Model	α	β	E_{peak} (keV)	A_1	kT (keV)	A_2	Γ	A_3	$\log(\mathcal{L}) \ / \ \mathrm{BIC} \ / \ \mathcal{Z}$	$Flux \times 10^{-5}$ (erg s ⁻¹ cm ⁻²)	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{54}$ (erg)
C+B+L	$\substack{-0.595 \\ +0.017 \\ -0.013}$		$773.3 \\ ^{+16.7}_{-6.6}$	-0.968 +0.000 -0.006	$\begin{array}{c} 5.4 \\ ^{+161.5} \\ ^{-29.0} \end{array}$	-1.185 $+1.346$ -10.773	-1.917 $+0.004$ -0.007	-1.819 $+0.021$ -0.001	-401.69/846.77/-435.30	$\substack{1.843 \\ +0.026 \\ -0.007}$	$\substack{3.562 \\ +0.050 \\ -0.013}$	$\begin{array}{c} 3.055 \\ +0.043 \\ -0.011 \end{array}$
C+L	$\begin{array}{c} -0.590 \\ +0.013 \\ -0.017 \end{array}$		$778.3 \\ ^{+11.7}_{-12.0}$	-0.972 $+0.004$ -0.002			$^{-1.919}_{\substack{+0.006 \\ -0.005}}$	$^{+0.006}_{+0.008}_{-0.013}$	-402.85/836.70/-435.50	$\substack{1.855 \\ +0.015 \\ -0.018}$	$3.585 \\ \substack{+0.028 \\ -0.035}$	$\begin{array}{c} 3.074 \\ ^{+0.024} \\ ^{-0.030} \end{array}$
G+L	$\substack{-0.587 \\ +0.012 \\ -0.019}$	-4.552 $+0.273$ -4.442	$\begin{array}{c} 775.1 \\ ^{+13.8} \\ ^{-11.5} \end{array}$	-0.972 $^{+0.004}$ $^{-0.002}$			$\substack{-1.920 \\ +0.007 \\ -0.004}$	$^{+0.008}_{-0.013}$	-403.19/843.57/-438.25	$\substack{1.855 \\ +0.013 \\ -0.021}$	$3.586 \\ \substack{+0.024 \\ -0.041}$	$\substack{3.075 \\ +0.021 \\ -0.035}$
G+B+L	$\substack{-0.596 \\ +0.020 \\ -0.011}$	$\substack{-8.101 \\ +3.219 \\ -0.928}$	$775.9 \\ ^{+12.4} _{-11.8}$	$\begin{array}{c} -0.972 \\ +0.004 \\ -0.002 \end{array}$	$187.9 \\ ^{+18.9}_{-151.7}$	$\begin{array}{c} 0.118 \\ +2.526 \\ -11.931 \end{array}$	-1.918 $+0.005$ -0.006	$^{-1.807}_{\substack{+0.009 \\ -0.011}}$	-403.13/855.84/-438.27	$\substack{1.850 \\ +0.018 \\ -0.015}$	$\begin{array}{c} 3.575 \\ +0.034 \\ -0.030 \end{array}$	$\begin{array}{c} 3.066 \\ ^{+0.029} \\ ^{-0.026} \end{array}$
S+B+L	$^{+0.871}_{+0.008}_{-0.011}$	$-3.666 \\ +0.150 \\ -0.096$	$711.8 \\ {}^{+3.1}_{-19.1}$	$^{-1.064}_{\substack{+0.010 \\ -0.002}}$	$55.0 \\ +7.2 \\ -4.6$	$\begin{array}{c} 0.540 \\ ^{+0.023} \\ ^{-0.226} \end{array}$	$^{-1.897}_{\substack{+0.010 \\ -0.002}}$	$\begin{array}{c} -1.914 \\ +0.005 \\ -0.014 \end{array}$	-404.89/859.37/-448.83	$\substack{1.852 \\ +0.011 \\ -0.019}$	$\begin{array}{c} 3.579 \\ ^{+0.021} \\ ^{-0.037} \end{array}$	$\substack{3.069 \\ +0.018 \\ -0.032}$
S+L	$\substack{-0.854 \\ +0.006 \\ -0.017}$	$\substack{-3.487 \\ +0.110 \\ -0.123}$	$\substack{666.8 \\ +12.9 \\ -5.9}$	$^{+0.042}_{+0.005}_{-0.002}$			$^{+0.010}_{-0.005}$	$^{-1.915}_{\substack{+0.008 \\ -0.022}}$	-418.80/874.79/-453.39	$\substack{1.839 \\ +0.018 \\ -0.014}$	$\begin{array}{c} 3.554 \\ ^{+0.035} _{-0.028} \end{array}$	$\substack{3.048 \\ +0.030 \\ -0.024}$
S+B	$^{+0.009}_{-0.005}$	$\substack{-2.376 \\ +0.014 \\ -0.019}$	$398.4 \\ ^{+18.5}_{-17.8}$	-1.029 $+0.005$ -0.002	$181.1 \\ ^{+3.6}_{-2.2}$	$\substack{1.960 \\ +0.012 \\ -0.018}$			-552.71/1142.60/-587.55	$\substack{1.762 \\ +0.013 \\ -0.014}$	$\substack{3.406 \\ +0.025 \\ -0.028}$	$\substack{2.921 \\ +0.021 \\ -0.024}$
G+B	$^{+0.010}_{-0.011}$	$^{+0.023}_{-0.026}$	$\begin{array}{c} 823.3 \\ +51.2 \\ -61.2 \end{array}$	$\substack{-0.994 \\ +0.008 \\ -0.006}$	$150.8 \\ ^{+5.7}_{-3.4}$	$\substack{1.797 \\ +0.026 \\ -0.019}$			-605.21/1247.61/-641.03	$\substack{1.806 \\ +0.019 \\ -0.017}$	$3.490 \\ \substack{+0.036 \\ -0.032}$	$\substack{2.993 \\ +0.031 \\ -0.028}$
S	$^{+0.004}_{-0.003}$	$^{+0.015}_{-0.013}$	$781.6 \\ ^{+9.4}_{-10.8}$	$\substack{-0.965 \\ +0.001 \\ -0.001}$					-797.87/1620.53/-823.35	$\substack{1.983 \\ +0.012 \\ -0.013}$	$3.833 \\ \substack{+0.024 \\ -0.025}$	$\substack{3.287 \\ +0.021 \\ -0.022}$
G	-0.969 $+0.004$ -0.006	$^{+0.013}_{-0.017}$	$1019.8 \\ ^{+18.6}_{-14.4}$	-0.909 $+0.002$ -0.002					-1025.64/2076.06/-1053.43	$\substack{2.041 \\ +0.014 \\ -0.014}$	$\begin{array}{c} 3.945 \\ ^{+0.028} \\ ^{-0.027} \end{array}$	$\begin{array}{c} 3.383 \\ ^{+0.024} \\ ^{-0.023} \end{array}$
C+B	$^{+0.010}_{-0.008}$		$^{+25.9}_{-52.4}$	$^{+0.007}_{\substack{+0.006 \\ -0.005}}$	$^{+3.3}_{-2.6}$	$\substack{1.709 \\ +0.019 \\ -0.014}$			-1319.35/2669.69/-1347.92	$\substack{1.897 \\ +0.012 \\ -0.025}$	$\begin{array}{c} 3.667 \\ ^{+0.022} \\ ^{-0.049} \end{array}$	$\begin{array}{c} 3.145 \\ ^{+0.019} \\ ^{-0.042} \end{array}$
С	-0.977 $+0.005$ -0.005		$1079.2 \\ ^{+17.9}_{-16.8}$	-0.913 +0.002 -0.002					-1665.49/3349.57/-1685.73	$\substack{2.067 \\ +0.017 \\ -0.017}$	$3.996 \\ +0.032 \\ -0.033$	$\begin{array}{c} 3.427 \\ ^{+0.028} \\ ^{-0.028} \end{array}$

Table 1. BXA Auto Runs fit results for bn090902462 using GBM + LAT data.

Model	α	β	E_{peak} (keV)	A_1	kT (keV)	A_2	Γ	A_3	$\log(\mathcal{L}) \; / \; \mathrm{BIC} \; / \; \mathcal{Z}$	$Flux \times 10^{-5}$ (erg s ⁻¹ cm ⁻²)	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{54}$ (erg)
C+B+L	-0.573 $+0.004$ -0.034		$768.3 \\ +22.5 \\ -1.3$	-0.973 $+0.005$ -0.001	$\begin{array}{c} 4.9 \\ +164.0 \\ -29.8 \end{array}$	-0.961 $+1.268$ -10.923	-1.917 $+0.004$ -0.007	-1.801 $+0.003$ -0.017	-402.35/848.08/-435.05	$\substack{1.841 \\ +0.030 \\ -0.003}$	$3.558 \\ ^{+0.057}_{-0.007}$	$\begin{array}{c} 3.051 \\ ^{+0.049} \\ ^{-0.006} \end{array}$
C+L	$\substack{-0.593 \\ +0.016 \\ -0.015}$		$\begin{array}{c} 778.2 \\ ^{+12.1} \\ ^{-11.7} \end{array}$	$^{+0.971}_{\substack{+0.003 \\ -0.003}}$			$^{+0.004}_{-0.007}$	$^{+0.010}_{-0.011}$	-402.84/836.68/-435.37	$\substack{1.854 \\ +0.015 \\ -0.017}$	$3.583 \\ \substack{+0.029 \\ -0.034}$	$\begin{array}{c} 3.073 \\ ^{+0.025} \\ ^{-0.029} \end{array}$
G+B+L	$\substack{-0.590 \\ +0.013 \\ -0.015}$	-6.408 $+1.494$ -2.563	$\begin{array}{c} 770.5 \\ ^{+17.1} \\ ^{-5.5} \end{array}$	$\substack{-0.970 \\ +0.001 \\ -0.004}$	$\begin{array}{c} 5.0 \\ ^{+161.2} \\ ^{-33.1} \end{array}$	$\substack{-1.138 \\ +1.569 \\ -10.363}$	$^{+0.005}_{-0.005}$	$^{+0.016}_{-0.002}$	-402.20/853.99/-438.41	$\substack{1.836 \\ +0.030 \\ -0.000}$	$\begin{array}{c} 3.548 \\ ^{+0.058} \\ ^{-0.000} \end{array}$	$\begin{array}{c} 3.043 \\ ^{+0.049} \\ ^{-0.000} \end{array}$
G+L	$\substack{-0.591 \\ +0.015 \\ -0.016}$	-4.797 $+0.057$ -4.126	$\begin{array}{c} 776.1 \\ ^{+12.5} \\ ^{-11.4} \end{array}$	-0.972 $+0.003$ -0.003			$^{+0.003}_{-0.008}$	$^{+0.006}_{+0.008}_{-0.012}$	-403.24/843.66/-438.45	$\substack{1.854 \\ +0.014 \\ -0.019}$	$\begin{array}{c} 3.582 \\ ^{+0.027} \\ ^{-0.036} \end{array}$	$\begin{array}{c} 3.072 \\ ^{+0.023} \\ ^{-0.031} \end{array}$
S+B+L	-0.846 $+0.006$ -0.031	-3.818 $+0.247$ -0.012	$711.4 \\ ^{+9.0}_{-17.2}$	$^{+0.016}_{-0.006}$	$^{+9.5}_{+9.3}_{-3.4}$	$0.625 \\ ^{+0.020}_{-0.179}$	$^{+0.007}_{-0.006}$	$^{+0.005}_{-0.034}$	-401.33/852.24/-445.20	$\substack{1.838 \\ +0.020 \\ -0.008}$	$\begin{array}{c} 3.552 \\ ^{+0.038} \\ ^{-0.015} \end{array}$	$\begin{array}{c} 3.046 \\ ^{+0.033} \\ ^{-0.013} \end{array}$
S+L	$\substack{-0.858 \\ +0.011 \\ -0.013}$	$-3.505 \\ +0.119 \\ -0.111$	$\substack{668.7 \\ +10.8 \\ -8.1}$	$^{+0.041}_{\substack{+0.004 \\ -0.003}}$			$^{+0.006}_{-0.008}$	$\substack{-1.917 \\ +0.011 \\ -0.020}$	-418.81/874.81/-454.39	$\substack{1.837 \\ +0.019 \\ -0.013}$	$\begin{array}{c} 3.551 \\ ^{+0.038} \\ ^{-0.026} \end{array}$	$\begin{array}{c} 3.045 \\ +0.032 \\ -0.022 \end{array}$
S+B	$^{+0.008}_{-0.006}$	$\substack{-2.373 \\ +0.010 \\ -0.023}$	$^{390.0}_{^{+27.3}}_{^{-9.3}}$	$^{+0.009}_{+0.005}_{-0.003}$	$180.6 \\ ^{+4.3}_{-1.9}$	$\substack{1.963 \\ +0.010 \\ -0.021}$			-552.61/1142.40/-587.54	$\substack{1.754 \\ +0.021 \\ -0.007}$	$\begin{array}{c} 3.391 \\ ^{+0.041} \\ ^{-0.013} \end{array}$	$\substack{2.908 \\ +0.035 \\ -0.011}$
G+B	$^{+0.008}_{-0.013}$	$\substack{-2.521 \\ +0.028 \\ -0.021}$	$\begin{array}{c} 812.9 \\ +60.2 \\ -48.5 \end{array}$	-0.992 $+0.006$ -0.008	$152.6 \\ ^{+3.7}_{-5.5}$	$\substack{1.799 \\ +0.023 \\ -0.020}$			-605.27/1247.73/-641.06	$\substack{1.805 \\ +0.020 \\ -0.016}$	$3.488 \\ \substack{+0.038 \\ -0.030}$	$\substack{2.991 \\ +0.033 \\ -0.026}$
S	$^{+0.003}_{\substack{+0.004 \\ -0.003}}$	$\substack{-2.719 \\ +0.012 \\ -0.016}$	$781.0 \\ ^{+10.0}_{-10.0}$	$\substack{-0.965 \\ +0.001 \\ -0.001}$					-797.87/1620.53/-824.37	$\substack{1.983 \\ +0.013 \\ -0.012}$	$\begin{array}{c} 3.832 \\ ^{+0.025} \\ ^{-0.023} \end{array}$	$\substack{3.286 \\ +0.022 \\ -0.020}$
G	-0.969 +0.004 -0.006	-2.733 $+0.011$ -0.018	$1018.0 \\ ^{+19.7}_{-12.9}$	-0.909 +0.002 -0.002					-1025.65/2076.09/-1053.45	$\substack{2.039 \\ +0.016 \\ -0.012}$	$3.942 \\ \substack{+0.030 \\ -0.023}$	$3.380 \\ \substack{+0.026 \\ -0.020}$

Table 2. BXA Original Runs fit results for bn090902462 using GBM + LAT data.

Model	α	β	E_{peak} (keV)	A_1	kT (keV)	A_2	Γ	A_3	or Command GBM + LAT $\text{C-Stat} / \log(\mathcal{L}) / \text{AIC} / \text{BIC}$	$Flux \times 10^{-5}$ (erg s ⁻¹ cm ⁻²)	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{54}$ (erg)
C+B+L	-0.640 $+0.021$ -0.021		783.7 +36.5 -34.6	-0.952 $+0.004$ -0.004	4.5 +0.3 -0.3	$0.005 \\ +0.088 \\ -0.109$	-1.876 $+0.015$ -0.014	-1.945 $+0.040$ -0.047	782.88/-391.44/796.88/826.27	1.853 +NA -NA	3.581 +NA -NA	3.071 +NA -NA
G+B+L	$\begin{array}{c} -0.638 \\ +0.021 \\ -0.022 \end{array}$	-4.704 + 0.739 - NA	$780.9 \\ +37.0 \\ -34.9$	-0.952 $+0.006$ -0.005	$\begin{array}{c} 4.5 \\ ^{+0.3} \\ ^{-0.3} \end{array}$	$0.005 \\ +0.088 \\ -0.107$	-1.877 $+0.016$ -0.013	-1.944 $+0.040$ -0.048	783.30/-391.65/799.30/832.89	$1.852 \\ ^{+NA}_{-NA}$	$\begin{array}{c} 3.579 \\ +NA \\ -NA \end{array}$	$\begin{array}{c} 3.070 \\ ^{+NA} \\ ^{-NA} \end{array}$
C+L	-0.592 $+0.015$ -0.015		$777.5 \\ +28.1 \\ -26.9$	$^{+0.971}_{+0.001}_{-0.000}$			-1.919 $+0.005$ -0.006	$^{+0.010}_{-0.010}$	805.58/-402.79/815.58/836.57	$\substack{1.852 \\ +0.016 \\ -0.016}$	$\substack{3.580 \\ +0.031 \\ -0.031}$	$\begin{array}{c} 3.070 \\ ^{+0.027} \\ ^{-0.027} \end{array}$
G+L	$^{+0.590}_{\substack{+0.015 \\ -0.015}}$	-4.887 +0.804 -NA	$775.3 \\ +28.3 \\ -27.2$	$^{+0.971}_{+0.003}_{-0.003}$			-1.919 $+0.006$ -0.006	$^{+0.010}_{-0.010}$	806.12/-403.06/818.12/843.31	$\substack{1.851 \\ +0.017 \\ -0.017}$	$\begin{array}{c} 3.578 \\ ^{+0.032} \\ ^{-0.032} \end{array}$	$\begin{array}{c} 3.069 \\ ^{+0.028} \\ ^{-0.028} \end{array}$
S+B+L	$^{+0.037}_{+0.028}_{-0.029}$	-3.784 $+0.169$ -0.212	$721.8 \\ ^{+83.9}_{-72.7}$	$^{+0.010}_{-0.010}$	$50.7 \\ ^{+7.3} _{-5.9}$	$0.726 \\ ^{+0.104}_{-0.102}$	-1.906 $+0.009$ -0.008	$^{+0.020}_{-0.022}$	799.63/-399.81/815.63/849.21	$\substack{1.848 \\ +0.018 \\ -0.018}$	$\substack{3.571 \\ +0.035 \\ -0.035}$	$\begin{array}{c} 3.062 \\ ^{+0.030} \\ ^{-0.030} \end{array}$
S+L	$^{+0.858}_{+0.012}_{-0.012}$	-3.472 $+0.105$ -0.121	$669.4 \\ ^{+45.5}_{-42.6}$	$^{-1.041}_{+0.003}$ $^{-0.003}$			-1.892 $+0.007$ -0.007	$^{-1.920}_{+0.015}_{-0.016}$	837.33/-418.67/849.33/874.52	$\substack{1.842 \\ +0.017 \\ -0.017}$	$\substack{3.561 \\ +0.033 \\ -0.033}$	$\begin{array}{c} 3.053 \\ ^{+0.028} \\ ^{-0.028} \end{array}$
S+B	-0.939 $+0.008$ -0.008	-2.676 $+0.013$ -0.013	$\begin{array}{c} 676.7 \\ ^{+19.2} \\ ^{-18.7} \end{array}$	$^{+0.978}_{+0.002}_{-0.002}$	$3.9 \\ ^{+0.1}_{-0.1}$	$0.276 \\ ^{+0.019}_{-0.020}$			1122.62/-561.31/1134.62/1159.81	$\substack{1.928 \\ +NA \\ -NA}$	$\begin{array}{c} 3.726 \\ {}^{+NA} \\ {}^{-NA} \end{array}$	$3.195 \atop ^{+NA}_{-NA}$
G+B (v1)	$\begin{array}{c} -0.755 \\ +0.011 \\ -0.010 \end{array}$	-2.661 $+0.013$ -0.014	$771.3 \\ +25.5 \\ -25.0$	-0.900 $+0.003$ -0.002	$\substack{4.1 \\ +0.1 \\ -0.1}$	$0.421 \\ ^{+0.014}_{-0.014}$			1142.29/-571.15/1154.29/1179.48	$1.926 \\ \substack{+NA \\ -NA}$	$\begin{array}{c} 3.722 \\ +NA \\ -NA \end{array}$	$3.192 \atop {+NA \atop -NA}$
G+B (v2)	-1.133 $+0.003$ -0.003	$-2.520 \\ +0.013 \\ -0.016$	$\begin{array}{c} 822.6 \\ ^{+17.6} \\ ^{-28.1} \end{array}$	-0.993 +0.002 -0.002	$151.5 \\ ^{+4.5}_{-4.5}$	$\substack{1.796 \\ +0.017 \\ -0.009}$			1210.08/-605.04/1222.08/1247.27	$\substack{1.808 \\ +0.017 \\ -0.017}$	$3.494 \\ \substack{+0.033 \\ -0.033}$	$\substack{2.996 \\ +0.028 \\ -0.028}$
S	-1.053 $+0.004$ -0.004	$-2.720 \\ +0.013 \\ -0.014$	$780.8 \\ ^{+19.9}_{-19.1}$	$^{+0.965}_{+0.001}_{-0.001}$					1595.71/-797.85/1603.71/1620.50	$\substack{1.983 \\ +0.014 \\ -0.014}$	$3.833 \\ \substack{+0.026 \\ -0.026}$	$\begin{array}{c} 3.287 \\ ^{+0.023} \\ ^{-0.023} \end{array}$
G	-0.970 $+0.005$ -0.005	-2.736 $+0.015$ -0.015	$1020.8 \\ ^{+24.2}_{-24.2}$	-0.909 +0.002 -0.002					2051.23/-1025.62/2059.23/2076.03	$\substack{2.041 \\ +0.016 \\ -0.016}$	$3.945 \\ \substack{+0.031 \\ -0.031}$	$3.383 \\ \substack{+0.026 \\ -0.026}$

Table 3. XSPEC fit results for bn090902462 using GBM + LAT data and errors from the Error command.