

Online Materials: Observed SEDs (*scattered data points*) with our best model fits (*lines*) for the FSRQs in our sample. The radio data are not considered in our fits because of the synchrotron self-absorption effect. The blue bumps observed in 3C273 and PKS 1510-089 are also not included since they may be emission from the accretion disk.

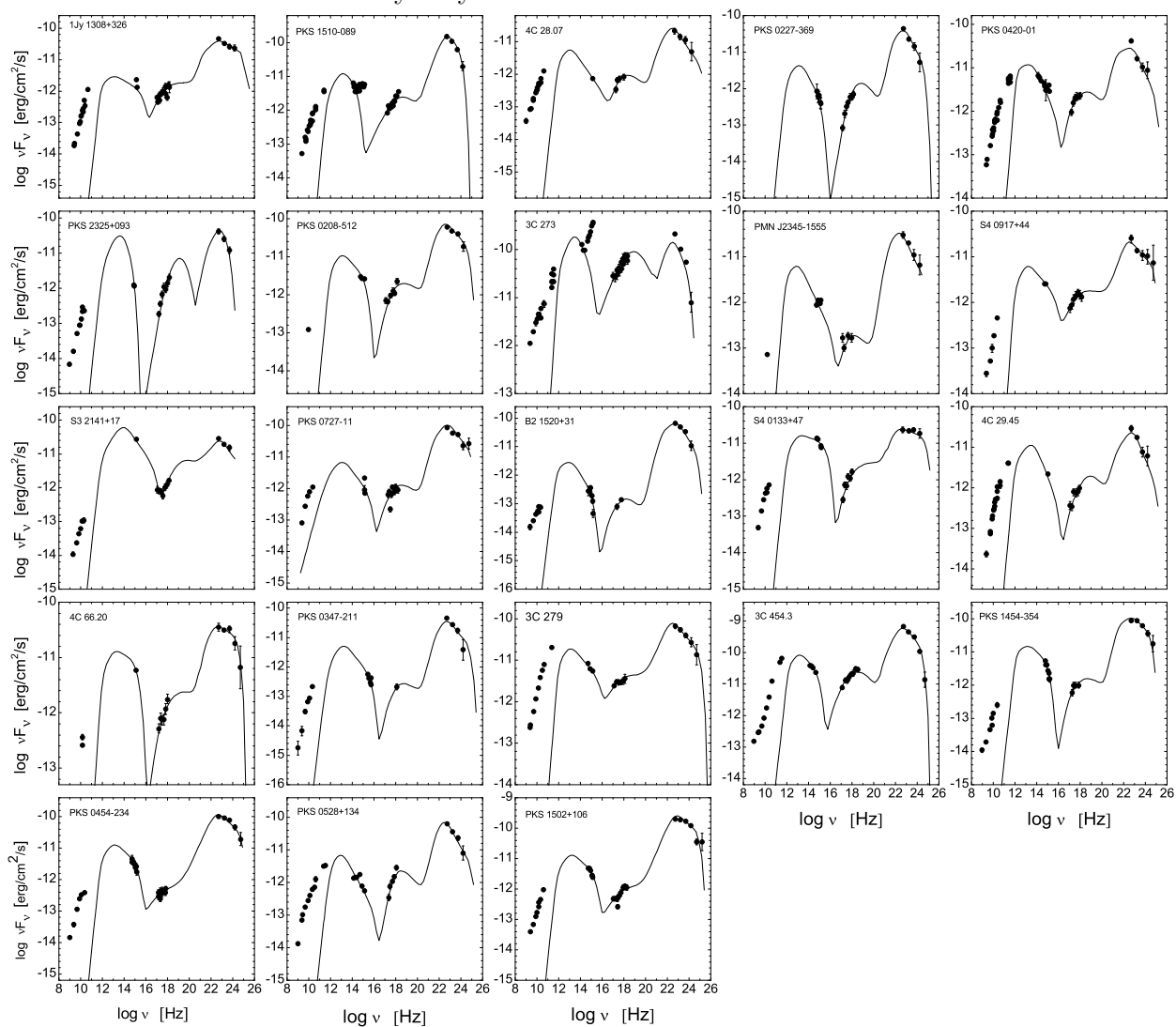


Table . **The best linear fits and Pearson correlation analysis for the parameter sets $\{x - y\}$. The fitting function is $\log y = a + b \log x$. The errors of both x and y , if available, are taken into account. r and p are the Pearson correlation coefficient and chance probability, respectively.**

Sample	Parameter Set	a	b	r	p
GRBs+FSRQs	$L_{s,\text{jet}} - P_{\text{jet}}$	11.0 ± 0.5	0.79 ± 0.01	0.98	0
GRBs	$L_{\text{iso}} - P_{\text{jet}}$	18.0 ± 2.8	0.62 ± 0.05	0.76	5.7E-11
	$L_{\text{jet}} - P_{\text{jet}}$	14.1 ± 2.8	0.73 ± 0.06	0.84	4.7E-15
	$L_{\text{jet}} - \varepsilon$	-21.0 ± 2.5	0.41 ± 0.05	0.40	0.003
FSRQs	$L_{s,\text{iso}} - P_{\text{jet}}$	21.4 ± 2.3	0.53 ± 0.05	0.92	4.6E-10
	$L_{s,\text{jet}} - P_{\text{jet}}$	14.2 ± 3.6	0.72 ± 0.08	0.75	4.3E-5
	$L_{\text{bol,jet}} - P_{\text{jet}}$	12.6 ± 3.0	0.73 ± 0.07	0.93	1.9E-10
	$L_{c,\text{jet}} - P_{\text{jet}}$	17.2 ± 3.2	0.64 ± 0.07	0.87	5.1E-8
	$L_{\text{bol,jet}} - \varepsilon$	-16.8 ± 2.5	0.35 ± 0.05	0.78	1.1E-5
	$\sigma - \varepsilon$	-0.72 ± 0.04	-0.32 ± 0.09	-0.63	0.001
BL Lacs	$L_{s,\text{iso}} - P_{\text{jet}}$	...	...	0.26	0.22
	$L_{s,\text{jet}} - P_{\text{jet}}$	...	...	0.43	0.04
	$L_{\text{bol,jet}} - P_{\text{jet}}$	...	...	0.46	0.02
	$L_{c,\text{jet}} - P_{\text{jet}}$	...	...	0.37	0.08
	$L_{\text{bol,jet}} - \varepsilon$	-37.6 ± 4.6	0.82 ± 0.10	0.50	0.013
	$\sigma - \varepsilon$	-0.72 ± 0.17	0.57 ± 0.09	0.55	0.005