

## The Parkes 2700 MHz Survey (Ninth Part) Supplementary Catalogue for the Declination Zone $-45^\circ$ to $-65^\circ$

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### *Abstract*

A catalogue of 166 radio sources is presented, covering an area of 0.63 sr with right ascensions  $00^{\text{h}}$  to  $03^{\text{h}}$ ,  $04^{\text{h}}$  to  $08^{\text{h}}30^{\text{m}}$ ,  $17^{\text{h}}30^{\text{m}}$  to  $19^{\text{h}}$  and  $20^{\text{h}}$  to  $23^{\text{h}}$  between declinations  $-45^\circ$  and  $-65^\circ$ . The regions omitted are either close to the galactic plane ( $08^{\text{h}}30^{\text{m}}$  to  $17^{\text{h}}30^{\text{m}}$ ) or are covered in the third part of the Parkes 2700 MHz survey. The catalogue was compiled from a 'fast' finding survey at 2700 MHz aimed at detecting sources stronger than 0.5 Jy. Subsequent measurements at 2700 and 5009 MHz of flux density and position were made for all sources which were not in the Parkes 408 MHz catalogue and for 42 sources in the 408 MHz catalogue for which only data of low accuracy were available.

### **Introduction**

This is the second section (see also Bolton *et al.* 1975, pp. 1–32 of this Supplement) of the Parkes 2700 MHz survey to be limited to sources stronger than 0.5 Jy. The aim of the observations reported in these supplementary catalogues is to survey the whole sky visible to the Parkes 64 m telescope, excluding the region close to the galactic plane, to a source density of  $\sim 160 \text{ sr}^{-1}$ . The present surveyed region covers an area of 0.63 sr, which is half of the area between declinations  $-45^\circ$  and  $-65^\circ$ . Omitted from the survey were the region between right ascensions  $08^{\text{h}}30^{\text{m}}$  and  $17^{\text{h}}30^{\text{m}}$ , which is close to the galactic plane, and the regions between right ascensions  $03^{\text{h}}$  and  $04^{\text{h}}$ ,  $19^{\text{h}}$  and  $20^{\text{h}}$ , and  $23^{\text{h}}$  and  $00^{\text{h}}$ , which had already been surveyed to a higher source density (Shimmins 1971).

### **Equipment and On-line Analysis**

A full description of equipment, method of observation and on-line computer analysis of the 'fast' survey are given in the seventh part of the survey (Bolton *et al.* 1975). Briefly, the 2700 MHz correlation receiver and dual-feed system was used as in previous surveys. The output of the 2700 MHz receiver represents the difference in signals received by an on-axis beam  $7'.9$  arc between half-power points and a slightly broader beam displaced by  $18'.5$  arc off axis. The off-axis beam was maintained at position angle  $270^\circ$  (i.e. offset in right ascension) and the area was surveyed with scans in declination at a rate of  $10^\circ \text{ min}^{-1}$ . The separation between adjacent scans was 35 s in right ascension ( $6'.2$  arc on the sky at declination  $-45^\circ$  and  $3'.7$  arc at declination  $-65^\circ$ ).

The receiver output was recorded on a strip chart and also digitally by means of a PDP-9 computer. At the end of each scan, the computer provided a list of approximate positions and flux densities of all sources detected above a specified level of 0.35 Jy. Because of the low signal-to-noise ratio, the detection technique failed for a few sources near the detection limit, and for the second source of close pairs. All such sources were detected in a subsequent comparison of the analogue record and computer output, and they were measured manually from the analogue record, thus ensuring the completeness of the survey.

### Positions and Flux Densities

The survey was made in December 1972. From the analogue and computer records, a list was compiled of all sources which gave deflections on a single scan estimated to be greater than 0.35 Jy. Sources common to the Parkes 408 MHz catalogue were eliminated from the list, with the exception of 42 sources for which data at 2700 and 5009 MHz were either of low accuracy or did not exist. For the remainder, positions and flux densities were measured at both frequencies. The epochs of these observations are:

Run 1, 2700 MHz, January 1973;                      Run 2, 5009 MHz, March 1973.

The measurements were made from forward-reverse scan pairs in right ascension and declination, as described in previous papers (e.g. Bolton and Shimmins 1973). The flux densities were measured by comparison with a 1 K noise signal injected at the input of the receiver. The flux density value of the noise signal was determined from observations of Hydra A (assumed peak flux density 23.50 Jy at 2700 MHz and 13.05 Jy at 5009 MHz). The errors are estimated to be the same as in previous sections of the survey, i.e.  $\pm 0.02$  Jy due to noise and confusion and 3% due to uncertainty in the scale factor.

Telescope pointing corrections applied to the apparent positions were derived from position calibrator sources measured in the course of the observations. Unfortunately few of these sources are within the surveyed region, and further corrections were made by comparing the positions with those given for eight sources by Hunstead (1972). The 2700 and 5009 MHz positions were averaged, except for a few cases where the 5009 MHz position was clearly superior because of confusion in the 2700 MHz observations. The r.m.s. errors in the final positions are probably 12" arc in each coordinate, but this estimate is somewhat uncertain owing to the small number of relevant calibration sources.

### Catalogue

Table 1 (at the end of the paper) is the supplementary catalogue for declination zone  $-45^\circ$  to  $-65^\circ$ . Column 1 contains the source number, the seven-digit numbers indicating sources found in the present 2700 MHz survey and the six-digit numbers indicating sources in the Parkes 408 MHz catalogue. Columns 2 and 3 contain the equatorial coordinates and columns 4 and 5 the galactic coordinates of the source. Annual precession is given in columns 6 and 7, run numbers referring to the epochs of observation at 2700 and 5009 MHz in column 8 and the flux densities at these frequencies in columns 9 and 10.

Identification and optical magnitude for the few sources where these are known are given in column 11. Abbreviations used are: D, DB and S0, galaxies of the corresponding optical type; G, a galaxy too faint to classify; Q, a quasi-stellar object; IIIA, stars only, with obscuration probably present.

Column 12 contains additional remarks, including alternative source numbers from the MSH catalogue (Mills *et al.* 1960, 1961), the catalogue of McGee *et al.* (1972) (prefixed MC) and the Index Catalogue (prefixed IC). Abbreviations used in this column are: CONF, confused; EXT, extended, sometimes followed by the direction of extension (RA, right ascension or DEC, declination); OA, a source just outside the nominal area of the catalogue; RAD VAR, a radio variable; Z, redshift. For most of the extended sources an estimate is given of the factor (A or B) by which the peak flux density given in column 9 or 10 respectively has to be increased to give the integrated flux density.

### Acknowledgments

We thank Mr P. W. Butler for his assistance in making the observations, Mrs Jenny Trett for assistance with the preparation of the catalogue, and the telescope operators for their diligence and skill in driving the telescope for the 'fast' survey.

### References

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 Mills, B. Y., Slee, O. B., and Hill, E. R. (1960). *Aust. J. Phys.* **13**, 676.  
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TABLE 1

## 2700 MHZ SURVEY - SUPPLEMENT FOR DECLINATION ZONE -45 TO -65 DEG

PAGE 1

(12)

Remarks

(11)

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Parkes source number	Position (1950)			Galactic coordinates		Annual precession		Run	2700 flux den. (Jy)	5000 flux den. (Jy)	Identifi- cation	Remarks
	R.A. h m s	Dec. ° ' "	l ° ' "	b ° ' "	R.A. ° ' "	Dec. " "						
0000-566	00 00 17.0	-56 37 56	316.2	-59.5	3.07	20.0	1,2	0.60	0.32			
0001-531	00 01 42.1	-53 11 18	318.5	-62.7	3.06	20.0	1,2	0.52	0.28			
0013-63	00 13 37.5	-63 26 42	309.6	-53.5	2.91	20.0	1,2	0.82	0.45			
0016-515	00 16 21.0	-51 31 30	315.1	-65.1	2.95	20.0	1,2	0.55	0.27		00-61	
0022-60	00 22 52.0	-60 45 03	308.7	-56.3	2.83	19.9	1,2	0.74	0.37			
0024-495	00 24 14.9	-49 35 27	313.4	-67.3	2.91	19.9	1,2	0.66	0.34			
0028-505	00 28 13.1	-50 35 12	311.3	-66.4	2.87	19.9	1,2	0.60	0.28			
0036-62	00 36 30.4	-62 47 33	305.5	-54.5	2.66	19.8	1,2	0.80	0.46			
0037-593	00 37 51.0	-59 20 19	305.7	-58.0	2.70	19.8	1,2	0.53	0.32			
0043-63	00 43 55.0	-63 50 22	303.9	-53.5	2.55	19.7	1,2	0.62	0.26			
0044-560	00 44 19.1	-56 04 27	304.3	-61.3	2.69	19.7	1,2	0.43	0.23			
0046-585	00 46 34.0	-58 32 27	303.6	-58.8	2.63	19.6	1,2	0.28	0.15			
0047-646	00 47 00.9	-64 41 24	303.3	-52.7	2.50	19.6	1,2	0.54	0.34			
0047-579	00 47 46.7	-57 54 36	303.3	-59.5	2.63	19.6	1,2	1.96	2.19			
0058-507	00 58 34.1	-50 47 40	299.2	-66.5	2.66	19.4	1,2	0.61	0.30		00-54	
0101-649	01 01 33.7	-64 55 00	300.8	-52.4	2.31	19.3	1,2	0.40	0.27		EXT IN DEC. B=1.1	
0119-63	01 19 52.9	-63 24 46	297.2	-53.6	2.16	18.8	1,2	0.73	0.39		01-61	
0126-53	01 26 31.8	-53 10 43	290.4	-63.3	2.41	18.6	1,2	0.56	0.34		01-54	
0129-51	01 29 13.6	-51 17 02	288.1	-64.9	2.44	18.5	1,2	0.61	0.27		01-55	
0130-620	01 30 39.7	-62 02 00	294.6	-54.6	2.10	18.5	1,2	0.59	0.30			
0131-522	01 31 05.0	-52 15 20	288.3	-63.9	2.40	18.5	1,2	1.09	1.18			
0141-457	01 41 22.8	-45 44 54	276.9	-68.9	2.49	18.1	1,2	0.67	0.38			
0147-579	01 47 07.8	-57 59 13	288.6	-57.7	2.11	17.9	1,2	0.61	0.32			
0150-559	01 50 30.7	-55 55 00	286.0	-59.4	2.16	17.8	1,2	0.42	0.18		01-58	
0155-549	01 55 04.0	-54 54 12	283.9	-60.0	2.16	17.6	1,2	0.48	0.47			
0158-484	01 58 04.7	-48 28 57	275.2	-65.0	2.33	17.4	1,2	0.78	0.37			
0203-552	02 03 02.0	-55 17 20	282.4	-59.0	2.08	17.2	1,2	0.40	0.26			
0208-512	02 08 58.0	-51 14 59	276.1	-61.8	2.18	16.9	1,2	3.56	3.21			
0209-621	02 09 59.9	-62 10 20	287.5	-52.7	1.71	16.9	1,2	0.54	0.31			
0211-479	02 11 16.5	-47 57 50	270.6	-63.9	2.27	16.8	1,2	0.60	0.21		EXT IN DEC. A=1.2 B=2.2	
0212-615	02 12 34.4	-61 31 52	286.6	-53.1	1.72	16.8	1,2	0.36	0.27			
0214-522	02 14 19.9	-52 14 06	276.1	-60.5	2.12	16.7	1,2	0.70	0.55			
0214-48	02 14 55.2	-48 02 50	269.8	-63.4	2.25	16.7	1,2	1.33	0.79		02-43. EXT IN DEC. B=1.2	
0215-575	02 15 35.3	-57 31 50	282.1	-56.2	1.90	16.6	1,2	0.53	0.31		02-51	
0216-475	02 16 22.0	-47 31 50	268.6	-63.6	2.25	16.6	1,2	0.50	0.32			

TABLE 1

2700 MHZ SURVEY - SUPPLEMENT FOR DECLINATION ZONE -45 TO -65 DEG

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Parkes source number	Position (1950)		Galactic coordinates		Annual precession		Run	2700 flux den. (Jy)	5000 flux den. (Jy)	Identification	Remarks
	R.A. h m s	Dec. ° ' "	l ° ' "	b ° ' "	R.A. ° ' "	Dec. ° ' "					
0227-527	02 27 46.5	-52 44 49	273.9	-58.7	2.02	16.0	1,2	0.98	0.63		
0230-516	02 30 34.5	-51 40 40	271.8	-59.1	2.04	15.9	1,2	0.54	0.31		
0241-51	02 42 07.0	-51 25 20	269.2	-57.9	1.98	15.2	1,2	0.86	0.48		02-53. EXT IN DEC. B=1.3
0244-470	02 44 14.8	-47 03 56	261.8	-60.1	2.13	15.1	1,2	0.73	0.59		
0248-600	02 48 18.5	-60 01 30	279.4	-51.5	1.52	14.9	1,2	0.48	0.27		
0248-561	02 48 22.7	-56 08 35	274.4	-54.2	1.74	14.9	1,2	0.62	0.37		
0252-549	02 52 02.8	-54 54 03	272.5	-54.6	1.77	14.6	1,2	0.76	0.96		
0254-491	02 54 14.3	-49 10 46	263.7	-57.5	2.01	14.5	1,2	0.36	0.15		
0254-484	02 54 20.1	-48 27 52	262.5	-57.9	2.03	14.5	1,2	0.31	0.16		
0257-510	02 57 04.0	-51 04 00	266.2	-56.2	1.92	14.3	1,2	0.45	0.39		
0400-643	04 00 03.2	-64 21 03	277.4	-42.3	0.66	10.0	1,2	0.42	0.26		
0401-506	04 01 50.1	-50 38 37	259.2	-46.9	1.65	9.9	1,2	0.52	0.30		
0402-477	04 02 18.7	-47 46 46	255.0	-47.5	1.79	9.8	1,2	0.57	0.41		EXT IN DEC. B=1.1
0409-526	04 09 07.5	-52 40 26	261.6	-45.3	1.52	9.3	1,2	0.72	0.37		
0411-647	04 11 36.3	-64 43 53	277.1	-41.0	0.55	9.1	1,2	0.71	0.38		
0411-56	04 11 44.0	-56 08 15	266.2	-44.0	1.30	9.1	1,2	1.29	0.68		04-52
0419-580	04 19 46.8	-58 03 16	268.2	-42.4	1.13	8.5	1,2	0.54	0.32		
0420-62	04 20 19.0	-62 30 41	273.9	-41.0	0.74	8.4	1,2	1.68	0.84		04-63
0427-53	04 27 57.9	-53 56 00	262.5	-42.3	1.38	7.8	1,2	2.96	1.60	DB 13.2M	04-54. IC2082. Z=0.0392
0430-624	04 30 56.5	-62 24 44	273.2	-39.8	0.70	7.6	1,2	0.33	0.19		
0431-512	04 31 06.3	-51 15 32	258.8	-42.3	1.53	7.6	1,2	0.68	0.59		CONF AT 2700 MHZ
0435-587	04 35 53.4	-58 46 05	268.4	-40.2	1.01	7.2	1,2	0.39	0.24		
0437-454	04 37 33.7	-45 28 05	250.9	-41.7	1.80	7.0	1,2	1.22	1.37		
0447-527	04 47 23.9	-52 46 14	260.4	-39.6	1.40	6.2	1,2	0.64	0.35		
0452-515	04 52 24.4	-51 35 03	258.8	-39.0	1.46	5.8	1,2	0.43	0.35		
0454-46	04 54 27.5	-46 20 32	252.0	-38.8	1.73	5.6	1,2	2.36	2.04		04-412. RAD VAR
0503-608	05 03 26.2	-60 53 47	270.2	-36.4	0.74	4.9	1,2	0.42	0.65		
0506-61	05 06 08.1	-61 13 30	270.6	-36.0	0.70	4.7	1,2	1.89	2.05	Q	17.5M 05-61. RAD VAR
0506-502	05 06 09.2	-50 17 15	257.0	-36.8	1.51	4.6	1,2	0.47	0.28		
0507-627	05 07 21.7	-62 46 12	272.5	-35.7	0.54	4.5	1,2	0.69	0.33		
0514-459	05 14 18.5	-45 59 54	251.8	-35.3	1.72	4.0	1,2	1.29	1.03		
0517-56	05 17 27.4	-56 17 16	264.4	-35.0	1.10	3.7	1,2	0.77	0.44		
0521-483	05 21 59.0	-48 19 06	254.7	-34.2	1.59	3.3	1,2	0.61	0.42		
0522-611	05 22 01.0	-61 10 41	270.3	-34.1	0.67	3.3	1,2	0.71	0.67		
0523-570	05 23 48.1	-57 01 24	265.2	-34.1	1.04	3.1	1,2	0.73	0.51		

TABLE 1  
2700 MHZ SURVEY - SUPPLEMENT FOR DECLINATION ZONE -45 TO -65 DEG

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Parkes source number	Position (1950)		Galactic coordinates		Annual precession R.A. Dec. " "	Run	2700 flux den. (Jy)	5000 flux den. (Jy)	Identifi- cation	Remarks
	R.A. h m s	Dec. ° ' "	l °	b °						
0524-460	05 24 05.7	-46 00 25	252.0	-33.6	1.70	3.1	1.2	0.91	0.94	
0532-638	05 32 27.0	-63 49 45	273.3	-32.8	0.37	2.4	1.2	0.43	0.23	
0533-512	05 33 14.5	-51 14 56	258.4	-32.6	1.42	2.3	1.2	0.54	0.38	
0534-61	05 34 15.2	-61 23 43	270.4	-32.7	0.63	2.2	1.2	0.70	0.36	
0541-488	05 41 10.8	-48 51 38	255.7	-31.1	1.55	1.6	1.2	0.65	0.38	
0543-479	05 43 49.0	-47 58 01	254.8	-30.5	1.59	1.4	1.2	0.42	0.22	EXT IN RA. B=1.1
0550-569	05 50 48.9	-56 55 22	265.2	-30.5	1.02	0.8	1.2	0.48	0.29	
0551-461	05 51 49.0	-46 11 16	253.0	-28.9	1.68	0.7	1.2	0.83	0.56	
0602-64	06 02 24.8	-64 43 18	274.3	-29.5	0.24	-0.2	1.2	0.70	0.31	
0605-494	06 05 42.0	-49 28 48	257.1	-27.2	1.51	-0.5	1.2	0.61	0.39	MC94
0607-605	06 07 18.3	-60 31 00	269.6	-28.6	0.71	-0.7	1.2	0.34	0.45	PART OF 0607-60 AND 06-62
0609-606	06 09 12.5	-60 41 37	269.8	-28.4	0.69	-0.8	1.2	0.39	0.20	PART OF 0607-60 AND 06-62
0612-47	06 12 10.2	-47 26 15	255.2	-25.8	1.62	-1.1	1.2	0.74	0.43	06-43
0616-48	06 16 49.2	-48 43 24	256.8	-25.3	1.55	-1.5	1.2	0.99	0.44	06-44. EXT. A=1.2 B=1.4
0619-450	06 19 34.3	-45 03 04	253.0	-23.9	1.74	-1.7	1.2	0.81	0.56	06-45
0619-468	06 19 50.0	-46 50 30	254.9	-24.3	1.65	-1.8	1.2	0.43	0.56	06-46. EXT IN DEC OR DOUBLE
0621-595	06 21 11.1	-59 33 32	268.7	-26.8	0.81	-1.9	1.2	0.81	0.58	
0624-626	06 24 17.5	-62 38 34	272.2	-26.9	0.50	-2.1	1.2	0.45	0.23	
0625-53	06 25 18.0	-53 39 27	262.4	-25.1	1.27	-2.2	1.2	3.70	1.80	06-55
0625-545	06 25 46.2	-54 30 38	263.3	-25.2	1.21	-2.3	1.2	1.73	0.87	
0628-627	06 28 30.2	-62 46 10	272.4	-26.4	0.49	-2.5	1.2	0.37	0.44	
0641-458	06 41 50.7	-45 52 30	255.1	-20.4	1.72	-3.7	1.2	0.56	0.24	
0647-475	06 47 25.0	-47 30 59	257.0	-20.1	1.64	-4.1	1.2	1.14	0.62	
0649-557	06 49 22.0	-55 45 42	265.6	-22.3	1.15	-4.3	1.2	0.66	0.30	
0651-60	06 51 14.0	-60 18 30	270.4	-23.3	0.79	-4.5	1.2	0.82	0.45	06-63
0651-56	06 51 47.5	-56 38 57	266.6	-22.2	1.09	-4.5	1.2	0.93	0.55	06-57
0656-615	06 56 27.2	-61 35 18	271.9	-23.0	0.67	-4.9	1.2	0.45	0.35	
0700-47	07 00 45.0	-47 21 58	257.7	-17.9	1.67	-5.3	1.2	0.60	0.24	07-41
0718-633	07 18 38.3	-63 20 56	274.6	-21.1	0.56	-6.8	1.2	0.41	0.32	
0719-55	07 19 12.1	-55 19 35	266.6	-18.2	1.25	-6.8	1.2	1.22	0.69	07-53
0720-52	07 20 09.0	-52 50 50	264.3	-17.1	1.42	-6.9	1.2	0.53	0.32	07-54
0725-444	07 25 25.0	-44 29 01	256.8	-12.8	1.85	-7.3	1.2	0.45	0.35	0A
0729-52	07 29 51.5	-52 30 38	264.6	-15.6	1.46	-7.7	1.2	0.56	0.31	07-55. EXT IN DEC. B=1.1
0731-465	07 31 16.3	-46 33 53	259.2	-12.8	1.77	-7.8	1.2	0.83	0.76	
0737-594	07 37 54.7	-59 27 59	271.7	-17.5	1.01	-8.3	1.2	0.60	0.37	

TABLE 1  
2700 MHZ SURVEY - SUPPLEMENT FOR DECLINATION ZONE -45 TO -65 DEG

(1) Parkes source number	(2) Position (1950)		(3) Dec. ° ' "		(4) Galactic coordinates l o b		(5) Annual precession R.A. Dec. s "		(7) Run	(8) 2700 flux den. (Jy)	(9) 5000 flux den. (Jy)	(10) Identifi- cation	(11) Remarks
	R.A. h m s	Dec. ° ' "	l	b	R.A.	Dec.							
0740-524	07 40 32.0	-52 26 57	265.3	-14.1	1.50	-8.5	1.2	0.71	0.46				
0748-45	07 48 03.6	-45 28 54	259.6	-9.7	1.86	-9.1	1.2	1.01	0.60				07-413
0748-44	07 48 06.2	-44 04 46	258.3	-9.0	1.92	-9.1	1.2	1.17	0.67				07-412. OA
0809-492	08 09 40.4	-49 20 35	264.8	-8.6	1.76	-10.8	1.2	0.88	0.75				CONF AT 2700 MHZ
0809-499	08 09 57.7	-49 59 01	265.4	-8.9	1.73	-10.8	1.2	0.72	0.37				
0816-594	08 16 45.0	-59 27 36	274.1	-13.1	1.20	-11.3	1.2	0.55	0.28				
0819-569	08 19 48.0	-56 55 54	272.1	-11.4	1.39	-11.5	1.2	1.01	0.67				
0822-52	08 22 24.8	-52 47 22	268.9	-8.8	1.64	-11.7	1.2	0.48	0.23				
0823-500	08 23 57.0	-50 00 48	266.7	-7.0	1.78	-11.8	1.2	5.03	3.10				
1737-575	17 37 13.2	-57 35 45	334.7	-14.1	5.17	-1.9	1.2	1.17	0.60				
1737-590	17 37 54.7	-59 00 14	333.5	-14.9	5.29	-1.9	1.2	0.81	0.39				
1740-517	17 40 28.9	-51 43 20	340.2	-11.6	4.76	-1.6	1.2	4.60	2.95				
1741-532	17 41 13.3	-53 14 53	338.9	-12.5	4.86	-1.6	1.2	0.75	0.37				
1753-509	17 53 59.4	-50 58 18	341.9	-13.1	4.72	-0.5	1.2	0.37	0.24				
1758-494	17 58 19.0	-49 24 59	343.7	-13.0	4.63	-0.1	1.2	0.52	0.44				
1803-509	18 03 36.2	-50 54 00	342.7	-14.4	4.72	0.4	1.2	0.51	0.25				
1806-458	18 06 15.6	-45 53 14	347.5	-12.6	4.45	0.6	1.2	1.18	0.86				
1815-554	18 15 38.6	-55 22 36	339.2	-17.9	5.01	1.4	1.2	1.37	1.31				
1817-64	18 17 25.0	-64 00 05	330.7	-21.2	5.81	1.6	1.2	1.43	0.69				PART OF 18-61
1818-557	18 18 12.0	-55 43 14	339.0	-18.4	5.03	1.7	1.2	0.71	0.38				18-53
1821-58	18 21 22.3	-58 19 15	336.6	-19.7	5.23	1.9	1.2	0.70	0.35				
1823-455	18 23 30.8	-45 34 48	349.1	-15.2	4.43	2.1	1.2	0.56	0.47				
1830-589	18 30 03.2	-58 58 45	336.4	-21.0	5.28	2.7	1.2	0.48	0.29				18-62
1843-607	18 43 16.0	-60 44 10	335.0	-23.1	5.42	3.8	1.2	0.61	0.29				
1845-501	18 45 08.4	-50 08 42	346.0	-20.2	4.64	4.0	1.2	0.64	0.33				
1846-631	18 46 04.0	-63 09 37	332.6	-24.0	5.66	4.1	1.2	0.65	0.24				
1853-534	18 53 01.2	-53 29 04	343.0	-22.4	4.83	4.7	1.2	0.58	0.47				
1853-632	18 53 59.4	-63 17 07	332.7	-24.9	5.66	4.7	1.2	0.51	0.24				
2002-50	20 02 52.2	-50 20 14	348.7	-32.4	4.46	10.3	1.2	0.86	0.53				
2004-479	20 04 18.1	-47 59 35	351.5	-32.4	4.34	10.4	1.2	0.67	0.37				
2005-489	20 05 47.4	-48 58 45	350.4	-32.7	4.38	10.5	1.2	1.06	1.19				
2006-56	20 06 30.3	-56 35 30	341.3	-33.2	4.80	10.6	1.2	0.51	0.10				
2013-454	20 13 42.2	-45 26 01	354.7	-33.7	4.20	11.1	1.2	0.68	0.68				
2016-615	20 16 46.5	-61 34 16	335.2	-34.3	5.11	11.3	1.2	0.63	0.49				
2022-582	20 22 04.8	-58 15 48	339.2	-35.3	4.83	11.7	1.2	0.56	0.32				

20-52. EXT. A=1.4 B=3. Z=0.05

SO 16M

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TABLE 1  
2700 MHZ SURVEY - SUPPLEMENT FOR DECLINATION ZONE -45 TO -65 DEG

PAGE 5  
(12)

Remarks

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)

(12)

Parke  
source  
number

Position (1950)  
R.A. h m s  
Dec. ° ' "

Galactic  
coordinates  
l °  
b °

Annual  
precession  
R.A. s  
Dec. "

Run

2700 Flux den. (Jy)  
5000 Flux den. (Jy)

Identifi-  
cation

Remarks

2022-484	20 22 33.2	-48 29 47	351.2	-35.5	4.30	11.7	1,2	0.48	0.30		
2025-538	20 25 48.9	-53 49 06	344.6	-36.0	4.54	12.0	1,2	0.55	0.45		
2032-535	20 32 21.5	-53 31 40	344.9	-37.0	4.49	12.4	1,2	0.43	0.25		
2036-577	20 36 05.5	-57 45 48	339.6	-37.2	4.72	12.7	1,2	0.66	0.64		
2041-551	20 41 09.8	-55 06 36	342.8	-38.2	4.53	13.0	1,2	0.66	0.44		
2044-588	20 44 33.3	-58 52 44	338.0	-38.1	4.74	13.2	1,2	0.50	0.31		
2054-581	20 54 47.9	-58 08 10	338.6	-39.5	4.62	13.9	1,2	0.46	0.35		
2055-650	20 55 16.5	-65 01 26	330.0	-37.9	5.14	13.9	1,2	0.47	0.28		
2059-64	20 59 18.0	-64 08 43	330.9	-38.6	5.02	14.2	1,2	0.51	0.23		OA 20-62
2105-48	21 05 24.1	-48 58 24	350.3	-42.5	4.13	14.6	1,2	0.90	0.63		
2117-642	21 17 52.5	-64 17 15	329.9	-40.4	4.87	15.3	1,2	0.93	0.56		
2122-555	21 22 40.7	-55 34 05	340.7	-43.9	4.30	15.6	1,2	0.89	0.50		21-52
2123-463	21 23 13.7	-46 18 51	353.5	-45.8	3.95	15.6	1,2	0.85	0.68		
2126-485	21 26 51.5	-48 33 24	350.2	-46.1	4.01	15.8	1,2	0.42	0.20		
2130-53	21 30 46.0	-53 50 01	342.6	-45.5	4.18	16.0	1,2	0.78	0.34		21-54
2134-470	21 34 46.4	-47 00 07	352.1	-47.6	3.92	16.2	1,2	0.90	0.59		
2148-555	21 48 01.0	-55 34 45	339.1	-47.2	4.13	16.9	1,2	0.87	0.41		
2205-636	22 05 11.0	-63 40 34	327.3	-45.3	4.36	17.6	1,2	0.84	0.59		
2207-45	22 07 16.8	-45 57 35	351.7	-53.3	3.72	17.7	1,2	0.76	0.40		
2213-45	22 13 52.1	-45 36 46	351.7	-54.5	3.68	18.0	1,2	1.08	0.56		
2215-508	22 15 10.2	-50 53 44	343.2	-52.8	3.79	18.0	1,2	0.91	0.60		22-51. CLOSE TO 2220-50
2218-50	22 18 04.0	-50 33 20	343.4	-53.4	3.77	18.1	1,2	0.76	0.30		CLOSE TO 2218-50
2220-50	22 20 20.7	-50 32 33	343.2	-53.7	3.75	18.2	1,2	0.68	0.37		
2223-62	22 23 31.9	-62 53 17	326.4	-47.4	4.13	18.3	1,2	0.53	0.27		
2232-488	22 32 12.9	-48 52 05	344.3	-56.2	3.64	18.6	1,2	0.81	0.80		
2252-53	22 52 51.4	-53 01 41	334.8	-56.7	3.58	19.2	1,2	1.66	0.94		