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The Parkes 2700 MHz Survey: A Resurvey of the ±4° Declination Zone

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Abstract

The ±4° declination zone of the Parkes 2700 MHz survey has been resurveyed with the Parkes 64 m telescope. The catalogue of 822 sources is complete to a limiting flux density of 0·25 Jy ($\equiv 0{\cdot}25 \times 10^{-26}$ W m^{-2} Hz^{-1}), substantially lower than the original (1971) survey. All but one of the sources have flux density measurements at 5000 MHz. Appreciable changes in flux density have been found for 20% of the sources in the original survey and 59 new optical identifications have been made.

1. Introduction

Over the past decade all of the southern sky away from the galactic plane ($|b| > 10°$) has been surveyed at 2700 MHz with the Parkes radio telescope. This survey, initiated in 1967 at a frequency which was, at the time, far higher than that of previous radio surveys, has provided a comprehensive and reliable catalogue of southern extragalactic radio sources. Part of the stimulus for the 2700 MHz survey came from the discovery amongst sources in the Parkes 408 MHz survey of a population of flat-spectrum objects. These sources began to appear near the 2 Jy limit of the 408 MHz survey and the identifications made were almost exclusively with quasars.

The 2700 MHz survey revealed from the first (Wall *et al.* 1971; referred to as WSM) a substantial population of 'flat-spectrum' radio sources and a higher fraction of identifications with quasars than had been found in earlier low-frequency surveys. An unexpected finding from the first part of the survey was a significantly flatter source count curve than that found for the lower-frequency surveys (Shimmins *et al.* 1968); the population of flat-spectrum sources appeared to be responsible for this flattening of the source counts.

Over the 10 years following the publication of WSM, many of these sources have been found to vary on time scales of years or even less. The presence of this variability implies that the contents of a flux-density-limited survey will change with time as different sources vary in intensity, some sources dropping below the limit as others increase above the limit. This phenomenon introduces a time dependence into the investigations outlined above. Furthermore, if only flux density *remeasurements* are made at a later epoch of sources in an existing survey, biased results are obtained. This follows, since the form of the source counts implies that the number of strong sources which decrease in flux density is smaller than the number of faint sources which increase in flux density.

We have sought to investigate the effects of such time dependence by *resurveying* the area covered by the original $\pm 4°$ declination zone at 2700 MHz. The new survey has been made to a deeper level than the WSM survey and all but one of the detected sources have flux density measurements at 5000 MHz.

In this paper we present the results of the new survey; companion papers will describe the new identification work (Savage *et al.* 1982) and a study of source variability (Wright *et al.*, in preparation).

2. Survey

The first observations for the resurvey were made in July 1976 when right ascensions 14^h and 22^h were surveyed. Right ascension 08^h was surveyed in October 1976 and 10^h and 11^h in January 1977. It was not until February 1980 that most of the rest of the zone was surveyed. The exceptions were 21^h and 23^h, which were too close to the Sun for complete coverage, but these were completed in August 1980. The survey was made using the 2700 MHz correlation receiver, the output of which represented the difference in signals received from an on-axis feed and a feed 18′ arc off axis, maintained at position angle 270°. Each feed produced a beam on the sky of half-power width 8′ arc. Scans were made in declination at a rate of $2\frac{1}{2}° \text{ min}^{-1}$. Three scans were made at intervals of 6′ arc in right ascension followed by a jump of 24′ arc. The intervening scans were covered by the off-axis beam. The data were automatically reduced on-line in the telescope's PDP-9 computer to produce an on-line source listing and source map. After each area was completed, data from adjacent scans were combined to give an improved value of source position and flux density. Full details of the reduction program and a sample map can be found in Bolton and Butler (1975).

In order to achieve the intended completeness level of 0·25 Jy, all sources with flux densities $\geqslant 0{\cdot}18$ Jy, as estimated in the survey reduction program, were listed for further measurement of flux density and position. To this list were added all other known sources within the area with $S_{11} \geqslant 0{\cdot}18$ Jy from the computer listing of the Parkes catalogue. Most of the sources added were from the 4C catalogue investigated by Wall (1971).

3. Positions and Flux Density Measurements

Accurate positions and flux densities for most sources were first determined at 5000 MHz, where effects of confusion are substantially lower than at 2700 MHz because of the smaller half-power beam width of 4′ arc. Further details of instrumentation can be found in Wall *et al.* (1976). The position measurements consisted of a pair of scans, forward and reverse in right ascension on the listed value for the source declination, followed by a pair of scans in declination at the measured right ascension. Where the measured declination from the second scan pair differed by more than 1′ arc from the set declination of the first scan pair, a further scan pair was made in right ascension at the measured declination. A fuller description of the on-line analysis program can be found in Shimmins (1971). This program has now been modified to provide computer control of the telescope. All the observations were made within ± 20 min in hour angle of the meridian and at least one position calibrator was measured each hour. For calibration, 61 sources were chosen whose positions had been measured interferometrically by McEwan *et al.* (1975) in the

±4° zone. These had flat spectra and flux densities greater than 0·7 Jy. At the end of each observing run global pointing corrections for the telescope were determined from the calibrator observations and applied to all the sources. For the calibrator sources the 'true'–'corrected' positions were plotted as a function of time and, where these differences showed systematic variations, a second 'trim' was applied to the unknown source positions. For the June 1980 observations at 5000 MHz the displacements from the mean curve used for the second-stage trimming were less than 3″ arc. This result was however exceptional and, in general, telescope pointing resulted in an r.m.s. error of about 4″ arc. To this must be added the effects of receiver noise and confusion which increased rapidly with decreasing flux density. Our estimate of the overall position error is $4\{1+(0\cdot6/S)^2\}^{\frac{1}{2}}$ seconds of arc in both coordinates, where S is the flux density in Jy.

The peak flux density of each source was obtained from the amplitudes of the smoothed scans at both 2700 and 5000 MHz. If the flux density of any source exceeded 0·3 Jy at either frequency, the position angle of the linearly polarized feed was changed by 90° between the scan pairs. An observation of PKS 0915−11 (Hydra A) was made each day as the prime flux density calibrator. The flux density scale is the same as WSM with assumed values of $S_{2700} = 23\cdot5$ Jy and $S_{5000} = 13\cdot05$ Jy for the peak flux density of Hydra A. Our estimate of the r.m.s. errors in flux density for the sources in the catalogue is $\pm\{(0\cdot02)^2+(0\cdot03S)^2\}^{\frac{1}{2}}$ Jy at both frequencies. The first term represents the error resulting from the effects of noise and confusion and the second a scaling error.

The epochs of the flux density measurements at both 5000 and 2700 MHz were as follows:

Run 1,	2700 MHz	February 1980;	Run 4,	5000 MHz	October 1980;
Run 2,	5000 MHz	June 1980;	Run 5,	2700 MHz	December 1980;
Run 3,	2700 MHz	July 1980;	Run 6,	5000 MHz	February 1981.

In run 1 some of the newly discovered sources were positioned at 2700 MHz and their flux density measurements obtained from the positioning program. In runs 3 and 5 the 2700 MHz flux densities were measured using an on–on or 'noddy' technique, in which the difference in receiver output was measured between the telescope positioned with the on-axis beam on the source and then the off-axis beam on the source. (The signs of the source signal are opposite in the correlation output.) The position angle of the offset feed was maintained so as to keep the two beams at the same zenith angle and the telescope motion was only in azimuth in order to eliminate second-order effects of the variation of gain with zenith angle.

4. Catalogue

Table 1 is the catalogue of 822 sources for the present survey. Column 1 gives the source name in standard IAU/Parkes nomenclature. Columns 2 and 3 give the right ascension and declination as measured in this resurvey except that accurately known coordinates of well-established optical identifications are used where available and the interferometer positions of McEwan *et al.* (1975) are given for most strong unidentified sources. Column 4 gives the run number for the 2700 and 5000 MHz flux density measurements, the epochs of which have been given in the previous section. Columns 5 and 6 are the flux densities at 2700 and 5000 MHz. Identification

or field classification is given in column 7. Identifications for the 59 new sources in this catalogue are taken from the following paper (Savage *et al.* 1982, present issue pp. 207–19). The abbreviations for the identifications are (a question mark indicates a suggested identification): D, DB, E, E0, N, S and S0, galaxies of the corresponding type; G, a galaxy too faint to classify; Q, a confirmed quasi-stellar object; IIIS, a star of normal colour in good agreement with the radio position; BLC, a BL Lac type object. Abbreviations for the field classifications are: II, one or more galaxies within the area covered by the possible position errors of the source; III, one or more stars of normal colour within the error box; IIIA, as for III but with obscuration possibly present; IIIB, blank; IIIC, a very crowded star field; IV, the region is obscured; HII, HII regions. Magnitudes for the identifications are given in column 8 and were estimated to $0^{m}\cdot 5$ from the Palomar Sky Survey prints. Columns 9–13 contain the following additional data. Column 9 contains a reference to the radio survey in which the source was first detected; abbreviations are: SA, selected areas of WSM; 4C, 4C sources first measured at 2700 MHz by Wall (1971); PKS, Parkes 408 MHz sources (Ekers 1969) but not listed by WSM; PS, previously seen on WSM survey records at $\sim 0\cdot 25$ Jy but not catalogued by them. Column 10 refers to the footnotes giving references for finding charts. Column 11 lists redshifts where known. Column 12 gives 3C (Bennett 1962) or 4C (Gower *et al.* 1967) catalogue numbers. Column 13 contains other more general remarks, including references to footnotes on individual sources. Abbreviations used in this column are: OA, outside nominal area of survey; OPT VAR, an optical variable; OPT VAR?, a possible optical variable; RAD VAR, a radio variable; RAD VAR!, flux changes of the order of a factor of two have been detected; CONF W, confused with; M, magnitude; MIN, minutes of arc; NSO, neutral stellar object; NW, north–west.

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Table 1. Parkes 2700 MHz catalogue for declination zone +4 to −4 degrees (epoch 1980)

(1) PARKES SOURCE NUMBER	(2) POSITION (1950) R.A. H M S	DEC. D M S	(3) RUN	(4) 2700 FLUX DEN. (JY)	(5) 5000 FLUX DEN. (JY)	(6) IDENT. OR FIELD CLASS	(7) MAG	(8) ORIG. SURVEY	(9) FINDING CHART*	(10) RED-SHIFT	(11) 3C OR 4C	(12) REMARKS*
0000-022	00 00 47.1	-02 13 34	3,2	0.16	0.11	III		SA				
0003+006	00 03 32.3	00 37 18	3,4	0.26	0.16	IIIB		SA				
0003-003	00 03 48.7	-00 21 06	3,2	2.46	1.43	Q	19.5	WSM	NOTE A	1.037	3C2	OPT VAR
0007+016	00 07 24.9	01 41 11	3,4	0.20	0.12	Q?	18.5	SA	NOTE B			
0008-033	00 08 40.5	-03 18 57	3,2	0.21	0.11	III		SA				
0010+005	00 10 37.1	00 35 03	3,2	0.94	0.50	IIIB		WSM			4C00.01	
0013-005	00 13 37.3	-00 31 53	3,2	0.80	0.65	IIIS	19.5	WSM	NOTE C			
0018-012	00 18 51.8	-01 12 18	3,2	0.66	0.33	III		WSM			4C-1.01	
0019-000	00 19 51.6	-00 01 39	3,2	1.94	1.08	III		WSM	NOTE C		4C00.02	
0021-031	00 21 03.3	-03 09 43	3,2	0.26	0.16	III		4C			4C-3.01	
0025-007	00 25 55.6	-00 42 58	3,2	0.63	0.29	III		WSM			4C-0.02	
0026-014	00 26 29.6	-01 29 42	3,6	0.30	0.26	III		WSM				
0027-024	00 27 58.9	-02 28 33	3,2	0.22	0.18	III						
0028-012	00 28 59.3	-01 17 10	3,2	0.60	0.33	G	19.4	WSM	NOTE D		4C-1.02	
0029+013	00 29 34.7	01 20 49	3,2	0.34	0.14	IIIB		WSM				
0029-040	00 29 42.9	-04 05 37	3,2	0.34	0.18	E	17.0		NOTE E			OA
0031+010	00 31 45.7	01 02 21	3,2	0.42	0.21	III		WSM			4C00.04	
0032-008	00 32 55.5	-00 48 35	3,4	0.13	0.07	IV						
0033-000	00 33 53.7	-00 03 32	3,2	0.33	0.19	III		WSM			4C-0.03	
0034-014	00 34 30.5	-01 25 37	3,2	2.60	1.56	E	18M	WSM	NOTE F	0.073	3C15	
0035-024	00 35 47.3	-02 24 09	3,2	4.02	2.48	E	19.0	WSM	NOTE F	.2190	3C17	
0036+030	00 36 43.4	03 03 18	3,2	1.21	0.65	E	13.5	WSM	NOTE G	0.014	3C18	
0037+011	00 37 41.0	01 08 51	3,6	0.20	0.15	II						
0037-009	00 37 46.9	-00 56 47	3,2	0.30	0.20	III		WSM				
0038-020	00 38 23.8	-02 02 54	3,2	0.72	0.56	Q	18.5	WSM	NOTE H	1.176		RAD VAR
0038-019	00 38 53.7	-01 59 39	3,2	0.62	0.29	Q	18.5	WSM	NOTE I	1.690		
0041+007	00 41 30.4	00 45 19	3,2	0.25	0.15	III		SA				
0043+000	00 43 07.8	00 04 30	3,2	0.27	0.15	IIIB		SA			4C-0.05	
0043-010	00 43 33.0	-01 00 15	3,2	0.22	0.11	IIIB		SA				
0047+023	00 47 07.8	02 20 41	3,2	0.39	0.39	Q?	18.0	WSM	NOTE B			
0047-029	00 47 15.0	-02 59 12	3,2	0.68	0.34	IIIB		WSM			4C-3.02	
0051-038	00 51 35.6	-03 50 12	3,2	1.20	0.59	E	19M	WSM	NOTE F	0.211	3C26	
0053-016	00 53 28.2	-01 36 24	3,2	0.74	0.36	N	16.4	WSM	NOTE D		4C-1.04	
0053-015	00 53 52.6	-01 32 45	3,2	0.88	0.39	N	16.7	WSM	NOTE D		4C-1.04	
0054+018	00 54 53.3	01 53 20	3,2	0.25	0.15	E	18.0	SA	NOTE B			

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0055-016	00 55 11.4	-01 39 37	3,2	3.47	2.01	E0	15.6	WSM	NOTE F	0.045	3C29	
0056-001	00 56 31.8	-00 09 18	3,2	2.01	1.43	Q	17M	WSM	NOTE F	0.717	4C-0.06	
0059+017	00 59 41.0	01 47 10	3,2	0.42	0.24	III		WSM			4C01.01	
0101-025	01 01 43.0	-02 32 05	3,2	0.25	0.12	Q	20.0	SA	NOTE Z			NOTE 1
0103-021	01 03 49.9	-02 11 40	3,2	0.39	0.29	Q	19M	WSM	NOTE H			
0105+034	01 05 49.9	03 25 34	3,2	0.18	0.12	IIIB		SA				
0105-008	01 05 53.4	-00 53 24	3,2	0.79	0.56	Q	17.5	WSM	NOTE J	1.359	4C-1.06	
0106+013	01 06 04.5	01 19 01	3,2	4.24	4.76	Q	18M	WSM	NOTE K	2.107	4C01.03	RAD VAR
0109+026	01 09 43.0	02 41 38	3,2	0.39	0.23	III		WSM			4C02.03	
0111+021	01 11 08.6	02 06 25	3,2	0.63	0.65	E	16.3	WSM	NOTE D	.0470		
0111-002	01 11 56.8	-00 15 09	3,2	0.24	0.16	III		4C			4C-0.07	
0112-017	01 12 43.8	-01 42 54	3,2	0.94	1.10	Q	18.0	WSM	NOTE H	1.365		RAD VAR
0113+012	01 13 59.7	01 12 30	3,2	0.19	0.11	III		4C			4C01.01	
0115-016	01 15 42.3	-01 36 15	3,2	0.64	0.56	IIIB		WSM			4C-1.07	
0115+027	01 15 43.7	02 42 21	3,4	0.90	0.56	Q	17M	WSM	NOTE L	0.673	4C02.04	RAD VAR
0118-001	01 18 21.5	-00 10 44	3,2	0.45	0.27	III		WSM			4C-0.08	
0118+034	01 18 26.2	03 28 29	3,2	0.57	0.30	Q	18M	WSM	NOTE K	0.765	4C03.02	
0119+041	01 19 21.4	04 06 44	5,6	0.99	0.90	Q	19.5		NOTE M	0.637		0A RAD VAR!
0119-005	01 19 40.5	-00 33 28	3,2	0.29	0.22	III		4C			4C-0.09	
0119+032	01 19 49.4	03 16 07	3,2	0.28	0.17	III		PKS				
0119-022	01 19 51.4	-02 15 45	3,2	0.21	0.13	IIIB		4C			4C-2.05	
0122-005	01 22 43.6	-00 34 04	3,2	0.28	0.23	Q?	18.5	WSM	NOTE N			
0122-003	01 22 55.2	-00 21 31	3,2	1.19	1.29	Q	17.0	WSM	NOTE F	1.085		RAD VAR
0123-016	01 23 26.7	-01 36 09	3,2	2.17	1.78	DB	13M	WSM	NOTE O	0.018	3C40	NGC545/7
0128+039	01 28 30.8	03 54 46	4		0.26	III		WSM			4C04.07	CONF W 0128+040
0128+040	01 28 42.1	04 00 12	1,4	0.91	0.39	III		WSM			4C04.07	CONF W 0128+039
0128+002	01 28 59.9	00 17 52	3,2	0.35	0.23	E	16.1	WSM	NOTE D		4C00.05	
0131-001	01 31 39.0	-00 11 46	3,2	0.69	0.46	IIIB		WSM			4C-0.11	NOTE 2
0135-020	01 35 34.7	-02 00 27	3,2	0.22	0.13	III		4C				
0137+012	01 37 23.0	01 16 36	3,2	1.04	0.73	Q	17.1	WSM	NOTE H	0.260	4C01.04	
0140-015	01 40 44.2	-01 34 01	3,4	0.50	0.31	DB	20.0	WSM	NOTE C		4C-1.09	
0141+019	01 41 21.0	01 56 41	3,2	0.33	0.21	III		WSM				
0141-039	01 41 49.8	-03 54 39	3,2	0.20	0.12	III		4C			4C-3.04	
0144-022	01 44 20.2	-02 12 18	3,2	0.50	0.22	IIIB		WSM			4C-2.08	
0144+037	01 44 43.6	03 46 36	3,2	0.35	0.20	III		WSM			4C03.03	

Table 1 (*Continued*)

(1) PARKES SOURCE NUMBER	(2) POSITION (1950) R.A. H M S	(3) DEC. D M S	(4) RUN	(5) 2700 FLUX DEN. (JY)	(6) 5000 FLUX DEN. (JY)	(7) IDENT. OR FIELD CLASS	(8) MAG	(9) ORIG. SURVEY	(10) FINDING CHART*	(11) RED-SHIFT	(12) 3C OR 4C	(13) REMARKS*
0145+000	01 45 42.0	00 04 56	3,2	0.42	0.28	E	16.5		NOTE Z			
0146+001	01 46 50.1	00 06 20	3,2	0.25	0.12	III		WSM			4C00.07	
0150+000	01 50 09.0	00 05 59	3,2	0.25	0.16	Q?	19.5	WSM	NOTE Z			
0150-038	01 50 52.0	-03 48 43	3,2	0.44	0.17	IIIB		WSM			4C-3.05	
0152+033	01 52 32.2	03 23 44	3,2	0.63	0.32	IIIB		WSM			4C03.04	
0153+032	01 53 24.3	03 17 26	3,4	0.49	0.26	IIIB		WSM				
0155+019	01 55 09.3	01 55 18	3,2	0.31	0.16	III		WSM				
0157+011	01 57 29.5	01 10 43	3,2	0.38	0.40	Q	18.5	WSM	NOTE C	1.170	4C01.05	RAD VAR
0158+031	01 58 04.7	03 08 18	3,2	0.28	0.37	Q	19M	WSM	NOTE H			RAD VAR
0159+034	01 59 15.1	03 28 49	3,2	0.36	0.33	III		WSM				
0202+011	02 02 16.0	01 06 31	3,2	0.31	0.16	IIIB		WSM				
0205-010	02 05 53.2	-01 01 56	3,4	0.48	0.37	III		WSM	NOTE I			
0207-018	02 07 12.6	-01 51 42	3,2	0.48	0.27	IIIB		WSM			4C-1.10	
0207-039	02 07 43.8	-03 58 26	3,2	0.23	0.16	Q?		4C	NOTE Z		4C-3.06	
0208+040	02 08 07.8	04 05 27	3,2	0.56	0.30	III						OA
0211+027	02 11 10.7	02 46 48	3,2	0.24	0.10	III		4C			4C02.06	
0211-031	02 11 14.0	-03 10 29	3,2	0.24	0.13	III		WSM				
0213-026	02 13 10.0	-02 36 51	3,2	0.54	0.77	IIIB		WSM			4C-2.09	RAD VAR
0213+025	02 13 59.9	02 30 10	3,4	0.38	0.23	N	18.0	WSM	NOTE C			
0215+015	02 15 14.1	01 31 00	3,6	0.73	1.06	Q	18.5	WSM	NOTE H			RAD VAR! OPT VAR
0215-015	02 15 22.0	-01 35 39	3,2	0.27	0.22	IIIB						
0215+027	02 15 59.9	02 42 23	3,4	0.42	0.22	G	21.0	WSM	NOTE Z		4C02.07	
0216+011	02 16 32.5	01 07 13	3,2	0.62	0.73	Q	20.0	WSM	NOTE C			RAD VAR
0217+017	02 17 24.2	01 42 01	3,4	0.37	0.23	E	15.2	WSM	NOTE P			
0218-021	02 18 22.0	-02 10 34	3,2	1.76	0.86	G	19.5	WSM	NOTE F	.1750	3C63	
0218+007	02 18 32.5	00 45 55	3,6	0.20	0.11	II		SA				
0218-006	02 18 36.1	-00 39 43	3,2	0.23	0.15	IIIB		PS				
0220-029	02 20 26.5	-02 56 32	3,2	0.22	0.13	III		SA			4C-2.11	
0222-008	02 22 35.0	-00 49 02	3,4	0.70	0.42	Q	19.0	WSM	NOTE C	0.687	4C-0.12	
0223-023	02 23 02.1	-02 23 41	3,2	0.22	0.13	III		SA				
0223+012	02 23 34.9	01 16 03	3,2	0.21	0.17	Q	19.0	SA	NOTE H			
0223+018	02 23 40.1	01 51 48	1,6	0.21	0.15	III		SA				
0225-014	02 25 34.8	-01 29 03	3,4	0.29	0.19	Q	18M	WSM	NOTE H	2.037	4C-1.11	
0226-038	02 26 22.1	-03 50 58	3,2	0.77	0.71	Q	17.5	WSM	NOTE H	2.064	4C-3.07	RAD VAR
0230-027	02 30 12.8	-02 46 57	3,2	0.34	0.20	III		WSM				

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0230-035	02 30 46.8	-03 34 10	3,2	0.37	0.20	IIIB		WSM			4C-3.08	
0230-022	02 30 58.6	-02 16 32	3,2	0.19	0.13	G	19.5	SA	NOTE Z			
0232-025	02 32 59.9	-02 32 31	3,2	0.56	0.34	Q	18.5	WSM	NOTE H	1.322	4C-2.12	OPT VAR
0235+017	02 35 05.8	01 46 54	3,2	0.15	0.07	E	14.8	SA	NOTE D			
0235-019	02 35 25.5	-01 58 15	3,2	0.22	0.13	III		SA			4C-2.13	
0235+023	02 35 59.9	02 21 23	3,2	0.24	0.12	III		SA				
0237-027	02 37 13.7	-02 47 33	3,2	0.68	1.16	Q	19M	WSM	NOTE H			RAD VAR!
0237+040	02 37 14.2	04 03 28	1,6	0.64	0.68	Q	18.5	PKS	NOTE M	0.978		OA RAD VAR
0240-002	02 40 07.0	-00 13 31	3,2	3.27	1.92	S	9.8	WSM	NOTE Q	.0034	3C71	
0240-034	02 40 11.9	-03 24 31	3,2	0.22	0.15	DB	18.5	WSM	NOTE N		4C-3.09	
0241-027	02 41 00.6	-02 45 38	3,2	0.19	0.11	IIIB		SA				
0242+028	02 42 49.8	02 49 33	3,2	0.21	0.16	IIIB		SA				
0251+008	02 51 08.3	00 48 43	3,2	0.26	0.16	III		PS			4C00.10	
0252+026	02 52 33.9	02 41 36	3,2	0.45	0.25	N	20M	WSM	NOTE P		3C74	
0253-031	02 53 21.2	-03 11 30	3,2	0.33	0.17	Q?	19M	WSM	NOTE H		4C-3.10	
0253+033	02 53 51.7	03 21 15	3,2	0.20	0.15	Q	18.0		NOTE Z			
0256-005	02 56 55.4	-00 31 52	3,2	0.27	0.23	Q	17.5	WSM	NOTE H	1.998		
0258-018	02 58 24.8	-01 51 10	3,2	0.16	0.14	G	19.0		NOTE Z			
0258+011	02 58 49.0	01 06 52	3,2	0.37	0.32	Q	20.5	PS	NOTE Z			RAD VAR
0300+020	03 00 23.8	02 03 46	1,6	0.34	0.18	IIIB		4C			4C02.09	
0300-004	03 00 39.6	-00 26 40	3,2	0.70	0.43	Q	18.0	WSM	NOTE R	0.693	4C-0.14	
0303+020	03 03 48.1	02 04 42	3,2	0.49	0.29	IIIB		WSM			4C01.07	
0303+033	03 03 56.0	03 18 40	3,2	0.32	0.19	IIIB		WSM				
0305+039	03 05 49.0	03 55 13	3,4	5.26	3.45	D	14.7	WSM	NOTE S	.0289	3C78	NGC1218
0307+010	03 07 38.2	01 01 30	3,2	0.27	0.17	III		4C			4C00.12	
0310+013	03 10 08.7	01 22 11	3,2	0.42	0.46	Q	18.5	WSM	NOTE T	0.660	4C-3.11	RAD VAR
0312-034	03 12 52.0	-03 27 50	3,2	0.69	0.37	Q	18.0	WSM	NOTE L	1.072	4C-3.11	
0313-035	03 13 53.8	-03 32 23	3,2	0.21	0.14	III		WSM				
0317+024	03 17 02.2	02 24 43	3,2	0.22	0.13	III		PKS				
0317-023	03 17 56.7	-02 19 25	3,2	0.39	0.28	Q	19.5	WSM	NOTE H	2.092	4C-2.15	
0320+015	03 20 34.8	01 35 08	3,2	0.49	0.42	III		WSM				NOTE 3
0322-035	03 22 12.5	-03 35 15	3,2	0.55	0.28	IIIB		WSM			4C-3.12	
0325+023	03 25 18.2	02 23 20	3,2	3.02	1.93	D	15M	WSM	NOTE V	.0302	3C88	
0328-032	03 28 41.9	-03 13 19	3,2	0.23	0.13	IIIB		4C			4C-3.13	
0331-013	03 31 42.1	-01 21 10	3,2	1.39	0.72	D	18.5	WSM	NOTE F	.1386	3C89	

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0332-020	03 32 42.1	-02 05 48	3,2	0.48	0.34	IIIB		WSM				
0336-017	03 36 29.8	-01 43 02	3,2	0.45	0.30	IIIB		WSM				RAD VAR
0336-019	03 36 59.2	-01 56 19	3,2	2.58	2.75	Q	18.4	WSM	NOTE F	0.852	CTA26	RAD VAR
0337-004	03 37 28.7	-00 26 33	3,2	0.21	0.15	IIIB						
0351+013	03 51 30.4	01 18 24	3,2	0.27	0.14	IIIB		PKS				
0351-032	03 51 44.0	-03 16 51	3,2	0.46	0.30	G	20.0	WSM	NOTE C		4C-3.14	
0353+027	03 53 22.5	02 47 44	3,2	0.48	0.27	N	19M	WSM	NOTE D	0.602	4C02.11	
0354+000	03 54 17.3	00 04 54	3,2	0.34	0.21	III		WSM				
0354-030	03 54 52.0	-03 03 38	3,2	0.32	0.20	E	18.5	4C	NOTE W		4C-3.15	
0357-022	03 57 11.3	-02 12 40	3,2	0.29	0.20	G	19.5	PS	NOTE Z			
0358+004	03 58 34.1	00 28 12	3,2	0.97	0.55	N	18.5	WSM	NOTE C	0.426	3C99	
0358+021	03 58 34.4	02 09 12	3,2	0.36	0.21	IIIA		WSM			4C02.12	
0358+031	03 58 35.0	03 10 06	3,2	0.10	0.11	Q?	20.0	WSM	NOTE C			RAD VAR
0359+028	03 59 59.6	02 53 43	3,2	0.32	0.18	IIIA		WSM				
0400-031	04 00 44.0	-03 08 20	3,2	0.46	0.24	III		WSM			4C-3.16	
0400+032	04 00 51.2	03 16 57	3,2	0.32	0.21	III		WSM				
0402+025	04 02 48.7	02 32 42	3,2	0.35	0.22	IIIB		WSM				
0404+035	04 04 47.3	03 32 58	3,2	3.28	2.02	IIIB		WSM			3C105	RAD VAR
0405-034	04 05 47.2	-03 28 09	3,2	0.18	0.10	III		4C			4C-3.17	
0407+012	04 07 06.1	01 16 57	3,2	0.36	0.22	IIIB		WSM			4C01.08	
0409-011	04 09 49.9	-01 07 10	3,2	0.73	0.36	IIIA		WSM			3C107	
0409+025	04 09 52.3	02 33 11	3,2	0.25	0.16	IIIB		WSM				
0410-024	04 10 22.8	-02 29 51	3,2	0.37	0.18	Q	19.0	WSM	NOTE Z		4C-2.16	
0414+020	04 14 36.9	02 03 17	3,2	0.19	0.11	III		4C			4C01.09	
0415-036	04 15 17.1	-03 41 58	3,2	0.22	0.13	E	17.5		NOTE Z			
0415-029	04 15 26.5	-02 57 30	3,2	0.16	0.14	III						
0416-031	04 16 17.3	-03 07 05	3,2	0.59	0.30	III		WSM			4C-3.18	
0420+022	04 20 16.6	02 12 27	3,2	0.33	0.67	Q	19.5	WSM	NOTE H			RAD VAR
0420-014	04 20 43.6	-01 27 27	3,2	2.14	4.15	Q	18M	WSM	NOTE F	0.915		RAD VAR
0421+004	04 21 17.3	00 24 13	3,2	1.01	0.63	IIIB		WSM			4C00.15	
0421+019	04 21 32.7	01 57 32	3,2	0.83	0.73	Q	17.5	WSM	NOTE H	2.048		RAD VAR
0422+004	04 22 12.6	00 29 18	3,2	1.28	1.60	BLC	16.0	WSM	NOTE L			RAD VAR NOTE 4
0428+011	04 28 31.9	01 06 38	3,2	0.90	0.47	III		WSM			4C01.10	
0429+025	04 29 38.9	02 33 45	3,2	0.20	0.11	III		4C			4C02.15	
0431-026	04 31 23.9	-02 36 08	3,2	1.04	0.64	G	19.5	WSM	NOTE X		4C-2.17	

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0432+034	04 32 35.2	03 28 18	3,2	0.31	0.17	IIIB		WSM			4C03.09	
0439-007	04 39 20.3	-00 43 27	3,2	0.43	0.24	III		WSM			4C-0.18	
0439+012	04 39 23.7	01 15 21	3,2	0.57	0.27	IIIB		WSM			3C124	
0440-003	04 40 05.2	-00 23 20	3,2	1.85	1.40	Q	19.2	WSM	NOTE F	0.850		RAD VAR
0441+018	04 41 42.3	01 49 08	3,2	0.36	0.20	III		PS				
0442+027	04 42 03.8	02 42 22	3,2	0.60	0.33	Q?	20.0	WSM	NOTE C		4C02.16	
0443-004	04 43 02.1	-00 24 20	3,2	0.29	0.17	III		WSM				NOTE 5
0443+028	04 43 42.9	02 51 49	3,4	0.35	0.26	Q	19.5	PKS	NOTE Z			
0445-019	04 45 11.7	-01 58 01	3,2	0.23	0.18	Q	19M	WSM	NOTE H			
0447-010	04 47 10.4	-01 02 28	3,2	0.41	0.35	Q	19.5	WSM	NOTE H			RAD VAR
0448-025	04 48 49.9	-02 34 00	3,2	0.25	0.16	E	19.0	WSM	NOTE D		4C-2.18	
0449-012	04 49 29.7	-01 17 16	3,2	0.27	0.17	III		4C			4C-1.14	
0451-018	04 51 53.0	-01 53 08	3,2	0.20	0.14	III						
0453-002	04 53 15.4	-00 14 09	3,2	0.67	0.35	G	19.5	WSM	NOTE C		4C-0.19	RAD VAR
0454+039	04 54 08.8	03 56 16	3,2	0.40	0.41	Q	16.5	WSM	NOTE H	1.345		
0457+024	04 57 15.5	02 25 06	3,2	1.60	1.16	Q	19M	WSM	NOTE H	2.370		RAD VAR
0458+014	04 58 02.9	01 25 58	3,2	0.56	0.35	E	18.5	WSM	NOTE D		4C01.12	
0458-020	04 58 41.3	-02 03 34	3,2	1.89	2.19	Q	20M	WSM	NOTE I	2.286	4C-2.19	RAD VAR
0459-023	04 59 32.2	-02 18 50	3,2	0.33	0.18	III		PS				
0500+006	05 00 00.2	00 37 41	3,2	0.39	0.24	III		PS				
0500+019	05 00 45.2	01 58 55	3,2	2.46	2.04	IIIB		WSM				RAD VAR
0501+002	05 01 28.0	00 15 13	3,2	0.20	0.13	III		4C			4C00.17	
0504+030	05 04 59.3	03 03 57	3,2	0.76	0.53	Q	19.0	WSM	NOTE P	2.453	4C03.10	
0508+016	05 08 29.7	01 38 30	3,2	0.21	0.12	III						
0508+026	05 08 56.9	02 40 44	3,2	0.21	0.14	III						
0509-038	05 09 07.5	-03 49 57	3,4	0.41	0.27	III		WSM				NOTE 6
0509+011	05 09 23.1	01 07 10	3,2	0.39	0.35	E	18.0	PS	NOTE Z			RAD VAR
0509+028	05 09 37.1	02 53 26	3,2	0.33	0.19	IIIB		PS				
0510-040	05 10 18.2	-04 02 14	3,4	0.46	0.25	III		PKS			4C-3.20	OA
0510-006	05 10 29.5	-00 36 00	3,2	0.33	0.31	DB		PS				
0511+018	05 11 16.9	01 53 06	3,2	0.22	0.15	E	16.5	4C	NOTE W		4C01.13	
0511+008	05 11 33.8	00 53 08	3,2	1.67	0.98	E	18M	WSM	NOTE K	0.127	3C135	
0512-016	05 12 39.8	-01 40 26	3,2	0.30	0.18	IIIA		4C			4C-1.15	
0517-027	05 17 38.7	-02 42 58	3,2	0.28	0.20	IIIA		4C			4C-2.21	
0517+020	05 17 53.4	02 01 27	3,2	0.35	0.24	III		PS				

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0519+011	05 19 42.6	01 10 43	3,2	0.55	0.55	IIIA		WSM				RAD VAR
0522-030	05 22 08.8	-03 03 35	3,2	0.06	0.11	IIIA		PKS				
0524+034	05 24 55.1	03 29 11	3,2	0.20	0.28	IIIA						
0528+012	05 28 03.4	01 15 57	3,2	0.20	0.11	III		4C			4C01.14	
0530+040	05 30 25.3	04 03 50	3,2	1.19	0.80	D	19M	PKS	NOTE Y		4C04.18	
0534-031	05 34 24.7	-03 10 33	3,2	0.43	0.16	IIIA		WSM			4C-3.21	
0538-026	05 38 32.6	-02 36 14	3	0.63		HII		PKS			4C-2.22	
0539-019	05 39 11.1	-01 55 42	3,4	56.5	43.6	HII		PKS			3C147.1	
0550+032	05 50 12.5	03 12 51	3,2	0.65	0.82	IV		WSM				RAD VAR
0550-017	05 50 57.4	-01 46 30	3,2	0.28	0.14	IIIA		4C			4C-1.17	
0552-020	05 52 58.7	-02 04 52	3,2	0.16	0.11	IIIA		4C			4C-2.23	
0554-026	05 54 22.3	-02 41 32	3,2	0.62	0.29	IV		WSM				RAD VAR
0559+024	05 59 02.7	02 27 40	3,2	0.30	0.23	IIIA		WSM			4C02.17	
0612-035	06 12 40.5	-03 31 10	3,2	0.36	0.18	IIIA		PKS			3C-3.22	
0709+008	07 09 12.4	00 53 12	3,2	0.29	0.23	III		PKS				OA
0713-024	07 13 15.8	-02 25 36	3,2	0.75	0.42	III		PKS			4C-2.30	OA
0717+020	07 17 59.2	02 04 01	3,2	0.21	0.20	III						OA
0718-007	07 18 38.7	-00 46 03	3,2	0.59	0.36	E	18.5	PKS	NOTE R		4C-2.24	
0723-008	07 23 17.9	-00 49 00	3,4	2.14	2.06	N	17.5	PKS	NOTE C	0.127		RAD VAR
0723-036	07 23 35.6	-03 38 43	3,2	0.29	0.21	E	17.5	WSM	NOTE D			RAD VAR
0724-019	07 24 33.3	-01 58 24	3,2	1.63	0.96	G	19M	WSM	NOTE F		3C180	
0725+001	07 25 02.1	00 10 46	3,2	0.28	0.18	III		WSM				
0726-000	07 26 15.5	-00 02 30	3,2	0.49	0.27	E	19M	WSM	NOTE K		4C-0.25	RAD VAR
0727-025	07 27 55.1	-02 35 01	3,2	0.26	0.28	IIIB		WSM				RAD VAR
0729+019	07 29 47.7	01 57 00	3,2	0.34	0.28	IIIB		WSM				
0731+021	07 31 18.7	02 08 58	3,2	0.60	0.28	III		WSM			4C02.20	
0734-016	07 34 24.1	-01 38 55	3,2	0.16	0.11	III						
0736-019	07 36 02.3	-01 57 27	3,2	0.65	0.38	Q	17.6	WSM	NOTE H	1.033	4C-1.18	
0736+017	07 36 42.5	01 44 00	3,2	2.24	1.85	Q	18M	WSM	NOTE Y	0.191		RAD VAR
0737-030	07 37 59.7	-03 03 54	3,2	0.34	0.22	III		WSM			4C-3.27	
0738-009	07 38 34.3	-00 59 06	3,2	0.38	0.22	III		WSM			4C-0.26	
0742+021	07 42 28.4	02 07 25	3,2	0.74	0.37	E	19.3	WSM	NOTE AA	.3500	3C187	
0743-006	07 43 21.0	-00 37 55	3,2	1.01	1.31	Q	18M	WSM	NOTE H			RAD VAR
0745-038	07 45 20.4	-03 49 31	3,2	0.24	0.09	III		4C			4C-3.30	
0747-000	07 47 04.6	-00 02 02	3,2	0.41	0.23	N	19.5	WSM	NOTE BB		4C-0.30	

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0748+042	07 48 21.6	04 13 49	3,2	0.27	0.18	III						OA
0748-006	07 48 37.0	-00 39 09	3,2	0.20	0.23	Q	20.5		NOTE Z			
0751-001	07 51 35.8	-00 09 51	3,2	0.26	0.17	Q	18.5	4C	NOTE W		4C-0.31	
0751+038	07 51 39.5	03 52 31	3,2	0.22	0.19	III		4C			4C03.13	
0752-026	07 52 16.6	-02 39 37	3,2	0.47	0.28	N	19.4	WSM	NOTE D		4C-2.33	
0752-022	07 52 27.2	-02 14 36	1,4	0.38	0.20	E	16.2	WSM	NOTE D			
0753+023	07 53 09.5	02 18 43	3,2	0.49	0.21	III		WSM			4C02.22	RAD VAR
0753+012	07 53 32.6	01 15 43	3,2	0.24	0.16	E	16.0	PS	NOTE Z			
0755+029	07 55 04.8	02 59 08	3,2	0.49	0.34	IIIB		WSM				
0756+040	07 56 04.8	04 02 45	3,2	0.32	0.19	III						OA
0757+025	07 57 25.4	02 31 00	3,2	0.30	0.19	III		WSM				
0802-010	08 02 42.9	-01 02 50	3,4	0.33	0.33	E	17.5	WSM	NOTE O	.0878		RAD VAR
0803-008	08 03 04.0	-00 49 42	3,2	0.73	0.50	E	15.4	WSM	NOTE F		4C-0.32	RAD VAR
0803-023	08 03 42.3	-02 23 10	3,2	0.31	0.23	III		WSM			4C-2.34	
0808+019	08 08 51.1	01 55 50	3,2	0.40	0.59	Q	17.0	WSM	NOTE H			RAD VAR!
0809-022	08 09 14.9	-02 17 54	3,2	0.23	0.10	III		PS				
0812+020	08 12 47.1	02 04 17	3,2	1.19	0.77	Q	18.5	WSM	NOTE K	0.404	4C02.23	
0812-029	08 12 57.3	-02 59 14	3,2	0.97	0.48	D	18.5	WSM	NOTE F	.1980	4C-2.35	
0813+020	08 13 24.7	02 05 01	3,2	0.35	0.22	III		WSM				
0814-029	08 14 57.3	-02 58 16	3,4	0.31	0.23	Q	18.0	4C	NOTE W		4C-2.36	
0815-023	08 15 27.6	-02 21 50	AAA	0.17	0.12	III		4C			4C-2.36	
0819+012	08 19 01.2	01 12 28	3,2	0.10	0.08	II						
0819-032	08 19 09.6	-03 13 39	3,2	0.37	0.30	Q	18.2	WSM	NOTE J	2.352		
0823+033	08 23 13.5	03 19 18	3,2	1.03	0.94	Q?	18.5	WSM	NOTE I			RAD VAR
0825+013	08 25 25.1	01 22 21	3,2	0.29	0.17	III		WSM			4C01.22	
0828-025	08 28 07.1	-02 32 31	3,2	0.31	0.20	III		PS				
0828-035	08 28 15.4	-03 30 36	3,2	0.55	0.36	Q	20M	WSM	NOTE H		4C-3.32	
0830+040	08 30 42.2	04 00 54	3,2	0.27	0.24	III						OA
0833-016	08 33 02.4	-01 40 33	3,2	0.55	0.24	E	13.9	WSM	NOTE R			
0833+042	08 33 24.3	04 16 54	3,2	0.25	0.18	III						OA
0833-004	08 33 47.6	-00 26 56	3,2	0.35	0.19	III		4C			4C-0.33	
0835+010	08 35 04.5	01 01 34	3,2	0.18	0.10	III						
0835-013	08 35 58.6	-01 23 37	3,2	0.32	0.21	III		WSM				
0836-004	08 36 21.1	-00 27 42	3,2	0.32	0.22	III		WSM			4C-0.34	
0837+035	08 37 12.4	03 30 33	3,4	0.69	0.58	Q?	20M	WSM	NOTE H			

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
0837+012	08 37 14.7	01 15 04	3,2	0.45	0.39	Q	19M	WSM	NOTE H			RAD VAR
0849+009	08 49 53.0	00 54 02	3,2	0.23	0.13	III		WSM			4C01.23	
0850-034	08 50 57.4	-03 29 43	3,2	0.79	0.41	N	18.0	WSM	NOTE BB		4C-3.34	
0852+029	08 52 31.3	02 56 54	3,2	0.42	0.23	IIIB		WSM			4C03.14	
0853+033	08 53 00.8	03 23 47	3,2	0.38	0.18	IIIB		WSM			4C03.15	
0854-034	08 54 40.9	-03 28 03	3,2	0.67	0.41	N	18.0	WSM	NOTE C		4C-3.35	
0856-002	08 56 08.7	-00 16 02	3,2	0.30	0.15	IIIB		4C			4C-0.35	
0857-026	08 57 22.3	-02 40 48	3,2	0.26	0.13	III		4C			4C-2.37	
0858-022	08 58 18.1	-02 13 45	3,2	0.19	0.11	Q	20.0		NOTE Z			
0858-004	08 58 52.8	-00 25 12	3,2	0.24	0.19	Q	20.0	PS	NOTE Z			
0859+032	08 59 15.0	03 16 12	3,2	0.34	0.22	G	19.0	WSM	NOTE D			
0904+039	09 04 04.3	03 54 47	3,2	0.44	0.22	IIIB		WSM				
0906+011	09 06 33.5	01 06 53	3,2	0.28	0.14	III		WSM				
0906+015	09 06 35.2	01 33 48	3,2	0.97	1.20	Q	18M	WSM	NOTE L	1.018	4C01.24	RAD VAR
0907+022	09 07 05.0	02 12 18	3,4	0.26	0.43	IIIS	19.0	WSM	NOTE Z			RAD VAR
0907-023	09 07 13.1	-02 19 14	3,2	0.52	0.40	Q	18.0	WSM	NOTE H	0.957		
0909+003	09 09 07.2	00 23 28	3,2	0.28	0.16	III		WSM				
0912+029	09 12 01.8	02 58 27	3,2	0.49	0.68	Q	19.5	WSM	NOTE C			RAD VAR
0913+003	09 13 18.0	00 19 55	3,2	0.27	0.25	III		PS				
0913-025	09 13 48.5	-02 32 03	3,2	0.28	0.19	Q	18.5	WSM	NOTE H	1.203	4C-2.38	
0922+005	09 22 33.7	00 32 12	3,2	0.82	0.70	Q	18.5	WSM	NOTE CC	1.720		
0926-039	09 26 01.9	-03 55 52	3,2	0.14	0.13	III						
0927+020	09 27 31.1	02 02 24	3,2	0.33	0.12	III		WSM				
0928+008	09 28 18.1	00 48 12	3,2	0.30	0.33	Q	19.0	PS	NOTE Z			NOTE 7
0932+022	09 32 42.1	02 17 28	3,2	0.49	0.30	Q	17.4	WSM	NOTE CC	0.652	4C02.27	
0936+022	09 36 40.2	02 13 36	3,2	0.28	0.14	III		WSM			4C02.28	
0937+033	09 37 09.1	03 18 06	3,2	0.33	0.22	III		WSM				
0938-002	09 38 07.4	-00 14 56	3,4	0.24	0.22	III		4C			4C00.29	
0938-014	09 38 49.9	-01 29 18	3,2	0.54	0.32	G	19.5	WSM	NOTE C	.3820	4C-1.19	
0939-031	09 39 14.4	-03 07 46	3,2	0.22	0.15	III						
0940+029	09 40 37.2	02 57 12	3,2	0.83	0.54	DB	20.0	WSM			4C02.29	
0940+012	09 40 43.3	01 16 53	3,2	0.24	0.13	III		4C			4C01.26	
0940+001	09 40 45.5	00 09 21	3,2	0.75	0.42	III		WSM	NOTE Z		4C00.30	
0945+003	09 45 10.6	00 18 34	3,2	0.42	0.21	III		WSM	NOTE C			
0945-034	09 45 22.8	-03 27 57	3,2	0.23	0.12	E	18.0	4C	NOTE W		4C-3.38	

Table 1 (*Continued*)

(1) PARKES SOURCE NUMBER	(2) POSITION (1950) R.A. H M S	DEC. D M S	(4) RUN	(5) 2700 FLUX DEN. (JY)	(6) 5000 FLUX DEN. (JY)	(7) IDENT. OR FIELD CLASS	(8) MAG	(9) ORIG. SURVEY	(10) FINDING CHART*	(11) RED-SHIFT	(12) 3C OR 4C	(13) REMARKS*
0949+011	09 49 03.6	01 06 45	3,2	0.21	0.10	IIIB						
0949+002	09 49 25.0	00 12 38	3,2	1.54	0.69	III		WSM			3C230	
0950+002	09 50 11.9	00 14 30	3,2	0.41	0.23	Q	19.5	WSM	NOTE H	1.075		
0955+036	09 55 22.8	03 41 49	3,2	0.39	0.20	II		WSM			4C03.17	
0955+036	09 55 49.0	03 38 40	3,2	0.40	0.18	II		WSM			4C03.17	
0955-014	09 55 56.0	-01 25 36	3,2	0.72	0.42	IIIB		WSM			4C-1.20	
0956-032	09 56 34.2	-03 12 23	3,4	0.26	0.15	III		4C			4C-3.39	
0956+015	09 56 46.1	01 32 29	3,2	0.32	0.20	DB	15.8	WSM	NOTE D			
0957+003	09 57 43.6	00 19 48	3,2	0.52	0.36	Q	17.6	WSM	NOTE K	0.905	4C00.34	
0958-001	09 58 49.0	-00 11 43	3,2	0.58	0.31	III		WSM			4C-0.37	
1003-013	10 03 03.5	-01 23 15	3,2	0.20	0.11	IIIB						
1004-018	10 04 31.7	-01 52 28	3,2	0.59	0.53	Q	19.2	WSM	NOTE H	1.212		
1005+007	10 05 37.4	00 44 42	3,2	0.33	0.24	N	16.9	WSM	NOTE D			
1007-038	10 07 37.7	-03 48 54	3,2	0.28	0.14	III		PKS			4C-3.40	
1008-017	10 08 18.9	-01 45 55	3,2	0.95	0.74	G?	19.4	WSM	NOTE D		4C-1.21	
1008+013	10 08 41.6	01 21 28	3,2	0.27	0.23	Q	19M	WSM	NOTE H			
1012+022	10 12 40.6	02 13 48	3,2	0.38	0.24	Q	18M	WSM	NOTE H	1.374	4C02.30	
1012+035	10 12 59.0	03 33 45	3,2	0.25	0.16	III		PS				
1014+018	10 14 01.4	01 52 13	3,2	0.32	0.20	III		WSM				
1017+041	10 17 58.4	04 06 00	3,4	0.37	0.23	III		WSM				OA
1019-009	10 19 26.6	-00 54 41	3,2	0.25	0.14	IIIB		4C			4C-0.38	
1019+015	10 19 57.3	01 30 06	3,2	0.11	0.07	III						
1021+028	10 21 17.6	02 48 32	3,2	0.22	0.14	Q?	19M	WSM	NOTE H			
1021-006	10 21 56.1	-00 37 41	3,2	0.99	0.70	Q	18.5	WSM	NOTE R	2.547		
1022-020	10 22 57.0	-02 02 38	3,2	0.25	0.13	III		PKS			4C-2.22	
1025+031	10 25 45.0	03 10 46	3,4	0.42	0.47	IIIB		PS				RAD VAR 18M NSO 0.2 MIN NW
1027+008	10 27 35.8	00 53 03	3,2	0.60	0.36	IIIB		WSM			4C00.35	
1031+003	10 31 39.8	00 21 28	3,2	0.22	0.12	III		4C			4C00.36	
1031-019	10 31 51.9	-01 55 36	3,4	0.14	0.14	III						
1033-022	10 33 00.5	-02 14 57	3,2	0.19	0.10	III		4C			4C-2.40	
1033-020	10 33 09.1	-02 04 57	3,2	0.19	0.12	III		4C			4C-2.40	NOTE 8
1033+003	10 33 32.7	00 21 37	3,2	0.34	0.21	E	16.5	WSM	NOTE D		4C00.37	
1039+029	10 39 04.2	02 58 15	3,2	1.67	0.99	IIIB		WSM			4C03.18	
1044-008	10 44 48.2	-00 49 48	5	0.32		III		WSM			4C-0.39	NOTE 9
1045+019	10 45 48.5	01 57 40	3,2	0.49	0.43	IIIB		WSM				

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1046+012	10 46 23.2	01 16 09	3,2	0.23	0.16	IIIB		4C			4C01.27	
1046-026	10 46 53.2	-02 39 05	3,2	0.52	0.27	III		WSM			4C-2.43	
1048+002	10 48 07.8	00 12 01	3,2	0.33	0.15	III		WSM			4C00.38	
1049-001	10 49 19.8	-00 09 38	3,2	0.30	0.15	III		4C			4C-0.40	
1050+008	10 50 45.6	00 49 12	3,2	0.25	0.15	III		4C			4C00.39	
1051-018	10 51 30.4	-01 53 00	3,2	0.19	0.11	G	18.5	4C	NOTE W		4C-1.23	
1051+035	10 51 51.0	03 30 49	3,2	0.32	0.15	DB	19.0	WSM	NOTE D		4C03.19	
1052-008	10 52 07.9	-00 52 00	3,2	0.26	0.16	III		PS				
1052-004	10 52 23.0	-00 29 40	3,2	0.27	0.18	Q	18M	WSM	NOTE H		4C-0.41	
1052+023	10 52 42.3	02 21 47	3,2	0.36	0.22	III		WSM			4C02.31	
1054+004	10 54 41.9	00 28 07	3,2	0.58	0.37	IIIB		WSM				
1055-028	10 55 38.3	-02 53 22	3,2	0.39	0.30	IIIB		WSM				
1055+018	10 55 55.5	01 50 03	3,2	3.15	3.16	Q	18.2	WSM	NOTE K	0.890	4C01.28	
1059-010	10 59 30.8	-01 00 10	3,2	1.35	0.68	IIIB		WSM			3C249	
1059+031	10 59 31.9	03 06 51	3,2	0.29	0.16	III		4C			4C02.20	
1059-023	10 59 51.8	-02 19 25	3,2	0.49	0.29	IIIB		WSM			4C-2.44	
1103+002	11 03 17.1	00 13 34	3,2	0.30	0.15	S	9.8	WSM	NOTE D	.0021	NGC3521	
1103-016	11 03 20.5	-01 40 07	3,2	0.25	0.14	IIIB		4C			4C-1.24	
1103-006	11 03 58.1	-00 37 38	3,2	0.59	0.44	Q	15.4	WSM	NOTE H	0.427	4C-0.43	
1105-028	11 05 04.0	-02 51 47	3,2	0.36	0.22	IIIB		WSM			4C-2.45	
1105+037	11 05 38.1	03 43 11	3,2	0.30	0.19	IIIB		WSM				
1106+023	11 06 11.3	02 18 53	3,2	0.67	0.49	N	18.9	WSM	NOTE D			
1106-003	11 06 17.8	-00 22 24	3,2	0.30	0.18	Q?	19.5	WSM	NOTE H			
1108+034	11 08 48.2	03 25 30	3,2	0.46	0.24	IIIB		WSM			4C03.21	
1110-019	11 10 59.0	-01 56 27	3,2	0.91	0.50	III		WSM	NOTE C		4C-1.25	
1111-037	11 11 58.5	-03 44 47	3,2	0.39	0.24	G	18M	WSM	NOTE D		4C-3.41	
1115-023	11 15 00.8	-02 19 36	3,2	0.60	0.38	G	20.0	WSM	NOTE C		4C-2.46	
1116-027	11 16 52.1	-02 46 27	3,2	0.57	0.20	IIIB		WSM			3C255	
1118+000	11 18 44.2	00 03 04	3,2	0.43	0.29	DB	17M	WSM	NOTE D			
1122-037	11 22 12.4	-03 46 09	3,2	0.48	0.32	III		WSM				
1123+012	11 23 20.5	01 16 06	3,2	0.26	0.20	Q?	20.0	WSM	NOTE N			
1127+005	11 27 02.2	00 31 50	3,2	0.58	0.35	II		WSM	NOTE D		4C00.40	
1127-032	11 27 36.6	-03 12 49	3,2	0.37	0.20	III		WSM			4C-3.42	
1127+012	11 27 47.4	01 15 02	3,2	0.45	0.32	N	17.8	WSM	NOTE D		4C01.30	
1130+008	11 30 12.1	00 50 59	1,2	0.34	0.25	Q?	18.5		NOTE Z			OPT VAR?

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1130-037	11 30 31.5	-03 44 25	3,2	0.56	0.30	E	15.3	WSM	NOTE D	.0482	4C-3.43	
1130+009	11 30 46.0	00 57 01	3,2	0.42	0.32	Q?	19M	WSM	NOTE H			
1132-000	11 32 39.3	-00 04 43	3,2	0.76	0.44	IIIB		WSM			4C-0.45	
1133-032	11 33 51.3	-03 13 51	3,4	0.26	0.39	Q?	19.5	WSM	NOTE N		4C-3.44	
1134+015	11 34 55.7	01 32 50	3,2	0.59	0.31	N	18.5	WSM	NOTE DD	0.430	4C01.31	
1136+014	11 36 31.5	01 27 01	3,2	0.23	0.17	III						
1138+015	11 38 34.4	01 30 56	3,2	1.60	0.97	IIIB		WSM			4C01.32	
1139+028	11 39 33.1	02 52 11	3,2	0.24	0.18	III		PS				
1140+021	11 40 25.1	02 11 00	3,2	0.26	0.14	E	18.5	PS	NOTE Z			
1141+011	11 41 34.8	01 11 18	3,2	0.34	0.27	G	19.4	WSM	NOTE D			
1142-002	11 42 20.4	-00 14 56	3,2	0.46	0.22	IIIB		WSM			4C-0.46	
1145+025	11 45 29.0	02 32 25	3,2	0.21	0.15	III		PS				
1146-037	11 46 21.6	-03 47 21	3,2	0.42	0.34	Q	16.4	WSM	NOTE H	0.341		
1146-024	11 46 43.3	-02 25 18	3,2	0.19	0.14	IIIB		4C			4C-2.49	
1147+015	11 47 51.4	01 32 42	3,2	0.31	0.20	G	19.9	WSM	NOTE D		4C01.33	
1148-001	11 48 10.2	-00 07 13	3,2	2.40	1.90	Q	17.6	WSM	NOTE EE	1.982	4C-0.47	
1155-029	11 55 17.6	-02 55 39	3,2	0.25	0.15	III		SA				
1158+007	11 58 49.5	00 45 10	3,2	0.35	0.27	Q	18.7	WSM	NOTE H	1.383		RAD VAR
1159-023	11 59 58.5	-02 23 23	3,2	0.46	0.20	IIIB		WSM			4C-2.50	
1201-026	12 01 08.4	-02 38 30	3,4	0.18	0.11	III		SA				
1201-041	12 01 28.2	-04 06 03	3,2	1.32	0.97	E	18M	PKS	NOTE F		4C-4.40	OA
1201-002	12 01 31.8	-00 13 10	3,2	0.23	0.17	G	20.5	SA	NOTE D			
1205-008	12 05 07.9	-00 49 55	3,4	0.22	0.20	Q	18.5	SA	NOTE B	1.002		RAD VAR
1205+011	12 05 59.9	01 11 05	3,2	0.25	0.25	IIIB		SA				
1207-013	12 07 57.5	-01 20 06	3,2	0.40	0.25	E	19.0	WSM	NOTE D			NOTE 10
1211+000	12 11 23.1	00 03 35	3,2	0.33	0.15	G	18.0	WSM	NOTE B			
1212-007	12 12 14.3	-00 43 33	3,2	0.57	0.30	IIIB		WSM			4C-0.48	
1212+005	12 12 48.7	00 35 27	3,2	0.28	0.16	III		SA			4C00.42	
1214-029	12 14 33.0	-02 55 04	3,2	0.23	0.11	III		SA			4C-2.52	
1215+039	12 15 02.7	03 54 57	3,2	1.19	0.53	D+E	17M	WSM	NOTE GG	0.075	4C04.41	
1215-002	12 15 25.9	-00 13 06	3,2	0.33	0.28	Q	18.5	SA	NOTE B			
1216-010	12 16 01.1	-01 03 14	3,2	0.15	0.16	Q	17.7	SA	NOTE H	0.415		RAD VAR
1217+023	12 17 38.3	02 20 21	3,2	0.51	0.44	Q	16.5	WSM	NOTE K	0.240		
1218-024	12 18 49.9	-02 25 12	3,2	0.57	0.44	Q	19M	WSM	NOTE H		4C-2.53	RAD VAR
1222+037	12 22 19.2	03 47 28	3,2	1.08	1.02	Q	18.8	WSM	NOTE H	0.957	4C03.23	RAD VAR

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1222+039	12 22 48.1	03 56 28	3,2	0.29	0.17	Q?	19.0		NOTE Z			NOTE 11
1223+032	12 23 32.0	03 12 45	3,2	0.22	0.13	III		PS				
1224-040	12 24 12.1	-04 04 42	3,4	0.20	0.12	III		4C				OA
1225-023	12 25 23.2	-02 20 26	3,2	0.37	0.26	Q?	20.0	WSM	NOTE H		4C-2.54	
1226-028	12 26 02.5	-02 48 06	3,2	0.18	0.16	Q	19.0		NOTE Z			
1226+023	12 26 33.3	02 19 44	3,2	40.9	36.7	Q	12.8	WSM	NOTE HH	0.158	3C273	RAD VAR
1229-021	12 29 25.9	-02 07 31	3,4	1.19	0.90	Q	16.8	WSM	NOTE EE	1.041	4C-2.55	RAD VAR
1229-013	12 29 31.1	-01 18 22	3,2	0.51	0.29	IIIB		WSM				
1234+018	12 34 31.8	01 52 49	3,2	0.26	0.13	III		4C			4C01.35	
1238+001	12 38 36.9	00 10 42	3,2	0.20	0.11	III		4C			4C00.44	
1246+024	12 46 18.0	02 25 33	3,2	0.28	0.16	III		4C			4C02.33	
1247+025	12 47 59.6	02 32 51	3,2	0.33	0.30	Q?	20.0	WSM				NOTE 12
1249-038	12 49 29.5	-03 50 30	3,4	0.17	0.11	III		PS				
1249+035	12 49 50.0	03 32 02	3,2	0.58	0.36	E	16.8	WSM	NOTE D			NOTE 10
1250+029	12 50 30.6	02 54 37	3,2	0.95	0.55	III		WSM	NOTE BB		4C02.34	
1253+026	12 53 29.7	02 36 31	3,2	0.35	0.18	III		WSM			4C02.35	RAD VAR
1256-015	12 56 32.3	-01 34 46	3,2	0.25	0.20	III		PS				
1256+018	12 56 35.1	01 52 16	3,2	0.29	0.19	IIIB		WSM				
1257-005	12 57 12.0	-00 31 03	3,4	0.23	0.13	III		PS			4C-0.49	
1302-034	13 02 08.8	-03 29 58	3,2	0.60	0.54	Q	19.4	WSM	NOTE H	1.250		RAD VAR
1303+039	13 03 43.4	03 57 37	3,2	0.28	0.16	III		PS				
1305-012	13 05 38.5	-01 13 00	3,2	0.31	0.20	III		WSM				
1307+000	13 07 16.0	00 03 25	3,2	0.86	0.47	D	19.0	WSM	NOTE C		4C00.46	
1307+010	13 07 54.9	01 00 10	3,4	0.21	0.25	Q?	20.0	PS	NOTE Z			
1307-007	13 07 55.3	-00 43 10	3,2	0.26	0.11	III		WSM				
1309-023	13 09 00.9	-02 18 00	3,2	0.22	0.14	III		4C				
1309+041	13 09 50.3	04 09 40	3,4	0.37	0.20	III		PKS				OA
1312+013	13 12 16.9	01 20 18	3,2	0.22	0.10	IIIB		PKS				
1312+026	13 12 43.5	02 37 57	3,2	0.30	0.16	III		PS				
1317-005	13 17 04.7	-00 33 56	3,2	1.01	0.63	Q	17.3	WSM	NOTE CC	0.890	4C-0.50	
1317+017	13 17 12.1	01 47 22	3,2	0.24	0.14	III		4C			4C01.37	
1317+019	13 17 53.8	01 56 19	3,2	0.59	0.59	N?	19.5	WSM	NOTE C			RAD VAR
1320+033	13 20 46.5	03 23 47	3,2	0.79	0.41	D	19.5	WSM	NOTE K		4C03.37	
1322-015	13 22 56.7	-01 31 32	3,2	0.23	0.10	III		4C			4C-1.28	
1324-025	13 24 30.8	-02 33 59	3,2	0.33	0.20	G	19.4	WSM	NOTE D			

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1325-017	13 25 03.7	-01 47 34	3,2	0.79	0.47	D	18.5	WSM	NOTE R		4C-1.29	
1328-034	13 28 53.7	-03 25 53	3,2	0.35	0.29	Q	19M	SA	NOTE H	1.352		RAD VAR
1329+012	13 29 43.1	01 17 12	3,2	0.19	0.11	III		SA			4C01.38	
1330+022	13 30 20.5	02 16 09	3,4	1.93	1.35	N	19M	WSM	NOTE K	.2156	3C287.1	OPT VAR?
1336-030	13 36 57.7	-03 01 55	3,2	0.18	0.12	Q	19.5	SA	NOTE Z			
1336+020	13 36 59.7	02 00 36	3,2	0.42	0.19	IIIB		WSM			4C02.37	
1337-013	13 37 30.3	-01 22 39	3,2	0.35	0.37	Q	19.1	SA	NOTE H	1.619		RAD VAR
1337-033	13 37 37.3	-03 20 15	3,2	0.58	0.30	BLC	18.0	WSM	NOTE Z			NOTE 13
1340+022	13 40 15.8	02 13 13	3,2	0.58	0.32	IIIB		WSM			4C02.38	
1342-016	13 42 41.9	-01 41 26	3,2	0.21	0.14	D	18.0	SA	NOTE D			
1343-007	13 43 03.4	-00 42 09	3,2	0.62	0.40	IIIB		WSM			4C-0.51	
1343-026	13 43 16.8	-02 37 30	3,2	0.25	0.13	IIIB		SA			4C-2.58	
1348+007	13 48 31.3	00 46 05	3,2	0.21	0.17	IIIB		SA				
1349-017	13 49 48.8	-01 42 05	3,2	0.31	0.19	G	18.0	WSM	NOTE D			
1349+027	13 49 58.3	02 47 34	3,2	0.78	0.47	IIIB		WSM				
1351+021	13 51 18.9	02 06 39	3,2	0.33	0.26	Q	19.0	WSM	NOTE C	1.606		RAD VAR
1351-018	13 51 32.0	-01 51 18	3,2	0.80	0.82	Q?	21.0	WSM	NOTE Z			RAD VAR
1352+009	13 52 34.3	00 55 25	3,2	0.38	0.19	IIIB		WSM				
1353-005	13 53 49.8	-00 34 51	3,2	0.29	0.14	III		WSM			4C-0.52	
1354+013	13 54 28.5	01 19 18	3,2	1.35	0.71	IIIB		WSM			4C01.39	
1355+010	13 55 20.4	01 01 08	1,2	1.00	0.49	IIIB		WSM				
1355+017	13 55 39.3	01 47 28	3,4	0.21	0.14	III		4C			4C01.40	
1356+022	13 56 54.7	02 14 26	3,2	0.75	0.68	Q	18.3	WSM	NOTE H	1.329		RAD VAR
1359+039	13 59 52.6	03 56 52	3,2	0.36	0.23	III		WSM				
1359+025	13 59 59.4	02 30 30	3,2	0.61	0.37	N	18.5	WSM	NOTE C	.1800	4C02.39	
1401+000	14 01 38.2	00 00 53	3,2	0.42	0.47	Q?	19.0	PS	NOTE Z			
1402-012	14 02 11.3	-01 16 02	1,2	0.73	0.60	Q	18.2	WSM	NOTE H	2.518		RAD VAR OPT VAR
1403-024	14 03 35.9	-02 29 23	3,2	0.51	0.24	IIIB		WSM			4C-2.59	
1404-016	14 04 14.3	-01 40 10	3,2	0.59	0.30	IIIB		WSM			4C-1.31	
1406+015	14 06 00.5	01 30 32	3,2	0.38	0.22	IIIB		WSM				
1407+022	14 07 32.3	02 17 16	3,2	0.39	0.35	Q	18.7	WSM	NOTE H			RAD VAR
1409+031	14 09 30.2	03 08 48	3,2	0.36	0.22	III		4C			4C03.28	
1414-037	14 14 47.6	-03 46 57	3,2	1.00	0.63	IIIB		WSM			3C297	
1416-000	14 16 38.4	-00 00 21	3,2	0.20	0.12	III		WSM				
1416-015	14 16 49.8	-01 35 41	3,2	0.27	0.17	IIIS	18.0	WSM	NOTE N		4C-1.33	

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1418-025	14 18 38.2	-02 33 18	3,2	0.26	0.16	III		WSM			4C-2.60	NOTE 14
1418+030	14 18 39.6	03 02 09	3,2	0.21	0.11	III						
1420-005	14 20 53.5	-00 35 42	3,2	0.26	0.13	III		WSM			4C-0.55	
1422-031	14 22 04.7	-03 09 58	3,2	0.32	0.19	III		4C	NOTE N		4C-3.51	NOTE 15
1425+034	14 25 02.8	03 28 48	3,2	0.34	0.19	Q?	19M	WSM	NOTE H		4C03.29	
1425+045	14 25 44.3	04 33 21	3,2	0.30	0.14	III		PKS				OA
1425-011	14 25 56.6	-01 10 46	3,2	1.66	0.87	IIIB		WSM			3C300.1	NOTE 16
1426+030	14 26 32.6	03 05 05	3,2	0.42	0.28	G	18.5	WSM	NOTE II			
1427-009	14 27 14.2	-00 59 29	3,2	0.41	0.27	Q	20.0	WSM	NOTE DD		4C-1.35	
1428-033	14 28 12.7	-03 21 28	3,2	0.39	0.20	IIIB		WSM			4C-3.52	
1431+018	14 31 36.1	01 49 36	3,2	0.35	0.19	III		WSM				
1433-040	14 33 03.1	-04 00 43	3,2	0.43	0.20	III		PKS			4C-4.51	OA
1434+036	14 34 25.9	03 37 11	3,2	1.97	1.28	IIIB		WSM			4C03.30	
1434+019	14 34 58.8	01 56 50	3,2	0.34	0.16	III		WSM				
1435+038	14 35 51.1	03 53 10	3,2	0.41	0.22	G	17.8	WSM	NOTE D			
1435+001	14 35 59.9	00 07 28	3,2	0.26	0.16	E	17M	4C	NOTE W	.2240	4C00.50	
1440-010	14 40 33.6	-01 04 33	3,2	0.22	0.13	III		WSM			4C-1.36	
1442-029	14 42 18.8	-02 59 12	3,2	0.27	0.16	E	17.6	WSM	NOTE D			
1443-032	14 43 06.1	-03 17 21	3,2	0.21	0.18	III		WSM				
1446+005	14 46 06.5	00 30 43	3,2	1.00	0.55	E	19.5	WSM	NOTE C		4C00.52	
1446+030	14 46 27.1	03 02 46	3,2	0.26	0.19	II		PS				
1446-005	14 46 42.3	-00 32 36	3,2	0.40	0.40	IIIB		WSM				RAD VAR NOTE 6
1449-012	14 49 12.7	-01 15 18	3,2	0.46	0.42	Q	18M	WSM	NOTE H	1.314		RAD VAR
1449+007	14 49 26.9	00 45 00	3,2	0.26	0.11	III		WSM			4C00.53	
1452+004	14 52 06.5	00 29 38	3,2	0.18	0.11	III		4C			4C00.54	
1454-034	14 54 35.7	-03 27 39	3,2	0.30	0.16	III		WSM			4C-3.53	
1456-004	14 56 25.1	-00 25 58	3,4	0.29	0.20	Q?	19.5	PS	NOTE Z			
1459-038	14 59 15.7	-03 53 45	3,2	0.24	0.17	IIIB						
1500-023	15 00 58.9	-02 18 48	3,2	0.60	0.32	IIIB		WSM			4C-2.62	
1502+036	15 02 35.8	03 38 07	3,2	0.36	0.54	Q	18.6	WSM	NOTE H	0.412		RAD VAR
1502+039	15 02 36.5	03 59 05	3,2	0.25	0.12	IIIB		WSM			4C03.31	
1502-001	15 02 59.5	-00 06 09	3,2	0.53	0.34	IIIB		WSM				
1503-037	15 03 02.8	-03 43 47	3,2	0.19	0.10	III						
1505+012	15 05 56.5	01 13 34	3,2	0.61	0.30	IIIB		WSM			4C01.41	
1507+031	15 07 27.6	03 11 44	3,2	0.22	0.14	E	16.5	4C	NOTE W		4C03.32	

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1508+004	15 08 27.7	00 25 47	3,2	0.44	0.23	IIIB		WSM			4C00.55	
1509-036	15 09 06.3	-03 36 24	3,2	0.21	0.11	III		4C			4C-3.54	
1509+022	15 09 43.9	02 14 28	3,2	0.68	0.56	G	18.4	WSM	NOTE C	.2190		
1509+015	15 09 52.9	01 32 22	3,2	1.28	0.68	IIIB		WSM			4C01.42	
1514+004	15 14 06.7	00 26 10	3,2	1.87	1.37	E	16.5	WSM	NOTE L	.053	4C00.56	
1516+015	15 16 23.4	01 31 36	3,2	0.27	0.17	III		PS				
1520+041	15 20 02.3	04 11 10	3,2	0.43	0.23	III					4C04.52	OA
1521-040	15 21 17.2	-04 00 15	3,2	0.20	0.09	III						OA
1523+033	15 23 18.1	03 18 55	3,2	1.22	0.69	IIIB		WSM			4C03.33	
1523-034	15 23 56.3	-03 27 42	3,2	0.22	0.13	III		WSM				
1523-017	15 23 56.4	-01 43 56	3,2	0.40	0.22	IIIB		WSM			4C-1.37	
1524+010	15 24 09.9	01 04 05	3,2	0.14	0.12	E	16.0					
1525-020	15 25 47.0	-02 02 56	3,2	0.30	0.17	III		WSM				
1528+012	15 28 22.6	01 17 16	3,2	0.18	0.12	G	20.5	4C	NOTE Z		4C01.44	
1532+016	15 32 20.2	01 41 02	3,2	0.97	0.79	Q	18.0	WSM	NOTE JJ	0.310		RAD VAR
1532-000	15 32 58.5	-00 01 38	3,2	0.29	0.18	III		WSM				
1535+004	15 35 42.6	00 28 51	3,4	0.78	0.69	IIIB		WSM				RAD VAR
1536-020	15 36 26.2	-02 01 49	3,2	0.25	0.14	III		4C			4C-2.64	
1538+010	15 38 40.8	01 00 03	3,2	0.44	0.25	G	19.5	WSM	NOTE Z		4C00.57	NOTE 17
1539-022	15 39 01.0	-02 13 09	3,2	0.23	0.16	III		WSM			4C-2.65	
1540+027	15 40 46.8	02 45 29	3,2	0.27	0.12	E	18.0	PS	NOTE Z			
1541-034	15 41 16.5	-03 24 55	3,4	0.25	0.16	III		PS				
1543+019	15 43 03.9	01 59 16	3,2	0.56	0.32	E	18.5	WSM	NOTE Y		4C01.45	
1543+005	15 43 36.2	00 35 41	3,2	1.24	0.84	IIIB		WSM				
1545-004	15 45 47.2	-00 24 58	3,2	0.22	0.12	III		WSM			4C-0.61	
1546+027	15 46 58.3	02 46 06	3,4	1.43	2.34	Q	17.8	WSM	NOTE H	0.412		RAD VAR
1547+032	15 47 53.2	03 12 52	3,2	0.22	0.16	III		WSM				
1548+013	15 48 04.7	01 20 57	3,2	0.28	0.15	III		WSM			4C01.46	
1552-033	15 52 53.7	-03 18 08	3,2	0.47	0.39	IIIA		WSM				
1555+001	15 55 17.7	00 06 43	3,2	1.02	1.01	Q	19.0	WSM	NOTE II	1.770		RAD VAR
1556+020	15 56 15.8	02 02 58	3,2	0.24	0.14	G	18.5	4C	NOTE W		4C01.47	
1557+032	15 57 00.3	03 13 15	3,2	0.69	0.71	IIIB		WSM				RAD VAR
1557-004	15 57 26.6	-00 28 56	3,2	0.54	0.18	IIIB		WSM				
1559+021	15 59 55.7	02 06 12	3,2	4.64	3.32	D	17.0	WSM	NOTE S	.1041	3C327	
1601-015	16 01 13.4	-01 31 01	3,2	0.36	0.27	III		WSM				

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1601-003	16 01 18.9	-00 21 42	3,2	0.45	0.27	N	17.5	WSM	NOTE D		4C-0.63	
1601-017	16 01 42.9	-01 46 10	3,2	0.29	0.14	D	16.5	WSM	NOTE Z			NOTE 14
1602+014	16 02 12.9	01 25 59	3,2	2.14	1.11	III		WSM			3C327.1	NOTE 18
1602-001	16 02 22.2	-00 11 00	3,2	0.64	0.39	Q	17.5	WSM	NOTE P	1.625		
1603+005	16 03 13.3	00 33 58	3,2	0.58	0.33	IIIA		WSM				
1603+001	16 03 39.0	00 08 29	3,2	1.55	1.00	E	16.5	WSM	NOTE K		4C00.58	
1605+018	16 05 32.2	01 49 49	3,2	0.27	0.15	III		4C			4C01.49	
1606-041	16 06 54.8	-04 06 54	3,4	0.23	0.13	III						OA
1608-011	16 08 14.6	-01 06 01	3,2	0.28	0.19	III		WSM				
1611-025	16 11 19.9	-02 33 37	3,2	0.23	0.12	III		4C			4C-2.67	
1611-007	16 11 53.7	-00 47 40	3,2	0.32	0.18	Q?	18.5	WSM	NOTE H		4C-0.64	
1614-005	16 14 27.3	-00 31 06	3,2	0.19	0.11	III		4C			4C-0.65	
1615+029	16 15 19.0	02 54 00	3,2	0.80	0.84	Q	18M	WSM	NOTE H	1.339		RAD VAR
1616-029	16 16 31.6	-02 57 26	3,2	0.42	0.26	E	16.6	WSM	NOTE D			
1617+026	16 17 20.0	02 36 10	3,2	0.14	0.14	Q?	19.0		NOTE Z			
1617+016	16 17 23.3	01 36 01	3,2	0.17	0.10	III		4C			4C01.50	
1617-030	16 17 47.5	-03 04 26	3,2	0.38	0.24	IIIB		WSM				
1618+007	16 18 15.1	00 44 02	3,2	0.19	0.13	Q?	18.5	WSM	NOTE H			
1621+013	16 21 11.1	01 22 03	3,2	0.20	0.17	III						
1626-033	16 26 04.0	-03 23 21	3,2	0.18	0.09	III		4C			4C-3.59	
1626-026	16 26 59.0	-02 40 42	3,2	0.32	0.19	III		PKS				
1630-004	16 30 22.6	-00 27 07	3,2	0.20	0.20	III		PS				
1635-035	16 35 41.6	-03 34 09	3,2	0.32	0.27	IIIB		WSM				RAD VAR
1636-031	16 36 19.5	-03 07 34	3,2	0.44	0.23	IIIB		WSM			4C-3.61	
1638-025	16 38 03.2	-02 33 57	3,2	1.02	0.55	IIIB		WSM			4C-2.69	
1643+022	16 43 11.1	02 17 09	3,2	1.15	0.65	E	17.0	WSM	NOTE D		4C02.42	
1646+028	16 46 01.3	02 48 05	3,4	0.61	0.26	IIIB		WSM			4C02.43	RAD VAR
1646+003	16 46 52.3	00 20 16	3,2	0.38	0.22	III		WSM			4C00.59	
1648+015	16 48 31.6	01 34 26	3,4	0.78	0.64	IIIB		WSM				RAD VAR
1649-039	16 49 30.6	-03 55 45	1,2	0.58	0.38	IIIA		WSM				RAD VAR
1650+004	16 50 25.0	00 24 02	3,2	0.78	0.37	IIIB		WSM			4C00.60	
1650+024	16 50 28.0	02 28 54	3,2	0.30	0.17	S	14.0	WSM	NOTE D	.0247	NGC6240	
1652+040	16 52 58.9	04 00 52	3,4	0.37	0.24	III						OA
1653-031	16 53 30.3	-03 10 02	3,4	0.17	0.11	IIIA						
1654-020	16 54 20.0	-02 02 13	3,2	0.57	0.47	IIIB		WSM			4C-1.39	

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
1657-042	16 57 03.9	-04 16 22	3,4	0.21	0.13	IIIA						OA
1657+022	16 57 14.4	02 17 35	3,2	0.37	0.32	III		PS				NOTE 7
1658+037	16 58 52.3	03 43 12	3,2	0.19	0.20	IIIA						
1659+010	16 59 23.4	01 04 12	3,2	0.29	0.13	III		WSM			4C00.62	
1659-009	16 59 48.7	-00 56 02	3,4	0.10	0.13	D	17.0					
1701-014	17 01 19.3	-01 29 28	3,2	0.26	0.14	G?	18.0	PKS	NOTE N		4C-1.41	
1701+016	17 01 35.1	01 38 12	3,2	0.32	0.26	III		PS				
1701+024	17 01 36.4	02 26 05	3,2	0.33	0.18	III		WSM				
1702+001	17 02 55.1	00 08 37	3,2	0.26	0.14	E	17M	4C	NOTE W		4C00.63	
1703+036	17 03 57.3	03 40 02	3,2	0.18	0.07	III		4C			4C03.35	
1704+001	17 04 49.2	00 06 59	3,2	0.42	0.24	IIIB		WSM			4C00.64	
1704-012	17 04 51.4	-01 17 40	3,2	0.22	0.14	III						
1705+018	17 05 02.8	01 52 38	3,2	0.71	0.76	Q	18.9	WSM	NOTE J	2.575		RAD VAR
1706+006	17 06 11.6	00 38 59	3,2	0.53	0.44	IIIB		WSM				
1706-028	17 06 13.2	-02 52 16	3,2	0.29	0.16	III		WSM			4C-2.72	
1706+015	17 06 34.4	01 34 02	3,2	0.21	0.13	E	17.5		NOTE Z			
1707-038	17 07 38.7	-03 52 15	3,2	0.34	0.28	III		WSM				
1708+006	17 08 02.2	00 40 14	3,2	0.88	0.58	DB	20M	WSM	NOTE Y		4C00.65	
1710-029	17 10 58.4	-02 55 29	3,2	0.39	0.22	III		WSM				
1711+006	17 11 34.5	00 38 21	3,2	0.71	0.40	IIIB		WSM			4C00.66	
1712-033	17 12 23.9	-03 18 09	3,2	0.62	0.27	IIIB		WSM			4C-3.62	
1714-019	17 14 06.0	-01 57 41	1,2	0.41	0.21	G	20.5	WSM	NOTE Z			
1714-034	17 14 12.1	-03 29 34	3,2	0.28	0.16	IIIA		4C			4C06.60	
1714+025	17 14 27.8	02 35 12	3,2	0.27	0.22	G	18.5	WSM	NOTE N			
1714-020	17 14 47.5	-02 02 06	3,2	0.34	0.19	G	20.0	WSM	NOTE Z		4C-2.73	OPT VAR?
1714+037	17 14 50.2	03 43 24	3,2	0.27	0.19	III		4C			4C03.36	
1716+006	17 16 49.9	00 40 11	3,2	1.35	0.77	G	20.0	WSM	NOTE II			
1717-024	17 17 21.1	-02 24 10	3,2	0.19	0.12	IIIA						
1717-009	17 17 55.6	-00 55 41	3,2	36.3	22.9	D	16.3	WSM	NOTE O	.0307	3C353	
1720+001	17 20 03.9	00 06 33	3,2	0.52	0.31	IIIB		WSM				
1720+023	17 20 53.2	02 19 02	3,2	0.12	0.07	III						
1722-026	17 22 01.4	-02 39 49	3,2	1.52	0.84	III		WSM			4C-2.74	
1726-038	17 26 12.3	-03 48 27	3,2	0.63	0.51	IIIA		WSM			4C-3.64	
1728+004	17 28 01.7	00 26 45	3,2	0.28	0.35	IIIS		WSM				RAD VAR
1729+010	17 29 52.9	01 01 41	3,2	0.22	0.14	III		WSM			4C01.52	

Table 1 (*Continued*)

(1) PARKES SOURCE NUMBER	(2) POSITION (1950) R.A. H M S	DEC. D M S	(3) RUN	(4) 2700 FLUX DEN. (JY)	(5) 5000 FLUX DEN. (JY)	(6) IDENT. OR FIELD CLASS	(7) MAG	(8) ORIG. SURVEY	(9) FINDING CHART*	(10) RED-SHIFT	(11) 3C OR 4C	(12) REMARKS*
1735+026	17 35 04.5	02 38 31	3,2	0.29	0.20	III		WSM				
1735-010	17 35 10.1	-01 00 32	3,2	0.28	0.18	III		WSM			4C-0.69	
1735+002	17 35 11.1	00 13 50	3,2	0.25	0.15	Q?	19M	4C	NOTE W		4C00.67	
1735+034	17 35 20.8	03 27 17	3,2	0.84	0.48	IIIA		WSM			4C03.37	
1738+032	17 38 07.3	03 13 26	3,2	0.29	0.22	IIIA		WSM				
1741-038	17 41 20.6	-03 48 48	3,2	2.02	2.30	Q	18.5	WSM	NOTE JJ			RAD VAR
1748+031	17 48 08.0	03 11 21	3,2	0.89	0.44	IIIA		WSM			4C03.38	
1749+023	17 49 31.6	02 20 03	3,2	0.57	0.30	IIIA		WSM			4C02.45	
1751+016	17 51 54.3	01 38 39	3,2	0.25	0.14	IIIC		4C			4C01.53	
1754+036	17 54 21.5	03 39 12	3,2	0.26	0.15	IIIA		PS				
1759+017	17 59 39.5	01 45 33	3,2	0.27	0.16	IIIC		4C			4C01.54	
1800-021	18 00 13.7	-02 07 44	3,2	1.00	0.52	IV		PKS			4C-2.75	OA
1801+010	18 01 43.3	01 01 18	3,2	1.03	1.08	Q	19M	PKS		1.522		OA RAD VAR
1846-009	18 46 47.6	-00 58 50	3,2	11.9	9.75	IV		PKS			3C391	OA
1850+011	18 50 48.8	01 10 39	3,2	12.5	12.5	IV		PKS				OA
1937-035	19 37 41.1	-03 34 09	3,2	0.51	0.27	III		PKS			4C-3.71	OA
1938-012	19 38 51.1	-01 12 10	3,2	0.55	0.34	IIIC		WSM			4C-1.49	OA
1942+038	19 42 04.7	03 49 28	3,2	0.55	0.32	IIIA		WSM			4C03.46	RAD VAR
1943+002	19 43 45.6	00 12 57	3,2	0.84	0.51	IIIA		WSM			4C00.73	
1944-029	19 44 14.4	-02 54 04	3,2	0.21	0.11	IIIA		PKS				
1946+024	19 46 37.4	02 29 35	3,2	0.32	0.19	IIIA		WSM			4C02.49	
1949+023	19 49 44.6	02 22 37	3,2	3.75	2.07	S0	16.5	WSM	NOTE K	.0590	3C403	
1949-014	19 49 55.2	-01 25 07	3,2	0.70	0.58	E	17.5	WSM	NOTE F	.0559	3C403.1	
1952+017	19 52 42.0	01 46 09	3,2	0.53	0.29	IIIB		WSM			4C01.61	
1952+007	19 52 52.1	00 42 28	3,2	0.40	0.22	III		WSM			4C00.74	RAD VAR
1953+035	19 53 05.4	03 35 43	3,2	0.25	0.15	III		WSM			4C03.47	
1956-003	19 56 51.1	-00 23 40	3,2	0.25	0.15	III		PS				
1957-013	19 57 30.7	-01 18 48	3,2	0.43	0.26	G	19.5	WSM	NOTE C		4C-1.52	
2001+003	20 01 02.7	00 19 06	3,2	0.35	0.15	III		WSM			3C406	
2001-022	20 01 53.2	-02 17 44	3,2	0.38	0.28	IIIB		WSM			4C-2.78	
2003+038	20 03 22.8	03 49 49	3,2	0.22	0.14	III		WSM				
2003-025	20 03 32.4	-02 32 06	3,2	1.55	1.00	IIIS	19.0	WSM	NOTE J		4C-2.79	RAD VAR
2003-000	20 03 41.0	-00 03 34	3,2	0.23	0.18	III						
2012+010	20 12 02.1	01 05 19	3,2	0.44	0.23	IIIB		WSM			4C01.76	
2012-017	20 12 39.7	-01 46 46	3,2	0.78	0.63	Q	17.5	WSM	NOTE JJ			RAD VAR

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
2018+005	20 18 29.2	00 34 57	3,2	0.30	0.17	III		4C			4C00.77	
2020+014	20 20 50.3	01 26 37	3,2	0.20	0.12	III		4C			4C01.63	
2021-040	20 21 02.7	-04 03 16	4	0.31	0.19	Q?	19.0	WSM	NOTE Z		4C-4.76	OA
2022+031	20 22 38.9	03 06 54	3,2	0.34	0.31	Q	19.0	WSM	NOTE C			
2026+004	20 26 21.3	00 25 17	3,2	0.24	0.13	E	18M	WSM			4C00.78	
2027-035	20 27 31.0	-03 35 27	3,2	0.20	0.15	III		WSM				
2029-018	20 29 51.3	-01 48 20	3,2	0.30	0.14	IIIB		4C			4C-1.53	
2034+039	20 34 24.3	03 59 31	3,2	0.24	0.13	III		WSM			4C04.70	
2037-029	20 37 32.8	-02 58 24	3,2	0.34	0.24	G	18.5	WSM	NOTE KK	.1920	4C-3.72	
2038-013	20 38 38.6	-01 22 25	3,2	0.25	0.13	III		WSM			4C-1.54	
2044-027	20 44 34.2	-02 47 26	3,2	1.46	0.83	Q	20.0	WSM	NOTE C		4C-2.80	
2047+039	20 47 36.0	03 56 35	3,2	0.57	0.63	Q	18.5	WSM	NOTE JJ			RAD VAR
2048-032	20 48 02.2	-03 17 14	3,2	0.37	0.25	IIIB		WSM				
2049+000	20 49 31.9	00 01 47	3,2	0.15	0.12	IIIS	20.0	4C	NOTE Z		4C-0.76	
2052+005	20 52 16.4	00 30 24	3,2	0.46	0.26	G	19.5	WSM	NOTE C			
2054+000	20 54 48.2	00 00 03	3,2	0.24	0.14	III		PS				
2056+028	20 56 35.7	02 52 38	3,2	0.42	0.25	IIIB		WSM				
2057-003	20 57 14.2	-00 20 08	3,2	0.27	0.11	III		4C			4C-0.77	
2058-037	20 58 18.7	-03 47 08	3,4	0.17	0.13	III		PS				
2058+019	20 58 39.2	01 54 46	3,2	0.32	0.18	III		WSM			4C01.64	
2059+034	20 59 08.1	03 29 41	3,2	0.50	0.46	Q	18M	WSM	NOTE H	1.013		RAD VAR
2102+009	21 02 10.4	00 56 24	3,4	0.16	0.17	Q	19.5	PS	NOTE Z			
2108+039	21 08 39.3	03 58 41	3,2	0.42	0.19	IIIB		WSM			4C03.50	
2110-017	21 10 12.1	-01 46 20	3,2	0.33	0.18	Q?	19.5	WSM	NOTE H		4C-1.55	
2110+023	21 10 50.2	02 18 11	3,2	0.39	0.22	III		WSM				RAD VAR
2111+015	21 11 48.8	01 31 44	3,4	0.10	0.09	III						
2113+035	21 13 10.8	03 30 05	3,4	0.28	0.14	III		PS				
2113+012	21 13 17.2	01 16 44	3,4	0.19	0.12	III						
2114+022	21 14 19.5	02 13 03	3,4	0.20	0.23	III						
2116-033	21 16 05.7	-03 22 57	3,2	0.30	0.20	G	19.0	PS	NOTE Z			
2117+025	21 17 55.9	02 33 53	3,4	0.22	0.16	E	15.5		NOTE Z			
2121-014	21 21 04.5	-01 25 28	3,2	0.64	0.32	IIIB		WSM				
2121+028	21 21 11.8	02 51 39	3,2	0.36	0.23	G	19.0	WSM	NOTE Z			
2122-022	21 22 19.6	-02 13 02	3,4	0.20	0.10	IIIB						
2122+020	21 22 33.0	02 02 55	3,4	0.20	0.09	III						

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
2123+007	21 23 12.8	00 42 57	1,2	0.38	0.20	DB	17.5	WSM	NOTE K		4C00.79	
2123-015	21 23 58.4	-01 32 38	3,2	0.33	0.29	III		WSM				
2124+030	21 24 51.9	03 05 52	3,4	0.25	0.14	III		PS				
2125+024	21 25 36.9	02 25 32	3,4	0.29	0.19	Q?		PS				
2126+010	21 26 17.6	01 01 40	3,2	0.29	0.19	III		WSM				
2127-003	21 27 05.2	-00 20 36	3,4	0.30	0.16	III		PS				
2127-012	21 27 29.1	-01 15 49	1,2	0.21	0.13	III						
2127+029	21 27 29.7	02 54 56	3,4	0.23	0.14	E	17.0		NOTE Z			
2131-021	21 31 35.1	-02 06 40	3,2	2.31	2.67	Q	19M	WSM	NOTE H	0.557	4C-2.81	RAD VAR OPT VAR
2133+010	21 33 19.6	01 04 48	3,2	0.55	0.35	Q	20M	WSM	NOTE C		4C01.66	
2134+004	21 34 05.2	00 28 26	3,2	8.44	9.96	Q	17M	WSM	NOTE LL	1.94		RAD VAR
2136-034	21 36 05.3	-03 25 43	3,4	0.21	0.15	III		PS				
2136+021	21 36 21.2	02 06 39	3,2	0.27	0.17	III		WSM				
2139+028	21 39 40.0	02 48 42	3,2	0.59	0.37	IIIB		WSM			4C02.53	
2141-016	21 41 02.4	-01 36 13	3,2	0.24	0.12	Q	19.5	4C	NOTE W		4C-1.56	
2143-007	21 43 38.8	-00 43 42	3,4	0.23	0.09	III						
2145+023	21 45 29.0	02 19 30	3,4	0.25	0.11	III		PS				
2146-016	21 46 08.7	-01 36 33	3,4	0.39	0.24	E	18.0	PS	NOTE Z			
2147+031	21 47 09.1	03 09 23	3,4	0.20	0.21	G	20.0		NOTE Z			
2148-019	21 48 06.5	-01 56 48	3,4	0.26	0.14	DB		PS				
2150-031	21 50 01.4	-03 08 47	3,2	0.33	0.21	G	19.6	WSM	NOTE D		4C-3.75	
2151+035	21 51 52.6	03 32 18	3,4	0.27	0.15	IIIB		PS				
2152+017	21 52 00.6	01 44 12	3,4	0.25	0.15	III		PS				
2152+022	21 52 33.8	02 12 52	3,2	0.20	0.09	IIIB		PKS			4C01.67	
2152-041	21 52 50.0	-04 09 42	3,4	0.28	0.16	E	16.5		NOTE Z			OA
2153-010	21 53 03.0	-01 01 57	3,4	0.33	0.19	III		PS				
2153-008	21 53 41.0	-00 51 21	3,4	0.36	0.49	IIIB		PS				
2154-016	21 54 14.4	-01 39 56	3,2	0.78	0.38	IIIB		WSM			4C-1.57	
2154+034	21 54 51.3	03 26 08	3,2	0.24	0.13	III		4C			4C03.52	NOTE 8
2156-043	21 56 47.0	-04 23 39	3,2	0.42	0.31	III		PKS				OA
2157-013	21 57 00.2	-01 20 26	3,4	0.27	0.21	Q	18.0	PS	NOTE Z			NOTE 7
2200+006	22 00 11.0	00 41 20	3,2	0.20	0.09	III		4C			4C00.80	
2201+018	22 01 15.4	01 50 02	3,2	0.27	0.15	III		4C			4C01.68	
2201-006	22 01 24.8	-00 36 07	1,2	0.37	0.18	III		WSM			4C-0.79	
2202+031	22 02 33.8	03 06 44	3,2	0.21	0.18	IIIB						

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
2202-003	22 02 39.7	-00 19 05	3,2	0.24	0.17	III		WSM			4C-0.80	
2204+021	22 04 12.8	02 06 59	3,2	0.20	0.10	II						
2207+020	22 07 00.2	02 03 56	3,2	0.47	0.25	Q?	19.5	WSM	NOTE J		4C02.54	
2210+016	22 10 05.1	01 37 59	3,4	1.76	1.01	IIIB		WSM			4C01.69	
2211-035	22 11 58.3	-03 33 02	3,2	0.43	0.21	IIIB		WSM			4C-3.77	
2214-035	22 14 38.7	-03 35 00	3,2	0.30	0.18	IIIB		WSM			4C-3.78	
2215-027	22 15 10.8	-02 47 39	3,4	0.35	0.24	IIIB		WSM				RAD VAR
2215+020	22 15 15.6	02 05 09	3,2	0.65	0.63	IIIB		WSM				
2215-000	22 15 56.2	-00 02 42	3,2	0.31	0.17	G	18.5	WSM	NOTE N		4C-0.81	
2216-038	22 16 16.4	-03 50 41	3,2	2.21	3.63	Q	16.4	WSM	NOTE F	0.901	4C-3.79	RAD VAR
2217-011	22 17 12.7	-01 06 34	3,2	0.35	0.28	IIIB		WSM				
2217+018	22 17 58.0	01 49 47	3,2	0.47	0.27	Q?	19.5	WSM	NOTE C		4C01.70	
2219-030	22 19 46.9	-03 05 07	3,2	0.77	0.46	IIIB		WSM			4C-3.80	
2221-023	22 21 15.9	-02 21 49	3,2	3.46	2.12	N	17M	WSM	NOTE V	.0568	3C445	
2222+040	22 22 08.4	04 02 24	3,2	0.29	0.14	III						OA
2224-024	22 24 05.5	-02 25 00	3,2	0.20	0.11	III		4C			4C-2.84	
2224+006	22 24 13.1	00 36 52	3,2	0.52	0.49	IIIB		WSM			4C00.81	
2225-019	22 25 40.9	-01 58 43	3,2	0.30	0.18	III		4C			4C-2.85	
2227+009	22 27 18.4	00 59 34	3,4	0.20	0.20	III						
2229+029	22 29 54.1	02 55 49	3,2	0.26	0.15	IIIB		WSM				
2232+001	22 32 57.8	00 07 07	3,2	0.13	0.08	III						
2236-008	22 36 27.1	-00 53 17	3,2	0.16	0.10	G?						
2238-011	22 38 23.1	-01 09 17	3,2	0.21	0.10	IIIB		4C			4C-1.58	
2241+013	22 41 16.8	01 20 35	3,2	0.27	0.17	III		4C			4C01.72	
2242-019	22 42 17.8	-01 58 19	3,2	0.20	0.13	G	20.0		NOTE Z			
2242+031	22 42 55.8	03 08 27	3,2	0.33	0.32	Q	19.0	PS	NOTE Z			
2243-032	22 43 36.4	-03 16 26	3,2	0.75	0.50	G	19M	WSM	NOTE R	0.303	4C-3.81	
2244-002	22 44 56.2	-00 15 44	3,2	0.39	0.35	Q?	18.5	WSM	NOTE N			RAD VAR
2245+029	22 45 26.0	02 54 52	3,2	0.73	0.61	IIIS	20.0	WSM	NOTE C			RAD VAR
2245-022	22 45 26.9	-02 13 30	3,2	0.39	0.24	IIIB		WSM				
2250+034	22 50 10.8	03 28 32	3,2	0.26	0.15	IIIB		WSM			4C03.55	
2250+003	22 50 22.2	00 21 50	3,2	0.53	0.33	G	20.0	WSM	NOTE C		4C00.83	
2250+023	22 50 48.1	02 20 21	3,2	0.31	0.28	III		WSM				
2251+006	22 51 30.9	00 38 18	3,2	0.42	0.33	IIIB		WSM				RAD VAR
2252+021	22 52 21.4	02 09 29	3,2	0.29	0.18	III		WSM				

Table 1 (*Continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PARKES SOURCE NUMBER	POSITION (1950) R.A. H M S	DEC. D M S	RUN	2700 FLUX DEN. (JY)	5000 FLUX DEN. (JY)	IDENT. OR FIELD CLASS	MAG	ORIG. SURVEY	FINDING CHART*	RED-SHIFT	3C OR 4C	REMARKS*
2254+024	22 54 44.6	02 27 15	3,4	0.41	0.49	Q	18M	WSM	NOTE CC	2.09		RAD VAR
2256+017	22 56 24.6	01 47 34	3,2	0.34	0.29	Q	19M	WSM	NOTE J	2.663		
2258+033	22 58 09.4	03 21 09	3,6	0.61	0.41	Q	20.0		NOTE Z			NOTE 11
2258-022	22 58 33.9	-02 14 12	3,4	0.28	0.27	IIIB		PS				
2300-013	23 00 16.6	-01 20 40	3,2	0.16	0.12	III		WSM				
2302-025	23 02 25.2	-02 35 09	3,2	0.23	0.13	IIIB		WSM			4C-2.87	
2303-008	23 03 11.7	-00 52 29	3,4	0.37	0.25	G	18.5	WSM	NOTE W		4C-1.59	
2304+006	23 04 09.3	00 40 45	3,2	0.34	0.16	III		WSM			4C00.84	
2304+038	23 04 53.6	03 50 11	3,2	0.31	0.18	E	18.0	4C	NOTE NN	.1540	4C03.56	
2305+022	23 05 43.2	02 12 41	3,2	0.35	0.19	III		WSM			4C02.57	
2305+033	23 05 53.0	03 20 43	1,2	0.28	0.14	IIIB		WSM				
2308+017	23 08 25.9	01 46 19	1,2	0.23	0.09	III		4C			4C01.73	
2309-014	23 09 48.6	-01 25 46	3,4	0.22	0.23	III						
2313+021	23 13 21.4	02 08 04	3,4	0.20	0.13	Q	18.0		NOTE Z			
2313+012	23 13 43.7	01 12 31	3,2	0.62	0.30	G	19.0	WSM	NOTE P			
2314+038	23 14 02.3	03 48 56	3,4	2.49	1.29	N	18.7	WSM	NOTE OO	.2205	3C459	
2318+026	23 18 13.5	02 40 30	3,2	0.39	0.20	Q	19.0	WSM	NOTE K	1.968	4C02.58	
2320-021	23 20 30.6	-02 07 16	3,2	0.38	0.32	Q	19.5	WSM	NOTE H			
2320+008	23 20 46.6	00 53 27	3,4	0.23	0.14	III						
2320-035	23 20 57.5	-03 33 33	3,2	0.89	0.80	Q	18.6	WSM	NOTE J	1.410		RAD VAR
2322-040	23 22 36.0	-04 01 12	3,4	0.91	0.50	III		PS				OA RAD VAR
2323-038	23 23 18.6	-03 52 48	3,2	0.28	0.15	III		WSM				
2323+009	23 23 52.6	00 55 37	3,4	0.24	0.18	III						
2324-023	23 24 19.9	-02 18 47	3,2	1.57	0.99	E	18M	WSM	NOTE F			
2325-029	23 25 13.3	-02 55 45	3,4	0.23	0.14	Q	19.5		NOTE Z			
2325-016	23 25 14.2	-01 37 04	3,4	0.18	0.09	IIIB						
2330+005	23 30 40.2	00 32 38	3,2	0.19	0.13	G	18.0	4C	NOTE Z			
2330-017	23 30 43.1	-01 47 33	3,4	0.23	0.29	Q	19.0	PS	NOTE Z			OPT VAR
2330+015	23 30 44.0	01 33 50	3,2	0.29	0.14	III					4C01.75	
2331-022	23 31 22.3	-02 12 21	3,2	0.22	0.09	III		4C			4C-2.88	
2331+009	23 31 35.3	00 55 15	3,4	0.20	0.09	Q	18.5		NOTE Z			
2332-017	23 32 46.2	-01 47 48	3,2	0.56	0.57	Q	18.5	WSM	NOTE H	1.185		RAD VAR
2335-027	23 35 23.2	-02 47 35	3,2	0.63	0.59	Q	19.2	WSM	NOTE H	1.072		
2335+031	23 35 34.4	03 10 10	3,2	0.93	0.56	IIIS		WSM	NOTE C		4C03.59	
2338-001	23 38 26.2	-00 11 56	3,2	0.37	0.22	DB	17.2	WSM	NOTE D		4C-0.83	

Table 1 (*Continued*)

(1) PARKES SOURCE NUMBER	(2) POSITION (1950) R.A. H M S	DEC. D M S	(3) RUN	(4) 2700 FLUX DEN. (JY)	(5) 5000 FLUX DEN. (JY)	(6) IDENT. OR FIELD CLASS	(7) MAG	(8) ORIG. SURVEY	(9) FINDING CHART*	(10) RED-SHIFT	(11) 3C OR 4C	(12) REMARKS*
2338+000	23 38 33.6	00 01 50	3,2	0.37	0.31	E	19M	WSM	NOTE D			
2338+030	23 38 56.8	03 00 48	3,2	0.44	0.19	G	20M	WSM	NOTE D		4C03.60	
2340+038	23 40 08.0	03 51 37	3,4	0.28	0.15	Q	18.0	PS	NOTE Z			
2340-036	23 40 22.6	-03 39 11	3,2	0.28	0.22	Q	17M	WSM	NOTE H	0.892		
2342+023	23 42 01.9	02 19 50	3,4	0.18	0.11	III						
2343+017	23 43 35.9	01 42 12	3,4	0.21	0.11	G?						
2345+039	23 45 09.6	03 54 49	3,4	0.31	0.13	IIIB						NOTE 11
2347-026	23 47 51.5	-02 41 24	3,2	0.96	0.47	IIIB		WSM			4C-2.90	RAD VAR
2348-010	23 48 29.0	-01 00 59	3,4	0.22	0.14	IIIB						
2349-014	23 49 22.5	-01 25 59	3,2	1.09	0.68	N	17.0	WSM	NOTE EE	.1740	4C-1.61	
2350-018	23 50 15.4	-01 53 02	3,4	0.27	0.14	G	19.5		NOTE Z			NOTE 11
2351-006	23 51 35.3	-00 36 28	3,2	0.43	0.36	Q	18.0	WSM	NOTE J	0.463		RAD VAR
2354-027	23 54 32.0	-02 43 19	3,2	0.43	0.25	IIIB		WSM			4C-2.91	
2354-021	23 54 51.2	-02 09 01	3,2	0.34	0.28	IIIB		SA				
2355-010	23 55 51.2	-01 01 27	3,2	0.49	0.26	IIIB		WSM			4C-0.85	
2356+033	23 56 09.3	03 20 15	3,2	0.20	0.13	IIIB		SA			4C03.61	
2357+004	23 57 25.4	00 25 33	3,2	0.28	0.18	DB	16.0	SA	NOTE K	.0839		

Number of sources is 822.

* References to identifications and finding charts (NOTES A–OO) and notes on individual sources (NOTES 1–18) are as follows:

NOTE A Sandage *et al.* (1965).
B Condon *et al.* (1976).
C McEwan *et al.* (1975).
D Merkelijn and Wall (1970).
E Savage and Wall (1976).
F Bolton and Ekers (1966*b*).
G Wills (1967).
H Bolton and Wall (1970).
I Browne and McEwan (1973).
J Browne and McEwan (1972).
K Clarke *et al.* (1966).
L Bolton *et al.* (1968*b*).
M Shimmins *et al.* (1975).
N Bolton *et al.* (1981).
O Mills (1960).
P Merkelijn (1969).
Q Mills *et al.* (1958).
R Bolton and Ekers (1967).
S Bolton (1960).
T Strittmatter (1974).
V Matthews *et al.* (1964).
W Wall (1971).
X Johnson (1974).
Y Bolton and Ekers (1966*a*).
Z Savage *et al.* (1982).
NOTE AA Wyndham (1965).
BB Wills *et al.* (1973).
CC Bolton *et al.* (1968*a*).
DD Browne *et al.* (1973).
EE Bolton and Ekers (1966*c*).
GG Hazard *et al.* (1964).
HH Hazard *et al.* (1963).
II Hoskins *et al.* (1972).
JJ Peterson and Bolton (1973).
KK Wills and Wills (1974).
LL Shimmins *et al.* (1974).
NN Ghigo (1977).
OO Longair (1965).

NOTE 1. 0101−025: The right ascension given in WSM is in error by 30 s.

2. 0131−001: The identification suggested by Bolton and Ekers (1967) is incorrect.

3. 0320+015: The galaxy identification suggested by McEwan *et al.* (1975) appears stellar on the Palomar Sky Survey print. An AAO spectrum confirms that it is an M4 star. (This spectrum and later AAO spectra were obtained with the image dissector scanner on 1981 February 8 and 9 by the authors in collaboration with M. G. Smith.)

4. 0422+004: The continuous AAO spectrum suggests this is a BL Lac object and is supported by a similar spectrum obtained in 1968 with the Carnegie image tube spectrograph on the 120 inch Lick telescope.

5. 0443−004: The identification suggested by Bolton and Wall (1970) is incorrect.

6. 0509−038, 1446−005: AAO spectra show that both these identifications are stars, K5 and K1 respectively.

7. 0928+008, 1657+022, 2157−013: Visible on WSM survey records but a factor of two lower in flux density at that epoch.

8. 1033−020, 2154+034: These identifications suggested by Wall (1971) are incorrect.

9. 1044−008: Accidentally omitted from 5000 MHz measurements. A UKST objective prism plate shows an $18^{m}\cdot5$ emission-line quasar $1'\cdot5$ arc south of the radio position.

NOTE 10. 1207−013, 1249+035: The finding charts for these objects given in Merkelijn and Wall (1970) are interchanged.

11. 1222+039, 2258+033, 2345+039, 2350−018: These four steep-spectrum sources were not easily found on the WSM survey records.

12. 1247+025: The galaxy identification suggested by McEwan *et al.* (1975) appears stellar and blue on UKST IIIa-J and IIIa-F plates.

13. 1337−033: The Parkes position differs slightly from that given by McEwan *et al.* (1975) and is closer to the neutral stellar object pointed out but not identified by them. A continuous AAO spectrum suggests this is a BL Lac object.

14. 1418−025, 1601−017: These identifications suggested by Merkelijn and Wall (1970) are incorrect.

15. 1422−031: The identification suggested by Bolton *et al.* (1981) is incorrect; an AAO spectrum confirms the object as an M1 star.

16. 1425−011: The present position agrees with that of McEwan *et al.* (1975); this excludes the identifications of Bolton and Ekers (1966*b*) and Wyndham (1965).

17. 1538+010: The Parkes position differs slightly from that of McEwan *et al.* (1975).

18. 1602+014: The galaxy suggested by McEwan *et al.* (1975) is not visible on a UKST IIIa-F plate.

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