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)	$E_{iso} \times 10^{54}$ (erg)
S+B	$^{-1.164}_{+0.034}$ $^{-0.016}$	-2.777 $+0.054$ -0.045	$561.3 \\ +33.7 \\ -64.1$	-1.733 $+0.023$ -0.011	$34.7 \\ ^{+2.4} _{-1.7}$	$0.326 \\ ^{+0.062} _{-0.082}$			-148.10/331.59/-177.79	$\substack{2.516 \\ +0.045 \\ -0.074}$	$\substack{1.222 \\ +0.022 \\ -0.036}$	$\substack{1.829 \\ +0.033 \\ -0.054}$
S+B+L	$\substack{-0.981 \\ +0.021 \\ -0.011}$	$\substack{-2.569 \\ +0.039 \\ -0.026}$	$^{223.6}_{^{+19.0}}_{^{-6.4}}$	$^{+0.010}_{-0.001}$	$172.5 \\ ^{+20.8}_{-5.4}$	$0.909 \\ ^{+0.026}_{-0.078}$	$\substack{0.295 \\ +1.050 \\ -3.634}$	$^{+5.893}_{-0.758}$	-151.24/349.68/-181.42	$\substack{2.344 \\ +0.066 \\ -0.027}$	$\substack{1.138 \\ +0.032 \\ -0.013}$	$\substack{1.704 \\ +0.048 \\ -0.020}$
G+B	-0.992 $+0.084$ -0.003	$\substack{-2.717 \\ +0.041 \\ -0.037}$	$\begin{array}{c} 533.3 \\ +5.9 \\ -105.2 \end{array}$	$^{+0.087}_{-0.009}$	$36.9 \\ ^{+37.4}_{-4.6}$	$0.077 \\ \substack{+0.057 \\ -5.775}$			-150.40/336.20/-183.74	$\substack{2.436 \\ +0.019 \\ -0.081}$	$1.183 \\ \substack{+0.009 \\ -0.040}$	$\substack{1.771 \\ +0.014 \\ -0.059}$
G+B+L	-0.982 $+0.082$ -0.003	$\substack{-2.731 \\ +0.062 \\ -0.015}$	$\begin{array}{c} 522.9 \\ ^{+9.8} \\ ^{-102.6} \end{array}$	$\begin{array}{c} -1.579 \\ +0.081 \\ -0.007 \end{array}$	$33.8 \\ +83.0 \\ -1.6$	$0.009 \\ ^{+0.029} _{-8.689}$	$\begin{array}{c} 0.192 \\ ^{+0.798} \\ ^{-3.340} \end{array}$	$\begin{array}{c} -11.905 \\ +4.382 \\ -1.614 \end{array}$	-149.91/347.02/-184.95	$\substack{2.430 \\ +0.007 \\ -0.095}$	$\begin{array}{c} 1.180 \\ +0.003 \\ -0.046 \end{array}$	$\substack{1.767 \\ +0.005 \\ -0.069}$
G	-0.903 $+0.017$ -0.016	-2.686 $+0.035$ -0.043	$\begin{array}{c} 423.4 \\ ^{+15.8} \\ ^{-15.3} \end{array}$	$^{+0.009}_{-0.009}$					-161.22/346.03/-186.12	$\substack{2.347 \\ +0.040 \\ -0.039}$	$\substack{1.140 \\ +0.019 \\ -0.019}$	$\substack{1.706 \\ +0.029 \\ -0.029}$
G+L	$\substack{-0.907 \\ +0.021 \\ -0.012}$	$\substack{-2.733 \\ +0.080 \\ -0.004}$	$\substack{427.0 \\ +12.0 \\ -18.6}$	$^{+0.010}_{-0.008}$			$0.261 \\ ^{+0.821}_{-3.611}$	$^{+5.260}_{-1.356}$	-160.48/356.37/-186.57	$\substack{2.345 \\ +0.040 \\ -0.037}$	$\begin{array}{c} 1.139 \\ ^{+0.019} \\ ^{-0.018} \end{array}$	$\substack{1.705 \\ +0.029 \\ -0.027}$
C+B+L	$^{-1.026}_{+0.047}_{-0.009}$		$608.6 \\ ^{+25.0}_{-80.4}$	$\begin{array}{c} -1.616 \\ +0.042 \\ -0.010 \end{array}$	$35.5 \\ ^{+2.7}_{-2.0}$	$0.164 \\ ^{+0.010}_{-0.205}$	$\begin{array}{c} 0.519 \\ ^{+0.232} \\ ^{-0.104} \end{array}$	$^{+0.526}_{-1.371}$	-159.01/359.32/-193.11	$\substack{2.432 \\ +0.027 \\ -0.123}$	$\begin{array}{c} 1.182 \\ ^{+0.013} \\ ^{-0.060} \end{array}$	$\substack{1.769 \\ +0.019 \\ -0.090}$
S	$^{+0.012}_{+0.013}_{-0.013}$	$-2.640 \\ +0.025 \\ -0.039$	$336.9 \\ ^{+10.9} _{-8.3}$	$^{+0.003}_{-0.005}$					-170.70/364.99/-193.32	$\substack{2.285 \\ +0.033 \\ -0.034}$	$\begin{array}{c} 1.110 \\ ^{+0.016} \\ ^{-0.016} \end{array}$	$\substack{1.662 \\ +0.024 \\ -0.024}$
S+L	$^{+0.013}_{\substack{+0.015 \\ -0.011}}$	$\substack{-2.641 \\ +0.027 \\ -0.037}$	$\substack{ 340.7 \\ +7.4 \\ -12.9 }$	$^{+0.005}_{-0.003}$			$\substack{-0.084 \\ +0.549 \\ -3.285}$	$^{+3.582}_{-2.843}$	-170.41/376.22/-193.89	$\substack{2.293 \\ +0.024 \\ -0.044}$	$\begin{array}{c} 1.114 \\ ^{+0.012} \\ ^{-0.021} \end{array}$	$\substack{1.668 \\ +0.017 \\ -0.032}$
C+L	$^{+0.083}_{+0.009}_{-0.039}$		$\begin{array}{c} 437.1 \\ ^{+21.4} \\ ^{-9.8} \end{array}$	$^{+0.009}_{-0.009}$			$^{-1.818}_{\substack{+2.245 \\ -0.029}}$	$-3.416 \\ +0.056 \\ -9.053$	-172.17/373.84/-197.57	$\substack{2.186 \\ +0.054 \\ -0.036}$	$\substack{1.062 \\ +0.026 \\ -0.018}$	$\substack{1.590 \\ +0.039 \\ -0.026}$
С+В	$^{-1.060}_{\substack{+0.034 \\ -0.032}}$		$\begin{array}{c} 663.5 \\ +69.4 \\ -65.8 \end{array}$	$^{+0.028}_{-0.022}$	$37.6 \\ ^{+2.4}_{-2.3}$	$\substack{0.265 \\ +0.065 \\ -0.118}$			-180.62/390.73/-205.77	$2.493 \atop \substack{+0.087 \\ -0.089}$	$\begin{array}{c} 1.211 \\ ^{+0.042} \\ ^{-0.043} \end{array}$	$\substack{1.812 \\ +0.063 \\ -0.065}$
С	-0.917 $+0.016$ -0.016		$447.8 \\ ^{+16.1}_{-14.9}$	-1.509 $+0.008$ -0.008					-196.85/411.41/-215.27	$\substack{2.202 \\ +0.047 \\ -0.046}$	$1.070 \\ \substack{+0.023 \\ -0.023}$	$\substack{1.601 \\ +0.034 \\ -0.034}$

Table 1. BXA Auto Runs fit results for bn130518580 using GBM + LAT data.

Model	α	β	E_{peak} (keV)	A_1	kT (keV)	A_2	Γ	A_3	$\log(\mathcal{L})$ / BIC / \mathcal{Z}	$Flux \times 10^{-6}$ $(erg s^{-1}cm^{-2})$	Fluence $\times 10^{-4}$ (erg cm ⁻²)	$E_{iso} \times 10^{54}$ (erg)
S+B	-1.164 $+0.036$ -0.014	-2.763 $+0.043$ -0.059	$560.5 \\ +32.9 \\ -64.4$	$^{+0.025}_{-0.009}$	$35.7 \\ ^{+1.3} _{-2.8}$	$0.342 \\ ^{+0.044} _{-0.100}$			-148.12/331.64/-177.85	$\substack{2.515 \\ +0.047 \\ -0.075}$	$\substack{1.222 \\ +0.023 \\ -0.036}$	$\substack{1.829 \\ +0.034 \\ -0.054}$
S+B+L	$\substack{-0.977 \\ +0.019 \\ -0.015}$	$\substack{-2.564 \\ +0.035 \\ -0.031}$	$^{+21.1}_{-5.0}$	$^{+0.009}_{-0.002}$	$172.0 \\ ^{+21.0}_{-4.7}$	$0.915 \\ ^{+0.021}_{-0.083}$	$0.022 \\ ^{+0.741}_{-3.390}$	$^{-11.246}_{\substack{+4.549 \\ -2.370}}$	-151.02/349.26/-181.70	$\substack{2.350 \\ +0.062 \\ -0.033}$	$\begin{array}{c} 1.142 \\ ^{+0.030} \\ ^{-0.016} \end{array}$	$\substack{1.709 \\ +0.045 \\ -0.024}$
G+B+L	$^{+0.089}_{-0.012}$	$\substack{-2.720 \\ +0.043 \\ -0.034}$	$545.3 \\ ^{+16.8} _{-109.1}$	$^{+0.090}_{-0.014}$	$^{36.2}_{\substack{+7.0 \ -3.6}}$	$0.136 \\ ^{+0.084} _{-3.625}$	$^{+0.591}_{-1.856}$	$\begin{array}{c} -6.056 \\ +1.026 \\ -7.355 \end{array}$	-149.85/346.91/-184.40	$\substack{2.438 \\ +0.010 \\ -0.085}$	$\substack{1.184 \\ +0.005 \\ -0.041}$	$\substack{1.773 \\ +0.007 \\ -0.062}$
G	-0.900 $+0.014$ -0.019	$\begin{array}{c} -2.677 \\ +0.024 \\ -0.050 \end{array}$	$^{418.4}_{^{+20.6}}_{^{-9.5}}$	-1.497 $+0.006$ -0.011					-161.26/346.12/-186.03	$\substack{2.339 \\ +0.046 \\ -0.030}$	$\begin{array}{c} 1.136 \\ ^{+0.022} \\ ^{-0.015} \end{array}$	$\substack{1.701 \\ +0.034 \\ -0.022}$
G+B	$-0.955 \\ +0.067 \\ -0.030$	$\substack{-2.735 \\ +0.081 \\ -0.000}$	$\substack{486.9 \\ +41.0 \\ -77.4}$	$^{+0.061}_{-0.041}$	$34.2 \atop +133.0 \atop -1.2$	$\begin{array}{c} -0.150 \\ +1.571 \\ -11.658 \end{array}$			-153.13/341.66/-186.07	$\substack{2.401 \\ +0.012 \\ -0.089}$	$1.166 \\ \substack{+0.006 \\ -0.043}$	$\substack{1.746 \\ +0.009 \\ -0.065}$
G+L	-0.903 $+0.017$ -0.016	-2.698 $+0.045$ -0.031	$\begin{array}{c} 421.2 \\ ^{+17.5} \\ ^{-12.4} \end{array}$	-1.499 $+0.008$ -0.009			$\begin{array}{c} -0.155 \\ +0.471 \\ -3.219 \end{array}$	$^{+3.511}_{-3.224}$	-160.47/356.33/-186.86	$\substack{2.334 \\ +0.052 \\ -0.025}$	$\substack{1.134 \\ +0.025 \\ -0.012}$	$\substack{1.697 \\ +0.038 \\ -0.018}$
C+B+L	-1.059 $+0.045$ -0.001		$\substack{663.1 \\ +7.9 \\ -86.0}$	$^{+0.039}_{+0.037}_{-0.003}$	$38.1 \\ ^{+1.3} _{-3.2}$	$0.253 \\ ^{+0.000}_{-0.150}$	$0.579 \\ ^{+0.172}_{-0.311}$	-13.298 $+1.705$ -0.996	-158.51/358.32/-190.73	$\substack{2.495 \\ +0.003 \\ -0.115}$	$\begin{array}{c} 1.212 \\ ^{+0.001} \\ ^{-0.056} \end{array}$	$\substack{1.814 \\ +0.002 \\ -0.083}$
S	$^{+0.010}_{+0.011}_{-0.014}$	$^{+0.023}_{-0.042}$	$\begin{array}{c} 336.5 \\ ^{+11.6} \\ ^{-7.9} \end{array}$	$^{+0.004}_{-0.005}$					-170.68/364.96/-194.36	$\substack{2.282 \\ +0.036 \\ -0.030}$	$\begin{array}{c} 1.109 \\ ^{+0.018} \\ ^{-0.014} \end{array}$	$\substack{1.659 \\ +0.026 \\ -0.022}$
S+L	$^{+0.014}_{+0.016}_{-0.011}$	$\substack{-2.657 \\ +0.042 \\ -0.022}$	$\begin{array}{c} 336.6 \\ ^{+11.0} \\ ^{-8.9} \end{array}$	$^{+0.004}_{-0.005}$			$\substack{-0.624 \\ +0.029 \\ -2.725}$	-8.808 $+1.727$ -4.820	-170.45/376.29/-194.72	$\substack{2.276 \\ +0.040 \\ -0.028}$	$\begin{array}{c} 1.106 \\ ^{+0.020} \\ ^{-0.014} \end{array}$	$\substack{1.655 \\ +0.029 \\ -0.020}$
C+L	$\substack{-0.877 \\ +0.005 \\ -0.045}$		$\substack{431.2 \\ +26.7 \\ -5.3}$	$^{+0.006}_{-0.012}$			-1.829 $+2.248$ -0.025	$-3.384 \\ +0.047 \\ -9.045$	-172.26/374.02/-197.76	$\substack{2.171 \\ +0.068 \\ -0.026}$	$1.055 \\ \substack{+0.033 \\ -0.012}$	$\substack{1.578 \\ +0.050 \\ -0.019}$
C+B	$^{-1.056}_{+0.055}$ $^{+0.055}_{-0.025}$		$^{646.6}_{^{+86.3}}_{^{-87.5}}$	$^{+0.046}_{-0.021}$	$38.4 \\ ^{+1.0}_{-4.4}$	$\substack{0.265 \\ +0.014 \\ -0.213}$			-180.81/391.12/-207.37	$\substack{2.459 \\ +0.104 \\ -0.103}$	$\substack{1.194 \\ +0.051 \\ -0.050}$	$\substack{1.788 \\ +0.076 \\ -0.075}$
C	-0.918 +0.015 -0.014		$448.0 \\ +14.8 \\ -14.2$	-1.509 $+0.008$ -0.008					-196.85/411.41/-215.25	$\substack{2.202 \\ +0.045 \\ -0.044}$	$1.070 \\ \substack{+0.022 \\ -0.021}$	$\substack{1.601 \\ +0.033 \\ -0.032}$

Table 2. BXA Original Runs fit results for bn130518580 using GBM + LAT data.

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)	$E_{iso} \times 10^{54}$ (erg)
S+B	$\begin{array}{c} -1.156 \\ +0.023 \\ -0.023 \end{array}$	-2.769 $+0.043$ -0.048	$547.3 \\ +78.4 \\ -67.5$	$^{+0.016}_{-0.015}$	$34.8 \atop +1.9 \atop -1.9$	$0.315 \\ ^{+0.063}_{-0.072}$			295.88/-147.94/307.88/331.28	$\substack{2.507 \\ +0.058 \\ -0.058}$	$\substack{1.218 \\ +0.028 \\ -0.028}$	$1.823 \\ \substack{+0.042 \\ -0.042}$
G+B	$^{+0.035}_{+0.032}$	-2.762 $+0.045$ -0.051	$\substack{618.7 \\ +113.7 \\ -92.3}$	$^{+0.026}_{-0.025}$	$37.3 \\ ^{+2.4} _{-2.4}$	$\substack{0.220 \\ +0.086 \\ -0.104}$			297.71/-148.85/309.71/333.11	$\substack{2.510 \\ +0.065 \\ -0.065}$	$\substack{1.219 \\ +0.032 \\ -0.032}$	$\substack{1.825 \\ +0.047 \\ -0.047}$
S+B+L	$^{-1.155}_{\substack{+NA \ -NA}}$	$^{-2.823}_{\stackrel{+NA}{-NA}}$	$550.5 \\ ^{+NA}_{-NA}$	$^{-1.732}_{\begin{subarray}{c} +NA \ -NA \end{subarray}}$	$34.7 \\ ^{+NA}_{-NA}$	$0.321 \\ ^{+NA}_{-NA}$	$^{-1.800}_{\substack{+NA \ -NA}}$	$^{+ 1.269}_{ + NA}_{ - NA}$	295.14/-147.57/311.14/342.36	$\substack{2.499 \\ +0.061 \\ -0.061}$	$\substack{1.214 \\ +0.030 \\ -0.030}$	$\begin{array}{c} 1.817 \\ ^{+0.044} \\ ^{-0.044} \end{array}$
G+B+L	$^{-1.000}_{\substack{+NA \ -NA}}$	$^{-2.827}_{\stackrel{+NA}{-NA}}$	$597.2 \\ {+NA} \\ {-NA}$	$^{-1.629}_{\stackrel{+NA}{-NA}}$	$\begin{array}{c} 35.8 \\ ^{+NA} \\ ^{-NA} \end{array}$	$0.203 \\ {}^{+NA}_{-NA}$	$^{-1.977}_{\substack{+NA \ -NA}}$	$^{-3.458}_{\stackrel{+NA}{-NA}}$	296.80/-148.40/312.80/344.00	$\substack{2.490 \\ +0.069 \\ -0.069}$	$\substack{1.209 \\ +0.034 \\ -0.034}$	$\substack{1.810 \\ +0.050 \\ -0.050}$
G	$\substack{+0.902 \\ +0.016 \\ -0.016}$	-2.683 $+0.035$ -0.039	$^{+22.1}_{+28.3}_{-26.1}$	$^{+0.009}_{-0.009}$					322.41/-161.21/330.41/346.01	$\substack{2.346 \\ +0.037 \\ -0.037}$	$\substack{1.139 \\ +0.018 \\ -0.018}$	$1.706 \\ ^{+0.027}_{-0.027}$
C+B+L	$\substack{-0.977 \\ +0.061 \\ -0.054}$		$\begin{array}{c} 625.3 \\ +139.4 \\ -106.3 \end{array}$	$^{+0.008}_{-0.003}$	$35.2 \\ ^{+2.5} _{-2.4}$	$\substack{0.242 \\ +0.074 \\ -0.087}$	$^{+0.071}_{-0.051}$	$\substack{-3.107 \\ +0.154 \\ -0.238}$	308.34/-154.17/322.34/349.64	$\substack{2.456 \\ +0.081 \\ -0.081}$	$\substack{1.193 \\ +0.039 \\ -0.039}$	$\substack{1.786 \\ +0.059 \\ -0.059}$
G+L	$^{+0.903}_{+NA}_{-NA}$	$^{-2.698}_{\stackrel{+NA}{-NA}}$	$^{+NA}_{-NA}$	$^{-1.499}_{\substack{+NA \ -NA}}$			$^{+0.272}_{+NA}_{-NA}$	$^{-10.000}_{\substack{+NA \\ -NA}}$	320.94/-160.47/332.94/356.34	$\substack{2.343 \\ +0.038 \\ -0.038}$	$\begin{array}{c} 1.138 \\ ^{+0.018} \\ ^{-0.018} \end{array}$	$\substack{1.703 \\ +0.028 \\ -0.028}$
S	$^{+0.011}_{+0.013}_{-0.013}$	-2.640 $+0.030$ -0.033	$337.3 \\ ^{+21.6} _{-20.2}$	-1.611 $+0.004$ -0.004					341.34/-170.67/349.34/364.94	$\substack{2.284 \\ +0.032 \\ -0.032}$	$1.109 \\ \substack{+0.016 \\ -0.016}$	$\begin{array}{c} 1.661 \\ +0.024 \\ -0.024 \end{array}$
C+L	-0.886 +0.029 -0.024		$\begin{array}{c} 437.9 \\ +36.2 \\ -33.1 \end{array}$	$^{+0.004}_{-0.003}$			$^{+0.084}_{-0.062}$	$-3.422 \\ +0.196 \\ -0.285$	344.25/-172.13/354.25/373.75	$\substack{2.186 \\ +0.047 \\ -0.047}$	$\substack{1.062 \\ +0.023 \\ -0.023}$	$1.589 \\ \substack{+0.034 \\ -0.034}$
S+L	$^{-1.022}_{\stackrel{+NA}{-NA}}$	$^{-2.648}_{\stackrel{+NA}{-NA}}$	$\begin{array}{c} 337.4 \\ ^{+NA} \\ ^{-NA} \end{array}$	$^{-1.611}_{\substack{+NA \ -NA}}$			$^{+0.317}_{+NA}_{-NA}$	$^{-9.993}_{\stackrel{+NA}{-NA}}$	340.51/-170.26/352.51/375.91	$\substack{2.281 \\ +0.033 \\ -0.033}$	$\substack{1.108 \\ +0.016 \\ -0.016}$	$1.659 \\ \substack{+0.024 \\ -0.024}$
С+В	$^{+0.059}_{+0.031}$ $^{+0.031}_{-0.031}$		$\substack{661.3 \\ +120.1 \\ -96.6}$	-1.639 $+0.022$ -0.021	$37.4 \\ ^{+2.3} _{-2.3}$	$\substack{0.250 \\ +0.079 \\ -0.094}$			361.10/-180.55/371.10/390.60	$\substack{2.492 \\ +0.083 \\ -0.083}$	$\begin{array}{c} 1.211 \\ ^{+0.040} \\ ^{-0.040} \end{array}$	$\begin{array}{c} 1.812 \\ ^{+0.060} \\ ^{-0.060} \end{array}$
С	-0.917 $+0.015$ -0.015		$\begin{array}{c} 447.0 \\ ^{+27.7} \\ ^{-25.8} \end{array}$	-1.508 +0.006 -0.006					393.70/-196.85/399.70/411.40	$2.199 \atop \substack{+0.044 \\ -0.044}$	$\substack{1.068 \\ +0.021 \\ -0.021}$	$1.599 \\ \substack{+0.032 \\ -0.032}$

Table 3. XSPEC fit results for bn130518580 using GBM + LAT data and errors from the Error command.