Table 1. The BL Lacertae Catalogue

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
RXJ00079+4711	00 07 56.5	47 12 32	...	18.3	63.0	...,B95,B95	B95	RASS
PKS 0017+200	00 19 37.8	20 21 46	...	20.0[a]	520	...,VV93,VV93	...	Candidate
PKS 0019+058	00 22 28.7	06 09 09	...	18.9[a]	540	...,VV93,VV93	D90	Candidate
1ES0033+595	00 35 52.7	59 50 04	...	19.5	66.0	...,P95,P95	P95	Slew
1ES0037+405N	00 40 13.8	40 50 05	...	19.3	17.8	...,P95,P95	E92,WGA	Candidate (Slew)
EXO0044.4+2001	00 47 08.5	20 17 44	...	18.0	76.0	...,G91,N6	G91	Candidate (Exosat)
5C 3.178	00 47 55.2	39 48 58	...	18.5	57.0	...,HB93,N6	D90	Candidate
PKS 0047+023, OB 078	00 49 43.2	02 37 03	...	18.4[a]	280	...,VV93,VV93	...	Miscellaneous
PKS 0048−097, PHL 0856	00 50 41.3	−09 29 05	>0.2	16.3	1980	S91,P92,S91	D90,WGA	1 Jy
GC 0109+224, S2 0109+22	01 12 05.7	22 44 38	...	15.7	780	...,VV93,VV93	D90,B95	Miscellaneous
PKS 0118−272, OC −230.4	01 20 31.7	−27 01 25	>0.557	15.9	1140	S91,P92,S91	D90,WGA	1 Jy
1ES0120+340	01 23 08.7	34 20 49	0.272	15.2	33.6	P95,P95,P95	P95,WGA	Slew
MS0122.1+0903	01 24 44.6	09 18 49	0.339	20.0	1.4	M91,ST91,ST91	ST91,WGA	EMSS
PKS 0138−097, OC −065	01 41 25.8	−09 28 44	>0.501	17.9	1220	S91,P92,S91	D90	1 Jy
1ES0145+138	01 48 29.7	14 02 18	0.125	17.9	5.7	P95,P95,P95	P95	Slew
MS0158.5+0019, 1ES0158+003	02 01 06.3	00 34 00	0.299	18.0	11.3	M91,ST91,ST91	ST91,P95,WGA	EMSS,Slew
S5 0159+723	02 03 33.3	72 32 53	...	19.3	330	...,KS90,K81	B92	S5
MS0205.7+3509	02 08 38.1	35 23 12	0.318	19.2	3.6	M91,ST91,ST91	ST91,WGA	EMSS
PKS 0215+015	02 17 48.9	01 44 50	1.715	15.4[a]	360	VV93,VV93,VV93	D90	Candidate
S4 0218+357, OD 330	02 21 05.4	35 56 15	>0.685	20.0	1160	S94,S94,S94	...	1 Jy,S4
PKS 0219−164, 1H 0212−172	02 22 00.7	−16 15 16	0.698	17.0	343.0	L93,FM88,PMN	D90,L93	HEAO-1
3C 66A, 1ES0219+428	02 22 39.6	43 02 08	0.444?	15.5	806.0	P95,P95,P95	D90,C93,P95,WGA	Slew
1ES0229+200	02 32 48.6	20 17 17	0.139	14.7	49.1	P95,P95,P95	P95	Slew
AO 0235+164, PKS 0235+164	02 38 38.8	16 36 59	0.940	17.0	2850	S91,P92,S91	D90,C93,P95,WGA	1 Jy,Slew,GRO
S5 0238+711	02 43 31.0	71 20 18	...	19.2	270	...,KS90,K81	...	S5
MS0257.9+3429	03 01 03.9	34 40 59	0.245	18.5	10.0	M91,ST91,ST91	ST91,WGA	EMSS
PKS 0301−243, OE −202	03 03 26.4	−24 07 12	...	15.9[a]	390	...,VV93,VV93	WGA	Miscellaneous
4C 47.08, B3 0300+470	03 03 35.2	47 16 16	...	17.0	2220	...,VV93,VV93	D90,B95	Miscellaneous
RXJ03162−2607	03 16 15.0	−26 07 56	...	16.9[a]	...	...,B94,...	B94,WGA	RASS
MS0317.0+1834	03 19 51.9	18 45 34	0.190	18.1	17.0	M91,ST91,ST91	D90,ST91,C93,WGA	EMSS

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
1H 0323+022, 1ES0323+022	03 26 13.9	02 25 15	0.147	17.4	42.0	P95,P95,P95	D90,C93,L93,P95	HEAO-1,Slew
MS0331.3−3629	03 33 12.2	−36 19 46	0.308	18.0	8.7	M91,ST91,ST91	ST91,WGA	EMSS
PKS 0338−214	03 40 35.5	−21 19 31	...	16.9[a]	940	...,VV93,VV93	D90	Candidate
1ES0347−121	03 49 23.2	−11 59 27	0.188	18.2	9.0	P95,P95,P95	P95,WGA	Slew
MS0350.0−3712	03 51 54.5	−37 03 44	0.165	17.0	16.8	M91,ST91,ST91	ST91,WGA	EMSS
PKS 0406+121, GC 0406+12	04 09 22.1	12 17 39	...	19.6[a]	1620	...,VV93,VV93	D90,WGA	Miscellaneous
1H 0413+009, 1ES0414+009	04 16 52.4	01 05 24	0.287	17.5	70	P95,P95,P95	D90,C93,L93,P95,WGA	HEAO-1,Slew
MS0419.3+1943	04 22 18.4	19 50 51	0.512	20.3	8.0	M91,ST91,ST91	ST91,WGA	EMSS
PKS 0420+022	04 22 52.0	02 19 31	...	18.9[a]	670	...,VV93,VV93	...	Candidate
PKS 0422+004, OF 038	04 24 46.8	00 36 06	...	17.0	1600	...,VV93,VV93	D90,B95	Miscellaneous
EXO0423.4−0840	04 25 50.7	−08 33 43	0.039	15.9	45.0	G91,G91,G91	G91,WGA	Candidate (Exosat)
PKS 0426−380	04 28 40.4	−37 56 20	>1.030	19.0	1170	S91,P92,S91	WGA	1 Jy
1ES0446+449	04 50 07.2	45 03 12	0.203?	18.5	139.4	P95,P95,P95	P95	Slew
1ES0502+675	05 07 56.2	67 37 24	...	17.0	32.7	...,P95,P95	P95	Slew
S5 0454+844, 1H 0454+844	05 08 42.4	84 32 05	0.112	17.3	1390	S94,P92,S91	D90,L93,WGA	1 Jy,S5,HEAO-1
EXO0507.1−0404, 1H 0506−039	05 09 38.1	−04 00 46	0.304	19.0	27.0[b]	G91,G91,G91	G91,L93,P95	Exosat,HEAO-1,Slew
PKS 0521−365	05 22 57.8	−36 27 03	0.055	14.6	9290	S94,S94,S94	D90,C93,L93,WGA	Candidate (1 Jy,HEAO-1,GRO)
1ES0525+713	05 31 41.7	71 22 17	0.249	19.0	9.0	P95,P95,P95	P95	Slew
PKS 0537−441, IRAS 05373−4406	05 38 50.4	−44 05 09	0.896	15.0	4000	S91,P92,S91	C93,WGA	1 Jy,GRO
PKS 0548−322, 1H 0548−322	05 50 41.9	−32 16 11	0.069	15.5	170	P95,P95,P95	D90,C93,L93,P95,WGA	HEAO-1,Slew
EXO0556.4−3838	05 58 05.8	−38 38 27	...	17.1	68.0	...,G91,PMN	G91,C93,WGA	Exosat
MS0607.9+7108	06 13 43.3	71 07 24	0.267	19.6	18.2	M91,ST91,ST91	ST91,WGA	EMSS
MS0622.5−5256	06 23 37.9	−52 57 57	...	19.0	24.1	...,M94,M94	ST91,WGA	Candidate (EMSS)
PKS 0627−199	06 29 23.7	−19 59 19	...	18.0[a]	750	...,VV93,VV93	IPC	Candidate
1ES0647+250	06 50 46.5	25 03 00	...	15.8	73.4	...,P95,P95	P95	Slew
EXO0706.1+5913, 1H 0658+595.A	07 10 30.1	59 08 20	0.125	18.4	41.0	G91,G91,G91	G91,L93	Exosat,HEAO-1
1ES0715−259	07 18 04.9	−26 08 11	...	18.0	185.0	...,P95,P95	P95	Slew
GB2 0716+332	07 19 19.4	33 07 08	...	17.0	440	...,VV93,VV93	...	Candidate
S5 0716+714	07 21 53.4	71 20 36	>0.2	14.4	1120	S91,P92,S91	D90,C93,WGA	1 Jy,S5,GRO
GB 0723+488	07 27 03.1	48 44 10	...	17.6[a]	282.0	...,VV93,VV93	...	Candidate

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
PKS 0735+178, OI 158	07 38 07.4	17 42 19	>0.424	15.4	1990	S91,P92,S91	D90,C93,P95,WGA	1 Jy,Slew
MS0737.9+7441, 1ES0737+746	07 44 05.7	74 33 58	0.315	16.9	24.0	M91,ST91,ST91	ST91,P95,WGA	EMSS,Slew
S4 0749+540, 4C 54.15	07 53 00.9	53 53 00	>0.2	18.5	560	SK93,SK94,SK94	B95	S4
GB 0751+485	07 54 45.6	48 23 50	...	16.5[a]	226.0	...,VV93,VV93	...	Candidate
PKS 0754+100, OI 090.4	07 57 06.6	09 56 35	0.660	15.0	1480	VV93,VV93,VV93	D90,B95	Miscellaneous
RXJ08098+5218, 1ES0806+524	08 09 49.0	52 18 56	...	15.0	171.9	...,P95,P95	B94,P95	RASS,Slew
PKS 0808+019, OJ 014	08 11 26.5	01 46 51	...	17.2	670	...,VV93,VV93	D90	Miscellaneous
EXO0811.2+2949	08 14 21.3	29 40 21	...	18.3	19.0	...,G91,G91	G91	Exosat
S4 0814+425, OJ 425	08 18 16.0	42 22 45	0.258?	18.3	1690	S91,P92,S91	B87,WGA	1 Jy,S4
PKS 0818−128, OJ −131	08 20 57.3	−12 58 58	...	15.0	860	...,VV93,VV93	D90	Miscellaneous
PKS 0820+225, 4C 22.21	08 23 24.8	22 23 03	0.951	19.2	1600	S91,P92,S91	WGA	1 Jy
PKS 0823+033, OJ 038	08 25 50.3	03 09 25	0.506	17.4	1320	S91,P92,S91	B92	1 Jy
PKS 0823−223	08 26 01.4	−22 30 27	0.910	16.2	1220	VV93,VV93,VV93	D90	Miscellaneous
PKS 0829+046, OJ 049	08 31 48.9	04 29 39	0.180	16.0	2105.0	L93,F94,N6	C93,L93	HEAO-1,GRO
1H 0829+089	08 31 54.8	08 47 58	...	...	106.0	...,...,N6	L93	HEAO-1
S4 0828+493, OJ 448	08 32 23.2	49 13 21	0.548	18.7	1030	S91,P92,S91	D90,WGA	1 Jy,S4
TEX 0836+182	08 39 30.7	18 02 47	...	16.4[a]	325.0	...,VV93,VV93	D90,WGA	Miscellaneous
PKS 0837+035	08 39 49.2	03 19 53	...	19.4[a]	630	...,VV93,VV93	...	Candidate
0841+129	08 44 24.1	12 45 48	...	18.5	...	...,HB93,...	...	Candidate
OJ 287, PKS 0851+202	08 54 48.9	20 06 31	0.306	15.1	2620	S91,P92,S91	D90,C93,P95,WGA	1 Jy,PG,Slew
B2 0912+29, TON 0396	09 15 52.3	29 33 23	...	16.4	200	...,VV93,VV93	D90,C93,WGA	Miscellaneous
MS0922.9+7459	09 28 03.0	74 47 20	0.638	19.7	3.3	M91,ST91,ST91	ST91,WGA	EMSS
S5 0916+864	09 29 42.7	86 12 21	...	19.4	250	...,KS90,K81	B92	S5
1ES0927+500	09 30 37.6	49 50 26	0.188	17.2	18.3	P95,P95,P95	P95	Slew
0936+52	09 39 35.6	51 59 25	...	17.6[a]	...	...,VV93,...	...	Candidate
MS0950.9+4929, 1ES0950+495	09 54 09.8	49 14 58	>0.5	19.3	3.3	P95,ST91,ST91	ST91,P95,WGA	EMSS,Slew
S4 0954+658	09 58 47.2	65 33 55	0.367	17.0	1460	S91,P92,S91	D90,B95,WGA	1 Jy,S4,GRO[c]
MS0958.9+2102	10 01 42.6	20 48 18	0.344	19.8	1.5	M91,ST91,ST91	ST91	EMSS
EXO1004.0+3509	10 06 56.5	34 54 45	...	19.0	6.0	...,G91,G91	G91,WGA	Exosat
RXJ10081+4705	10 08 11.3	47 05 20	...	18.4[a]	...	...,B94,...	B94	RASS

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
1WGAJ1012.2+063, NRAO 350	10 12 13.3	06 30 57	...	16.8	325.0	...,W95,N6	WGA	Candidate (WGA)
1H 1013+498, 1ES1011+496	10 15 04.2	49 26 00	0.200	16.1	286.0	L93,P95,P95	D90,L93,P95,WGA	HEAO-1,Slew
MS1019.0+5139	10 22 12.8	51 23 58	0.141	18.1	2.4	ST91,ST91,ST91	ST91	Candidate (EMSS)
RXJ10313+5053, 1ES1028+511	10 31 18.6	50 53 34	0.239?	16.6	44.2	P95,P95,P95	B94,P95	RASS,Slew
1ES1044+549	10 47 45.8	54 37 41	...	19.8	3.7	...,P95,P95	E92,WGA	Candidate (Slew)
RXJ10578−2753	10 57 50.7	−27 54 11	0.092	17.2[a]	...	B94,B94,...	B94	RASS
1H 1100−230, 1ES1101−232	11 03 37.7	−23 29 31	0.186	16.1	66.0	L93,P95,P95	D90,L93,P95	HEAO-1,Slew
MRK 421, S4 1101+384	11 04 27.3	38 12 32	0.031	14.4	722.0	P95,P95,P95	D90,C93,L93,P95,WGA	S4,PG,HEAO-1,Slew,GRO
1ES1106+244	11 09 16.2	24 11 20	...	18.7	18.1	...,P95,P95	P95	Slew
OP 1106+36	11 09 32.9	36 38 26	...	18.8	0.3[b]	...,J93,J93	...	Candidate
EXO1118.0+4228, 1ES1118+424	11 20 48.1	42 12 12	0.124?	17.3	34.0	P95,G91,G91	G91,P95,WGA	Exosat,Slew
MS1133.7+1618	11 36 17.4	16 01 53	...	20.0	9.0	...,ST91,ST91	ST91	EMSS
MRK 180, S5 1133+704	11 36 26.4	70 09 28	0.046	14.4	270	P95,P95,K81	D90,C93,L93,P95,WGA	S5,HEAO-1,Slew
RXJ11365+6737	11 36 30.3	67 37 05	0.135	16.7[a]	45.0	B94,B94,N6	B94	RASS
PKS 1144−379, MC 1144−379	11 47 01.4	−38 12 11	1.048	17.4	1610	S91,P92,S91	D90,WGA	1 Jy
EXO1146.9+2455	11 49 30.3	24 39 27	...	18.0	13.0	...,G91,G91	G91,WGA	Exosat
B2 1147+245, OM 280	11 50 19.2	24 17 54	>0.2	16.2	1010	S91,P92,S91	D90,L93,WGA	1 Jy,HEAO-1
1WGAJ1202.1+444, B3 1159+450	12 02 08.7	44 44 22	...	18.1	74.0	...,K95,N6	WGA	WGA
MS1207.9+3945, EXO1207.9+3945	12 10 26.7	39 29 06	0.615	19.1	5.8	M91,ST91,ST91	D90,ST91,P95,WGA	EMSS,Exosat
1210+121	12 12 33.9	11 51 03	...	17.8	154.0	...,HB93,N6	D90	Candidate
1ES1212+078	12 15 11.0	07 32 04	0.130	16.0	94.0	P95,P95,P95	P95,WGA	Slew
EXO1215.3+3022, ON 325	12 17 52.1	30 07 00	0.237[d]	15.6	420	M93,G91,G91	D90,C93,G91,P95,WGA	Exosat,Slew
GB2 1217+348, GV 136	12 20 08.3	34 31 21	...	17.1	160	...,VV93,VV93	D90,B95,WGA	Miscellaneous
1H 1219+301, EXO1218.8+3027	12 21 22.0	30 10 37	0.130	16.4	56.0	L93,P95,P95	D90,G91,C93,L93,P95,WGA	PG,Exosat,HEAO-1,Slew
ON 231, W Comae	12 21 31.7	28 13 58	0.102	16.5	981.0	P95,P95,P95	D90,C93,P95,WGA	Slew
UM 493	12 22 06.5	−01 06 38	...	16.4[a]	...	...,VV93,...	...	Candidate
S5 1221+809	12 23 40.4	80 40 04	...	19.0	520	...,KS90,K81	B92	S5
MS1221.8+2452	12 24 24.2	24 36 20	0.218	17.6	26.4	M91,ST91,ST91	ST91,WGA	EMSS
1222+102	12 25 22.8	09 59 33	...	18.3	...	...,HB93,...	...	Candidate
1225+206	12 28 11.3	20 23 48	...	18.0	434.0	...,HB93,N6	D90	Candidate

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
RXJ12302+2517	12 30 14.0	25 18 07	...	15.0[a]	419.0	...,B94,N6	B94	RASS
1WGAJ1231.3+142	12 31 23.9	14 21 24	0.260	17.7	58.0	W95,W95,N6	WGA	WGA
MS1229.2+6430	12 31 31.7	64 14 16	0.164	16.9	42.0	M91,ST91,ST91	ST91,WGA	EMSS
MS1235.4+6315, 1H 1241+626.A	12 37 39.0	62 58 42	0.297	18.6	7.0	M91,ST91,ST91	D90,ST91,L93	EMSS,HEAO-1
1ES1239+069	12 41 48.3	06 36 01	0.150	19.4	10.2	P95,P95,P95	P95	Slew
RXJ12418−1455	12 41 49.4	−14 55 58	...	17.3[a]	42.0	...,B94,PMN	B94,WGA	RASS
PG 1246+586	12 48 18.8	58 20 28	...	15.6	412.0	...,G86,N6	F93	PG
1ES1248−296	12 51 34.8	−29 58 43	0.487?	19.0	5.8	P95,P95,P95	P95	Candidate (Slew)
1ES1249+174E	12 51 45.5	17 11 17	...	18.5	4.2	...,P95,P95	E92	Candidate (Slew)
1ES1249+174W	12 51 46.7	17 11 14	0.644	18.5	6.2	P95,P95,P95	E92	Candidate (Slew)
PKS 1250−330	12 52 58.4	−33 20 01	...	20.9[a]	490	...,VV93,VV93	...	Candidate
1ES1255+244	12 57 31.9	24 12 40	0.141	15.4	7.4	P95,P95,P95	P95	Slew
MS1256.3+0151	12 58 54.5	01 34 42	...	20.0	8.0	...,ST91,ST91	ST91	EMSS
PKS 1256−229	12 59 08.4	−23 10 39	...	16.7[a]	540	...,VV93,VV93	...	Candidate
MS1258.4+6401	13 00 17.6	63 44 38	...	20.2	12.0	...,ST91,ST91	ST91	EMSS
MC2 1307+12, 4C 12.46	13 09 33.8	11 54 23	...	18.5	1130	...,VV93,VV93	D90	Miscellaneous
B2 1308+326, OP 313	13 10 28.7	32 20 44	0.997	17.1	1530	S91,P92,S91	D90,P95,WGA	1 Jy,Slew
PKS 1309−216, MC1 1309−216	13 12 31.4	−21 56 24	>1.489	18.3[a]	198.0	VV93,VV93,PMN	D90	Miscellaneous
MS1312.1−4221, 1ES1312−423	13 15 03.3	−42 36 50	0.105	16.6	18.5	P95,ST91,ST91	ST91,P95	EMSS,Slew
UM 566	13 19 55.2	01 52 57	...	17.4[a]	...	...,VV93,...	...	Candidate
1ES1320+084N	13 22 54.9	08 10 10	...	18.6	11.9	...,P95,P95	P95	Candidate (Slew)
1ES1322−297	13 25 32.7	−30 01 45	...	20.0	1.1	...,P95,P95	E92	Candidate (Slew)
MS1332.6−2935, 1ES1332−295	13 35 29.7	−29 50 39	0.513	19.1	11.7	P95,ST91,ST91	ST91,P95,WGA	EMSS,Slew
1338.8+2705	13 41 05.8	26 50 26	...	17.5[a]	...	...,VV93,...	...	Candidate
1340.8+2721	13 43 05.7	27 06 23	...	18.2[a]	...	...,VV93,...	...	Candidate
PKS 1349−439	13 52 56.4	−44 12 41	...	16.4	760	...,VV93,VV93	D90	Candidate
MC 1400+162, 4C 16.39	14 02 44.4	15 59 55	0.244	16.7	528.0	VV93,VV93,VV93	D90,C93	Miscellaneous
MS1402.3+0416, 1ES1402+042	14 04 51.0	04 02 00	0.344?	17.1	20.8	P95,ST91,ST91	D90,ST91,C93,P95,WGA	EMSS,Slew
MS1407.9+5954	14 09 23.7	59 39 39	0.495	19.7	16.5	M91,ST91,ST91	ST91,WGA	EMSS
PKS 1407+022, OQ 102	14 10 04.5	02 03 06	...	18.6	450	...,VV93,VV93	D90	Miscellaneous

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
PKS 1413+135, OQ 122	14 15 58.7	13 20 24	0.247	19.9[a]	1200	VV93,VV93,VV93	D90,C93,WGA	Miscellaneous
EXO1415.6+2557, 1E 1415+2557	14 17 56.2	25 43 56	0.237	16.0	54.0	G91,G91,G91	D90,G91,C93,WGA	Exosat
S4 1418+546, OQ 530	14 19 46.6	54 23 15	0.152	15.3	1090	S91,P92,S91	D90,C93	1 Jy,S4,PG
RXJ14226+5801, 1ES1421+582	14 22 39.0	58 01 55	...	18.4	7.3	...,P95,P95	B94,P95	RASS,Slew
PG 1424+240	14 27 00.4	23 48 01	...	15.4	313.0	...,G86,N6	F93,WGA	PG
1H 1430+423, 1ES1426+428	14 28 32.5	42 40 24	0.130	16.4	38.0	L93,P95,P95	D90,C93,L93,P95,WGA	HEAO-1,Slew
PG 1437+398	14 39 17.5	39 32 44	...	16.6	62.0	...,G86,N6	F93	PG
1ES1440+122	14 42 48.3	12 00 40	0.162	17.0	41.3	P95,P95,P95	P95	Slew
MS1443.5+6349	14 44 35.1	63 36 03	0.299	19.6	11.6	M91,ST91,ST91	ST91,WGA	EMSS
1451+172	14 53 55.8	17 00 59	...	17.9	58.0	...,HB93,N6	D90	Candidate
MS1458.8+2249	15 01 01.9	22 38 04	0.235	16.8	29.8	M91,ST91,ST91	ST91,WGA	EMSS
RXJ15098+5555	15 09 46.5	55 56 46	...	16.5	42.0	...,B95,B95	B95,WGA	RASS
PKS 1514+197	15 16 56.7	19 32 11	...	18.7	500	...,VV93,VV93	D90	Miscellaneous
AP Librae, PKS 1514−421	15 17 41.8	−24 22 19	0.049	14.9	2000	S91,P92,S91	D90,C93	1 Jy
1H 1515+660, 1ES1517+656	15 17 47.5	65 25 23	...	15.9	39.0	...,P95,P95	L93,P95,WGA	HEAO-1,Slew
PKS 1519−273	15 22 37.6	−27 30 11	>0.2	18.1	2350	S91,P92,S91	WGA	1 Jy
1ES1533+535	15 35 00.8	53 20 37	...	17.6	9.8	...,P95,P95	P95	Slew
MS1534.2+0148	15 36 46.8	01 37 58	0.312	18.7	34.0	M91,ST91,ST91	ST91	EMSS
1ES1544+820	15 40 15.7	81 55 06	...	16.9	42.7	...,P95,P95	P95	Slew
4C 14.60, PKS 1538+149	15 40 49.5	14 47 46	0.605	17.8	1960	S91,P92,S91	D90,C93,WGA	1 Jy
MS1552.1+2020	15 54 24.4	20 11 21	0.222	17.7	37.5	M91,ST91,ST91	ST91,WGA	EMSS
PG 1553+113, 1ES1553+113	15 55 43.2	11 11 21	...	14.7	636.0	...,FT90,P95	D90,P95	PG,Slew
PKS 1604+159, 4C 15.54	16 07 06.3	15 51 33	...	17.4[a]	500	...,VV93,VV93	D90	Miscellaneous,GRO
1620+103	16 22 35.1	10 13 14	...	17.8	76.0	...,HB93,N6	D90	Candidate
RXJ16247+3726	16 24 42.6	37 27 09	0.200	18.2	42.0	B95,B95,B95	B95	RASS
RXJ16264+3513	16 26 25.6	35 13 38	0.500	19.2	27.0	B95,B95,B95	B95	RASS
RXJ16442+4546	16 44 19.3	45 46 43	0.223	17.6	111.0	B95,B95,B95	B95	RASS
1643.2+4021	16 44 53.2	40 16 28	...	16.9[a]	...	...,VV93,...	...	Candidate
MRK 501, S4 1652+398	16 53 52.2	39 45 37	0.033	13.7	1420	S91,P92,S91	D90,C93,L93,P95,WGA	1 Jy,S4,HEAO-1,Slew
MS1704.9+6046	17 05 35.0	60 42 14	0.280	19.1	1.8	M91,ST91,ST91	D90,ST91,WGA	EMSS

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
PKS 1717+177, OT 129	17 19 13.0	17 45 06	...	19.1	940	...,VV93,VV93	D90,C93	Miscellaneous
1H 1720+117, 4U 1722+11	17 25 04.3	11 52 15	>0.1	15.8	94.7	B90,B90,B90	C93,L93	HEAO-1
I ZW 187, 1H 1730+500	17 28 18.5	50 13 11	0.055	16.7	159.0	P95,P95,P95	D90,C93,L93,P95,WGA	HEAO-1,Slew
S4 1738+476, OT 465	17 39 57.0	47 37 58	>0.2	19.5	900	SK93,SK94,SK94	D90	S4
1ES1741+196	17 43 57.5	19 35 10	0.083	16.6	222.6	P95,P95,P95	P95	Slew
1ES1745+504	17 46 32.3	50 28 09	...	19.2	1.3	...,P95,P95	E92	Candidate (Slew)
S4 1749+701, S5 1749+701	17 48 32.8	70 05 51	0.770	16.9	1080	S91,P92,S91	D90,B95,WGA	1 Jy,S4,S5
PKS 1749+096, 4C 09.57	17 51 32.8	09 39 01	0.320	17.4	1870	S91,P92,S91	D90,C93,WGA	1 Jy
MS1757.7+7034	17 57 13.4	70 33 36	0.407	18.3	7.2	M91,ST91,ST91	ST91,WGA	EMSS
S5 1803+784, IRAS 18036+7827	18 00 45.7	78 28 04	0.684	16.7	2620	S91,P92,S91	D90,C93,WGA	1 Jy,S5
3C 371, S4 1807+698	18 06 50.7	69 49 28	0.051	14.4	2260	S91,P92,S91	D90,C93,L93,P95,WGA	1 Jy,S4,HEAO-1,Slew
EXO1811.7+3143	18 13 35.1	31 44 17	0.117	17.4	105.0	G91,G91,G91	G91,WGA	Exosat
4C 56.27, S4 1823+568	18 24 07.1	56 51 01	0.664	18.4	1660	S91,P92,S91	D90,B95,WGA	1 Jy,S4
1ES1853+671	18 53 52.1	67 13 55	0.212	16.4	12.1	P95,P95,P95	P95	Slew
1H 1914−194	19 17 44.2	−19 21 28	...	...	413.0	...,...,PMN	L93	HEAO-1
S4 1926+611	19 27 30.4	61 17 32	...	17.5	720	...,SK94,SK94	...	S4
1ES1959+650	19 59 59.9	65 08 55	0.048	13.7	251.6	P95,P95,P95	P95	Slew
S5 2007+777	20 05 30.9	77 52 43	0.342	16.6	1260	S91,P92,S91	D90,C93,L93,WGA	1 Jy,S5,HEAO-1
PKS 2005−489, 1ES2005−489	20 09 25.4	−48 49 54	0.071	14.4	1230	S91,P92,S91	D90,C93,P95,WGA	1 Jy,Slew,GRO
S5 2010+723, 4C 72.28	20 09 52.3	72 29 19	...	19.0	920	...,KS90,K81	B92	S5
PKS 2012−017	20 15 15.0	−01 37 32	...	16.8[a]	630	...,VV93,VV93	...	Candidate
S5 2023+760	20 22 35.6	76 11 26	...	17.8	430	...,KS90,K81	B92	S5
PKS 2029+121, OW 149	20 31 55.6	12 19 37	1.215	20.3	1330	S94,S94,S94	...	1 Jy
PKS 2032+107, OW 154.9	20 35 22.3	10 56 06	0.601	16.4	770	VV93,VV93,VV93	D90,C93	Miscellaneous
1ES2037+521	20 39 23.6	52 19 50	...	19.0	32.5	...,P95,P95	E92	Candidate (Slew)
PKS 2047+039	20 50 06.1	04 07 49	...	19.2[a]	420	...,VV93,VV93	...	Candidate
S5 2051+745	20 51 33.8	74 41 41	...	19.7	530	...,KS90,K81	...	S5
4C−02.81, PKS 2131−021	21 34 10.3	−01 53 17	0.557?	18.7	2120	S91,P92,S91	D90,WGA	1 Jy
MH 2133−449	21 36 18.4	−44 43 49	...	18.6[e]	6.2	...,H91,H91	...	Variability
MH 2136−428	21 39 24.1	−42 35 21	...	16.2[e]	115.0	...,H91,H91	WGA	Variability

Table 1. (continued)

Name(s)	RA (J2000.0)	Dec (J2000.0)	z	V	F_{5GHz} mJy	References (z,V,F_{5GHz})	Reference(s) (X-ray)	Sample(s)
MS2143.4+0704	21 45 52.3	07 19 28	0.237	18.0	50.0	M91,ST91,ST91	ST91,WGA	EMSS
PKS 2149+173	21 52 24.8	17 34 38	...	18.9	1020	S94,S94,S94	...	1 Jy
PKS 2155−304, 1ES2155−304	21 58 51.9	−30 13 31	0.116	13.5	310	FPT93,P95,P95	D90,C93,L93,P95,WGA	HEAO-1,Slew,GRO[c]
BL Lacertae, S4 2200+420	22 02 43.2	42 16 40	0.069	14.9	4770	S91,P92,S91	D90,C93,P95,WGA	1 Jy,S4,Slew
1WGAJ2207.3+004	22 07 19.8	00 41 57	...	19.1	143.0	...,W95,N6	WGA	Candidate (WGA)
RXJ22174−3106	22 17 28.4	−31 06 19	...	18.9[a]	...	...,B94,...	B94	RASS
PKS 2223−114	22 25 43.6	−11 13 40	...	18.4[a]	350	...,VV93,VV93	...	Miscellaneous
PKS 2233−148	22 36 34.0	−14 33 21	...	18.4[a]	610	...,VV93,VV93	D90	Candidate
PKS 2240−260, OY −268	22 43 26.4	−25 44 27	0.774	17.9	1030	S91,P92,S91	WGA	1 Jy
PKS 2254−204, OY −290	22 56 41.1	−20 11 40	...	16.0[a]	420	...,VV93,VV93	...	Miscellaneous
PKS 2254+074, OY 091	22 57 17.3	07 43 12	0.190	16.4	1190	S91,P92,S91	D90,C93	1 Jy,PG
MS2306.1−2236	23 08 46.8	−22 19 49	0.137	16.0	4.4	M91,ST91,M94	ST91	Candidate (EMSS)
PKS 2316−423, MS2316.3−4222	23 19 05.8	−42 06 48	0.055	14.5	540	CF94,ST91,ST91	ST91,CF94,WGA	Candidate (EMSS)
1H 2318+417, 1ES2321+419	23 23 54.1	42 11 19	0.059?	17.0	19.0	P95,P95,P95	L93,P95	HEAO-1,Slew
1ES2326+174	23 29 03.3	17 43 30	0.213	16.8	18.4	P95,P95,P95	P95	Slew
MS2336.5+0517	23 39 06.9	05 34 36	...	20.3	4.9	...,ST91,ST91	ST91	EMSS
MS2342.7−1531	23 45 22.3	−15 15 07	...	19.2	2.3	...,ST91,ST91	ST91,WGA	EMSS
1ES2343−151	23 45 38.4	−14 49 29	0.226	19.2	8.2	P95,P95,P95	P95,WGA	Slew
1ES2344+514	23 47 04.8	51 42 18	0.044	15.5	215.2	P95,P95,P95	P95	Slew
MS2347.4+1924	23 50 01.7	19 41 52	0.515	20.8	3.2	M91,ST91,ST91	ST91,WGA	EMSS
S5 2353+816	23 56 22.2	81 52 53	...	20.3	476.0	...,SK93,SK93	B92	Candidate (S5)
PKS 2354−021	23 57 25.1	−01 52 15	...	20.6[a]	280	...,VV93,VV93	...	Candidate
1H 2354−315.A	23 59 07.9	−30 37 39	0.165	17.0	29.0	L93,S89,S89	L93	HEAO-1

Notes
[a]Derived from the B magnitude assuming $B-V=0.6$, the mean value for BL Lacs
[b]Radio flux at 8.4 GHz
[c]Detected only during phase 2 of the EGRET observations and therefore not included in the phase 1 EGRET catalogue of Fichtel et al. (1994)
[d]From Murphy, Browne & Perley (1993); Perlman et al. (1995b) give no redshift, so this value might be uncertain
[e]Derived from the mean B magnitude using the observed value of $B-V$

References

B87: Biermann et al. (1987)
B90: Brissenden et al. (1990)
B92: Biermann et al. (1992)
B94: Bade et al. (1994)
B95: Brinkmann et al. (1995)
C93: Ciliegi et al. (1993)
CF94: Crawford & Fabian (1994)
D90: Della Ceca et al. (1990)
E92: Elvis et al. (1992)
F93: Fleming et al. (1993)
F94: Falomo et al. (1994)
FM88: Fugmann & Meisenheimer (1988)
FPT93: Falomo et al. (1993)
FT90: Falomo & Treves (1990)
G86: Green et al. (1986)
G91: Giommi et al. (1991)
H91: Hawkins et al. (1991)
HB93: Hewitt & Burbidge (1993)
IPC: *Einstein* IPC Database
J93: Jannuzi et al. (1993)
K81: Kühr et al. (1981b)
K95: Katgert et al., in preparation
KS90: Kühr & Schmidt (1990)
L93: Laurent-Muehleisen et al. (1993)
M91: Morris et al. (1991)
M93: Murphy et al. (1993)
M94: Maccacaro et al. (1994)
N6: Becker et al. (1991)
P92: Padovani (1992)
P95: Perlman et al. (1995b)
PMN: Wright et al. (1994), Griffith et al. (1994)
S89: Schwartz et al. (1989)
S91: Stickel et al. (1991)
S94: Stickel et al. (1994)
SK93: Stickel & Kühr (1993b)
SK94: Stickel & Kühr (1994)
ST91: Stocke et al. (1991)
VV93: Véron-Cetty & Véron (1993a)
W95: Wolter et al., in preparation
WGA: White et al. (1994)