GRB Archive

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Contents

1 Comfirmed GRBs

1.1 GRB 180720B
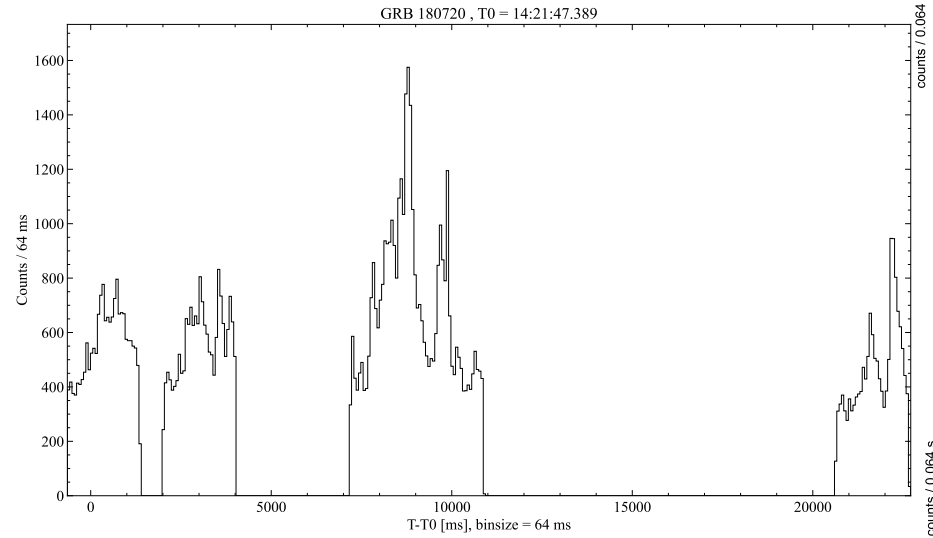
Figure 1: *ASIM HED light curve.*
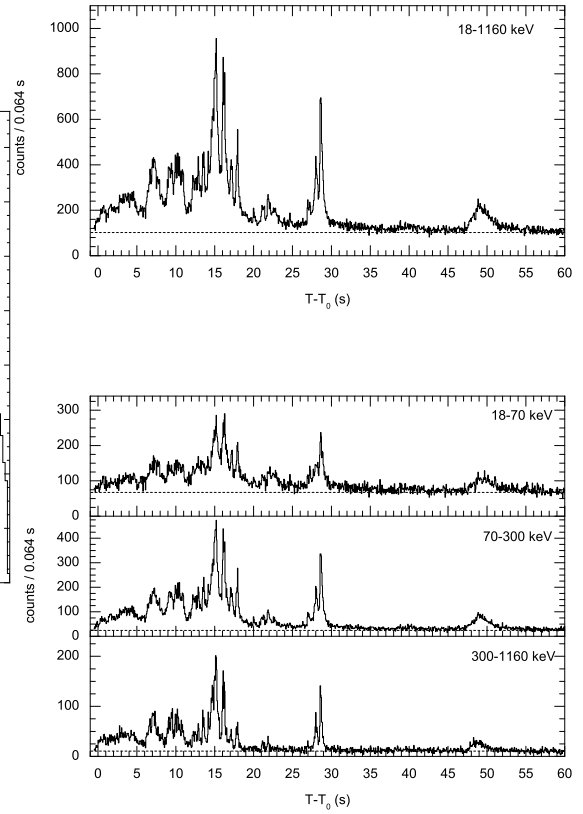
Figure 2: *KW light curve*

1.2 GRB 181222B

GRB 181222 , T0 = 20:11:36.576

Counts / 2 ms

T-T0 [ms], binsize = 2 ms
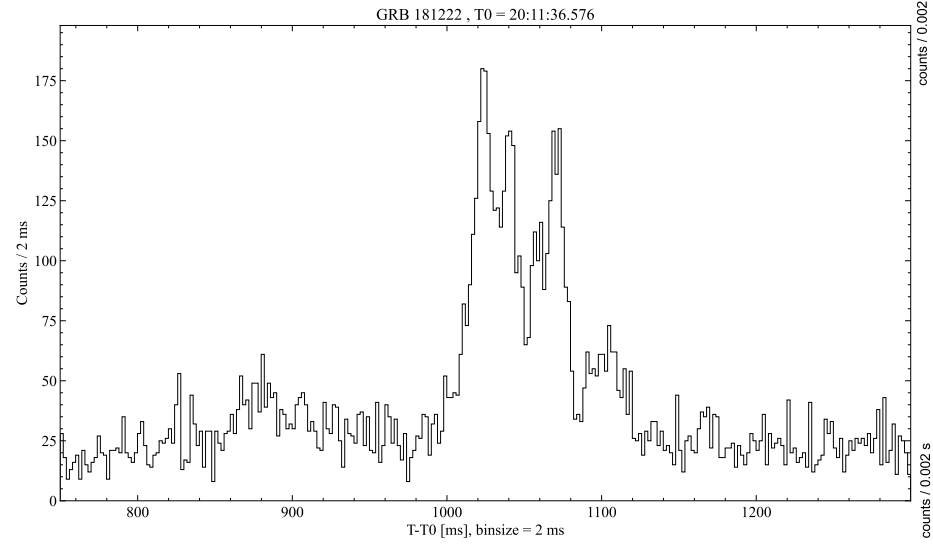
Figure 3: Trimmed ASIM HED light curve

KONUS-WIND GRB 181222
T_0 = 72694.563 s UT (20:11:34.563)

S2

18-1160 keV

counts / 0.002 s

$T-T_0$ (s)

18-70 keV

70-300 keV

300-1160 keV

counts / 0.002 s

$T-T_0$ (s)

Figure 4: KW light curve

1.3 GRB 190206A

GRB 190206 , T0 = 03:49:28.525

Counts / 2 ms

T-T0 [ms], binsize = 2 ms
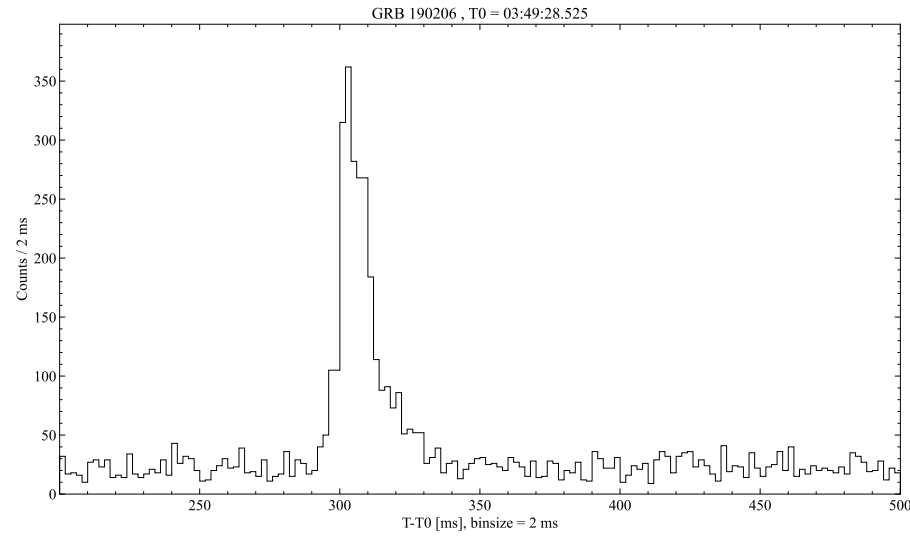
Figure 5: Trimmed ASIM HED light curve

KONUS-WIND GRB 190206
T_0 = 13763.926 s UT (03:49:23.926)

S1

counts / 0.002 s

21-1360 keV

T-T_0 (s)

21-83 keV

83-360 keV

360-1360 keV

counts / 0.002 s

T-T_0 (s)
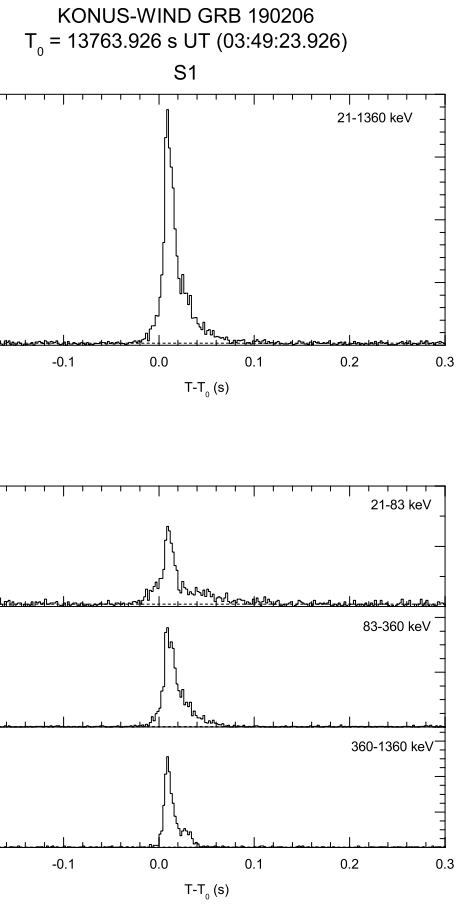
Figure 6: KW light curve

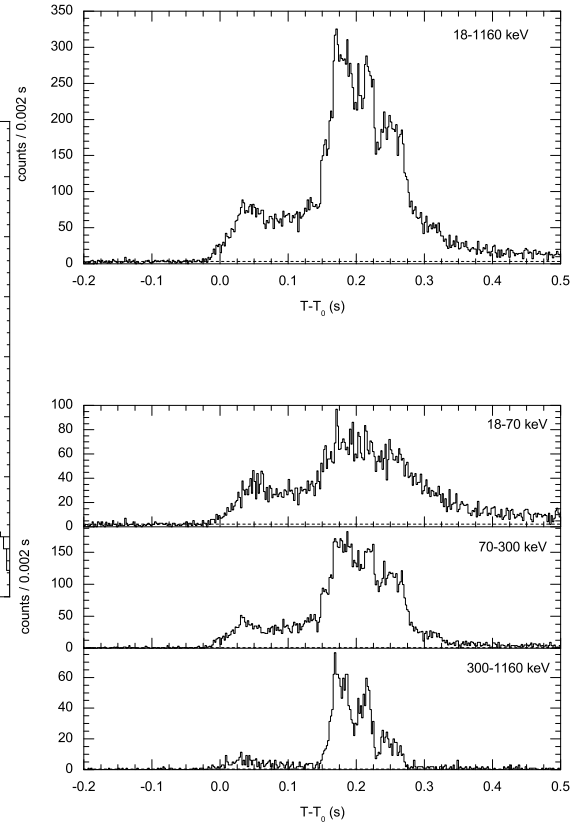## 1.4 GRB 190305A
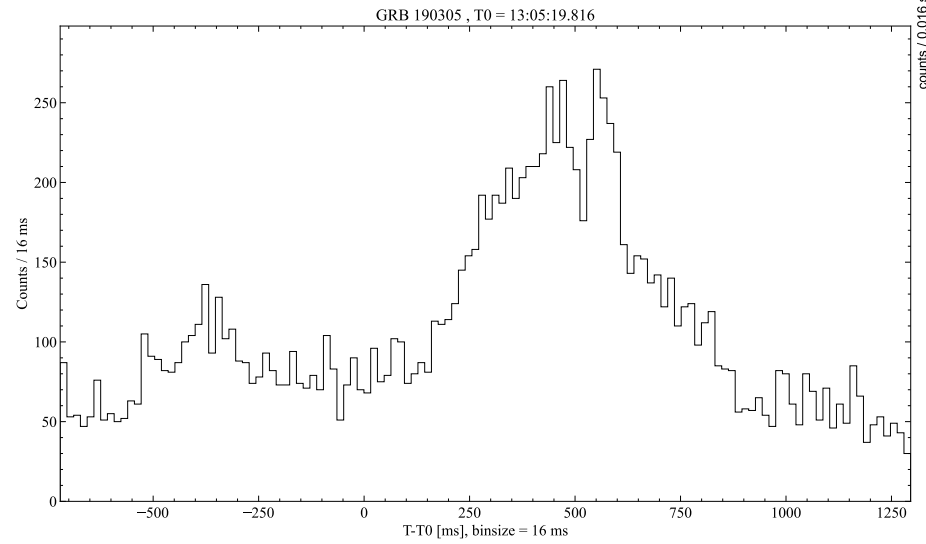
Figure 7: ASIM HED light curve

Figure 8: KW light curve

1.5 GRB 190606A

Figure 9: Trimmed ASIM HED light curve
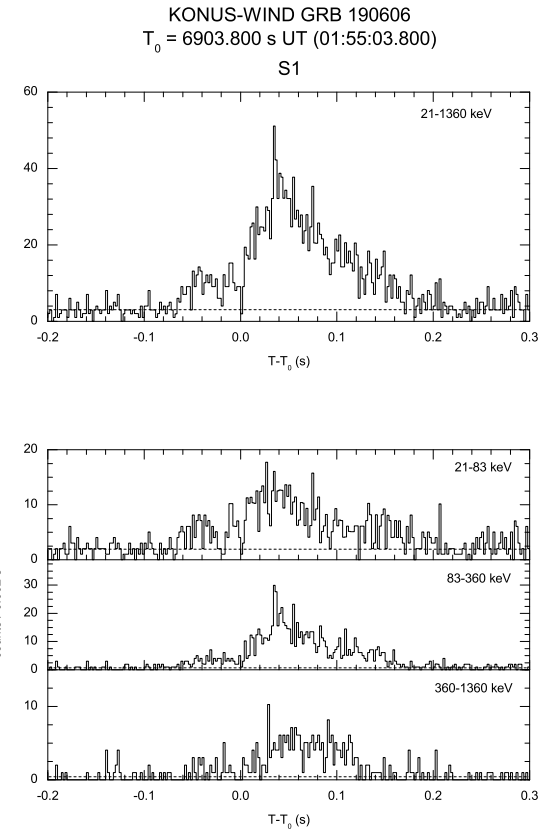
Figure 10: KW light curve

1.6 GRB 200415A
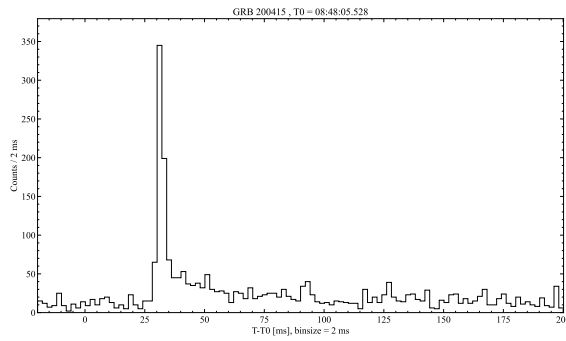
Figure 11: Trimmed ASIM HED light curve
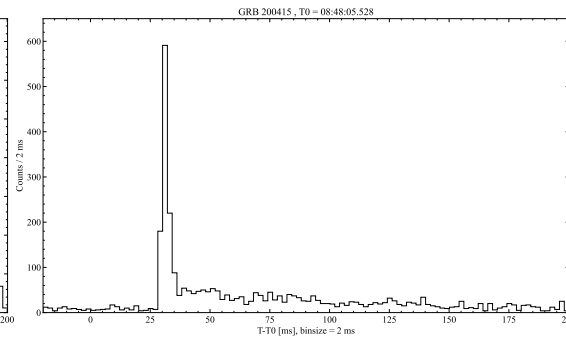
Figure 12: Trimmed ASIM LED light curve

KONUS-WIND GRB 200415
T_0 = 31681.401 s UT (08:48:01.401)
S1

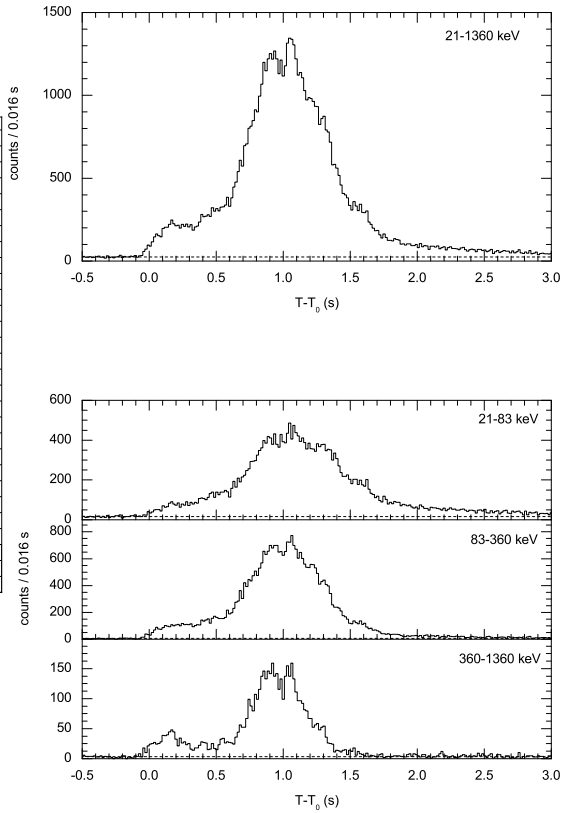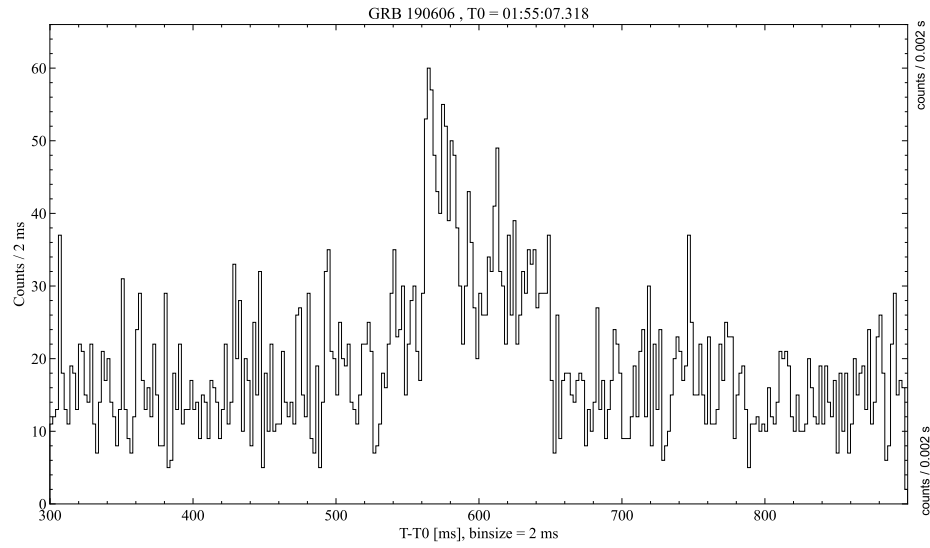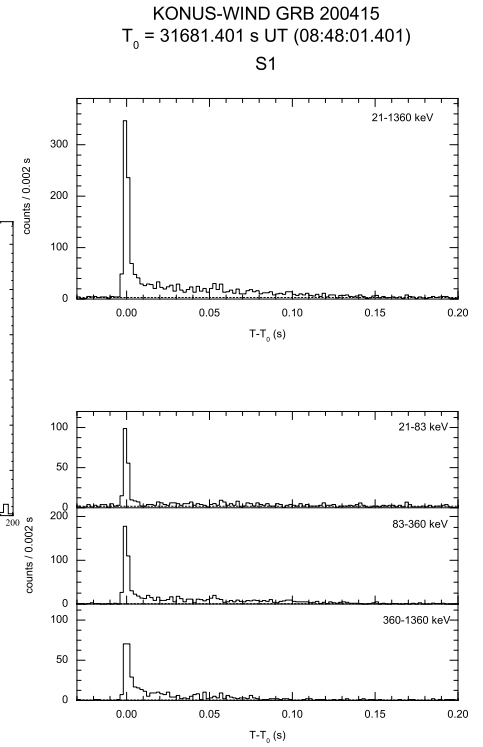Figure 13: KW light curve.

1.7 GRB 200521A
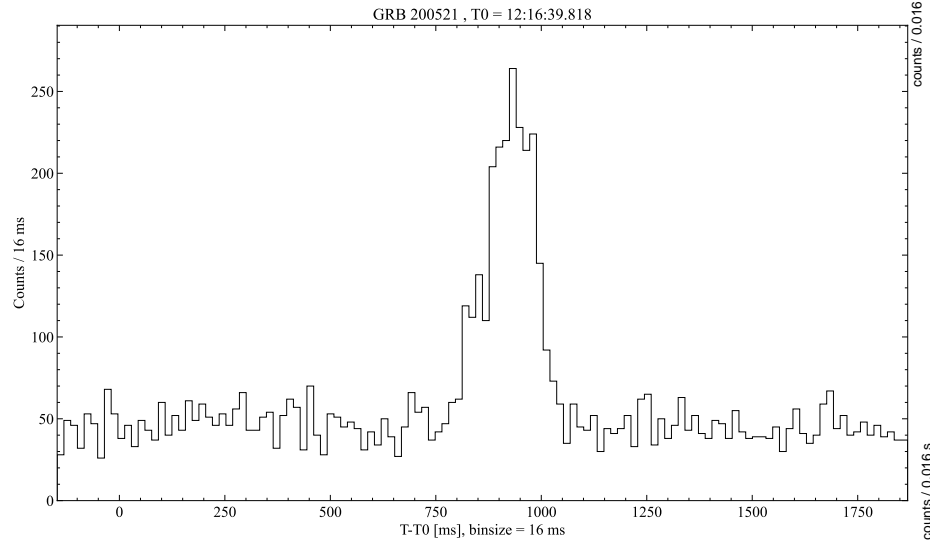
Figure 14: ASIM HED light curve

KONUS-WIND GRB 200521
T_0 = 44201.268 s UT (12:16:41.268)

S2
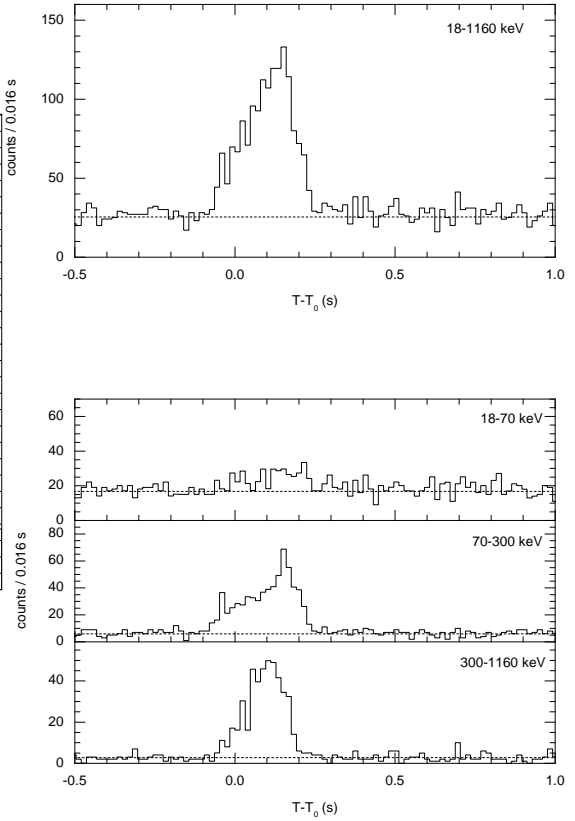
Figure 15: KW light curve

1.8 GRB 200716C
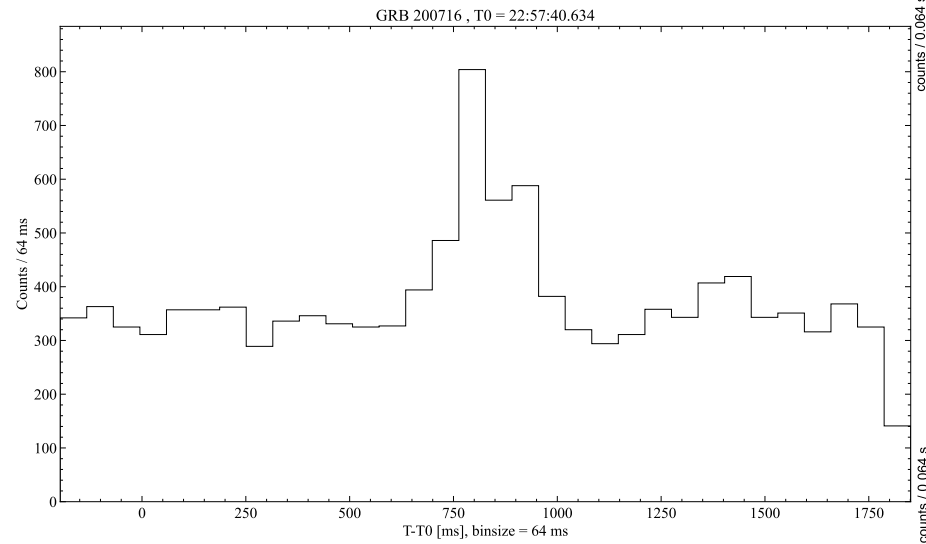
Figure 16: ASIM HED light curve
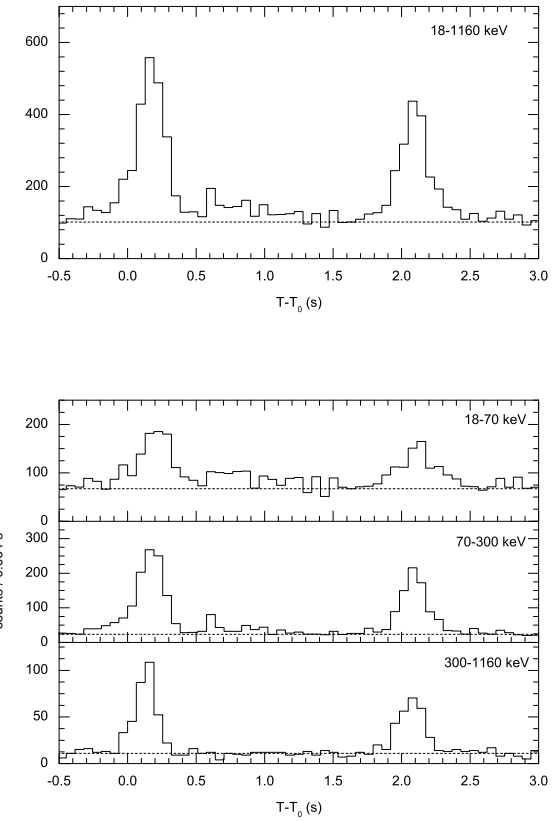
Figure 17: KW light curve

1.9 GRB 201227A

GRB 201227 , T0 = 15:14:06.853

Counts / 2 ms

T-T0 [ms], binsize = 2 ms
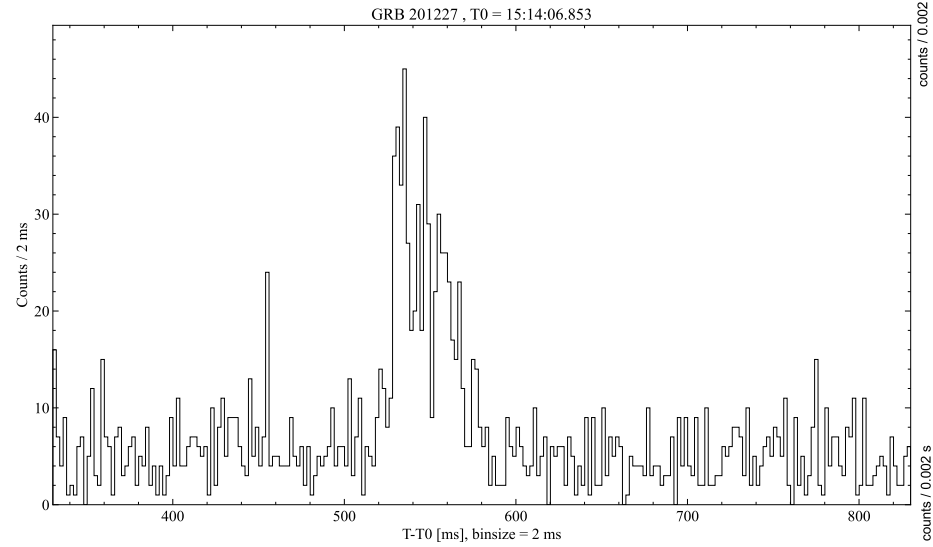
Figure 18: Trimmed ASIM HED light curve

KONUS-WIND GRB 201227
T_0 = 54846.705 s UT (15:14:06.705)

S1

counts / 0.002 s

21-1360 keV

T-T$_0$ (s)

counts / 0.002 s

21-83 keV

83-360 keV

360-1360 keV

T-T$_0$ (s)

Figure 19: KW light curve

1.10 GRB 210424B

GRB 210424 , T0 = 08:01:54.997
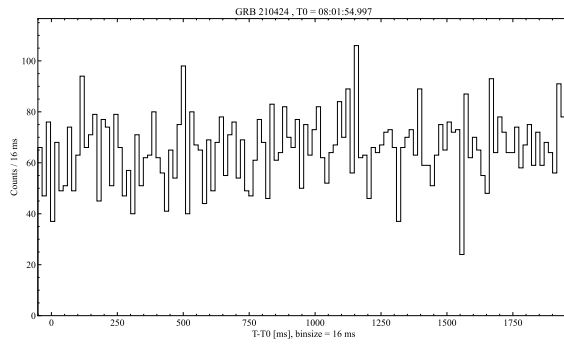
Figure 20: ASIM HED light curve

GRB 210424 , T0 = 08:01:54.997
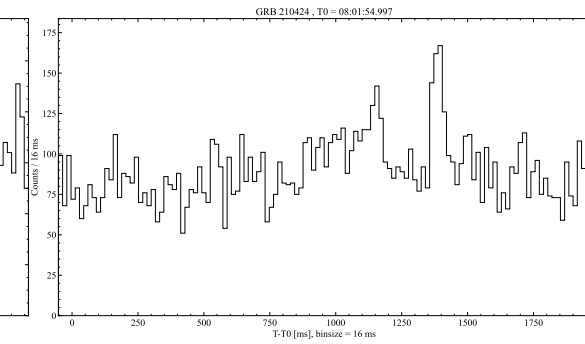
Figure 21: ASIM LED light curve

KONUS-WIND GRB 210424
T_0 = 28916.081 s UT (08:01:56.081)
S2
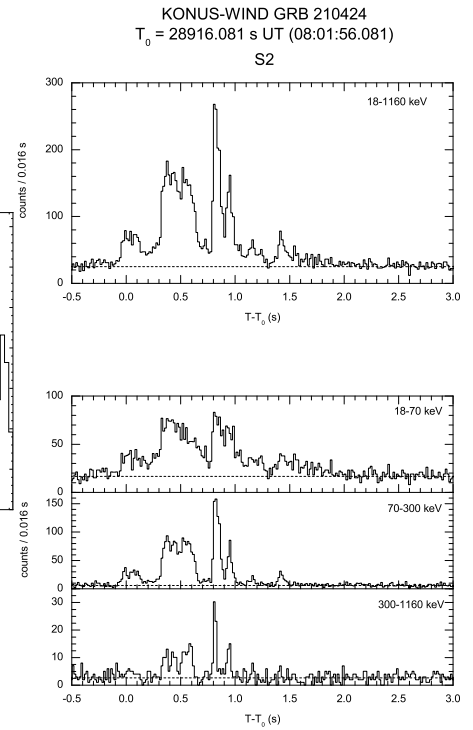
Figure 22: KW light curve.

1.11   GRB 210619B
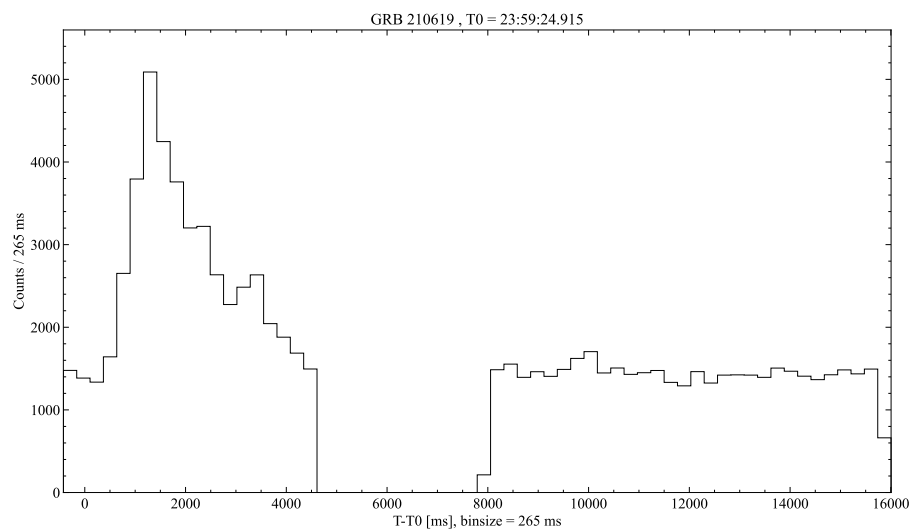
Figure 23: ASIM HED light curve

Figure 24: KW light curve

1.12   GRB 211211A

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

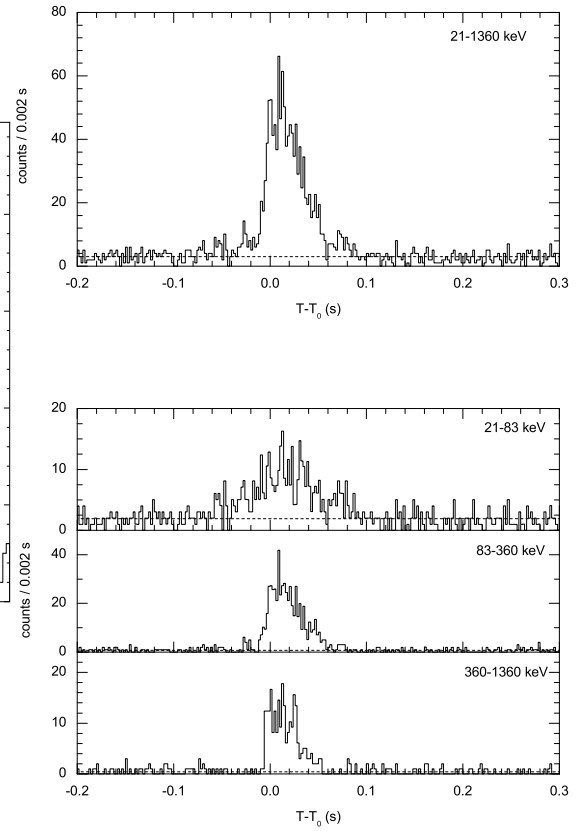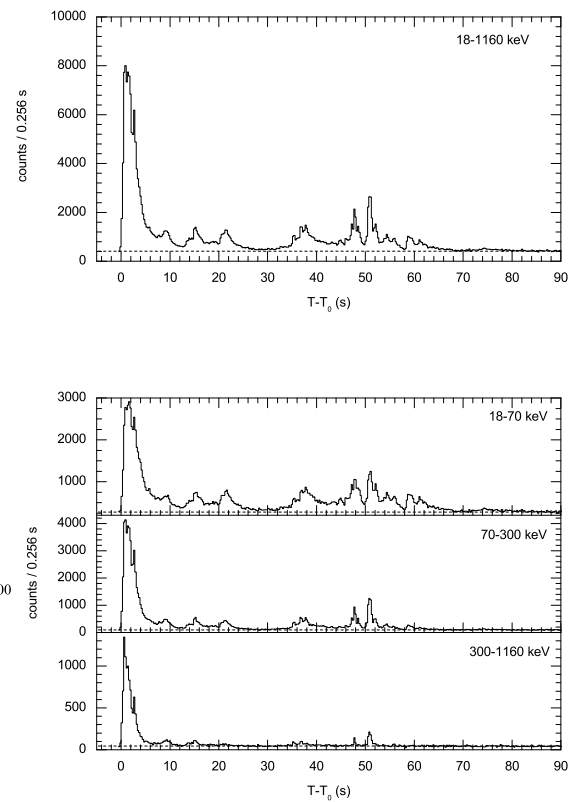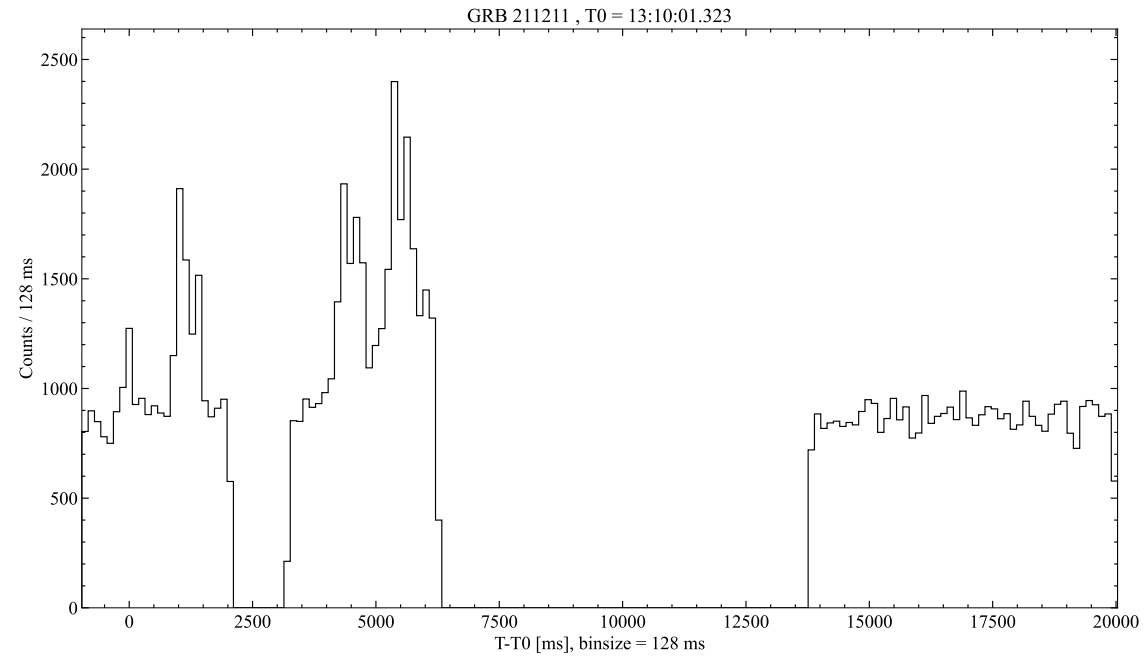| GRB #	Date Time	Other Satellites	Location	GCN #	Duration	Fluence	Peak Flux	Model	alpha	beta	Ep / Ec	χ^2
-	*UT*	-	*Ra, Dec*	-	*s*	*erg/cm^2*	*erg/cm^2/s (/Δt)*	-	*index*	*index*	*keV*	*dof*
GRB 180720B	2018-07-20 14:21:47.389	KW, FERMI, SWIFT	0.530, -2.933	23011-KW 22981-FERMI 22973-SWIFT	125	$(5.43 \pm 0.26) \times 10^{-4}$	$(9.70 \pm 0.52) \times 10^{-5}$ (64ms)	B	-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	$3.70(-0.17,+0.18) \times 10^{-5}$	$2.72(-0.25,+0.26) \times 10^{-4}$ (16 ms)	B	-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	$6.44(-0.75,+0.76) \times 10^{-4}$	$1.64(-0.17,+0.17) \times 10^{-5}$ (16 ms)	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	$1.47(\pm 0.04) \times 10^{-4}$	$2.00(\pm 0.08) \times 10^{-4}$	B	-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	$1.16(\pm 0.18) \times 10^{-5}$	$1.45(-0.39,+0.35) \times 10^{-4}$ (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	$(1.28 \pm 0.15) \times 10^{-5}$	$(7.38 +/- 0.87) \times 10^{-5}$ (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	$4.30(-0.52,+0.54) \times 10^{-6}$	$1.05(-0.18,+0.18) \times 10^{-4}$ (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)	B	$-0.39(-0.17,+0.20)$	$-2.76(-0.45,+0.25)$	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)	$4.60(\pm 0.13) \times 10^{-4}$	$1.54(\pm 0.12) \times 10^{-4}$ (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	5.01×10^{-4}	-	-	-	-	-	