

A DIFFERENTIAL CATALOG OF RIGHT ASCENSIONS OF 345 RRS2 STARS

N. V. Bazej

ABSTRACT. The meridian Repsold circle of Odessa Astronomical Observatory was used for conducting the meridian part of the CONFOR program in order to establish connection between the radio and optical coordinate systems. Over 6600 differential observations of the program and reference star right ascensions were made in 1990-1993 within 148 nights. From observational results, a catalogue was compiled of right ascensions of 345 stars RRS2 for equinox J2000.0 and epoch of observations. The catalogue was sent to Astronomical Observatory of Kiev University for the inclusion in a summary catalogue of stars RRS2.

Key Words: Astrometry, Catalogue, CONFOR program, meridian circle.

Meridian observation of right ascensions and declination are traditional for Odessa Astronomical Observatory. The meridian Repsold circle is a classical instrument of fundamental astrometry ($d=135\text{mm}$, $F=1980\text{ mm}$, magn 200 \times , ocular micrometer visual) (Volyanskaya, M.Yu., 1984). In 1990-1993 an author were obtained a series of observations of right ascensions stars the CONFOR program (Tel'nyuk-Adamchuk, Molotay, 1989). An observations of stars RRS2 list are component part this program that establish connection between the radio and optical coordinate systems (Tel'nyuk-Adamchuk, Kumkova et al., 1991).

The declination of stars RRS2 list were disposed in wide zone from -20° to $+45^\circ$ with gravity center near the equatorial zone from -10° to $+10^\circ$). Apparent positions of the stars observed were initially calculated by researchers of the Astrometry Department of Astronomy Observatory Kiev University. Later, the apparent positions calculated by Zhukov (1996) on the Odessa Astronomical Observatory. The observations were begun in August 1990. The stars of the FK5 catalogue were observed as reference stars. The magnitude of stars is limited by 9.5 m for Odessa meridian circle. In general, over 6600 differential observations of the right ascensions were made within 148 nights, where over 2370 are observations of determinations stars.

In the processing of observations the colimation and the inclination were determined regularly (seldom one time in the week); dates introduced in the calculations of right ascensions. The calculations were made by standard method of determination of right ascensions of stars. The Bessel formula was used for determination of right ascensions (Podobed, 1968):

$$\alpha = T + (c + \gamma)\sec \delta + n \operatorname{tg} \delta + (u + m),$$

where

T - the moment of passing of star across a meridian;

c - the colimation;

γ - the diurnal aberration;

n, (u + m) - corrections of the circle.

Although the stars were observed from a comparatively large meridian arc during whole nights, the main principle of the differential determination of coordinates was taken into account: the reduction of observed stars to the reference catalogue should be made by using narrow zones (Podobed, 1968).

From observational results, a catalogue was compiled of right ascensions of 345 stars RRS2 for equinox J2000.0 and epoch of observation. The catalogue comprising MRS error of 0.010 s per position (obtained from inner consistency). The dates presenting in following form:

RRS2 - designation of the star in the RRS2 list;

mag - photographic magnitude, copied from PPM;

sp - spectral type, copied from PPM;

R.A. - right ascension for equinox J2000,0;

dec - declination for 2000.0 (from PPM);

epo - mean epoch of observations;

n - number of observations

The catalogue was sent to Astronomical Observatory of Kiev University for the inclusion in a summary catalogue of stars RRS2.

References

- Volyanskaya, M.Yu., Myalkovsky, M.I., Usanov, D.S., and Chelombitko, A.P. (1984) On restoration works of the meridian circle AO OGU. *Tr. 22 Astrometr Conf. USSR., Moscow MGU*, 215-216..
- Tel'nyuk-Adamchuk, V.V. and Molotay, A.A. (1989) Meridian stars of intermediate reference system in the vicinity of 238 extragalactic optical radio sources, *Kiev, Dept. in UkrNINTI, No.1459-Uk*, 89.
- Tel'nyuk-Adamchuk, V.V., Kumkova I.I., Sadzakov, S., Toma, E. and Volanskaya, M.U. (1991) Intermediate star reference systems in the vicinity of radio sources, *Proc. of the IAU. Reference systems*, 363-367.
- Zhukov, V. V. (1996) Computing apparent positions of stars with a personal computer. *Astron. and Astrophis. Transactions, Vol. 10*, pp. 175-176
- Podobed, V.V. The Fundamental Astrometry. *Moscow, Nauka*, 1968, pp. 277-280.

A DIFFERENTIAL CATALOG OF RIGHT ASCENSIONS OF 345 RRS2 STARS

RRS2	mag	Sp	α			δ		epo 1900+	n
			h	m	s	o	'		
72002	9.2	F8	00	03	17.026	-05	27	92.397	6
72004	8.6	G0	00	04	30.150	-06	57	91.990	4
72005	9.0	K0	00	04	56.563	-07	16	92.740	4
72006	8.9	K0	00	07	47.836	-05	29	92.070	6
72012	8.6	G5	00	09	48.665	-06	50	92.115	4
72015	9.4	G5	00	10	44.834	-05	40	92.747	5
72033	10.1	K0	00	19	44.142	-00	32	92.724	4
72038	9.3	K2	00	21	51.277	-00	00	91.956	5
72042	9.8	G5	00	22	53.185	+00	10	92.683	3
72044	9.5	K0	00	23	40.443	-00	32	92.089	3
72046	9.3	G5	00	23	49.131	+00	07	92.740	5
72059	7.0	G5	00	26	37.407	-00	02	92.070	6
72068	10.1	K5	00	32	23.839	+35	27	92.742	3
72069	9.8	G5	00	56	06.500	-00	23	92.761	3
72076	10.0	K0	01	00	02.812	+00	22	92.756	3
72087	9.6	G0	01	06	05.097	+01	42	92.798	3
72092	8.5	F2	01	07	12.810	+01	21	92.096	3
72098	8.3	F2	01	11	12.844	-01	16	92.064	4
72111	8.3	M0	01	14	14.838	-02	10	92.416	3
72119	7.7	G5	01	16	24.134	-12	05	92.098	4
72131	8.8	K5	01	18	16.897	-11	31	92.437	3
72137	9.1	F5	01	19	35.995	+32	17	92.395	3
72146	7.5	F0	01	22	23.407	+05	15	92.784	3
72173	8.3	K0	01	40	16.671	-09	14	92.461	3
72178	8.4	K0	01	41	08.979	-09	58	92.431	5
72181	7.3	G5	01	42	31.994	-08	39	92.029	2
72257	8.8	K2	02	09	40.218	+32	18	92.523	3
72332	7.5	A2	03	00	38.082	+47	53	92.062	2
72345	6.9	F0	03	03	56.742	+47	50	92.084	2
72351	8.0	B8	03	18	15.216	+12	49	92.579	4
72362	8.0	F5	03	20	33.646	+12	20	92.579	4
72387	8.6	F8	03	38	17.296	-02	33	93.111	3
72402	9.5	A5	03	41	01.992	-02	11	93.112	2
72422	8.6	M1	04	04	18.699	+12	30	92.077	2
72438	9.1	K0	04	08	30.860	+12	20	92.904	5
72445	7.3	K0	04	13	49.817	+12	45	92.102	3
72446	8.3	K0	04	13	46.946	-18	03	93.105	4
72448	7.2	K0	04	15	46.876	-18	38	92.084	6

RRS2	mag	Sp	α			δ		epo 1900+	n
			h	m	s	o	'		
72449	9.0	F5	04	15	55.505	-18	20	93.105	4
72453	8.3	F0	04	17	21.410	-19	31	92.092	3
72456	8.3	K5	04	18	19.130	-19	14	93.108	2
72465	8.3	A0	04	23	03.178	-01	21	92.102	3
72468	9.1	F5	04	23	29.977	-01	35	93.108	3
72474	7.9	B9	04	26	42.608	+41	07	92.094	4
72481	7.5	F5	04	30	17.953	+19	50	92.087	4
72494	7.8	K0	04	37	44.296	-18	19	92.101	4
72497	7.5	A3	04	38	28.790	-19	38	93.111	3
72502	9.0	F2	04	39	51.708	-18	06	93.101	3
72510	8.3	G5	04	42	56.728	-00	35	92.115	4
72515	9.5	G5	04	44	22.237	-00	02	93.105	3
72520	7.8	G5	04	48	42.017	+18	42	92.096	4
72541	8.1	B9	04	59	29.213	-02	03	92.901	5
72544	8.6	K0	05	00	16.264	-01	56	92.121	3
72547	6.0	A5	05	00	39.827	-02	03	93.105	5
72551	8.5	A0	05	01	38.550	-02	43	92.129	4
72554	9.3	K0	05	02	15.131	-01	43	93.107	3
72560	8.9	K0	05	03	40.574	-02	31	93.105	4
72578	8.1	F5	05	29	27.257	+13	25	92.121	5
72613	8.4	F5	05	39	05.554	-05	53	92.136	3
72620	9.1	G0	05	41	49.127	-05	18	93.108	3
72624	8.9	K2	05	43	42.928	-05	09	93.112	2
72625	8.1	F2	05	44	25.455	-05	27	92.152	4
72626	6.5	A2	05	52	39.688	+39	34	92.182	2
72630	9.6	M0	05	54	06.942	+40	23	92.644	2
72632	8.8	A0	05	56	11.133	+39	42	93.105	4
72634	9.1	G0	05	57	30.316	+39	58	93.104	2
72637	7.5	F5	05	59	17.044	+40	02	92.461	6
72643	8.1	A0	06	02	20.475	+18	01	92.917	5
72649	8.3	K2	06	03	49.328	+17	07	92.147	3
72656	8.8	K5	06	07	27.997	-15	15	93.103	3
72659	7.5	F5	06	08	06.462	-15	54	92.152	4
72666	8.2	A0	06	09	07.154	-15	42	92.390	4
72670	8.5	K0	06	10	10.050	-08	32	93.140	3
72673	7.3	A3	06	11	21.757	-15	47	91.963	5
72676	8.9	G0	06	11	45.436	-15	33	93.130	3
72701	7.5	G5	06	44	46.619	+44	30	92.015	7
72713	7.1	Ob	06	54	13.049	-23	55	91.831	6
72715	7.5	F0	07	09	05.666	+44	15	91.939	4
72730	8.5	K0	07	14	08.718	+35	32	91.939	4

RRS2	mag	Sp	α			δ		epo 1900+	n
			h	m	s	$^{\circ}$	'		
72739	8.6	K0	07	17	19.943	+35	59	91.682	4
72748	9.5	A2	07	24	13.036	-00	45	92.178	2
72753	7.4	A2	07	26	34.150	-00	28	92.693	4
72759	8.1	K0	07	27	52.285	-11	43	91.696	4
72764	9.0	A0	07	29	15.995	-12	03	93.208	2
72774	5.1	K5	07	33	47.938	-14	31	91.682	4
72779	7.6	G5	07	35	12.248	-17	32	92.178	2
72806	6.4	F0	07	39	54.093	+32	00	91.845	3
72820	5.3	K0	07	43	18.653	+28	53	92.180	4
72838	7.4	F8	07	47	32.573	+09	37	92.868	3
72850	7.3	K0	07	49	32.298	+12	48	92.696	2
72876	9.3	G0	08	15	30.812	+43	00	91.868	3
72904	6.1	A5	08	28	36.818	+24	08	91.612	5
72919	5.8	F0	08	31	30.600	+24	04	91.612	5
72929	7.5	K0	08	33	00.165	+24	05	91.608	5
72973	7.5	F8	08	53	55.349	+19	58	91.744	4
72984	6.9	G0	08	59	42.782	-27	48	91.211	2
72990	8.5	A0	09	01	33.519	-14	29	91.923	3
72993	7.4	K5	09	03	07.793	-14	00	93.218	2
72994	7.7	K2	09	03	36.348	-14	26	91.763	4
73005	6.8	A0	09	07	22.212	+00	36	91.742	4
73034	9.1	G5	09	25	36.554	+39	41	92.271	4
73056	8.6	F8	09	47	51.272	-08	29	92.627	3
73058	8.3	F8	09	51	39.154	+17	28	92.679	5
73085	8.3	F8	10	07	35.140	+13	01	92.305	4
73104	7.8	K0	10	27	43.907	+41	14	92.312	5
73110	9.6	G0	10	31	07.572	+40	26	92.314	6
73118	8.5	F0	10	33	30.703	-20	10	93.315	2
73133	8.4	K0	10	36	48.481	-19	53	93.315	2
73153	8.6	K2	10	40	37.358	+12	04	92.308	4
73160	8.8	K0	10	42	15.564	+12	25	92.311	5
73170	8.5	A0	10	46	36.702	+11	11	92.318	4
73202	8.0	K0	11	15	25.561	+15	06	92.330	5
73218	9.8	G0	11	22	22.822	+26	52	92.664	3
73223	8.8	G5	11	24	18.065	+14	10	92.323	4
73226	7.3	K5	11	25	42.379	-14	32	92.330	3
73227	9.2	F8	11	26	02.212	-14	56	93.321	4
73238	9.1	K2	11	29	15.952	-15	06	92.097	4
73243	9.0	G0	11	30	21.194	-14	27	92.330	5
73257	8.6	F8	11	34	19.184	-15	30	92.325	6
73258	9.0	F5	11	34	37.729	-15	34	93.339	3

RRS2	mag	Sp	α			δ		epo 1900+	n
			^h	^m	^s	^o	[']		
73273	8.7	K5	11	44	37.663	-07	49	92.005	3
73279	8.6	G5	11	46	07.996	-06	38	91.997	3
73287	9.3	G5	11	47	15.953	-00	09	93.336	2
73297	6.9	F8	11	49	01.373	-00	19	93.332	4
73299	7.4	K2	11	49	15.279	-06	53	92.129	5
73305	8.6	K0	11	49	53.070	-07	35	93.326	2
73306	7.9	F8	11	50	18.670	-07	22	92.076	4
73313	8.8	K2	11	54	02.186	-01	02	91.936	5
73314	8.5	F2	11	55	00.739	-00	33	92.076	4
73325	9.1	G0	11	59	13.593	+24	37	91.936	5
73333	8.8	F8	12	12	38.603	+48	35	92.170	5
73356	9.1	G0	12	21	56.207	+27	18	92.312	2
73368	7.9	A0	12	26	00.874	+02	02	91.608	4
73386	10.1	F8	12	31	02.055	+02	17	92.677	3
73387	9.5	K0	12	31	17.430	+02	18	92.136	5
73395	9.0	A2	12	36	08.530	-10	23	92.341	4
73397	8.5	K2	12	37	31.179	-09	39	92.082	4
73399	8.7	K2	12	41	09.613	-09	49	91.939	5
73401	8.9	K0	12	42	11.356	-11	11	92.342	6
73404	8.0	F0	12	43	48.637	-09	46	93.358	4
73407	9.0	F8	12	44	06.559	-08	16	92.347	4
73409	7.7	K0	12	44	59.669	-08	31	92.334	6
73413	8.4	A5	12	45	58.561	-20	04	92.838	4
73415	8.7	K0	12	46	56.463	-19	56	92.354	3
73416	8.0	G5	12	46	59.076	-07	47	92.326	4
73425	8.2	K0	12	48	48.720	-19	39	92.353	3
73431	8.8	F8	12	49	30.342	-19	53	92.688	3
73449	9.1	G5	12	55	44.420	-05	02	91.949	5
73451	9.2	K5	12	56	22.846	-05	24	93.106	4
73461	7.8	A2	12	59	00.197	-06	05	92.340	5
73462	8.3	K2	12	59	23.696	-04	54	91.863	6
73468	8.6	F0	13	01	40.782	-09	38	91.372	4
73469	9.0	K0	13	02	01.395	-10	27	92.871	4
73470	9.2	F8	13	03	55.982	-10	57	92.355	4
73474	8.9	F8	13	06	24.406	-10	03	92.106	4
73479	4.9	K0	13	07	53.805	-10	44	91.959	5
73491	7.3	G0	13	13	44.650	+32	31	91.849	6
73509	10.3	K0	13	22	20.849	+32	32	91.953	5
73524	8.6	A3	13	28	57.549	+32	01	91.540	6
73528	8.9	G5	13	30	46.866	+24	13	91.868	4
73529	10.3	K0	13	30	53.840	+30	32	92.673	3

RRS2	mag	Sp	α			δ		epo 1900+	n
			^h	^m	^s	^o	[']		
73538	8.1	A3	13	34	28.173	-13	20	91.117	4
73539	8.8	K0	13	34	33.115	-13	26	92.183	6
73545	8.3	F5	13	38	27.783	-13	33	91.654	7
73548	9.2	K0	13	40	13.840	-12	55	92.346	4
73549	9.4	G0	13	40	16.365	-12	42	93.418	2
73574	8.6	F8	13	50	55.907	+11	34	91.768	5
73581	7.9	F0	13	53	51.693	-14	39	91.572	5
73591	7.8	K2	13	55	36.902	-16	08	92.163	5
73597	9.0	F8	13	57	42.856	-15	53	93.077	4
73600	8.9	F5	13	58	46.420	-15	54	92.158	5
73603	8.2	K0	14	00	28.249	-14	57	91.699	6
73627	8.9	K2	14	29	30.282	-18	41	93.362	2
73630	8.7	A0	14	32	21.806	-17	52	91.882	4
73631	8.5	K0	14	32	32.555	-18	49	92.985	5
73636	9.4	F5	14	35	21.838	-18	49	93.368	4
73650	8.6	F5	14	44	34.540	+10	45	91.908	5
73655	8.6	G5	14	47	22.340	+10	18	91.626	5
73661	7.2	K0	15	03	06.448	-17	37	92.568	5
73663	7.7	K2	15	03	33.665	-16	35	91.550	7
73669	5.2	K0	15	06	37.636	-16	15	91.411	5
73671	6.6	A0	15	06	49.105	-16	29	92.241	6
73678	8.3	K0	15	08	14.792	-17	05	91.896	6
73687	8.1	K5	15	11	51.649	-08	50	91.681	4
73690	8.9	F8	15	13	04.619	-09	49	91.890	4
73693	8.3	G0	15	13	57.329	-09	29	91.964	3
73695	9.3	F0	15	14	04.352	-08	46	92.369	3
73698	8.5	G5	15	14	33.476	-08	12	92.068	3
73722	9.8	K0	15	49	59.709	+01	44	92.937	4
73724	6.5	K0	15	50	17.553	+02	11	91.484	4
73735	9.0	K5	15	57	00.891	-00	44	91.757	4
73736	8.6	A0	15	57	40.226	-00	05	91.649	5
73743	8.8	G0	16	00	18.914	+00	08	92.912	4
73750	8.5	F0	16	09	19.347	+27	22	92.779	3
73753	7.4	K0	16	10	03.903	+26	44	91.521	3
73759	8.5	G5	16	11	50.554	+34	23	91.449	4
73766	8.3	K0	16	15	14.994	+34	42	92.089	5
73775	9.0	A2	16	33	11.558	+38	04	91.502	6
73791	9.6	M0	16	36	54.246	+38	50	91.999	4
73797	10.6	G5	16	38	50.388	+40	13	92.180	3
73807	9.3	G0	16	44	00.229	+40	45	91.495	3
73816	9.5	K0	16	49	42.113	+39	14	91.864	6

RRS2	mag	Sp	α			δ		epo 1900+	n
			h	m	s	u	'		
73821	8.6	K0	16	54	42.637	+40	42	91.510	6
73829	9.1	K0	16	56	34.115	+40	06	91.515	7
73836	9.3	G5	16	57	40.260	+39	43	91.519	4
73838	8.5	G0	16	58	22.842	+39	42	91.516	8
73850	8.6	K2	17	15	34.298	+17	49	91.714	6
73852	7.1	B9	17	16	31.125	+18	01	91.521	6
73853	8.1	K5	17	17	58.379	+17	07	91.527	5
73854	5.9	A0	17	18	04.932	+17	19	92.384	6
73862	10.3	K0	17	29	42.653	+39	08	92.083	7
73866	8.5	G5	17	32	13.570	-13	41	91.501	5
73868	7.8	A0	17	32	50.770	-13	28	92.101	4
73869	9.4	A0	17	33	17.450	-12	34	92.563	4
73870	8.4	K0	17	33	51.032	-13	30	91.556	4
73874	7.4	A2	17	35	07.497	-13	38	91.529	6
73877	9.1	K5	17	35	15.705	-13	42	92.554	3
73890	8.0	F2	17	39	08.383	+48	26	91.753	5
73893	9.0	G0	17	41	57.649	-03	50	91.521	3
73896	9.3	A0	17	42	36.310	-03	49	92.589	3
73905	9.5	A5	17	44	03.629	-04	33	92.566	5
73911	9.5	K0	17	44	55.275	-04	57	92.563	3
73916	8.7	A3	17	46	41.838	-04	03	91.520	5
73918	8.1	M0	17	47	42.351	-03	38	91.959	5
73929	8.6	F8	17	50	16.091	+28	13	92.576	5
73930	6.5	K0	17	50	22.874	+29	19	91.743	5
73937	7.9	A2	17	52	07.250	+08	49	91.713	8
73947	9.6	K2	17	53	08.963	+28	36	91.518	5
73966	6.1	O5	18	03	52.446	-24	21	91.540	4
73986	9.3	K2	18	23	59.398	+10	33	91.269	6
73987	8.0	A0	18	24	09.034	+10	57	91.612	4
73990	9.0	0	18	25	31.528	-12	41	92.576	5
73993	9.3	A0	18	25	55.698	+10	08	91.405	5
73996	8.4	G5	19	09	01.536	-20	00	92.560	3
73997	8.6	K2	19	09	51.169	-20	27	92.301	7
73998	8.8	F0	19	10	57.163	-19	58	91.413	5
74002	9.3	A0	19	11	58.577	-19	57	91.863	4
74003	8.6	K2	19	13	02.602	-20	11	92.003	7
74039	7.3	B8	19	39	52.355	-15	10	91.599	4
74040	8.9	K0	19	40	10.025	-15	16	90.892	5
74041	8.6	K0	19	40	21.134	-15	48	92.239	3
74045	9.3	F8	19	41	22.013	-15	46	92.632	4
74047	9.1	A0	19	42	50.436	-15	21	92.602	4

RRS2	mag	Sp	α			δ		epo	n
			^h	^m	^s	^o	[']		
74049	8.8	A5	19	43	09.958	-15	10	1900+ 90.741	4
74058	9.1	K2	19	50	02.772	+07	51	91.991	6
74059	6.0	B3	19	50	17.485	+07	54	92.654	7
74065	8.6	K0	19	58	03.443	-18	17	91.458	5
74066	8.3	F0	19	58	34.305	-18	22	90.761	4
74067	8.5	A2	19	59	02.941	-17	57	92.137	4
74071	9.0	K0	20	00	44.823	-17	57	91.285	7
74074	9.1	G0	20	02	31.200	-17	54	92.692	3
74075	8.7	K0	20	02	49.035	-18	10	92.067	5
74077	7.7	K0	20	03	05.652	-17	20	91.630	4
74078	8.0	F5	20	03	12.997	-18	14	91.211	6
74085	9.2	G5	20	10	51.217	-06	37	92.593	4
74087	8.2	G5	20	11	23.587	-07	12	91.627	5
74088	7.7	K2	20	11	36.834	-07	17	90.744	7
74090	9.1	F5	20	11	43.619	-06	08	92.705	5
74091	9.1	K0	20	12	04.009	-06	57	92.616	4
74097	4.7	B0	20	17	47.241	+38	01	91.768	3
74102	6.8	O1	20	20	27.963	+43	51	90.875	7
74114	9.5	K2	20	29	48.033	+13	00	92.453	5
74126	0.2	B0	20	33	15.113	+41	18	91.670	5
74154	9.1	K0	21	13	09.033	+30	01	92.647	7
74157	7.0	K0	21	14	10.309	+29	54	91.306	7
74159	10.3	M0	21	14	24.220	+30	06	92.645	6
74160	8.6	A0	21	15	13.453	+29	29	91.708	5
74161	9.8	K0	21	17	30.087	+29	39	92.628	5
74164	10.3	M0	21	18	25.727	+29	39	91.512	5
74165	8.9	G0	21	28	42.962	-12	35	91.746	4
74168	9.1	G5	21	29	23.273	-12	46	92.630	2
74170	8.5	G0	21	29	28.976	-12	04	92.699	6
74174	9.1	K0	21	30	30.984	-12	24	91.711	3
74177	8.9	F5	21	31	04.351	-01	43	92.627	3
74179	8.1	F8	21	31	34.924	-12	30	91.526	5
74180	8.6	F5	21	31	34.973	-11	56	92.285	4
74181	8.5	K2	21	31	57.632	-12	46	92.740	4
74183	8.8	F5	21	32	05.227	-01	32	92.665	4
74184	6.6	K5	21	32	22.119	-12	16	92.799	3
74187	9.3	M1	21	32	40.473	-01	36	91.909	5
74191	8.9	F5	21	33	44.928	-02	22	92.253	5
74192	8.7	G5	21	33	54.761	-12	08	92.714	4
74193	9.3	K0	21	33	59.912	-11	46	92.776	5
74196	9.2	F8	21	34	06.688	-01	33	91.774	2

RRS2	mag	Sp	α			δ		epo 1900+	n
			^h	^m	^s	^o	[']		
74201	9.4	G8	21	36	19.143	-02	09	92.673	3
74211	9.1	K2	21	38	29.823	+13	41	91.716	5
74219	9.3	F2	21	41	55.612	+14	15	92.098	5
74222	8.3	F8	21	44	48.470	+07	12	91.716	5
74240	9.1	K5	21	49	25.567	+06	07	91.772	3
74263	7.1	K0	21	55	00.314	-15	15	91.367	5
74265	9.0	G5	21	55	43.958	-15	39	92.771	3
74266	9.1	F8	21	56	49.496	-15	37	92.662	4
74269	8.7	M0	21	58	49.492	-15	07	92.691	4
74271	8.6	K0	21	59	10.515	-14	30	91.722	5
74276	7.3	F0	22	00	45.501	+31	26	91.905	5
74279	10.1	K0	22	01	24.370	+42	01	91.996	4
74284	9.0	K0	22	02	25.427	+42	25	91.869	6
74286	8.2	K0	22	04	11.098	-17	48	91.745	6
74291	8.9	G5	22	04	52.309	-19	04	91.958	4
74296	8.0	A3	22	05	48.169	-18	40	91.697	5
74297	9.2	K0	22	05	54.498	-18	55	92.702	5
74304	8.7	K0	22	07	52.414	-17	55	92.025	4
74305	9.4	F5	22	08	20.916	-19	05	92.727	3
74307	5.9	B3	22	08	58.977	-18	31	92.278	4
74309	9.0	A3	22	09	28.259	-18	27	92.080	5
74322	8.7	F0	22	15	57.396	-02	44	91.725	6
74324	8.9	K0	22	17	14.690	-03	00	91.885	7
74325	9.1	F2	22	17	43.960	-03	20	92.451	4
74328	8.2	A3	22	19	49.055	-04	03	91.713	4
74331	8.4	K0	22	22	02.868	-03	48	92.654	4
74335	9.0	G0	22	25	53.752	-08	57	91.894	5
74337	8.3	A2	22	26	47.026	-08	30	91.746	5
74340	9.1	A0	22	27	54.062	-08	46	92.660	4
74346	8.5	G0	22	29	55.907	-08	25	91.736	9
74354	8.6	F8	22	32	19.577	+12	14	91.868	6
74368	9.6	F0	22	36	41.556	+28	35	91.754	3
74376	8.6	G0	22	43	01.009	-12	20	91.503	7
74377	9.1	G0	22	43	50.784	-11	28	92.783	4
74378	8.7	K0	22	44	03.048	-12	41	91.580	5
74381	8.2	F8	22	45	27.117	-13	00	92.522	7
74388	8.4	F0	22	47	44.770	-12	30	92.118	5
74389	9.1	G5	22	47	48.409	-12	34	92.717	3
74423	9.6	M1	22	56	35.415	+16	33	92.086	5
74437	9.1	K2	22	59	47.714	+07	21	92.197	6
74448	9.1	K2	23	19	52.992	-03	05	92.828	3

RRS2	mag	Sp	α			δ		epo 1900+	n
			h	m	s	°	'		
74454	9.2	F5	23	20	23.378	-02	54	92.100	5
74455	9.4	G0	23	20	23.626	-03	21	92.732	3
74459	9.2	K5	23	21	24.604	-03	03	92.828	3
74467	8.6	K2	23	23	23.090	-03	12	91.986	8
74472	10.0	K0	23	25	01.834	+26	55	92.300	5
74476	9.3	K2	23	26	53.908	-02	54	92.805	2
74477	7.8	K0	23	27	14.582	-02	38	91.883	7
74491	8.2	F8	23	30	54.276	-15	58	91.751	6
74492	9.3	G5	23	30	58.948	-15	16	92.763	3
74499	8.1	K2	23	31	56.213	-14	56	92.074	5
74504	8.6	K5	23	32	49.237	-16	50	92.108	5
74512	9.0	A3	23	33	52.284	-16	18	92.108	5
74516	8.5	G0	23	34	36.639	-16	59	92.763	3
74518	6.2	K0	23	34	49.333	-15	14	92.054	9
74539	8.3	K5	23	46	04.640	-17	08	91.902	6
74542	9.2	K0	23	47	07.396	-17	05	92.483	4
74543	8.5	F5	23	47	35.935	-15	58	92.762	2
74547	8.5	K0	23	49	07.679	-16	15	92.279	11
74551	8.9	K0	23	50	49.748	-16	07	92.458	4
74565	8.0	K0	23	55	03.731	+28	38	92.229	8