

3FGL BCUs CLASSIFICATION LIST
Appendix to : Blazar Flaring Patterns (B-FlaP)

The List contains the classification of BCUs (Blazar of Unknown Type) listed in the 3FGL Fermi–LAT catalogue and relies on the artificial neural networks likelihood which used the Empirical Cumulative Distribution Function of the γ -ray flux as key parameter. The second and the third columns show the galactic latitude and longitude respectively.

ANN likelihood (L) to be a BL Lac or an FSRQ is in unit $0 \leq L \leq 1$. The closer to 1 is the value of L , the greater the likelihood that the source is in that specific source class.

The column HSP Candidates lists only BCUs characterized by a large confidence level to be a HSP candidate, we splitted these objects in High Confidence HSP and Very High Confidence HSP in according to their likelihood to be an HSP-like source.

How to use the list

BCU are classified as a BL Lac candidates if $L_{\text{BL Lac}}$ is greater than 0.566, or FSRQ candidates if L_{FSRQ} is greater than 0.770.

3FGL Name	b ($^{\circ}$)	l ($^{\circ}$)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0002.2–4152	–72.040	334.320	0.877	0.123	BL Lac	
J0003.2–5246	–62.820	318.940	0.976	0.024	BL Lac	
J0003.8–1151	–71.080	84.660	0.952	0.048	BL Lac	
J0009.6–3211	–79.570	0.880	0.859	0.141	BL Lac	
J0012.4+7040	8.140	119.620	0.022	0.978	FSRQ	
J0014.6+6119	–1.270	118.540	0.896	0.104	BL Lac	
J0015.7+5552	–6.660	117.890	0.835	0.165	BL Lac	
J0017.2–0643	–68.150	99.510	0.953	0.047	BL Lac	
J0019.1–5645	–59.890	311.690	0.650	0.350	BL Lac	
J0021.6–6835	–48.580	306.730	0.459	0.541	Uncertain	
J0028.6+7507	12.300	121.400	0.749	0.251	BL Lac	
J0028.8+1951	–42.540	115.610	0.602	0.398	BL Lac	
J0030.2–1646	–78.570	96.580	0.981	0.019	BL Lac	High C.
J0030.7–0209	–64.580	110.690	2.35e–04	1.000	FSRQ	
J0031.3+0724	–55.120	114.190	0.984	0.016	BL Lac	
J0039.0–2218	–84.460	92.050	0.990	0.010	BL Lac	High C.
J0039.1+4330	–19.310	120.560	0.976	0.024	BL Lac	
J0040.3+4049	–21.990	120.640	0.996	0.004	BL Lac	Very High C.
J0040.5–2339	–85.740	86.620	0.971	0.029	BL Lac	
J0043.5–0444	–67.510	117.800	0.984	0.016	BL Lac	High C.
J0043.7–1117	–74.040	116.110	0.993	0.007	BL Lac	High C.
J0045.2–3704	–79.950	310.070	0.029	0.971	FSRQ	
J0047.9+5447	–8.080	122.410	0.995	0.005	BL Lac	Very High C.
J0049.4–4149	–75.270	304.240	0.949	0.051	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0049.4-5401	-63.090	303.460	0.938	0.062	BL Lac	
J0050.0-4458	-72.180	304.180	0.397	0.603	Uncertain	
J0051.2-6241	-54.430	302.960	0.989	0.011	BL Lac	
J0055.2-1213	-75.150	126.510	0.385	0.615	Uncertain	
J0059.1-5701	-60.120	300.920	0.554	0.446	Uncertain	
J0103.7+1323	-49.370	127.530	0.910	0.090	BL Lac	
J0107.0-1208	-74.610	137.580	0.915	0.085	BL Lac	
J0116.2-2744	-84.540	220.760	0.945	0.055	BL Lac	
J0121.7+5154	-10.670	127.640	0.908	0.092	BL Lac	
J0127.2+0325	-58.290	140.110	0.960	0.040	BL Lac	
J0131.3+5548	-6.690	128.540	0.939	0.061	BL Lac	
J0132.5-0802	-68.590	151.960	0.986	0.014	BL Lac	High C.
J0133.2-5159	-63.930	288.260	0.589	0.411	BL Lac	
J0133.3+4324	-18.810	130.830	0.676	0.324	BL Lac	
J0134.5+2638	-35.240	134.710	0.910	0.090	BL Lac	
J0135.0+6927	6.860	126.730	0.085	0.915	FSRQ	
J0137.8+5813	-4.090	129.020	0.910	0.090	BL Lac	
J0139.9+8735	24.810	123.470	0.975	0.025	BL Lac	
J0145.6+8600	23.270	124.010	0.690	0.310	BL Lac	
J0146.4-6746	-48.530	295.200	0.843	0.157	BL Lac	
J0147.0-5204	-63.010	284.010	0.859	0.141	BL Lac	
J0148.3+5200	-9.860	131.750	0.973	0.027	BL Lac	
J0150.5-5447	-60.270	285.640	0.947	0.053	BL Lac	
J0151.0+0537	-54.170	148.840	0.687	0.313	BL Lac	
J0151.0-3609	-74.420	251.790	0.827	0.173	BL Lac	
J0152.2+3707	-24.040	136.130	0.400	0.600	Uncertain	
J0153.4+7114	8.980	127.920	0.992	0.008	BL Lac	Very High C.
J0156.3+3913	-21.920	136.450	0.024	0.976	FSRQ	
J0156.9-4742	-65.770	275.500	0.981	0.019	BL Lac	
J0200.9-6635	-49.060	292.490	0.530	0.470	Uncertain	
J0203.1-0227	-59.930	160.620	0.673	0.327	BL Lac	
J0204.2+2420	-35.650	143.470	0.983	0.017	BL Lac	High C.
J0205.0+1510	-44.050	147.920	0.099	0.901	FSRQ	
J0207.9-3846	-70.270	254.500	0.357	0.643	Uncertain	
J0210.7-5101	-61.780	276.100	0.028	0.972	FSRQ	
J0211.2-0649	-62.160	169.470	0.955	0.045	BL Lac	
J0211.7+5402	-6.990	134.520	0.118	0.882	FSRQ	
J0213.1-2720	-71.910	218.170	0.962	0.038	BL Lac	
J0214.7-5823	-55.590	283.800	0.651	0.349	BL Lac	
J0216.1-7016	-45.230	293.000	0.389	0.611	Uncertain	
J0216.6-1019	-63.800	176.990	0.263	0.737	Uncertain	
J0217.3+6209	0.960	132.730	0.818	0.182	BL Lac	
J0218.9+3642	-22.970	141.840	2.92e-04	1.000	FSRQ	
J0219.0+2440	-33.990	147.030	0.978	0.022	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0223.3+6820	6.980	131.240	0.887	0.113	BL Lac	
J0223.5+6313	2.080	133.110	0.282	0.718	Uncertain	
J0224.1-7941	-36.550	297.910	0.710	0.290	BL Lac	
J0225.2-2602	-69.050	215.340	9.29e-05	1.000	FSRQ	
J0226.5-4442	-64.110	261.860	0.961	0.039	BL Lac	
J0228.0+2248	-34.910	150.220	0.286	0.714	Uncertain	
J0228.5+6703	6.030	132.260	0.008	0.992	FSRQ	
J0228.7-3106	-68.550	229.210	0.941	0.059	BL Lac	
J0232.9+2606	-31.380	149.700	0.916	0.084	BL Lac	
J0241.3+6542	5.220	133.910	0.880	0.120	BL Lac	
J0244.4-8224	-33.610	298.410	0.037	0.963	FSRQ	
J0249.1+8438	22.400	125.810	0.898	0.102	BL Lac	
J0250.6+5630	-2.640	138.890	0.881	0.119	BL Lac	
J0253.5+3216	-23.860	150.930	0.582	0.418	BL Lac	
J0255.8+0532	-45.590	170.190	0.806	0.194	BL Lac	
J0256.3+0335	-46.980	172.300	0.954	0.046	BL Lac	
J0301.4-1652	-58.320	200.860	0.781	0.219	BL Lac	
J0301.8-2721	-61.090	221.220	0.980	0.020	BL Lac	
J0301.8-7157	-41.770	290.010	0.083	0.917	FSRQ	
J0302.0+5335	-4.490	141.740	0.004	0.996	FSRQ	
J0303.0+3150	-23.220	153.060	0.802	0.198	BL Lac	
J0304.9+6817	8.580	134.720	0.322	0.678	Uncertain	
J0305.2-1607	-57.150	200.350	0.989	0.011	BL Lac	High C.
J0310.4-5015	-54.880	263.610	0.978	0.022	BL Lac	
J0318.7+2134	-29.660	162.830	0.730	0.270	BL Lac	
J0326.0-1842	-53.610	207.940	0.907	0.093	BL Lac	
J0331.3-6155	-46.340	276.960	0.917	0.083	BL Lac	
J0332.0+6308	5.690	139.940	0.066	0.934	FSRQ	
J0333.4+4003	-12.900	153.620	0.737	0.263	BL Lac	
J0333.4+7853	18.450	130.550	0.878	0.122	BL Lac	
J0338.5+1303	-32.950	173.570	0.960	0.040	BL Lac	
J0339.2-1738	-50.250	208.070	0.957	0.043	BL Lac	
J0342.6-3006	-52.530	227.920	0.986	0.014	BL Lac	High C.
J0343.3+3622	-14.690	157.530	0.583	0.417	BL Lac	
J0343.3-6443	-43.670	279.190	0.649	0.351	BL Lac	
J0352.9+5655	2.350	145.840	0.962	0.038	BL Lac	
J0354.1+4643	-5.380	152.490	0.110	0.890	FSRQ	
J0356.3-6948	-39.750	283.920	0.409	0.591	Uncertain	
J0357.1+2325	-22.470	169.020	0.424	0.576	Uncertain	
J0358.7+0633	-33.670	183.340	0.002	0.998	FSRQ	
J0409.4+3158	-14.360	164.640	0.351	0.649	Uncertain	
J0418.0-0251	-35.060	195.980	0.014	0.986	FSRQ	
J0425.2+6319	9.780	144.400	0.858	0.142	BL Lac	
J0426.3+6827	13.360	140.690	0.283	0.717	Uncertain	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0426.6+0459	-29.100	189.750	0.015	0.985	FSRQ	
J0427.3-3900	-43.930	242.180	0.227	0.773	FSRQ	
J0429.8+2843	-13.480	170.240	0.589	0.411	BL Lac	
J0430.5+1655	-21.040	179.740	0.216	0.784	FSRQ	
J0431.6+7403	17.360	136.580	0.962	0.038	BL Lac	
J0433.1+3228	-10.450	167.860	0.915	0.085	BL Lac	
J0433.7-6028	-40.160	270.840	4.05e-04	1.000	FSRQ	
J0434.0-5726	-40.930	266.940	0.952	0.048	BL Lac	
J0434.4-2341	-39.930	222.140	0.671	0.329	BL Lac	
J0434.6+0921	-24.770	186.920	0.754	0.246	BL Lac	
J0439.6-3159	-40.730	233.100	0.988	0.012	BL Lac	High C.
J0439.9-1859	-37.280	216.950	0.950	0.050	BL Lac	
J0440.3+1444	-20.550	183.250	0.279	0.721	Uncertain	
J0444.5+3425	-7.360	167.960	0.178	0.822	FSRQ	
J0453.2+6321	12.160	146.450	0.582	0.418	BL Lac	
J0456.3+2702	-10.050	175.370	0.060	0.940	FSRQ	
J0501.8+3046	-6.820	173.080	0.404	0.596	Uncertain	
J0502.7+3438	-4.380	170.140	2.07e-04	1.000	FSRQ	
J0503.4+4522	2.300	161.810	0.055	0.945	FSRQ	
J0505.5-1558	-30.430	216.240	0.907	0.093	BL Lac	
J0506.9-5435	-36.780	262.410	0.991	0.009	BL Lac	High C.
J0508.2-1936	-31.180	220.430	0.733	0.267	BL Lac	
J0509.7-6418	-35.200	274.270	0.949	0.051	BL Lac	
J0512.2+2918	-5.710	175.600	6.07e-04	0.999	FSRQ	
J0512.9+4038	0.910	166.500	0.252	0.748	Uncertain	
J0515.5-0123	-21.870	202.800	0.987	0.013	BL Lac	High C.
J0519.3+2746	-5.470	177.880	0.072	0.928	FSRQ	
J0519.5+0852	-15.950	193.930	0.428	0.572	Uncertain	
J0521.7+0103	-19.350	201.290	0.978	0.022	BL Lac	
J0521.9-3847	-33.390	243.350	0.079	0.921	FSRQ	
J0522.9-3628	-32.720	240.600	0.381	0.619	Uncertain	
J0525.6-6013	-33.880	269.100	0.984	0.016	BL Lac	
J0525.8-2014	-27.610	222.690	0.888	0.112	BL Lac	
J0526.0+4253	4.090	166.000	0.071	0.929	FSRQ	
J0526.6+6321	15.170	148.640	0.257	0.743	Uncertain	
J0528.3+1815	-8.990	186.960	0.990	0.010	BL Lac	High C.
J0529.1+0933	-13.470	194.570	0.189	0.811	FSRQ	
J0529.8-7242	-31.860	283.850	0.141	0.859	FSRQ	
J0532.0-4827	-32.820	255.020	5.37e-05	1.000	FSRQ	
J0533.0-3939	-31.420	244.790	0.242	0.758	Uncertain	
J0535.6-2749	-27.900	231.770	0.459	0.541	Uncertain	
J0538.4-3909	-30.320	244.400	0.896	0.104	BL Lac	
J0542.2-8737	-27.730	300.390	0.926	0.074	BL Lac	
J0542.5-0907	-19.380	213.540	0.008	0.992	FSRQ	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0553.5-2036	-21.630	225.730	0.904	0.096	BL Lac	
J0602.2+5314	14.560	160.060	0.902	0.098	BL Lac	
J0602.8-4016	-25.970	246.920	0.905	0.095	BL Lac	
J0603.8+2155	0.030	188.060	0.009	0.991	FSRQ	
J0604.7-4849	-27.540	256.300	0.725	0.275	BL Lac	
J0606.4-4729	-26.950	254.900	0.824	0.176	BL Lac	
J0611.2+4323	11.540	169.820	0.865	0.135	BL Lac	
J0611.7+2759	4.540	183.610	0.030	0.970	FSRQ	
J0618.2-2429	-17.770	231.840	0.883	0.117	BL Lac	
J0618.9-1138	-12.420	219.830	0.228	0.772	FSRQ	
J0620.4+2644	5.660	185.730	0.987	0.013	BL Lac	High C.
J0622.9+3326	9.140	179.930	2.19e-07	1.000	FSRQ	
J0623.3+3043	8.010	182.390	0.928	0.072	BL Lac	
J0626.6-4259	-22.410	251.030	0.984	0.016	BL Lac	
J0627.9-1517	-12.050	224.140	0.006	0.994	FSRQ	
J0630.3+6906	23.270	145.770	0.914	0.086	BL Lac	
J0631.2+2019	4.830	192.510	4.85e-04	1.000	FSRQ	
J0640.0-1252	-8.320	223.210	0.989	0.011	BL Lac	High C.
J0641.8-0319	-3.660	214.820	5.75e-07	1.000	FSRQ	
J0643.4-5358	-22.790	263.320	0.208	0.792	FSRQ	
J0644.3-6713	-25.530	277.530	0.065	0.935	FSRQ	
J0644.6-2853	-14.060	238.440	0.834	0.166	BL Lac	
J0646.4-5452	-22.580	264.370	0.993	0.007	BL Lac	High C.
J0647.0-5134	-21.580	261.020	0.921	0.079	BL Lac	
J0647.1-4415	-19.360	253.630	0.788	0.212	BL Lac	
J0647.6-6058	-23.950	270.860	0.271	0.729	Uncertain	
J0648.1+1606	6.580	198.160	0.985	0.015	BL Lac	High C.
J0649.6-3138	-14.220	241.520	0.978	0.022	BL Lac	
J0650.4-1636	-7.720	227.700	0.003	0.997	FSRQ	
J0650.5+2055	9.190	194.040	0.989	0.011	BL Lac	High C.
J0651.3+4014	17.060	175.930	0.824	0.176	BL Lac	
J0652.0-4808	-19.770	257.780	0.945	0.055	BL Lac	
J0653.6+2817	12.930	187.570	0.815	0.185	BL Lac	
J0654.5+0926	4.940	204.860	0.042	0.958	FSRQ	
J0658.3-5832	-22.020	268.550	0.697	0.303	BL Lac	
J0658.6+0636	4.630	207.850	0.157	0.843	FSRQ	
J0700.0+1709	9.570	198.470	0.205	0.795	FSRQ	
J0700.2+1304	7.840	202.210	0.977	0.023	BL Lac	
J0700.3-6310	-23.090	273.610	0.927	0.073	BL Lac	
J0703.4-3914	-14.660	249.840	0.402	0.598	Uncertain	
J0706.1-4849	-17.820	259.250	0.334	0.666	Uncertain	
J0708.9+2239	13.800	194.240	0.818	0.182	BL Lac	
J0712.2-6436	-22.060	275.370	0.432	0.568	Uncertain	
J0720.0-4010	-12.180	252.080	0.704	0.296	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0723.2-0728	3.510	223.240	0.970	0.030	BL Lac	
J0723.7+2050	16.220	197.410	0.545	0.455	Uncertain	
J0725.8-0054	7.220	217.690	0.803	0.197	BL Lac	
J0728.0+4828	25.780	169.580	0.872	0.128	BL Lac	
J0729.5-3127	-6.520	245.120	0.002	0.998	FSRQ	
J0730.5-0537	6.060	222.400	0.709	0.291	BL Lac	
J0730.5-6606	-20.790	277.590	0.981	0.019	BL Lac	
J0732.2-4638	-12.850	259.110	0.181	0.819	FSRQ	
J0733.5+5153	27.350	165.990	0.989	0.011	BL Lac	High C.
J0734.3-7709	-24.060	289.130	0.159	0.841	FSRQ	
J0742.4-8133	-24.970	293.800	0.995	0.005	BL Lac	Very High C.
J0744.1-3804	-7.050	252.330	0.004	0.996	FSRQ	
J0744.8-4028	-8.100	254.590	0.642	0.358	BL Lac	
J0746.6-0706	8.800	225.700	0.195	0.805	FSRQ	
J0746.6-4756	-11.310	261.340	0.339	0.661	Uncertain	
J0746.9+8511	28.180	128.210	0.990	0.010	BL Lac	High C.
J0747.2-3311	-4.000	248.420	0.055	0.945	FSRQ	
J0748.0-1639	4.450	234.220	0.024	0.976	FSRQ	
J0748.5+7910	29.380	134.980	0.618	0.382	BL Lac	
J0748.8+4929	29.300	169.110	0.776	0.224	BL Lac	
J0749.4+1059	17.780	209.490	0.478	0.522	Uncertain	
J0756.3-6433	-17.730	277.220	0.708	0.292	BL Lac	
J0803.3-0339	14.170	224.590	0.745	0.255	BL Lac	
J0804.0-3629	-2.760	253.040	0.802	0.198	BL Lac	
J0804.4+0418	18.090	217.390	0.243	0.757	Uncertain	
J0805.0-0622	13.170	227.330	0.928	0.072	BL Lac	
J0807.1+7744	30.420	136.380	0.392	0.608	Uncertain	
J0813.3+6509	32.920	150.930	0.819	0.181	BL Lac	
J0816.7-2421	6.110	244.320	0.050	0.950	FSRQ	
J0825.4-0213	19.720	226.050	0.854	0.146	BL Lac	
J0825.8-3217	3.290	252.050	2.41e-04	1.000	FSRQ	
J0827.2-0711	17.530	230.890	0.904	0.096	BL Lac	
J0828.8-2420	8.400	245.840	0.900	0.100	BL Lac	
J0829.6-1137	15.650	235.250	0.955	0.045	BL Lac	
J0830.3-5855	-11.540	274.300	0.137	0.863	FSRQ	
J0836.3+2143	32.240	203.320	0.238	0.762	Uncertain	
J0841.3-3554	3.730	256.870	0.844	0.156	BL Lac	
J0842.0-6055	-11.360	276.890	0.284	0.716	Uncertain	
J0845.1-5458	-7.500	272.310	0.704	0.296	BL Lac	
J0849.5-2912	9.200	252.590	0.822	0.178	BL Lac	
J0849.9-3540	5.210	257.750	1.78e-04	1.000	FSRQ	
J0852.6-5756	-8.510	275.310	0.026	0.974	FSRQ	
J0853.0-3654	4.920	259.190	0.709	0.291	BL Lac	
J0855.2-0718	23.340	234.990	0.282	0.718	Uncertain	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J0858.1-1951	16.530	246.290	0.004	0.996	FSRQ	
J0858.1-3130	9.190	255.610	0.982	0.018	BL Lac	High C.
J0904.3+4240	41.860	178.680	0.673	0.327	BL Lac	
J0904.8-3516	7.820	259.380	0.085	0.915	FSRQ	
J0904.8-5734	-7.050	276.110	0.398	0.602	Uncertain	
J0912.6-2757	13.950	254.880	0.063	0.937	FSRQ	
J0915.0+5844	41.480	156.920	0.862	0.138	BL Lac	
J0917.3-0344	29.870	235.160	0.979	0.021	BL Lac	
J0921.0-2258	18.640	252.370	0.994	0.006	BL Lac	Very High C.
J0922.8-3959	7.180	265.350	0.007	0.993	FSRQ	
J0923.1+3853	45.420	184.000	0.060	0.940	FSRQ	
J0928.7+7300	36.980	139.400	0.728	0.272	BL Lac	
J0928.9-3530	11.220	263.000	0.383	0.617	Uncertain	
J0939.2-1732	25.480	251.170	0.155	0.845	FSRQ	
J0939.9-2831	17.900	259.720	0.008	0.992	FSRQ	
J0940.7-6102	-6.310	281.880	0.196	0.804	FSRQ	
J0947.1-2542	21.020	258.870	0.943	0.057	BL Lac	
J0953.1-7657	-17.540	293.370	0.955	0.045	BL Lac	
J0956.7-6441	-7.890	285.520	0.077	0.923	FSRQ	
J0958.4-6752	-10.290	287.710	0.667	0.333	BL Lac	
J0958.6-2447	23.430	260.190	0.463	0.537	Uncertain	
J1003.6+2608	52.660	204.710	0.794	0.206	BL Lac	
J1005.0-4959	4.360	277.920	0.034	0.966	FSRQ	
J1007.8+0026	42.650	240.230	0.937	0.063	BL Lac	
J1008.9-2910	21.500	265.240	0.269	0.731	Uncertain	
J1009.0-3137	19.600	266.870	0.443	0.557	Uncertain	
J1014.2+4115	54.950	178.980	0.836	0.164	BL Lac	
J1015.2-4512	9.410	276.090	0.403	0.597	Uncertain	
J1016.0-0635	39.570	249.170	0.351	0.649	Uncertain	
J1016.1+5555	50.000	156.210	0.583	0.417	BL Lac	
J1021.8+8023	34.580	129.990	0.972	0.028	BL Lac	
J1022.3-4234	12.320	275.740	0.417	0.583	Uncertain	
J1024.8+0105	46.120	243.360	0.516	0.484	Uncertain	
J1026.5+7423	39.200	134.640	0.350	0.650	Uncertain	
J1028.0+1829	55.920	219.830	0.856	0.144	BL Lac	
J1030.4-2030	31.420	263.690	0.957	0.043	BL Lac	
J1031.0+7440	39.210	134.200	0.783	0.217	BL Lac	
J1035.2+5545	52.440	153.970	0.172	0.828	FSRQ	
J1038.9-5311	4.650	283.720	3.03e-04	1.000	FSRQ	
J1040.4+0615	52.570	240.770	0.432	0.568	Uncertain	
J1040.8+1342	56.750	230.160	0.989	0.011	BL Lac	High C.
J1040.9-1205	39.650	259.780	0.871	0.129	BL Lac	
J1042.0-0557	44.450	254.730	0.951	0.049	BL Lac	
J1042.1-4126	15.130	278.400	0.955	0.045	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J1047.8–6216	–2.800	289.080	0.252	0.748	Uncertain	
J1049.8+1425	59.000	230.790	0.086	0.914	FSRQ	
J1051.5–6517	–5.300	290.810	0.097	0.903	FSRQ	
J1052.8–3741	19.440	278.430	0.946	0.054	BL Lac	
J1106.4–3643	21.470	280.540	0.620	0.380	BL Lac	
J1109.4–4815	11.210	285.920	0.225	0.775	FSRQ	
J1123.2–6415	–3.040	293.550	0.017	0.983	FSRQ	
J1125.0–2101	37.510	277.290	0.983	0.017	BL Lac	
J1126.7–3834	21.460	285.240	0.665	0.335	BL Lac	
J1129.4–4215	18.130	287.220	0.062	0.938	FSRQ	
J1131.9–0503	52.500	268.920	0.109	0.891	FSRQ	
J1136.1–7411	–12.150	297.790	0.570	0.430	BL Lac	
J1136.6–6826	–6.600	296.070	0.203	0.797	FSRQ	
J1138.2+4905	63.950	151.000	0.179	0.821	FSRQ	
J1141.2+6805	47.720	132.550	0.993	0.007	BL Lac	Very High C.
J1141.6–1406	45.400	278.480	0.893	0.107	BL Lac	
J1153.7–2555	35.160	286.940	0.932	0.068	BL Lac	
J1154.0–3243	28.620	289.200	0.953	0.047	BL Lac	
J1155.4–3417	27.160	289.920	0.995	0.005	BL Lac	Very High C.
J1156.7–2250	38.300	286.750	0.959	0.041	BL Lac	
J1158.9+0818	67.460	267.010	0.981	0.019	BL Lac	High C.
J1159.3–2226	38.810	287.380	0.006	0.994	FSRQ	
J1159.6–0723	53.250	281.070	0.836	0.164	BL Lac	
J1200.8+1228	71.150	261.300	0.922	0.078	BL Lac	
J1200.9+2010	76.500	241.400	0.496	0.504	Uncertain	
J1203.5–3925	22.490	292.890	0.989	0.011	BL Lac	High C.
J1207.6–2232	39.200	289.840	0.210	0.790	FSRQ	
J1207.6–4537	16.680	294.950	0.913	0.087	BL Lac	
J1208.2–7810	–15.490	300.640	0.768	0.232	BL Lac	
J1218.5+6912	47.790	127.000	0.449	0.551	Uncertain	
J1218.8–4827	14.080	297.400	0.472	0.528	Uncertain	
J1223.3–3028	31.940	295.870	0.976	0.024	BL Lac	
J1224.6–8312	–20.400	302.090	0.010	0.990	FSRQ	
J1225.7–7314	–10.460	301.030	0.345	0.655	Uncertain	
J1229.8–5305	9.670	299.610	0.353	0.647	Uncertain	
J1233.9–5736	5.190	300.600	0.763	0.237	BL Lac	
J1238.2–1958	42.770	298.750	0.617	0.383	BL Lac	
J1238.3–4543	17.110	300.490	0.480	0.520	Uncertain	
J1239.4+0727	70.160	294.110	0.787	0.213	BL Lac	
J1243.9–0217	60.500	299.090	0.768	0.232	BL Lac	
J1244.3–4955	12.940	301.760	0.794	0.206	BL Lac	
J1251.0–0203	60.830	302.860	0.095	0.905	FSRQ	
J1254.1–2203	40.790	303.830	0.686	0.314	BL Lac	
J1256.1–5919	3.530	303.520	0.159	0.841	FSRQ	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J1256.3-1146	51.070	304.810	0.905	0.095	BL Lac	
J1256.7+5328	63.530	121.190	0.135	0.865	FSRQ	
J1258.7+5137	65.380	120.330	0.937	0.063	BL Lac	
J1259.0-2310	39.650	305.230	0.758	0.242	BL Lac	
J1259.8-3749	25.020	304.760	0.673	0.327	BL Lac	
J1302.6+5748	59.250	119.950	0.923	0.077	BL Lac	
J1304.2-2411	38.570	306.670	0.832	0.168	BL Lac	
J1304.3-5535	7.150	304.690	0.128	0.872	FSRQ	
J1304.9-2109	41.640	307.160	0.834	0.166	BL Lac	
J1306.8-2146	40.920	307.610	0.856	0.144	BL Lac	
J1307.6-4300	19.770	306.070	0.953	0.047	BL Lac	
J1308.1-6707	-4.310	304.570	0.050	0.950	FSRQ	
J1310.6+2446	85.090	5.690	0.923	0.077	BL Lac	
J1312.7-2349	38.760	309.200	0.972	0.028	BL Lac	
J1314.7-4237	20.040	307.550	0.806	0.194	BL Lac	
J1315.1-5329	9.130	306.480	0.081	0.919	FSRQ	
J1315.4+1130	73.430	324.070	0.946	0.054	BL Lac	
J1318.7-1232	49.730	313.260	0.189	0.811	FSRQ	
J1319.6+7759	39.050	121.060	0.987	0.013	BL Lac	High C.
J1322.3+0839	70.190	325.880	0.250	0.750	Uncertain	
J1322.6-1619	45.920	313.750	0.549	0.451	Uncertain	
J1323.0+2942	82.600	55.060	0.919	0.081	BL Lac	
J1328.5-4728	14.930	309.430	0.963	0.037	BL Lac	
J1328.9-5607	6.350	308.180	0.004	0.996	FSRQ	
J1330.1-7002	-7.440	306.250	1.84e-04	1.000	FSRQ	
J1330.9+5201	64.020	109.070	0.790	0.210	BL Lac	
J1331.1-1328	48.290	317.600	0.004	0.996	FSRQ	
J1338.6-2403	37.570	316.670	0.189	0.811	FSRQ	
J1340.6-0408	56.510	325.610	0.881	0.119	BL Lac	
J1342.7+0945	68.870	340.230	0.987	0.013	BL Lac	
J1344.5-3655	24.730	314.550	0.825	0.175	BL Lac	
J1345.9-3357	27.580	315.610	0.169	0.831	FSRQ	
J1346.9-2958	31.350	317.050	0.976	0.024	BL Lac	
J1351.7-2913	31.840	318.440	0.139	0.861	FSRQ	
J1356.3-4029	20.730	316.080	0.899	0.101	BL Lac	
J1400.7-5605	5.490	312.530	0.004	0.996	FSRQ	
J1406.0-2508	34.710	323.580	0.956	0.044	BL Lac	
J1407.7-4256	17.670	317.430	0.875	0.125	BL Lac	
J1412.0+5249	60.270	98.170	0.616	0.384	BL Lac	
J1416.0+1325	65.910	2.200	0.107	0.893	FSRQ	
J1418.5+3543	69.600	63.190	8.36e-06	1.000	FSRQ	
J1418.9+7731	38.560	117.020	0.977	0.023	BL Lac	
J1419.1-5156	8.620	316.460	0.018	0.982	FSRQ	
J1419.5-0836	48.360	336.780	0.011	0.989	FSRQ	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J1421.0–1122	45.840	335.360	0.729	0.271	BL Lac	
J1424.6–6807	–6.830	311.480	0.028	0.972	FSRQ	
J1427.8–3215	26.330	325.590	0.951	0.049	BL Lac	
J1434.6+6640	47.380	108.170	0.995	0.005	BL Lac	Very High C.
J1440.0–3955	18.350	324.530	0.970	0.030	BL Lac	
J1446.8–1831	36.490	337.600	0.987	0.013	BL Lac	High C.
J1503.7–6426	–5.140	316.620	0.016	0.984	FSRQ	
J1504.5–8242	–20.990	307.230	0.276	0.724	Uncertain	
J1507.6–3710	18.230	330.900	0.874	0.126	BL Lac	
J1508.7–4956	7.170	324.400	0.005	0.995	FSRQ	
J1509.9–2951	24.050	335.640	0.080	0.920	FSRQ	
J1511.8–0513	43.120	354.590	0.658	0.342	BL Lac	
J1512.2–2255	29.490	340.510	0.948	0.052	BL Lac	
J1512.3+8005	35.170	115.970	0.639	0.361	BL Lac	
J1514.8–3623	18.170	332.690	0.294	0.706	Uncertain	
J1518.0–2732	24.980	338.670	0.416	0.584	Uncertain	
J1525.2–5905	–1.860	321.540	2.51e–04	1.000	FSRQ	
J1532.7–1319	33.720	352.140	2.23e–10	1.000	FSRQ	
J1536.6+8331	31.980	117.840	0.839	0.161	BL Lac	
J1537.8–8000	–19.460	309.970	0.287	0.713	Uncertain	
J1539.8–1128	33.830	355.150	0.687	0.313	BL Lac	
J1543.5+0451	43.380	12.260	0.910	0.090	BL Lac	
J1547.1–2801	20.560	343.780	0.982	0.018	BL Lac	High C.
J1549.0+6309	43.850	96.840	0.795	0.205	BL Lac	
J1549.5+1709	47.800	28.790	0.966	0.034	BL Lac	
J1549.7–0658	34.980	1.230	0.884	0.116	BL Lac	
J1550.3+7409	37.730	108.930	0.328	0.672	Uncertain	
J1557.4–7040	–13.170	317.210	0.719	0.281	BL Lac	
J1559.7+8512	30.350	118.810	0.837	0.163	BL Lac	
J1559.8–2525	20.540	347.940	0.947	0.053	BL Lac	
J1600.3–5810	–3.940	325.740	0.886	0.114	BL Lac	
J1604.4–4442	5.760	335.150	0.138	0.862	FSRQ	
J1607.9–2040	22.580	352.950	0.858	0.142	BL Lac	
J1612.4–3100	14.670	345.850	0.986	0.014	BL Lac	High C.
J1617.3–2519	17.610	350.670	0.009	0.991	FSRQ	
J1626.4–7640	–18.810	314.280	0.855	0.145	BL Lac	
J1628.2+7703	34.080	110.300	0.643	0.357	BL Lac	
J1630.8+1047	35.990	26.590	0.260	0.740	Uncertain	
J1636.7+2624	40.130	45.790	0.949	0.051	BL Lac	
J1637.6–3449	8.150	346.750	0.972	0.028	BL Lac	
J1640.9+1142	34.220	28.790	0.875	0.125	BL Lac	
J1643.6–0642	24.480	10.660	0.752	0.248	BL Lac	
J1645.2–5747	–7.960	330.170	0.007	0.993	FSRQ	
J1647.1–6438	–12.480	325.030	0.730	0.270	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J1647.4+4950	40.070	76.640	0.550	0.450	Uncertain	
J1648.5-4829	-2.300	337.760	0.003	0.997	FSRQ	
J1650.2-5044	-3.970	336.130	0.021	0.979	FSRQ	
J1656.0+2044	34.330	40.530	0.030	0.970	FSRQ	
J1656.8-2010	14.050	1.060	0.844	0.156	BL Lac	
J1659.7-3132	6.700	352.270	0.289	0.711	Uncertain	
J1704.0+7646	32.400	108.930	0.089	0.911	FSRQ	
J1711.5-5029	-6.490	338.440	7.79e-04	0.999	FSRQ	
J1711.6+8846	27.630	121.620	0.993	0.007	BL Lac	Very High C.
J1714.1-2029	10.610	3.210	0.994	0.006	BL Lac	Very High C.
J1716.7-8112	-23.370	311.660	0.887	0.113	BL Lac	
J1718.1-3056	3.890	355.050	0.079	0.921	FSRQ	
J1719.3+1206	25.850	33.730	0.919	0.081	BL Lac	
J1723.5-5609	-11.220	334.630	0.003	0.997	FSRQ	
J1723.7-7713	-21.810	315.690	0.030	0.970	FSRQ	
J1735.4-1118	11.230	13.900	0.088	0.912	FSRQ	
J1736.0+2033	25.410	44.070	0.981	0.019	BL Lac	
J1739.0+8716	27.950	120.020	0.029	0.971	FSRQ	
J1740.4+5347	31.850	81.410	0.964	0.036	BL Lac	
J1741.9-2539	2.430	2.380	0.033	0.967	FSRQ	
J1744.9-1725	6.080	9.760	0.311	0.689	Uncertain	
J1747.1+0139	15.110	26.960	0.208	0.792	FSRQ	
J1753.5-5010	-12.050	342.210	9.44e-07	1.000	FSRQ	
J1757.1+1533	18.940	41.170	0.865	0.135	BL Lac	
J1757.4+6536	30.070	95.270	0.846	0.154	BL Lac	
J1759.1-4822	-11.930	344.340	4.36e-04	1.000	FSRQ	
J1807.8+6427	28.980	94.030	0.928	0.072	BL Lac	
J1816.9-4944	-15.170	344.390	0.970	0.030	BL Lac	
J1819.1+2134	16.490	49.100	0.535	0.465	Uncertain	
J1819.1+4259	23.660	70.630	0.471	0.529	Uncertain	
J1820.3+3625	21.550	63.890	0.986	0.014	BL Lac	
J1822.1-7051	-23.310	323.600	0.592	0.408	BL Lac	
J1823.6-3453	-9.950	358.670	0.956	0.044	BL Lac	
J1824.4+4310	22.860	71.110	0.992	0.008	BL Lac	High C.
J1825.2-5230	-17.470	342.260	0.032	0.968	FSRQ	
J1828.9-2417	-6.210	8.760	0.499	0.501	Uncertain	
J1830.0-4439	-15.170	350.100	0.002	0.998	FSRQ	
J1831.0-2714	-7.950	6.330	0.304	0.696	Uncertain	
J1835.4+1349	9.700	43.560	0.036	0.964	FSRQ	
J1838.5-6006	-21.670	335.400	0.964	0.036	BL Lac	
J1841.2+2910	14.850	58.430	0.989	0.011	BL Lac	High C.
J1842.3-5841	-21.820	336.930	0.981	0.019	BL Lac	
J1844.3+1547	8.630	46.300	0.867	0.133	BL Lac	
J1848.1-4230	-17.380	353.490	0.909	0.091	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J1849.3-1645	-7.120	17.670	0.984	0.016	BL Lac	
J1855.1-6008	-23.720	335.850	0.987	0.013	BL Lac	High C.
J1858.4-2509	-12.610	10.880	0.058	0.942	FSRQ	
J1904.5+3627	13.360	67.290	0.897	0.103	BL Lac	
J1908.8-0130	-4.490	33.600	0.990	0.010	BL Lac	High C.
J1910.8+2855	8.890	60.970	0.993	0.007	BL Lac	Very High C.
J1911.4-1908	-12.890	17.810	0.955	0.045	BL Lac	
J1912.0-0804	-8.250	28.040	0.002	0.998	FSRQ	
J1912.6-1223	-10.230	24.160	0.016	0.984	FSRQ	
J1913.5-3631	-19.860	1.210	0.017	0.983	FSRQ	
J1913.9+4441	14.950	75.800	0.987	0.013	BL Lac	
J1918.0+3750	11.430	69.820	0.868	0.132	BL Lac	
J1924.9+2817	5.820	61.780	0.928	0.072	BL Lac	
J1925.7+1228	-1.780	47.900	0.001	0.999	FSRQ	
J1933.4+0727	-5.820	44.370	0.975	0.025	BL Lac	
J1935.5+8355	25.760	116.330	0.821	0.179	BL Lac	
J1939.6-4925	-27.880	348.940	0.989	0.011	BL Lac	High C.
J1941.2-6210	-29.550	334.500	0.091	0.909	FSRQ	
J1941.8+7218	22.090	104.310	0.045	0.955	FSRQ	
J1942.7+1033	-6.370	48.250	0.955	0.045	BL Lac	
J1944.1-4523	-27.890	353.590	0.993	0.007	BL Lac	Very High C.
J1949.0+1312	-6.350	51.350	0.198	0.802	FSRQ	
J1949.4-6140	-30.490	335.190	0.482	0.518	Uncertain	
J1954.9-5640	-31.000	340.980	0.974	0.026	BL Lac	
J1955.0-1605	-21.130	25.150	0.932	0.068	BL Lac	
J1955.9+0212	-13.220	42.460	0.906	0.094	BL Lac	
J1959.8-4725	-30.850	351.800	0.992	0.008	BL Lac	High C.
J2000.1+4212	6.440	77.520	0.061	0.939	FSRQ	
J2002.7+6303	16.430	96.190	0.939	0.061	BL Lac	
J2007.7-7728	-30.510	316.660	0.010	0.990	FSRQ	
J2014.5+0648	-15.030	48.920	0.897	0.103	BL Lac	
J2014.9+1623	-10.150	57.350	0.036	0.964	FSRQ	
J2017.6-4110	-33.100	359.530	0.863	0.137	BL Lac	
J2018.5+3851	1.660	76.580	0.004	0.996	FSRQ	
J2023.2+3154	-3.100	71.400	0.033	0.967	FSRQ	
J2024.4-0848	-24.660	35.560	0.965	0.035	BL Lac	
J2025.2+3340	-2.370	73.120	0.016	0.984	FSRQ	
J2026.3+7644	21.200	109.920	0.983	0.017	BL Lac	
J2031.0+1937	-11.530	62.210	0.966	0.034	BL Lac	
J2033.6+6309	13.490	98.150	0.977	0.023	BL Lac	
J2036.6-3325	-35.530	9.620	0.996	0.004	BL Lac	Very High C.
J2040.0-5734	-37.060	339.630	0.731	0.269	BL Lac	
J2040.2-7115	-34.230	323.160	0.984	0.016	BL Lac	
J2041.9-7318	-33.740	320.730	0.785	0.215	BL Lac	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J2046.7-1011	-30.240	36.870	0.991	0.009	BL Lac	High C.
J2049.0-6801	-35.830	326.610	0.919	0.081	BL Lac	
J2049.7+1002	-20.680	56.690	0.488	0.512	Uncertain	
J2051.8-5535	-39.000	341.910	0.065	0.935	FSRQ	
J2056.7+4938	2.760	89.320	0.910	0.090	BL Lac	
J2103.9-3546	-41.380	7.840	0.051	0.949	FSRQ	
J2103.9-6233	-38.940	332.720	0.887	0.113	BL Lac	
J2104.2-0211	-30.330	47.380	0.993	0.007	BL Lac	Very High C.
J2106.1+2505	-14.830	71.770	0.044	0.956	FSRQ	
J2107.7-4822	-42.230	350.790	0.427	0.573	Uncertain	
J2108.0+3654	-7.220	81.110	0.946	0.054	BL Lac	
J2108.6-8619	-29.190	306.400	0.990	0.010	BL Lac	High C.
J2109.1-6638	-38.170	327.550	0.942	0.058	BL Lac	
J2110.3+3540	-8.360	80.280	0.023	0.977	FSRQ	
J2112.7+0819	-26.310	58.680	0.957	0.043	BL Lac	
J2114.7+3130	-11.900	78.000	0.514	0.486	Uncertain	
J2118.0-3241	-43.880	12.440	0.556	0.444	Uncertain	
J2119.2-3313	-44.160	11.710	0.105	0.895	FSRQ	
J2126.5-3926	-46.050	3.250	0.859	0.141	BL Lac	
J2132.4-5420	-44.850	341.840	0.036	0.964	FSRQ	
J2133.3+2533	-18.970	76.340	0.904	0.096	BL Lac	
J2133.8+6648	10.990	105.170	0.497	0.503	Uncertain	
J2141.6-6412	-42.280	328.600	0.001	0.999	FSRQ	
J2142.2-2546	-47.910	23.500	0.713	0.287	BL Lac	
J2144.2+3132	-16.290	82.610	0.227	0.773	FSRQ	
J2149.6+1915	-26.010	74.540	0.001	0.999	FSRQ	
J2156.0+1818	-27.780	74.910	0.945	0.055	BL Lac	
J2159.2-2841	-52.120	20.230	0.928	0.072	BL Lac	
J2200.9-2412	-51.590	27.400	0.600	0.400	BL Lac	
J2212.3-7039	-41.040	319.280	0.875	0.125	BL Lac	
J2212.6+2801	-23.000	85.140	0.972	0.028	BL Lac	
J2213.6-4755	-53.020	348.040	0.983	0.017	BL Lac	
J2220.3+2812	-23.860	86.800	0.978	0.022	BL Lac	
J2230.5-7817	-36.470	311.320	0.130	0.870	FSRQ	
J2232.9-2021	-57.680	37.410	0.937	0.063	BL Lac	
J2233.5-1235	-54.680	50.500	0.534	0.466	Uncertain	
J2234.1-2655	-59.530	25.270	0.831	0.169	BL Lac	
J2235.6-2319	-59.290	32.770	0.003	0.997	FSRQ	
J2236.2-5049	-55.090	340.750	0.735	0.265	BL Lac	
J2243.2-3933	-60.730	359.590	0.951	0.049	BL Lac	
J2246.2+1547	-37.440	83.840	0.326	0.674	Uncertain	
J2246.7-5205	-55.840	337.420	0.994	0.006	BL Lac	Very High C.
J2250.3-4206	-61.170	353.770	0.929	0.071	BL Lac	
J2250.7-2806	-63.320	23.750	0.032	0.968	FSRQ	

3FGL Name	b (°)	l (°)	$L_{\text{BL Lac}}$	L_{FSRQ}	Classification	HSP Candidates
J2251.5-4928	-57.940	340.630	0.951	0.049	BL Lac	
J2258.1-8248	-33.430	307.030	0.773	0.227	BL Lac	
J2305.3-4219	-63.600	350.940	0.967	0.033	BL Lac	
J2309.6-3633	-66.530	2.950	0.957	0.043	BL Lac	
J2312.9-6923	-45.410	314.880	0.989	0.011	BL Lac	High C.
J2316.8-5209	-59.360	331.730	0.988	0.012	BL Lac	High C.
J2317.3-4534	-63.780	342.070	0.771	0.229	BL Lac	
J2318.6+1912	-38.440	94.500	0.199	0.801	FSRQ	
J2321.2-6439	-49.860	317.620	0.857	0.143	BL Lac	
J2322.9-4917	-62.070	334.570	0.968	0.032	BL Lac	
J2328.4-4034	-68.220	349.480	0.003	0.997	FSRQ	
J2336.5+2356	-35.860	101.750	0.906	0.094	BL Lac	
J2336.5-7620	-39.950	308.610	0.848	0.152	BL Lac	
J2338.7-7401	-42.130	309.500	0.952	0.048	BL Lac	
J2344.4+0549	-53.260	94.060	0.937	0.063	BL Lac	
J2346.7+0705	-52.370	95.980	0.958	0.042	BL Lac	
J2347.9+5436	-7.130	113.730	0.984	0.016	BL Lac	High C.
J2348.4-5100	-63.310	325.080	0.623	0.377	BL Lac	
J2353.3-4805	-66.160	327.480	0.978	0.022	BL Lac	
J2353.7-3911	-72.940	344.050	0.867	0.133	BL Lac	
J2358.3-2853	-78.150	21.290	0.746	0.254	BL Lac	