# **GRB** Archive

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## **Contents**

1	Com	firmed GRBs	2
	1.1	GRB 180720B	2
	1.2	GRB 181222B	3
	1.3	GRB 190206A	4
	1.4	GRB 190305A	5
	1.5	GRB 190606A	6
	1.6	GRB 200415A	7
	1.7	GRB 200521A	8
	1.8	GRB 200716C	9
	1.9	GRB 201227A	10
	1.10	GRB 210424B	11
	1.11	GRB 210619B	12
	1.12	GRB 211211A	13
2	Arch	ive table	14

## 1 Comfirmed GRBs

#### 1.1 GRB 180720B

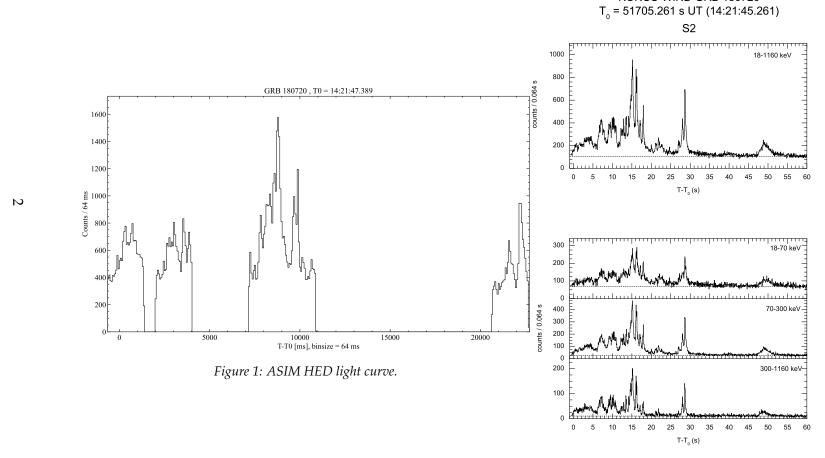


Figure 2: KW light curve

KONUS-WIND GRB 180720

#### 1.2 GRB 181222B

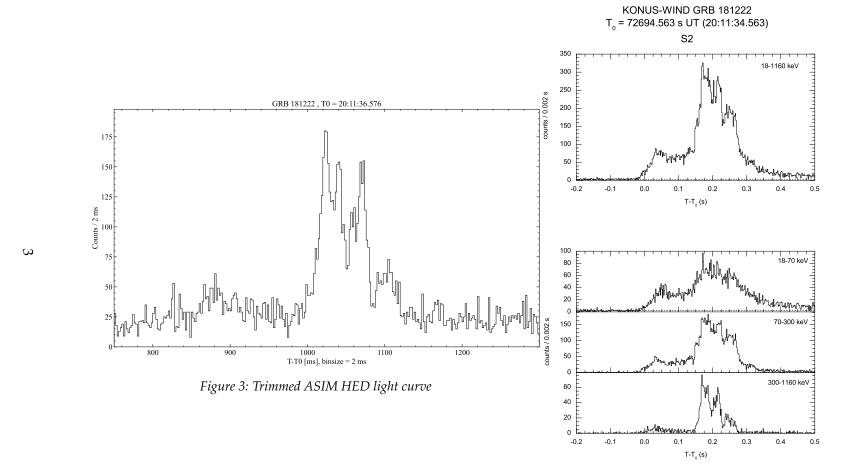


Figure 4: KW light curve

#### 1.3 GRB 190206A

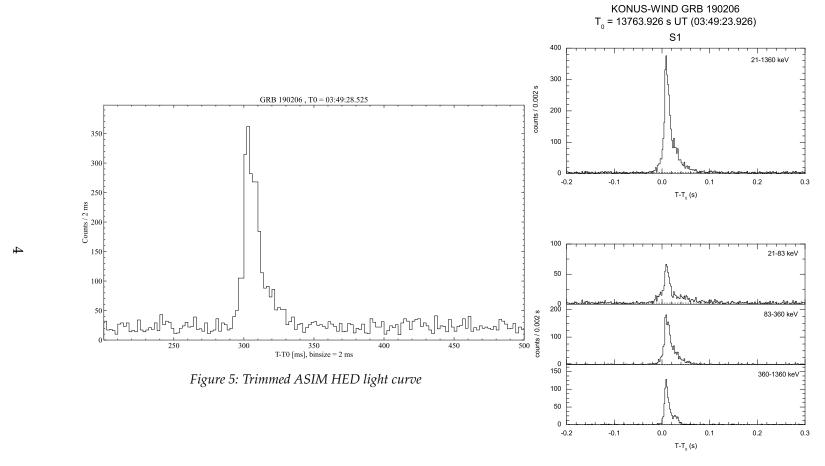


Figure 6: KW light curve

#### 1.4 GRB 190305A

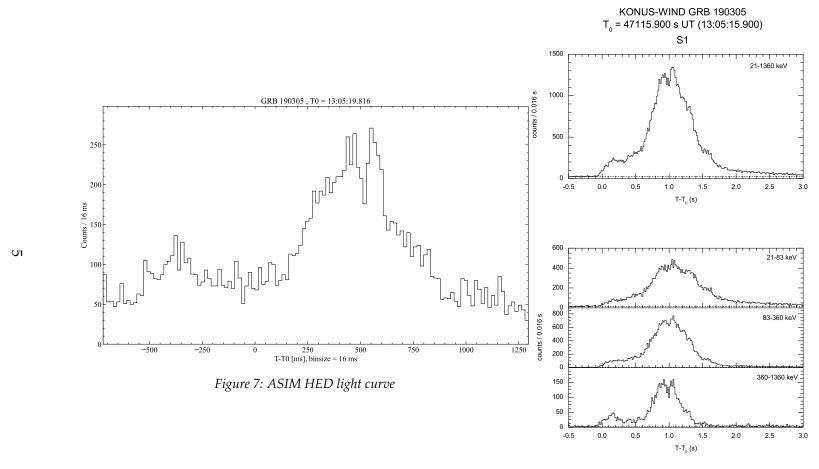


Figure 8: KW light curve

Figure 9: Trimmed ASIM HED light curve

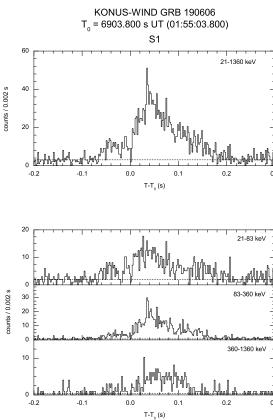


Figure 10: KW light curve

#### 1.6 GRB 200415A

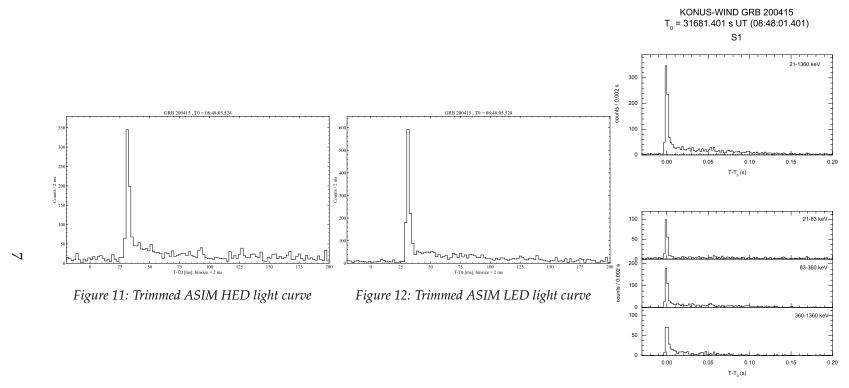


Figure 13: KW light curve.

#### 1.7 GRB 200521A

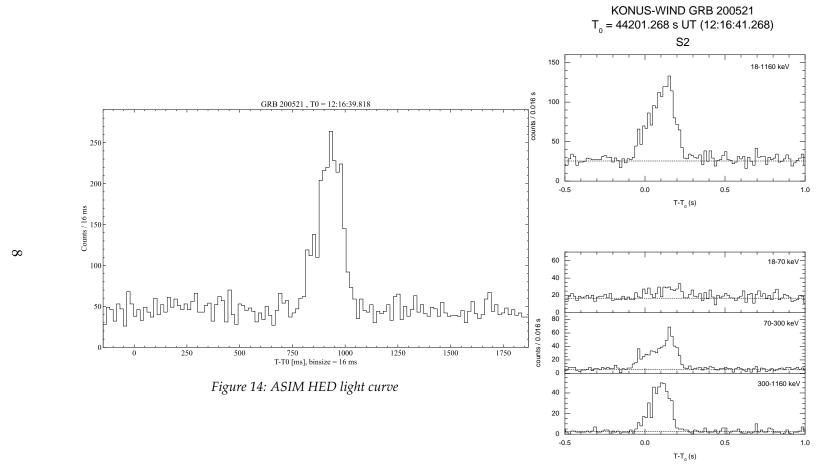


Figure 15: KW light curve

#### 1.8 GRB 200716C

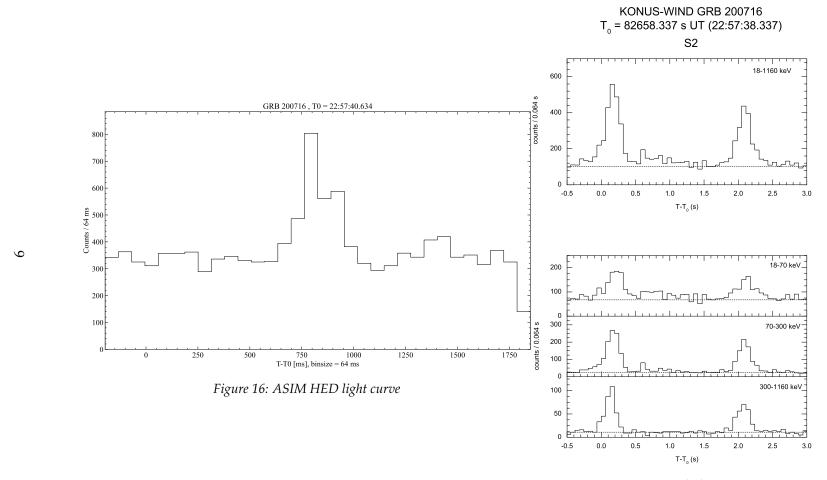


Figure 17: KW light curve

Figure 19: KW light curve

#### 1.10 GRB 210424B

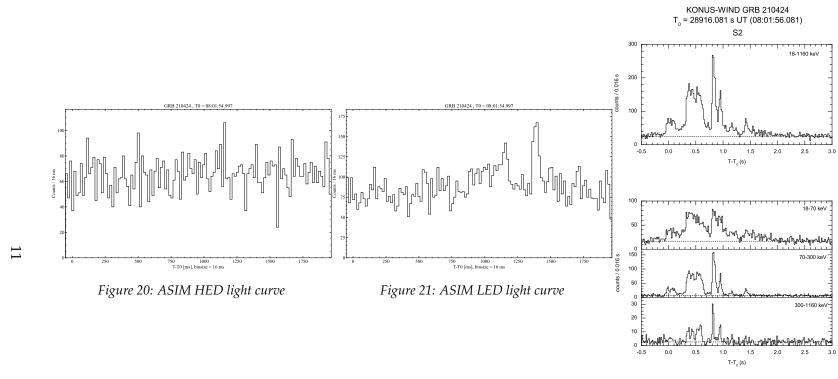


Figure 22: KW light curve.

#### 1.11 GRB 210619B

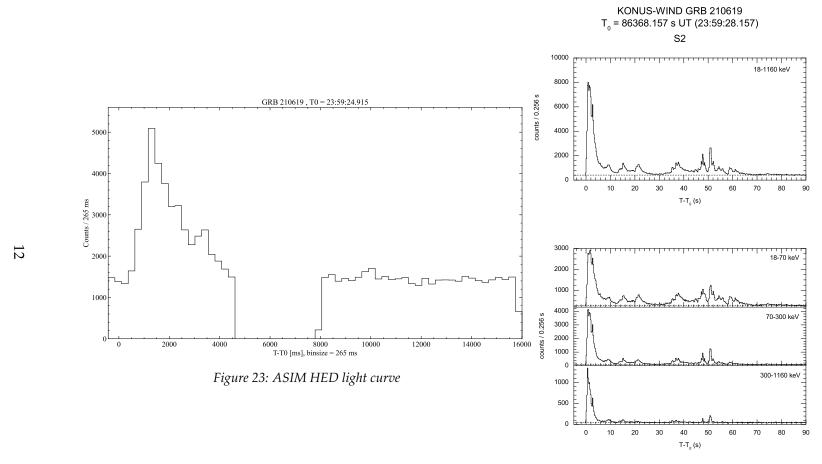


Figure 24: KW light curve

Figure 25: ASIM HED light curve

## 2 Archive table

Table 1: Summary table containing parameter values and hyperlinks to GCN archive and light curves. Model description. A: Power law with exponential cutoff, B: Band model

GRB#	Date Time	Other Satellites	Location	GCN#	Duration	Fluence	Peak Flux	Model	alpha	beta	Ep / Ec	$\chi^2$
=	UT	-	Ra, Dec	-	s	erg/cm <sup>2</sup>	$erg/cm^2/s$ $(/\Delta t)$	-	index	index	keV	dof
GRB 180720B	2018-07-20 14:21:47.389	KW, FERMI, SWIFT	0.530, -2.933	23011-KW 22981-FERMI 22973-SWIFT	125	$(5.43\pm0.26)\times10^{-4}$	$(9.70 \pm 0.52) \times 10^{-5} \text{ (64ms)}$	В	-1.01 (-0.06,+0.06)	-2.07 (-0.08,+0.07)	451 (-45,+52)	102/97
GRB 181222B	2018-12-22 20:11:36.576	KW, FERMI	312.572, 24.240	23557-KW 23556-IPN 23551-FERMI	2.1	$3.70(-0.17, +0.18) \times 10^{-5}$	$2.72(-0.25, +0.26) \times 10^{-4} \text{ (16 ms)}$	В	-0.52(-0.08,+0.08)	-2.95(-0.30,+0.20)	365(-26,+27)	53/56
GRB 190206A	2019-02-06 03:49:28.525	KW	313.330, -30.510	23880-KW 23879-IPN	0.1	$6.44(-0.75, +0.76) \times 10^{-4} \text{ (16 ms)}$	$1.64 (-0.17, +0.17) \times 10^{-5}$	A B	-0.58(-0.10,+0.12) -0.58(-0.10,+0.12)	< -2.3	1600(-223,+248)	31/30
GRB 190305A	2019-03-05 13:05:19.816	KW, IPN, AGILE	11.627, -50.349	23939-KW 23936-IPN 23930-AGILE	11	$1.47(\pm 0.04)\times 10^{-4}$	$2.00(\pm0.08)\times10^{-4}$	В	-0.44(-0.04,+0.05)	-2.82(-0.11,+0.10)	387(-15,+16)	130/74
GRB 190606A	2019-06-06 01:55:07.318	KW, FERMI, AGILE	76.561, -0.638	24784-KW 24765-IPN 24764-FERMI	0.2	$1.16(\pm0.18)\times10^{-5}$	$1.45(-0.39, +0.35) \times 10^{-4} $ (16 ms)	A B	-1.19(-0.10,+0.12) -0.88(-0.26,+0.45)	- -1.67(-0.27,+0.15)	3194(-1324,+2736) 664(-388,+1038)	32/34 26/33
GRB 200415A	2020-04-15 08:48:05.528	KW, FERMI ++	11.071, -25.017	27596-KW 27590-FERMI 27585-IPN	0.005	$8.1(-0.8,+0.9) \times 10^{-6}$	$1.0(\pm 0.08)\times 10^{-3}~(2~ms)$	A B	+0.10(-0.23, +0.27)  +0.10(-0.23, +0.27)	< -2.5	818(-112,+136) 818(-112,+136)	33/49
GRB 200521A	2020-05-21 12:16:39.818	KW, FERMI, CALET	169.531, 7.222	27795-IPN 27796-KW 27777-CALET	0.3	$(1.28\pm0.15)\times10^{-5}$	$(7.38 + / - 0.87) \times 10^{-5} \text{ (16 ms)}$	A B	-0.26(-0.16,+0.18) -0.26(-0.16,+0.18)	-2.7	1358(-170,+196) 1358(-170,+196)	46/61
GRB 200716C	2020-07-16 22:57:40.634	KW, FERMI, SWIFT, CALET, AGILE	196.010, 29.645	28148-KW 28135-FERMI 28139-CALET 28133-AGILE 28124-SWIFT	5.3	$(1.2 + / - 0.2) \times 10^{-5}$	$(3.7 + / - 0.6) \times 10^{-5}$ (64 ms)	B (peak)	-0.51 (-0.19,+0.31)	-2.23 (-0.58,+0.29)	616 (-200,+226)	48/42
GRB 201227A	2020-12-27 15:14:06.853	KW, FERMI	170.121, -73.613	29196-KW 29182-IPN 29206-FERMI	0.106	$4.30(-0.52,+0.54)\times10^{-6}$	$1.05(-0.18, +0.18) \times 10^{-4} $ (16 ms)	A B	$^{-0.17(-0.18,+0.21)}_{-0.17(-0.18,+0.21)}$	< -2.3	870(-130,+151) 870(-130,+151)	17/19 17/18
GRB 210424B	2021-04-24 08:01:54.997	FERMI, KW	284.716, 16.172	29911-KW 29909-IPN ICECUBE	1.6	$8.91(-0.83,+0.93) \times 10^{-6}$	$3.13(-0.52, +0.54) \times 10^{-5}$ (16 ms)	В	-0.39(-0.17,+0.20)	-2.76(-0.45,+0.25)	198(-21,+23)	62/55
GRB 210619B	2021-06-19 23:59:24.915	KW, FERMI	319.712, 33.867	30276-KW ICECUBE	10 (peak)	$4.60(\pm0.13)\times10^{-4}$	$1.54(\pm 0.12) \times 10^{-4} \text{ (64 ms)}$	B (peak)	-0.41(-0.11,+0.12)	-2.06(-0.12,+0.09)	572(-81,+98)	76/60
GRB 211211A	2021-12-11 13:10:01.323	CALET, FERMI, SWIFT	212.271, 27.883	31226-CALET 31210-FERMI 31209-SWIFT	51.37	$5.01\times10^-4$	-	-	-	-		