	bn090510016~BXA~Auto~Runs~~GBM+LAT											
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 $\times 10^{-5}$ (erg cm ⁻²)	$E_{iso} \times 10^{52}$ (erg)
S+B+L	$^{+0.808}_{+0.008}_{-0.078}$	$-3.052 \\ +0.048 \\ -0.373$	$\begin{array}{c} 3071.2 \\ ^{+517.6} \\ ^{-179.0} \end{array}$	$^{+0.053}_{-0.010}$	$33.0 \\ ^{+135.3}_{-0.3}$	$\substack{-0.234 \\ +1.719 \\ -11.522}$	$^{+0.090}_{-0.063}$	-2.866 $+0.242$ -0.369	-163.43/376.35/-185.89	$\substack{1.869 \\ +0.105 \\ -0.097}$	$\substack{1.794 \\ +0.101 \\ -0.094}$	$\begin{array}{c} 3.961 \\ +0.223 \\ -0.207 \end{array}$
S+L	$\substack{-0.851 \\ +0.050 \\ -0.037}$	-3.103 $+0.104$ -0.318	$3167.0 \\ +426.5 \\ -275.9$	$^{-1.668}_{\substack{+0.018 \\ -0.044}}$			-1.452 $+0.076$ -0.078	$-2.950 \\ +0.323 \\ -0.286$	-164.06/365.24/-186.66	$\substack{1.867 \\ +0.108 \\ -0.105}$	$1.792 \\ \substack{+0.104 \\ -0.101}$	$\begin{array}{c} 3.957 \\ +0.230 \\ -0.223 \end{array}$
G+B+L	$\begin{array}{c} -0.571 \\ +0.117 \\ -0.228 \end{array}$	-3.447 $+0.418$ -0.097	$\substack{3694.6 \\ +675.2 \\ -153.3}$	$^{-1.806}_{\substack{+0.170 \\ -0.101}}$	$\begin{array}{c} 23.1 \\ ^{+144.1} \\ ^{-11.1} \end{array}$	$\substack{0.234 \\ +2.534 \\ -11.980}$	-1.560 $+0.153$ -0.011	-2.480 $+0.074$ -0.635	-163.48/376.45/-189.07	$\substack{1.849 \\ +0.002 \\ -0.170}$	$\substack{1.775 \\ +0.002 \\ -0.164}$	$\substack{3.918 \\ +0.005 \\ -0.361}$
G+L	$\substack{-0.760 \\ +0.072 \\ -0.044}$	-3.292 $+0.268$ -0.279	$\begin{array}{c} 4027.3 \\ +372.8 \\ -493.2 \end{array}$	-1.669 $+0.035$ -0.036			$\begin{array}{c} -1.515 \\ +0.114 \\ -0.037 \end{array}$	$-2.696 \\ +0.162 \\ -0.437$	-164.49/366.10/-189.57	$\substack{1.743 \\ +0.109 \\ -0.071}$	$\substack{1.673 \\ +0.105 \\ -0.068}$	$\substack{3.693 \\ +0.232 \\ -0.150}$
C+L	$\substack{-0.682 \\ +0.033 \\ -0.110}$		$\begin{array}{c} 4104.2 \\ +938.1 \\ -282.0 \end{array}$	$\begin{array}{c} -1.735 \\ +0.058 \\ -0.018 \end{array}$			-1.560 $+0.052$ -0.019	-2.401 $+0.055$ -0.195	-170.90/372.74/-192.01	$\substack{1.845 \\ +0.075 \\ -0.096}$	$\begin{array}{c} 1.771 \\ ^{+0.072} \\ ^{-0.092} \end{array}$	$\begin{array}{c} 3.910 \\ +0.159 \\ -0.203 \end{array}$
C+B+L	$\substack{-0.584 \\ +0.061 \\ -0.206}$		$3780.1 \\ ^{+1240.4}_{-54.1}$	$^{+0.127}_{-0.052}$	$\begin{array}{c} 50.7 \\ ^{+118.4} \\ ^{-14.6} \end{array}$	$\substack{0.255 \\ +2.069 \\ -12.040}$	$^{+0.071}_{-0.003}$	-2.309 $+0.037$ -0.276	-169.85/383.00/-192.10	$\substack{1.861 \\ +0.057 \\ -0.114}$	$1.786 \\ \substack{+0.055 \\ -0.110}$	$\substack{3.943 \\ +0.121 \\ -0.242}$
S	$\substack{-0.816 \\ +0.055 \\ -0.035}$	$\substack{-2.314 \\ +0.051 \\ -0.049}$	${}^{1881.0}_{+239.9}_{-203.1}$	$\begin{array}{c} -1.625 \\ +0.013 \\ -0.023 \end{array}$					-200.36/425.46/-217.27	$\substack{1.300 \\ +0.105 \\ -0.090}$	$\substack{1.248 \\ +0.101 \\ -0.087}$	$\substack{2.754 \\ +0.222 \\ -0.191}$
S+B	$^{+0.803}_{\substack{+0.043 \\ -0.047}}$	-2.327 $+0.064$ -0.036	$1984.4 \\ ^{+152.5}_{-300.8}$	$^{+0.043}_{-0.004}$	$31.9 \atop +137.0 \atop -1.3$	-0.059 $^{+1.932}$ $^{-11.584}$			-199.92/436.95/-217.45	$1.315 \\ \substack{+0.094 \\ -0.103}$	$\substack{1.262 \\ +0.090 \\ -0.099}$	$\substack{2.786 \\ +0.199 \\ -0.217}$
G+B	$\substack{+0.052 \\ +0.006 \\ -0.113}$	$\substack{-2.306 \\ +0.051 \\ -0.052}$	$1998.6 \\ ^{+436.4}_{-220.0}$	$^{+0.042}_{-0.002}$	$\begin{array}{c} 23.7 \\ ^{+143.5} \\ ^{-8.9} \end{array}$	$\substack{-0.144 \\ +2.013 \\ -11.668}$			-199.64/436.41/-219.73	$\begin{array}{c} 1.311 \\ ^{+0.083} \\ ^{-0.116} \end{array}$	$\substack{1.259 \\ +0.080 \\ -0.111}$	$\substack{2.779 \\ +0.176 \\ -0.246}$
G	$^{+0.709}_{+0.051}_{-0.056}$	-2.306 $+0.049$ -0.051	$^{2092.4}_{^{+350.3}}_{^{-289.4}}$	$-1.590 \\ +0.019 \\ -0.021$					-200.14/425.02/-219.75	$1.308 \\ ^{+0.086}_{-0.103}$	$\substack{1.256 \\ +0.083 \\ -0.099}$	$\begin{array}{c} 2.772 \\ +0.183 \\ -0.218 \end{array}$
С+В	-1.029 $+0.091$ -0.012		$9284.9 \\ ^{+80.6}_{-1280.4}$	$^{+0.080}_{-0.004}$	$^{199.5}_{^{+6.5}}_{^{-120.4}}$	$\substack{1.394 \\ +0.087 \\ -9.840}$			-494.10/1019.14/-511.83	$\substack{1.415 \\ +0.304 \\ -0.006}$	$\substack{1.359 \\ +0.292 \\ -0.006}$	$\substack{2.999 \\ +0.644 \\ -0.013}$
С	-0.949 +0.025 -0.024		$8068.9 \\ +336.8 \\ -276.4$	-1.615 $+0.013$ -0.019					-500.12/1018.80/-512.90	$\substack{1.704 \\ +0.069 \\ -0.075}$	$1.636 \\ \substack{+0.066 \\ -0.072}$	$3.611 \\ \substack{+0.146 \\ -0.159}$

Table 1. BXA Auto Runs fit results for bn090510016 using GBM + LAT data.

						510016		Ü	·			_ =
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 $\times 10^{-5}$ (erg cm ⁻²)	$E_{iso} \times 10^{52}$ (erg)
S+B+L	$\substack{-0.709 \\ +0.089 \\ -0.176}$	-3.017 $^{+0.010}$ $^{-0.414}$	$\substack{2926.5 \\ +673.1 \\ -12.2}$	$^{-1.789}_{\substack{+0.136 \ -0.074}}$	$\substack{34.2 \\ +136.7 \\ -0.1}$	$\substack{0.341 \\ +2.208 \\ -12.924}$	$^{+0.141}_{-0.011}$	$^{+0.160}_{-0.446}$	-163.04/375.58/-186.99	$1.896 \\ \substack{+0.081 \\ -0.123}$	$\substack{1.821 \\ +0.078 \\ -0.118}$	$\substack{4.019 \\ +0.172 \\ -0.261}$
S+L	$\begin{array}{c} -0.828 \\ +0.027 \\ -0.059 \end{array}$	-3.134 $+0.135$ -0.295	$\begin{array}{c} 3186.9 \\ +399.9 \\ -284.6 \end{array}$	$^{+0.040}_{-0.022}$			$-1.490 \\ +0.114 \\ -0.042$	$\substack{-2.801 \\ +0.177 \\ -0.450}$	-164.16/365.44/-187.09	$\substack{1.895 \\ +0.083 \\ -0.128}$	$\begin{array}{c} 1.819 \\ ^{+0.080} \\ ^{-0.123} \end{array}$	$\substack{4.015 \\ +0.176 \\ -0.270}$
G+B+L	$\begin{array}{c} -0.743 \\ +0.048 \\ -0.057 \end{array}$	-3.284 $+0.254$ -0.290	$3917.1 \\ ^{+464.6}_{-356.0}$	-1.669 $+0.034$ -0.033	$194.4 \\ ^{+26.0}_{-158.8}$	$\substack{-2.544 \\ +0.241 \\ -9.920}$	$\begin{array}{c} -1.523 \\ +0.114 \\ -0.025 \end{array}$	$\substack{-2.652 \\ +0.101 \\ -0.459}$	-164.40/378.29/-188.53	$\substack{1.779 \\ +0.068 \\ -0.100}$	$\substack{1.708 \\ +0.065 \\ -0.096}$	$\begin{array}{c} 3.771 \\ ^{+0.144} \\ ^{-0.213} \end{array}$
G+L	$\begin{array}{c} -0.744 \\ +0.056 \\ -0.058 \end{array}$	$-3.205 \\ +0.176 \\ -0.396$	$3895.1 \\ +526.9 \\ -368.4$	-1.660 $+0.025$ -0.045			$^{-1.468}_{+0.060}_{-0.084}$	-2.878 $+0.340$ -0.238	-164.47/366.06/-188.91	$\substack{1.787 \\ +0.066 \\ -0.111}$	$1.716 \\ \substack{+0.063 \\ -0.106}$	$3.787 \\ ^{+0.139} _{-0.235}$
C+L	$\begin{array}{c} -0.671 \\ +0.027 \\ -0.120 \end{array}$		$\begin{array}{c} 4012.7 \\ ^{+1052.8} \\ ^{-213.7} \end{array}$	$\begin{array}{c} -1.737 \\ +0.058 \\ -0.019 \end{array}$			-1.564 $+0.056$ -0.016	$\substack{-2.382 \\ +0.041 \\ -0.210}$	-170.91/372.76/-192.03	$\substack{1.854 \\ +0.068 \\ -0.106}$	$\substack{1.780 \\ +0.065 \\ -0.102}$	$\begin{array}{c} 3.930 \\ ^{+0.144} \\ ^{-0.225} \end{array}$
C+B+L	$\begin{array}{c} -0.661 \\ +0.014 \\ -0.131 \end{array}$		$\begin{array}{c} 4344.7 \\ +699.5 \\ -511.5 \end{array}$	$\substack{-1.768 \\ +0.091 \\ -0.012}$	$31.0 \\ ^{+136.9}_{-2.8}$	$\substack{-0.074 \\ +2.091 \\ -12.539}$	$^{+0.049}_{-0.032}$	$\substack{-2.422 \\ +0.079 \\ -0.168}$	-169.65/382.61/-192.13	$\substack{1.875 \\ +0.043 \\ -0.126}$	$\substack{1.800 \\ +0.042 \\ -0.121}$	$3.973 \\ \substack{+0.092 \\ -0.268}$
S+B	$\begin{array}{c} -0.752 \\ +0.008 \\ -0.096 \end{array}$	-2.297 $+0.035$ -0.066	$1863.9 \\ ^{+259.5}_{-192.2}$	$^{-1.670}_{\substack{+0.059 \\ -0.020}}$	$35.4 \\ ^{+134.4} _{-1.1}$	$\begin{array}{c} 0.114 \\ +2.349 \\ -12.679 \end{array}$			-199.99/437.09/-217.85	$\substack{1.301 \\ +0.104 \\ -0.096}$	$\substack{1.249 \\ +0.100 \\ -0.093}$	$\substack{2.758 \\ +0.220 \\ -0.204}$
S	$\begin{array}{c} -0.812 \\ +0.052 \\ -0.039 \end{array}$	-2.310 $+0.046$ -0.054	$1860.4 \\ ^{+280.5}_{-183.3}$	$\begin{array}{c} -1.624 \\ +0.013 \\ -0.025 \end{array}$					-200.35/425.44/-218.42	$\substack{1.297 \\ +0.108 \\ -0.088}$	$\substack{1.245 \\ +0.104 \\ -0.085}$	$\substack{2.748 \\ +0.229 \\ -0.187}$
G	$\substack{-0.694 \\ +0.038 \\ -0.069}$	$\substack{-2.294 \\ +0.037 \\ -0.062}$	$1998.2 \\ ^{+421.4}_{-196.1}$	$\begin{array}{c} -1.590 \\ +0.018 \\ -0.020 \end{array}$					-200.15/425.04/-219.58	$\substack{1.283 \\ +0.106 \\ -0.081}$	$\substack{1.231 \\ +0.102 \\ -0.078}$	$\substack{2.718 \\ +0.226 \\ -0.172}$
G+B	$\begin{array}{c} -0.676 \\ +0.020 \\ -0.087 \end{array}$	-2.282 $+0.025$ -0.074	$\substack{1926.6 \\ +502.7 \\ -139.2}$	$^{-1.603}_{+0.031}$ $^{-0.008}$	$\begin{array}{c} 21.1 \\ ^{+149.6} \\ ^{-13.6} \end{array}$	-0.216 $+2.097$ -12.492			-199.78/436.67/-219.96	$\substack{1.246 \\ +0.142 \\ -0.044}$	$1.196 \\ ^{+0.137}_{-0.042}$	$\substack{2.641 \\ +0.302 \\ -0.092}$

Table 2. BXA Original Runs fit results for bn090510016 using GBM + LAT data.

m bn090510016~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	$Flux \times 10^{-5}$ (erg s ⁻¹ cm ⁻²)	Fluence $\times 10^{-5}$ (erg cm ⁻²)	$E_{iso} \times 10^{52}$ (erg)
S+L	$^{+0.845}_{+0.049}_{-0.041}$	-3.179 $+0.185$ -0.222	${}^{+803.1}_{-659.0}$	$^{-1.679}_{\substack{+0.029 \ -0.037}}$			$^{+0.089}_{-0.065}$	$-2.844 \\ +0.249 \\ -0.357$	327.86/-163.93/339.86/364.97	$\substack{1.876 \\ +0.108 \\ -0.108}$	$\substack{1.801 \\ +0.103 \\ -0.103}$	$\begin{array}{c} 3.976 \\ ^{+0.228} \\ ^{-0.228} \end{array}$
G+L	$^{+0.739}_{\substack{+0.069 \\ -0.056}}$	-3.221 $+0.207$ -0.267	$\substack{ 3866.1 \\ +816.4 \\ -674.7 }$	$^{+0.035}_{-0.044}$			$^{+0.089}_{-0.059}$	$\substack{-2.725 \\ +0.225 \\ -0.356}$	328.45/-164.23/340.45/365.57	$1.769 \\ \substack{+0.087 \\ -0.087}$	$\substack{1.698 \\ +0.083 \\ -0.083}$	$3.749 \atop +0.184 \atop -0.184$
S+B+L	$\substack{-0.673 \\ +0.178 \\ -0.118}$	-3.244 $+0.189$ -0.229	$\begin{array}{c} 3052.6 \\ +932.8 \\ -723.6 \end{array}$	$^{+0.104}_{-0.156}$	$35.5 \\ ^{+9.5}_{-8.2}$	$\substack{0.440 \\ +0.217 \\ -0.305}$	$^{+0.088}_{-0.054}$	$-2.593 \\ +0.200 \\ -0.347$	322.83/-161.42/338.83/372.32	$1.936 \\ \substack{+0.134 \\ -0.134}$	$\substack{1.858 \\ +0.129 \\ -0.129}$	$\substack{4.102 \\ +0.284 \\ -0.284}$
G+B+L	$^{+0.419}_{+0.245}_{-0.192}$	$-3.272 \\ +0.193 \\ -0.252$	$\begin{array}{c} 3465.5 \\ ^{+1571.4} \\ ^{-1079.4} \end{array}$	-1.914 $+0.133$ -0.184	$33.6 \\ ^{+7.9} _{-8.1}$	$0.506 \\ ^{+0.202}_{-0.297}$	$^{+0.066}_{-0.039}$	$\substack{-2.460 \\ +0.136 \\ -0.258}$	322.86/-161.43/338.86/372.35	$1.913 \\ \substack{+0.132 \\ -0.132}$	$\substack{1.837 \\ +0.127 \\ -0.127}$	$\substack{4.054 \\ +0.280 \\ -0.280}$
C+L	$^{+0.701}_{\substack{+0.077 \\ -0.073}}$		$^{4210.6}_{^{+1198.6}}_{^{-868.7}}$	$^{+0.034}_{-0.038}$			$^{+0.037}_{-0.030}$	$\substack{-2.417 \\ +0.103 \\ -0.131}$	341.64/-170.82/351.64/372.57	$\substack{1.848 \\ +0.099 \\ -0.099}$	$1.775 \\ \substack{+0.095 \\ -0.095}$	$\substack{3.917 \\ +0.209 \\ -0.209}$
C+B+L	$\substack{-0.397 \\ +0.202 \\ -0.170}$		$\begin{array}{c} 3689.4 \\ ^{+1504.3} \\ ^{-968.2} \end{array}$	$\substack{-1.961 \\ +0.122 \\ -0.154}$	$38.2 \\ ^{+8.4}_{-7.5}$	$\substack{0.538 \\ +0.167 \\ -0.252}$	$^{+0.030}_{-0.024}$	$\substack{-2.311 \\ +0.077 \\ -0.100}$	335.30/-167.65/349.30/378.60	$\substack{1.957 \\ +0.130 \\ -0.130}$	$\substack{1.878 \\ +0.124 \\ -0.124}$	$\substack{4.146 \\ +0.275 \\ -0.275}$
G	$^{+0.708}_{+0.057}_{-0.053}$	-2.299 $+0.047$ -0.052	$^{+520.2}_{-418.7}$	$^{+0.019}_{-0.020}$					400.23/-200.12/408.23/424.98	$\substack{1.288 \\ +0.090 \\ -0.090}$	$1.237 \\ \substack{+0.086 \\ -0.086}$	$\substack{2.730 \\ +0.190 \\ -0.190}$
S	$\begin{array}{c} -0.806 \\ +0.047 \\ -0.043 \end{array}$	-2.307 $+0.048$ -0.052	$^{+517.2}_{-402.9}$	$^{+0.018}_{-0.019}$					400.59/-200.30/408.59/425.34	$\substack{1.299 \\ +0.089 \\ -0.089}$	$\substack{1.247 \\ +0.086 \\ -0.086}$	$\substack{2.752 \\ +0.189 \\ -0.189}$
G+B	$\substack{-0.527 \\ +0.167 \\ -0.130}$	$^{+0.049}_{-0.052}$	$^{1851.3}_{\substack{+772.0 \\ -553.9}}$	$^{+0.054}_{-0.070}$	$17.1 \\ ^{+6.3}_{-4.6}$	$\begin{array}{c} 0.118 \\ ^{+0.235} \\ ^{-0.404} \end{array}$			397.29/-198.65/409.29/434.41	$\substack{1.321 \\ +0.094 \\ -0.094}$	$\substack{1.268 \\ +0.090 \\ -0.090}$	$\substack{2.800 \\ +0.198 \\ -0.198}$
S+B	$-0.690 \\ +0.133 \\ -0.100$	$^{+0.050}_{-0.052}$	$^{1802.1}_{^{+594.0}}_{^{-443.9}}$	$^{+0.055}_{-0.071}$	$21.3 \\ ^{+12.6} _{-6.8}$	$0.110 \\ +0.253 \\ -0.493$			398.32/-199.16/410.32/435.44	$\substack{1.321 \\ +0.091 \\ -0.091}$	$\substack{1.268 \\ +0.087 \\ -0.087}$	$\substack{2.799 \\ +0.193 \\ -0.193}$
С	-0.949 +0.025 -0.025		$8088.7 \\ ^{+649.4}_{-601.8}$	$^{+0.017}_{-0.012}$					1000.23/-500.12/1006.23/1018.79	$\substack{1.702 \\ +0.072 \\ -0.072}$	$\substack{1.634 \\ +0.069 \\ -0.069}$	$\begin{array}{c} 3.606 \\ ^{+0.153} \\ ^{-0.153} \end{array}$

Table 3. XSPEC fit results for bn090510016 using GBM + LAT data and errors from the Error command.