

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

James Chivers

Montgomery, Powys, Wales
Email: chiversjames@gmail.com

Abstract: The position angle, separation and spectral class of 753 common proper motion red dwarf binary stars are reported based on data-mining the Sloan Digital Sky Survey Data Release 9. 290 of these are new discoveries.

The aim of this investigation was to combine the proper motion and photometric results from the Sloan Digital Sky Survey (SDSS) Data Release 9 (Ahn *et al.* 2012) with the earlier work on M dwarf stars authored by West, A. A. *et al.* (2011). This earlier paper used the SDSS (r-i) and SDSS (i-z) magnitudes as a predictive tool to allocate stars to the sub-types between M0 and M9 inclusive, see Table 1.

The SDSS Data Release 9 offers a number of significant advantages over both Data Release 7 and Data Release 8. The proper motion values in DR7 had systematic errors due to the galaxy sample used as a reference frame being contaminated with stars and the as-

tronometry errors introduced in the DR8 catalog have been corrected in DR9.

Other researchers such as Cabellero (2012) have used earlier data releases from SDSS as a source of potential common proper motion pairs but, regardless of the source of data to be searched, if the criteria used to identify such pairs are too lenient there will be large numbers of “false positives” in the resulting list.

The decision was made to make the selection criteria rigorous by requiring both components to have a minimum total proper motion of 60 mas/yr and, perhaps more importantly, requiring a close match in the proper motion in both right ascension and in declination.

Table 1: Main feature of M type dwarf stars

Spectral Type M+	Median colours (West <i>et al.</i> , 2011)		Relative to the sun				Main sequence
	SDSS (r-i)	SDSS (i-z)	Mass	Radius	Luminosity	Teff (K)	lifetime
0	0.56	0.33	60%	62%	7.20%	3800	
1	0.73	0.41	49%	49%	3.50%	3600	
2	0.96	0.53	44%	44%	2.30%	3400	
3	1.13	0.61	36%	39%	1.50%	3250	
4	1.33	0.71	20%	26%	0.56%	3100	1.5 trillion years
5	1.62	0.9	14%	20%	0.22%	2800	
6	1.92	1.05	10%	15%	0.09%	2600	6 trillion years
7	2.09	1.14	9%	12%	0.05%	2500	
8	2.56	1.41	8%	11%	0.03%	2400	
9	2.7	1.71	7.50%	8%	0.02%	2300	8 trillion years

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

Method

Step 1 – The astrometric, photometric and positional data for all stars was downloaded using a SQL query at <http://skyserver.sdss3.org/casjobs/login.aspx> where the proper motion in right ascension or in declination was outside the range -60 to +60 mas/yr.

Step 2 – All pairs of stars where the components are within 120 arcsec were identified.

Step 3 – The designation of the primary star was allocated on the basis of the SDSS r-band magnitude allowing the separation (in arcsec) and the position angle (in degrees) between the two components to be calculated.

Step 4 – All pairs where the differences between the proper motions of the primary and secondary stars are greater than 5 mas/yr in either right ascension or in declination were deleted.

Step 5 – Any remaining pairs were allocated to one of two groups. The first group was for those that could be matched to a pair already listed in the Washington Visual Double Star Catalog (Mason et al., 2001-2013). The second group was for new discoveries.

Results and Discussion

A total of 753 common proper motion pairs were identified where both components had the SDSS (r-i) and SDSS (i-z) colours characteristic of red dwarf stars.

It can be seen in Table 2 that the new discoveries tended to be fainter, slower moving and more widely separated than those common proper motion pairs already listed in the WDS catalog.

All the primary and secondary stars were checked against a range of other catalogs to ensure that they were genuine objects and not artifacts introduced during the compilation of the Sloan Digital Sky Survey. This was particularly important where the stars had not previously been identified as being part of a common proper motion binary star system. Each primary and secondary star was checked against:

- 2MASS All-Sky Catalog of Point Sources (Cutri+ 2003)
- Palomar Transient Factory (PTF) photometric catalog 1.0 (Ofek+, 2012)
- The PPMXL Catalog (Roesser+ 2010)
- WISE All-Sky Data Release (Cutri+ 2012)

Table 3 shows the results of the matching. There were just five stars that could not be matched against any of these catalogs. These were all confirmed on the SDSS images available via <http://skyserver.sdss3.org/public/en/tools/chart/list.asp>.

For pairs that were already listed in the Washington Visual Double Star Catalog it is worth noting that the position angle and separation calculated using the SDSS data were in every case very similar to the most recent results available from the Vizier site (<http://vizier.u-strasbg.fr/viz-bin/VizieR>).

What is of more scientific interest is the identification of all these binary star systems as being common proper motion pairs with both components having the typical SDSS colors for red dwarf stars. The quoted spectral sub-classes (M0 to M9) are based on the results obtained by West. As there is some overlap between the different colours (r-i) and (i-z) associated with each subclass the quoted values should be taken as being ±1. In almost every case the primary star is either of an earlier spectral type than the secondary star or is of the same spectral type. This was to be expected since both components are at virtually the same distance from the observer and early M dwarfs are more luminous than later M dwarfs.

For binary pairs that were previously unreported an additional check was carried out. Images obtained from the POSS1 and the POSS2 surveys were downloaded from the Digitized Sky Survey (http://archive.stsci.edu/cgi-bin/dss_form) and “blinked” using the software package MaxIm (<http://www.cyanogen.com/>) Only those pairs showing clear evidence of motion have been

Table 2a: The distribution of angular separations between the two classes

SEPARATION (ARCSEC)	PAIR ALREADY IN WDS	NEW DISCOVERIES
0-20	207	83
20-40	141	66
40-60	56	33
60-80	29	38
80-100	12	36
100-120	10	42

Table 2b: The key characteristics of the two classes

CHARACTERISTIC	PAIR ALREADY IN WDS	NEW DISCOVERIES
MEAN PRIMARY MAGNITUDE	15.42	16.83
MEAN SECONDARY MAGNITUDE	16.93	18.43
SEPARATION	29.23 as	50.62 as
MEAN PROPER MOTION (RA)	85.4 as/yr	39.1 as/yr
MEAN PROPER MOTION (DEC)	76.9 as/yr	63.1 as/yr

(Continued on page 64)

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

Table 3 – Matching the SDSS observation to other catalogs

Catalog	Mean offset	Number of matches	Success rate
2MASS	0.63 arcsec	1437/1506	95.4%
Palomar	0.56 arcsec	512/1506	40.0%
PPMXL	0.55 arcsec	1489/1506	98.9%
Wise	0.60 arc sec	813/1506	54.0%

included in this study.

Conclusions

Combining data from a number of on-line sources increases the chances of distinguishing between genuine binary star systems and random alignments of stars. Providing the emphasis is always on the quality rather than the quantity of any discoveries claimed by the researcher it is still possible for the amateur data miner to add useful results to the standard catalogs.

The distinction between a visual binary, a common proper motion binary and two members of a larger moving group that just happen to be close together in the sky is not well defined. It is likely that members of all three of these groups could be data-mined from the Sloan Digital Sky Survey (SDSS) Data Release 9.

Acknowledgements

This research has made use of the Washington Double Star Catalog maintained at the U.S. Naval Observatory and the VizieR database of astronomical catalogs, as maintained at the Centre de Données Astronomiques, Strasbourg, France.

Funding for SDSS-III has been provided by the Alfred P. Sloan Foundation, the Participating Institutions, the National Science Foundation, and the U.S. Department of Energy Office of Science.

The SDSS-III web site is <http://www.sdss3.org/>.

SDSS-III is managed by the Astrophysical Research Consortium for the Participating Institutions of the SDSS-III Collaboration including the University of Arizona, the Brazilian Participation Group, Brookhaven National Laboratory, University of Cambridge, Carnegie Mellon University, University of Florida, the French Participation Group, the German Participation Group, Harvard University, the Instituto de Astrofísica de Canarias, the Michigan State/Notre Dame/JINA Participation Group, Johns Hopkins University, Lawrence Berkeley National Laboratory, Max Planck Institute for Astrophysics, Max Planck Institute for Extraterrestrial Physics, New Mexico State University, New York University, Ohio State University, Pennsylvania State University,

University of Portsmouth, Princeton University, the Spanish Participation Group, University of Tokyo, University of Utah, Vanderbilt University, University of Virginia, University of Washington, and Yale University.

References

- Caballero, R., 2012, “351 New Common Proper Motion Pairs from the Sloan Digital Sky Survey”, *JDSO*, **8**, 1.
- Christopher P. Ahn *et al.*, 2012, *ApJS*, **203**, 21.
- West, A. A. *et al.*, 2011, *AJ*, **141**, 97.

The table of results begins on the next page.

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
1.4044	-1.6654	15.42	16.81	336.71	19.00	2008.830	323.9	127.7	325.7	128.7	LDS 3012
1.6852	-0.9035	14.81	16.78	90.98	81.56	2001.882	76.0	-16.5	74.3	-19.2	GWP 13
1.8549	-5.3131	15.46	18.49	359.58	10.51	2006.711	-28.4	-60.8	-28.4	-60.2	GWP 15
2.1427	18.8297	16.09	16.25	106.67	11.26	2009.057	132.1	-15.2	131.8	-18.0	LDS 3126
2.4115	1.8063	14.68	16.50	9.39	10.89	2008.756	82.6	-39.2	83.6	-36.4	GWP 22
2.4421	23.9435	17.19	17.68	265.51	15.85	2004.729	146.4	1.3	145.4	-3.4	LDS 3131
2.6793	34.2905	15.13	17.55	221.90	43.19	2002.763	-4.3	-81.1	-3.3	-80.9	NEW
3.6267	21.3149	14.87	17.23	26.16	10.72	2009.071	89.9	49.8	92.2	50.8	LDS 3141
3.8319	17.8980	17.33	18.42	272.69	25.22	2008.754	130.6	-158.8	130.5	-158.6	LDS 3145
4.2745	-12.0791	15.99	16.46	117.47	80.25	2006.711	88.7	-15.9	88.0	-11.1	CBL 202
4.5137	-6.5172	15.22	15.82	334.66	21.22	2009.788	47.9	-74.4	45.5	-72.0	GWP 37
4.9296	19.8531	14.69	14.90	262.77	52.93	2009.789	71.7	-45.1	73.7	-44.5	GWP 40
5.2741	-10.0117	14.33	15.84	208.11	64.48	2000.740	95.9	-29.2	96.0	-31.0	LDS 5268
5.4128	21.7372	16.97	17.87	336.74	13.22	2009.071	-21.8	-87.0	-23.9	-84.2	NEW
5.4547	8.8241	15.61	20.28	295.86	20.42	2008.836	27.8	-87.9	26.7	-92.4	NEW
6.0506	15.0750	14.93	16.66	341.19	30.49	2001.715	-22.0	-63.0	-22.4	-63.2	GWP 44
6.1267	36.5557	16.33	18.98	70.25	30.38	2002.763	57.3	-72.9	59.4	-72.8	CRB 27
6.2231	13.9184	17.03	17.80	221.70	51.42	2001.715	-11.2	-111.7	-10.7	-110.7	GWP 45
6.3559	26.0631	13.73	17.84	71.70	42.19	2009.737	-114.8	-198.4	-114.9	-198.8	LDS 3166
6.4710	-9.1188	13.66	15.02	334.52	80.37	2000.737	11.7	-63.3	8.4	-67.0	GWP 48
6.7456	-1.4262	14.49	18.79	53.55	19.92	2008.830	30.0	-96.8	30.0	-98.6	GWP 50
6.7699	-6.4551	16.46	19.07	228.52	19.57	2009.788	-29.8	-186.3	-26.2	-187.8	LDS 3169
7.2477	-9.5794	13.50	14.49	164.05	47.70	2000.740	336.2	-598.9	335.0	-597.0	GIC 10
7.9124	12.1549	13.87	17.09	96.87	83.90	2008.839	-22.8	-84.9	-22.1	-86.8	NEW
8.1133	14.4490	15.31	15.94	152.99	39.49	2000.915	82.3	-27.7	80.0	-25.8	GRV 975
8.5745	26.9980	15.49	16.41	302.52	24.10	2008.817	84.9	14.5	83.5	14.3	NEW
8.9132	19.4773	16.61	17.33	281.21	54.11	2009.046	-77.1	-68.8	-76.9	-72.9	NEW
8.9144	19.4055	16.11	17.51	252.73	51.21	2009.046	90.6	-12.8	89.2	-12.9	NEW
9.7764	27.0619	16.12	16.37	353.62	11.65	2009.792	-41.6	-112.3	-39.5	-109.7	AZC 5
9.7967	34.4952	16.62	17.59	291.07	14.54	2006.753	75.0	28.8	78.1	31.0	CRB 31
9.9562	28.2812	17.51	17.86	350.73	19.52	2009.792	-79.0	-127.2	-75.4	-126.4	LDS 3187
10.0125	-20.9960	18.15	19.46	313.02	17.01	2006.711	56.3	-77.4	53.8	-80.5	SLW 35
10.6490	32.2209	15.63	17.15	76.93	17.22	2009.876	78.8	-5.5	83.0	-6.4	CRB 32
10.7680	29.6904	13.79	17.48	20.66	71.39	2009.792	-75.3	17.9	-72.8	17.1	NEW
10.7878	-22.1988	16.48	16.78	36.03	29.30	2006.744	65.1	28.2	60.9	29.9	NEW
10.7979	-4.0289	14.63	17.66	180.90	15.61	2008.997	60.3	16.6	60.2	14.9	NEW
12.1660	12.4297	15.62	17.72	80.10	104.75	2008.839	67.1	4.1	65.3	5.1	NEW
12.7719	22.5095	16.60	17.69	112.33	13.75	2009.071	55.6	-65.7	53.0	-62.9	AZC 7
12.9979	34.5433	14.18	15.68	130.67	49.43	2008.820	-79.5	17.5	-80.2	15.6	UC 450
13.4329	-3.6179	18.21	18.45	302.13	7.22	2009.043	-10.0	-81.4	-6.5	-81.0	NEW
13.7828	31.0324	14.74	15.37	219.16	12.84	2009.794	65.4	-25.1	64.1	-26.0	CRB 36
14.1045	5.8013	14.89	15.52	219.68	10.15	2008.770	22.4	-68.6	19.8	-71.9	GWP 105
14.3928	2.2630	15.91	16.43	122.74	113.23	2008.754	69.0	2.6	68.9	4.9	NEW
14.4232	4.6839	14.17	15.98	358.20	52.27	2008.770	-41.2	-113.6	-37.5	-111.0	GWP 107
14.4819	-3.4199	15.78	17.03	115.43	27.75	2008.830	-23.6	-77.9	-21.9	-77.3	NEW
14.7040	10.7366	15.40	17.43	212.35	14.48	2008.836	66.5	-24.5	69.1	-22.6	GWP 109
15.0241	12.7700	15.62	17.57	138.46	16.39	2008.839	63.1	-55.2	61.6	-53.7	GWP 113
15.3423	27.9828	14.92	17.34	16.89	27.21	2009.737	-114.7	-75.4	-113.4	-70.5	LDS 3219
15.5773	0.4275	14.68	17.53	0.49	63.93	2003.886	80.7	-27.6	83.8	-30.2	CBL 205
16.1629	32.4891	14.55	16.21	197.20	82.47	2009.794	-84.5	-84.6	-79.9	-82.6	LDS 3227

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
16.7226	23.6802	17.07	19.12	273.09	7.70	2009.737	2.4	-67.4	-1.2	-63.7	NEW
18.1427	-4.7024	15.91	17.57	173.22	47.62	2008.997	185.8	-59.7	185.7	-61.9	LDS 3245
19.3855	25.4217	17.54	17.68	346.95	19.00	2004.707	-24.7	-61.9	-27.3	-64.2	NEW
19.8912	24.8322	15.90	16.18	266.24	64.53	2004.707	-11.7	-73.0	-9.4	-71.4	CBL 209
19.9617	25.4935	15.03	17.53	265.88	15.98	2004.707	64.8	-25.3	64.4	-23.9	SLW 63
20.1468	6.7028	16.15	17.11	291.18	11.26	2005.737	58.0	-83.4	55.6	-85.3	LDS 3265
20.2545	23.9330	13.23	14.20	279.88	67.09	2004.707	148.0	-48.2	149.0	-48.7	LDS 877
20.6151	34.8650	16.34	18.13	0.20	7.13	2008.833	30.5	-74.6	29.8	-71.7	NEW
20.8470	1.8699	17.47	17.87	67.98	8.22	2009.740	-28.1	-149.3	-23.6	-147.5	NEW
20.9674	0.8304	15.18	15.30	191.12	20.47	2003.735	-53.7	-64.8	-52.5	-60.0	GWP 182
21.2060	39.7912	16.92	18.00	1.01	8.53	2004.708	27.7	-75.7	23.9	-76.2	NEW
21.2129	18.0431	15.21	16.64	261.66	30.28	2008.754	103.9	30.1	106.7	30.3	LDS 3274
21.6531	0.6252	16.03	17.53	96.55	12.46	2003.886	0.3	-64.0	-1.5	-66.2	CLZ 8
21.8609	-8.9215	15.52	16.11	317.55	39.10	2005.931	83.1	-15.4	81.5	-12.9	GWP 191
23.2800	-6.0364	17.38	17.62	2.05	17.16	2009.743	178.6	-72.6	180.0	-75.8	LDS 3290
24.2903	-3.0913	16.23	19.91	30.52	10.55	2008.833	-35.8	-76.5	-33.4	-75.4	GWP 203
25.3499	32.2633	14.79	14.90	114.50	51.89	2008.820	-129.4	-33.7	-130.7	-33.0	LDS 1111
25.8692	15.6464	15.10	16.74	342.61	13.86	2008.926	99.8	4.4	99.9	3.8	NEW
25.9382	-17.1922	17.96	18.93	166.41	10.73	2006.881	-62.3	-67.6	-64.0	-67.2	NEW
25.9454	19.9057	16.94	17.10	38.14	13.08	2009.046	-0.2	-71.1	0.1	-71.5	GWP 216
26.4582	20.9601	16.20	18.56	67.32	23.87	2009.049	-77.1	-62.7	-77.5	-63.3	AZC 15
26.4965	21.0957	15.67	15.97	170.66	27.73	2009.071	38.4	-127.5	37.7	-127.0	LDS 3308
26.9896	-6.8728	15.97	17.23	165.62	11.01	2009.044	71.4	52.6	71.9	53.2	NEW
27.1030	28.3934	17.79	19.31	199.64	18.46	2009.792	5.1	80.2	7.5	81.2	NEW
27.2776	6.4010	12.12	12.54	315.84	46.13	2005.781	134.9	-19.2	134.0	-19.9	LDS 3315
27.3071	65.0911	19.56	19.71	109.87	48.13	2005.841	-6.1	72.5	-9.2	68.0	NEW
27.3238	18.1271	14.99	17.74	23.90	21.16	2009.046	-25.2	-91.0	-23.8	-90.0	GWP 225
27.5833	11.7723	14.44	15.12	88.84	45.54	2008.839	-68.1	-102.7	-69.6	-101.4	GWP 227
27.9165	-18.8276	14.06	17.39	191.24	14.37	2004.956	112.1	7.1	116.7	2.8	LDS 1119
28.1953	64.4091	17.69	18.35	39.88	110.74	2005.841	-28.2	73.6	-29.1	74.6	NEW
28.4826	29.5325	17.44	17.79	354.24	13.90	2009.082	135.8	-46.5	137.1	-47.3	AZC 18
29.0487	-3.1614	14.42	14.49	205.49	26.13	2008.831	-11.0	-68.1	-9.0	-68.5	UC 648
29.1263	65.7435	19.70	20.88	154.66	51.12	2005.841	16.3	-61.2	12.8	-61.3	NEW
29.4425	24.6173	15.55	17.60	167.02	7.66	2009.737	-52.7	-69.1	-50.3	-66.1	NEW
29.4645	16.2257	15.72	15.80	90.56	12.21	2008.754	162.8	62.4	159.7	61.7	CBL 11
29.4920	62.3444	16.49	18.83	302.36	117.26	2005.994	-3.2	-114.1	1.3	-113.7	NEW
29.7619	29.6839	16.81	17.19	131.46	9.81	2009.082	25.5	-64.3	25.9	-63.2	AZC 19
30.2393	-5.1792	14.33	17.45	300.98	33.32	2008.997	136.8	-35.2	134.0	-38.7	LDS 5361
30.2677	-17.6834	15.29	17.34	262.33	13.28	2004.956	225.4	6.7	223.3	2.3	LDS 5362
30.4752	67.1517	20.26	20.59	41.74	112.58	2005.994	-22.8	63.3	-19.1	63.1	NEW
30.5441	-18.1415	17.81	18.99	178.72	10.20	2004.956	13.5	-97.9	10.9	-94.7	GWP 252
30.8484	8.8319	16.08	17.61	83.24	22.71	2008.825	-23.5	-65.5	-28.5	-68.1	NEW
30.8662	62.3385	19.17	20.89	228.45	34.86	2005.841	-9.5	86.0	-5.1	87.2	NEW
30.9631	2.6808	15.46	17.55	59.64	13.85	2008.757	53.1	-227.4	52.7	-229.0	LDS 3341
31.6560	-7.1281	14.33	16.50	342.64	23.24	2009.044	130.6	30.8	130.6	30.0	LDS 5366
32.9871	16.9943	15.97	18.21	296.30	23.36	2005.931	137.8	-105.5	138.2	-103.1	LDS 3355
33.1654	16.2350	16.84	17.74	132.17	14.81	2005.844	-27.6	-94.1	-29.4	-90.4	GWP 270
33.3434	31.9227	17.36	17.57	160.78	29.49	2008.820	-62.7	-27.3	-60.5	-24.9	NEW
33.6098	-11.0742	15.25	15.65	261.43	15.52	2008.000	100.6	6.5	101.6	4.4	LDS 5373
34.3465	70.7603	16.11	17.72	148.44	31.64	2005.841	-57.1	71.9	-59.2	70.5	CBL 210

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
35.0575	5.5767	16.19	16.78	97.92	28.51	2005.781	15.0	-71.1	13.9	-68.8	CBL 211
35.8361	22.5007	13.30	17.29	91.02	12.68	2008.752	85.1	-167.3	86.9	-172.1	LDS 3378
35.9285	25.0468	16.44	16.51	180.19	15.73	2009.789	17.1	-127.0	21.0	-129.0	LDS 3379
35.9810	-9.3842	15.03	16.42	217.31	11.90	2000.738	-90.6	-47.8	-94.0	-44.3	LDS 5382
38.1240	6.1042	13.93	17.92	56.12	18.24	2009.710	126.2	-86.3	130.6	-84.4	FMR 55
38.1830	74.1485	17.64	17.82	160.89	14.76	2005.841	209.8	-53.7	205.6	-52.8	CBL 212
38.2552	1.0940	15.02	15.48	344.52	29.12	2008.683	140.9	-44.9	145.7	-44.3	CBL 213
38.8032	21.0488	15.44	16.43	71.56	30.35	2008.752	119.0	-24.6	120.6	-28.4	SLW 120
39.2101	20.2111	14.92	17.58	143.35	19.65	2008.752	97.5	-42.8	95.1	-46.7	SLW 123
40.6041	2.7748	16.28	16.62	290.60	29.70	2008.683	-37.5	-110.8	-37.7	-110.2	GWP 356
42.1294	32.7722	16.75	17.81	272.22	33.62	2005.931	5.4	-60.7	7.3	-62.3	NEW
42.1814	-5.4392	15.42	16.15	106.15	20.22	2009.044	63.2	-12.5	64.1	-11.4	UC 819
42.8408	-15.4281	17.68	17.80	82.09	66.76	2004.956	-47.7	-63.5	-50.3	-65.4	GWP 382
43.9682	-15.3465	16.43	16.46	23.25	18.30	2004.956	155.4	-155.7	156.2	-154.6	LDS 3441
44.6393	6.7659	15.41	17.44	27.58	31.29	2004.953	64.7	-18.7	64.1	-18.3	SLW 140
44.9157	-14.5963	14.30	16.98	336.68	9.81	2004.956	-16.6	-242.7	-19.3	-240.8	LDS 3445
46.6495	0.4298	14.95	15.85	335.84	30.02	2002.832	-39.8	-68.8	-41.4	-66.4	CBL 218
50.0486	77.9747	14.82	15.97	329.84	28.51	2005.994	32.0	-94.0	35.1	-96.0	SLW 152
50.2429	-0.9275	13.44	15.74	280.41	46.41	2004.727	95.6	-25.8	99.9	-24.0	LDS 5420 AB
52.3878	42.8563	17.03	20.11	208.81	119.36	2003.075	40.9	-89.2	36.1	-89.0	NEW
52.7922	42.0576	17.72	17.84	344.65	23.15	2003.075	70.2	-56.8	69.8	-56.5	BVD 189
57.2477	50.0645	18.98	19.17	266.38	21.25	2004.948	61.2	-81.5	66.1	-77.8	NEW
57.3275	-12.0376	20.06	20.33	337.21	113.66	2004.956	8.8	-77.8	4.4	-80.5	NEW
59.0668	52.1353	20.44	20.52	200.87	52.23	2004.948	26.4	76.4	29.4	73.2	NEW
59.3143	-10.9015	16.44	17.56	124.71	17.25	2004.956	-51.2	-65.4	-52.8	-67.1	GWP 536
59.9129	-11.7903	16.40	17.38	116.35	9.24	2004.956	96.0	-31.4	97.2	-33.7	GWP 540
60.3484	1.1136	15.03	17.05	27.12	37.81	2004.727	110.2	-23.3	112.0	-21.7	GWP 542
60.7972	-0.4043	16.20	20.30	82.40	68.40	1998.726	-28.5	-87.1	-32.1	-88.9	NEW
62.5362	-4.2097	17.62	19.14	249.18	22.06	1999.785	56.2	-197.7	54.7	-196.2	NEW
62.5964	16.1847	14.26	17.65	4.31	45.32	2006.084	2.8	-71.5	3.1	-70.8	GWP 557
64.3080	29.2129	15.50	17.08	70.43	11.50	2002.930	66.3	-1.5	65.6	-5.8	NEW
64.4973	52.9498	13.09	19.20	199.02	15.04	2004.790	58.4	-80.0	62.3	-80.0	NEW
64.9543	32.1998	17.92	17.95	349.01	85.47	2002.999	18.5	-82.0	19.7	-85.3	NEW
65.2939	6.4451	16.44	17.18	307.22	30.16	2006.835	49.0	-94.8	50.9	-98.5	SLW 171
65.7116	54.5303	19.64	20.18	170.72	116.23	2004.948	2.5	-73.9	0.4	-74.2	NEW
66.6478	19.1939	15.33	18.39	182.97	37.46	2006.810	153.3	-195.7	151.0	-199.7	GWP 585
67.5064	-1.0774	14.77	18.10	239.13	10.90	1998.884	-10.6	-76.1	-10.7	-80.5	GWP 592
67.5265	9.0411	15.08	15.68	251.98	16.11	2006.835	-33.1	-69.0	-31.1	-70.9	CBL 225
68.2832	-0.7446	15.43	17.07	178.04	10.84	1998.884	40.9	-121.0	42.8	-124.5	GWP 596
69.5509	-7.6016	17.60	18.02	196.07	53.06	2007.102	18.0	-81.0	14.7	-84.3	NEW
71.1993	-0.0085	15.34	15.48	358.17	45.64	1998.879	160.5	-14.7	157.6	-19.6	GWP 611
71.4396	58.0921	20.09	20.67	1.52	82.15	2004.951	-33.4	72.4	-33.6	71.3	NEW
72.0206	59.6764	15.79	15.81	358.24	22.09	2004.790	85.3	-69.6	81.7	-67.4	CBL 226
72.4602	-6.4204	16.59	17.54	336.79	23.87	2007.102	62.7	14.1	62.5	15.8	NEW
72.5439	-4.2093	14.85	15.24	287.93	12.77	2007.883	132.1	-59.5	136.5	-61.3	SLW 172
74.4233	26.1747	13.77	16.12	130.79	63.76	2003.971	66.7	-4.8	71.1	-4.4	LDS 6152
75.9398	-3.2587	17.80	18.35	277.30	87.88	2007.883	7.3	-87.2	3.3	-90.1	SLW 178
77.7073	-2.0041	19.49	20.37	327.37	65.46	2007.883	23.8	-63.2	21.8	-65.5	NEW
80.2154	26.6981	15.89	15.92	174.68	10.33	2006.824	-63.6	24.8	-63.2	20.2	AZC 43
80.7033	28.0082	18.14	20.51	26.64	109.72	2003.971	69.3	-124.4	68.5	-129.2	NEW

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
80.9712	28.4175	12.94	14.81	163.09	44.73	2006.084	-62.9	-101.3	-61.2	-99.8	IPH 13
82.6950	-0.5675	15.26	17.47	283.72	15.11	1998.879	-83.9	-128.8	-83.2	-132.4	CBL 228
82.7899	63.3446	14.94	17.42	71.93	27.13	2004.951	43.7	-111.6	47.3	-114.4	CBL 229
83.2143	3.4040	17.74	21.06	234.45	58.92	2005.189	14.2	-60.4	16.3	-64.7	NEW
83.7654	3.6155	16.36	20.42	68.76	118.99	2005.189	8.7	-65.4	12.9	-64.1	NEW
85.8302	3.5375	18.80	20.09	186.17	109.09	2007.884	8.2	65.6	3.9	66.7	NEW
87.0119	22.0589	19.84	20.05	318.17	87.86	2006.890	28.1	-65.1	23.4	-66.4	NEW
89.5894	22.0736	19.13	20.37	140.32	94.55	2006.887	-10.0	-66.7	-5.6	-69.5	NEW
91.7696	63.4211	18.43	20.04	294.41	18.72	2004.798	1.1	-60.6	0.3	-61.3	NEW
93.2852	5.3769	17.67	18.72	213.90	14.74	2007.102	31.3	-68.0	35.7	-69.9	GWP 764
93.9610	44.4394	18.80	18.93	70.09	15.29	2000.937	7.5	-67.2	4.6	-69.8	NEW
95.0016	34.6970	19.12	19.40	180.95	21.56	2006.827	23.5	-102.6	22.7	-100.6	NEW
97.3074	7.8459	16.84	17.08	193.85	14.01	2007.884	26.8	-78.7	23.1	-83.0	IPH 24
100.1133	64.2539	14.32	16.33	24.76	14.36	2004.951	11.7	-140.2	10.6	-137.6	CBL 233
101.0817	10.3339	15.82	16.36	54.55	14.46	2006.895	-17.6	-109.3	-14.9	-107.1	LDS 5680
105.1090	37.5503	17.36	18.63	188.05	100.24	2006.881	42.5	-92.0	38.3	-93.1	NEW
106.8448	66.2761	16.86	18.99	327.80	84.53	2004.790	-13.2	-68.7	-15.8	-64.0	NEW
107.3515	31.3240	19.34	20.03	251.64	9.34	2006.887	-15.8	-62.0	-16.6	-60.6	NEW
110.4190	35.8510	17.34	19.00	184.78	26.14	2003.812	21.6	-114.4	18.4	-117.3	SLW 192
110.7781	14.1111	17.49	19.16	121.67	9.32	2006.895	6.4	-65.3	3.6	-69.8	GWP 901
111.9617	42.4719	15.41	17.25	172.80	32.09	2003.886	51.6	-145.9	51.4	-145.6	CBL 234
112.0865	31.0035	14.49	17.28	296.16	9.39	2001.071	24.9	-144.5	21.8	-142.9	CBL 235
113.9183	27.8237	14.95	16.22	102.42	17.56	2001.967	-83.8	-53.9	-81.3	-53.4	CBL 236
115.7318	66.4950	15.12	18.55	266.70	65.54	2004.951	-33.1	-87.5	-31.4	-86.6	NEW
115.7945	42.8767	14.24	19.78	233.35	52.72	2000.315	-25.6	-68.3	-23.3	-69.0	NEW
116.0562	37.6648	14.64	17.66	14.79	112.88	2000.258	110.6	-69.9	107.6	-71.4	NEW
116.4990	44.6468	17.44	19.16	227.93	94.28	2003.810	-21.2	-60.3	-21.6	-60.5	NEW
117.8786	-9.2879	14.35	14.76	29.45	15.93	2008.001	-51.7	-175.0	-50.5	-179.6	NEW
118.2084	82.6954	15.16	15.39	167.44	115.48	2005.994	-155.8	34.4	-157.8	36.9	SLW 210
119.1866	46.3326	16.46	16.54	120.72	20.28	2000.263	-0.8	-140.4	-4.2	-140.4	SLW 214
119.7087	46.4449	14.98	16.96	326.97	12.99	2000.315	-87.6	6.0	-87.9	5.0	CBL 238
121.5498	35.7325	15.70	17.90	222.45	14.77	2001.967	-29.5	-63.9	-33.0	-64.9	NEW
121.6154	42.5302	18.23	19.30	180.73	8.03	2001.072	-38.3	-67.2	-34.8	-68.4	SLW 219
121.9631	65.2387	15.72	16.09	4.39	11.14	2004.790	-152.1	-307.5	-150.8	-307.4	LDS 2561
122.3855	54.1074	15.74	18.36	180.52	64.76	2003.913	20.6	-68.3	17.0	-68.4	CBL 244
122.4947	7.9378	14.77	19.70	15.63	10.14	2006.016	-3.2	-65.7	0.1	-66.0	NEW
122.7108	53.6292	16.66	17.87	341.66	113.91	2003.913	-25.5	-68.0	-29.6	-66.8	NEW
123.4082	29.5494	14.63	16.94	72.07	14.20	2002.038	5.2	-69.7	4.8	-70.2	NEW
123.5535	14.1471	15.07	17.74	36.14	22.03	2004.951	-68.8	-69.6	-64.5	-72.5	CBL 245
123.8913	29.8493	15.30	16.07	288.15	17.71	2002.106	48.0	-81.4	43.9	-82.9	SLW 230
124.2610	55.0623	15.87	16.25	109.62	31.02	2003.913	-19.3	-105.5	-21.3	-107.7	SLW 231
124.6412	31.6339	14.63	16.32	106.06	64.47	2002.024	-8.4	-69.7	-9.8	-67.4	NEW
125.1800	-0.0155	17.15	18.19	89.60	55.59	1999.220	-61.5	-71.7	-65.1	-69.1	SLW 241
125.9202	14.5367	14.19	16.71	321.64	28.54	2004.970	32.8	-138.9	34.9	-140.9	LDS 1211
126.0429	-1.8337	13.11	15.91	123.73	42.90	2001.213	-86.6	-5.4	-86.5	-5.6	GWP 1014
126.0723	-4.4038	15.66	17.91	300.71	24.53	2006.881	123.1	-95.4	123.6	-98.3	GWP 1015
126.7865	32.9944	18.14	18.84	334.91	6.50	2002.106	-19.9	-66.4	-21.7	-63.5	NEW
127.0938	0.4361	16.91	17.51	265.20	27.71	2000.173	4.5	-113.6	2.8	-116.8	LDS 3793
127.1317	27.6510	18.61	19.62	206.02	12.80	2002.999	29.6	-115.8	31.2	-120.1	NEW
127.4853	47.1119	15.46	16.85	336.61	23.34	2001.072	-66.8	-12.9	-65.4	-13.6	GRV 1005

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
127.9852	18.5763	14.96	16.91	259.32	11.45	2004.951	-53.6	-100.6	-55.5	-102.4	LDS 1215
128.1922	4.8981	13.67	16.69	219.27	101.15	2002.174	-63.1	-23.6	-62.1	-24.0	GWP 1036
128.4603	20.2201	15.05	17.63	5.56	85.10	2004.948	-69.7	17.6	-72.7	15.5	NEW
128.4661	24.4369	16.97	18.63	69.61	42.67	2003.971	-61.3	120.5	-64.1	118.1	CBL 260
129.4731	31.7043	13.22	18.24	72.84	14.85	2002.851	-79.6	-85.3	-78.8	-88.1	LDS 3802
130.0760	47.6603	18.18	19.03	299.28	64.45	2000.907	-29.6	-66.2	-26.8	-65.5	NEW
130.3365	1.1579	16.25	16.79	342.74	22.72	1999.220	64.9	-126.7	66.1	-125.2	LDS 3807
130.6014	58.4335	15.01	16.78	161.87	61.17	2003.812	-75.5	-37.7	-74.3	-34.5	SLW 282
130.9752	58.4797	15.48	16.40	347.24	23.29	2003.810	-26.6	-74.6	-29.0	-77.3	CBL 266
130.9827	14.2193	17.27	19.77	226.05	47.34	2005.194	-25.8	-66.8	-29.4	-66.2	NEW
131.1456	49.2003	16.02	17.72	210.15	38.77	2001.071	60.9	-4.8	62.0	-3.8	SLW 286
131.2634	14.9010	16.45	19.29	31.28	38.28	2005.841	34.8	-75.1	39.7	-78.7	NEW
131.5521	7.7396	13.70	17.00	3.40	47.85	2003.075	162.3	-103.5	164.0	-104.7	LDS 3817
131.5803	50.3219	14.77	17.59	268.88	17.12	2001.071	-20.5	-89.4	-21.2	-92.7	SLW 290
131.6001	24.0368	16.19	16.73	110.30	22.20	2004.212	-79.0	-73.4	-78.0	-75.0	CBL 267
131.9749	43.0445	13.04	15.81	334.47	95.10	2001.967	2.2	-64.3	5.6	-68.8	NEW
132.2878	56.0776	14.17	18.84	65.14	90.53	2003.062	172.7	-77.2	169.9	-74.3	LDS 3820
132.3778	60.0379	15.50	17.23	105.80	15.00	2003.812	-244.1	-17.0	-243.2	-17.7	LDS 1219
132.6098	42.2155	17.58	19.15	132.98	90.10	2001.967	-14.9	-68.6	-13.6	-65.7	NEW
133.0240	32.7813	15.75	16.81	13.75	12.11	2002.999	-39.6	-87.3	-38.0	-92.2	SLW 308
133.3336	48.6003	17.05	18.63	317.84	9.59	2001.145	-29.7	-81.5	-30.1	-79.6	BVD 203
133.4041	55.5337	16.54	16.69	270.22	14.97	2003.062	67.3	-32.4	68.1	-33.4	GRV 1012
134.6606	4.4862	16.71	16.94	59.24	33.38	2002.120	11.8	-66.8	9.6	-64.1	SLW 318
134.9539	18.5543	19.40	20.36	252.96	39.17	2004.971	-8.8	-61.4	-5.2	-60.1	NEW
135.9097	44.9843	13.45	16.73	291.37	17.34	2002.024	60.1	-49.6	60.3	-46.7	BVD 206
136.5376	12.3807	15.10	15.73	96.18	18.97	2006.016	-11.0	-65.1	-12.9	-68.8	GWP 1136
137.9730	64.5921	14.55	16.88	303.62	105.96	2003.886	67.4	-6.7	67.2	-7.2	NEW
138.0561	28.6351	17.98	18.87	295.66	36.81	2004.209	-17.8	-74.3	-18.8	-77.9	CBL 274
139.0599	6.1589	15.54	16.71	8.59	106.30	2002.120	35.6	-149.2	32.8	-152.4	SLW 339
139.4385	53.2153	13.57	17.44	226.47	26.15	2000.907	143.2	-31.5	146.0	-32.5	LDS 3869
139.6849	17.1915	18.46	18.77	333.77	8.98	2005.194	-44.2	-93.2	-48.1	-93.4	NEW
140.3947	26.9298	14.40	14.42	59.95	29.64	2004.288	45.4	-61.4	46.2	-63.2	AZC 62
140.5475	34.0574	14.94	14.95	76.80	13.61	2003.086	55.9	-81.4	52.7	-80.2	CRB 81
141.2885	36.7066	12.81	15.97	273.56	15.35	2003.067	-73.0	-47.5	-72.1	-48.2	CRB 82
141.6457	45.7897	13.01	16.45	259.11	13.38	2001.890	3.8	-72.9	3.7	-73.0	CBL 278
141.9756	28.6393	14.18	16.25	115.43	45.78	2004.212	-103.1	-49.8	-105.5	-52.1	CBL 279
142.6479	55.9815	18.15	20.06	190.03	13.46	2001.071	-18.8	-61.1	-20.8	-60.4	NEW
143.1430	55.1921	17.96	18.14	207.74	7.91	2001.071	-53.5	-61.8	-56.1	-65.6	CRB 181
143.6459	15.2116	16.84	17.16	302.67	31.71	2005.356	24.1	-62.4	27.4	-60.6	SLW 369
143.8819	15.2363	16.82	17.06	85.45	15.99	2005.356	-119.7	4.9	-121.3	1.3	CBL 285
144.8106	30.2452	14.75	18.10	107.10	72.61	2004.212	55.6	-138.2	52.3	-141.8	LDS 3909
145.1421	59.2459	15.26	16.72	295.44	29.28	2000.258	-242.5	-93.2	-244.4	-91.5	LDS 1230
145.2355	46.1250	16.85	17.55	248.03	49.36	2001.970	-97.2	41.0	-94.6	38.6	NEW
145.3156	7.1286	15.49	16.14	244.94	22.72	2002.934	-64.7	-158.0	-61.5	-158.1	GWP 1212
146.2065	-2.9304	12.16	15.25	162.87	120.00	2001.213	-91.1	-2.5	-90.1	-5.6	GWP 1229
146.3416	46.2759	16.63	17.06	21.80	21.73	2002.024	-195.0	-132.1	-194.3	-133.2	LDS 3922
146.3549	3.7221	16.18	18.67	253.67	29.40	2001.140	-35.0	-92.6	-37.8	-97.0	GWP 1232
147.0062	81.6037	14.76	18.97	147.48	17.27	2005.994	-85.0	-73.2	-86.9	-78.0	NEW
147.2835	-0.8997	15.23	17.45	333.64	9.67	1999.220	-71.7	44.2	-75.5	47.7	NEW
147.3219	4.0710	17.66	17.76	220.91	29.85	2001.140	-75.5	-14.5	-73.1	-16.7	SLW 394

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
147.3345	20.7109	15.73	16.08	258.74	16.05	2005.096	-85.4	30.9	-84.1	28.8	LDS 3932
147.6203	22.3703	16.20	16.23	25.81	15.57	2005.047	18.5	-68.7	19.4	-68.0	AZC 63
147.6889	24.1602	16.66	18.82	107.13	53.72	2004.957	19.7	-61.3	22.2	-61.3	NEW
148.2477	58.1898	18.02	18.59	278.29	7.63	2001.071	9.8	-61.3	13.8	-63.4	NEW
148.8217	22.0523	18.49	18.60	65.50	7.24	2004.971	50.1	-85.2	52.5	-86.1	NEW
149.0813	27.9690	15.28	15.69	84.94	60.32	2004.367	-75.7	11.1	-76.7	12.1	UC 1845
149.1125	-1.9132	14.51	17.00	164.23	14.05	2000.173	-99.8	-84.4	-100.6	-84.5	LDS 3944
149.4029	0.4876	14.87	17.87	190.58	40.86	2001.145	-82.7	-18.8	-81.5	-16.0	NEW
149.4194	-1.1783	15.55	17.67	265.01	17.07	2001.145	-65.6	-5.7	-64.4	-7.3	NEW
149.6509	11.8978	15.12	16.72	293.43	27.10	2003.971	-62.3	12.8	-61.7	12.5	GWP 1263
150.4355	51.5774	14.38	17.15	132.42	10.14	2002.024	-70.5	13.0	-70.8	10.1	NEW
150.6464	34.9509	16.26	19.45	282.00	7.57	2004.130	-29.4	-78.1	-30.7	-77.8	NEW
150.9852	2.1271	15.60	15.83	325.36	20.50	2000.343	-75.8	23.1	-75.8	24.6	GRV 1042
151.0052	19.1477	15.42	15.96	307.28	110.34	2005.194	64.7	-16.4	66.6	-18.6	NEW
151.0743	47.5310	15.64	17.69	334.91	26.42	2002.035	-78.1	10.8	-76.1	6.2	CBL 299
151.1729	43.0043	15.65	17.33	115.05	11.03	2002.950	59.8	-100.6	60.7	-95.8	LDS 3953
151.9045	54.2666	13.79	15.99	0.14	45.47	2002.120	-63.2	-29.9	-64.4	-30.1	AZC 160
151.9573	21.8394	16.44	17.51	24.78	28.29	2005.096	-68.1	-3.8	-67.4	-5.8	NEW
152.1531	38.3227	16.27	16.58	44.34	12.44	2003.087	35.7	-62.8	36.8	-61.7	SLW 438
152.3194	11.3648	17.48	18.43	63.83	16.53	2003.075	-4.0	-60.7	-8.4	-61.0	GWP 1303
152.4093	40.6873	16.17	16.43	203.84	35.29	2002.999	-59.5	-73.1	-63.4	-72.2	CBL 301
152.8377	27.3593	16.22	17.37	69.76	13.80	2004.367	-171.0	-301.7	-172.3	-302.4	LDS 3961
153.1661	66.1619	17.90	18.24	244.90	90.91	2003.812	-31.7	-64.6	-36.1	-60.9	NEW
153.6331	1.8860	14.85	16.60	225.95	21.25	2000.343	-131.5	-50.2	-127.0	-53.8	CBL 306
153.8398	47.4380	13.29	13.51	232.52	47.84	2002.035	-74.0	-122.4	-70.8	-122.0	UC 153
153.9910	11.3786	17.26	18.30	211.96	9.62	2002.953	4.0	-67.8	-0.5	-64.7	GWP 1333
154.1745	38.9387	15.49	16.20	155.74	18.65	2003.087	-141.7	1.0	-138.9	1.6	LDS 3971
154.8019	13.3222	15.15	15.70	207.23	83.04	2003.971	-65.4	-4.9	-62.8	-6.8	GWP 1345
155.3613	25.6480	18.61	20.55	317.24	71.64	2004.957	8.6	-64.3	8.3	-66.9	NEW
155.4594	35.9173	16.23	17.55	144.51	13.23	2004.130	-162.5	-81.4	-162.9	-82.2	LDS 1240
155.5374	34.4506	17.06	17.50	70.56	28.14	2004.212	-65.2	-29.4	-63.1	-30.4	CBL 307
155.6880	58.5974	15.93	16.33	37.50	9.11	2001.378	-5.6	-66.8	-2.8	-64.7	SLW 9001
156.6538	62.7551	17.37	17.42	312.79	9.74	2001.072	63.2	-38.6	60.8	-41.1	LDS 2583
156.7203	45.1841	17.65	18.56	323.78	8.52	2002.219	-72.1	-69.2	-76.1	-67.1	SLW 473
157.6359	31.4971	17.11	17.86	254.67	17.29	2004.291	-65.8	-15.3	-68.2	-13.2	NEW
158.3636	17.9975	18.64	20.20	87.75	48.16	2005.356	86.6	-126.4	82.1	-131.3	NEW
158.5637	40.6830	15.47	16.11	220.43	104.19	2003.087	-214.1	-108.0	-213.5	-110.6	LDS 3998
159.0221	29.1049	15.45	15.62	271.20	16.31	2004.970	-91.8	-48.5	-91.9	-48.3	LDS 1248
159.1624	54.6806	14.74	18.81	311.23	9.17	2001.967	-90.7	-77.0	-86.8	-78.6	LDS 2870
159.2800	51.3378	13.78	16.13	10.12	41.28	2002.248	-26.7	-153.9	-26.5	-155.4	LDS 2871
159.5184	24.6950	15.43	16.70	44.60	67.55	2005.047	-85.7	-69.7	-82.2	-71.1	SLW 500
159.6264	12.1666	16.15	19.08	244.84	117.56	2003.245	-102.2	-67.4	-101.9	-63.8	GWP 1417
159.7034	6.0255	13.93	16.84	39.91	46.24	2002.120	-116.1	-10.9	-118.8	-8.9	LDS 2875
159.9180	32.4518	12.64	14.78	316.75	48.60	2004.291	108.5	-160.3	111.6	-160.9	DAM 28
160.3248	21.9051	16.28	16.72	8.34	24.14	2005.096	-71.6	-48.4	-73.0	-50.3	AZC 65
161.1572	65.8421	18.60	19.97	256.17	103.12	2000.264	-57.7	-98.0	-58.5	-93.3	NEW
161.2427	61.2439	14.07	17.24	173.15	53.89	2001.378	-103.0	-35.7	-106.0	-35.0	LDS 2586
161.8387	33.8267	16.22	18.46	334.45	24.54	2004.291	44.8	-63.4	47.6	-65.9	CRB 85
162.2172	-1.0379	16.95	17.31	61.28	11.27	1999.221	-60.2	8.5	-63.0	9.1	GWP 1465
162.5800	-22.5686	16.33	16.72	59.42	10.50	2006.079	-98.1	-1.8	-94.8	-5.6	LDS 4024

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
162.7791	24.5540	18.02	20.28	246.53	95.78	2005.096	-4.5	-61.1	-4.2	-63.7	NEW
162.8541	-20.8813	16.50	17.17	156.88	13.41	2006.019	90.1	-115.8	88.4	-114.4	NEW
163.2244	23.0184	17.48	17.91	0.27	28.73	2005.096	-77.6	-28.7	-78.6	-30.1	NEW
163.5905	26.9390	16.87	18.19	211.03	65.18	2005.047	2.3	-94.1	5.8	-92.1	SLW 538
164.1451	58.9921	16.60	17.68	262.39	17.00	2002.120	-34.5	-115.5	-36.6	-111.1	LDS 2589
164.4492	-1.1188	15.41	17.08	185.68	50.64	2007.300	-77.6	15.0	-77.9	13.7	GWP 1509
164.4949	10.0343	16.42	19.80	254.17	72.00	2006.393	-120.2	-111.6	-118.4	-113.5	NEW
164.9008	12.6671	14.42	16.78	146.33	19.40	2002.953	-318.5	-106.0	-316.2	-106.7	LDS 4043
164.9447	22.7130	17.46	17.76	352.33	25.12	2005.096	34.3	-95.9	35.6	-93.0	CBL 324
164.9983	13.7466	15.58	18.89	13.46	31.22	2003.076	83.5	-79.4	82.8	-79.0	GWP 1516
165.0335	75.7973	16.35	17.23	121.93	67.28	2006.303	-74.5	-2.5	-72.1	-1.9	NEW
165.1309	64.2894	15.32	16.23	66.92	28.40	2001.072	-98.3	-46.7	-97.9	-47.2	GRV 1050
165.5079	23.8855	14.69	16.12	118.96	97.80	2005.096	-145.9	-96.0	-145.6	-91.4	CBL 326
165.5557	46.0724	15.58	16.35	66.18	10.48	2002.950	-71.9	-19.5	-69.2	-20.1	SLW 555
165.7347	55.4758	13.93	16.19	347.25	107.21	2001.967	-98.1	-6.9	-98.8	-11.0	NEW
166.1409	63.0615	16.22	18.43	95.28	25.74	2001.072	26.0	-89.0	25.7	-88.8	BVD 317
166.5567	47.4351	15.16	16.47	146.51	12.88	2002.106	65.0	-40.5	67.4	-40.7	GRV 1192
166.8162	31.7627	16.32	17.50	161.16	15.04	2004.362	37.6	-76.0	33.9	-72.0	NEW
167.0888	47.8605	13.43	15.75	222.77	22.97	2002.219	-119.1	-170.3	-116.7	-166.3	BVD 216
167.3230	54.3821	17.94	18.00	20.34	9.94	2001.964	-5.0	-61.1	-3.2	-61.9	NEW
167.4628	47.6190	13.62	17.82	301.76	10.53	2002.106	-109.3	-9.1	-112.1	-5.6	CBL 330
167.4965	-2.8093	14.92	16.05	165.39	49.41	2000.116	-81.7	-53.3	-81.6	-56.1	UC 2092
167.9294	58.0516	15.81	16.13	25.79	14.93	2001.287	-10.0	-63.8	-13.7	-63.3	UC 2097
167.9491	32.2973	18.00	20.28	139.09	93.94	2004.362	-67.0	-81.3	-66.3	-80.1	NEW
168.7687	23.7046	15.63	15.66	103.85	42.30	2005.252	-73.2	-111.7	-72.5	-113.3	AZC 69
168.8277	18.8524	16.58	17.71	131.75	12.36	2005.356	-73.8	-6.5	-71.7	-7.0	GWP 1564
168.9197	59.3823	16.87	16.88	316.93	8.84	2002.120	-88.4	-18.2	-88.1	-14.9	SLW 582
168.9293	0.7805	14.87	16.21	155.68	19.52	1999.221	-86.0	-10.8	-84.0	-10.8	GWP 1567
169.8378	23.6848	15.98	16.48	353.46	13.82	2005.096	-81.8	-23.3	-83.5	-23.8	AZC 70
170.0507	25.4726	15.32	15.97	116.30	21.60	2005.096	-19.8	-113.2	-20.0	-110.4	CBL 337
170.0734	7.1150	16.48	17.17	20.29	29.59	2002.175	-66.3	-17.2	-63.1	-20.5	NEW
171.1441	20.4038	17.01	19.02	32.96	12.96	2005.356	41.9	-78.0	42.5	-78.1	NEW
171.1513	34.9757	13.61	15.64	353.77	29.79	2004.283	-134.6	-13.8	-136.5	-15.6	LDS 4095
171.3307	74.5472	15.42	16.60	130.03	11.87	2006.303	62.6	-97.4	61.7	-99.3	SLW 599
171.6865	25.0545	16.95	17.13	355.28	12.35	2005.096	-80.7	-37.4	-78.8	-38.5	CBL 340
172.3154	39.5277	15.92	18.04	275.86	14.74	2004.130	82.3	-145.6	84.8	-142.5	SLW 607
173.3764	33.1415	12.50	16.19	211.26	56.86	2004.367	-109.8	-9.1	-107.9	-13.0	CBL 344
173.4052	7.6400	19.31	20.55	14.67	111.55	2002.175	-33.5	-110.8	-33.2	-114.6	NEW
173.4548	14.5576	17.78	18.63	134.87	70.10	2004.075	-29.4	-75.7	-31.4	-73.5	GWP 1609
174.2693	39.7942	16.27	17.00	147.44	23.22	2004.130	-80.7	-0.3	-80.7	-4.4	NEW
174.5784	61.2106	15.83	16.01	216.00	19.87	2001.378	-91.4	-90.9	-92.0	-89.7	LDS 2605
174.7520	4.1059	15.36	15.52	0.29	10.87	2001.290	-92.7	25.5	-94.5	28.7	GRV 1059
174.9084	21.0792	17.49	17.59	93.52	13.65	2005.195	75.2	-77.9	72.7	-78.2	NEW
175.8591	9.6778	15.44	17.86	331.80	9.63	2002.945	-83.2	-18.8	-81.3	-17.5	SLW 636
175.9255	54.9623	15.20	16.98	175.93	29.45	2001.964	-91.2	23.9	-91.1	22.1	CBL 350
176.5905	30.9614	15.19	15.43	2.07	21.72	2004.957	-160.1	84.3	-158.2	84.6	SLW 645
176.7381	20.9385	14.62	14.67	261.60	25.31	2005.252	-83.5	-12.8	-80.4	-8.2	CBL 357
177.4709	5.2841	16.25	20.04	166.94	56.31	2001.140	-35.1	-60.7	-31.3	-62.8	NEW
178.0810	38.4354	16.82	17.23	78.14	24.84	2004.207	-101.1	-11.8	-100.2	-11.9	LDS 4151
179.4062	64.1585	14.57	16.93	55.94	66.32	2001.072	-71.8	-5.4	-70.0	-7.9	NEW

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
179.4238	43.3370	14.93	15.63	27.50	45.95	2003.248	-60.6	-20.3	-61.2	-19.6	BVD 219
179.9736	11.7341	14.80	15.18	336.68	55.60	2003.223	79.0	-28.5	76.8	-27.1	BPM 585
180.0686	6.2962	16.30	17.29	121.35	19.11	2006.019	89.0	-55.3	88.3	-55.5	GRV 1196
180.3611	2.0520	20.47	20.75	60.07	73.04	2000.340	12.7	-65.0	8.0	-68.7	NEW
180.5532	24.0432	16.68	17.96	227.65	10.35	2005.050	-96.6	-43.0	-94.5	-39.2	SLW 678
180.6561	44.2993	16.36	18.71	239.26	12.87	2003.226	-164.5	-66.0	-162.1	-66.7	BVD 221
180.7327	0.0682	14.70	16.46	99.12	12.08	2007.300	-73.8	48.2	-69.8	48.1	GRV 1068
181.0907	63.0134	15.28	17.80	186.39	91.45	2001.391	-103.6	-41.6	-102.4	-40.2	CBL 371
181.2457	21.8241	14.50	14.81	336.27	77.36	2005.195	-183.0	-84.5	-182.9	-83.1	LDS 4177
181.7197	39.3493	15.25	15.37	19.49	8.34	2004.130	-61.8	49.5	-62.4	49.5	SLW 684
181.9031	15.5508	14.95	15.62	104.50	14.55	2003.076	-92.7	-37.6	-92.8	-38.6	LDS 4181
182.2479	3.9486	17.04	18.81	193.74	18.53	2001.140	1.0	-62.5	-1.4	-66.2	NEW
182.8738	47.4208	14.54	17.85	65.17	30.96	2003.191	-23.9	-323.3	-23.6	-323.5	LDS 4187
183.0093	38.8194	14.17	17.99	9.46	18.54	2003.316	-135.4	-26.4	-134.3	-26.6	LDS 4188
183.6073	27.4000	15.33	16.16	333.00	28.26	2005.050	-112.9	21.6	-113.6	17.8	LDS 1286
183.7332	58.4954	15.50	18.35	155.78	13.13	2002.219	90.6	-102.9	88.7	-105.4	NEW
183.7632	39.2404	14.21	18.95	48.87	32.46	2003.316	-178.1	-113.6	-180.7	-111.9	LDS 4196
183.7653	48.9629	17.37	17.86	20.79	10.68	2002.106	-66.9	21.8	-69.2	21.5	SLW 697
184.4923	27.8577	11.99	16.99	330.58	37.01	2005.050	-81.3	20.4	-81.3	16.4	CBL 378
184.9587	34.5398	17.13	17.67	64.63	109.02	2004.283	68.1	-45.6	68.3	-44.6	SLW 708
184.9656	0.0874	14.56	15.74	137.92	14.95	1999.218	44.0	-64.9	42.1	-67.7	GRV 1075
185.8189	66.7608	15.03	17.41	313.05	33.43	2000.264	-84.2	-50.2	-83.5	-49.0	CBL 381
185.9511	-1.9375	16.20	17.81	169.63	39.80	2000.171	-99.5	-6.5	-97.7	-5.5	SLW 714
186.3220	49.6331	14.80	17.73	343.04	21.93	2002.219	-60.8	-4.9	-61.5	-6.4	NEW
186.6484	38.9523	16.14	16.39	74.90	19.33	2004.130	-88.7	-235.3	-93.2	-235.3	LDS 4208
188.0576	41.0457	12.93	13.89	146.75	112.09	2004.130	-130.0	35.2	-128.1	31.4	UC 177
188.2814	36.2395	15.08	15.53	247.71	13.71	2004.130	69.2	-69.4	67.2	-68.8	CRB 92
188.3522	14.2633	13.67	16.03	262.78	35.09	2003.076	-107.1	-107.7	-108.4	-110.3	LDS 1319
188.5666	0.8583	16.28	16.97	166.89	12.02	1999.218	15.3	-62.6	17.0	-62.2	SLW 736
188.6668	19.8581	15.07	15.34	178.59	60.82	2005.252	73.7	-33.9	76.3	-32.2	NEW
188.7742	1.0875	18.89	19.90	226.03	105.28	1999.221	11.4	-62.2	12.4	-67.1	NEW
188.8861	17.8713	15.57	17.59	325.87	22.91	2005.430	75.5	-57.1	73.7	-59.0	CBL 387
189.0135	62.4957	15.70	18.15	302.83	16.44	2001.391	4.0	-98.6	7.5	-97.3	LDS 2654
189.0556	14.9546	15.21	17.14	14.20	80.53	2004.075	-157.3	-107.0	-156.3	-106.3	CBL 388
189.0842	11.5046	17.28	17.96	35.45	8.60	2002.224	-202.2	-25.3	-204.2	-28.4	LDS 1327
189.1800	1.8364	16.23	16.35	297.57	14.34	2000.343	-36.5	-80.9	-34.3	-82.2	SLW 744
189.3303	-0.2514	17.37	18.85	129.66	15.15	1999.218	-88.3	-60.4	-86.0	-60.6	SLW 747
190.0970	-17.0777	13.93	17.38	173.46	25.97	2006.085	-72.0	-1.2	-71.8	-0.5	NEW
190.1489	22.3836	14.81	17.14	253.26	116.66	2005.189	-116.5	-26.6	-119.0	-22.9	LDS 4246
190.1797	46.4487	16.44	18.37	257.23	11.51	2003.191	-25.9	-75.7	-30.0	-77.8	CBL 391
190.4392	21.5289	15.45	17.71	183.42	25.76	2005.189	17.9	-62.3	20.6	-64.0	SLW 760
190.5172	52.4632	16.41	17.47	8.31	13.81	2001.970	-144.9	-31.6	-145.9	-34.3	LDS 3055
191.3313	3.3217	16.03	18.51	240.05	22.99	2006.331	-19.5	70.8	-23.2	67.0	NEW
191.4615	63.3324	16.49	16.77	143.98	15.07	2001.391	-147.7	81.9	-151.1	82.7	LDS 2658
192.0367	22.0701	15.03	19.27	328.76	28.33	2005.195	-76.8	-85.6	-75.2	-89.0	AZC 77
192.4695	26.7179	16.13	17.63	281.49	15.08	2005.050	-69.0	15.2	-66.3	18.2	LDS 4280
193.0343	37.9245	14.98	16.95	206.93	16.66	2004.207	-124.8	8.8	-125.8	12.1	SLW 786
193.5231	55.0090	16.73	16.78	98.41	10.80	2002.287	-108.3	-10.7	-111.8	-14.6	LDS 3067
193.9053	6.3477	16.09	16.53	285.98	37.79	2003.248	-140.5	36.5	-141.2	34.0	LDS 4295
194.1641	31.0447	16.13	17.80	192.88	35.40	2004.362	51.2	-84.5	50.6	-82.9	CBL 401

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
194.2971	1.6815	13.77	16.16	348.80	26.11	2000.343	15.1	64.2	18.3	64.7	GRV 1200
194.3340	30.7575	16.17	16.88	110.28	79.37	2004.957	-211.1	47.6	-211.2	45.0	LDS 1347
195.1255	28.9943	14.73	15.46	310.23	35.12	2004.390	-64.7	-26.5	-69.3	-24.4	NEW
195.1312	46.1346	15.04	17.47	20.95	23.24	2003.191	-100.6	50.6	-103.3	47.1	LDS 4305
195.8438	43.5609	17.97	18.56	47.46	8.54	2003.226	-27.9	-63.0	-25.5	-64.6	SLW 817
195.9583	32.1669	15.26	15.56	232.80	9.82	2004.362	-2.8	-63.9	-4.7	-65.5	NEW
195.9959	22.8214	17.49	17.51	196.13	53.95	2005.189	-100.8	9.4	-101.8	4.7	NEW
196.3467	12.0039	17.08	17.34	170.91	63.51	2003.223	-217.8	-21.6	-215.2	-24.9	LDS 4313
196.8016	44.5019	15.28	16.36	222.42	54.79	2003.232	-137.2	-18.5	-135.8	-14.1	LDS 4317
197.0658	8.2130	16.79	17.61	329.73	11.82	2003.248	-17.4	-84.8	-18.2	-87.4	CBL 408
197.1407	14.4086	16.86	17.11	228.82	49.84	2003.409	-93.2	-16.6	-94.5	-14.0	LDS 4320
197.5889	32.8829	13.80	16.61	359.92	66.43	2004.362	-174.2	0.4	-178.2	-0.9	CBL 410
197.6643	7.2391	15.02	15.40	301.59	23.34	2003.248	-77.2	-59.6	-81.3	-63.5	CBL 411
197.7023	47.0355	16.29	17.48	109.59	13.89	2003.191	15.4	-76.6	14.3	-76.5	BVD 227
198.3784	16.9411	16.71	17.00	76.52	55.96	2005.430	-82.7	5.0	-82.6	6.7	SLW 837
198.9568	36.1892	14.40	14.68	279.28	39.67	2004.209	-123.7	-119.0	-124.8	-115.7	NEW
199.1036	43.0946	15.14	15.69	133.53	49.30	2003.226	-67.2	-23.8	-65.1	-21.7	UC 2509
199.3243	21.2879	16.21	17.82	179.77	9.00	2005.189	-79.6	15.3	-80.8	16.6	LDS 2910
199.4381	51.5277	14.49	17.70	252.41	89.83	2003.324	-78.4	-25.2	-77.7	-25.6	NEW
199.5646	47.5082	15.19	17.41	355.61	64.52	2003.177	-104.8	31.9	-103.7	33.6	SLW 850
199.7980	10.3285	16.29	16.43	106.03	22.76	2003.319	-66.1	-1.1	-68.6	-2.1	NEW
199.9135	28.3727	14.71	15.05	193.32	27.40	2004.392	-111.7	-79.2	-113.9	-80.8	LDS 1383
200.0329	61.0578	14.57	17.36	153.01	11.74	2001.378	-44.5	-146.3	-41.1	-150.8	LDS 2673
200.0973	6.8900	19.59	19.85	319.16	110.54	2003.248	-22.6	-69.7	-24.8	-69.2	NEW
200.1704	-3.4412	16.10	17.22	343.15	102.78	2001.394	-75.3	-8.9	-79.4	-4.6	NEW
200.2492	43.4603	16.01	16.57	35.54	31.00	2003.226	-66.6	-15.0	-69.6	-11.9	SLW 859
200.5319	67.8116	15.59	16.03	8.08	28.23	2000.264	-52.2	83.3	-49.5	84.3	GRV 1087
200.5657	5.5216	14.58	17.11	236.54	46.92	2001.214	26.5	-137.1	25.8	-136.4	CBL 422
200.6474	16.7131	17.70	17.76	165.04	14.34	2005.430	-71.7	40.7	-75.0	45.2	NEW
200.7787	50.5509	17.22	17.50	231.04	13.16	2003.324	-72.4	-0.5	-69.8	-3.7	SLW 864
200.9903	35.8226	18.81	18.94	179.46	68.06	2004.209	18.0	-80.7	17.3	-85.2	NEW
201.1590	-1.8925	14.68	16.39	230.28	34.80	2001.394	-159.1	-151.7	-156.6	-156.1	LDS 4357
201.2742	51.8829	16.65	17.39	88.31	36.52	2003.246	-8.2	-128.3	-8.4	-125.9	SLW 866
201.3889	22.8945	15.89	16.28	324.49	21.98	2005.252	55.2	-86.9	57.9	-89.1	SLW 867
201.4041	43.7438	15.87	16.27	165.70	9.69	2003.226	-5.4	-77.0	-4.2	-81.0	CBL 425
202.0177	28.1319	14.66	16.99	70.58	28.20	2004.392	-150.0	32.7	-149.7	35.2	LDS 1389
202.4715	26.7921	18.22	18.47	127.47	23.70	2004.447	48.1	-65.3	48.8	-65.4	AZC 79
202.5916	38.7492	14.71	16.89	181.45	38.28	2003.316	-25.0	-62.4	-24.7	-63.1	CRB 98
203.0408	7.7375	15.35	17.68	281.89	18.92	2006.396	-69.8	29.1	-74.7	31.0	LDS 3074
203.2673	38.2188	15.10	17.74	233.12	9.11	2003.316	-45.2	-67.4	-49.6	-64.8	CBL 427
203.4448	19.2795	16.08	17.54	108.07	54.91	2005.353	-95.4	64.1	-99.5	64.2	SLW 892
203.5417	67.2625	17.48	18.78	260.79	16.67	2000.321	31.8	-79.8	35.3	-78.8	LDS 2323
204.0681	33.7085	14.77	16.10	321.02	42.24	2004.291	-161.0	-57.4	-161.2	-55.9	LDS 4380
204.2369	7.8653	14.51	16.85	50.69	65.73	2003.319	-235.6	44.1	-234.5	46.8	VBS 23
204.6930	1.7806	14.19	19.80	180.77	11.47	2006.399	-237.3	-92.0	-234.3	-88.7	NEW
205.1350	33.2328	17.23	18.65	297.47	31.75	2004.283	-41.3	-105.3	-37.0	-107.6	NEW
205.5331	67.3888	16.09	18.17	228.83	11.25	2000.321	-104.2	77.4	-104.3	74.5	LDS 2325
205.6732	21.6020	18.24	19.07	204.35	27.23	2005.189	-38.7	-91.8	-36.9	-88.7	NEW
206.3581	28.9566	14.59	16.20	89.28	20.33	2004.390	-81.3	31.4	-84.1	31.4	LAW 20
206.6125	38.7296	17.81	18.88	1.81	41.60	2004.075	-95.5	-84.7	-92.5	-86.3	SLW 927

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
206.7724	5.9257	16.21	16.22	178.80	37.24	2003.319	-5.3	-64.3	-3.3	-65.0	LDS 3102
206.9649	40.3297	19.49	19.82	71.45	54.91	2003.313	56.0	-89.0	51.4	-87.3	NEW
207.0033	33.7421	14.80	16.11	189.46	69.16	2004.283	78.0	-135.1	79.0	-134.6	LDS 4408 AB
207.1643	29.0224	14.24	16.23	56.93	14.50	2004.392	-145.3	43.6	-140.9	40.3	AZC 80
207.6703	-1.0116	17.12	18.18	99.16	23.65	2006.399	-21.5	-67.4	-18.1	-67.2	NEW
208.2497	7.2811	13.46	19.35	75.03	25.74	2003.319	-30.3	-81.0	-28.0	-85.8	NEW
208.5162	16.5197	15.23	16.61	8.77	36.23	2005.359	-73.2	-28.4	-72.2	-26.5	CBL 433
208.7155	51.4710	14.45	17.44	333.53	10.32	2002.248	-67.1	-44.4	-68.0	-41.8	CBL 434
209.2614	34.0585	17.84	17.90	89.06	81.06	2004.209	-69.4	10.3	-72.7	5.4	NEW
209.3122	19.8819	15.43	16.53	211.63	13.88	2005.195	-75.5	-49.5	-73.7	-46.6	SLW 948
209.4516	24.7934	16.29	16.76	147.51	36.46	2004.447	-75.7	23.6	-76.5	23.8	CBL 435
209.7437	5.5149	15.76	16.05	280.97	49.40	2001.290	-106.7	-55.7	-106.2	-56.4	SLW 953
209.8168	8.0023	17.43	20.63	192.19	84.23	2003.322	-9.8	-64.6	-6.6	-63.9	NEW
210.4113	59.2369	16.49	16.58	48.14	32.11	2001.391	-64.2	27.7	-63.6	27.6	LDS 2697
210.7794	24.3858	16.55	18.09	37.66	10.19	2004.450	-70.0	-76.0	-70.9	-72.4	SLW 958
211.4265	15.6192	14.87	15.13	339.79	48.85	2005.359	-48.7	-65.3	-48.8	-67.8	BPM 613
211.6036	11.6077	16.61	17.96	94.79	14.83	2003.245	-158.5	39.8	-159.1	38.1	LDS 4432
211.8991	53.3696	15.28	17.60	248.34	40.24	2003.180	-154.5	62.2	-152.9	63.4	LDS 2922
212.0121	-16.0398	14.73	16.99	233.86	39.68	2006.396	-65.0	-11.6	-64.3	-15.3	NEW
213.4627	29.4634	16.98	17.41	2.22	102.42	2004.362	36.7	-68.4	32.1	-68.3	SLW 982
213.6376	-1.2288	14.09	15.22	232.97	26.64	1999.218	-68.6	-7.9	-69.0	-8.9	UC 2711
213.7498	2.3744	14.04	17.04	299.16	26.35	2000.343	-94.4	29.5	-95.6	30.4	GRV 1096
213.8628	25.1775	15.77	17.67	312.05	26.19	2004.447	-7.0	-67.5	-7.2	-67.3	NEW
213.8946	48.1117	13.95	16.13	163.61	40.35	2003.324	-77.6	-12.1	-78.9	-9.8	CBL 445
213.9989	5.5835	16.65	16.85	70.73	12.42	2003.319	-64.9	-15.9	-64.1	-12.7	NEW
214.2937	16.7649	16.57	17.88	159.29	21.35	2005.356	-101.9	38.0	-103.1	34.7	SLW 988
214.3429	13.5011	15.68	15.99	55.20	10.52	2003.472	-82.3	33.4	-84.6	32.1	LDS 4452
214.9838	16.5603	14.54	15.50	267.34	63.24	2005.353	-82.8	23.4	-87.5	21.7	CBL 450
215.1114	35.3920	17.30	17.85	23.51	113.92	2003.475	-60.0	-12.4	-60.8	-10.4	NEW
215.7237	-20.6428	16.93	17.33	204.12	89.34	2006.396	-66.6	-60.4	-65.4	-60.1	NEW
215.7887	22.7211	15.59	16.93	295.72	32.57	2005.252	-102.0	-166.6	-102.2	-163.7	LDS 4462
216.1134	59.2281	16.17	16.59	72.95	88.73	2001.392	-87.0	72.1	-89.7	69.7	NEW
216.1498	18.0704	15.88	18.11	224.82	33.32	2005.354	-155.4	-72.6	-153.4	-73.3	CBL 453
216.2367	57.8993	17.14	19.23	325.78	29.51	2001.392	58.3	-74.0	59.6	-74.7	NEW
216.7367	55.6577	16.95	16.98	159.60	14.53	2002.437	-83.2	22.1	-84.8	25.0	CBL 454
216.8442	3.2304	15.49	16.13	126.74	17.13	2000.341	-81.0	4.5	-82.1	3.3	SLW 9005
216.9200	26.2263	16.48	16.85	244.87	8.79	2004.392	-103.4	102.0	-107.7	99.2	AZC 85
217.0552	10.2225	16.01	17.35	205.45	19.54	2003.314	-80.0	-27.3	-79.0	-22.5	CBL 455
217.0786	54.7091	15.08	17.76	89.69	49.42	2002.437	-101.5	36.2	-100.4	37.9	LDS 4468
217.4426	34.7590	15.78	16.38	320.19	9.81	2003.475	-249.9	164.3	-246.4	164.1	LDS 4470
217.4493	42.2564	15.37	17.50	120.11	41.82	2003.177	-88.0	-7.8	-87.6	-6.9	SLW 1002
217.7336	13.0201	17.30	18.40	294.19	11.80	2003.472	33.9	-80.1	37.5	-75.3	CBL 456
217.9205	6.4495	14.62	16.56	30.70	103.98	2001.457	-86.8	-13.7	-87.9	-17.2	NEW
218.1465	-1.3872	16.84	17.18	73.44	35.79	2001.394	-68.5	17.5	-67.4	16.6	NEW
218.9413	4.9698	16.82	16.96	335.38	51.82	2001.214	32.5	-163.0	33.8	-167.7	CBL 461
218.9590	0.7096	15.63	17.36	138.09	49.80	1999.221	79.8	-88.4	81.2	-88.7	CBL 462
219.8853	51.9061	15.26	16.42	102.70	13.04	2003.188	-87.0	81.9	-88.0	85.7	LDS 4487
220.5172	16.8932	16.10	16.89	266.12	32.22	2005.354	-72.5	10.5	-68.9	12.4	CBL 465
220.5792	26.2453	15.95	17.41	316.52	13.86	2004.365	49.0	-124.6	51.0	-125.3	LDS 4490
220.6966	28.1224	14.51	15.37	184.73	95.82	2004.308	56.0	-85.4	56.5	-87.3	CBL 466

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
221.4351	26.6369	17.89	19.92	307.41	68.98	2004.308	12.1	-85.3	14.1	-84.3	NEW
221.9265	34.6576	13.77	16.75	6.57	97.99	2003.475	-69.5	35.4	-70.6	37.8	NEW
222.0107	46.9666	16.75	18.02	290.88	8.60	2003.324	42.6	-88.9	45.2	-85.2	SLW 1033
223.2703	53.9476	15.97	17.77	182.49	73.94	2002.437	-26.5	78.0	-24.5	78.7	CBL 473
223.4139	7.3574	15.17	15.82	180.28	23.95	2003.319	-62.6	-27.5	-66.5	-30.4	NEW
225.1837	40.1749	17.57	18.43	73.55	10.87	2003.191	-0.9	-91.1	-1.9	-91.0	SLW 1051
225.1978	23.1075	15.45	16.42	338.92	26.22	2004.392	-171.7	113.9	-171.6	114.7	LDS 4521
225.5044	60.9530	15.53	15.55	341.01	26.83	2001.225	44.5	-91.9	47.9	-94.8	SLW 1053
225.8068	39.4541	16.35	18.34	115.91	9.22	2003.191	-79.3	-69.4	-75.3	-70.4	SLW 1055
226.1840	22.5274	16.50	19.65	280.39	20.33	2004.447	47.5	-66.4	46.5	-68.3	SLW 1057
227.0363	61.4387	16.96	18.49	308.23	12.12	2001.225	5.6	-67.7	2.0	-64.0	NEW
227.5123	22.0986	18.38	19.25	84.78	24.73	2004.447	22.9	-66.2	23.8	-67.1	NEW
228.1499	30.9517	13.91	16.15	240.08	41.51	2003.475	19.5	-63.7	22.1	-65.1	CRB 109
228.3403	8.6389	14.41	17.05	152.85	24.78	2003.245	-123.6	-20.4	-124.8	-24.4	CBL 481
228.8172	0.4073	17.21	17.88	331.35	20.78	1999.221	-83.0	-23.3	-79.9	-27.2	NEW
228.9839	22.4085	20.35	21.29	242.15	77.64	2004.390	19.8	-72.6	19.2	-75.0	NEW
229.3205	47.5232	16.44	16.64	158.54	18.93	2002.353	-53.8	116.9	-54.4	117.4	GRV 1207
229.3452	35.9369	15.48	17.10	26.71	10.37	2003.226	-94.6	-75.4	-92.2	-78.6	LDS 5165
229.7218	19.0649	15.50	16.86	174.31	11.71	2004.452	0.1	-68.6	0.0	-68.0	UC 2982
230.1532	55.1371	13.48	17.17	101.37	17.10	2005.428	-77.3	82.5	-76.2	83.5	CBL 486
230.3062	27.7479	17.66	17.91	184.40	59.58	2004.209	-140.0	-121.4	-137.6	-120.7	LDS 4544
230.3599	53.2034	14.95	15.06	137.01	10.95	2001.375	-64.6	87.0	-63.2	88.6	GRV 1209
230.8539	11.1754	14.37	14.48	54.22	23.50	2005.364	-22.0	-74.3	-24.0	-73.1	NEW
231.2795	57.5020	16.00	18.35	348.53	32.89	2006.331	45.1	-63.7	43.2	-63.9	CRB 195
231.2888	27.5664	16.46	18.79	130.23	7.80	2003.480	28.2	-78.4	29.5	-79.6	AZC 90
231.4670	12.5347	15.20	17.29	31.91	46.66	2005.362	2.8	-75.5	4.9	-76.9	CBL 488
231.5453	-2.8570	15.49	15.60	222.58	21.35	2001.454	-20.3	-111.6	-22.8	-108.1	UC 3003
231.7055	27.3091	16.27	16.94	257.28	13.68	2003.480	38.4	-69.7	42.7	-72.9	AZC 91
231.9668	49.1484	16.00	17.01	344.89	55.10	2002.437	-60.8	50.2	-63.6	53.2	SLW 1095
232.0655	29.3386	17.38	17.95	57.36	13.01	2003.317	-72.8	-14.5	-69.1	-13.8	NEW
232.9907	13.3573	13.83	16.27	186.99	13.70	2005.359	-128.4	-36.2	-128.3	-33.6	LDS 4557
233.0902	56.9993	18.33	18.73	251.95	8.62	2000.321	-64.3	-67.7	-65.8	-67.6	SLW 1103
233.5381	40.7901	14.01	17.64	293.80	11.34	2003.324	88.7	-131.3	87.8	-132.0	LDS 4562
233.5712	63.8920	16.08	18.12	110.16	8.17	2005.416	-1.8	-65.5	2.2	-66.8	NEW
234.4683	0.2850	16.60	16.70	283.41	52.00	1999.221	33.9	-466.8	34.9	-466.6	LDS 4575
234.9551	2.4947	14.42	16.97	132.49	101.55	2001.392	-115.4	-10.6	-115.7	-8.6	NEW
235.8304	40.4027	15.51	17.44	315.76	36.80	2003.324	16.1	-137.0	16.6	-137.6	CBL 494
236.3961	42.0852	13.98	14.29	253.62	60.77	2002.350	87.1	-10.4	89.5	-11.2	UC 212
236.3975	18.9915	17.03	17.87	288.29	11.57	2004.393	-76.1	-7.3	-79.7	-9.6	SLW 1135
236.4010	56.9842	16.46	17.45	31.07	8.62	2000.321	12.9	-65.6	8.5	-63.8	NEW
236.8494	53.4087	15.72	18.85	191.89	11.12	2000.261	-13.2	63.0	-11.1	63.2	NEW
237.0738	4.7261	16.62	17.22	59.51	10.92	2001.457	-3.9	-64.8	-0.6	-64.6	SLW 1138
237.3033	45.0279	15.43	18.79	310.79	10.39	2002.353	-9.1	-72.1	-7.2	-71.8	NEW
237.5326	18.3661	16.03	18.19	139.48	54.53	2004.447	-24.2	-66.1	-21.2	-63.7	NEW
237.8183	6.3459	18.82	19.46	141.01	13.35	2003.319	-29.1	-63.6	-29.4	-65.9	NEW
237.9101	61.1431	16.84	17.24	282.11	15.17	2004.455	-7.8	-60.2	-11.0	-60.3	NEW
238.2828	22.8490	14.64	18.00	247.29	38.71	2004.291	-211.9	-162.3	-215.9	-162.9	LDS 4598
238.5167	44.4289	15.70	15.93	188.90	14.02	2002.437	-93.1	106.7	-93.8	106.9	LDS 1428
238.7548	35.2288	17.55	17.78	162.63	75.61	2003.404	-67.9	16.8	-70.8	17.7	NEW
238.8730	15.7088	16.44	17.62	188.70	55.96	2004.452	-83.6	61.0	-80.8	64.5	LDS 4602

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
238.8828	49.0735	17.15	18.14	3.51	21.50	2001.375	-2.1	-96.3	0.5	-97.9	NEW
238.9321	26.0516	14.34	16.01	63.69	30.06	2003.475	-220.5	84.5	-221.3	82.6	LDS 4604
239.3731	3.4011	17.68	19.30	292.29	21.32	2003.322	15.7	-65.7	16.4	-69.2	NEW
239.7728	51.7971	14.64	14.86	269.95	79.23	2001.290	-9.0	78.5	-6.9	74.3	NEW
241.3093	-17.6722	16.16	16.27	302.77	25.92	2007.300	38.5	-100.8	40.9	-101.5	LDS 4630
241.3806	29.9235	15.90	17.59	140.86	8.31	2003.472	-22.2	78.7	-25.8	79.3	GRV 1217
241.7064	14.7358	14.48	17.85	316.10	66.19	2004.453	-22.6	67.0	-25.6	67.0	NEW
242.4293	52.1786	14.59	17.00	236.76	11.47	2000.321	-69.6	-5.1	-66.4	-3.0	NEW
242.8577	43.0924	17.11	17.50	145.73	15.77	2002.437	30.1	-64.0	25.3	-67.6	NEW
242.9587	34.6981	20.44	20.98	85.63	44.44	2003.407	-47.7	79.2	-46.1	81.3	NEW
243.5141	53.8250	13.28	17.08	322.32	26.50	2003.481	53.8	-97.9	57.2	-102.8	LDS 4655
244.1729	22.7805	14.62	18.96	103.13	9.36	2003.317	36.5	-67.6	40.8	-69.4	AZC 97
244.2595	-0.1013	15.70	20.40	352.29	18.76	1999.216	-19.7	-81.6	-14.9	-84.1	NEW
244.8640	56.3326	15.69	16.09	58.01	78.25	2005.416	-61.5	-18.2	-63.4	-21.0	NEW
245.4876	35.3981	17.29	17.79	356.63	25.89	2002.350	-9.0	-64.9	-4.6	-68.1	NEW
245.8345	38.7316	15.63	17.11	301.56	75.11	2002.437	-135.8	138.9	-138.7	138.5	LDS 4664
246.2437	-5.1642	16.30	17.81	195.73	44.93	2005.425	-26.8	-113.1	-25.0	-111.0	NEW
246.8698	7.6775	17.37	19.51	323.65	25.58	2005.365	-14.5	-62.0	-10.5	-66.1	NEW
248.0291	7.3279	18.84	20.09	265.98	89.32	2003.472	-19.3	-61.6	-20.4	-60.7	NEW
248.3748	46.0599	15.53	15.99	39.52	19.24	2001.225	-38.3	66.7	-40.6	66.4	BVD 247
249.1048	37.7952	14.25	17.65	261.25	21.21	2002.438	-105.7	3.3	-106.6	0.0	LDS 4680
249.2637	12.2270	15.22	15.67	254.86	33.01	2004.453	-37.4	-61.5	-36.7	-60.0	BPM 665
249.3832	53.8559	15.27	15.37	83.29	15.10	2005.416	13.4	-74.8	12.8	-76.0	SLW 1188
249.5384	48.6414	17.65	18.37	314.95	34.56	2004.453	-46.3	70.5	-45.2	66.6	SLW 1189
249.5767	50.6736	14.54	17.46	269.98	15.39	2003.481	-25.3	-65.3	-29.4	-65.1	NEW
251.0388	37.8350	17.65	19.24	147.75	87.93	2001.378	9.8	-69.3	11.2	-70.2	NEW
252.4825	79.5342	16.93	17.46	138.24	24.37	2003.483	-37.0	67.1	-41.4	66.9	NEW
252.8689	18.2349	20.19	20.38	300.12	110.41	2003.317	1.1	-61.8	-2.6	-60.4	NEW
253.6643	50.8689	16.98	17.43	63.95	18.21	2005.417	-46.3	97.9	-46.3	98.0	GRV 1223
255.1078	28.2857	15.97	17.52	120.80	18.58	2004.709	-133.4	4.9	-134.9	3.0	LDS 4717
255.1082	23.7566	15.03	16.88	259.02	17.97	2003.325	-26.5	-64.2	-27.1	-67.5	NEW
255.1260	33.2270	15.63	16.45	289.30	27.12	2001.392	-44.8	-66.8	-46.1	-67.0	CBL 513
255.6099	11.7654	14.78	19.43	195.98	8.66	2005.438	2.6	-89.0	5.5	-89.4	NEW
256.1921	73.0997	15.40	17.23	65.13	78.56	2001.720	60.6	-31.9	64.2	-35.5	NEW
256.2522	28.1493	16.55	16.77	90.28	27.71	2003.180	2.6	66.4	4.2	69.0	NEW
256.2693	59.4490	16.74	19.80	102.63	12.41	2000.259	0.9	-129.7	1.2	-127.7	NEW
257.6061	27.9777	11.98	16.83	128.88	48.11	2002.438	19.5	-86.6	23.1	-87.9	SKF 366
257.9359	-0.5620	12.97	16.07	272.62	15.28	2001.411	115.2	-78.7	115.1	-77.0	LDS 4724
258.7007	43.1964	15.75	16.13	60.63	14.79	2004.455	24.9	-125.9	26.5	-125.7	LDS 4731
259.0877	-2.1036	17.92	20.70	148.82	102.39	2005.433	13.2	-67.1	17.4	-64.5	NEW
259.3079	36.0540	18.44	18.54	202.79	61.16	2003.481	-34.5	-139.7	-37.0	-142.3	NEW
259.5219	27.0971	18.44	20.77	37.96	111.86	2001.378	-21.9	-74.1	-19.6	-74.7	NEW
260.6460	29.5177	13.98	18.52	342.23	31.55	2000.261	-20.7	-171.3	-25.1	-175.9	FMR 132
261.8348	33.9072	13.30	20.99	353.26	52.86	2004.456	-2.8	80.2	-1.8	76.2	NEW
263.6019	4.9193	18.61	20.17	117.45	5.76	2005.433	-10.8	-106.5	-14.3	-102.6	NEW
263.8870	6.0532	14.60	17.63	236.63	27.04	2005.425	19.7	-107.2	20.8	-107.8	NEW
264.1361	7.1297	14.47	15.78	34.50	51.48	2003.639	31.7	-102.4	35.8	-103.7	UC 3374
264.4001	67.7244	17.35	17.59	193.14	31.99	2001.720	49.5	106.3	52.7	104.7	AZC 177
264.7749	65.1519	15.96	17.80	109.10	17.47	2001.720	-3.7	113.5	0.1	111.5	NEW
264.9433	5.6246	16.63	16.97	249.21	9.34	2005.425	-128.4	-153.1	-129.0	-153.2	FMR 137

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
265.0576	28.4391	19.04	19.45	215.88	14.53	2004.453	-43.0	-67.7	-46.2	-72.0	NEW
266.7337	64.9359	14.93	15.08	144.47	23.13	2006.331	-81.5	105.3	-84.3	103.2	LDS 2741
266.8601	44.1455	16.13	17.81	302.75	10.69	2005.444	0.3	-79.7	3.2	-80.9	NEW
267.1462	46.0976	15.63	18.12	34.33	19.82	2001.717	-1.2	80.8	2.2	77.3	CBL 518
267.1944	5.6933	17.40	17.50	219.32	14.05	2003.639	20.5	-60.9	21.1	-63.6	NEW
267.4790	41.8551	17.03	17.80	177.96	10.68	2002.760	-31.7	89.4	-31.8	89.2	LDS 4765
269.2249	78.4767	14.23	14.52	276.43	53.85	2003.740	11.2	-66.3	12.9	-66.8	NEW
269.3062	0.9325	14.72	20.79	303.91	69.44	2000.344	14.1	-64.6	17.8	-66.0	NEW
269.6317	0.7237	18.81	20.37	213.99	108.40	2002.337	-5.3	60.4	-7.8	60.2	NEW
270.2203	0.8416	13.57	16.56	355.95	25.90	2000.344	-35.2	-76.8	-39.1	-72.8	NEW
272.8278	0.9743	19.65	19.97	345.72	99.83	2000.344	-27.5	-63.6	-26.4	-65.2	NEW
274.2337	64.2448	16.72	17.71	44.36	12.65	2006.394	-42.0	-246.4	-42.8	-248.1	SLW 1218
280.6273	-0.2593	17.84	20.10	89.26	75.79	2003.639	-12.4	-75.0	-11.9	-77.9	NEW
281.5963	39.9721	14.55	16.36	70.73	10.56	2005.435	-129.4	19.2	-124.6	18.3	LDS 4799
291.1071	14.7860	20.00	20.90	226.25	83.38	2004.707	-1.0	-65.3	3.0	-66.8	NEW
291.5741	15.4872	17.21	17.71	253.40	80.12	2004.707	4.7	68.3	0.8	67.9	NEW
294.3393	63.3232	19.12	19.67	307.11	19.43	2006.394	12.9	73.2	12.7	72.3	NEW
295.2510	23.2820	20.08	20.20	43.21	19.22	2007.625	14.3	77.7	11.2	74.4	NEW
296.7048	62.6387	16.94	18.26	83.27	8.17	2006.397	12.2	69.5	15.8	69.8	BVD 334
298.4580	10.3515	18.31	19.84	283.52	110.82	2004.707	-7.4	-62.0	-6.7	-65.2	NEW
299.6021	60.5317	13.12	18.34	246.16	51.58	2006.397	2.1	96.1	1.1	96.2	CBL 524
302.1205	60.3984	15.64	16.06	355.45	74.14	2006.397	-79.5	-30.3	-82.1	-27.3	CBL 525
302.3434	33.1282	14.86	15.56	359.56	35.01	2006.402	114.9	-203.1	111.2	-199.2	GIC 162
302.4844	41.9991	18.32	19.69	210.16	113.06	2003.735	16.2	-60.1	15.3	-62.4	NEW
303.4920	7.2232	19.17	20.13	238.07	102.10	2004.710	-6.6	-72.2	-1.9	-70.8	NEW
303.7531	32.7298	20.52	21.53	55.86	35.92	2006.402	5.3	-65.6	3.0	-64.3	NEW
304.1702	8.0382	19.78	20.76	284.68	97.60	2004.707	0.4	65.9	4.6	70.7	NEW
304.6610	-11.4369	15.22	18.06	38.56	27.87	2005.444	-55.2	-121.8	-52.8	-121.3	NEW
306.7294	0.7565	16.35	17.25	216.91	35.56	2001.788	0.9	-64.6	-2.5	-66.4	NEW
307.4056	-5.5173	15.43	17.93	84.90	35.98	2000.674	-63.4	-86.3	-58.6	-87.1	NEW
308.7576	-13.3905	15.26	16.90	36.10	18.43	2005.452	69.8	32.8	72.3	30.6	NEW
309.0652	-13.3370	16.12	17.69	221.12	9.78	2005.444	-52.4	-90.3	-55.5	-92.5	NEW
309.7707	27.1608	19.95	20.22	319.80	43.28	2006.402	-9.1	68.2	-12.6	70.9	NEW
310.0914	-6.1701	14.93	16.99	73.39	35.09	2000.740	6.6	-67.2	11.1	-66.8	NEW
311.5927	45.8478	14.49	19.49	7.16	111.96	2000.937	-48.7	-63.2	-50.2	-63.1	NEW
312.0350	39.9707	14.82	16.75	358.83	9.66	2003.735	66.4	16.8	66.4	12.3	NEW
312.0630	75.3106	16.15	17.13	132.87	10.03	2003.738	89.8	185.9	91.6	189.5	LDS 1940
312.4928	57.8417	19.50	19.94	318.98	112.14	2006.410	-7.6	-68.1	-9.8	-69.5	NEW
313.6640	42.1775	20.05	20.78	234.76	61.41	2003.719	-0.9	-89.2	-1.7	-91.3	NEW
314.0111	-5.9222	15.60	16.04	183.62	73.70	2000.674	-11.8	-89.4	-10.9	-88.8	UC 4333
314.3734	-11.7008	13.02	17.52	320.65	48.68	2004.699	76.9	51.4	80.1	52.3	NEW
315.2225	-3.2735	17.11	18.20	297.29	75.40	2008.887	-47.7	-74.0	-44.2	-73.8	NEW
315.5343	3.4863	18.28	18.64	278.88	69.70	2008.816	-1.5	-79.1	-1.8	-80.2	NEW
315.8179	-17.6377	20.13	20.52	307.07	73.60	2005.452	1.2	-61.4	-1.5	-62.7	NEW
316.2584	-3.1529	16.79	18.42	78.62	23.46	2009.774	28.3	64.3	28.3	66.6	NEW
317.2117	54.9814	19.53	19.65	189.94	93.88	2006.410	-11.5	60.4	-9.7	62.1	NEW
318.2369	-0.7460	16.32	16.39	210.79	14.00	2003.795	67.5	3.5	68.5	6.5	SLW 1231
318.4494	74.1492	14.99	16.45	167.89	32.70	2003.738	30.7	71.1	30.8	72.0	CBL 91
319.6920	21.8327	17.20	17.86	9.77	12.56	2008.732	-62.2	71.8	-65.2	70.4	LDS 4878
320.2728	53.6226	17.31	19.30	21.12	64.35	2006.394	3.0	-70.0	6.9	-73.8	NEW

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
320.5836	51.5355	16.72	19.27	156.06	74.95	2006.394	24.4	-66.7	24.1	-64.7	NEW
321.0934	-10.5503	19.72	19.82	34.86	114.43	2008.732	-16.3	-63.0	-18.9	-62.2	NEW
321.3466	52.5830	19.28	19.63	319.38	113.02	2006.410	23.3	63.7	27.8	65.9	NEW
321.4797	52.2311	20.43	20.85	111.88	54.45	2006.394	-27.6	68.1	-23.5	67.8	NEW
321.5872	7.1116	13.53	17.76	103.53	91.92	2008.827	-9.0	-73.6	-6.9	-70.6	NEW
321.7870	51.8578	17.34	19.63	51.32	71.96	2006.394	-3.7	78.1	-4.6	76.6	NEW
322.0926	19.3974	20.38	20.64	262.83	79.74	2004.712	13.4	-65.4	9.7	-67.3	NEW
323.2605	17.3657	19.12	19.48	80.42	114.90	2006.402	33.3	64.4	29.5	63.9	NEW
323.2859	-2.2200	14.23	18.92	315.08	94.97	2008.882	56.4	-66.7	60.0	-66.1	NEW
323.5443	50.4402	17.23	18.17	114.09	119.73	2006.410	6.4	-62.7	6.0	-65.1	NEW
324.9261	14.3850	16.22	17.71	319.32	18.41	2007.448	-18.1	-108.6	-18.3	-108.1	LDS 4901
325.2194	25.5337	14.50	16.43	199.32	9.51	2009.876	-88.8	-45.5	-87.8	-50.3	AZC 113
325.3350	23.9111	14.03	20.07	163.68	11.36	2009.859	29.9	-113.9	30.9	-114.0	NEW
325.4102	20.9826	13.99	14.00	33.44	69.77	2004.783	74.0	-10.5	76.3	-9.6	UC 4531
325.7705	24.2164	16.63	19.79	38.90	9.67	2009.797	116.4	-71.1	120.8	-67.9	NEW
325.7925	13.8314	17.04	17.87	305.13	13.51	2009.739	-43.3	-66.8	-47.9	-64.2	CBL 534
326.2730	0.3672	17.65	18.75	143.20	18.94	2003.811	-71.1	-63.2	-71.5	-62.9	SLW 1252
328.0672	23.7417	17.91	19.01	98.25	40.16	2009.794	-9.3	-70.0	-7.5	-70.0	NEW
328.6062	7.6378	17.12	17.93	72.81	13.06	2008.827	-78.4	-94.1	-73.7	-92.0	NEW
329.1905	-4.4500	14.18	17.18	309.64	71.95	2009.775	65.3	-15.3	61.4	-19.1	NEW
329.4003	-3.4697	15.01	18.36	128.20	37.04	2009.775	166.5	-129.6	162.2	-133.6	LDS 4926
330.3202	-2.3535	14.79	15.60	299.26	12.66	2009.709	49.1	-92.1	49.2	-90.9	NEW
331.2027	22.4412	16.78	17.08	40.98	35.47	2004.784	-106.9	-56.0	-109.4	-54.7	CBL 538
331.2363	-9.6061	16.30	17.26	347.57	15.21	2004.710	-34.2	-106.1	-34.9	-102.0	NEW
331.3875	25.3995	15.20	15.74	243.09	75.47	2009.797	-7.7	-173.9	-12.3	-172.1	FMR 168
331.6505	6.8764	16.21	19.02	345.22	71.32	2005.742	-19.6	-65.2	-16.5	-64.8	SLW 1261
331.8189	8.7040	17.07	19.81	126.93	32.85	2004.699	46.8	-85.3	48.7	-85.3	NEW
332.1345	2.1601	15.36	16.77	187.91	32.29	2008.756	119.8	-170.1	118.9	-170.8	LDS 4945
333.3313	25.0324	15.39	17.48	204.99	29.73	2009.797	-18.2	-60.0	-16.5	-60.2	NEW
333.9568	0.9589	17.63	18.29	303.98	7.36	2008.756	-11.2	-144.6	-9.1	-144.4	LDS 4952
334.1306	18.7533	14.41	17.40	16.86	105.27	2009.794	73.8	15.2	76.4	13.7	NEW
335.8782	31.9892	14.57	16.10	168.49	34.06	2009.878	144.4	69.8	140.7	69.1	LDS 4964
336.0963	-1.6424	13.26	13.45	296.58	83.45	2009.709	227.4	-377.1	223.7	-382.1	GIC 180
336.8214	18.0835	13.22	16.27	243.16	33.63	2009.789	70.8	-23.0	67.1	-22.5	NEW
336.9505	-4.0455	18.14	18.59	328.92	18.94	2009.737	27.5	-116.1	29.3	-113.0	NEW
337.4019	-7.2731	15.65	18.34	70.30	34.35	2009.791	22.5	-92.9	22.6	-89.3	NEW
337.7115	21.0546	18.26	18.32	8.13	29.22	2009.791	-35.9	-78.2	-39.3	-76.9	NEW
337.9365	13.3233	16.42	18.17	298.25	10.54	2000.740	-12.9	-74.7	-13.5	-75.2	CBL 541
338.3175	-7.9104	17.62	18.35	163.43	13.02	2009.788	-64.8	80.2	-63.4	79.7	SLW 1278
338.9853	24.4336	16.96	17.04	137.60	13.77	2009.794	75.3	12.1	75.1	16.4	NEW
339.0294	4.0376	16.09	16.19	120.21	57.12	2008.816	-48.4	-75.2	-51.1	-73.0	NEW
339.3326	22.4123	13.87	14.98	348.47	15.36	2004.712	95.1	0.9	92.1	5.7	UC 276
339.7480	11.5732	16.82	17.28	20.32	90.41	2008.828	4.2	-68.2	0.7	-69.8	NEW
339.8554	3.6573	15.37	17.04	281.56	35.31	2008.816	82.8	-6.2	81.8	-5.2	NEW
340.0931	10.7247	16.86	17.69	15.45	22.80	2008.839	46.1	-131.9	48.1	-134.5	NEW
340.1422	4.8130	15.05	15.93	187.26	12.45	2008.816	116.0	-46.6	115.0	-47.6	UC 4788
342.3576	5.2832	14.86	17.38	303.19	26.47	2008.816	106.0	50.4	104.1	49.9	LDS 5002
342.8887	13.5764	15.78	17.17	318.56	55.44	2001.715	-51.0	-61.4	-47.1	-60.9	NEW
343.2650	27.4462	16.75	17.40	52.55	12.90	2009.797	179.9	-8.6	180.8	-7.6	LDS 5012
343.3717	23.5880	15.04	17.11	190.76	16.74	2008.751	82.8	-1.8	83.5	-1.4	LDS 5014

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
344.2093	18.8216	14.93	15.27	166.95	110.75	2009.057	66.8	-27.0	65.0	-25.8	NEW
344.2563	19.7471	15.23	18.13	307.09	54.44	2009.057	181.4	119.5	184.5	116.2	LDS 5024
344.7357	20.2218	15.37	16.25	235.62	21.19	2009.791	-49.7	-117.9	-48.8	-117.4	LDS 5033
345.0863	58.6101	19.44	20.23	227.58	37.48	2003.738	36.5	-62.5	37.1	-61.0	NEW
345.1376	10.2863	19.13	19.18	129.04	22.67	2008.836	8.8	-68.0	5.6	-64.7	NEW
346.1311	-19.3387	16.23	16.66	146.64	29.21	2004.953	117.5	-19.2	117.7	-21.8	UC 4874
347.1577	1.4628	14.61	14.65	202.03	37.13	2008.753	118.9	-51.9	117.4	-50.6	LDS 6008
347.7866	57.8106	19.55	20.21	331.89	88.75	2003.738	-36.1	72.4	-33.2	71.3	NEW
347.9436	58.2237	17.90	18.90	174.75	80.17	2003.738	2.3	69.5	-2.2	65.1	NEW
348.8313	-6.8810	14.17	16.74	327.36	81.18	2009.791	10.3	-78.7	12.2	-78.8	NEW
349.3903	57.4171	17.58	19.50	197.42	90.75	2003.738	-5.4	62.7	-3.6	64.8	NEW
349.5095	5.3496	14.57	16.55	216.02	51.74	2008.879	123.8	75.8	121.3	72.4	NEW
349.5244	-7.3409	16.97	17.88	150.80	17.77	2009.791	10.5	-136.2	12.6	-134.8	LDS 2978
349.8584	15.6379	16.26	18.09	82.07	13.21	2006.708	-26.9	-79.8	-26.6	-78.6	CBL 547
349.9249	53.1805	15.84	17.96	272.65	30.89	2003.738	19.5	62.1	16.9	65.8	NEW
349.9718	-1.0904	15.61	18.12	323.93	23.39	2003.741	-48.1	-76.4	-48.3	-73.2	CBL 548
350.4113	29.7427	15.85	17.53	233.24	16.55	2009.797	116.8	15.4	116.7	18.0	LDS 5077
350.7054	23.3744	15.86	15.95	176.62	12.68	2008.732	138.9	-24.3	142.8	-25.4	AZC 129
350.9869	-7.8473	14.84	17.40	137.32	11.90	2009.791	53.4	69.4	56.8	65.9	LDS 2986
351.0937	35.0785	16.31	20.45	349.31	21.73	2009.879	-42.8	-79.5	-38.9	-81.2	NEW
351.3788	3.4928	16.20	17.48	187.37	53.84	2008.753	62.1	-106.1	62.6	-107.1	NEW
352.1281	-3.6990	15.29	16.68	65.25	22.26	2008.888	64.4	-10.0	64.0	-9.8	NEW
352.4656	31.6811	17.76	18.34	223.27	94.47	2009.876	-8.0	-77.2	-9.8	-74.1	NEW
352.7752	8.7004	13.59	14.96	359.00	30.77	2008.836	223.5	89.8	226.6	89.1	GIC 194
353.0244	15.2238	15.57	16.63	340.25	89.68	2001.644	73.2	-5.9	72.1	-1.5	NEW
353.2963	22.1927	14.35	16.67	212.50	63.85	2009.794	-64.2	-31.9	-61.5	-32.3	UC 4981
353.3449	3.7616	15.06	17.89	126.90	43.66	2008.879	93.6	12.2	98.4	12.3	NEW
353.4344	33.2785	15.23	15.30	242.61	14.43	2009.879	-85.7	-55.3	-84.9	-55.3	LDS 5102
354.1972	25.4950	17.19	18.71	311.78	12.63	2004.713	-39.4	69.3	-43.9	68.4	NEW
354.2788	-1.4730	14.01	17.10	37.95	66.72	2009.709	62.0	3.8	60.6	-0.8	NEW
354.3734	6.3137	15.86	16.21	73.33	16.39	2005.698	112.5	-37.3	112.0	-37.6	SLW 1329
354.5753	61.7184	14.60	14.63	173.40	29.77	1999.765	90.2	-0.5	88.0	0.0	NEW
354.6033	69.1896	20.50	22.00	171.26	69.68	1999.765	19.5	64.3	20.8	65.0	NEW
354.7499	3.7143	18.00	18.31	162.55	115.37	2008.754	-29.2	-61.2	-25.7	-61.4	NEW
354.9839	-1.4498	16.74	18.58	164.60	15.29	2009.709	-105.5	-185.5	-108.6	-190.3	LDS 5110
355.3478	-5.4040	18.75	18.97	158.33	78.99	2008.888	-4.5	-61.2	-0.6	-61.6	NEW
355.4222	1.0870	15.37	18.67	24.75	7.87	2001.789	-38.4	-71.0	-33.8	-73.9	NEW
356.1779	-5.1651	17.78	17.96	321.68	24.08	2009.742	-73.0	-40.1	-70.2	-38.5	LDS 6056
356.2283	28.2342	13.90	15.24	240.42	31.61	2009.792	119.5	-53.0	115.2	-51.7	LDS 5117
356.2721	21.1019	17.03	18.09	209.57	22.73	2009.794	-63.6	-122.6	-63.1	-121.5	LDS 5118
356.4222	-19.6774	15.84	17.89	102.13	111.89	2004.953	60.6	5.0	65.2	6.3	NEW
356.4882	12.3709	13.68	16.02	129.32	42.85	2008.839	128.7	-9.4	130.0	-11.4	NEW
357.4130	10.4626	16.14	16.79	314.64	17.19	2008.836	120.0	-67.8	116.8	-69.8	NEW
358.2733	7.4509	18.44	19.34	338.64	16.38	2005.698	-57.5	-156.4	-56.5	-157.4	NEW
358.2780	-8.4969	14.83	17.91	32.66	35.27	2009.791	-191.2	-226.6	-192.9	-228.7	LDS 3003
358.4323	8.4169	15.05	15.93	276.92	60.96	2005.698	-68.9	-5.3	-64.1	-6.9	NEW
358.6469	24.4626	15.01	16.07	124.11	14.41	2008.751	88.4	-29.5	89.1	-28.2	CBL 550
358.8996	15.0600	20.66	21.00	244.90	81.48	2001.644	9.3	-62.3	8.7	-63.3	NEW
359.1769	8.4959	18.25	19.64	329.95	70.81	2005.698	-53.0	-65.8	-51.3	-65.0	NEW
359.3094	29.9884	17.21	18.38	203.86	11.98	2003.738	40.6	-70.6	39.8	-67.7	AZC 132

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	MAG A	MAG B	PA	SEP	DATE	PRIMARY		SECONDARY		WDS NAME
							PM RA	PM DE	PM RA	PM DE	
359.5415	30.9672	15.42	15.95	62.67	34.84	2003.738	140.3	-7.1	141.2	-7.8	LDS 5144
359.7226	1.8124	13.59	14.21	143.26	37.83	2008.756	69.0	-19.6	67.0	-20.3	UC 300
359.8908	-10.6220	14.94	17.74	3.74	15.06	2000.680	121.3	-71.0	118.7	-67.7	LDS 5150

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
1.4044	-1.6654	LDS 3012	1.38	0.75	1.56	0.86	4	5
1.6852	-0.9035	GWP 13	0.95	0.51	1.22	0.63	2	3
1.8549	-5.3131	GWP 15	0.72	0.32	1.22	0.63	0	3
2.1427	18.8297	LDS 3126	1.40	0.73	1.36	0.63	4	4
2.4115	1.8063	GWP 22	0.84	0.52	1.36	0.79	2	4
2.4421	23.9435	LDS 3131	1.60	0.88	1.79	1.12	5	6
2.6793	34.2905	NEW	0.86	0.50	1.30	0.74	2	4
3.6267	21.3149	LDS 3141	0.74	0.39	1.19	0.61	1	3
3.8319	17.8980	LDS 3145	1.77	0.90	2.05	1.05	5	6
4.2745	-12.0791	CBL 202	1.07	0.50	1.16	0.59	2	3
4.5137	-6.5172	GWP 37	0.71	0.41	0.95	0.54	1	2
4.9296	19.8531	GWP 40	0.53	1.95	1.61	0.88	5	5
5.2741	-10.0117	LDS 5268	0.92	0.48	1.33	0.67	2	4
5.4128	21.7372	NEW	1.14	0.59	1.16	0.61	3	3
5.4547	8.8241	NEW	0.97	0.54	1.81	1.00	2	6
6.0506	15.0750	GWP 44	1.07	0.59	1.41	0.75	3	4
6.1267	36.5557	CRB 27	1.63	0.82	2.19	1.14	5	7
6.2231	13.9184	GWP 45	1.22	0.58	1.33	0.68	3	4
6.3559	26.0631	LDS 3166	1.82	0.55	2.02	1.02	4	6
6.4710	-9.1188	GWP 48	0.62	0.37	1.05	0.59	0	3
6.7456	-1.4262	GWP 50	0.79	0.43	1.55	0.78	1	5
6.7699	-6.4551	LDS 3169	1.77	0.98	2.26	1.19	6	7
7.2477	-9.5794	GIC 10	0.83	0.43	1.02	0.53	1	2
7.9124	12.1549	NEW	0.68	0.38	1.34	0.73	1	4
8.1133	14.4490	GRV 975	1.02	0.56	1.13	0.59	2	3
8.5745	26.9980	NEW	1.28	0.68	1.50	0.80	4	5
8.9132	19.4773	NEW	1.41	0.82	1.36	0.79	4	4
8.9144	19.4055	NEW	1.35	0.71	1.44	0.77	4	4
9.7764	27.0619	AZC 5	1.22	0.62	1.26	0.64	3	3
9.7967	34.4952	CRB 31	1.35	0.70	1.50	0.82	4	5
9.9562	28.2812	LDS 3187	1.45	0.76	1.52	0.79	4	5
10.0125	-20.9960	SLW 35	1.46	0.76	1.65	0.87	4	5
10.6490	32.2209	CRB 32	0.93	0.50	1.39	0.73	2	4
10.7680	29.6904	NEW	0.52	0.33	1.34	0.75	0	4
10.7878	-22.1988	NEW	1.10	0.65	1.00	0.58	3	2
10.7979	-4.0289	NEW	0.59	0.36	1.08	0.63	0	3
12.1660	12.4297	NEW	1.11	0.60	0.98	0.52	3	2
12.7719	22.5095	AZC 7	0.99	0.51	1.27	0.63	2	3
12.9979	34.5433	UC 450	0.85	0.41	1.24	0.58	1	3
13.4329	-3.6179	NEW	1.06	0.56	0.65	1.04	2	3
13.7828	31.0324	CRB 36	0.62	0.36	0.75	0.42	0	1
14.1045	5.8013	GWP 105	0.72	0.34	0.85	0.40	1	1
14.3928	2.2630	NEW	1.48	0.77	1.33	0.68	4	4
14.4232	4.6839	GWP 107	1.17	0.65	1.38	0.70	3	4
14.4819	-3.4199	NEW	1.18	0.56	1.25	0.64	3	3

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
14.7040	10.7366	GWP 109	0.69	0.40	1.16	0.66	1	3
15.0241	12.7700	GWP 113	1.13	0.62	1.45	0.74	3	4
15.3423	27.9828	LDS 3219	0.52	0.44	1.08	0.55	1	2
15.5773	0.4275	CBL 205	1.04	0.42	1.44	0.76	2	4
16.1629	32.4891	LDS 3227	0.83	0.38	1.15	0.58	1	3
16.7226	23.6802	NEW	1.30	0.68	1.70	0.87	4	5
18.1427	-4.7024	LDS 3245	1.37	0.76	1.67	0.93	4	5
19.3855	25.4217	NEW	1.51	0.94	1.33	0.81	5	4
19.8912	24.8322	CBL 209	0.94	0.49	1.00	0.52	2	2
19.9617	25.4935	SLW 63	0.76	0.39	1.30	0.66	1	3
20.1468	6.7028	LDS 3265	0.70	0.43	0.93	0.55	1	2
20.2545	23.9330	LDS 877	0.67	0.32	1.57	0.45	0	3
20.6151	34.8650	NEW	1.29	0.69	1.56	0.81	4	5
20.8470	1.8699	NEW	1.20	0.60	1.27	0.64	3	3
20.9674	0.8304	GWP 182	1.45	0.78	1.48	0.79	4	4
21.2060	39.7912	NEW	1.20	0.62	1.55	0.82	3	5
21.2129	18.0431	LDS 3274	0.63	0.35	0.81	0.51	0	2
21.6531	0.6252	CLZ 8	1.65	0.90	1.92	1.00	5	6
21.8609	-8.9215	GWP 191	0.82	0.46	0.89	2.56	1	5
23.2800	-6.0364	LDS 3290	1.50	0.80	1.53	0.81	5	5
24.2903	-3.0913	GWP 203	1.25	0.66	1.82	0.99	3	6
25.3499	32.2633	LDS 1111	1.22	0.64	1.21	0.65	3	3
25.8692	15.6464	NEW	0.62	0.37	0.96	0.56	0	2
25.9382	-17.1922	NEW	1.71	0.90	1.72	0.90	5	5
25.9454	19.9057	GWP 216	1.09	0.57	1.12	0.58	3	3
26.4582	20.9601	AZC 15	1.56	0.67	2.03	0.94	4	6
26.4965	21.0957	LDS 3308	1.32	0.69	1.45	0.79	4	4
26.9896	-6.8728	NEW	1.07	0.56	1.28	0.68	3	4
27.1030	28.3934	NEW	1.36	0.71	2.02	1.03	4	6
27.2776	6.4010	LDS 3315	0.82	0.39	0.67	0.37	1	1
27.3071	65.0911	NEW	0.61	0.38	0.81	0.49	0	2
27.3238	18.1271	GWP 225	1.01	0.56	1.37	0.76	2	4
27.5833	11.7723	GWP 227	0.77	0.45	0.93	0.49	1	2
27.9165	-18.8276	LDS 1119	0.86	0.40	1.43	0.72	1	4
28.1953	64.4091	NEW	0.56	0.35	0.76	0.52	0	2
28.4826	29.5325	AZC 18	1.33	0.76	1.28	0.70	4	4
29.0487	-3.1614	UC 648	0.49	1.09	1.02	0.56	3	2
29.1263	65.7435	NEW	0.68	0.44	0.69	0.36	1	1
29.4425	24.6173	NEW	0.91	0.50	1.36	0.70	2	4
29.4645	16.2257	CBL 11	0.95	0.52	1.15	0.63	2	3
29.4920	62.3444	NEW	0.66	0.42	0.84	0.47	1	2
29.7619	29.6839	AZC 19	1.32	0.72	1.39	0.77	4	4
30.2393	-5.1792	LDS 5361	0.58	0.32	1.29	0.70	0	4
30.2677	-17.6834	LDS 5362	0.76	0.43	1.05	0.63	1	3
30.4752	67.1517	NEW	1.14	0.63	1.01	0.59	3	3
30.5441	-18.1415	GWP 252	1.45	0.75	1.73	0.93	4	5
30.8484	8.8319	NEW	1.07	0.53	1.35	0.66	2	4
30.8662	62.3385	NEW	0.58	0.32	1.25	0.72	0	4
30.9631	2.6808	LDS 3341	1.16	0.57	1.54	0.75	3	4
31.6560	-7.1281	LDS 5366	1.45	0.67	1.68	0.87	4	5

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
32.9871	16.9943	LDS 3355	1.34	0.72	1.57	0.85	4	5
33.1654	16.2350	GWP 270	1.26	0.63	1.41	0.72	3	4
33.3434	31.9227	NEW	1.26	0.67	1.29	0.68	3	4
33.6098	-11.0742	LDS 5373	0.54	0.32	0.64	0.37	0	1
34.3465	70.7603	CBL 210	1.07	0.58	1.47	0.77	3	4
35.0575	5.5767	CBL 211	0.87	0.49	0.99	0.54	2	2
35.8361	22.5007	LDS 3378	0.64	0.32	1.43	0.73	0	4
35.9285	25.0468	LDS 3379	1.35	0.63	1.27	0.66	3	3
35.9810	-9.3842	LDS 5382	1.17	0.78	1.39	0.74	4	4
38.1240	6.1042	FMR 55	0.88	0.47	1.66	0.84	2	5
38.1830	74.1485	CBL 212	0.74	0.45	0.85	0.52	1	2
38.2552	1.0940	CBL 213	1.38	0.79	1.45	0.82	4	4
38.8032	21.0488	SLW 120	1.22	0.67	1.38	0.73	3	4
39.2101	20.2111	SLW 123	0.85	0.49	1.41	0.74	2	4
40.6041	2.7748	GWP 356	1.50	0.83	0.97	2.78	5	5
42.1294	32.7722	NEW	1.38	0.77	1.52	0.85	4	5
42.1814	-5.4392	UC 819	1.13	0.59	1.23	0.64	3	3
42.8408	-15.4281	GWP 382	1.52	0.85	1.53	0.84	5	5
43.9682	-15.3465	LDS 3441	0.66	0.38	0.65	0.40	1	1
44.6393	6.7659	SLW 140	1.27	0.66	1.63	0.86	3	5
44.9157	-14.5963	LDS 3445	0.55	0.64	1.25	0.66	2	3
46.6495	0.4298	CBL 218	1.24	0.63	1.40	0.75	3	4
50.0486	77.9747	SLW 152	1.36	0.67	1.56	0.74	4	4
50.2429	-0.9275	LDS 5420 AB	0.53	0.29	1.09	0.57	0	3
52.3878	42.8563	NEW	0.76	0.42	1.54	0.82	1	5
52.7922	42.0576	BVD 189	1.36	0.74	1.36	0.75	4	4
57.2477	50.0645	NEW	1.81	0.97	1.87	0.99	6	6
57.3275	-12.0376	NEW	0.61	0.38	1.49	0.82	0	5
59.0668	52.1353	NEW	0.73	0.62	0.81	0.48	2	2
59.3143	-10.9015	GWP 536	1.12	0.61	1.35	0.74	3	4
59.9129	-11.7903	GWP 540	1.46	0.76	1.58	0.82	4	5
60.3484	1.1136	GWP 542	1.68	0.90	2.17	1.17	5	7
60.7972	-0.4043	NEW	0.78	0.48	0.66	0.40	1	1
62.5362	-4.2097	NEW	0.69	0.38	0.93	0.49	1	2
62.5964	16.1847	GWP 557	0.76	0.43	1.30	0.68	1	4
64.3080	29.2129	NEW	1.21	0.64	1.47	0.78	3	4
64.4973	52.9498	NEW	0.53	0.28	1.87	0.89	0	6
64.9543	32.1998	NEW	1.09	0.63	1.44	0.82	3	4
65.2939	6.4451	SLW 171	1.27	0.66	1.38	0.73	3	4
65.7116	54.5303	NEW	0.62	0.60	0.80	0.60	2	2
66.6478	19.1939	GWP 585	1.05	0.31	0.98	0.59	1	2
67.5064	-1.0774	GWP 592	0.91	0.50	1.54	0.84	2	5
67.5265	9.0411	CBL 225	0.48	0.31	0.60	0.36	0	0
68.2832	-0.7446	GWP 596	1.16	0.58	1.44	0.74	3	4
69.5509	-7.6016	NEW	1.40	0.74	1.47	0.77	4	4
71.1993	-0.0085	GWP 611	0.68	0.42	0.79	0.48	1	1
71.4396	58.0921	NEW	0.64	0.46	0.74	0.58	1	2
72.0206	59.6764	CBL 226	0.89	0.51	0.88	0.52	2	2
72.4602	-6.4204	NEW	1.49	0.77	1.54	0.81	4	5
72.5439	-4.2093	SLW 172	1.36	0.71	1.43	0.74	4	4

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
74.4233	26.1747	LDS 6152	0.89	0.42	1.30	0.69	1	4
75.9398	-3.2587	SLW 178	1.47	0.81	1.54	0.86	5	5
77.7073	-2.0041	NEW	0.69	0.42	0.85	0.51	1	2
80.2154	26.6981	AZC 43	1.11	0.59	1.13	0.60	3	3
80.7033	28.0082	NEW	0.63	0.37	0.49	0.41	0	0
80.9712	28.4175	IPH 13	0.71	0.41	1.10	0.59	1	3
82.6950	-0.5675	CBL 228	1.25	0.69	1.56	0.89	4	5
82.7899	63.3446	CBL 229	0.96	0.51	1.45	0.77	2	4
83.2143	3.4040	NEW	1.52	0.78	1.40	0.73	4	4
83.7654	3.6155	NEW	0.69	0.42	1.91	1.01	1	6
85.8302	3.5375	NEW	0.71	0.49	0.57	0.38	1	0
87.0119	22.0589	NEW	0.46	0.33	1.18	0.69	0	3
89.5894	22.0736	NEW	0.62	0.43	0.63	0.57	1	1
91.7696	63.4211	NEW	1.50	0.77	1.88	0.93	4	6
93.2852	5.3769	GWP 764	1.32	0.74	1.48	0.80	4	4
93.9610	44.4394	NEW	1.27	0.69	1.25	0.70	4	4
95.0016	34.6970	NEW	1.65	0.96	1.69	1.02	5	6
97.3074	7.8459	IPH 24	1.43	0.77	1.45	0.84	4	5
100.1133	64.2539	CBL 233	0.81	0.43	1.18	0.63	1	3
101.0817	10.3339	LDS 5680	0.60	0.52	0.85	0.42	1	1
105.1090	37.5503	NEW	0.55	0.30	1.68	0.90	0	5
106.8448	66.2761	NEW	1.13	0.62	1.86	1.00	3	6
107.3515	31.3240	NEW	1.38	0.72	1.55	0.80	4	5
110.4190	35.8510	SLW 192	1.56	0.83	1.85	1.03	5	6
110.7781	14.1111	GWP 901	0.90	1.33	1.73	0.96	5	6
111.9617	42.4719	CBL 234	1.46	0.77	1.65	0.90	4	5
112.0865	31.0035	CBL 235	0.83	0.58	1.49	0.78	2	4
113.9183	27.8237	CBL 236	1.10	0.60	1.34	0.73	3	4
115.7318	66.4950	NEW	0.70	0.61	1.39	0.75	2	4
115.7945	42.8767	NEW	0.65	0.34	2.06	1.06	0	7
116.0562	37.6648	NEW	1.54	0.54	1.64	0.88	3	5
116.4990	44.6468	NEW	0.95	0.54	1.08	0.74	2	3
117.8786	-9.2879	NEW	0.97	0.53	2.19	0.43	2	4
118.2084	82.6954	SLW 210	1.12	0.61	1.17	0.62	3	3
119.1866	46.3326	SLW 214	1.26	0.66	1.27	0.66	3	3
119.7087	46.4449	CBL 238	1.09	0.60	1.37	0.73	3	4
121.5498	35.7325	NEW	0.87	0.50	1.36	0.75	2	4
121.6154	42.5302	SLW 219	1.08	0.60	1.24	0.71	3	4
121.9631	65.2387	LDS 2561	1.49	0.80	1.55	0.84	5	5
122.3855	54.1074	NEW	0.50	0.28	1.44	0.80	0	4
122.4947	7.9378	NEW	0.56	0.31	1.63	0.84	0	5
122.7108	53.6292	NEW	1.25	0.71	1.36	0.76	4	4
123.4082	29.5494	NEW	0.85	0.54	1.25	0.77	2	4
123.5535	14.1471	CBL 245	0.86	0.41	1.38	0.69	1	4
123.8913	29.8493	SLW 230	1.25	0.67	1.33	0.72	3	4
124.2610	55.0623	SLW 231	1.05	0.60	1.12	0.62	3	3
124.6412	31.6339	NEW	0.76	0.56	1.25	0.66	2	3
125.1800	-0.0155	SLW 241	1.20	0.63	1.34	0.73	3	4
125.9202	14.5367	LDS 1211	1.03	0.56	1.39	0.85	2	4
126.0429	-1.8337	GWP 1014	0.94	0.49	1.50	0.82	2	5

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
126.0723	-4.4038	GWP 1015	0.77	0.42	1.34	0.70	1	4
126.7865	32.9944	NEW	1.71	0.96	1.72	0.94	6	5
127.0938	0.4361	LDS 3793	0.84	0.48	0.98	0.53	2	2
127.1317	27.6510	NEW	1.45	0.79	1.74	0.93	4	5
127.4853	47.1119	GRV 1005	0.66	0.32	0.92	0.46	0	2
127.9852	18.5763	LDS 1215	0.89	0.50	1.27	0.64	2	3
128.1922	4.8981	GWP 1036	1.20	0.67	1.52	0.83	3	5
128.4603	20.2201	NEW	1.37	0.29	1.24	0.68	2	3
128.4661	24.4369	CBL 260	1.41	0.74	1.87	0.98	4	6
129.4731	31.7043	LDS 3802	0.63	0.32	1.62	0.83	0	5
130.0760	47.6603	NEW	1.46	0.75	1.49	0.75	4	4
130.3365	1.1579	LDS 3807	1.26	0.63	1.36	0.69	3	4
130.6014	58.4335	SLW 282	0.55	0.33	0.95	0.54	0	2
130.9752	58.4797	CBL 266	0.86	0.61	1.22	0.61	2	3
130.9827	14.2193	NEW	0.70	0.39	1.22	0.64	1	3
131.1456	49.2003	SLW 286	0.75	0.40	1.08	0.56	1	3
131.2634	14.9010	NEW	0.60	0.37	1.08	0.60	0	3
131.5521	7.7396	LDS 3817	0.81	0.51	1.53	0.80	2	5
131.5803	50.3219	SLW 290	0.69	0.42	1.23	0.68	1	3
131.6001	24.0368	CBL 267	1.19	0.67	1.31	0.73	3	4
131.9749	43.0445	NEW	0.86	0.45	1.44	0.71	2	4
132.2878	56.0776	LDS 3820	1.12	0.57	2.49	1.33	3	8
132.3778	60.0379	LDS 1219	1.34	0.63	1.58	0.74	3	4
132.6098	42.2155	NEW	1.04	0.59	0.97	0.52	3	2
133.0240	32.7813	SLW 308	1.32	0.68	1.48	0.77	4	4
133.3336	48.6003	BVD 203	1.34	0.70	1.55	0.85	4	5
133.4041	55.5337	GRV 1012	0.94	0.47	1.11	0.56	2	3
134.6606	4.4862	SLW 318	1.11	0.55	1.14	0.59	3	3
134.9539	18.5543	NEW	1.65	0.98	2.11	1.13	5	7
135.9097	44.9843	BVD 206	0.61	0.28	1.25	0.67	0	3
136.5376	12.3807	GWP 1136	0.73	0.39	0.90	0.52	1	2
137.9730	64.5921	NEW	0.64	0.40	1.20	0.66	1	3
138.0561	28.6351	CBL 274	0.53	0.32	0.67	0.38	0	1
139.0599	6.1589	SLW 339	0.78	0.41	1.04	0.52	1	2
139.4385	53.2153	LDS 3869	0.77	0.39	1.43	0.80	1	4
139.6849	17.1915	NEW	1.83	0.96	1.92	1.02	6	6
140.3947	26.9298	AZC 62	1.04	0.49	0.87	0.49	2	2
140.5475	34.0574	CRB 81	0.97	0.53	0.97	0.52	2	2
141.2885	36.7066	CRB 82	0.50	0.29	1.22	0.64	0	3
141.6457	45.7897	CBL 278	0.51	0.28	1.33	0.69	0	4
141.9756	28.6393	CBL 279	0.63	0.43	1.36	0.76	1	4
142.6479	55.9815	NEW	1.35	0.72	1.72	0.90	4	5
143.1430	55.1921	NEW	1.21	0.63	1.24	0.66	3	3
143.6459	15.2116	SLW 369	1.34	0.70	1.36	0.73	4	4
143.8819	15.2363	CBL 285	1.22	0.63	1.21	0.65	3	3
144.8106	30.2452	LDS 3909	0.51	0.28	1.11	0.62	0	3
145.1421	59.2459	LDS 1230	1.32	0.68	1.56	0.81	4	5
145.2355	46.1250	NEW	1.41	0.76	1.41	0.76	4	4
145.3156	7.1286	GWP 1212	1.25	0.67	1.35	0.72	3	4
146.2065	-2.9304	GWP 1229	0.70	0.36	1.53	0.82	1	5

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
146.3416	46.2759	LDS 3922	1.48	0.81	1.53	0.84	5	5
146.3549	3.7221	GWP 1232	1.66	0.86	1.85	1.00	5	6
147.0062	81.6037	NEW	0.61	0.31	1.40	0.73	0	4
147.2835	-0.8997	NEW	1.17	0.64	1.52	0.83	3	5
147.3219	4.0710	SLW 394	1.33	0.71	1.34	0.72	4	4
147.3345	20.7109	LDS 3932	0.93	0.47	1.81	0.40	2	3
147.6203	22.3703	AZC 63	1.42	0.78	1.39	0.73	4	4
147.6889	24.1602	NEW	0.91	0.50	1.24	0.64	2	3
148.2477	58.1898	NEW	0.80	0.37	0.89	0.40	1	1
148.8217	22.0523	NEW	0.54	0.33	0.54	0.34	0	0
149.0813	27.9690	UC 1845	1.40	0.73	1.36	0.72	4	4
149.1125	-1.9132	LDS 3944	1.25	0.69	1.52	0.89	4	5
149.4029	0.4876	NEW	0.60	0.34	1.32	0.72	0	4
149.4194	-1.1783	NEW	0.97	0.54	1.54	0.85	2	5
149.6509	11.8978	GWP 1263	1.03	0.57	1.47	0.78	2	4
150.4355	51.5774	NEW	0.82	0.52	1.44	0.84	2	5
150.6464	34.9509	NEW	0.70	0.41	1.35	0.71	1	4
150.9852	2.1271	GRV 1042	1.03	0.56	1.06	0.59	2	3
151.0052	19.1477	NEW	0.79	0.54	0.98	0.51	2	2
151.0743	47.5310	CBL 299	0.52	1.46	1.51	0.81	4	5
151.1729	43.0043	LDS 3953	1.20	0.69	1.39	0.76	3	4
151.9045	54.2666	NEW	0.89	0.46	1.16	0.64	2	3
151.9573	21.8394	NEW	0.97	0.53	1.27	0.70	2	4
152.1531	38.3227	SLW 438	1.22	0.62	1.26	0.65	3	3
152.3194	11.3648	GWP 1303	1.35	0.64	1.46	0.71	4	4
152.4093	40.6873	CBL 301	1.18	0.62	1.29	0.68	3	4
152.8377	27.3593	LDS 3961	1.72	0.93	1.76	0.93	5	6
153.1661	66.1619	NEW	1.44	0.80	1.62	0.90	4	5
153.6331	1.8860	CBL 306	1.09	0.65	1.29	0.68	3	4
153.8398	47.4380	UC 153	1.24	0.63	2.48	0.33	3	4
153.9910	11.3786	GWP 1333	1.01	0.53	1.16	0.61	2	3
154.1745	38.9387	LDS 3971	0.97	0.57	1.02	0.60	2	3
154.8019	13.3222	GWP 1345 BC	0.77	0.45	1.16	0.62	1	3
155.3613	25.6480	NEW	0.62	0.33	0.85	0.44	0	1
155.4594	35.9173	LDS 1240	1.27	0.72	1.36	0.78	4	4
155.5374	34.4506	CBL 307	1.11	0.56	1.29	0.68	3	4
155.6880	58.5974	SLW 9001	1.55	0.86	1.43	0.76	5	4
156.6538	62.7551	LDS 2583	1.40	0.72	1.41	0.73	4	4
156.7203	45.1841	SLW 473	1.31	0.66	1.48	0.76	4	4
157.6359	31.4971	NEW	1.17	0.64	1.40	0.78	3	4
158.3636	17.9975	NEW	0.75	0.48	1.00	0.63	1	3
158.5637	40.6830	LDS 3998	0.83	1.38	1.54	0.81	5	5
159.0221	29.1049	LDS 1248	1.06	0.57	0.99	0.51	3	2
159.1624	54.6806	LDS 2870	0.91	0.49	1.68	0.90	2	5
159.2800	51.3378	LDS 2871	0.93	0.50	1.46	0.70	2	4
159.5184	24.6950	SLW 500	0.99	0.54	1.20	0.64	2	3
159.6264	12.1666	GWP 1417	0.98	0.48	1.77	0.91	2	5
159.7034	6.0255	LDS 2875	0.48	0.28	1.04	0.59	0	3
159.9180	32.4518	DAM 28	0.83	0.36	1.85	0.58	1	4
160.3248	21.9051	AZC 65	1.31	0.70	1.27	0.67	4	3

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
161.1572	65.8421	NEW	0.89	0.52	1.45	0.78	2	4
161.2427	61.2439	LDS 2586	0.76	0.46	1.36	0.71	1	4
161.8387	33.8267	CRB 85	1.08	0.56	1.43	0.76	3	4
162.2172	-1.0379	GWP 1465	1.06	0.60	1.18	0.65	3	3
162.5800	-22.5686	LDS 4024	1.29	0.64	1.35	0.69	3	4
162.7791	24.5540	NEW	0.68	0.37	1.39	0.74	1	4
162.8541	-20.8813	NEW	1.47	0.77	1.75	0.93	4	5
163.2244	23.0184	NEW	1.69	0.97	1.66	0.93	6	5
163.5905	26.9390	SLW 538	1.05	0.55	1.29	0.67	2	4
164.1451	58.9921	LDS 2589	1.16	0.63	1.26	0.69	3	4
164.4492	-1.1188	GWP 1509	0.64	0.32	0.99	0.53	0	2
164.4949	10.0343	NEW	1.43	0.76	1.94	0.98	4	6
164.9008	12.6671	LDS 4043	0.87	0.99	1.69	0.89	4	5
164.9447	22.7130	CBL 324	1.56	0.82	1.60	0.82	5	5
164.9983	13.7466	GWP 1516	1.21	0.62	1.66	0.84	3	5
165.0335	75.7973	NEW	1.22	0.65	1.30	0.69	3	4
165.1309	64.2894	GRV 1050	2.30	0.36	1.19	0.67	4	3
165.5079	23.8855	CBL 326	1.59	0.32	1.14	0.70	2	3
165.5557	46.0724	SLW 555	1.19	0.66	1.43	0.79	3	4
165.7347	55.4758	NEW	1.11	0.45	1.40	0.74	2	4
166.1409	63.0615	NEW	0.91	0.49	1.16	0.64	2	3
166.5567	47.4351	GRV 1192	0.67	1.33	1.72	0.96	4	6
166.8162	31.7627	NEW	1.09	0.64	1.31	0.74	3	4
167.0888	47.8605	BVD 216	0.88	0.36	1.51	0.85	1	5
167.3230	54.3821	NEW	1.03	0.54	0.94	0.45	2	2
167.4628	47.6190	CBL 330	0.52	0.29	1.29	0.67	0	4
167.4965	-2.8093	UC 2092	1.02	0.56	1.24	0.67	2	3
167.9294	58.0516	UC 2097	0.48	0.30	0.55	0.33	0	0
167.9491	32.2973	NEW	0.57	0.29	1.61	0.87	0	5
168.7687	23.7046	AZC 69	1.47	0.73	1.38	0.65	4	4
168.8277	18.8524	GWP 1564	1.40	0.68	1.60	0.84	4	5
168.9197	59.3823	SLW 582	1.26	0.65	1.26	0.65	3	3
168.9293	0.7805	GWP 1567	0.92	0.44	1.22	0.62	2	3
169.8378	23.6848	AZC 70	1.24	0.66	1.19	0.64	3	3
170.0507	25.4726	CBL 337	1.18	0.65	1.26	0.73	3	4
170.0734	7.1150	NEW	0.80	0.44	1.12	0.60	1	3
171.1441	20.4038	NEW	0.58	0.32	0.82	0.48	0	2
171.1513	34.9757	LDS 4095	0.62	0.35	2.05	0.50	0	4
171.3307	74.5472	SLW 599	1.22	0.61	1.40	0.71	3	4
171.6865	25.0545	CBL 340	0.68	3.34	1.53	0.78	2	4
172.3154	39.5277	SLW 607	0.50	0.32	0.90	0.52	0	2
173.3764	33.1415	CBL 344	0.69	0.39	1.47	0.83	1	5
173.4052	7.6400	NEW	1.35	0.74	1.32	0.71	4	4
173.4548	14.5576	GWP 1609	0.76	0.43	1.32	0.72	1	4
174.2693	39.7942	NEW	1.42	0.77	1.44	0.77	4	4
174.5784	61.2106	LDS 2605	1.01	0.53	1.03	0.53	2	2
174.7520	4.1059	GRV 1059	1.07	0.60	1.10	0.61	3	3
174.9084	21.0792	NEW	1.22	0.65	1.24	0.66	3	3
175.8591	9.6778	SLW 636	0.78	0.45	1.23	0.71	1	4
175.9255	54.9623	CBL 350	0.64	0.37	1.02	0.56	0	2

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
176.5905	30.9614	SLW 645	1.07	0.54	1.13	0.56	2	3
176.7381	20.9385	CBL 357	0.66	0.38	0.68	0.40	1	1
177.4709	5.2841	NEW	0.58	0.33	0.80	0.41	0	1
178.0810	38.4354	LDS 4151	1.34	0.68	1.40	0.72	4	4
179.4062	64.1585	NEW	1.06	0.73	1.51	0.87	3	5
179.4238	43.3370	BVD 219	0.81	0.58	1.10	0.59	2	3
179.9736	11.7341	BPM 585	0.78	0.41	0.84	0.45	1	1
180.0686	6.2962	GRV 1196	1.30	0.68	1.47	0.79	4	4
180.3611	2.0520	NEW	0.82	0.42	1.58	0.86	1	5
180.5532	24.0432	SLW 678	1.30	0.67	1.50	0.81	4	5
180.6561	44.2993	BVD 221	1.43	0.74	1.79	1.01	4	6
180.7327	0.0682	GRV 1068	1.43	0.33	0.95	0.53	2	2
181.0907	63.0134	CBL 371	1.00	0.48	1.47	0.75	2	4
181.2457	21.8241	LDS 4177	1.17	0.72	1.14	0.63	3	3
181.7197	39.3493	SLW 684	0.69	0.37	0.72	0.40	1	1
181.9031	15.5508	LDS 4181	0.96	0.53	1.22	0.68	2	3
182.2479	3.9486	NEW	1.01	0.55	1.54	0.86	2	5
182.8738	47.4208	LDS 4187	0.73	0.30	1.25	0.66	0	3
183.0093	38.8194	LDS 4188	0.59	0.33	1.39	0.76	0	4
183.6073	27.4000	LDS 1286	1.00	0.54	1.00	0.55	2	2
183.7332	58.4954	NEW	1.38	0.42	1.39	0.79	3	4
183.7632	39.2404	LDS 4196	1.36	0.74	2.49	1.35	4	8
183.7653	48.9629	SLW 697	0.88	0.46	1.01	0.51	2	2
184.4923	27.8577	CBL 378	0.67	0.28	1.64	0.92	0	5
184.9587	34.5398	SLW 708	1.36	0.73	1.46	0.79	4	4
184.9656	0.0874	GRV 1075	0.68	0.41	0.98	0.54	1	2
185.8189	66.7608	CBL 381	1.01	0.55	1.60	0.94	2	5
185.9511	-1.9375	SLW 714	1.08	0.60	1.41	0.77	3	4
186.3220	49.6331	NEW	0.91	0.45	1.44	0.74	2	4
186.6484	38.9523	LDS 4208	0.68	0.41	0.62	0.38	1	1
188.0576	41.0457	UC 177	1.06	0.49	1.10	0.59	2	3
188.2814	36.2395	CRB 92	1.06	0.54	1.25	0.63	2	3
188.3522	14.2633	LDS 1319	0.96	0.52	1.45	0.86	2	5
188.5666	0.8583	SLW 736	1.32	0.72	1.43	0.77	4	4
188.6668	19.8581	NEW	1.01	0.56	1.26	0.69	2	4
188.7742	1.0875	NEW	0.59	0.30	0.72	0.42	0	1
188.8861	17.8713	CBL 387	0.84	0.46	1.35	0.67	1	4
189.0135	62.4957	LDS 2654	0.72	1.12	1.62	0.83	4	5
189.0556	14.9546	CBL 388	1.17	0.61	1.47	0.80	3	4
189.0842	11.5046	LDS 1327	0.62	0.35	0.68	0.40	0	1
189.1800	1.8364	SLW 744	1.34	0.72	1.35	0.74	4	4
189.3303	-0.2514	SLW 747	0.82	0.48	1.07	0.63	2	3
190.0970	-17.0777	NEW	0.91	0.49	1.76	0.94	2	6
190.1489	22.3836	LDS 4246	0.91	0.48	1.21	0.64	2	3
190.1797	46.4487	CBL 391	1.25	0.61	1.53	0.78	3	4
190.4392	21.5289	SLW 760	0.76	0.47	1.31	0.73	1	4
190.5172	52.4632	LDS 3055	1.41	0.78	1.46	0.81	4	4
191.3313	3.3217	NEW	0.59	1.30	1.77	0.95	4	6
191.4615	63.3324	LDS 2658	1.04	0.55	1.10	0.57	2	3
192.0367	22.0701	AZC 77	1.18	0.73	2.05	1.08	4	7

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
192.4695	26.7179	LDS 4280	0.59	0.37	0.88	0.55	0	2
193.0343	37.9245	SLW 786	1.16	0.61	1.52	0.80	3	5
193.5231	55.0090	LDS 3067	0.90	0.46	0.99	0.51	2	2
193.9053	6.3477	LDS 4295	1.64	0.87	1.71	0.91	5	5
194.1641	31.0447	CBL 401	1.40	0.67	1.62	0.83	4	5
194.2971	1.6815	GRV 1200	0.46	0.34	0.95	0.55	0	2
194.3340	30.7575	LDS 1347	1.43	0.75	1.54	0.79	4	5
195.1255	28.9943	NEW	0.69	0.42	0.87	0.51	1	2
195.1312	46.1346	LDS 4305	0.77	0.46	1.26	0.66	1	3
195.8438	43.5609	SLW 817	1.41	0.80	1.49	0.85	4	5
195.9583	32.1669	NEW	0.75	0.39	0.82	0.43	1	1
195.9959	22.8214	NEW	1.38	0.72	1.27	0.67	4	3
196.3467	12.0039	LDS 4313	1.37	0.75	1.32	0.71	4	4
196.8016	44.5019	LDS 4317	1.39	0.74	1.60	1.05	4	6
197.0658	8.2130	CBL 408	1.34	0.67	1.36	0.69	4	4
197.1407	14.4086	LDS 4320	1.14	0.62	1.17	0.66	3	3
197.5889	32.8829	CBL 410	1.25	0.68	1.71	0.91	3	5
197.6643	7.2391	CBL 411	0.81	1.37	1.41	0.70	5	4
197.7023	47.0355	BVD 227	1.13	0.65	1.19	0.68	3	3
198.3784	16.9411	SLW 837	1.47	0.77	1.49	0.80	4	4
198.9568	36.1892	NEW	2.04	0.48	1.31	0.71	4	4
199.1036	43.0946	UC 2509	1.14	0.62	1.10	0.59	3	3
199.3243	21.2879	LDS 2910	1.50	0.81	1.83	1.04	5	6
199.4381	51.5277	NEW	0.90	0.47	1.53	0.78	2	4
199.5646	47.5082	SLW 850	1.40	0.81	1.90	1.06	4	6
199.7980	10.3285	NEW	0.86	0.45	0.89	0.47	1	2
199.9135	28.3727	LDS 1383	0.98	0.58	1.16	0.67	2	3
200.0329	61.0578	LDS 2673	0.91	0.48	1.43	0.74	2	4
200.0973	6.8900	NEW	1.83	1.00	1.65	0.81	6	5
200.1704	-3.4412	NEW	0.60	0.34	1.02	0.57	0	2
200.2492	43.4603	SLW 859	0.85	0.50	0.97	0.57	2	2
200.5319	67.8116	GRV 1087	0.78	0.44	0.86	0.48	1	2
200.5657	5.5216	CBL 422	0.56	0.30	0.85	0.51	0	2
200.6474	16.7131	NEW	1.26	0.67	1.29	0.67	3	4
200.7787	50.5509	SLW 864	1.15	0.59	1.17	0.63	3	3
200.9903	35.8226	NEW	0.56	0.31	0.56	0.36	0	0
201.1590	-1.8925	LDS 4357	1.45	0.76	1.72	0.89	4	5
201.2742	51.8829	SLW 866	1.04	0.54	1.19	0.60	2	3
201.3889	22.8945	SLW 867	1.51	0.79	1.55	0.80	4	5
201.4041	43.7438	CBL 425	1.13	0.57	1.20	0.64	3	3
202.0177	28.1319	LDS 1389	1.12	0.57	1.38	0.70	3	4
202.4715	26.7921	AZC 79	1.46	0.81	1.33	0.71	4	4
202.5916	38.7492	CRB 98	0.83	0.47	1.24	0.63	1	3
203.0408	7.7375	LDS 3074	0.79	0.44	1.21	0.65	1	3
203.2673	38.2188	CBL 427	0.69	0.58	1.30	0.72	2	4
203.4448	19.2795	SLW 892	0.92	0.49	1.16	0.63	2	3
203.5417	67.2625	LDS 2323	1.26	0.63	1.49	0.76	3	4
204.0681	33.7085	LDS 4380	2.24	0.35	1.19	0.62	4	3
204.2369	7.8653	VBS 23	1.13	0.59	1.53	0.78	3	5
204.6930	1.7806	NEW	1.01	0.57	2.15	1.14	2	7

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
205.1350	33.2328	NEW	0.57	0.32	0.75	0.41	0	1
205.5331	67.3888	LDS 2325	1.02	0.54	1.37	0.74	2	4
205.6732	21.6020	NEW	0.82	0.47	1.17	0.35	2	2
206.3581	28.9566	LAW 20	1.20	0.61	1.36	0.65	3	4
206.6125	38.7296	SLW 927	1.18	0.65	1.38	0.72	3	4
206.7724	5.9257	LDS 3102	1.44	0.77	1.59	0.89	4	5
206.9649	40.3297	NEW	1.64	0.84	1.93	1.02	5	6
207.0033	33.7421	LDS 4408 AB	1.85	0.29	1.15	0.62	3	3
207.1643	29.0224	AZC 80	0.57	0.29	1.01	0.51	0	2
207.6703	-1.0116	NEW	1.21	0.63	1.55	0.82	3	5
208.2497	7.2811	NEW	0.50	0.29	1.68	0.86	0	5
208.5162	16.5197	CBL 433	0.70	0.37	0.83	0.44	1	1
208.7155	51.4710	CBL 434	0.92	0.48	1.63	0.82	2	5
209.2614	34.0585	NEW	1.47	0.84	1.30	0.73	5	4
209.3122	19.8819	SLW 948	1.33	0.68	1.51	0.78	4	4
209.4516	24.7934	CBL 435	1.03	0.54	1.24	0.67	2	3
209.7437	5.5149	SLW 953	0.93	0.50	1.00	0.52	2	2
209.8168	8.0023	NEW	1.20	0.64	1.54	0.84	3	5
210.4113	59.2369	LDS 2697	0.48	0.29	0.58	0.37	0	0
210.7794	24.3858	SLW 958	1.38	0.74	1.69	0.93	4	5
211.4265	15.6192	BPM 613	1.03	0.60	0.95	0.57	3	2
211.6036	11.6077	LDS 4432	1.30	0.72	1.41	0.79	4	4
211.8991	53.3696	LDS 2922	0.76	0.45	1.30	0.74	1	4
212.0121	-16.0398	NEW	0.65	0.33	1.49	0.75	0	4
213.4627	29.4634	SLW 982	1.27	0.62	1.26	0.69	3	4
213.6376	-1.2288	UC 2711	0.74	0.40	1.02	0.53	1	2
213.7498	2.3744	GRV 1096	0.85	0.45	1.49	0.83	1	5
213.8628	25.1775	NEW	0.94	0.50	1.28	0.66	2	3
213.8946	48.1117	CBL 445	0.98	0.48	1.38	0.72	2	4
213.9989	5.5835	NEW	1.28	0.71	1.24	0.81	4	4
214.2937	16.7649	SLW 988	1.12	0.57	1.37	0.68	3	4
214.3429	13.5011	LDS 4452	0.77	0.40	0.86	0.44	1	1
214.9838	16.5603	CBL 450	1.14	0.64	1.56	0.91	3	5
215.1114	35.3920	NEW	1.53	0.83	1.61	0.88	5	5
215.7237	-20.6428	NEW	1.16	0.62	1.26	0.71	3	4
215.7887	22.7211	LDS 4462	0.76	0.55	1.10	0.61	2	3
216.1134	59.2281	NEW	1.16	0.62	1.22	0.64	3	3
216.1498	18.0704	CBL 453	1.18	0.56	1.55	0.75	3	4
216.2367	57.8993	NEW	1.21	0.65	1.53	0.83	3	5
216.7367	55.6577	CBL 454	1.26	0.66	1.37	0.72	3	4
216.8442	3.2304	SLW 9005	1.38	0.69	1.46	0.73	4	4
216.9200	26.2263	AZC 85	1.23	0.63	1.28	0.65	3	3
217.0552	10.2225	CBL 455	1.21	0.66	1.39	0.73	3	4
217.0786	54.7091	LDS 4468	0.88	0.43	1.59	0.81	1	5
217.4426	34.7590	LDS 4470	1.04	0.57	1.16	0.64	3	3
217.4493	42.2564	SLW 1002	0.87	0.47	1.40	0.73	2	4
217.7336	13.0201	CBL 456	1.00	0.53	1.21	0.66	2	3
217.9205	6.4495	NEW	0.78	0.42	1.13	0.63	1	3
218.1465	-1.3872	NEW	1.00	0.55	1.10	0.58	2	3
218.9413	4.9698	CBL 461	0.98	0.54	1.02	0.55	2	2

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
218.9590	0.7096	CBL 462	1.00	0.50	1.29	0.71	2	4
219.8853	51.9061	LDS 4487	1.17	0.58	1.38	0.69	3	4
220.5172	16.8932	CBL 465	0.93	0.52	0.97	0.51	2	2
220.5792	26.2453	LDS 4490	1.26	0.66	1.53	0.80	3	5
220.6966	28.1224	CBL 466	1.01	0.28	0.65	0.36	1	0
221.4351	26.6369	NEW	1.32	0.75	1.57	0.91	4	5
221.9265	34.6576	NEW	0.70	0.38	1.29	0.71	1	4
222.0107	46.9666	SLW 1033	1.17	0.60	1.39	0.72	3	4
223.2703	53.9476	CBL 473	0.84	0.44	1.15	0.61	1	3
223.4139	7.3574	NEW	0.57	0.33	0.82	0.45	0	1
225.1837	40.1749	SLW 1051	1.52	0.80	1.62	0.89	5	5
225.1978	23.1075	LDS 4521	1.12	0.61	1.27	0.68	3	4
225.5044	60.9530	SLW 1053	1.00	0.54	1.00	0.54	2	2
225.8068	39.4541	SLW 1055	0.88	0.53	1.28	0.66	2	3
226.1840	22.5274	SLW 1057	0.77	0.44	1.46	0.80	1	4
227.0363	61.4387	NEW	0.59	0.33	1.78	0.92	0	6
227.5123	22.0986	NEW	0.85	0.50	1.02	0.60	2	3
228.1499	30.9517	CRB 109	0.48	0.28	0.90	0.48	0	2
228.3403	8.6389	CBL 481	0.63	0.38	1.04	0.58	0	3
228.8172	0.4073	NEW	1.28	0.70	1.29	0.72	4	4
228.9839	22.4085	NEW	0.78	0.43	1.55	0.76	1	4
229.3205	47.5232	GRV 1207	1.30	0.71	1.46	0.80	4	4
229.3452	35.9369	LDS 5165	1.07	0.71	1.62	0.90	3	5
229.7218	19.0649	UC 2982	0.75	0.37	2.72	0.84	1	7
230.1532	55.1371	CBL 486	0.63	0.36	1.24	0.68	0	3
230.3062	27.7479	LDS 4544	1.20	0.66	1.15	0.65	3	3
230.3599	53.2034	GRV 1209	1.20	0.67	1.23	0.69	3	3
230.8539	11.1754	NEW	0.90	0.45	0.93	0.46	2	2
231.2795	57.5020	NEW	0.66	0.35	1.21	0.63	0	3
231.2888	27.5664	AZC 90	0.87	0.49	1.31	0.72	2	4
231.4670	12.5347	CBL 488	0.66	0.38	1.15	0.59	1	3
231.5453	-2.8570	UC 3003	1.18	0.63	1.20	0.64	3	3
231.7055	27.3091	AZC 91	1.65	0.93	1.78	0.99	5	6
231.9668	49.1484	SLW 1095	1.42	0.78	1.67	0.91	4	5
232.0655	29.3386	NEW	0.89	0.54	1.00	0.60	2	3
232.9907	13.3573	LDS 4557	0.57	0.34	1.25	0.59	0	3
233.0902	56.9993	SLW 1103	1.71	0.90	1.78	0.94	5	6
233.5381	40.7901	LDS 4562	0.94	0.48	1.59	0.89	2	5
233.5712	63.8920	NEW	1.14	0.64	1.28	0.69	3	4
234.4683	0.2850	LDS 4575	0.89	0.52	0.88	0.49	2	2
234.9551	2.4947	NEW	0.73	0.38	1.41	0.72	1	4
235.8304	40.4027	CBL 494	1.61	0.44	1.44	0.77	3	4
236.3961	42.0852	UC 212	1.43	0.73	1.51	0.81	4	5
236.3975	18.9915	SLW 1135	1.58	0.90	1.69	0.97	5	6
236.4010	56.9842	NEW	0.92	0.46	1.16	0.57	2	3
236.8494	53.4087	NEW	1.03	0.61	1.59	0.90	3	5
237.0738	4.7261	SLW 1138	1.41	0.70	1.54	0.78	4	5
237.3033	45.0279	NEW	0.88	0.40	1.54	0.76	1	4
237.5326	18.3661	NEW	2.67	0.76	2.02	1.13	6	7
237.8183	6.3459	NEW	0.72	0.43	0.82	0.40	1	1

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
237.8183	6.3459	NEW	0.72	0.43	0.82	0.40	1	1
237.9101	61.1431	NEW	1.10	0.58	1.02	0.56	3	2
238.2828	22.8490	LDS 4598	2.11	0.56	1.97	1.00	5	6
238.5167	44.4289	LDS 1428	1.08	0.53	1.11	0.55	2	3
238.7548	35.2288	NEW	1.08	0.55	0.95	0.55	3	2
238.8730	15.7088	LDS 4602	1.12	0.61	1.46	0.78	3	4
238.8828	49.0735	NEW	1.58	0.83	1.64	0.87	5	5
238.9321	26.0516	LDS 4604	1.07	0.58	1.39	0.75	3	4
239.3731	3.4011	NEW	0.80	0.45	1.07	0.59	1	3
239.7728	51.7971	NEW	1.08	0.61	1.98	0.56	3	4
241.3093	-17.6722	LDS 4630	1.23	0.68	1.27	0.67	3	3
241.3806	29.9235	GRV 1217	1.09	0.58	1.40	0.75	3	4
241.7064	14.7358	NEW	0.52	0.30	1.25	0.68	0	3
242.4293	52.1786	NEW	0.50	0.28	1.10	0.54	0	3
242.8577	43.0924	NEW	1.36	0.67	1.41	0.70	4	4
242.9587	34.6981	NEW	0.57	0.37	1.47	0.81	0	4
243.5141	53.8250	LDS 4655	0.61	0.34	1.27	0.72	0	4
244.1729	22.7805	AZC 97	0.68	0.32	1.53	0.85	0	5
244.2595	-0.1013	NEW	0.65	0.37	1.62	0.85	1	5
244.8640	56.3326	NEW	0.64	0.33	0.71	0.36	0	1
245.4876	35.3981	NEW	1.49	0.85	1.43	0.81	5	4
245.8345	38.7316	LDS 4664	1.00	0.53	1.25	0.65	2	3
246.2437	-5.1642	NEW	1.31	0.80	1.57	0.93	4	5
246.8698	7.6775	NEW	1.26	0.71	1.47	0.83	4	5
248.0291	7.3279	NEW	0.53	0.29	1.03	0.58	0	2
248.3748	46.0599	BVD 247	1.00	0.57	1.08	0.62	2	3
249.1048	37.7952	LDS 4680	0.65	0.34	1.38	0.72	0	4
249.2637	12.2270	BPM 665	1.07	0.57	1.32	1.10	3	5
249.3832	53.8559	SLW 1188	0.89	0.47	0.83	0.46	2	1
249.5384	48.6414	SLW 1189	1.21	0.65	1.30	0.72	3	4
249.5767	50.6736	NEW	0.60	0.30	1.31	0.65	0	3
251.0388	37.8350	NEW	1.37	0.72	1.52	0.79	4	5
252.4825	79.5342	NEW	1.35	0.72	1.40	0.73	4	4
252.8689	18.2349	NEW	0.73	0.44	1.80	0.97	1	6
253.6643	50.8689	GRV 1223	1.37	0.68	1.35	0.62	4	3
255.1078	28.2857	LDS 4717	0.85	0.41	1.18	0.57	1	3
255.1082	23.7566	NEW	0.58	0.34	0.94	0.52	0	2
255.1260	33.2270	CBL 513	1.23	0.71	1.39	0.73	4	4
255.6099	11.7654	NEW	0.70	0.39	1.67	0.87	1	5
256.1921	73.0997	NEW	0.97	0.54	1.27	0.73	2	4
256.2522	28.1493	NEW	0.96	0.51	1.00	0.55	2	2
256.2693	59.4490	NEW	1.49	0.82	2.09	1.20	5	7
257.6061	27.9777	SKF 366	1.11	0.45	2.14	1.14	2	7
257.9359	-0.5620	LDS 4724	0.57	0.30	1.26	0.64	0	3
258.7007	43.1964	LDS 4731	1.22	0.60	1.28	0.63	3	3
259.0877	-2.1036	NEW	0.55	0.36	0.64	0.57	0	1
259.3079	36.0540	NEW	0.73	0.46	0.85	0.50	1	2
259.5219	27.0971	NEW	0.54	0.29	1.11	0.53	0	3
260.6460	29.5177	FMR 132	0.90	0.47	1.68	0.92	2	5
261.8348	33.9072	NEW	0.53	0.28	2.28	1.22	0	7
263.6019	4.9193	NEW	0.91	0.51	1.13	0.60	2	3

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
263.8870	6.0532	NEW	1.13	0.57	1.62	0.87	3	5
264.1361	7.1297	UC 3374	1.18	0.62	1.39	0.74	3	4
264.4001	67.7244	NEW	1.49	0.78	1.41	0.72	4	4
264.7749	65.1519	NEW	1.07	0.77	1.67	0.93	3	5
264.9433	5.6246	FMR 137	0.56	0.32	0.62	0.35	0	0
265.0576	28.4391	NEW	1.23	0.67	1.30	0.68	3	4
266.7337	64.9359	LDS 2741	0.80	0.35	0.85	0.37	1	1
266.8601	44.1455	NEW	1.01	0.56	1.20	0.68	2	3
267.1462	46.0976	CBL 518	1.32	0.67	1.74	0.93	4	5
267.1944	5.6933	NEW	1.31	0.67	1.31	0.68	4	4
267.4790	41.8551	LDS 4765	1.39	0.82	1.38	0.82	4	4
269.2249	78.4767	NEW	1.07	0.59	0.97	0.54	3	2
269.3062	0.9325	NEW	0.75	0.28	0.69	0.47	0	1
269.6317	0.7237	NEW	0.66	0.33	0.46	0.54	0	1
270.2203	0.8416	NEW	0.47	0.81	1.39	0.86	2	4
272.8278	0.9743	NEW	0.75	0.35	0.73	0.45	1	1
274.2337	64.2448	SLW 1218	1.59	0.84	1.79	0.95	5	6
280.6273	-0.2593	NEW	1.67	1.15	1.79	1.32	6	7
281.5963	39.9721	LDS 4799	0.56	2.27	1.45	0.75	5	4
291.1071	14.7860	NEW	1.11	0.83	1.86	1.32	4	7
291.5741	15.4872	NEW	0.55	0.35	0.67	0.41	0	1
294.3393	63.3232	NEW	0.73	0.37	0.75	0.40	1	1
295.2510	23.2820	NEW	0.89	0.41	1.39	1.02	1	5
296.7048	62.6387	NEW	1.47	0.76	1.65	0.89	4	5
298.4580	10.3515	NEW	0.49	0.42	0.55	0.46	0	1
299.6021	60.5317	CBL 524	0.73	0.36	1.78	0.88	1	5
302.1205	60.3984	CBL 525	1.20	0.63	1.17	0.61	3	3
302.3434	33.1282	GIC 162	1.01	0.53	1.18	2.18	2	6
302.4844	41.9991	NEW	0.57	0.42	0.59	0.36	1	0
303.4920	7.2232	NEW	1.29	0.71	1.17	0.67	4	3
303.7531	32.7298	NEW	1.60	1.20	1.74	1.39	6	7
304.1702	8.0382	NEW	0.71	0.35	1.27	0.61	1	3
304.6610	-11.4369	NEW	1.09	0.71	1.82	0.86	3	5
306.7294	0.7565	NEW	1.30	0.71	1.42	0.80	4	4
307.4056	-5.5173	NEW	0.64	0.37	1.23	0.65	1	3
308.7576	-13.3905	NEW	1.03	0.54	1.33	0.69	2	4
309.0652	-13.3370	NEW	1.03	0.58	1.29	0.73	3	4
309.7707	27.1608	NEW	0.55	0.54	0.70	0.51	1	1
310.0914	-6.1701	NEW	0.54	0.50	1.07	0.60	1	3
311.5927	45.8478	NEW	0.61	0.49	0.69	0.46	1	1
312.0350	39.9707	NEW	0.56	0.37	0.94	0.57	0	2
312.0630	75.3106	LDS 1940	1.39	0.74	1.45	0.76	4	4
312.4928	57.8417	NEW	0.64	0.44	0.83	0.50	1	2
313.6640	42.1775	NEW	1.18	0.88	1.42	0.99	4	5
314.0111	-5.9222	UC 4333	0.50	1.17	1.16	0.62	3	3
314.3734	-11.7008	NEW	0.73	0.32	1.77	0.96	0	6
315.2225	-3.2735	NEW	0.49	0.30	1.24	0.68	0	3
315.5343	3.4863	NEW	0.62	0.44	1.58	0.88	1	5
315.8179	-17.6377	NEW	0.68	0.44	1.44	0.77	1	4
316.2584	-3.1529	NEW	1.52	0.70	1.58	0.85	4	5

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
317.2117	54.9814	NEW	0.55	0.47	0.69	0.50	1	1
318.2369	-0.7460	SLW 1231	0.81	0.45	0.85	0.45	1	1
318.4494	74.1492	CBL 91	0.91	0.44	1.24	0.60	2	3
319.6920	21.8327	LDS 4878	1.30	0.74	1.28	0.72	4	4
320.2728	53.6226	NEW	0.82	0.52	1.03	0.69	2	3
320.5836	51.5355	NEW	0.48	0.35	0.55	0.61	0	1
321.0934	-10.5503	NEW	1.45	0.76	1.53	0.80	4	5
321.3466	52.5830	NEW	0.98	0.74	0.95	0.73	3	3
321.4797	52.2311	NEW	1.20	0.69	1.12	0.97	3	4
321.5872	7.1116	NEW	0.48	0.28	0.49	0.31	0	0
321.7870	51.8578	NEW	0.68	0.44	1.04	0.74	1	3
322.0926	19.3974	NEW	0.95	0.45	1.17	0.55	2	3
323.2605	17.3657	NEW	0.59	0.31	0.72	0.34	0	1
323.2859	-2.2200	NEW	1.34	0.70	1.42	0.73	4	4
323.5443	50.4402	NEW	0.66	0.30	0.76	0.37	0	1
324.9261	14.3850	LDS 4901	1.59	0.90	1.83	1.05	5	6
325.2194	25.5337	AZC 113	0.68	0.36	1.09	0.57	1	3
325.3350	23.9111	NEW	0.92	0.50	2.27	1.30	2	8
325.4102	20.9826	UC 4531	0.67	0.38	0.69	0.38	1	1
325.7705	24.2164	NEW	1.26	0.70	2.20	1.17	4	7
325.7925	13.8314	CBL 534	1.05	0.65	1.25	0.67	3	3
326.2730	0.3672	SLW 1252	1.26	0.66	1.52	0.77	3	4
328.0672	23.7417	NEW	1.55	0.80	1.32	0.91	5	5
328.6062	7.6378	NEW	1.26	0.70	1.39	0.80	4	4
329.1905	-4.4500	NEW	0.53	0.45	1.32	0.68	1	4
329.4003	-3.4697	LDS 4926	0.56	0.34	0.90	0.50	0	2
330.3202	-2.3535	NEW	0.46	0.28	0.57	0.34	0	0
331.2027	22.4412	CBL 538	1.30	0.72	1.36	0.72	4	4
331.2363	-9.6061	NEW	1.58	0.81	1.55	0.78	5	5
331.3875	25.3995	FMR 168	1.27	0.72	1.20	0.90	4	4
331.6505	6.8764	SLW 1261	1.16	0.62	1.70	0.90	3	5
331.8189	8.7040	NEW	0.85	0.50	1.35	0.79	2	4
332.1345	2.1601	LDS 4945	1.95	0.45	1.33	0.71	4	4
333.3313	25.0324	NEW	0.50	0.34	0.99	0.59	0	2
333.9568	0.9589	LDS 4952	0.72	0.41	0.82	0.49	1	2
334.1306	18.7533	NEW	1.03	0.54	1.60	0.88	2	5
335.8782	31.9892	LDS 4964	0.73	0.40	0.98	2.52	1	5
336.0963	-1.6424	GIC 180	0.86	0.44	0.90	0.41	1	1
336.8214	18.0835	NEW	0.88	0.47	1.48	0.78	2	4
336.9505	-4.0455	NEW	1.50	0.81	1.59	0.86	5	5
337.4019	-7.2731	NEW	1.33	0.76	1.81	1.04	4	6
337.7115	21.0546	NEW	1.46	0.76	1.48	0.73	4	4
337.9365	13.3233	CBL 541	0.63	0.39	1.05	0.59	1	3
338.3175	-7.9104	SLW 1278	1.18	0.69	1.31	0.78	3	4
338.9853	24.4336	NEW	1.22	0.71	1.33	0.82	4	4
339.0294	4.0376	NEW	1.25	0.71	1.40	0.80	4	4
339.3326	22.4123	UC 276	0.75	0.42	0.89	2.37	1	5
339.7480	11.5732	NEW	0.93	0.54	1.14	0.63	2	3
339.8554	3.6573	NEW	1.28	0.70	1.65	0.89	4	5
340.0931	10.7247	NEW	1.08	0.61	1.13	0.62	3	3

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
340.1422	4.8130	UC 4788	0.96	0.45	1.14	0.54	2	3
342.3576	5.2832	LDS 5002	1.32	0.66	1.80	0.92	4	6
342.8887	13.5764	NEW	1.21	0.66	1.34	0.73	3	4
343.2650	27.4462	LDS 5012	1.60	0.85	1.71	0.92	5	5
343.3717	23.5880	LDS 5014	0.55	1.09	1.53	0.85	3	5
344.2093	18.8216	NEW	0.78	0.42	0.87	0.47	1	2
344.2563	19.7471	LDS 5024	0.92	0.49	1.48	0.77	2	4
344.7357	20.2218	LDS 5033	1.10	0.63	1.25	0.71	3	4
345.0863	58.6101	NEW	0.56	0.43	0.87	0.70	1	3
345.1376	10.2863	NEW	1.71	0.93	1.74	0.92	5	5
346.1311	-19.3387	UC 4874	0.84	0.40	0.93	0.45	1	2
347.1577	1.4628	LDS 6008	1.33	0.73	1.32	0.74	4	4
347.7866	57.8106	NEW	0.66	0.50	0.83	0.67	1	2
347.9436	58.2237	NEW	0.46	0.34	0.74	0.59	0	2
348.8313	-6.8810	NEW	1.12	0.60	1.53	0.88	3	5
349.3903	57.4171	NEW	0.58	0.41	0.65	0.41	1	1
349.5095	5.3496	NEW	0.73	0.43	1.06	0.56	1	3
349.5244	-7.3409	LDS 2978	1.43	0.77	1.56	0.84	4	5
349.8584	15.6379	CBL 547	1.02	0.53	1.19	0.63	2	3
349.9249	53.1805	NEW	0.52	0.34	0.51	0.36	0	0
349.9718	-1.0904	CBL 548	1.13	0.60	1.54	0.82	3	5
350.4113	29.7427	LDS 5077	1.20	0.62	2.05	3.34	3	5
350.7054	23.3744	AZC 129	1.49	0.79	1.55	0.85	4	5
350.9869	-7.8473	LDS 2986	0.73	0.46	1.32	0.76	1	4
351.0937	35.0785	NEW	0.48	0.28	1.04	0.52	0	2
351.3788	3.4928	NEW	1.40	0.69	1.55	0.84	4	5
352.1281	-3.6990	NEW	0.71	0.40	1.09	0.52	1	2
352.4656	31.6811	NEW	1.40	0.81	1.57	0.77	4	5
352.7752	8.7004	GIC 194	1.11	0.58	2.24	0.71	3	6
353.0244	15.2238	NEW	0.76	0.35	1.38	0.67	1	4
353.2963	22.1927	UC 4981	0.79	0.40	1.12	0.55	1	3
353.3449	3.7616	NEW	1.26	0.64	1.75	0.91	3	5
353.4344	33.2785	LDS 5102	1.42	0.80	1.41	0.79	4	4
354.1972	25.4950	NEW	1.98	1.04	2.41	1.27	6	8
354.2788	-1.4730	NEW	2.26	0.31	1.56	0.96	4	5
354.3734	6.3137	SLW 1329	0.87	0.40	0.95	0.43	1	2
354.5753	61.7184	NEW	1.00	0.53	0.91	0.51	2	2
354.6033	69.1896	NEW	0.66	0.58	1.20	1.02	2	5
354.7499	3.7143	NEW	0.67	0.46	1.46	0.80	1	4
354.9839	-1.4498	LDS 5110	0.68	0.30	1.03	0.54	0	2
355.3478	-5.4040	NEW	1.46	0.86	1.49	0.86	5	5
355.4222	1.0870	NEW	0.80	0.44	1.42	0.77	1	4
356.1779	-5.1651	LDS 6056	1.24	0.66	1.19	0.61	3	3
356.2283	28.2342	LDS 5117	1.08	0.57	1.19	0.61	3	3
356.2721	21.1019	LDS 5118	0.67	0.37	0.81	0.48	1	1
356.4222	-19.6774	NEW	0.87	0.40	1.19	0.59	1	3
356.4882	12.3709	NEW	0.95	0.49	1.21	0.66	2	3
357.4130	10.4626	NEW	0.72	0.41	0.88	0.48	1	2
358.2733	7.4509	NEW	0.74	0.43	0.82	0.50	1	2
358.2780	-8.4969	LDS 3003	1.45	0.73	2.01	1.03	4	6

Identification and Spectral Classification of Red Dwarf Common Proper Motion Binary Stars

PRIMARY RA	PRIMARY DEC	NAME	PRIMARY		SECONDARY		TYPE M+	TYPE M+
			(r-i)	(i-z)	(r-i)	(i-z)		
358.4323	8.4169	NEW	1.84	0.29	0.97	0.53	3	2
358.6469	24.4626	CBL 550	1.13	0.60	1.17	0.62	3	3
358.8996	15.0600	NEW	1.57	0.87	1.30	0.77	5	4
359.1769	8.4959	NEW	0.94	0.52	1.31	0.71	2	4
359.3094	29.9884	AZC 132	1.16	0.60	1.49	0.81	3	5
359.5415	30.9672	LDS 5144	1.16	0.62	1.38	0.74	3	4
359.7226	1.8124	UC 300	0.59	0.34	0.80	0.44	0	1
359.8908	-10.6220	LDS 5150	1.09	0.55	1.58	0.81	3	5

