

Short GRBs	No of LC breaks	index(m)	intercept(c)
GRB 051221A	2	-1.1667 -+0.0688	5.108e-08 -+1.7418e-08
GRB 140903A	1	-0.6707 -+0.06312	1.446e-09 -+0.5009e-9
GRB 190627A	1	-0.6275 -+0.0406	5.527e-09 -+1.195e-09
GRB 051210	2	-1.2429 -+0.2305	1.3708e-07 -+1.5062e-07
GRB 090510	1	-0.3317 -+0.0491	1.7701e-10 -+0.74633e-10

REPORT:- The data randomly taken from swift/XRT data catalogue: 10 GRBs(5 short and 5 long) GRBs are sampled with known red shifts and has light curve breaks. To analyze light curve fitting light curve, spectral power model:

$$\frac{dN}{dE} = N_o(dE/E_o)^{-\gamma} \quad (1)$$

used. using python 3 program the spectral indices(slope) and the amplitudes(c) intercepts are calculated shown in two tables for long and short GRBs. Futures of fitting The calculated value of spectral indices are negative values, indicating that the flux (light curves) fade as time increasing, and behaves hardening, which characterizing that the sources were compact objects: blackholes with accretion of matter. The amplitude(c) for sampled GRBs greater than zero how ever the values highly dispersed this may be due to different sizes their sources.