

KONUS

01/09/2021

24.299

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4040

3040

2040

1040

40
0

10000

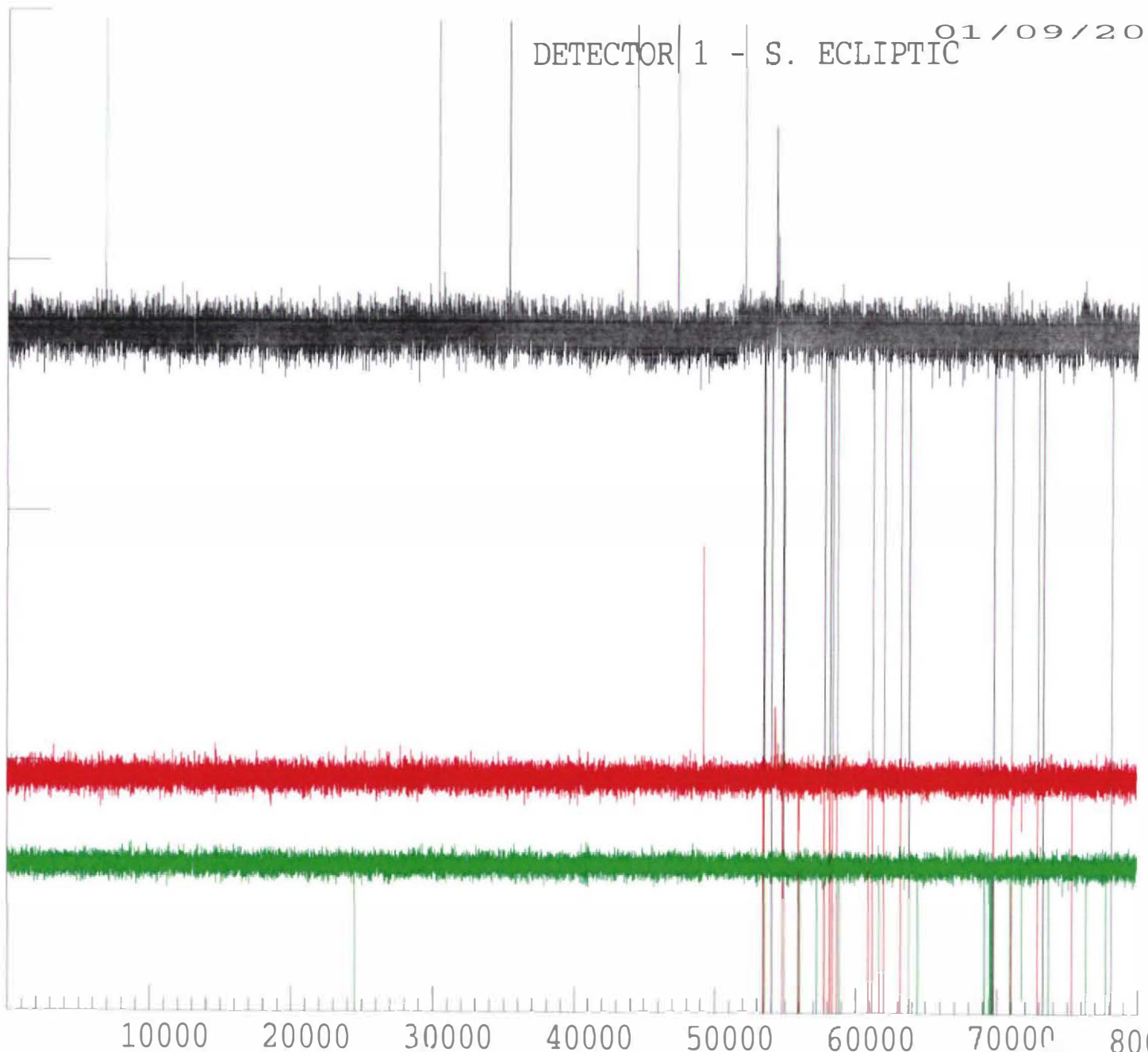
20000

TI , SECS

DETECTOR 1 - S. ECLIPTIC 01/09/2021

70000

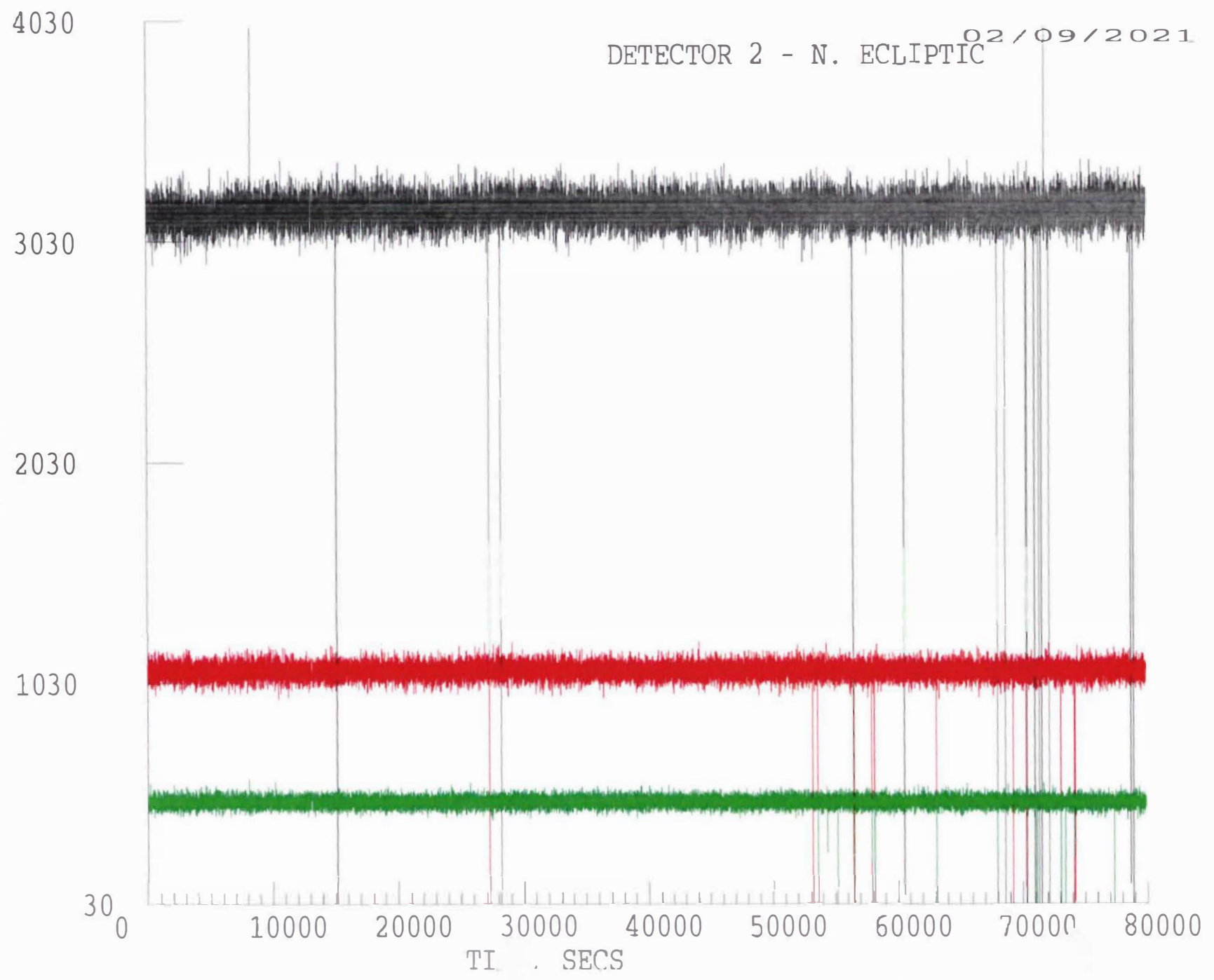
80000



KONUS
01/09/2021
24.299
v01

10- 50 keV
50- 200 keV
200- 750 keV

COUNTS/2.944 S



Subject: GCN/SWIFT_BAT_LIGHTCURVE

From: Bacodine <vxw@capella2.gsfc.nasa.gov>

Date: 9/1/2021, 8:08 AM

To: khurley@ssl.berkeley.edu

TITLE: GCN/SWIFT NOTICE
 NOTICE_DATE: Wed 01 Sep 21 15:08:31 UT
 NOTICE_TYPE: Swift-BAT GRB Lightcurve
 TRIGGER_NUM: 1071488, Seg_Num: 0
 GRB_RA: 295.292d {+19h 41m 10s} (J2000),
 296.037d {+19h 44m 09s} (current),
 293.554d {+19h 34m 13s} (1950)
 GRB_DEC: -76.932d {-76d 55' 55"} (J2000),
 -76.880d {-76d 52' 46"} (current),
 -77.047d {-77d 02' 49"} (1950)
 GRB_DATE: 19458 TJD; 244 DOY; 21/09/01
 GRB_TIME: 54276.34 SOD {15:04:36.34} UT
 TRIGGER_INDEX: 20000
 GRB_PHI: -44.64 [deg]
 GRB_THETA: 47.22 [deg]
 DELTA_TIME: 0.00 [sec]
 TRIGGER_DUR: 64.000 [sec]
 SOLN_STATUS: 0x13
 RATE_SIGNIF: 0.00 [sigma]
 IMAGE_SIGNIF: 10.87 [sigma]
 LC_URL: sw01071488000msb.lc
 SUN_POSTN: 160.97d {+10h 43m 53s} +8.04d {+08d 02' 36"}
 SUN_DIST: 107.18 [deg] Sun_angle= -9.0 [hr] (East of Sun)
 MOON_POSTN: 95.33d {+06h 21m 19s} +25.76d {+25d 45' 25"}
 MOON_DIST: 127.91 [deg]
 MOON_ILLUM: 29 [%]
 GAL_COORDS: 317.58, -29.18 [deg] galactic lon,lat of the burst (or transient)
 ECL_COORDS: 279.54, -54.33 [deg] ecliptic lon,lat of the burst (or transient)
 COMMENTS: SWIFT-BAT GRB Lightcurve.
 COMMENTS:
 COMMENTS: The next comments were copied from the BAT_POS Notice:
 COMMENTS: This is an image trigger.
 COMMENTS: A point_source was found.
 COMMENTS: This does not match any source in the on-board catalog.
 COMMENTS: This does not match any source in the ground catalog.
 COMMENTS: This is a GRB.
 COMMENTS: This trigger occurred at longitude,latitude = 204.94, -17.55 [deg].

46.7 s

 $3.1 \times 10^{-6} \text{ erg cm}^{-2}$ $2.4 \text{ phot/cm}^2 \text{ s}$

SPI NO

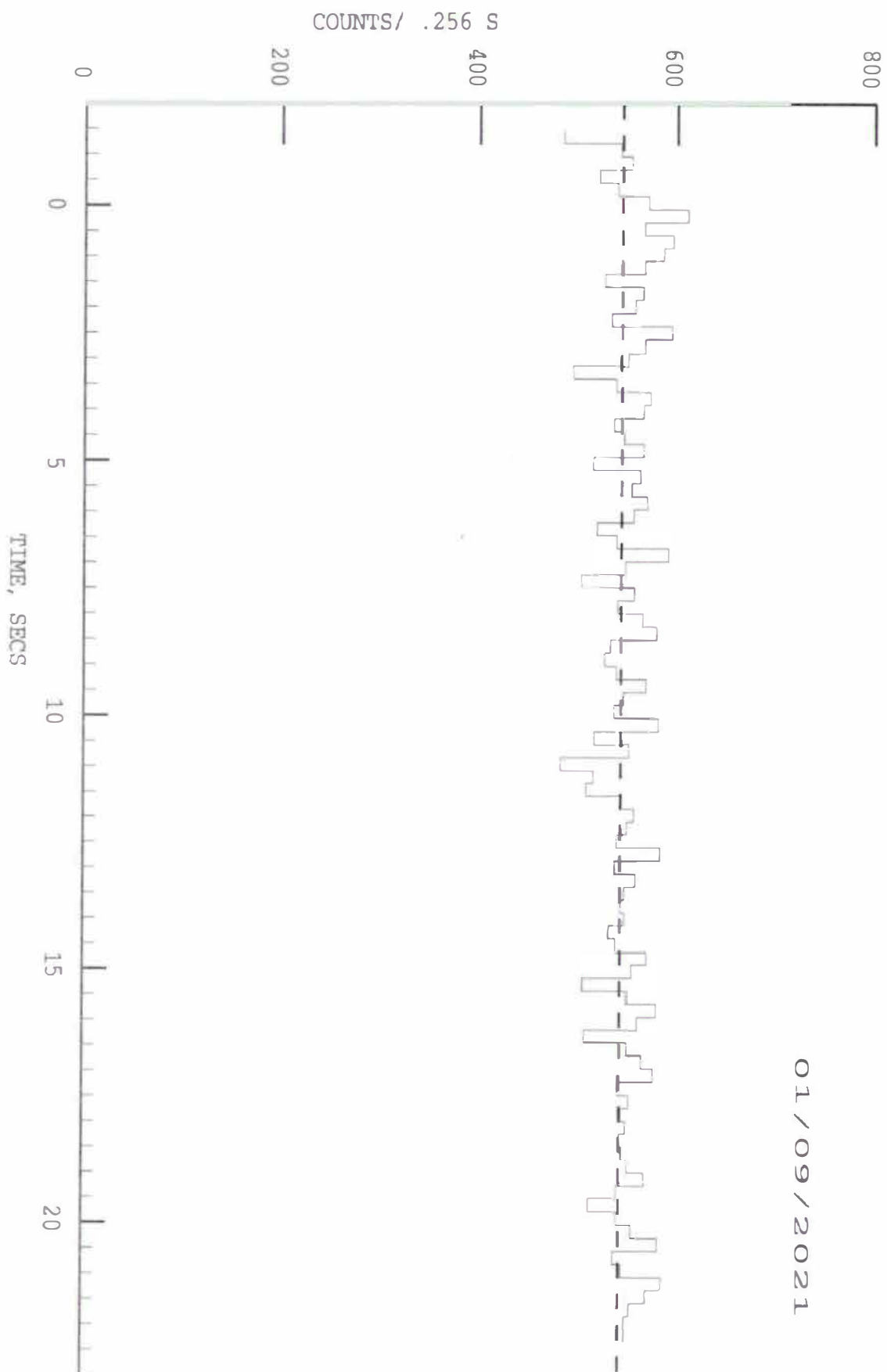
BAT

01/09/21

54276.348

15:04:36.348

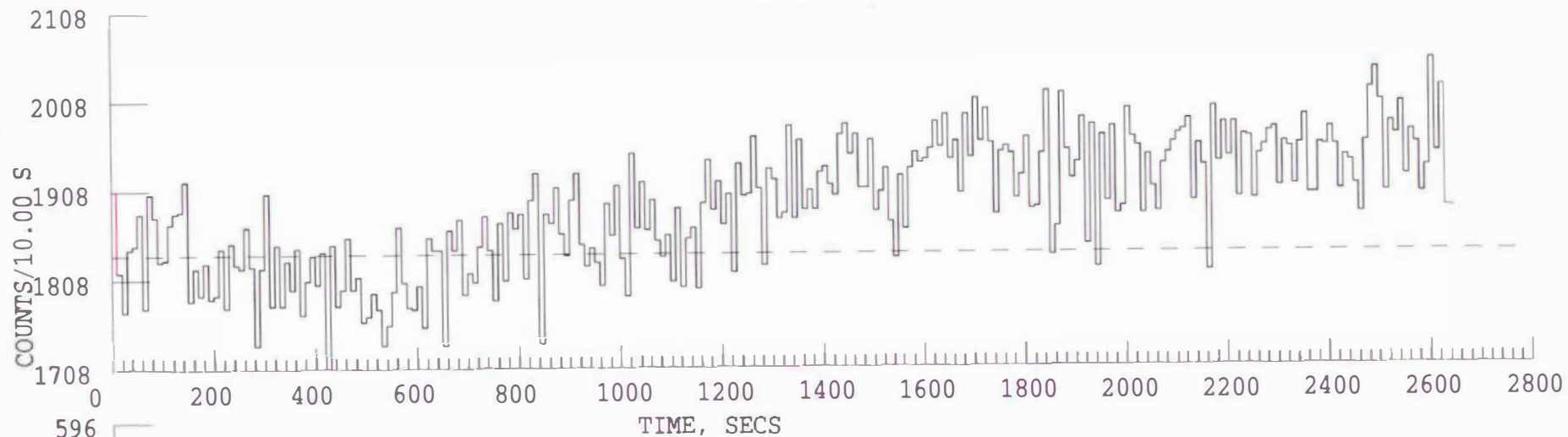
25- 100 keV



17/11/2021

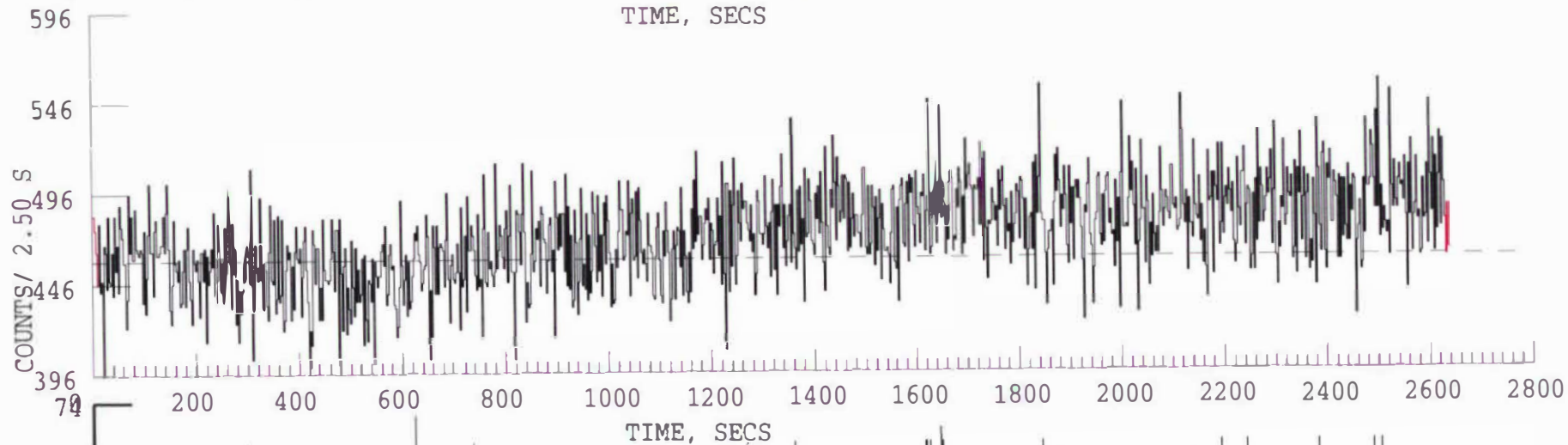
14:42:07.880

Observed



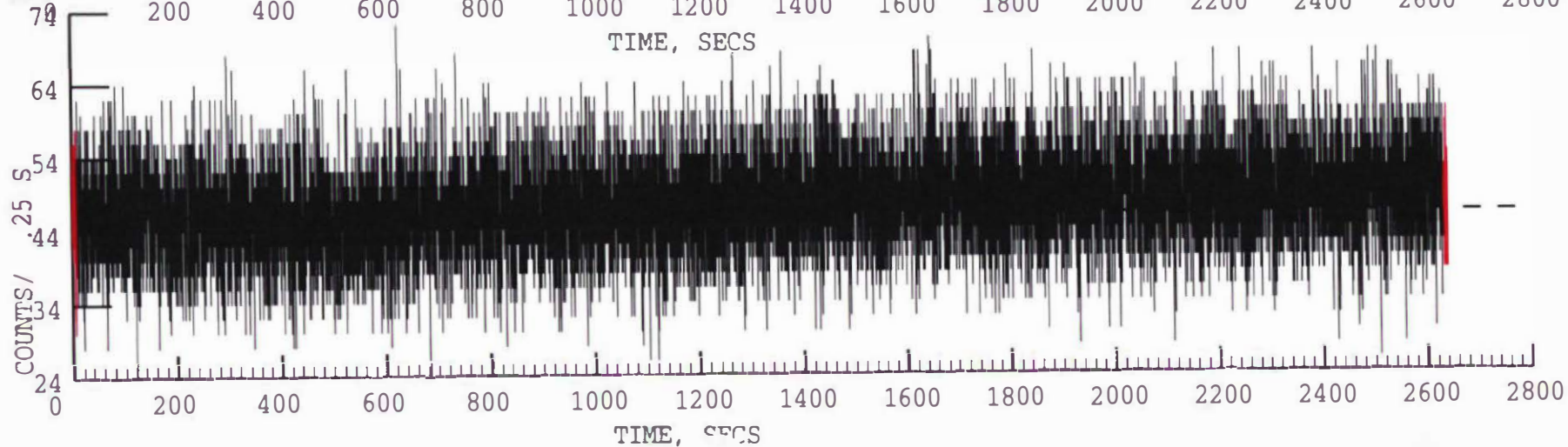
52927.880

50-3000 keV



01/09/21

ODYSSEY



KONUS

10- 50 keV

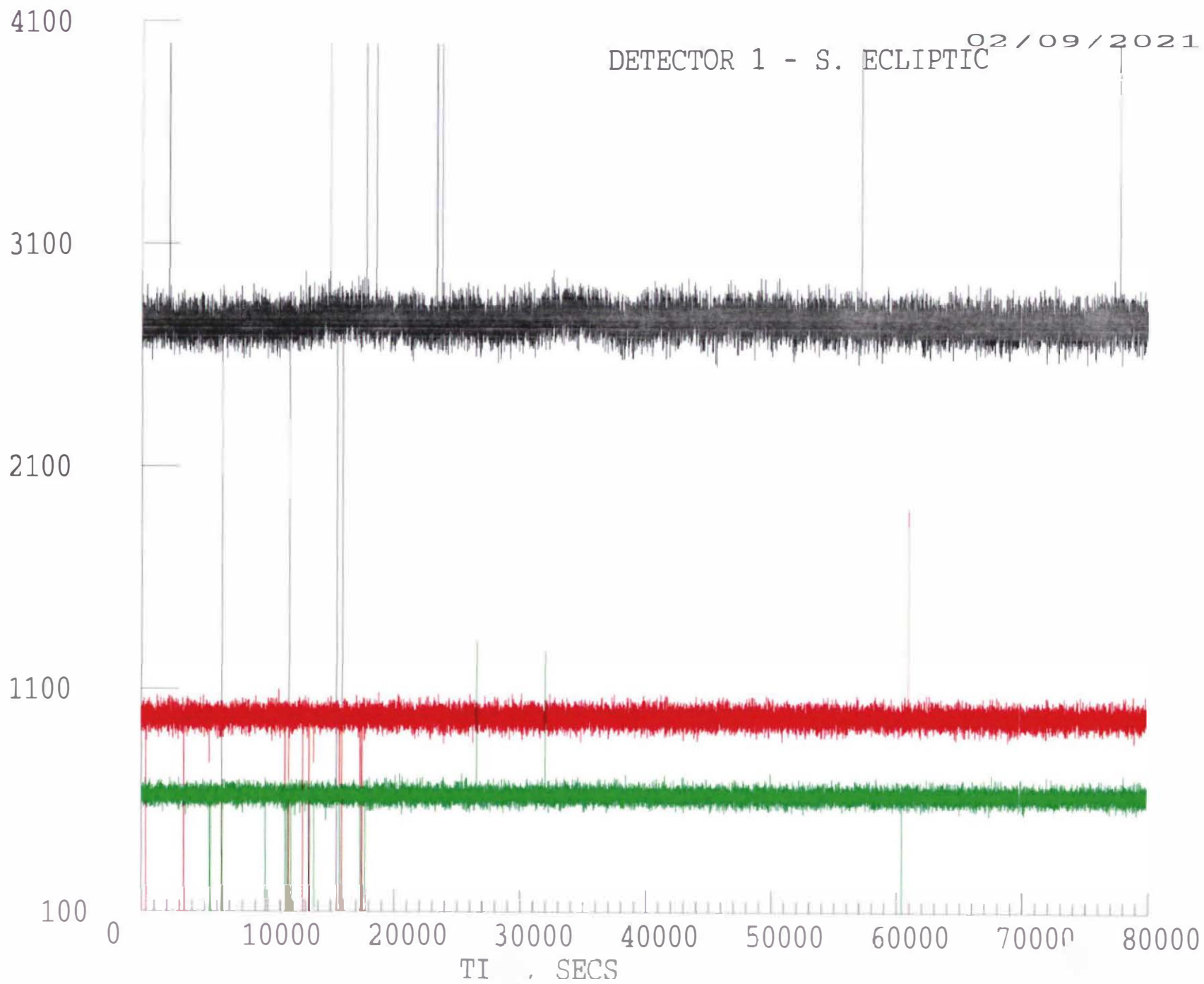
50- 200 keV

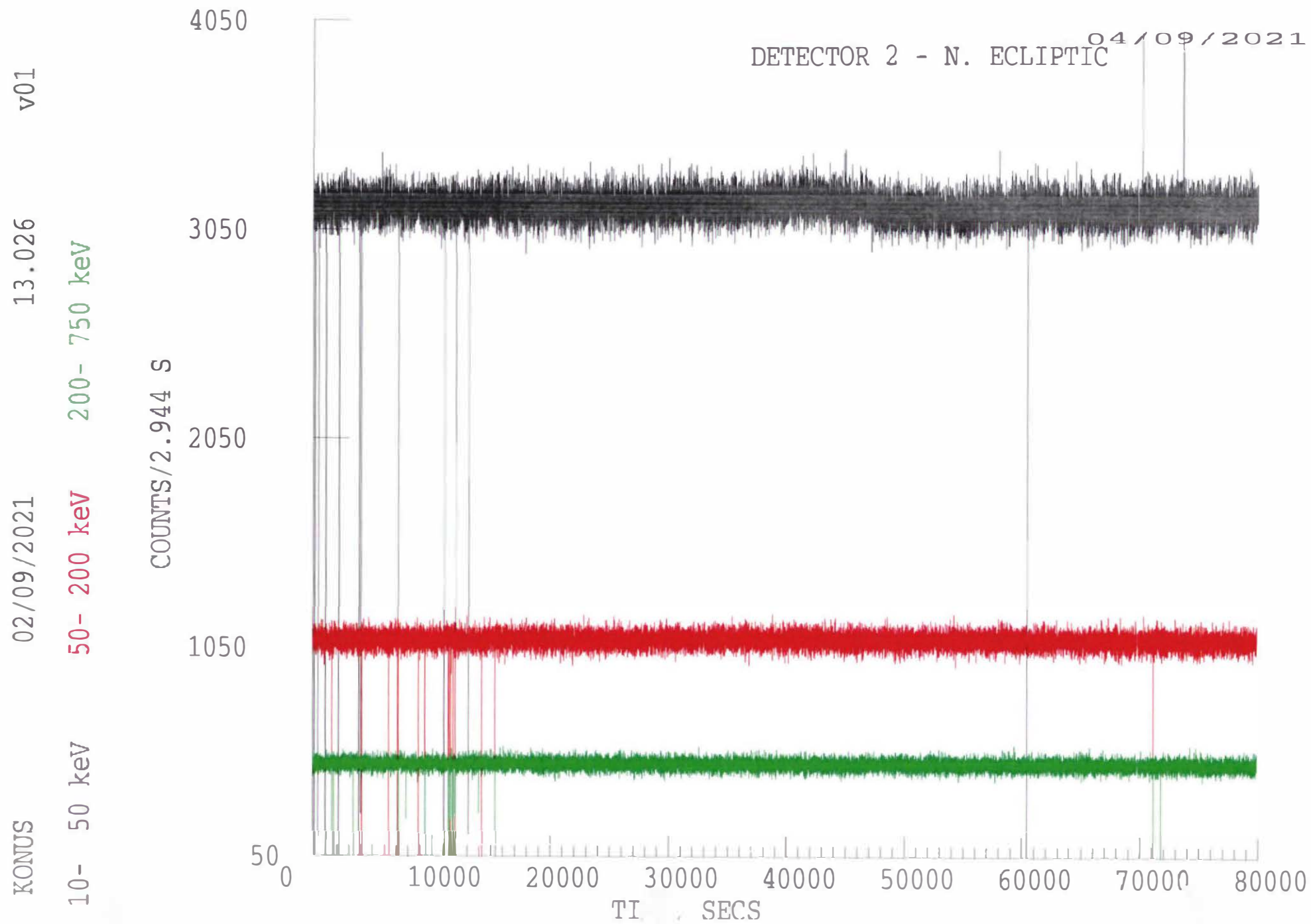
200- 750 keV

13.026

v01

COUNTS/2.944 S





v01

1.754

03/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

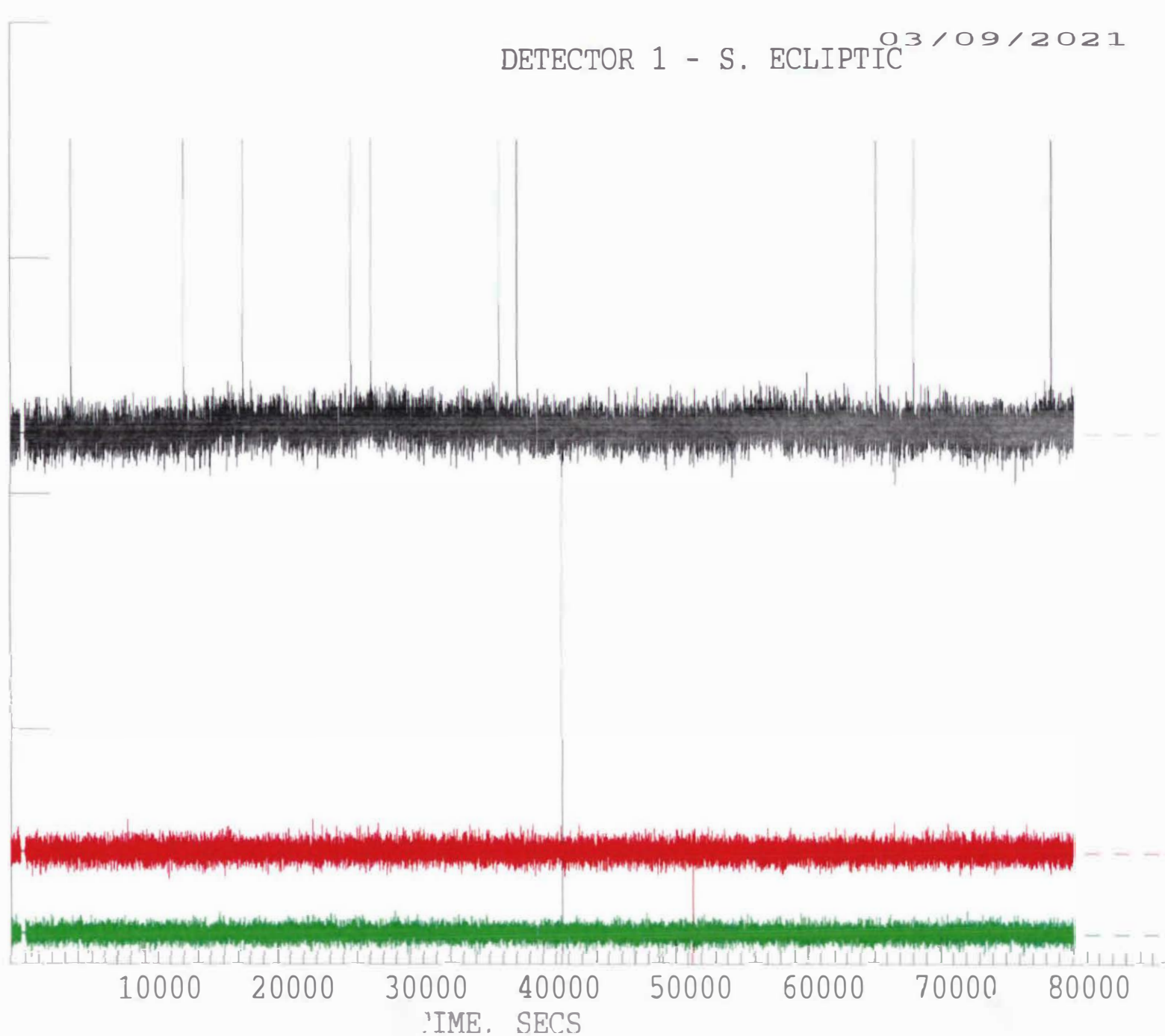
60000

70000

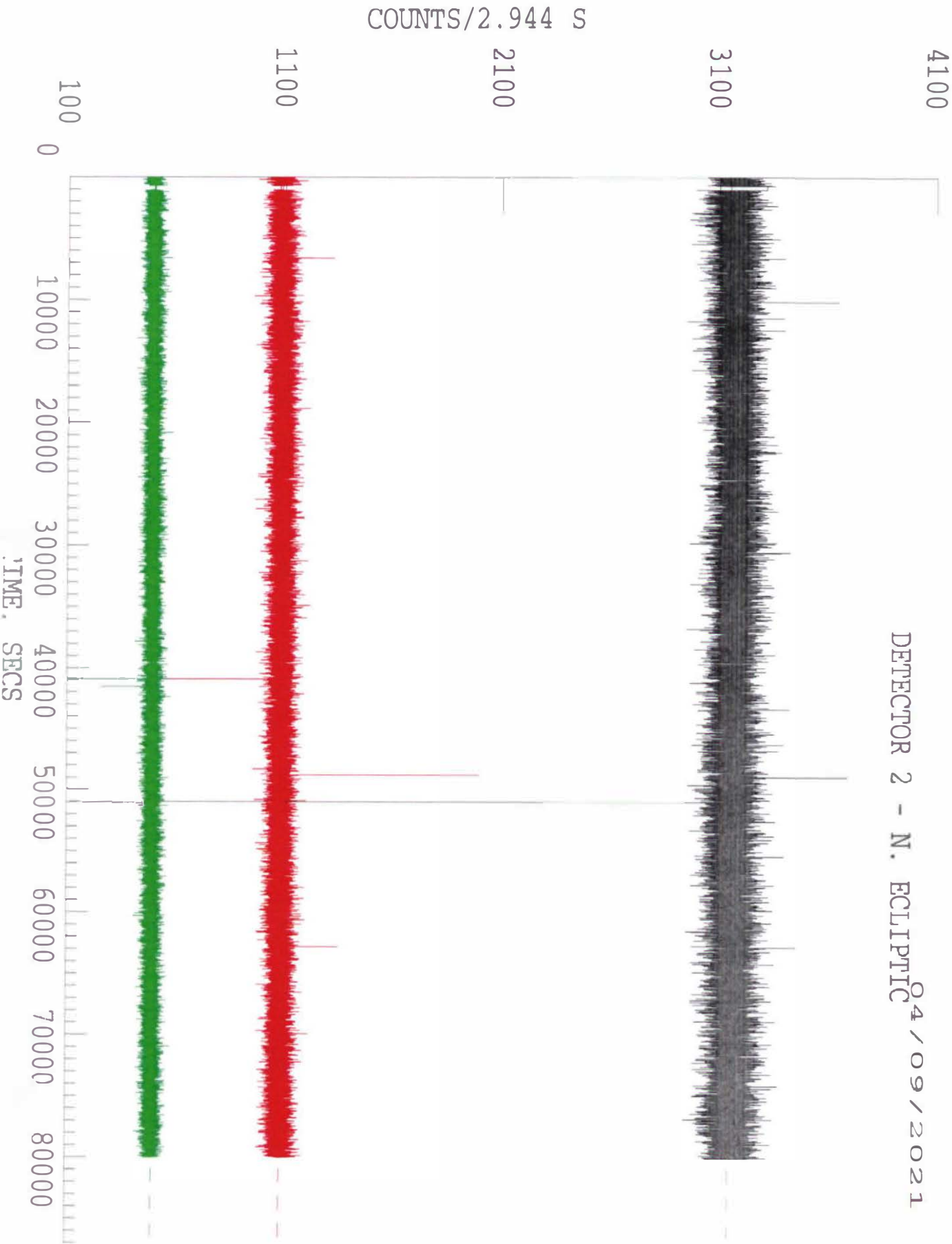
80000

TIME. SECS

DETECTOR 1 - S. ECLIPTIC 03/09/2021



10- 50 keV50- 200 keV200- 750 keV



Subject: IPN triangulation of short GRB 210903B (=Fermi/GBM trigger 652321851) - GBM - SPI-ACS annulus

From: Dmitry Svinkin <svinkin@mail.ioffe.ru>

Date: 9/3/2021, 10:59 AM

To: IPN <ipn@ssl.berkeley.edu>

Dear colleagues,

The short-duration GRB 210903B
(Fermi-GBM detection: The Fermi GBM team, GCN Circ. 30754)
has been detected by Fermi (GBM trigger 652321851) and
INTEGRAL (SPI-ACS), so far, at about 1846 s UT (00:30:46),
see the attached GBM figure.

+GBM

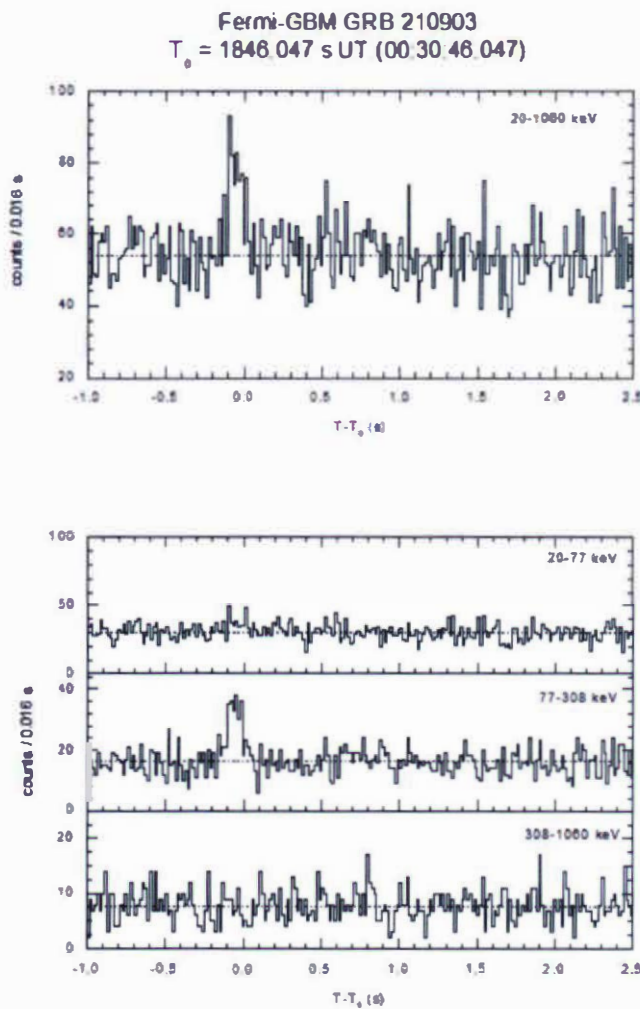
We have triangulated it to a GBM-SPI-ACS annulus centered at
RA(2000)=218.674 deg (14h 34m 42s) Dec(2000)=+59.774 deg (+59d 46' 26"),
whose radius is 21.971 ± 21.971 deg (3 sigma).

The annulus combined with the Fermi-GBM final position glg_healpix_all_bn210903021_v03 and the Fermi Earth-occultation information gives ~3200 deg² 3 sigma localization region, see the attached figure and the corresponding HEALPix map.

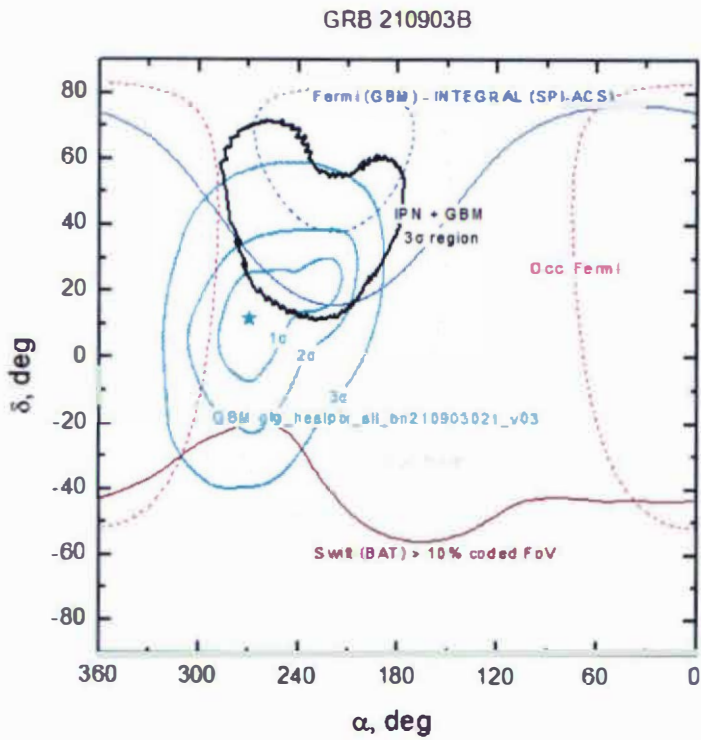
Best regards,

Dmitry

— GRB20210903_T01846_GBM_16ms.png —



— GRB210903B_IPN_map.png —

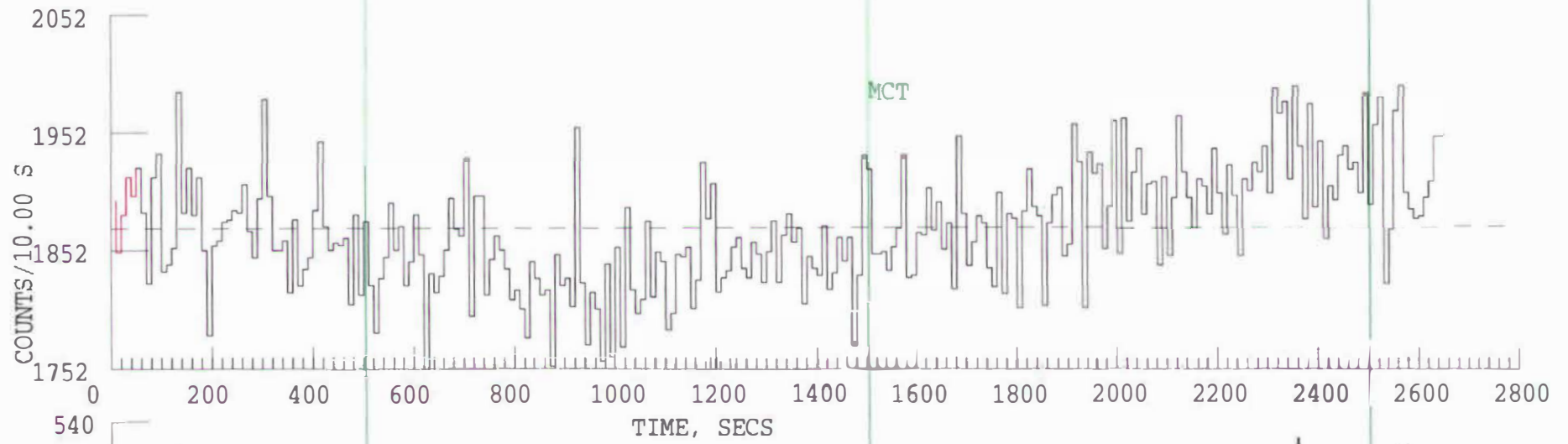


Attachments		
GRB20210903_T01846_GBM_16ms.png		18.0 KB
GRB210903B_IPN_map.png		21.5 KB
GRB20210903_T01846_RoboBA_IPN_map_hpx.fits.gz		206 KB

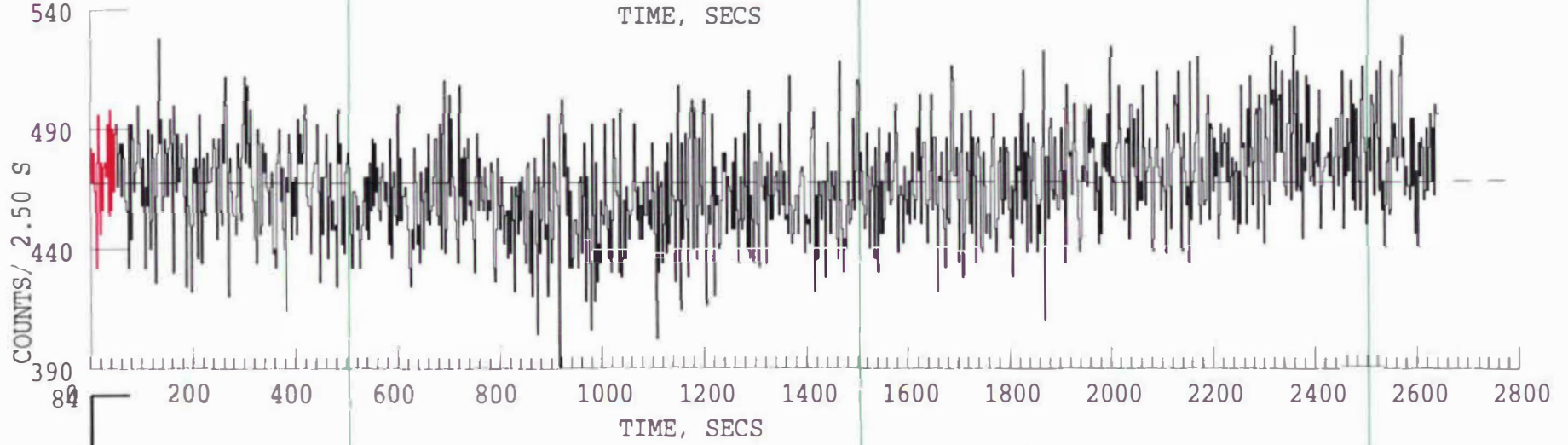
17/11/2021

A

00:08:05.773

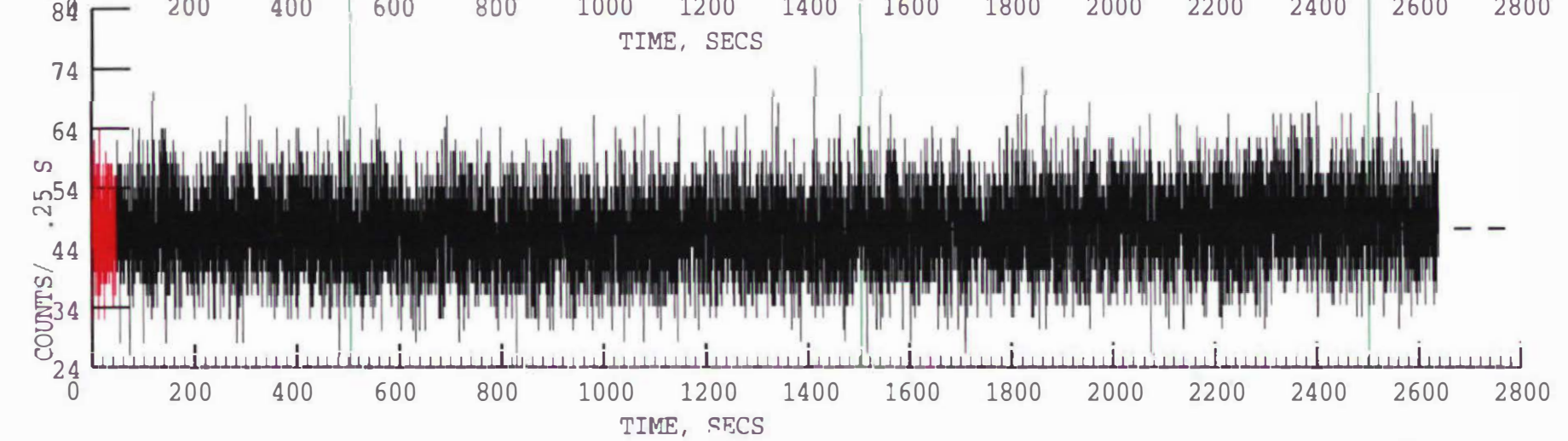


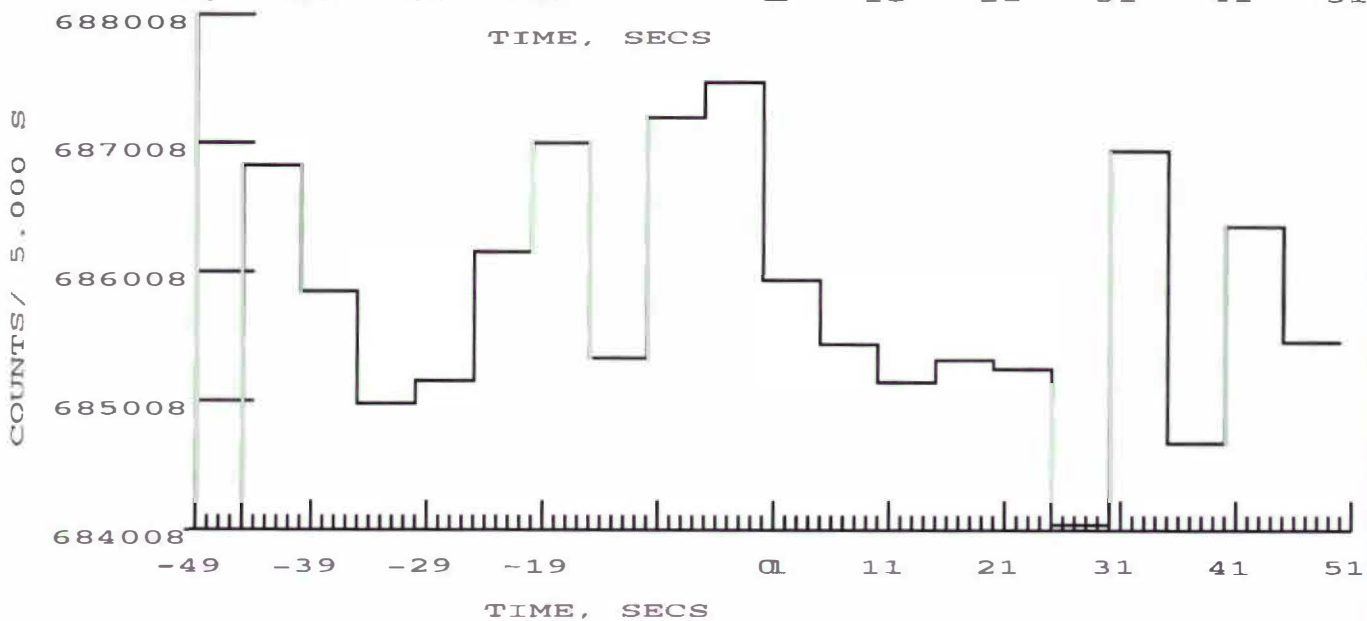
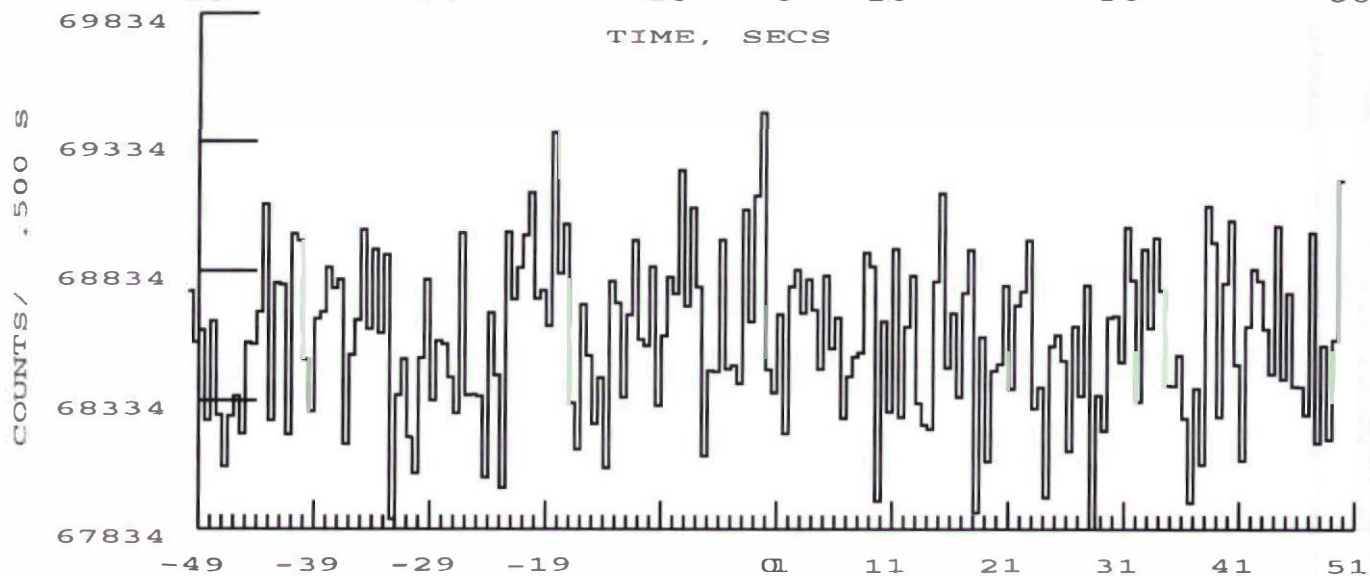
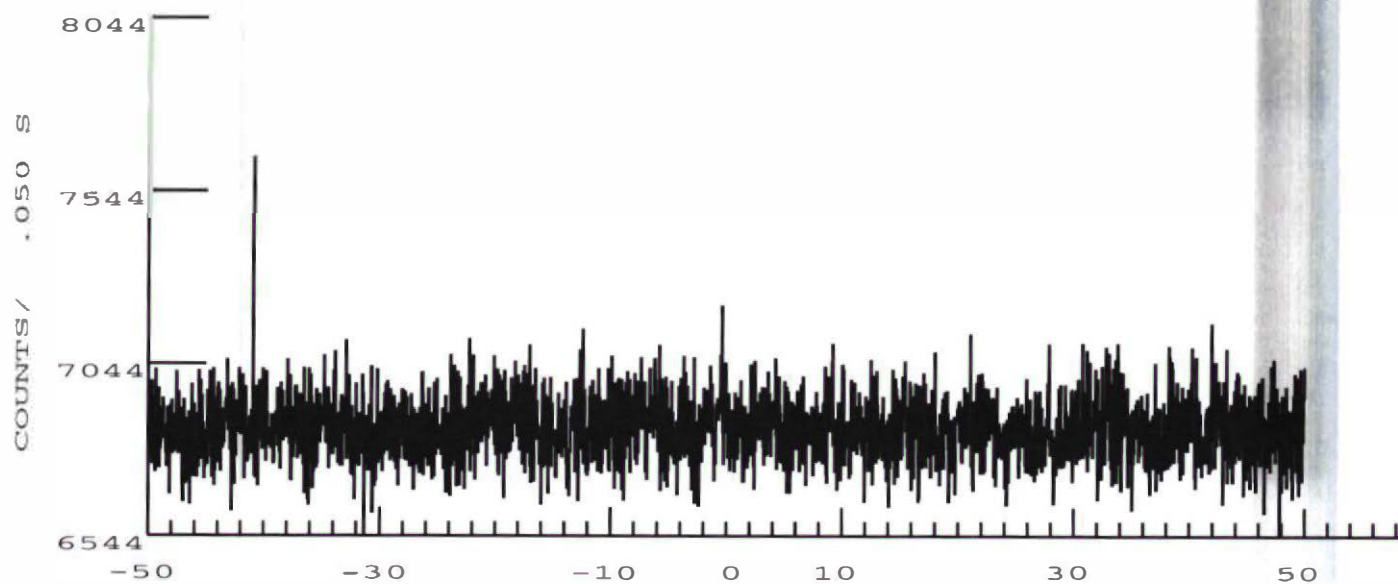
485.773



03/09/21

50-3000 keV





Subject: BAT lightcurve for trigger at 210903_0030

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/3/2021, 9:46 AM

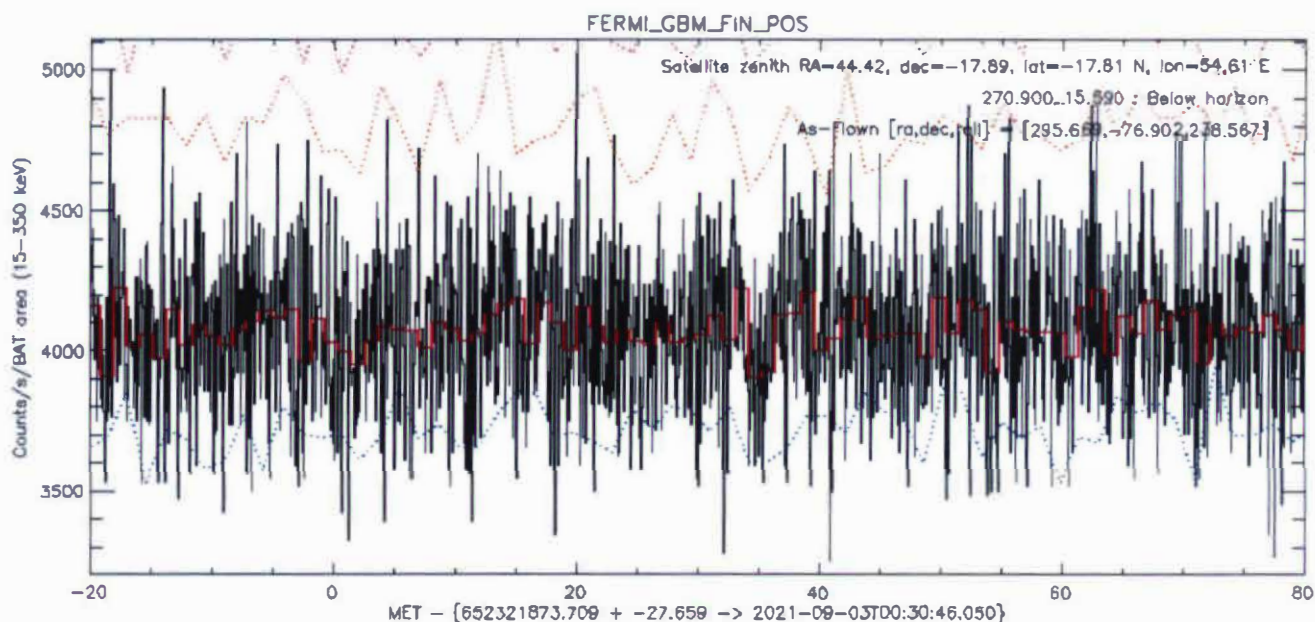
To: bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrland@lanl.gov, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-03T00:30:46.050 -s 270.900_15.590
Swift Zenith(RA,dec):      44.42, -17.89
Swift Location(lon,lat,alt): 54.61 E, -17.81 N, 545 km
Time(MET + UTCF -> UT):   652321873.709 + -27.659 -> 2021-09-03T00:30:46.050
YYMMDD_S00:               210903_01846.050      DOY=246
Obs Sequence Number:      01071488002
Obs Target Name:          GRB 210901A
Obs Date and Times:       2021-09-03 00:25:34 - 00:44:29
Obs Pointing(ra,dec,roll): 295.669, -76.902, 238.57
270.900_15.590_imageloc (boresight_dist, angle): (94, 8)
270.900_15.590_exposure (cm2 cos adjusted): 0
270.900_15.590_altitude: -23 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210903_0030.png



Attachments

/tmp/swift/210903_0030.png

19.2 KB

/tmp/swift/210903_0030_bat64ms_ipn

87.0 KB

Subject: BAT lightcurve for trigger at 210903_0107

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/2/2021, 9:56 PM

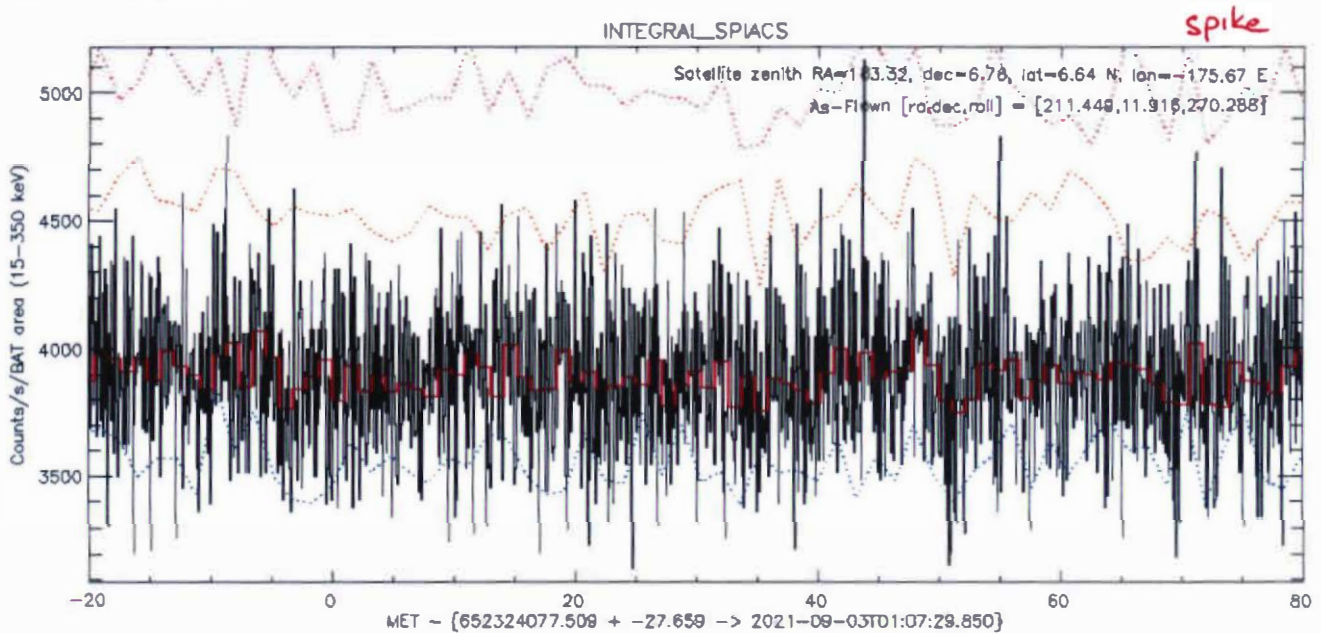
To: palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, mkippen@lanl.gov, vestrland@lanl.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652324077.509
Swift Zenith(RA,dec):      183.32, 6.76
Swift Location(lon,lat,alt): -175.67 E, 6.64 N, 552 km
Time(MET + UTCF -> UT):   652324077.509 + -27.659 -> 2021-09-03T01:07:29.850
YYMMDD_SOD:               210903_04049.850      DOY=246
Obs Sequence Number:      03107611002
Obs Target Name:          SGWGS-2820
Obs Date and Times:       2021-09-03 01:05:51 - 01:15:30
Obs Pointing(ra,dec,roll): 211.449, 11.916, 270.29
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210903_0107.png



-- Attachments: --

/tmp/swift/210903_0107_bat64ms_ipn

87.1 KB

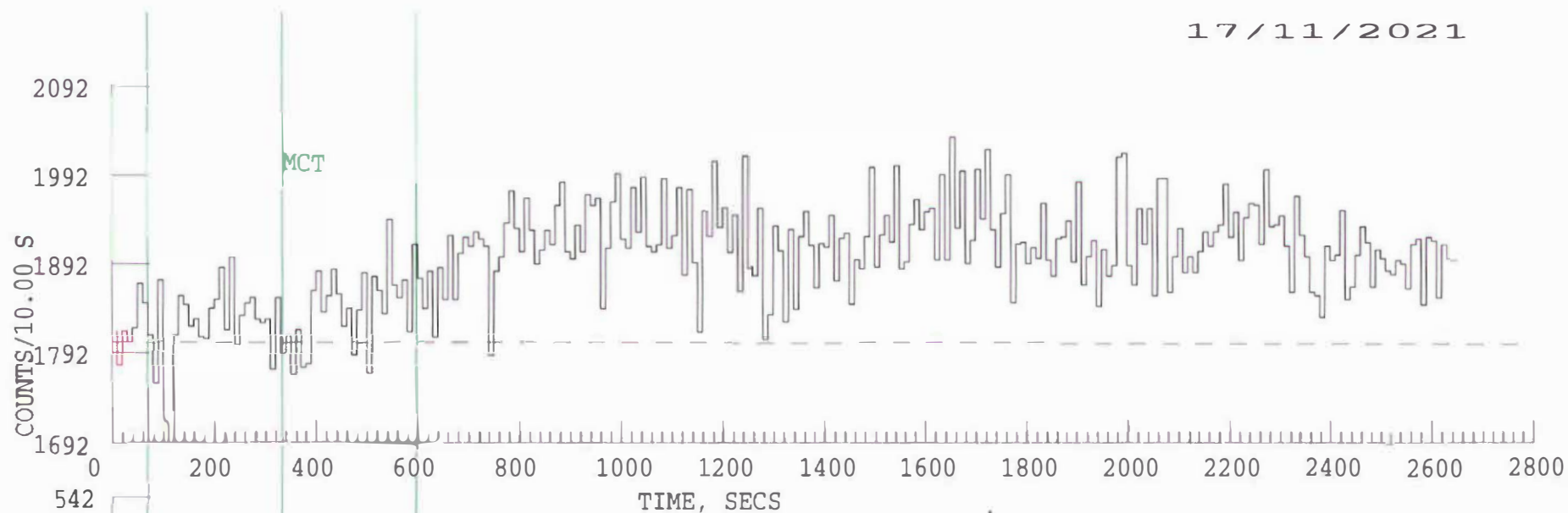
/tmp/swift/210903_0107.png

21.0 KB

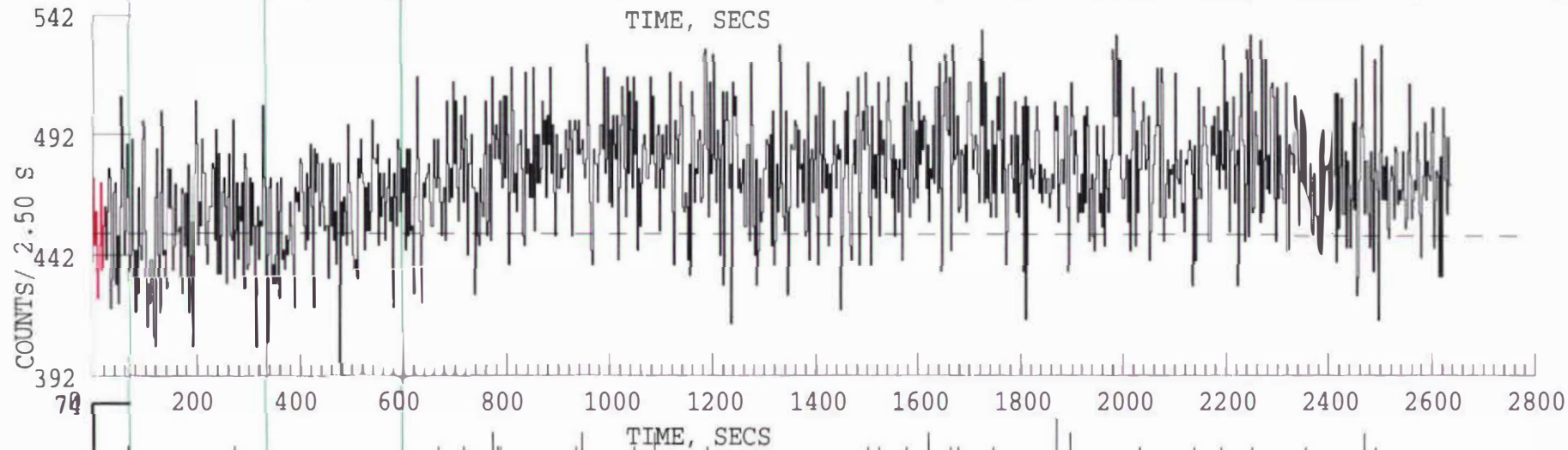
B

17/11/2021

01:28:05.686

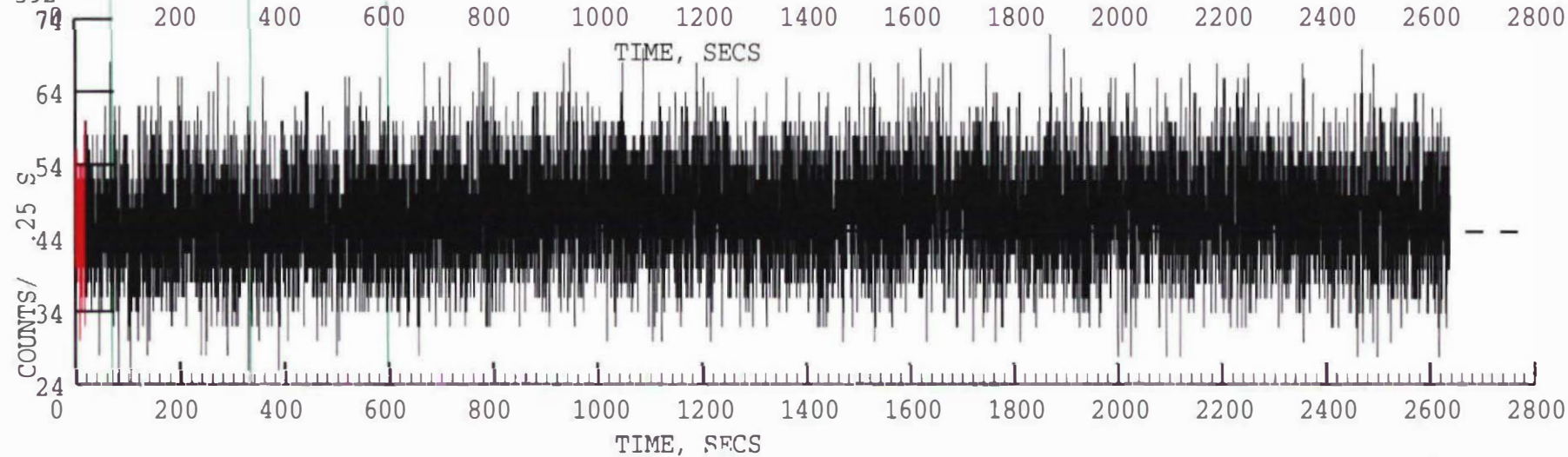


5285.686

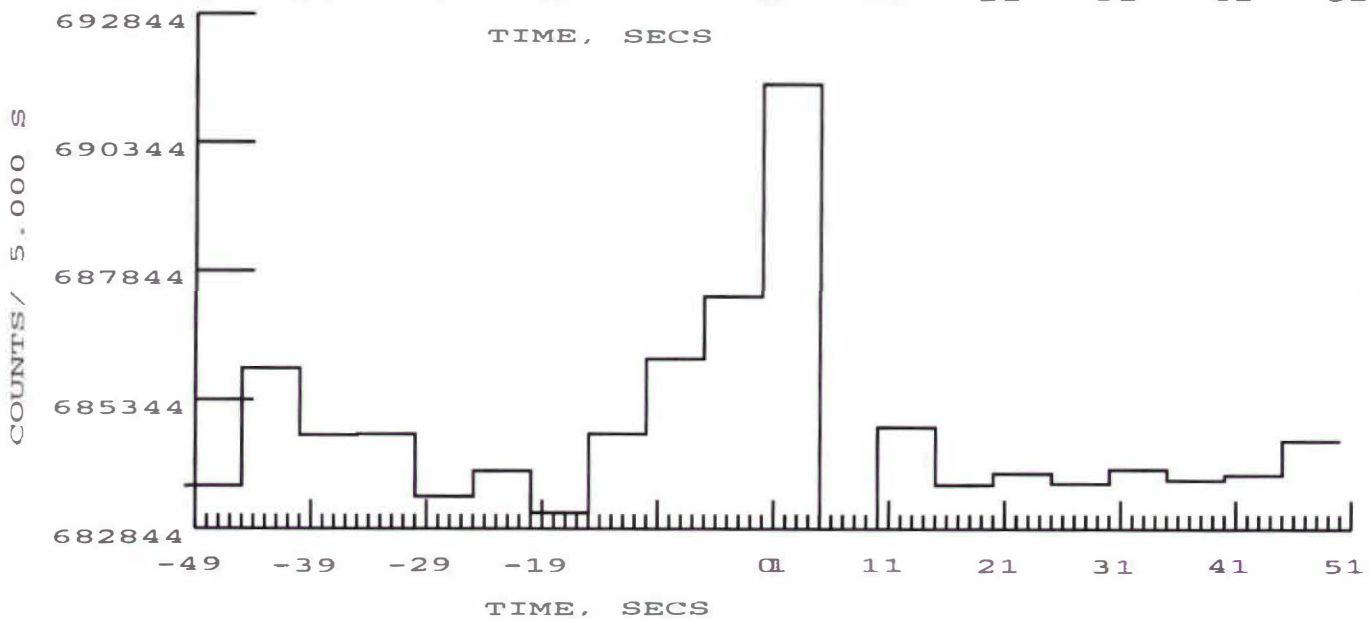
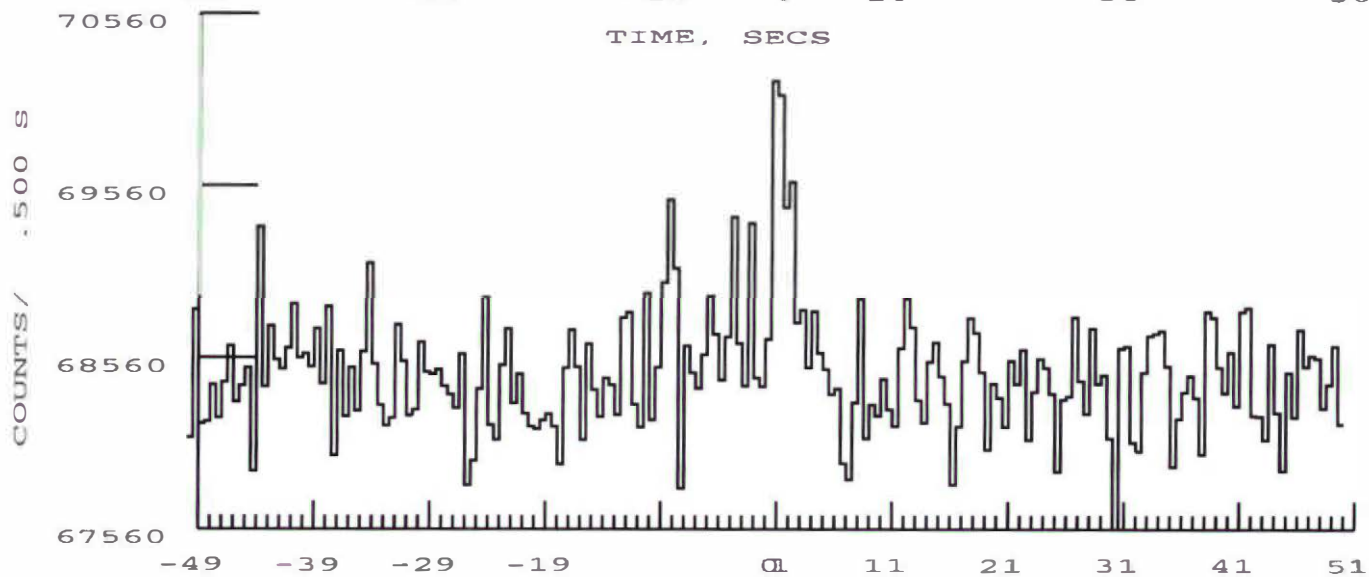
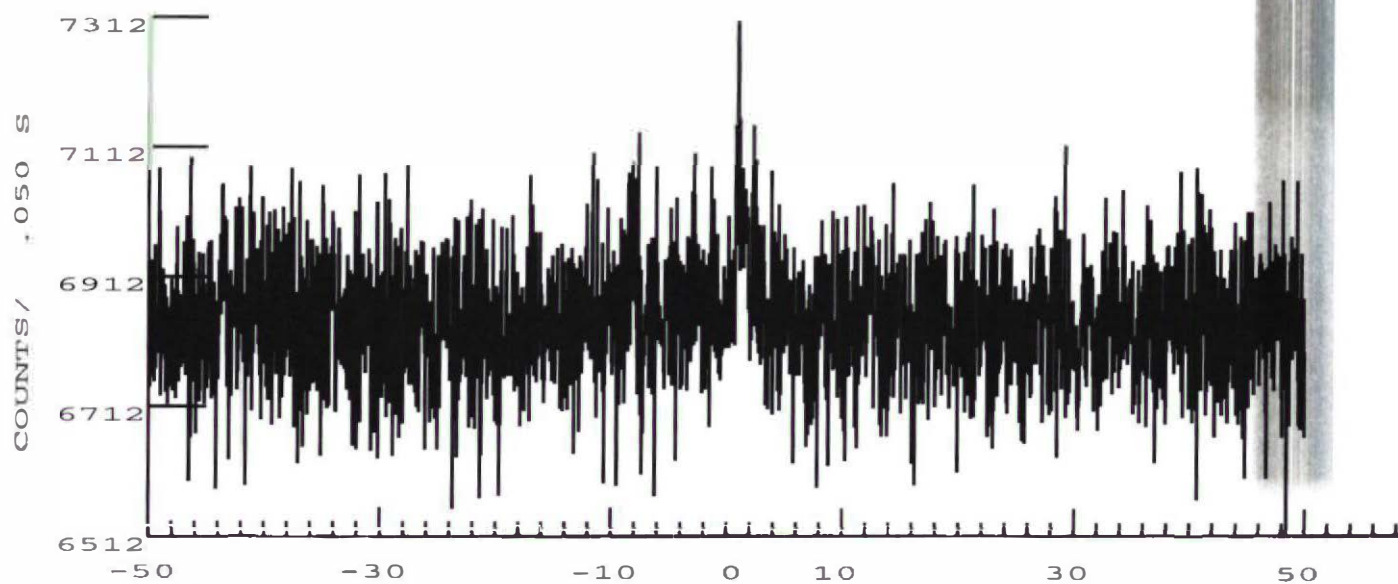


03/09/21

50-3000 keV



B



Subject: BAT lightcurve for trigger at 210903_0150

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/3/2021, 12:30 AM

To: palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, mkippen@lanl.gov, dmopalmer@gmail.com, vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com

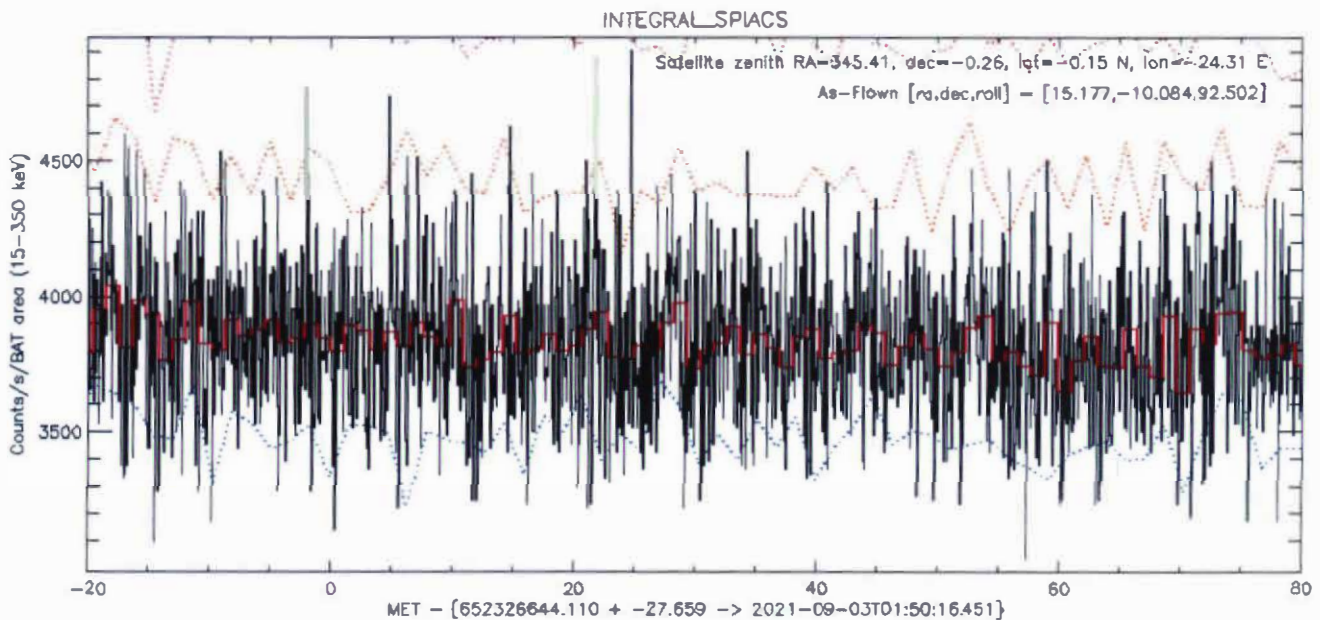
*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

+GBM
178.6 39.1

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652326644.110
Swift Zenith(RA,dec):      345.41, -0.26
Swift Location(lon,lat,alt): -24.31 E, -0.15 N, 547 km
Time(MET + UTCF -> UT):   652326644.110 + -27.659 -> 2021-09-03T01:50:16.451
YYMMDD_SOD:               210903_06616.451      DOY=246
Obs Sequence Number:      00074916017
Obs Target Name:          saa-cold-137-06
Obs Date and Times:       2021-09-03  01:46:34 - 01:53:30
Obs Pointing(ra,dec,roll): 15.177, -10.084, 92.50
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210903_0150.png



Attachments

/tmp/swift/210903_0150_bat64ms_ipn

87.1 KB

/tmp/swift/210903_0150.png

19.8 KB

BAT

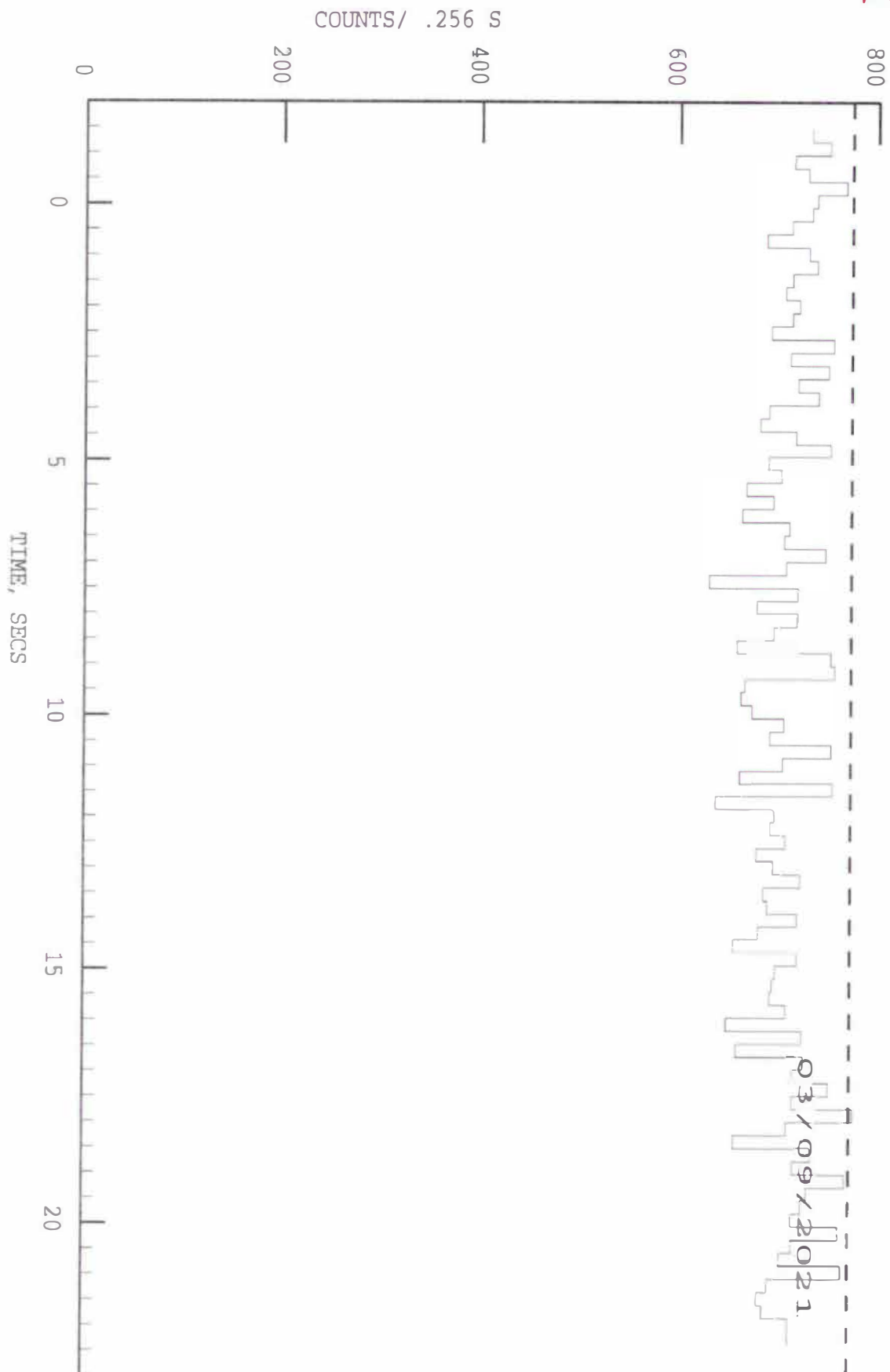
03/09/21

49564.337

13:46:04.337

25- 100 keV

2
Not in list



BAT

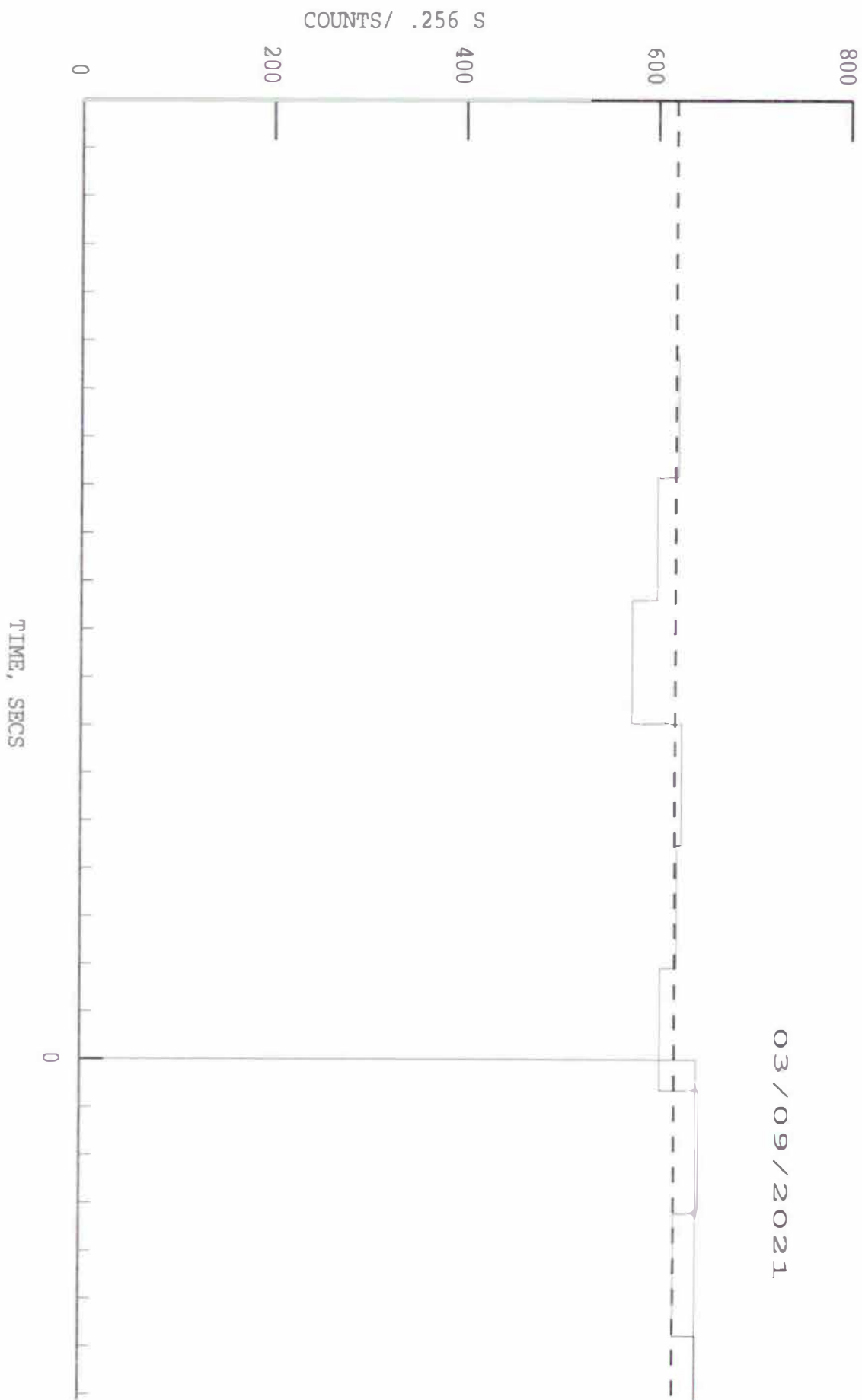
03/09/21

50684.337

14:04:44.337

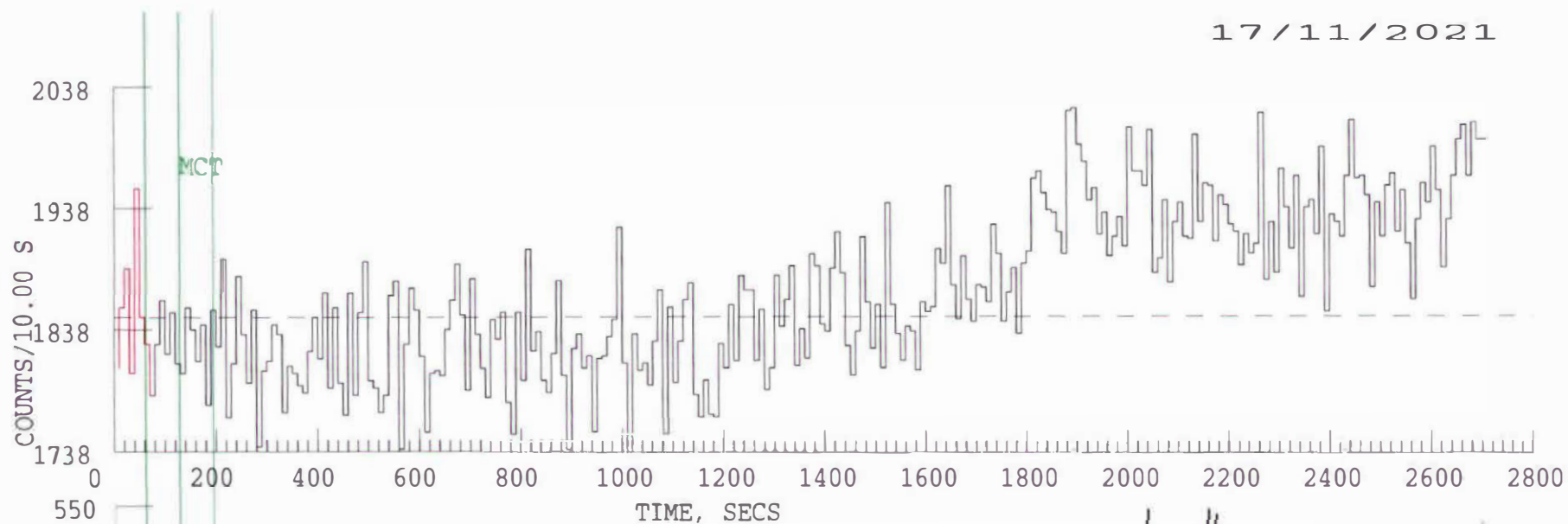
25- 100 keV

?

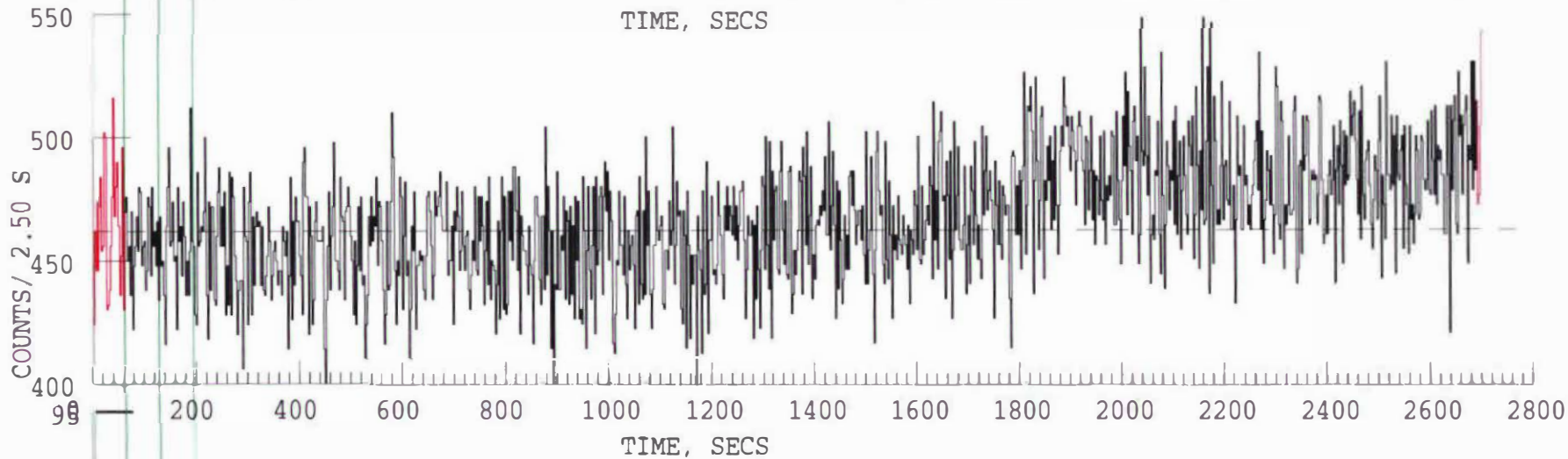


17/11/2021

17:04:04.685

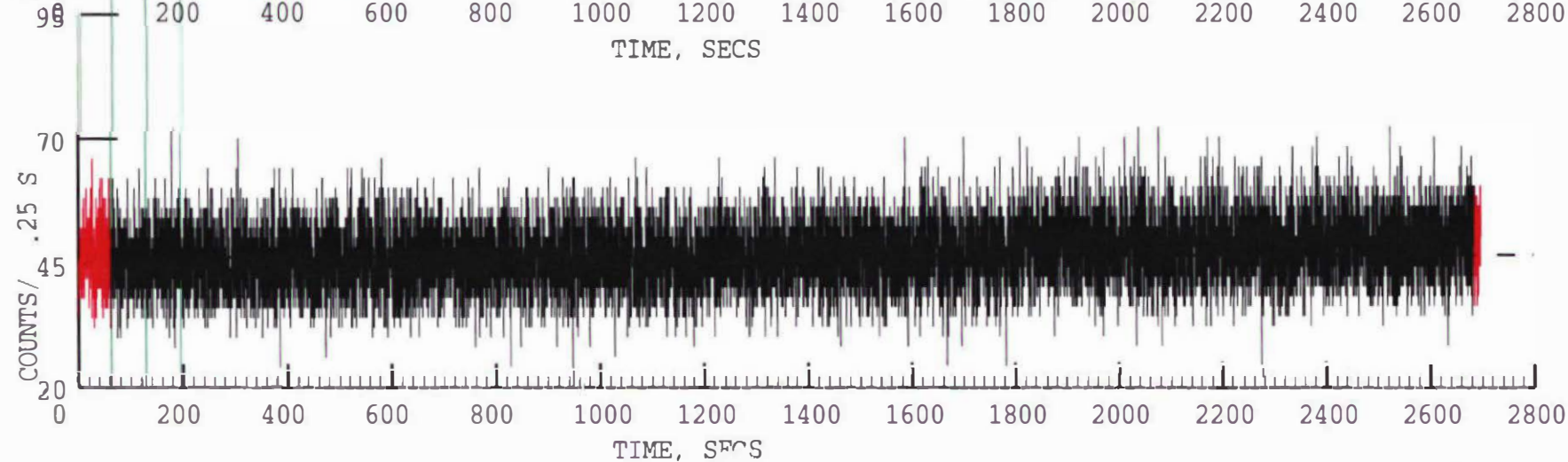


61444.685



03/09/21

50-3000 keV



Subject: Re: BAT lightcurve for trigger at 210903_1726
From: Aaron Tohuvavohu <aaron.tohu@gmail.com>
Date: 9/4/2021, 7:39 AM
To: "<palmer+automatic_lightcurve@lanl.gov>" <palmer+automatic_lightcurve@lanl.gov>
CC: "Vestrand, W" <vestrand@lanl.gov>, gbm-burst-advocate@lists.nasa.gov, IPN <ipn@ssl.berkeley.edu>, BAT TEAM <bat_team@bigbang.gsfc.nasa.gov>, David Palmer <dmopalmer@gmail.com>, "Kippen, Marc" <mkippen@lanl.gov>

This is a solid detection. Best fit position is weakly preferred to be near the edge of the FoV, but could be outside.

On Fri, Sep 3, 2021 at 8:44 PM <palmer+automatic_lightcurve@lanl.gov> wrote:

+GBM

SPI NO

ISS.0 22.0

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652382846.313
Swift Zenith(RA,dec): 275.15, 18.80
Swift Location(lon,lat,alt): 30.58 E, 18.81 N, 555 km
Time(MET + UTCF -> UT): 652382846.313 + -27.663 -> 2021-09-03T17:26:58.650
YYMMDD_SOD: 210903_62818.650 DOY=246
Obs Sequence Number: 00095931034
Obs Target Name: CDF-N
Obs Date and Times: 2021-09-03 17:04:34 - 17:29:33
Obs Pointing(ra,dec,roll): 189.089, 62.223, 214.07

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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Subject: BAT lightcurve for trigger at 210903_1726

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/3/2021, 5:44 PM

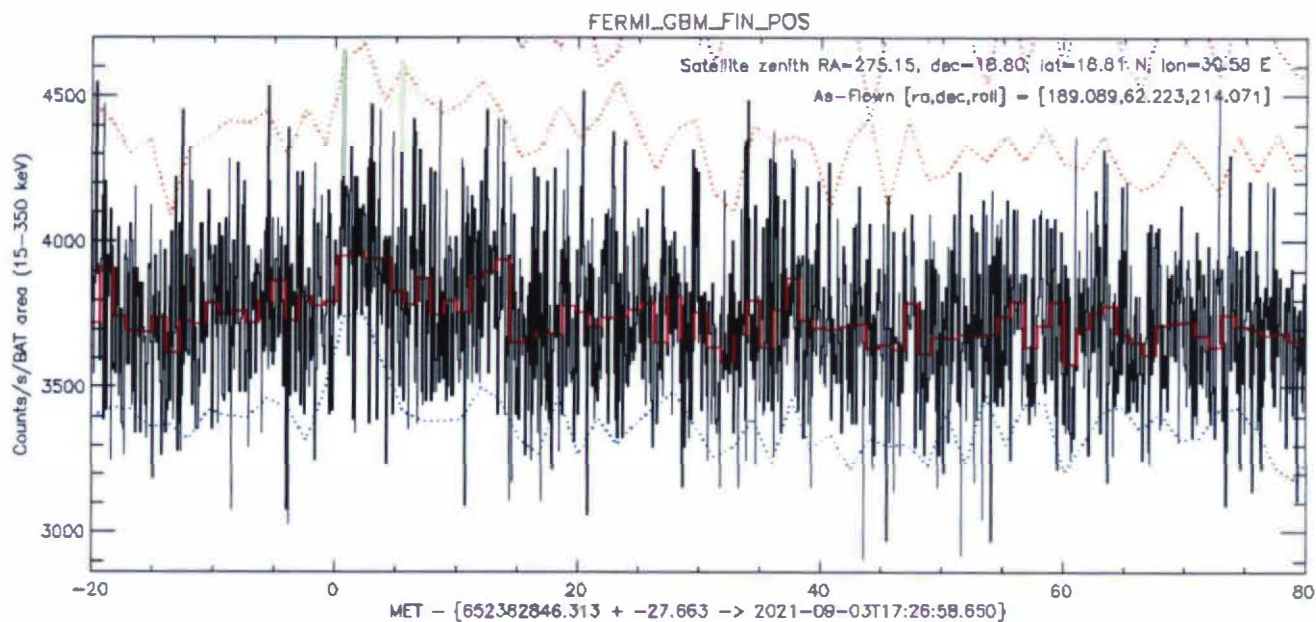
To: vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, ipn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652382846.313
Swift Zenith(RA,dec):      275.15, 18.80
Swift Location(lon,lat,alt): 30.58 E, 18.81 N, 555 km
Time(MET + UTCF -> UT):   652382846.313 + -27.663 -> 2021-09-03T17:26:58.650
YYMMDD_SOD:               210903_62818.650      DOY=246
Obs Sequence Number:      00095931034
Obs Target Name:          CDF-N
Obs Date and Times:       2021-09-03 17:04:34 - 17:29:33
Obs Pointing(ra,dec,roll): 189.089, 62.223, 214.07
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210903_1726.png



Attachments

/tmp/swift/210903_1726.png

19.3 KB

/tmp/swift/210903_1726_bat64ms_ipn

62.9 KB

KONUS

04/09/2021

81.745

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

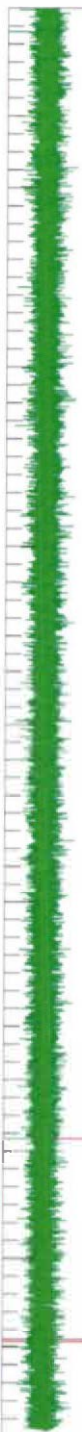
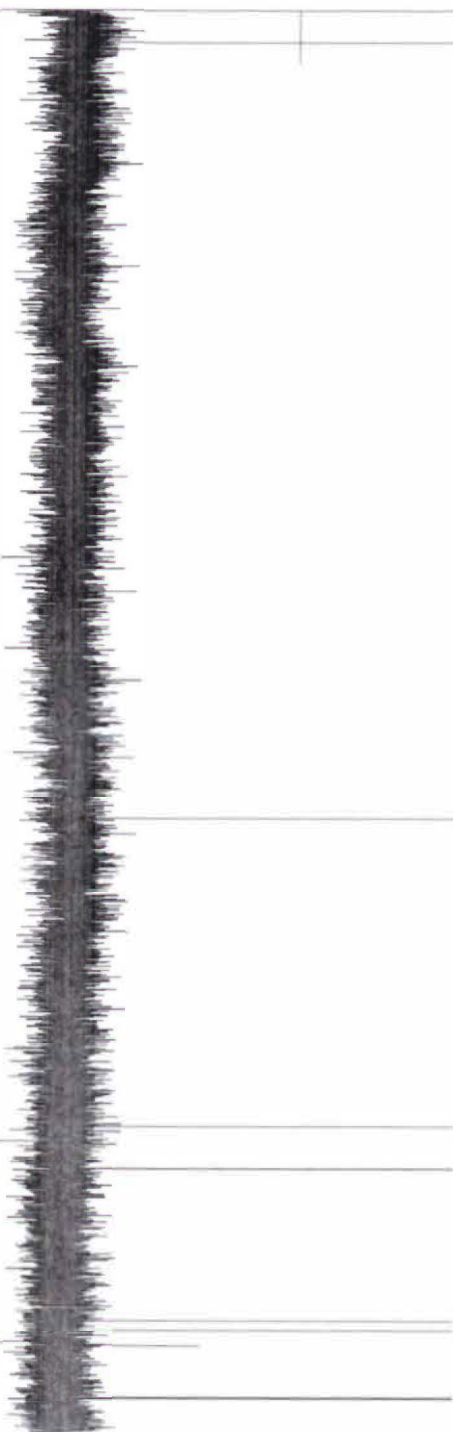
60000

70000

80000

TI SECS

DETECTOR 1 - S. ECLIP⁰⁴/09/2021



v01

81.745

04/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4300

3300

2300

1300

300

0

10000

20000

30000

40000

50000

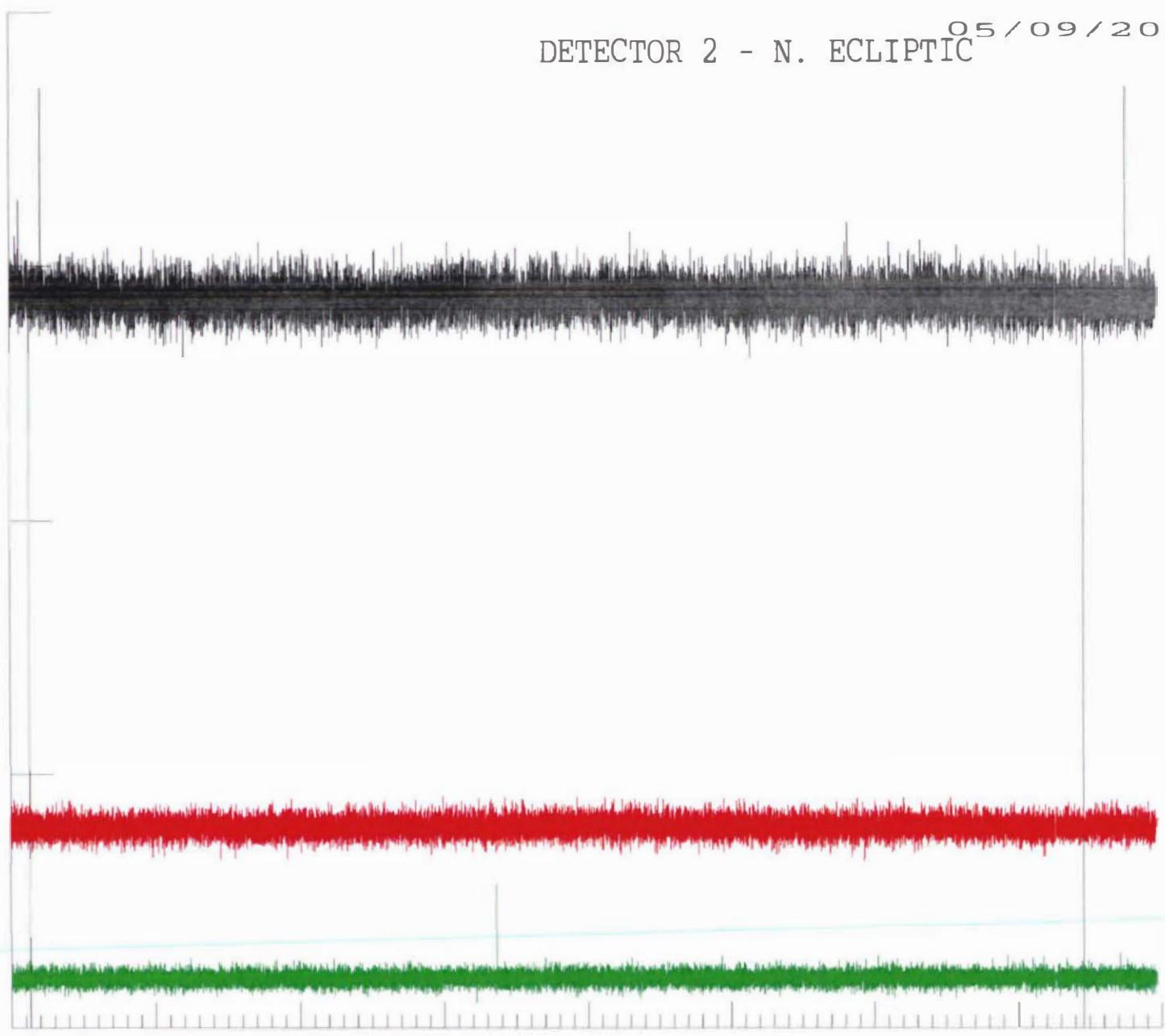
60000

70000

80000

TI SECS

DETECTOR 2 - N. ECLIPTIC 05/09/2021



Subject: BAT lightcurve for trigger at 210904_2047

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/4/2021, 4:47 PM

To: aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, vestrland@lanl.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

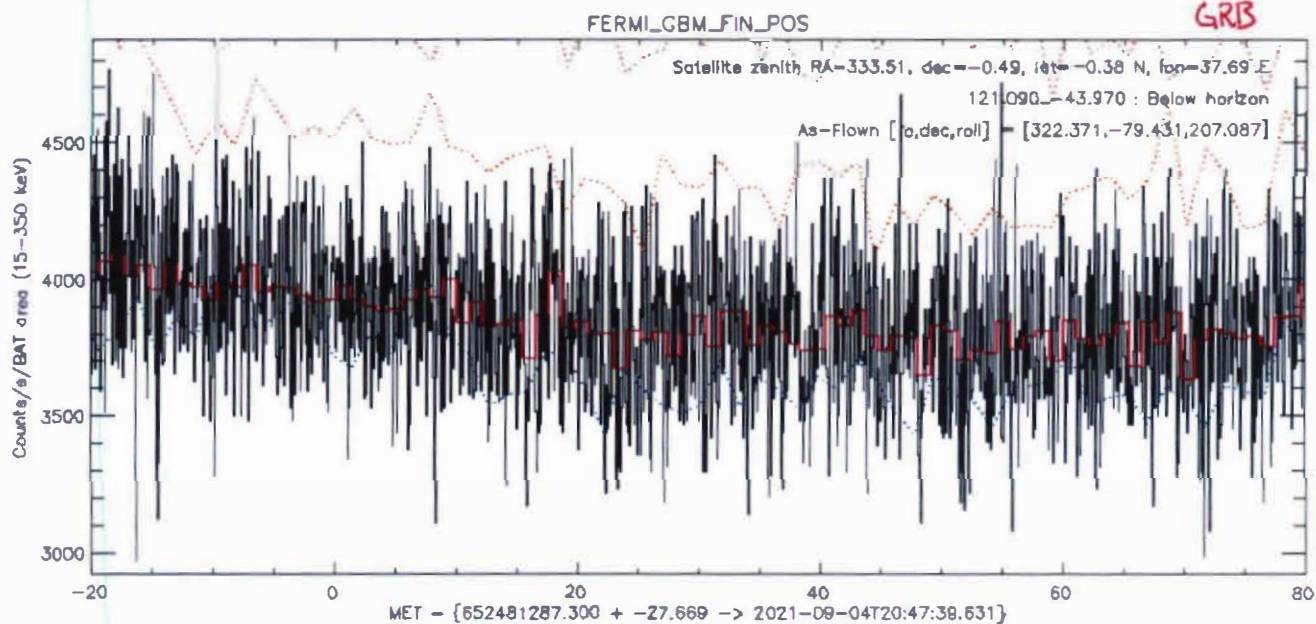
```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652481287.300 -s 121.090_-43.970
Swift Zenith(RA,dec):      333.51, -0.49
Swift Location(lon,lat,alt): 37.69 E, -0.38 N, 550 km
Time(MET + UTCF -> UT):   652481287.300 + -27.669 -> 2021-09-04T20:47:39.631
YYMMDD_SDD:              210904_74859.631      DOY=247
Obs Sequence Number:      00014782001
Obs Target Name:          FRB20190102
Obs Date and Times:       2021-09-04 20:46:34 - 21:16:32
Obs Pointing(ra,dec,roll): 322.371, -79.431, 207.09
121.090_-43.970_imageloc (boresight_dist, angle): (56, -135)
121.090_-43.970_exposure (cm2 cos adjusted): 0
121.090_-43.970_altitude: -14 (down)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210904_2047.png

SPI N/O

124.6 -92.2



Attachments:

/tmp/swift/210904_2047_bat64ms_ipn

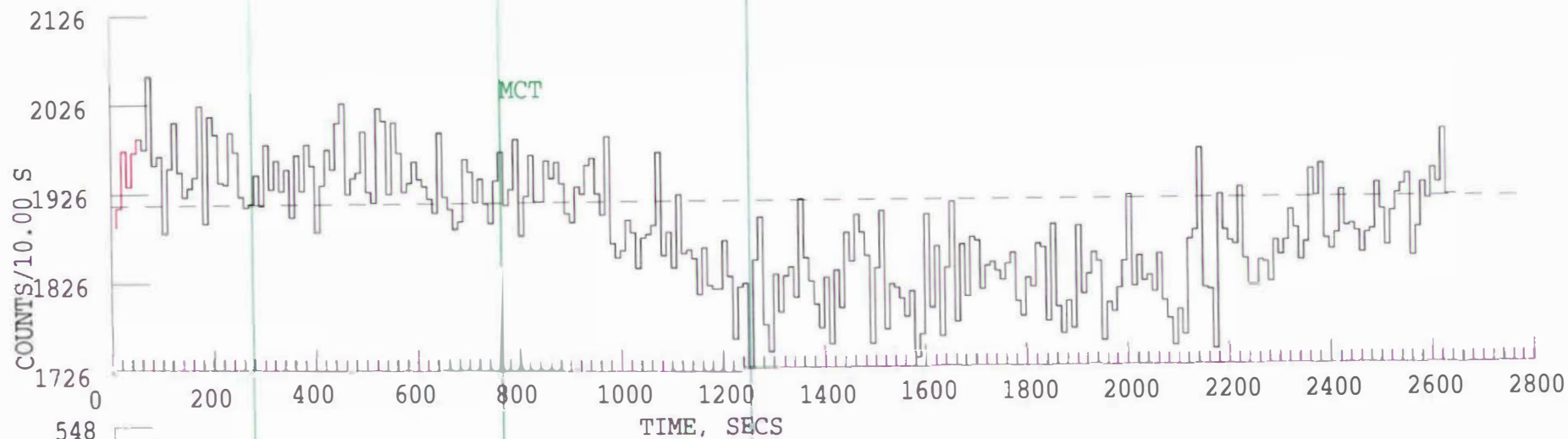
87.1 KB

/tmp/swift/210904_2047.png

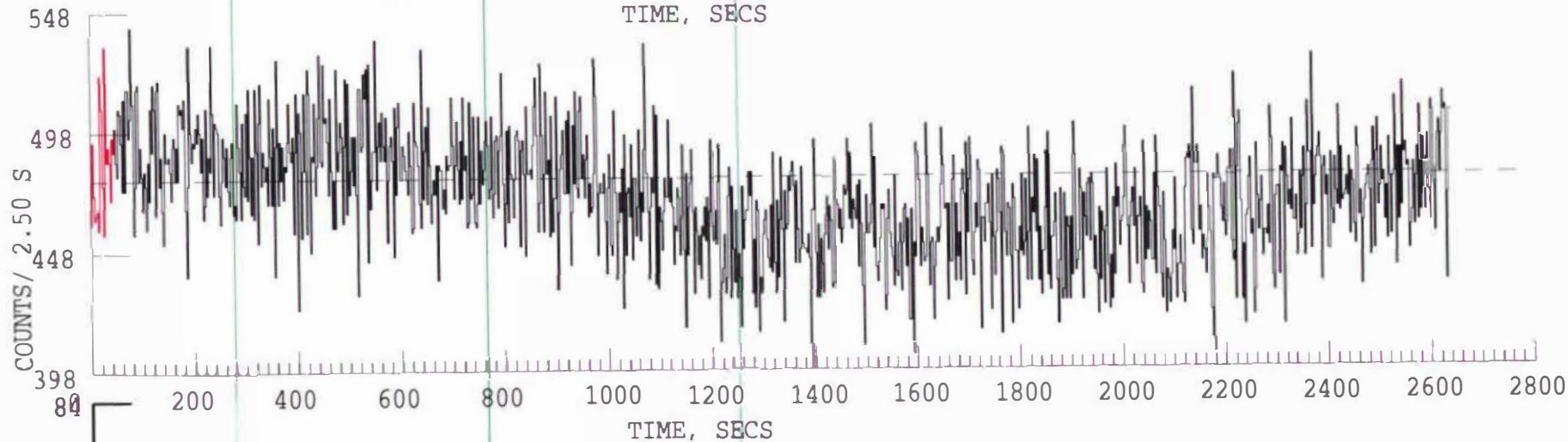
20.6 KB

17/11/2021

20:25:02.934

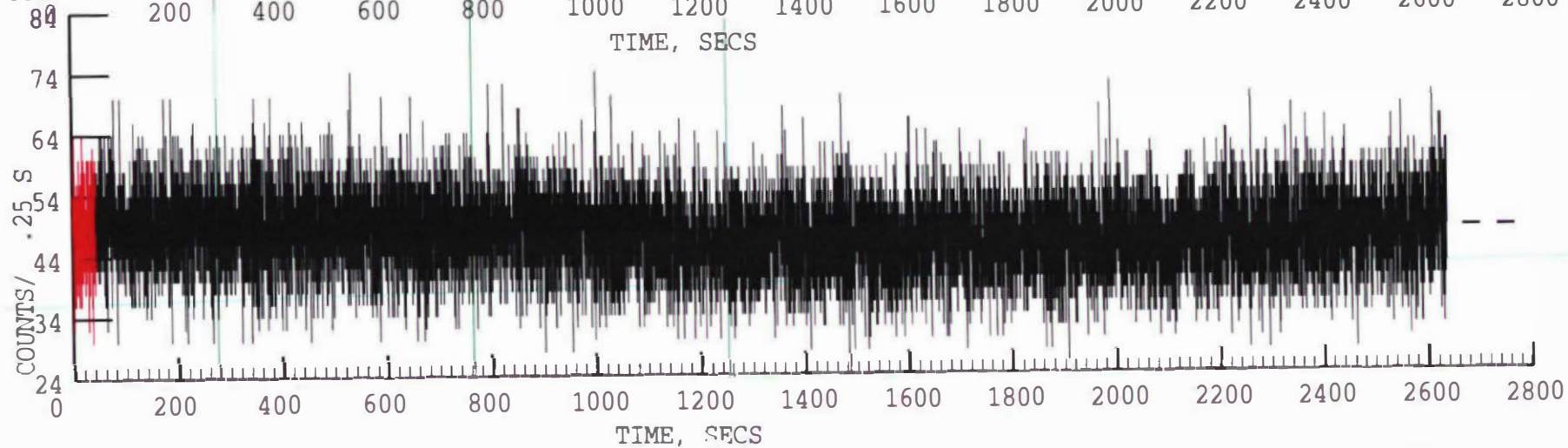


73502.934



04/09/21

50-3000 keV



KONUS

10- 50 keV

05/09/2021

70.472

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

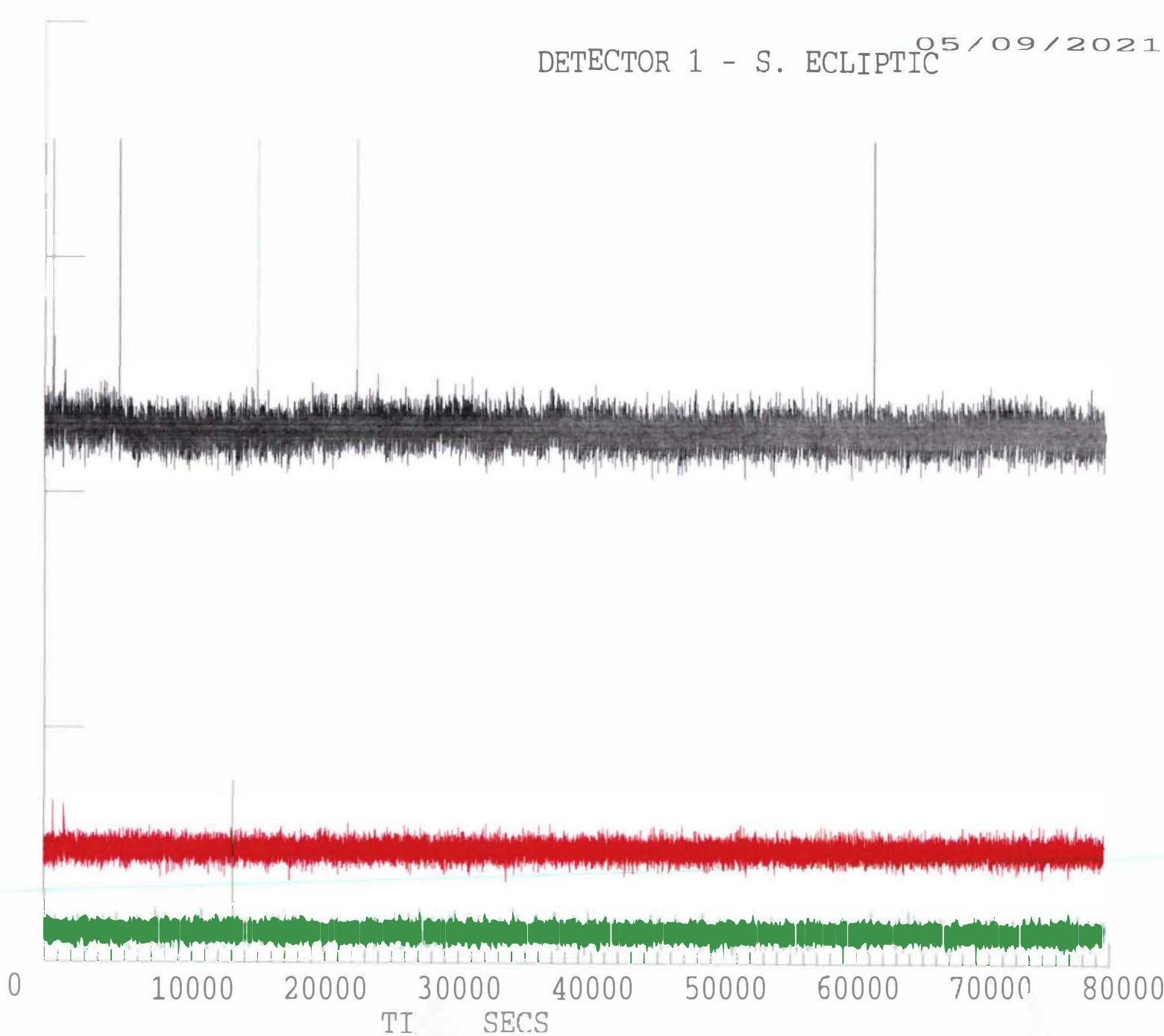
10000

20000

TI

SECS

DETECTOR 1 - S. ECLIPTIC 05/09/2021

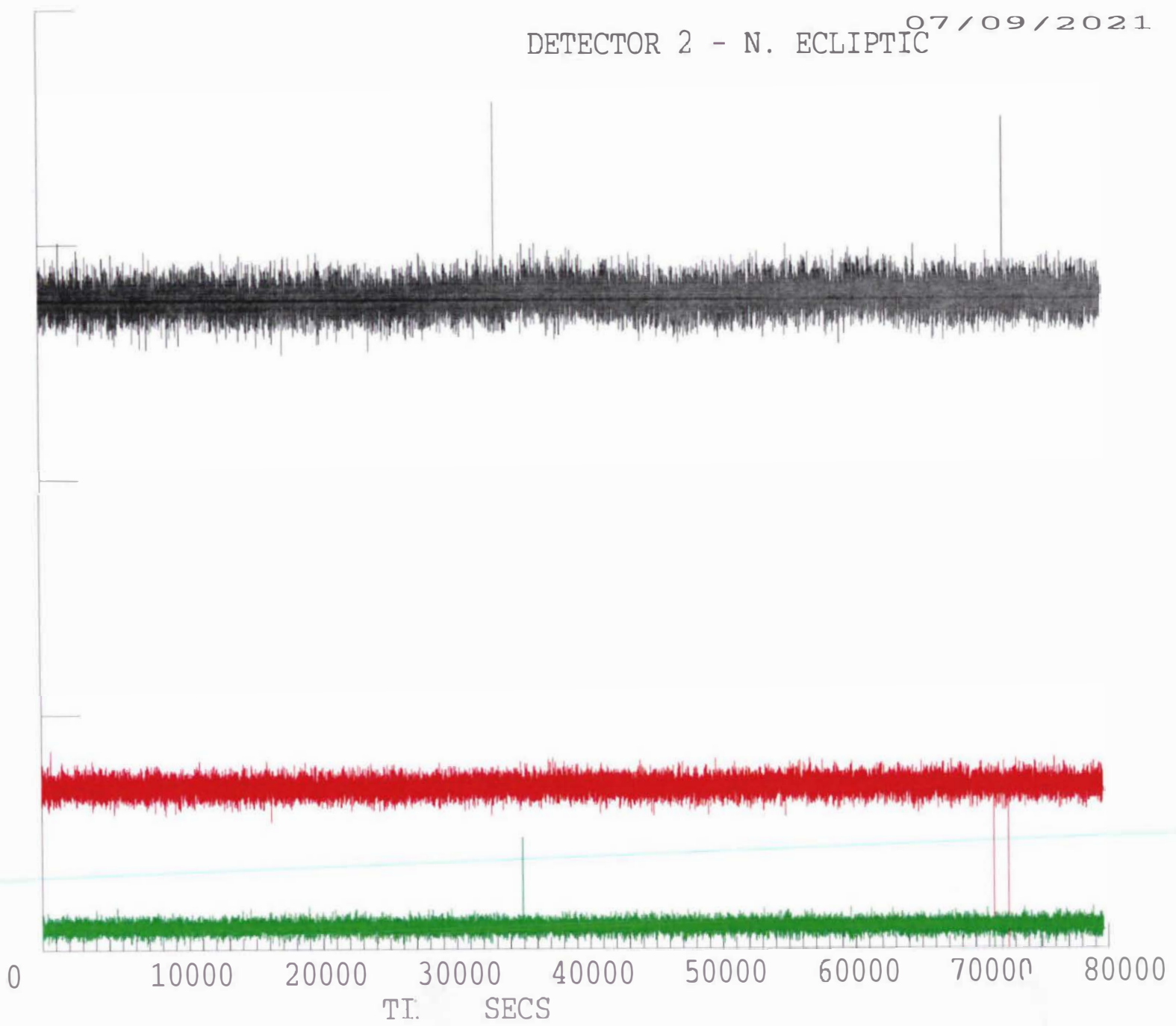


KONUS
10- 50 keV
05/09/2021
70.472
v01

200- 750 keV
50- 200 keV

COUNTS/2.944 S

4400
3400
2400
1400
400
0



Subject: GCN/SWIFT_BAT_LIGHTCURVE

From: Bacodine <vxw@capella2.gsfc.nasa.gov>

Date: 9/4/2021, 5:20 PM

To: khurley@ssl.berkeley.edu

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Sun 05 Sep 21 00:20:12 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 1071993, Seg_Num: 0
GRB_RA: 309.062d {+20h 36m 15s} (J2000),
309.431d {+20h 37m 43s} (current),
308.207d {+20h 32m 50s} (1950)
GRB_DEC: -44.431d {-44d 25' 50"} (J2000),
-44.354d {-44d 21' 15"} (current),
-44.605d {-44d 36' 16"} (1950)
GRB_DATE: 19462 TJD; 248 DOY; 21/09/05
GRB_TIME: 761.32 SOD {00:12:41.32} UT
TRIGGER_INDEX: 263
GRB_PHI: 54.49 [deg]
GRB_THETA: 32.96 [deg]
DELTA_TIME: -18.00 [sec]
TRIGGER_DUR: 2.048 [sec]
SOLN_STATUS: 0x3
RATE_SIGNIF: 14.17 [sigma]
IMAGE_SIGNIF: 9.35 [sigma]
LC_URL: sw01071993000msb.lc
SUN_POSTN: 164.03d {+10h 56m 07s} +6.80d {+06d 48' 02"}
SUN_DIST: 131.85 [deg] Sun_angle= -9.7 [hr] (East of Sun)
MOON_POSTN: 141.31d {+09h 25m 15s} +20.13d {+20d 08' 05"}
MOON_DIST: 153.84 [deg]
MOON_ILLUM: 5 [%]
GAL_COORDS: 356.14,-36.86 [deg] galactic lon,lat of the burst (or transient)
ECL_COORDS: 299.75,-24.94 [deg] ecliptic lon,lat of the burst (or transient)
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point_source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.
COMMENTS: This trigger occurred at longitude,latitude = 12.68,-9.77 [deg].

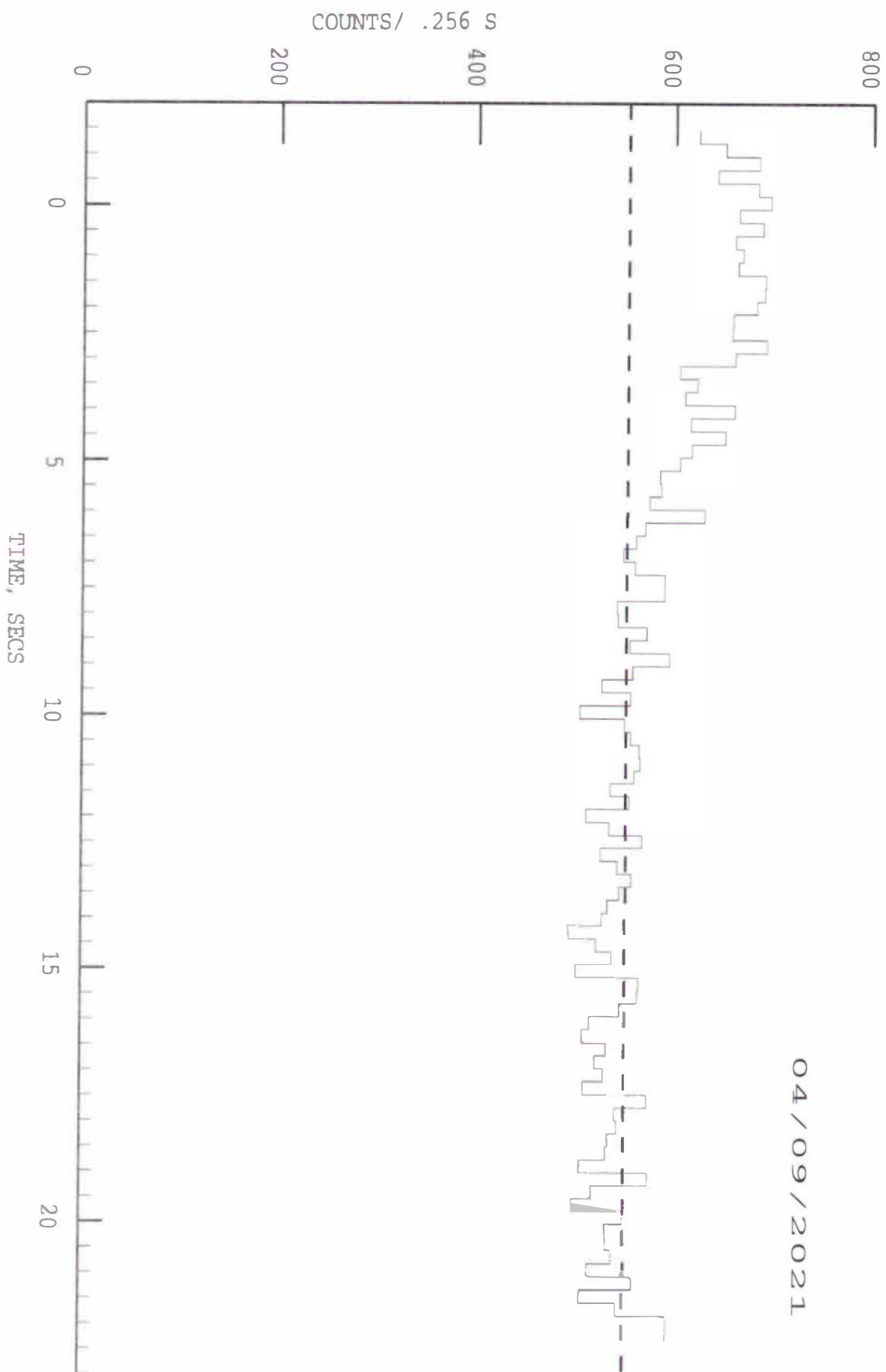
BAT

05/09/21

761.321

00:12:41.321

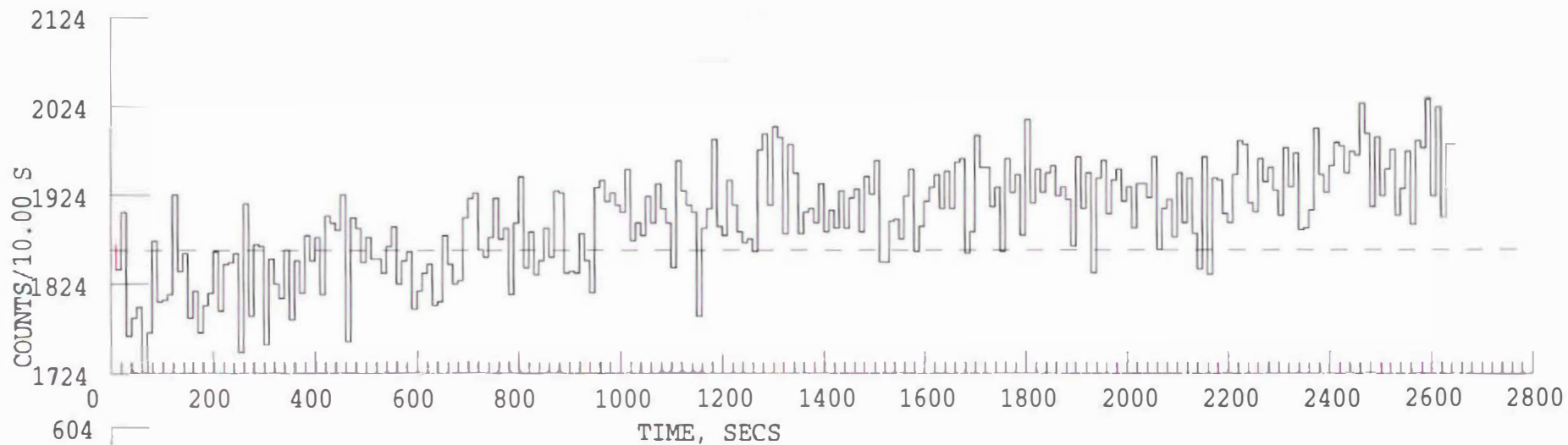
25- 100 keV



17/11/2021

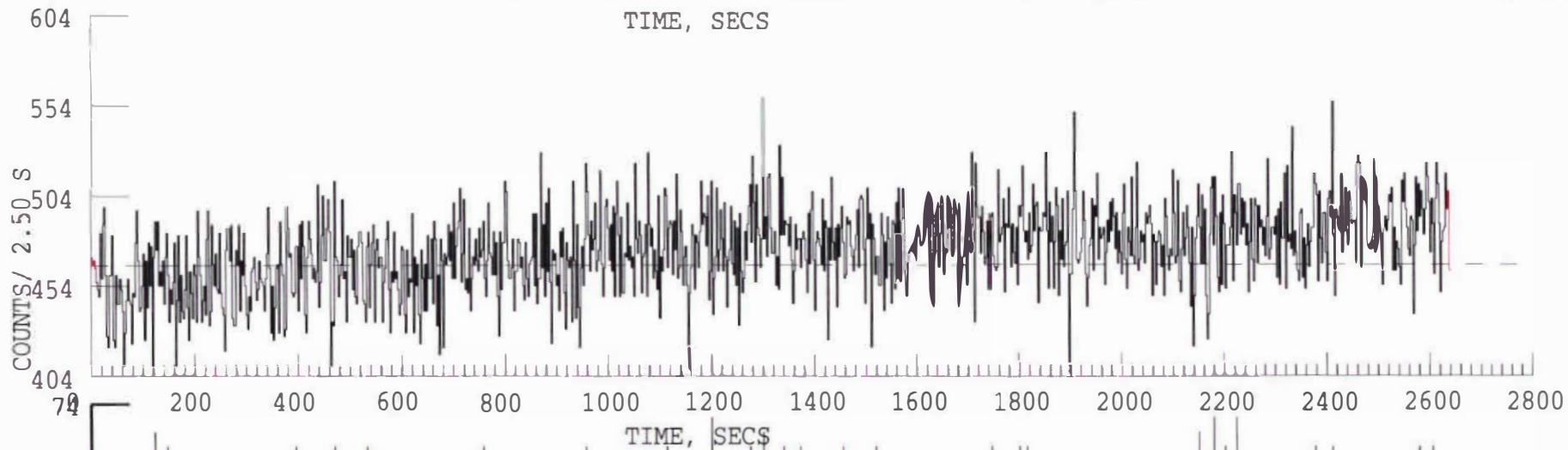
23:50:02.703

Overexposed



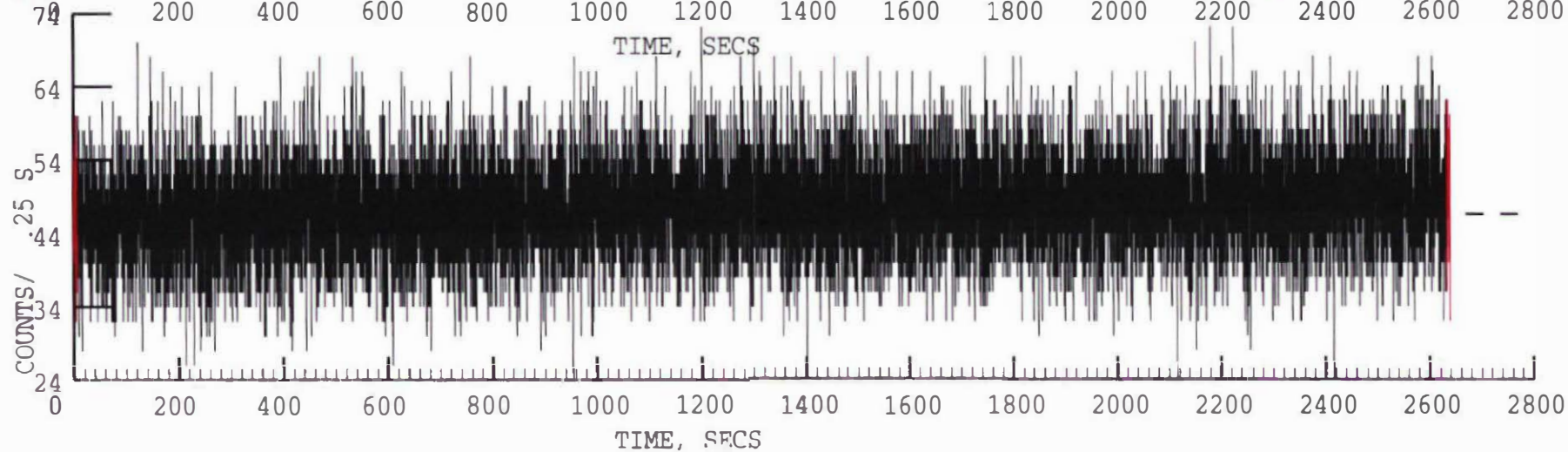
85802.703

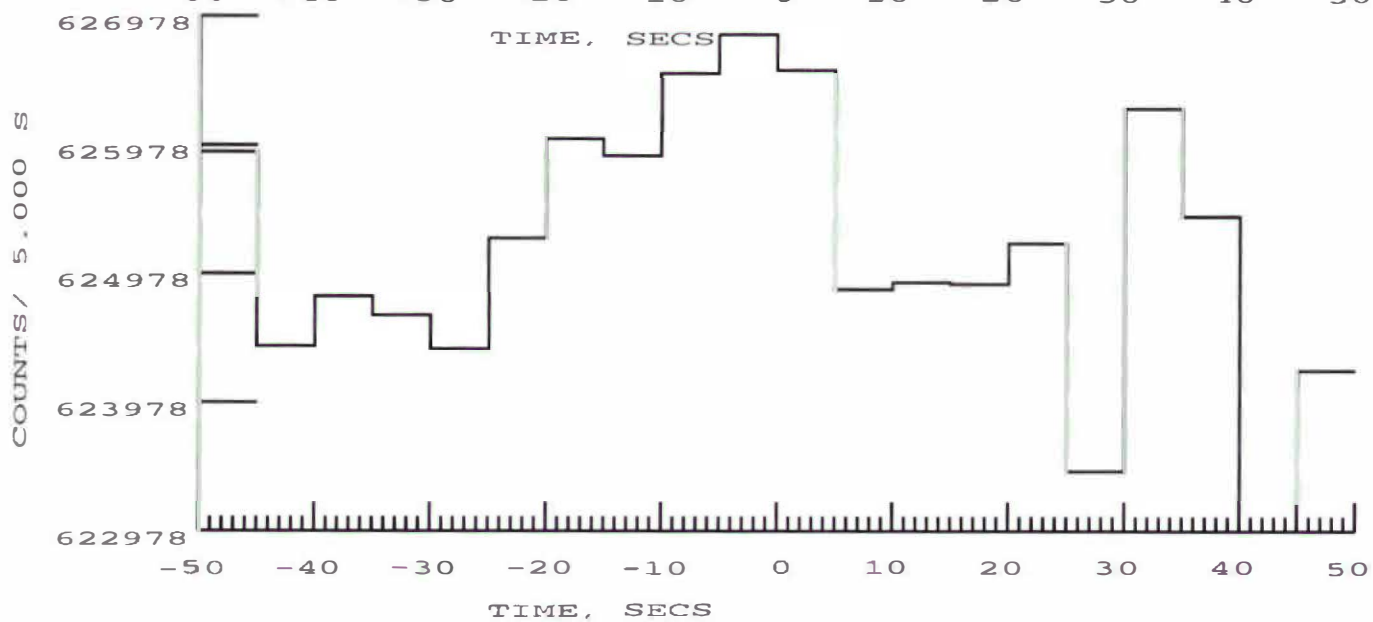
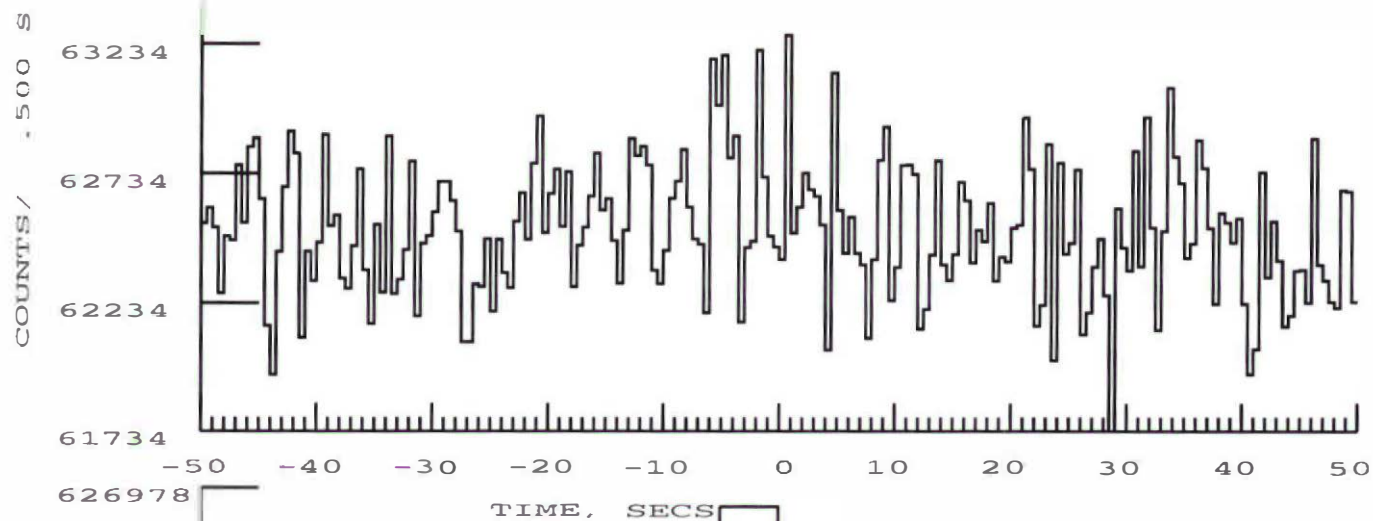
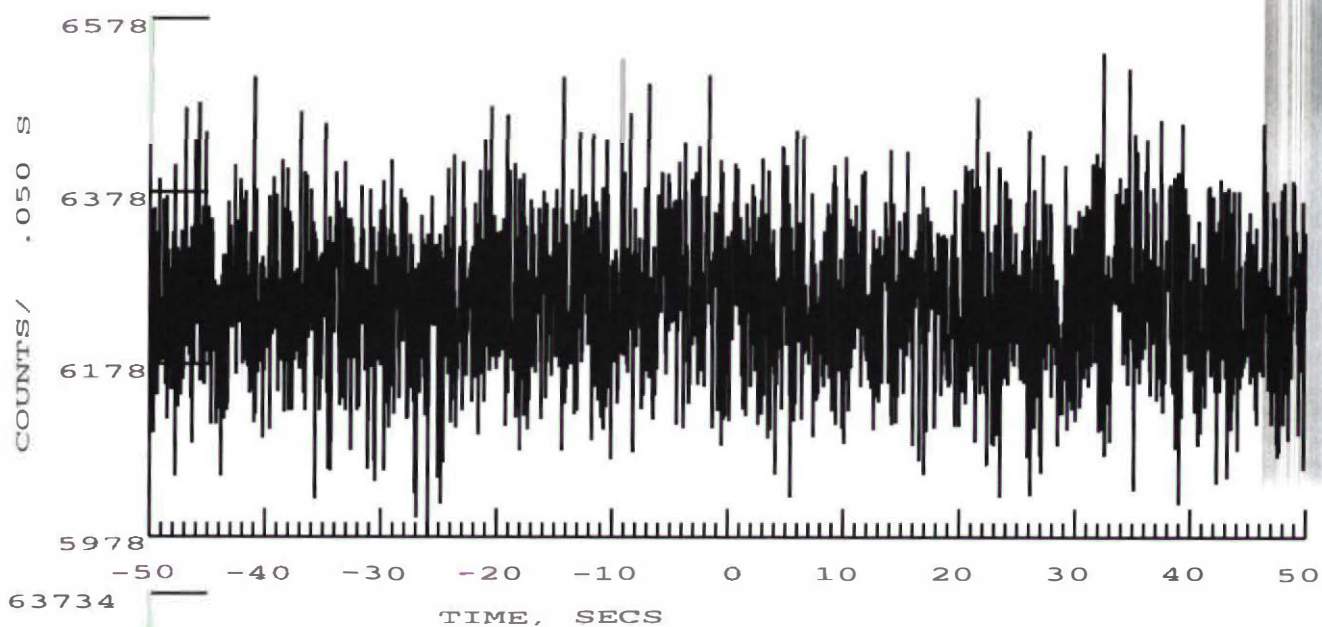
50-3000 keV



04/09/21

ODYSSEY





From kevinhurley+caf_ =khurley2=ssl.berkeley.edu@berkeley.edu Sun Sep 5 22:40:35
Date: Mon, 6 Sep 2021 01:40:29 -0400
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
Subject: Fermi GBM Sub-Threshold Detection of GRB 210905A

TITLE: GCN CIRCULAR
NUMBER: 30779
SUBJECT: Fermi GBM Sub-Threshold Detection of GRB 210905A
DATE: 21/09/06 05:39:59 GMT
FROM: Peter Veres at UAH <veresp@gmail.com>

P. Veres (UAH) and O. J. Roberts (USRA) report
on behalf of the Fermi-GBM Team:

"Swift-BAT detected GRB 210905A at 00:12:41 UT (GCN 30765). There was no
Fermi-GBM onboard trigger around the event.

The GBM targeted search [1], the most sensitive, coherent search for
GRB-like signals was run from +/-30 s around the BAT trigger time. A
transient source was identified whose most significant timescale according
to the search is 8.192 s with a false alarm rate of $1.3e-5$ Hz, and a
location consistent with the Swift-BAT event, using the standard search
protocol with a S/N of 13. The GBM targeted search event was found with
the highest significance with a "normal" spectral template (Band function
with $E_{\text{peak}} = 230$ keV, $\alpha = -1.0$, $\beta = -2.3$).

The GBM light curve consists of multiple overlapping pulses. The
time-averaged spectrum from $T_0 - 26$ s to $T_0 + 16$ s is best fit by a power law
function with an exponential high-energy cutoff (T_0 is 2021-09-05 00:12:41
UT). The power law index is -1.19 ± 0.13 and the cutoff energy,
parameterized as E_{peak} , is 204 ± 45 keV.

The event fluence (10-1000 keV) in this time interval for the best fitting
model is $(6.08 \pm 0.59)E-6$ erg/cm². Using the redshift $z=6.318$ reported
by Tanvir et al. (GCN 30771), we derive an isotropic equivalent energy in
the 1-10,000 keV range of $(4.25 \pm 0.41)E+53$ erg.

This analysis is preliminary.

[1] Goldstein et al. 2019 arXiv:1903.12597
"

From kevinhurley+caf_ =khurley2=ssl.berkeley.edu@berkeley.edu Tue Sep 7 08:36:05
Date: Tue, 7 Sep 2021 11:36:00 -0400
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
Subject: GRB 210905A: AstroSat CZTI detection

TITLE: GCN CIRCULAR
NUMBER: 30782
SUBJECT: GRB 210905A: AstroSat CZTI detection
DATE: 21/09/07 15:35:29 GMT
FROM: Gaurav Waratkar at IIT, Bombay <gauravwaratkar@iitb.ac.in>

V. Prasad (IUCAA), P. Sawant (IUCAA), G. Waratkar (IITB), A. Vibhute (IUCAA), V. Bhalerao (IITB), D. Bhattacharya (IUCAA), A. R. Rao (IUCAA/TIFR), and S. Vadawale (PRL) report on behalf of the AstroSat CZTI collaboration:

Analysis of AstroSat CZTI data with the CIFT framework (Sharma et al., 2021, JApA, 42, 73) showed detection of a long GRB 210905A, which was also detected by Swift-BAT (Sonbas et al., GCN 30765) and a sub-threshold detection in Fermi-GBM (Veres & Roberts, GCN 30779).

The source was clearly detected in the 20-200 keV energy range. The light curve showed multiple peaks of emission with the strongest peak at 2021-09-05 00:12:40.5 UT. The measured peak count rate associated with the burst is 87 (+37.9, -7) cts/s above the background in the combined data of two quadrants (out of four), with a total of 1092 (+250, -294) cts. The local mean background count rate was 286.0 (+2, -2) cts/s. Using cumulative rates, we measure a T90 of 24 (+11, -7) s.

CZTI GRB detections are reported regularly on the payload site at <http://astrosat.iucaa.in/czti/?q=grb> [1]. CZTI is built by a TIFR-led consortium of institutes across India, including VSSC, ISAC, IUCAA, SAC and PRL. The Indian Space Research Organisation funded, managed and facilitated the project.

Links:

[1] <http://astrosat.iucaa.in/czti/?q=grb>

v01

56.256

06/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

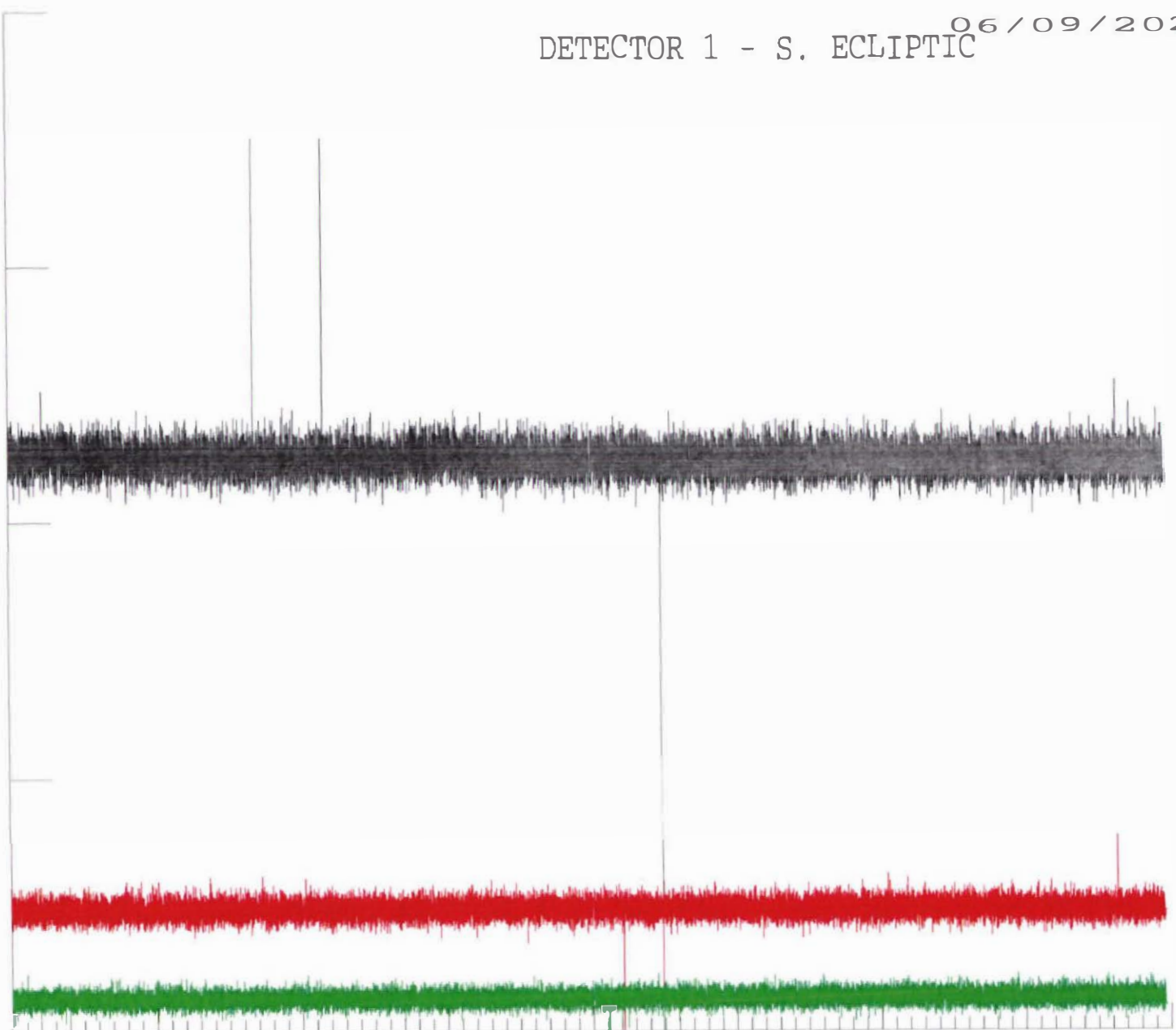
60000

70000

80000

TI. SECS

DETECTOR 1 - S. ECLIPTIC 06/09/2021



KONUS

06/09/2021

56.256

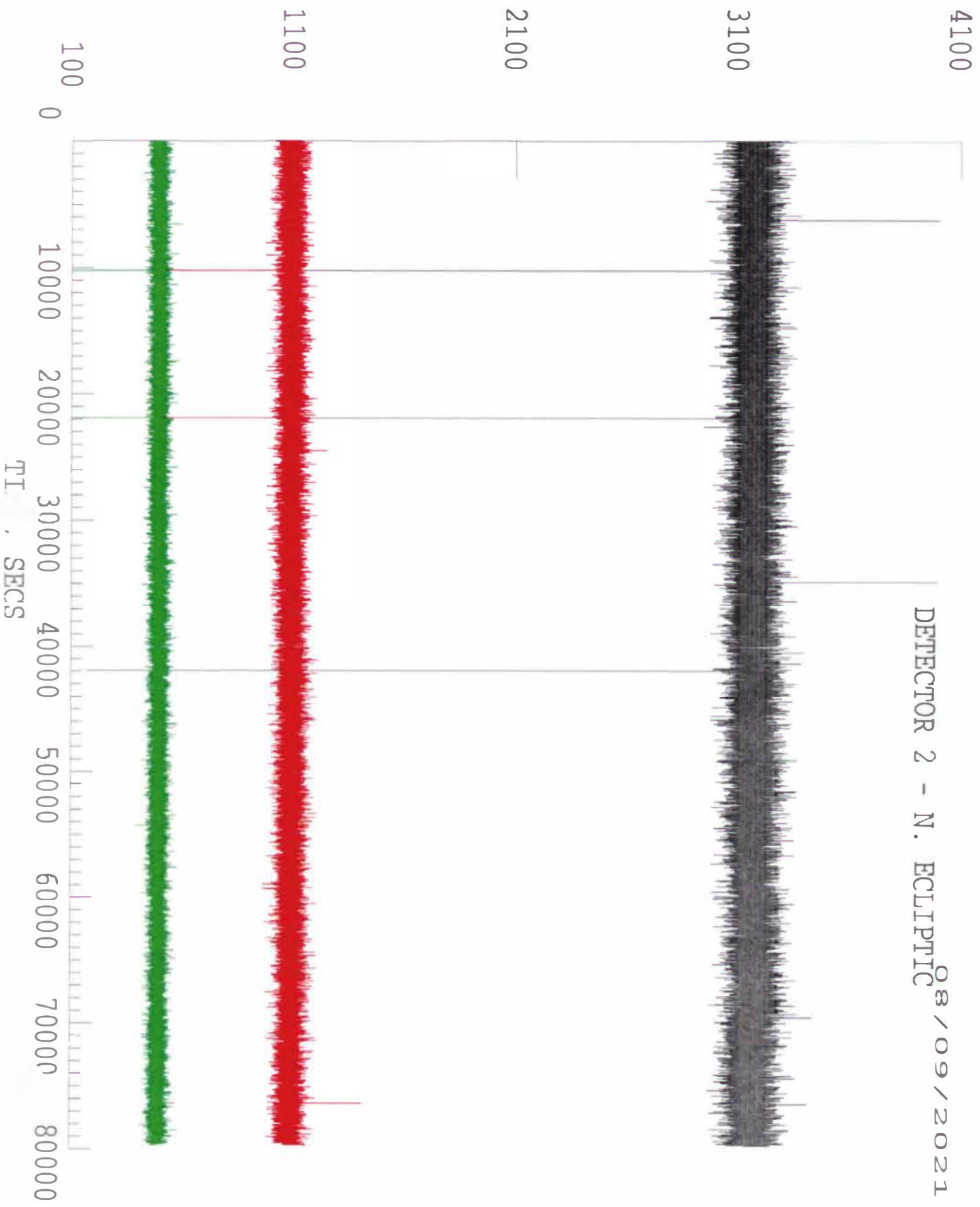
v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S



Subject: GCN/CALET_GBM_FLT_LIGHTCURVE
From: Bacodine <vxw@capella2.gsfc.nasa.gov>
Date: 9/5/2021, 6:45 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN/CALET NOTICE
NOTICE_DATE: Mon 06 Sep 21 01:45:09 UT
NOTICE_TYPE: CALET GBM Flight Lightcurve
POINT_RA: 341.86d {+22h 47m 26s} (J2000),
POINT_DEC: +38.56d {+38d 33' 54"} (J2000),
TRIGGER_NUM: 1314927545
TRIGGER_DATE: 19463 TJD; 249 DOY; 21/09/06
TRIGGER_TIME: 6270.05 SOD {01:44:30.05} UT
TRIGGER_DET: 1 1 1 (HXM1 HXM2 SGM)
SIGNIFICANCE: 18.10 [sigma]
FOREGND_DUR: 0.20 [sec]
BACKGND_DUR1: 16.00 [sec]
ENERGY_BAND: 25-100 [keV]
SC_LOW_LAT: 330.60,38.68 [deg]
LC_URL: http://gbm-calet.jo/cgbm_trigger/flight/1314927545/index.html
COMMENTS: CALET-GBM Flight Lightcurve.
COMMENTS: NOTE: This CALET_GBM_FLT_LC event is temporally(0.0<100sec) coincident with the FERMI_GBM event (trignum=652585475).
COMMENTS: The LC_URL file will not be created until ~15 min after the trigger.

+GBM

SGR 1935

296.7 23.1

Subject: IPN triangulation of SGR 1935+2154 burst on 6 Sep 21 (=Fermi/GBM trigger 652585475) - Konus-GBM annulus
From: Dmitry Svinkin <svinkin@mail.ioffe.ru>
Date: 9/7/2021, 4:05 AM
To: IPN <ipn@ssl.berkeley.edu>

Dear colleagues,

A short-duration, soft, burst (=Fermi/GBM trigger 652585475) has been detected by Fermi (GBM) and Konus-Wind, in the waiting mode, so far, on 6 Sep 21 at about 6270 s UT (01:44:30)
 - see the attached GBM figure.

SPI NO

We have triangulated this burst to a Konus-GBM annulus centered at RA(2000)=324.157 deg (21h 36m 38s) Dec(2000)=-15.844 deg (-15d 50' 38"), whose radius is 62.581 ± 17.313 deg (3 sigma).

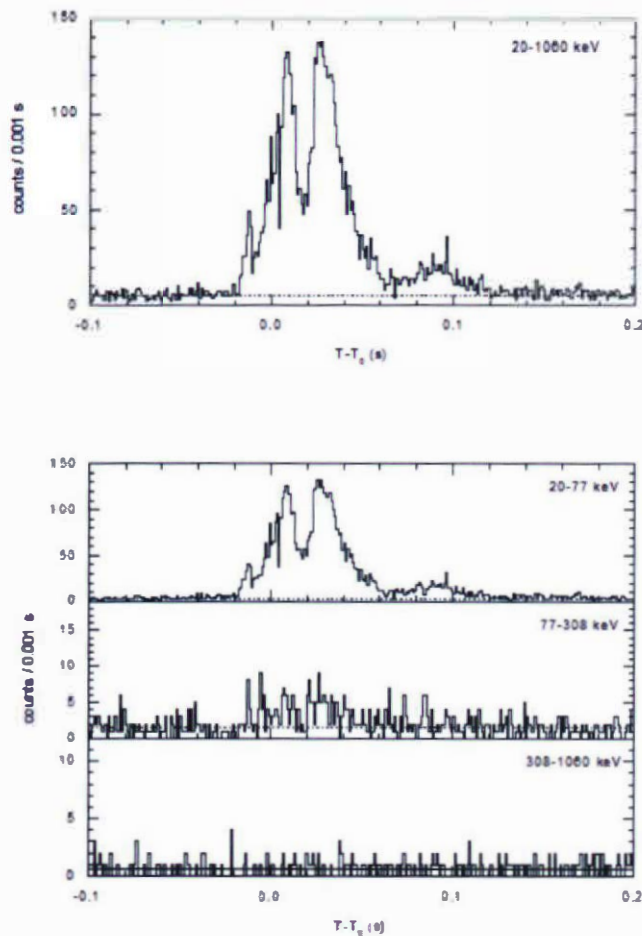
The position of SGR 1935+2154 is inside the annulus (while another possible source SGR1900+14 is outside it), supporting the association of the burst and the SGR, see the attached figure.

BALROG localization is available at <https://grb.mpe.mpg.de/grb/GRB210906073/>

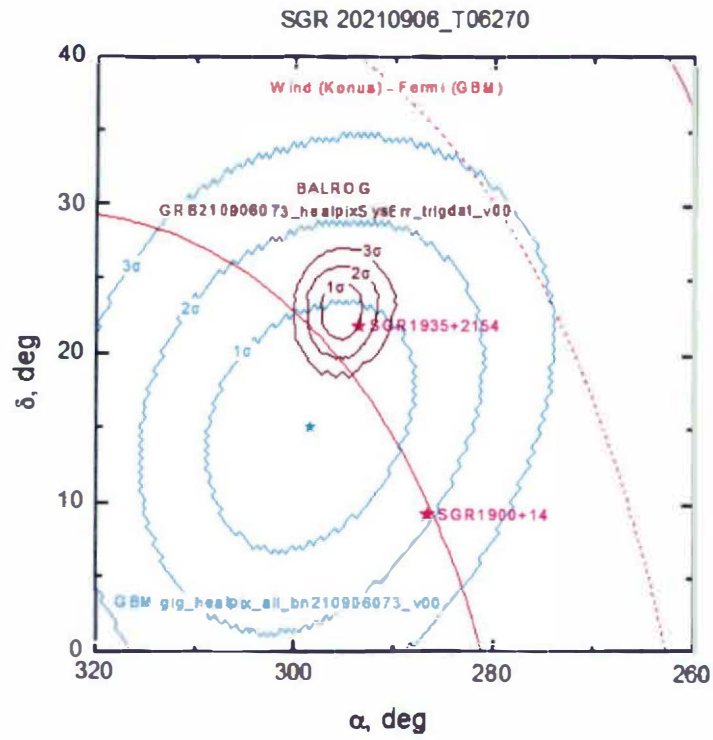
Best regards,
 Dmitry

—SGR20210906_T06270_GBM1ms.png

Fermi-GBM GRB 210906
 $T_0 = 6270.100$ s UT (01:44:30.100)



SGR20210906_T06270_IPN_map.png



Attachments

SGR20210906_T06270_GBM1ms.png

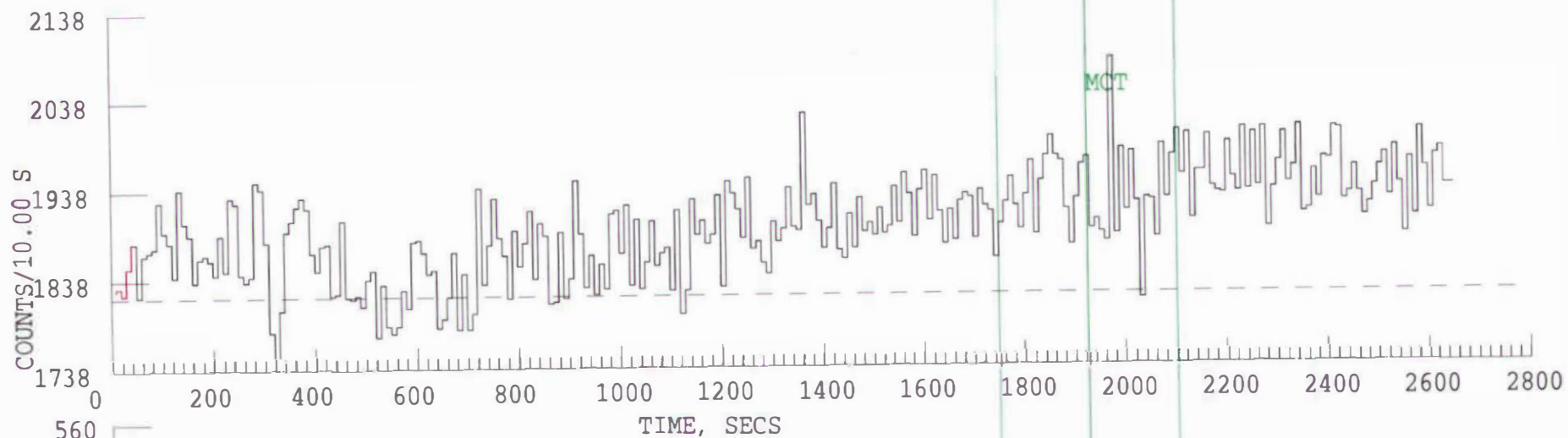
16.3 KB

SGR20210906_T06270_IPN_map.png

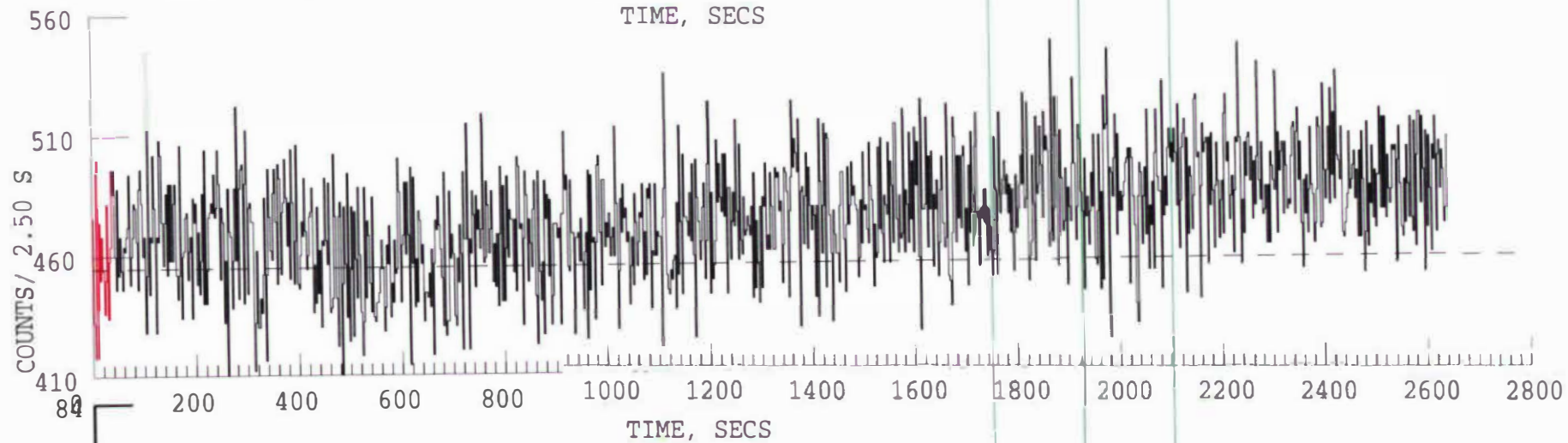
19.5 KB

17/11/2021

01:22:01.079



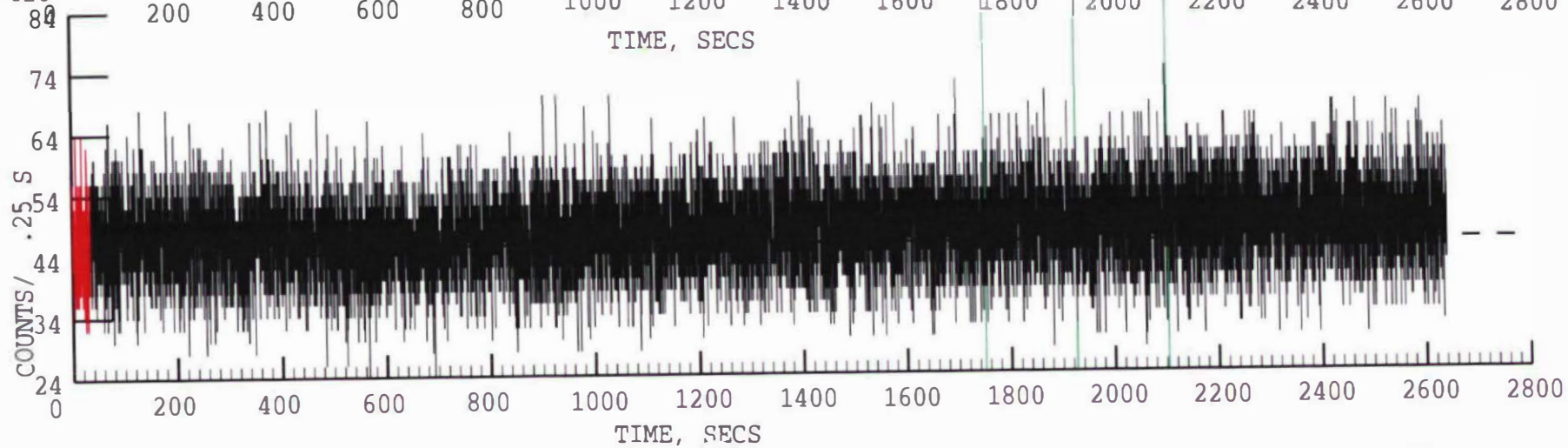
4921.079



06/09/21

50-3000 keV

ODYSSEY



Fermi GBM trigger 652585475 / 210906073 is not a GRB

Subject: Fermi GBM trigger 652585475 / 210906073 is not a GRB
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/5/2021, 9:37 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30778
SUBJECT: Fermi GBM trigger 652585475 / 210906073 is not a GRB
DATE: 21/09/06 04:36:10 GMT
FROM: Peter Veres at UAH <pveres@gmail.com>

P. Veres (UAH) reports on behalf of the Fermi GBM Team:

"The Fermi Gamma-ray Burst Monitor (GBM) trigger 652585475 / 210906073 at 01:44:30.10 UT on 6 September 2021, tentatively classified as a GRB, is in fact not due to a GRB. This trigger is likely due to SGR J1935+2154."

Subject: BAT lightcurve for trigger at 210906_0144

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/6/2021, 12:35 AM

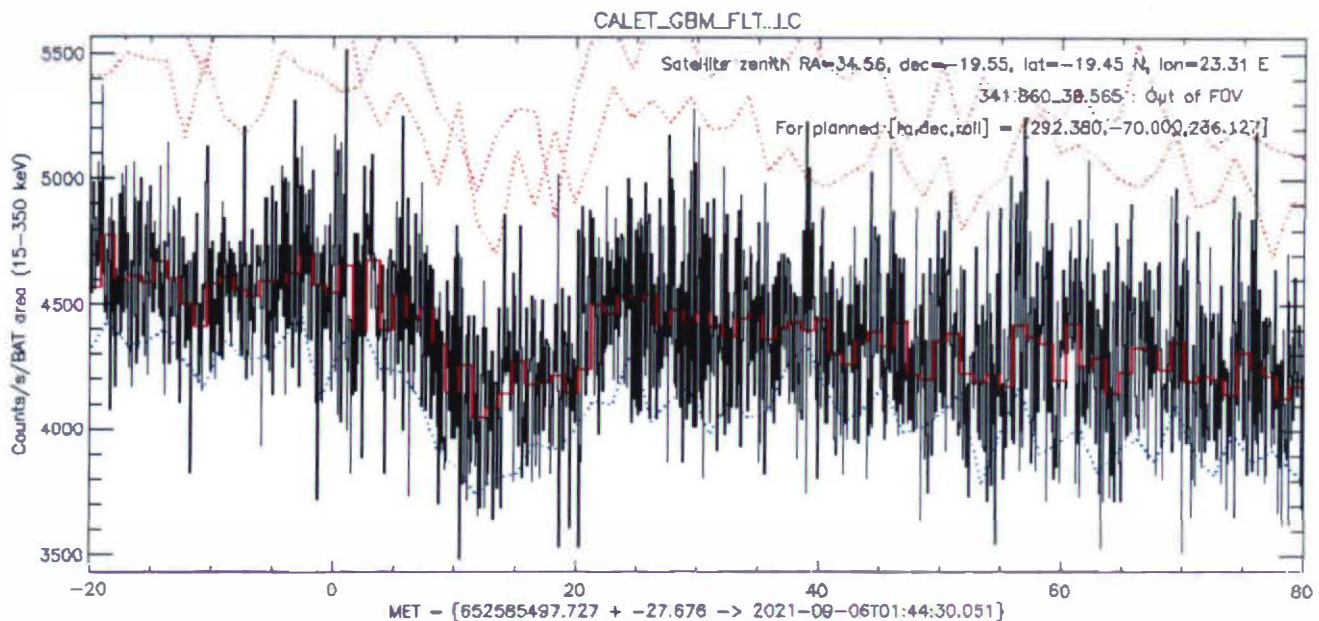
To: palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, vestrand@lanl.gov, aaron.tohu@gmail.com, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652585497.727 -s 341.860_38.565
Swift Zenith(RA,dec):      34.56, -19.55
Swift Location(lon,lat,alt): 23.31 E, -19.45 N, 548 km
Time(MET + UTCF -> UT):   652585497.727 + -27.676 -> 2021-09-06T01:44:30.051
YYMMDD_SOD:               210906_06270.051      DOY=249
Obs Sequence Number:      00076031019
Obs Target Name:          saa-cold-250-00 (planned)
Obs Date and Times:       2021-09-06 01:23:32 - 01:44:32
Obs Pointing(ra,dec,roll): 292.380, -70.000, 236.13
341.860_38.565_imageloc (boresight_dist, angle): (114, 75)
341.860_38.565_exposure (cm2 cos adjusted): 0
341.860_38.565_altitude: 37 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210906_0144.png



Attachments

/tmp/swift/210906_0144.png

21.0 KB

/tmp/swift/210906_0144_bat64ms_ipn

87.0 KB

Subject: Fwd: BAT lightcurve for trigger at 210906_2113

From: "'Palmer, David' via ipn" <ipn@ssl.berkeley.edu>

Date: 9/7/2021, 9:34 AM

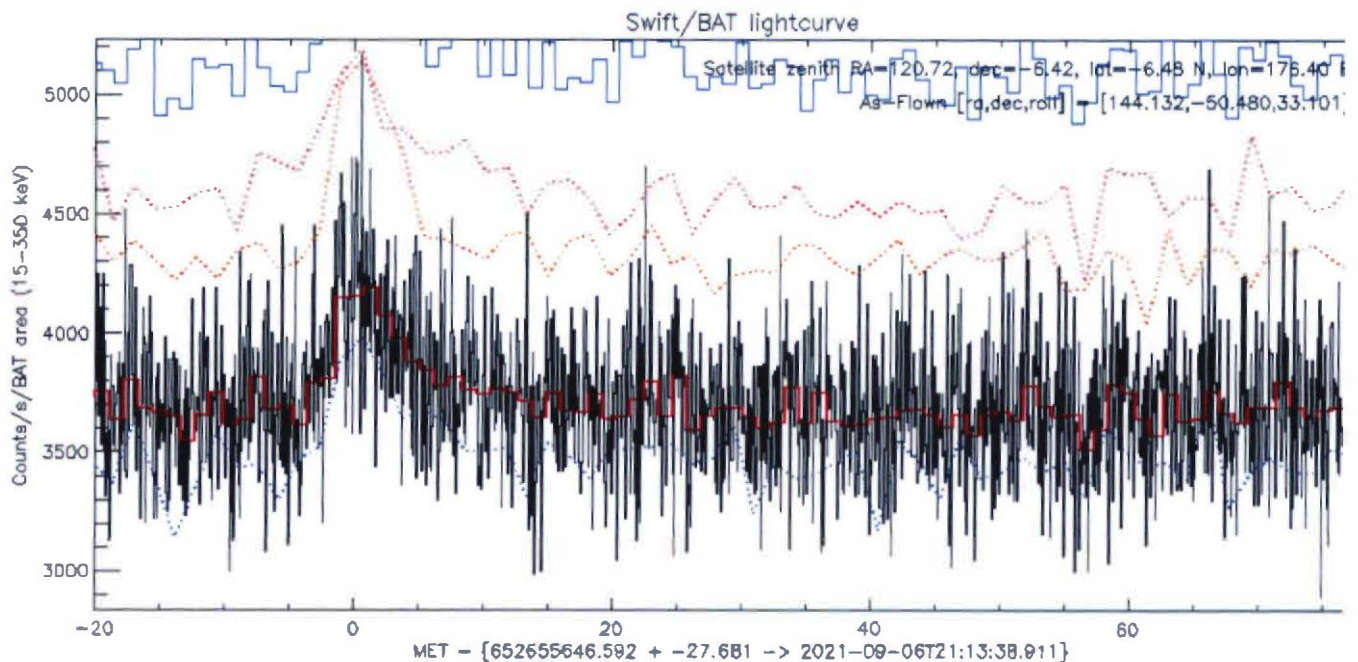
To: IPN <ipn@ssl.berkeley.edu>, BAT TEAM <bat_team@bigbang.gsfc.nasa.gov>, Aaron Tohuvavohu <aaron.tohu@gmail.com>, "gbm-burst-advocate@lists.nasa.gov" <gbm-burst-advocate@lists.nasa.gov>

Did anyone else see a burst at 2021-09-06T21:13:38 ?

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
%/Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652655646.592
Swift Zenith(RA,dec): 120.72, -6.42
Swift Location(lon,lat,alt): 176.40 E, -6.48 N, 544 km
Time(MET + UTC -> UT): 652655646.592 + -27.681 -> 2021-09-06T21:13:38.911
YYMMDD_SOD: 210906_76418.911 DOY=249
Obs Sequence Number: 03111073012
Obs Target Name: T01-677
Obs Date and Times: 2021-09-06 21:12:34 - 21:28:32
Obs Pointing(ra,dec,roll): 144.132, -50.480, 33.10
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data



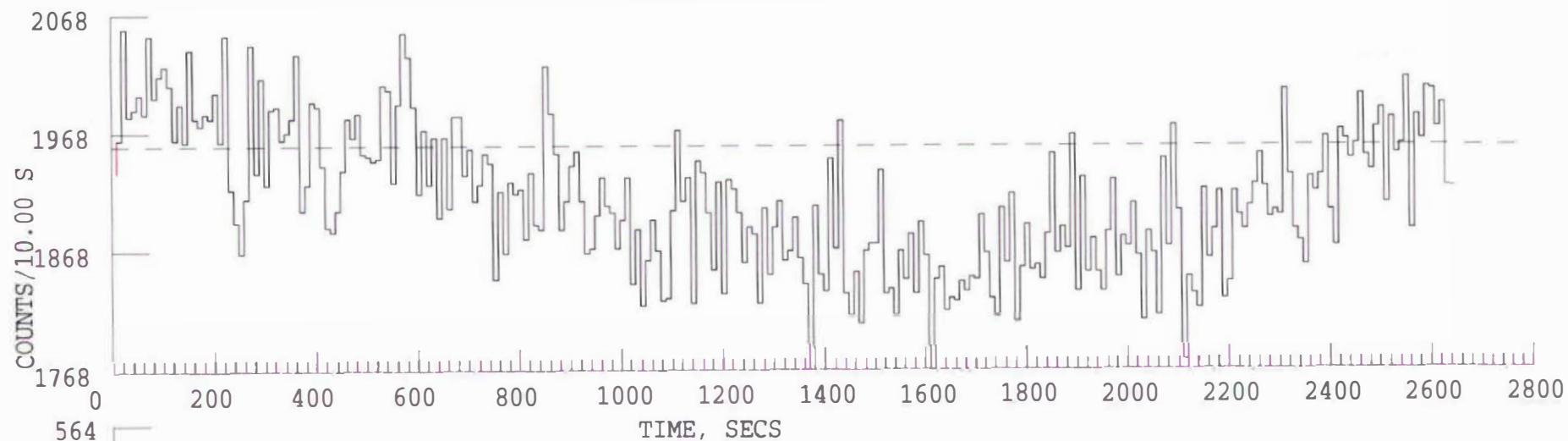
Attachments:

_tmp_swift_210906_2113_bat64ms_ipn

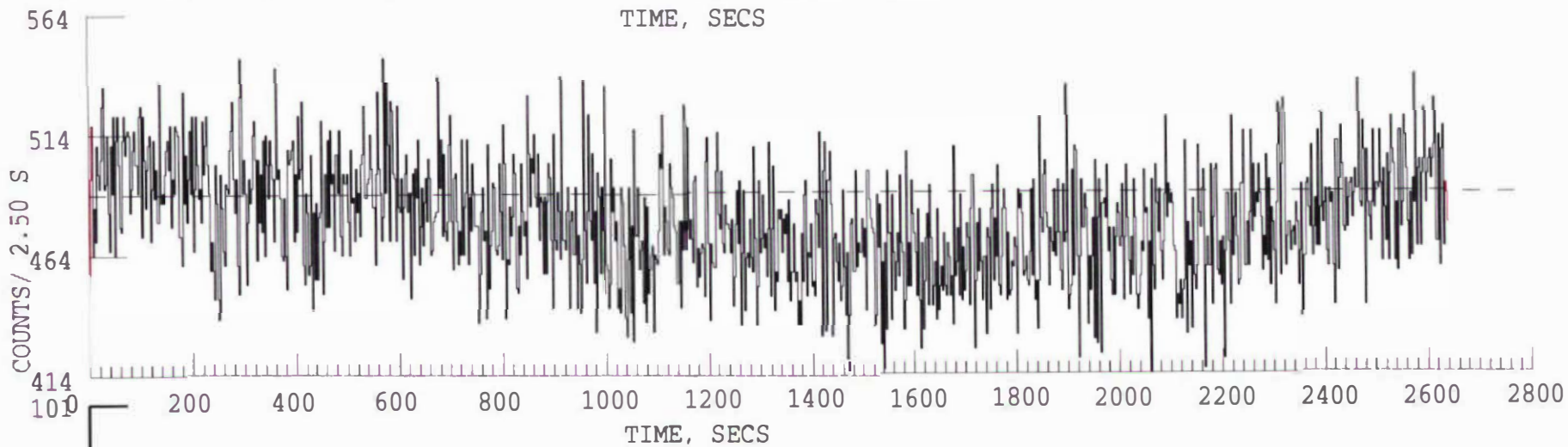
91.6 KB

17/11/2021

20:50:59.821

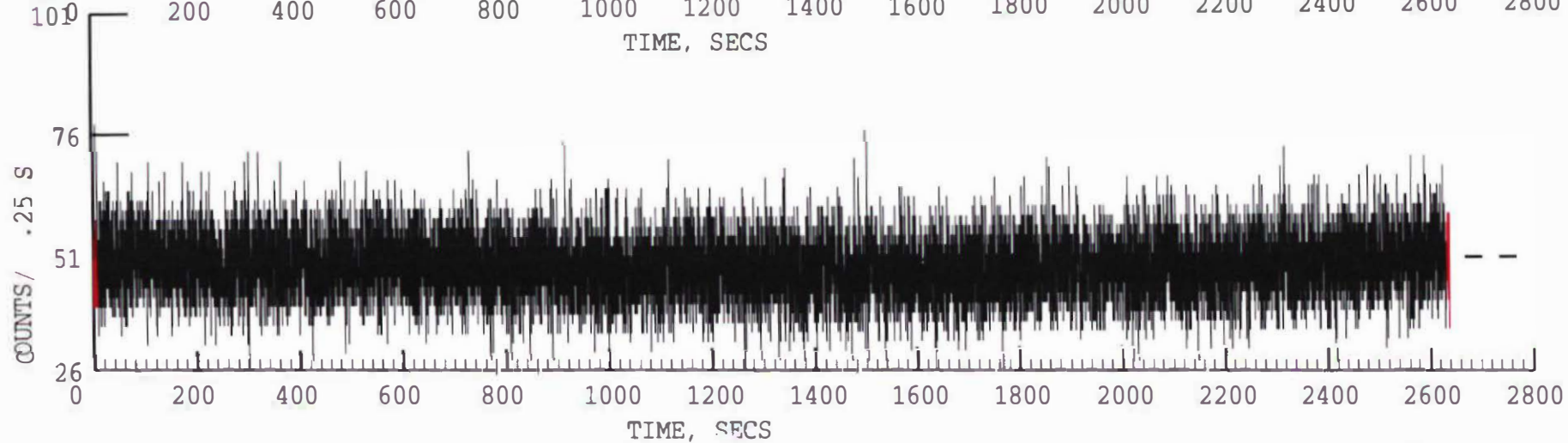


75059.821



06/09/21
50-3000 keV

ODYSSEY



Subject: Re: Fwd: BAT lightcurve for trigger at 210906_2113
From: Dmitry Svinkin <svinkin@mail.ioffe.ru>
Date: 9/10/2021, 11:25 AM
To: IPN <ipn@ssl.berkeley.edu>

Dear David and Kevin,

This burst was detected by Konus-Wind in the waiting mode, see the attached figure (red solid line - S1 detector count rate; blue solid line - S2 detector count rate; G1, G2, and G3 - 20-80, 80-350, and 350-1500 keV energy bands, respectively).

Dmitry

On 10.09.2021 21:15, Kevin Hurley wrote:

Dear David,

There appears to be a very weak detection by INTEGRAL SPI-ACS.

Kevin

On 9/7/2021 9:34 AM, 'Palmer, David' via ipn wrote:

Did anyone else see a burst at 2021-09-06T21:13:38 ?

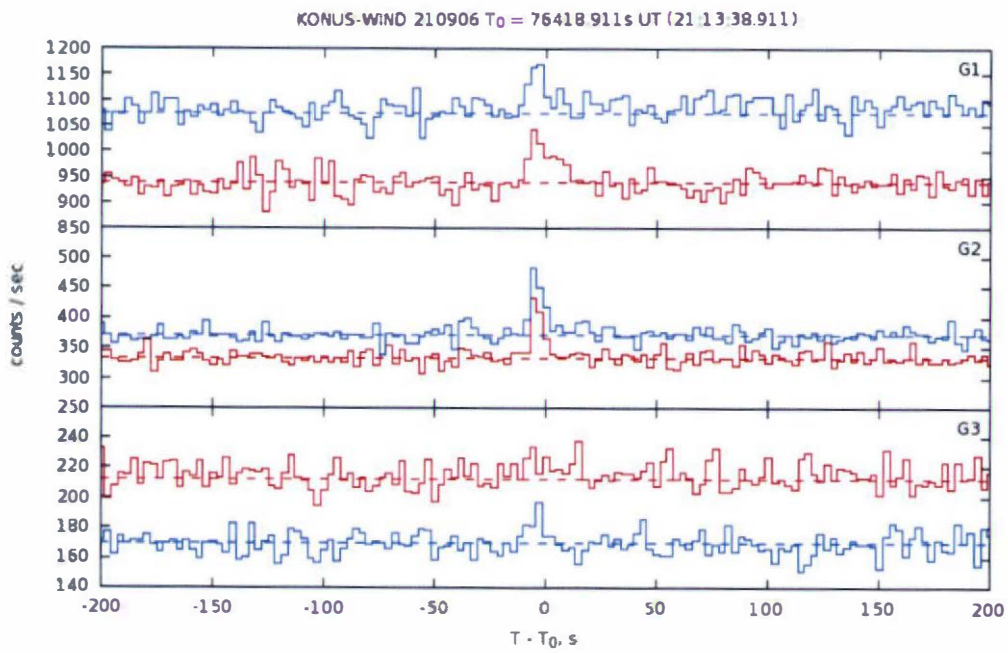
*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652655646.592
Swift Zenith(RA,dec):      120.72, -6.42
Swift Location(lon,lat,alt): 176.40 E, -6.48 N, 544 km
Time(MET + UTCF -> UT):   652655646.592 + -27.681 -> 2021-09-06T21:13:38.911
YYMMDD_SOD:               210906_76418.911 DOY=249
Obs Sequence Number:      03111073012
Obs Target Name:          TOI-677
Obs Date and Times:       2021-09-06 21:12:34 - 21:28:32
Obs Pointing(ra,dec,roll): 144.132, -50.480, 33.10
```

--

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

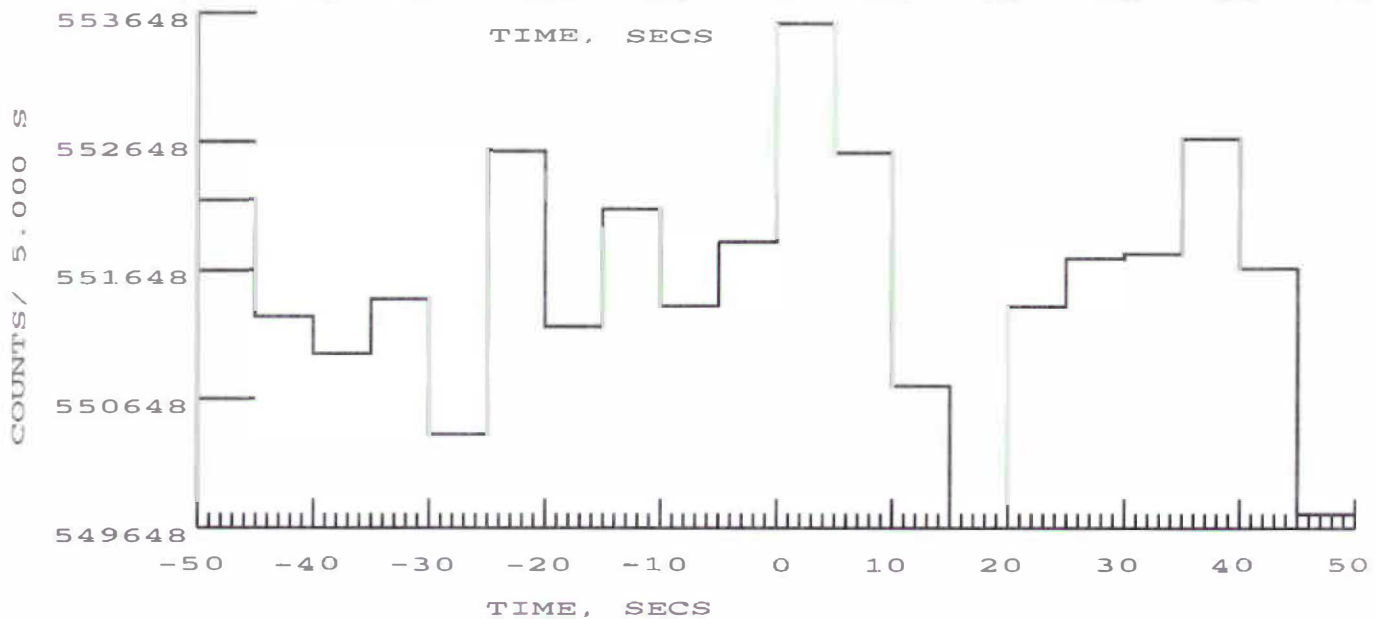
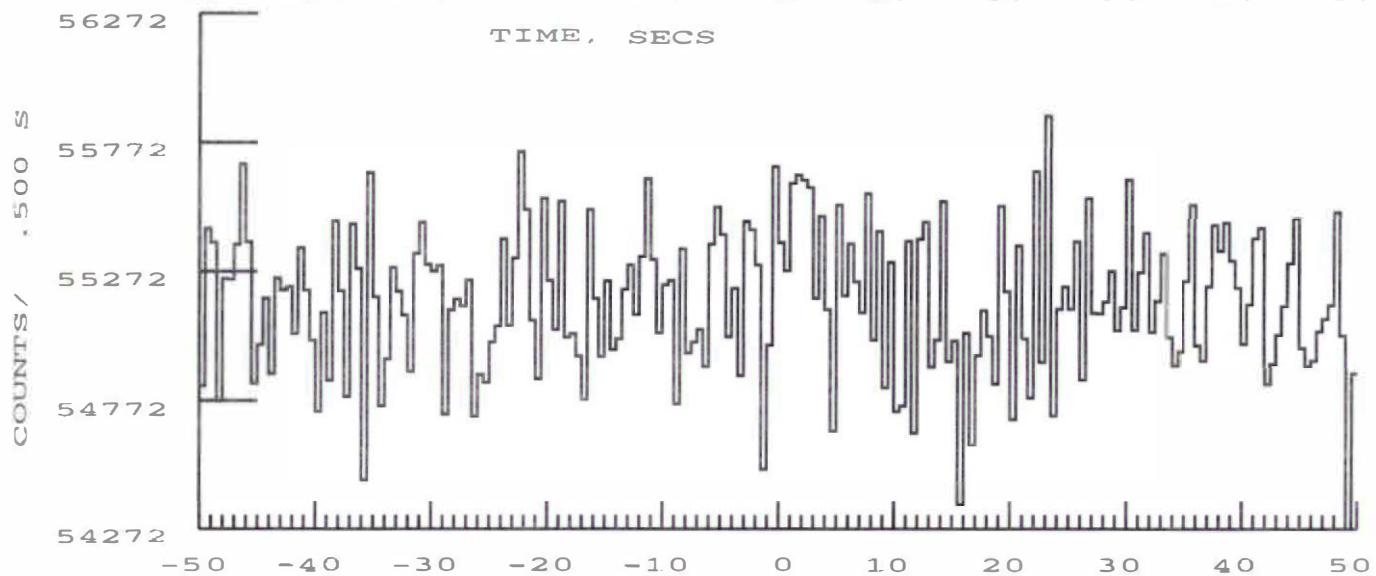
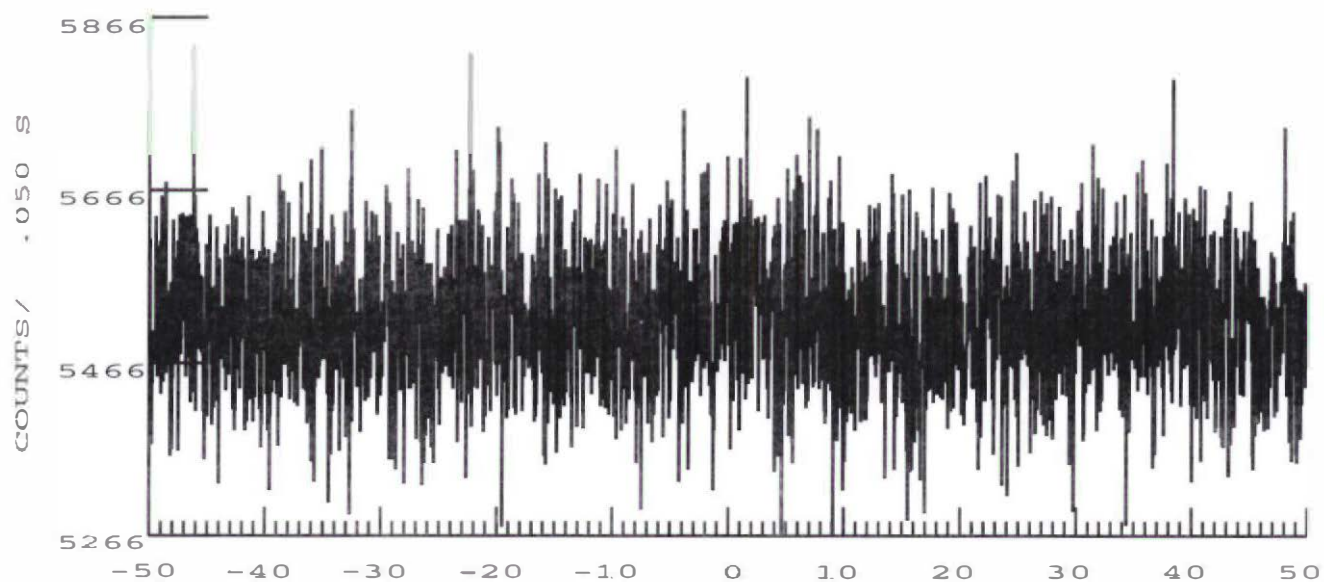
—GRB20210906_76418_bg.png



Attachments

GRB20210906_76418_bg.png

26.6 KB



KONUS

07/09/2021

44.983

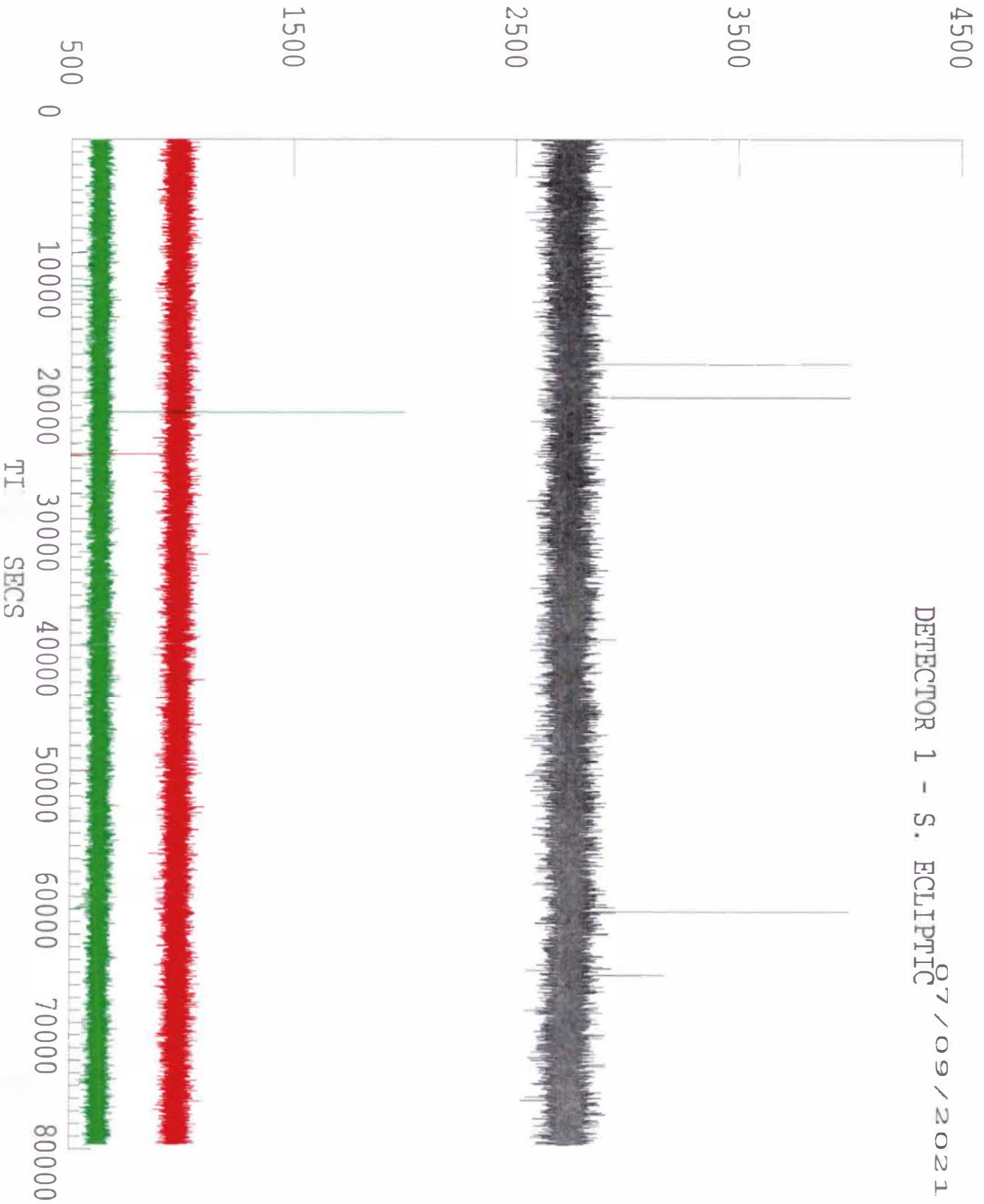
v02

10- 50 keV

50- 200 keV

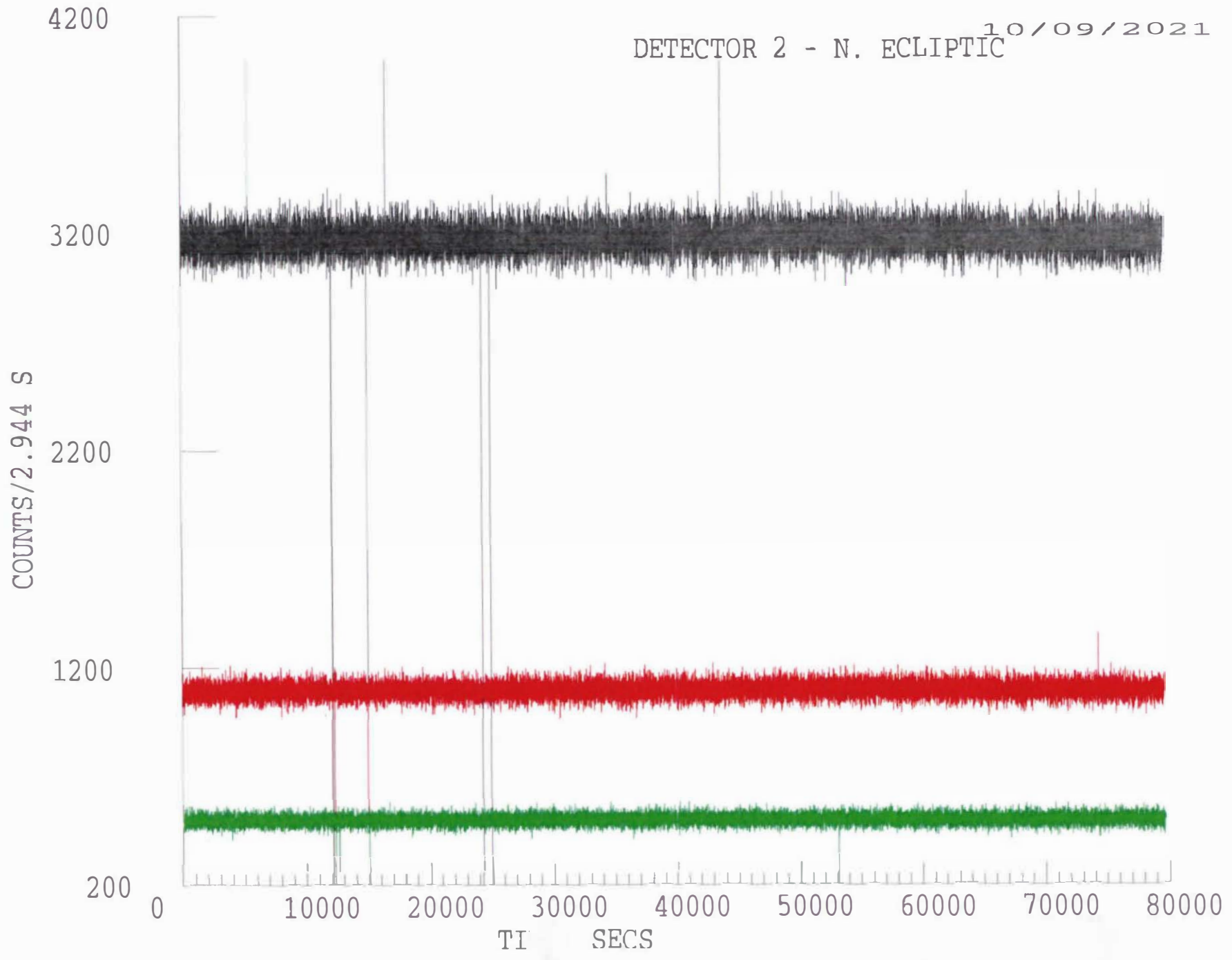
200- 750 keV

COUNTS/2.944 S



KONUS
10- 50 keV
07/09/2021
44.983
v02

10- 50 keV
50- 200 keV
200- 750 keV



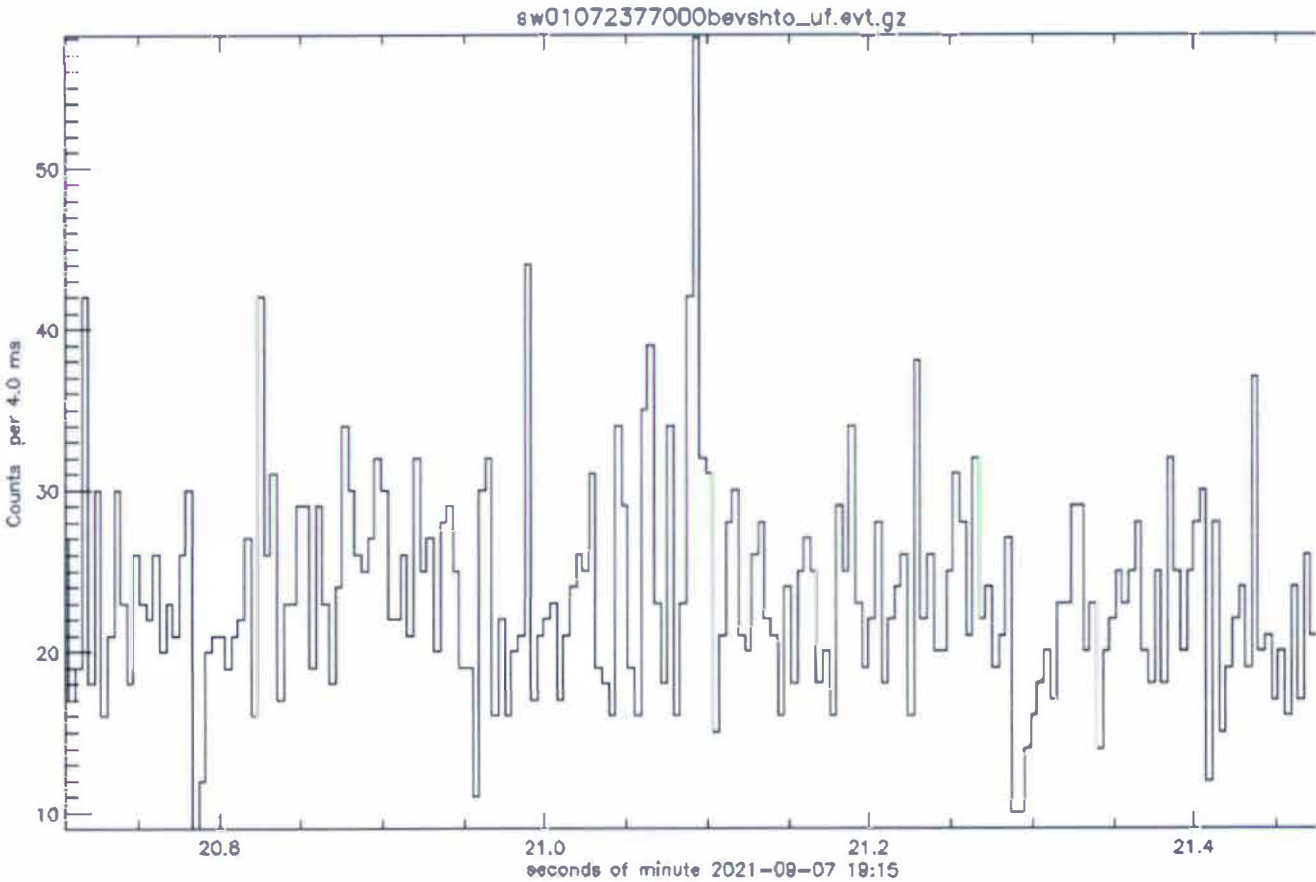
Subject: SGR J1555.2-5402 : BAT lightcurve for trigger at 210907_1915 for GCNCirc 20787
From: "'Palmer, David' via ipn" <ipn@ssl.berkeley.edu>
Date: 9/9/2021, 9:56 AM
To: IPN <ipn@ssl.berkeley.edu>, BAT TEAM <bat_team@bigbang.gsfc.nasa.gov>
CC: "yizhao@ihep.ac.cn" <yizhao@ihep.ac.cn>, Teruaki Enoto <teruaki.enoto@gmail.com>, "Lien, Amy Yarleen. (GSFC-660.0)[UNIVERSITY OF MARYLAND BALTIMORE CO]" <amy.y.lien@nasa.gov>, cphu0821 <cphu0821@cc.ncue.edu.tw>, "Palmer, David" <palmer@lanl.gov>, "Takanori Sakamoto" <tsakamoto@phys.aoyama.ac.jp>

BAT sees this burst reported by
Zhao Yi at POLAR <yizhao@ihep.ac.cn> (cc'd)
in GCN Circ 30787 SUBJECT: GECAM observation of a burst from SGR J1555.2-5402

During the commissioning phase, GECAM-B was triggered on-ground by
a bright short burst from SGR J1555.2-5402 at 2021-09-07T19:15:21.100 UTC (T0),
which was also detected by Fermi/GBM.

This was seen in the BAT lightcurve as trigger 1072377 on the 8 ms timescale and was about 50% coded. With only 35 excess counts (above 14 background) it would not be expected to yield an image position and, indeed, only noise peaks were seen.

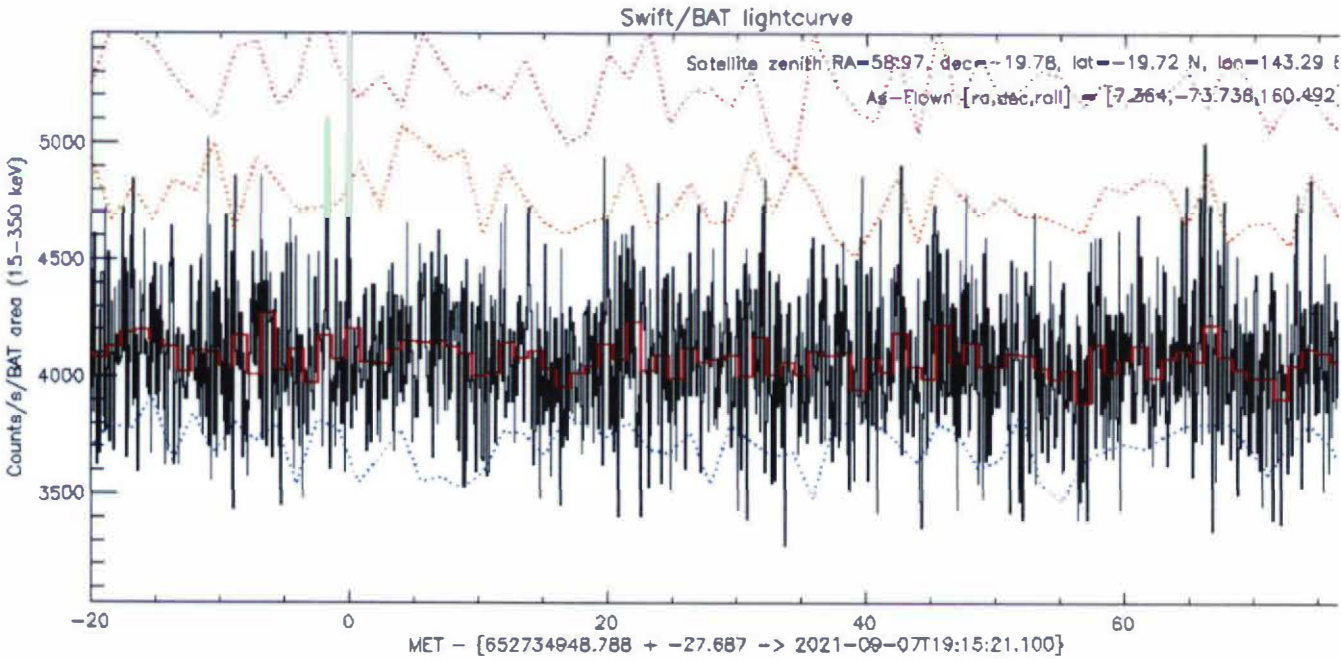
BR: Response from the dsp Imaging: 652734948.77600 - 652734948.78400
BR: 2 sources found
Src# 0: 12 +/- 2 @ (th,ph)=(0.3170,-2.6965) (ra,dec)=(60.094,-67.079)
Src# 0: 12 +/- 2 @ (th,ph)=(0.1549,-0.7003) (ra,dec)=(339.752,-80.346)
Blip too weak to be considered a burst



%swinfo -o 2021-09-07T19:15:21.100 -s 238.819_-54.046

Swift Zenith(RA,dec): 58.97, -19.78
Swift Location(lon,lat,alt): 143.29 E, -19.72 N, 547 km
Time(MET + UTCF -> UT): 652734948.788 + -27.687 -> 2021-09-07T19:15:21.100
YYMMDD_SOD: 210907_69321.100 DOY=250
Obs Sequence Number: 00048706205
Obs Target Name: SMC J0029.4-7344
Obs Date and Times: 2021-09-07 19:14:05 - 19:15:36
Obs Pointing(ra,dec,roll): 7.364, -73.736, 160.49
238.819 -54.046_imageloc (boresight_dist, angle): (48, -32)
238.819 -54.046_exposure (cm^2 cos adjusted): 1173
238.819 -54.046_altitude: 7 (depressed but unattenuated)

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data



Attachments

sw01072377000bevsho_uf.evt.gz.ipn	15.0 KB
_tmp_swift_210907_1915_bat64ms_ipn	91.6 KB

From kevinhurley+caf_ =khurley2=ssl.berkeley.edu@berkeley.edu Thu Sep 9 07:49:48
Date: Thu, 9 Sep 2021 10:49:43 -0400
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
Subject: GECAM observation of a burst from SGR J1555.2-5402

TITLE: GCN CIRCULAR
NUMBER: 30787
SUBJECT: GECAM observation of a burst from SGR J1555.2-5402
DATE: 21/09/09 14:49:12 GMT
FROM: Zhao Yi at POLAR <yizhao@ihep.ac.cn>

Yi Zhao, S. Xiao, S. L. Xiong, L. Lin, C. Cai, J. J. He, Y. Huang, Z. W. Guo, C. Y. Li, X. B. Li, J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, W. C. Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, C. Zheng, Y. Q. Du, D. Y. Guo, J. Liang, F. J. Lu, Q. Luo, X. Ma, W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. P. Zhang, S. N. Zhang, X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP),
report on behalf of GECAM team:

During the commissioning phase, GECAM-B was triggered on-ground by a bright short burst from SGR J1555.2-5402 at 2021-09-07T19:15:21.100 UTC (T0), which was also detected by Fermi/GBM.

According to the GECAM-B light curves in about 15-60 keV, this burst mainly consists of a single pulse with T90 of 18 ms measured from T0-0.014 s.

The GECAM light curve could be found here:
<http://twiki.ihep.ac.cn/pub/GECAM/GRBList/SGR20210907T191521.100-Lc.png>

Since this burst has very few counts registered on GECAM-B detectors, the location given by GECAM-B alone is quite coarse but broadly consistent with SGR J1555.2-5

According to our multiple-mission joint location pipeline (S. Xiao et al., accepted by ApJ) using GECAM-B and Fermi/GBM data, this burst is localized to an annulus which is very consistent with SGR J1555.2-5402.

The GECAM-GBM joint location could be found here:
<http://twiki.ihep.ac.cn/pub/GECAM/GRBList/SGR20210907T191521.100-JointLoc.png>

Considering these results stated above and some activities reported recently, we conclude that this burst is from SGR J1555.2-5402.

Please note that all GECAM results here are preliminary. The final analysis will be published in journal papers or GECAM online catalog.

Gravitational wave high-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission consists of two small satellites (GECAM-A and GECAM-B) in Low Earth Orbit (600 km, 29 deg), launched on Dec 10, 2020 (Beijing Time), which was funded by the Chinese Academy of Sciences (CAS).

KONUS

08/09/2021

33.711

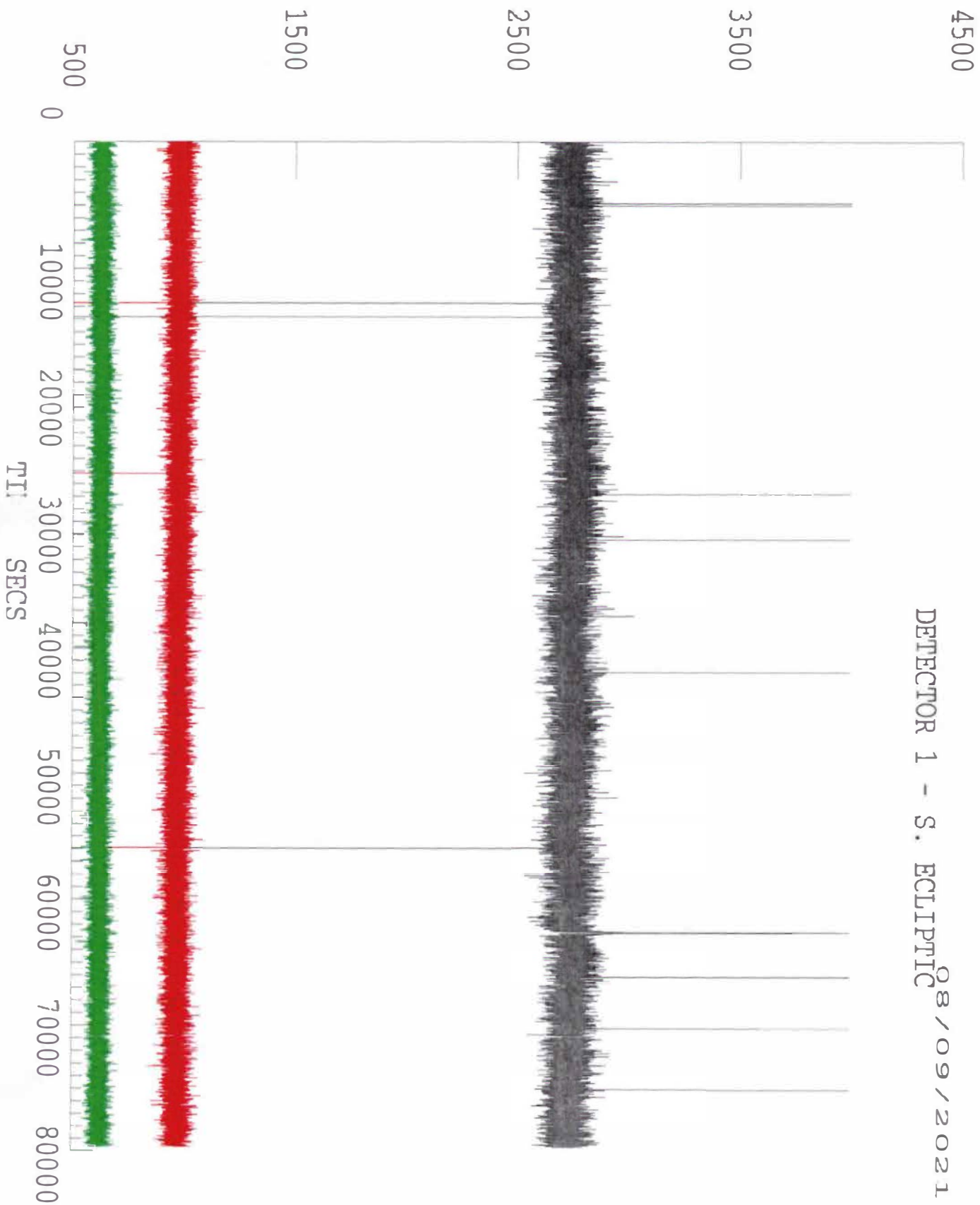
v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S



KONUS

08/09/2021

33.711

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

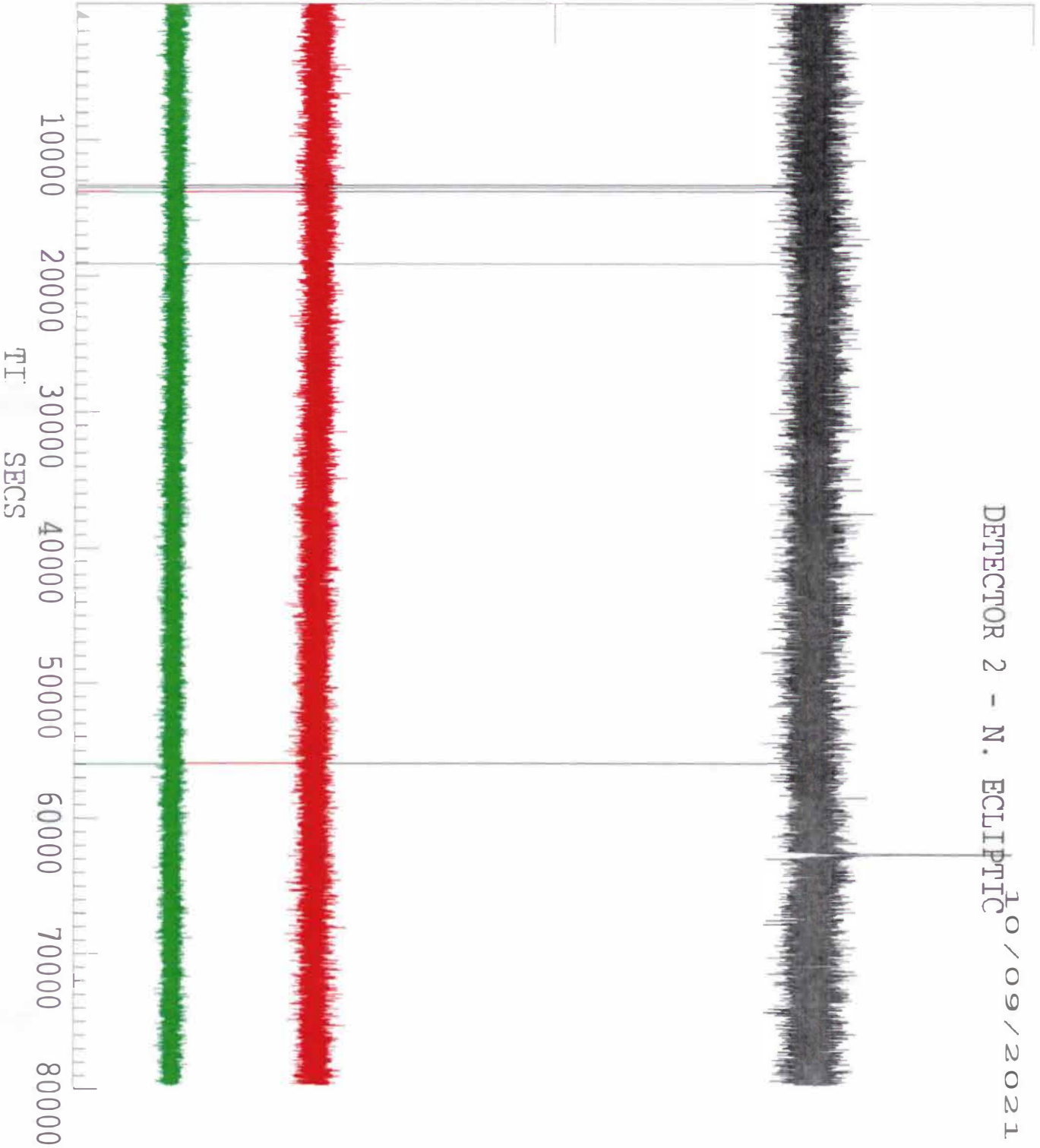
4080

3080

2080

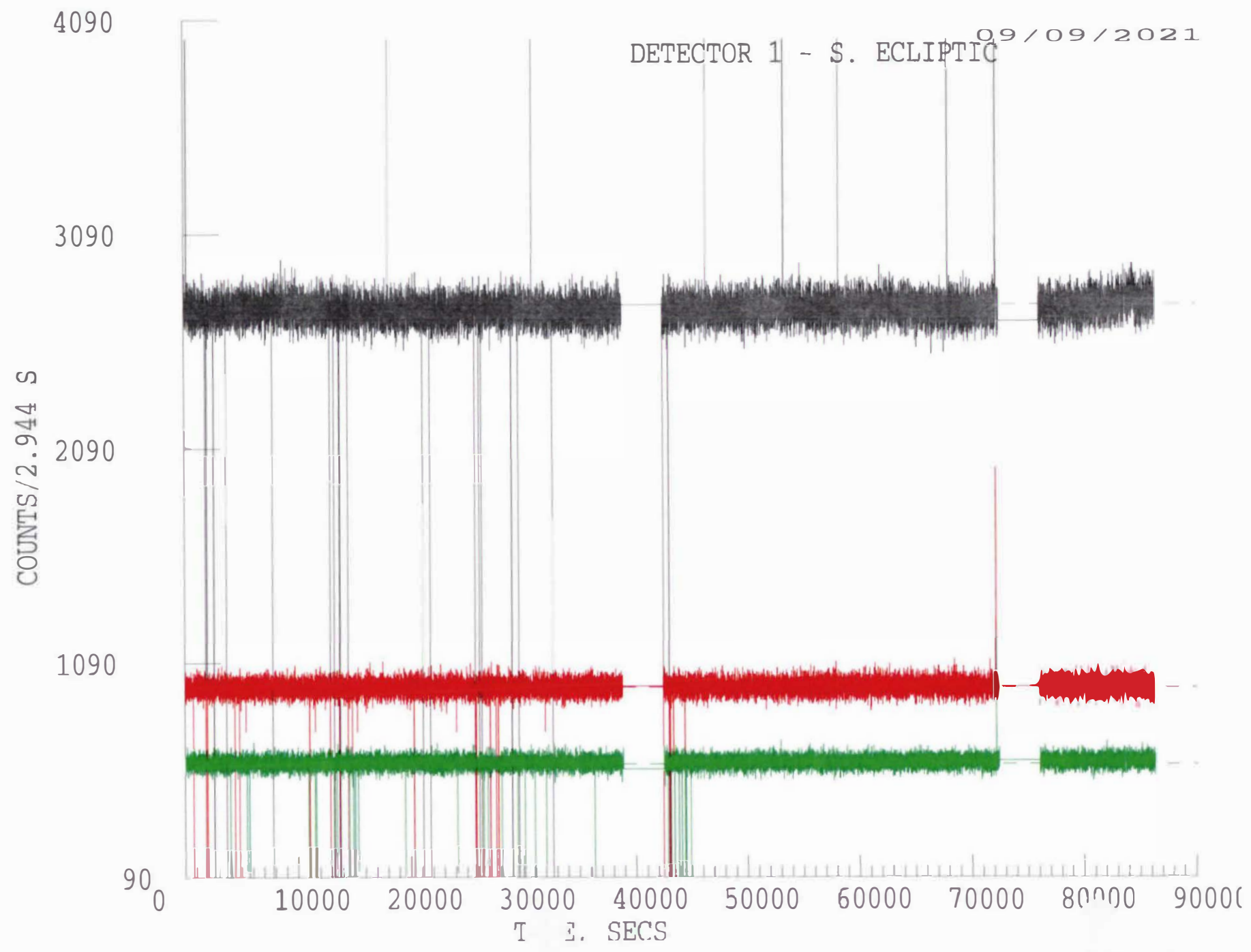
1080

80
0



KONUS 09/09/2021 22.438 v01

10- 50 keV 50- 200 keV 200- 750 keV



KONUS

09/09/2021

22.438

v01

10- 50 keV

50- 200 keV

200- 750 keV

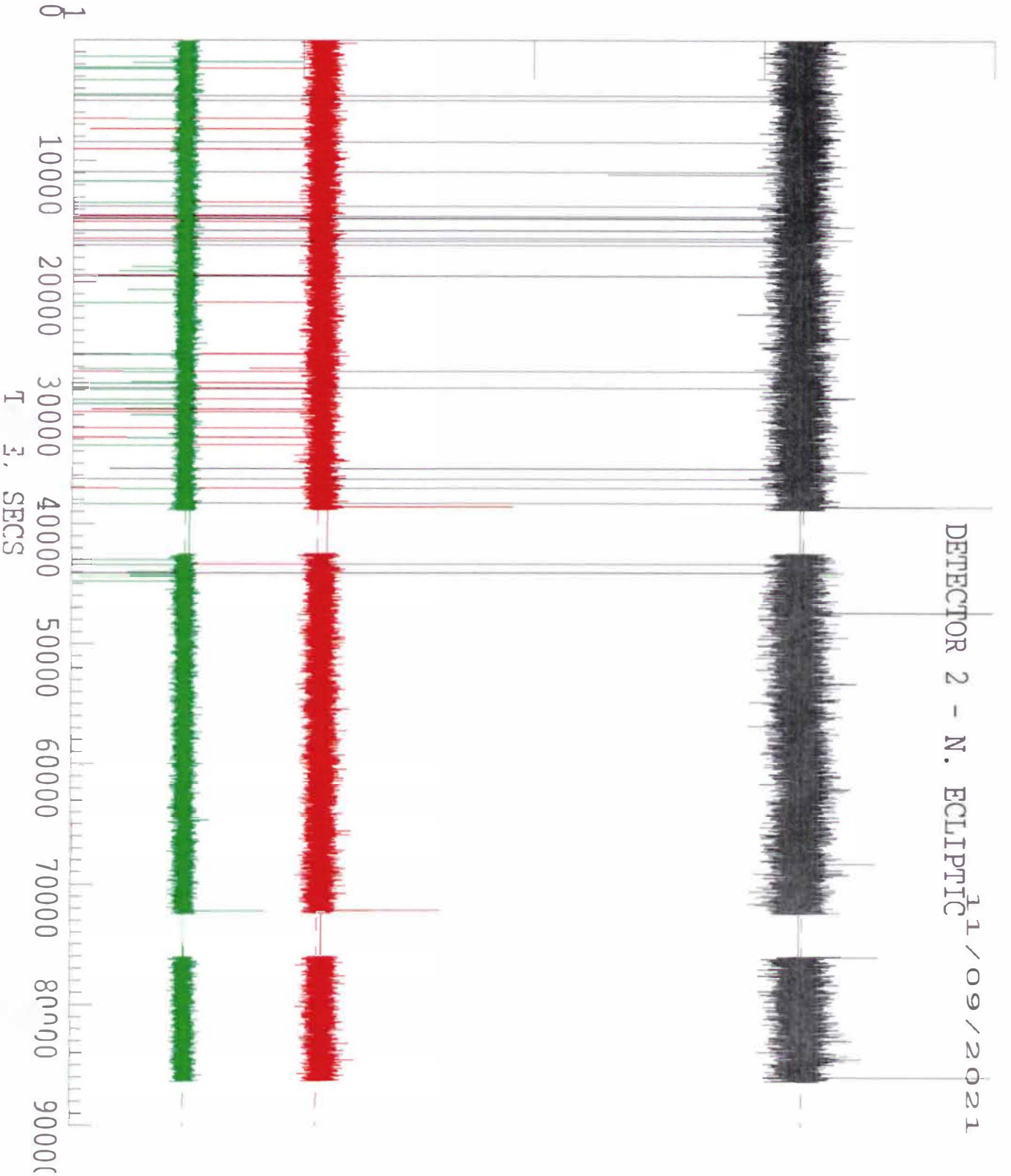
COUNTS/2.944 S

1001

2001

3001

4001

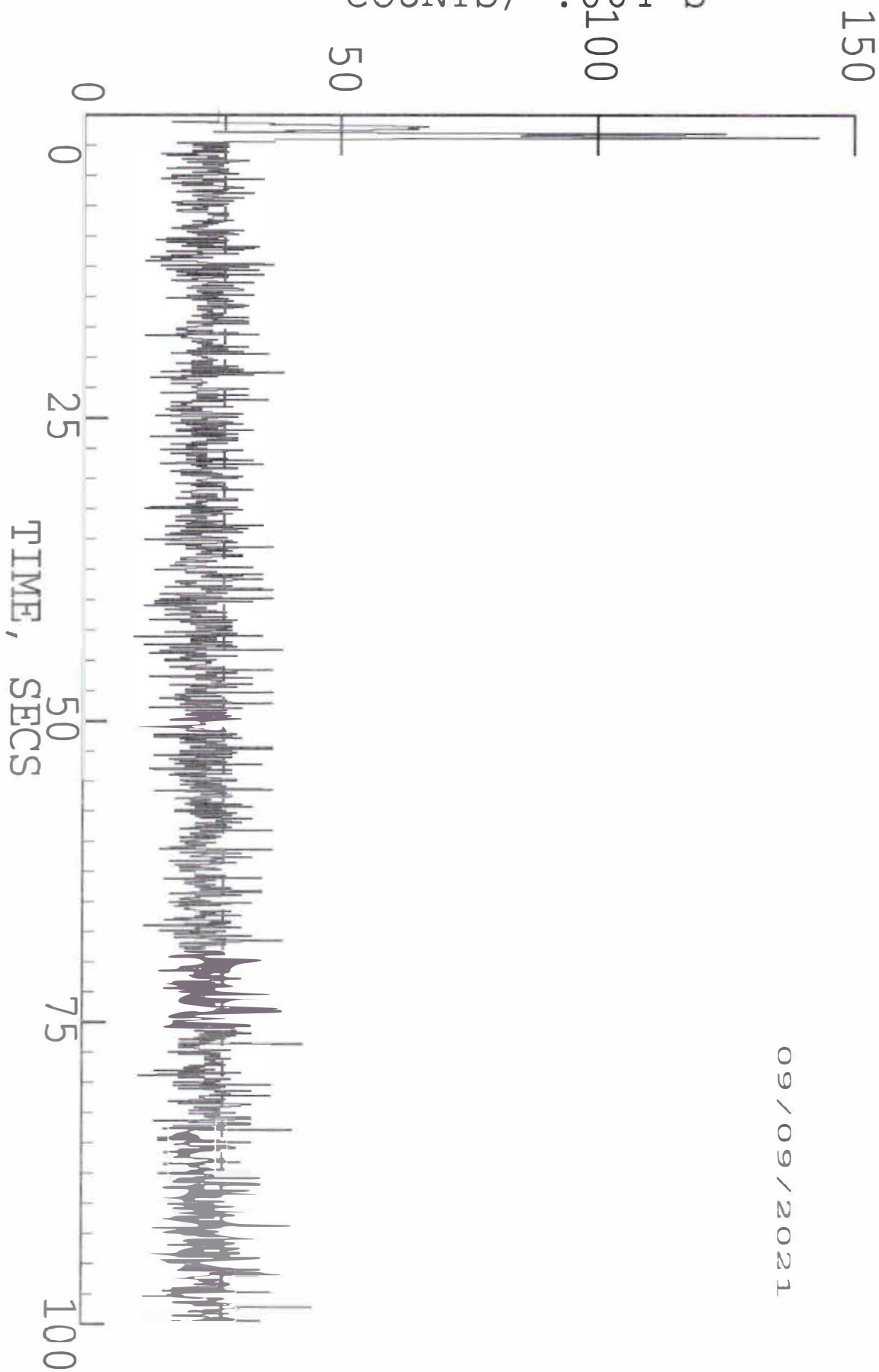


A

KONUS 09/09/21 38597.573 10:43:17.573
50- 200 keV

COUNTS/ .064 S

+GBM
176.7 83.8



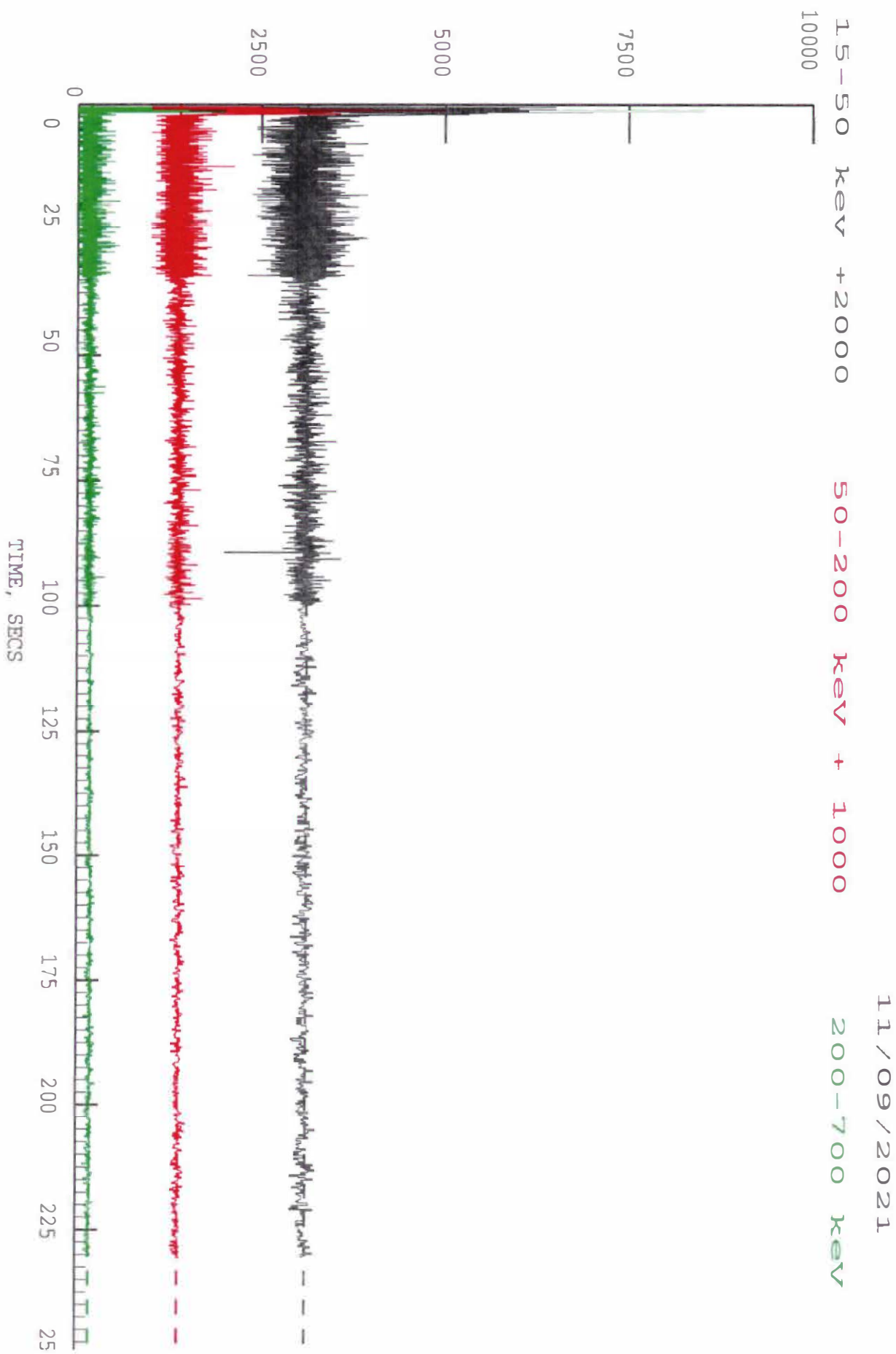
A

KONUS

09/09/21

COUNTS/SEC 38597.000

10:43:17.000



A

12/09/2021

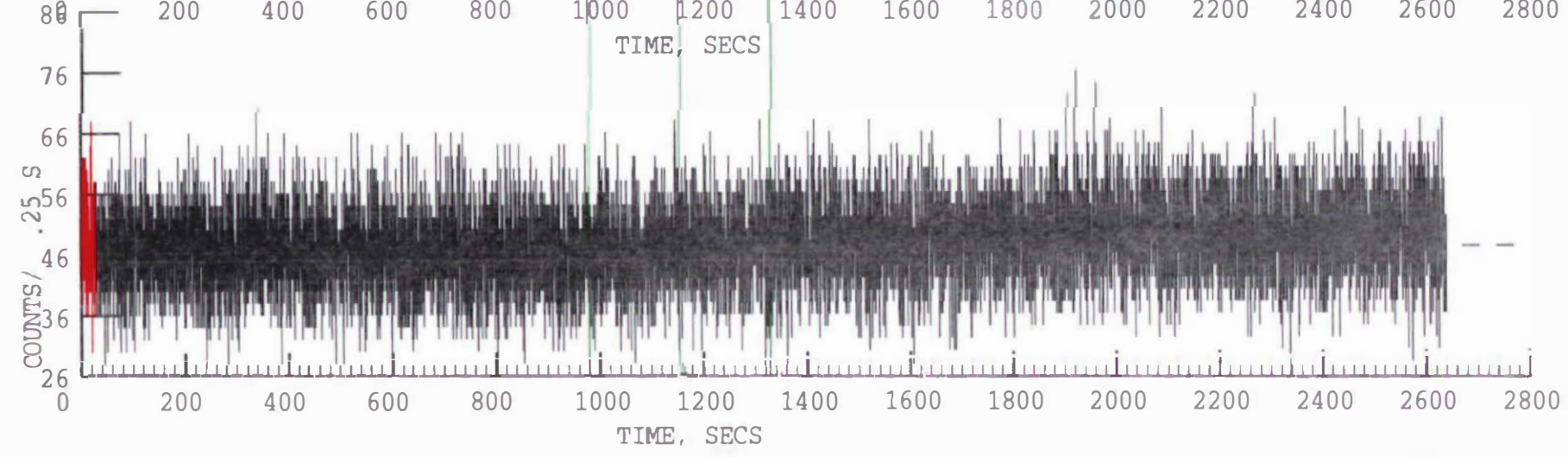
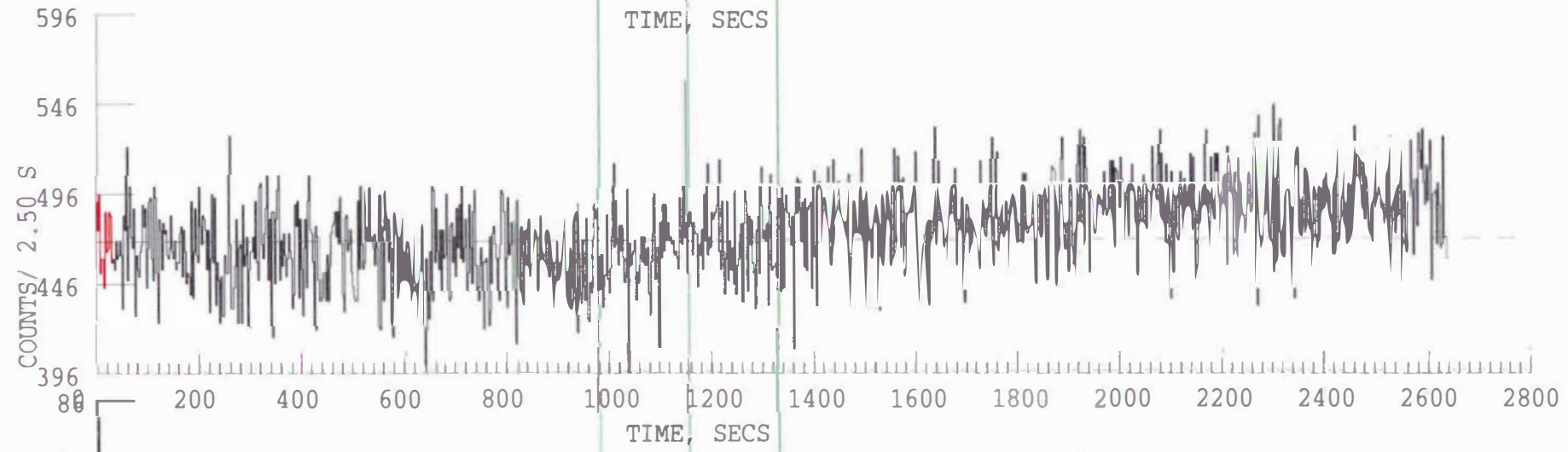
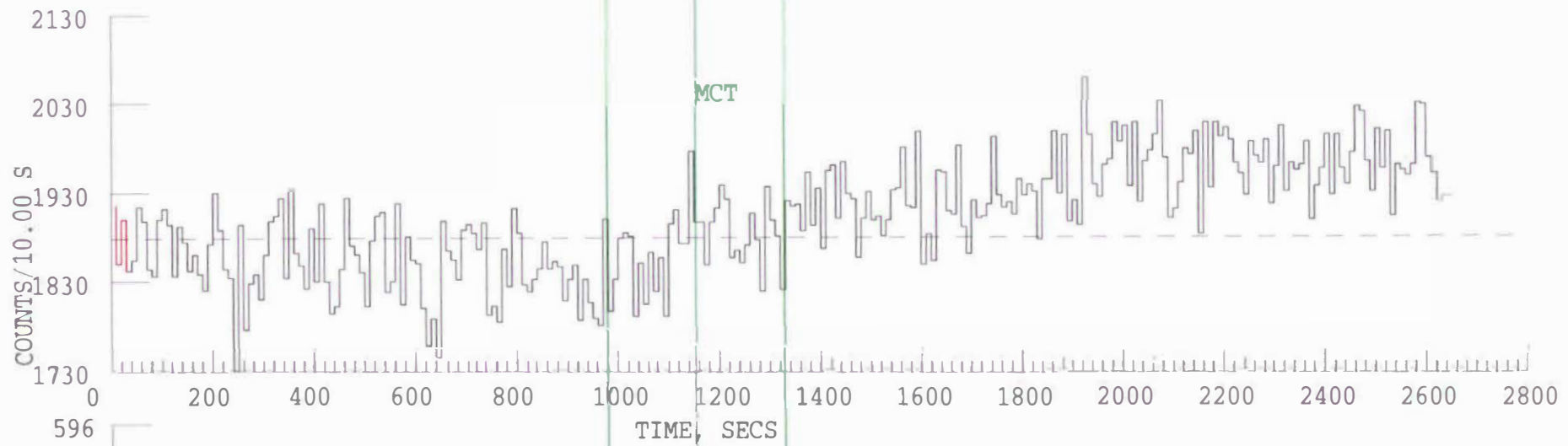
10:20:55.892

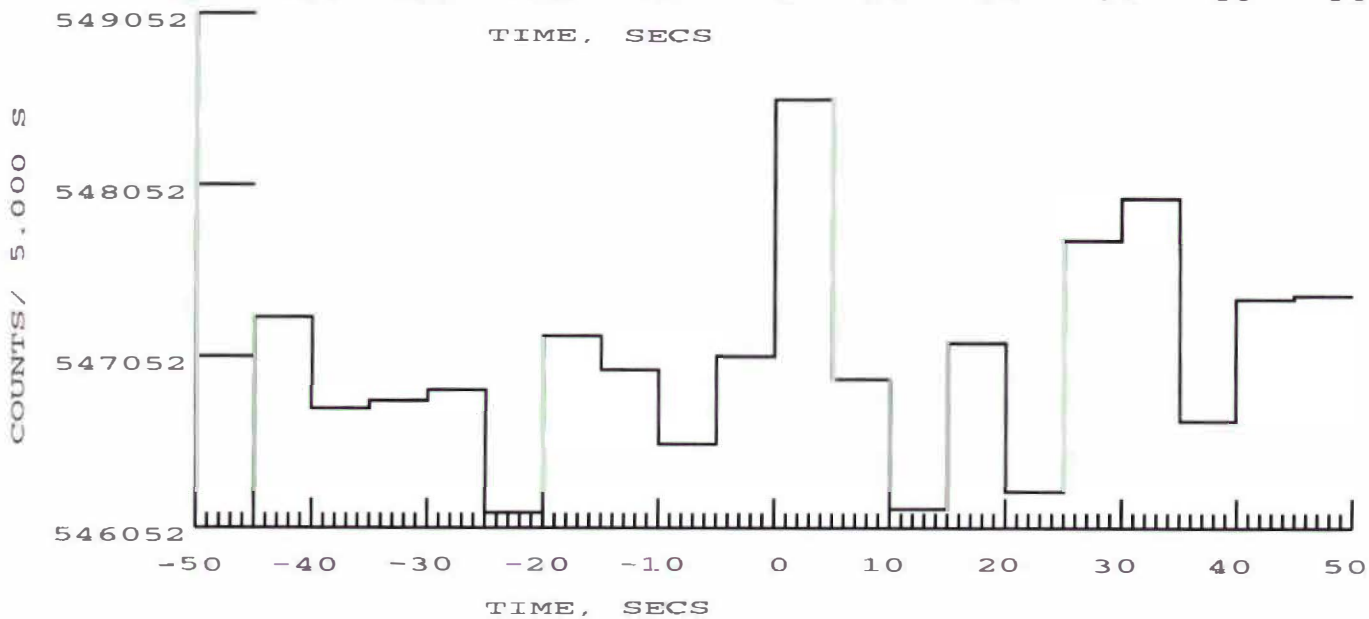
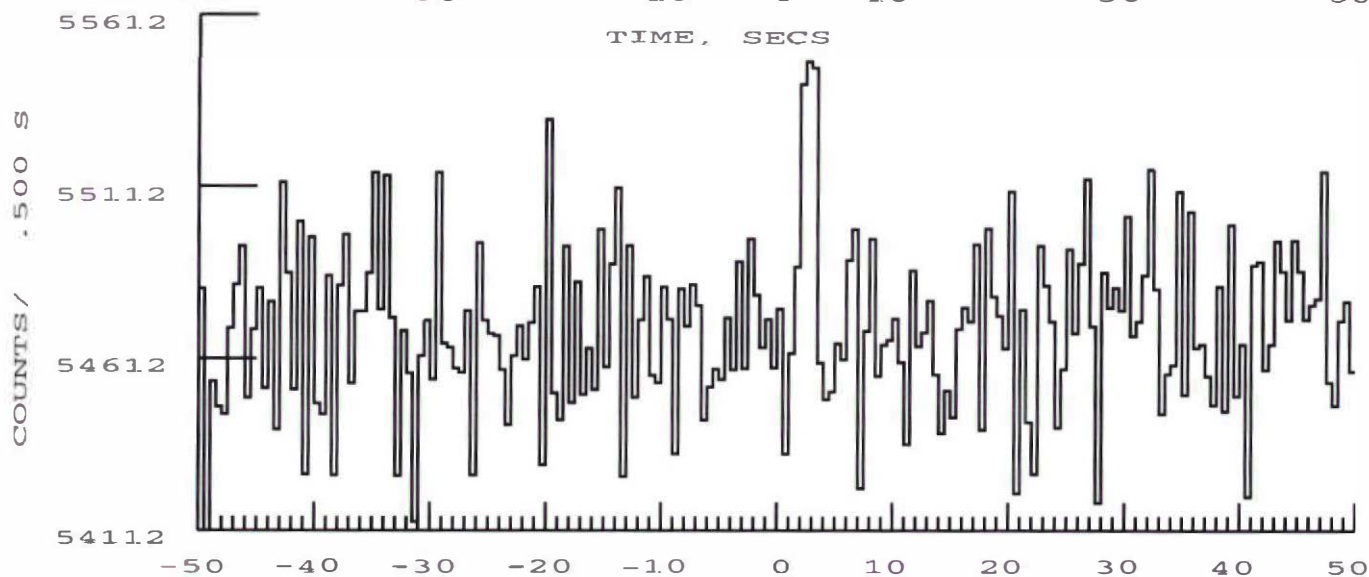
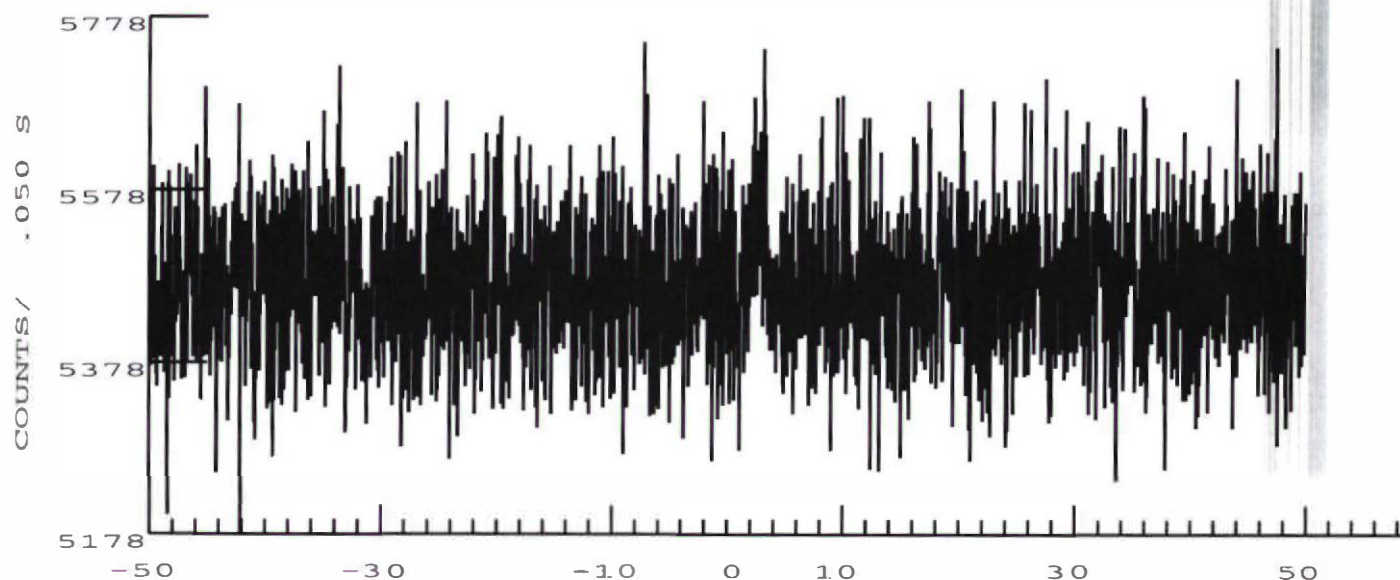
37255.892

09/09/21

ODYSSEY

50-3000 keV





Subject: IPN triangulation of short GRB 210909A (=Fermi/GBM trigger 652877004) - Konus - GBM annulus
From: Anna Ridnaia <ridnaia@mail.ioffe.ru>
Date: 9/9/2021, 9:24 AM
To: IPN <ipn@ssl.berkeley.edu>

Dear colleagues,

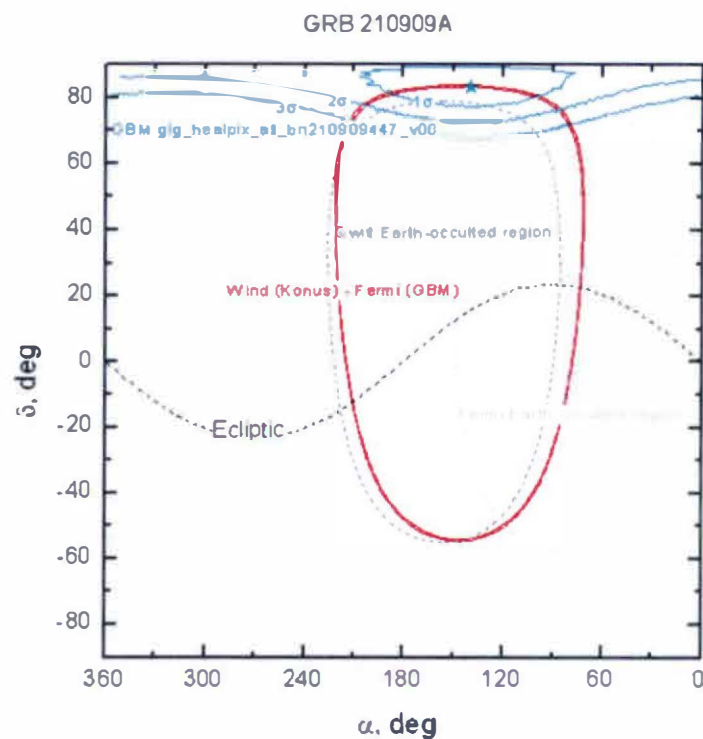
The short-duration GRB 210909A
(Fermi-GBM detection: Fermi GBM Team, GCN Circ. 30786)
has been detected by Fermi (GBM trigger 652877004),
Konus-Wind, and INTEGRAL (SPI-ACS, weak response), so far,
at about 38599 s UT (10:43:19).

We have triangulated it to a Konus-GBM annulus centered at
RA(2000)=146.207 deg (09h 44m 50s) Dec(2000)=+14.806 deg (+14d 48' 22"),
whose radius is 68.835 +/- 0.308 deg (3 sigma), see the attached figure.

Any other detections?

Best regards,
Anna

— GRB210909A_IPN_map.png



— Attachments

GRB210909A_IPN_map.png

7.5 KB

Subject: BAT lightcurve for trigger at 210909_1043

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/9/2021, 7:37 AM

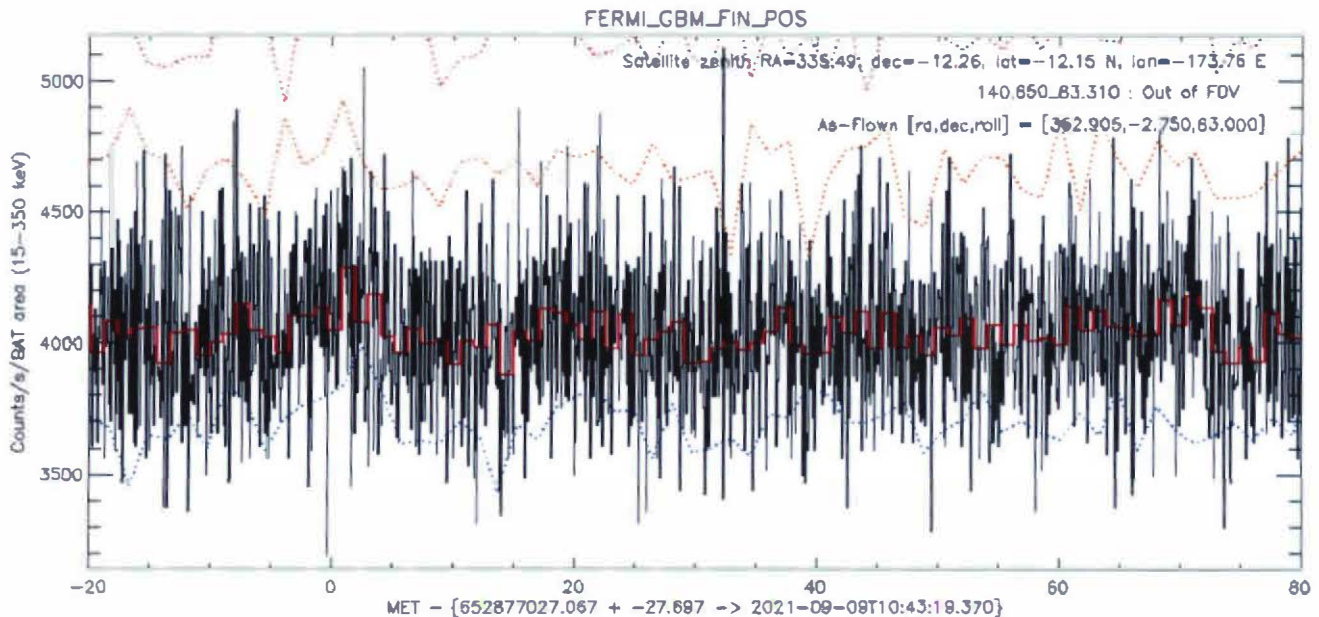
To: aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, vestrland@lanl.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652877027.067 -s 140.650_83.310
Swift Zenith(RA,dec):      335.49, -12.26
Swift Location(lon,lat,alt): -173.76 E, -12.15 N, 555 km
Time(MET + UTCF -> UT):  652877027.067 + -27.697 -> 2021-09-09T10:43:19.370
YYMMDD_SOD:               210909_38599.370      DOY=252
Obs Sequence Number:      00014769027
Obs Target Name:          AF Psc
Obs Date and Times:       2021-09-09  10:30:34 - 10:55:32
Obs Pointing(ra,dec,roll): 352.905, -2.750, 63.00
140.650_83.310_imageloc (boresight_dist, angle): (98, -149)
140.650_83.310_exposure (cm2 cos adjusted): 0
140.650_83.310_altitude: 4 (depressed but unattenuated)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

— /tmp/swift/210909_1043.png —



— Attachments: —

/tmp/swift/210909_1043_bat64ms_ipn

87.0 KB

/tmp/swift/210909_1043.png

20.2 KB

Subject: GRB 210909A: Detection by GRBAlpha
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 3:35 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30840
SUBJECT: GRB 210909A: Detection by GRBAlpha
DATE: 21/09/15 10:35:12 GMT
FROM: Masanori Ohno at Hiroshima U <ohno@astro.hiroshima-u.ac.jp>

J. Ripa (Masaryk U.), M. Ohno (Eotvos U./Konkoly Observatory/Hiroshima U.), H. Takahashi (Hiroshima U.), A. Pal, L. Meszaros, B. Csak (Konkoly Observatory), N. Werner, M. Topinka, F. Munz, F. Hroch (Masaryk U.), T. Urbanec, M. Kasal, A. Povalac (Brno U. of Technology), J. Hudec, J. Kapus, M. Frajt (Spacemanic s.r.o), R. Laszlo, M. Koleda (Needronix s.r.o), M. Smelko, P. Hanak, P. Lipovsky (Technical U. of Kosice), G. Galgoczi (Wigner Research Center/Eotvos U.), Yuusuke Uchida, Helen Poon, H. Mataka, N. Uchida (Hiroshima U.), T. Bozoki (Eotvos U.), G. Dalya (Eotvos U.), T. Enoto (Kyoto U.), Zs. Frei (Eotvos U.), G. Friss (Eotvos U.), Y. Fukazawa, K. Hirose (Hiroshima U.), S. Hisadomi (Nagoya U.), Y. Ichinohe (Rikkyo U.), K. Kapas (Eotvos U.), L. L. Kiss (Konkoly Observatory), T. Mizuno (Hiroshima U.), K. Nakazawa (Nagoya U.), H. Odaka (Univ of Tokyo), J. Takatsy (Eotvos U.), K. Torigoe (Hiroshima U.) -- the GRBAlpha collaboration.

The short duration GRB 210909A (Fermi-GBM detection; GCN Circ. 30786) was detected by the GRBAlpha 1U CubeSat (Pal et al. Proc. SPIE 2020).

The light curve shows a short spike structure within the 4 s time bin. The detection had significance of the SNR = 8.8.

The light curve obtained by GRBAlpha is available here:
https://grbalpha.konkoly.hu/static/share/GRB210909A_GCN.pdf

GRBAlpha is a demonstration mission for a future CubeSats constellation (Werner et al. Proc. SPIE 2018). The detector of GRBAlpha consists of a 75 x 75 x 5 mm³ CsI scintillator read out by a SiPM array, covering the energy range from ~50 keV to ~1000 keV. GRBAlpha was launched on 2021 March 22 from Baikonur. After its commissioning phase, the scientific observations are now under way. To increase the duty cycle and the downlink rate, the upgrade of the on-board data acquisition software stack is in progress. The ground segment is also supported by the radio amateur community and it takes advantage of the SatNOGS network for increased data downlink volume.

BAT lightcurve for trigger at 210909_1857

Subject: BAT lightcurve for trigger at 210909_1857

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/9/2021, 2:56 PM

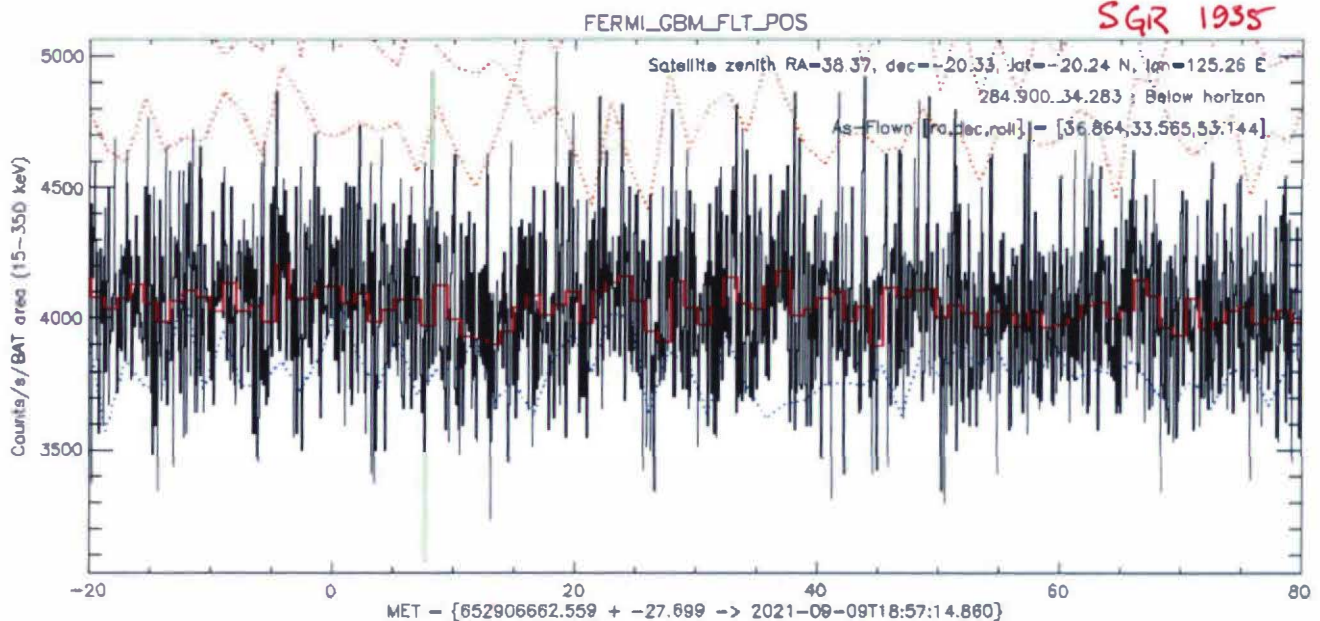
To: bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, vestrand@lanl.gov, aaron.tohu@gmail.com, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652906662.559 -s 284.900_34.283
Swift Zenith(RA,dec):      38.37, -20.33
Swift Location(lon,lat,alt): 125.26 E, -20.24 N, 550 km
Time(MET + UTCF -> UT):   652906662.559 + -27.699 -> 2021-09-09T18:57:14.860
YYMMDD_S00:               210909_68234.860      DOY=252
Obs Sequence Number:      00014387012
Obs Target Name:          NGC 925
Obs Date and Times:       2021-09-09 18:48:32 - 19:00:32
Obs Pointing(ra,dec,roll): 36.864, 33.565, 53.14
284.900_34.283_imageloc (boresight_dist, angle): (87, 167)
284.900_34.283_exposure (cm2 cos adjusted): 0
284.900_34.283_altitude: -7 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210909_1857.png



Attachments:

/tmp/swift/210909_1857_bat64ms_ipn

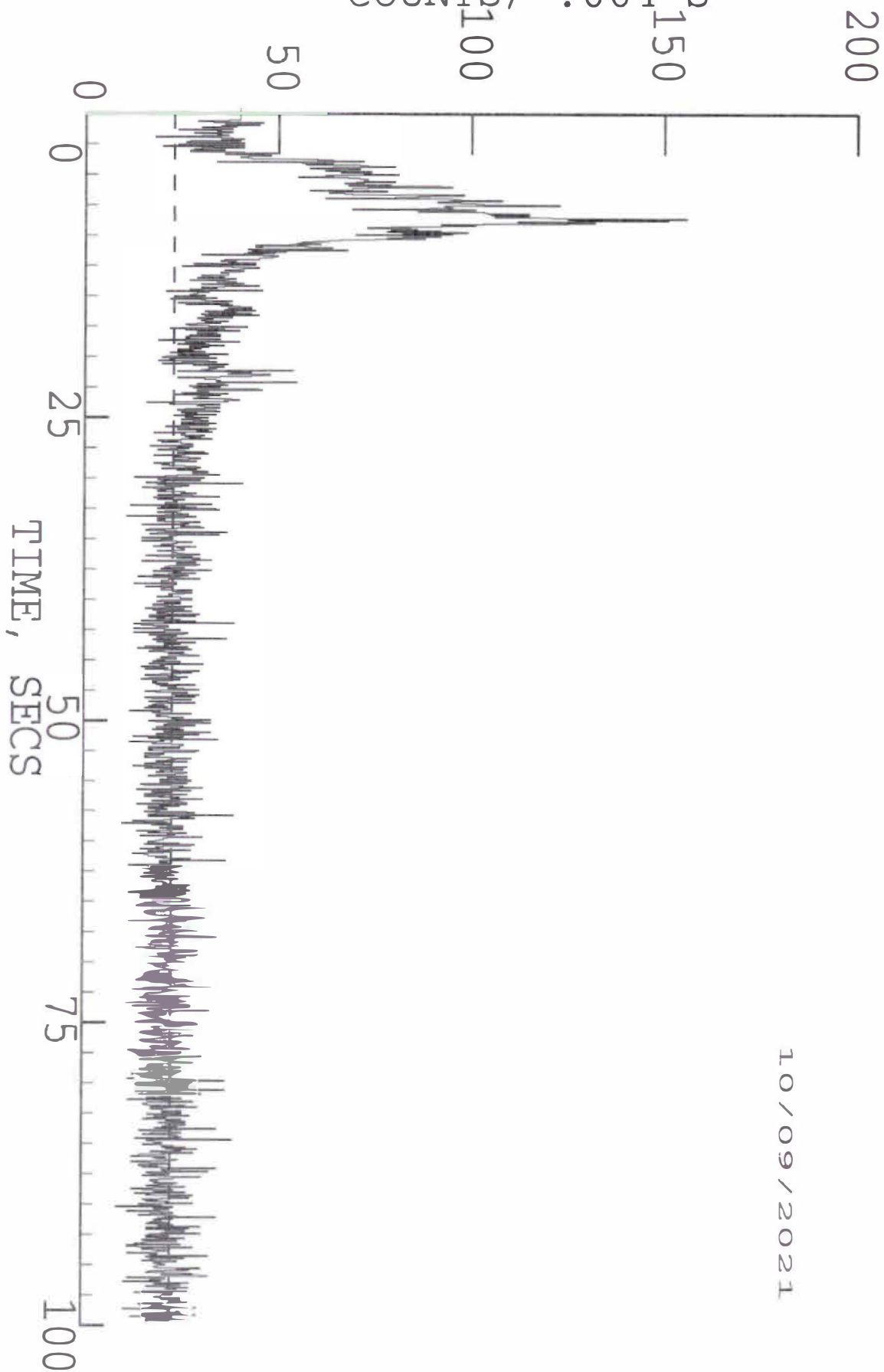
87.1 KB

/tmp/swift/210909_1857.png

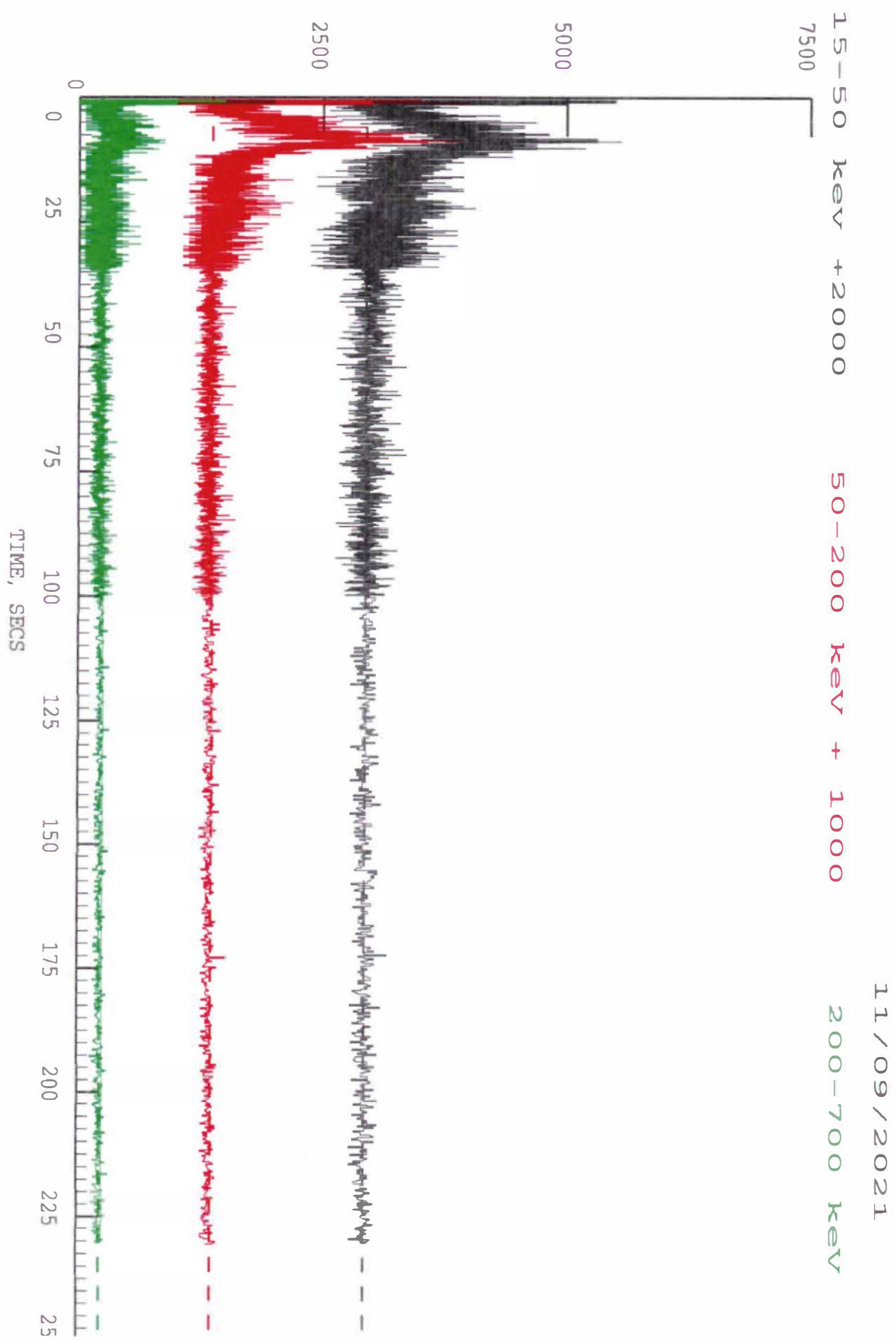
20.6 KB

KONUS 09/09/21 72156.220 20:02:36.220
50- 200 keV

COUNTS/ .064 S



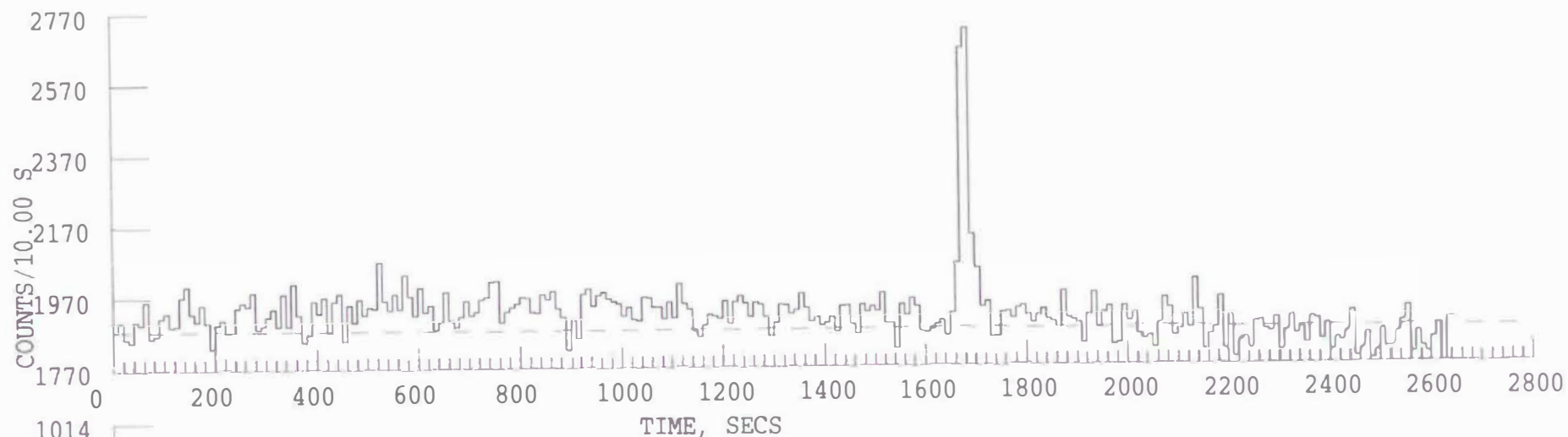
COUNTS/SEC



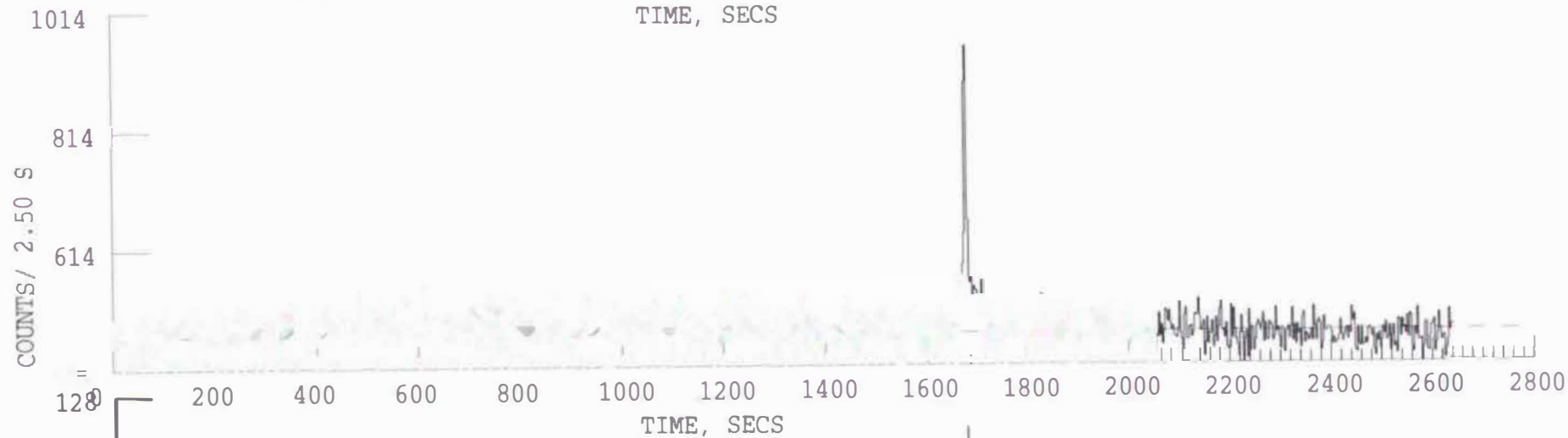
B

12/09/2021

19:39:55.297



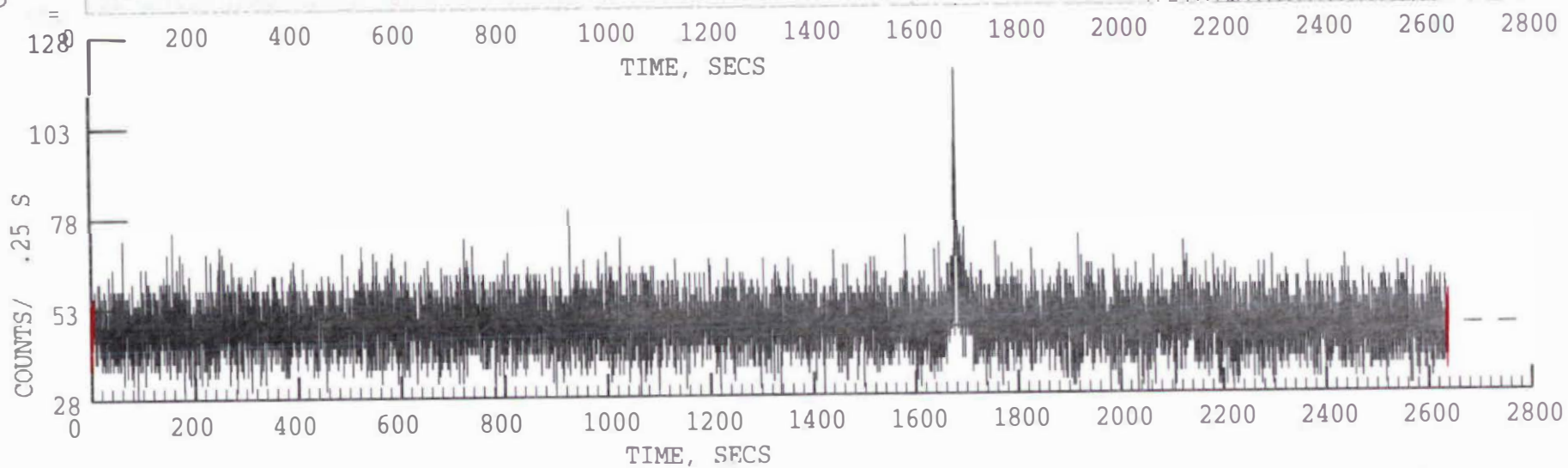
70795.297

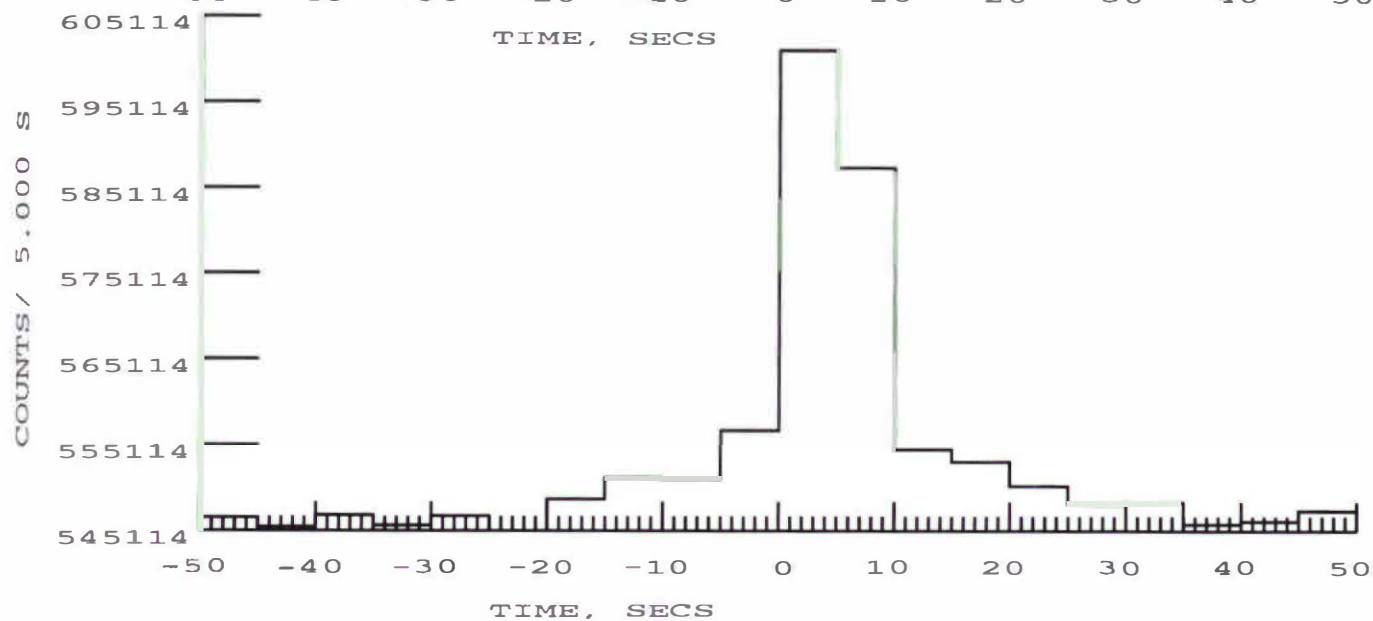
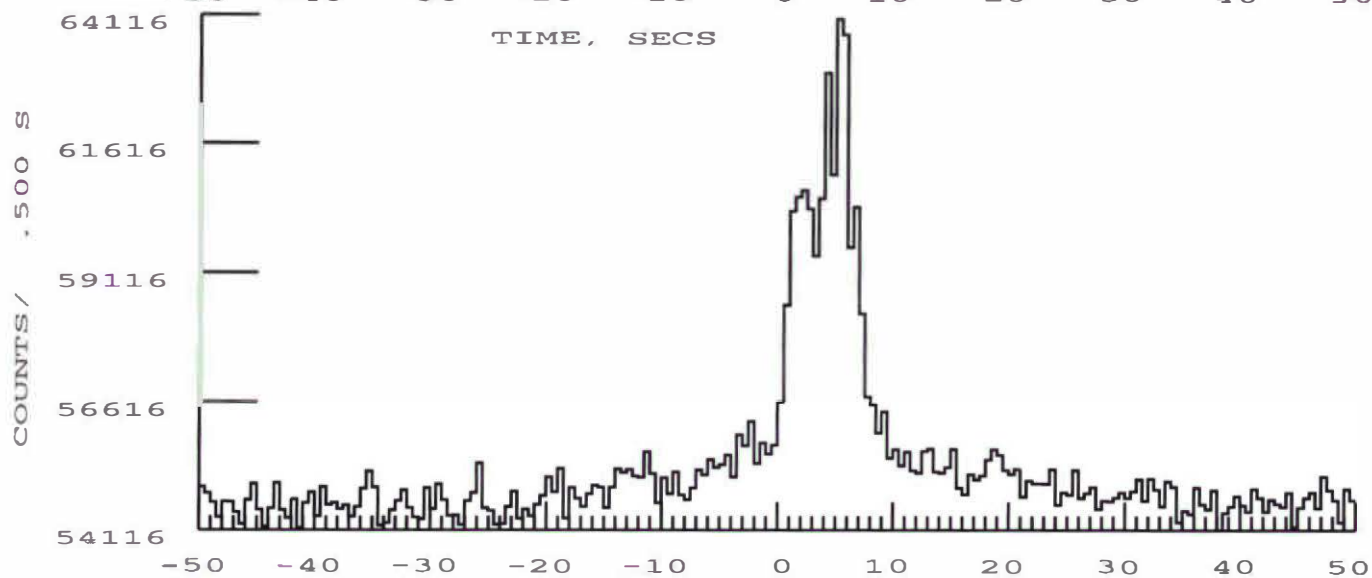
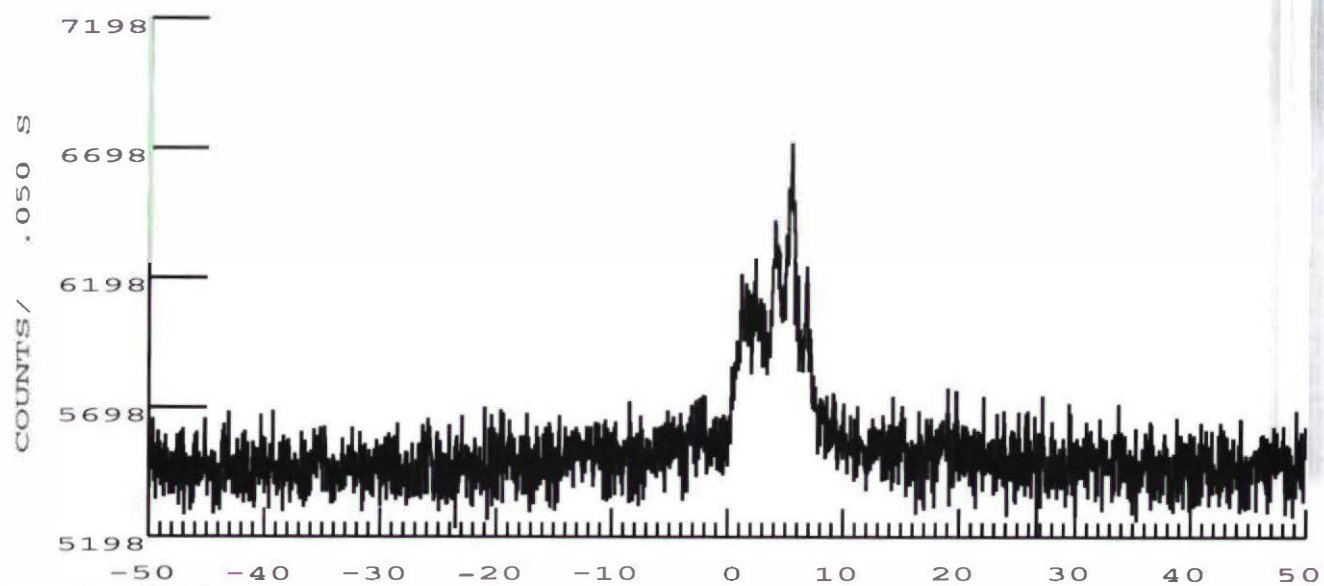


50-3000 keV

09/09/21

ODYSSEY





Subject: BAT lightcurve for trigger at 210909_2002

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 8:33 AM

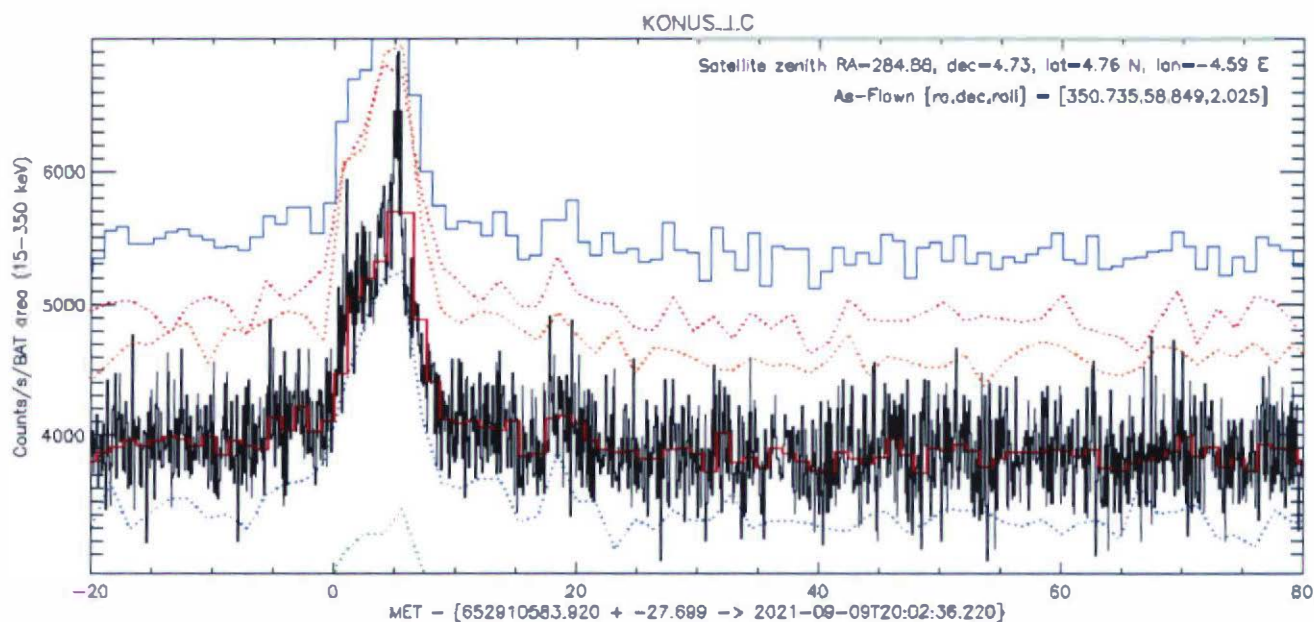
To: bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-09T20:02:36.220
Swift Zenith(RA,dec):      284.88, 4.73
Swift Location(lon,lat,alt): -4.59 E, 4.76 N, 556 km
Time(MET + UTC -> UT):    652910583.920 + -27.699 -> 2021-09-09T20:02:36.220
YYMMDD_SOD:               210909_72156.220      DOY=252
Obs Sequence Number:      00059151022
Obs Target Name:          Cas A Bottom 1
Obs Date and Times:       2021-09-09 19:59:34 - 20:24:30
Obs Pointing(ra,dec,roll): 350.735, 58.849, 2.02
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

---/tmp/swift/210909_2002.png---



---Attachments---

/tmp/swift/210909_2002_bat64ms_ipn

87.0 KB

/tmp/swift/210909_2002.png

19.9 KB

From kevinhurley+caf_ =khurley2=ssl.berkeley.edu@berkeley.edu Fri Sep 10 08:02:59
Date: Fri, 10 Sep 2021 11:02:51 -0400
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
Subject: GRB 210909B: GECAM detection

TITLE: GCN CIRCULAR
NUMBER: 30798
SUBJECT: GRB 210909B: GECAM detection
DATE: 21/09/10 15:02:21 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

S. Xiao, S. L. Xiong, Y. Zhao, X. Y. Zhao, Y. Huang, X. Y. Song, C. Cai,
S. L. Xie, Y. Q. Zhang, Z. W. Guo, J. C. Liu, C. Zheng, W. C. Xue, C. Y. Li,
C. W. Wang, Q. B. Yi, B. X. Zhang, P. Zhang, W. X. Peng, R. Qiao, D. Y. Guo,
X. B. Li, X. Ma, P. Wang, J. Wang, Z. Zhang, S. J. Zheng, W. Chen, J. J. He,
G. Y. Zhao, Y. Q. Du, H. Wu, J. Liang, Q. Luo, X. L. Zhang,
L. M. Song, F. J. Lu, S. N. Zhang (IHEP), report on behalf of GECAM team:

During the commissioning phase, GECAM-B was triggered in-flight by a long burst, GRB 210909B, at 2021-09-09T20:02:33.600 UTC (denoted as T0), which was also detected by INTEGRAL/SPI-ACS.

According to the GECAM-B light curves in about 15-3500 keV, this burst mainly consists of a broad pulse with a duration of about 10 s.

The GECAM light curve could be found here:
http://twiki.ihep.ac.cn/pub/GECAM/GRBList/utn210909_200233_GECAMb.png

GECAM-B localized this burst to the following position (J2000):
Ra: 358.6 deg
Dec: -74.9 deg
Err: 1.1 deg (1-sigma, statistical only)
The systematic error of location is estimated to be several degrees.

Please note that all GECAM results here are preliminary. The final analysis will be published in journal papers or GECAM online catalog.

Gravitational wave high-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission consists of two small satellites (GECAM-A and GECAM-B) in Low Earth Orbit (600 km, 29 deg), launched on Dec 10, 2020 (Beijing Time), which was funded by the Chinese Academy of Sciences (CAS).

BAT lightcurve for trigger at 210909_2021

Subject: BAT lightcurve for trigger at 210909_2021

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/9/2021, 4:26 PM

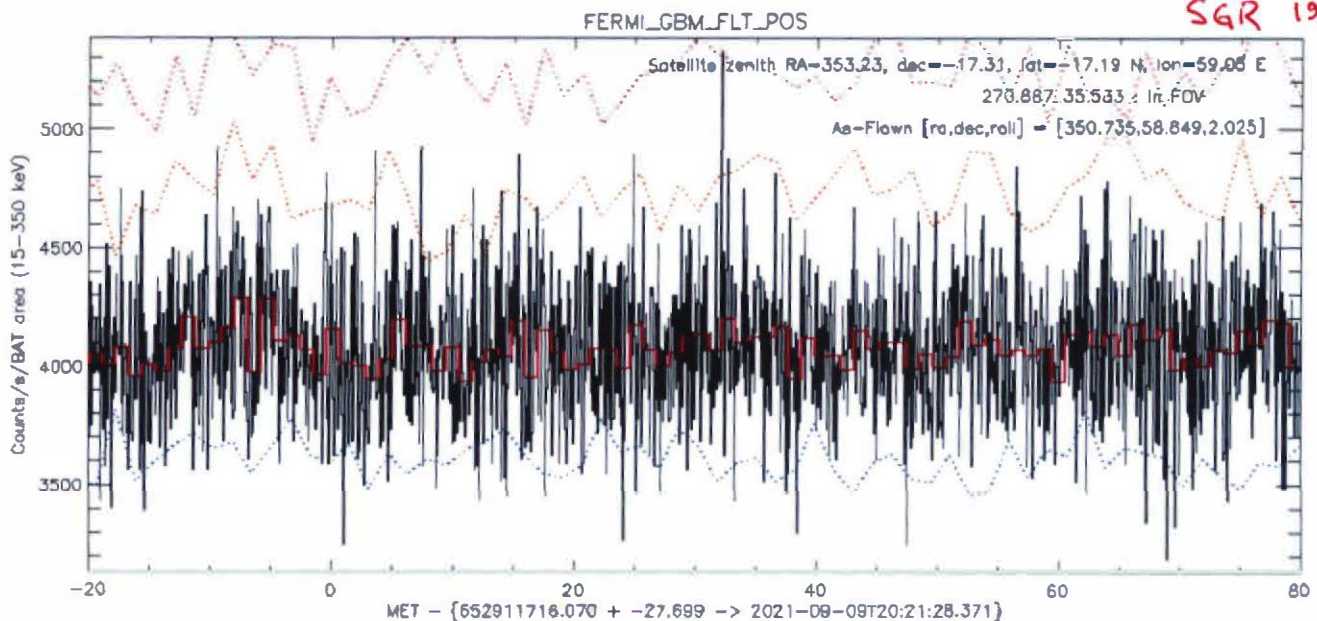
To: gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, mkippen@lanl.gov, vestrand@lanl.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652911716.070 -s 270.867_35.533
Swift Zenith(RA,dec):      353.23, -17.31
Swift Location(lon,lat,alt): 59.05 E, -17.19 N, 555 km
Time(MET + UTC -> UT):    652911716.070 + -27.699 -> 2021-09-09T20:21:28.371
YYMMDD_SOD:               210909_73288.371      DOY=252
Obs Sequence Number:      00059151022
Obs Target Name:          Cas A Bottom 1
Obs Date and Times:       2021-09-09 19:59:34 - 20:24:30
Obs Pointing(ra,dec,roll): 350.735, 58.849, 2.02
270.867_35.533_imageloc (boresight_dist, angle): (55, -169)
270.867_35.533_exposure (cm2 cos adjusted): 808
270.867_35.533_altitude: 19 (depressed but unattenuated)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210909_2021.png



Attachments:

/tmp/swift/210909_2021_bat64ms_ipn

87.0 KB

/tmp/swift/210909_2021.png

20.4 KB

GECAM observations of a series of bursts from SGR J1935+2154

Subject: GECAM observations of a series of bursts from SGR J1935+2154

From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>

Date: 9/10/2021, 6:57 AM

To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR

NUMBER: 30797

SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154

DATE: 21/09/10 13:56:58 GMT

FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

S. Xiao, S. L. Xiong, C. Cai, Y. Huang, Z. W. Guo, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Yi Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B has detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data.
Here is the list of these bursts:

Trigger Time (UTC)

2021-09-09T20:58:35.600

2021-09-09T21:07:12.100

2021-09-10T01:04:33.500

2021-09-10T02:07:56.700

2021-09-10T02:08:28.800

2021-09-10T03:22:40.550

2021-09-10T03:24:47.150

2021-09-10T03:42:45.750

2021-09-10T05:05:03.350

2021-09-10T05:35:55.500

BAT N/O
- BAT N/O

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

v01

8.221

10/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

60000

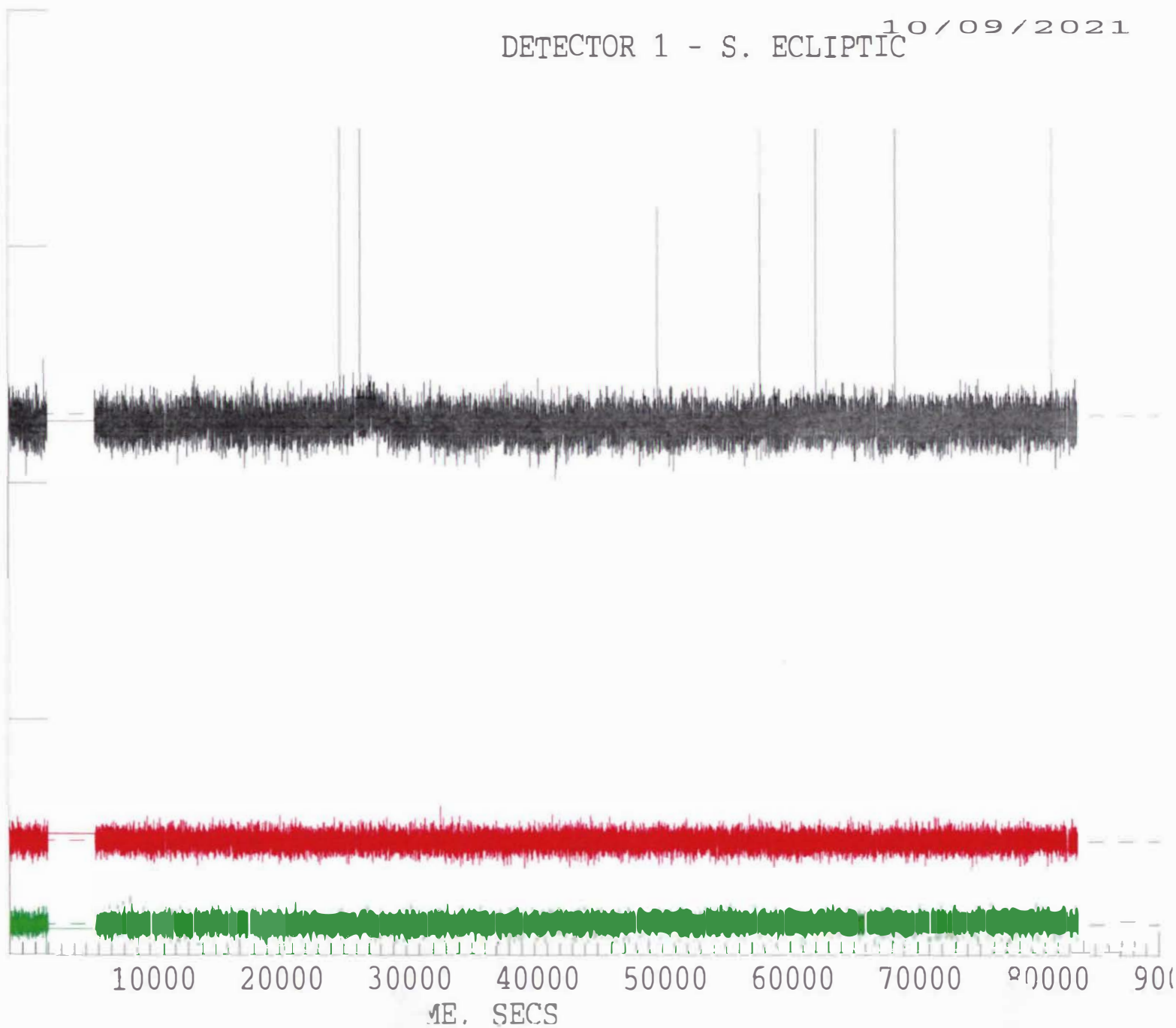
70000

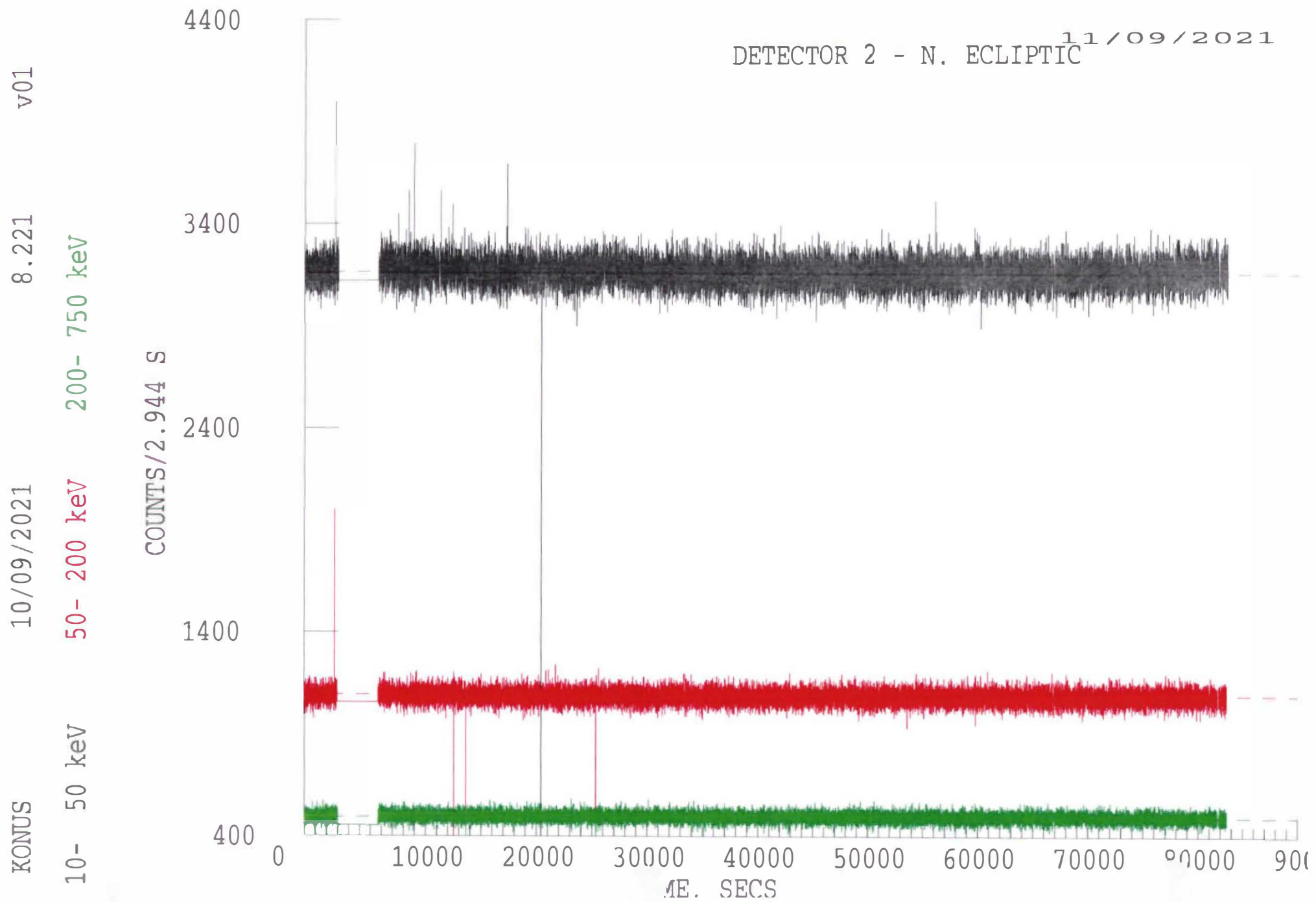
80000

90000

ME. SECS

DETECTOR 1 - S. ECLIPTIC 10/09/2021





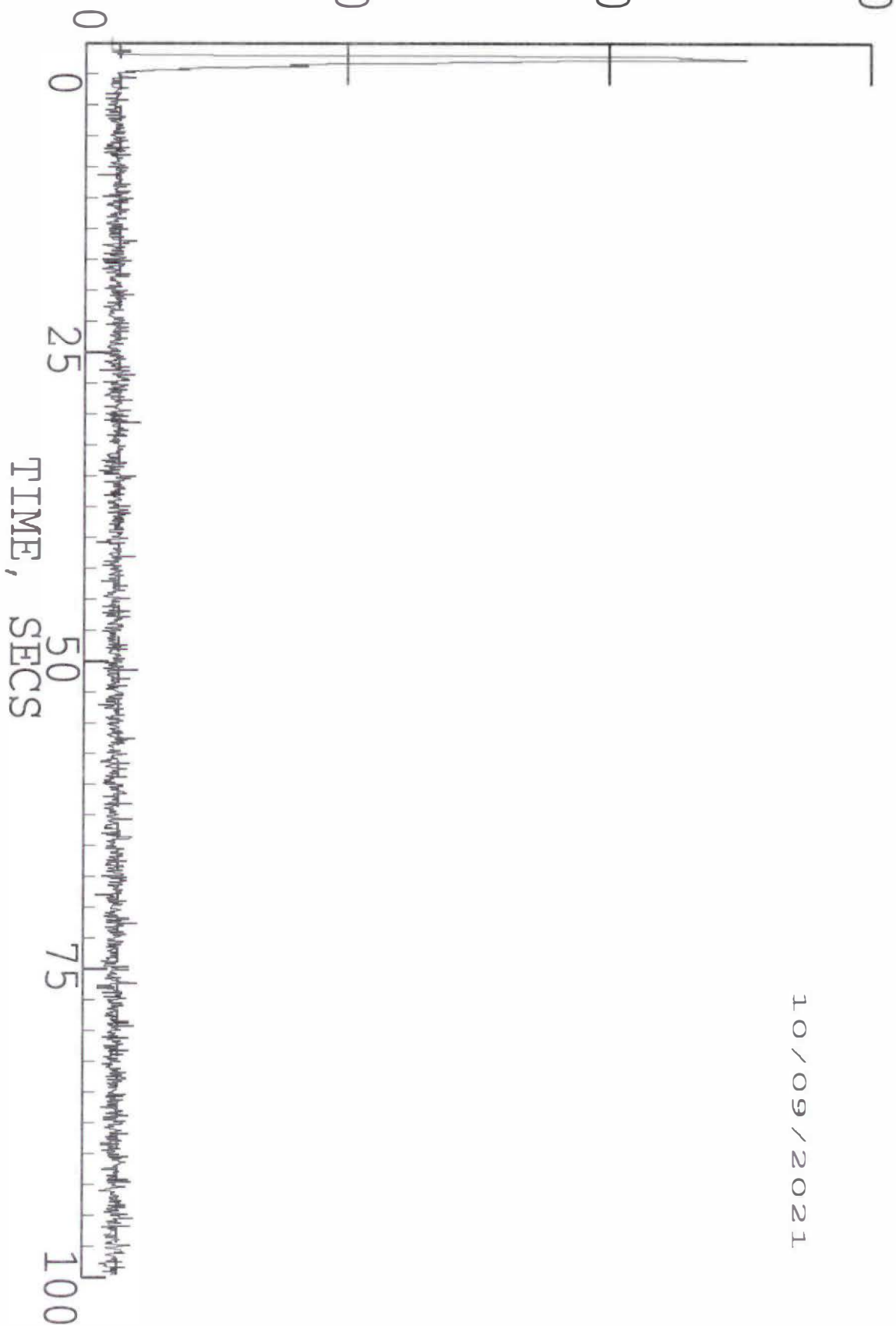
KONUS 10/09/21 2750.499 00:45:50.499
50- 200 keV

COUNTS/ .064 S

+ GBM

SGR

SP1 W/O



10/09/2021

KONUS

10/09/21

COUNTS/SEC

2750.000

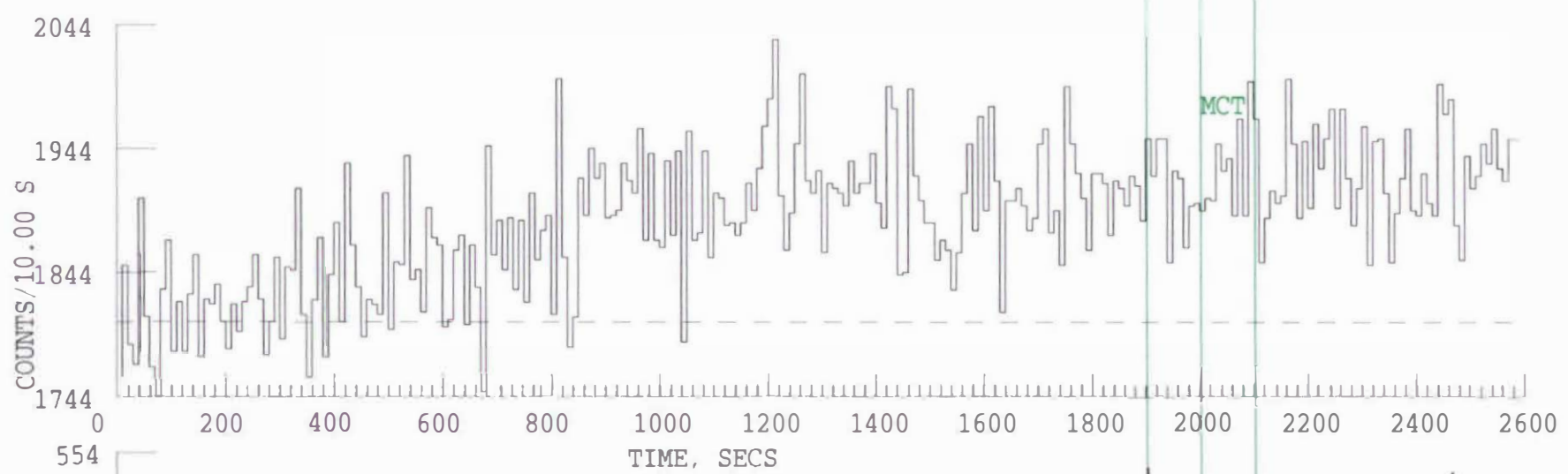
00:45:50.000



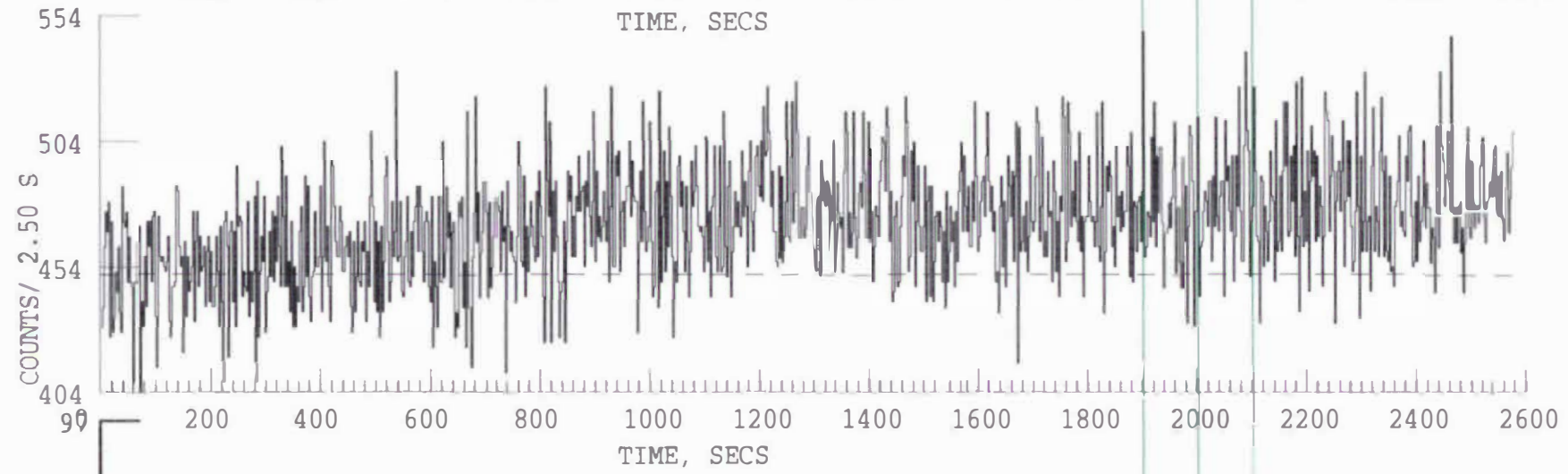
A

12/09/2021

00:23:54.999

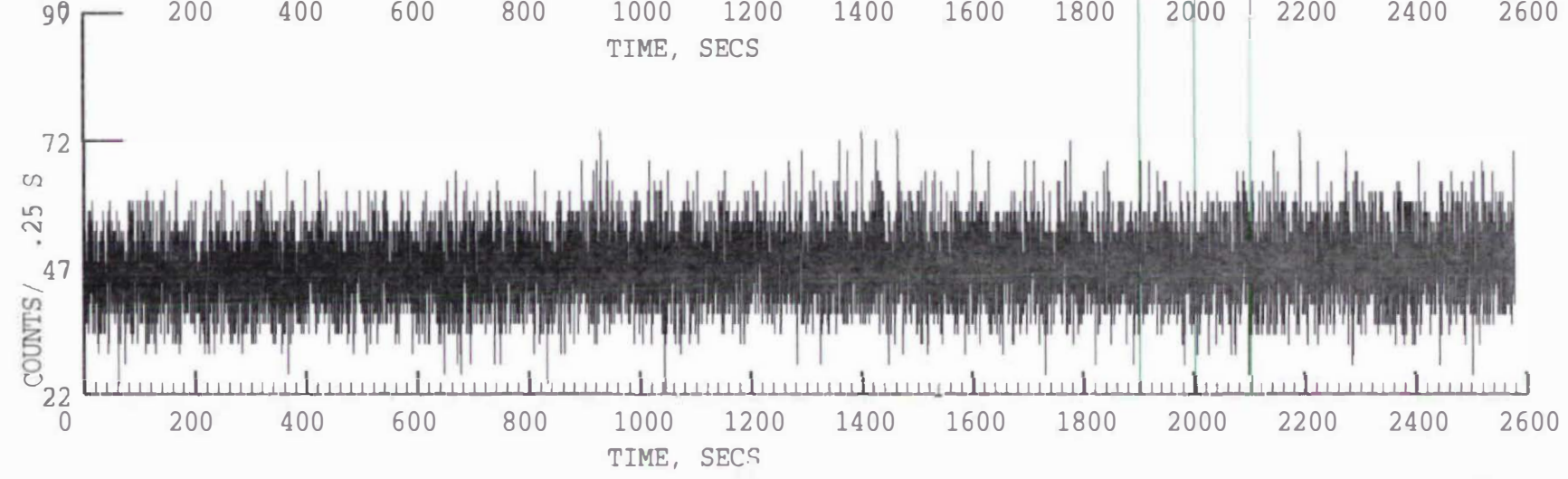


1434.999



10/09/21

50-3000 keV



Subject: IPN triangulation of a bright burst from SGR 1935+2154 on 10 Sep 21 (=Fermi/GBM trigger 652927551) - Konus-GBM annulus
From: Anna Ridnaia <ridnaia@mail.ioffe.ru>
Date: 9/10/2021, 9:56 AM
To: IPN <ipn@ssl.berkeley.edu>

Dear colleagues,

A bright, short-duration, soft burst has been detected by Fermi (GBM), Konus-Wind, and Swift (BAT), outside the coded FoV, so far, at about 2747 s UT (00:45:47) on September 10 - see the attached figure.

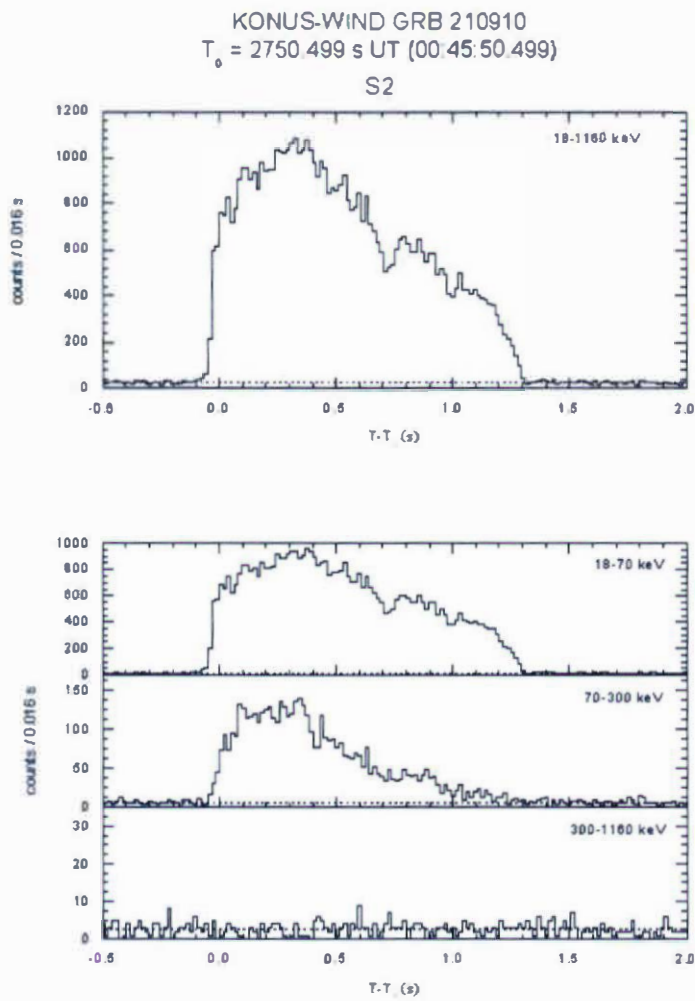
We have triangulated this burst to a Konus-GBM annulus centered at $RA(2000)=326.594$ deg (21h 46m 22s) $Dec(2000)=-14.741$ deg (-14d 44' 28"), whose radius is 48.801 ± 0.199 deg (3 sigma).

The position of SGR 1935+2154 lies inside the annulus.

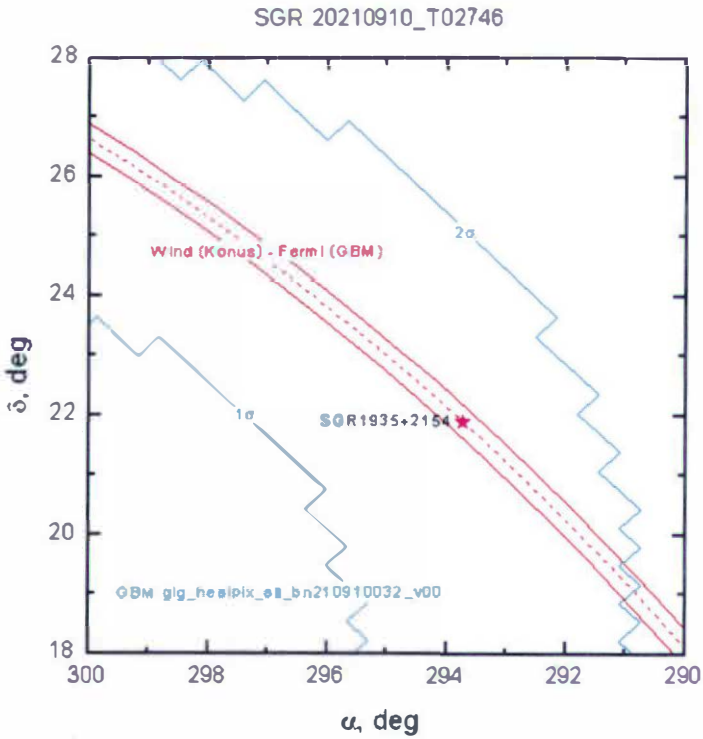
Given the positional coincidence of this burst with SGR 1935+2154, its time history, softness of its spectrum (as observed by Konus-Wind), and reported bursting activity (Xiao et al., GCN Circ. 30797), we conclude this burst is likely originated from SGR 1935+2154.

Best regards,
Anna

— kw20210910_02750_16ms.png —



—SGR20210910_T02750_IPN_map.png



Attachments:		
kw20210910_02750_16ms.png		7.3 KB
SGR20210910_T02750_IPN_map.png		6.8 KB

Subject: BAT lightcurve for trigger at 210910_0045

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/9/2021, 11:58 PM

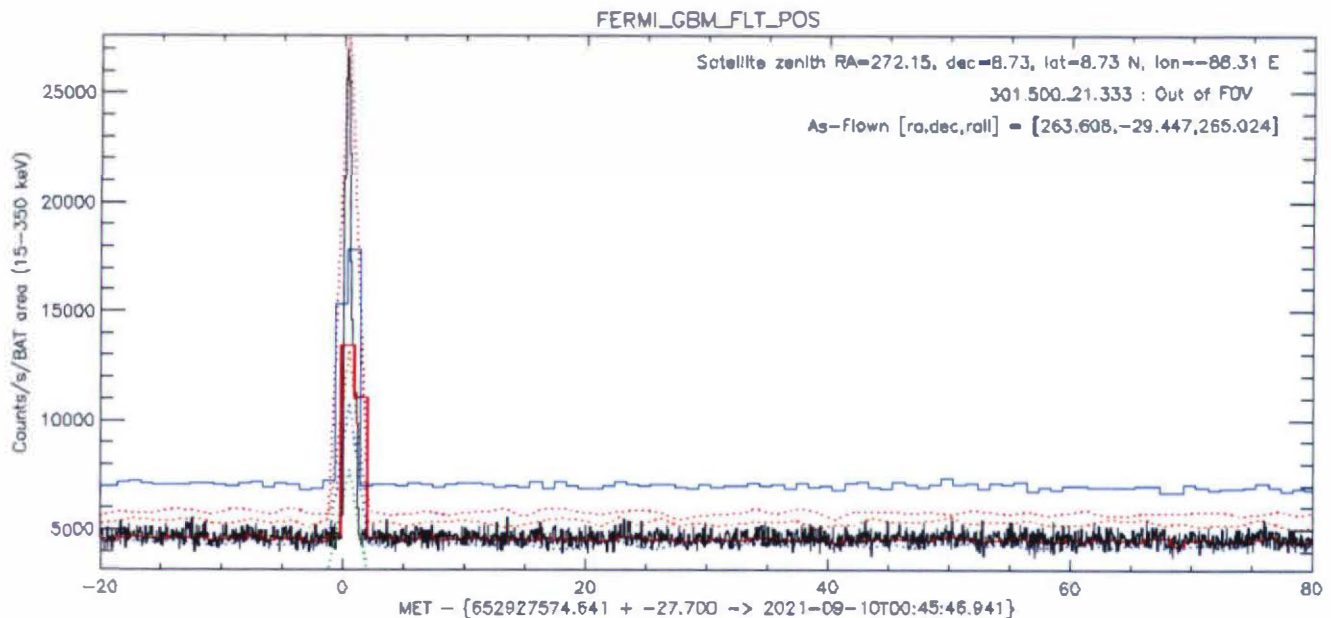
To: mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652927574.641 -s 301.500_21.333
Swift Zenith(RA,dec):      272.15, 8.73
Swift Location(lon,lat,alt): -88.31 E, 8.73 N, 556 km
Time(MET + UTCF -> UT):  652927574.641 + -27.700 -> 2021-09-10T00:45:46.941
YYMMDD_SOD:               210910_02746.941      DOY=253
Obs Sequence Number:      00096390012
Obs Target Name:          SB53 J1734.4-2927
Obs Date and Times:       2021-09-10 00:44:43 - 00:47:11
Obs Pointing(ra,dec,roll): 263.608, -29.447, 265.02
301.500_21.333_imageloc (boresight_dist, angle): (63, 45)
301.500_21.333_exposure (cm2 cos adjusted): 0
301.500_21.333_altitude: 82 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210910_0045.png



Attachments

/tmp/swift/210910_0045_bat64ms_ipn

87.0 KB

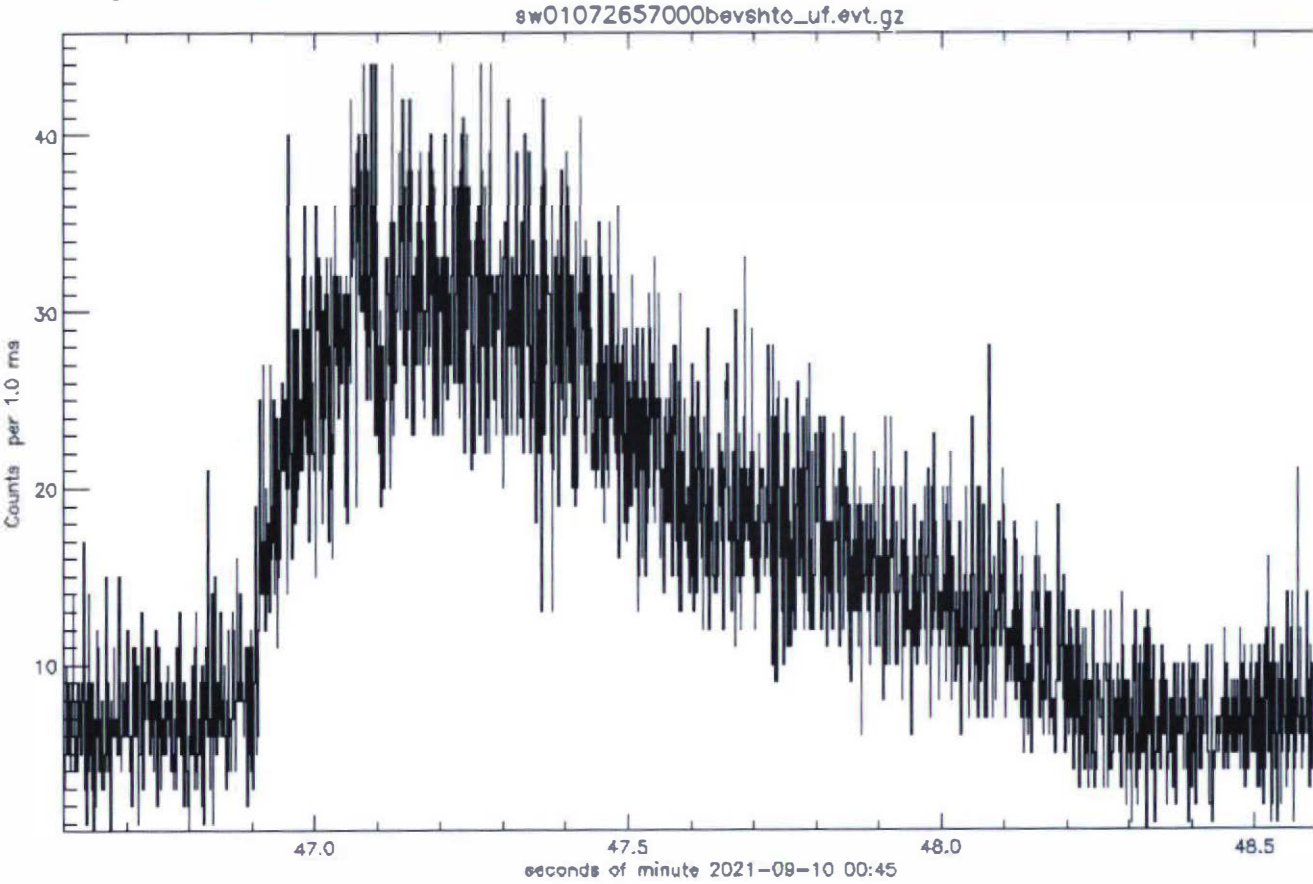
/tmp/swift/210910_0045.png

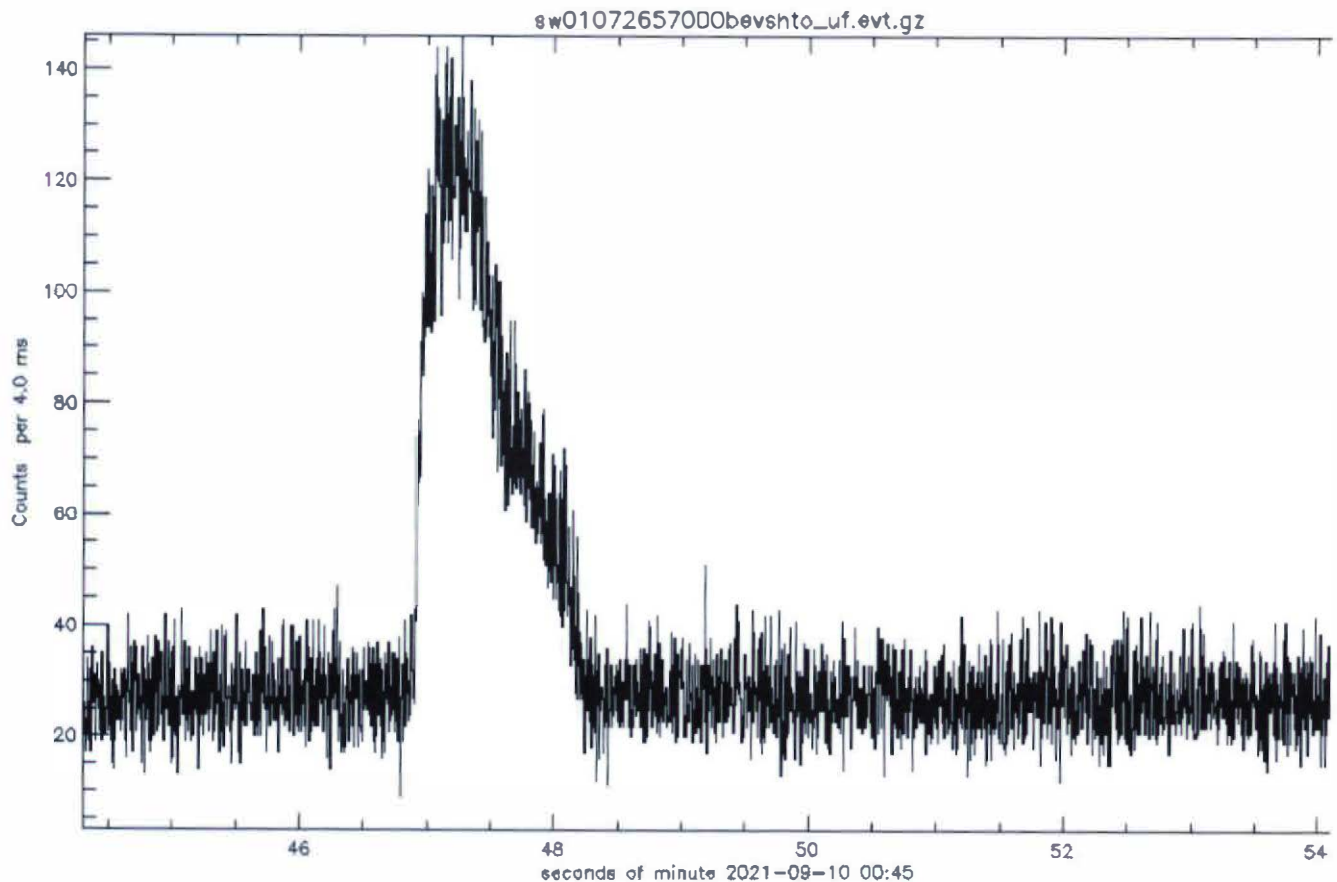
15.8 KB

A

Subject: Re: [EXTERNAL] BAT lightcurve for trigger at 210910_0045
From: "'Palmer, David' via ipn" <ipn@ssl.berkeley.edu>
Date: 9/10/2021, 8:19 AM
To: IPN <ipn@ssl.berkeley.edu>
CC: "Kippen, Marc" <mkippen@lanl.gov>, BAT TEAM <bat_team@bigbang.gsfc.nasa.gov>, David Palmer <dmopalmer@gmail.com>, "Vestrand, W" <vestrand@lanl.gov>, "gbm-burst-advocate@lists.nasa.gov" <gbm-burst-advocate@lists.nasa.gov>, Aaron Tohuvavohu <aaron.tohu@gmail.com>

4 ms and 1 ms lightcurves for this short GRB





David Palmer palmer@lanl.gov (505) 665-6863
Socially Distant: Work-From-Home (505) 695-9190

On Sep 10, 2021, at 12:58 AM, palmer+automatic_lightcurve@lanl.gov wrote:

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652927574.641 -s 301.500_21.333
Swift Zenith(RA,dec): 272.15, 8.73
Swift Location(lon,lat,alt): -88.31 E, 8.73 N, 556 km
Time(MET + UTC -> UT): 652927574.641 + -27.700 -> 2021-09-10T00:45:46.941
YYMMDD_SOD: 210910_02746.941 DOY=253
Obs Sequence Number: 00096390012
Obs Target Name: SBS3 J1734.4-2927
Obs Date and Times: 2021-09-10 00:44:43 - 00:47:11
Obs Pointing(ra,dec,roll): 263.608, -29.447, 265.02
301.500_21.333_imageloc (boresight_dist, angle): (63, 45)
301.500_21.333_exposure (cm^2 cos adjusted): 0
301.500_21.333_altitude: 82 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

Subject: AGILE observations of two bright bursts from SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/13/2021, 6:07 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30835
SUBJECT: AGILE observations of two bright bursts from SGR 1935+2154
DATE: 21/09/13 13:06:58 GMT
FROM: Alessandro Ursi at INAF/IAPS <alessandro.ursi@gmail.com>

A. Ursi (INAF/IAPS), E. Menegoni, L. Foffano (INAF/IAPS), V. Fioretti (INAF/OAS-Bologna), C. Pittori, F. Verrecchia (SSDC, and INAF/OAR), M. Tavani (INAF/IAPS, and Univ. Roma Tor Vergata), A. Argan, M. Cardillo, C. Casentini, V. Evangelista, L. Pacciani, G. Piano (INAF/IAPS), F. Lucarelli (SSDC, and INAF/OAR), A. Bulgarelli, F. Fuschino, N. Parmiggiani (INAF/OAS-Bologna), M. Marisaldi (INAF/OAS-Bologna, and Bergen University), M. Pilia, A. Trois (INAF/OA-Cagliari), I. Donnarumma (ASI), F. Longo (Univ. Trieste and INFN Trieste), A. Giuliani (INAF/IASF-Mi), report on behalf of the AGILE Team:

The AGILE satellite clearly detected the two bright bursts from the SGR1935+2154, at T1 = 2021-09-10 00:45:47 s (UTC), reported by Konus-Wind (GCN #30804), Fermi GBM (GCN #30806), and GECAM (GCN #30822), and at T2 = 2021-09-12 20:16:10 s (UTC), reported by Fermi GBM (GCN #30831).

The bursts are clearly visible in the AGILE scientific ratemeters of the SuperAGILE (SA; 20-60 keV) and AntiCoincidence (AC; 50-200 keV) detectors.

The first event lasted about 2 s and it released a total number of 560 counts in the SA detector (above a background rate of 65 Hz), and 8730 counts in the AC detector (above a background rate of 3450 Hz). The AGILE ratemeter light curves can be found at http://www.agilescienceapp.it/notices/burst210910_AGILE_RM.png. At T1, the SGR1935+2154 was 150 deg off-axis for AGILE.

The second event lasted 2 s and it released a total number of 620 counts in the SA detector (above a background rate of 100 Hz), and 8170 counts in the AC detector (above a background rate of 3500 Hz). The AGILE ratemeter light curves can be found at http://www.agilescienceapp.it/notices/burst210912_AGILE_RM.png. At T2, the SGR1935+2154 was 37 deg off-axis for AGILE.

Additional analysis of AGILE data is in progress.

GECAM observations of a series of bursts from SGR J1935+2154

Subject: GECAM observations of a series of bursts from SGR J1935+2154

From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>

Date: 9/10/2021, 6:57 AM

To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR

NUMBER: 30797

SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154

DATE: 21/09/10 13:56:58 GMT

FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

S. Xiao, S. L. Xiong, C. Cai, Y. Huang, Z. W. Guo, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Yi Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-8 has detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data.
Here is the list of these bursts:

Trigger Time (UTC)

2021-09-09T20:58:35.600

2021-09-09T21:07:12.100

2021-09-10T01:04:33.500 BAT N/O

2021-09-10T02:07:56.700 BAT No

2021-09-10T02:08:28.800 BAT No

2021-09-10T03:22:40.550 BAT N/O

2021-09-10T03:24:47.150 BAT No

2021-09-10T03:42:45.750 BAT No

2021-09-10T05:05:03.350 BAT N/O

2021-09-10T05:35:55.500 BAT No

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210910_0127

Subject: BAT lightcurve for trigger at 210910_0127

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/9/2021, 11:58 PM

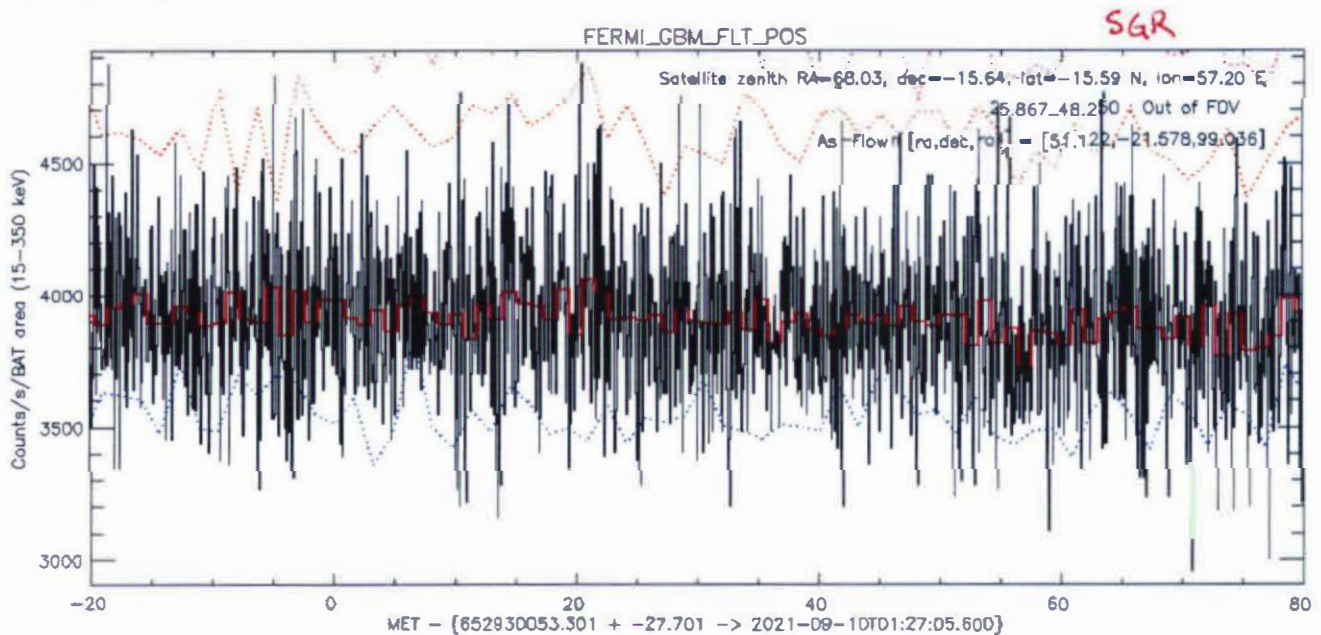
To: mkippen@lanl.gov, vestrland@lanl.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652930053.301 -s 25.867_48.250
Swift Zenith(RA,dec):      68.03, -15.64
Swift Location(lon,lat,alt): 57.20 E, -15.59 N, 546 km
Time(MET + UTC -> UT):    652930053.301 + -27.701 -> 2021-09-10T01:27:05.600
YYMMDD_S00:               210910_05225.600      DOY=253
Obs Sequence Number:      00014808004
Obs Target Name:          AT2021yja
Obs Date and Times:       2021-09-10 01:18:34 - 01:32:30
Obs Pointing(ra,dec,roll): 51.122, -21.578, 99.04
25.867_48.250_imageloc (boresight_dist, angle): (73, 154)
25.867_48.250_exposure (cm2 cos adjusted): 0
25.867_48.250_altitude: 39 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210910_0127.png



Attachments:

/tmp/swift/210910_0127.png

19.3 KB

/tmp/swift/210910_0127_bat64ms_ipn

87.0 KB

BAT lightcurve for trigger at 210910_0221

Subject: BAT lightcurve for trigger at 210910_0221

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/9/2021, 11:59 PM

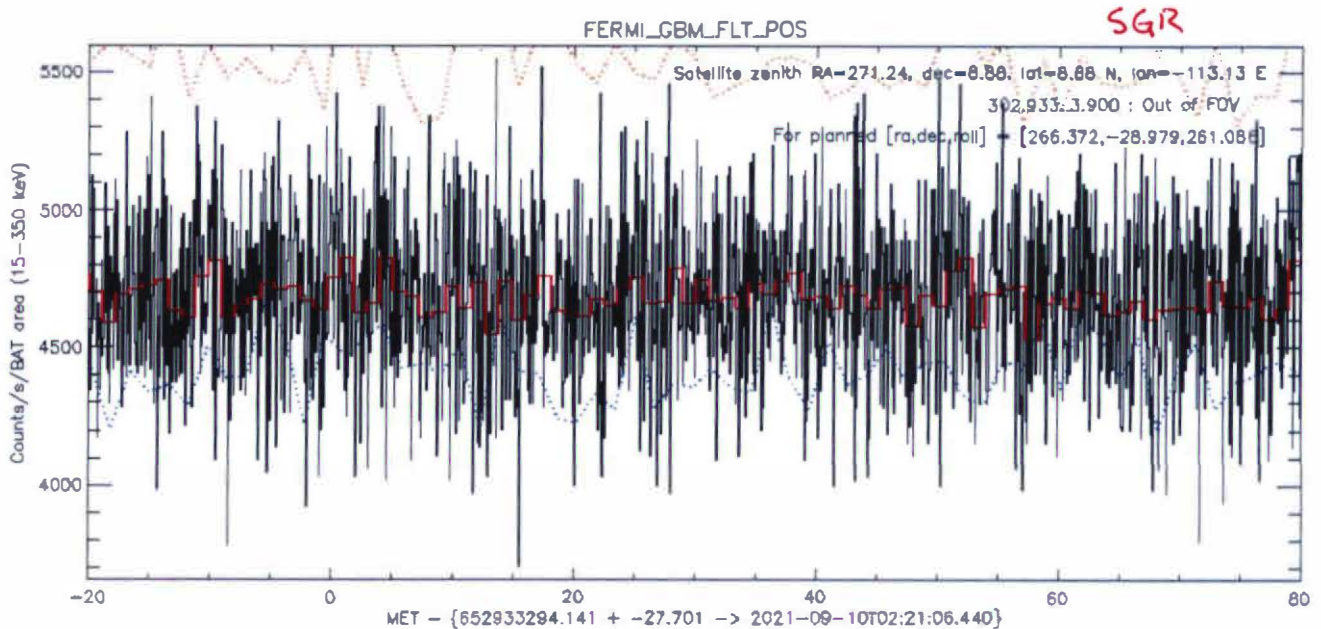
To: mkippen@lanl.gov, vestrاند@lanl.gov, aaron.tohu@gmail.com, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652933294.141 -s 302.933_3.900
Swift Zenith(RA,dec):      271.24, 8.88
Swift Location(lon,lat,alt): -113.13 E, 8.88 N, 556 km
Time(MET + UTCF -> UT):    652933294.141 + -27.701 -> 2021-09-10T02:21:06.440
YYMMDD_SOD:                210910_08466.440      DOY=253
Obs Sequence Number:       00096134135
Obs Target Name:           GALACTIC CENTER (planned)
Obs Date and Times:        2021-09-10 02:16:32 - 02:31:32
Obs Pointing(ra,dec,roll):  266.372, -28.979, 261.09
302.933_3.900_imageloc (boresight_dist, angle): (48, 62)
302.933_3.900_exposure (cm2 cos adjusted): 0
302.933_3.900_altitude: 81 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210910_0221.png



Attachments:

/tmp/swift/210910_0221.png

18.2 KB

/tmp/swift/210910_0221_bat64ms_ipn

87.0 KB

BAT lightcurve for trigger at 210910_0236

Subject: BAT lightcurve for trigger at 210910_0236

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 1:04 AM

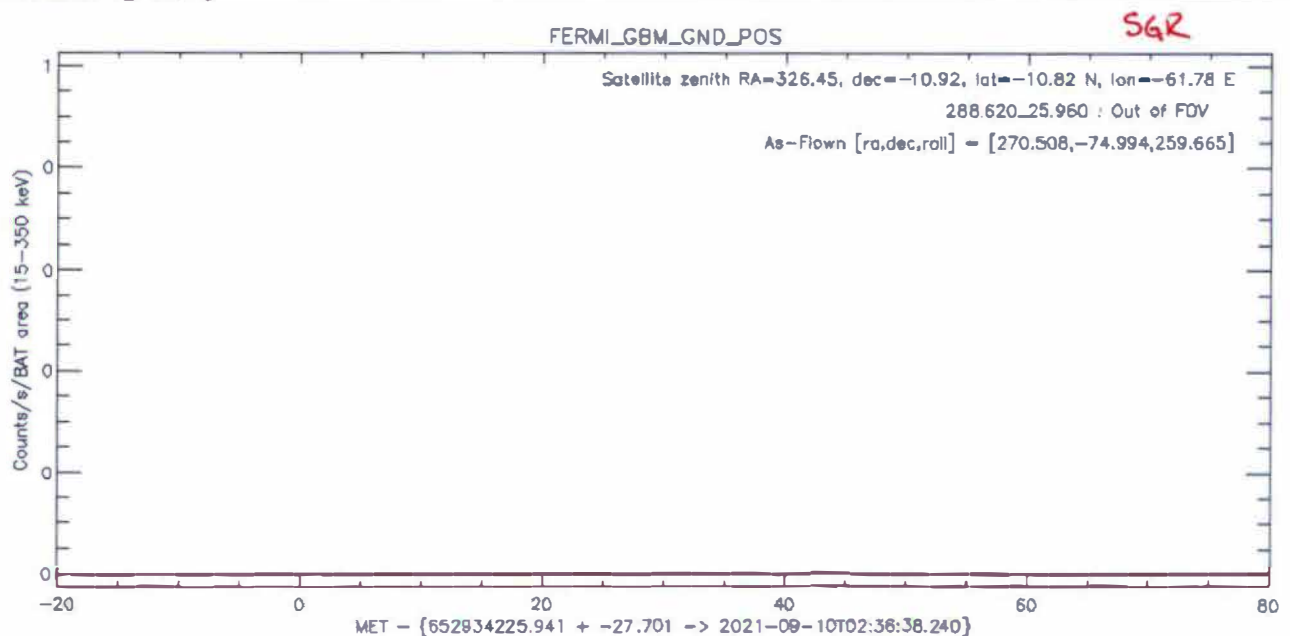
To: mkippen@lanl.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, vestrand@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652934225.941 -s 288.620_25.960
Swift Zenith(RA,dec):      326.45, -10.92
Swift Location(lon,lat,alt): -61.78 E, -10.82 N, 556 km
Time(MET + UTCF -> UT):    652934225.941 + -27.701 -> 2021-09-10T02:36:38.240
YYMMDD_SOD:                210910_09398.240      DOY=253
Obs Sequence Number:       00075899017
Obs Target Name:           saa-cold-254-08
Obs Date and Times:        2021-09-10 02:31:36 - 02:36:29
Obs Pointing(ra,dec,roll): 270.508, -74.994, 259.67
288.620_25.960_imageloc (boresight_dist, angle): (102, 27)
288.620_25.960_exposure (cm2 cos adjusted): 0
288.620_25.960_altitude: 61 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210910_0236.png



-- Attachments --

/tmp/swift/210910_0236.png

8.0 KB

/tmp/swift/210910_0236_bat64ms_ipn

87.1 KB

BAT lightcurve for trigger at 210910_0255

Subject: BAT lightcurve for trigger at 210910_0255

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 1:04 AM

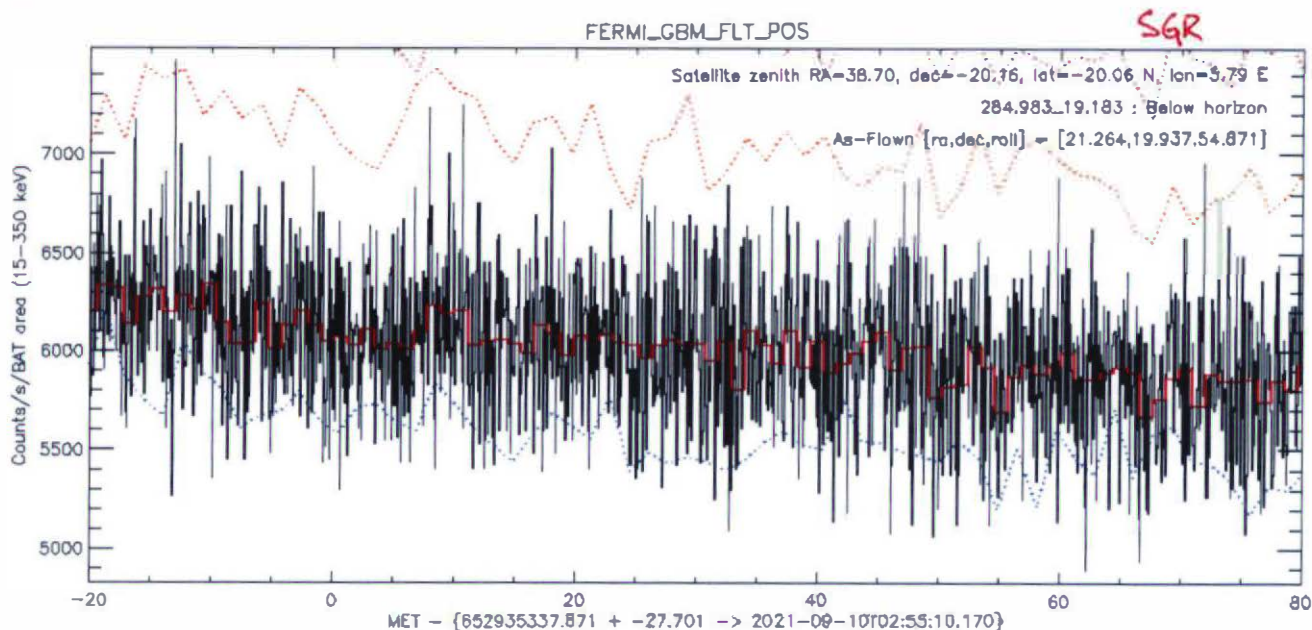
To: palmer+automatic_lightcurve@lanl.gov, dmpalmer@gmail.com, mkippen@lanl.gov, aaron.tohu@gmail.com, ipn@ssl.berkeley.edu, vestrand@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652935337.871 -s 284.983_19.183
Swift Zenith(RA,dec):      38.70, -20.16
Swift Location(lon,lat,alt): 5.79 E, -20.06 N, 550 km
Time(MET + UTC -> UT):    652935337.871 + -27.701 -> 2021-09-10T02:55:10.170
YYMMDD_SOD:               210910_10510.170      DOY=253
Obs Sequence Number:      00076568004
Obs Target Name:          saa-cold-160-02
Obs Date and Times:       2021-09-10 02:36:34 - 02:58:29
Obs Pointing(ra,dec,roll): 21.264, 19.937, 54.87
284.983_19.183_imageloc (boresight_dist, angle): (89, 145)
284.983_19.183_exposure (cm2 cos adjusted): 0
284.983_19.183_altitude: -5 (down)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210910_0255.png



Attachments:

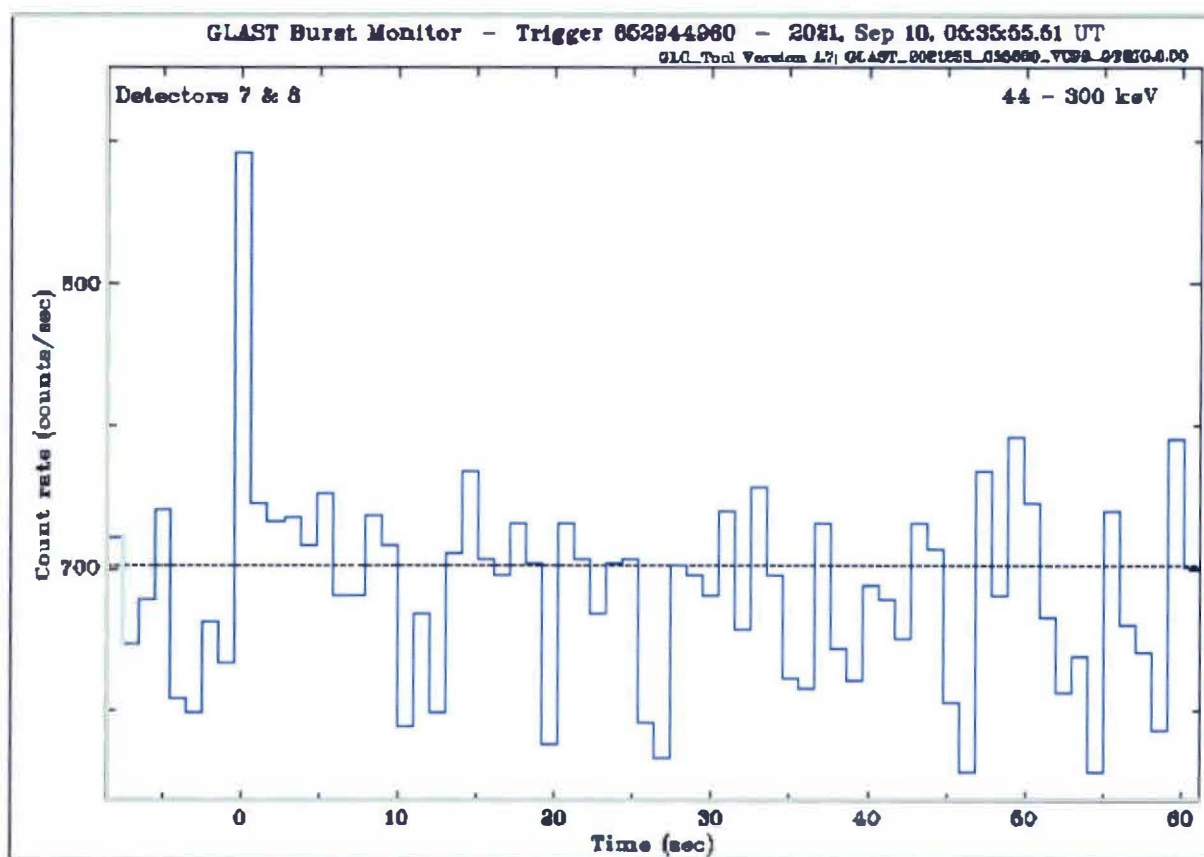
/tmp/swift/210910_0255_bat64ms_ipn

87.1 KB

/tmp/swift/210910_0255.png

19.3 KB

SPI NO



B

05:13:54.679

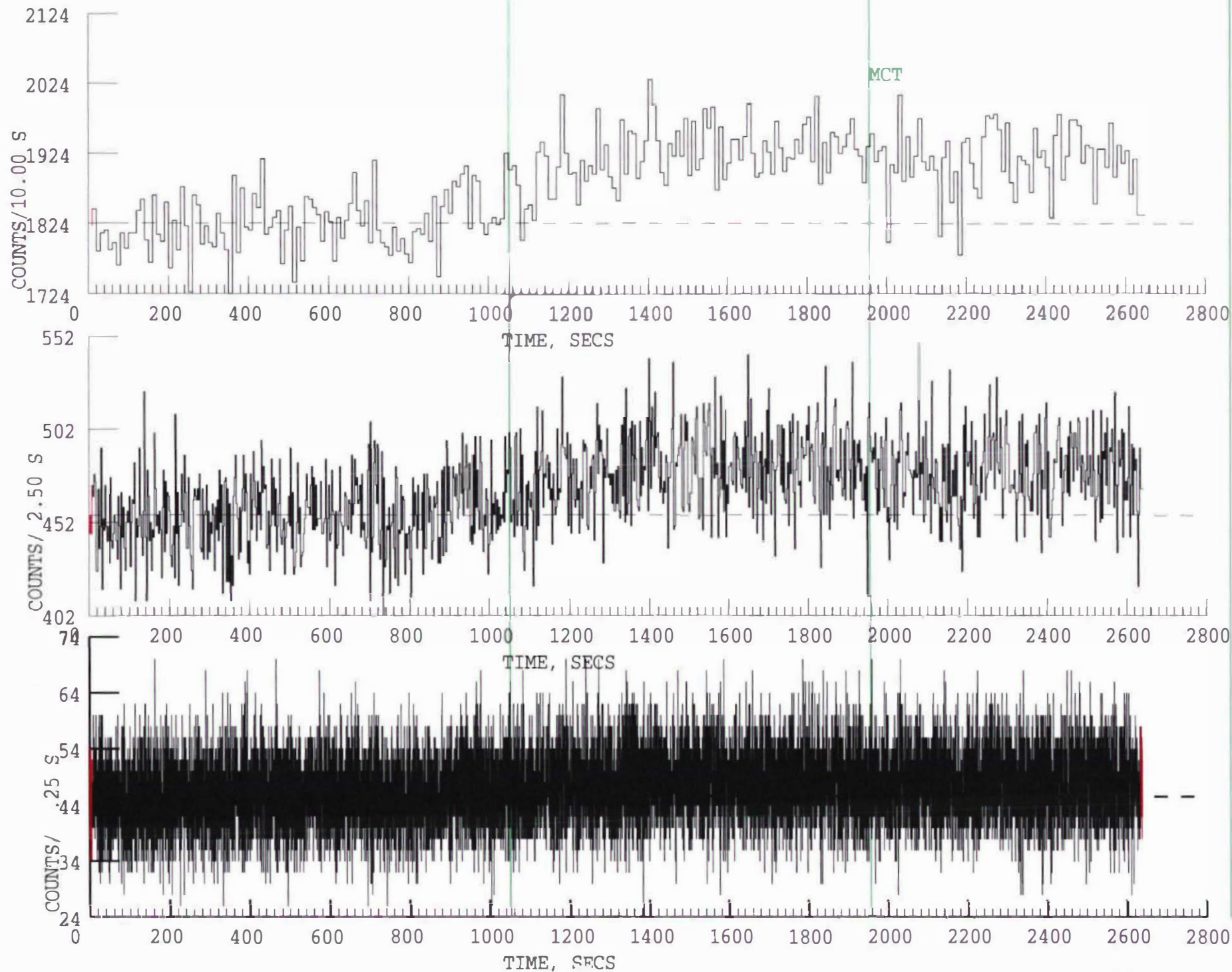
18834.679

10/09/21

ODYSSEY

50-3000 keV

17/11/2021



Subject: BAT lightcurve for trigger at 210910_0535

From: "palmer+automatic_lightcurve via ipn" <lpn@ssl.berkeley.edu>

Date: 9/10/2021, 1:05 AM

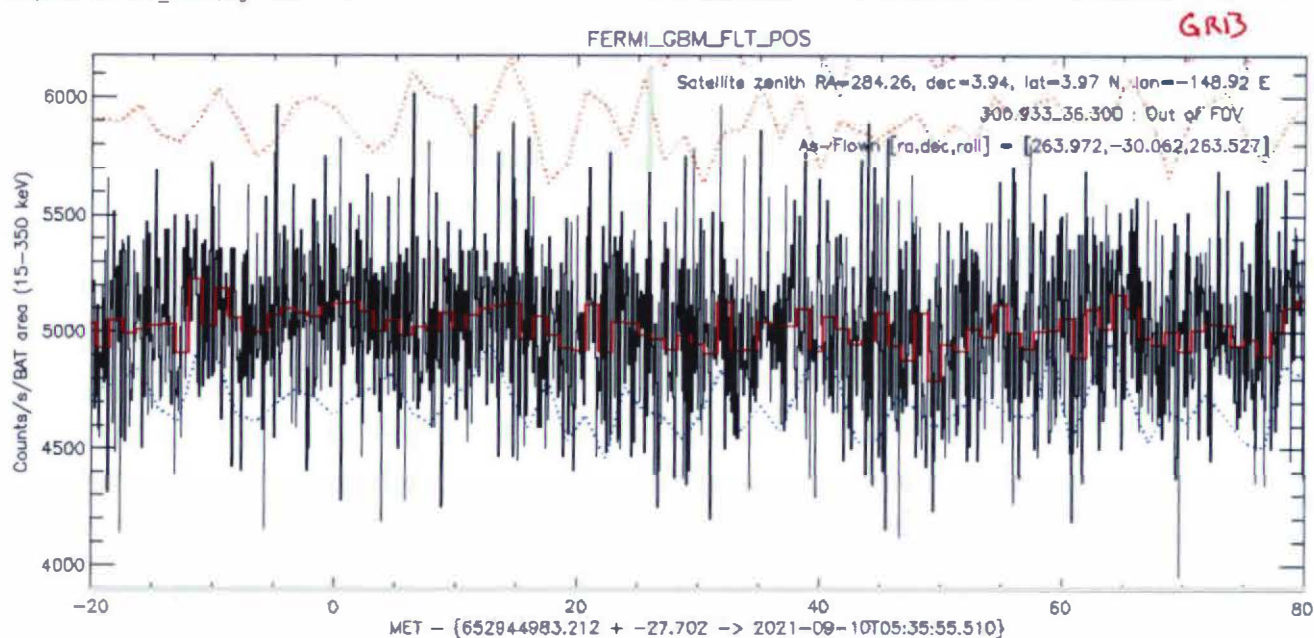
To: palmer+automatic_lightcurve@lanl.gov, dmpalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, ipn@ssl.berkeley.edu, vestrland@lanl.gov, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652944983.212 -s 300.933_36.300
Swift Zenith(RA,dec):      284.26, 3.94
Swift Location(lon,lat,alt): -148.92 E, 3.97 N, 556 km
Time(MET + UTC -> UT):    652944983.212 + -27.702 -> 2021-09-10T05:35:55.510
YYMMDD_SOD:               210910_20155.510      DOY=253
Obs Sequence Number:      00096397011
Obs Target Name:          SB53 J1735.9-3004
Obs Date and Times:       2021-09-10 05:33:32 - 05:35:59
Obs Pointing(ra,dec,roll): 263.972, -30.062, 263.53
300.933_36.300_imageloc (boresight_dist, angle): (75, 37)
300.933_36.300_exposure (cm2 cos adjusted): 0
300.933_36.300_altitude: 77 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210910_0535.png



Attachments:

~/tmp/swift/210910_0535.png	18.8 KB
~/tmp/swift/210910_0535_bat64ms_ipn	87.0 KB

BAT lightcurve for trigger at 210910_0912

Subject: BAT lightcurve for trigger at 210910_0912

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 6:59 AM

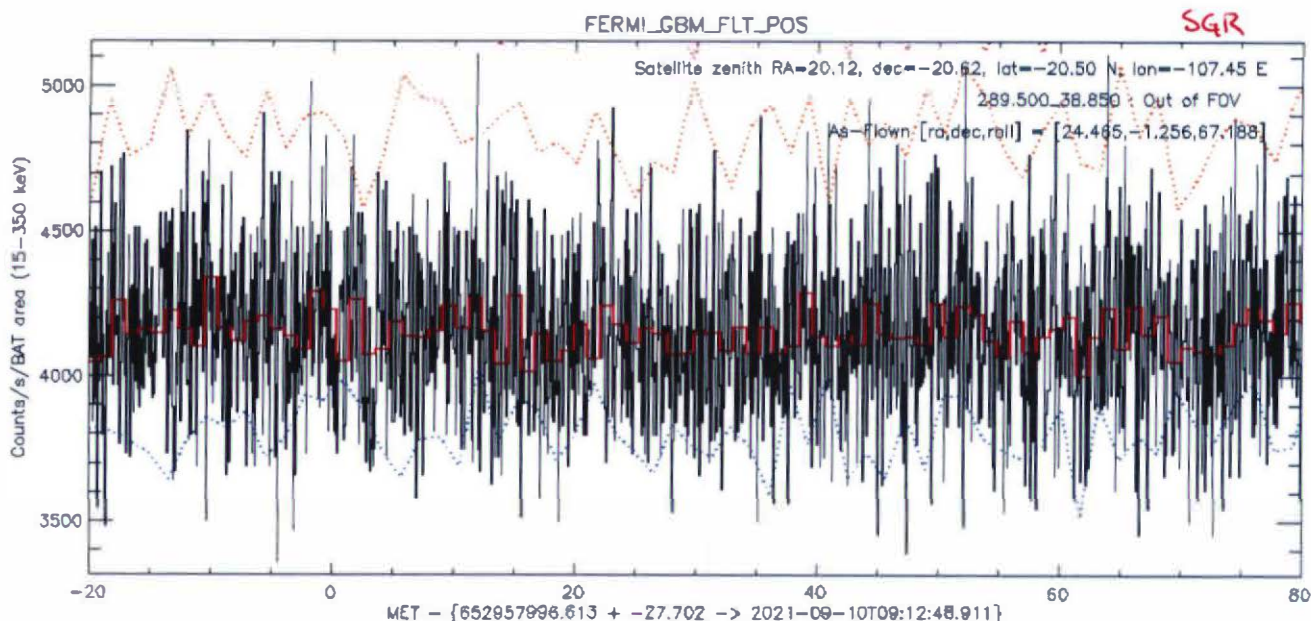
To: mkippen@lanl.gov, vestrland@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652957996.613 -s 289.500_38.850
Swift Zenith(RA,dec):      20.12, -20.62
Swift Location(lon,lat,alt): -107.45 E, -20.50 N, 553 km
Time(MET + UTCF -> UT):  652957996.613 + -27.702 -> 2021-09-10T09:12:48.911
YYMMDD_SOD:               210910_33168.911      DOY=253
Obs Sequence Number:      00014807005
Obs Target Name:          ZTF21abzbmhz
Obs Date and Times:       2021-09-10 09:07:34 - 09:17:33
Obs Pointing(ra,dec,roll): 24.465, -1.256, 67.19
289.500_38.850_imageloc (boresight_dist, angle): (95, 152)
289.500_38.850_exposure (cm2 cos adjusted): 0
289.500_38.850_altitude: 10 (depressed but unattenuated)
```

==
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210910_0912.png



Attachments:

/tmp/swift/210910_0912.png

20.2 KB

/tmp/swift/210910_0912_bat64ms_ipn

87.1 KB

Subject: GCN/SWIFT_BAT_LIGHTCURVE
From: Bacodine <vxw@capella2.gsfc.nasa.gov>
Date: 9/10/2021, 3:15 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Fri 10 Sep 21 10:15:44 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 1072706, Seg_Num: 0
GRB_RA: 238.773d {+15h 55m 05s} (J2000),
239.194d {+15h 56m 46s} (current),
237.807d {+15h 51m 14s} (1950)
GRB_DEC: -54.055d {-54d 03' 16"} (J2000),
-54.117d {-54d 07' 00"} (current),
-53.908d {-53d 54' 29"} (1950)
GRB_DATE: 19467 TJD; 253 DOY; 21/09/10
GRB_TIME: 36715.90 SOD {10:11:55.90} UT
TRIGGER_INDEX: 10009
GRB_PHI: -143.61 [deg]
GRB_THETA: 33.57 [deg]
DELTA_TIME: 39.00 [sec]
TRIGGER_DUR: 0.004 [sec]
SOLN_STATUS: 0x3
RATE_SIGNIF: 29.83 [sigma]
IMAGE_SIGNIF: 8.71 [sigma]
LC_URL: sw01072706000msb.lc
SUN_POSTN: 168.90d {+11h 15m 36s} +4.77d {+04d 46' 10"}
SUN_DIST: 82.55 [deg] Sun_angle= -4.7 [hr] (East of Sun)
MOON_POSTN: 211.23d {+14h 04m 55s} -9.70d {-09d 42' 13"}
MOON_DIST: 49.70 [deg]
MOON_ILLUM: 14 [%]
GAL_COOROS: 327.87, -0.33 [deg] galactic lon,lat of the burst (or transient)
ECL_COORDS: 248.75, -32.90 [deg] ecliptic lon,lat of the burst (or transient)
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point_source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.
COMMENTS: This trigger occurred at longitude,latitude = 102.21,15.76 [deg].

Swift detection of a burst from SGR Swift J1555.2-5402

Subject: Swift detection of a burst from SGR Swift J1555.2-5402
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/10/2021, 3:31 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30796
SUBJECT: Swift detection of a burst from SGR Swift J1555.2-5402
DATE: 21/09/10 10:31:17 GMT
FROM: David Palmer at LANL <palmer@lanl.gov>

N. J. Klingler (GSFC/UMBC/CRESSTII), K. L. Page (U Leicester) and
D. M. Palmer (LANL) report on behalf of the Neil Gehrels Swift
Observatory Team:

At 10:11:55 on 2021-09-10 UT, the Swift Burst Alert Telescope (BAT) triggered and located a burst from the Soft Gamma Repeater Swift J1555.2-5402 (trigger=1072706). Swift slewed immediately to the burst. The BAT on-board calculated location is RA, Dec 238.773, -54.055 which is

RA(J2000) = 15h 55m 05s

Dec(J2000) = -54d 03' 16"

with an uncertainty of 3 arcmin (radius, 90% containment, including systematic uncertainty). The BAT light curve showed a single high bin at the 64 ms timescale, consistent with the 4 ms trigger duration. The peak count rate on the 64 ms timescale was ~1300 counts/sec (15-350 keV), at ~0 sec after the trigger.

The XRT began observing the field at 10:13:14.4 UT, 78.8 seconds after the BAT trigger. Using promptly downlinked data we find an X-ray source with an enhanced position: RA, Dec 238.78912, -54.06236 which is equivalent to:

RA(J2000) = 15h 55m 09.39s

Dec(J2000) = -54d 03' 44.5"

with an uncertainty of 1.9 arcseconds (radius, 90% containment). This location is 43 arcseconds from the BAT onboard position, within the BAT error circle, and consistent with the known position of Swift J1555.2-5402. This position may be improved as more data are received; the latest position is available at <https://www.swift.ac.uk/sgr>.

A power-law fit to a spectrum formed from promptly downlinked event data does not constrain the column density.

UVOT took a finding chart exposure of 150 seconds with the White filter starting 82 seconds after the BAT trigger. No credible afterglow candidate has been found in the initial data products. The 2.7'x2.7' sub-image covers 100% of the XRT error circle. The typical 3-sigma upper limit has been about 19.6 mag. The 8'x8' region for the list of sources generated on-board covers 100% of the XRT error circle. The list of sources is typically complete to about 18 mag. No correction has been made for the large, but uncertain, extinction expected.

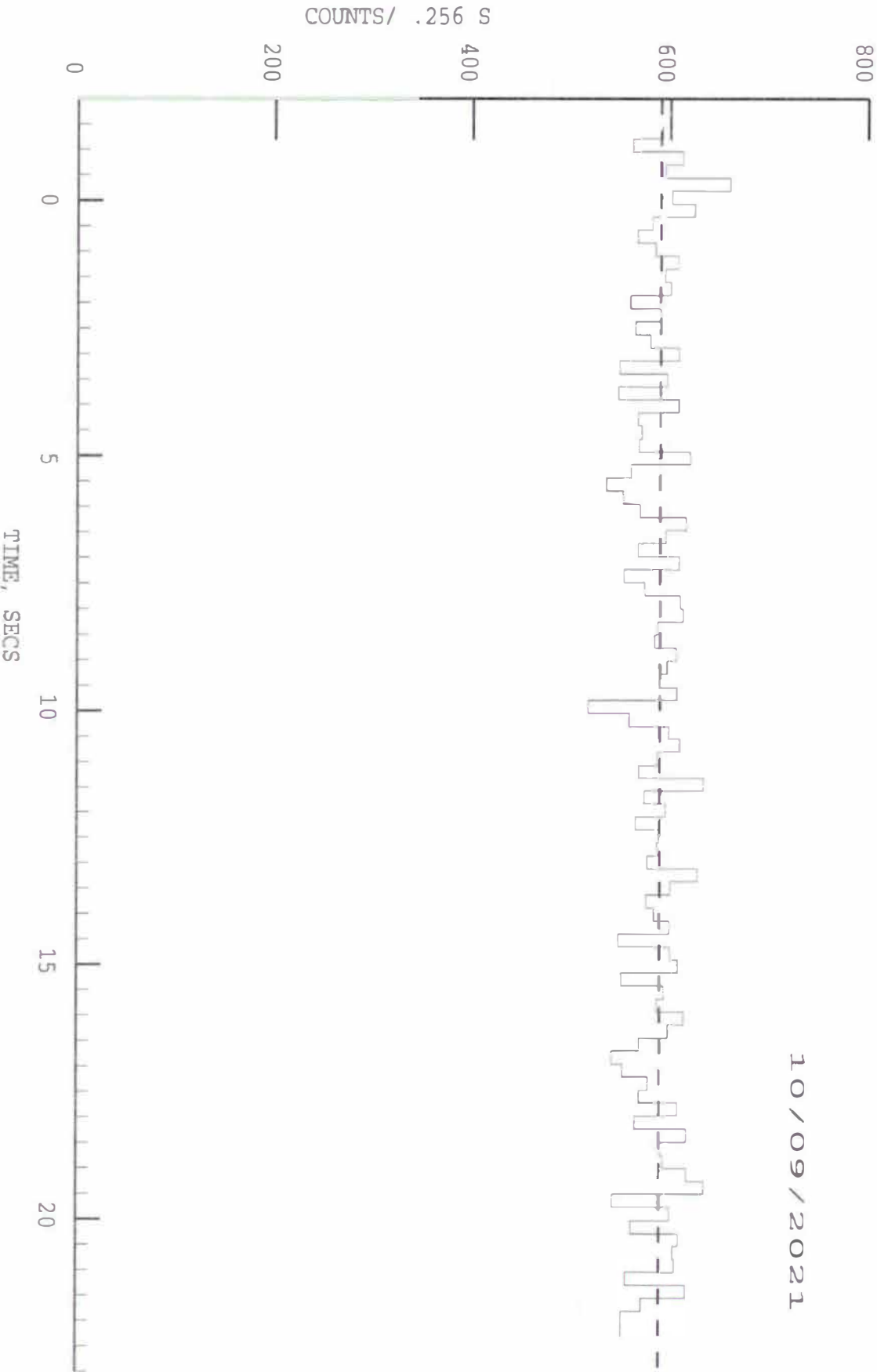
BAT

10/09/21

36715.909

10:11:55.909

25- 100 keV



BAT lightcurve for trigger at 210910_1056

Subject: BAT lightcurve for trigger at 210910_1056

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 6:59 AM

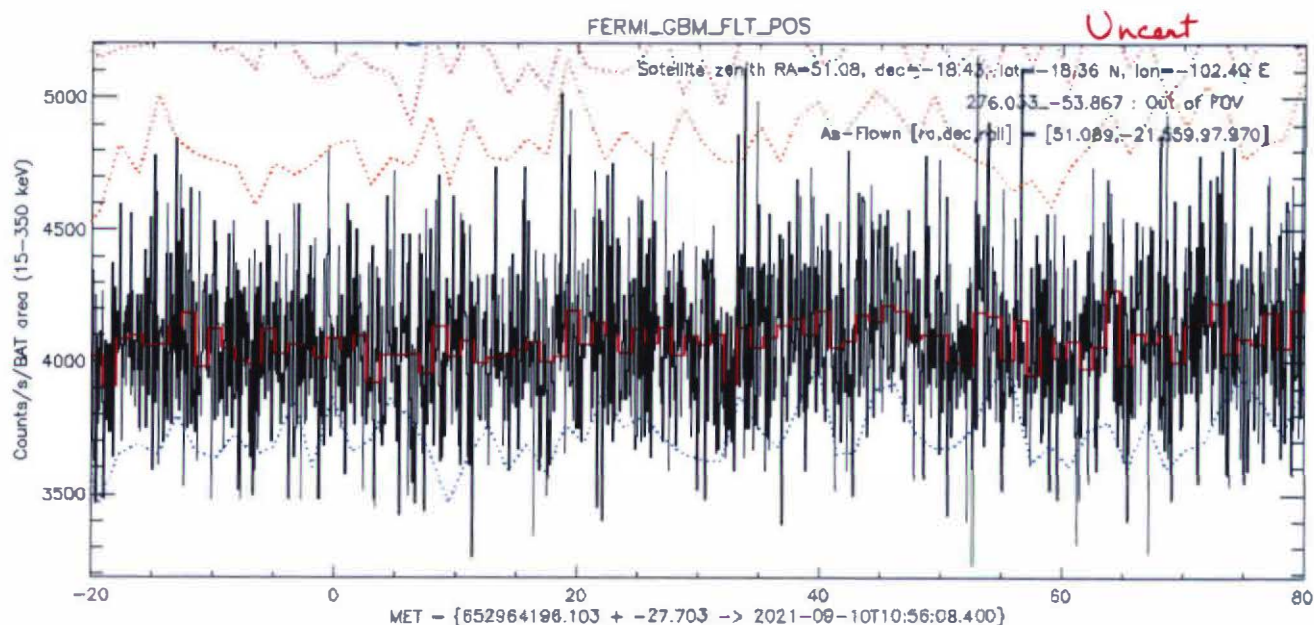
To: gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, mkippen@lanl.gov, dmopalmer@gmail.com, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652964196.103 -s 276.033_-53.867
Swift Zenith(RA,dec):      51.08, -18.43
Swift Location(lon,lat,alt): -102.40 E, -18.36 N, 548 km
Time(MET + UTCF -> UT):  652964196.103 + -27.703 -> 2021-09-10T10:56:08.400
YYMMDD_SOD:               210910_39368.400      DOY=253
Obs Sequence Number:      00014808004
Obs Target Name:          AT2021yja
Obs Date and Times:       2021-09-10 10:39:20 - 10:59:31
Obs Pointing(ra,dec,roll): 51.089, -21.559, 97.97
276.033_-53.867_imageloc (boresight_dist, angle): (95, 17)
276.033_-53.867_exposure (cm2 cos adjusted): 0
276.033_-53.867_altitude: 15 (depressed but unattenuated)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

-- /tmp/swift/210910_1056.png



Attachments:

/tmp/swift/210910_1056.png

20.2 KB

/tmp/swift/210910_1056_bat64ms_ipn

87.1 KB

BAT lightcurve for trigger at 210910_1550

Subject: BAT lightcurve for trigger at 210910_1550

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 12:44 PM

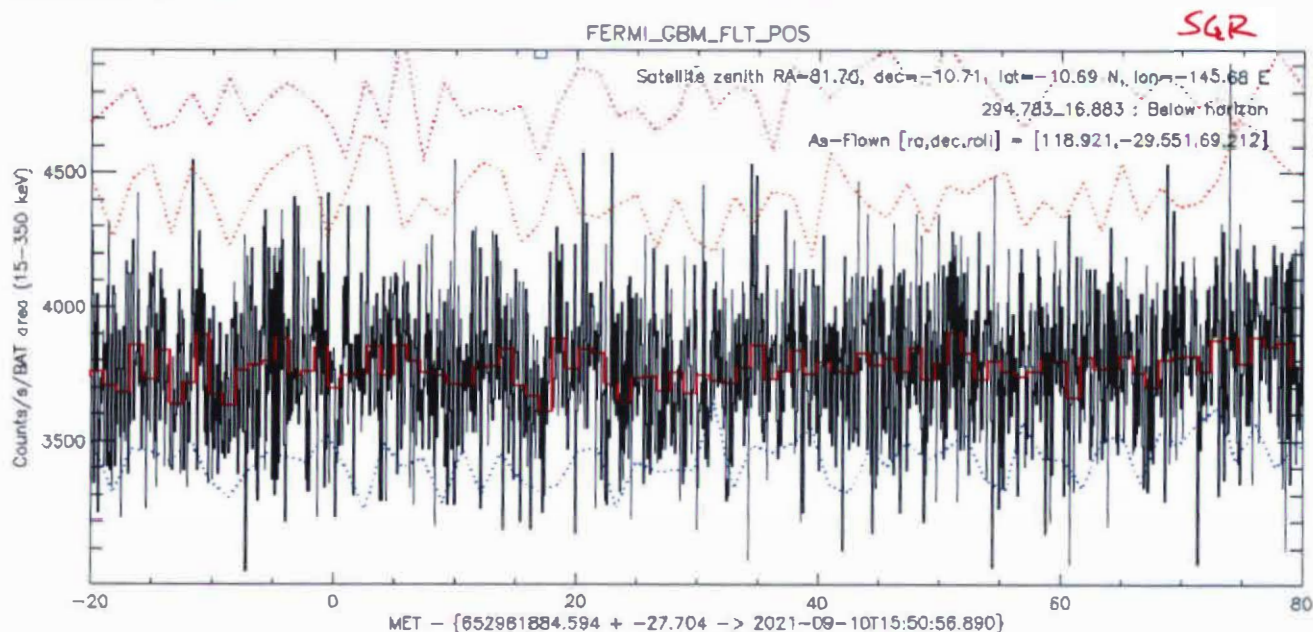
To: ipn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 652981884.594 -s 294.783_16.883
Swift Zenith(RA,dec):      81.70, -10.71
Swift Location(lon,lat,alt): -145.68 E, -10.69 N, 544 km
Time(MET + UTCF -> UT):  652981884.594 + -27.704 -> 2021-09-10T15:50:56.890
YYMMDD_SOD:              210910_57056.890      DOY=253
Obs Sequence Number:      00095967021
Obs Target Name:          SGR 0755-2933
Obs Date and Times:       2021-09-10 15:49:34 - 15:57:29
Obs Pointing(ra,dec,roll): 118.921, -29.551, 69.21
294.783_16.883_imageloc (boresight_dist, angle): (167, 3)
294.783_16.883_exposure (cm2 cos adjusted): 0
294.783_16.883_altitude: -34 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210910_1550.png



Attachments

~/tmp/swift/210910_1550.png

20.8 KB

~/tmp/swift/210910_1550_bat64ms_ipn

87.0 KB

BAT lightcurve for trigger at 210910_2340

Subject: BAT lightcurve for trigger at 210910_2340

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/10/2021, 8:08 PM

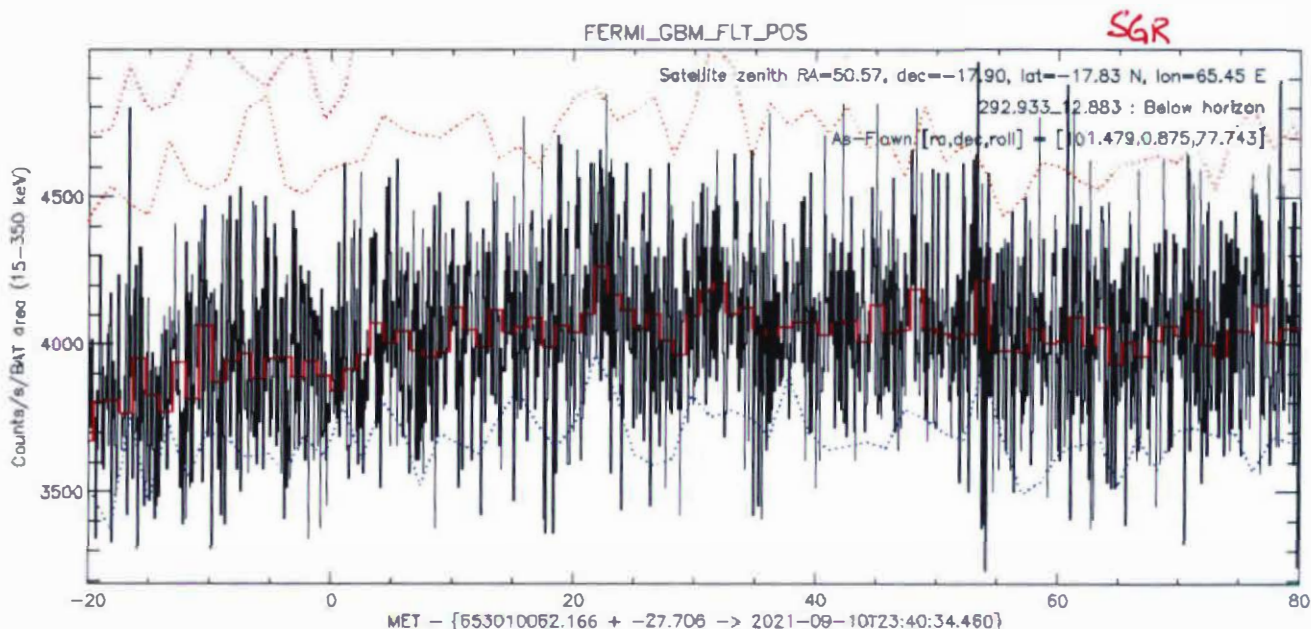
To: vestrand@lanl.gov, mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653010062.166 -s 292.933_12.883
Swift Zenith(RA,dec):      50.57, -17.90
Swift Location(lon,lat,alt): 65.45 E, -17.83 N, 549 km
Time(MET + UTC -> UT):    653010062.166 + -27.706 -> 2021-09-10T23:40:34.460
YYMMDD_SOD:               210910_85234.460      DOY=253
Obs Sequence Number:      03103604001
Obs Target Name:          OGP_3815
Obs Date and Times:       2021-09-10 23:39:34 - 23:49:29
Obs Pointing(ra,dec,roll): 101.479, 0.875, 77.74
292.933_12.883_imageloc (boresight_dist, angle): (162, 153)
292.933_12.883_exposure (cm2 cos adjusted): 0
292.933_12.883_altitude: -7 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210910_2340.png



Attachments

/tmp/swift/210910_2340_bat64ms_ipn

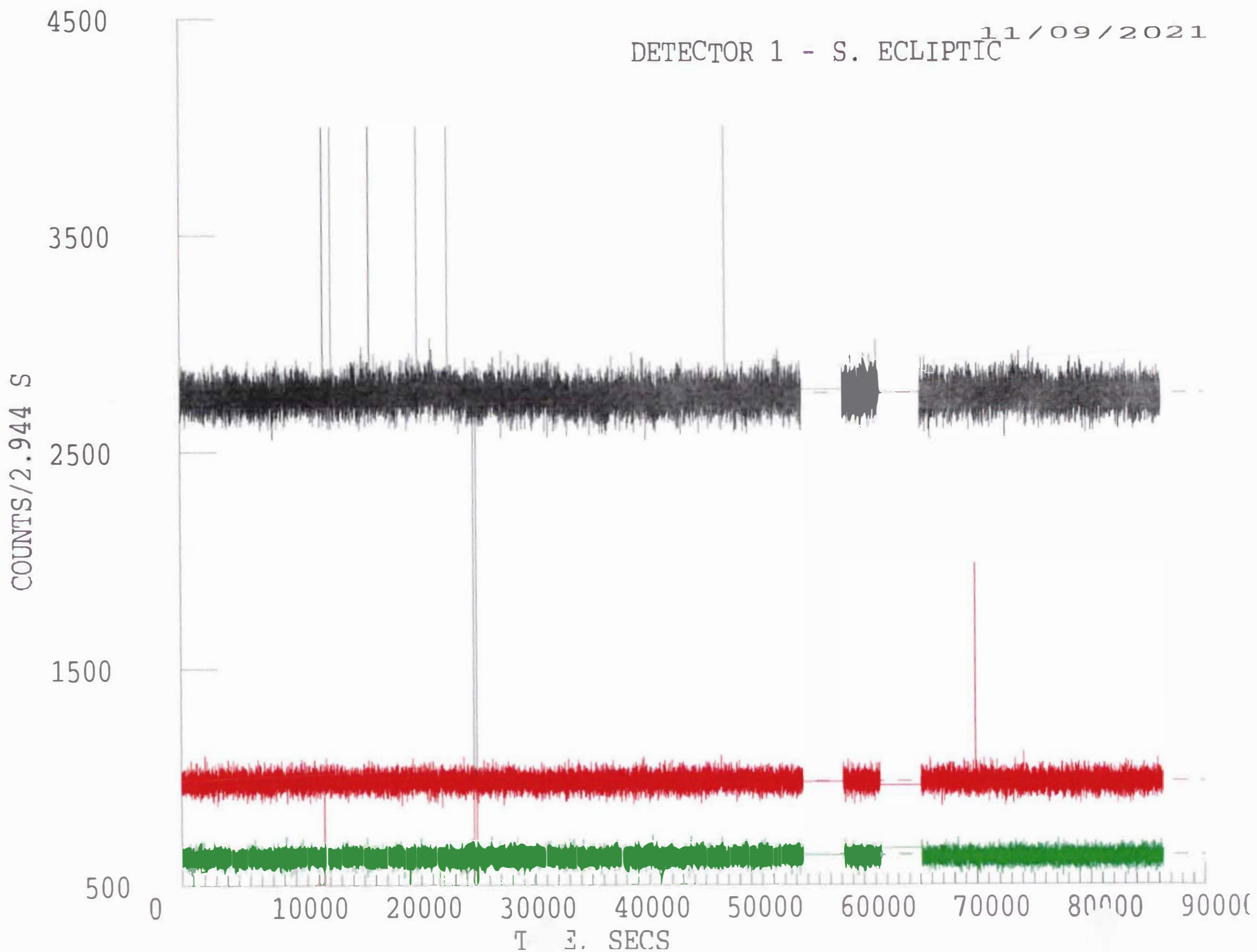
87.1 KB

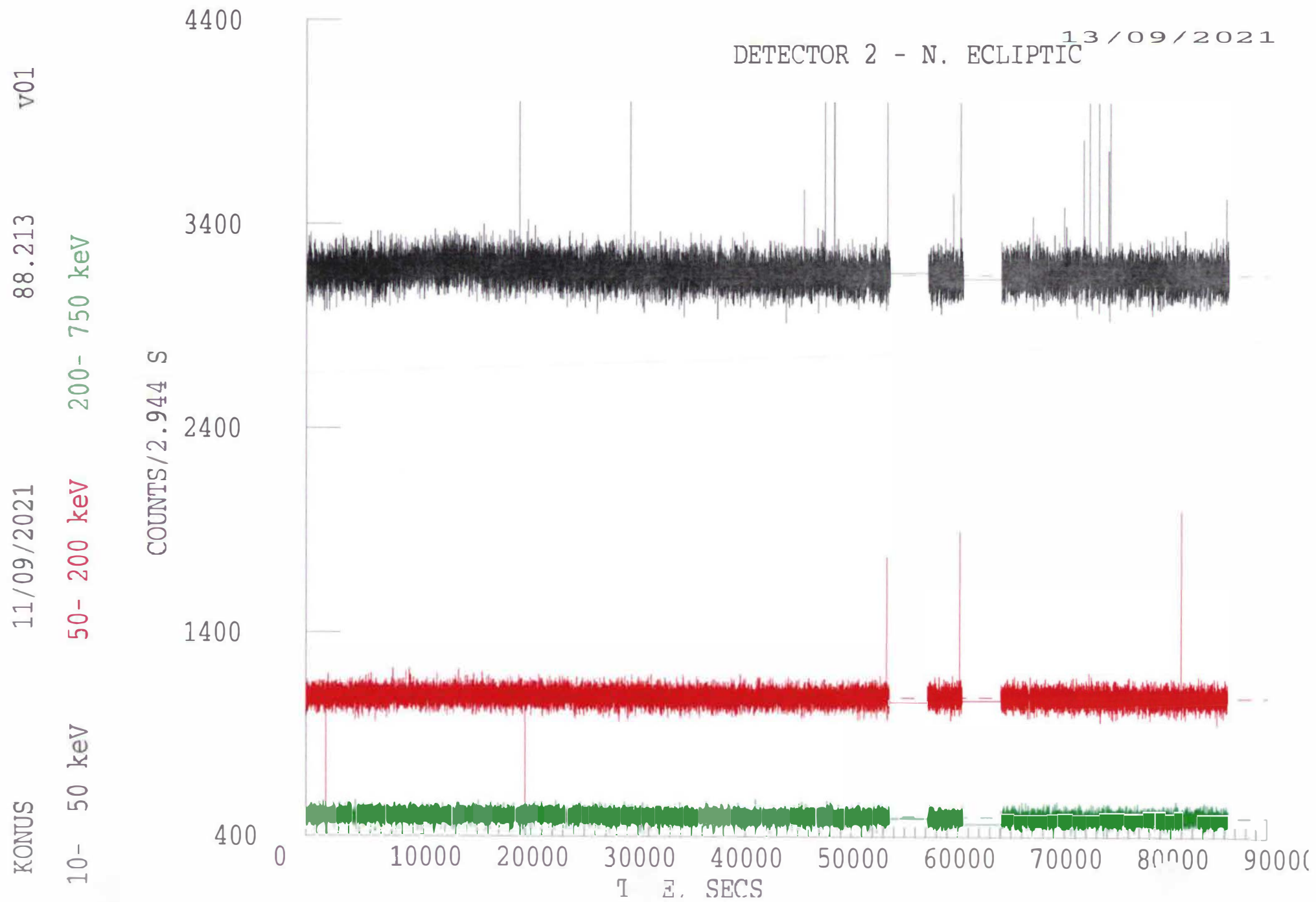
/tmp/swift/210910_2340.png

19.5 KB

KONUS 11/09/2021 88.213 v01

10- 50 keV 50- 200 keV 200- 750 keV





Subject: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 8:33 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30831
SUBJECT: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
DATE: 21/09/13 03:33:14 GMT
FROM: Oliver J Roberts at USRA/NASA <oliver.roberts@nasa.gov>

O.J. Roberts (USRA/NASA-MSFC) reports on behalf of the Fermi GBM Team:

"At 20:16:10.44 UT on 12 September 2021, the Fermi Gamma-Ray Burst Monitor (GBM) triggered and located a bright, SGR-like burst from the direction of the magnetar SGR 1935+2154 (trigger 653170575/210912845).

The GBM on-ground location is consistent with the known position of the SGR.

The angle from the Fermi LAT boresight at the GBM trigger time is 96 degrees.

The event episode has a duration (T90) of about 1 s (10-1000 keV). During this time interval, there are several very short bursts. The first burst has a rapid risetime.

The whole event is best fit with a power law function with an exponential high-energy cutoff. The power law index is 0.08 ± 0.08 and the cutoff energy, parameterized as E_{peak} , is 32.1 ± 0.3 keV.

The time-integrated event fluence (10-1000 keV) from T0-0.064 to T0+0.944s is $(3.545 \pm 0.038) \times 10^{-6}$ erg/cm². The average photon flux in the 10-1000 keV band during this period is 84 ± 1 ph/s/cm².

Fermi GBM has also triggered on a further 24 bursts from the direction of SGR 1935+2154 since yesterday's GCN (Roberts and Wood, GCN 30806):

Date and Time in UTC	Fermi MET (s)
2021-09-12T23:19:32.08	653181577
2021-09-12T20:16:10.44	653170575
2021-09-12T15:03:50.60	653151835
2021-09-12T13:55:16.45	653147721
2021-09-12T12:19:20.44	653141965
2021-09-12T10:10:11.73	653134216
2021-09-12T07:28:07.46	653124492
2021-09-12T06:51:13.22	653122278
2021-09-12T05:14:07.84	653116452
2021-09-11T02:36:38.24	653093506
2021-09-11T20:22:59.04	653084584
2021-09-11T20:05:46.22	653083551
2021-09-11T18:54:36.05	653079281
2021-09-11T17:01:09.77	653072474
2021-09-11T16:50:03.83	653071808
2021-09-11T16:36:57.91	653071022
2021-09-11T15:26:11.55	653066776
2021-09-11T15:15:25.44	653066130
2021-09-11T15:03:00.55	653065385
2021-09-11T13:27:33.85	653059658
2021-09-11T11:53:57.29	653054042
2021-09-11T10:42:51.85	653049776
2021-09-11T05:32:38.65	653031163
2021-09-11T03:02:28.36	653022153

Fermi GBM will not report on future triggers from this event.

The spectral analysis results presented above are preliminary. We encourage multi-wavelength observations to follow-up this most recent activation.

For Fermi GBM data and info, please visit the official Fermi GBM Support Page:
<https://fermi.gsfc.nasa.gov/ssc/data/access/gbm/>

BAT lightcurve for trigger at 210911_0302

Subject: BAT lightcurve for trigger at 210911_0302

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 1:41 AM

To: aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653022176.067 -s 291.217_16.367
```

Swift Zenith(RA,dec): 90.60, -6.63

Swift Location(lon,lat,alt): 54.88 E, -6.63 N, 543 km

Time(MET + UTCF -> UT): 653022176.067 + -27.707 -> 2021-09-11T03:02:28.360

YYMMDD_SOD: 210911_10948.360 DOY=254

Obs Sequence Number: 00049717008

Obs Target Name: MASER 093106.7+4904

Obs Date and Times: 2021-09-11 03:01:34 - 03:06:31

Obs Pointing(ra,dec,roll): 142.742, 49.121, 132.60

291.217_16.367_imageloc (boresight_dist, angle): (109, 169)

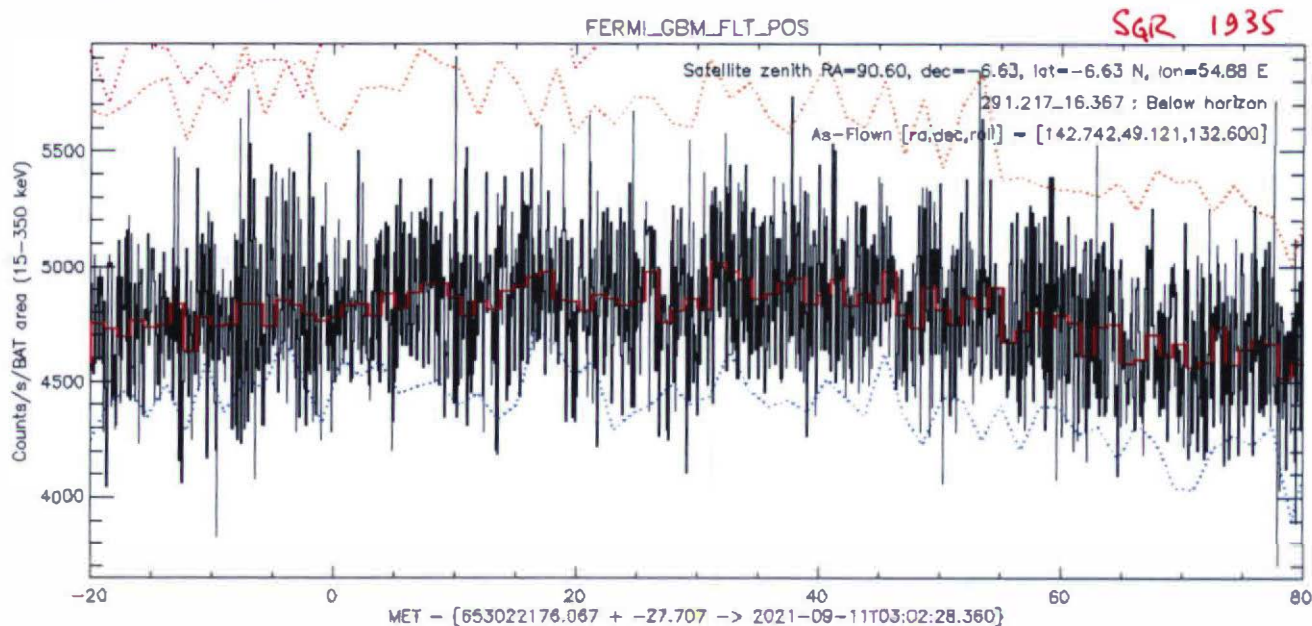
291.217_16.367_exposure (cm² cos adjusted): 0

291.217_16.367_altitude: -45 (down)

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)

TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210911_0302.png



Attachments:

/tmp/swift/210911_0302.png

19.1 KB

/tmp/swift/210911_0302_bat64ms_ipn

87.1 KB

BAT lightcurve for trigger at 210911_0532

Subject: BAT lightcurve for trigger at 210911_0532

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 1:42 AM

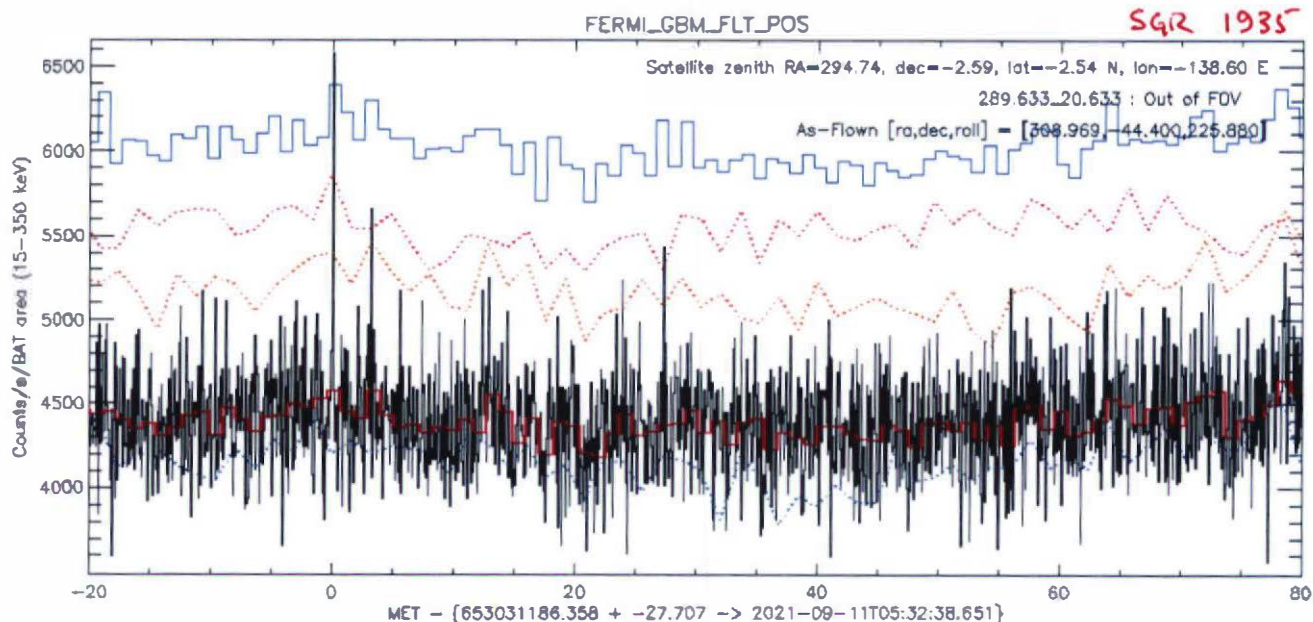
To: aaron.tohu@gmail.com, mkippen@lanl.gov, vestrand@lanl.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653031186.358 -s 289.633_20.633
Swift Zenith(RA,dec):      294.74, -2.59
Swift Location(lon,lat,alt): -138.60 E, -2.54 N, 557 km
Time(MET + UTCF -> UT):   653031186.358 + -27.707 -> 2021-09-11T05:32:38.651
YYMMDD_SOD:               210911_19958.651      DOY=254
Obs Sequence Number:      01071993008
Obs Target Name:          GRB 210905A
Obs Date and Times:       2021-09-11 05:20:58 - 05:32:31
Obs Pointing(ra,dec,roll): 308.969, -44.400, 225.88
289.633_20.633_imageloc (boresight_dist, angle): (67, 25)
289.633_20.633_exposure (cm2 cos adjusted): 0
289.633_20.633_altitude: 89 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210911_0532.png



Attachments:

/tmp/swift/210911_0532.png

20.4 KB

/tmp/swift/210911_0532_bat64ms_ipn

87.0 KB

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-11T07 to 2021-09-12T08)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 7:40 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30822
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-11T07 to 2021-09-12T08)
DATE: 21/09/12 14:39:57 GMT
FROM: Wangchen Xue at IHEP <xuewc@ihep.ac.cn>

W. C. Xue, S. L. Xiong, C. Cai, Y. Huang, Z. W. Guo, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-11T07 to 2021-09-12T08. Here is the list of these bursts:

Trigger Time (UTC)
2021-09-11T07:15:04.000
2021-09-11T16:35:46.500
2021-09-11T16:36:57.900
2021-09-11T16:38:01.050
2021-09-11T16:39:21.000
2021-09-11T16:50:03.850
2021-09-11T17:00:41.900
2021-09-11T17:01:09.800
2021-09-11T17:01:59.550
2021-09-11T17:04:29.800
2021-09-11T17:10:48.750
2021-09-11T18:02:13.500
2021-09-11T18:04:46.350
2021-09-11T18:54:36.050
2021-09-11T19:43:29.000
2021-09-11T19:46:50.050
2021-09-11T20:13:40.550
2021-09-11T20:22:59.050
2021-09-11T20:33:14.550
2021-09-11T21:07:28.350
2021-09-11T22:51:41.600
2021-09-12T00:34:37.450
2021-09-12T00:45:49.400
2021-09-12T05:14:07.950
2021-09-12T06:51:13.700
2021-09-12T07:28:07.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210911_1042

Subject: BAT lightcurve for trigger at 210911_1042

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 9:19 AM

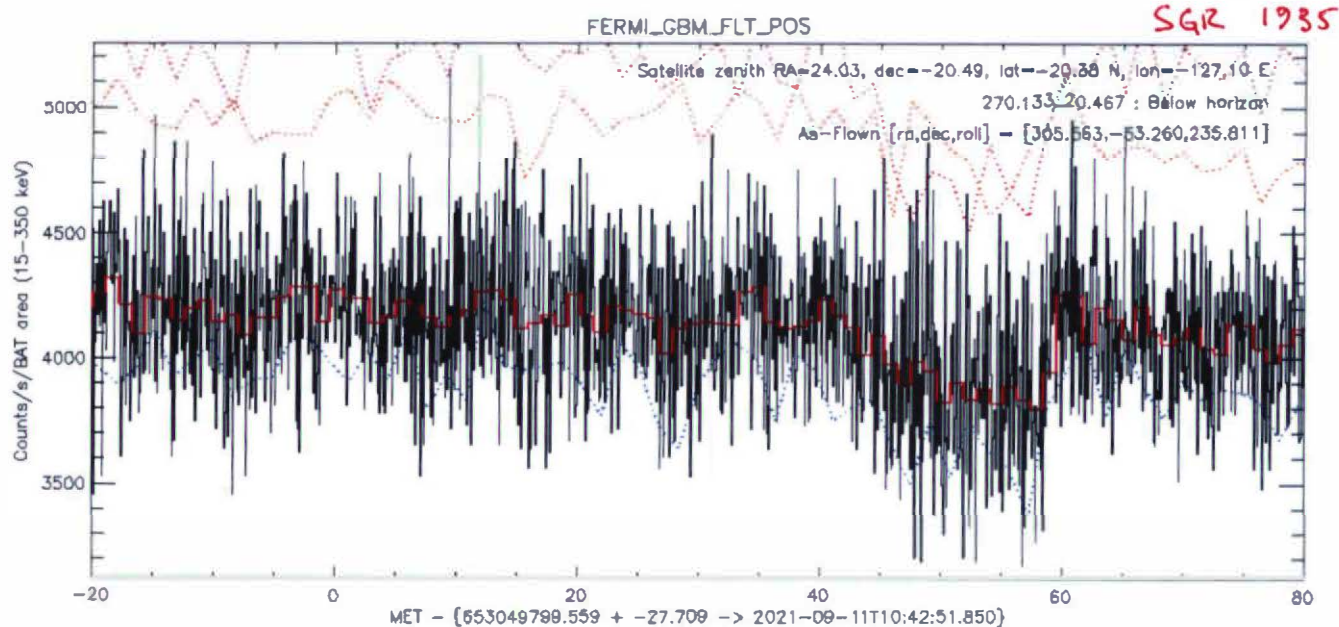
To: mkippen@lanl.gov, vestrands@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653049799.559 -s 270.133_20.467
Swift Zenith(RA,dec):      24.03, -20.49
Swift Location(lon,lat,alt): -127.10 E, -20.38 N, 553 km
Time(MET + UTCF -> UT):  653049799.559 + -27.709 -> 2021-09-11T10:42:51.850
YYMMDD_SOD:               210911_38571.850      DOY=254
Obs Sequence Number:      00014799001
Obs Target Name:          SN2021xju
Obs Date and Times:       2021-09-11 10:20:33 - 10:43:32
Obs Pointing(ra,dec,roll): 305.563, -53.260, 235.81
270.133_20.467_imageloc (boresight_dist, angle): (80, 1)
270.133_20.467_exposure (cm2 cos adjusted): 0
270.133_20.467_altitude: -6 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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---/tmp/swift/210911_1042.png---



---Attachments---

/tmp/swift/210911_1042_bat64ms_ipn

87.1 KB

/tmp/swift/210911_1042.png

20.4 KB

BAT lightcurve for trigger at 210911_1153

Subject: BAT lightcurve for trigger at 210911_1153

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 8:49 AM

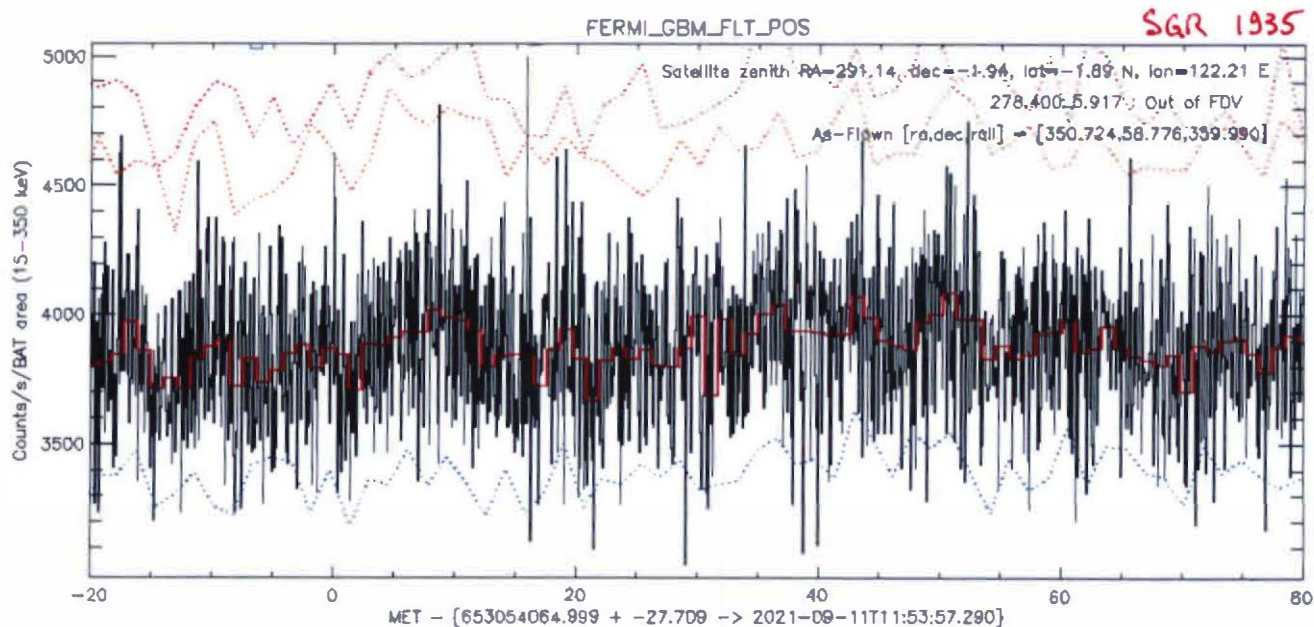
To: bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653054064.999 -s 278.400_5.917
Swift Zenith(RA,dec):      291.14, -1.94
Swift Location(lon,lat,alt): 122.21 E, -1.89 N, 557 km
Time(MET + UTCF -> UT):   653054064.999 + -27.709 -> 2021-09-11T11:53:57.290
YYMMDD_SOD:               210911_42837.290      DOY=254
Obs Sequence Number:      00050451036
Obs Target Name:          Cas A Bottom 2
Obs Date and Times:       2021-09-11 11:52:34 - 12:12:30
Obs Pointing(ra,dec,roll): 350.724, 58.776, 359.99
278.400_5.917_imageloc (boresight_dist, angle): (76, 168)
278.400_5.917_exposure (cm2 cos adjusted): 0
278.400_5.917_altitude: 98 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210911_1153.png



Attachments:

/tmp/swift/210911_1153_bat64ms_ipn

87.0 KB

/tmp/swift/210911_1153.png

19.9 KB

Subject: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 8:33 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30831
SUBJECT: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
DATE: 21/09/13 03:33:14 GMT
FROM: Oliver J Roberts at USRA/NASA <oliver.roberts@nasa.gov>

O.J. Roberts (USRA/NASA-MSFC) reports on behalf of the Fermi GBM Team:

"At 20:16:10.44 UT on 12 September 2021, the Fermi Gamma-Ray Burst Monitor (GBM) triggered and located a bright, SGR-like burst from the direction of the magnetar SGR 1935+2154 (trigger 653170575/210912845).

The GBM on-ground location is consistent with the known position of the SGR.

The angle from the Fermi LAT boresight at the GBM trigger time is 96 degrees.

The event episode has a duration (T90) of about 1 s (10-1000 keV). During this time interval, there are several very short bursts. The first burst has a rapid risetime.

The whole event is best fit with a power law function with an exponential high-energy cutoff. The power law index is 0.08 ± 0.08 and the cutoff energy, parameterized as Epeak, is 32.1 ± 0.3 keV.

The time-integrated event fluence (10-1000 keV) from T0-0.064 to T0+0.944s is $(3.545 \pm 0.038) \times 10^{-6}$ erg/cm². The average photon flux in the 10-1000 keV band during this period is 84 ± 1 ph/s/cm².

Fermi GBM has also triggered on a further 24 bursts from the direction of SGR 1935+2154 since yesterday's GCN (Roberts and Wood, GCN 30806):

Date and Time in UTC	Fermi MET (s)
2021-09-12T23:19:32.08	653181577
2021-09-12T20:16:10.44	653170575
2021-09-12T15:03:50.60	653151835
2021-09-12T13:55:16.45	653147721
2021-09-12T12:19:20.44	653141965
2021-09-12T10:10:11.73	653134216
2021-09-12T07:28:07.46	653124492
2021-09-12T06:51:13.22	653122278
2021-09-12T05:14:07.84	653116452
2021-09-11T02:36:38.24	653093506
2021-09-11T20:22:59.04	653084584
2021-09-11T20:05:46.22	653083551
2021-09-11T18:54:36.05	653079281
2021-09-11T17:01:09.77	653072474
2021-09-11T16:50:03.83	653071808
2021-09-11T16:36:57.91	653071022
2021-09-11T15:26:11.55	653066776
2021-09-11T15:15:25.44	653066130
2021-09-11T15:03:00.55	653065385
2021-09-11T13:27:33.85	653059658
2021-09-11T11:53:57.29	653054042
2021-09-11T10:42:51.85	653049776
2021-09-11T05:32:38.65	653031163
2021-09-11T03:02:28.36	653022153

Fermi GBM will not report on future triggers from this event.

The spectral analysis results presented above are preliminary. We encourage multi-wavelength observations to follow-up this most recent activation.

For Fermi GBM data and info, please visit the official Fermi GBM Support Page:
<https://fermi.gsfc.nasa.gov/ssc/data/access/gbm/>

BAT lightcurve for trigger at 210911_1503

Subject: BAT lightcurve for trigger at 210911_1503

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 2:02 PM

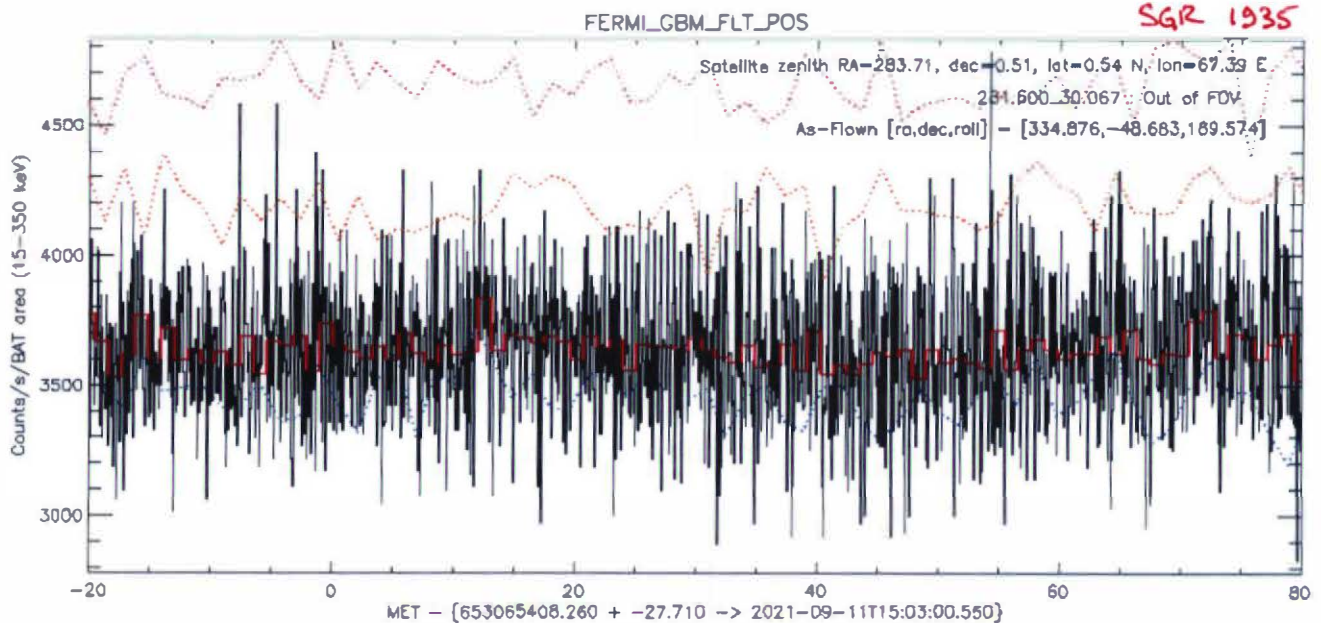
To: gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, ipn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653065408.260 -s 281.600_30.067
Swift Zenith(RA,dec):      283.71, 0.51
Swift Location(lon,lat,alt): 67.39 E, 0.54 N, 556 km
Time(MET + UTCF -> UT):   653065408.260 + -27.710 -> 2021-09-11T15:03:00.550
YYMMDD_SOD:               210911_54180.550      DOY=254
Obs Sequence Number:       00013486046
Obs Target Name:           Swift J221951-484240
Obs Date and Times:        2021-09-11 14:59:34 - 15:24:32
Obs Pointing(ra,dec,roll): 334.876, -48.683, 189.57
281.600_30.067_imageloc (boresight_dist, angle): (92, 36)
281.600_30.067_exposure (cm2 cos adjusted): 0
281.600_30.067_altitude: 83 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210911_1503.png



Attachments:

/tmp/swift/210911_1503_bat64ms_ipn

87.1 KB

/tmp/swift/210911_1503.png

20.7 KB

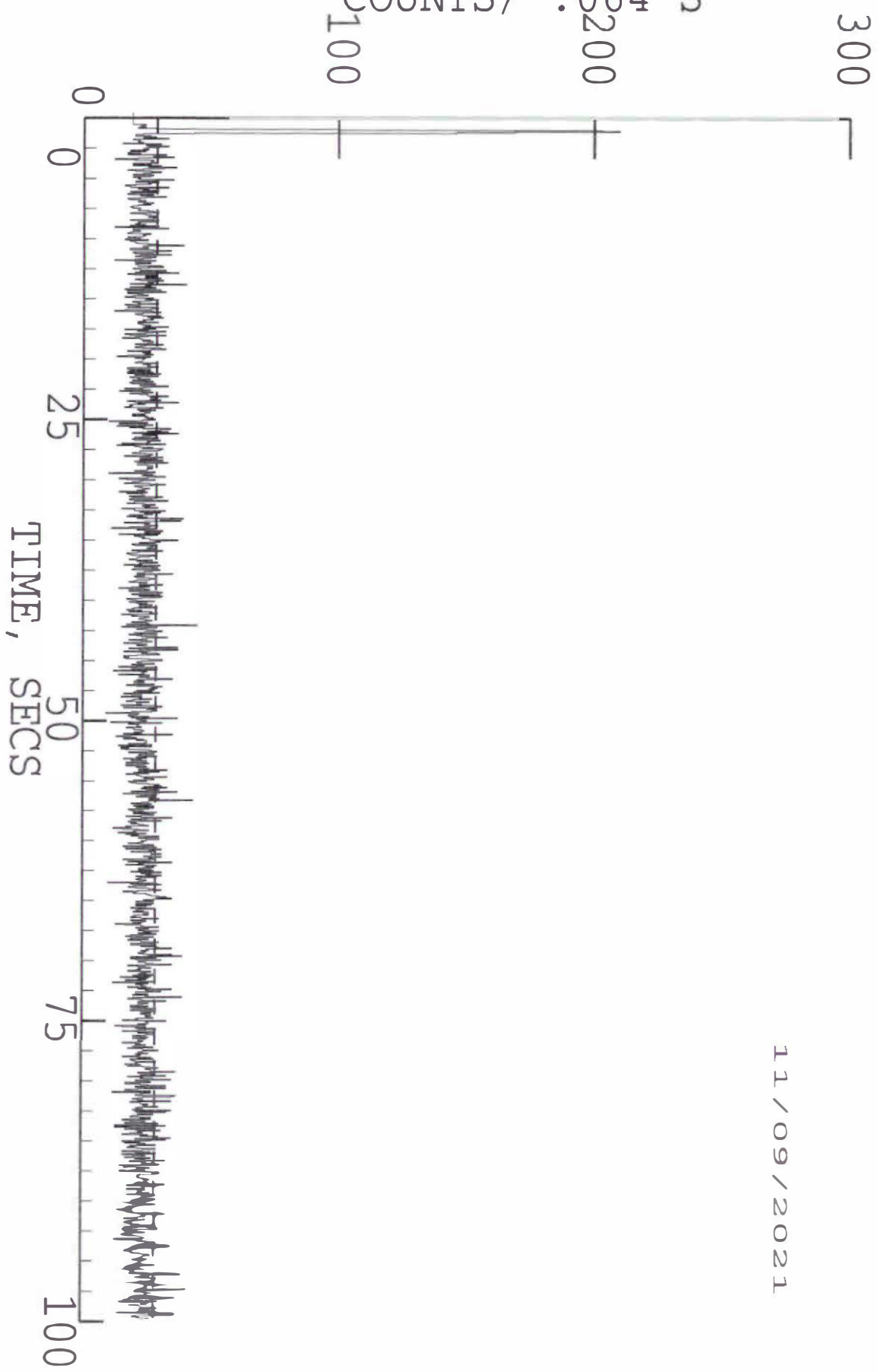
A

KONUS 11/09/21 54406.825 15:06:46.825

50- 200 keV

SGR 1935

COUNTS/ .064 S



11/09/2021

A

KONUS

11/09/21

COUNTS/SEC 54406.000

15:06:46.000



Subject: BAT lightcurve for trigger at 210911_1506

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 3:36 PM

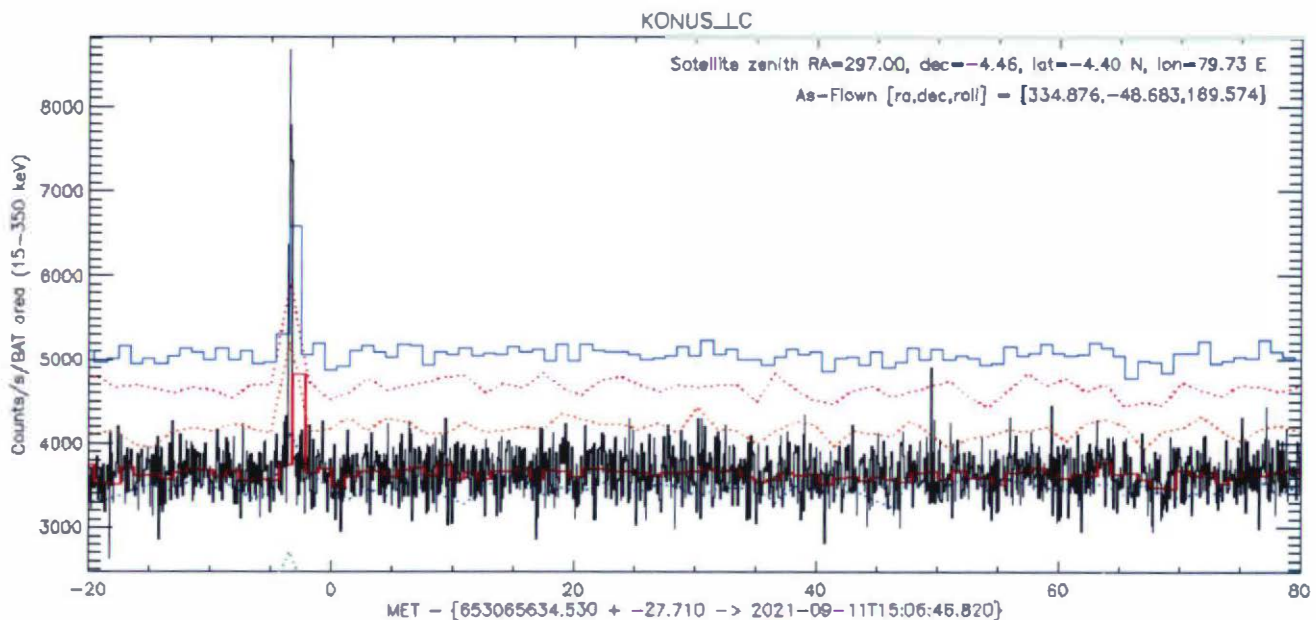
To: gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, dmopalmer@gmail.com, vestrand@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-11T15:06:46.820
Swift Zenith(RA,dec):      297.00, -4.46
Swift Location(lon,lat,alt): 79.73 E, -4.40 N, 557 km
Time(MET + UTC -> UT):    653065634.530 + -27.710 -> 2021-09-11T15:06:46.820
YYMMDD_SOD:               210911_54406.820      DOY=254
Obs Sequence Number:      00013486046
Obs Target Name:          Swift J221951-484240
Obs Date and Times:       2021-09-11 14:59:34 - 15:24:32
Obs Pointing(ra,dec,roll): 334.876, -48.683, 189.57
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210911_1506.png



Attachments:

/tmp/swift/210911_1506.png	17.9 KB
/tmp/swift/210911_1506_bat64ms_ipn	87.0 KB

BAT lightcurve for trigger at 210911_1515

Subject: BAT lightcurve for trigger at 210911_1515

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 2:02 PM

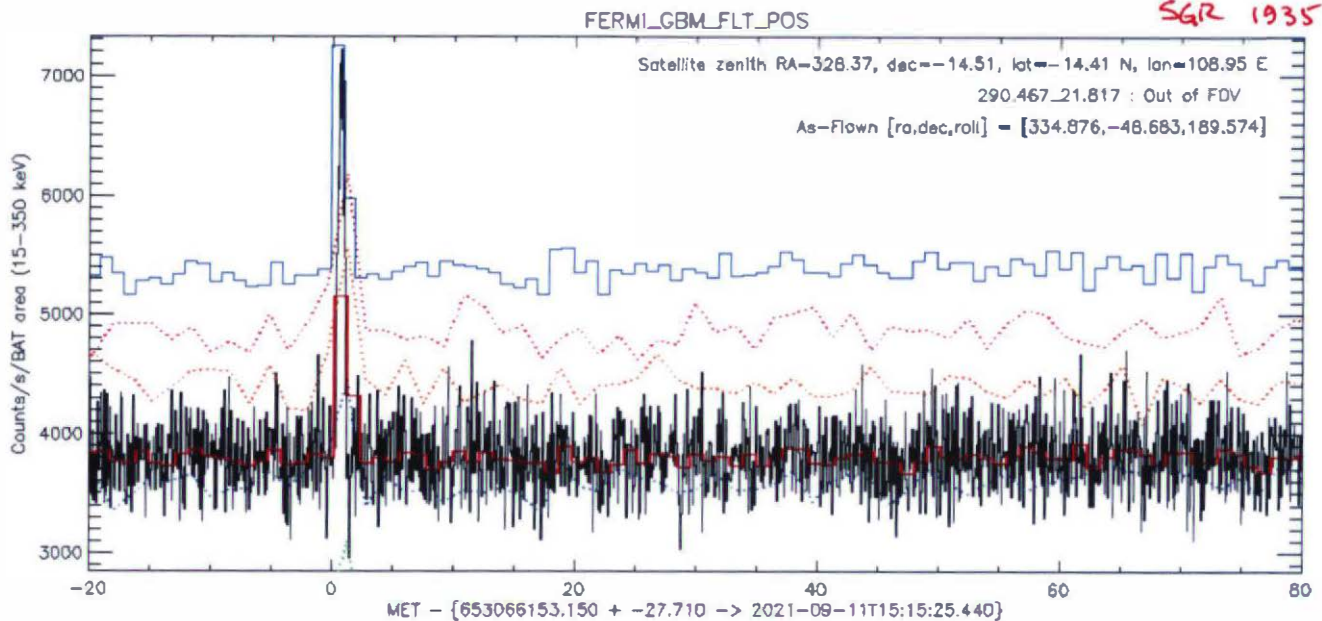
To: mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com, vestrand@lanl.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653066153.150 -s 290.467_21.817
Swift Zenith(RA,dec):      328.37, -14.51
Swift Location(lon,lat,alt): 108.95 E, -14.41 N, 558 km
Time(MET + UTCF -> UT):   653066153.150 + -27.710 -> 2021-09-11T15:15:25.440
YYMMDD_SOD:               210911_54925.440      DOY=254
Obs Sequence Number:      00013486046
Obs Target Name:          Swift J221951-484240
Obs Date and Times:       2021-09-11 14:59:34 - 15:24:32
Obs Pointing(ra,dec,roll): 334.876, -48.683, 189.57
290.467_21.817_imageloc (boresight_dist, angle): (81, 39)
290.467_21.817_exposure (cm2 cos adjusted): 0
290.467_21.817_altitude: 61 (up)
```

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~/tmp/swift/210911_1515.png



Attachments

/tmp/swift/210911_1515_bat64ms_ipn

87.0 KB

/tmp/swift/210911_1515.png

19.8 KB

BAT lightcurve for trigger at 210911_1526

Subject: BAT lightcurve for trigger at 210911_1526

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 10:53 PM

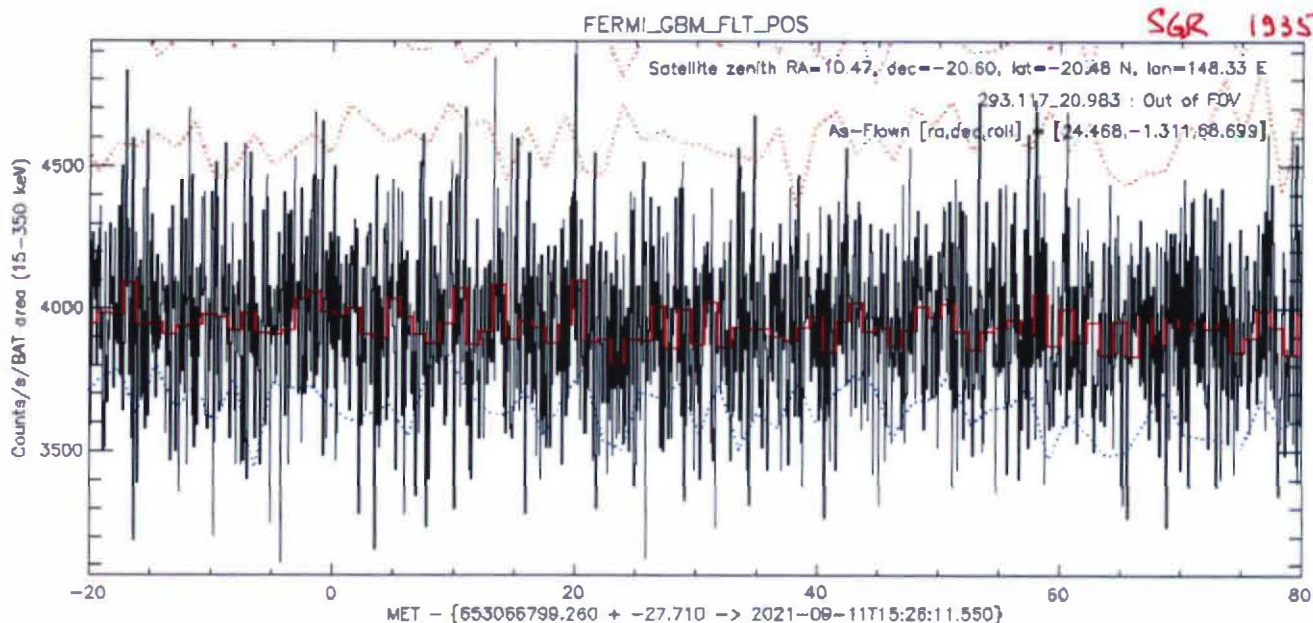
To: vestrand@lanl.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653066799.260 -s 293.117_20.983
Swift Zenith(RA,dec):      10.47, -20.60
Swift Location(lon,lat,alt): 148.33 E, -20.48 N, 555 km
Time(MET + UTCF -> UT):    653066799.260 + -27.710 -> 2021-09-11T15:26:11.550
YYMMDD_SOD:                210911_55571.550      DOY=254
Obs Sequence Number:       00014807006
Obs Target Name:           2TF21abzbmhz
Obs Date and Times:        2021-09-11 15:24:34 - 15:40:31
Obs Pointing(ra,dec,roll): 24.468, -1.311, 68.70
293.117_20.983_imageloc (boresight_dist, angle): (92, 132)
293.117_20.983_exposure (cm2 cos adjusted): 0
293.117_20.983_altitude: 27 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210911_1526.png



Attachments:

/tmp/swift/210911_1526_bat64ms_ipn

87.1 KB

/tmp/swift/210911_1526.png

19.1 KB

Subject: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 8:33 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30831
SUBJECT: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
DATE: 21/09/13 03:33:14 GMT
FROM: Oliver J Roberts at USRA/NASA <oliver.roberts@nasa.gov>

O.J. Roberts (USRA/NASA-MSFC) reports on behalf of the Fermi GBM Team:

"At 20:16:10.44 UT on 12 September 2021, the Fermi Gamma-Ray Burst Monitor (GBM) triggered and located a bright, SGR-like burst from the direction of the magnetar SGR 1935+2154 (trigger 653170575/210912845).

The GBM on-ground location is consistent with the known position of the SGR.

The angle from the Fermi LAT boresight at the GBM trigger time is 96 degrees.

The event episode has a duration (T90) of about 1 s (10-1000 keV). During this time interval, there are several very short bursts. The first burst has a rapid risetime.

The whole event is best fit with a power law function with an exponential high-energy cutoff. The power law index is 0.08 ± 0.08 and the cutoff energy, parameterized as Epeak, is 32.1 ± 0.3 keV.

The time-integrated event fluence (10-1000 keV) from T0-0.064 to T0+0.944s is $(3.545 \pm 0.038) \times 10^{-6}$ erg/cm². The average photon flux in the 10-1000 keV band during this period is 84 ± 1 ph/s/cm².

Fermi GBM has also triggered on a further 24 bursts from the direction of SGR 1935+2154 since yesterday's GCN (Roberts and Wood, GCN 30806):

Date and Time in UTC	Fermi MET (s)
2021-09-12T23:19:32.08	653181577
2021-09-12T20:16:10.44	653170575
2021-09-12T15:03:50.60	653151835
2021-09-12T13:55:16.45	653147721
2021-09-12T12:19:20.44	653141965
2021-09-12T10:10:11.73	653134216
2021-09-12T07:28:07.46	653124492
2021-09-12T06:51:13.22	653122278
2021-09-12T05:14:07.84	653116452
2021-09-11T02:36:38.24	653093506
2021-09-11T20:22:59.04	653084584
2021-09-11T20:05:46.22	653083551
2021-09-11T18:54:36.05	653079281
2021-09-11T17:01:09.77	653072474
2021-09-11T16:50:03.83	653071808
2021-09-11T16:36:57.91	653071022
2021-09-11T15:26:11.55	653066776
2021-09-11T15:15:25.44	653066130
2021-09-11T15:03:00.55	653065385
2021-09-11T13:27:33.85	653059658
2021-09-11T11:53:57.29	653054042
2021-09-11T10:42:51.85	653049776
2021-09-11T05:32:38.65	653031163
2021-09-11T03:02:28.36	653022153

Fermi GBM will not report on future triggers from this event.

The spectral analysis results presented above are preliminary. We encourage multi-wavelength observations to follow-up this most recent activation.

For Fermi GBM data and info, please visit the official Fermi GBM Support Page:
<https://fermi.gsfc.nasa.gov/ssc/data/access/gbm/>

BAT lightcurve for trigger at 210911_1650

Subject: BAT lightcurve for trigger at 210911_1650

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 12:28 PM

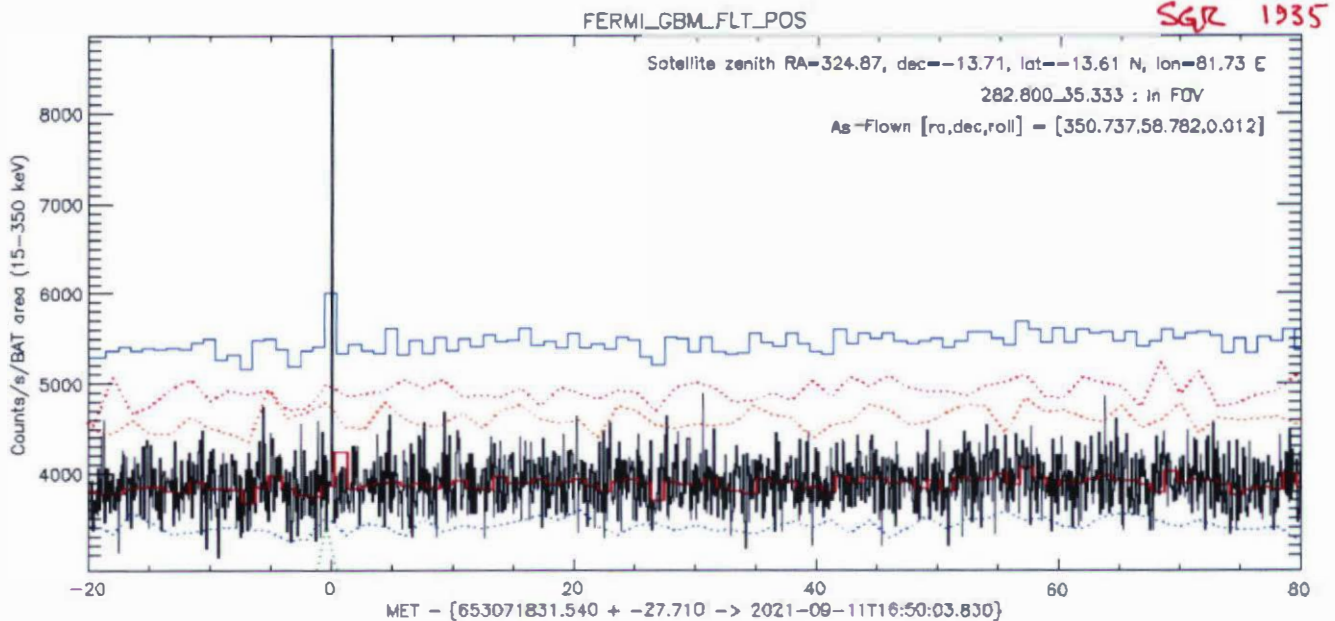
To: palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, vestrand@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653071831.540 -s 282.800_35.333
Swift Zenith(RA,dec):      324.87, -13.71
Swift Location(lon,lat,alt): 81.73 E, -13.61 N, 558 km
Time(MET + UTC -> UT):    653071831.540 + -27.710 -> 2021-09-11T16:50:03.830
YYMMDD_SOD:               210911_60603.830      DOY=254
Obs Sequence Number:      00050451036
Obs Target Name:          Cas A Bottom 2
Obs Date and Times:       2021-09-11 16:45:34 - 16:59:30
Obs Pointing(ra,dec,roll): 350.737, 58.782, 0.01
282.800_35.333_imageloc (boresight_dist, angle): (49, -177)
282.800_35.333_exposure (cm2 cos adjusted): 1416
282.800_35.333_altitude: 50 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210911_1650.png



Attachments

/tmp/swift/210911_1650.png

17.1 KB

/tmp/swift/210911_1650_bat64ms_ipn

87.0 KB

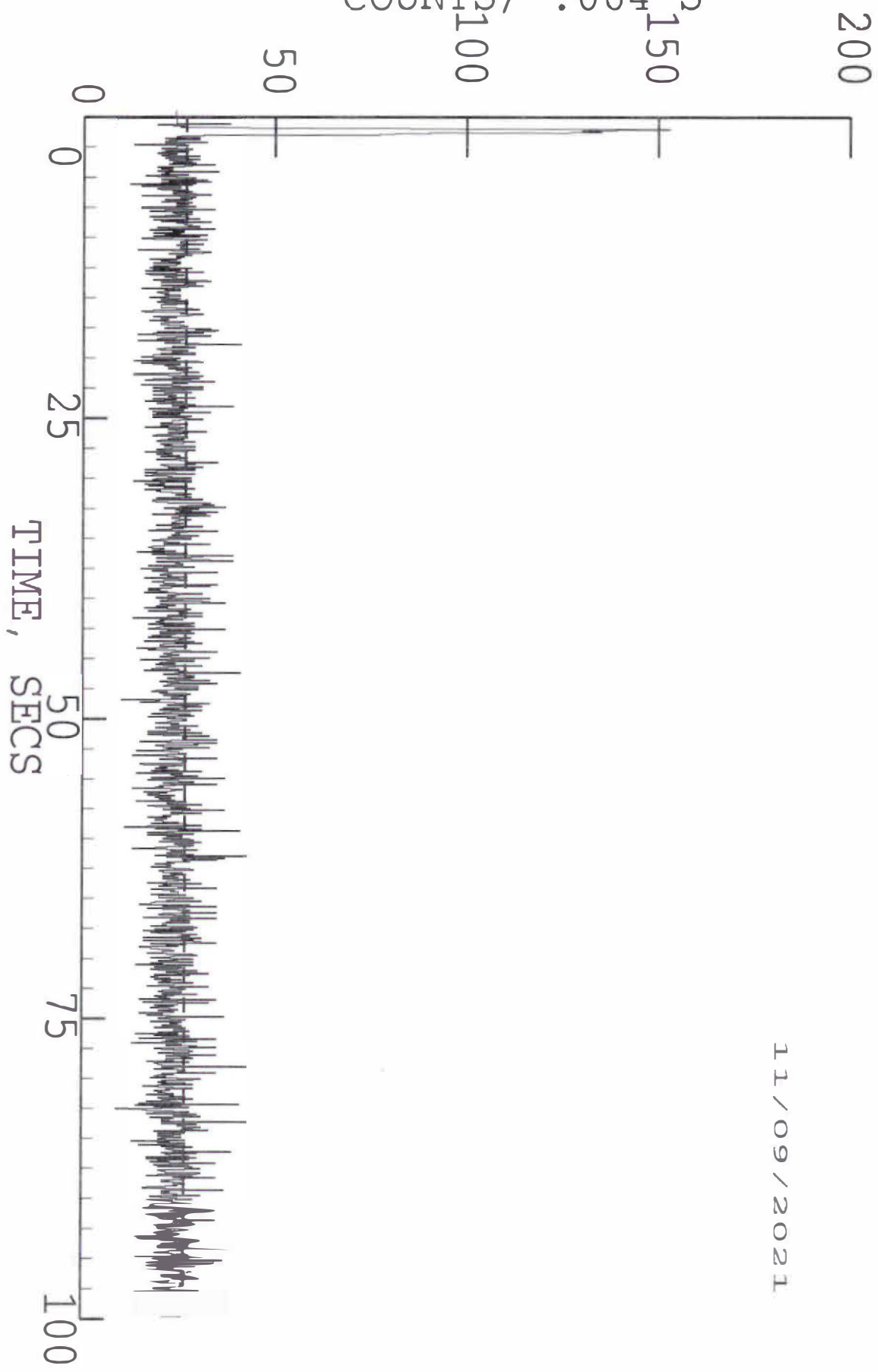
B

KONUS 11/09/21 61274.025 17:01:14.025

50- 200 keV

COUNTS/ .064 S

SGR 1735
+ GBM SGR
SPI NO



11/09/2021

KONUS

11/09/21

COUNTS/SEC 61274.000

17:01:14.000



Subject: BAT lightcurve for trigger at 210911_1701

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 12:28 PM

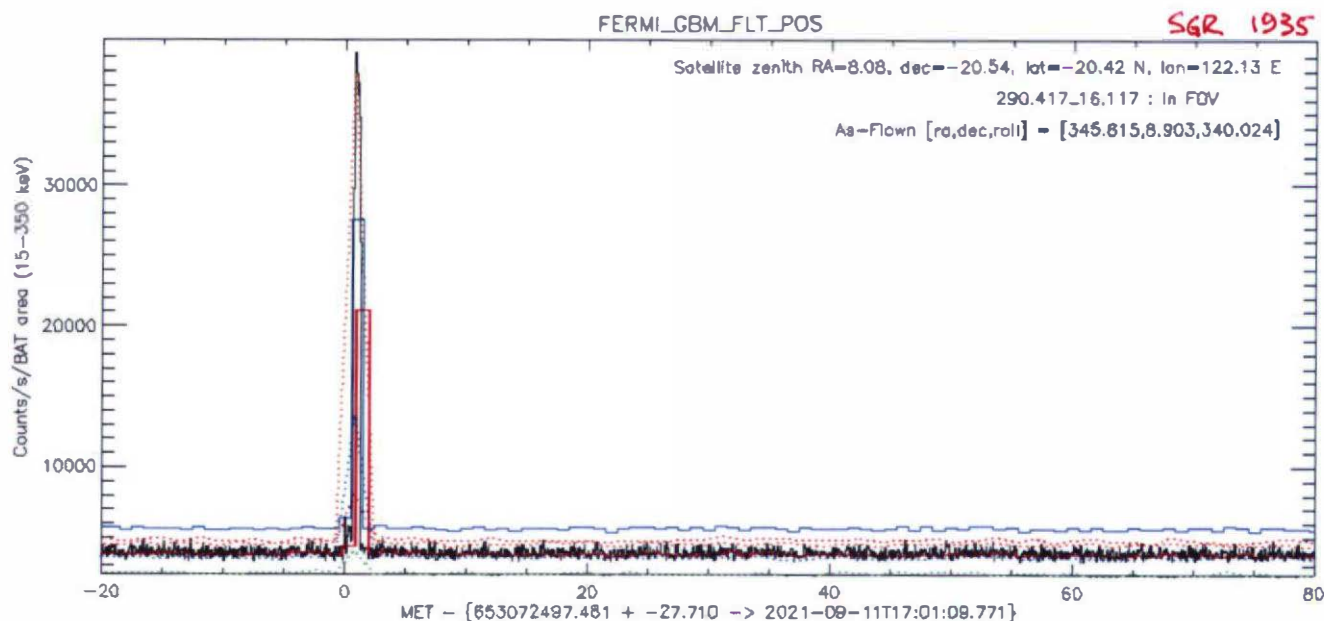
To: bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, vestrand@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653072497.481 -s 290.417_16.117
Swift Zenith(RA,dec):      8.08, -20.54
Swift Location(lon,lat,alt): 122.13 E, -20.42 N, 555 km
Time(MET + UTCF -> UT):  653072497.481 + -27.710 -> 2021-09-11T17:01:09.771
YYMMDD_50D:              210911_61269.771      DOY=254
Obs Sequence Number:      00095670065
Obs Target Name:          NGC 7469
Obs Date and Times:       2021-09-11 16:59:34 - 17:14:30
Obs Pointing(ra,dec,roll): 345.815, 8.903, 340.02
290.417_16.117_imageloc (boresight_dist, angle): (54, -147)
290.417_16.117_exposure (cm2 cos adjusted): 380
290.417_16.117_altitude: 29 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210911_1701.png



Attachments

/tmp/swift/210911_1701.png

14.1 KB

/tmp/swift/210911_1701_bat64ms_ipn

87.1 KB

BAT lightcurve for trigger at 210911_1854

Subject: BAT lightcurve for trigger at 210911_1854

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 8:19 PM

To: aaron.tohu@gmail.com, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu, vestrand@lanl.gov, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

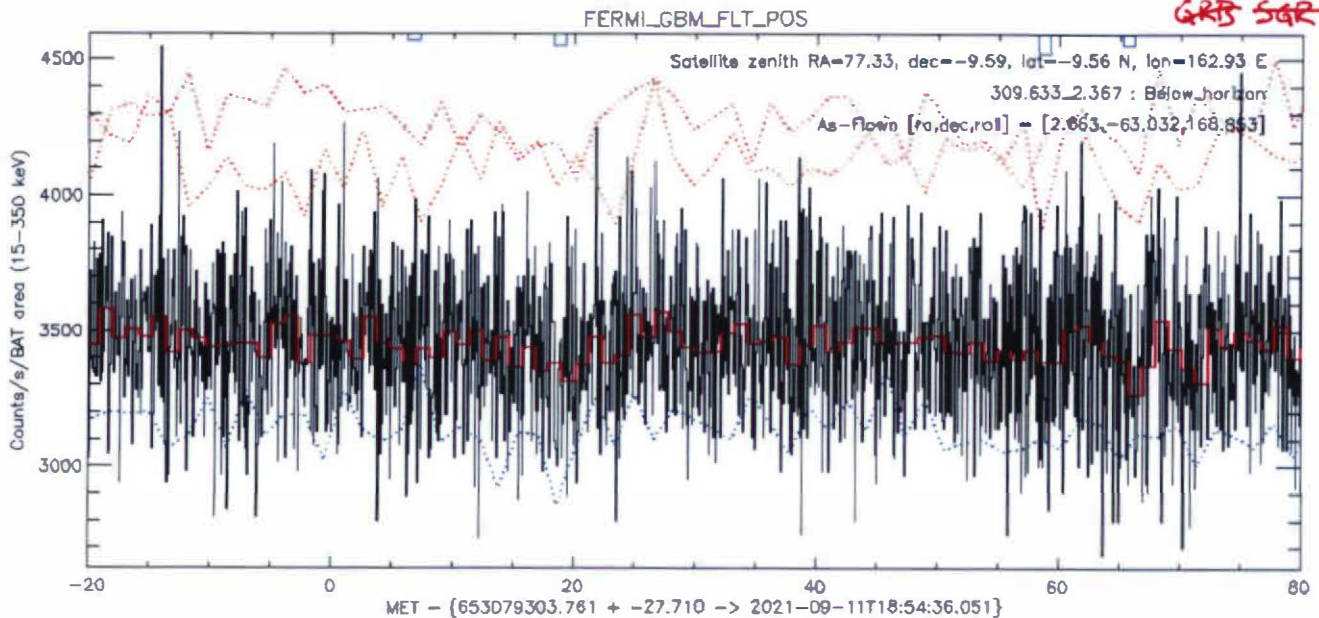
```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653079303.761 -s 309.633_2.367
Swift Zenith(RA,dec):      77.33, -9.59
Swift Location(lon,lat,alt): 162.93 E, -9.56 N, 544 km
Time(MET + UTCF -> UT):   653079303.761 + -27.710 -> 2021-09-11T18:54:36.051
YYMMDD_S00:               210911_68076.051      DOY=254
Obs Sequence Number:      00014458015
Obs Target Name:          SN 2021uds
Obs Date and Times:       2021-09-11 18:38:34 - 18:55:28
Obs Pointing(ra,dec,roll): 2.663, -63.032, 168.85
309.633_2.367_imageloc (boresight_dist, angle): (76, 46)
309.633_2.367_exposure (cm2 cos adjusted): 0
309.633_2.367_altitude: -15 (down)
```

--
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Reclassified as GRB

276.5 18.2 13.1

—/tmp/swift/210911_1854.png—



—Attachments—

/tmp/swift/210911_1854_bat64ms_ipn

87.1 KB

/tmp/swift/210911_1854.png

20.7 KB

Subject: BAT lightcurve for trigger at 210911_2005

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 8:20 PM

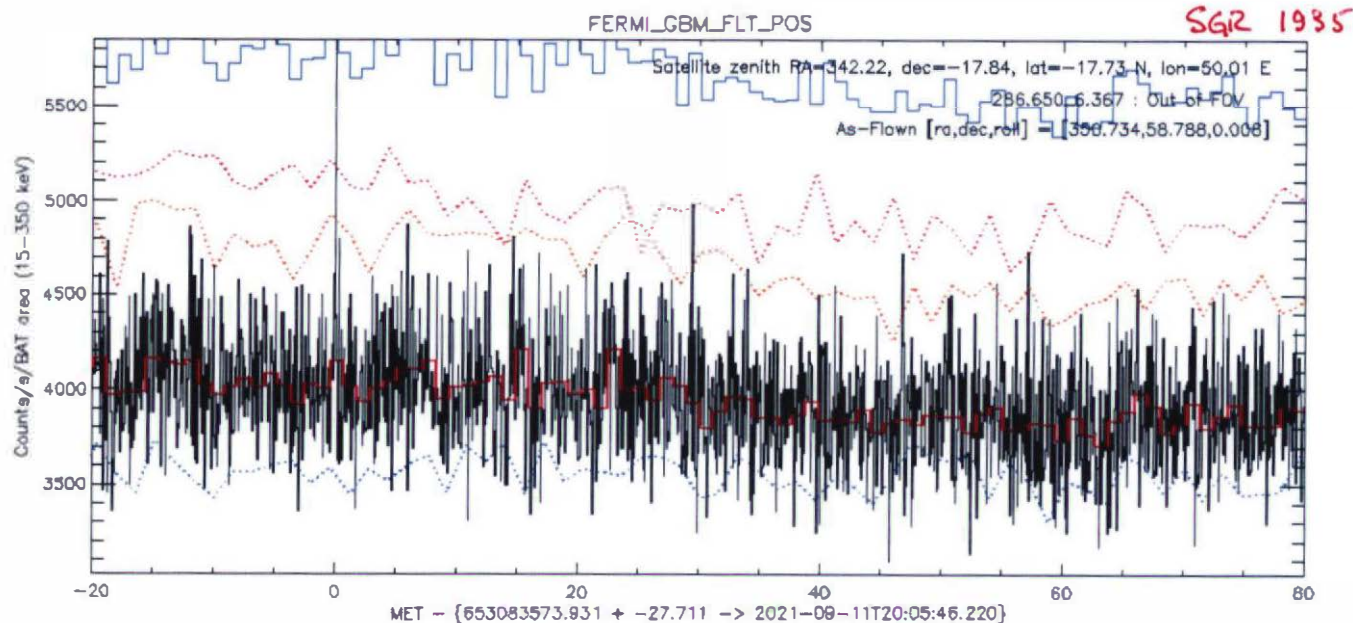
To: gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, mkippen@lanl.gov, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653083573.931 -s 286.650_6.367
Swift Zenith(RA,dec):      342.22, -17.84
Swift Location(lon,lat,alt): 50.01 E, -17.73 N, 558 km
Time(MET + UTCF -> UT):  653083573.931 + -27.711 -> 2021-09-11T20:05:46.220
YYMMDD_SOD:              210911_72346.220      DOY=254
Obs Sequence Number:      00050451036
Obs Target Name:          Cas A Bottom 2
Obs Date and Times:       2021-09-11 19:51:34 - 20:05:30
Obs Pointing(ra,dec,roll): 350.734, 58.788, 0.01
286.650_6.367_imageloc (boresight_dist, angle): (71, 161)
286.650_6.367_exposure (cm2 cos adjusted): 0
286.650_6.367_altitude: 53 (up)
```

--
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--/tmp/swift/210911_2005.png--



-- Attachments --

/tmp/swift/210911_2005.png

20.5 KB

/tmp/swift/210911_2005_bat64ms_ipn

87.0 KB

BAT lightcurve for trigger at 210911_2022

Subject: BAT lightcurve for trigger at 210911_2022

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 8:20 PM

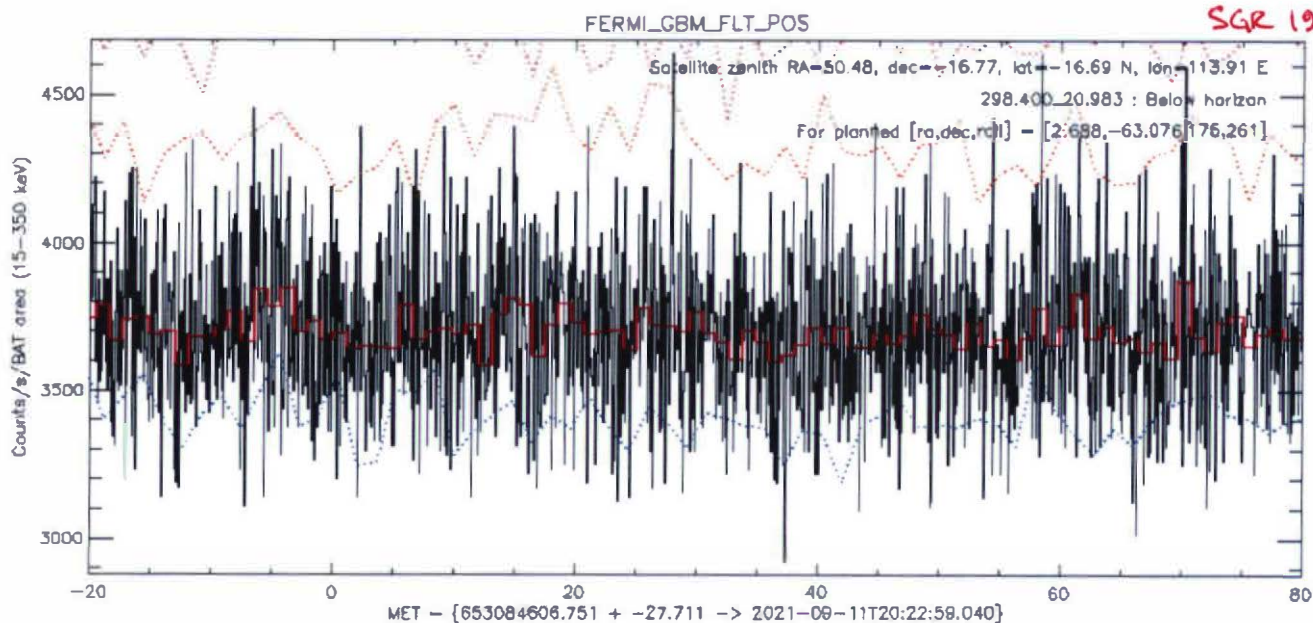
To: bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, mkippen@lanl.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653084606.751 -s 298.400_20.983
Swift Zenith(RA,dec):      50.48, -16.77
Swift Location(lon,lat,alt): 113.91 E, -16.69 N, 549 km
Time(MET + UTCF -> UT):   653084606.751 + -27.711 -> 2021-09-11T20:22:59.040
YYMMDD_SOD:               210911_73379.040      DOY=254
Obs Sequence Number:      00014458015
Obs Target Name:          SN 2021uds (planned)
Obs Date and Times:       2021-09-11 20:15:32 - 20:30:32
Obs Pointing(ra,dec,roll): 2.688, -63.076, 175.26
298.400_20.983_imageloc (boresight_dist, angle): (98, 37)
298.400_20.983_exposure (cm2 cos adjusted): 0
298.400_20.983_altitude: -3 (down)
```

--
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--/tmp/swift/210911_2022.png--



-- Attachments --

/tmp/swift/210911_2022_bat64ms_ipn

50.3 KB

/tmp/swift/210911_2022.png

19.8 KB

BAT lightcurve for trigger at 210911_2251

Subject: BAT lightcurve for trigger at 210911_2251

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/11/2021, 11:54 PM

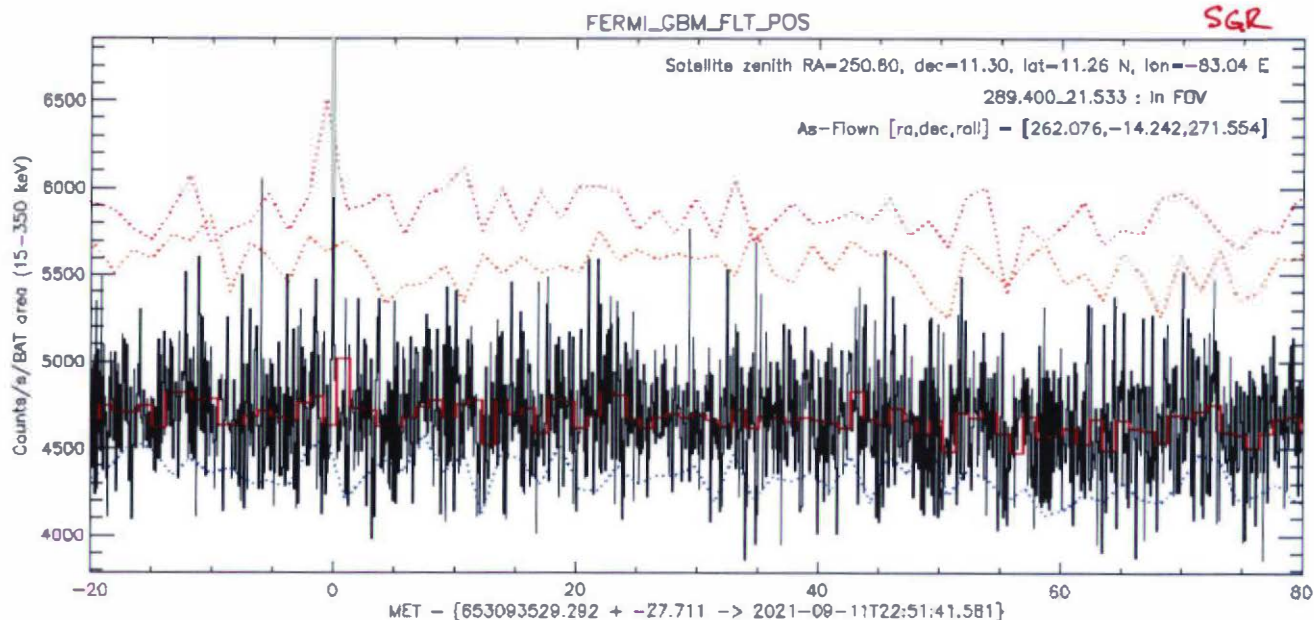
To: ipn@ssl.berkeley.edu, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov, mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653093529.292 -s 289.400_21.533
Swift Zenith(RA,dec):      250.80, 11.30
Swift Location(lon,lat,alt): -83.04 E, 11.26 N, 554 km
Time(MET + UTC -> UT):    653093529.292 + -27.711 -> 2021-09-11T22:51:41.581
YYMMDD_SOD:               210911_82301.581      DOY=254
Obs Sequence Number:      00010383092
Obs Target Name:          PDS 456
Obs Date and Times:       2021-09-11 22:37:34 - 22:59:33
Obs Pointing(ra,dec,roll): 262.076, -14.242, 271.55
289.400_21.533_imageloc (boresight_dist, angle): (45, 36)
289.400_21.533_exposure (cm2 cos adjusted): 840
289.400_21.533_altitude: 75 (up)
```

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/tmp/swift/210911_2251.png



Attachments

/tmp/swift/210911_2251.png

19.8 KB

/tmp/swift/210911_2251_bat64ms_ipn

87.1 KB

KONUS

12/09/2021

76.940

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

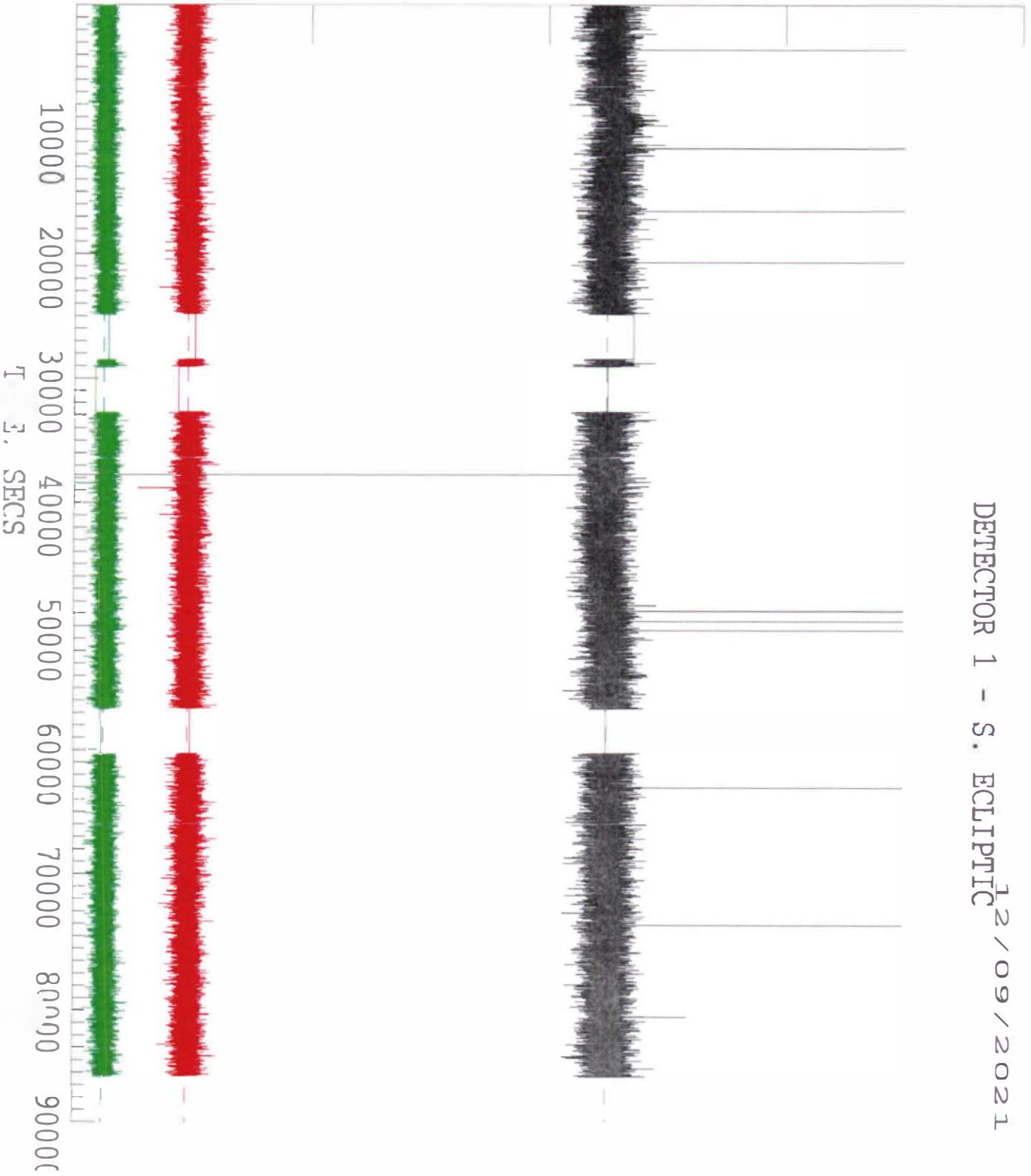
3500

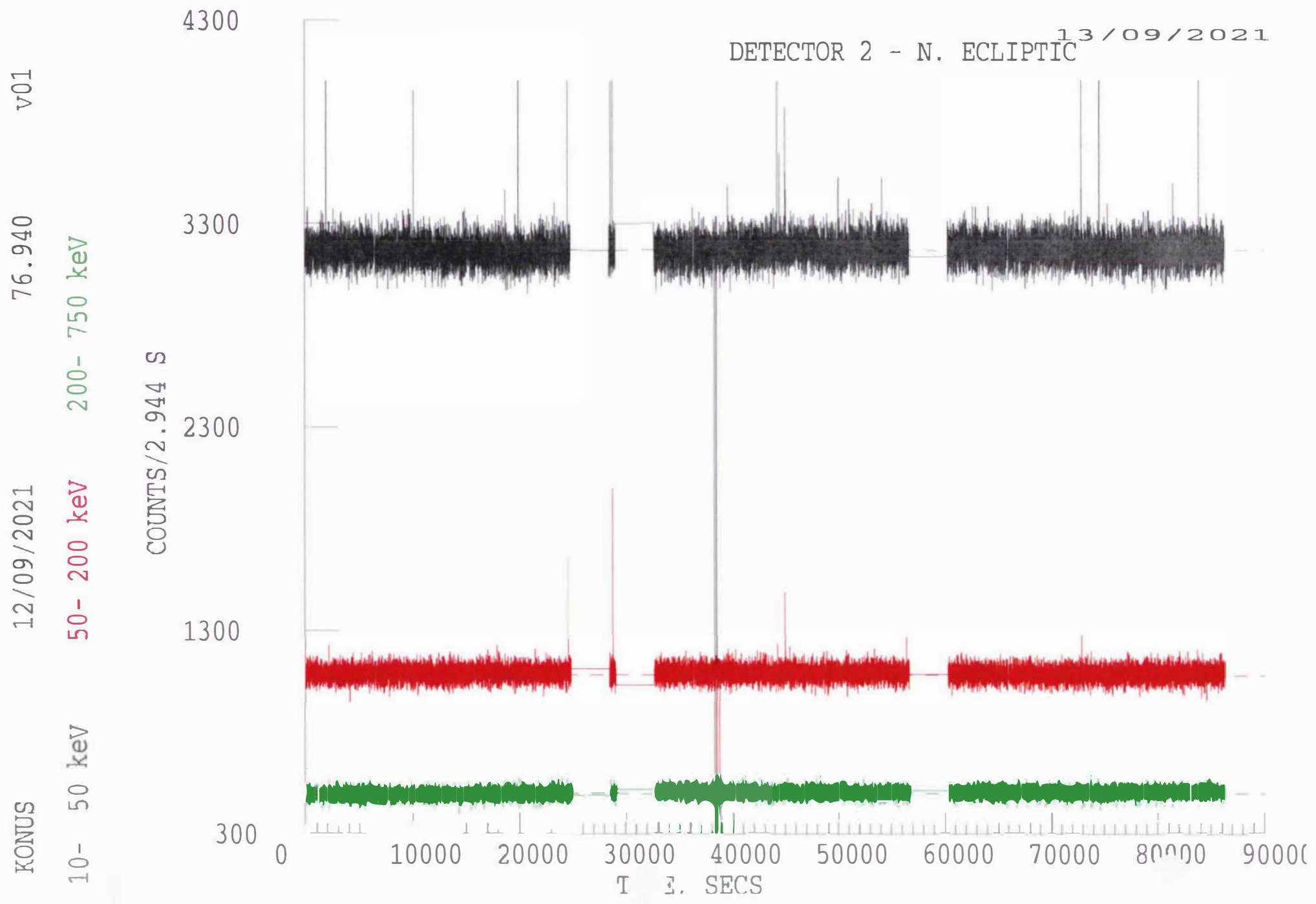
2500

1500

500

0





Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-11T07 to 2021-09-12T08)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 7:40 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30822
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-11T07 to 2021-09-12T08)
DATE: 21/09/12 14:39:57 GMT
FROM: Wangchen Xue at IHEP <xuewc@ihep.ac.cn>

W. C. Xue, S. L. Xiong, C. Cai, Y. Huang, Z. W. Guo, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-11T07 to 2021-09-12T08. Here is the list of these bursts:

Trigger Time (UTC)
2021-09-11T07:15:04.000
2021-09-11T16:35:46.500
2021-09-11T16:36:57.900
2021-09-11T16:38:01.050
2021-09-11T16:39:21.000
2021-09-11T16:50:03.850
2021-09-11T17:00:41.900
2021-09-11T17:01:09.800
2021-09-11T17:01:59.550
2021-09-11T17:04:29.800
2021-09-11T17:10:48.750
2021-09-11T18:02:13.500
2021-09-11T18:04:46.350
2021-09-11T18:54:36.050
2021-09-11T19:43:29.000
2021-09-11T19:46:50.050
2021-09-11T20:13:40.550
2021-09-11T20:22:59.050
2021-09-11T20:33:14.550
2021-09-11T21:07:28.350
2021-09-11T22:51:41.600
2021-09-12T00:34:37.450
2021-09-12T00:45:49.400
2021-09-12T05:14:07.950
2021-09-12T06:51:13.700
2021-09-12T07:28:07.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-12T05 to 2021-09-13T01)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/13/2021, 8:03 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30836
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-12T05 to 2021-09-13T01)
DATE: 21/09/13 15:03:09 GMT
FROM: Ce Cai at IHEP <caice@ihep.ac.cn>

C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Yi Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-12T05 to 2021-09-13T01. Here is the list of these bursts:

Trigger Time (UTC)
2021-09-12T05:44:17.050
2021-09-12T16:26:08.150
2021-09-12T16:52:07.950
2021-09-12T22:16:36.200
2021-09-13T00:27:25.200

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210912_0514

Subject: BAT lightcurve for trigger at 210912_0514

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 12:55 AM

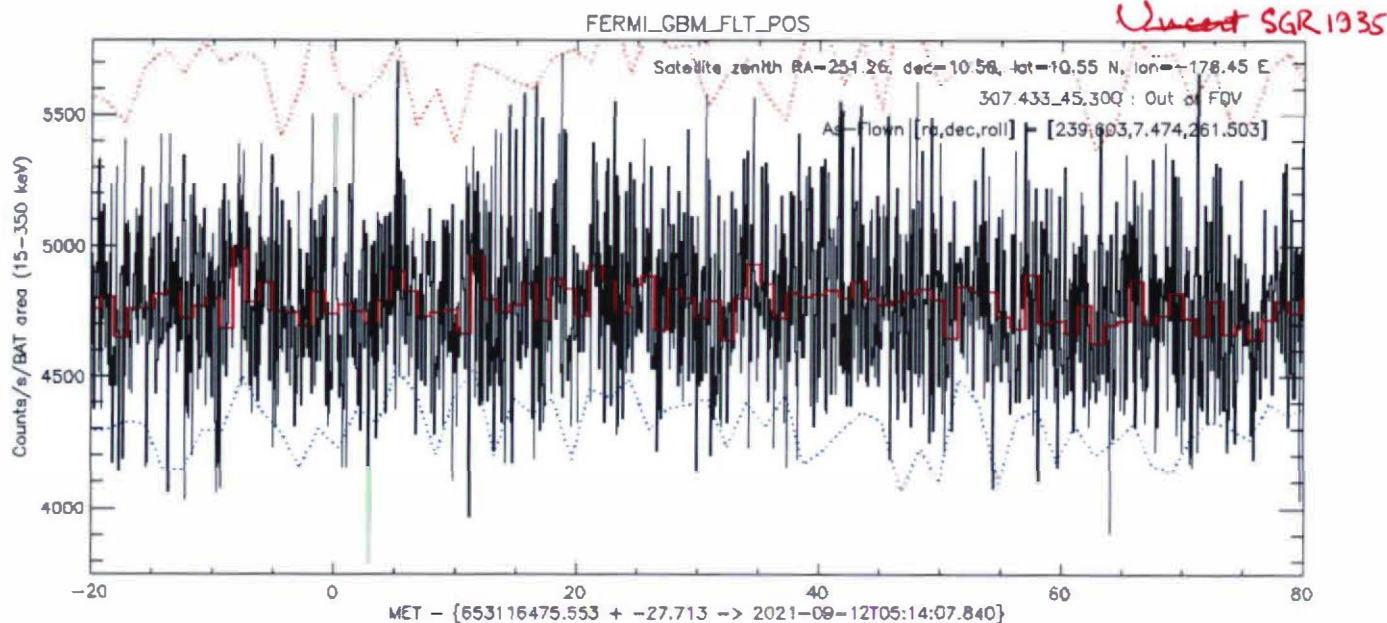
To: mkippen@lanl.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653116475.553 -s 307.433_45.300
Swift Zenith(RA,dec):      251.26, 10.58
Swift Location(lon,lat,alt): -178.45 E, 10.55 N, 554 km
Time(MET + UTCF -> UT):   653116475.553 + -27.713 -> 2021-09-12T05:14:07.840
YYMMDD_SOD:               210912_18847.840      DOY=255
Obs Sequence Number:      00014796003
Obs Target Name:
Obs Date and Times:       2021-09-12 04:49:34 - 05:20:26
Obs Pointing(ra,dec,roll): 239.603, 7.474, 261.50
307.433_45.300_imageloc (boresight_dist, angle): (69, 53)
307.433_45.300_exposure (cm2 cos adjusted): 0
307.433_45.300_altitude: 54 (up)
```

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/tmp/swift/210912_0514.png



Attachments:

/tmp/swift/210912_0514.png

18.2 KB

/tmp/swift/210912_0514_bat64ms_ipn

87.0 KB

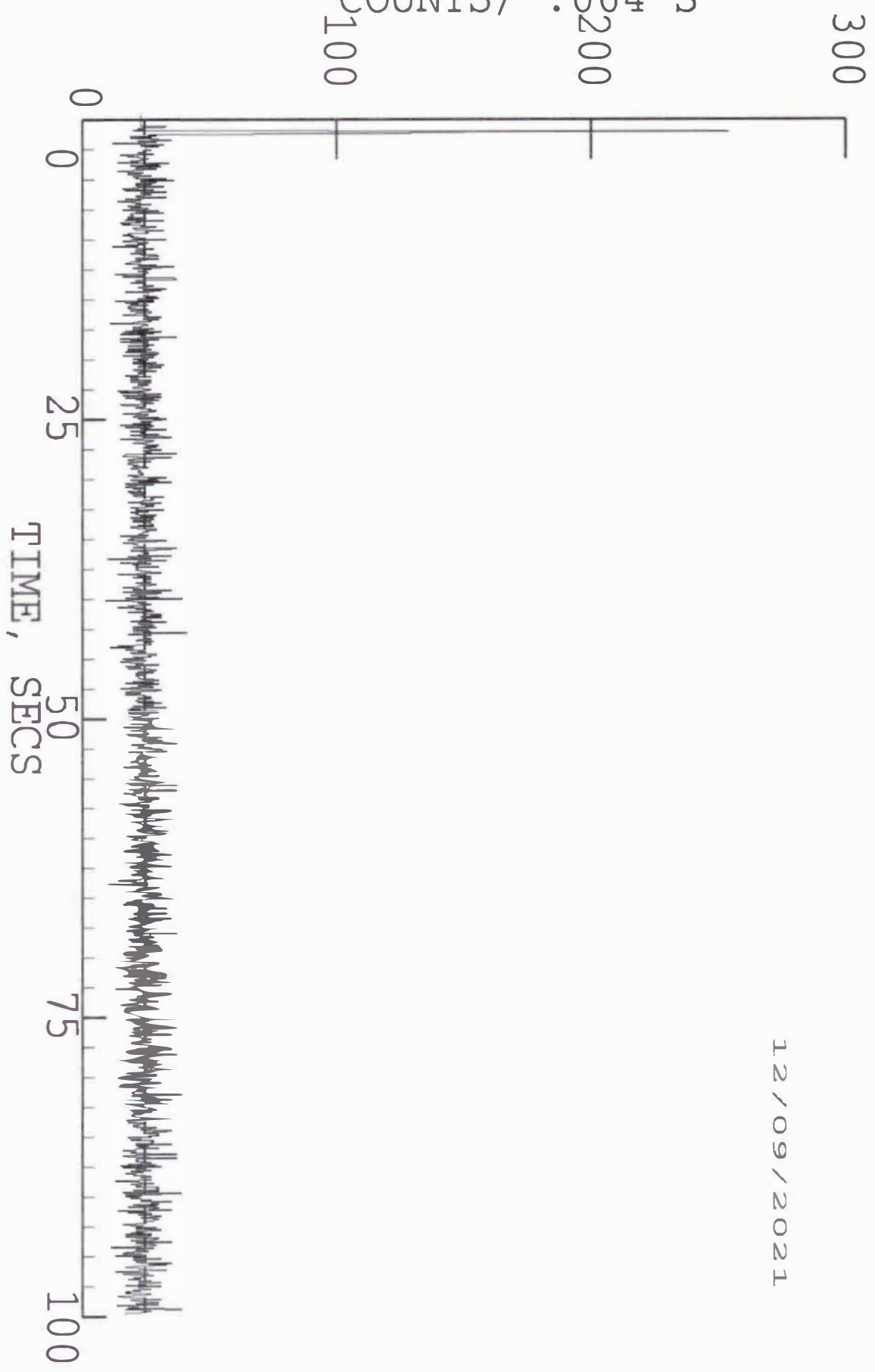
A

KONUS 12/09/21 24677.185 06:51:17.185

50- 200 keV

COUNTS/ .064 S

SGR 1935
+ GBM
SPI NVO



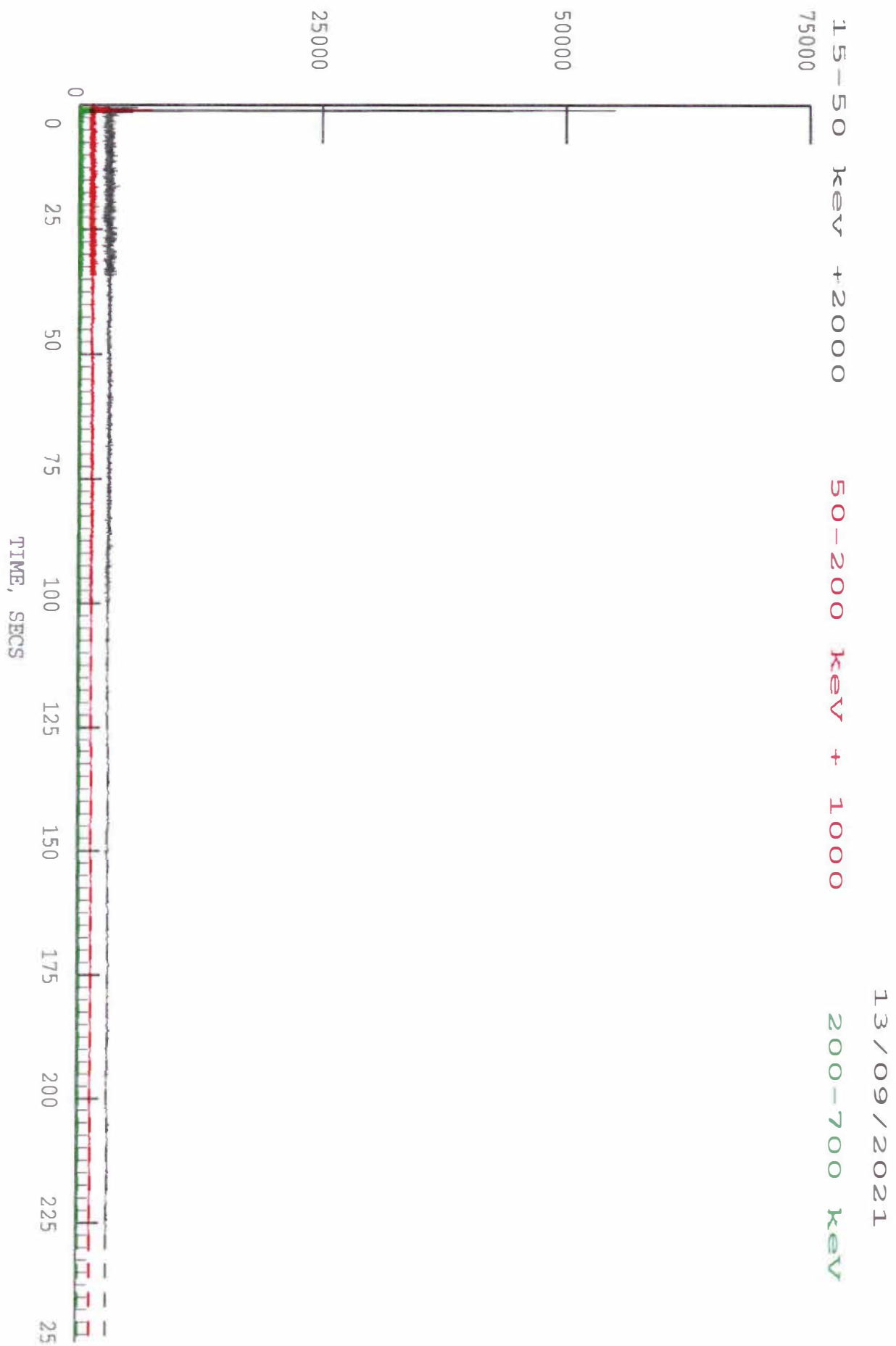
12/09/2021

KONUS

12/09/21

COUNTS/SEC 24677.000

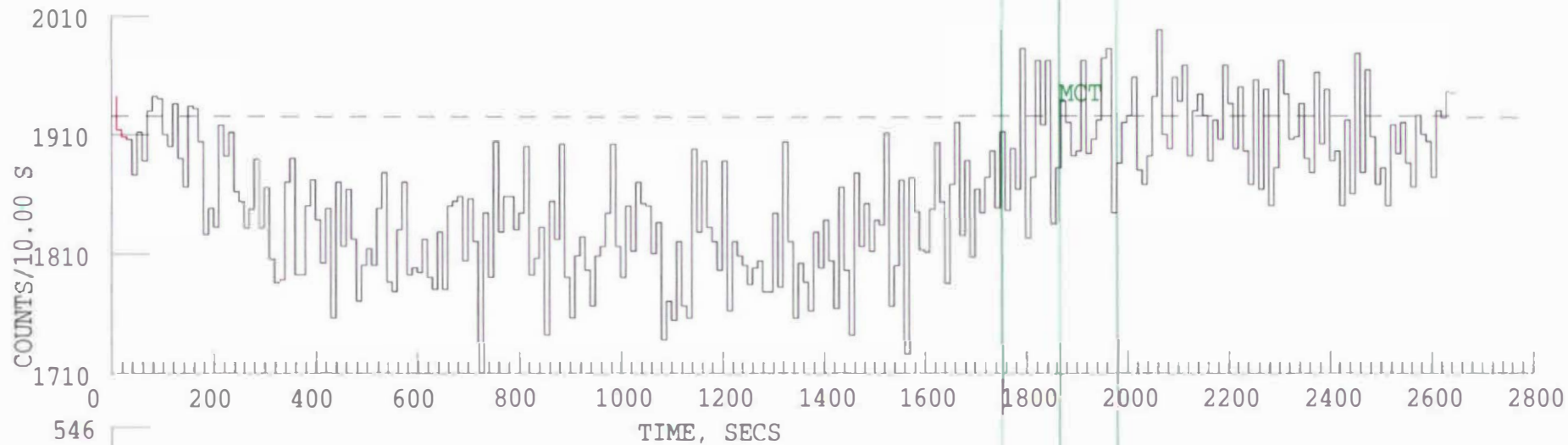
06:51:17.000



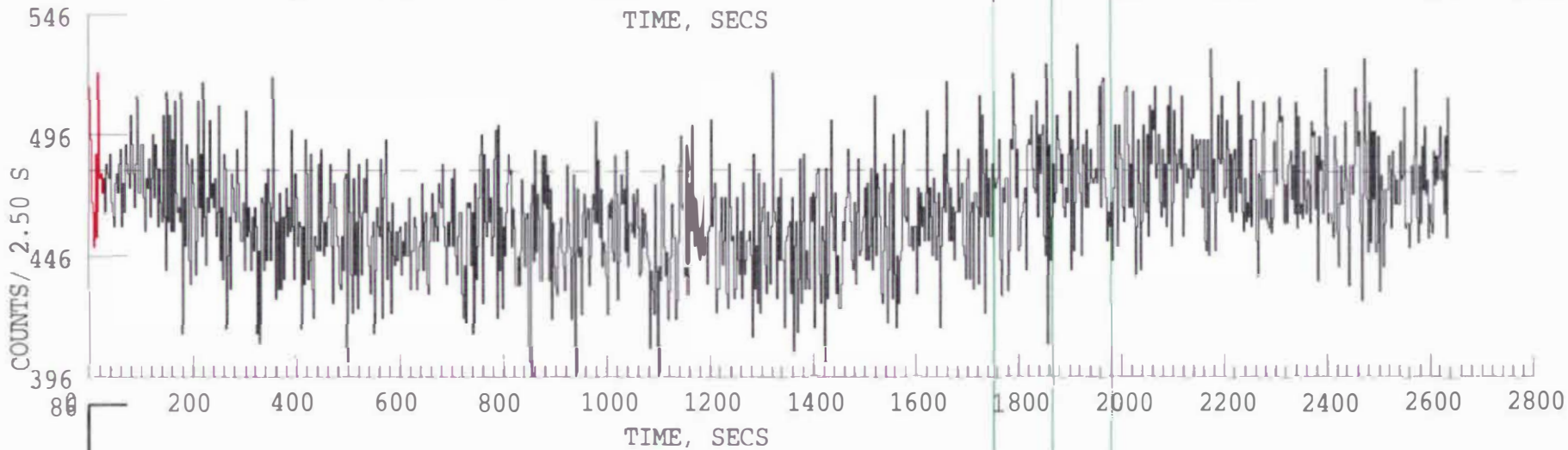
A

13/09/2021

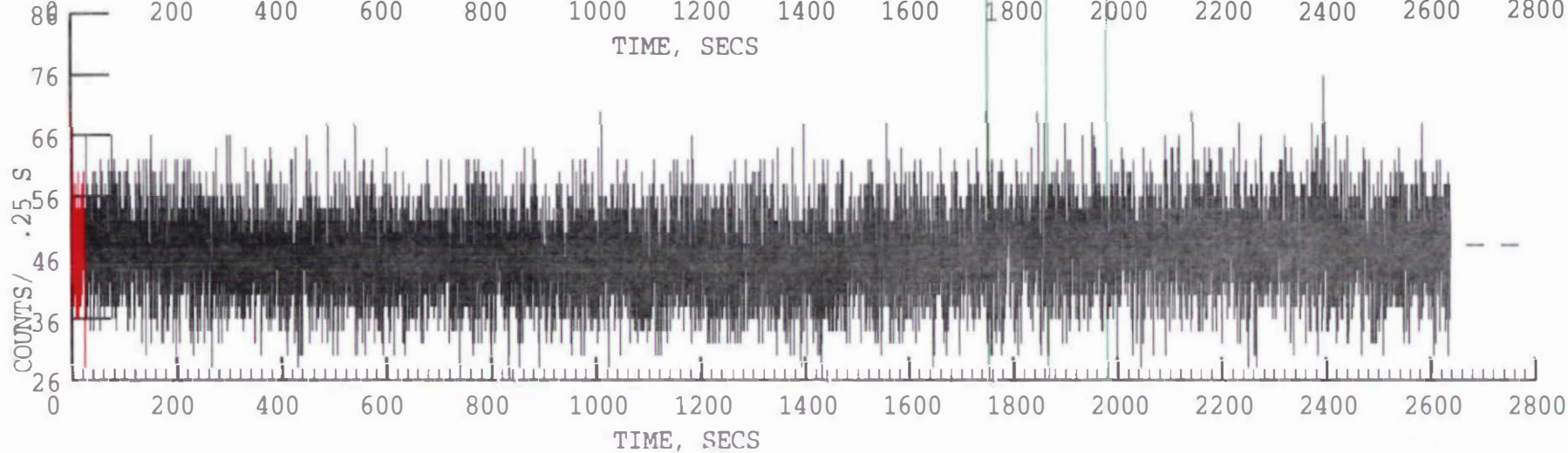
06:28:51.523



23331.523



12/09/21
50-3000 keV



Subject: BAT lightcurve for trigger at 210912_0651

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 2:26 AM

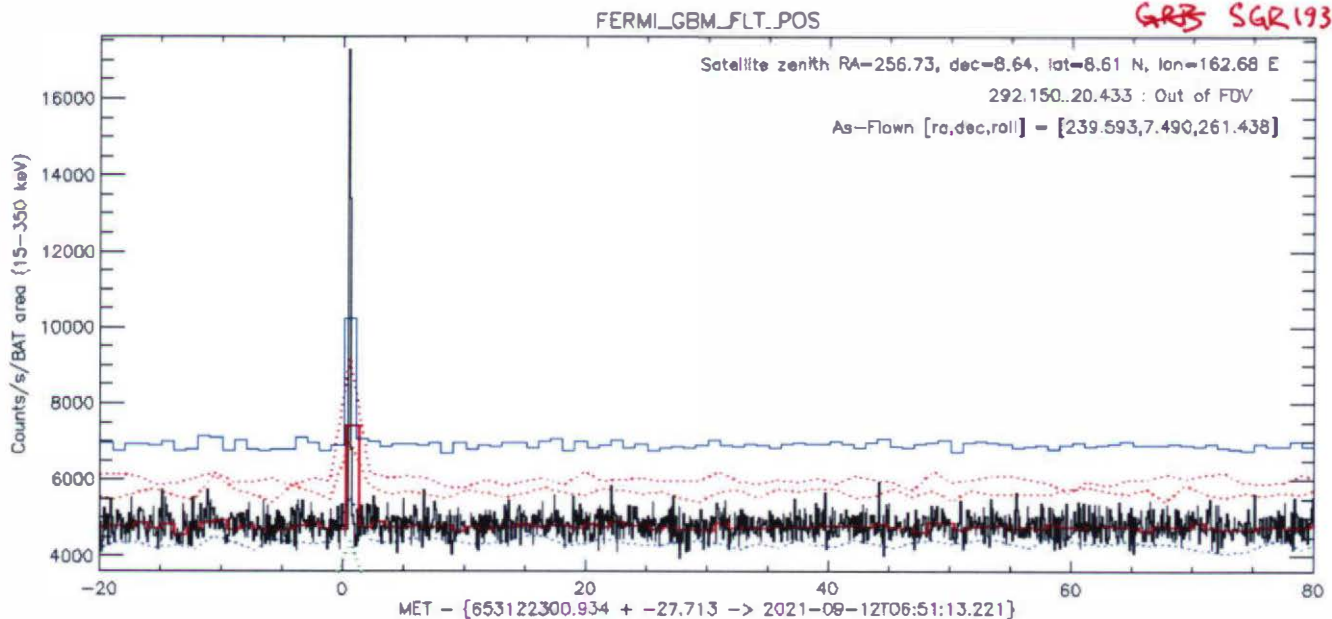
To: dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, vestrand@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653122300.934 -s 292.150_20.433
Swift Zenith(RA,dec):      256.73, 8.64
Swift Location(lon,lat,alt): 162.68 E, 8.61 N, 554 km
Time(MET + UTCF -> UT):  653122300.934 + -27.713 -> 2021-09-12T06:51:13.221
YYMMDD_SOD:              210912_24673.221      DOY=255
Obs Sequence Number:      00014796003
Obs Target Name:          WISEA J155819.19+072824.5
Obs Date and Times:       2021-09-12 06:25:32 - 06:55:46
Obs Pointing(ra,dec,roll): 239.593, 7.490, 261.44
292.150_20.433_imageloc (boresight_dist, angle): (52, 78)
292.150_20.433_exposure (cm2 cos adjusted): 0
292.150_20.433_altitude: 77 (up)
```

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/tmp/swift/210912_0651.png



Attachments:

/tmp/swift/210912_0651_bat64ms_ipn

87.1 KB

/tmp/swift/210912_0651.png

15.8 KB

Subject: BAT lightcurve for trigger at 210912_0728

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 4:57 AM

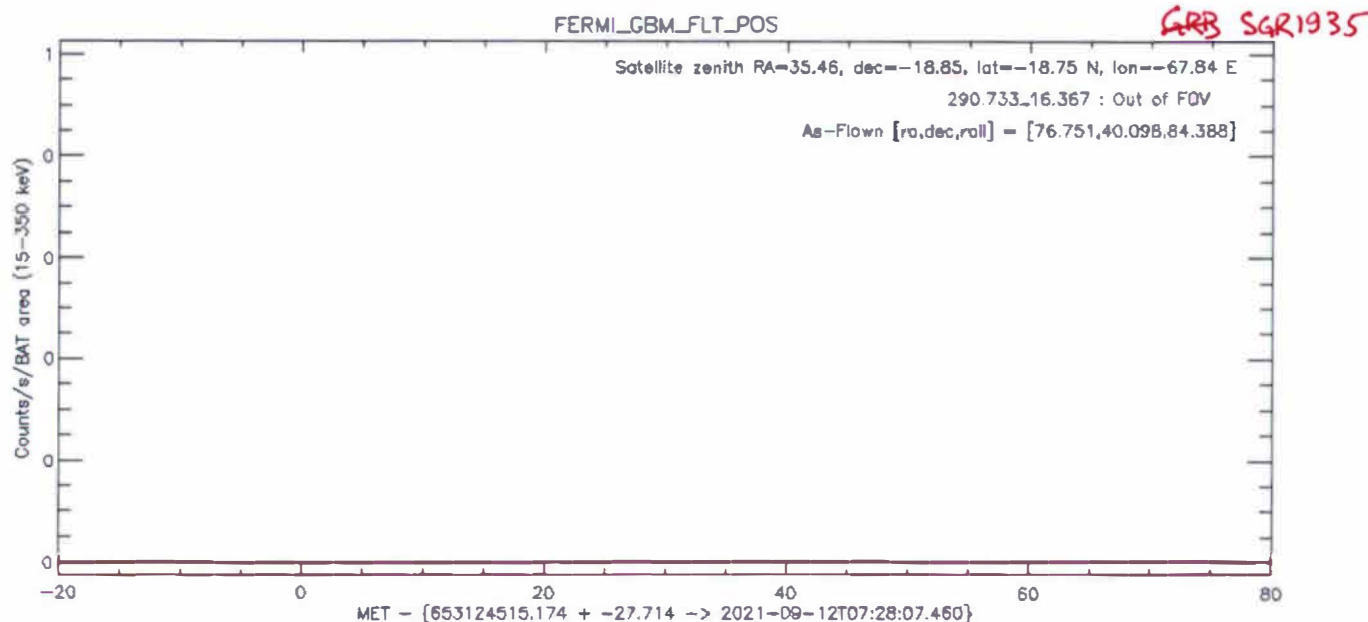
To: ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653124515.174 -s 290.733_16.367
Swift Zenith(RA,dec):      35.46, -18.85
Swift Location(lon,lat,alt): -67.84 E, -18.75 N, 552 km
Time(MET + UTCF -> UT):  653124515.174 + -27.714 -> 2021-09-12T07:28:07.460
YYMMDD_SOD:               210912_26887.460      DOY=255
Obs Sequence Number:      03103753001
Obs Target Name:
Obs Date and Times:       2021-09-12 07:22:34 - 07:41:31
Obs Pointing(ra,dec,roll): 76.751, 40.098, 84.39
290.733_16.367_imageloc (boresight_dist, angle): (115, 149)
290.733_16.367_exposure (cm2 cos adjusted): 0
290.733_16.367_altitude: 4 (depressed but unattenuated)
```

--
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--/tmp/swift/210912_0728.png



-- Attachments

/tmp/swift/210912_0728_bat64ms_ipn

87.0 KB

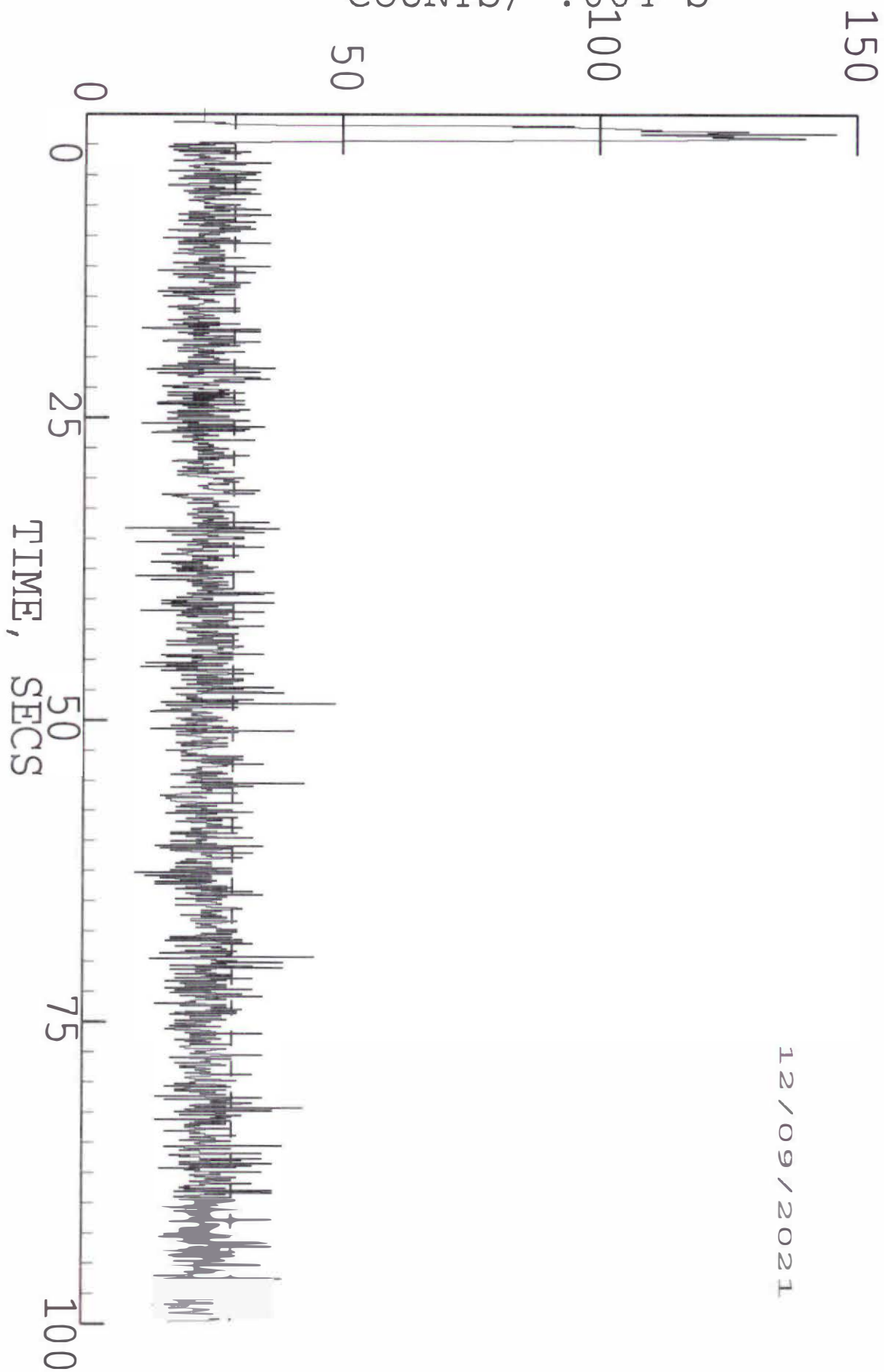
/tmp/swift/210912_0728.png

7.8 KB

KONUS 12/09/21 28904.121 08:01:44.121
50- 200 keV

COUNTS/ .064 S

SGR 1935
SPI NO



12/09/2021

08:01:44.000

COUNTS/SEC 28904.000

12/09/21

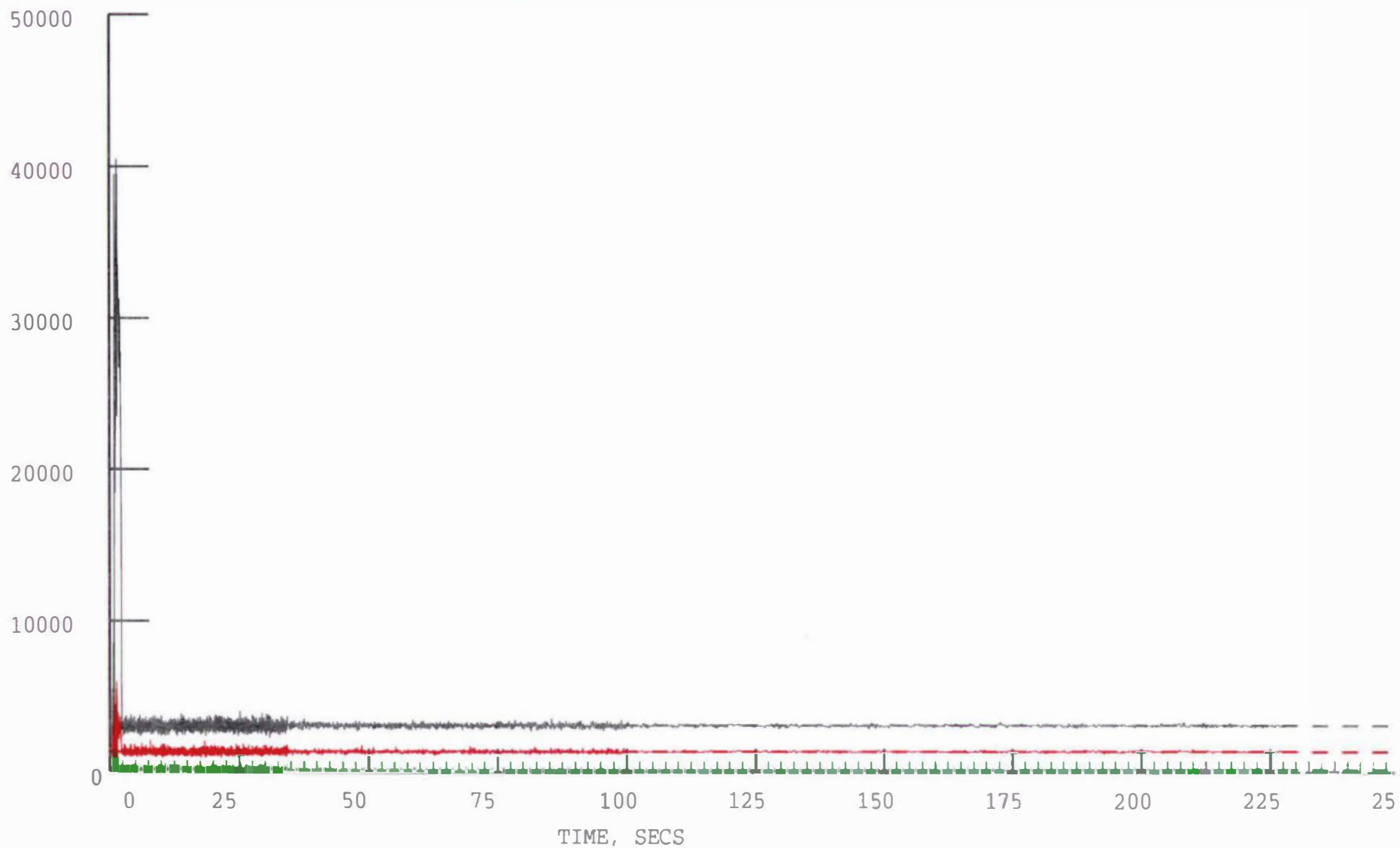
KONUS

13/09/2021

15-50 keV +2000

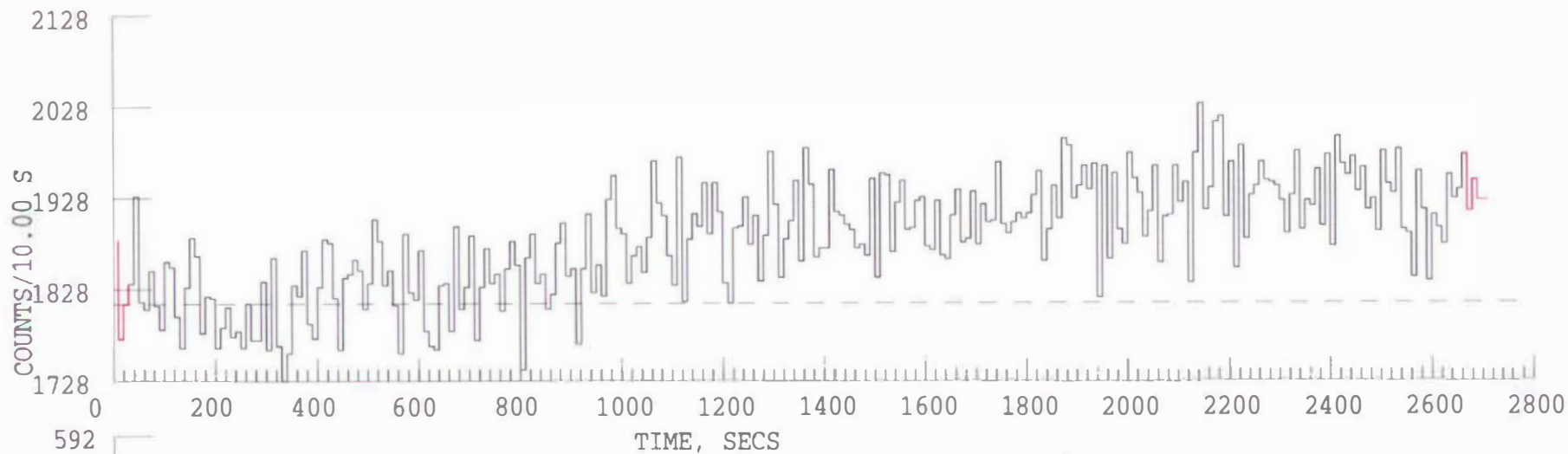
50-200 keV + 1000

200-700 keV

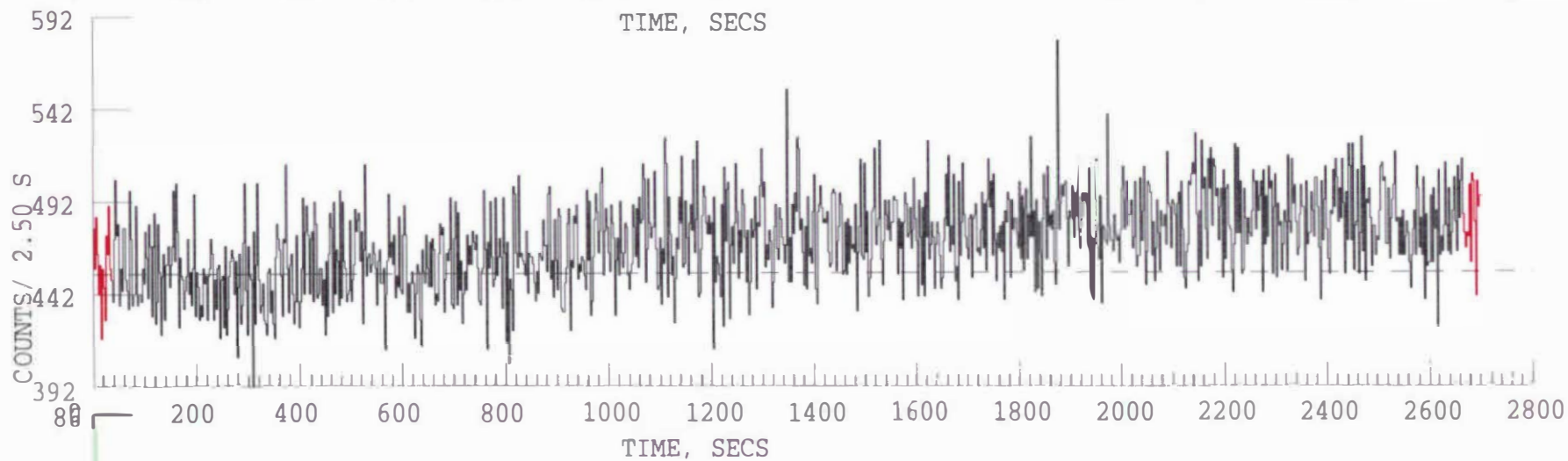


13/09/2021

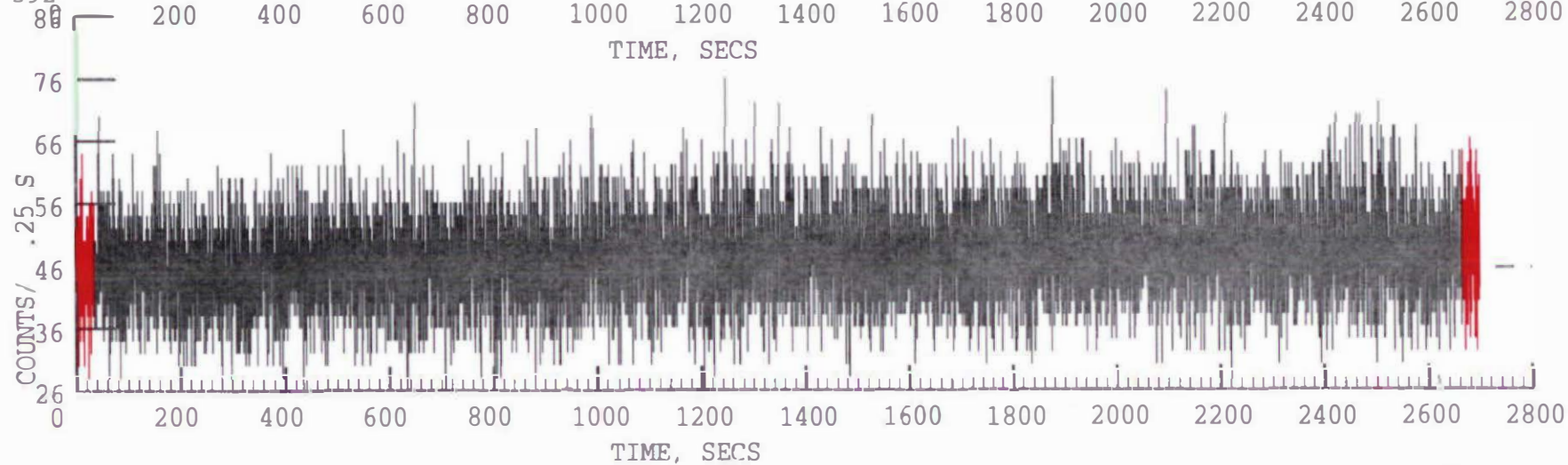
07:38:51.456



27531.456



12/09/21
50-3000 keV



Subject: BAT lightcurve for trigger at 210912_0801

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 8:33 AM

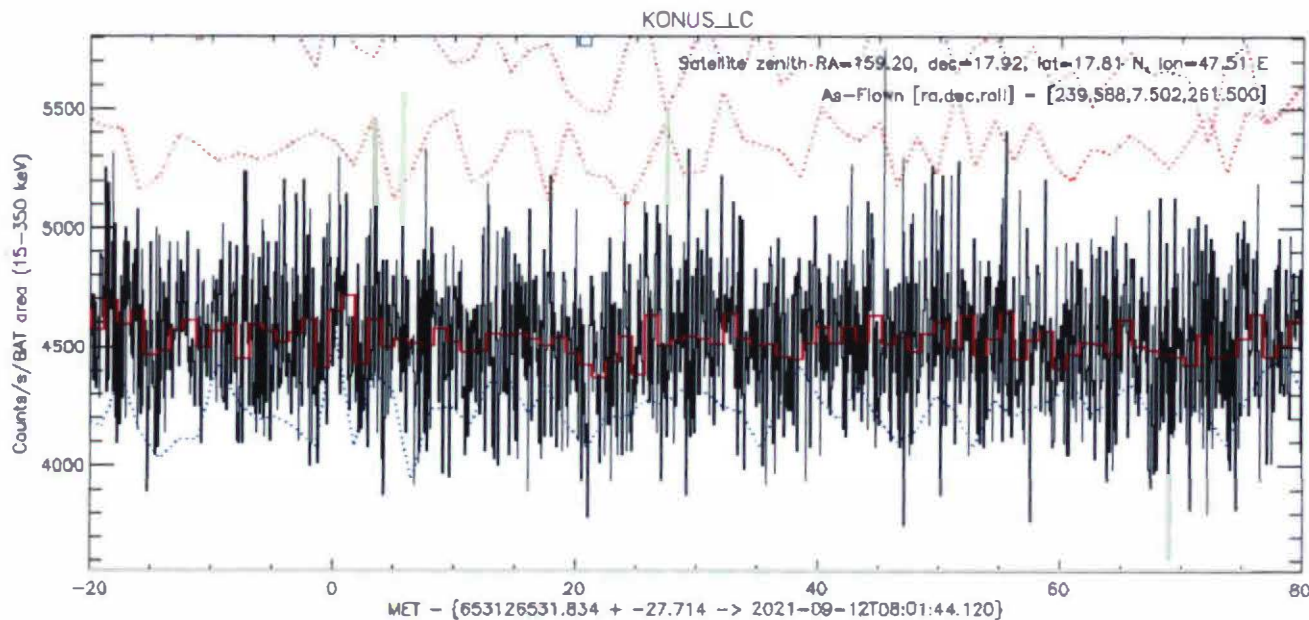
To: palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, mkippen@lanl.gov, aaron.tohu@gmail.com, vestrland@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-12T08:01:44.120
Swift Zenith(RA,dec):      159.20, 17.92
Swift Location(lon,lat,alt): 47.51 E, 17.81 N, 543 km
Time(MET + UTCF -> UT):  653126531.834 + -27.714 -> 2021-09-12T08:01:44.120
YYMMDD_SOD:               210912_28904.120      DOY=255
Obs Sequence Number:       00014796003
Obs Target Name:           WISEA J155819.19+072824.5
Obs Date and Times:        2021-09-12  08:00:34 - 08:31:22
Obs Pointing(ra,dec,roll): 239.588, 7.502, 261.50
```

--
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/tmp/swift/210912_0801.png



Attachments

/tmp/swift/210912_0801_bat64ms_ipn

87.0 KB

/tmp/swift/210912_0801.png

18.9 KB

Subject: BAT lightcurve for trigger at 210912_1010

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 9:36 AM

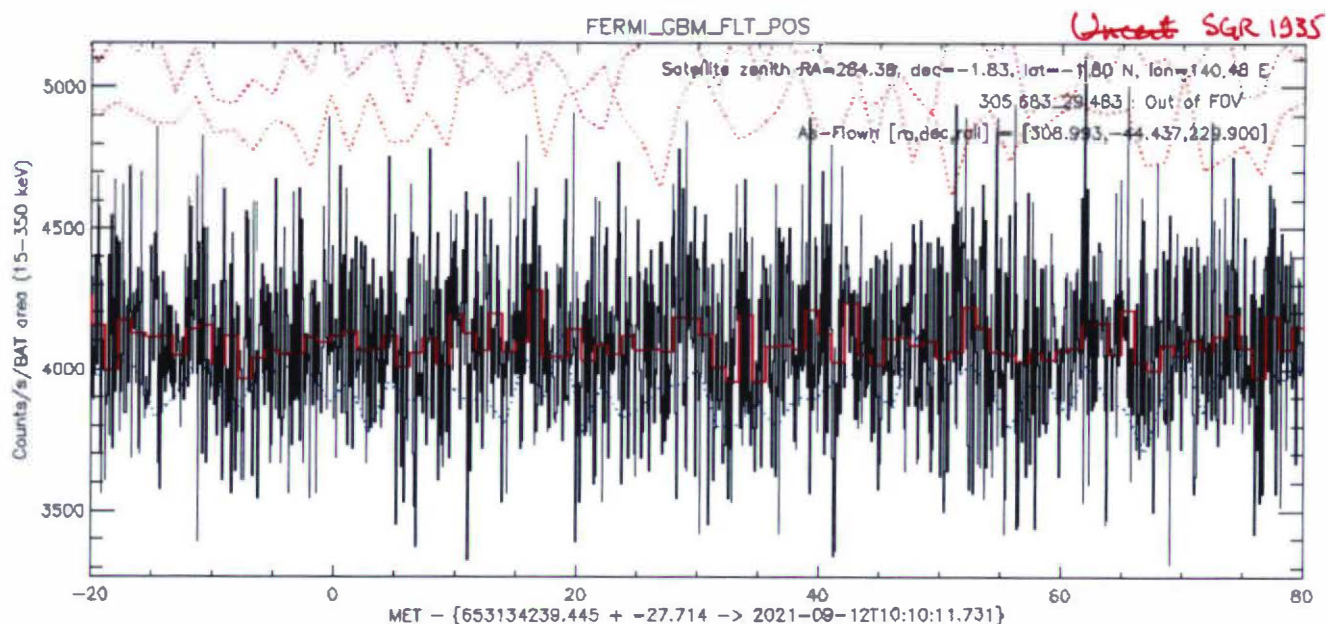
To: bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, mkippen@lanl.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653134239.445 -s 305.683_29.483
Swift Zenith(RA,dec):      284.38, -1.83
Swift location(lon,lat,alt): 140.48 E, -1.80 N, 557 km
Time(MET + UTCF -> UT):   653134239.445 + -27.714 -> 2021-09-12T10:10:11.731
YYMMDD_SOD:               210912_36611.731      DOY=255
Obs Sequence Number:      01071993009
Obs Target Name:          GRB 210905A
Obs Date and Times:       2021-09-12 10:07:58 - 10:17:33
Obs Pointing(ra,dec,roll): 308.993, -44.437, 229.90
305.683_29.483_imageloc (boresight_dist, angle): (74, 37)
305.683_29.483_exposure (cm2 cos adjusted): 0
305.683_29.483_altitude: 76 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210912_1010.png



Attachments:

/tmp/swift/210912_1010_bat64ms_ipn

87.1 KB

/tmp/swift/210912_1010.png

20.0 KB



Subject: GRB 210912A: Swift detection of a burst
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 4:18 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30820
SUBJECT: GRB 210912A: Swift detection of a burst
DATE: 21/09/12 11:18:18 GMT
FROM: David Palmer at LANL <palmer@lanl.gov>

E. Troja (NASA/GSFC/UMCP), A. P. Beardmore (U Leicester),
R. Caputo (NASA/GSFC), N. J. Klingler (GSFC/UMBC/CRESSTII),
F. E. Marshall (NASA/GSFC), K. L. Page (U Leicester) and
D. M. Palmer (LANL) report on behalf of the Neil Gehrels Swift
Observatory Team:

SPI NO

39671
At 11:01:11 UT, the Swift Burst Alert Telescope (BAT) triggered and
located GRB 210912A (trigger=1072990). Swift slewed immediately to the burst.
The BAT on-board calculated location is
RA, Dec 129.769, +79.194 which is
RA(J2000) = 08h 39m 04s
Dec(J2000) = +79d 11' 38"

with an uncertainty of 3 arcmin (radius, 90% containment, including
systematic uncertainty). The BAT light curve showed a complex
structure with a duration of about 40 sec. The peak count rate
was ~2800 counts/sec (15-350 keV), at ~0 sec after the trigger.

The XRT began observing the field at 11:02:04.1 UT, 52.6 seconds after
the BAT trigger. Using promptly downlinked data we find a bright,
fading, uncatalogued X-ray source located at RA, Dec 129.88358,
79.22292 which is equivalent to:

RA(J2000) = 08h 39m 32.06s
Dec(J2000) = +79d 13' 22.5"

with an uncertainty of 7.5 arcseconds (radius, 90% containment). This
location is 129 arcseconds from the BAT onboard position, within the
BAT error circle. This position may be improved as more data are
received; the latest position is available at
<https://www.swift.gsfc.nasa.gov/sper>.

A power-law fit to a spectrum formed from promptly downlinked event
data gives a column density consistent with the Galactic value of $2.40 \times 10^{20} \text{ cm}^{-2}$ (Willingale et al. 2013).

The initial flux in the 2.5 s image was $6.40 \times 10^{-10} \text{ erg cm}^{-2} \text{ s}^{-1}$ (0.2-10 keV).

There are no UVOT data available.

Burst Advocate for this burst is E. Troja (eleonora.troja AT nasa.gov).
Please contact the BA by email if you require additional information
regarding Swift followup of this burst. In extremely urgent cases, after
trying the Burst Advocate, you can contact the Swift PI by phone (see
Swift TOO web site for information: <http://www.swift.psu.edu/>)

Subject: GRB 210912A: Swift-BAT refined analysis
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/13/2021, 4:34 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30839
SUBJECT: GRB 210912A: Swift-BAT refined analysis
DATE: 21/09/13 23:34:08 GMT
FROM: Sibasish Laha at GSFC <sibasish.laha@nasa.gov>

M. Stamatikos (OSU), S. D. Barthelmy (GSFC),
H. A. Krimm (NSF), S. Laha (GSFC/UMBC),
A. Y. Lien (U Tampa), C. B. Markwardt (GSFC),
D. M. Palmer (LANL), T. Sakamoto (AGU),
(i.e. the Swift-BAT team):

Using the data set from T-239 to T+963 sec from the recent telemetry downlink,
we report further analysis of BAT GRB 210912A (trigger #1072990)
(Troja et al., GCN Circ. 30820). The BAT ground-calculated position is
RA, Dec = 129.874, 79.216 deg which is
RA(J2000) = 08h 39m 29.7s
Dec(J2000) = +79d 12' 59.3"
with an uncertainty of 1.2 arcmin, (radius, sys+stat, 90% containment).
The partial coding was 100%.

The BAT light curve showed a complex structure with a duration of about ~30 sec.
T90 (15-350 keV) is 28.35 +- 14.34 sec (estimated error including systematics).

The time-averaged spectrum from T-23 to T+25 sec is best fit by a simple
power-law model. The power law index of the time-averaged spectrum is
1.61 +- 0.13. The fluence in the 15-150 keV band is 1.1 +- 0.1 x 10⁻⁰⁶ erg/cm2.
The 1-sec peak photon flux measured from T+0.23 sec in the 15-150 keV band
is 1.7 +- 0.2 ph/cm2/sec. All the quoted errors are at the 90% confidence
level.

The results of the batgrbproduct analysis are available at
http://gsn.gsfc.nasa.gov/notices_s/1072990/BA/

BAT

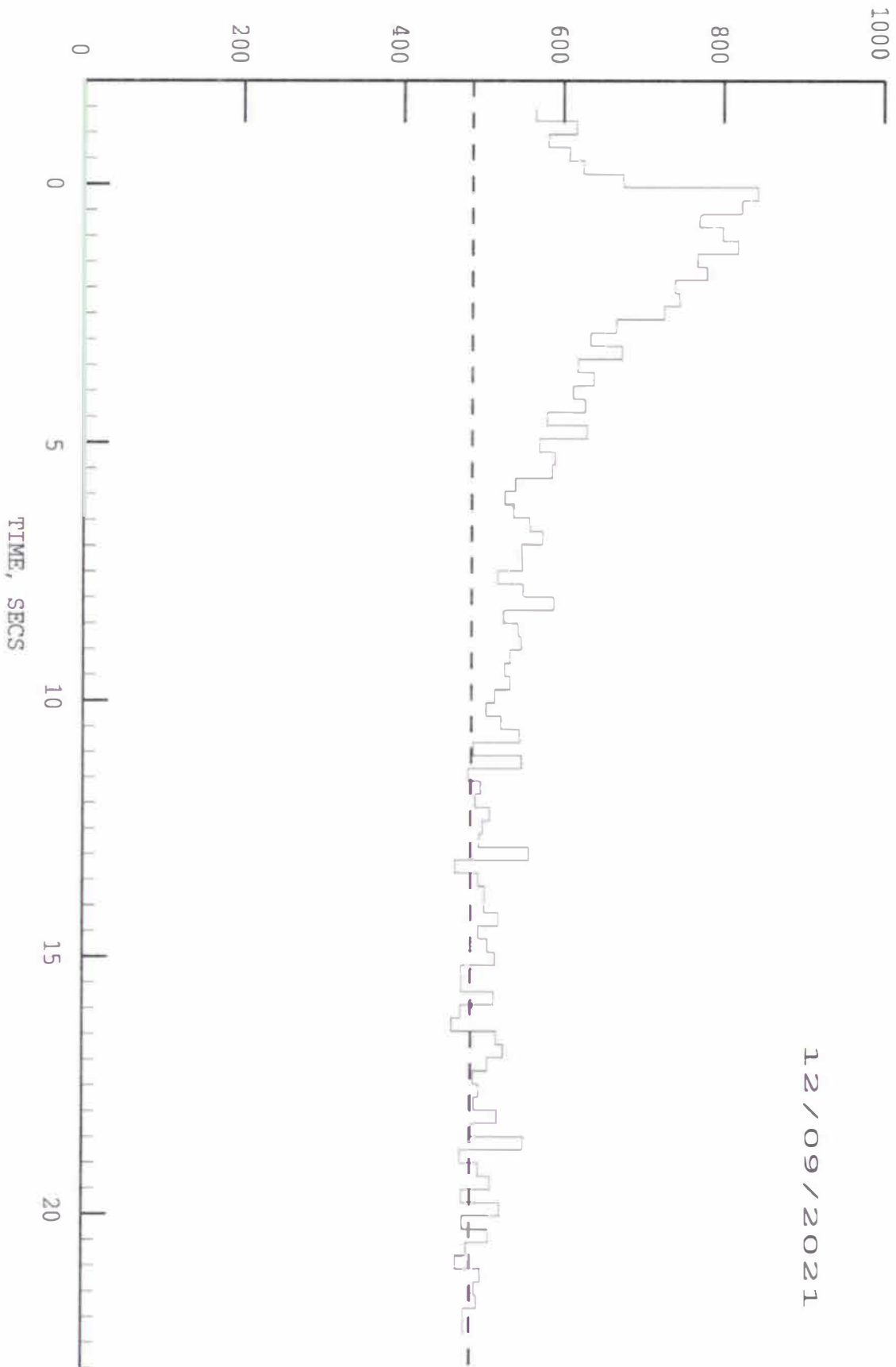
12/09/21

39671.550

11:01:11.550

25- 100 keV

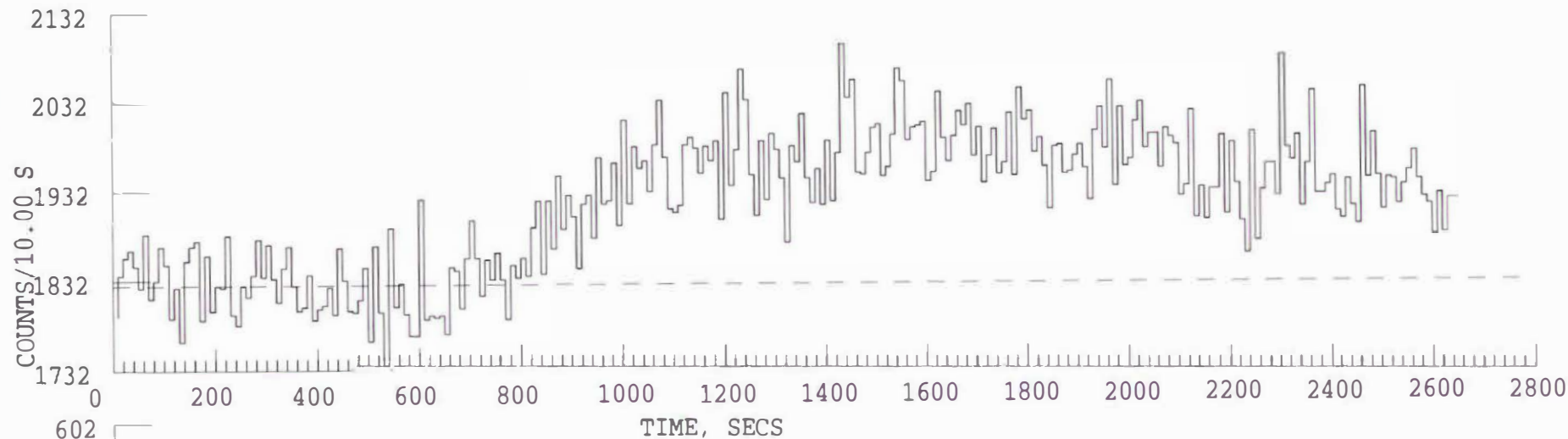
COUNTS/ .256 S



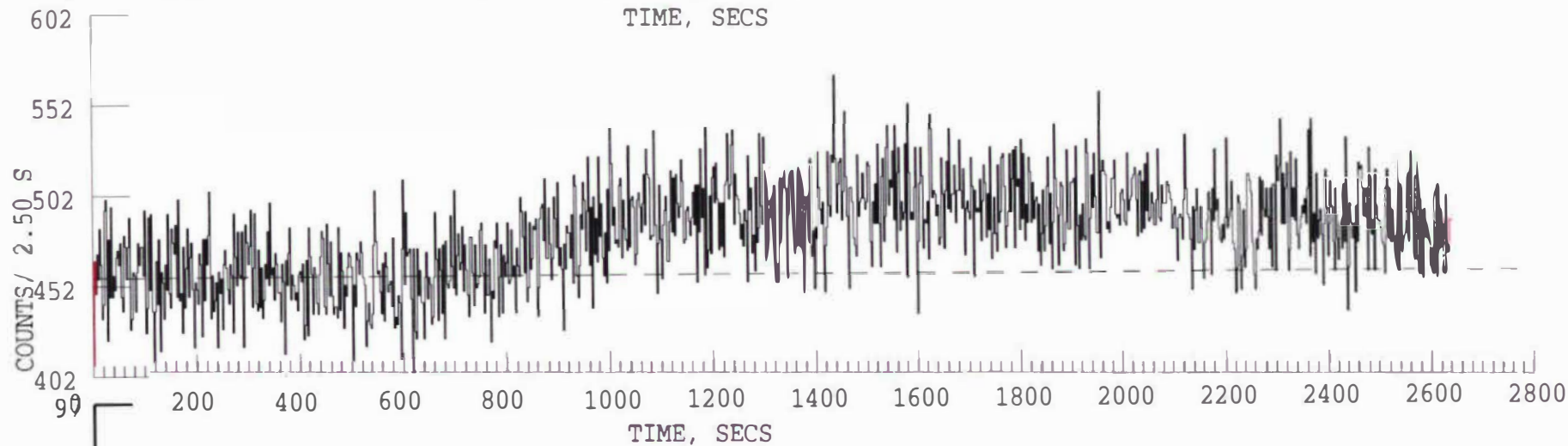
17/11/2021

10:38:51.266

Decented



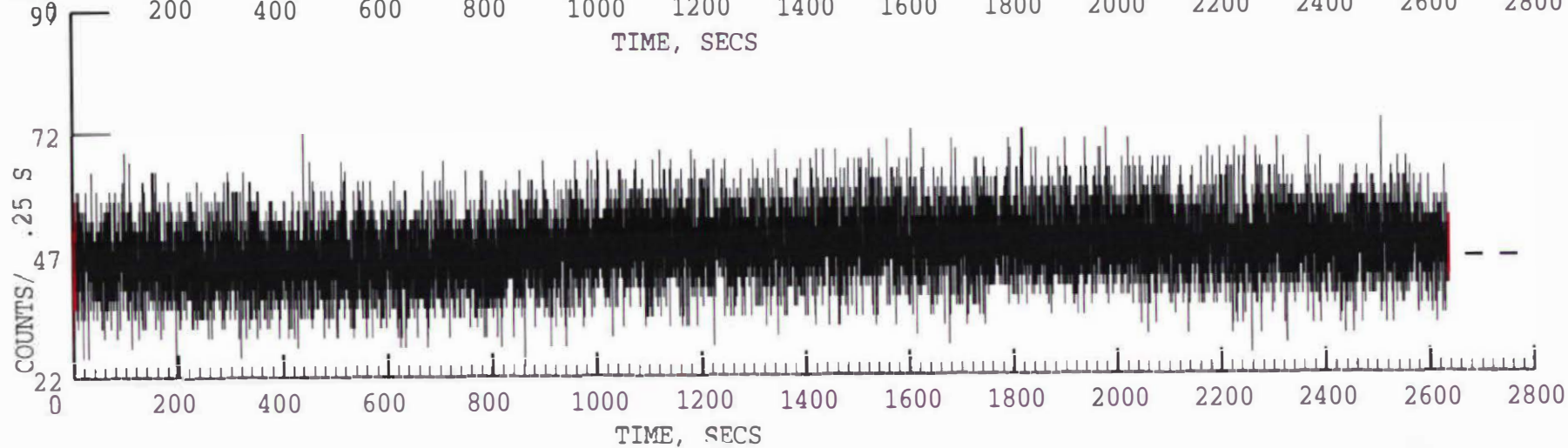
38331.266



12/09/21

50-3000 keV

ODYSSEY



BAT lightcurve for trigger at 210912_1219

Subject: BAT lightcurve for trigger at 210912_1219

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 10:37 AM

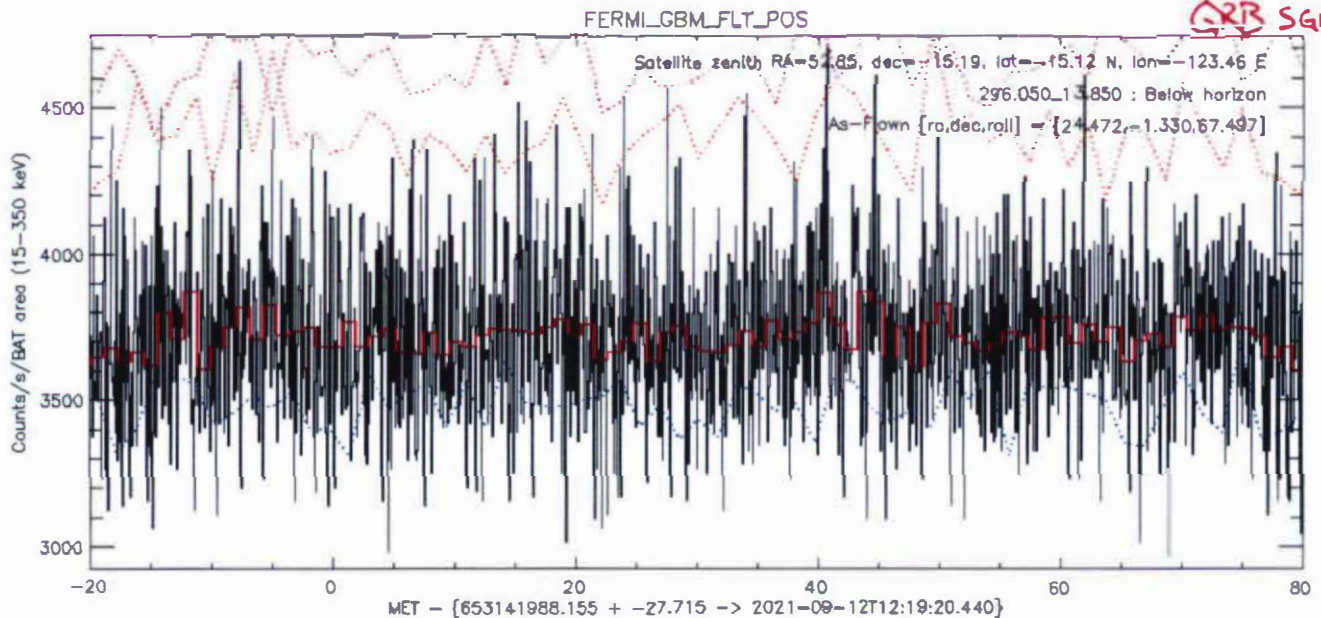
To: vestrand@lanl.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653141988.155 -s 296.050_13.850
Swift Zenith(RA,dec):      52.85, -15.19
Swift Location(lon,lat,alt): -123.46 E, -15.12 N, 549 km
Time(MET + UTCF -> UT):   653141988.155 + -27.715 -> 2021-09-12T12:19:20.440
YYMMDD_SOD:               210912_44360.440      DOY=255
Obs Sequence Number:      00014807007
Obs Target Name:          ZTF21abzbmhz
Obs Date and Times:       2021-09-12 12:04:34 - 12:24:31
Obs Pointing(ra,dec,roll): 24.472, -1.330, 67.50
296.050_13.850_imageloc (boresight_dist, angle): (89, 126)
296.050_13.850_exposure (cm2 cos adjusted): 0
296.050_13.850_altitude: -6 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210912_1219.png



Attachments

/tmp/swift/210912_1219.png

20.7 KB

/tmp/swift/210912_1219_bat64ms_ipn

87.0 KB

Subject: BAT lightcurve for trigger at 210912_1231

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 10:37 AM

To: bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653142722.005 -s 344.910_24.630
Swift Zenith(RA,dec):      97.19, -0.62
Swift Location(lon,lat,alt): -82.16 E, -0.64 N, 542 km
Time(MET + UTCF -> UT):   653142722.005 + -27.715 -> 2021-09-12T12:31:34.290
YYMMDD_SOD:               210912_45094.290      DOY=255
Obs Sequence Number:      00049717009
Obs Target Name:          MASER 093106.7+4904
Obs Date and Times:       2021-09-12 12:29:34 - 12:31:30
Obs Pointing(ra,dec,roll): 142.755, 49.099, 133.23
344.910_24.630_imageloc (boresight_dist, angle): (104, 116)
344.910_24.630_exposure (cm2 cos adjusted): 0
344.910_24.630_altitude: 2 (depressed but unattenuated)
```

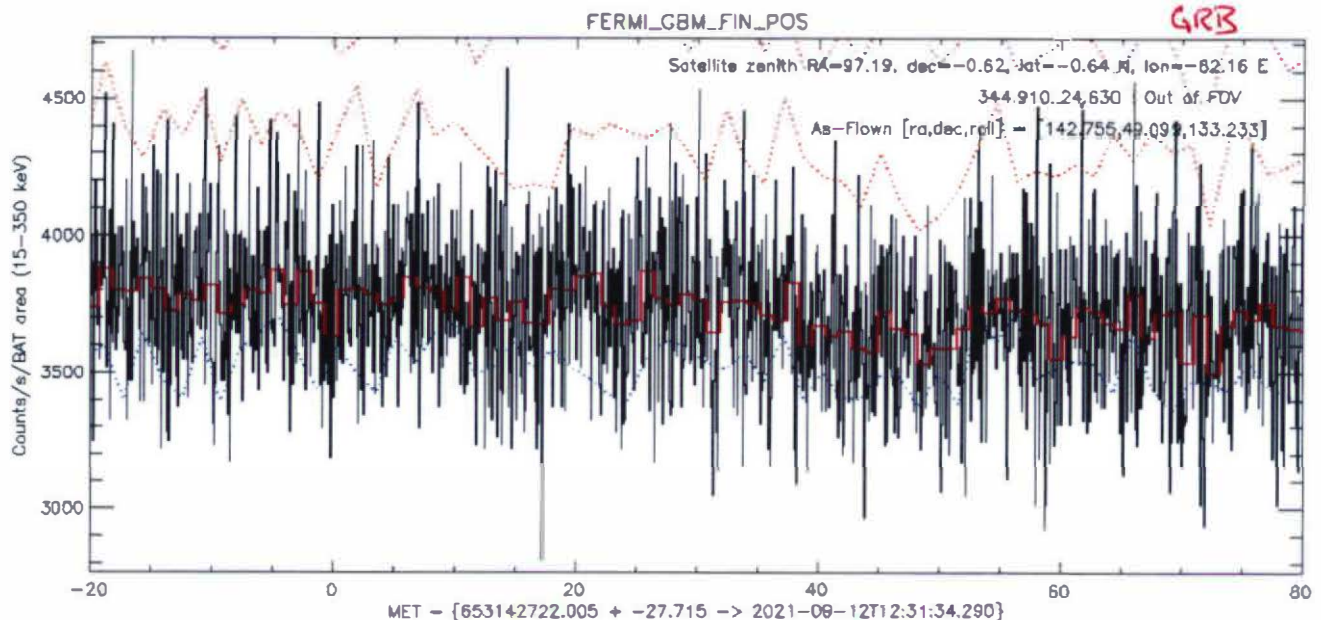
SPI W/O

338.3 21.1 12.2

NO occulted

David Palmer dpalmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

— /tmp/swift/210912_1231.png —



— Attachments: —

/tmp/swift/210912_1231_bat64ms_ipn

87.1 KB

/tmp/swift/210912_1231.png

20.2 KB

Subject: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 8:33 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30831
SUBJECT: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
DATE: 21/09/13 03:33:14 GMT
FROM: Oliver J Roberts at USRA/NASA <oliver.roberts@nasa.gov>

O.J. Roberts (USRA/NASA-MSFC) reports on behalf of the Fermi GBM Team:

"At 20:16:10.44 UT on 12 September 2021, the Fermi Gamma-Ray Burst Monitor (GBM) triggered and located a bright, SGR-like burst from the direction of the magnetar SGR 1935+2154 (trigger 653170575/210912845).

The GBM on-ground location is consistent with the known position of the SGR.

The angle from the Fermi LAT boresight at the GBM trigger time is 96 degrees.

The event episode has a duration (T90) of about 1 s (10-1000 keV). During this time interval, there are several very short bursts. The first burst has a rapid risetime.

The whole event is best fit with a power law function with an exponential high-energy cutoff. The power law index is 0.08 ± 0.08 and the cutoff energy, parameterized as Epeak, is 32.1 ± 0.3 keV.

The time-integrated event fluence (10-1000 keV) from T0-0.064 to T0+0.944s is $(3.545 \pm 0.038) \times 10^{-6}$ erg/cm². The average photon flux in the 10-1000 keV band during this period is 84 ± 1 ph/s/cm².

Fermi GBM has also triggered on a further 24 bursts from the direction of SGR 1935+2154 since yesterday's GCN (Roberts and Wood, GCN 30806):

Date and Time in UTC	Fermi MET (s)
2021-09-12T23:19:32.08	653181577
2021-09-12T20:16:10.44	653170575
2021-09-12T15:03:50.60	653151835
2021-09-12T13:55:16.45	653147721
2021-09-12T12:19:20.44	653141965
2021-09-12T10:10:11.73	653134216
2021-09-12T07:28:07.46	653124492
2021-09-12T06:51:13.22	653122278
2021-09-12T05:14:07.84	653116452
2021-09-11T02:36:38.24	653093506
2021-09-11T20:22:59.04	653084584
2021-09-11T20:05:46.22	653083551
2021-09-11T18:54:36.05	653079281
2021-09-11T17:01:09.77	653072474
2021-09-11T16:50:03.83	653071808
2021-09-11T16:36:57.91	653071022
2021-09-11T15:26:11.55	653066776
2021-09-11T15:15:25.44	653066130
2021-09-11T15:03:00.55	653065385
2021-09-11T13:27:33.85	653059658
2021-09-11T11:53:57.29	653054042
2021-09-11T10:42:51.85	653049776
2021-09-11T05:32:38.65	653031163
2021-09-11T03:02:28.36	653022153

Fermi GBM will not report on future triggers from this event.

The spectral analysis results presented above are preliminary. We encourage multi-wavelength observations to follow-up this most recent activation.

For Fermi GBM data and info, please visit the official Fermi GBM Support Page:
<https://fermi.gsfc.nasa.gov/ssc/data/access/gbm/>

Subject: BAT lightcurve for trigger at 210912_1503

From: "palmer+automatic_lightcurve via ipn" <lpn@ssl.berkeley.edu>

Date: 9/12/2021, 1:10 PM

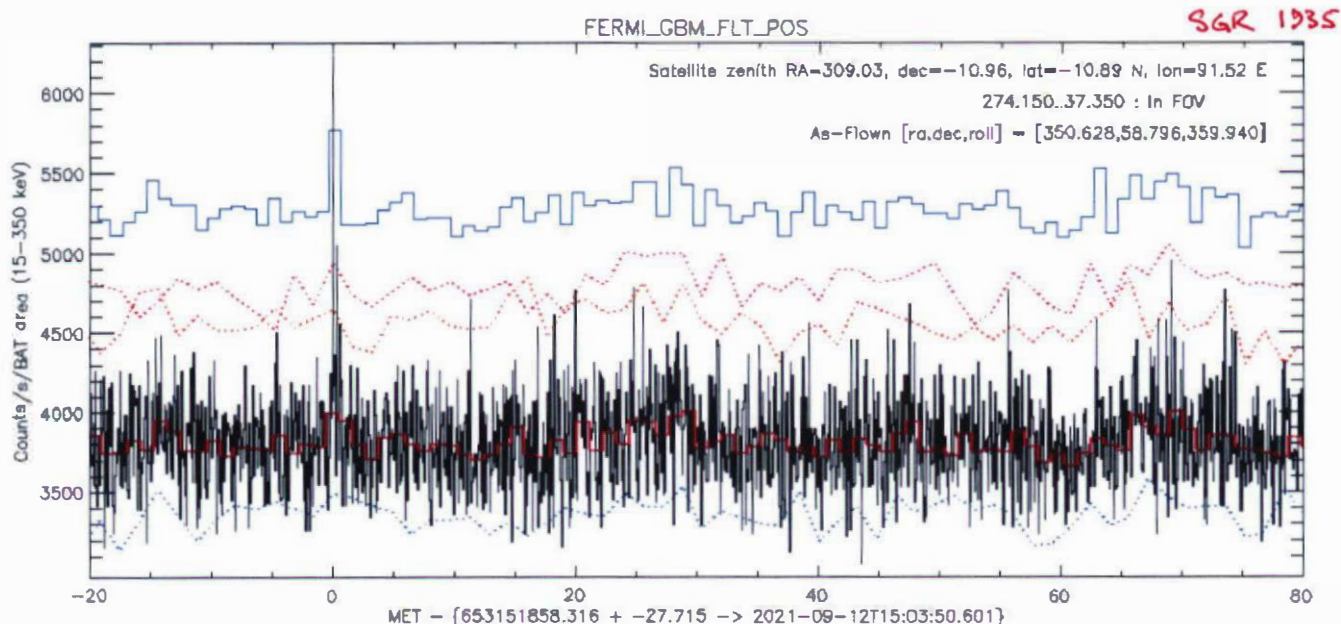
To: lpn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, vestrand@lanl.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653151858.316 -s 274.150_37.350
Swift Zenith(RA,dec):      309.03, -10.96
Swift Location(lon,lat,alt): 91.52 E, -10.89 N, 558 km
Time(MET + UTCF -> UT):   653151858.316 + -27.715 -> 2021-09-12T15:03:50.601
YYMMOD_SOD:               210912_54230.601      DOY=255
Obs Sequence Number:      00050451037
Obs Target Name:          Cas A Bottom 2
Obs Date and Times:       2021-09-12 14:59:34 - 15:04:29
Obs Pointing(ra,dec,roll): 350.628, 58.796, 359.94
274.150_37.350_imageloc (boresight_dist, angle): (52, -169)
274.150_37.350_exposure (cm2 cos adjusted): 1221
274.150_37.350_altitude: 55 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210912_1503.png



Attachments

/tmp/swift/210912_1503.png

19.5 KB

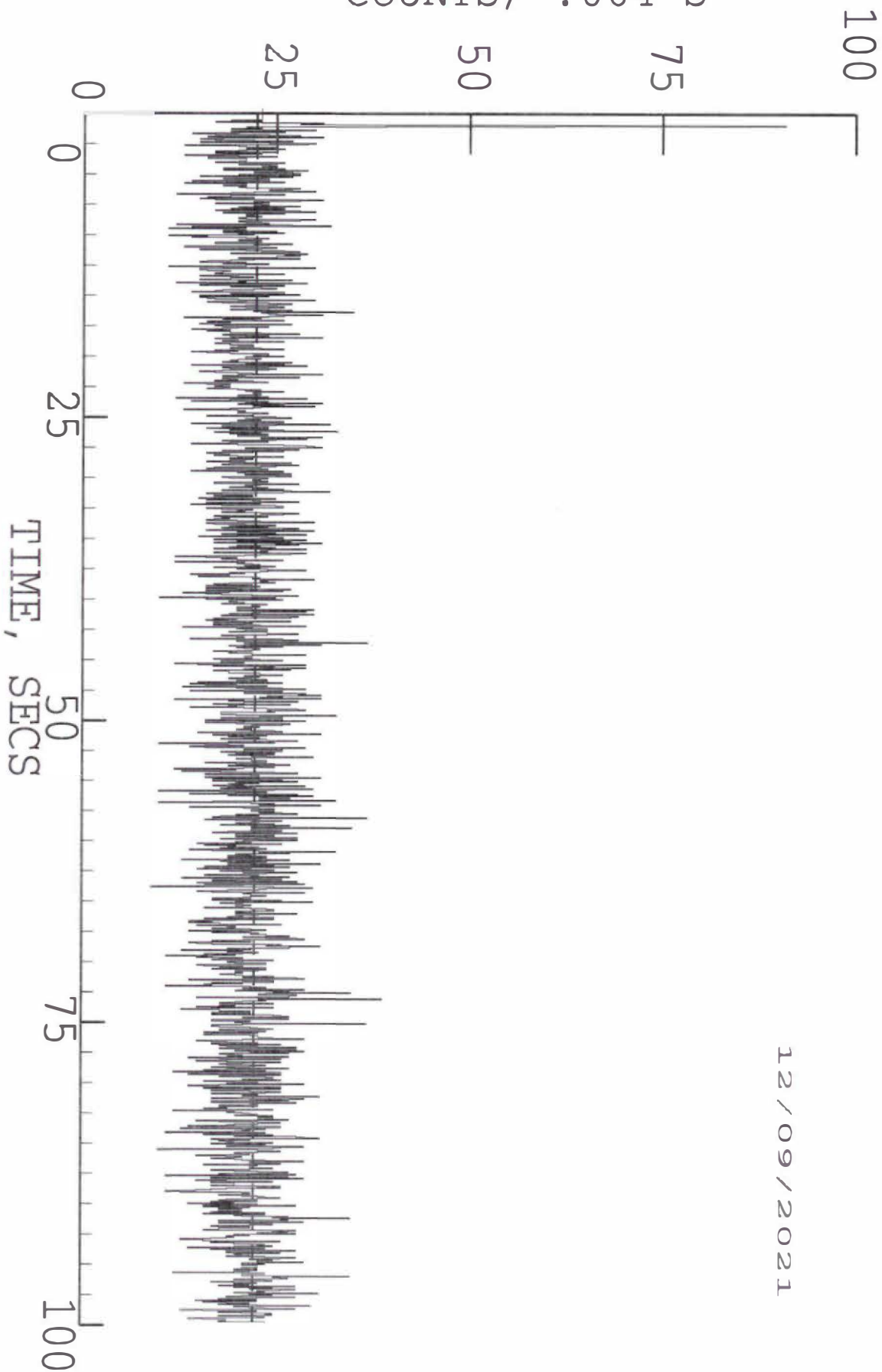
/tmp/swift/210912_1503_bat64ms_ipn

87.1 KB

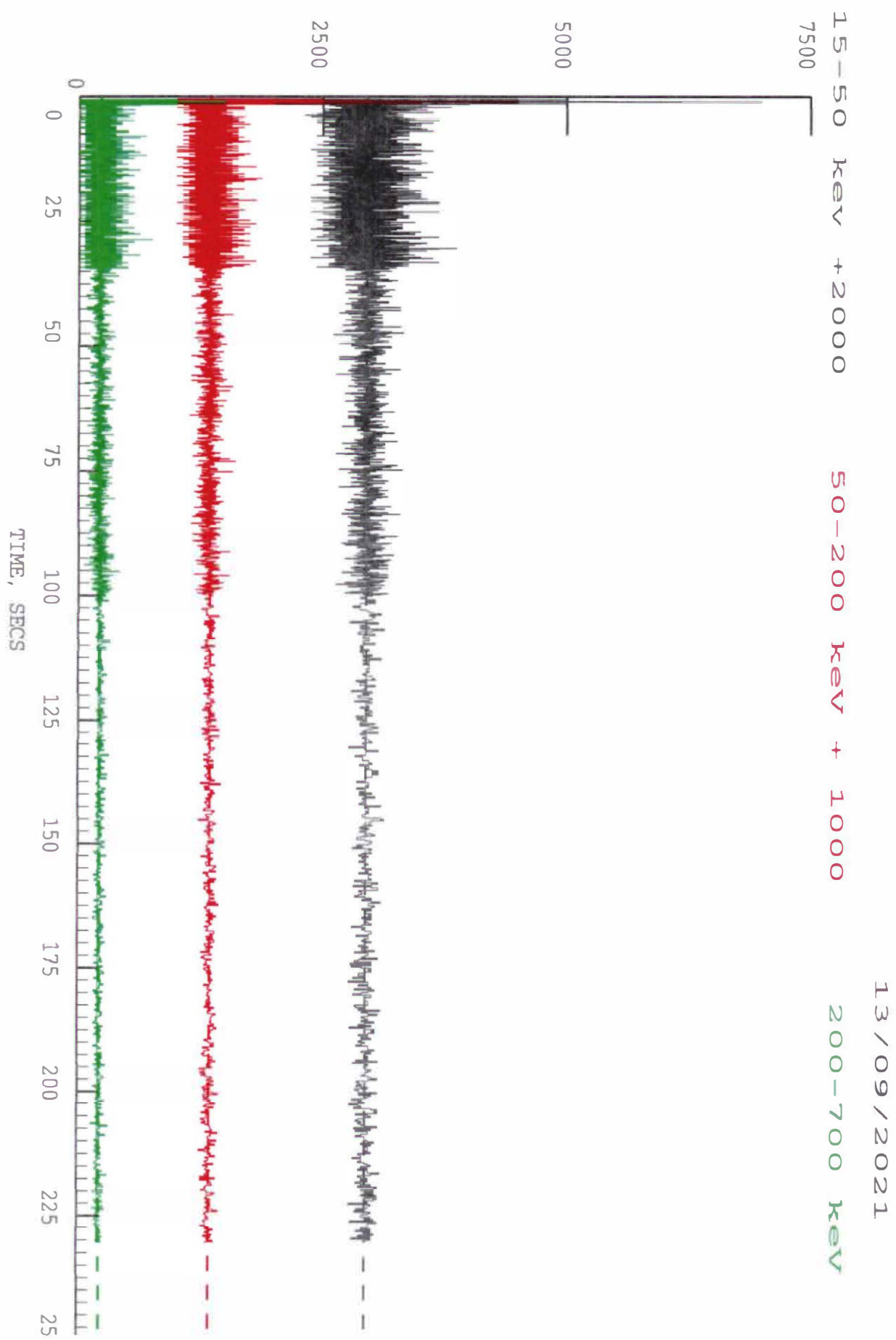
KONUS 12/09/21 56504.086 15:41:44.086
50- 200 keV

COUNTS/ .064 S

SPI N/O



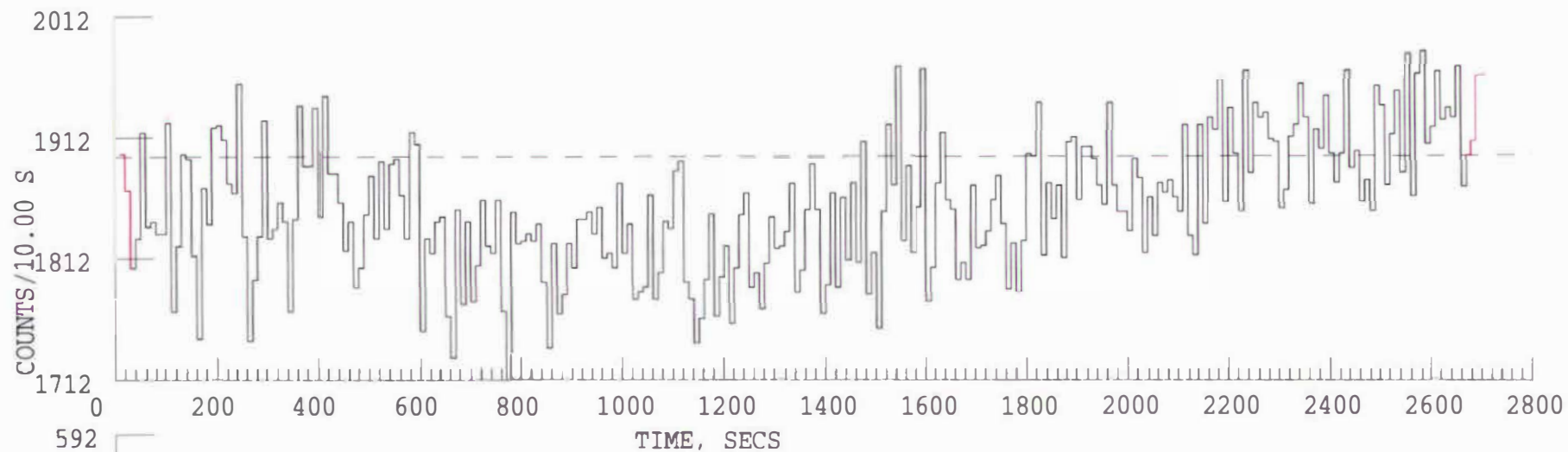
COUNTS/SEC



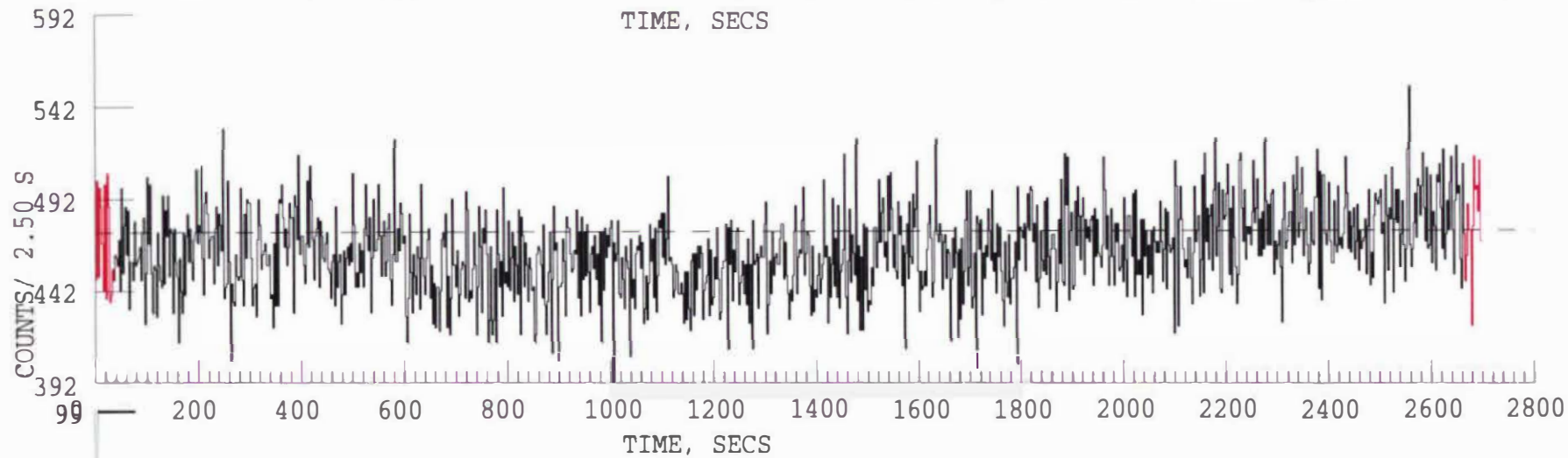
17/11/2021

E

15:18:50.964

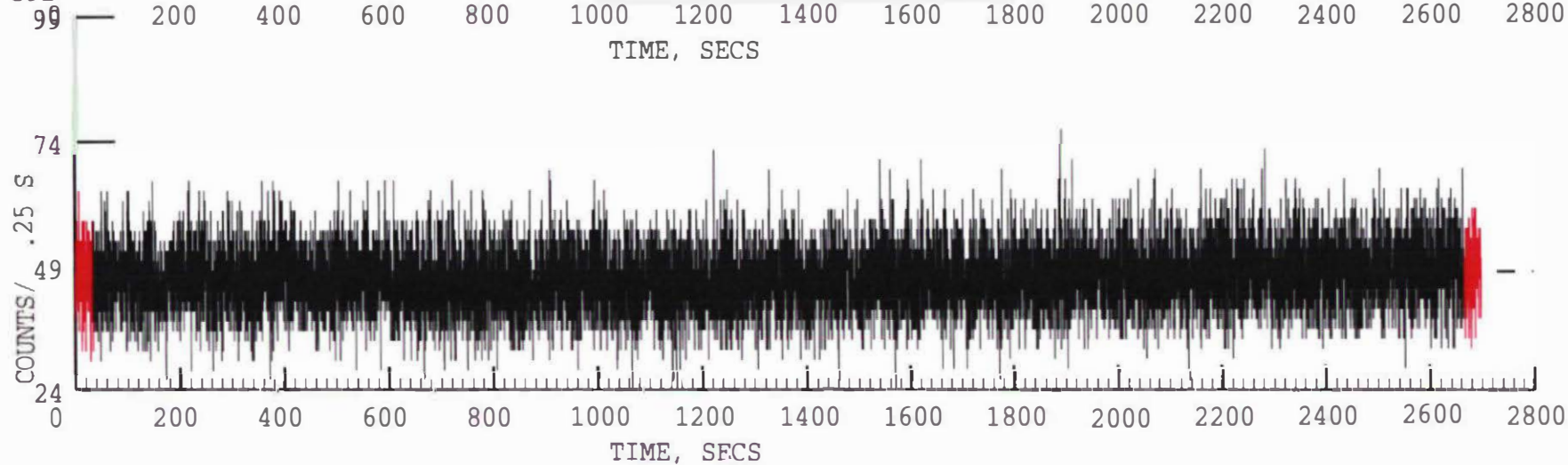


55130.964



12/09/21

50-3000 keV



Subject: BAT lightcurve for trigger at 210912_1541

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/13/2021, 2:08 AM

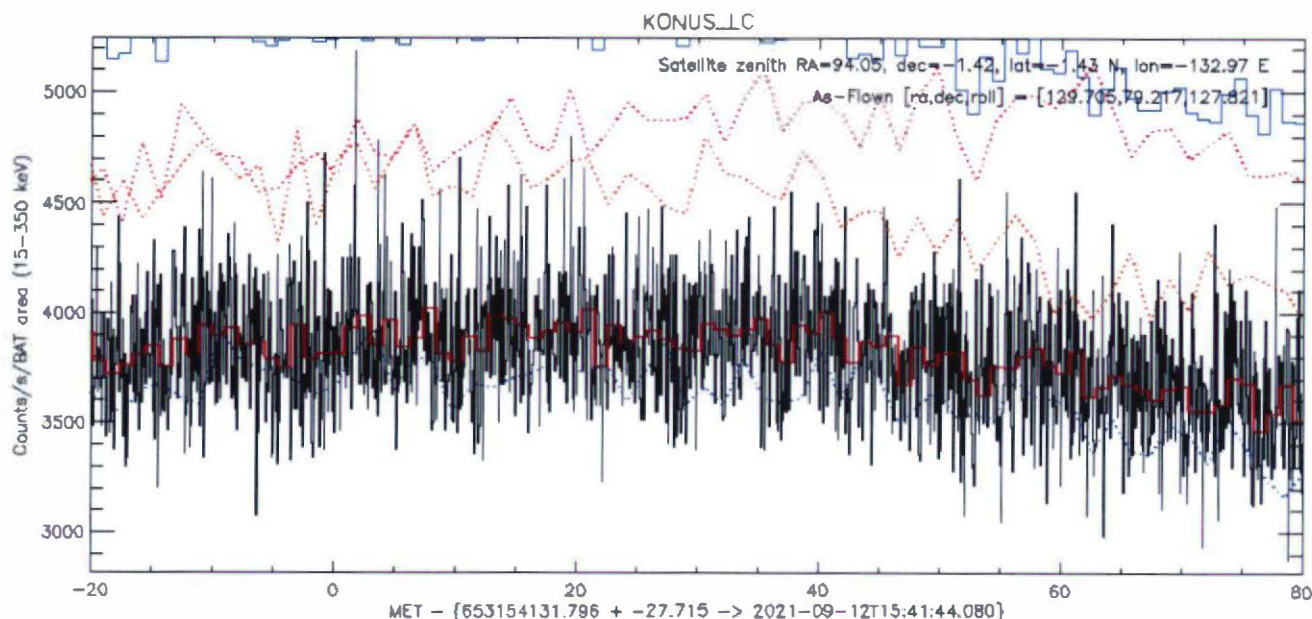
To: mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov, vestrland@lanl.gov, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-12T15:41:44.080
Swift Zenith(RA,dec):      94.05, -1.42
Swift Location(lon,lat,alt): -132.97 E, -1.43 N, 542 km
Time(MET + UTCF -> UT):  653154131.796 + -27.715 -> 2021-09-12T15:41:44.080
YYMMDD_SOD:               210912_56504.080      DOY=255
Obs Sequence Number:       01072990003
Obs Target Name:           GRB 210912A
Obs Date and Times:        2021-09-12 15:40:34 - 15:55:20
Obs Pointing(ra,dec,roll): 129.705, 79.217, 127.82
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210912_1541.png



Attachments:

/tmp/swift/210912_1541_bat64ms_ipn

87.1 KB

/tmp/swift/210912_1541.png

20.7 KB

BAT lightcurve for trigger at 210912_2016

Subject: BAT lightcurve for trigger at 210912_2016

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/12/2021, 3:18 PM

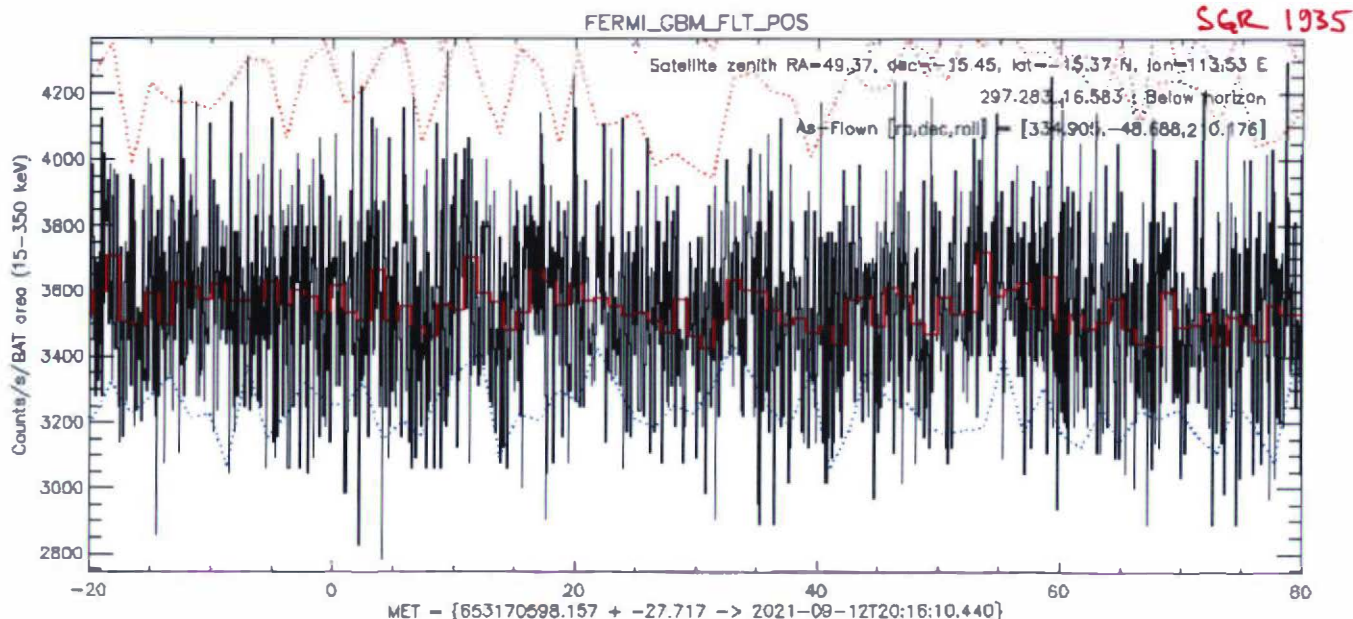
To: bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov, aaron.tohu@gmail.com, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653170598.157 -s 297.283_16.583
Swift Zenith(RA,dec):      49.37, -15.45
Swift Location(lon,lat,alt): 113.53 E, -15.37 N, 550 km
Time(MET + UTC -> UT):    653170598.157 + -27.717 -> 2021-09-12T20:16:10.440
YYMMDD_SOD:               210912_72970.440      DOY=255
Obs Sequence Number:      00013486047
Obs Target Name:          Swift J221951-484240
Obs Date and Times:       2021-09-12 20:00:35 - 20:18:32
Obs Pointing(ra,dec,roll): 334.905, -48.688, 210.18
297.283_16.583_imageloc (boresight_dist, angle): (73, 22)
297.283_16.583_exposure (cm2 cos adjusted): 0
297.283_16.583_altitude: -2 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210912_2016.png--



--Attachments--

/tmp/swift/210912_2016_bat64ms_ipn

87.1 KB

/tmp/swift/210912_2016.png

20.2 KB

Subject: AGILE observations of two bright bursts from SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/13/2021, 6:07 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30835
SUBJECT: AGILE observations of two bright bursts from SGR 1935+2154
DATE: 21/09/13 13:06:58 GMT
FROM: Alessandro Ursi at INAF/IAPS <alessandro.ursi@gmail.com>

A. Ursi (INAF/IAPS), E. Menegoni, L. Foffano (INAF/IAPS), V. Fioretti (INAF/OAS-Bologna), C. Pittori, F. Verrecchia (SSDC, and INAF/OAR), M. Tavani (INAF/IAPS, and Univ. Roma Tor Vergata), A. Argan, M. Cardillo, C. Casentini, Y. Evangelista, L. Pacciani, G. Piano (INAF/IAPS), F. Lucarelli (SSDC, and INAF/OAR), A. Bulgarelli, F. Fuschino, N. Parmiggiani (INAF/OAS-Bologna), M. Marisaldi (INAF/OAS-Bologna, and Bergen University), M. Pilia, A. Trois (INAF/OA-Cagliari), I. Donnarumma (ASI), F. Longo (Univ. Trieste and INFN Trieste), A. Giuliani (INAF/IASF-Mi), report on behalf of the AGILE Team:

The AGILE satellite clearly detected the two bright bursts from the SGR1935+2154, at T1 = 2021-09-10 00:45:47 s (UTC), reported by Konus-Wind (GCN #30804), Fermi GBM (GCN #30806), and GECAM (GCN #30822), and at T2 = 2021-09-12 20:16:10 s (UTC), reported by Fermi GBM (GCN #30831).

The bursts are clearly visible in the AGILE scientific ratemeters of the SuperAGILE (SA; 20-60 keV) and AntiCoincidence (AC; 50-200 keV) detectors.

The first event lasted about 2 s and it released a total number of 560 counts in the SA detector (above a background rate of 65 Hz), and 8730 counts in the AC detector (above a background rate of 3450 Hz). The AGILE ratemeter light curves can be found at http://www.agilescienceapp.it/notices/burst210910_AGILE_RM.png. At T1, the SGR1935+2154 was 150 deg off-axis for AGILE.

The second event lasted 2 s and it released a total number of 620 counts in the SA detector (above a background rate of 100 Hz), and 8170 counts in the AC detector (above a background rate of 3500 Hz). The AGILE ratemeter light curves can be found at http://www.agilescienceapp.it/notices/burst210912_AGILE_RM.png. At T2, the SGR1935+2154 was 37 deg off-axis for AGILE.

Additional analysis of AGILE data is in progress.

Subject: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/12/2021, 8:33 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30831
SUBJECT: Fermi GBM observation of another bright burst in the direction of SGR 1935+2154
DATE: 21/09/13 03:33:14 GMT
FROM: Oliver J Roberts at USRA/NASA <oliver.roberts@nasa.gov>

O.J. Roberts (USRA/NASA-MSFC) reports on behalf of the Fermi GBM Team:

"At 20:16:10.44 UT on 12 September 2021, the Fermi Gamma-Ray Burst Monitor (GBM) triggered and located a bright, SGR-like burst from the direction of the magnetar SGR 1935+2154 (trigger 653170575/210912845).

The GBM on-ground location is consistent with the known position of the SGR.

The angle from the Fermi LAT boresight at the GBM trigger time is 96 degrees.

The event episode has a duration (T90) of about 1 s (10-1000 keV). During this time interval, there are several very short bursts. The first burst has a rapid risetime.

The whole event is best fit with a power law function with an exponential high-energy cutoff. The power law index is 0.08 ± 0.08 and the cutoff energy, parameterized as Epeak, is 32.1 ± 0.3 keV.

The time-integrated event fluence (10-1000 keV) from T0-0.064 to T0+0.944s is $(3.545 \pm 0.038) \times 10^{-6}$ erg/cm². The average photon flux in the 10-1000 keV band during this period is 84 ± 1 ph/s/cm².

Fermi GBM has also triggered on a further 24 bursts from the direction of SGR 1935+2154 since yesterday's GCN (Roberts and Wood, GCN 30806):

Date and Time in UTC	Fermi MET (s)
<u>2021-09-12T23:19:32.08</u>	<u>653181577</u>
2021-09-12T20:16:10.44	653170575
2021-09-12T15:03:50.60	653151835
2021-09-12T13:55:16.45	653147721
2021-09-12T12:19:20.44	653141965
2021-09-12T10:10:11.73	653134216
2021-09-12T07:28:07.46	653124492
2021-09-12T06:51:13.22	653122278
2021-09-12T05:14:07.84	653116452
2021-09-11T02:36:38.24	653093506
2021-09-11T20:22:59.04	653084584
2021-09-11T20:05:46.22	653083551
2021-09-11T18:54:36.05	653079281
2021-09-11T17:01:09.77	653072474
2021-09-11T16:50:03.83	653071808
2021-09-11T16:36:57.91	653071022
2021-09-11T15:26:11.55	653066776
2021-09-11T15:15:25.44	653066130
2021-09-11T15:03:00.55	653065385
2021-09-11T13:27:33.85	653059658
2021-09-11T11:53:57.29	653054042
2021-09-11T10:42:51.85	653049776
2021-09-11T05:32:38.65	653031163
2021-09-11T03:02:28.36	653022153

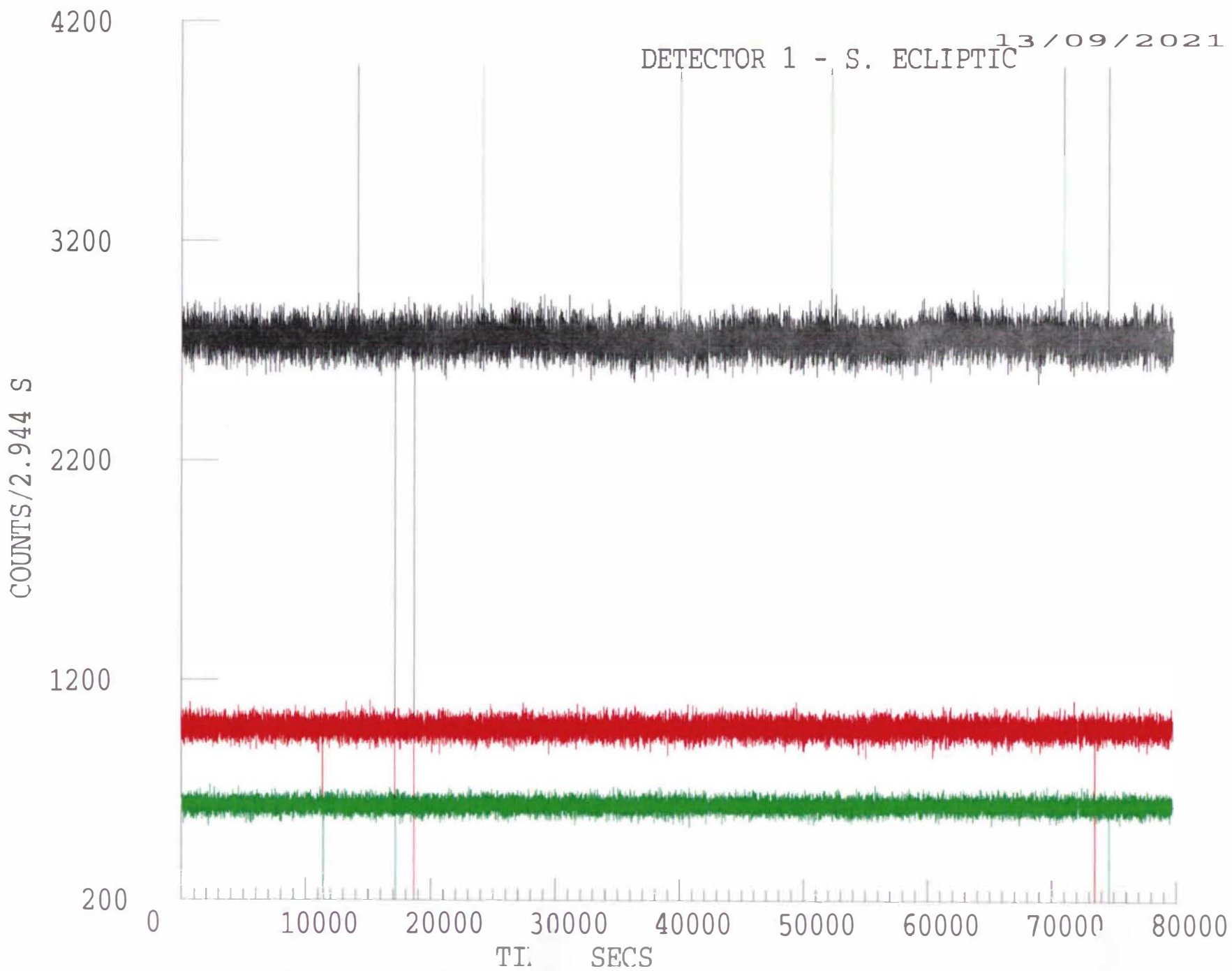
Fermi GBM will not report on future triggers from this event.

The spectral analysis results presented above are preliminary. We encourage multi-wavelength observations to follow-up this most recent activation.

For Fermi GBM data and info, please visit the official Fermi GBM Support Page:
<https://fermi.gsfc.nasa.gov/ssc/data/access/gbm/>

KONUS 13/09/2021 65.667 v01

10- 50 keV 50- 200 keV 200- 750 keV



v01

65.667

13/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4400

3400

2400

1400

400

0

10000

20000

30000

40000

50000

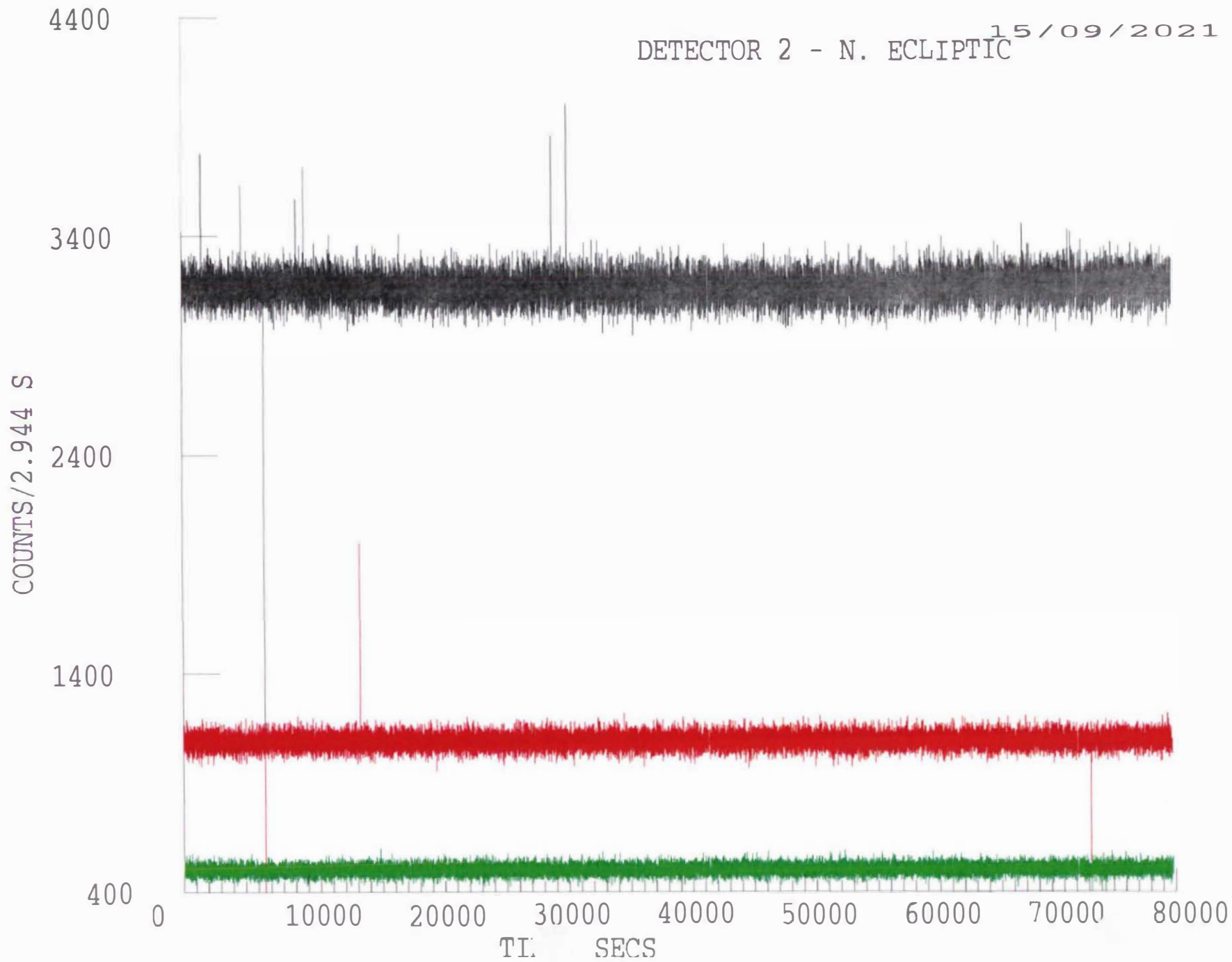
60000

70000

80000

TIME SECS

DETECTOR 2 - N. ECLIPTIC 15/09/2021



Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-12T05 to 2021-09-13T01)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/13/2021, 8:03 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30836
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-12T05 to 2021-09-13T01)
DATE: 21/09/13 15:03:09 GMT
FROM: Ce Cai at IHEP <caice@ihep.ac.cn>

C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Yi Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-12T05 to 2021-09-13T01. Here is the list of these bursts:

Trigger Time (UTC)
2021-09-12T05:44:17.050
2021-09-12T16:26:08.150
2021-09-12T16:52:07.950
2021-09-12T22:16:36.200
2021-09-13T00:27:25.200

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210913_0816

Subject: BAT lightcurve for trigger at 210913_0816

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/13/2021, 4:39 AM

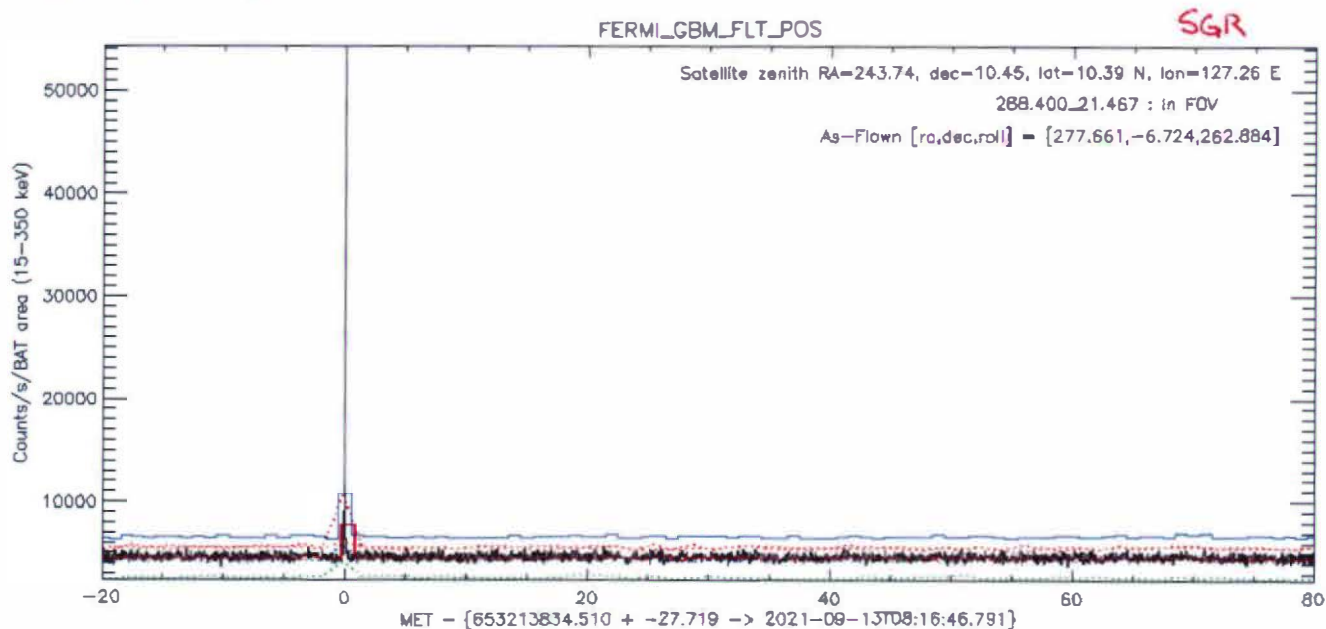
To: dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, vestrland@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653213834.510 -s 288.400_21.467
Swift Zenith(RA,dec):      243.74, 10.45
Swift Location(lon,lat,alt): 127.26 E, 10.39 N, 552 km
Time(MET + UTCF -> UT):   653213834.510 + -27.719 -> 2021-09-13T08:16:46.791
YYMMDD_SOD:               210913_29806.791      DOY=256
Obs Sequence Number:      00013840021
Obs Target Name:          SGR 1830-0645
Obs Date and Times:       2021-09-13 08:08:52 - 08:31:29
Obs Pointing(ra,dec,roll): 277.661, -6.724, 262.88
288.400_21.467_imageloc (boresight_dist, angle): (30, 27)
288.400_21.467_exposure (cm2 cos adjusted): 3109
288.400_21.467_altitude: 69 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210913_0816.png



Attachments:

/tmp/swift/210913_0816_bat64ms_ipn

87.1 KB

/tmp/swift/210913_0816.png

12.4 KB

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

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2021-09-13T01 to 2021-09-15T14 (UTC). Here is the list of these bursts:

Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
2021-09-14T14:15:42.900
2021-09-14T23:21:58.500
2021-09-14T23:26:34.050
2021-09-15T02:35:47.350
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-13T01 to 2021-09-15T14 (UTC). Here is the list of these bursts:

Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
~~2021-09-14T11:10:36.250~~
2021-09-14T14:15:42.900
2021-09-14T23:21:58.500
2021-09-14T23:26:34.050
2021-09-15T02:35:47.350
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

KONUS

14/09/2021

54.395

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

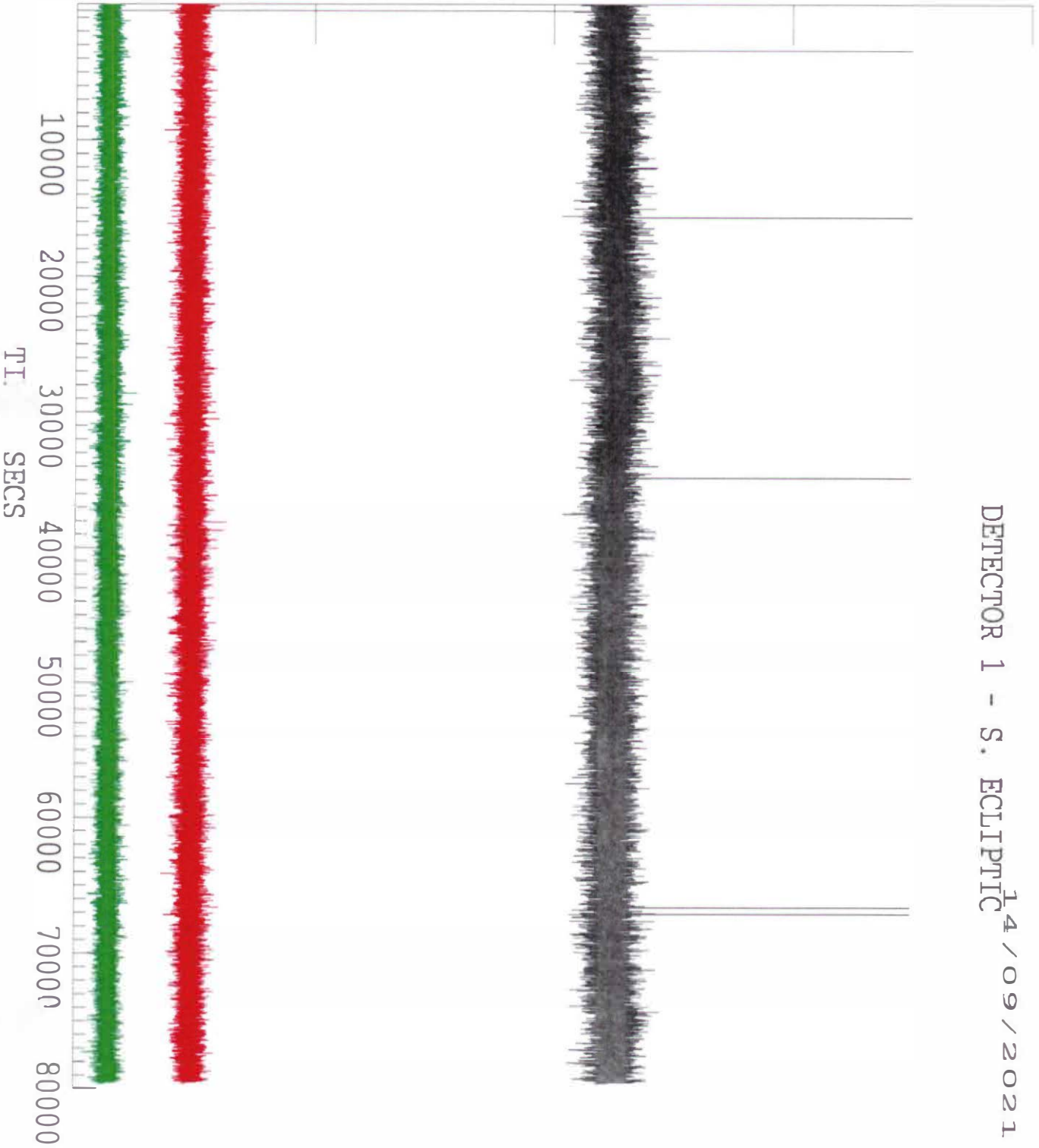
3500

2500

1500

500

0



KONUS

14/09/2021

54.395

v01

10- 50 keV

50- 200 keV

200- 750 keV

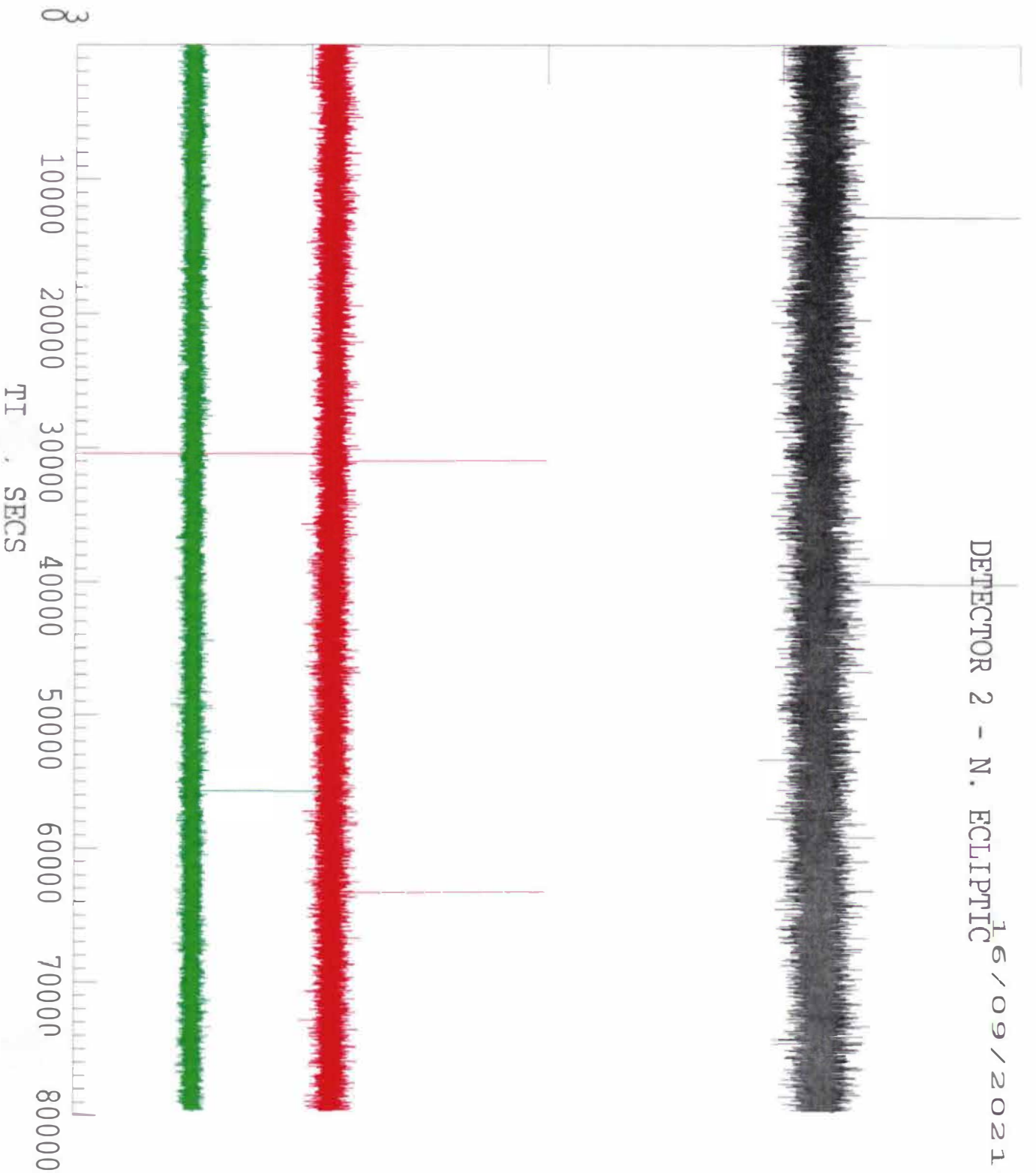
COUNTS/2.944 S

1003

2003

3003

4003



BAT lightcurve for trigger at 210914_0612

Subject: BAT lightcurve for trigger at 210914_0612

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/14/2021, 4:44 AM

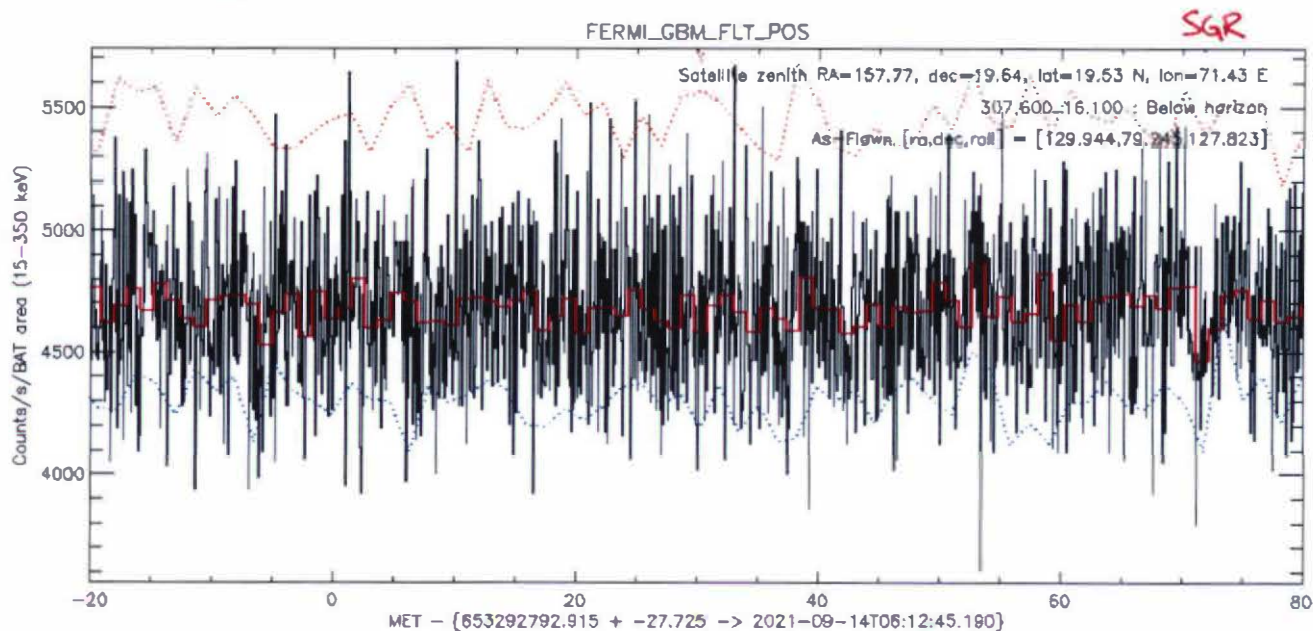
To: aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, mkippen@lanl.gov, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653292792.915 -s 307.600_16.100
Swift Zenith(RA,dec):      157.77, 19.64
Swift Location(lon,lat,alt): 71.43 E, 19.53 N, 542 km
Time(MET + UTCF -> UT):   653292792.915 + -27.725 -> 2021-09-14T06:12:45.190
YYMMDD_SOD:               210914_22365.190      DOY=257
Obs Sequence Number:      01072990006
Obs Target Name:          GRB 210912A
Obs Date and Times:       2021-09-14 06:01:34 - 06:16:31
Obs Pointing(ra,dec,roll): 129.944, 79.245, 127.82
307.600_16.100_imageloc (boresight_dist, angle): (85, 144)
307.600_16.100_exposure (cm2 cos adjusted): 0
307.600_16.100_altitude: -21 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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--/tmp/swift/210914_0612.png



Attachments:

/tmp/swift/210914_0612.png

18.4 KB

/tmp/swift/210914_0612_bat64ms_ipn

87.1 KB

BAT lightcurve for trigger at 210914_1110

Subject: BAT lightcurve for trigger at 210914_1110

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/14/2021, 9:22 AM

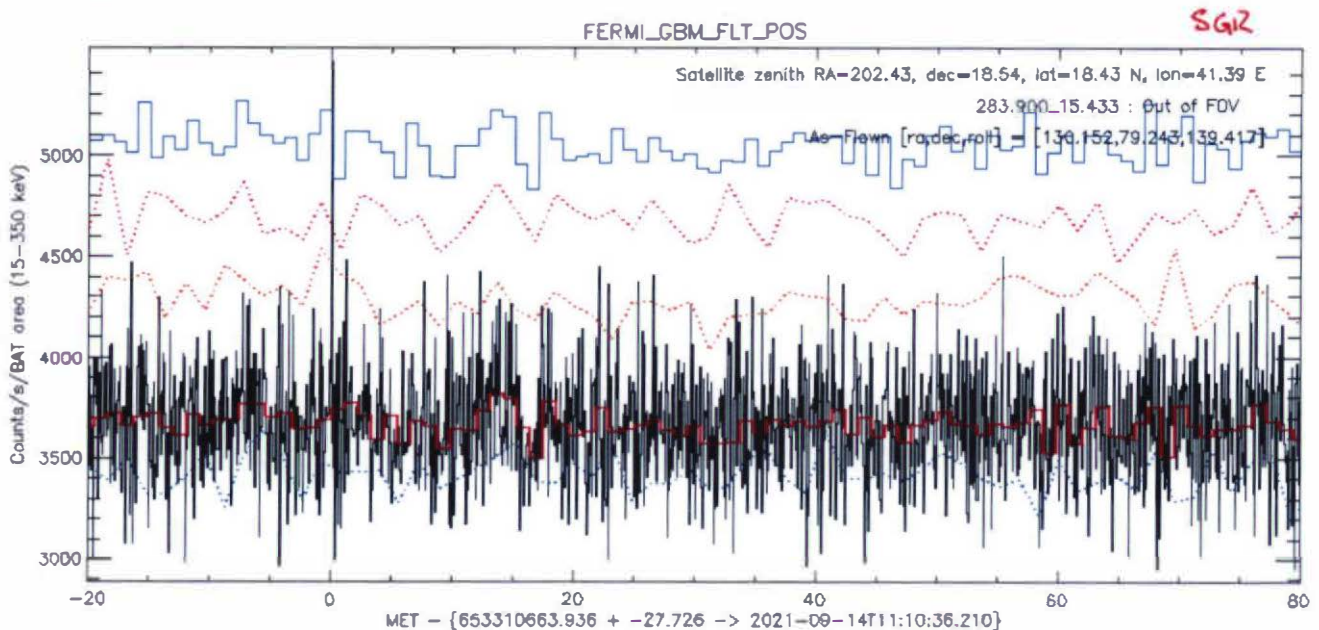
To: vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653310663.936 -s 283.900_15.433
Swift Zenith(RA,dec):      202.43, 18.54
Swift Location(lon,lat,alt): 41.39 E, 18.43 N, 546 km
Time(MET + UTCF -> UT):   653310663.936 + -27.726 -> 2021-09-14T11:10:36.210
YYMMDD_SOD:               210914_40236.210      DOY=257
Obs Sequence Number:      01072990006
Obs Target Name:          GRB 210912A
Obs Date and Times:       2021-09-14 10:54:34 - 11:16:33
Obs Pointing(ra,dec,roll): 130.152, 79.243, 139.42
283.900_15.433_imageloc (boresight_dist, angle): (84, 156)
283.900_15.433_exposure (cm2 cos adjusted): 0
283.900_15.433_altitude: 36 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210914_1110.png



Attachments:

/tmp/swift/210914_1110_bat64ms_ipn

87.0 KB

/tmp/swift/210914_1110.png

20.5 KB

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-13T01 to 2021-09-15T14 (UTC). Here is the list of these bursts:

Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
~~2021-09-14T14:15:42.900~~
2021-09-14T23:21:58.500
2021-09-14T23:26:34.050
2021-09-15T02:35:47.350
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210914_1415

Subject: BAT lightcurve for trigger at 210914_1415

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/14/2021, 10:56 AM

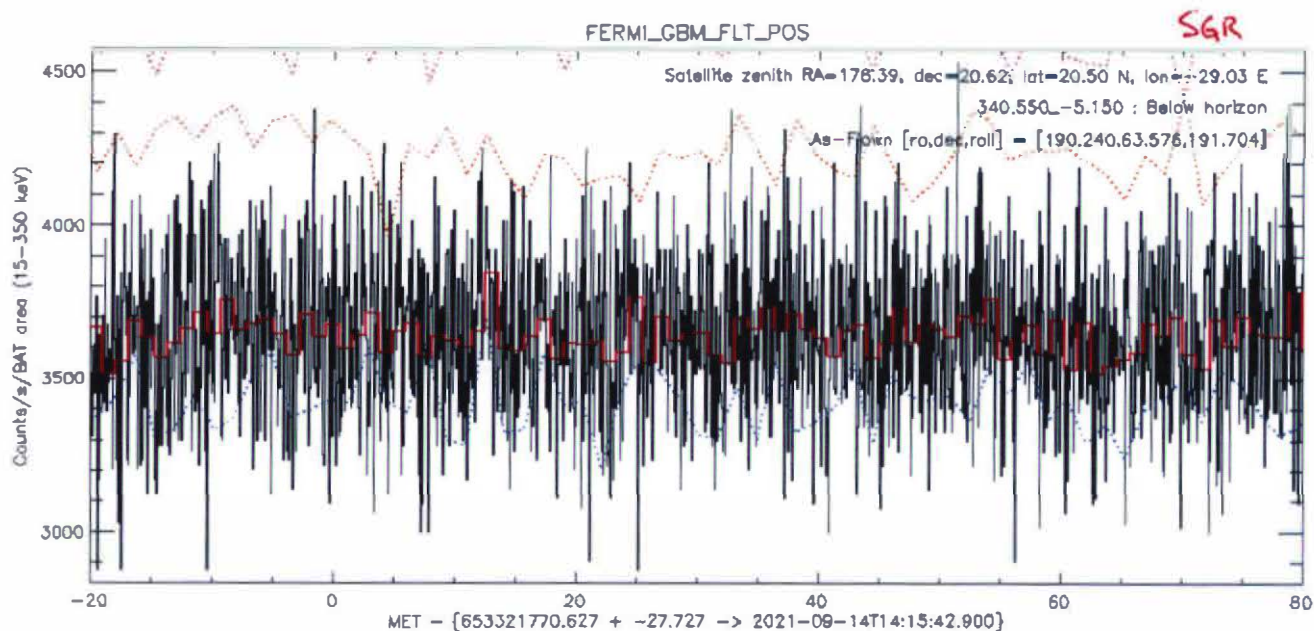
To: bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, vestrand@lanl.gov, ipn@ssl.berkeley.edu, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653321770.627 -s 340.550_-5.150
Swift Zenith(RA,dec):      178.39, 20.62
Swift Location(lon,lat,alt): -29.03 E, 20.50 N, 543 km
Time(MET + UTCF -> UT):  653321770.627 + -27.727 -> 2021-09-14T14:15:42.900
YYMMDD_S00:               210914_51342.900      DOY=257
Obs Sequence Number:      00049814005
Obs Target Name:          SN06BV-HOST
Obs Date and Times:       2021-09-14 13:59:34 - 14:26:31
Obs Pointing(ra,dec,roll): 190.240, 63.576, 191.70
340.550_-5.150_imageloc (boresight_dist, angle): (118, 112)
340.550_-5.150_exposure (cm2 cos adjusted): 0
340.550_-5.150_altitude: -44 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

—/tmp/swift/210914_1415.png—



—Attachments:—

/tmp/swift/210914_1415.png

19.5 KB

/tmp/swift/210914_1415_bat64ms_ipn

87.1 KB

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

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Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
2021-09-14T14:15:42.900
~~2021-09-14T23:21:58.500~~
2021-09-14T23:26:34.050
2021-09-15T02:35:47.350
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
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SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
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J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
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2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
2021-09-14T14:15:42.900
2021-09-14T23:21:58.500
~~2021-09-14T23:26:34.050~~
2021-09-15T02:35:47.350
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210914_2323

Subject: BAT lightcurve for trigger at 210914_2323

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/14/2021, 8:15 PM

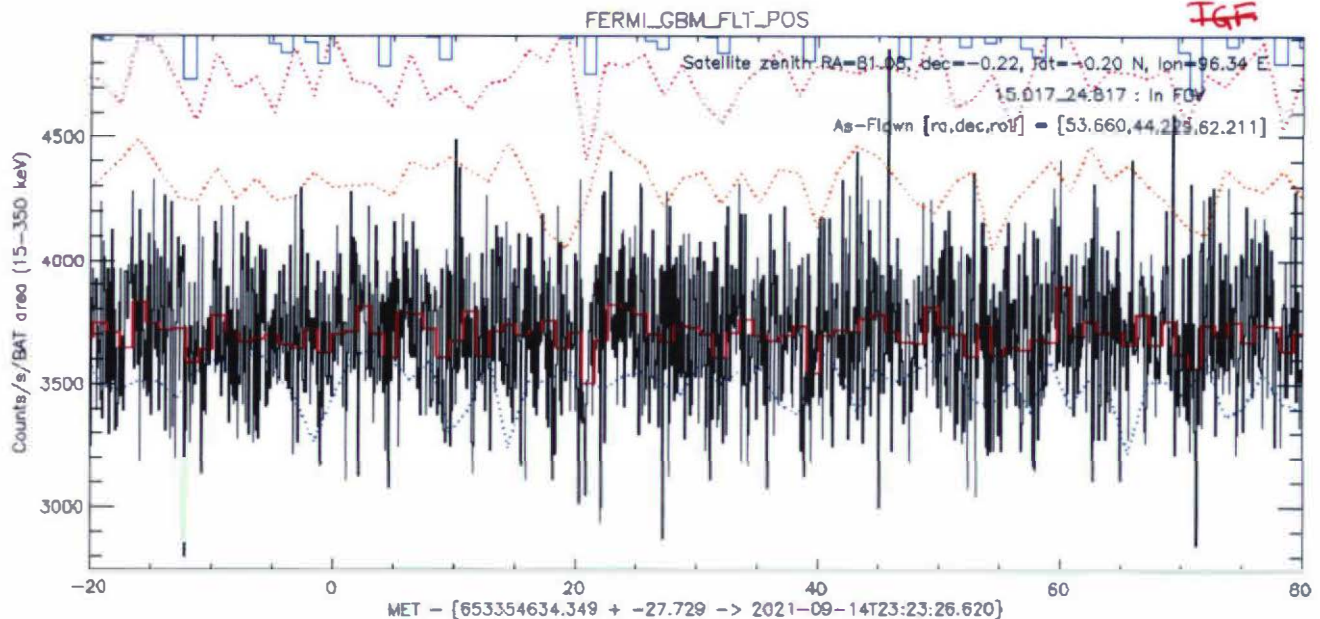
To: dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653354634.349 -s 15.017_24.817
Swift Zenith(RA,dec):      81.08, -0.22
Swift Location(lon,lat,alt): 96.34 E, -0.20 N, 544 km
Time(MET + UTCF -> UT):   653354634.349 + -27.729 -> 2021-09-14T23:23:26.620
YYMMDD_SOD:               210914_84206.620      DOY=257
Obs Sequence Number:      00034387011
Obs Target Name:          IGR J03346+4414
Obs Date and Times:       2021-09-14 23:02:34 - 23:31:30
Obs Pointing(ra,dec,roll): 53.660, 44.229, 62.21
15.017_24.817_imageloc (boresight_dist, angle): (37, 99)
15.017_24.817_exposure (cm2 cos adjusted): 1092
15.017_24.817_altitude: 44 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210914_2323.png



Attachments:

/tmp/swift/210914_2323.png

20.4 KB

/tmp/swift/210914_2323_bat64ms_ipn

87.0 KB

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-13T01 to 2021-09-15T14 (UTC). Here is the list of these bursts:

Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
2021-09-14T14:15:42.900
2021-09-14T23:21:58.500
2021-09-14T23:26:34.050
~~2021-09-15T02:35:47.350~~
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

KONUS

15/09/2021

40.178

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

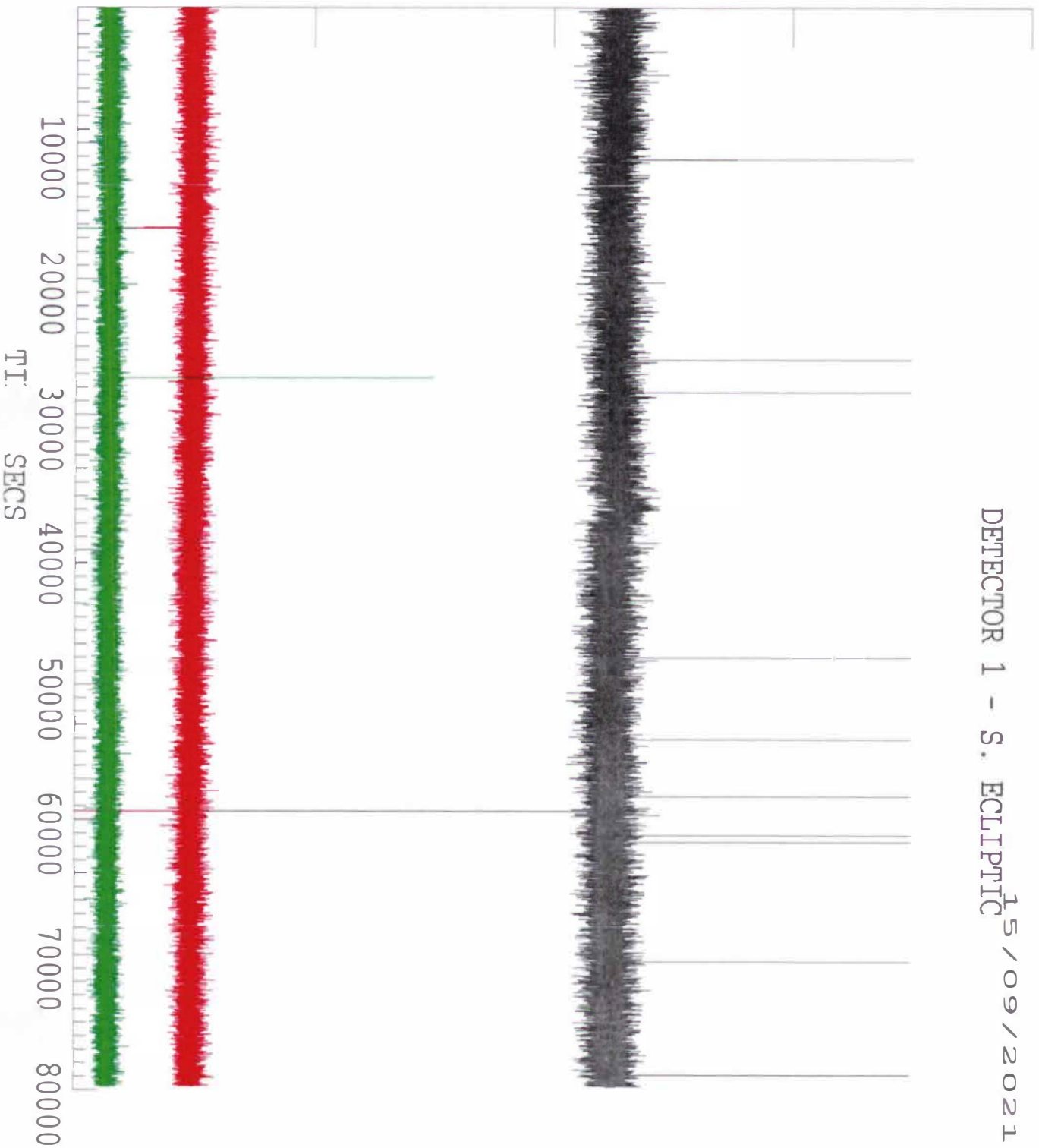
3500

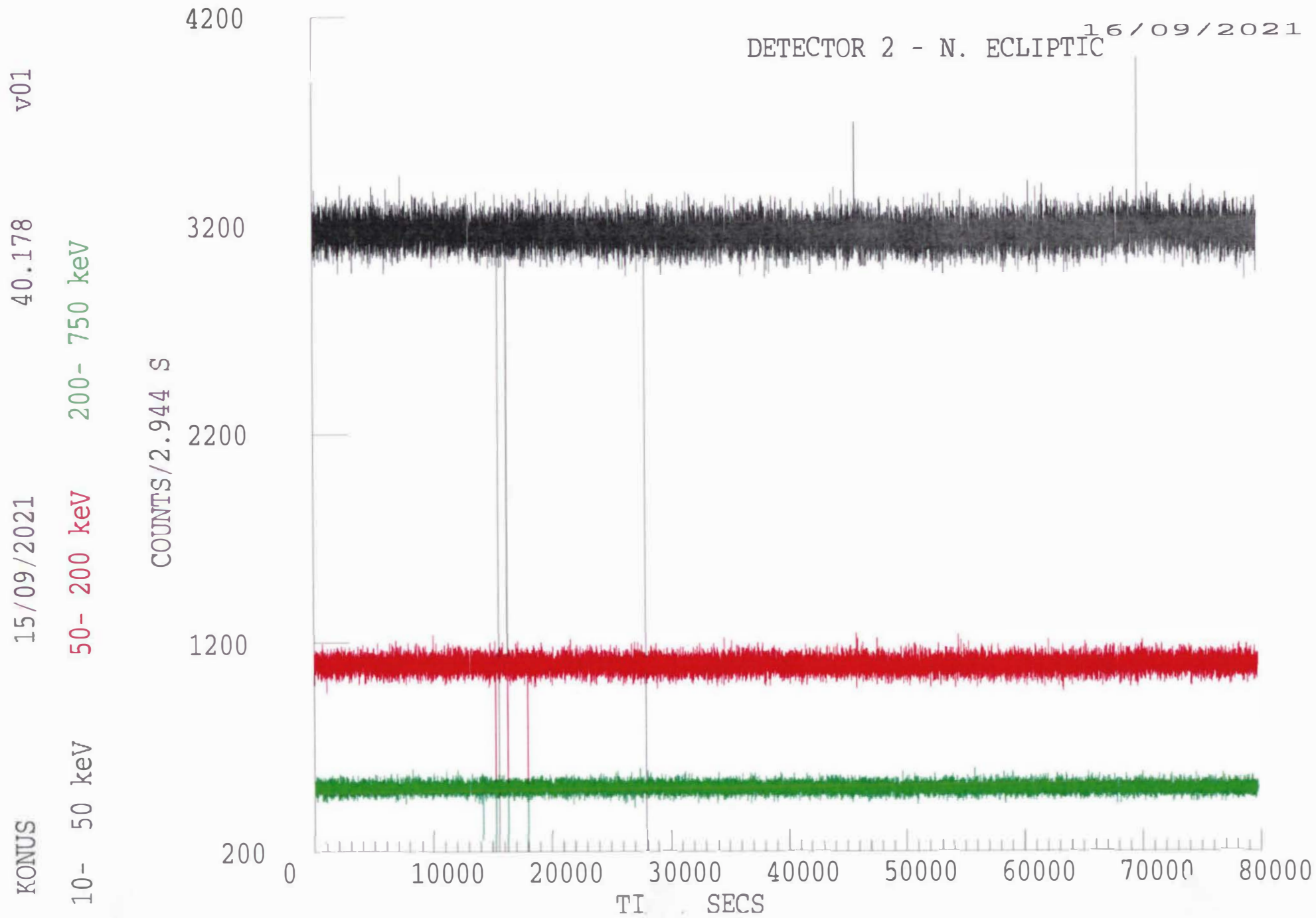
2500

1500

500

0





Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-13T01 to 2021-09-15T14 (UTC). Here is the list of these bursts:

Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
2021-09-14T14:15:42.900
2021-09-14T23:21:58.500
2021-09-14T23:26:34.050
2021-09-15T02:35:47.350
~~2021-09-15T02:39:25.700~~

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/15/2021, 7:41 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30841
SUBJECT: GECAM observations of bursts from SGR J1935+2154 (2021-09-13T01 to 2021-09-15T14)
DATE: 21/09/15 14:40:52 GMT
FROM: Shuo Xiao at IHEP <xiaoshuo@ihep.ac.cn>

C. Y. Li, C. Cai, S. L. Xiong, Y. Huang, W. C. Xue, Z. W. Guo, X. B. Li,
J. C. Liu, X. Y. Song, C. W. Wang, P. Wang, S. L. Xie, S. Xiao,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154,
either by in-flight trigger or by on-ground search of the data, from
2021-09-13T01 to 2021-09-15T14 (UTC). Here is the list of these bursts:

Trigger Time (UTC)
2021-09-13T14:12:39.650
2021-09-13T19:51:32.950
2021-09-14T11:10:36.250
2021-09-14T14:15:42.900
2021-09-14T23:21:58.500
2021-09-14T23:26:34.050
2021-09-15T02:35:47.350
2021-09-15T02:39:25.700

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: BAT lightcurve for trigger at 210915_1243

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/15/2021, 10:38 AM

To: dmopalmer@gmail.com, ipn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, aaron.tohu@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653402648.933
Swift Zenith(RA,dec):      217.52, 13.70
Swift Location(lon,lat,alt): 32.16 E, 13.61 N, 547 km
Time(MET + UTCF -> UT):   653402648.933 + -27.732 -> 2021-09-15T12:43:41.201
YYMMDD_SOD:               210915_45821.201      DOY=258
Obs Sequence Number:      00096080001
Obs Target Name:          3FHL J1440.2-2343
Obs Date and Times:       2021-09-15 12:42:34 - 12:54:31
Obs Pointing(ra,dec,roll): 220.082, -23.725, 283.36
```

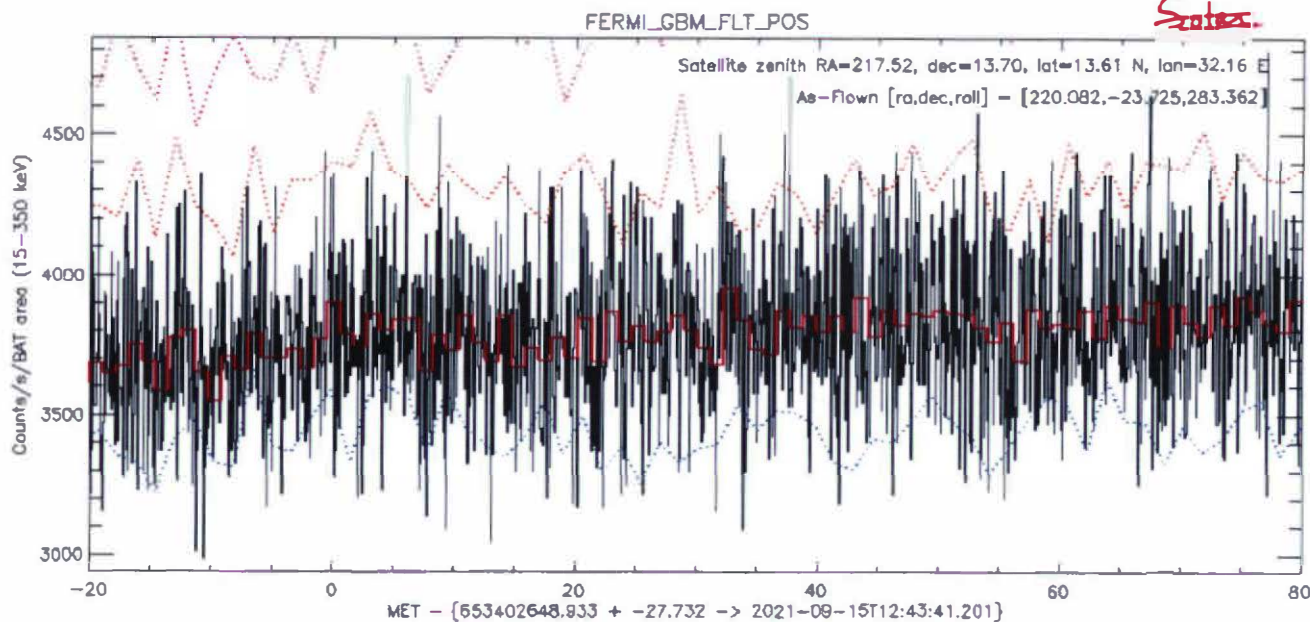
--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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SPI N/O
166.8 30.5 5.6

/tmp/swift/210915_1243.png

GRB

States



Attachments:

/tmp/swift/210915_1243_bat64ms_ipn

87.0 KB

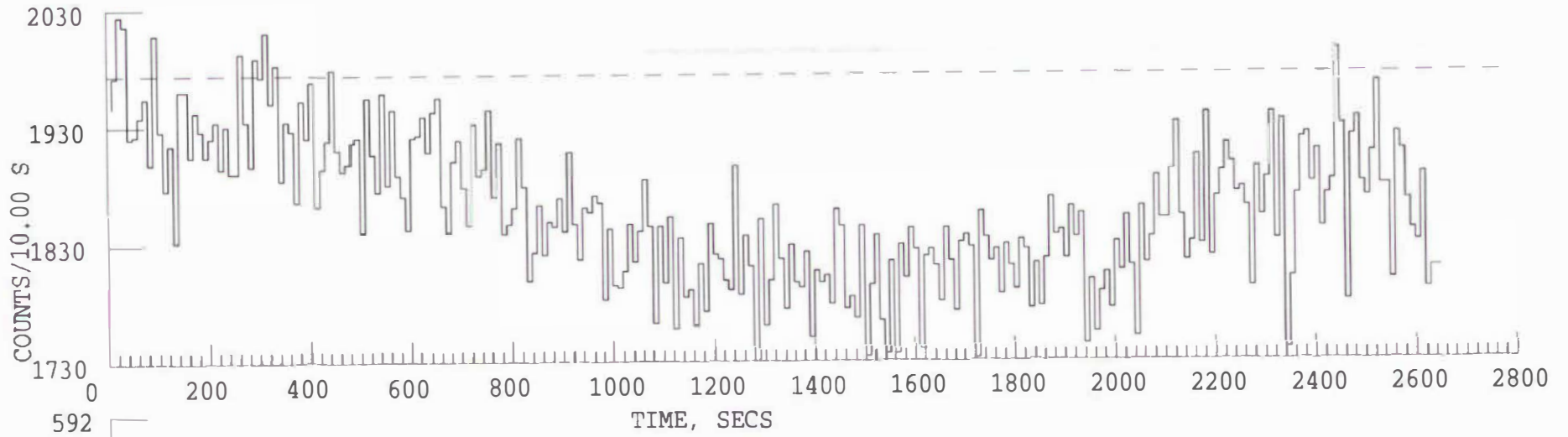
/tmp/swift/210915_1243.png

20.8 KB

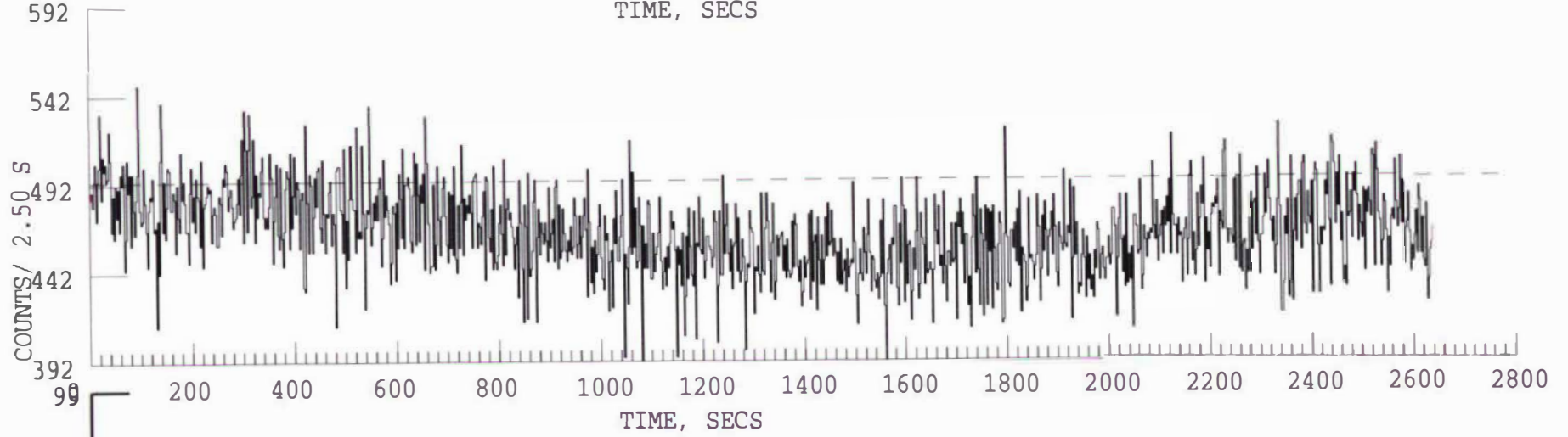
17/11/2021

A

12:21:46.551



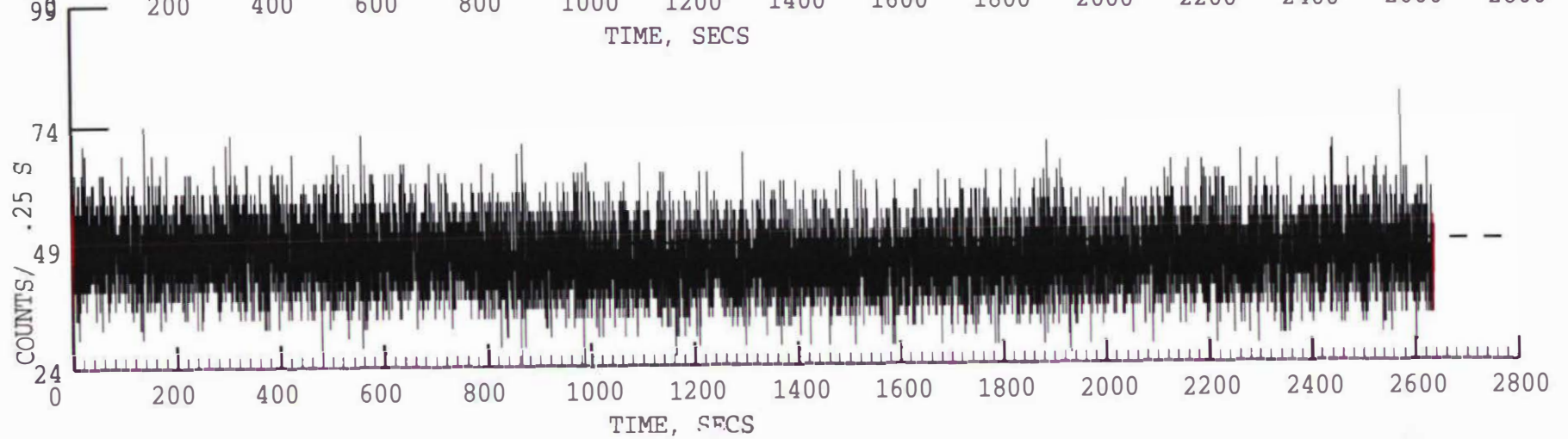
44506.551



15/09/21

50-3000 keV

ODYSSEY



Subject: BAT lightcurve for trigger at 210915_1507

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/15/2021, 11:09 AM

To: aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu, vestrand@lanl.gov, dmopalmer@gmail.com, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov

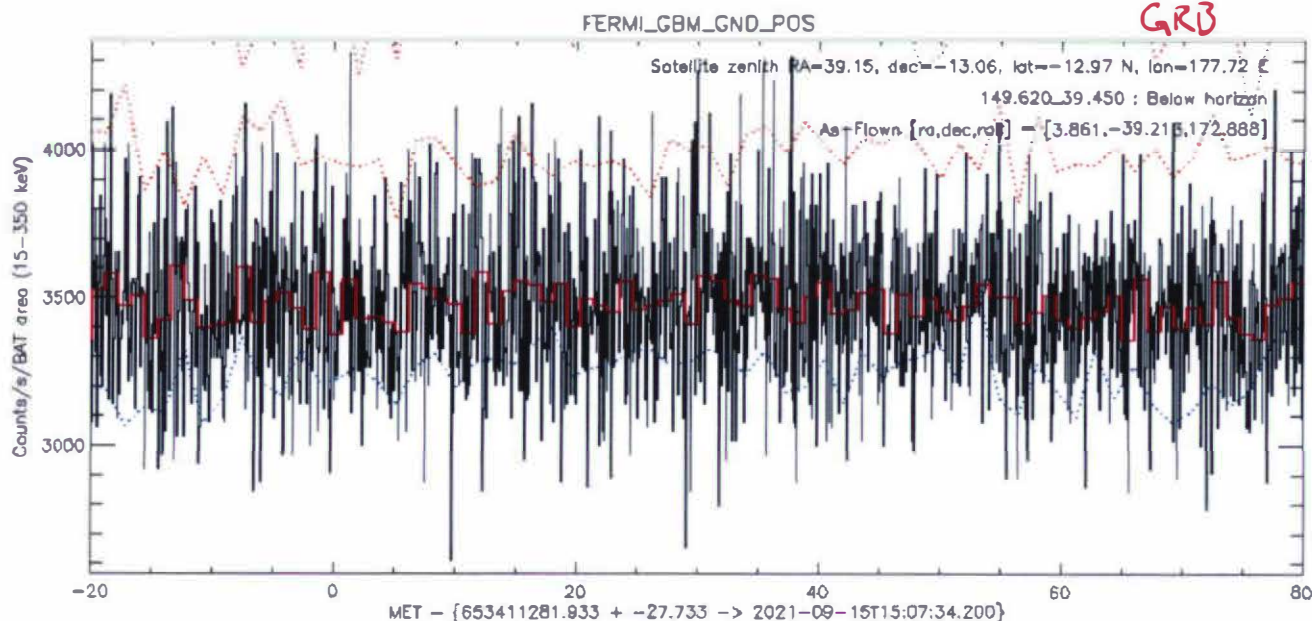
*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653411281.933 -s 149.620_39.450
Swift Zenith(RA,dec):      39.15, -13.06
Swift Location(lon,lat,alt): 177.72 E, -12.97 N, 552 km
Time(MET + UTC -> UT):    653411281.933 + -27.733 -> 2021-09-15T15:07:34.200
YYMMDD_SOD:               210915_54454.200      DOY=258
Obs Sequence Number:      00032619053
Obs Target Name:          XMMU J001528.9-391319
Obs Date and Times:       2021-09-15 14:52:34 - 15:17:32
Obs Pointing(ra,dec,roll): 3.861, -39.213, 172.89
149.620_39.450_imageloc (boresight_dist, angle): (154, 176)
149.620_39.450_exposure (cm2 cos adjusted): 0
149.620_39.450_altitude: -1 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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155.8 41.7 15.5

~/tmp/swift/210915_1507.png



Attachments:

/tmp/swift/210915_1507_bat64ms_ipn

87.1 KB

/tmp/swift/210915_1507.png

19.6 KB

Subject: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 7:20 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30869
SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
DATE: 21/09/23 14:19:30 GMT
FROM: Chenwei Wang at IHEP <cwwang@ihep.ac.cn>

C. W. Wang, S. L. Xiong, Y. Huang, C. Cai, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, P. Wang, S. L. Xie, S. Xiao, Z. W. Guo, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154
either by in-flight trigger or by on-ground search of the data, from
2021-09-15T14 to 2021-09-23T14(UTC).
Here is the list of these bursts:

Trigger Time (UTC)
2021-09-15T15:32:56.050
2021-09-17T12:52:37.800
2021-09-17T13:58:25.100
2021-09-18T22:58:52.150
2021-09-22T02:39:10.200
2021-09-22T20:12:16.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

BAT lightcurve for trigger at 210915_1937

Subject: BAT lightcurve for trigger at 210915_1937

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/15/2021, 7:54 PM

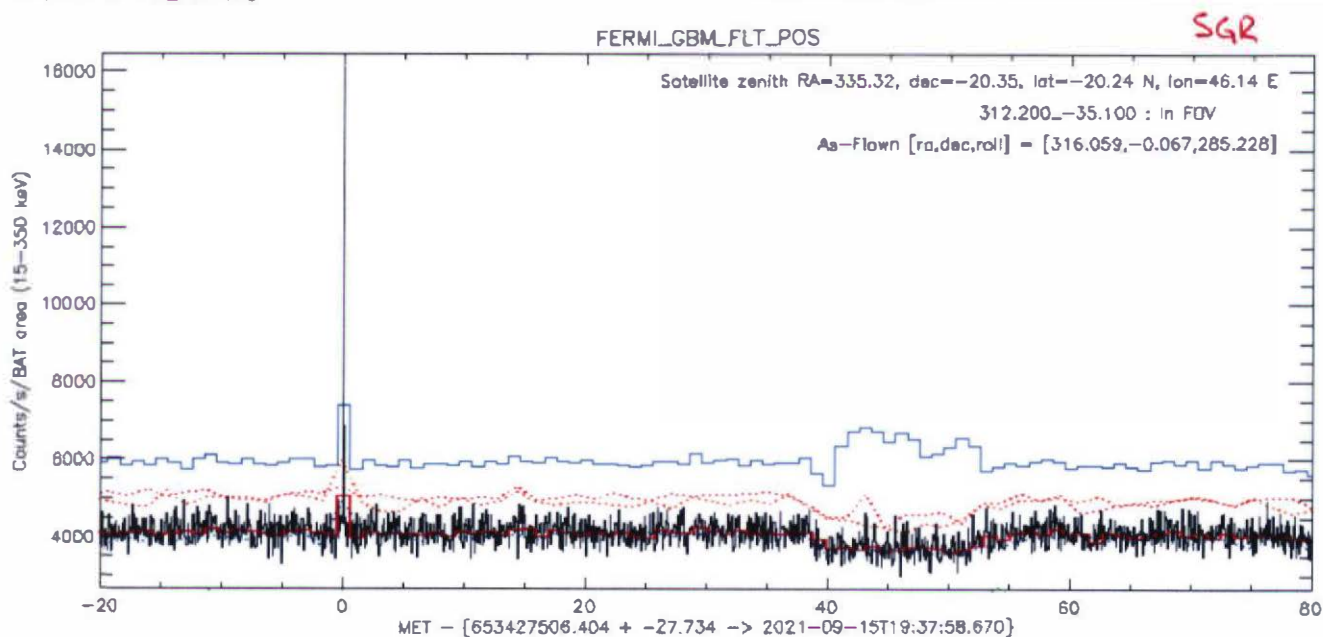
To: mkippen@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, vestrand@lanl.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653427506.404 -s 312.200_-35.100
Swift Zenith(RA,dec):      335.32, -20.35
Swift Location(lon,lat,alt): 46.14 E, -20.24 N, 561 km
Time(MET + UTCF -> UT):   653427506.404 + -27.734 -> 2021-09-15T19:37:58.670
YYMMDD_SOD:               210915_70678.670      DOY=258
Obs Sequence Number:      00014812002
Obs Target Name:          AT2021ysx
Obs Date and Times:       2021-09-15 19:27:34 - 19:38:32
Obs Pointing(ra,dec,roll): 316.059, -0.067, 285.23
312.200_-35.100_imageloc (boresight_dist, angle): (35, 170)
312.200_-35.100_exposure (cm2 cos adjusted): 2855
312.200_-35.100_altitude: 88 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210915_1937.png



Attachments

/tmp/swift/210915_1937.png

15.8 KB

/tmp/swift/210915_1937_bat64ms_ipn

87.0 KB

v01

28.905

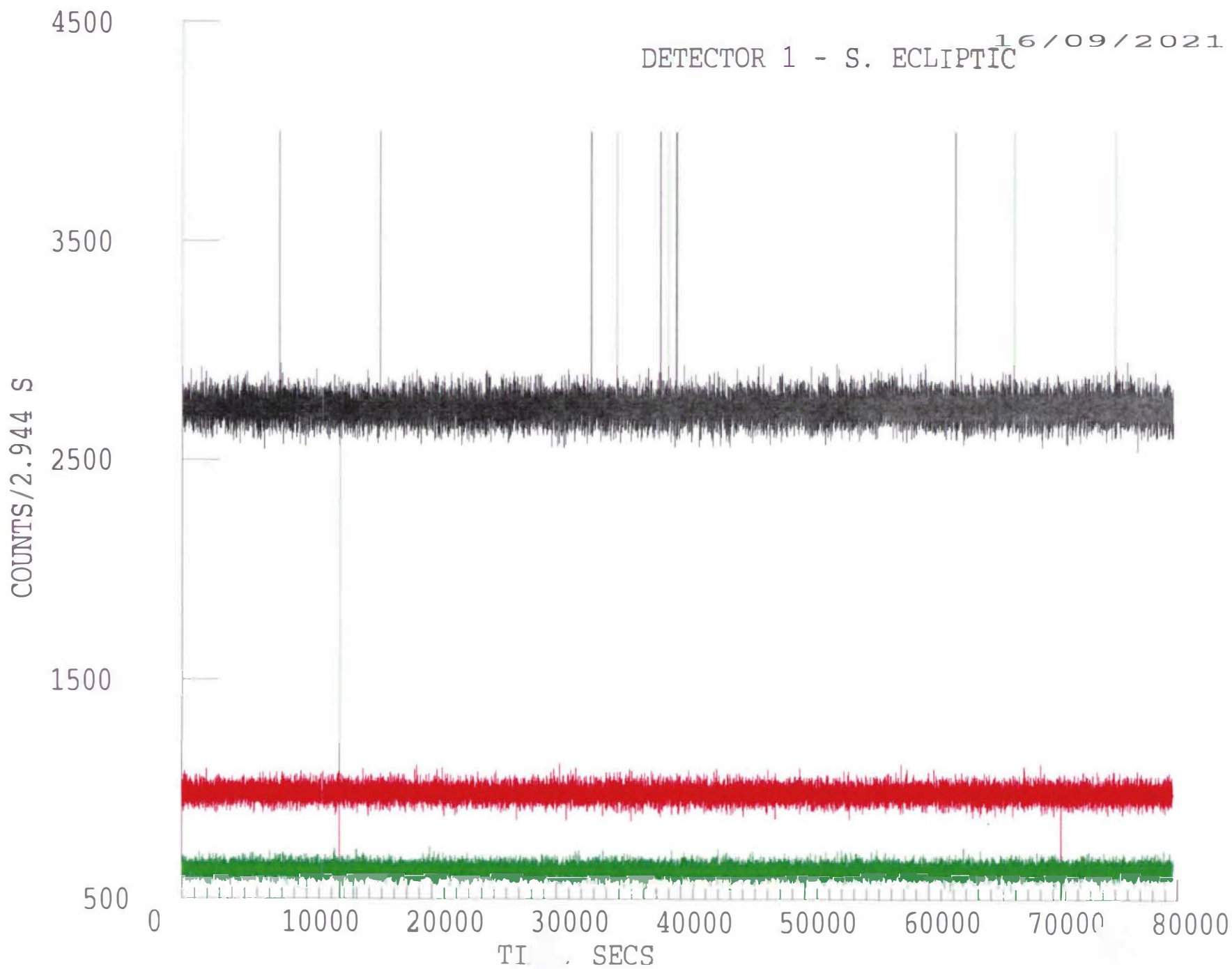
16/09/2021

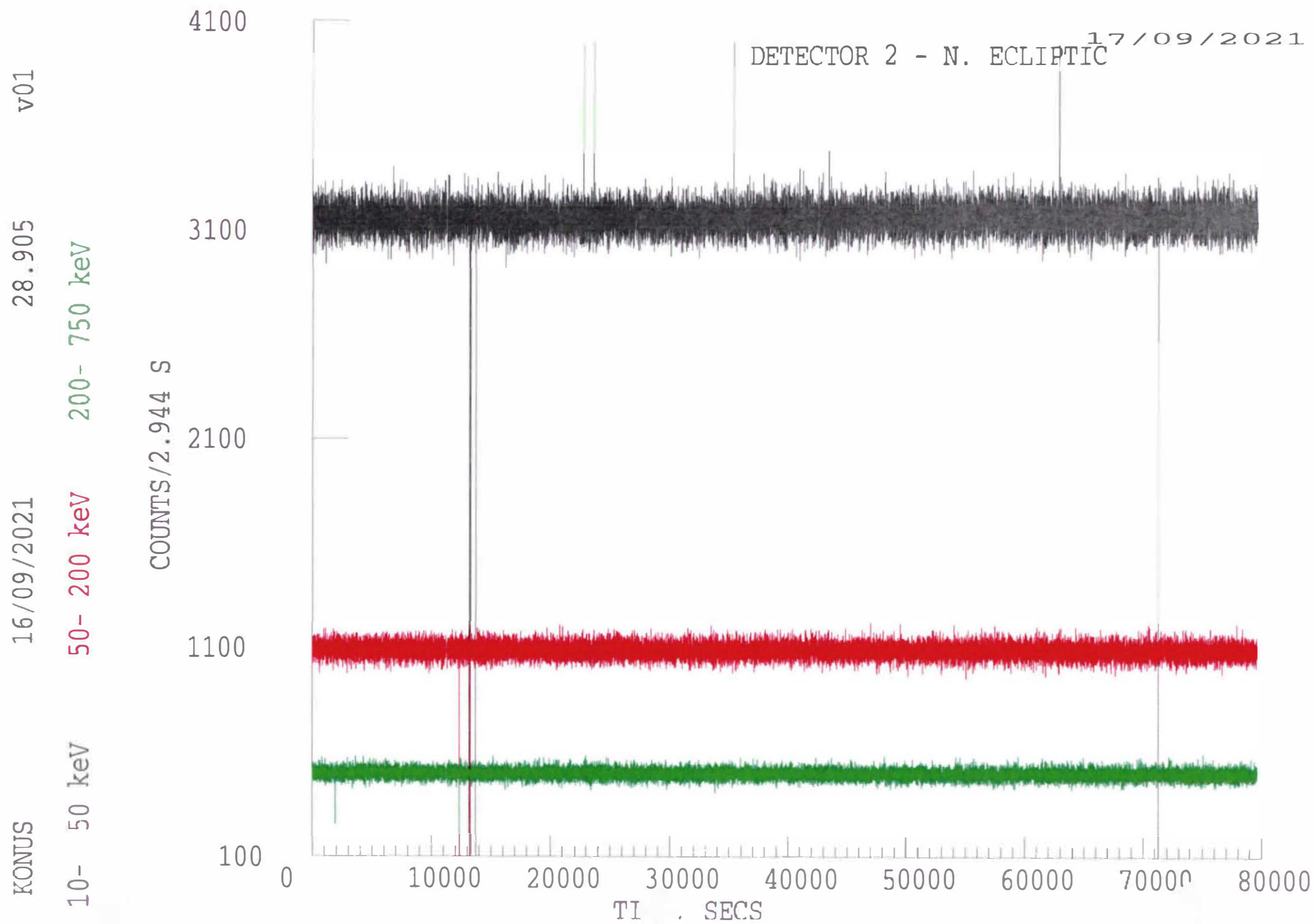
KONUS

200- 750 keV

50- 200 keV

10- 50 keV





BAT lightcurve for trigger at 210916_1728

Subject: BAT lightcurve for trigger at 210916_1728

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/16/2021, 12:32 PM

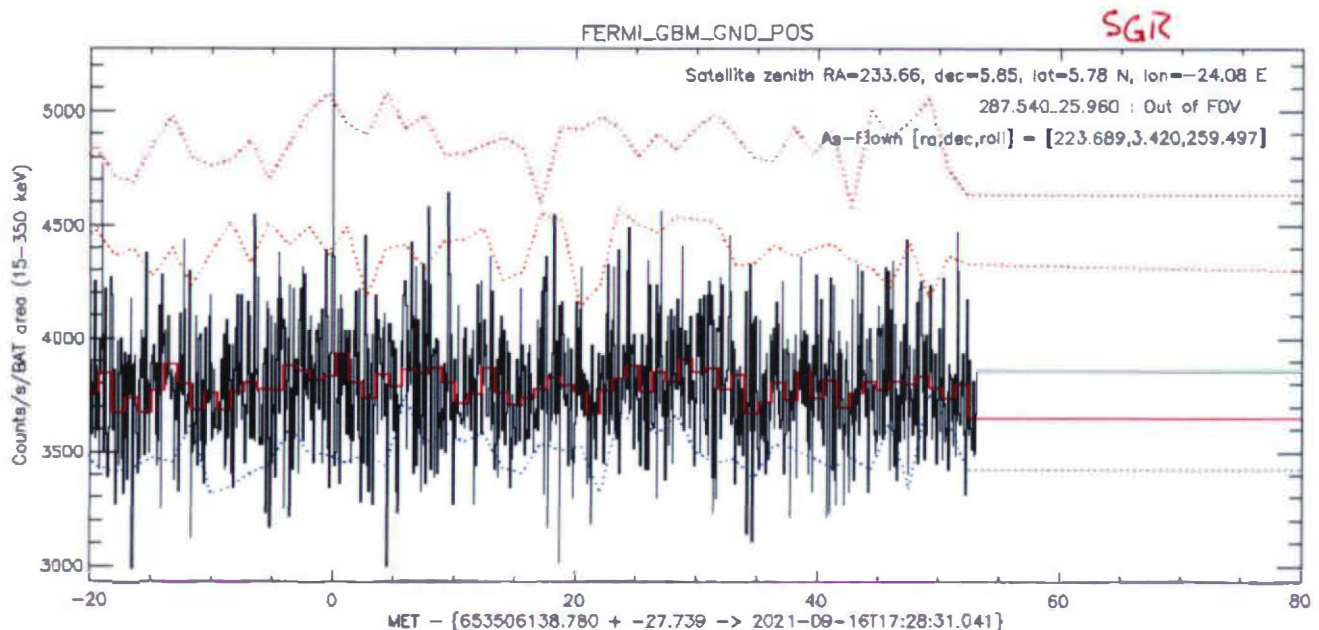
To: bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653506138.780 -s 287.540_25.960
Swift Zenith(RA,dec):      233.66, 5.85
Swift Location(lon,lat,alt): -24.08 E, 5.78 N, 548 km
Time(MET + UTC -> UT):    653506138.780 + -27.739 -> 2021-09-16T17:28:31.041
YYMMDD_SOD:               210916_62911.041      DOY=259
Obs Sequence Number:      00014790002
Obs Target Name:          SDSS J145453.53+032456.8
Obs Date and Times:       2021-09-16 17:06:34 - 17:36:31
Obs Pointing(ra,dec,roll): 223.689, 3.420, 259.50
287.540_25.960_imageloc (boresight_dist, angle): (65, 73)
287.540_25.960_exposure (cm2 cos adjusted): 0
287.540_25.960_altitude: 58 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210916_1728.png



Attachments:

/tmp/swift/210916_1728.png

17.7 KB

/tmp/swift/210916_1728_bat64ms_ipn

32.9 KB

Subject: Re: [EXTERNAL] Fermi GBM burst 210916850/653516654 - A possible hard magnetar burst from SGR1935

From: Dmitry Svinkin <svinkin@mail.ioffe.ru>

Date: 11/4/2021, 9:19 AM

To: ipn@ssl.berkeley.edu, "Roberts, Oliver (MSFC-ST12)[USRA]" <oliver.roberts@nasa.gov>

Using BAT TTE data I have derived a degenerate GBM-BAT annulus centered at RA(2000)=306.375 deg (20h 25m 30s) Dec(2000)=-5.346 deg (-5d 20' 45"), whose radius is 49.151 ± 49.151 deg (3 sigma).

The GBM-BAT and GBM-SPI-ACS annuli intersect to form a long box containing SGR 1935, see the attached figure.

Dmitry

On 04.11.2021 18:44, 'Palmer, David' via ipn wrote:

Oliver,

The improved position would come from a higher time resolution lightcurve that the TTE data provides.

Attached is a 4ms resolution lightcurve from the TTE, and I have cc'd the IPN group.

I have also attached the list of SGR1935 bursts that BAT imaged and located, so you can check them all and see if there are any hard ones.

--
David Palmer palmer@lanl.gov <<mailto:palmer@lanl.gov>> (505) 665-6863
Socially Distant: Work-From-Home (505) 695-9190

On Nov 4, 2021, at 9:18 AM, Roberts, Oliver (MSFC-ST12)[USRA] <oliver.roberts@nasa.gov> <<mailto:oliver.roberts@nasa.gov>> wrote:

Hi David and Aaron,
It was mentioned in the flurry of emails yesterday that it might be possible to improve upon the initial localization you provided, by doing finer analysis of the TTE data to produce a better localization. I was wondering whether you see any merit in performing this analysis and whether you would both have time to look into it, given both your expertise in this area?
I think this could be an important result/paper if the localization Dmitry Svinkin provided yesterday could be improved upon. Obviously, you would both be involved in any subsequent paper, if we decide to go that route, along with all those in the email strings yesterday. However, deciding on whether to proceed with a paper would be contingent on whether we manage to confidently isolate the source of this event to SGR 1935.

I am checking for additional "hard" events in the sub-threshold TTE event data from Fermi-GBM.

Best Regards and thanks,

Oliver

From:"Younes, George" <gyounes@email.gwu.edu> <<mailto:gyounes@email.gwu.edu>>
*Date:*Wednesday, November 3, 2021 at 12:26 PM
To:"Palmer, David (GSFC-410.0)[Department of DEFENSE]" <palmer@lanl.gov> <<mailto:palmer@lanl.gov>>
*Cc:*Dmitry Svinkin <svinkin@mail.ioffe.ru> <<mailto:svinkin@mail.ioffe.ru>>, "Mereghetti, Sandro" <sandro.mereghetti@inaf.it> <<mailto:sandro.mereghetti@inaf.it>>, Aaron Tohuvavohu <aaron.tohu@gmail.com> <<mailto:aaron.tohu@gmail.com>>, "Roberts, Oliver (MSFC-ST12)[USRA]" <oliver.roberts@nasa.gov> <<mailto:oliver.roberts@nasa.gov>>, Dmitry Frederiks <fred@mail.ioffe.ru> <<mailto:fred@mail.ioffe.ru>>, "sandro@iasf-milano.inaf.it" <<mailto:sandro@iasf-milano.inaf.it>> <<mailto:sandro@iasf-milano.inaf.it>> <<mailto:sandro@iasf-milano.inaf.it>>, "Kouveliotou, Chryssa" <ckouveliotou@email.gwu.edu> <<mailto:ckouveliotou@email.gwu.edu>>
*Subject:*Re: [EXTERNAL] Fermi GBM burst 210916850/653516654 - A possible hard magnetar burst from SGR1935

Yes, this is important. Thanks, David.

On Wed, Nov 3, 2021 at 1:19 PM Palmer, David <palmer@lanl.gov> <<mailto:palmer@lanl.gov>> wrote:

Since SGR 1900+14 is near the arc
1) It was out of the FOV (85 deg boresight) but above the horizon
2) It has not been seen by BAT since 2007-11-26 (4 bursts)

--
David Palmer palmer@lanl.gov <<mailto:palmer@lanl.gov>> (505) 665-6863
Socially Distant: Work-From-Home (505) 695-9190

On Nov 3, 2021, at 10:26 AM, Dmitry Svinkin <svinkin@mail.ioffe.ru> <<mailto:svinkin@mail.ioffe.ru>> wrote:
Dear All,

I have triangulated this burst to a GBM-SPI-ACS annulus centered at RA(2000)=223.400 deg (14h 53m 36s) Dec(2000)=+52.564 deg (+52d 33' 49"), whose radius is 62.348 ± 2.614 deg (3 sigma).

The position of SGR 1935 is consistent with the annulus, see the attached figure.

Best regards,
Dmitry

On 03.11.2021 19:19, Mereghetti, Sandro wrote:

the burst is in only 2 bins in the SPI/ACS so the duration is between 50-100 ms. This is consistent with a 'normal' SGR burst, but the high Epeak of 450 keV points more to a short GRB nature. I look forward to seeing the triangulation by Dmitry S. !!
sandro
Il giorno mer 3 nov 2021 alle ore 17:01 Palmer, David <palmer@lanl.gov> <<mailto:palmer@lanl.gov>> <<mailto:palmer@lanl.gov>> ha scritto:
George,
The lack of a point source in the image implies that the the source is most likely outside of the FOV. But this is a statistical

statement: at the given signal level (9 sigma in rates, from 95 excess counts) a source might have been below threshold in the image in some parts of the FOV.
With the TTE data from BAT, we can make a finer-binned lightcurve which might help on the identification.

-- David Palmer palmer@lanl.gov <<mailto:palmer@lanl.gov>> <<mailto:palmer@lanl.gov>> (505) 665-6863
Socially Distant: Work-From-Home (505) 695-9190

On Nov 3, 2021, at 9:44 AM, Younes, George <gyounes@email.gwu.edu> <<mailto:gyounes@email.gwu.edu>> wrote:

Dear David, Aaron,

Apologies in advance for my rudimentary understanding of BAT, but quick question, does the lack of an image in BAT imply that the likely source of the burst is outside the FOV?

Best,
George

On Wed, Nov 3, 2021 at 11:40 AM Palmer, David <palmer@lanl.gov> <<mailto:palmer@lanl.gov>> wrote:

Oliver,

This event rate-triggered BAT (Trigger #1073659) so there should be 3 seconds of event-by-event data.

There was nothing found in the BAT images.

There were 11 BAT-imaged bursts from the SGR in the week Sept 11-18, so it would not be surprising if that were the source

At the time, SGR1935+2154 was outside of the FOV (77 deg boresight angle) but above the horizon.

```
swinfo -o 2021-09-16T20:24:09.16 -s SGR1935p2154
Swift Zenith(RA,dec):      175.13, 19.87
Swift Location(lon,lat,alt): -126.63 E, 19.75 N, 542 km
Time(MET + UTCF => UT):    653516676.900 + -27.740 =>
2021-09-16T20:24:09.160
VYMMDD_500:                210916_73449.160      DOY=259
Obs Sequence Number:        00095928039
Obs Target Name:            CDF-N
Obs Date and Times:         2021-09-16  20:18:34 - 20:43:31
Obs Pointing(ra,dec,roll):  189.164, 62.287, 203.37
sgr1935p2154_imageloc (boresight_dist, angle): (77, 134)
sgr1935p2154_exposure (cm^2 cos adjusted): 0
sgr1935p2154_altitude: 6 (depressed but unattenuated)
```

<210916_2024.png>

-- David Palmer palmer@lanl.gov <<mailto:palmer@lanl.gov>> <<mailto:palmer@lanl.gov>> (505) 665-6863
Socially Distant: Work-From-Home (505) 695-9190

On Nov 3, 2021, at 9:22 AM, Aaron Tohuavohu <aaron.tohu@gmail.com> <<mailto:aaron.tohu@gmail.com>> <<mailto:aaron.tohu@gmail.com>> wrote:

Oli,
Did this trigger generate a prompt GCN notice? I see no evidence for such in the GCN archive, and it did not trigger GUANO.

On Wed, Nov 3, 2021 at 11:14 AM Roberts, Oliver (MSFC-ST12)[USRA] <oliver.roberts@nasa.gov> <<mailto:oliver.roberts@nasa.gov>> wrote:

Dear All,____

While working with Fermi-GBM data from the latest SGR 1935 outburst, I found one of the Fermi-GBM triggered events (210916850/653516654) to be of interest that I would like to request some follow-up for. The GBM localization for this event is consistent with that of SGR 1935 (RA=290.49, Dec.=18.68, err 10.15), but is spectrally hard (Ep of 450 keV). ____

I would like to ask whether it would be possible to triangulate this burst using the IPN data (or data independently from BAT, Konus-Wind, INTEGRAL), to determine with any greater certainty whether this burst

is truly from SGR 1935 or is a coincident short GRB. ____

__

Thank you in advance, ____

Oliver ____

__

__

Dr. Oliver J. Roberts (he/him/his) ____

__

Scientist (Astronomy) ____

USRA Science and Technology Institute, ____

NASA Marshall Space Flight Center, ____

National Space Science and Technology Center, ____

320 Sparkman Dr. NW, Huntsville, AL 35805 ____

__

Office: +1 (256) 961-7407 ____

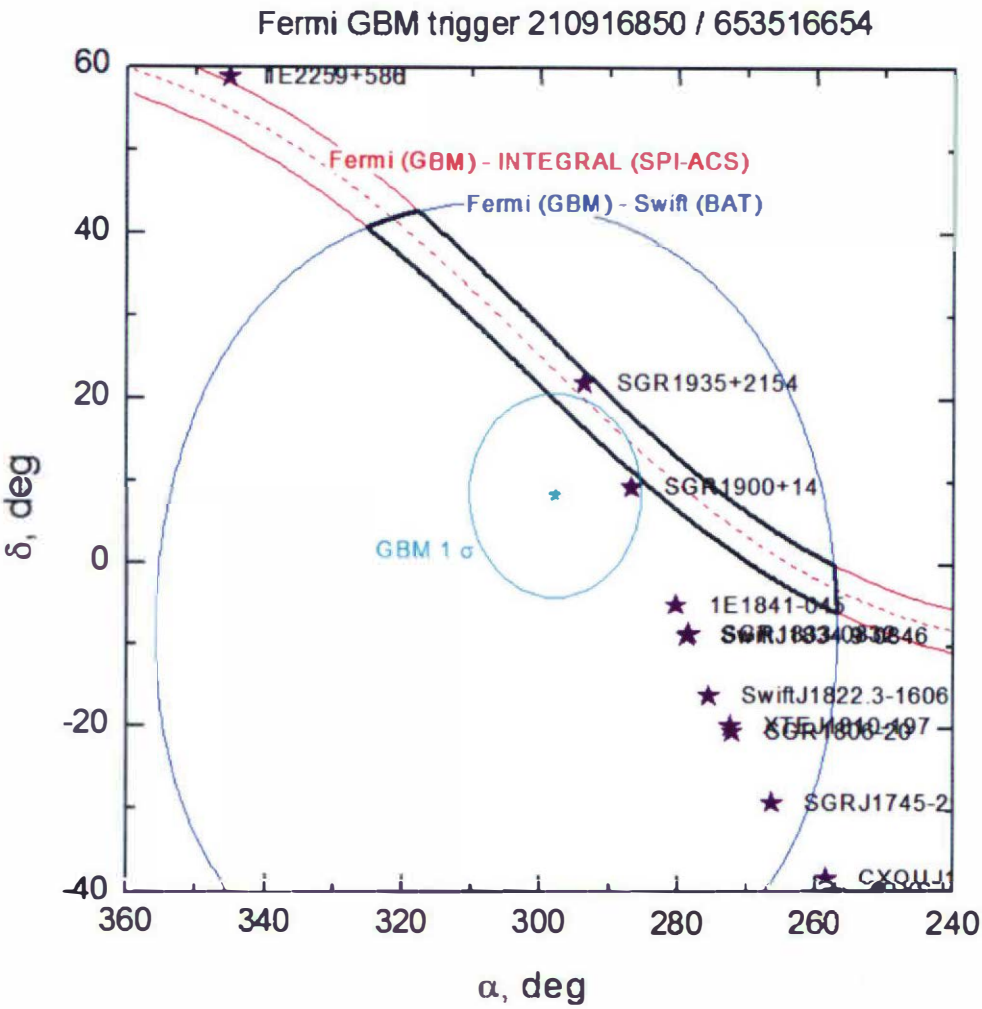
__

Sandro Mereghetti
INAF - Istituto di Astrofisica Spaziale e Fisica Cosmica - Milano
via A.Corti 12, I-20133 Milano, ITALY
Tel. +39-02-23699323
Cel. +39-338-7259309
Fax +39-02-2666017
ORCID Id 0000-0003-3259-7801

<20210916_T73449_IPN_map.png>

==
You received this message because you are subscribed to the Google Groups "ipn" group.
To unsubscribe from this group and stop receiving emails from it, send an email to ipn+unsubscribe@ssl.berkeley.edu
<<mailto:ipn+unsubscribe@ssl.berkeley.edu>>.

-- 20210916_T73449_IPN_map_v2.png



— Attachments —

20210916_T73449_IPN_map_v2.png

32.3 KB

KONUS

17/09/2021

17.633

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

60000

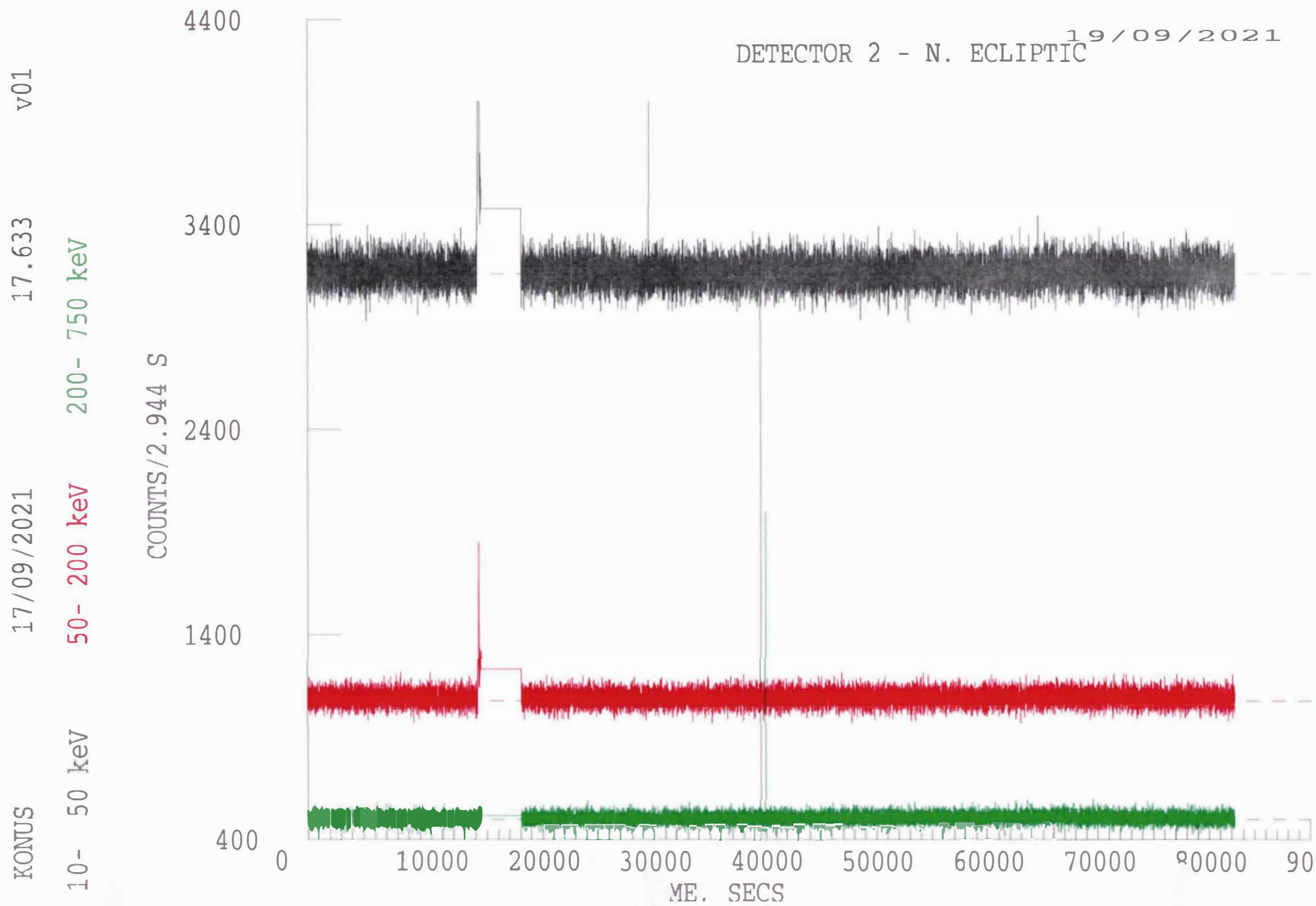
70000

80000

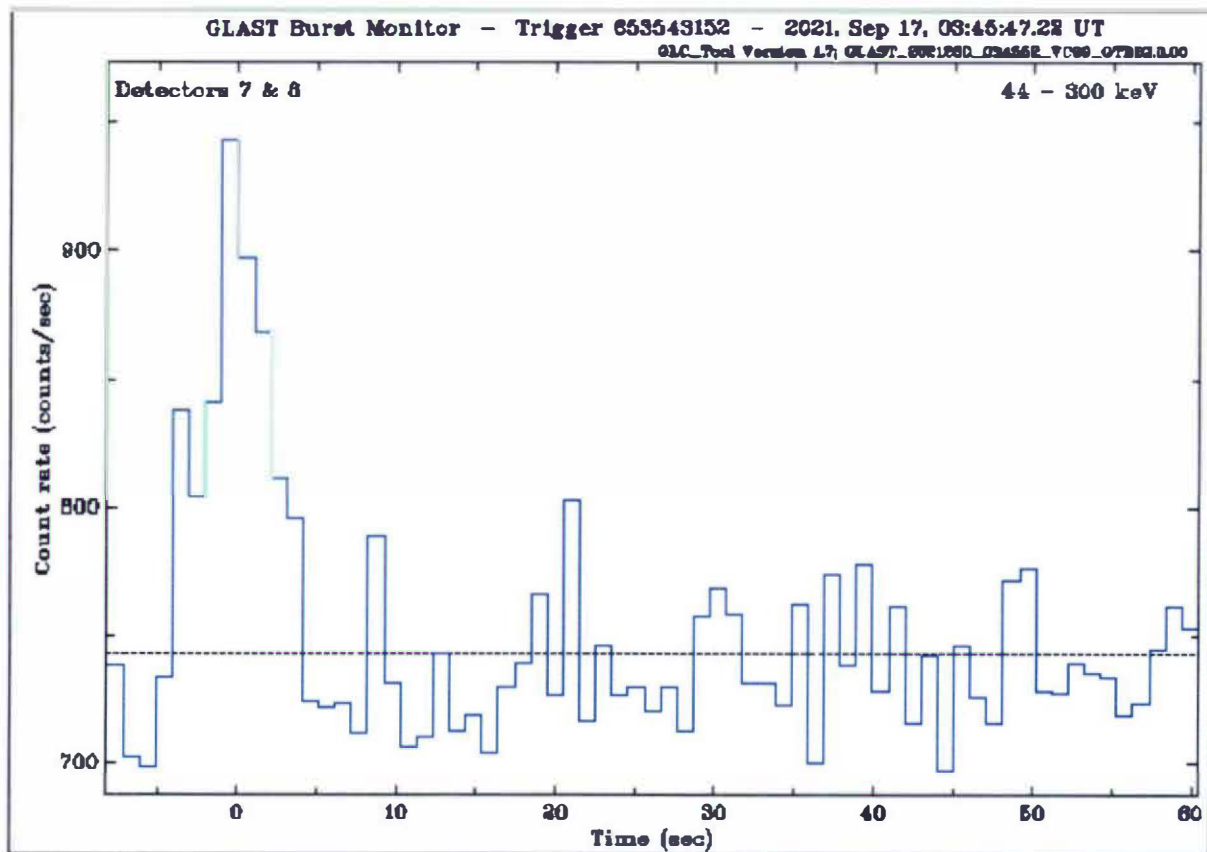
90

ME. SECS

DETECTOR 1 - S. ECLIP¹₇/09/2021



75.5 -36.2 5.6

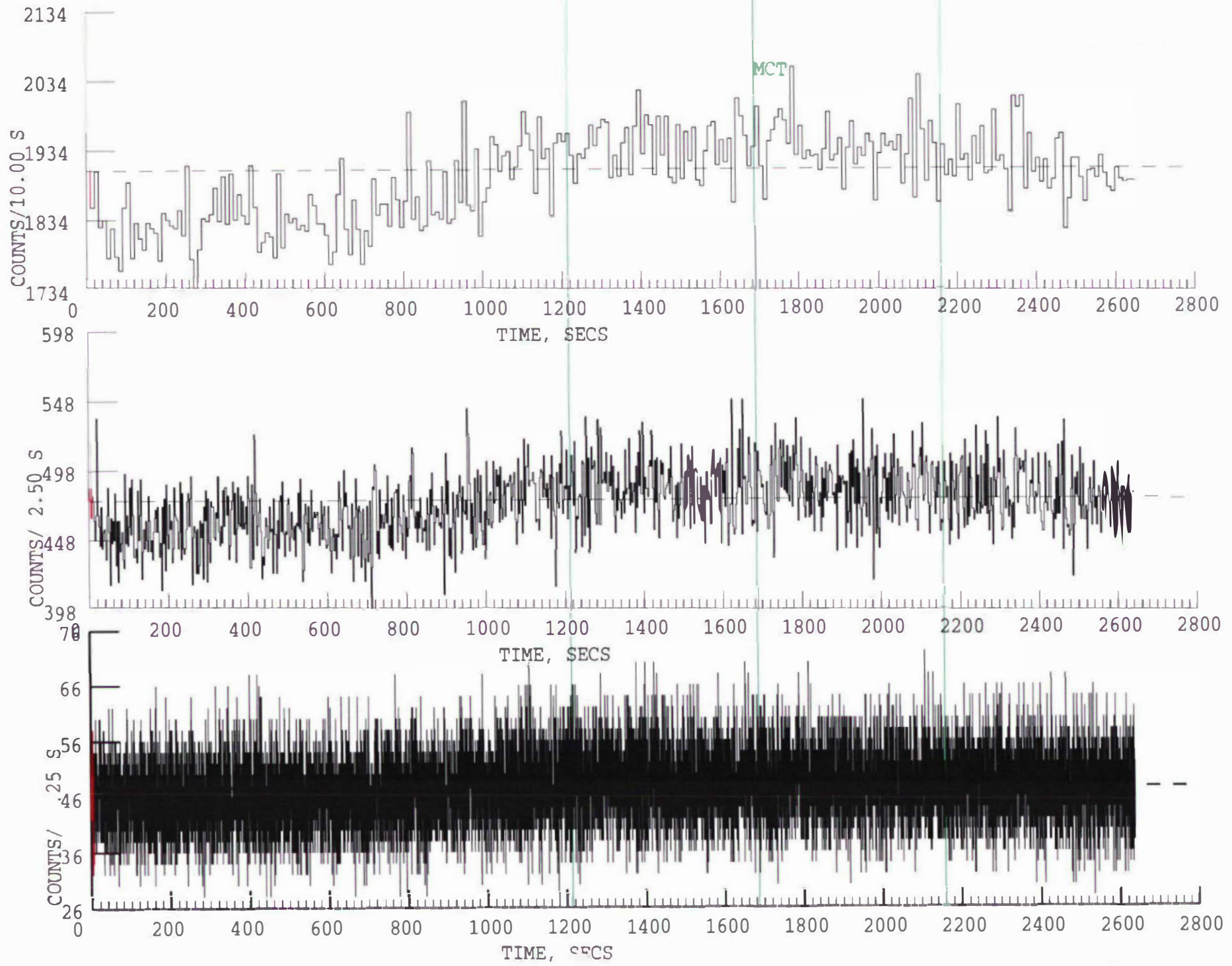


A

03:23:44.062
12224.062
17/09/21
ODYSSEY

17/11/2021

50-3000 keV



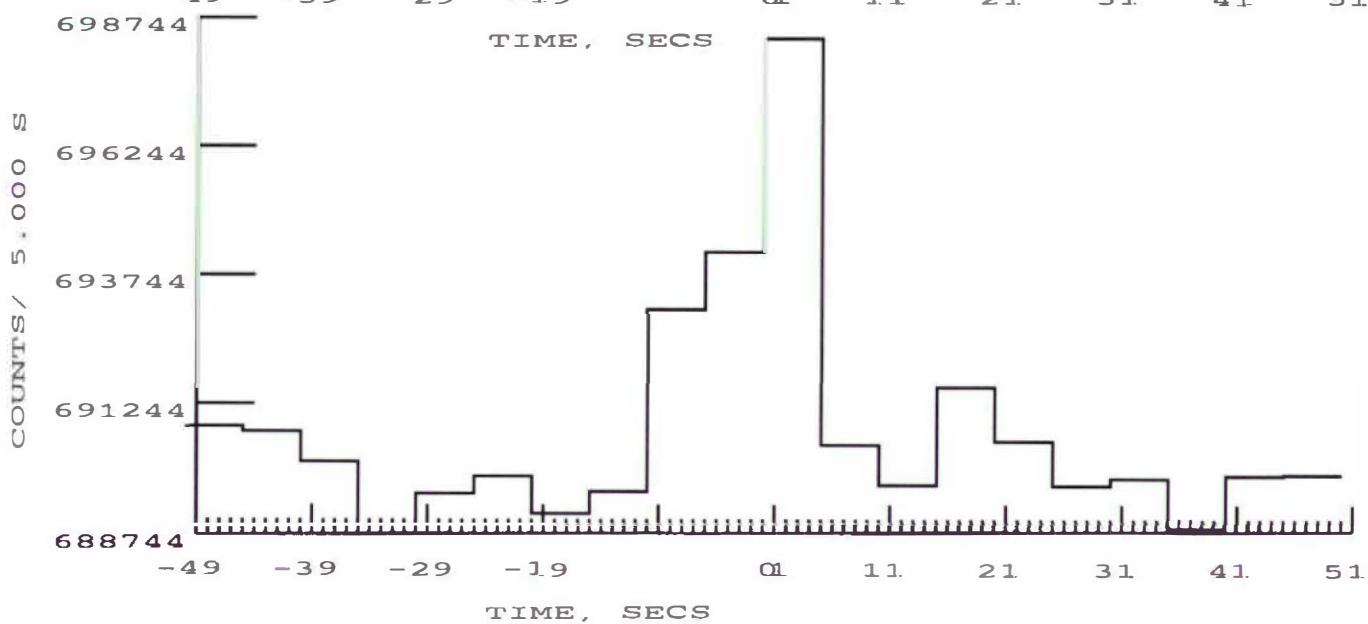
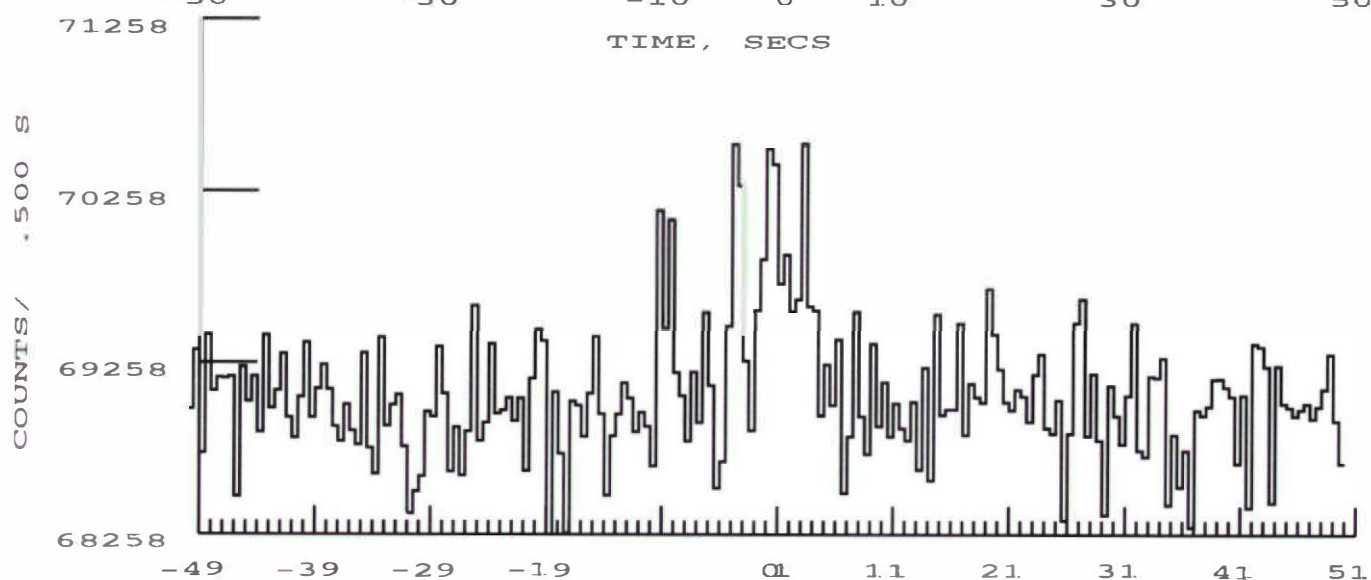
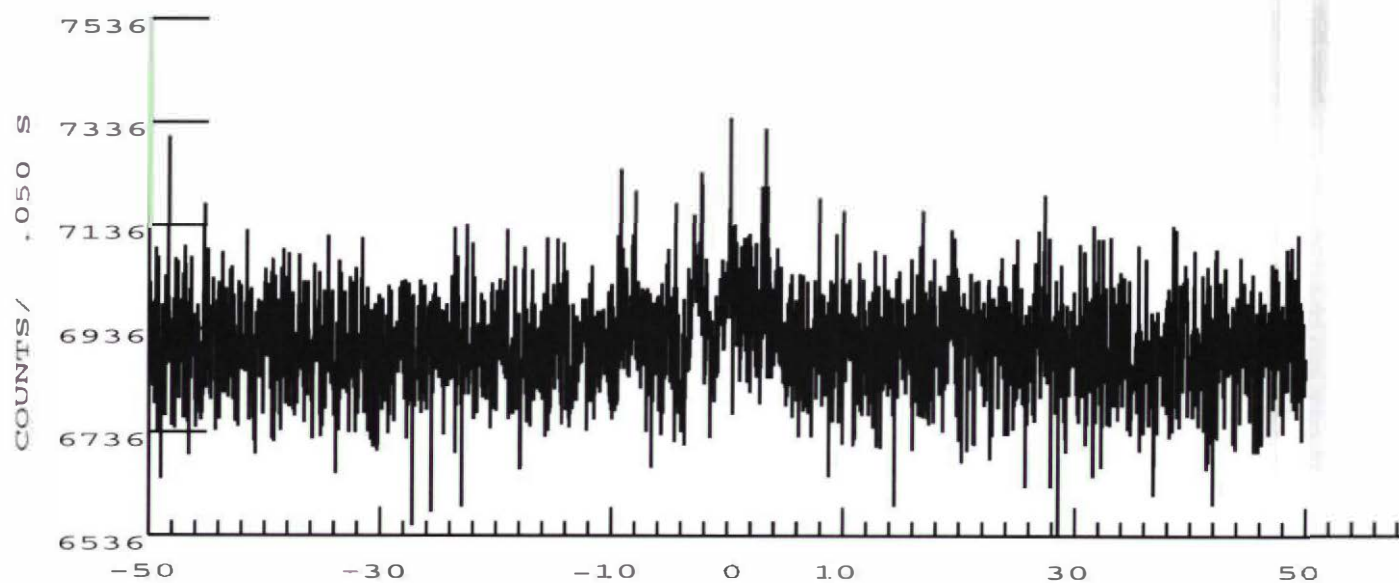
INTEGRAL

17/09/21

13547.000

03:45:47.0

16/11/21



Subject: BAT lightcurve for trigger at 210917_0345

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/16/2021, 11:58 PM

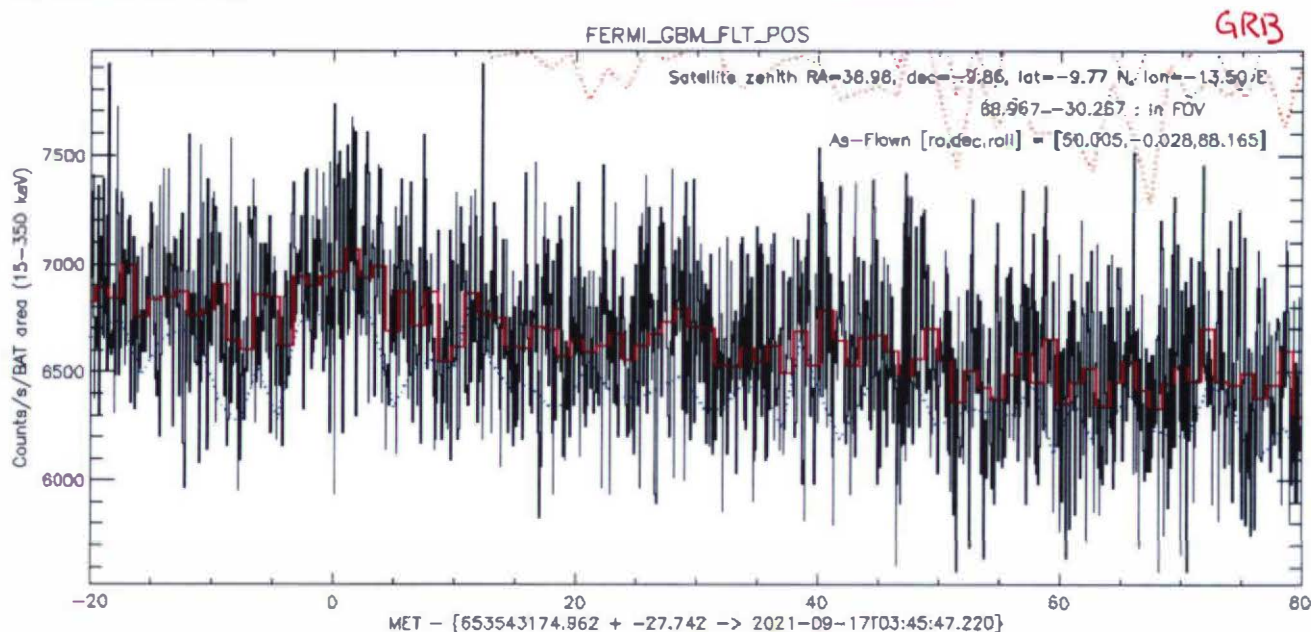
To: palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, mkippen@lanl.gov, vestrand@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653543174.962 -s 68.967_-30.267
Swift Zenith(RA,dec):      38.98, -9.86
Swift Location(lon,lat,alt): -13.50 E, -9.77 N, 553 km
Time(MET + UTCF -> UT):  653543174.962 + -27.742 -> 2021-09-17T03:45:47.220
YYMMDD_SOD:              210917_13547.220      DOY=260
Obs Sequence Number:      00075011065
Obs Target Name:          saa-cold-215-04
Obs Date and Times:       2021-09-17 03:29:34 - 03:48:31
Obs Pointing(ra,dec,roll): 50.005, -0.028, 88.17
68.967_-30.267_imageloc (boresight_dist, angle): (35, -27)
68.967_-30.267_exposure (cm2 cos adjusted): 3146
68.967_-30.267_altitude: 78 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210917_0345.png



Attachments:

/tmp/swift/210917_0345_bat64ms_ipn

87.0 KB

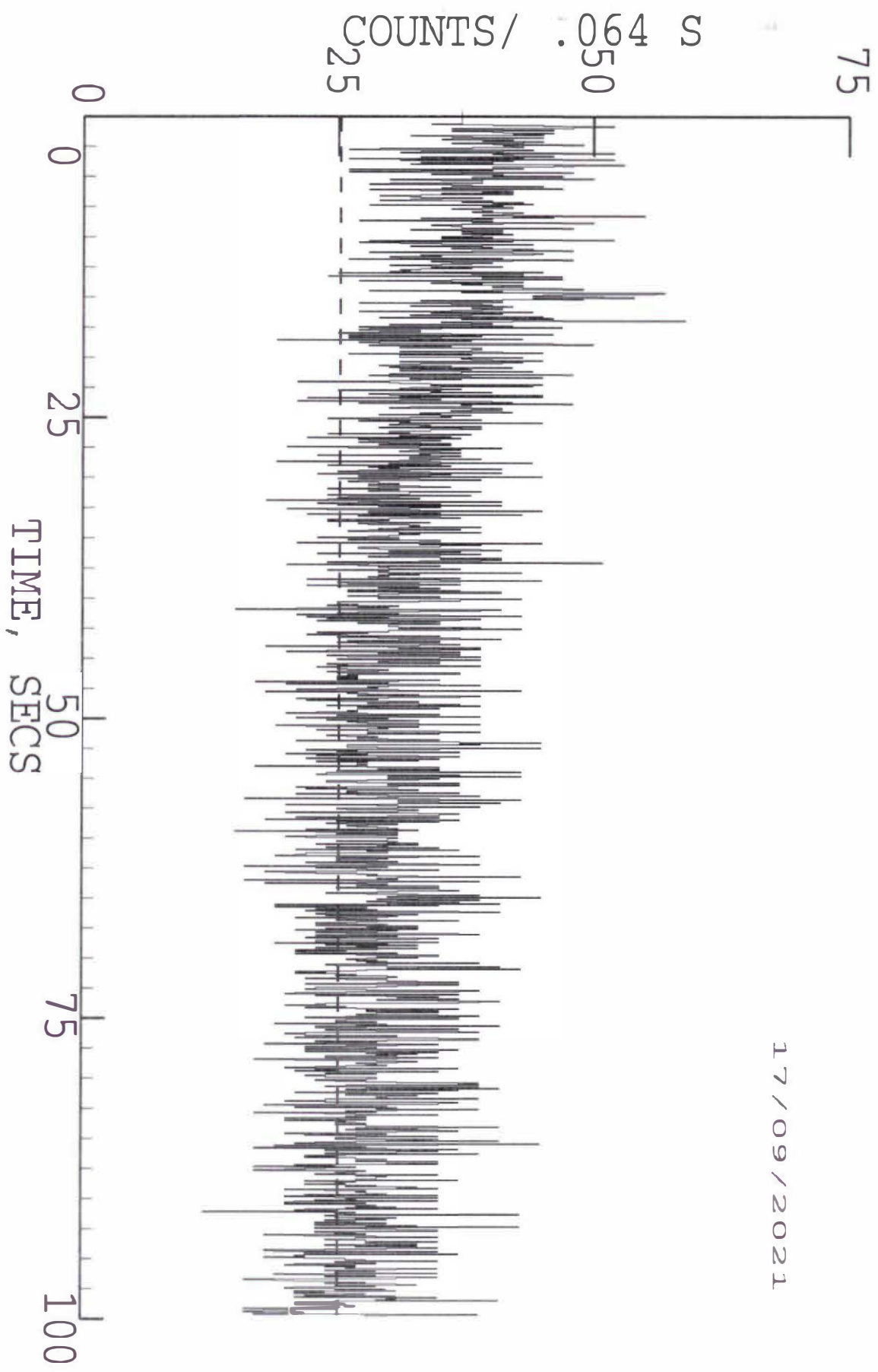
/tmp/swift/210917_0345.png

18.0 KB

KONUS 17/09/21 15257.027 04:14:17.027
50- 200 keV

B

Solar
SPI NO

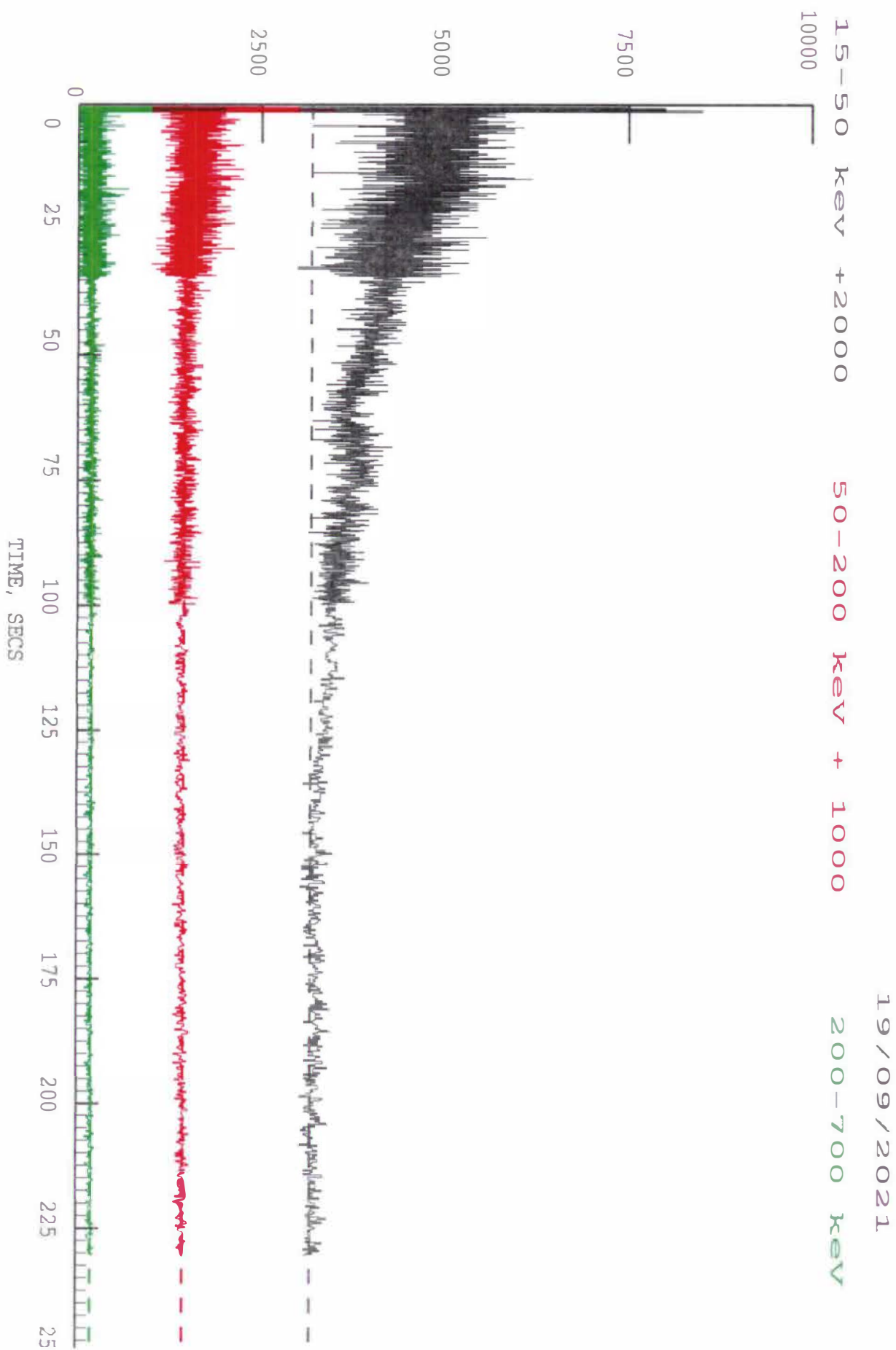


KONUS

17/09/21

COUNTS/SEC 15257.000

04:14:17.000



17/09/2021

03:51:44.022

13904.022

17/09/21

ODYSSEY

50-3000 keV

MCT
COUNTS/10.00 S

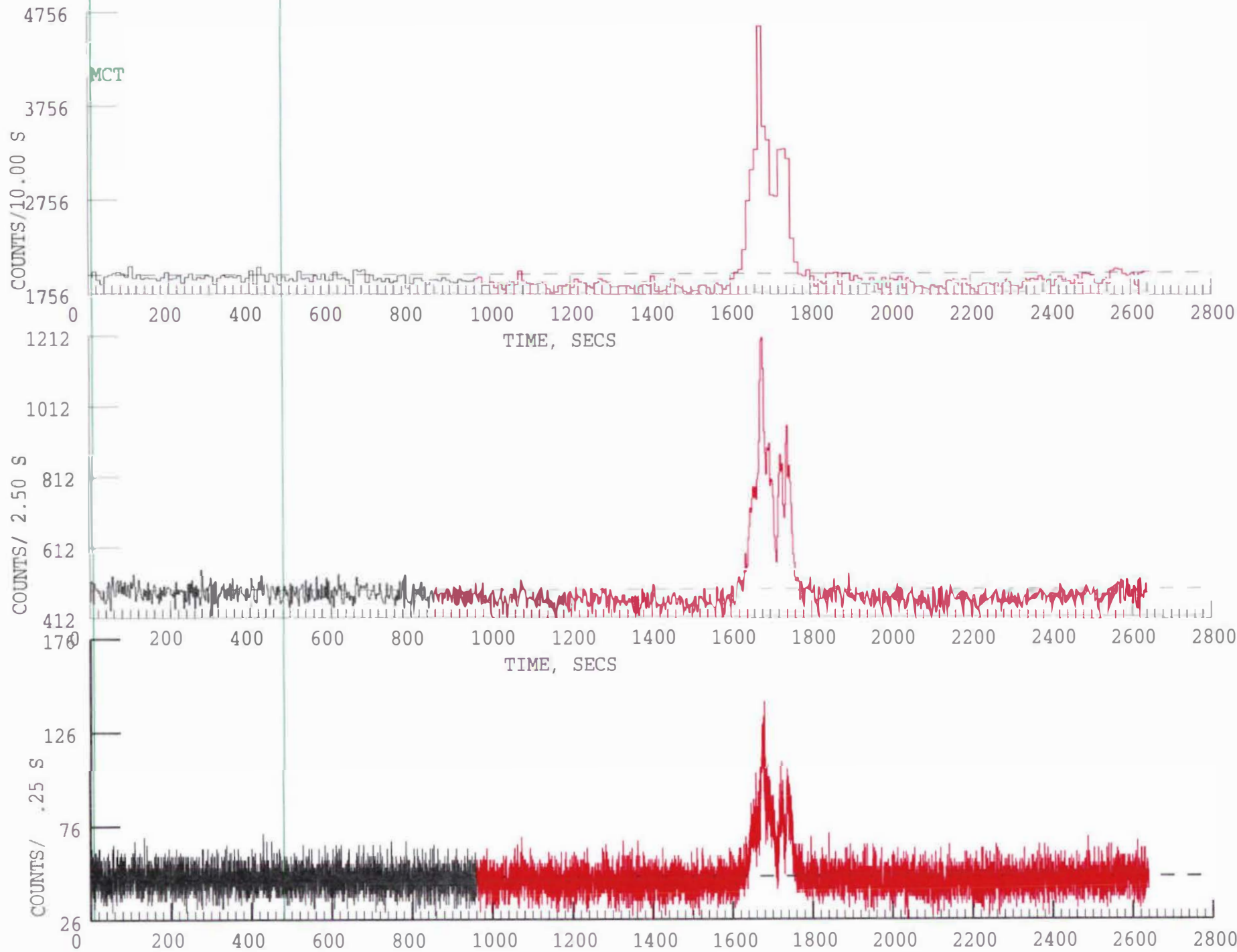
TIME, SECS

COUNTS/ 2.50 S

TIME, SECS

COUNTS/ .25 S

TIME, SECS



Subject: BAT lightcurve for trigger at 210917_0413

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/16/2021, 11:58 PM

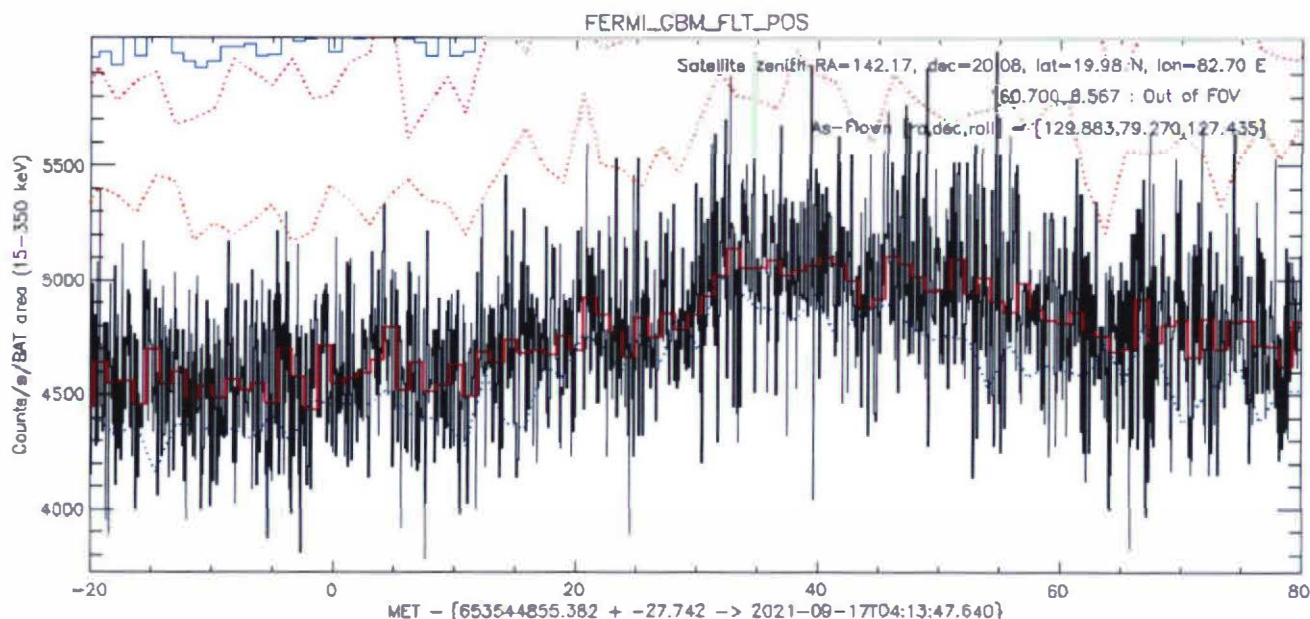
To: palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653544855.382 -s 160.700_8.567
Swift Zenith(RA,dec):      142.17, 20.08
Swift Location(lon,lat,alt): 82.70 E, 19.98 N, 541 km
Time(MET + UTC -> UT):    653544855.382 + -27.742 -> 2021-09-17T04:13:47.640
YYMMDD_S00:               210917_15227.640      DOY=260
Obs Sequence Number:       01072990009
Obs Target Name:           GRB 210912A
Obs Date and Times:        2021-09-17 03:56:34 - 04:26:32
Obs Pointing(ra,dec,roll): 129.883, 79.270, 127.44
160.700_8.567_imageloc (boresight_dist, angle): (72, -70)
160.700_8.567_exposure (cm2 cos adjusted): 0
160.700_8.567_altitude: 92 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210917_0413.png



Attachments

/tmp/swift/210917_0413.png

20.2 KB

/tmp/swift/210917_0413_bat64ms_ipn

87.1 KB

Subject: BAT lightcurve for trigger at 210917_0414

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/17/2021, 9:16 AM

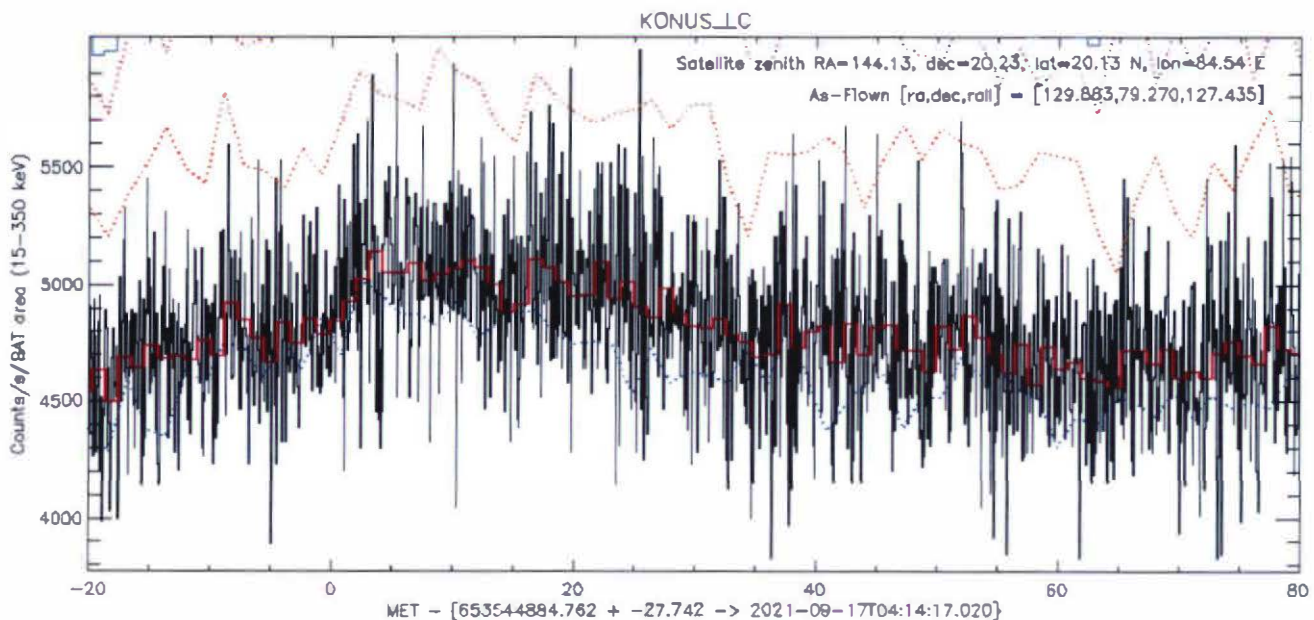
To: mkippen@lanl.gov, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-17T04:14:17.020
Swift Zenith(RA,dec):      144.13, 20.23
Swift Location(lon,lat,alt): 84.54 E, 20.13 N, 541 km
Time(MET + UTC -> UT):    653544884.762 + -27.742 -> 2021-09-17T04:14:17.020
YYMMDD_500:                210917_15257.020      DOY=260
Obs Sequence Number:       01072990009
Obs Target Name:           GRB 210912A
Obs Date and Times:        2021-09-17 03:56:34 - 04:26:32
Obs Pointing(ra,dec,roll): 129.883, 79.270, 127.44
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

— /tmp/swift/210917_0414.png —



— Attachments —

/tmp/swift/210917_0414_bat64ms_ipn

87.1 KB

/tmp/swift/210917_0414.png

20.1 KB

Subject: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 7:20 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30869
SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
DATE: 21/09/23 14:19:30 GMT
FROM: Chenwei Wang at IHEP <cwwang@ihep.ac.cn>

C. W. Wang, S. L. Xiong, Y. Huang, C. Cai, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, P. Wang, S. L. Xie, S. Xiao, Z. W. Guo, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154
either by in-flight trigger or by on-ground search of the data, from
2021-09-15T14 to 2021-09-23T14(UTC).
Here is the list of these bursts:

Trigger Time (UTC)
2021-09-15T15:32:56.050
~~2021-09-17T12:52:37.800~~
~~2021-09-17T13:58:25.100~~
2021-09-18T22:58:52.150
2021-09-22T02:39:10.200
2021-09-22T20:12:16.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 7:20 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30869
SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
DATE: 21/09/23 14:19:30 GMT
FROM: Chenwei Wang at IHEP <cwwang@ihep.ac.cn>

C. W. Wang, S. L. Xiong, Y. Huang, C. Cai, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, P. Wang, S. L. Xie, S. Xiao, Z. W. Guo, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-8 detected a series of bursts very probably from SGR J1935+2154
either by in-flight trigger or by on-ground search of the data, from
2021-09-15T14 to 2021-09-23T14(UTC).
Here is the list of these bursts:

Trigger Time (UTC)
2021-09-15T15:32:56.050
2021-09-17T12:52:37.800
2021-09-17T13:58:25.100
2021-09-18T22:58:52.150
2021-09-22T02:39:10.200
2021-09-22T20:12:16.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

KONUS

18/09/2021

6.360

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4200

3200

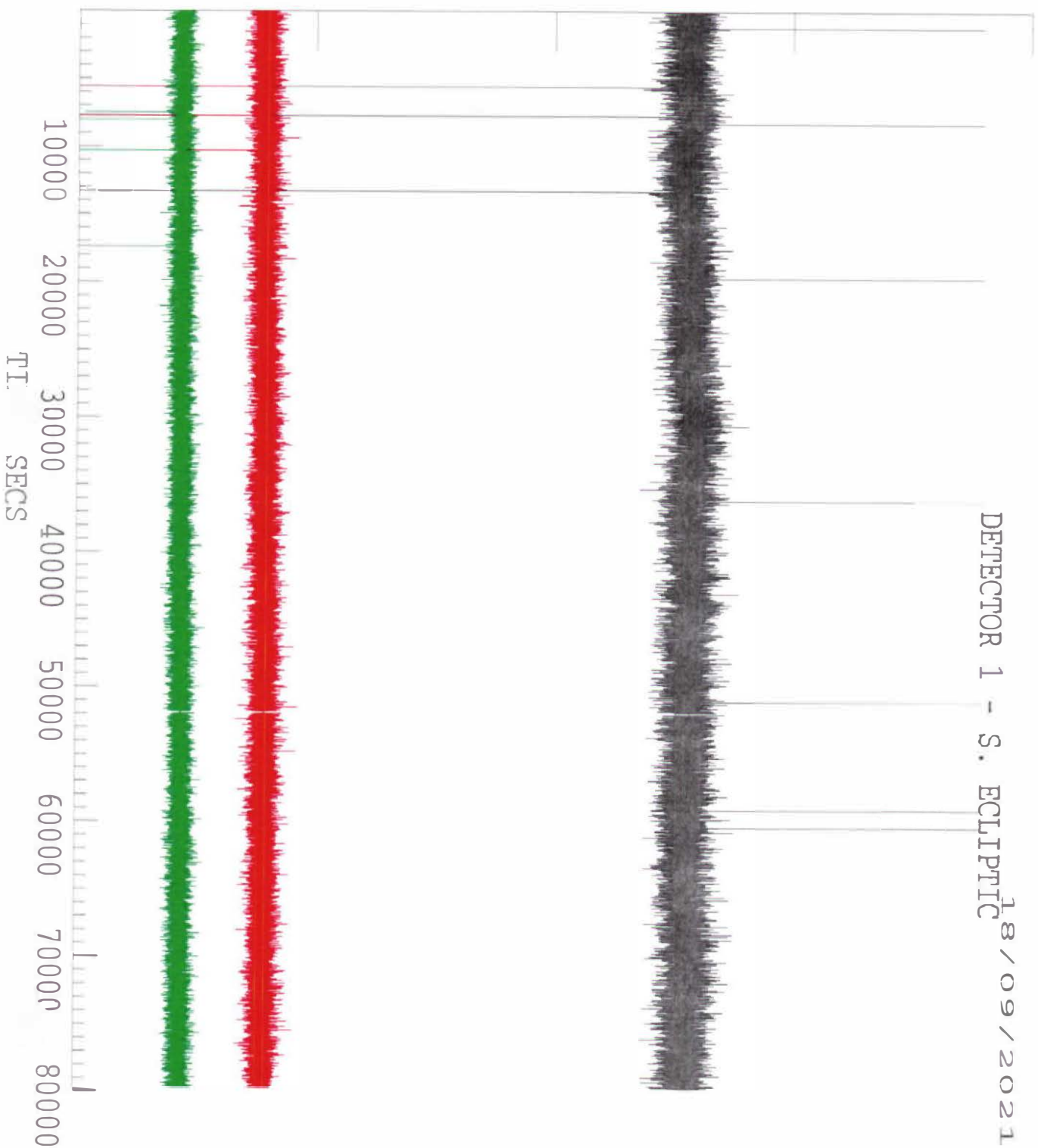
2200

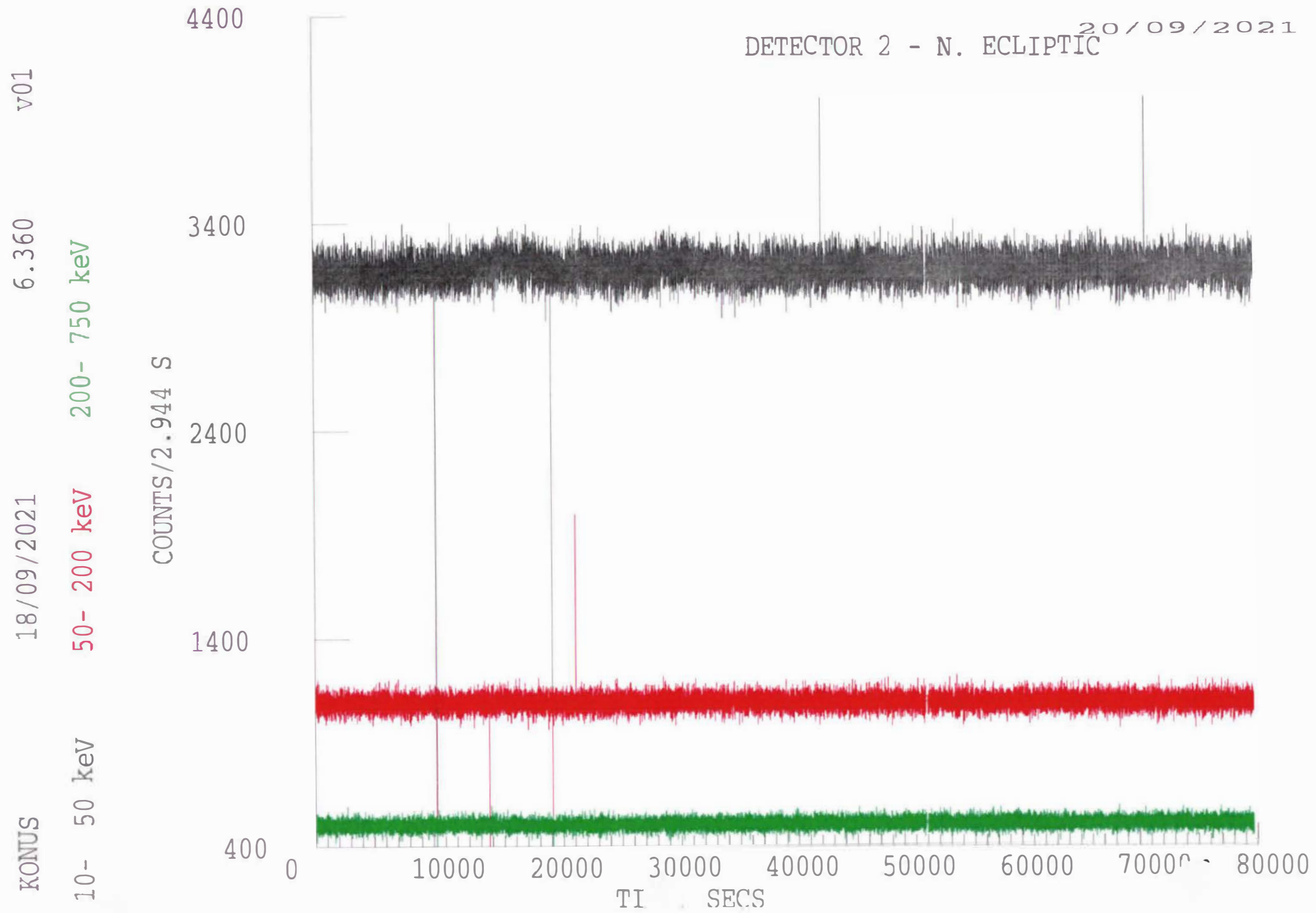
1200

200

0

DETECTOR 1 - S. ECLIP¹⁸TIC / 09 / 2021





Subject: GCN/SWIFT_BAT_LIGHTCURVE

From: Bacodine <vxw@capella2.gsfc.nasa.gov>

Date: 9/18/2021, 1:02 AM

To: khurley@ssl.berkeley.edu

TITLE: GCN/SWIFT NOTICE
 NOTICE_DATE: Sat 18 Sep 21 08:02:33 UT
 NOTICE_TYPE: Swift-BAT GRB Lightcurve
 TRIGGER_NUM: 1073821, Seg_Num: 0
 GRB_RA: 250.455d {+16h 41m 49s} (J2000),
 250.850d {+16h 43m 24s} (current),
 249.548d {+16h 38m 12s} (1950)
 GRB_DEC: -45.540d {-45d 32' 22"} (J2000),
 -45.580d {-45d 34' 46"} (current),
 -45.444d {-45d 26' 39"} (1950)
 GRB_DATE: 19475 TJD; 261 DOY; 21/09/18
 GRB_TIME: 28700.25 SOD {07:58:20.25} UT
 TRIGGER_INDEX: 20000
 GRB_PHI: -139.31 [deg]
 GRB_THETA: 22.35 [deg]
 DELTA_TIME: 0.00 [sec]
 TRIGGER_DUR: 64.000 [sec]
 SCLN_STATUS: 0x19D
 RATE_SIGNIF: 0.00 [sigma]
 IMAGE_SIGNIF: 6.79 [sigma]
 LC_URL: sw01073821000msb.lc
 SUN_POSTN: 175.99d {+11h 43m 58s} +1.73d {+01d 44' 05"}
 SUN_DIST: 80.73 [deg] Sun_angle= -5.0 [hr] (East of Sun)
 MOON_POSTN: 327.12d {+21h 48m 30s} -18.53d {-18d 31' 50"}
 MOON_DIST: 67.39 [deg]
 MOON_ILLUM: 92 [%]
 GAL_COORDS: 339.19, 0.49 [deg] galactic lon,lat of the burst (or transient)
 ECL_COORDS: 255.24,-23.10 [deg] ecliptic lon,lat of the burst (or transient)
 COMMENTS: SWIFT-BAT GRB Lightcurve.
 COMMENTS:
 COMMENTS: The next comments were copied from the BAT_POS Notice:
 COMMENTS: This is an image trigger.
 COMMENTS: A point_source was found.
 COMMENTS: This matches a source in the on-board catalog.
 COMMENTS: This matches a source in the ground catalog: IGRJ16418-4532, delta=0.003 [deg].
 COMMENTS: This is not a GRB.
 COMMENTS: This is an interesting source.
 COMMENTS: Since the IMAGE_SIGNIF is less than 7 sigma, this is a questionable detection.
 COMMENTS: This trigger occurred at longitude,latitude = 177.80,-17.51 [deg].

BAT lightcurve for trigger at 210918_1039

Subject: BAT lightcurve for trigger at 210918_1039

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/18/2021, 7:33 AM

To: gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653654374.829 -s 188.417_-80.100
```

Swift Zenith(RA,dec): 180.37, 17.56

Swift Location(lon,lat,alt): 23.29 E, 17.44 N, 541 km

Time(MET + UTCF -> UT): 653654374.829 + -27.749 -> 2021-09-18T10:39:07.080

YYMMDD_S00: 210918_38347.080 DOY=261

Obs Sequence Number: 00014424004

Obs Target Name: SRGe J131014.2+444315

Obs Date and Times: 2021-09-18 10:34:34 - 10:40:36

Obs Pointing(ra,dec,roll): 197.555, 44.777, 215.03

188.417_-80.100_imageloc (boresight_dist, angle): (125, -123)

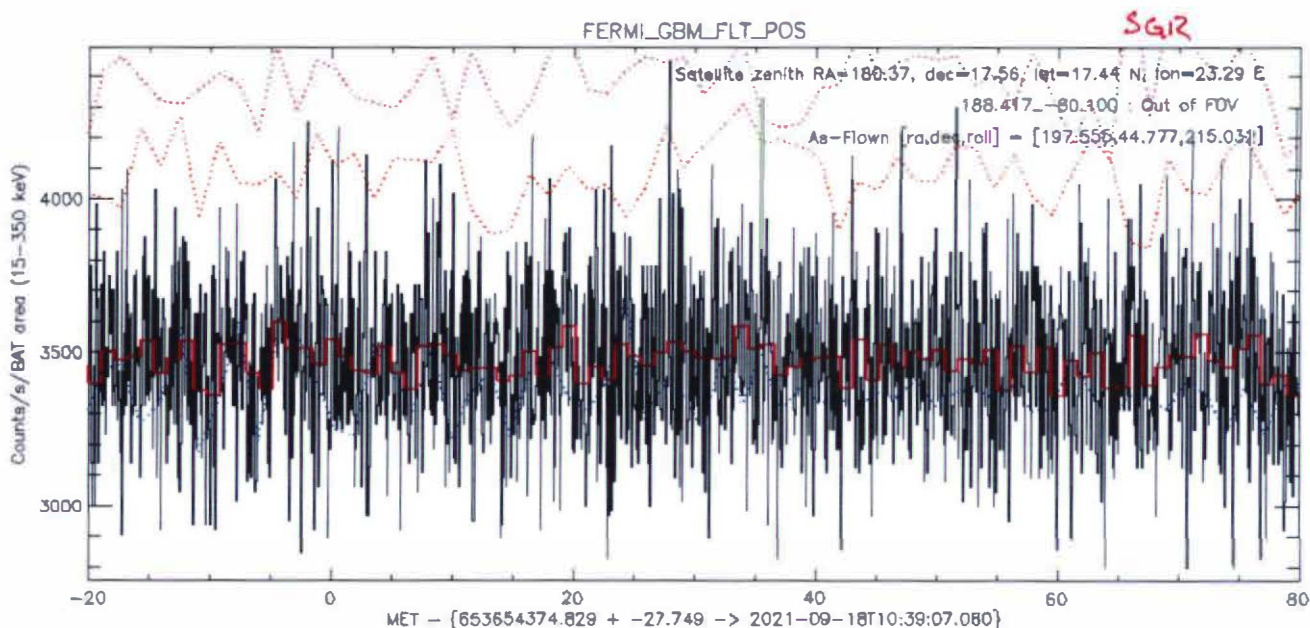
188.417_-80.100_exposure (cm² cos adjusted): 0

188.417_-80.100_altitude: 15 (depressed but unattenuated)

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)

TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210918_1039.png



Attachments:

/tmp/swift/210918_1039.png

21.6 KB

/tmp/swift/210918_1039_bat64ms_ipn

57.2 KB

Subject: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 7:20 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30869
SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
DATE: 21/09/23 14:19:30 GMT
FROM: Chenwei Wang at IHEP <cw@ihep.ac.cn>

C. W. Wang, S. L. Xiong, Y. Huang, C. Cai, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, P. Wang, S. L. Xie, S. Xiao, Z. W. Guo, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154
either by in-flight trigger or by on-ground search of the data, from
2021-09-15T14 to 2021-09-23T14(UTC).
Here is the list of these bursts:

Trigger Time (UTC)
2021-09-15T15:32:56.050
2021-09-17T12:52:37.800
2021-09-17T13:58:25.100
2021-09-18T22:58:52.150
2021-09-22T02:39:10.200
2021-09-22T20:12:16.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

v01

86.351

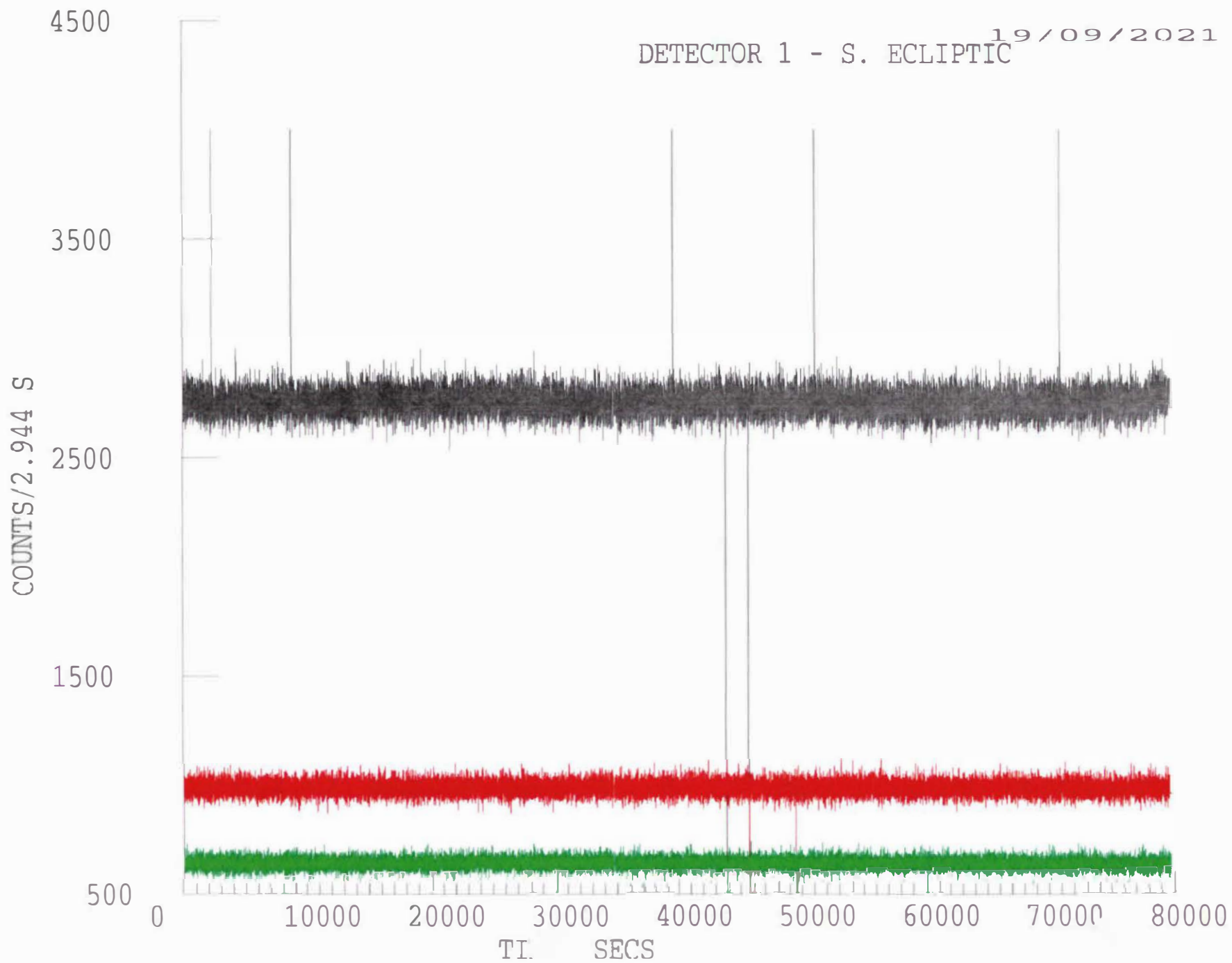
19/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV



v01

86.351

19/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4400

3400

2400

1400

400

0

10000

20000

30000

40000

50000

60000

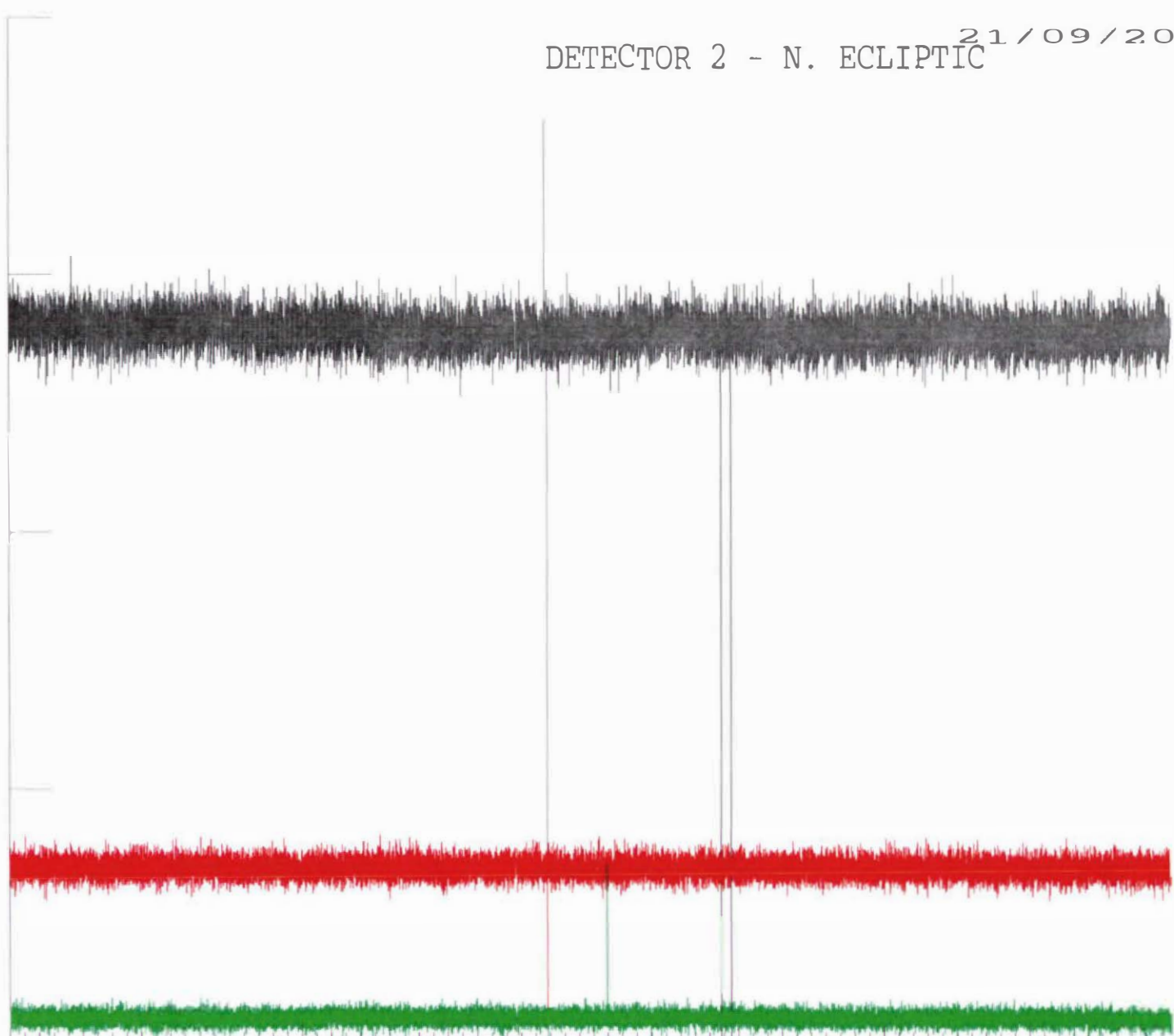
70000

80000

TIME SECS

DETECTOR 2 - N. ECLIPTIC

21/09/2021



Subject: GCN/SWIFT_BAT_LIGHTCURVE

From: Bacodine <vxw@capella2.gsfc.nasa.gov>

Date: 9/18/2021, 5:32 PM

To: khurley@ssl.berkeley.edu

TITLE: GCN/SWIFT NOTICE
 NOTICE_DATE: Sun 19 Sep 21 00:32:17 UT
 NOTICE_TYPE: Swift-BAT GRB Lightcurve
 TRIGGER_NUM: 1073893, Seg_Num: 0
 GRB_RA: 80.230d {+05h 20m 55s} (J2000),
 80.511d {+05h 22m 03s} (current),
 79.583d {+05h 18m 20s} (1950)
 GRB_DEC: +1.274d {+01d 16' 27"} (J2000),
 +1.294d {+01d 17' 40"} (current),
 +1.225d {+01d 13' 31"} (1950)
 GRB_DATE: 19476 TJD; 262 DOY; 21/09/19
 GRB_TIME: 1713.55 SOD {00:28:33.55} UT
 TRIGGER_INDEX: 38
 GRB_PHI: -12.32 [deg]
 GRB_THETA: 42.62 [deg]
 DELTA_TIME: -51.00 [sec]
 TRIGGER_DUR: 0.256 [sec]
 SOLN_STATUS: 0x3
 RATE_SIGNIF: 24.28 [sigma]
 IMAGE_SIGNIF: 8.91 [sigma]
 LC_URL: sw01073893000msb.lc
 SUN_POSTN: 176.61d {+11h 46m 26s} +1.47d {+01d 28' 06"}
 SUN_DIST: 96.06 [deg] Sun_angle= 6.4 [hr] (West of Sun)
 MOON_POSTN: 336.12d {+22h 24m 29s} -15.39d {-15d 23' 07"}
 MOON_DIST: 104.21 [deg]
 MOON_ILLUM: 96 [%]
 GAL_COORDS: 200.99, -19.40 [deg] galactic lon,lat of the burst (or transient)
 ECL_COORDS: 79.47, -21.81 [deg] ecliptic lon,lat of the burst (or transient)
 COMMENTS: SWIFT-BAT GRB Lightcurve.
 COMMENTS:
 COMMENTS: The next comments were copied from the BAT_POS Notice:
 COMMENTS: This is a rate trigger.
 COMMENTS: A point_source was found.
 COMMENTS: This does not match any source in the on-board catalog.
 COMMENTS: This does not match any source in the ground catalog.
 COMMENTS: This is a GRB.
 COMMENTS: This trigger occurred at longitude,latitude = 57.10,3.35 [deg].

0.16 s

 $8.8 \times 10^{-8} \text{ erg cm}^{-2}$ 1.5 phot/cm²s

BAT

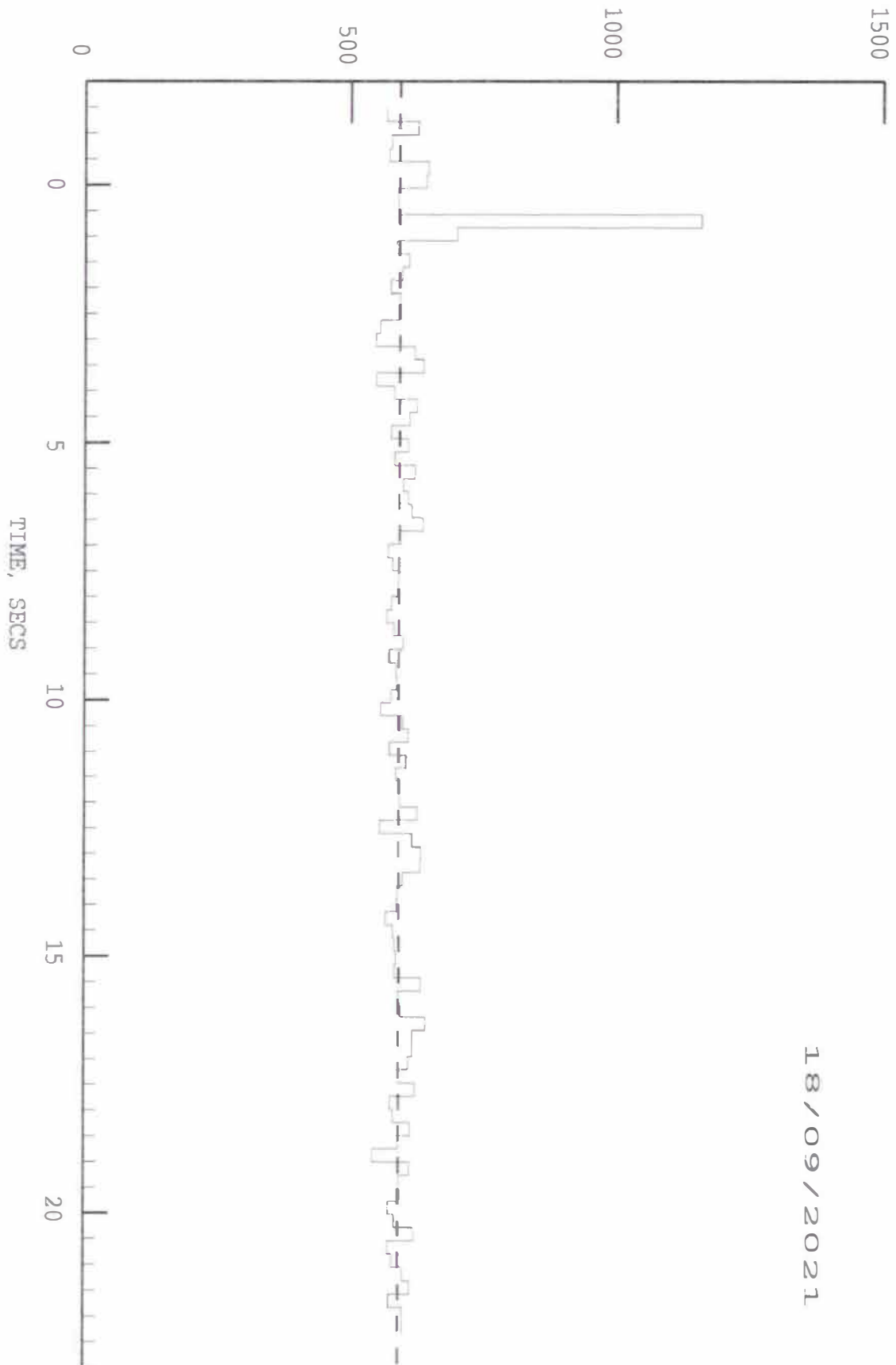
19/09/21

1713.560

00:28:33.560

25- 100 keV

COUNTS/ .256 S

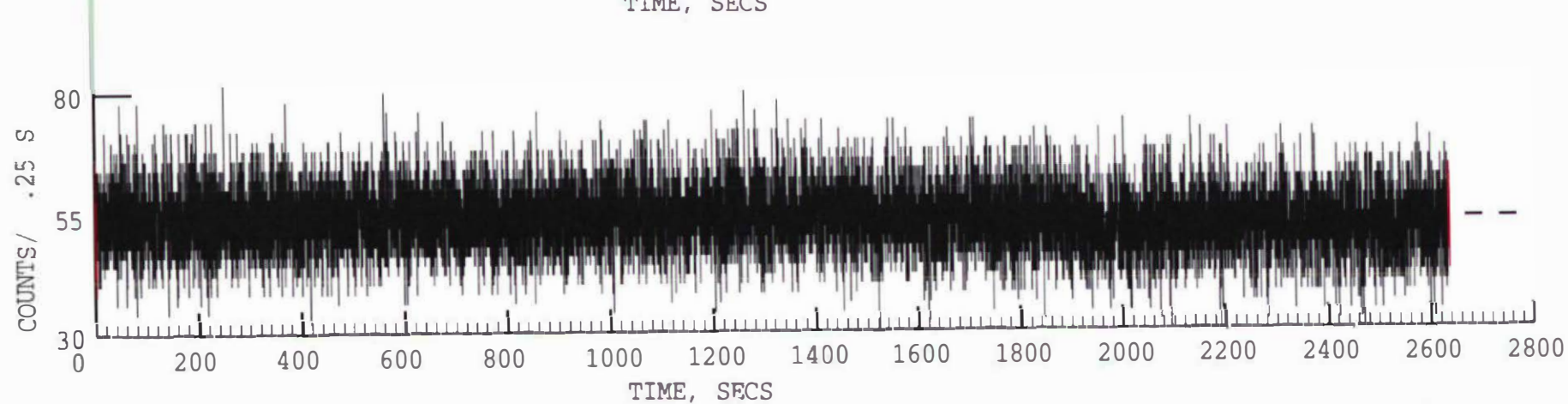
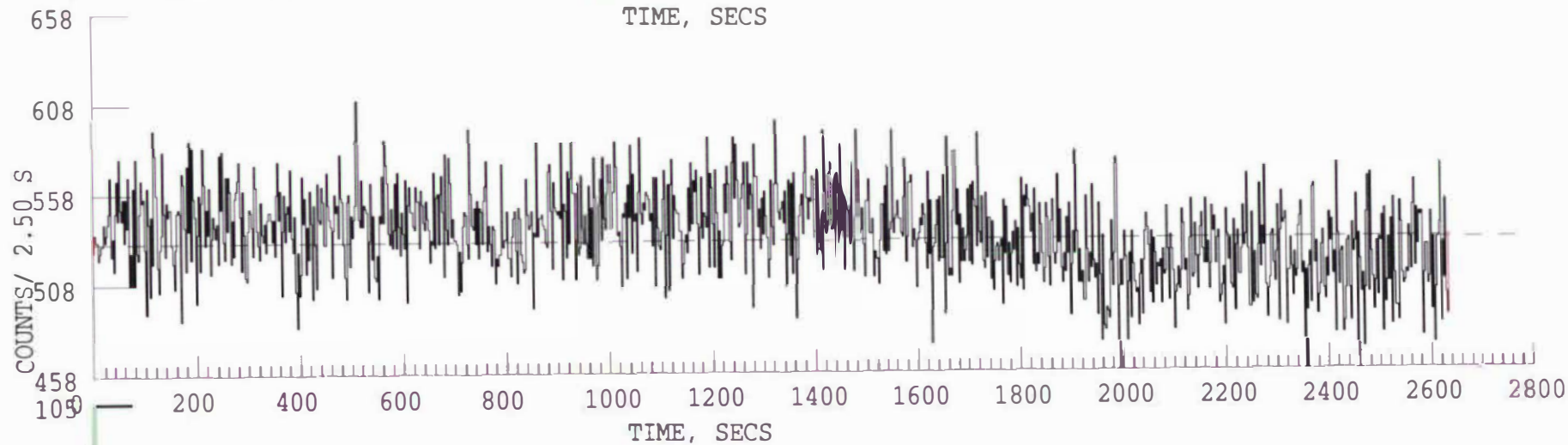


18/09/2021

401.208

19/09/21

ODYSSEY



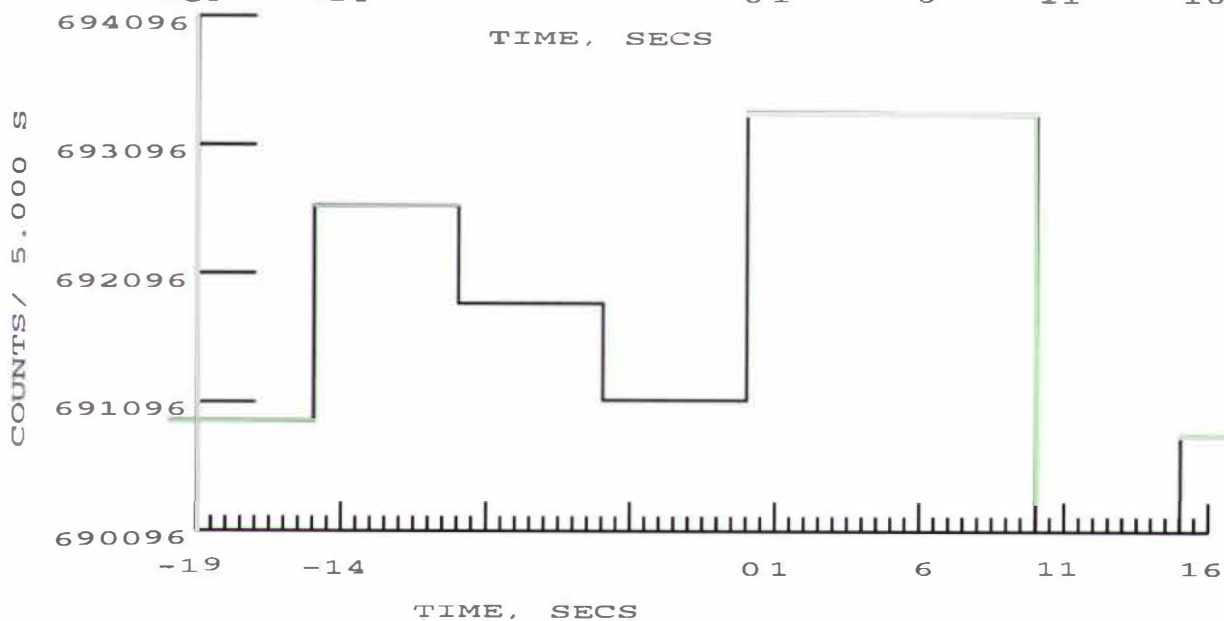
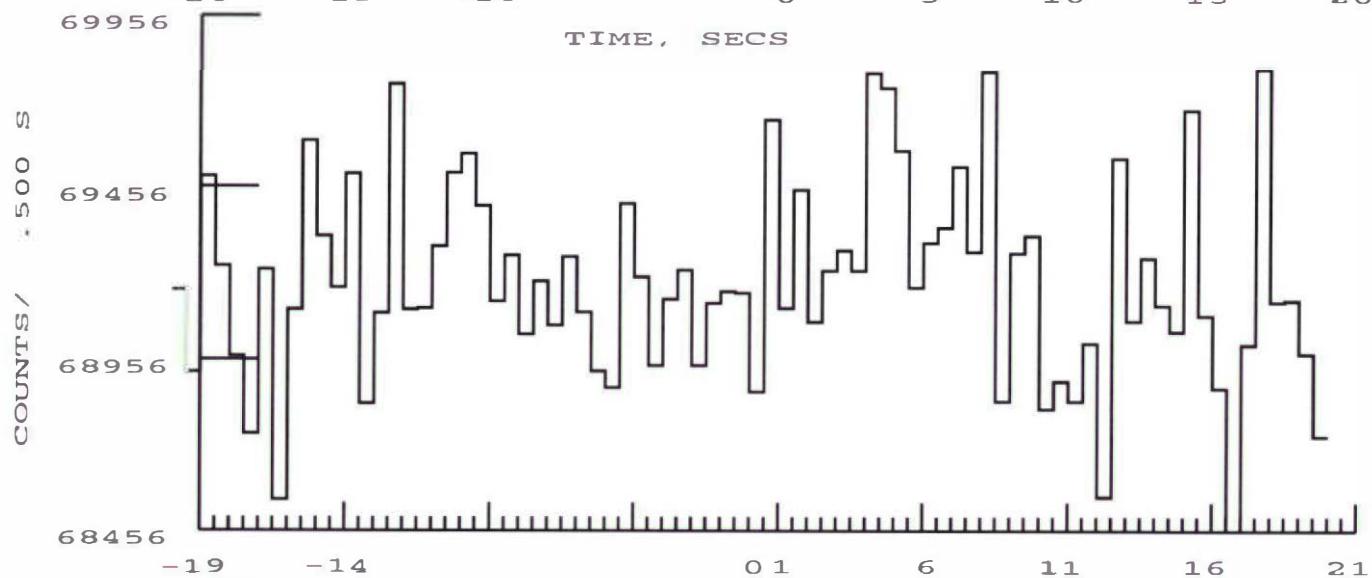
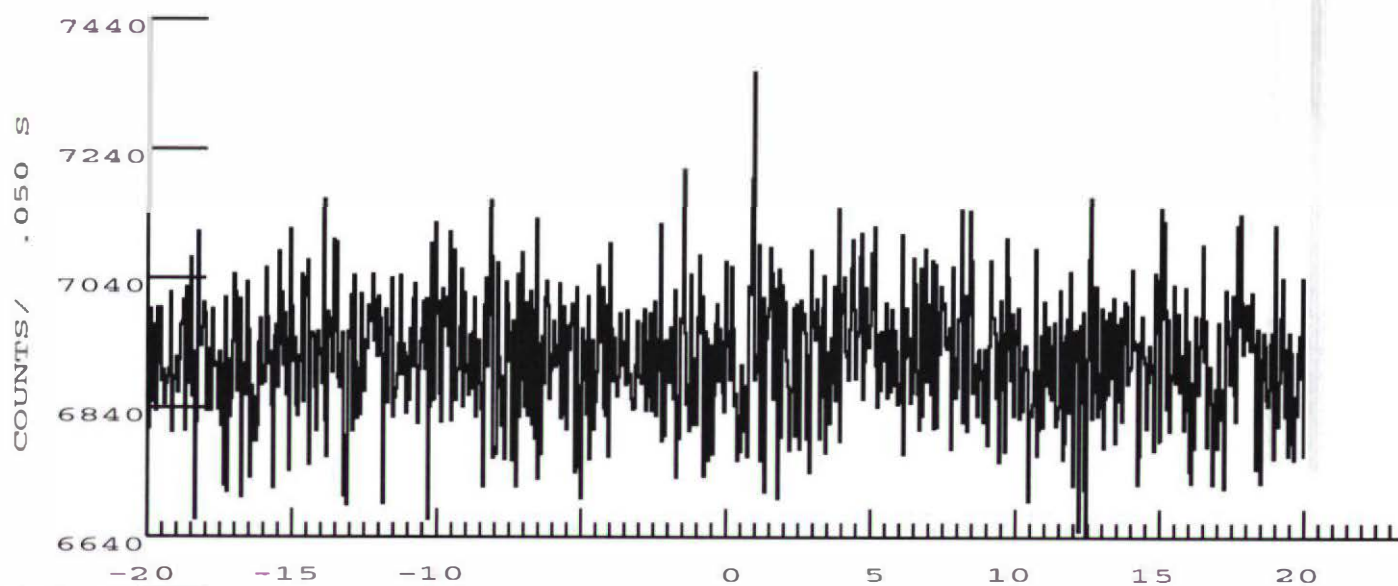
INTEGRAL

19/09/21

1713.000

00:28:33.0

16/11/21



Subject: BAT lightcurve for trigger at 210919_0114

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/19/2021, 8:48 AM

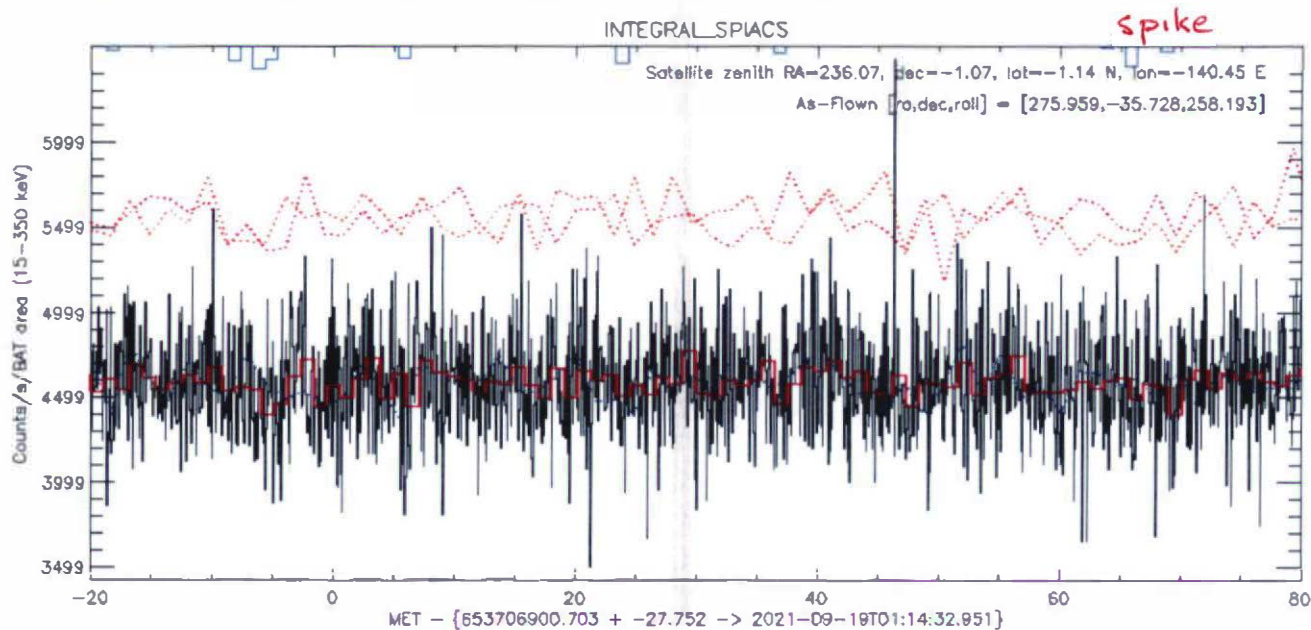
To: mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, ipn@ssl.berkeley.edu,
bat_team@bigbang.gsfc.nasa.gov, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653706900.703
Swift Zenith(RA,dec):      236.07, -1.07
Swift Location(lon,lat,alt): -140.45 E, -1.14 N, 548 km
Time(MET + UTCF -> UT):  653706900.703 + -27.752 -> 2021-09-19T01:14:32.951
YYMMDD_SOD:               210919_04472.951      DOY=262
Obs Sequence Number:      00014436004
Obs Target Name:          4FGL J1823.8-3544
Obs Date and Times:       2021-09-19  01:07:34 - 01:29:32
Obs Pointing(ra,dec,roll): 275.959, -35.728, 258.19
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210919_0114.png



Attachments

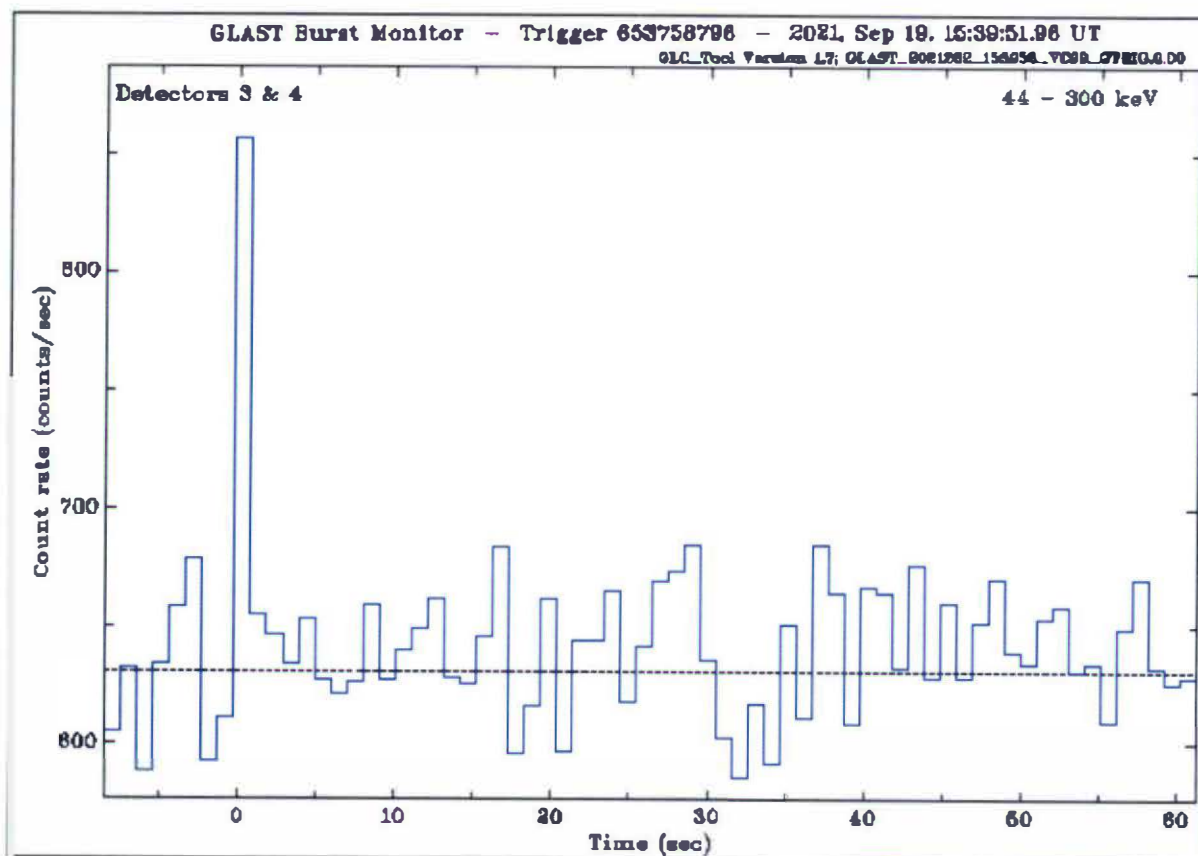
/tmp/swift/210919_0114.png

18.6 KB

/tmp/swift/210919_0114_bat64ms_ipn

87.1 KB

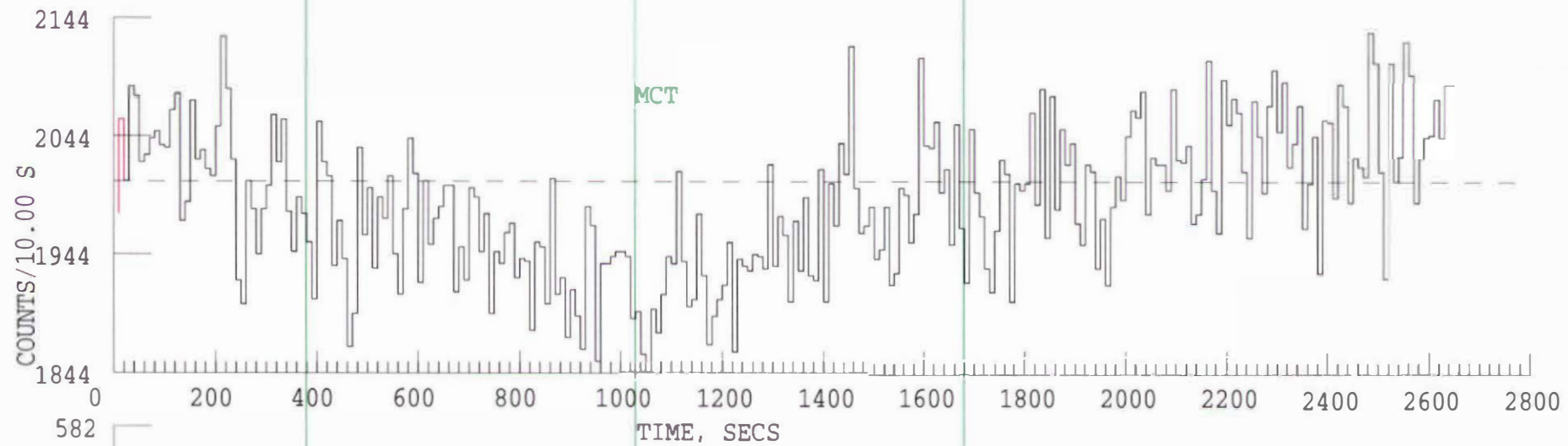
215.2 -77.1 9.2



B

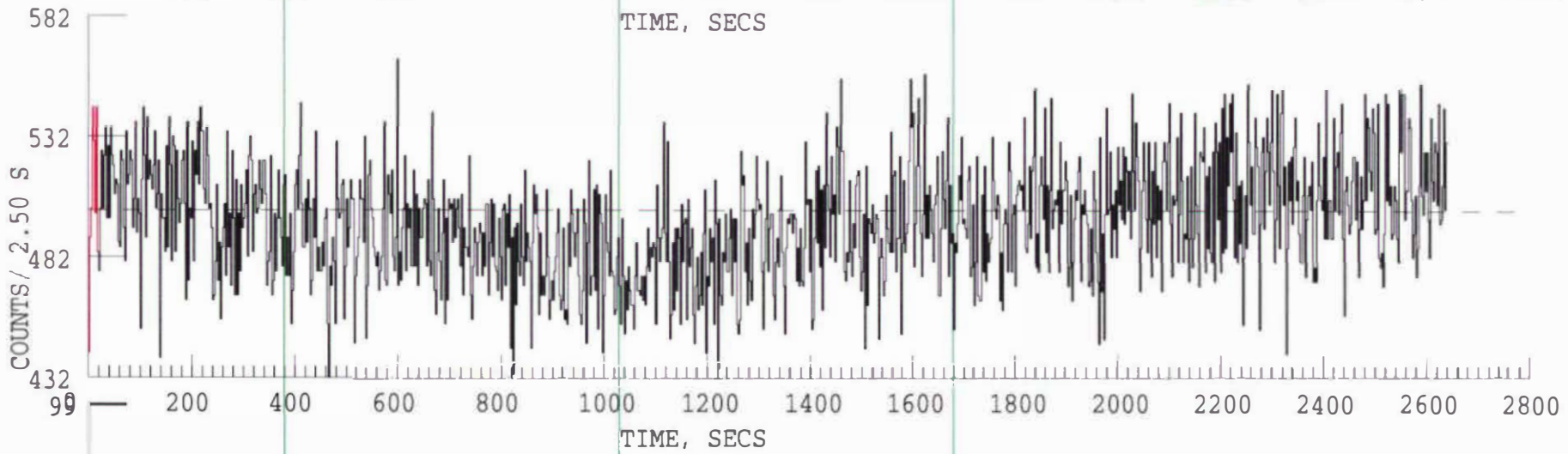
17/11/2021

15:17:40.232



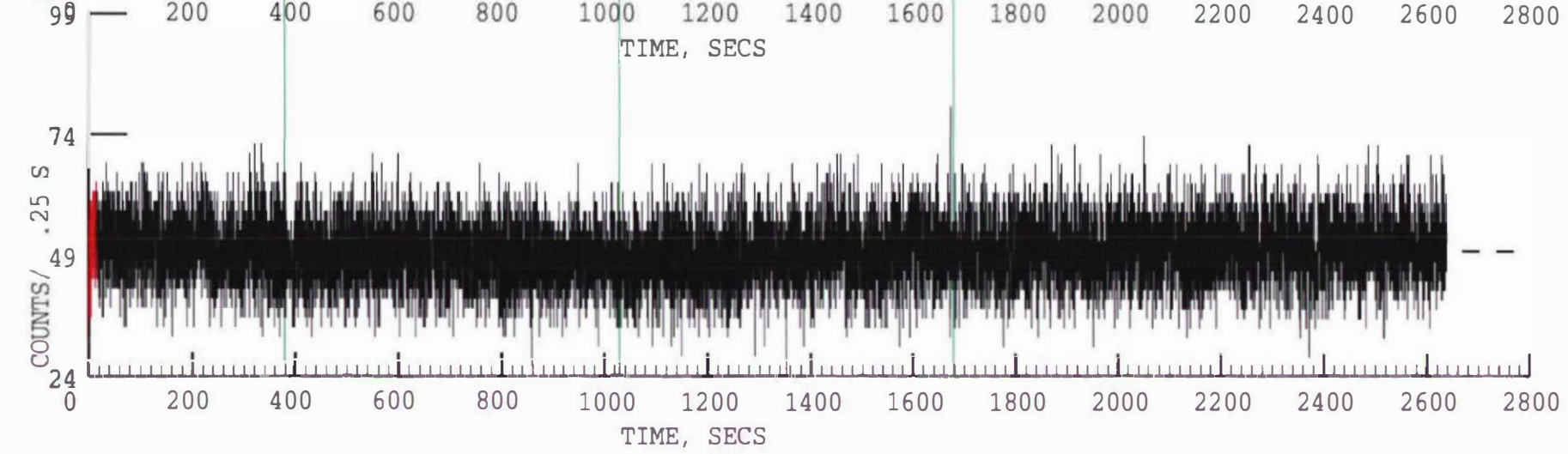
55060.232

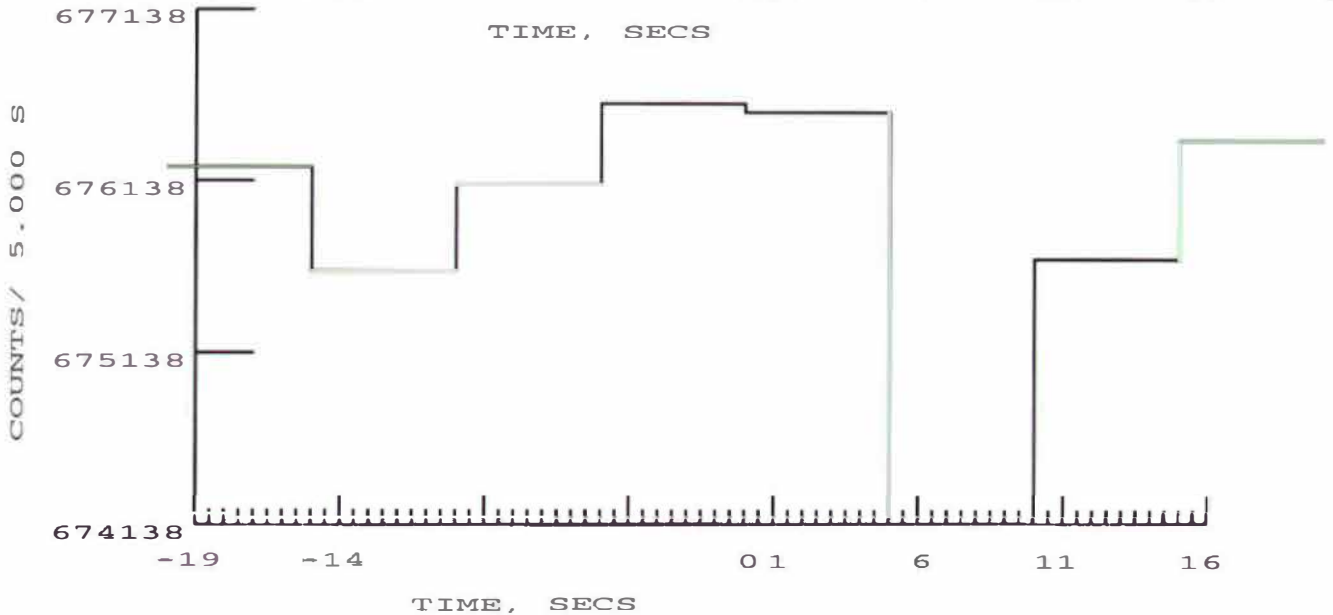
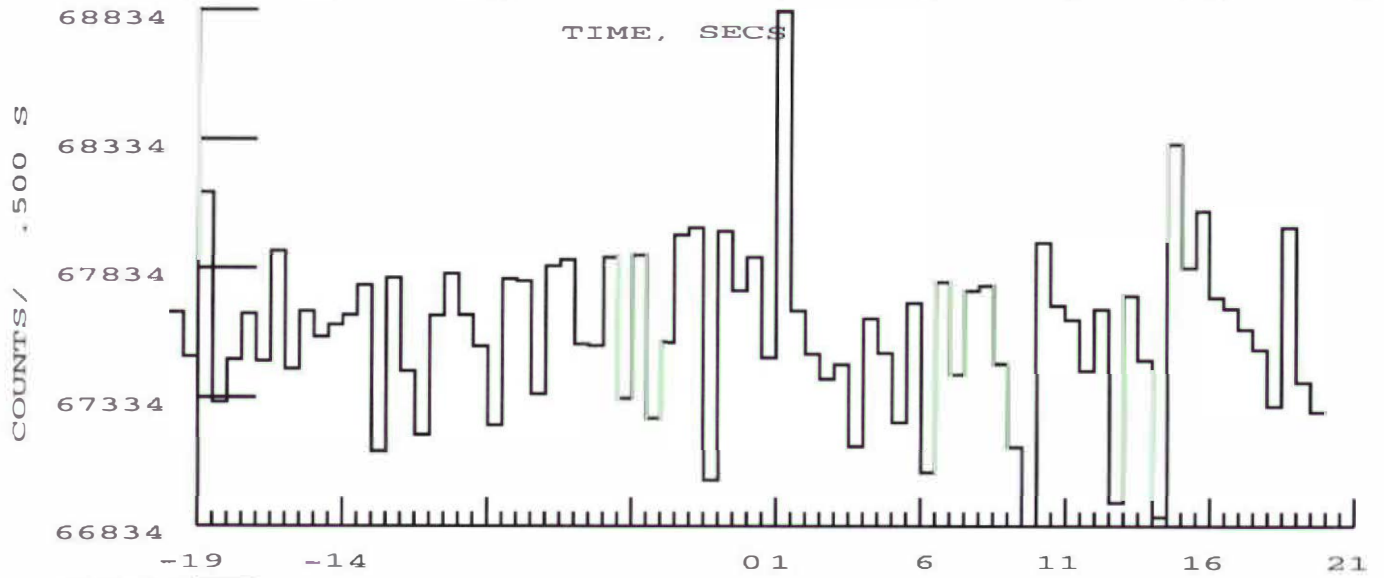
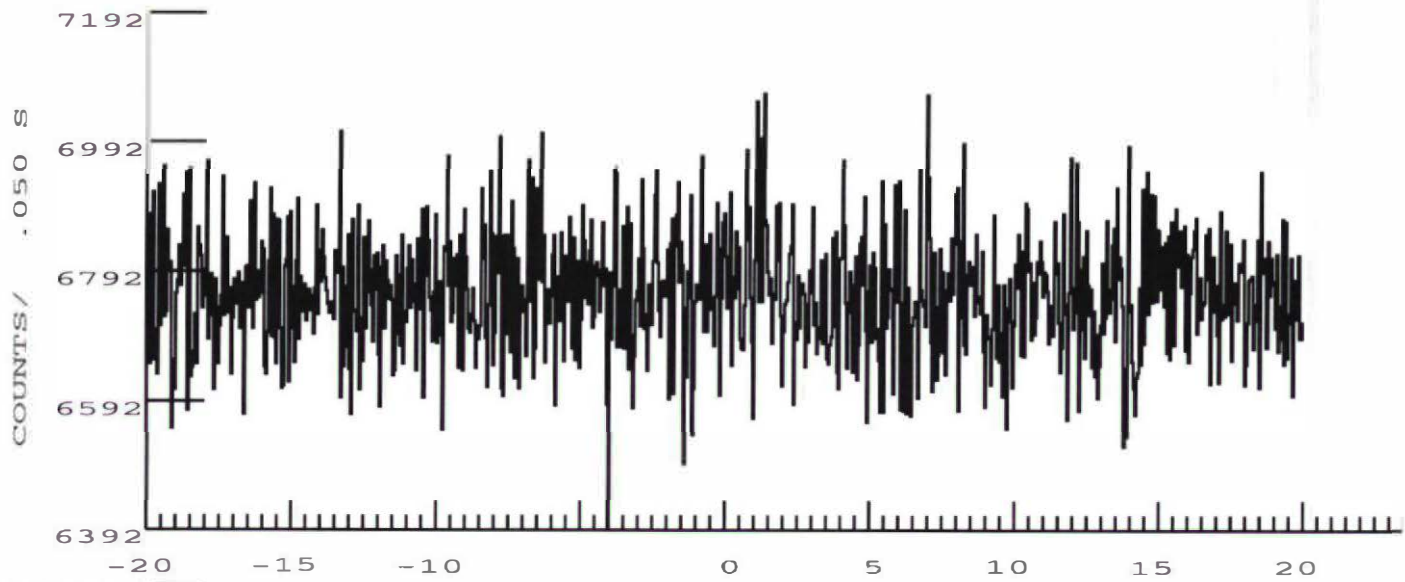
50-3000 keV



19/09/21

ODYSSEY





Subject: BAT lightcurve for trigger at 210919_1539

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/19/2021, 11:24 AM

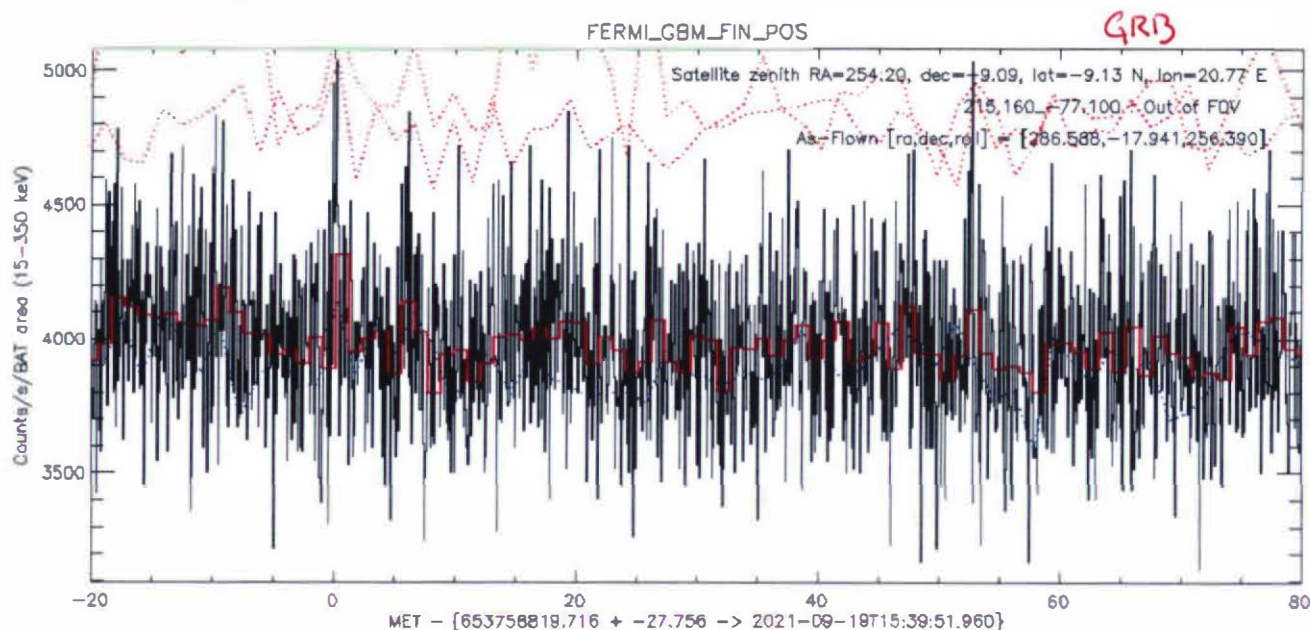
To: ipn@ssl.berkeley.edu, mkippen@lanl.gov, vestrland@lanl.gov, gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653758819.716 -s 215.160_-77.100
Swift Zenith(RA,dec):      254.20, -9.09
Swift Location(lon,lat,alt): 20.77 E, -9.13 N, 552 km
Time(MET + UTCF -> UT):   653758819.716 + -27.756 -> 2021-09-19T15:39:51.960
YYMMDD_SOD:               210919_56391.960      DOY=262
Obs Sequence Number:      00014437003
Obs Target Name:          4FGL J1906.4-1757
Obs Date and Times:       2021-09-19 15:28:34 - 15:44:33
Obs Pointing(ra,dec,roll): 286.588, -17.941, 256.39
215.160_-77.100_imageloc (boresight_dist, angle): (68, -153)
215.160_-77.100_exposure (cm2 cos adjusted): 0
215.160_-77.100_altitude: 42 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210919_1539.png



Attachments:

/tmp/swift/210919_1539_bat64ms_ipn

87.1 KB

/tmp/swift/210919_1539.png

19.9 KB

KONUS

20/09/2021

72.135

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

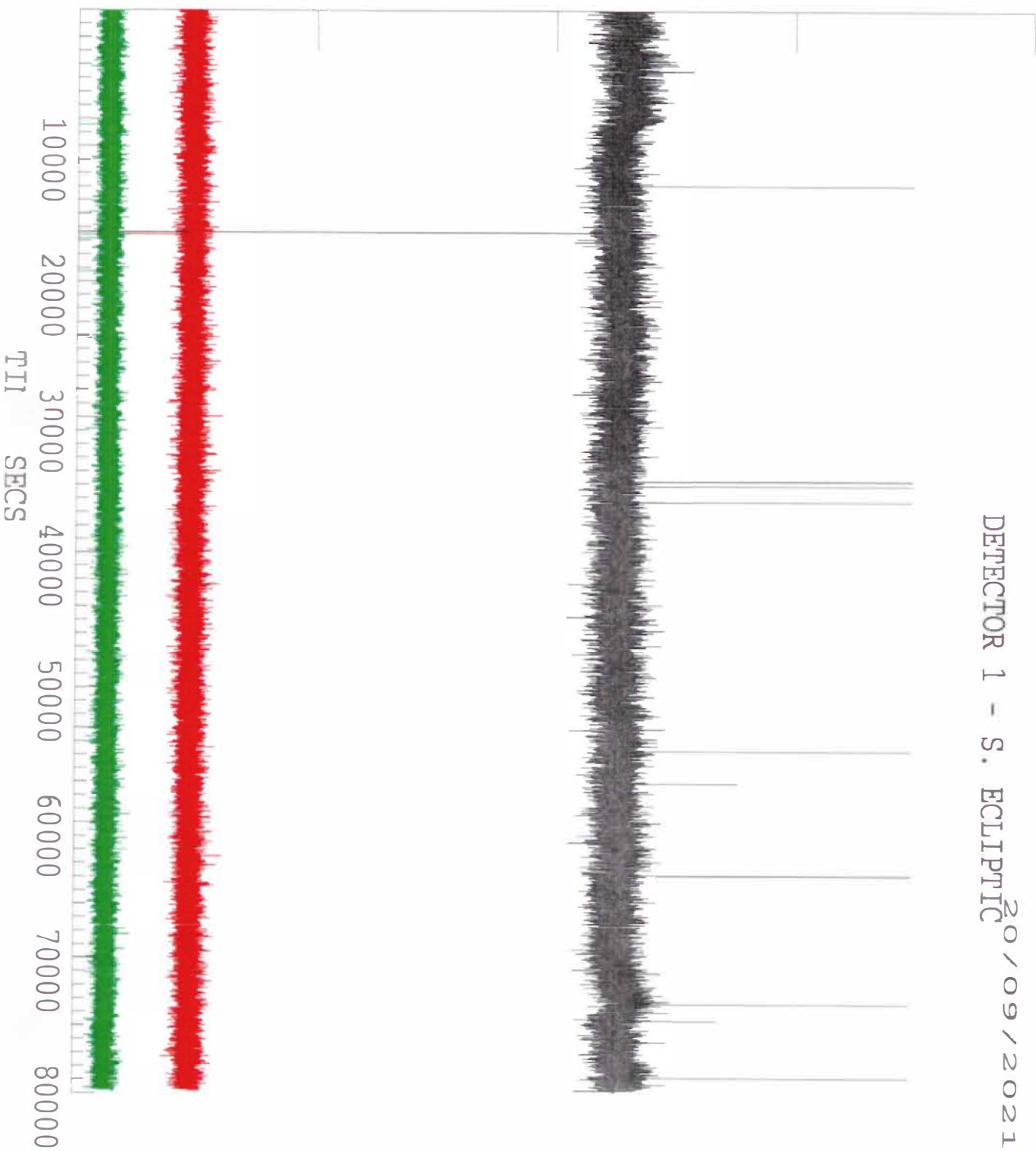
3500

2500

1500

500

0



v01

72.135

20/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4400

3400

2400

1400

400

0

10000

20000

30000

40000

50000

60000

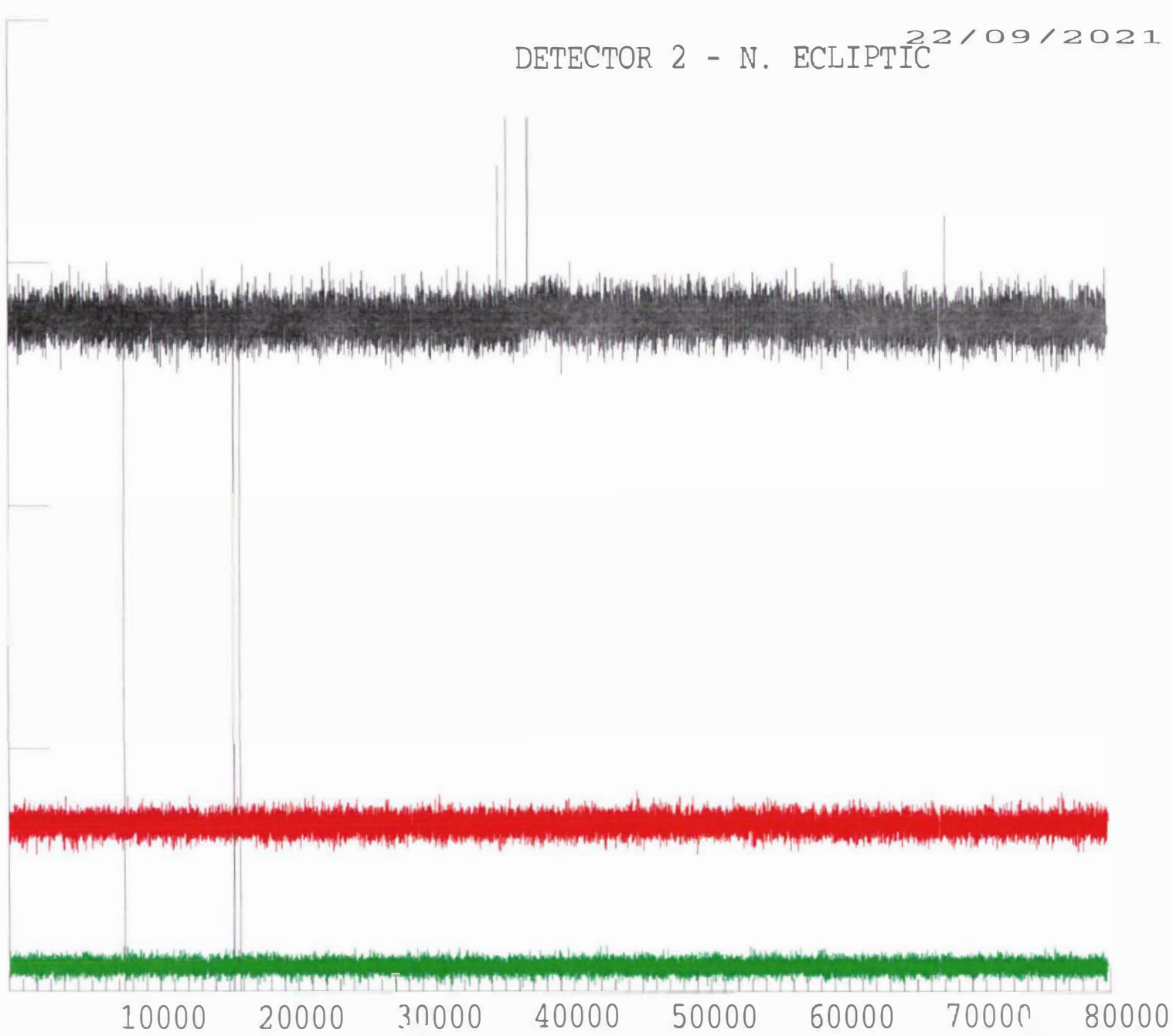
70000

80000

TIME, SECS

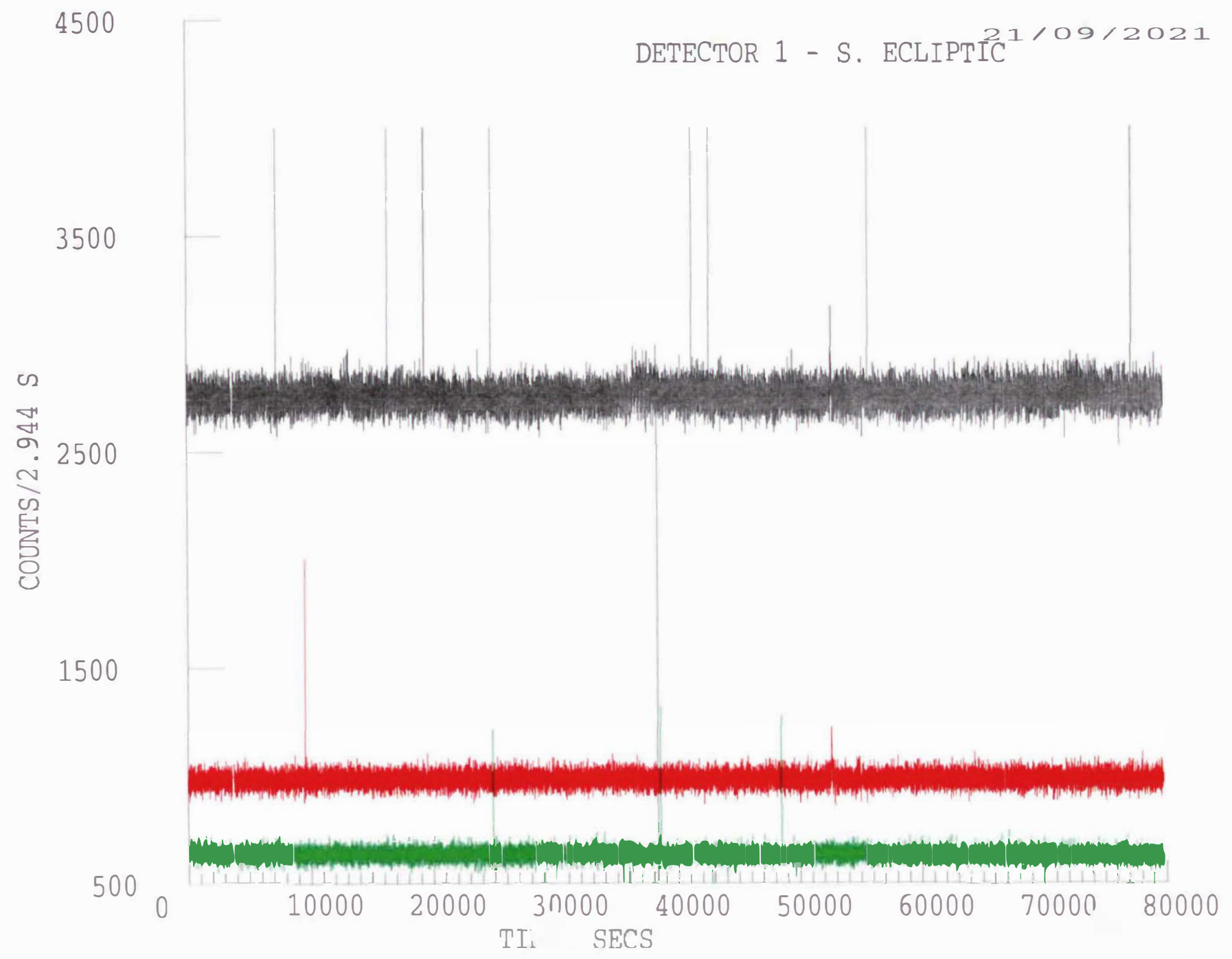
DETECTOR 2 - N. ECLIPTIC

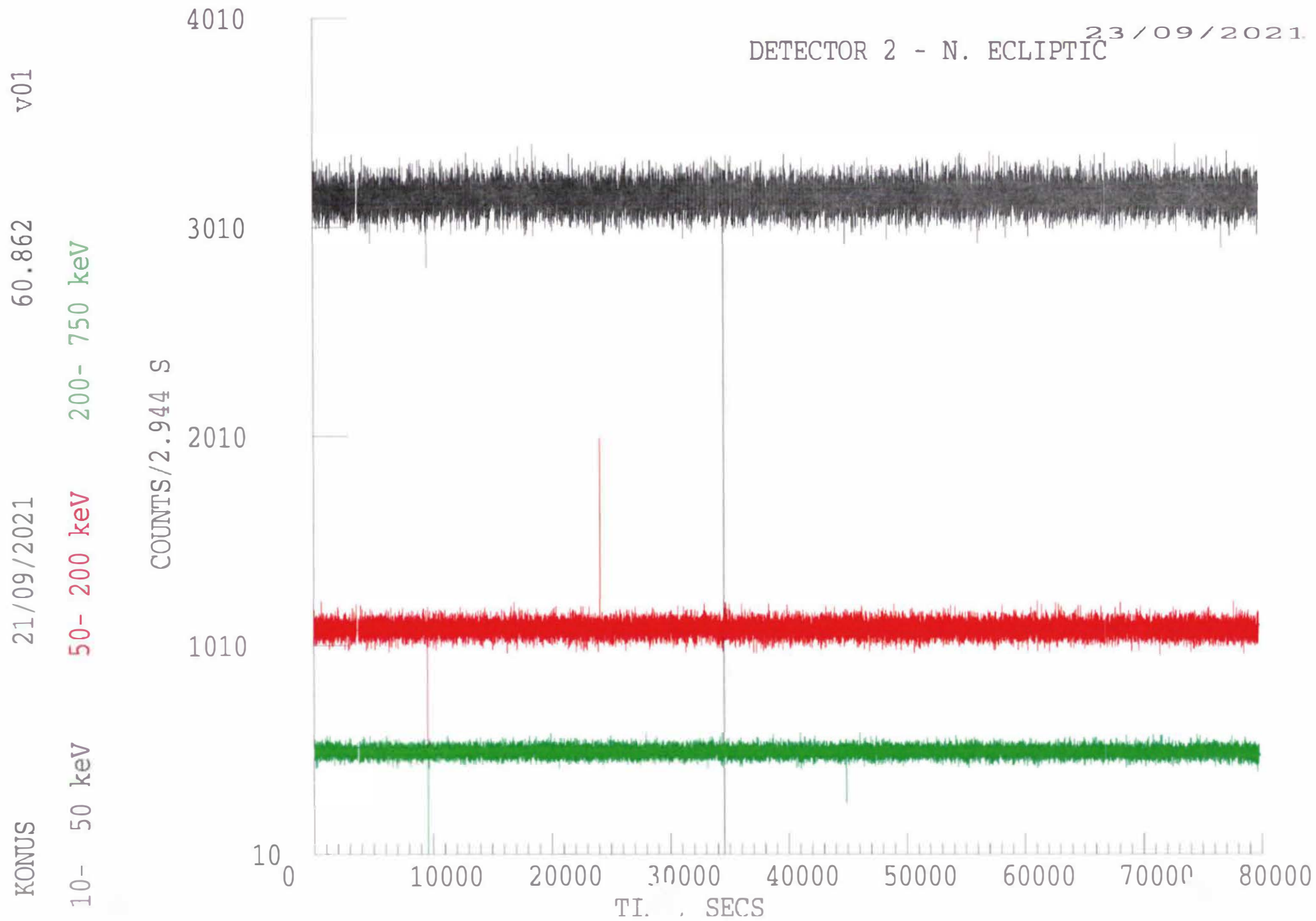
22/09/2021



KONUS 21/09/2021 60.862 v01

10- 50 keV 50- 200 keV 200- 750 keV





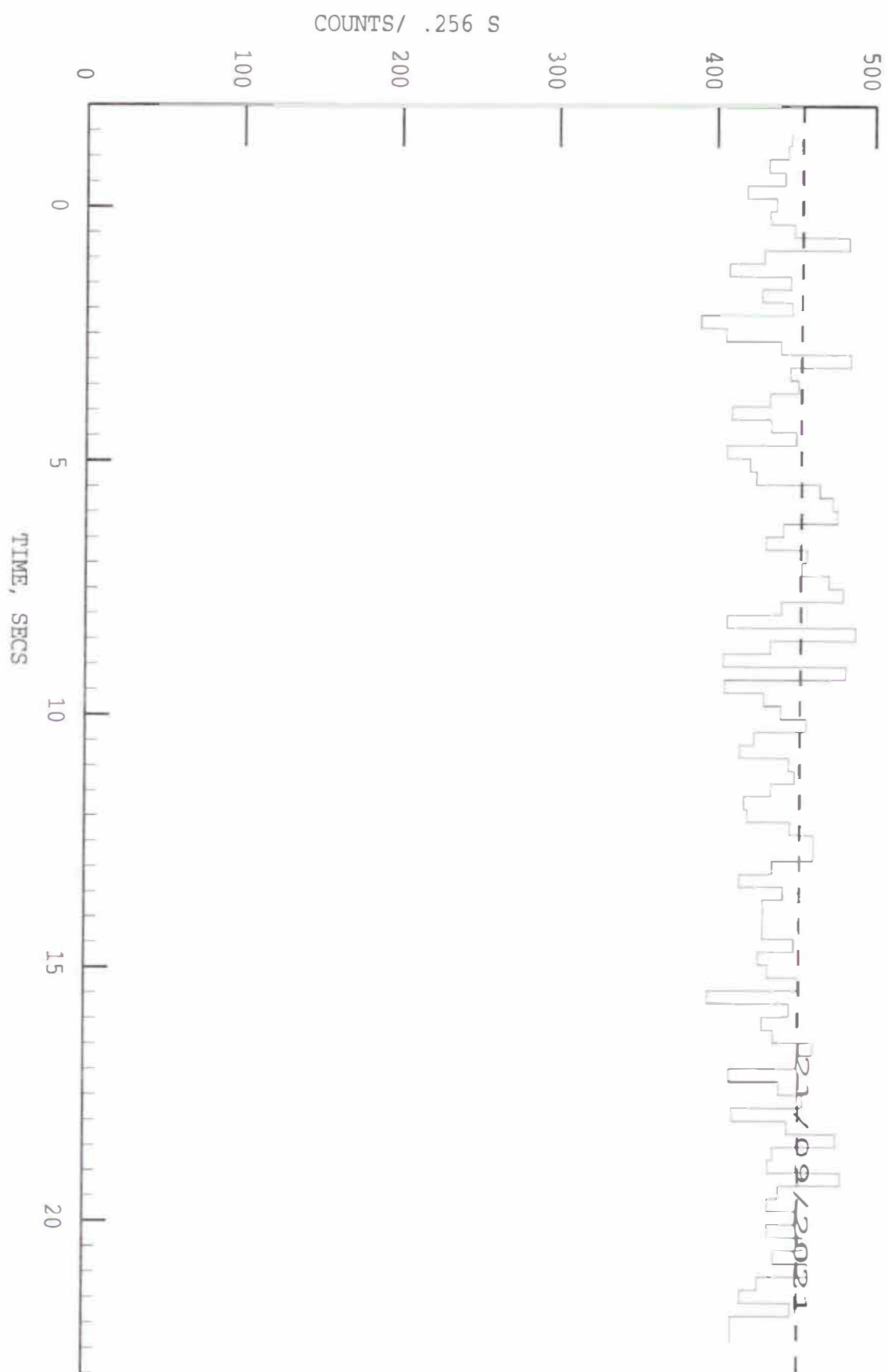
BAT

21/09/21

63796.232

17:43:16.232

25- 100 keV



KONUS

22/09/2021

49.590

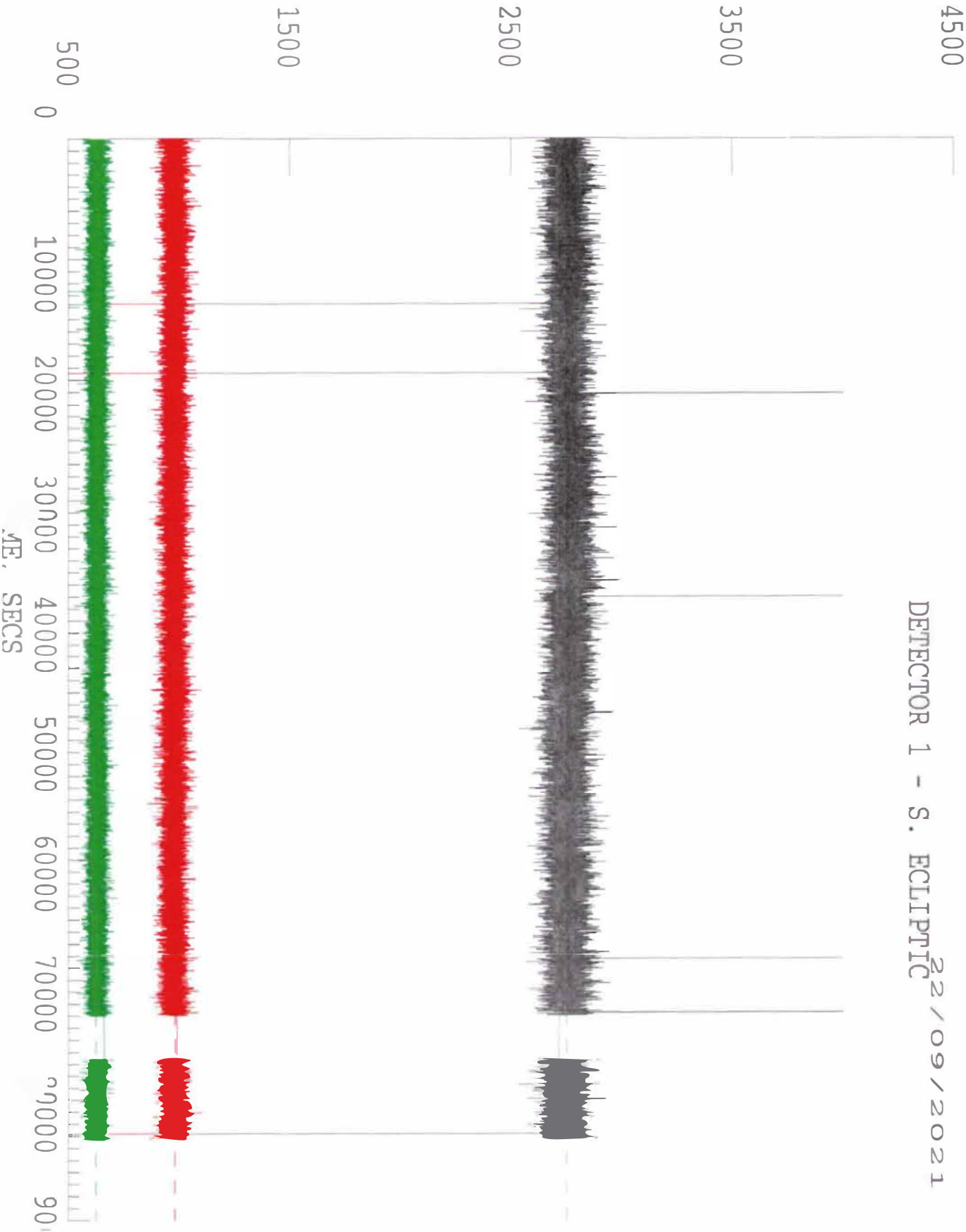
v01

10- 50 keV

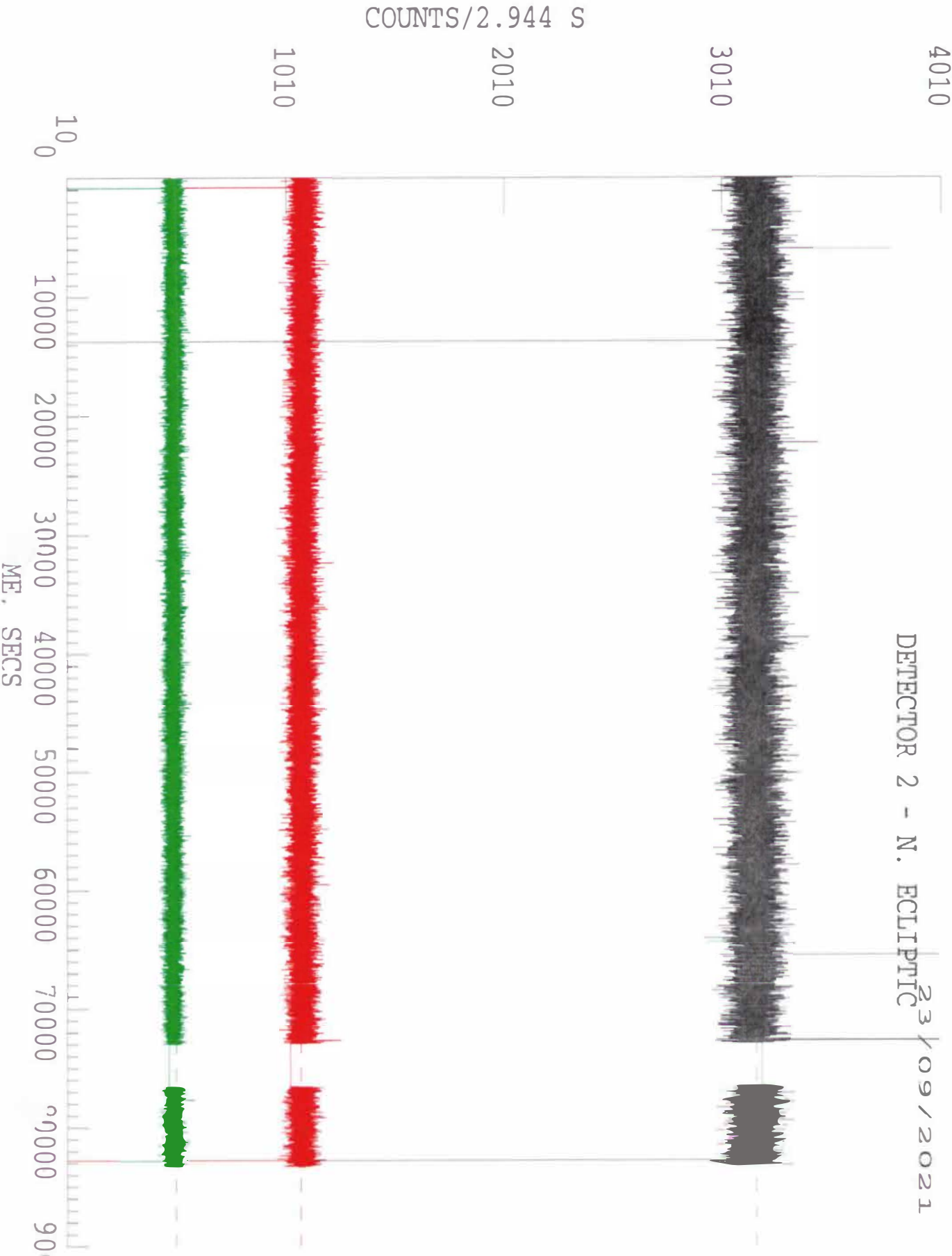
50- 200 keV

200- 750 keV

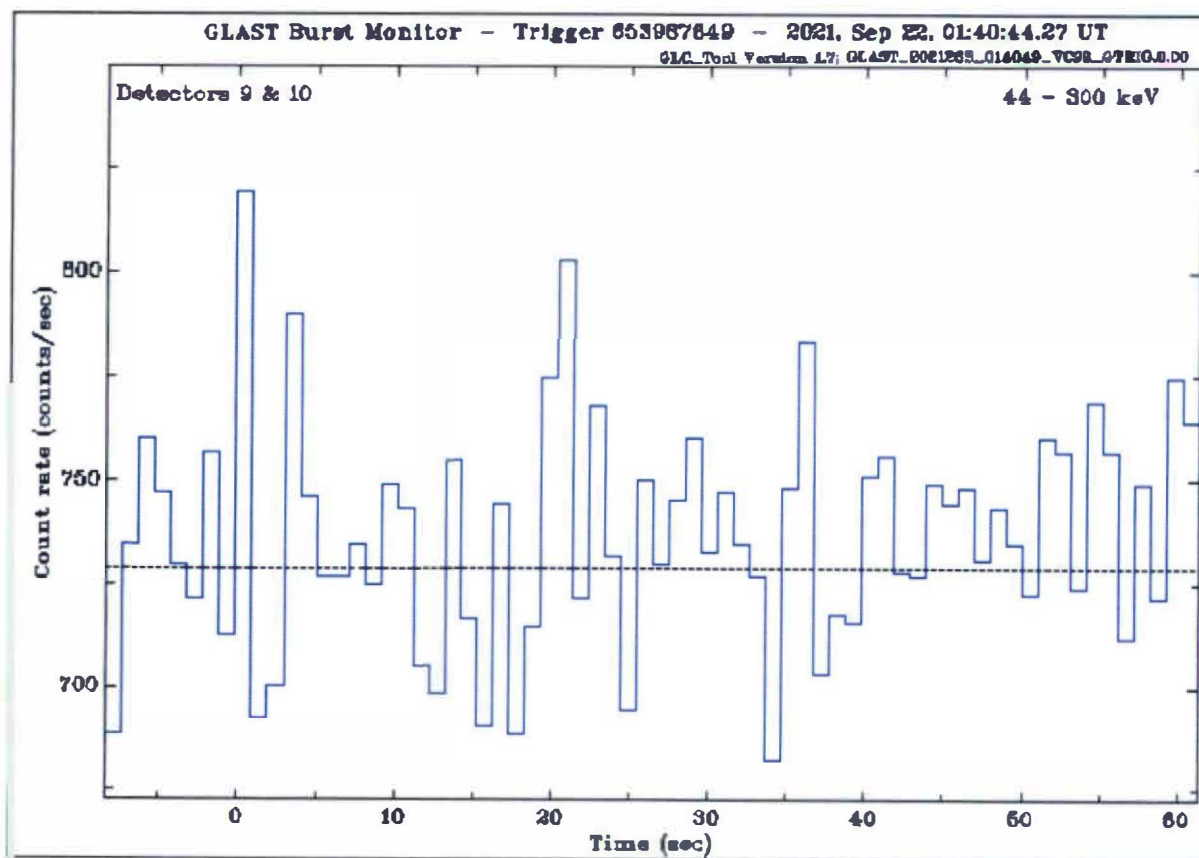
COUNTS/2.944 S



10- 50 keV50- 200 keV200- 750 keV



SGR



Subject: BAT lightcurve for trigger at 210922_0140

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/21/2021, 8:59 PM

To: gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, vestrland@lanl.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 653967672.040 -s 289.967_19.250
```

Swift Zenith(RA,dec): 46.05, 5.15

Swift Location(lon,lat,alt): 20.01 E, S.23 N, 552 km

Time(MET + UTC -> UT): 653967672.040 + -27.770 -> 2021-09-22T01:40:44.270

YYMMDD_SOD: 210922_06044.270 DOY=265

Obs Sequence Number: 00048698206

Obs Target Name: SMC J0048.2-7406

Obs Date and Times: 2021-09-22 01:38:43 - 01:40:33

Obs Pointing(ra,dec,roll): 12.036, -74.106, 172.64

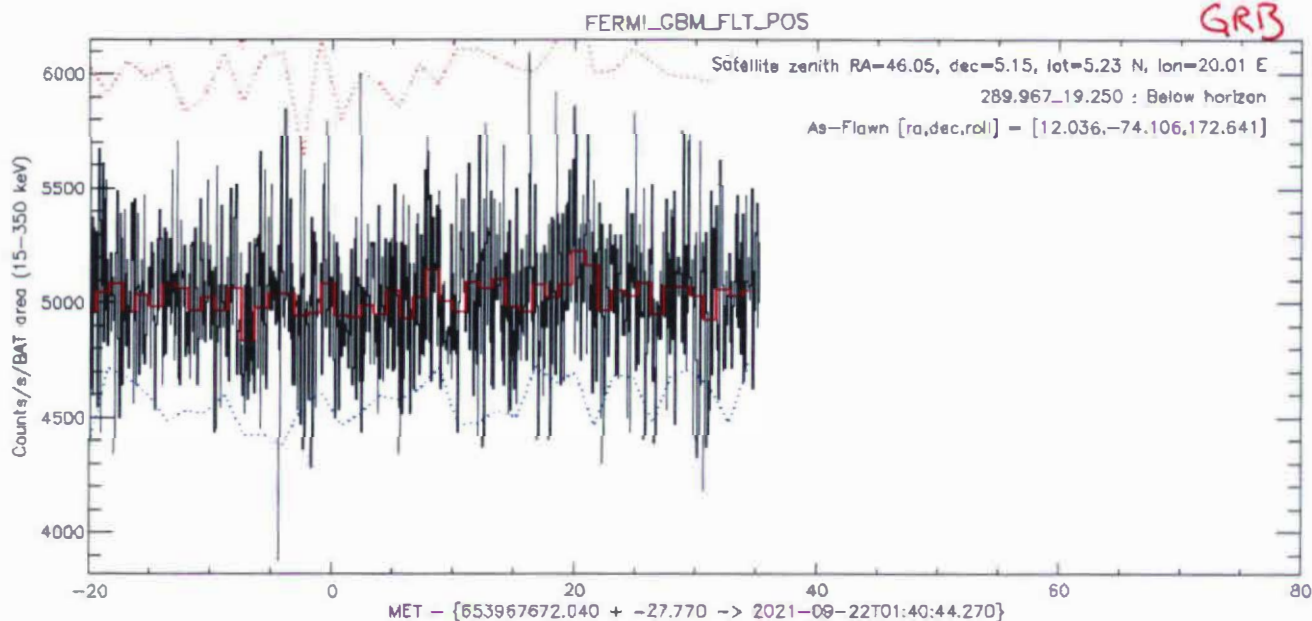
289.967_19.250_imageloc (boresight_dist, angle): (106, 20)

289.967_19.250_exposure (cm² cos adjusted): 0

289.967_19.250_altitude: 0 (attenuated by atmosphere at 22 km)

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210922_0140.png



Attachments

~/tmp/swift/210922_0140.png

13.6 KB

~/tmp/swift/210922_0140_bat64ms_ipn

27.7 KB

Subject: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 7:20 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30869
SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
DATE: 21/09/23 14:19:30 GMT
FROM: Chenwei Wang at IHEP <cwwang@ihep.ac.cn>

C. W. Wang, S. L. Xiong, Y. Huang, C. Cai, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, P. Wang, S. L. Xie, S. Xiao, Z. W. Guo, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154
either by in-flight trigger or by on-ground search of the data, from
2021-09-15T14 to 2021-09-23T14(UTC).
Here is the list of these bursts:

Trigger Time (UTC)
2021-09-15T15:32:56.050
2021-09-17T12:52:37.800
2021-09-17T13:58:25.100
2021-09-18T22:58:52.150
2021-09-22T02:39:10.200
~~2021-09-22T20:12:16.500~~

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

Subject: GCN/ICECUBE_ASTROTRACK_GOLD
From: Bacodine <vxw@capella2.gsfc.nasa.gov>
Date: 9/22/2021, 11:18 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN/AMON NOTICE
NOTICE_DATE: Wed 22 Sep 21 18:18:01 UT
NOTICE_TYPE: ICECUBE Astrotrack Gold
STREAM: 24
RUN_NUM: 135736
EVENT_NUM: 30987826
SRC_RA: 60.2786d {+04h 01m 07s} (J2000),
60.5491d {+04h 02m 12s} (current),
59.6566d {+03h 58m 38s} (1950)
SRC_DEC: -4.3204d {-04d 19' 12"} (J2000),
-4.2607d {-04d 15' 37"} (current),
-4.4597d {-04d 27' 34"} (1950)
SRC_ERROR: 30.80 [arcmin radius, stat-only, 90% containment]
SRC_ERRORS0: 12.00 [arcmin radius, stat-only, 50% containment]
DISCOVERY_DATE: 19479 TJD; 265 DOV; 21/09/22 (yy/mm/dd)
DISCOVERY_TIME: 65840 S00 {18:17:20.94} UT
REVISION: 0
ENERGY: 7.5076e+02 [TeV]
SIGNALNESS: 9.2534e-01 [dn]
FAR: 0.1472 [yr⁻¹]
SUN_POSTN: 179.97d {+11h 59m 52s} +0.02d {+00d 00' 55"}
SUN_DIST: 119.33 [deg] Sun_angle= 8.0 [hr] (West of Sun)
MOON_POSTN: 20.24d {+01h 20m 57s} +4.89d {+04d 53' 20"}
MOON_DIST: 41.29 [deg]
GAL_COORDS: 194.79, -39.41 [deg] galactic lon,lat of the event
ECL_COORDS: 57.11, -24.43 [deg] ecliptic lon,lat of the event
COMMENTS: IceCube Gold event.
COMMENTS: The position error is statistical only, there is no systematic added.

BAT lightcurve for trigger at 210922_1817

Subject: BAT lightcurve for trigger at 210922_1817

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/22/2021, 1:57 PM

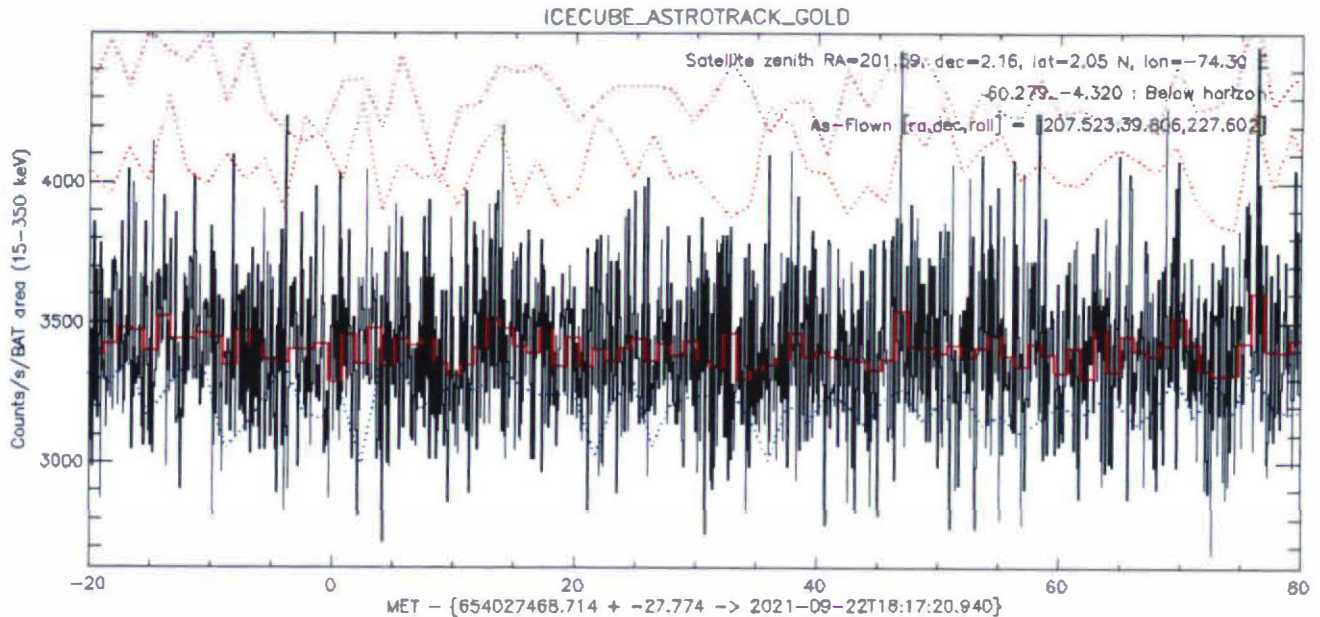
To: bat_team@bigbang.gsfc.nasa.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-22T18:17:20.940 -s 60.279_-4.320
Swift Zenith(RA,dec):      201.59, 2.16
Swift Location(lon,lat,alt): -74.30 E, 2.05 N, 542 km
Time(MET + UTCF -> UT):  654027468.714 + -27.774 -> 2021-09-22T18:17:20.940
YYMMDD_SOD:               210922_65840.940      DOY=265
Obs Sequence Number:       03107827008
Obs Target Name:           SGWGS-3036
Obs Date and Times:        2021-09-22 18:12:34 - 18:19:33
Obs Pointing(ra,dec,roll): 207.523, 39.806, 227.60
60.279_-4.320_imageloc (boresight_dist, angle): (134, -6)
60.279_-4.320_exposure (cm2 cos adjusted): 0
60.279_-4.320_altitude: -28 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210922_1817.png



Attachments

/tmp/swift/210922_1817_bat64ms_ipn

87.0 KB

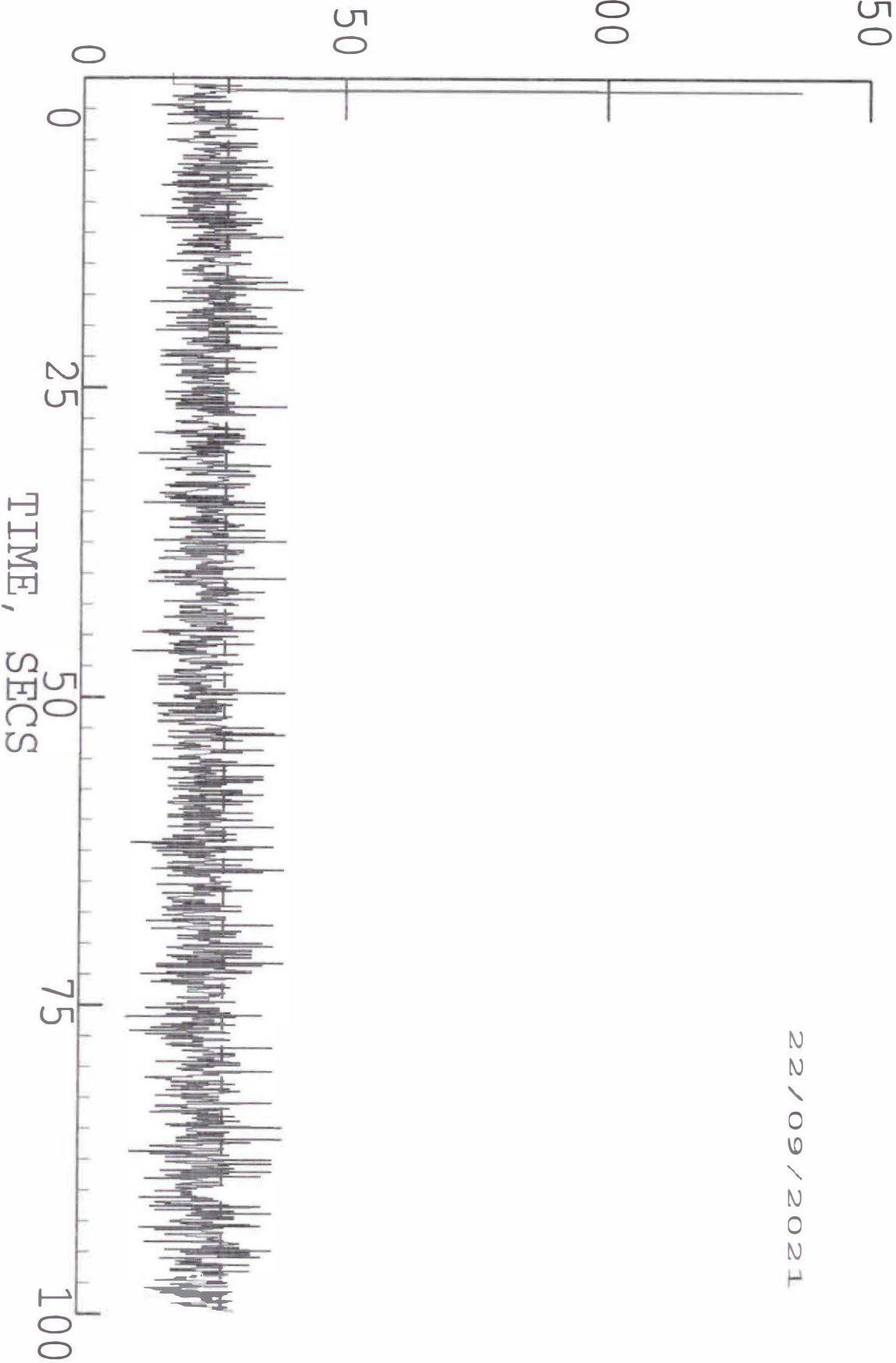
/tmp/swift/210922_1817.png

20.8 KB

KONUS 22/09/21 72739.639 20:12:19.639^B
50- 200 keV

COUNTS/ .064 S

SGR 1935
+ GBM (classified
as solar)



22/09/2021

KONUS

22/09/21

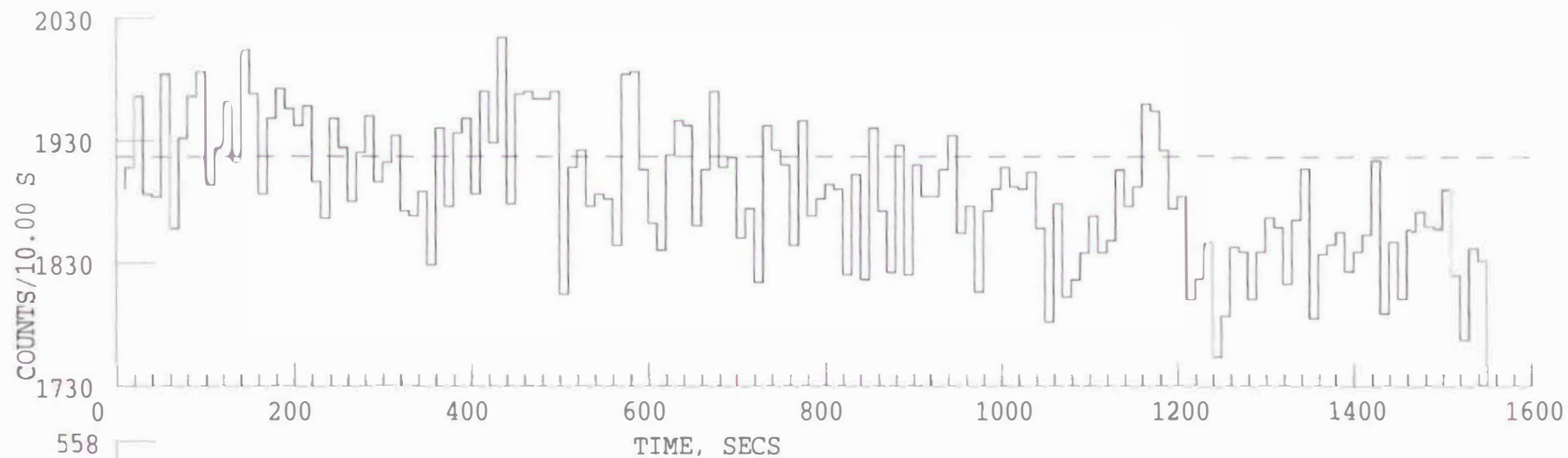
COUNTS/SEC 72739.000

20:12:19.000

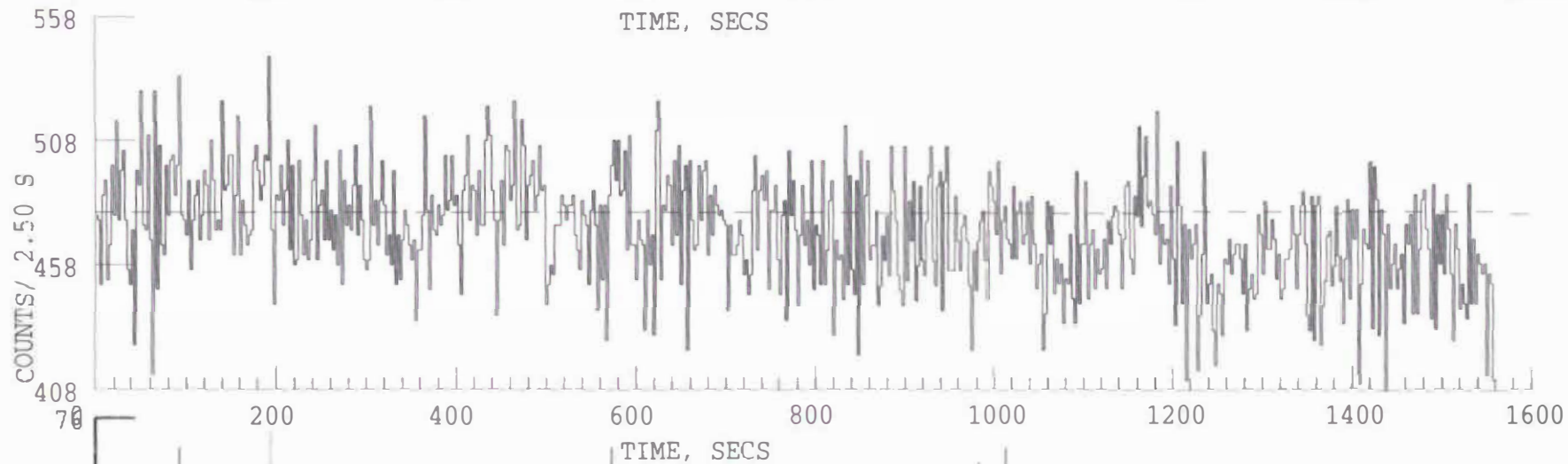


23/09/2021

20:08:35.312



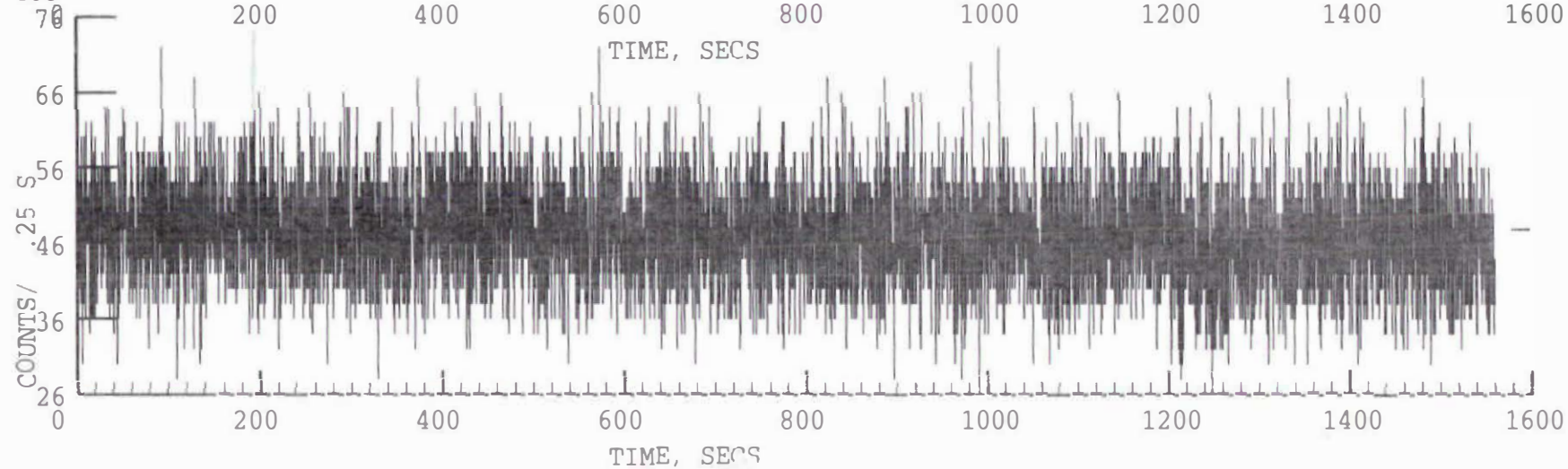
72515.312



22/09/21

50-3000 keV

ODYSSEY



Subject: BAT lightcurve for trigger at 210922_2012

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/22/2021, 6:18 PM

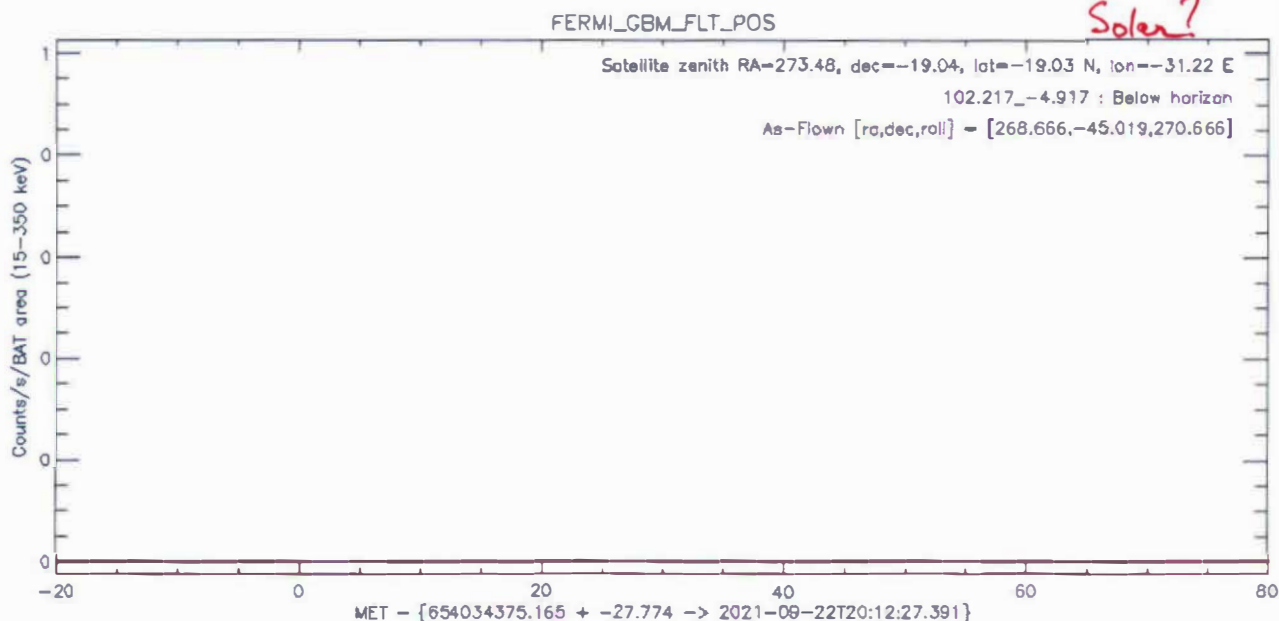
To: bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, vestrans@lanl.gov, dmopalmer@gmail.com, mkippen@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654034375.165 -s 102.217_-4.917
Swift Zenith(RA,dec):      273.48, -19.04
Swift Location(lon,lat,alt): -31.22 E, -19.03 N, 554 km
Time(MET + UTC -> UT):    654034375.165 + -27.774 -> 2021-09-22T20:12:27.391
YYMMDD_500:               210922_72747.391      DOY=265
Obs Sequence Number:      00076036005
Obs Target Name:          saa-cold-265-07
Obs Date and Times:       2021-09-22 19:58:34 - 20:25:33
Obs Pointing(ra,dec,roll): 268.666, -45.019, 270.67
102.217_-4.917_imageloc (boresight_dist, angle): (129, -163)
102.217_-4.917_exposure (cm2 cos adjusted): 0
102.217_-4.917_altitude: -41 (down)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210922_2012.png



Attachments

/tmp/swift/210922_2012_bat64ms_ipn

87.0 KB

/tmp/swift/210922_2012.png

7.9 KB

Subject: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 7:20 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30869
SUBJECT: GECAM observations of a series of bursts from SGR J1935+2154 (2021-09-15T14 to 2021-09-23T14)
DATE: 21/09/23 14:19:30 GMT
FROM: Chenwei Wang at IHEP <cw@ihep.ac.cn>

C. W. Wang, S. L. Xiong, Y. Huang, C. Cai, C. Y. Li, X. B. Li,
J. C. Liu, X. Y. Song, P. Wang, S. L. Xie, S. Xiao, Z. W. Guo, W. C. Xue,
Q. B. Yi, Y. Q. Zhang, G. Y. Zhao, X. Y. Zhao, Y. Zhao, C. Zheng, W. Chen,
Y. Q. Du, D. Y. Guo, J. J. He, J. Liang, F. J. Lu, Q. Luo, X. Ma,
W. X. Peng, R. Qiao, L. M. Song, J. Wang, H. Wu, P. Zhang, S. N. Zhang,
X. L. Zhang, Z. Zhang, S. J. Zheng (IHEP), report on behalf of GECAM team:

GECAM-B detected a series of bursts very probably from SGR J1935+2154
either by in-flight trigger or by on-ground search of the data, from
2021-09-15T14 to 2021-09-23T14(UTC).
Here is the list of these bursts:

Trigger Time (UTC)
2021-09-15T15:32:56.050
2021-09-17T12:52:37.800
2021-09-17T13:58:25.100
2021-09-18T22:58:52.150
2021-09-22T02:39:10.200
2021-09-22T20:12:16.500

Locations of all these bursts are consistent with SGR J1935+2154.

Please note that all GECAM results here are preliminary.

KONUS

23/09/2021

38.317

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

3500

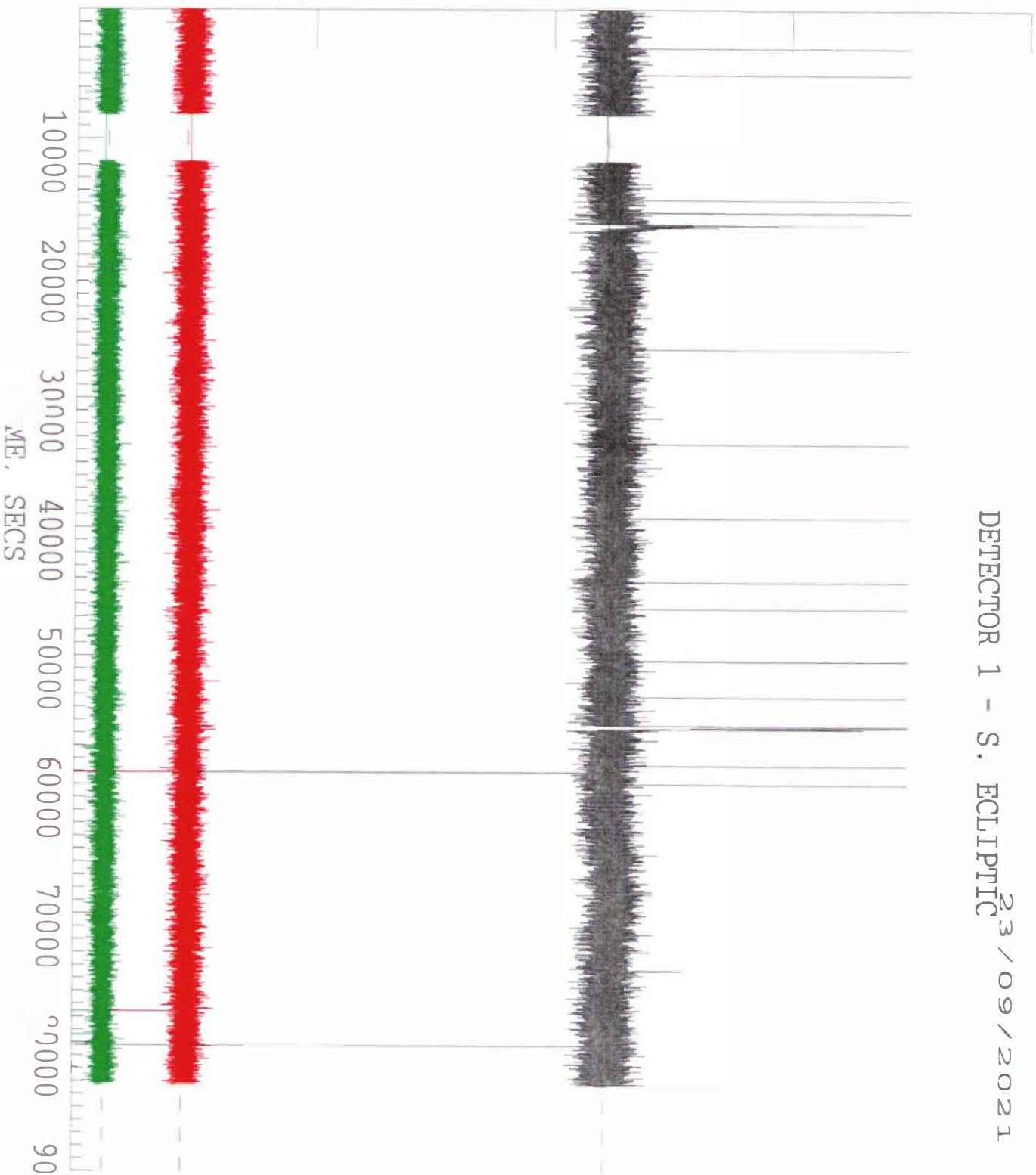
2500

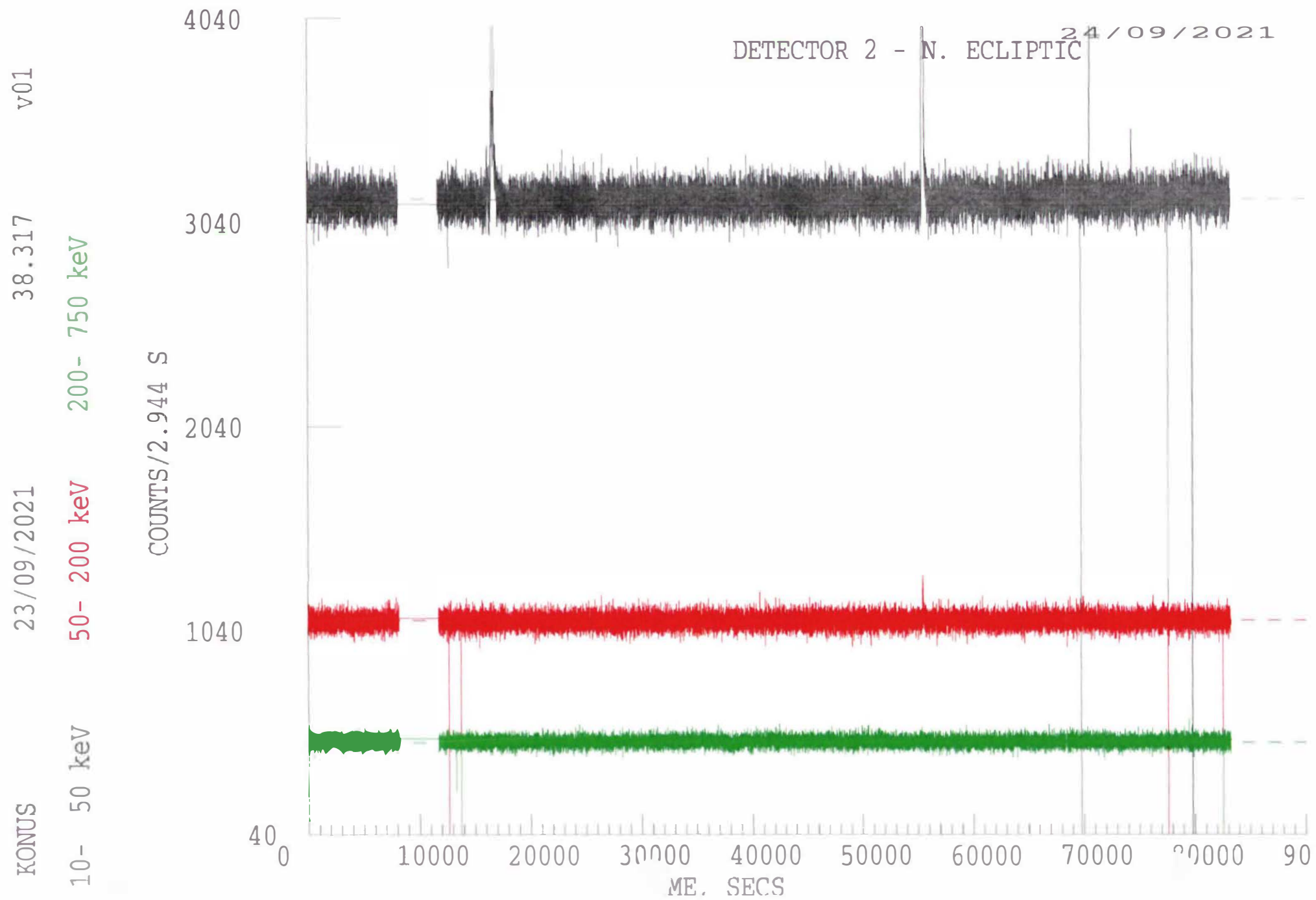
1500

500

0

DETECTOR 1 - S. ECLIP²³ / 09 / 2021

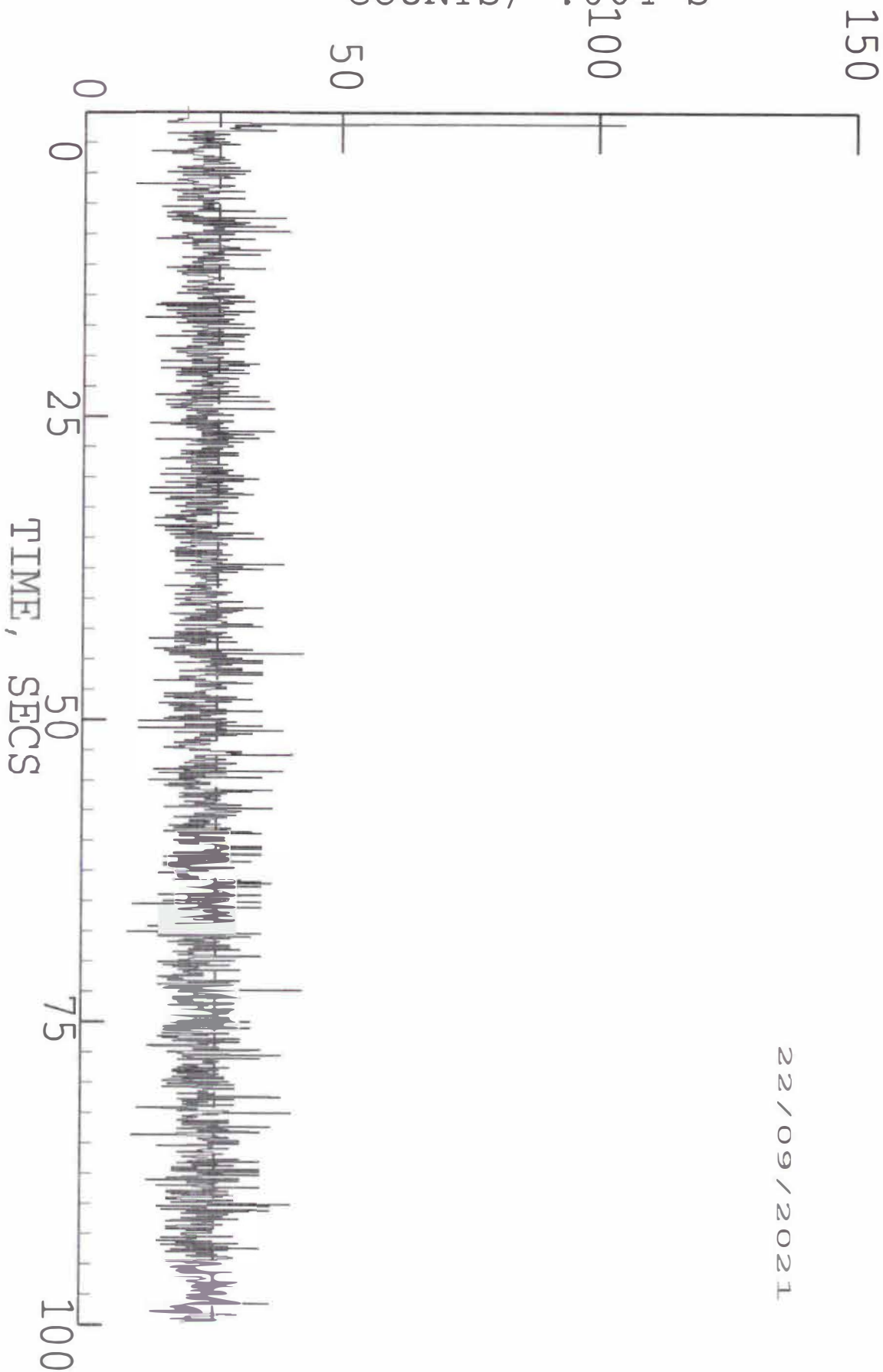




KONUS 23/09/21 7888.715 02:11:28.715
50- 200 keV

COUNTS/ .064 S

SPI No



22/09/2021

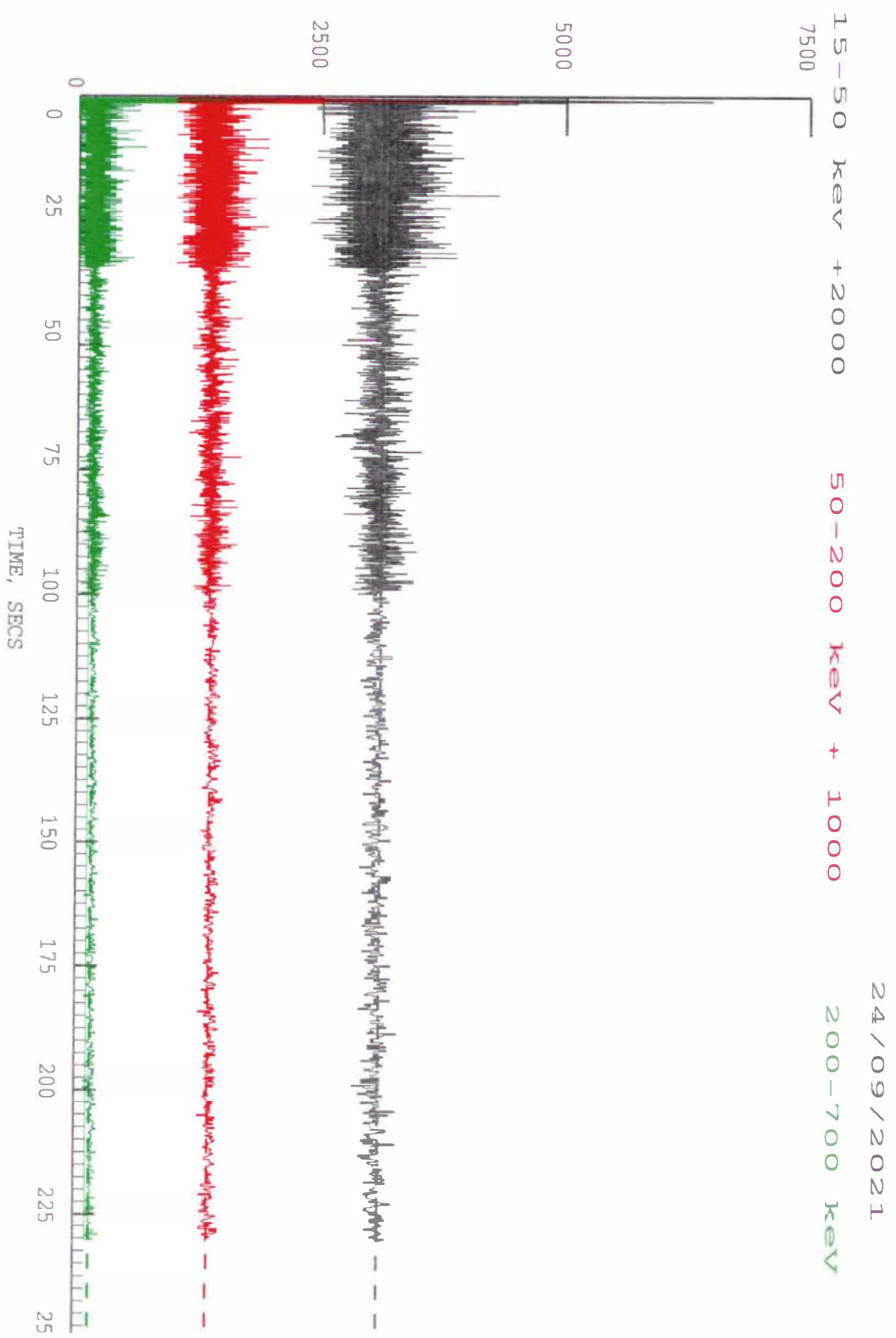
KONUS

23/09/21

7888.000

02:11:28.000

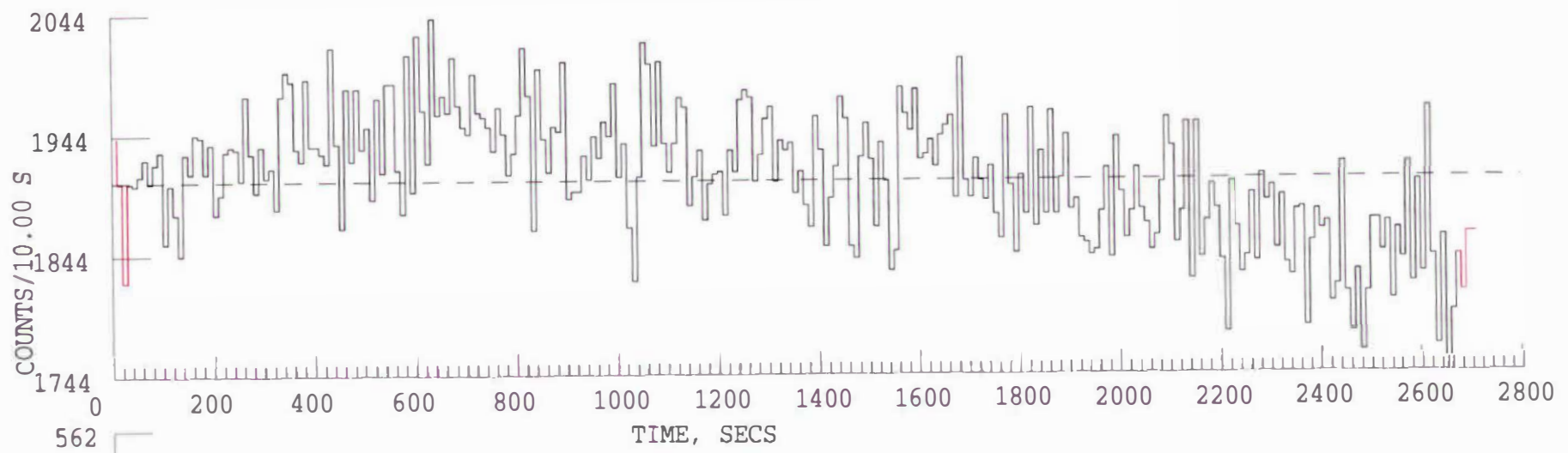
COUNTS/SEC



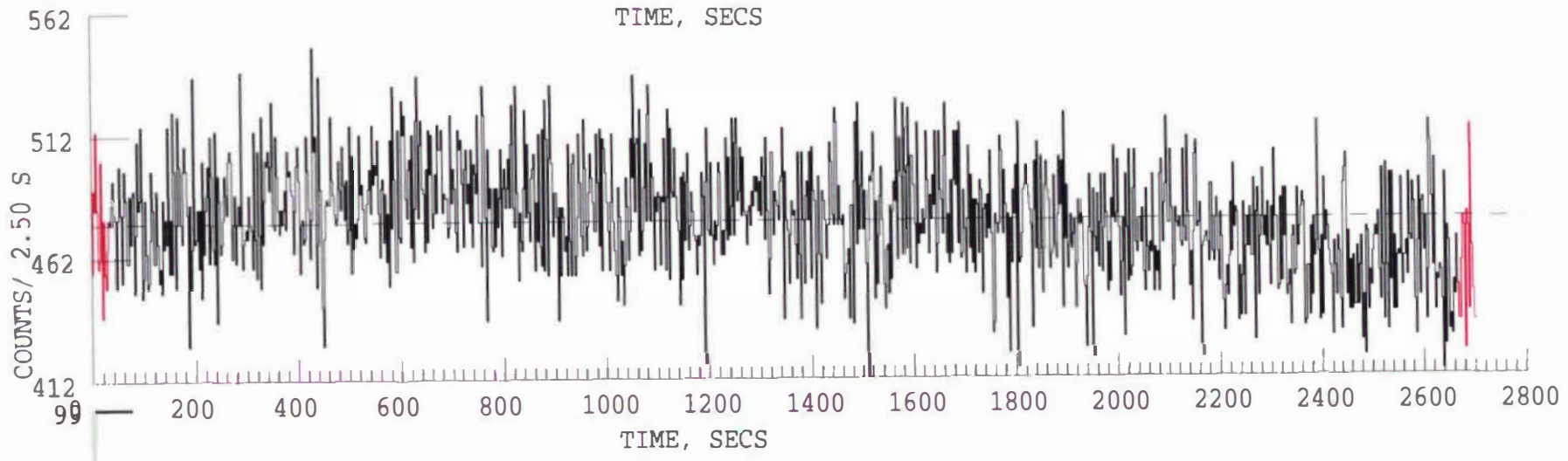
A

17/11/2021

01:48:34.949

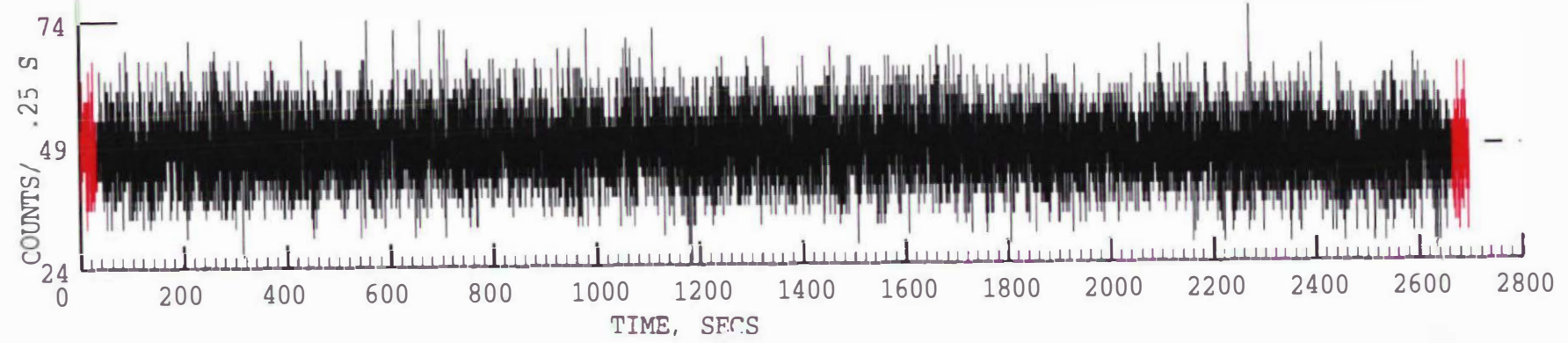


6514.949



23/09/21

50-3000 keV



ODYSSEY

Subject: BAT lightcurve for trigger at 210923_0211

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/23/2021, 1:01 AM

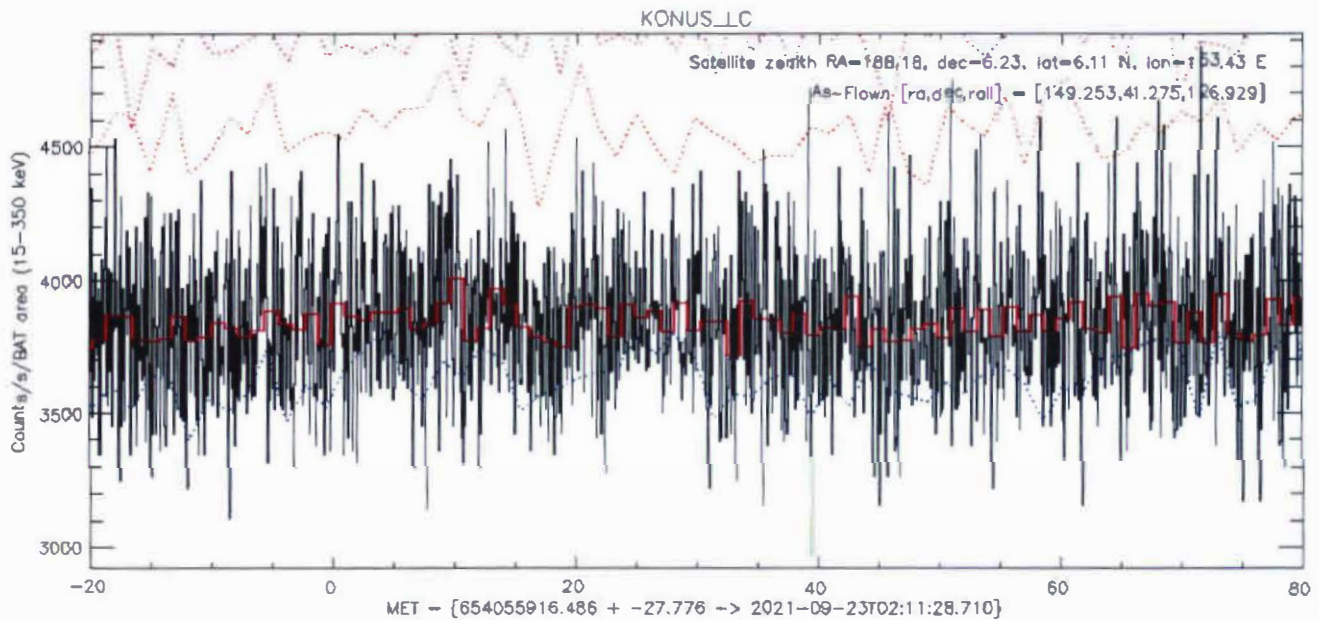
To: palmer+automatic_lightcurve@lanl.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, vestrland@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, mkippen@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-23T02:11:28.710
Swift Zenith(RA,dec):      188.18, 6.23
Swift Location(lon,lat,alt): 153.43 E, 6.11 N, 541 km
Time(MET + UTC -> UT):    654055916.486 + -27.776 -> 2021-09-23T02:11:28.710
YYMMDD_SOD:               210923_07888.710      DOY=266
Obs Sequence Number:       00037562014
Obs Target Name:           PG 0953+41
Obs Date and Times:        2021-09-23 01:50:34 - 02:14:32
Obs Pointing(ra,dec,roll): 149.253, 41.275, 126.93
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210923_0211.png



Attachments

/tmp/swift/210923_0211_bat64ms_ipn

87.1 KB

/tmp/swift/210923_0211.png

19.1 KB

Subject: GRB 210923B: GECAM detection
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 11:06 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30874
SUBJECT: GRB 210923B: GECAM detection
DATE: 21/09/24 06:05:39 GMT
FROM: Xiaolu Zhang at IHEP <xlzhang@ihep.ac.cn>

GRB 210923B: GECAM detection

X. L. Zhang, S. L. Xiong, X. Y. Zhao, Y. Huang, X. Y. Song, C. Cai,
S. Xiao, S. L. Xie, Y. Q. Zhang, Y. Zhao, Z. W. Guo, C. Zheng,
W. C. Xue, C. Y. Li, C. W. Wang, Q. B. Yi, B. X. Zhang, P. Zhang,
W. X. Peng, R. Qiao, D. Y. Guo, X. B. Li, X. Ma, P. Wang, J. Wang,
Z. Zhang, S. J. Zheng, W. Chen, J. J. He, G. Y. Zhao, Y. Q. Du,
H. Wu, J. Liang, Q. Luo, J. C. Liu,
L. M. Song, F. J. Lu, S. N. Zhang (IHEP), report on behalf of GECAM team:

During the commissioning phase, GECAM-B was triggered ground by a short bright burst, GRB 210923B, at 2021-09-23 02:11:29.000 UTC (denoted as T0), which was also detected by Konus-Wind.

According to the GECAM-B light curves in about 15-3500 keV, this burst mainly consists of a broad pulse with a duration of about 0.679 s.

The GECAM light curve could be found here:
http://twiki.ihep.ac.cn/pub/GECAM/GRB1st/utn210923_021129_GECAMB_lc.png

GECAM-B localized this burst to the following position (J2000):

Ra: 287.25 deg

Dec: -12.03 deg

Err: 6.29 deg (1-sigma, statistical only)

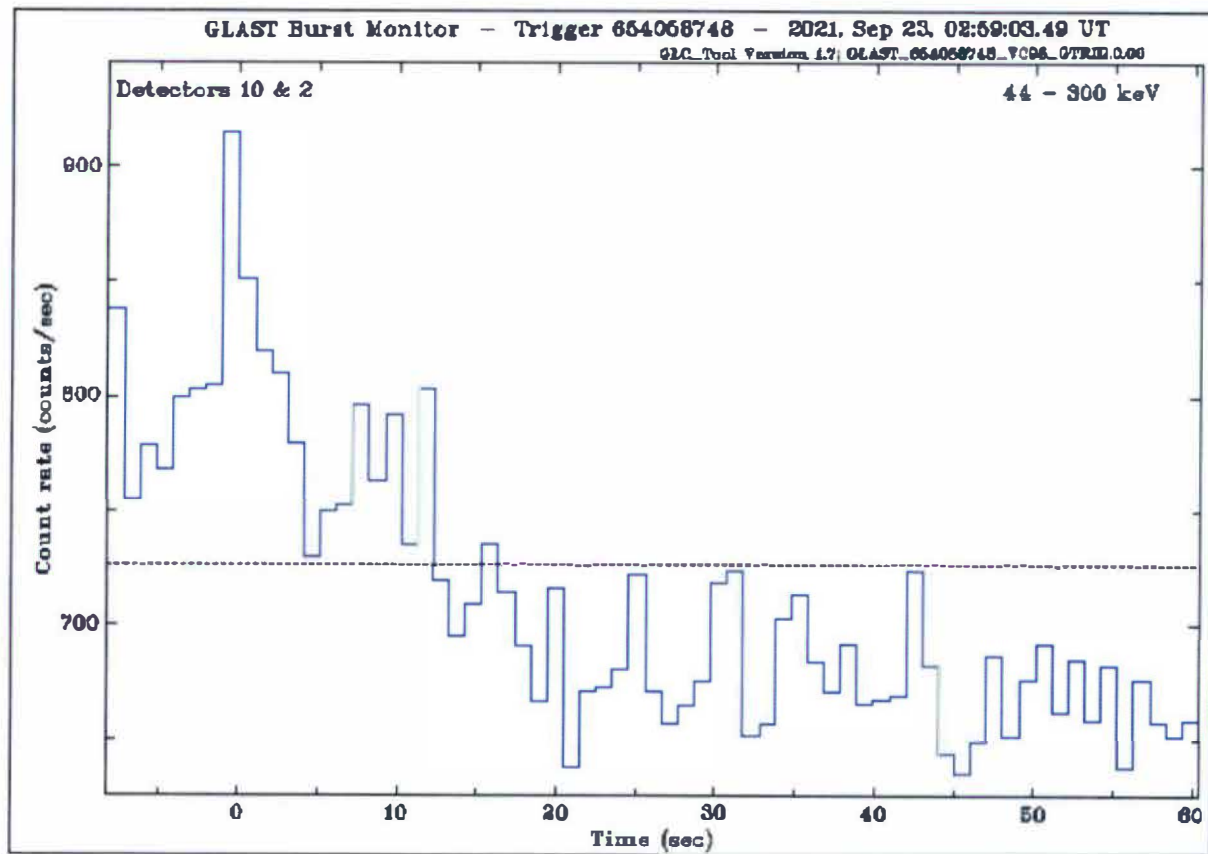
The current systematic error of location is estimated to be several degrees which could be minimized by the ongoing calibration.

Please note that all GECAM results here are preliminary. The final analysis will be published in journal papers or GECAM online catalog.

Gravitational wave high-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission consists of two small satellites (GECAM-A and GECAM-B) in Low Earth Orbit (600 km, 29 deg), launched on Dec 10, 2020 (Beijing Time), which was funded by the Chinese Academy of Sciences (CAS).

278.9 -50.5 3.8

SPI N/O



B

02:36:34.903

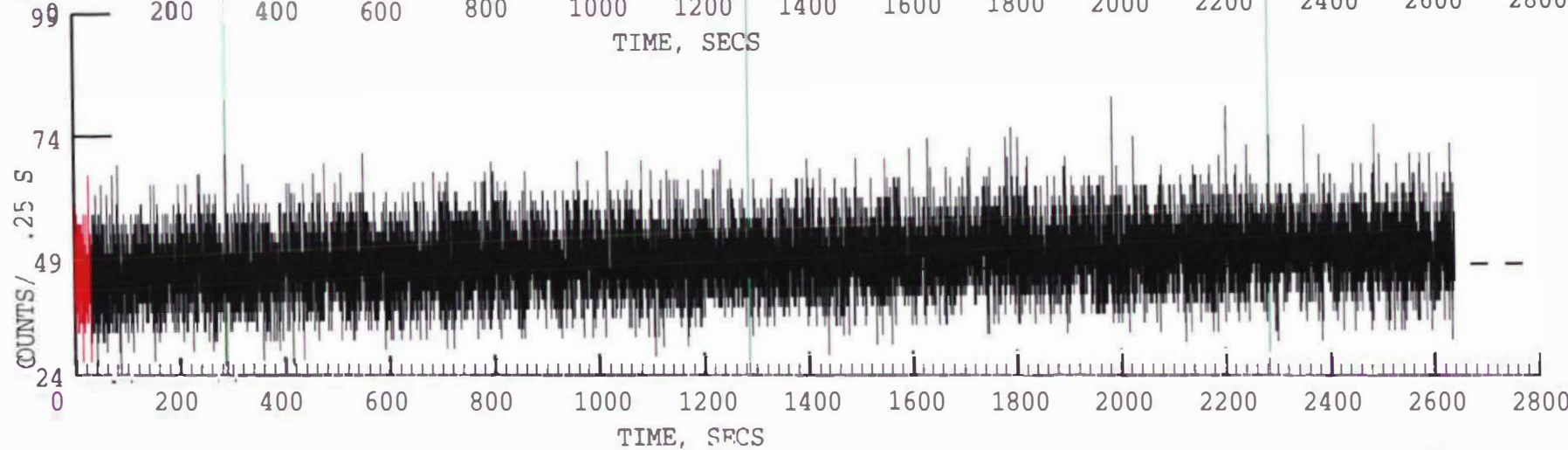
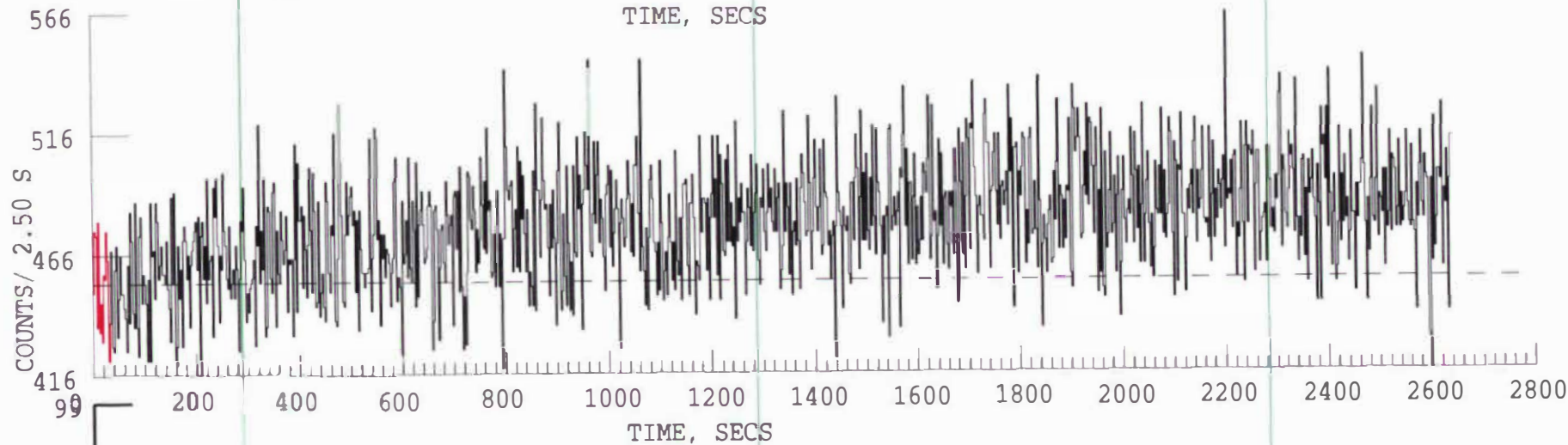
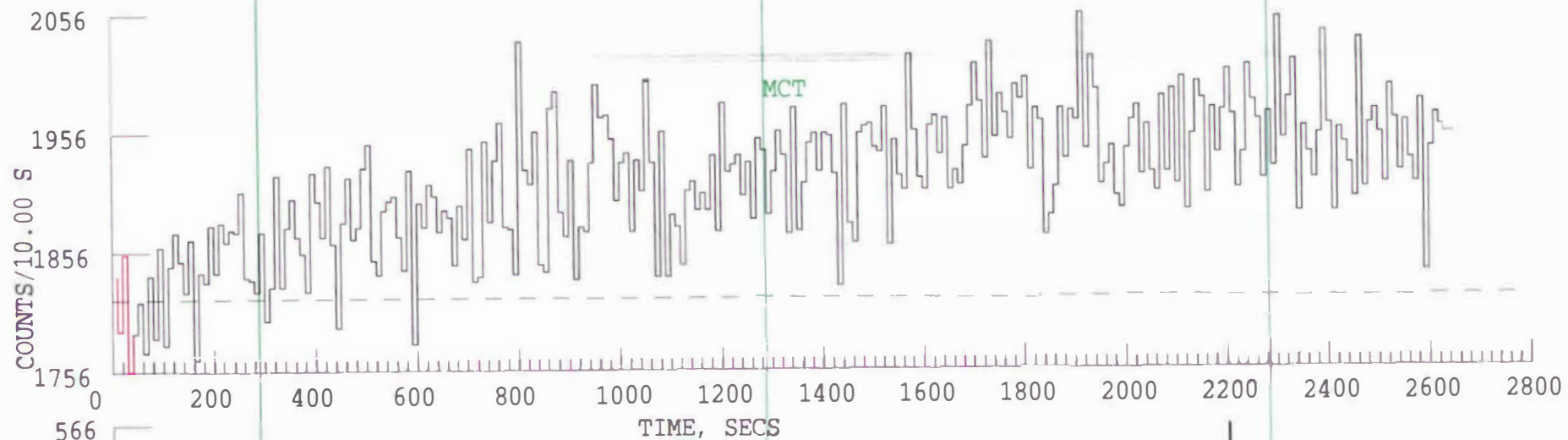
9394.903

23/09/21

ODYSSEY

50-3000 keV

17/11/2021



Subject: BAT lightcurve for trigger at 210923_0259

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/23/2021, 1:01 AM

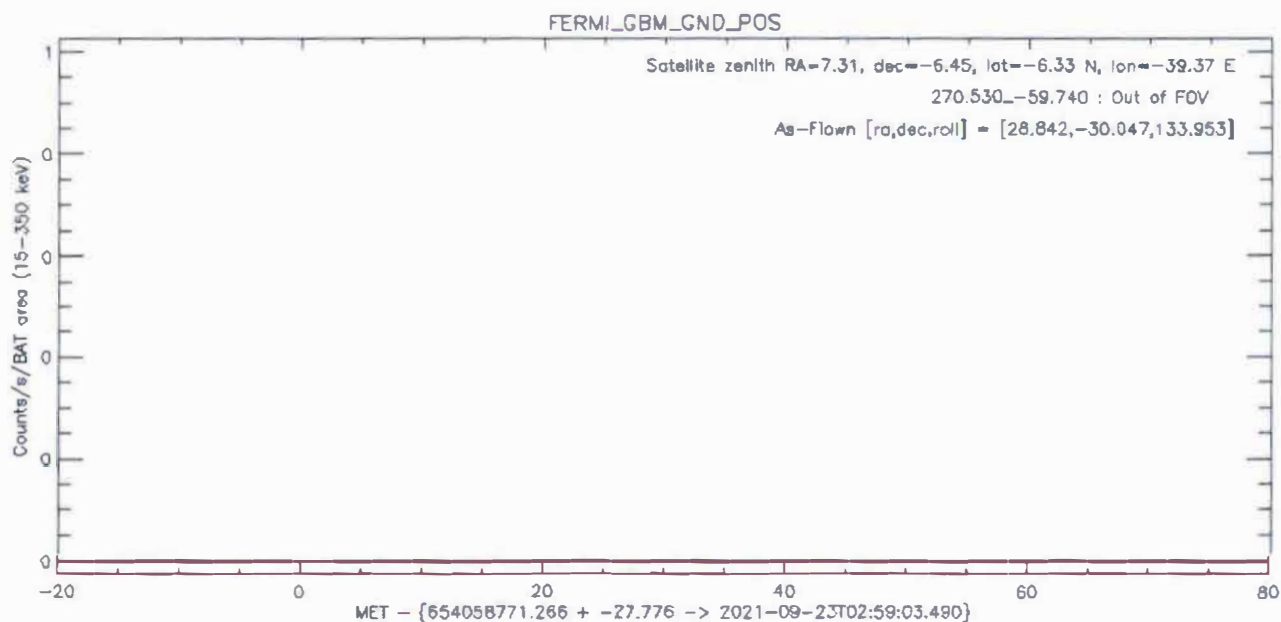
To: mkippen@lanl.gov, aaron.tohu@gmail.com, vestrand@lanl.gov, ipn@ssl.berkeley.edu, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654058771.266 -s 270.530_-59.740
Swift Zenith(RA,dec):      7.31, -6.45
Swift Location(lon,lat,alt): -39.37 E, -6.33 N, 557 km
Time(MET + UTCF -> UT):  654058771.266 + -27.776 -> 2021-09-23T02:59:03.490
YYMMDD_SOD:               210923_10743.490      DOY=266
Obs Sequence Number:      00074671032
Obs Target Name:          saa-cold-123-07
Obs Date and Times:       2021-09-23  02:44:34 - 03:04:30
Obs Pointing(ra,dec,roll): 28.842, -30.047, 133.95
270.530_-59.740_imageloc (boresight_dist, angle): (77, -17)
270.530_-59.740_exposure (cm2 cos adjusted): 0
270.530_-59.740_altitude: 25 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210923_0259.png



Attachments

/tmp/swift/210923_0259_bat64ms_ipn

87.1 KB

/tmp/swift/210923_0259.png

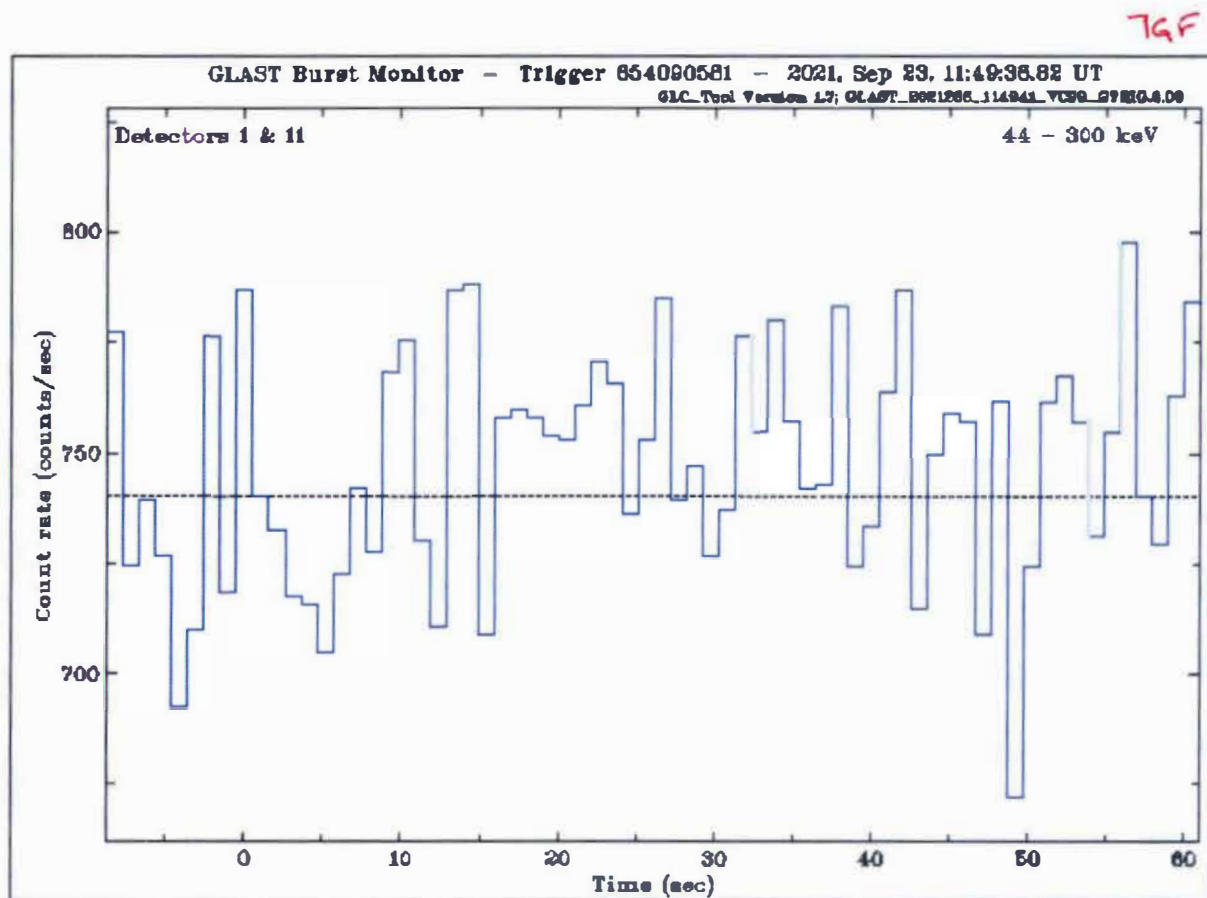
7.9 KB

Subject: Retraction of Fermi GBM GRB 210923A: the trigger is not a GRB
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/23/2021, 3:04 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30873
SUBJECT: Retraction of Fermi GBM GRB 210923A: the trigger is not a GRB
DATE: 21/09/23 22:03:59 GMT
FROM: Joe Mangan at UCD <joseph.mangan@ucdconnect.ie>

J.Mangan (UCD), S.Lesage (UAH) report on behalf of the Fermi Gamma-ray Burst Monitor Team:

The Fermi Gamma-ray Burst Monitor (GBM) trigger 654090581/210923493 at 11:49:36.820 UT on 23 September 2021, tentatively classified as a GRB (GCN 30865), is in fact not due to a GRB. This trigger is likely due to a terrestrial electron beam (TEB).



Subject: BAT lightcurve for trigger at 210923_1149

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/23/2021, 8:13 AM

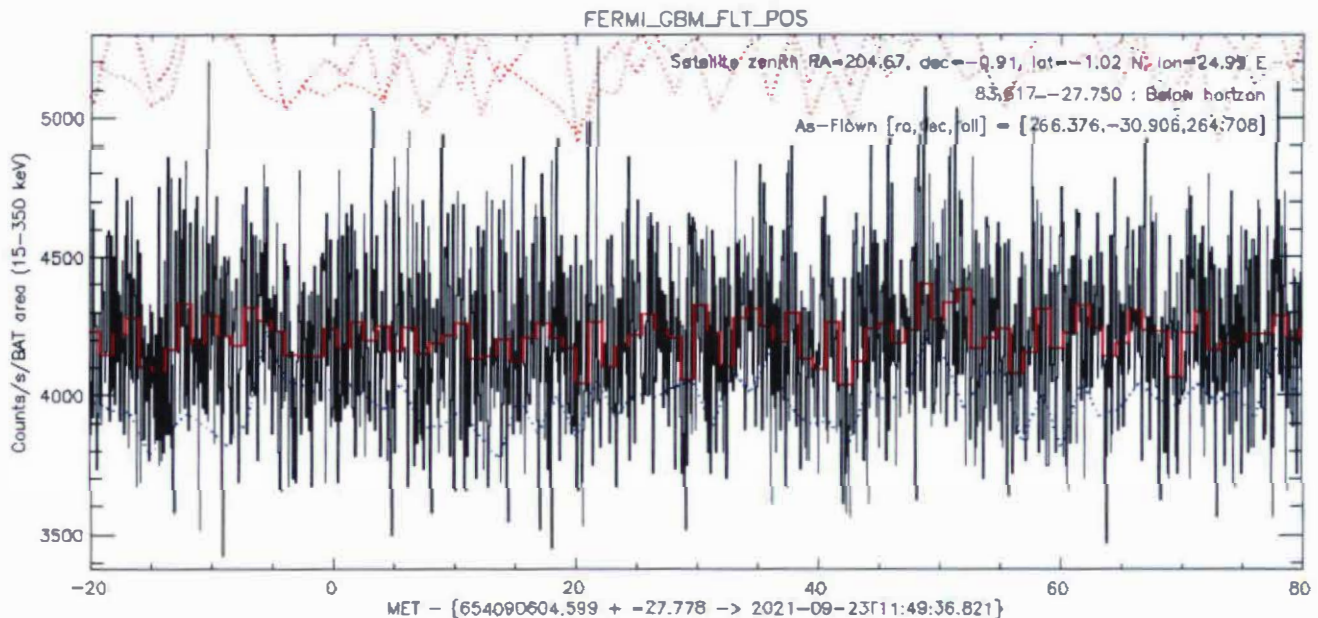
To: mkippen@lanl.gov, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, vestrand@lanl.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654090604.599 -s 83.617_-27.750
Swift Zenith(RA,dec):      204.67, -0.91
Swift location(lon,lat,alt): 24.99 E, -1.02 N, 542 km
Time(MET + UTCF -> UT):   654090604.599 + -27.778 -> 2021-09-23T11:49:36.821
YYMMDD_SOD:               210923_42576.821      DOY=266
Obs Sequence Number:      00096395011
Obs Target Name:          S853 J1745.4-3056
Obs Date and Times:       2021-09-23 11:46:32 - 11:51:34
Obs Pointing(ra,dec,roll): 266.376, -30.906, 264.71
83.617_-27.750_imageloc (boresight_dist, angle): (121, -178)
83.617_-27.750_exposure (cm2 cos adjusted): 0
83.617_-27.750_altitude: -4 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210923_1149.png



Attachments

/tmp/swift/210923_1149_bat64ms_ipn

87.0 KB

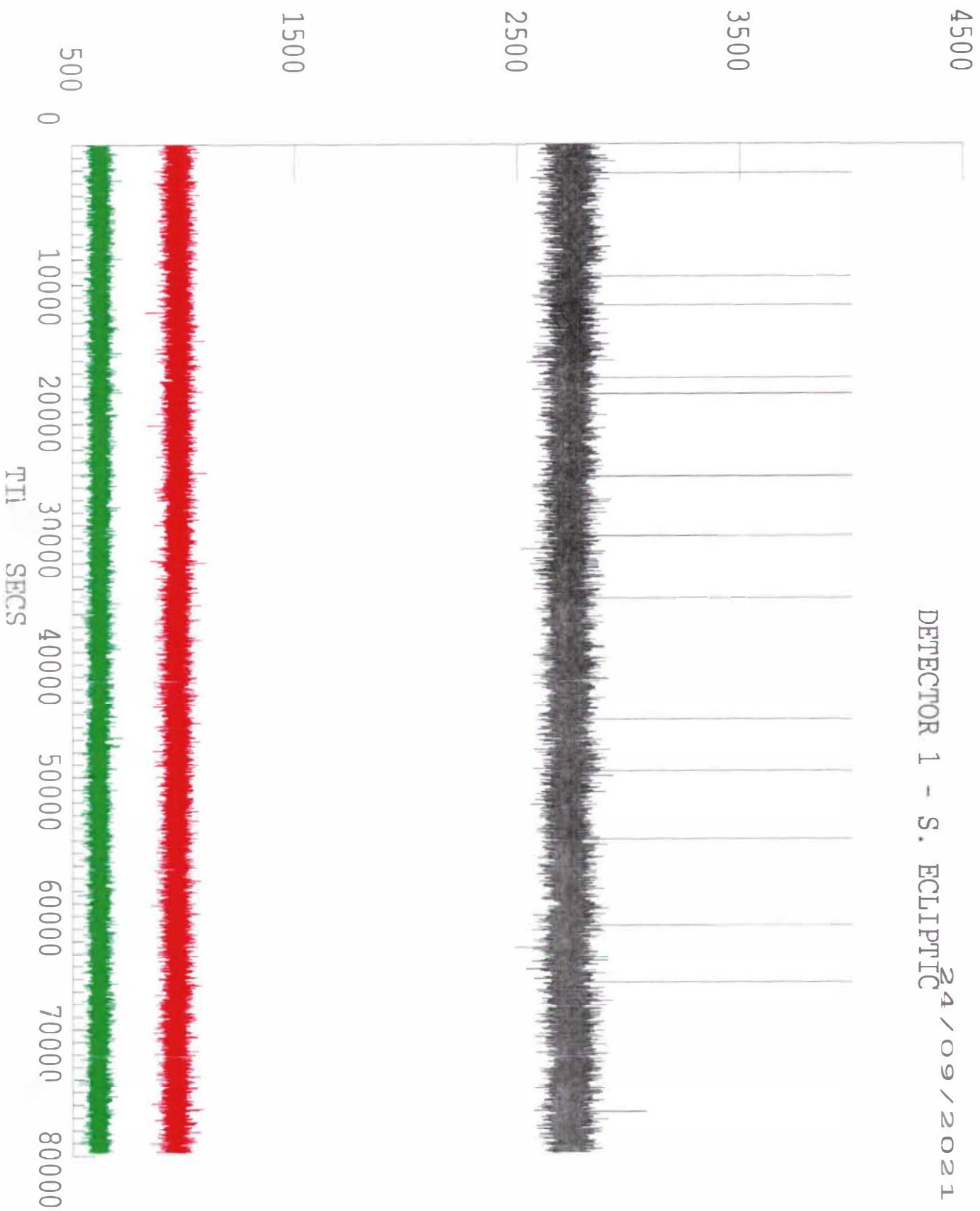
/tmp/swift/210923_1149.png

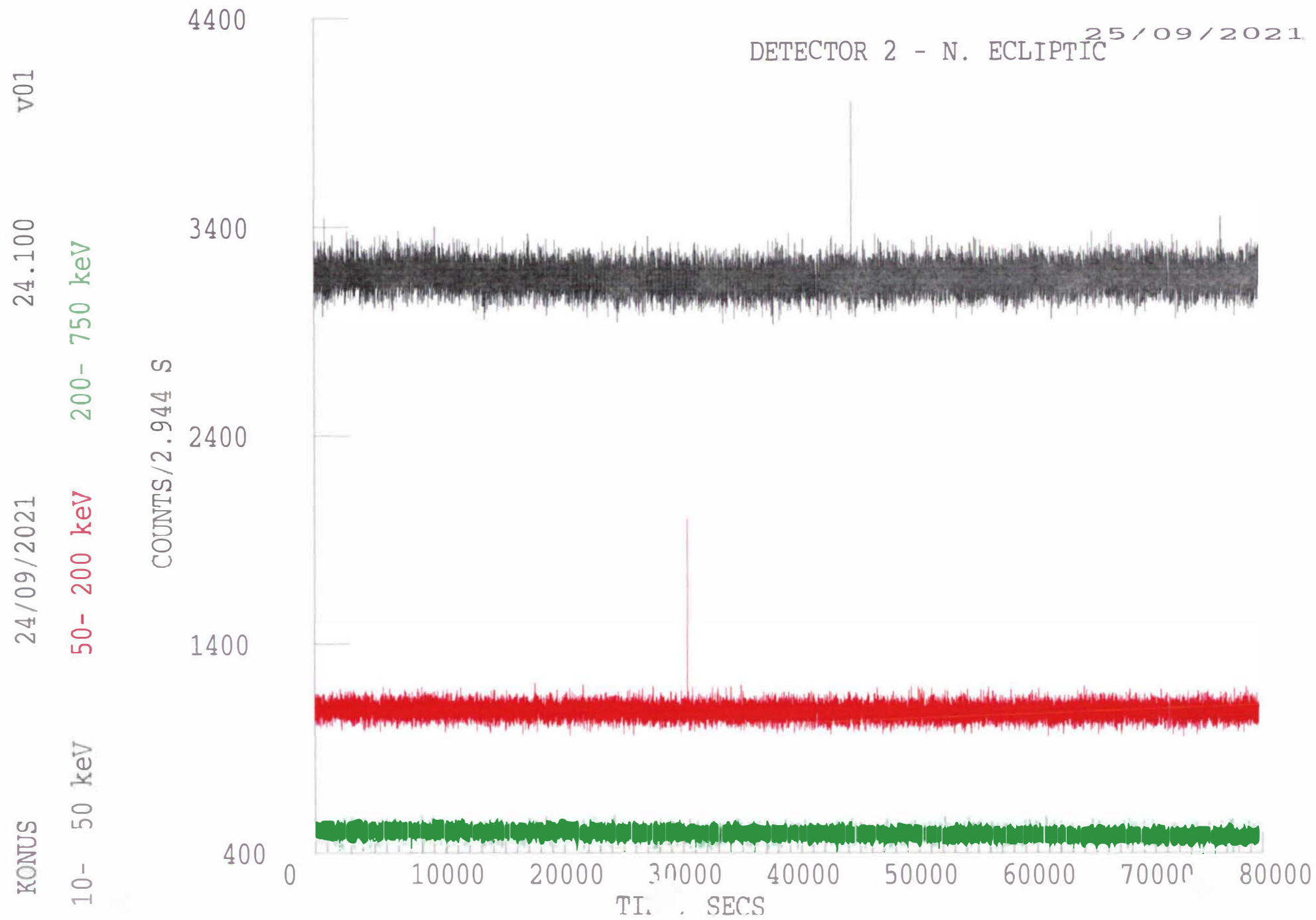
19.3 KB

KONUS 24/09/2021 24.100 v01

10- 50 keV 50- 200 keV 200- 750 keV

COUNTS/2.944 S





BAT lightcurve for trigger at 210924_2116

Subject: BAT lightcurve for trigger at 210924_2116

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/24/2021, 5:02 PM

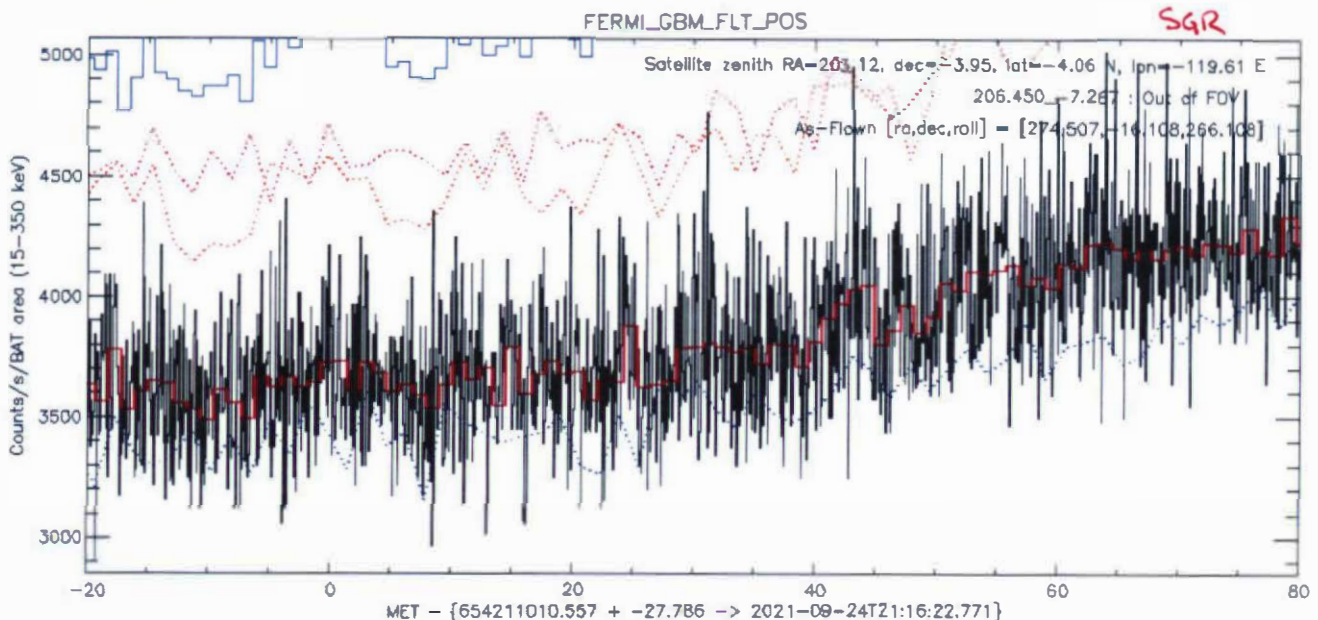
To: dmopalmer@gmail.com, ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654211010.557 -s 206.450_-7.267
Swift Zenith(RA,dec):      203.12, -3.95
Swift Location(lon,lat,alt): -119.61 E, -4.06 N, 542 km
Time(MET + UTC -> UT):    654211010.557 + -27.786 -> 2021-09-24T21:16:22.771
YYMMDD_SOD:               210924_76582.771      DOY=267
Obs Sequence Number:      00013996021
Obs Target Name:          Swift J1818.0-1607
Obs Date and Times:       2021-09-24  21:15:34 - 21:25:31
Obs Pointing(ra,dec,roll): 274.507, -16.108, 266.11
206.450_-7.267_imageloc (boresight_dist, angle): (67, -87)
206.450_-7.267_exposure (cm2 cos adjusted): 0
206.450_-7.267_altitude: 108 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210924_2116.png



Attachments

/tmp/swift/210924_2116.png

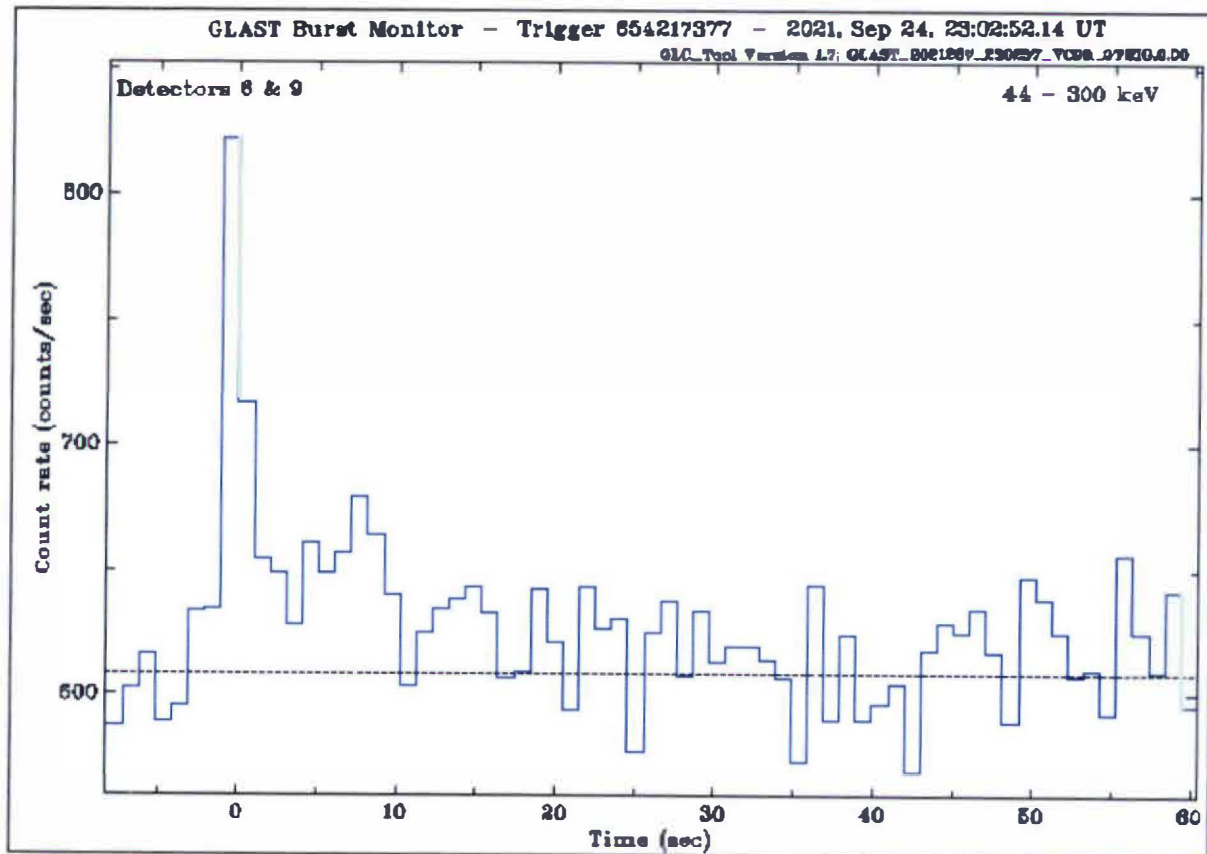
20.7 KB

/tmp/swift/210924_2116_bat64ms_ipn

87.0 KB

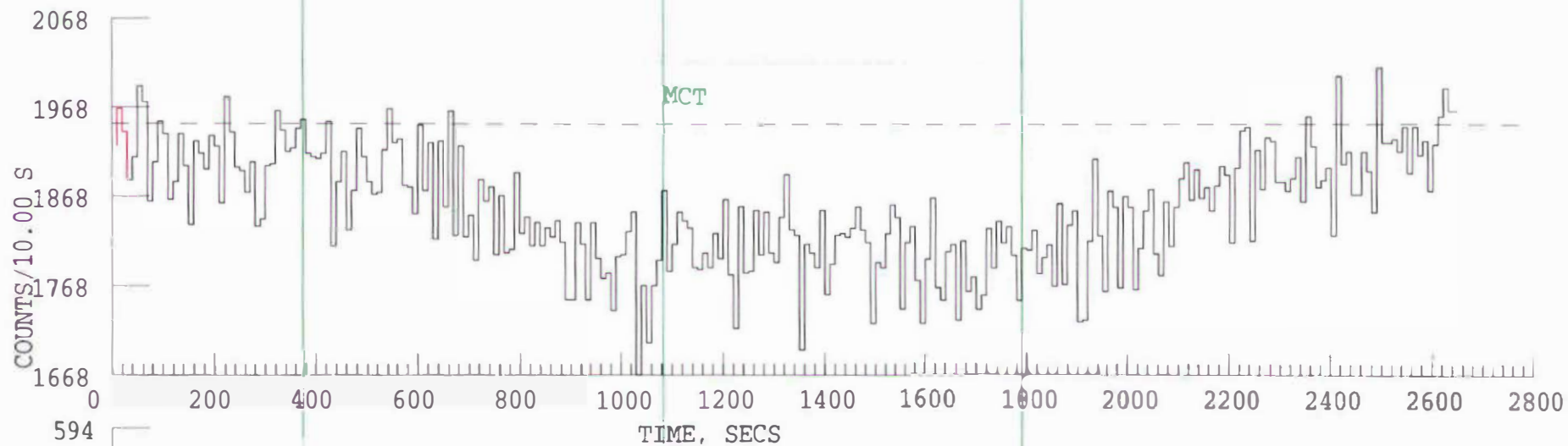
112.1 43.2 9.9

GRB

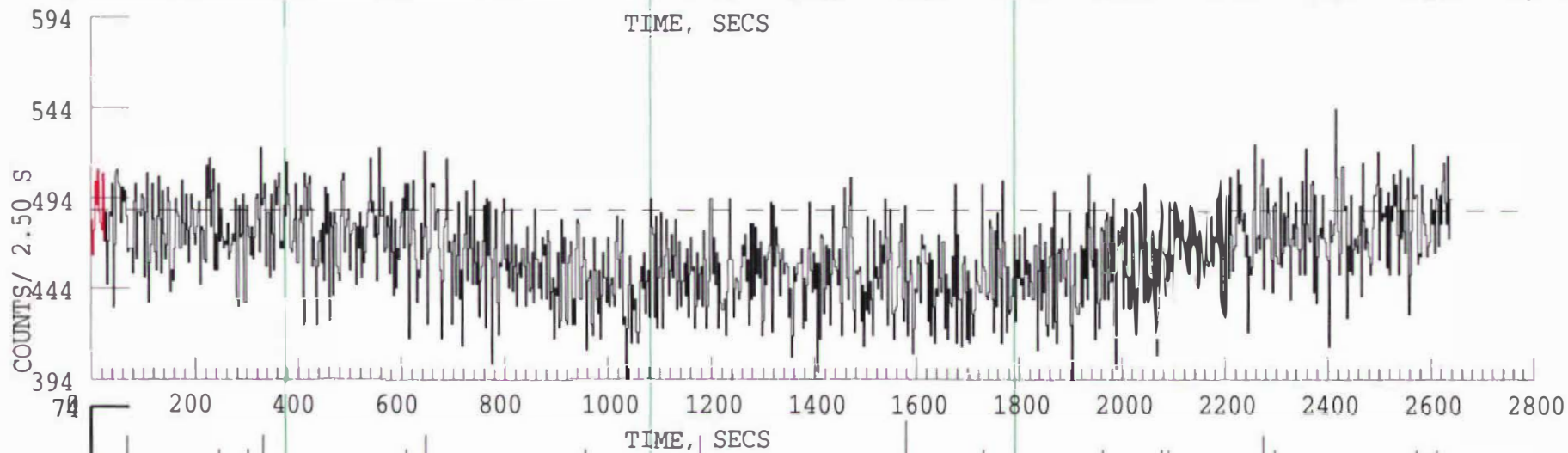


17/11/2021

22:40:32.089



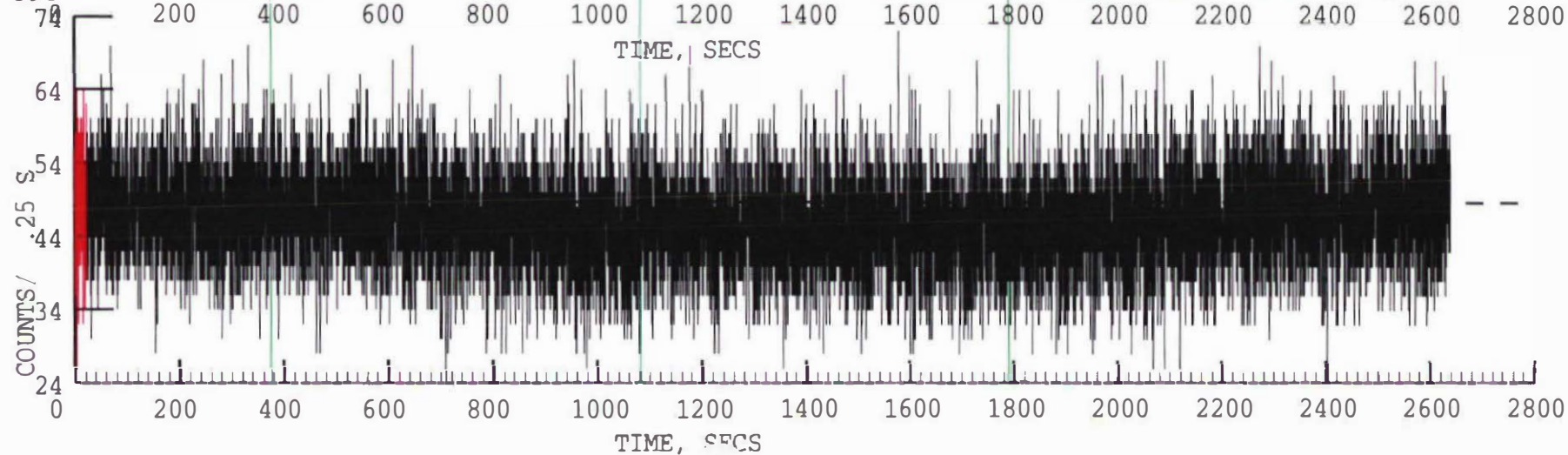
81632.089

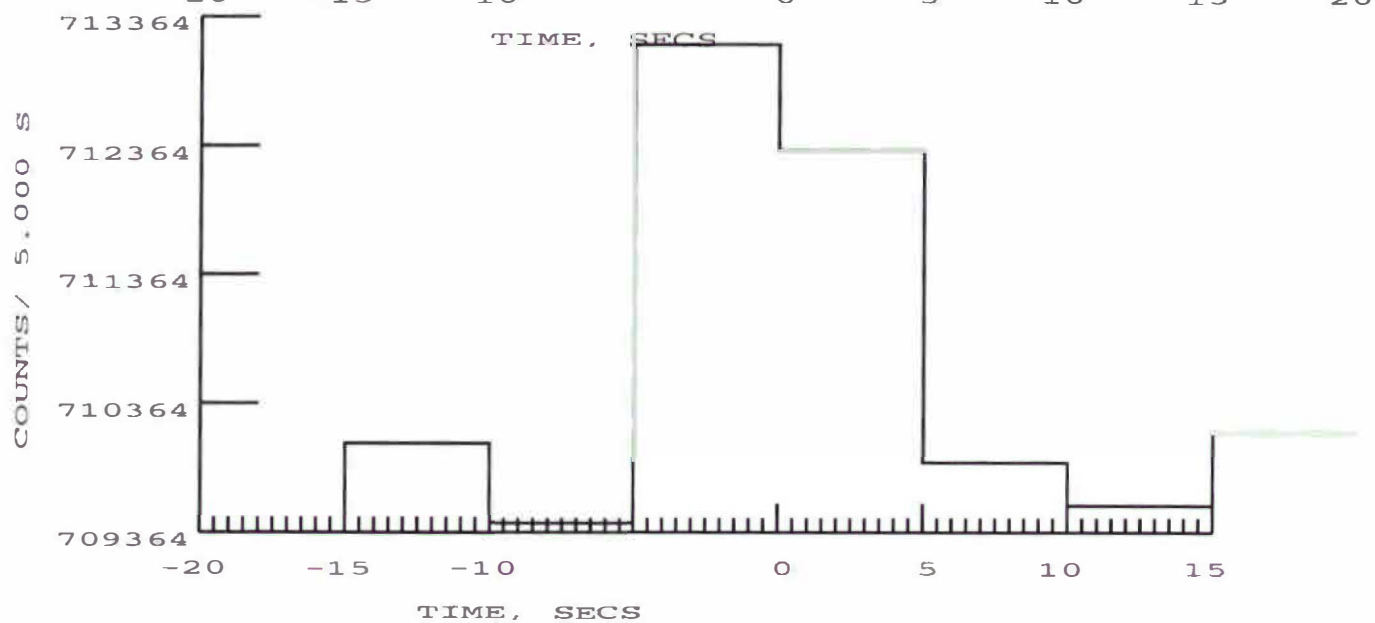
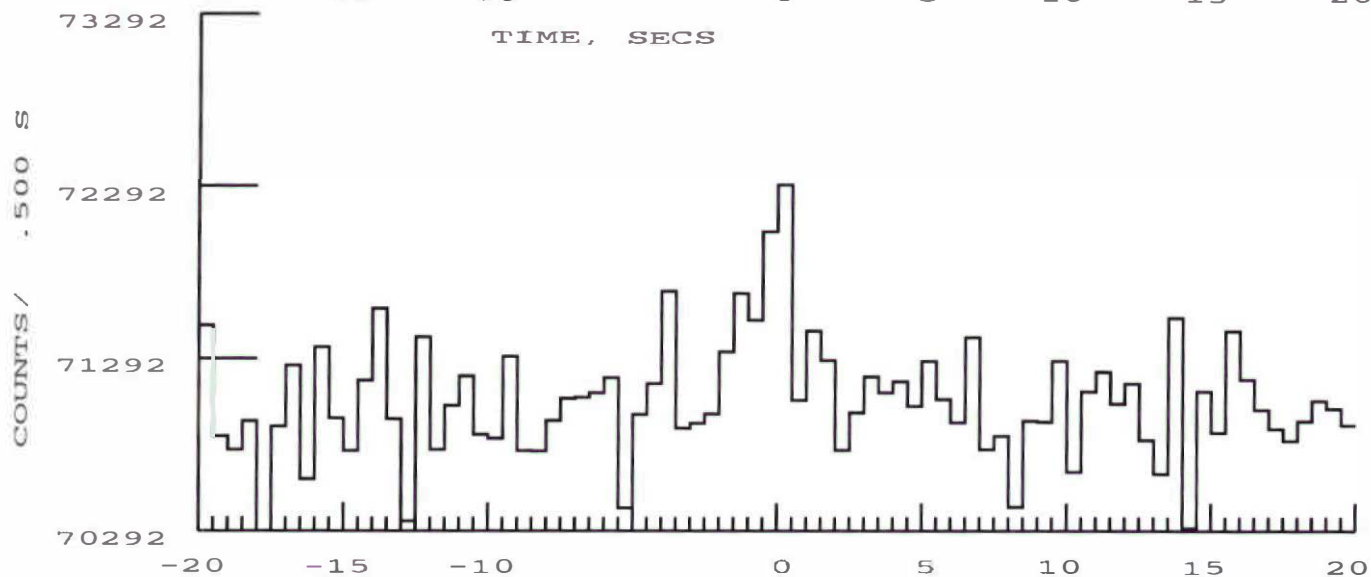
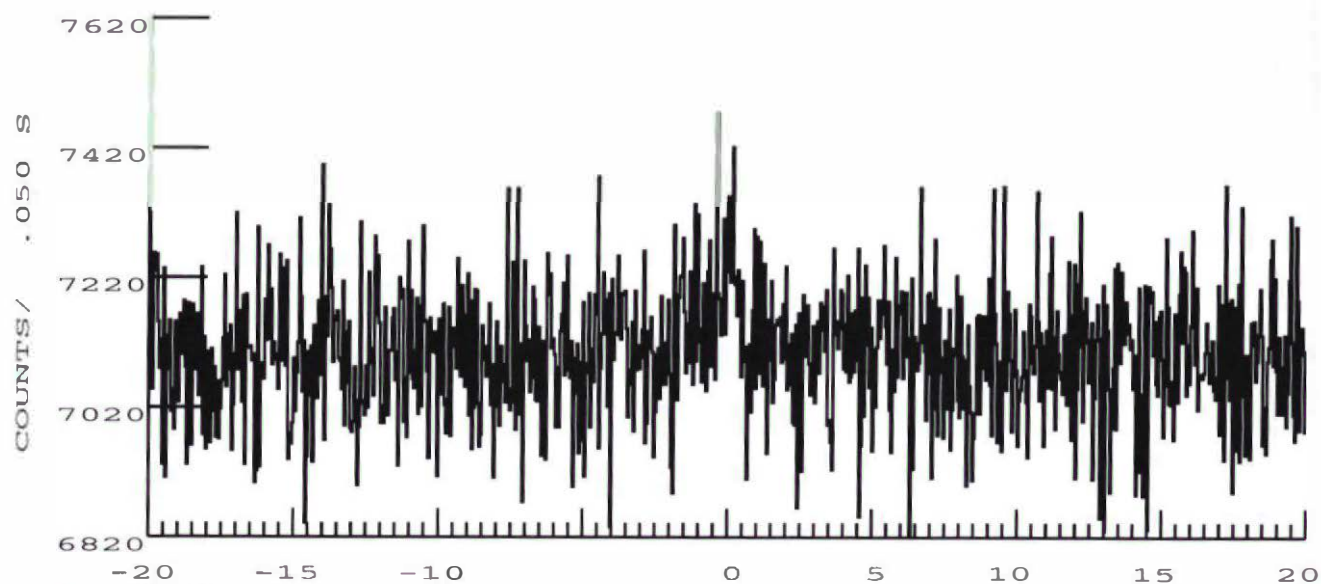


50-3000 keV

24/09/21

ODYSSEY





Subject: BAT lightcurve for trigger at 210924_2302

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/24/2021, 6:05 PM

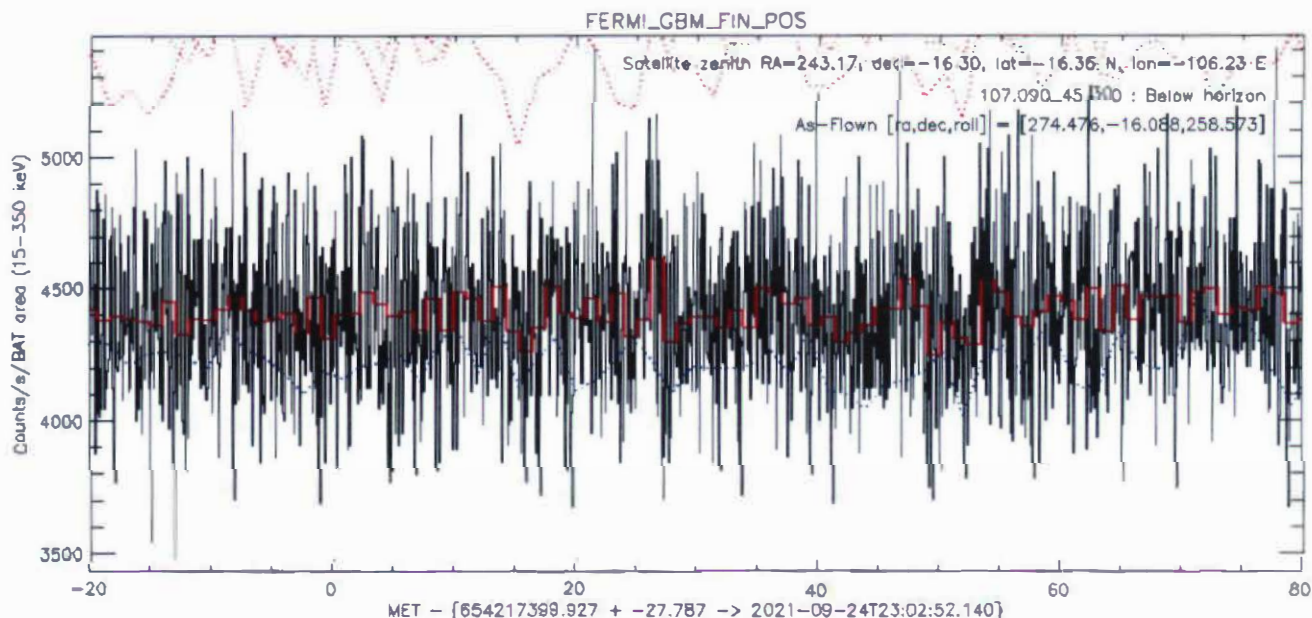
To: vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654217399.927 -s 107.090_45.300
Swift Zenith(RA,dec):      243.17, -16.30
Swift Location(lon,lat,alt): -106.23 E, -16.35 N, 548 km
Time(MET + UTCF -> UT):   654217399.927 + -27.787 -> 2021-09-24T23:02:52.140
YYMMDD_50D:               210924_82972.140      DOY=267
Obs Sequence Number:      00013996021
Obs Target Name:          Swift J1818.0-1607
Obs Date and Times:       2021-09-24 22:50:34 - 23:07:30
Obs Pointing(ra,dec,roll): 274.476, -16.088, 258.57
107.090_45.300_imageloc (boresight_dist, angle): (149, -6)
107.090_45.300_exposure (cm2 cos adjusted): 0
107.090_45.300_altitude: -20 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210924_2302.png



Attachments:

/tmp/swift/210924_2302_bat64ms_ipn

87.0 KB

/tmp/swift/210924_2302.png

17.9 KB

v01

12.828

25/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

60000

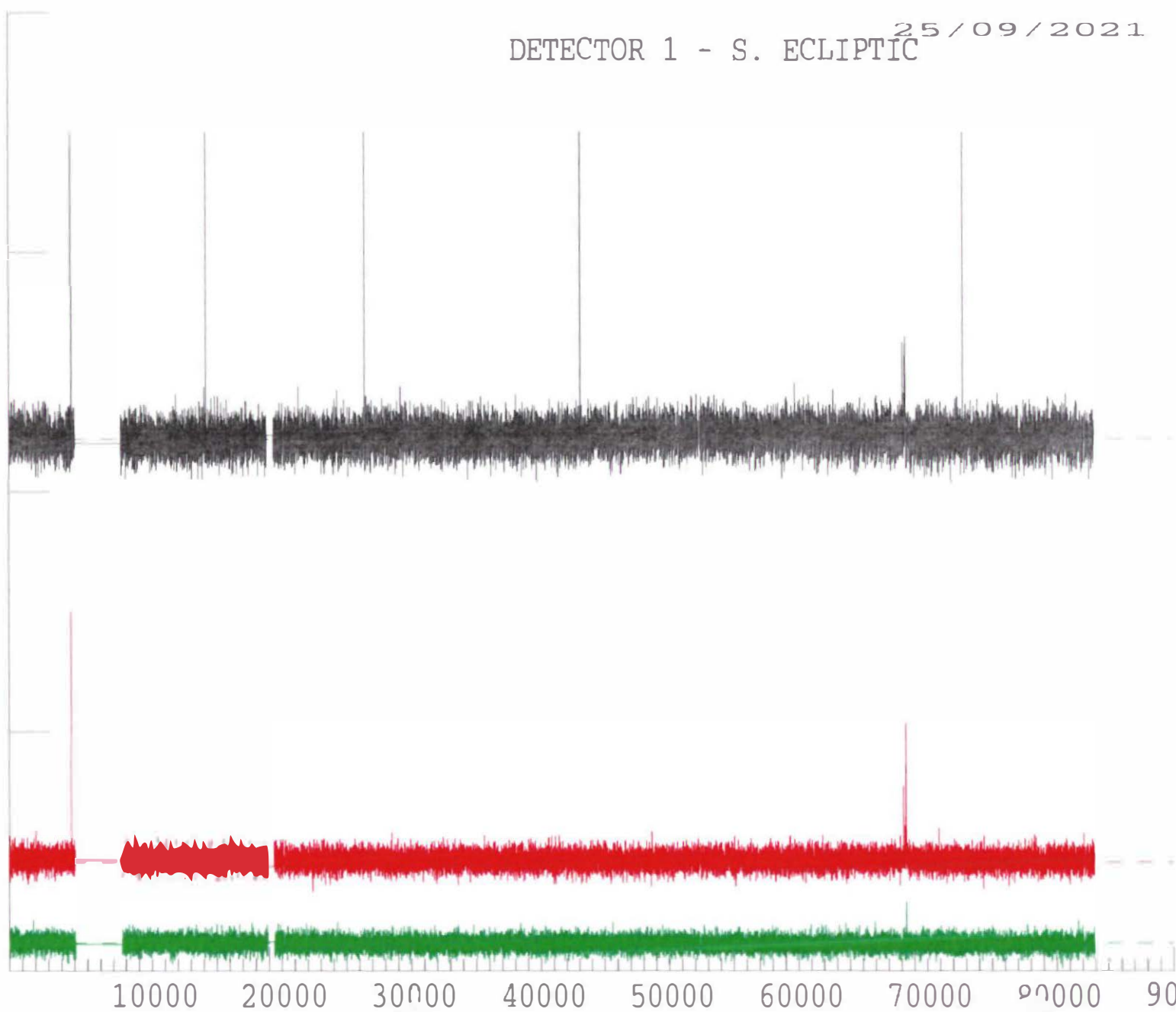
70000

80000

90000

IE. SECS

DETECTOR 1 - S. ECLIPTIC 25/09/2021



KONUS

25/09/2021

12.828

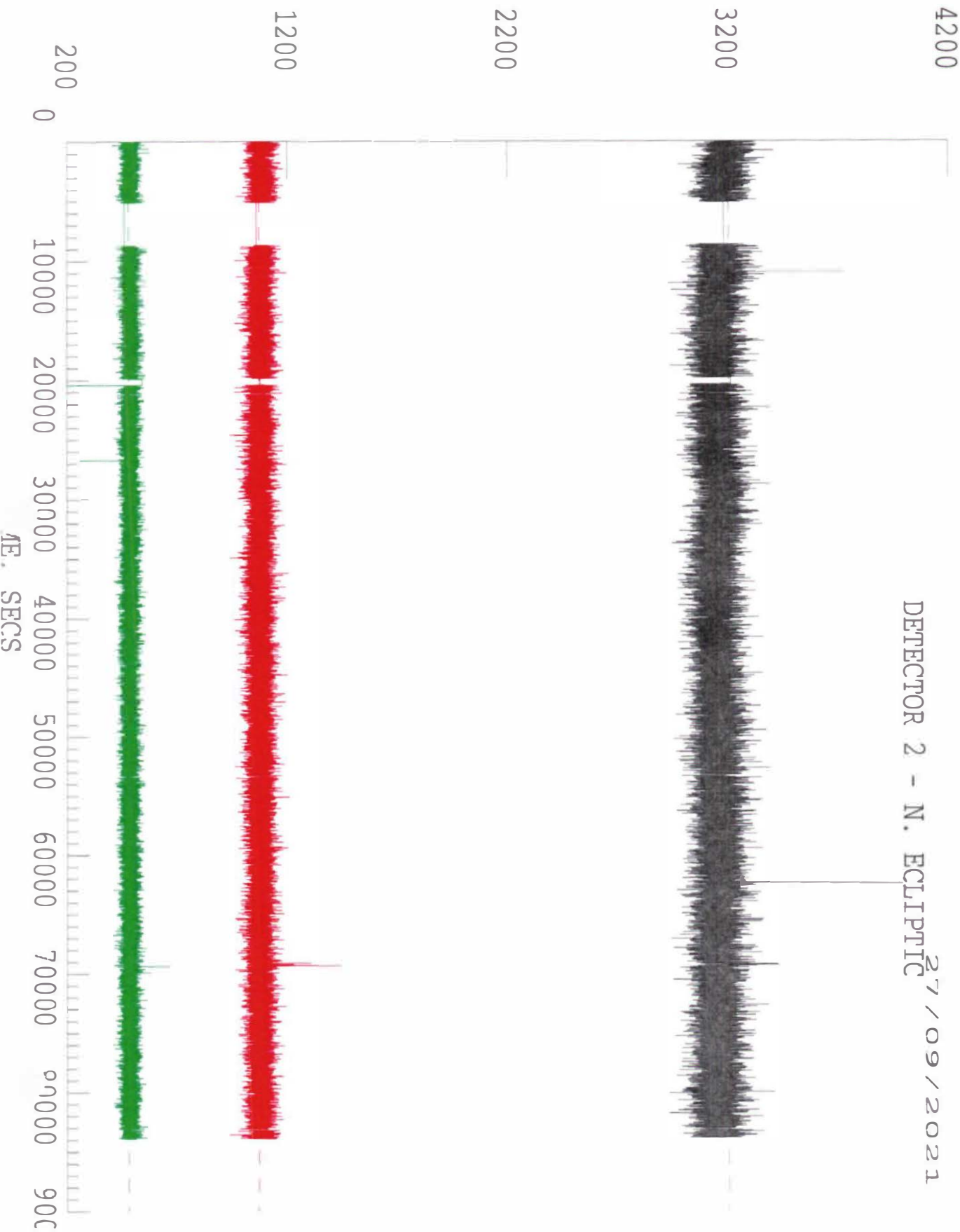
v01

10- 50 keV

50- 200 keV

200- 750 keV

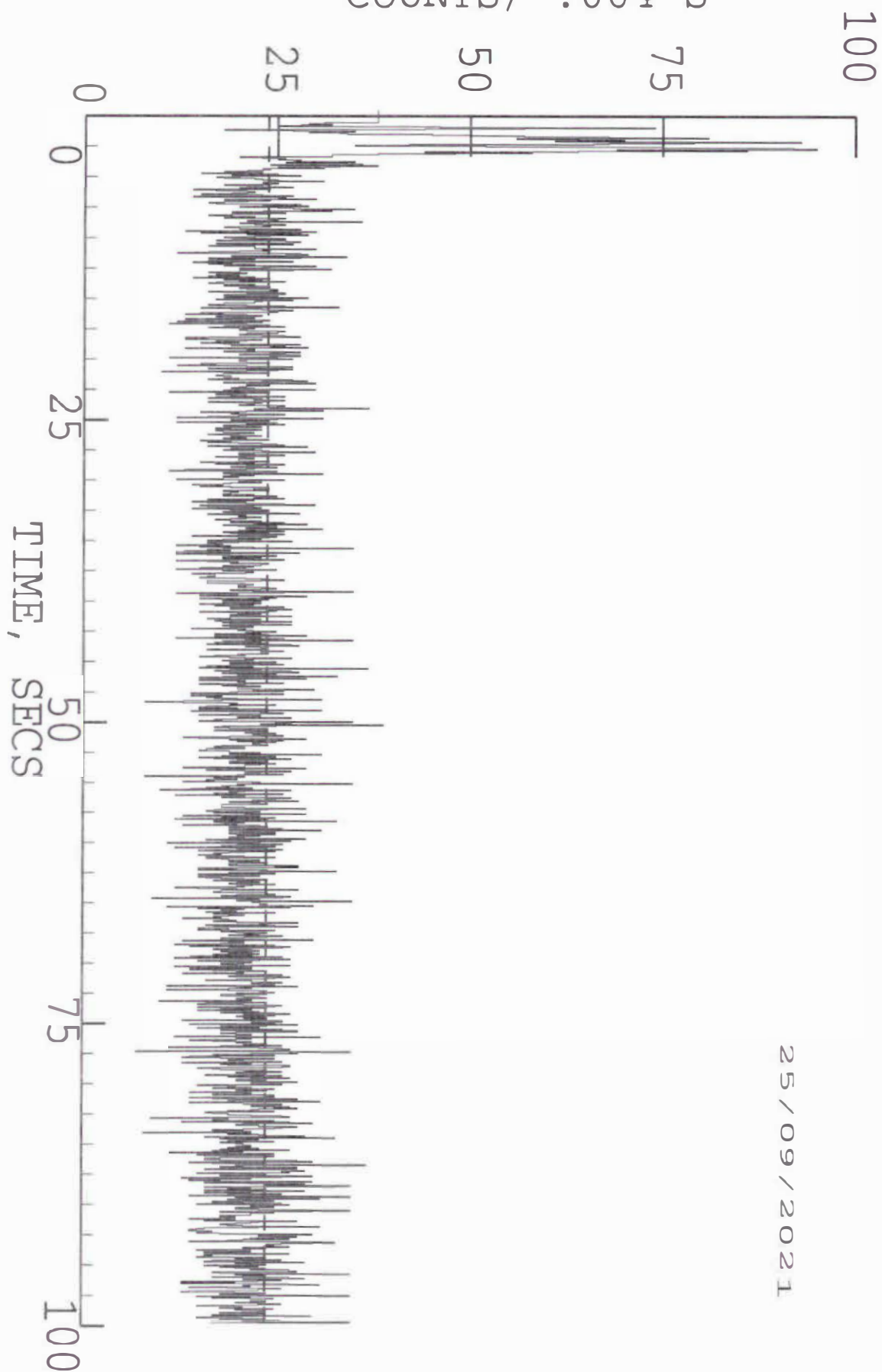
COUNTS/2.944 S



A

KONUS 25/09/21 4810.690 01:20:10.690
50- 200 keV

COUNTS/ .064 S



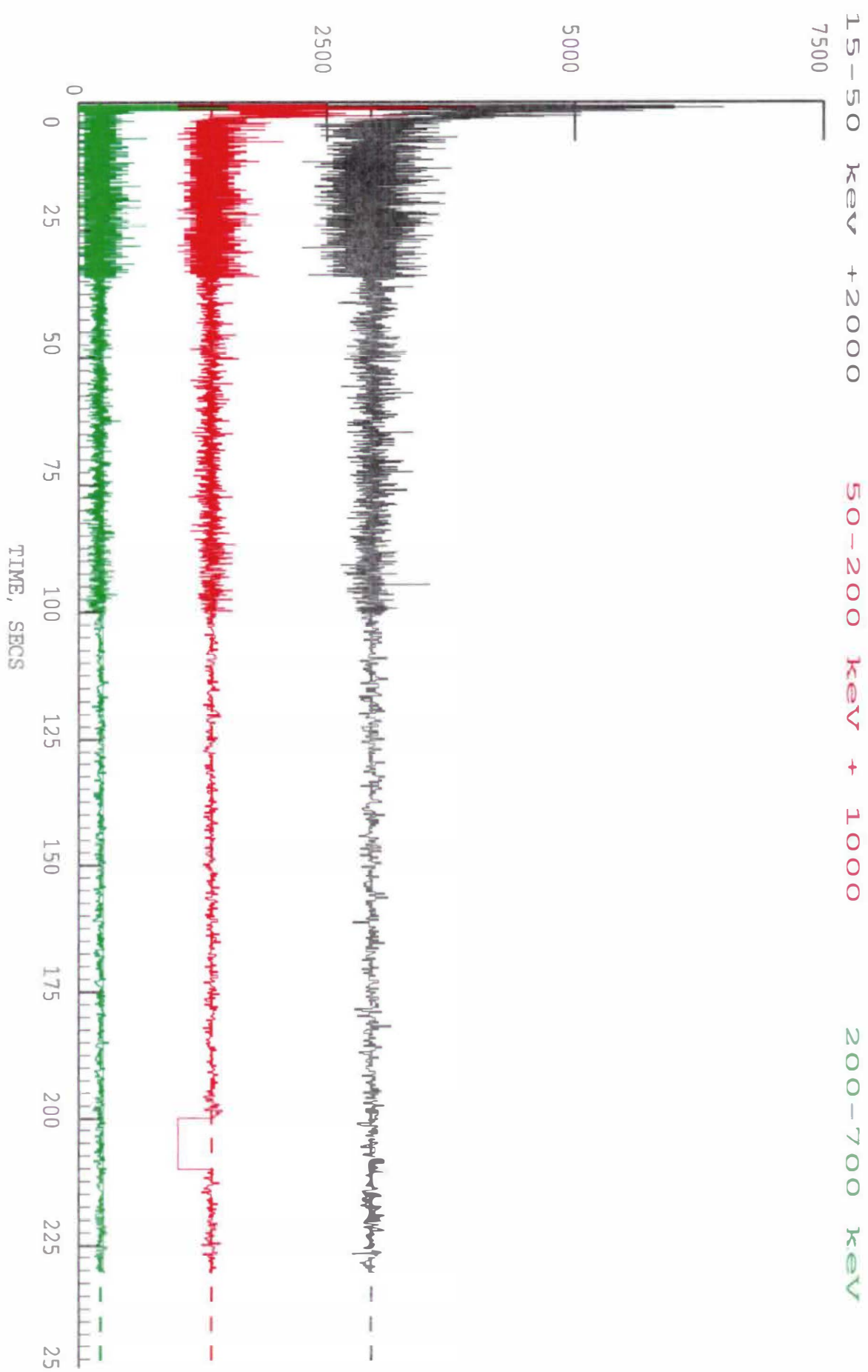
01:20:10.000

4810.000

25/09/21

KONUS

COUNTS/SEC



A

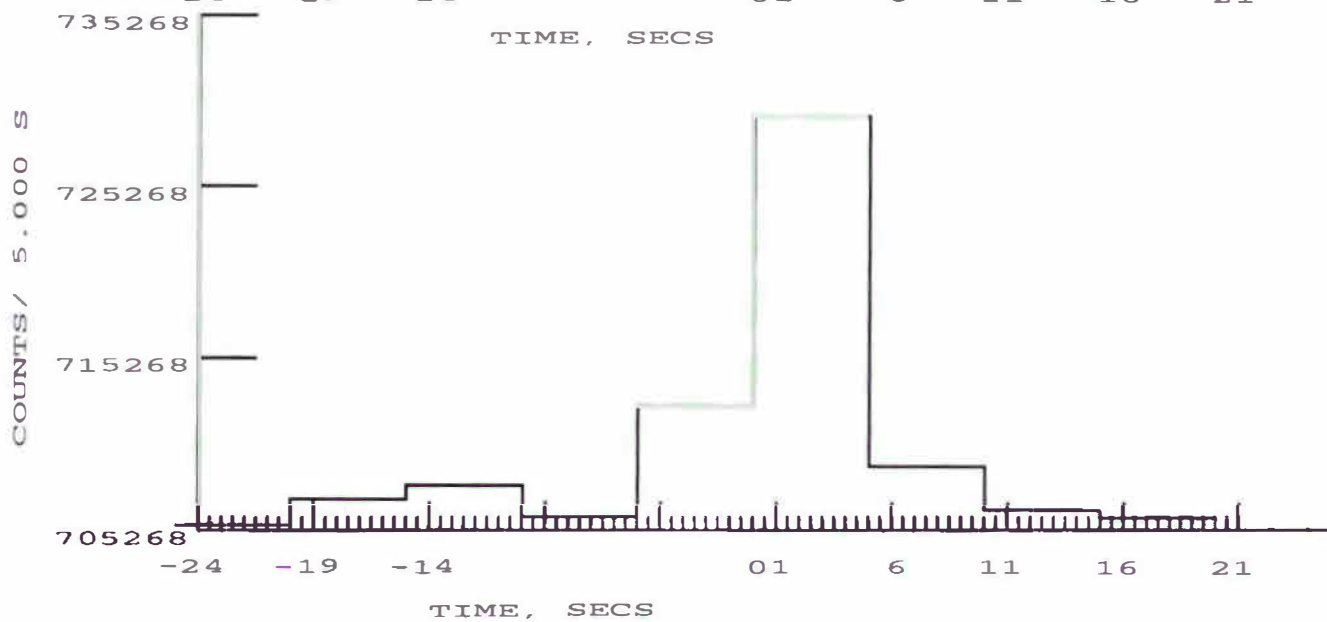
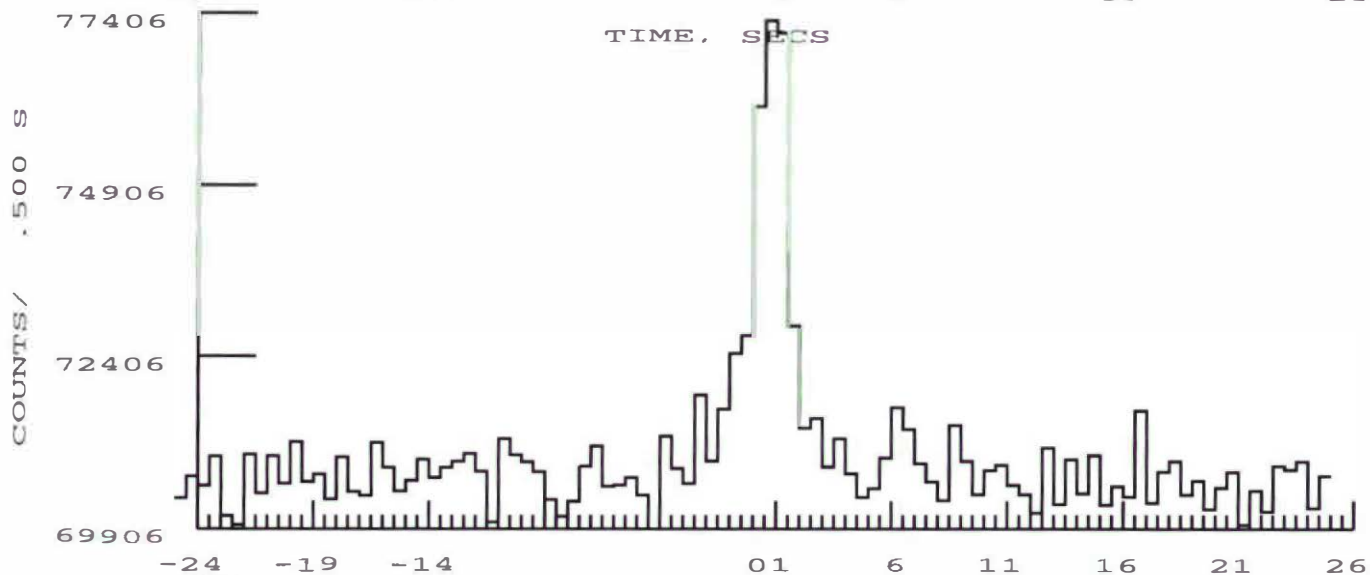
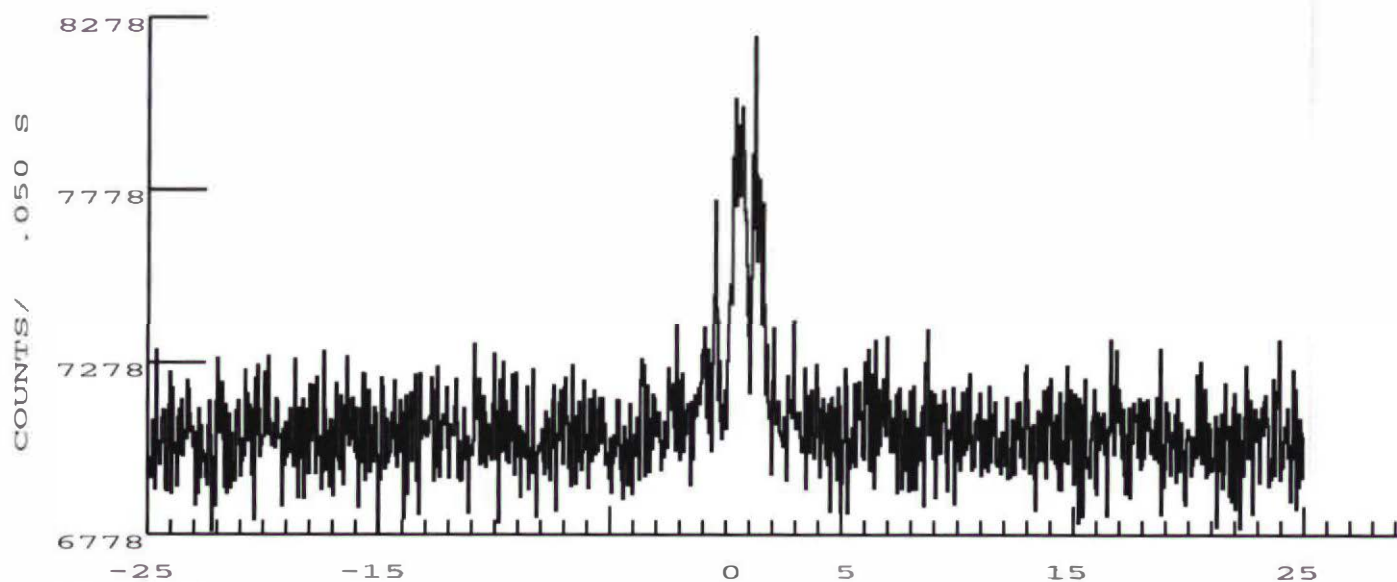
INTEGRAL

25/09/21

4810.000

01:20:10.0

16/11/21



Subject: IPN triangulation of GRB 210925B
 From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
 Date: 9/27/2021, 11:09 AM
 To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
 NUMBER: 30890
 SUBJECT: IPN triangulation of GRB 210925B
 DATE: 21/09/27 18:08:46 GMT
 FROM: Anna Ridnaia at Ioffe Institute <ridnaia@mail.ioffe.ru>

K. Hurley, on behalf of the IPN,

I. G. Mitrofanov, D. V. Golovin, A. S. Kozyrev, M. L. Litvak,
 and A. B. Sanin, on behalf of the HEND-Odyssey GRB team,

A. Ridnaia, S. Golenetskii, D. Frederiks, D. Svinkin,
 A. Lysenko, and T. Cline on behalf of the Konus-Wind team,

A. Goldstein, M. S. Briggs, and C. Wilson-Hodge
 on behalf of the Fermi-GBM team,

A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo,
 and C. Ferrigno, on behalf of the INTEGRAL SPI-ACS GRB team,

S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, and A. Tohuvavohu
 on behalf of the Swift-BAT team, and

W. Boynton, C. Fellows, K. Harshman, H. Enos, and R. Starr,
 on behalf of the GRS-Odyssey GRB team, report:

The long-duration GRB 210925B
 was detected by Fermi (GBM trigger 654225613), Konus-Wind,
 Mars-Odyssey (HEND), INTEGRAL (SPI-ACS), and Swift-BAT
 at about 4809 s UT (01:20:09).
 The burst was outside the coded field of view of the BAT.

We have triangulated it to a preliminary, 3 sigma error box
 whose coordinates are:

```
-----
RA(2000), deg          Dec(2000), deg
-----
Center:
  48.817 (03h 15m 16s) -52.863 (-52d 51' 45")
Corners:
  47.551 (03h 10m 12s) -53.723 (-53d 43' 21")
  50.006 (03h 20m 01s) -52.058 (-52d 03' 29")
  50.027 (03h 20m 06s) -51.978 (-51d 58' 41")
  47.579 (03h 10m 19s) -53.644 (-53d 38' 39")
-----
```

The error box area is 335 sq. arcmin, and its maximum
 dimension is 2.3 deg (the minimum one is 2.5 arcmin).
 The Sun distance was 113 deg.

This box may be improved.

A triangulation map is posted at
http://www.ioffe.ru/LEA/GRBs/GRB210925_T04810/IPN/

The time history and spectrum will be given in forthcoming GCN Circulars.

Subject: IPN triangulation of long GRB 20210925_T04810 (=Fermi/GBM trigger 654225613) - single box
 From: Anna Ridnaia <ridnaia@mail.ioffe.ru>
 Date: 9/27/2021, 9:19 AM
 To: IPN <ipn@ssl.berkeley.edu>

Dear colleagues,

A long-duration GRB 20210925_T04810 was detected by Fermi (GBM trigger 654225613), Konus-Wind, INTEGRAL (SPI-ACS), and Mars-Odyssey (HEND) at about 4809 s UT (01:20:09) - see the attached figure.

We have triangulated it to a Konus-GBM annulus centered at RA(2000)=338.238 deg (22h 32m 57s) Dec(2000)=-8.721 deg (-8d 43' 17"), whose radius is 71.380 +/- 0.578 deg (3 sigma), to a Konus-SPI-ACS annulus centered at RA(2000)=234.312 deg (15h 37m 15s) Dec(2000)=+47.346 deg (+47d 20' 45"), whose radius is 76.599 +/- 0.581 deg (3 sigma), and to a GBM-HEND annulus centered at RA(2000)=6.009 deg (00h 24m 02s) Dec(2000)=+1.785 deg (+1d 47' 07"), whose radius is 65.300 +/- 0.021 deg (3 sigma).

The Konus-GBM and GBM-HEND annuli intersect to form two error boxes one of which is inconsistent with the KW ecliptic latitude response and the Konus-SPI-ACS annulus.

The correct preliminary 3-sigma error box is (see the attached figure):

RA(2000), deg	Dec(2000), deg
Center:	
48.817 (03h 15m 16s)	-52.863 (-52d 51' 45")
Corners:	
47.551 (03h 10m 12s)	-53.723 (-53d 43' 21")
50.006 (03h 20m 01s)	-52.058 (-52d 03' 29")
50.027 (03h 20m 06s)	-51.978 (-51d 58' 41")
47.579 (03h 10m 19s)	-53.644 (-53d 38' 39")

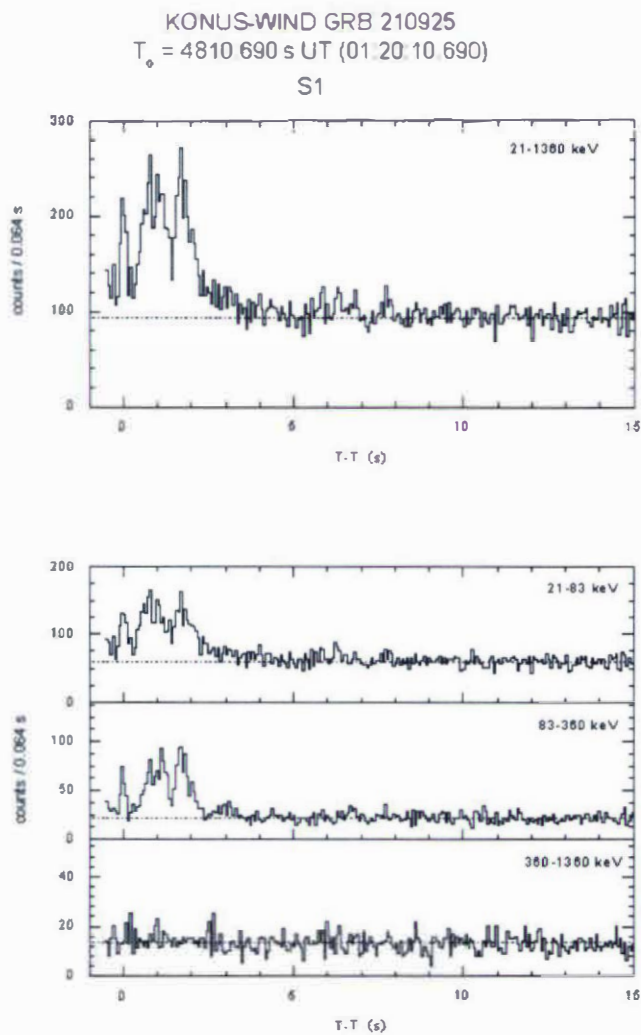
The error box area is 335 sq. arcmin, and its maximum dimension is 2.3 deg (the minimum one is 2.5 arcmin). The Sun distance was 113 deg.

This box may be improved.

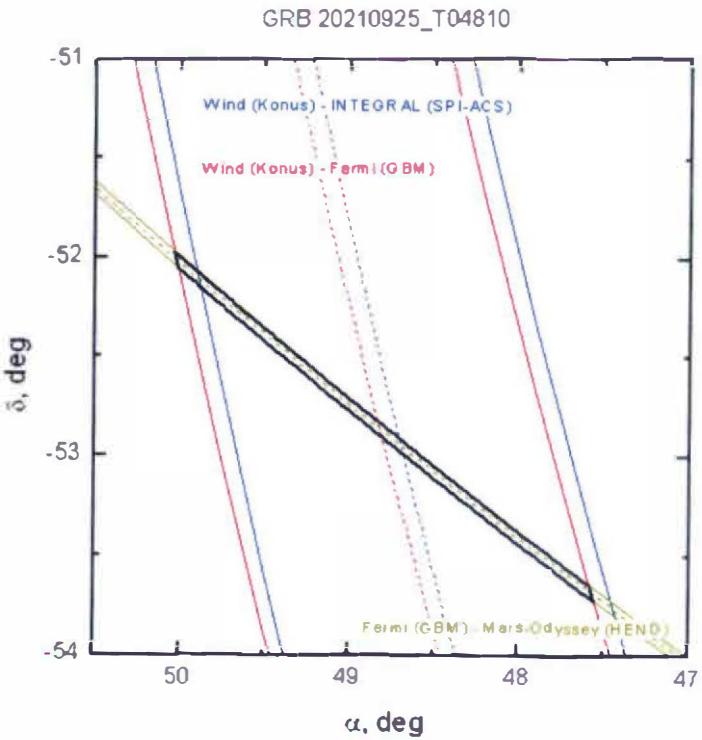
Best regards,

Anna

— kw20210925_04810_64ms.png —



GRB20210925_T04810_IPN_map.png



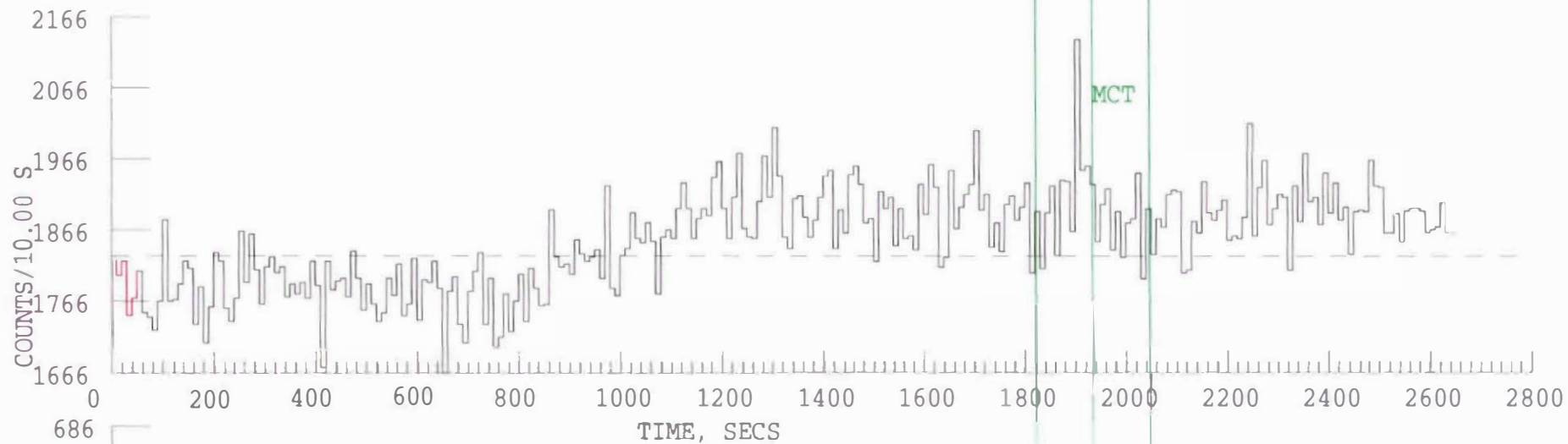
Attachments:

kw20210925_04810_64ms.png	7.7 KB
GRB20210925_T04810_IPN_map.png	7.2 KB

A

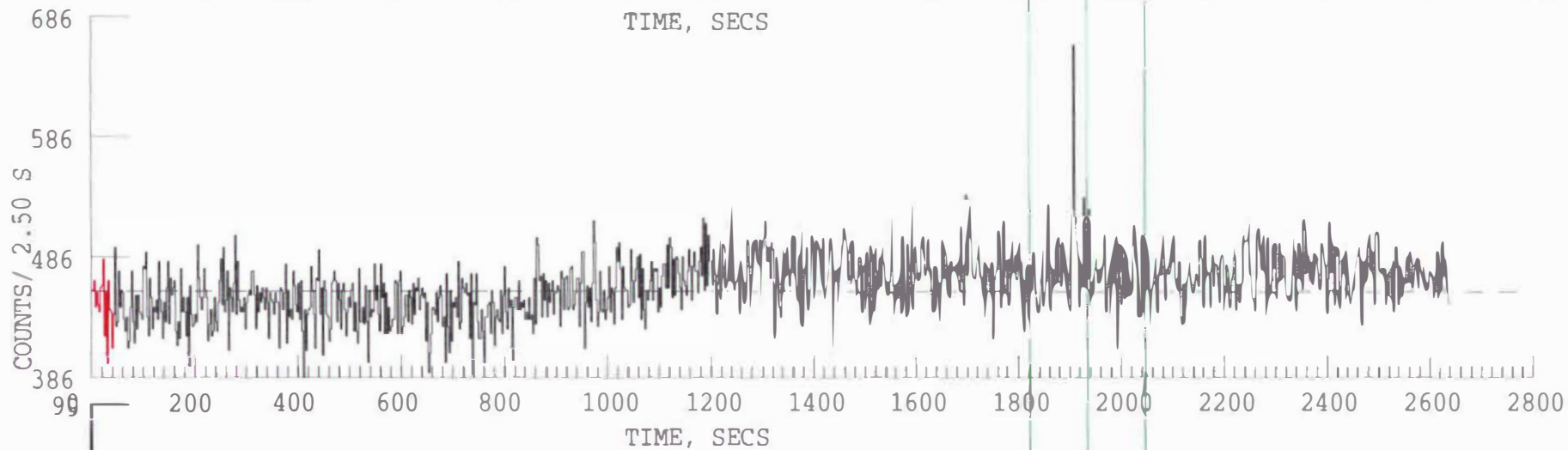
27/09/2021

00:57:31.939



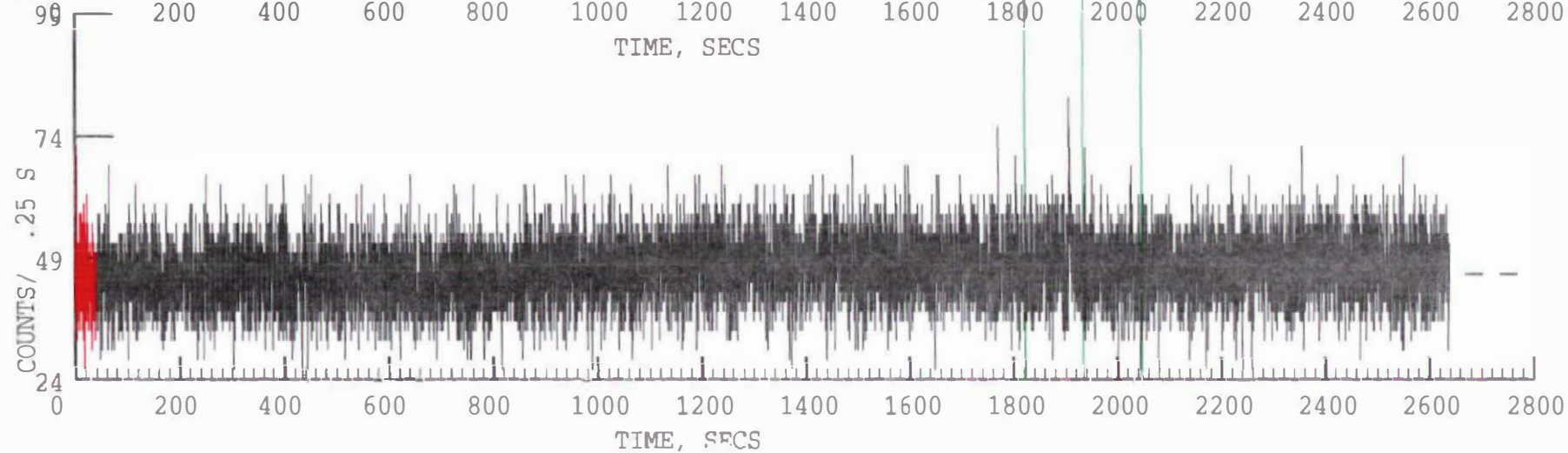
3451.939

50-3000 keV



25/09/21

ODYSSEY



Subject: BAT lightcurve for trigger at 210925_0120

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/25/2021, 7:43 AM

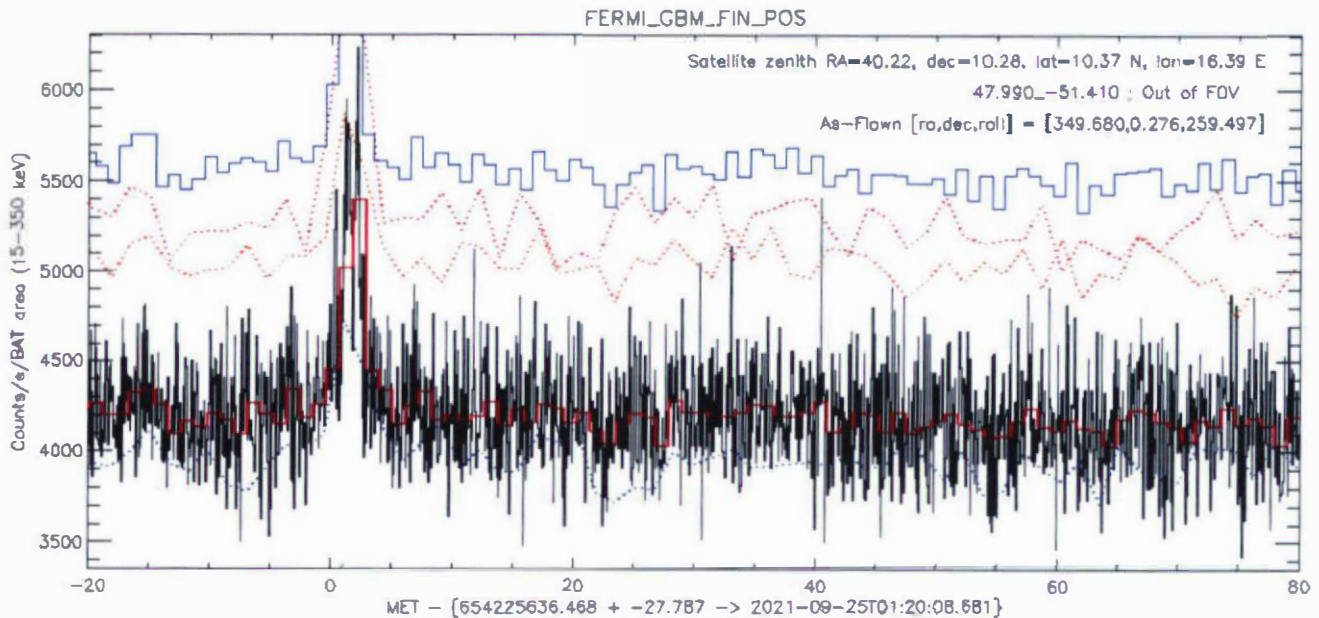
To: dmopalmer@gmail.com, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov, gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654225636.468 -s 47.990_-51.410
Swift Zenith(RA,dec):      40.22, 10.28
Swift Location(lon,lat,alt): 16.39 E, 10.37 N, 554 km
Time(MET + UTCF -> UT):  654225636.468 + -27.787 -> 2021-09-25T01:20:08.681
YYMMDD_SOD:               210925_04808.681      DOY=268
Obs Sequence Number:      00049538059
Obs Target Name:          NGC 7603
Obs Date and Times:       2021-09-25 01:10:33 - 01:26:32
Obs Pointing(ra,dec,roll): 349.680, 0.276, 259.50
47.990_-51.410_imageloc (boresight_dist, angle): (71, 156)
47.990_-51.410_exposure (cm2 cos adjusted): 0
47.990_-51.410_altitude: 51 (up)
```

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210925_0120.png



Attachments

/tmp/swift/210925_0120.png

20.5 KB

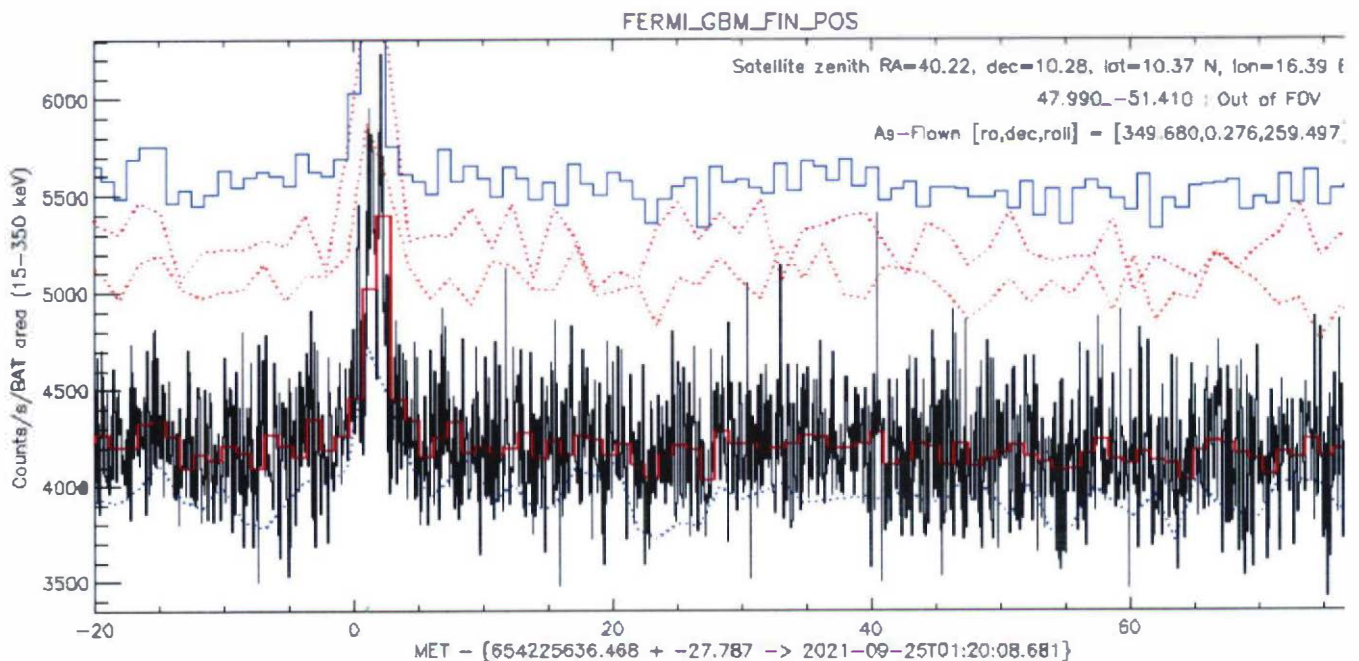
/tmp/swift/210925_0120_bat64ms_ipn

87.0 KB

Subject: Re: [EXTERNAL] IPN triangulation of long GRB 20210925_T04810 (=Fermi/GBM trigger 654225613) - single box
 From: "'Palmer, David' via ipn" <ipn@ssl.berkeley.edu>
 Date: 9/27/2021, 9:30 AM
 To: Anna Ridnaia <ridnaia@mail.ioffe.ru>
 CC: IPN <ipn@ssl.berkeley.edu>, Aaron Tohuvavohu <aaron.tohu@gmail.com>, "BAT TEAM" <bat_team@bigbang.gsfc.nasa.gov>

Also seen by BAT above the horizon, outside of FOV, consistent with the IPN position.

```
% swinfo 2021-09-25T01:20:09.999 -s 49_-50 -o
Swift Zenith(RA,dec): 40.30, 10.31
Swift Location(lon,lat,alt): 16.47 E, 10.41 N, 554 km
Time(MET + UTC -> UT): 654225637.787 + -27.787 -> 2021-09-25T01:20:09.999
YYMMDD_SOD: 210925_04809.999 DOY=268
Obs Sequence Number: 00049538059
Obs Target Name: NGC 7603
Obs Date and Times: 2021-09-25 01:10:33 - 01:26:32
Obs Pointing(ra,dec,roll): 349.680, 0.276, 259.50
49_-50_imageloc (boresight_dist, angle): (71, 155)
49_-50_exposure (cm^2 cos adjusted): 0
49_-50_altitude: 52 (up)
```



David Palmer palmer@lanl.gov (505) 665-6863
 Socially Distant: Work-From-Home (505) 695-9190

On Sep 27, 2021, at 10:19 AM, Anna Ridnaia <ridnaia@mail.ioffe.ru> wrote:

Dear colleagues,

A long-duration GRB 20210925_T04810 was detected by Fermi (GBM trigger 654225613), Konus-Wind, INTEGRAL (SPI-ACS), and Mars-Odyssey (HEND) at about 4809 s UT (01:20:09) - see the attached figure.

We have triangulated it to a Konus-GBM annulus centered at RA(2000)=338.238 deg (22h 32m 57s) Dec(2000)=-8.721 deg (-8d 43' 17"), whose radius is 71.380 +/- 0.578 deg (3 sigma),

to a Konus-SPI-ACS annulus centered at
RA(2000)=234.312 deg (15h 37m 15s) Dec(2000)=+47.346 deg (+47d 20' 45"),
whose radius is 76.599 +/- 0.581 deg (3 sigma), and
to a GBM-HEND annulus centered at
RA(2000)=6.009 deg (00h 24m 02s) Dec(2000)=+1.785 deg (+1d 47' 07"),
whose radius is 65.300 +/- 0.021 deg (3 sigma).

The Konus-GBM and GBM-HEND annuli intersect to form two error
boxes one of which is inconsistent with the KW ecliptic latitude response
and the Konus-SPI-ACS annulus.

The correct preliminary 3-sigma error box is (see the attached figure):

RA(2000), deg	Dec(2000), deg
Center:	
48.817 (03h 15m 16s) -52.863 (-52d 51' 45")	
Corners:	
47.551 (03h 10m 12s) -53.723 (-53d 43' 21")	
50.006 (03h 20m 01s) -52.058 (-52d 03' 29")	
50.027 (03h 20m 06s) -51.978 (-51d 58' 41")	
47.579 (03h 10m 19s) -53.644 (-53d 38' 39")	

The error box area is 335 sq. arcmin, and its maximum
dimension is 2.3 deg (the minimum one is 2.5 arcmin).
The Sun distance was 113 deg.

This box may be improved.

Best regards,

Anna

--

You received this message because you are subscribed to the Google Groups "ipn" group.
To unsubscribe from this group and stop receiving emails from it, send an email to ipn+unsubscribe@ssl.berkeley.edu.
<kw20210925_04810_64ms.png><GRB20210925_T04810_IPN_map.png>

Attachments

_tmp_swift_210925_0120_bat64ms_ipn

91.6 KB

Subject: GRB 210925B: AstroSat CZTI detection
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/28/2021, 6:24 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30892
SUBJECT: GRB 210925B: AstroSat CZTI detection
DATE: 21/09/28 13:24:23 GMT
FROM: Gaurav Waratkar at IIT, Bombay <gauravwaratkar@iitb.ac.in>

V. Prasad (IUCAA), P. Sawant (IUCAA), G. Waratkar (IITB), A. Vibhute (IUCAA), V. Bhalerao (IITB), D. Bhattacharya (IUCAA), A. R. Rao (IUCAA/TIFR), and S. Vadawale (PRL) report on behalf of the AstroSat CZTI collaboration:

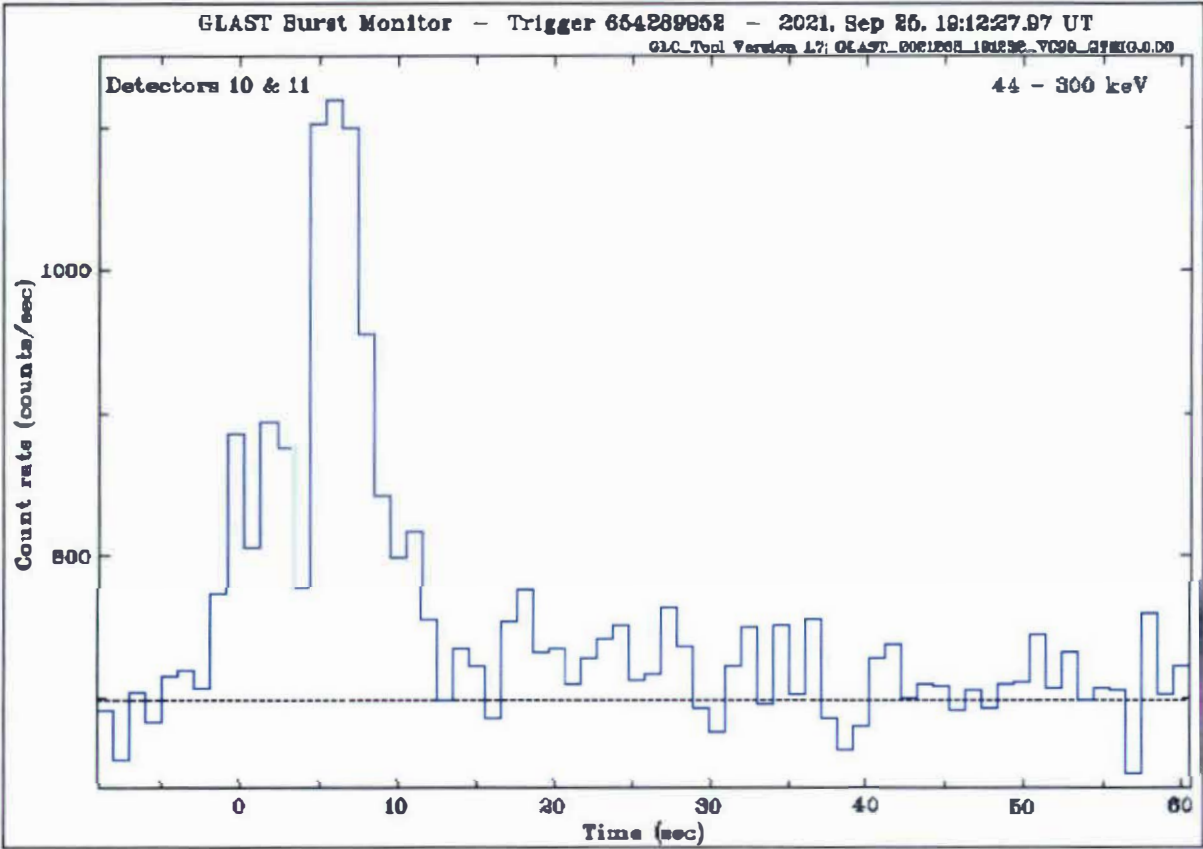
Analysis of AstroSat CZTI data with the CIFT framework (Sharma et al., 2021, JApA, 42, 73) showed detection of a long GRB 210925B for which the IPN triangulation (Hurley et al., GCN 30890) was reported.

The source was clearly detected in the 20-200 keV energy range. The light curve showed multiple peaks of emission with the strongest peak at 2021-09-25 01:20:09.75 UT. The measured peak count rate associated with the burst is 887 (+190, -97) cts/s above the background in the combined data of four quadrants, with a total of 1482 (+214, -230) cts. The local mean background count rate was 471 (+5, -9) cts/s. Using cumulative rates, we measure a T90 of 6.3 (+1.9, -2.0) s.

It was also clearly detected in the CsI anticoincidence (Veto) detector in the 100-500 keV energy range.

CZTI GRB detections are reported regularly on the payload site at <http://astrosat.iucaa.in/czti/?q=grb>. CZTI is built by a TIFR-led consortium of institutes across India, including VSSC, ISAC, IUCAA, SAC, and PRL. The Indian Space Research Organisation funded, managed, and facilitated the project.

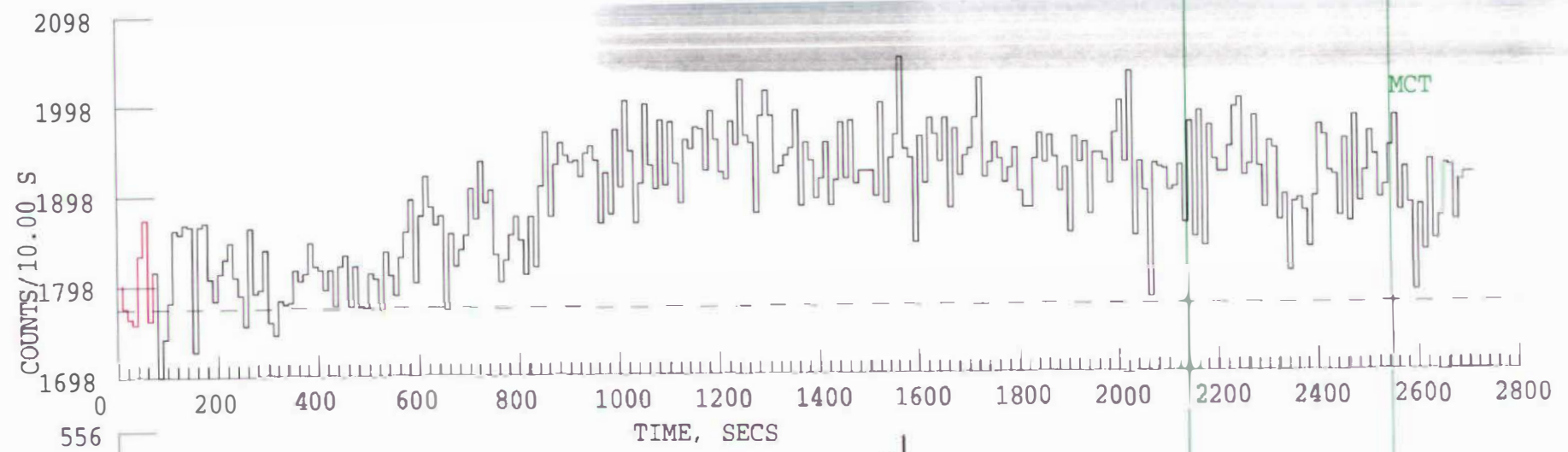
347.3 -17.1 3.3



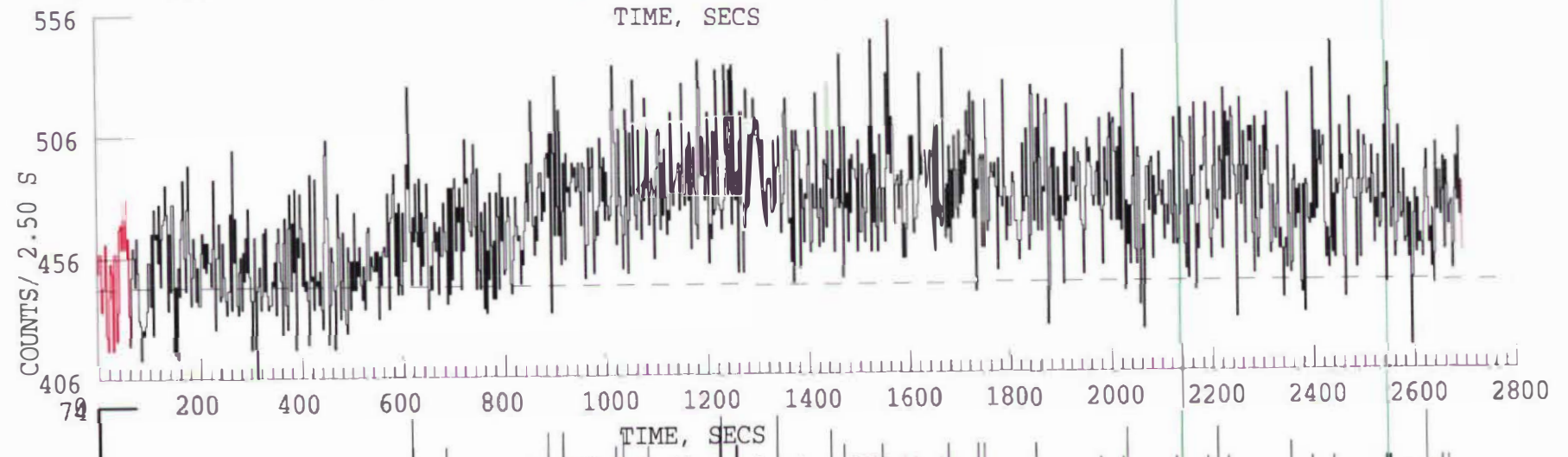
B

18/11/2021

18:49:30.791

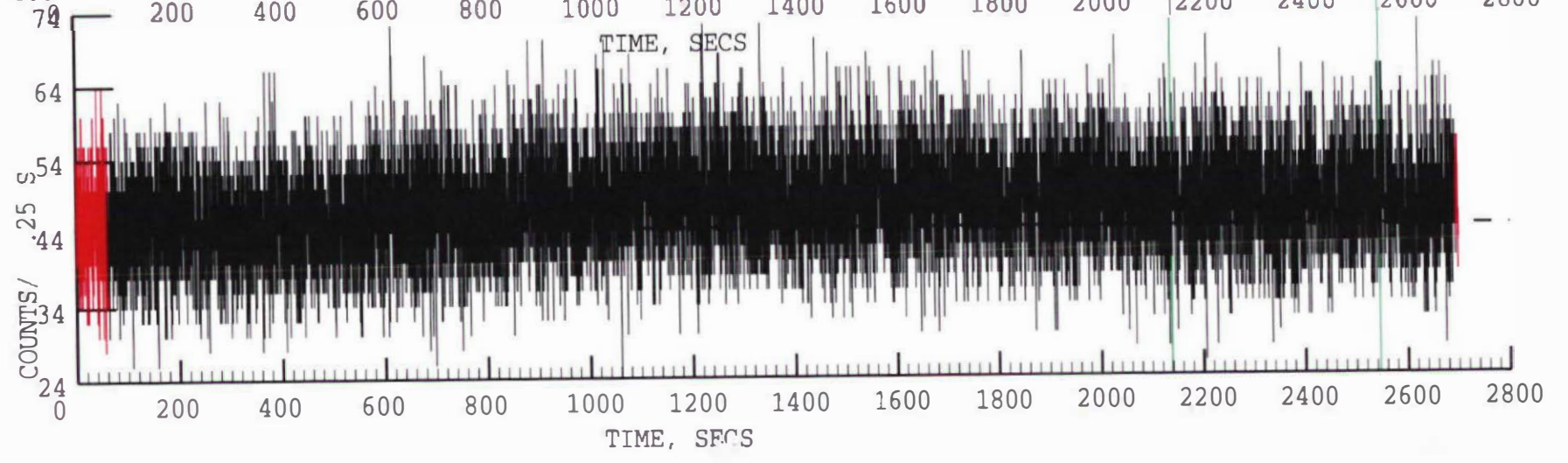


67770.791

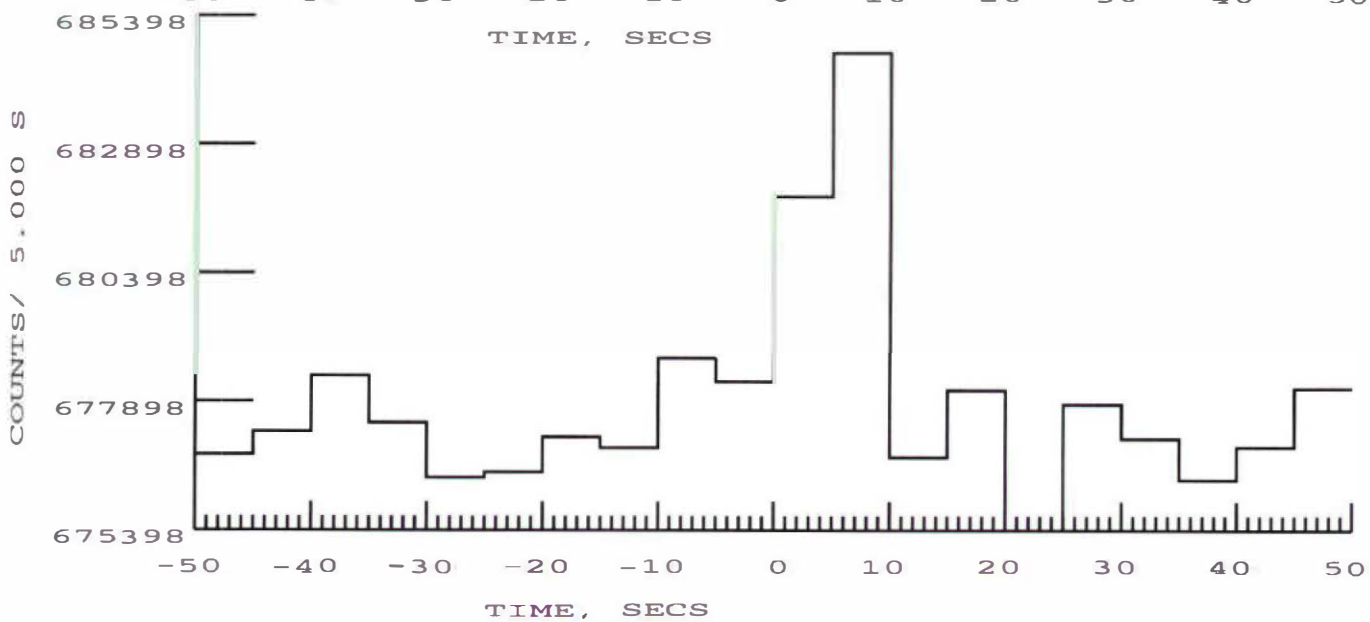
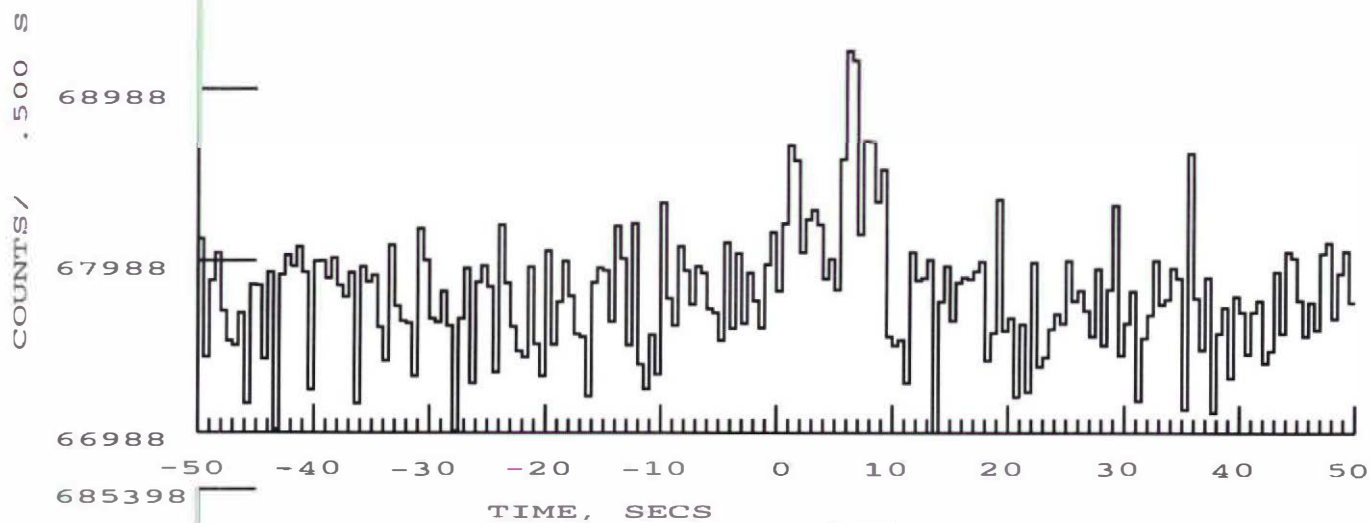
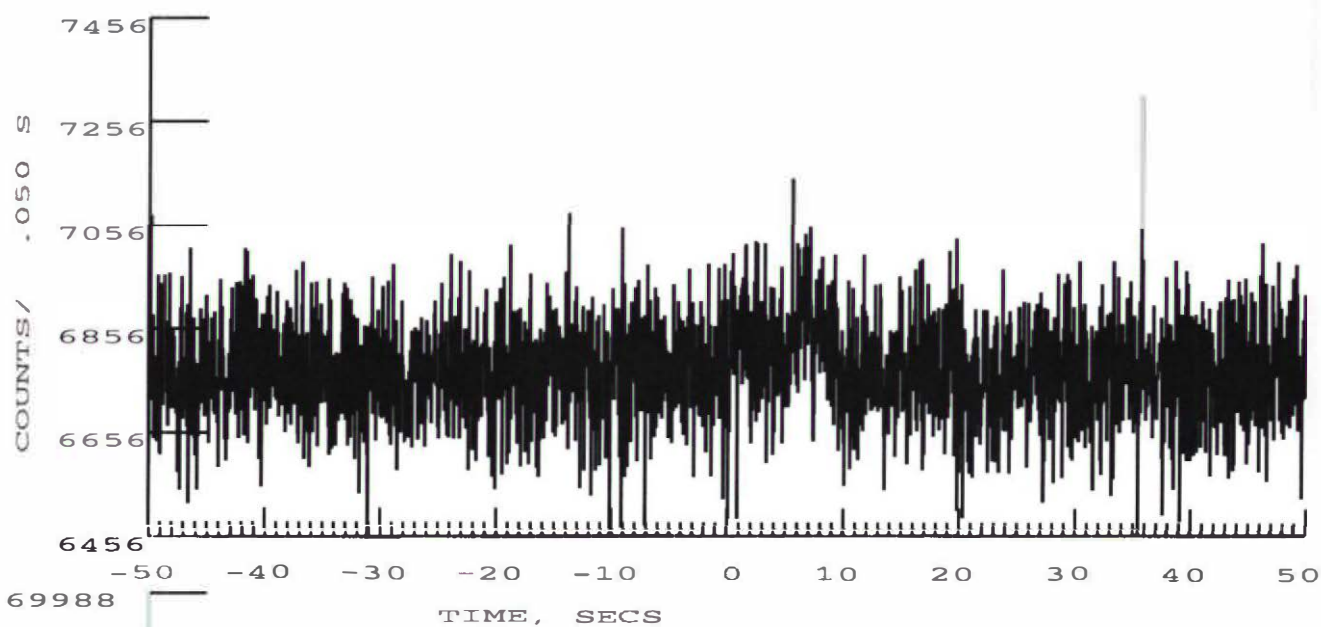


25/09/21

50-3000 keV



ODYSSEY



Subject: BAT lightcurve for trigger at 210925_1912

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/25/2021, 3:55 PM

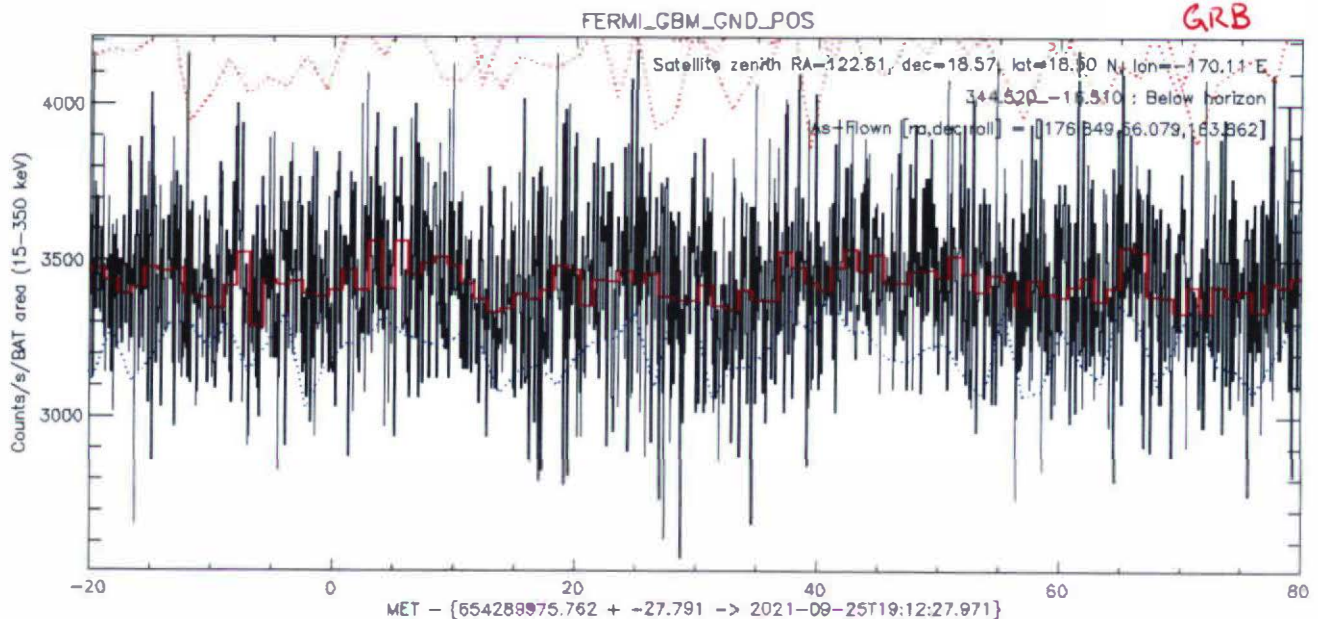
To: ipn@ssl.berkeley.edu, palmer+automatic_lightcurve@lanl.gov, mkippen@lanl.gov, aaron.tohu@gmail.com, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, vestrland@lanl.gov, gbm-burst-advocate@lists.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654289975.762 -s 344.520_-16.510
Swift Zenith(RA,dec):      122.51, 18.57
Swift Location(lon,lat,alt): -170.11 E, 18.50 N, 546 km
Time(MET + UTCF -> UT):   654289975.762 + -27.791 -> 2021-09-25T19:12:27.971
YYMMDD_SOD:               210925_69147.971      DOY=268
Obs Sequence Number:      03109136010
Obs Target Name:          SGWGS-4345
Obs Date and Times:       2021-09-25 19:02:34 - 19:17:32
Obs Pointing(ra,dec,roll): 176.849, 56.079, 163.86
344.520_-16.510_imageloc (boresight_dist, angle): (139, 124)
344.520_-16.510_exposure (cm2 cos adjusted): 0
344.520_-16.510_altitude: -27 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

— /tmp/swift/210925_1912.png —



— Attachments —

/tmp/swift/210925_1912_bat64ms_ipn

87.1 KB

/tmp/swift/210925_1912.png

18.8 KB

Subject: GRB 210925A: GECAM detection

From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>

Date: 9/26/2021, 2:28 AM

To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR

NUMBER: 30881

SUBJECT: GRB 210925A: GECAM detection

DATE: 21/09/26 09:27:52 GMT

FROM: Chao Zheng at IHEP <zhengchao97@ihep.ac.cn>

C. Zheng, S. L. Xiong, S. Xiao, Y. Q. Zhang, W. C. Xue, X. Y. Song,
X. Y. Zhao, Y. Huang, S. L. Xie, C. Cai, Y. Zhao, Z. W. Guo,
X. L. Zhang, C. Y. Li, C. W. Wang, Q. B. Yi, B. X. Zhang, P. Zhang,
W. X. Peng, R. Qiao, D. Y. Guo, X. B. Li, X. Ma, P. Wang, J. Wang,
Z. Zhang, S. J. Zheng, W. Chen, J. J. He, G. Y. Zhao, Y. Q. Du,
H. Wu, J. Liang, Q. Luo, J. C. Liu, L. M. Song, F. J. Lu,
S. N. Zhang (IHEP), report on behalf of GECAM team:

During the commissioning phase, GECAM-B was triggered in-flight by a long bright burst, GRB 210925A, at 2021-09-25T19:12:34.600 UTC (denoted as T0), which was also detected by Fermi/GBM (GCN #30880).

Its alert data was promptly downlinked to the ground through the short message service of BeiDou Navigation Satellite System (BDS). The time latency of the first BeiDou message relative to the trigger time is about 1 minute.

According to the BDS alert data, this burst mainly consists of multiple pulses with duration of about 10 s.

The GECAM light curve could be found here:

http://twiki.ihep.ac.cn/pub/GECAM/GRBList/utn210925_191234_GECAMB.png

An automatic in-flight localization was calculated using the light curves and spectrum. Although the in-flight calibration of energy response and localization has not been finalized yet, GECAM-B localized this burst to the following position (J2000):

Ra: 357.83 deg

Dec: -24.58 deg

Err: 3.50 deg (1-sigma, statistical only)

The current systematic error of location is estimated to be several degrees which could be minimized by the ongoing calibration.

Please note that all GECAM results here are preliminary. The final analysis will be published in journal papers or GECAM online catalog.

Gravitational wave high-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission consists of two small satellites (GECAM-A and GECAM-B) in Low Earth Orbit (600 km, 29 deg), launched on Dec 10, 2020 (Beijing Time), which was funded by the Chinese Academy of Sciences (CAS).

KONUS

26/09/2021

1.555

v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S

4500

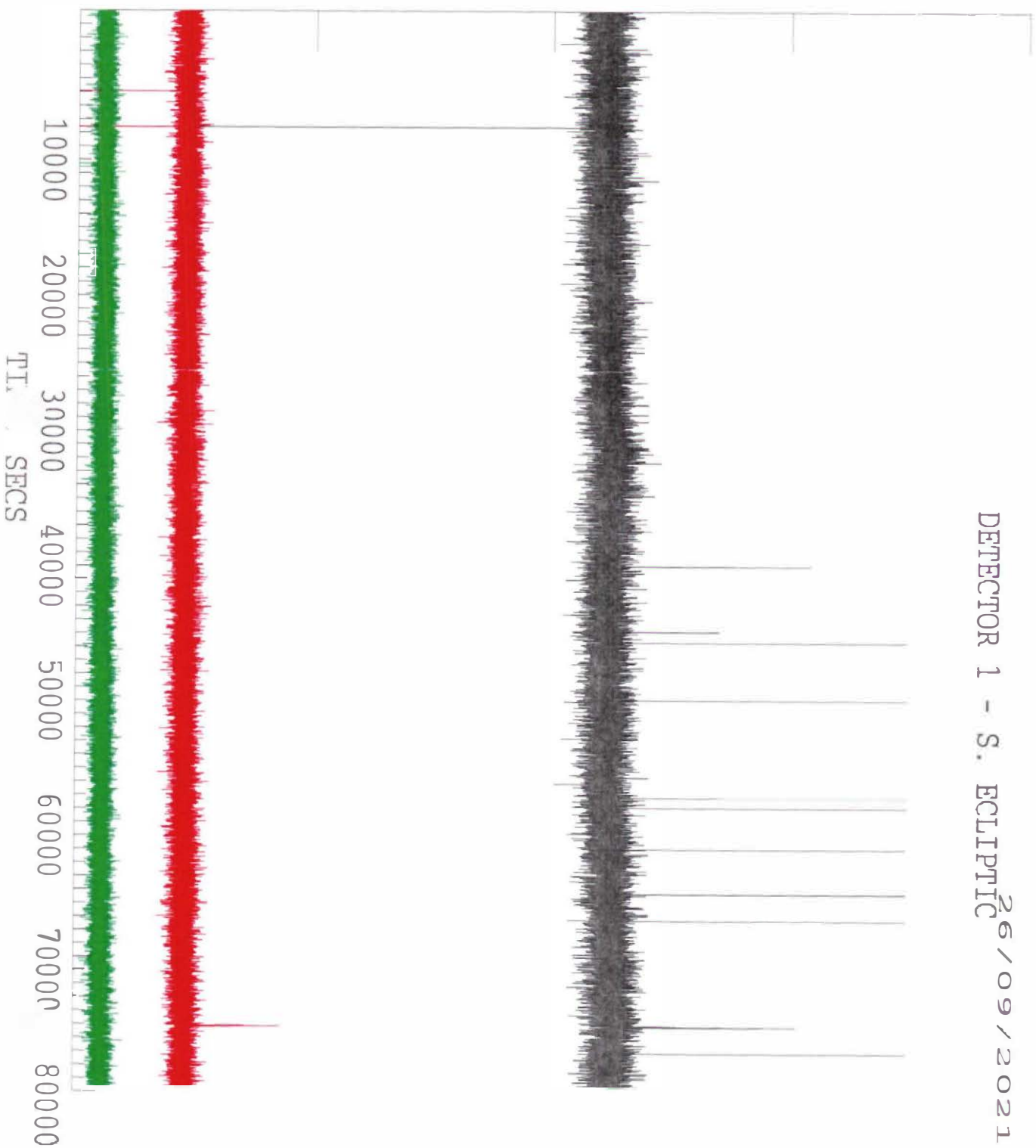
3500

2500

1500

500

0



KONUS

26/09/2021

1.555

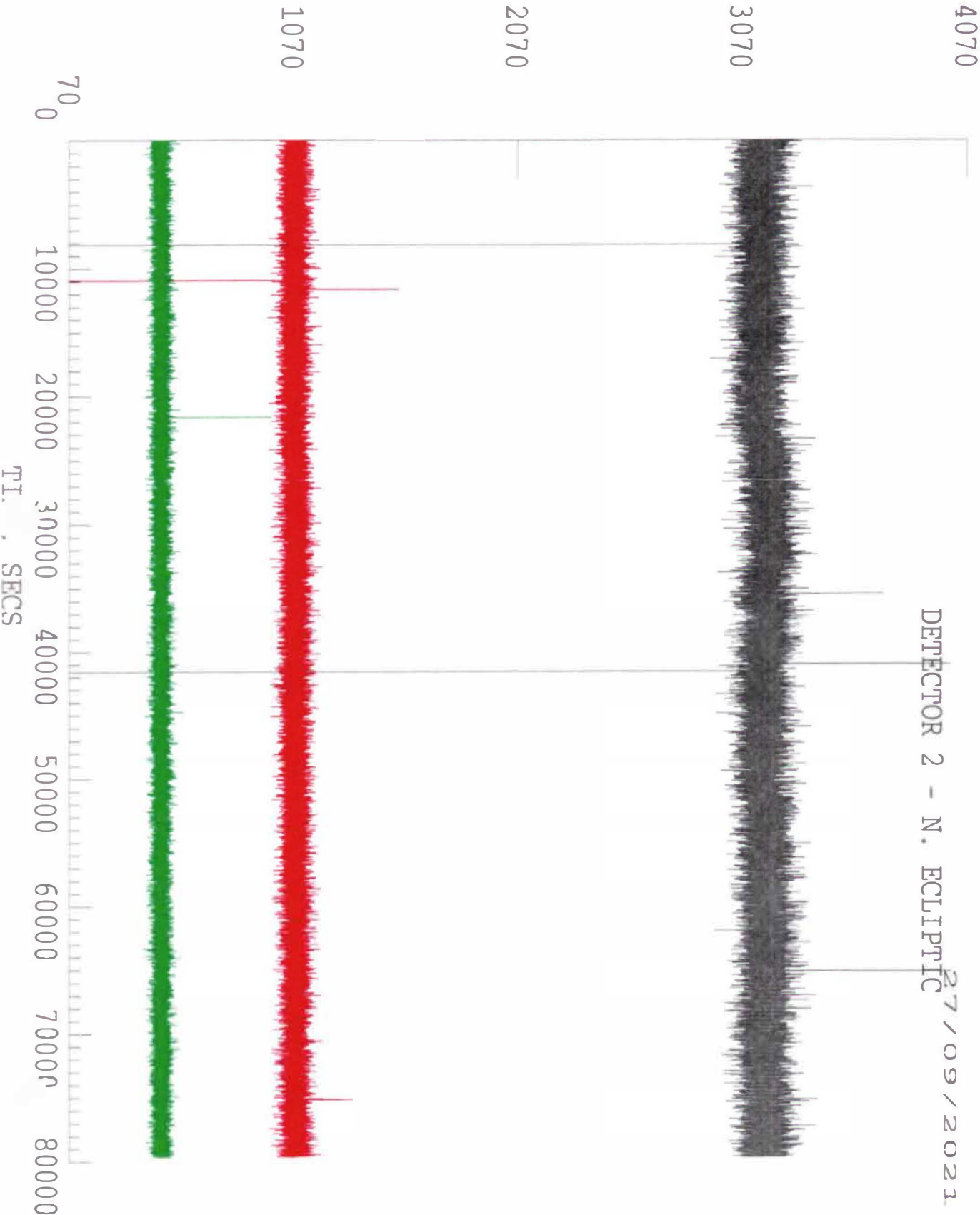
v01

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S



GBM

$$01:03:30 = 0.3810$$

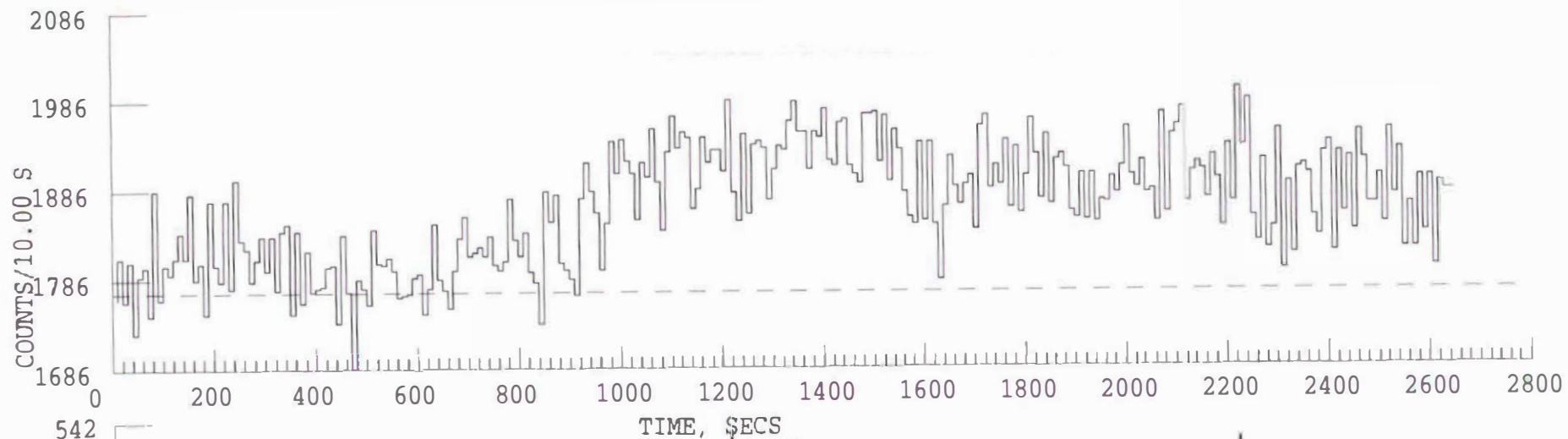
$$19^h 24^m 26^s + 01^h 30' 00''$$

$$291.1 \quad 1.5 \quad 9.4$$

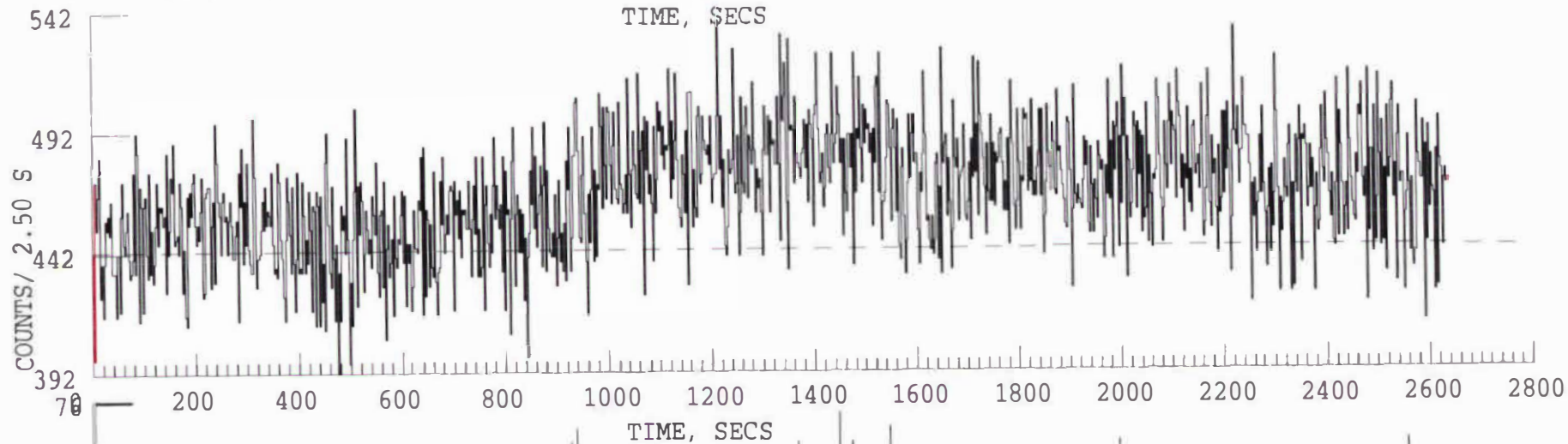
17/11/2021

A

00:41:30.423



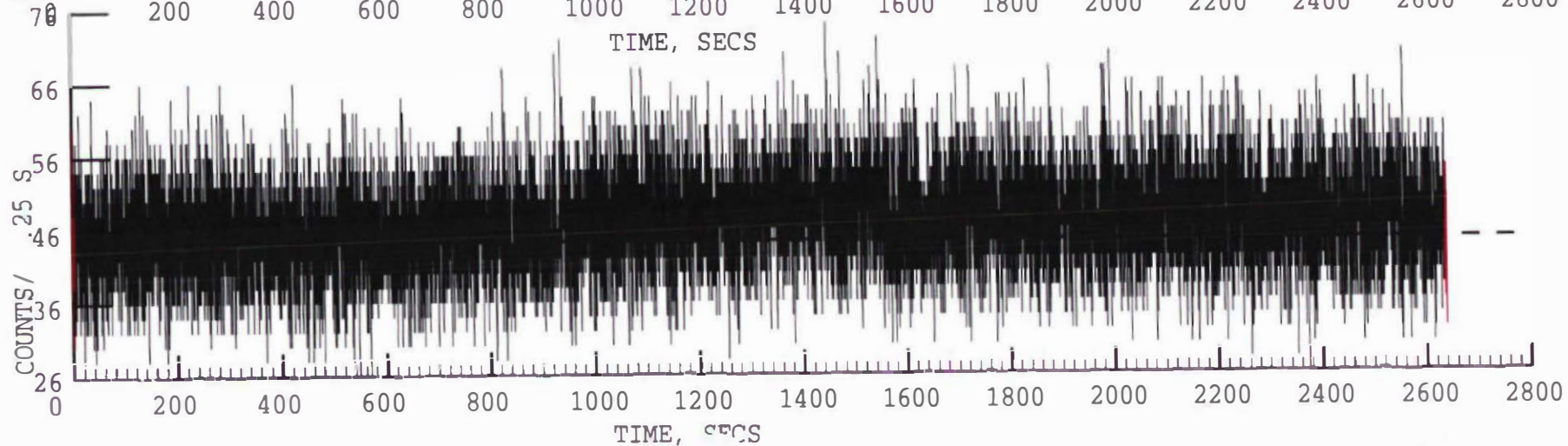
2490.423



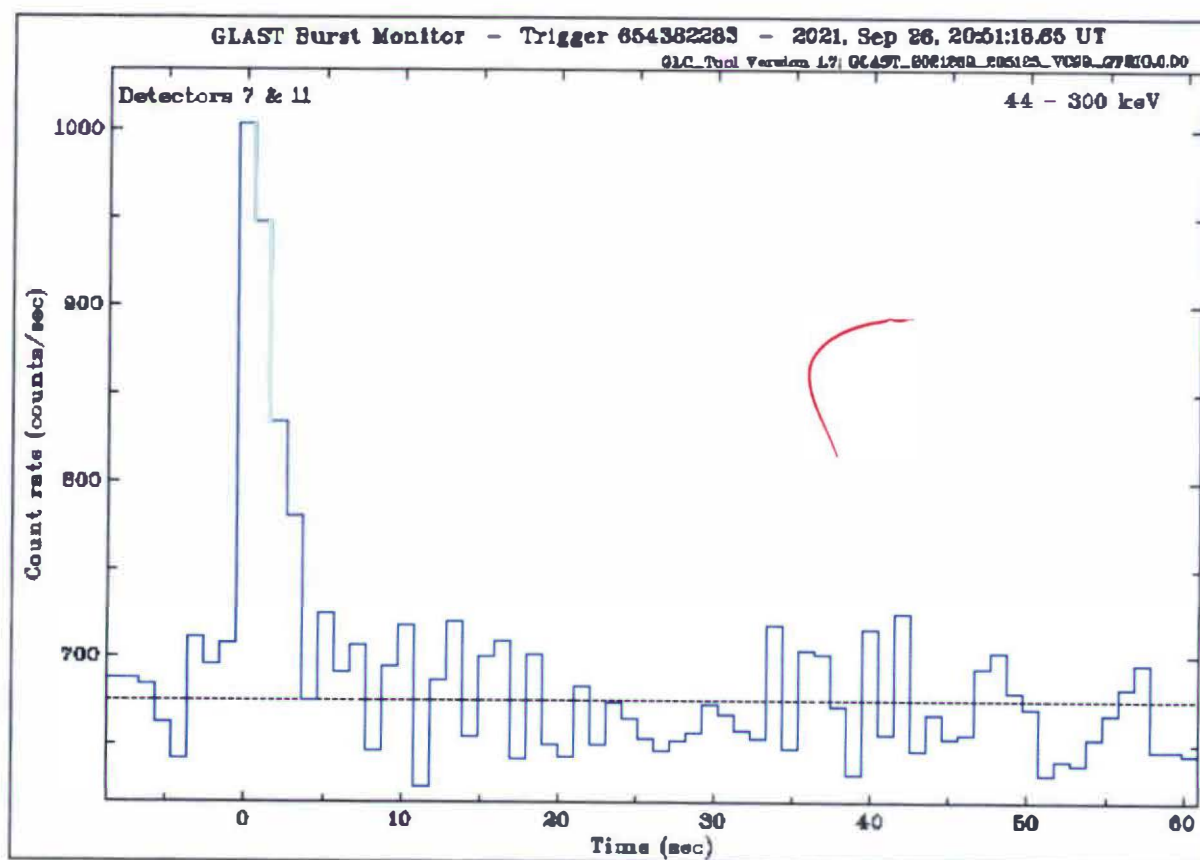
26/09/21

50-3000 keV

ODYSSEY

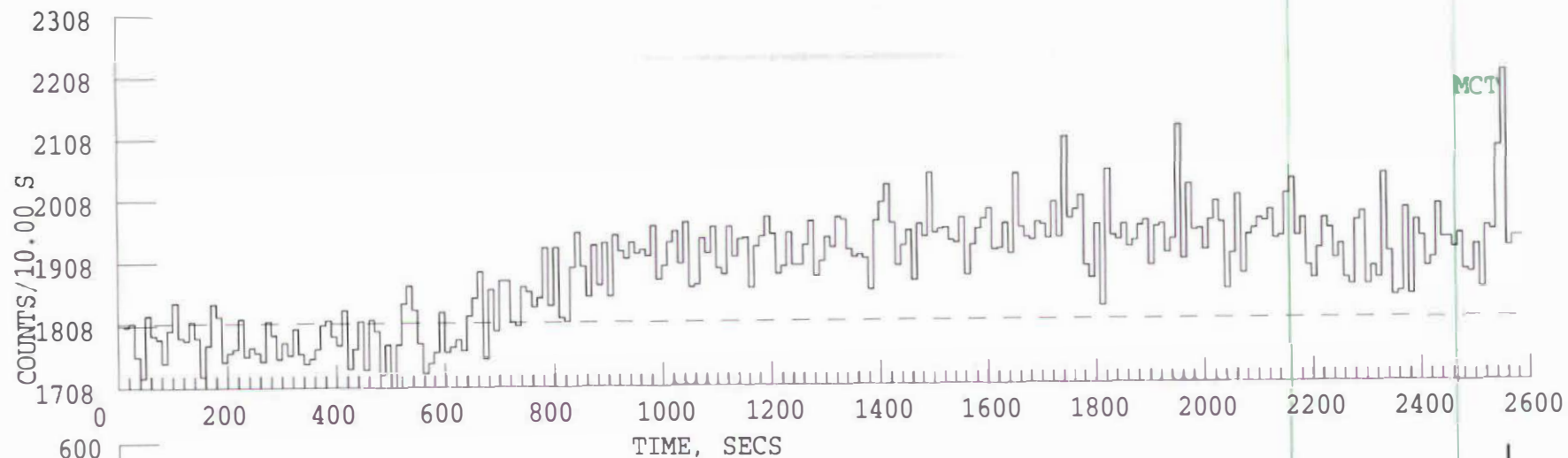


347.7 -18.4 7

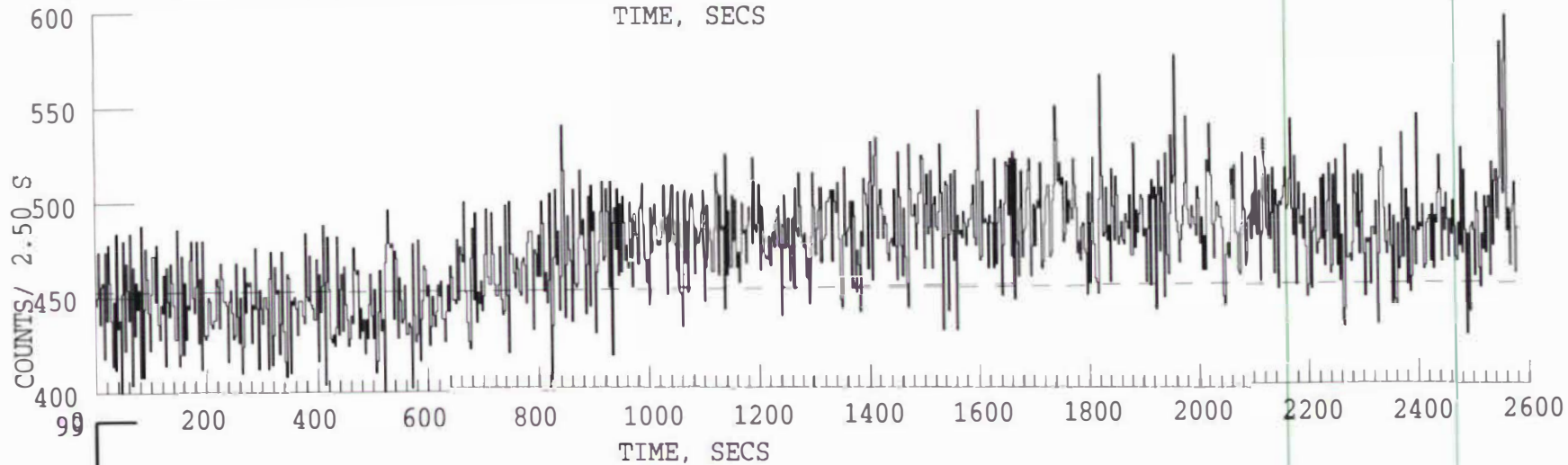


17/11/2021

20:29:29.152



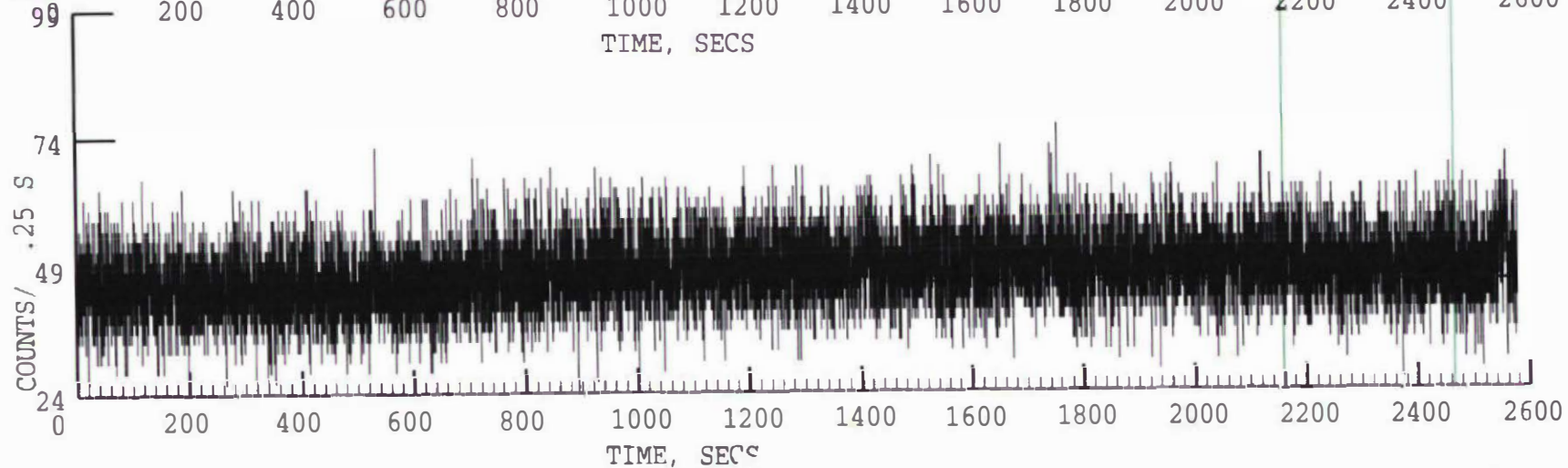
73769.152

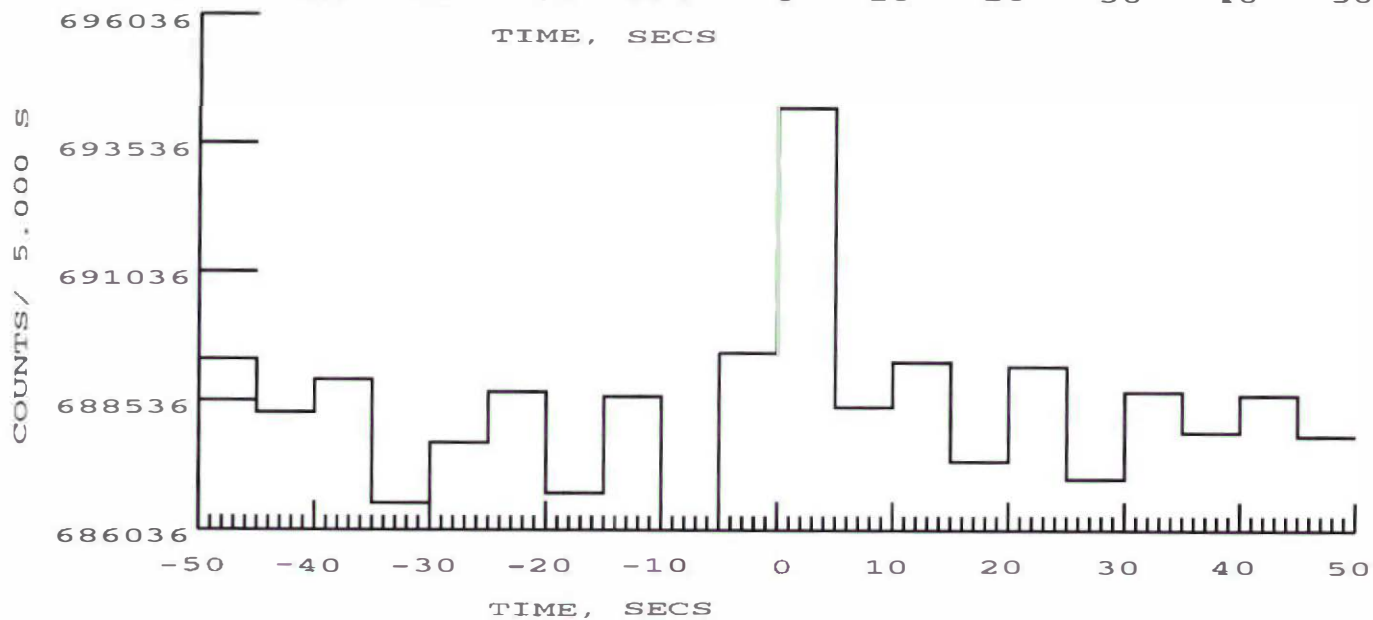
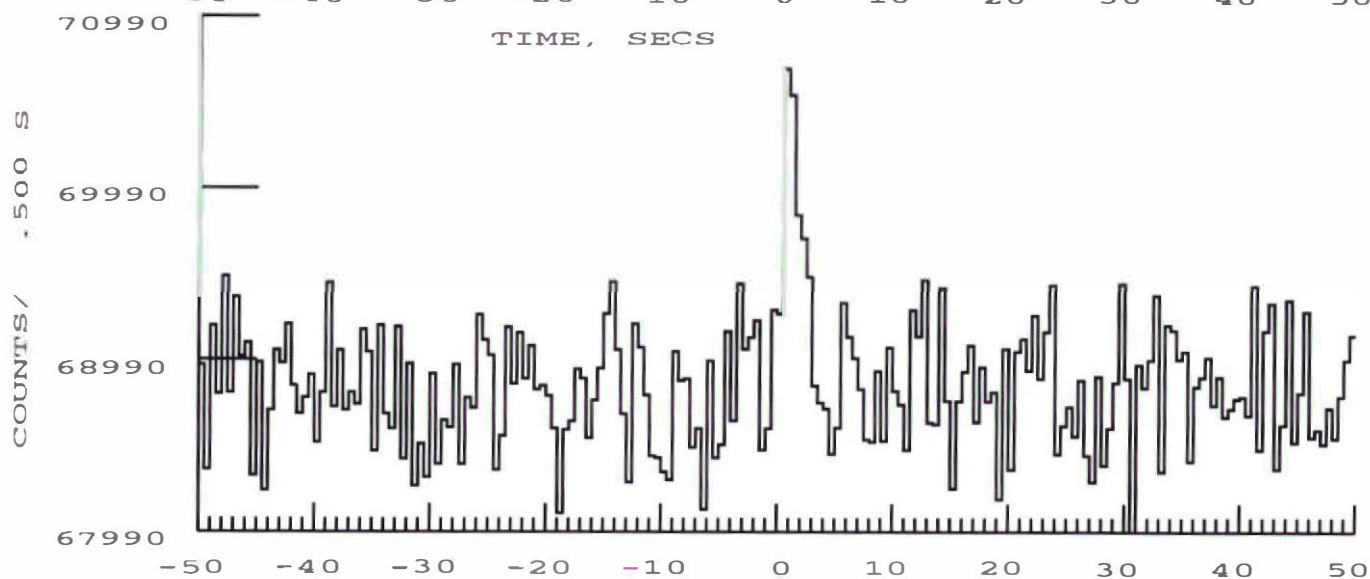
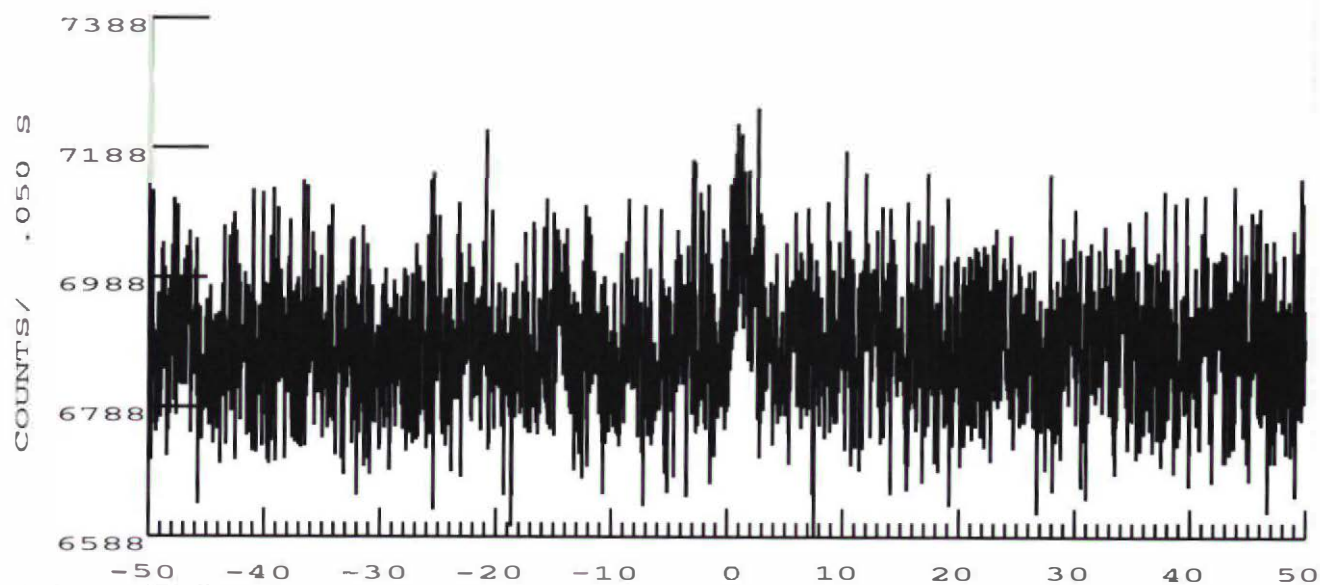


26/09/21

50-3000 keV

ODYSSEY





Subject: BAT lightcurve for trigger at 210926_2051

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/26/2021, 9:44 PM

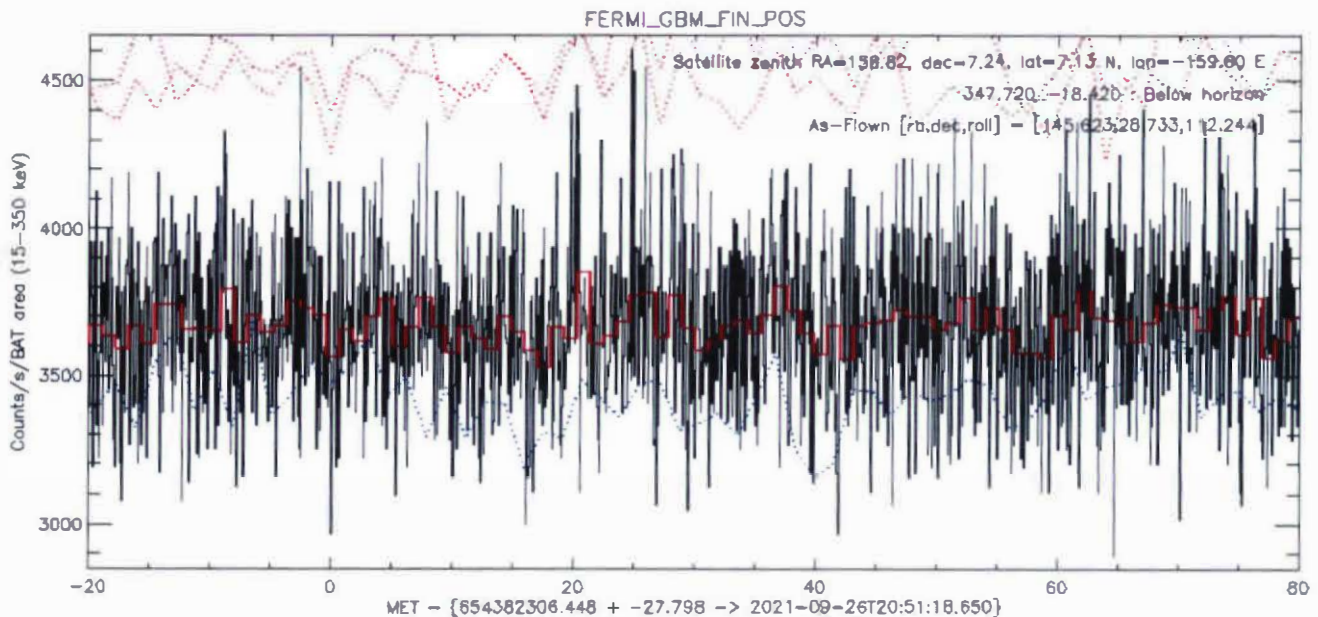
To: mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654382306.448 -s 347.720_-18.420
Swift Zenith(RA,dec):      158.82, 7.24
Swift Location(lon,lat,alt): -159.60 E, 7.13 N, 542 km
Time(MET + UTC -> UT):    654382306.448 + -27.798 -> 2021-09-26T20:51:18.650
YYMMDD_S00:               210926_75078.650      DOY=269
Obs Sequence Number:      00038174004
Obs Target Name:          SOSS J094223.30+28441
Obs Date and Times:       2021-09-26 20:45:34 - 21:04:30
Obs Pointing(ra,dec,roll): 145.623, 28.733, 112.24
347.720_-18.420_imageloc (boresight_dist, angle): (157, 90)
347.720_-18.420_exposure (cm2 cos adjusted): 0
347.720_-18.420_altitude: -53 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210926_2051.png



Attachments

/tmp/swift/210926_2051_bat64ms_ipn

87.1 KB

/tmp/swift/210926_2051.png

19.6 KB

BAT lightcurve for trigger at 210926_2052

Subject: BAT lightcurve for trigger at 210926_2052

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/27/2021, 9:29 AM

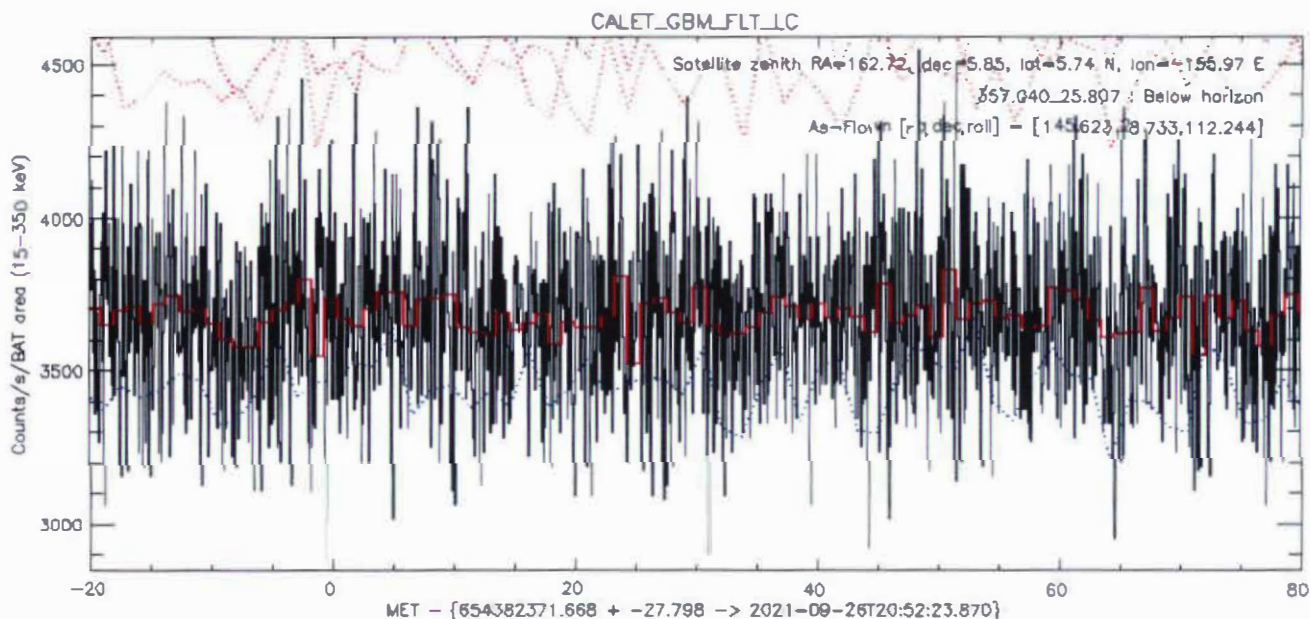
To: dmopalmer@gmail.com, vestrland@lanl.gov, mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 2021-09-26T20:52:23.870 -s 357.040_25.807
Swift Zenith(RA,dec):      162.72, 5.85
Swift Location(lon,lat,alt): -155.97 E, 5.74 N, 542 km
Time(MET + UTC -> UT):    654382371.668 + -27.798 -> 2021-09-26T20:52:23.870
YYMMDD_SOD:               210926_75143.870      DOY=269
Obs Sequence Number:      00038174004
Obs Target Name:          SDSS J094223.30+28441
Obs Date and Times:       2021-09-26  20:45:34 - 21:04:30
Obs Pointing(ra,dec,roll): 145.623, 28.733, 112.24
357.040_25.807_imageloc (boresight_dist, angle): (118, 126)
357.040_25.807_exposure (cm2 cos adjusted): 0
357.040_25.807_altitude: -33 (down)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

~/tmp/swift/210926_2052.png



Attachments:

/tmp/swift/210926_2052.png

19.1 KB

/tmp/swift/210926_2052_bat64ms_ipn

87.1 KB

Subject: GRB 210926A: AstroSat CZTI detection
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 9/27/2021, 6:36 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30889
SUBJECT: GRB 210926A: AstroSat CZTI detection
DATE: 21/09/27 13:36:09 GMT
FROM: Gaurav Waratkar at IIT, Bombay <gauravwaratkar@iitb.ac.in>

P. Sawant (IUCAA), G. Waratkar (IITB), V. Prasad (IUCAA), A. Vibhute (IUCAA), V. Bhalerao (IITB), D. Bhattacharya (IUCAA), A. R. Rao (IUCAA/TIFR), and S. Vadawale (PRL) report on behalf of the AstroSat CZTI collaboration:

Analysis of AstroSat CZTI data with the CIFT framework (Sharma et al., 2021, JApA, 42, 73) showed detection of a long GRB 210926A, which was also detected by GECAM (C. Zheng et al., GCN 30886).

The source was clearly detected in the 20-200 keV energy range. The light curve showed multiple peaks of emission with the strongest peak at 2021-09-26 20:52:27.5 UT. The measured peak count rate associated with the burst is 250 (+51, -16) cts/s above the background in the combined data of four quadrants, with a total of 3971 (+446, -463) cts. The local mean background count rate was 480 (+3, -3) cts/s. Using cumulative rates, we measure a T90 of 26 (+6, -5) s.

It was also clearly detected in the CsI anticoincidence (Veto) detector in the 100-500 keV energy range. The light curve showed multiple peaks of emission with the strongest peak at 2021-09-26 20:52:30.9 UT. The measured peak count rate is 262 (+73, -38) cts/s above the background in the combined Veto data of four quadrants, with a total of 3091 (+703, -866) cts. The local mean background count rate was 1512 (+5, -4) cts/s. We measure a T90 of 25 (+14, -10) s from the cumulative Veto light curve.

CZTI GRB detections are reported regularly on the payload site at <http://astrosat.iucaa.in/czti/?q=grb>. CZTI is built by a TIFR-led consortium of institutes across India, including VSSC, ISAC, IUCAA, SAC, and PRL. The Indian Space Research Organisation funded, managed and facilitated the project.

Subject: GRB 210926A: GECAM detection

From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>

Date: 9/26/2021, 10:10 PM

To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR

NUMBER: 30886

SUBJECT: GRB 210926A: GECAM detection

DATE: 21/09/27 05:09:38 GMT

FROM: Chao Zheng at IHEP <zhengchao97@ihep.ac.cn>

C. Zheng, S. L. Xiong, X. Y. Zhao, Y. Huang, C. Cai, Z. W. Guo, C. Y. Li, S. Xiao, S. L. Xie, W. C. Xue, Q. B. Yi, Y. Zhao, Y. Q. Zhang, J. C. Liu, X. Y. Song, X. B. Li, P. Wang, J. Wang, Q. Luo, W. Chen, J. J. He, H. Wu, X. L. Zhang, C. W. Wang, P. Zhang, W. X. Peng, R. Qiao, D. Y. Guo, X. Ma, S. J. Zheng, G. Y. Zhao, Y. Q. Du, J. Liang, Z. Zhang, L. M. Song, F. J. Lu, S. N. Zhang (IHEP), report on behalf of GECAM team:

During the commissioning phase, GECAM-B was triggered in-flight by a long burst, GRB 210926A, at 2021-09-26T20:52:28.250 UTC (denoted as T0). This burst consists of two episodes, with the first one triggered by Fermi/GBM (trigger ID: 654382283). Both episodes were triggered by GECAM-B with the on-ground pipeline.

Its alert data was promptly downlinked to the ground through the short message service of BeiDou Navigation Satellite System (BDS). The time latency of the first BeiDou message relative to the trigger time is about 1 minute.

According to the BDS alert data, this burst mainly consists of multiple pulses with duration of about 90 s.

The GECAM light curve could be found here:

http://twiki.ihep.ac.cn/pub/GECAM/GRBList/GRB_210926A.png

GECAM-B localized this burst to the following position (J2000):

Ra: 351.51 deg

Dec: -18.21 deg

Err: 2.86 deg (1-sigma, statistical only)

The current systematic error of location is estimated to be several degrees which could be minimized by the ongoing calibration.

The GECAM preliminary location could be found here:

<http://twiki.ihep.ac.cn/pub/GECAM/GRBList/210926Aloc.png>

This location is consistent with Fermi/GBM position within the error.

Please note that all GECAM results here are preliminary. The final analysis will be published in journal papers or GECAM online catalog.

Gravitational wave high-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission consists of two small satellites (GECAM-A and GECAM-B) in Low Earth Orbit (600 km, 29 deg), launched on Dec 10, 2020 (Beijing Time), which was funded by the Chinese Academy of Sciences (CAS).

v01

81.546

27/09/2021

KONUS

200- 750 keV

50- 200 keV

10- 50 keV

COUNTS/2.944 S

4500

3500

2500

1500

500

0

10000

20000

30000

40000

50000

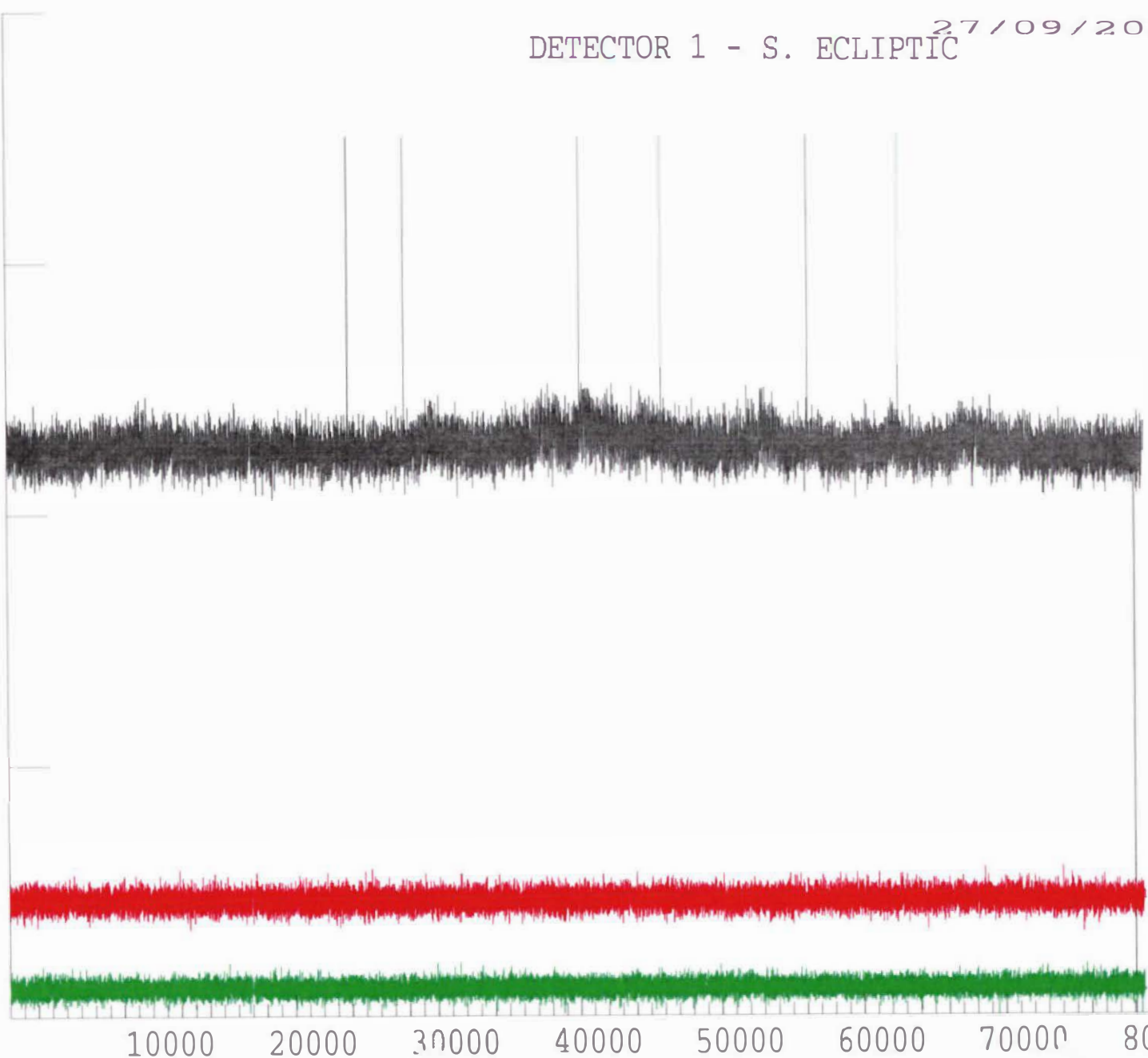
60000

70000

80000

TIME, SECS

DETECTOR 1 - S. ECLIPTIC 27/09/2021



KONUS

27/09/2021

81.546

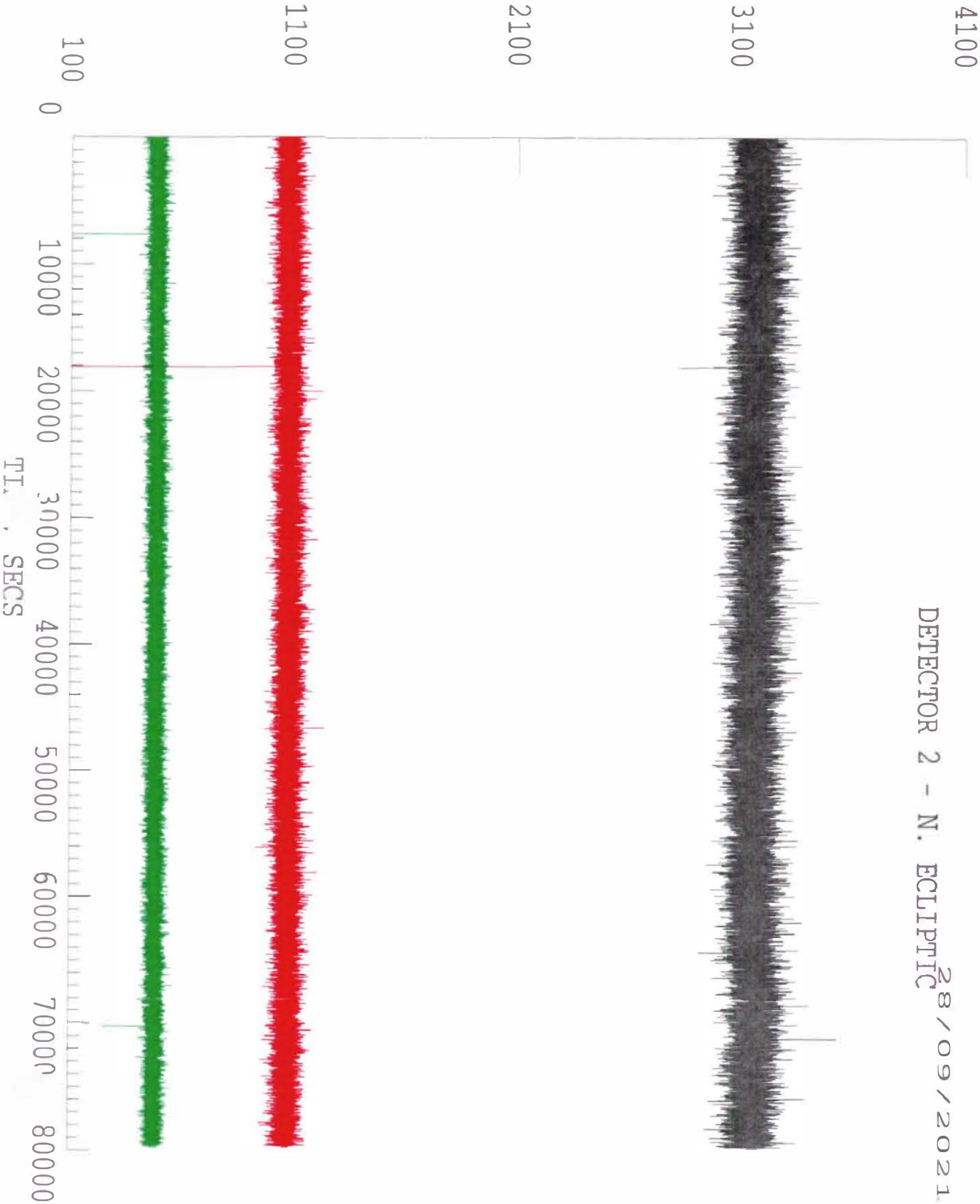
v01

10- 50 keV

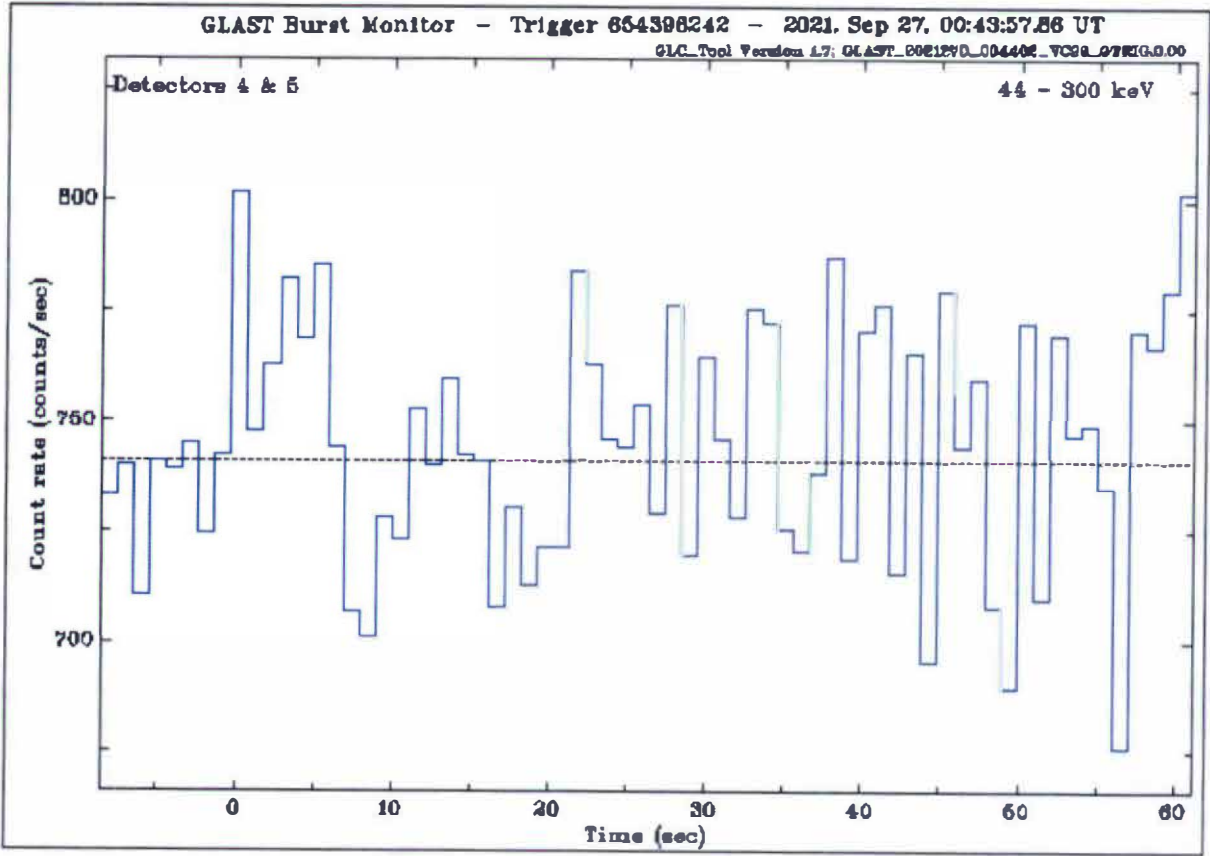
50- 200 keV

200- 750 keV

COUNTS/2.944 S



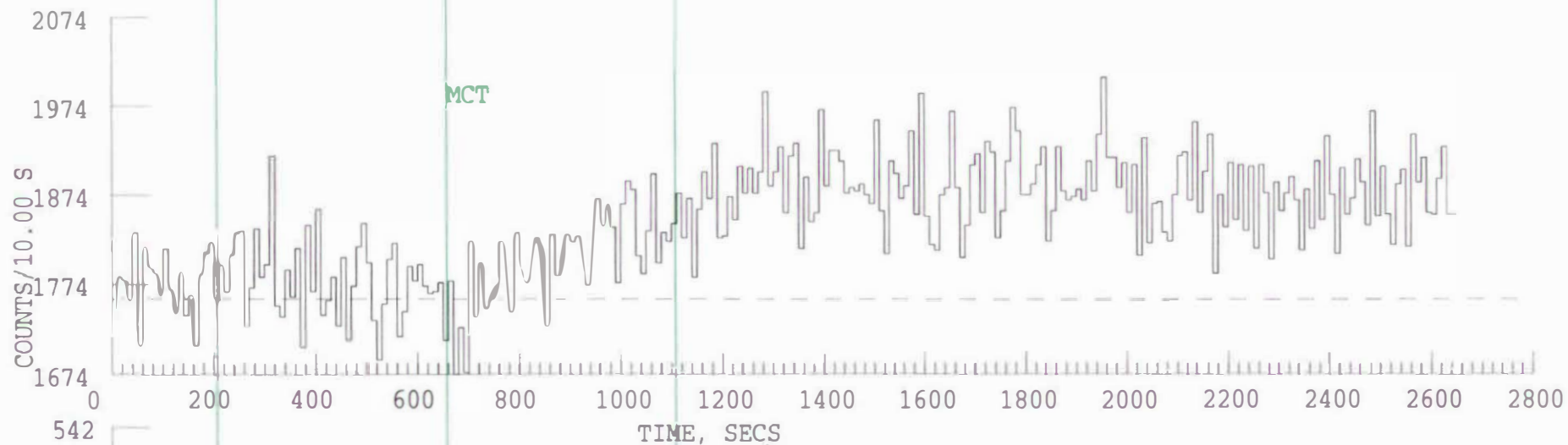
252.1 0 20.8
SPI NO



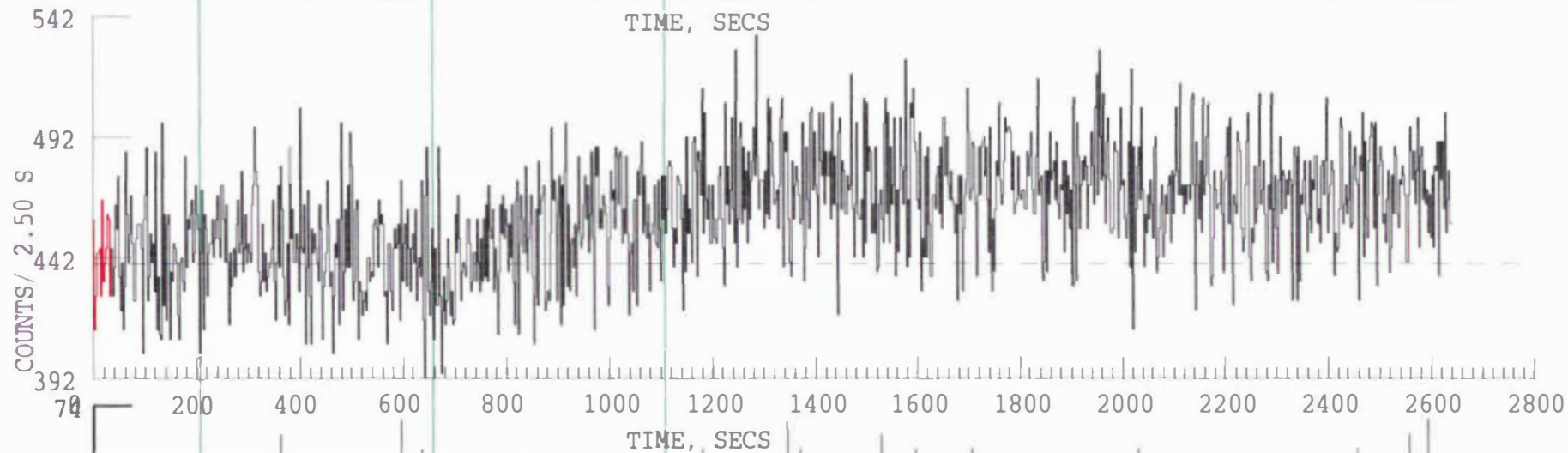
01/10/2021

2

00:21:28.910

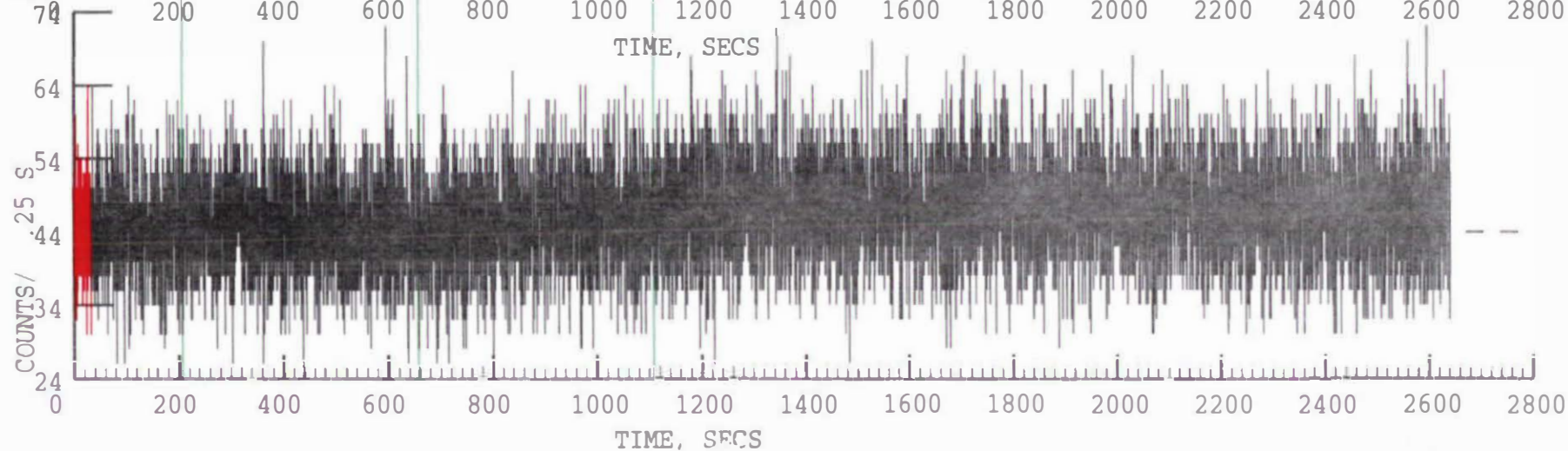


1288.910



27/09/21

50-3000 keV



ODYSSEY

Subject: BAT lightcurve for trigger at 210927_0043

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/26/2021, 10:16 PM

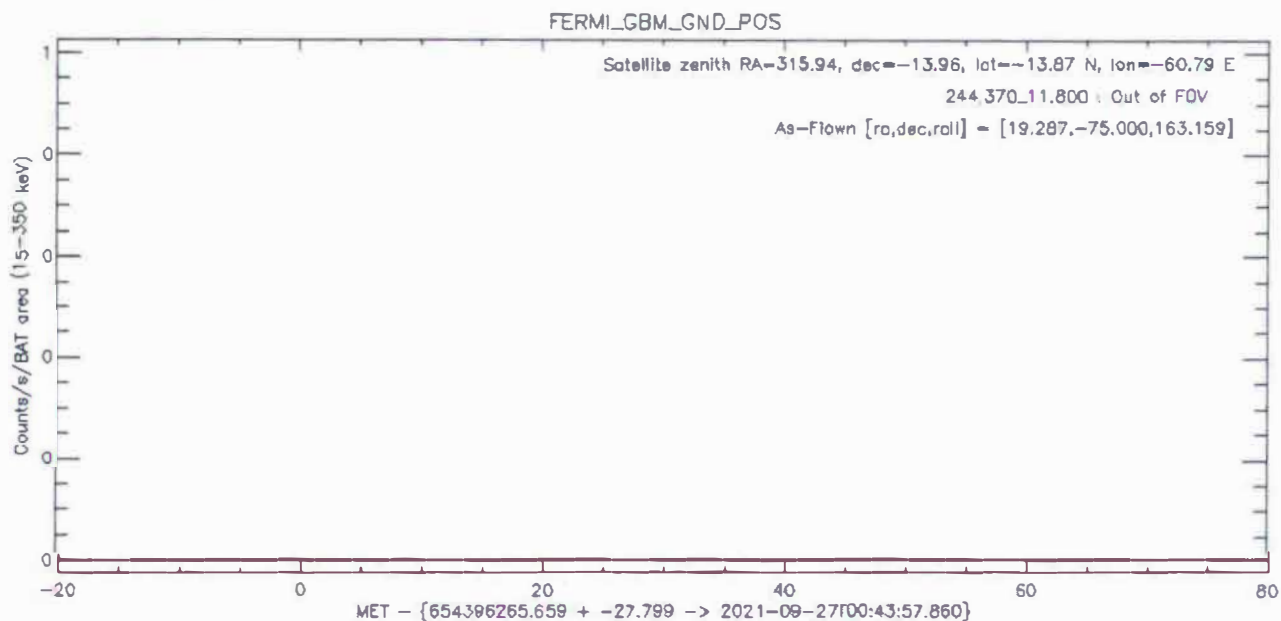
To: mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, vestrand@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, ipn@ssl.berkeley.edu, aaron.tohu@gmail.com, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654396265.659 -s 244.370_11.800
Swift Zenith(RA,dec):      315.94, -13.96
Swift Location(lon,lat,alt): -60.79 E, -13.87 N, 555 km
Time(MET + UTCF -> UT):  654396265.659 + -27.799 -> 2021-09-27T00:43:57.860
YYMMDD_SDD:               210927_02637.860      DOY=270
Obs Sequence Number:       00075756021
Obs Target Name:           saa-cold-269-00
Obs Date and Times:        2021-09-27  00:35:34 - 00:56:29
Obs Pointing(ra,dec,roll): 19.287, -75.000, 163.16
244.370_11.800_imageloc (boresight_dist, angle): (112, -25)
244.370_11.800_exposure (cm2 cos adjusted): 0
244.370_11.800_altitude: 38 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210927_0043.png



Attachments

/tmp/swift/210927_0043_bat64ms_ipn

87.0 KB

/tmp/swift/210927_0043.png

7.9 KB

BAT lightcurve for trigger at 210927_1946

Subject: BAT lightcurve for trigger at 210927_1946

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/27/2021, 2:57 PM

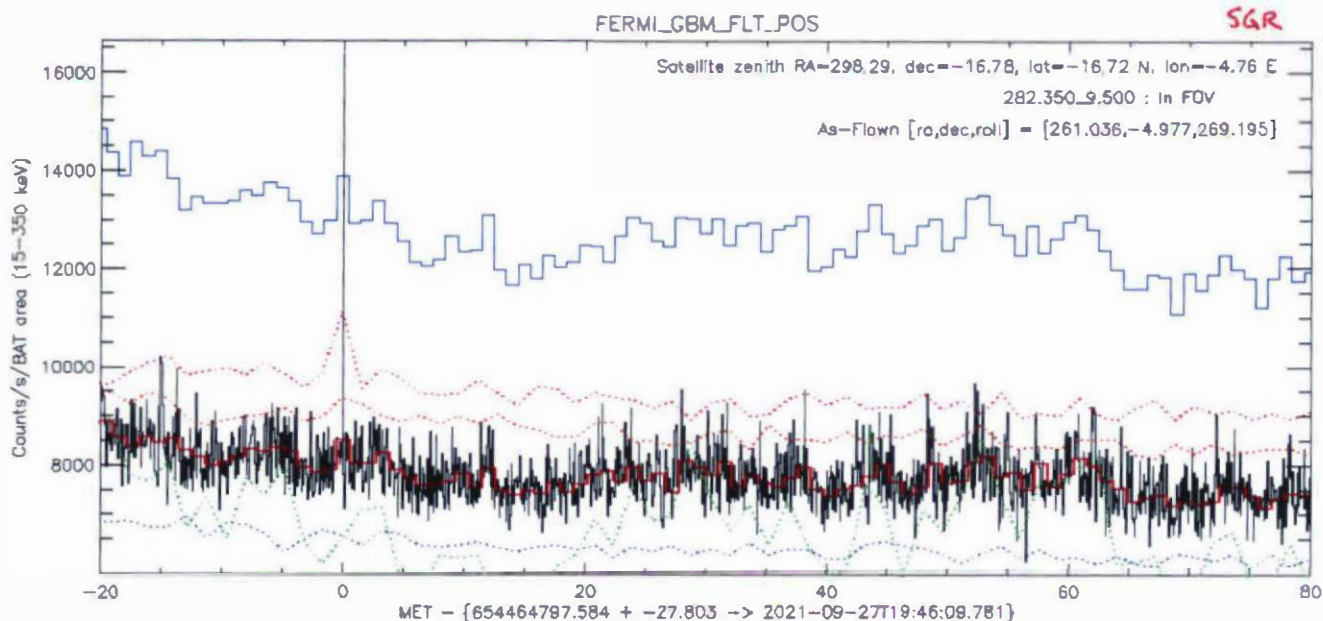
To: vestrand@lanl.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, gbm-burst-advocate@lists.nasa.gov, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654464797.584 -s 282.350_9.500
Swift Zenith(RA,dec):      298.29, -16.78
Swift Location(lon,lat,alt): -4.76 E, -16.72 N, 553 km
Time(MET + UTC -> UT):    654464797.584 + -27.803 -> 2021-09-27T19:46:09.781
YYMMDD_SOD:               210927_71169.781      DOY=270
Obs Sequence Number:      00074415047
Obs Target Name:          saa-cold-301-07
Obs Date and Times:       2021-09-27 19:23:34 - 19:49:32
Obs Pointing(ra,dec,roll): 261.036, -4.977, 269.19
282.350_9.500_imageloc (boresight_dist, angle): (26, 57)
282.350_9.500_exposure (cm2 cos adjusted): 2933
282.350_9.500_altitude: 82 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210927_1946.png



Attachments

/tmp/swift/210927_1946_bat64ms_ipn

87.1 KB

/tmp/swift/210927_1946.png

20.6 KB

Re: [EXTERNAL] BAT lightcurve for trigger at 210927_1946

Subject: Re: [EXTERNAL] BAT lightcurve for trigger at 210927_1946

From: "'Palmer, David' via ipn" <ipn@ssl.berkeley.edu>

Date: 9/27/2021, 3:17 PM

To: IPN <ipn@ssl.berkeley.edu>

CC: "Vestrand, W" <vestrand@lanl.gov>, "Kippen, Marc" <mkippen@lanl.gov>, David Palmer <dmopalmer@gmail.com>, "gbm-burst-advocate@lists.nasa.gov" <gbm-burst-advocate@lists.nasa.gov>, BAT TEAM <bat_team@bigbang.gsfc.nasa.gov>, Aaron Tohuvavohu <aaron.tohu@gmail.com>

BAT verifies this Fermi GBM trigger is another sgr1935+2154 burst.

Previous BAT imaging detection was 2021-09-18T12:58:50

BR: Response from the dsp Imaging: 654464797.57200 - 654464797.58800

BR: 1 sources found

Src#10762 : 75 +/- 7 @ (th,ph)=(0.7300, 0.8690) (ra,dec)=(293.771,21.912)

David Palmer palmer@lanl.gov (505) 665-6863

Socially Distant: Work-From-Home (505) 695-9190

On Sep 27, 2021, at 3:57 PM, palmer+automatic_lightcurve@lanl.gov wrote:

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654464797.584 -s 282.350_9.500

Swift Zenith(RA,dec): 298.29, -16.78

Swift Location(lon,lat,alt): -4.76 E, -16.72 N, 553 km

Time(MET + UTCF -> UT): 654464797.584 + -27.803 -> 2021-09-27T19:46:09.781

YYMMDD_SOD: 210927_71169.781 DOY=270

Obs Sequence Number: 00074415047

Obs Target Name: saa-cold-30107

Obs Date and Times: 2021-09-27 19:23:34 - 19:49:32

Obs Pointing(ra,dec,roll): 261.036, -4.977, 269.19

282.350_9.500_imageloc (boresight_dist, angle): (26, 57)

282.350_9.500_exposure (cm^2 cos adjusted): 2933

282.350_9.500_altitude: 82 (up)

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)

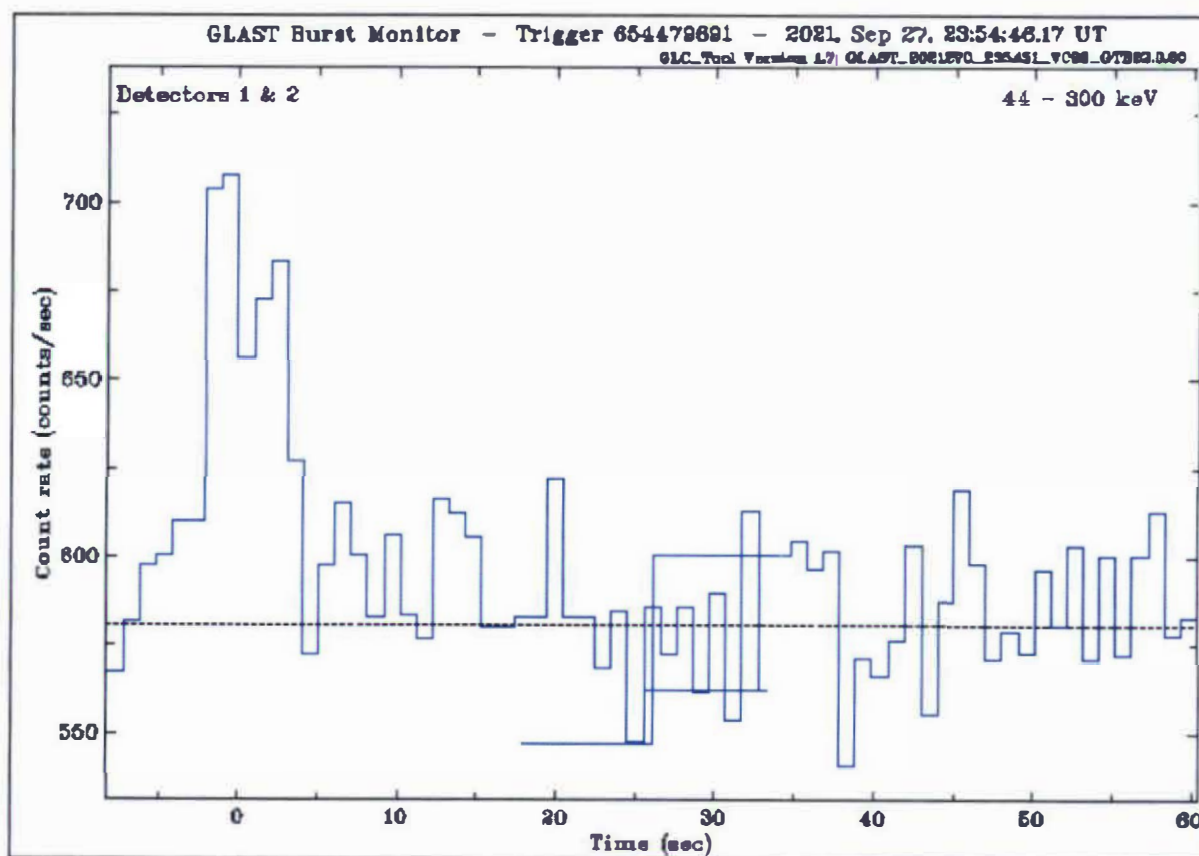
TSPA -- Automatically generated plot of publicly-available scientific data

<_tmp_swift_210927_1946_bat64ms_ipn><_tmp_swift_210927_1946.png>

Subject: GCN/CALET_GBM_FLT_LIGHTCURVE
From: Bacodine <vxw@capella2.gsfc.nasa.gov>
Date: 9/27/2021, 8:15 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN/CALET NOTICE
NOTICE_DATE: Mon 27 Sep 21 15:15:38 UT
NOTICE_TYPE: CALET GBM Flight Lightcurve
POINT_RA: 357.04d {+23h 48m 10s} (J2000),
POINT_DEC: +25.81d {+25d 48' 25"} (J2000),
TRIGGER_NUM: 1316724380
TRIGGER_DATE: 19483 TJD; 269 DOY; 21/09/26
TRIGGER_TIME: 75143.87 SOD {20:52:23.87} UT
TRIGGER_DET: 0 0 1 (HXM1 HXM2 SGM)
SIGNIFICANCE: 13.09 [sigma]
FOREGND_DUR: 4.00 [sec]
BACKGND_DUR1: 16.00 [sec]
ENERGY_BAND: 40-230 [keV]
SC_LON_LAT: 38.33,25.93 [deg]
LC_URL: http://cgbm.calet.jp/cgbm_trigger/flight//1316724380/index.htm
COMMENTS: CALET-GBM Flight Lightcurve.
COMMENTS: NOTE: This CALET_GBM_FLT_LC event is temporally(65.0<100sec) coincident with the FERMI_GBM event (trignum=654382283).
COMMENTS: The LC_URL file will not be created until ~15 min after the trigger.

246.6 81.4 1



Subject: BAT lightcurve for trigger at 210927_2354

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/28/2021, 1:24 AM

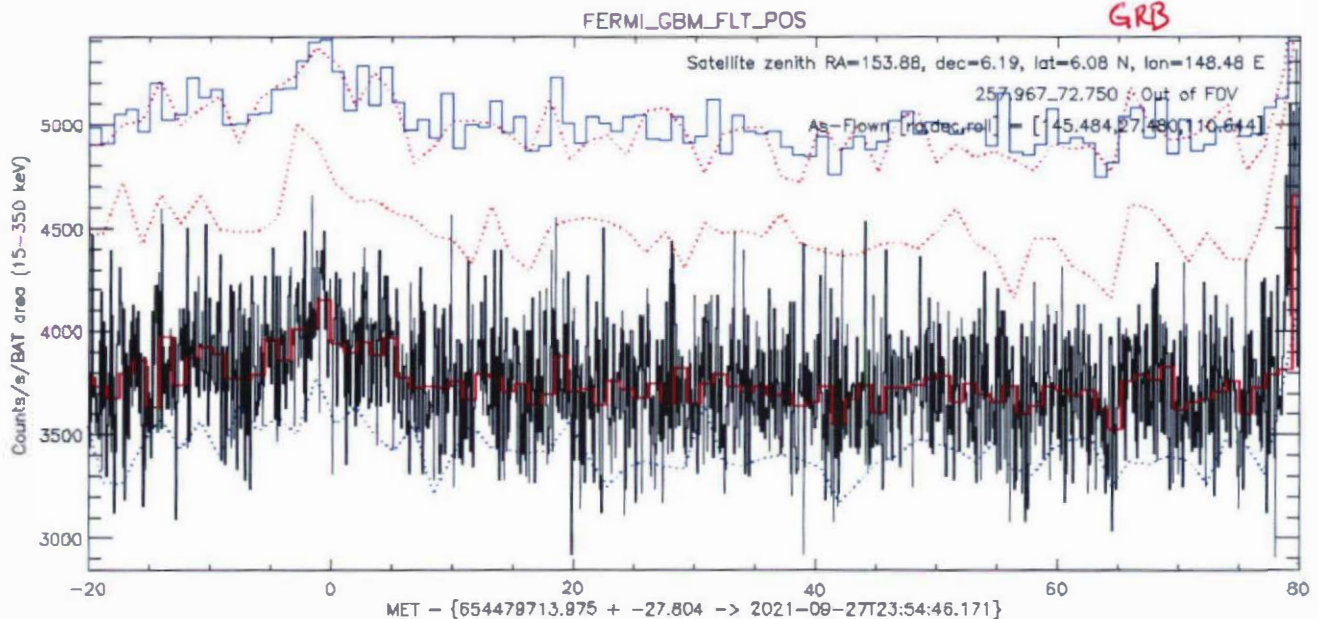
To: mkippen@lanl.gov, vestrands@lanl.gov, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654479713.975 -s 257.967_72.750
Swift Zenith(RA,dec):      153.88, 6.19
Swift Location(lon,lat,alt): 148.48 E, 6.08 N, 543 km
Time(MET + UTC -> UT):    654479713.975 + -27.804 -> 2021-09-27T23:54:46.171
YYMMDD_SOD:               210927_86086.171      DOY=270
Obs Sequence Number:      00040544007
Obs Target Name:          82QJ0941+2728
Obs Date and Times:       2021-09-27 23:39:34 - 23:59:32
Obs Pointing(ra,dec,roll): 145.484, 27.480, 110.64
257.967_72.750_imageloc (boresight_dist, angle): (70, 176)
257.967_72.750_exposure (cm2 cos adjusted): 0
257.967_72.750_altitude: 25 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210927_2354.png



Attachments

/tmp/swift/210927_2354_bat64ms_ipn

87.0 KB

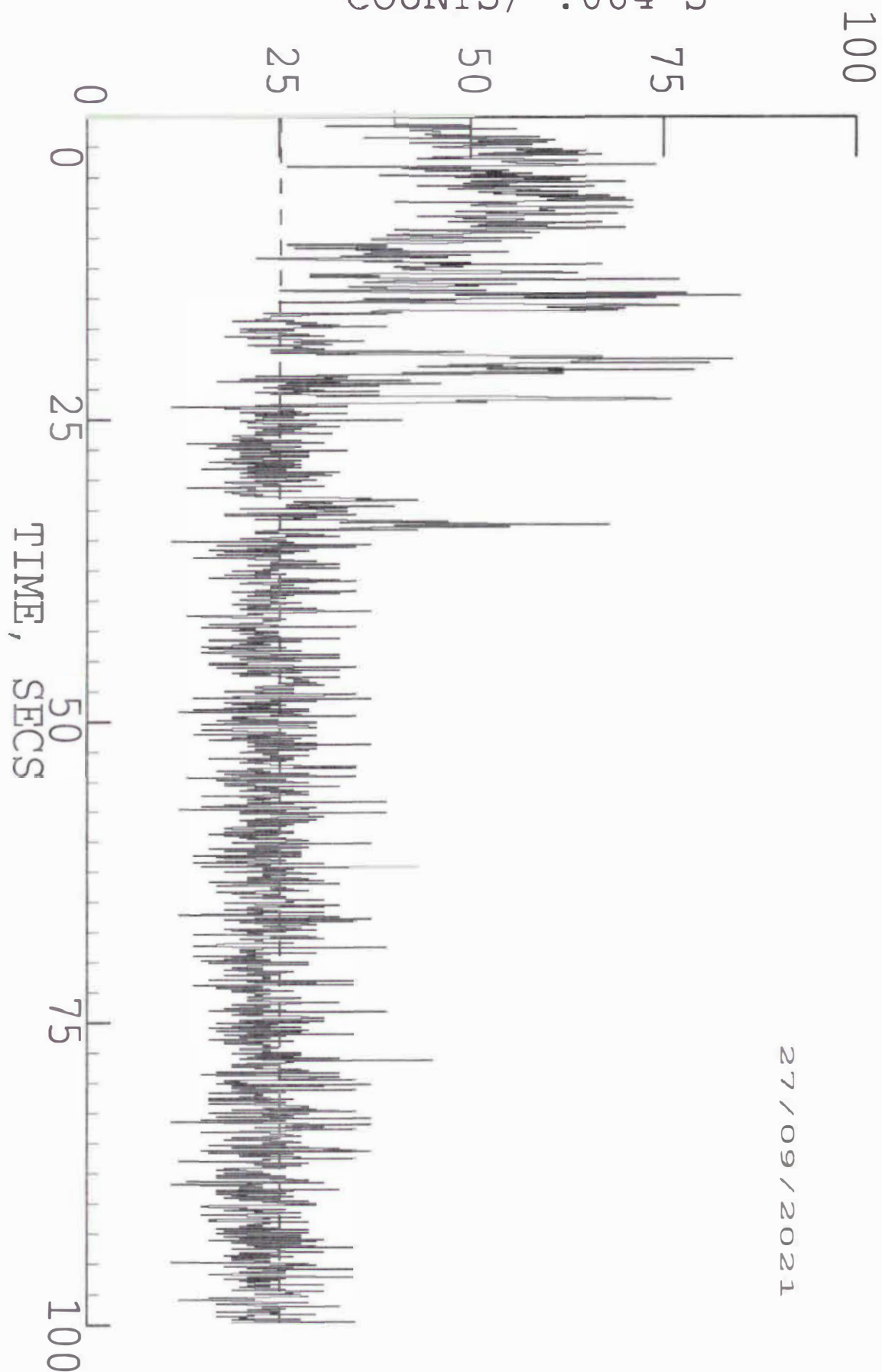
/tmp/swift/210927_2354.png

21.0 KB

KONUS 27/09/21 86165.374 23:56:05.374^B
50- 200 keV

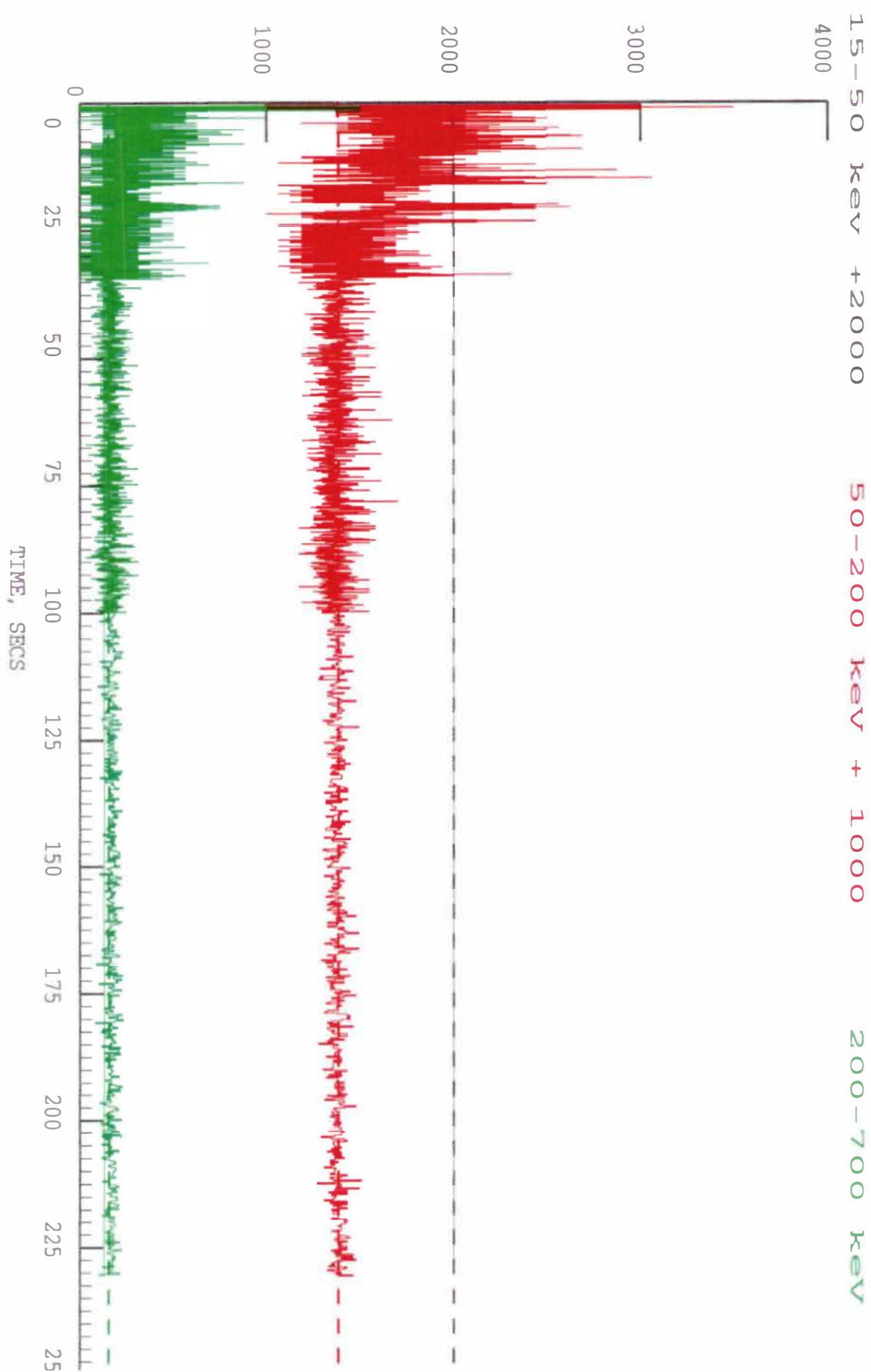
COUNTS/ .064 S

+M GNS



KONUS

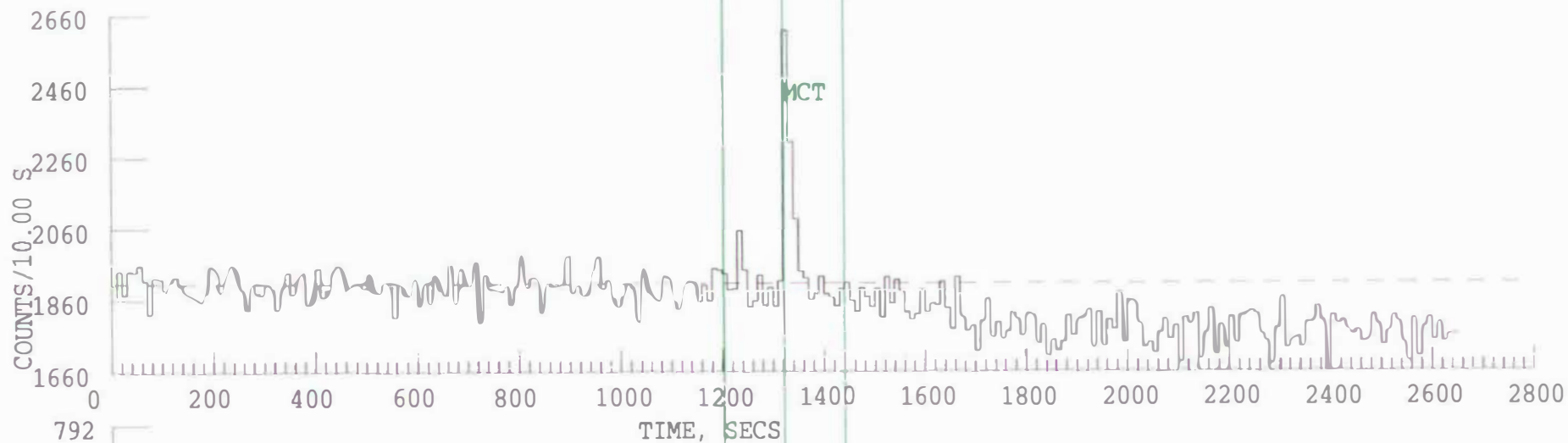
COUNTS/SEC



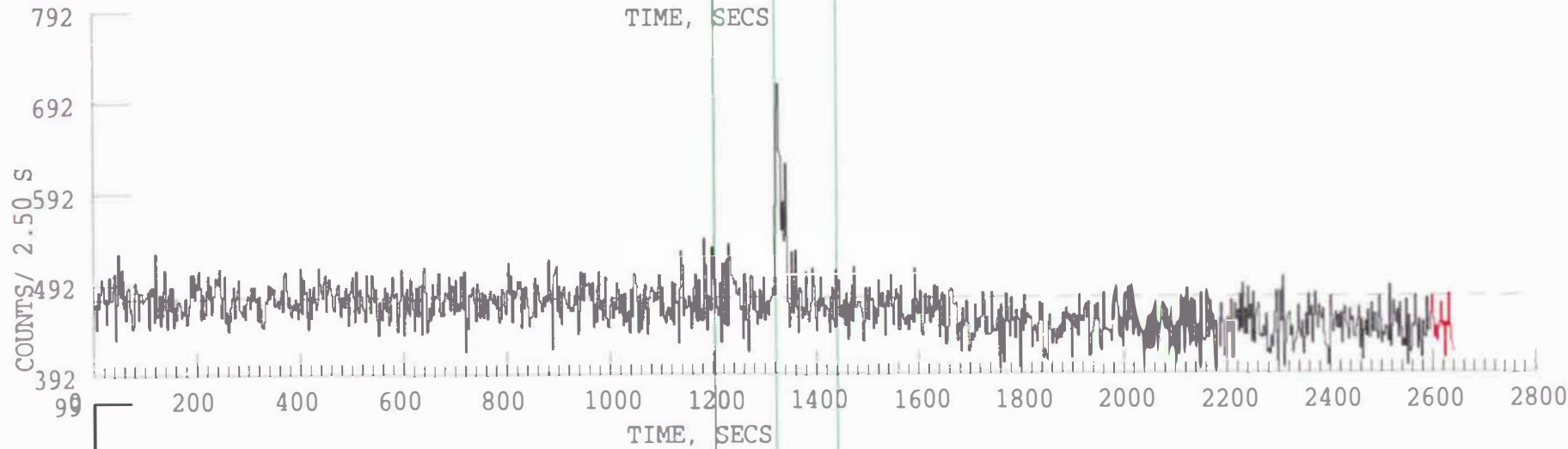
3

30/09/2021

23:33:27.423



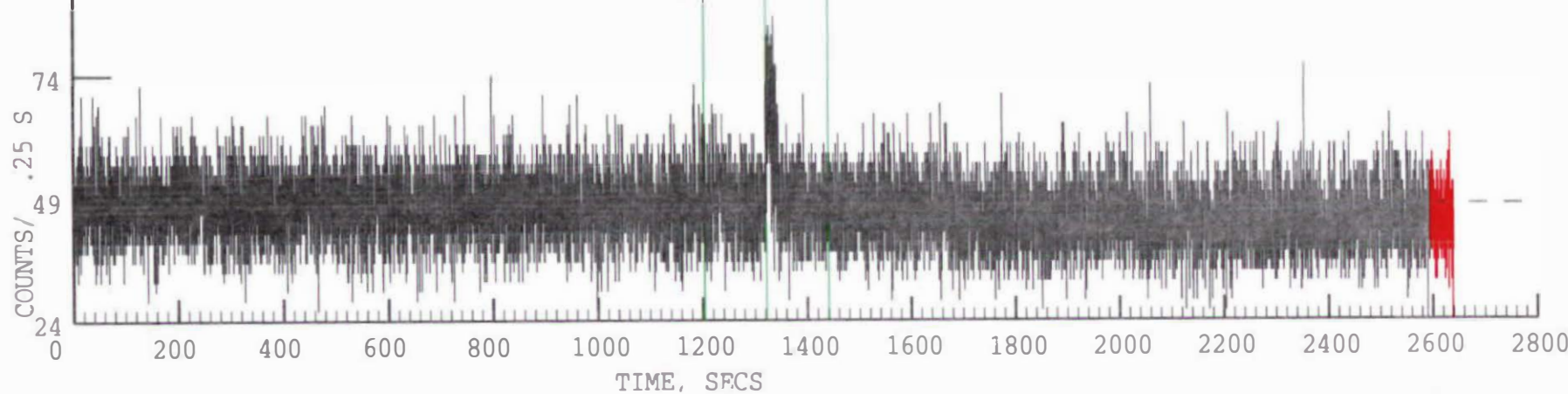
84807.423



50-3000 keV

27/09/21

ODYSSEY



Subject: IPN Triangulation of GRB 210927B
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 10/22/2021, 1:49 PM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30956
SUBJECT: IPN Triangulation of GRB 210927B
DATE: 21/10/22 20:49:00 GMT
FROM: Dmitry Svinkin at Ioffe Institute <svinkin@mail.ioffe.ru>

A.S. Kozyrev, D.V. Golovin, M.L. Litvak, I.G. Mitrofanov, and A.B. Sanin
on behalf of the MGNS/BepiColombo and HEND/Mars Odyssey teams,

J. Benkhoff on behalf of the BepiColombo team,

K. Hurley, on behalf of the IPN,

D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia,
A. Lysenko, and T. Cline on behalf of the Konus-Wind team,

A. Goldstein, M. S. Briggs, and C. Wilson-Hodge
on behalf of the Fermi GBM team,

A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo,
and C. Ferrigno, on behalf of the INTEGRAL SPI-ACS GRB team,

S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, and A. Tohuvavohu
on behalf of the Swift-BAT team, and

W. Boynton, C. Fellows, K. Harshman, H. Enos, and R. Starr,
on behalf of the GRS-Odyssey GRB team, report:

The long-duration GRB 210927B (GECAM-B detection: GCN circ. 30910)
was detected by BepiColombo (MGNS), in the vicinity of Mercury
(see introductory GCN Circ. 30949); Mars-Odyssey (HEND);
GECAM-B; Fermi (GBM trigger 654479691); Konus-Wind; INTEGRAL (SPI-ACS);
and Swift (BAT) at about 86086 s UT (23:54:46).
The burst was outside the coded field of view of the BAT.

The burst light curves in the energy range 30 keV-1.5 MeV (HEND)
and 250-450 keV (MGNS) exhibit a multi-peaked pulse structure
with a total duration of ~25 s.

We have triangulated GRB 210927B to the following 3 sigma annuli:

	R.A.(J2000) deg	Dec.(J2000) deg	R deg	+dR deg	-dR deg
MGNS-HEND	2.101	-1.674	94.136	+0.034	-0.079
Konus-HEND	187.856	-2.595	88.396	+0.017	-0.017
Konus-GBM	161.442	7.403	85.952	+0.562	-0.562

The MGNS-HEND and Konus-HEND annuli intersect to form two error
boxes one of which is inconsistent with the Konus-GBM annulus,
the KW ecliptic latitude response, and the Fermi (GBM) final position.

The correct preliminary, 3 sigma error box is:

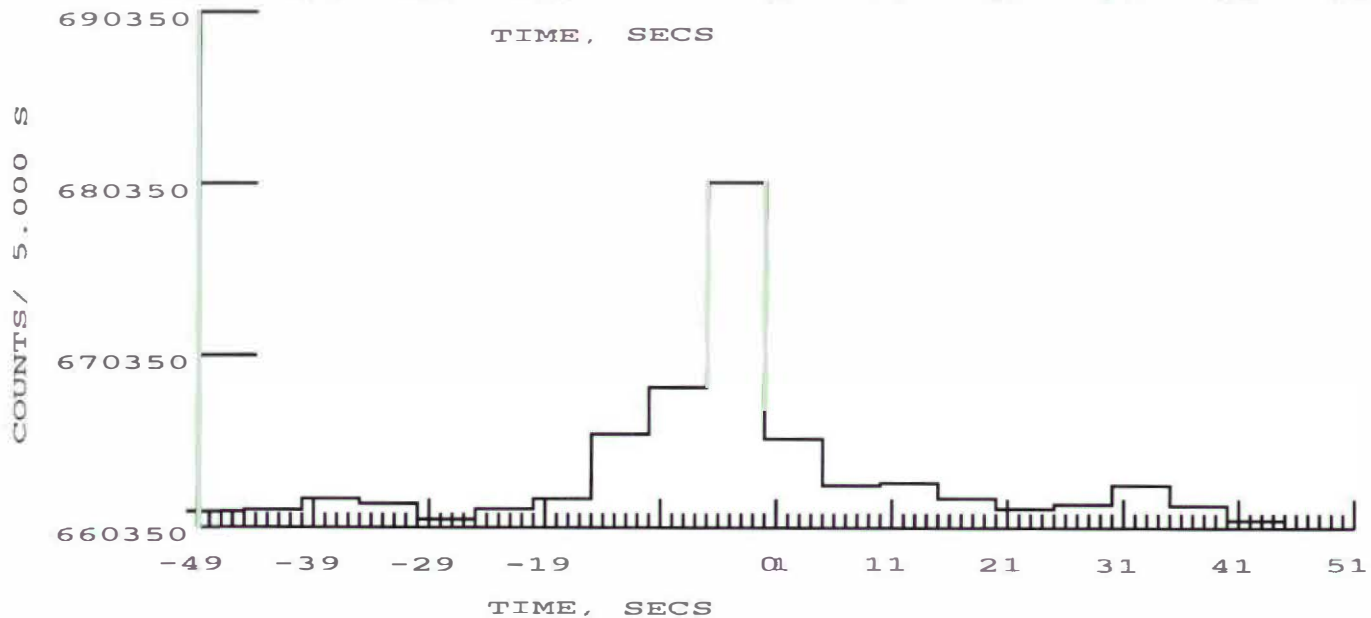
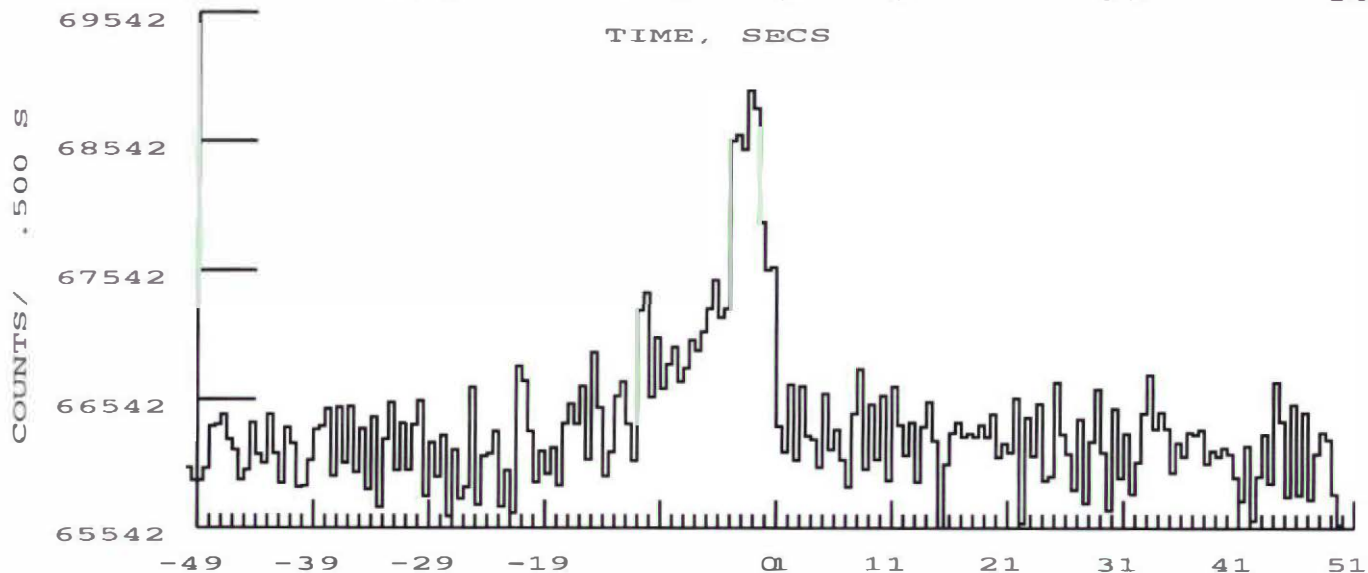
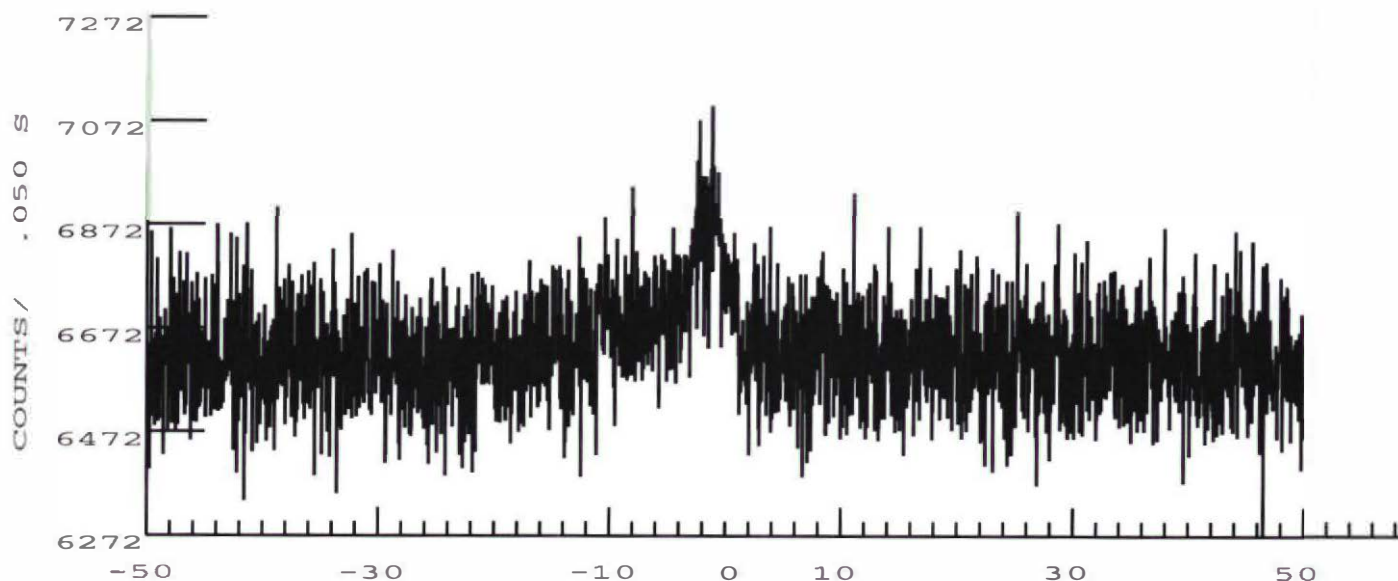
RA(2000), deg	Dec(2000), deg
Center:	
263.021 (17h 32m 05s) +73.775 (+73d 46' 32")	
Corners:	
263.554 (17h 34m 13s) +73.267 (+73d 15' 59")	
262.667 (17h 30m 40s) +74.201 (+74d 12' 03")	
262.825 (17h 31m 18s) +73.913 (+73d 54' 45")	
263.687 (17h 34m 45s) +72.979 (+72d 58' 46")	

The error box area is 49 sq. arcmin, and its maximum
dimension is 1.26 deg (the minimum one is 2.0 arcmin).
The Sun distance was 89 deg.

This box may be improved.

A triangulation map is posted at:

<http://1503.iki.rssi.ru/owncloud/index.php/s/nfbsu69DdxQvd2>



Subject: BAT lightcurve for trigger at 210927_2356

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/28/2021, 1:25 AM

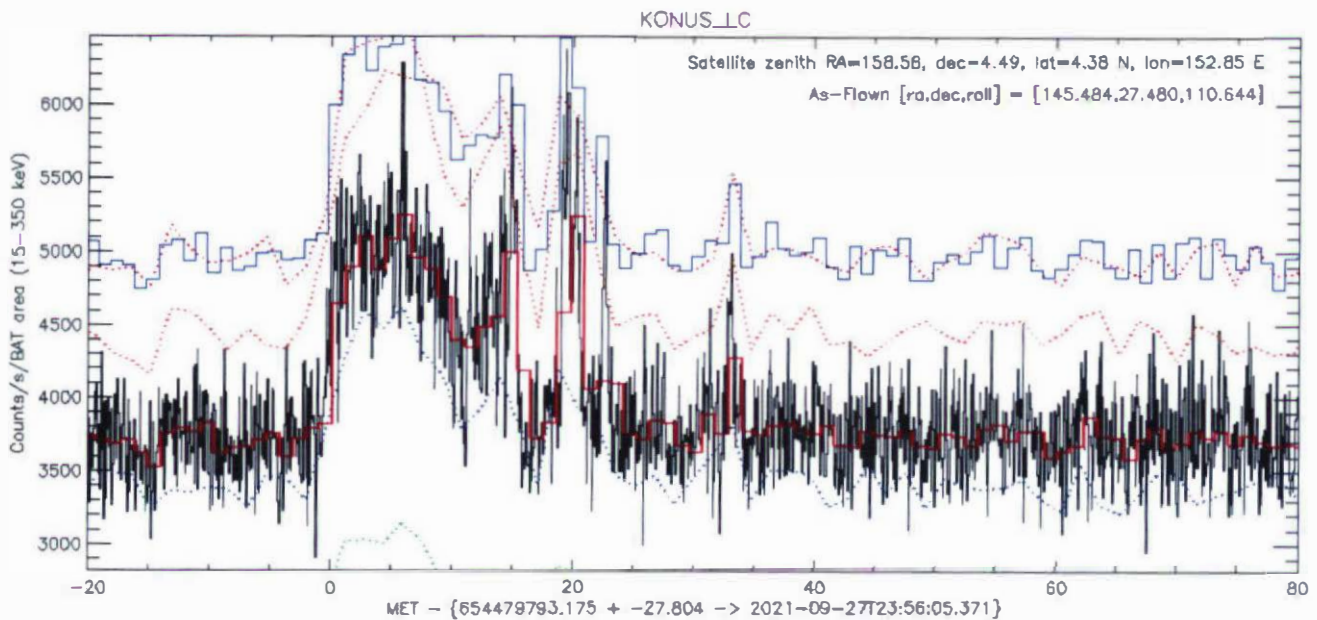
To: mkippen@lanl.gov, bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, dmopalmer@gmail.com, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, vestrand@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654479793.175
Swift Zenith(RA,dec):      158.58, 4.49
Swift Location(lon,lat,alt): 152.85 E, 4.38 N, 543 km
Time(MET + UTCF -> UT):   654479793.175 + -27.804 -> 2021-09-27T23:56:05.371
YYMMDD_500:               210927_86165.371      OOF=270
Obs Sequence Number:      00040544007
Obs Target Name:          BZQJ0941+2728
Obs Date and Times:       2021-09-27 23:39:34 - 23:59:32
Obs Pointing(ra,dec,roll): 145.484, 27.480, 110.64
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

--/tmp/swift/210927_2356.png--



-- Attachments --

/tmp/swift/210927_2356.png

22.7 KB

/tmp/swift/210927_2356_bat64ms_ipn

87.1 KB

Subject: GRB 210927B: GECAM detection

From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>

Date: 9/30/2021, 9:48 PM

To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR

NUMBER: 30910

SUBJECT: GRB 210927B: GECAM detection

DATE: 21/10/01 04:47:11 GMT

FROM: Y Q Zhang at IHEP <yqzhang@ihep.ac.cn>

J. C. Liu, S. L. Xiong, X. Y. Zhao, Y. Huang, X. Y. Song, C. Cai, S. Xiao, S. L. Xie, Y. Q. Zhang, Y. Zhao, Z. W. Guo, C. Zheng, W. C. Xue, C. Y. Li, C. W. Wang, Q. B. Yi, B. X. Zhang, P. Zhang, W. X. Peng, R. Qiao, D. Y. Guo, X. B. Li, X. Ma, P. Wang, J. Wang, Z. Zhang, S. J. Zheng, W. Chen, J. J. He, G. Y. Zhao, Y. Q. Du, H. Wu, J. Liang, Q. Luo, X. L. Zhang, L. M. Song, F. J. Lu, S. N. Zhang (IHEP), report on behalf of GECAM team:

During the commissioning phase, GECAM-B was triggered in-flight by a long burst, GRB 210927B, at 2021-09-27T23:54:45.600 UTC (denoted as T0), which was also observed by Fermi/GBM(trigger ID: 654479691)

Its alert data was promptly downlinked to the ground through the short message service of BeiDou Navigation Satellite System (BDS). The time latency of the first BeiDou message relative to the trigger time is about 1 minute.

According to the BDS alert data, this burst mainly consists of multiple pulses with duration of about 120 s.

The GECAM light curve could be found here:

<http://twiki.ihep.ac.cn/pub/GECAM/GRBList/86486085.60000002energys.png>

GECAM-B localized this burst to the following position (J2000):

Ra: 276.4 deg

Dec: 76.0 deg

Err: 3.0 deg (1-sigma, statistical only)

The current systematic error of location is estimated to be several degrees which could be minimized by the ongoing calibration.

The GECAM preliminary location could be found here:

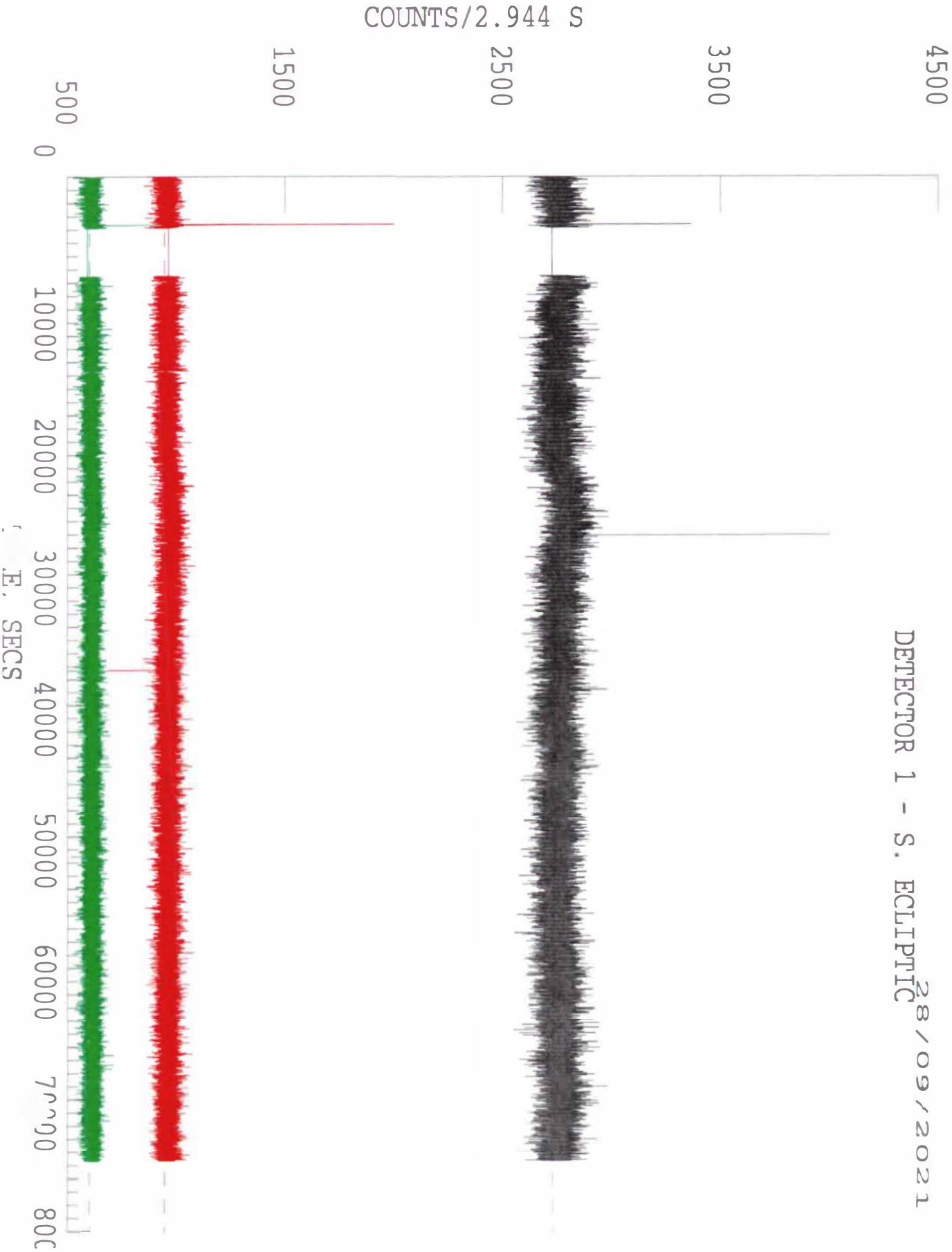
http://twiki.ihep.ac.cn/pub/GECAM/GRBList/gecamb_skymap_bdm_86486085_v01.png

This location is consistent with Fermi/GBM position within the error.

Please note that all GECAM results here are preliminary. The final analysis will be published in journal papers or GECAM online catalog.

Gravitational wave high-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission consists of two small satellites (GECAM-A and GECAM-B) in Low Earth Orbit (600 km, 29 deg), launched on Dec 10, 2020 (Beijing Time), which was funded by the Chinese Academy of Sciences (CAS).

10- 50 keV 50- 200 keV 200- 750 keV



KONUS

28/09/2021

3635.457

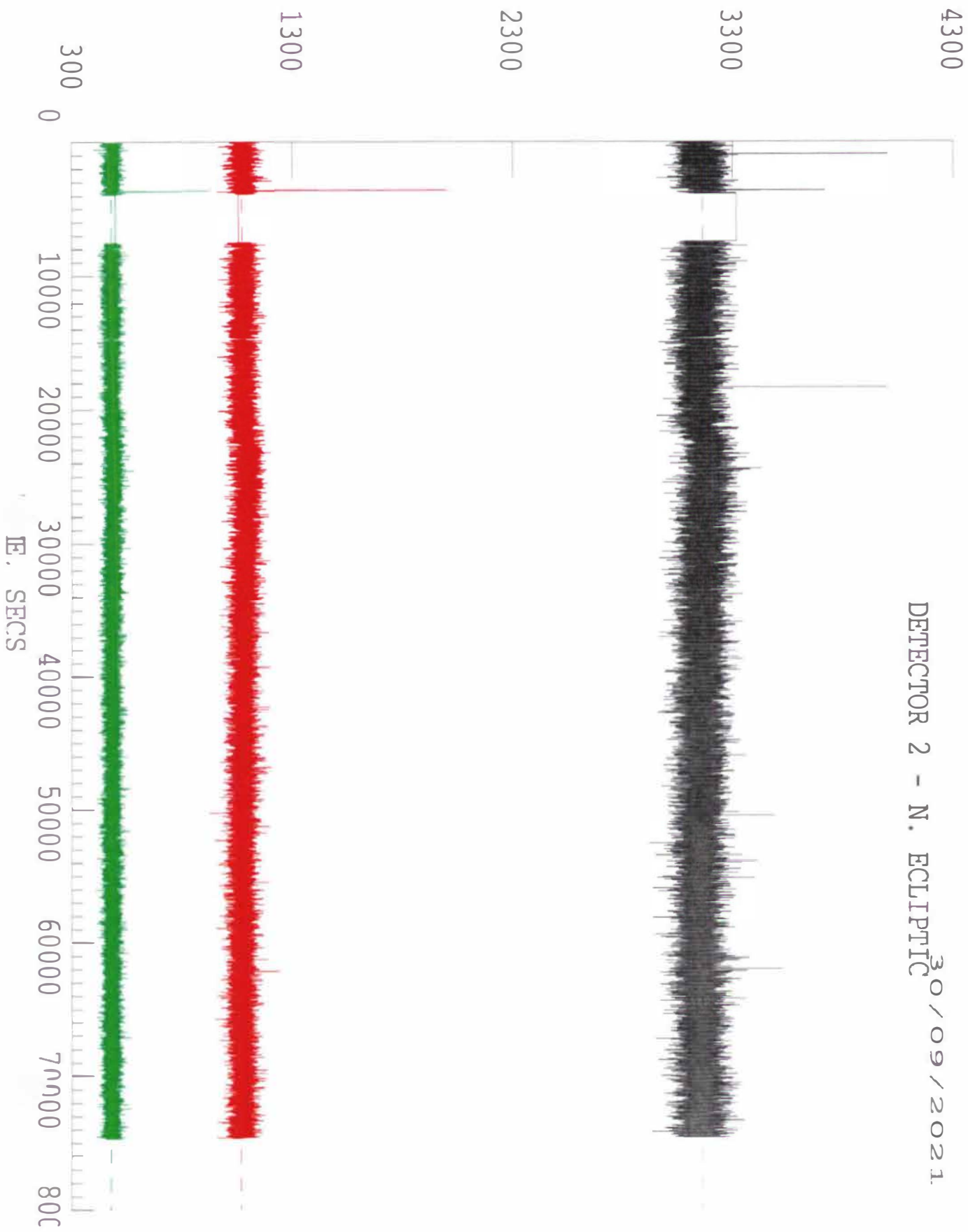
v01

10- 50 keV

50- 200 keV

200- 750 keV

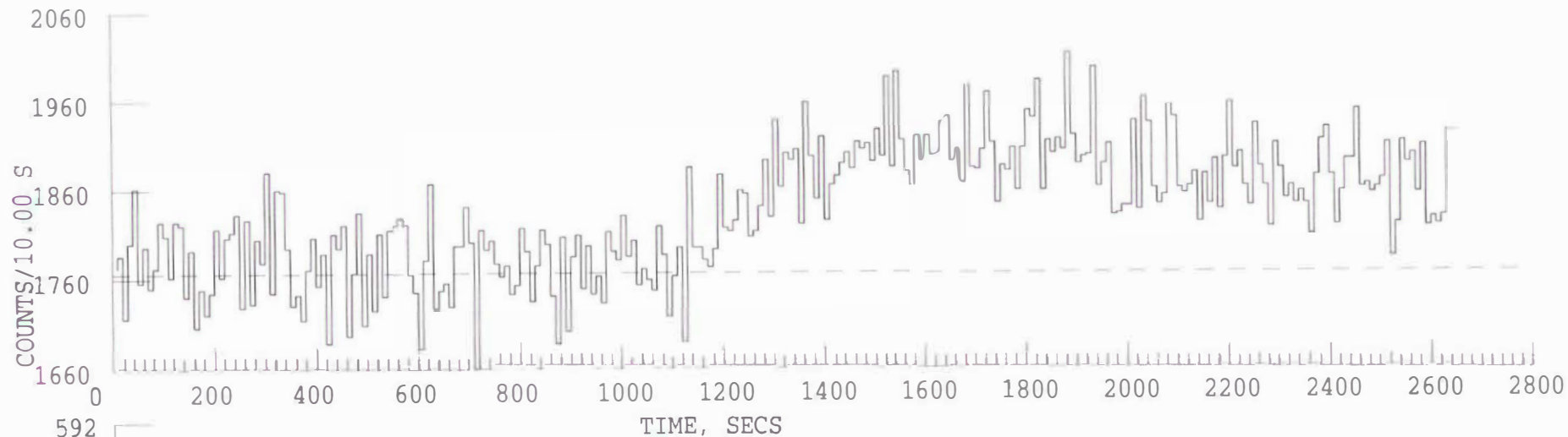
COUNTS/2.944 S



06/10/2021

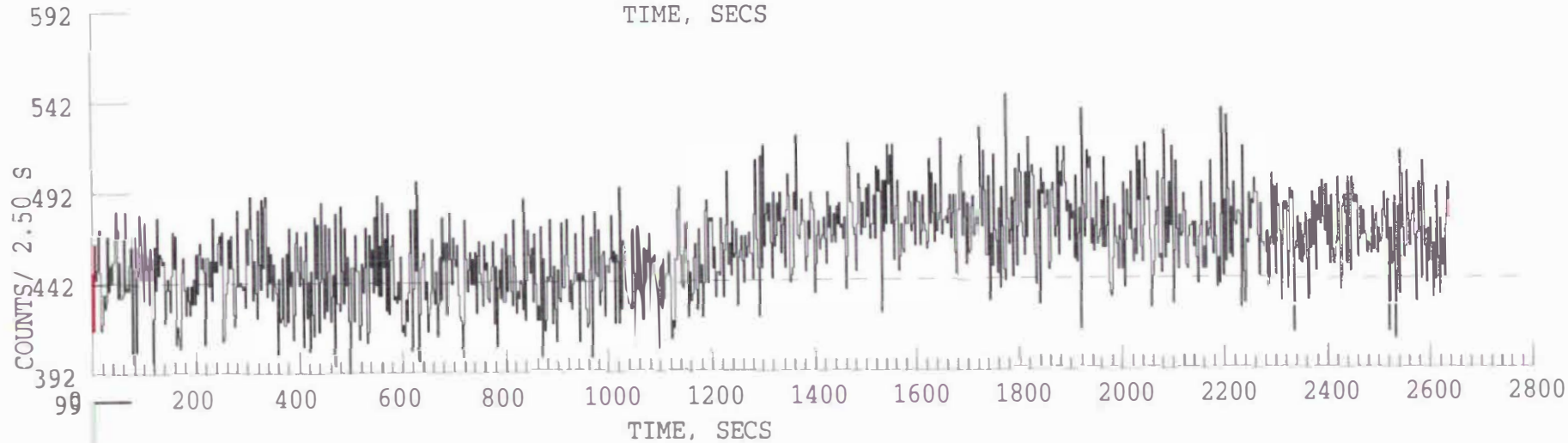
?

00:01:27.398



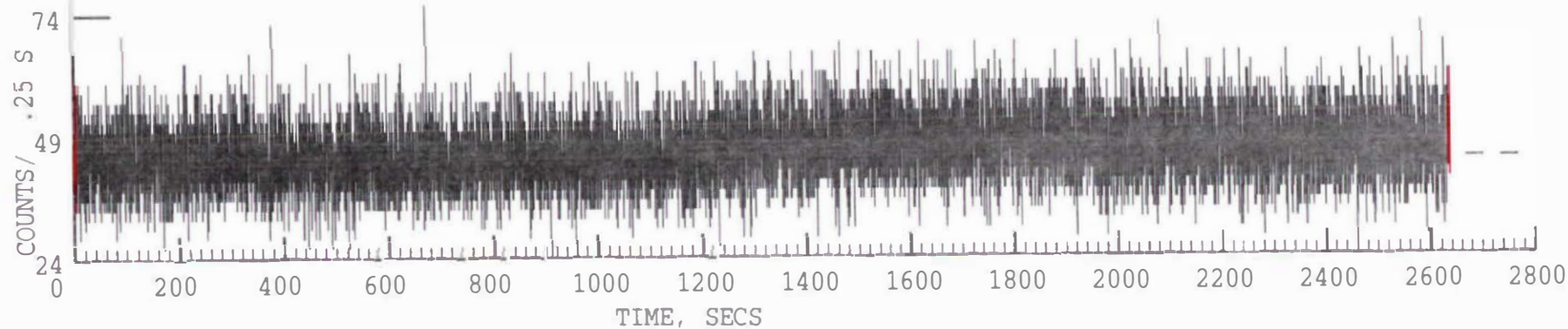
87.398

50-3000 keV

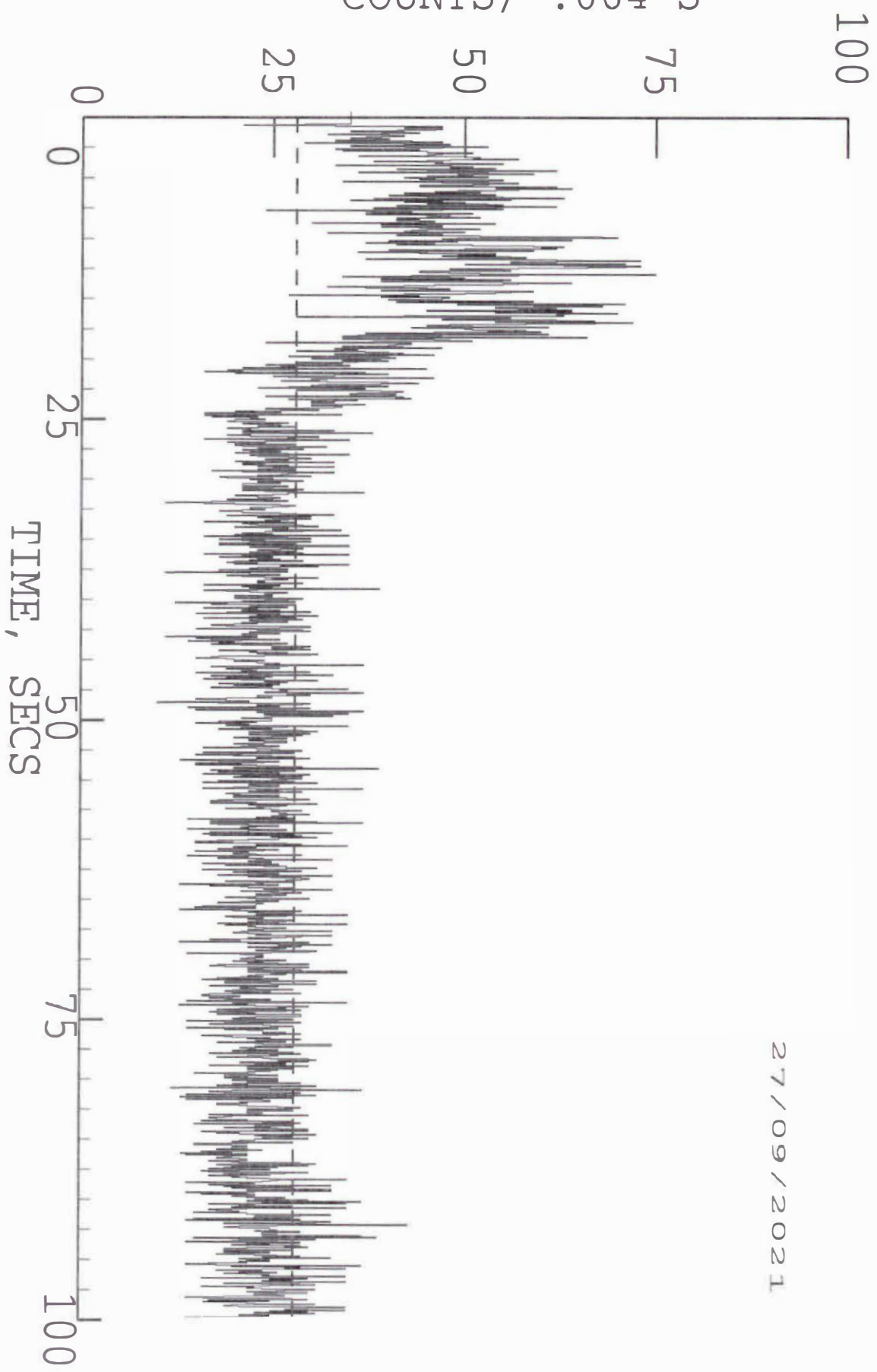


28/09/21

ODYSSEY



KONUS 28/09/21 7234.398 02:00:34.398
50- 200 keV
COUNTS/ .064 S



27/09/2021

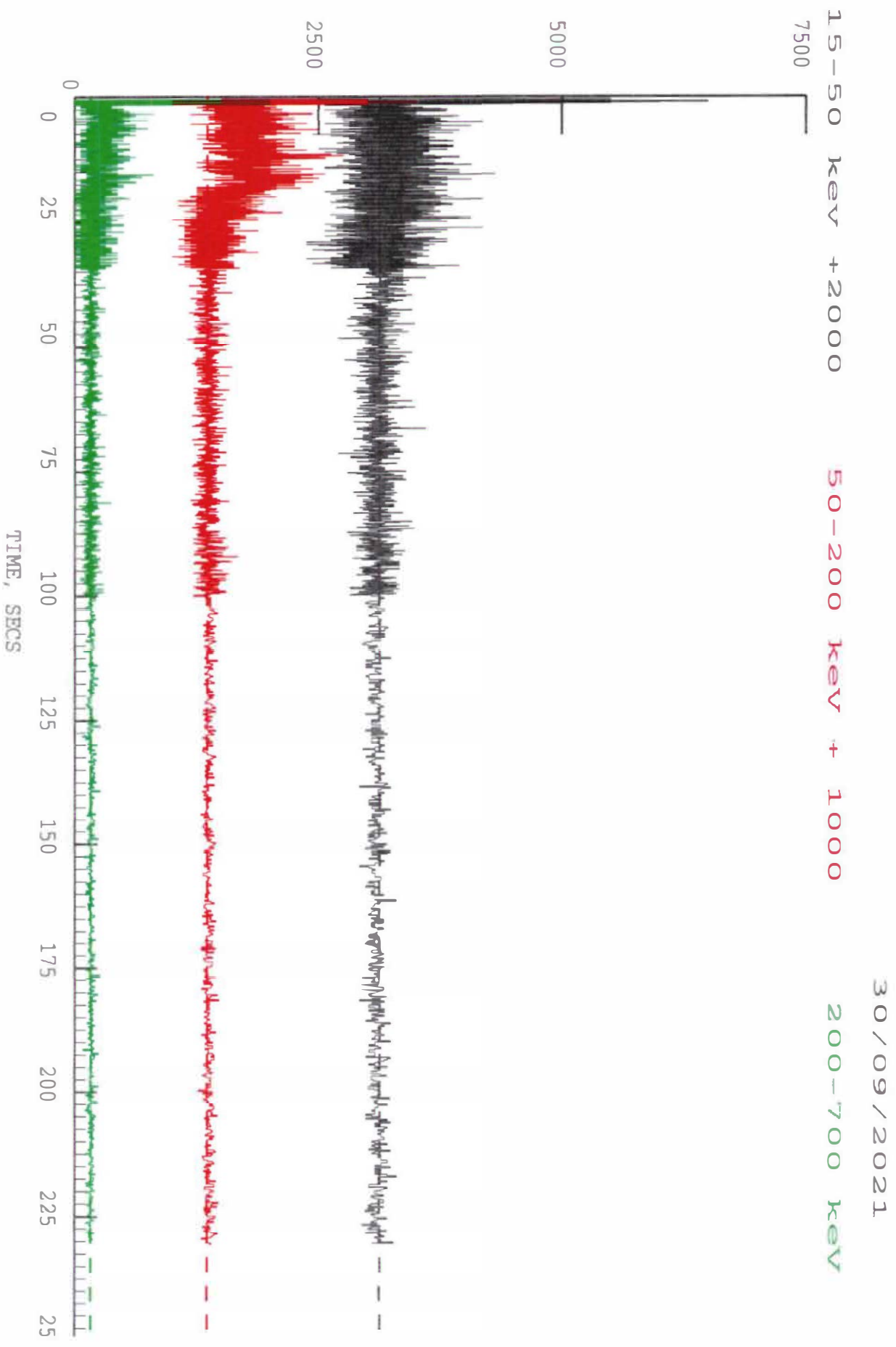
KONUS

28/09/21

7234.000

02:00:34.000

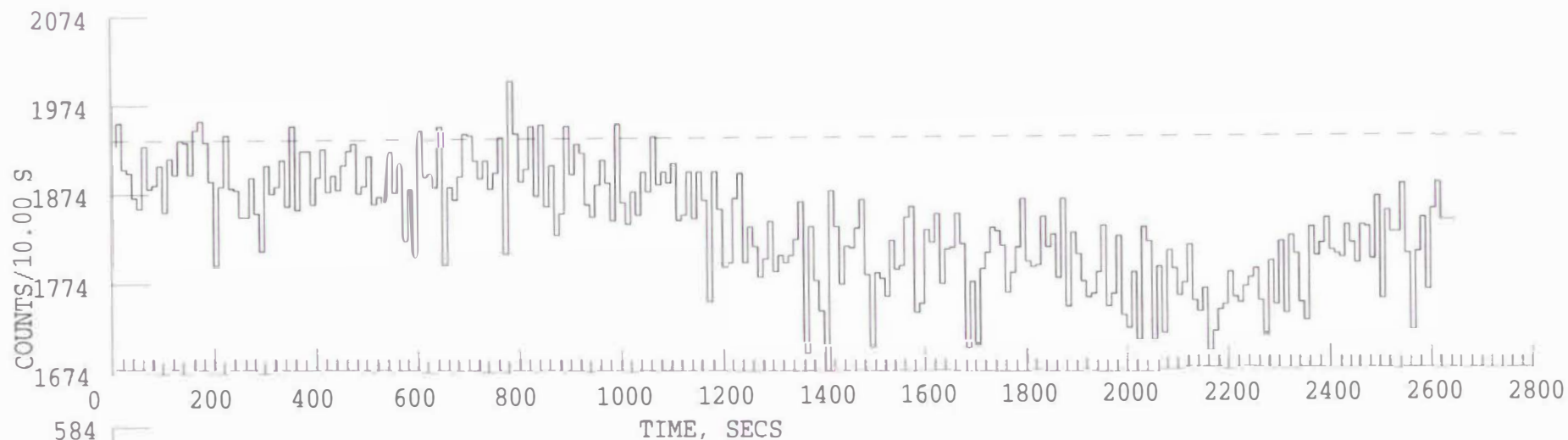
COUNTS/SEC



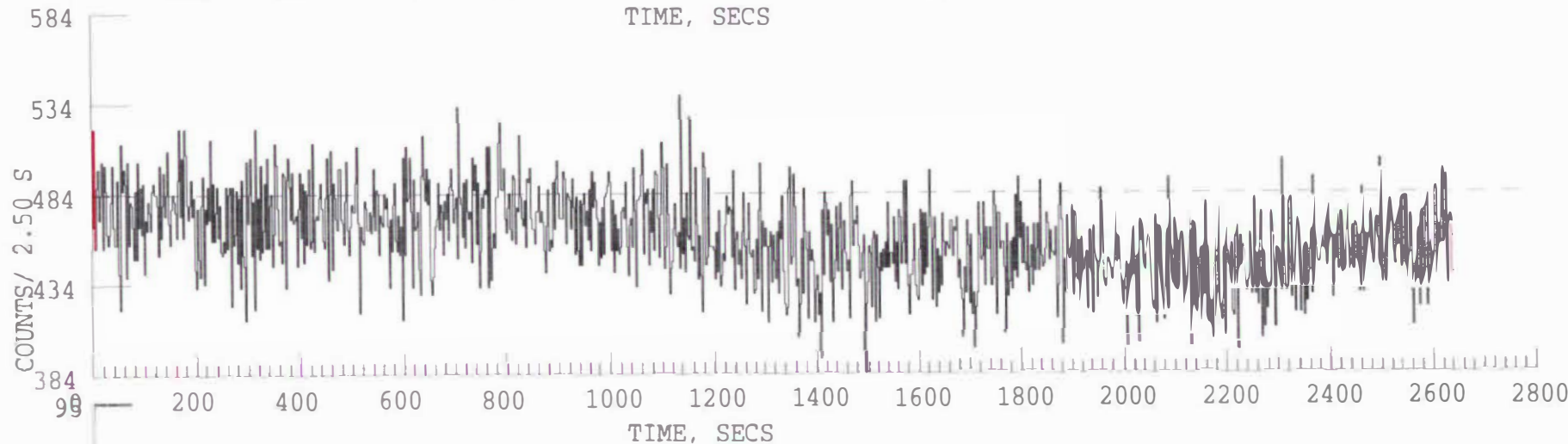
28/09/2021

A

01:38:27.292



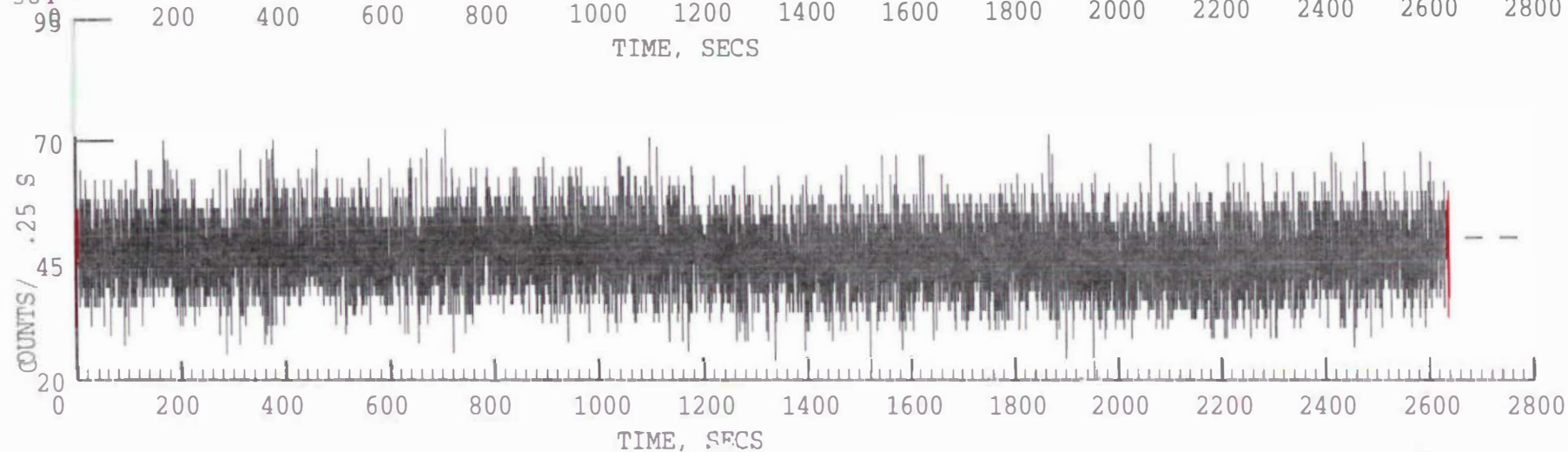
5907.292



50-3000 keV

28/09/21

ODYSSEY



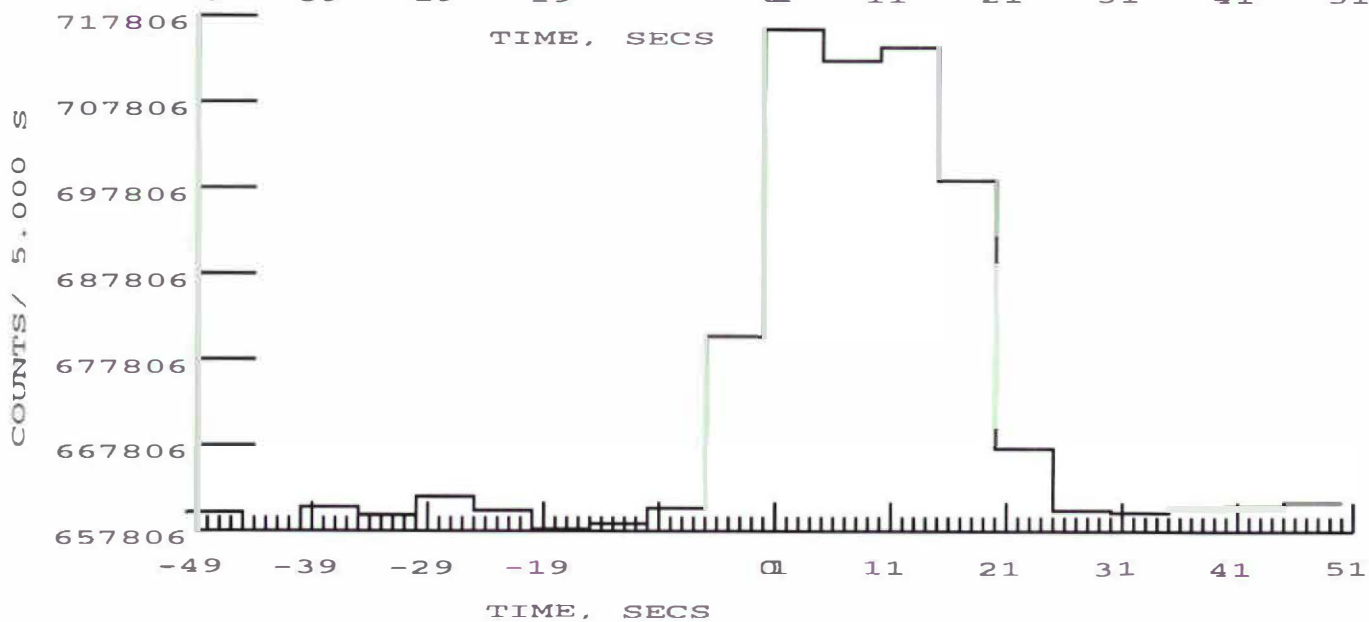
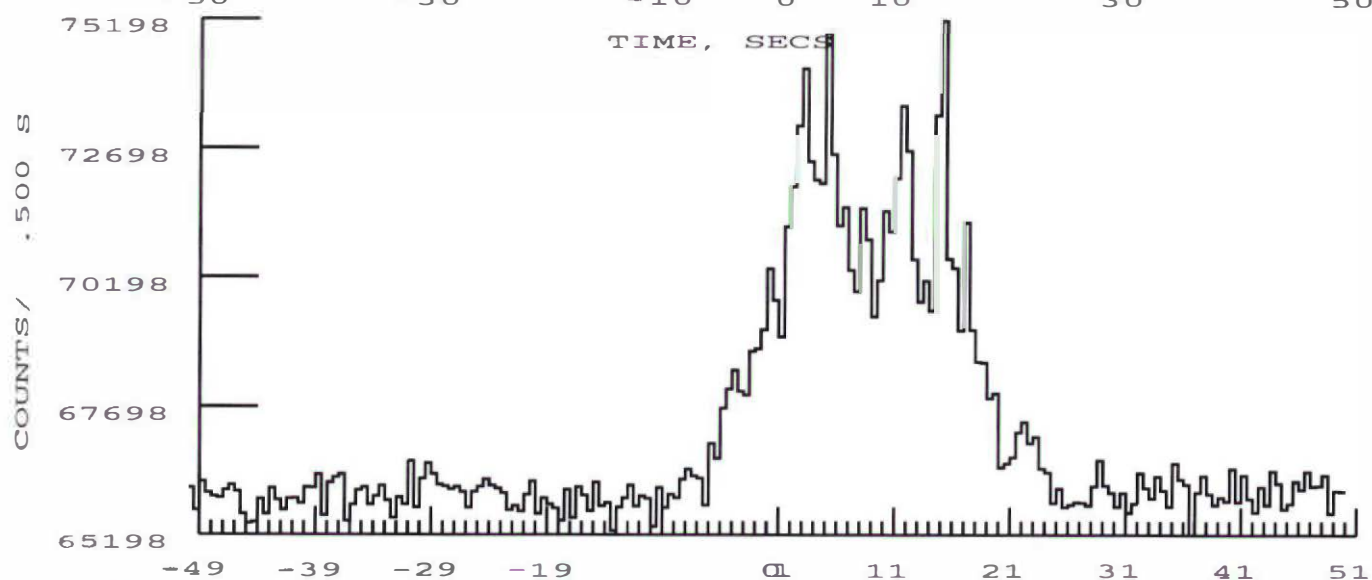
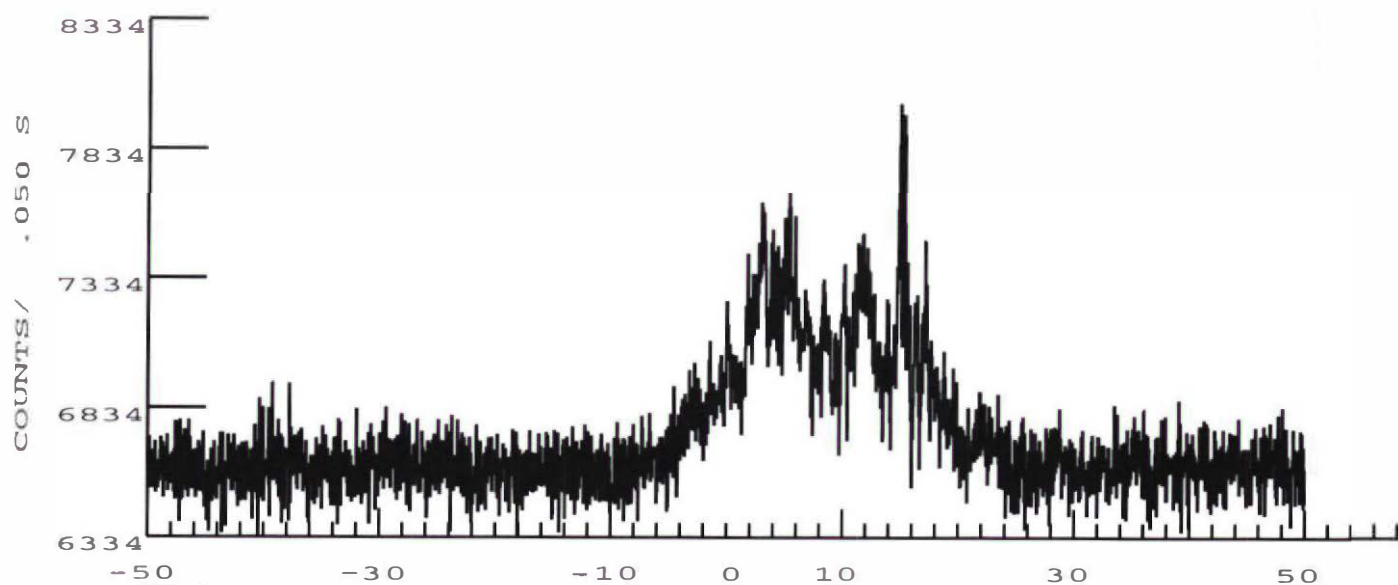
INTEGRAL

28/09/21

7234.000

02:00:34.0

16/11/21



Subject: BAT lightcurve for trigger at 210928_0200

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/28/2021, 4:22 AM

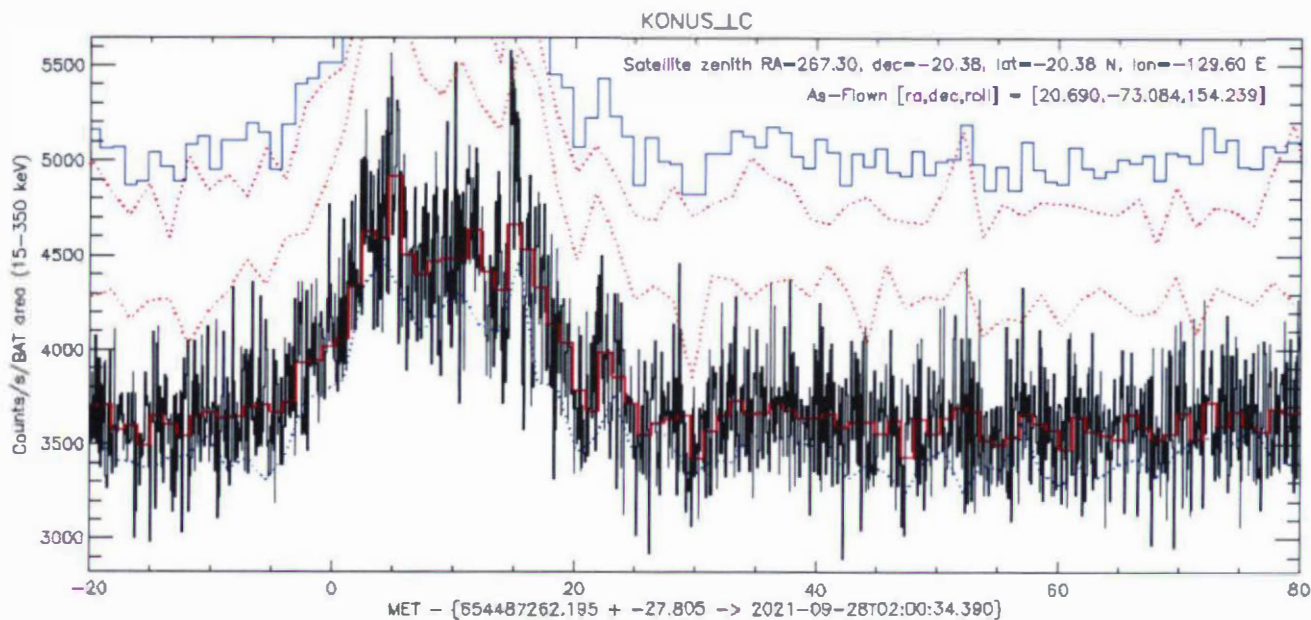
To: gbm-burst-advocate@lists.nasa.gov, mkippen@lanl.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654487262.195
Swift Zenith(RA,dec):      267.30, -20.38
Swift Location(lon,lat,alt): -129.60 E, -20.38 N, 550 km
Time(MET + UTCF -> UT):  654487262.195 + -27.805 -> 2021-09-28T02:00:34.390
YYMMDD_SOD:               210928_07234.390      DOY=271
Obs Sequence Number:      00048747177
Obs Target Name:          SMC J0122.8-7305
Obs Date and Times:       2021-09-28  01:58:54 ~ 02:00:19
Obs Pointing(ra,dec,roll): 20.690, -73.084, 154.24
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
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/tmp/swift/210928_0200.png



Attachments

/tmp/swift/210928_0200_bat64ms_ipn

87.0 KB

/tmp/swift/210928_0200.png

22.2 KB



Subject: Re: [EXTERNAL] BAT lightcurve for trigger at 210928_0200

From: "Palmer, David" via ipn <ipn@ssl.berkeley.edu>

Date: 10/1/2021, 8:29 AM

To: IPN <ipn@ssl.berkeley.edu>

CC: "gbm-burst-advocate@lists.nasa.gov" <gbm-burst-advocate@lists.nasa.gov>, "Kippen, Marc" <mkippen@lanl.gov>, Aaron Tohuvavohu <aaron.tohu@gmail.com>, BAT TEAM <bat_team@bigbang.gsfc.nasa.gov>, David Palmer <dmopalmer@gmail.com>, "Vestrand, W" <vestrand@lanl.gov>

This is the burst that is in ATEL 14948

<https://www.astronomerstelegram.org/?read=14948>

The gamma-ray source Fermi J1623-1752 and X-ray transient Swift J162315.0-175233 are likely GRB 210928A

It was nominally outside of the FOV (84 deg from boresight) but above the horizon.

We were in a short slew at the start of the burst (tiling a region of the SMC, apparently). Slews are blue horizontal lines in the attached plot. The burst is the activity at T~1250 in this plot.

```
swinfo 2021-09-28T02:00:31 -s 245.88_-17.91 -o
Swift Zenith(RA,dec): 267.07, -20.38
Swift Location(lon,lat,alt): -129.81 E, -20.39 N, 550 km
Time(MET + UTCF -> UT): 654487258.805 + -27.805 -> 2021-09-28T02:00:30.999
YYMMDD_SOD: 210928_07230.999 DOY=271
Obs Sequence Number: 00048747177
Obs Target Name: SMC J0122.8-7305
Obs Date and Times: 2021-09-28 01:58:54 - 02:00:19
Obs Pointing(ra,dec,roll): 20.690, -73.084, 154.24
245.88_-17.91_imageloc (boresight_dist, angle): (84, -22)
245.88_-17.91_exposure (cm^2 cos adjusted): 0
245.88_-17.91_altitude: 93 (up)
```

David Palmer palmer@lanl.gov (505) 665-6863
Socially Distant: Work-From-Home (505) 695-9190

On Sep 28, 2021, at 5:22 AM, palmer+automatic_lightcurve@lanl.gov wrote:

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654487262.195
Swift Zenith(RA,dec): 267.30, -20.38
Swift Location(lon,lat,alt): -129.60 E, -20.38 N, 550 km
Time(MET + UTCF -> UT): 654487262.195 + -27.805 -> 2021-09-28T02:00:34.390
YYMMDD_SOD: 210928_07234.390 DOY=271
Obs Sequence Number: 00048747177
Obs Target Name: SMC J0122.8-7305
Obs Date and Times: 2021-09-28 01:58:54 - 02:00:19
Obs Pointing(ra,dec,roll): 20.690, -73.084, 154.24
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

<_tmp_swift_210928_0200_bat64ms_ipn><_tmp_swift_210928_0200.png>

Attachments

orbitplots (dragged).pdf	51.9 KB
--------------------------	---------

Subject: GRB 210928A: Fermi-LAT detection
From: GCN Circulars <gcncirc@capella2.gsfc.nasa.gov>
Date: 10/1/2021, 7:30 AM
To: khurley@ssl.berkeley.edu

TITLE: GCN CIRCULAR
NUMBER: 30912
SUBJECT: GRB 210928A: Fermi-LAT detection
DATE: 21/10/01 14:29:38 GMT
FROM: Magnus Axelsson at Stockholm U. <magaxe@kth.se>

M. Axelsson (KTH & Stockholm Univ.), N. Di Lalla (Stanford Univ.), E. Bissaldi (Politecnico & INFN Bari), N. Omodei (Stanford Univ.), C. C. Cheung (NRL) and G. La Mura (LIP) report on behalf of the Fermi-LAT Collaboration:

On September 28th, 2021, Fermi-LAT detected high-energy emission from GRB 210928A, which was also detected by Fermi GBM (trigger 654487236 / 210928084). This source has previously been reported as the Fermi-LAT transient J1623-1752 (Rani et al., ATel #14939) and Swift X-ray transient J162315.0-175233 (Page et al.; ATel #14945). Further analysis shows that the LAT source is consistent with being a GRB, making the Swift transient the afterglow candidate.

The best LAT on-ground location is found to be

RA, Dec = 245.88, -17.91 (degrees, J2000)

with an error radius of 0.15 deg (90% containment, statistical error only). This location is consistent with the Swift X-ray transient.

The position was 16 deg from the LAT boresight at the time of the GBM trigger:

T0 = 02:00:31 UT.

The data from the Fermi-LAT show a significant increase in the event rate after the trigger that is spatially correlated with the GBM emission with high significance. The photon flux above 100 MeV in the time interval 0-1000 s after the trigger is $8.4 (-/+ 1.5) \times 10^{-6}$ ph/cm²/s.

The estimated photon index above 100 MeV is -2.2 (-/+ 0.2).

The highest-energy photon is a 6 GeV event which is observed ~50 s after the trigger.

The Fermi-LAT point of contact for this burst is Magnus Axelsson (magaxe@kth.se).

The Fermi-LAT is a pair conversion telescope designed to cover the energy band from 20 MeV to greater than 300 GeV. It is the product of an international collaboration between NASA and DOE in the U.S. and many scientific institutions across France, Italy, Japan and Sweden.

Subject: BAT lightcurve for trigger at 210928_1816

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/28/2021, 3:07 PM

To: bat_team@bigbang.gsfc.nasa.gov, gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com, vestrand@lanl.gov, aaron.tohu@gmail.com, palmer+automatic_lightcurve@lanl.gov, mkippen@lanl.gov, ipn@ssl.berkeley.edu

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

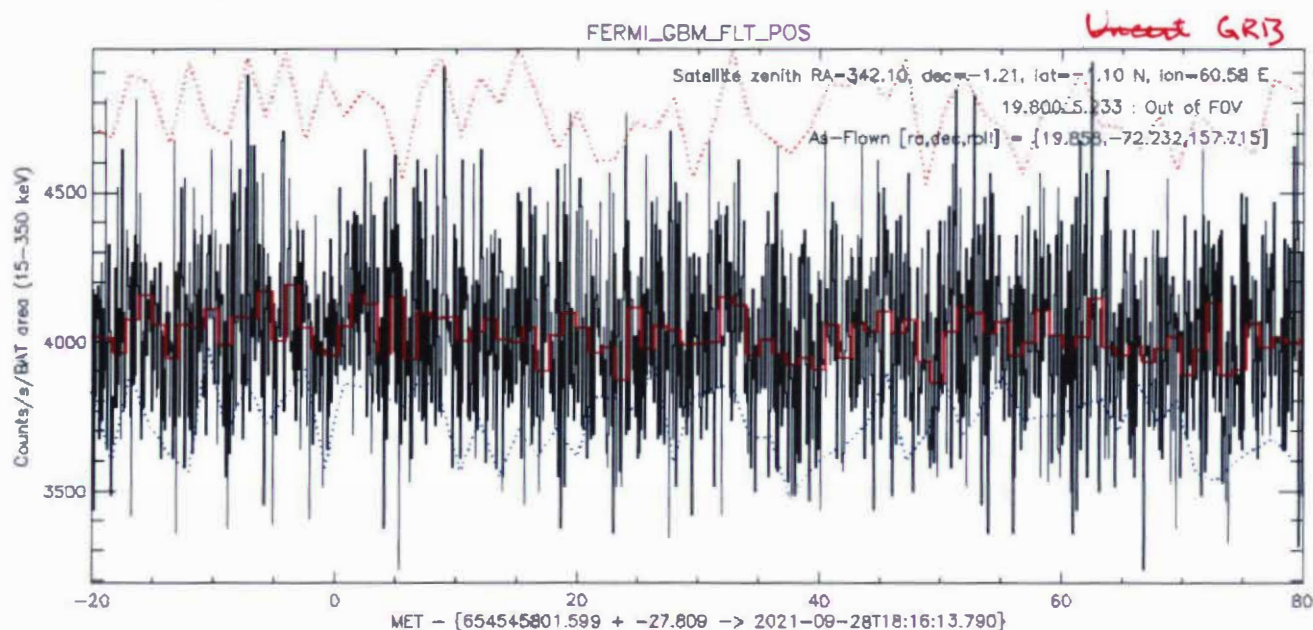
```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654545801.599 -s 19.800_5.233
Swift Zenith(RA,dec):      342.10, -1.21
Swift Location(lon,lat,alt): 60.58 E, -1.10 N, 554 km
Time(MET + UTCF -> UT):   654545801.599 + -27.809 -> 2021-09-28T18:16:13.790
YYMMDD_S00:               210928_65773.790      DOY=271
Obs Sequence Number:      00048788176
Obs Target Name:          SMC J0119.4-7214
Obs Date and Times:       2021-09-28 18:15:26 - 18:16:54
Obs Pointing(ra,dec,roll): 19.858, -72.232, 157.72
19.800_5.233_imageloc (boresight_dist, angle): (77, 112)
19.800_5.233_exposure (cm2 cos adjusted): 0
19.800_5.233_altitude: 75 (up)
```

SPI N6

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

02h 55m 26s 22° 39' 36"

—/tmp/swift/210928_1816.png—



—Attachments—

/tmp/swift/210928_1816.png

19.1 KB

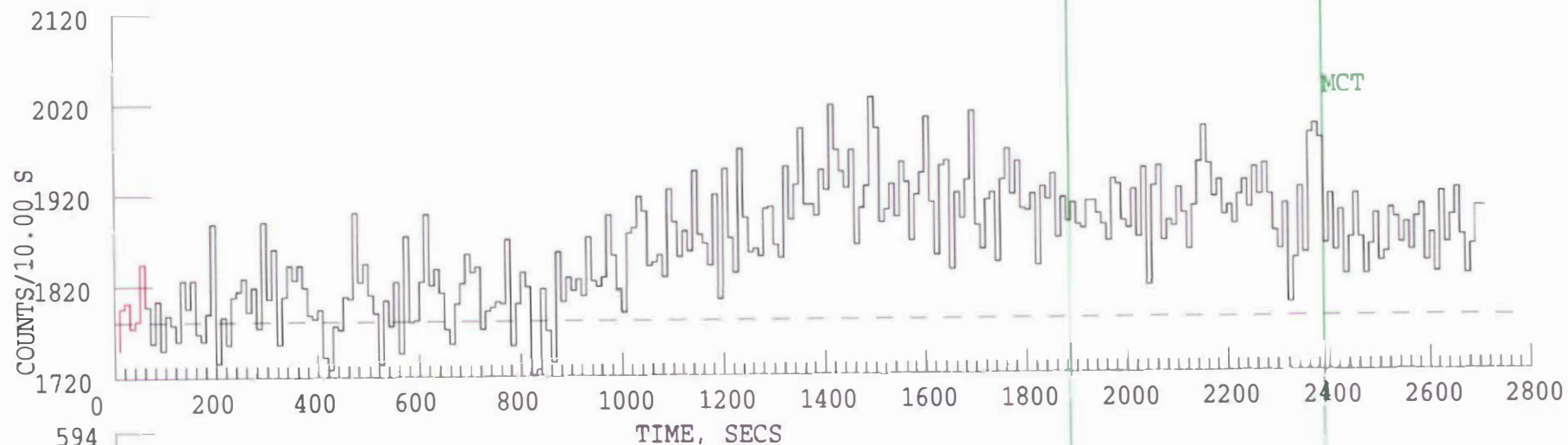
/tmp/swift/210928_1816_bat64ms_ipn

84.0 KB

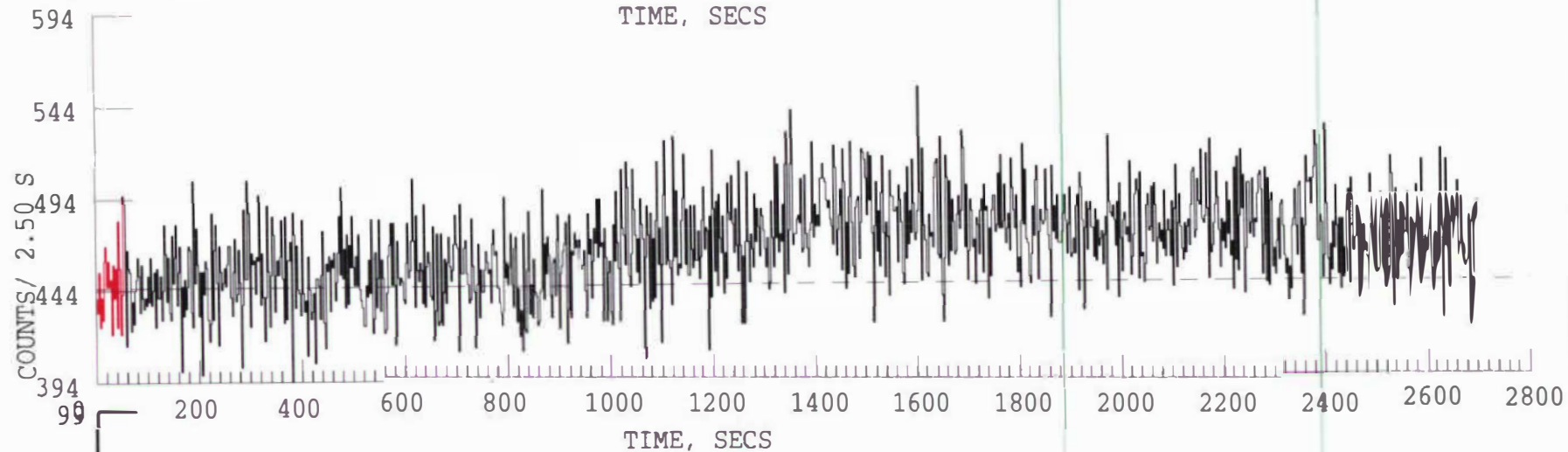
B

17/11/2021

17:53:26.247



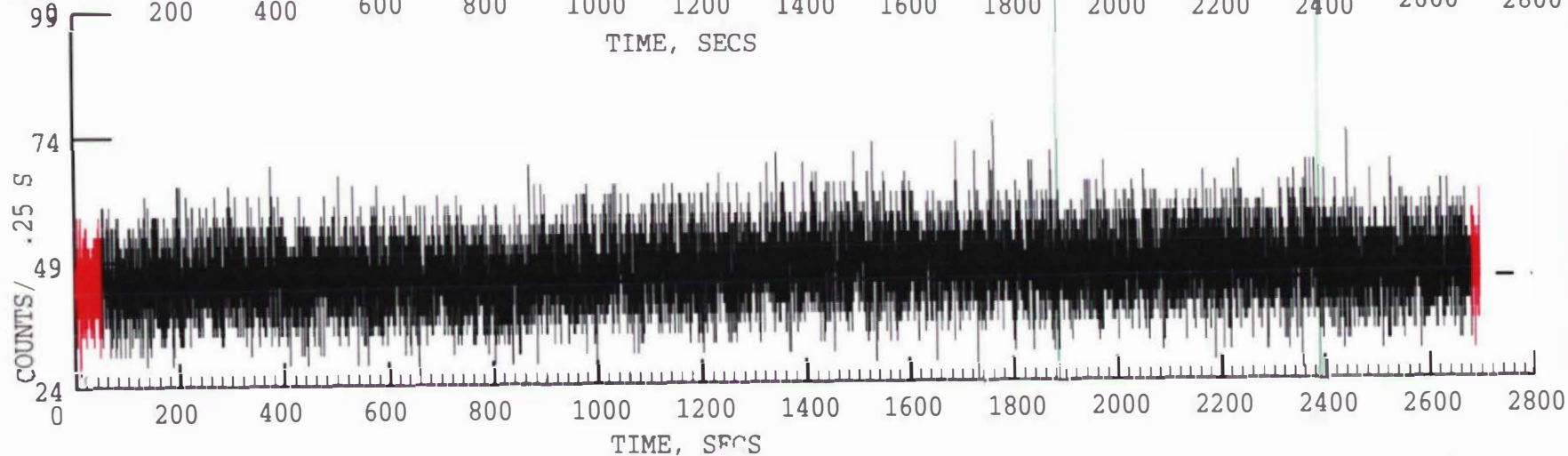
64406.247



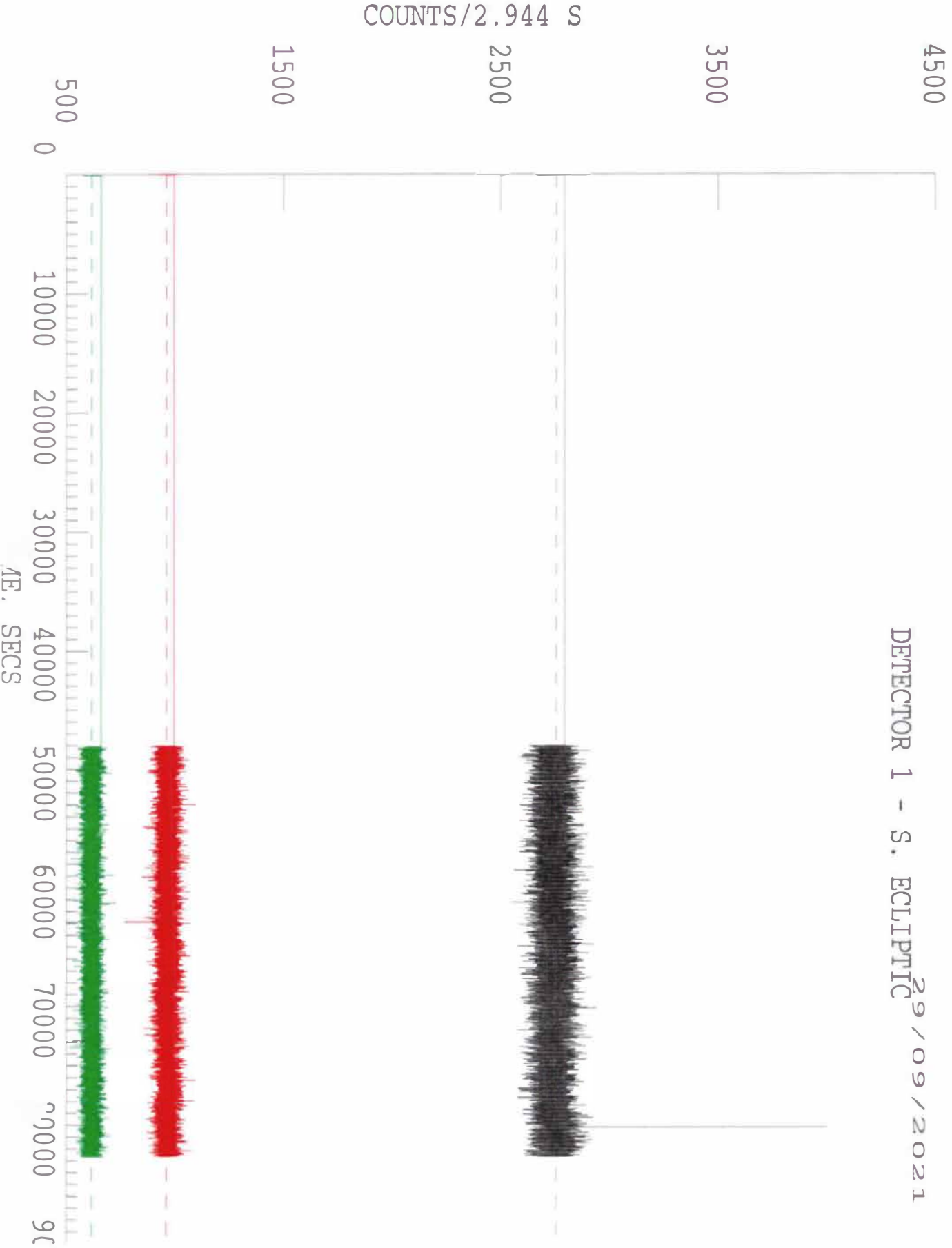
28/09/21

50-3000 keV

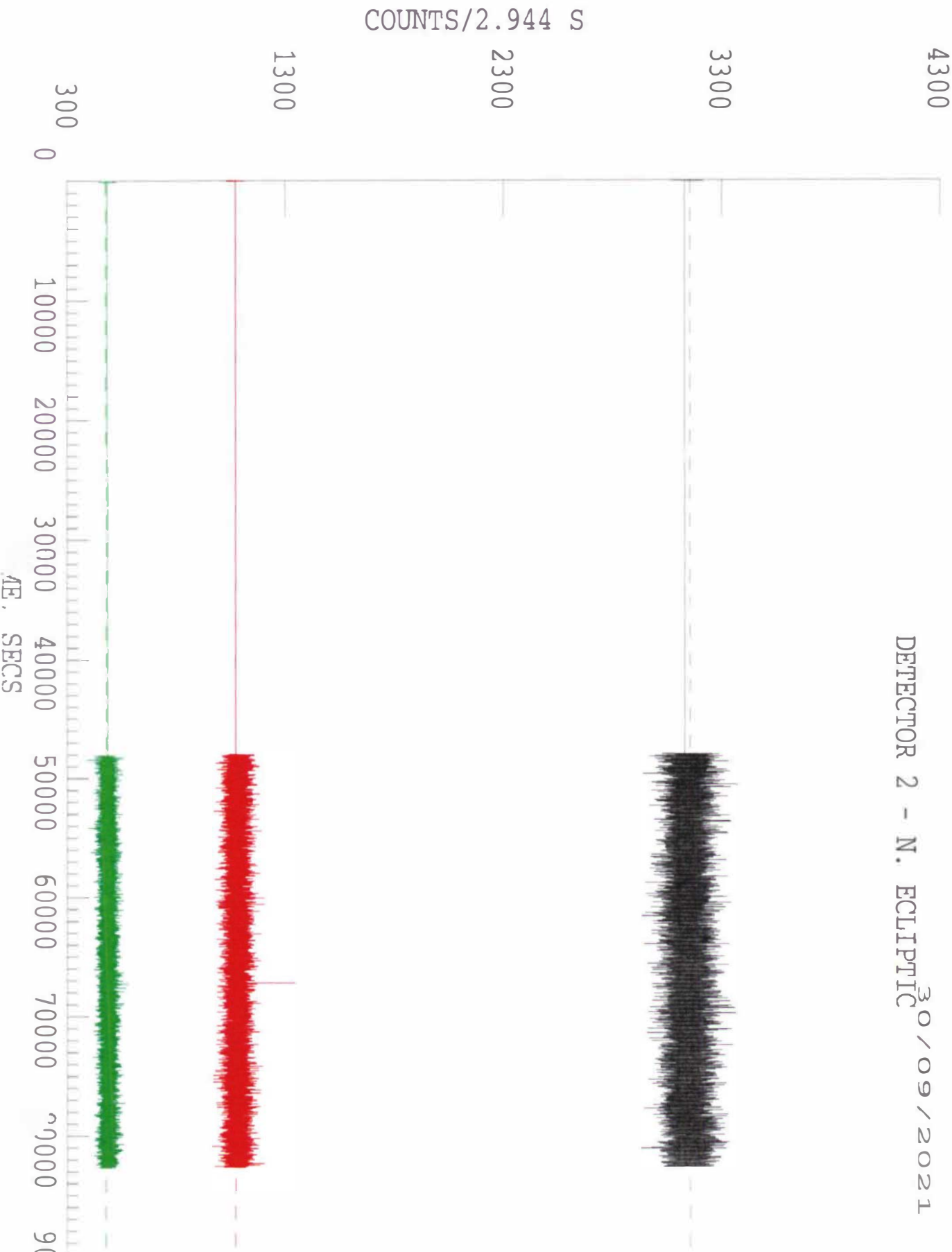
ODYSSEY



10- 50 keV 50- 200 keV 200- 750 keV

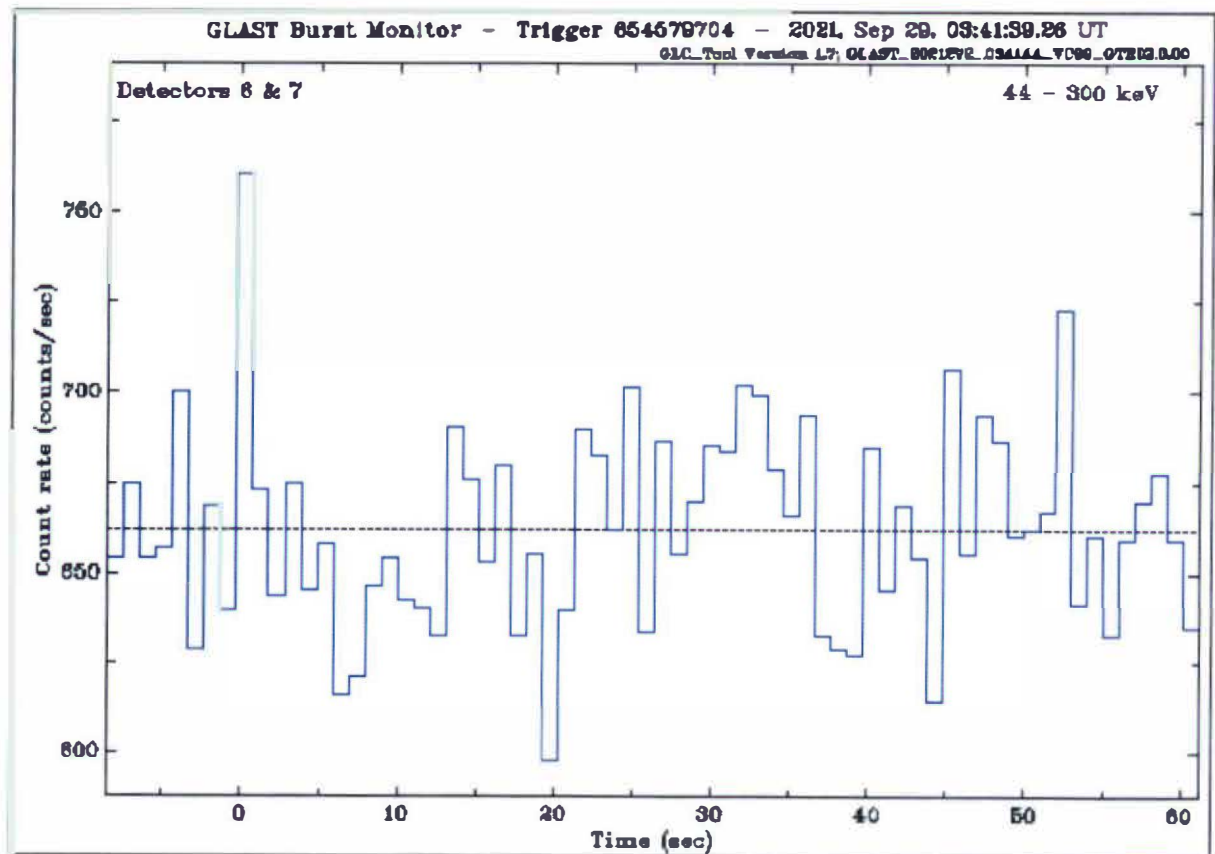


10- 50 keV50- 200 keV200- 750 keV



317.8 12.3 14

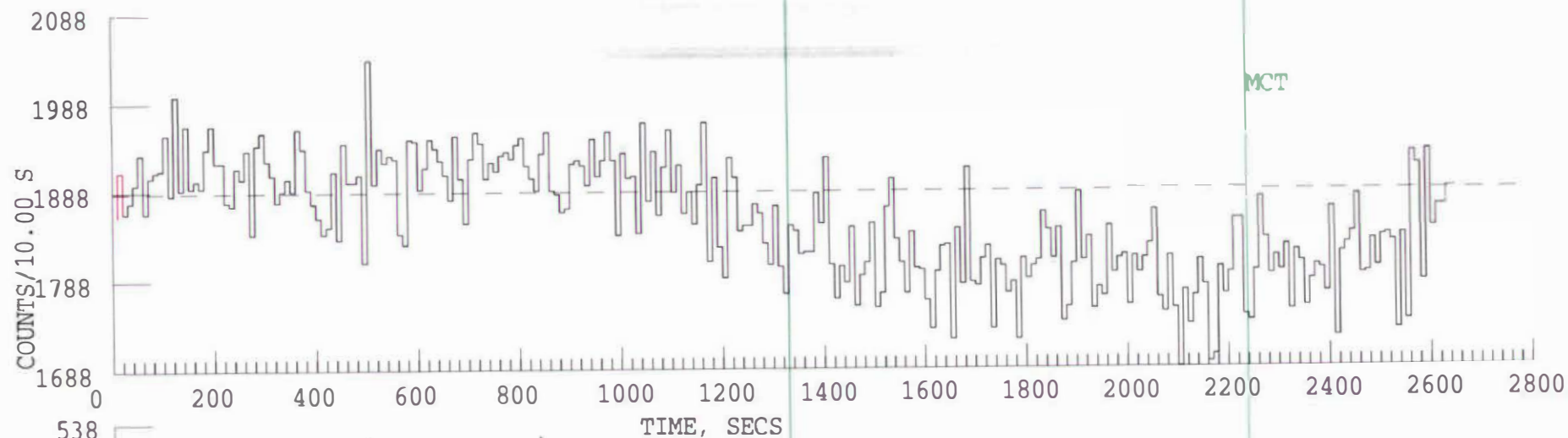
SPI N/O



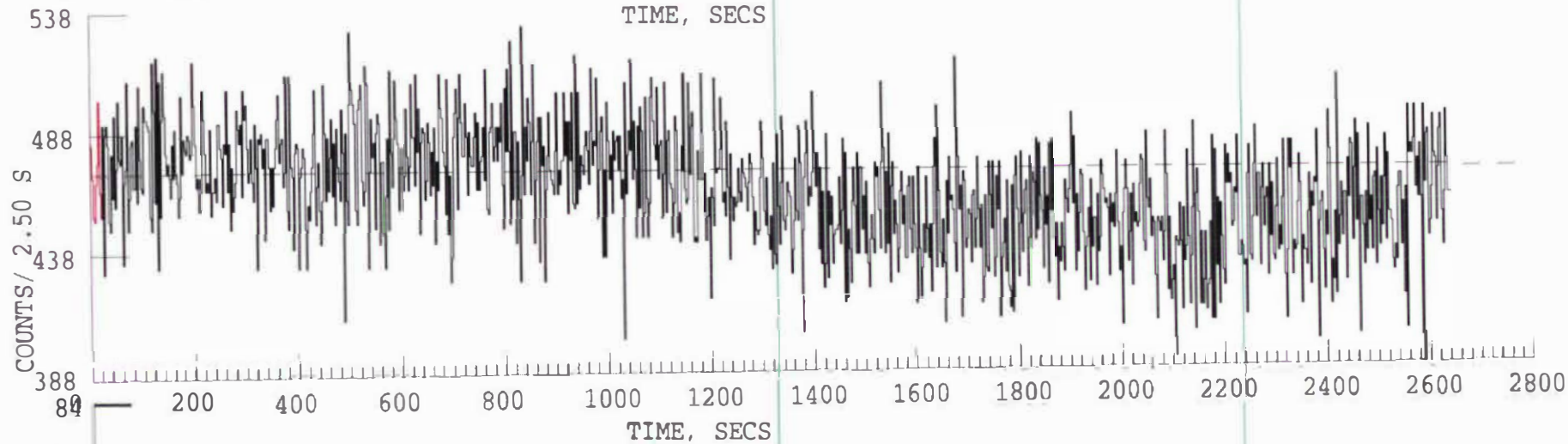
A

17/11/2021

03:19:25.650



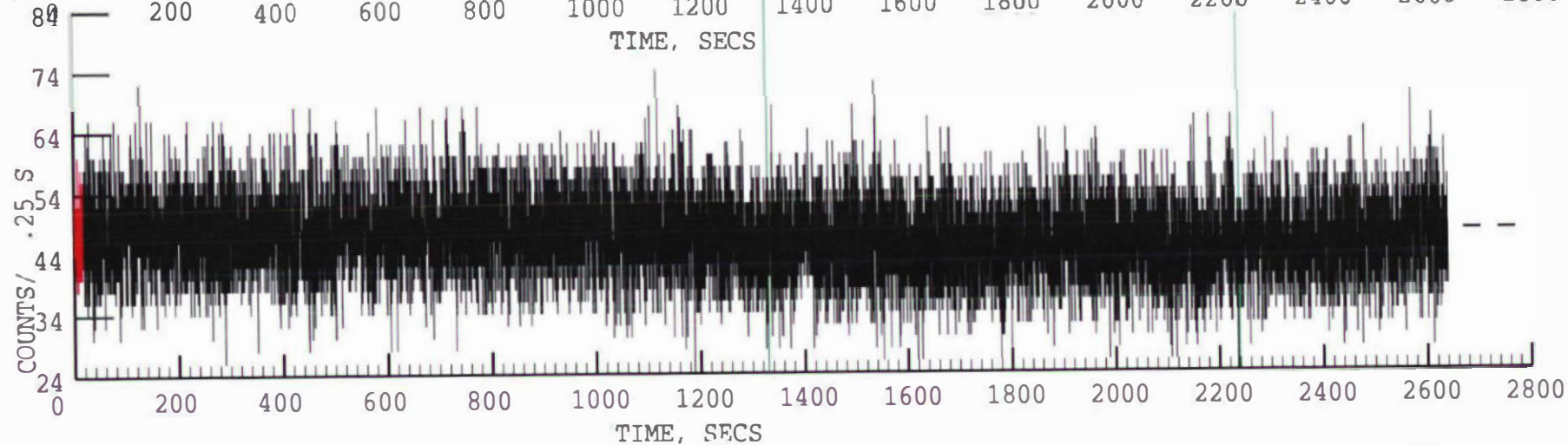
11965.650



50-3000 keV

29/09/21

ODYSSEY



Subject: BAT lightcurve for trigger at 210929_0341

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/29/2021, 12:44 AM

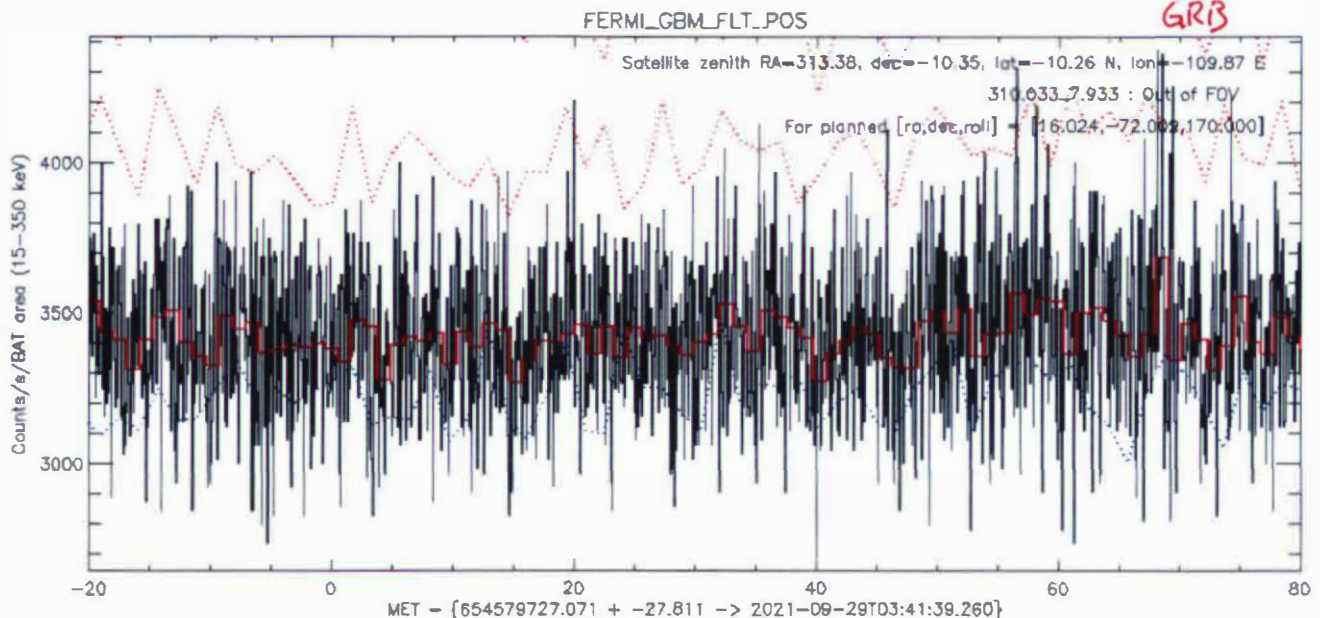
To: mkippen@lanl.gov, aaron.tohu@gmail.com, gbm-burst-advocate@lists.nasa.gov, ipn@ssl.berkeley.edu, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov, vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654579727.071 -s 310.033_7.933
Swift Zenith(RA,dec):      313.38, -10.35
Swift Location(lon,lat,alt): -109.87 E, -10.26 N, 552 km
Time(MET + UTCF -> UT):   654579727.071 + -27.811 -> 2021-09-29T03:41:39.260
YYMMDD_SOD:               210929_13299.260      DOY=272
Obs Sequence Number:      00050051159
Obs Target Name:          SNR 0102-72.3 (planned)
Obs Date and Times:       2021-09-29 03:31:32 - 03:55:32
Obs Pointing(ra,dec,roll): 16.024, -72.009, 170.00
310.033_7.933_imageloc (boresight_dist, angle): (90, 35)
310.033_7.933_exposure (cm2 cos adjusted): 0
310.033_7.933_altitude: 94 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

—/tmp/swift/210929_0341.png



—Attachments:

/tmp/swift/210929_0341_bat64ms_ipn

87.1 KB

/tmp/swift/210929_0341.png

19.8 KB

BAT lightcurve for trigger at 210929_1723

Subject: BAT lightcurve for trigger at 210929_1723

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/29/2021, 2:04 PM

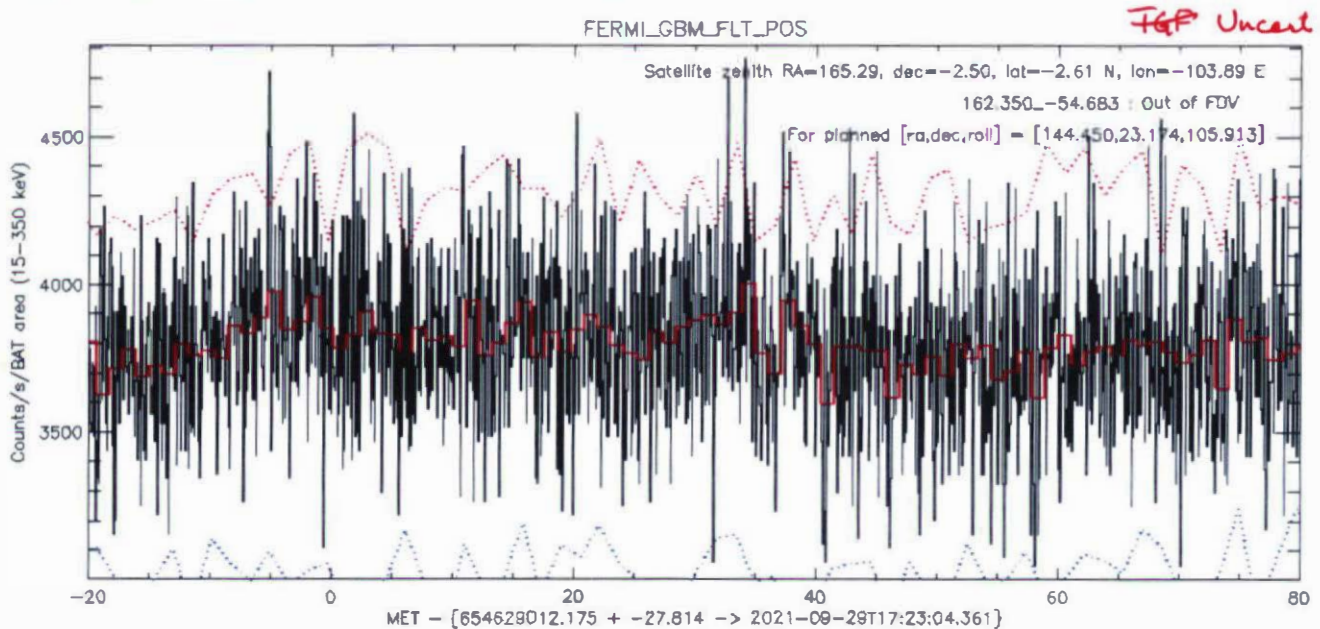
To: palmer+automatic_lightcurve@lanl.gov, dmopalmer@gmail.com, mkippen@lanl.gov, ipn@ssl.berkeley.edu, vestrand@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654629012.175 -s 162.350_-54.683
Swift Zenith(RA,dec):      165.29, -2.50
Swift Location(lon,lat,alt): -103.89 E, -2.61 N, 544 km
Time(MET + UTCF -> UT):    654629012.175 + -27.814 -> 2021-09-29T17:23:04.361
YYMMDD_SOD:                210929_62584.361      DOY=272
Obs Sequence Number:        00049886006
Obs Target Name:             PTF10YGU-HOST (planned)
Obs Date and Times:          2021-09-29 17:12:32 - 17:28:32
Obs Pointing(ra,dec,roll):   144.450, 23.174, 105.91
162.350_-54.683_imageloc (boresight_dist, angle): (79, -26)
162.350_-54.683_exposure (cm2 cos adjusted): 0
162.350_-54.683_altitude: 61 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210929_1723.png



Attachments:

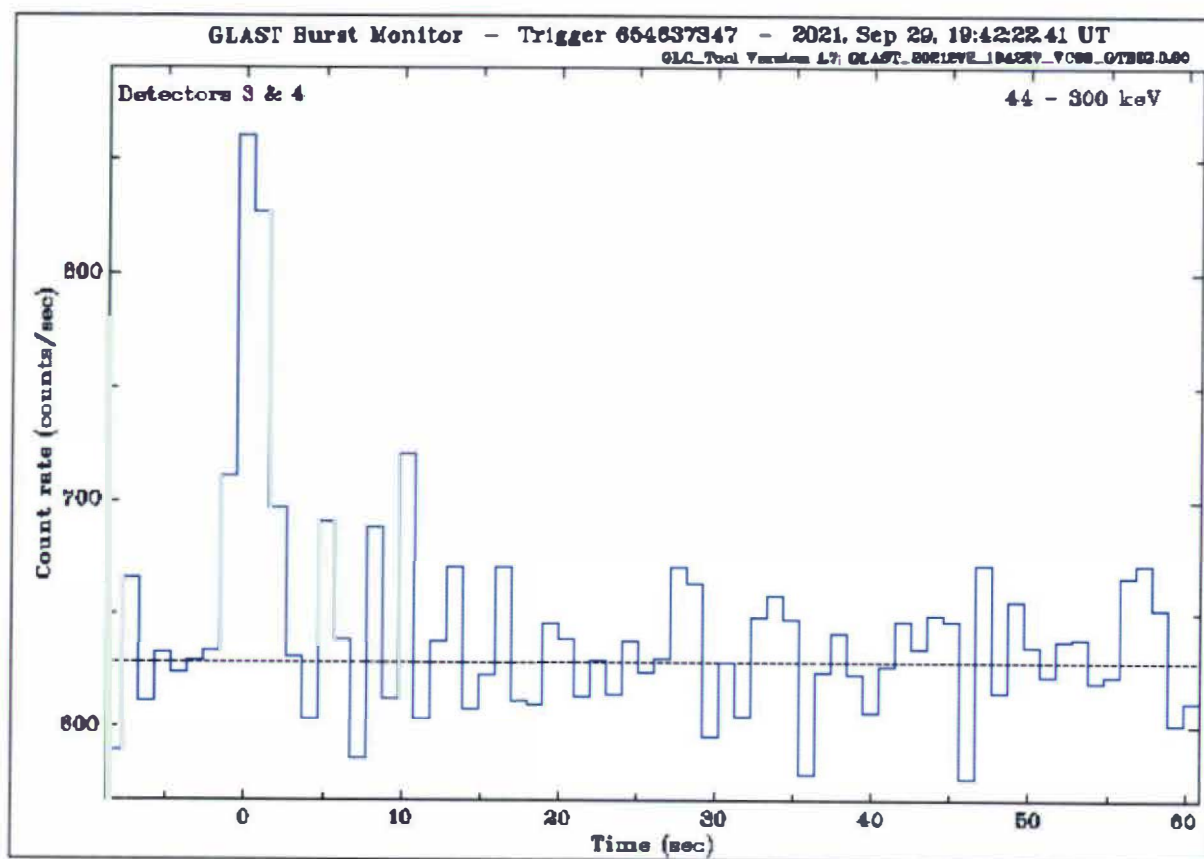
/tmp/swift/210929_1723.png

17.6 KB

/tmp/swift/210929_1723_bat64ms_ipn

87.1 KB

262.9 2.4 13.3



13

17/11/2021

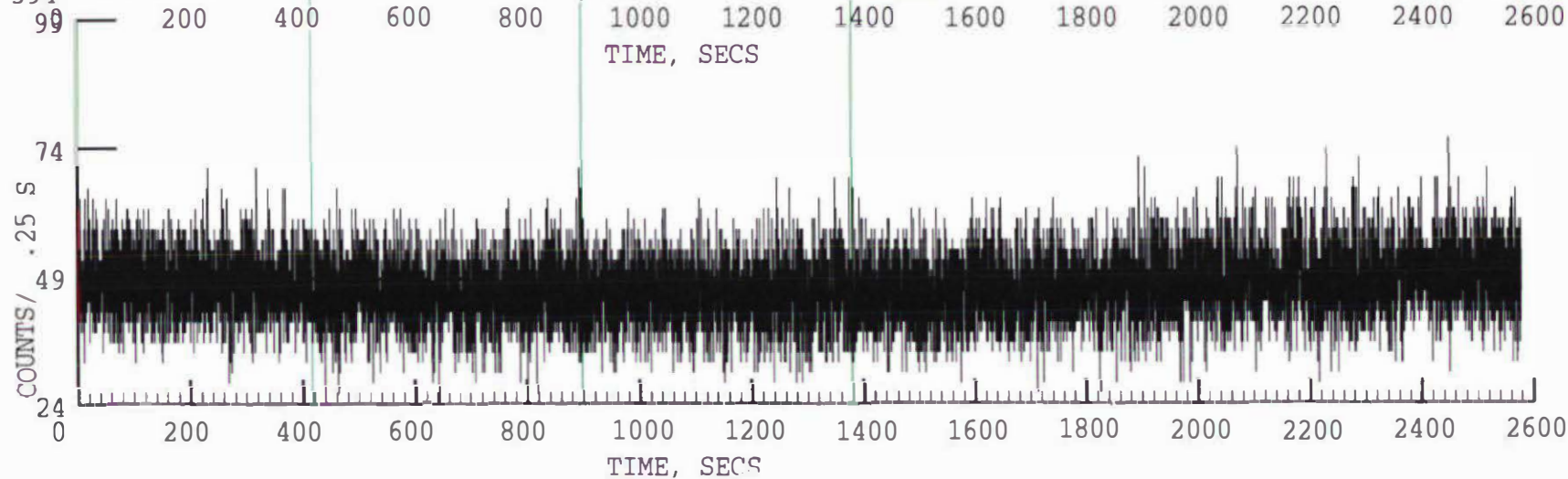
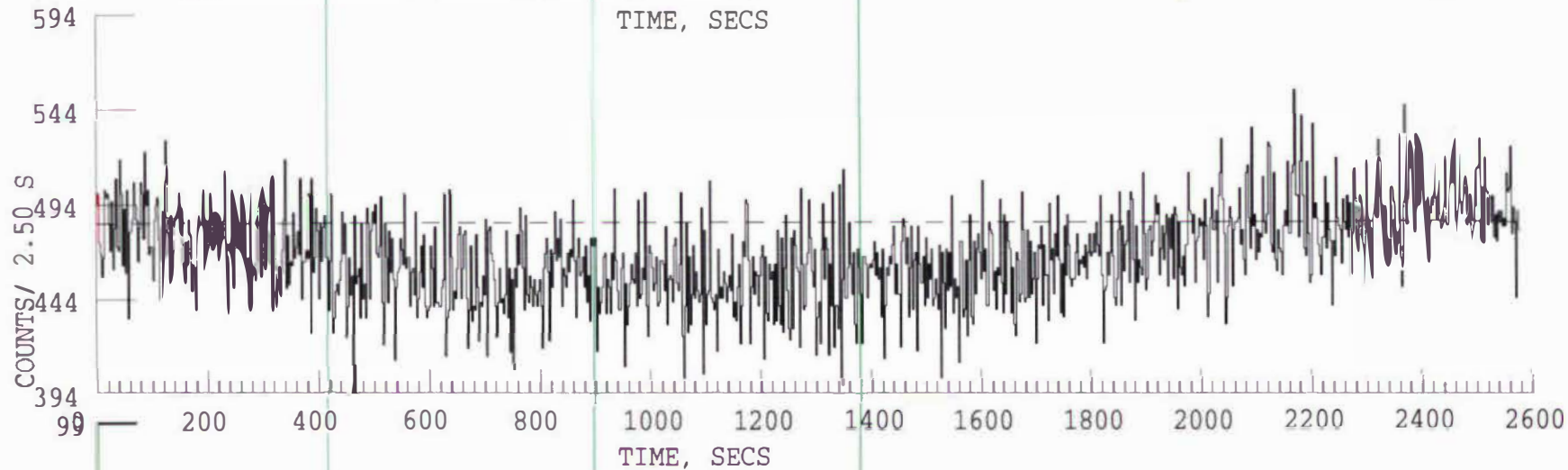
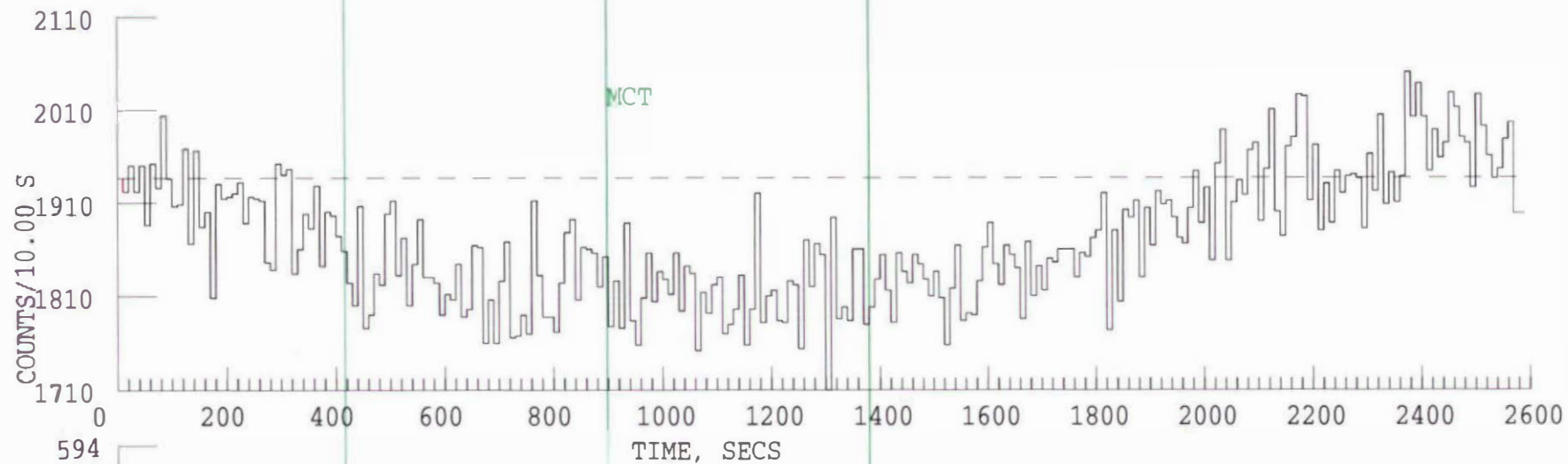
19:20:24.626

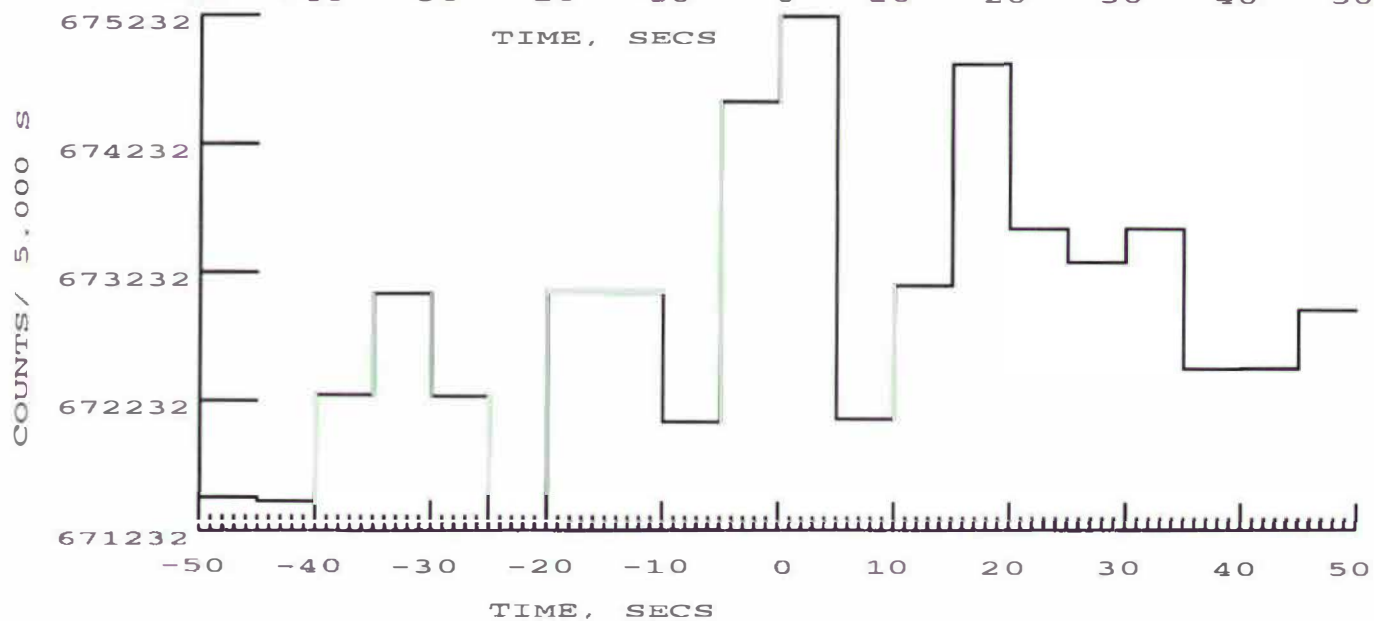
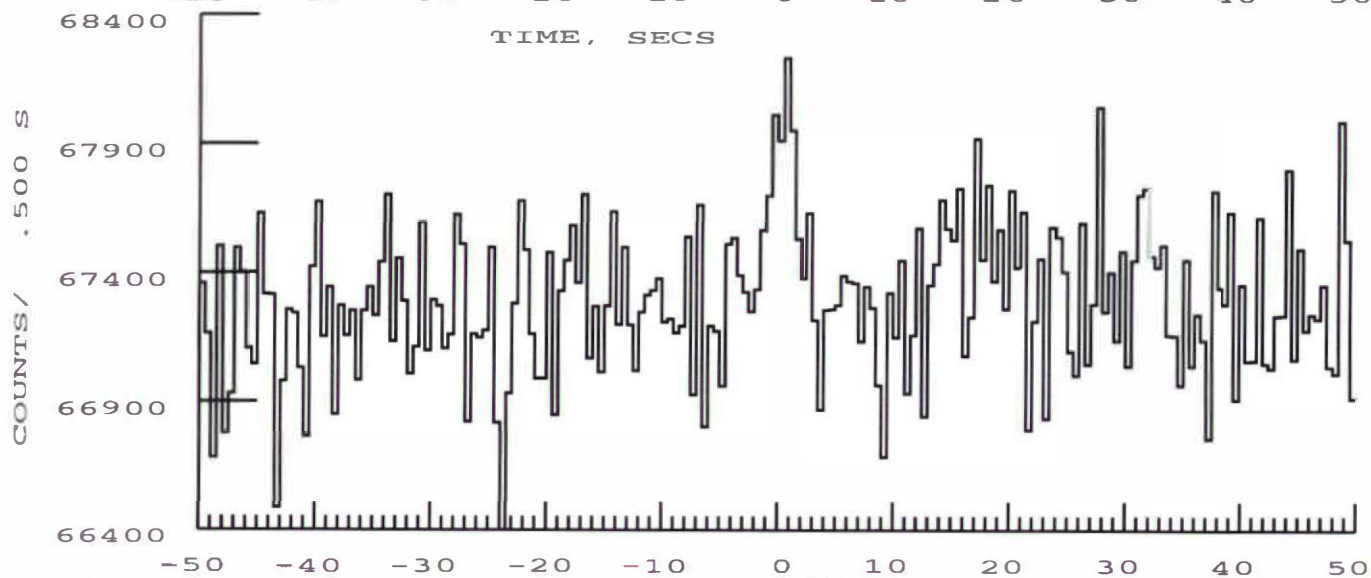
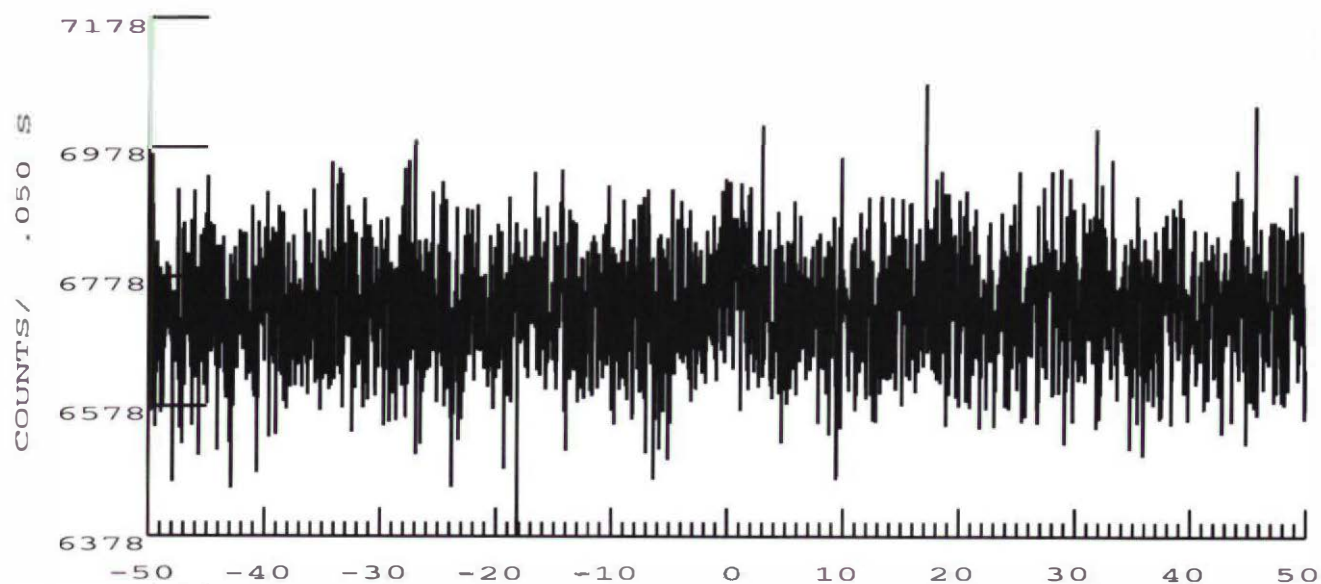
69624.626

29/09/21

ODYSSEY

50-3000 keV





Subject: BAT lightcurve for trigger at 210929_1942

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/29/2021, 4:07 PM

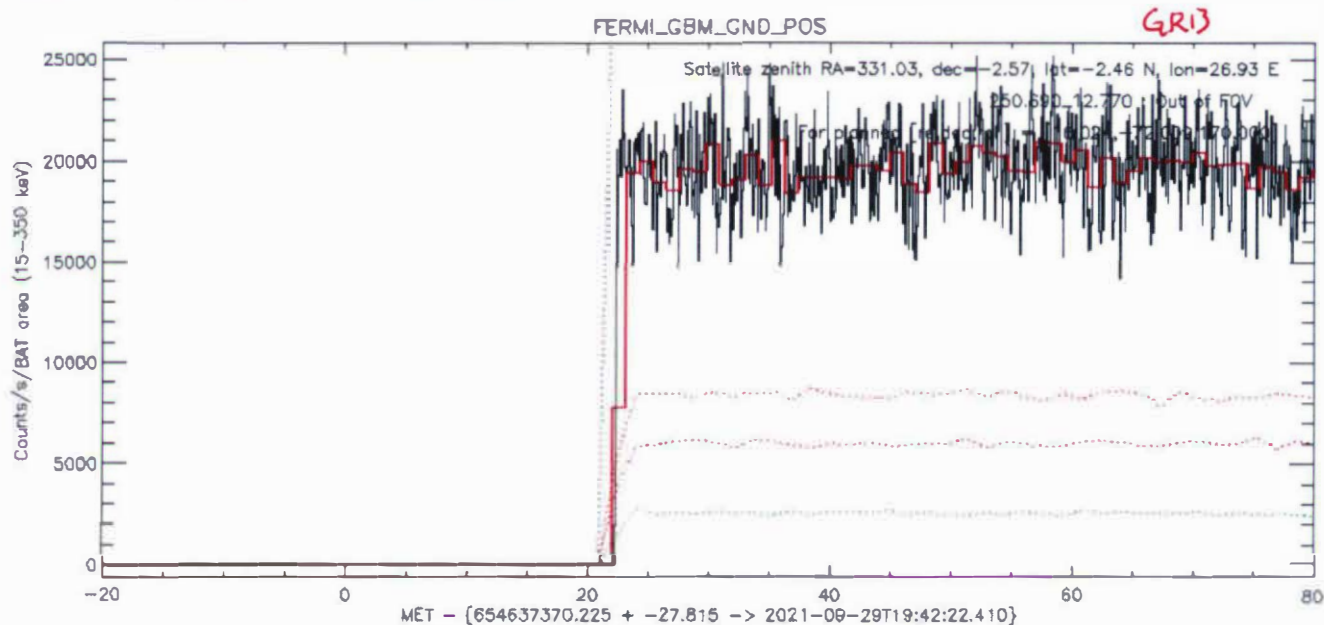
To: aaron.tohu@gmail.com, vestrand@lanl.gov, mkippen@lanl.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, gbm-burst-advocate@lists.nasa.gov, dmopalmer@gmail.com, bat_team@bigbang.gsfc.nasa.gov

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654637370.225 -s 250.690_12.770
Swift Zenith(RA,dec):      331.03, -2.57
Swift Location(lon,lat,alt): 26.93 E, -2.46 N, 553 km
Time(MET + UTCF -> UT):   654637370.225 + -27.815 -> 2021-09-29T19:42:22.410
YYMMDD_SOD:               210929_70942.410      DOY=272
Obs Sequence Number:      00050051159
Obs Target Name:          SNR 0102-72.3 (planned)
Obs Date and Times:       2021-09-29 19:40:32 - 19:49:32
Obs Pointing(ra,dec,roll): 16.024, -72.009, 170.00
250.690_12.770_imageloc (boresight_dist, angle): (113, -20)
250.690_12.770_exposure (cm2 cos adjusted): 0
250.690_12.770_altitude: 32 (up)
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

—/tmp/swift/210929_1942.png—



—Attachments—

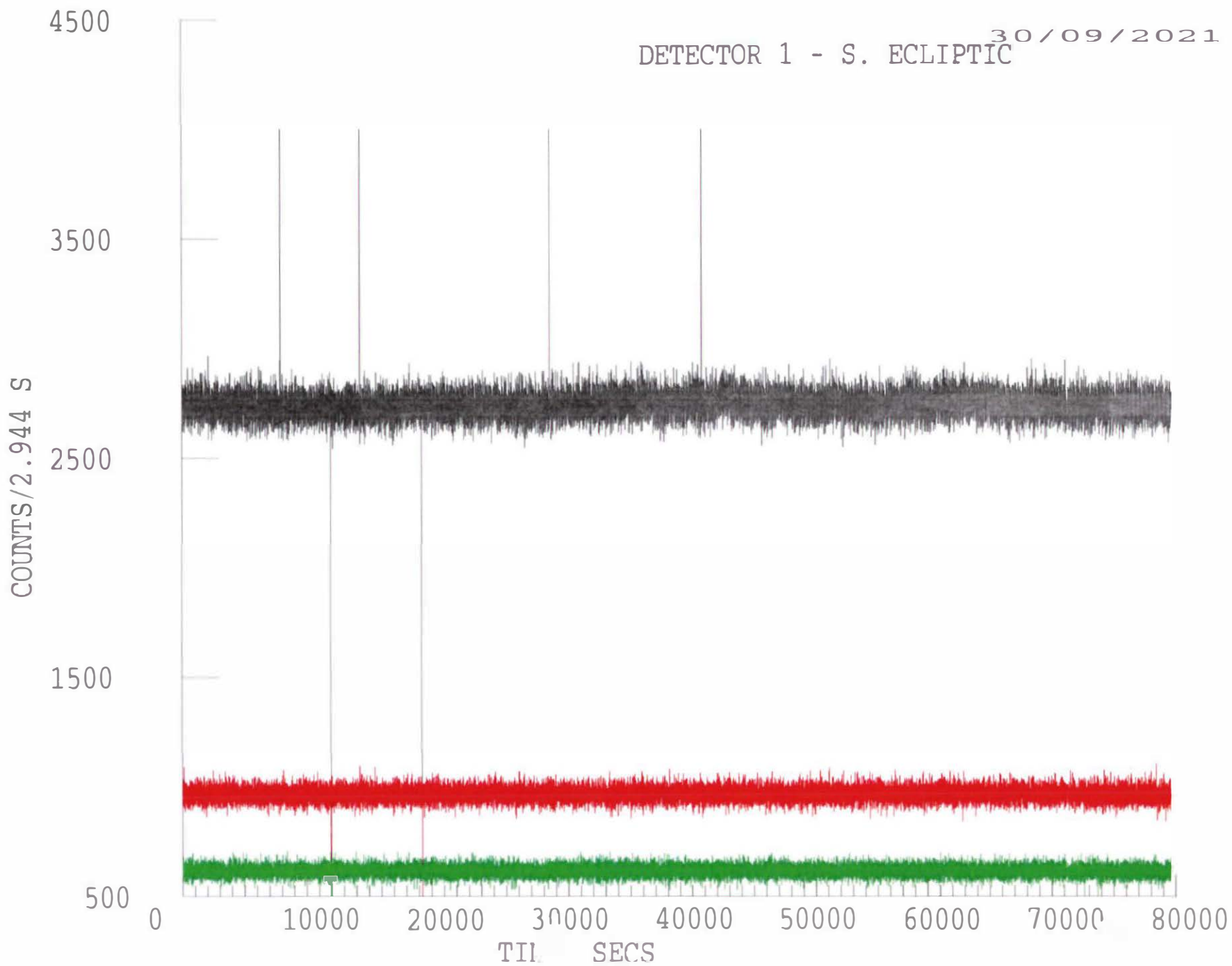
/tmp/swift/210929_1942.png	13.3 KB
/tmp/swift/210929_1942_bat64ms_ipn	87.0 KB

KONUS 10- 50 keV 50- 200 keV 200- 750 keV 44.784 v02

30/09/2021

30/09/2021

DETECTOR 1 - S. ECLIPTIC



KONUS

30/09/2021

44.784

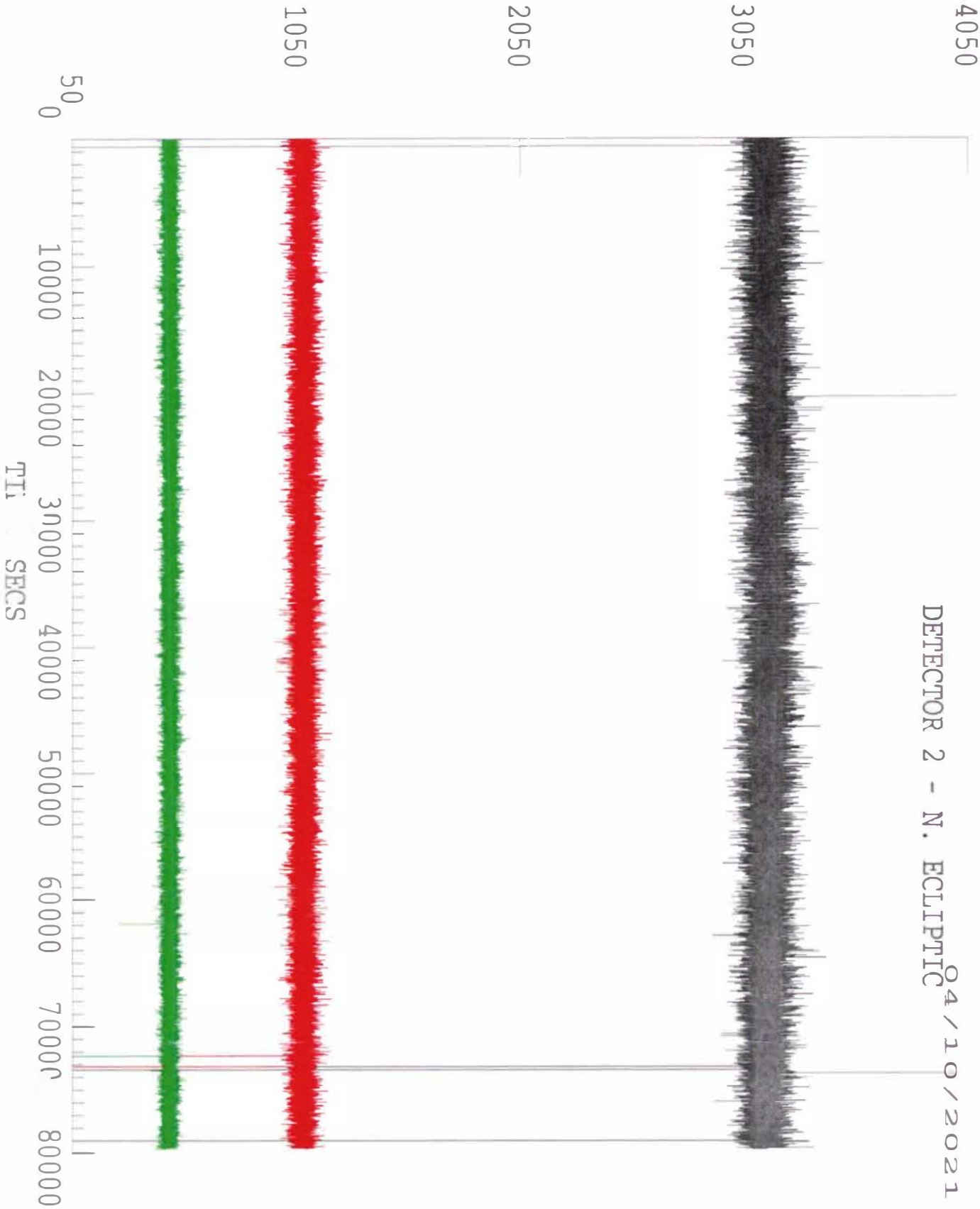
v02

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S



BAT lightcurve for trigger at 210930_0131

Subject: BAT lightcurve for trigger at 210930_0131

From: "palmer+automatic_lightcurve via ipn" <ipn@ssl.berkeley.edu>

Date: 9/30/2021, 12:50 AM

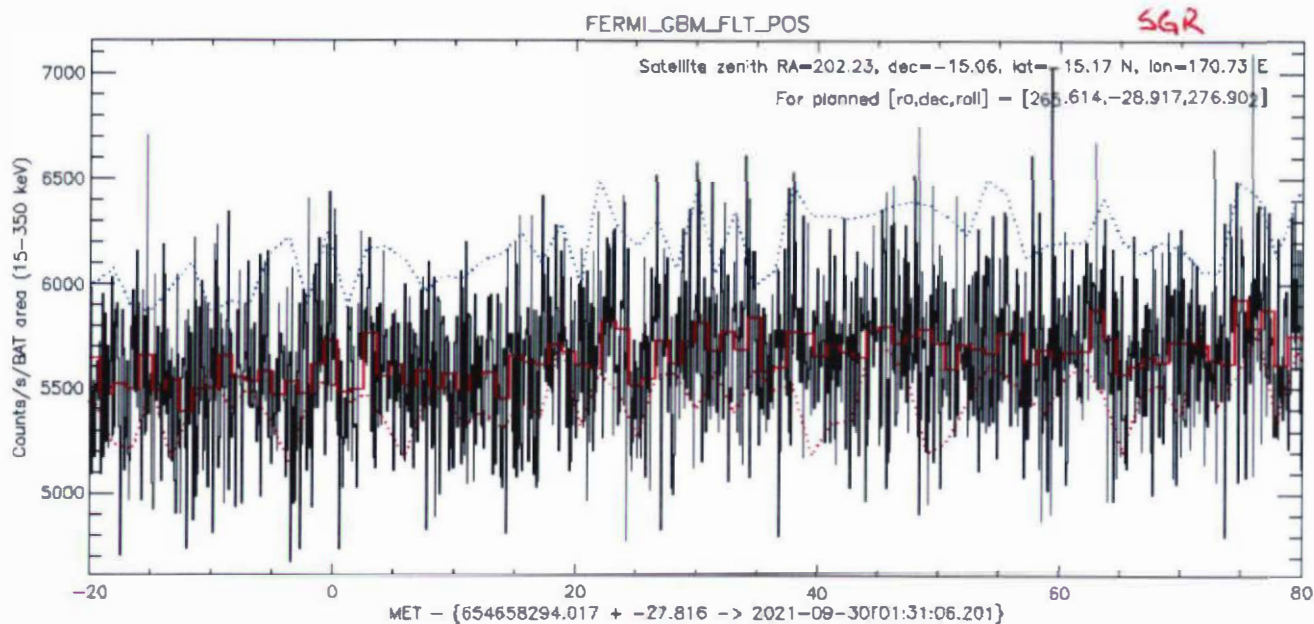
To: vestrand@lanl.gov, palmer+automatic_lightcurve@lanl.gov, ipn@ssl.berkeley.edu, mkippen@lanl.gov, gbm-burst-advocate@lists.nasa.gov, aaron.tohu@gmail.com, bat_team@bigbang.gsfc.nasa.gov, dmopalmer@gmail.com

*****THIS IS AN AUTOMATICALLY GENERATED MESSAGE*****

```
% /Users/palmer/anaconda3/envs/stable/bin/swinfo -o 654658294.017
Swift Zenith(RA,dec):      202.23, -15.06
Swift Location(lon,lat,alt): 170.73 E, -15.17 N, 544 km
Time(MET + UTCF -> UT):   654658294.017 + -27.816 -> 2021-09-30T01:31:06.201
YYMMDD_SOD:               210930_05466.201      DOY=273
Obs Sequence Number:       00013794018
Obs Target Name:           CB5 J1742.5-2855 (planned)
Obs Date and Times:        2021-09-30 01:27:32 - 01:38:24
Obs Pointing(ra,dec,roll): 265.614, -28.917, 276.90
```

--
David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)
TSPA -- Automatically generated plot of publicly-available scientific data

/tmp/swift/210930_0131.png



Attachments

/tmp/swift/210930_0131_bat64ms_ipn

87.1 KB

/tmp/swift/210930_0131.png

18.6 KB

Subject: GCN/SWIFT_BAT_LIGHTCURVE

From: Bacodine <vxw@capella2.gsfc.nasa.gov>

Date: 9/29/2021, 7:51 PM

To: khurley@ssl.berkeley.edu

11.8 s
 $4 \times 10^{-7} \text{ erg cm}^{-2}$
 $0.7 \text{ phot/cm}^2 \text{ s}$

SPI NO

TITLE: GCN/SWIFT NOTICE
 NOTICE_DATE: Thu 30 Sep 21 02:51:05 UT
 NOTICE_TYPE: Swift-BAT GRB Lightcurve
 TRIGGER_NUM: 1075565, Seg_Num: 0
 GRB_RA: 197.435d {+13h 09m 44s} (J2000),
 197.673d {+13h 10m 41s} (current),
 196.888d {+13h 07m 33s} (1950)
 GRB_DEC: +48.623d {+48d 37' 22"} (J2000),
 +48.507d {+48d 30' 27"} (current),
 +48.889d {+48d 53' 20"} (1950)
 GRB_DATE: 19487 TJD; 273 DOY; 21/09/30
 GRB_TIME: 10012.18 SOD {02:46:52.18} UT
 TRIGGER_INDEX: 20000
 GRB_PHI: -159.38 [deg]
 GRB_THETA: 19.03 [deg]
 DELTA_TIME: 0.00 [sec]
 TRIGGER_DUR: 64.000 [sec]
 SOLN_STATUS: 0x13
 RATE_SIGNIF: 0.00 [sigma]
 IMAGE_SIGNIF: 7.50 [sigma]
 LC_URL: sw01075565000msb.lc
 SUN_POSTN: 186.59d {+12h 26m 21s} -2.85d {-02d 50' 49"}
 SUN_DIST: 52.25 [deg] Sun_angle= -0.7 [hr] (East of Sun)
 MOON_POSTN: 110.67d {+07h 22m 40s} +25.79d {+25d 47' 15"}
 MOON_DIST: 69.08 [deg]
 MOON_ILLUM: 40 [%]
 GAL_COORDS: 114.76, 68.21 [deg] galactic lon,lat of the burst (or transient)
 ECL_COORDS: 169.51, 50.11 [deg] ecliptic lon,lat of the burst (or transient)
 COMMENTS: SWIFT-BAT GRB Lightcurve.
 COMMENTS:
 COMMENTS: The next comments were copied from the BAT_POS Notice:
 COMMENTS: This is an image trigger.
 COMMENTS: A point_source was found.
 COMMENTS: This does not match any source in the on-board catalog.
 COMMENTS: This does not match any source in the ground catalog.
 COMMENTS: This is a GRB.
 COMMENTS: This trigger occurred at longitude,latitude = 82.97,7.91 [deg].

BAT

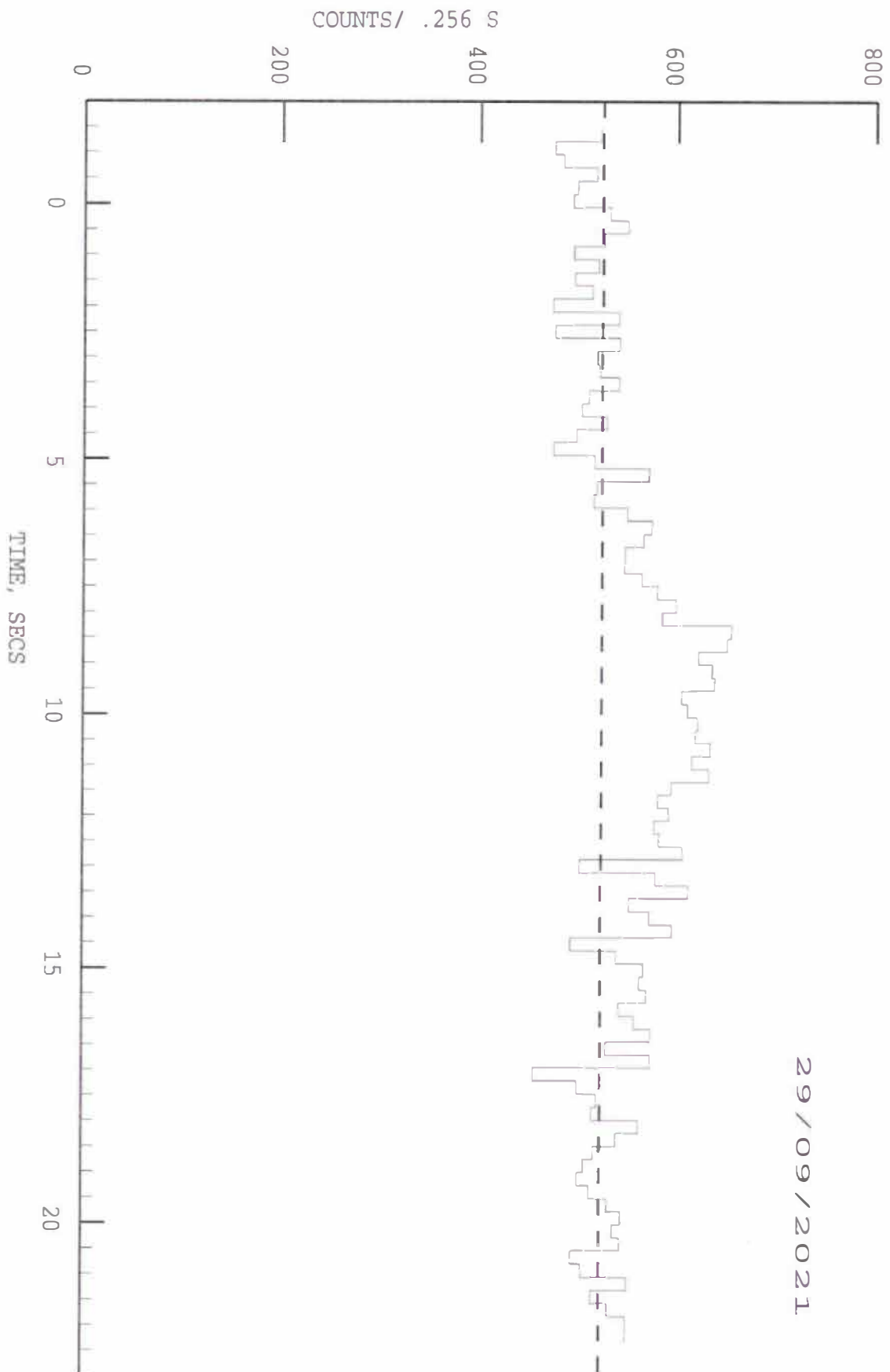
30/09/21

10012.183

02:46:52.183

25- 100 keV

29/09/2021



From kevinhurley+caf_=_khurley2=ssl.berkeley.edu@berkeley.edu Wed Nov 17 11:04:51
From: "grbhend" <grbhend@mx.iki.rssi.ru>
To: "'recipient1'" <grbhend@mx.iki.rssi.ru>,
 "'recipient2'" <khurley@ssl.berkeley.edu>
Subject: No data in HEND Data Base
Date: Wed, 17 Nov 2021 22:04:38 +0300

Received letter from = SMTP:khurley@ssl.berkeley.edu
No HEND data for GRB around 210930 02:24:52

<This message contains 1 attachments (not printed)>

