

# GRB Archive

Andreas Ramsli

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# 1 Confirmed GRBs

## 1.1 GRB 180720B

2

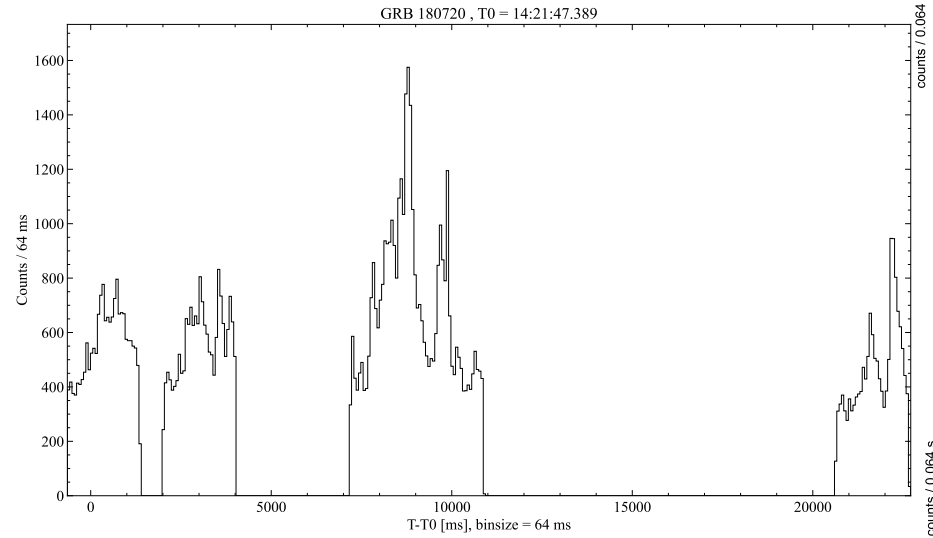


Figure 1: ASIM HED light curve.

KONUS-WIND GRB 180720  
 $T_0 = 51705.261$  s UT (14:21:45.261)  
S2

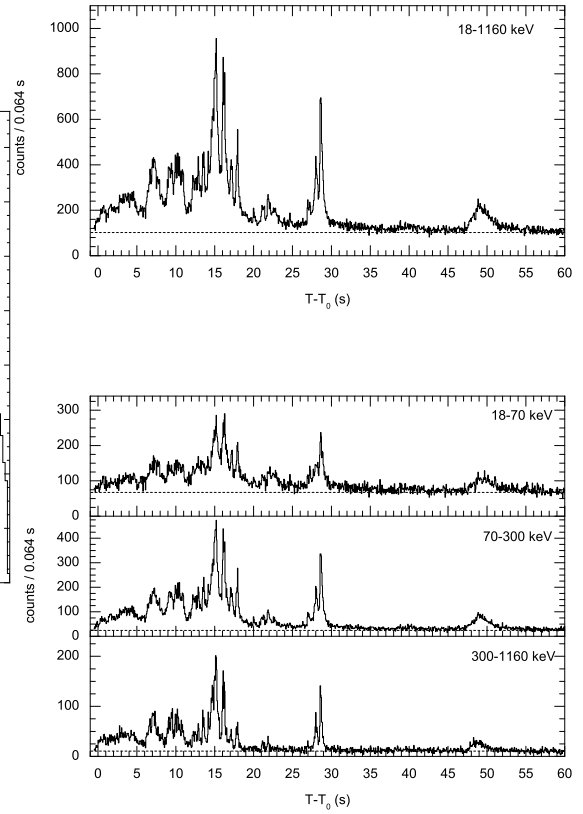


Figure 2: KW light curve

## 1.2 GRB 181222B

3

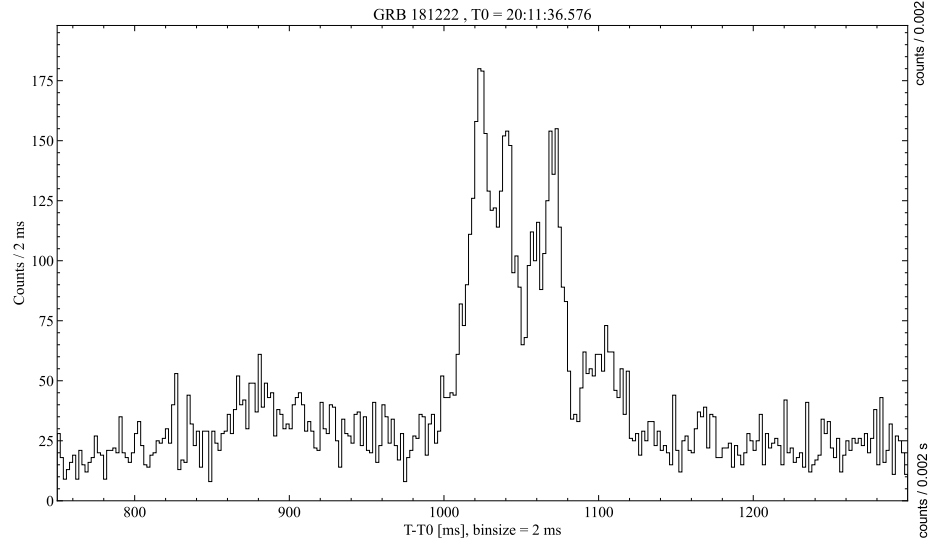


Figure 3: Trimmed ASIM HED light curve

KONUS-WIND GRB 181222  
T<sub>0</sub> = 72694.563 s UT (20:11:34.563)  
S2

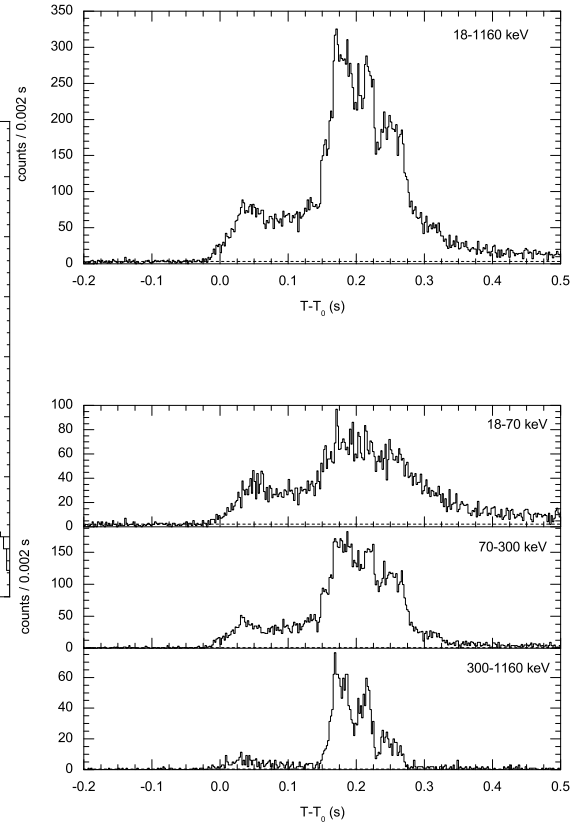


Figure 4: KW light curve

### 1.3 GRB 190206A

4

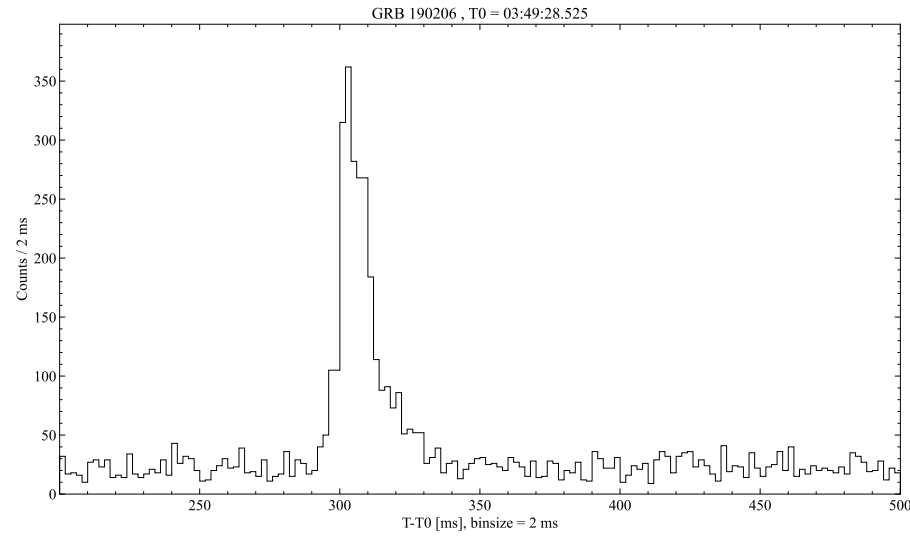


Figure 5: Trimmed ASIM HED light curve

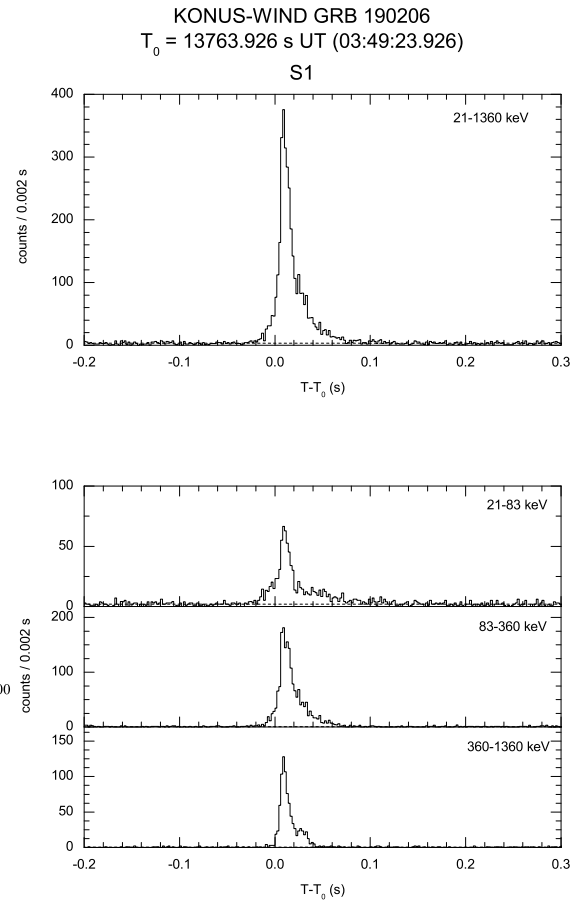


Figure 6: KW light curve

## 1.4 GRB 190305A

5

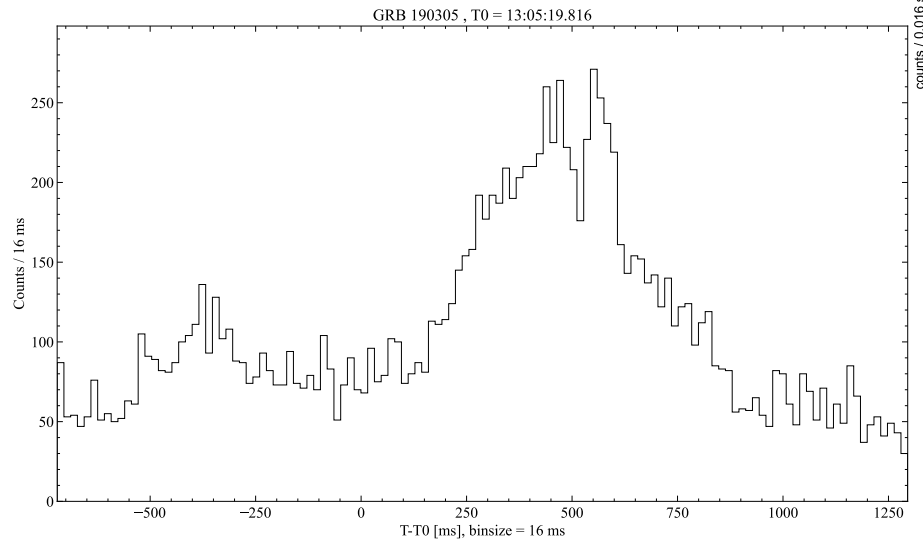


Figure 7: ASIM HED light curve

KONUS-WIND GRB 190305  
T<sub>0</sub> = 47115.900 s UT (13:05:15.900)  
S1

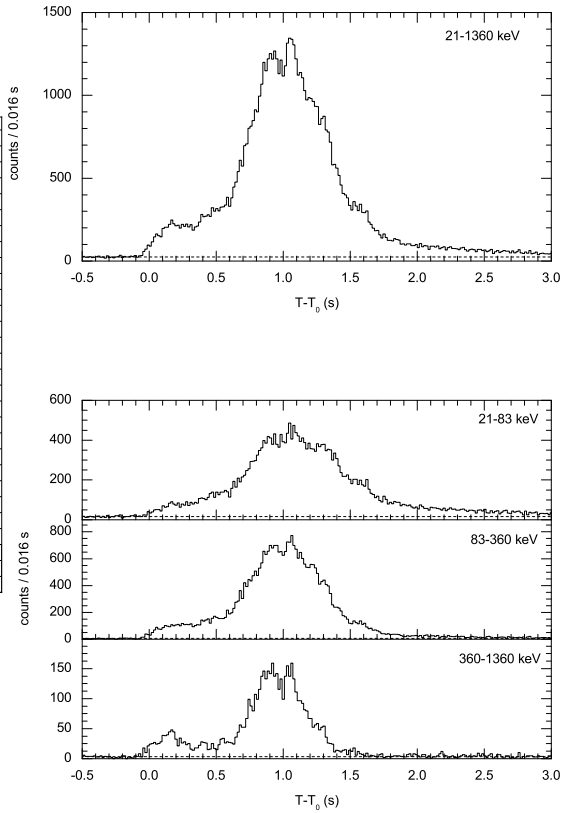


Figure 8: KW light curve

## 1.5 GRB 190606A

9

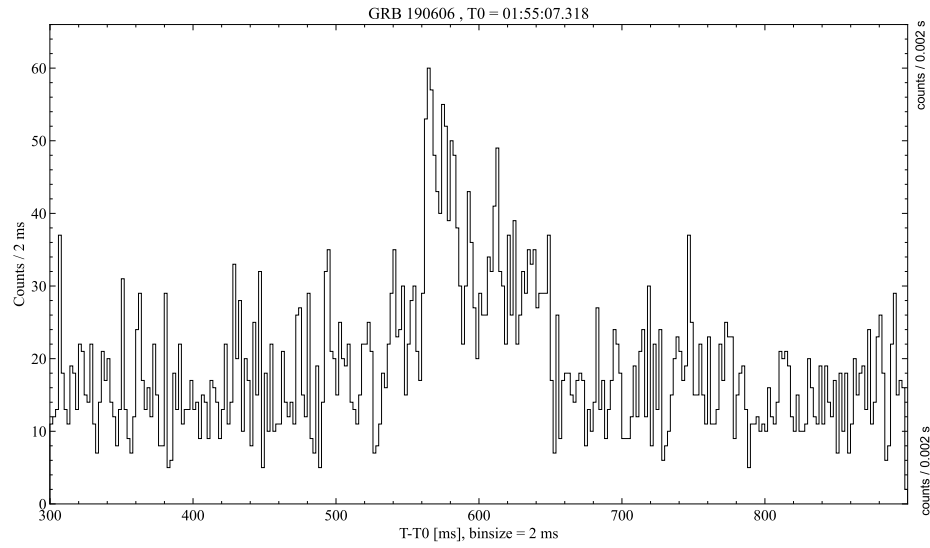


Figure 9: Trimmed ASIM HED light curve

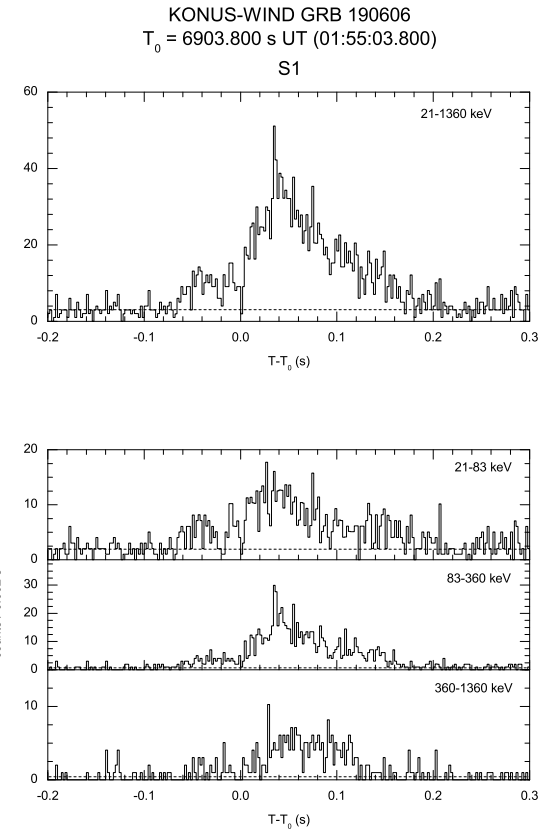


Figure 10: KW light curve

## 1.6 GRB 200415A

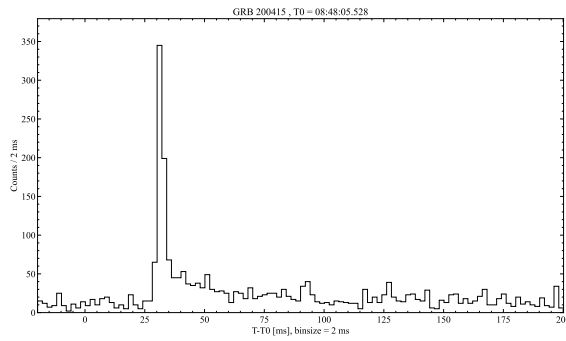


Figure 11: Trimmed ASIM HED light curve

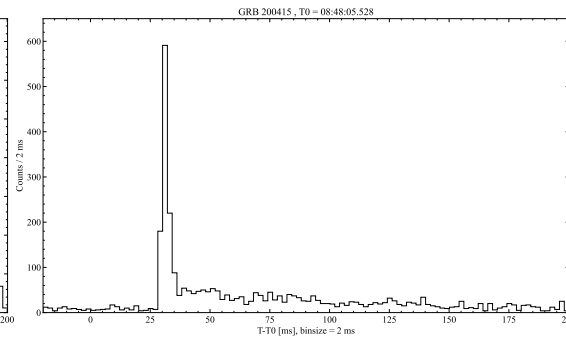


Figure 12: Trimmed ASIM LED light curve

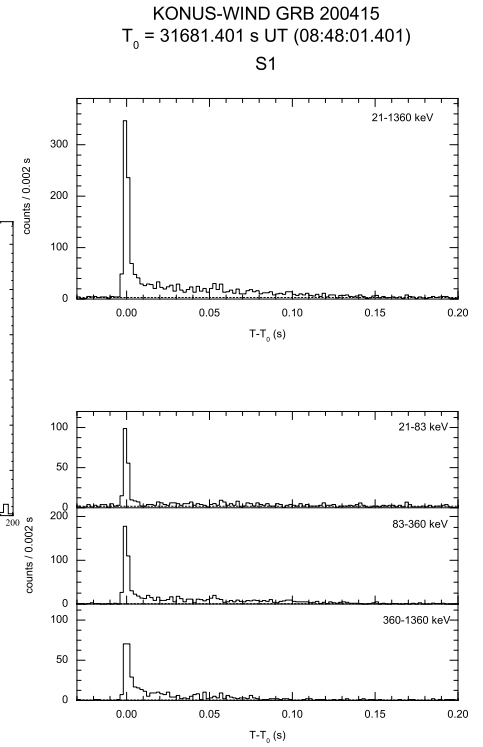


Figure 13: KW light curve.

## 1.7 GRB 200521A

8

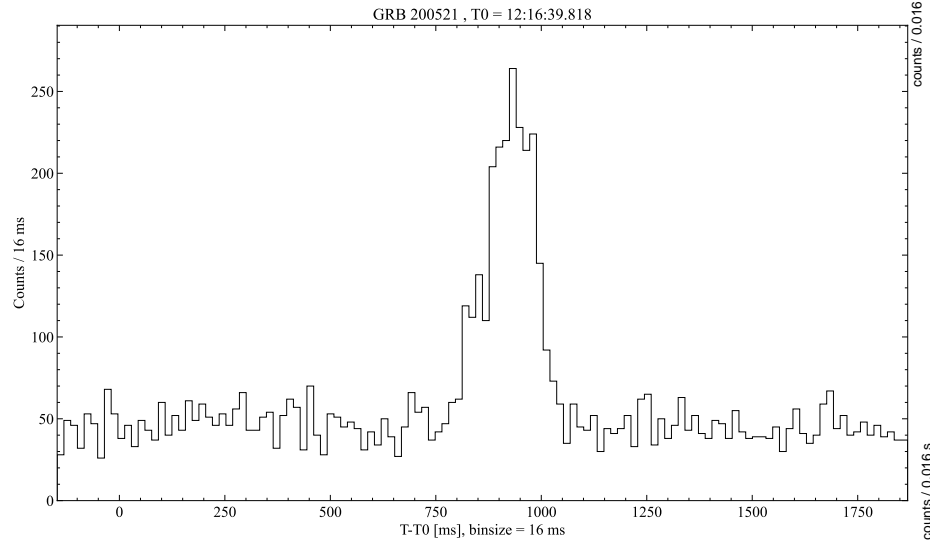


Figure 14: ASIM HED light curve

KONUS-WIND GRB 200521  
 $T_0 = 44201.268$  s UT (12:16:41.268)  
 S2

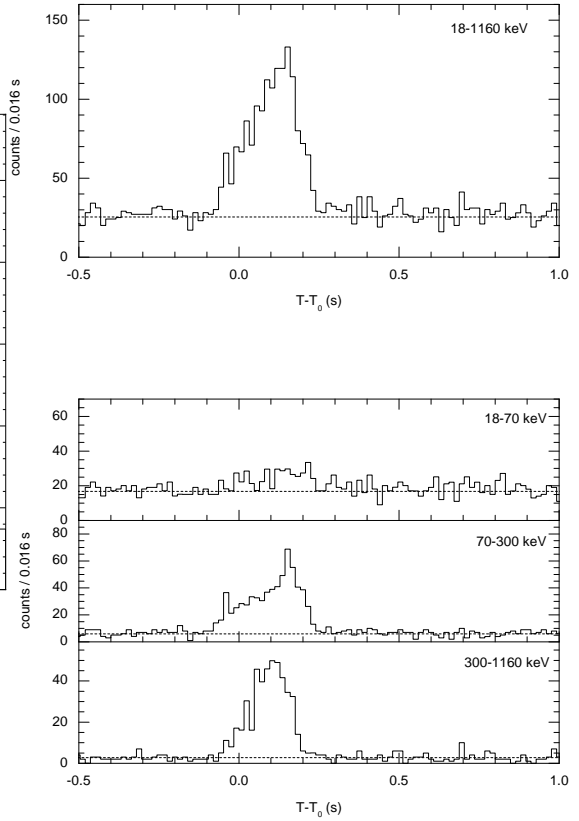


Figure 15: KW light curve



## 1.8 GRB 200716C

6

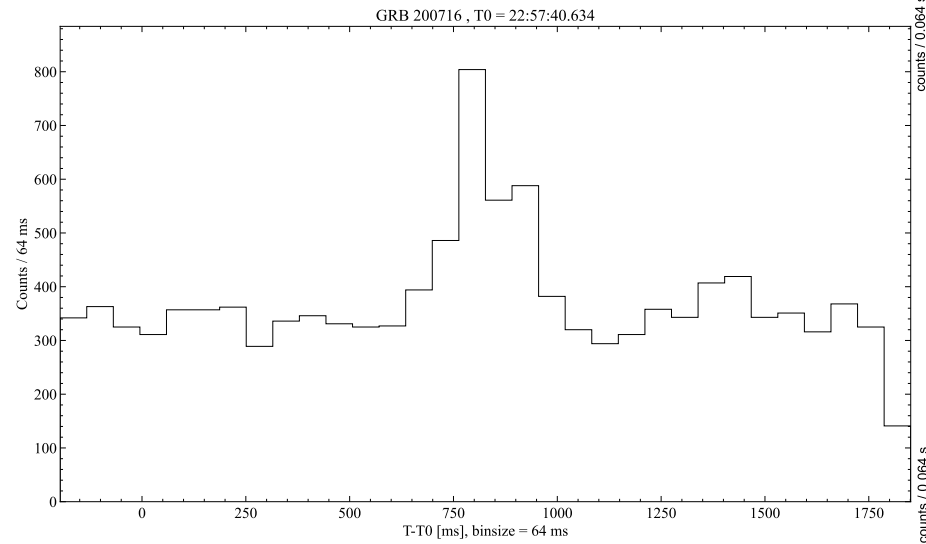


Figure 16: ASIM HED light curve

KONUS-WIND GRB 200716  
 $T_0 = 82658.337$  s UT (22:57:38.337)  
 S2

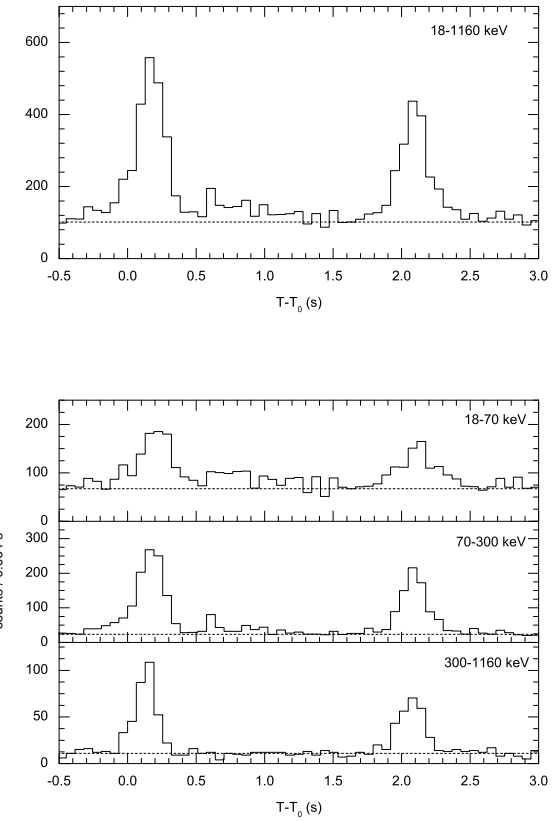


Figure 17: KW light curve

## 1.9 GRB 201227A

10

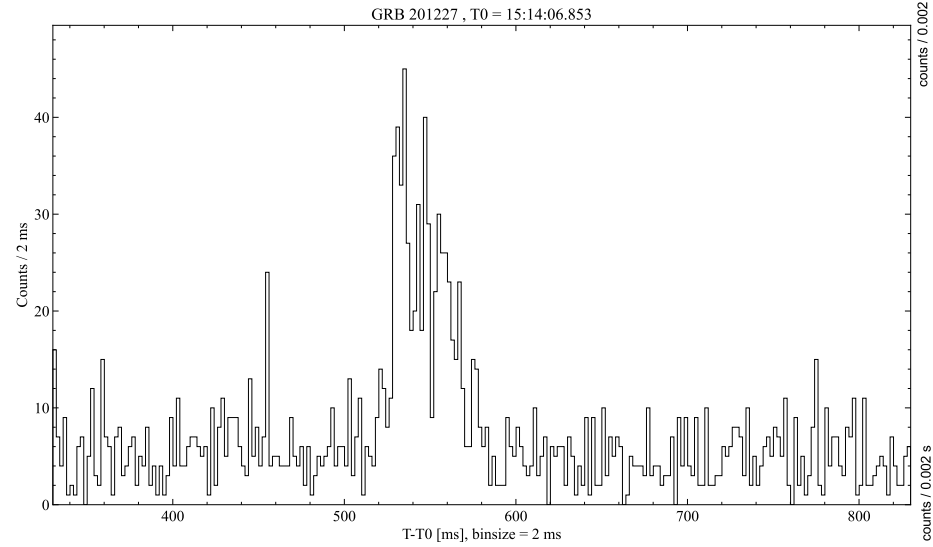


Figure 18: Trimmed ASIM HED light curve

KONUS-WIND GRB 201227  
T<sub>0</sub> = 54846.705 s UT (15:14:06.705)  
S1

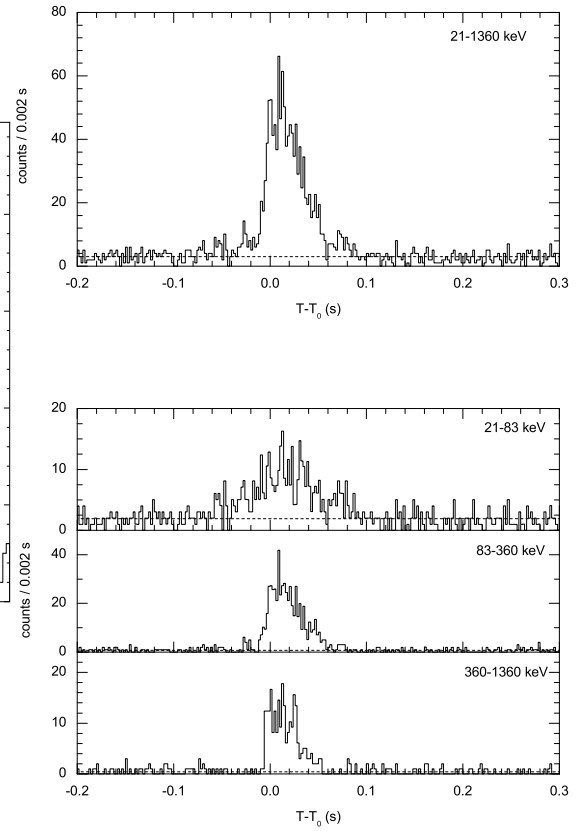


Figure 19: KW light curve

## 1.10 GRB 210424B

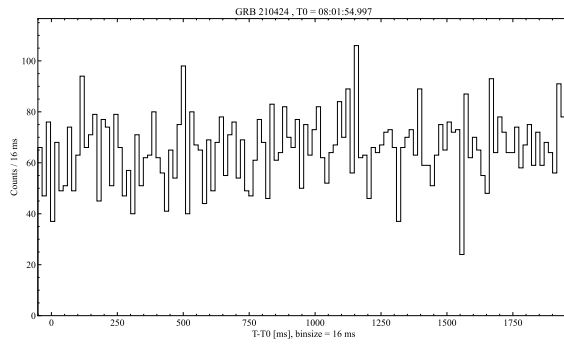


Figure 20: ASIM HED light curve

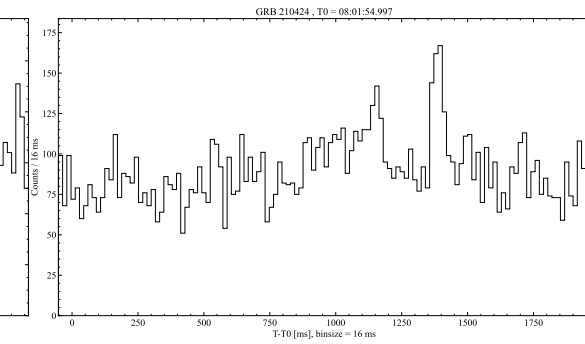


Figure 21: ASIM LED light curve

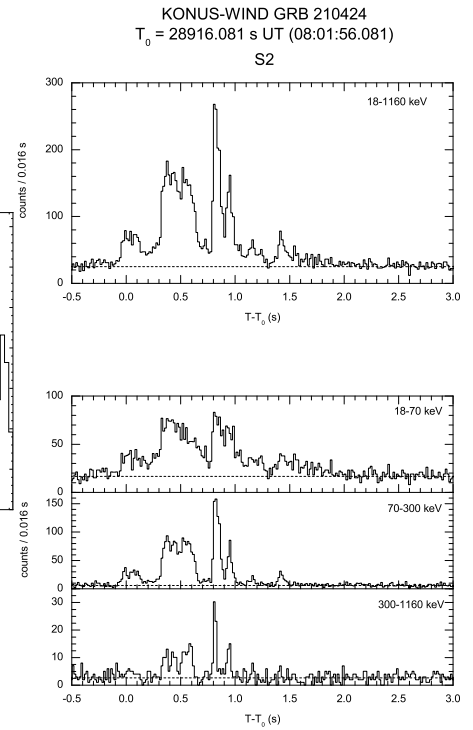


Figure 22: KW light curve.

## 1.11 GRB 210619B

12

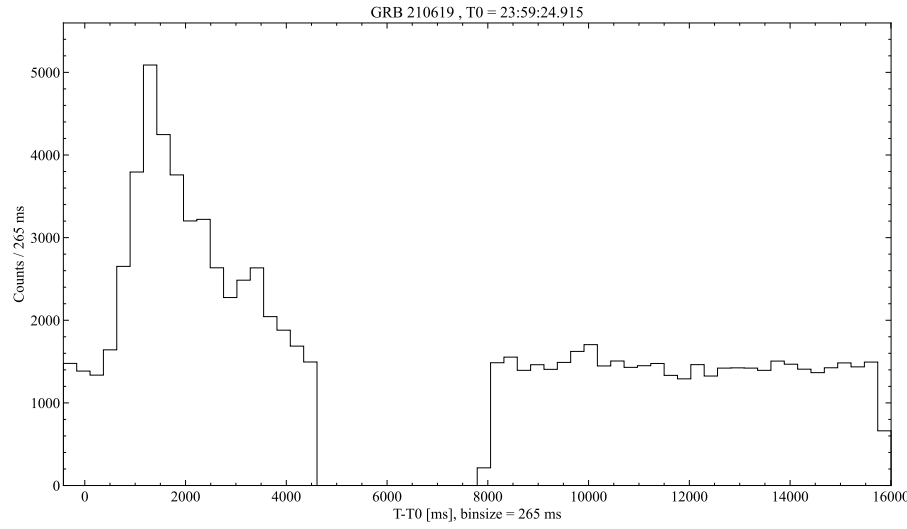


Figure 23: ASIM HED light curve

KONUS-WIND GRB 210619  
T<sub>0</sub> = 86368.157 s UT (23:59:28.157)  
S2

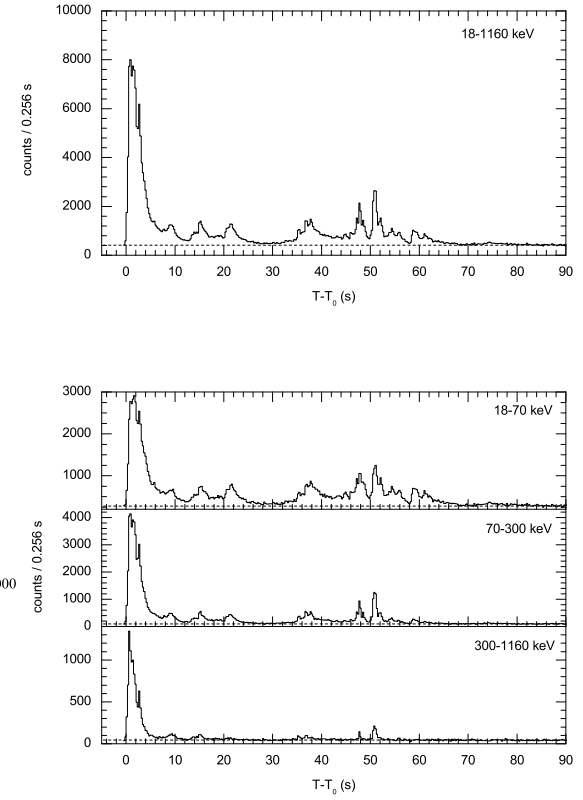


Figure 24: KW light curve

## 1.12 GRB 211211A

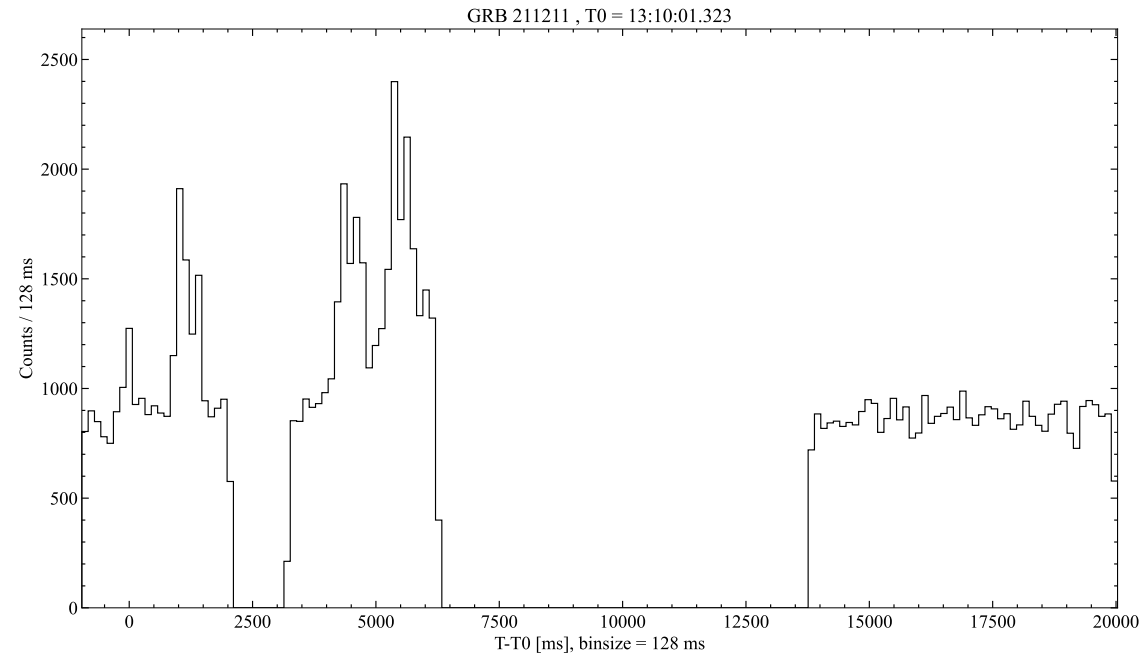


Figure 25: ASIM HED light curve

## 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	$\chi^2$
-	UT	-	Ra, Dec	-	s	erg/cm <sup>2</sup>	erg/cm <sup>2</sup> /s (/Δt)	-	index	index	keV	dof
<b>GRB 180720B</b>	2018-07-20 14:21:47.389	KW, FERMI, SWIFT	0.530, -2.933	<a href="#">23011-KW</a> <a href="#">22981-FERMI</a> <a href="#">22973-SWIFT</a>	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
<b>GRB 181222B</b>	2018-12-22 20:11:36.576	KW, FERMI	312.572, 24.240	<a href="#">23557-KW</a> <a href="#">23556-IPN</a> <a href="#">23551-FERMI</a>	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
<b>GRB 190206A</b>	2019-02-06 03:49:28.525	KW	313.330, -30.510	<a href="#">23880-KW</a> <a href="#">23879-IPN</a>	0.1	$6.44(-0.75,+0.76) \times 10^{-4}$ (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
<b>GRB 190305A</b>	2019-03-05 13:05:19.816	KW, IPN, AGILE	11.627, -50.349	<a href="#">23939-KW</a> <a href="#">23936-IPN</a> <a href="#">23930-AGILE</a>	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
<b>GRB 190606A</b>	2019-06-06 01:55:07.318	KW, FERMI, AGILE	76.561, -0.638	<a href="#">24784-KW</a> <a href="#">24765-IPN</a> <a href="#">24764-FERMI</a>	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
<b>GRB 200415A</b>	2020-04-15 08:48:05.528	KW, FERMI ++	11.071, -25.017	<a href="#">27596-KW</a> <a href="#">27590-FERMI</a> <a href="#">27585-IPN</a> <a href="#">27795-IPN</a>	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
<b>GRB 200521A</b>	2020-05-21 12:16:39.818	KW, FERMI, CALET	169.531, 7.222	<a href="#">27796-KW</a> <a href="#">27777-CALET</a>	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 -
<b>GRB 200716C</b>	2020-07-16 22:57:40.634	KW, FERMI, SWIFT, CALET, AGILE	196.010, 29.645	<a href="#">28148-KW</a> <a href="#">28135-FERMI</a> <a href="#">28139-CALET</a> <a href="#">28133-AGILE</a> <a href="#">28124-SWIFT</a>	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
<b>GRB 201227A</b>	2020-12-27 15:14:06.853	KW, FERMI	170.121, -73.613	<a href="#">29196-KW</a> <a href="#">29182-IPN</a> <a href="#">29206-FERMI</a>	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
<b>GRB 210424B</b>	2021-04-24 08:01:54.997	FERMI, KW	284.716, 16.172	<a href="#">29911-KW</a> <a href="#">29909-IPN</a> <a href="#">ICECUBE</a>	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
<b>GRB 210619B</b>	2021-06-19 23:59:24.915	KW, FERMI	319.712, 33.867	<a href="#">30276-KW</a> <a href="#">ICECUBE</a>	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
<b>GRB 211211A</b>	2021-12-11 13:10:01.323	CALET, FERMI, SWIFT	212.271, 27.883	<a href="#">31226-CALET</a> <a href="#">31210-FERMI</a> <a href="#">31209-SWIFT</a>	51.37	$5.01 \times 10^{-4}$	-	-	-	-	-	-