pairs	Mag Pri	Mag Sec	Drifts	Nights
20066+0735	STTA198AC	173.6	0.2	36.1	0.14	2016.660	18110	7.12	13.4	4	2
20087+1223	J 1338	72.8	0.8	10.0	0.14	2016.584	9047	11.75	12.3	2	1
20123+1524	CHE 191AB	334.2	0.6	11.9	0.11	2016.592	3100	9.13	9.65	5	1
20123+1524	CHE 191AC	336.0	0.8	18.1	0.25	2016.592	9355	9.13	11.5	2	1
20126+1506	CHE 194	223.3	0.5	22.2	0.21	2016.592	9131	10.48	12.82	2	1
20127+1508	CHE 196	51.9	0.8	11.5	0.14	2016.660	18280	11.1	12.4	4	2
20132+1541	BKO 532BC	185.5	1.2	7.1	0.13	2016.660	18132	11.57	12.5	4	2
20132+1541	CHE 207AB	263.3	0.3	23.5	0.12	2016.660	18093	10.13	11.57	4	2
20136+1613	CHE 214	333.6	0.4	26.5	0.21	2016.666	9084	8.29	13.09	2	1
20139+1441	CHE 221	7.0	0.3	17.5	0.10	2016.660	6272	9.98	10.41	10	2
20156+1526	CHE 246AC	87.0	0.5	15.9	0.14	2016.660	18162	8.85	11.0	4	2
20156+1526	CVP 1AD	340.1	0.2	39.7	0.12	2016.660	18243	8.85	12.75	4	2
20170+1538	CHE 269	285.0	0.3	26.8	0.14	2016.666	2977	8.97	9.92	5	1
20188+1442	CHE 300	318.9	0.3	40.4	0.19	2016.666	9081	9.39	9.93	2	1
20196+1300	STF2664	321.3	0.3	27.5	0.15	2016.641	3011	8.07	8.34	5	1
20222+1623	ABH 139AD	142.5	0.1	93.0	0.14	2016.666	18177	8.99	11.67	4	2
20222+1623	GUI 31AC	129.4	0.2	37.0	0.11	2016.666	5904	8.99	10.60	10	2
20222+1623	STF2670AB	153.5	0.2	30.0	0.10	2016.666	6054	8.99	9.19	10	2
20222+1623	STF2670BC	77.7	1.2	15.6	0.28	2016.666	772	9.19	10.60	5	1
20227+1320	STF2673AC	99.6	0.1	76.5	0.15	2016.641	2526	8.29	8.60	5	1
20227+1320	STF2674CD	1.0	0.5	15.0	0.22	2016.641	9152	8.60	11.43	2	1
20308+1347	STF2688	174.6	0.8	7.7	0.11	2016.677	6111	9.35	10.41	10	2
20310+2036	BU 363AC	206.4	0.2	55.9	0.19	2016.679	9034	6.18	13.0	2	1
20312+1116	HJ 269AD	107.7	0.3	23.0	0.12	2016.677	18074	7.12	12.1	4	2
20329+1357	A 3108AB,D	340.0	0.1	98.4	0.16	2016.641	2875	9.12	10.02	5	1
20368+1444	STF2703AB	289.8	0.3	25.3	0.14	2016.677	2988	8.35	8.42	5	1
20368+1444	STF2703AC	233.5	0.1	77.8	0.16	2016.677	2693	8.35	8.76	5	1
20368+1444	STF2703AD	346.7	0.2	84.7	0.23	2016.677	9032	8.35	12.78	2	1
20368+1444	STF2703BC	215.2	0.1	67.0	0.16	2016.677	2854	8.42	8.76	5	1
20386+0950	OL 218	274.2	1.2	5.4	0.13	2016.718	13962	10.7	11.2	9	2
20409+1035	STF2713	62.4	1.0	5.0	0.10	2016.718	5106	9.80	9.80	10	2
20411+2133	HJ 922	313.3	0.9	7.5	0.12	2016.679	3257	9.76	9.79	5	1
20419+2043	BU 673AC	162.6	0.1	102.6	0.13	2016.679	3015	7.46	8.07	5	1
20436+1944	STF2722	305.7	1.0	7.4	0.13	2016.679	3198	8.32	8.94	5	1
20450+1244	BU 64AD	117.0	0.1	64.3	0.13	2016.592	2653	9.14	11.06	5	1
20450+1244	D 32CD	14.9	0.1	60.8	0.13	2016.592	2995	8.17	11.06	5	1
20450+1244	STTA209AC	154.7	0.1	97.2	0.12	2016.592	2736	9.14	8.17	5	1
20585+1626	STF2738AB	253.8	0.4	15.0	0.09	2016.666	5729	7.51	8.57	9	2

Table 1 concludes on next page.

Double Star Measures Using the Video Drift Method - VIII

Table 1 (conclusion). Results of 206 double stars using the video drift method.

WDS	Designation	PA°	σ -PA	Sep"	σ -Sep	Date	(x,y) pairs	Mag Pri	Mag Sec	Drifts	Nights
20585+1626	STF2738AC	103.8	0.03	209.4	0.10	2016.666	2698	7.51	8.14	8	2
20585+1626	STF2738BC	101.9	0.03	222.7	0.11	2016.666	2504	8.57	8.14	8	2
21033+1259	HJ 272	253.1	0.8	11.3	0.15	2016.718	16704	9.71	13.6	6	2
21105+2227	STF2769AB	298.8	0.4	18.0	0.13	2016.660	3217	6.65	7.42	5	1
21289+1105	STF2799AC	331.0	0.05	135.9	0.12	2016.718	5100	7.37	10.20	10	2
21442+0953	S 798AC	317.7	0.1	144.6	0.14	2016.718	4555	2.53	8.74	10	2
21458+1545	STTA224	359.6	0.1	59.4	0.10	2016.679	6282	7.81	9.27	10	2
21586+0601	SHJ 336AB	222.1	0.1	93.5	0.12	2016.718	5164	7.98	8.93	10	2
21586+0601	SHJ 336AC	100.8	0.1	84.1	0.17	2016.718	18197	7.98	12.0	4	2
22045+1551	BU 696AC	322.3	0.1	63.3	0.09	2016.679	5732	7.95	8.96	10	2
22045+1551	BU 696AE	3.3	0.0	121.0	0.10	2016.679	6255	7.95	10.02	10	2
22045+1551	BU 696CE	32.8	0.1	84.1	0.10	2016.679	5627	8.96	10.02	10	2
22143+1711	STF2877AB	24.5	0.3	23.6	0.14	2016.677	3132	6.65	9.23	5	1
22143+1711	STF2877AC	43.9	0.1	97.3	0.24	2016.677	9024	6.65	12.42	2	1
22143+1711	STF2877AD	309.0	0.1	101.2	0.18	2016.677	9033	6.65	11.31	2	1
22143+1711	STF2877BC	49.8	0.2	75.5	0.21	2016.677	9058	9.23	12.42	2	1
22143+1711	STF2877BD	295.6	0.1	97.9	0.17	2016.677	9036	9.23	11.31	2	1
22173-0042	STF2887	30.7	0.9	7.7	0.14	2015.704	3072	9.85	9.93	5	1
22226+0956	STTA231	112.6	0.1	90.6	0.12	2016.718	4864	8.02	8.97	10	2
22326+0725	STF2915AB	125.0	0.4	15.2	0.11	2016.718	6021	9.46	9.52	10	2
22345+0413	STF2920AB	143.5	0.5	13.7	0.13	2015.704	3067	7.55	8.85	5	1
22357+1719	HJ 967	16.5	0.6	20.2	0.18	2016.679	9021	9.95	11.50	2	1
23188+0510	STF2999AB	166.9	0.1	78.6	0.11	2016.718	5856	8.90	9.17	10	2
23188+0510	STF2999AD	19.5	0.3	26.8	0.15	2016.718	15901	8.90	11.9	4	2
23188+0510	STF2999BC	172.1	0.9	10.3	0.16	2016.718	18079	9.17	10.86	4	2

Table 1 Notes:

- All magnitudes taken from the WDS catalogue. All position angle/separation measurements are for the Equator and Equinox of date.
- Column titled "**No. of (x,y) pairs**" is the total combined no. of (x,y) pairs (video frames) from all drift runs. All video frames were used, none were discarded.
- The column "**drifts**" is the number of separate drifts made. "**Nights**" is the number of nights' drift runs were made for that system.