Bull.Spec.Astrophys.Obs., 1996, 40, 128–164

Spectra of radio sources of the program "Cold" at the RATAN–600 radiotelescope

N.N. Bursov

Special Astrophysical Observatory of the Russian AS, Nizhnij Arkhyz 357147, Russia

Received April 3, 1996; accepted April 18, 1996.

Abstract. In accordance with the program "Cold" in 1987–1988 and in 1996 deep surveys of the sky strip at the declination of the source SS 433 ($\delta \simeq 5° \pm 20'$) were made at the radio telescope RATAN–600.
For the first time spectral characteristics of 400 sources from the RC catalog have been determined using only the data obtained with the RATAN–600. The maximum of the flux density distributions at the central wavelength λ7.6 cm is $\sim$ 30 mJy. The lower flux limit in the sample of the sources at the wavelengths 3.9, 7.6, 13.0, 31.0 cm is 16, 9, 37, 61 mJy, respectively. Spectra of 112 sources (28%) have been obtained for the first time, spectra of 90 (23%) sources have been made more accurate. For the first time the fluxes at the wavelengths 2.7, 3.9, 13.0 and 31.0 cm (90% of data) have been measured. The maximum of the distribution of spectral indices for the entire sample of sources in the interval $\lambda\lambda$7.6 – 31.0 cm falls at $\alpha = -0.86 \pm 0.04\,(S_\nu \sim \nu^\alpha)$.
About 20 (5%) sources of the sample have a maximum of radiation at a frequency of about 1 GHz (GHz–Peaked–Spectrum radio sources), about 40 (10%) have a low–frequency cut off of the spectrum. About 70 (19%) sources have flat spectra ($\alpha > -0.5$), 64 (18%) very steep ($\alpha < -1.1$) spectra.

Key words: radio sources: catalog – spectra

1. Introduction

Since 1980 multifrequency "Cold" surveys of the sky strip at the declination of the source SS 433 ($\delta \sim 5°$) have been carried out. The principal goals of this experiment are stated in detail in the paper by Parijskij and Korolkov (1986). One of the objectives is a search for variability of radio sources in the region of the survey and plotting of their spectra.

As a result of reduction of the data obtained with the most sensitive radiometer of the 1980s at λ7.6 cm a catalog (RC) of 1145 radio sources has been compiled (Parijskij et al., 1991; 1992). The RC catalog proved to be the most complete of all the published catalogs in the region of fluxes 10–40 mJy, which is the most interesting region for the investigation of distant objects. However the quality of the data obtained at other frequences allowed these to be used only for clearing the records at the wavelength λ7.6 cm from the radiation of the atmosphere, Galaxy, and for identification of local interference.

For the first time the spectra of the sources from the RC catalog have been obtained for 21 objects after the reduction of the first two surveys data in the interval $16^h < \alpha < 17^h$ at the λ7.6 cm wave using the data from other surveys (Parijskij et al., 1989). Later on spectral investigations of the RC catalog sources, involving all the known data which fell within the strip of the "Cold" surveys were made. As a result, spectra for 491 sources of the catalog have been obtained (Bursov et al., 1989; 1991; 1993). The modernization of the recording system and improvement of the sensitivity of the radiometers at the decimeter waves made it possible to carry out multifrequency surveys at RATAN–600, and to obtain spectra of sources.

The present paper is devoted to determination of spectral characteristics of the sources from the deep RATAN–600 surveys, and, which is most important, in the region of flux densities (λ7.6 cm) from 10 to 40 mJy.

2. Observations

In late 1987 and early 1988 the "Cold" program survey was executed. The observations were carried out at the Northern Sector of RATAN–600 under the condition of source transit through the antenna beam pattern of the telescope. Radiation was recorded with the complex of continuum spectrum radiometers of the secondary mirror (feed-cabine 1). The observations were performed in the interval of right ascension

$0^h - 14^h$, $18^h - 24^h$ at 3.9, 7.6, 13.0 and 31.0 cm. The survey lasted 25 days, and covered about 200 square degrees of the sky.

In January–February 1996 additional observations of a sample of 121 "Cold" program sources were undertaken to revise the coordinates and fluxes of the weakest sources and the 1988 sources with unreliable spectra. The duration of observation of each source ranged from 10 to 30 days over a wide wavelength range in the fixed focus mode.

The HPBW of the RATAN radiotelescope pattern at the elevation of SS 433 were $10'$ in declination and $1'$ ($\lambda 7.6$ cm) in R.A. In 1988 the primary feed of the receiver at the $\lambda 7.6$ cm wavelength was placed at the telescope secondary mirror focus, while in 1996 the focus was located between the $\lambda 2.7$ cm horns. The feeds of the other receivers were aligned with the focal line of the mirror with different displacements, which involved low losses in amplitude of the signal (see Table 1) and distortions in the beam shape.

The observations at decimeter wavelengths were made in a single mode with an internal comparison channel (as a reference signal), at $\lambda 7.6$ cm in the "pilot" signal mode, at $\lambda 2.7$ and $\lambda 3.9$ cm in the mode of two-ray "scanning" of the beam.

3. Multifrequency data processing of radio sources

The observational data processing was performed using the procedure described by Parijskij and Korolkov (1986) as well as in the papers by Parijskij et al. (1989), Bursov et al. (1990) and comprised the following stages: isolation of radio sources from the curves of passage through the beam; monitoring of observations by calibration sources; monitoring of the gain of the radiometers; clearing of records from industrial interference and atmospheric fluctuations. Extra difficulties in the reduction, as compared to the previous reduction at $\lambda 7.6$ cm, were due to the lower sensitivity of the radiometers and the great amount of interference of various origin at other wavelengths from the satellites (especially at $\lambda 13.0$ cm and $\lambda 31.0$ cm). There was another problem consisting in separating the parameters of the sources at $\lambda 31.0$ cm.

The receiver sensitivity at the time of observations and the flux density depth of the survey are given in Table 1, where ΔT_α is the receiver output minimum increment of the antenna noise temperature, which can be measured during one transit of the sky strip through the beam at $\tau = 1$ s (antenna temperature sensitivity):

- the measured sensitivity — the distribution maximum of the measured ΔT_α values on the intervals of records through the whole data file. The size of an interval is equal to the characteristic size under the source passage curve (≈4 HPBW) for the given wavelength;
- the maker's sensitivity — the specifications of the receivers for the moment of observations;
- ΔS_ν – the minimum detectable signal accumulated by averaging over the records — the survey flux sensitivity over the time interval of the source through the beam of the radio telescope as a function of wavelength;
- c_ν – the coefficient of sensitivity losses caused by the displacement of the input paths of the radiometers along the focal line of the radio telescope secondary mirror.

At the wavelengths $\lambda 2.7$ and $\lambda 3.9$ cm the diagram modulation mode allowed the S/N ratio to be increased by a factor of $\sqrt{2}$. The lower sensitivity at $\lambda 31.0$ cm is due to unresolved sources ("confusion") and interference radiation from the satellites.

The reduction was performed on a PC with MS-DOS using the software developed by the author of this paper. In particular, the estimation of the parameters of the sources was made with visual monitoring of all the parameters and comparing them with the other "Cold" surveys or with the reference records of the current survey. This was necessary for the parameters of the sources with a low S/N ratio, distorted background, superimposition of interference and sources to be estimated. That is the case when it is impossible to use the automated procedures of signal reduction.

The signal was accumulated by non-parametric averaging over a number of many-day observations broken up into hourly records. This allowed a large body of observational information to be processed and more correct estimates of the parameters of the sources to be obtained. The averaging of the records and deletion of the extended components (background) from them were performed using the standard software for reduction of the RATAN-600 radio astronomy observations, which is operated in Xenix System (Verkhodanov et al., 1992).

4. Estimation of fluxes of radio sources

One of the most significant and complete catalogs for investigation of spectral characteristics of the sources from the RC catalog was the UTRAO catalog (Douglas, private communication). From the spectra of RC catalog sources obtained earlier using the data from other catalogs (see Bursov et al., 1989) a sample of calibration sources was compiled.

The sample included 190 steep spectrum sources ($\alpha < -0.5$). The functional dependences (calibration curves) obtained on the basis of processing of the calibration sources were used to convert the measured antenna temperatures T_α of the sources into the ra-

Table 1: Survey sensitivity

Wave length	Radiometer sensitivity s^{-1}				
	ΔT_α(1 record)		ΔS_ν(25 records)		c_ν
	maker's	measured	referred to beam		
cm	mK	mK	mJy/BP	5·σ	
2.7	3.2	4.5±0.8	3.8	19	0.94
3.9	13	17.0±4.4	4.9	25	0.72
7.6	3	2.8±0.4	1.1	5.5	1.00
13.0	25	35±7	15.8	80	0.81
31.0	30	64±14	17.1	85	0.96

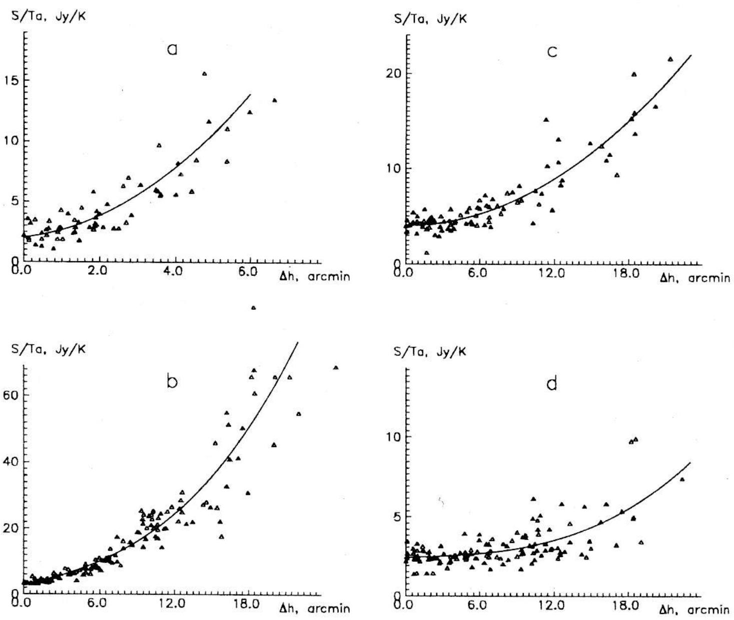


Figure 1: Calibration curves for conversion of measured antenna temperatures (T_a) of the survey sources into radiation flux densities (S_ν) depending on the shift from the BP center in height (Δh) at the wavelengths of observations: a) 3.9 cm; b) 7.6 cm; c) 13.0 cm; d) 31.0 cm.

diation flux S_ν. The data of the dependence are corrected for the elevation Δh displaced transit of the sources through the knife beam of the radio telescope and are represented by the ratio $S_\nu/T_a \sim f(\Delta h)$ (Fig. 1). At λ7.6 cm a curve was obtained with an error no worse than 5% for the sources with the mean flux of $\sim$ 75 mJy and $|\Delta h| \leq 10'$. At λ3.9 cm the flux error was estimated no worse than 15-20% ($\sim$ 50 mJy). At λ13.0 cm it was 15% ($\sim$ 140 mJy) and $|\Delta h| \leq 15'$. For λ31.0 cm – 12% ($\sim$ 300 mJy). The obtained estimates of the error in the calibration curves are of special interest in searching for variability of the RC catalog sources.

As a result of reduction a sample of 400 sources with the flux estimates for all the wavelengths has been obtained. At λ7.6 cm more than half of the sample sources have flux densities below 80 mJy, a quarter – below 40 mJy. The flux distribution maxima for the wavelengths 3.9, 7.6, 13.0, 31.0 cm are 32, 30, 70 and 92 mJy, respectively. The lower limit of the flux in the sample is 16, 9, 37 and 61 mJy. The sample is complete up to fluxes of 80 mJy.

The error in the flux estimates on the survey records after the averaging has been computed by the formula:

$$\sigma^2 = \Delta S_\nu^2 + k_{\Delta h} S_\nu^2,$$

where ΔS_ν is the flux sensitivity of the survey at the frequency ν;
S_ν is the source flux density at the frequency ν;

$k_{\Delta h}$ is the parameter associated with the error in determination of the coordinates and fluxes of the calibration sources depending upon the displacement of a source from the centre of the beam of the telescope in elevation (Δh).

The source fluxes for the observations of 1996 were measured by a similar procedure and are given in the Apendix in the table of the fluxes at λ2.7 cm, which is lacking in the previous survey.

5. Spectra of RC catalog sources

For the above mentioned 400 sources, having the flux measured at more than two different frequencies, spectra have been obtained. For 112 (28% of the total number) of them spectra have been obtained for the first time; for another 90 sources (23%) the spectra have been refined. Spectral indices of 353 sources have been determined. The spectra were approximated by the following functional dependences: a) the straight spectra $logS_\nu = a + blog\nu$; b) the curved spectra $logS_\nu = a + blog\nu + ce^{klog\nu}$, where the coefficient $k = +1$ was taken for the spectra with a steep slope in the high–frequency part; while $k = -1$ in the low–frequency one. In the cases when the spectrum had a slope on both sides with respect to a certain maximum; the approximation was done by the parabola $logS_\nu = a + blog\nu + clog^2\nu$.

The number of sources and the degree of completeness of the RC catalog were evaluated in the earlier papers (Parijskij et al., 1991; 1992), including our survey at λ7.6 cm. In Fig. 2 is presented the distribution of the spectral indices calculated from the spectra in the wavelength range $\lambda\lambda 7.6 - 31.0$ cm and fluxes (λ7.6 cm): a) 10 mJy$\leq S_\nu \leq 40$ mJy, b) 40 mJy$< S_\nu \leq 80$ mJy, c) 80 mJy $< S_\nu \leq 1000$ mJy. The total distribution for all the sources that fall within the survey region is given in Fig. 1d. The solid line shows the distribution of the known spectra from the earlier papers (Bursov et al., 1989; 1991; 1993), the dashed line shows the distribution of the sources whose spectra have been obtained for the first time.

It is seen from the figures that the fainter the mean flux in the sample of the sources the more the maximum of the distribution of the spectral indices is displaced to the region characteristic for steep–spectrum sources. The number of the sources with the spectra obtained for the first time increases with decreasing fluxes, and they are located mainly in the interval of fluxes less than $S_\nu \leq 40$ mJy. The mean value of the maximum of distribution of the spectral indices for the whole sample is $\alpha = -0.86 \pm 0.04$. For comparison from the paper on model calculation of the number of sources (Gorshkov, 1991) was taken the distribution of spectral indices at $\nu = 3.9$ GHz. Fig. 2c shows good agreement of the model curve with the spectral distribution for the entire sample of sources with a flux density of $S_\nu(7.6cm) > 80$ mJy.

6. Classification of spectra of faint sources

For 202 sources with the spectra obtained for the first time classification by types (classes) of spectra according to the descriptions presented in the paper by Kellerman (1974) was made.

1. Class S. The straight power spectrum assigned to extended optically thin synchrotron radio sources.

   a) Class C^-. The spectrum has a negative second derivative of the dependence $lgS - lg\nu$ and is more steep at the short wavelengths. Such spectra are also assigned to extended radio sources.

   b) Class C_{max}. The power spectrum (class S) or dual power spectrum (class C^-) at short waves, but there is a sharp cut off at the long wavelengths. Such spectra are produced by compact optically thick sources.

   c) Class C_1^+. The spectrum has positive curvature with a rise at the long wavelengths. Typical of sources in rich clusters of galaxies.

   d) Class C_s^+. The spectrum has positive curvature with a rise at the short waves. Such spectra are assigned to compact optically thick objects.

2. Class CPX. Complex spectra with one or more minima. The spectra are generally believed to be composed of two or more spectra of class C_{max} plus, in some cases, of class S. The spectra of this class are also assigned to compact optically thick objects.

It should be noted that the types of spectra are determined in many cases from the upper limit of the flux density at 365 MHz (UTRAO catalog). Probably some of them have an extended structure and are simply invisible with interferometer. On the other hand, the fact that there is a sharp drop in the low–frequency part of the cut off spectrum is also confirmed by the UTRAO data for a number of sources of spectral type C_{max}, for instance: 0452+0443, 0545+0505, 0545+0459, 0627+0457, 0804+0506, 0948+0510, 1053+0456, 1123+0448, 1134+0442, 1219+0448, 1224+0457, 1326+0438, 1624+0443, 1644+0451, 1807+0510, 2322+0459. In the cases when there is no pronounced drop, the spectra are interpreted by class C^-.

In Table 2 is presented the distribution of spectra by classes in accordance with the definitions of Kellerman (1974).

In the second column is given a percentage for each type of spectrum for the sample of 202 sources of the RC catalog with the revised and first–obtained spectra, with a mean flux S_ν (7.6 cm)$\sim$ 30 mJy.

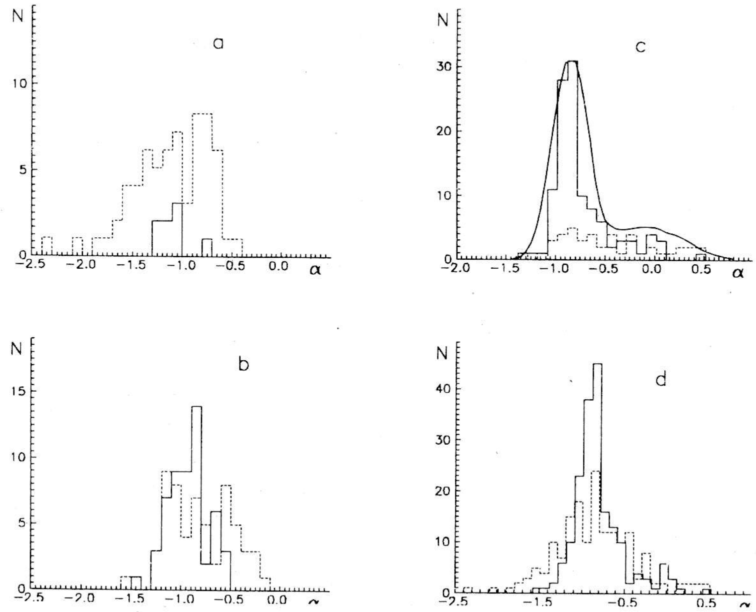


Figure 2: Distribution of spectral indices in the wavelength interval $\lambda\lambda 7.6 - 31.0$ cm in the region of flux densities (7.6 cm): a) $10 \leq mJy \leq S \leq 40mJy$, b) $40mJy < S \leq 80mJy$, c) $80mJy < S \leq 1000mJy$, d) $10mJy \leq S \leq 1000mJy$. The spectra obtained for the first time – dashed line, the spectra from (Bursov et al., 1989; 1991; 1993) – solid line, the envelope – the model curve taken from (Gorshkov, 1991).

Table 2: Classification of spectra

Spectrum class from Kellerman, 1974	New spectra of RC catalog in %	Compact sources from Steppe et al., 1995, %	Spectra of strong RC sources, %	Spectra of strong (Herbig, Readhead, 1992) sources, %
S, C^-	46	45	79	65
C_{max}	32	31	3	6
C_1^+, C_s^+	8	12	7	8
CPX	2	1	3	4
$FLAT$,?	12	11	8	17

In the third column a percentage is given for the sample of 198 stronger sources ($S_\nu \sim 80$ mJy) of the same catalog with the spectra already known (Bursov et al., 1989; 1991; 1993).

In the fourth column, a percentage is given for the sample of 76 compact steep spectrum sources (*CSS* sources) calculated from the data presented in (Steepe et al., 1995)

In the fifth column, a percentage is given for the sample of 256 strong sources ($S_\nu \geq 1$Jy, $\nu \geq 1$ GHz) calculated from the data given in (Herbig and Readhead, 1992).

The last line of the table contains a percentage of sources with flat and unclassified spectra. From the remarkable coincidence of the proportion of weak RC catalog sources with the sample of *CSS* sources in types of spectra, weak sources may be assumed to be *CSS* sources with the same portion of the sources having maximum radiation near 1 GHz (*GPS* sources).

The class distribution of the spectra of the strong sources from the RC catalog is considerably different from the distribution of the weak sources, however, on the whole it is in good agreement with the distribution for the sample of sources from (Herbig and Readhead, 1992). The distinction for the RC catalog sources is a somewhat smaller proportion of flat-spectrum sources relative to steep–spectrum ones.

7. Spectral catalog

All calculated flux density values at a given wavelength and their spectral indices, if determined, are listed in Table 3, where:

- (1) – the number of the source;
- (2) – the name of the source in the RC catalog derived from the coordinates for the epoch J2000; designations: "n" – sources with the spectra obtained for the first time, "c" – sources with the revised or corrected spectra, for the rest of the sources spectra are added.
- (3,4) – right ascension and declination of the sources for the epoch 1950.0. The coordinates are taken from the RC catalog or from the UTRAO catalog if the RC catalog source coordinates have been determined with large errors.
- (5) – elevation drift (Δh) of the source from the centre of the beam of the radio telescope, in seconds of arc;
- (6) – flux density and its errors at $\lambda 2.7$ cm, in mJy, based on the observations of the RC catalog sources in 1996;
- (7) – flux density and its error at $\lambda = 3.9$ cm, mJy;
- (8) – the same at $\lambda = 7.6$ cm;
- (9) – the same at $\lambda = 13.0$ cm;
- (10) – the same at $\lambda = 31.0$ cm;
- (11) – the calculated spectral index in the wavelength interval $\lambda\lambda 76 - 31.0$ cm for the given source. The error of spectral indices for the known–spectrum sources is 5-8%, and 15-20% for the sources with the first–obtained spectra;
- (12) – the type of the source spectrum from the classification of Kellerman (1974). Flat spectra are denoted by "F".

When a source is not revealed against the noise background, the upper flux value is presented, which is calculated from the flux sensitivity corrected for displacement of the source from the center of the telescope beam. At $\lambda 3.9$ cm fluxes are measured for $|\Delta h| \leq 5'$. This is due to a relatively more narrow beam at $\lambda 3.9$ cm and, as a consequence, to the rapid decrease in sensitivity from the centre to the edge of the survey region. If $\Delta h > 5'$, the "no" implies that the flux value is lacking. For some other waves the "no" means the absence of the flux value for a number of reasons: the source transit time coincidence with the time of calibration of the output signal of the radiometer, the distortion of records, the insufficient resolution of the sources, etc.

At $\lambda 2.7$ cm the flux estimates are given for 121 sources from the 1996 observations.

The spectra of the RC catalog sources obtained for the first time are presented in the Apendix (Fig. 3). These data are denoted by filled triangles, while the points from other catalogs – by open circles, including the $\lambda 7.6$ cm data from the RC catalog.

8. Principal results

1. Spectral investigations of all the RC catalog sources in the RATAN-600 "Cold" survey strip have been carried out (epoch 1988.0). From the obtained data spectra for 400 sources have been constructed, for 353 of them the spectral indices have been computed at the wavelengths $\lambda\lambda 7.6 - 31.0$ cm. From the additional 1996 observations of 121 sources flux estimates at $\lambda 2.7$ cm have been made.

2. For 112 (28% of the total number) sources spectra have been obtained for the first time, for another 90 (23%) sources the spectra have been refined. The maximum of distribution of spectral indices is $\alpha = -0.86 \pm 0.04$. 1/5 of the sources are steep–spectrum sources ($\alpha \geq -1.1$), more than half of them fall within the flux region of 10 mJy$\geq S \geq$ 40 mJy.

3. The realized survey sensitivity (in the time interval of the source transit through the beam of the telescope) is 4.9, 1.1, 15.8 and 17.1 mJy for the wavelengths 3.9, 7.6, 13.0, and 31.0 cm, respectively. More than half of the survey sources have fluxes below 80 mJy, a quarter of them – below 40 mJy.

4. For the first time the source fluxes have been measured at the decimeter wavelengths: $\lambda 13.0$ cm and $\lambda 31.0$ cm (90% of data). The data for $\lambda 7.6$ cm have been revised. At RATAN-600 first measurements of the fluxes for a large sample of weak sources have been made for $\lambda 2.7$ cm and $\lambda 3.9$ cm.

5. The distribution of spectral indices of the complete sample of sources ($S_\nu \leq 8$ mJy (7.6 cm) has been shown to have a good fit to the model curve (Gorshkov, 1991).

6. The spectral types portions in the sample of weak sources with the spectra obtained for the first time and in sample of the steep–spectrum compact sources (CSS sources, Steppe, 1995) are in good coincidence ance weak sources also compose to the sample of CSS sources. However, for the sample of comparatively strong sources ($S_\nu \sim 80$ mJy) the distribution of spectra by type is, on the whole, coincident with the distribution of spectra of strong sources (Herbig, 1992), but with a smaller portion of flat–spectrum sources.

7. 20 (5%) sources of the sample have spectra with maximum radiation near 1 GHz (GPS sources), about 40 more sources (10%) have a cut off in radiation at low frequencies. About 70 (19%) are flat–spectrum ($\alpha > -0.5$), while 64 (18%) have very steep spectra ($\alpha \geq -1.1$).

So, in the present paper complete information is obtained about spectral characteristics of the RC catalog radio sources whose spectral index is higher than

-0.7 . For refining the spectra of weak sources at the decimeter wavelengths and at the waves shorter than λ7.6 cm, the author has accumulated a considerable body of evidence obtained at the RATAN–600.

The spectral catalog is also expected to be revised using the new data from the VLA survey at a frequency of 1.4 GHz (Condon et al., 1992) and the WSRT (327 MHz) survey.

The author thanks N.S. Soboleva and S.A. Trushkin for assistance in the work and colleagues who provided the necessary conditions of operation of the radio telescope.

References

Bursov N.N., Gol'neva N.E., Lipovka N.M., Soboleva N.S., Temirova A.V.: 1989, Soobshch.Spets.Astrofiz.Obs., **63**, 50.

Bursov N.N., Lipovka N.M., Pyatunina T.B., et al.: 1990, Astrofiz. Issled. (Izv SAO), **29**, 12.

Bursov N.N., Lipovka N.M., Soboleva N.S., Temirova A.V.: 1991, Preprint SAO RAS, No. **69–73L**.

Bursov N.N., Chepurnov A.V., Lipovka N.M., Soboleva N.S., Temirova A.V.: 1993, Astron.Astrophys.Suppl., **101**, 447.

Condon J.J., Cotton W.D., Greisen E.W., et al.: 1992, Preprint 92/77, NRAO.

Douglas J.: Catalogs of sources at λ365 MHz in the band $5^\circ \pm 3^\circ$. Private communication.

Kellermann K.I.: 1974, in: Galactic and Extra–Galactic Radio Astronomy, ed.: G.L. Verschuur and K.I. Kellermann, Springer–Verlag, Berlin, Heidelberg, New York, 320.

Gorshkov A.G.: 1991, Astron.Zh., **68**, 1124.

Herbig T. and Readhead A.C.S.: 1992, Astron.Astrophys.Suppl., **81**, 83.

Parijskij Yu.N. and Korolkov D.V.: 1986, in: Astrophysics and Space Reviews. Soviet Scientific Reviews, Section E, ed.: R.A. Syunyaev, Harward Academic Publishers, London, **5**.

Parijskij Yu.N., Bursov N.N., Vilebinskij R., et al.: 1989, Astrofiz. Issled. (Izv. SAO) **27**, 95.

Parijskij Yu.N., Bursov N.N., Lipovka N.M., Soboleva N.S., Temirova A.V.: 1991, Astron.Astrophys.Suppl., **87**, 1.

Parijskij Yu.N., Bursov N.N., Lipovka N.M., Soboleva N.S., Temirova A.V.: 1992, **96**, 583.

Steppe H., Jeyakumar S., Saikia D.J., Salter C.J.: 1995, Astron.Astrophys.Suppl., **113**, 409.

Verkhodanov O.V., Erukhimov B.L., Monosov M.L., Chernenkov V.N., Shergin V.S.:1993, Bull.Spec.Astrophys.Obs., **36**, 132.

Table 3: Flux densities of RC catalog radio sources

	Source name		Coordinates R.A.1950.0	DEC.1950.0	Shift arcmin	Flux densities (mJy) at wavelength (cm) 2.7	±	3.9	±	7.6	±	13.	±	31.	±	Spectral index	type
(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
1	J0009+0458		00 06 44.80	04 41 16.0	-3.59	28	5	78	12	150	11	180	19	514	50	-0.86	S
2	J0012+0501	n	00 09 37.73	04 44 19.0	-0.55	no		17	5	22	3	37	8	<	82	-0.82	S
3	J0015+0503		00 12 39.29	04 46 31.0	1.64	no		26	8	17	5	81	25	150	25	-1.39	S
4	J0015+0501	n	00 12 49.08	04 44 39.0	-0.22	no		<	11	33	3	76	11	192	28	-1.13	C^-,C_{max}?
5	J0022+0502		00 19 51.93	04 45 29.2	0.59	18	4	55	11	93	5	86	10	167	27	-0.54	CPX
6	J0025+0504	n	00 22 45.06	04 48 08.0	3.22	27	5	<	31	22	4	93	14	131	22	-1.30	C^-,C_{max}?
7	J0025+0501		00 23 15.56	04 45 47.1	0.87	27	5	65	11	61	5	125	14	185	33	-0.61	S
8	J0027+0503	c	00 24 51.99	04 46 26.0	1.51	no		<	17	29	3	63	10	105	20	-0.91	C^-
9	J0029+0509		00 26 28.89	04 52 59.0	8.05	239	11	434	93	399	42	486	65	608	91	-0.25	F
10	J0032+0510	c	00 30 22.82	04 54 02.0	9.08	no		no		71	14	<	193	252	39	-0.90	C_{max},C^+?
11	J0033+0502	n	00 31 02.54	04 45 38.0	0.67	no		<	13	38	4	42	8	123	21	-0.68	C^-
12	J0034+0513		00 31 31.68	04 58 25.2	13.46	no		no		115	30	141	35	240	59	-0.94	S
13	J0038+0449		00 36 00.06	04 34 20.2	-10.66	22	4	no		93	18	131	33	331	65	-0.97	S
14	J0039+0454		00 37 17.59	04 38 22.0	-6.64	no		208	51	365	24	483	53	1016	103	-0.92	C^-
15	J0042+0504		00 39 52.02	04 48 57.8	3.93	no		51	13	98	10	170	22	331	40	-0.89	S
16	J0043+0502		00 41 12.37	04 46 22.0	1.32	81	6	146	16	138	8	126	18	242	50	-0.05	C^+
17	J0049+0456	n	00 46 34.22	04 40 17.0	-4.82	no		<	52	46	6	103	18	234	38	-1.15	C_{max}
18	J0049+0448		00 47 14.55	04 32 42.2	-12.40	no		no		67	18	no		174	35	-0.74	S
19	J0057+0502	n	00 54 30.72	04 46 13.0	1.02	6	2	<	14	28	2	57	12	<	83	-0.81	S
20	J0057+0501	n	00 55 08.14	04 45 35.0	0.38	6	2	24	7	24	3	70	15	<	82	-0.85	S
21	J0058+0458		00 55 27.86	04 42 26.3	-2.77	31	4	<	27	80	6	139	18	237	40	-0.77	C^-
22	J0103+0521		01 00 53.61	05 05 25.2	20.14	73	5	no		255	80	400	90	<	212	-0.83	C^-
23	J0105+0501		01 02 58.75	04 45 06.2	-0.20	no		16	5	21	3	45	7	187	30	-1.16	S,C^+?
24	J0106+0501	n	01 04 04.29	04 45 34.0	0.24	no		17	6	24	3	48	10	113	17	-1.09	C^-
25	J0110+0500		01 07 38.82	04 44 02.9	-1.33	7	2	59	10	78	3	165	19	292	29	-0.94	S
26	J0111+0456	n	01 08 34.92	04 40 41.0	-4.71	no		<	50	25	6	no		77	17	-0.82	S
27	J0116+0503	n	01 14 01.88	04 47 24.0	1.92	no		<	19	15	4	42	8	105	22	-1.38	C^-
28	J0117+0503	n	01 15 06.40	04 47 15.0	1.75	4	2	<	18	16	4	<	112	75	16	-0.98	S
29	J0118+0502	c	01 16 12.86	04 47 05.0	1.56	no		<	17	57	5	98	12	262	42	-0.85	C^-
30	J0124+0459	n	01 21 50.84	04 43 27.0	-2.18	no		59	15	62	5	95	18	134	18	-0.50	S,F
31	J0125+0457	n	01 22 30.01	04 41 50.0	-3.81	no		105	25	88	9	64	20	133	25	-0.25	F?
32	J0126+0502		01 23 40.61	04 46 38.0	0.97	no		24	5	64	5	65	15	175	26	-1.01	S
33	J0128+0511	c	01 25 45.37	04 56 02.0	10.33	20	4	no		78	19	115	29	252	45	-1.10	C^-

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
34	J0129+0454	n	01 26 43.68	04 38 35.0	-7.14	no		no		56	12	78	20	85	16	-0.40	F
35	J0133+0459		01 30 45.02	04 43 55.8	-1.88	6	2	32	7	66	5	140	17	321	32	-1.14	S,C^{+}?
36	J0135+0448		01 33 01.14	04 33 13.3	-12.63	35	4	no		90	20	190	40	312	72	-0.95	S
37	J0143+0505		01 40 57.58	04 52 54.2	6.87	9	2	no		55	9	117	22	266	37	-1.11	C^{-}
38	J0145+0456	n	01 42 40.15	04 41 28.0	-4.61	no		<	49	28	4	84	14	123	24	-1.05	C_{max}
39	J0148+0503		01 45 49.65	04 49 13.0	3.07	no		65	10	114	8	199	24	353	31	-0.78	S
40	J0149+0458	n	01 46 31.83	04 44 02.0	-2.13	no		30	8	40	4	78	18	163	28	-1.00	C^{-}
41	J0149+0506	n	01 46 39.85	04 51 22.0	5.20	no		no		39	6	95	17	180	30	-1.08	C_{max}
42	J0152+0453		01 50 17.44	04 39 07.6	-7.13	no		no		39	7	125	23	230	45	-1.28	S
43	J0153+0455		01 51 20.17	04 41 17.7	-4.99	40	3	71	20	78	9	88	15	232	38	-0.65	S
44	J0154+0459		01 52 14.81	04 45 40.2	-0.64	9	2	17	5	36	4	61	10	222	28	-1.03	C^{-}
45	J0159+0444		01 56 59.32	04 30 59.7	-15.44	no		no		80	20	255	60	295	70	-0.97	C^{-}
46	J0209+0501		02 06 35.96	04 47 28.0	0.77	10	2	21	5	32	3	49	10	197	29	-1.05	S
47	J0213+0518		02 10 59.40	05 04 20.7	17.52	no		no		132	30	<	393	436	90	-0.95	S
48	J0214+0504	c	02 12 12.98	04 50 18.0	3.43	20	4	<	34	38	5	147	18	155	30	-1.00	C_{max}
49	J0215+0522	c	02 13 14.40	05 09 01.0	22.12	138	6	no		192	60	195	50	109	40	+0.12	F,C^{+}?
50	J0217+0518		02 14 52.10	05 04 32.7	17.60	no		no		91	30	<	395	373	93	-0.92	S,C^{-}
51	J0220+0502		02 17 55.67	04 49 00.9	1.97	no		33	7	71	5	108	15	240	36	-0.94	S
52	J0222+0502	n	02 19 38.14	04 49 06.9	2.02	no		<	20	9	4	<	114	110	21	-1.35	C^{-}
53	J0222+0511	c	02 19 43.59	04 57 34.0	10.47	no		no		118	24	<	219	109	31		
54	J0225+0508		02 22 32.30	04 55 05.0	7.90	28	5	no		49	10	177	25	348	40	-1.11	S
55	J0226+0512		02 23 45.69	04 58 39.0	11.43	no		no		87	20	128	25	268	40	-0.91	S
56	J0234+0446	c	02 31 30.23	04 33 01.0	-14.47	133	6	no		362	70	538	100	330	70	+0.29	C_{max}
57	J0238+0456		02 36 02.69	04 43 32.0	-4.10	no		<	42	55	6	101	14	121	21	-0.82	S
58	J0250+0516		02 48 15.66	05 03 51.9	15.79	no		no		155	41	140	40	444	80	-1.32	C^{-}
59	J0252+0458	n	02 50 01.94	04 46 24.0	-1.74	7	2	<	18	21	3	66	15	75	14	-0.81	S
60	J0252+0503	n	02 50 16.54	04 51 25.0	3.27	no		<	32	34	4	70	20	83	17	-0.74	S
61	J0305+0454	n	03 03 09.36	04 42 30.0	-6.14	no		no		33	8	106	18	112	19	-0.64	S?
62	J0306+0456	n	03 03 47.21	04 44 39.0	-4.02	no		<	41	27	8	<	128	107	27	-0.79	S
63	J0306+0457		03 04 18.75	04 46 03.0	-2.64	no		<	25	49	5	109	16	141	14	-0.63	S
64	J0308+0454		03 05 55.80	04 42 42.4	-6.05	24	4	no		27	5	85	17	484	125	-1.12	C^{+}
65	J0311+0500	n	03 08 40.59	04 49 20.0	0.47	no		<	12	16	3	63	11	171	28	-1.68	C^{-}
66	J0311+0507		03 09 09.80	04 56 46.8	7.90	no		<	113	133	20	313	49	792	116	-1.26	C^{-}
67	J0315+0515	n	03 12 52.88	05 04 07.0	15.08	no		no		97	25	146	30	246	50	-0.70	C_{max}
68	J0318+0506	n	03 16 20.52	04 55 59.0	6.80	24	4	167	55	179	21	146	26	602	133	-1.18	C_{max}?
69	J0319+0504		03 16 48.37	04 53 29.0	4.28	37	4	<	44	73	9	124	18	271	52	-0.87	S
70	J0323+0444	n	03 20 39.62	04 33 22.0	-16.00	no		no		259	50	266	78	922	200	-0.97	C_{max}?

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
71	J0324+0442		03 21 30.37	04 31 28.0	-17.93	18	3	no		199	60	206	60	580	110	-1.01	S
72	J0324+0443		03 22 16.14	04 33 12.0	-16.23	18	3	no		135	37	214	40	388	54	-0.92	S
73	J0328+0456	n	03 25 47.16	04 46 03.0	-3.53	no		<	35	41	5	56	16	179	20	-1.04	C^-?
74	J0332+0508	c	03 29 49.26	04 58 51.0	9.09	no		no		101	18	<	194	123	30	-0.46	C_{max}
75	J0334+0512		03 31 49.36	05 02 57.0	13.11	no		no		83	20	120	25	293	47	-0.89	C^-
76	J0335+0457	n	03 32 32.26	04 47 30.0	-2.38	no		30	8	43	7	66	15	178	22	-0.84	S,C^-
77	J0337+0450	n	03 34 48.04	04 40 59.0	-8.99	no		no		100	18	175	40	184	33	-0.40	C_{max}
78	J0340+0458	n	03 37 46.89	04 48 41.0	-1.43	no		21	6	26	4	49	12	75	8	-0.65	S
79	J0341+0507		03 38 31.20	04 57 32.6	7.40	no		no		59	10	147	25	310	54	-0.94	S
80	J0343+0458		03 40 51.35	04 48 21.0	-1.90	246	12	556	29	1180	50	1690	134	3442	252	-0.91	C^-
81	J0349+0500	c	03 46 53.13	04 51 53.0	1.36	no		<	16	29	3	63	20	349	55	-1.48	C_{max}
82	J0349+0455	n	03 47 01.57	04 46 32.0	-4.00	no		<	40	25	6	77	13	205	43	-1.49	S
83	J0350+0506		03 48 15.30	04 57 19.8	6.74	38	4	291	54	462	42	604	64	930	78	-0.50	C^-
84	J0354+0442	c	03 51 44.49	04 33 52.0	-16.88	no		no		251	50	225	70	210	50	+0.27	C^+,F?
85	J0355+0449		03 52 37.92	04 40 22.0	-10.43	no		no		48	15	96	23	<	121	-1.48	S
86	J0421+0501	n	04 19 15.35	04 54 48.0	2.71	no		<	26	22	7	73	20	<	86	-0.67	S?
87	J0426+0451		04 23 40.10	04 43 41.4	-8.62	74	5	no		540	67	767	89	1628	208	-0.85	C^-
88	J0426+0518		04 23 56.79	05 11 41.0	19.36	no		no		595	150	466	120	243	80	+0.06	C_{max}?
89	J0427+0457		04 25 08.52	04 50 30.5	-1.87	337	10	552	29	654	28	527	31	816	59	-0.20	F
90	J0433+0520		04 30 31.52	05 14 59.6	22.34	no		no		4150	900	4542	700	4673	600	+0.00	F,C^+?
91	J0437+0507		04 34 44.03	05 01 19.5	8.45	no		no		60	15	<	183	195	41	-0.97	S
92	J0444+0501		04 41 38.56	04 55 55.4	2.69	no		43	8	67	5	162	16	301	45	-1.04	S
93	J0444+0517	n	04 42 04.40	05 12 27.0	19.20	no		no		250	90	<	447	238	80	-0.05	
94	J0451+0437		04 48 34.77	04 32 51.7	-20.73	15	3	no		<	215	218	75	210	40	-0.70	
95	J0452+0443	c	04 49 31.16	04 39 02.1	-14.61	6	2	no		<	111	151	44	362	65	-1.37	C^-,C_{max}
96	J0453+0509	n	04 50 43.06	05 04 58.0	11.26	no		no		79	25	124	25	124	20	-0.26	F?
97	J0457+0452		04 55 15.01	04 49 31.9	-4.42	20	4	<	46	68	7	67	16	277	49	-1.06	S
98	J0458+0503		04 55 35.78	04 59 37.7	5.66	19	4	no		82	10	164	24	400	50	-1.04	S
99	J0459+0456		04 56 26.39	04 51 43.2	-2.29	no		<	22	90	7	166	20	369	42	-0.96	S
100	J0505+0459		05 02 43.84	04 55 38.3	1.29	632	18	871	40	947	38	840	45	747	65	-0.02	F
101	J0506+0508		05 03 45.58	05 04 20.7	9.94	55	4	no		68	18	151	30	296	50	-0.82	S
102	J0517+0500	c	05 14 32.37	04 57 14.9	2.26	no		69	10	43	5	52	12	114	26	-0.42	
103	J0519+0515		05 16 34.21	05 12 15.7	17.16	14	3	no		137	30	170	50	642	117	-0.90	S
104	J0520+0453	n	05 17 56.07	04 50 41.0	-4.49	15	3	<	47	35	5	67	18	<	92	-0.70	S
105	J0520+0508		05 18 18.72	05 05 21.0	10.16	no		no		52	11	128	30	285	60	-1.21	C_{max}
106	J0521+0509		05 18 41.31	05 06 51.9	11.65	no		no		119	20	296	50	291	60	-0.71	CPX
107	J0523+0503	c	05 20 53.03	05 00 16.0	4.93	no		<	54	42	8	104	25	180	30	-1.18	C_{max}

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
108	J0525+0454	c	05 22 22.62	04 51 53.2	-3.53	no		57	10	82	7	120	18	198	30	-0.65	S
109	J0527+0500	c	05 24 36.30	04 58 25.2	2.88	no		40	9	35	6	91	15	116	18	-0.60	S
110	J0528+0457	n	05 25 21.25	04 54 55.0	-0.66	12	3	32	8	45	3	111	18	98	18	-0.55	S
111	J0534+0503		05 31 55.58	05 01 43.8	5.79	no		128	30	248	22	389	31	892	105	-0.98	C^-
112	J0535+0515	c	05 32 26.35	05 14 11.8	18.23	38	4	no		148	40	275	60	796	160	-0.99	S
113	J0542+0454	c	05 40 06.95	04 52 54.1	-3.49	no		<	34	61	5	66	11	157	25	-0.56	S
114	J0545+0505	c	05 43 11.10	05 04 32.0	7.97	5	2	no		40	8	<	175	200	49	-1.14	C^-
115	J0545+0459	c	05 43 16.40	04 58 48.0	2.23	no		<	22	118	25	<	115	241	32	-0.60	C^-
116	J0552+0447		05 50 16.90	04 46 49.7	-10.13	24	4	no		59	10	164	36	357	50	-1.17	S
117	J0553+0455	n	05 50 34.20	04 55 12.0	-1.77	28	4	<	18	38	5	117	20	150	28	-0.91	C_{max}
118	J0606+0457	n	06 03 32.34	04 57 49.0	0.13	16	3	19	6	23	3	48	9	97	15	-0.87	S
119	J0607+0507		06 04 20.06	05 07 23.5	9.66	no		no		56	12	144	38	191	38	-0.72	S
120	J0614+0511		06 12 01.13	05 13 08.5	14.98	no		no		110	35	<	322	235	50	-0.72	S
121	J0616+0442		06 13 55.08	04 43 21.4	-14.91	no		no		126	40	280	76	187	55	-0.48	C^-?
122	J0618+0513	n	06 15 39.76	05 14 41.0	16.32	no		no		120	40	<	357	275	60	-0.59	C_{max}
123	J0619+0506		06 16 20.52	05 07 47.8	9.40	no		205	100	362	50	456	60	788	150	-0.63	C^-
124	J0621+0452		06 18 50.70	04 53 47.0	-4.76	no		142	21	82	9	129	19	110	27	-0.25	S
125	J0621+0437		06 19 13.69	04 40 04.1	-18.49	no		no		357	80	729	150	1400	250	-0.80	F?
126	J0621+0456	n	06 19 18.71	04 58 01.0	-0.55	no		<	12	37	3	163	25	98	25	-0.65	C_{max}
127	J0622+0451	n	06 19 20.40	04 53 17.0	-5.28	no		<	60	55	7	107	25	112	28	-0.38	F
128	J0622+0455	n	06 19 26.91	04 57 30.0	-1.07	no		19	6	35	3	no		99	22	-0.70	S
129	J0622+0502	n	06 19 28.57	05 04 24.0	5.82	no		103	35	82	10	<	147	115	29	-0.23	F
130	J0623+0505	c	06 20 34.12	05 07 02.0	8.40	no		no		117	20	176	31	256	34	-0.87	C_{max}
131	J0624+0456		06 21 39.35	04 58 41.4	0.00	53	4	97	15	169	6	245	20	549	55	-0.83	S?
132	J0625+0435		06 23 12.70	04 37 27.3	-21.33	no		no		357	90	485	90	1222	175	-0.87	S
133	J0627+0457	c	06 25 02.44	04 59 58.2	1.09	no		<	14	34	3	75	10	175	29	-1.16	C^-
134	J0636+0451		06 33 23.07	04 54 28.0	-4.88	no		118	22	53	6	<	136	290	57	-1.20	C^+
135	J0636+0507	n	06 34 20.12	05 09 51.0	10.45	no		no		90	18	<	218	217	57	-0.39	C_{max}?
136	J0639+0459	c	06 36 50.23	05 02 15.0	2.72	no		<	26	14	4	49	10	128	25	-1.01	C^-
137	J0644+0506		06 41 35.74	05 09 48.5	10.02	36	4	no		91	21	142	38	432	80	-0.97	S
138	J0646+0444		06 43 32.23	04 48 22.6	-11.52	no		no		48	12	122	37	<	129	-0.84	C^+?
139	J0653+0508		06 50 47.68	05 12 37.5	12.33	77	6	no		199	35	196	50	482	80	-0.63	C^-?
140	J0655+0455	c	06 52 50.36	04 58 56.0	-1.47	no		28	8	48	5	66	13	100	25	-0.52	S
141	J0704+0446	n	07 01 48.49	04 51 22.0	-9.52	11	2	no		<	55	154	30	327	74	-1.70	C_{max}
142	J0707+0455	n	07 05 07.61	05 00 00.0	-1.07	12	3	28	7	26	3	62	13	161	24	-1.29	C^-
143	J0711+0501	n	07 08 51.15	05 06 37.0	5.35	32	4	<	61	37	6	70	15	209	43	-1.08	C_{max}?
144	J0713+0500	n	07 11 11.42	05 05 18.0	3.91	no		<	39	30	5	139	19	200	39	-1.26	C_{max}

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
145	J0715+0429		07 12 46.99	04 34 52.1	-26.60	no		no		281	130	394	140	677	140	-0.63	C^-
146	J0716+0450	n	07 13 46.14	04 56 01.0	-5.51	8	2	<	63	25	7	<	143	85	16	-0.82	C^-
147	J0718+0456	n	07 15 54.76	05 02 06.0	0.46	no		34	8	34	3	81	12	61	15	-0.52	
148	J0718+0452	n	07 15 55.38	04 58 04.0	-3.57	no		<	35	54	7	118	20	<	89	-0.49	S?
149	J0718+0446		07 16 21.79	04 52 38.7	-9.02	no		no		56	12	131	27	227	57	-1.07	S
150	J0719+0451	n	07 16 30.33	04 56 44.0	-4.94	no		<	54	27	5	93	22	188	40	-1.38	C_{max}
151	J0724+0445	c	07 21 36.99	04 51 15.5	-10.68	no		no		72	19	170	47	312	61	-1.12	C^-
152	J0729+0450		07 26 40.57	04 56 03.2	-6.15	no		no		63	9	138	25	180	25	-0.83	S,CPX?
153	J0730+0453	n	07 28 02.85	05 00 17.0	-1.99	20	4	37	8	58	5	63	9	80	17	-0.33	F
154	J0732+0500	c	07 29 45.61	05 07 17.4	4.93	no		<	54	41	9	62	18	125	26	-0.79	S
155	J0733+0456	c	07 31 18.48	05 02 54.0	0.46	no		643	38	496	19	408	32	286	31	+0.38	F
156	J0734+0459		07 32 12.83	05 06 20.7	3.86	no		<	39	65	7	127	17	183	24	-0.69	S
157	J0742+0507		07 40 00.09	05 14 12.6	11.33	55	4	no		352	59	540	90	1031	122	-0.81	S
158	J0743+0455	c	07 40 36.76	05 03 02.5	0.13	no		23	6	44	4	72	15	163	28	-1.04	S
159	J0744+0500	c	07 42 13.65	05 07 27.4	4.46	no		<	47	30	6	75	20	204	34	-1.22	S
160	J0746+0433		07 43 37.39	04 40 59.6	-22.07	no		no		205	70	248	80	743	180	-0.80	S
161	J0748+0452	n	07 45 23.41	05 00 21.0	-2.80	16	3	<	27	22	5	69	20	77	16	-0.79	S
162	J0749+0437	c	07 46 32.45	04 46 09.2	-17.06	no		no		110	35	261	60	452	80	-1.00	C^-
163	J0753+0451		07 50 35.31	04 59 21.0	-4.06	no		137	25	197	15	235	33	291	29	-0.28	F
164	J0754+0452	n	07 51 26.71	05 00 41.0	-2.77	no		<	27	31	4	60	15	77	15	-0.64	S
165	J0802+0449		08 00 17.87	04 57 39.8	-6.22	no		no		113	14	159	29	no		-0.95	C^-,C_{max}
166	J0804+0506	c	08 01 27.01	05 15 22.3	11.43	50	4	no		69	20	272	75	345	60	-1.14	C_{max}
167	J0804+0511	n	08 01 32.99	05 19 53.0	15.94	no		no		245	50	424	110	199	50	+0.19	F,C_{max}?
168	J0804+0446		08 02 06.25	04 55 11.0	-8.79	no		no		73	14	144	34	215	53	-0.82	S
169	J0811+0451	c	08 08 59.84	05 00 07.0	-4.18	no		79	25	57	7	52	10	<	91	-0.21	C^+
170	J0812+0507		08 09 39.26	05 16 56.2	12.61	38	4	no		89	28	305	70	369	69	-0.78	C^-
171	J0815+0453	c	08 12 44.66	05 02 45.5	-1.72	no		64	10	101	5	141	18	184	25	-0.67	CPX?
172	J0816+0458	c	08 13 48.81	05 07 49.0	3.29	no		<	32	48	6	93	20	170	15	-0.74	C^-
173	J0818+0517		08 16 17.36	05 27 02.8	22.40	no		no		<	250	429	100	356	110	-0.33	F
174	J0820+0454		08 18 18.11	05 03 50.2	-0.90	42	3	86	13	181	7	251	27	513	46	-0.95	S
175	J0822+0455	c	08 19 58.45	05 04 59.0	0.17	no		29	10	16	6	202	30	208	36	-1.10	C_{max}
176	J0831+0429		08 29 10.88	04 39 47.5	-25.43	no		no		580	200	784	150	935	200	+0.05	F
177	J0832+0431	n	08 29 27.69	04 41 29.0	-23.75	no		no		<	283	688	120	466	150	+0.75	C_{max}
178	J0833+0458	n	08 31 14.34	05 09 04.0	3.75	15	3	48	12	56	6	80	13	252	44	-0.82	C^+
179	J0836+0513		08 34 08.99	05 23 36.3	18.16	no		no		98	35	<	413	481	100	-1.07	C^-
180	J0837+0444		08 34 51.17	04 54 52.6	-10.60	20	4	no		76	18	109	27	308	60	-1.03	C^-
181	J0838+0445	c	08 35 37.50	04 56 11.0	-9.32	no		no		68	14	<	198	85	21	-0.43	

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
182	J0845+0434		08 42 37.08	04 45 44.0	-20.07	225	11	no		336	90	<	476	791	150	-0.51	C^-,F
183	J0845+0442		08 42 52.84	04 53 37.2	-12.20	no		no		74	25	278	60	240	67		S
184	J0847+0454	c	08 44 42.74	05 05 39.0	-0.25	no		18	6	13	3	<	106	83	15	-0.84	C^-?
185	J0849+0454	c	08 46 54.54	05 06 16.7	0.29	no		43	10	99	4	142	15	147	20	-0.28	CPX
186	J0851+0447	c	08 48 51.70	04 58 39.6	-7.41	no		no		51	10	85	18	142	35	-0.71	C^-
187	J0852+0459	n	08 50 09.53	05 10 26.0	4.31	no		<	45	<	22	66	18	116	12	-0.44	F
188	J0906+0459	c	09 03 33.94	05 11 56.0	5.27	no		no		27	5	73	15	197	33	-1.28	C_{max}
189	J0907+0436		09 04 42.47	04 48 25.7	-18.28	no		no		148	40	<	418	713	150	-0.85	S
190	J0907+0453	c	09 04 48.27	05 05 55.0	-0.79	no		<	13	91	4	140	17	370	57	-0.90	C^+
191	J0908+0451		09 05 43.21	05 03 08.1	-3.61	no		79	20	110	8	177	25	437	44	-0.93	S
192	J0909+0445		09 07 13.56	04 56 36.0	-10.20	14	3	no		59	12	115	28	402	70	-1.00	S
193	J0914+0507		09 11 23.83	05 19 16.8	12.32	no		no		221	40	217	40	606	110	-0.77	CPX
194	J0916+0441	c	09 14 01.45	04 54 11.0	-12.87	38	4	no		108	25	185	35	333	50	-0.79	C_{max}
195	J0927+0457	c	09 25 10.00	05 10 45.0	3.29	19	3	<	32	40	5	83	18	248	30	-1.29	C^+
196	J0932+0444		09 30 12.66	04 57 29.0	-10.15	no		no		48	11	<	212	124	34	-0.56	C^-,C_{max}
197	J0933+0503		09 31 12.30	05 17 05.8	9.43	no		no		46	10	152	30	120	20	-0.52	S?
198	J0934+0503		09 31 48.38	05 17 09.4	9.47	no		no		60	13	191	39	201	36	-0.87	S?
199	J0934+0456	n	09 32 14.28	05 09 36.0	1.90	no		<	19	27	3	159	30	174	24	-1.32	C_{max}
200	J0936+0504		09 33 32.99	05 17 05.2	9.34	34	4	no		101	20	264	50	581	90	-0.85	S
201	J0937+0450		09 34 33.31	05 03 38.6	-4.14	49	3	118	16	189	14	271	34	680	101	-0.87	S
202	J0940+0450	n	09 37 31.02	05 03 47.0	-4.10	no		54	14	29	8	<	129	80	17	-0.41	F
203	J0942+0441		09 39 36.65	04 55 02.0	-12.91	12	3	no		88	20	153	46	<	140	-0.29	
204	J0942+0444	c	09 40 03.65	04 58 08.5	-9.82	12	3	no		<	58	76	25	280	54	-1.53	C^-
205	J0945+0451	n	09 42 35.61	05 05 26.0	-2.61	no		<	25	24	4	<	117	114	21	-1.10	C^-
206	J0945+0454		09 42 51.18	05 07 36.1	-0.45	no		<	12	32	3	53	8	85	16	-1.09	S
207	J0947+0504	c	09 45 14.53	05 18 14.9	10.12	no		no		<	60	146	25	285	50	-0.77	C^-
208	J0948+0510	n	09 46 19.54	05 24 23.5	16.23	no		no		<	135	131	40	380	60	-1.40	C_{max}
209	J0949+0454		09 47 05.02	05 08 45.6	0.58	35	4	50	10	97	4	131	15	207	24	-0.73	S
210	J0950+0511		09 48 19.61	05 25 30.6	17.29	no		no		99	25	<	387	252	50	-0.63	S
211	J0952+0509		09 49 48.83	05 23 43.0	15.45	no		no		210	50	255	40	<	163		C_{max}
212	J0952+0453	n	09 50 09.69	05 07 40.0	-0.61	no		<	12	33	3	66	11	113	13	-0.87	C^-
213	J1005+0451	n	10 02 58.43	05 06 12.0	-2.45	20	4	<	24	36	4	<	116	84	15	-0.70	S
214	J1011+0502		10 09 21.21	05 17 01.0	8.20	no		no		40	12	118	30	273	39	-1.05	C^+
215	J1015+0452		10 12 39.12	05 08 01.5	-0.88	no		79	12	126	5	170	18	401	42	-0.84	S
216	J1016+0512		10 13 26.62	05 27 58.1	19.05	no		no		509	100	598	129	689	127	+0.12	F
217	J1017+0455		10 14 51.38	05 10 38.8	1.69	no		33	8	49	4	57	12	100	17	-0.62	S
218	J1019+0442		10 17 08.05	04 58 01.1	-10.99	22	4	no		113	22	106	23	187	40	-0.50	C^-

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
219	J1031+0443		10 28 43.09	04 58 34.8	-10.70	no		no		222	34	441	81	997	82	-1.11	C^-
220	J1034+0450		10 31 36.06	05 05 34.0	-3.78	no		<	38	45	6	95	12	209	35	-0.90	S
221	J1035+0452	n	10 32 30.00	05 08 08.0	-1.23	no		23	7	27	6	50	10	74	15	-0.73	S
222	J1038+0451	n	10 35 41.50	05 07 34.0	-1.86	no		<	19	34	4	91	12	63	13	-0.69	S?
223	J1038+0512		10 36 10.94	05 28 06.6	18.67	534	16	no		220	70	264	80	402	86	-0.06	C^+,F
224	J1039+0510		10 37 02.14	05 26 02.4	16.58	no		no		125	40	220	66	517	93	-0.77	S?
225	J1041+0454	n	10 38 42.84	05 10 25.0	0.93	no		43	9	40	5	82	12	121	22	-0.48	F,S?
226	J1041+0447	n	10 39 03.32	05 03 11.0	-6.31	no		no		51	7	88	17	176	29	-1.04	C_{max}
227	J1042+0444		10 39 42.49	05 00 08.0	-9.38	no		no		52	11	158	35	155	30	-0.84	S
228	J1043+0440		10 41 10.64	04 56 13.5	-13.31	no		no		89	26	617	102	277	45	-0.95	S?
229	J1045+0451	n	10 42 51.24	05 06 49.0	-2.75	42	3	39	9	30	4	<	118	90	19	-0.63	S?
230	J1045+0455		10 43 16.03	05 11 39.4	2.08	42	3	92	12	156	7	248	27	538	48	-0.85	S
231	J1048+0500	c	10 45 36.33	05 16 11.0	6.56	no		no		27	7	<	156	119	26	-0.72	C^-
232	J1049+0506		10 46 56.45	05 21 25.4	11.78	no		no		121	27	187	34	521	66	-0.82	C^+
233	J1050+0439		10 47 37.98	04 55 39.0	-14.01	27	5	no		83	22	<	296	<	150	-0.23	C^+?
234	J1051+0449		10 48 50.24	05 05 40.1	-4.01	no		82	14	131	10	220	29	420	40	-0.91	S
235	J1052+0458		10 50 18.46	05 14 15.0	4.55	no		107	19	116	12	203	35	150	22	-0.17	F
236	J1053+0456	n	10 51 16.31	05 12 31.7	2.81	no		<	27	27	4	95	20	181	33	-1.35	C_{max},C^-
237	J1054+0448	n	10 51 40.81	05 04 44.0	-4.99	no		<	55	41	5	131	21	208	39	-1.15	C_{max}
238	J1055+0501		10 52 55.42	05 17 38.7	7.90	no		no		71	18	<	175	285	55	-0.69	C^-
239	J1057+0506		10 54 33.62	05 22 20.3	12.56	no		no		156	36	348	65	434	73	-0.73	C^-,C_{max}
240	J1057+0456	n	10 54 43.96	05 12 16.0	2.49	25	5	<	24	56	6	133	22	179	27	-1.00	C_{max}
241	J1058+0443	n	10 56 23.00	05 00 04.0	-9.73	no		no		77	15	<	205	122	29	-0.28	F
242	J1059+0453	n	10 57 15.92	05 09 57.0	0.13	no		<	11	85	4	181	19	329	55	-0.96	C_{max}
243	J1100+0444		10 57 36.20	05 00 08.0	-9.69	59	4	no		249	30	no		723	137	-0.86	S
244	J1102+0459		11 00 12.19	05 15 59.0	6.12	22	4	<	74	146	15	245	29	no		-0.79	S
245	J1103+0451	n	11 01 13.98	05 07 23.0	-2.49	no		<	24	21	4	98	15	153	26	-1.56	C_{max}?
246	J1104+0450	n	11 01 50.14	05 06 13.0	-3.67	no		<	36	14	3	<	125	119	25	-1.60	C^-
247	J1110+0456		11 08 15.52	05 13 36.0	3.63	45	3	73	15	108	8	152	21	219	36	-0.50	C_{max}
248	J1113+0436		11 11 24.09	04 54 20.5	-15.67	no		no		99	25	155	42	245	56	-0.90	S
249	J1123+0448	c	11 21 02.46	05 05 18.0	-4.81	no		<	52	60	7	172	40	322	50	-1.15	C_{max},C^-?
250	J1123+0450	n	11 21 18.53	05 06 38.0	-3.48	38	4	63	15	112	8	175	21	336	48	-0.82	C_{max}
251	J1124+0456		11 22 03.80	05 12 57.2	2.83	no		285	18	462	20	658	45	1302	94	-0.90	S
252	J1125+0446		11 23 07.17	05 03 19.0	-6.82	no		no		51	8	85	22	180	45	-0.59	C^-
253	J1126+0454	n	11 23 40.16	05 11 11.0	1.04	no		<	14	21	3	90	11	372	34	-2.00	C_{max}
254	J1131+0455		11 29 21.90	05 12 22.7	2.19	no		140	14	265	16	355	30	1136	81	-0.77	S
255	J1134+0442	c	11 31 57.72	05 00 25.1	-9.79	no		no		154	27	205	33	315	74	-0.51	C_{max}

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
256	J1134+0501		11 31 58.97	05 18 32.0	8.32	no		no		57	10	180	28	291	67		C_{max}
257	J1135+0454	n	11 33 08.94	05 11 02.0	0.82	no		<	13	23	4	<	108	308	42	-1.84	C_{max}
258	J1136+0457	n	11 33 33.89	05 13 39.0	3.43	no		<	33	11	3	<	123	315	45	-2.38	C_{max}
259	J1140+0500	c	11 37 31.28	05 16 29.5	6.25	no		no		46	10	116	23	176	45	-0.78	C^-
260	J1142+0436	c	11 39 35.52	04 46 02.0	-16.47	no		no		87	25	346	90	680	120	-1.18	C_{max}
261	J1142+0455		11 39 45.78	05 11 36.3	1.35	no		60	10	108	5	189	19	298	46	-0.90	S,CPX?
262	J1145+0455		11 42 47.10	05 12 05.8	1.83	no		474	27	540	22	580	45	919	93	-0.42	C^+
263	J1146+0458		11 43 58.74	05 15 39.0	5.37	no		194	35	224	18	262	40	508	65	-0.31	F
264	J1148+0455		11 46 13.60	05 12 06.5	1.82	46	3	74	11	205	8	413	33	932	80	-1.07	C^-
265	J1150+0456	n	11 47 43.71	05 12 49.0	2.53	no		<	24	22	4	110	15	256	45	-1.74	C_{max}
266	J1150+0459		11 48 17.75	05 15 40.3	5.38	no		80	20	164	15	324	40	749	93	-0.87	S
267	J1152+0500	c	11 50 14.31	05 17 39.3	7.36	no		no		54	11	90	25	188	28	-0.64	C^-
268	J1153+0454	n	11 51 00.88	05 10 00.0	-0.30	no		30	8	30	4	<	106	85	17	-0.71	C^-
269	J1154+0424		11 52 19.52	04 40 54.2	-29.40	no		no		403	200	<	868	1318	345	-0.94	S
270	J1155+0444	c	11 52 45.19	05 00 03.0	-10.25	no		no		58	13	<	215	269	50	-0.88	S
271	J1213+0500		12 10 55.39	05 16 50.6	6.54	no		no		82	11	<	156	386	52	-1.05	S
272	J1219+0448	c	12 17 04.01	05 04 47.4	-5.49	no		no		55	9	133	19	340	62	-1.29	C_{max}
273	J1221+0508		12 19 19.27	05 24 54.6	14.63	153	7	no		156	44	408	69	709	133	-0.40	C^-,F
274	J1235+0453	n	12 32 34.46	05 10 05.0	-0.12	24	4	30	8	44	4	63	8	73	15	-0.47	F,CPX
275	J1237+0457		12 34 51.24	05 14 35.5	4.41	19	4	<	46	115	9	184	25	375	48	-0.85	S
276	J1239+0443	c	12 36 59.63	04 59 44.1	-10.43	356	10	no		361	38	378	63	399	60	-0.07	F
277	J1246+0448		12 44 05.62	05 04 24.8	-5.68	no		no		47	9	<	145	157	35	-0.85	C^-
278	J1251+0446		12 48 56.86	05 03 01.7	-7.01	52	4	no		234	25	340	45	699	78	-1.00	S
279	J1252+0448		12 50 08.46	05 04 44.3	-5.29	no		122	27	149	16	238	27	314	47	-0.61	S
280	J1255+0453		12 53 22.35	05 09 53.3	-0.10	no		37	9	65	4	105	12	170	25	-0.79	C^-
281	J1257+0458		12 55 24.41	05 14 23.6	4.43	no		95	25	142	14	352	33	489	46	-0.77	C^-
282	J1259+0444		12 56 28.98	05 00 54.7	-9.04	7	2	no		47	10	<	192	251	46	-0.93	C^-
283	J1305+0457	n	13 03 19.15	05 13 57.0	4.09	no		<	42	22	3	150	25	80	16	-0.87	
284	J1310+0448	c	13 07 41.75	05 04 37.8	-5.16	no		no		42	6	117	19	224	38	-1.19	C^-
285	J1316+0508	n	13 13 52.22	05 23 55.0	14.23	31	4	no		126	30	119	34	293	69	-0.64	C_{max}?
286	J1318+0436	c	13 15 58.88	04 52 44.0	-16.92	138	6	no		112	45	182	55	106	30	+0.50	F,C^+?
287	J1322+0449		13 19 31.63	05 04 27.7	-5.12	no		no		48	6	182	36	168	35	-0.90	S
288	J1324+0457	c	13 22 16.55	05 13 34.2	4.03	14	3	<	41	52	8	186	25	376	60	-1.40	C^-
289	J1326+0438	c	13 23 41.76	04 54 16.0	-15.24	17	3	no		94	23	192	55	362	75	-0.96	C_{max}
290	J1327+0452	n	13 24 55.02	05 08 01.8	-1.45	no		37	8	57	5	55	9	212	34	-0.61	CPX
291	J1328+0514		13 25 24.87	05 30 21.9	20.89	no		no		205	70	<	505	928	220	-0.78	S
292	J1333+0451	n	13 30 33.35	05 06 37.0	-2.75	no		<	26	32	3	105	13	158	29	-1.13	C_{max}

Table 3: Flux densities of RC catalog radio sources (continued)

(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
293	J1333+0452		13 30 54.20	05 07 30.0	-1.86	no		<	19	29	3	166	22	201	50	-1.23	CPX?
294	J1339+0455	c	13 37 08.16	05 11 11.9	1.97	no		<	20	53	6	86	12	253	48	-1.06	S
295	J1340+0451	n	13 37 40.82	05 06 23.7	-2.82	no		44	12	67	7	67	11	206	40	-0.54	C^+
296	J1342+0505		13 40 12.44	05 19 37.5	10.47	no		535	150	1001	110	1336	120	2111	207	-0.61	S
297	J1347+0437		13 45 18.95	04 52 33.9	-16.47	no		no		100	30	184	44	282	55	-0.88	S
298	J1350+0451	n	13 48 19.10	05 06 26.1	-2.52	no		<	24	31	4	64	10	128	24	-1.00	C^-
299	J1351+0435		13 49 06.31	04 50 29.3	-18.45	no		no		249	60	476	90	865	150	-0.76	S
300	J1353+0444	c	13 50 34.60	04 59 17.0	-9.62	no		no		64	10	143	27	138	27	-0.43	C^-?
301	J1356+0457	c	13 53 48.74	05 12 26.0	3.61	11	2	<	36	<	19	<	125	79	15	-1.69	C^-
302	J1357+0505		13 54 28.05	05 19 41.8	10.89	22	4	no		103	20	158	33	308	52	-0.97	S
303	J1357+0453		13 55 06.25	05 07 49.9	-0.95	no		40	9	102	7	187	22	327	35	-1.07	S
304	J1405+0433		14 02 47.82	04 48 26.3	-20.14	no		no		<	206	261	70	543	130	-0.57	S
305	J1407+0452	n	14 04 38.42	05 07 05.5	-1.43	26	5	30	8	57	4	125	14	187	27	-0.84	S
306	J1407+0449	c	14 04 59.82	05 03 49.1	-4.70	no		<	50	94	11	154	25	220	40	-0.74	C_{max}
307	J1421+0508		14 18 33.99	05 22 25.2	14.31	no		no		164	35	268	61	362	78	-0.69	S
308	J1421+0452	n	14 19 27.89	05 05 52.0	-2.22	no		<	22	30	4	<	115	165	27	-1.21	C_{max}
309	J1424+0434		14 21 38.54	04 48 28.8	-19.53	no		no		229	70	470	120	405	90	+0.00	F?
310	J1429+0501		14 26 46.52	05 14 42.8	6.86	no		no		67	9	201	28	437	65	-1.00	C^-
311	J1605+0458	c	16 02 41.60	05 06 51.0	2.95	21	4	<	28	35	6	<	120	194	32	-1.21	C_{max},CPX?
312	J1612+0459		16 09 44.31	05 05 54.9	2.36	no		50	15	71	10	207	35	318	45	-0.82	S
313	J1615+0453	n	16 12 44.03	05 01 05.0	-2.33	no		<	23	38	6	110	20	248	52	-1.31	C_{max}
314	J1616+0459		16 14 08.88	05 06 53.9	3.56	743	22	745	50	836	39	709	42	277	49	+0.51	C^+
315	J1619+0455	n	16 16 38.67	05 03 01.0	-0.20	no		<	11	31	4	121	24	294	60	-1.59	C_{max}
316	J1624+0443	c	16 22 22.37	04 51 41.5	-11.24	8	2	no		100	23	233	54	418	99	-1.01	C_{max}
317	J1626+0448		16 24 21.73	04 55 33.0	-7.28	no		no		60	11	178	31	<	103	-1.14	S
318	J1627+0457	c	16 24 44.60	05 03 43.0	0.91	no		<	14	58	7	90	15	148	30	-1.00	C^-
319	J1628+0446		16 25 44.23	04 52 07.6	-10.63	no		no		123	26	237	43	434	102	-0.93	S
320	J1631+0502		16 28 37.43	05 08 42.0	6.09	no		no		67	10	<	149	291	44	-0.89	S
321	J1634+0505		16 32 12.89	05 11 55.4	9.49	20	4	no		69	14	<	201	448	78	-0.99	S
322	J1638+0450		16 36 03.71	04 55 49.4	-6.41	no		no		178	28	235	40	888	150	-0.92	S
323	J1643+0452	n	16 41 00.70	04 58 05.0	-3.89	13	3	<	39	50	7	113	25	133	27	-1.10	C_{max}
324	J1643+0449	n	16 41 30.40	04 55 25.0	-6.53	no		no		71	15	<	155	191	40	-0.84	C^-,C_{max}
325	J1644+0451	c	16 42 02.84	04 57 31.6	-4.39	no		<	45	46	7	188	30	no		-0.92	C_{max}
326	J1646+0501	c	16 44 24.91	05 06 30.9	4.72	no		<	50	50	6	128	19	226	45	-1.03	C^-
327	J1653+0443		16 51 30.12	04 47 39.8	-13.76	no		no		142	37	<	291	427	90	-0.96	S
328	J1656+0500	c	16 54 16.63	05 05 15.0	3.97	32	4	<	40	59	8	122	20	214	40	-0.99	C^-,C_{max}
329	J1658+0452		16 55 39.98	04 56 59.5	-4.21	no		<	44	62	10	<	130	174	35	-1.16	S

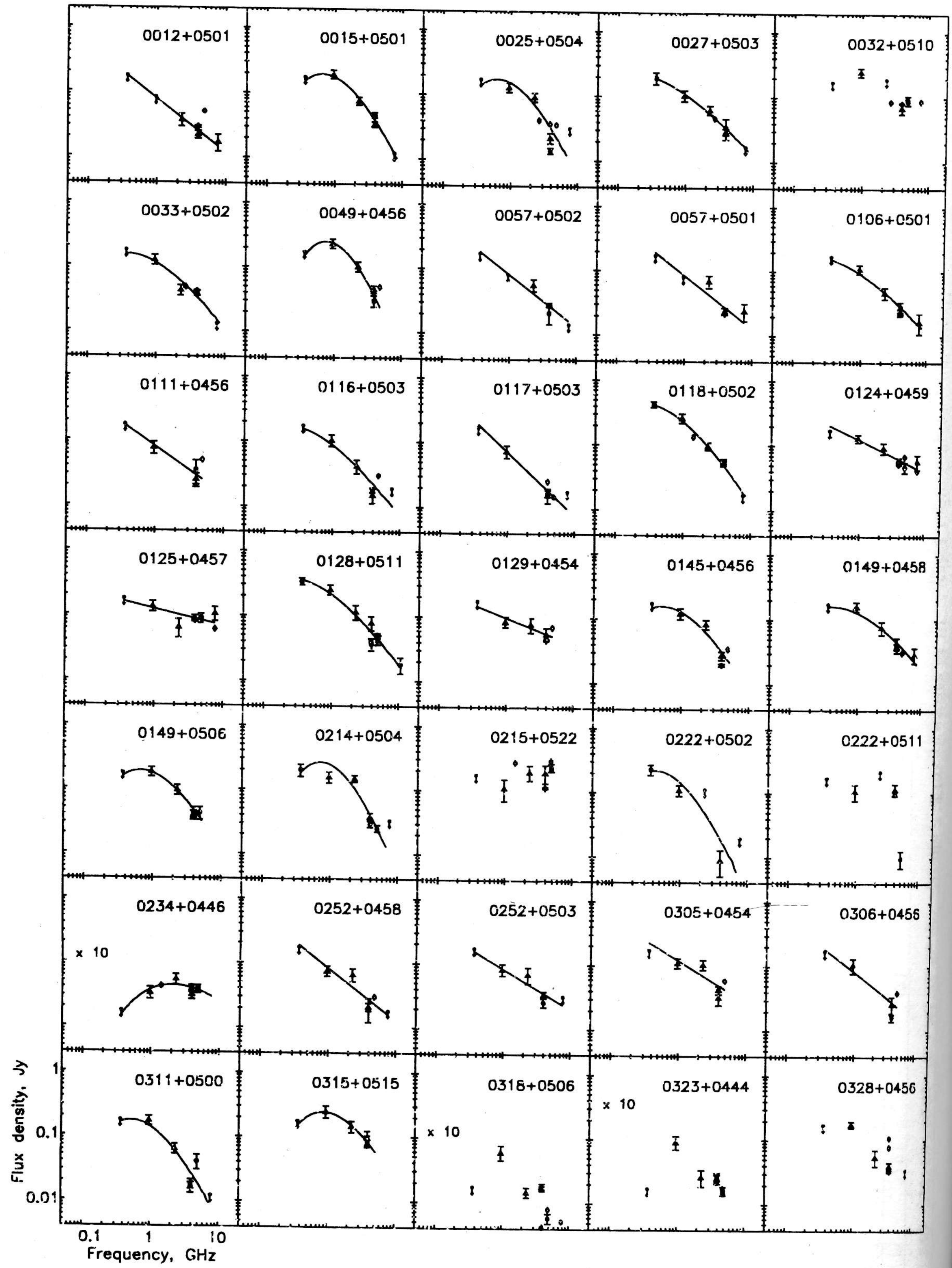
Table 3: Flux densities of RC catalog radio sources (continued)

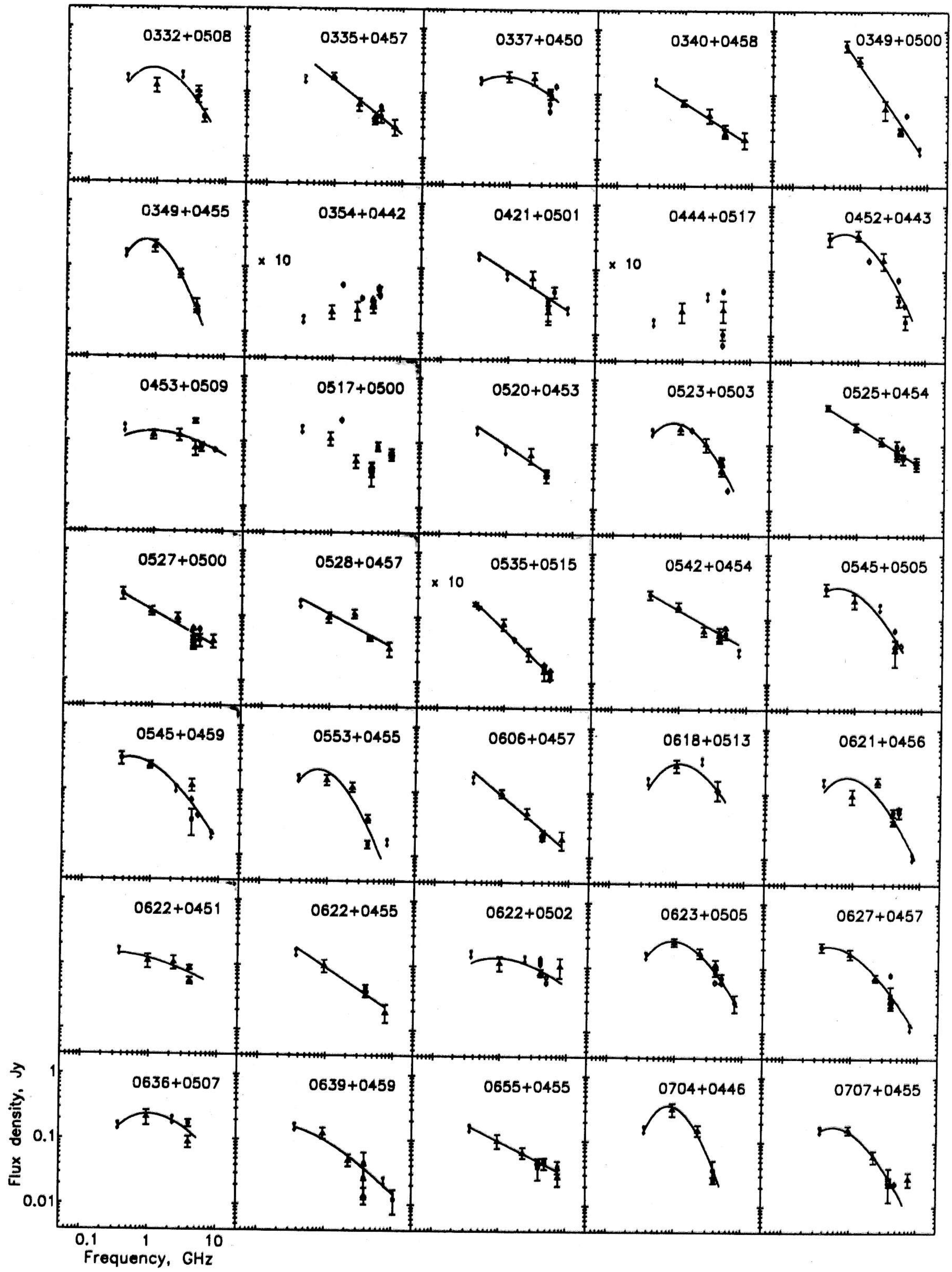
(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
330	J1658+0514		16 56 05.65	05 19 46.4	18.59	no		no		1447	250	1224	250	1513	250	-0.03	C^+
331	J1807+0510	c	18 04 50.59	05 10 45.4	13.35	33	4	no		118	30	512	110	707	140	-1.05	C_{max}
332	J1813+0440		18 10 47.58	04 38 40.4	-18.41	314	9	no		750	200	1164	225	2846	549	-0.78	C^-
333	J1921+0500		19 18 44.85	04 55 17.5	1.91	37	4	80	11	123	9	<	113	315	44	-0.64	S
334	J1922+0451		19 20 15.26	04 45 37.6	-7.68	no		312	80	513	54	654	104	1507	167	-0.84	S
335	J1924+0503	n	19 21 44.88	04 57 37.0	4.39	no		<	45	46	6	102	25	367	47	-1.54	C_{max}
336	J1929+0508	c	19 26 52.84	05 02 01.7	9.07	no		no		313	39	450	50	572	68	-0.43	C^+
337	J1934+0503	n	19 32 02.62	04 56 34.0	3.87	17	4	<	39	13	4	74	15	186	30	-1.58	C^-,C_{max}
338	J1935+0457	c	19 33 19.82	04 50 05.9	-2.53	12	3	<	24	26	4	89	12	207	31	-1.47	C^-
339	J1938+0453	c	19 35 36.81	04 46 50.0	-5.68	40	3	no		63	8	89	16	143	30	-0.58	F,CPX
340	J1938+0449	c	19 36 01.67	04 41 19.2	-11.17	no		400	100	400	65	358	57	378	69	-0.10	C^+
341	J1943+0455	n	19 41 10.24	04 48 36.0	-3.63	11	2	<	37	66	7	118	20	212	38	-0.81	C_{max},C^-
342	J1949+0503	n	19 46 49.78	04 56 03.0	4.10	no		100	30	80	8	87	15	107	21	-0.19	C^+,F
343	J1952+0504		19 50 06.80	04 56 36.7	4.83	65	5	<	52	100	10	148	18	194	36	-0.50	S
344	J2005+0510		20 03 04.63	05 01 56.0	10.78	no		no		115	22	177	31	222	50	-0.77	S
345	J2005+0506	n	20 03 15.37	04 57 24.0	6.25	9	2	no		44	6	119	35	180	35	-1.00	C_{max}
346	J2006+0458	c	20 03 53.07	04 49 30.0	-1.62	27	5	<	17	52	5	107	18	200	29	-0.84	C^-,S
347	J2007+0508	c	20 04 43.28	04 59 24.0	8.32	no		no		40	7	<	181	73	23	-0.38	C^+,F
348	J2013+0512	c	20 10 54.96	05 03 23.2	12.61	no		no		62	19	244	60	407	84	-1.23	C^-
349	J2020+0503		20 18 06.73	04 53 15.6	2.81	no		39	8	45	5	<	118	186	34	-0.85	S
350	J2021+0516	c	20 19 08.87	05 06 38.0	16.23	319	9	no		660	120	543	145	380	77	+0.45	C_{max}
351	J2029+0456		20 27 14.19	04 46 03.9	-3.97	no		<	40	61	7	73	11	107	23	-0.87	C^+?
352	J2036+0449		20 34 27.82	04 39 24.3	-10.31	19	4	no		96	24	<	215	288	63	-1.01	S
353	J2040+0500		20 37 38.55	04 49 42.0	0.12	10	2	<	11	9	4	<	106	97	25	-0.77	S?
354	J2044+0444		20 42 15.64	04 33 09.6	-16.22	92	7	no		203	63	407	74	639	112	-0.78	S
355	J2046+0506		20 44 26.34	04 55 38.0	6.35	no		90	30	119	14	236	31	373	56	-0.64	C^-
356	J2048+0453	n	20 45 32.18	04 42 50.0	-6.41	82	6	no		105	13	159	25	355	60	-0.87	C^+,CPX
357	J2050+0459	n	20 48 26.24	04 47 49.0	-1.30	no		<	15	18	4	42	12	149	25	-1.50	C^-
358	J2056+0502	n	20 53 50.70	04 50 41.0	1.79	12	3	<	18	18	5	56	9	91	16	-0.52	C^-
359	J2058+0507	n	20 55 51.82	04 56 18.0	7.48	no		no		62	10	<	168	124	28	-0.48	C_{max}?
360	J2104+0503	c	21 02 21.16	04 51 10.0	2.61	46	3	83	11	114	7	130	16	154	31	-0.19	F
361	J2106+0459		21 03 30.29	04 47 30.3	-1.01	no		41	9	51	4	<	109	161	26	-0.82	S
362	J2110+0456		21 08 22.21	04 43 23.0	-4.94	no		<	54	177	14	251	31	556	61	-0.80	S
363	J2113+0445		21 11 03.59	04 32 55.7	-15.30	43	3	no		190	40	264	60	960	170	-0.87	S
364	J2116+0507		21 13 49.44	04 54 52.0	6.75	no		100	28	129	16	258	35	454	60	-0.86	S
365	J2117+0503	c	21 14 50.80	04 50 27.5	2.38	250	7	426	24	329	14	212	19	190	23	+0.39	C^+
366	J2119+0501	n	21 17 20.39	04 48 41.0	0.69	no		25	8	11	3	48	12	73	20	-0.79	S?

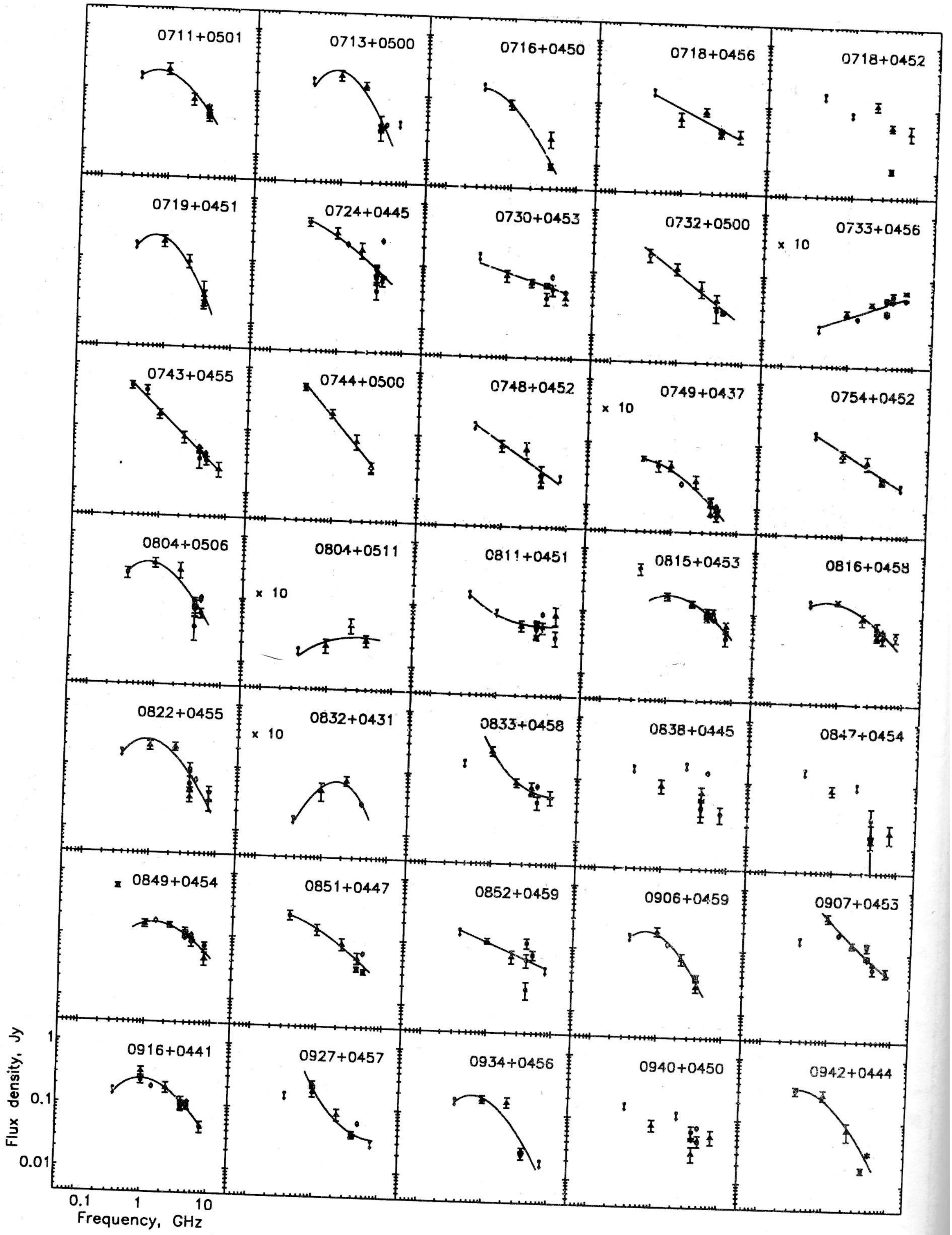
Table 3: Flux densities of RC catalog radio sources (continued)

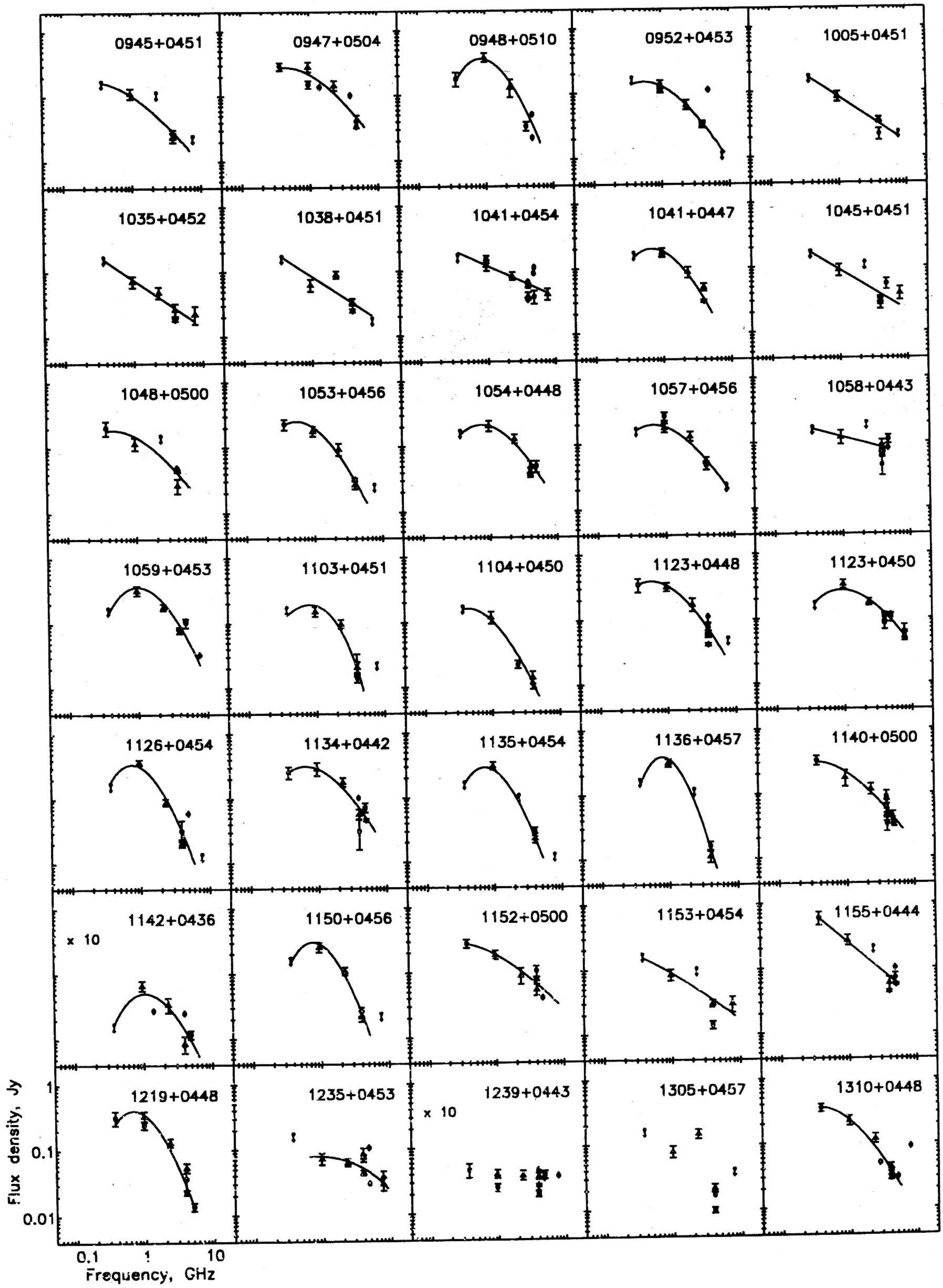
(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)		(9)		(10)		(11)	(12)
367	J2120+0451	n	21 17 58.93	04 38 43.0	-9.25	no		no		66	14	107	21	158	33	-0.54	C^-,F
368	J2123+0503	n	21 21 14.19	04 50 13.0	2.37	no		42	11	49	9	119	20	255	41	-0.93	C_{max}
369	J2125+0447		21 22 57.67	04 34 45.0	-13.04	359	10	no		140	34	<	272	421	87	-0.82	C^+
370	J2130+0502		21 28 02.58	04 49 04.1	1.46	988	29	1617	53	2624	107	3172	169	4050	287	-0.50	C_{max}
371	J2133+0506	c	21 30 48.49	04 52 25.4	4.91	no		70	20	66	7	52	15	83	20	-0.16	C^+
372	J2137+0452	c	21 34 59.15	04 37 50.8	-9.53	no		no		83	16	161	29	241	44	-0.42	F,S
373	J2138+0505		21 36 08.46	04 52 13.0	4.88	30	3	79	22	82	10	156	22	327	43	-0.81	S
374	J2144+0511		21 41 56.77	04 57 26.4	10.29	no		no		55	10	230	40	288	55	-1.00	S
375	J2204+0440		22 01 46.07	04 25 32.3	-21.02	346	10	no		347	115	450	100	1102	180	-0.50	C^+,CPX?
376	J2213+0502	n	22 10 51.19	04 47 54.2	1.59	11	2	26	6	30	3	48	12	162	27	-1.19	C^+
377	J2214+0507	c	22 11 40.74	04 52 03.7	5.77	16	3	no		37	6	72	18	134	24	-0.90	S
378	J2219+0458	c	22 16 34.69	04 43 40.3	-2.50	no		30	7	57	5	89	15	204	35	-0.97	S
379	J2223+0453	c	22 20 34.36	04 39 33.3	-6.52	9	2	no		83	11	164	23	266	37	-1.01	C^-
380	J2224+0513		22 21 46.58	04 58 33.3	12.51	31	4	no		102	20	230	40	510	75	-1.04	S
381	J2236+0454		22 34 20.28	04 39 43.1	-6.05	no		no		41	7	86	18	218	41	-1.26	S
382	J2241+0453	c	22 39 02.25	04 37 28.7	-8.20	no		no		82	13	163	25	275	60	-0.68	C^-
383	J2241+0502		22 39 22.53	04 47 10.4	1.51	no		38	8	89	4	101	12	250	39	-0.82	S
384	J2245+0501	c	22 43 21.61	04 45 08.0	-0.46	352	10	560	35	420	16	277	22	588	50	+0.29	C^+,CPX
385	J2247+0507		22 44 43.25	04 52 17.5	6.73	no		<	87	130	14	275	33	419	56	-0.98	CPX
386	J2251+0452	c	22 49 13.41	04 37 02.0	-8.45	no		no		128	16	189	31	327	70	-0.87	C_{max}
387	J2251+0502		22 49 22.10	04 46 38.0	1.15	49	3	65	8	157	7	243	18	563	60	-0.85	S
388	J2255+0453	c	22 52 55.22	04 39 07.3	-6.30	no		no		35	8	75	20	205	30	-1.17	C^-
389	J2258+0515	c	22 55 55.65	04 59 37.7	14.25	122	6	no		168	35	211	45	447	70	-0.48	C^+,CPX?
390	J2312+0517		23 10 21.97	05 00 03.5	14.89	121	6	485	300	1334	205	1461	185	3470	497	-0.82	S
391	J2320+0512		23 18 11.94	04 57 23.5	12.31	1218	36	no		1400	250	1000	151	1013	160	+0.20	F
392	J2320+0459		23 18 12.81	04 42 45.0	-2.33	no		42	10	60	7	163	45	236	50	-0.92	S
393	J2322+0459	n	23 19 39.61	04 42 36.6	-2.46	no		<	24	26	4	108	18	192	38	-1.42	C_{max}
394	J2322+0503	c	23 20 22.55	04 47 08.0	2.07	17	3	<	21	42	5	<	114	126	21	-0.78	C^-
395	J2329+0503	n	23 26 52.38	04 46 32.0	1.53	no		44	10	65	6	<	111	109	14	-0.37	F
396	J2343+0520		23 41 15.28	05 04 20.0	19.43	no		no		154	50	244	70	694	140	-0.85	C^-,CPX?
397	J2348+0507		23 45 58.52	04 50 51.9	5.98	45	3	95	27	130	13	255	27	430	56	-0.96	S
398	J2354+0454	n	23 51 53.12	04 38 12.0	-6.67	8	2	no		32	7	70	18	87	17	-0.53	S?
399	J2357+0446	n	23 54 37.64	04 29 30.0	-15.36	no		no		107	20	152	40	144	30	-0.26	F,C_{max}?
400	J2357+0501		23 55 22.84	04 44 46.9	-0.08	no		<	11	51	4	121	10	256	25	-1.19	S

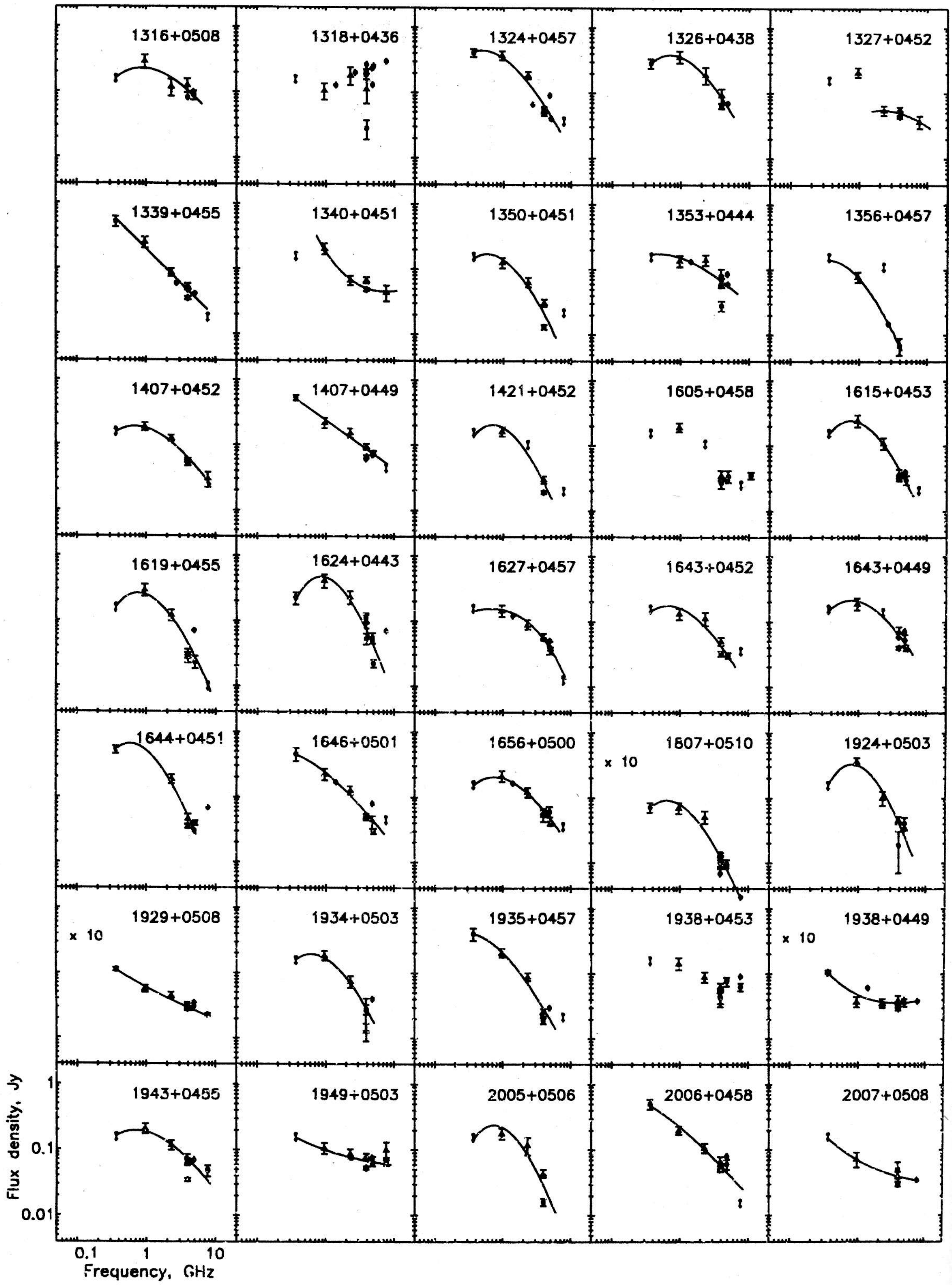
Figure 3: *a) The spectra of the sources from the RC catalog obtained for the first time. The data of the paper for the epoch 1988.0 are labled with filled triangles, from other catalogs – with open circles.*




0332+0508
0335+0457
0337+0450
0340+0458
0349+0500
0349+0455
0354+0442
× 10
0421+0501
0444+0517
× 10
0452+0443
0453+0509
0517+0500
0520+0453
0523+0503
0525+0454
0527+0500
0528+0457
0535+0515
× 10
0542+0454
0545+0505
0545+0459
0553+0455
0606+0457
0618+0513
0621+0456
0622+0451
0622+0455
0622+0502
0623+0505
0627+0457
0636+0507
0639+0459
0655+0455
0704+0446
0707+0455
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz


0711+0501
0713+0500
0716+0450
0718+0456
0718+0452
0719+0451
0724+0445
0730+0453
0732+0500
× 10
0733+0456
0743+0455
0744+0500
0748+0452
× 10
0749+0437
0754+0452
0804+0506
0804+0511
× 10
0811+0451
0815+0453
0816+0458
0822+0455
× 10
0832+0431
0833+0458
0838+0445
0847+0454
0849+0454
0851+0447
0852+0459
0906+0459
0907+0453
0916+0441
0927+0457
0934+0456
0940+0450
0942+0444
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz


0945+0451
0947+0504
0948+0510
0952+0453
1005+0451
1035+0452
1038+0451
1041+0454
1041+0447
1045+0451
1048+0500
1053+0456
1054+0448
1057+0456
1058+0443
1059+0453
1103+0451
1104+0450
1123+0448
1123+0450
1126+0454
1134+0442
1135+0454
1136+0457
1140+0500
x 10
1142+0436
1150+0456
1152+0500
1153+0454
1155+0444
1219+0448
1235+0453
x 10
1239+0443
1305+0457
1310+0448
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz


1316+0508
1318+0436
1324+0457
1326+0438
1327+0452
1339+0455
1340+0451
1350+0451
1353+0444
1356+0457
1407+0452
1407+0449
1421+0452
1605+0458
1615+0453
1619+0455
1624+0443
1627+0457
1643+0452
1643+0449
1644+0451
1646+0501
1656+0500
1807+0510
× 10
1924+0503
1929+0508
× 10
1934+0503
1935+0457
1938+0453
1938+0449
× 10
1943+0455
1949+0503
2005+0506
2006+0458
2007+0508
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

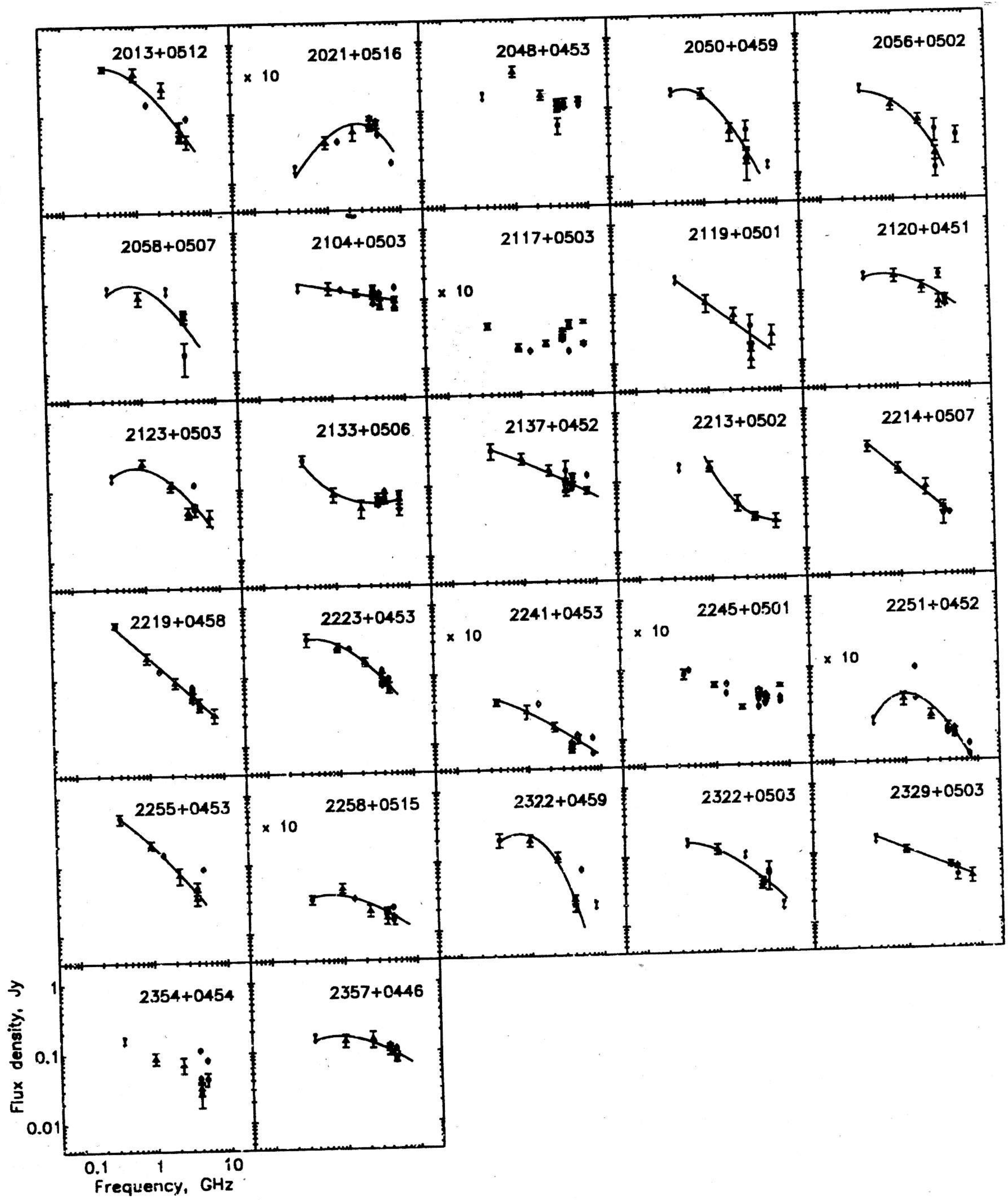
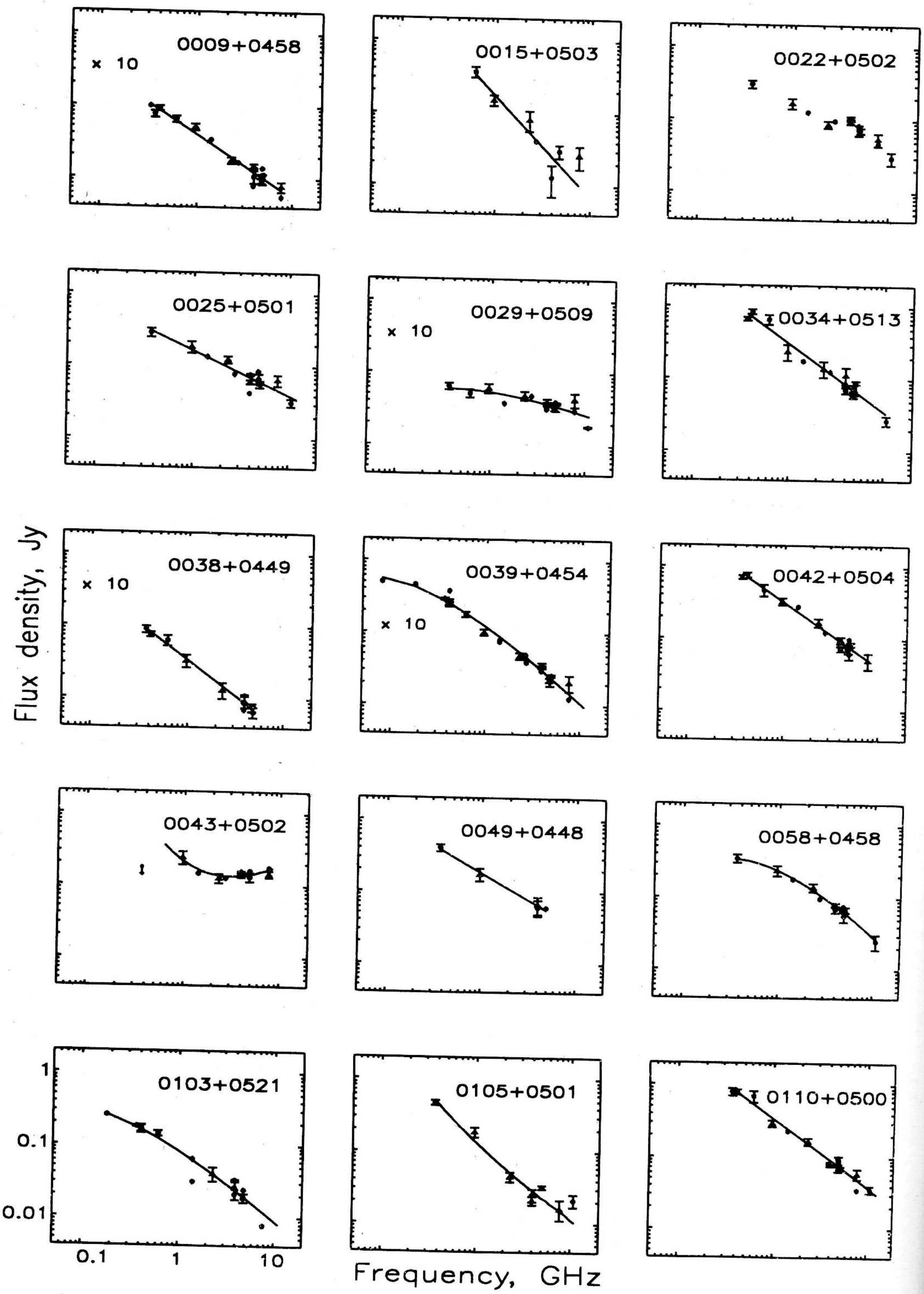
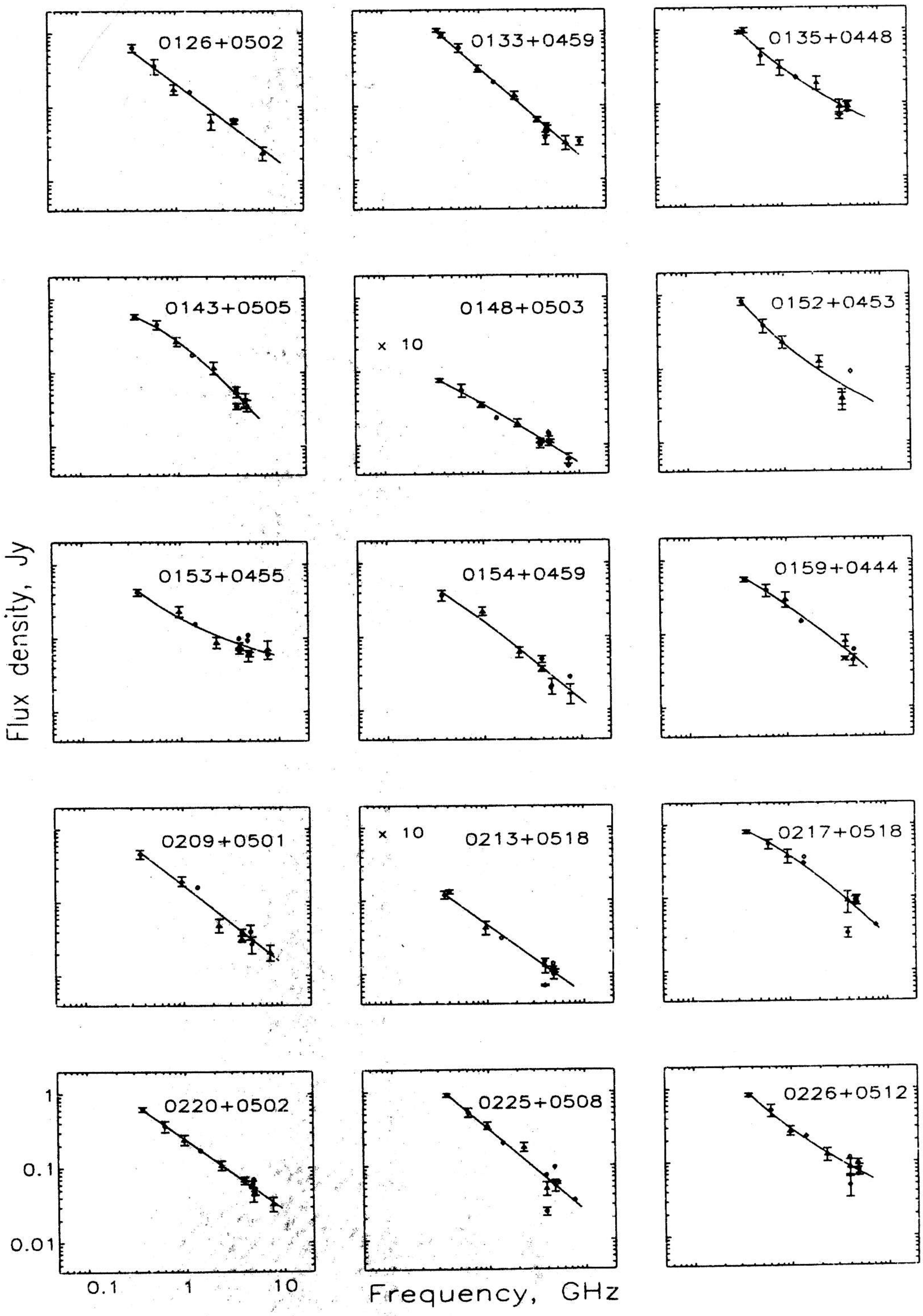
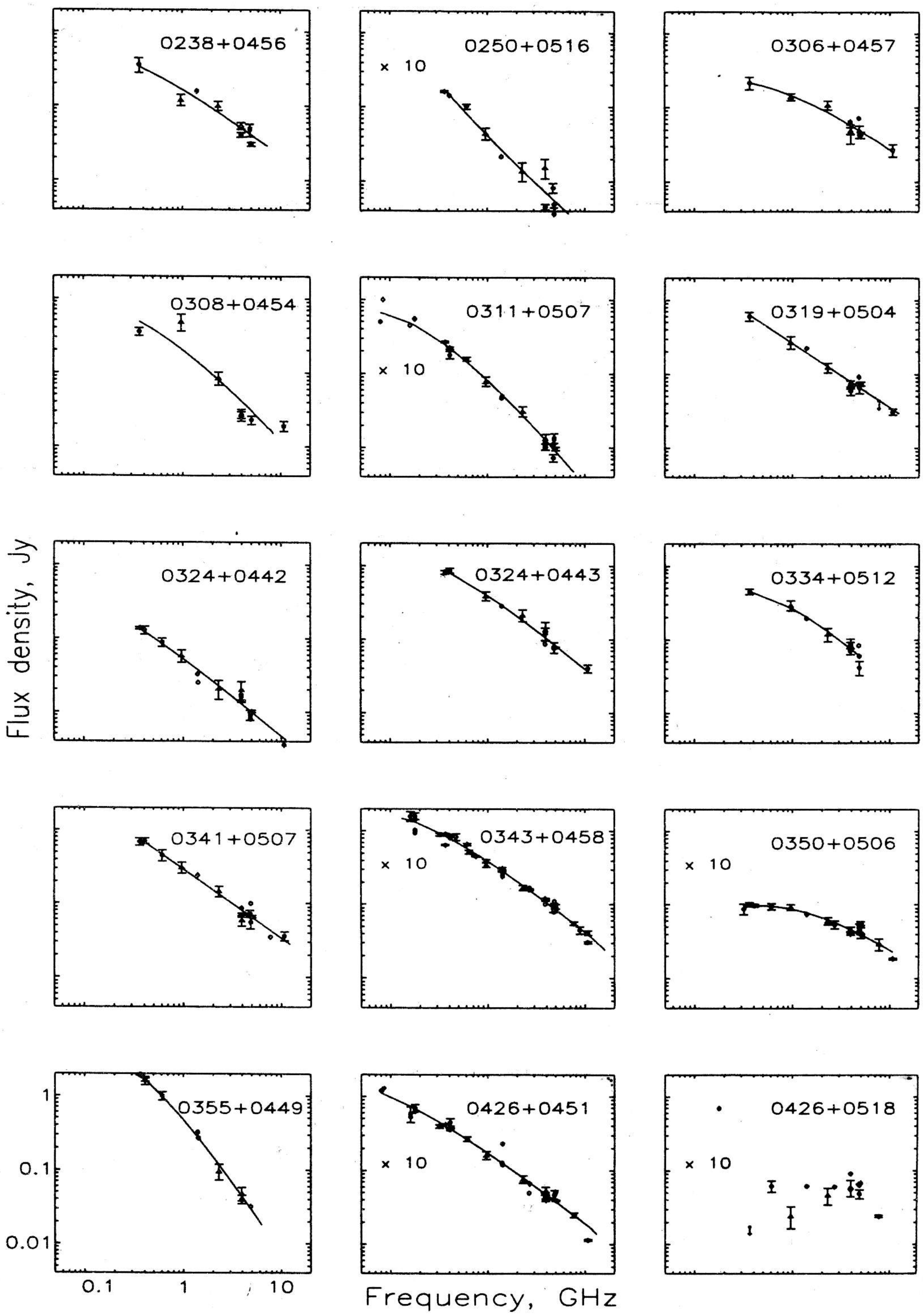
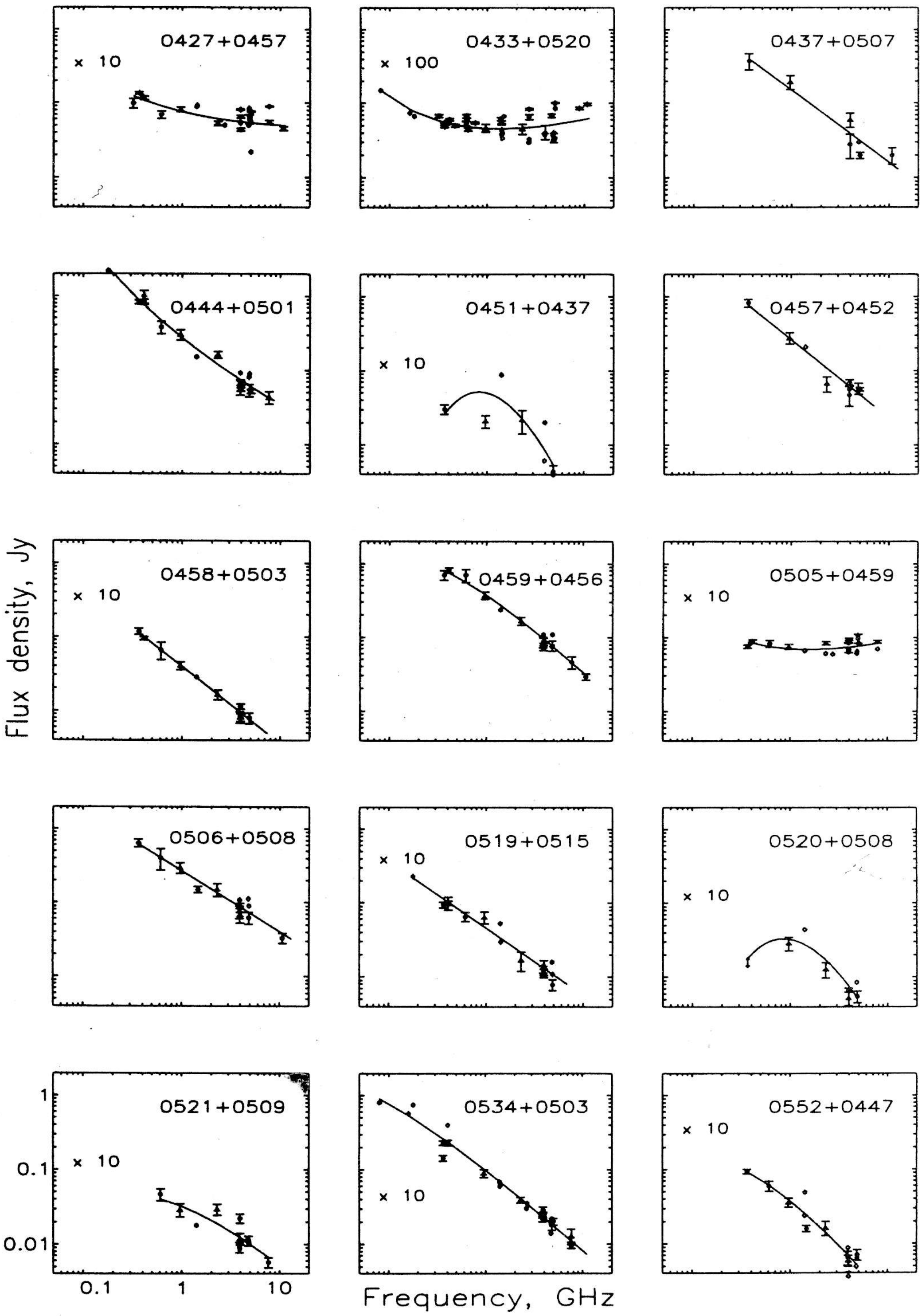

2013+0512
2021+0516
x 10
2048+0453
2050+0459
2056+0502
2058+0507
2104+0503
2117+0503
x 10
2119+0501
2120+0451
2123+0503
2133+0506
2137+0452
2213+0502
2214+0507
2219+0458
2223+0453
2241+0453
x 10
2245+0501
x 10
2251+0452
x 10
2255+0453
2258+0515
x 10
2322+0459
2322+0503
2329+0503
2354+0454
2357+0446
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

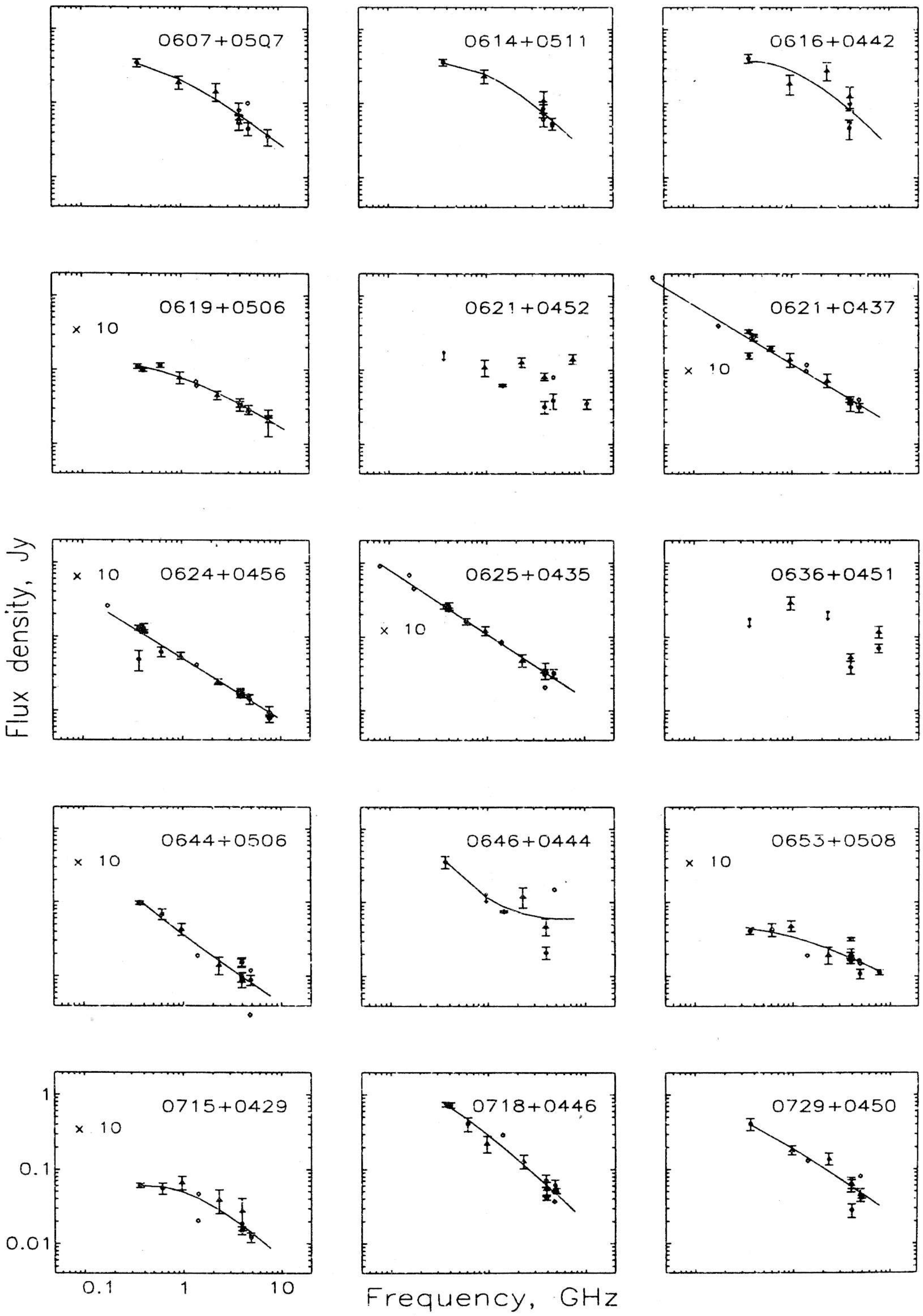
Figure 3: *b) The spectra of the sources from the RC catalog obtained using known data.*

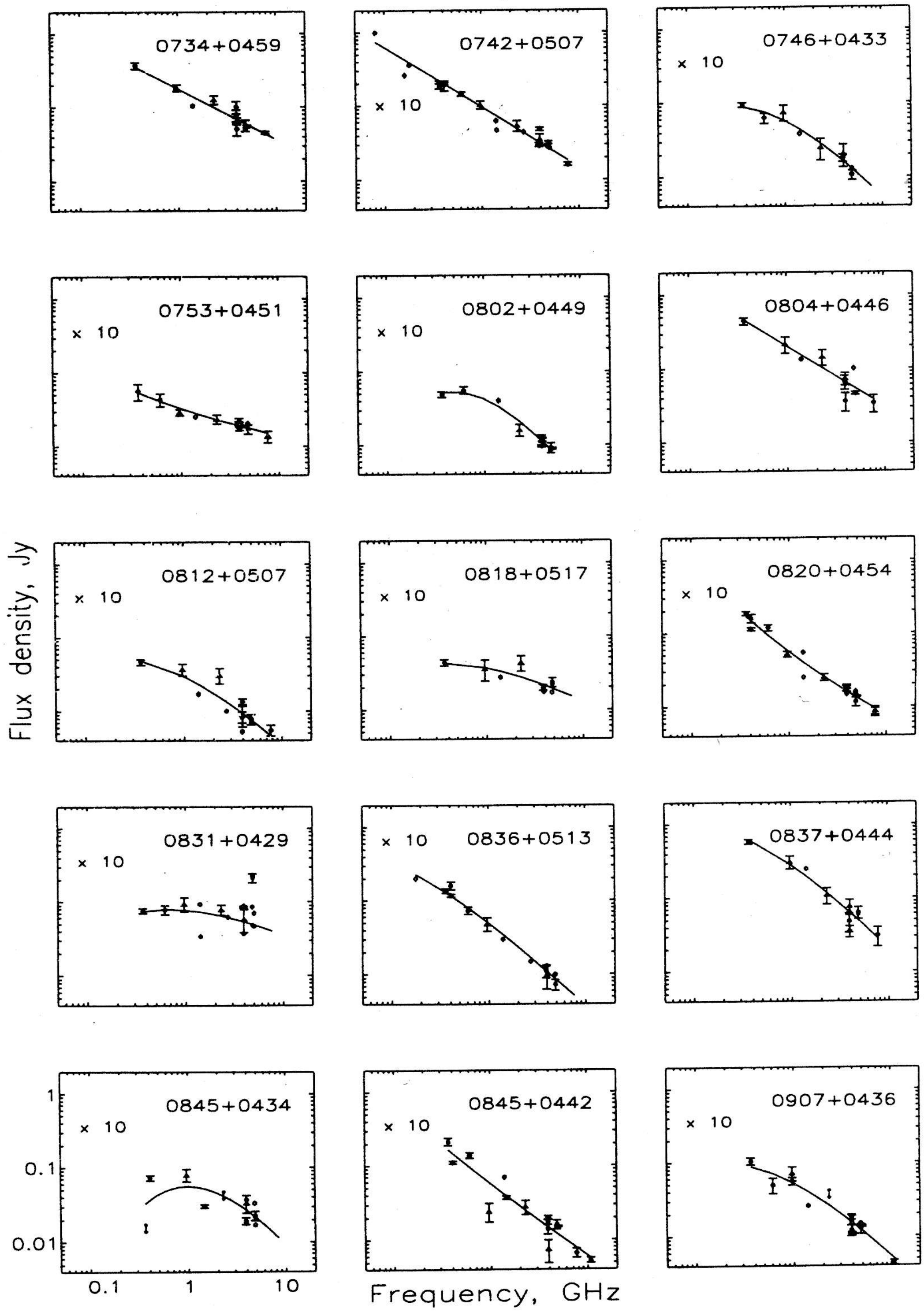


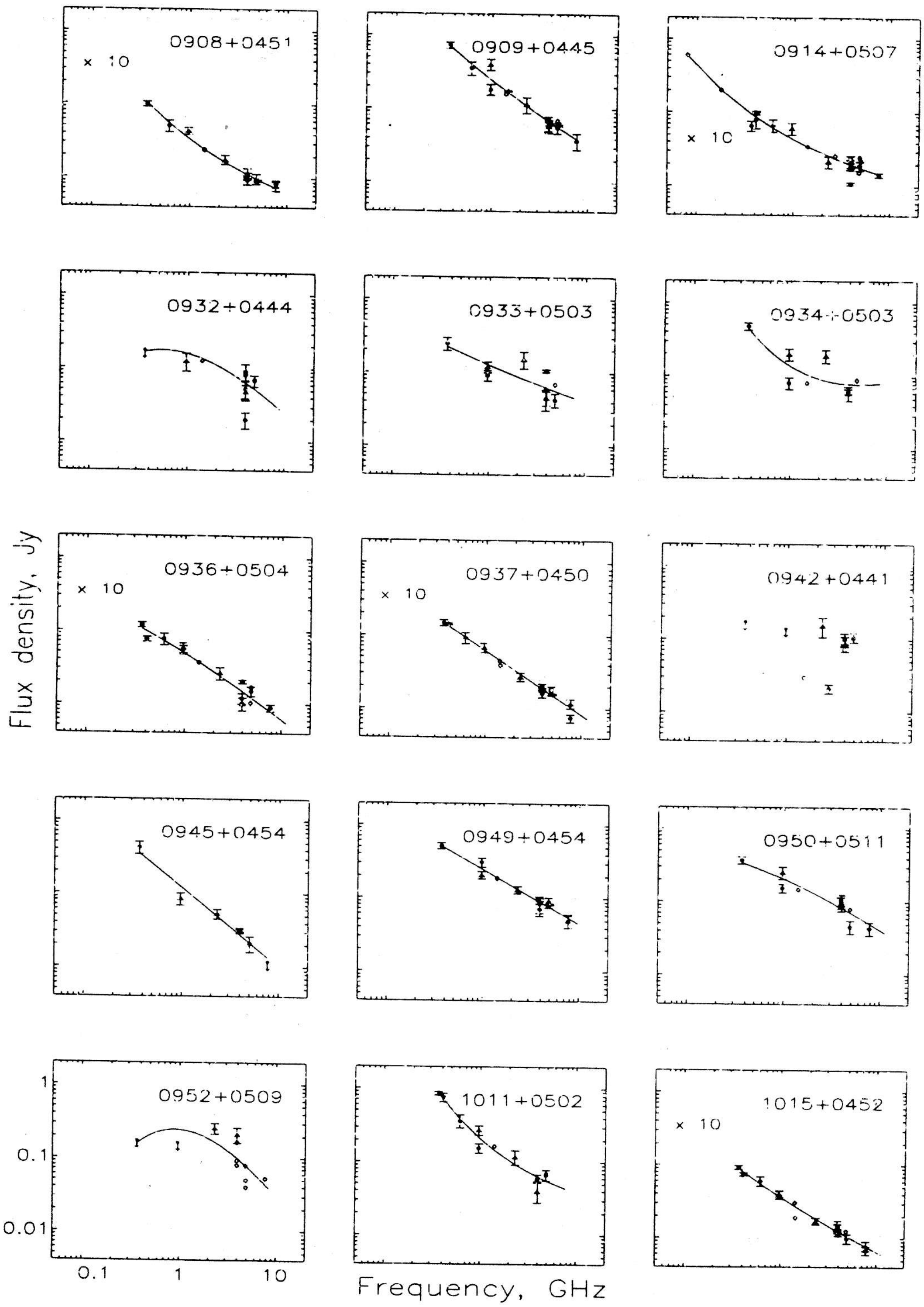

0126+0502
0133+0459
0135+0448
0143+0505
0148+0503
× 10
0152+0453
0153+0455
0154+0459
0159+0444
0209+0501
× 10
0213+0518
0217+0518
0220+0502
0225+0508
0226+0512
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

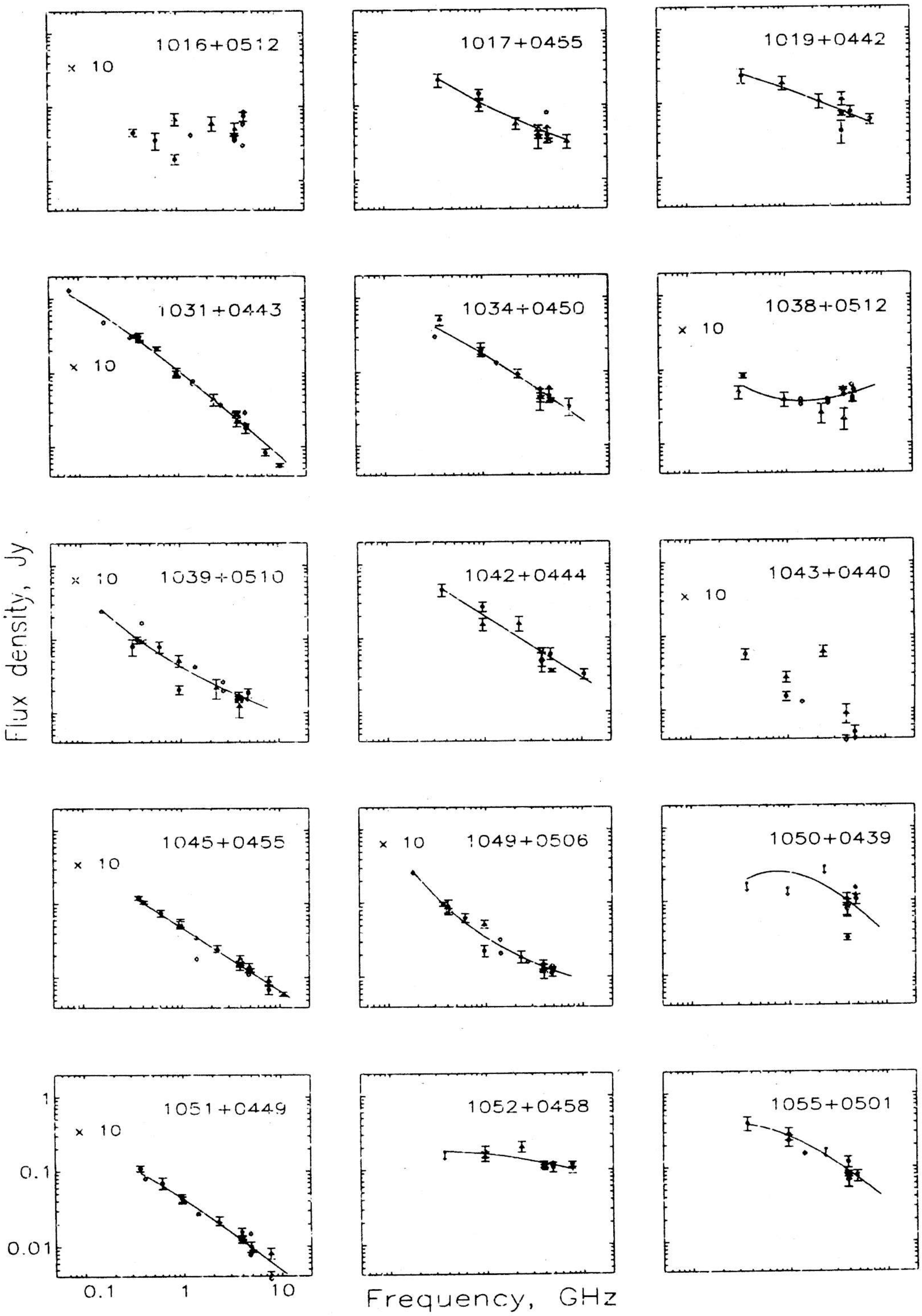

0238+0456
0250+0516
× 10
0306+0457
0308+0454
0311+0507
× 10
0319+0504
0324+0442
0324+0443
0334+0512
0341+0507
0343+0458
× 10
0350+0506
× 10
0355+0449
0426+0451
× 10
0426+0518
× 10
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

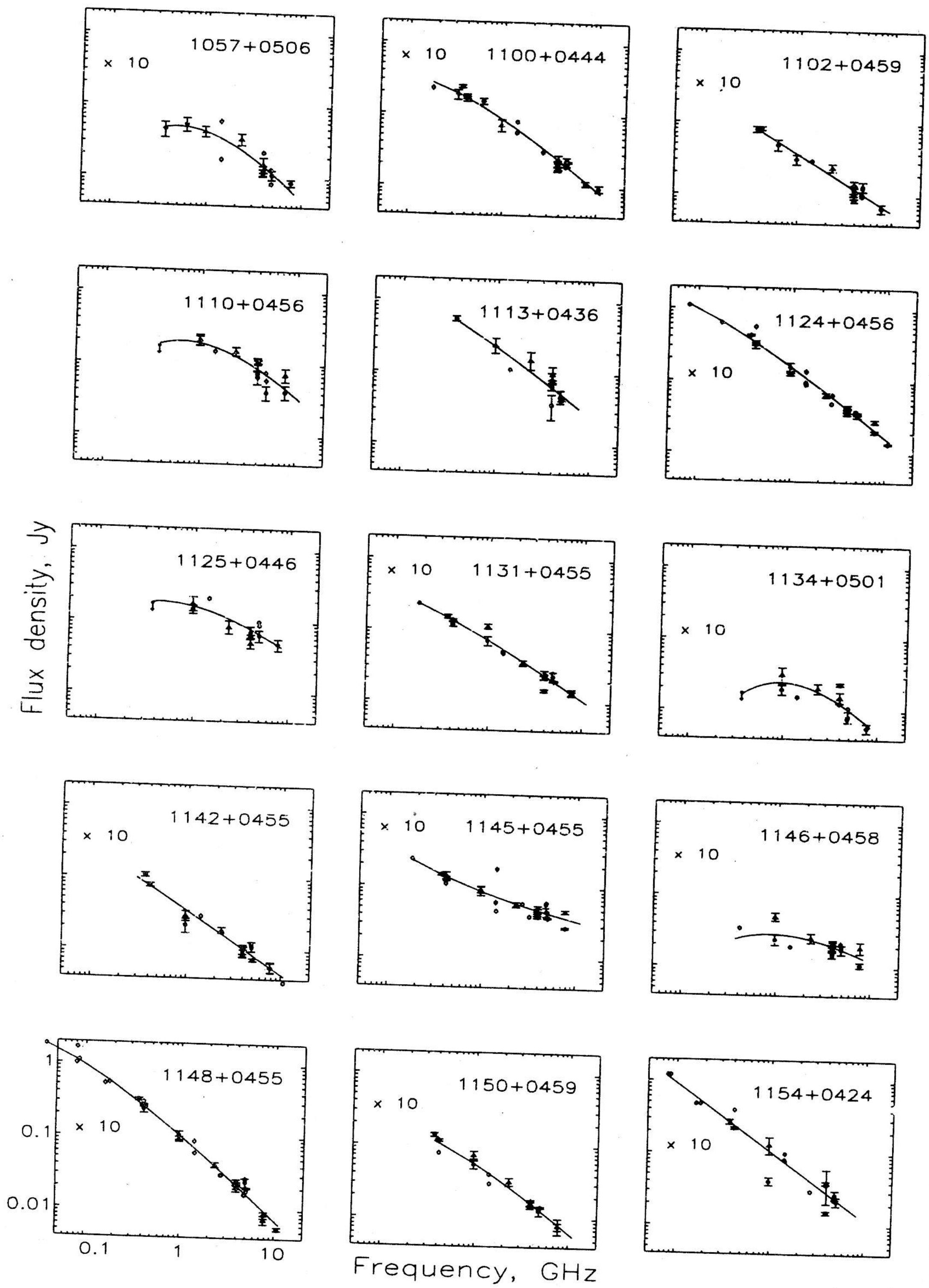

0427+0457
× 10
0433+0520
× 100
0437+0507
0444+0501
0451+0437
× 10
0457+0452
0458+0503
× 10
0459+0456
0505+0459
× 10
0506+0508
0519+0515
× 10
0520+0508
× 10
0521+0509
× 10
0534+0503
× 10
0552+0447
× 10
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

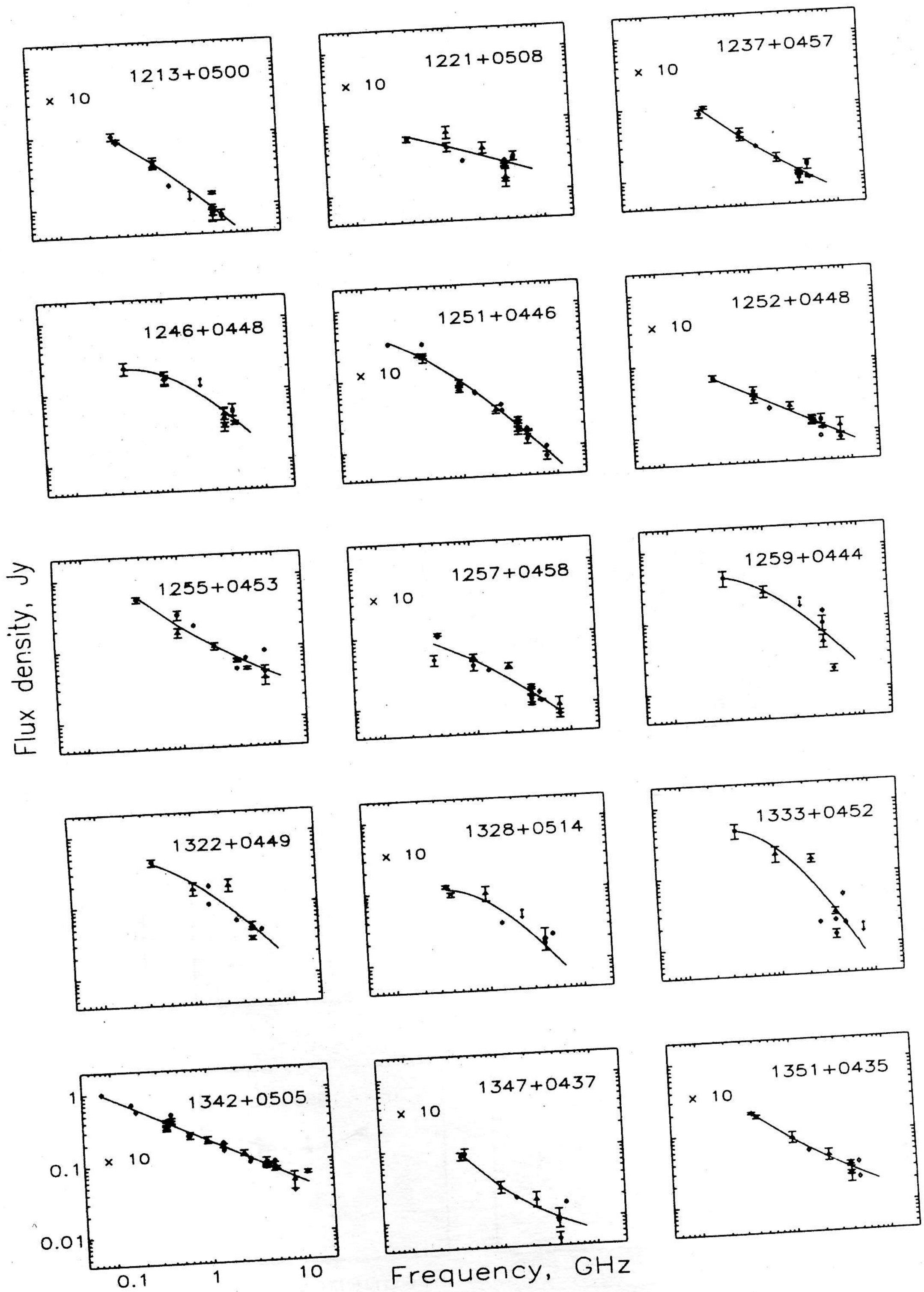

0607+05Q7
0614+0511
0616+0442
0619+0506
× 10
0621+0452
0621+0437
× 10
0624+0456
× 10
0625+0435
× 10
0636+0451
0644+0506
× 10
0646+0444
0653+0508
× 10
0715+0429
× 10
0718+0446
0729+0450
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

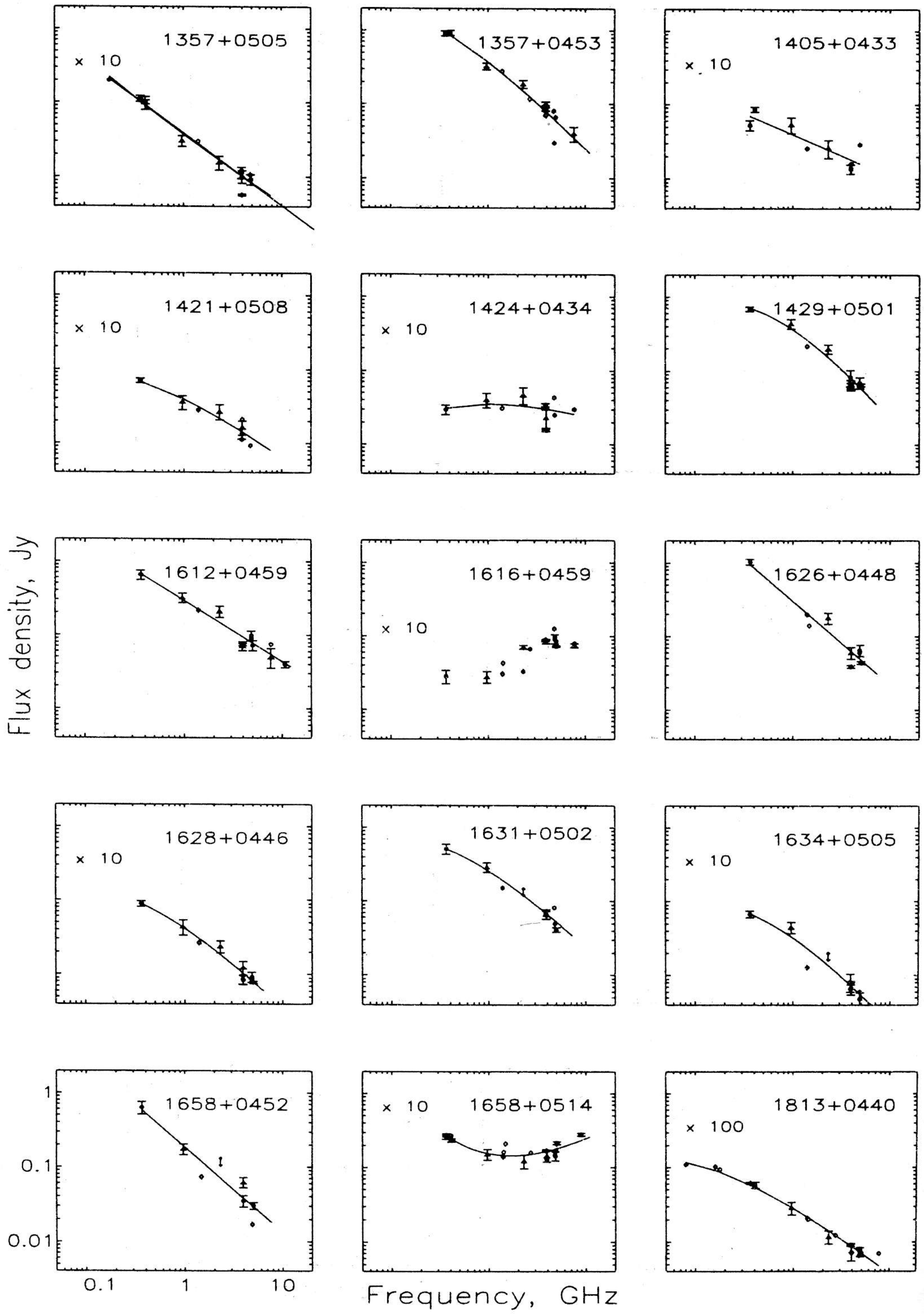

0734+0459
0742+0507
× 10
0746+0433
× 10
0753+0451
× 10
0802+0449
× 10
0804+0446
0812+0507
× 10
0818+0517
× 10
0820+0454
× 10
0831+0429
× 10
0836+0513
× 10
0837+0444
0845+0434
× 10
0845+0442
× 10
0907+0436
× 10
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

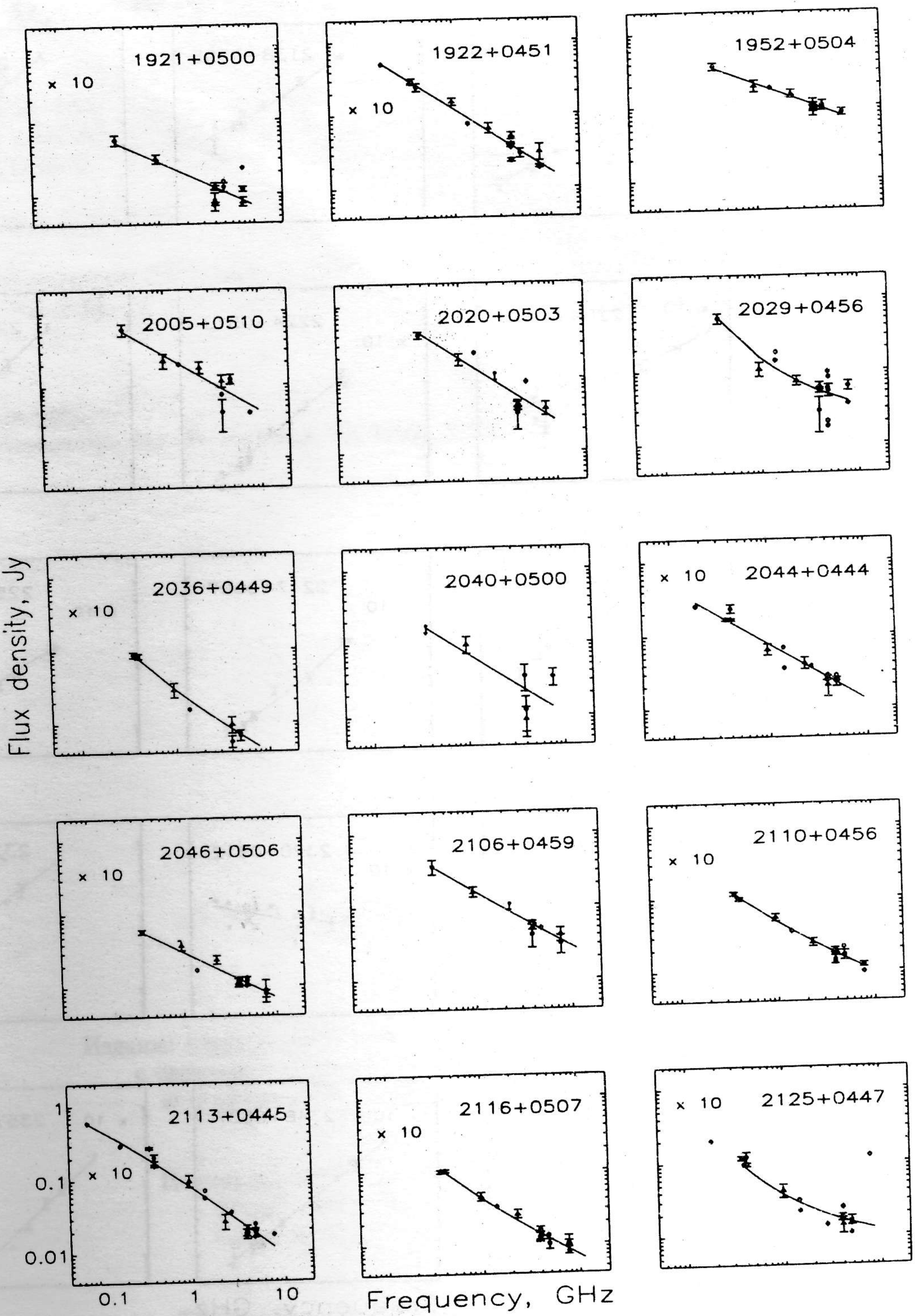

0908+0451
× 10
0909+0445
0914+0507
× 10
0932+0444
0933+0503
0934+0503
0936+0504
× 10
0937+0450
× 10
0942+0441
0945+0454
0949+0454
0950+0511
0952+0509
1011+0502
1015+0452
× 10
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz

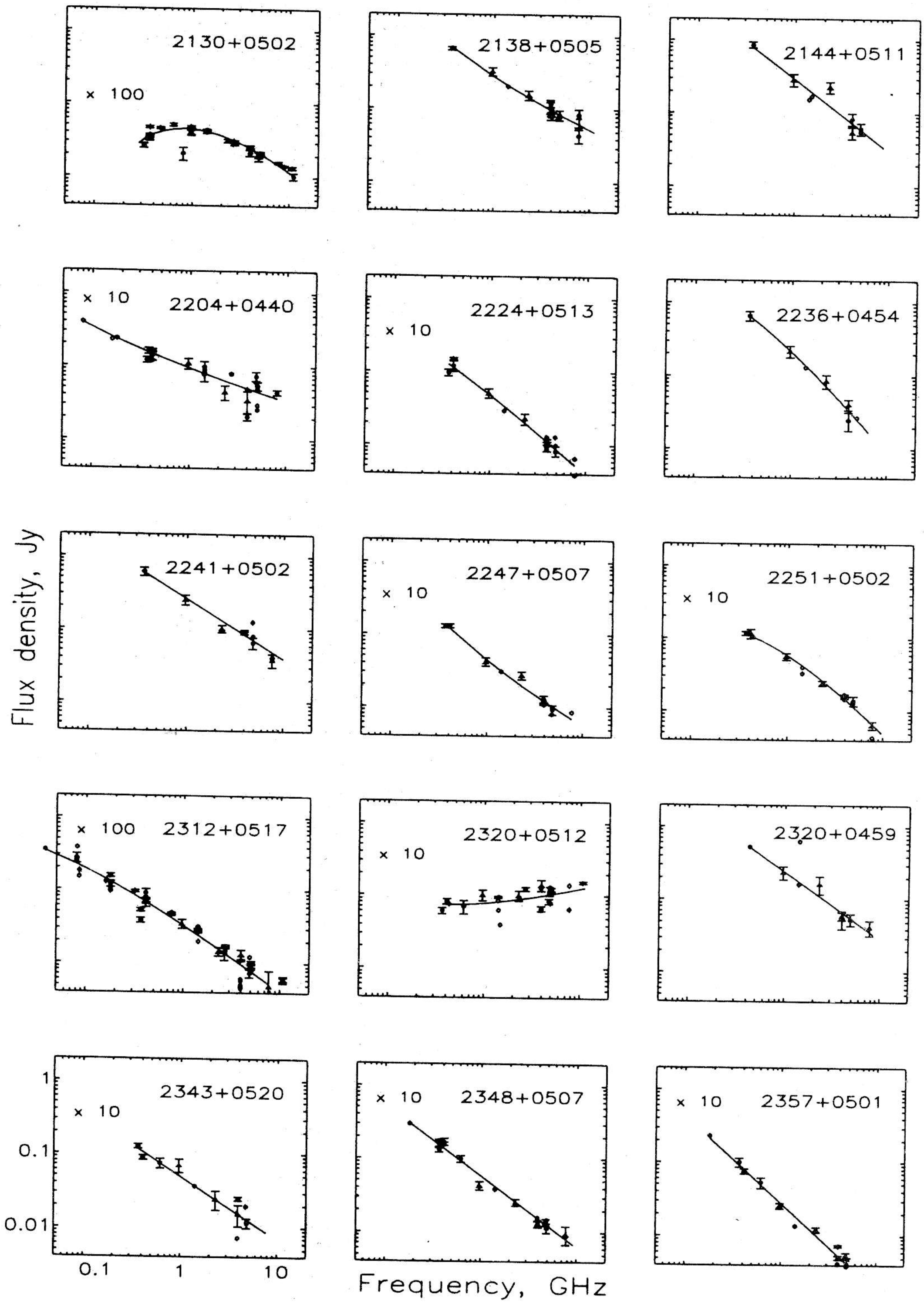

1016+0512
× 10
1017+0455
1019+0442
1031+0443
× 10
1034+0450
1038+0512
× 10
× 10
1039+0510
1042+0444
1043+0440
× 10
1045+0455
× 10
× 10
1049+0506
1050+0439
1051+0449
× 10
1052+0458
1055+0501
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz


1057+0506
× 10
1100+0444
× 10
1102+0459
× 10
1110+0456
1113+0436
1124+0456
× 10
1125+0446
1131+0455
× 10
1134+0501
× 10
1142+0455
× 10
1145+0455
× 10
1146+0458
× 10
1148+0455
× 10
1150+0459
× 10
1154+0424
× 10
1
0.1
0.01
0.1
1
10
Flux density, Jy
Frequency, GHz


1213+0500
× 10
1221+0508
× 10
1237+0457
× 10
1246+0448
1251+0446
× 10
1252+0448
× 10
1255+0453
1257+0458
× 10
1259+0444
1322+0449
1328+0514
× 10
1333+0452
1342+0505
× 10
1347+0437
× 10
1351+0435
× 10
1
0.1
0.01
0.1
1
10
Flux density, Jy
Frequency, GHz


1357+0505
× 10
1357+0453
1405+0433
× 10
1421+0508
× 10
1424+0434
× 10
1429+0501
1612+0459
1616+0459
× 10
1626+0448
1628+0446
× 10
1631+0502
1634+0505
× 10
1658+0452
1658+0514
× 10
1813+0440
× 100
1
0.1
0.01
0.1
1
10
Flux density, Jy
Frequency, GHz


1921+0500
× 10
1922+0451
× 10
1952+0504
2005+0510
2020+0503
2029+0456
Flux density, Jy
2036+0449
× 10
2040+0500
× 10
2044+0444
2046+0506
× 10
2106+0459
2110+0456
× 10
1
0.1
0.01
2113+0445
× 10
0.1
1
10
2116+0507
× 10
× 10
2125+0447
Frequency, GHz


2130+0502
× 100
2138+0505
2144+0511
× 10
2204+0440
2224+0513
× 10
2236+0454
2241+0502
2247+0507
× 10
2251+0502
× 10
× 100
2312+0517
2320+0512
× 10
2320+0459
2343+0520
× 10
× 10
2348+0507
× 10
2357+0501
Flux density, Jy
1
0.1
0.01
0.1
1
10
Frequency, GHz