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SURVEYS OF THE GALACTIC PLANE AT 1.414, 2.695 AND 5.000 GHZ

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New surveys of the galactic plane, covering galactic longitudes $l^{II} = 335°$ to $75°$ and latitudes $b^{II} = -4°$ to $+4°$, have been made in the radio continuum at 1.414, 2.695 and 5.000 GHz. The antennas used for the surveys had diameters of 300, 140, and 85 ft, respectively, and the antenna half-power beamwidths in each case were of the order of $11'$. The data are presented in the form of contour maps, together with a tabulation of 356 radio sources.

1. INTRODUCTION

Radio observations provide an excellent means of investigating the large-scale distribution of thermal sources (H II regions) and non-thermal sources (probably supernova remnants) in our galaxy. This paper presents data taken from three new surveys that cover the galactic plane from longitudes 335° to 75°. Since each of the surveys was made with a beamwidth of approximately $11'$, it was possible to determine spectral indices fairly reliably for a large number of sources. Data concerning the antenna parameters and overall sensitivity levels for the three surveys are given in table 1.

2. SURVEY AT 1.414 GHZ

This survey was carried out by D. Downes, with the assistance of L. Goad and R. Rinehart, during July 1967 and it was made with the 300-ft transit paraboloid antenna at the National Radio Astronomy Observatory, Green Bank, West Virginia. The observations were taken in the form of drift scans (covering about ± 5° in galactic latitude), with the antenna simultaneously scanning one degree in declination, at a scan rate of one degree per 24 seconds. Figure 1 shows an example of the data obtained in this way. It will be seen that the endpoints of the scans are approximately $10'$ apart. However, scans at adjacent declinations were interlaced, so that the individual data points were never separated by more than $5'$.

The front-end of the receiver consisted of a non-degenerate parametric amplifier, operating at ambient temperature. The overall system noise temperature was approximately 150 °K and the i. f. bandwidth was 10 MHz.

The data from receiver output were recorded in two ways. An analog recorder with a time constant of $0^s.3$ provided a check on interfering signals and, because it was operated at high gain, gave additional information on the weakest sources. The data were integrated in digital counters for $0^s.5$ and were recorded on magnetic

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Table 1. Equipment parameters for the surveys

Observing frequency (GHz)	1.414	2.695	5.000
Antenna aperture (ft)	300 (transit, NRAO)	140 (steerable, NRAO)	85 (steerable, Ft. Davis)
Half-power beamwidth (arc min)	9.4 × 10.4	10.9 × 11.7	10.8 × 10.8
Contour-level unit on maps (T_b in °K)	1.74	1.00	0.23
Minimum flux-level in source list (flux units)	1	1	4
Region of galactic plane surveyed (l^{II})	12° - 55°	345° - 75°	335° - 55°

tape every second. The digital data were printed out on equiangular coordinates with one print-out at every 2′.5. Contours were then drawn in by hand.

The overall system was calibrated each night by flux measurements on the radio sources 3C 348 (assumed to be 45.0 flux units) and 3C 353 (55.0 flux units), and the receiver was calibrated internally every hour with a standard noise tube. To determine the zero-level for the scans, long scans, covering approximately ± 25° in galactic latitude, were taken every 5° of galactic longitude.

3. SURVEY AT 2.695 GHZ

This survey was carried out by W. Altenhoff, with the assistance of R. Fisher (University of Maryland). E. Reifenstein and T. Wilson (Massachusetts Institute of Technology) assisted with the data reduction, and P. G. Mezger (NRAO) gave helpful advice.

The observations were made with the 140-ft antenna at NRAO during July-August 1966 and May-June 1967. The antenna beamwidth was of the order of 11′ and the overall system temperature of the order of 200 °K. The receiver, which used a parametric amplifier operating at ambient temperature, was switched between the antenna and a thermal load stabilized at 300 °K. The i. f. bandwidth was 40 MHz, the switch rate 50 Hz, and the post-detection time constant $0^s.3$. The data were recorded simultaneously with an analog recorder and a digital stepping recorder.

The survey was taken with scans in right ascension. The scans were spaced 5′ in declination, and at least two scans were taken at every declination. The scan rate of the telescope was 1° per minute. Because of the limited observing time, the survey covered only galactic latitudes ± 2°. At these limits, however, the galactic background radiation is still considerable. To determine the zero-correction for each scan, therefore, long scans in right ascension were taken every 2° of declination. These scans reached out to about ± 5° in galactic latitude and defined the zero-level for the survey.

All signal intensities were normalized against an internal calibration signal generated by a standard noise source; this secondary standard was checked each day against the radio source 3C 353. The internal calibration remained constant within 1 per cent of the signal strength of 3C 353. The calibrating signal, which corresponded to 4.4 °K antenna temperature, was then compared with the radio source 3C 274 (M 87), for which the flux density was assumed to be 123 flux units. The resulting main-beam efficiency was determined to be 76 per cent, yielding an equivalent brightness temperature of 5.8 °K for the calibration signal.

The survey was evaluated entirely from the analog records, except when the analog recorder went off-scale; the data were then retrieved from the digital records, which had a larger dynamic range.

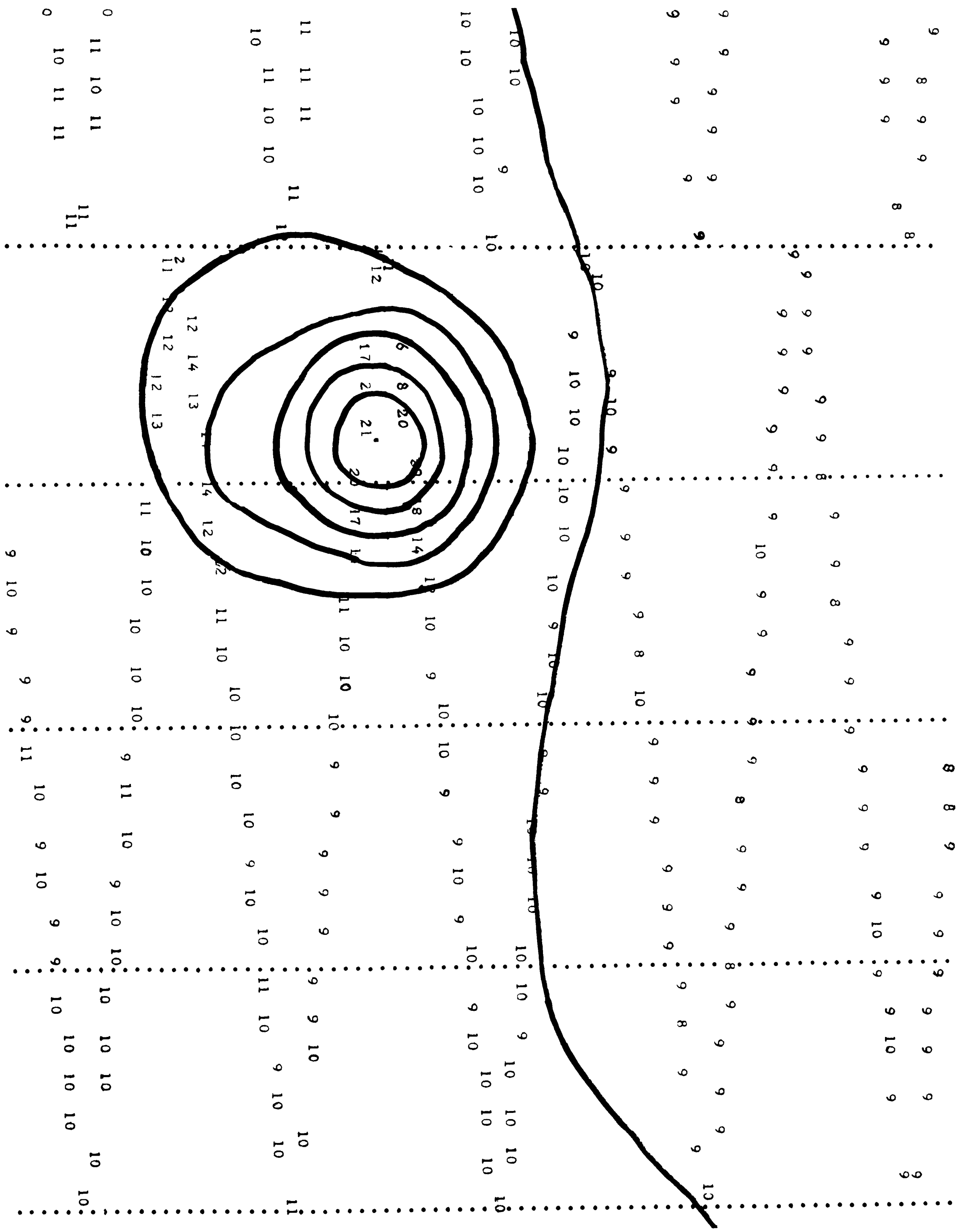

Figure 1. Example of computer print-out at 1.414 GHz, showing interlacing of scans.

4. SURVEY AT 5.000 GHZ

This survey was carried out under the supervision of A. Maxwell, with the assistance of D. Downes, L. Goad, C. Hawkins, T. Manguba, and R. Rinehart, during the period June-September 1967. The survey was made in the form of drift scans, spaced one half-power beamwidth apart in declination. The observations were also confined to times of transit ± 2^h of the appropriate section of the galactic plane under observation.

The receiver system has been described elsewhere (Hughes *et al.* 1965). It used a parametric amplifier operating in the degenerate mode and the receiver was switched between the antenna main beam and a "sky-horn" pointed 45° north of the main beam. The i. f. bandwidth was 100 MHz and the overall system temperature approximately 270 °K. The receiver output time constant was 4^s and the noise fluctuations were 0.1 °K (r. m. s.).

The receiver was calibrated internally every hour with a standard argon noise tube, and this secondary calibration was normalized each day against measurements of 3C 274 (M 87), which was assumed to have a flux density of 70 flux units. The output data were recorded with an analog pen recorder and the data were evaluated from these records.

5. LIST OF SOURCES

A list of 356 radio sources recorded from the surveys is given in table 2.

Columns 1 and 2 of the table give the source coordinates in galactic longitude and latitude.

Columns 3 and 4 give the right ascension and declination of the sources for epoch 1950.0. Errors in right ascension are estimated to be ± 4^s and errors in declination to be ± $1'.0$. However, where source entries have been marked with an asterisk in the remarks column, the coordinates were determined more accurately from a survey of certain galactic sources at 5.00 GHz with the 140-ft antenna at NRAO, beamwidth 6′ (Altenhoff, Mezger and Schraml, private communication); for these cases, the errors are ± 2^s and ± $0'.5$, respectively.

Columns 5, 6, and 7 give the measured peak flux densities S' of sources at 1.414, 2.695, and 5.000 GHz, respectively. These values represent the source intensity minus the average intensity of the galactic ridge near the source. The accuracy of these measurements is estimated at about 30 per cent for sources with flux densities < 10 flux units, and approximately 10 per cent in the case of stronger sources. In all three surveys, flux densities were measured with linear polarization and the E vector in the north-south plane.

Columns 8, 9, and 10 give the integrated flux density S for the sources after corrections have been made for the apparent diameters of the source and on the assumption that sources have Gaussian brightness distributions. The diameters for the most part were measured directly from the contour maps and they are thus not of great accuracy. The integrated fluxes should therefore be treated accordingly.

Columns 11 and 12 give estimates of the angular diameters of the sources in declination and right ascension, after correction for beam-broadening effects. The letter p stands for point source. An asterisk in the remarks column indicates that the diameters were taken from the survey of galactic sources made at 5 GHz with the 140-ft antenna, beamwidth 6′, mentioned previously. The remainder of the diameters were measured directly from the contour maps and are not accurate. We would also stress that recent observations (Schraml and Mezger 1969, Shaver 1969, and others) have shown that many of the larger galactic sources are composed of multiple components, some of small angular diameter and of great intensity. The apparent diameters given in table 2, for the present surveys at angular resolution 11′, therefore have little real significance.

Column 13 gives the intensity spectral indices for the source where flux-density measurements at all three frequencies were available. In cases where flux densities were measured at only two frequencies, and where the flux densities were greater than 10 flux units, the spectral indices are enclosed in parentheses. Errors are estimated to be of the order of 0.2 for the stronger sources observed at all three frequencies, and approximately 0.4 for the remainder (*i. e.* cases where the spectral indices are enclosed in parentheses).

Column 14 gives the optical or radio identifications of the source where these are available. The letter M refers to the Messier catalog, NGC and IC to Dreyer's New General Catalogue and Index Catalogue, RCW to the Rodgers *et al.* (1960) Hα survey of the southern Milky Way, and SHARP to the Sharpless (1959) Hα survey of the northern Milky Way. The designation KE refers to Kesteven's (1968) catalog of radio sources at 408 MHz, NRAO to the catalog of radio sources compiled by Pauliny-Toth *et al.* (1966) from observations at 750 and 1400 MHz, W to the Westerhout (1958) catalog of galactic radio sources at 1390 MHz, 3C to the third Cambridge catalog (revised) of radio sources at 178 MHz (Bennett 1962), and 4C to the fourth Cambridge catalog at 178 MHz (Gower *et al.* 1967, Pilkington *et al.* 1965).

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Table 2. List of radio sources

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
335°.7	−0°.1	16h 27m 15s	−48° 24′.8			10			12	5′	5′		KE 38
335.8	+0.1	16 26 20	−48 10.1			6			6	p	p		
336.4	−0.2	16 30 12	−47 56.8			18			51	12	18		NGC 6164-5
336.7	−1.2	16 36 00	−48 24.7			4			8	10	10		
337.1	−0.2	16 32 48	−47 26.5			26			58	14	10		
336.8	+0.0	16 31 00	−47 30.8			36			66	3	16		KE 39
337.2	−1.0	16 37 03	−47 56.4			5			5	p	p		
337.3	+1.0	16 28 56	−46 29.2			5			10	11	11		KE 40
337.7	−0.1	16 34 56	−46 55.0			12			15	5	5		KE 41
337.9	−0.5	16 37 32	−47 00.1			20			22	3	3		KE 42
338.0	−0.1	16 36 11	−46 43.6			18			73	12	28		
338.4	+0.1	16 37 04	−46 16.6			32			54	9	9		KE 43, KE 44
338.9	+0.6	16 36 40	−45 36.2			6			6	p	p		
339.3	+0.4	16 39 15	−45 26.2			4			4	p	p		
340.3	−0.2	16 45 18	−45 06.7			6			43	24	31		
340.8	−1.0	16 50 35	−45 11.7			12			19	11	6		
341.1	−0.2	16 48 15	−44 26.2			5			6	3	5		
341.8	+1.9	16 41 50	−42 30.0		2			11		28	22		outside 2.695 GHz map
342.4	+0.3	16 50 22	−43 08.2		4	5		8	9	10	10		outside 2.695 GHz map
343.1	−0.4	16 56 22	−43 01.3		2			6		14	14		outside 2.695 GHz map
343.4	−0.1	16 55 47	−42 33.2		13	8		27	16	10	11	(−0.8)	outside 2.695 GHz map
344.4	−0.0	16 58 57	−41 45.4		2			3		9	9		outside 2.695 GHz map
344.6	−0.6	17 01 45	−41 56.4		2			11		33	17		outside 2.695 GHz map
344.7	−0.2	17 00 22	−41 38.4		1			1		p	p		outside 2.695 GHz map
344.8	+1.7	16 52 47	−40 23.2		3			8		14	14		outside 2.695 GHz map
345.0	+1.5	16 54 28	−40 20.3		14			91		17	36		
345.1	−0.2	17 01 50	−41 18.4		2			4		10	10		
345.2	−0.8	17 04 36	−41 37.5		5			11		10	13		
345.2	+1.0	16 57 03	−40 28.8		12	12		24	24	9	13	(+0.0)	
345.4	−1.0	17 06 04	−41 32.0		27	26		43	42	9	8	(−0.0)	RCW 117
345.4	+1.4	16 56 08	−40 07.2		25	20		46	37	4	15	(−0.3)	KE 46
345.5	+0.3	17 01 02	−40 44.4		4			6		10	10		
345.6	−0.0	17 02 50	−40 50.2		12	10		25	20	12	10	(−0.3)	
346.2	−0.1	17 04 48	−40 24.5		3			6		7	15		
346.5	+0.0	17 05 34	−40 04.5		1			2		12	5		

Table 2 (*continued*)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
346°.6	−0°.2	17h 06m 45s	−40° 06′.9		4	6		4	6	2′	2′		
347.2	+0.0	17 07 38	−39 31.1		3			12		22	22		
347.6	+0.2	17 08 08	−39 04.8		14	12		20	17	5	9	(−0.2)	*
347.8	−1.1	17 14 05	−39 44.7		3			5		10	10		
347.9	−0.4	17 11 34	−39 09.7		2			2		p	p		
347.9	+0.1	17 09 34	−38 56.1		2			2		5	5		
348.2	+0.5	17 08 56	−38 26.5		6	6		7	7	5	4		* RCW 120
348.2	−1.0	17 14 56	−39 15.5		12	8		13	9	2	3	(−0.7)	
348.4	+0.1	17 11 05	−38 28.4		26	18		38	27	7	8	(−0.6)	* KE 47
348.6	−0.6	17 14 23	−38 42.0		7	6		18	15	16	11		
348.7	−1.0	17 16 37	−38 54.3		33	32		38	37	5	4	(−0.0)	*
348.7	+0.3	17 10 54	−38 08.0		16	10		22	14	6	6	(−0.8)	* KE 48
349.1	+0.0	17 13 24	−37 57.5		9	8		14	14	10	9		*
349.5	+1.1	17 10 22	−37 02.8		3			3		3	2		* NGC 6302, RCW 124
349.7	+0.2	17 14 37	−37 23.3		14	10		18	13	5	8	(−0.5)	*
349.8	−0.6	17 17 53	−37 44.1		9	8		11	10	5	5		*
349.9	−1.8	17 23 12	−38 19.0		2			9		22	17		
350.0	−0.3	17 17 35	−37 25.6		3			5		7	7		
350.1	+0.1	17 16 04	−37 07.6		6	6		6	6	3	2		*
350.6	+1.0	17 13 47	−36 12.1		7	4		15	9	15	8		* RCW 126
350.8	−0.1	17 18 36	−36 38.9		2			2		p	p		
351.0	−0.5	17 21 05	−36 46.4		3	4		5	7	10	10		
351.3	+0.2	17 19 04	−36 08.9		2			2		p	p		
351.4	+0.7	17 17 12	−35 46.0		109	106		176	174	10	7	(−0.0)	* NGC 6334, KE 49-51
351.5	−0.5	17 22 15	−36 18.0		4	4		5	5	6	2		*
351.6	−1.2	17 25 52	−36 37.6		25	28		31	35	7	4	(+0.2)	* KE 52
351.6	+0.2	17 19 54	−35 51.5		14	14		17	17	3	6	(−0.0)	*
352.3	−0.0	17 22 53	−35 21.5		3	4		5	6	10	5		
352.5	+2.1	17 14 46	−34 02.3		2	4		19	36	33	28		RCW 130
352.6	−0.1	17 24 04	−35 12.0		5			8		9	10		
353.1	+0.3	17 23 19	−34 33.4		26	26		36	36	5	9	(+0.0)	* NGC 6357
353.1	+0.7	17 22 17	−34 18.3		117	106		269	249	13	12	(−0.1)	* NGC 6357, KE 53, W22 ?
353.2	+0.9	17 21 30	−34 08.6		108	100		150	141	5	8	(−0.1)	* NGC 6357, W 22 ?
353.4	−0.4	17 27 08	−34 39.9		7	6		7	6	3	2		*
353.5	−0.0	17 26 01	−34 33.4		6	6		7	7	5	3		*

Table 2 (*continued*)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
354°.2	− 0°.0	17h 27m 48s	− 33° 49′.4		5	6		6	7	2′	7′		
354.5	− 0.4	17 30 06	− 33 46.2		1			4		17	17		
354.5	+ 0.1	17 28 13	− 33 30.1		4			8		12	10		
354.7	+ 0.3	17 27 56	− 33 13.1		2			2		p	p		
354.7	+ 0.5	17 27 11	− 33 09.6		2			2		p	p		
355.2	+ 0.1	17 30 09	− 32 52.7		9	8		15	13	9	8		* NGC 6383, W 23 ?
355.6	− 0.1	17 31 43	− 32 41.2		1			1		p	p		
356.3	− 1.5	17 39 17	− 32 49.4		1	4		1	7	10	10		
356.2	+ 0.7	17 30 19	− 31 46.2		3			4		7	7		
356.6	+ 0.1	17 33 33	− 31 41.2		2			3		7	7		
357.5	− 1.4	17 41 43	− 31 47.4		2			3		6	11		
357.7	− 0.1	17 37 05	− 30 56.9		18	14		20	16	3	4	(− 0.4)	*
358.4	− 1.8	17 45 25	− 31 14.5		1			2		10	10		RCW 134 ?
359.0	− 0.0	17 40 12	− 29 45.2		11	8		46	35	14	27	(− 0.4)	
359.1	− 0.9	17 44 02	− 30 10.0		5			9		10	12		
359.4	− 0.1	17 41 22	− 29 26.6		18	12		20	13	3	3	(− 0.7)	
0.0	− 0.0	17 42 29	− 28 58.8		280	214		294	225	3	3	(− 0.4)	Sgr A complex
0.6	− 0.0	17 44 02	− 28 25.2		60	54		111	101	9	11	(− 0.1)	*
1.1	− 0.1	17 45 30	− 28 02.5		12	12		15	16	6	6	(+ 0.1)	KE 56
2.3	+ 0.2	17 46 58	− 26 51.7		4	4		5	5	6	6		*
2.3	+ 1.4	17 42 42	− 26 14.0		2			2		5	7		
2.4	− 0.0	17 48 10	− 26 51.6		2			6		17	13		
2.9	− 0.0	17 49 25	− 26 28.3		3			4		7	9		
3.3	− 0.1	17 50 28	− 26 10.4		6	6		10	9	8	8		*
3.8	− 0.0	17 51 27	− 25 37.7		1			5		20	17		
4.4	+ 0.1	17 52 18	− 25 06.1		5	6		6	7	4	4		*
4.5	− 0.1	17 53 21	− 25 04.7		2			3		5	5		
5.0	+ 0.1	17 53 27	− 24 34.2		1			1		5	9		
5.3	− 1.0	17 58 28	− 24 53.9		11	6		30	17	17	13	(− 0.9)	*
5.4	+ 0.1	17 54 31	− 24 14.8		3			5		17	5		
5.5	− 0.2	17 55 59	− 24 20.3		3			4		7	9		
5.9	− 0.4	17 57 34	− 24 04.7		18	16		23	21	6	6	(− 0.1)	*
6.0	− 1.2	18 00 41	− 24 23.3		63	58		96	90	8	9	(− 0.1)	* M 8, NGC 6523
6.1	− 0.1	17 56 46	− 23 45.5		10	8		18	15	10	10		
6.2	+ 1.2	17 52 00	− 23 01.7		1			2		22	17		

Table 2 (*continued*)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$	$S'_{2.695}$ (flux units)	$S'_{5.000}$	$S_{1.414}$	$S_{2.695}$ (flux units)	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
6°.3	+ 2°.0	17h 49m 35s	− 22° 29′.7		1			1		p	p		
6.6	− 0.3	17 58 28	− 23 22.7		26	18		54	38	12	11	(− 0.5)	W 28, KE 59
6.6	+ 0.1	17 57 06	− 23 14.8		14			31		10	14		RCW 145 ?
6.8	− 0.7	18 00 52	− 23 24.9		1			1		p	p		
6.9	− 2.1	18 06 22	− 24 01.4		4			15		19	15		NGC 6559, W 32
7.0	− 0.2	17 59 19	− 23 02.1		12	12		15	15	6	5	(+ 0.0)	* M 20, NGC 6514
7.2	+ 0.2	17 58 13	− 22 36.9		2			4		12	12		
7.4	+ 0.7	17 56 41	− 22 11.8		2			3		7	7		
7.7	− 0.1	18 00 10	− 22 17.9		2			2		7	5		
8.1	+ 0.2	17 59 59	− 21 48.1		5	6		5	6	2	1		*
8.5	− 0.2	18 02 29	− 21 40.8		12	10		70	62	27	22	(− 0.2)	W 30
9.6	+ 0.2	18 03 13	− 20 32.0		1			1		p	p		
9.7	− 0.1	18 04 27	− 20 37.0		1			2		7	7		
9.7	+ 0.5	18 02 17	− 20 15.9		1			1		p	p		
9.8	− 1.0	18 07 55	− 20 57.1		2			5		12	13		
9.9	− 0.8	18 07 31	− 20 43.1		5	5		7	6	5	5		
10.2	− 0.3	18 06 24	− 20 19.9		50	43		55	47	4	3	(− 0.2)	* W 31, KE 62
10.3	− 0.1	18 05 59	− 20 05.2		14	14		20	20	6	8	(+ 0.0)	W 31
10.6	− 0.4	18 07 34	− 19 56.5		8	8		9	10	4	6		*
11.0	+ 0.0	18 06 44	− 19 27.1		3	3		16	18	31	18		
11.2	− 1.1	18 11 13	− 19 47.2		3			5		10	12		
11.2	− 0.4	18 08 33	− 19 26.9		10	10		11	11	4	3	(− 0.1)	*
11.4	− 0.1	18 07 53	− 19 07.1		3			4		7	7		
11.5	+ 0.3	18 06 58	− 18 49.6		1			1		p	p		
11.7	− 1.7	18 14 43	− 19 38.3		2			3		9	9		IC 1284, W 34
11.9	− 0.1	18 09 15	− 18 40.1	5	5		16	14		14	15		*
11.9	+ 0.7	18 06 06	− 18 18.7	2	2		2	2		2	2		
11.9	+ 2.2	18 00 41	− 17 32.9	1	1		1	1		p	p		
12.2	− 0.1	18 09 40	− 18 25.3	5	4		8	6		7	8		
12.4	− 1.1	18 13 44	− 18 40.5	1	1		1	1		2	p		
12.4	+ 3.8	17 55 50	− 16 17.0	4			4			p	p		
12.7	+ 0.3	18 09 15	− 17 45.8	2	3		2	3		3	3		SHARP 40
12.8	− 0.2	18 11 15	− 17 57.0	31	36	34	38	41	39	4	5	+ 0.0	* W 33, KE 64
13.2	+ 0.0	18 11 10	− 17 29.5	6	7	6	7	7	6	1	4	− 0.0	*
13.4	+ 0.1	18 11 21	− 17 16.7	7	6	4	11	9	6	12	3	− 0.5	

Table 2 (continued)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	α	Spectral index	Remarks
13°.7	−0°.0	18h 12m 30s	−17° 01′.9	5	5		15	14		17′	13′		
13.8	−0.8	18 15 24	−17 19.3	7	8	6	13	14	11	6	14	−0.1	
13.9	+0.2	18 11 50	−16 47.9	4	4		4	4		p	p		
14.2	−0.2	18 13 55	−16 44.9	7	9	8	26	28	26	12	20	+0.0	IC 4701, W 33 ?
14.5	−0.6	18 16 05	−16 41.5	3	4		4	5		6	5		
14.6	−2.2	18 22 27	−17 20.4	1			3			21	10		
14.6	+0.1	18 13 57	−16 14.6	17	18	16	35	32	30	9	11	−0.1	* KE 65, W 33 ?
14.6	+1.1	18 10 15	−15 42.0	1			1			p	p		
15.0	−1.6	18 20 49	−16 38.0	1	1		5	6		21	17		
15.1	−0.7	18 17 36	−16 12.3	364	420	418	502	552	554	7	5	+0.1	* Omega nebula, M 17
15.1	+3.3	18 03 21	−14 13.3	2			7			13	18		RCW 158
15.4	+0.2	18 15 04	−15 31.6	2	2		3	3		13	3		
15.6	−0.1	18 16 35	−15 29.7	2	2		5	4		8	16		
15.6	+1.8	18 09 38	−14 31.1	1			3			19	20		
15.9	+0.2	18 16 10	−15 03.5	2	2		3	3		7	8		
16.1	−2.6	18 26 37	−16 10.2	1			5			15	26		
16.4	−0.2	18 18 19	−14 48.1	5	3	4	12	6	9	12	12	−0.3	
16.4	−0.5	18 19 25	−14 54.9	1	1		2	2		9	9		
16.6	−0.3	18 19 26	−14 38.2	4	2	4	4	2	4	4	2	+0.1	
16.6	+2.2	18 10 16	−13 29.1	1			2			17	p		
16.7	+0.1	18 18 11	−14 22.0	3	2		3	2		p	p		
16.8	−1.1	18 22 28	−14 50.6	3	3	3	5	4	4	7	8	−0.0	RCW 164 ?
16.9	−2.2	18 26 40	−15 15.1	2			38			40	60		RCW 163 ?
17.0	+0.8	18 15 54	−13 47.5	37	34	32	134	107	103	18	14	−0.2	* M 16, NGC 6611
17.0	+1.6	18 13 07	−13 20.7	2	2		4	4		7	16		
17.1	−0.1	18 19 38	−14 06.2	2	2		3	3		6	9		
17.4	+0.4	18 18 20	−13 39.9	2			2			p	p		
17.7	+1.4	18 15 27	−12 52.6	1	2		1	2		3	6		
18.2	−0.3	18 22 16	−13 15.1	14	15	12	27	26	21	10	9	−0.2	* RCW 166
18.2	+1.9	18 14 27	−12 11.1	5	5	4	8	6	6	7	7	−0.2	
18.3	+1.2	18 17 13	−12 25.3	2	1		4	3		10	10		
18.6	+1.9	18 15 03	−11 51.3	19	18	17	122	97	94	19	27	−0.2	W 35, NGC 6604
18.7	+1.8	18 15 40	−11 45.8	7	8		14	14		10	10		
18.8	+0.3	18 21 10	−12 26.4	15	9	6	33	19	12	15	7	−0.8	* KE 67
18.9	−0.4	18 24 20	−12 39.7	11	13	10	18	18	14	7	8	−0.2	

Table 2 (*continued*)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	α	Spectral index	Remarks
18°.9	− 1°.0	18h 26m 22s	− 12° 56′.5	7	5	5	42	27	28	23′	23′	− 0.3	
19.1	− 0.3	18 23 53	− 12 29.0	16	15	14	29	25	23	4	12	− 0.2	* W 39
19.2	+ 2.1	18 15 34	− 11 10.9	2	2		2	2		p	p		
19.5	+ 0.1	18 23 21	− 11 57.5	3	3		3	3		p	p		
19.7	− 0.2	18 24 46	− 11 53.7	12	10	10	16	13	13	6	6	− 0.2	*
19.8	− 0.7	18 26 43	− 12 02.6	2	2		4	4		10	17		
19.8	+ 0.3	18 23 28	− 11 32.0		1			1		p	p		
20.0	− 3.1	18 35 51	− 12 55.6	1			3			29	19		
20.0	− 0.2	18 25 23	− 11 36.2	8	7	4	14	11	6	7	9	− 0.6	
20.3	− 0.8	18 28 18	− 11 40.4	2	1		3	2		10	10		
20.4	− 3.0	18 36 29	− 12 32.6	1			1			p	p		
20.4	+ 0.1	18 25 18	− 11 05.7	3	3		3	3		2	2		
20.7	− 0.1	18 26 29	− 10 54.8	12	12	12	17	17	16	7	6	− 0.0	* KE 68
21.0	+ 2.0	18 19 44	− 9 40.4	6	4		6	4		1	2		*
21.5	− 0.9	18 30 47	− 10 36.6	6	7	6	6	7	6	1	1	− 0.0	*
21.8	− 0.6	18 30 16	− 10 13.0	25	18	12	46	30	20	7	11	− 0.6	* KE 69
21.9	− 0.0	18 28 20	− 9 52.9	4	3		10	8		15	11		RCW 169
22.3	− 0.1	18 29 25	− 9 29.7	1	1		1	1		p	p		
22.8	− 0.3	18 31 01	− 9 11.6	14	13	10	66	51	41	18	20	− 0.4	*
23.1	− 0.3	18 31 36	− 8 57.2	15	12	8	50	36	24	17	13	− 0.6	* W 41
23.1	+ 0.5	18 28 51	− 8 32.3	2	2		2	2		p	p		SHARP 58, RCW 171
23.4	− 0.2	18 31 58	− 8 34.9	15	16	12	19	19	15	3	7	− 0.2	*
23.5	− 0.0	18 31 32	− 8 25.3	8	5	8	15	8	13	4	13	− 0.1	
23.9	+ 0.2	18 31 29	− 7 56.7	2	3		2	3		p	p		
24.5	+ 0.2	18 32 34	− 7 27.2	8	9	6	18	18	12	13	10	− 0.3	NRAO 569, W 42 ?
24.6	+ 0.5	18 31 29	− 7 13.5	8	7	8	14	11	13	11	6	− 0.0	
24.7	− 0.6	18 35 43	− 7 34.8	3	2		6	3		12	8		
24.7	− 0.1	18 34 05	− 7 26.4	9	10	8	23	23	19	18	8	− 0.2	RCW 172, W 42 ?
24.8	+ 0.1	18 33 30	− 7 13.4	10	10	10	13	13	13	4	7	− 0.0	* W 42 ?
24.9	− 1.7	18 40 06	− 8 00.9	1	1		1	2		7	7		
25.3	+ 0.3	18 33 41	− 6 43.4	3	2		3	2		p	p		KE 71 ?, RCW 173
25.4	− 0.2	18 35 32	− 6 50.1	21	23	20	24	26	23	4	4	− 0.1	* 3C 385, KE 72, NRAO 572
25.8	+ 0.2	18 34 55	− 6 18.7	10	10	10	14	14	13	8	4	− 0.1	*
26.1	− 0.0	18 36 22	− 6 06.6	5	5	4	6	5	4	5	2	− 0.2	
26.6	− 0.1	18 37 40	− 5 42.8	4	3	4	11	7	10	13	14	− 0.1	

Table 2 (*continued*)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$	$S'_{2.695}$ (flux units)	$S'_{5.000}$	$S_{1.414}$	$S_{2.695}$ (flux units)	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
26°.6	+0°.4	18h 35m 46s	−5° 32'.8	2	2		2	2		2'	2'		
27.1	+0.0	18 38 04	−5 11.4	3	3		7	6		15	8		3C 387, NRAO 576
27.3	−0.1	18 38 52	−5 06.4	6	5	4	13	10	8	15	8	−0.3	3C 387, KE 73 ?
27.5	+0.2	18 38 07	−4 50.5	3	2		4	3		6	7		
27.7	+0.6	18 37 11	−4 25.2	5	5	4	28	24	20	22	21	−0.3	
28.6	+0.0	18 40 53	−3 52.7	7	7	8	18	17	19	13	12	+0.0	
28.8	+3.5	18 28 51	−2 07.5	27	27	28	36	34	35	6	5	−0.0	* W 40, KE 74, SHARP 64
29.0	−0.6	18 43 51	−3 48.7	3	2		6	4		10	9		SHARP 65, RCW 175
29.1	+0.4	18 40 24	−3 13.7	2	2		2	3		2	3		
29.2	+0.0	18 42 03	−3 20.7	3	4		10	11		27	7		
29.7	−0.2	18 43 49	−3 01.7	7	5		7	5		p	p		NRAO 580, KE 75
29.8	+2.2	18 35 08	−1 50.8	1	1		1	1		p	p		
29.9	−0.0	18 43 29	−2 44.8	18	17	18	21	19	21	5	3	−0.0	*
30.1	+1.3	18 38 56	−1 56.7	6	3		7	4		4	6		
30.3	−0.2	18 44 44	−2 28.0	7	8	6	14	15	11	4	15	−0.2	NRAO 581
30.7	+1.0	18 41 13	−1 35.8	2	2		2	2		4	4		4C −01.46
30.8	−0.0	18 45 01	−2 00.1	80	77	74	104	95	92	5	5	−0.1	* W 43, KE 76
31.0	+0.5	18 43 40	−1 33.3	2	2		2	2		p	p		
31.4	−0.3	18 47 01	−1 31.3	4	3		10	6		11	12		
31.9	+0.0	18 46 48	−0 59.0	18	13	8	20	14	9	2	4	−0.7	* 3C 391, KE 77, NRAO 583
31.9	+1.3	18 42 17	−0 21.4	1	2		3	4		7	20		RCW 177
32.1	−0.3	18 48 13	−0 57.1		1			3		14	14		
32.7	−0.1	18 48 56	−0 19.1		3			6		17	9		
32.8	+0.2	18 48 06	−0 06.1		2			2		p	p		
32.9	−0.0	18 48 55	−0 06.1	5	5	4	8	7	6	5	10	−0.2	4C −00.73 ?
33.1	−0.1	18 49 23	+0 04.3	4	5		6	7		7	7		KE 78
33.7	+0.0	18 50 04	+0 35.9	9	7	4	13	9	5	6	7	−0.7	* 4C +00.70
34.3	+0.1	18 50 48	+1 11.1	12	15	14	12	15	15	3	2	+0.1	* NRAO 584
34.5	−1.1	18 55 37	+0 52.9	2	2		5	5		11	14		
34.7	−0.5	18 53 50	+1 15.4	46	35	24	272	172	123	23	20	−0.6	W 44, KE 80
35.1	−1.5	18 58 07	+1 09.5	4	4		5	5		8	2		NRAO 588, W 48
35.2	−1.7	18 59 15	+1 09.1	14	14	14	14	15	14	2	1	−0.0	* W 48
35.3	+0.8	18 50 18	+2 24.3	1	1		4	4		12	25		
35.5	−0.8	18 56 40	+1 52.7		3			9		12	17		
35.6	−0.4	18 55 18	+2 05.4	7	5		18	10		11	13		

Table 2 (*continued*)

l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$	$S'_{2.695}$ (flux units)	$S'_{5.000}$	$S_{1.414}$	$S_{2.695}$ (flux units)	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
35°.6	−0°.0	18h 53m 52s	+ 2° 17′.0	10	8	6	22	15	12	10′	12′	−0.5	
36.1	+0.3	18 53 39	+ 2 52.7	1			1			p	p		4C + 02.47
36.3	−1.7	19 01 02	+ 2 09.9	3	3		11	10		15	16		RCW 179
36.3	+0.7	18 52 28	+ 3 15.6	2	2		3	3		8	8		
36.5	−0.1	18 55 51	+ 3 01.7	1	1		1	1		p	p		
36.6	−0.7	18 58 18	+ 2 52.6	2			5			12	17		
37.0	−0.2	18 57 12	+ 3 29.8	2	1		4	2		p	14		
37.5	−0.1	18 57 44	+ 3 57.7	7	7	8	12	11	13	6	10	+0.0	W 47, 4C + 03.44 ?
37.5	+0.9	18 54 13	+ 4 24.7	1	1		4	3		10	22		
37.6	+1.5	18 52 04	+ 4 46.3	1	1		1	1		p	p		
37.7	+0.1	18 57 10	+ 4 12.0	4	3	4	6	5	6	6	7	−0.0	W 47
37.8	−0.3	18 59 03	+ 4 09.1	8	8	8	18	15	16	5	17	−0.1	W 47
38.1	−0.1	18 58 46	+ 4 28.2	1			3			17	14		
38.2	+1.5	18 53 02	+ 5 17.6	1	2		1	2		6	6		
38.4	+1.3	18 54 27	+ 5 20.7	1	1		2	2		10	10		
39.2	−0.3	19 01 38	+ 5 22.5	13	10	8	16	11	9	4	5	−0.4	* 3C 396, NRAO 593
39.3	−0.0	19 00 41	+ 5 32.9	3	4		3	4		2	2		NRAO 591
39.4	−1.7	19 07 00	+ 4 51.9		1			1		5	5		
39.5	+0.5	18 59 25	+ 6 00.3	2	1		4	3		11	14		
39.6	−2.4	19 09 40	+ 4 48.4		1			8		30	30		W 50
39.6	−1.8	19 07 51	+ 5 02.1	3	2		107	52		45	75		W 50
39.9	−0.1	19 01 54	+ 6 03.5	1	1		1	1		5	5		
40.0	−3.2	19 13 13	+ 4 44.0	2			10			23	23		
40.0	−1.3	19 06 36	+ 5 33.4	2	2		9	7		21	17		RCW 182
40.5	+2.5	18 53 48	+ 7 50.0	5		4	10		7	9	10		W 45
40.6	−0.5	19 04 41	+ 6 31.9	3	3		8	6		10	15		NRAO 596
41.1	−0.3	19 05 05	+ 7 03.4	15	12	10	24	17	15	5	10	−0.4	* 3C 397, NRAO 597
41.4	+0.4	19 03 20	+ 7 39.1	3	3		9	7		17	12		
41.5	+0.1	19 04 29	+ 7 33.8	1	2		1	2		p	p		
41.6	−2.9	19 15 20	+ 6 15.7	1			1			p	p		4C + 06.66
42.0	−0.1	19 05 59	+ 7 57.7	2	1		11	7		25	18		
42.1	−0.6	19 07 55	+ 7 47.5	5	3		6	4		6	5		
42.2	+0.0	19 05 55	+ 8 07.7	2	1		2	1		p	p		
42.5	−0.2	19 07 14	+ 8 19.9	3	3	4	7	7	9	19	12	+0.2	
43.2	−0.5	19 09 39	+ 8 46.7	2	1		2	1		p	p		

Table 2 (*continued*)

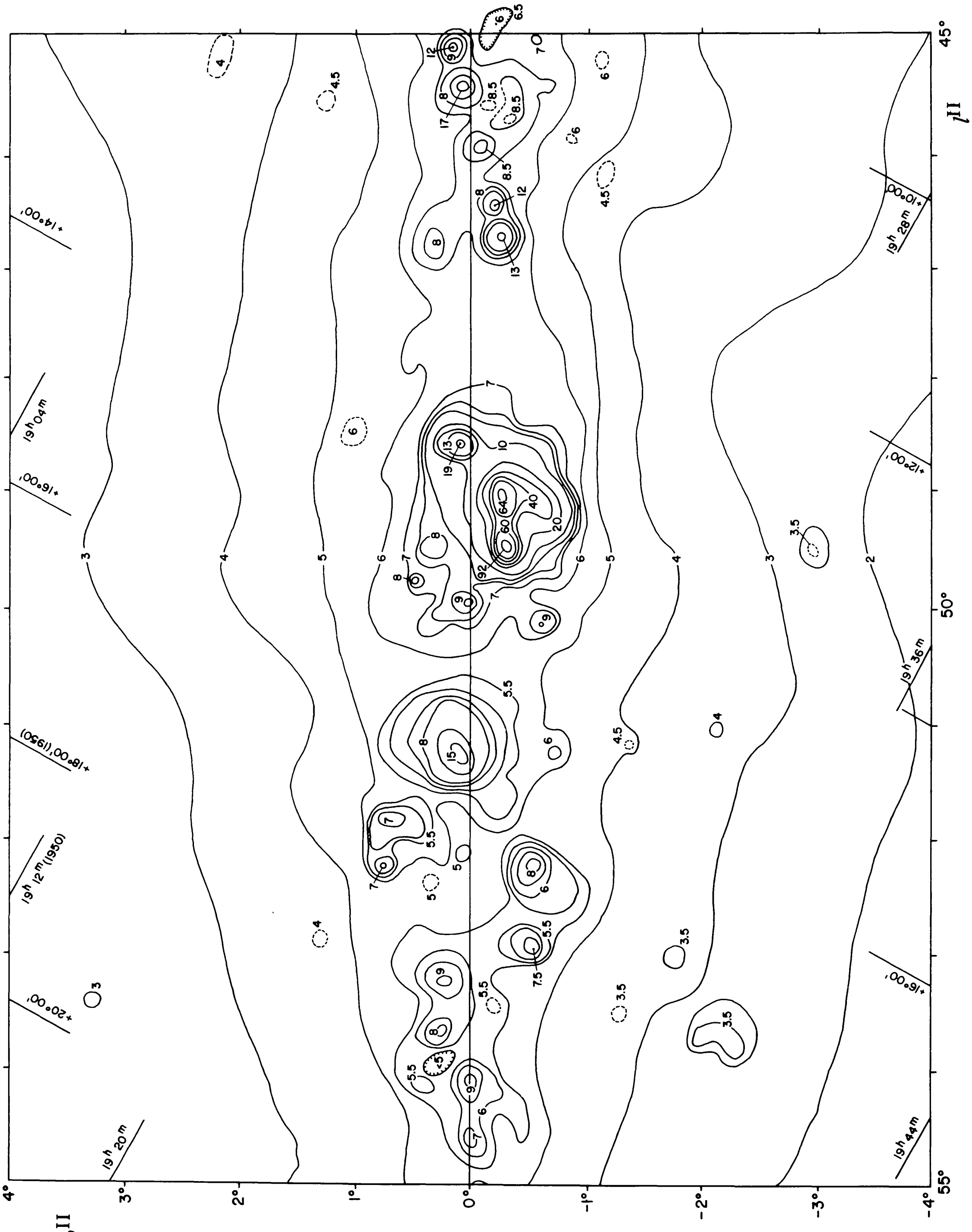
l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	α	Spectral index	Remarks
43°.2	−0°.0	19h 07m 54s	+9° 01′.0	45	51	48	47	53	49	2′	2′	+0.0	* W 49, NRAO 598
43.3	−0.2	19 08 44	+9 00.8	28	20	14	29	20	14	2	1	−0.6	* W 49, 3C 398, NRAO 599
43.4	+0.5	19 06 36	+9 28.8	1	1		1	1		3	3		
43.9	−0.7	19 11 52	+9 18.3	1	1		1	1		p	p		
44.1	+0.2	19 09 08	+9 57.8	3			43			40	40		
44.0	+1.4	19 04 16	+10 23.0	1			1			p	p		
44.3	−0.4	19 11 21	+9 51.3	1	1		1	1		p	p		
44.5	+2.5	19 01 20	+11 23.0	1			1			p	p		4C + 11.55 ?
45.0	−0.6	19 13 32	+10 23.3	1	1		1	1		p	p		
45.1	+0.1	19 11 04	+10 48.3	6	5	6	7	6	7	5	p	−0.0	* NRAO 600
45.5	+0.1	19 11 59	+11 04.3	10	12	10	12	13	11	3	4	−0.1	* NRAO 601
45.6	+1.3	19 07 59	+11 46.6	1			1			p	p		4C + 11.57
45.7	−0.4	19 14 01	+11 06.9	2			9			12	25		
46.0	−0.1	19 13 35	+11 27.4	2			2			p	p		
46.1	−3.7	19 26 49	+9 48.3	1			1			p	p		4C + 09.65
46.5	−0.2	19 15 00	+11 50.4	5	5		5	5		2	2		NRAO 605
46.8	−0.3	19 15 45	+12 04.1	7	5		17	11		14	10		* NRAO 607
46.9	+0.3	19 13 50	+12 24.7	2	2		11	9		22	21		
48.6	+0.0	19 18 07	+13 49.3	11	11	10	14	13	12	5	5	−0.1	* NRAO 608
49.0	−0.3	19 20 23	+14 01.7	49	49	46	129	113	109	13	12	−0.1	* W 51, 4C + 14.70, NRAO 608
49.1	−0.7	19 21 37	+13 56.1	26	23	22	41	34	32	7	7	−0.2	W 51
49.4	−3.0	19 30 39	+13 06.0	1			1			p	p		
49.5	−0.4	19 21 23	+14 24.5	86	106	96	100	119	109	3	5	+0.1	* W 51, NRAO 608
49.5	+0.3	19 19 04	+14 42.9	1			4			17	18		
49.8	+0.4	19 19 12	+15 02.1	2	1		2	1		2	2		
50.0	−0.0	19 21 05	+15 00.0	3	2		3	2		p	5		
50.1	−0.7	19 23 40	+14 50.2	4	3		5	4		7	8		
51.0	−2.2	19 30 53	+14 54.3	1			1			p	p		
51.2	−0.8	19 26 12	+15 45.1	1	1		1	1		2	4		
51.2	+0.1	19 23 18	+16 09.4	10	10	8	51	41	35	20	20	−0.3	*
51.6	−0.3	19 25 20	+16 17.1	1			1			p	p		
51.8	+0.6	19 22 29	+16 54.5	2	2		8	8		13	22		
52.2	−0.6	19 27 31	+16 40.8	4	3		10	7		15	13		
52.2	+0.7	19 22 47	+17 17.5	3	1		3	2		5	3		
52.9	−1.8	19 33 24	+16 45.7	1			1			p	p		4C + 16.65

Table 2 (*continued*)

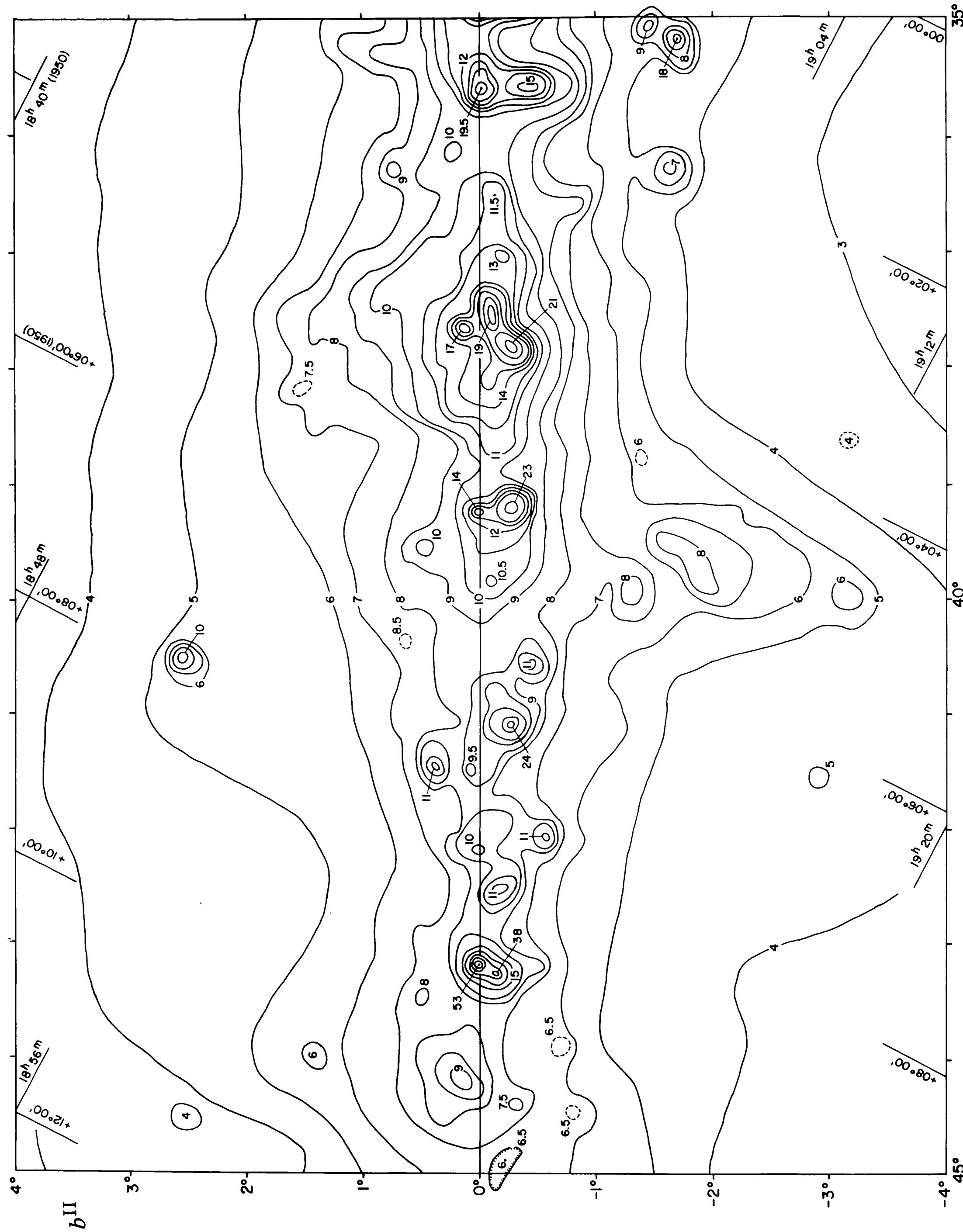
l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$ (flux units)	$S'_{2.695}$	$S'_{5.000}$	$S_{1.414}$ (flux units)	$S_{2.695}$	$S_{5.000}$	Diameter δ	α	Spectral index	Remarks
52°.9	−0°.6	19h 28m 50s	+17° 17'.9	3	3		7	7		8'	16'		*
53.2	+0.2	19 26 51	+17 55.9	4	4		11	9		12	15		
53.5	+3.2	19 16 17	+19 37.4	1			1			p	p		4C + 19.67
53.6	−2.2	19 36 17	+17 07.3	1			11			33	28		3C 400.2, NRAO 611
53.6	+0.2	19 27 34	+18 20.5	3	3		8	7		15	11		W 52
54.1	−0.0	19 29 24	+18 36.3	4	4		5	4		5	5		4C + 18.57 ?
54.1	+0.4	19 28 02	+18 50.5	1			1			p	p		
54.6	−0.0	19 30 21	+19 03.2	3			14			19	23		
55.2	−0.2	19 32 22	+19 27.9		1			1		p	p		
55.6	+0.7	19 29 48	+20 20.0		1			4		17	17		
57.6	−0.3	19 37 30	+21 31.8		2			2		p	p		
59.5	−0.2	19 41 15	+23 13.8		3			15		25	17		NGC 6823, W 55
59.7	+1.2	19 36 27	+24 09.4		1			1		10	10		
60.9	−0.1	19 44 04	+24 30.2		1			2		9	9		
61.0	+1.7	19 37 15	+25 27.8		1			1		p	p		
61.5	+0.1	19 44 38	+25 07.2		6			9		7	7		
61.7	+0.9	19 42 07	+25 44.2		1			3		17	13		
62.4	−0.9	19 50 41	+25 21.0		1			2		9	9		4C + 25.55
63.0	+0.1	19 48 05	+26 26.6		2			10		22	22		
63.2	+0.5	19 47 06	+26 45.6		5			7		5	7		SHARP 90
63.7	−0.7	19 52 37	+26 35.0		1			1		p	p		
63.8	+1.2	19 45 47	+27 40.2		1			1		p	p		
64.1	+1.7	19 44 34	+28 07.7		1			5		20	20		SHARP 92
64.2	−0.5	19 52 56	+27 06.5		2			2		p	p		SHARP 93
65.3	−0.2	19 54 42	+28 13.5		1			1		p	p		
65.8	+1.2	19 50 18	+29 19.6		2			4		13	14		
68.2	+1.0	19 56 59	+31 16.4		2			10		25	21		SHARP 98
69.7	+1.1	20 00 27	+32 39.9		1			1		7	7		
69.9	+1.6	19 59 09	+33 05.4		7			14		12	10		
69.9	+1.7	19 58 21	+33 08.1		2			4		10	10		SHARP 99
70.3	+1.6	19 59 54	+33 26.4		15			23		7	10		NGC 6857, W 58, NRAO 621
70.7	+1.2	20 02 21	+33 32.8		1			1		7	7		
71.2	−0.1	20 08 53	+33 14.7		2			3		9	5		
72.3	−0.9	20 15 16	+33 42.1		1			3		13	14		4C + 33.50 ?
72.4	−0.4	20 13 30	+34 06.1		1			1		p	p		

Table 2 (*continued*)

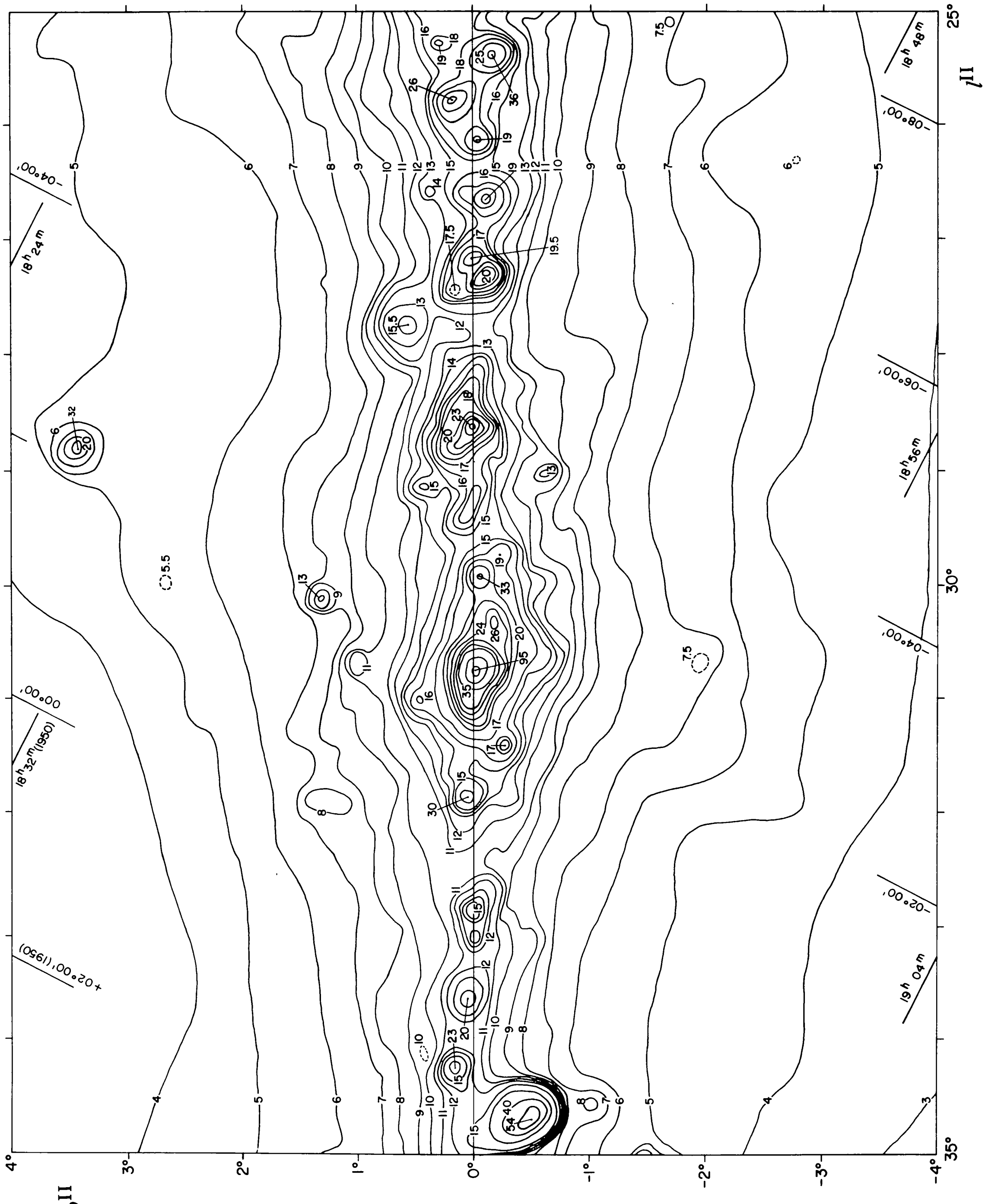
l^{II}	b^{II}	α(1950)	δ(1950)	$S'_{1.414}$	$S'_{2.695}$ (flux units)	$S'_{5.000}$	$S_{1.414}$	$S_{2.695}$ (flux units)	$S_{5.000}$	Diameter δ	Diameter α	Spectral index	Remarks
72°.9	+0°.2	20h 12m 06s	+34° 49'.1		1			4		20'	14'		
73.1	+1.2	20 08 40	+35 33.7		1			2		14	14		
73.8	+1.0	20 11 52	+36 01.1		4			13		15	21		
74.5	+0.9	20 13 54	+36 30.1		1			4		10	22		4C + 36.38 ?
74.8	+0.7	20 15 48	+36 39.1		4			7		10	9		SHARP 104
75.0	+1.2	20 14 02	+37 05.6		7			10		7	9		4C + 37.57



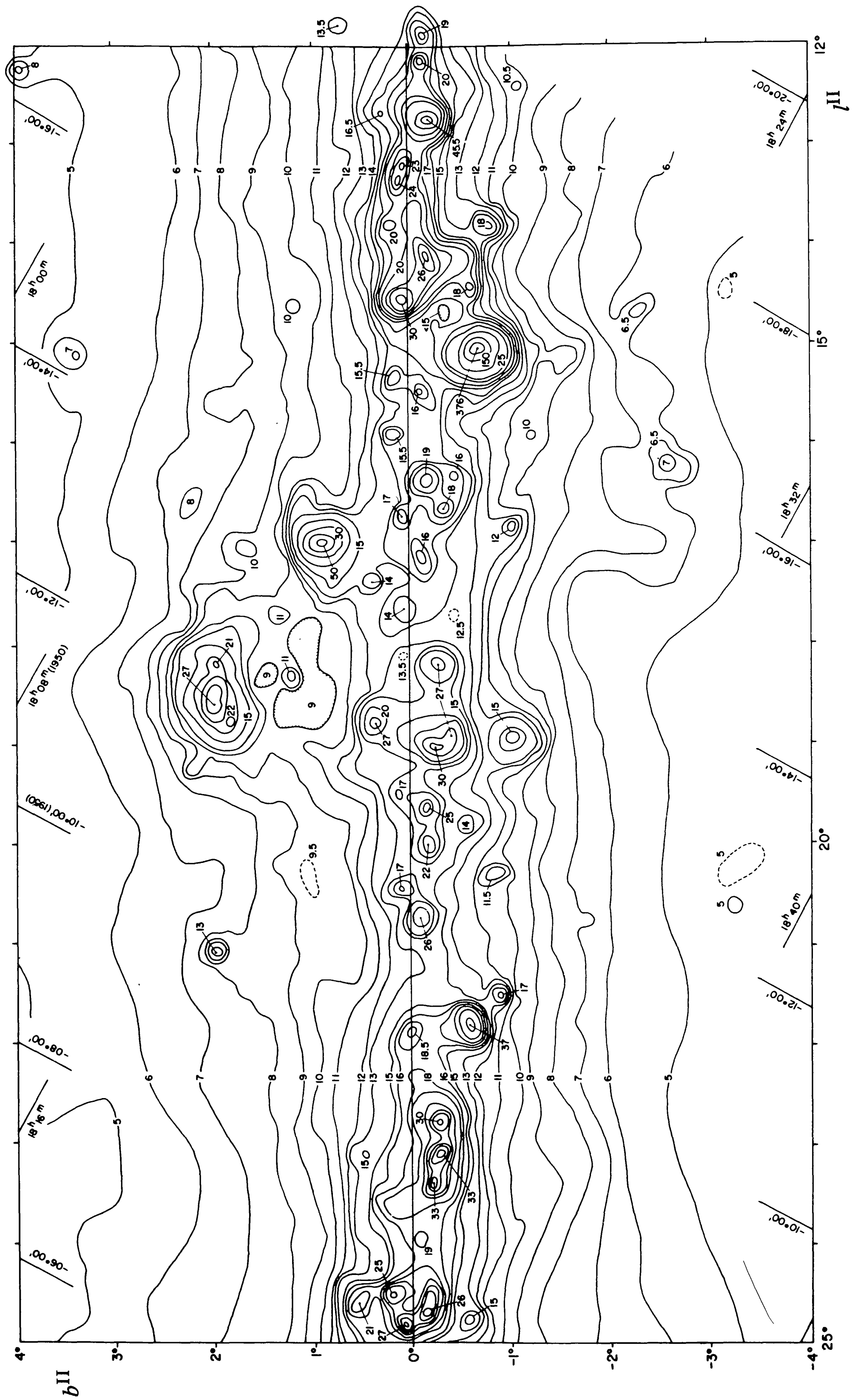
1.414 GHz Contour unit: 1.74 °K T_b Beam:



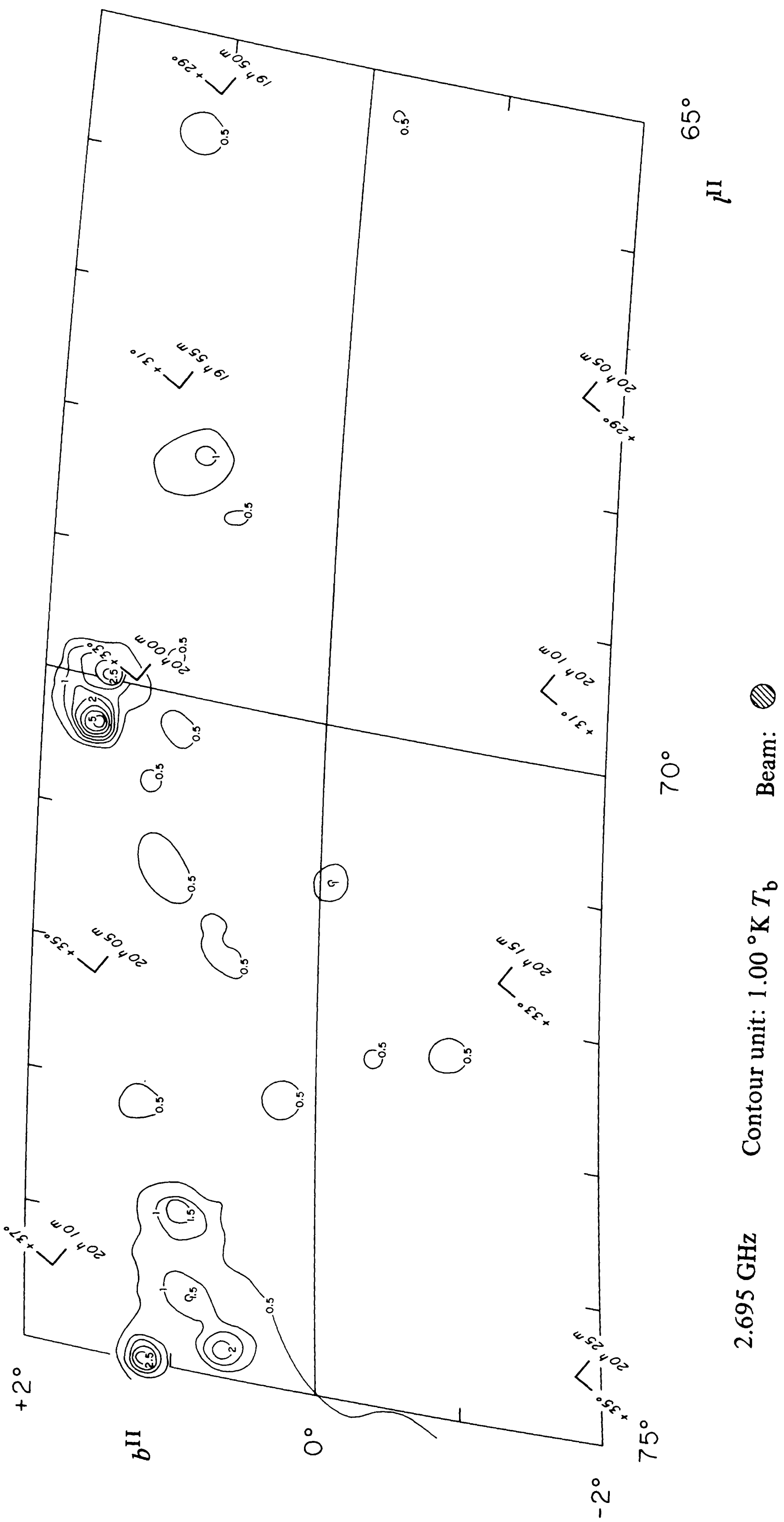
1.414 GHz Contour unit: 1.74 °K T_b Beam:



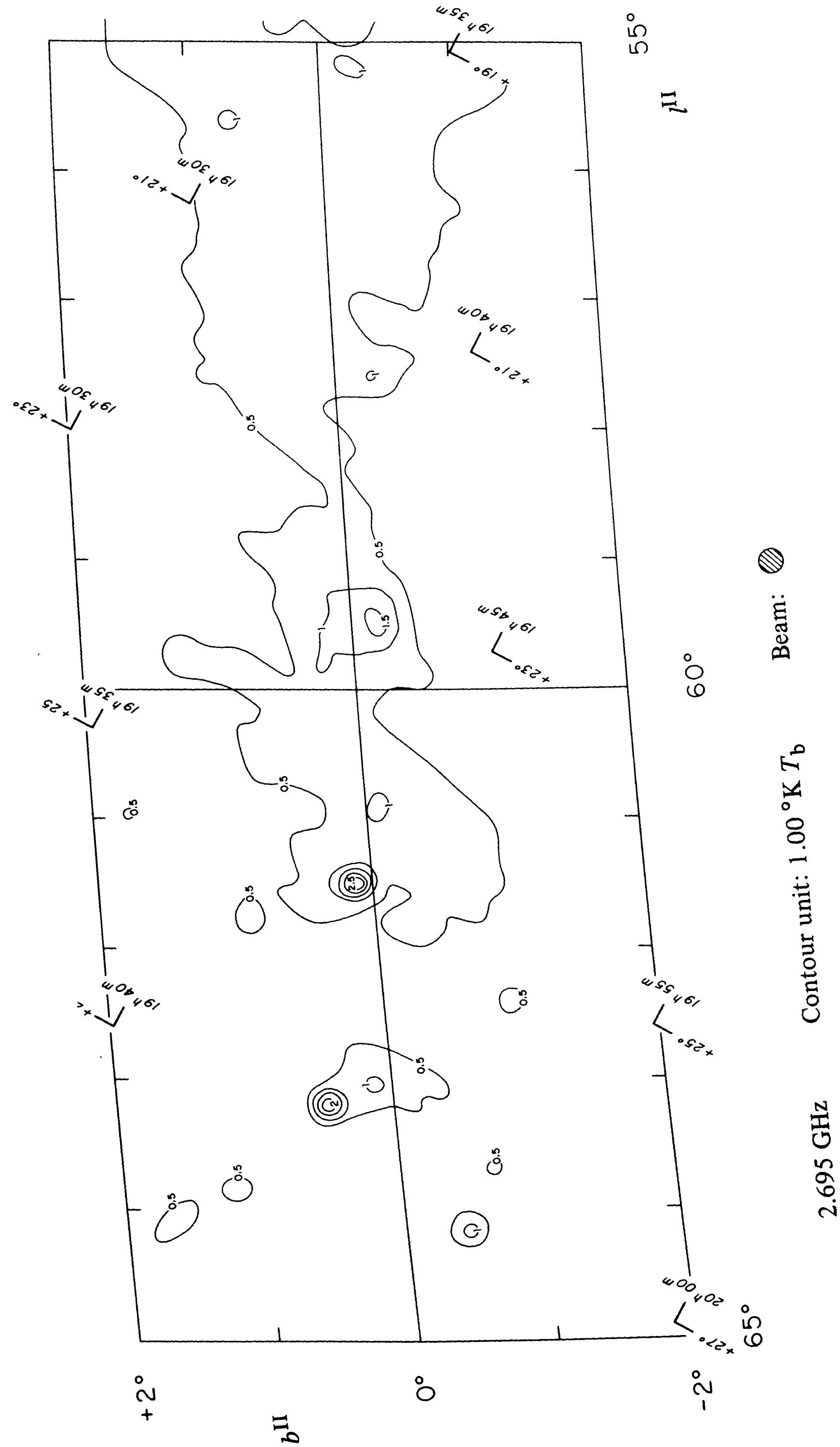
1.414 GHz Contour unit: 1.74 °K T_b Beam:



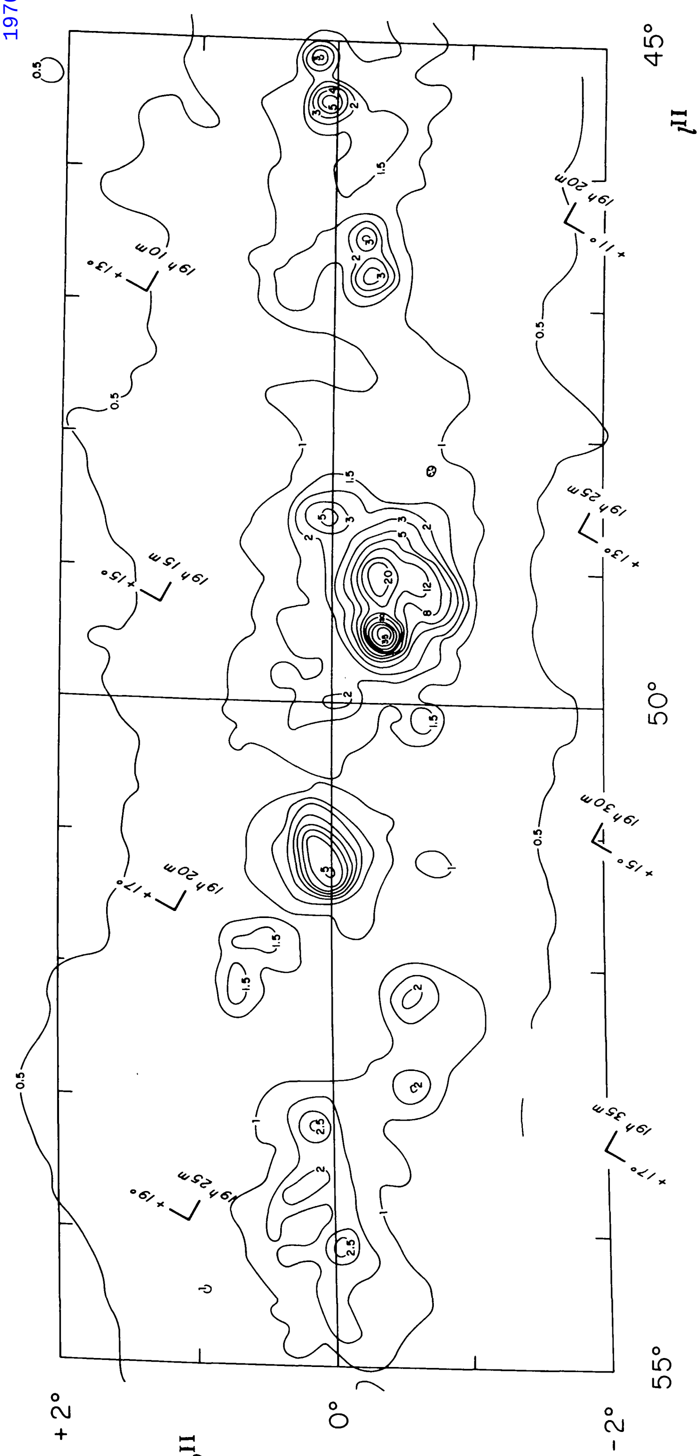
1.414 GHz Contour unit: 1.74 °K T_b Beam:



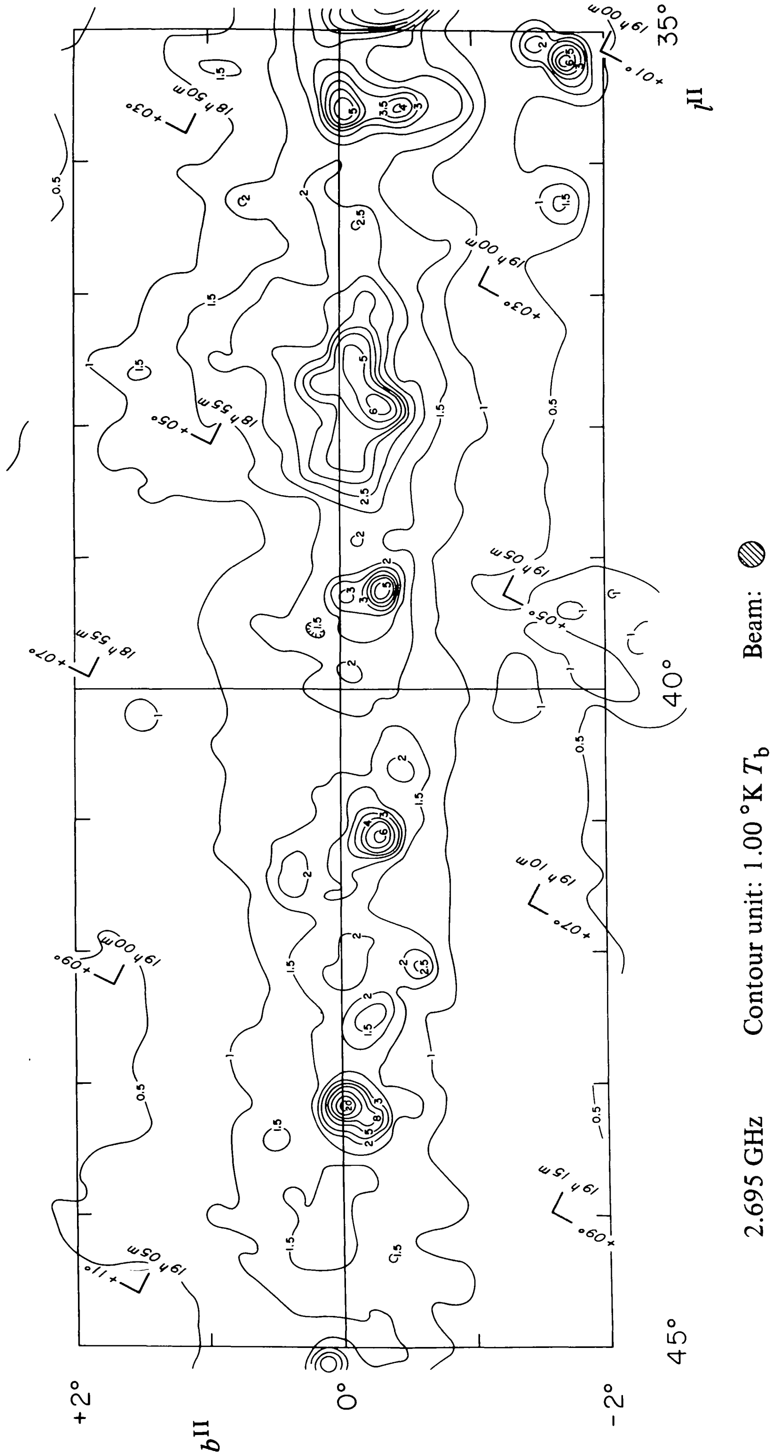
2.695 GHz
Contour unit: 1.00 °K T_b
Beam:
l^{II}
65°
70°
75°
b^{II}
+2°
0°
-2°
19h 50m +29°
19h 55m +31°
20h 00m +33°
20h 05m +35°
20h 10m +37°
20h 05m +29°
20h 10m +31°
20h 15m +33°
20h 25m +35°

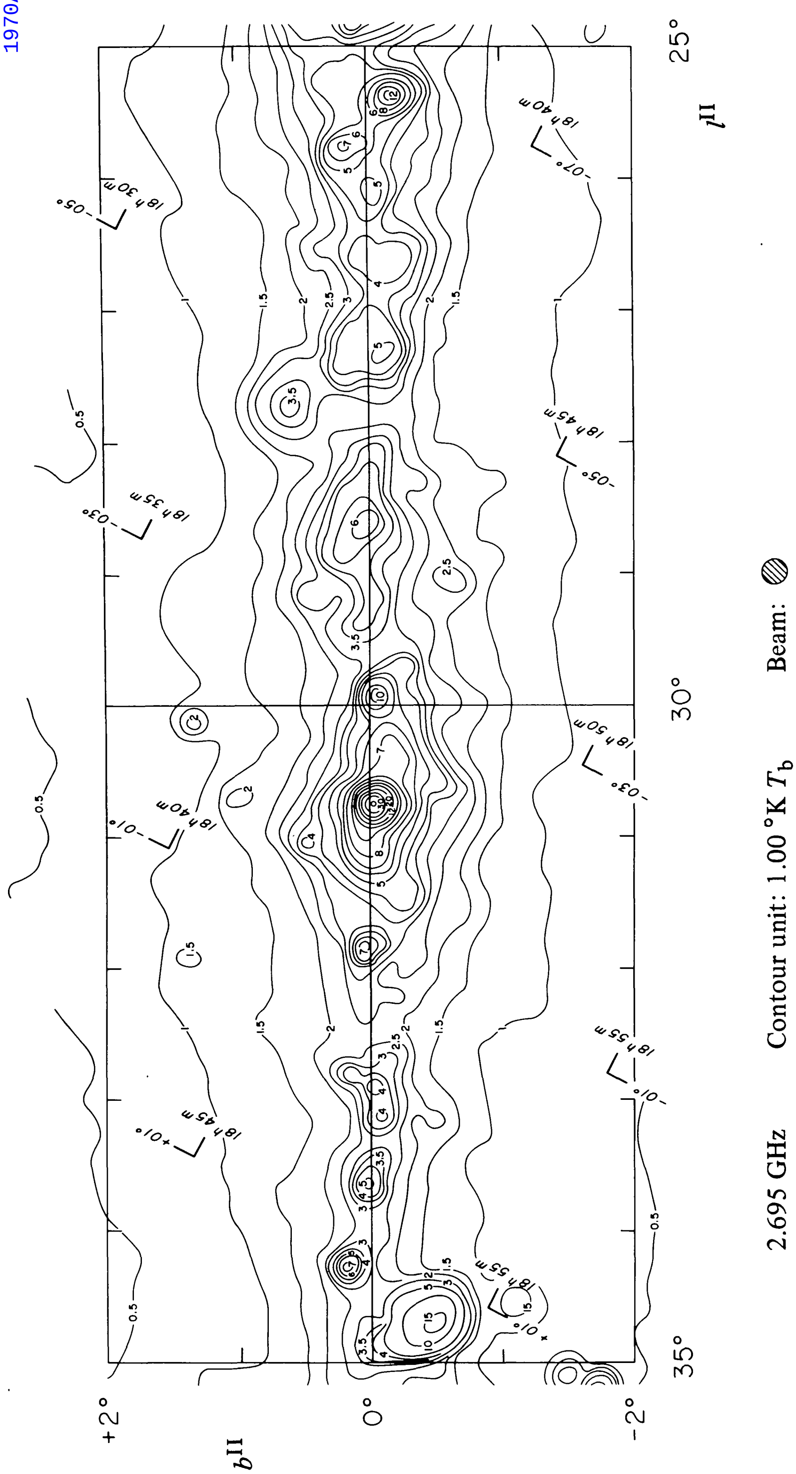


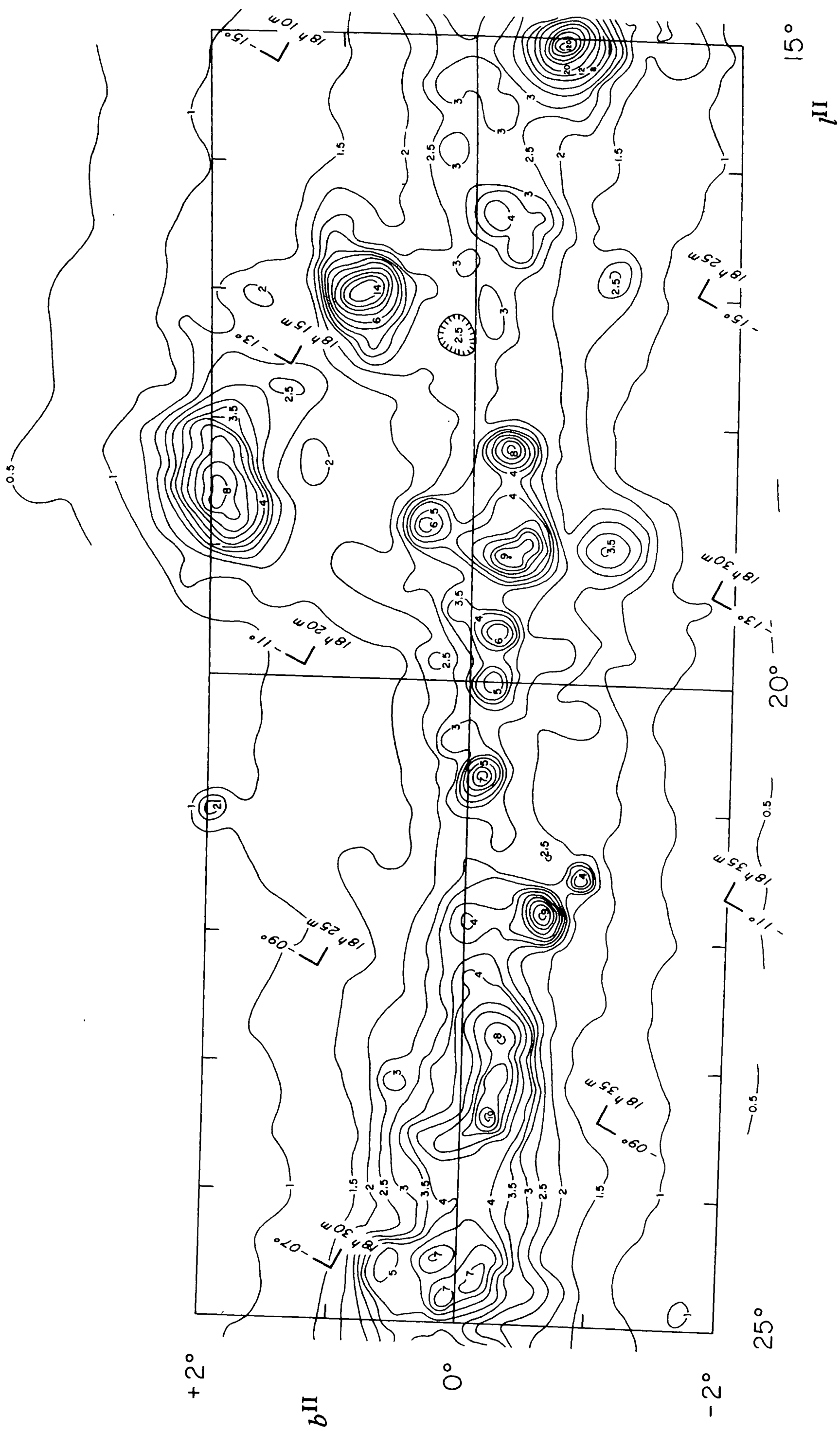
55°
60°
65°
l^{II}
+2°
0°
-2°
b^{II}
Beam:
Contour unit: 1.00 °K T_b
2.695 GHz



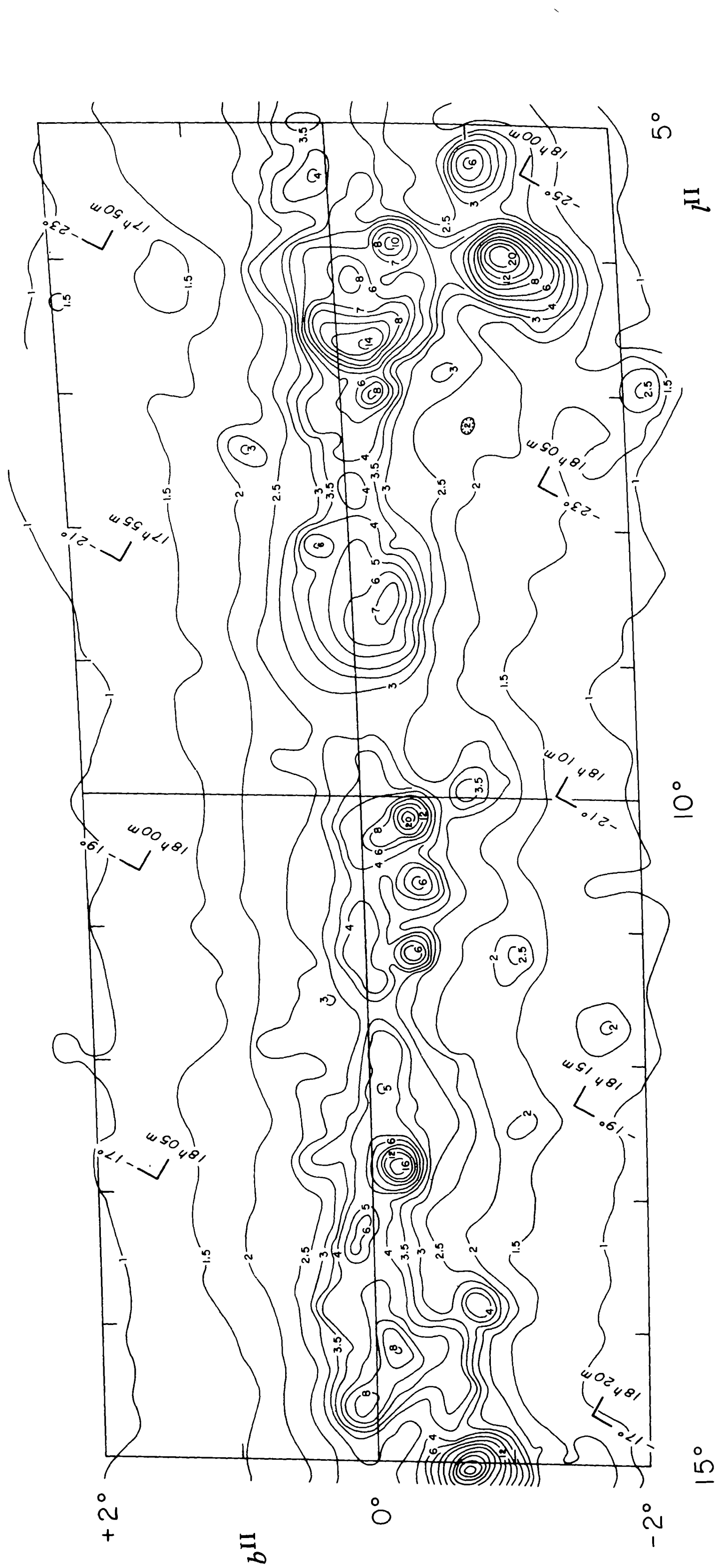
2.695 GHz Contour unit: 1.00 °K T_b Beam:


35°
40°
45°
l^{II}
+2°
0°
-2°
b^{II}
2.695 GHz
Contour unit: 1.00 °K T_b
Beam:

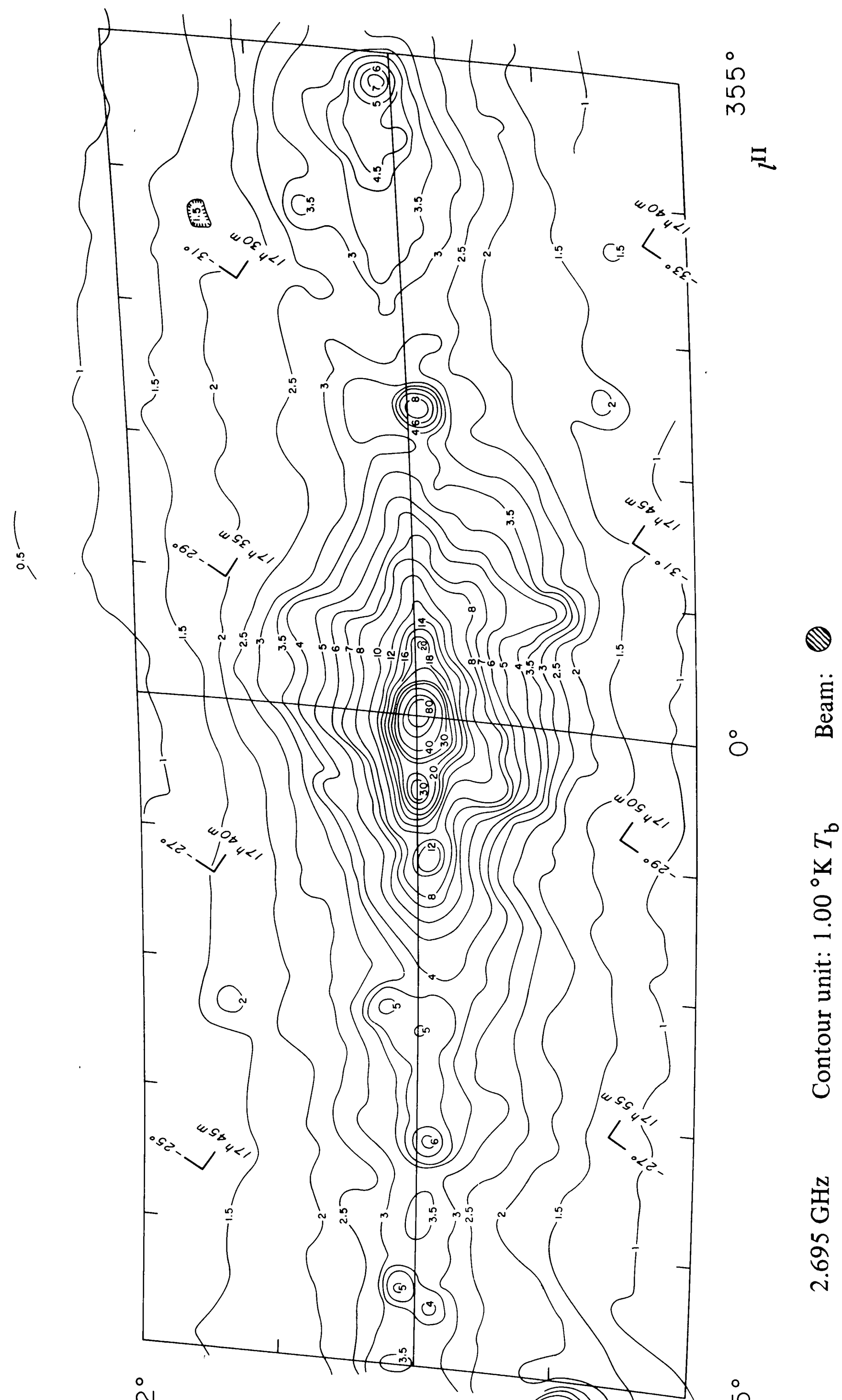

+2°
0°
−2°
b^{II}
25°
30°
35°
l^{II}
2.695 GHz
Contour unit: 1.00 °K T_b
Beam:

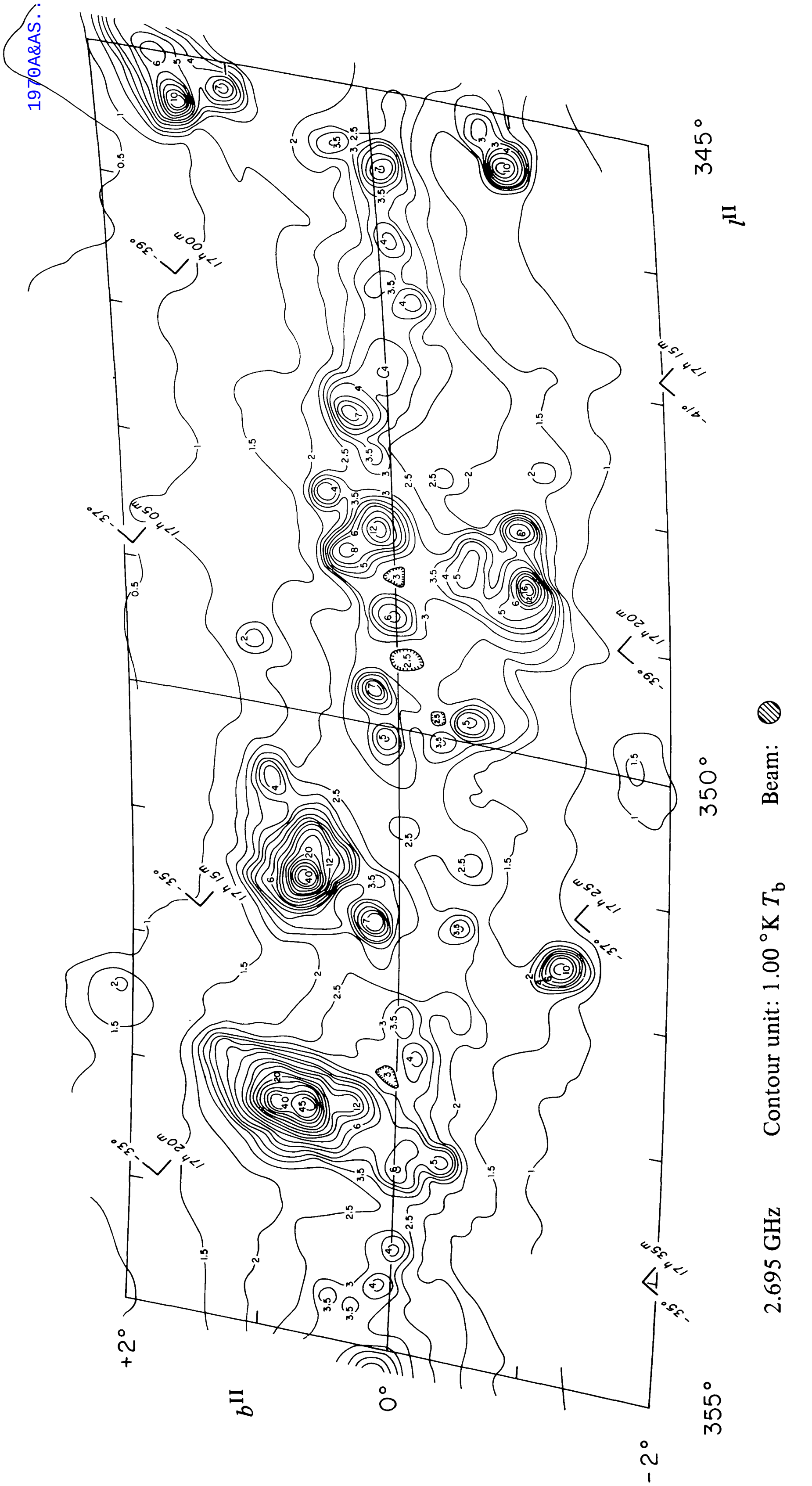


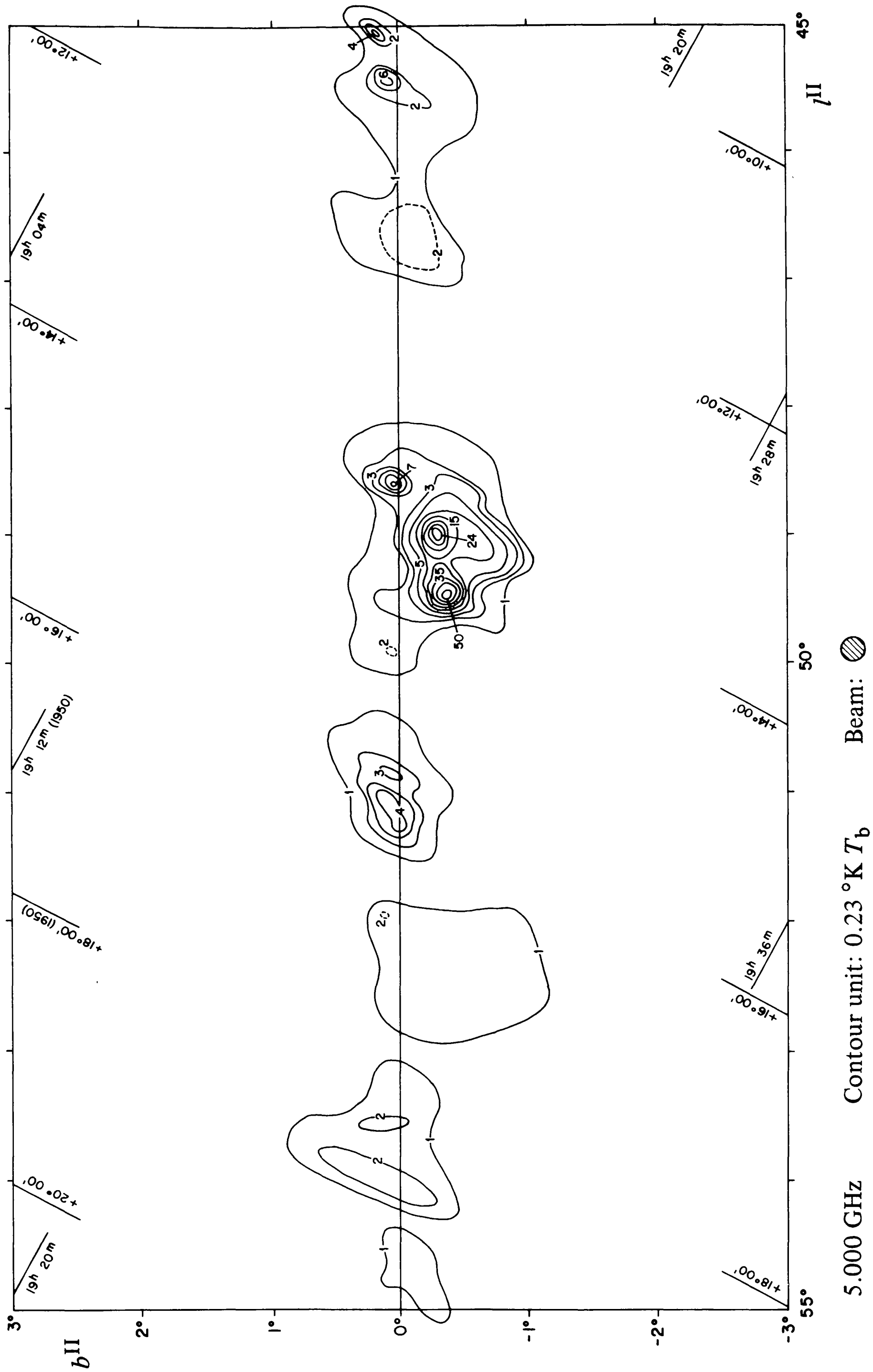
2.695 GHz   Contour unit: 1.00 °K T_b Beam:

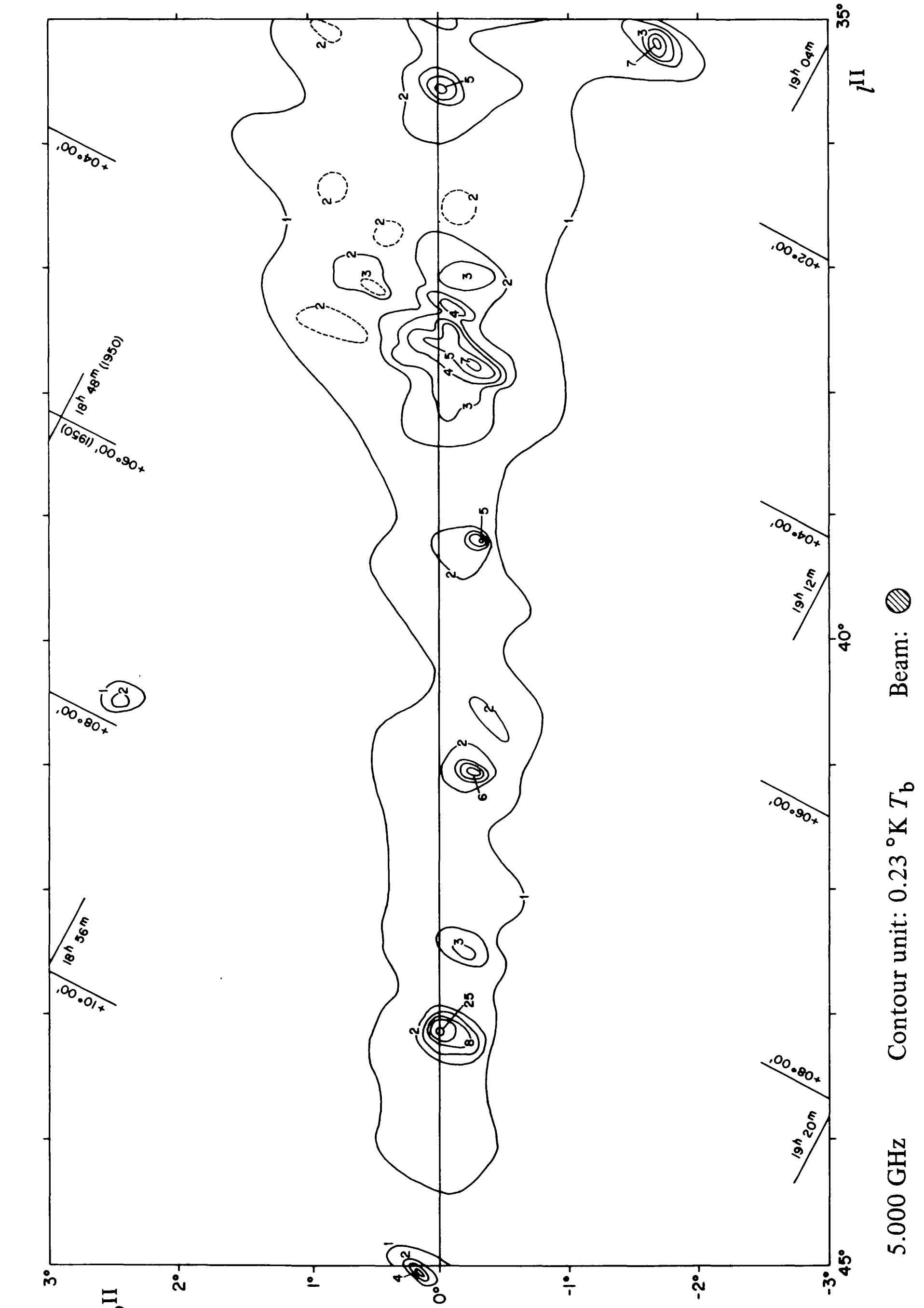


2.695 GHz   Contour unit: 1.00 °K T_b Beam: ◍

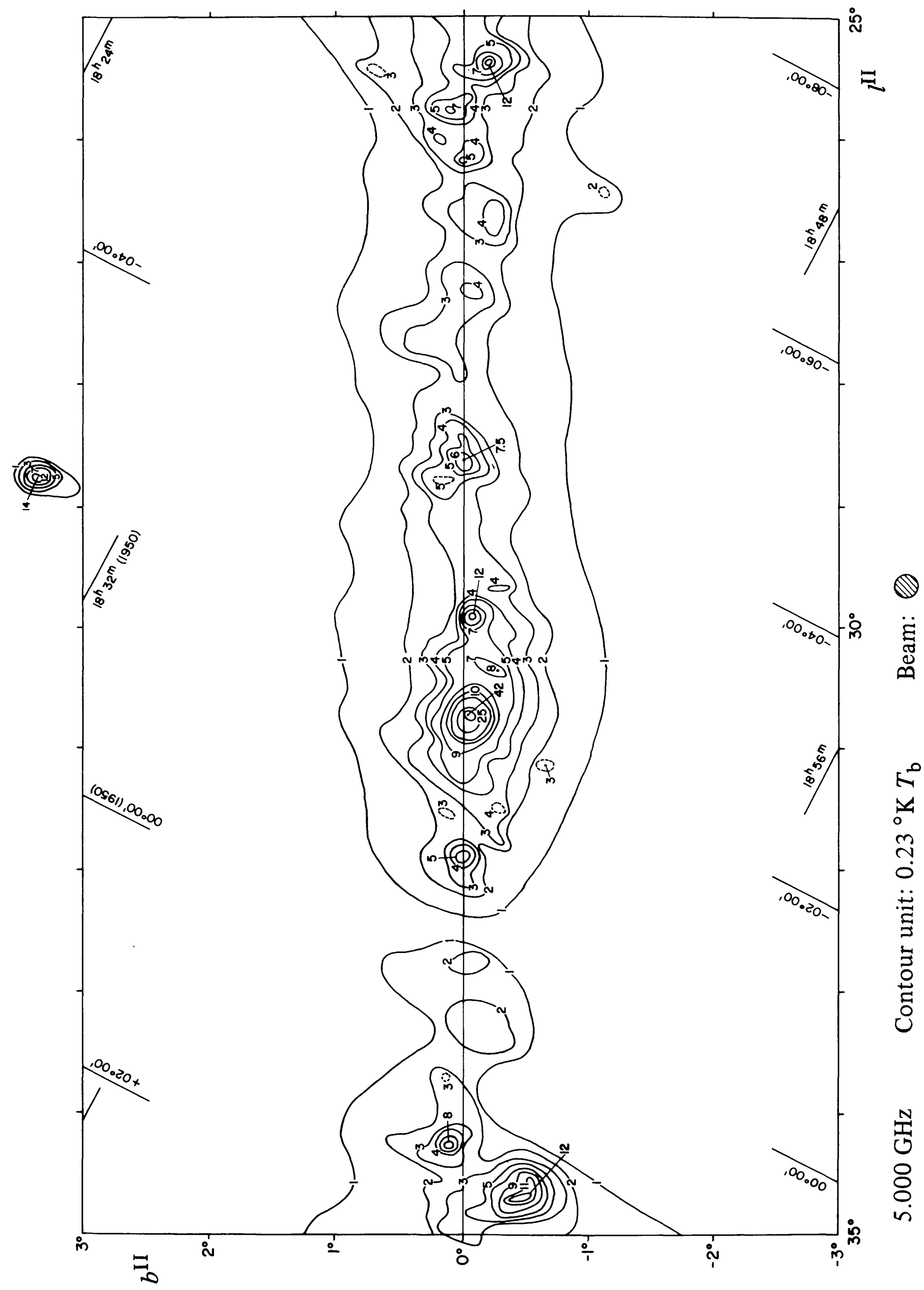

2.695 GHz
Contour unit: 1.00 °K T_b
Beam:
355°
0°
5°
l^II
+2°
0°
−2°
b^II


345°
350°
355°
l^{II}
b^{II}
+2°
0°
-2°
2.695 GHz
Contour unit: 1.00 °K T_b
Beam:

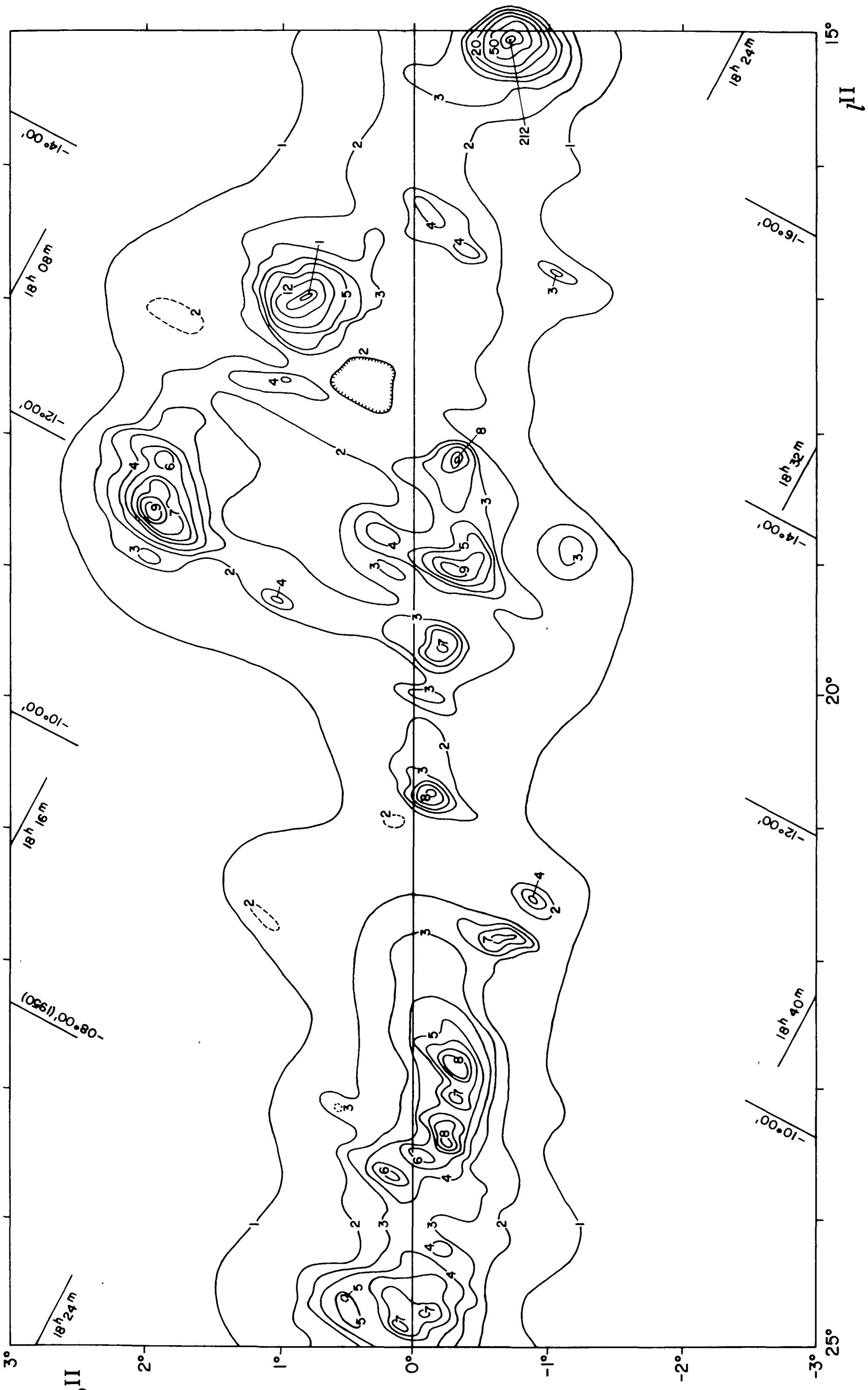

5.000 GHz
Contour unit: 0.23 °K T_b
Beam:
l^{II}
b^{II}
45°
50°
55°
3°
2°
1°
0°
-1°
-2°
-3°



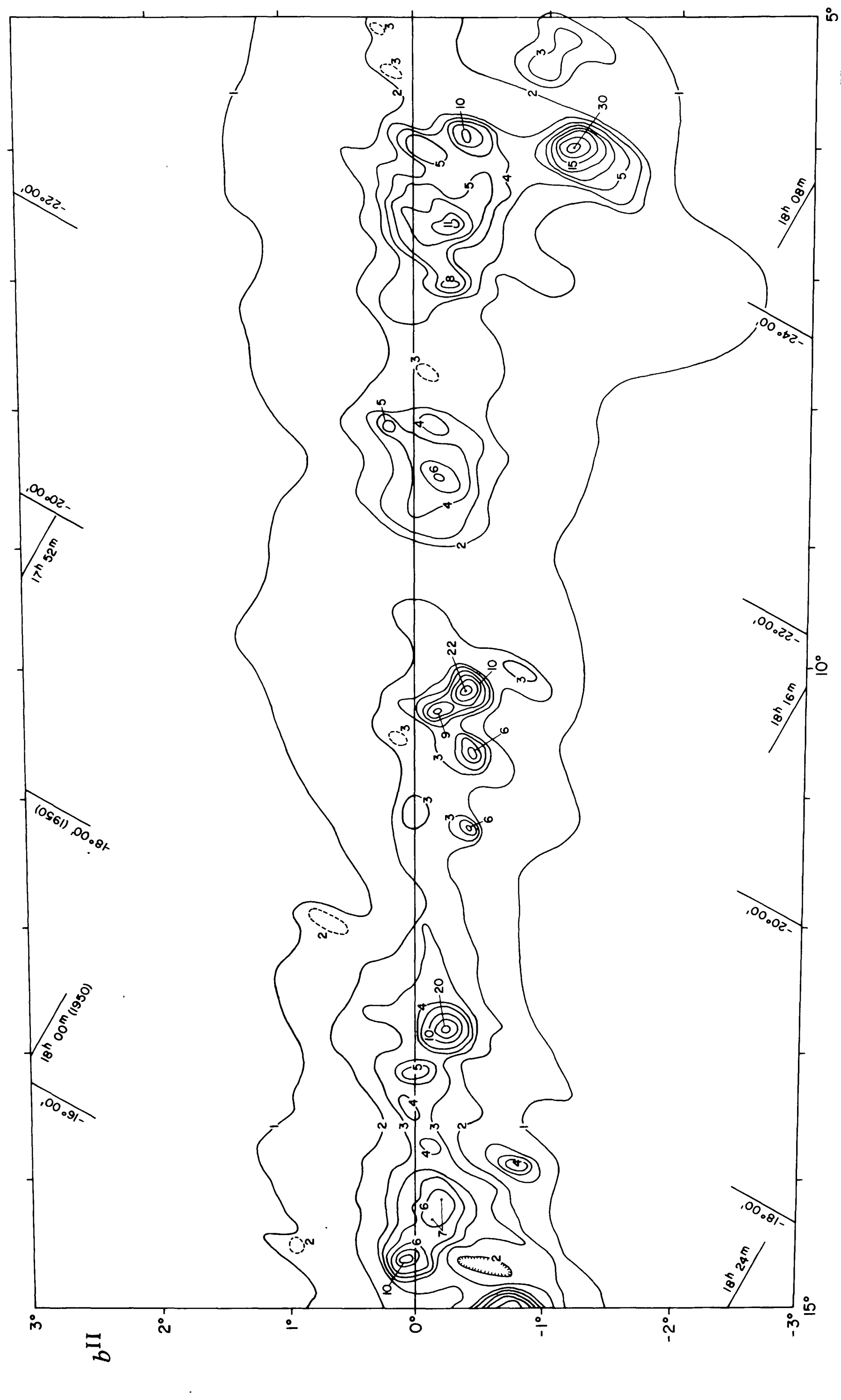
b^{II}
l^{II}
3°
2°
1°
0°
-1°
-2°
-3°
35°
40°
45°
$18^h 48^m$ (1950)
$18^h 56^m$
$19^h 04^m$
$19^h 12^m$
$19^h 20^m$
+04°00'
+06°00' (1950)
+08°00'
+10°00'
+02°00'
+04°00'
+06°00'
+08°00'
5.000 GHz
Contour unit: 0.23 °K T_b
Beam:



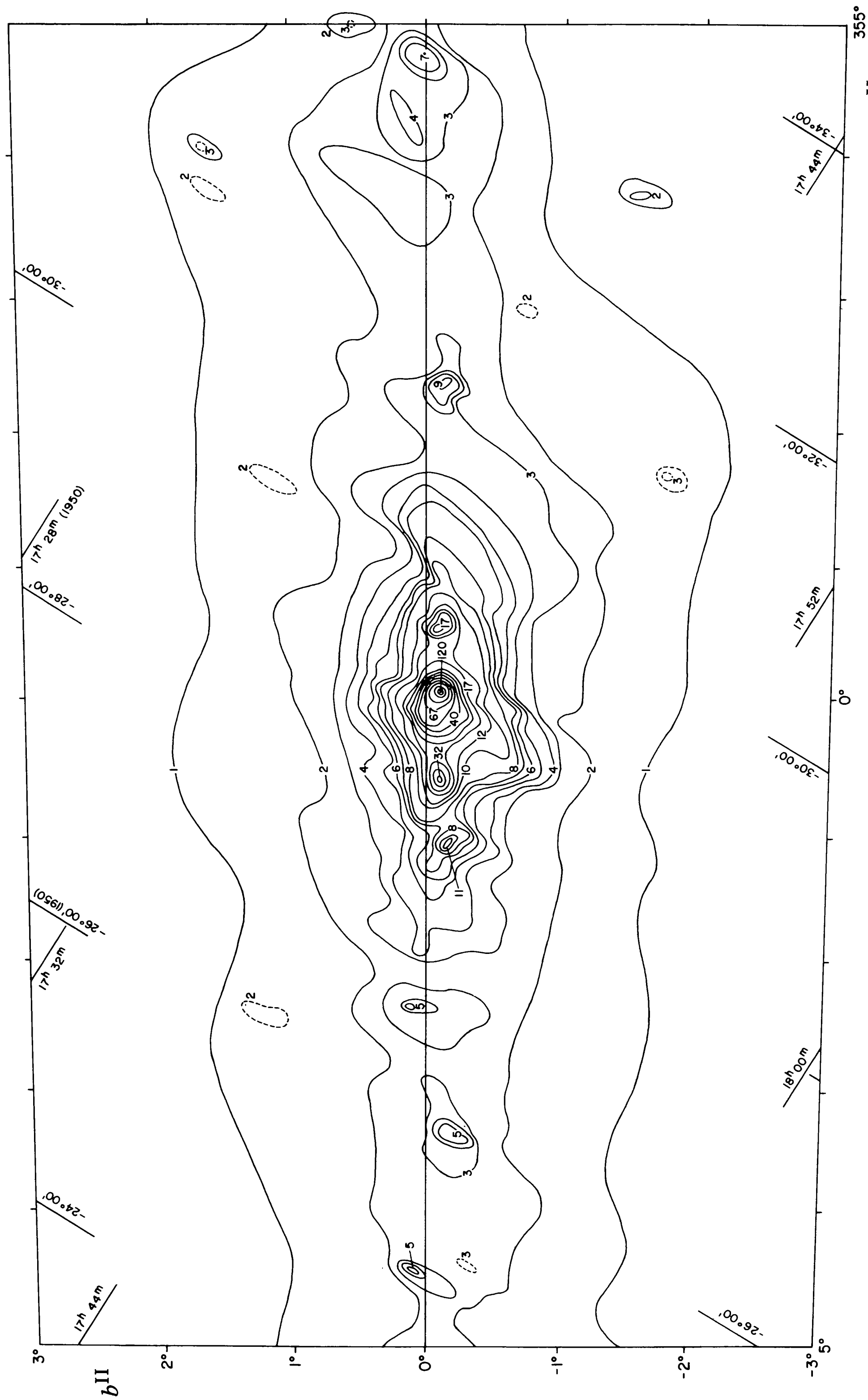
25°
30°
35°
l^{II}
3°
2°
1°
0°
-1°
-2°
-3°
b^{II}
18h24m
18h32m (1950)
18h48m
18h56m
-04°00'
00°00'(1950)
+02°00'
-08°00'
-06°00'
-04°00'
-02°00'
00°00'
5.000 GHz
Contour unit: 0.23 °K T_b
Beam:



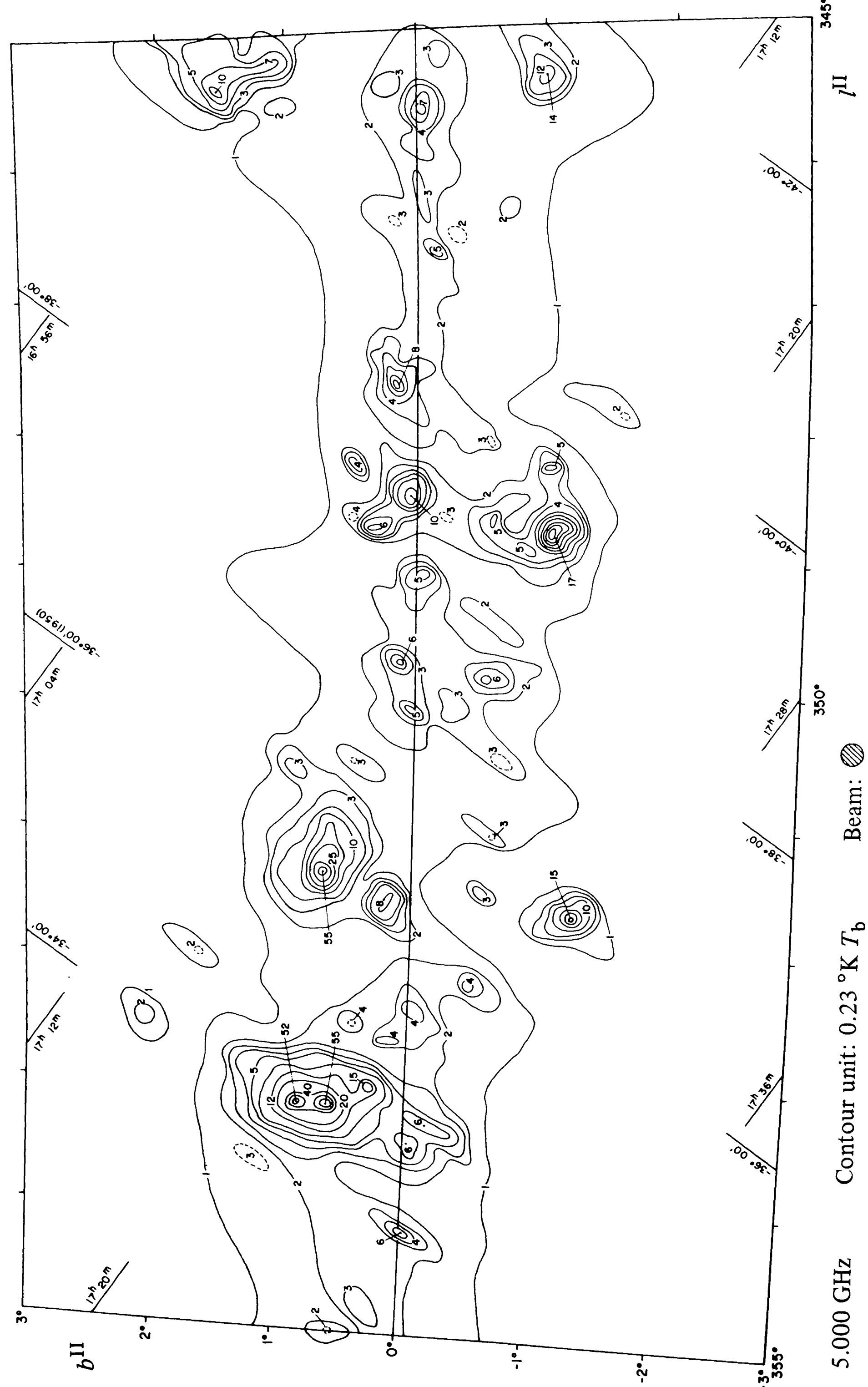
5.000 GHz Contour unit: 0.23 °K T_b Beam:



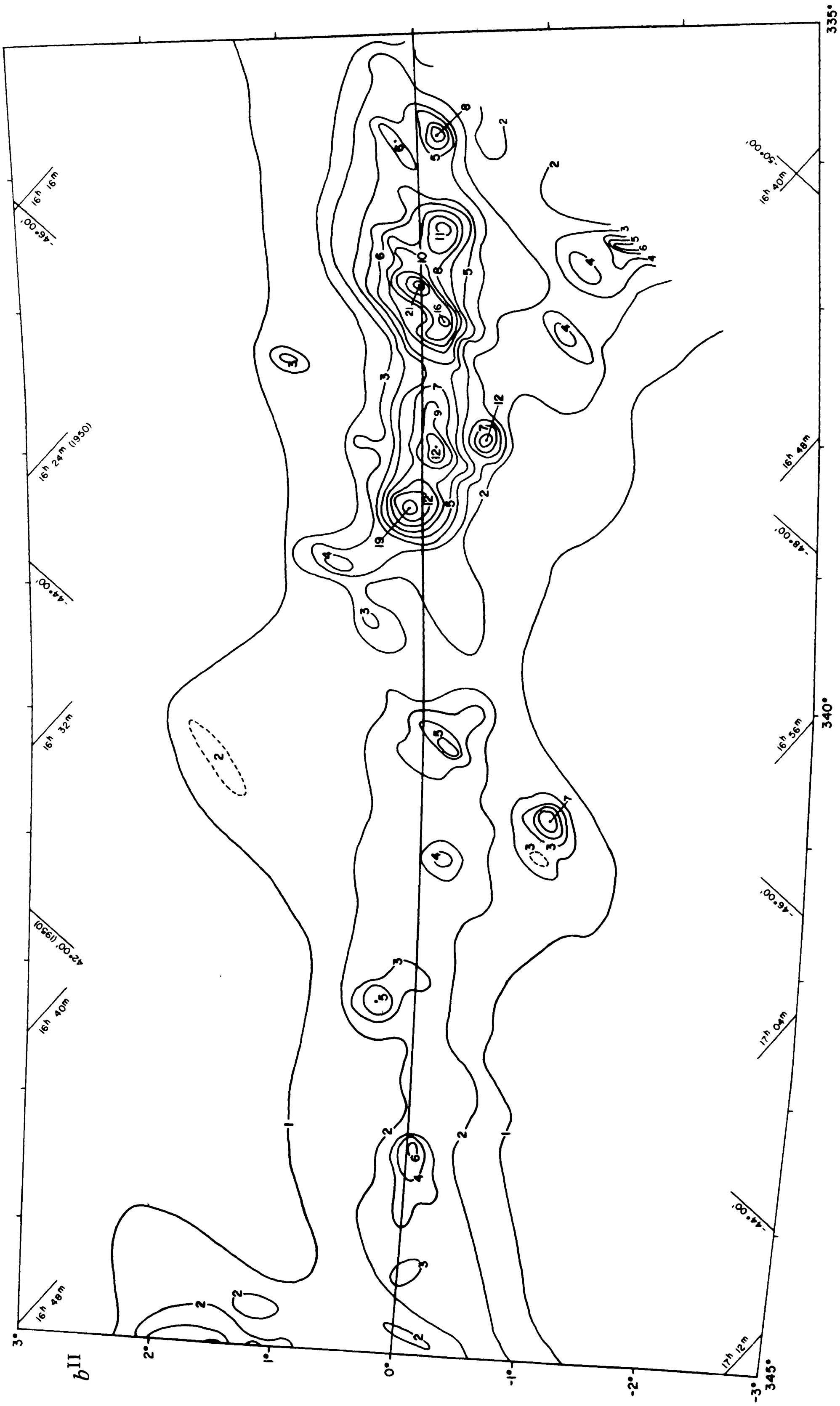
5.000 GHz Contour unit: 0.23 °K T_b Beam:



5.000 GHz Contour unit: 0.23 °K T_b Beam:



5.000 GHz
Contour unit: 0.23 °K T_b
Beam:
l^{II}
b^{II}
345°
350°
355°
3°
2°
1°
0°
-1°
-2°
-3°



5.000 GHz Contour unit: 0.23 °K T_b Beam: