Model	$\alpha$	β	$E_{peak}$ (keV)	$A_1$	kT  (keV)	$A_2$	Γ	$A_3$	$\log(\mathcal{L}) \; / \; \mathrm{BIC} \; / \; \mathcal{Z}$	$Flux \times 10^{-6}$ $(erg s^{-1}cm^{-2})$	Fluence $\times 10^{-5}$ (erg cm <sup>-2</sup> )	$E_{iso} \times 10^{53}$ (erg)
S+B	-1.039 $+0.070$ $-0.025$	$^{+0.008}_{-0.032}$	$314.6 \\ +33.4 \\ -7.9$	-1.638 +0.037 -0.025	$80.4 \\ +86.8 \\ -46.1$	$0.293 \\ +2.589 \\ -12.151$			-172.64/382.40/-196.89	$\substack{2.246 \\ +0.140 \\ -0.070}$	$\substack{4.155 \\ +0.260 \\ -0.130}$	$5.834 \\ \substack{+0.365 \\ -0.182}$
S	$\substack{-0.992 \\ +0.023 \\ -0.022}$	$^{+0.012}_{-0.012}$	$\begin{array}{c} 337.2 \\ ^{+10.9} \\ ^{-13.3} \end{array}$	$^{+0.006}_{-0.006}$					-174.39/373.53/-197.33	$\substack{2.360 \\ +0.027 \\ -0.042}$	$\substack{4.365 \\ +0.050 \\ -0.078}$	$\substack{6.129 \\ +0.070 \\ -0.110}$
S+L	$\substack{-0.975 \\ +0.007 \\ -0.037}$	$\substack{-2.205 \\ +0.015 \\ -0.008}$	$327.6 \\ ^{+20.3} _{-3.3}$	$^{+0.008}_{-0.005}$			$\substack{-1.834 \\ +1.080 \\ -1.567}$	-3.747 $+2.836$ $-9.945$	-174.11/385.33/-197.62	$\substack{2.338 \\ +0.049 \\ -0.018}$	$\substack{4.324 \\ +0.090 \\ -0.033}$	$\substack{6.071 \\ +0.127 \\ -0.047}$
S+B+L	$^{-1.001}_{\tiny{+0.034}\atop\tiny{-0.013}}$	$\begin{array}{c} -2.165 \\ +0.024 \\ -0.048 \end{array}$	$313.9 \\ +33.8 \\ -9.5$	$^{-1.627}_{\substack{+0.026 \\ -0.015}}$	$92.3 \\ ^{+74.3}_{-56.8}$	$\begin{array}{c} 0.278 \\ ^{+2.933} \\ ^{-12.114} \end{array}$	-3.445 $+2.760$ $-0.118$	$\begin{array}{c} -11.339 \\ +4.914 \\ -2.324 \end{array}$	-172.43/394.35/-198.04	$\substack{2.287 \\ +0.101 \\ -0.030}$	$\substack{4.230 \\ +0.186 \\ -0.056}$	$\begin{array}{c} 5.939 \\ +0.261 \\ -0.079 \end{array}$
G+B	$^{+0.209}_{-0.123}$	$\substack{-2.176 \\ +0.002 \\ -0.030}$	$\substack{416.5 \\ +59.0 \\ -101.0}$	$^{+0.154}_{-0.103}$	$\substack{48.7 \\ +110.3 \\ -8.0}$	$\substack{0.365 \\ +0.240 \\ -11.574}$			-172.48/382.08/-201.67	$\substack{2.255 \\ +0.115 \\ -0.023}$	$\begin{array}{c} 4.171 \\ ^{+0.212} \\ ^{-0.043} \end{array}$	$\begin{array}{c} 5.857 \\ +0.298 \\ -0.061 \end{array}$
G	$^{+0.859}_{\substack{+0.030 \\ -0.026}}$	$^{+0.011}_{-0.013}$	$\begin{array}{c} 331.1 \\ ^{+17.3} \\ ^{-15.2} \end{array}$	$^{+0.015}_{-0.014}$					-176.74/378.22/-202.04	$\substack{2.333 \\ +0.042 \\ -0.032}$	$\begin{array}{c} 4.316 \\ ^{+0.078} \\ ^{-0.059} \end{array}$	$\substack{6.059 \\ +0.110 \\ -0.082}$
G+L	$^{+0.710}_{+0.104}_{-0.173}$	$^{+0.008}_{-0.014}$	$302.2 \\ ^{+44.8}_{-10.6}$	$^{+0.009}_{-0.042}$			$-2.370 \\ +1.481 \\ -1.033$	-3.299 $+1.500$ $-10.088$	-174.19/385.50/-202.27	$\substack{2.318 \\ +0.057 \\ -0.013}$	$\substack{4.288 \\ +0.106 \\ -0.025}$	$\substack{6.020 \\ +0.149 \\ -0.034}$
G+B+L	$^{+0.078}_{+0.050}_{-0.107}$	$^{+0.008}_{-0.014}$	$308.3 \\ ^{+39.0} _{-8.6}$	$^{+0.007}_{-0.035}$	$97.1 \\ ^{+70.0}_{-60.1}$	-0.614 $+2.445$ $-11.217$	$-2.575 \\ +1.744 \\ -0.779$	$-3.790 \\ +2.109 \\ -9.704$	-174.35/398.18/-202.40	$\substack{2.323 \\ +0.049 \\ -0.017}$	$\substack{4.297 \\ +0.091 \\ -0.031}$	$\substack{6.033 \\ +0.128 \\ -0.044}$
C+L	$^{+0.551}_{\substack{+0.038 \\ -0.098}}$		$\begin{array}{c} 322.6 \\ ^{+20.1} \\ ^{-7.9} \end{array}$	$^{+0.012}_{-0.021}$			$^{+0.023}_{-0.010}$	$^{+0.031}_{-0.069}$	-193.35/417.63/-220.97	$\substack{1.887 \\ +0.059 \\ -0.023}$	$3.490 \\ \substack{+0.110 \\ -0.043}$	$\substack{4.901 \\ +0.154 \\ -0.061}$
C+B+L	$\substack{-0.569 \\ +0.059 \\ -0.080}$		$\substack{326.1 \\ +17.7 \\ -11.0}$	$^{+0.014}_{-0.020}$	$\begin{array}{c} 44.7 \\ ^{+123.4} \\ ^{-10.6} \end{array}$	$^{+9.192}_{-0.191}$	$^{+0.024}_{-0.012}$	$-2.499 \\ +0.037 \\ -0.066$	-193.28/429.86/-221.10	$\substack{1.903 \\ +0.045 \\ -0.035}$	$\begin{array}{c} 3.520 \\ ^{+0.083} \\ ^{-0.064} \end{array}$	$\substack{4.942 \\ +0.116 \\ -0.090}$
C+B	$^{+0.010}_{-0.008}$		$\substack{6500.2 \\ +88.7 \\ -99.3}$	$^{+0.010}_{-0.007}$	$^{41.6}_{^{+1.3}}_{^{-1.2}}$	$0.656 \\ ^{+0.022}_{-0.017}$			-868.56/1768.06/-896.67	$\begin{array}{c} 3.028 \\ ^{+0.067} \\ ^{-0.036} \end{array}$	$\begin{array}{c} 5.600 \\ ^{+0.124} \\ ^{-0.067} \end{array}$	$\begin{array}{c} 7.862 \\ ^{+0.174} \\ ^{-0.094} \end{array}$
С	-1.351 $+0.007$ $-0.004$		$6484.4 \\ +44.0 \\ -68.3$	-1.713 $+0.003$ $-0.004$					-1173.98/2366.51/-1192.34	$3.784 \\ +0.049 \\ -0.037$	$\substack{6.998 \\ +0.090 \\ -0.069}$	$\begin{array}{c} 9.825 \\ ^{+0.127} \\ ^{-0.097} \end{array}$

Table 1. BXA Auto Runs fit results for bn131108862 using GBM + LAT data.

Model	$\alpha$	β	$E_{peak}$ (keV)	$A_1$	kT (keV)	$A_2$	Γ	$A_3$	$\log(\mathcal{L}) \ / \ \mathrm{BIC} \ / \ \mathcal{Z}$	$Flux \times 10^{-6}$ (erg s <sup>-1</sup> cm <sup>-2</sup> )	Fluence $\times 10^{-5}$ (erg cm <sup>-2</sup> )	$E_{iso} \times 10^{53}$ (erg)
S+B (v1)	-1.004 $+0.034$ $-0.013$	-2.149 $+0.038$ $-0.064$	$294.2 \\ +54.5 \\ -27.6$	$-1.640 \\ +0.039 \\ -0.025$	$\begin{array}{c} 81.5 \\ +84.6 \\ -43.6 \end{array}$	$\substack{0.438 \\ +2.161 \\ -12.294}$			-171.66/380.43/-197.68	$\substack{2.214 \\ +0.173 \\ -0.096}$	$\substack{4.094 \\ +0.321 \\ -0.177}$	$\begin{array}{c} 5.748 \\ ^{+0.450} \\ ^{-0.248} \end{array}$
S+B (v2)	$^{+0.029}_{+0.061}_{-0.015}$	$^{+0.010}_{-0.034}$	$326.4 \\ ^{+21.6}_{-2.7}$	$^{+0.029}_{-0.017}$	$\begin{array}{c} 97.0 \\ +73.1 \\ -62.8 \end{array}$	$0.163 \\ ^{+2.788} _{-12.245}$			-174.12/385.35/-197.76	$\substack{2.294 \\ +0.093 \\ -0.023}$	$\substack{4.243 \\ +0.173 \\ -0.043}$	$\begin{array}{c} 5.958 \\ +0.243 \\ -0.060 \end{array}$
S	$\begin{array}{c} -0.990 \\ +0.022 \\ -0.022 \end{array}$	$\substack{-2.205 \\ +0.015 \\ -0.009}$	$334.7 \\ ^{+13.4}_{-11.2}$	$^{+0.006}_{-0.006}$					-174.42/373.59/-198.36	$\substack{2.353 \\ +0.036 \\ -0.036}$	$\substack{4.352 \\ +0.066 \\ -0.067}$	$\substack{6.110 \\ +0.093 \\ -0.094}$
S+B+L	$\begin{array}{c} -0.967 \\ +0.000 \\ -0.046 \end{array}$	$\substack{-2.197 \\ +0.007 \\ -0.016}$	$327.8 \\ ^{+19.9}_{-4.2}$	$^{-1.607}_{\substack{+0.005 \\ -0.006}}$	$\begin{array}{c} 79.0 \\ ^{+90.2} \\ ^{-40.8} \end{array}$	-1.079 $+1.487$ $-10.941$	-3.133 $+2.360$ $-0.243$	-4.772 $+1.663$ $-8.935$	-173.82/397.13/-198.50	$\substack{2.341 \\ +0.048 \\ -0.022}$	$\substack{4.329 \\ +0.089 \\ -0.041}$	$\substack{6.079 \\ +0.126 \\ -0.057}$
S+L	-0.946 $+0.022$ $-0.067$	$\substack{-2.198 \\ +0.007 \\ -0.016}$	$326.1 \\ ^{+22.5}_{-2.6}$	$\begin{array}{c} -1.605 \\ +0.005 \\ -0.007 \end{array}$			-2.793 $+2.080$ $-0.558$	-4.187 $+2.253$ $-9.567$	-173.74/384.59/-199.06	$\substack{2.347 \\ +0.041 \\ -0.029}$	$\substack{4.340 \\ +0.077 \\ -0.053}$	$\substack{6.094 \\ +0.107 \\ -0.075}$
G+B (v2)	$\begin{array}{c} -0.977 \\ +0.144 \\ -0.077 \end{array}$	$\substack{-2.167 \\ +0.011 \\ -0.039}$	$344.1 \\ ^{+4.0}_{-29.8}$	$\begin{array}{c} -1.541 \\ +0.094 \\ -0.057 \end{array}$	$59.1 \\ ^{+103.3} _{-18.9}$	$\begin{array}{c} 0.321 \\ ^{+0.922} \\ ^{-11.864} \end{array}$			-172.80/382.71/-201.79	$\substack{2.226 \\ +0.146 \\ -0.059}$	$\substack{4.117 \\ +0.270 \\ -0.110}$	$\begin{array}{c} 5.780 \\ ^{+0.380} \\ ^{-0.154} \end{array}$
G	$\begin{array}{c} -0.860 \\ +0.028 \\ -0.026 \end{array}$	$\substack{-2.195 \\ +0.010 \\ -0.013}$	$\begin{array}{c} 330.8 \\ ^{+18.2} \\ ^{-14.0} \end{array}$	$^{+0.013}_{-0.016}$					-176.75/378.25/-202.00	$\substack{2.338 \\ +0.039 \\ -0.035}$	$\substack{4.325 \\ +0.072 \\ -0.065}$	$\substack{6.072 \\ +0.101 \\ -0.092}$
G+B (v1)	-0.977 $+0.146$ $-0.085$	$\substack{-2.163 \\ +0.019 \\ -0.043}$	$342.7 \\ \substack{+7.9 \\ -27.6}$	$^{+0.041}_{-0.060}$	$\begin{array}{c} 57.1 \\ ^{+108.3} \\ ^{-21.4} \end{array}$	$0.328 \\ ^{+1.938} _{-12.021}$			-173.04/383.20/-202.14	$\substack{2.230 \\ +0.146 \\ -0.068}$	$\begin{array}{c} 4.124 \\ +0.270 \\ -0.125 \end{array}$	$\begin{array}{c} 5.790 \\ +0.379 \\ -0.176 \end{array}$
G+B+L	$\substack{-0.888 \\ +0.062 \\ -0.003}$	$\substack{-2.141 \\ +0.043 \\ -0.067}$	$\substack{288.6 \\ +59.4 \\ -26.5}$	$^{+0.032}_{-0.002}$	$\begin{array}{c} 77.9 \\ +88.7 \\ -43.9 \end{array}$	$\substack{0.348 \\ +3.143 \\ -12.196}$	-2.039 $+1.207$ $-1.348$	$^{+6.308}_{-1.506}$	-174.41/398.31/-202.57	$\substack{2.226 \\ +0.149 \\ -0.077}$	$\begin{array}{c} 4.117 \\ +0.276 \\ -0.143 \end{array}$	$\begin{array}{c} 5.781 \\ ^{+0.388} \\ ^{-0.200} \end{array}$
G+L	$\begin{array}{c} -0.716 \\ +0.095 \\ -0.167 \end{array}$	$^{+0.008}_{-0.017}$	$308.5 \\ ^{+39.1}_{-2.3}$	$^{+0.001}_{-0.035}$			-2.232 $+1.303$ $-1.176$	$\substack{-3.231 \\ +1.450 \\ -10.158}$	-173.92/384.96/-202.58	$\substack{2.334 \\ +0.042 \\ -0.033}$	$\begin{array}{c} 4.317 \\ ^{+0.078} \\ ^{-0.060} \end{array}$	$\substack{6.061 \\ +0.109 \\ -0.084}$
C+L	$\begin{array}{c} -0.589 \\ +0.083 \\ -0.055 \end{array}$		$\begin{array}{c} 330.6 \\ ^{+12.0} \\ ^{-15.7} \end{array}$	$^{+0.019}_{-0.014}$			$^{+0.014}_{-0.020}$	$^{+0.058}_{-0.044}$	-193.35/417.64/-220.97	$\begin{array}{c} 1.909 \\ ^{+0.039} \\ ^{-0.044} \end{array}$	$\begin{array}{c} 3.531 \\ ^{+0.072} \\ ^{-0.082} \end{array}$	$\substack{4.957 \\ +0.101 \\ -0.115}$
C+B+L	-0.578 +0.068 -0.073		$330.2 \\ ^{+13.6}_{-15.2}$	-1.490 +0.024 -0.009	$27.4 \\ ^{+144.1}_{-7.7}$	-0.890 $+1.862$ $-11.153$	-1.777 $+0.014$ $-0.020$	-2.503 $+0.042$ $-0.062$	-192.77/428.84/-221.07	$\substack{1.907 \\ +0.042 \\ -0.039}$	$\begin{array}{c} 3.527 \\ ^{+0.077} \\ ^{-0.073} \end{array}$	$\substack{4.952 \\ +0.109 \\ -0.102}$

Table 2. BXA Original Runs fit results for bn131108862 using GBM + LAT data.

${ m bn131108862~XSPEC/Error~Command} \qquad { m GBM} + { m LAT}$												
Model	α	β	$E_{peak}$ (keV)	$A_1$	kT  (keV)	$A_2$	Γ	$A_3$	C-Stat / $\log(\mathcal{L})$ / AIC / BIC	$Flux \times 10^{-6}$ (erg s <sup>-1</sup> cm <sup>-2</sup> )	Fluence $\times 10^{-5}$ (erg cm <sup>-2</sup> )	$E_{iso} \times 10^{53}$ (erg)
S	$\begin{array}{c} -0.991 \\ +0.023 \\ -0.022 \end{array}$	$^{+0.011}_{-0.012}$	$335.0 \\ ^{+27.3}_{-24.7}$	$^{+0.006}_{-0.006}$					348.72/-174.36/356.72/373.46	$\substack{2.351 \\ +0.036 \\ -0.036}$	$\substack{4.349 \\ +0.066 \\ -0.066}$	$\substack{6.106 \\ +0.092 \\ -0.092}$
G	$\substack{-0.856 \\ +0.029 \\ -0.028}$	$\substack{-2.195 \\ +0.012 \\ -0.012}$	330.4	$^{+0.015}_{-0.015}$					353.44/-176.72/361.44/378.19	$\substack{2.336 \\ +0.038 \\ -0.038}$	$\substack{4.321 \\ +0.070 \\ -0.070}$	$\substack{6.067 \\ +0.099 \\ -0.099}$
S+B (v2)	$^{+0.032}_{\substack{+0.034 \\ -0.035}}$	$\substack{-2.141 \\ +0.026 \\ -0.028}$	$^{292.7}_{^{+76.3}}_{-57.9}$	$^{+0.020}_{-0.022}$	$\begin{array}{c} 82.9 \\ +9.8 \\ -10.6 \end{array}$	$\substack{0.527 \\ +0.137 \\ -0.231}$			342.08/-171.04/354.08/379.20	$\substack{2.196 \\ +0.074 \\ -0.074}$	$\substack{4.061 \\ +0.137 \\ -0.137}$	$\begin{array}{c} 5.702 \\ ^{+0.192} \\ ^{-0.192} \end{array}$
S+B (v1)	$\substack{-0.856 \\ +0.087 \\ -0.075}$	$\substack{-2.194 \\ +0.012 \\ -0.012}$	$311.1 \\ ^{+41.9} _{-36.1}$	$^{+0.000}_{+0.007}_{-0.007}$	$5.3 \\ ^{+1.1} _{-1.1}$	$\substack{-0.570 \\ +0.190 \\ -0.302}$			344.46/-172.23/356.46/381.57	$\substack{2.318 \\ +0.037 \\ -0.037}$	$\begin{array}{c} 4.288 \\ ^{+0.068} \\ ^{-0.068} \end{array}$	$\substack{6.020 \\ +0.096 \\ -0.096}$
G+B (v2)	$^{-1.022}_{+0.074}_{-0.066}$	$^{+0.020}_{-0.018}$	$403.3 \\ ^{+142.5}_{-111.9}$	$^{+0.059}_{-0.052}$	$^{49.8}_{^{+12.6}}_{^{-5.7}}$	$0.327 \\ ^{+0.118}_{-0.170}$			344.46/-172.23/356.46/381.57	$\substack{2.274 \\ +0.059 \\ -0.059}$	$\substack{4.206 \\ +0.109 \\ -0.109}$	$5.906 \\ +0.153 \\ -0.153$
G+B (v1)	$^{+0.665}_{\substack{+0.087 \\ -0.080}}$	$^{+0.012}_{-0.012}$	$287.0 \\ ^{+59.6}_{-48.6}$	$^{+0.031}_{-0.028}$	$\substack{4.7 \\ +0.8 \\ -0.8}$	-0.505 $+0.133$ $-0.187$			344.63/-172.32/356.63/381.75	$\substack{2.291 \\ +0.038 \\ -0.038}$	$\substack{4.237 \\ +0.070 \\ -0.070}$	$\substack{5.949 \\ +0.098 \\ -0.098}$
S+L	$^{+0.859}_{+0.097}_{-0.090}$	-2.239 $+0.044$ $-0.045$	$\substack{309.5 \\ +60.0 \\ -47.7}$	$^{+0.008}_{-0.013}$			$^{+0.087}_{-0.290}$	-2.869 $+0.175$ $-0.357$	345.73/-172.87/357.73/382.85	$\substack{2.322 \\ +0.042 \\ -0.042}$	$\substack{4.296 \\ +0.077 \\ -0.077}$	$\substack{6.031 \\ +0.108 \\ -0.108}$
G+L	$^{+0.620}_{\substack{+0.107 \\ -0.097}}$	-2.233 $+0.048$ $-0.051$	$^{295.7}_{^{+67.3}}_{-55.0}$	$^{+0.028}_{-0.023}$			-1.897 $+0.062$ $-0.281$	$\substack{-2.746 \\ +0.125 \\ -0.351}$	346.22/-173.11/358.22/383.34	$\substack{2.300 \\ +0.043 \\ -0.043}$	$\substack{4.255 \\ +0.079 \\ -0.079}$	$\substack{5.973 \\ +0.111 \\ -0.111}$
S+B+L	$^{+0.720}_{+NA}_{-NA}$	$^{-2.220}_{\stackrel{+NA}{-NA}}$	$^{296.2}_{^{+NA}}_{^{-NA}}$	$^{-1.622}_{\substack{+NA \ -NA}}$	$7.0 \atop \substack{+NA \\ -NA}$	$^{+0.568}_{-NA}$	$^{-1.897}_{\stackrel{+NA}{-NA}}$	$^{-2.919}_{\stackrel{+NA}{-NA}}$	343.36/-171.68/359.36/392.85	$\substack{2.306 \\ +0.096 \\ -0.096}$	$\substack{4.265 \\ +0.178 \\ -0.178}$	$\begin{array}{c} 5.988 \\ +0.250 \\ -0.250 \end{array}$
G+B+L	$^{+0.595}_{-NA}$	$^{-2.214}_{\stackrel{+NA}{-NA}}$	$^{284.9}_{^{+NA}}_{^{-NA}}$	$^{+NA}_{-NA}$	$\begin{array}{c} 5.5 \\ ^{+NA} \\ ^{-NA} \end{array}$	$^{+0.652}_{-NA}$	$^{-1.876}_{\substack{+NA \ -NA}}$	$^{-3.002}_{\stackrel{+NA}{-NA}}$	343.81/-171.90/359.81/393.30	$\substack{2.287 \\ +0.121 \\ -0.121}$	$\substack{4.230 \\ +0.224 \\ -0.224}$	$5.939 \\ \substack{+0.314 \\ -0.314}$
C+L	$-0.570 \\ +0.073 \\ -0.068$		$326.7 \\ ^{+47.8} _{-41.2}$	$^{+0.009}_{-0.012}$			$^{+0.018}_{-0.016}$	$^{+0.046}_{-0.054}$	386.50/-193.25/396.50/417.44	$\substack{1.902 \\ +0.043 \\ -0.043}$	$\begin{array}{c} 3.517 \\ ^{+0.080} \\ ^{-0.080} \end{array}$	$\substack{4.939 \\ +0.113 \\ -0.113}$
C+B+L	$\begin{array}{c} -0.551 \\ +0.163 \\ -0.123 \end{array}$		$394.5 \\ ^{+124.7}_{-88.5}$	$^{+0.014}_{-0.001}$	$30.9 \\ ^{+2.5}_{-4.5}$	$0.130 \\ ^{+0.141}_{-0.195}$	$^{-1.808}_{+0.018}_{-0.017}$	$^{+0.051}_{-0.055}$	377.59/-188.80/391.59/420.90	$2.003 \atop +0.065 \atop -0.065$	$\substack{3.704 \\ +0.121 \\ -0.121}$	$\begin{array}{c} 5.201 \\ ^{+0.170} \\ ^{-0.170} \end{array}$
C+B	$^{+0.046}_{+0.061}$		$\substack{480.2 \\ +143.4 \\ -102.6}$	-1.607 $+0.043$ $-0.044$	$\substack{45.3 \\ +5.3 \\ -4.6}$	$0.287 \\ ^{+0.133}_{-0.199}$			2386.48/-1193.24/2396.48/2417.41	$\substack{2.047 \\ +0.087 \\ -0.087}$	$\begin{array}{c} 3.786 \\ ^{+0.160} \\ ^{-0.160} \end{array}$	$\begin{array}{c} 5.315 \\ +0.225 \\ -0.225 \end{array}$

Table 3. XSPEC fit results for bn131108862 using GBM + LAT data and errors from the Error command.