

Swift Observations of GRB 130719A

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1. Introduction

At 05:47:49 UT, the Swift Burst Alert Telescope (BAT) triggered and located GRB 130719A (trigger=562625) (Marshall *et al.* GCN Circ. [15012](#)). Swift could not slew to the burst due to a Sun constraint. At the time of the trigger, the initial BAT position was 44° from the Sun (2.0 hours West) and 141° from the 83%-illuminated Moon. **Table 1** contains the best reported positions from Swift.

Table 2 is a summary of GCN Circulars about this GRB from observatories other than Swift.

Standard analysis products for this burst are available at http://gcn.gsfc.nasa.gov/swift_gnd_ana.html.

2. BAT Observations and Analysis

As reported by Stamatikos *et al.* (GCN Circ. [15016](#)), the BAT ground-calculated position is RA, Dec = 89.038, -11.591 deg which is RA(J2000) = $05^{\text{h}}56^{\text{m}}09.2^{\text{s}}$ Dec(J2000) = $-11^\circ35'29.0''$ with an uncertainty of 1.9 arcmin, (radius, sys+stat, 90% containment). The partial coding was 50%.

The mask-weighted light curve (**Figure 1**) shows a single weak approximately FRED peak. T_{90} (15-350 keV) is 177.7 ± 20.5 s (estimated error including systematics).

The time-averaged spectrum from T+6.2 to T+205.2 s is best fit by a simple power-law model. The power law index of the time-averaged spectrum is 1.63 ± 0.17 . The fluence in the 15-150 keV band is $2.3 \pm 0.2 \times 10^{-6}$ erg cm^{-2} . This fluence is larger than that of 63% of the long GRBs in the Second BAT GRB Catalog (Sakamoto *et al.* 2011). The 1-s peak photon flux measured from T+82.68 s in the 15-150 keV band is 0.6 ± 0.2 ph cm^{-2} s^{-1} . All the quoted errors are at the 90% confidence level.

The results of the batgrbproduct analysis are available at http://gcn.gsfc.nasa.gov/notices_s/562625/BA/.

3. XRT Observations and Analysis

XRT results are not available.

4. UVOT Observations and Analysis

UVOT results are not available.

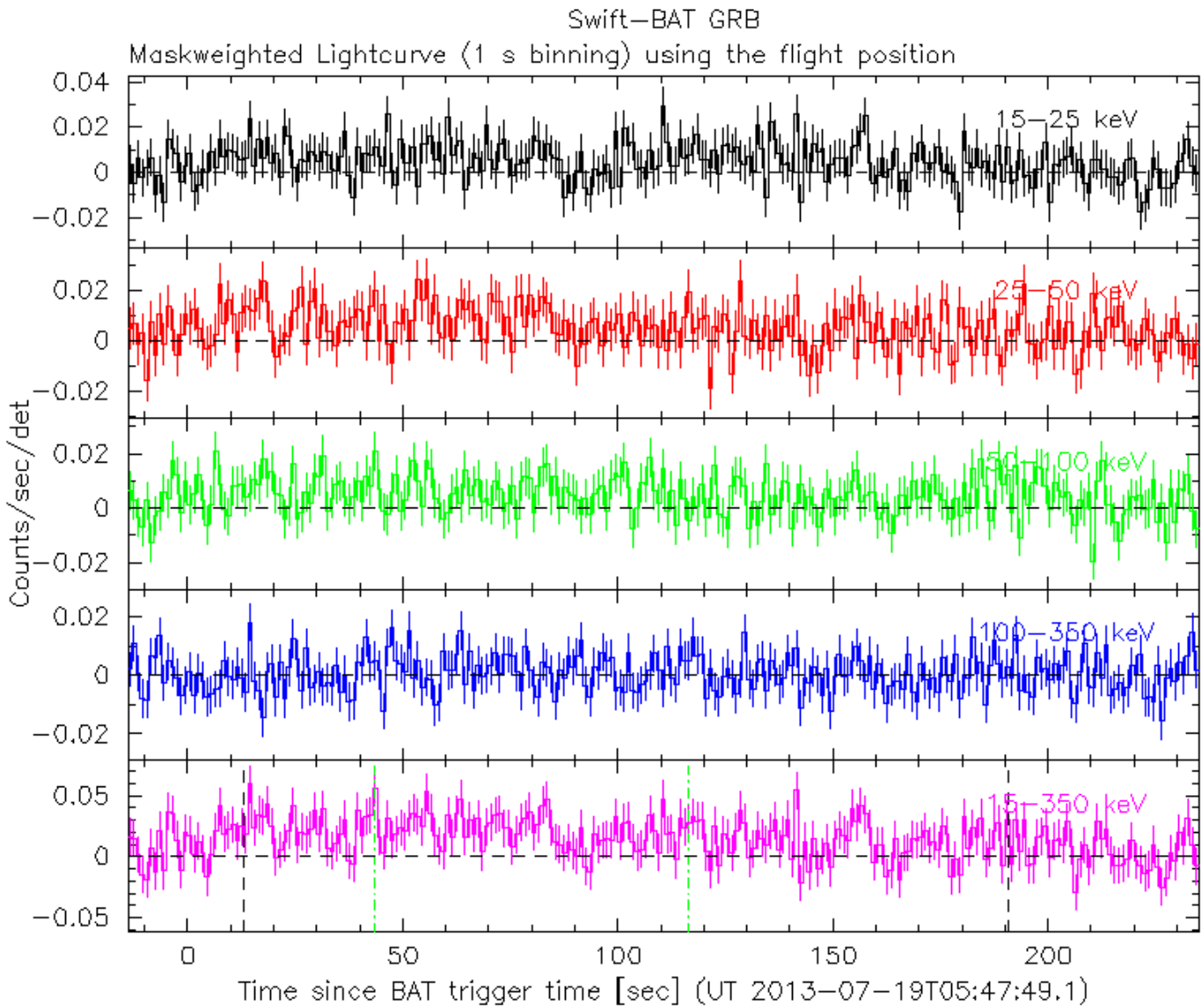


Figure 1. The BAT mask-weighted light curve in the four individual and total energy bands. The units are counts s⁻¹ illuminated-detector⁻¹.

RA (2000)	Dec (2000)	Error	Note	Reference
05 ^h 56 ^m 09.2 ^s	-11°35'29.0"	1.9'	BAT-refined	Stamatikos <i>et al.</i> GCN Circ. 15016

Table 1. Positions from the Swift instruments.

Band	Authors	GCN Circ.	Subject	Observatory	Notes
Optical	Trotter <i>et al.</i>	15030	Skynet/PROMPT observations	PROMPT	

Table 2. Summary of GCN Circulars from other observatories sorted by band and then circular number.

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