Model	α	β	E_{peak} (keV)	A_1	kT (keV)	A_2	Γ	A_3	$\log(\mathcal{L}) \; / \; \mathrm{BIC} \; / \; \mathcal{Z}$	$Flux \times 10^{-6}$ $(erg s^{-1}cm^{-2})$	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{53}$ (erg)
G+B	$^{+0.008}_{-0.014}$	-2.682 $+0.037$ -0.046	$^{182.1}_{^{+11.0}}_{^{-4.4}}$	$^{+0.918}_{+0.006}_{-0.013}$	$161.7 \\ ^{+26.6}_{-9.2}$	$\substack{0.780 \\ +0.054 \\ -0.110}$			-348.99/735.02/-382.61	$\begin{array}{c} 5.318 \\ ^{+0.072} \\ ^{-0.036} \end{array}$	$\substack{1.661 \\ +0.022 \\ -0.011}$	$\substack{1.825 \\ +0.025 \\ -0.012}$
G+B+L	$^{+0.003}_{-0.013}$	$-2.693 \\ +0.048 \\ -0.011$	$^{+8.5}_{-1.3}$	$\substack{-0.932 \\ +0.002 \\ -0.010}$	$187.8 \\ ^{+4.3}_{-19.9}$	$0.688 \\ \substack{+0.034 \\ -0.214}$	$\substack{-2.677 \\ +2.031 \\ -0.528}$	$\substack{-12.967 \\ +3.687 \\ -0.735}$	-349.88/749.16/-387.48	$\begin{array}{c} 5.367 \\ +0.032 \\ -0.044 \end{array}$	$\substack{1.676 \\ +0.010 \\ -0.014}$	$\substack{1.842 \\ +0.011 \\ -0.015}$
G	$^{+0.008}_{-0.007}$	$\substack{-2.661 \\ +0.027 \\ -0.042}$	${}^{+3.9}_{-3.4}$	$\begin{array}{c} -0.955 \\ +0.005 \\ -0.005 \end{array}$					-363.14/750.98/-390.94	$\begin{array}{c} 5.332 \\ ^{+0.034} \\ ^{-0.056} \end{array}$	$\substack{1.665 \\ +0.011 \\ -0.017}$	$\substack{1.830 \\ +0.012 \\ -0.019}$
G+L	$^{-1.231}_{^{+0.004}}_{^{-0.010}}$	$\substack{-2.676 \\ +0.041 \\ -0.028}$	${}^{+4.3}_{-3.0}$	-0.954 $+0.004$ -0.006			-0.498 +0.162 -2.815	-9.069 $+1.933$ -4.626	-362.76/762.57/-391.58	$\substack{5.303 \\ +0.066 \\ -0.028}$	$\substack{1.656 \\ +0.020 \\ -0.009}$	$\substack{1.820 \\ +0.023 \\ -0.010}$
C+B+L	$^{-1.182}_{\substack{+0.010 \\ -0.011}}$		$176.7 \\ ^{+4.5}_{-4.9}$	$\begin{array}{c} -0.912 \\ +0.009 \\ -0.007 \end{array}$	$^{198.7}_{^{+0.3}}_{^{-9.6}}$	$\substack{1.074 \\ +0.022 \\ -0.049}$	-1.783 $+0.245$ -0.012	$-3.435 \\ +0.018 \\ -0.845$	-354.66/752.53/-392.22	$\begin{array}{c} 5.019 \\ +0.004 \\ -0.078 \end{array}$	$\substack{1.567 \\ +0.001 \\ -0.024}$	$\substack{1.722 \\ +0.001 \\ -0.027}$
S+B	$\substack{-1.330 \\ +0.007 \\ -0.007}$	$\substack{-2.650 \\ +0.023 \\ -0.048}$	$^{+6.6}_{-3.9}$	$^{+0.004}_{-0.002}$	$142.6 \\ ^{+18.9}_{-9.5}$	$0.855 \\\substack{+0.044 \\ -0.070}$			-360.86/758.76/-392.92	$\substack{5.343 \\ +0.045 \\ -0.066}$	$\substack{1.669 \\ +0.014 \\ -0.021}$	$\substack{1.834 \\ +0.015 \\ -0.023}$
S+B+L	$^{-1.326}_{+0.003}_{-0.010}$	$\substack{-2.644 \\ +0.016 \\ -0.057}$	$152.0 \\ ^{+8.6}_{-1.7}$	$\begin{array}{c} -1.106 \\ +0.004 \\ -0.002 \end{array}$	$^{140.5}_{^{+21.3}}_{^{-6.1}}$	$0.863 \\ \substack{+0.035 \\ -0.077}$	-0.398 +0.212 -2.916	-9.092 $+1.911$ -4.511	-360.45/770.29/-393.53	$\begin{array}{c} 5.336 \\ +0.052 \\ -0.060 \end{array}$	$\substack{1.666 \\ +0.016 \\ -0.019}$	$\substack{1.831 \\ +0.018 \\ -0.021}$
C+B	$^{+0.011}_{-0.009}$		$^{+3.6}_{+3.8}_{-5.7}$	$\substack{-0.909 \\ +0.009 \\ -0.007}$	$^{+0.7}_{-9.9}$	$\substack{1.083 \\ +0.034 \\ -0.040}$			-369.15/769.18/-399.12	$\begin{array}{c} 5.002 \\ ^{+0.019} \\ ^{-0.064} \end{array}$	$\substack{1.562 \\ +0.006 \\ -0.020}$	$1.717 \\ ^{+0.006} _{-0.022}$
S	$^{+0.005}_{-0.007}$	$^{+0.020}_{-0.027}$	$^{+3.5}_{-2.1}$	$^{+0.007}_{-0.002}$					-388.47/801.63/-414.31	$\begin{array}{c} 5.390 \\ ^{+0.042} \\ ^{-0.044} \end{array}$	$\substack{1.683 \\ ^{+0.013} \\ -0.014}$	$\substack{1.850 \\ +0.015 \\ -0.015}$
S+L	$^{+0.008}_{-0.003}$	$^{+0.020}_{-0.028}$	$^{+1.7}_{-3.6}$	-1.098 +0.002 -0.001			-0.260 $+0.366$ -3.063	$^{-10.249}_{^{+2.889}}_{^{-3.484}}$	-388.44/813.93/-414.41	$\substack{5.405 \\ +0.027 \\ -0.059}$	$\substack{1.688 \\ +0.008 \\ -0.018}$	$\substack{1.855 \\ +0.009 \\ -0.020}$
C+L	$^{+0.005}_{-0.009}$		$^{+3.9}_{-2.7}$	$-0.975 \\ +0.004 \\ -0.004$			-1.789 $+0.219$ -0.032	-3.413 $+0.115$ -0.719	-396.20/823.26/-423.75	$\substack{4.755 \\ +0.033 \\ -0.028}$	$\substack{1.485 \\ +0.010 \\ -0.009}$	$\substack{1.632 \\ +0.011 \\ -0.010}$
С	-1.258 +0.006 -0.007		$240.3 \\ {}^{+3.5}_{-3.1}$	-0.974 $+0.004$ -0.004					-410.96/840.43/-432.19	$\substack{4.743 \\ +0.031 \\ -0.028}$	$\substack{1.481 \\ +0.010 \\ -0.009}$	$\substack{1.628 \\ +0.011 \\ -0.010}$

Table 1. BXA Auto Runs fit results for bn131231198 using GBM + LAT data.

Model	α	β	E_{peak} (keV)	A_1	kT (keV)	A_2	Γ	A_3	$\log(\mathcal{L}) \; / \; \mathrm{BIC} \; / \; \mathcal{Z}$	$Flux \times 10^{-6}$ $(erg s^{-1}cm^{-2})$	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{53}$ (erg)
G+B	$^{+0.011}_{-0.012}$	$^{+0.033}_{-0.053}$	$^{+9.1}_{-6.6}$	$^{+0.920}_{\substack{+0.009 \\ -0.010}}$	$164.7 \\ ^{+24.6}_{-14.2}$	$\substack{0.779 \\ +0.062 \\ -0.102}$			-349.03/735.10/-382.70	$\begin{array}{c} 5.341 \\ ^{+0.052} \\ ^{-0.062} \end{array}$	$\substack{1.668 \\ +0.016 \\ -0.019}$	$\substack{1.833 \\ +0.018 \\ -0.021}$
G+B+L	$^{-1.191}_{\substack{+0.005 \\ -0.016}}$	$\begin{array}{c} -2.672 \\ +0.025 \\ -0.052 \end{array}$	$^{+9.2}_{-5.3}$	-0.918 $+0.004$ -0.013	$171.4 \\ ^{+16.6}_{-19.7}$	$0.762 \\ ^{+0.065}_{-0.086}$	$0.040 \\ ^{+0.585}_{-3.104}$	$\begin{array}{c} -11.695 \\ +4.691 \\ -1.627 \end{array}$	-348.69/746.78/-383.55	$\begin{array}{c} 5.344 \\ +0.042 \\ -0.059 \end{array}$	$\substack{1.669 \\ +0.013 \\ -0.019}$	$\substack{1.834 \\ +0.014 \\ -0.020}$
G	$\substack{-1.233 \\ +0.006 \\ -0.008}$	$\substack{-2.664 \\ +0.030 \\ -0.038}$	${}^{+4.2}_{-2.9}$	$\substack{-0.955 \\ +0.005 \\ -0.005}$					-363.13/750.95/-390.96	$\begin{array}{c} 5.319 \\ ^{+0.050} _{-0.043} \end{array}$	$\substack{1.661 \\ +0.016 \\ -0.013}$	$\substack{1.825 \\ +0.017 \\ -0.015}$
C+B+L	$^{-1.180}_{\substack{+0.014 \\ -0.008}}$		$176.5 \\ ^{+2.6}_{-6.5}$	$\substack{-0.911 \\ +0.010 \\ -0.006}$	$199.9 \\ ^{+1.2}_{-10.2}$	$\substack{1.070 \\ +0.042 \\ -0.029}$	$\begin{array}{c} -1.741 \\ +0.157 \\ -0.125 \end{array}$	$-3.496 \\ +0.306 \\ -0.586$	-354.59/752.39/-391.12	$\begin{array}{c} 5.008 \\ +0.028 \\ -0.053 \end{array}$	$\substack{1.564 \\ +0.009 \\ -0.017}$	$\substack{1.719 \\ +0.009 \\ -0.018}$
G+L	$^{+0.008}_{-0.006}$	$\substack{-2.666 \\ +0.031 \\ -0.038}$	$^{+3.6}_{-3.6}$	$\begin{array}{c} -0.956 \\ +0.005 \\ -0.005 \end{array}$			$0.095 \\ ^{+0.767}_{-3.439}$	$\begin{array}{c} -11.513 \\ +4.222 \\ -2.169 \end{array}$	-362.95/762.94/-391.95	$\begin{array}{c} 5.323 \\ +0.044 \\ -0.049 \end{array}$	$\substack{1.662 \\ +0.014 \\ -0.015}$	$\substack{1.827 \\ +0.015 \\ -0.017}$
S+B	$\substack{-1.328 \\ +0.005 \\ -0.009}$	$\begin{array}{c} -2.653 \\ +0.024 \\ -0.047 \end{array}$	$^{+8.3}_{-2.9}$	$\substack{-1.107 \\ +0.005 \\ -0.001}$	$^{140.3}_{^{+22.2}}_{^{-7.0}}$	$0.869 \\ \substack{+0.032 \\ -0.087}$			-360.86/758.77/-392.62	$\begin{array}{c} 5.326 \\ ^{+0.064} \\ ^{-0.052} \end{array}$	$\substack{1.663 \\ +0.020 \\ -0.016}$	$\substack{1.828 \\ +0.022 \\ -0.018}$
S+B+L	$^{+0.004}_{-0.010}$	$^{+0.038}_{-0.035}$	$^{149.3}_{^{+11.6}}_{^{-0.9}}$	$^{+0.006}_{-0.000}$	$136.1 \\ ^{+26.2}_{-2.2}$	$0.897 \\ \substack{+0.002 \\ -0.115}$	$\begin{array}{c} -0.871 \\ +0.237 \\ -2.398 \end{array}$	-8.252 $+1.103$ -5.317	-360.82/771.02/-393.83	$\begin{array}{c} 5.287 \\ +0.103 \\ -0.012 \end{array}$	$\substack{1.651 \\ +0.032 \\ -0.004}$	$\substack{1.814 \\ +0.035 \\ -0.004}$
C+B	$^{+0.012}_{-0.007}$		$^{+3.6}_{-5.5}$	$^{+0.910}_{\substack{+0.010 \\ -0.006}}$	${}^{+1.2}_{-10.1}$	$\substack{1.084 \\ +0.033 \\ -0.038}$			-369.20/769.28/-399.16	$\substack{4.996 \\ +0.026 \\ -0.057}$	$\substack{1.560 \\ +0.008 \\ -0.018}$	$\substack{1.715 \\ +0.009 \\ -0.020}$
S	$^{+0.006}_{-0.005}$	$\substack{-2.602 \\ +0.021 \\ -0.027}$	$^{+2.3}_{-2.9}$	$^{+0.007}_{\substack{+0.002 \\ -0.002}}$					-388.45/801.59/-415.32	$\begin{array}{c} 5.396 \\ ^{+0.036} \\ ^{-0.048} \end{array}$	$\substack{1.685 \\ +0.011 \\ -0.015}$	$\substack{1.852 \\ +0.012 \\ -0.017}$
S+L	$^{+0.007}_{-0.005}$	$^{+0.031}_{-0.018}$	$^{+1.5}_{-3.8}$	$^{+0.007}_{+0.002}_{-0.002}$			$\begin{array}{c} -0.716 \\ +0.005 \\ -2.580 \end{array}$	-8.359 $+1.131$ -5.408	-388.41/813.86/-416.54	$\begin{array}{c} 5.392 \\ ^{+0.040} \\ ^{-0.046} \end{array}$	$\substack{1.684 \\ +0.013 \\ -0.014}$	$\substack{1.850 \\ +0.014 \\ -0.016}$
C+L	$^{+0.006}_{-0.008}$		$^{+3.1}_{-3.4}$	-0.976 $+0.005$ -0.003			$^{+0.210}_{-0.049}$	$\substack{-3.427 \\ +0.121 \\ -0.727}$	-396.16/823.19/-424.07	$\substack{4.763 \\ +0.024 \\ -0.034}$	$\substack{1.487 \\ +0.007 \\ -0.010}$	$\substack{1.635 \\ +0.008 \\ -0.012}$
С	-1.258 +0.006 -0.006		$240.5 \\ {}^{+3.3}_{-3.6}$	-0.974 $+0.004$ -0.004					-410.96/840.44/-432.18	$\substack{4.745 \\ +0.030 \\ -0.032}$	$\substack{1.482 \\ +0.009 \\ -0.010}$	$\substack{1.628 \\ +0.010 \\ -0.011}$

Table 2. BXA Original Runs fit results for bn131231198 using GBM + LAT data.

					bn131231198 XSPEC/Error Command $GBM + LAT$								
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 ⁻¹ cm ⁻²)	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{53}$ (erg)	
S+B	$^{+0.017}_{-0.016}$	-2.597 $+0.023$ -0.024	$186.2 \\ ^{+10.1}_{-9.6}$	-1.100 $+0.003$ -0.003	$7.0 \\ ^{+0.3} _{-0.3}$	$0.226 \\ ^{+0.041}_{-0.045}$			666.92/-333.46/678.92/703.97	$5.373 \\ ^{+NA}_{-NA}$	$1.678 \\ {}^{+NA}_{-NA}$	$1.844 \\ {+NA} \\ {-NA}$	
G+B	$^{+0.021}_{-0.020}$	-2.639 $+0.031$ -0.031	$^{213.5}_{^{+13.6}}_{^{-12.9}}$	$^{+0.928}_{+0.009}_{-0.008}$	$\substack{6.2 \\ +0.3 \\ -0.3}$	$0.085 \\ ^{+0.054} _{-0.065}$			670.24/-335.12/682.24/707.29	$5.302 \\ ^{+NA} _{-NA}$	$1.656 \\ {}^{+NA}_{-NA}$	$1.819 \\ {+NA} \\ {-NA}$	
S+B+L	$^{-1.241}_{\stackrel{+NA}{-NA}}$	$^{-2.599}_{\stackrel{+NA}{-NA}}$	$_{-NA}^{186.3}$	$^{-1.100}_{\substack{+NA \ -NA}}$	$7.0 \\ \substack{+NA \\ -NA}$	$0.226 \\ ^{+NA}_{-NA}$	$^{+0.439}_{-NA}$	$^{+0.522}_{-NA}$	666.49/-333.24/682.49/715.88	$5.369 \\ {}^{+NA}_{-NA}$	$1.677 \\ {}^{+NA}_{-NA}$	$^{+NA}_{-NA}$	
G+B+L	$^{+1.135}_{\stackrel{+NA}{-NA}}$	$^{-2.636}_{\stackrel{+NA}{-NA}}$	$\begin{array}{c} 213.6 \\ ^{+NA} \\ ^{-NA} \end{array}$	$^{+0.930}_{+NA}_{-NA}$	$\begin{array}{c} 6.2 \\ {}^{+NA} \\ {}^{-NA} \end{array}$	$\begin{array}{c} 0.053 \\ ^{+NA} \\ ^{-NA} \end{array}$	$^{-1.343}_{\substack{+NA \ -NA}}$	$^{+8.724}_{-NA}_{-NA}$	670.60/-335.30/686.60/719.99	$5.310 \\ ^{+NA}_{-NA}$	$1.659 \\ {}^{+NA}_{-NA}$	$1.822 \atop \substack{+NA \\ -NA}$	
G	$^{+0.007}_{-0.007}$	-2.663 $+0.032$ -0.034	$^{+7.6}_{-7.4}$	$^{+0.955}_{\substack{+0.005 \\ -0.005}}$					726.21/-363.11/734.21/750.91	$\begin{array}{c} 5.325 \\ ^{+0.047} \\ ^{-0.047} \end{array}$	$\substack{1.663 \\ +0.015 \\ -0.015}$	$\substack{1.828 \\ +0.016 \\ -0.016}$	
G+L	$^{+0.007}_{-0.007}$	$^{+0.033}_{-0.036}$	$^{+7.6}_{-7.3}$	$\substack{-0.955 \\ +0.005 \\ -0.005}$			$\substack{-0.425 \\ +0.066 \\ -0.968}$	$-9.352 \\ +3.327 \\ -NA$	725.06/-362.53/737.06/762.10	$\begin{array}{c} 5.318 \\ ^{+0.049} \\ ^{-0.049} \end{array}$	$\substack{1.661 \\ +0.015 \\ -0.015}$	$\substack{1.825 \\ +0.017 \\ -0.017}$	
C+B+L	$^{+0.017}_{-0.012}$		$^{240.6}_{^{+11.5}}_{^{-11.1}}$	-0.969 $+0.003$ -0.003	$7.3 \\ ^{+0.4}_{-0.4}$	$^{+0.031}_{\substack{+0.069 \\ -0.069}}$	$^{+0.109}_{-0.089}$	$-3.361 \\ +0.279 \\ -6.639$	754.60/-377.30/768.60/797.81	$\begin{array}{c} 4.731 \\ {}^{+NA} \\ {}^{-NA} \end{array}$	$1.478 \\ {}^{+NA}_{-NA}$	$^{+NA}_{-NA}$	
S	$^{+0.006}_{-0.006}$	$^{+0.023}_{-0.025}$	$^{+8.7}_{+8.1}_{-7.7}$	$^{+0.007}_{\substack{+0.002 \\ -0.002}}$					776.86/-388.43/784.86/801.55	$\begin{array}{c} 5.391 \\ ^{+0.047} \\ ^{-0.047} \end{array}$	$\substack{1.684 \\ +0.015 \\ -0.015}$	$\substack{1.850 \\ +0.016 \\ -0.016}$	
S+L	$^{+NA}_{-NA}$	$^{-2.606}_{\stackrel{+NA}{-NA}}$	$188.8 \\ ^{+NA}_{-NA}$	$^{-1.097}_{\substack{+NA \ -NA}}$			$^{+0.445}_{-NA}$	$^{+0.481}_{-NA}$	776.38/-388.19/788.38/813.42	$\begin{array}{c} 5.387 \\ +0.048 \\ -0.048 \end{array}$	$\substack{1.682 \\ +0.015 \\ -0.015}$	$\substack{1.849 \\ +0.017 \\ -0.017}$	
С+В	$^{+0.014}_{-0.013}$		$^{241.5}_{^{+10.9}}_{^{-10.4}}$	-0.968 +0.004 -0.004	$7.3 \\ ^{+0.5}_{-0.5}$	$^{+0.029}_{\substack{+0.067 \\ -0.079}}$			784.89/-392.44/794.89/815.76	$\begin{array}{c} 4.712 \\ {}^{+NA} \\ {}^{-NA} \end{array}$	$1.472 \\ ^{+NA}_{-NA}$	$1.617 \\ \substack{+NA \\ -NA}$	
C+L	$^{+0.007}_{-0.007}$		$^{+7.8}_{-7.2}$	$^{+0.975}_{+0.003}_{-0.002}$			$^{+0.120}_{-0.078}$	$-3.435 \\ +0.248 \\ -6.565$	792.22/-396.11/802.22/823.08	$\substack{4.759 \\ +0.119 \\ -0.119}$	$\substack{1.486 \\ +0.037 \\ -0.037}$	$1.633 \\ ^{+0.041}_{-0.041}$	
С	-1.258 +0.006 -0.006		$^{+7.2}_{-6.9}$	-0.974 +0.004 -0.004					821.91/-410.95/827.91/840.43	$\substack{4.743 \\ +0.029 \\ -0.029}$	$\substack{1.481 \\ +0.009 \\ -0.009}$	$\substack{1.628 \\ +0.010 \\ -0.010}$	

Table 3. XSPEC fit results for bn131231198 using GBM + LAT data and errors from the Error command.