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THE GAMMA-RAY BURST CATALOG OBTAINED WITH THE GAMMA-RAY BURST MONITOR ABOARD *BeppoSAX*

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ABSTRACT

We report on the catalog of gamma-ray bursts (GRBs) detected with the Gamma-Ray Burst Monitor aboard the *BeppoSAX* satellite. It includes 1082 GRBs with 40–700 keV fluences in the range from 1.3×10^{-7} to 4.5×10^{-4} erg cm^{-2}, and 40–700 keV peak fluxes from 3.7×10^{-8} to 7.0×10^{-5} erg cm^{-2} s^{-1}. We report in the catalog some relevant parameters of each GRB and discuss the derived statistical properties.

Key words: gamma-rays: bursts – gamma-rays: observations – X-rays: general

Online-only material: color figures

1. INTRODUCTION

In the last 10 years a big step forward has been accomplished in gamma-ray burst (GRB) astronomy. A key role in this advancement has been played by the *BeppoSAX* satellite (Boella et al. 1997). Its capability of promptly and accurately localizing GRBs and the possibility of following them up with highly sensitive X-ray telescopes on board allowed the discovery of the X-ray afterglow emission and, with ground telescopes, of the optical/radio afterglow from GRB sources (Costa et al. 1997; van Paradijs et al. 1997; Metzger et al. 1997; Frail et al. 1997). In this way the distance scale of long (>1 s) GRBs could be eventually established and important information on the GRB sources, their emission mechanisms, and their environments could be derived.

The two *BeppoSAX* instruments that allowed the prompt and accurate GRB localization were the Gamma-Ray Burst Monitor (GRBM) and the two Wide Field Cameras (WFCs), the first with the role of recognizing the occurrence of a GRB and second with the role of localizing it in the case the event direction occurred in their field of view (FOV) ($40^\circ \times 40^\circ$ full width at zero response) and was above the instrument sensitivity in their operative energy range (2–28 keV, Jager et al. 1997). Only a handful of GRBs (50; see Frontera 2004) was detected with both instruments, while the GRBM alone detected 1082 GRBs, a number similar to that of GRBs included in the third BATSE (3B) burst catalog (Meegan et al. 1996). In this paper, we present the catalog of these GRBs with their main observational and statistical properties.

2. INSTRUMENTATION

The *BeppoSAX* GRBM was part of the high energy experiment PDS (Phoswich Detection System; Frontera et al. 1997), being its anticoincidence (AC) shield. It was composed of four independent detection units, made of slabs of CsI(Na) scintillators, forming the four sides of a square box (see Figure 1). Each slab was 1 cm thick and had a geometric area of 1136 cm^2, with an open FOV. The light scintillation produced in each unit was viewed by two photomultipliers. A calibration source made of Am^{241}, embedded in a NaI(Tl) crystal, allowed to monitor the instrument gain. The gain could be varied by changing the high-voltage (HV) supply of each GRBM unit.

The electronics associated with the GRBM was a simple spectroscopic chain in which signals from each of the four detection units between two analog thresholds, after being multiplexed, were analog-to-digital converted by an analog-to-digital converter (ADC). By telecommand the low-level threshold (LLT) could be varied in the nominal energy range from 20 to 90 keV (16 steps), while the upper level threshold (ULT) could be varied between 200 and 700 keV (8 steps). The signals detected by each unit between LLT and ULT (good events) and above the AC threshold (ACT) were continuously counted with a 1 s integration time and stored in the onboard memory. The ACT could be selected between 100 and 300 keV (8 steps). The GRBM electronic unit included an onboard GRB trigger (see Section 2.1). If the onboard trigger condition was satisfied for at least two detection units, then the following high time resolution profiles for each of the GRBM units were stored on board and then transmitted to ground:

1. 7.8125 ms time profiles from the trigger time back to 8 s before;
2. 0.48828125 ms time profiles from the trigger time to 10 s later;
3. 7.8125 ms time profiles from 10 s after the trigger time for 88 s.

In addition to these data, for each detection unit, the following data were continuously transmitted:

1. 1 s count rates between LLT and ULT;
2. 1 s count rates above ACT (in phase with the previous ones);
3. 240 channel spectra of the signals between LLT and ULT, integrated over 128 s (synchronous integration, in phase with the 1 s count rates).

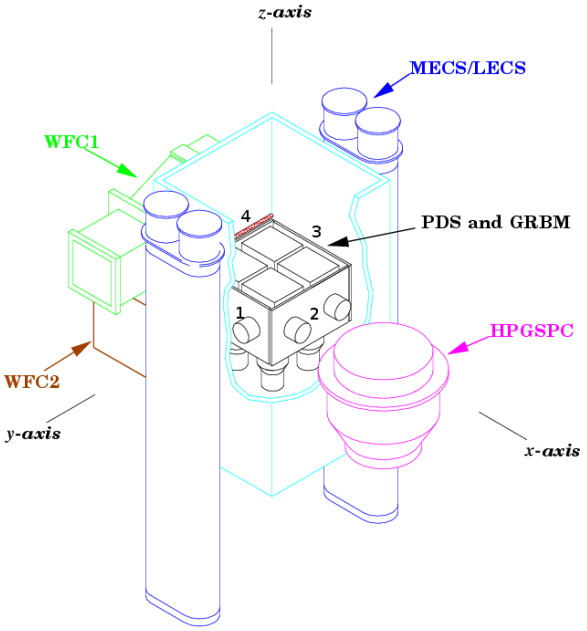

Figure 1. *BeppoSAX* payload, in which the location of the GRBM units is shown.

Further details about the GRBM instrument can be found elsewhere (Amati et al. 1997; Feroci et al. 1997; Costa et al. 1998).

2.1. Onboard and On-ground GRB Trigger Logic

The GRBM electronic unit included an onboard GRB trigger logic (OBTL) that worked in the following way. For each GRBM unit and for the events with amplitudes between LLT and ULT with a binning time of 7.8125 ms, a moving average on a Long Integration Time (LIT) was continuously computed. The LIT was adjustable from the ground between 8 and 128 s. The counts integrated over a Short Integration Time (SIT), also adjustable between 7.8125 ms and 4 s, were thus compared with the LIT moving average normalized to the same integration time. If the count difference exceeded n ($n = 4$, 8, or 16) times the Poissonian standard deviation σ of the mean count rate, then the trigger condition for that unit was satisfied. As seen above, the GRB trigger was activated when the trigger condition was satisfied for at least two detection units.

As discussed below, the OBTL was not suitable for distinguishing between true GRBs and many other spurious events, like the crossing of high-energy charged particles, atmospheric phenomena, etc. In addition, it was not able to detect weak events, that were recognized as GRBs only by visual inspection of the 1 s ratemeters; also it was not operative during the transmission of the high time resolution data to the onboard tape recorder. In the latter case, only a flag about the occurrence of a burst-like event was transmitted.

In order to reject spurious events and/or to increase the GRB detection rate, we implemented a ground software (Guidorzi et al. 2001) that was capable of performing a prompt analysis of the GRBM data transmitted by each orbit when the satellite was visible from the Malindi (Kenya) ground station. The SW trigger conditions (SWTC) were the following. As in the case of the OBTL, for each GRBM detection unit the count level in the 40–700 keV and >100 keV nominal energy bands was continuously monitored by performing a moving average integrated over a 100 s time interval. A SW trigger was generated each time the counting rate either in both energy bands for at least two detection units, or in both energy bands for only one unit whose axis was directed toward the sky, or only in the 40–700 keV band for at least three detection units, was $n\sigma$ higher than the last estimate of the moving average, with $n = 6$ in the 40–700 keV band, and $n = 3$ in the >100 keV channel. The condition for the >100 keV channel was of key importance for recognizing a true GRB event and to reject spikes due to high-energy particles, whose energy release in the GRBM detectors showed a soft spectrum.

3. GRBM RESPONSE FUNCTION

The determination of the GRBM response function, both in direction and energy, was performed with Monte Carlo techniques and tested with ground calibrations performed before the *BeppoSAX* launch and with various observations of the Crab Nebula. It was also cross-calibrated with the BATSE experiment (Fishman et al. 1994).

The GRBM response function derived via the Monte Carlo code (Rapisarda et al. 1997) was obtained using the Monte Carlo N-Particle Transport Code (MCNP), version 4.2, released by the Los Alamos National Laboratory (LANL; for the current MCNP version see Brown 2002). The code allows to transport photons, neutrons, and electrons from 1 keV to 100 MeV through matter. Every kind of three-dimensional geometry could be described by defining separate cells with composition and density chosen by the user. Photon interactions were treated very accurately and the entire satellite was modeled with a high degree of detail.

The model was tested using the GRBM ground calibrations performed before the flight when the instrument was integrated in the spacecraft (Amati et al. 1997). Preliminary results of these tests were reported by Calura et al. (2000).

The response function, obtained with the Monte Carlo code, was determined as a function of the energy and direction of the incident photons. Using as reference frame the satellite local frame with equatorial plane perpendicular to the axis of the Narrow Field Instruments (z-axis), and using the z-axis as polar axis, a grid of 576 directions was determined: 36 azimuthal angles ϕ_k in the range 0°–360°, in which the zero value corresponds to the azimuth of the axis of the detection unit No. 2, and 16 polar angles θ_j in the range $-70° < \theta < +80°$. Ten different intervals of the photon energy E_n ($n = 1, 11$) in the 30–1000 keV were also simulated with logarithmic steps. For each grid point we determined the expected number of counts $N_i(E_n, \theta_j, \phi_k)$ detected in the 40–700 keV and >100 keV channels by each of the four detection units ($i = 1, 2, 3, 4$ for detections by the units Nos. 1, 2, 3, 4 in the 40–700 keV channel, and $i = 5, 6, 7, 8$ for detections by the same units in the >100 keV channel), for an input photon of energy E_n incident from the direction (θ_j, ϕ_k).

A further refinement of the grid was obtained by interpolating with cubic splines $N_i(E_n, \theta_j, \phi_k)$ in both energy and direction. The grid energy was refined up to 1 keV steps and the direction (θ_j, ϕ_k) was refined up to (1°, 1°) steps. Assuming a photon spectrum $I(E) = Kf(E, \alpha)$, where α are the model parameters for a photon beam coming from the direction (θ_j, ϕ_k) we expect to detect from each detection unit the following count rate in the above energy channels by each detection unit:

$$C_i(\theta_j, \phi_k, \alpha, K) = \sum_n \Delta E_n K f(E_n, \alpha) N_i(E_n, \theta_j, \phi_k). \quad (1)$$

The best estimate of the GRB arrival direction (θ, ϕ) and of the parameters α of the assumed photon spectrum is determined

Table 1
GRBM Trigger Parameter and Energy Threshold Settings

Epoch	Trigger Parameters			Energy Thresholds		
	LIT (s)	SIT (s)	$n\sigma$	LLT (keV)	ULT (keV)	ACT (keV)
Mission start time	128	4	8	32.8	700	100
1996 Oct 30	128	1	4	42.5	700	100
1996 Nov 28	32	1	4	42.5	700	100
2002 Jan	32	0.125	4	42.5	700	100

by minimizing the following χ^2 statistics (for a power-law (PL) photon spectrum, see Calura et al. 2000):

$$\chi^2(\theta_j, \phi_k, K, \alpha) = \sum_{i=1}^{8} \frac{1}{\sigma_i^2} \left(n_i - \frac{n\, C_i(\theta_j, \phi_k, K, \alpha)}{C(\theta_j, \phi_k)} \right)^2, \quad (2)$$

where n_i is the measured counting rate measured by the unit i as defined above, σ_i^2 is the variance of n_i, $n = \sum_{i=1}^{8} n_i$, and $C(\theta_j, \phi_k) = \sum_{i=1}^{8} C_i(\theta_j, \phi_k, K, \alpha)$.

Actually, given that we had only two energy channels, we were constrained to use as input model $f(E, \alpha)$ a simple power law ($E^{-\Gamma}$). The best estimate of the parameters $(\theta, \phi, K, \Gamma)$ was that which minimized the χ^2 in Equation (2). In case more solutions were found for (θ, ϕ), no localization or spectrum was included in the catalog.

4. IN-FLIGHT PERFORMANCE

4.1. In-Flight Settings

The values of the GRBM thresholds and trigger parameters were set and varied during the *BeppoSAX* mission (inclination orbit of 3°.9, initial altitude of 600 km) according to Table 1. The initial low-energy threshold (32.5 keV) was risen to 42.5 keV in 1996 October in order to suppress the spiking noise and to decrease the background level, without a significant change in the source signal given the small transparency of the GRBM at low energies due to payload materials in its FOV (see Figure 1). With the new low-energy threshold and the new setting of the GRB trigger parameters (see Table 1), about 12 triggers per day occurred (∼0.8 triggers per orbit), most of which were false. The false triggers were due to correlated events in two contiguous detection units. These events were mainly due to charged particles that crossed two detection units. Indeed, we found that the false triggers were composed of fast events (less than 10 ms duration) with slightly different time profiles in two contiguous detection units.

The decrease of the LIT from 128 s to 32 s in 1996 November (see Table 1) was motivated by the need for a correct evaluation of the background level when the satellite was approaching the South Atlantic geomagnetic Anomaly (SAA). Indeed, we found that 10 minutes before SAA the background significantly increased below 100 keV, sometimes dramatically. One of these rapid variations occurred during the orbit in which we detected the famous GRB event of 1997 February 28 (Costa et al. 1997). We called these rapid background variations pre-SAA effects (Feroci et al. 1997).

The last change of the GRB trigger parameters, in particular of the SIT, was performed in 2002, a few months before the end of the *BeppoSAX* operative life, in order to make the GRB trigger more sensitive to short GRBs.

4.2. Background Estimate and its Subtraction

The GRBM was nominally performing since the satellite launch (Feroci et al. 1997). The background level along the orbit, outside the region near the SAA, remained very stable, with an average variation $\leqslant 10\%$. Because of the background stability, the background subtraction for the GRB data analysis was in general not critical, except for very weak events occurring close to the SAA and for spectral evolution analysis, during the initial onset and tails of weak events. For the ratemeters data, the background during the event was estimated by interpolating the data taken ∼250 s before and after the event with a polynomial, the order of which was chosen on the basis of the local background variation level. In the case of the 240 channel spectra, polynomials were used to interpolate the background trend in different energy ranges using three (or more) packets (each one covering 128 s) before and after the packet (or more packets) containing the event spectrum.

5. IN-FLIGHT TEST OF THE GRBM RESPONSE FUNCTION

After background subtraction, GRBM data were analyzed using the response matrix described above, which had also been converted to the Flexible Images Transport (FITS) format to be used with standard spectral analysis software packages like XSPEC.

The goodness of the response matrix was verified in flight with the Crab Nebula observed via source occultation from the Earth (Guidorzi et al. 1998) and with cross-checks with BATSE results obtained for a GRB-selected sample by Kaneko et al. (2006).

The Crab flux and spectrum were derived using both the 2 channel ratemeters and the 240 channel spectra. We found the spectral parameters to be consistent with the corresponding values found with other experiments in hard X-/soft gamma rays, i.e., a photon index of about 2.2 and a 100 keV flux density of about 60×10^{-5} photons cm^{-2} s^{-1} keV^{-1}, with reduced χ^2 values of about 1.3 for about 13 degrees of freedom (dof). By fixing the photon index at the commonly adopted X-ray value of 2.1, we obtain a normalization at 1 keV of 9.64 ± 0.49 photons cm^{-2} s^{-1} keV^{-1}, which is fully consistent with the classical value of 9.7 photons cm^{-2} s^{-1} keV^{-1} (Toor & Seward 1974).

Cross-checks with BATSE results were performed with a sample of 46 strong GRBs detected by both experiments and arriving from various directions. The results show that the ratio of the 40–700 keV fluences derived from the GRBM response function with those derived using spectral law, parameters, and time integration given by Kaneko et al. (2006), is distributed according to a Gaussian centered at about 0.8 with a standard deviation of 0.3. The deviation of the ratio's mean value from 1 and the distribution spread are a likely consequence of the uncertainties in the response functions and GRB directions, and of the differences in integration time and spectral models adopted by us and by the above authors.

The uncertainty in the knowledge of the GRBM response function is on average of the order of 10%. This uncertainty is mainly due to the error in the knowledge of the flux of the calibration sources and the errors in the calibration data. This uncertainty was added in quadrature to that on the GRB count spectra before performing the fits.

6. SKY EXPOSURE

The GRBM sky exposure, that is the fraction of time above the horizon in which a given sky direction was exposed to the

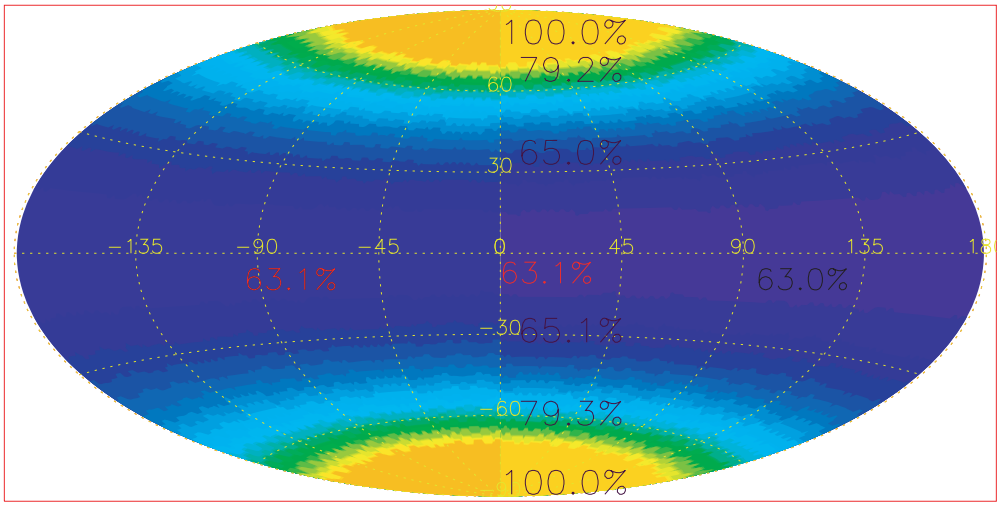

Figure 2. Fraction of time in which a given sky direction, in celestial coordinates, was exposed to the GRBM.

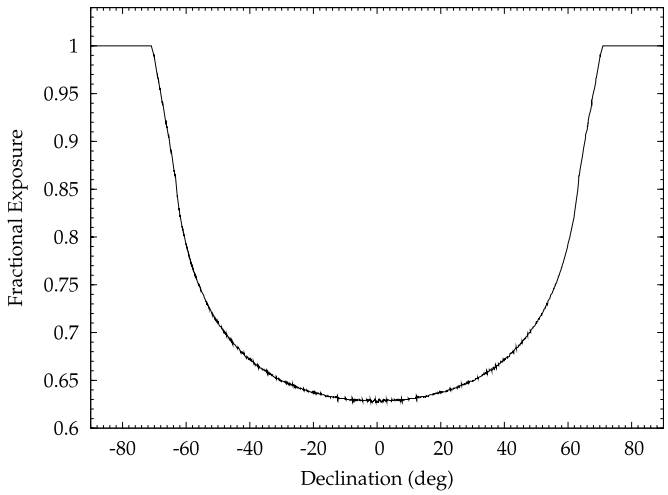

Figure 3. Fraction of the GRBM exposure time vs. celestial declination after averaging the sky exposure over the right ascension.

GRBM, is shown in Figure 2 in celestial coordinates. As can be seen, the celestial poles were never blocked by the Earth and thus they were continuously visible by the GRBM, while the other sky directions, due to the *BeppoSAX* orbit, were monitored for a shorter time. The dependence of the sky exposure on the right ascension was very small, while that on the declination is shown in Figure 3, after averaging the sky exposure over the right ascension.

7. THE CATALOG

In Table 2, we show the GRBM catalog of GRBs. A preliminary version of the catalog can be found elsewhere (Guidorzi 2002), where the peak fluxes and fluences were given in counts (no correction for efficiency). The catalog includes 1082 events. The parameters associated with each event include the best GRB direction in Galactic and equatorial coordinates, two different estimates of GRB time duration, i.e., the classical T_{90} (time during which the burst-integrated counts increase from 5% to 95% of the total counts; Kouveliotou et al. 1993) and the time duration $T_{\rm det}$ (see below), the integrated time $T_{\rm a}$ during which the burst-count rate is detected above a 2σ level, the 40–700 keV fluence, peak flux, the spectral hardness, the GRBM units used for the parameter determination, and the binning factor with respect to the default count accumulation time (1 s for long GRBs, 7.8125 ms in the case of short GRBs). For different reasons not all the parameters were determined for the entire GRB samples (see details in Table 3). Details on the data reported and the methods adopted for the derivation of the parameters reported in the catalog are given below.

7.1. GRB Coordinates

For each event, we report the most accurate equatorial (at the epoch 2000.0) and Galactic coordinates available. When a GRB was detected by more than one experiment, the more plausibly precise localization is given. When the GRB was detected by one of the WFCs on board *BeppoSAX* other possible detections are ignored. For the GRBs detected by only GRBM and for which the localization procedure has given a unique position, the GRBM direction estimate is reported. In the column CAT of the catalog we report the instrument or mission that provided the best GRB coordinates.

7.2. Detection Units Used for the Parameter Derivation

For each GRB, we give in the column Unit the GRBM units used to derive the parameters reported in the catalog. The first number of the column identifies, for each GRB, the GRBM unit used for the determination of T_{90}, $T_{\rm det}$, and $T_{\rm a}$. This unit provided the light curve with the best signal-to-noise ratio (S/N). The second number gives the GRBM unit used for the determination of the GRB fluence, peak flux, and spectral hardness Γ. When it was possible to improve the statistical quality of the results, the signal from another unit was added in (third number). These two units have the lowest angular distance from the GRB.

7.3. GRB Duration

We report two different estimates of the GRB time duration in the 40–700 keV energy band. The first one is the usual T_{90} as defined by the BATSE team (Kouveliotou et al. 1993). The technique adopted is described by Koshut et al. (1996) and it applies to the background-subtracted light curves. This method is applied to both 1 s and 7.8125 ms light curves. For the T_{90} estimate, we have used the most illuminated unit.

Table 2
BeppoSAX GRBM Catalog

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
960703A	07.39.48	N	142.00	−9.00	36.0	241.8678	28.9165	...	G	11.0 ± 1.4	9.0 ± 2.8	3	12.0 ± 4.2	2.34 ± 0.28	2.81 ± 0.50	2.30 ± 0.29	2 2 -	2
960703B	13.42.54	N	4.62	−7.75	1.9	99.4676	−69.1067	72.0	4B_5526	78.0 ± 0.7	58.0 ± 2.1	10	71.0 ± 3.2	11.11 ± 0.75	9.54 ± 0.74	1.88 ± 0.14	1 1 4	1
960703C	18.10.41	N	330.40	−54.79	1.9	339.0609	−48.6887	61.1	4B_5527	1.0 ± 0.7	1.0 ± 0.7	1	3.0 ± 1.4	0.91 ± 0.13	6.04 ± 0.89	1.73 ± 0.37	3 1 4	1
960707A	10.16.41	Y	320.95	82.51	1.9	116.5625	22.3662	23.8	4B_5530	6.0 ± 0.7	6.0 ± 0.7	1	4.45 ± 0.25	3.34 ± 0.25	9.09 ± 0.76	2.76 ± 0.18	1 1 -	1
960707B	16.26.26	N	162.39	−14.34	9.5	263.6772	39.0682	71.7	4B_5532	97.0 ± 0.7	35.0 ± 3.5	22	90.0 ± 21.5	5.25 ± 0.52	3.25 ± 0.48	0.63 ± 0.26	3 3 -	1
960720	11.36.53	Y	262.65	49.08	0.1	75.7380	33.0885	66.0	W	6.0 ± 0.7	6.0 ± 0.7	1	6.0 ± 2.2	1.95 ± 0.16	8.45 ± 0.77	1.66 ± 0.18	1 1 -	1
960723A	04.46.03	N	94.99	43.25	2.2	170.6861	12.9251	67.0	4B_5551	64.0 ± 0.7	39.0 ± 2.1	11	54.0 ± 4.5	6.63 ± 0.58	3.10 ± 0.46	3.08 ± 0.23	2 2 -	1
960723B	07.07.46	N	...	...	...	...	...	...	...	3.0 ± 0.7	3.0 ± 0.7	1	3.0 ± 2.2	...	...	...	2 - -	1
960725	17.39.07	N	90.30	45.10	8.5	167.4608	10.7418	58.4	K	10.0 ± 0.7	5.0 ± 1.4	4	9.0 ± 2.8	0.51 ± 0.18	2.78 ± 0.67	3.0 ± 1.1	1 2 -	1
960730	19.35.13	Y	277.94	−56.54	3.2	338.6466	−19.7754	20.6	4B_5554	19.0 ± 0.7	16.0 ± 1.4	4	18.0 ± 4.1	3.91 ± 0.43	4.13 ± 0.64	0.91 ± 0.37	4 4 -	1
960731	05.46.04	N	43.93	12.51	1.8	164.2040	−40.1983	19.4	4B_5557	15.0 ± 3.5	4.0 ± 7.1	5	27.0 ± 7.8	1.69 ± 0.42	1.98 ± 0.56	1.88 ± 0.68	1 3 -	5
960801A	11.29.09	Y	...	...	...	...	...	...	...	18.0 ± 0.7	13.0 ± 1.4	4	11.0 ± 2.8	...	...	...	3 - -	1
960801B	15.49.02	N	230.00	21.00	50.0	30.8587	55.6644	...	G	7.0 ± 0.7	3.0 ± 0.7	2	7.0 ± 2.2	0.62 ± 0.07	3.00 ± 0.35	2.46 ± 0.29	1 1 2	1
960802	22.07.02	N	249.52	30.53	6.9	51.1064	40.7651	20.1	4B_5559	8.0 ± 0.7	8.0 ± 0.7	1	8.0 ± 2.8	0.82 ± 0.11	1.78 ± 0.28	0.98 ± 0.32	1 1 -	1
960805A	21.29.07	N	186.03	76.36	4.4	125.0503	40.6557	17.2	4B_5564	1.0 ± 0.7	...	...	...	0.36 ± 0.10	3.16 ± 0.79	...	2 3 2	1
960805B	21.55.57	Y	...	...	...	...	...	...	...	19.0 ± 0.7	19.0 ± 0.7	1	14.0 ± 1.4	...	...	...	3 - -	1
960806	22.28.36	N	182.93	−2.19	2.3	283.2919	59.1588	73.2	4B_5566	99.0 ± 0.7	43.0 ± 2.1	12	93.0 ± 3.6	15.04 ± 0.84	10.16 ± 0.70	1.85 ± 0.14	3 2 3	1
960810A	06.49.32	N	185.29	−34.60	3.0	295.8873	27.8572	59.3	4B_5569	14.0 ± 0.7	10.0 ± 1.4	4	15.0 ± 3.2	1.65 ± 0.24	2.27 ± 0.58	1.14 ± 0.38	2 2 -	1
960810B	06.56.16	Y	102.00	−11.00	33.0	222.3668	−5.7455	...	G	...	...	...	...	...	...	...	- - -	1
960811	02.06.57	N	...	...	...	...	...	...	...	33.0 ± 0.7	6.0 ± 1.4	6	32.0 ± 3.6	...	...	...	1 - -	1
960813	10.55.44	N	...	...	...	...	...	...	...	5.0 ± 0.7	5.0 ± 0.7	1	6.0 ± 3.2	...	...	...	1 - -	1
960818	23.35.31	N	...	...	...	...	...	...	...	1.0 ± 0.7	...	...	2.0 ± 1.4	...	...	...	4 - -	1
960824	01.43.24	N	...	...	...	...	...	...	...	7.0 ± 0.7	6.0 ± 0.7	2	8.0 ± 2.8	...	...	...	1 - -	1
960825	00.23.03	Y	...	...	...	...	...	...	...	131.0 ± 0.7	117.0 ± 2.1	10	114.0 ± 4.5	...	...	...	1 - -	1
960909	20.40.42	N	25.88	−7.80	2.9	157.8830	−67.0679	100.1	4B_5599	2.0 ± 0.7	2.0 ± 0.7	1	3.0 ± 1.4	0.77 ± 0.12	5.30 ± 0.85	1.74 ± 0.38	4 4 -	1
960912	13.57.28	Y	95.14	76.86	1.7	137.2812	24.6370	14.5	4B_5601	19.0 ± 0.7	19.0 ± 0.7	1	16.0 ± 4.1	8.63 ± 0.47	14.16 ± 0.85	1.83 ± 0.12	1 1 2	1
960913	23.05.20	N	182.58	−23.45	1.8	290.8646	38.4564	54.8	4B_5604	16.0 ± 0.7	15.0 ± 0.7	2	14.0 ± 2.2	7.43 ± 0.43	9.80 ± 0.76	1.84 ± 0.13	3 2 3	1
960916A	03.51.08	N	...	...	...	...	...	...	...	5.0 ± 0.7	5.0 ± 0.7	1	6.0 ± 2.8	...	...	...	4 - -	1
960916B	03.56.20	N	...	...	...	...	...	...	...	21.0 ± 0.7	14.0 ± 1.4	4	21.0 ± 4.2	...	...	...	4 - -	1
960916C	08.31.11	Y	285.00	−67.00	60.0	328.5969	−25.6405	...	G	11.0 ± 4.9	5.0 ± 9.9	6	22.0 ± 4.1	1.07 ± 0.34	0.68 ± 0.13	2.88 ± 0.89	4 1 -	7
960916D	15.15.13	N	206.00	32.00	29.0	59.1759	77.5872	...	G	72.0 ± 0.7	20.0 ± 2.8	17	87.0 ± 4.2	7.6 ± 1.1	6.6 ± 1.4	3.78 ± 0.30	1 2 -	1
960916E	23.48.19	N	153.96	57.55	9.3	153.9384	49.1503	40.9	4B_5605	28.0 ± 2.1	3.0 ± 4.2	3	39.0 ± 4.2	5.8 ± 2.0	5.6 ± 1.7	1.91 ± 0.99	2 2 -	3
960917	22.22.33	Y	313.87	−33.89	1.7	9.9832	−39.4108	29.4	4B_5606	21.0 ± 0.7	21.0 ± 0.7	1	18.0 ± 2.2	5.94 ± 0.41	5.21 ± 0.55	1.67 ± 0.16	1 4 1	1
960919	22.28.00	Y	233.34	21.57	3.9	33.3731	52.8615	82.9	4B_5607	1.69 ± 0.02	0.98 ± 0.02	...	1.09 ± 0.54	1.12 ± 0.08	10.0 ± 1.4	1.53 ± 0.17	3 3 2	1
960921	15.03.49	Y	345.27	−28.55	1.6	23.1199	−65.6157	63.8	4B_5609	39.0 ± 0.7	22.0 ± 1.4	4	37.0 ± 1.4	25.7 ± 1.8	63.9 ± 4.0	2.33 ± 0.14	4 4 1	1
960922A	05.06.07	Y	...	...	...	...	...	...	...	72.0 ± 0.7	57.0 ± 2.1	7	62.0 ± 2.2	...	...	...	1 - -	1
960922B	05.21.06	Y	...	...	...	...	...	...	...	30.0 ± 0.7	26.0 ± 1.4	4	24.0 ± 5.0	...	...	...	1 - -	1
960923	00.38.15	N	256.33	57.35	3.1	85.8851	36.7550	58.6	4B_5610	33.0 ± 1.4	3.0 ± 4.2	11	18.0 ± 2.2	2.17 ± 0.77	1.79 ± 0.46	4.68 ± 0.81	1 2 -	2
960927	03.47.23	Y	199.56	74.13	1.9	120.4368	42.8682	39.2	4B_5617	28.0 ± 0.7	14.0 ± 2.1	7	29.0 ± 9.5	...	...	...	1 - -	1
960929	06.36.22	Y	110.00	−44.00	42.0	255.6480	−13.7198	...	G	26.0 ± 3.5	15.0 ± 7.1	6	24.0 ± 3.6	1.65 ± 0.17	1.05 ± 0.12	2.20 ± 0.23	1 1 -	5
961004	18.58.35	N	80.60	−35.55	5.9	239.5231	−32.6432	29.0	4B_5623	2.0 ± 0.7	2.0 ± 0.7	1	3.0 ± 2.2	0.32 ± 0.05	2.61 ± 0.37	1.42 ± 0.36	1 1 -	1
961006	08.56.08	N	274.65	−28.88	2.3	3.6063	−6.2548	5.4	4B_5624	10.0 ± 1.4	5.0 ± 2.8	4	9.0 ± 3.6	1.42 ± 0.34	3.58 ± 0.95	2.83 ± 0.38	1 1 4	2
961008	05.20.59	N	258.69	29.57	5.1	52.1633	32.8168	80.5	4B_5626	5.0 ± 2.1	5.0 ± 2.1	1	5.0 ± 2.2	0.57 ± 0.07	1.32 ± 0.19	2.39 ± 0.29	2 3 2	3
961011	19.32.15	N	210.00	−21.00	47.0	323.6947	39.0916	...	G	38.0 ± 1.4	9.0 ± 4.2	7	33.0 ± 2.8	1.48 ± 0.25	1.92 ± 0.34	2.79 ± 0.48	1 2 1	2
961015A	10.36.45	N	305.00	45.00	43.0	81.8331	4.8906	...	G	23.0 ± 0.7	17.0 ± 1.4	4	23.0 ± 4.2	2.44 ± 0.27	2.04 ± 0.36	0.74 ± 0.28	1 1 -	1
961015B	11.53.00	Y	29.00	21.00	19.0	142.5564	−39.3988	...	G	11.0 ± 0.7	11.0 ± 0.7	1	11.0 ± 2.2	4.17 ± 0.30	8.97 ± 0.79	1.45 ± 0.20	4 4 1	1
961022	19.01.05	Y	159.63	−38.76	1.7	276.3665	17.1598	61.7	4B_5642	28.0 ± 0.7	21.0 ± 1.4	3	27.0 ± 2.2	5.54 ± 0.36	4.19 ± 0.44	1.65 ± 0.15	1 1 2	1
961023	02.09.15	N	328.40	9.30	4.0	66.8626	−33.5859	...	S	165.0 ± 0.7	32.0 ± 3.5	24	155.0 ± 9.8	...	...	...	3 - -	1
961026	06.11.50	Y	99.32	41.88	1.8	173.3170	15.2775	43.8	4B_5644	19.0 ± 0.7	11.0 ± 1.4	3	16.0 ± 1.4	4.87 ± 0.35	16.5 ± 1.2	1.70 ± 0.15	3 3 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
961101	16.07.43	Y	...	...	...	...	...	...	...	23.0 ± 0.7	7.0 ± 1.4	3	21.0 ± 6.1	...	...	...	3 - -	1
961106	11.57.10	N	296.90	68.70	16.2	100.8670	20.2675	34.3	K	1.0 ± 0.7	...	...	...	0.15 ± 0.03	1.55 ± 0.25	2.00 ± 0.42	1 1 -	1
961110	07.29.37	Y	61.10	59.00	8.9	145.6133	4.9089	28.0	K	10.0 ± 1.4	6.0 ± 1.4	2	9.2 ± 1.7	0.72 ± 0.11	1.49 ± 0.28	2.07 ± 0.39	3 3 -	2
961116	20.33.09	N	...	...	...	...	...	...	...	1.0 ± 0.7	...	...	2.0 ± 1.4	...	...	...	1 - -	1
961120	08.27.13	Y	286.80	43.60	15.5	74.3101	15.6741	52.5	K	1.91 ± 0.01	0.46 ± 0.01	...	1.62 ± 0.32	0.34 ± 0.04	2.64 ± 0.56	1.04 ± 0.33	1 1 2	1
961122	21.51.04	N	...	...	...	...	...	...	...	4.0 ± 0.7	4.0 ± 0.7	1	3.0 ± 2.2	...	...	...	2 - -	1
961125A	00.24.48	Y	278.00	10.00	49.0	39.7029	8.8257	...	G	1.31 ± 0.05	0.33 ± 0.05	...	1.69 ± 0.31	0.26 ± 0.10	2.16 ± 0.81	...	2 2 -	1
961125B	07.47.45	Y	326.00	−47.00	38.0	351.5629	−48.4628	...	G	54.0 ± 0.7	43.0 ± 2.1	7	47.0 ± 2.2	4.47 ± 0.32	2.43 ± 0.30	2.12 ± 0.17	3 3 -	1
961126	06.43.19	N	150.34	36.72	1.7	187.0588	52.9808	75.9	4B_5697	1.0 ± 0.7	1.0 ± 0.7	1	4.0 ± 2.2	0.70 ± 0.12	4.34 ± 0.72	3.49 ± 0.40	2 1 -	1
961202	23.41.25	Y	...	...	...	...	...	...	...	86.0 ± 0.7	8.0 ± 2.1	8	79.0 ± 3.2	...	...	...	4 - -	1
961208A	05.24.17	Y	316.00	−33.00	21.0	11.5002	−41.0261	...	G	135.0 ± 3.5	54.0 ± 17.7	23	125.0 ± 3.2	7.40 ± 0.66	1.39 ± 0.19	1.92 ± 0.21	2 2 -	5
961208B	18.57.13	Y	61.40	−44.90	50.2	250.9068	−47.6682	50.4	K	2.31 ± 0.06	0.50 ± 0.06	...	2.26 ± 0.24	0.54 ± 0.12	2.98 ± 0.72	1.25 ± 0.61	3 3 -	1
961211	01.56.12	N	281.71	54.82	1.9	84.3542	22.5186	21.2	4B_5709	...	...	...	...	...	...	...	- - -	1
961220	05.21.51	N	6.90	17.33	2.2	114.8507	−45.1674	79.0	4B_5719	2.0 ± 0.7	2.0 ± 0.7	1	4.0 ± 2.2	...	...	...	1 - -	1
961222	12.00.08	N	302.90	−12.10	7.3	30.8264	−23.1907	18.5	K	20.0 ± 2.8	10.0 ± 5.7	6	20.0 ± 2.2	1.84 ± 0.21	1.41 ± 0.18	2.08 ± 0.25	2 2 1	4
961223	10.29.29	Y	...	...	...	...	...	...	...	0.82 ± 0.04	0.20 ± 0.04	...	0.82 ± 0.24	...	...	...	2 - -	1
961224A	10.11.03	N	319.50	14.50	4.2	64.9782	−23.5814	95.7	K	13.0 ± 0.7	5.0 ± 1.4	4	14.0 ± 3.6	1.90 ± 0.55	...	...	3 2 -	1
961224B	17.41.48	Y	182.84	−64.64	5.6	298.6555	−2.1015	47.5	4B_5724	1.50 ± 0.05	0.38 ± 0.05	...	1.5 ± 1.1	0.47 ± 0.08	5.3 ± 1.4	1.20 ± 0.46	3 2 -	1
961228	00.29.58	Y	160.28	−53.60	1.8	284.2379	4.4743	45.5	4B_5729	74.0 ± 0.7	41.0 ± 2.1	7	59.0 ± 8.2	11.85 ± 0.76	4.73 ± 0.60	1.80 ± 0.15	1 2 3	1
970101	06.21.50	N	329.96	−21.92	5.7	30.9040	−50.8097	87.9	4B_5736	68.0 ± 2.1	9.0 ± 4.2	3	71.0 ± 4.1	1.95 ± 0.38	1.23 ± 0.24	4.63 ± 0.64	2 2 -	3
970104	03.26.16	N	107.00	−46.00	55.0	256.6741	−16.4614	...	G	1.0 ± 0.7	...	...	...	0.31 ± 0.05	2.68 ± 0.39	0.97 ± 0.50	1 1 -	1
970108	17.14.01	Y	1.23	−53.61	5.2	317.7689	−62.1578	12.7	4B_5753	11.0 ± 0.7	10.0 ± 0.7	2	12.0 ± 3.2	2.00 ± 0.21	3.15 ± 0.51	1.81 ± 0.26	2 2 -	1
970111	09.44.00	Y	232.06	19.60	0.1	29.6314	53.3872	39.9	W	42.0 ± 0.7	42.0 ± 0.7	1	31.0 ± 2.8	49.2 ± 2.8	35.9 ± 2.1	2.20 ± 0.11	3 3 4	1
970116	11.41.21	Y	123.45	−11.15	3.8	232.6645	12.6451	99.3	4B_5827	123.0 ± 0.7	91.0 ± 2.8	19	112.0 ± 5.0	16.7 ± 1.7	4.39 ± 0.61	1.88 ± 0.25	4 4 -	1
970117A	14.27.54	Y	...	...	...	...	...	...	...	13.0 ± 0.7	11.0 ± 1.4	3	13.0 ± 2.2	...	...	...	2 - -	1
970117B	14.46.51	Y	101.00	−74.00	19.0	285.0023	−26.5052	...	G	18.0 ± 0.7	18.0 ± 0.7	1	13.0 ± 2.8	27.1 ± 1.4	42.2 ± 2.3	1.56 ± 0.12	1 1 2	1
970122	11.41.25	Y	261.00	−45.00	34.0	344.1425	−5.0552	...	G	60.0 ± 0.7	28.0 ± 2.1	8	49.0 ± 6.3	6.05 ± 0.49	4.03 ± 0.43	2.16 ± 0.18	2 2 -	1
970123	08.36.37	Y	96.00	51.00	18.0	163.6511	16.7067	...	G	38.0 ± 0.7	24.0 ± 1.4	6	36.0 ± 3.2	6.47 ± 0.58	4.13 ± 0.69	2.93 ± 0.17	4 4 3	1
970124	12.19.07	Y	...	...	...	...	...	...	...	13.0 ± 0.7	5.0 ± 1.4	4	19.0 ± 3.6	...	...	...	3 - -	1
970128	23.35.09	Y	28.00	3.00	40.0	151.1473	−56.5174	...	G	45.0 ± 0.7	28.0 ± 2.1	7	42.0 ± 2.8	3.13 ± 0.29	1.81 ± 0.27	1.29 ± 0.18	3 3 -	1
970131A	21.40.39	N	289.00	−1.00	27.0	34.8467	−5.9202	...	G	97.0 ± 2.8	10.0 ± 8.5	9	90.0 ± 7.1	2.91 ± 0.51	1.10 ± 0.28	1.41 ± 0.41	2 2 -	4
970131B	21.46.11	Y	253.79	36.59	3.1	59.6100	38.2434	75.4	4B_5983	2.44 ± 0.06	0.94 ± 0.06	...	2.12 ± 0.40	0.46 ± 0.06	2.20 ± 0.34	1.70 ± 0.31	1 1 -	1
970203	01.31.56	Y	251.00	32.00	23.0	53.3066	39.7934	...	G	77.0 ± 0.7	45.0 ± 2.1	9	72.0 ± 2.2	9.39 ± 0.54	7.16 ± 0.49	1.83 ± 0.13	1 1 2	1
970221A	03.49.19	N	33.60	68.80	38.4	130.3474	7.1311	39.1	K	15.0 ± 2.1	11.0 ± 4.2	4	27.0 ± 5.8	0.95 ± 0.13	0.77 ± 0.15	2.45 ± 0.34	1 1 -	3
970221B	10.18.28	Y	342.80	−69.70	2.3	316.9165	−44.0195	21.4	4B_6098	11.0 ± 0.7	8.0 ± 0.7	2	11.0 ± 3.2	1.97 ± 0.21	3.50 ± 0.57	2.16 ± 0.25	2 2 -	1
970222	23.53.28	Y	308.00	−10.00	16.0	35.2592	−26.8425	...	G	0.98 ± 0.01	0.47 ± 0.01	...	0.84 ± 0.03	3.63 ± 0.22	91.1 ± 9.3	1.42 ± 0.18	2 2 1	1
970223	18.01.24	Y	240.00	60.80	15.5	93.1773	43.8979	23.1	S	0.85 ± 0.01	0.17 ± 0.01	...	0.51 ± 0.47	0.23 ± 0.04	3.23 ± 0.77	0.64 ± 0.53	3 3 4	1
970228	02.58.01	Y	75.49	11.77	0.1	188.9492	−17.9108	103.5	W	60.0 ± 0.7	28.0 ± 2.1	7	56.0 ± 3.2	8.29 ± 0.55	25.9 ± 1.6	1.92 ± 0.14	1 1 2	1
970302A	12.56.13	N	7.93	−54.54	4.5	309.0989	−62.3515	14.7	4B_6109	36.0 ± 0.7	5.0 ± 1.4	5	63.0 ± 5.8	4.2 ± 1.1	5.2 ± 1.4	3.66 ± 0.54	2 2 -	1
970302B	18.42.26	Y	275.92	21.02	3.3	49.0520	15.3035	63.2	4B_6111	42.0 ± 2.8	26.0 ± 8.5	7	39.0 ± 5.1	3.53 ± 0.29	2.74 ± 0.22	1.50 ± 0.16	3 3 2	4
970303	00.36.58	Y	130.00	−3.00	42.0	228.9009	22.4309	...	G	0.19 ± 0.06	0.19 ± 0.06	...	0.76 ± 0.52	0.17 ± 0.03	3.36 ± 0.82	0.89 ± 0.62	4 4 1	1
970306	02.48.20	N	18.34	21.36	1.7	129.7234	−41.2225	3.7	4B_6115	...	...	...	...	...	...	...	- - -	1
970307	19.29.06	Y	349.00	−42.00	25.0	349.3960	−65.5027	...	G	24.0 ± 0.7	23.0 ± 0.7	2	21.0 ± 2.2	11.03 ± 0.58	16.01 ± 0.95	1.96 ± 0.12	2 2 3	1
970311A	08.24.27	N	20.70	−1.90	5.4	140.8381	−63.6761	64.4	K	24.0 ± 4.2	7.0 ± 8.5	6	26.0 ± 3.6	3.60 ± 0.49	2.29 ± 0.39	2.86 ± 0.30	3 2 3	6
970311B	08.43.12	Y	320.00	16.00	41.0	66.5758	−23.0073	...	G	0.23 ± 0.05	0.23 ± 0.05	...	0.13 ± 0.11	0.31 ± 0.03	7.0 ± 1.1	0.85 ± 0.34	1 1 2	1
970313	09.45.58	Y	179.00	6.00	20.0	268.4803	65.0949	...	G	23.0 ± 0.7	22.0 ± 0.7	2	18.0 ± 3.6	10.58 ± 0.78	13.7 ± 1.2	1.45 ± 0.21	4 4 1	1
970314	04.01.12	N	106.00	31.00	40.0	185.8856	16.0599	...	G	...	...	...	...	...	...	...	- - -	1
970315A	15.40.55	Y	2.15	60.72	1.6	117.7151	−1.7171	36.1	4B_6124	15.0 ± 0.7	15.0 ± 0.7	1	15.0 ± 2.2	40.6 ± 2.2	65.9 ± 3.7	1.63 ± 0.13	3 3 2	1
970315B	22.09.19	Y	...	...	...	...	...	...	...	48.0 ± 0.7	48.0 ± 0.7	1	37.0 ± 2.2	...	...	...	1 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
970317A	00.29.22	N	339.71	−23.15	4.2	33.0619	−59.8149	0.2	4B_6127	45.0 ± 2.8	10.0 ± 8.5	8	44.0 ± 3.6	3.44 ± 0.94	2.30 ± 0.65	...	3 2 -	4
970317B	23.20.29	Y	111.75	68.90	2.6	146.7705	28.3546	4.7	4B_6128	67.0 ± 0.7	23.0 ± 1.4	6	66.0 ± 3.2	3.27 ± 0.28	2.58 ± 0.33	2.87 ± 0.22	3 3 -	1
970325	12.38.47	N	266.00	−26.00	41.0	2.3167	1.8398	...	G	137.0 ± 4.2	33.0 ± 21.2	25	139.0 ± 5.4	4.51 ± 0.50	0.54 ± 0.10	...	1 1 -	6
970326A	08.16.13	N	359.28	−67.63	3.8	310.7086	−48.6699	38.1	4B_6136	2.0 ± 0.7	2.0 ± 0.7	1	3.0 ± 2.2	0.36 ± 0.05	1.67 ± 0.23	1.84 ± 0.30	1 1 -	1
970326B	18.03.17	N	94.00	−40.00	31.0	247.3326	−23.4595	...	G	8.0 ± 0.7	6.0 ± 0.7	2	8.0 ± 3.6	0.70 ± 0.10	1.90 ± 0.36	...	1 1 -	1
970330A	08.58.54	N	347.74	−19.12	2.3	46.7390	−65.6051	65.0	4B_6147	63.0 ± 2.8	18.0 ± 8.5	8	66.0 ± 6.7	5.69 ± 0.66	3.03 ± 0.42	2.54 ± 0.29	2 2 -	4
970330B	12.13.11	Y	332.00	29.00	25.0	84.9601	−21.5709	...	G	1.47 ± 0.02	0.83 ± 0.02	...	0.72 ± 0.05	1.54 ± 0.14	23.6 ± 3.6	1.25 ± 0.20	2 2 -	1
970402	22.18.36	Y	222.57	−69.32	0.1	313.1345	−8.8370	9.8	W	129.0 ± 0.7	71.0 ± 2.8	18	105.0 ± 3.6	7.23 ± 0.60	2.08 ± 0.32	1.65 ± 0.17	1 1 -	1
970404	12.00.08	N	...	...	...	...	...	...	...	47.0 ± 0.7	11.0 ± 1.4	5	47.0 ± 3.2	...	...	...	1 - -	1
970405A	03.42.01	Y	98.84	22.84	1.7	190.7456	6.8633	53.4	4B_6159	30.0 ± 0.7	29.0 ± 0.7	2	27.0 ± 4.5	4.54 ± 0.34	2.92 ± 0.33	2.28 ± 0.18	1 1 -	1
970405B	04.55.02	Y	...	...	...	...	...	...	...	8.0 ± 0.7	7.0 ± 0.7	2	7.1 ± 3.1	...	...	...	3 - -	1
970406A	00.17.38	Y	201.00	38.00	27.0	92.7984	77.1576	...	G	10.0 ± 0.7	10.0 ± 0.7	1	8.0 ± 2.2	5.55 ± 0.36	10.97 ± 0.87	1.22 ± 0.19	4 4 3	1
970406B	06.19.33	N	50.81	−24.64	3.0	217.4558	−55.8937	62.3	4B_6161	38.0 ± 3.5	12.0 ± 10.6	8	36.0 ± 3.6	3.26 ± 0.33	1.53 ± 0.20	1.90 ± 0.24	2 2 1	5
970406C	07.04.56	N	287.60	−30.30	4.6	7.1031	−17.0712	0.8	K	41.0 ± 0.7	13.0 ± 2.1	7	49.0 ± 5.1	1.56 ± 0.67	2.36 ± 0.67	...	1 2 -	1
970407	11.55.54	N	174.28	2.66	4.0	263.7466	59.7524	96.0	4B_6162	78.0 ± 1.4	5.0 ± 2.8	4	85.0 ± 7.2	0.90 ± 0.47	1.63 ± 0.27	...	4 4 -	2
970415	15.47.01	Y	42.53	−11.76	5.3	189.8537	−58.2119	34.2	4B_6182	0.55 ± 0.08	0.31 ± 0.08	...	0.81 ± 0.05	0.31 ± 0.08	4.0 ± 1.0	...	2 2 3	1
970416	23.13.58	Y	332.00	10.00	37.0	70.4213	−35.7116	...	G	2.18 ± 0.07	1.76 ± 0.07	...	1.95 ± 0.67	1.15 ± 0.07	8.3 ± 1.0	2.46 ± 0.15	1 1 2	1
970417A	00.23.05	Y	...	...	...	...	...	...	...	27.0 ± 0.7	19.0 ± 1.4	3	20.0 ± 3.6	...	...	...	4 - -	1
970417B	14.20.56	Y	56.53	8.61	2.2	178.9990	−34.6268	55.4	4B_6189	...	...	...	...	...	...	...	- - -	1
970417C	18.12.19	Y	331.00	11.00	39.0	70.4624	−34.3096	...	G	1.12 ± 0.09	0.43 ± 0.09	...	1.10 ± 0.24	0.23 ± 0.03	2.93 ± 0.60	2.56 ± 0.35	1 1 2	1
970419	06.12.17	N	240.42	−63.04	1.8	322.6647	−7.7093	−2.7	4B_6194	22.0 ± 0.7	11.0 ± 1.4	5	22.0 ± 5.8	1.60 ± 0.19	1.93 ± 0.40	1.72 ± 0.32	3 4 3	1
970420	20.14.03	N	212.99	−15.91	1.6	329.7152	42.7353	40.2	4B_6198	14.0 ± 0.7	14.0 ± 0.7	1	9.0 ± 2.2	43.1 ± 2.4	134.1 ± 7.6	1.55 ± 0.15	4 4 1	1
970424A	09.56.24	Y	18.00	64.00	47.0	125.1834	1.2182	...	G	18.0 ± 0.7	8.0 ± 1.4	4	18.0 ± 4.5	0.74 ± 0.10	1.70 ± 0.23	1.91 ± 0.36	1 1 2	1
970424B	10.09.33	Y	198.04	−17.53	1.8	309.9332	45.0599	15.1	4B_6207	34.0 ± 3.5	20.0 ± 7.1	6	34.0 ± 4.1	5.90 ± 0.56	3.27 ± 0.38	2.37 ± 0.20	4 4 3	5
970427	12.41.58	Y	181.35	−8.37	2.3	283.8795	52.7903	52.4	4B_6211	0.12 ± 0.06	0.12 ± 0.06	...	0.09 ± 0.05	0.45 ± 0.06	11.0 ± 2.0	1.02 ± 0.38	4 4 3	1
970429	11.36.24	Y	34.72	26.98	1.9	145.9536	−31.9531	31.2	4B_6214	37.0 ± 0.7	18.0 ± 1.4	5	34.0 ± 4.1	7.50 ± 0.43	15.35 ± 0.90	1.89 ± 0.14	2 2 1	1
970430	19.18.37	Y	259.71	44.93	10.4	70.5498	34.7322	51.7	4B_6215	0.35 ± 0.12	0.35 ± 0.12	...	0.59 ± 0.15	0.15 ± 0.04	2.23 ± 0.79	2.37 ± 0.39	4 3 4	1
970501	21.30.56	N	...	...	...	...	...	...	...	31.0 ± 0.7	3.0 ± 0.7	2	44.0 ± 9.9	...	...	...	2 - -	1
970502	10.10.07	N	304.00	42.00	37.0	78.9309	3.8175	...	G	16.0 ± 0.7	7.0 ± 1.4	3	15.0 ± 2.8	0.79 ± 0.12	1.80 ± 0.25	1.47 ± 0.32	1 1 -	1
970504	08.13.25	Y	95.00	−23.00	44.0	230.5942	−16.8695	...	G	1.91 ± 0.01	0.35 ± 0.01	...	1.89 ± 0.12	0.34 ± 0.05	2.48 ± 0.56	0.70 ± 0.45	3 3 2	1
970506	15.41.47	Y	30.00	−10.00	34.0	169.5213	−66.4511	...	G	1.91 ± 0.04	1.25 ± 0.04	...	1.91 ± 0.71	1.27 ± 0.09	11.6 ± 1.5	1.83 ± 0.17	2 2 1	1
970508	21.41.47	Y	103.37	79.28	0.1	134.9502	26.7117	17.5	W	14.0 ± 0.7	12.0 ± 0.7	2	14.0 ± 3.6	1.65 ± 0.15	2.86 ± 0.34	1.51 ± 0.18	3 3 -	1
970509	13.23.56	Y	192.38	20.10	1.9	299.2566	82.9581	50.6	4B_6226	66.0 ± 0.7	25.0 ± 1.4	5	55.0 ± 7.2	9.00 ± 0.64	6.65 ± 0.70	1.46 ± 0.17	3 4 3	1
970515	00.55.41	Y	...	...	...	...	...	...	...	51.0 ± 0.7	8.0 ± 1.4	6	54.0 ± 5.8	...	...	...	1 - -	1
970517A	00.18.58	N	333.58	17.32	4.9	77.8140	−31.4613	43.6	4B_6234	24.0 ± 0.7	6.0 ± 1.4	3	24.0 ± 3.6	1.29 ± 0.23	2.41 ± 0.50	1.43 ± 0.50	2 2 -	1
970517B	09.04.43	Y	112.11	−15.41	1.6	230.8225	0.9602	67.6	4B_6235	5.0 ± 0.7	5.0 ± 0.7	1	5.0 ± 1.4	12.41 ± 0.62	36.8 ± 1.9	1.55 ± 0.11	2 2 3	1
970517C	12.52.47	Y	119.00	−36.00	47.0	251.7698	−3.8911	...	G	0.77 ± 0.07	0.77 ± 0.07	...	0.84 ± 0.22	0.36 ± 0.04	4.55 ± 0.83	0.58 ± 0.30	3 3 2	1
970518	07.12.12	N	77.00	17.00	14.0	185.3048	−13.7628	...	G	28.0 ± 0.7	12.0 ± 1.4	5	28.0 ± 2.8	3.69 ± 0.45	5.46 ± 0.77	1.82 ± 0.25	2 2 -	1
970525	08.49.47	N	149.50	50.80	7.3	165.0372	49.6703	...	K	12.0 ± 0.7	4.0 ± 1.4	4	18.0 ± 5.4	...	...	...	1 - -	1
970526	01.53.28	Y	1.12	12.94	2.3	105.5743	−48.3428	55.9	4B_6242	65.0 ± 0.7	20.0 ± 2.1	7	63.0 ± 2.2	2.98 ± 0.23	6.72 ± 0.43	1.92 ± 0.18	1 1 2	1
970527	04.14.12	N	...	...	...	...	...	...	...	74.0 ± 0.7	24.0 ± 2.1	7	72.0 ± 2.8	...	...	...	4 - -	1
970531	17.50.54	Y	...	...	...	...	...	...	...	3.50 ± 0.11	2.19 ± 0.11	...	2.72 ± 0.59	...	...	...	1 - -	1
970601	19.19.14	Y	...	...	...	...	...	...	...	47.0 ± 0.7	32.0 ± 1.4	6	30.0 ± 5.4	...	...	...	4 - -	1
970603A	09.49.08	Y	105.25	−13.85	1.9	226.3546	−4.1927	3.0	4B_6249	47.0 ± 0.7	34.0 ± 2.1	8	45.0 ± 3.2	6.75 ± 0.43	2.88 ± 0.36	0.89 ± 0.19	3 2 3	1
970603B	23.35.01	Y	177.05	62.31	1.9	135.1594	53.2913	11.3	4B_6251	2.88 ± 0.06	1.19 ± 0.06	...	2.12 ± 0.16	...	...	...	2 - -	1
970604	19.49.06	Y	...	...	...	...	...	...	...	1.72 ± 0.09	0.95 ± 0.09	...	1.98 ± 0.38	...	...	...	1 - -	1
970608	13.37.13	Y	...	...	...	...	...	...	...	2.69 ± 0.06	1.50 ± 0.06	...	2.05 ± 0.09	...	...	...	3 - -	1
970609	02.03.00	Y	195.48	37.05	5.2	111.0001	79.8342	54.5	4B_6260	25.0 ± 0.7	9.0 ± 1.4	3	25.0 ± 4.5	...	...	...	3 - -	1
970610	10.04.14	Y	32.70	41.80	12.7	138.4222	−18.6722	...	K	4.22 ± 0.09	2.16 ± 0.09	...	3.95 ± 0.28	...	...	...	1 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
970611	08.21.30	Y	78.37	−3.31	2.2	204.3372	−23.2432	104.0	4B_6263	0.55 ± 0.05	0.22 ± 0.05	...	0.66 ± 0.18	...	...	...	4 - -	1
970612A	07.18.32	Y	272.62	8.42	3.1	35.8802	12.9012	15.3	4B_6265	0.12 ± 0.03	0.12 ± 0.03	...	0.08 ± 0.06	...	...	...	4 - -	1
970612B	14.28.26	Y	290.23	43.52	1.7	75.2712	13.3679	50.8	4B_6266	51.0 ± 0.7	44.0 ± 1.4	4	38.0 ± 3.6	...	...	...	3 - -	1
970613	05.23.31	Y	106.85	28.19	4.5	188.8780	15.6639	80.3	4B_6268	81.0 ± 0.7	16.0 ± 2.1	10	77.9 ± 13.6	...	...	...	2 - -	1
970614	23.07.41	Y	234.69	62.20	1.9	96.6120	45.4500	1.8	4B_6272	127.0 ± 0.7	18.0 ± 2.8	13	116.0 ± 5.8	...	...	...	3 - -	1
970616	18.10.39	Y	20.44	−7.12	1.6	144.0911	−68.7369	92.5	4B_6274	120.0 ± 0.7	65.0 ± 2.1	11	64.0 ± 1.4	26.5 ± 1.5	24.8 ± 1.4	1.72 ± 0.12	1 1 2	1
970617A	17.04.26	N	161.70	10.60	8.2	236.3071	56.3536	...	K	79.0 ± 0.7	20.0 ± 2.8	15	89.0 ± 5.1	...	...	...	3 - -	1
970617B	21.21.07	N	...	...	...	...	...	...	...	129.0 ± 0.7	21.0 ± 2.8	20	161.0 ± 7.2	...	...	...	2 - -	1
970619	15.34.49	N	...	...	...	...	...	...	...	58.0 ± 0.7	23.0 ± 1.4	6	47.0 ± 2.8	...	...	...	3 - -	1
970623	05.23.22	N	279.50	−40.19	5.5	354.9815	−14.7390	49.5	4B_6277	31.0 ± 0.7	2.0 ± 0.7	2	52.0 ± 6.4	...	...	...	4 - -	1
970624A	05.45.05	Y	...	...	...	...	...	...	...	160.0 ± 0.7	29.0 ± 2.8	16	154.0 ± 3.2	...	...	...	4 - -	1
970624B	06.30.06	Y	...	...	...	...	...	...	...	15.0 ± 0.7	15.0 ± 0.7	1	12.0 ± 2.2	...	...	...	1 - -	1
970625A	06.34.42	Y	...	...	...	...	...	...	...	0.06 ± 0.03	0.06 ± 0.03	...	0.04 ± 0.02	...	...	...	1 - -	1
970625B	12.13.06	Y	...	...	...	...	...	...	...	54.0 ± 0.7	43.0 ± 2.1	9	15.0 ± 2.2	...	...	...	4 - -	1
970626	01.44.02	Y	...	...	...	...	...	...	...	0.19 ± 0.05	0.19 ± 0.05	...	...	...	...	...	3 - -	1
970627A	07.13.04	Y	120.84	42.28	1.8	177.8314	30.6659	41.9	4B_6280	77.0 ± 0.7	59.0 ± 2.1	11	60.0 ± 3.6	...	...	...	2 - -	1
970627B	22.06.50	Y	...	...	...	...	...	...	...	18.0 ± 0.7	18.0 ± 0.7	1	15.0 ± 2.2	...	...	...	1 - -	1
970628A	03.27.50	Y	...	...	...	...	...	...	...	21.0 ± 0.7	17.0 ± 1.4	4	18.0 ± 4.5	...	...	...	4 - -	1
970628B	20.46.39	N	45.92	−24.02	3.1	214.4506	−60.1019	24.4	4B_6285	17.0 ± 0.7	12.0 ± 1.4	5	17.0 ± 5.0	...	...	...	1 - -	1
970629	14.16.45	Y	29.62	25.04	2.3	141.6234	−35.3866	7.4	4B_6288	10.0 ± 0.7	10.0 ± 0.7	1	10.0 ± 3.6	...	...	...	1 - -	1
970701	11.15.48	Y	272.65	32.30	7.4	59.0163	22.1476	83.8	4B_6292	0.83 ± 0.01	0.25 ± 0.01	...	0.73 ± 0.16	...	...	...	4 - -	1
970703	21.59.14	N	...	...	...	...	...	...	...	81.0 ± 0.7	6.0 ± 1.4	5	90.0 ± 7.3	...	...	...	1 - -	1
970704	01.08.17	Y	74.82	−16.00	4.4	215.5819	−31.8600	81.3	4B_6293	0.31 ± 0.04	0.23 ± 0.04	...	0.08 ± 0.03	...	...	...	1 - -	1
970705	05.12.23	Y	...	...	...	...	...	...	...	5.0 ± 0.7	5.0 ± 0.7	1	4.06 ± 0.23	...	...	...	1 - -	1
970706	21.39.57	Y	...	...	...	...	...	...	...	98.0 ± 0.7	80.0 ± 1.4	6	59.0 ± 3.6	...	...	...	1 - -	1
970709	13.31.10	Y	315.91	−31.30	4.3	13.6985	−40.6646	41.5	4B_6301	1.17 ± 0.05	0.61 ± 0.05	...	0.90 ± 0.43	...	...	...	4 - -	1
970713A	15.17.24	N	274.48	58.65	4.0	87.5772	27.1866	33.9	4B_6304	5.0 ± 0.7	5.0 ± 0.7	1	6.0 ± 2.2	...	...	...	2 - -	1
970713B	20.57.17	Y	127.12	58.45	4.2	158.7740	35.4452	15.1	4B_6305	11.0 ± 0.7	10.0 ± 0.7	2	14.0 ± 3.2	...	...	...	2 - -	1
970715	14.21.11	Y	...	...	...	...	...	...	...	44.0 ± 0.7	38.0 ± 1.4	5	31.0 ± 3.6	...	...	...	4 - -	1
970716	16.47.56	Y	...	...	...	...	...	...	...	2.0 ± 0.7	...	...	...	...	...	...	2 - -	1
970718	16.18.09	Y	...	...	...	...	...	...	...	66.0 ± 0.7	22.0 ± 2.8	13	67.0 ± 5.8	...	...	...	2 - -	1
970812	03.39.21	Y	111.00	13.00	28.0	204.8311	13.0245	...	G	27.0 ± 2.8	9.0 ± 5.7	6	27.0 ± 3.2	1.83 ± 0.18	1.91 ± 0.21	2.00 ± 0.25	2 2 1	4
970815	12.07.05	Y	242.18	81.50	0.1	115.2976	32.4608	26.9	A	116.0 ± 0.7	45.0 ± 1.4	6	109.0 ± 3.6	10.95 ± 0.79	10.90 ± 0.88	2.22 ± 0.17	1 1 -	1
970816	02.17.45	Y	91.57	44.97	1.6	168.0000	11.4783	50.8	4B_6336	11.0 ± 0.7	11.0 ± 0.7	1	6.0 ± 2.8	17.08 ± 0.92	52.7 ± 2.9	1.11 ± 0.14	1 1 2	1
970817	19.21.39	N	50.30	50.50	13.3	145.7963	−5.6026	38.2	K	28.0 ± 3.5	9.0 ± 7.1	5	52.0 ± 19.1	1.31 ± 0.21	0.52 ± 0.09	1.28 ± 0.38	1 1 -	5
970818	18.07.09	Y	319.72	18.98	2.8	68.8533	−20.8883	34.3	4B_6339	11.0 ± 2.8	9.0 ± 2.8	2	11.0 ± 2.8	1.62 ± 0.19	2.27 ± 0.22	1.68 ± 0.28	4 4 1	4
970819	04.21.01	N	...	...	...	...	...	...	...	106.0 ± 0.7	19.0 ± 2.8	18	100.0 ± 6.7	...	...	...	3 - -	1
970820	05.37.01	Y	95.21	68.93	3.3	145.6194	22.5139	40.9	4B_6341	2.06 ± 0.09	1.72 ± 0.09	...	1.39 ± 0.10	1.00 ± 0.08	10.8 ± 1.5	0.80 ± 0.21	1 1 2	1
970821	10.59.23	Y	117.00	15.00	27.0	205.4661	19.1495	...	G	30.0 ± 0.7	14.0 ± 2.1	7	38.0 ± 4.5	3.00 ± 0.25	3.92 ± 0.43	2.33 ± 0.20	2 2 1	1
970824A	17.23.46	Y	221.87	39.26	3.7	67.0553	63.0252	0.4	4B_6344	53.0 ± 3.5	26.0 ± 10.6	11	50.0 ± 3.6	3.26 ± 0.32	1.32 ± 0.16	1.19 ± 0.25	1 1 -	5
970824B	18.34.44	Y	...	...	...	...	...	...	...	1.62 ± 0.02	0.58 ± 0.02	...	1.23 ± 0.29	...	...	...	1 - -	1
970825A	11.17.14	N	29.20	−47.80	12.5	275.5829	−65.7093	2.8	K	112.0 ± 5.7	16.0 ± 17.0	11	104.0 ± 7.1	3.20 ± 0.48	0.70 ± 0.14	0.84 ± 0.39	3 3 -	8
970825B	22.02.53	N	89.26	−10.18	3.1	216.0294	−16.6523	69.1	4B_6346	191.0 ± 0.7	32.0 ± 3.5	28	170.0 ± 16.3	2.1 ± 1.0	0.43 ± 0.20	...	1 3 -	1
970827A	07.11.41	N	287.60	−23.80	4.3	13.3329	−14.5549	82.6	K	...	...	...	...	...	...	...	- - -	1
970827B	09.55.54	Y	134.65	−51.64	1.8	271.0162	−3.8173	55.8	4B_6349	88.0 ± 2.1	58.0 ± 8.5	14	78.0 ± 7.2	11.25 ± 0.65	3.95 ± 0.29	1.17 ± 0.15	3 3 2	3
970831	17.39.41	Y	85.75	−47.33	1.7	253.9496	−30.8462	35.7	4B_6353	242.0 ± 0.7	162.0 ± 2.8	17	152.0 ± 5.8	33.3 ± 1.8	7.85 ± 0.53	2.18 ± 0.12	1 1 2	1
970903	17.25.08	N	237.75	−58.44	5.0	324.6488	−3.3556	52.1	4B_6359	25.0 ± 1.4	6.0 ± 2.8	5	32.0 ± 3.6	1.65 ± 0.48	1.62 ± 0.72	...	3 3 -	2
970907	06.29.22	Y	175.47	−17.34	3.8	280.1909	42.4394	53.6	4B_6369	25.0 ± 1.4	6.0 ± 2.8	3	25.0 ± 3.2	1.15 ± 0.14	1.51 ± 0.19	2.19 ± 0.32	2 2 3	2
970910	01.13.34	N	316.64	−45.44	4.9	354.8957	−42.2299	8.8	4B_6375	3.0 ± 0.7	3.0 ± 0.7	1	3.0 ± 2.2	1.32 ± 0.61	...	2.40 ± 0.93	2 4 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
970919A	03.45.01	N	194.98	45.46	3.4	118.2180	71.5905	7.4	4B_6388	13.0 ± 1.4	8.0 ± 2.8	3	13.0 ± 3.6	1.42 ± 0.22	1.95 ± 0.33	1.65 ± 0.35	2 2 -	2
970919B	18.14.24	Y	140.39	−4.74	1.7	236.8411	30.1743	56.5	4B_6389	35.0 ± 0.7	26.0 ± 1.4	5	33.0 ± 8.2	11.0 ± 1.2	8.7 ± 1.4	2.48 ± 0.18	2 2 1	1
970919C	22.10.15	Y	298.55	59.56	3.1	92.4846	15.7350	37.6	4B_6390	3.12 ± 0.06	2.88 ± 0.06	...	2.85 ± 0.10	3.59 ± 0.27	8.8 ± 2.2	...	2 2 1	1
970922A	00.48.17	Y	...	...	...	...	...	...	...	60.0 ± 0.7	30.0 ± 1.4	5	32.0 ± 27.9	...	...	...	3 - -	1
970922B	02.25.57	Y	328.00	62.00	28.0	103.4783	6.1101	...	G	9.0 ± 0.7	9.0 ± 0.7	1	7.20 ± 0.24	4.35 ± 0.25	10.95 ± 0.69	2.14 ± 0.12	3 3 4	1
970923	11.39.20	Y	29.00	−41.00	21.0	263.2990	−70.7970	...	G	2.74 ± 0.10	2.03 ± 0.10	...	1.89 ± 0.72	3.95 ± 0.24	43.1 ± 4.7	1.50 ± 0.16	4 4 3	1
970924	02.38.56	Y	95.00	−54.00	38.0	262.4991	−26.1315	...	G	20.0 ± 0.7	16.0 ± 1.4	3	18.0 ± 2.2	4.96 ± 0.32	7.07 ± 0.54	0.85 ± 0.16	3 3 4	1
970928	02.21.48	N	168.30	78.63	9.3	128.8479	37.3453	17.5	4B_6401	2.0 ± 0.7	2.0 ± 0.7	1	3.0 ± 2.2	0.38 ± 0.05	2.72 ± 0.35	1.10 ± 0.28	1 1 -	1
970930	15.42.37	N	40.40	−19.90	29.4	202.8583	−63.7957	65.2	S	112.0 ± 5.7	11.0 ± 17.0	11	95.0 ± 7.2	1.21 ± 0.26	0.37 ± 0.10	2.45 ± 0.61	1 1 -	8
971002	17.41.37	N	8.42	47.25	5.7	119.8060	−15.5139	62.1	4B_6408	5.0 ± 0.7	2.0 ± 0.7	2	6.0 ± 2.2	0.48 ± 0.09	1.34 ± 0.32	2.64 ± 0.45	1 4 1	1
971005	01.15.56	Y	331.17	−56.25	2.5	336.7867	−48.4496	28.7	4B_6413	1.59 ± 0.05	0.94 ± 0.05	...	1.45 ± 0.26	0.55 ± 0.07	3.43 ± 0.89	2.37 ± 0.31	3 3 -	1
971007	15.56.01	N	221.72	−17.07	1.9	338.5949	37.6809	75.7	4B_6416	8.0 ± 0.7	8.0 ± 0.7	1	7.0 ± 2.2	2.16 ± 0.13	5.72 ± 0.41	1.74 ± 0.14	1 1 2	1
971009A	08.14.00	N	255.96	−31.06	4.8	353.1582	6.2961	68.5	4B_6419	24.0 ± 2.1	11.0 ± 4.2	3	27.0 ± 4.5	1.26 ± 0.13	1.13 ± 0.13	3.00 ± 0.28	3 3 -	3
971009B	18.56.55	Y	273.51	−66.24	1.6	328.1436	−21.0438	19.8	4B_6422	6.0 ± 0.7	6.0 ± 0.7	1	5.52 ± 0.78	1.24 ± 0.13	4.25 ± 0.45	1.37 ± 0.25	3 3 -	1
971011	11.50.53	Y	206.08	−59.72	2.3	309.5600	2.4695	3.6	4B_6425	1.48 ± 0.07	0.98 ± 0.07	...	1.02 ± 0.25	0.58 ± 0.07	4.14 ± 1.00	1.44 ± 0.31	1 1 -	1
971013	23.57.09	N	221.75	−63.87	2.6	315.2446	−3.7959	22.5	4B_6432	6.0 ± 0.7	6.0 ± 0.7	1	8.0 ± 5.1	1.07 ± 0.09	2.15 ± 0.19	1.41 ± 0.22	2 1 2	1
971014	05.24.28	N	284.81	−52.84	4.6	343.7109	−22.4387	54.5	4B_6433	...	...	...	...	0.17 ± 0.03	1.74 ± 0.35	...	1 1 -	1
971015	03.49.53	N	265.71	12.91	6.2	37.0946	20.9571	95.5	4B_6435	52.0 ± 0.7	11.0 ± 2.1	9	51.0 ± 3.6	1.11 ± 0.29	0.77 ± 0.13	...	2 1 2	1
971019	14.55.53	Y	153.00	6.00	24.0	234.7424	46.6432	...	G	29.0 ± 0.7	23.0 ± 1.4	4	20.0 ± 3.2	11.13 ± 0.63	23.8 ± 1.4	1.85 ± 0.14	2 2 1	1
971020	04.03.48	Y	149.00	−54.00	46.0	278.8975	0.4752	...	G	0.31 ± 0.03	0.31 ± 0.03	...	0.28 ± 0.21	0.17 ± 0.03	2.55 ± 0.59	0.93 ± 0.48	1 1 2	1
971022A	11.57.18	Y	11.00	−64.00	34.0	304.2897	−53.1086	...	G	99.0 ± 0.7	44.0 ± 2.1	7	97.0 ± 2.8	8.98 ± 0.61	4.87 ± 0.44	1.42 ± 0.14	3 3 4	1
971022B	19.40.23	N	54.00	−65.00	37.0	280.1330	−44.1485	...	G	12.0 ± 2.1	9.0 ± 2.1	2	12.0 ± 4.2	0.88 ± 0.09	1.15 ± 0.14	2.48 ± 0.25	3 3 -	3
971023A	05.43.29	Y	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
971023B	11.12.14	Y	288.08	51.52	4.8	82.3144	17.8525	62.2	4B_6446	58.0 ± 0.7	18.0 ± 2.1	9	66.0 ± 9.1	2.36 ± 0.24	1.82 ± 0.29	2.28 ± 0.26	3 3 -	1
971024A	11.33.33	N	276.21	49.47	0.2	77.7834	24.4279	33.4	A	48.0 ± 0.7	10.0 ± 2.1	9	50.0 ± 5.4	2.67 ± 0.51	2.29 ± 0.50	2.86 ± 0.46	3 2 -	1
971024B	13.26.41	Y	141.00	80.00	36.0	132.3030	32.9906	...	G	44.0 ± 0.7	9.0 ± 1.4	4	44.0 ± 2.2	2.95 ± 0.30	9.25 ± 0.80	1.09 ± 0.26	1 1 -	1
971027A	02.43.30	Y	205.70	59.20	4.4	110.9635	56.7188	18.1	K	20.0 ± 0.7	18.0 ± 0.7	2	11.0 ± 2.2	7.53 ± 0.41	15.64 ± 0.89	2.06 ± 0.12	1 1 2	1
971027B	08.52.25	N	309.00	−51.00	54.0	347.9181	−36.9506	...	G	11.0 ± 0.7	6.0 ± 1.4	3	13.0 ± 5.1	0.83 ± 0.16	1.63 ± 0.21	1.23 ± 0.42	3 3 -	1
971027C	13.22.14	N	...	...	...	...	...	...	...	151.0 ± 0.7	31.0 ± 2.8	20	138.0 ± 3.6	...	...	...	3 - -	1
971028	20.52.06	N	213.90	−4.90	19.6	338.5105	52.0609	85.5	S	46.0 ± 0.7	5.0 ± 1.4	4	47.0 ± 8.2	1.31 ± 0.22	0.80 ± 0.16	2.56 ± 0.46	2 2 -	1
971029	01.28.46	Y	101.12	24.67	1.6	190.0123	9.5422	70.6	4B_6453	143.0 ± 0.7	123.0 ± 2.1	8	92.0 ± 2.2	40.2 ± 2.2	11.76 ± 0.75	2.01 ± 0.12	3 3 4	1
971102A	01.33.08	N	181.10	38.60	9.8	160.5937	74.8894	8.9	S	33.0 ± 4.9	11.0 ± 14.8	7	33.0 ± 2.2	1.09 ± 0.15	0.42 ± 0.08	2.40 ± 0.34	1 1 -	7
971102B	01.49.46	Y	280.00	−37.00	32.0	358.1610	−13.8251	...	G	1.55 ± 0.02	1.48 ± 0.02	...	1.31 ± 0.14	1.07 ± 0.07	7.3 ± 1.0	0.69 ± 0.19	3 3 2	1
971103	07.31.37	N	3.50	2.20	4.8	104.3628	−59.3153	57.9	S	14.0 ± 4.9	10.0 ± 9.9	4	18.0 ± 4.5	1.82 ± 0.21	1.77 ± 0.50	1.61 ± 0.28	3 4 3	7
971110	18.53.10	Y	241.67	50.37	1.7	78.7514	46.4707	41.2	4B_6472	240.0 ± 0.7	208.0 ± 2.1	9	194.0 ± 2.8	123.8 ± 6.4	52.3 ± 2.8	1.44 ± 0.12	1 1 2	1
971114	12.21.04	Y	57.00	−50.00	31.0	259.4141	−49.4504	...	G	105.0 ± 0.7	36.0 ± 2.1	8	98.0 ± 3.2	14.01 ± 0.89	11.51 ± 0.75	2.73 ± 0.14	3 3 4	1
971118	20.43.11	N	36.00	3.00	46.0	163.0772	−52.5041	...	G	33.0 ± 0.7	12.0 ± 2.1	8	30.0 ± 5.4	1.30 ± 0.29	1.48 ± 0.28	...	4 4 -	1
971122	21.29.41	Y	300.49	78.47	2.1	110.9764	23.1352	10.0	4B_6492	85.0 ± 0.7	37.0 ± 2.1	10	63.0 ± 9.2	8.75 ± 0.59	10.27 ± 0.75	1.60 ± 0.15	1 1 2	1
971123	06.35.13	Y	...	...	...	...	...	...	...	38.0 ± 0.7	14.0 ± 2.1	7	38.0 ± 3.2	...	...	...	3 - -	1
971127	00.04.42	N	225.61	31.93	2.1	50.4846	61.2133	51.7	4B_6504	39.0 ± 0.7	18.0 ± 1.4	3	23.0 ± 9.1	6.04 ± 0.34	6.91 ± 0.46	1.78 ± 0.13	2 2 1	1
971130	20.29.41	N	111.00	21.00	40.0	197.2957	16.3237	...	G	33.0 ± 0.7	19.0 ± 1.4	6	31.0 ± 4.2	4.40 ± 0.33	8.35 ± 0.69	1.46 ± 0.17	3 4 3	1
971206A	12.50.29	N	117.84	4.13	6.3	216.1080	15.2063	69.1	4B_6520	164.0 ± 3.5	31.0 ± 14.1	18	152.0 ± 25.3	3.41 ± 0.42	0.72 ± 0.11	1.08 ± 0.32	1 1 -	5
971206B	19.20.48	N	161.05	−5.78	0.1	255.1106	44.9549	44.7	W	45.0 ± 0.7	32.0 ± 2.1	7	42.0 ± 2.2	4.41 ± 0.29	3.43 ± 0.31	2.03 ± 0.16	1 1 2	1
971206C	21.57.44	Y	56.00	1.00	26.0	185.9420	−39.8925	...	G	0.86 ± 0.04	0.62 ± 0.04	...	0.82 ± 0.52	0.49 ± 0.07	5.8 ± 1.3	1.45 ± 0.36	4 4 -	1
971207A	20.04.02	Y	133.74	−4.59	1.7	232.5247	24.7608	15.2	4B_6525	48.0 ± 0.7	23.0 ± 2.1	9	44.0 ± 5.4	5.12 ± 0.46	4.90 ± 0.86	1.79 ± 0.25	1 1 4	1
971207B	20.58.12	N	138.20	71.00	8.5	142.2966	36.7800	28.6	K	18.0 ± 0.7	9.0 ± 0.7	2	17.0 ± 1.4	1.49 ± 0.14	3.41 ± 0.35	2.87 ± 0.23	1 1 -	1
971208A	04.47.12	Y	50.00	−12.00	20.0	196.8277	−52.0699	...	G	15.0 ± 0.7	15.0 ± 0.7	1	13.0 ± 3.2	9.36 ± 0.55	11.89 ± 0.90	1.31 ± 0.16	4 4 3	1
971208B	07.48.36	Y	356.46	77.94	2.0	119.4220	15.5176	33.2	4B_6526	549.0 ± 0.7	380.0 ± 5.7	67	456.0 ± 9.2	96.2 ± 6.9	5.85 ± 0.91	1.85 ± 0.17	3 1 -	1
971210	07.43.34	Y	176.91	−51.95	1.9	293.0383	9.6920	13.6	4B_6528	14.0 ± 0.7	14.0 ± 0.7	1	15.0 ± 4.1	4.68 ± 0.25	9.97 ± 0.58	1.82 ± 0.12	3 3 2	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
971212	22.17.38	Y	306.69	−44.95	8.2	355.3415	−35.2141	55.4	4B_6531	...	...	...	...	...	...	...	- - -	1
971214A	02.38.30	N	...	...	...	...	...	...	...	4.0 ± 0.7	2.0 ± 0.7	2	6.0 ± 3.2	...	...	...	3 - -	1
971214B	23.20.42	Y	179.12	65.20	0.1	132.0297	50.9464	28.5	W	40.0 ± 2.1	25.0 ± 4.2	5	30.0 ± 6.3	7.37 ± 0.50	5.25 ± 0.39	2.03 ± 0.14	1 1 2	3
971216	15.13.46	Y	...	...	...	...	...	...	...	101.0 ± 0.7	30.0 ± 2.8	15	91.0 ± 8.2	...	...	...	2 - -	1
971218	12.42.44	Y	248.00	31.00	31.0	51.4055	42.1349	...	G	6.0 ± 0.7	6.0 ± 0.7	1	4.45 ± 0.31	1.41 ± 0.10	4.17 ± 0.33	2.01 ± 0.17	2 2 1	1
971219A	10.41.17	Y	240.00	−45.00	44.0	334.3476	6.0637	...	G	0.27 ± 0.04	0.27 ± 0.04	...	0.16 ± 0.07	0.33 ± 0.03	7.2 ± 1.2	0.83 ± 0.35	1 1 2	1
971219B	22.12.54	Y	...	...	...	...	...	...	...	5.0 ± 0.7	4.0 ± 0.7	2	4.77 ± 0.95	...	...	...	4 - -	1
971220	04.06.34	N	33.23	−38.55	2.3	251.9173	−69.4992	54.7	4B_6539	13.0 ± 0.7	13.0 ± 0.7	1	12.0 ± 3.6	6.53 ± 0.66	7.9 ± 1.1	...	1 1 4	1
971223A	00.38.03	Y	221.65	50.53	2.7	87.6707	57.9742	61.9	4B_6544	26.0 ± 1.4	21.0 ± 1.4	2	24.0 ± 3.2	3.21 ± 0.22	1.91 ± 0.16	1.61 ± 0.16	1 1 2	2
971223B	09.35.00	Y	75.00	−26.00	39.0	226.9663	−35.0083	...	G	6.0 ± 0.7	6.0 ± 0.7	1	6.0 ± 3.5	0.99 ± 0.14	2.62 ± 0.39	0.76 ± 0.39	3 3 -	1
971223C	10.36.21	Y	312.00	−43.00	37.0	358.0949	−38.8980	...	G	59.0 ± 0.7	54.0 ± 0.7	2	47.0 ± 2.8	17.42 ± 0.87	10.83 ± 0.62	1.91 ± 0.11	3 3 2	1
971227	08.23.07	N	194.40	59.25	0.1	121.4513	57.8605	11.1	W	41.0 ± 0.7	8.0 ± 1.4	4	47.0 ± 5.0	1.88 ± 0.19	4.23 ± 0.35	2.00 ± 0.22	3 3 -	1
971228A	06.55.40	Y	138.00	−29.00	41.0	255.6771	13.1187	...	G	28.0 ± 1.4	11.0 ± 2.8	6	27.0 ± 5.8	1.32 ± 0.17	1.72 ± 0.21	1.17 ± 0.36	1 4 1	2
971228B	14.53.52	N	34.40	26.90	5.2	145.6801	−32.1375	73.0	S	10.0 ± 0.7	10.0 ± 0.7	1	11.0 ± 2.8	1.08 ± 0.10	1.65 ± 0.26	1.74 ± 0.20	3 3 -	1
971229	10.11.34	N	340.29	−68.34	3.9	319.1005	−44.4768	18.8	4B_6550	11.0 ± 3.5	6.0 ± 7.1	4	12.0 ± 7.1	0.96 ± 0.16	0.95 ± 0.19	...	1 1 -	5
971230	23.15.47	Y	...	...	...	...	...	...	...	0.25 ± 0.02	0.22 ± 0.02	...	0.14 ± 0.12	...	...	...	4 - -	1
980101	03.27.24	Y	205.07	35.05	3.1	73.1211	76.8996	17.8	4B_6554	9.0 ± 0.7	2.0 ± 0.7	2	13.0 ± 5.4	0.67 ± 0.18	2.17 ± 0.46	2.79 ± 0.72	3 3 -	1
980102	19.31.50	Y	...	...	...	...	...	...	...	5.0 ± 0.7	3.0 ± 0.7	2	6.7 ± 1.4	...	...	...	3 - -	1
980103A	10.38.43	Y	236.69	−75.04	2.5	313.6473	−15.9496	6.4	4B_6557	7.0 ± 0.7	7.0 ± 0.7	2	8.0 ± 3.6	2.20 ± 0.19	4.31 ± 0.52	2.06 ± 0.20	1 1 -	1
980103B	16.01.13	N	133.85	1.48	7.7	226.8093	28.0262	52.2	4B_6558	39.0 ± 2.1	16.0 ± 6.4	11	38.0 ± 5.4	2.32 ± 0.30	1.30 ± 0.26	0.97 ± 0.42	4 4 -	3
980105	00.44.42	Y	37.20	51.66	2.1	137.9081	−8.3582	39.5	4B_6560	38.0 ± 0.7	16.0 ± 1.4	6	37.0 ± 5.1	6.96 ± 0.47	8.61 ± 0.69	1.88 ± 0.15	1 1 4	1
980106	14.31.35	N	286.00	4.00	41.0	37.9238	−0.9644	...	G	4.0 ± 1.4	4.0 ± 1.4	1	9.0 ± 2.2	1.03 ± 0.20	1.73 ± 0.36	0.76 ± 0.48	2 2 -	2
980109	01.12.26	N	6.48	−63.02	0.2	307.8358	−53.8646	45.4	W	19.0 ± 0.7	19.0 ± 0.7	1	18.0 ± 3.6	2.85 ± 0.21	3.33 ± 0.33	1.84 ± 0.16	3 3 -	1
980112A	01.23.49	N	...	...	...	...	...	...	...	1.0 ± 0.7	...	...	...	...	...	...	3 - -	1
980112B	07.50.04	N	40.51	71.64	3.7	131.4853	10.6293	33.8	4B_6567	14.0 ± 2.1	11.0 ± 4.2	4	13.0 ± 2.8	0.78 ± 0.09	0.85 ± 0.13	2.45 ± 0.27	1 1 -	3
980116	15.01.36	N	296.00	40.00	52.0	74.0633	7.9383	...	G	2.0 ± 0.7	2.0 ± 0.7	1	...	0.27 ± 0.04	1.72 ± 0.32	0.98 ± 0.36	3 3 -	1
980118	11.53.48	Y	96.00	0.00	39.0	209.7922	−6.1018	...	G	7.0 ± 2.1	5.0 ± 2.1	2	7.59 ± 0.98	0.71 ± 0.08	1.35 ± 0.15	1.00 ± 0.31	1 1 4	3
980121	22.42.43	Y	293.00	−21.00	39.0	18.0629	−18.0409	...	G	3.0 ± 0.7	2.0 ± 0.7	2	12.0 ± 3.6	0.82 ± 0.17	1.75 ± 0.41	...	2 2 1	1
980124A	06.34.36	Y	272.22	80.30	1.9	112.0710	28.4995	20.8	4B_6576	42.0 ± 0.7	18.0 ± 1.4	6	40.0 ± 2.2	9.97 ± 0.78	13.9 ± 1.1	1.56 ± 0.21	3 3 4	1
980124B	20.57.39	N	192.20	−62.70	4.2	302.6295	0.1702	41.0	4B_6578	70.0 ± 0.7	9.0 ± 2.1	8	70.0 ± 5.7	...	...	...	1 - -	1
980127	00.58.52	Y	36.00	−29.00	19.0	223.6003	−69.5273	...	G	34.0 ± 0.7	31.0 ± 0.7	2	31.0 ± 1.4	8.59 ± 0.51	15.75 ± 0.97	1.24 ± 0.13	3 3 2	1
980129	15.19.44	Y	287.43	−64.92	2.9	331.0519	−26.2989	28.3	4B_6583	45.0 ± 2.8	16.0 ± 5.7	3	37.0 ± 4.2	2.28 ± 0.23	1.77 ± 0.17	1.24 ± 0.27	1 1 2	4
980203A	14.21.06	Y	...	...	...	...	...	...	...	29.0 ± 0.7	8.0 ± 1.4	4	29.0 ± 6.7	...	...	...	3 - -	1
980203B	22.47.08	Y	3.46	−17.65	1.6	78.5168	−77.1515	89.6	4B_6587	57.0 ± 0.7	47.0 ± 1.4	4	23.0 ± 1.4	104.5 ± 5.1	93.8 ± 4.7	1.61 ± 0.11	3 2 3	1
980205	05.29.44	Y	146.40	−37.40	2.1	266.8454	12.1276	1.5	S	1.37 ± 0.05	0.71 ± 0.05	...	1.25 ± 0.60	1.47 ± 0.11	34.6 ± 3.8	...	1 4 1	1
980208A	12.33.23	Y	75.99	−32.20	2.6	234.5978	−35.6868	67.4	4B_6592	18.0 ± 0.7	18.0 ± 0.7	1	18.0 ± 5.1	2.52 ± 0.20	2.32 ± 0.31	2.21 ± 0.19	3 3 -	1
980208B	12.51.00	Y	60.97	−75.49	1.6	289.5714	−36.1802	15.7	4B_6593	28.0 ± 0.7	19.0 ± 1.4	4	27.0 ± 2.8	...	...	...	2 - -	1
980222	02.25.56	N	31.21	28.51	2.0	141.8955	−31.6445	71.2	4B_6610	14.0 ± 0.7	3.0 ± 1.4	5	49.0 ± 8.1	1.17 ± 0.35	2.39 ± 0.48	...	4 3 -	1
980223	21.17.22	N	305.30	−42.60	7.9	358.0510	−33.9672	68.3	S	21.0 ± 0.7	6.0 ± 1.4	4	23.0 ± 3.6	0.89 ± 0.15	1.52 ± 0.35	1.81 ± 0.42	2 2 -	1
980224	20.54.14	N	186.00	18.00	42.0	266.7918	78.8953	...	G	49.0 ± 2.8	21.0 ± 5.7	5	48.0 ± 3.2	4.42 ± 0.49	2.72 ± 0.32	2.91 ± 0.25	3 3 -	4
980226	11.28.54	N	243.00	−10.00	21.0	2.5979	28.8523	82.8	S	149.0 ± 4.2	20.0 ± 17.0	15	141.0 ± 17.5	2.12 ± 0.33	0.57 ± 0.10	1.20 ± 0.37	1 1 -	6
980228	23.11.39	Y	184.00	24.00	33.0	232.3515	81.4204	...	G	11.0 ± 0.7	11.0 ± 0.7	1	9.8 ± 1.5	4.15 ± 0.28	6.81 ± 0.62	1.89 ± 0.16	3 4 3	1
980304	14.41.04	N	18.40	44.80	4.7	127.0603	−17.8940	36.5	S	6.0 ± 2.8	4.0 ± 2.8	2	8.0 ± 4.5	1.04 ± 0.13	1.57 ± 0.21	1.48 ± 0.35	2 2 3	4
980306A	04.41.31	Y	...	...	...	...	...	...	...	0.23 ± 0.02	0.19 ± 0.02	...	...	...	...	...	3 - -	1
980306B	09.33.02	Y	7.05	−45.51	1.6	315.5455	−71.0449	57.4	4B_6629	...	...	...	...	...	...	...	- - -	1
980306C	17.34.11	Y	341.63	−56.74	1.7	331.1296	−53.0029	53.3	4B_6630	29.0 ± 0.7	29.0 ± 0.7	1	21.0 ± 3.2	17.66 ± 0.87	53.5 ± 2.8	1.79 ± 0.11	3 3 2	1
980308	14.24.48	Y	...	...	...	...	...	...	...	21.0 ± 0.7	13.0 ± 1.4	3	21.0 ± 2.2	...	...	...	2 - -	1
980310A	13.57.41	Y	242.41	−60.47	2.0	325.1079	−6.4398	29.1	4B_6635	1.17 ± 0.12	1.17 ± 0.12	...	0.88 ± 0.16	1.19 ± 0.08	18.6 ± 2.4	2.35 ± 0.16	3 3 4	1
980310B	15.50.47	Y	...	...	...	...	...	...	...	2.50 ± 0.06	0.50 ± 0.06	...	2.40 ± 0.30	...	...	...	3 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	$T_{\rm det}$ (s)	$T_{\rm a}$ (s)	$N_{\rm a}$	T_{90} (s)	Fluence (10^{-6} cgs)	$F_{\rm peak}$ (10^{-7} cgs)	Γ	Unit	R
980313	09.04.22	N	31.85	42.33	3.6	137.6155	−18.3656	47.5	4B_6640	66.0 ± 0.7	3.0 ± 1.4	3	43.0 ± 12.5	5.9 ± 1.9	...	1.89 ± 0.84	3 2 -	1
980315A	02.49.57	Y	75.84	20.36	3.9	181.8305	−12.7332	88.4	4B_6641	0.56 ± 0.02	0.33 ± 0.02	...	0.46 ± 0.10	0.22 ± 0.03	3.39 ± 0.84	1.51 ± 0.40	1 1 -	1
980315B	07.24.53	Y	74.65	31.57	2.2	172.0660	−6.8752	59.4	4B_6642	113.0 ± 0.7	76.0 ± 2.8	16	105.0 ± 3.6	10.38 ± 0.73	4.24 ± 0.51	1.48 ± 0.19	1 1 2	1
980315C	22.42.35	Y	...	...	...	...	...	...	...	0.77 ± 0.05	0.27 ± 0.05	...	0.80 ± 0.14	...	...	...	4 - -	1
980320	16.22.29	Y	82.00	29.00	37.0	177.8752	−3.2163	...	G	7.0 ± 0.7	5.0 ± 0.7	2	7.0 ± 2.2	0.49 ± 0.08	1.06 ± 0.20	0.63 ± 0.44	1 1 -	1
980321	06.06.15	Y	42.25	7.59	4.3	166.5020	−45.1065	46.0	4B_6651	193.0 ± 4.2	64.0 ± 21.2	24	166.0 ± 18.1	6.99 ± 0.50	1.49 ± 0.12	2.90 ± 0.17	1 2 1	6
980324A	11.24.45	Y	66.00	29.00	25.0	169.1478	−14.2328	...	G	16.0 ± 0.7	8.0 ± 0.7	2	13.0 ± 3.2	0.71 ± 0.09	1.55 ± 0.27	2.12 ± 0.28	1 1 -	1
980324B	13.46.52	N	...	...	...	...	...	...	...	10.0 ± 0.7	5.0 ± 1.4	3	13.0 ± 5.0	...	...	...	4 - -	1
980325	15.57.26	N	...	...	...	...	...	...	...	87.0 ± 0.7	23.0 ± 2.1	12	102.0 ± 16.1	...	...	...	2 - -	1
980326	21.18.53	Y	129.11	−18.88	0.1	242.3651	12.9976	27.8	W	333.0 ± 0.7	45.0 ± 4.2	35	312.0 ± 8.1	5.09 ± 0.50	3.14 ± 0.32	1.85 ± 0.21	1 1 -	1
980329A	03.44.26	Y	105.67	38.83	0.1	178.1398	18.6570	12.8	W	83.0 ± 0.7	51.0 ± 2.1	8	19.0 ± 2.2	43.8 ± 2.9	42.0 ± 3.0	1.74 ± 0.14	3 3 -	1
980329B	15.24.47	N	172.30	−63.20	15.1	293.8169	−1.7929	28.0	S	37.0 ± 0.7	9.0 ± 1.4	6	36.0 ± 4.1	0.89 ± 0.16	0.67 ± 0.12	2.21 ± 0.53	3 3 -	1
980330	00.01.32	Y	224.92	−24.01	2.8	337.0705	30.2288	90.4	4B_6668	0.33 ± 0.11	0.33 ± 0.11	...	...	1.80 ± 0.16	13.2 ± 1.1	1.64 ± 0.21	4 4 3	1
980401A	04.31.54	N	125.70	18.27	1.8	205.7076	28.0991	98.0	4B_6672	32.0 ± 0.7	14.0 ± 1.4	4	22.0 ± 11.0	5.26 ± 0.33	12.62 ± 0.80	2.44 ± 0.14	3 3 4	1
980401B	09.11.02	N	35.44	−3.51	3.4	169.2711	−58.0097	66.1	4B_6673	15.0 ± 2.1	6.0 ± 2.1	2	17.0 ± 6.3	1.16 ± 0.15	1.61 ± 0.21	2.19 ± 0.36	2 2 3	3
980401C	12.46.24	N	198.55	−62.39	2.9	305.5658	0.3653	45.3	4B_6674	93.0 ± 4.2	12.0 ± 12.7	10	93.0 ± 6.4	3.59 ± 0.65	1.79 ± 0.45	2.96 ± 0.40	1 1 -	6
980403	23.15.52	Y	279.55	46.41	3.0	75.2373	21.4501	54.1	4B_6677	93.0 ± 0.7	32.0 ± 2.1	11	92.0 ± 7.8	10.18 ± 0.81	4.35 ± 0.67	2.23 ± 0.17	3 1 2	1
980404	18.54.49	Y	0.00	11.80	3.1	103.4887	−49.1201	70.4	4B_6679	1.64 ± 0.12	1.29 ± 0.12	...	1.41 ± 0.32	0.80 ± 0.07	8.0 ± 1.3	1.40 ± 0.20	2 2 3	1
980406A	16.12.53	Y	...	...	...	...	...	...	...	7.0 ± 0.7	7.0 ± 0.7	1	8.77 ± 0.94	...	...	...	2 - -	1
980406B	17.14.05	N	31.00	−56.00	35.0	283.5729	−58.3169	...	G	9.0 ± 2.1	7.0 ± 2.1	2	13.0 ± 4.5	0.78 ± 0.11	0.80 ± 0.14	1.54 ± 0.32	3 3 -	3
980407	18.51.40	Y	64.00	27.00	39.0	169.4081	−16.8889	...	G	155.0 ± 0.7	29.0 ± 3.5	21	153.0 ± 14.1	4.29 ± 0.37	3.09 ± 0.42	2.66 ± 0.22	3 3 -	1
980409	02.08.35	Y	206.37	9.83	2.0	341.8683	68.5133	49.8	4B_6683	7.0 ± 0.7	7.0 ± 0.7	1	7.0 ± 2.2	2.89 ± 0.45	7.3 ± 1.1	2.54 ± 0.29	4 4 -	1
980413	06.49.21	N	...	...	...	...	...	...	...	6.0 ± 0.7	2.0 ± 0.7	2	10.0 ± 3.6	...	...	...	3 - -	1
980416	14.12.37	N	182.00	2.00	47.0	278.6050	62.8019	...	G	51.0 ± 1.4	20.0 ± 4.2	12	49.0 ± 10.2	2.24 ± 0.29	1.47 ± 0.28	1.24 ± 0.36	4 4 -	2
980419	21.08.45	N	130.00	78.00	39.0	135.5383	32.0345	...	G	100.0 ± 2.8	25.0 ± 11.3	15	94.0 ± 7.3	3.31 ± 0.39	1.04 ± 0.17	...	3 3 -	4
980420	10.06.52	Y	292.81	26.56	1.7	60.9309	3.8031	81.2	4B_6694	26.0 ± 0.7	20.0 ± 1.4	4	20.0 ± 3.2	12.39 ± 0.71	12.28 ± 0.73	1.05 ± 0.16	1 3 2	1
980421	22.44.02	N	220.15	34.92	3.5	58.1669	65.4421	72.6	4B_6698	22.0 ± 0.7	8.0 ± 1.4	5	23.0 ± 3.6	3.25 ± 0.36	4.02 ± 0.55	1.43 ± 0.28	2 1 -	1
980424	01.32.08	Y	93.33	5.18	3.5	203.9334	−6.0601	87.2	4B_6702	49.0 ± 0.7	23.0 ± 2.1	7	43.0 ± 2.8	3.59 ± 0.24	4.06 ± 0.37	1.63 ± 0.15	2 3 2	1
980425A	10.41.54	N	174.00	23.00	39.0	222.3687	72.4443	...	G	23.0 ± 0.7	13.0 ± 0.7	2	22.0 ± 4.5	1.41 ± 0.15	1.71 ± 0.27	1.90 ± 0.24	1 1 -	1
980425B	21.49.08	Y	293.73	−52.82	0.1	345.0186	−27.6929	54.7	W	20.0 ± 0.7	20.0 ± 0.7	1	18.0 ± 4.1	3.04 ± 0.21	2.49 ± 0.27	2.56 ± 0.17	3 3 -	1
980426	10.49.18	Y	206.73	−29.70	3.4	317.0899	31.6418	10.4	4B_6708	25.0 ± 0.7	10.0 ± 1.4	5	25.0 ± 4.1	2.01 ± 0.18	4.55 ± 0.41	1.57 ± 0.24	1 4 1	1
980427	15.40.30	Y	225.17	−21.89	8.7	338.6638	31.8672	38.0	4B_6710	1.41 ± 0.07	0.63 ± 0.07	...	1.45 ± 0.12	0.26 ± 0.06	2.18 ± 0.99	1.39 ± 0.64	4 4 -	2
980428	20.10.08	Y	...	...	...	...	...	...	...	122.0 ± 0.7	52.0 ± 2.8	14	100.0 ± 13.0	...	...	...	3 - -	1
980429	08.45.56	N	130.17	22.81	0.1	202.4111	33.5811	83.1	W	144.0 ± 0.7	15.0 ± 2.8	14	165.0 ± 8.5	2.11 ± 0.32	0.78 ± 0.21	3.57 ± 0.43	3 3 -	1
980508	04.07.26	Y	334.08	20.46	2.4	80.5984	−29.3829	69.6	4B_6744	5.78 ± 0.08	4.92 ± 0.08	...	3.77 ± 0.36	4.32 ± 0.23	14.56 ± 0.82	2.16 ± 0.12	1 1 2	1
980511	01.55.26	N	66.99	1.94	5.4	192.7834	−30.3808	1.2	4B_6753	7.0 ± 2.1	6.0 ± 2.1	2	8.0 ± 2.8	0.65 ± 0.09	1.07 ± 0.17	1.06 ± 0.39	3 2 3	3
980513	21.41.24	Y	127.62	−54.84	3.1	270.9546	−9.0987	5.7	4B_6757	1.72 ± 0.02	0.75 ± 0.02	...	1.67 ± 0.17	0.52 ± 0.06	3.85 ± 0.90	0.91 ± 0.27	1 1 -	1
980515	17.00.20	N	319.52	−67.23	0.1	326.3963	−38.7638	29.5	W	28.0 ± 0.7	19.0 ± 1.4	3	25.0 ± 5.4	2.83 ± 0.21	3.16 ± 0.30	2.10 ± 0.17	3 3 -	1
980516	11.23.37	N	89.00	−4.00	15.0	210.1608	−14.1510	...	G	63.0 ± 0.7	57.0 ± 1.4	3	16.0 ± 2.2	446.6 ± 23.1	706.3 ± 36.6	1.71 ± 0.12	2 2 1	1
980518A	18.44.48	N	306.10	−79.00	19.5	314.7310	−30.9717	23.8	S	2.0 ± 0.7	2.0 ± 0.7	1	...	0.26 ± 0.04	1.36 ± 0.25	0.59 ± 0.52	1 1 -	1
980518B	22.23.09	N	...	...	...	...	...	...	...	6.0 ± 0.7	3.0 ± 1.4	3	7.0 ± 5.8	...	...	...	3 - -	1
980519A	03.43.32	Y	...	...	...	...	...	...	...	47.0 ± 0.7	35.0 ± 1.4	4	33.0 ± 3.2	...	...	...	1 - -	1
980519B	12.20.22	N	350.56	77.25	0.1	117.9524	15.2488	12.4	W	40.0 ± 0.7	35.0 ± 1.4	4	28.0 ± 5.1	8.58 ± 0.52	10.53 ± 0.75	1.95 ± 0.13	3 3 2	1
980520A	01.46.50	N	...	...	...	...	...	...	...	80.0 ± 0.7	13.0 ± 2.1	10	79.0 ± 2.2	...	...	...	4 - -	1
980520B	14.26.57	N	349.80	−24.10	4.6	36.0649	−69.0177	54.3	S	107.0 ± 1.4	39.0 ± 5.7	15	98.0 ± 9.2	4.40 ± 0.38	1.53 ± 0.19	2.57 ± 0.21	1 1 -	2
980520C	19.12.18	N	353.71	−11.32	2.6	70.5289	−66.0486	38.3	4B_6767	67.0 ± 1.4	27.0 ± 4.2	9	64.0 ± 3.6	3.11 ± 0.30	1.62 ± 0.19	2.94 ± 0.23	1 1 -	2
980523	02.23.32	Y	...	...	...	...	...	...	...	3.52 ± 0.12	0.94 ± 0.12	...	3.11 ± 0.81	...	...	...	1 - -	1
980525	02.35.22	N	157.61	−17.86	7.0	261.7272	33.4998	10.8	4B_6782	39.0 ± 2.8	8.0 ± 5.7	6	39.0 ± 2.8	1.07 ± 0.20	0.71 ± 0.14	...	1 1 -	4
980527	08.22.01	Y	276.93	24.15	1.9	52.4173	15.6909	61.2	4B_6788	0.16 ± 0.05	0.16 ± 0.05	...	0.09 ± 0.02	1.22 ± 0.08	11.59 ± 0.75	1.04 ± 0.21	1 1 4	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
980531	07.42.42	Y	...	...	...	...	...	...	...	115.0 ± 0.7	14.0 ± 2.1	9	99.0 ± 13.0	...	...	...	2 - -	1
980603	05.05.02	Y	...	...	...	...	...	...	...	2.56 ± 0.06	0.69 ± 0.06	...	2.55 ± 0.56	...	...	...	3 - -	1
980605	14.12.10	Y	264.30	44.50	6.2	70.5092	31.4429	67.2	S	0.19 ± 0.02	0.16 ± 0.02	...	...	0.89 ± 0.07	8.91 ± 0.66	1.17 ± 0.23	1 4 1	1
980606	09.02.15	Y	71.00	−21.00	35.0	219.7100	−37.0117	...	G	0.56 ± 0.05	0.19 ± 0.05	...	0.53 ± 0.21	0.29 ± 0.04	6.2 ± 1.3	...	2 2 3	1
980610	19.52.28	Y	...	...	...	...	...	...	...	0.70 ± 0.05	0.61 ± 0.05	...	0.66 ± 0.06	...	...	...	2 - -	1
980613	04.51.06	N	154.44	71.48	0.1	138.0539	40.8328	37.6	W	33.0 ± 0.7	11.0 ± 1.4	4	42.0 ± 22.1	1.86 ± 0.26	1.49 ± 0.26	0.59 ± 0.35	3 3 -	1
980615A	02.47.11	Y	242.00	−32.00	40.0	344.4461	14.6035	...	G	0.76 ± 0.01	0.08 ± 0.01	...	0.84 ± 0.26	0.16 ± 0.03	1.88 ± 0.58	2.26 ± 0.50	4 4 1	1
980615B	10.12.16	Y	43.00	19.00	20.0	158.5542	−35.3994	...	G	143.0 ± 0.7	110.0 ± 2.1	12	64.0 ± 3.2	105.9 ± 5.0	33.9 ± 1.7	1.96 ± 0.11	2 2 3	1
980616	13.28.54	Y	213.32	36.37	1.9	66.0714	70.3578	51.7	4B_6828	6.0 ± 0.7	5.0 ± 0.7	2	5.09 ± 0.17	2.32 ± 0.20	7.15 ± 0.74	0.53 ± 0.33	4 4 3	1
980617	02.51.52	Y	55.95	−3.82	3.6	191.1083	−42.7555	89.0	4B_6829	237.0 ± 0.7	140.0 ± 4.2	32	186.0 ± 5.8	18.6 ± 1.5	6.90 ± 0.63	1.80 ± 0.17	2 2 -	1
980619	13.12.12	Y	...	...	...	...	...	...	...	0.42 ± 0.14	0.42 ± 0.14	...	...	...	...	...	3 - -	1
980622	20.21.39	Y	312.00	45.00	44.0	84.7846	0.9157	...	G	5.0 ± 1.4	5.0 ± 1.4	1	4.16 ± 0.36	1.12 ± 0.10	3.05 ± 0.26	1.73 ± 0.18	1 1 4	2
980623	00.05.06	N	...	...	...	...	...	...	...	57.0 ± 0.7	5.0 ± 1.4	4	70.0 ± 18.2	...	...	...	1 - -	1
980624	16.07.53	Y	...	...	...	...	...	...	...	47.0 ± 0.7	23.0 ± 1.4	6	38.0 ± 6.7	...	...	...	3 - -	1
980625	13.47.40	N	...	...	...	...	...	...	...	7.0 ± 0.7	5.0 ± 0.7	2	12.0 ± 5.4	...	...	...	1 - -	1
980626A	14.21.30	N	...	...	...	...	...	...	...	9.0 ± 0.7	7.0 ± 0.7	2	13.0 ± 5.4	...	...	...	4 - -	1
980626B	22.39.47	Y	17.65	−72.98	1.8	300.9820	−44.0756	39.9	4B_6877	14.0 ± 0.7	14.0 ± 0.7	1	14.0 ± 2.8	2.80 ± 0.21	3.00 ± 0.34	2.03 ± 0.18	1 1 -	1
980627A	04.20.29	Y	159.71	−0.23	3.6	248.1040	48.0136	102.1	4B_6880	5.0 ± 1.4	3.0 ± 1.4	2	8.0 ± 2.2	0.59 ± 0.09	1.59 ± 0.26	1.58 ± 0.41	3 3 -	2
980627B	12.36.34	Y	180.20	22.83	2.6	230.7012	77.7542	66.8	4B_6882	14.0 ± 1.4	8.0 ± 2.8	3	14.0 ± 3.6	1.25 ± 0.12	2.24 ± 0.20	2.44 ± 0.22	3 3 2	2
980629	01.34.00	Y	308.46	44.29	3.1	82.6805	2.4723	33.6	4B_6886	44.0 ± 0.7	31.0 ± 2.1	7	39.0 ± 4.5	4.57 ± 0.38	3.97 ± 0.43	1.26 ± 0.18	1 1 4	1
980701	18.39.08	N	138.00	39.00	37.0	183.6668	43.2405	...	G	9.0 ± 0.7	7.0 ± 0.7	2	9.0 ± 3.6	0.89 ± 0.16	2.61 ± 0.46	2.53 ± 0.50	1 2 -	1
980703	04.22.47	Y	359.78	8.58	0.1	101.5649	−52.1079	49.3	A	97.0 ± 2.1	32.0 ± 8.5	14	76.0 ± 10.2	14.6 ± 2.6	4.50 ± 0.92	1.64 ± 0.38	4 4 -	3
980705	06.26.05	Y	157.10	34.90	17.2	189.7007	58.5622	71.6	S	1.41 ± 0.12	1.05 ± 0.12	...	1.28 ± 0.45	0.46 ± 0.07	3.00 ± 0.61	1.68 ± 0.42	2 2 1	1
980706A	15.37.59	Y	298.28	33.56	2.1	69.3679	3.1455	38.4	4B_6903	41.0 ± 0.7	22.0 ± 2.1	7	35.0 ± 6.3	4.07 ± 0.53	3.11 ± 0.52	1.82 ± 0.31	4 4 -	1
980706B	15.59.47	Y	162.00	57.33	4.0	150.1692	52.7731	36.8	C	99.0 ± 0.7	24.0 ± 2.1	11	71.0 ± 13.0	15.0 ± 1.1	106.6 ± 7.6	0.63 ± 0.19	3 3 -	1
980706C	17.46.27	Y	198.00	49.70	6.7	114.3724	67.0851	40.4	S	6.0 ± 0.7	6.0 ± 0.7	1	4.58 ± 0.83	0.96 ± 0.09	3.15 ± 0.37	1.55 ± 0.19	3 3 4	1
980706D	21.40.38	Y	308.00	−37.00	29.0	5.1497	−35.1966	...	G	160.0 ± 0.7	95.0 ± 2.8	18	146.0 ± 2.8	35.8 ± 2.2	35.3 ± 2.2	2.03 ± 0.14	1 4 1	1
980709A	04.42.52	N	12.60	−31.90	6.6	305.5781	−85.2229	78.8	S	57.0 ± 0.7	22.0 ± 2.1	8	53.0 ± 6.3	2.64 ± 0.29	1.51 ± 0.25	0.46 ± 0.34	1 1 -	1
980709B	05.40.07	Y	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
980712A	05.09.43	N	331.90	8.30	8.7	68.8125	−36.8149	18.2	S	134.0 ± 7.1	33.0 ± 28.3	16	121.0 ± 19.2	2.11 ± 0.25	0.50 ± 0.07	2.18 ± 0.29	1 1 -	10
980712B	06.04.00	N	292.60	−47.67	3.8	350.5336	−26.0079	66.1	4B_6917	7.0 ± 0.7	5.0 ± 0.7	2	8.0 ± 3.2	1.43 ± 0.17	4.63 ± 0.54	2.19 ± 0.27	4 4 -	1
980712C	15.21.36	N	...	...	...	...	...	...	...	2.0 ± 0.7	...	...	...	...	...	...	4 - -	1
980713	03.41.44	Y	119.70	−28.20	5.8	245.4132	0.6737	64.3	S	1.42 ± 0.10	1.02 ± 0.10	...	1.52 ± 0.40	0.55 ± 0.07	3.71 ± 0.75	1.62 ± 0.31	3 3 2	2
980714	19.44.32	N	327.00	43.00	46.0	90.9101	−8.1820	...	G	13.0 ± 2.1	10.0 ± 4.2	3	12.0 ± 3.6	1.10 ± 0.12	1.48 ± 0.19	1.79 ± 0.25	1 1 -	3
980715	09.48.05	Y	313.70	−20.70	4.1	26.1216	−36.0136	86.1	S	10.0 ± 2.8	9.0 ± 2.8	2	9.10 ± 0.93	1.56 ± 0.13	1.92 ± 0.17	1.91 ± 0.21	1 4 1	4
980718	01.10.38	N	129.00	27.00	30.0	197.2177	33.8059	...	G	6.0 ± 2.1	6.0 ± 2.1	1	9.0 ± 3.2	1.01 ± 0.10	1.78 ± 0.20	1.71 ± 0.28	2 2 1	3
980720	22.16.07	Y	36.00	−28.00	36.0	220.7441	−69.4981	...	G	10.0 ± 0.7	6.0 ± 0.7	2	11.0 ± 6.1	0.66 ± 0.09	2.45 ± 0.27	2.05 ± 0.34	1 1 -	1
980722	04.51.44	Y	...	...	...	...	...	...	...	0.72 ± 0.03	0.28 ± 0.03	...	0.67 ± 0.12	...	...	...	3 - -	1
980724	12.28.18	Y	127.75	−31.32	5.2	251.8898	4.7593	24.8	4B_6943	0.28 ± 0.03	0.25 ± 0.03	...	...	0.22 ± 0.04	4.4 ± 1.3	1.04 ± 0.56	2 2 -	1
980726	16.44.48	Y	...	...	...	...	...	...	...	57.0 ± 0.7	30.0 ± 1.4	6	53.0 ± 2.2	...	...	...	2 - -	1
980728	08.48.35	Y	88.00	−56.00	33.0	264.1405	−30.3749	...	G	80.0 ± 0.7	54.0 ± 2.1	9	52.0 ± 6.3	11.35 ± 0.59	6.33 ± 0.42	1.96 ± 0.12	3 3 2	1
980802A	04.30.54	Y	178.62	−45.54	5.9	292.5974	16.1857	36.5	4B_6960	0.78 ± 0.04	0.35 ± 0.04	...	0.77 ± 0.29	0.26 ± 0.04	3.60 ± 0.96	2.10 ± 0.48	2 2 -	1
980802B	08.01.14	Y	252.64	−32.16	2.1	350.5299	7.8453	46.3	4B_6961	11.0 ± 2.1	8.0 ± 2.1	2	10.0 ± 3.2	2.78 ± 0.33	3.81 ± 0.36	1.80 ± 0.32	2 1 4	3
980805	13.36.57	Y	115.32	−23.93	8.4	239.7363	−0.5405	66.9	4B_6967	30.0 ± 0.7	23.0 ± 1.4	4	24.0 ± 2.8	5.22 ± 0.36	6.67 ± 0.60	1.56 ± 0.16	2 2 3	1
980808A	07.50.41	Y	123.12	−4.11	2.0	226.2371	15.9453	75.2	4B_6975	153.0 ± 0.7	65.0 ± 2.8	20	140.0 ± 10.8	15.0 ± 1.3	4.37 ± 0.56	1.87 ± 0.18	2 2 -	1
980808B	21.53.18	N	155.80	−1.90	2.9	246.0683	44.0042	28.1	S	55.0 ± 2.1	7.0 ± 4.2	5	58.0 ± 3.2	3.0 ± 1.4	3.49 ± 0.69	...	2 2 -	3
980810A	04.25.45	N	334.70	7.10	12.4	70.1564	−39.6478	9.7	S	6.0 ± 0.7	3.0 ± 0.7	2	9.0 ± 3.6	0.47 ± 0.24	...	...	4 4 -	1
980810B	18.35.34	N	349.93	24.64	1.6	97.7382	−33.7055	77.0	4B_6985	...	...	...	...	...	...	...	- - -	1
980811	06.45.07	Y	266.80	3.51	2.0	28.6737	15.8820	67.5	4B_6986	19.0 ± 0.7	14.0 ± 1.4	3	17.5 ± 1.4	3.75 ± 0.27	7.48 ± 0.59	1.14 ± 0.18	1 1 4	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
980812A	04.54.06	N	145.10	15.70	8.8	217.2860	44.3755	99.7	S	25.0 ± 0.7	5.0 ± 1.4	3	24.0 ± 8.2	1.21 ± 0.22	2.16 ± 0.37	1.71 ± 0.52	2 2 3	1
980812B	05.16.08	Y	337.30	33.90	2.7	91.9616	−20.2807	11.0	S	56.0 ± 1.4	29.0 ± 4.2	9	49.0 ± 7.2	5.18 ± 0.43	5.54 ± 0.42	1.31 ± 0.21	1 1 4	2
980815	21.21.56	Y	210.94	−32.22	2.9	320.2658	28.2058	68.9	4B_6992	50.0 ± 0.7	24.0 ± 2.1	7	46.0 ± 2.2	5.18 ± 0.34	3.74 ± 0.35	2.45 ± 0.16	2 2 3	1
980819	08.42.28	Y	192.92	28.47	2.9	120.6611	88.6572	66.6	4B_7000	31.0 ± 0.7	11.0 ± 1.4	6	37.0 ± 5.4	2.61 ± 0.21	3.98 ± 0.34	2.66 ± 0.20	2 2 1	1
980820	23.25.17	N	84.00	−19.00	26.0	222.4727	−24.8641	...	G	165.0 ± 2.1	8.0 ± 6.4	9	115.0 ± 60.6	3.26 ± 0.34	0.67 ± 0.11	2.34 ± 0.25	3 1 -	3
980827A	03.33.30	Y	...	...	...	...	...	...	...	1.31 ± 0.05	0.33 ± 0.05	...	0.96 ± 0.38	...	...	...	1 - -	1
980827B	11.09.24	N	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
980827C	20.10.25	Y	...	...	...	...	...	...	...	88.0 ± 0.7	61.0 ± 2.1	7	51.0 ± 2.8	...	...	...	2 - -	1
980829A	05.20.50	Y	240.00	−54.20	2.1	328.3260	−0.9004	47.1	4B_7030	1.64 ± 0.04	0.51 ± 0.04	...	1.73 ± 0.32	0.44 ± 0.11	4.1 ± 1.3	...	1 1 -	1
980829B	09.23.06	N	...	...	...	...	...	...	...	30.0 ± 0.7	3.0 ± 0.7	2	30.0 ± 1.4	...	...	...	3 - -	1
980830	14.42.01	N	92.00	−49.00	46.0	256.6136	−27.0096	...	G	1.0 ± 0.7	...	...	2.0 ± 1.4	0.23 ± 0.03	2.25 ± 0.25	1.84 ± 0.28	1 1 2	1
980903	03.35.03	Y	139.91	−41.54	9.5	266.0388	5.6808	67.3	4B_7060	0.10 ± 0.10	0.10 ± 0.10	...	0.29 ± 0.14	0.14 ± 0.03	2.34 ± 0.60	1.72 ± 0.55	2 2 1	1
980904A	06.42.45	N	58.00	−34.00	48.0	234.3933	−50.8439	...	G	1.0 ± 0.7	...	...	...	0.19 ± 0.03	1.93 ± 0.28	1.39 ± 0.32	1 1 -	1
980904B	08.42.30	Y	125.99	−53.71	2.5	269.4652	−9.2424	25.8	4B_7063	0.19 ± 0.06	0.19 ± 0.06	...	...	0.36 ± 0.04	3.60 ± 0.39	0.44 ± 0.42	1 1 2	1
980907	11.13.07	N	78.10	−10.00	13.7	210.7850	−26.5036	41.4	S	31.0 ± 2.8	8.0 ± 8.5	7	36.0 ± 7.8	2.09 ± 0.37	1.34 ± 0.26	2.32 ± 0.46	2 2 -	4
980908	00.41.32	N	183.70	−54.30	7.6	297.5470	8.1882	54.6	S	22.0 ± 2.1	8.0 ± 4.2	6	22.0 ± 6.1	1.02 ± 0.16	0.90 ± 0.16	1.19 ± 0.43	1 1 -	3
980910A	16.57.44	Y	195.07	−21.15	7.0	305.6924	41.6744	76.0	4B_7077	0.51 ± 0.04	0.23 ± 0.04	...	0.72 ± 0.30	0.16 ± 0.05	...	1.76 ± 0.92	3 3 -	1
980910B	20.02.22	N	205.49	27.47	3.6	37.5746	78.7758	35.8	4B_7078	1.0 ± 0.7	...	...	2.0 ± 1.4	0.24 ± 0.04	2.42 ± 0.41	1.22 ± 0.49	2 2 3	1
980912	15.15.39	Y	...	...	...	...	...	...	...	3.28 ± 0.08	1.88 ± 0.08	...	2.62 ± 0.76	...	...	...	1 - -	1
980914	21.46.08	Y	...	...	...	...	...	...	...	0.77 ± 0.05	0.11 ± 0.05	...	0.98 ± 0.13	...	...	...	3 - -	1
980916	20.22.04	N	57.30	−10.40	15.5	199.8875	−45.0162	73.4	S	14.0 ± 0.7	7.0 ± 0.7	2	30.0 ± 11.2	0.76 ± 0.15	1.54 ± 0.31	2.04 ± 0.55	3 3 -	1
980917	09.48.09	N	162.50	−7.50	5.3	258.2252	44.5762	45.8	S	146.0 ± 4.2	17.0 ± 17.0	16	157.0 ± 6.7	6.19 ± 0.72	1.08 ± 0.19	2.29 ± 0.29	2 2 -	6
980918	13.49.57	N	134.70	26.88	11.3	199.0107	38.6786	15.7	4B_7102	1.0 ± 0.7	...	...	...	0.18 ± 0.04	1.66 ± 0.25	1.19 ± 0.60	1 2 1	1
980919	19.28.53	Y	309.29	78.29	4.2	111.6695	21.4748	21.6	4B_7103	30.0 ± 0.7	10.0 ± 1.4	5	28.6 ± 1.6	1.75 ± 0.21	3.06 ± 0.40	0.89 ± 0.30	1 1 -	1
980920A	02.22.37	Y	344.00	42.00	31.0	101.0326	−15.9106	...	G	24.0 ± 0.7	17.0 ± 1.4	4	23.0 ± 2.2	2.20 ± 0.18	3.16 ± 0.39	1.42 ± 0.22	1 4 1	1
980920B	13.18.50	N	199.18	−6.27	10.1	314.2310	56.0461	67.7	4B_7106	5.0 ± 1.4	3.0 ± 1.4	2	5.0 ± 1.4	0.39 ± 0.09	1.18 ± 0.25	1.03 ± 0.55	2 2 -	2
980922	05.42.16	Y	258.95	5.07	5.8	26.3274	23.5526	70.2	4B_7110	64.0 ± 2.1	17.0 ± 6.4	11	57.0 ± 6.1	2.52 ± 0.47	1.32 ± 0.36	1.78 ± 0.49	1 3 -	3
980923	08.22.58	N	235.30	−32.70	10.9	339.5556	17.8398	40.9	S	47.0 ± 3.5	6.0 ± 7.1	4	50.0 ± 5.0	1.58 ± 0.26	0.71 ± 0.12	0.69 ± 0.46	3 3 -	5
980925	20.04.45	Y	323.00	14.00	29.0	66.9431	−26.5122	...	G	62.0 ± 0.7	24.0 ± 2.1	9	52.0 ± 10.2	6.00 ± 0.52	7.93 ± 0.62	1.35 ± 0.29	1 1 4	1
980929	21.51.38	Y	166.25	−22.99	2.5	273.2324	33.6711	69.2	4B_7133	1.12 ± 0.05	0.33 ± 0.05	...	0.82 ± 0.06	0.96 ± 0.07	7.30 ± 0.52	1.11 ± 0.18	2 2 1	1
981002	01.31.06	Y	199.50	−45.90	4.0	307.7521	16.7230	37.6	S	44.0 ± 0.7	27.0 ± 2.1	8	34.0 ± 4.1	4.72 ± 0.31	4.02 ± 0.35	1.07 ± 0.20	2 2 1	1
981005	18.00.25	Y	275.24	44.05	2.0	71.8571	23.6942	55.2	4B_7142	1.09 ± 0.05	1.04 ± 0.05	...	0.98 ± 0.14	1.83 ± 0.15	15.6 ± 2.5	1.40 ± 0.20	2 3 4	1
981009	05.45.32	Y	...	...	...	...	...	...	...	5.0 ± 0.7	4.0 ± 0.7	2	5.0 ± 1.4	...	...	...	2 - -	1
981017	00.38.07	Y	211.00	52.00	41.0	99.1287	61.6444	...	G	0.84 ± 0.03	0.53 ± 0.03	...	0.73 ± 0.19	0.28 ± 0.03	3.63 ± 0.66	1.09 ± 0.31	1 1 2	1
981018	00.27.21	N	109.40	−11.50	4.9	226.1313	0.4831	98.1	S	130.0 ± 0.7	48.0 ± 3.5	24	115.0 ± 8.5	4.80 ± 0.37	1.48 ± 0.26	2.38 ± 0.19	3 3 -	1
981019	22.06.45	Y	318.70	−36.70	2.8	6.8746	−43.6559	61.6	S	64.0 ± 0.7	9.0 ± 1.4	5	63.0 ± 3.6	1.78 ± 0.33	5.51 ± 0.56	2.02 ± 0.45	1 4 1	1
981022A	06.01.23	N	146.80	38.80	12.8	183.9307	50.0870	37.3	S	32.0 ± 2.1	9.0 ± 6.4	7	25.0 ± 4.1	0.75 ± 0.14	0.76 ± 0.15	1.83 ± 0.48	3 3 -	3
981022B	18.02.01	Y	14.89	48.92	1.9	124.3065	−13.9301	67.1	4B_7172	4.77 ± 0.08	3.59 ± 0.08	...	3.06 ± 0.55	2.67 ± 0.18	12.17 ± 0.83	1.87 ± 0.15	1 4 1	1
981022C	23.08.28	Y	111.90	−5.03	5.2	221.5675	5.7005	95.4	4B_7173	0.62 ± 0.06	0.38 ± 0.06	...	0.61 ± 0.15	0.26 ± 0.07	3.4 ± 1.3	1.66 ± 0.84	3 1 -	1
981030	01.20.02	N	4.00	−6.00	39.0	99.5964	−67.2522	...	G	4.0 ± 0.7	4.0 ± 0.7	1	5.0 ± 3.6	1.24 ± 0.11	6.86 ± 0.59	1.73 ± 0.21	3 4 3	1
981101	05.19.33	N	170.30	−6.60	25.8	266.7260	49.8209	31.6	S	6.0 ± 2.1	3.0 ± 4.2	3	8.0 ± 2.8	0.45 ± 0.11	0.77 ± 0.25	...	1 1 -	3
981104	17.17.18	Y	351.00	41.00	49.0	105.6514	−18.9193	...	G	98.0 ± 0.7	32.0 ± 2.8	15	88.0 ± 3.2	5.60 ± 0.48	6.26 ± 0.53	2.38 ± 0.19	3 4 3	1
981106	10.41.19	Y	323.80	58.40	5.7	99.5301	4.7491	53.8	S	43.0 ± 2.1	22.0 ± 6.4	11	41.0 ± 4.5	2.16 ± 0.18	1.71 ± 0.17	2.75 ± 0.21	3 3 4	3
981107	00.12.59	N	317.00	20.00	25.0	67.9460	−18.2645	...	G	13.0 ± 0.7	11.0 ± 1.4	3	...	13.4 ± 1.2	119.1 ± 10.9	...	3 3 4	1
981110	22.52.38	Y	168.94	−44.60	4.5	285.5404	15.0167	28.2	4B_7206	10.0 ± 1.4	9.0 ± 1.4	2	9.0 ± 3.2	1.13 ± 0.09	2.08 ± 0.19	1.90 ± 0.19	3 3 2	2
981111	11.29.31	Y	173.00	−62.00	21.0	293.7544	−0.5520	...	G	65.0 ± 0.7	59.0 ± 1.4	6	34.0 ± 3.6	39.2 ± 1.9	21.9 ± 1.2	1.43 ± 0.11	3 3 2	1
981112	03.55.45	N	203.00	7.00	22.0	330.3371	67.6873	...	G	11.0 ± 0.7	11.0 ± 0.7	1	11.0 ± 3.2	2.78 ± 0.21	7.87 ± 0.69	1.99 ± 0.16	2 2 1	1
981113	12.38.55	Y	...	...	...	...	...	...	...	44.0 ± 0.7	37.0 ± 1.4	5	32.0 ± 3.6	...	...	...	3 - -	1
981121	01.26.14	Y	15.51	42.33	1.9	125.0236	−20.4987	3.8	4B_7219	42.0 ± 4.2	26.0 ± 8.5	4	34.0 ± 3.6	3.97 ± 0.29	1.89 ± 0.16	1.54 ± 0.17	1 1 4	6

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
981122	15.08.51	N	...	...	...	...	...	...	...	13.0 ± 0.7	5.0 ± 1.4	3	13.0 ± 2.8	...	...	...	1 - -	1
981125A	08.26.23	Y	254.63	29.87	1.8	51.4708	36.3091	57.5	4B_7228	81.0 ± 0.7	23.0 ± 1.4	6	79.0 ± 2.8	5.88 ± 0.35	6.37 ± 0.42	2.16 ± 0.14	2 2 3	1
981125B	21.06.21	Y	202.31	61.86	1.8	115.2306	54.6994	48.9	4B_7230	49.0 ± 0.7	38.0 ± 2.1	8	44.0 ± 4.5	6.35 ± 0.38	6.87 ± 0.49	1.73 ± 0.13	3 3 2	1
981126A	17.21.19	Y	65.00	55.00	39.0	149.9115	3.4528	...	G	6.0 ± 0.7	6.0 ± 0.7	1	5.16 ± 0.12	2.93 ± 0.18	8.80 ± 0.63	1.95 ± 0.13	3 3 4	1
981126B	19.13.20	N	57.00	1.00	34.0	186.7264	−39.0966	...	G	87.0 ± 5.7	13.0 ± 17.0	10	85.0 ± 11.2	2.79 ± 0.57	0.54 ± 0.11	2.94 ± 0.42	4 4 -	8
981203A	00.59.19	Y	161.46	32.91	1.7	193.2099	62.3124	60.2	4B_7247	185.0 ± 0.7	146.0 ± 2.8	19	142.0 ± 6.3	64.2 ± 5.0	16.1 ± 1.3	0.57 ± 0.27	3 1 2	1
981203B	07.18.01	N	293.34	−27.24	1.7	12.0451	−20.6494	3.5	4B_7248	100.0 ± 0.7	57.0 ± 2.1	8	65.0 ± 12.2	14.76 ± 0.79	12.38 ± 0.76	1.77 ± 0.12	1 1 2	1
981203C	23.23.56	N	...	...	...	...	...	...	...	4.0 ± 0.7	4.0 ± 0.7	1	5.0 ± 3.2	...	...	...	2 - -	1
981215A	12.43.41	Y	...	...	...	...	...	...	...	23.0 ± 0.7	22.0 ± 0.7	2	20.6 ± 1.2	...	...	...	3 - -	1
981215B	14.09.24	Y	194.73	23.24	2.9	326.8616	85.7595	15.1	4B_7263	34.0 ± 0.7	14.0 ± 2.1	7	31.8 ± 1.4	2.64 ± 0.44	4.52 ± 0.62	...	2 2 -	1
981216A	05.29.16	N	226.40	17.20	10.5	22.2157	57.5078	44.2	S	37.0 ± 2.8	11.0 ± 5.7	5	51.0 ± 6.3	1.13 ± 0.20	0.80 ± 0.15	2.59 ± 0.50	2 2 -	4
981216B	18.00.33	Y	277.00	−15.00	20.0	16.9439	−1.7338	...	G	7.0 ± 0.7	6.0 ± 0.7	2	6.12 ± 0.60	1.72 ± 0.26	3.89 ± 0.67	0.67 ± 0.53	1 2 1	1
981219A	18.04.55	Y	...	...	...	...	...	...	...	12.0 ± 0.7	10.0 ± 1.4	3	11.0 ± 2.2	...	...	...	1 - -	1
981219B	19.25.35	Y	233.00	−31.00	44.0	339.0539	20.3857	...	G	0.43 ± 0.04	0.23 ± 0.04	...	0.37 ± 0.05	0.65 ± 0.05	3.74 ± 0.33	1.39 ± 0.18	1 1 2	1
981220	21.52.26	Y	55.64	17.15	0.1	171.0358	−29.3218	11.1	A	14.0 ± 0.7	14.0 ± 0.7	1	9.31 ± 0.50	7.17 ± 0.43	16.4 ± 1.1	2.06 ± 0.13	3 4 3	1
981221A	02.30.57	Y	283.68	3.61	3.2	36.5188	0.9163	102.5	4B_7273	1.12 ± 0.03	0.34 ± 0.03	...	1.01 ± 0.06	0.84 ± 0.11	6.49 ± 0.84	1.40 ± 0.27	2 2 -	1
981221B	17.37.34	Y	150.38	24.53	2.2	207.0261	51.8551	26.2	4B_7274	23.0 ± 0.7	12.0 ± 1.4	5	28.0 ± 8.1	3.30 ± 0.33	4.66 ± 0.53	1.55 ± 0.25	2 4 1	1
981222A	17.42.05	Y	...	...	...	...	...	...	...	83.0 ± 0.7	26.0 ± 2.1	10	70.0 ± 4.5	...	...	...	1 - -	1
981222B	23.07.25	N	...	...	...	...	...	...	...	1.0 ± 0.7	1.0 ± 0.7	1	3.0 ± 2.8	...	...	...	3 - -	1
981226A	09.47.32	N	352.42	−23.92	0.1	38.2514	−71.3005	69.5	W	11.0 ± 4.2	6.0 ± 8.5	3	17.0 ± 5.8	0.58 ± 0.08	0.37 ± 0.07	2.38 ± 0.35	1 1 -	6
981226B	10.47.03	N	267.15	−24.40	2.4	4.2253	1.7811	82.9	4B_7281	3.0 ± 0.7	3.0 ± 0.7	1	3.0 ± 2.2	1.96 ± 0.12	11.83 ± 0.75	1.72 ± 0.15	2 2 1	1
981228	12.23.35	N	285.76	31.31	1.9	62.4041	11.4483	49.7	4B_7285	54.0 ± 0.7	23.0 ± 2.1	9	50.0 ± 4.5	4.20 ± 0.27	4.43 ± 0.34	2.06 ± 0.15	2 2 1	1
981229	09.23.05	Y	326.69	61.42	8.3	102.6254	6.0602	35.8	4B_7287	0.25 ± 0.06	0.19 ± 0.06	...	...	0.19 ± 0.03	4.6 ± 1.2	0.93 ± 0.46	3 3 -	1
981230	07.10.28	Y	...	...	...	...	...	...	...	3.47 ± 0.09	0.66 ± 0.09	...	3.16 ± 0.81	...	...	...	1 - -	1
990102A	05.06.38	Y	277.38	39.33	1.7	67.4922	20.7770	52.7	4B_7293	29.0 ± 0.7	25.0 ± 1.4	3	31.0 ± 9.2	6.04 ± 0.40	5.84 ± 0.57	1.64 ± 0.16	2 2 1	1
990102B	13.51.59	Y	203.48	2.74	1.7	327.3699	63.5778	55.2	4B_7295	17.0 ± 0.7	16.0 ± 0.7	2	15.0 ± 4.2	5.90 ± 0.38	8.79 ± 0.75	1.34 ± 0.18	3 3 2	1
990103	04.59.06	N	...	...	...	...	...	...	...	57.0 ± 0.7	4.0 ± 1.4	4	64.0 ± 8.1	...	...	...	2 - -	1
990104A	11.00.02	N	268.10	74.50	10.6	105.5706	29.9995	24.1	S	42.0 ± 6.4	21.0 ± 19.1	8	42.0 ± 5.0	1.90 ± 0.22	0.62 ± 0.09	1.05 ± 0.29	1 1 -	9
990104B	16.02.20	N	129.96	1.19	1.8	224.9330	24.5079	22.7	4B_7301	238.0 ± 0.7	124.0 ± 2.8	14	169.0 ± 2.2	207.7 ± 11.8	219.8 ± 12.5	1.26 ± 0.17	4 4 1	1
990105	08.49.49	N	306.61	4.33	2.7	48.2690	−18.8443	30.7	4B_7305	1.0 ± 0.7	...	...	...	1.17 ± 0.07	11.74 ± 0.72	0.72 ± 0.19	3 3 2	1
990111A	09.07.18	Y	272.00	−24.00	23.0	6.7833	−1.8502	...	G	17.0 ± 4.2	13.0 ± 8.5	3	16.1 ± 2.0	1.51 ± 0.14	0.97 ± 0.12	2.17 ± 0.23	2 2 1	6
990111B	17.58.20	Y	173.65	27.82	2.3	206.1653	72.9603	81.9	4B_7319	50.0 ± 0.7	14.0 ± 2.1	7	48.0 ± 3.6	3.97 ± 0.60	4.07 ± 0.46	2.75 ± 0.32	1 3 4	1
990117A	22.22.18	N	...	...	...	...	...	...	...	110.0 ± 0.7	22.0 ± 2.8	14	105.0 ± 3.6	...	...	...	1 - -	1
990117B	23.36.16	Y	188.00	41.00	21.0	137.7901	75.5626	...	G	21.0 ± 0.7	18.0 ± 0.7	2	13.8 ± 1.9	6.21 ± 0.41	6.77 ± 0.51	1.24 ± 0.15	1 1 4	1
990118A	03.12.42	Y	...	...	...	...	...	...	...	97.0 ± 0.7	79.0 ± 2.1	11	84.0 ± 3.2	...	...	...	3 - -	1
990118B	12.36.36	Y	299.00	19.00	28.0	57.2066	−4.9035	...	G	1.0 ± 0.7	...	...	...	0.28 ± 0.04	2.71 ± 0.31	1.48 ± 0.43	2 2 1	1
990120	09.33.40	Y	10.20	−7.58	3.7	115.0938	−70.2897	83.0	4B_7335	43.0 ± 0.7	19.0 ± 2.1	7	43.0 ± 4.5	2.65 ± 0.27	4.94 ± 0.40	1.95 ± 0.24	2 3 2	1
990122	08.16.52	Y	63.00	−49.00	32.0	256.5545	−45.9185	...	G	37.0 ± 1.4	30.0 ± 2.8	6	32.0 ± 3.2	4.62 ± 0.35	3.74 ± 0.33	1.04 ± 0.16	3 3 4	2
990123A	09.47.10	Y	231.37	44.75	0.0	73.0924	54.6467	4.9	W	101.0 ± 0.7	101.0 ± 0.7	1	61.0 ± 2.8	191.3 ± 10.5	105.0 ± 6.1	1.21 ± 0.13	1 1 2	1
990123B	13.19.42	Y	320.61	−60.81	7.9	333.9701	−41.5915	14.4	4B_7344	0.27 ± 0.05	0.27 ± 0.05	...	0.19 ± 0.09	0.28 ± 0.04	6.0 ± 1.4	1.27 ± 0.38	3 3 -	1
990126	14.24.03	Y	321.14	−24.30	2.6	24.2863	−43.6423	53.5	4B_7353	1.0 ± 0.7	...	...	...	1.75 ± 0.29	17.5 ± 2.9	0.82 ± 0.56	3 2 -	1
990128	10.20.52	Y	304.90	−41.90	0.5	358.8380	−33.5803	13.4	S	12.0 ± 0.7	12.0 ± 0.7	1	8.0 ± 2.2	21.3 ± 1.0	62.4 ± 3.0	2.06 ± 0.11	2 2 3	1
990130	13.27.02	Y	19.00	−71.00	31.0	300.0588	−45.9910	...	G	29.0 ± 0.7	28.0 ± 0.7	2	25.0 ± 3.6	3.37 ± 0.29	2.90 ± 0.37	1.12 ± 0.17	3 3 -	1
990131	19.26.42	Y	303.00	−21.00	22.0	21.8065	−26.7116	...	G	75.0 ± 0.7	41.0 ± 1.4	6	70.0 ± 5.0	7.66 ± 0.47	7.02 ± 0.50	2.36 ± 0.14	2 2 1	1
990202A	03.35.32	Y	315.85	−1.78	3.6	47.6690	−29.9027	59.0	4B_7366	0.20 ± 0.10	0.20 ± 0.10	...	0.43 ± 0.06	0.29 ± 0.06	6.9 ± 1.9	0.84 ± 0.50	2 2 -	1
990202B	15.38.08	Y	336.06	38.43	5.4	93.7197	−15.9527	10.1	4B_7367	0.75 ± 0.02	0.28 ± 0.02	...	0.59 ± 0.15	0.22 ± 0.03	2.65 ± 0.51	2.01 ± 0.31	2 2 3	1
990206	15.51.01	Y	112.10	60.40	3.9	156.3928	27.8441	47.1	4B_7375	0.31 ± 0.03	0.25 ± 0.03	...	0.36 ± 0.20	0.47 ± 0.04	12.8 ± 1.9	1.31 ± 0.21	3 3 4	1
990207	19.21.15	Y	166.00	51.00	25.0	156.0627	58.6527	...	G	0.33 ± 0.05	0.33 ± 0.05	...	0.22 ± 0.02	1.12 ± 0.07	35.4 ± 4.1	1.09 ± 0.18	3 3 4	1
990208A	01.04.10	N	303.08	16.13	7.3	56.7892	−9.7193	81.7	4B_7377	13.0 ± 0.7	2.0 ± 0.7	2	15.0 ± 2.2	1.47 ± 0.44	...	0.99 ± 0.81	3 2 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	$T_{\rm det}$ (s)	$T_{\rm a}$ (s)	$N_{\rm a}$	T_{90} (s)	Fluence (10^{-6} cgs)	$F_{\rm peak}$ (10^{-7} cgs)	Γ	Unit	R
990208B	04.12.44	Y	296.10	−39.40	2.8	0.1618	−26.5477	65.5	4B_7378	1.44 ± 0.03	1.03 ± 0.03	...	1.23 ± 0.03	1.68 ± 0.12	23.0 ± 2.8	0.76 ± 0.21	2 2 1	1
990210	04.28.15	N	108.11	50.11	2.2	167.1583	23.7093	8.0	4B_7379	41.0 ± 3.5	7.0 ± 10.6	7	31.0 ± 12.2	1.28 ± 0.36	1.16 ± 0.29	1.17 ± 0.82	4 4 -	5
990213	09.46.03	Y	145.89	51.72	3.2	164.7666	47.2380	22.6	4B_7387	11.0 ± 2.8	6.0 ± 5.7	4	11.0 ± 1.4	1.62 ± 0.57	1.43 ± 0.39	3.05 ± 0.54	4 4 -	4
990216A	01.52.06	Y	316.00	4.00	22.0	53.3389	−26.9722	...	G	185.0 ± 0.7	37.0 ± 3.5	21	155.0 ± 11.2	9.31 ± 0.90	3.61 ± 0.43	1.78 ± 0.19	2 2 -	1
990216B	06.30.24	N	274.94	−40.34	1.7	353.3567	−11.6365	23.5	4B_7390	43.0 ± 2.8	6.0 ± 5.7	3	47.0 ± 5.8	12.1 ± 2.4	5.1 ± 1.2	2.38 ± 0.43	2 2 -	4
990217	05.23.26	N	45.51	−53.10	0.1	268.9838	−54.5447	46.1	W	...	...	...	...	...	...	...	- - -	1
990218	14.47.48	N	...	...	...	...	...	...	...	1.0 ± 0.7	...	...	...	...	...	...	2 - -	1
990220	12.03.18	Y	163.05	55.60	2.3	151.7348	54.3430	45.7	4B_7403	23.0 ± 2.8	21.0 ± 5.7	3	21.0 ± 3.2	3.24 ± 0.24	2.63 ± 0.22	1.43 ± 0.17	1 1 4	4
990225	19.38.48	Y	232.94	−18.73	8.7	347.6313	29.8997	29.9	4B_7428	0.27 ± 0.05	0.22 ± 0.05	...	...	0.15 ± 0.03	2.57 ± 0.79	...	1 1 -	1
990226	08.34.48	Y	244.47	10.66	1.8	24.5388	38.8656	20.1	4B_7429	21.0 ± 0.7	21.0 ± 0.7	1	18.0 ± 2.2	8.84 ± 0.61	9.48 ± 0.76	1.51 ± 0.14	1 1 4	1
990301	06.05.06	N	...	...	...	...	...	...	...	19.0 ± 0.7	15.0 ± 1.4	3	18.0 ± 4.1	...	...	...	1 - -	1
990306	16.46.29	Y	315.01	13.45	3.0	61.2120	−20.7661	72.8	4B_7452	16.0 ± 2.1	11.0 ± 4.2	4	16.0 ± 3.6	1.15 ± 0.11	1.26 ± 0.14	1.74 ± 0.22	1 1 2	3
990307	10.49.43	N	19.20	14.59	6.8	132.0924	−47.8301	95.0	4B_7455	1.0 ± 0.7	...	...	...	0.21 ± 0.03	2.06 ± 0.35	2.05 ± 0.49	2 2 -	1
990308A	03.04.52	Y	48.19	69.21	5.3	134.9512	9.7051	45.8	4B_7456	0.47 ± 0.05	0.47 ± 0.05	...	0.36 ± 0.03	0.88 ± 0.20	11.9 ± 3.8	...	1 1 2	1
990308B	19.47.34	N	64.72	70.10	4.2	138.9470	13.9852	7.0	4B_7460	50.0 ± 0.7	4.0 ± 1.4	4	55.0 ± 3.6	1.05 ± 0.47	0.83 ± 0.26	...	1 1 -	1
990310	08.34.48	N	232.00	66.00	43.0	101.9423	44.2125	...	G	1.0 ± 0.7	1.0 ± 0.7	1	3.0 ± 2.2	0.31 ± 0.05	2.82 ± 0.37	1.14 ± 0.37	1 1 -	1
990311A	18.57.00	Y	...	...	...	...	...	...	...	1.50 ± 0.09	0.28 ± 0.09	...	1.57 ± 0.25	...	...	...	2 - -	1
990311B	22.11.44	N	43.95	19.25	1.6	159.2982	−34.6943	58.7	4B_7464	33.0 ± 0.7	33.0 ± 0.7	1	22.0 ± 2.8	24.2 ± 1.2	20.5 ± 1.1	1.41 ± 0.11	3 3 2	1
990312A	04.52.19	N	303.00	−31.00	53.0	11.0142	−29.8362	...	G	36.0 ± 2.8	9.0 ± 5.7	4	35.0 ± 12.0	0.88 ± 0.17	0.60 ± 0.11	0.84 ± 0.56	1 1 -	4
990312B	16.35.42	N	189.00	9.00	24.0	290.8326	71.5082	...	G	12.0 ± 0.7	12.0 ± 0.7	1	12.0 ± 2.2	2.18 ± 0.27	3.70 ± 0.54	2.37 ± 0.27	4 4 -	1
990313	09.21.52	N	338.00	52.00	23.0	102.2405	−5.1802	...	G	1.0 ± 0.7	...	...	...	0.93 ± 0.06	9.32 ± 0.56	1.73 ± 0.14	3 3 2	1
990314	20.05.13	Y	184.01	−12.86	2.4	289.6898	49.0995	93.8	4B_7469	6.0 ± 0.7	5.0 ± 0.7	2	6.0 ± 2.2	1.52 ± 0.17	5.06 ± 0.72	1.92 ± 0.26	4 4 3	1
990315	16.35.30	Y	5.71	−63.00	3.1	308.4247	−53.8222	9.2	4B_7472	2.11 ± 0.05	1.69 ± 0.05	...	1.88 ± 0.20	1.26 ± 0.09	9.2 ± 1.3	0.92 ± 0.20	1 1 2	1
990318A	03.14.50	Y	244.90	1.65	3.6	15.0201	34.0792	26.9	4B_7481	13.0 ± 0.7	5.0 ± 1.4	3	18.0 ± 3.2	1.99 ± 0.36	4.02 ± 0.56	2.48 ± 0.33	4 4 3	1
990318B	09.39.46	N	...	...	...	...	...	...	...	1.0 ± 0.7	...	...	...	...	...	...	1 - -	1
990319	12.42.36	N	138.00	−49.00	47.0	270.4859	−0.4619	...	G	137.0 ± 2.8	29.0 ± 11.3	20	137.0 ± 13.0	4.42 ± 0.55	0.86 ± 0.14	...	3 3 -	4
990320	23.01.58	N	5.70	6.70	3.4	110.3190	−55.4689	50.5	4B_7486	7.0 ± 0.7	4.0 ± 1.4	3	8.0 ± 1.4	1.61 ± 0.27	3.5 ± 1.2	1.86 ± 0.45	2 2 -	1
990322	04.03.56	Y	12.49	−68.32	2.3	303.1392	−48.8077	22.1	4B_7488	18.0 ± 0.7	10.0 ± 1.4	3	18.0 ± 4.1	2.90 ± 0.18	6.10 ± 0.43	1.48 ± 0.15	2 2 1	1
990323	08.57.52	N	208.07	24.66	3.4	26.1043	76.1051	19.9	4B_7489	100.0 ± 3.5	18.0 ± 10.6	7	102.0 ± 6.1	2.46 ± 0.32	1.27 ± 0.17	1.85 ± 0.34	4 4 1	5
990328	03.24.18	N	150.08	−47.17	4.7	275.2524	6.2965	18.7	4B_7493	92.0 ± 3.5	23.0 ± 10.6	12	87.0 ± 11.4	3.10 ± 0.37	1.11 ± 0.20	2.61 ± 0.28	1 1 -	5
990330A	18.11.04	Y	35.61	−16.48	7.8	190.8080	−66.4027	17.8	4B_7496	1.72 ± 0.03	0.50 ± 0.03	...	1.64 ± 0.67	0.31 ± 0.04	2.49 ± 0.57	1.49 ± 0.35	2 1 2	1
990330B	19.26.25	N	160.65	34.31	1.8	190.3637	61.5246	46.2	4B_7497	27.0 ± 1.4	10.0 ± 2.8	4	27.0 ± 4.2	2.51 ± 0.27	2.83 ± 0.45	1.18 ± 0.35	4 4 3	2
990403A	02.22.40	Y	301.41	−19.02	1.9	23.2509	−24.6004	90.3	4B_7502	96.0 ± 0.7	69.0 ± 2.1	11	83.0 ± 3.6	6.95 ± 0.43	4.23 ± 0.33	2.09 ± 0.14	1 1 2	1
990403B	16.35.08	N	355.30	−19.40	8.5	54.8387	−72.1387	12.2	S	...	...	...	...	...	...	...	- - -	1
990405	03.08.19	Y	166.00	−16.00	19.0	268.6187	39.6079	...	G	48.0 ± 0.7	19.0 ± 1.4	6	44.0 ± 5.1	5.39 ± 0.37	8.55 ± 0.64	1.43 ± 0.19	4 4 1	1
990406	20.33.03	N	306.10	30.30	26.1	70.2325	−4.1951	27.6	S	32.0 ± 1.4	11.0 ± 4.2	8	28.0 ± 5.4	1.59 ± 0.27	1.83 ± 0.40	1.28 ± 0.47	2 2 -	2
990407	13.55.15	Y	346.00	−38.00	29.0	0.3676	−65.0114	...	G	90.0 ± 4.9	31.0 ± 14.8	8	80.0 ± 5.0	4.14 ± 0.34	1.63 ± 0.13	2.46 ± 0.21	2 2 3	7
990409	23.14.16	N	6.30	53.30	7.2	118.9643	−9.3695	5.4	S	14.0 ± 2.8	8.0 ± 5.7	5	20.0 ± 4.5	1.60 ± 0.27	1.39 ± 0.34	3.09 ± 0.40	2 2 -	4
990411	04.25.32	Y	329.84	−83.44	1.7	308.1953	−31.8256	29.2	4B_7515	21.0 ± 2.1	17.0 ± 4.2	3	20.0 ± 4.5	3.42 ± 0.38	2.90 ± 0.37	...	1 1 -	3
990412	01.48.34	Y	...	...	...	...	...	...	...	1.09 ± 0.02	0.44 ± 0.02	...	0.84 ± 0.13	...	...	...	3 - -	1
990502	09.15.42	Y	...	...	...	...	...	...	...	83.0 ± 0.7	21.0 ± 2.1	9	82.0 ± 3.2	...	...	...	2 - -	1
990504A	11.22.12	N	248.90	−58.30	8.3	328.9966	−7.2799	32.6	S	21.0 ± 1.4	8.0 ± 2.8	5	30.0 ± 5.7	1.20 ± 0.15	1.09 ± 0.20	2.31 ± 0.32	3 3 -	2
990504B	18.46.26	Y	...	...	...	...	...	...	...	0.19 ± 0.06	0.19 ± 0.06	...	...	...	...	...	2 - -	1
990506A	11.23.31	Y	178.67	−26.75	0.1	287.5439	34.4201	80.9	P	138.0 ± 0.7	77.0 ± 2.1	7	129.0 ± 1.4	107.3 ± 5.9	56.4 ± 3.2	1.48 ± 0.13	3 4 3	1
990506B	19.27.31	N	196.00	−48.00	35.0	305.1051	14.8187	...	G	15.0 ± 0.7	6.0 ± 1.4	3	17.0 ± 7.3	1.17 ± 0.25	1.35 ± 0.27	...	3 3 -	1
990507	19.48.55	N	137.56	65.90	6.4	148.3500	38.5445	15.9	4B_7552	11.0 ± 0.7	3.0 ± 0.7	2	11.0 ± 2.2	0.54 ± 0.15	1.84 ± 0.43	2.52 ± 0.84	2 2 -	1
990510	08.49.09	N	204.53	−80.50	0.1	304.9415	−17.8109	31.1	W	75.0 ± 0.7	36.0 ± 1.4	6	57.0 ± 3.2	16.41 ± 0.96	22.7 ± 1.4	1.98 ± 0.13	3 3 4	1
990513A	19.06.23	Y	...	...	...	...	...	...	...	17.0 ± 0.7	10.0 ± 1.4	3	15.0 ± 2.8	...	...	...	2 - -	1
990513B	19.48.15	N	339.45	−75.01	2.4	313.5285	−39.2440	...	4B_7564	3.0 ± 0.7	3.0 ± 0.7	1	5.0 ± 4.1	0.53 ± 0.08	2.70 ± 0.34	2.76 ± 0.38	3 3 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
990516A	20.55.15	Y	85.62	56.09	3.5	156.1396	13.3723	43.8	4B_7567	1.85 ± 0.02	0.80 ± 0.02	...	1.73 ± 0.22	0.41 ± 0.04	2.27 ± 0.28	1.61 ± 0.27	1 1 2	1
990516B	23.24.16	N	266.00	−43.06	6.0	347.7261	−7.0501	59.1	4B_7568	17.0 ± 1.4	6.0 ± 1.4	2	17.0 ± 3.2	0.86 ± 0.14	1.30 ± 0.19	0.82 ± 0.39	3 3 -	2
990516C	23.54.23	Y	253.55	−3.64	1.8	15.1397	23.9441	25.7	4B_7569	31.0 ± 0.7	13.0 ± 1.4	5	25.0 ± 6.1	5.27 ± 0.48	32.7 ± 2.8	0.74 ± 0.32	4 4 3	1
990518A	01.27.05	N	235.25	19.20	3.1	30.6514	50.4178	32.0	4B_7573	6.0 ± 0.7	6.0 ± 0.7	1	11.0 ± 2.8	1.24 ± 0.21	2.52 ± 0.52	2.19 ± 0.38	4 4 -	1
990518B	17.18.25	Y	343.33	−38.68	1.6	0.2867	−62.8099	40.2	4B_7575	68.0 ± 0.7	68.0 ± 0.7	1	32.0 ± 2.2	101.0 ± 5.3	61.6 ± 3.3	1.08 ± 0.14	1 1 2	1
990520	12.18.47	N	198.00	22.00	38.0	346.3853	83.0624	...	G	6.0 ± 0.7	3.0 ± 0.7	2	11.0 ± 3.6	0.79 ± 0.18	1.79 ± 0.51	2.30 ± 0.52	4 4 -	1
990521	23.12.50	Y	206.00	25.00	21.0	25.6535	78.0116	...	G	35.0 ± 0.7	27.0 ± 1.4	6	33.0 ± 4.5	9.74 ± 0.60	7.62 ± 0.63	1.16 ± 0.17	3 4 3	1
990525	00.23.14	Y	268.64	5.90	2.3	31.7479	15.3270	15.7	4B_7582	15.0 ± 2.8	9.0 ± 5.7	5	14.0 ± 3.6	2.34 ± 0.46	1.79 ± 0.44	2.82 ± 0.28	4 4 -	4
990526	13.07.53	Y	285.70	15.10	9.6	47.6701	4.3704	59.8	S	0.70 ± 0.07	0.42 ± 0.07	...	1.27 ± 0.16	0.33 ± 0.10	4.8 ± 1.1	1.31 ± 0.73	3 4 3	1
990527	18.22.27	Y	...	...	...	...	...	...	...	0.47 ± 0.08	0.47 ± 0.08	...	0.54 ± 0.20	...	...	...	2 - -	1
990601	15.01.33	N	105.00	−32.00	49.0	242.7687	−12.3243	...	G	11.0 ± 2.8	8.0 ± 5.7	4	13.0 ± 4.2	0.58 ± 0.09	0.80 ± 0.13	1.92 ± 0.40	2 1 2	4
990603A	13.18.47	Y	220.00	−19.00	37.0	335.5712	36.8978	...	G	3.0 ± 0.7	2.0 ± 0.7	2	6.1 ± 1.8	0.72 ± 0.21	1.95 ± 0.41	2.89 ± 0.57	4 4 -	1
990603B	18.31.26	Y	55.10	−36.30	17.1	238.1214	−53.2221	72.6	S	3.53 ± 0.03	0.72 ± 0.03	...	3.45 ± 0.13	0.32 ± 0.06	2.58 ± 0.36	1.06 ± 0.58	2 2 1	1
990603C	18.48.18	Y	48.00	−16.00	21.0	201.3771	−55.6163	...	G	71.0 ± 0.7	42.0 ± 2.1	10	55.0 ± 5.0	5.60 ± 0.49	2.62 ± 0.38	1.84 ± 0.18	2 2 -	1
990603D	19.19.00	N	263.76	3.07	10.5	26.8030	18.3738	56.5	4B_7594	3.0 ± 0.7	3.0 ± 0.7	1	8.0 ± 5.1	0.31 ± 0.13	...	...	3 4 -	1
990604A	16.41.35	Y	69.81	−63.61	4.8	274.4507	−38.6235	20.6	4B_7597	7.0 ± 0.7	7.0 ± 0.7	1	6.73 ± 0.74	1.12 ± 0.12	2.29 ± 0.28	1.31 ± 0.23	3 3 -	1
990604B	19.59.41	Y	91.09	38.05	2.0	174.0439	7.9374	11.3	4B_7598	17.0 ± 0.7	17.0 ± 0.7	1	15.0 ± 2.2	3.77 ± 0.21	5.83 ± 0.40	2.13 ± 0.13	2 2 1	1
990605	21.58.37	Y	...	...	...	...	...	...	...	2.41 ± 0.03	0.44 ± 0.03	...	2.16 ± 0.15	...	...	...	3 - -	1
990606	01.12.09	N	151.00	48.00	43.0	168.7365	51.4803	...	G	46.0 ± 0.7	15.0 ± 1.4	6	36.0 ± 11.2	1.50 ± 0.15	1.98 ± 0.25	2.52 ± 0.25	3 3 -	1
990610	01.03.04	Y	...	...	...	...	...	...	...	37.0 ± 0.7	25.0 ± 2.1	8	34.0 ± 7.3	...	...	...	2 - -	1
990611A	10.07.11	N	228.12	48.01	4.2	79.8106	55.5969	65.7	4B_7604	11.0 ± 0.7	9.0 ± 1.4	3	24.0 ± 10.2	1.20 ± 0.28	2.33 ± 0.64	1.25 ± 0.65	1 3 -	1
990611B	11.57.02	Y	343.20	−47.09	1.7	344.3383	−59.3762	39.8	4B_7605	22.0 ± 1.4	17.0 ± 2.8	5	20.0 ± 2.2	4.06 ± 0.29	3.74 ± 0.34	1.92 ± 0.16	1 1 4	2
990615	04.46.38	N	342.00	−1.00	30.0	69.1671	−50.5187	...	G	36.0 ± 4.2	20.0 ± 8.5	5	29.0 ± 6.1	1.30 ± 0.13	0.53 ± 0.07	2.09 ± 0.23	1 1 -	6
990618A	03.54.22	N	214.66	−61.31	2.3	313.2020	−0.1892	52.6	4B_7609	87.0 ± 5.7	33.0 ± 17.0	12	69.0 ± 25.1	3.57 ± 0.34	1.00 ± 0.12	1.88 ± 0.22	3 3 -	8
990618B	10.27.32	N	169.70	−65.50	7.7	293.5181	−4.3356	37.5	S	44.0 ± 1.4	15.0 ± 4.2	10	50.0 ± 10.0	2.21 ± 0.26	1.13 ± 0.21	2.95 ± 0.29	3 3 -	2
990620	22.46.12	Y	133.00	−3.00	15.0	230.6085	24.9866	...	G	18.0 ± 0.7	17.0 ± 0.7	2	16.0 ± 4.1	22.6 ± 1.8	57.9 ± 4.7	1.35 ± 0.19	2 2 -	1
990621	12.12.22	N	132.90	58.10	22.9	158.7031	38.5031	12.8	S	24.0 ± 1.4	6.0 ± 2.8	4	23.0 ± 6.7	0.82 ± 0.17	1.49 ± 0.25	1.20 ± 0.49	3 3 -	2
990622A	10.30.27	Y	116.00	24.00	34.0	196.2089	21.7343	...	G	36.0 ± 0.7	24.0 ± 2.1	9	32.0 ± 5.1	6.37 ± 0.35	12.61 ± 0.73	1.64 ± 0.13	3 2 3	1
990622B	20.47.04	Y	79.43	−29.73	2.1	232.5444	−32.2372	26.7	4B_7617	50.0 ± 0.7	27.0 ± 1.4	5	46.0 ± 2.2	4.07 ± 0.30	4.02 ± 0.39	1.53 ± 0.17	2 2 1	1
990624	21.13.36	N	82.00	−2.00	32.0	204.9345	−19.4282	...	G	19.0 ± 0.7	6.0 ± 1.4	3	25.0 ± 5.1	1.47 ± 0.18	2.77 ± 0.41	2.43 ± 0.31	2 2 -	1
990625	00.24.34	N	6.64	−31.20	0.1	354.5875	−83.2144	44.6	W	8.0 ± 0.7	8.0 ± 0.7	1	10.0 ± 4.5	0.70 ± 0.08	1.35 ± 0.28	1.90 ± 0.26	3 3 -	1
990627A	04.00.25	N	359.00	−76.00	30.0	307.3127	−40.6532	...	G	60.0 ± 0.7	32.0 ± 2.8	13	59.0 ± 5.4	3.07 ± 0.28	3.34 ± 0.39	1.59 ± 0.18	3 3 -	1
990627B	05.00.53	N	27.10	−77.08	0.1	298.8390	−39.5921	31.9	W	29.0 ± 0.7	25.0 ± 1.4	3	25.0 ± 4.5	1.98 ± 0.16	1.69 ± 0.22	2.06 ± 0.18	3 3 -	1
990630	15.39.18	Y	115.00	−26.00	31.0	241.3940	−1.8143	...	G	46.0 ± 0.7	21.0 ± 2.1	7	36.0 ± 9.2	4.16 ± 0.28	5.01 ± 0.43	1.41 ± 0.16	3 2 3	1
990701	11.04.07	Y	171.00	39.00	31.0	174.3064	68.2610	...	G	54.0 ± 0.7	12.0 ± 1.4	4	54.0 ± 2.8	1.21 ± 0.16	1.75 ± 0.26	2.20 ± 0.34	1 1 -	1
990704A	17.30.20	Y	184.79	−3.80	0.1	287.5594	58.1051	69.4	W	21.0 ± 0.7	10.0 ± 1.4	4	22.0 ± 4.2	1.00 ± 0.11	1.86 ± 0.23	2.69 ± 0.28	1 1 -	1
990704B	19.51.59	Y	...	...	...	...	...	...	...	0.78 ± 0.08	0.55 ± 0.08	...	1.50 ± 0.53	...	...	...	2 - -	1
990705	16.01.25	Y	77.38	−72.15	0.1	283.5604	−33.4625	4.7	W	44.0 ± 0.7	44.0 ± 0.7	1	32.0 ± 1.4	69.4 ± 4.9	37.4 ± 2.8	1.40 ± 0.14	3 3 -	1
990706	14.27.23	Y	314.79	−15.04	8.5	33.0688	−34.9532	43.6	4B_7634	3.0 ± 0.7	3.0 ± 0.7	1	5.0 ± 3.2	1.50 ± 0.33	3.2 ± 1.1	1.28 ± 0.63	1 1 -	1
990707A	15.13.21	Y	102.70	−53.00	0.9	262.6470	−21.4479	45.8	S	18.0 ± 0.7	8.0 ± 0.7	2	18.0 ± 2.2	5.90 ± 0.51	14.2 ± 1.3	2.13 ± 0.20	2 2 -	1
990707B	19.39.17	Y	72.41	21.84	2.3	178.6453	−14.4196	9.4	4B_7638	10.0 ± 0.7	10.0 ± 0.7	1	11.0 ± 4.1	1.97 ± 0.14	3.78 ± 0.30	2.70 ± 0.17	3 3 2	1
990708	23.11.48	N	178.13	57.51	3.8	137.8174	57.8830	−3.2	4B_7640	8.0 ± 0.7	4.0 ± 1.4	3	11.0 ± 2.8	1.10 ± 0.16	2.80 ± 0.41	2.98 ± 0.35	2 2 -	1
990709	15.56.27	N	299.03	44.60	3.4	79.2205	8.2613	12.8	4B_7642	1.0 ± 1.4	1.0 ± 1.4	1	3.0 ± 2.2	0.37 ± 0.13	1.81 ± 0.53	...	3 1 -	2
990711A	07.21.02	N	313.00	−21.00	59.0	25.5086	−35.4935	...	G	5.0 ± 0.7	4.0 ± 0.7	2	7.0 ± 3.2	1.53 ± 0.19	4.71 ± 0.77	2.97 ± 0.29	3 3 -	1
990711B	13.38.31	Y	288.70	−3.50	4.8	32.4693	−6.7902	21.1	S	1.26 ± 0.05	1.09 ± 0.05	...	1.10 ± 0.36	0.46 ± 0.06	3.39 ± 0.88	1.43 ± 0.35	4 4 -	1
990711C	21.49.52	N	66.07	29.22	4.1	169.0239	−14.0386	80.6	4B_7645	25.0 ± 0.7	6.0 ± 1.4	4	26.0 ± 3.2	2.62 ± 0.38	3.09 ± 0.71	1.29 ± 0.40	2 2 -	1
990712A	07.45.19	Y	126.52	8.65	3.9	215.9069	24.9409	101.5	4B_7647	43.0 ± 0.7	31.0 ± 1.4	5	38.0 ± 3.2	10.99 ± 0.91	57.2 ± 4.8	1.36 ± 0.18	2 2 -	1
990712B	16.43.02	Y	337.96	−73.40	0.0	315.2896	−40.2041	38.8	W	24.0 ± 0.7	24.0 ± 0.7	1	19.0 ± 4.5	5.40 ± 0.37	5.79 ± 0.50	2.01 ± 0.15	3 3 -	1
990713A	09.48.01	N	186.00	−60.00	44.0	299.5046	2.6890	...	G	72.0 ± 0.7	19.0 ± 2.1	9	71.0 ± 4.5	1.52 ± 0.18	1.58 ± 0.28	2.06 ± 0.27	3 3 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
990713B	21.38.21	Y	310.46	−27.28	1.8	17.3155	−35.1325	59.0	4B_7651	66.0 ± 1.4	15.0 ± 4.2	9	58.0 ± 6.1	7.31 ± 0.81	3.63 ± 0.42	2.38 ± 0.18	4 4 3	2
990714	18.13.49	Y	231.19	19.66	1.7	29.2662	54.1800	38.9	4B_7652	6.25 ± 0.12	3.25 ± 0.12	...	3.46 ± 0.79	2.31 ± 0.27	6.81 ± 0.64	1.98 ± 0.24	4 4 3	2
990715	23.59.36	Y	154.42	44.51	2.8	173.1446	54.7637	68.9	4B_7655	...	...	...	...	...	...	...	- - -	1
990717	17.12.15	N	104.00	−13.00	30.0	225.0433	−4.8940	...	G	59.0 ± 0.7	43.0 ± 2.1	8	55.0 ± 6.3	6.51 ± 0.54	3.35 ± 0.51	2.21 ± 0.19	2 2 -	1
990718	12.06.53	Y	286.92	1.33	1.8	35.9706	−3.0048	62.2	4B_7660	149.0 ± 0.7	108.0 ± 2.8	15	126.0 ± 5.4	19.1 ± 1.8	3.55 ± 0.48	1.54 ± 0.25	4 4 -	1
990719	22.03.36	N	32.90	2.10	14.0	159.5567	−54.9678	100.6	S	23.0 ± 2.8	8.0 ± 5.7	4	21.0 ± 9.4	0.92 ± 0.15	0.61 ± 0.10	1.68 ± 0.39	3 3 -	4
990720A	00.00.27	Y	160.80	−38.90	5.4	277.2655	17.4972	60.8	S	75.0 ± 0.7	24.0 ± 2.1	8	67.0 ± 10.2	3.29 ± 0.33	2.48 ± 0.31	1.17 ± 0.23	1 1 -	1
990720B	08.29.51	Y	189.00	−41.00	35.0	299.7961	21.7777	...	G	115.0 ± 0.7	76.0 ± 2.8	18	93.0 ± 4.5	7.31 ± 0.54	2.53 ± 0.31	2.25 ± 0.17	1 1 -	1
990720C	15.42.46	N	...	...	...	...	...	...	...	10.0 ± 0.7	8.0 ± 1.4	3	11.0 ± 3.2	...	...	...	3 - -	1
990725	11.23.36	N	15.50	−9.90	16.0	131.6574	−72.5926	10.6	S	1.0 ± 0.7	1.0 ± 0.7	1	16.0 ± 3.6	0.81 ± 0.34	...	...	2 1 -	1
990726	02.59.33	N	289.00	77.00	46.0	108.6428	25.0167	...	G	127.0 ± 0.7	78.0 ± 2.8	20	111.0 ± 4.5	7.12 ± 0.50	3.44 ± 0.36	2.14 ± 0.16	3 3 -	1
990727	13.24.49	Y	271.70	−6.00	3.8	22.4343	7.1023	37.3	S	65.0 ± 4.2	32.0 ± 17.0	13	61.0 ± 6.3	6.34 ± 0.86	1.93 ± 0.26	2.42 ± 0.28	4 4 -	6
990730A	18.59.11	N	141.36	74.80	5.6	137.5908	35.8238	6.1	4B_7683	170.0 ± 0.7	30.0 ± 2.8	19	169.0 ± 5.4	2.94 ± 0.32	1.34 ± 0.22	1.89 ± 0.24	1 1 -	1
990730B	20.43.23	Y	53.03	−10.29	3.2	196.7775	−48.6406	73.4	4B_7684	23.0 ± 0.7	8.0 ± 1.4	6	23.0 ± 2.2	...	...	...	2 - -	1
990731	12.59.14	Y	...	...	...	...	...	...	...	1.13 ± 0.07	0.49 ± 0.07	...	0.88 ± 0.13	...	...	...	4 - -	1
990803	15.59.25	Y	80.60	31.70	32.4	174.9576	−2.7069	29.6	S	2.39 ± 0.05	0.56 ± 0.05	...	2.37 ± 0.21	0.43 ± 0.10	2.34 ± 0.51	...	2 2 -	1
990806A	00.26.13	Y	...	...	...	...	...	...	...	4.0 ± 0.7	4.0 ± 0.7	1	7.4 ± 1.7	...	...	...	2 - -	1
990806B	14.28.07	Y	47.65	−68.12	0.0	285.7182	−44.0684	36.2	W	11.0 ± 0.7	11.0 ± 0.7	1	11.0 ± 2.2	1.91 ± 0.16	4.95 ± 0.42	1.91 ± 0.18	1 1 -	1
990810	19.44.34	Y	...	...	...	...	...	...	...	75.0 ± 0.7	48.0 ± 2.8	16	65.0 ± 5.8	...	...	...	4 - -	1
990811	18.09.23	N	...	...	...	...	...	...	...	44.0 ± 0.7	18.0 ± 2.1	7	41.0 ± 5.4	...	...	...	3 - -	1
990814A	09.17.08	N	154.78	−66.08	3.9	288.3181	−7.6298	40.8	4B_7708	1.0 ± 0.7	1.0 ± 0.7	1	14.0 ± 2.2	0.54 ± 0.26	...	...	3 1 -	1
990814B	21.40.24	Y	164.32	6.62	7.8	244.8236	56.0165	61.2	4B_7710	0.56 ± 0.07	0.42 ± 0.07	...	0.55 ± 0.21	0.39 ± 0.10	4.3 ± 1.3	...	2 2 -	1
990816	02.44.43	Y	187.97	6.70	1.8	289.2369	69.0501	87.9	4B_7711	18.0 ± 0.7	15.0 ± 1.4	3	16.0 ± 4.5	4.82 ± 0.37	8.90 ± 0.80	2.23 ± 0.18	2 2 -	1
990819	18.28.06	Y	225.00	50.00	33.0	84.6699	56.4812	...	G	7.0 ± 0.7	6.0 ± 0.7	2	6.61 ± 0.23	1.21 ± 0.12	4.11 ± 0.45	1.35 ± 0.22	1 1 -	1
990820	23.08.10	Y	120.00	58.00	23.0	159.4639	31.7148	...	G	141.0 ± 5.7	45.0 ± 28.3	21	130.0 ± 15.1	5.87 ± 0.41	1.01 ± 0.10	1.95 ± 0.16	3 3 2	8
990821A	06.07.28	Y	...	...	...	...	...	...	...	9.0 ± 0.7	9.0 ± 0.7	1	8.4 ± 1.2	...	...	...	3 - -	1
990821B	11.02.44	Y	70.00	34.00	17.0	167.6702	−8.3576	...	G	19.0 ± 1.4	11.0 ± 2.8	4	22.0 ± 5.0	1.87 ± 0.18	2.83 ± 0.36	2.73 ± 0.23	3 3 2	2
990822	12.03.35	Y	111.57	−38.07	1.7	250.7106	−10.0823	48.1	4B_7727	21.0 ± 0.7	20.0 ± 0.7	2	18.0 ± 2.2	5.06 ± 0.28	4.88 ± 0.35	2.12 ± 0.12	2 2 1	1
990824A	09.23.41	N	...	...	...	...	...	...	...	7.0 ± 0.7	5.0 ± 1.4	3	17.0 ± 5.1	...	...	...	2 - -	1
990824B	13.13.50	Y	...	...	...	...	...	...	...	6.12 ± 0.06	1.25 ± 0.06	...	3.7 ± 1.6	...	...	...	2 - -	1
990827	20.02.35	N	264.00	52.00	47.0	79.2745	32.4415	...	G	21.0 ± 2.8	10.0 ± 8.5	7	31.0 ± 9.1	0.73 ± 0.12	0.86 ± 0.18	2.90 ± 0.46	1 1 -	4
990829A	03.19.55	N	261.00	27.00	28.0	49.9289	30.1500	...	G	52.0 ± 0.7	33.0 ± 2.8	14	50.0 ± 3.2	2.11 ± 0.19	1.03 ± 0.19	2.41 ± 0.21	1 1 -	1
990829B	13.09.25	N	250.60	−66.80	6.8	322.9597	−13.4134	43.1	S	12.0 ± 0.7	6.0 ± 1.4	5	23.0 ± 9.2	...	...	...	3 - -	1
990903	05.42.10	N	237.00	52.00	43.0	82.3102	48.8104	...	G	6.0 ± 0.7	6.0 ± 0.7	1	4.0 ± 2.8	3.46 ± 0.25	17.1 ± 1.3	2.07 ± 0.16	1 1 -	1
990905	22.38.56	N	95.40	46.13	2.8	168.1213	14.3977	31.1	4B_7753	5.0 ± 0.7	3.0 ± 0.7	2	6.0 ± 2.2	...	...	...	2 - -	1
990907	17.35.11	Y	112.70	−69.40	0.1	280.9892	−21.9200	44.6	W	165.0 ± 0.7	75.0 ± 2.8	16	145.0 ± 6.7	8.41 ± 0.62	4.10 ± 0.37	1.87 ± 0.15	3 3 -	1
990908	00.18.36	N	103.23	−74.98	0.1	286.1687	−26.0346	24.0	W	52.0 ± 4.2	32.0 ± 12.7	11	47.0 ± 4.2	2.04 ± 0.17	0.65 ± 0.09	2.46 ± 0.21	3 3 -	6
990913A	06.51.56	Y	153.00	46.00	18.0	171.2040	53.3770	...	G	49.0 ± 0.7	22.0 ± 1.4	5	40.0 ± 2.2	24.0 ± 1.2	82.6 ± 4.1	1.66 ± 0.11	2 2 3	1
990913B	18.49.27	Y	...	...	...	...	...	...	...	15.0 ± 0.7	9.0 ± 1.4	4	15.0 ± 6.3	...	...	...	2 - -	1
990915A	10.38.57	N	...	...	...	...	...	...	...	25.0 ± 0.7	20.0 ± 1.4	4	23.0 ± 4.5	...	...	...	2 - -	1
990915B	23.15.22	N	97.10	71.87	1.7	142.7301	23.9258	6.4	4B_7766	24.0 ± 0.7	23.0 ± 0.7	2	19.0 ± 2.2	...	...	...	2 - -	1
990917A	14.18.09	Y	42.00	61.00	22.0	136.5905	1.2578	...	G	9.0 ± 0.7	9.0 ± 0.7	1	6.38 ± 0.48	4.01 ± 0.26	8.73 ± 0.64	1.86 ± 0.14	1 1 4	1
990917B	14.35.00	Y	85.90	−14.90	4.7	219.1253	−21.6000	95.3	S	3.97 ± 0.03	0.38 ± 0.03	...	3.70 ± 0.34	0.24 ± 0.07	1.21 ± 0.31	2.84 ± 0.85	3 1 -	1
990917C	19.44.59	Y	155.30	25.80	5.8	206.4954	56.4749	86.3	S	8.0 ± 1.4	8.0 ± 1.4	1	11.0 ± 3.2	1.07 ± 0.10	1.68 ± 0.18	1.95 ± 0.23	2 2 1	2
990918	05.33.15	Y	262.08	1.97	2.2	24.9464	19.3435	65.7	4B_7770	8.25 ± 0.09	4.41 ± 0.09	...	3.60 ± 0.37	1.81 ± 0.13	6.86 ± 0.52	2.32 ± 0.17	3 3 -	1
990919	13.42.18	N	69.40	74.00	2.2	136.8956	17.6419	5.8	S	22.0 ± 0.7	18.0 ± 1.4	3	17.0 ± 4.1	3.10 ± 0.23	3.89 ± 0.40	1.12 ± 0.20	1 1 2	1
990923	16.15.51	N	334.00	−1.00	31.0	61.3526	−44.4972	...	G	48.0 ± 0.7	9.0 ± 1.4	5	44.0 ± 3.2	1.66 ± 0.25	1.38 ± 0.34	1.58 ± 0.40	4 4 -	1
990924	20.53.14	Y	...	...	...	...	...	...	...	60.0 ± 0.7	28.0 ± 2.1	9	55.0 ± 7.1	...	...	...	3 - -	1
990925	22.50.35	Y	317.00	56.00	46.0	95.2155	5.6655	...	G	1.04 ± 0.15	0.45 ± 0.15	...	1.49 ± 0.54	0.26 ± 0.04	5.0 ± 1.1	1.58 ± 0.32	3 3 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
991002A	04.10.38	N	292.80	−41.70	7.7	356.9852	−24.7112	11.3	S	43.0 ± 5.7	17.0 ± 17.0	10	41.0 ± 6.3	1.62 ± 0.19	0.70 ± 0.10	1.61 ± 0.27	3 3 -	8
991002B	22.49.03	Y	25.16	3.75	2.7	145.8517	−56.9162	85.8	4B_7784	0.59 ± 0.12	0.47 ± 0.12	...	0.34 ± 0.26	0.60 ± 0.10	10.0 ± 1.7	...	3 4 3	1
991004A	06.21.31	Y	251.90	−6.40	7.1	11.6283	23.8383	62.2	S	3.0 ± 0.7	3.0 ± 0.7	1	10.5 ± 2.1	1.04 ± 0.19	3.13 ± 0.57	1.64 ± 0.53	2 2 -	1
991004B	15.12.37	Y	146.00	18.00	16.0	214.7077	46.0286	...	G	34.0 ± 0.7	10.0 ± 2.1	7	34.0 ± 4.1	6.16 ± 0.59	12.1 ± 1.1	0.53 ± 0.36	1 2 1	1
991005	03.29.52	Y	48.38	−72.60	4.7	289.6893	−40.6724	34.1	4B_7789	1.0 ± 0.7	1.0 ± 0.7	1	...	0.62 ± 0.08	5.20 ± 0.52	0.54 ± 0.31	3 3 -	1
991007	06.34.13	Y	...	...	...	...	...	...	...	22.0 ± 0.7	22.0 ± 0.7	1	19.0 ± 1.4	...	...	...	2 - -	1
991011A	01.30.46	N	159.81	−22.28	3.9	266.7945	31.1590	16.5	4B_7795	22.0 ± 0.7	9.0 ± 1.4	3	21.0 ± 4.5	1.36 ± 0.15	2.42 ± 0.38	2.59 ± 0.28	2 2 -	1
991011B	09.59.30	Y	287.10	6.10	4.5	40.2928	−0.9730	38.0	S	7.34 ± 0.08	1.88 ± 0.08	...	4.0 ± 3.6	0.61 ± 0.09	3.16 ± 0.36	1.26 ± 0.35	1 1 4	1
991011C	13.42.46	Y	203.42	−17.87	5.1	316.9295	43.8506	30.1	4B_7798	4.64 ± 0.05	1.22 ± 0.05	...	3.83 ± 0.23	0.47 ± 0.06	2.03 ± 0.26	2.73 ± 0.32	2 2 1	1
991013A	07.53.39	Y	...	...	...	...	...	...	...	19.0 ± 0.7	15.0 ± 1.4	3	18.0 ± 3.6	...	...	...	1 - -	1
991013B	20.38.13	N	123.94	8.56	10.3	214.7762	22.6075	12.2	4B_7802	22.0 ± 4.2	8.0 ± 8.5	6	22.0 ± 3.2	0.80 ± 0.11	0.48 ± 0.09	1.94 ± 0.31	3 3 -	6
991014	21.52.33	Y	102.78	11.60	0.1	202.5437	5.1912	74.3	W	4.84 ± 0.16	2.97 ± 0.16	...	2.28 ± 0.58	0.93 ± 0.08	3.99 ± 0.34	2.16 ± 0.20	3 3 -	1
991018	19.02.42	Y	224.03	−3.68	2.2	352.0923	46.9421	92.5	4B_7810	38.0 ± 0.7	23.0 ± 1.4	5	32.0 ± 11.2	6.70 ± 0.51	8.74 ± 0.69	...	1 2 1	1
991022	18.32.34	Y	1.00	−24.66	2.8	43.3146	−79.0543	40.2	4B_7817	18.0 ± 2.8	16.0 ± 5.7	3	17.0 ± 2.8	3.08 ± 0.26	2.74 ± 0.25	1.60 ± 0.19	3 4 3	4
991026A	04.33.18	Y	...	...	...	...	...	...	...	27.0 ± 0.7	19.0 ± 1.4	5	23.0 ± 3.2	...	...	...	1 - -	1
991026B	13.02.17	N	51.00	−69.00	41.0	285.4413	−42.5743	21.7	G	80.0 ± 0.7	33.0 ± 2.1	9	57.0 ± 6.3	3.90 ± 0.29	1.96 ± 0.24	2.48 ± 0.18	3 3 -	1
991030	01.46.02	Y	123.00	−47.52	1.9	263.1842	−7.4316	...	4B	32.0 ± 0.7	31.0 ± 0.7	2	30.0 ± 3.6	3.27 ± 0.24	2.17 ± 0.30	2.00 ± 0.16	3 3 -	1
991101	03.46.22	Y	25.00	5.00	33.0	144.8135	−55.7949	...	G	6.0 ± 0.7	6.0 ± 0.7	1	5.20 ± 0.75	1.89 ± 0.21	4.73 ± 0.76	2.04 ± 0.25	4 4 -	1
991103	18.42.41	Y	320.95	15.14	3.2	66.4913	−24.2607	10.7	4B_7838	104.0 ± 0.7	43.0 ± 2.8	13	90.0 ± 9.8	4.59 ± 0.43	3.97 ± 0.42	0.47 ± 0.30	1 1 -	1
991104	17.07.08	Y	53.13	55.08	1.8	144.6512	−0.8498	58.6	4B_7840	39.0 ± 2.1	29.0 ± 4.2	6	32.0 ± 6.1	6.86 ± 0.46	5.10 ± 0.37	1.86 ± 0.15	1 1 4	3
991105A	08.12.17	N	259.00	−8.00	36.0	14.2337	17.0395	...	G	70.0 ± 2.1	9.0 ± 4.2	4	61.0 ± 10.2	1.96 ± 0.34	1.05 ± 0.19	0.93 ± 0.42	2 2 -	3
991105B	10.39.32	Y	16.00	48.00	46.0	125.1051	−14.8187	...	G	0.75 ± 0.06	0.75 ± 0.06	...	0.54 ± 0.18	0.46 ± 0.06	7.4 ± 1.3	1.62 ± 0.27	1 1 -	1
991105C	16.40.46	Y	180.75	−66.80	0.1	298.1776	−4.3764	9.9	W	36.0 ± 0.7	23.0 ± 2.1	7	31.0 ± 3.2	2.79 ± 0.23	7.13 ± 0.62	1.71 ± 0.17	3 3 -	1
991106	19.03.32	Y	39.24	60.63	1.8	135.5191	0.3632	25.4	4B_7842	15.0 ± 0.7	12.0 ± 1.4	3	13.6 ± 1.3	4.54 ± 0.34	8.08 ± 0.68	1.36 ± 0.20	2 4 1	1
991108	06.46.05	Y	3.64	−54.89	1.9	314.0435	−61.4355	7.7	4B_7845	53.0 ± 0.7	29.0 ± 2.1	10	45.0 ± 6.1	7.73 ± 0.61	9.94 ± 0.83	0.73 ± 0.19	3 3 -	1
991109	21.01.41	Y	227.00	24.00	27.0	34.8553	59.1366	...	G	5.0 ± 0.7	5.0 ± 0.7	1	8.0 ± 3.2	1.62 ± 0.17	4.64 ± 0.51	2.64 ± 0.27	2 2 -	1
991115	18.48.09	Y	294.22	40.44	1.7	73.8011	9.3432	9.8	4B_7858	14.0 ± 0.7	13.0 ± 0.7	2	10.82 ± 0.69	4.16 ± 0.37	7.46 ± 0.69	2.72 ± 0.19	2 2 3	1
991116	14.31.05	Y	267.00	−71.00	19.0	322.4791	−20.6071	...	G	258.0 ± 0.7	113.0 ± 2.8	18	185.0 ± 2.2	38.6 ± 2.8	11.29 ± 0.91	1.43 ± 0.14	3 3 -	1
991119	14.33.55	Y	311.00	−65.00	48.0	330.4372	−36.2036	...	G	3.92 ± 0.01	0.50 ± 0.01	...	4.0 ± 1.4	0.49 ± 0.05	2.96 ± 0.36	1.47 ± 0.28	3 3 2	1
991120	05.46.50	Y	51.19	−56.61	1.7	270.9328	−49.9013	33.7	4B_7864	21.0 ± 0.7	18.0 ± 1.4	4	20.0 ± 5.1	5.46 ± 0.35	6.91 ± 0.54	1.81 ± 0.15	1 1 4	1
991122A	00.06.26	N	...	...	...	...	...	...	...	53.0 ± 0.7	29.0 ± 2.1	7	43.0 ± 11.0	...	...	...	3 - -	1
991122B	09.04.31	Y	266.00	21.00	38.0	45.2733	23.8526	...	G	1.46 ± 0.09	0.43 ± 0.09	...	1.98 ± 0.06	0.16 ± 0.04	1.60 ± 0.73	2.11 ± 0.86	2 2 -	1
991124A	06.42.02	Y	142.00	84.00	38.0	128.3484	30.8110	...	G	40.0 ± 0.7	16.0 ± 1.4	6	36.0 ± 6.3	1.57 ± 0.17	1.75 ± 0.27	1.78 ± 0.23	1 1 -	1
991124B	09.31.10	Y	...	...	...	...	...	...	...	45.0 ± 0.7	32.0 ± 1.4	4	28.0 ± 3.2	...	...	...	3 - -	1
991128	06.04.00	N	121.00	78.00	46.0	136.1524	30.2405	...	G	37.0 ± 0.7	6.0 ± 1.4	5	40.0 ± 3.6	1.02 ± 0.19	1.62 ± 0.26	...	1 1 -	1
991129	12.38.08	Y	313.73	57.53	3.2	95.1988	8.0214	8.2	4B_7886	9.0 ± 0.7	8.0 ± 0.7	2	8.0 ± 3.6	1.15 ± 0.13	2.52 ± 0.31	2.28 ± 0.28	1 1 -	1
991130	13.06.59	Y	114.80	40.61	2.5	178.5781	25.8865	42.3	4B_7887	12.0 ± 0.7	11.0 ± 0.7	2	11.0 ± 2.2	2.71 ± 0.22	5.44 ± 0.53	1.18 ± 0.17	3 3 -	1
991201	22.51.14	Y	245.00	35.00	51.0	56.4340	45.1512	...	G	1.0 ± 0.7	1.0 ± 0.7	1	14.0 ± 5.1	0.45 ± 0.14	1.55 ± 0.50	1.59 ± 0.93	2 2 -	1
991205A	17.03.36	Y	248.00	−11.00	21.0	5.0778	24.3516	...	G	2.38 ± 0.12	2.12 ± 0.12	...	1.72 ± 0.24	1.73 ± 0.17	10.0 ± 1.0	1.50 ± 0.20	2 2 -	1
991205B	22.24.50	Y	21.00	−35.00	44.0	263.4337	−79.4925	...	G	26.0 ± 3.5	13.0 ± 7.1	5	31.0 ± 7.6	1.07 ± 0.11	0.90 ± 0.09	2.60 ± 0.27	3 3 -	5
991205C	22.57.41	Y	337.60	−43.70	1.0	353.2971	−57.1848	5.7	S	121.0 ± 0.7	50.0 ± 2.8	17	103.0 ± 4.1	5.59 ± 0.47	2.43 ± 0.27	1.40 ± 0.18	3 3 2	1
991209A	15.27.26	Y	...	...	...	...	...	...	...	11.0 ± 0.7	9.0 ± 1.4	3	24.0 ± 8.6	...	...	...	1 - -	1
991209B	19.11.33	Y	359.00	4.00	43.0	97.5526	−56.1156	...	G	0.95 ± 0.09	0.34 ± 0.09	...	...	0.36 ± 0.05	2.25 ± 0.31	1.22 ± 0.33	1 1 -	1
991212	06.53.24	Y	317.00	22.00	52.0	69.5681	−16.9956	...	G	0.86 ± 0.04	0.47 ± 0.04	...	0.95 ± 0.73	0.25 ± 0.04	5.3 ± 1.2	1.77 ± 0.31	3 3 -	1
991216A	00.48.21	Y	...	...	...	...	...	...	...	39.0 ± 0.7	9.0 ± 1.4	6	45.0 ± 5.7	...	...	...	4 - -	1
991216B	16.07.17	Y	79.88	11.18	0.1	191.9041	−14.6224	72.9	P	22.0 ± 0.7	22.0 ± 0.7	1	15.0 ± 1.4	146.3 ± 13.2	292.4 ± 26.0	1.72 ± 0.23	4 4 -	1
991217	06.03.39	Y	115.30	48.50	2.1	170.0231	27.9404	13.2	S	30.0 ± 3.5	15.0 ± 7.1	6	34.0 ± 9.5	2.35 ± 0.29	1.62 ± 0.29	1.14 ± 0.39	1 1 4	5
991221	10.36.36	Y	...	...	...	...	...	...	...	39.0 ± 0.7	29.0 ± 1.4	4	23.0 ± 4.1	...	...	...	1 - -	1
991226A	15.00.05	Y	...	...	...	...	...	...	...	28.0 ± 0.7	16.0 ± 1.4	4	18.0 ± 1.4	...	...	...	3 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	$T_{\rm det}$ (s)	$T_{\rm a}$ (s)	$N_{\rm a}$	T_{90} (s)	Fluence (10^{-6} cgs)	$F_{\rm peak}$ (10^{-7} cgs)	Γ	Unit	R
991226B	23.08.59	Y	269.00	11.00	29.0	36.6898	17.2342	...	G	0.42 ± 0.07	0.42 ± 0.07	...	...	0.54 ± 0.09	11.9 ± 2.3	1.99 ± 0.38	2 2 -	1
000104A	01.28.44	Y	145.17	−66.12	2.1	285.2321	−10.0451	24.7	4B_7933	67.0 ± 0.7	40.0 ± 2.1	11	55.0 ± 4.1	6.24 ± 0.52	6.08 ± 0.59	1.35 ± 0.17	1 1 -	1
000104B	14.26.11	N	223.24	70.39	4.6	109.4200	43.4101	15.8	4B_7934	17.0 ± 0.7	10.0 ± 1.4	5	17.0 ± 1.4	0.82 ± 0.10	1.51 ± 0.29	1.97 ± 0.29	3 3 -	1
000107A	18.26.35	Y	...	...	...	...	...	...	...	49.0 ± 0.7	10.0 ± 1.4	5	50.0 ± 3.6	...	...	...	1 - -	1
000107B	20.35.59	N	119.00	−20.00	48.0	238.0671	4.3894	...	G	22.0 ± 2.8	9.0 ± 8.5	7	37.0 ± 6.7	1.30 ± 0.49	1.00 ± 0.22	...	4 4 -	4
000107C	21.44.33	Y	285.76	−29.15	1.7	7.5751	−15.1555	76.0	4B_7938	41.0 ± 0.7	29.0 ± 1.4	3	38.0 ± 3.2	6.73 ± 0.52	4.32 ± 0.45	2.26 ± 0.18	2 2 -	1
000108	16.48.07	Y	236.35	−78.82	1.7	311.0352	−18.7923	32.3	4B_7939	0.88 ± 0.03	0.84 ± 0.03	...	0.80 ± 0.43	1.17 ± 0.13	10.6 ± 1.1	2.16 ± 0.26	3 1 -	1
000109	10.27.24	Y	248.88	−28.53	1.9	351.2377	12.6634	63.9	4B_7941	172.0 ± 0.7	109.0 ± 2.8	14	142.0 ± 2.2	89.8 ± 7.5	42.2 ± 3.7	1.22 ± 0.18	2 2 -	1
000110	04.38.45	Y	312.00	70.00	42.0	104.8003	16.2757	...	G	7.19 ± 0.08	4.53 ± 0.08	...	3.20 ± 0.48	4.89 ± 0.33	21.9 ± 1.5	1.82 ± 0.14	3 3 -	1
000114	08.56.32	Y	214.00	−65.00	34.0	311.7164	−3.5805	...	G	17.0 ± 0.7	7.0 ± 1.4	3	16.2 ± 4.4	0.88 ± 0.12	2.23 ± 0.31	1.07 ± 0.30	1 1 -	1
000115	14.49.32	Y	116.55	−15.79	2.3	233.2419	4.5088	30.9	4B_7954	18.0 ± 0.7	17.0 ± 0.7	2	15.0 ± 2.2	27.8 ± 2.5	85.8 ± 7.7	1.66 ± 0.24	4 4 -	1
000116	13.43.59	N	245.00	45.00	33.0	70.6287	45.1258	...	G	5.0 ± 0.7	4.0 ± 0.7	2	6.0 ± 4.1	0.67 ± 0.08	2.85 ± 0.38	1.48 ± 0.28	3 3 -	1
000119A	11.12.54	Y	...	...	...	...	...	...	...	0.91 ± 0.07	0.56 ± 0.07	...	1.6 ± 1.2	...	...	...	3 - -	1
000119B	13.09.33	Y	203.00	−12.00	33.0	318.3586	49.6529	...	G	35.0 ± 0.7	31.0 ± 1.4	3	31.0 ± 2.8	6.70 ± 0.53	5.11 ± 0.51	1.30 ± 0.18	1 1 -	1
000123	13.49.42	Y	318.07	14.10	2.1	63.7013	−22.7435	81.4	4B_7965	7.0 ± 0.7	7.0 ± 0.7	1	7.0 ± 2.8	3.23 ± 0.41	12.4 ± 1.5	1.23 ± 0.34	3 2 -	1
000126	06.58.00	N	0.56	35.52	4.8	111.7821	−26.2843	7.9	4B_7968	23.0 ± 2.8	12.0 ± 5.7	5	30.0 ± 8.2	1.54 ± 0.17	1.01 ± 0.15	2.02 ± 0.28	3 3 -	4
000127	03.32.21	Y	273.00	−41.00	41.0	352.0884	−10.6109	...	G	2.69 ± 0.06	0.38 ± 0.06	...	2.51 ± 0.39	0.27 ± 0.06	1.96 ± 0.41	...	2 1 2	1
000205A	08.39.52	Y	8.41	30.18	1.9	118.3694	−32.5340	32.8	4B_7984	7.0 ± 0.7	5.0 ± 0.7	2	6.5 ± 1.1	...	...	...	2 - -	1
000205B	12.39.08	Y	203.00	14.60	1.2	341.9814	74.3093	18.8	S	21.0 ± 0.7	21.0 ± 0.7	1	21.0 ± 4.1	4.09 ± 0.33	3.26 ± 0.47	2.48 ± 0.19	3 3 -	1
000206	02.33.03	N	28.10	18.20	1.4	142.6719	−42.3230	75.0	S	1.0 ± 0.7	1.0 ± 0.7	1	26.0 ± 3.2	...	...	...	1 - -	1
000207	23.56.21	N	289.70	59.25	1.7	90.2937	19.7354	−1.1	4B_7986	6.0 ± 1.4	6.0 ± 1.4	1	6.0 ± 2.2	3.13 ± 0.22	6.70 ± 0.52	1.41 ± 0.19	3 2 3	2
000208A	04.21.11	N	28.90	−22.84	0.1	200.0127	−74.8548	85.3	W	5.0 ± 0.7	5.0 ± 0.7	1	8.0 ± 4.5	0.43 ± 0.08	0.89 ± 0.22	1.53 ± 0.46	1 1 -	1
000208B	09.12.08	N	82.00	−16.00	25.0	218.6054	−25.4875	...	G	50.0 ± 5.7	37.0 ± 17.0	8	48.0 ± 4.1	4.22 ± 0.30	1.18 ± 0.10	1.34 ± 0.19	1 1 4	8
000209	08.04.50	Y	...	...	...	...	...	...	...	3.0 ± 0.7	2.0 ± 0.7	2	4.7 ± 1.7	...	...	...	1 - -	1
000210	08.44.05	Y	29.81	−40.67	0.1	261.3449	−70.5399	39.9	W	17.0 ± 0.7	17.0 ± 0.7	1	9.0 ± 1.4	48.0 ± 3.7	164.5 ± 13.1	1.44 ± 0.16	1 1 -	1
000211	12.33.44	N	3.20	24.00	1.7	111.7107	−38.0284	16.3	S	...	...	...	...	...	...	...	- - -	1
000212	17.06.32	N	329.00	72.00	24.0	110.2050	13.6131	...	G	8.0 ± 0.7	4.0 ± 1.4	3	8.0 ± 3.6	0.82 ± 0.09	5.41 ± 0.52	1.49 ± 0.23	3 3 -	1
000214A	01.01.00	Y	283.57	−66.45	0.1	329.0852	−24.9872	15.7	W	9.0 ± 0.7	9.0 ± 0.7	1	8.0 ± 3.2	10.87 ± 0.86	29.4 ± 2.4	1.46 ± 0.16	1 1 -	1
000214B	05.44.18	Y	319.00	−49.00	50.0	349.8631	−43.5108	...	G	0.49 ± 0.07	0.35 ± 0.07	...	0.41 ± 0.16	0.21 ± 0.04	1.62 ± 0.24	1.93 ± 0.65	1 1 2	1
000217	10.47.06	Y	16.56	36.51	2.1	126.2482	−26.2664	46.3	4B_7989	12.0 ± 0.7	12.0 ± 0.7	1	16.0 ± 5.4	1.85 ± 0.15	5.95 ± 0.45	1.76 ± 0.19	2 2 1	1
000218A	16.01.10	Y	...	...	...	...	...	...	...	280.0 ± 0.7	117.0 ± 4.2	32	252.0 ± 7.3	...	...	...	3 - -	1
000218B	16.19.05	Y	...	...	...	...	...	...	...	24.0 ± 0.7	24.0 ± 0.7	1	20.0 ± 2.2	...	...	...	3 - -	1
000222	13.44.26	Y	53.99	60.60	5.8	141.8162	3.9096	56.2	4B_7995	0.59 ± 0.12	0.47 ± 0.12	...	...	0.23 ± 0.06	4.1 ± 1.1	...	3 3 -	1
000223	23.13.41	Y	...	...	...	...	...	...	...	25.0 ± 0.7	14.0 ± 1.4	4	24.0 ± 4.5	...	...	...	2 - -	1
000224	22.50.09	N	298.80	−27.40	9.8	13.6656	−25.2677	85.9	S	1.0 ± 0.7	1.0 ± 0.7	1	6.0 ± 3.6	0.27 ± 0.08	...	2.07 ± 0.91	3 3 2	1
000225	01.35.30	Y	110.56	0.53	2.9	215.9856	7.0922	25.7	4B_7997	16.0 ± 0.7	13.0 ± 1.4	4	13.0 ± 4.2	2.13 ± 0.21	2.23 ± 0.37	1.79 ± 0.23	1 1 4	1
000226	12.51.08	Y	327.00	−10.00	20.0	45.5484	−43.5961	...	G	126.0 ± 0.7	108.0 ± 2.1	10	84.0 ± 2.8	96.1 ± 7.5	53.6 ± 4.3	1.59 ± 0.16	2 2 -	1
000227	21.36.02	Y	43.33	−7.49	2.5	184.3738	−55.0814	100.5	4B_8001	109.0 ± 5.7	59.0 ± 17.0	12	102.0 ± 2.2	12.21 ± 0.95	3.18 ± 0.27	2.17 ± 0.18	2 2 -	8
000301A	02.33.54	Y	354.86	75.78	0.1	118.4539	13.5380	25.8	I	11.0 ± 0.7	8.0 ± 0.7	2	10.0 ± 3.2	3.62 ± 0.27	10.03 ± 0.82	0.90 ± 0.19	3 3 -	1
000301B	12.27.44	N	239.00	0.00	24.0	9.2697	38.0731	...	G	46.0 ± 0.7	24.0 ± 2.1	12	45.0 ± 5.4	1.92 ± 0.19	1.18 ± 0.26	1.81 ± 0.22	1 1 -	1
000301C	12.41.05	Y	215.00	−6.00	26.0	339.0810	50.5503	...	G	96.0 ± 9.9	87.0 ± 29.7	10	87.0 ± 4.2	8.35 ± 0.53	1.13 ± 0.09	1.79 ± 0.15	1 1 4	14
000302	14.22.27	N	174.46	30.66	3.8	196.1943	73.5291	59.2	4B_8009	7.0 ± 0.7	5.0 ± 0.7	2	11.0 ± 4.1	1.32 ± 0.31	2.54 ± 0.47	2.74 ± 0.44	4 4 -	1
000306	18.00.32	Y	226.07	40.92	2.2	68.3825	59.4657	10.6	4B_8019	19.0 ± 0.7	8.0 ± 1.4	4	20.0 ± 11.2	2.35 ± 0.36	3.86 ± 0.54	1.90 ± 0.44	2 4 1	1
000310	15.07.15	Y	5.40	−1.46	3.6	106.1113	−63.3531	53.7	4B_8027	0.08 ± 0.04	0.08 ± 0.04	...	0.09 ± 0.04	0.90 ± 0.19	7.6 ± 1.6	1.32 ± 0.59	3 2 -	1
000312	05.23.55	N	320.29	37.92	1.7	83.6404	−8.4240	25.0	4B_8030	28.0 ± 0.7	17.0 ± 0.7	2	24.0 ± 2.2	6.15 ± 0.33	10.20 ± 0.59	1.96 ± 0.12	1 2 1	1
000314	08.51.43	Y	137.71	50.66	2.3	167.7720	42.4582	56.8	4B_8036	13.0 ± 0.7	10.0 ± 1.4	3	12.9 ± 2.7	1.81 ± 0.20	2.94 ± 0.42	1.60 ± 0.28	2 4 1	1
000317	08.03.27	N	...	...	...	...	...	...	...	29.0 ± 0.7	29.0 ± 0.7	1	25.0 ± 2.2	...	...	...	3 - -	1
000323	09.02.06	Y	193.00	48.82	1.0	122.6816	68.3080	66.2	I	63.0 ± 0.7	54.0 ± 1.4	5	46.0 ± 4.5	11.93 ± 0.78	4.71 ± 0.41	1.99 ± 0.14	3 3 -	1
000327	22.37.57	Y	316.00	55.00	25.0	94.0877	5.4194	...	G	122.0 ± 0.7	80.0 ± 2.1	12	87.0 ± 6.3	11.66 ± 0.85	3.80 ± 0.39	1.44 ± 0.15	3 3 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
000328	01.35.09	Y	...	...	...	...	...	...	...	147.0 ± 0.7	87.0 ± 2.1	12	116.0 ± 12.0	...	...	...	1 - -	1
000330	20.57.29	Y	358.31	39.26	5.1	110.8013	−22.2370	43.2	4B_8057	...	...	...	...	...	...	...	- - -	1
000402A	02.55.51	N	318.00	25.00	55.0	72.5722	−15.7571	...	G	14.0 ± 0.7	6.0 ± 1.4	3	17.0 ± 5.1	0.73 ± 0.12	1.19 ± 0.35	1.38 ± 0.41	3 3 -	1
000402B	14.30.58	Y	343.53	6.65	1.8	78.5947	−45.8799	22.5	4B_8063	22.0 ± 0.7	15.0 ± 0.7	2	27.0 ± 11.0	5.55 ± 0.50	12.1 ± 1.1	1.46 ± 0.19	2 2 -	1
000407	03.06.38	Y	157.98	−70.06	2.7	291.4974	−10.3496	19.0	4B_8066	5.0 ± 0.7	5.0 ± 0.7	1	8.5 ± 1.9	0.74 ± 0.09	2.66 ± 0.32	1.62 ± 0.28	1 1 -	1
000409	15.00.30	N	264.37	80.82	5.3	112.9027	29.6811	27.9	4B_8071	37.0 ± 0.7	15.0 ± 1.4	5	39.0 ± 5.4	1.31 ± 0.16	2.58 ± 0.37	1.71 ± 0.26	3 3 -	1
000410	07.19.47	Y	...	...	...	...	...	...	...	28.0 ± 0.7	19.0 ± 2.1	7	27.0 ± 10.0	...	...	...	3 - -	1
000411	02.14.02	Y	...	...	...	...	...	...	...	1.76 ± 0.04	1.29 ± 0.04	...	1.62 ± 0.17	...	...	...	1 - -	1
000412	11.42.53	Y	201.37	−59.78	4.0	307.2088	2.8088	45.1	4B_8073	4.81 ± 0.11	1.42 ± 0.11	...	3.16 ± 0.81	0.44 ± 0.08	1.86 ± 0.36	1.58 ± 0.50	1 1 -	1
000415	00.16.09	N	175.47	68.27	8.8	132.3699	47.5634	34.9	4B_8074	20.0 ± 1.4	4.0 ± 2.8	3	62.0 ± 15.0	2.38 ± 0.57	2.02 ± 0.49	...	1 1 -	2
000418	21.30.18	Y	69.80	76.15	5.6	135.1867	19.0569	31.1	4B_8079	2.0 ± 0.7	0.56 ± 0.06	...	2.0 ± 1.3	0.20 ± 0.07	1.00 ± 0.36	...	1 1 -	1
000419	02.12.49	Y	330.07	48.28	0.3	95.9251	−5.4109	68.2	I	24.0 ± 0.7	24.0 ± 0.7	1	20.0 ± 3.2	10.82 ± 0.73	14.7 ± 1.1	1.78 ± 0.14	3 3 -	1
000420A	11.44.32	Y	16.446	27.177	0.7	126.8557	−35.5854	68.7	I	1.88 ± 0.03	0.19 ± 0.03	...	1.89 ± 0.11	1.28 ± 0.14	12.5 ± 1.3	0.93 ± 0.31	3 2 -	1
000420B	14.22.11	N	129.26	−14.59	1.6	238.8048	15.5515	33.7	4B_8081	32.0 ± 0.7	29.0 ± 1.4	4	31.0 ± 3.2	15.4 ± 2.5	21.9 ± 4.5	1.72 ± 0.34	4 4 -	1
000420C	18.00.40	Y	313.81	−63.01	3.2	332.4787	−37.8829	46.4	4B_8082	3.06 ± 0.06	0.75 ± 0.06	...	2.73 ± 0.29	...	...	...	2 - -	1
000421	12.23.34	Y	174.91	16.98	3.5	240.6663	70.5490	67.4	4B_8084	52.0 ± 0.7	41.0 ± 2.1	7	44.0 ± 5.4	10.8 ± 1.3	4.77 ± 0.77	2.01 ± 0.27	4 4 -	1
000425	05.25.31	N	315.00	−47.00	34.0	352.8800	−41.0253	...	G	40.0 ± 0.7	29.0 ± 1.4	3	33.0 ± 4.1	3.40 ± 0.26	3.44 ± 0.33	2.20 ± 0.17	1 1 -	1
000429	10.07.22	Y	98.34	−4.42	0.2	214.8200	−6.0307	84.0	I	176.0 ± 0.7	91.0 ± 3.5	26	163.0 ± 2.2	21.8 ± 1.6	17.4 ± 1.3	1.03 ± 0.16	3 3 -	1
000502A	03.23.24	N	68.00	9.00	47.0	186.8545	−25.5369	...	G	25.0 ± 1.4	6.0 ± 1.4	2	28.0 ± 5.4	1.28 ± 0.21	1.05 ± 0.18	3.03 ± 0.42	2 2 3	2
000502B	13.18.35	Y	252.00	−41.00	47.0	343.3629	2.6008	...	G	9.0 ± 2.8	6.0 ± 2.8	2	9.0 ± 2.8	1.73 ± 0.39	2.14 ± 0.54	2.58 ± 0.42	4 4 -	4
000502C	15.00.59	N	171.80	−63.50	7.3	293.6990	−2.1484	43.6	S	6.0 ± 1.4	5.0 ± 1.4	2	21.0 ± 10.3	0.89 ± 0.15	1.19 ± 0.21	2.15 ± 0.40	3 4 3	2
000503	22.49.45	N	...	...	...	...	...	...	...	155.0 ± 0.7	23.0 ± 1.4	6	150.0 ± 7.1	...	...	...	1 - -	1
000506	10.16.42	Y	258.00	−9.00	17.0	12.7978	17.3500	...	G	26.0 ± 0.7	11.0 ± 1.4	3	19.0 ± 8.1	2.98 ± 0.24	4.44 ± 0.40	1.75 ± 0.20	1 4 1	1
000507	13.08.50	Y	232.00	−32.00	40.0	337.6854	20.1056	...	G	...	...	...	...	...	...	...	- - -	1
000511A	01.12.09	N	331.24	−36.11	1.8	8.0287	−53.7302	73.1	4B_8101	135.0 ± 0.7	74.0 ± 3.5	22	109.0 ± 9.2	...	...	...	4 - -	1
000511B	18.02.58	N	295.58	−8.70	4.2	30.8311	−15.2297	13.6	4B_8102	33.0 ± 2.8	6.0 ± 5.7	5	40.0 ± 4.5	1.31 ± 0.33	0.57 ± 0.14	3.66 ± 0.52	1 1 4	4
000516	09.26.05	Y	35.07	−14.83	0.5	186.6706	−65.9536	32.5	I	7.16 ± 0.05	4.21 ± 0.05	...	3.88 ± 0.84	4.07 ± 0.30	17.9 ± 1.4	2.37 ± 0.17	2 2 -	1
000517A	05.36.30	Y	107.98	76.74	1.9	137.8597	27.5192	12.3	4B_8109	5.99 ± 0.10	3.96 ± 0.10	...	3.9 ± 1.0	1.79 ± 0.14	6.41 ± 0.54	1.92 ± 0.16	3 3 -	1
000517B	10.02.03	Y	...	...	...	...	...	...	...	56.0 ± 0.7	14.0 ± 2.1	7	57.0 ± 3.6	...	...	...	1 - -	1
000518	05.41.51	Y	71.33	53.91	2.4	153.2196	5.4125	41.9	4B_8110	9.0 ± 0.7	9.0 ± 0.7	1	7.98 ± 0.93	2.54 ± 0.22	3.98 ± 0.43	1.15 ± 0.20	1 1 -	1
000519	08.18.12	Y	346.16	1.17	0.3	76.3756	−51.7778	24.7	I	10.0 ± 0.7	4.0 ± 0.7	2	10.0 ± 8.2	2.54 ± 0.22	3.98 ± 0.43	1.15 ± 0.20	3 3 -	1
000523	19.01.35	N	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
000525	06.08.33	Y	169.00	10.00	33.0	245.6726	61.7324	...	G	12.0 ± 2.1	9.0 ± 4.2	3	15.0 ± 4.5	1.09 ± 0.14	1.34 ± 0.21	0.63 ± 0.35	3 3 4	3
000528	08.46.24	Y	161.35	−34.00	0.1	275.0789	21.9662	62.8	W	80.0 ± 0.7	79.0 ± 0.7	2	65.0 ± 2.2	16.5 ± 1.1	12.21 ± 0.98	2.01 ± 0.14	3 3 -	1
000529A	00.03.51	N	218.00	39.00	50.0	68.8653	65.9358	...	G	3.0 ± 0.7	3.0 ± 0.7	1	4.0 ± 2.2	0.23 ± 0.05	0.87 ± 0.33	1.19 ± 0.61	1 1 -	1
000529B	08.43.12	Y	2.28	−61.53	0.1	311.6812	−54.8736	7.4	W	14.0 ± 0.7	14.0 ± 0.7	1	13.0 ± 4.5	3.48 ± 0.24	6.12 ± 0.50	2.15 ± 0.15	3 3 -	1
000604	08.31.02	N	91.00	24.00	25.0	186.3373	1.0529	...	G	14.0 ± 0.7	6.0 ± 1.4	3	18.0 ± 4.2	1.40 ± 0.26	1.94 ± 0.45	1.10 ± 0.41	2 2 -	1
000606	01.54.29	Y	247.00	52.00	36.0	80.0274	42.8669	...	G	15.0 ± 0.7	12.0 ± 1.4	3	13.0 ± 3.6	2.14 ± 0.16	4.06 ± 0.42	2.30 ± 0.15	3 3 4	1
000612	22.54.41	Y	...	...	...	...	...	...	...	0.86 ± 0.08	0.70 ± 0.08	...	0.85 ± 0.18	...	...	...	3 - -	1
000613	00.31.44	N	133.00	52.00	34.0	166.4675	39.3791	...	G	1.0 ± 0.7	1.0 ± 0.7	1	5.0 ± 3.6	0.44 ± 0.09	2.94 ± 0.37	1.36 ± 0.47	3 3 -	1
000614	08.34.01	Y	...	...	...	...	...	...	...	19.0 ± 0.7	13.0 ± 1.4	3	18.0 ± 5.0	...	...	...	2 - -	1
000615A	06.17.48	N	233.14	73.80	0.1	109.5397	38.8514	31.9	W	13.0 ± 2.1	11.0 ± 4.2	3	13.0 ± 4.2	0.96 ± 0.10	1.00 ± 0.13	1.93 ± 0.23	1 1 -	3
000615B	16.32.35	Y	35.61	−17.87	0.2	193.8783	−67.0831	46.3	I	24.0 ± 0.7	12.0 ± 1.4	3	18.0 ± 1.4	7.62 ± 0.47	20.9 ± 1.3	1.91 ± 0.14	2 2 1	1
000618	08.55.40	N	89.00	21.00	39.0	188.0226	−2.0413	...	G	28.0 ± 0.7	6.0 ± 1.4	3	24.0 ± 3.6	0.93 ± 0.17	1.73 ± 0.56	2.47 ± 0.48	2 2 -	1
000620A	00.54.39	N	276.00	−59.00	40.0	335.8158	−19.6399	...	G	24.0 ± 0.7	13.0 ± 1.4	6	25.0 ± 5.4	1.67 ± 0.21	1.12 ± 0.20	...	1 1 -	1
000620B	05.33.33	Y	113.82	69.20	0.1	146.4475	29.1013	38.1	W	...	...	...	...	...	...	...	- - -	1
000621	02.00.51	Y	247.00	−3.00	68.0	11.7687	29.7869	...	G	132.0 ± 0.7	88.0 ± 3.5	25	119.0 ± 5.4	16.2 ± 2.0	3.76 ± 0.59	2.28 ± 0.25	4 4 -	1
000623	01.04.46	N	296.00	6.00	19.0	44.3799	−8.8332	...	G	1.0 ± 0.7	...	...	2.0 ± 1.4	0.72 ± 0.09	7.23 ± 0.94	1.43 ± 0.37	4 4 -	1
000626	20.47.29	Y	90.00	−26.00	40.0	231.7689	−22.2049	...	G	1.28 ± 0.03	0.25 ± 0.03	...	1.60 ± 0.36	0.58 ± 0.09	10.6 ± 2.5	1.63 ± 0.39	3 2 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
000627	04.42.08	N	51.00	22.00	29.0	163.6244	−28.5673	...	G	2.0 ± 0.7	2.0 ± 0.7	1	5.0 ± 3.6	0.70 ± 0.09	2.24 ± 0.32	2.12 ± 0.35	2 2 1	1
000629	00.28.18	Y	104.00	53.00	50.0	163.3991	22.0135	...	G	2.0 ± 0.7	2.0 ± 0.7	1	16.0 ± 4.5	0.40 ± 0.10	0.93 ± 0.37	1.29 ± 0.70	1 1 -	1
000630	00.30.59	Y	221.81	41.22	0.4	71.1143	62.4061	62.5	I	51.0 ± 0.7	30.0 ± 1.4	6	26.0 ± 4.1	15.1 ± 1.1	15.3 ± 1.2	1.63 ± 0.16	1 1 -	1
000701A	00.19.16	Y	...	...	...	...	...	...	...	8.0 ± 0.7	8.0 ± 0.7	1	7.0 ± 2.2	...	...	...	2 - -	1
000701B	07.12.40	Y	...	...	...	...	...	...	...	1.31 ± 0.02	0.97 ± 0.02	...	0.81 ± 0.15	...	...	...	2 - -	1
000704	02.59.33	Y	115.00	−31.00	31.0	245.7573	−4.2673	...	G	31.0 ± 0.7	18.0 ± 1.4	4	30.0 ± 1.4	2.97 ± 0.30	3.24 ± 0.37	1.64 ± 0.24	2 2 -	1
000713	05.28.39	N	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
000718A	12.29.52	Y	...	...	...	...	...	...	...	46.0 ± 0.7	18.0 ± 2.1	8	39.0 ± 7.1	...	...	...	2 - -	1
000718B	20.47.09	Y	111.00	−3.00	18.0	219.3418	5.8536	...	G	58.0 ± 0.7	55.0 ± 1.4	4	34.0 ± 2.2	68.8 ± 5.8	66.5 ± 5.8	1.45 ± 0.16	2 2 -	1
000721	20.36.50	N	...	...	...	...	...	...	...	2.0 ± 0.7	2.0 ± 0.7	1	7.0 ± 2.2	...	...	...	2 - -	1
000723	10.40.06	N	20.00	−51.00	41.0	292.0500	−65.5205	...	G	20.0 ± 0.7	8.0 ± 1.4	3	18.0 ± 3.2	1.00 ± 0.12	2.12 ± 0.28	1.54 ± 0.25	3 3 -	1
000727	19.42.41	N	176.30	17.40	0.1	241.9599	71.8780	3.7	I	...	...	...	...	...	...	...	- - -	1
000801	01.11.08	Y	53.00	−44.00	24.0	251.3272	−53.7231	...	G	1.20 ± 0.09	0.95 ± 0.09	...	1.05 ± 0.15	0.51 ± 0.05	4.34 ± 0.84	0.74 ± 0.35	3 3 2	1
000805	12.06.24	Y	...	...	...	...	...	...	...	0.60 ± 0.05	0.60 ± 0.05	...	...	...	...	...	2 - -	1
000808	18.37.01	N	...	...	...	...	...	...	...	13.0 ± 0.7	5.0 ± 1.4	3	19.0 ± 5.1	...	...	...	3 - -	1
000811	15.30.01	N	299.58	23.53	0.5	61.3728	−3.0220	69.1	I	73.0 ± 0.7	67.0 ± 1.4	4	51.0 ± 4.1	26.8 ± 1.5	30.7 ± 1.8	1.68 ± 0.14	1 4 1	1
000818	20.09.06	N	...	...	...	...	...	...	...	2.0 ± 0.7	2.0 ± 0.7	1	3.0 ± 1.4	...	...	...	4 - -	1
000819	08.15.35	N	177.00	−14.00	38.0	280.4556	46.0849	...	G	11.0 ± 0.7	6.0 ± 1.4	4	21.0 ± 2.2	0.95 ± 0.13	1.27 ± 0.24	2.63 ± 0.36	2 2 -	1
000820	16.45.45	N	196.00	−21.00	27.0	306.8645	41.7758	...	G	128.0 ± 3.5	34.0 ± 7.1	5	125.0 ± 3.6	3.42 ± 0.38	1.59 ± 0.18	2.57 ± 0.28	2 2 -	5
000821	02.16.52	N	359.00	22.00	17.0	106.3077	−39.0755	...	G	8.0 ± 0.7	8.0 ± 0.7	1	7.0 ± 2.2	2.68 ± 0.39	6.72 ± 0.96	2.09 ± 0.32	4 4 -	1
000823	07.22.32	N	...	...	...	...	...	...	...	38.0 ± 0.7	23.0 ± 2.1	7	31.0 ± 5.1	...	...	...	3 - -	1
000827	03.50.55	N	...	...	...	...	...	...	...	6.0 ± 0.7	5.0 ± 0.7	2	9.0 ± 7.2	...	...	...	3 - -	1
000828A	17.55.38	N	19.00	61.00	41.0	125.9059	−1.7298	...	G	14.0 ± 2.8	11.0 ± 5.7	4	14.0 ± 2.8	0.73 ± 0.09	0.73 ± 0.12	1.91 ± 0.26	1 1 -	4
000828B	23.02.14	N	155.00	−24.00	47.0	263.8714	27.1582	...	G	1.0 ± 0.7	1.0 ± 0.7	1	5.0 ± 3.6	0.26 ± 0.07	1.77 ± 0.58	1.64 ± 0.78	2 2 -	1
000830A	05.09.14	N	...	...	...	...	...	...	...	33.0 ± 0.7	10.0 ± 2.1	7	29.0 ± 6.4	...	...	...	3 - -	1
000830B	11.39.08	Y	141.00	−49.00	22.0	271.8636	0.9436	...	G	39.0 ± 0.7	17.0 ± 1.4	5	35.0 ± 3.2	2.71 ± 0.20	4.14 ± 0.37	2.03 ± 0.17	3 3 2	1
000830C	23.49.52	Y	353.55	6.35	0.2	90.9412	−51.6594	27.8	I	16.0 ± 0.7	14.0 ± 0.7	2	9.0 ± 2.8	9.70 ± 0.97	18.4 ± 1.9	2.23 ± 0.22	4 4 -	1
000903A	13.01.50	Y	327.00	59.00	29.0	101.1817	4.1077	...	G	1.02 ± 0.10	0.71 ± 0.10	...	1.20 ± 0.73	0.53 ± 0.05	8.6 ± 1.3	0.70 ± 0.29	1 1 4	1
000903B	13.29.04	Y	...	...	...	...	...	...	...	44.0 ± 0.7	14.0 ± 2.1	7	43.0 ± 3.6	...	...	...	1 - -	1
000903C	15.32.22	Y	134.00	−6.00	17.0	233.9785	24.2088	...	G	1.0 ± 0.7	1.0 ± 0.7	1	21.0 ± 4.5	2.09 ± 0.48	7.5 ± 1.1	2.37 ± 0.68	2 2 -	1
000903D	23.35.14	Y	11.00	−23.00	21.0	100.3356	−85.5416	...	G	11.0 ± 0.7	8.0 ± 0.7	2	21.0 ± 9.2	3.15 ± 0.45	7.6 ± 1.6	1.69 ± 0.36	3 4 -	1
000904	13.18.42	Y	12.00	5.00	22.0	121.3223	−57.8610	...	G	14.0 ± 0.7	13.0 ± 0.7	2	10.0 ± 3.2	6.65 ± 0.65	18.4 ± 1.8	1.55 ± 0.27	4 4 -	1
000906	21.00.49	N	272.00	47.00	34.0	74.4190	26.6051	...	G	24.0 ± 0.7	24.0 ± 0.7	1	20.0 ± 1.4	6.41 ± 0.49	10.27 ± 0.87	1.72 ± 0.16	1 1 -	1
000915	03.58.18	N	244.00	−81.00	40.0	310.4438	−21.2857	...	G	6.0 ± 0.7	6.0 ± 0.7	1	7.0 ± 2.8	0.52 ± 0.07	1.45 ± 0.22	1.93 ± 0.28	1 1 -	1
000916	14.15.02	N	85.00	29.00	20.0	179.2990	−1.0118	...	G	6.0 ± 0.7	6.0 ± 0.7	1	15.0 ± 2.2	0.79 ± 0.11	1.52 ± 0.24	1.28 ± 0.30	1 1 -	1
000917A	09.10.04	Y	...	...	...	...	...	...	...	18.0 ± 0.7	10.0 ± 1.4	5	26.0 ± 4.5	...	...	...	2 - -	1
000917B	17.23.49	Y	...	...	...	...	...	...	...	6.0 ± 0.7	5.0 ± 0.7	2	4.6 ± 1.6	...	...	...	2 - -	1
000922	21.21.31	Y	94.00	34.00	33.0	178.7700	8.1259	...	G	7.0 ± 0.7	6.0 ± 0.7	2	4.9 ± 1.3	0.91 ± 0.09	3.04 ± 0.36	1.75 ± 0.21	1 1 -	1
000924	16.40.37	N	48.00	−39.00	40.0	244.0762	−58.4904	...	G	45.0 ± 0.7	13.0 ± 1.4	6	43.0 ± 6.3	2.30 ± 0.26	4.36 ± 0.46	...	3 3 -	1
000926	21.03.06	Y	146.00	12.00	44.0	222.4715	43.6357	...	G	1.32 ± 0.10	0.61 ± 0.10	...	1.30 ± 0.59	0.26 ± 0.07	2.16 ± 0.87	0.78 ± 0.78	2 2 -	1
001004	14.51.26	Y	240.09	−56.81	6.0	326.6585	−2.9099	53.4	I	15.0 ± 0.7	15.0 ± 0.7	1	9.0 ± 3.2	43.3 ± 2.1	124.0 ± 6.1	1.52 ± 0.11	3 3 2	1
001009	14.32.04	Y	...	...	...	...	...	...	...	40.0 ± 0.7	26.0 ± 1.4	6	39.0 ± 4.1	...	...	...	3 - -	1
001011A	10.06.49	Y	67.00	53.00	34.0	152.1651	2.8893	...	G	0.93 ± 0.05	0.60 ± 0.05	...	0.77 ± 0.25	0.28 ± 0.04	5.7 ± 1.2	1.60 ± 0.29	1 1 -	1
001011B	12.59.22	N	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
001011C	15.54.48	Y	275.77	−50.90	0.1	343.6887	−16.5343	57.1	W	32.0 ± 0.7	28.0 ± 1.4	3	24.0 ± 2.8	18.5 ± 1.3	21.8 ± 1.7	1.54 ± 0.14	3 3 -	1
001012	14.15.34	Y	...	...	...	...	...	...	...	0.82 ± 0.12	0.59 ± 0.12	...	0.98 ± 0.33	...	...	...	3 - -	1
001013	18.13.38	N	203.00	−44.00	22.0	310.5963	18.2673	...	G	67.0 ± 0.7	59.0 ± 1.4	5	37.0 ± 3.2	27.5 ± 2.0	16.5 ± 1.2	2.29 ± 0.17	2 2 -	1
001015A	02.34.12	Y	...	...	...	...	...	...	...	54.0 ± 0.7	12.0 ± 1.4	3	53.0 ± 2.2	...	...	...	1 - -	1
001015B	17.31.12	N	...	...	...	...	...	...	...	8.0 ± 0.7	6.0 ± 1.4	3	8.0 ± 2.2	...	...	...	3 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
001019	23.59.17	Y	257.93	35.34	0.3	58.7577	34.7336	29.4	I	33.0 ± 0.7	18.0 ± 1.4	5	28.0 ± 4.5	8.19 ± 0.45	22.5 ± 1.2	1.97 ± 0.13	1 1 2	1
001020	17.17.49	N	...	...	...	...	...	...	...	19.0 ± 0.7	4.0 ± 1.4	3	19.0 ± 3.2	...	...	...	2 - -	1
001022A	00.18.18	N	196.00	15.00	24.0	317.1119	77.5246	...	G	7.0 ± 0.7	5.0 ± 0.7	2	6.0 ± 2.8	0.88 ± 0.17	1.71 ± 0.43	...	2 2 -	1
001022B	05.14.53	Y	275.00	−79.00	23.0	314.9808	−25.1117	...	G	10.0 ± 0.7	8.0 ± 0.7	2	11.0 ± 8.1	1.23 ± 0.11	3.93 ± 0.37	2.22 ± 0.21	3 3 -	1
001101	21.52.31	N	119.00	42.00	27.0	177.8527	29.2732	...	G	17.0 ± 3.5	15.0 ± 7.1	3	19.0 ± 2.8	1.23 ± 0.14	0.87 ± 0.11	1.81 ± 0.24	1 1 -	5
001105	09.49.01	Y	...	...	...	...	...	...	...	27.0 ± 0.7	26.0 ± 0.7	2	23.0 ± 2.8	...	...	...	1 - -	1
001106	17.17.48	Y	190.00	−15.00	40.0	298.8197	47.7804	...	G	0.97 ± 0.03	0.41 ± 0.03	...	0.71 ± 0.17	0.36 ± 0.06	2.78 ± 0.55	1.64 ± 0.41	2 2 -	1
001107	02.17.09	N	...	...	...	...	...	...	...	7.0 ± 0.7	7.0 ± 0.7	1	8.0 ± 3.6	...	...	...	4 - -	1
001108	21.19.00	Y	233.00	48.00	27.0	77.7171	52.5718	...	G	26.0 ± 0.7	10.0 ± 1.4	4	26.0 ± 4.5	1.46 ± 0.19	1.64 ± 0.25	1.50 ± 0.35	2 1 2	1
001109	09.23.13	Y	277.53	55.30	0.3	84.2352	24.9574	50.3	W	60.0 ± 0.7	38.0 ± 2.8	13	54.0 ± 3.6	4.23 ± 0.34	3.38 ± 0.35	1.95 ± 0.17	1 1 -	1
001110	12.17.29	Y	196.00	−6.00	21.0	308.6323	56.7326	...	G	41.0 ± 0.7	25.0 ± 1.4	4	35.0 ± 2.8	11.57 ± 0.93	24.3 ± 2.2	1.86 ± 0.16	2 2 -	1
001115	14.06.41	N	34.00	−7.00	21.0	171.7060	−61.5790	...	G	147.0 ± 0.7	51.0 ± 2.8	16	134.0 ± 4.1	10.54 ± 0.99	6.22 ± 0.70	1.33 ± 0.27	4 4 -	1
001117	18.19.12	Y	...	...	...	...	...	...	...	0.94 ± 0.05	0.28 ± 0.05	...	1.12 ± 0.46	...	...	...	2 - -	1
001118A	08.19.44	N	42.00	−2.00	22.0	175.9136	−52.4461	...	G	30.0 ± 0.7	26.0 ± 1.4	3	24.0 ± 2.8	5.62 ± 0.52	5.53 ± 0.60	1.22 ± 0.27	4 4 -	1
001118B	20.43.36	Y	171.00	−76.00	22.0	297.6044	−14.0408	...	G	29.0 ± 0.7	24.0 ± 0.7	2	24.0 ± 5.1	3.10 ± 0.24	3.49 ± 0.35	1.77 ± 0.16	3 3 -	1
001121	20.57.25	Y	...	...	...	...	...	...	...	18.0 ± 0.7	15.0 ± 1.4	3	16.0 ± 2.8	...	...	...	3 - -	1
001123	13.56.47	N	...	...	...	...	...	...	...	13.0 ± 0.7	8.0 ± 1.4	5	19.0 ± 5.0	...	...	...	4 - -	1
001201A	13.08.56	Y	101.00	−65.00	44.0	275.1085	−25.1802	...	G	6.0 ± 2.1	5.0 ± 2.1	2	6.3 ± 1.1	0.54 ± 0.07	0.97 ± 0.13	1.69 ± 0.30	3 3 -	3
001201B	16.38.40	Y	...	...	...	...	...	...	...	12.0 ± 0.7	10.0 ± 1.4	3	14.0 ± 5.4	...	...	...	4 - -	1
001204A	02.23.37	Y	77.00	−4.00	34.0	204.2972	−24.7743	...	G	5.0 ± 0.7	5.0 ± 0.7	1	4.89 ± 0.91	0.74 ± 0.10	2.30 ± 0.37	1.13 ± 0.39	4 4 -	1
001204B	08.01.09	Y	40.29	12.90	0.2	160.0576	−41.9276	99.3	I	2.50 ± 0.08	0.62 ± 0.08	...	2.4 ± 1.0	0.68 ± 0.11	6.70 ± 0.64	2.29 ± 0.31	4 4 1	1
001205	14.59.30	Y	260.00	41.00	31.0	65.8494	34.0615	...	G	31.0 ± 0.7	9.0 ± 1.4	3	35.0 ± 3.2	2.15 ± 0.17	3.62 ± 0.30	2.00 ± 0.19	2 2 1	1
001206A	09.37.01	Y	49.00	−36.00	33.0	238.1995	−58.1558	...	G	49.0 ± 0.7	43.0 ± 1.4	5	41.0 ± 5.1	6.70 ± 0.55	4.13 ± 0.43	1.45 ± 0.16	1 1 -	1
001206B	14.31.58	Y	...	...	...	...	...	...	...	13.0 ± 0.7	7.0 ± 0.7	2	15.0 ± 4.1	...	...	...	2 - -	1
001206C	21.29.40	Y	209.00	−49.00	27.0	313.6992	12.5173	...	G	32.0 ± 0.7	27.0 ± 1.4	4	27.0 ± 4.1	5.55 ± 0.47	4.47 ± 0.53	1.58 ± 0.18	2 2 -	1
001212A	09.33.42	Y	7.00	−74.00	43.0	305.1380	−43.0277	...	G	123.0 ± 0.7	42.0 ± 2.1	8	116.0 ± 3.2	7.98 ± 0.51	4.30 ± 0.35	0.93 ± 0.17	1 1 2	1
001212B	14.57.23	Y	102.40	36.44	0.1	179.4755	15.3731	58.4	I	74.0 ± 0.7	40.0 ± 1.4	6	67.0 ± 2.2	20.4 ± 1.9	27.8 ± 2.6	1.43 ± 0.27	4 4 -	1
001213	23.07.05	Y	...	...	...	...	...	...	...	469.0 ± 0.7	78.0 ± 4.9	45	454.0 ± 6.1	...	...	...	2 - -	1
001214A	05.59.07	Y	192.00	−42.00	64.0	302.2484	20.8672	...	G	19.0 ± 0.7	11.0 ± 1.4	5	18.0 ± 6.7	1.21 ± 0.11	2.70 ± 0.30	2.58 ± 0.23	1 1 -	1
001214B	21.03.05	N	...	...	...	...	...	...	...	6.0 ± 0.7	6.0 ± 0.7	1	6.0 ± 3.6	...	...	...	3 - -	1
001215A	04.56.35	N	40.00	2.00	29.0	169.1713	−50.8591	...	G	30.0 ± 5.7	21.0 ± 11.3	5	33.0 ± 5.0	2.13 ± 0.21	0.91 ± 0.10	2.03 ± 0.20	1 1 4	8
001215B	14.34.34	Y	298.00	−17.00	13.0	23.9254	−20.8310	...	G	13.0 ± 0.7	11.0 ± 1.4	3	13.0 ± 2.2	2.37 ± 0.76	5.4 ± 1.2	...	1 2 1	1
001216	14.13.22	Y	71.00	−54.00	53.0	262.1406	−40.1673	...	G	0.30 ± 0.15	0.30 ± 0.15	...	1.07 ± 0.63	0.36 ± 0.05	7.1 ± 1.6	...	1 1 -	1
001217	16.20.29	Y	195.00	44.00	32.0	117.6471	73.0403	...	G	68.0 ± 0.7	49.0 ± 2.1	11	69.0 ± 6.3	4.32 ± 0.31	2.27 ± 0.26	2.22 ± 0.17	3 3 -	1
001218	02.06.08	Y	102.00	18.00	56.0	196.4406	7.3662	...	G	6.0 ± 0.7	5.0 ± 0.7	2	15.0 ± 4.2	0.87 ± 0.20	1.33 ± 0.36	2.14 ± 0.55	4 4 -	1
001219A	07.35.29	N	50.00	56.00	36.0	142.6678	−1.0714	...	G	239.0 ± 0.7	53.0 ± 3.5	26	234.0 ± 2.8	5.9 ± 1.5	3.19 ± 0.53	...	4 4 -	1
001219B	17.10.04	Y	...	...	...	...	...	...	...	15.0 ± 0.7	10.0 ± 1.4	3	18.0 ± 5.1	...	...	...	3 - -	1
001226A	09.24.44	Y	269.00	−33.00	38.0	357.6411	−3.9882	...	G	5.53 ± 0.09	1.78 ± 0.09	...	3.0 ± 2.2	1.22 ± 0.19	4.49 ± 0.79	1.56 ± 0.36	2 2 -	1
001226B	20.14.44	Y	350.00	−39.00	26.0	355.2059	−67.5613	...	G	35.0 ± 0.7	25.0 ± 1.4	3	33.0 ± 5.1	3.36 ± 0.30	2.82 ± 0.40	0.46 ± 0.26	3 3 -	1
001228	12.03.14	N	...	...	...	...	...	...	...	25.0 ± 0.7	17.0 ± 1.4	3	13.0 ± 3.2	...	...	...	2 - -	1
010104A	00.00.53	N	...	...	...	...	...	...	...	2.0 ± 0.7	2.0 ± 0.7	1	6.0 ± 5.4	...	...	...	3 - -	1
010104B	17.21.30	Y	317.37	63.51	0.12	100.9771	10.5564	93.2	I	3.0 ± 0.7	3.0 ± 0.7	1	3.0 ± 1.4	1.05 ± 0.07	7.82 ± 0.52	2.15 ± 0.15	3 3 2	1
010109	02.38.06	Y	323.26	−49.52	1.5	348.4745	−46.1620	60.1	I	9.0 ± 0.7	9.0 ± 0.7	1	7.0 ± 1.4	39.6 ± 2.0	138.8 ± 7.2	1.56 ± 0.12	2 2 1	1
010111	18.43.28	Y	141.00	55.00	38.0	161.4133	43.5341	...	G	42.0 ± 0.7	25.0 ± 2.1	7	43.0 ± 4.1	2.22 ± 0.19	1.59 ± 0.23	2.66 ± 0.22	3 3 -	1
010113	04.54.57	N	325.00	39.00	40.0	87.0929	−10.2011	...	G	5.0 ± 0.7	5.0 ± 0.7	1	6.0 ± 3.2	0.53 ± 0.06	1.84 ± 0.26	1.80 ± 0.24	3 3 -	1
010114	03.43.52	Y	158.00	−64.00	30.0	288.3614	−5.1463	...	G	25.0 ± 0.7	20.0 ± 1.4	3	24.0 ± 2.2	2.85 ± 0.24	3.17 ± 0.42	1.62 ± 0.19	1 1 -	1
010119A	00.19.55	N	150.00	12.00	21.0	224.9716	47.1327	...	G	...	...	...	...	...	...	...	- - -	1
010119B	10.19.37	N	283.46	12.02	0.1	43.9268	4.9241	96.9	I	6.0 ± 0.7	2.0 ± 0.7	2	10.0 ± 5.4	4.32 ± 0.73	23.4 ± 2.6	2.01 ± 0.43	2 2 -	1
010121	17.28.36	Y	141.00	−45.00	40.0	269.0583	3.7976	...	G	6.0 ± 0.7	5.0 ± 0.7	2	9.0 ± 5.1	1.13 ± 0.11	4.63 ± 0.43	1.80 ± 0.21	1 1 -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
010123	02.18.41	Y	99.00	24.00	33.0	189.7653	7.5123	...	G	24.0 ± 0.7	13.0 ± 1.4	6	24.0 ± 6.1	1.77 ± 0.23	1.88 ± 0.43	0.85 ± 0.42	4 4 -	1
010126A	03.22.59	Y	...	...	...	...	...	...	...	2.44 ± 0.05	0.52 ± 0.05	...	2.19 ± 0.67	...	...	...	4 - -	1
010126B	09.10.46	N	179.29	49.75	0.3	144.0320	65.0957	17.1	A	6.0 ± 0.7	3.0 ± 0.7	2	7.0 ± 3.2	0.82 ± 0.34	7.0 ± 3.3	1.4 ± 1.0	2 4 -	1
010126C	20.26.49	N	349.00	−27.00	40.0	27.7819	−68.7850	...	G	21.0 ± 0.7	18.0 ± 0.7	2	20.0 ± 2.2	1.91 ± 0.18	1.48 ± 0.29	2.47 ± 0.23	2 2 -	1
010127	08.29.18	Y	...	...	...	...	...	...	...	169.0 ± 0.7	97.0 ± 3.5	21	147.0 ± 4.5	...	...	...	1 - -	1
010203	04.37.26	Y	118.00	−59.00	33.0	271.8337	−15.7316	...	G	...	...	...	...	...	...	...	- - -	1
010208A	01.01.24	Y	...	...	...	...	...	...	...	13.0 ± 0.7	12.0 ± 0.7	2	13.0 ± 4.1	...	...	...	2 - -	1
010208B	04.08.22	N	33.00	48.00	35.0	136.5941	−12.7232	...	G	19.0 ± 0.7	13.0 ± 1.4	5	18.0 ± 5.0	1.24 ± 0.13	1.43 ± 0.23	1.85 ± 0.23	3 3 -	1
010208C	14.26.17	N	131.00	39.00	48.0	183.1010	37.8188	...	G	10.0 ± 0.7	10.0 ± 0.7	2	12.0 ± 2.2	3.02 ± 0.22	4.94 ± 0.48	0.79 ± 0.20	3 3 4	1
010209A	05.10.59	Y	8.00	28.00	44.0	117.7137	−34.6747	...	G	...	...	...	...	...	...	...	- - -	1
010209B	07.28.53	Y	...	...	...	...	...	...	...	3.42 ± 0.05	0.61 ± 0.05	...	2.7 ± 1.2	...	...	...	2 - -	1
010211	22.33.36	Y	335.00	−17.00	26.0	41.0836	−53.6369	...	G	32.0 ± 0.7	22.0 ± 1.4	5	34.0 ± 5.4	2.39 ± 0.23	1.94 ± 0.39	2.10 ± 0.22	2 2 -	1
010212A	05.09.51	Y	...	...	...	...	...	...	...	8.0 ± 0.7	5.0 ± 1.4	3	6.72 ± 0.50	...	...	...	1 - -	1
010212B	17.26.27	Y	219.00	47.00	30.0	83.9827	61.4467	...	G	30.0 ± 0.7	29.0 ± 0.7	2	26.0 ± 2.2	5.28 ± 0.37	5.70 ± 0.53	1.89 ± 0.15	3 3 -	1
010212C	23.57.13	N	77.00	−43.00	55.0	247.9725	−36.5040	...	G	5.0 ± 0.7	5.0 ± 0.7	1	7.0 ± 4.5	0.52 ± 0.06	1.38 ± 0.20	2.26 ± 0.27	1 1 -	1
010213	02.57.23	N	257.34	39.26	0.0	63.4030	35.8343	75.7	W	15.0 ± 0.7	15.0 ± 0.7	1	10.0 ± 2.2	5.11 ± 0.33	10.46 ± 0.72	2.21 ± 0.15	3 3 -	1
010214	08.48.07	Y	265.24	48.58	0.1	75.3474	31.3428	18.0	W	19.0 ± 0.7	19.0 ± 0.7	1	17.0 ± 4.1	3.44 ± 0.24	4.31 ± 0.40	2.06 ± 0.15	3 3 -	1
010217	02.27.42	N	...	...	...	...	...	...	...	10.0 ± 0.7	8.0 ± 0.7	2	10.0 ± 3.2	...	...	...	3 - -	1
010220A	19.20.54	N	315.00	2.00	26.0	50.8423	−27.2110	...	G	...	...	...	...	...	...	...	- - -	1
010220B	20.31.21	N	293.00	10.00	40.0	46.4805	−4.3088	...	G	14.0 ± 1.4	13.0 ± 1.4	2	23.0 ± 4.5	1.54 ± 0.19	1.52 ± 0.26	1.49 ± 0.26	2 2 -	2
010220C	22.51.04	Y	39.25	61.77	0.1	135.0725	1.4121	33.5	W	36.0 ± 0.7	28.0 ± 1.4	6	31.0 ± 5.1	4.63 ± 0.31	4.09 ± 0.35	2.57 ± 0.16	3 3 -	1
010222A	07.23.03	Y	223.05	43.02	0.1	73.8820	60.8704	38.5	W	99.0 ± 0.7	99.0 ± 0.7	2	74.0 ± 4.1	83.7 ± 6.4	74.2 ± 5.9	1.57 ± 0.16	1 1 -	1
010222B	20.53.43	Y	106.00	26.00	53.0	190.6525	14.1058	...	G	1.25 ± 0.06	0.44 ± 0.06	...	1.21 ± 0.19	0.63 ± 0.28	5.5 ± 2.5	2.96 ± 0.71	3 4 -	1
010226A	19.15.13	Y	242.00	−64.00	30.0	322.5398	−8.8936	...	G	24.0 ± 0.7	22.0 ± 1.4	3	20.0 ± 3.6	7.09 ± 0.51	9.80 ± 0.83	2.06 ± 0.17	1 1 -	1
010226B	21.27.13	N	181.00	31.00	65.0	189.6318	78.9421	...	G	1.0 ± 0.7	1.0 ± 0.7	1	4.0 ± 2.2	0.23 ± 0.10	1.96 ± 0.41	2.62 ± 0.65	4 3 4	1
010301	05.48.47	Y	173.00	3.00	20.0	261.3017	59.2915	...	G	0.66 ± 0.05	0.33 ± 0.05	...	0.38 ± 0.20	0.62 ± 0.07	16.4 ± 3.1	0.92 ± 0.36	4 4 -	1
010303	15.15.28	N	294.00	55.00	35.0	87.1066	15.9553	...	G	87.0 ± 5.7	25.0 ± 22.6	14	86.0 ± 4.5	2.04 ± 0.23	0.53 ± 0.08	1.78 ± 0.24	3 3 -	8
010304	05.18.51	N	316.59	53.21	1.0	92.9806	3.9681	12.1	W	13.0 ± 0.7	13.0 ± 0.7	1	12.0 ± 3.2	4.02 ± 0.27	8.16 ± 0.61	2.19 ± 0.15	3 3 -	1
010307	16.27.41	Y	159.00	−29.00	35.0	270.3551	25.1712	...	G	8.0 ± 0.7	6.0 ± 1.4	3	9.0 ± 4.5	1.64 ± 0.16	4.10 ± 0.44	2.02 ± 0.22	3 4 3	1
010308	15.38.57	N	37.00	−60.00	30.0	282.9605	−53.2229	...	G	4.0 ± 0.7	4.0 ± 0.7	1	3.0 ± 2.2	3.55 ± 0.25	31.7 ± 2.2	1.71 ± 0.15	3 3 -	1
010309	12.33.51	Y	19.00	−2.00	29.0	137.1462	−64.1918	...	G	2.62 ± 0.05	1.17 ± 0.05	...	2.36 ± 0.58	0.70 ± 0.07	3.68 ± 0.48	2.30 ± 0.25	2 2 -	1
010313	23.15.11	N	...	...	...	...	...	...	...	41.0 ± 0.7	15.0 ± 2.1	9	41.0 ± 5.4	...	...	...	3 - -	1
010317	06.28.07	Y	33.00	−5.00	24.0	167.4441	−60.7069	...	G	32.0 ± 0.7	12.0 ± 0.7	2	30.0 ± 3.2	13.6 ± 1.0	86.2 ± 6.3	1.87 ± 0.17	3 2 -	1
010321	12.08.17	N	204.00	−14.00	36.0	319.0347	47.4737	...	G	23.0 ± 1.4	7.0 ± 2.8	5	28.0 ± 6.4	1.30 ± 0.21	1.22 ± 0.25	1.39 ± 0.46	1 1 -	2
010324	11.32.28	Y	107.78	20.08	0.2	196.9034	13.1941	86.6	A	305.0 ± 0.7	108.0 ± 3.5	23	292.0 ± 4.5	12.37 ± 0.95	7.62 ± 0.68	1.82 ± 0.17	1 1 -	1
010325	06.38.06	Y	19.00	25.00	19.0	129.9543	−37.5366	...	G	12.0 ± 0.7	10.0 ± 0.7	2	10.0 ± 4.1	3.04 ± 0.31	6.16 ± 0.68	1.29 ± 0.19	2 2 -	1
010326	03.14.56	Y	132.96	−38.30	0.3	260.0487	3.8803	76.9	I	26.0 ± 0.7	23.0 ± 1.4	4	19.0 ± 3.2	10.86 ± 0.68	18.2 ± 1.2	1.80 ± 0.14	1 1 4	1
010327	05.58.48	Y	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
010330	14.28.23	Y	35.00	−67.00	59.0	290.2464	−47.8883	...	G	14.0 ± 1.4	6.0 ± 2.8	4	16.0 ± 4.2	0.59 ± 0.10	0.70 ± 0.15	1.99 ± 0.43	1 1 -	2
010402	13.36.08	Y	301.00	36.00	43.0	72.6188	2.5129	...	G	1.80 ± 0.08	1.33 ± 0.08	...	1.28 ± 0.28	0.56 ± 0.05	5.17 ± 0.80	1.42 ± 0.24	1 1 2	1
010404	08.27.49	Y	15.00	10.00	37.0	126.4210	−52.8137	...	G	15.0 ± 0.7	13.0 ± 1.4	3	18.0 ± 4.5	2.56 ± 0.31	2.88 ± 0.53	1.16 ± 0.26	2 2 -	1
010405	19.30.21	Y	...	...	...	...	...	...	...	1.59 ± 0.13	0.66 ± 0.13	...	...	...	...	...	2 - -	1
010406	00.56.16	N	158.00	46.00	33.0	169.1665	56.6477	...	G	...	...	...	...	...	...	...	- - -	1
010407A	07.16.56	Y	84.00	37.00	34.0	172.0898	2.5597	...	G	17.0 ± 0.7	12.0 ± 1.4	4	17.0 ± 3.2	1.07 ± 0.10	1.10 ± 0.24	2.16 ± 0.23	3 3 2	1
010407B	11.11.03	Y	...	...	...	...	...	...	...	6.0 ± 0.7	4.0 ± 1.4	3	6.0 ± 1.4	...	...	...	2 - -	1
010407C	22.36.07	Y	68.00	40.00	54.0	162.0954	−5.5420	...	G	2.0 ± 0.7	2.0 ± 0.7	1	5.36 ± 0.80	0.31 ± 0.05	1.38 ± 0.26	1.91 ± 0.46	3 3 2	1
010408A	00.35.44	Y	...	...	...	...	...	...	...	8.0 ± 0.7	6.0 ± 1.4	3	17.0 ± 4.2	...	...	...	2 - -	1
010408B	06.45.22	Y	...	...	...	...	...	...	...	6.78 ± 0.11	6.67 ± 0.11	...	3.81 ± 0.30	...	...	...	2 - -	1
010410	10.02.26	N	...	...	...	...	...	...	...	7.0 ± 0.7	6.0 ± 0.7	2	7.0 ± 3.6	...	...	...	3 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
010411A	13.10.01	N	13.00	−2.00	52.0	123.2626	−64.8714	...	G	2.0 ± 1.4	2.0 ± 1.4	1	3.0 ± 2.2	0.37 ± 0.08	1.19 ± 0.31	...	2 2 1	2
010411B	16.06.07	Y	218.00	−11.00	36.0	338.8834	44.7383	...	G	26.0 ± 0.7	15.0 ± 0.7	2	23.0 ± 3.2	6.17 ± 0.67	10.4 ± 1.1	2.45 ± 0.23	4 4 -	1
010412	21.46.29	Y	290.91	13.62	0.1	48.6952	−0.7883	23.6	W	73.0 ± 0.7	67.0 ± 1.4	4	60.0 ± 2.2	29.8 ± 2.2	12.9 ± 1.1	1.75 ± 0.15	1 1 -	1
010414	23.47.30	N	218.00	−88.00	25.0	303.8717	−25.3146	...	G	34.0 ± 0.7	16.0 ± 2.1	9	33.0 ± 5.4	1.29 ± 0.14	0.94 ± 0.22	1.99 ± 0.23	1 1 -	1
010415A	00.03.27	Y	...	...	...	...	...	...	...	11.0 ± 0.7	6.0 ± 1.4	4	19.0 ± 6.7	...	...	...	1 - -	1
010415B	19.11.43	Y	200.00	−30.00	37.0	310.2622	32.4649	...	G	...	...	...	...	...	...	...	- - -	1
010418	08.12.03	Y	342.00	−1.00	19.0	69.1671	−50.5187	...	G	76.0 ± 0.7	53.0 ± 2.1	8	70.0 ± 2.2	21.8 ± 1.7	9.72 ± 0.86	1.85 ± 0.16	2 2 -	1
010420	22.37.56	N	159.00	−3.00	33.0	250.2874	45.5756	...	G	6.0 ± 0.7	6.0 ± 0.7	1	5.0 ± 2.2	2.00 ± 0.17	8.81 ± 0.79	1.26 ± 0.18	1 1 -	1
010427A	01.38.21	Y	13.00	28.00	24.0	123.0831	−34.8716	...	G	30.0 ± 0.7	24.0 ± 1.4	3	24.0 ± 5.4	4.75 ± 0.39	4.39 ± 0.48	1.88 ± 0.18	2 2 -	1
010427B	09.20.04	N	319.00	24.00	23.0	72.4091	−17.1001	...	G	70.0 ± 0.7	66.0 ± 1.4	5	42.0 ± 5.1	52.6 ± 4.0	42.0 ± 3.2	0.51 ± 0.26	1 1 -	1
010427C	13.14.05	N	98.00	−36.00	24.0	244.3226	−19.2090	...	G	24.0 ± 1.4	17.0 ± 2.8	5	32.0 ± 6.3	1.44 ± 0.17	0.87 ± 0.13	1.45 ± 0.23	3 3 -	2
010427D	18.44.15	Y	...	...	...	...	...	...	...	2.58 ± 0.05	0.84 ± 0.05	...	2.46 ± 0.51	...	...	...	2 - -	1
010428	13.29.39	N	...	...	...	...	...	...	...	3.0 ± 0.7	2.0 ± 0.7	2	4.0 ± 2.8	...	...	...	2 - -	1
010429	22.22.43	N	...	...	...	...	...	...	...	8.0 ± 0.7	8.0 ± 0.7	1	8.0 ± 2.8	...	...	...	2 - -	1
010430	23.03.30	N	8.00	−4.00	39.0	110.7410	−66.4106	...	G	...	...	...	...	...	...	...	- - -	1
010501	06.37.27	N	286.71	−70.18	0.1	325.1827	−26.6947	35.0	W	38.0 ± 3.5	30.0 ± 7.1	4	35.0 ± 5.1	1.98 ± 0.17	1.02 ± 0.12	2.45 ± 0.20	1 1 -	5
010504	02.43.46	Y	16.00	−33.00	17.0	278.8655	−83.5307	...	G	21.0 ± 0.7	18.0 ± 1.4	3	15.0 ± 6.1	19.3 ± 1.5	32.2 ± 2.7	1.59 ± 0.17	2 2 -	1
010505A	06.26.28	Y	41.00	10.00	39.0	163.0861	−43.9223	...	G	2.39 ± 0.05	0.80 ± 0.05	...	2.31 ± 0.61	0.61 ± 0.06	2.22 ± 0.29	2.10 ± 0.25	2 2 1	1
010505B	11.45.50	Y	192.00	0.00	42.0	301.0476	62.8592	...	G	4.53 ± 0.08	1.09 ± 0.08	...	3.1 ± 1.3	0.24 ± 0.07	2.18 ± 0.29	2.32 ± 0.50	4 4 1	1
010507A	02.24.27	Y	...	...	...	...	...	...	...	1.52 ± 0.04	0.27 ± 0.04	...	1.48 ± 0.56	...	...	...	3 - -	1
010507B	09.12.11	Y	347.00	81.00	25.0	118.7944	18.9708	...	G	15.0 ± 2.8	12.0 ± 5.7	4	16.0 ± 3.6	1.32 ± 0.11	1.20 ± 0.12	1.74 ± 0.21	2 2 1	4
010510	00.42.46	N	47.00	−1.00	46.0	180.1188	−48.1124	...	G	9.0 ± 2.8	6.0 ± 5.7	4	12.0 ± 3.6	1.06 ± 0.17	1.06 ± 0.23	1.37 ± 0.33	2 2 -	4
010511	16.34.26	N	307.00	54.00	26.0	90.0480	8.9141	...	G	15.0 ± 0.7	11.0 ± 1.4	4	19.0 ± 7.3	0.90 ± 0.10	1.32 ± 0.28	1.99 ± 0.26	1 1 -	1
010514	16.42.19	Y	55.00	−69.00	38.0	284.2156	−41.4674	...	G	2.88 ± 0.03	0.69 ± 0.03	...	2.34 ± 0.81	0.28 ± 0.05	1.18 ± 0.22	0.78 ± 0.52	1 1 -	1
010515A	02.20.32	Y	22.00	−7.00	27.0	147.9159	−68.0802	...	G	16.0 ± 0.7	8.0 ± 0.7	2	14.0 ± 2.8	2.67 ± 0.22	8.53 ± 0.70	2.59 ± 0.20	2 2 -	1
010515B	18.04.32	N	...	...	...	...	...	...	...	18.0 ± 0.7	13.0 ± 1.4	3	18.0 ± 2.8	...	...	...	1 - -	1
010517	23.51.33	Y	...	...	...	...	...	...	...	42.0 ± 0.7	30.0 ± 2.1	7	37.0 ± 4.1	...	...	...	1 - -	1
010518A	06.43.09	N	161.68	−57.78	0.1	286.9049	1.1578	34.6	W	23.0 ± 0.7	21.0 ± 1.4	3	22.0 ± 2.8	1.86 ± 0.15	1.38 ± 0.21	2.39 ± 0.19	3 3 -	1
010518B	08.24.33	Y	138.00	−51.00	40.0	271.9421	−1.8331	...	G	15.0 ± 0.7	7.0 ± 1.4	5	15.0 ± 2.2	0.73 ± 0.10	1.35 ± 0.28	1.52 ± 0.29	3 3 -	1
010521	06.40.50	N	...	...	...	...	...	...	...	35.0 ± 0.7	18.0 ± 2.1	8	34.0 ± 3.2	...	...	...	2 - -	1
010522	20.51.48	Y	257.00	−39.00	26.0	347.3111	0.8431	...	G	14.0 ± 0.7	14.0 ± 0.7	1	14.0 ± 3.6	2.83 ± 0.22	4.04 ± 0.41	1.03 ± 0.22	1 4 1	1
010528	03.20.25	Y	56.00	8.00	36.0	179.1294	−35.4242	...	G	3.28 ± 0.08	1.02 ± 0.08	...	3.25 ± 0.74	0.65 ± 0.11	2.48 ± 0.52	1.37 ± 0.38	2 2 -	1
010602	11.57.08	N	84.00	3.00	53.0	201.3442	−15.2736	...	G	2.0 ± 0.7	2.0 ± 0.7	1	3.0 ± 1.4	0.27 ± 0.09	1.07 ± 0.29	...	2 2 -	1
010605	14.40.32	Y	84.00	33.00	49.0	175.4613	0.4052	...	G	0.81 ± 0.06	0.31 ± 0.06	...	1.36 ± 0.15	0.19 ± 0.05	1.73 ± 0.44	1.89 ± 0.73	2 2 1	1
010607	08.58.28	Y	...	...	...	...	...	...	...	52.0 ± 0.7	41.0 ± 1.4	5	49.0 ± 3.2	...	...	...	1 - -	1
010610	11.39.15	Y	...	...	...	...	...	...	...	21.0 ± 0.7	13.0 ± 1.4	4	21.0 ± 2.2	...	...	...	1 - -	1
010611A	07.38.20	N	349.00	−31.00	41.0	16.7023	−68.8316	...	G	8.0 ± 2.1	8.0 ± 2.1	1	10.0 ± 3.6	0.62 ± 0.07	0.82 ± 0.11	2.36 ± 0.29	1 1 -	3
010611B	22.06.07	N	...	...	...	...	...	...	...	6.0 ± 0.7	6.0 ± 0.7	1	5.0 ± 2.8	...	...	...	2 - -	1
010612A	02.33.13	Y	270.82	−32.13	1.0	359.1589	−4.8935	8.4	H	31.0 ± 0.7	22.0 ± 1.4	6	33.0 ± 5.1	6.01 ± 0.45	6.29 ± 0.67	1.08 ± 0.26	4 4 1	1
010612B	09.50.01	N	328.00	−30.00	38.0	17.8098	−50.7444	...	G	13.0 ± 2.1	11.0 ± 2.1	2	13.0 ± 2.2	0.62 ± 0.08	0.72 ± 0.12	2.16 ± 0.29	1 1 -	3
010616	01.38.05	Y	63.00	28.00	30.0	168.0127	−16.8317	...	G	11.0 ± 0.7	7.0 ± 1.4	3	11.0 ± 2.8	0.85 ± 0.09	1.45 ± 0.25	2.11 ± 0.27	2 2 1	1
010617	02.52.52	N	259.00	27.00	41.0	49.3241	31.8550	...	G	26.0 ± 2.8	9.0 ± 5.7	5	36.0 ± 8.1	2.21 ± 0.43	0.92 ± 0.23	2.72 ± 0.39	4 4 -	4
010618A	12.52.29	N	...	...	...	...	...	...	...	16.0 ± 0.7	8.0 ± 1.4	6	17.0 ± 5.4	...	...	...	3 - -	1
010618B	16.06.37	N	95.00	22.00	29.0	189.8612	3.3236	...	G	4.0 ± 0.7	4.0 ± 0.7	1	4.0 ± 2.2	0.98 ± 0.12	4.15 ± 0.56	1.36 ± 0.25	2 2 -	1
010619A	02.58.26	Y	123.00	−64.00	20.0	277.5828	−15.9918	...	G	470.0 ± 0.7	78.0 ± 3.5	30	449.0 ± 5.4	19.3 ± 1.3	23.9 ± 1.6	2.49 ± 0.16	3 3 -	1
010619B	15.17.01	Y	...	...	...	...	...	...	...	3.75 ± 0.08	2.50 ± 0.08	...	2.11 ± 0.64	...	...	...	1 - -	1
010623	03.31.15	Y	321.00	28.00	44.0	76.7548	−15.7381	...	G	5.0 ± 0.7	5.0 ± 0.7	1	5.15 ± 0.88	0.55 ± 0.08	1.69 ± 0.32	1.57 ± 0.30	3 3 -	1
010624	13.35.30	Y	38.00	−83.00	22.0	299.3755	−33.4200	...	G	1.06 ± 0.06	0.94 ± 0.06	...	0.93 ± 0.34	0.64 ± 0.06	9.2 ± 1.6	1.66 ± 0.19	1 1 -	1
010625	01.15.54	Y	...	...	...	...	...	...	...	26.0 ± 0.7	18.0 ± 1.4	3	28.0 ± 2.8	...	...	...	3 - -	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	$T_{\rm det}$ (s)	$T_{\rm a}$ (s)	$N_{\rm a}$	T_{90} (s)	Fluence (10^{-6} cgs)	$F_{\rm peak}$ (10^{-7} cgs)	Γ	Unit	R
010626	02.25.54	N	303.00	39.00	45.0	76.0040	2.7976	...	G	76.0 ± 0.7	6.0 ± 1.4	6	85.0 ± 5.4	1.12 ± 0.28	1.30 ± 0.29	2.69 ± 0.68	1 1 -	1
010629A	12.21.06	Y	248.16	−18.72	0.2	358.6159	19.4812	87.8	I	14.0 ± 0.7	7.0 ± 0.7	2	14.0 ± 3.6	2.49 ± 0.33	6.62 ± 0.78	2.60 ± 0.26	1 4 1	1
010629B	19.10.57	Y	94.00	11.00	20.0	199.1029	−2.7251	...	G	14.0 ± 0.7	14.0 ± 0.7	1	12.0 ± 2.2	5.21 ± 0.40	11.28 ± 0.99	2.28 ± 0.17	2 2 -	1
010703	20.30.49	Y	...	...	...	...	...	...	...	19.0 ± 0.7	9.0 ± 1.4	6	19.0 ± 5.4	...	...	...	3 - -	1
010705	04.14.12	N	67.00	12.00	20.0	183.5524	−24.5292	...	G	6.0 ± 2.8	4.0 ± 2.8	2	11.0 ± 6.7	0.72 ± 0.14	0.91 ± 0.19	1.69 ± 0.44	2 2 -	4
010710A	14.48.28	Y	...	...	...	...	...	...	...	12.0 ± 0.7	10.0 ± 1.4	3	17.0 ± 4.1	...	...	...	4 - -	1
010710B	23.34.13	Y	149.00	27.00	25.0	202.7305	51.1497	...	G	28.0 ± 0.7	26.0 ± 1.4	3	20.0 ± 2.2	24.8 ± 1.8	38.3 ± 2.9	2.15 ± 0.17	2 2 -	1
010711	02.43.50	N	...	...	...	...	...	...	...	57.0 ± 0.7	12.0 ± 1.4	3	68.0 ± 14.4	...	...	...	2 - -	1
010714	13.18.30	Y	...	...	...	...	...	...	...	11.0 ± 0.7	7.0 ± 0.7	2	14.0 ± 5.8	...	...	...	3 - -	1
010715	20.23.41	Y	...	...	...	...	...	...	...	43.0 ± 0.7	32.0 ± 1.4	5	45.0 ± 7.3	...	...	...	2 - -	1
010718	08.16.25	Y	...	...	...	...	...	...	...	3.52 ± 0.08	0.55 ± 0.08	...	3.2 ± 1.3	...	...	...	1 - -	1
010721	03.56.51	Y	118.00	17.00	29.0	203.9254	20.8310	...	G	6.0 ± 0.7	6.0 ± 0.7	1	5.0 ± 1.4	12.01 ± 0.94	68.4 ± 5.3	0.72 ± 0.22	2 2 -	1
010723	16.49.55	Y	266.00	−4.00	83.0	21.4450	13.0430	...	G	26.0 ± 4.2	8.0 ± 8.5	5	30.0 ± 5.4	2.08 ± 0.48	0.95 ± 0.24	2.57 ± 0.45	2 4 -	6
010727A	01.06.24	Y	279.00	55.00	43.0	84.1187	24.0717	...	G	3.0 ± 0.7	3.0 ± 0.7	1	7.0 ± 3.6	0.37 ± 0.08	1.90 ± 0.42	0.62 ± 0.59	1 1 -	1
010727B	01.59.30	N	...	...	...	...	...	...	...	37.0 ± 0.7	17.0 ± 2.1	8	37.0 ± 10.2	...	...	...	3 - -	1
010727C	12.29.52	Y	276.00	−26.00	22.0	6.7320	−5.9899	...	G	15.0 ± 0.7	10.0 ± 1.4	3	15.0 ± 4.1	1.59 ± 0.21	2.07 ± 0.36	2.05 ± 0.31	4 4 -	1
010728	19.24.42	Y	175.03	−7.95	0.1	274.1936	50.8989	64.7	A	8.0 ± 0.7	8.0 ± 0.7	1	6.61 ± 0.79	1.24 ± 0.12	2.37 ± 0.35	1.66 ± 0.23	3 3 -	1
010730	11.58.39	Y	244.00	42.00	43.0	66.4246	46.0608	...	G	13.0 ± 0.7	11.0 ± 0.7	2	12.1 ± 1.6	1.25 ± 0.13	1.80 ± 0.30	1.23 ± 0.22	3 3 -	1
010801	18.30.33	Y	...	...	...	...	...	...	...	47.0 ± 0.7	45.0 ± 0.7	2	42.0 ± 1.4	...	...	...	2 - -	1
010802	08.35.20	Y	177.00	12.00	19.0	255.3223	68.7815	...	G	6.0 ± 0.7	6.0 ± 0.7	1	5.0 ± 2.8	4.93 ± 0.36	21.1 ± 1.6	2.33 ± 0.18	2 2 -	1
010804	20.13.18	Y	...	...	...	...	...	...	...	20.0 ± 0.7	17.0 ± 0.7	2	14.0 ± 2.2	...	...	...	2 - -	1
010806	19.47.50	Y	...	...	...	...	...	...	...	2.88 ± 0.01	0.29 ± 0.01	...	2.77 ± 0.33	...	...	...	1 - -	1
010813	09.43.56	Y	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
010818A	13.53.10	Y	328.00	−2.00	19.0	55.4296	−40.2698	...	G	53.0 ± 0.7	24.0 ± 2.1	12	41.0 ± 5.1	10.8 ± 1.0	24.0 ± 2.2	1.82 ± 0.24	4 4 -	1
010818B	20.57.40	N	167.00	−2.00	41.0	258.2739	51.6716	...	G	9.0 ± 0.7	7.0 ± 0.7	2	8.0 ± 2.8	0.60 ± 0.11	1.53 ± 0.68	2.02 ± 0.43	2 2 -	1
010820	20.36.13	Y	180.00	−12.00	24.0	283.5808	48.9295	...	G	9.0 ± 0.7	9.0 ± 0.7	1	7.30 ± 0.93	1.97 ± 0.17	4.87 ± 0.47	2.25 ± 0.20	2 2 -	1
010825	18.02.57	N	267.00	−75.00	32.0	318.5284	−22.1788	...	G	36.0 ± 0.7	19.0 ± 0.7	2	39.0 ± 4.5	2.34 ± 0.19	2.49 ± 0.32	2.19 ± 0.19	3 3 -	1
010826	18.06.01	Y	299.00	41.00	34.0	76.0802	6.4553	...	G	316.0 ± 0.7	116.0 ± 3.5	22	288.0 ± 3.6	29.6 ± 2.3	10.97 ± 0.93	1.36 ± 0.17	1 1 -	1
010827	12.56.11	Y	...	...	...	...	...	...	...	0.59 ± 0.04	0.12 ± 0.04	...	...	...	...	...	1 - -	1
010908	18.00.05	N	251.00	31.00	53.0	52.0296	39.6071	...	G	23.0 ± 4.2	9.0 ± 12.7	7	25.0 ± 5.0	1.33 ± 0.24	0.81 ± 0.19	1.52 ± 0.50	1 2 -	6
010910	02.30.51	Y	274.00	26.00	34.0	53.1478	18.8497	...	G	...	...	...	...	...	...	...	- - -	1
010913	20.48.39	Y	127.00	23.00	57.0	201.0928	30.8783	...	G	0.20 ± 0.10	0.20 ± 0.10	...	0.21 ± 0.10	0.15 ± 0.04	1.98 ± 0.50	2.79 ± 0.72	1 1 2	1
010917	07.04.33	Y	140.00	52.00	15.0	165.6335	43.6416	...	G	...	...	...	...	...	...	...	- - -	1
010921	05.15.50	Y	343.90	40.93	0.3	100.4627	−16.8334	70.1	I	33.0 ± 0.7	29.0 ± 1.4	3	22.0 ± 3.6	13.4 ± 1.7	10.4 ± 1.6	2.30 ± 0.24	4 4 -	1
010922	17.36.52	Y	...	...	...	...	...	...	...	45.0 ± 0.7	35.0 ± 1.4	6	40.0 ± 2.2	...	...	...	3 - -	1
010923	09.24.29	Y	302.07	18.03	0.3	57.9013	−7.8932	94.4	I	5.16 ± 0.05	2.02 ± 0.05	...	4.00 ± 0.66	1.55 ± 0.11	9.80 ± 0.65	1.54 ± 0.17	1 4 1	1
010929	01.00.09	N	...	...	...	...	...	...	...	17.0 ± 0.7	8.0 ± 1.4	6	16.0 ± 3.6	...	...	...	3 - -	1
010930	13.40.02	Y	272.00	−29.00	39.0	2.3999	−4.2675	...	G	6.0 ± 0.7	5.0 ± 0.7	2	6.0 ± 2.8	0.64 ± 0.07	2.62 ± 0.29	1.97 ± 0.23	3 3 -	1
011001	22.31.36	N	187.00	−64.00	22.0	300.3663	−1.2451	...	G	113.0 ± 4.2	29.0 ± 17.0	14	111.0 ± 14.1	3.66 ± 0.38	0.89 ± 0.13	1.22 ± 0.23	3 3 -	6
011003	03.34.08	Y	...	...	...	...	...	...	...	50.0 ± 0.7	50.0 ± 0.7	1	34.0 ± 2.8	...	...	...	1 - -	1
011104	10.02.03	Y	190.00	−5.00	32.0	297.5876	57.7530	...	G	17.0 ± 0.7	14.0 ± 1.4	3	19.0 ± 4.5	3.93 ± 0.41	4.49 ± 0.76	1.69 ± 0.25	3 2 -	1
011111	18.24.03	Y	...	...	...	...	...	...	...	104.0 ± 0.7	53.0 ± 2.8	13	94.0 ± 4.5	...	...	...	2 - -	1
011115	20.16.17	Y	...	...	...	...	...	...	...	72.0 ± 0.7	26.0 ± 2.1	9	67.0 ± 2.2	...	...	...	1 - -	1
011116	03.35.05	Y	294.00	28.00	33.0	62.7057	3.5684	...	G	25.0 ± 0.7	16.0 ± 1.4	3	17.0 ± 6.3	3.24 ± 0.26	3.45 ± 0.35	1.84 ± 0.17	1 1 -	1
011121	18.47.08	Y	173.63	−76.03	0.1	298.2343	−13.8646	22.6	W	90.0 ± 0.7	90.0 ± 0.7	1	47.0 ± 3.2	98.3 ± 7.7	65.9 ± 5.3	1.22 ± 0.17	1 1 -	1
011122	20.51.33	N	...	...	...	...	...	...	...	17.0 ± 0.7	14.0 ± 1.4	3	13.0 ± 4.1	...	...	...	2 - -	1
011126	10.04.02	N	45.00	−9.00	31.0	188.1919	−54.6514	...	G	32.0 ± 4.2	6.0 ± 8.5	3	35.0 ± 4.5	1.30 ± 0.17	0.72 ± 0.13	2.12 ± 0.32	1 4 1	6
011128	17.18.21	Y	...	...	...	...	...	...	...	3.56 ± 0.05	0.66 ± 0.05	...	2.3 ± 1.4	...	...	...	1 - -	1
011211	19.09.21	N	168.81	−21.94	0.1	275.1916	35.6970	17.5	W	39.0 ± 5.7	11.0 ± 11.3	6	51.0 ± 7.6	1.35 ± 0.22	0.35 ± 0.08	1.00 ± 0.39	1 1 -	8

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	T_{det} (s)	T_a (s)	N_a	T_{90} (s)	Fluence (10^{-6} cgs)	F_{peak} (10^{-7} cgs)	Γ	Unit	R
011212	01.35.55	N	170.00	−31.00	51.0	280.7951	27.9113	...	G	40.0 ± 1.4	13.0 ± 4.2	9	37.0 ± 4.2	1.57 ± 0.21	1.24 ± 0.19	0.63 ± 0.35	1 1 -	2
011214	19.48.23	Y	...	...	...	...	...	...	...	108.0 ± 0.7	75.0 ± 2.8	18	99.0 ± 5.0	...	...	...	2 - -	1
011216	02.55.23	Y	43.00	54.00	10.0	140.1599	−4.7895	118.6	I	2.89 ± 0.08	2.42 ± 0.08	...	2.28 ± 0.66	1.30 ± 0.11	5.34 ± 0.42	2.43 ± 0.18	3 3 4	1
011217	11.43.07	N	220.00	−16.00	53.0	337.5435	39.4664	...	G	...	...	...	...	...	...	...	- - -	1
011222	10.35.03	N	129.00	−8.00	32.0	232.8886	18.9552	...	G	7.0 ± 1.4	6.0 ± 1.4	2	8.0 ± 2.2	0.69 ± 0.10	1.41 ± 0.25	2.11 ± 0.40	1 1 -	2
011228	23.19.15	Y	...	...	...	...	...	...	...	4.77 ± 0.08	3.28 ± 0.08	...	3.37 ± 0.70	...	...	...	1 - -	1
011229	03.50.25	N	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
011230A	07.46.18	N	16.00	33.00	39.0	125.9670	−29.7977	...	G	18.0 ± 0.7	10.0 ± 1.4	3	17.0 ± 2.2	0.87 ± 0.09	1.99 ± 0.27	2.28 ± 0.25	3 3 -	1
011230B	08.48.22	Y	82.00	67.00	19.0	145.4044	17.2122	...	G	30.0 ± 2.8	17.0 ± 5.7	5	34.0 ± 4.1	3.26 ± 0.29	2.12 ± 0.22	1.72 ± 0.20	3 3 4	4
011231	03.34.47	Y	178.00	−34.00	53.0	289.0932	27.2695	...	G	5.0 ± 0.7	4.0 ± 0.7	2	5.3 ± 1.1	0.49 ± 0.10	1.50 ± 0.34	...	1 1 -	1
020102A	20.57.49	N	11.00	−40.00	50.0	309.2935	−77.0362	...	G	26.0 ± 3.5	12.0 ± 7.1	6	31.0 ± 4.1	1.06 ± 0.16	0.56 ± 0.12	0.57 ± 0.38	3 3 -	5
020102B	21.08.02	N	84.00	−19.00	33.0	222.4727	−24.8641	...	G	55.0 ± 7.1	37.0 ± 21.2	8	51.0 ± 4.5	7.66 ± 0.52	2.32 ± 0.18	1.60 ± 0.16	3 4 3	10
020112	18.52.00	Y	...	...	...	...	...	...	...	5.0 ± 0.7	5.0 ± 0.7	1	4.18 ± 0.51	...	...	...	1 - -	1
020113A	02.04.11	Y	84.00	52.00	41.0	159.2685	10.4981	...	G	6.0 ± 0.7	4.0 ± 0.7	2	6.0 ± 3.2	2.63 ± 0.17	12.15 ± 0.81	0.92 ± 0.17	3 3 4	1
020113B	11.02.44	N	...	...	...	...	...	...	...	35.0 ± 0.7	13.0 ± 1.4	6	28.0 ± 5.8	...	...	...	3 - -	1
020115	22.29.24	Y	...	...	...	...	...	...	...	16.0 ± 0.7	9.0 ± 1.4	5	17.0 ± 3.6	...	...	...	2 - -	1
020119A	00.09.57	N	...	...	...	...	...	...	...	13.0 ± 0.7	6.0 ± 0.7	2	15.0 ± 3.6	...	...	...	2 - -	1
020119B	04.27.10	Y	125.00	4.00	33.0	219.6811	21.4943	...	G	29.0 ± 0.7	27.0 ± 1.4	3	18.0 ± 2.2	17.3 ± 1.6	30.5 ± 2.7	1.66 ± 0.23	4 4 -	1
020119C	16.10.49	Y	58.00	69.00	46.0	137.9606	11.5793	...	G	7.0 ± 0.7	5.0 ± 0.7	2	6.86 ± 1.00	0.66 ± 0.09	1.88 ± 0.30	1.21 ± 0.29	3 3 -	1
020208	14.14.12	Y	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
020209	07.49.57	N	205.00	−51.00	42.0	310.6844	11.1393	...	G	9.0 ± 0.7	8.0 ± 0.7	2	8.0 ± 3.2	1.44 ± 0.13	3.89 ± 0.41	1.65 ± 0.19	1 1 -	1
020212A	22.45.14	Y	...	...	...	...	...	...	...	9.0 ± 0.7	7.0 ± 0.7	2	17.0 ± 2.8	...	...	...	2 - -	1
020212B	23.32.01	N	154.00	27.00	72.0	204.0183	55.5378	...	G	10.0 ± 1.4	6.0 ± 2.8	4	13.0 ± 3.2	1.56 ± 0.32	2.83 ± 0.53	...	4 4 -	2
020221	08.07.43	Y	48.70	36.30	1.0	152.7075	−18.1499	...	I	31.0 ± 0.7	30.0 ± 0.7	2	19.0 ± 2.8	19.5 ± 1.3	23.4 ± 1.7	1.64 ± 0.14	3 3 -	1
020304	01.02.26	Y	...	...	...	...	...	...	...	62.0 ± 0.7	57.0 ± 1.4	4	48.0 ± 5.1	...	...	...	1 - -	1
020305	15.06.23	Y	62.00	27.00	35.0	168.1043	−18.1655	...	G	...	...	...	...	...	...	...	- - -	1
020306	18.58.03	Y	...	...	...	...	...	...	...	1.55 ± 0.07	0.42 ± 0.07	...	1.14 ± 0.10	...	...	...	3 - -	1
020308	06.06.59	N	6.00	−9.00	37.0	101.9701	−70.7468	...	G	35.0 ± 2.8	14.0 ± 8.5	11	28.0 ± 5.8	3.79 ± 0.58	2.15 ± 0.52	1.66 ± 0.36	1 2 -	4
020309	06.58.05	Y	351.00	−56.00	19.0	325.4912	−57.1316	...	G	65.0 ± 0.7	59.0 ± 1.4	6	55.0 ± 3.2	10.94 ± 0.85	5.56 ± 0.54	1.22 ± 0.18	1 1 -	1
020311	01.21.30	Y	57.00	54.00	20.0	147.0962	−0.3731	...	G	20.0 ± 0.7	16.0 ± 1.4	5	12.0 ± 1.4	12.29 ± 0.85	17.7 ± 1.3	1.44 ± 0.15	3 3 -	1
020315	15.42.46	Y	...	...	...	...	...	...	...	24.0 ± 0.7	12.0 ± 1.4	4	22.9 ± 3.7	...	...	...	1 - -	1
020317	01.30.19	N	...	...	...	...	...	...	...	18.0 ± 0.7	9.0 ± 1.4	4	18.0 ± 8.1	...	...	...	2 - -	1
020320	05.54.50	N	43.00	−7.00	48.0	183.3482	−55.0340	...	G	...	...	...	...	...	...	...	- - -	1
020321	04.20.43	N	242.76	−83.70	0.0	308.1629	−22.9747	11.5	W	53.0 ± 2.8	33.0 ± 8.5	8	51.0 ± 4.5	2.98 ± 0.31	1.03 ± 0.17	0.53 ± 0.29	1 1 -	4
020322	03.51.37	N	270.21	81.10	0.0	113.0194	28.7276	16.9	W	11.0 ± 0.7	10.0 ± 0.7	2	11.0 ± 2.8	0.85 ± 0.08	2.24 ± 0.24	2.34 ± 0.24	3 3 -	1
020323	20.18.51	Y	...	...	...	...	...	...	...	0.23 ± 0.12	0.23 ± 0.12	...	0.12 ± 0.03	...	...	...	2 - -	1
020327A	01.39.13	N	152.00	−39.00	44.0	271.3840	13.6592	...	G	17.0 ± 1.4	9.0 ± 2.8	4	18.0 ± 3.2	1.54 ± 0.18	2.12 ± 0.27	...	1 4 1	2
020327B	02.26.08	Y	337.00	60.00	32.0	105.8900	1.9625	...	G	31.0 ± 0.7	12.0 ± 1.4	5	30.0 ± 1.4	2.37 ± 0.22	5.45 ± 0.50	1.30 ± 0.20	3 3 -	1
020329	20.37.49	Y	...	...	...	...	...	...	...	5.0 ± 0.7	2.0 ± 0.7	2	5.68 ± 0.06	...	...	...	2 - -	1
020401	16.55.33	N	339.00	−80.00	36.0	309.7373	−35.2673	...	G	...	...	...	...	...	...	...	- - -	1
020402	07.54.35	Y	...	...	...	...	...	...	...	73.0 ± 0.7	42.0 ± 2.1	8	56.0 ± 5.0	...	...	...	2 - -	1
020405	00.41.34	Y	209.54	−31.39	0.2	319.2595	29.3575	74.5	I	55.0 ± 0.7	55.0 ± 0.7	1	40.0 ± 2.2	42.2 ± 2.4	32.1 ± 1.9	2.00 ± 0.13	3 4 3	1
020409A	09.27.18	Y	151.00	53.00	46.0	161.3480	49.7362	...	G	43.0 ± 5.7	23.0 ± 17.0	7	40.0 ± 5.0	2.65 ± 0.23	1.23 ± 0.13	2.32 ± 0.21	3 3 -	8
020409B	21.11.33	N	131.31	66.69	0.1	148.3721	35.9119	13.1	W	36.0 ± 0.7	19.0 ± 2.1	7	36.0 ± 3.6	1.48 ± 0.15	1.39 ± 0.24	2.01 ± 0.23	1 1 -	1
020413	16.20.14	N	14.91	−7.11	0.1	128.8585	−69.8873	25.9	I	11.0 ± 0.7	11.0 ± 0.7	1	9.0 ± 1.4	11.18 ± 0.95	26.5 ± 2.3	1.29 ± 0.17	2 2 -	1
020414	01.47.24	N	240.00	−81.00	49.0	309.9795	−20.8344	...	G	2.0 ± 0.7	...	...	2.0 ± 1.4	0.35 ± 0.05	2.24 ± 0.35	0.64 ± 0.34	3 3 -	1
020416	07.53.14	N	4.00	68.00	33.0	119.6099	5.3571	...	G	40.0 ± 3.5	19.0 ± 10.6	8	45.0 ± 5.8	1.78 ± 0.19	0.74 ± 0.10	2.05 ± 0.24	1 1 -	5
020417	05.36.17	N	349.00	−44.00	27.0	345.3669	−64.4548	...	G	68.0 ± 0.7	51.0 ± 2.1	9	52.0 ± 3.2	18.96 ± 0.93	14.61 ± 0.79	1.82 ± 0.11	3 2 3	1

Table 2
(Continued)

GRB	Time (hh.mm.ss)	HR	R.A. (°)	Decl. (°)	Err (°)	l (°)	b (°)	Elev (°)	CAT	$T_{\rm det}$ (s)	$T_{\rm a}$ (s)	$N_{\rm a}$	T_{90} (s)	Fluence (10^{-6} cgs)	$F_{\rm peak}$ (10^{-7} cgs)	Γ	Unit	R
020418	08.38.33	Y	120.08	−48.65	0.1	263.1278	−9.6850	16.7	I	...	...	...	...	...	...	...	- - -	1
020419A	18.24.41	N	...	...	...	...	...	...	...	17.0 ± 0.7	12.0 ± 1.4	3	14.0 ± 2.2	...	...	...	2 - -	1
020419B	22.25.49	Y	...	...	...	...	...	...	...	...	...	...	...	...	...	...	- - -	1
020422	07.31.45	Y	...	...	...	...	...	...	...	4.0 ± 0.7	3.0 ± 0.7	2	11.0 ± 2.8	...	...	...	2 - -	1
020426	23.56.14	N	143.00	76.00	27.0	136.0686	35.5378	...	G	2.0 ± 0.7	...	...	...	0.68 ± 0.07	6.00 ± 0.59	1.07 ± 0.22	1 1 -	1

Notes. Column 1: GRB name (yymmdd); Column 2: Trigger time in UT (hh.mm.ss); Column 3: high time resolution data available for the GRB: yes (Y), no (N); Column 4: right ascension (epoch 2000.0); Column 5: declination (epoch 2000.0); Column 6: error radius; Column 7: Galactic longitude; Column 8: Galactic latitude; Column 9: Elevation angle with respect to the Earth limb of GRBs with already known position; Column 10: instrument/catalog that provided the best GRB coordinates: *BeppoSAX* GRBM (G); *BeppoSAX* Wide Field Cameras (W); ASM aboard RXTE (A); BATSE 4B catalog (4B; Paciesas et al. 1999); HETE 2 (H); Kommers catalog (K; Kommers et al. 2001); Inter-Planetary Network (I); RXTE PCA (P); Stern catalog (S; Stern et al. 2001); Column 11: time elapsed from the earliest GRB onset above 2σ threshold to its final disappearance below 2σ threshold; Column 12: integrated time in which the emission level is above 2σ; Column 13: number of time intervals in which the emission level is above 2σ; Column 14: time duration defined by the BATSE team (Kouveliotou et al. 1993); Column 15: 40–700 keV fluence in units 10^{-6} erg cm^{-2}; Column 16: 40–700 keV peak flux in units of 10^{-7} erg cm^{-2} s^{-1}; Column 17: best fit photon index of the 2 channel data; Column 18: detection units used for the derived parameter values (see the text); Column 19: rebinning factor of the default light curve adopted to derive the reported parameters. Default light curves: 1 s light curves in the case of long GRB ($T_{90} \geqslant 2$ s), 7.8125 ms in the case of short GRBs.

Table 3
GRBs Statistics

GRB Type	Number
GRBs with all parameters determined	764
GRBs with only information about duration	266
GRBs with gaps in the data	42
GRBs without $F_{\rm peak}$ because of low statistics	10
Total GRBs	1082

Table 4
Dipole and Quadrupole Statistics for the GRBs Detected by the *BeppoSAX* GRBM with Determined Direction

Tested Moment	Moment Type	Coordinate System	Measured Value	Expected Value[a]
$\langle\cos\theta\rangle$	Dipole	Galactic	-0.015 ± 0.020	0.000 ± 0.009
$\langle\sin\delta\rangle$	Dipole	Equatorial	0.026 ± 0.020	0.000 ± 0.009
$\langle\sin^2 b - 1/3\rangle$	Quadrupole	Galactic	-0.003 ± 0.010	-0.007 ± 0.005
$\langle\sin^2 \delta - 1/3\rangle$	Quadrupole	Equatorial	0.038 ± 0.010	0.039 ± 0.005

Notes. θ is the angle between the direction to the burst and the Galactic center, b is the Galactic latitude, and δ is the GRB declination.
[a] For an isotropic distribution and corrected for the sky exposure map.

The second estimate of the GRB duration is $T_{\rm det}$, which gives the time elapsed from the earliest GRB onset above a 2σ threshold to its final disappearance below 2σ. In the case of long GRBs ($\geqslant 2$ s), the error associated with $T_{\rm det}$ was given by $R/\sqrt{2}$, where R is the rebinning time listed in the column R of Table 2, while in the case of short GRBs, this error was assumed to be equal to R. In addition to $T_{\rm det}$, for each GRB we report in the catalog the integrated time $T_{\rm a}$ in which the burst was visible above a 2σ level and the number $N_{\rm a}$ of intervals in which the 2σ level was exceeded in the time profile. The error associated with $T_{\rm a}$ was determined assuming an uncertainty of $R/\sqrt{2}$ for each of the $N_{\rm a}$ intervals. From $T_{\rm a}$ an estimate of the integrated quiescent time T_q of each GRB can be derived.

For short GRBs with available high time resolution data (112 events), the $T_{\rm det}$ estimate was obtained from the 7.8125 ms light curves. For the $T_{\rm a}$ determination, the 2σ level was derived using the Poissonian distribution, i.e., determining the count threshold $n_{\rm th}$ such that, if the count rate n is higher than $n_{\rm th}$, the probability that this count excess is due to a Poissonian fluctuation is lower than 5%.

7.4. Fluence and Spectral Hardness

Using the GRBM response function discussed above and the XSPEC software package, for each GRB, its 40–700 keV fluence has been derived from the 2 channel background-subtracted spectra (40–700 keV and >100 keV) integrated over $T_{\rm det}$ with the assumption of a PL spectrum. We refer to these spectra as "2 channel spectra." The PL spectral index Γ derived is reported in the column Γ of the catalog. The PL model was a forced choice for those GRBs for which the 240 channel spectra (integrated over 128 s) did not provide useful results. Given that the PL choice could introduce a systematic error in the fluence estimate, we corrected the fluences derived from the 2 channel spectra in the following way. Using the strong GRBs (163) for which both the 2 channel and 240 channel spectra could be used, we compared the fluence estimates derived from the 2 channel spectra with those derived from the dead-time-corrected 240 channel spectra, in which the best input spectral model was adopted. Thus we derived an average correction factor (CF) that was used to correct the 2 channel fluences. This factor was found to approximately show a Gaussian distribution with a $\sigma \sim 0.01$ and no significant dependence on GRB fluence.

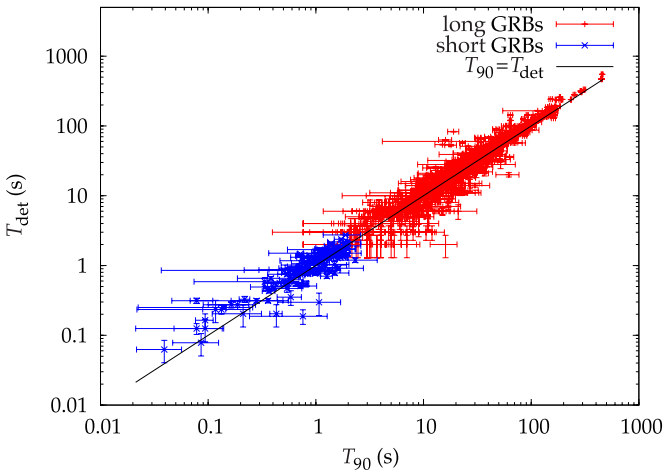

Figure 4. Correlation between T_{90} and $T_{\rm det}$ GRB time durations. Short GRBs in blue color. The central continuous line gives the curve $T_{90} = T_{\rm det}$.

7.5. Peak Flux

For the 40–700 keV peak flux estimate, we adopted the same procedure followed for the fluence estimate. Using the GRBM response function and assuming a PL model, for long GRBs, we deconvolved the 40–700 keV peak counts over the minimum time interval around the peak that gave a significant peak flux estimate. For long GRBs, in general, we used the 1 s background-subtracted light curves in the two (40–700 keV and >100 keV) energy channels. However, for those GRBs for which the 1 s light curves provided a peak count rate with an S/N lower than 3, a rebinning of the data was performed. The rebinning factor R is given in the last column of the catalog (a value of 1 corresponds to 1 s light curves).

For short GRBs, we first derived the 40–700 keV peak flux F_p^{1s} from the 1 s light curves as above. Given that a 1 s integration time is too long, we corrected F_p^{1s} for the ratio R_C between the 125 ms 40–700 keV peak count rate C_p^{125ms} normalized to a 1 s time and the corresponding 1 s peak count rate C_p^{1s} adopted for the deconvolution of the 2 channel spectra. The reported 40–700 keV peak flux is given by $F_p = F_p^{1s} \times R_C$.

8. RESULTS OF STATISTICAL ANALYSIS OF THE CATALOG

We performed a statistical analysis of the data reported in the GRBM Catalog, for checking their mutual consistency, for comparing our results with those obtained with BATSE, and for getting new results.

8.1. Consistency Tests

We tested the dependence of the $T_{\rm det}$ estimate on T_{90}. The result is shown in Figure 4. We find that, within statistical uncertainties, $T_{\rm det}$ is fully correlated with T_{90}, as expected. In principle, we would expect to get $T_{\rm det}$ equal to or longer than T_{90}. However, for some weak GRBs, this expectation is not satisfied, mainly due to the larger uncertainty in the determination of the $T_{\rm det}$ estimate with respect to that of T_{90}.

The distributions of the GRB peak flux and fluence are shown in Figure 5. As can be seen, both are clearly skewed, as expected as a consequence of the GRBM sensitivity threshold. We derive

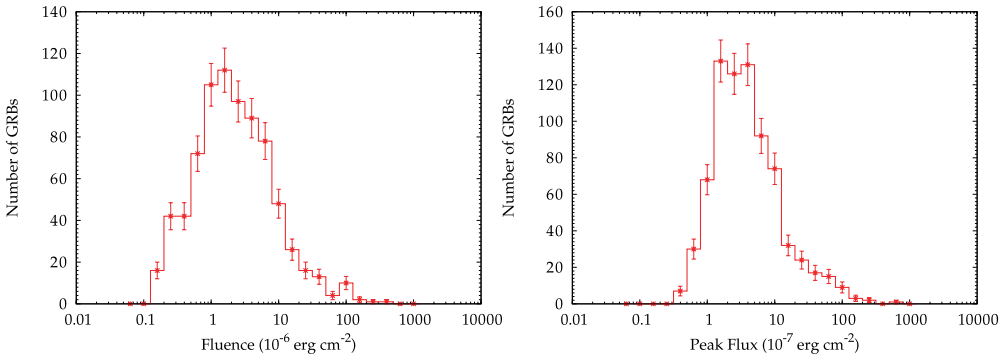

Figure 5. Distribution of fluence (left) and peak flux (right) of the GRBs detected with the *BeppoSAX* GRBM.

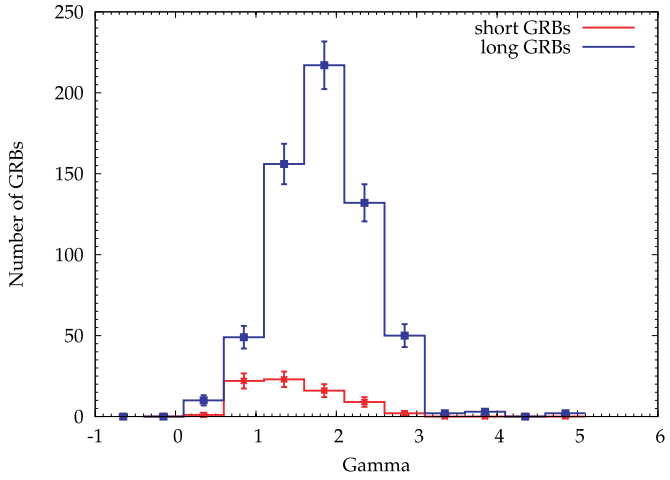

Figure 6. Distribution of the GRB spectral hardness for short and long GRBs. The GRB hardness is defined as the index Γ of the best PL fit to the 2 channel spectra.

from these figures the limit sensitivity of the GRBM: it is $\sim 4 \times 10^{-8}$ erg cm^{-2} s^{-1} in terms of peak flux, while it is about $\sim 2 \times 10^{-7}$ erg cm^{-2} in terms of fluence. Also the hardness distribution for short and long GRBs has been derived and shown in Figure 6. As can be seen the distribution derived for long GRBs is almost symmetrical with a mean value of $\Gamma_{\rm long} \simeq 2$ and a saturation around $\Gamma \simeq 3$, likely due to the limited sensitivity of the instrument at high photon energies. Instead that derived for short GRBs is asymmetrical with a positive skewness and a mean value of $\Gamma_{\rm short} \simeq 1.5$. At a significance level of 3.2×10^{-5}, we find that the Γ mean value of the long GRBs is higher than that of the short GRBs.

8.2. Comparison with the BATSE Results

The first test performed is the spatial distribution of the detected GRBs in the sky. The result is shown in Figure 7. We confirm the isotropical distribution of the GRBs as found by BATSE (Fishman et al. 1994; Paciesas et al. 1999). In Table 4, we report the corresponding statistical results for detecting a Galactic association, i.e., our measures of the dipole and quadrupole moments (Briggs 1993) in Galactic and equatorial coordinates.

We also derived the log N–log S and log N–log P distributions, where N is the number of GRBs with the 40–700 keV fluence S (or 40–700 keV peak flux P) higher than given values. The results are shown in Figure 8. To compare our results with those derived with BATSE in the 50–300 keV energy range (e.g., Paciesas et al. 1999), we first estimated the GRB fluence and

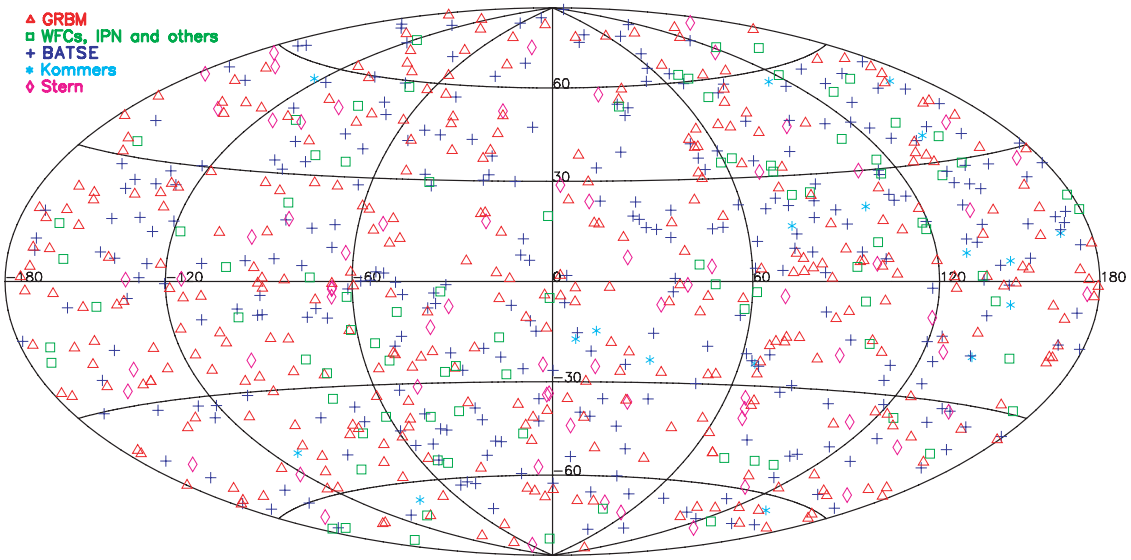

Figure 7. Sky distribution (in Galactic coordinates) of GRBs detected with the *BeppoSAX* GRBM. In different colors and symbols the GRB is also found in other catalogs found with other instrumentation. Also the GRBs identified with the *BeppoSAX* WFCs are shown.

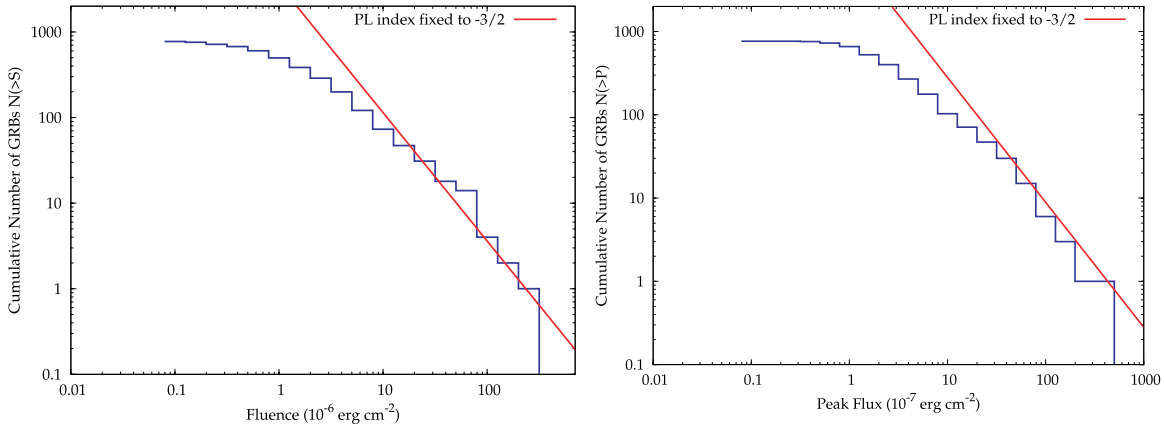

Figure 8. Cumulative distribution of the 40–700 keV fluence (left panel) and peak flux (right panel) of the GRBs detected with the *BeppoSAX* GRBM. The continuous line gives the distribution (a PL of index $-3/2$) that is expected in the case where the observed GRBs are homogeneously distributed in an Eucledian space throughout the sampled volume.

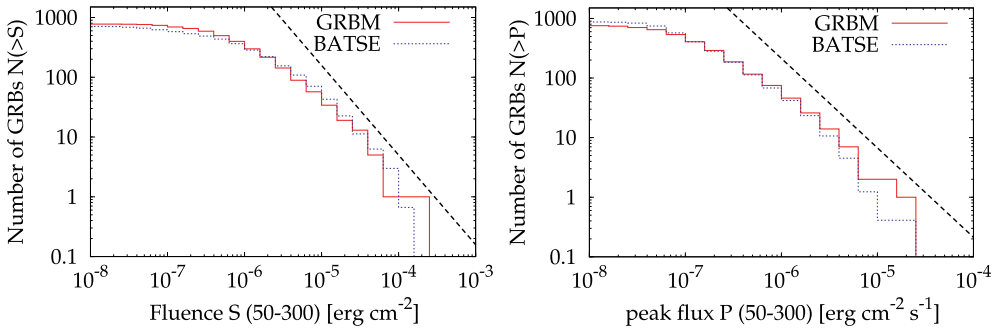

Figure 9. Comparison of the *BeppoSAX* GRBM and BATSE 50–300 keV fluence (left panel) and peak flux (right panel) cumulative distributions. The continuous line gives the distribution (a PL of index $-3/2$) that is expected in the case where the observed GRBs are homogeneously distributed in an Eucledian space throughout the sampled volume.

peak flux in the 50–300 keV using the derived PL spectral index Γ. The derived distributions compared with those obtained with BATSE are shown in Figure 9. Using a Kolmogorov–Smirnov (KS) test, we find that at a significance level of 1% the GRBM and BATSE log N–log S distributions are consistent for fluences $>1\times10^{-6}$ erg cm^{-2} while at a significance level of 5% the log N–log P distributions are consistent with each other for peak fluxes $>1\times10^{-7}$ erg cm^{-2} s^{-1}.

The distributions of the GRBM GRBs with T_{90} and $T_{\rm det}$ have also been investigated. Both distributions are similar. The results for T_{90} are shown in Figure 10. As can be seen, the bimodal behavior found with BATSE (see Kouveliotou et al. 1993) is confirmed, even if the distribution of T_{90} for short GRBs appears less pronounced and displaced toward higher durations with respect to BATSE. This discrepancy is due to the lower efficiency of our trigger system for short GRBs, which, for almost the entire mission duration, used 1 s as SIT (see Table 1). This bias does not allow to test the presence of a third class of GRBs as claimed by Horváth et al. (2008).

We have also investigated the dependence of the GRB hardness Γ as a function of the time duration T_{90}. The result is shown in Figure 11. While it is apparent that there is no correlation of Γ with the GRB time duration within either the long or the short GRBs, using the nonparametric Spearman and Kendall correlation tests, we find a slight correlation (significance level of 2%) between Γ and GRB duration when both short and long GRBs are taken into account. This result

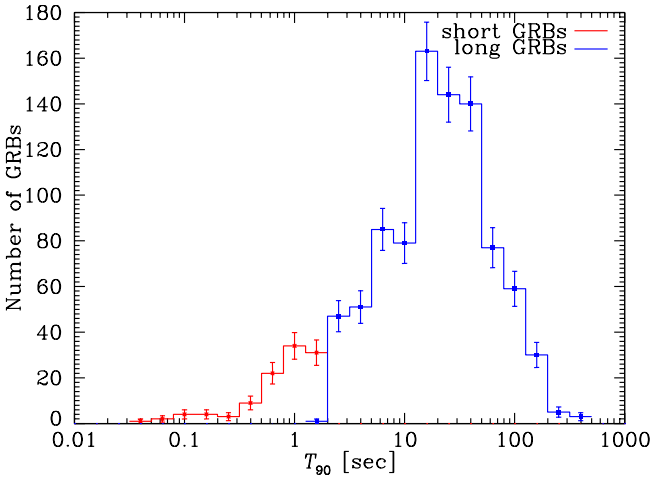

Figure 10. Distribution of the GRBM GRBs according to their T_{90} duration. Only short GRB triggered by the onboard logic were included. Red color: short GRBs; blue color: long GRBs.

confirms the result found using the Γ distribution of long and short GRBs (see Section 8.1).

8.3. Other Tests

In addition to the previous tests, other tests have been derived from our catalog, thanks to the determination of $T_{\rm det}$ and of the activity time $T_{\rm a}$.

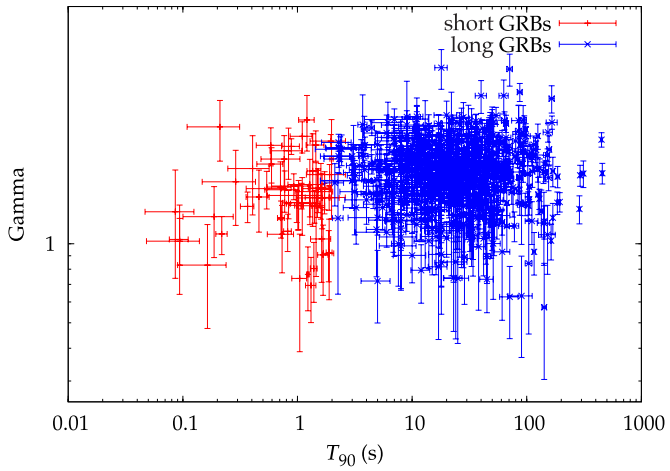

Figure 11. Dependence of the GRB hardness on T_{90} duration. As hardness parameter we use the PL photon index Γ listed in the catalog. Red color: short GRBs; blue color: long GRBs.

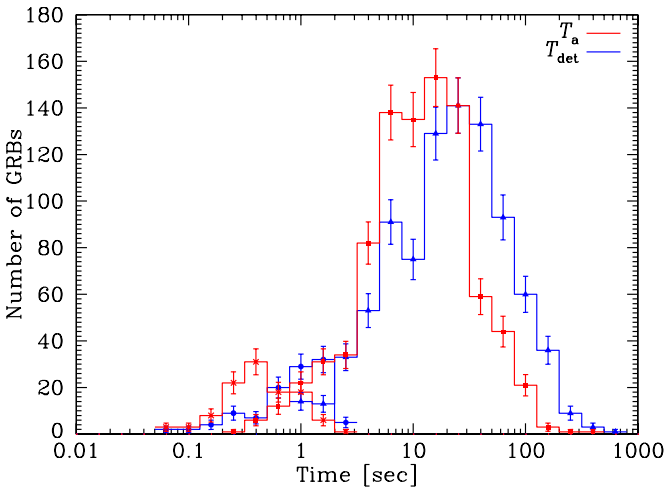

Figure 12. Distribution of the integrated active emission time T_a (red) compared with the total duration T_{det} (blue). Symbols for T_{det}: filled triangles for long GRBs, filled circles for short GRBs. Symbols for T_a: filled squares for long GRBs, stars for short GRBs.

In Figure 12, we show the distribution of T_a compared with that of T_{det}. As can be seen, the maximum activity time detected is about 200 s, whereas we find GRBs with T_{det} up to 600 s.

In Figure 13, we show the cumulative distribution of the integrated active time T_a. As can be seen from this figure and as found from a Shapiro–Wilk test (Shapiro & Wilk 1965), for short GRBs, this distribution is consistent with a log-normal distribution (p-value of 0.58) in the case of short GRBs, while it is inconsistent with the latter (p-value of 4.6×10^{-8}) in the case of long GRBs. In Figure 14, we show the cumulative distribution of the integrated quiescent time T_q obtained by subtracting T_a from T_{det}. As can be seen from this figure and from the Shapiro–Wilk test, for both short and long GRBs this distribution is inconsistent with a log-normal distribution, with a lower probability chance for long GRBs (p-value of 1.9×10^{-4} in the case of short GRBs against a p-value of 7.5×10^{-8} in the case of long GRBs).

9. DISCUSSION

The first complete catalog of the GRBs detected with the *BeppoSAX* GRBM includes 1082 GRBs, for most of which we have reported complete information (position, duration, peak flux, fluence, and spectral hardness).

Concerning the GRB positions, we have reported the most accurate coordinates available for each GRBs included in the catalog. In the future, for some of them, more accurate (or the first determination of) positions will be available from the Inter-Planetary Network (K. Hurley et al. 2009, in preparation), allowing a more accurate determination (or the first determination) of the fluence and peak flux values.

Some relevant results obtained with the BATSE catalogs (e.g., isotropical distribution of GRBs in the sky, deviation of the log N–log S and log N–log P cumulative distributions from that expected in the case of a homogeneous distribution of GRBs in an Euclidean space, two-peak distribution of the GRBs with time duration, higher hardness of the short GRBs) are confirmed.

For the first time, our catalog includes, in addition to the classical T_{90} GRB duration, also the total duration T_{det} and the integrated time T_a during which the GRB intensity exceeds the 2σ level. We find that the GRB active time has a cutoff at about 200 s, in spite of that we find GRBs with T_{det} up to 600 s. This result can have a relation with the physics of the unknown engine that gives rise to the GRBs. It seems that this engine has a maximum active time of 200 s. The integrated active time is found consistent with a log-normal distribution for both short and long GRBs.

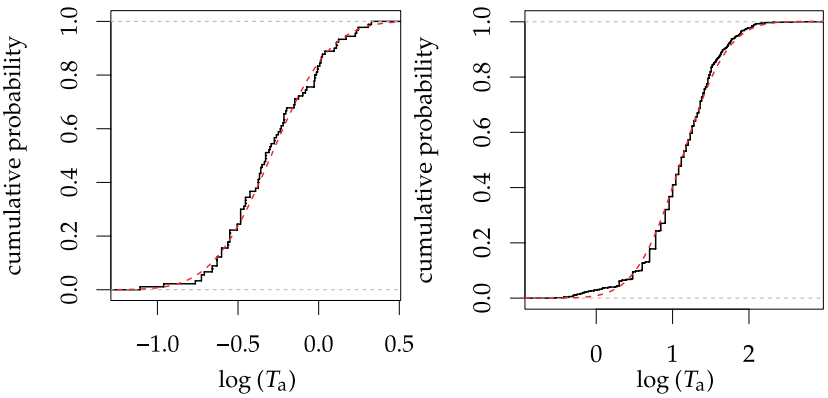

Figure 13. Cumulative distribution of the active time T_a compared with that expected from a log-normal distribution (dashed line). Left panel: short GRBs; right panel: long GRBs.

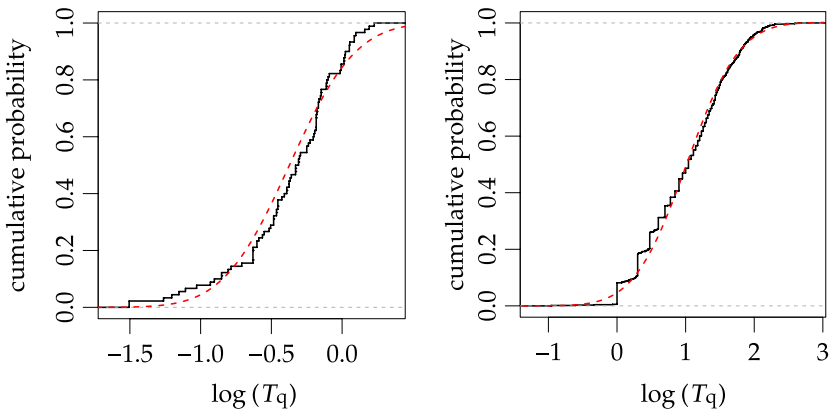

Figure 14. Cumulative distribution of the quiescent time T_q compared with that expected from a log-normal distribution (dashed line). Left panel: short GRBs; right panel: long GRBs.

(A color version of this figure is available in the online journal.)

The origin of quiescent times is still unknown. The quiescent time properties have been investigated by various authors (Nakar & Piran 2002; Drago & Pagliara 2007). We limit our investigation to the active time T_a and quiescent time T_q, both integrated over the entire GRB duration. In the case of T_a, we find that its distribution is consistent with a log-normal distribution for short GRBs, while it is inconsistent with the latter in the case of long GRBs. In the case of the integrated T_q, we find that the cumulative distribution is inconsistent with a log-normal distribution in the case of short and long GRBs. The consequences of these results would require further discussion, which is beyond the scope of this paper. We limit ourselves to state that models of GRB engines and their behavior with time should take into account these statistical results.

Many people contributed to the success of the GRBM instrument, we thank all of them. The *BeppoSAX* mission was a joint program of the Italian space agency ASI and of the Netherlands Agency for Aerospace Programs. This research was supported by the Ministry of Education, University and Research of Italy (PRIN 2005-025417 devoted to GRBs).

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