

GRB Archive

Andreas Ramsli

March 2022

Contents

1	Confirmed 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	Archive table	14

1 Confirmed GRBs

1.1 GRB 180720B

2

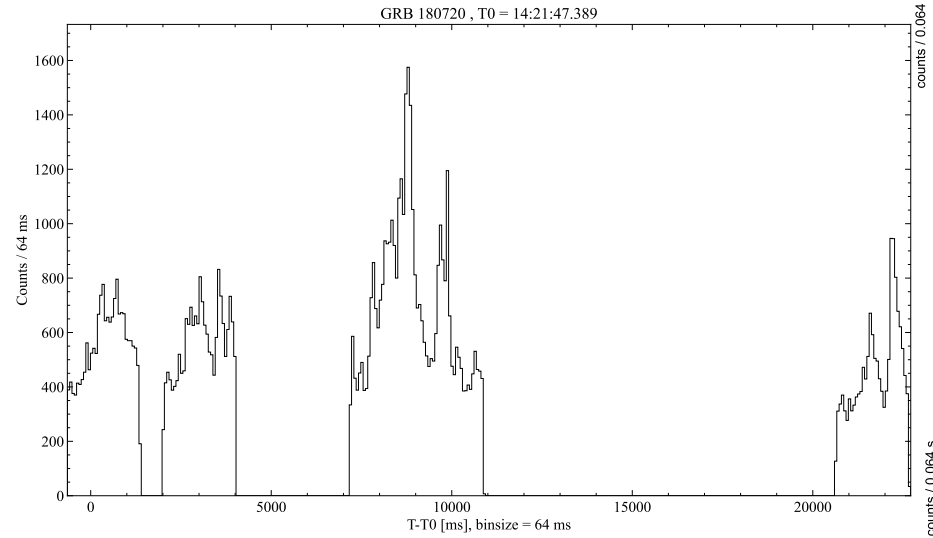


Figure 1: ASIM HED light curve.

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

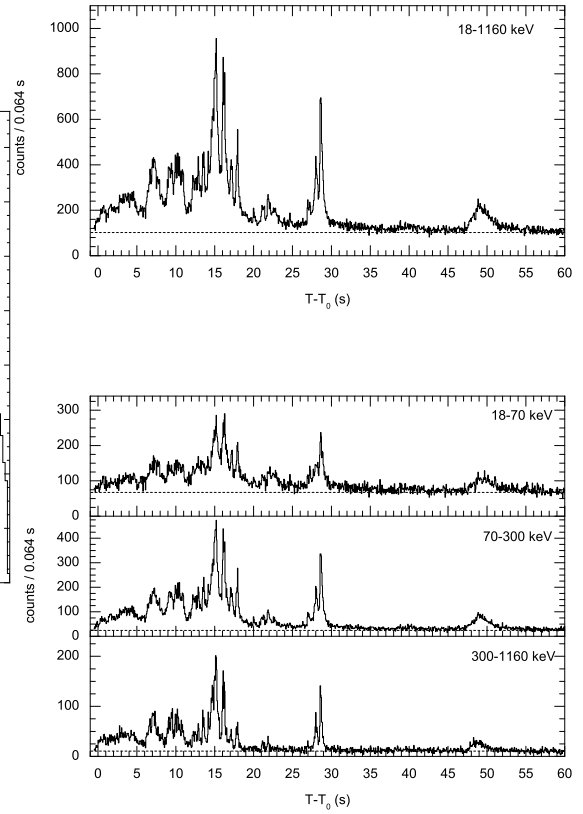


Figure 2: KW light curve

1.2 GRB 181222B

3

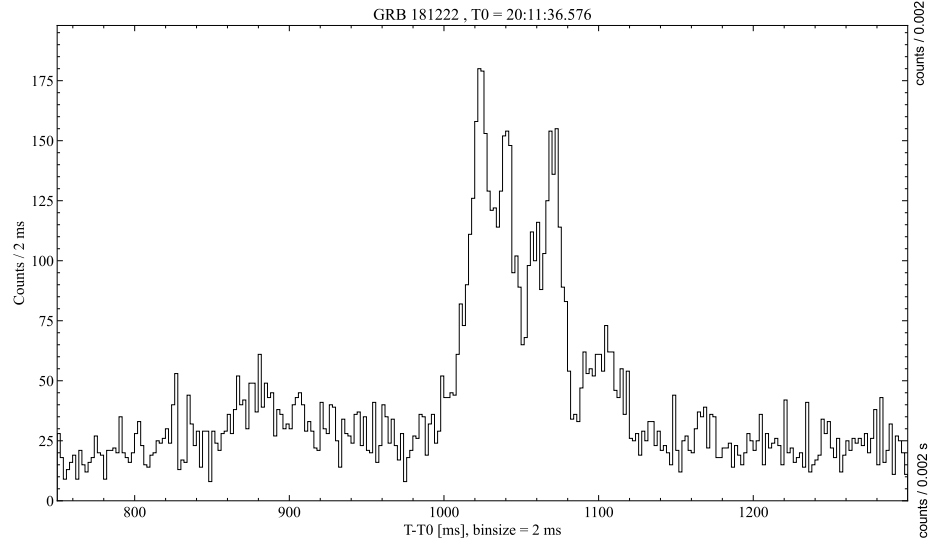


Figure 3: Trimmed ASIM HED light curve

KONUS-WIND GRB 181222
 $T_0 = 72694.563$ s UT (20:11:34.563)
 S2

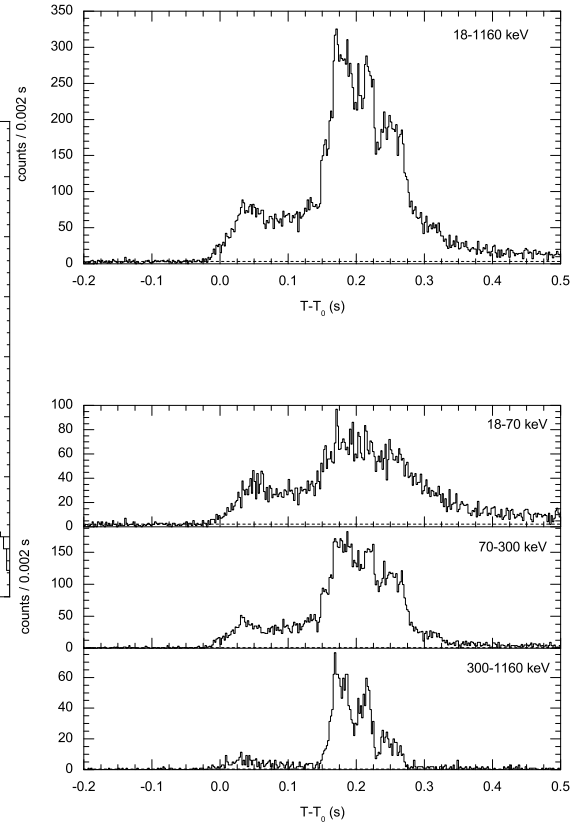


Figure 4: KW light curve

1.3 GRB 190206A

4

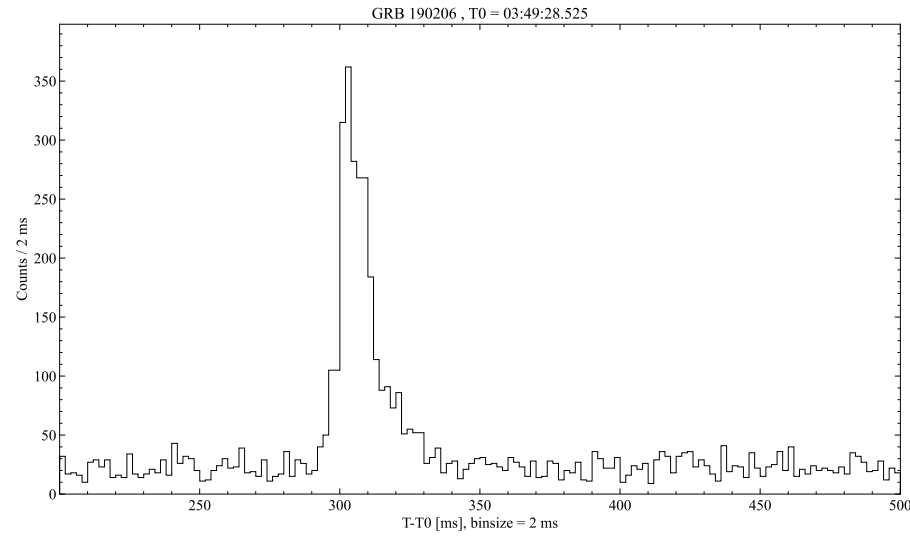


Figure 5: Trimmed ASIM HED light curve

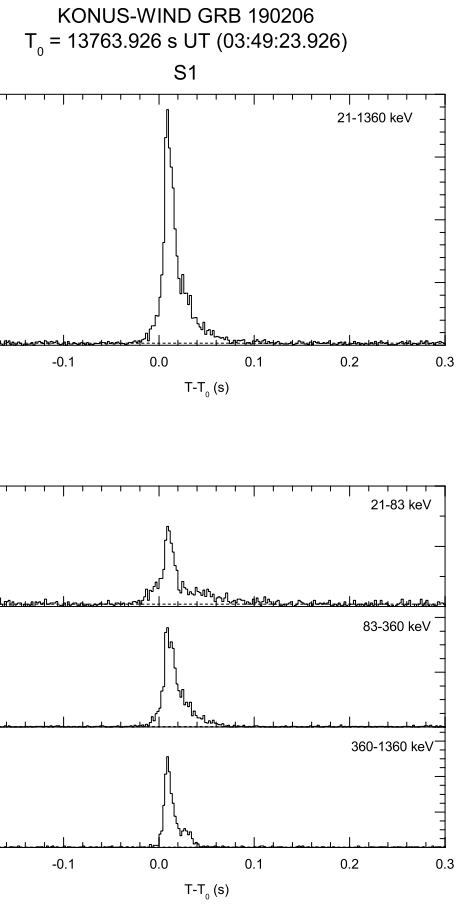


Figure 6: KW light curve

1.4 GRB 190305A

5

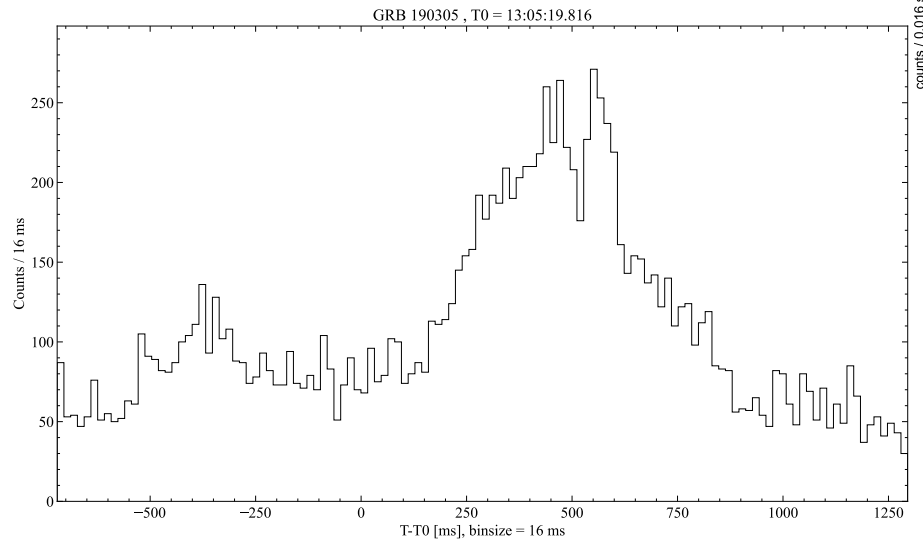


Figure 7: ASIM HED light curve

KONUS-WIND GRB 190305
 $T_0 = 47115.900$ s UT (13:05:15.900)
 S1

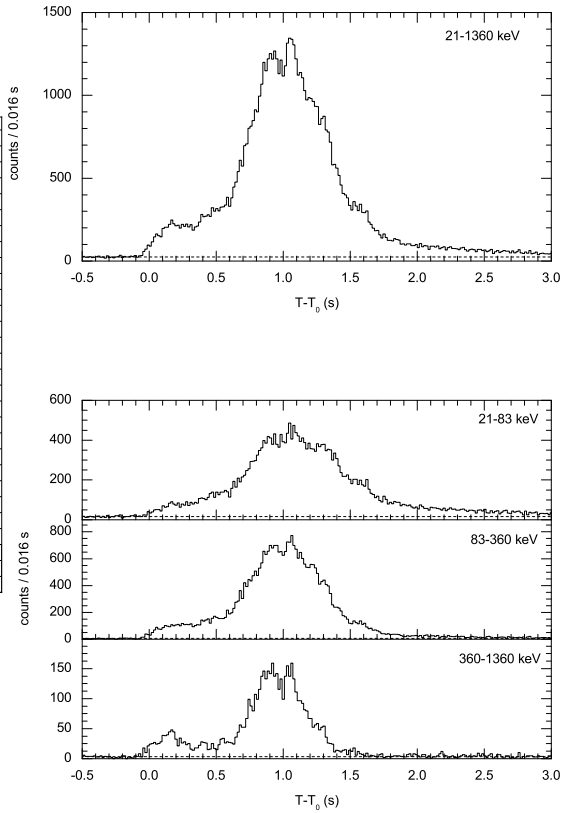


Figure 8: KW light curve

1.5 GRB 190606A

9

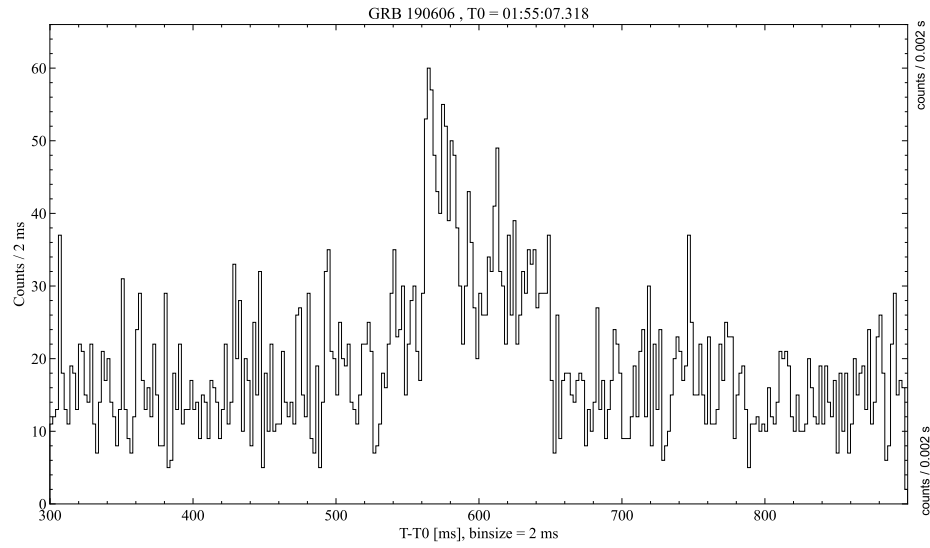


Figure 9: Trimmed ASIM HED light curve

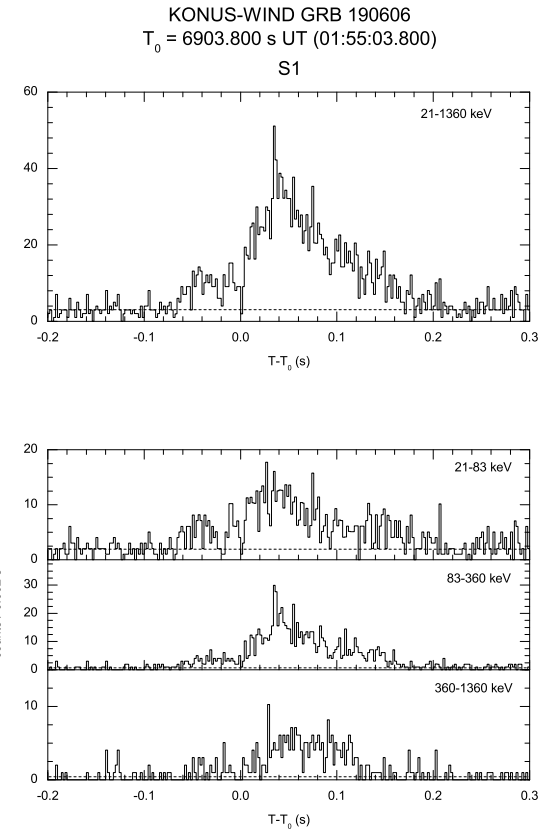


Figure 10: KW light curve

1.6 GRB 200415A

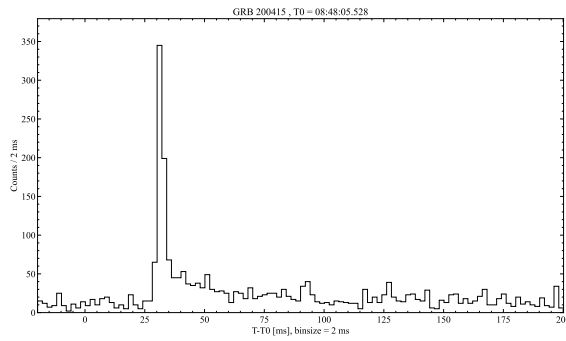


Figure 11: Trimmed ASIM HED light curve

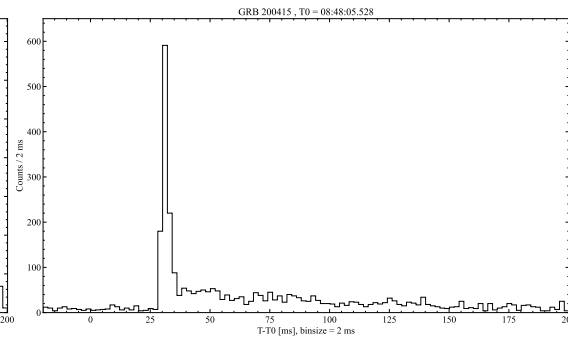


Figure 12: Trimmed ASIM LED light curve

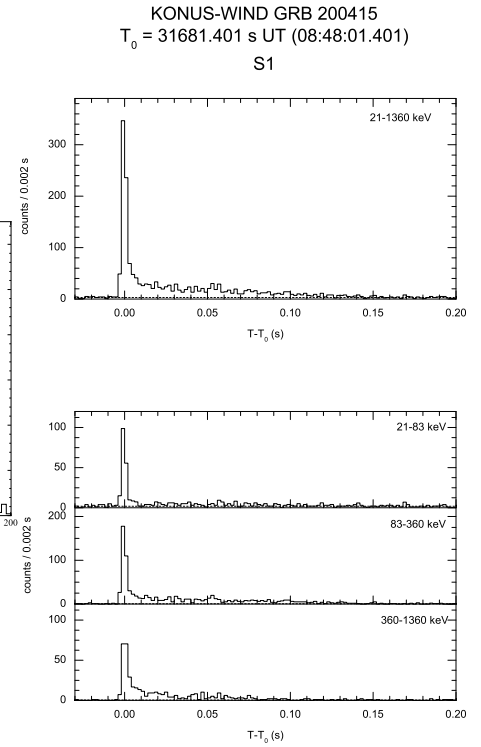


Figure 13: KW light curve.

1.7 GRB 200521A

8

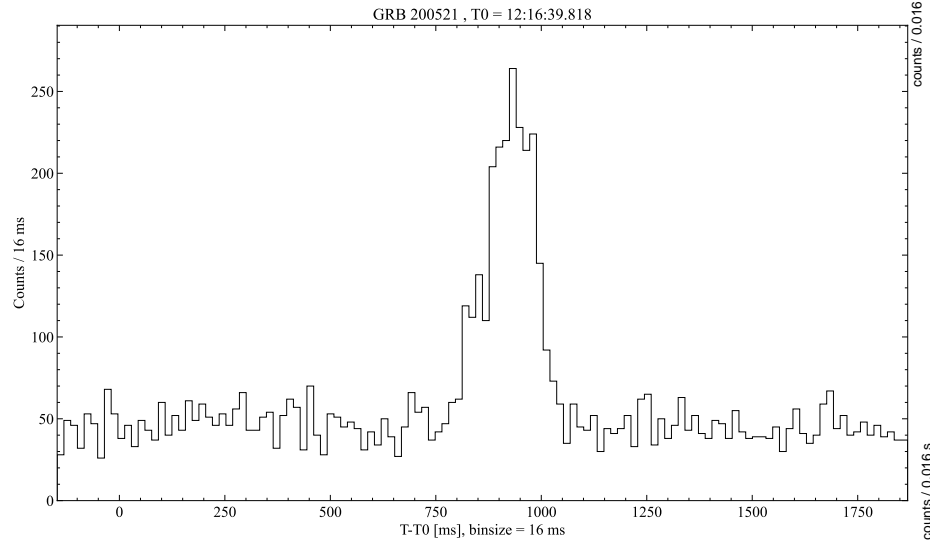


Figure 14: ASIM HED light curve

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

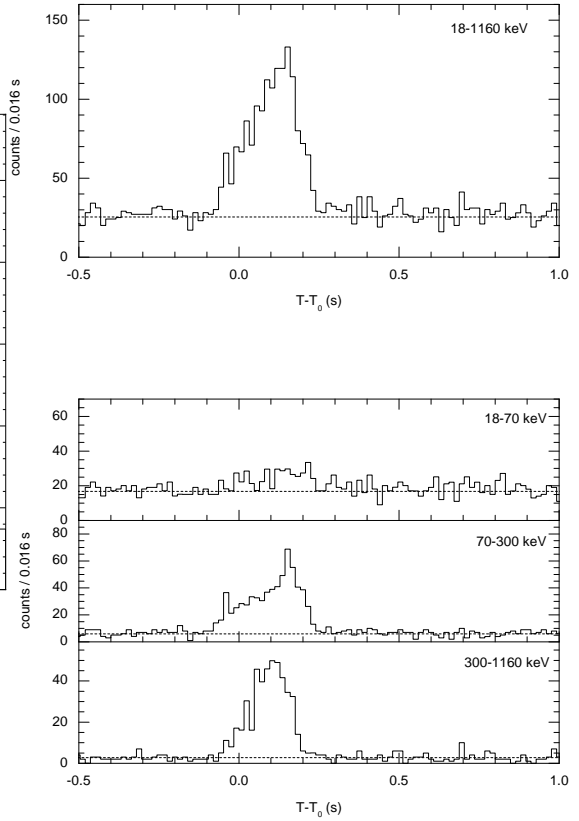


Figure 15: KW light curve

1.8 GRB 200716C

6

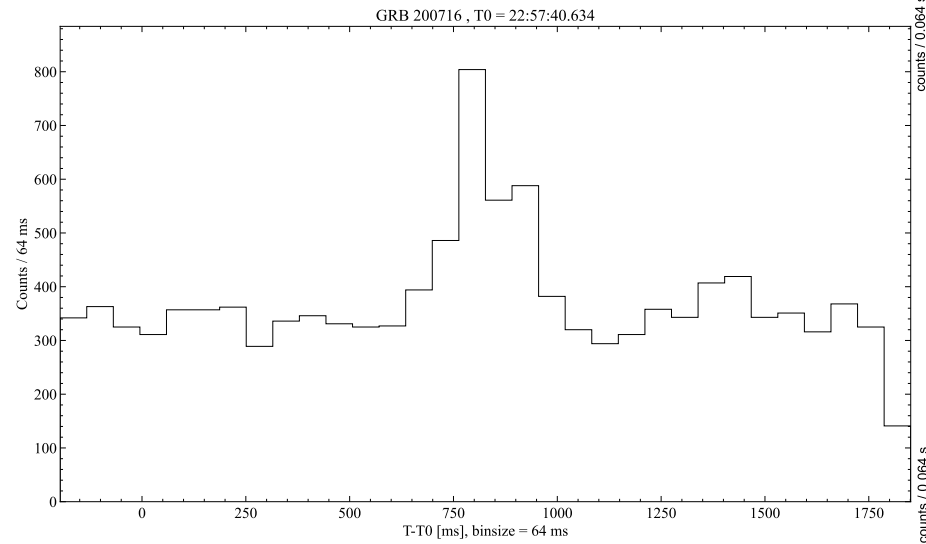


Figure 16: ASIM HED light curve

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

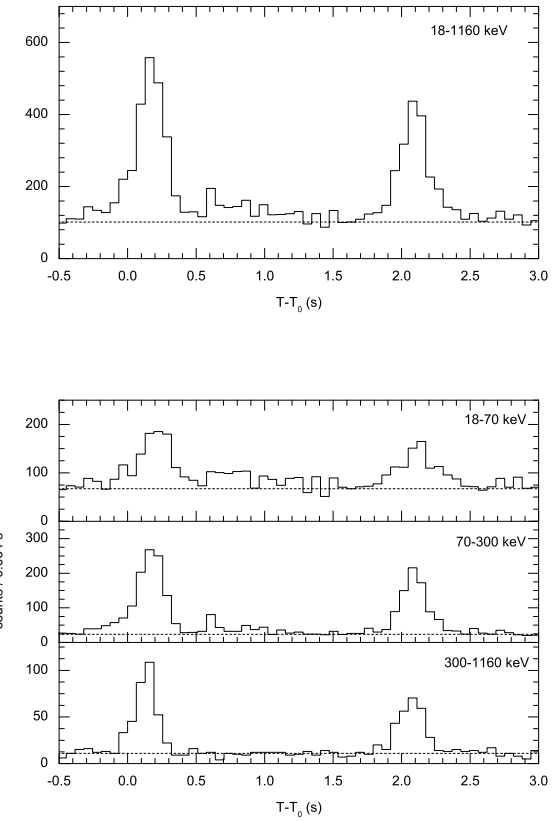


Figure 17: KW light curve

1.9 GRB 201227A

10

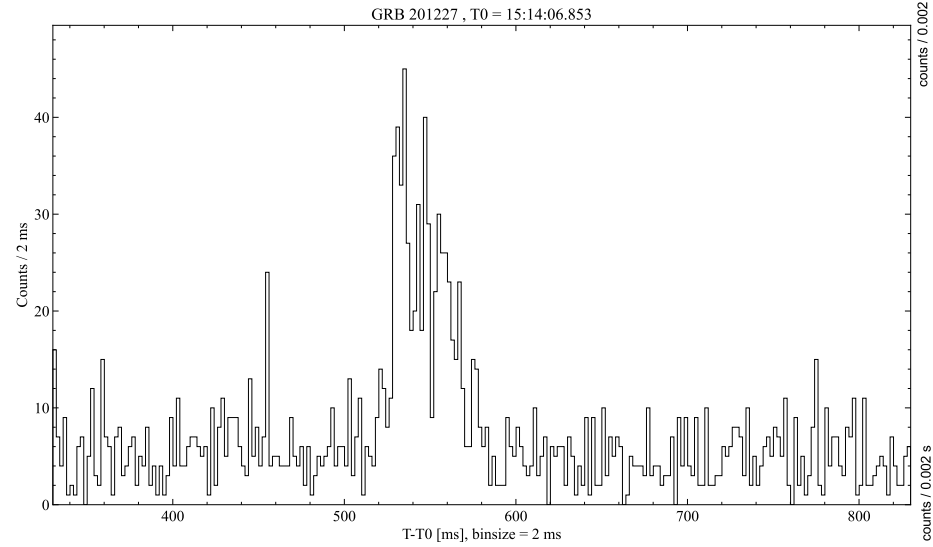


Figure 18: Trimmed ASIM HED light curve

KONUS-WIND GRB 201227
T₀ = 54846.705 s UT (15:14:06.705)
S1

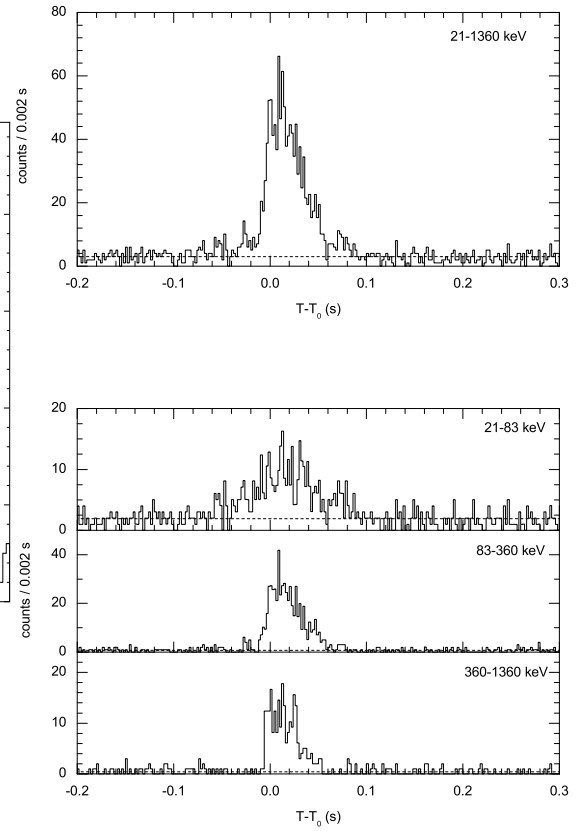


Figure 19: KW light curve

1.10 GRB 210424B

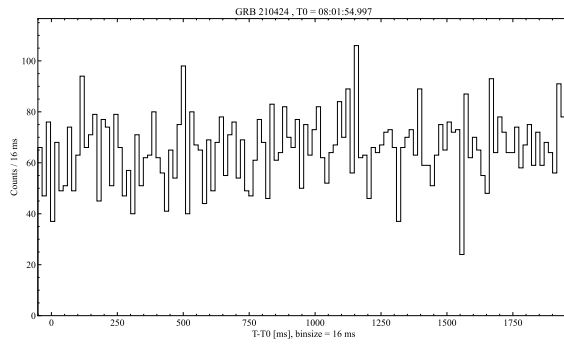


Figure 20: ASIM HED light curve

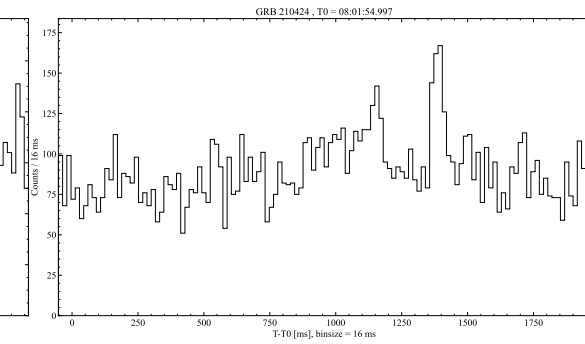


Figure 21: ASIM LED light curve

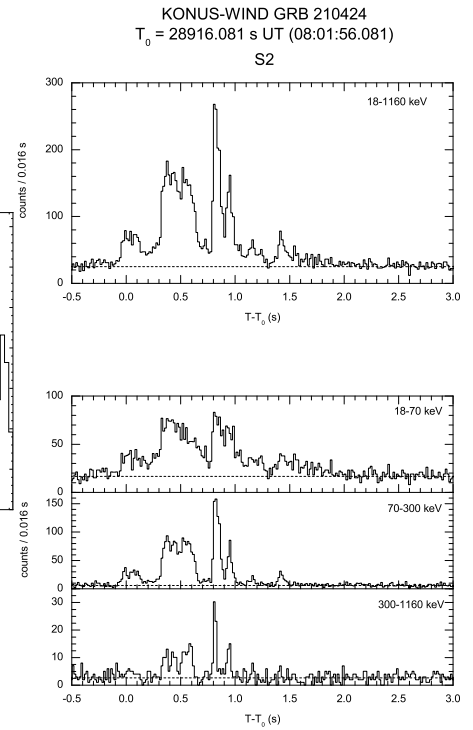


Figure 22: KW light curve.

1.11 GRB 210619B

12

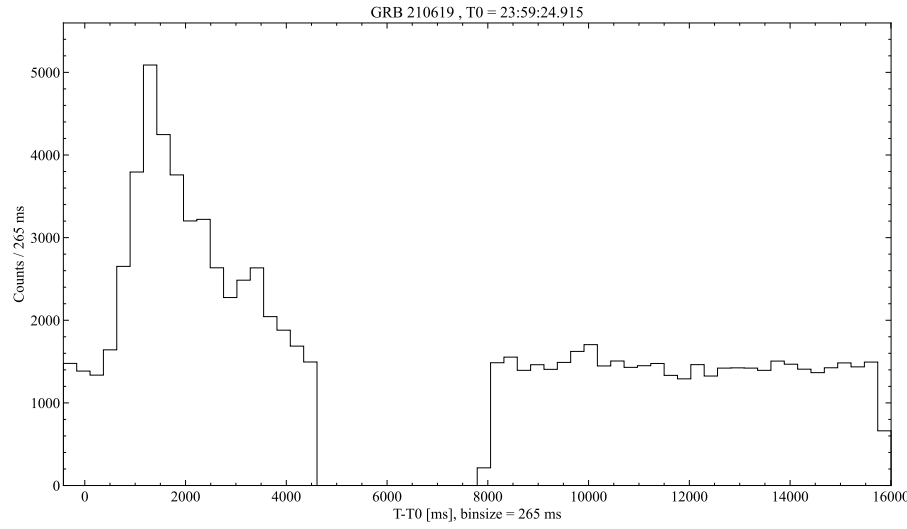


Figure 23: ASIM HED light curve

KONUS-WIND GRB 210619
T₀ = 86368.157 s UT (23:59:28.157)
S2

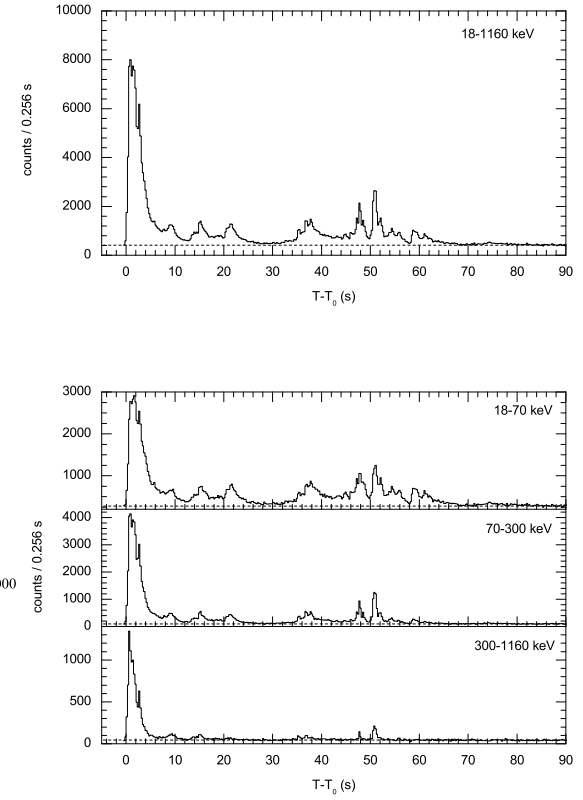


Figure 24: KW light curve

1.12 GRB 211211A

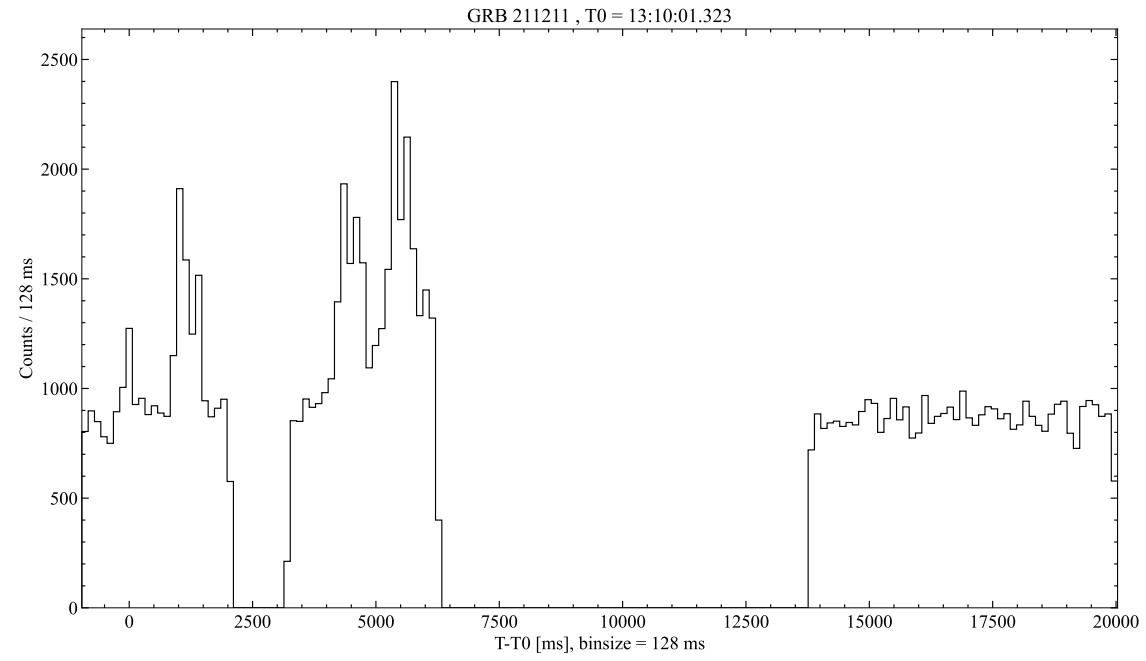


Figure 25: ASIM HED light curve

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	χ^2
-	UT	-	Ra, Dec	-	s	erg/cm ²	erg/cm ² /s (/Δt)	-	index	index	keV	dof
GRB 180720B	2018-07-20 14:21:48.227	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 20:11:36.161	KW, FERMI	294.324, -23.694	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 03:49:28.312	KW	313.330, -30.510	23880-KW 23879-IPN	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
GRB 190305A	2019-03-05 13:05:19.779	KW, IPN, AGILE	340.399, -10.588	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 01:55:07.164	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 08:48:05.561	KW, FERMI ++	11.0708, -25.0167	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 12:16:39.798	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 22:57:40.644	KW, FERMI, SWIFT, CALET, AGILE	196.0101, 29.6446	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 15:14:06.777	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 08:01:55.095	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 23:59:24.928	KW, FERMI	319.7125, 33.8667	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 13:30:01.244	CALET, FERMI, SWIFT	212.2708, 27.8833	31226-CALET 31210-FERMI 31209-SWIFT	51.37	5.01×10^{-4}	-	-	-	-	-	-