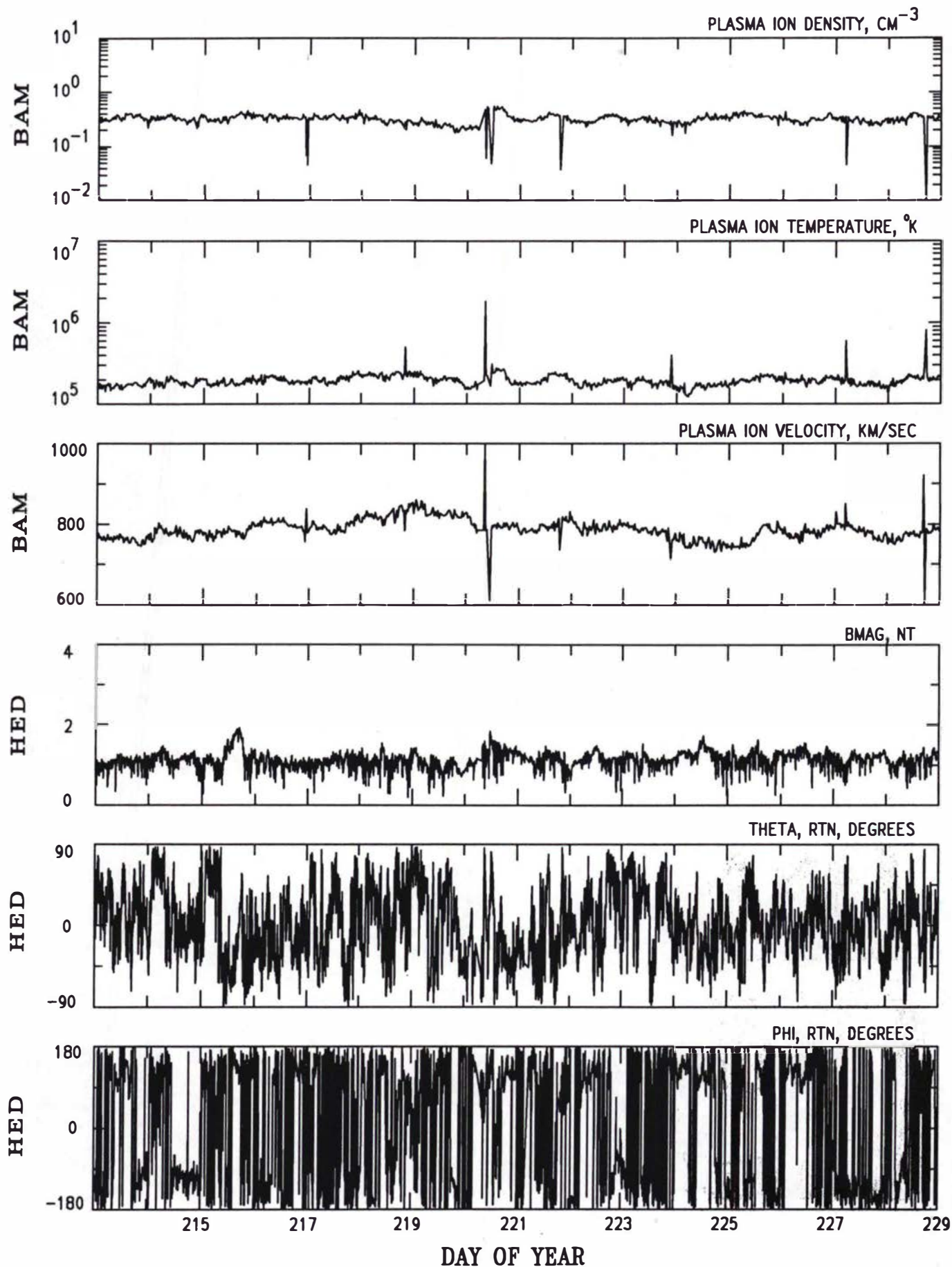


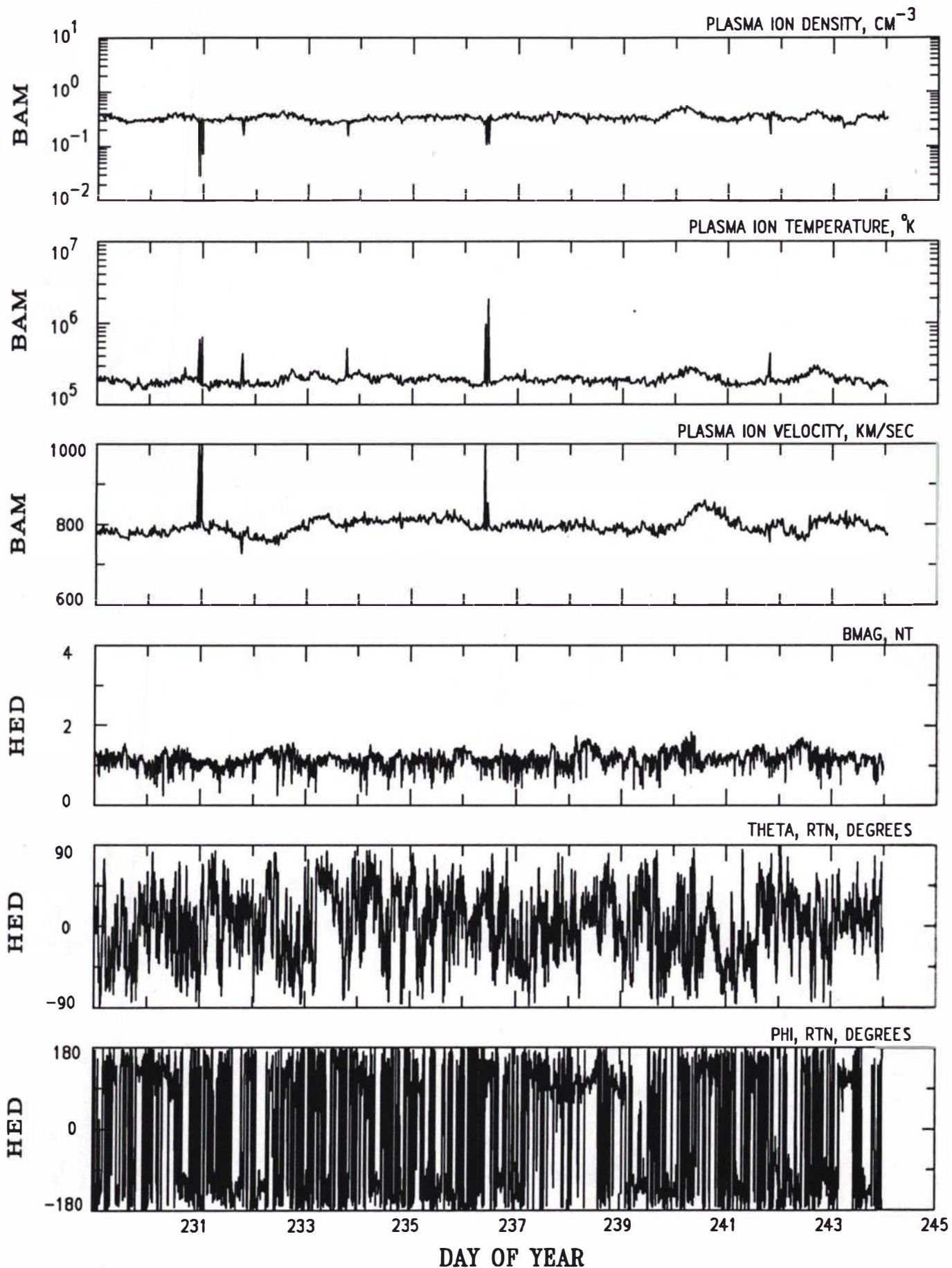
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



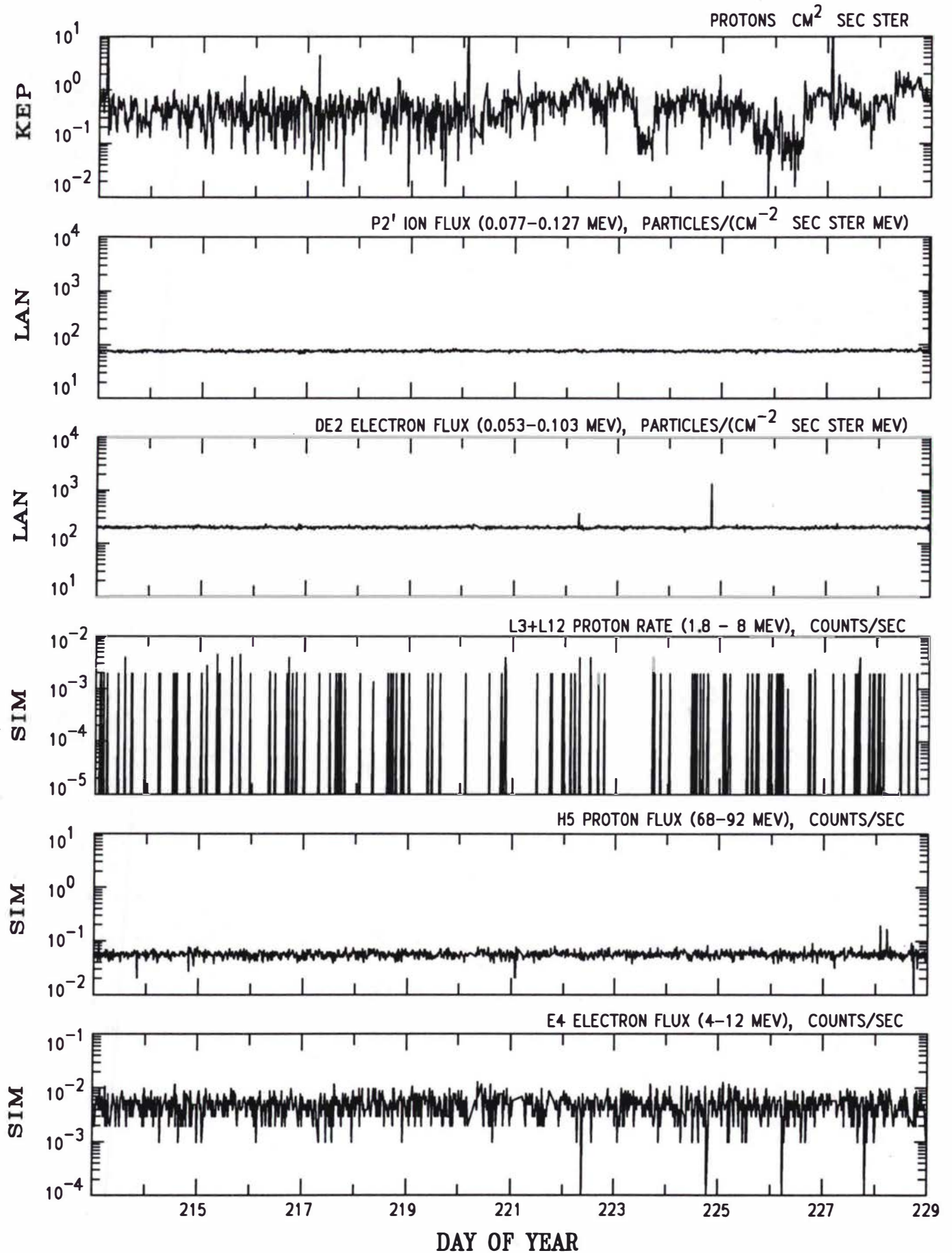
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



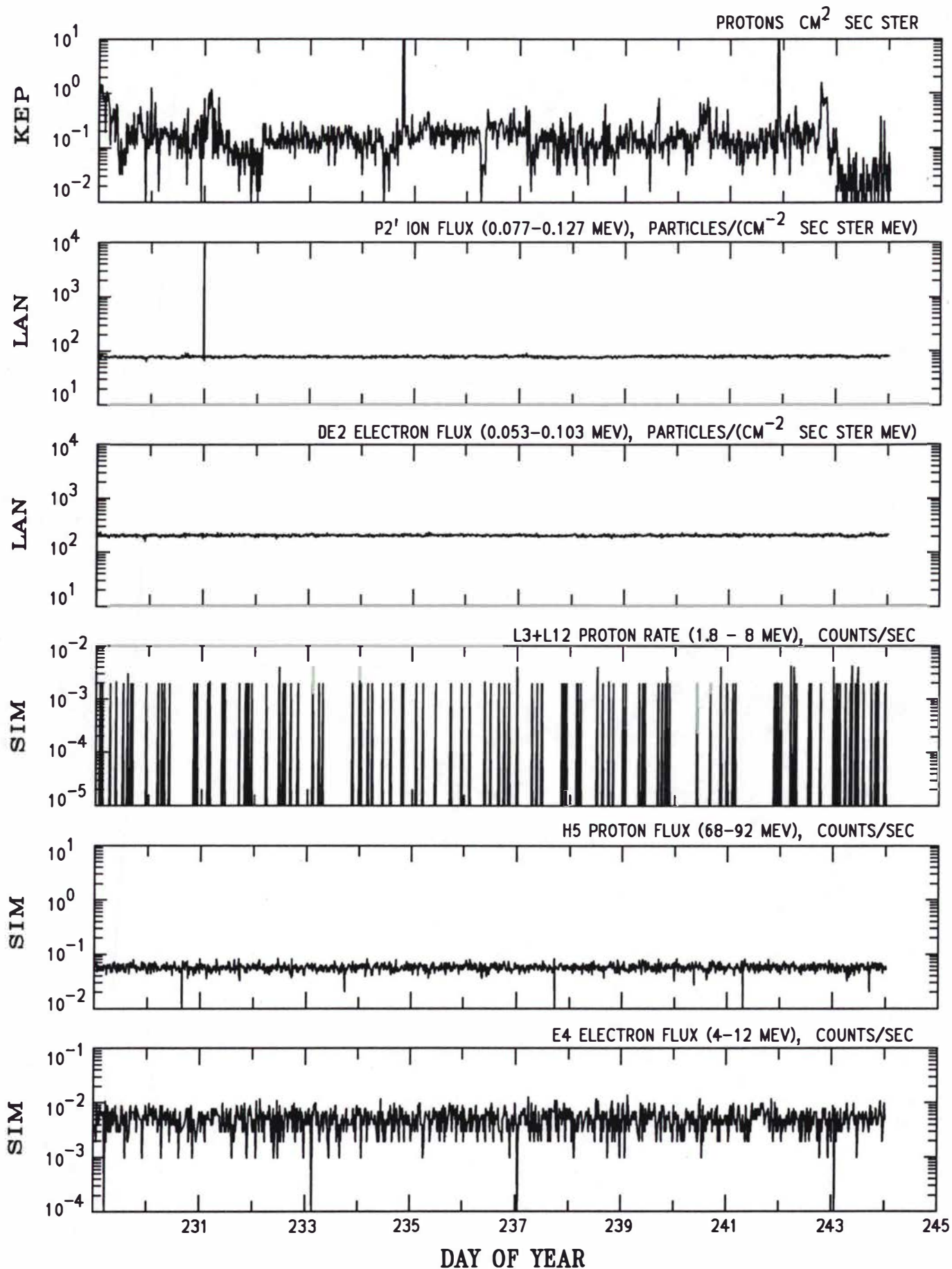
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



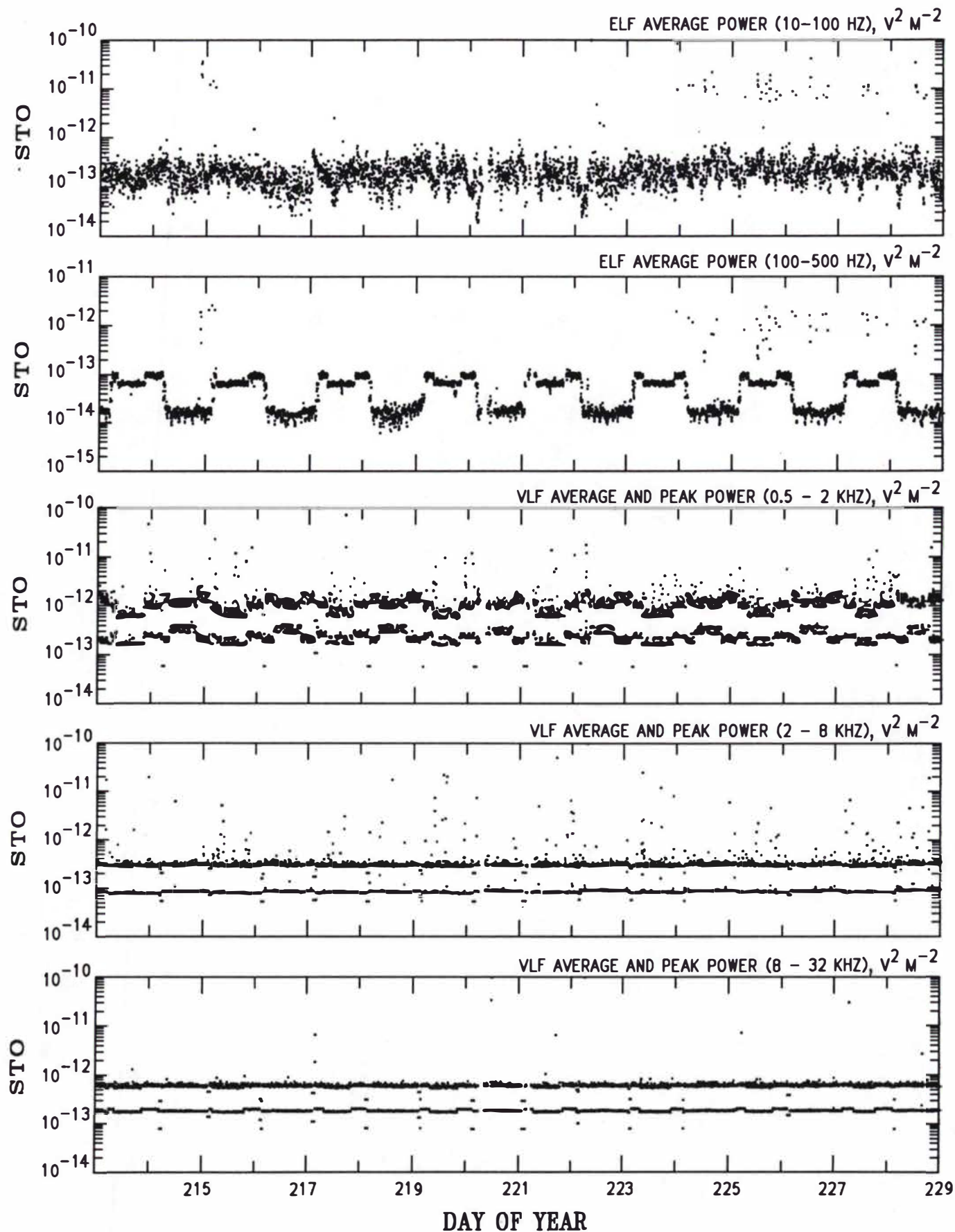
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



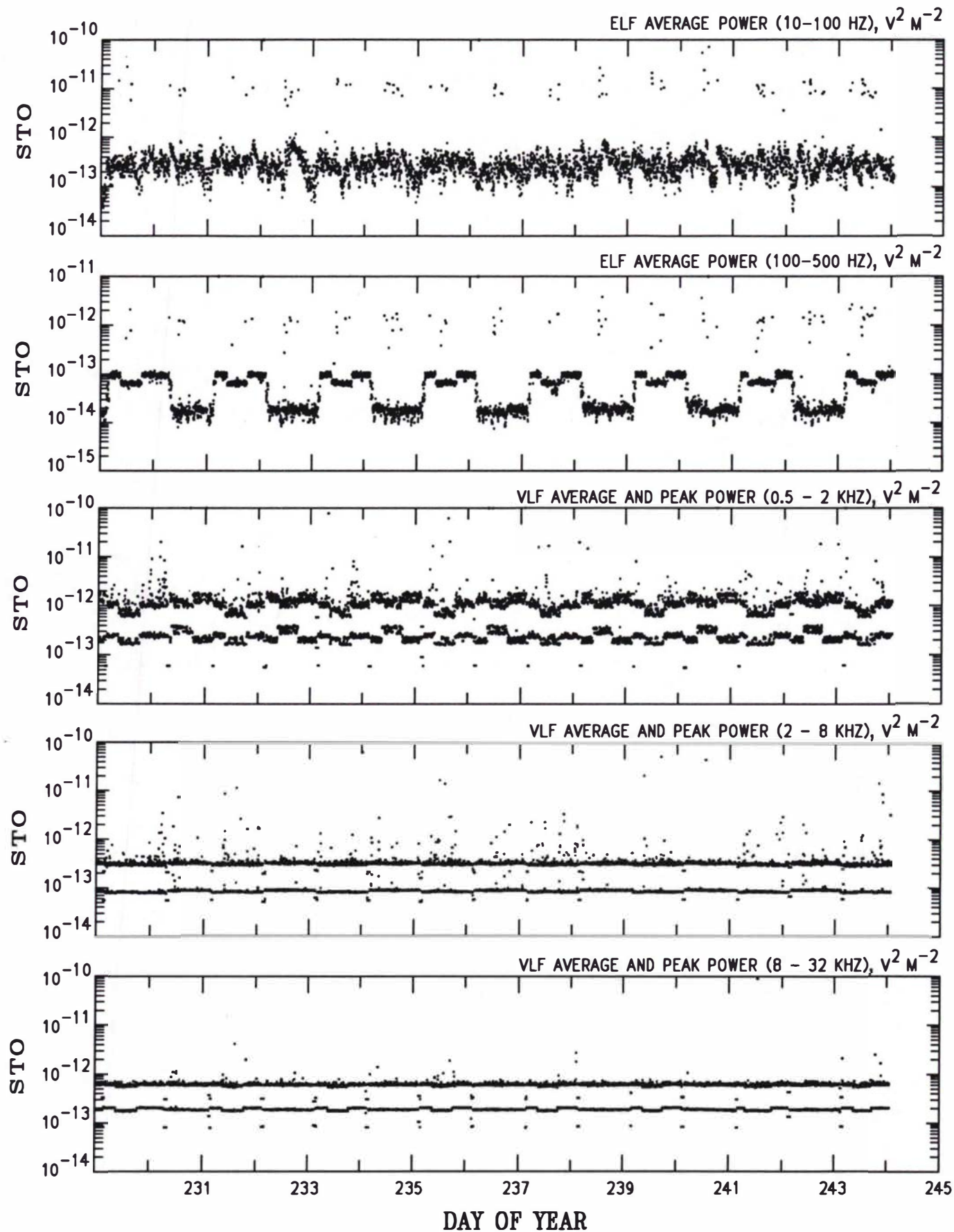
ULYSSES CDR - PLASMA WAVE

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



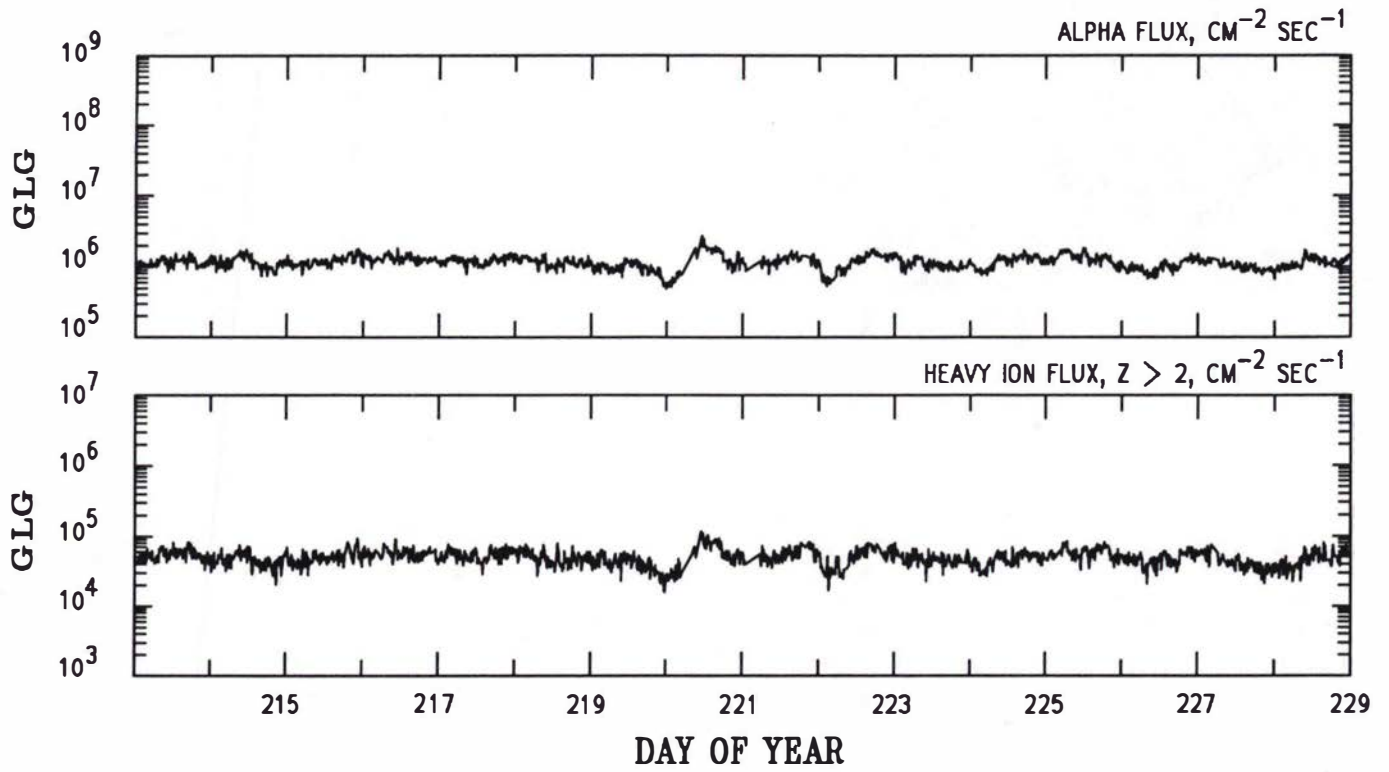
ULYSSES CDR - PLASMA WAVE

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



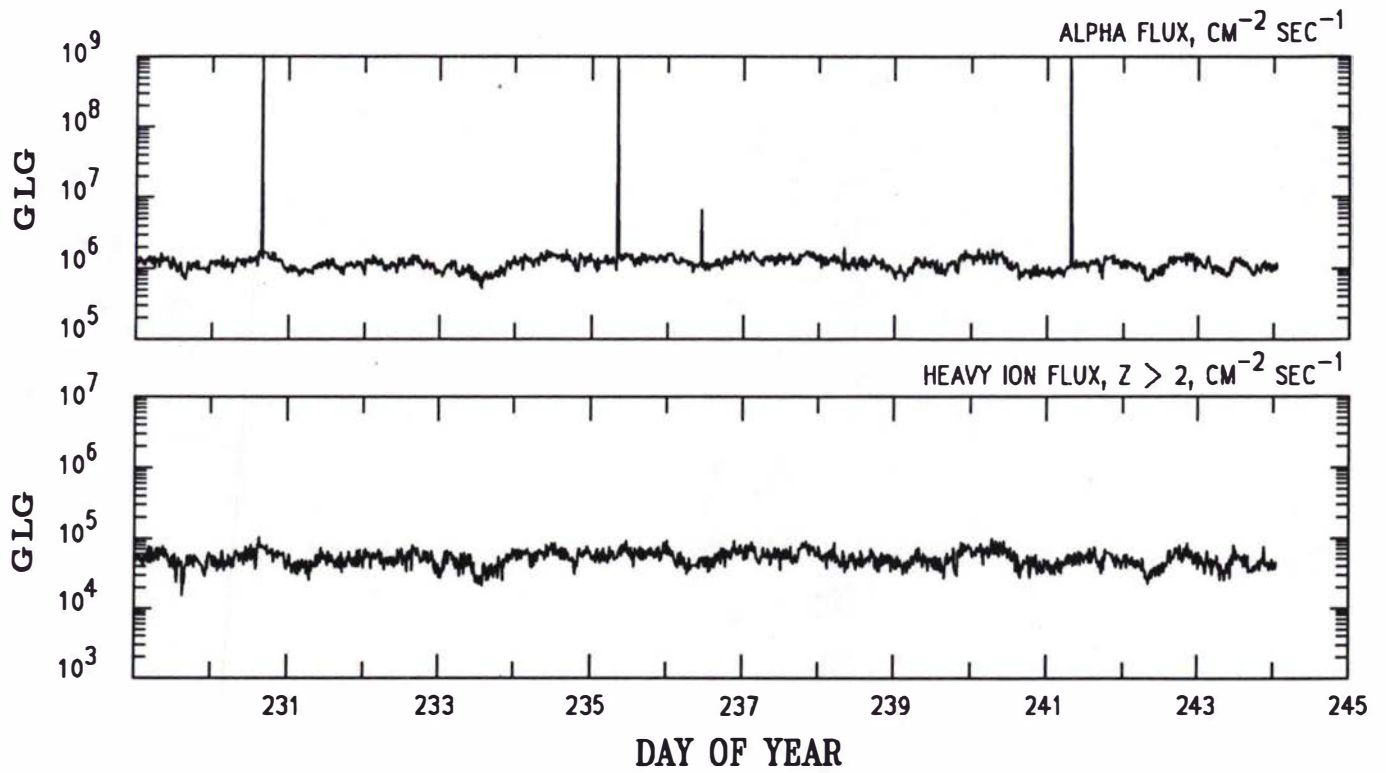
ULYSSES CDR - SOLAR WIND ION COMPOSITION

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



ULYSSES CDR - SOLAR WIND ION COMPOSITION

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



.94.213.00.11.14.130

HUS monthly long term thermal data

818

RET

E002 2ARADTMP S/C

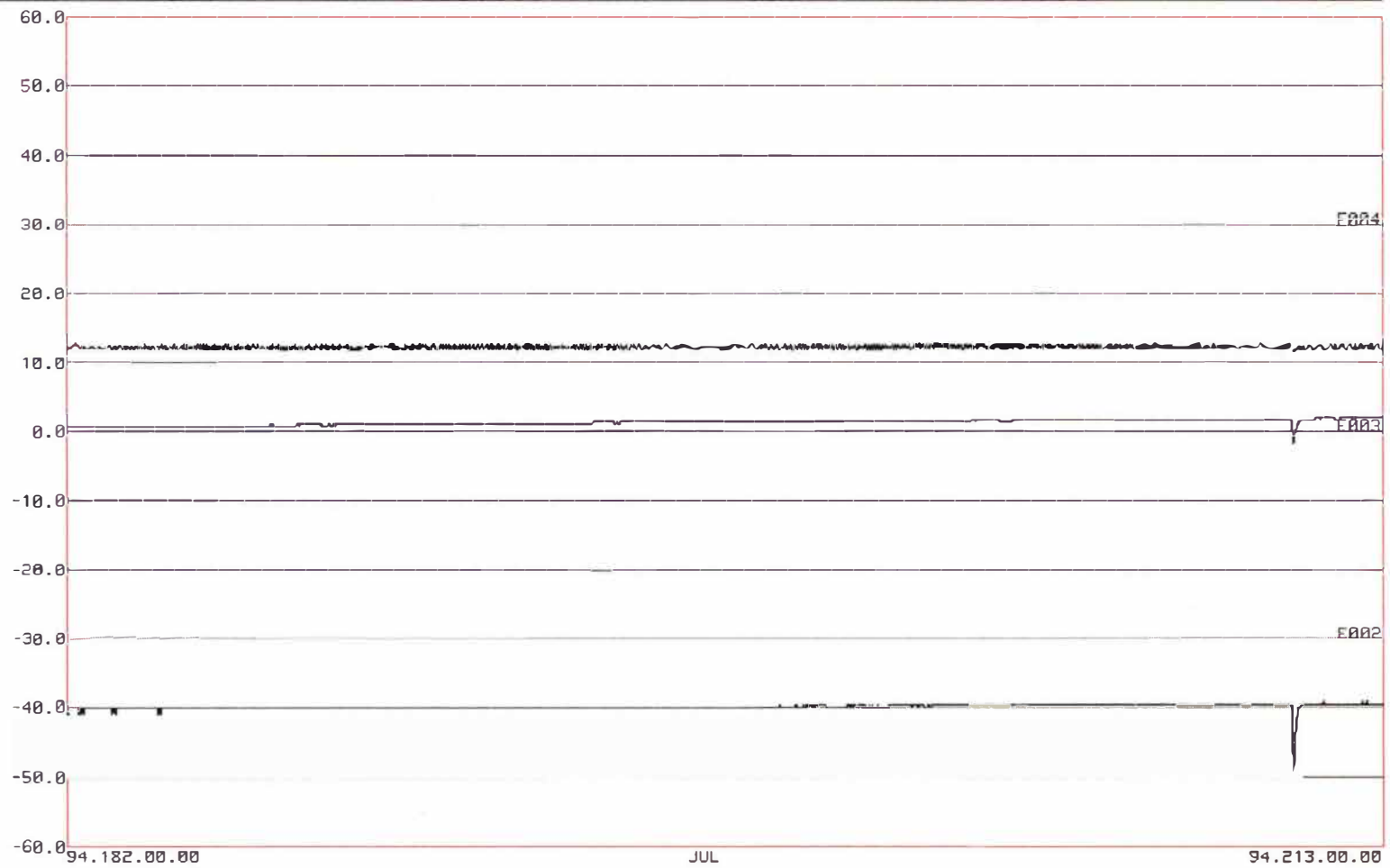
2.0

E003 2BSENTMP S/C

-39.5

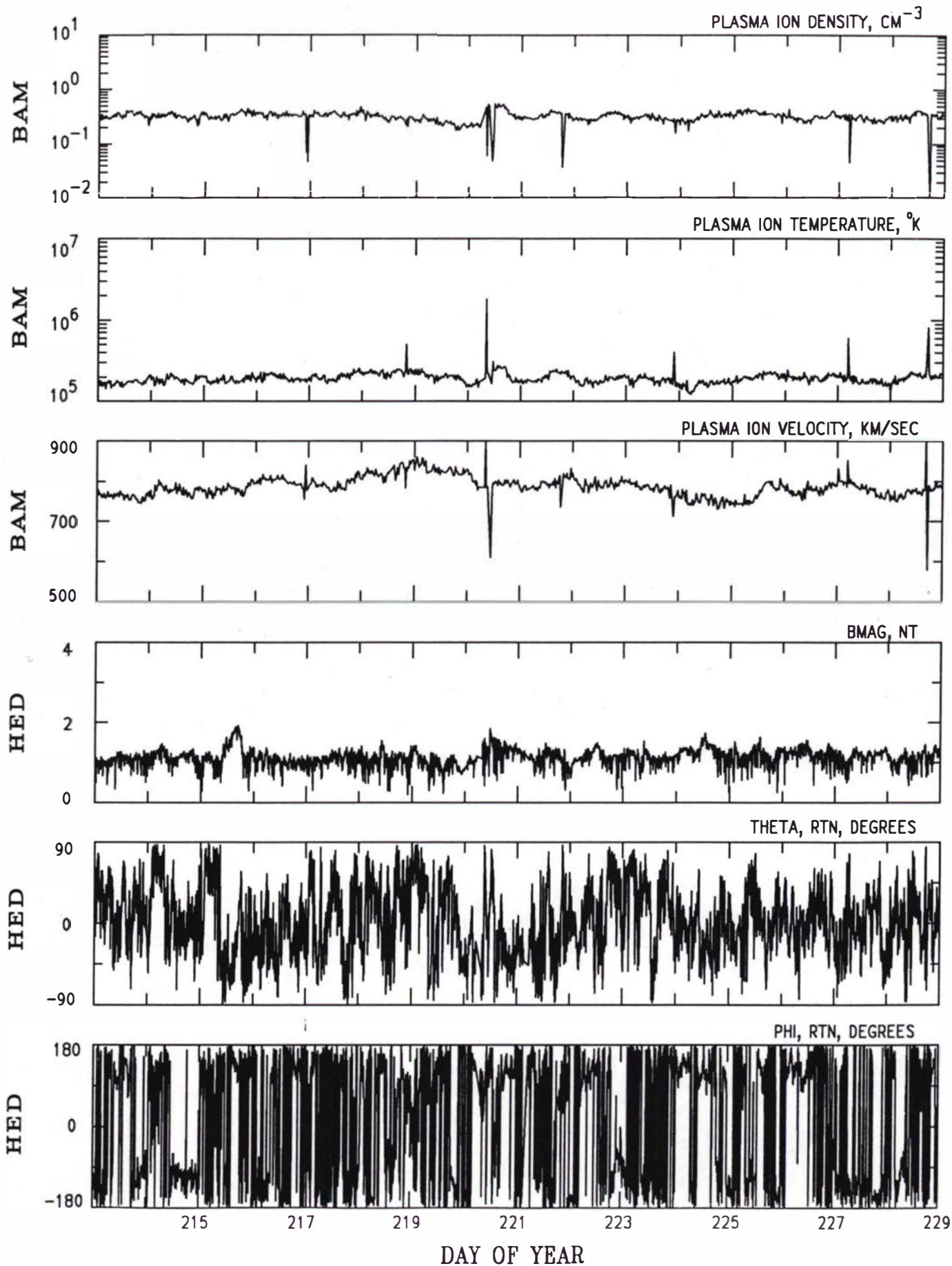
E004 2ASENSTMP EX

12.36



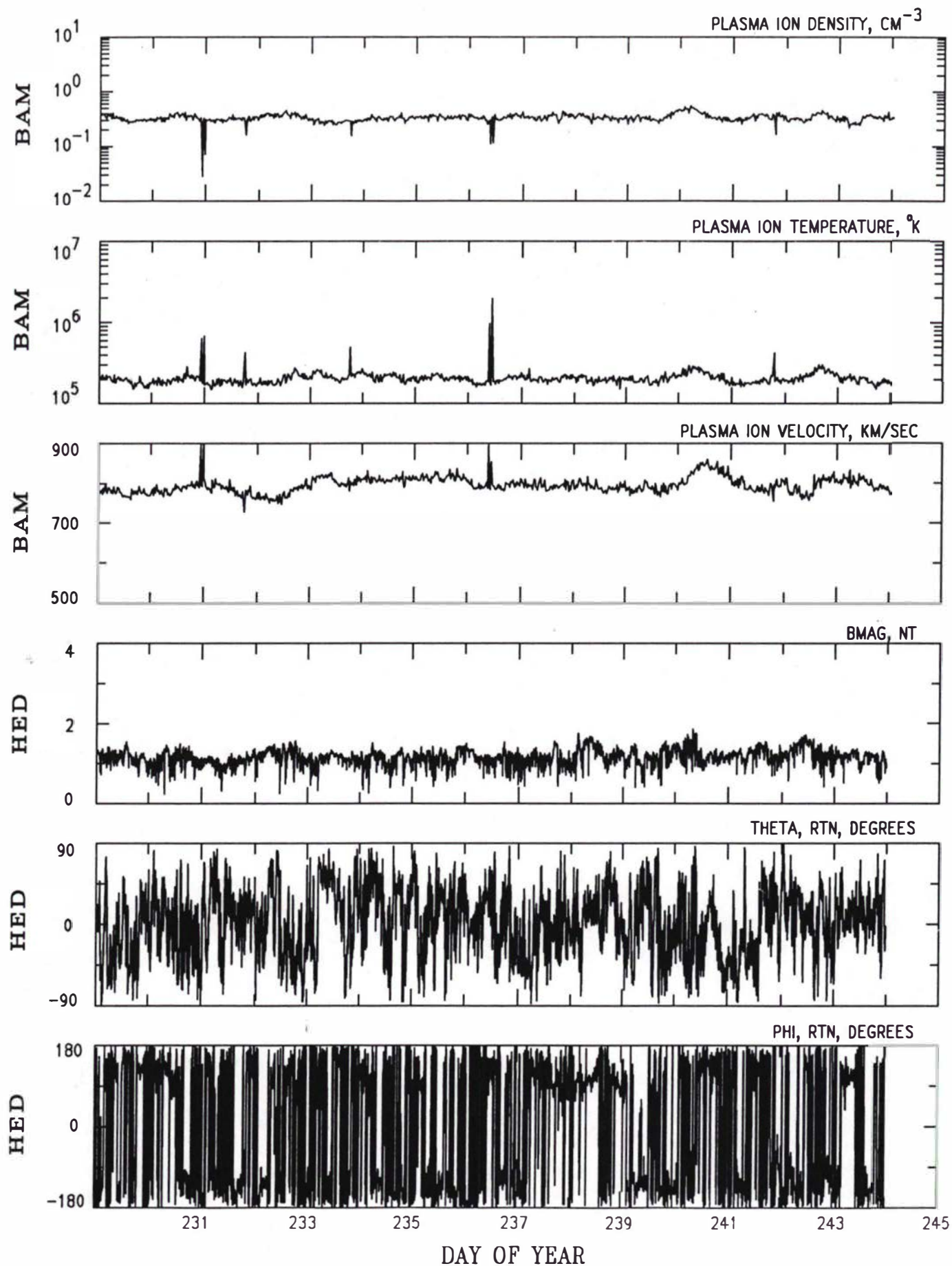
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



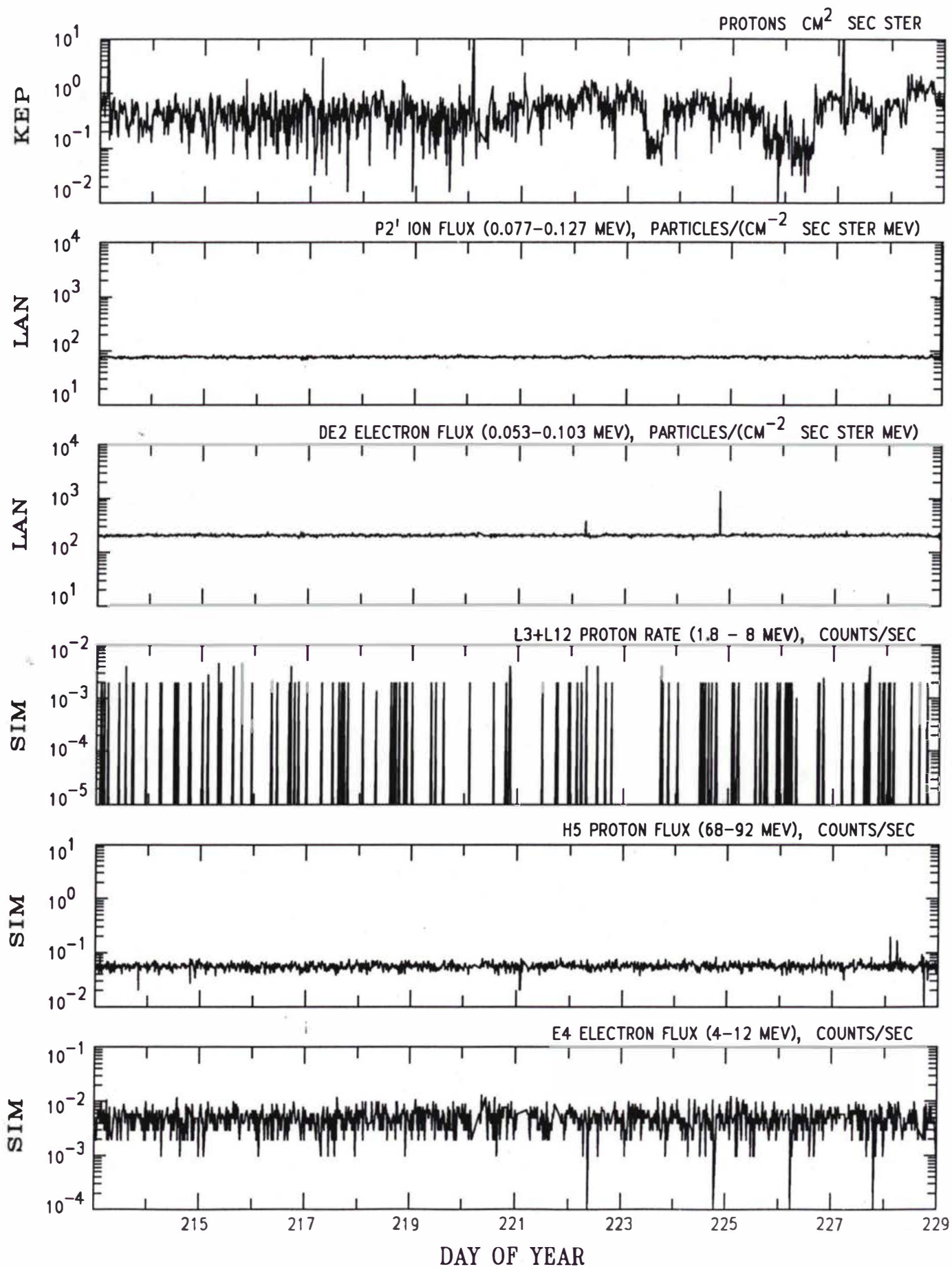
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



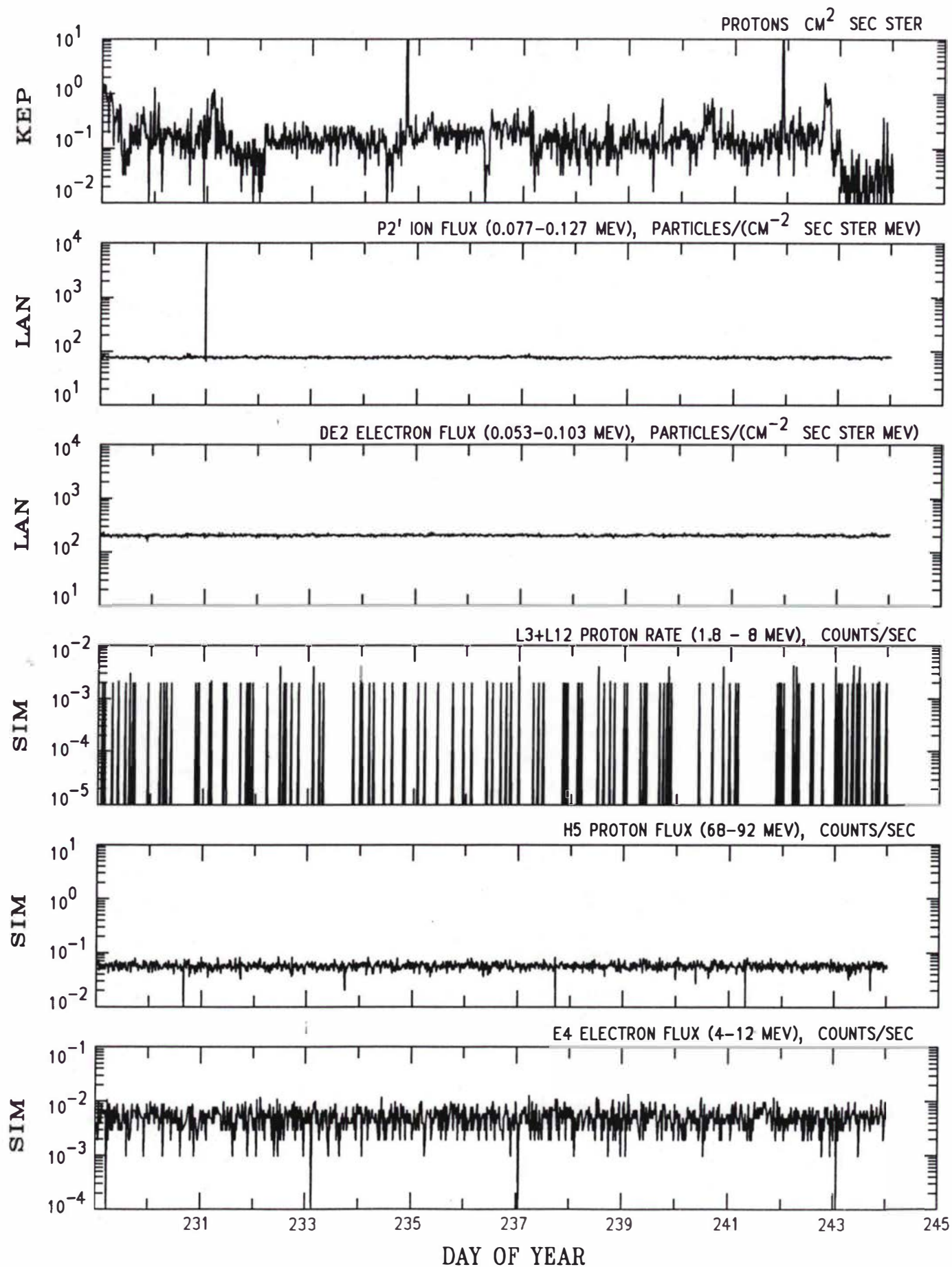
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



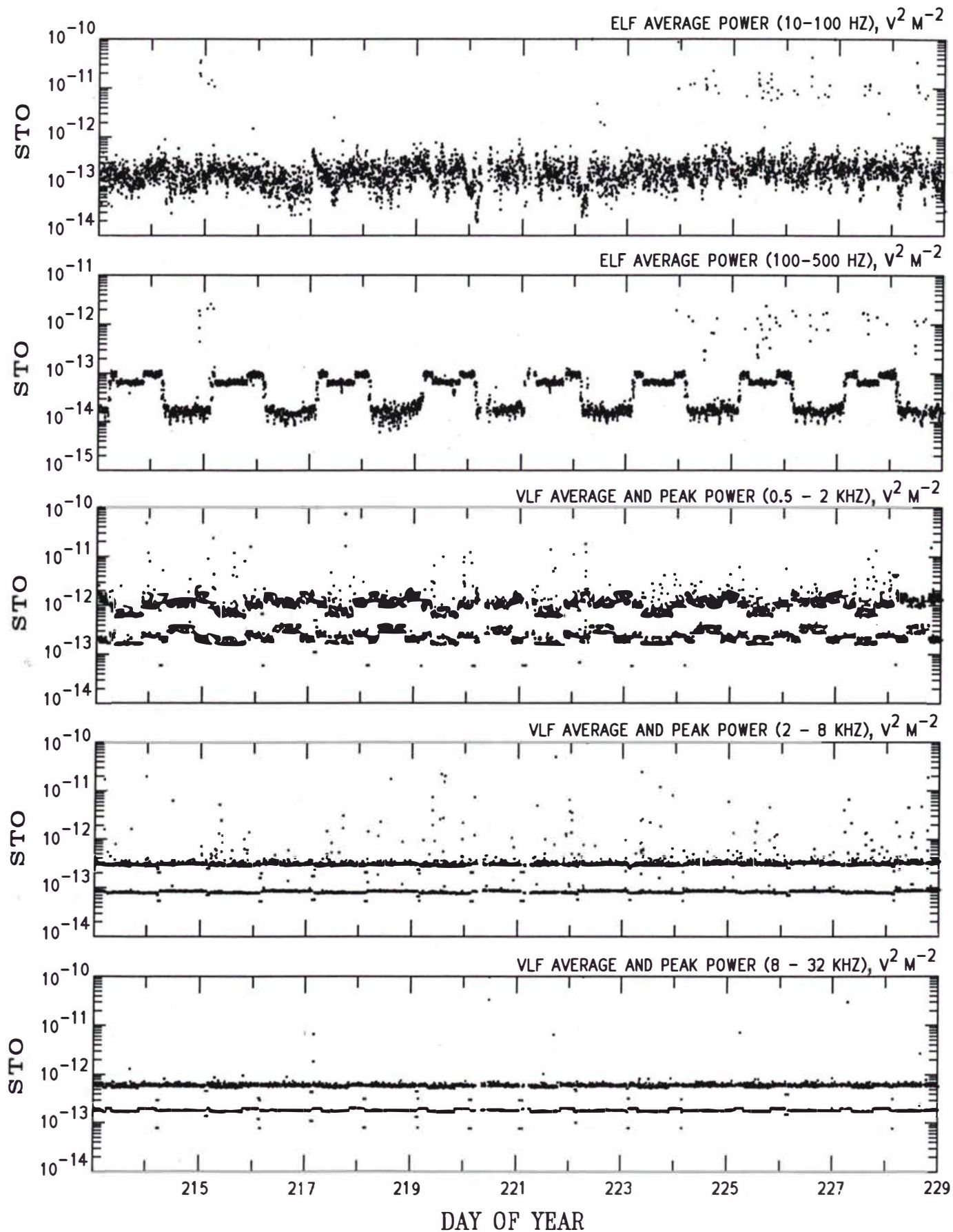
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



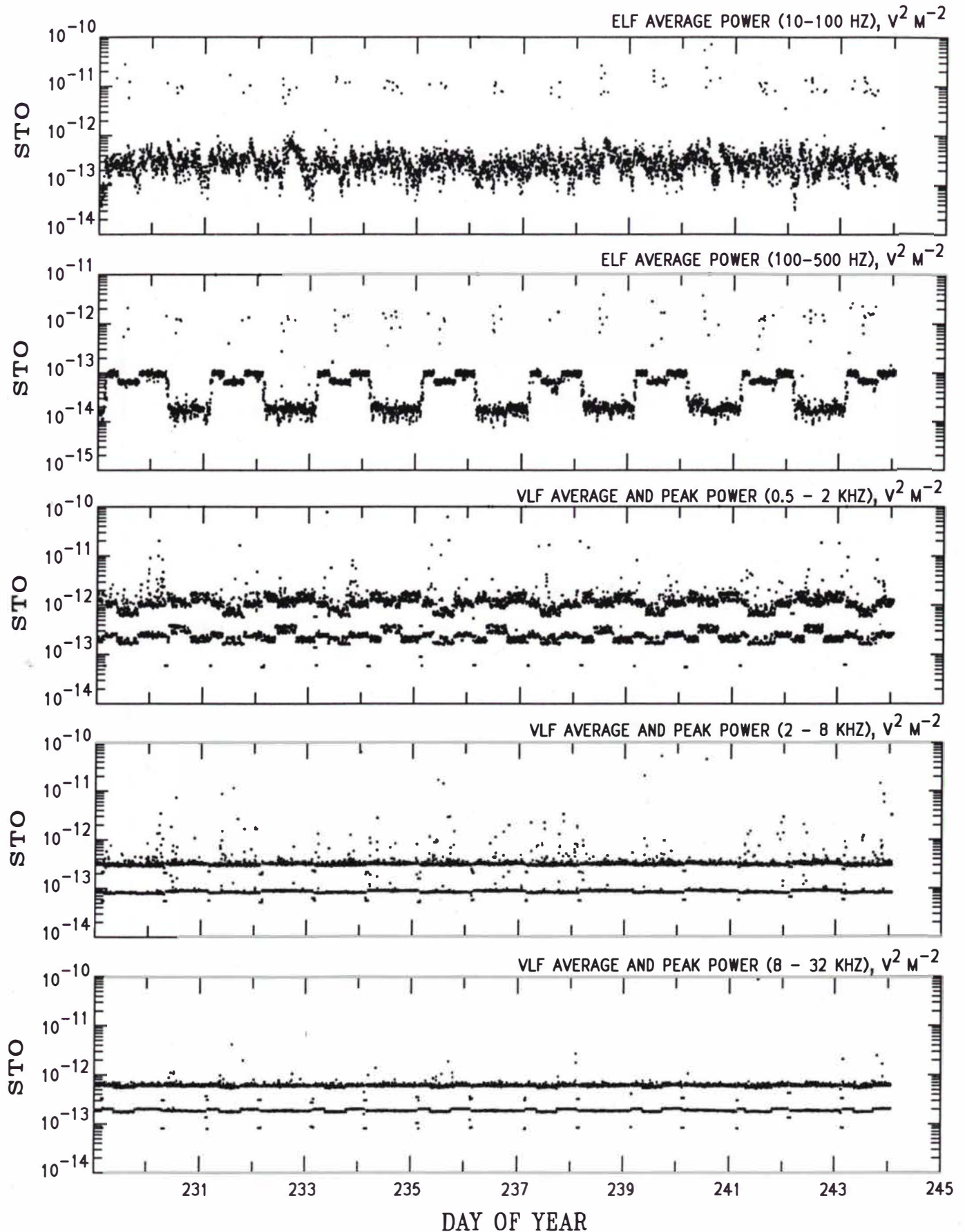
ULYSSES CDR - PLASMA WAVE

94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



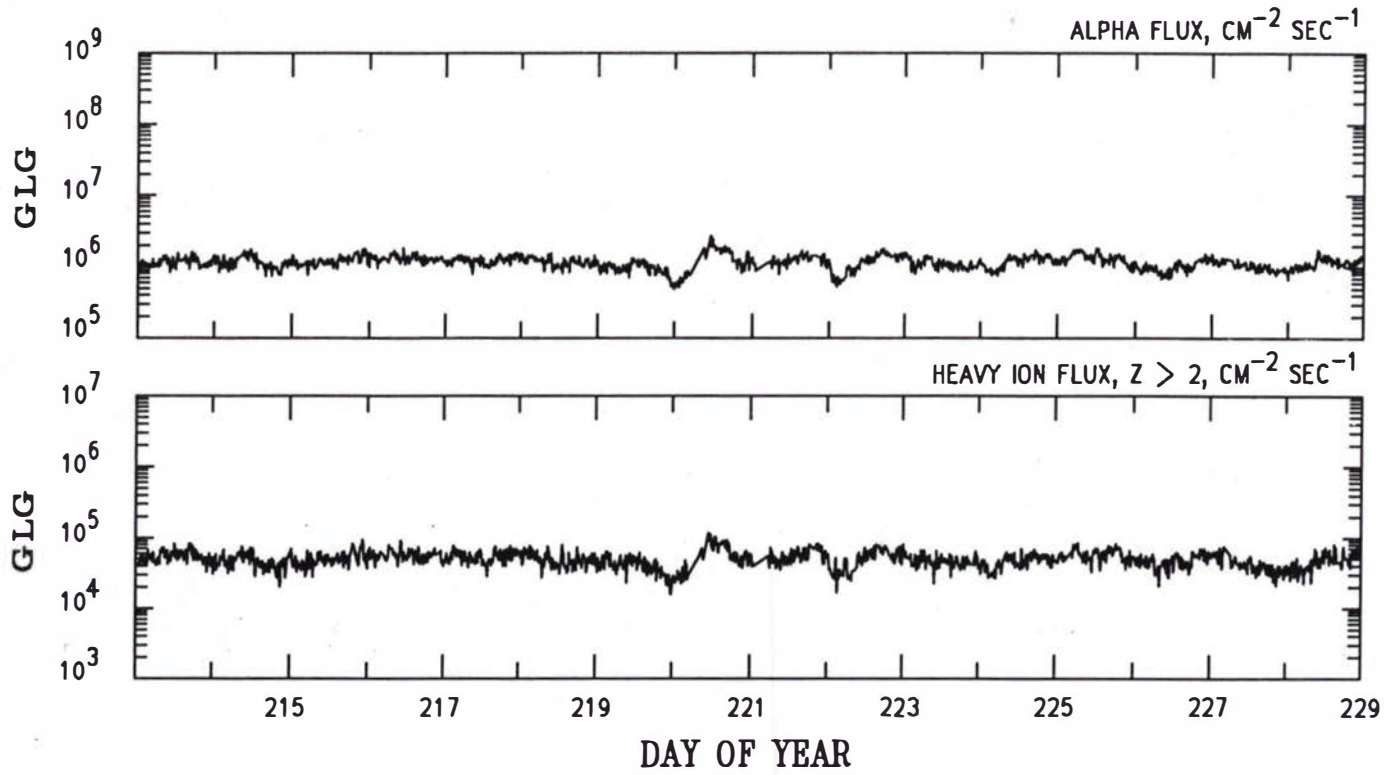
ULYSSES CDR - PLASMA WAVE

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000



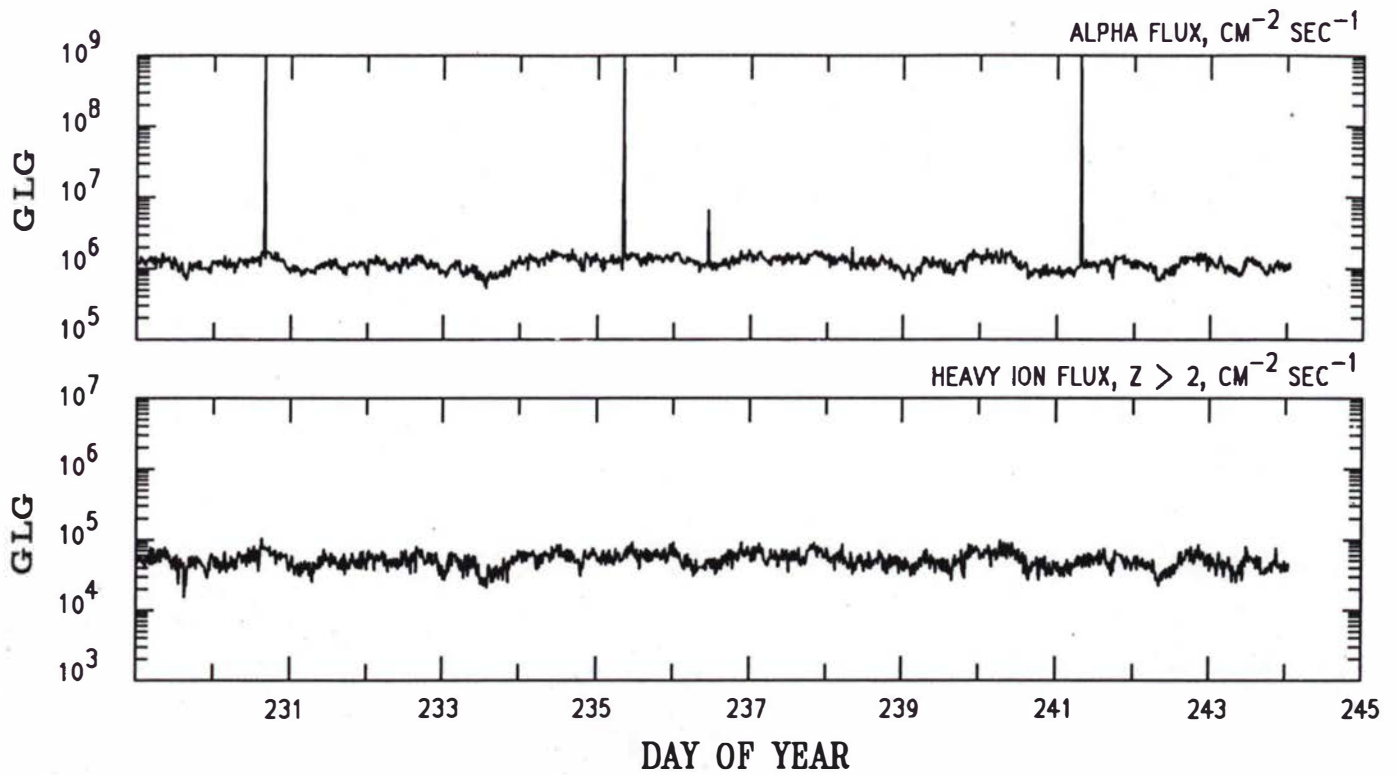
ULYSSES CDR - SOLAR WIND ION COMPOSITION

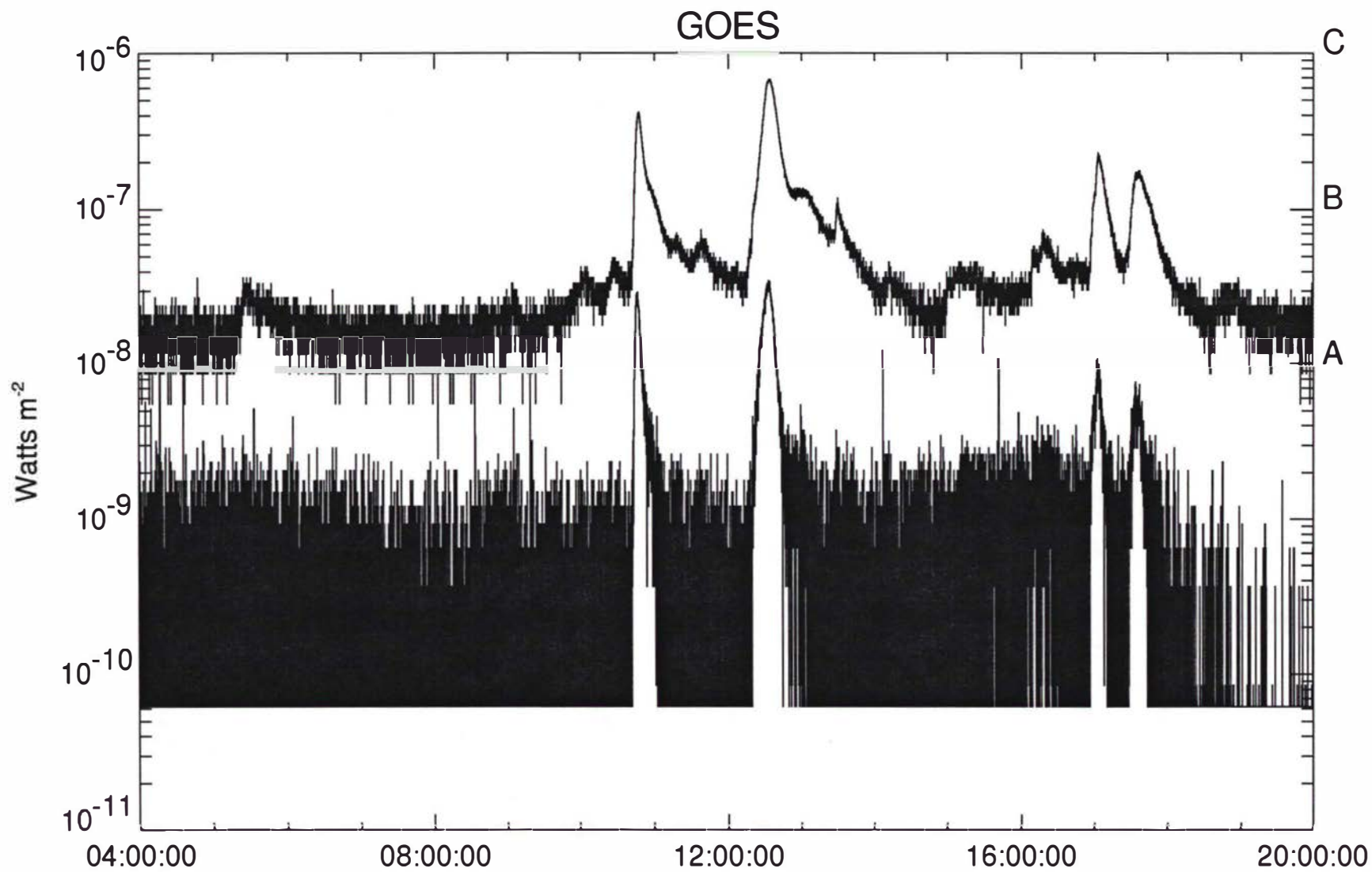
94 213 AUG 1 00:00:00.000 - 94 229 AUG 17 00:00:00.000



ULYSSES CDR - SOLAR WIND ION COMPOSITION

94 229 AUG 17 00:00:00.000 - 94 245 SEP 2 00:00:00.000





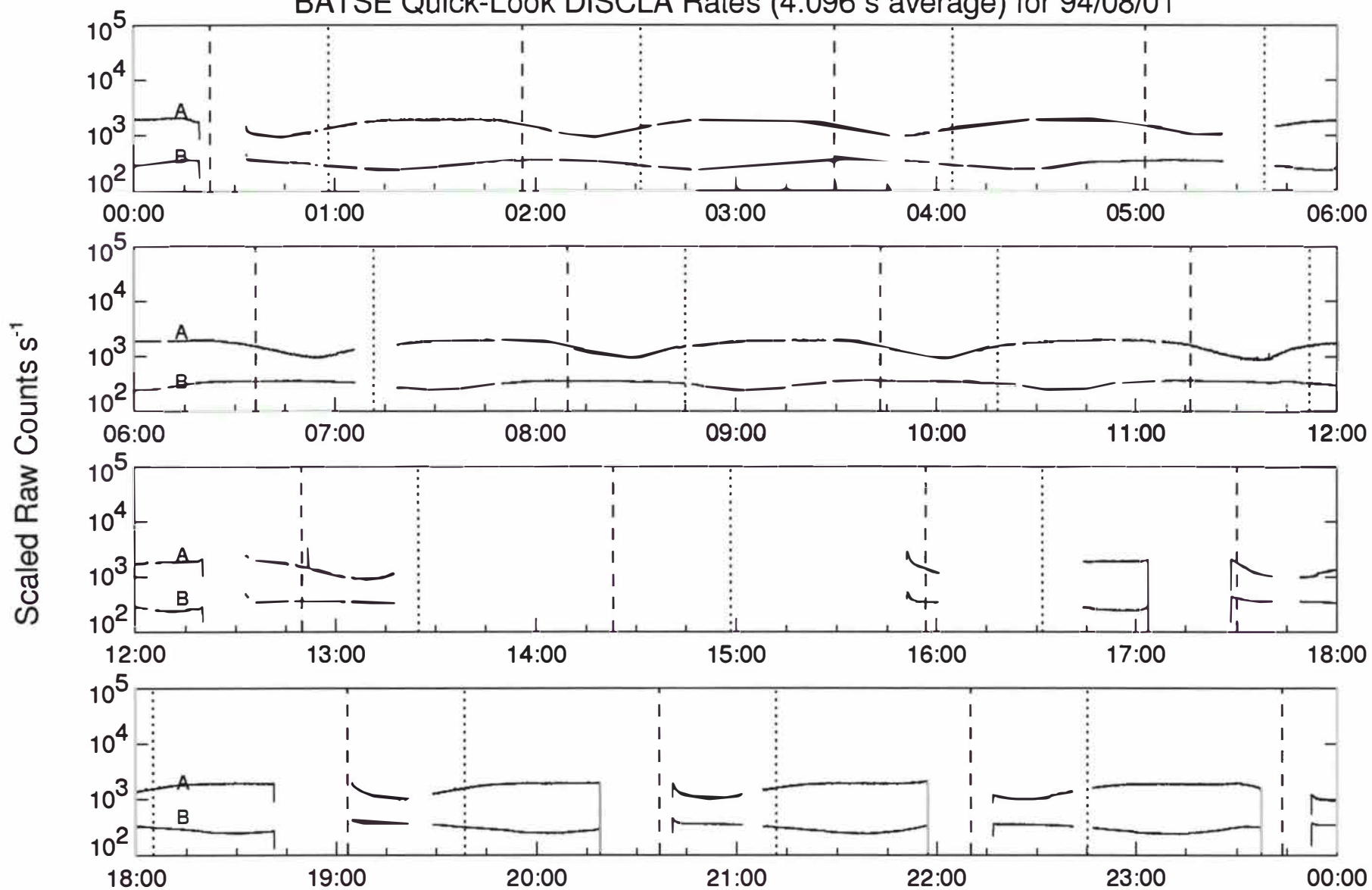
Data Start: 94/08/01, 0000:00

Plot created: 94/08/16, 1724

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/01

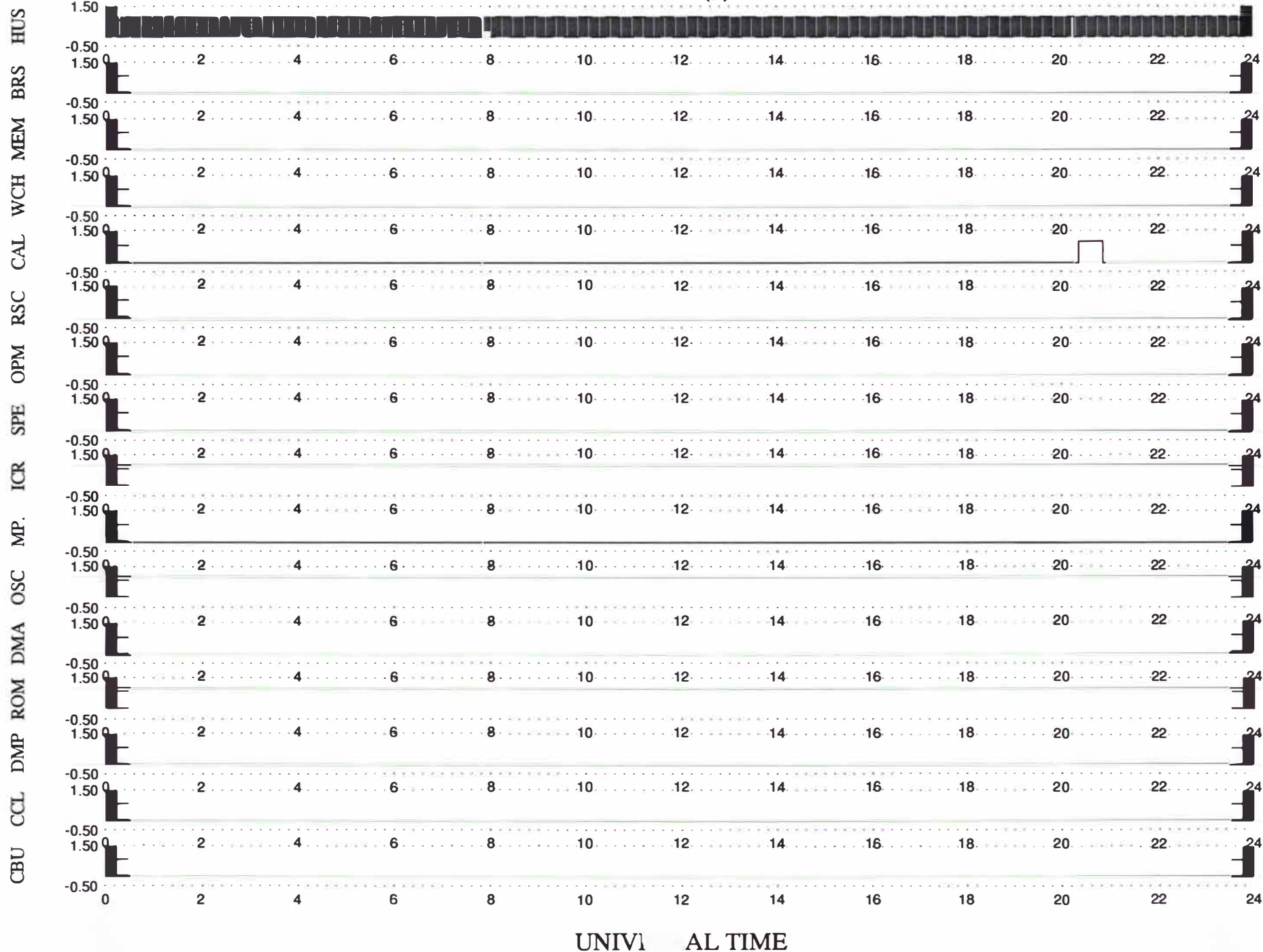


Current Time: 94/08/16, 1735 EDT
A: Channel 0 Most Sunward LAD
B: Sum Channel 0 Anti-Sunward LADs X .05

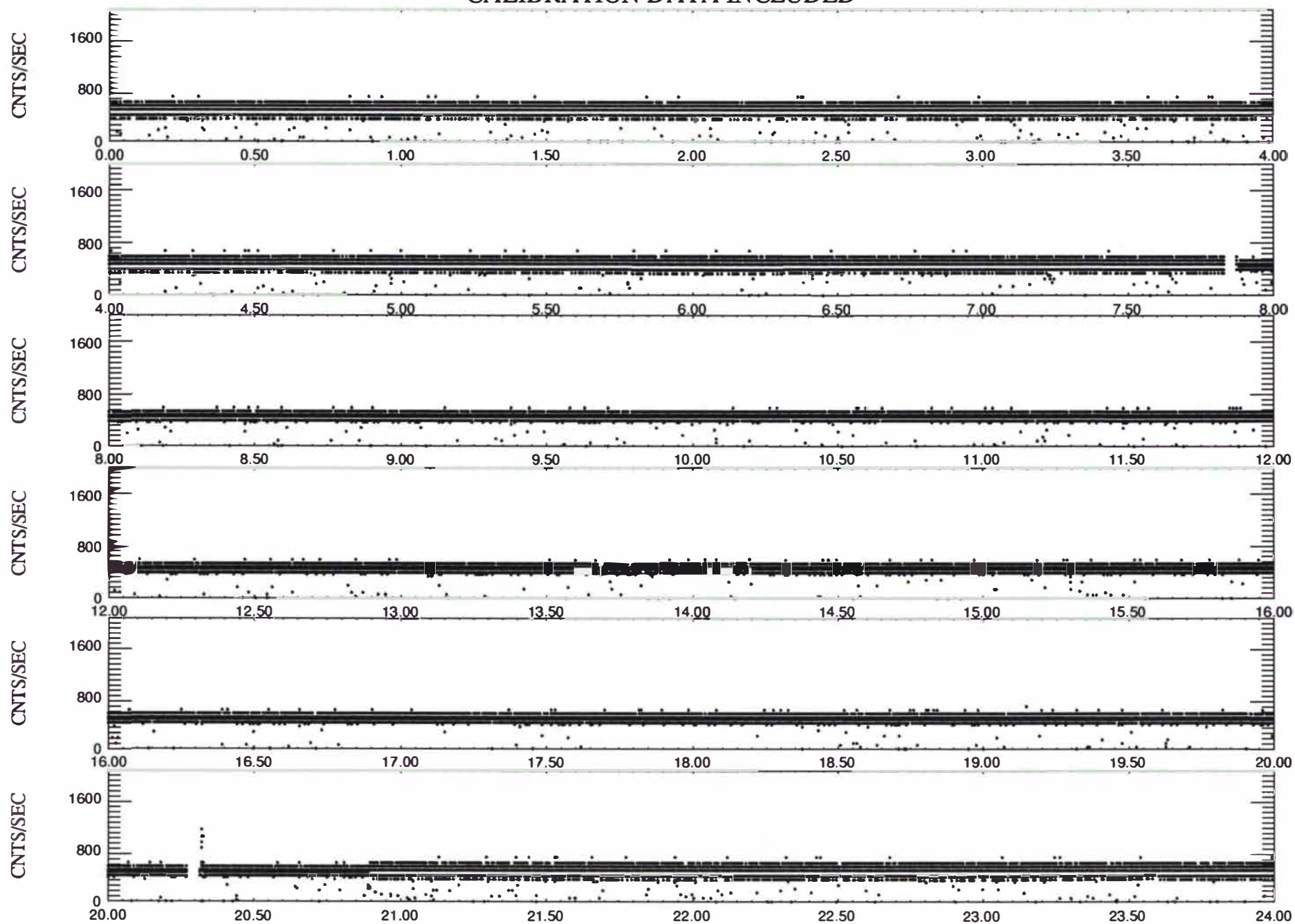
Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

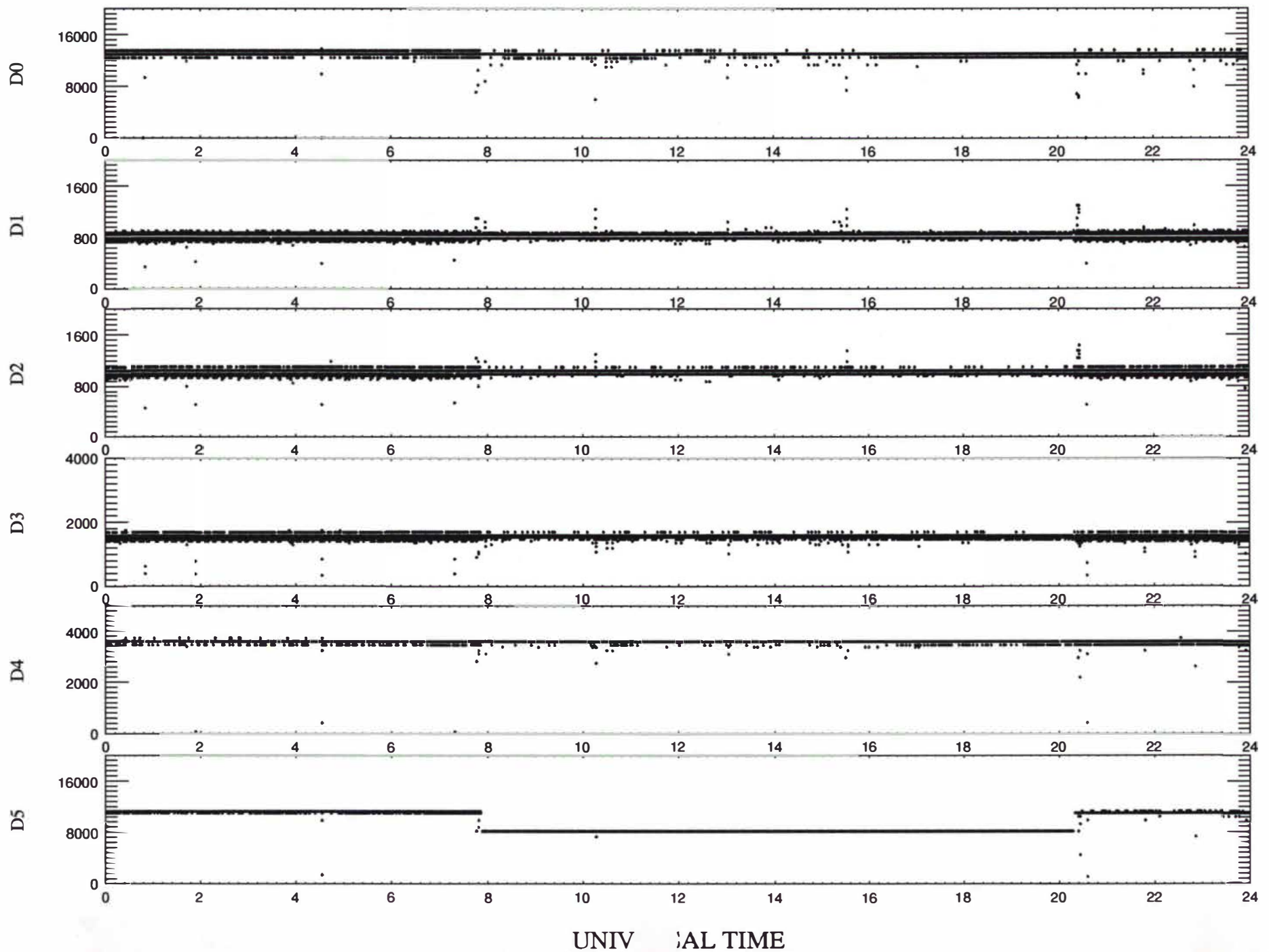
NO BURST (0)

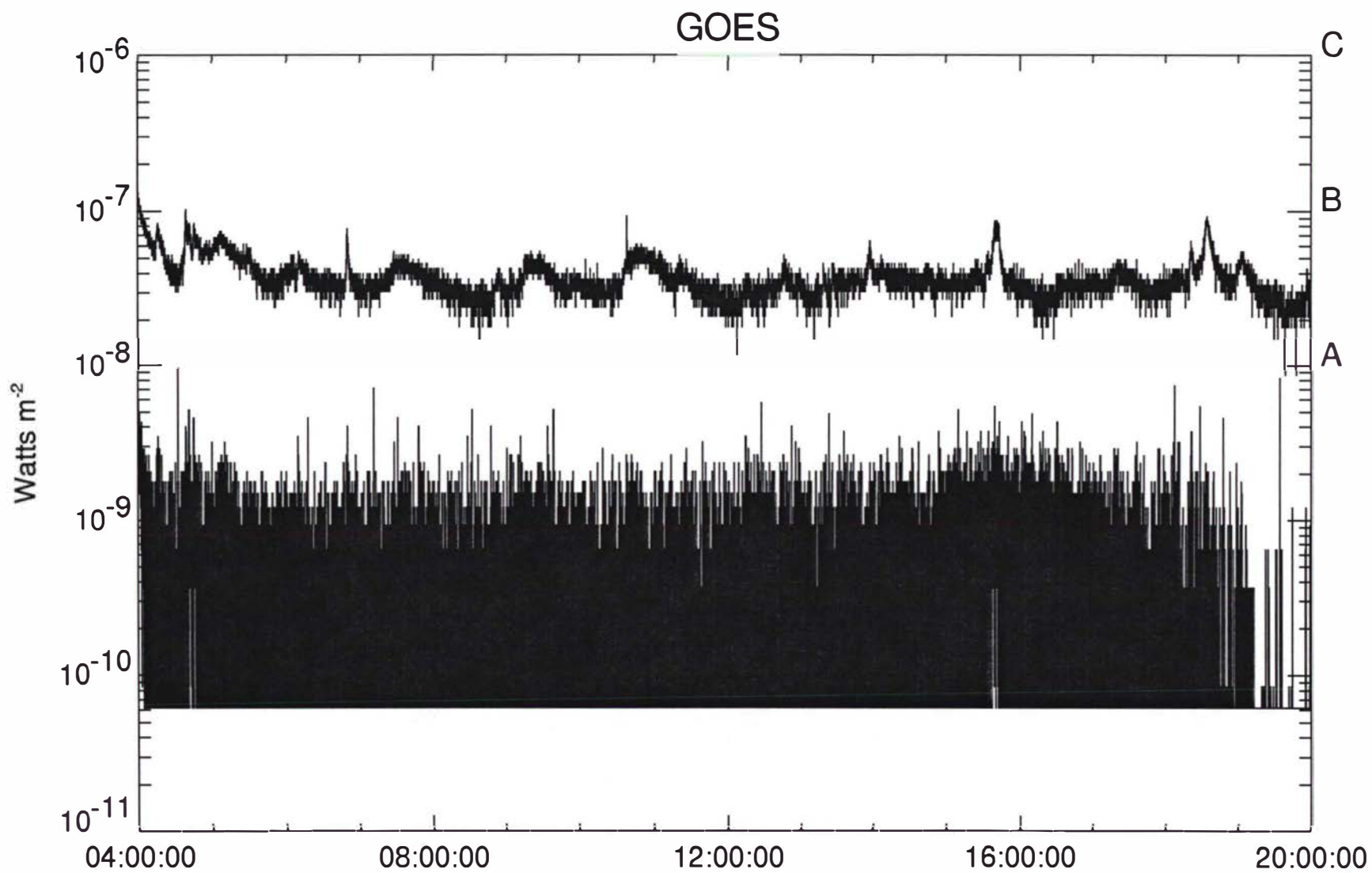


CALIBRATION DATA INCLUDED



UNIV AL TIME





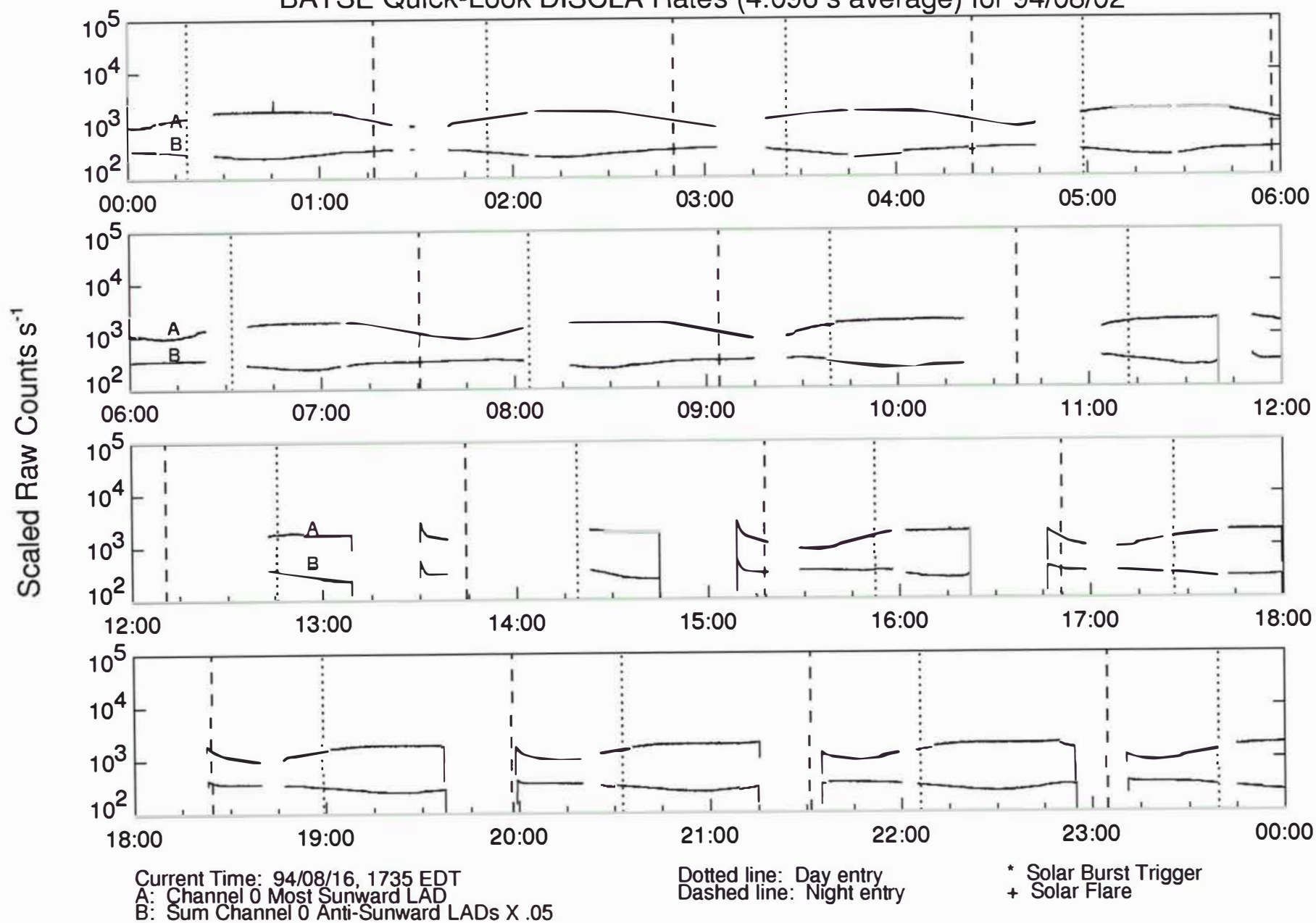
Data Start: 94/08/02, 0000:00

Plot created: 94/08/16, 1724

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/02



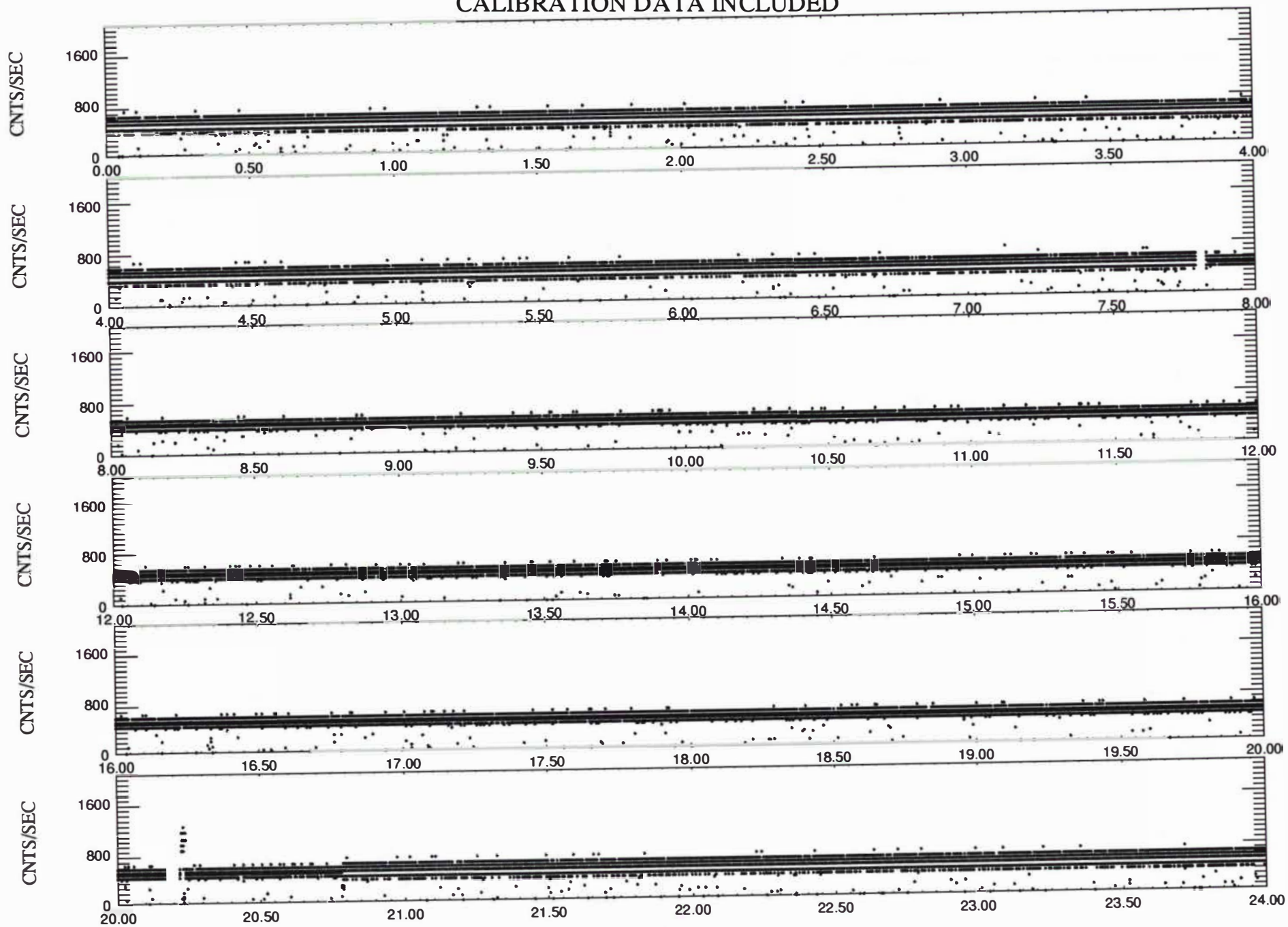
NO BURST (0)

CUB CCL DMP ROM DMA OSC MP. ICR SPE OPM RSC CAL WCH MEM BRS HUS

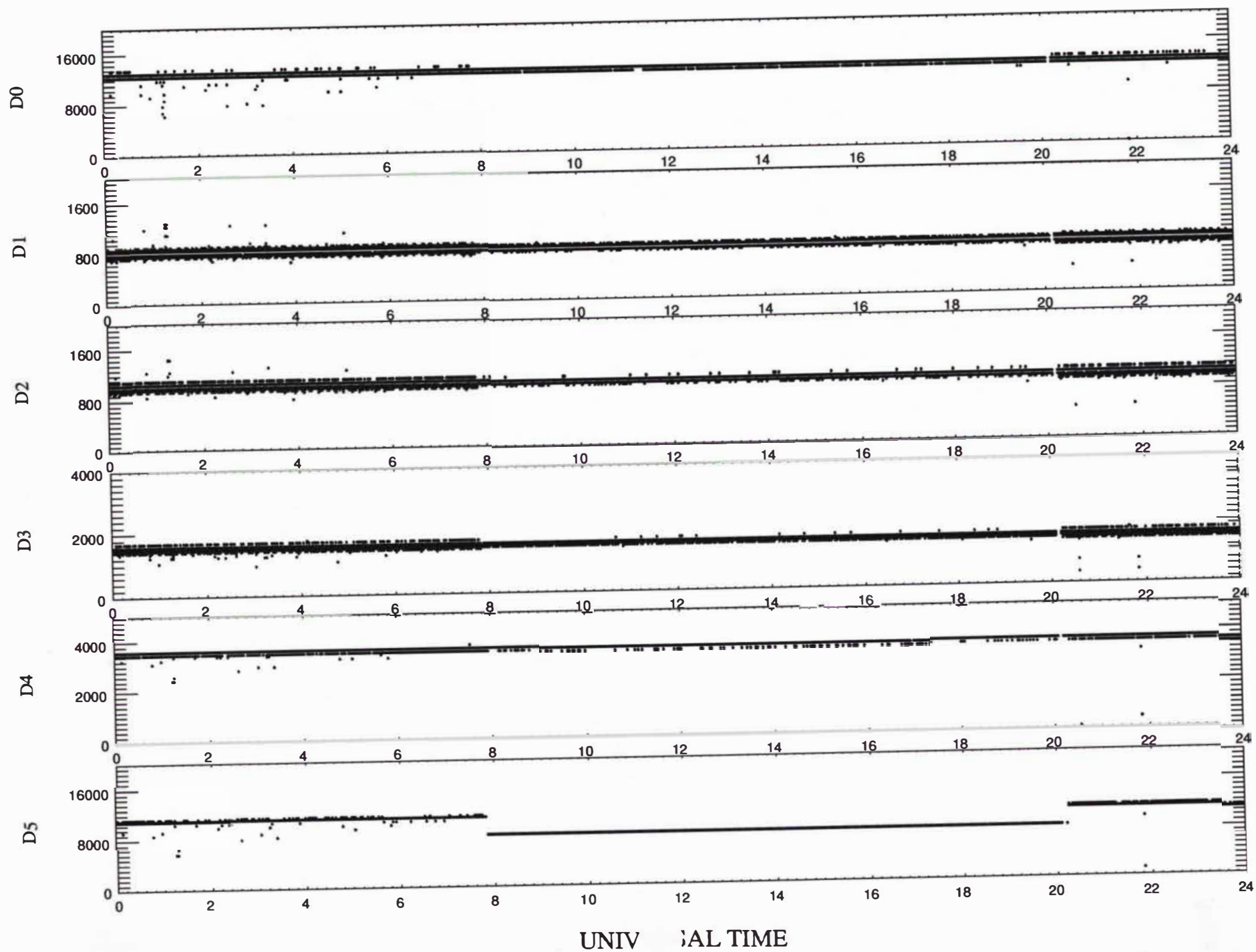


UNIV1 AL TIME

CALIBRATION DATA INCLUDED



UNIV! AL TIME



You'll probably get this later as a BATSE message, but for now, let's try to find it quickly.

BATSEARCH PROGRAM

BATSE BURST # 3104
EVENT OF 1994 AUG 4 DAY OF YEAR=216
EVENT CROSSING TIME AT BATSE : 4994. S. OR 01:23:14.0
COORDINATES ARE .000 .000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 110.000 -59.000
BATSE PEAK COUNTING RATE: 90000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 4/ 8/ 94 IS:
RA= 135.028 DEC= -42.099 DIST= 2.932 AU
BATSE-ULYSSES DISTANCE = 438673627. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=157.06 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1347.55 SECS.
CROSSING TIME AT ULYSSES IS 3646. S. OR 01:00:46 +/- 128.55 SECONDS

BATSE BURST TRIGGER

NO.: 03104

TIME: TJD=9567 SECONDS=04994

TYPE: UNKNOWN SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=114. AZIMUTH=227. ERROR= DEGREES

COMMENTS:

HARD EVENT LASTING 10-20 MS. NEAR HORIZON. NOT SURE IF THIS IS A BURST OR A TGF.

Dear Jerry,

We didn't trigger on 3104, and it isn't apparent as a rate increase either. Given that you had about 80000 c/s net, x 0.01 s, it looks like you would have had 800 counts at most, and Ulysses would have had 1/50th or so of that - in other words, it would have been undetectable.

Kevin

From root Fri Aug 5 14:07 1994

Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)

id AA01574; Fri, 5 Aug 94 14:07:21

Received: from SSLMOR.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)

id AA02319; Fri, 5 Aug 1994 14:18:53 +0800

Date: Fri, 5 Aug 1994 16:18:34 -0500 (CDT)

From: FISHMAN@ssl.msfc.nasa.gov

To: khurley@space6.ssl.berkeley.edu

Cc: PACIESAS@ssl.msfc.nasa.gov

Message-Id: <940805161834.2100c66b@ssl.msfc.nasa.gov>

Subject: Trig. #3104

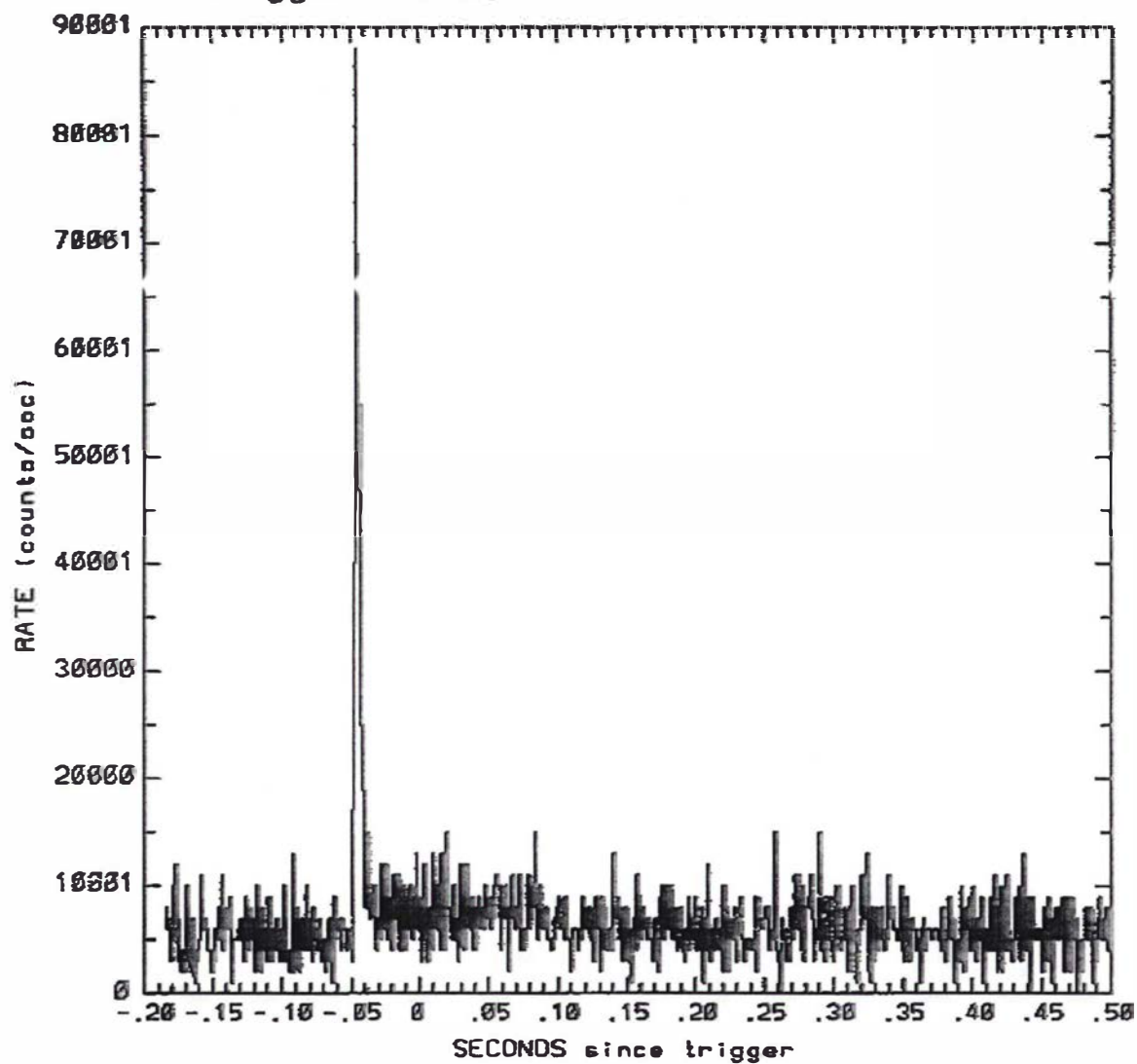
Content-Length: 180

Status: R

Kevin-

Thanks for looking- too bad you couldn't see anything. We're beginning to think it was a real burst - from the spectrum and the location. - Maybe the shortest ever.

Trigger # 3104

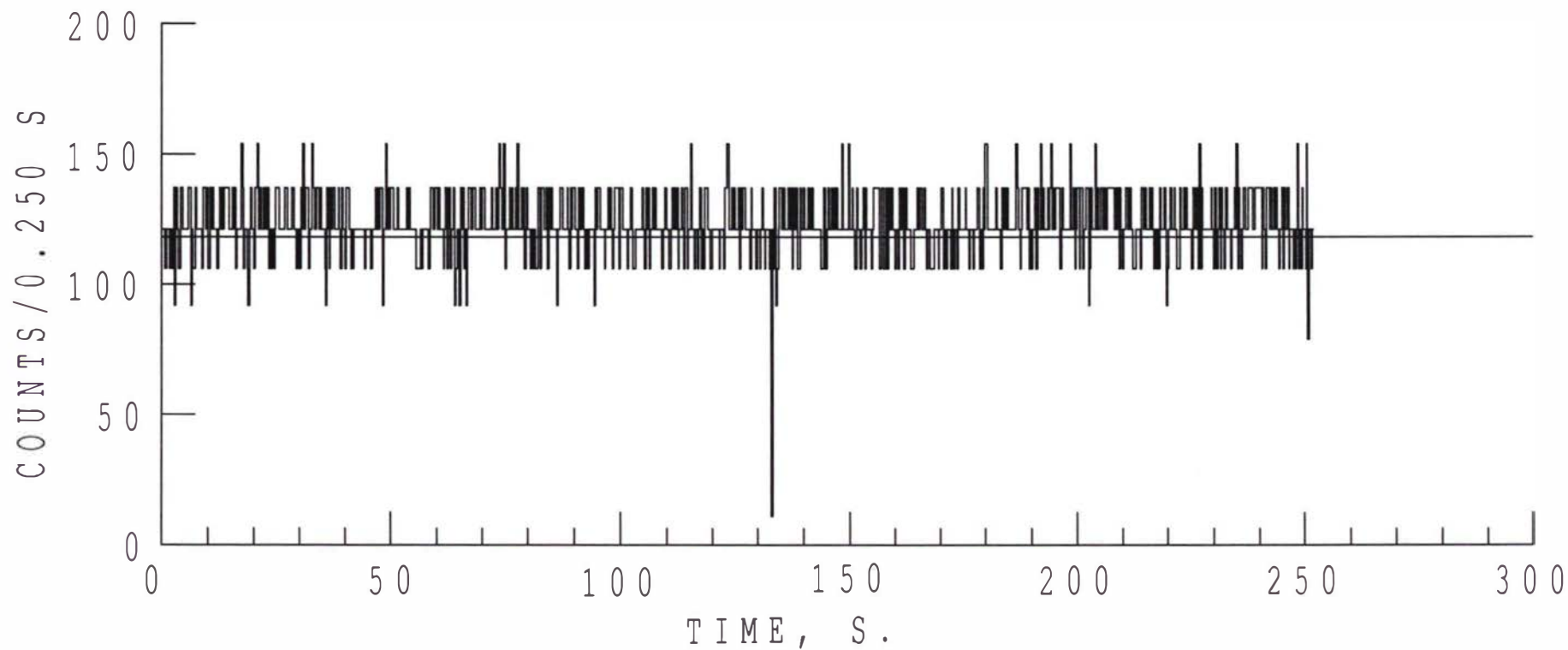


8 / 8 / 94

ULYSSES RT
3 / 8 / 94 3528.130 s
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From MEEGAN@ssl.msfc.nasa.gov Mon Aug 8 08:47 PDT 1994
Date: Mon, 8 Aug 1994 10:47:07 -0500 (CDT)
From: MEEGAN@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3105

BATSEARCH PROGRAM

BATSE BURST # 3105
EVENT OF 1994 AUG 3 DAY OF YEAR=215
EVENT CROSSING TIME AT BATSE : 14402. S. OR 04:00:02.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 275.000 -7.000
BATSE PEAK COUNTING RATE: 17000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 3/ 8/ 94 IS:
RA= 134.746 DEC= -41.959 DIST= 2.937 AU
BATSE-ULYSSES DISTANCE = 439342035. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 60.92 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 712.26 SECS.
CROSSING TIME AT ULYSSES IS 15114. S. OR 04:11:54 +/- 283.18 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 3/ 8/ 94 IS:
RA= 80.015 DEC= 23.113 DIST= 1.908 AU
MARS-BATSE DISTANCE = 285494176. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 21.62 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 885.34 SECS.
CROSSING TIME AT MARS IS 15287. S. OR 04:14:47 +/- 74.35 SECONDS

RE

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3105	940803	9567	14402	17000	275	-07

BATSE BURST TRIGGER

NO.: 03105

TIME: TJD=9567 SECONDS=14402

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= 76. AZIMUTH=118. ERROR= DEGREES

COMMENTS:

STRONG, MULTYPEAKED EVENT LASTING ABOUT 30 S. SEEN ABOVE 300 KEV.

Date: Feb 2 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Were data checked by Joe Springer for 0.5 s errors?
- ☐ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)?
- ☐ BATSE ephemeris for T_0 ?
- ☐ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included?

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?

- ☐ ACCESS database updated?

*CORREL3 run for regroupings
from 0.25 to 4 s. Time histories
are a very poor match.
Can't be reliably triangulated*

ULYSSES RT

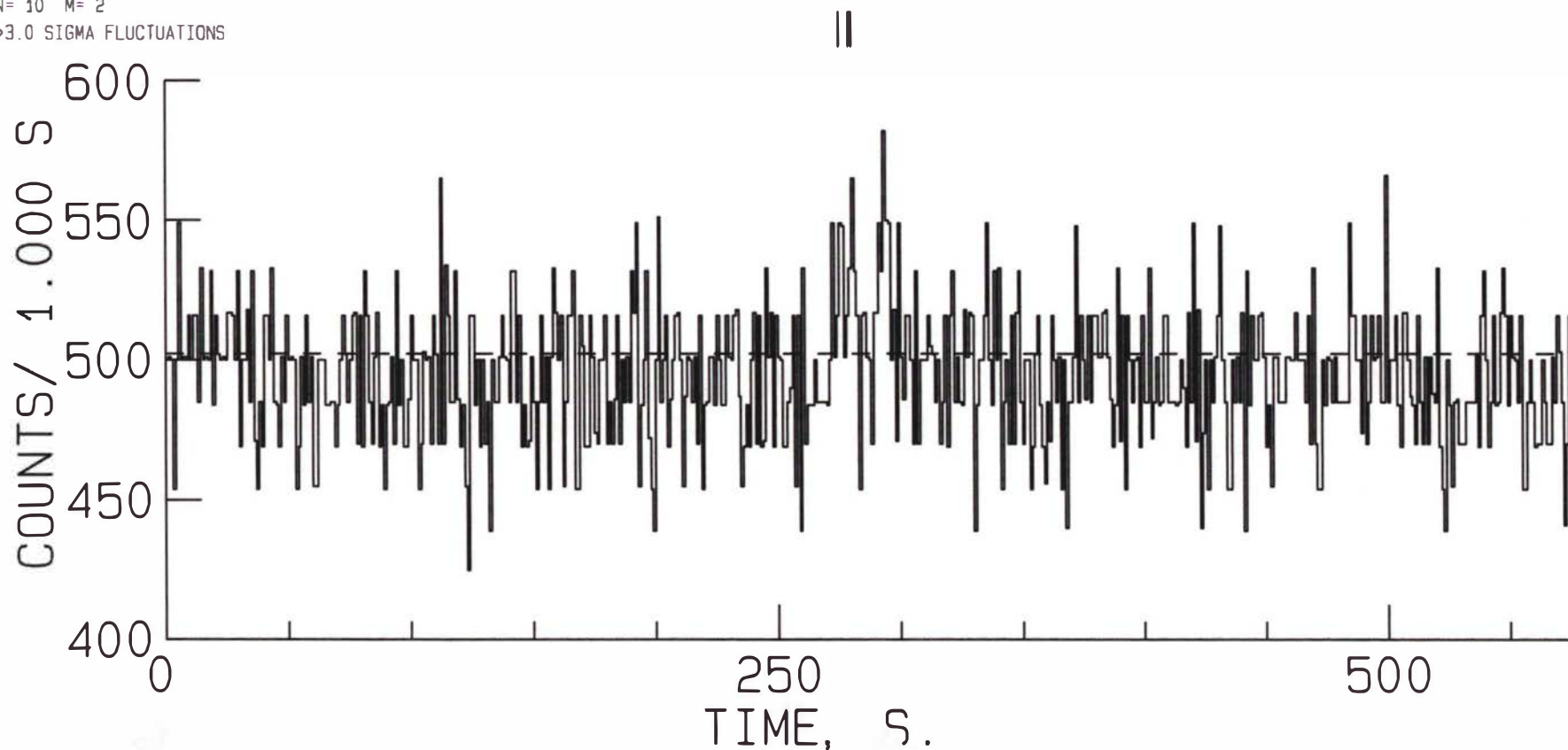
15 / 11 / 93

3/ 8/94 14832.065 s

0.250 S INTERVALS REGROUPED BY 4

22- 148 keV

N= 10 M= 2
>3.0 SIGMA FLUCTUATIONS



N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

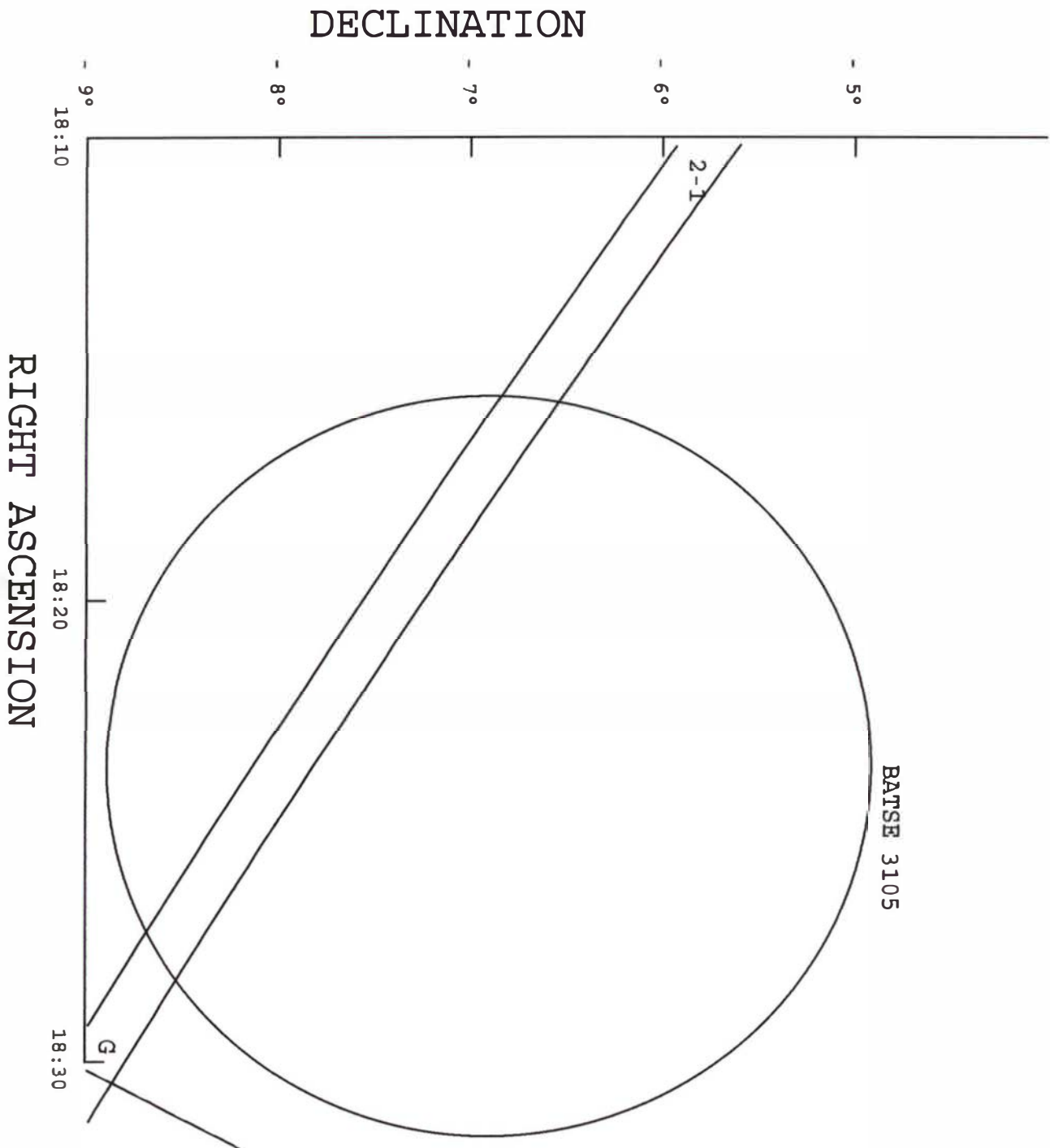
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 3, 1994 4:10

15/11/93



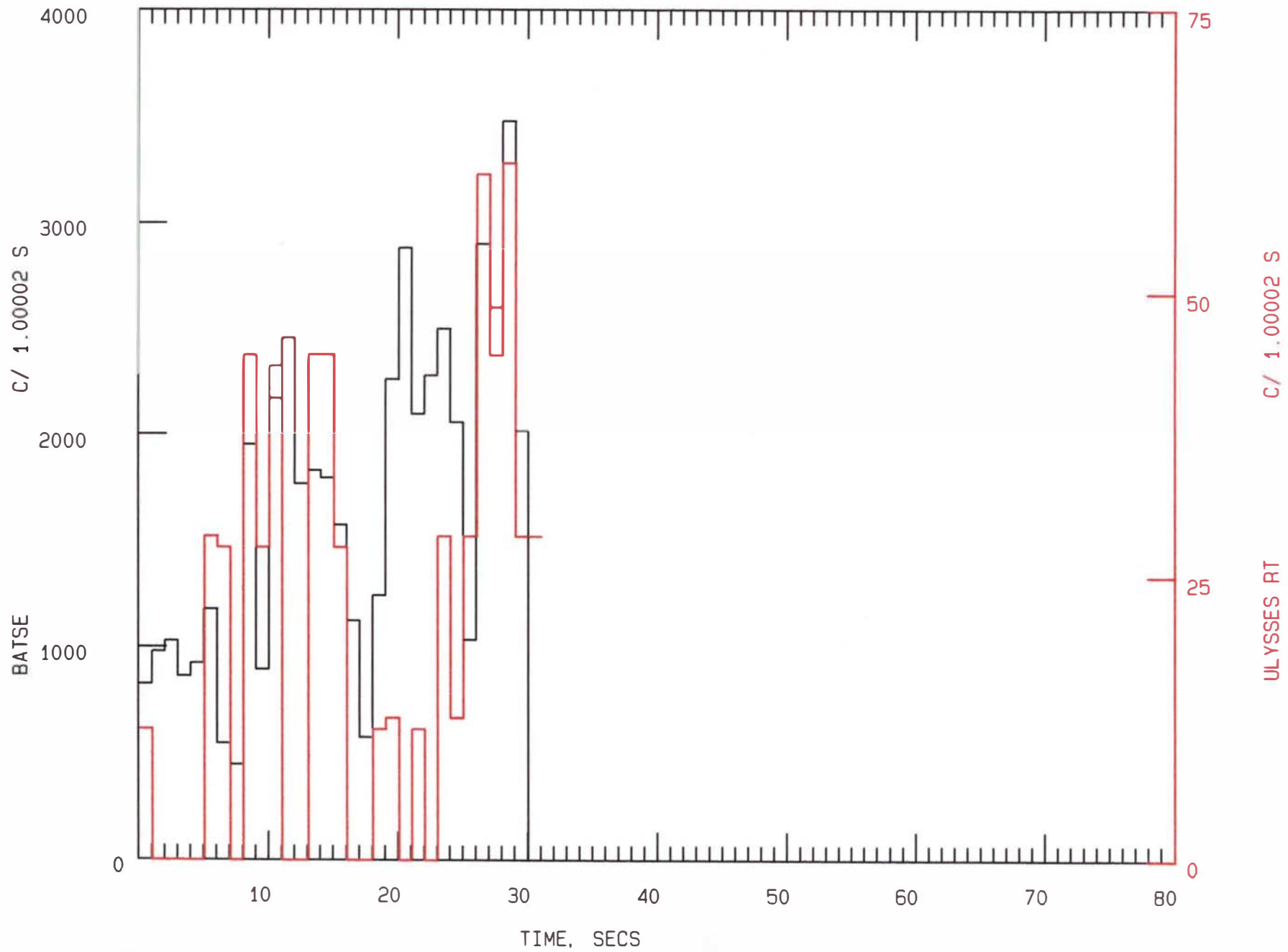
BATSE

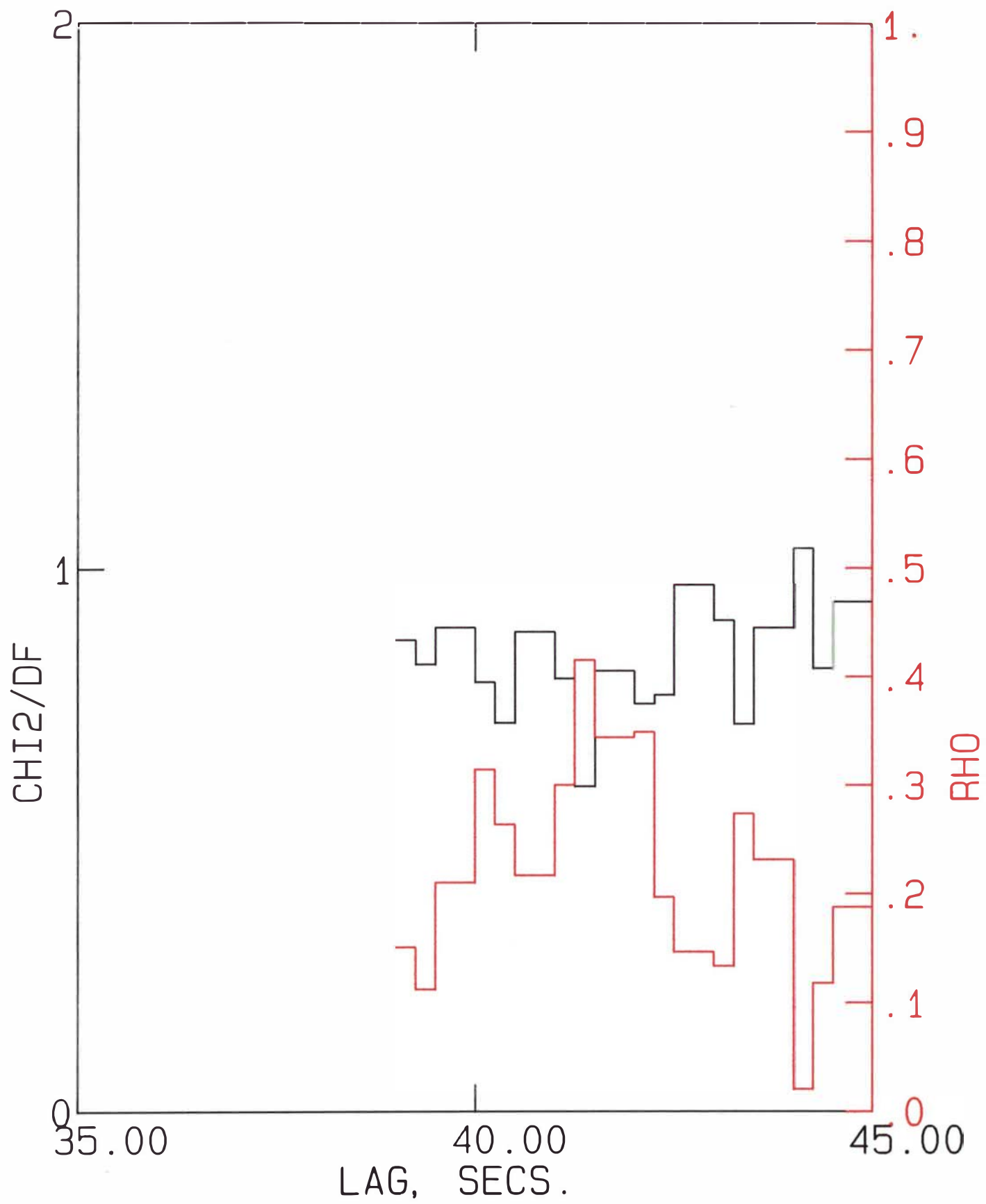
-ULYSSES RT CORRELATION

3/ 8/94

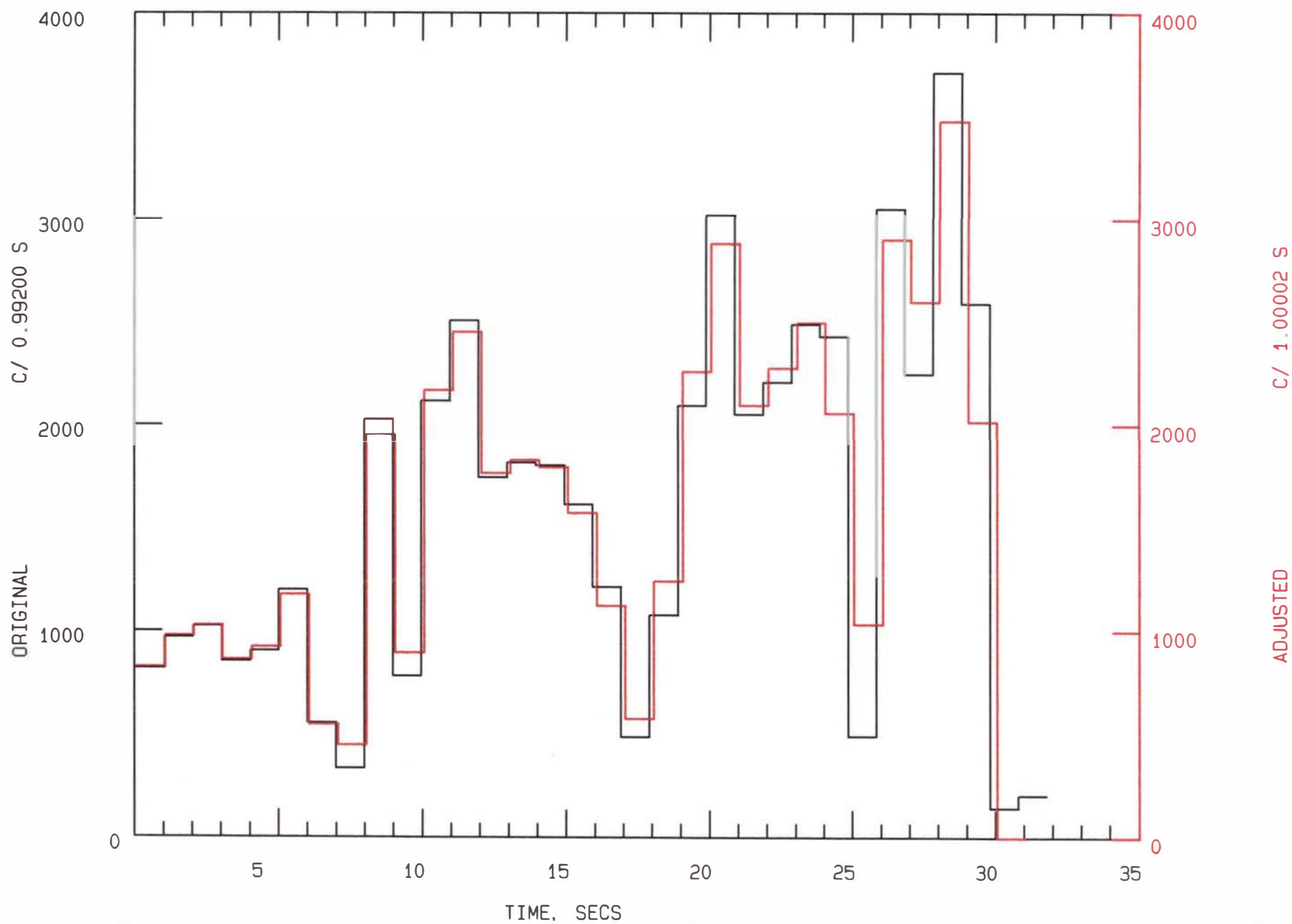
14402.226

15/11/93

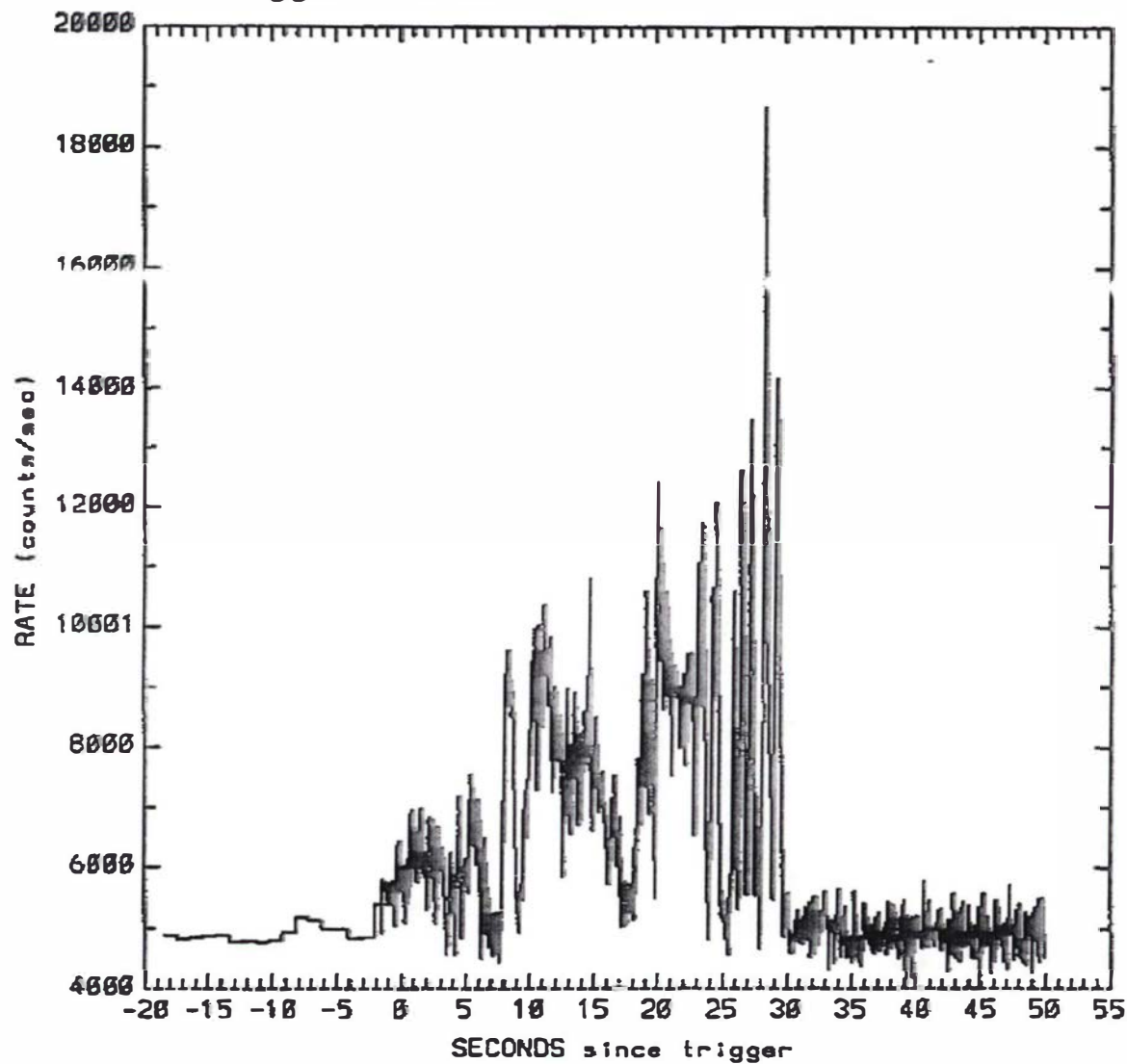




15/11/93



Trigger # 3105



4-AUG-1994 13:16:52

Created by KOPS 80
(Burst Display)
Version 2.21

Trigger # : 3105

Trigger Time:
9567 / 14482.226Burst Data Type:
DISCDeadtime
Corrected: RBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors [7..8].
05:18000Discriminators:
(2, 3)Quality Mask:
BDISP8

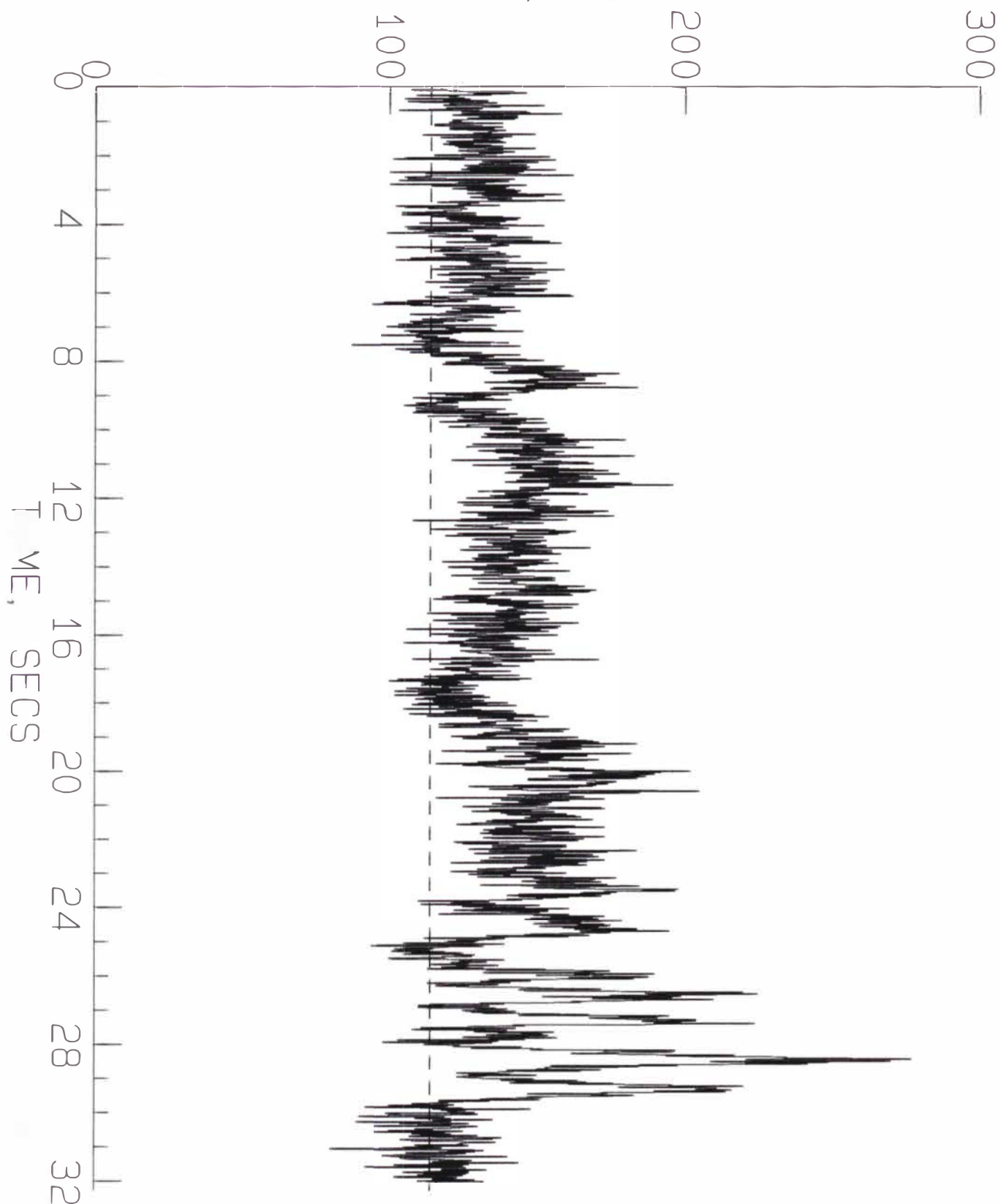
BATSE

03/08/94

14402.226

25- 100 keV

COUNTS/ .016 S



From root Tue Oct 4 14:06 1994
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA01789; Tue, 4 Oct 94 14:06:16
 Received: from sangam.ncst.ernet.in by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA09220; Tue, 4 Oct 1994 14:15:47 +0800
 Received: from soochak.ncst.ernet.in (soochak.ncst.ernet.in [144.16.11.100]) by sangam.ncst.ernet.in
 From: kmarar@isac.ernet.in
 Received: from nic.iisc.ernet.in (twisha.ece.iisc.ernet.in [144.16.64.4]) by soochak.ncst.ernet.in
 Received: by nic.iisc.ernet.in (ERNET-IISc/AT&T UNIX SYS V.3.2)
 id AA15091; Wed, 5 Oct 94 02:51:30 EST
 Message-Id: <9410050751.AA15091@nic.iisc.ernet.in>
 Received: by vigyan.iisc.ernet.in (smail2.3)
 id AA24209; 5 Oct 94 02:18:52 EST (Wed)
 To: vigyan!khurley@sunspot.ssl.berkeley.edu, vigyan!kmarar@isac.ncst.ernet.in
 Date: Mon Oct 3 14:14:08 1994
 Content-Length: 2592
 Status: R

Oct 3, 1994

Dear Kevin,

Kindly recall my fax to you dated 25 June 94. Since then the SROSS-C2 orbit has been brought down to 430 x 620 km. Our instrument is working very satisfactorily. I am giving below the times of trigger of a few more events from our experiment. Kindly check them with your list. The events marked ** may please be looked up first.

SROSS-C2 GRB CANDIDATE EVENTS

Event orbit	Event date (d m y)	time(UT)			
		h	m	s	
1126	19 July 94	06	00	05	** NO TRIG
1296	30 July 94	11	01	31	** NO DATA SET
1358	3 Aug 94	13	14	52	NO TRIG NO
1448	9 Aug 94	11	52	31	NO DATA SET
1650	22 Aug 94	20	23	20	** TRIGGER
2095	21 sep 94	05	08	19	** RI

** Most likely genuine from temporal profile

2. You had asked for the earth centre position and distance of SROSS-C2 for the events. Is it enough if we give you the state vector of the satellite corresponding to equator crossing for an orbit close to our event?

3. Do you have a software which we can use for determining the area of the celestial sphere blocked by the earth at the event time when our SROSS-C2 detects the events? I suppose this is what you had asked earlier. We wish to use your software to double-check our calculations. Can you send me a copy of your software through email with a sample input and output for checking the same.

My email address is : kmarar@isac.ernet.in (Please note the change)

In case you have problem in getting the correct gateway Please contact Prof.Edward Nather at the U of Texas at Austin (Astronomy Department) and check with him how he contacts me regularly.

His email address is nather@astro.as.utexas.edu

Kindly inform me when you receive this message.

Many thanks
Krishnan

10 / 10 / 94

ULYSSES RT

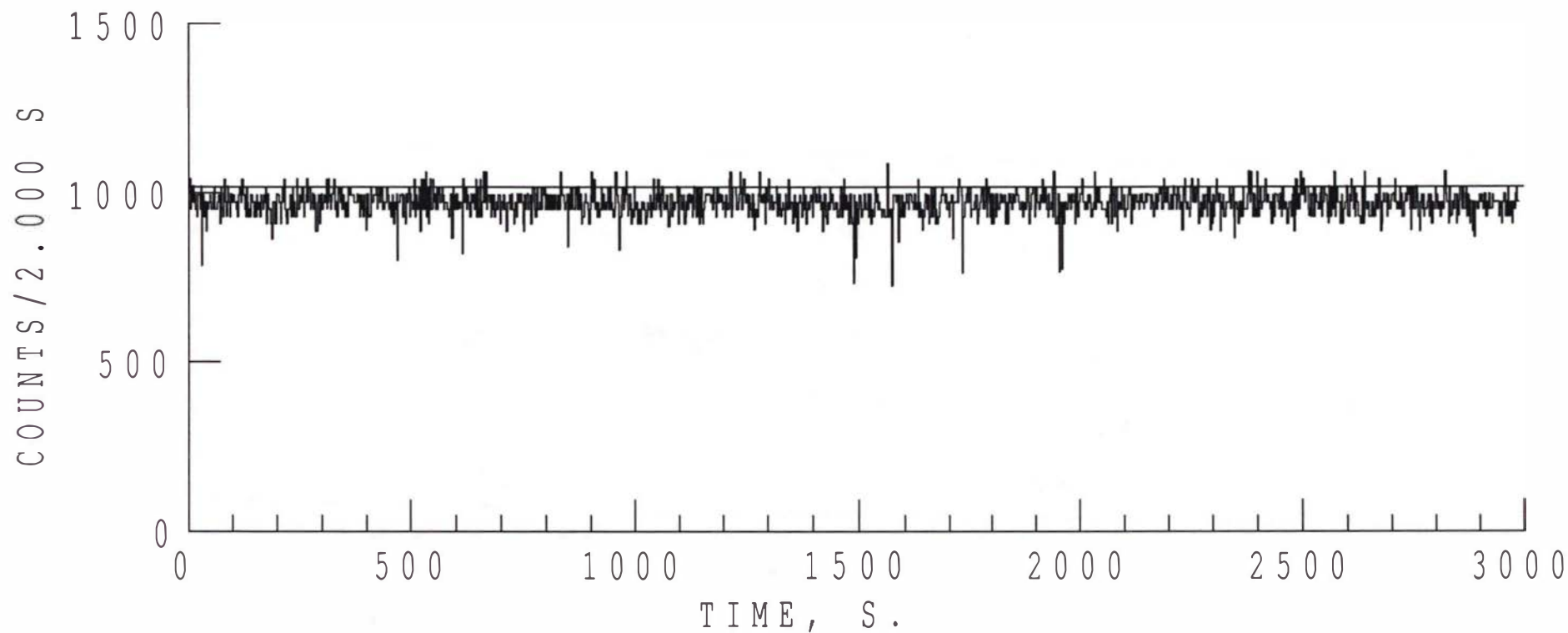
3 / 8 / 94 46188.062 s

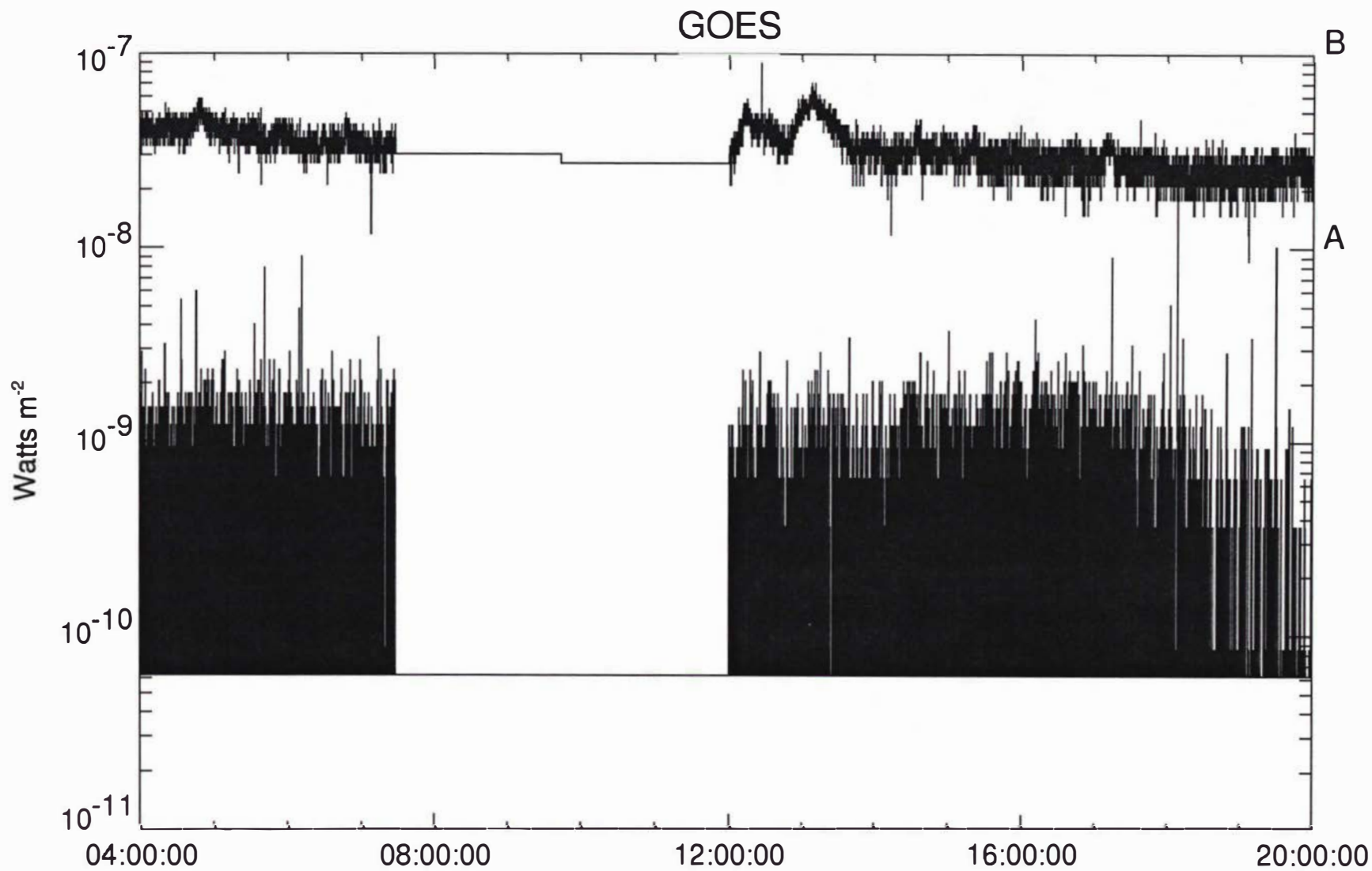
0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





Data Start: 94/08/03, 0000:00

Plot created: 94/08/16, 1725

Channel

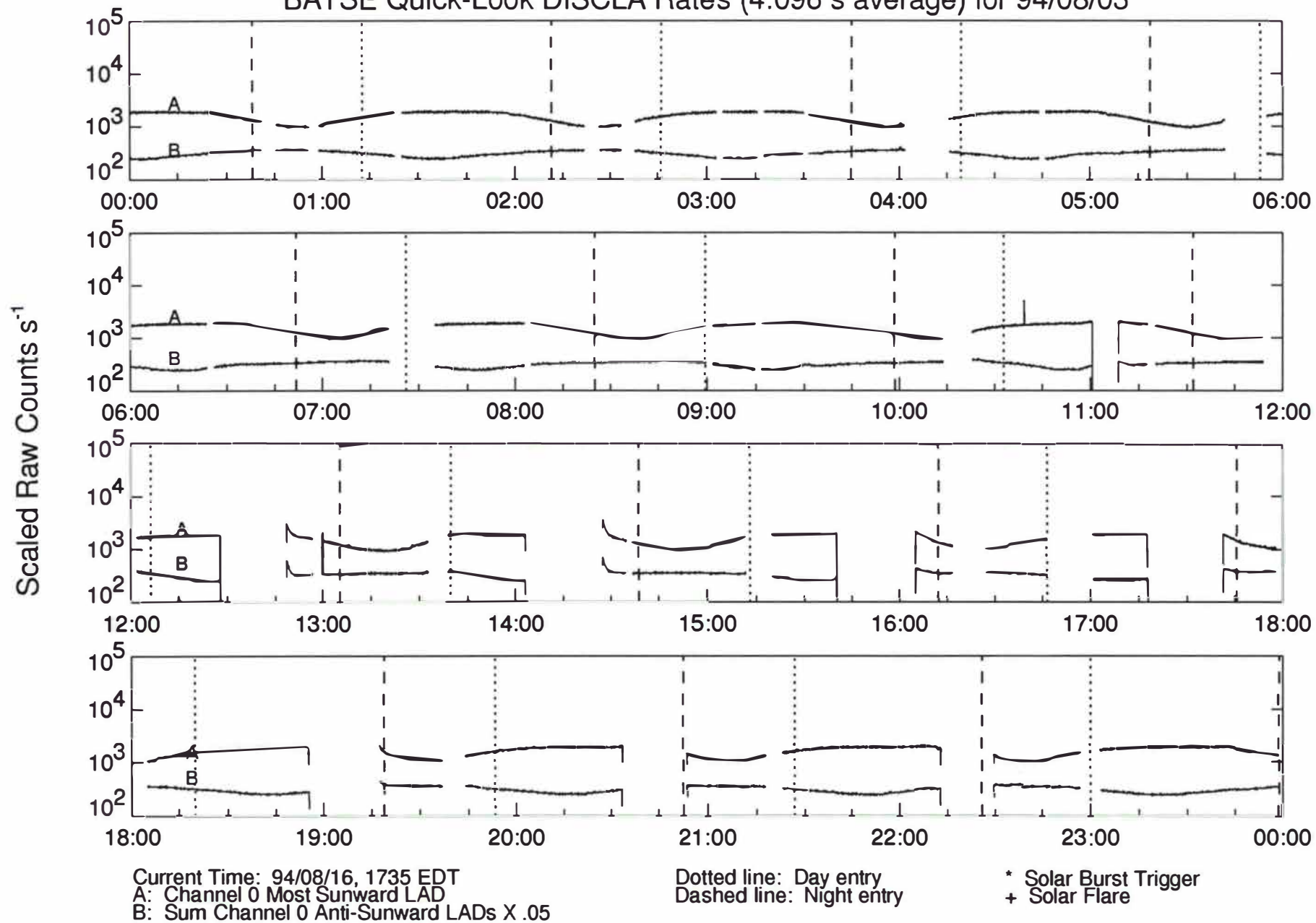
1 (1.0 - 8.0 Angstroms)

Background not subtracted

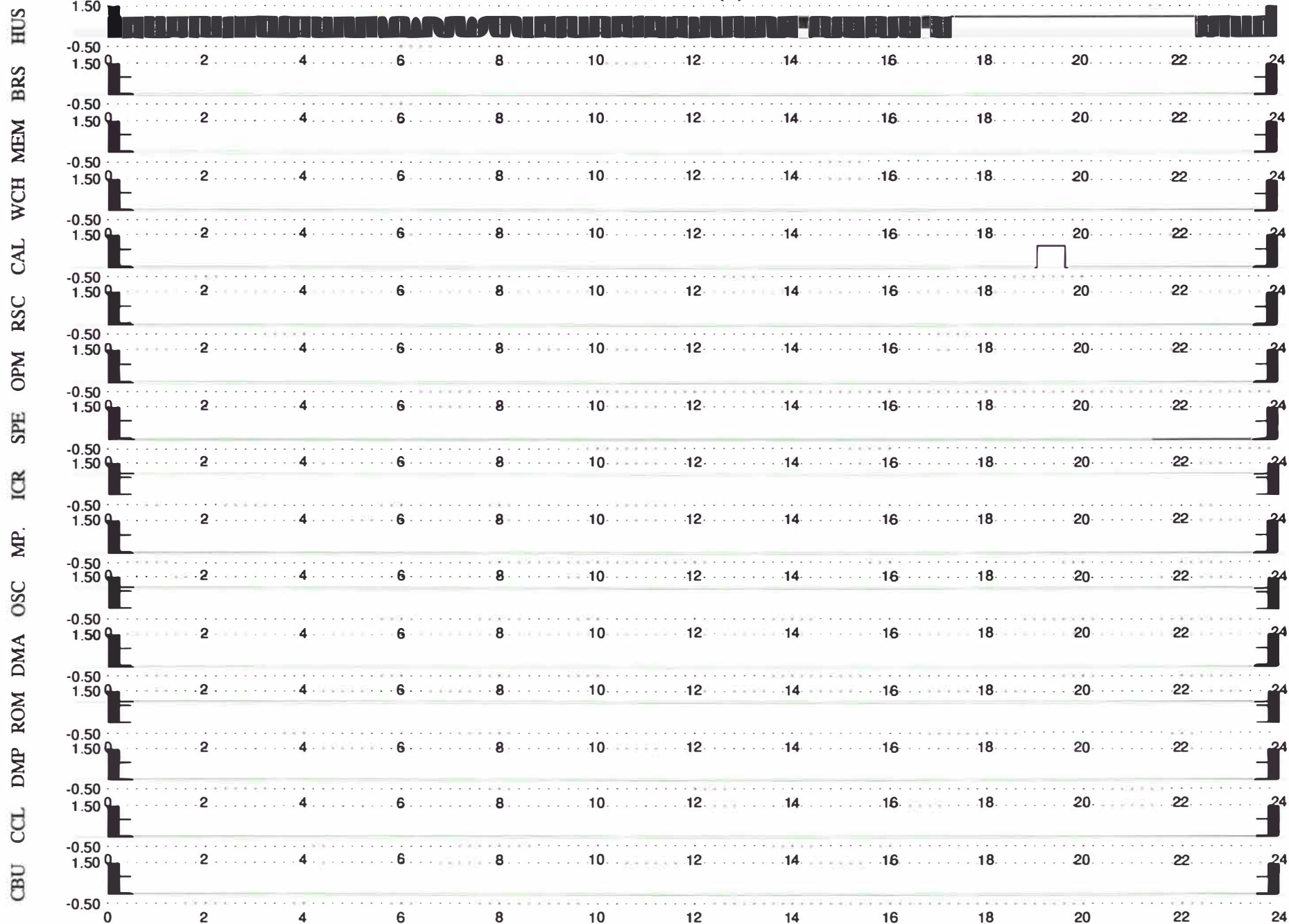
2 (0.5 - 4.0 Angstroms)

Background not subtracted

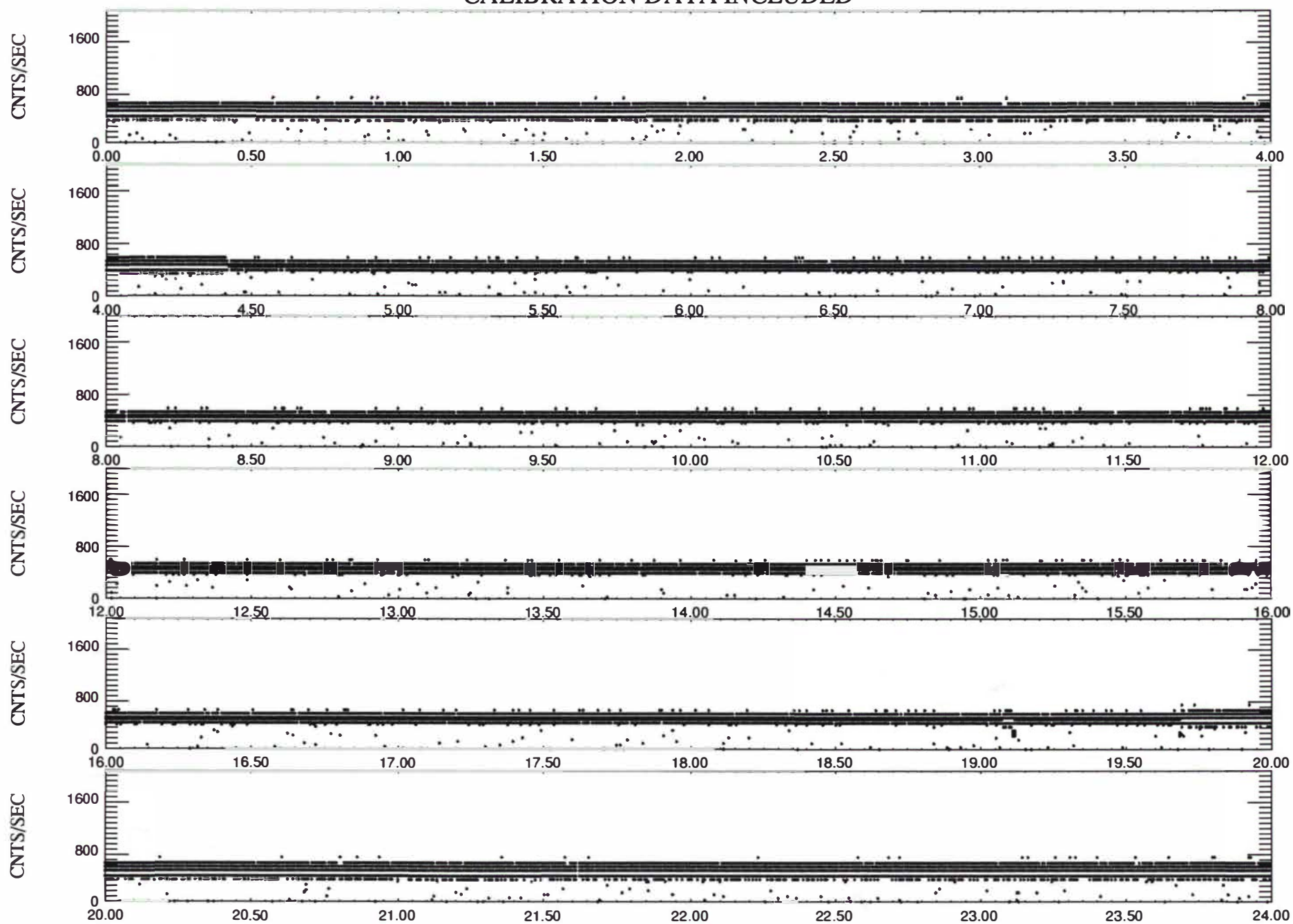
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/03



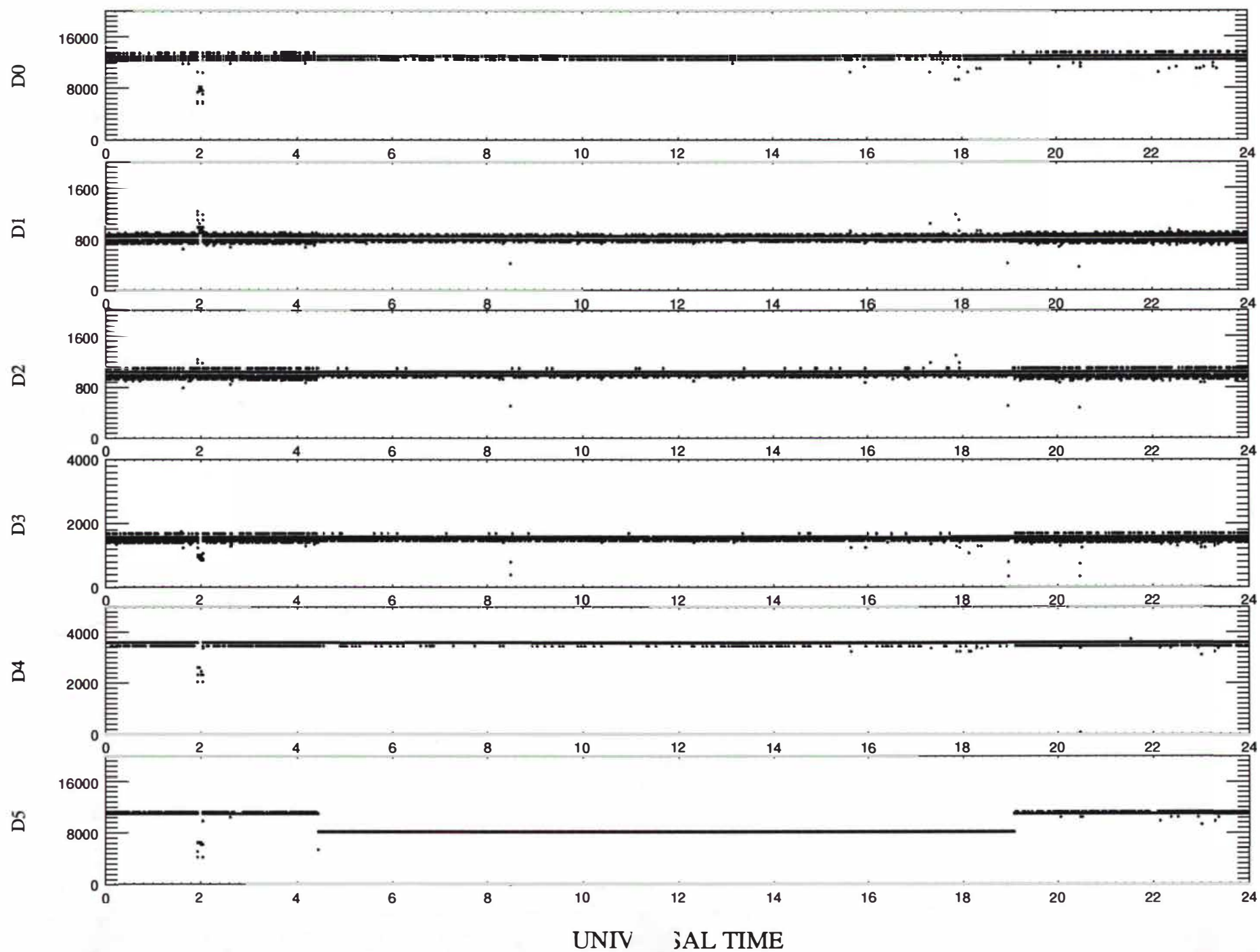
UNIV. AL TIME

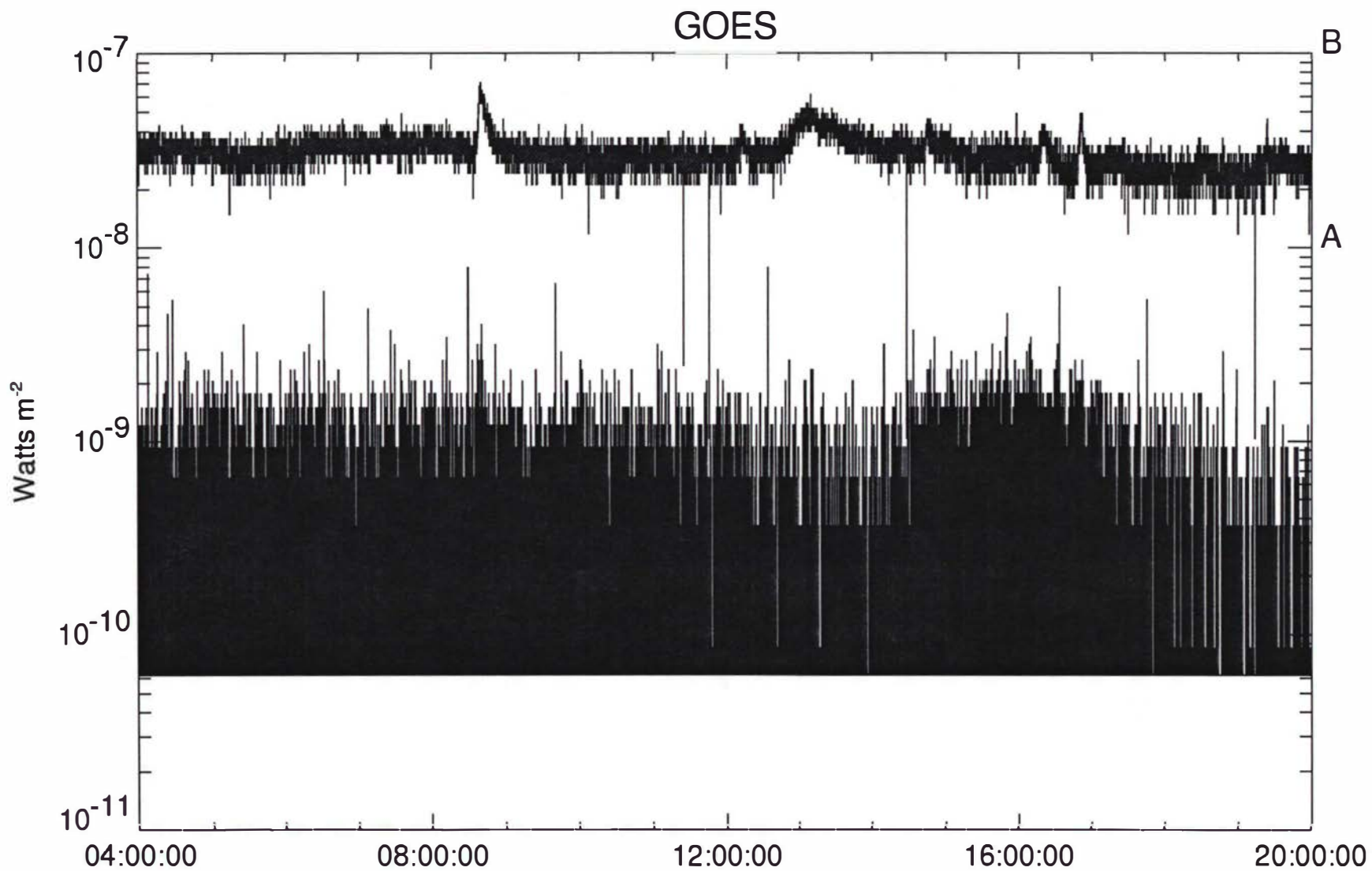


CALIBRATION DATA INCLUDED



UNIV. AL TIME





Data Start: 94/08/04, 0000:00

Plot created: 94/08/16, 1726

Channel

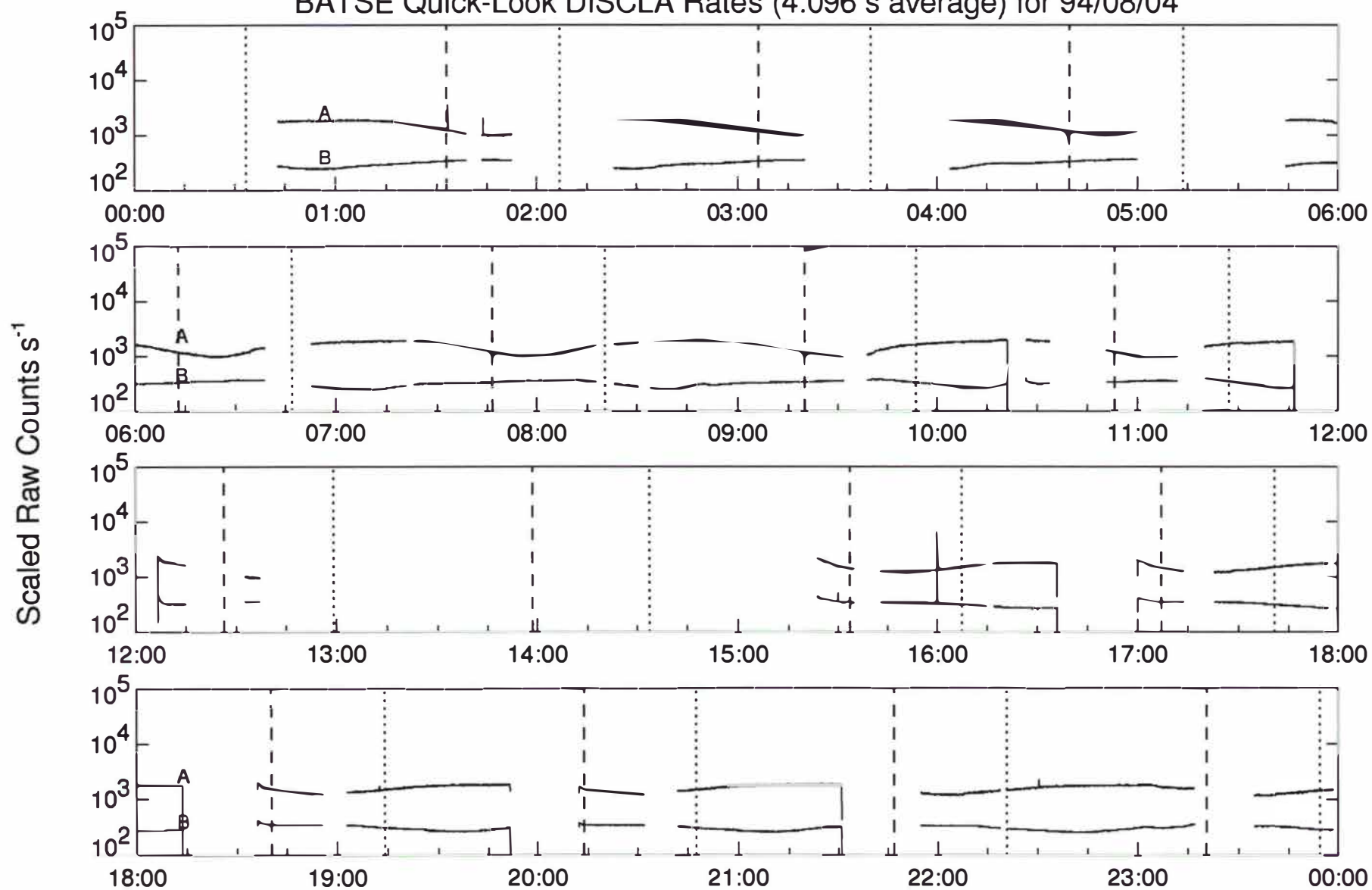
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/04



Current Time: 94/08/16, 1735 EDT

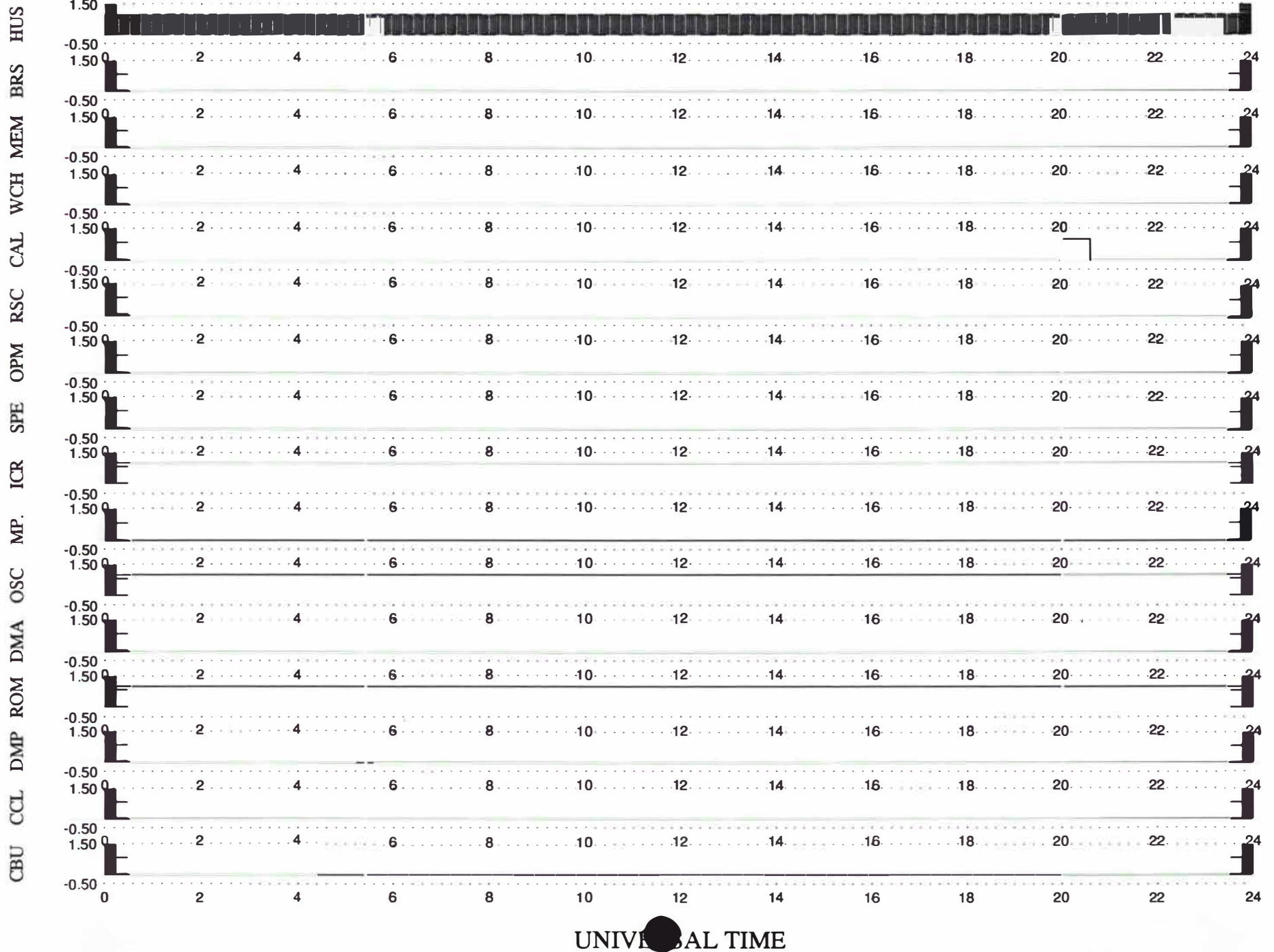
A: Channel 0 Most Sunward LAD

B: Sum Channel 0 Anti-Sunward LADs X .05

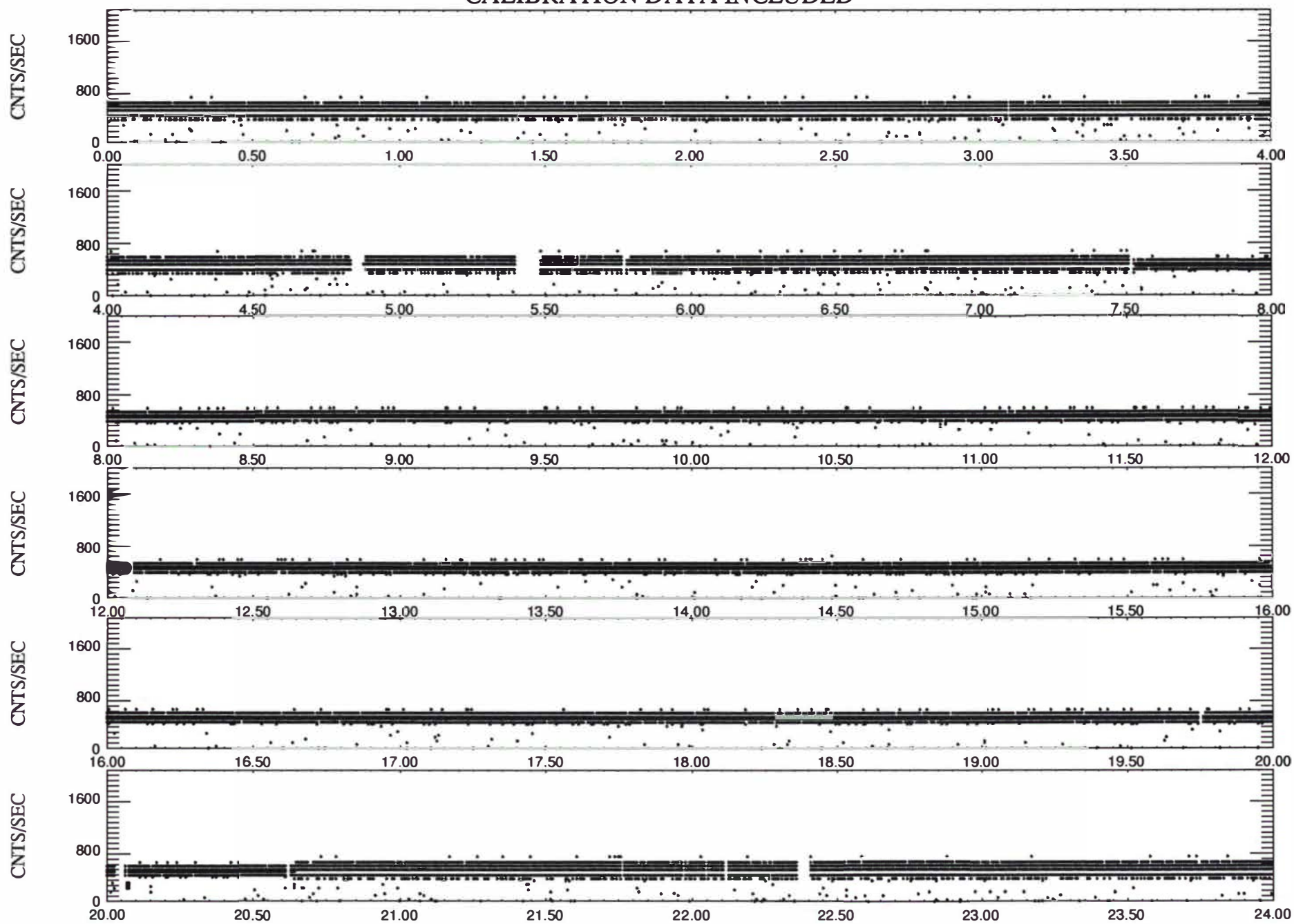
Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

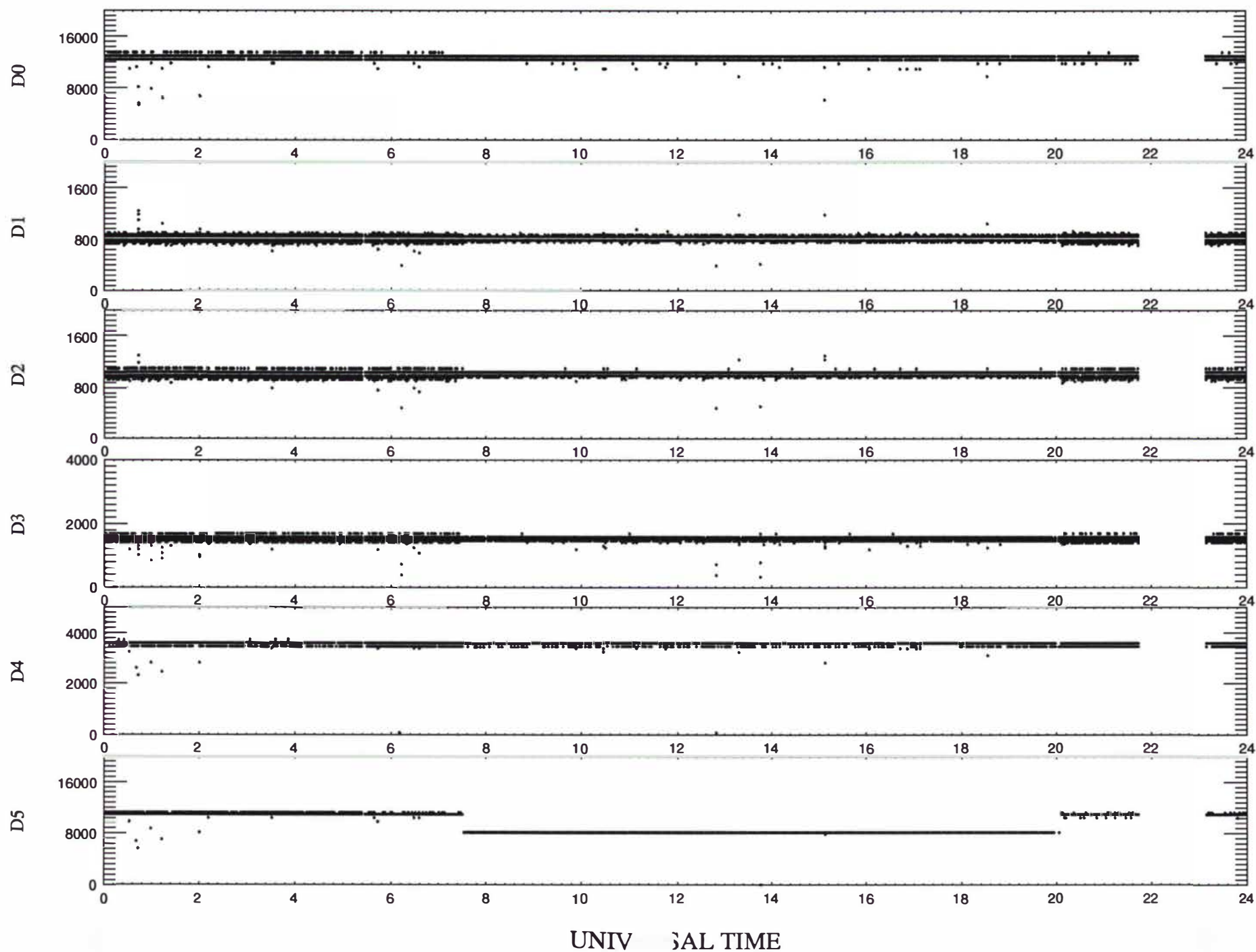
NO BURST (0)



CALIBRATION DATA INCLUDED



UNIVERSAL TIME



From SHARIFF@ssl.msfc.nasa.gov Sat Aug 6 15:28 PDT 1994
Date: Sat, 6 Aug 1994 17:27:54 -0500 (CDT)
From: SHARIFF@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03106

TIME: TJD=9569 SECONDS=39919

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:Y

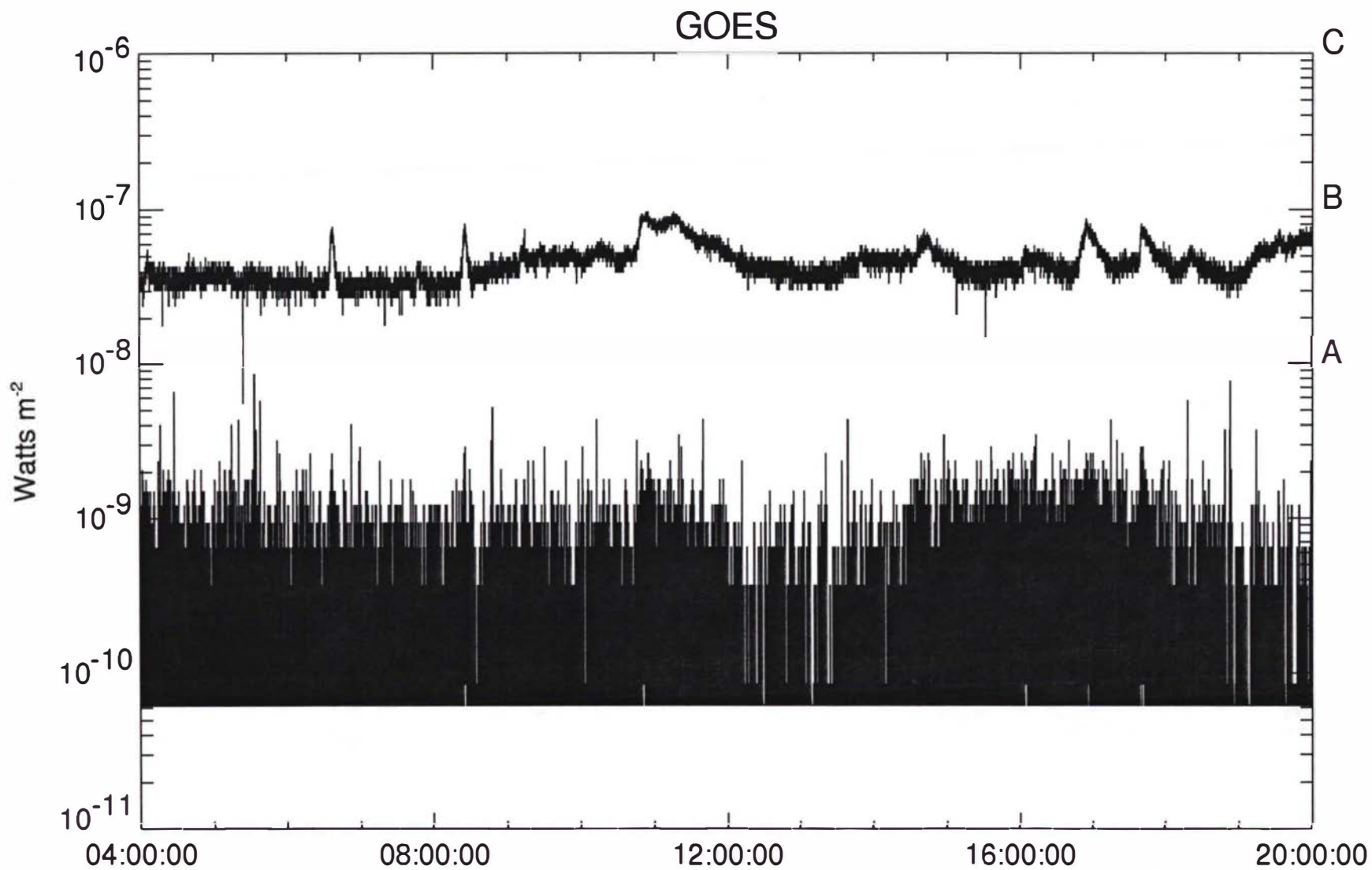
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

SAA ENTRY (PARTICLES).



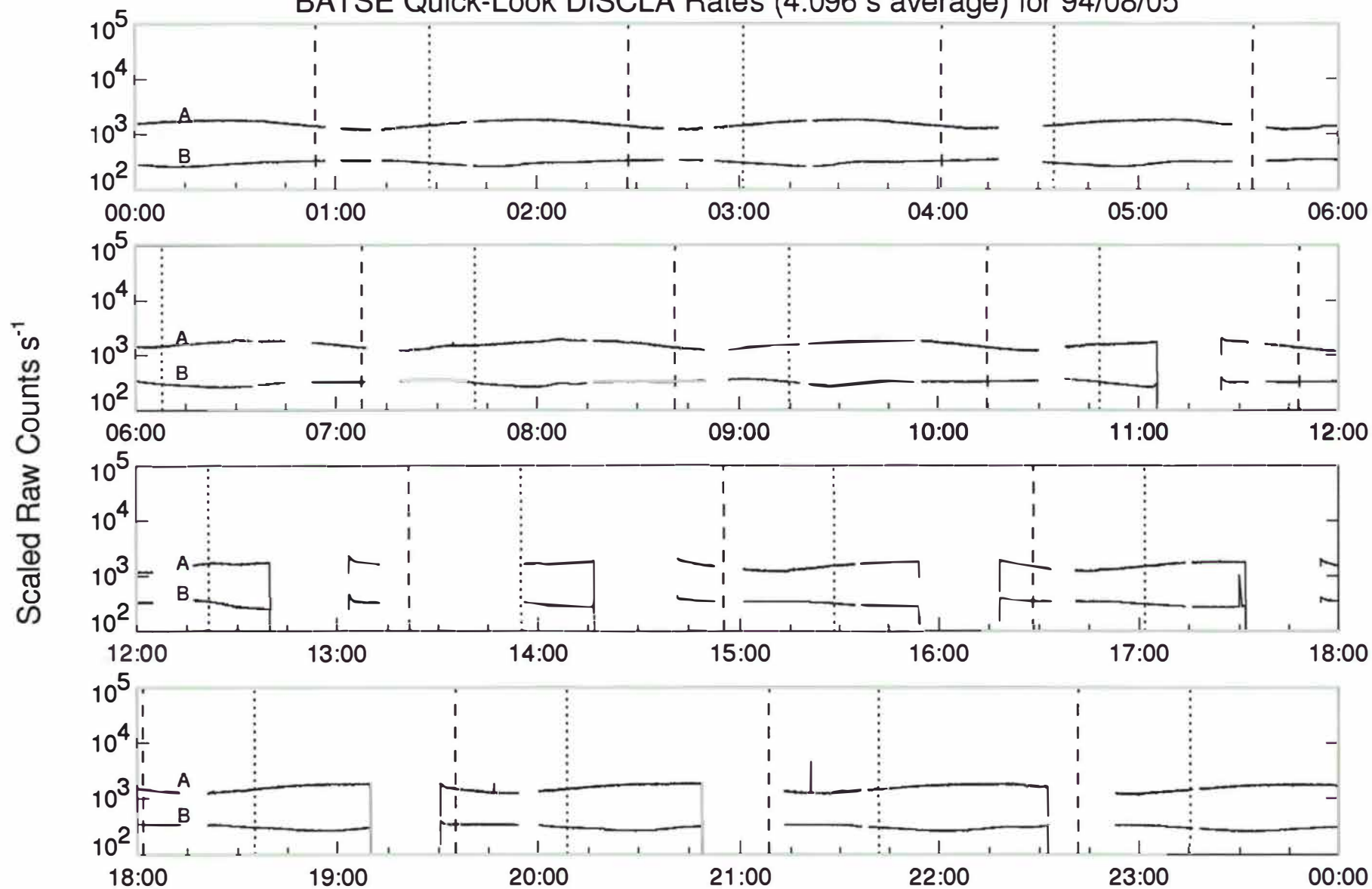
Data Start: 94/08/05, 0000:00

Plot created: 94/08/16, 1727

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

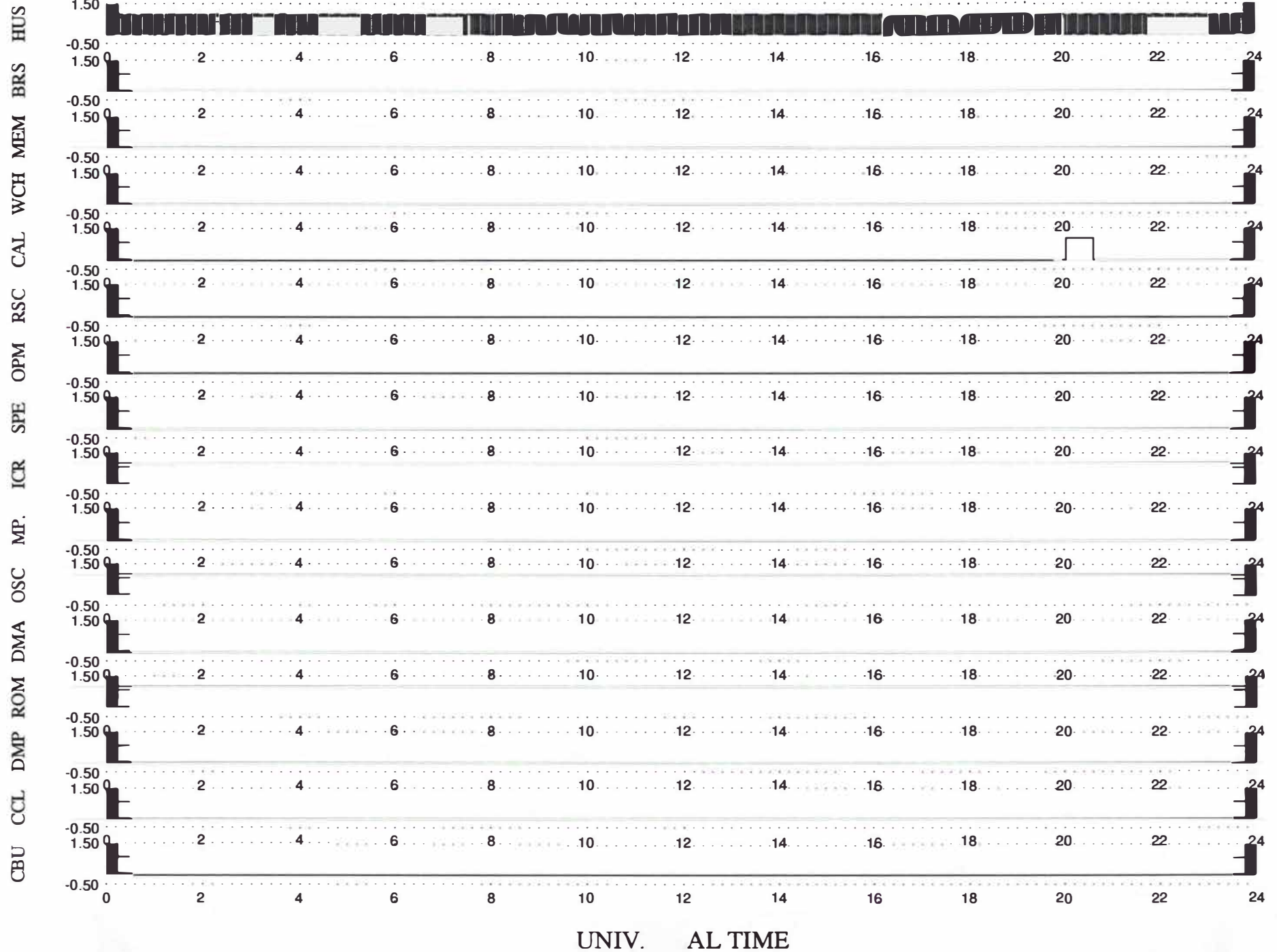
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/05



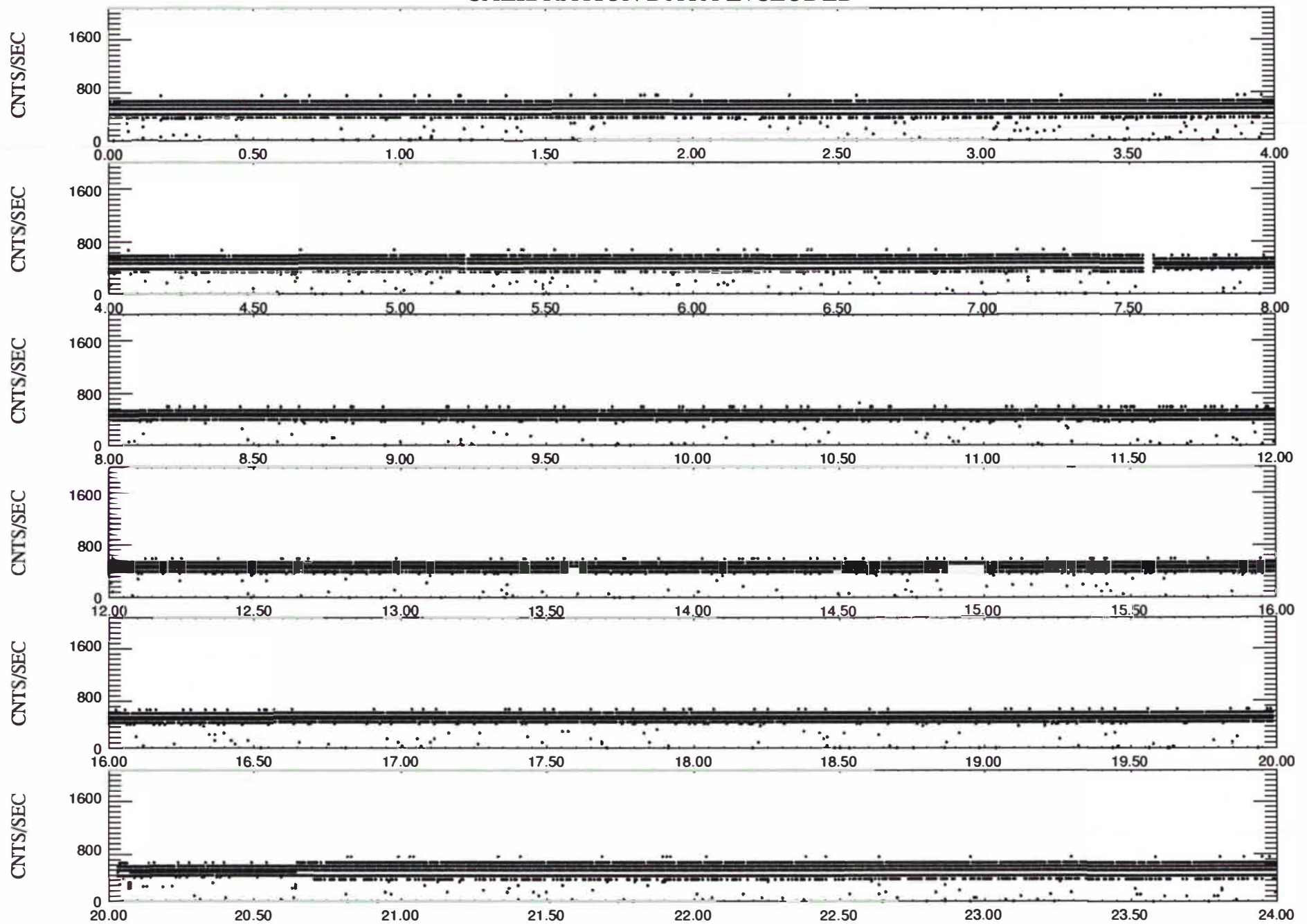
Current Time: 94/08/16, 1735 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

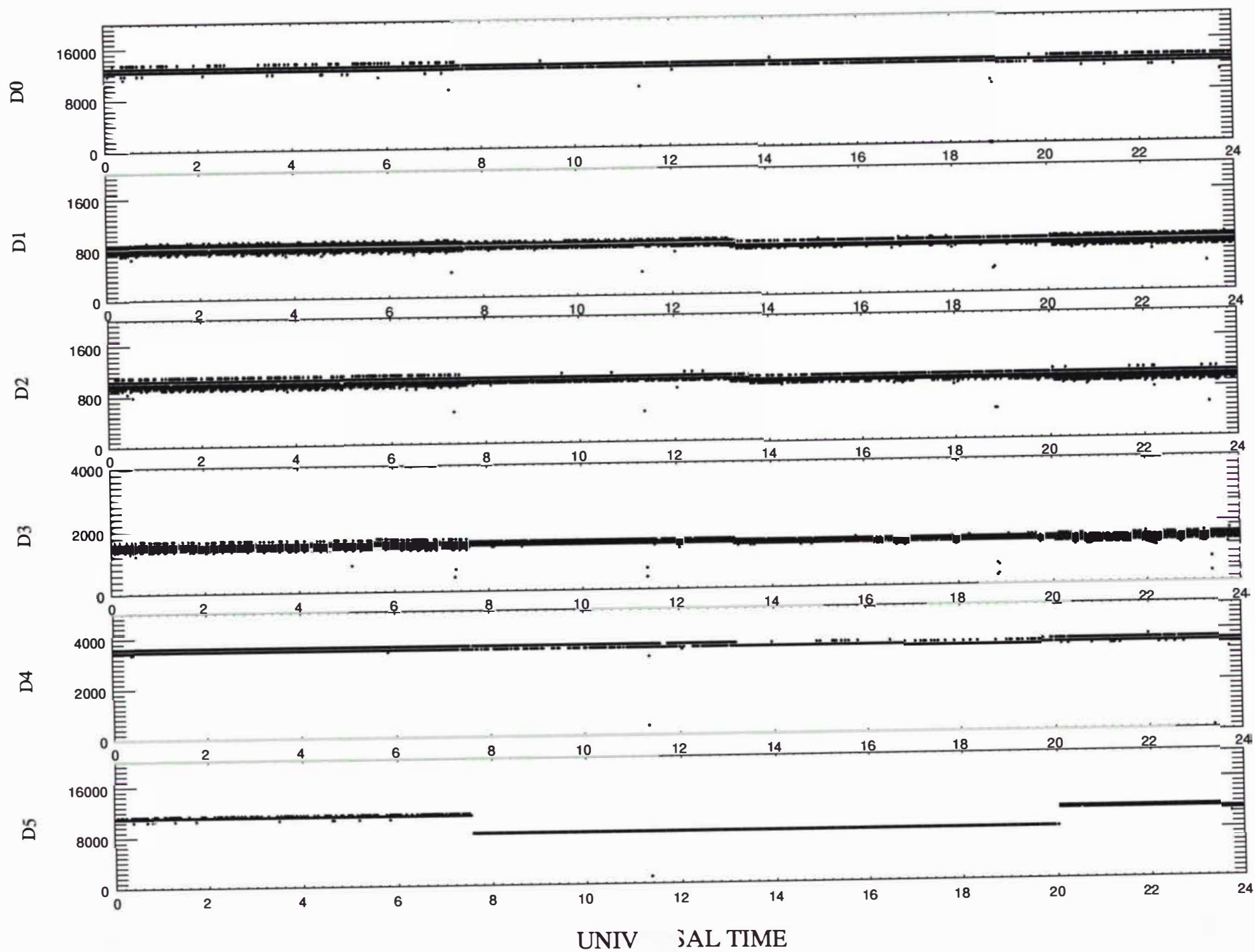
* Solar Burst Trigger
 + Solar Flare



CALIBRATION DATA INCLUDED



UNIV. AL TIME



From HENZE@ssl.msfc.nasa.gov Mon Aug 8 11:41 PDT 1994
Date: Mon, 8 Aug 1994 13:41:12 -0500 (CDT)
From: HENZE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3107

BATSEARCH PROGRAM

BATSE BURST # 3107
EVENT OF 1994 AUG 6 DAY OF YEAR=218
EVENT CROSSING TIME AT BATSE : 7785. S. OR 02:09:45.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 200.000 53.000
BATSE PEAK COUNTING RATE: 1700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 8/ 94 IS:
RA= 135.681 DEC= -42.433 DIST= 2.922 AU
BATSE-ULYSSES DISTANCE = 437089102. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 69.73 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 505.01 SECS.
CROSSING TIME AT ULYSSES IS 8290. S. OR 02:18:10 +/- 295.13 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 8/ 94 IS:
RA= 82.202 DEC= 23.278 DIST= 1.895 AU
MARS-BATSE DISTANCE = 283501248. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 93.31 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -54.66 SECS.
CROSSING TIME AT MARS IS 7730. S. OR 02:08:50 +/- 163.08 SECONDS

ND

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3107	940806	9570	07785	1700	200	+53

BATSE BURST TRIGGER

NO.: 03107

TIME: TJD=9570 SECONDS=07785

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=105.1 AZIMUTH=265.2 ERROR= DEGREES

COMMENTS:

WEAK, MULTI-PEAKED. TOTAL DUR. ~30 S. MAX EMISSION AT ~TRIGGER TIME,
DUR. ~0.3 S. NOT VISIBLE ABOVE 300 KEV.

9 / 8 / 94

ULYSSES RT

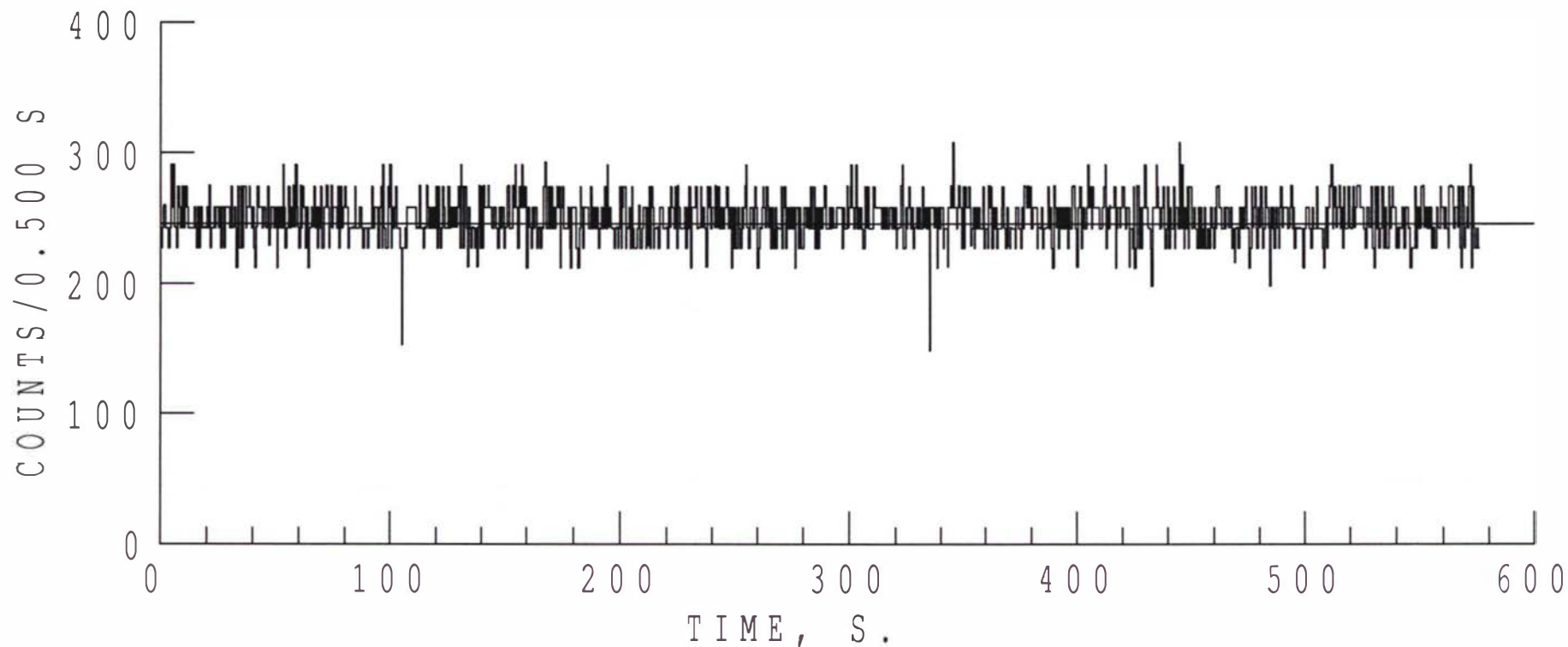
6 / 8 / 94 7992.122 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From PREECE@ssl.msfc.nasa.gov Mon Aug 8 08:14 PDT 1994
Date: Mon, 8 Aug 1994 10:14:26 -0500 (CDT)
From: PREECE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3108

BATSEARCH PROGRAM

BATSE BURST # 3108
EVENT OF 1994 AUG 6 DAY OF YEAR=218
EVENT CROSSING TIME AT BATSE : 16728. S. OR 04:38:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 276.000 -34.000
BATSE PEAK COUNTING RATE: 7500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 8/ 94 IS:
RA= 135.715 DEC= -42.451 DIST= 2.921 AU
BATSE-ULYSSES DISTANCE = 437005854. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 84.66 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 135.74 SECS.
CROSSING TIME AT ULYSSES IS 16864. S. OR 04:41:03 +/- 304.04 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 8/ 94 IS:
RA= 82.202 DEC= 23.278 DIST= 1.895 AU
MARS-BATSE DISTANCE = 283501248. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 16.14 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 908.37 SECS.
CROSSING TIME AT MARS IS 17636. S. OR 04:53:56 +/- 59.45 SECONDS

RI

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3108	940806	9570	16728	7500	276	-34

BATSE BURST TRIGGER

NO.: 03108

TIME: TJD=9570 SECONDS=16728

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=022.4 AZIMUTH=162.4 ERROR=001.4 DEGREES

COMMENTS:

TWO SHORT SPIKES, 2ND MORE INTENSE, STARTS 50 S AFTER TRIGGER. VISIBLE ABOVE 300 KEV.

Helio corr removed

Date: Feb 2 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution? *No - BATSE TTS data*

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T₀?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

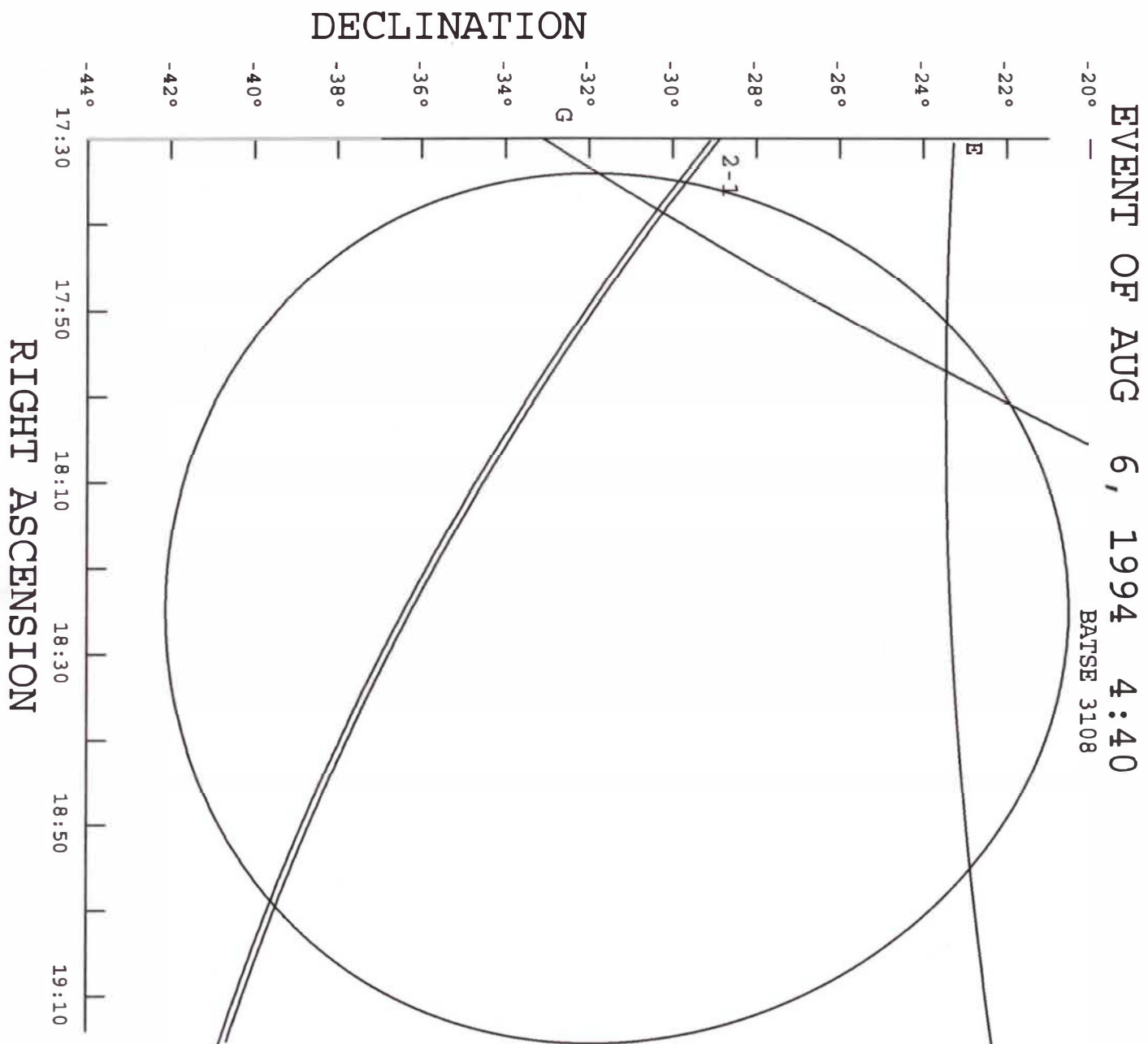
S=SUN

E=ECLIPTIC

G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE



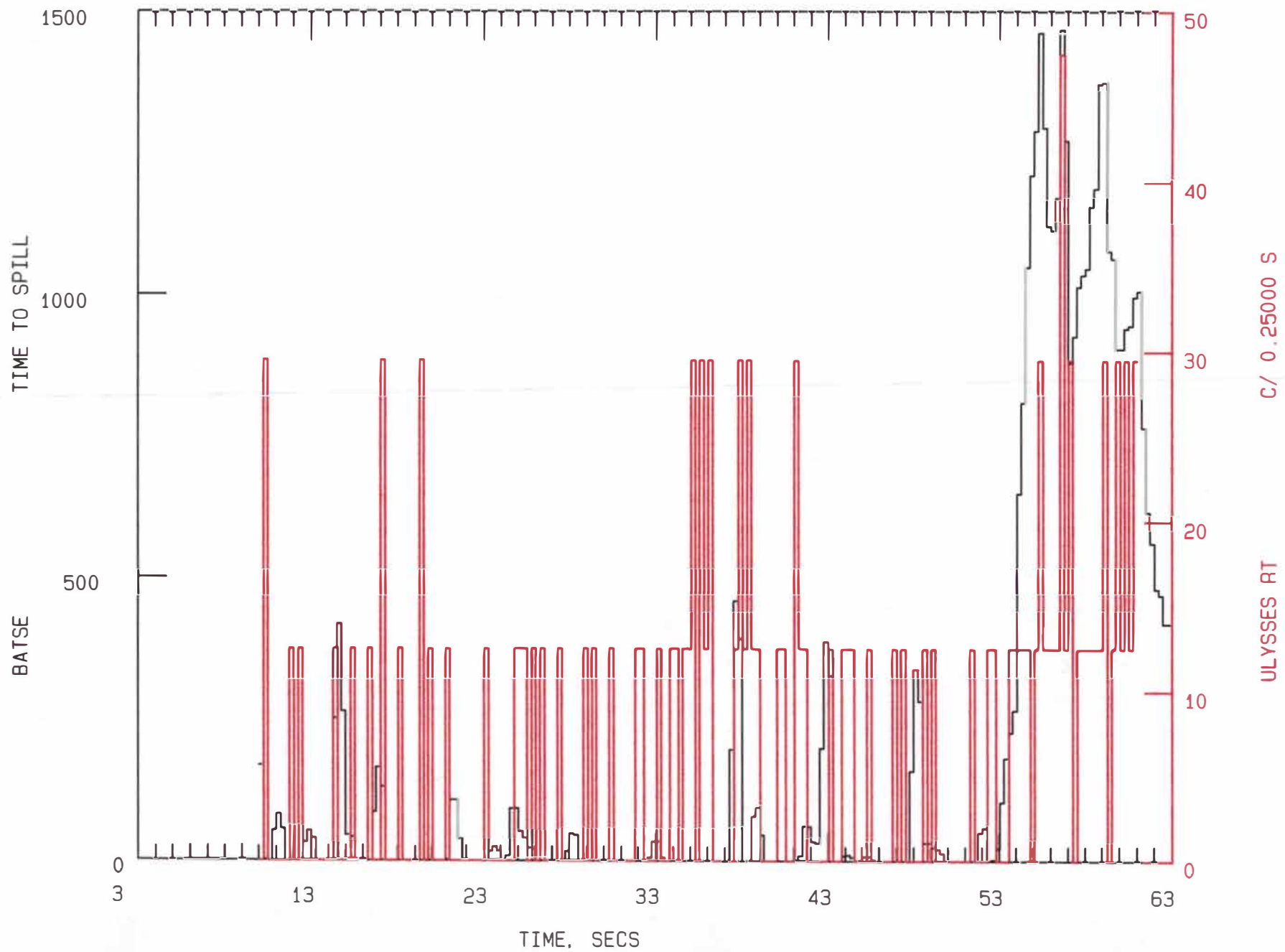
BATSE

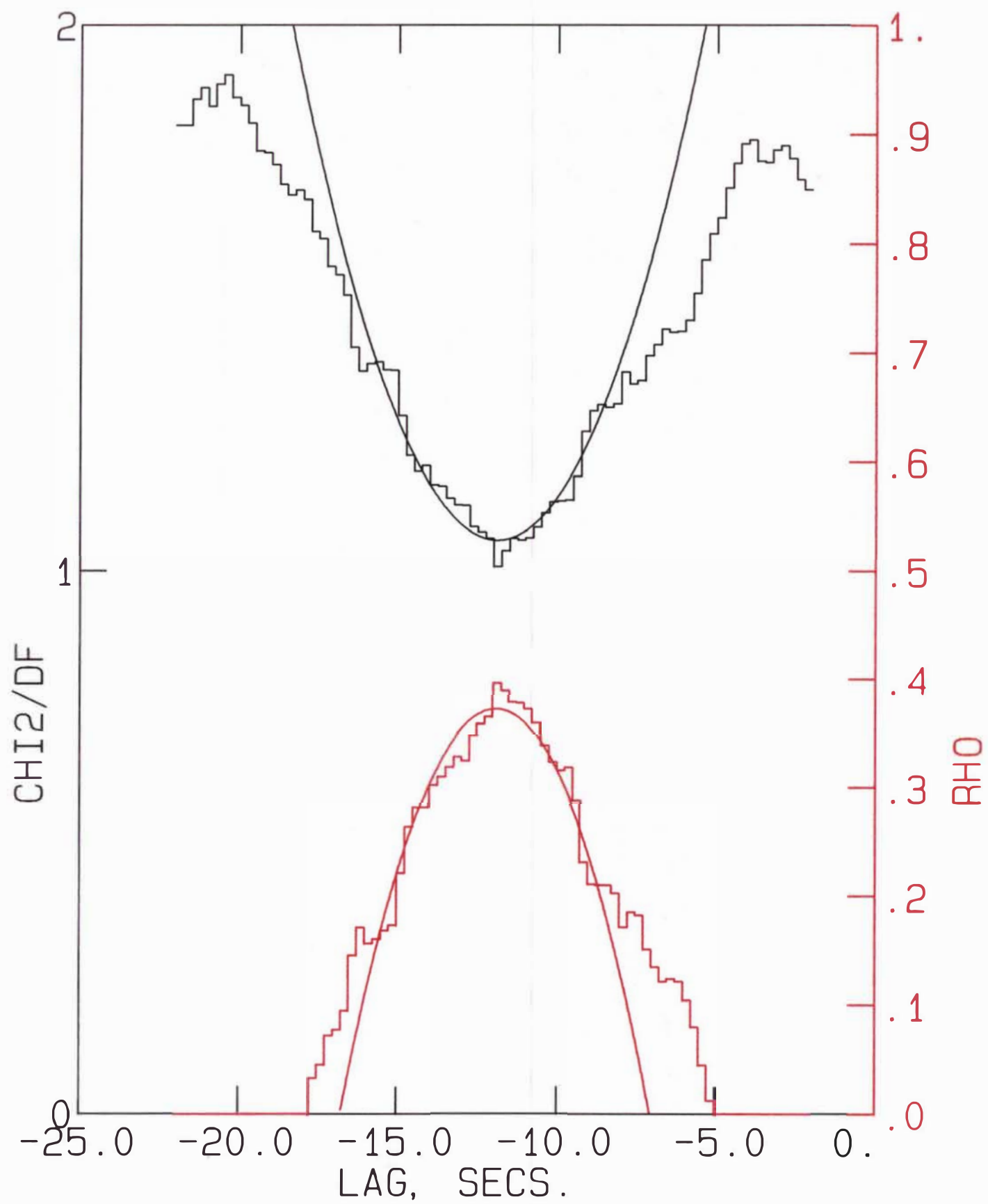
-ULYSSES RT CORRELATION

6/ 8/94

16728.754

2/ 2/98





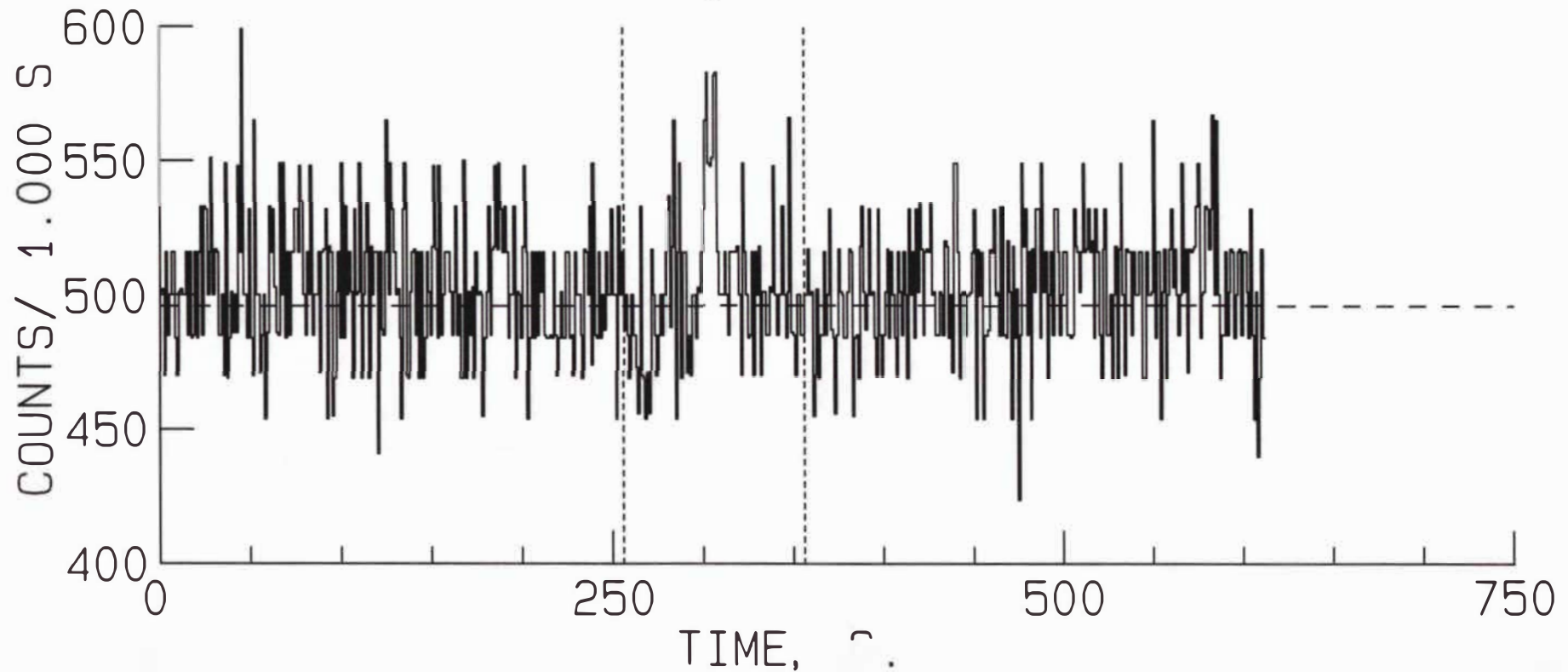
ULYSSES RT

2 / 2 / 98

6 / 8 / 94 16560.008 s

0.250 S INTERVALS REGROUPED BY 4
22- 148 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



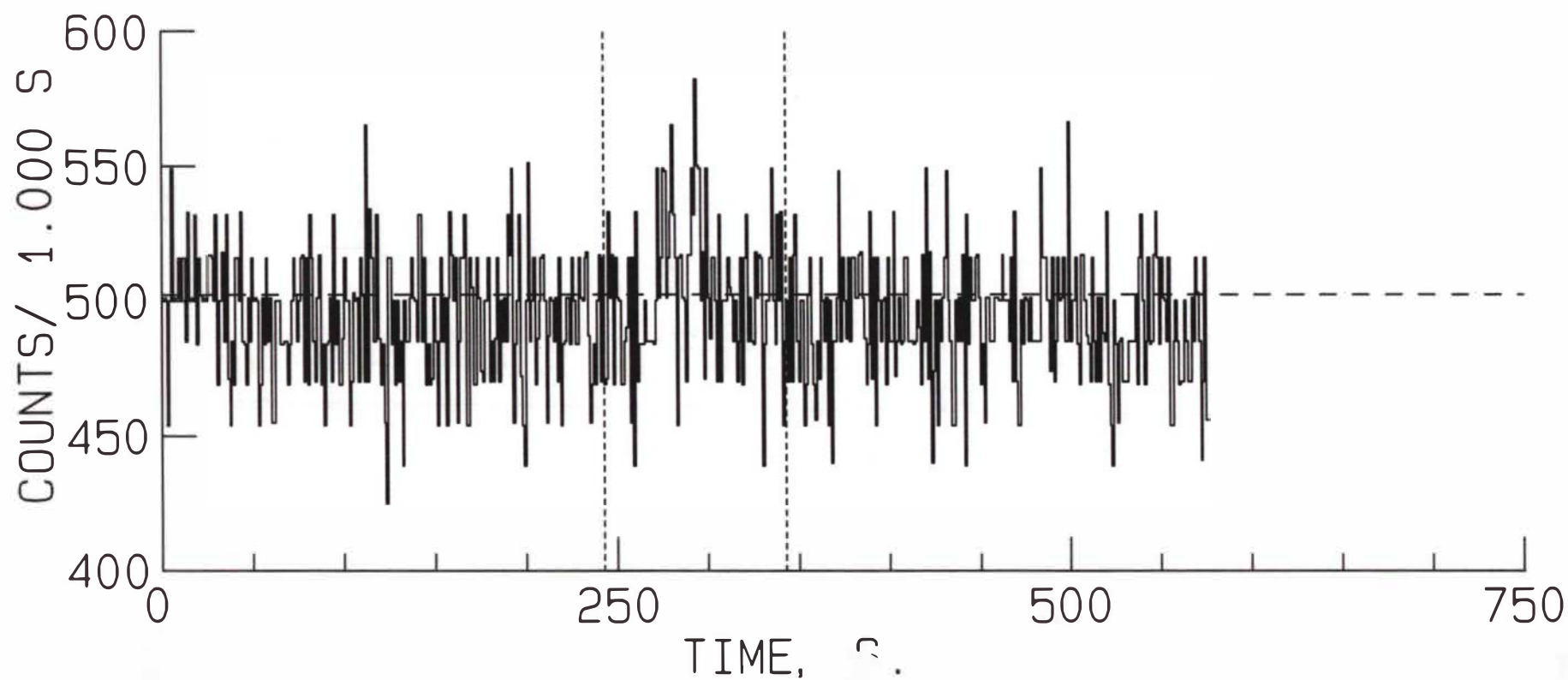
ULYSSES RT

2 / 2 / 98

3 / 8 / 94 14832.065 s

0.250 S INTERVALS REGROUPED BY 4

22- 148 keV



BATSE

06/08/94

16728.754

25- 100 keV

COUNTS/S TTS

2000

4000

6000

8000

-6

0

10

26

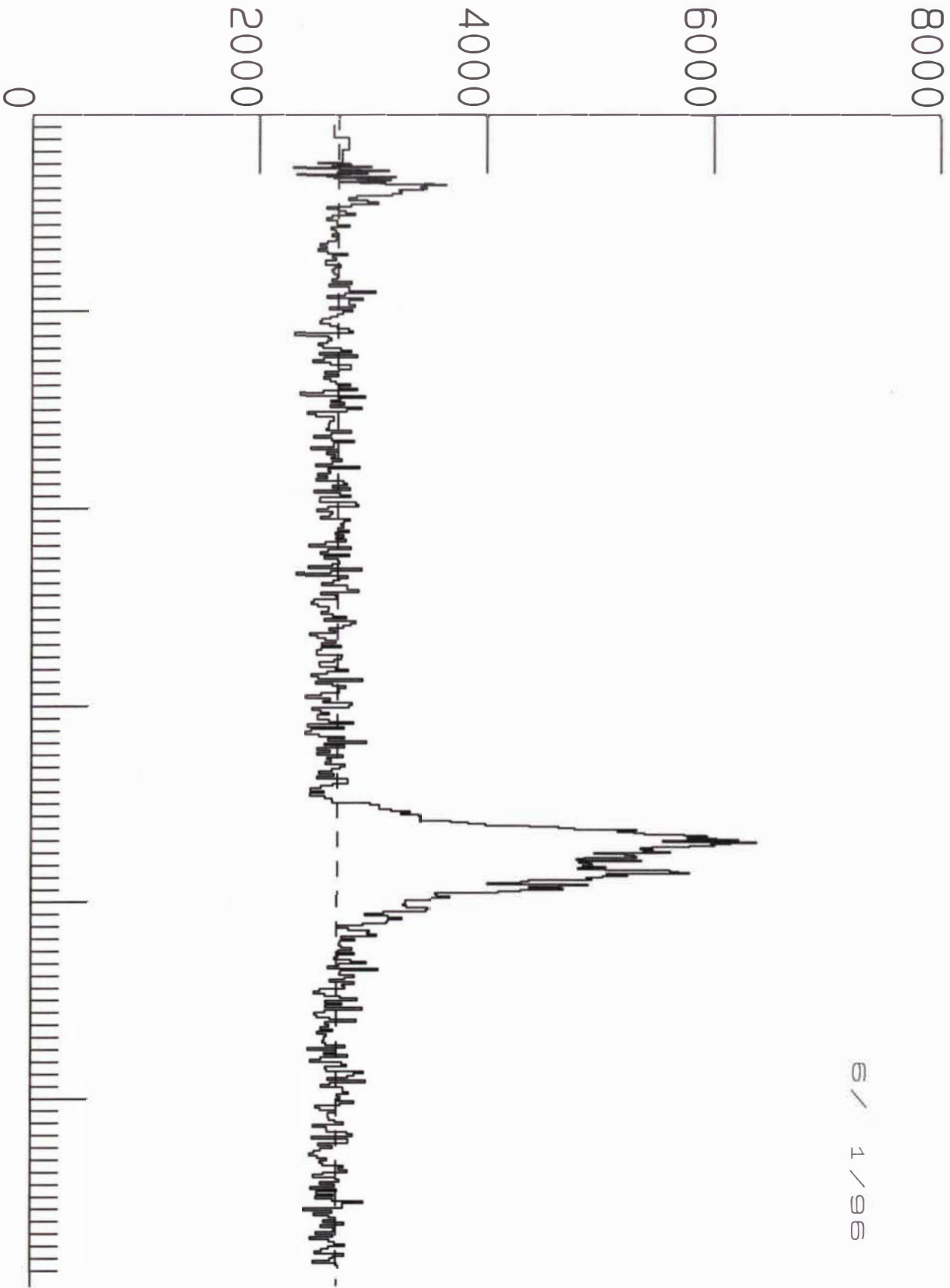
42

58

74

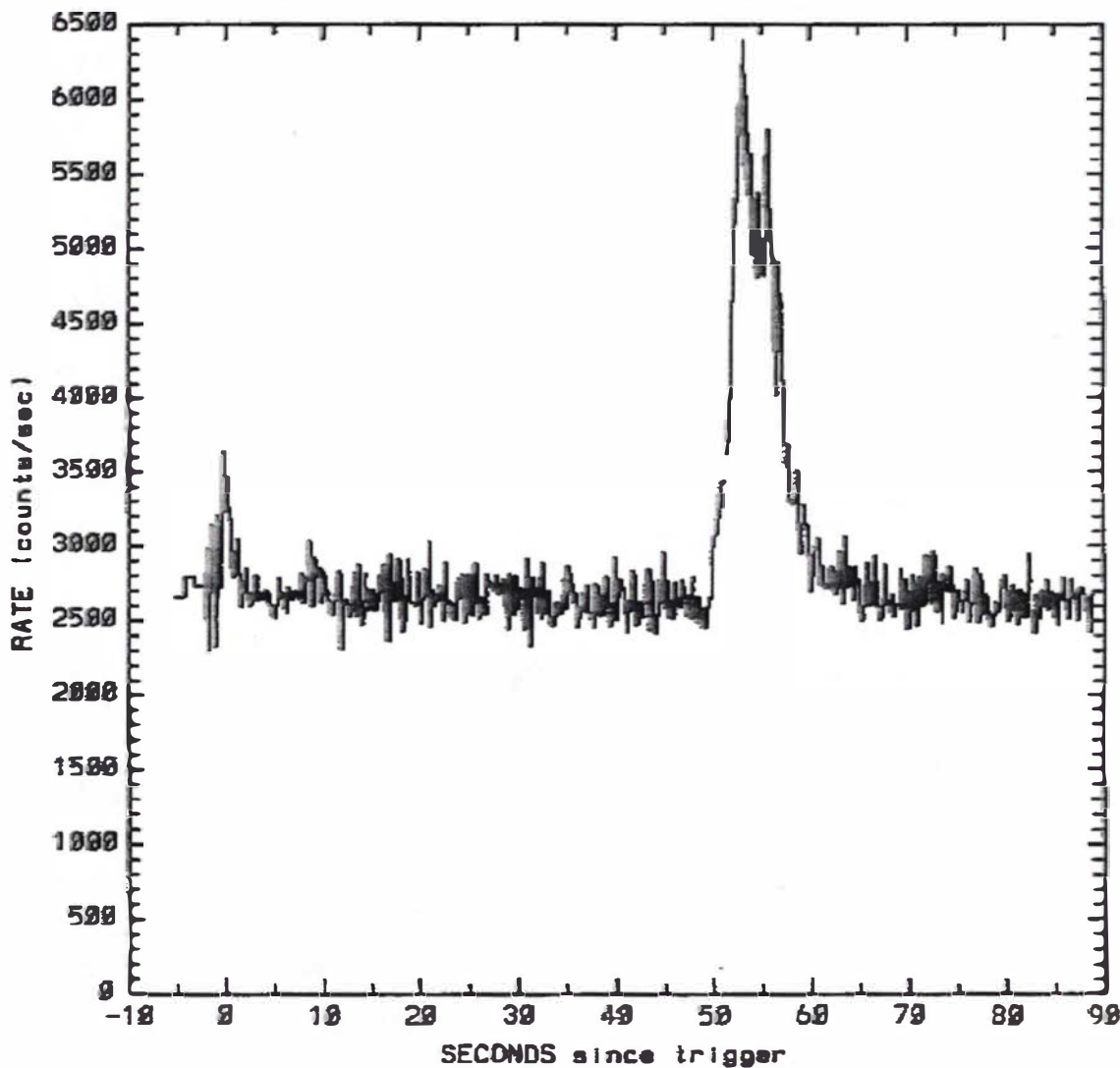
TIME, SECS

6 / 1 / 96



Aug 6 1994

TTS Data for K. Hurley, No. 3108



23-DEC-1995 19:39:24

Created by MOPS 8D
(Burst Display)
Version 42.25

Trigger # : 3108

Trigger Time:
9579 / 16728.754Burst Data Type:
TTS

Time Corrected: Y

Maximum Time Error:
0.95038 second(s)Deadtime
Corrected: NBackground Data
Type: PREB + DISCLA

Bin Count: 8

Detectors (7..3):
-5-4----Discriminators:
(2 . 2)Quality Mask:
80ISP1

From RICHARDSON@ssl.msfc.nasa.gov Mon Aug 8 09:48 PDT 1994
Date: Mon, 8 Aug 1994 11:48:44 -0500 (CDT)
From: RICHARDSON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3109

BATSEARCH PROGRAM

BATSE BURST # 3109
EVENT OF 1994 AUG 6 DAY OF YEAR=218
EVENT CROSSING TIME AT BATSE : 34376. S. OR 09:32:56.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 243.000 14.000
BATSE PEAK COUNTING RATE: 4500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 8/ 94 IS:
RA= 135.782 DEC= -42.486 DIST= 2.920 AU
BATSE-ULYSSES DISTANCE = 436839323. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 67.96 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 546.73 SECS.
CROSSING TIME AT ULYSSES IS 34923. S. OR 09:42:02 +/- 292.80 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 8/ 94 IS:
RA= 82.202 DEC= 23.278 DIST= 1.895 AU
MARS-BATSE DISTANCE = 283501248. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 41.74 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 705.57 SECS.
CROSSING TIME AT MARS IS 35082. S. OR 09:44:41 +/- 120.03 SECONDS

RI

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3109	940806	9570	34376	4500	243	+14

BATSE BURST TRIGGER

NO.: 3109

TIME: TJD=9570 SECONDS=34376

TYPE: BURST

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=56.8 AZIMUTH=244.7 ERROR= DEGREES

COMMENTS:

GRB. WITH STRUCTURE, LASTING APROX. 35SEC. NOT VISIBLE ABOVE 300KEV.

Helio corr removed

Date: Feb 2 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution? *No - bad stats*

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T₀?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?

*Large shift in anomalies
between preliminary + final
versions*

- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

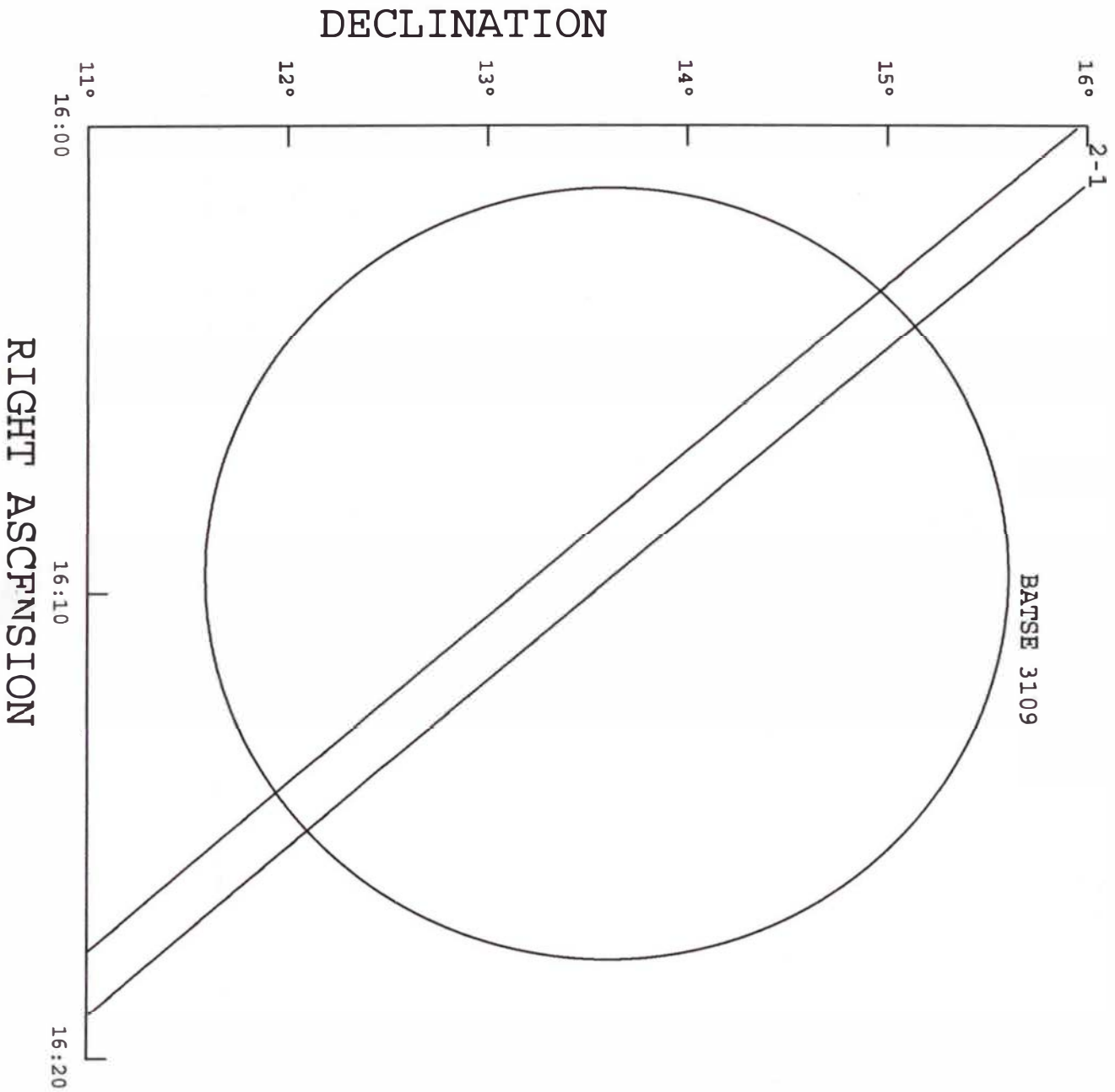
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 6, 1994 9:40

2 / 2/98



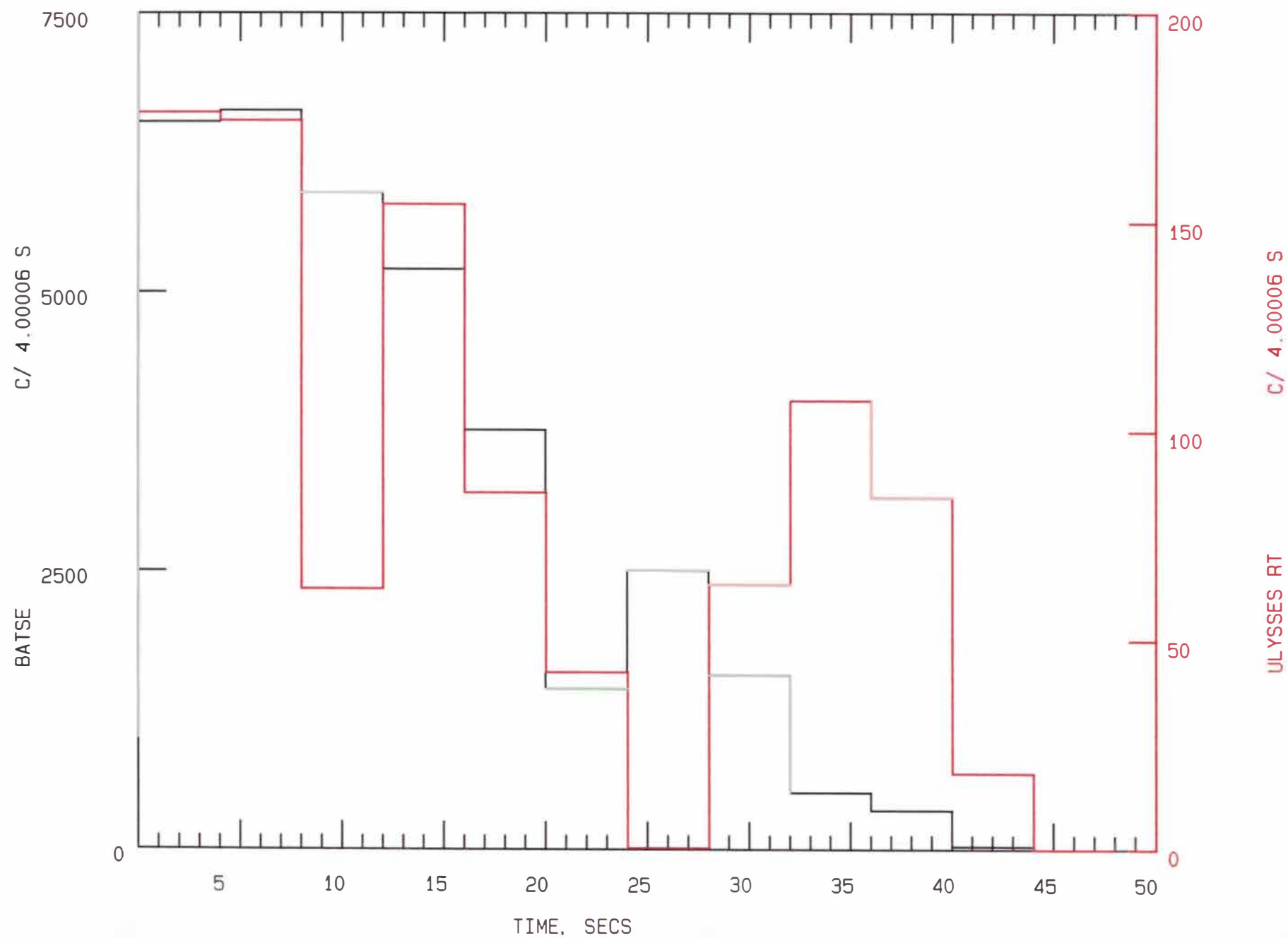
BATSE

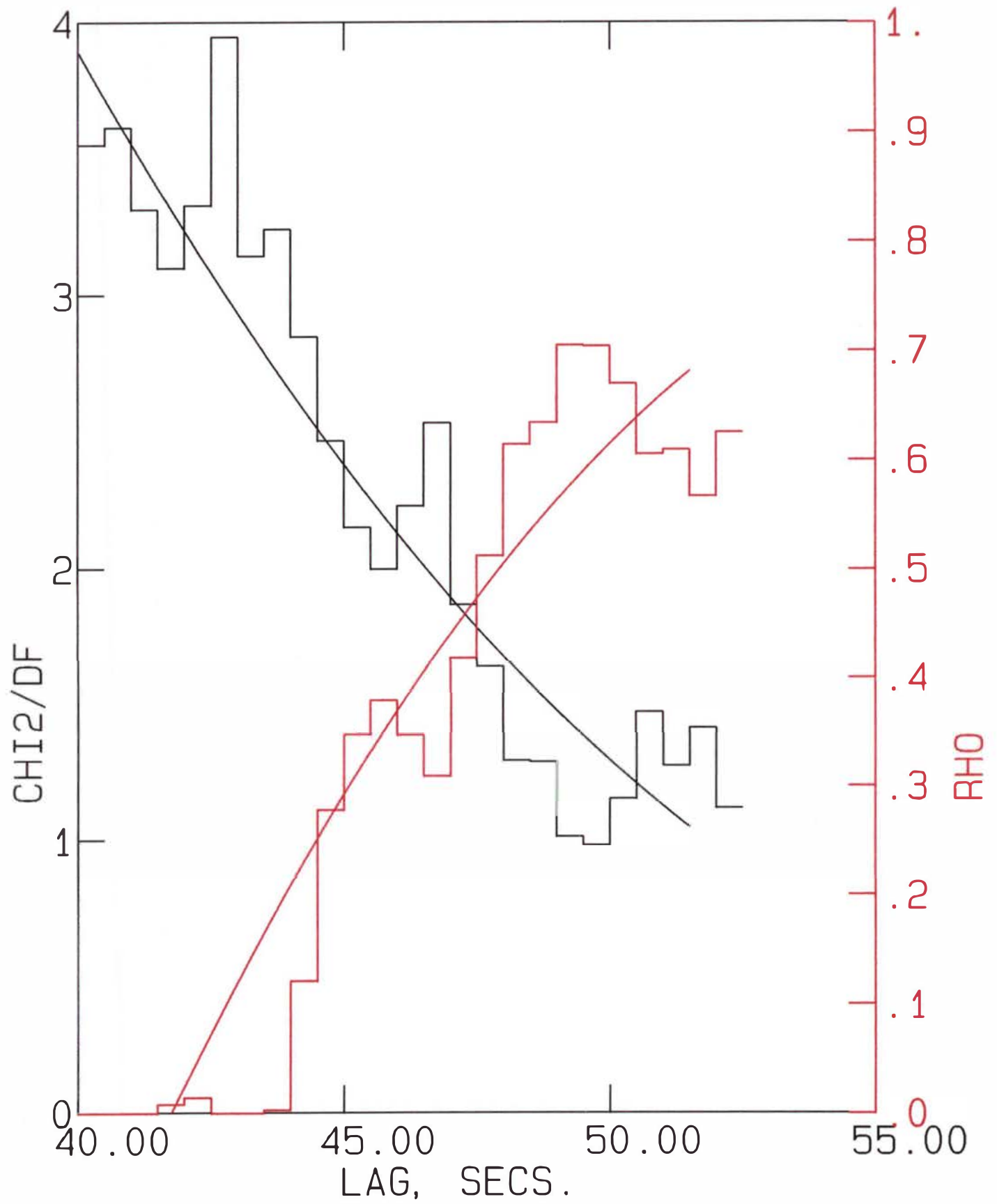
-ULYSSES RT CORRELATION

6/ 8/94

34376.882

2/ 2/98





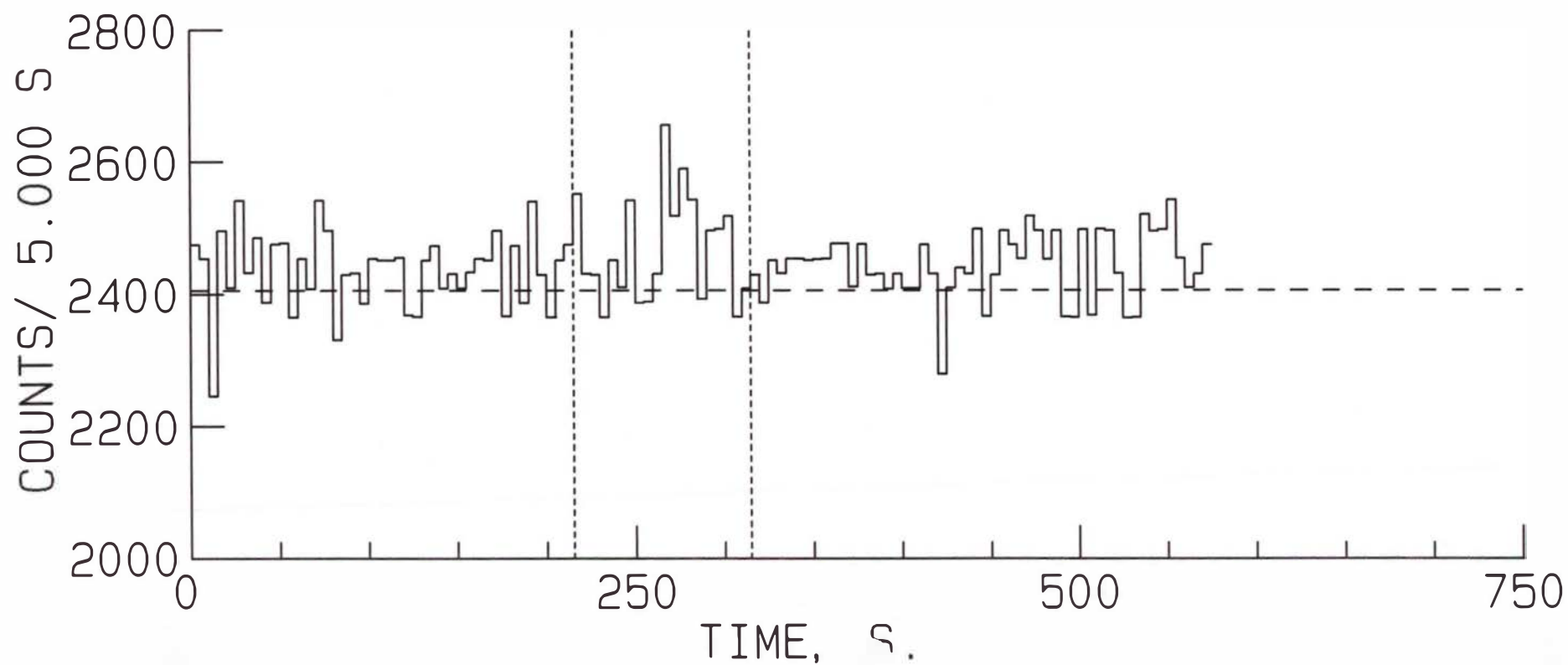
ULYSSES RT

2 / 2 / 98

6 / 8 / 94 34632.050 s

0.500 S INTERVALS REGROUPED BY 10

22- 148 keV



Return-Path: <rhudec>

Received: by asu.cas.cz (4.1/SMI-4.2)

id AA27040; Mon, 27 Feb 95 09:22:41 +0100

Date: Mon, 27 Feb 95 09:22:41 +0100

From: rhudec (Rene HUDEC)

Message-Id: <9502270822.AA27040@asu.cas.cz>

To: khurley@sunspot.berkeley.edu

Subject: GB940806

Cc: scott@xtelab.gsfc.nasa.gov

Dear Kevin:

as already mentioned, we have detected variable object in the BACODINE BATSE error box of GB940806. The 1950.0 position is

16h18m44s +14deg27.6 arcmin

244.683 14.460 → 245.258 14.341 (2000)

This is about 1 deg outside of your first IPN error arc.

Please let us know whether there was any modification of the IPN#3 error box in the meantime.

Thank you.

Regards Rene

From khurley@sunspot Sat Mar 11 14:57 PST 1995

Date: Sat, 11 Mar 1995 15:00:20 -0800

From: khurley@sunspot (Kevin Hurley)

To: astmph@csearn.bitnet@lilac.berkeley.edu, khurley@sunspot

Subject: August 6 1994 burst

Dear Rene,

I re-did this event, and there were some changes in spacecraft coordinates (from predict to final) as well as a new and more reliable BATSE/Ulysses comparison. Although the annulus moved, it still does not include the variable star. This was an extremely weak event for Ulysses, but I feel that the 10 second uncertainty in the BATSE/Ulysses comparison is probably good to 3 sigma accuracy.

Kevin

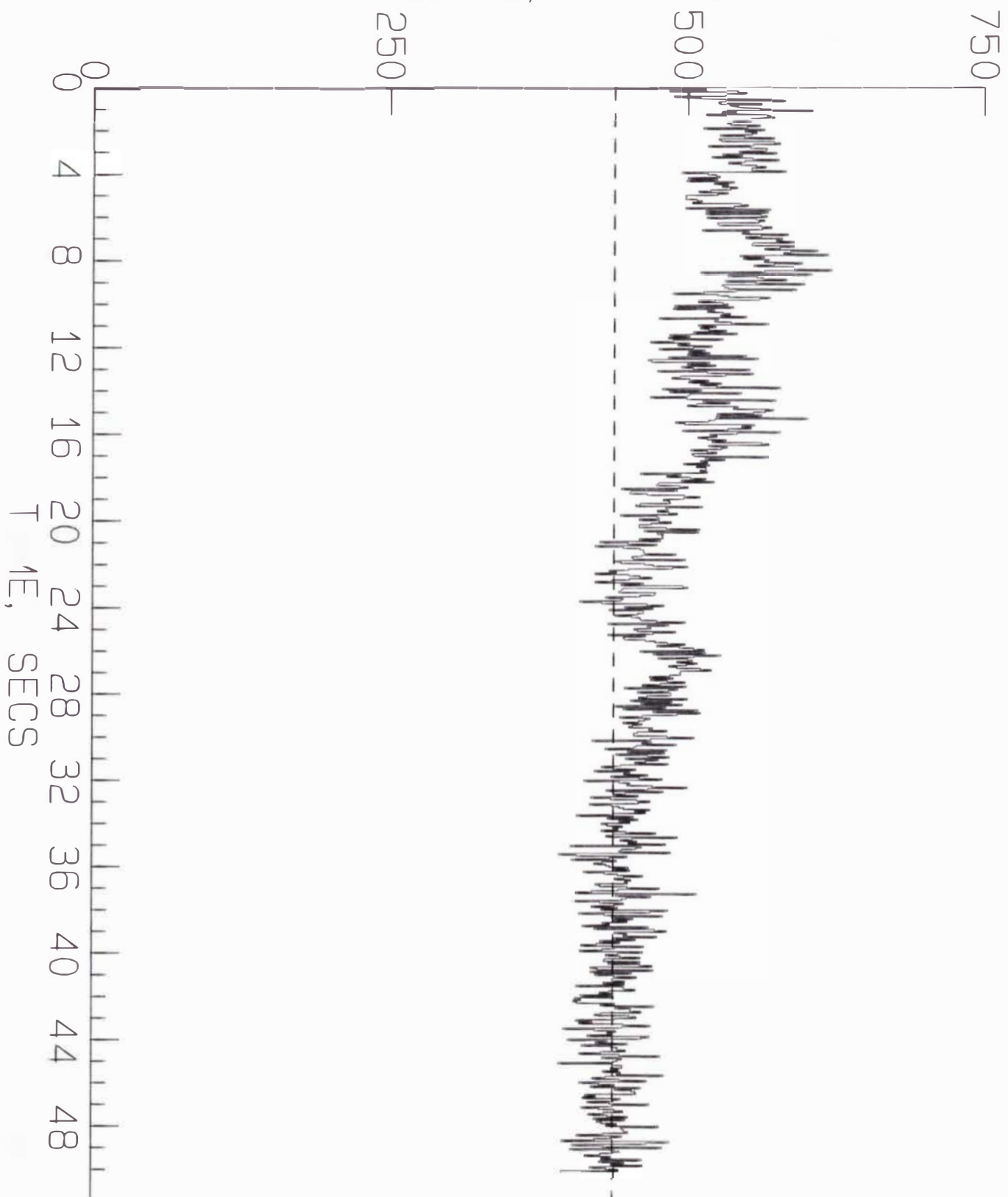
BATSE

06/08/94

34376.882

25- 100 keV

COUNTS/ .064 S



19/10/94

Message 4:

From root Tue Sep 13 08:38 1994

Date: Tue, 13 Sep 1994 08:48:43 +0800

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

To: KHURLEY@space6.ssl.berkeley.edu

From: cline@tgrs.gsfc.nasa.gov (T L Cline)

Subject: Data for 94-8-6, part-2

Content-Length: 586

KEVIN:

And here is more: - TLC

Tom,

Is there an IPN arc for GRB940806 (TJD=9570)?

One of Rene HUdec's people at the Sonneberg Observatory got some plates

on this BADINE burst and is looking for location clarification so

that the error box and hence the plate scanning can be reduced.

The BACO location was RA=245.19 Dec=10.87 (J2000) and the Huntsville

location is RA=242.99 Dec=13.45 (J2000). The burst was of middle intensity

and middle fluence (total of 35sec long with multiple peaks) so there is

half a chance that Ulysses saw this.

--scott

-- T. L. Cline ----- LHEAVX::CLINE

From root Tue Sep 13 08:38 1994

Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)

id AA07431; Tue, 13 Sep 94 08:38:08

Received: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)

id AA15646; Tue, 13 Sep 1994 08:48:43 +0800

Date: Tue, 13 Sep 1994 08:48:43 +0800

Message-Id: <9409131548.AA15646@sunspot.ssl.berkeley.edu>

Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;

Tue, 13 Sep 1994 11:54:20 -0400 (EDT)

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

To: KHURLEY@space6.ssl.berkeley.edu

From: cline@tgrs.gsfc.nasa.gov (T L Cline)

Subject: Data for 94-8-6, part-2

Content-Length: 586

Status: R

KEVIN:

And here is more: - TLC

Tom,

Is there an IPN arc for GRB940806 (TJD=9570)?

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that the error box and hence the plate scanning can be reduced.

The BACO location was RA=245.19 Dec=10.87 (J2000) and the Huntsville

location is RA=242.99 Dec=13.45 (J2000). The burst was of middle intensity

and middle fluence (total of 35sec long with multiple peaks) so there is

half a chance that Ulysses saw this.

scott

-- T. L. Cline ----- LHEAVX::CLINE

From root Tue Sep 13 08:36 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA07428; Tue, 13 Sep 94 08:36:44
Received: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA15637; Tue, 13 Sep 1994 08:47:20 +0800
Date: Tue, 13 Sep 1994 08:47:20 +0800
Message-Id: <9409131547.AA15637@sunspot.ssl.berkeley.edu>
Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
Tue, 13 Sep 1994 11:52:56 -0400 (EDT)
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: KHURLEY@space6.ssl.berkeley.edu
From: cline@tgrs.gsfc.nasa.gov (T L Cline)
Subject: Ulysses data
Content-Length: 603
Status: R

KEVIN:
Any Ulysses results on the 94-8-6 burst for purposes of annular definition?
Here is a message about it: - TLC
Dear Scott:
A probably new variable star has been found on the plates taken at the Sonne
berg Observatory (EON) roughly 12 h after the GRB 940806 34378.41 SOD.
Its preliminary 1950.0 position is
RA = 16 h 18 m 44 s d = +14 deg 27.6 arcmin
The object is probably unrelated to GRB (there are about 53 known variable
stars in the BACODINE error box) but, still, it would be nice to know the
better GRB position if available.
Regards Rene

-- T. L. Cline ----- LHEAVX::CLINE

Sent to HuDEC + Cline

Oct 20

From root Mon Oct 24 08:17 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA08054; Mon, 24 Oct 94 08:17:19
Received: from asu.cas.cz (sunkl.asu.cas.cz) by sunspot.ssl.berkeley.edu (5.0/SM
id AA07801; Mon, 24 Oct 1994 08:26:02 +0800
Received: by asu.cas.cz (4.1/SMI-4.2)
id AA11731; Mon, 24 Oct 94 16:28:06 +0100
Date: Mon, 24 Oct 94 16:28:06 +0100
From: rhudec@asu.cas.cz (Rene HUDEC)
Message-Id: <9410241528.AA11731@asu.cas.cz>
To: khurley@space6.ssl.berkeley.edu
Subject: GB940806
Content-Length: 647
Status: R

Dear Kevin,
thank you for sending us the IPN position of this GRB. If you have the corres
ponding plot giving intersection of IPN annulus and BATSE box, it would help.
You can either use postscript file or our fax 0042-2-881611.
Thanks and regards

Rene

From HAGEDON@fender.msfc.nasa.gov Mon Aug 8 08:54 PDT 1994
Date: Mon, 8 Aug 1994 10:54:15 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3110

BATSEARCH PROGRAM

BATSE BURST # 3110
EVENT OF 1994 AUG 6 DAY OF YEAR=218
EVENT CROSSING TIME AT BATSE : 71000. S. OR 19:43:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 28.000 -50.000
BATSE PEAK COUNTING RATE: 23500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 8/ 94 IS:
RA= 135.920 DEC= -42.559 DIST= 2.918 AU
BATSE-ULYSSES DISTANCE = 436497308. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=111.87 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -542.25 SECS.
CROSSING TIME AT ULYSSES IS 70458. S. OR 19:34:17 +/- 276.36 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 8/ 94 IS:
RA= 82.202 DEC= 23.278 DIST= 1.895 AU
MARS-BATSE DISTANCE = 283501248. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 92.44 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -40.32 SECS.
CROSSING TIME AT MARS IS 70960. S. OR 19:42:39 +/- 163.42 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3110	940806	9570	71000	23500	028	-50

BATSE BURST TRIGGER

NO.: 3110

TIME: TJD=9570 SECONDS=71000

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=80.7 AZIMUTH=83.3 ERROR= DEGREES

COMMENTS:

SINGLE, COMPLEX PULSE. DUR.~12 SEC. VISIBLE ABOVE 300 KEV.

9 / 8 / 94

ULYSSES RT

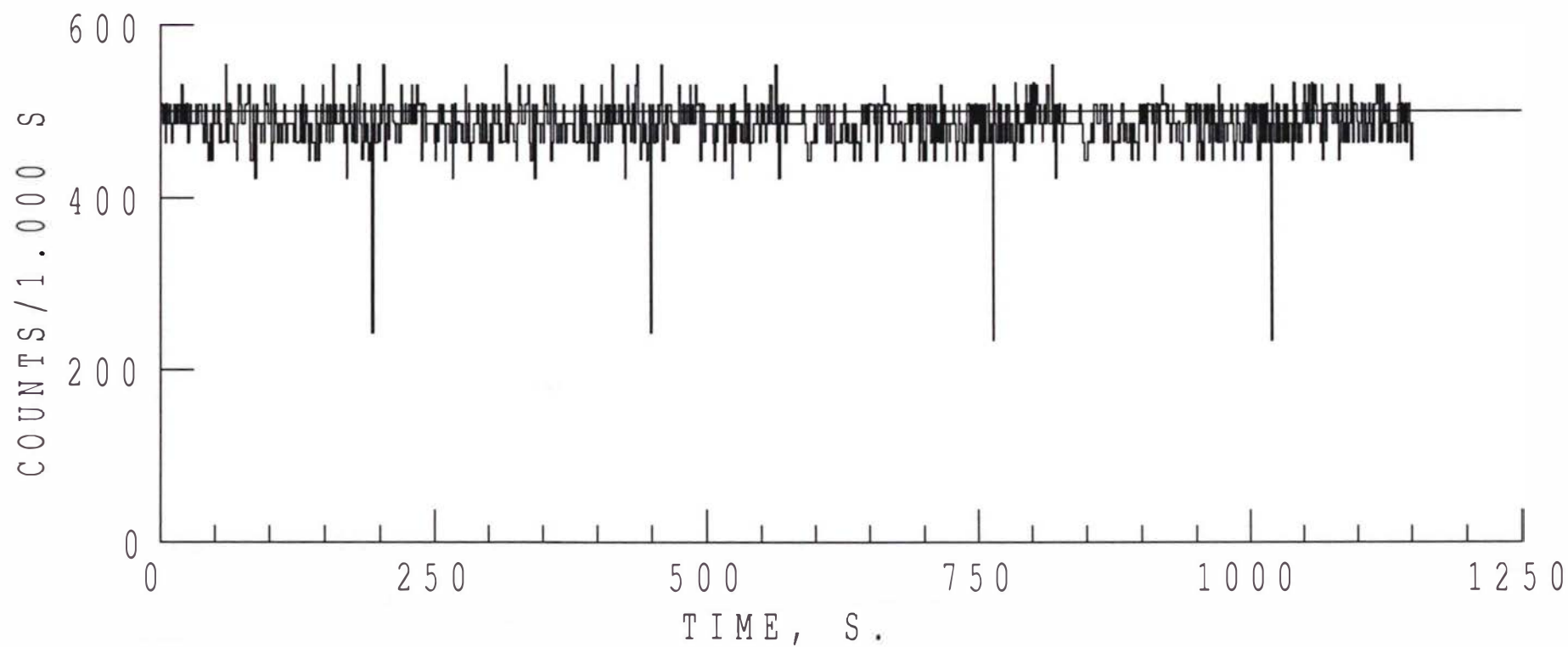
6 / 8 / 94 70164.109 s

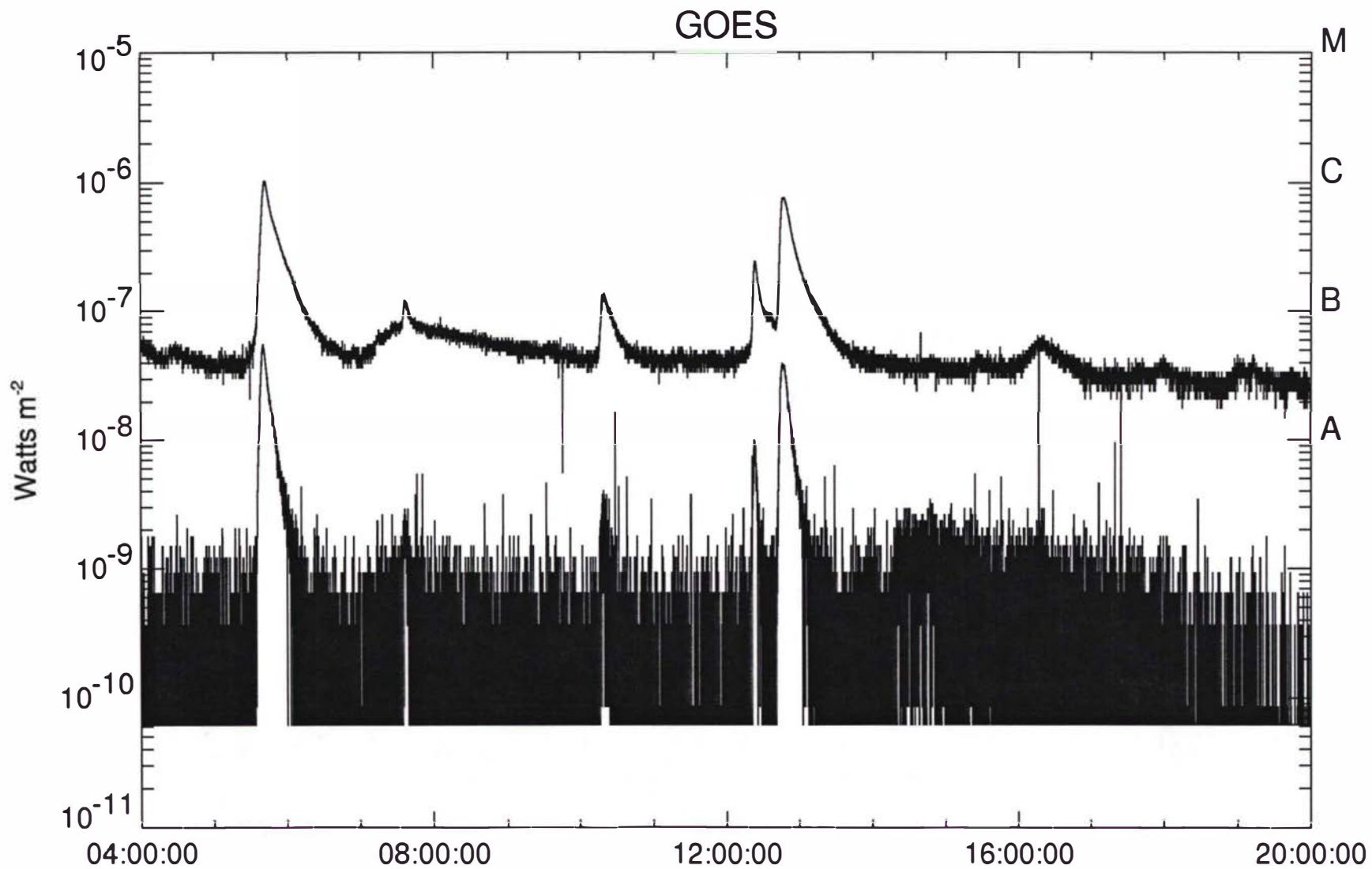
0.500 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





Data Start: 94/08/06, 0000:02

Plot created: 94/08/16, 1728

Channel

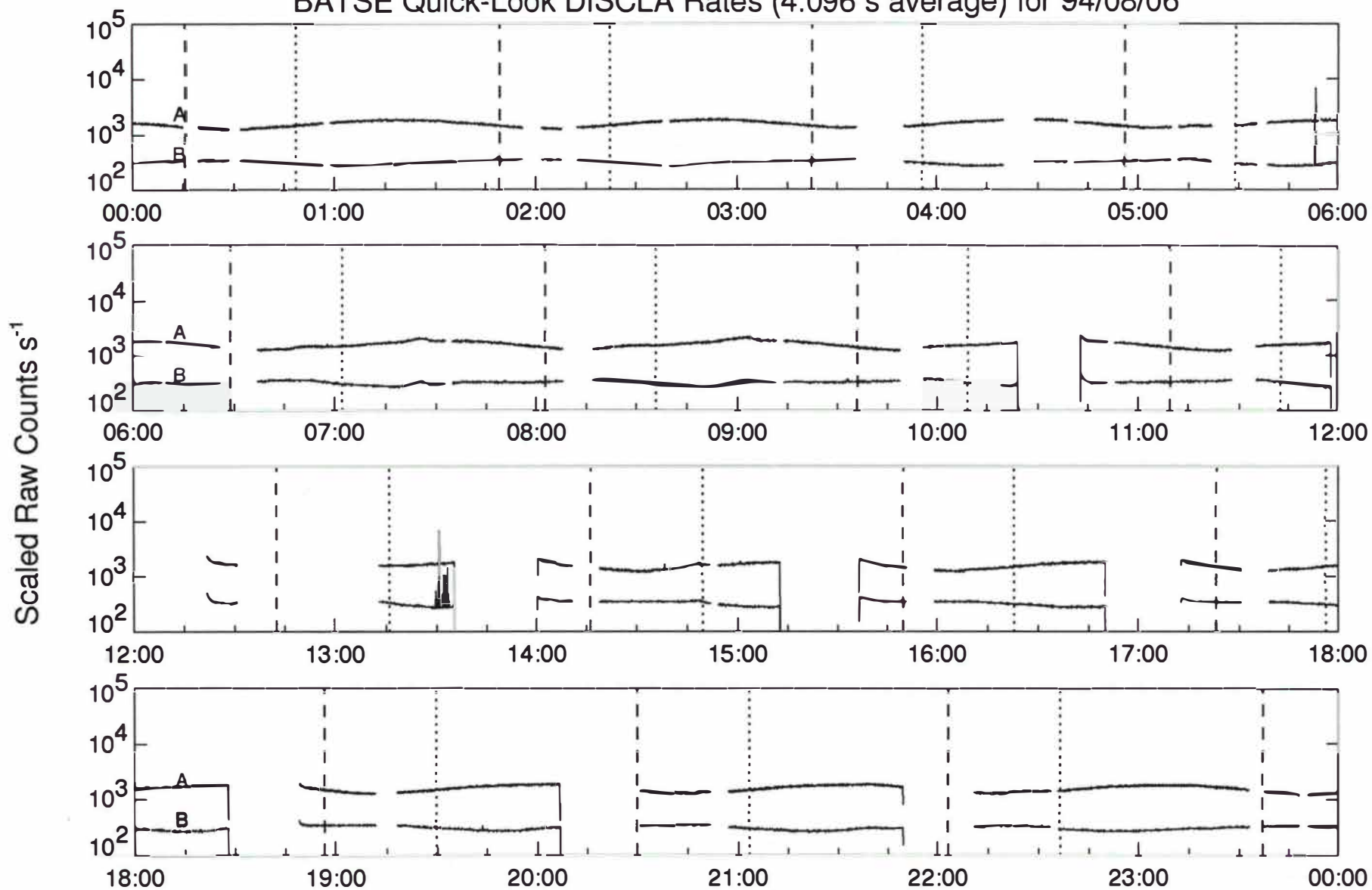
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/06

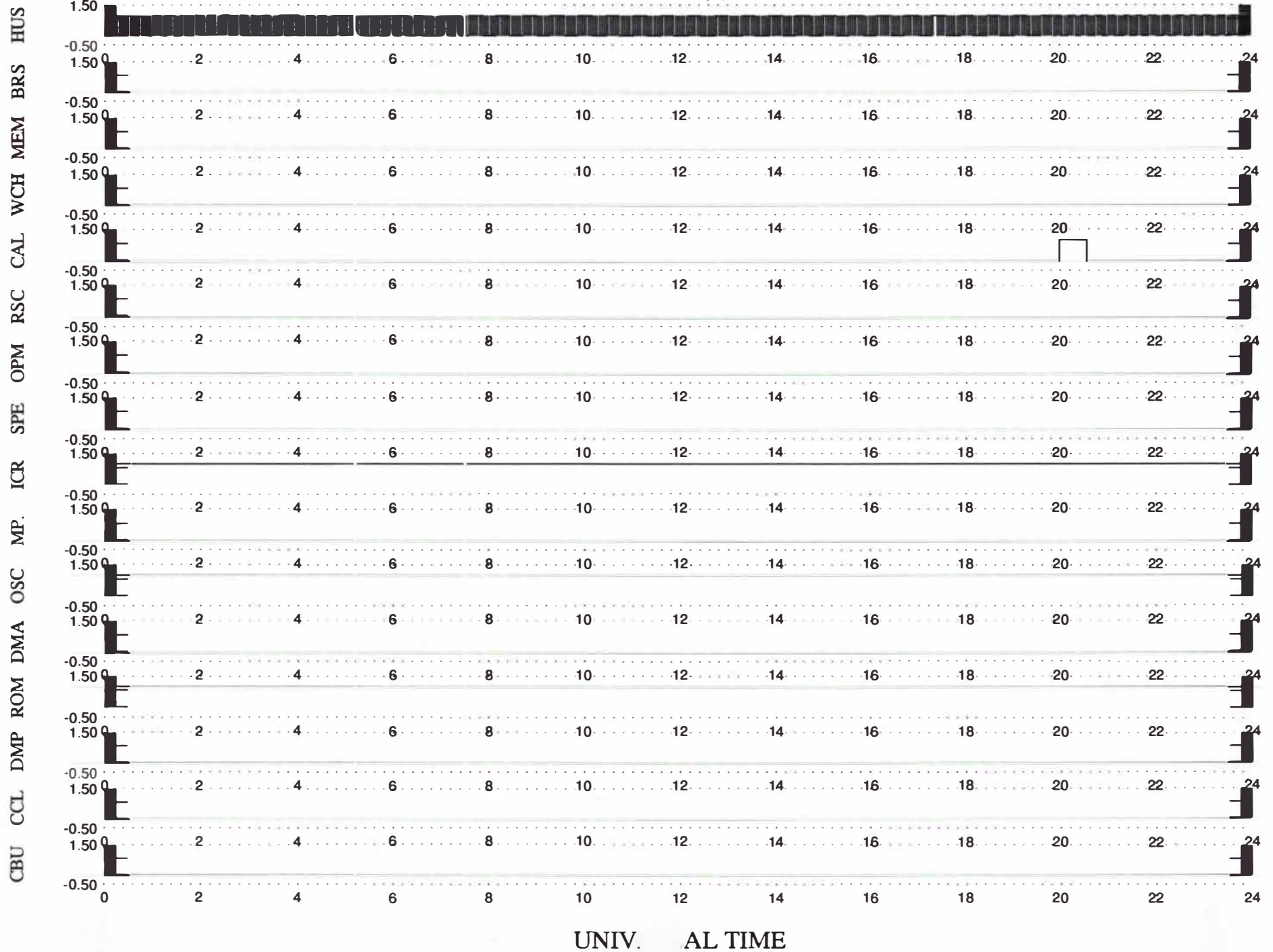


Current Time: 94/08/16, 1735 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

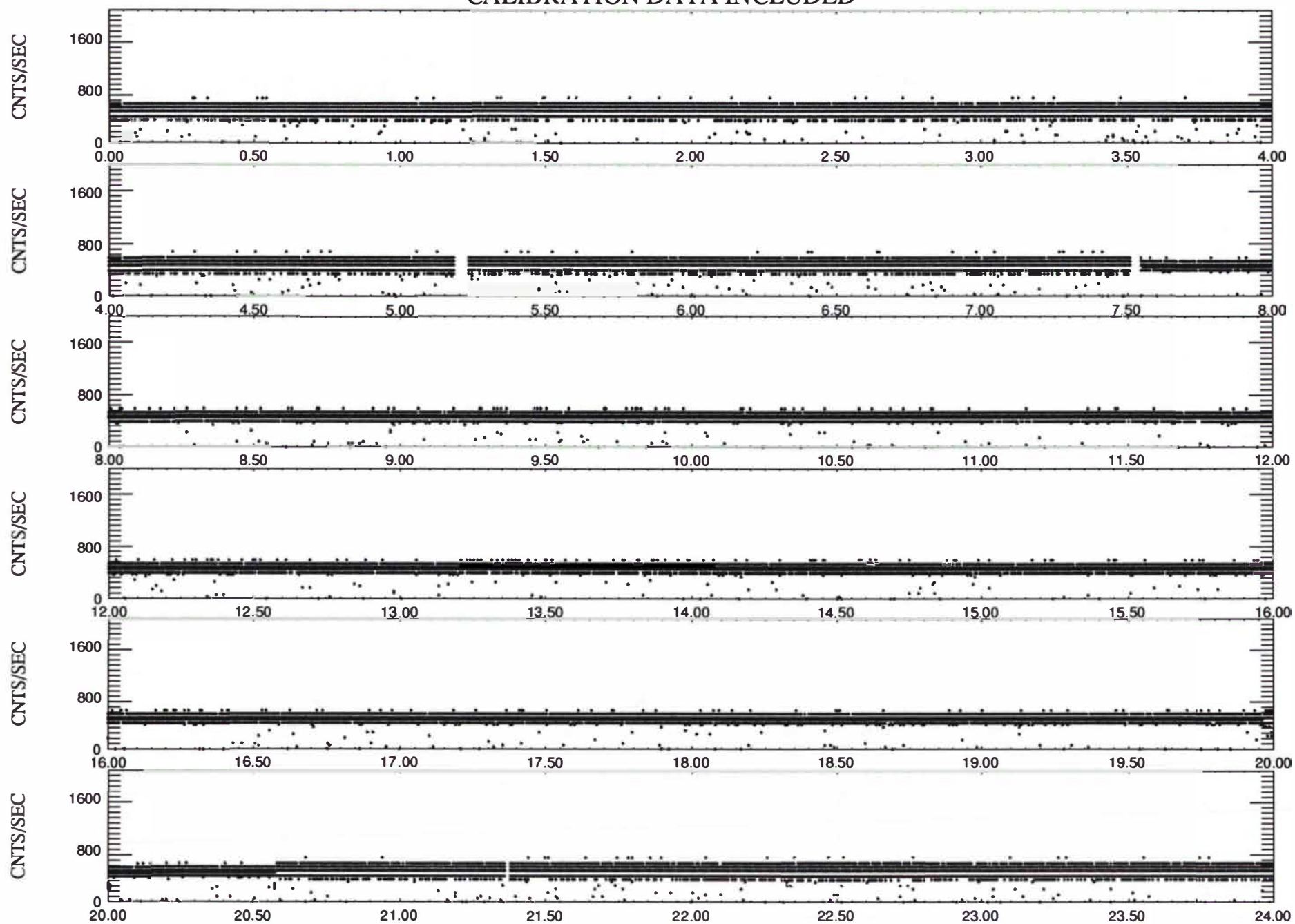
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

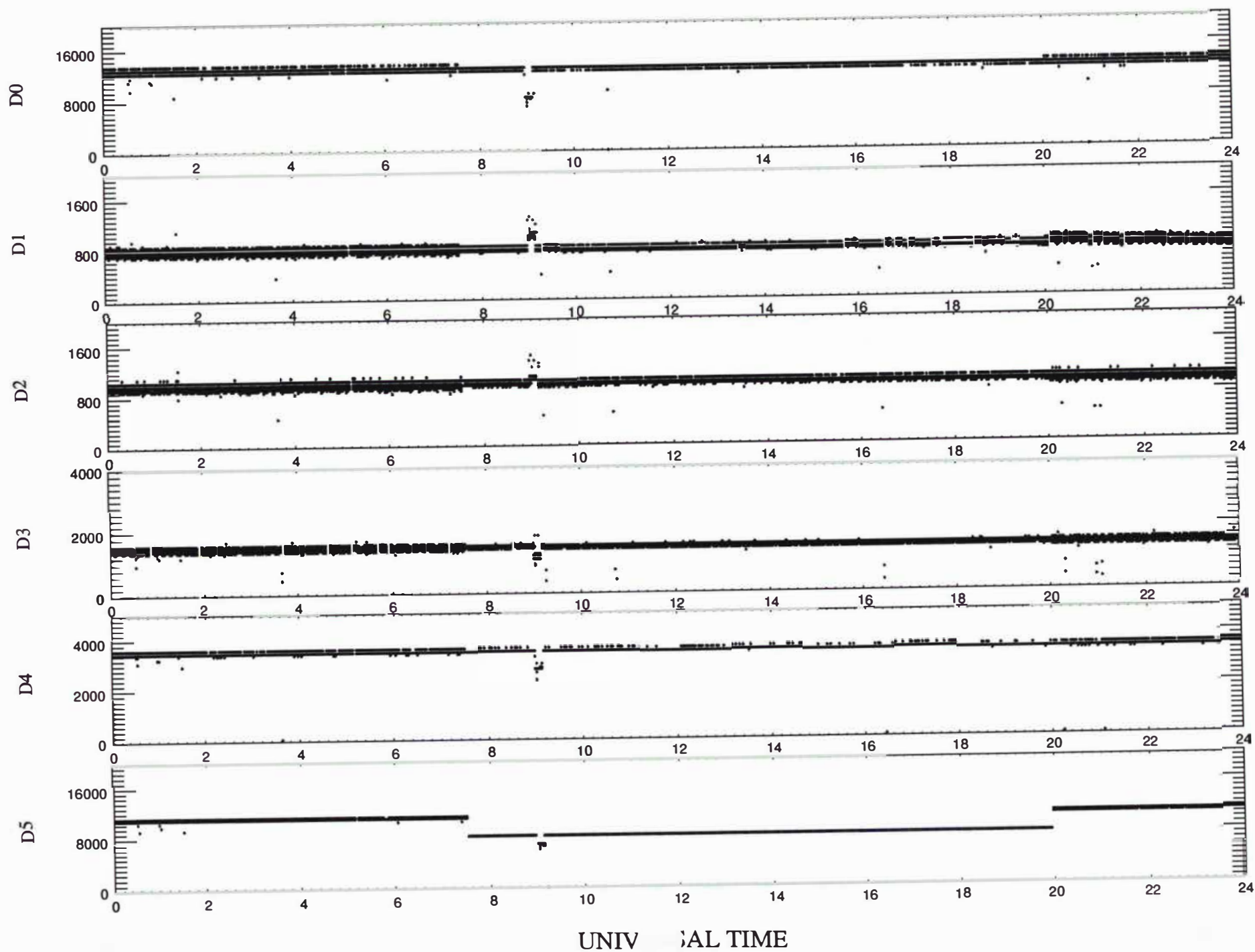
NO BURST (0)



CALIBRATION DATA INCLUDED



UNIV AL TIME



From HAGEDON@ssl.msfc.nasa.gov Tue Aug 9 08:46 PDT 1994
Date: Tue, 9 Aug 1994 10:46:34 -0500 (CDT)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3111

TIME: TJD=9571 SECONDS=46394

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From HAGEDON@fender.msfc.nasa.gov Tue Aug 9 08:56 PDT 1994
Date: Tue, 9 Aug 1994 10:56:40 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3112

BATSEARCH PROGRAM

BATSE BURST # 3112
EVENT OF 1994 AUG 7 DAY OF YEAR=219
EVENT CROSSING TIME AT BATSE : 66665. S. OR 18:31:05.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 82.000 50.000
BATSE PEAK COUNTING RATE: 8200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/ 8/ 94 IS:
RA= 136.231 DEC= -42.723 DIST= 2.913 AU
BATSE-ULYSSES DISTANCE = 435718403. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 75.89 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 354.21 SECS.
CROSSING TIME AT ULYSSES IS 67019. S. OR 18:36:59 +/- 300.10 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/ 8/ 94 IS:
RA= 82.929 DEC= 23.327 DIST= 1.891 AU
MARS-BATSE DISTANCE = 282824896. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=153.32 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -842.93 SECS.
CROSSING TIME AT MARS IS 65822. S. OR 18:17:02 +/- 60.75 SECONDS

ND

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3112	940807	9571	66665	8200	082	+50

BATSE BURST TRIGGER

NO.: 3112

TIME: TJD=9571 SECONDS=66665

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=169. AZIMUTH=286. ERROR= DEGREES

COMMENTS:

BURST. COMPLEX EVENT WITH FIVE MAIN PEAKS, EACH WITH SUBSTRUCTURE.
TOTAL DUR.~12 SEC. MAX AT ~T+10 SEC. WEAKLY VISIBLE ABOVE 300 KEV.

9 / 8 / 94

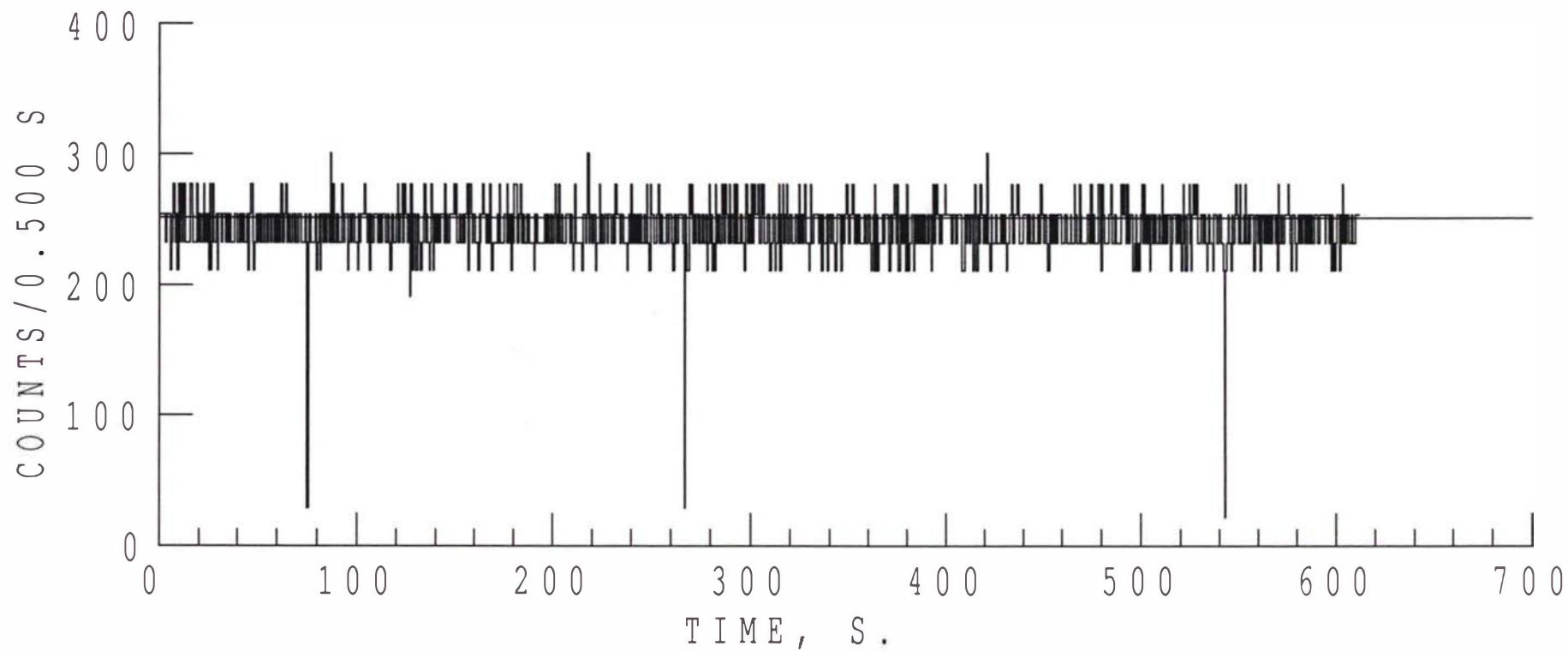
ULYSSES RT

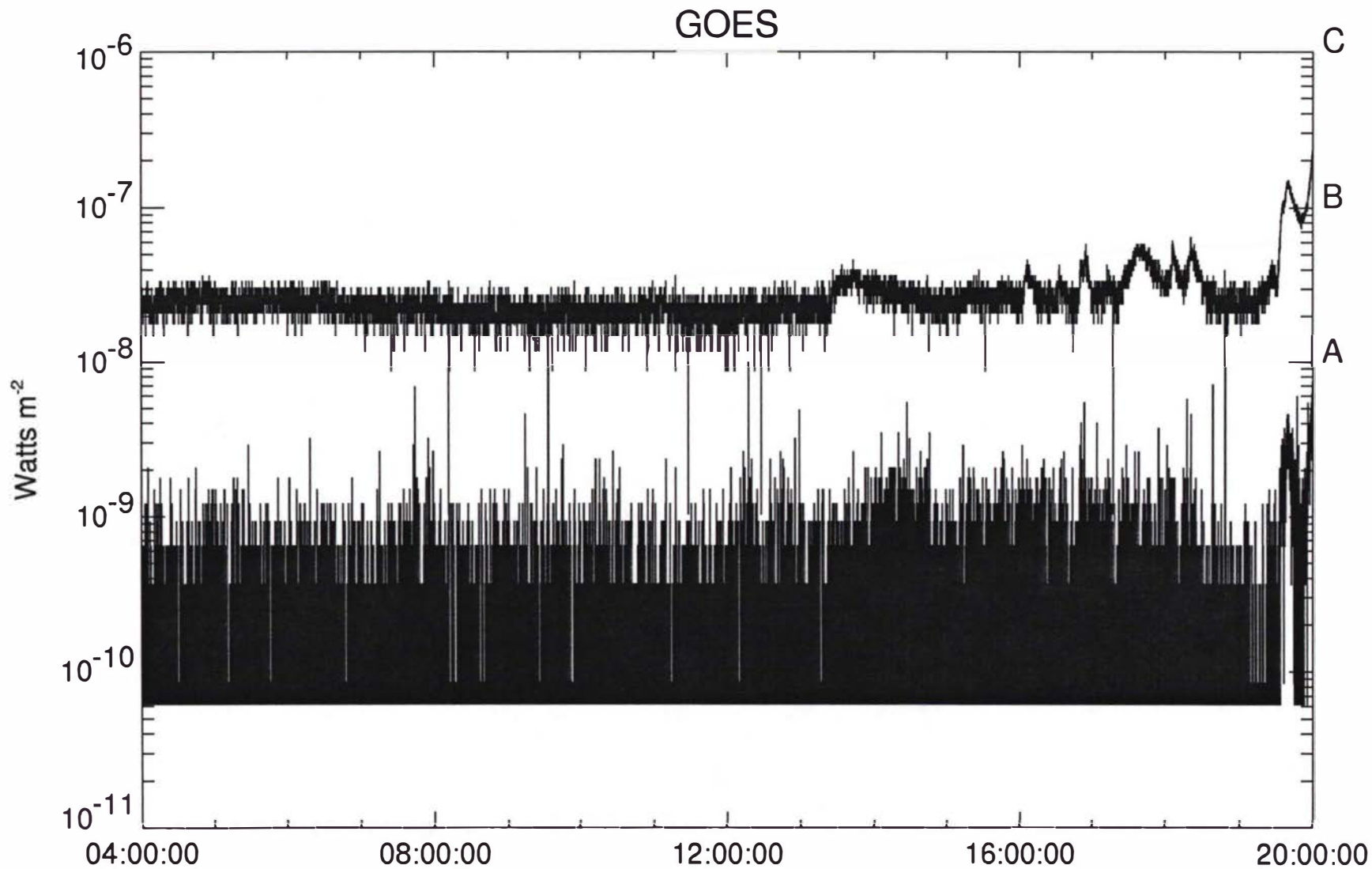
7 / 8 / 94 66708.453 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





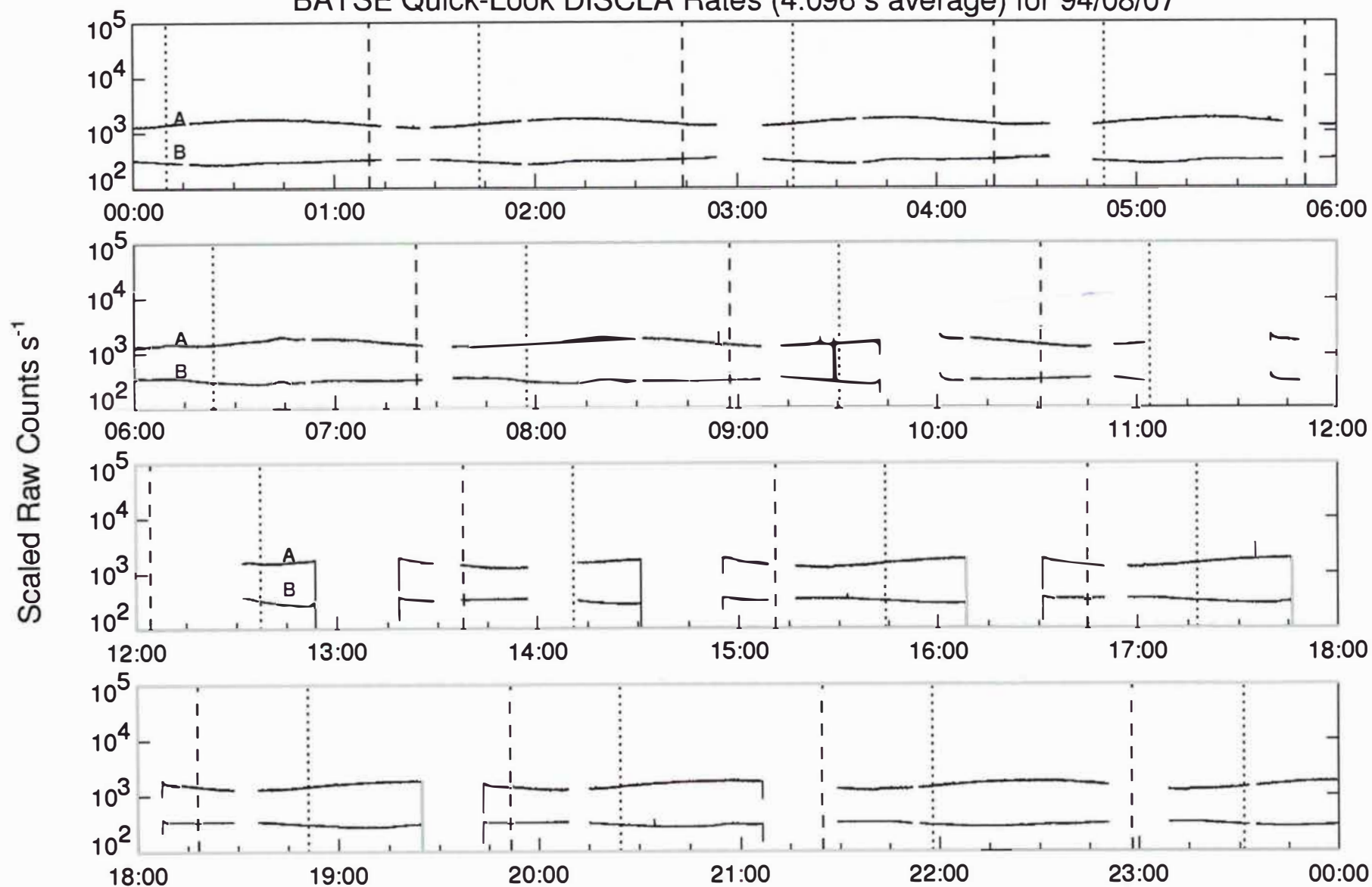
Data Start: 94/08/07, 0000:02

Plot created: 94/08/16, 1729

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/07

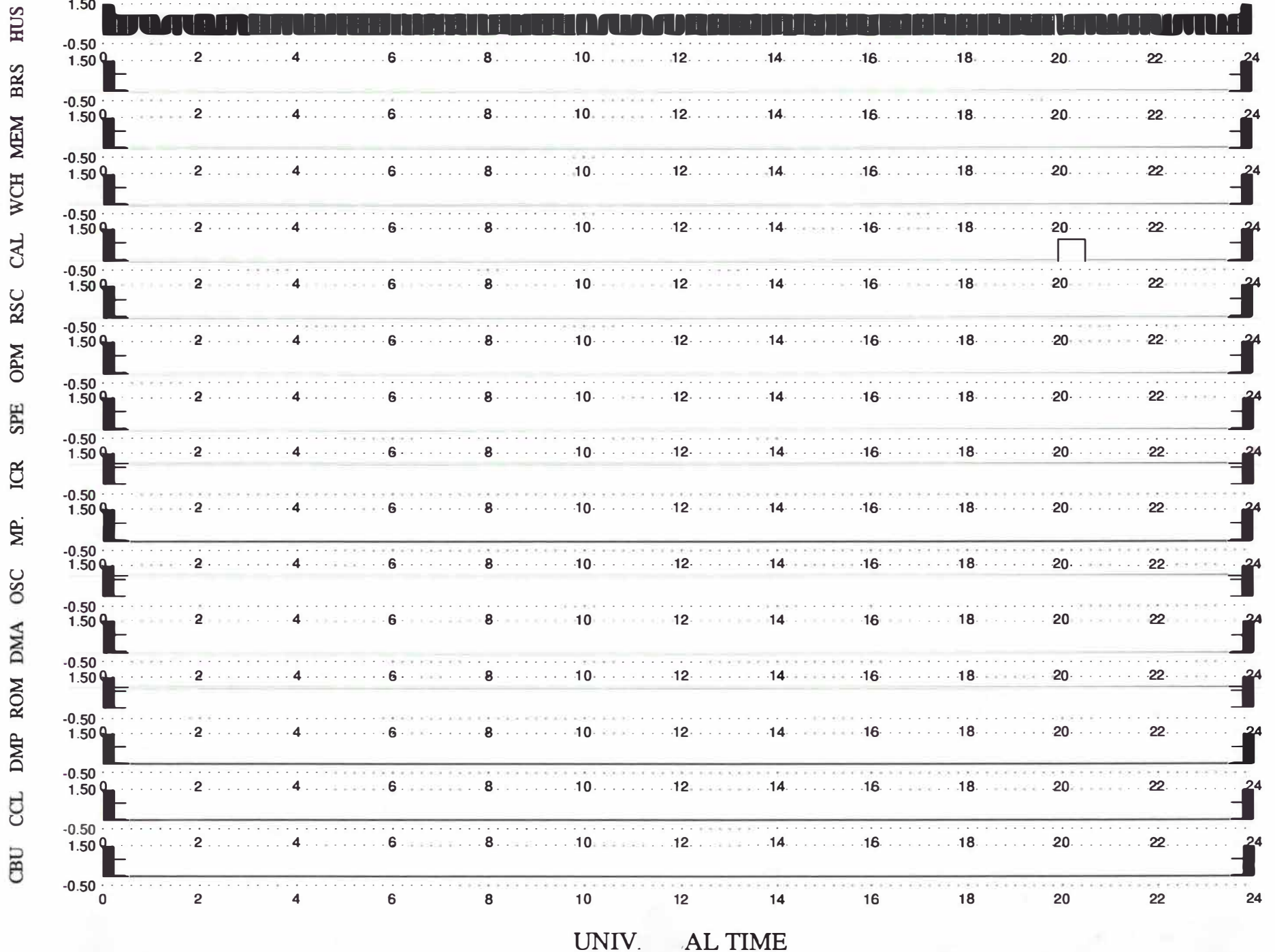


Current Time: 94/08/16, 1735 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

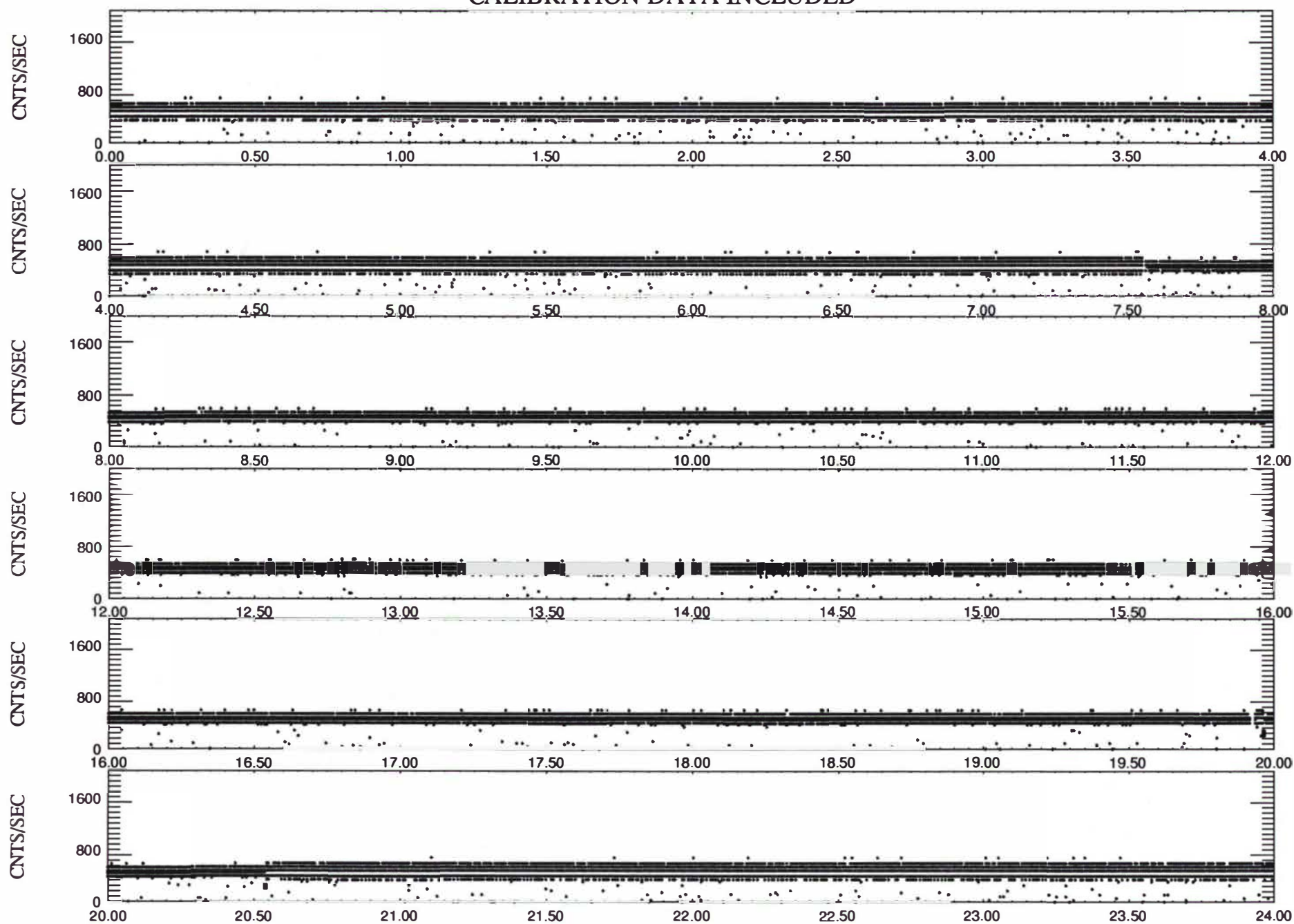
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

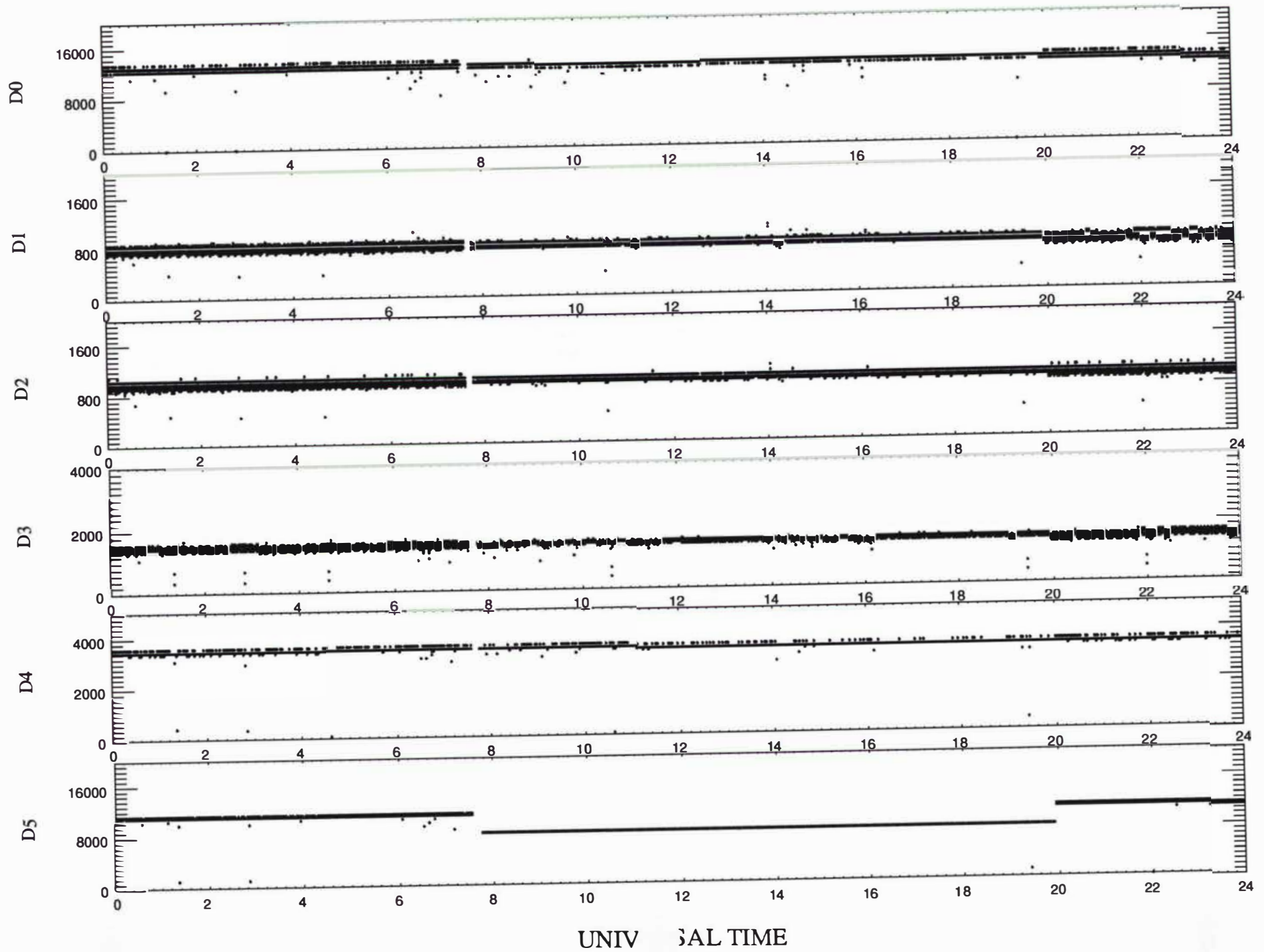
NO BURST (0)



CALIBRATION DATA INCLUDED



UNIV AL TIME



From RICHARDSON@ssl.msfc.nasa.gov Tue Aug 9 09:32 PDT 1994
Date: Tue, 9 Aug 1994 11:32:23 -0500 (CDT)
From: RICHARDSON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3113

BATSEARCH PROGRAM

BATSE BURST # 3113
EVENT OF 1994 AUG 8 DAY OF YEAR=220
EVENT CROSSING TIME AT BATSE : 53362. S. OR 14:49:22.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 252.000 46.000
BATSE PEAK COUNTING RATE: 15000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 8/ 8/ 94 IS:
RA= 136.511 DEC= -42.874 DIST= 2.908 AU
BATSE-ULYSSES DISTANCE = 435012402. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 44.89 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1028.07 SECS.
CROSSING TIME AT ULYSSES IS 54390. S. OR 15:06:30 +/- 243.40 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 8/ 8/ 94 IS:
RA= 83.655 DEC= 23.372 DIST= 1.886 AU
MARS-BATSE DISTANCE = 282142464. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 70.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 319.18 SECS.
CROSSING TIME AT MARS IS 53681. S. OR 14:54:41 +/- 158.56 SECONDS

No

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3113	940808	9572	53362	15000	252	+46

BATSE BURST TRIGGER

NO.: 3113

TIME: TJD=9572 SECONDS=53362

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=89.2 AZIMUTH=235.9 ERROR= DEGREES

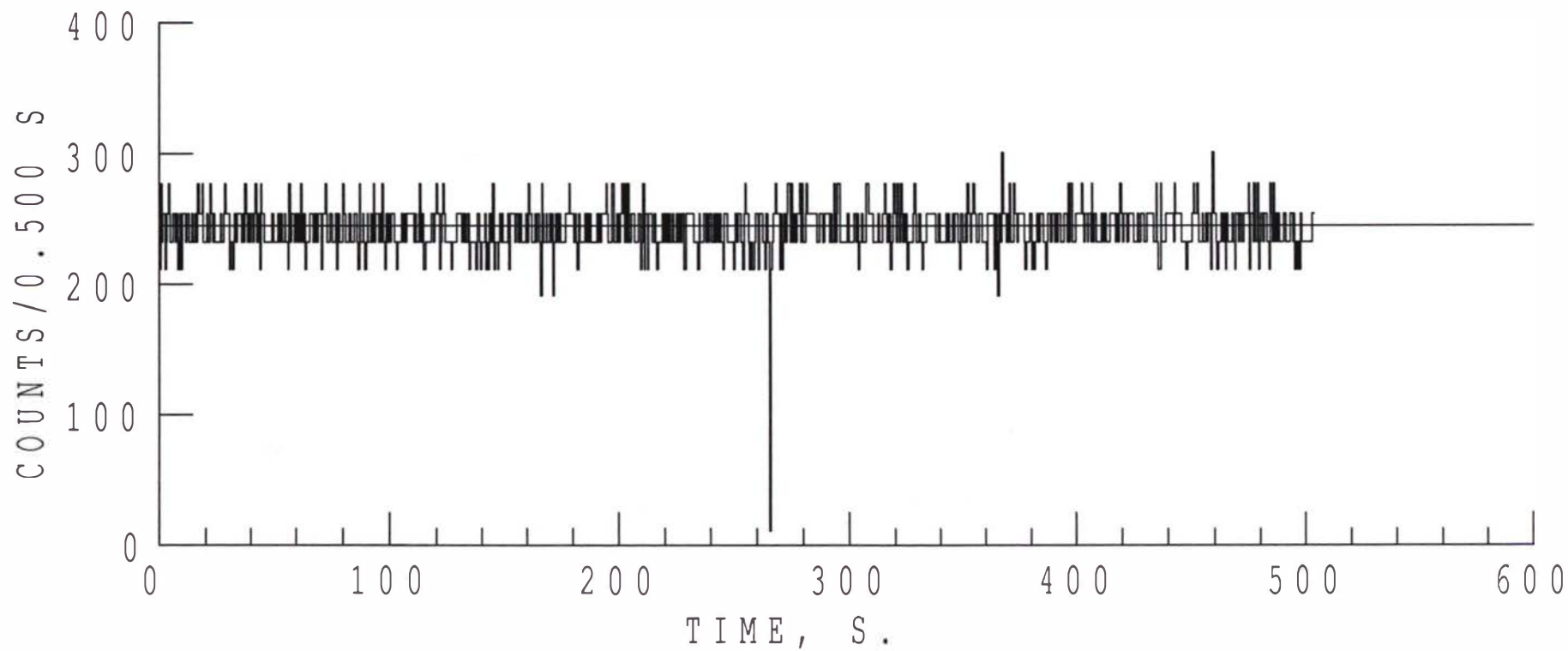
COMMENTS:

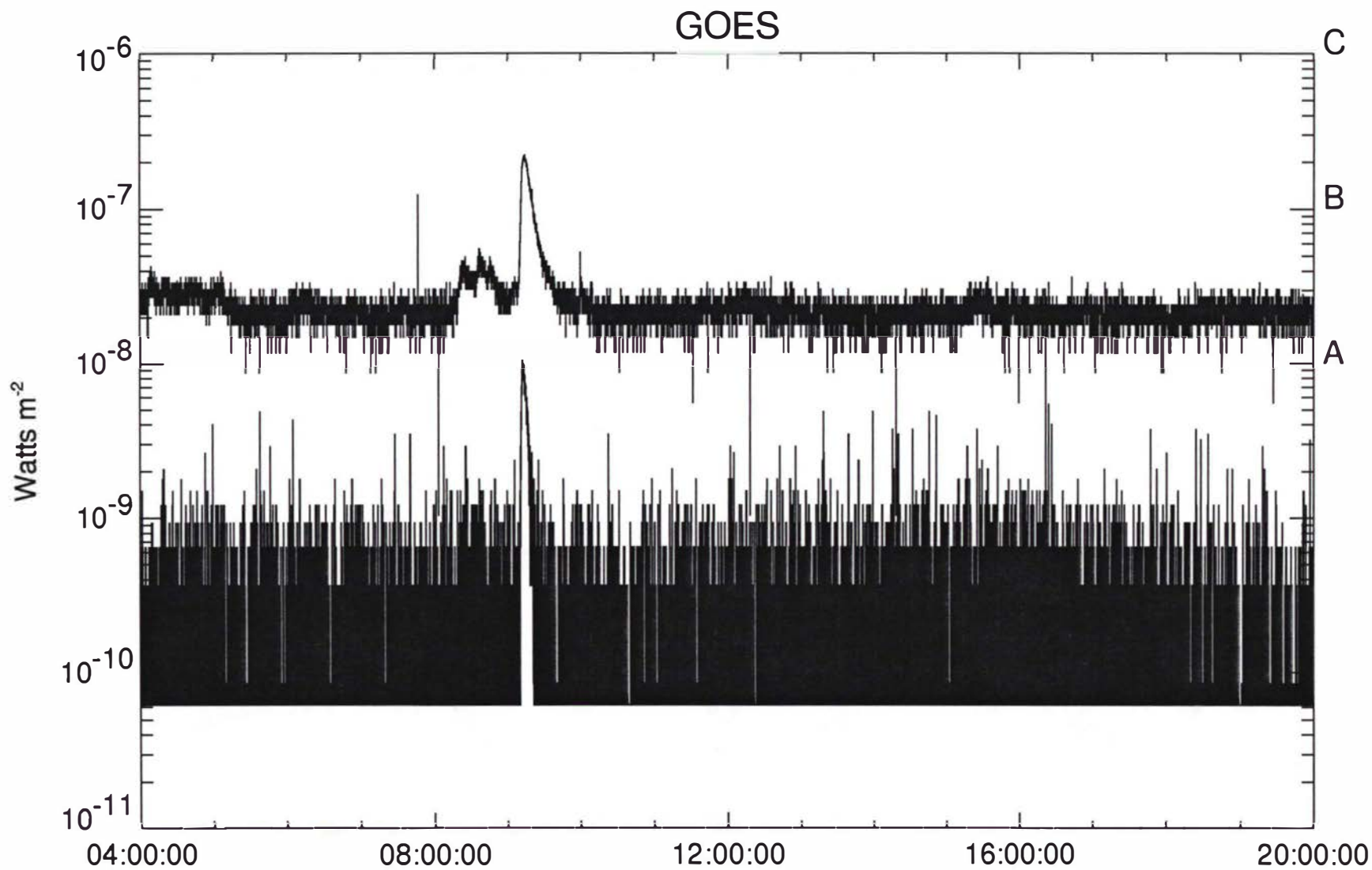
GRB. DOUBLE SPIKE WITH SUBSTRUCTURE. DUR.~1S. VISIBLE ABOVE 300KEV.

9 / 8 / 94

ULYSSES RT
8 / 8 / 94 54144.195 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





Data Start: 94/08/08, 0000:02

Plot created: 94/08/16, 1730

Channel

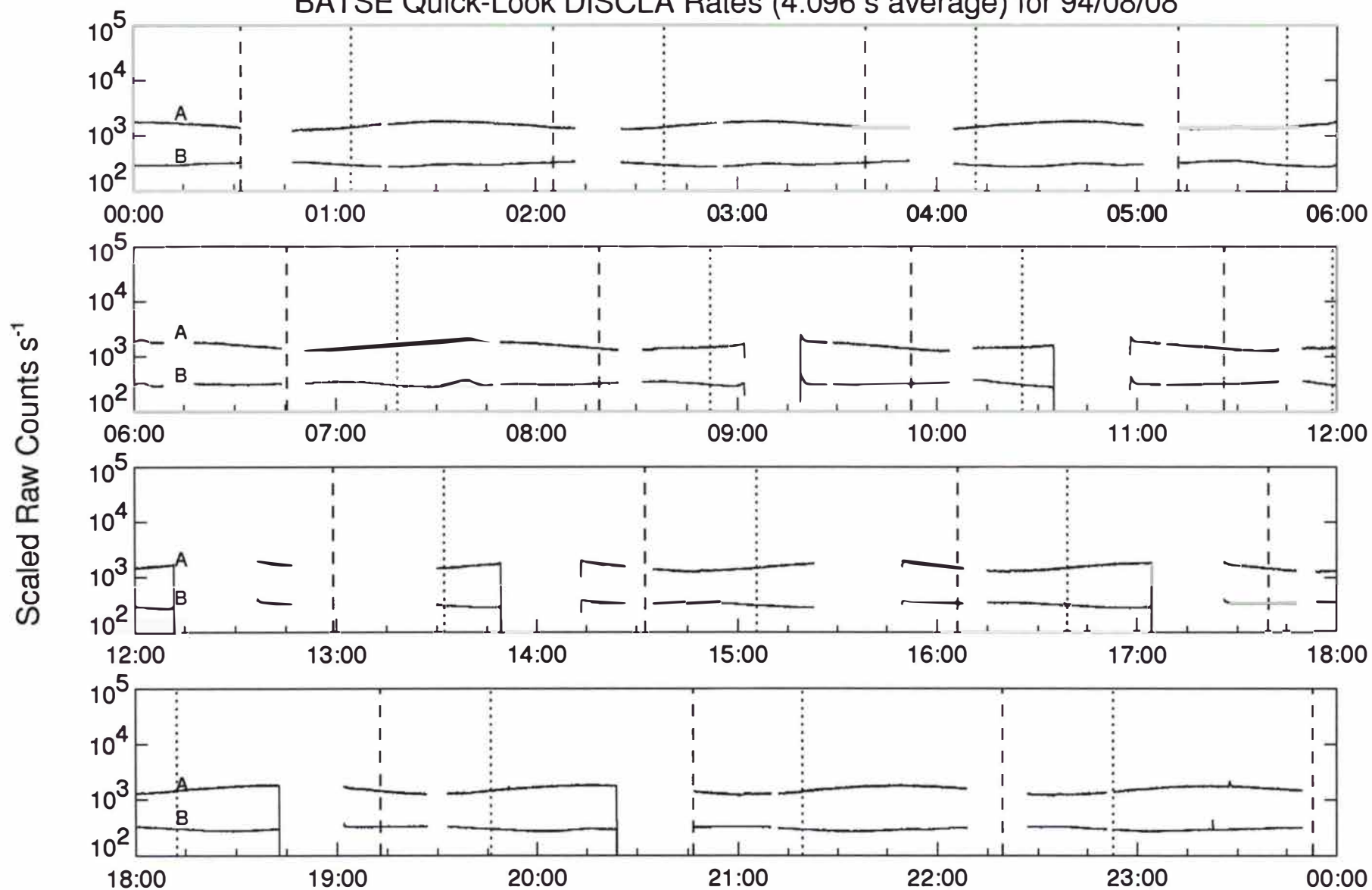
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/08

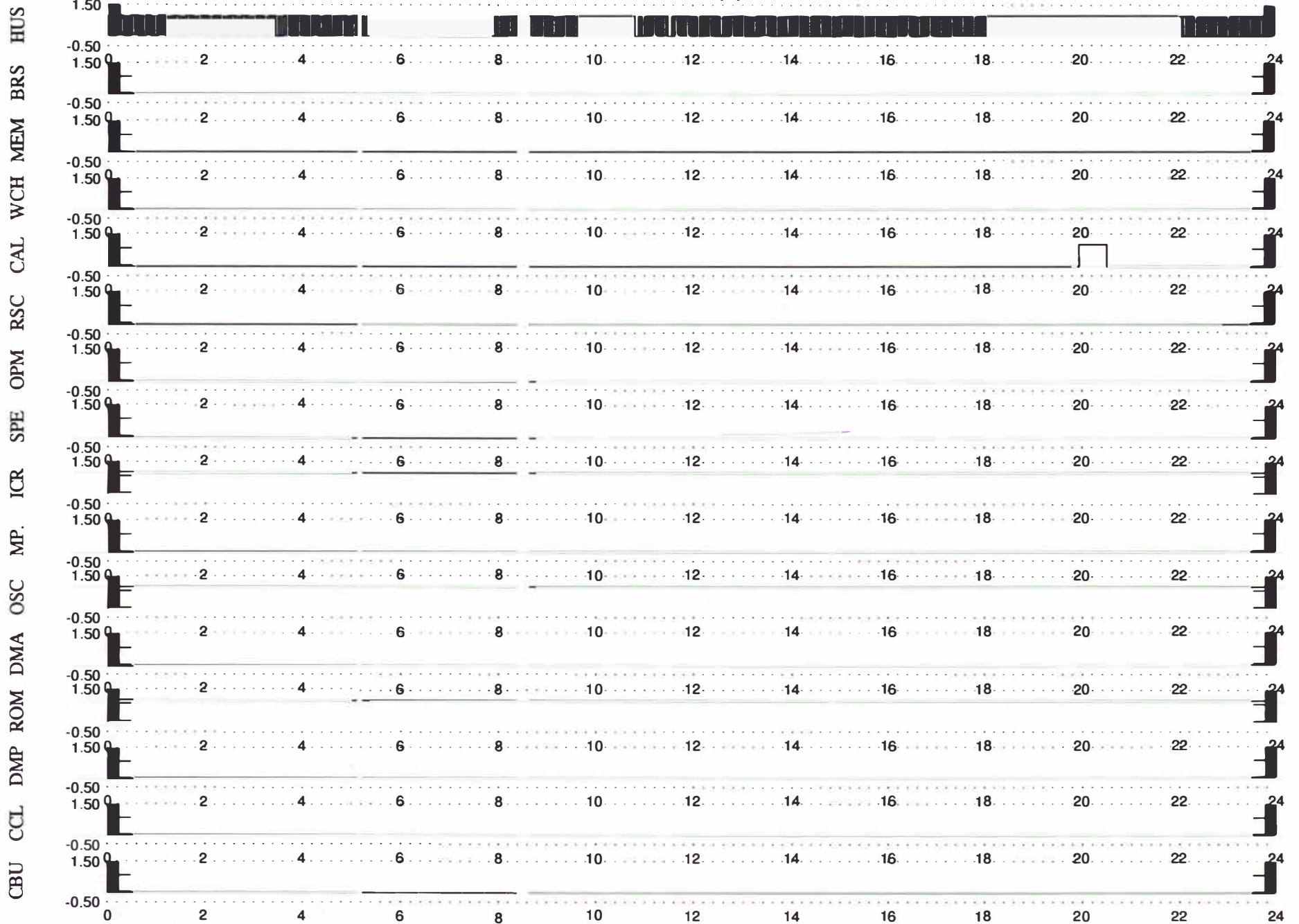


Current Time: 94/08/16, 1736 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

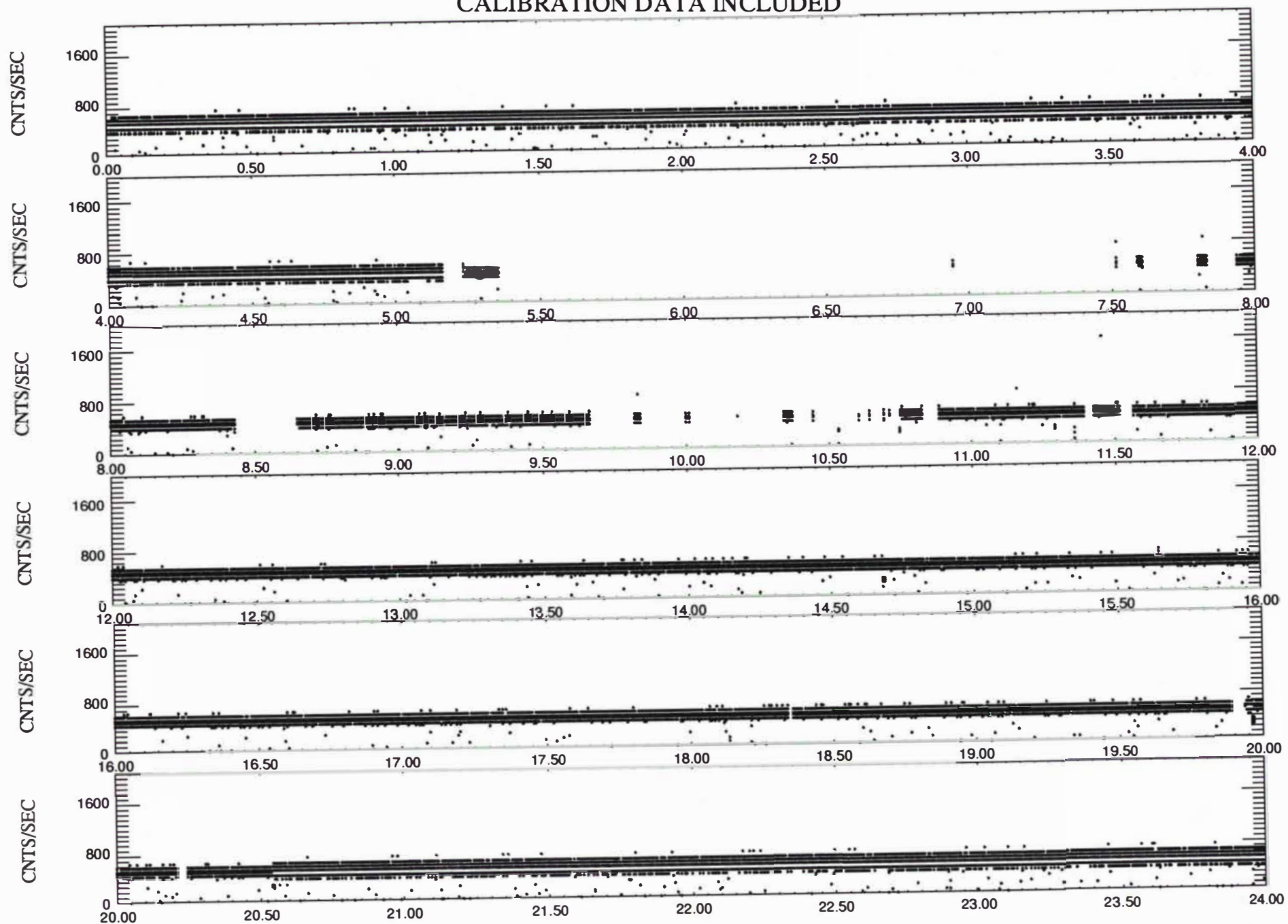
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

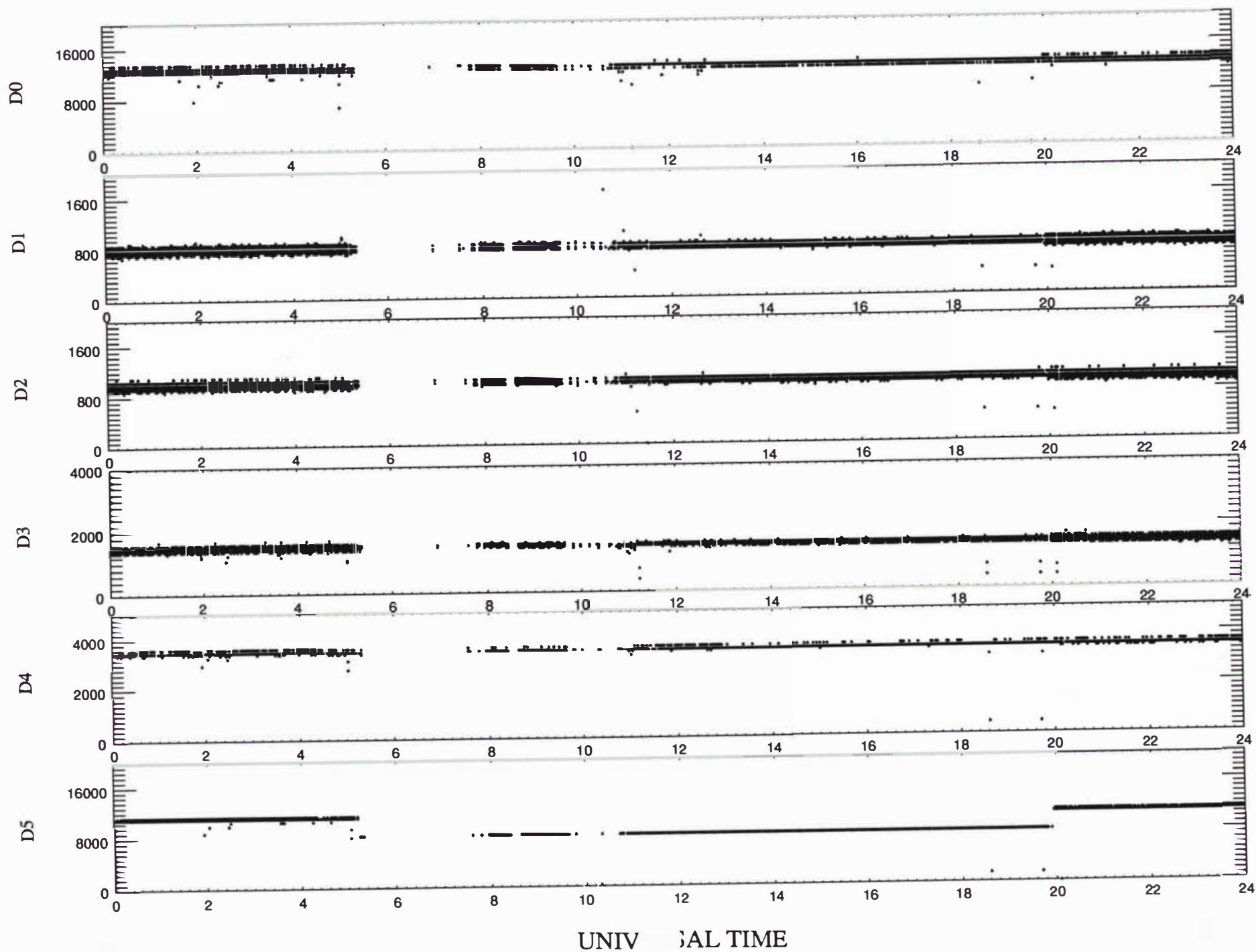
UNIV. AL TIME



CALIBRATION DATA INCLUDED



UNIV AL TIME



From KOSHUT@ssl.msfc.nasa.gov Wed Aug 10 13:00 PDT 1994
Date: Wed, 10 Aug 1994 15:00:17 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3114

BATSEARCH PROGRAM

BATSE BURST # 3114
EVENT OF 1994 AUG 9 DAY OF YEAR=221
EVENT CROSSING TIME AT BATSE : 26960. S. OR 07:29:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 160.000 16.000
BATSE PEAK COUNTING RATE: 2000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 9/ 8/ 94 IS:
RA= 136.742 DEC= -42.999 DIST= 2.904 AU
BATSE-ULYSSES DISTANCE = 434426708. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=117.25 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -663.56 SECS.
CROSSING TIME AT ULYSSES IS 26296. S. OR 07:18:16 +/- 263.58 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 9/ 8/ 94 IS:
RA= 84.380 DEC= 23.414 DIST= 1.881 AU
MARS-BATSE DISTANCE = 281453984. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=109.18 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -308.50 SECS.
CROSSING TIME AT MARS IS 26651. S. OR 07:24:11 +/- 149.26 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3114	940809	9573	26960	2000	160	+16

BATSE BURST TRIGGER

NO.: 03114

TIME: TJD=9573 SECONDS=26960

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=101. AZIMUTH=316. ERROR= DEGREES

COMMENTS:

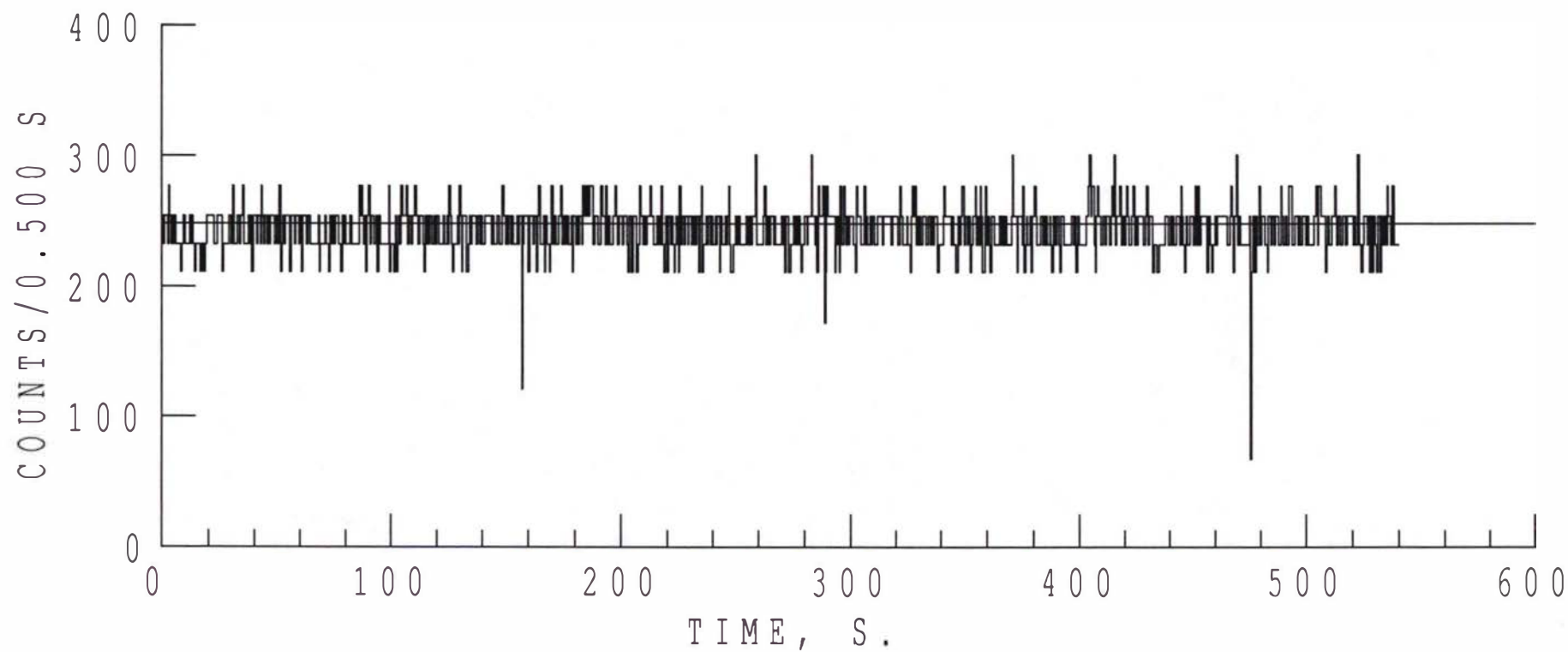
WEAK BURST (BACKGROUND-SUBTRACTED PEAK RATE ~ 2000 C/S) OF ~ 1 SECOND
DURATION. NO EMISSION OBSERVED ABOVE 300 KEV.

11 / 10 / 94

ULYSSES RT
9 / 8 / 94 26028.148 s
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From root Fri Dec 2 01:06 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA08685; Fri, 2 Dec 94 01:06:01
Received: from ax252.rikkyo.ac.jp by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA01032; Fri, 2 Dec 1994 01:04:42 +0800
Received: by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-MX9407011)
id AA14094; Fri, 2 Dec 94 18:04:59 JST
Received: from ax251.rikkyo.ac.jp by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-M
id AA14087; Fri, 2 Dec 94 18:04:51 JST
Received: by ax251.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-NoMX940525)
id AA07502; Fri, 2 Dec 94 18:04:50 JST
Date: Fri, 2 Dec 94 18:04:50 JST
From: M. Yoshimori <yosimori@rikkyo.ac.jp>
Return-Path: <yosimori@rikkyo.ac.jp>
Message-Id: <9412020904.AA07502@ax251.rikkyo.ac.jp>
To: khurley@space6.ssl.berkeley.edu
Subject: Burst positions
Cc: suga@flare2.solar.isas.ac.jp
Content-Length: 297
Status: R

Dear Dr.Hurley,

In addition to the previous three events, we found the following
five events:

1992.Oct.04	14:00:21 UT	✓
1992.Dec.07	16:00:48	✓
1993.Jan.06	15:37:39	✓
94.Aug.09	12:00:06	NO POSITION AVAILABLE
94.Aug.26	20:55:20	✓

We would appreciate receiving their positions.

Thank you.

Regards,

M.Yoshimori

From root Wed Nov 30 03:00 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA07664; Wed, 30 Nov 94 03:00:48
Received: from ax252.rikkyo.ac.jp by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA11098; Wed, 30 Nov 1994 02:59:29 +0800
Received: by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-MX9407011)
id AA22039; Wed, 30 Nov 94 19:59:42 JST
Received: from ax251.rikkyo.ac.jp by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-M)
id AA22032; Wed, 30 Nov 94 19:59:27 JST
Received: by ax251.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-NoMX940525)
id AA18391; Wed, 30 Nov 94 19:59:27 JST
Date: Wed, 30 Nov 94 19:59:27 JST
From: M. Yoshimori <yosimori@rikkyo.ac.jp>
Return-Path: <yosimori@rikkyo.ac.jp>
Message-Id: <9411301059.AA18391@ax251.rikkyo.ac.jp>
To: khurley@space6.ssl.berkeley.edu
Cc: suga@flare2.solar.isas.ac.jp, morimoto@flare2.solar.isas.ac.jp
Subject: Yohkoh GBD events
Content-Length: 362
Status: R

Dear Dr.Hurley,

Yohkoh observed the following four events.

1. 1994 Feb.06 00:08:37 UT
2. 1994 Feb.18 19:32:28 UT
3. 1994 Mar.02 05:08:31 UT
4. 1994 Jul.03 04:40:46 UT

We like to know the locations of the following three events,

1. 1994 Feb.06 00:08:37 UT ✓
2. 1994 Feb.18 19:32:28 UT ✓
3. 1994 Mar.02 05:08:31 UT (~~rough location only~~) ✓

Thank you.

Regards,

M.Yoshimori

From root Tue Oct 4 14:06 1994
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA01789; Tue, 4 Oct 94 14:06:16
 Received: from sangam.ncst.ernet.in by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA09220; Tue, 4 Oct 1994 14:15:47 +0800
 Received: from soochak.ncst.ernet.in (soochak.ncst.ernet.in [144.16.11.100]) by sangam.ncst.ernet.in
 From: kmarar@isac.ernet.in
 Received: from nic.iisc.ernet.in (twisha.ece.iisc.ernet.in [144.16.64.4]) by soochak.ncst.ernet.in
 Received: by nic.iisc.ernet.in (ERNET-IISc/AT&T UNIX SYS V.3.2)
 id AA15091; Wed, 5 Oct 94 02:51:30 EST
 Message-Id: <9410050751.AA15091@nic.iisc.ernet.in>
 Received: by vigyan.iisc.ernet.in (smail2.3)
 id AA24209; 5 Oct 94 02:18:52 EST (Wed)
 To: vigyan!khurley@sunspot.ssl.berkeley.edu, vigyan!kmarar@isac.ncst.ernet.in
 Date: Mon Oct 3 14:14:08 1994
 Content-Length: 2592
 Status: R

Oct 3, 1994

Dear Kevin,

Kindly recall my fax to you dated 25 June 94. Since then the SROSS-C2 orbit has been brought down to 430 x 620 km. Our instrument is working very satisfactorily. I am giving below the times of trigger of a few more events from our experiment. Kindly check them with your list. The events marked ** may please be looked up first.

SROSS-C2 GRB CANDIDATE EVENTS

Event	Event orbit date (d m y)	time (UT)			
		h	m	s	
1126	19 July 94	06	00	05	** 110 TR15
1296	30 July 94	11	01	31	** 110 DATE VET
1358	3 Aug 94	13	14	52	110 TR15
1448	9 Aug 94	11	52	31	110 DATE VET RI ?
1650	22 Aug 94	20	23	20	** TR166 OR
2095	21 sep 94	05	08	19	** RI

** Most likely genuine from temporal profile

2. You had asked for the earth centre position and distance of SROSS-C2 for the events. Is it enough if we give you the state vector of the satellite corresponding to equator crossing for an orbit close to our event?

3. Do you have a software which we can use for determining the area of the celestial sphere blocked by the earth at the event time when our SROSS-C2 detects the events? I suppose this is what you had asked earlier. We wish to use your software to double-check our calculations. Can you send me a copy of your software through email with a sample input and output for checking the same.

My email address is : kmarar@isac.ernet.in (Please note the change)

In case you have problem in getting the correct gateway Please contact Prof. Edward Nather at the U of Texas at Austin (Astronomy Department) and check with him how he contacts me regularly.

His email address is `nather@astro.as.utexas.edu`

Kindly inform me when you receive this message.

Many thanks
Krishnan

इसरो उपग्रह केन्द्र

अन्तरिक्ष विभाग

भारत सरकार

हवाई पटल मार्ग, विमानपुरा डाक घर,

बेगलूर-560 017, भारत

नार : "उपग्रह" टेलिफोन : 0845-325 और 769

दूरभाषी : 566251



ISRO SATELLITE CENTRE

DEPARTMENT OF SPACE

GOVERNMENT OF INDIA

AIRPORT ROAD, VILANAPURA P.O.

BANGALORE-560 017, INDIA

Telegram : UPAGRAH Tel : 0845-325 & 769

Telephone : 566251

Nov 29, 1994

Dear Kevin,

I am extremely thankful to your letter dated Oct 31. I am very sorry that our email does not work always. Our fax numbers have changed and the new numbers are : 91-80-526-9490 or 91-80-526-5407.

I am enclosing the time histories of SROSS-C2 GRB events in orbits 1126 (19 Jul 94), 1296 (30 Jul 94), 1650 (22 Aug 94) and 2095 (21 Sep 94) all of which I believe were detected by Ulysses also. The time profile of our event in orbit 1448 for which you had written a possible rate increase is also enclosed. I do not now believe that this event (Orbit 1448) is confirmed. ALL PROFILES CORRESPOND TO THE ENERGY RANGE 100 - 1024 KEV.

In addition we are sending the temporal profiles of our new events in orbit 2234 (30 Sep 94) and 2492 (17 Oct 94). I hope that you will receive this fax message satisfactorily and that the annotations in the figures are clear. If not, please let me know.

New events

Event orbit	Event date (d m y)	time(UT) h m s
2234	30 Sep 94	10 2 6.008
2492	17 Oct 94	10 19 59.748

Kindly check in your Ulysses data the above two new events and confirm.

I am now hopeful that we can start contributing to your interplanetary network. I wonder whether any of our four Ulysses/SROSS-C2 events could be confirmed by GRAMAT satellite also!

With best regards,

sincerely yours,

Krishnan

(Krishnan)

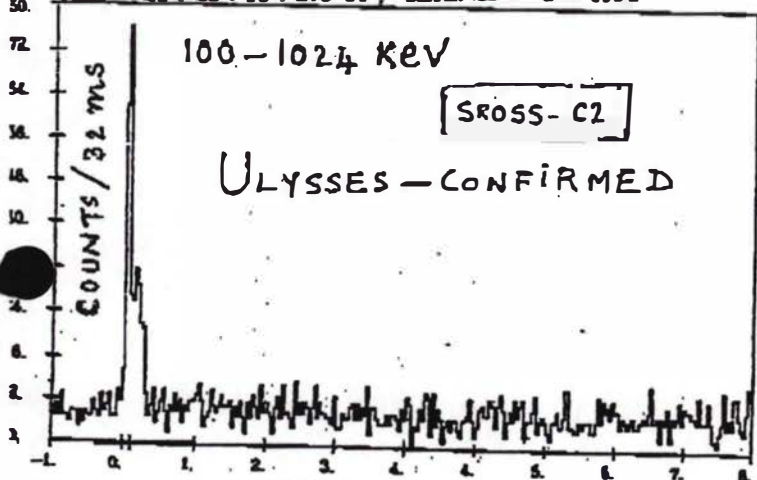
t- 1s to t+ 8s 32 ms res. north=1650.2 ra=35.1 dec=-42.1

TIME = 20 : 23 : 19.878 UT ; DATE: 22 - 8 - 1994

100-1024 KEV

SROSS-C2

ULYSSES - CONFIRMED

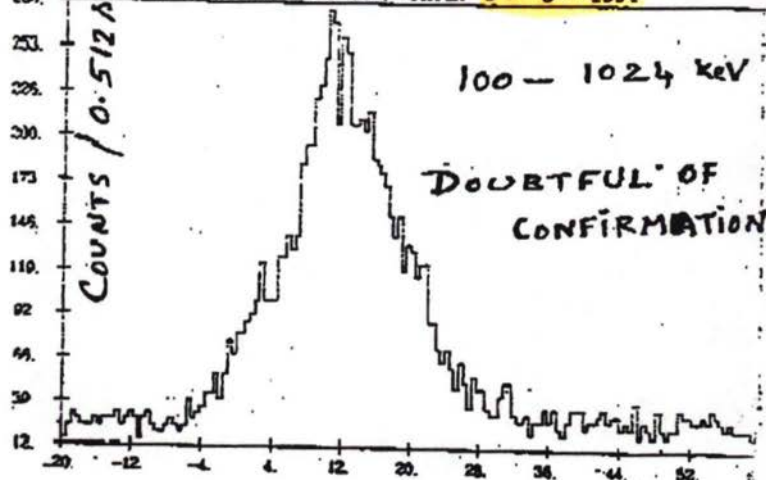


t-20s to t+60s 512 ms ch2. north=1448.1 ra=96.0 dec=-40.0

TIME = 11 : 52 : 31.500 UT ; DATE: 9 - 8 - 1994

100-1024 KEV

DOUBTFUL OF CONFIRMATION



SROSS 19940809 43156

ULYSSES RT

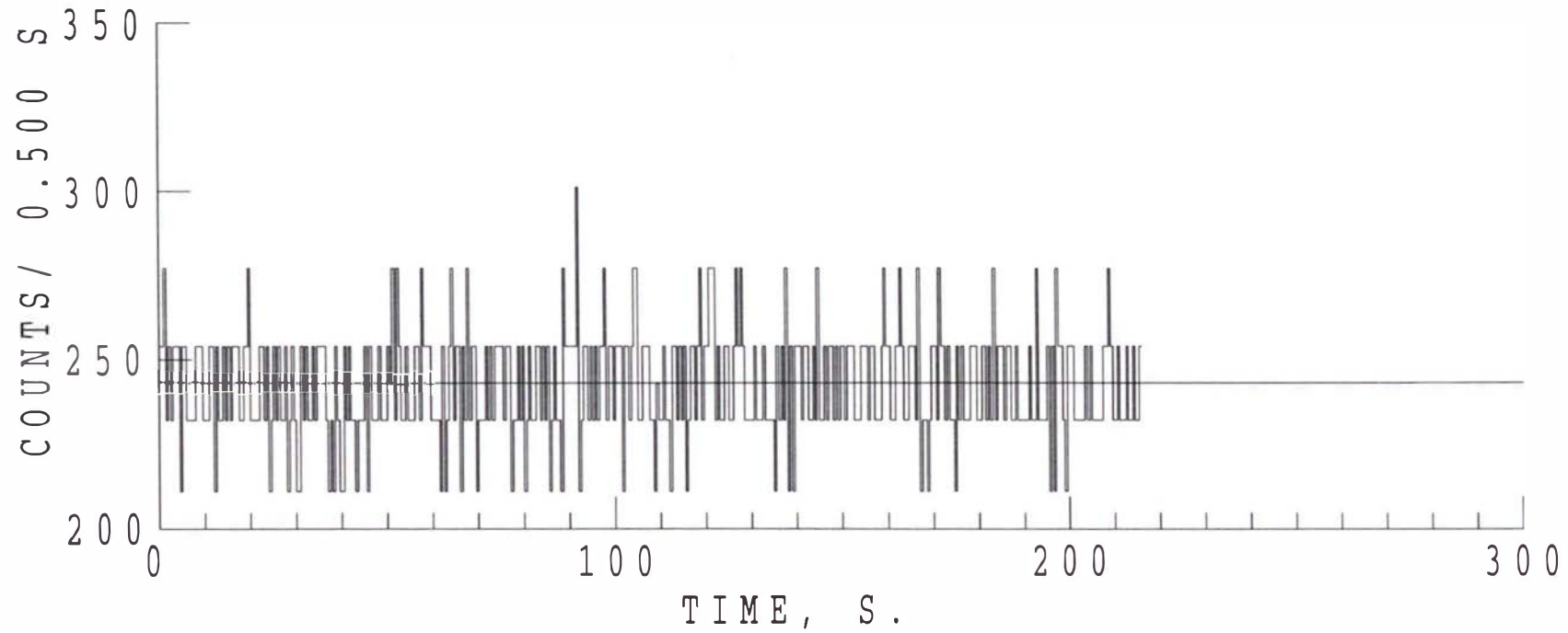
09/08/11

09/08/94 43056.434 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



10 / 10 / 94

ULYSSES RT

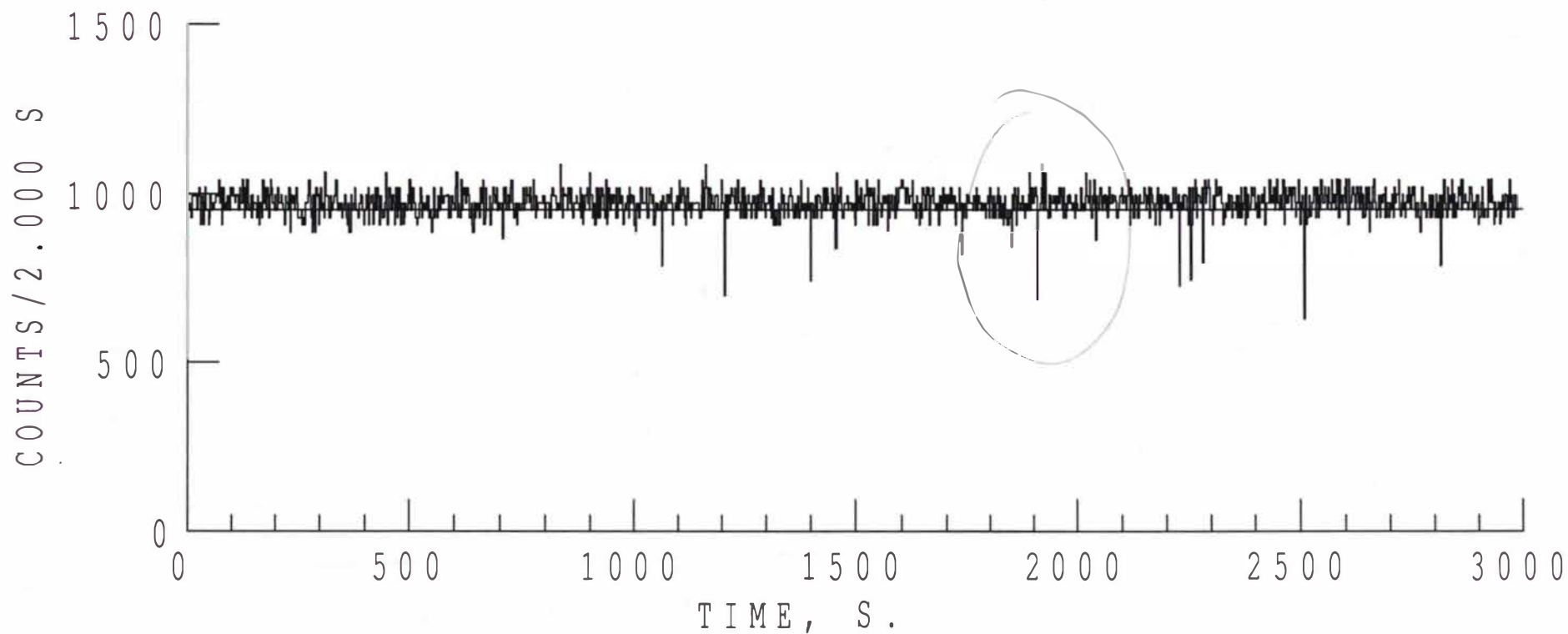
9 / 8 / 94 41256.398 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



Dear Yoshimori-san,

I have just sent you the more accurate location for the March 2 1994 burst.
As I mentioned, I would be interested in receiving the August 9 1994
Yohkoh data so that I can determine a position for this event. Can you send
the digital data on the finest time resolution available, and the spacecraft
coordinates?

Kevin

From root Fri Dec 16 01:49 1994

Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)

id AA13771; Fri, 16 Dec 94 01:49:43

Received: from ax252.rikkyo.ac.jp by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)

id AA11777; Fri, 16 Dec 1994 01:48:38 +0800

Received: by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-MX9407011)

id AA21175; Fri, 16 Dec 94 18:48:55 JST

Received: from ax251.rikkyo.ac.jp by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-M

id AA21171; Fri, 16 Dec 94 18:48:54 JST

Received: by ax251.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-Mx94120201) id AA16065; F

Date: Fri, 16 Dec 94 18:48:54 JST

From: M. Yoshimori <yosimori@rikkyo.ac.jp>

Return-Path: <yosimori@rikkyo.ac.jp>

Message-Id: <9412160948.AA16065@ax251.rikkyo.ac.jp>

To: khurley@space6.ssl.berkeley.edu

Cc: morimoto@rikkyo.ac.jp

Subject: Yohkoh data of the 1994 Aug.9 event

Content-Length: 241

Status: R

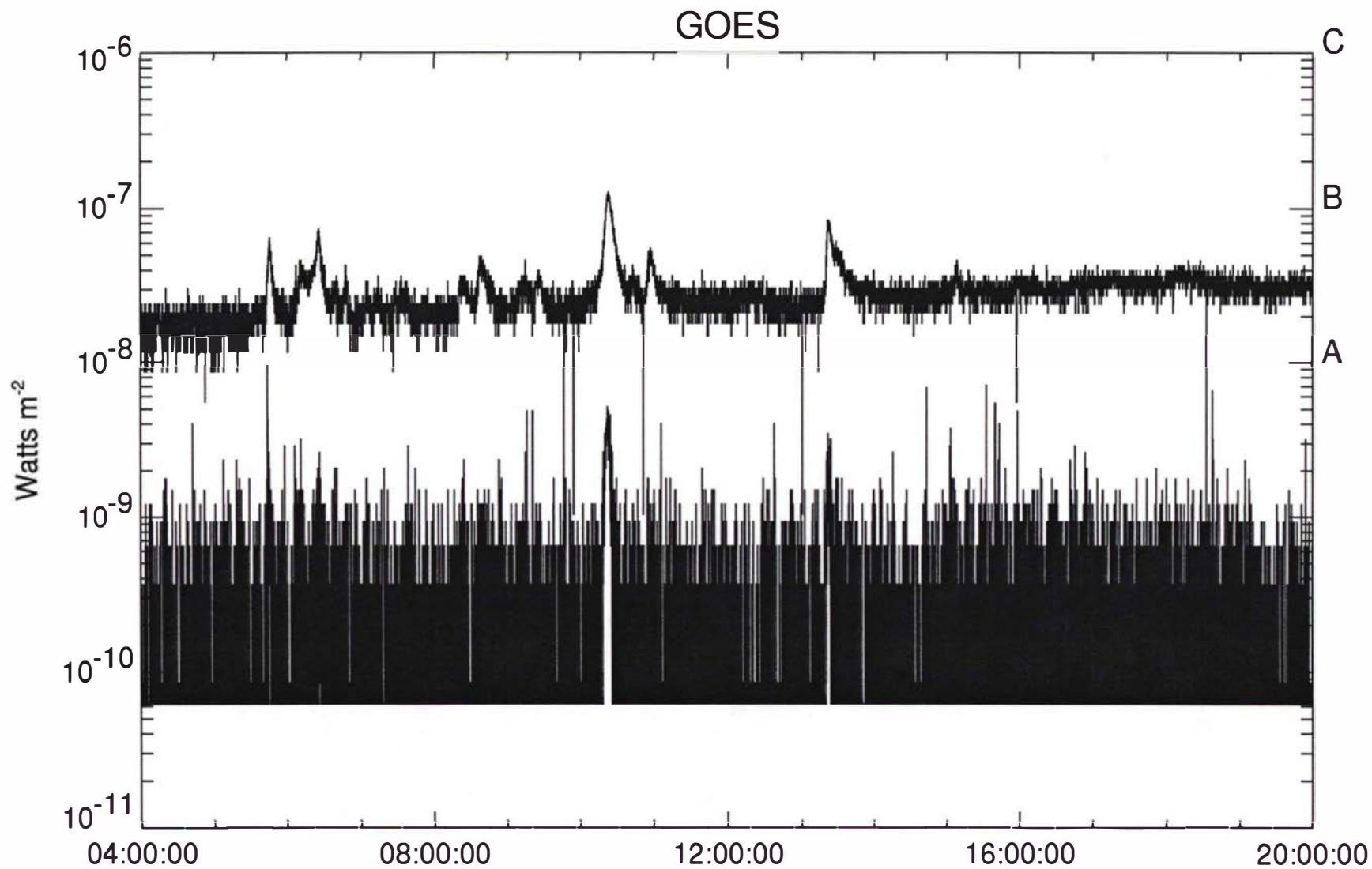
Dear Dr. Hurley,

We rechecked the Yohkoh data of the 1994 Aug.9 event.
We concluded the counting increase is due to particles because
the energy spectrum is quite different from the GB spectrum.

I apologize it.

Regards,

M.Yoshimori



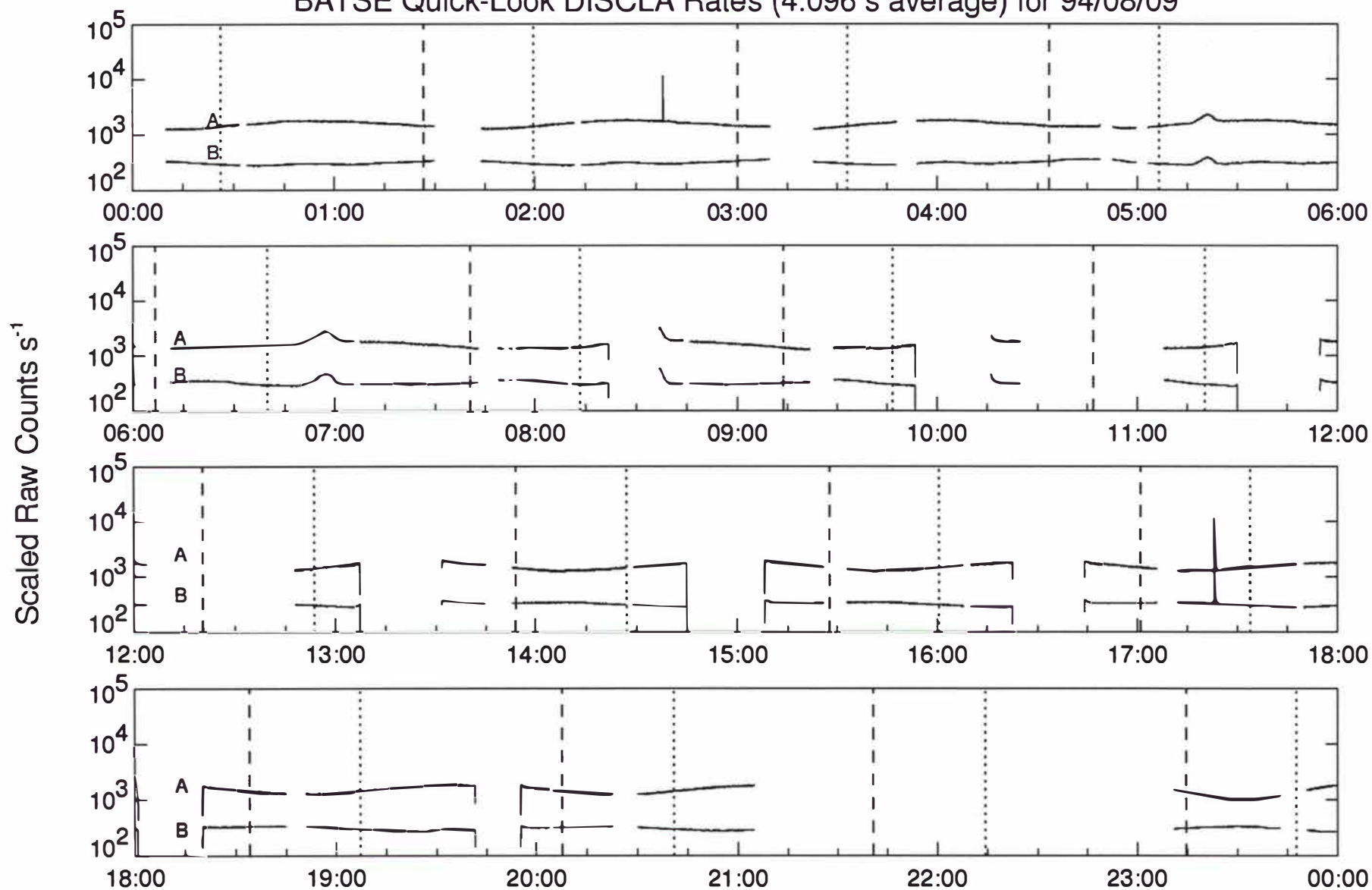
Data Start: 94/08/09, 0000:02

Plot created: 94/08/16, 1754

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/09

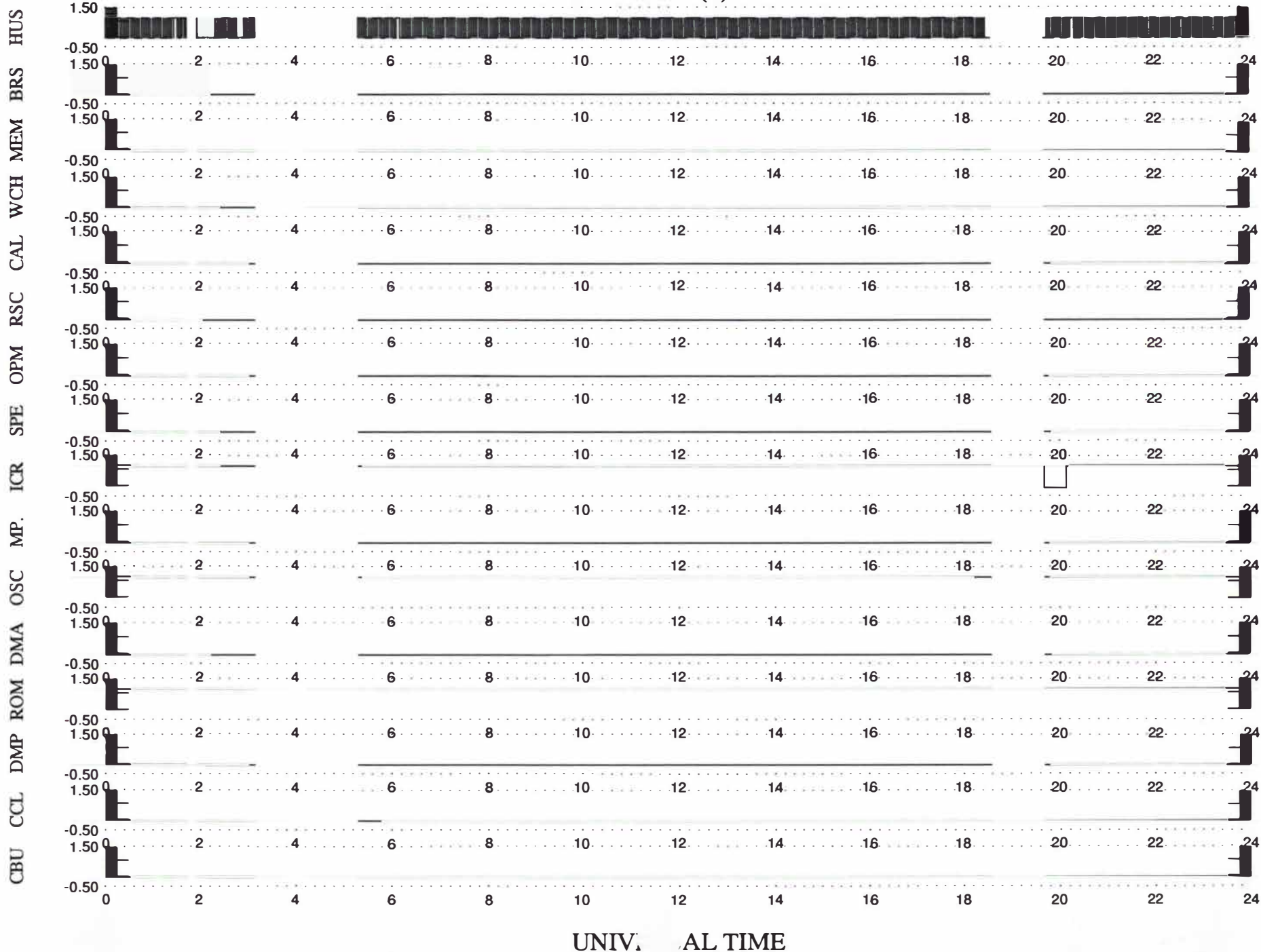


Current Time: 94/08/16, 1802 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

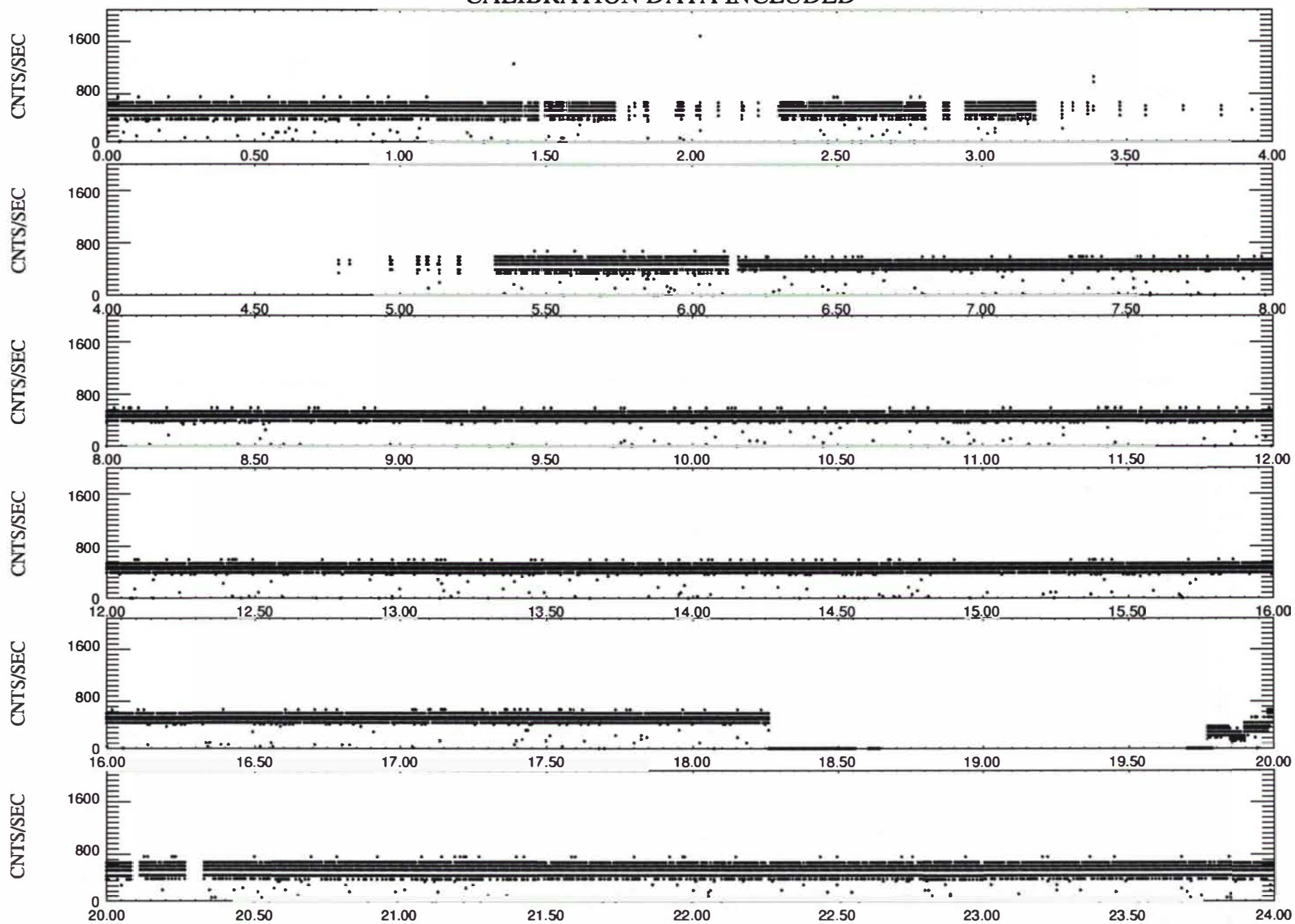
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

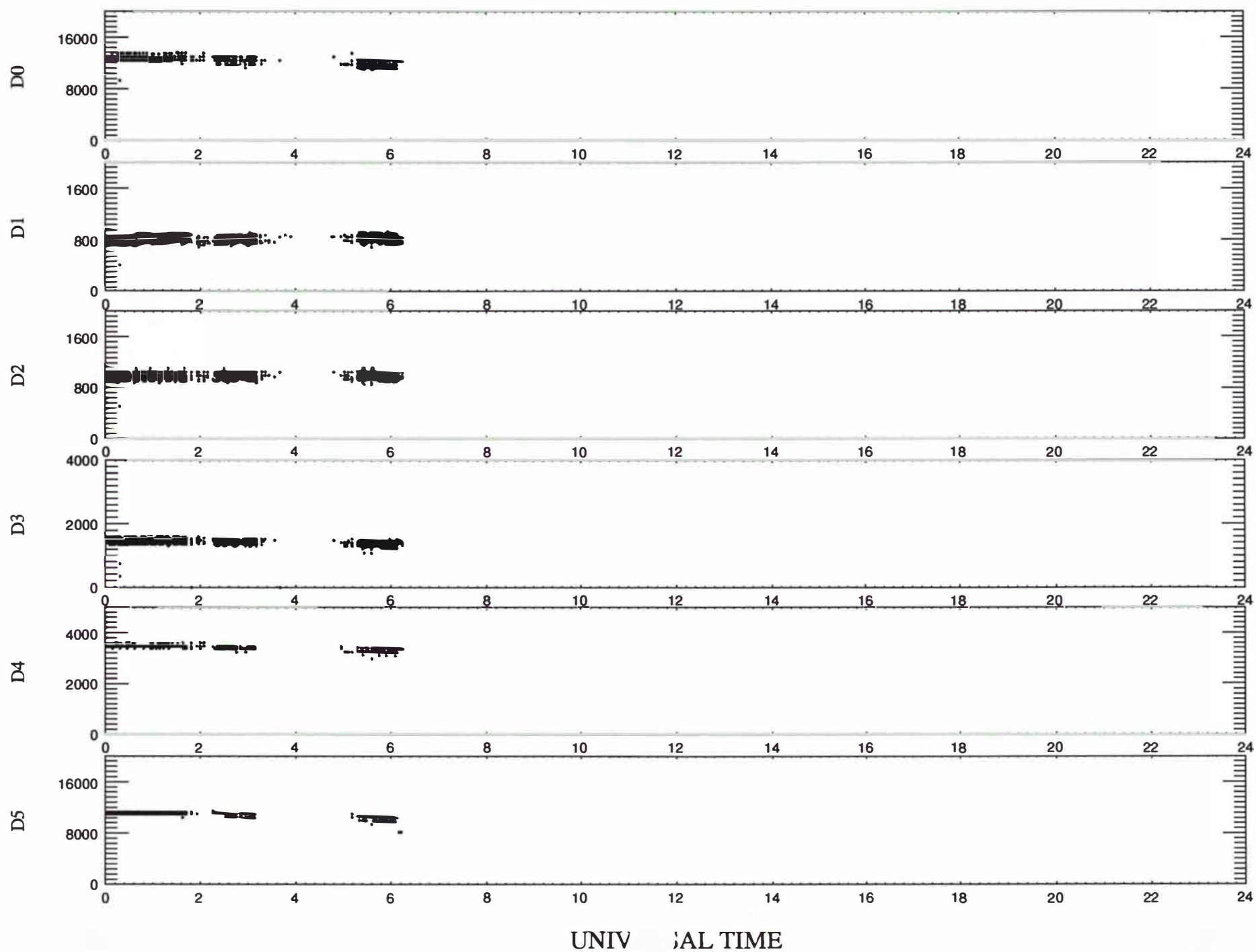
NO BURST (0)



CALIBRATION DATA INCLUDED



UNIV. AL TIME



From HAGEDON@fender.msfc.nasa.gov Fri Aug 12 13:17 PDT 1994
Date: Fri, 12 Aug 1994 9:26:07 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3115

BATSEARCH PROGRAM

BATSE BURST # 3115
EVENT OF 1994 AUG 10 DAY OF YEAR=222
EVENT CROSSING TIME AT BATSE : 8562. S. OR 02:22:42.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 213.000 -18.000
BATSE PEAK COUNTING RATE: 35000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 10/ 8/ 94 IS:
RA= 137.006 DEC= -43.145 DIST= 2.899 AU
BATSE-ULYSSES DISTANCE = 433753021. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=112.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -548.73 SECS.
CROSSING TIME AT ULYSSES IS 8013. S. OR 02:13:33 +/- 274.09 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 10/ 8/ 94 IS:
RA= 85.104 DEC= 23.453 DIST= 1.877 AU
MARS-BATSE DISTANCE = 280759488. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 48.78 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 617.06 SECS.
CROSSING TIME AT MARS IS 9179. S. OR 02:32:59 +/- 131.68 SECONDS

RI

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3115	940810	9574	08562	35000	213	-18

BATSE BURST TRIGGER

NO.: 3115

TIME: TJD=9574 SECONDS=08562

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=123. AZIMUTH=302. ERROR= DEGREES

COMMENTS:

BURST. THREE DISTINCT EPISODES. SECOND EPISODE IS LONGEST, STRONGEST
AND MOST COMPLEX. TOTAL DUR.~50 SEC. MAIN EPISODE FROM ~T+15 TO ~T+27 SEC.
PEAK AT ~T+19.5 SEC. VISIBLE ABOVE 300 KEV.

Helio corr removed

Date: Feb 3 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? N/A
- ☒ BATSE ephemeris for T₀?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? N/A

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

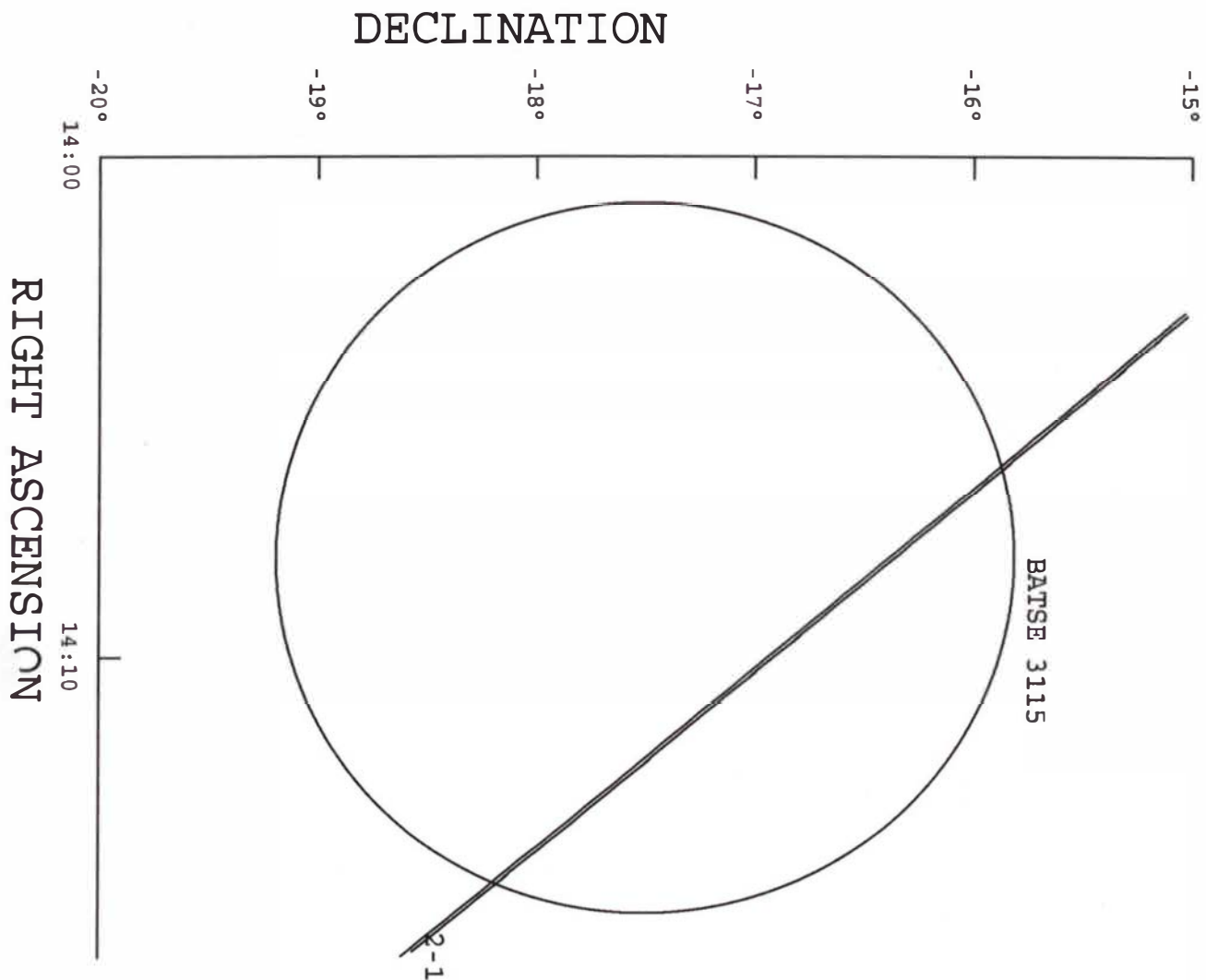
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 10, 1994 2:13

3 / 2/98



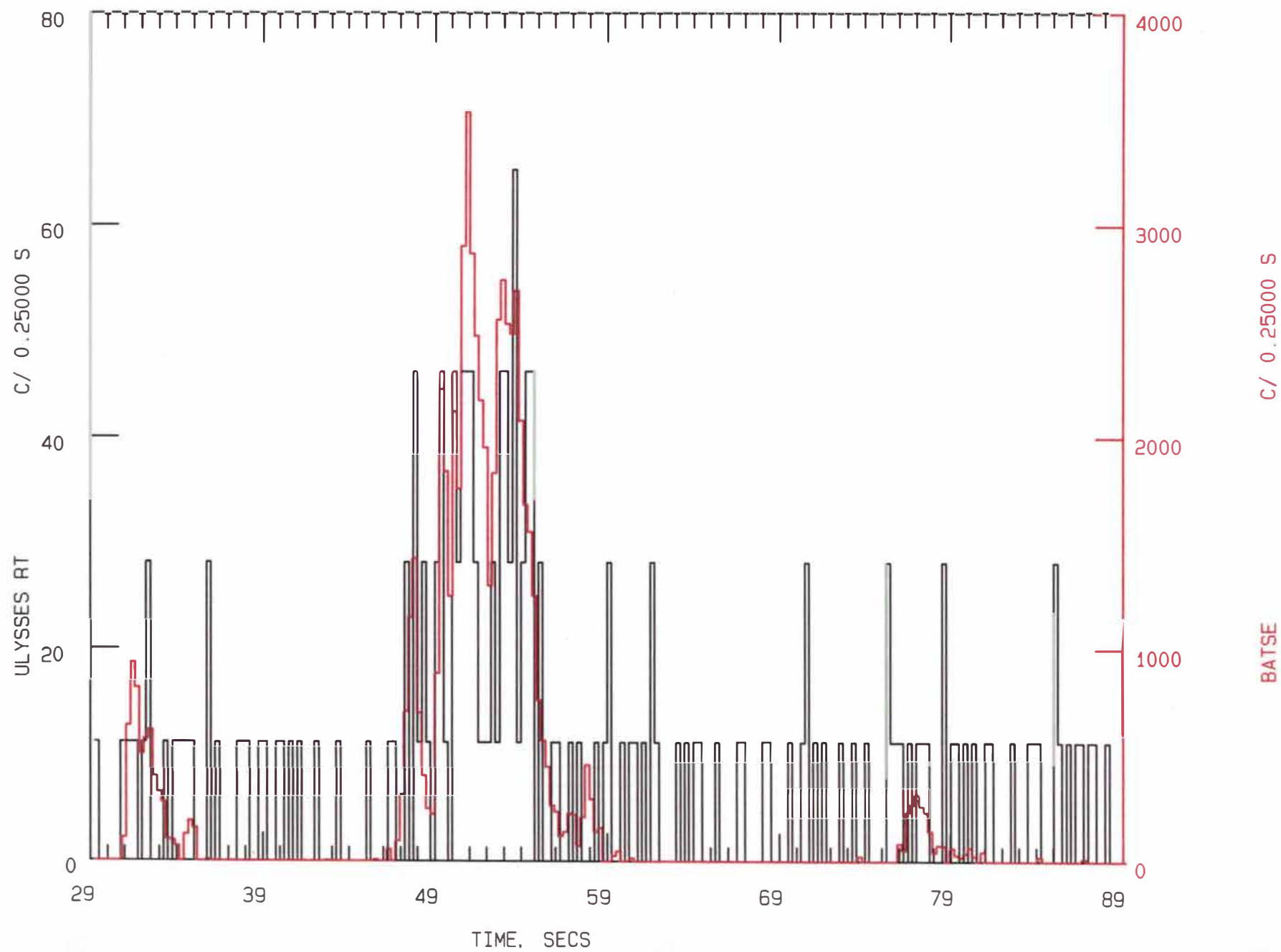
ULYSSES RT-BATSE

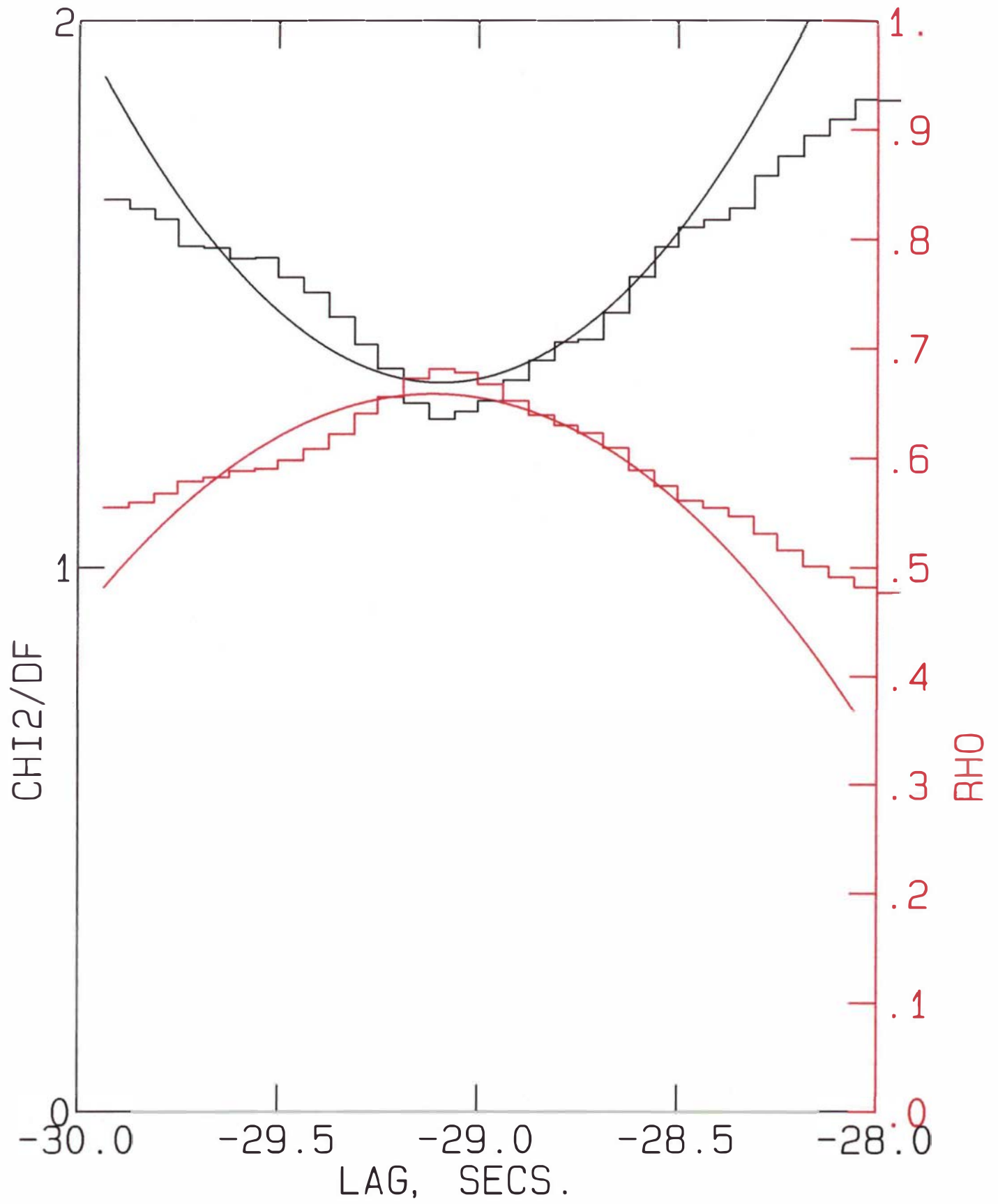
CORRELATION

10/ 8/94

7981.954

3/ 2/98





ULYSSES RT

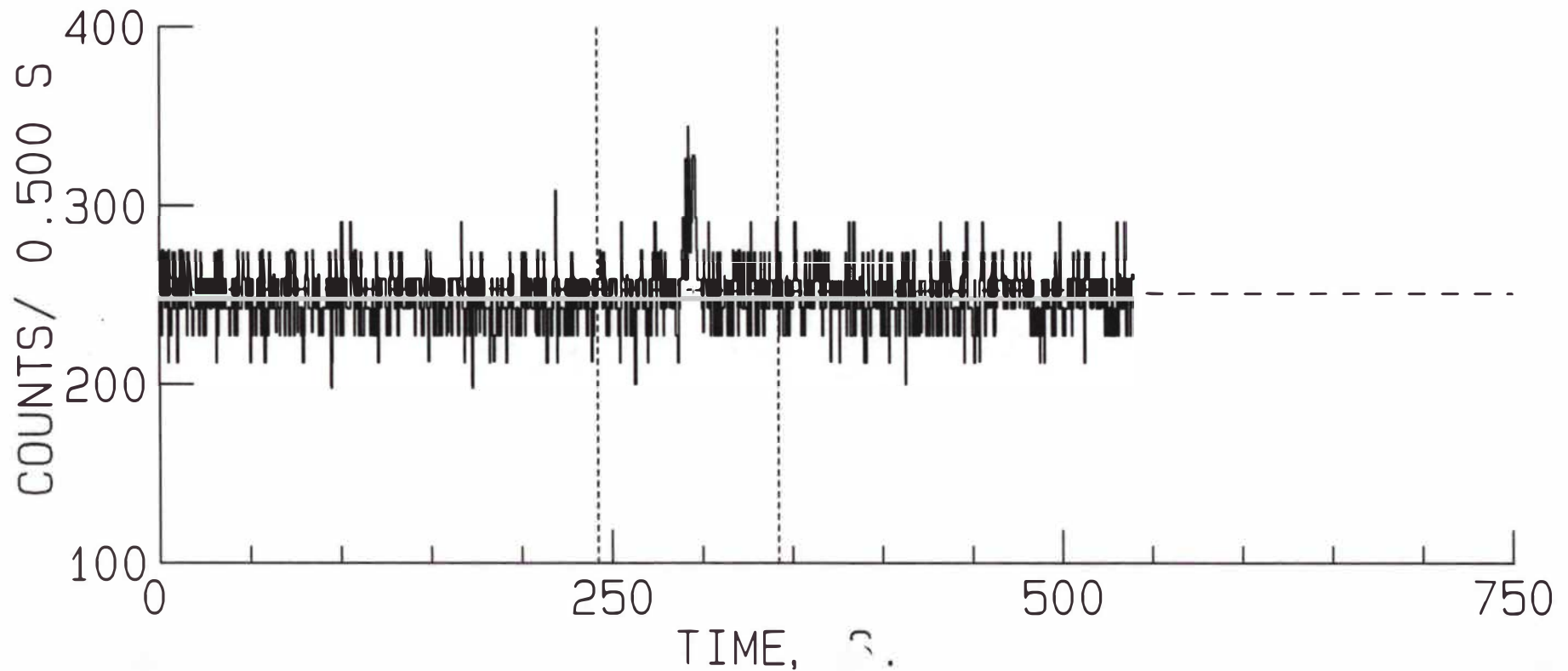
3 / 2 / 98

10 / 8 / 94 7740.014 s

0.250 S INTERVALS REGROUPED BY 2

22- 148 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



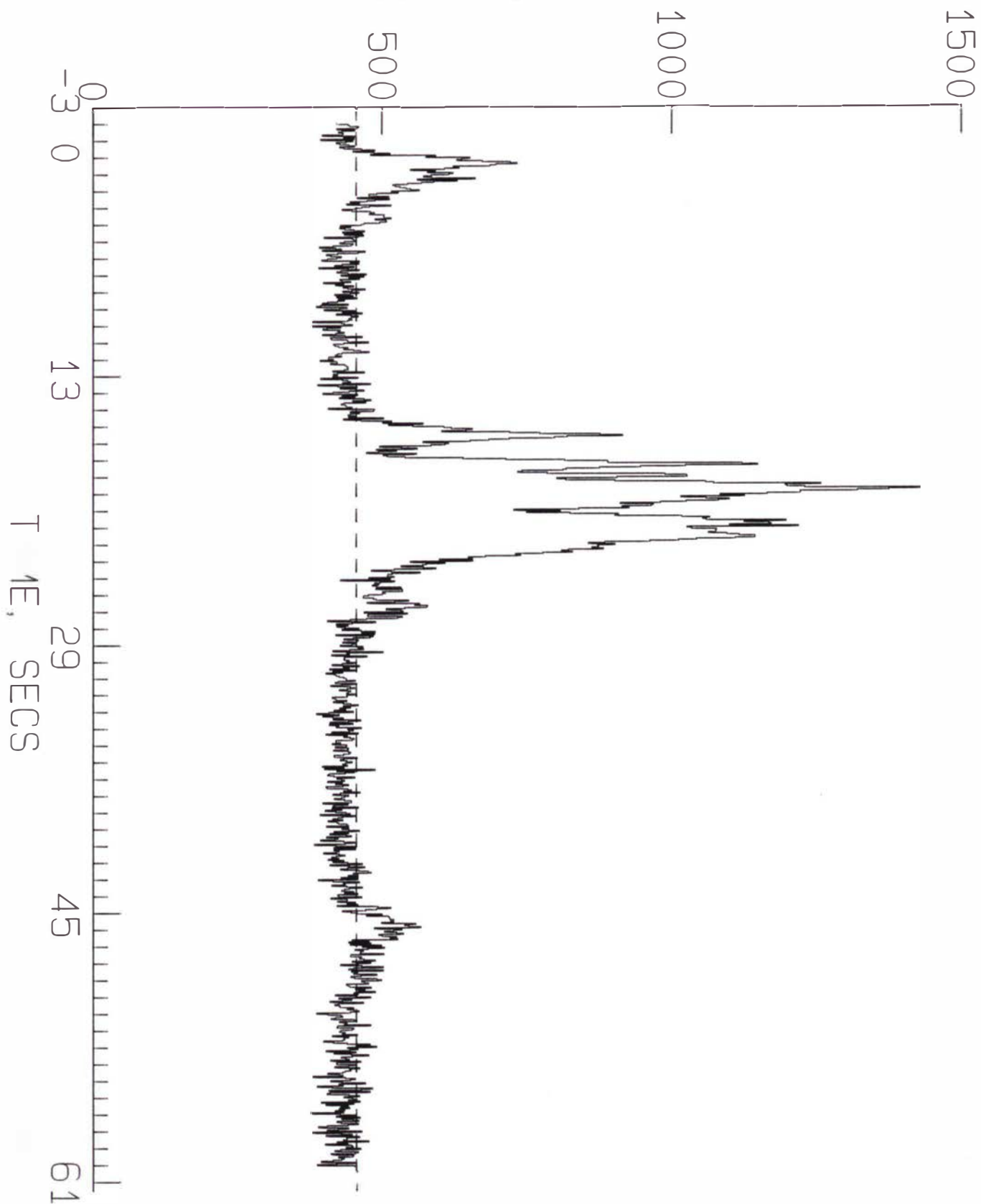
BATSE

10/08/94

8562.290

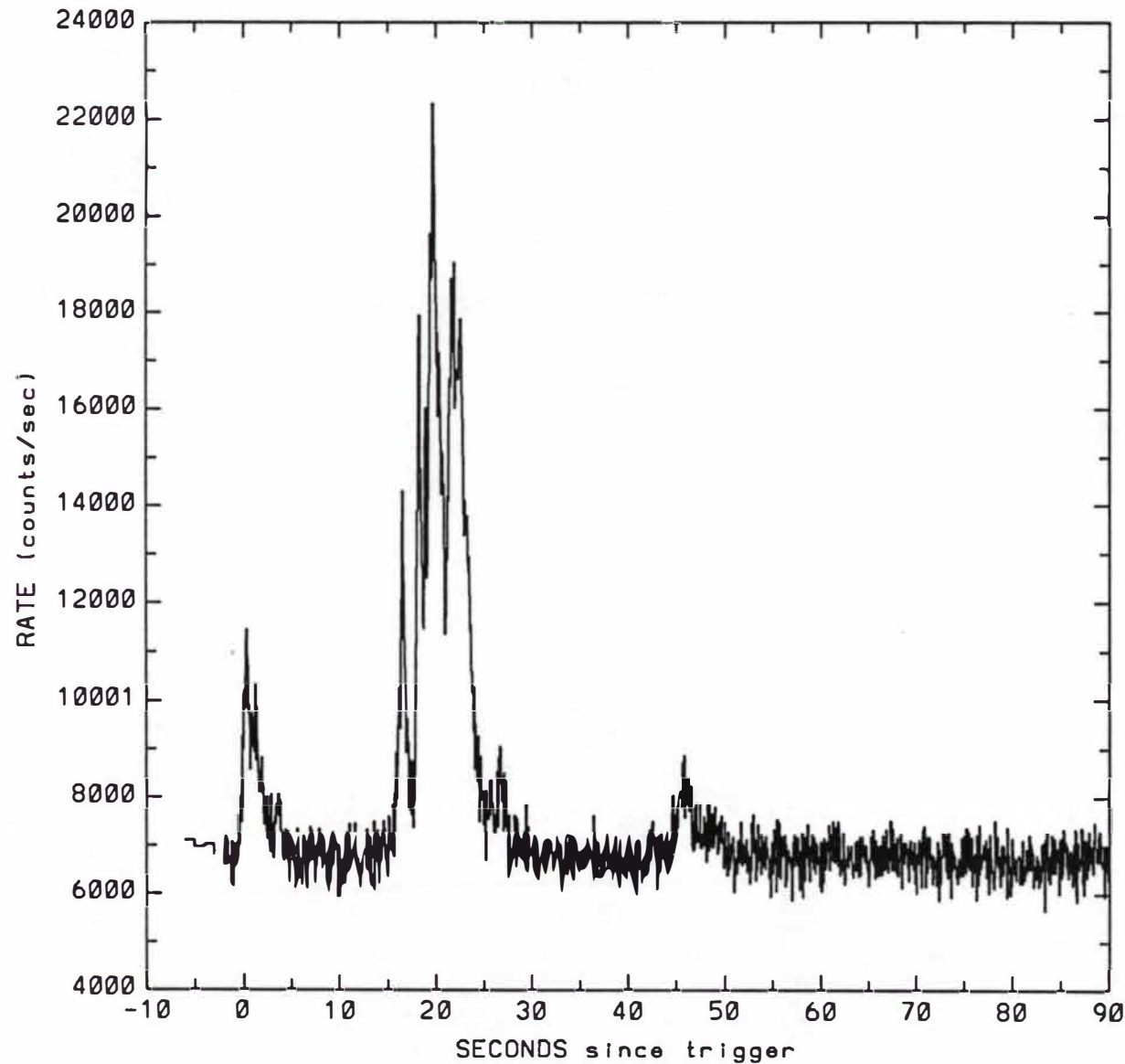
25- 100 keV

COUNTS/ .064 S



5 / 11 / 94

DISCSC Data for K. Hurley, No. 3115



25-OCT-1994 15:15:29

Created by MDPS 80
(Burst Display)
Version 2.22

Trigger # : 3115

Trigger Time:
9574 / 8562.290

Burst Data Type:
DISCSC

Deadtime
Corrected: N
Background Data
Type: PREB + DISCLA
Minimum Integ. Time:
0.064 seconds

Detectors (7..0).
7---3---

Discriminators:
(1, 2)

Quality Mask:
BDISP1

From HAGEDON@fender.msfc.nasa.gov Fri Aug 12 13:20 PDT 1994
Date: Fri, 12 Aug 1994 14:25:58 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3116

TIME: TJD=9574 SECONDS=27711

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From HAGEDON@fender.msfc.nasa.gov Fri Aug 12 13:08 PDT 1994
Date: Fri, 12 Aug 1994 14:26:25 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3117

TIME: TJD=9574 SECONDS=50564

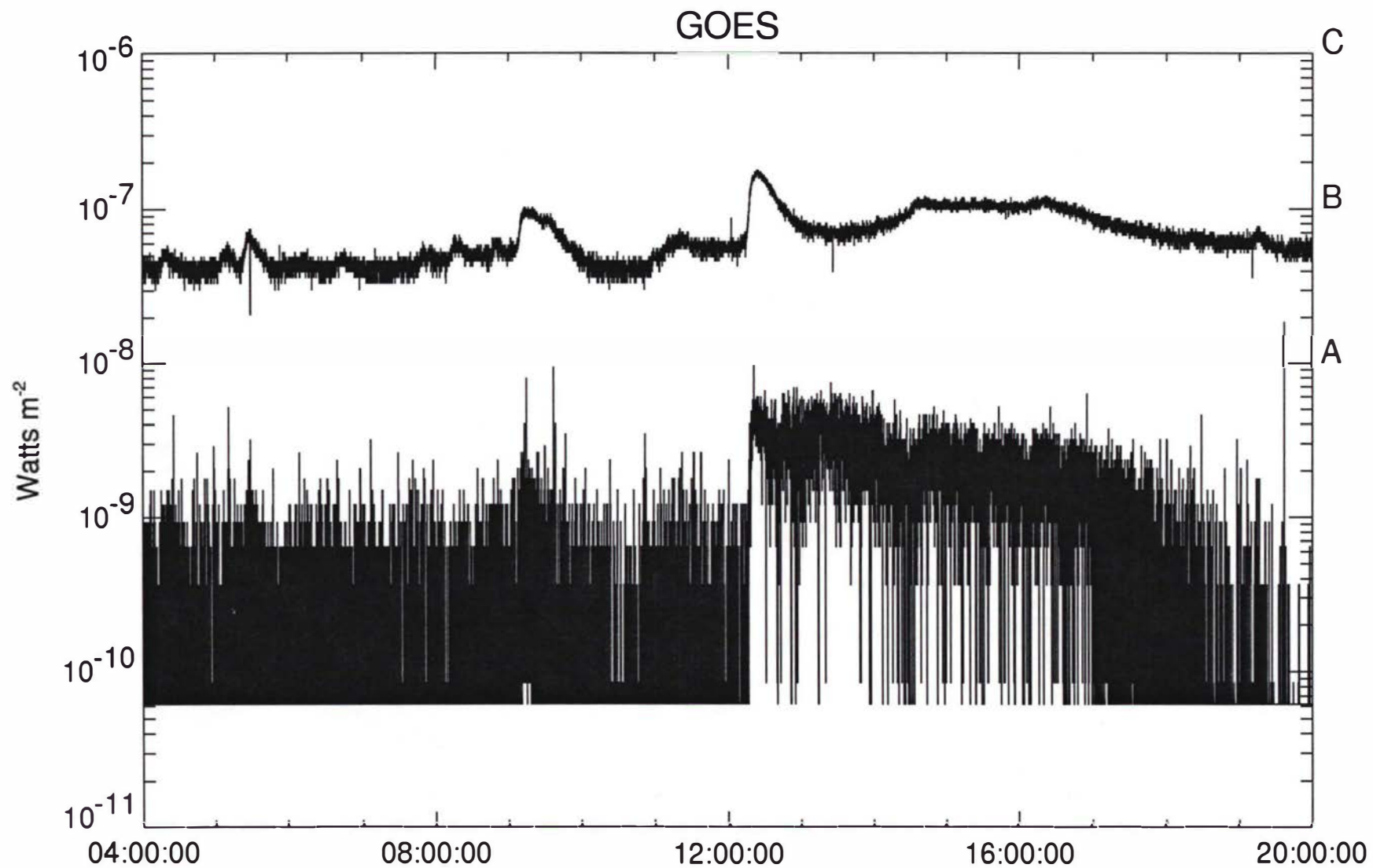
TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.



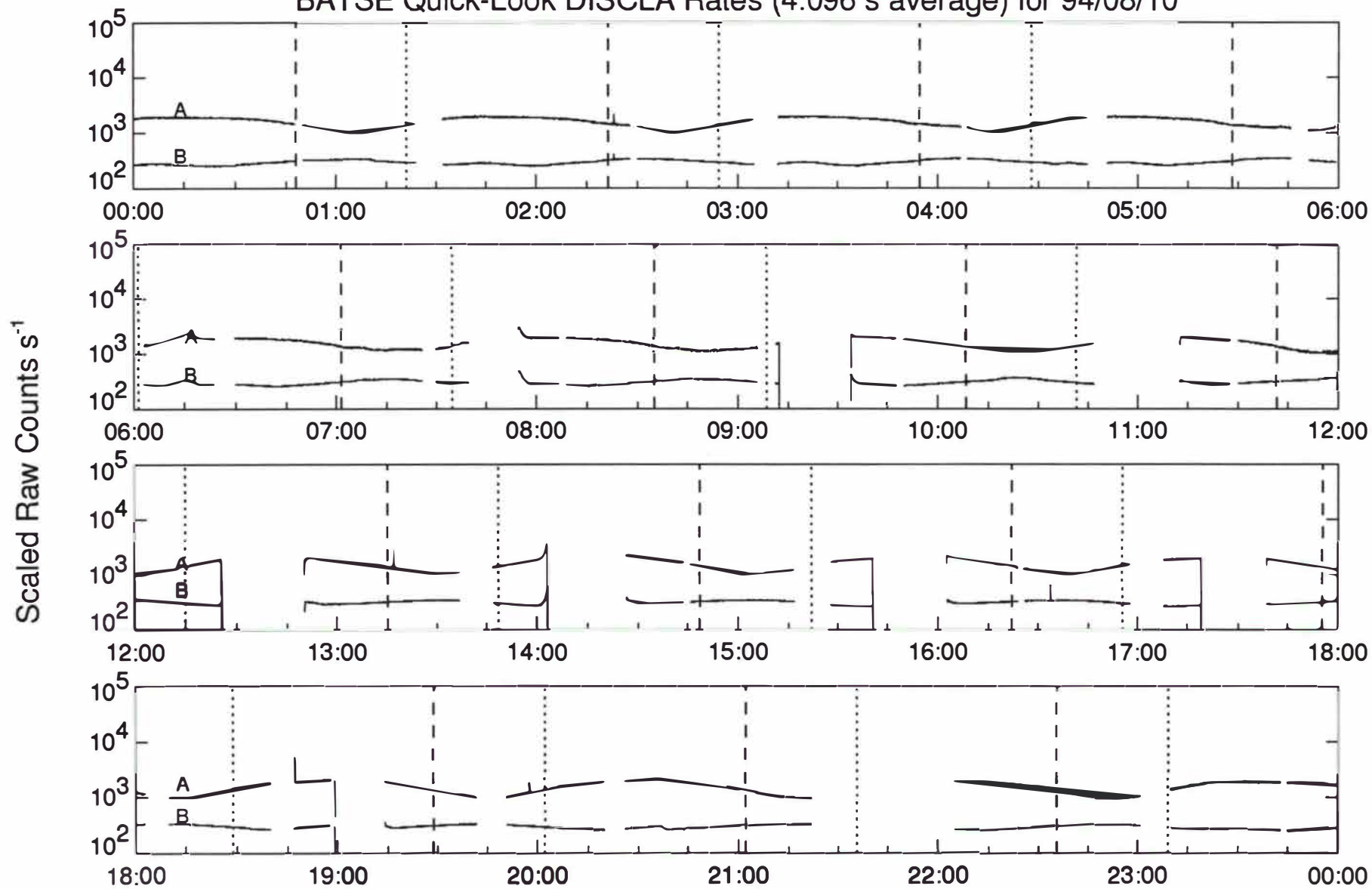
Data Start: 94/08/10, 0000:02

Plot created: 94/08/16, 1754

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/10

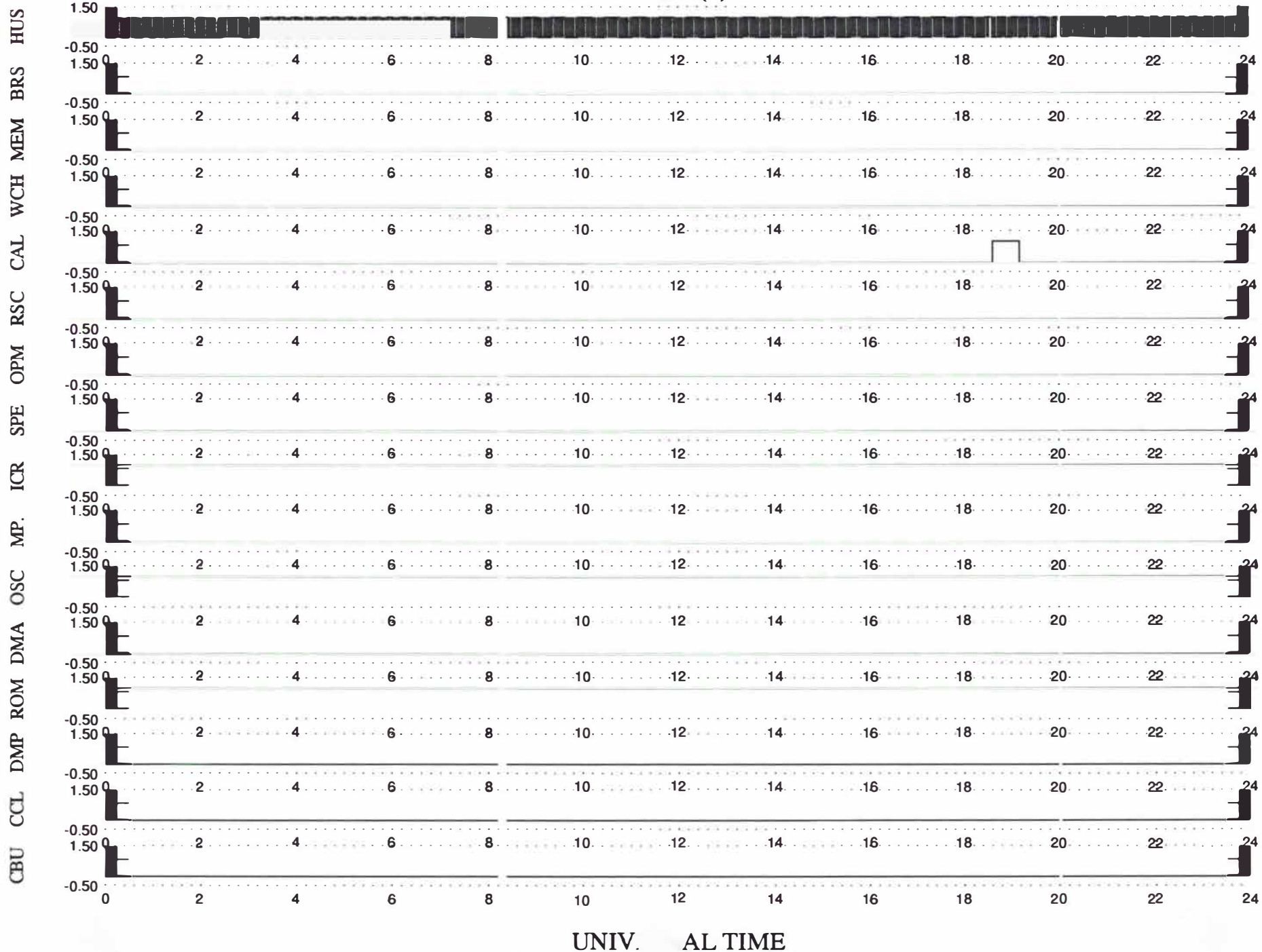


Current Time: 94/08/16, 1802 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

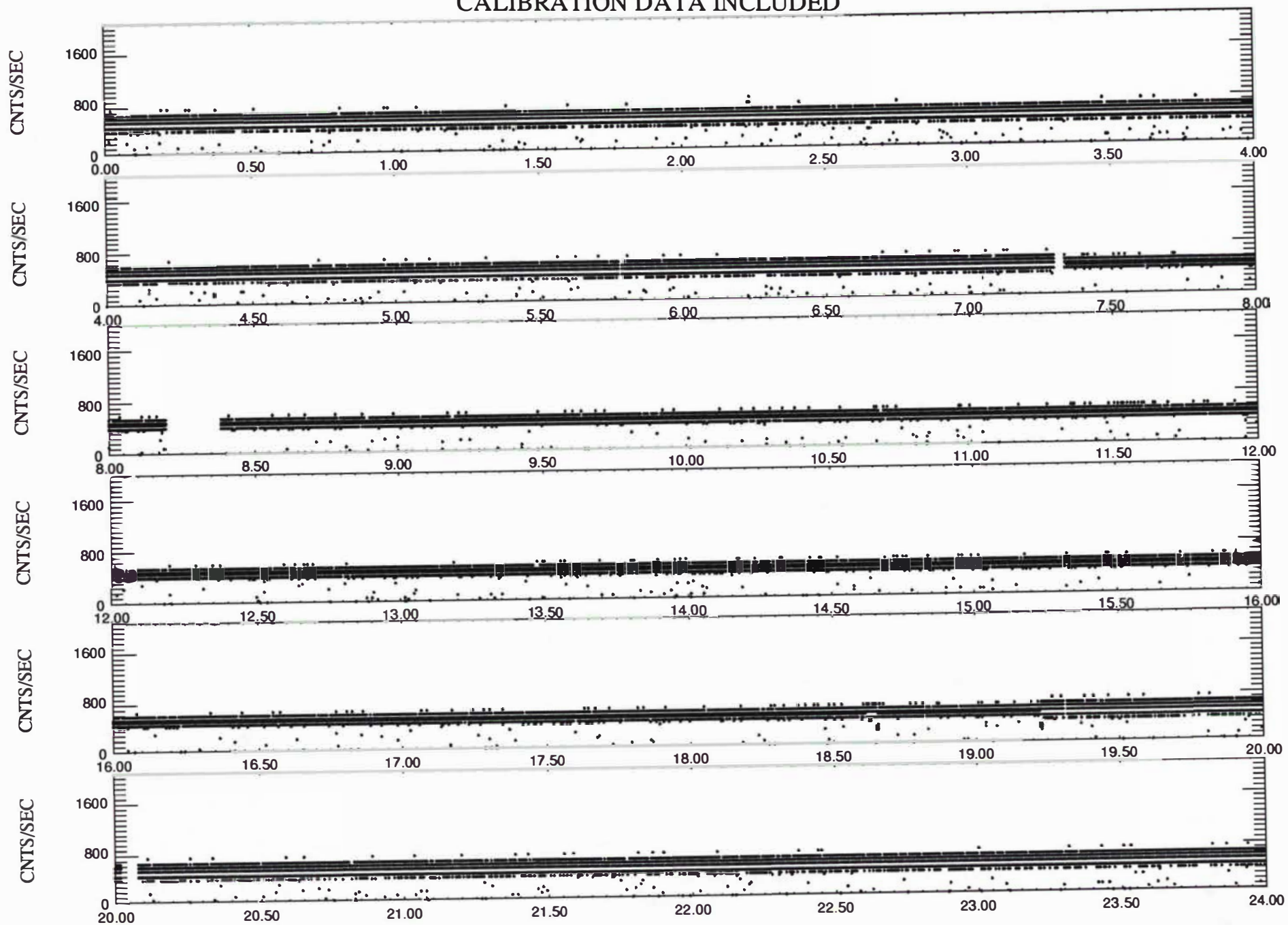
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

NO BURST (0)



CALIBRATION DATA INCLUDED



UNIV. AL TIME



UNIV CAL TIME

From MALLOZZI@ssl.msfc.nasa.gov Sat Aug 13 12:27 PDT 1994
Date: Sat, 13 Aug 1994 14:28:05 -0500 (CDT)
From: MALLOZZI@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3118

BATSEARCH PROGRAM

BATSE BURST # 3118
EVENT OF 1994 AUG 11 DAY OF YEAR=223
EVENT CROSSING TIME AT BATSE : 34139. S. OR 09:28:59.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 76.000 77.000
BATSE PEAK COUNTING RATE: 4100 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/ 8/ 94 IS:
RA= 137.445 DEC= -43.389 DIST= 2.892 AU
BATSE-ULYSSES DISTANCE = 432624183. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 53.76 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 853.14 SECS.
CROSSING TIME AT ULYSSES IS 34992. S. OR 09:43:12 +/- 265.02 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/ 8/ 94 IS:
RA= 85.827 DEC= 23.488 DIST= 1.872 AU
MARS-BATSE DISTANCE = 280058976. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=126.27 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -552.68 SECS.
CROSSING TIME AT MARS IS 33586. S. OR 09:19:46 +/- 122.36 SECONDS

No

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3118	940811	9575	34139	4100	076	+77

BATSE BURST TRIGGER

NO.: 03118

TIME: TJD=9575 SECONDS=34139

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=076.7 AZIMUTH=053.6 ERROR= DEGREES

COMMENTS:

SPIKE EVENT; APPROX. 30MS DURATION.
NOT OBSERVED ABOVE 300 KEV.

15 / 8 / 94

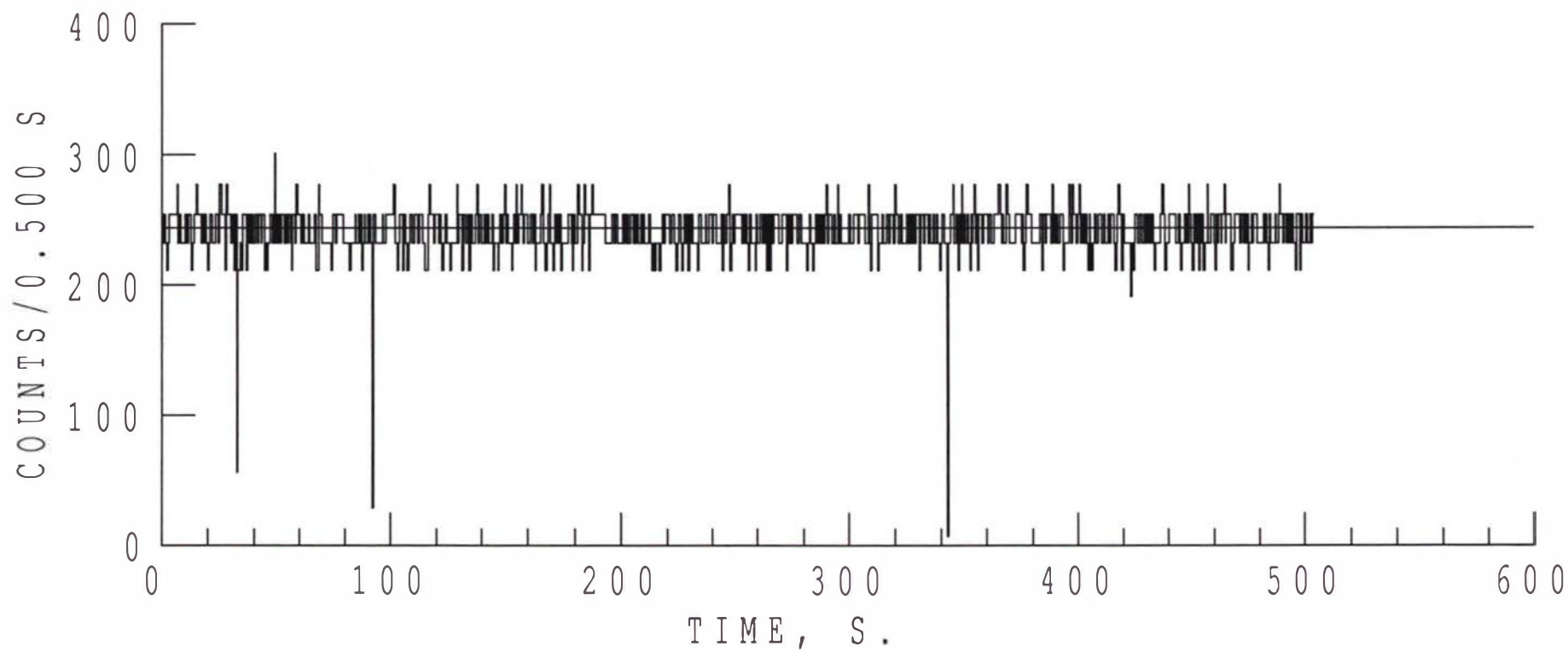
ULYSSES RT

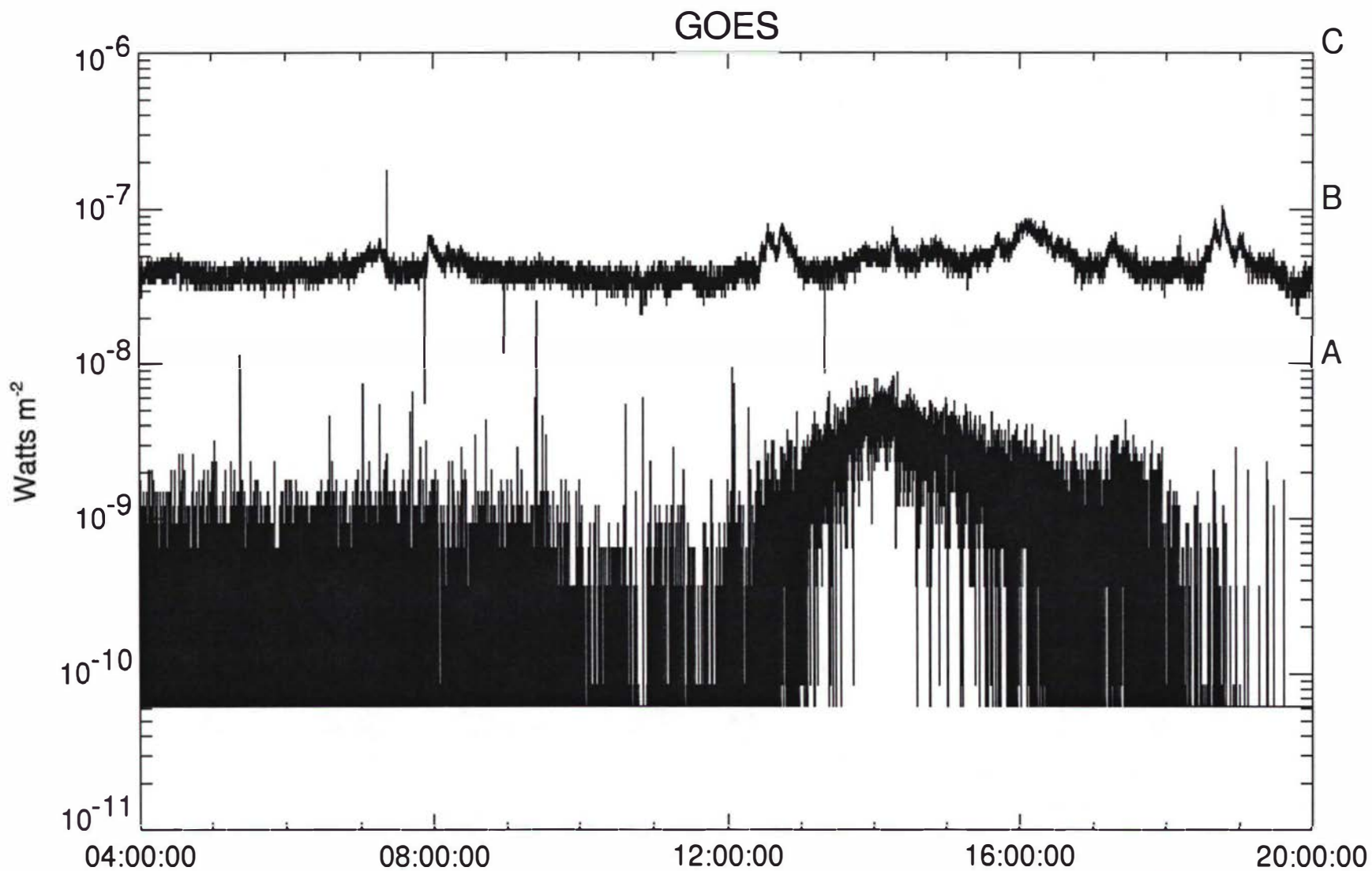
11 / 8 / 94 34740.117 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





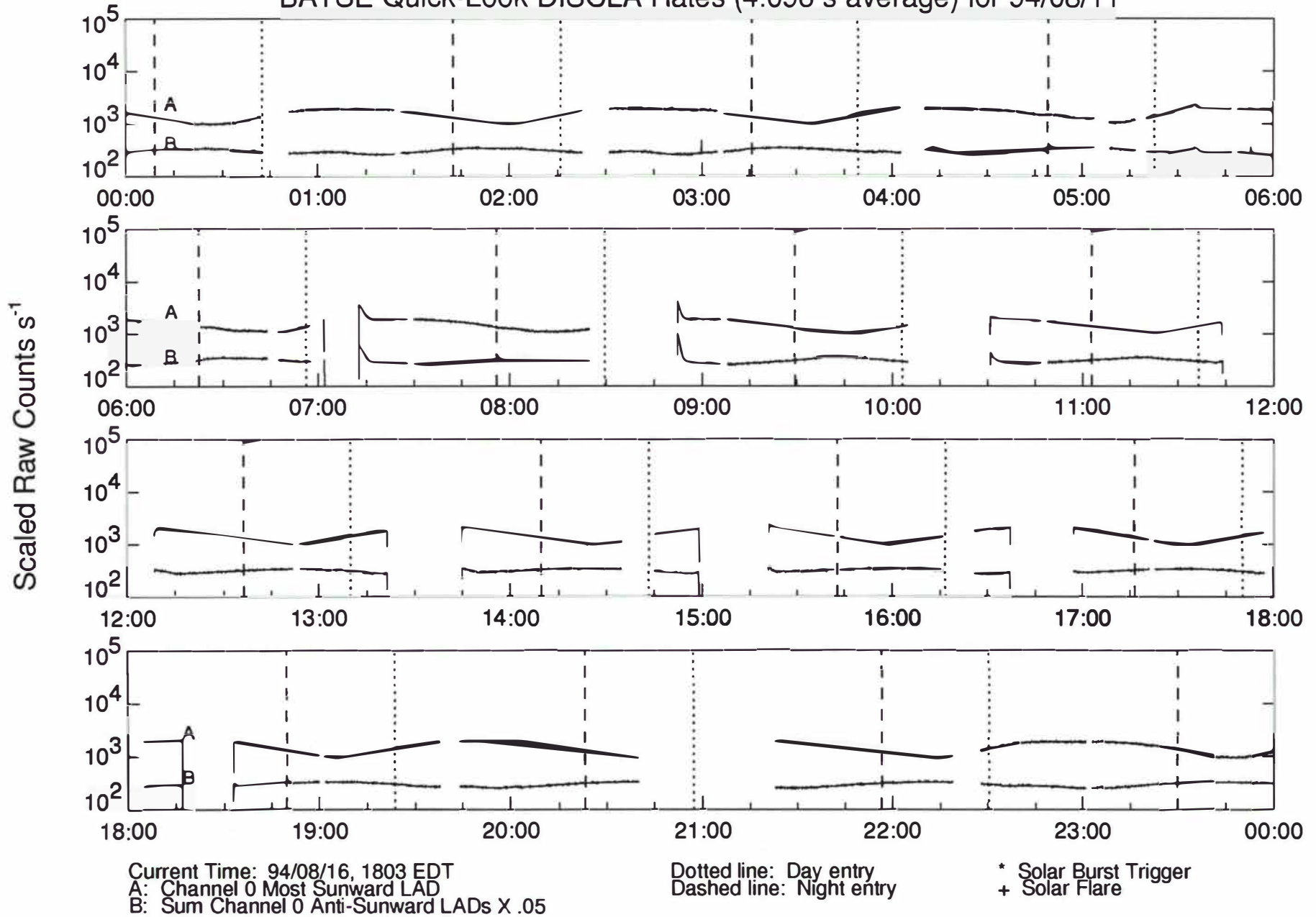
Data Start: 94/08/11, 0000:01

Plot created: 94/08/16, 1755

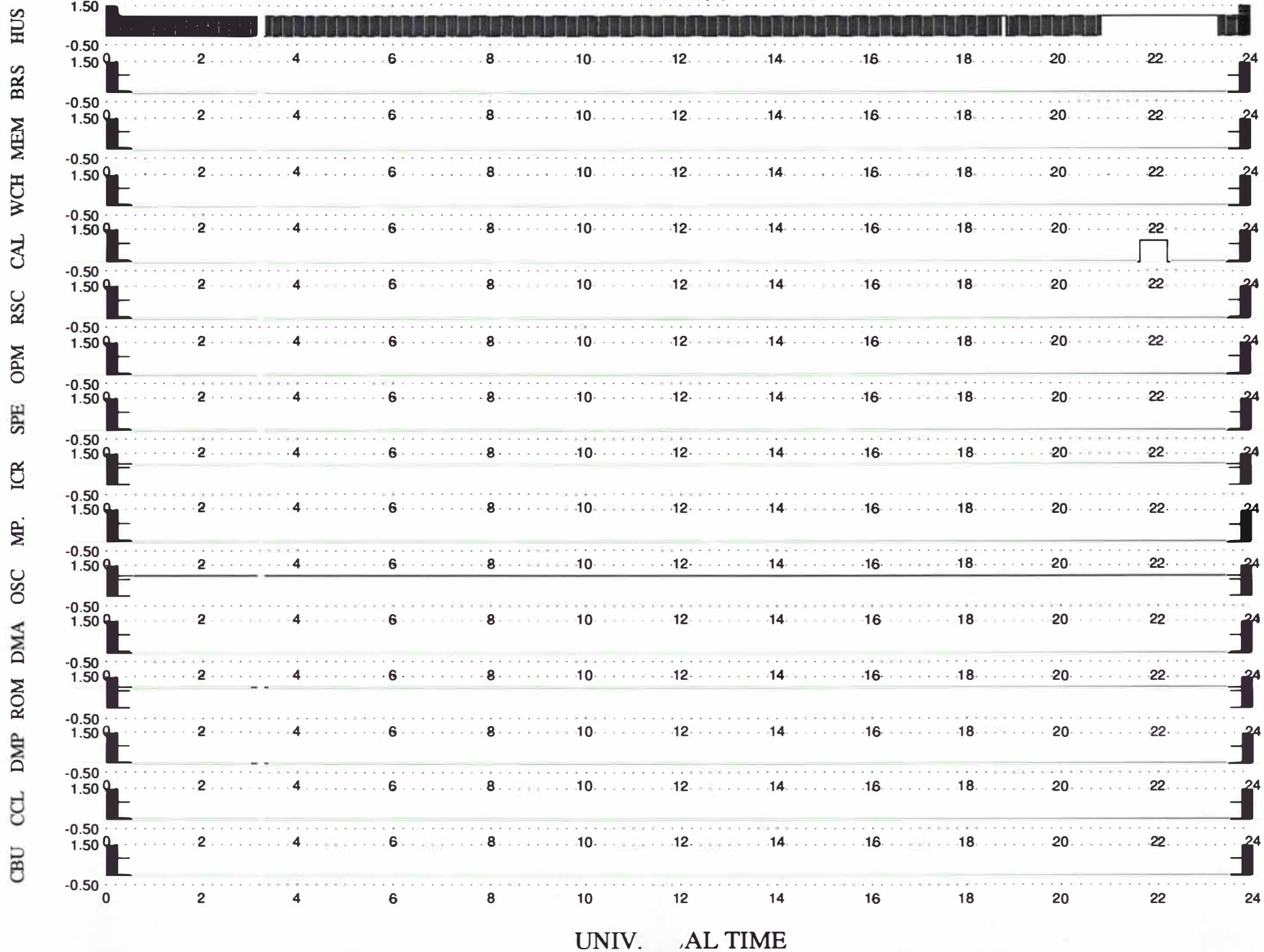
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

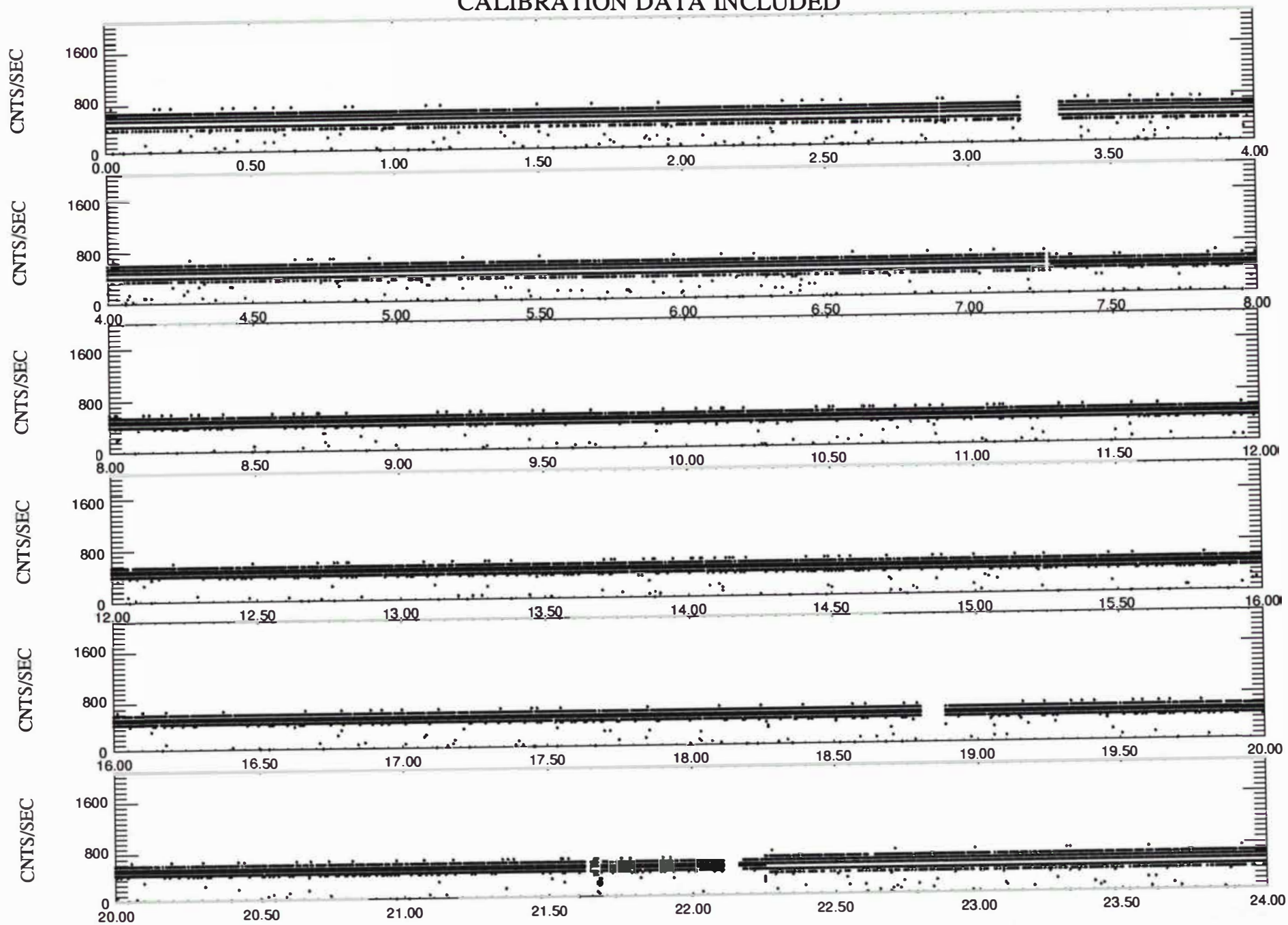
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/11



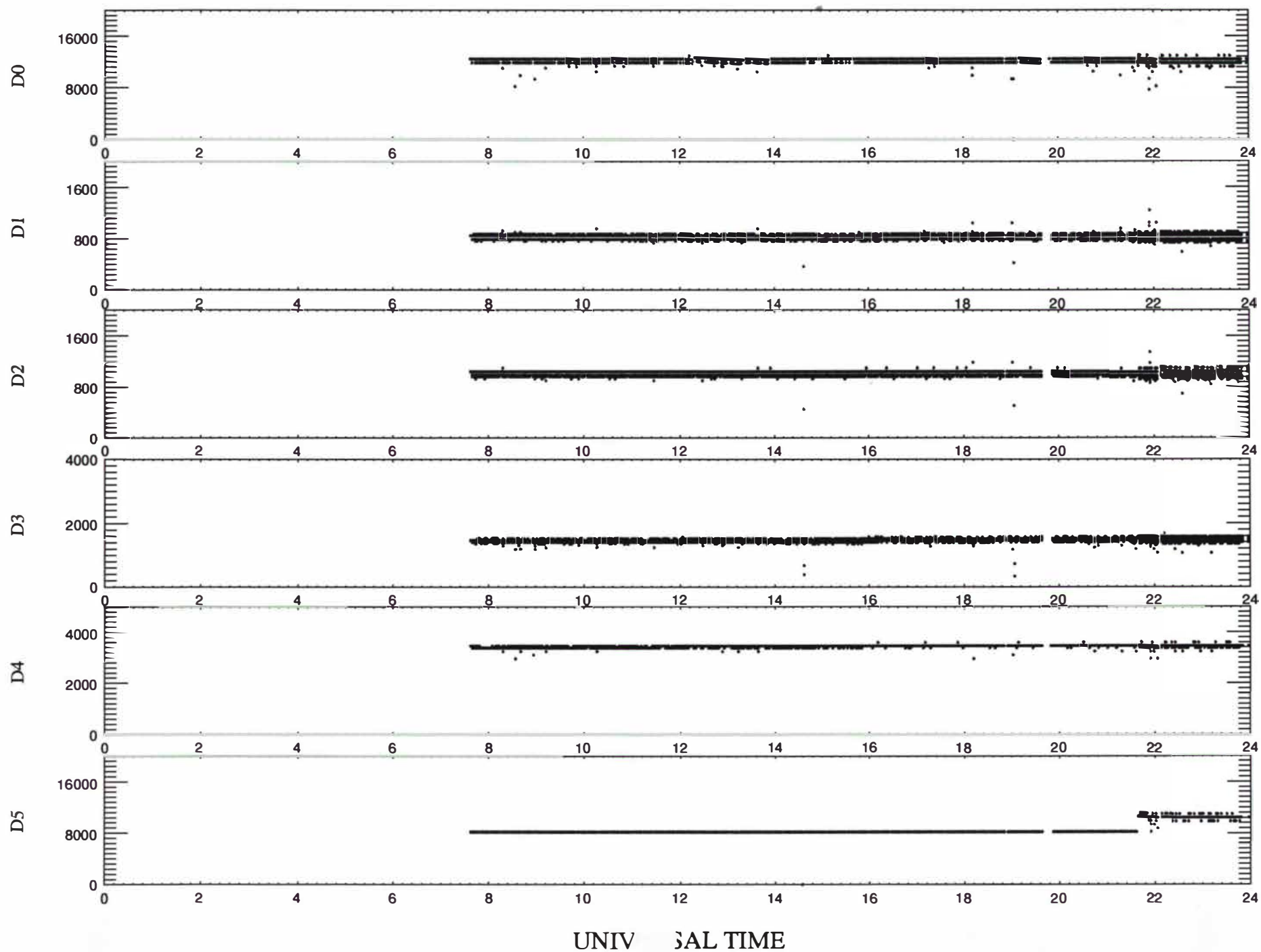
NO BURST (0)



CALIBRATION DATA INCLUDED



UNIV AL TIME



From SHARIFF@ssl.msfc.nasa.gov Sat Aug 13 21:38 PDT 1994
Date: Sat, 13 Aug 1994 23:38:37 -0500 (CDT)
From: SHARIFF@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3119

BATSEARCH PROGRAM

BATSE BURST # 3119
EVENT OF 1994 AUG 12 DAY OF YEAR=224
EVENT CROSSING TIME AT BATSE : 1662. S. OR 00:27:42.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 337.000 -47.000
BATSE PEAK COUNTING RATE: 3000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/ 8/ 94 IS:
RA= 137.657 DEC= -43.508 DIST= 2.888 AU
BATSE-ULYSSES DISTANCE = 432074406. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 92.11 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -53.02 SECS.
CROSSING TIME AT ULYSSES IS 1609. S. OR 00:26:48 +/- 299.25 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/ 8/ 94 IS:
RA= 86.549 DEC= 23.520 DIST= 1.867 AU
MARS-BATSE DISTANCE = 279352448. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 59.93 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 466.94 SECS.
CROSSING TIME AT MARS IS 2129. S. OR 00:35:28 +/- 147.09 SECONDS

RI

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3119	940812	9576	01662	3000	337	-47

BATSE BURST TRIGGER

NO.: 03119

TIME: TJD=9576 SECONDS=01662

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=104.6 AZIMUTH=189.3 ERROR= DEGREES

COMMENTS:

BURST, SINGLE PULSE WITH SUBSTRUCTURE, LASTING ~45 SECONDS. NOT VISIBLE ABOVE 30 OKEV.

Helio corr removed

Date: *Feb 3 '98*

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution? *No - had s-lats*

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T₀?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

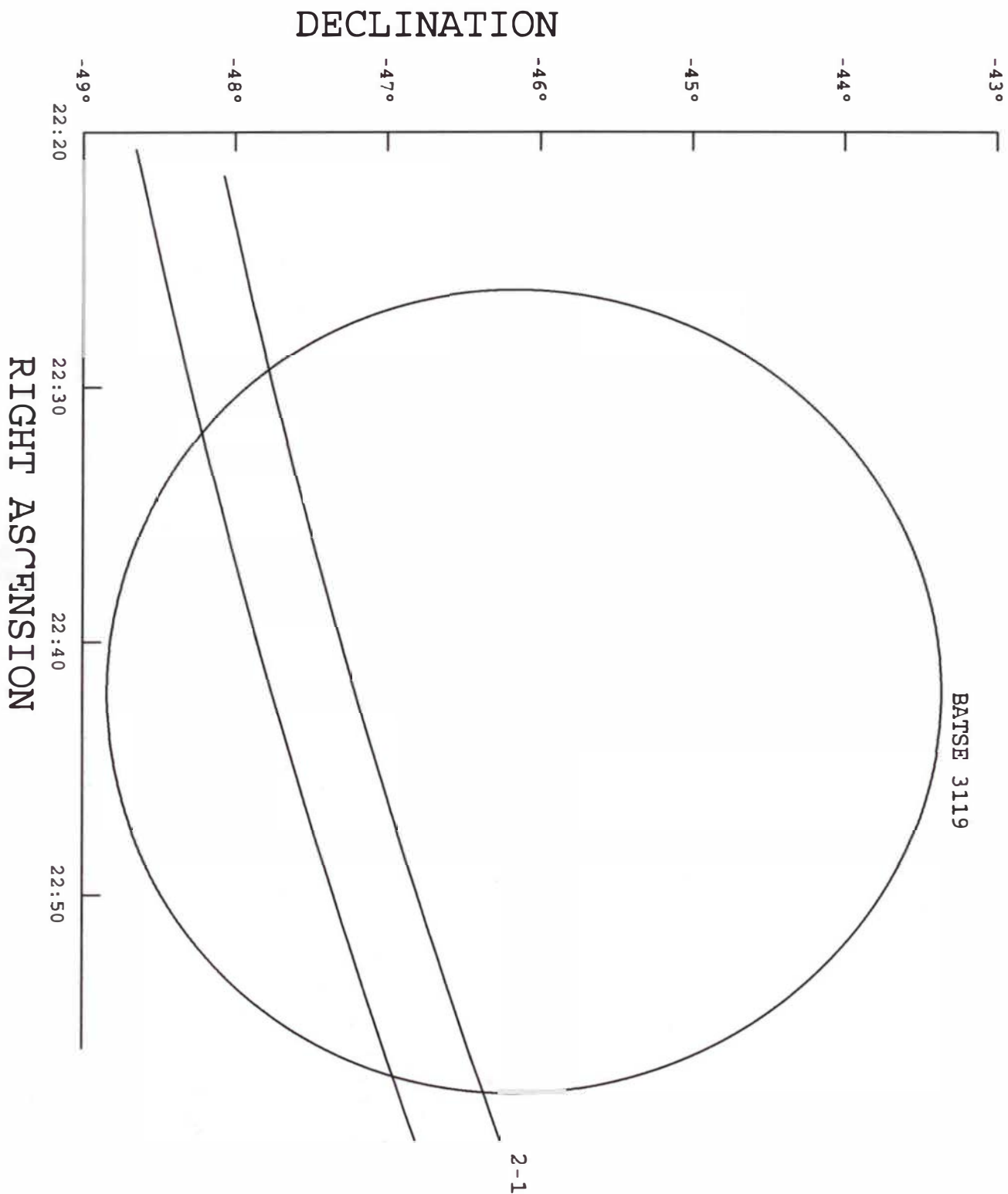
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 12, 1994 0:25

3 / 2/98



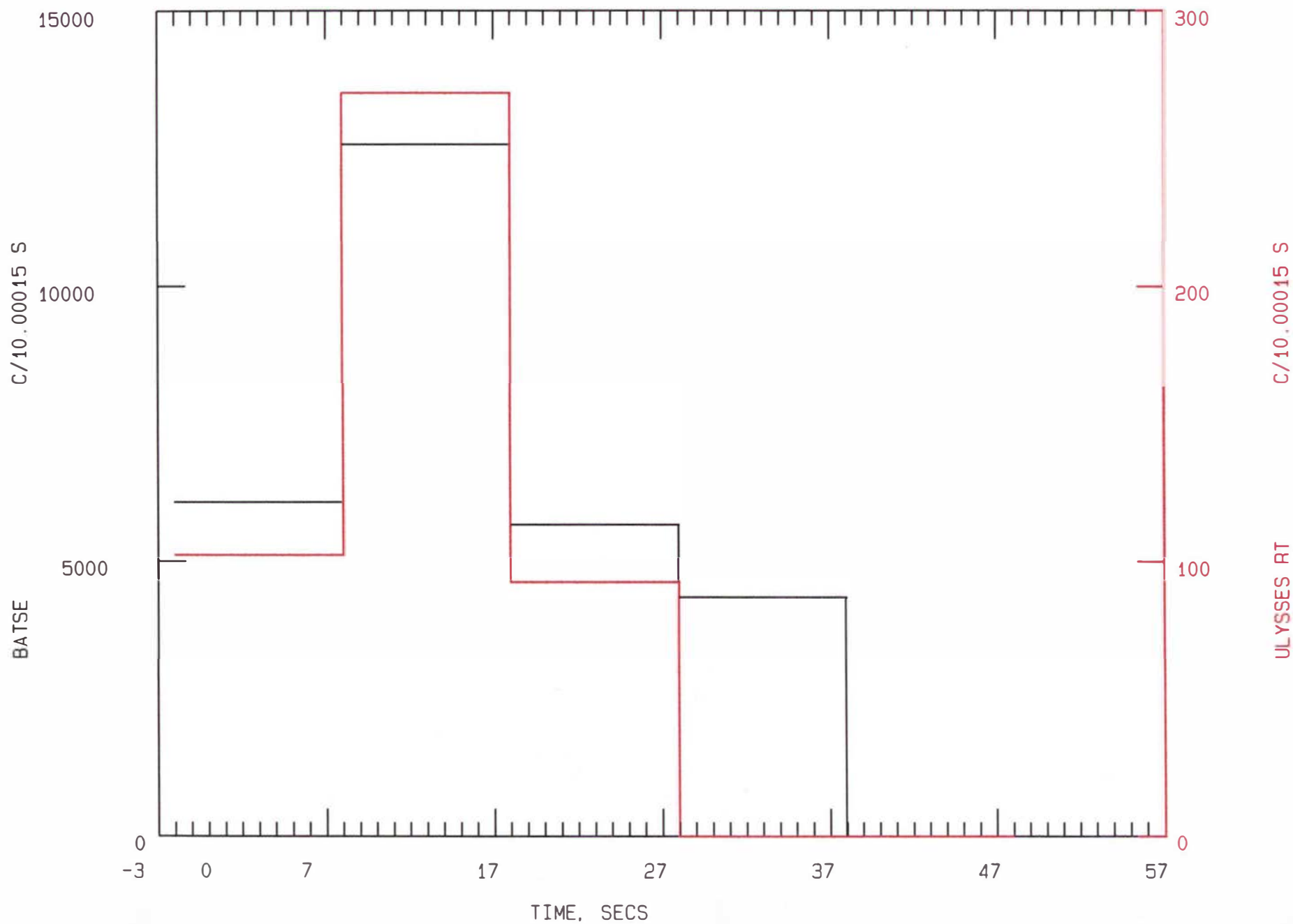
BATSE

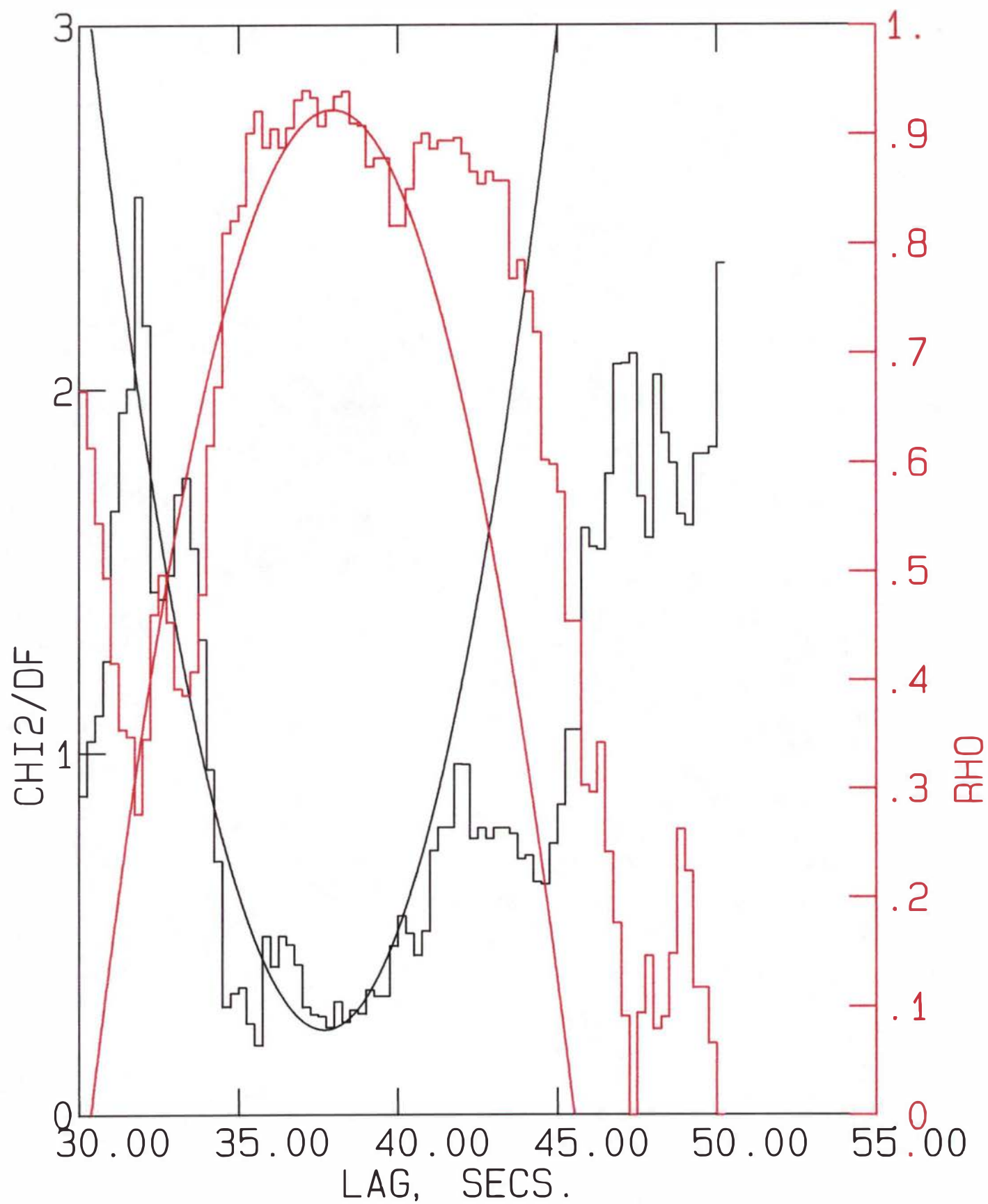
-ULYSSES RT CORRELATION

12/ 8/94

1662.642

3/ 2/98





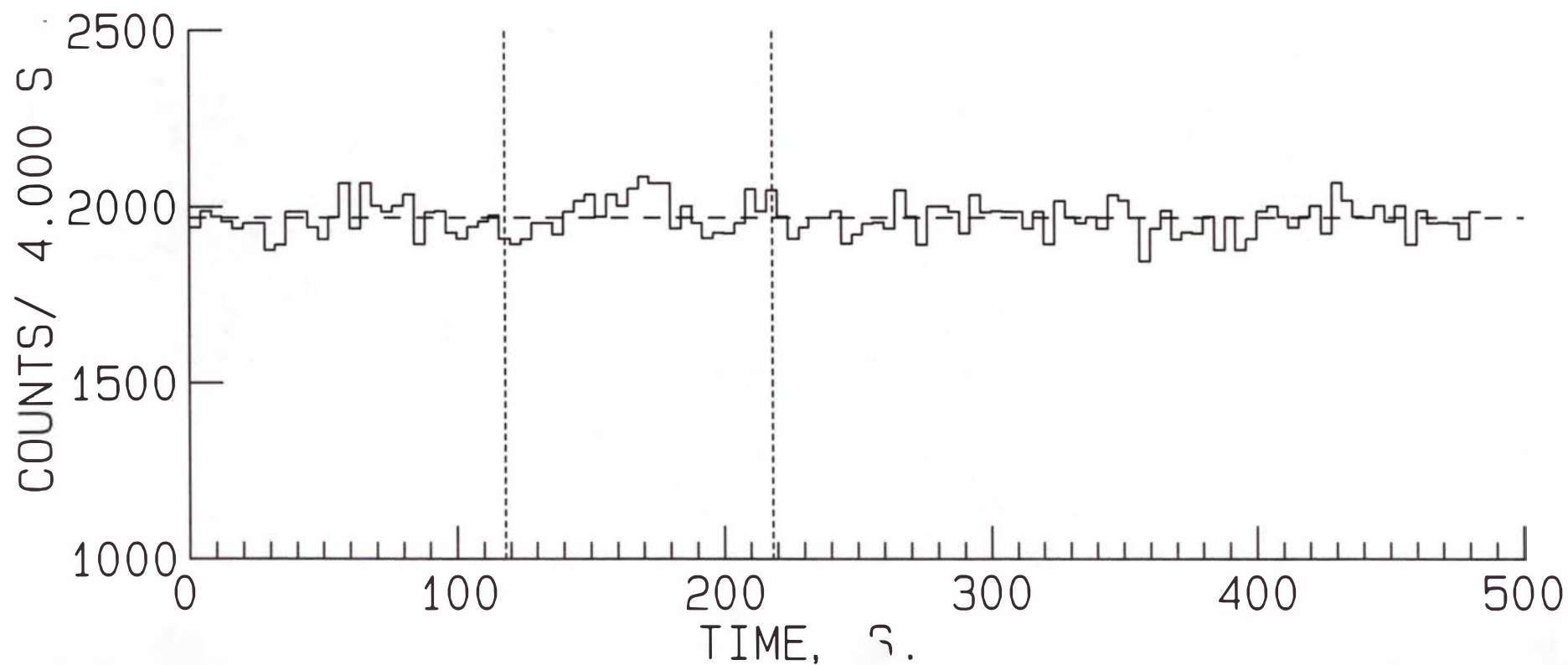
ULYSSES RT

3 / 2 / 98

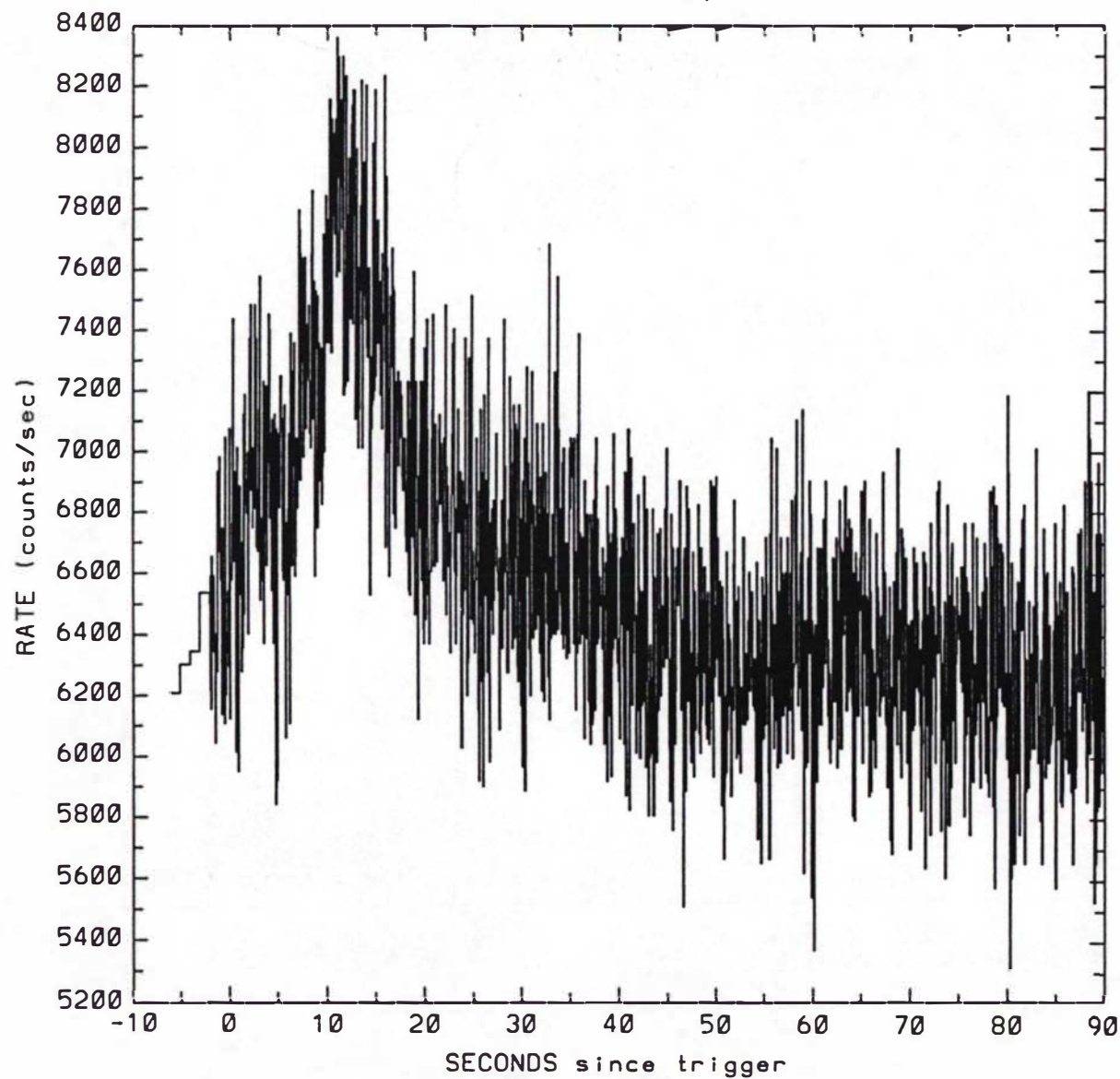
12 / 8 / 94 1423.739 s

0.250 S INTERVALS REGROUPED BY 16

22- 147 keV



DISCSC Data for K. Hurley, No. 3119



25-OCT-1994 15.24.08

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger # : 3119

Trigger Time:
9576 / 1662.642

Burst Data Type:
DISCSC

Deadtime
Corrected: N
Background Data
Type: PREB + DISCLA
Minimum Integ. Time:
0.064 second(s)

Detectors [7..0]:
76-----

Discriminators:
(1, 2)

Quality Mask:
BDISP1

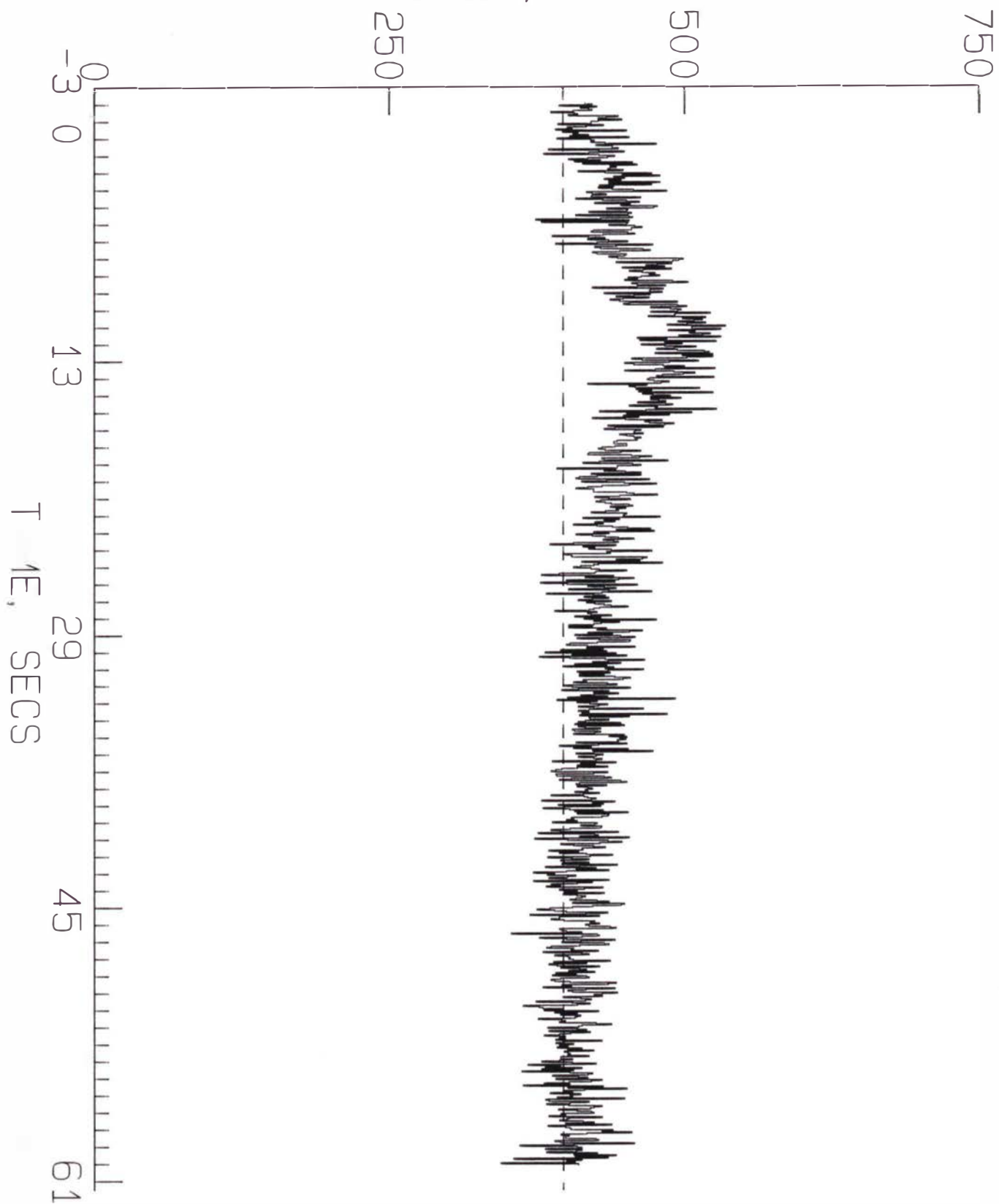
BATSE

12/08/94

1662.642

25- 100 keV

COUNTS/ .064 S



5/11/94

From SHARIFF@ssl.msfc.nasa.gov Sat Aug 13 21:40 PDT 1994
Date: Sat, 13 Aug 1994 23:40:51 -0500 (CDT)
From: SHARIFF@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3120

BATSEARCH PROGRAM

BATSE BURST # 3120
EVENT OF 1994 AUG 12 DAY OF YEAR=224
EVENT CROSSING TIME AT BATSE : 43530. S. OR 12:05:30.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 90.000 44.000
BATSE PEAK COUNTING RATE: 4500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/ 8/ 94 IS:
RA= 137.823 DEC= -43.604 DIST= 2.885 AU
BATSE-ULYSSES DISTANCE = 431632130. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 82.57 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 186.23 SECS.
CROSSING TIME AT ULYSSES IS 43716. S. OR 12:08:36 +/- 300.69 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/ 8/ 94 IS:
RA= 86.549 DEC= 23.520 DIST= 1.867 AU
MARS-BATSE DISTANCE = 279352448. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=159.32 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -871.81 SECS.
CROSSING TIME AT MARS IS 42658. S. OR 11:50:58 +/- 43.88 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3120	940812	9576	43530	4500	090	+44

BATSE BURST TRIGGER

NO.: 03120

TIME: TJD=9576 SECONDS=43530

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=042.9 AZIMUTH=049.1 ERROR= DEGREES

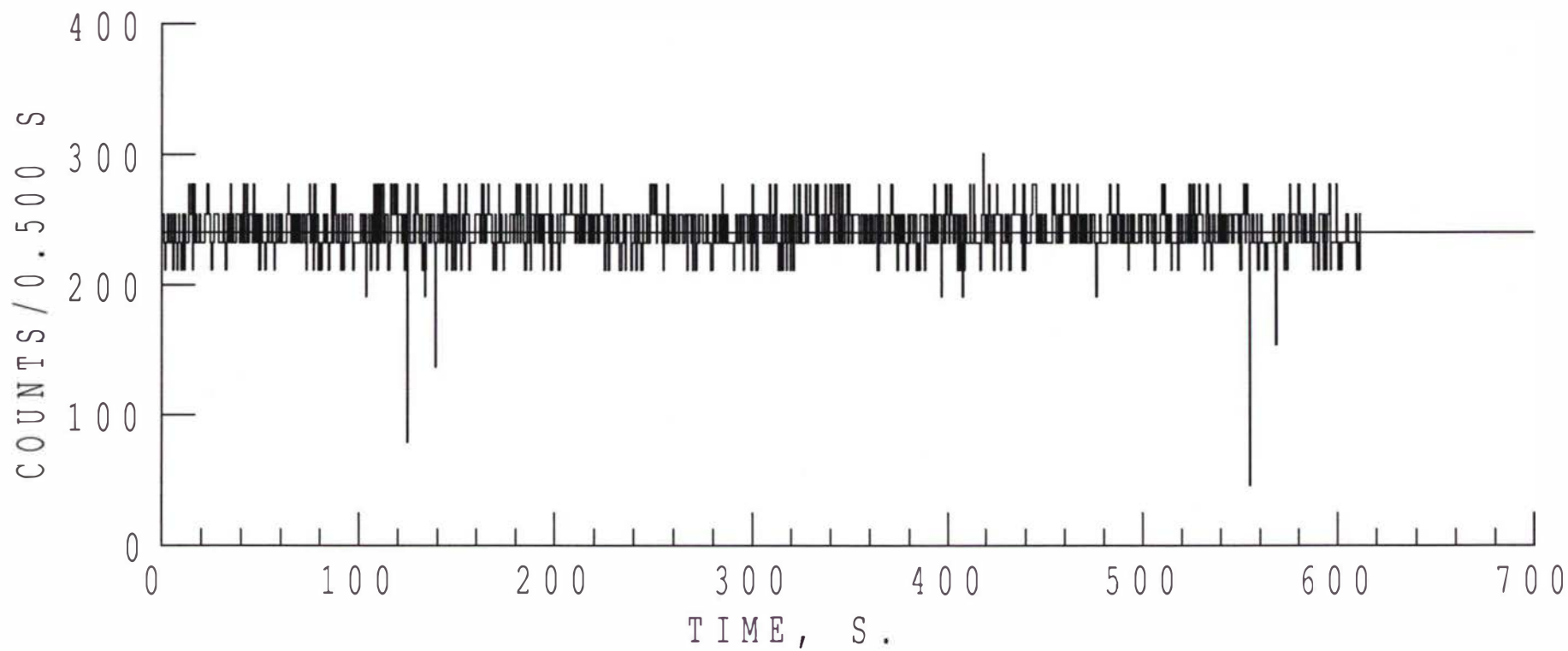
COMMENTS:

BURST, THREE PEAKS LASTING ~14 SECONDS. NOT VISIBLE ABOVE 300KEV.

15 / 8 / 94

ULYSSES RT
12 / 8 / 94 43416.172 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From SHARIFF@ssl.msfc.nasa.gov Sat Aug 13 21:42 PDT 1994
Date: Sat, 13 Aug 1994 23:43:07 -0500 (CDT)
From: SHARIFF@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3121

BATSEARCH PROGRAM

BATSE BURST # 3121
EVENT OF 1994 AUG 12 DAY OF YEAR=224
EVENT CROSSING TIME AT BATSE : 54622. S. OR 15:10:22.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 241.000 -5.000
BATSE PEAK COUNTING RATE: 4000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/ 8/ 94 IS:
RA= 137.869 DEC= -43.630 DIST= 2.884 AU
BATSE-ULYSSES DISTANCE = 431512644. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 84.05 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 149.23 SECS.
CROSSING TIME AT ULYSSES IS 54771. S. OR 15:12:51 +/- 300.82 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/ 8/ 94 IS:
RA= 86.549 DEC= 23.520 DIST= 1.867 AU
MARS-BATSE DISTANCE = 279352448. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 30.81 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 800.34 SECS.
CROSSING TIME AT MARS IS 55422. S. OR 15:23:42 +/- 95.01 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3121	940812	9576	54622	4000	241	-05

BATSE BURST TRIGGER

NO.: 03121

TIME: TJD=9576 SECONDS=54622

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=152.6 AZIMUTH=312.1 ERROR= DEGREES

COMMENTS:

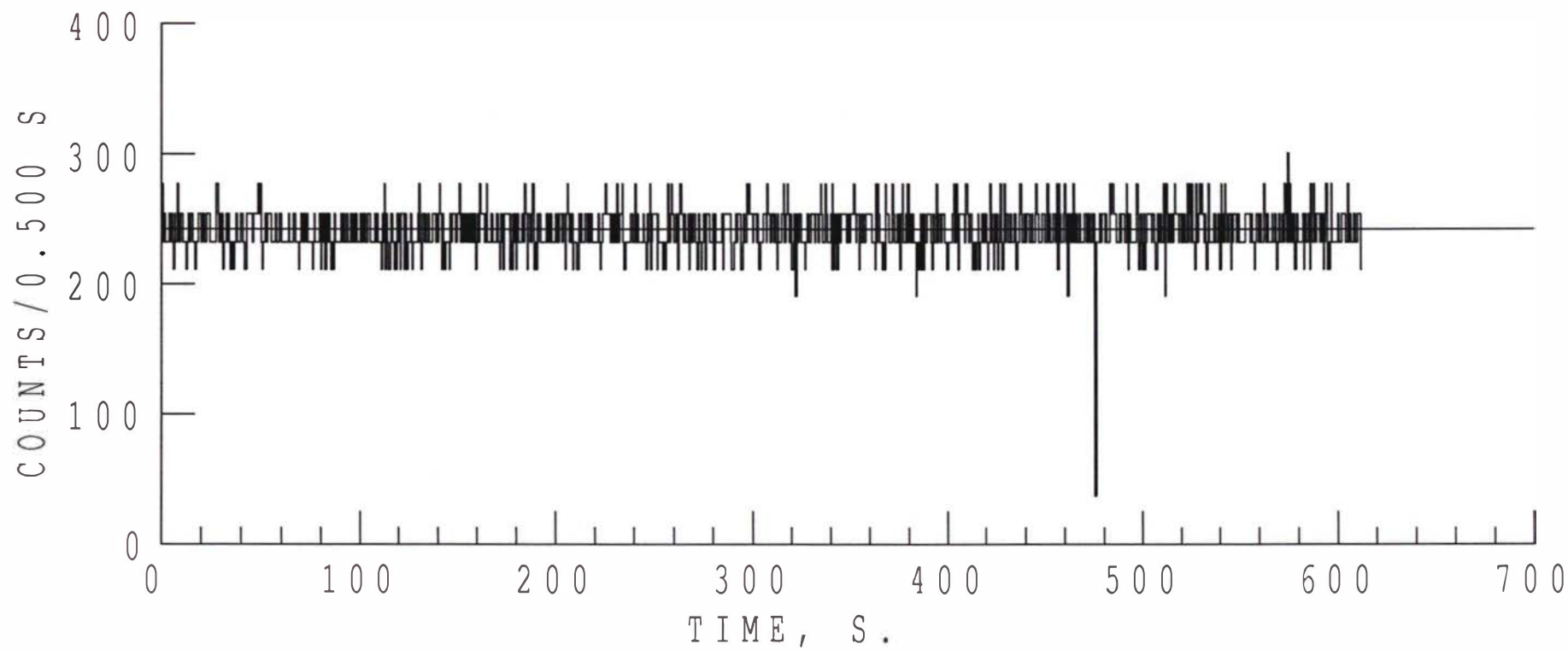
BURST, SINGLE PULSE LASTING ~1 SECOND. VISIBLE ABOVE 300KEV.

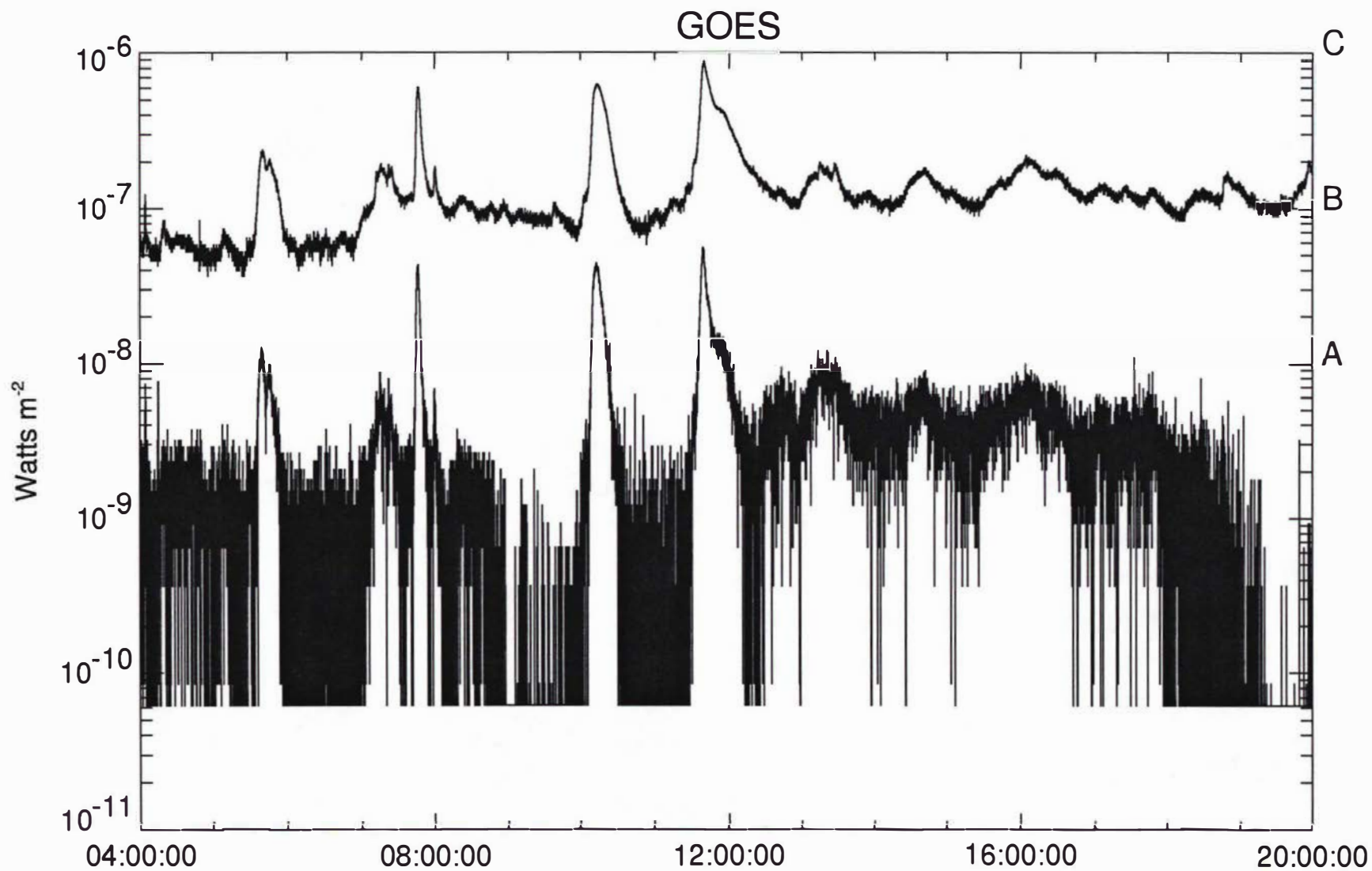
15 / 8 / 94

ULYSSES RT
12 / 8 / 94 54468.355 s
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





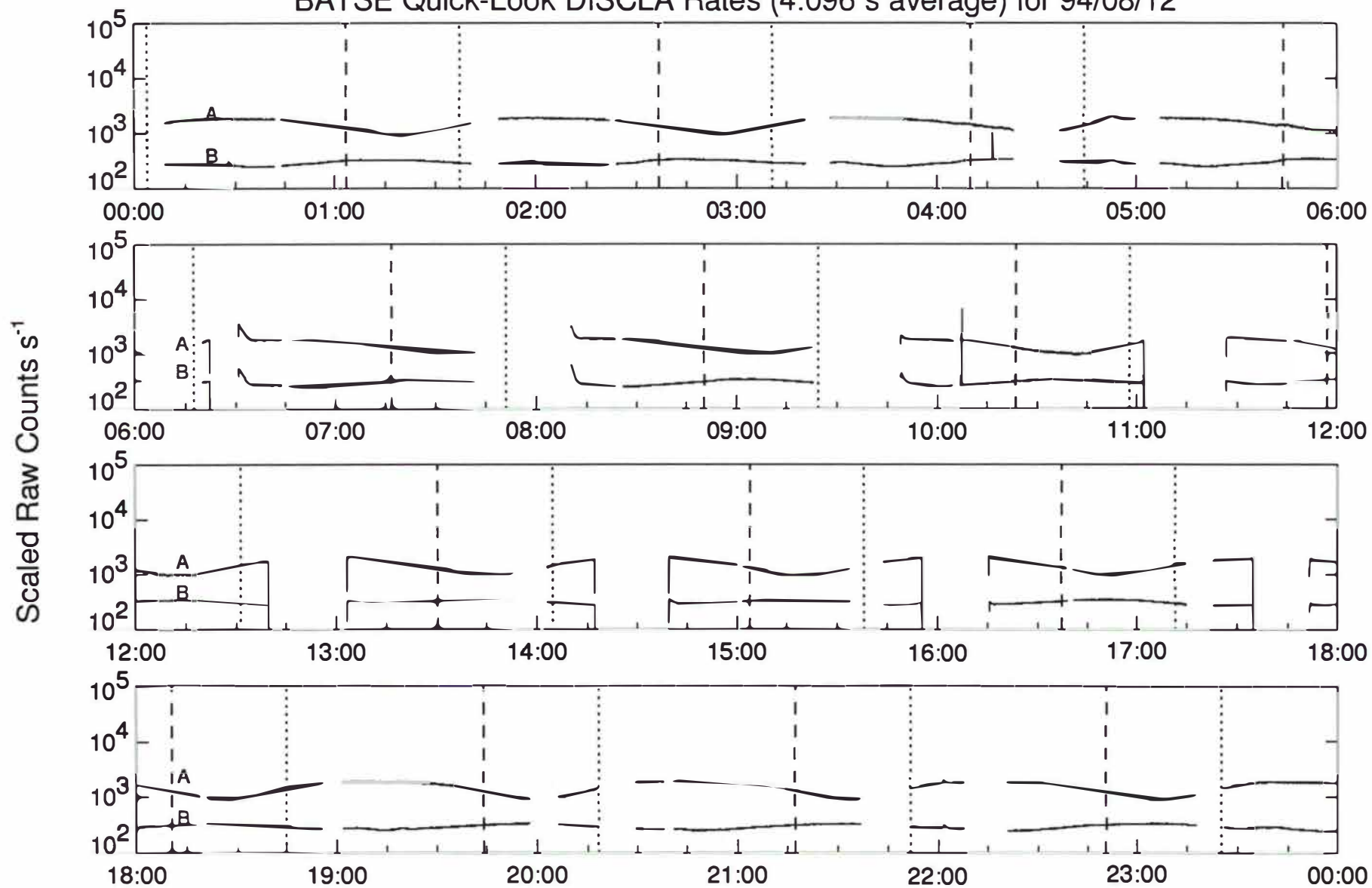
Data Start: 94/08/12, 0000:01

Plot created: 94/08/16, 1756

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/12

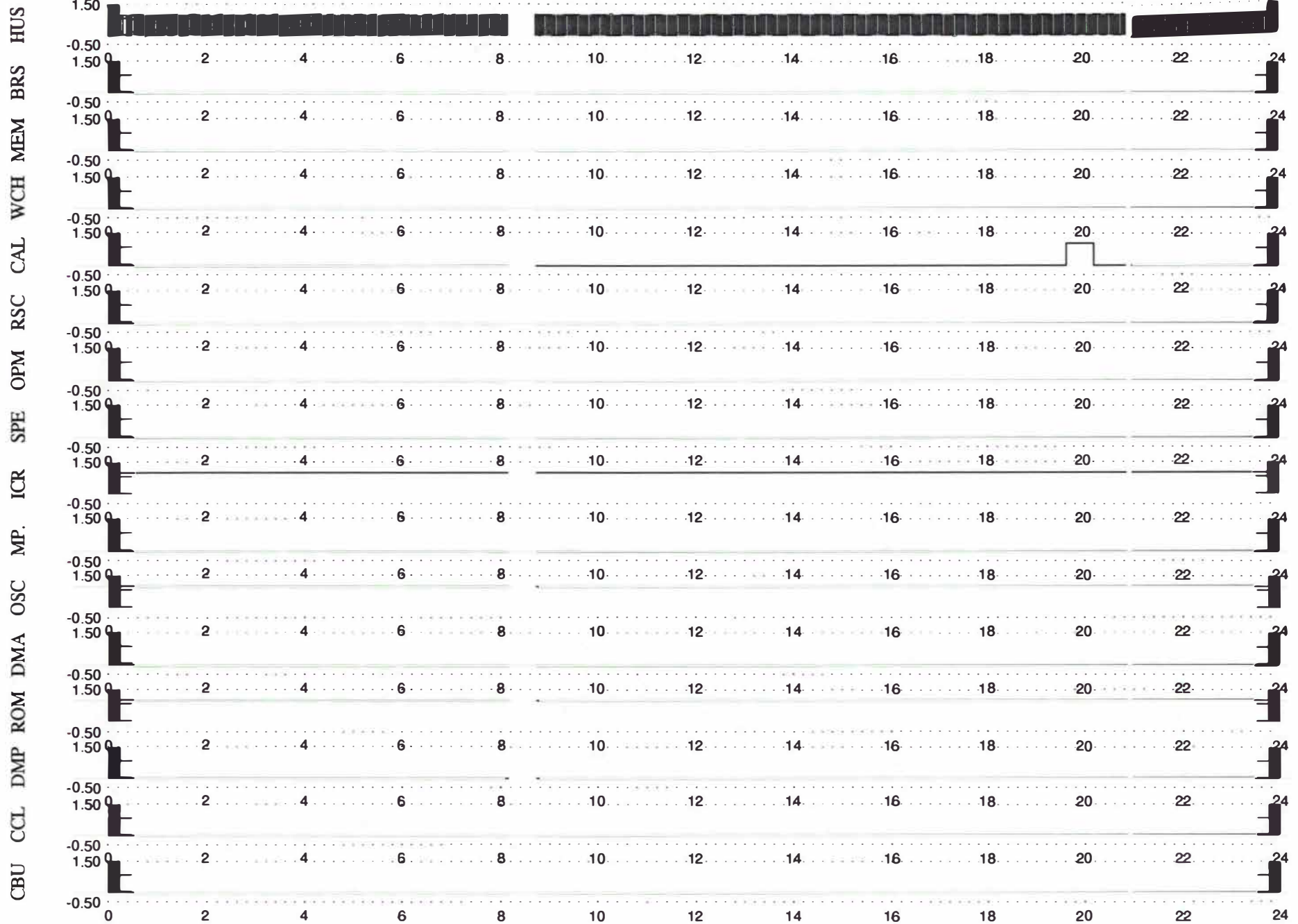


Current Time: 94/08/16, 1803 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

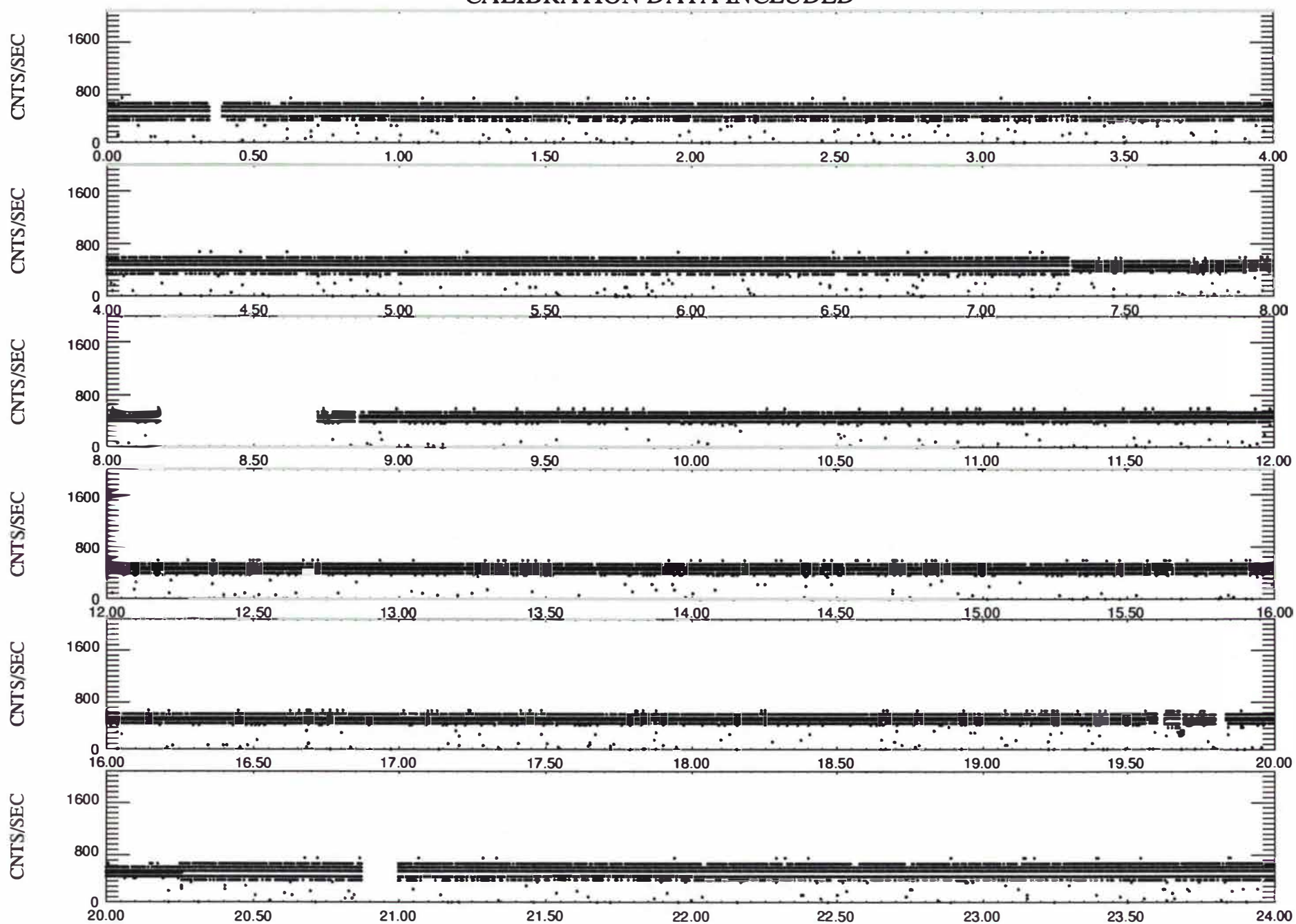
* Solar Burst Trigger
 + Solar Flare

NO BURST (0)

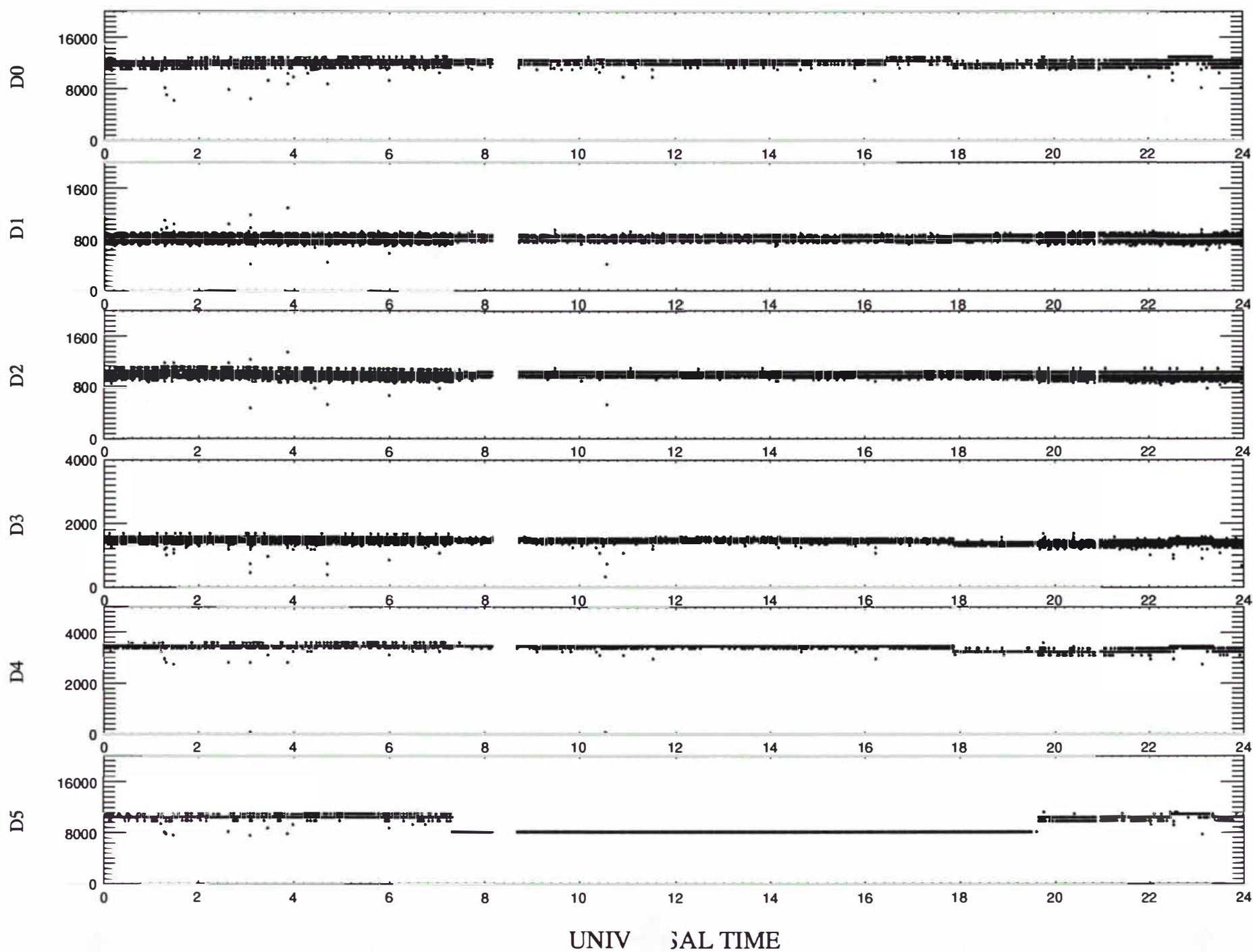


UNIV. AL TIME

CALIBRATION DATA INCLUDED



UNIV. AL TIME



From HAGEDON@ssl.msfc.nasa.gov Mon Aug 15 06:43 PDT 1994
Date: Mon, 15 Aug 1994 8:43:33 -0500 (CDT)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3122

TIME: TJD=9577 SECONDS=25704

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From HAGEDON@ssl.msfc.nasa.gov Mon Aug 15 06:47 PDT 1994
Date: Mon, 15 Aug 1994 8:45:57 -0500 (CDT)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3123

TIME: TJD=9577 SECONDS=43069

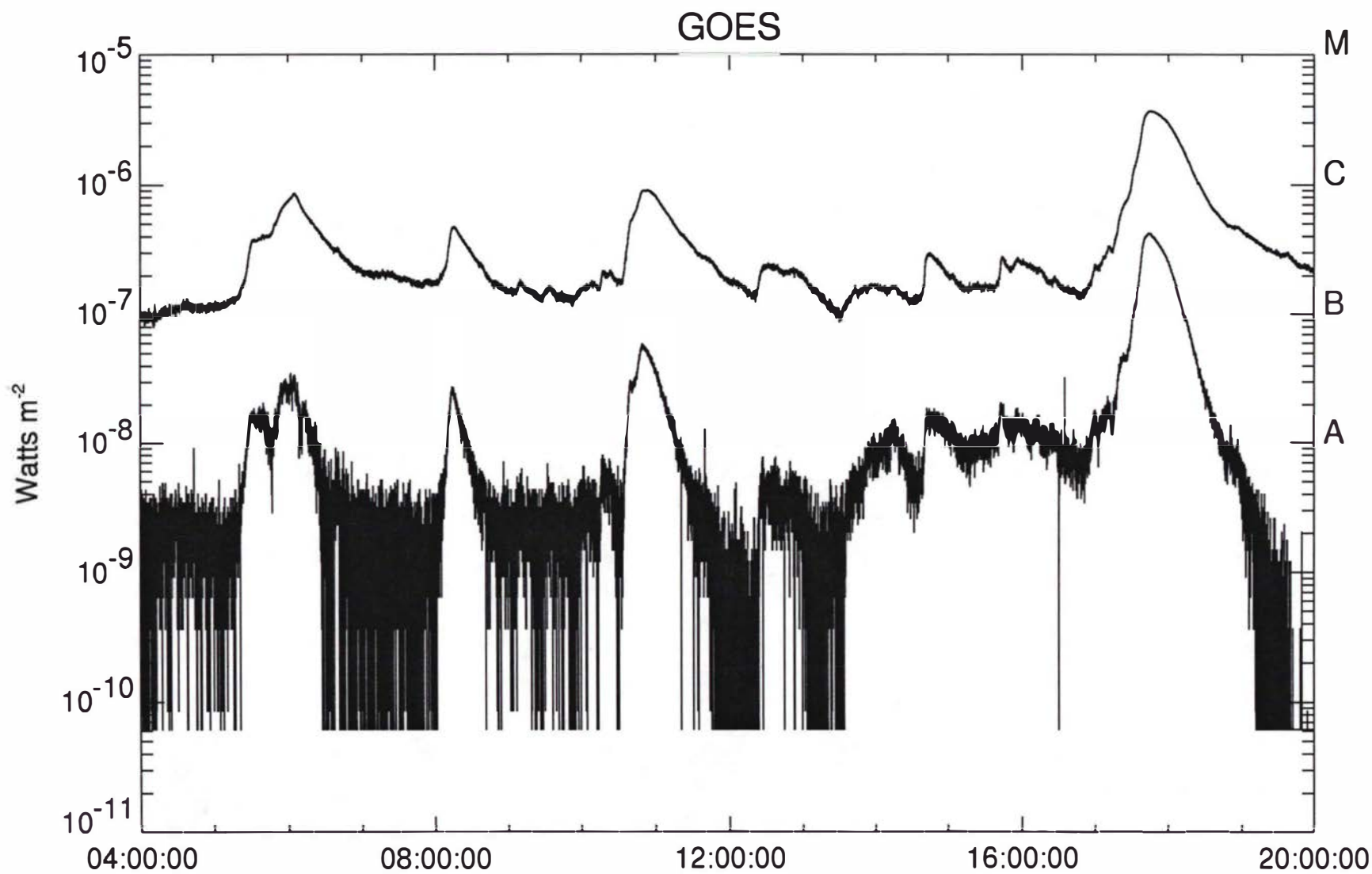
TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

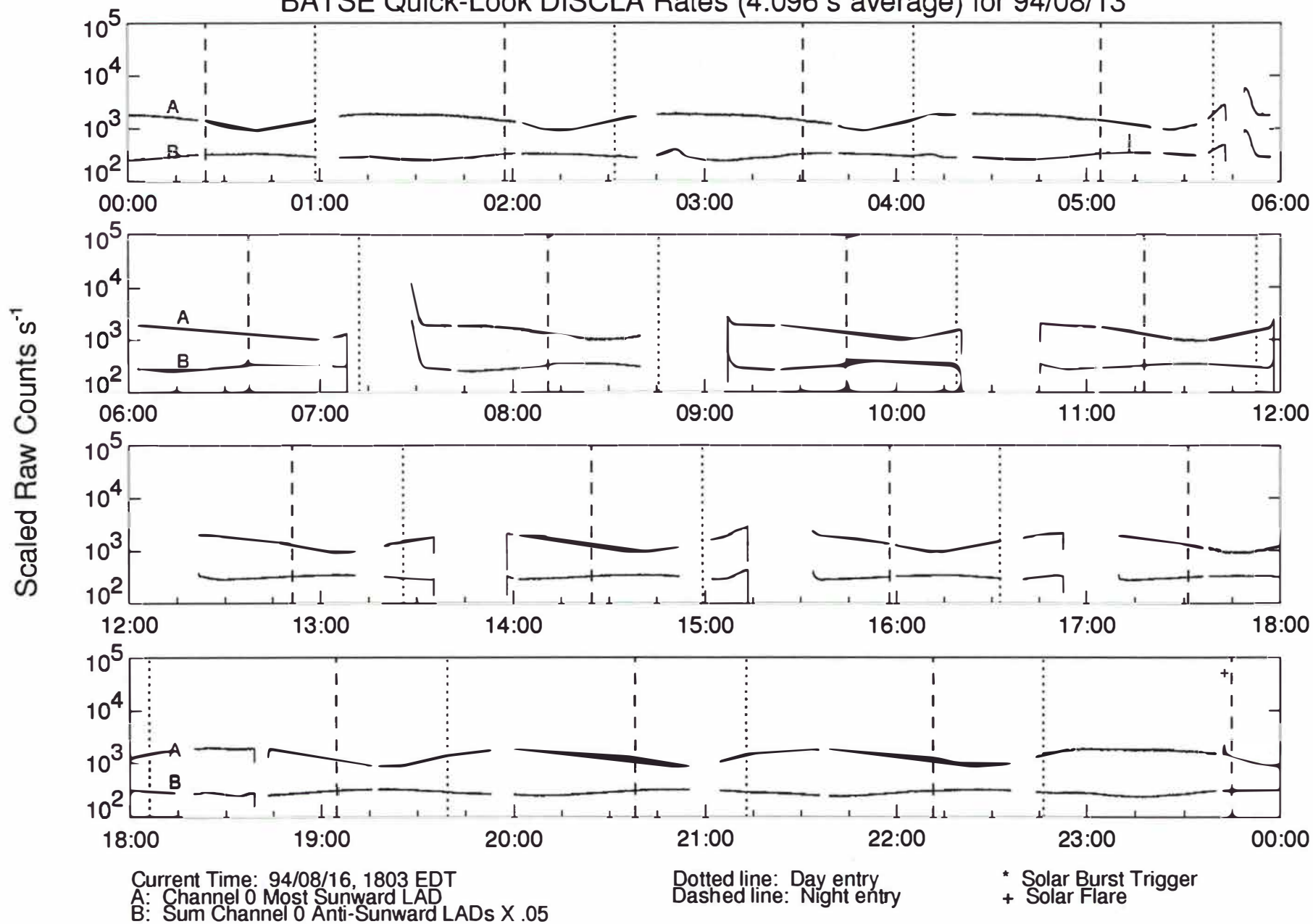
LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

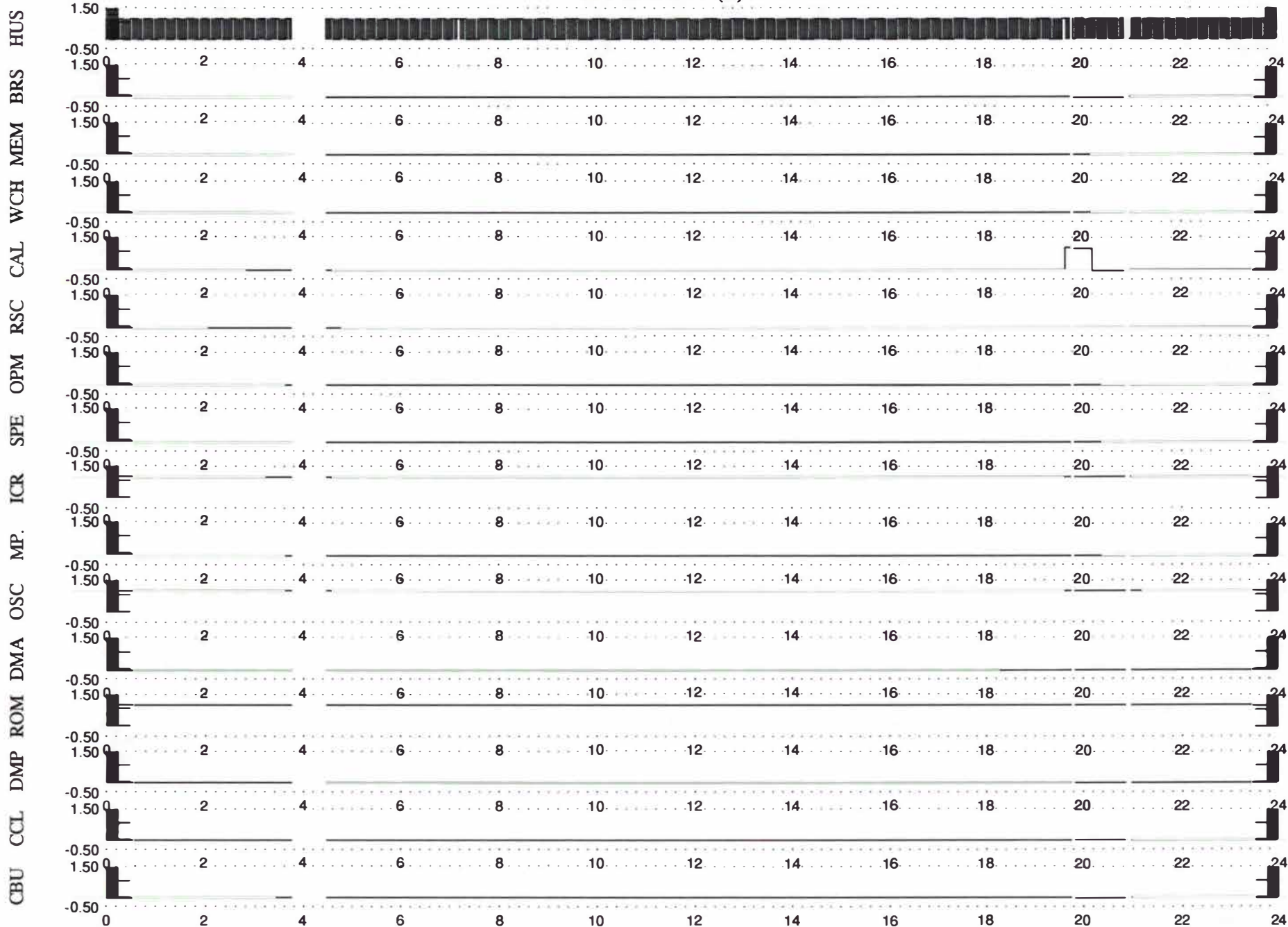


Data Start: 94/08/13, 0000:01 Plot created: 94/08/16, 1756
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

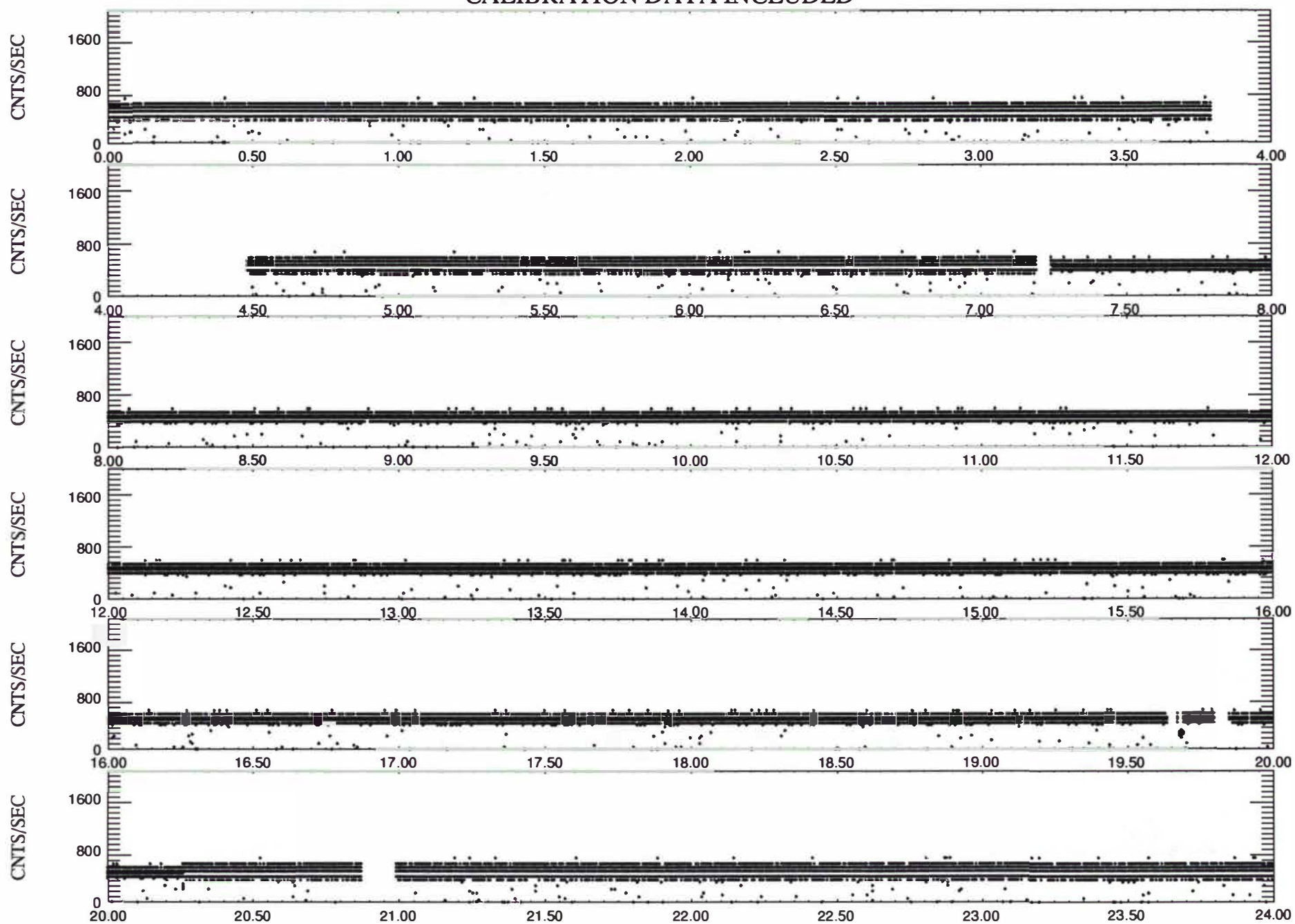
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/13



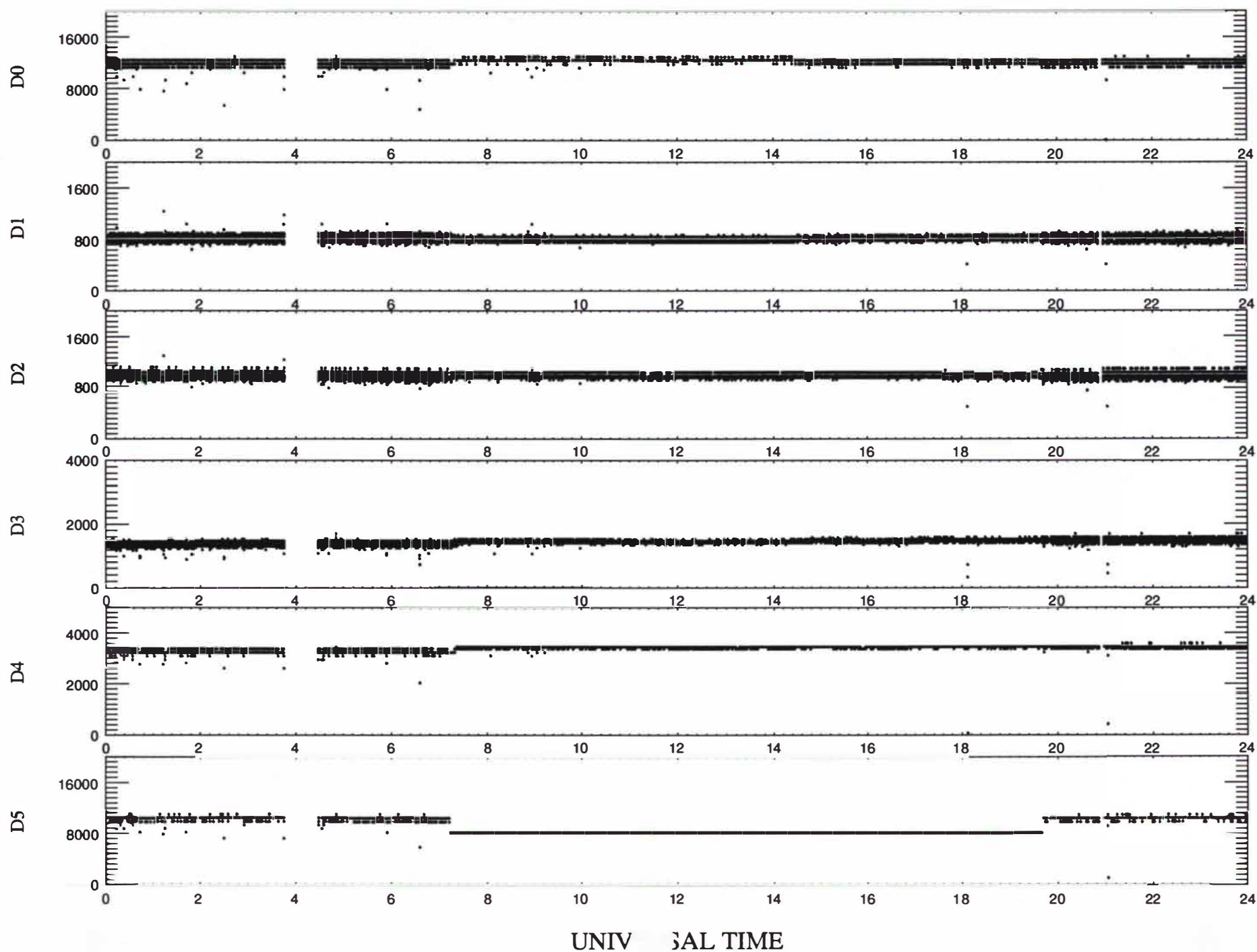
UNIV. AL TIME



CALIBRATION DATA INCLUDED



UNIV AL TIME



From HAGEDON@ssl.msfc.nasa.gov Tue Aug 16 08:38 PDT 1994
Date: Tue, 16 Aug 1994 10:38:34 -0500 (CDT)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3124

TIME: TJD=9578 SECONDS=63312

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

GOES M3.9 SOLAR FLARE. DUR.~200 SEC. NOT VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Tue Aug 16 08:48 PDT 1994
Date: Tue, 16 Aug 1994 10:48:23 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3125

BATSEARCH PROGRAM

BATSE BURST # 3125
EVENT OF 1994 AUG 14 DAY OF YEAR=226
EVENT CROSSING TIME AT BATSE : 72617. S. OR 20:10:17.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 137.000 57.000
BATSE PEAK COUNTING RATE: 6100 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 14/ 8/ 94 IS:
RA= 138.636 DEC= -44.074 DIST= 2.871 AU
BATSE-ULYSSES DISTANCE = 429484309. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 78.92 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 275.41 SECS.
CROSSING TIME AT ULYSSES IS 72892. S. OR 20:14:52 +/- 298.27 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 14/ 8/ 94 IS:
RA= 87.988 DEC= 23.574 DIST= 1.858 AU
MARS-BATSE DISTANCE = 277921408. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=131.52 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -614.47 SECS.
CROSSING TIME AT MARS IS 72003. S. OR 20:00:02 +/- 111.18 SECONDS

RI No-too weak

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3125	940814	9578	72617	6100	137	+57

NO.: 3125 BATSE BURST TRIGGER

TIME: TJD=9578 SECONDS=72617

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=69. AZIMUTH=25. ERROR= DEGREES

COMMENTS:

BURST. SINGLE PULSE WITH TWO PEAKS. FAST RISE, SLOWER DECAY.
FIRST PEAK HARDER THAN SECOND. TOTAL DUR.~35 SEC. MARGINAL ABOVE 300 KEV.

ULYSSES RT

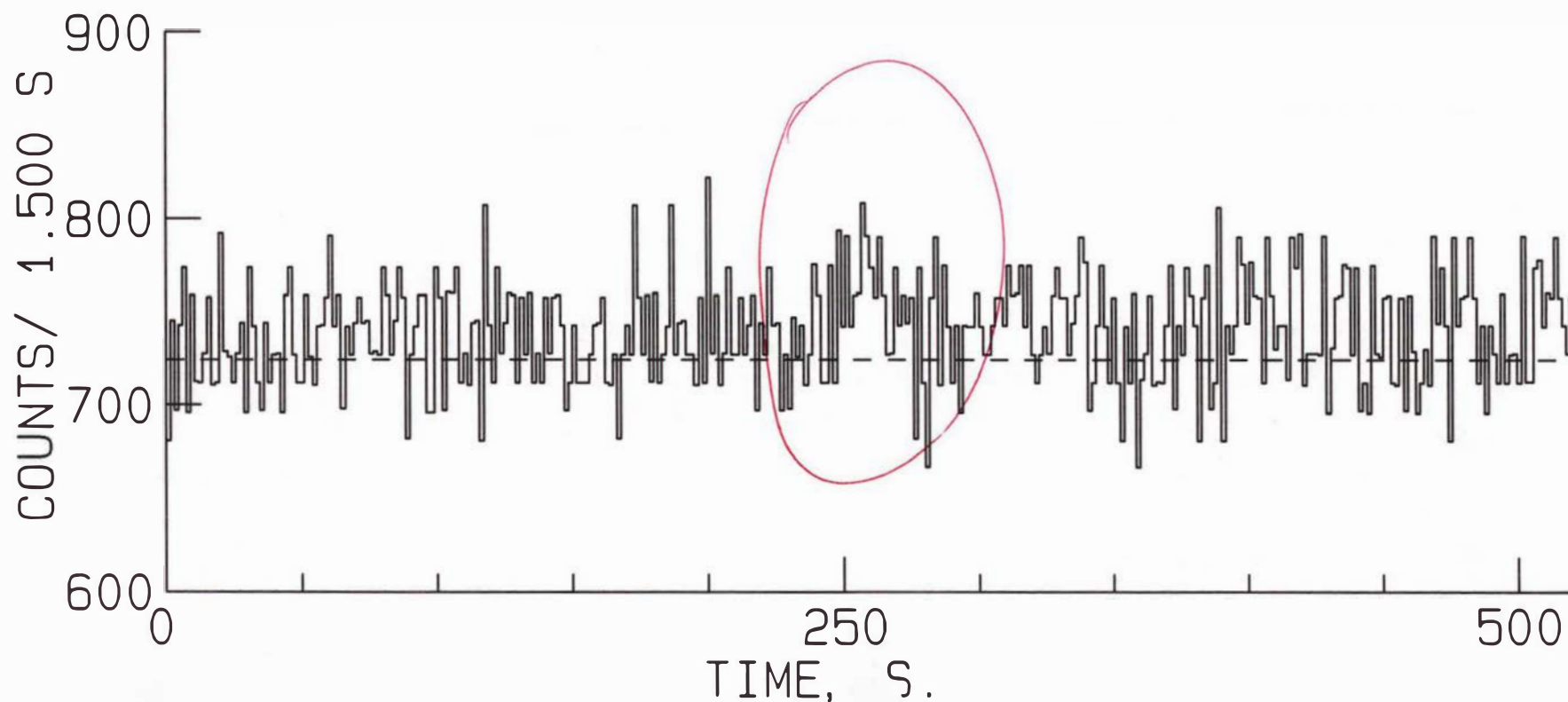
15 / 11 / 93

14/ 8/94 72667.725 s

0.250 S INTERVALS REGROUPED BY 6

22- 148 keV

N= 10 M= 2
>3.0 SIGMA FLUCTUATIONS



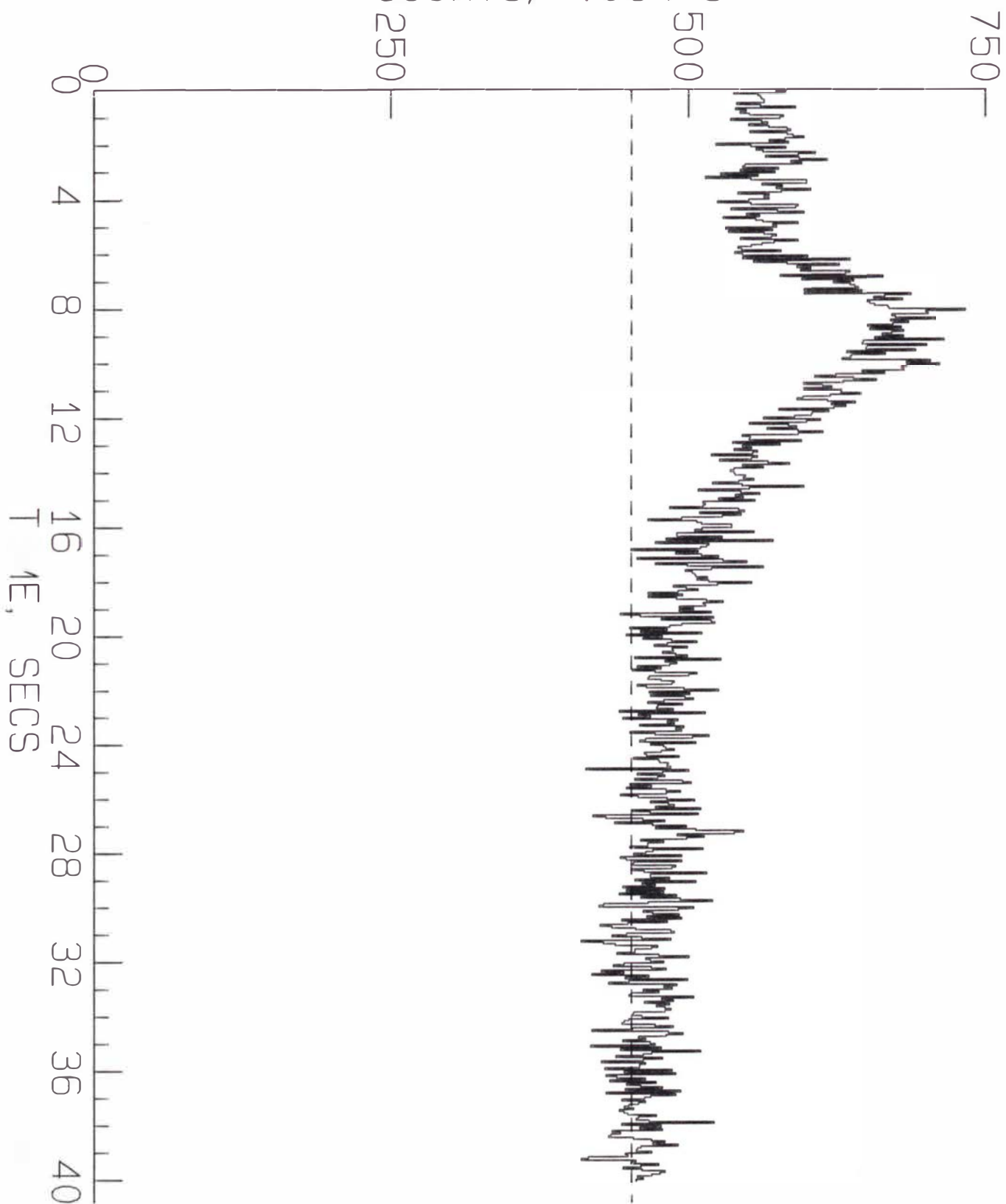
BATSE

14/08/94

72617.394

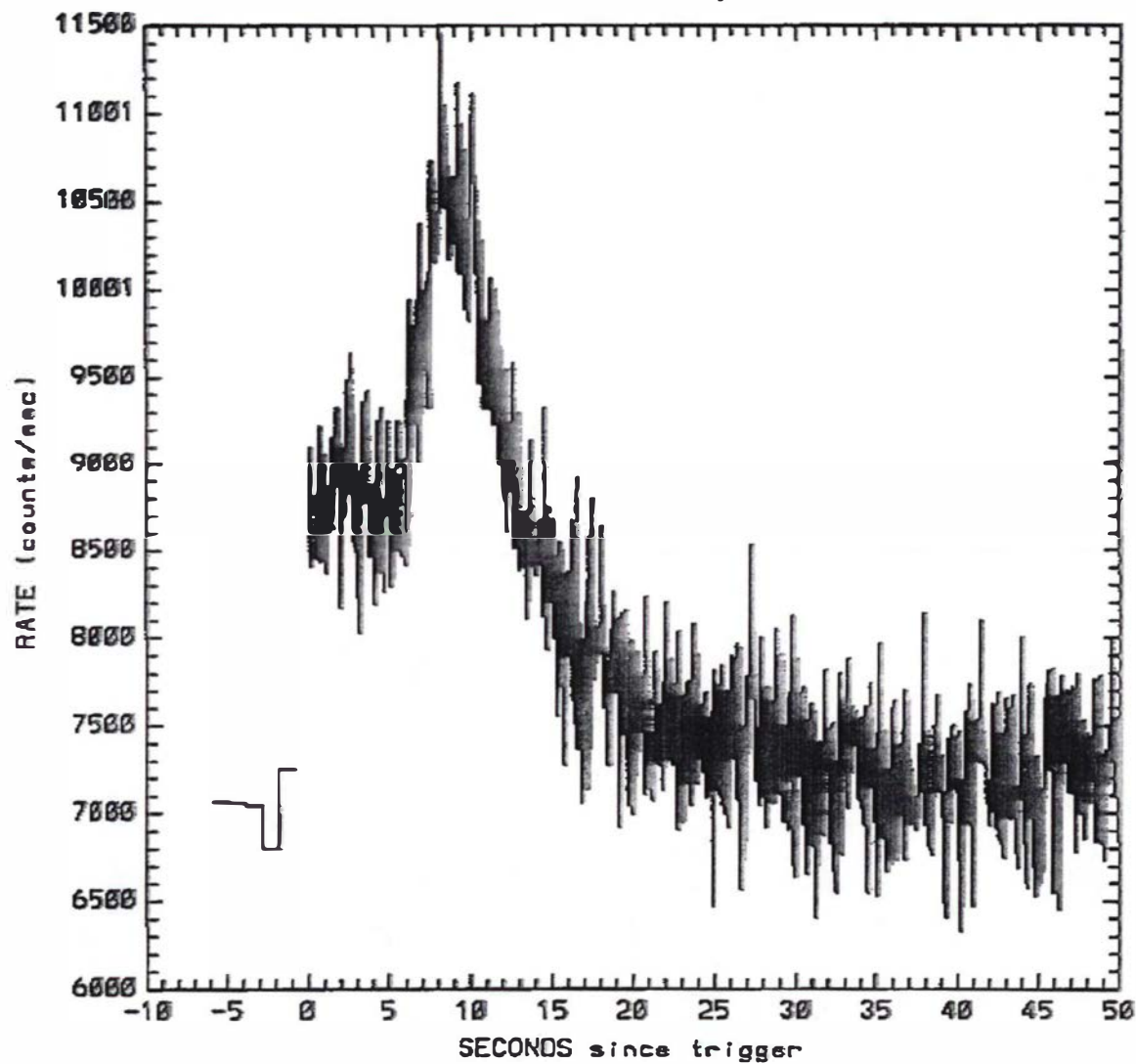
25- 100 keV

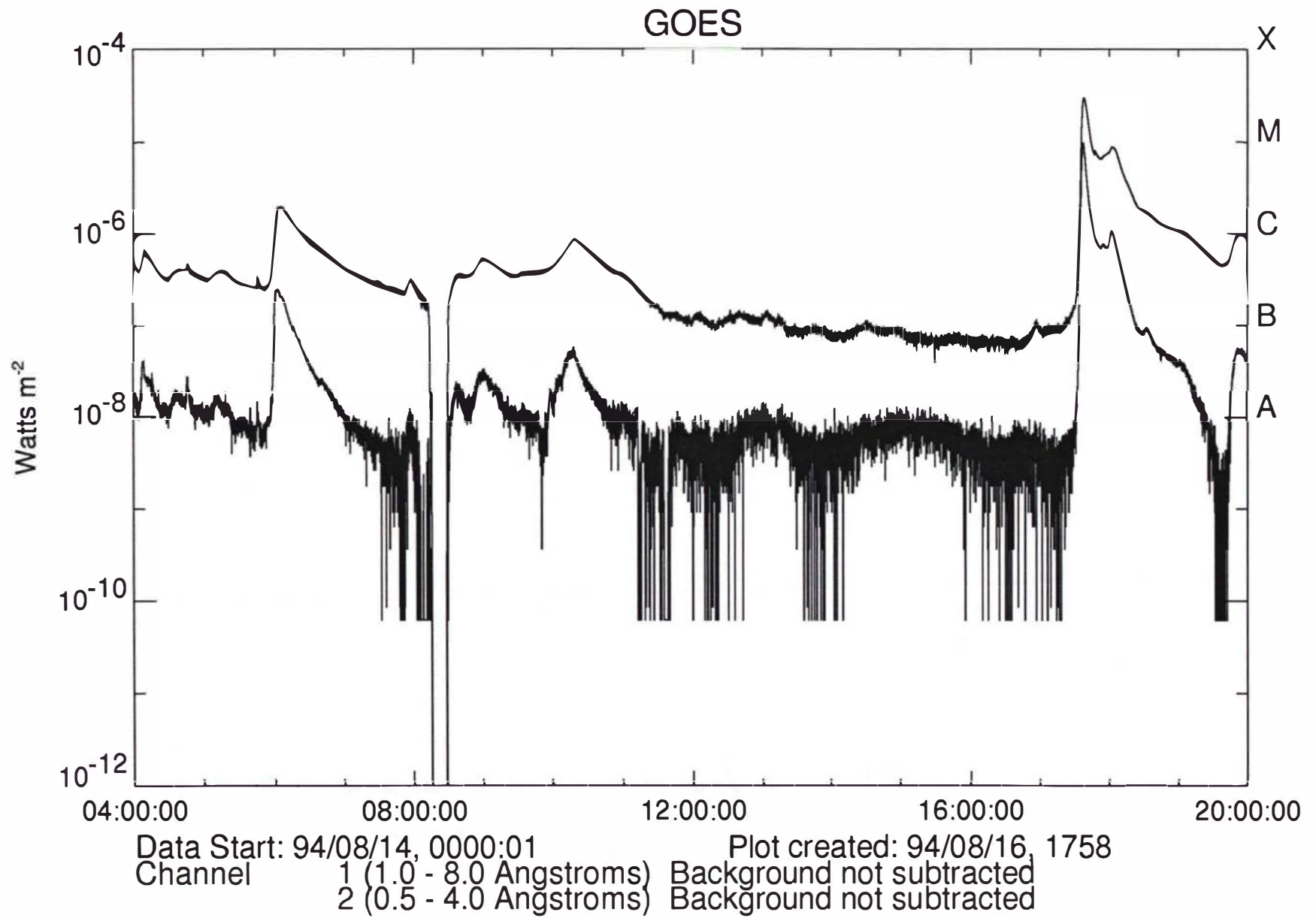
COUNTS/ .064 S



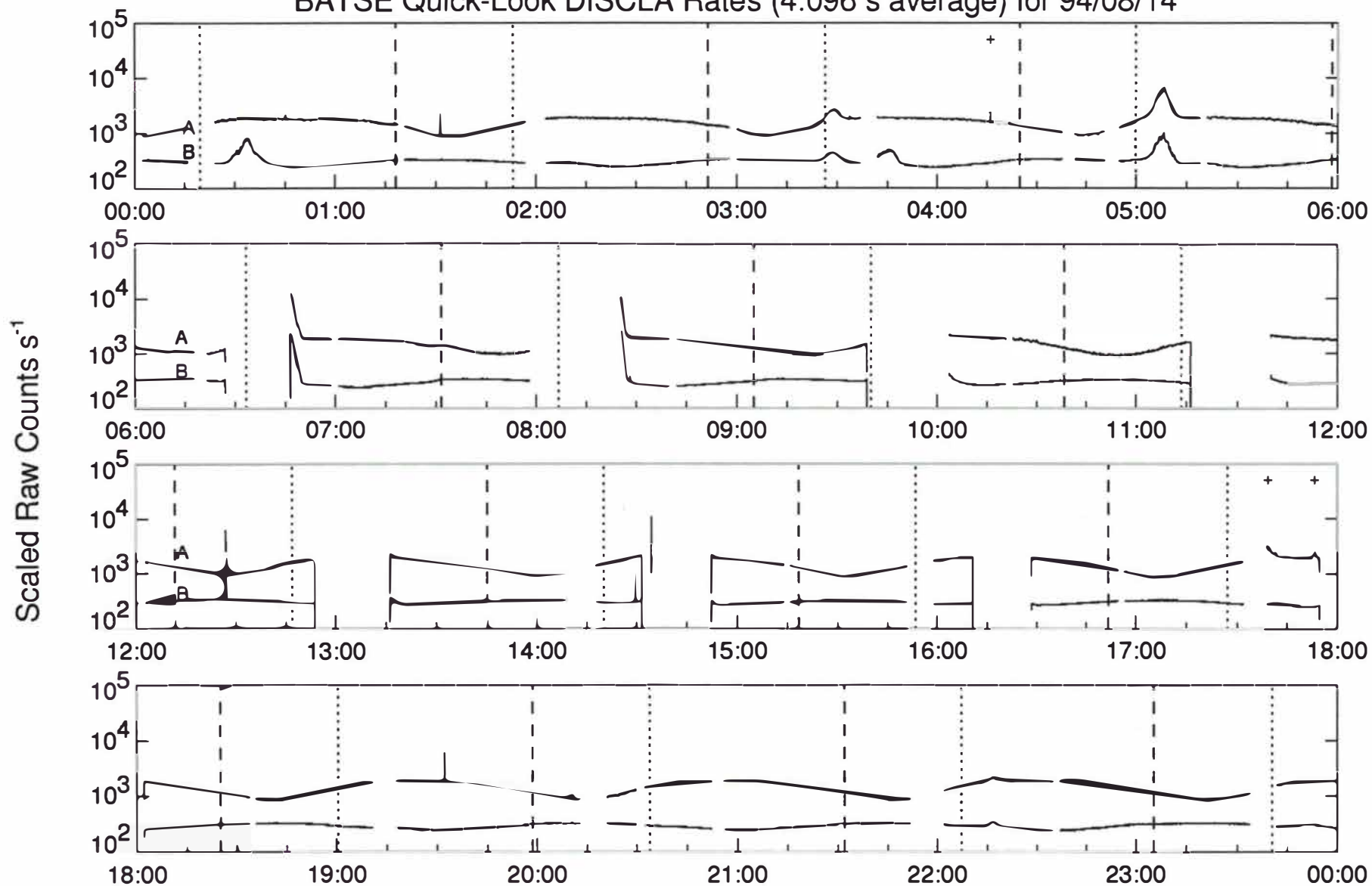
5/11/94

DISCSC Data for K. Hurley, No. 3125





BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/14

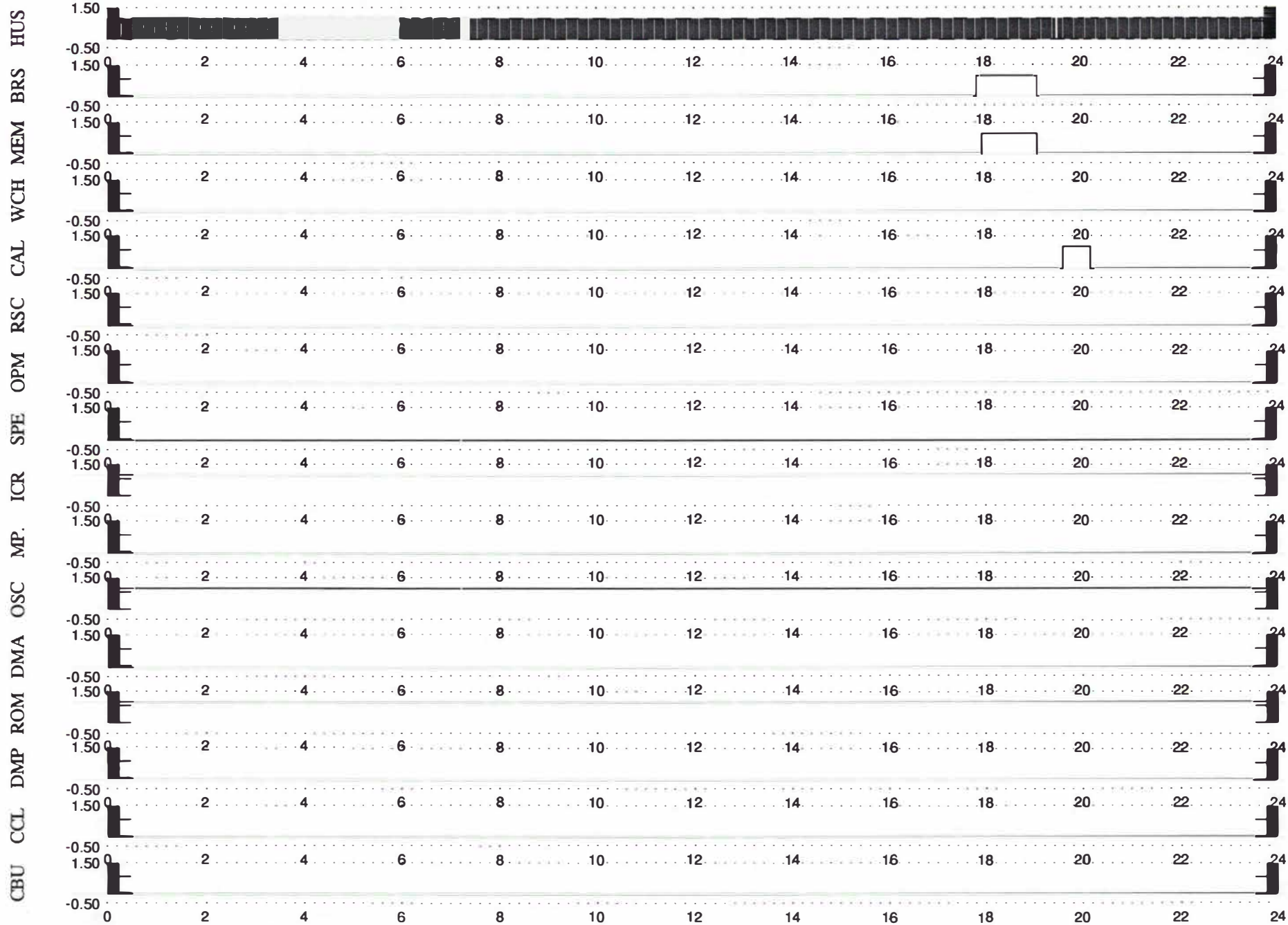


Current Time: 94/08/16, 1803 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

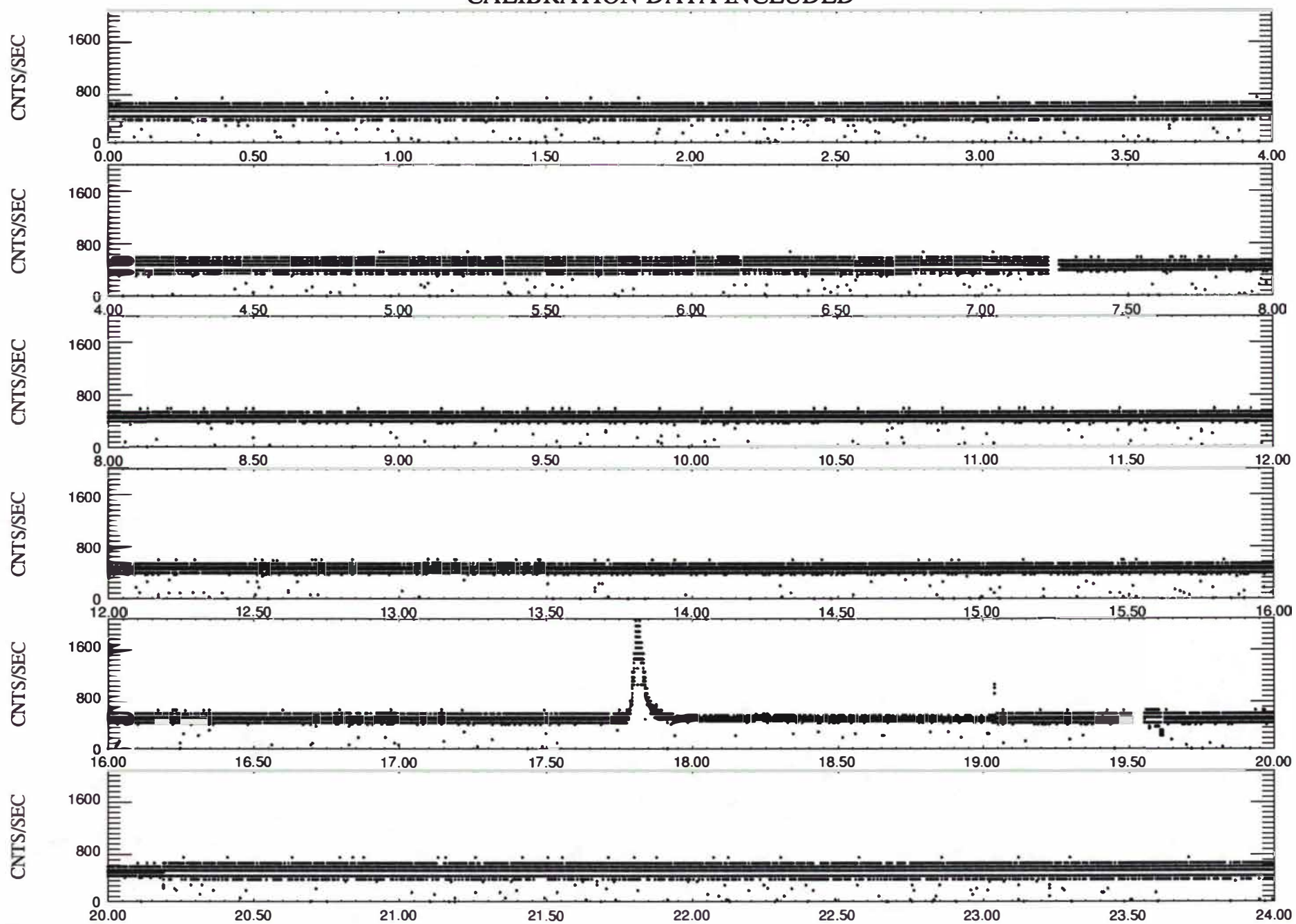
* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 1



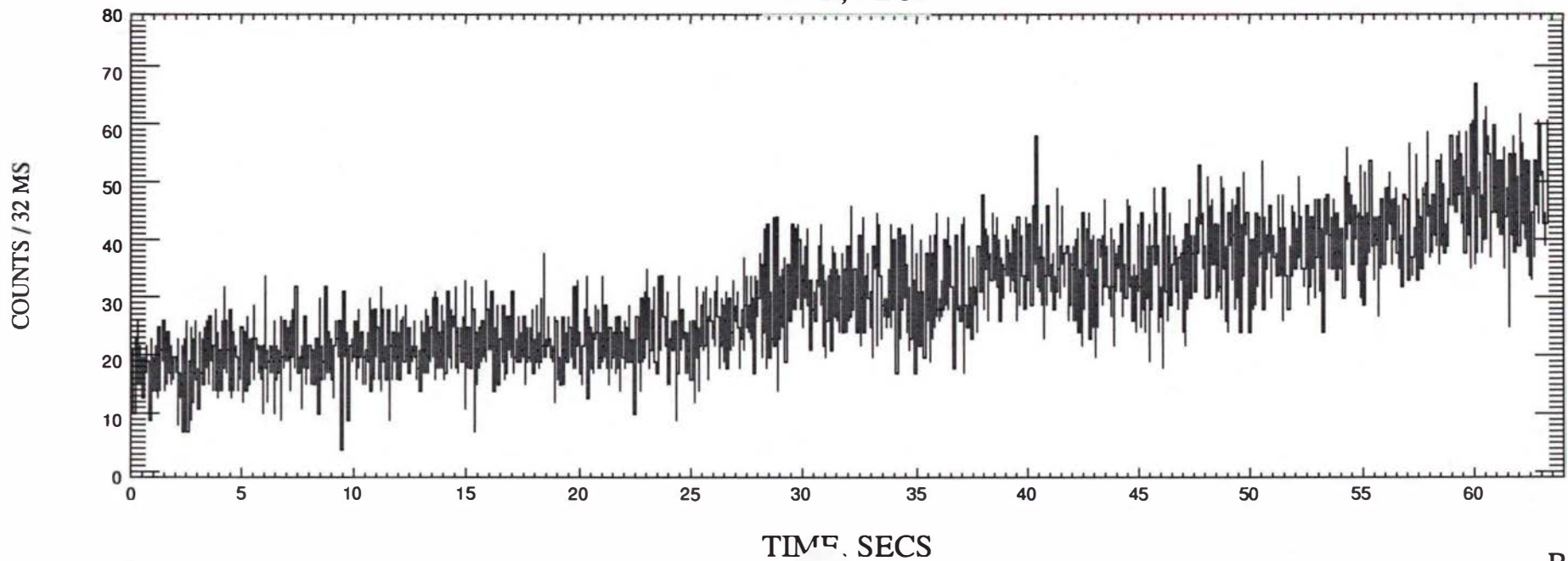
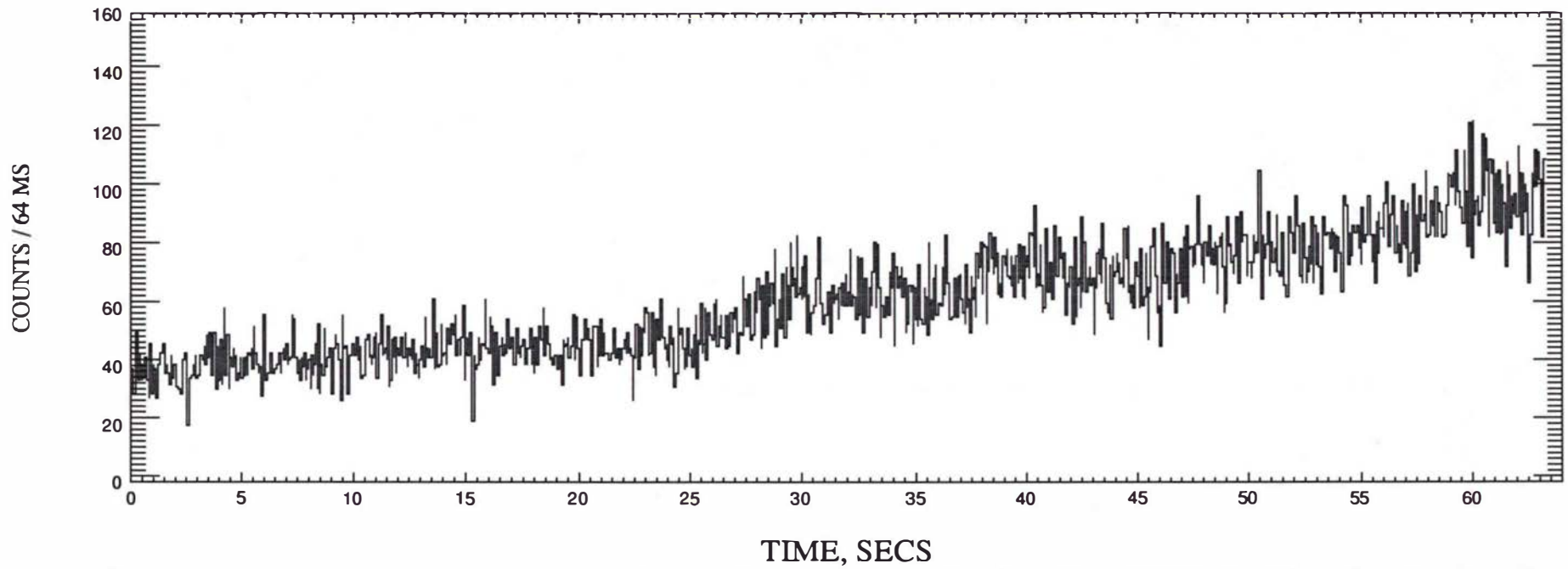
UNIVI AL TIME

CALIBRATION DATA INCLUDED

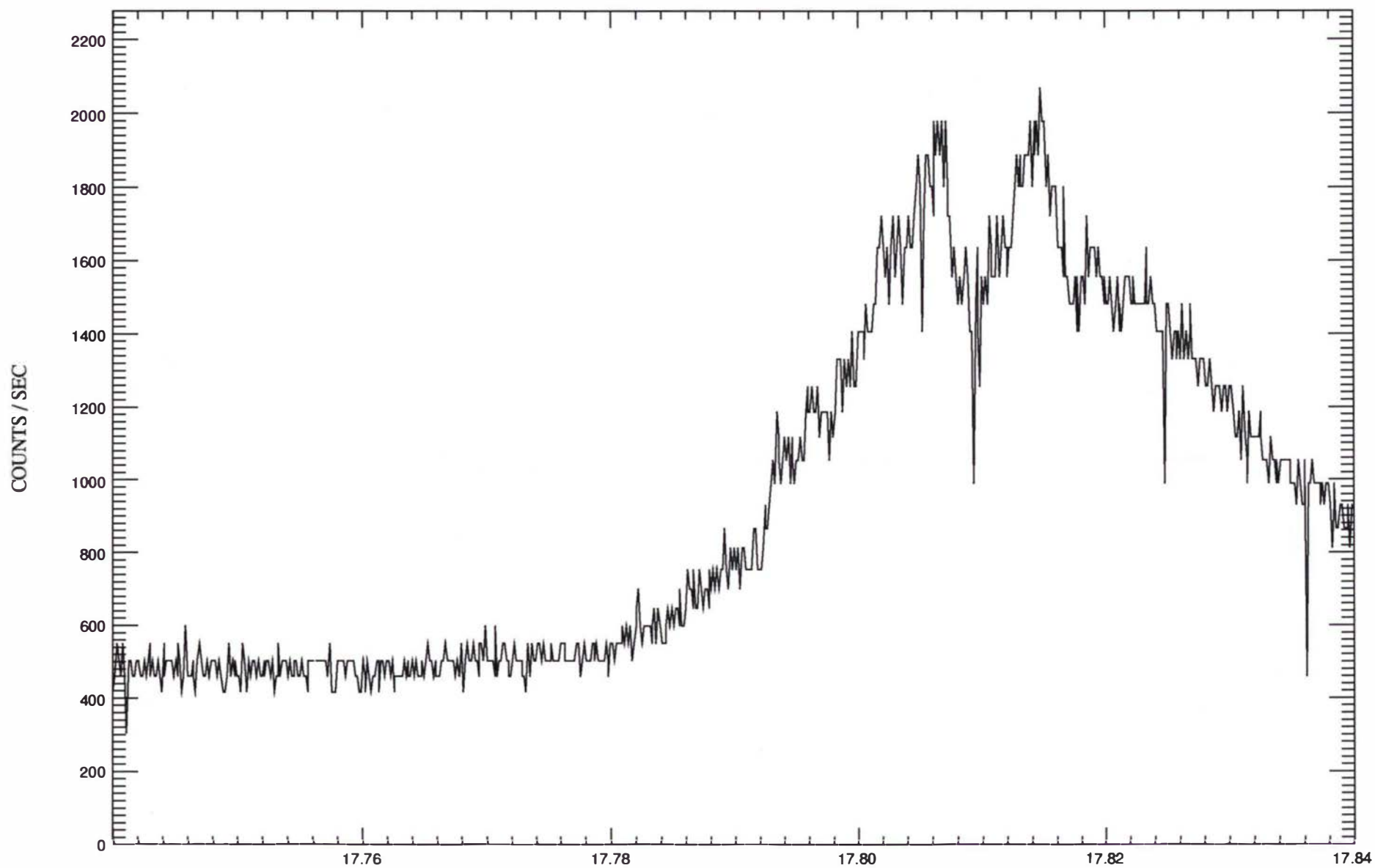


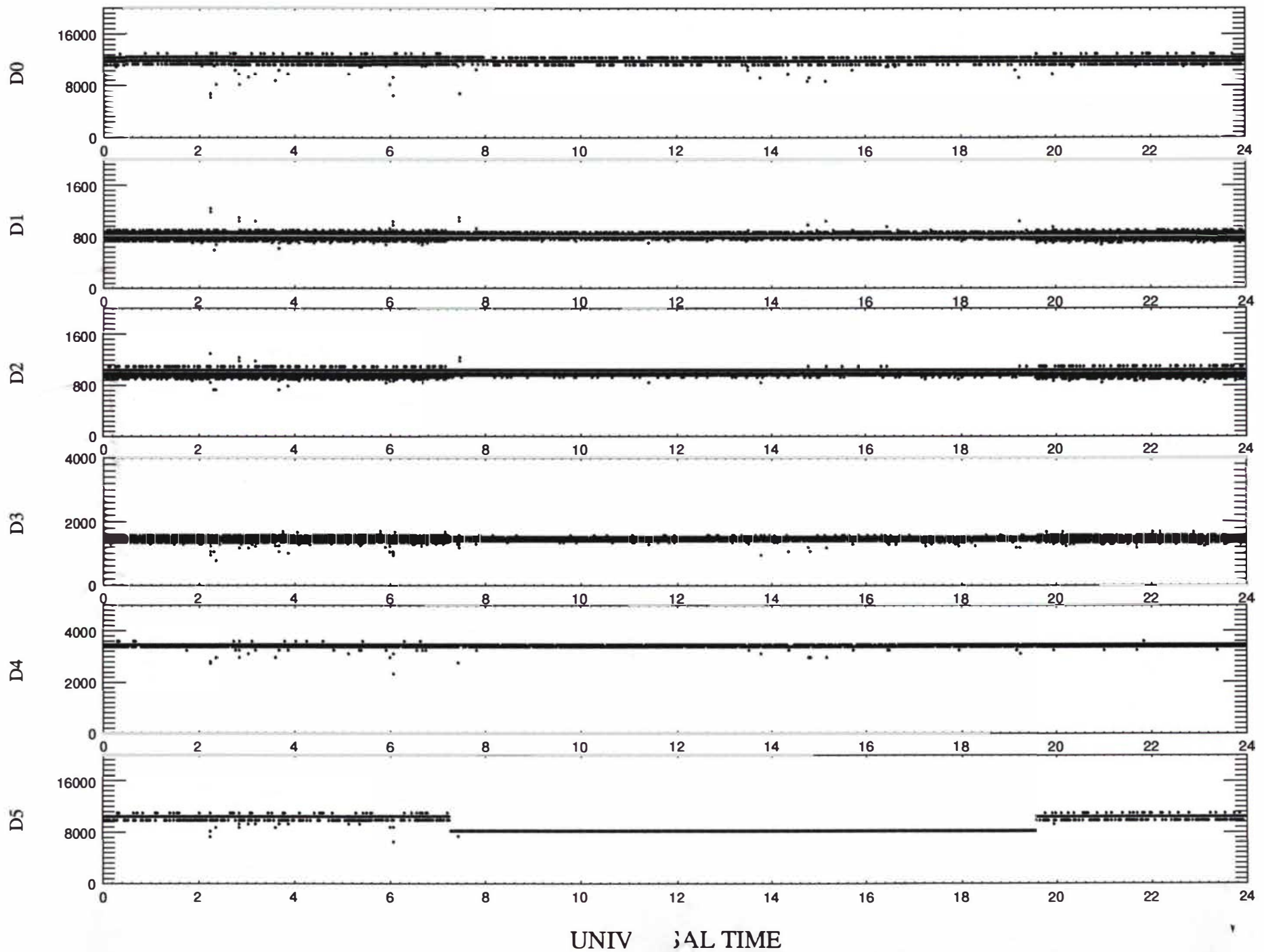
UNIV AL TIME

Burst Counter 1 at UT=17.787312363519 h=64034.325 s 17:47:14.325



CALIBRATION DATA INCLUDED





From HENZE@fender.msfc.nasa.gov Tue Aug 16 14:05 PDT 1994
Date: Tue, 16 Aug 1994 16:06:03 -0500 (CDT)
From: HENZE@fender.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, CASS09BAND@fender.msfc.nasa.gov,
CASS09GRUBER@fender.msfc.nasa.gov, CASS09MATTESON@fender.msfc.nasa.gov,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03126

TIME: TJD=9579 SECONDS=45976

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

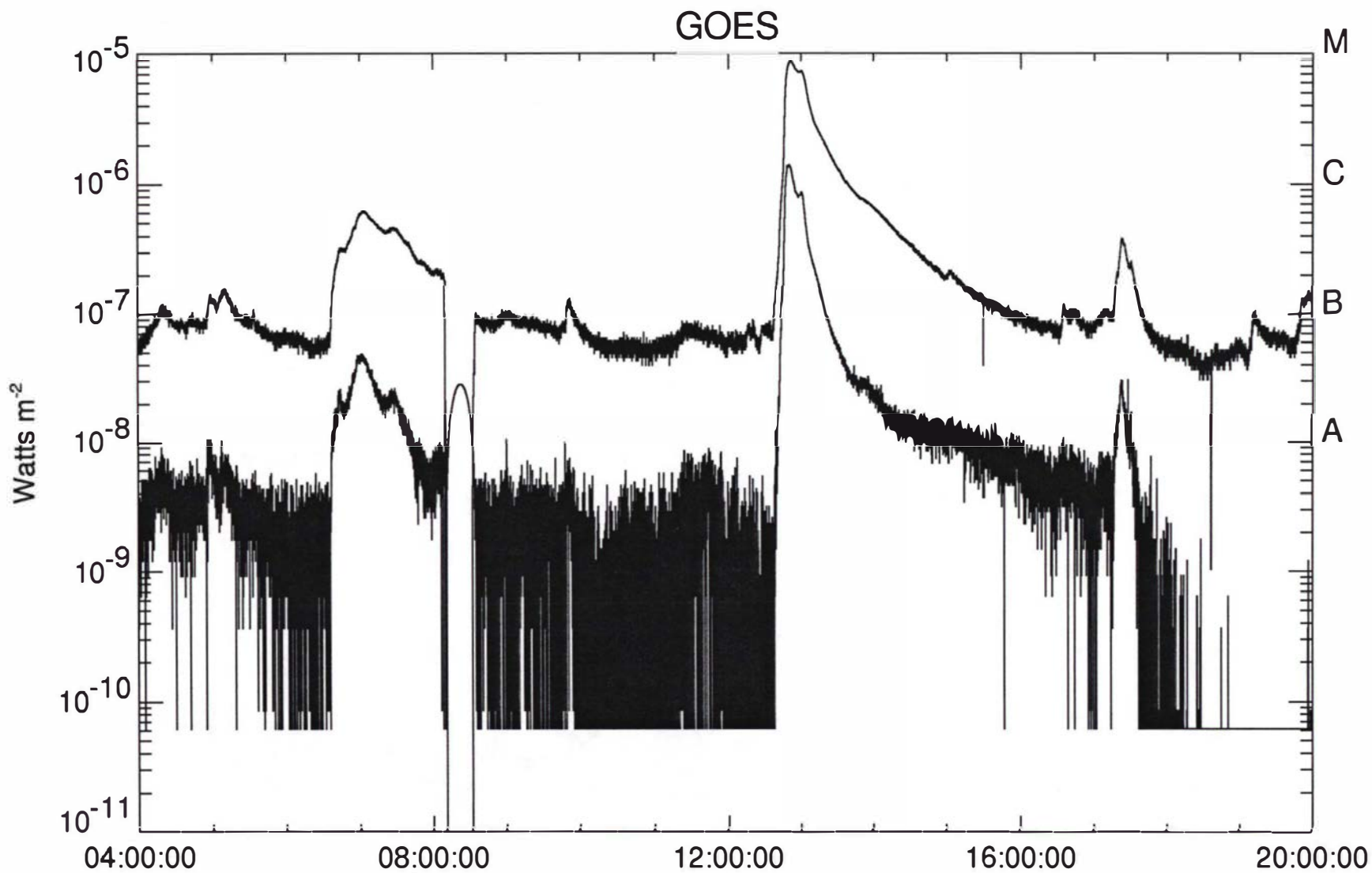
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=085.4 AZIMUTH=341.4 ERROR= DEGREES

COMMENTS:

GOES M1.2, OPTICAL 2N FLARE. SINGLE PULSE WITH MANY PEAKS.
TOTAL DURATION ~350 S. BEGINS AT ~T-70 S. MAX AT T.
MARGINALLY VISIBLE ABOVE 100 KEV.



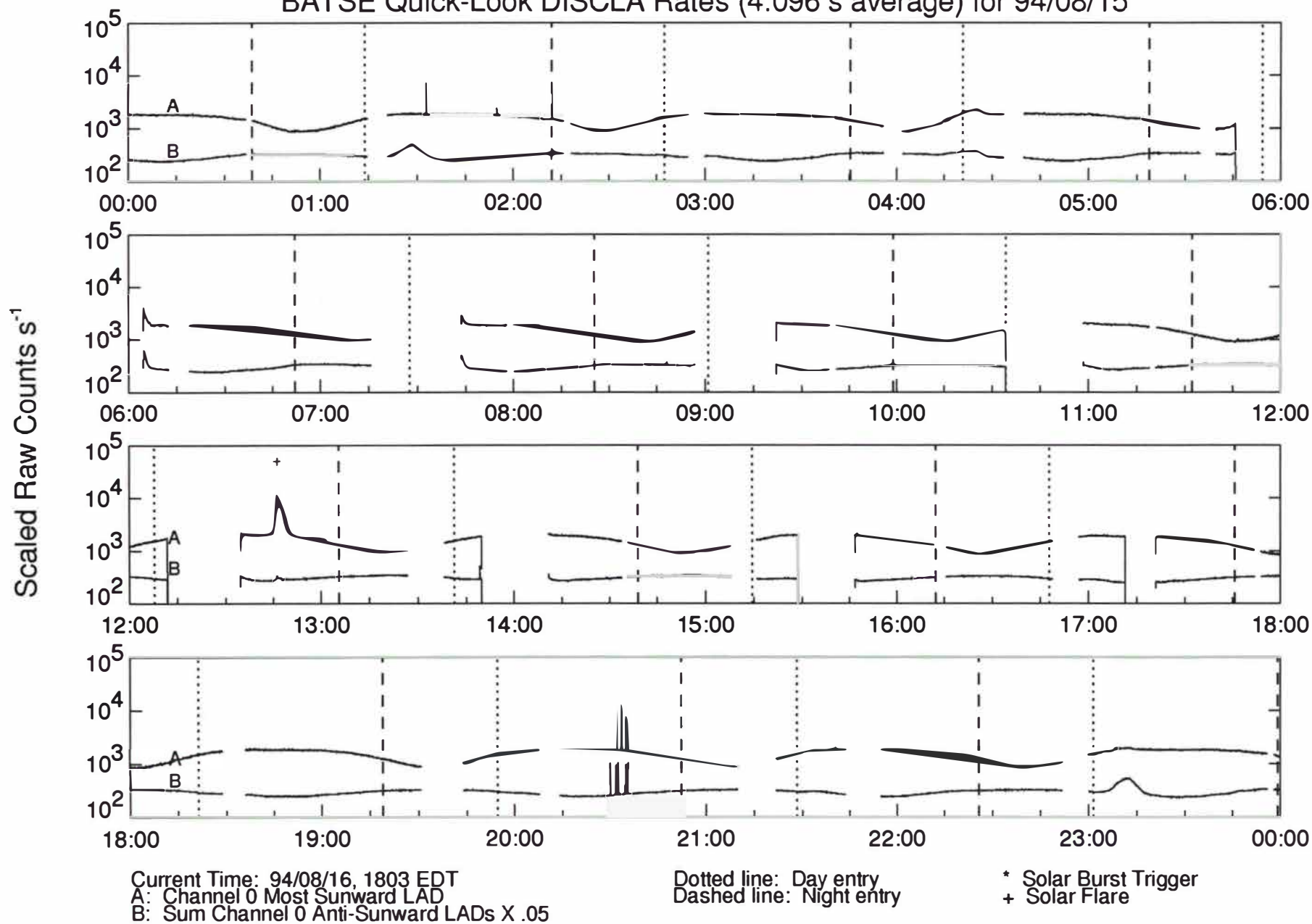
Data Start: 94/08/15, 0000:00

Plot created: 94/08/16, 1758

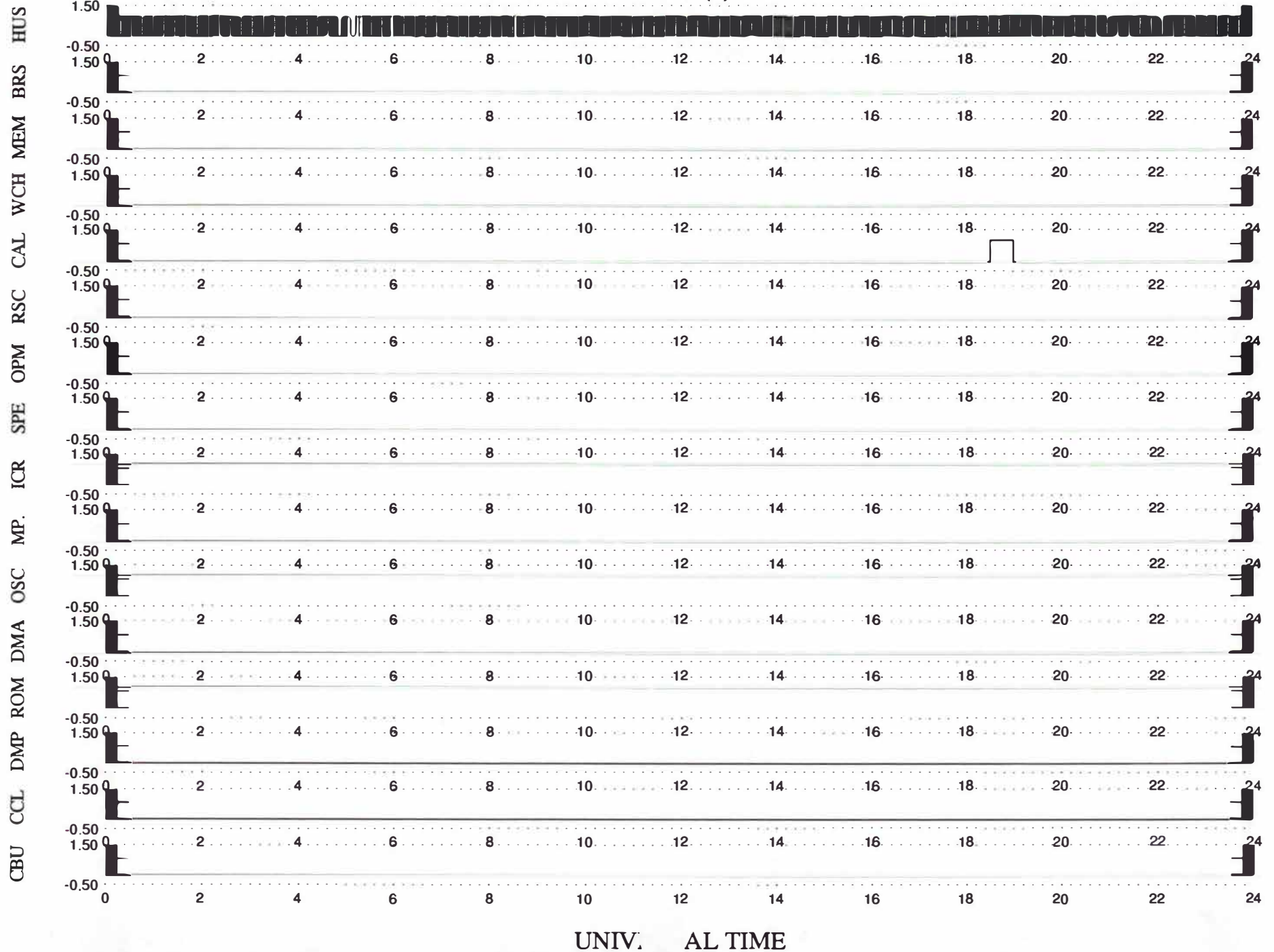
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

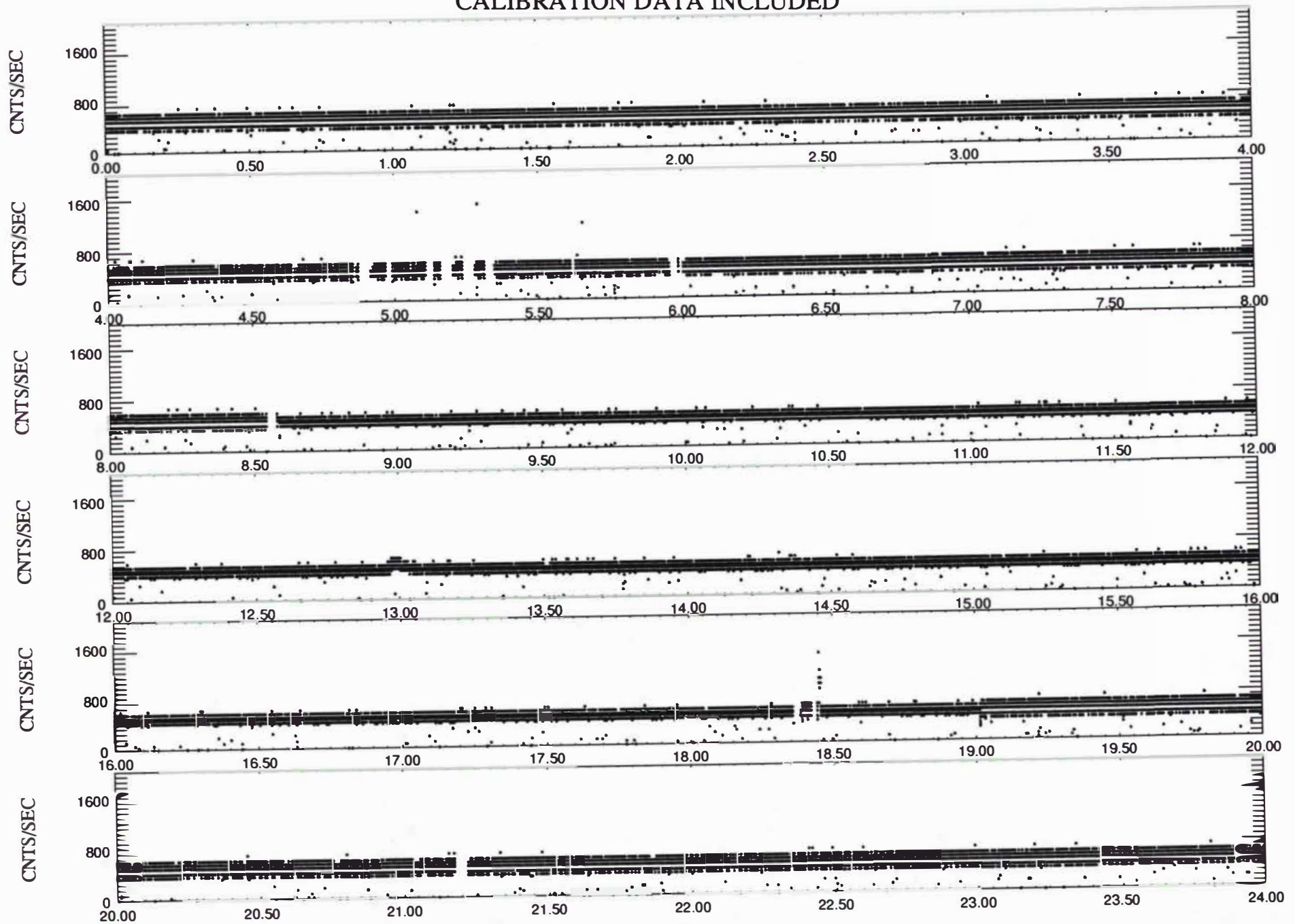
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/15



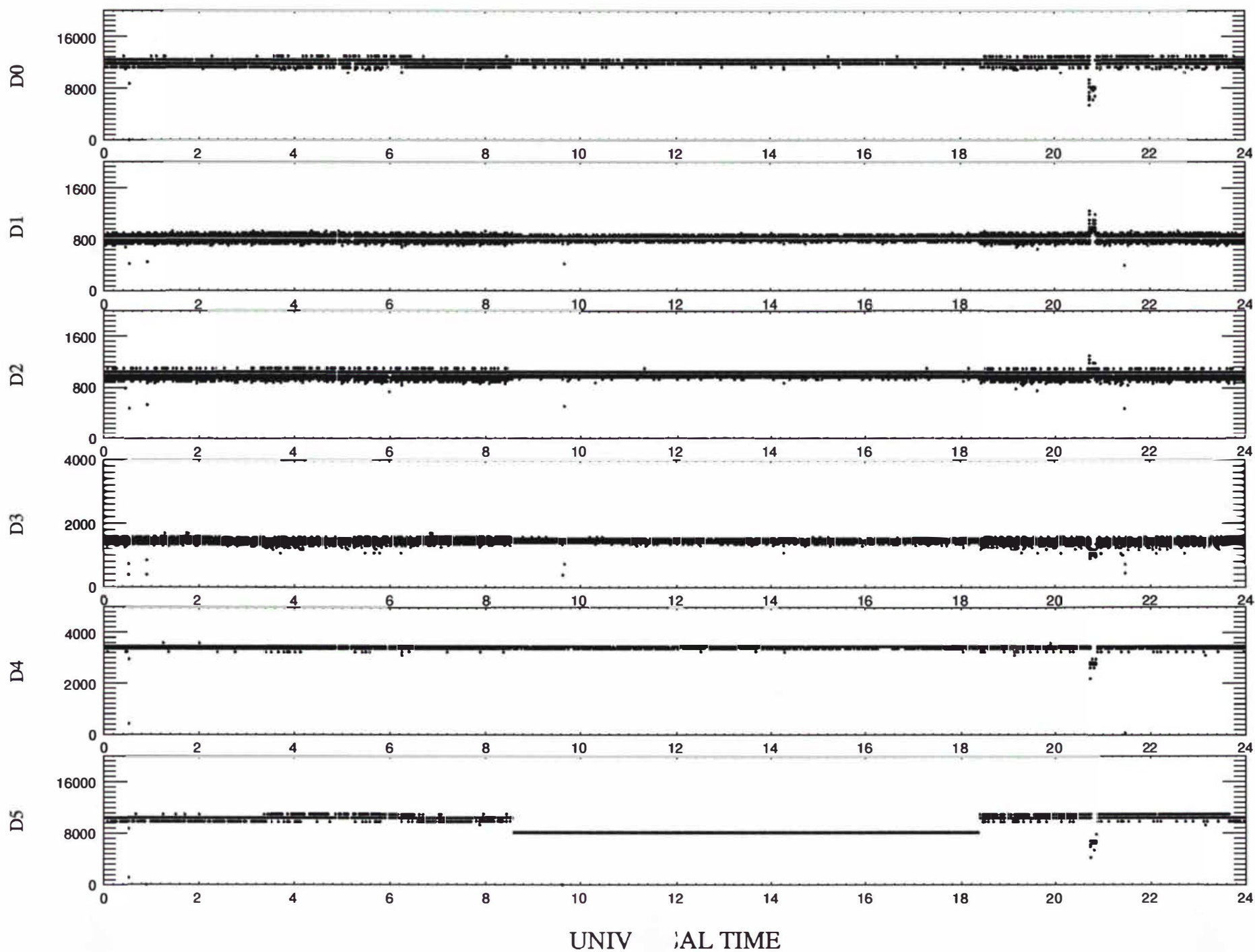
NO BURST (1)



CALIBRATION DATA INCLUDED



UNIV AL TIME



From KOSHUT@ssl.msfc.nasa.gov Wed Aug 17 11:27 PDT 1994
Date: Wed, 17 Aug 1994 13:27:44 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3127

BATSEARCH PROGRAM

BATSE BURST # 3127
EVENT OF 1994 AUG 16 DAY OF YEAR=228
EVENT CROSSING TIME AT BATSE : 38686. S. OR 10:44:46.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 201.000 -28.000
BATSE PEAK COUNTING RATE: 2000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 16/ 8/ 94 IS:
RA= 139.206 DEC= -44.413 DIST= 2.861 AU
BATSE-ULYSSES DISTANCE = 427950218. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=128.80 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -894.53 SECS.
CROSSING TIME AT ULYSSES IS 37791. S. OR 10:29:51 +/- 229.55 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 16/ 8/ 94 IS:
RA= 89.423 DEC= 23.615 DIST= 1.848 AU
MARS-BATSE DISTANCE = 276466464. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 60.95 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 447.80 SECS.
CROSSING TIME AT MARS IS 39134. S. OR 10:52:13 +/- 146.76 SECONDS

No

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3127	940816	9580	38686	2000	201	-28

BATSE BURST TRIGGER

NO.: 03127

TIME: TJD=9580 SECONDS=38686

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=111. AZIMUTH=290. ERROR= DEGREES

COMMENTS:

WEAK BURST OF ~ 45 SECONDS DURATION, NOT OBSERVED ABOVE 300 KEV.
TIME HISTORY CONSISTS OF SINGLE PULSE WITH NO SIGNIFICANT SUBSTRUCTURE.

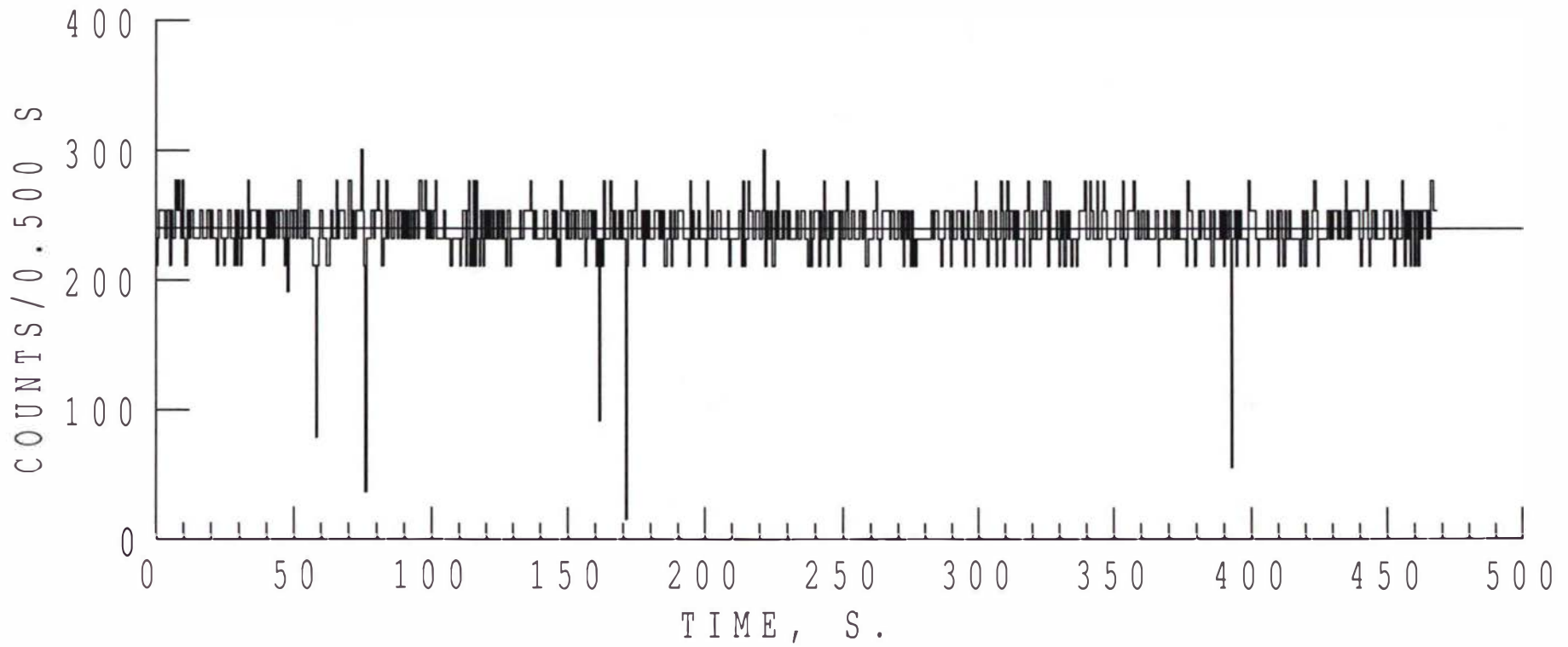
17 / 8 / 94

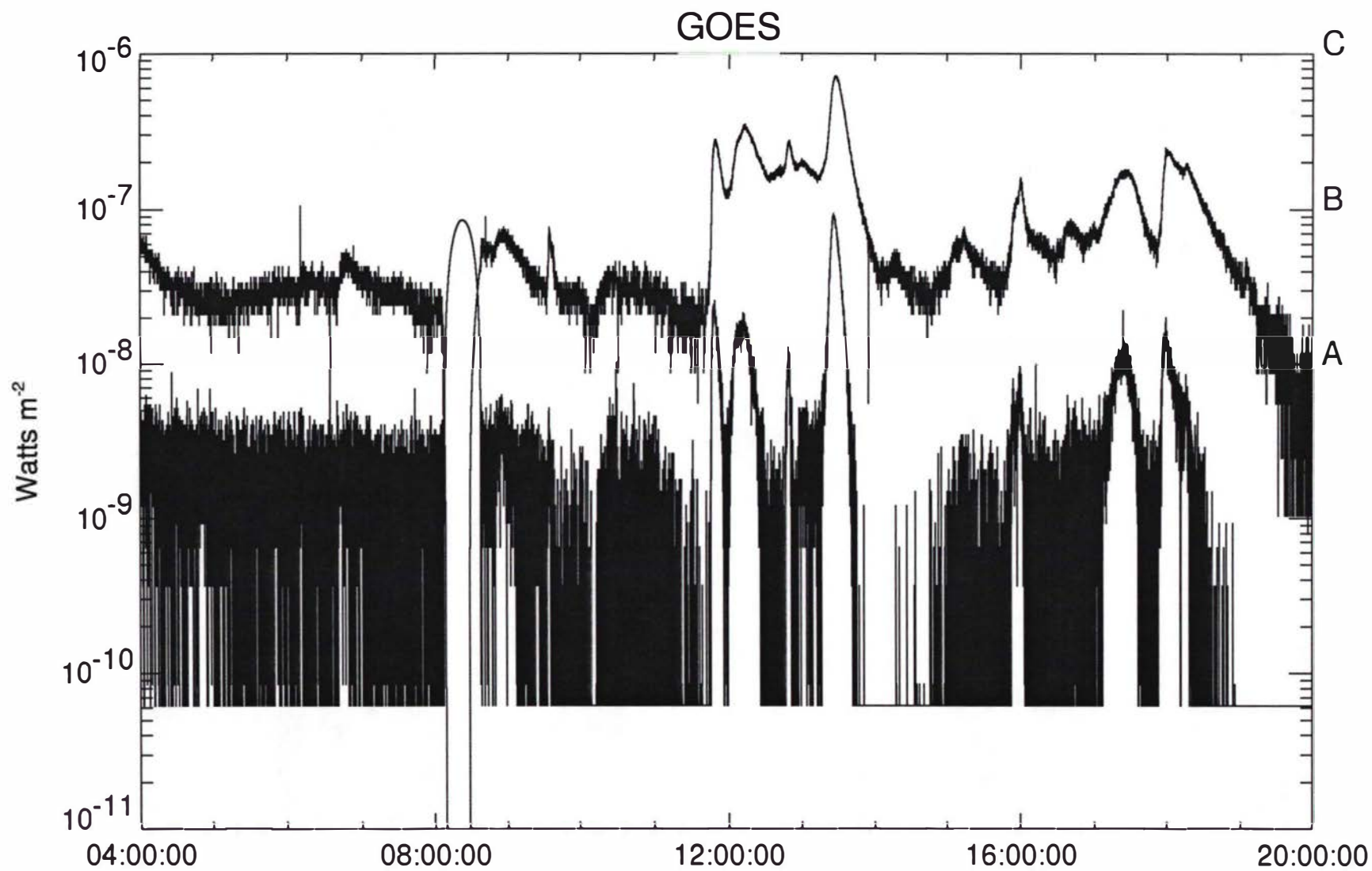
ULYSSES RT

16 / 8 / 94 37548.051 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





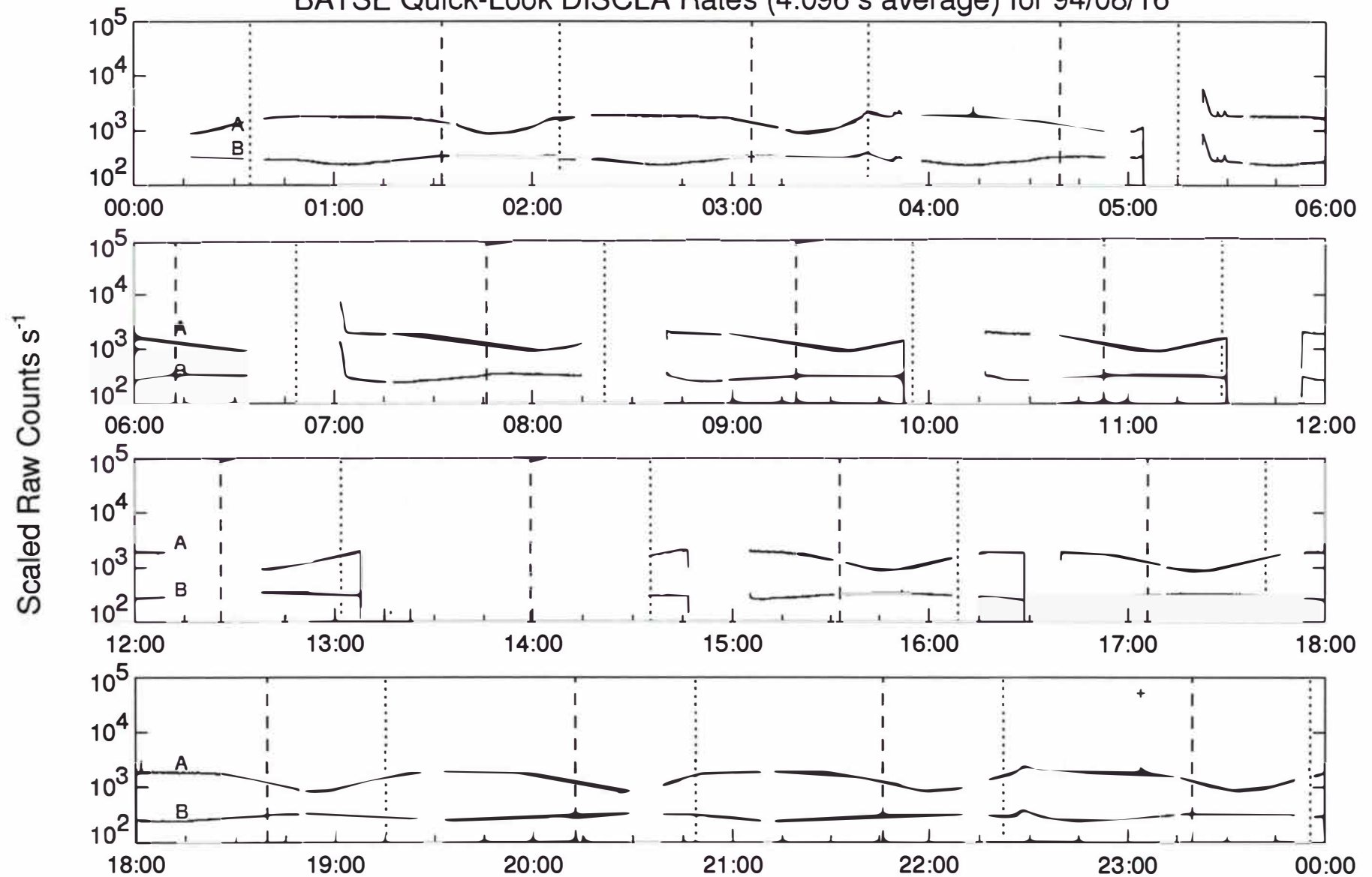
Data Start: 94/08/16, 0000:00

Plot created: 94/08/25, 1350

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/16

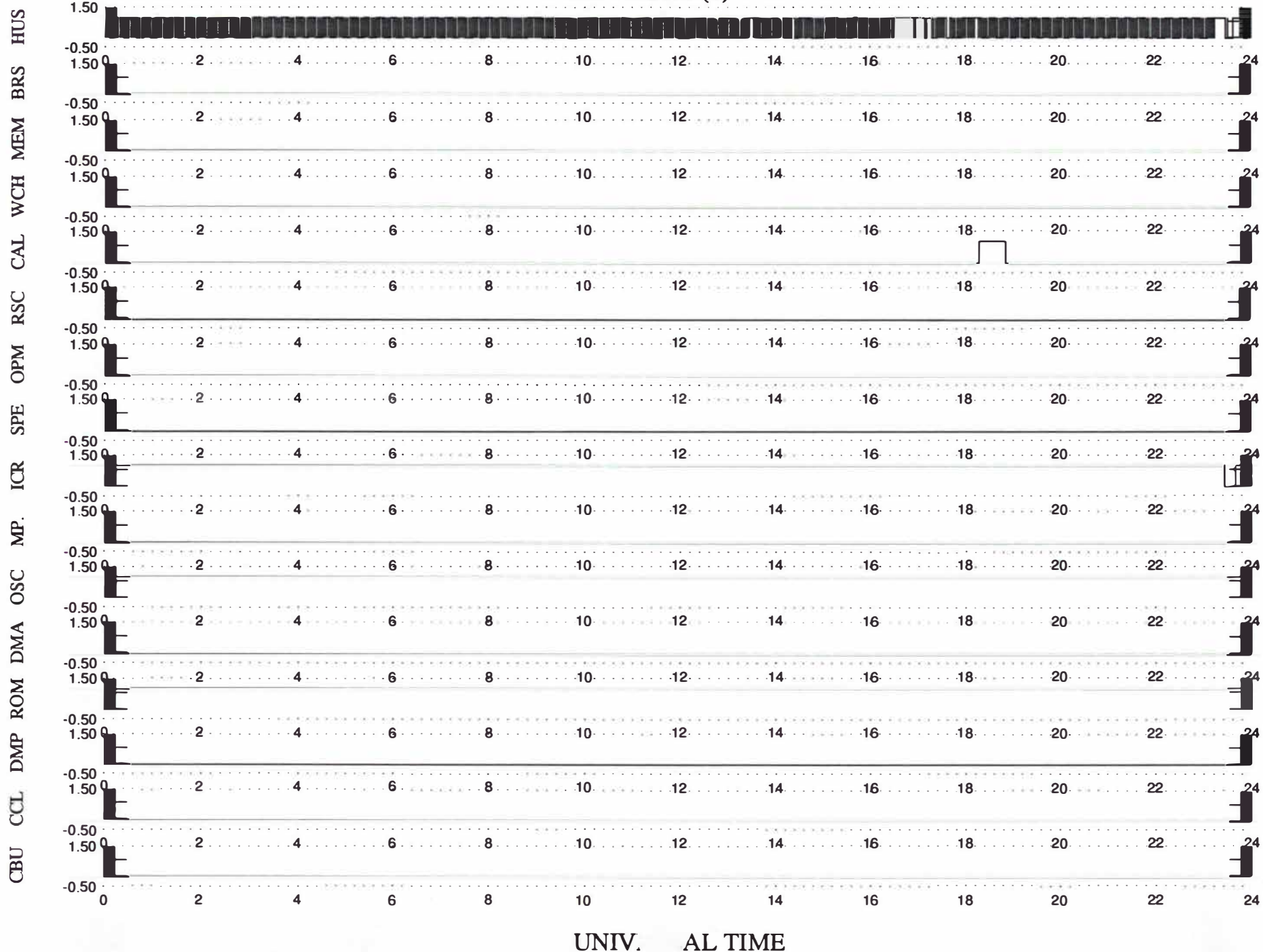


Current Time: 94/08/25, 1407 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

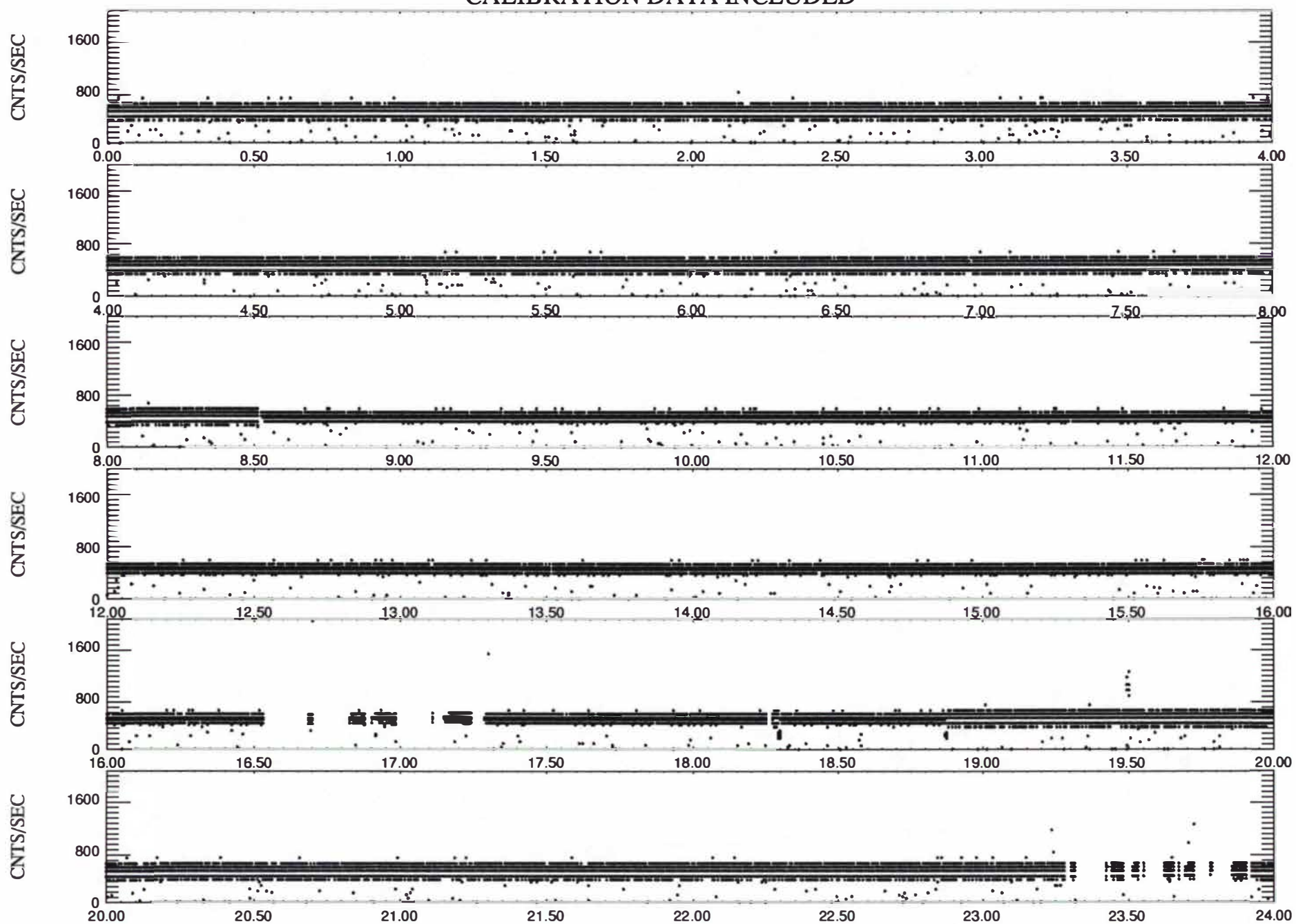
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

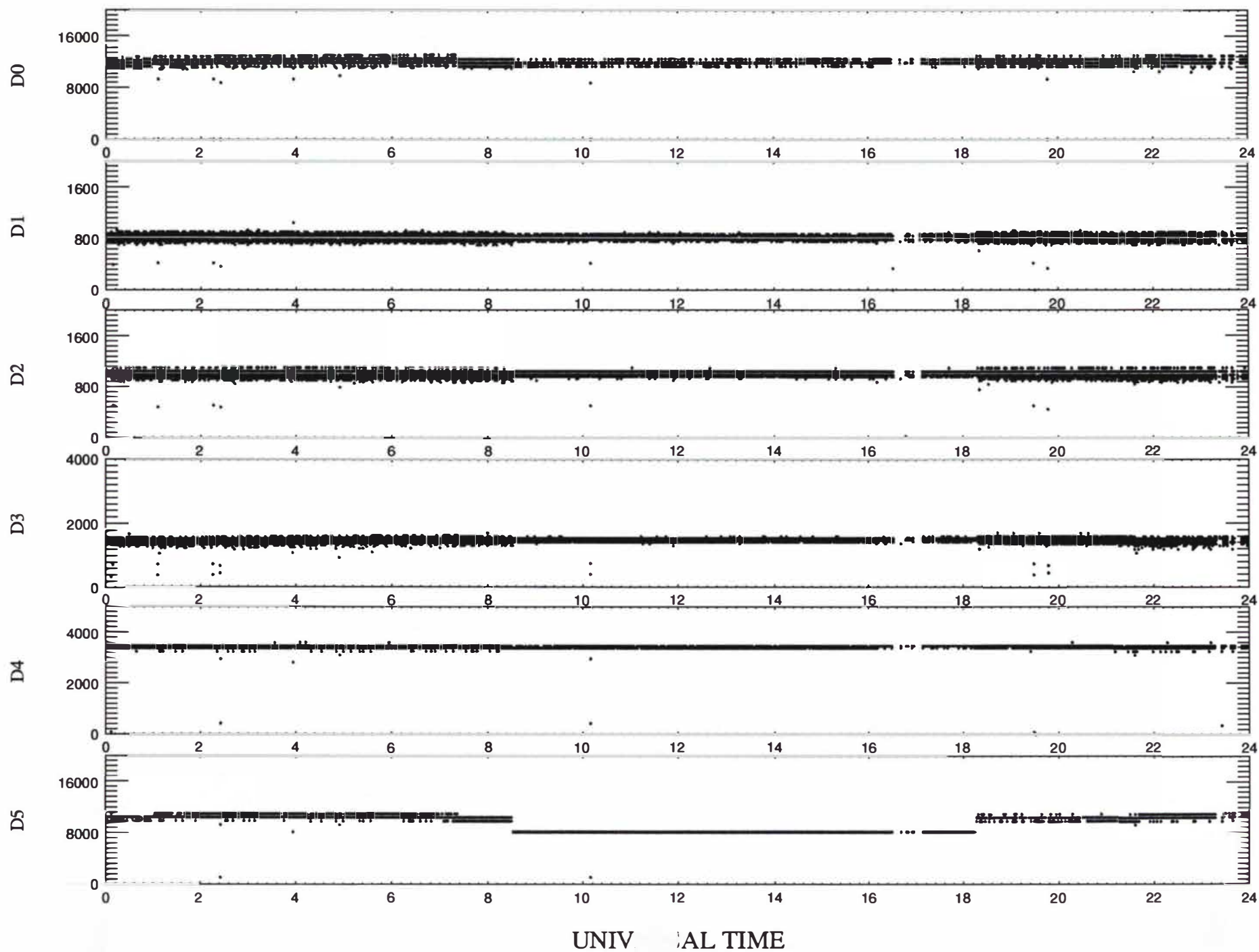
NO BURST (1)



CALIBRATION DATA INCLUDED



UNIVI AL TIME



From DEAL@fender.msfc.nasa.gov Thu Aug 18 09:18 PDT 1994
Date: Thu, 18 Aug 1994 11:18:21 -0500 (CDT)
From: DEAL@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3128

BATSEARCH PROGRAM

BATSE BURST # 3128
EVENT OF 1994 AUG 17 DAY OF YEAR=229
EVENT CROSSING TIME AT BATSE : 31215. S. OR 08:40:15.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 279.000 3.000
BATSE PEAK COUNTING RATE: 40000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 17/ 8/ 94 IS:
RA= 139.534 DEC= -44.610 DIST= 2.855 AU
BATSE-ULYSSES DISTANCE = 427070053. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 54.75 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 822.08 SECS.
CROSSING TIME AT ULYSSES IS 32037. S. OR 08:53:57 +/- 264.47 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 17/ 8/ 94 IS:
RA= 90.138 DEC= 23.631 DIST= 1.843 AU
MARS-BATSE DISTANCE = 275729984. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 27.99 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 812.12 SECS.
CROSSING TIME AT MARS IS 32027. S. OR 08:53:47 +/- 87.29 SECONDS

Trigger

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3128	940817	9581	31215	40000	279	+03

BATSE BURST TRIGGER
NO.: 03128

TIME: TJD=9581 SECONDS=31215

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=167.2 AZIMUTH=119.7 ERROR= DEGREES

COMMENTS:
BURST LASTING APPROX. 30S. VISIBLE ABOVE 300KEV.

Helio corr removed

Date: Feb 3 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution? *No - bad starts*

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T₀?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

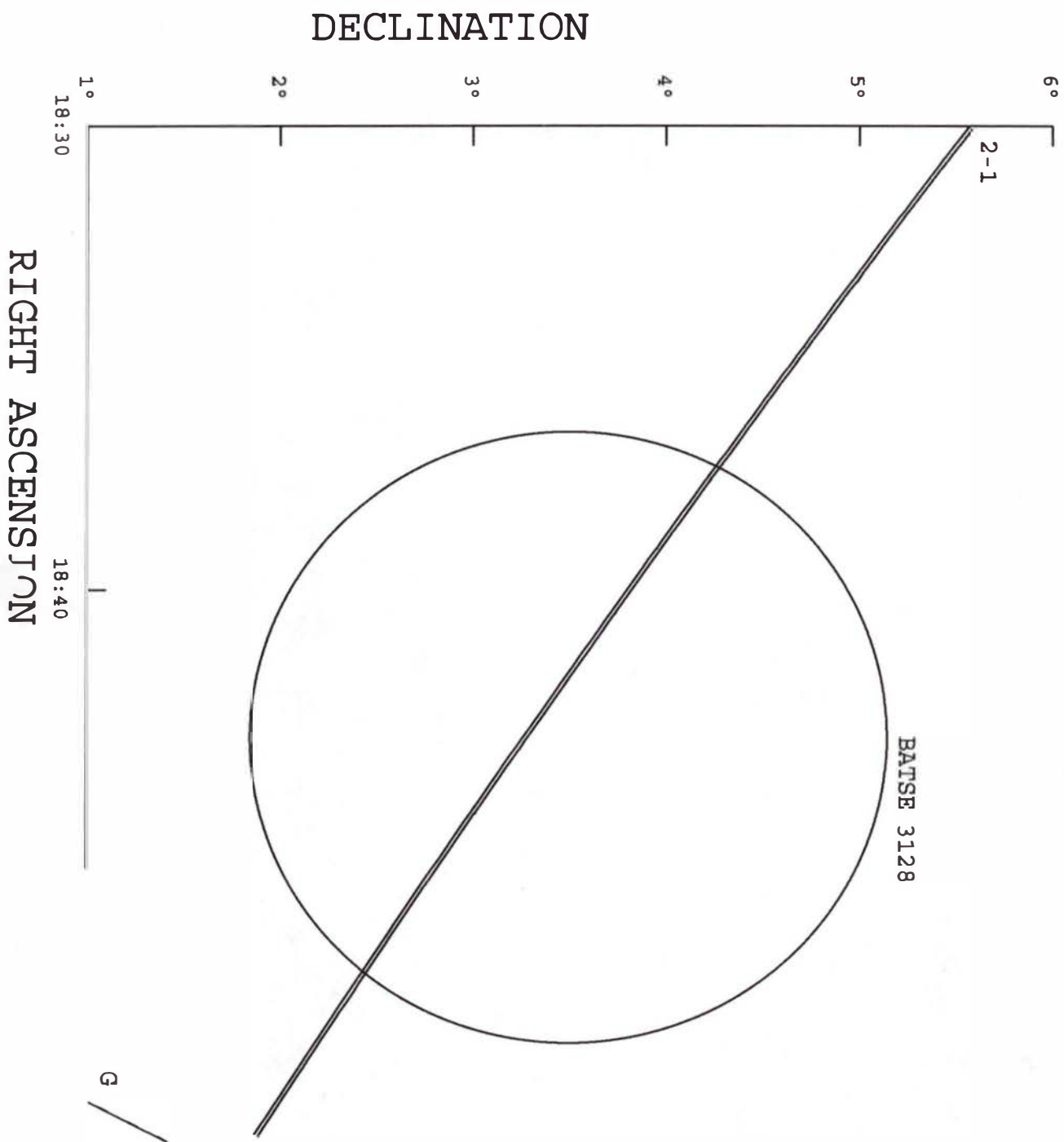
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 17, 1994 8:54

3 / 2/98



ULYSSES

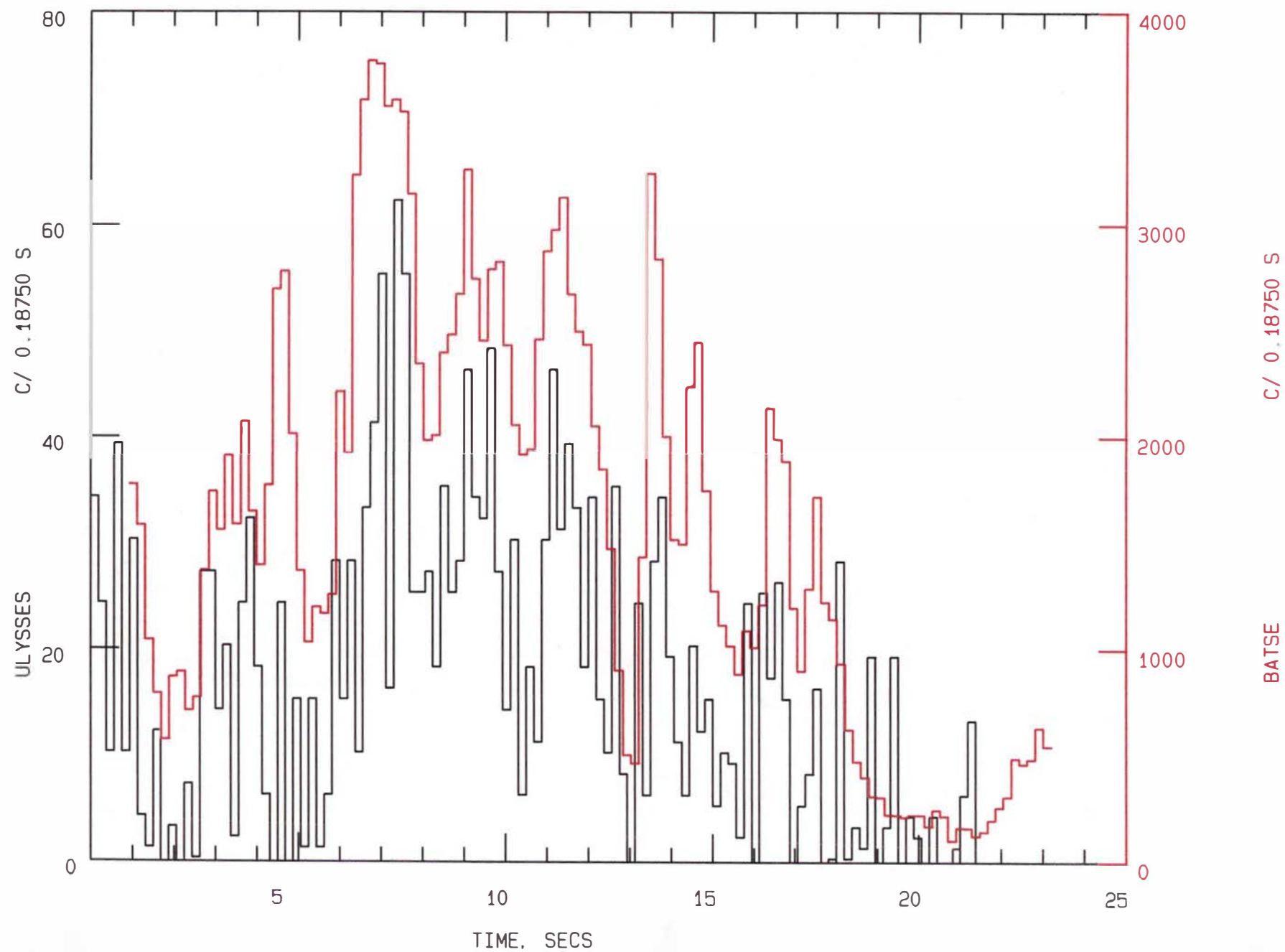
-BATSE

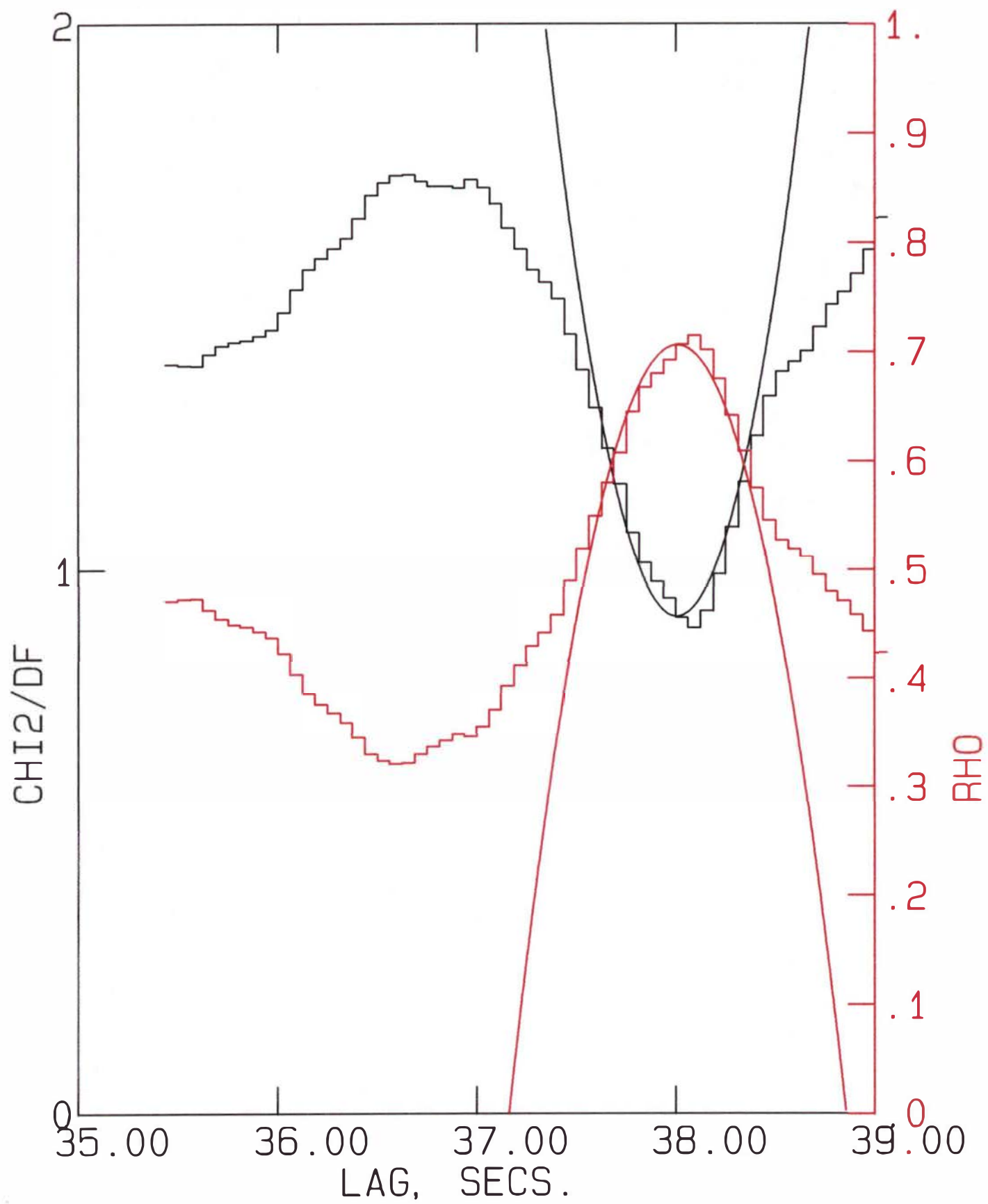
CORRELATION

17/08/94

32098.344

3/ 2/98





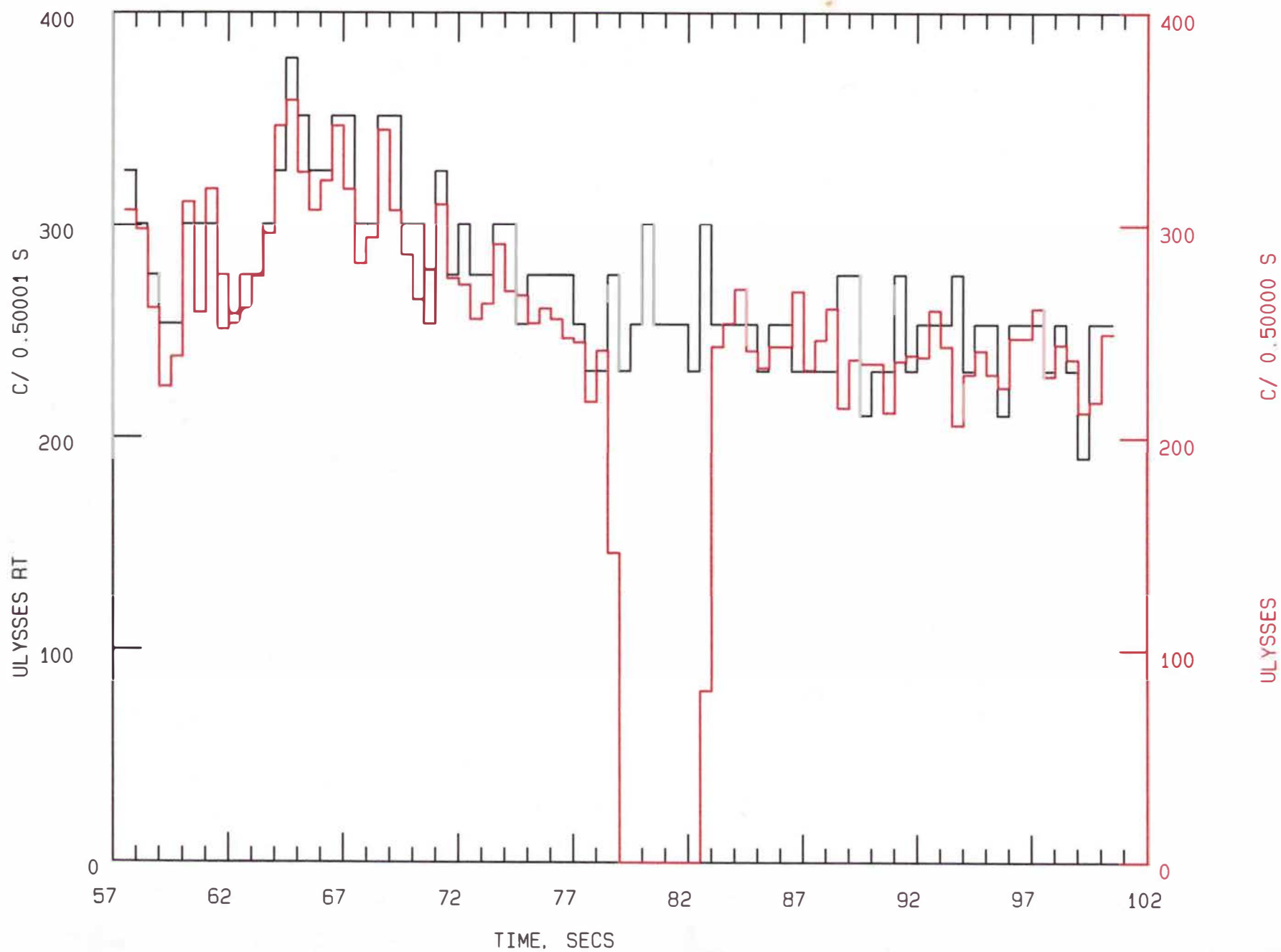
ULYSSES RT-ULYSSES

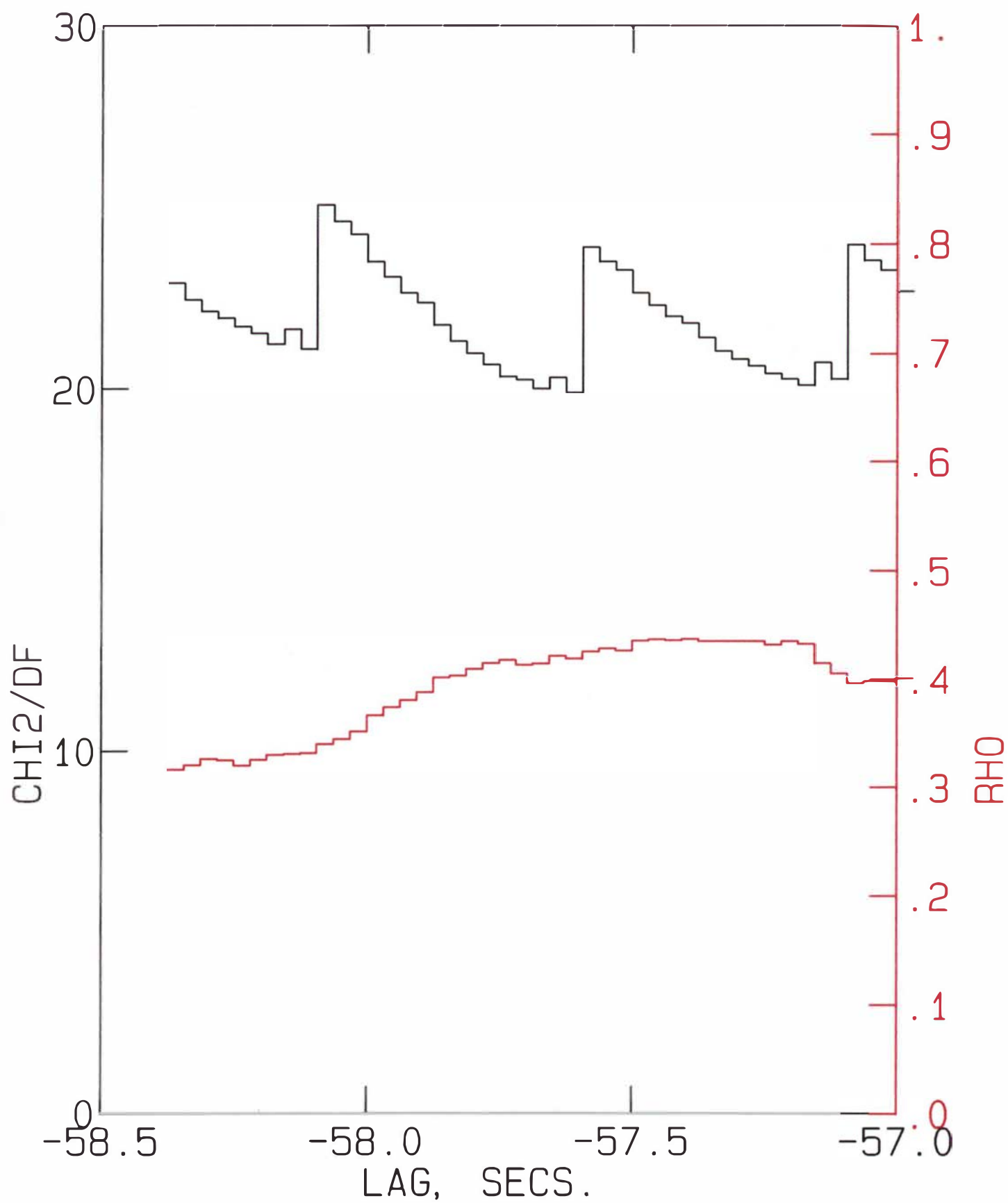
CORRELATION

17/ 8/94

32033.342

3/ 2/98

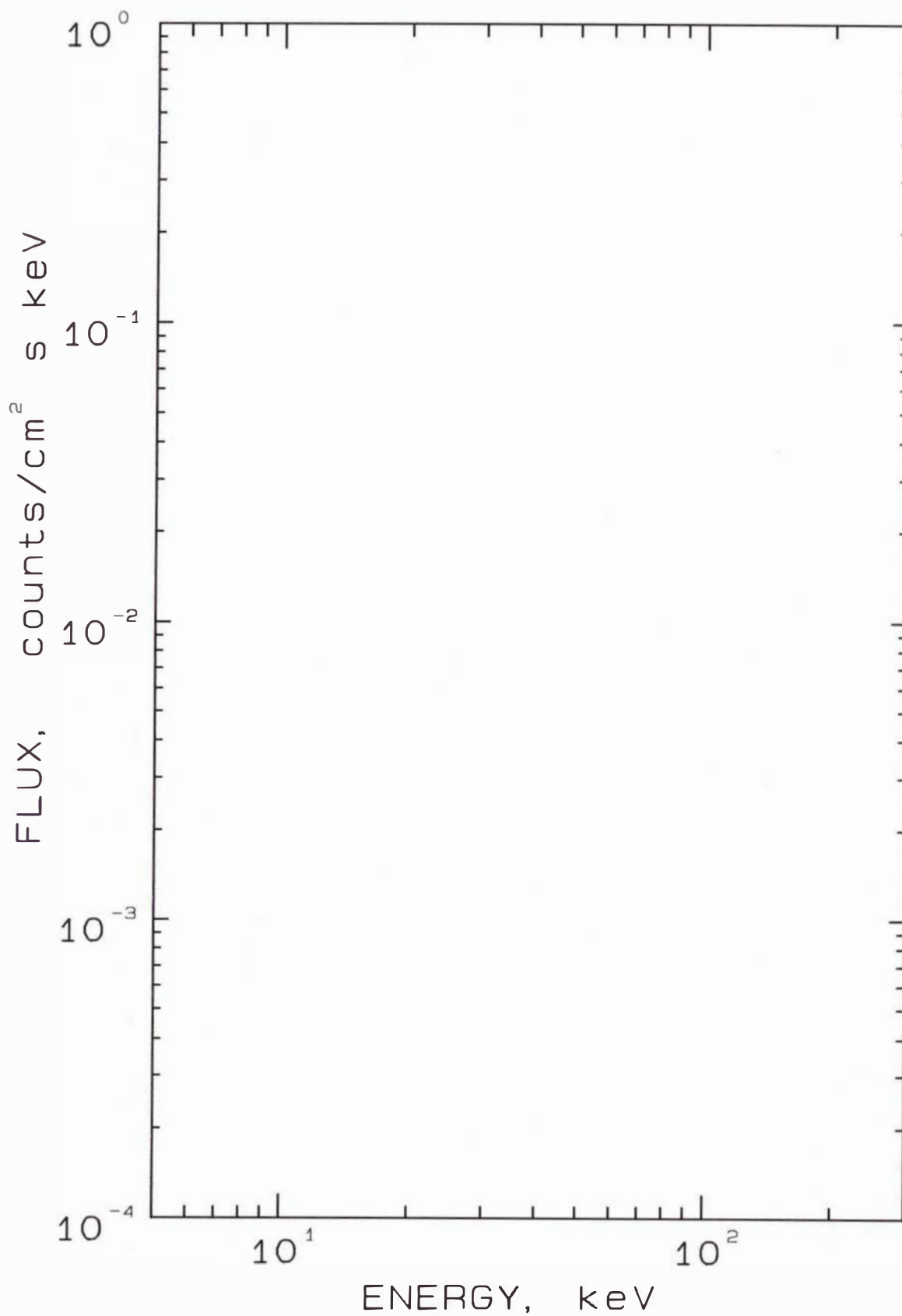




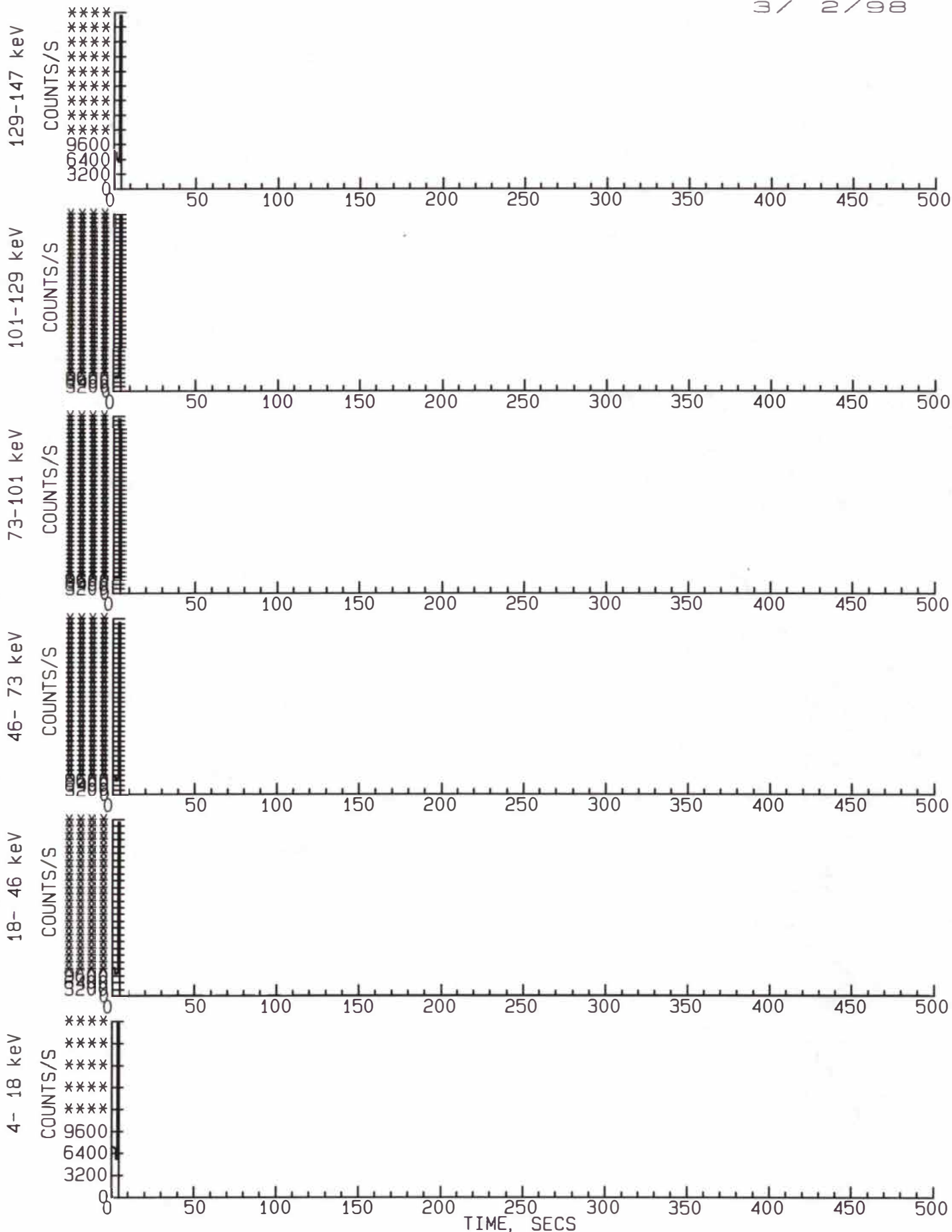
ULYSSES 17/08/94 32098.342

3/ 2/98

SPECTRUM INTEGRATED OVER 63.6 SECONDS, INTERVALS 2 TO 34



ULYSSES 17/08/94 32098.342 BURST SPECTRAL COUNT RATES



ULYSSES

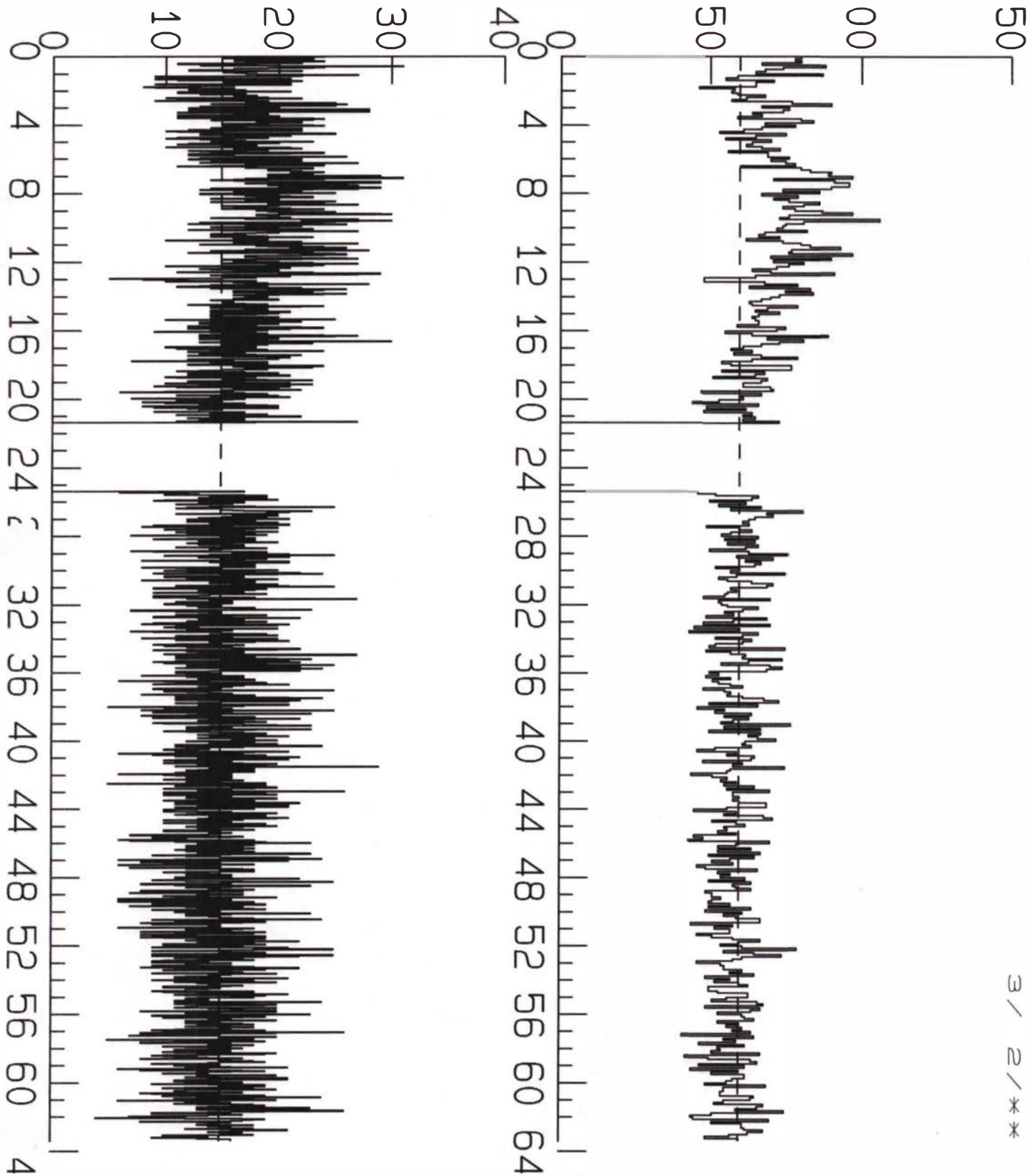
17/08/94

Ttrig=32098.344

22- 148 keV

COUNTS/0.031 S

COUNTS/0.125 S



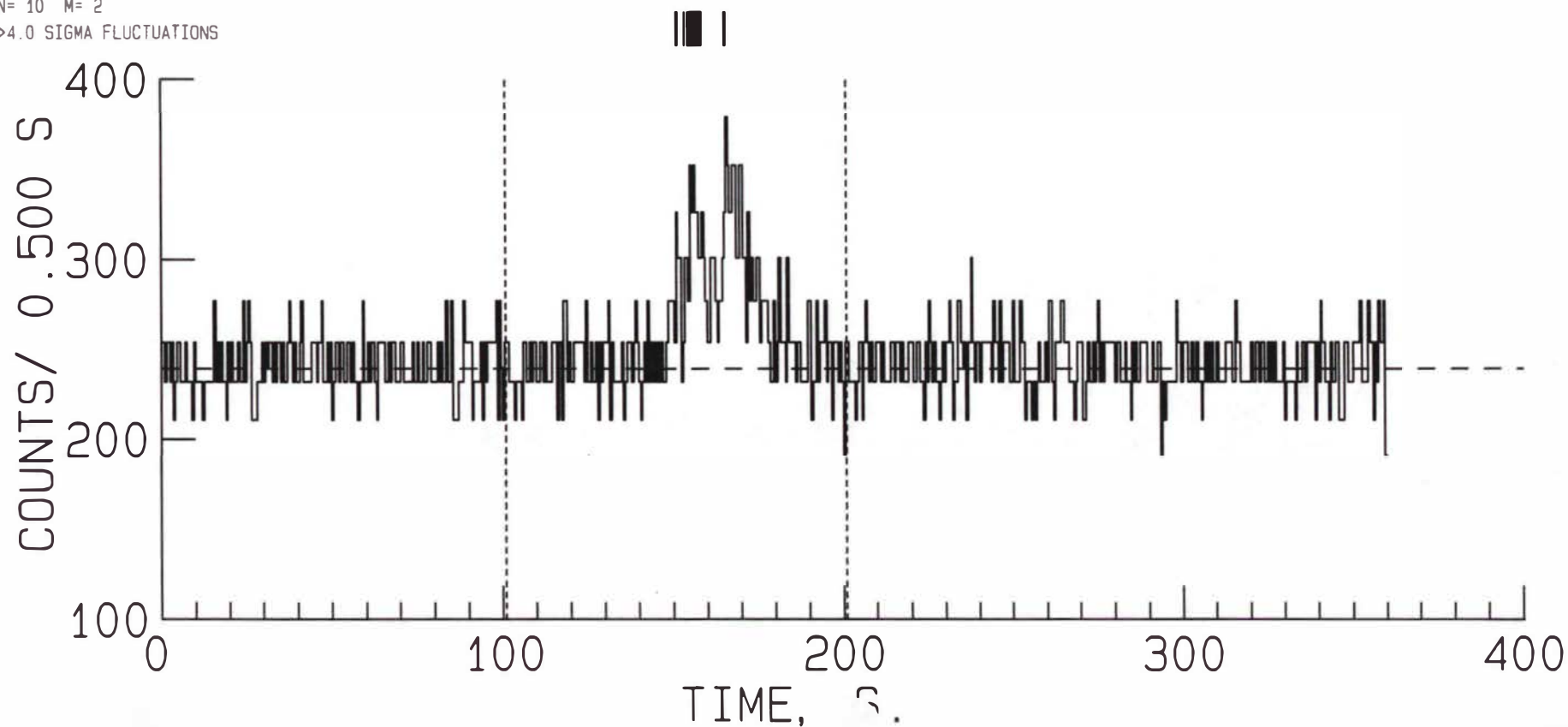
ULYSSES RT

3 / 2 / 98

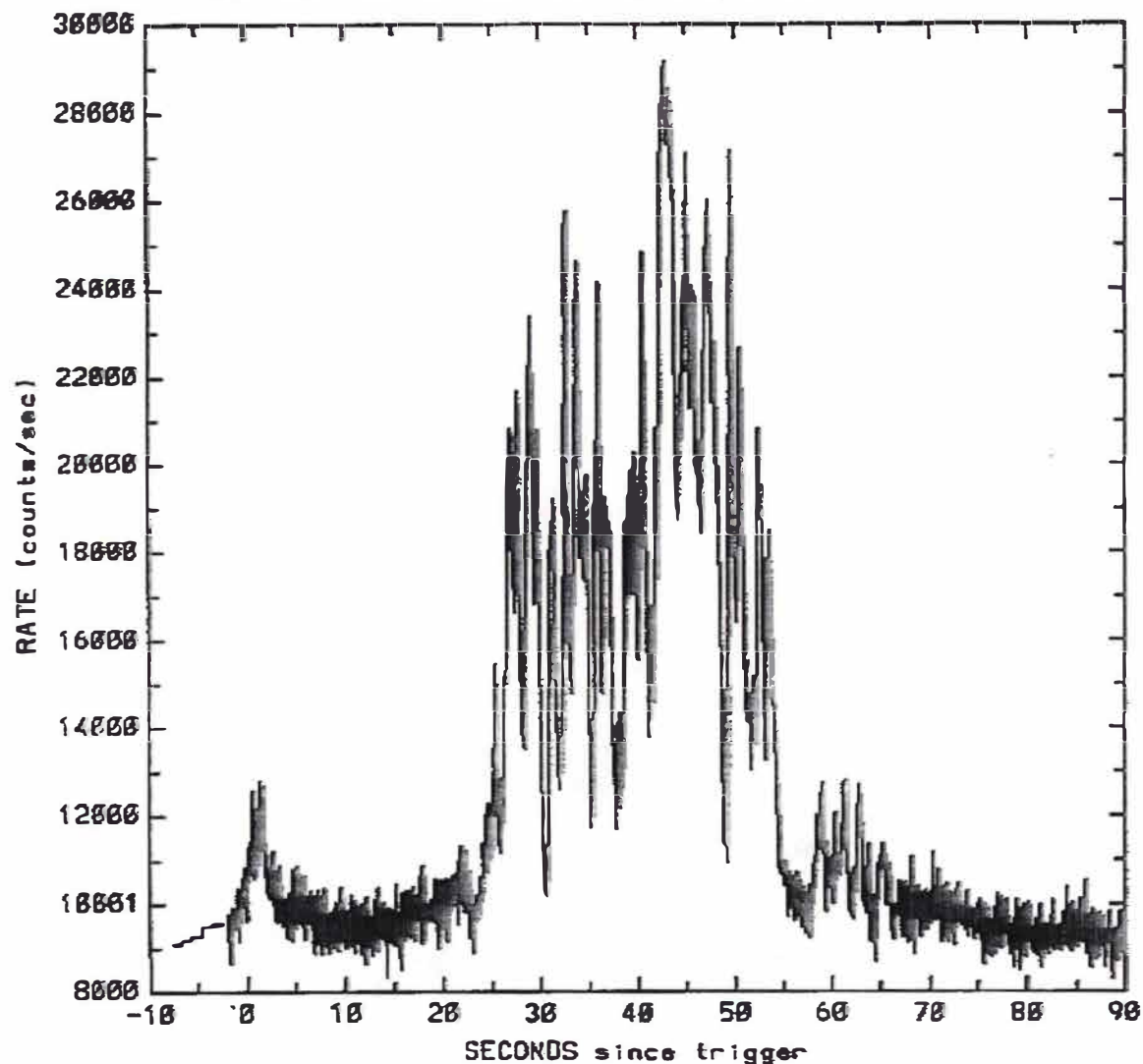
17 / 8 / 94 31932.349 s

22- 148 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



DISCSC Data for K. Hurley, No. 3128

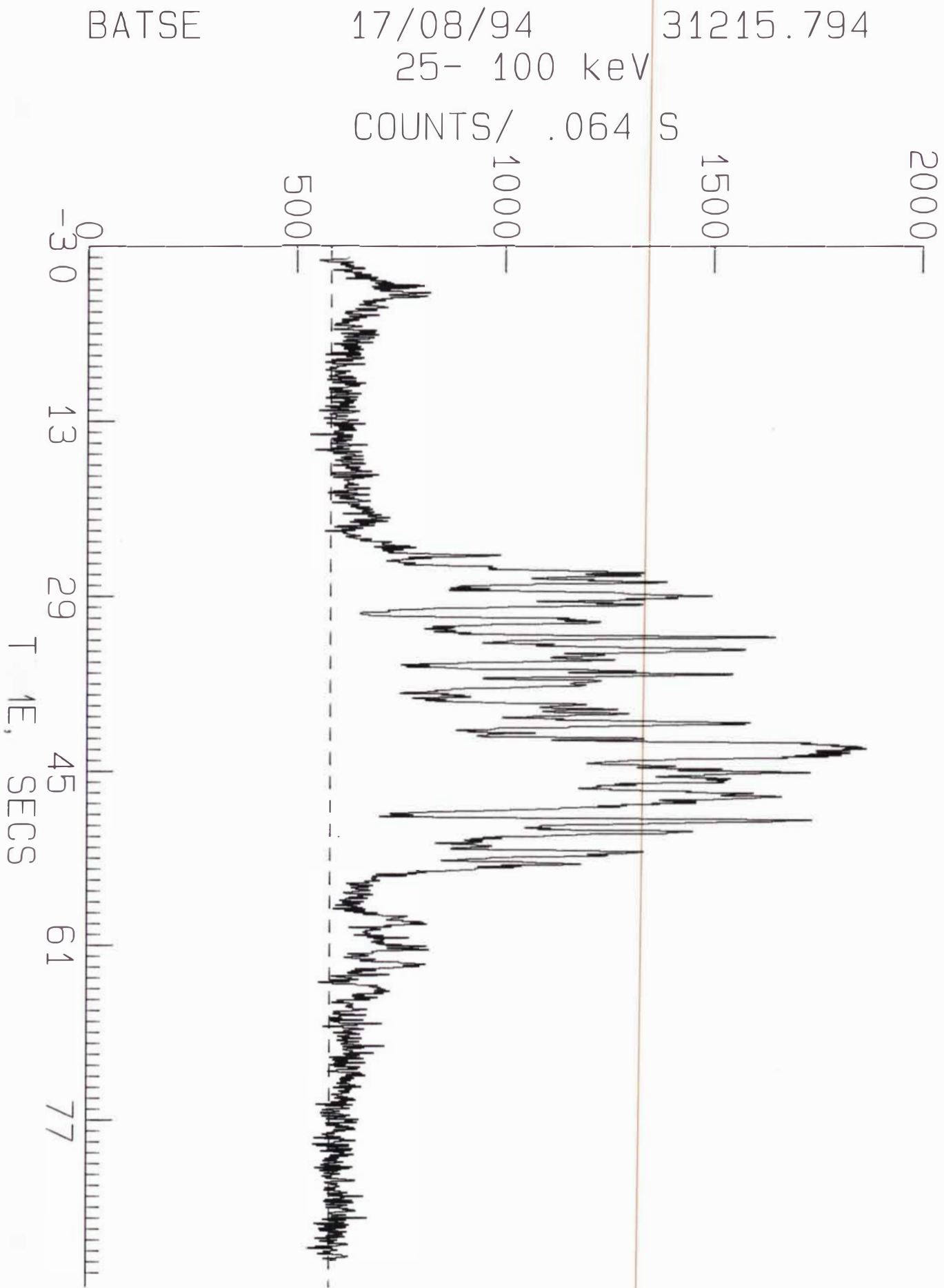


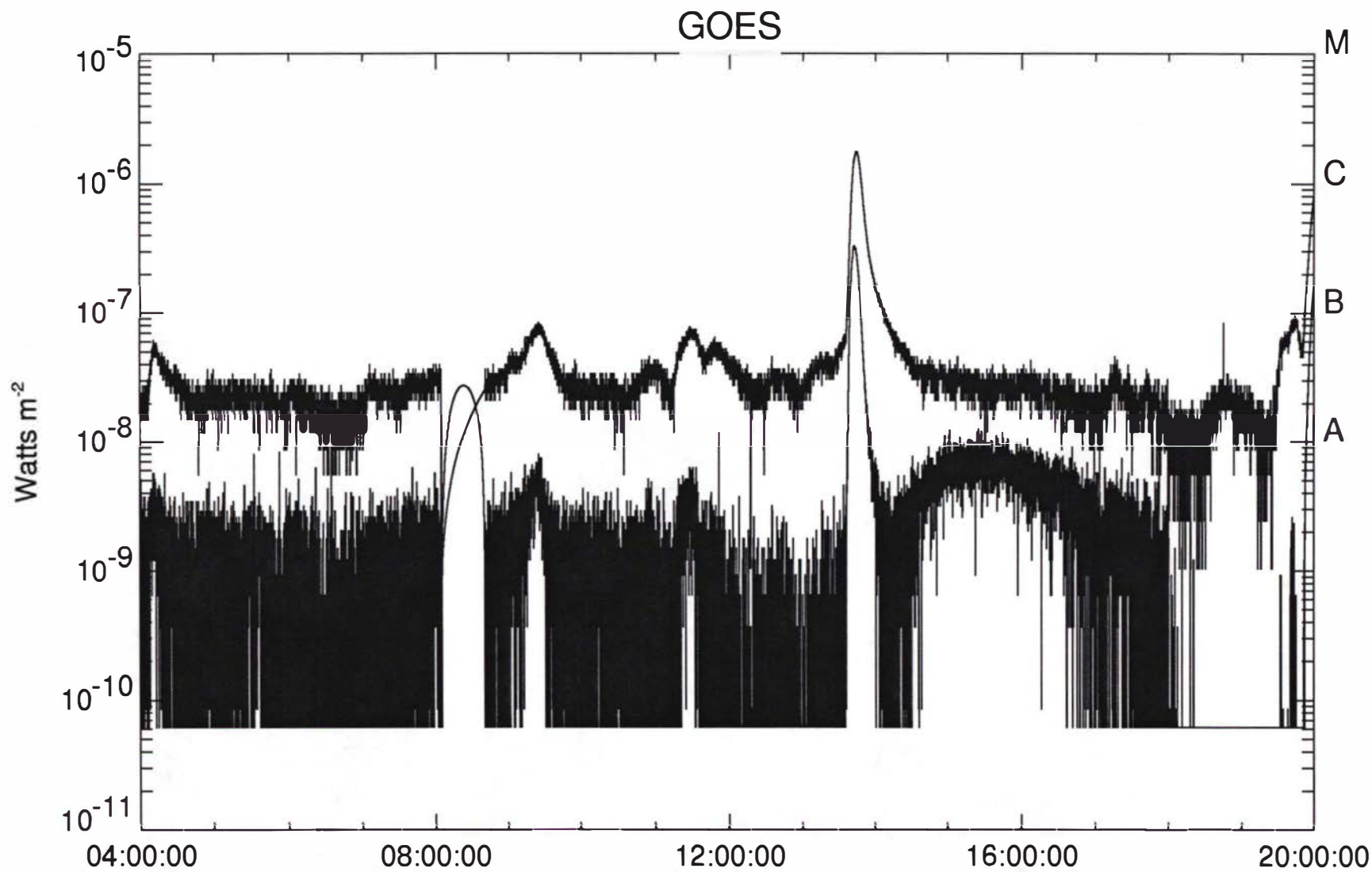
26-OCT-1994 13:57:58

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger #: 3128

Trigger Time:
9581 / 31215.794Burst Data Type:
DISCSCDeadtime
Corrected: K
Background Data
Type: PREB + DISCLA
Minimum Integ. Time:
0.064 secondsDetectors [7..6]:
7-5---1-Discriminators:
(1..2)Quality Mask:
B01SP1





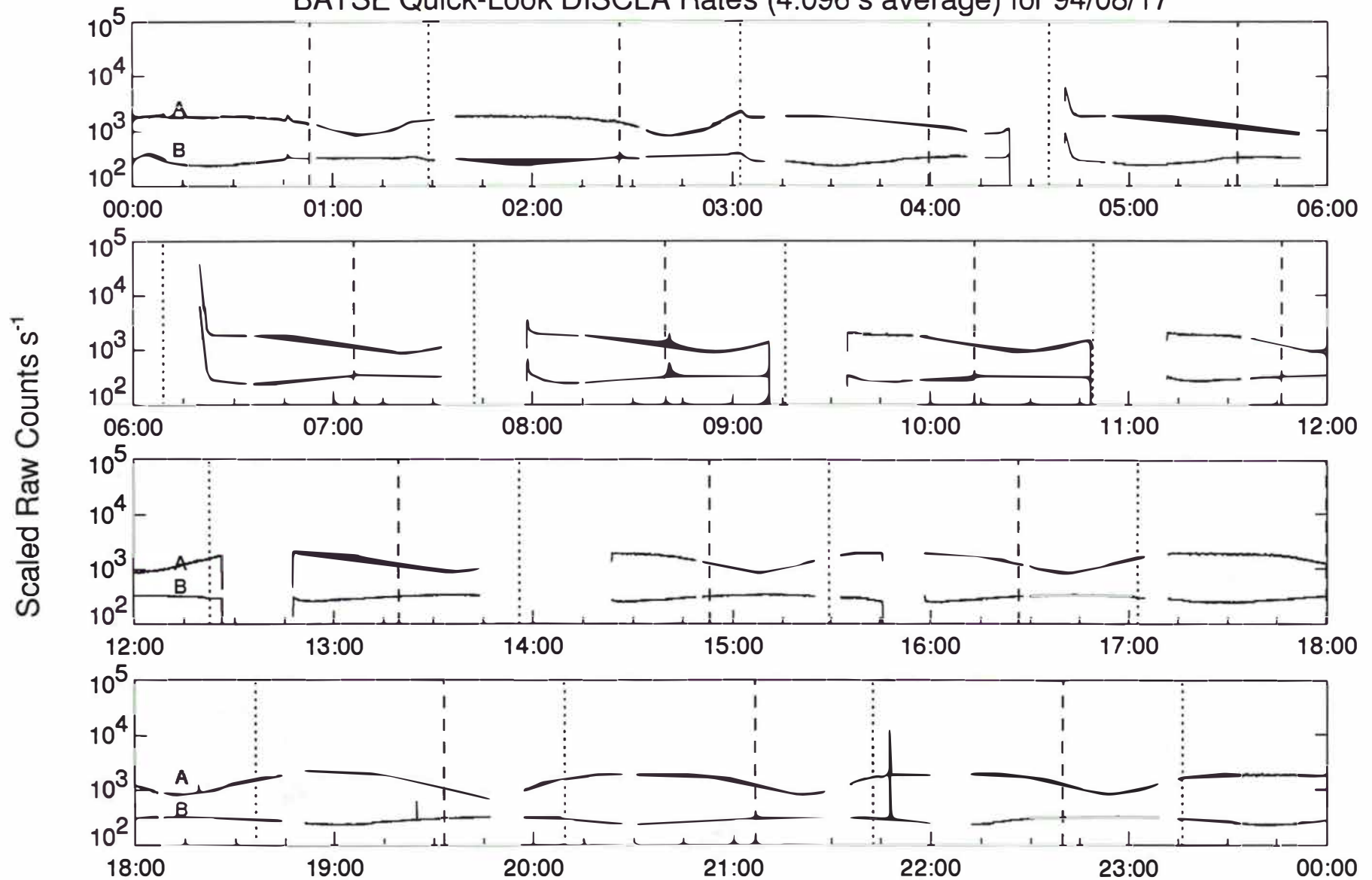
Data Start: 94/08/17, 0000:00

Plot created: 94/08/25, 1351

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/17

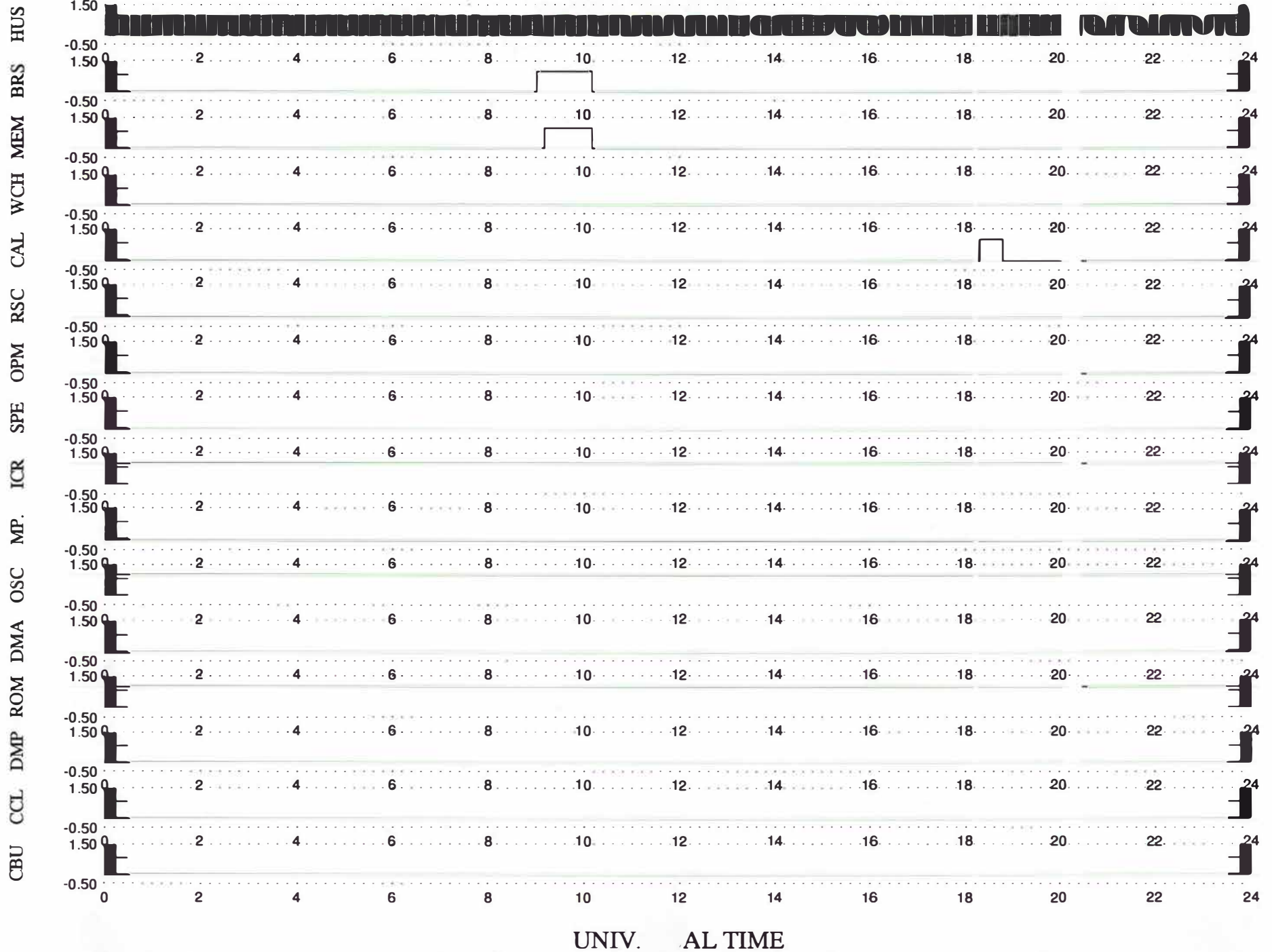


Current Time: 94/08/25, 1407 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

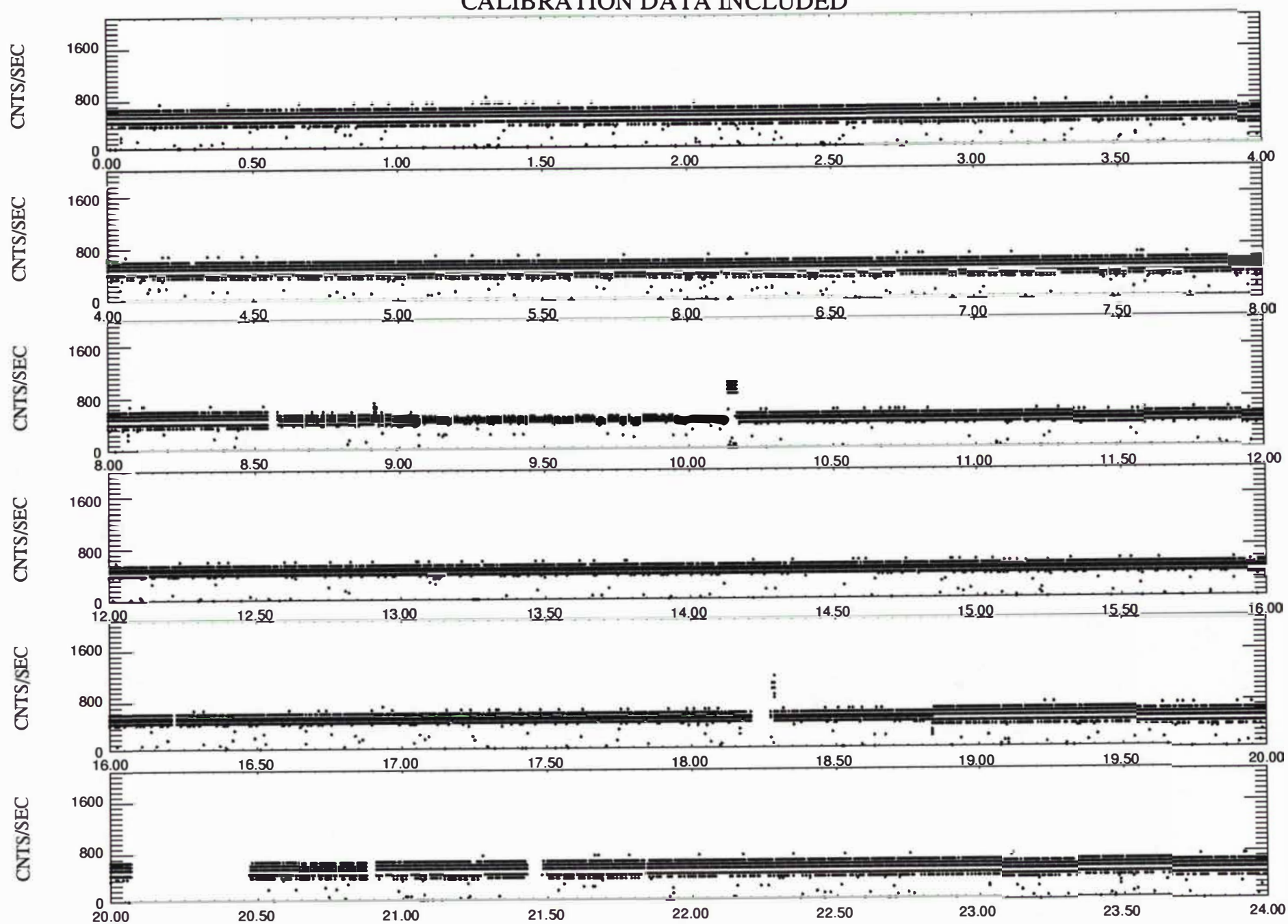
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 2

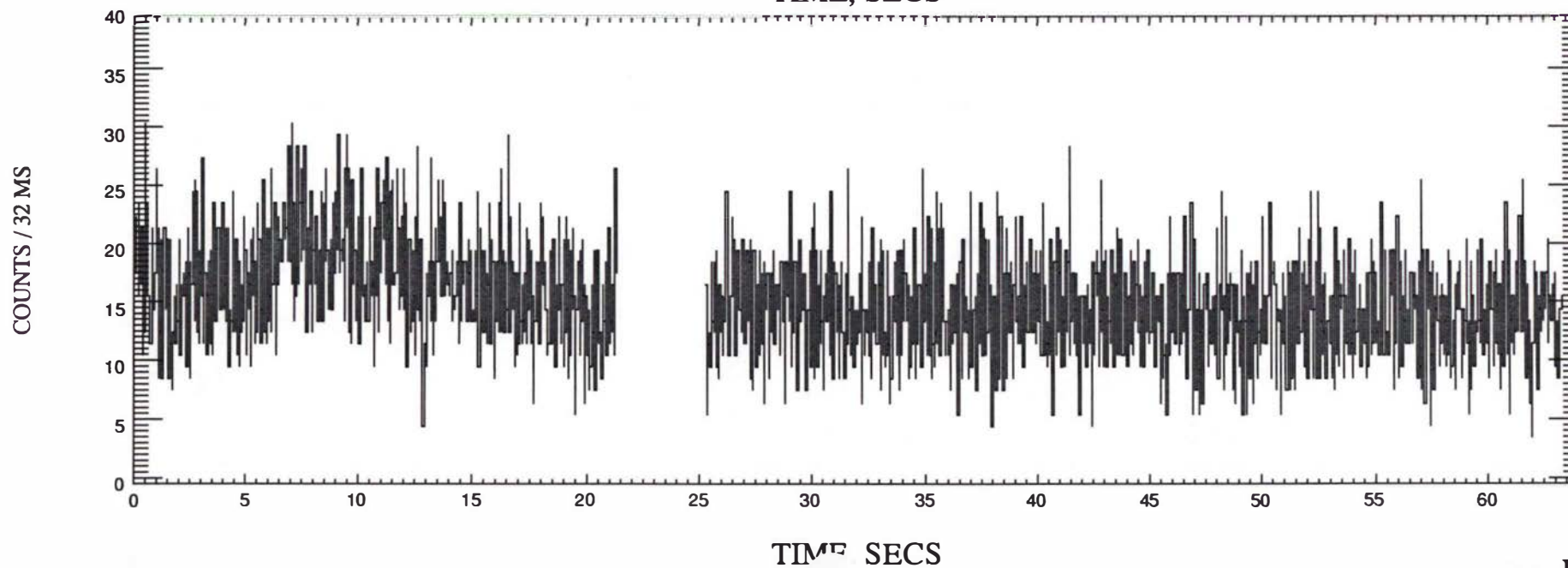
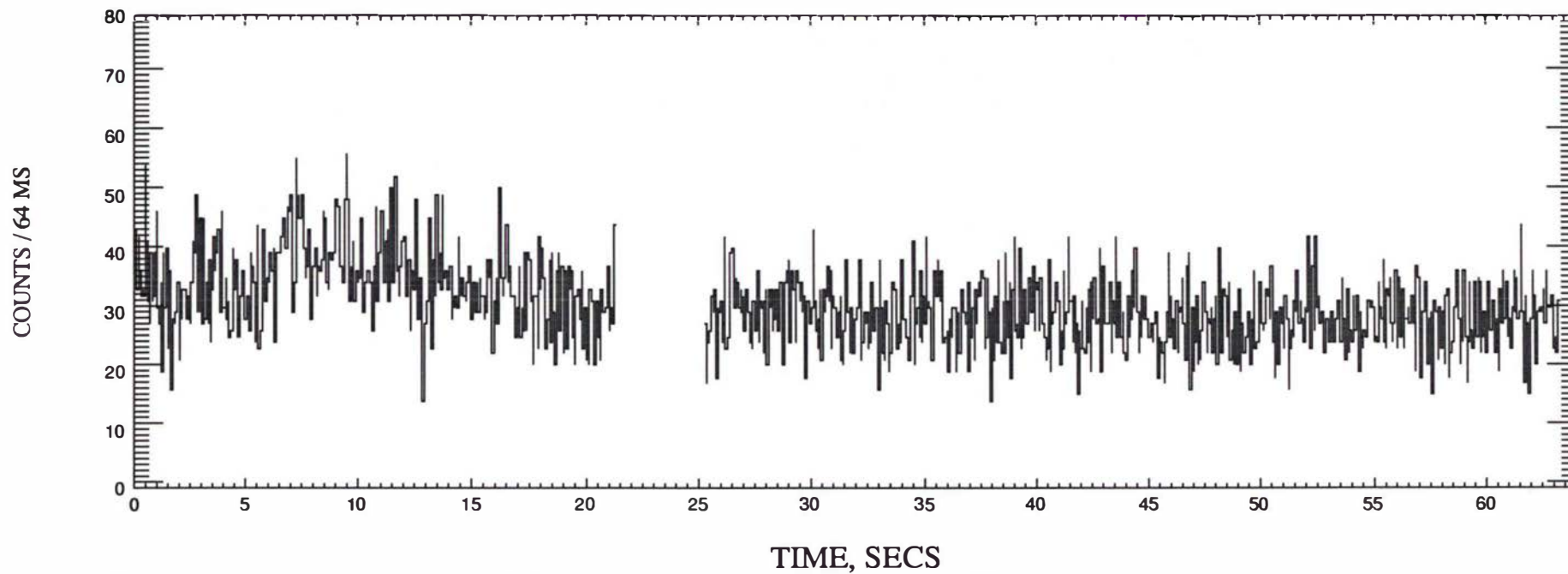


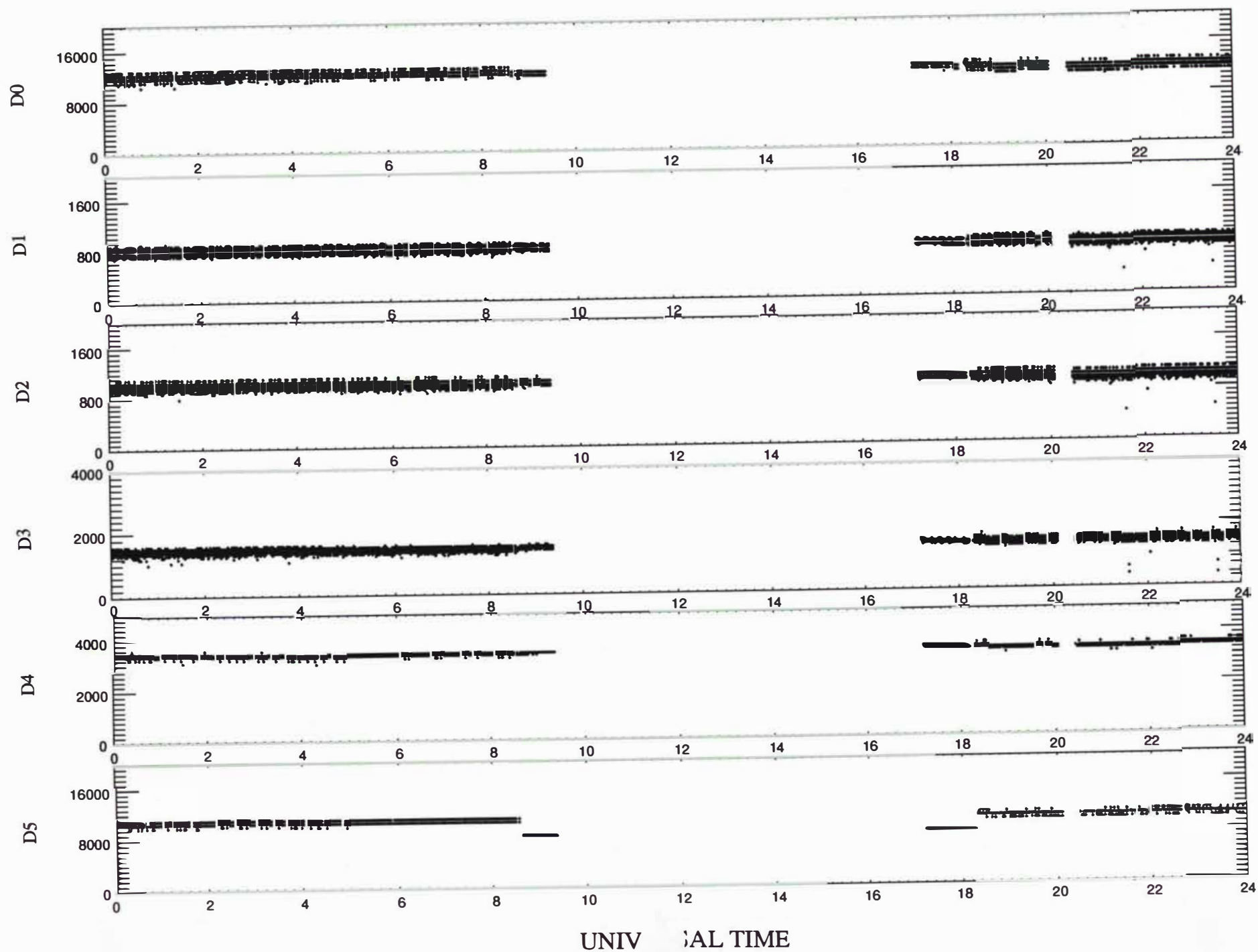
CALIBRATION DATA INCLUDED



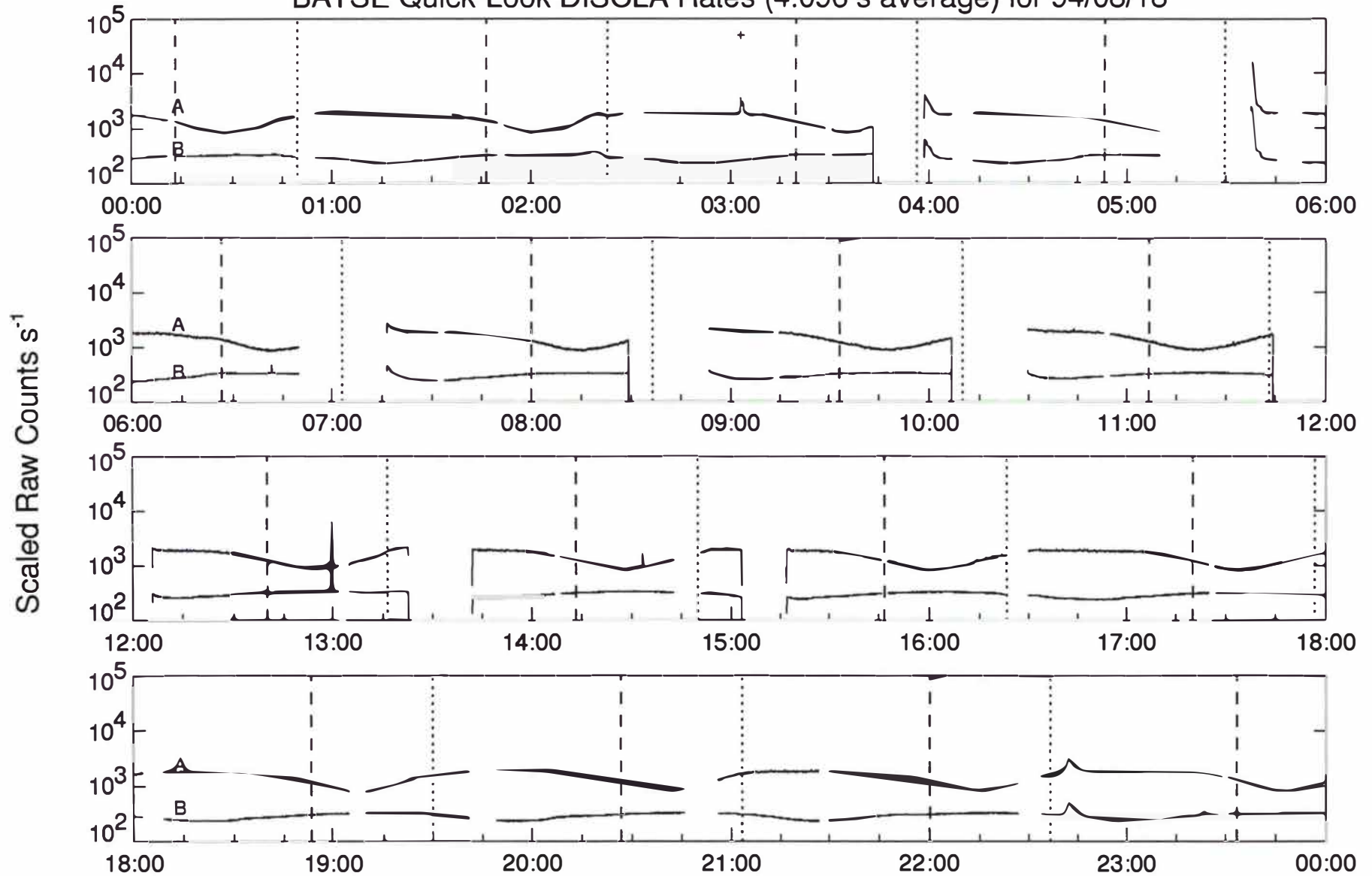
UNIVI AL TIME

Burst Counter 2 at UT= 8.916206105550 h=32098.342 s 08:54:58.342





BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/18



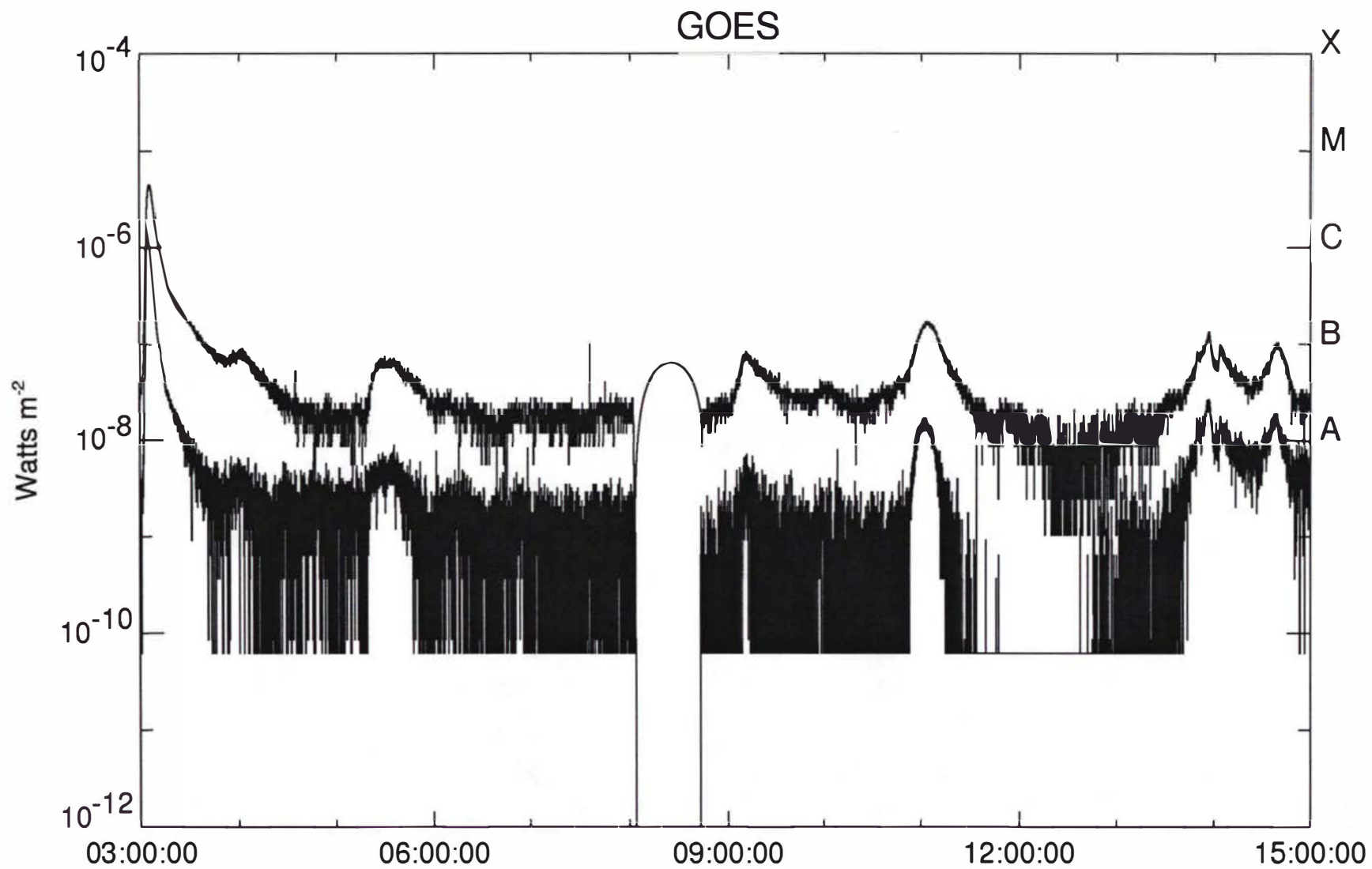
Current Time: 94/08/25, 1407 EDT

A: Channel 0 Most Sunward LAD

B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare



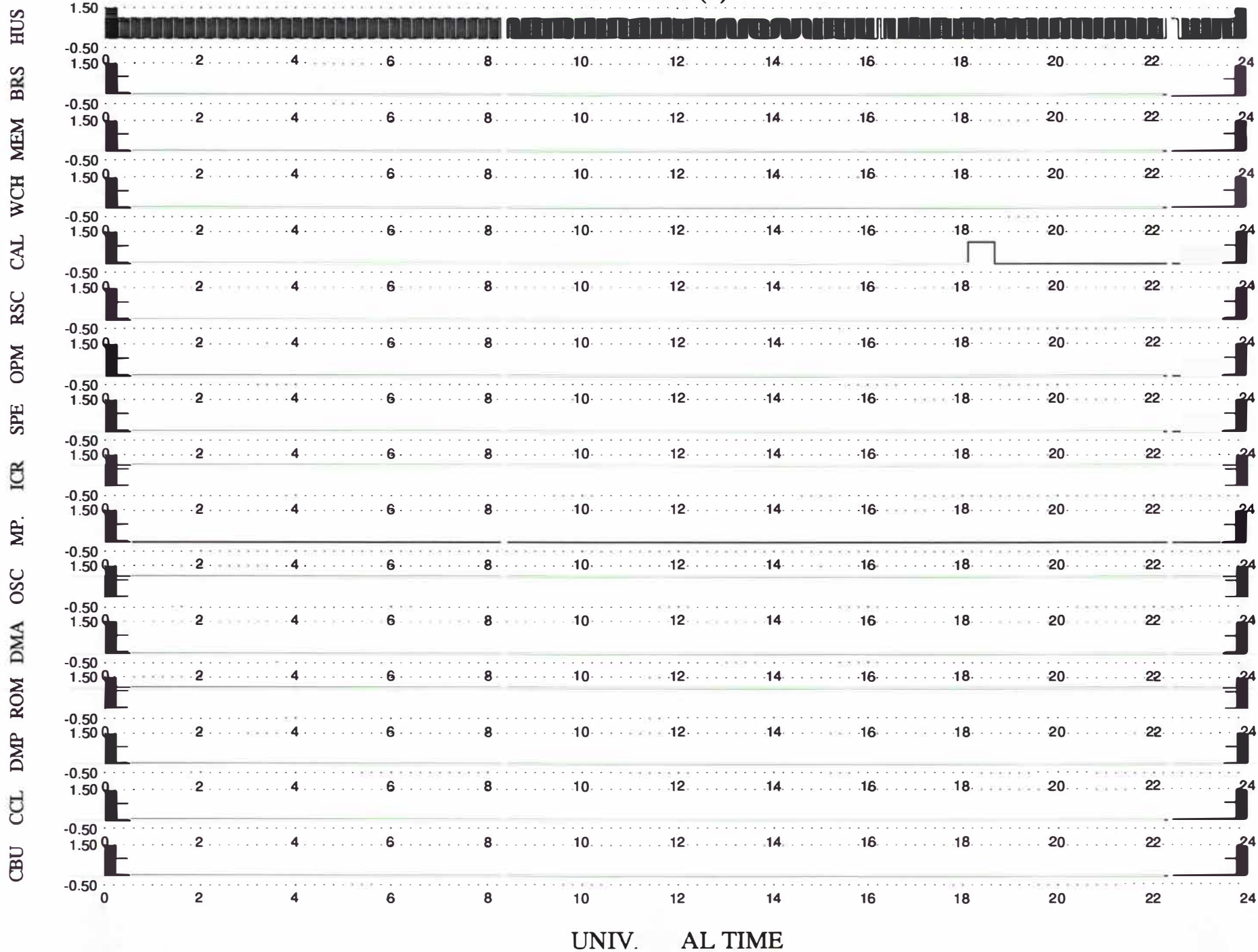
Data Start: 94/08/18, 0000:00

Plot created: 94/08/25, 1353

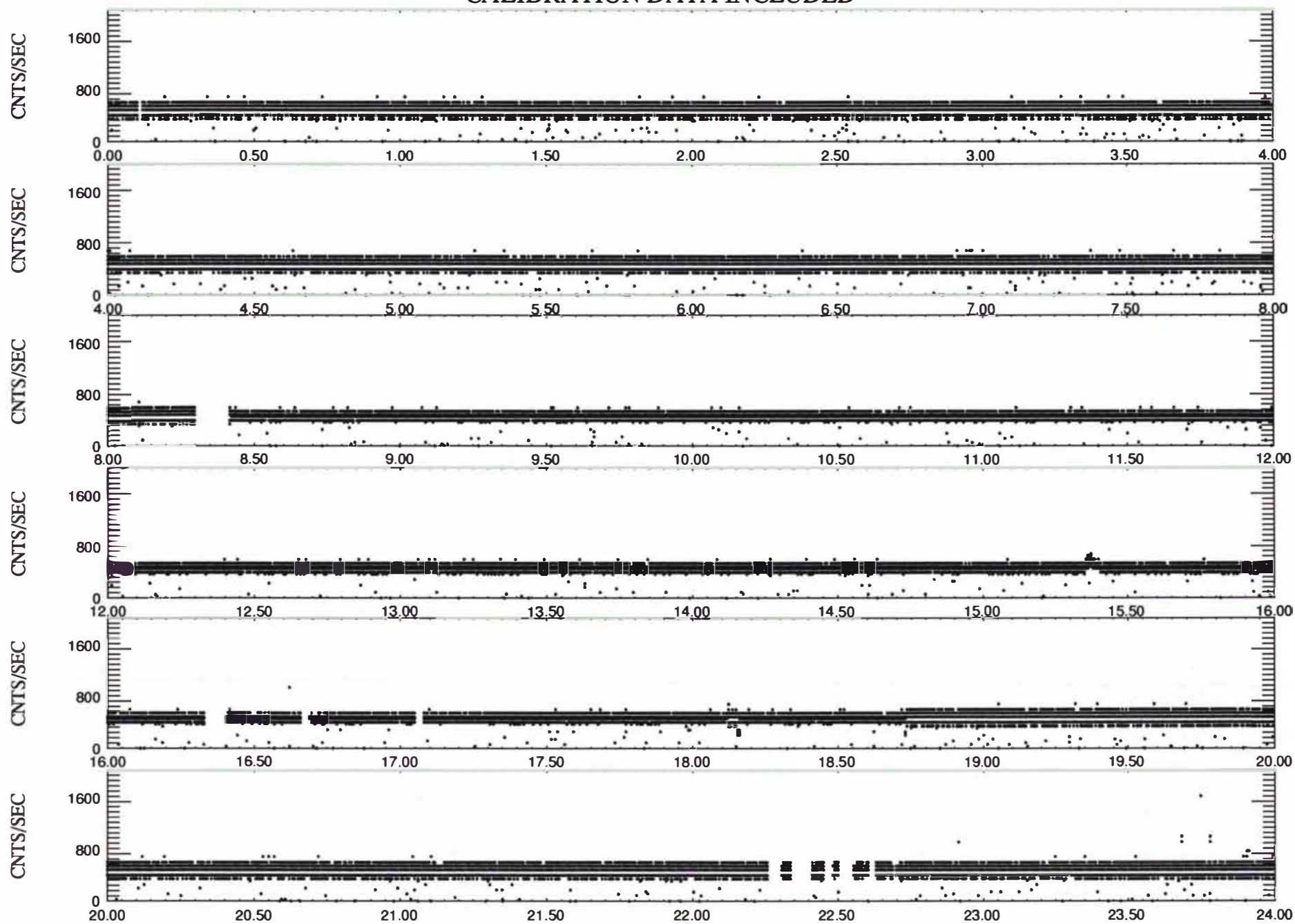
Channel 1 (1.0 - 8.0 Angstroms)
2 (0.5 - 4.0 Angstroms)

Background not subtracted
Background not subtracted

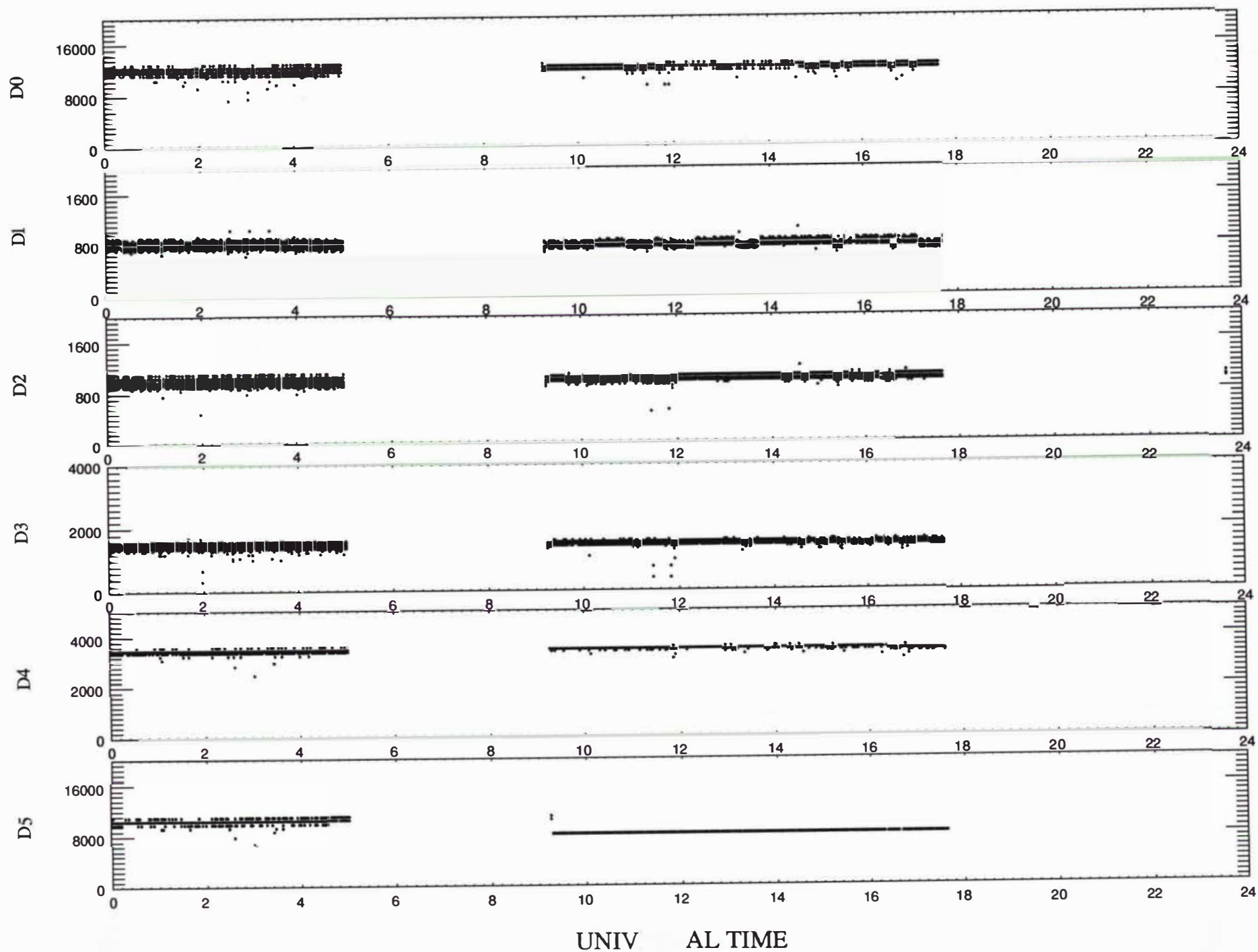
NO BURST (2)



CALIBRATION DATA INCLUDED



UNIV. AL TIME



From SHARIFF@ssl.msfc.nasa.gov Sat Aug 20 15:51 PDT 1994
Date: Sat, 20 Aug 1994 17:51:29 -0500 (CDT)
From: SHARIFF@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3129

BATSEARCH PROGRAM

BATSE BURST # 3129
EVENT OF 1994 AUG 19 DAY OF YEAR=231
EVENT CROSSING TIME AT BATSE : 85474. S. OR 23:44:34.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 161.000 -8.000
BATSE PEAK COUNTING RATE: 3000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 19/ 8/ 94 IS:
RA= 140.493 DEC= -45.197 DIST= 2.837 AU
BATSE-ULYSSES DISTANCE = 424453491. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=138.79 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1065.18 SECS.
CROSSING TIME AT ULYSSES IS 84409. S. OR 23:26:48 +/- 195.76 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 19/ 8/ 94 IS:
RA= 91.564 DEC= 23.653 DIST= 1.833 AU
MARS-BATSE DISTANCE = 274238976. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=105.23 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -240.37 SECS.
CROSSING TIME AT MARS IS 85234. S. OR 23:40:33 +/- 149.59 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3129	940819	9583	85474	3000	161	-08

BATSE BURST TRIGGER

NO.: 03129

TIME: TJD=9583 SECONDS=85474

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=072.9 AZIMUTH=313.1 ERROR= DEGREES

COMMENTS:

BURST, MULTIPLE PEAKS, LASTING ~20 SECONDS. NOT VISIBLE ABOVE 300KEV.

26 / 8 / 94

ULYSSES RT

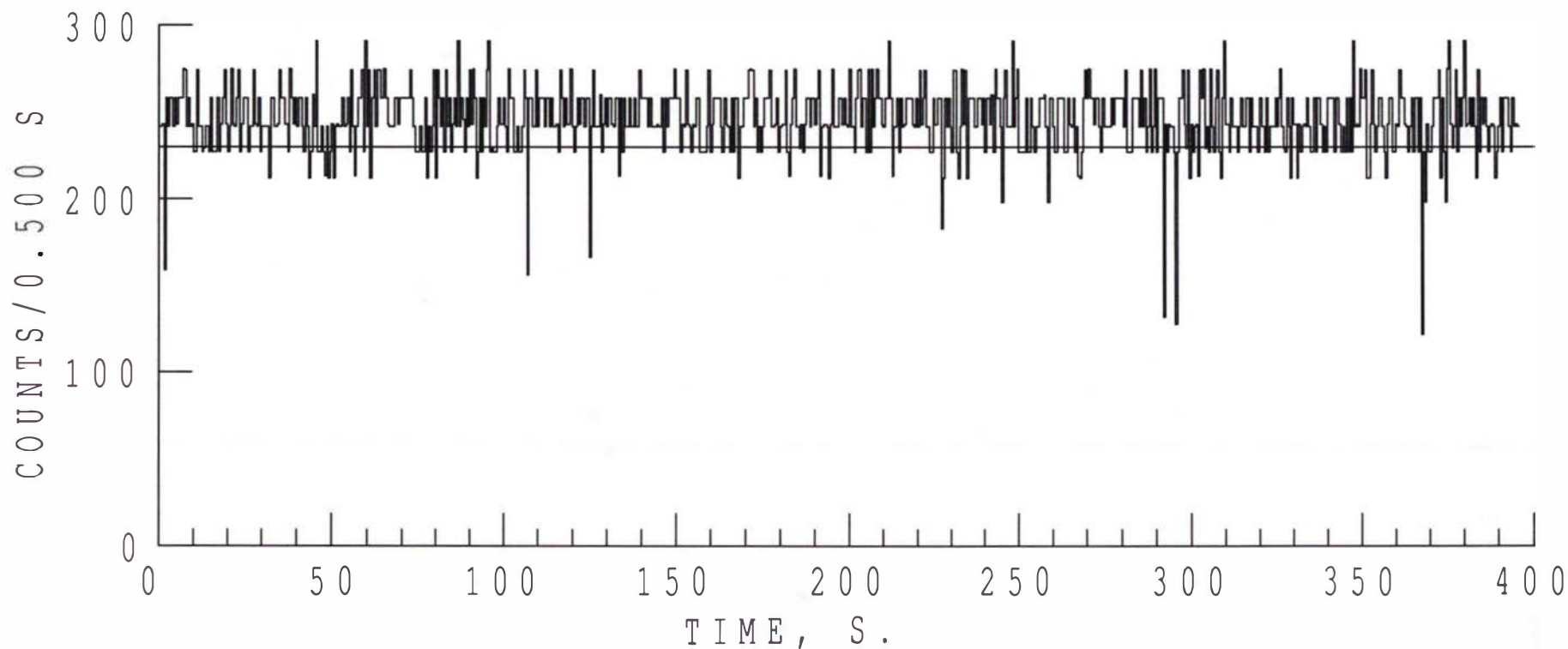
19 / 8 / 94 84204.016 s

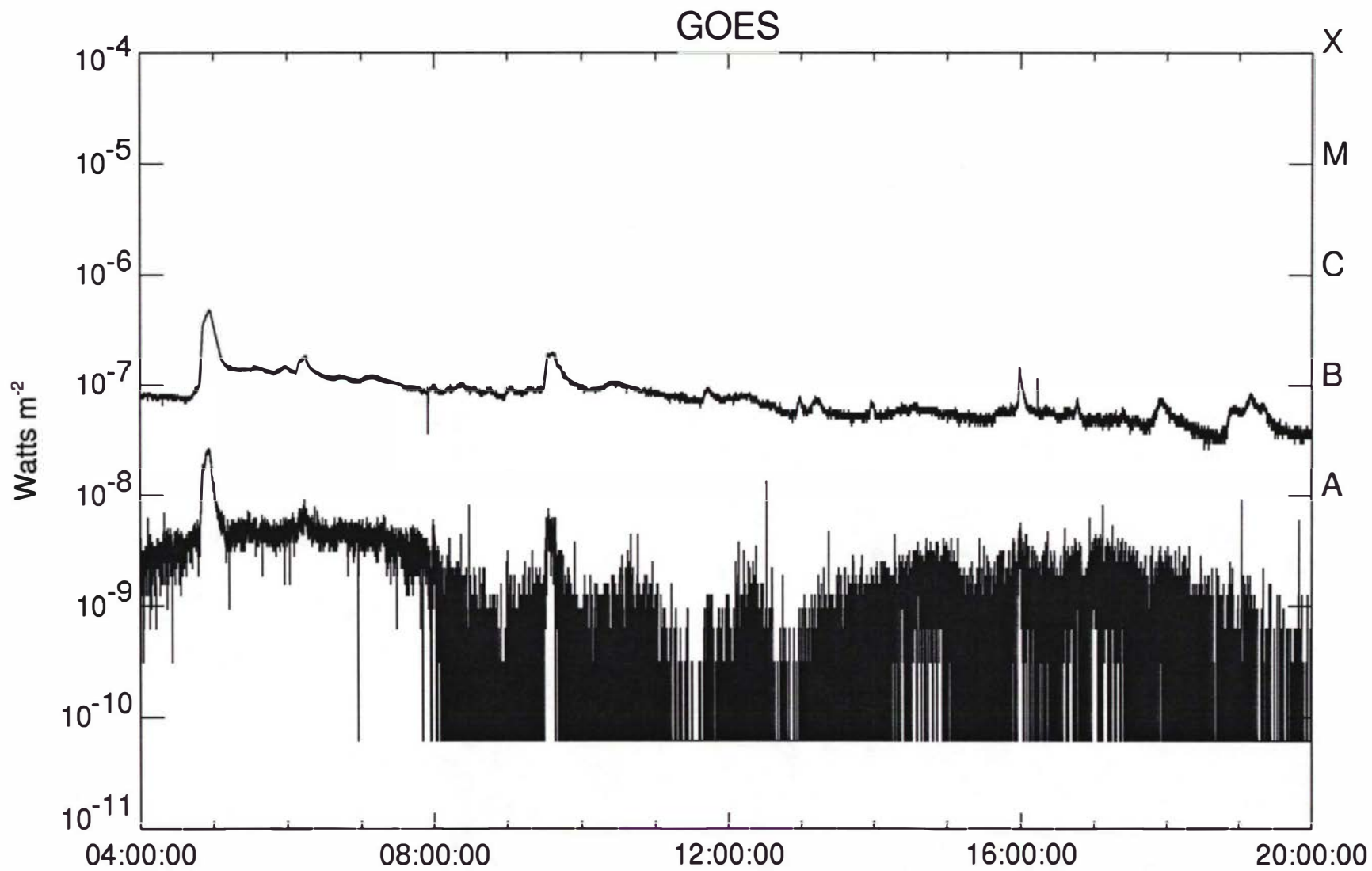
0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





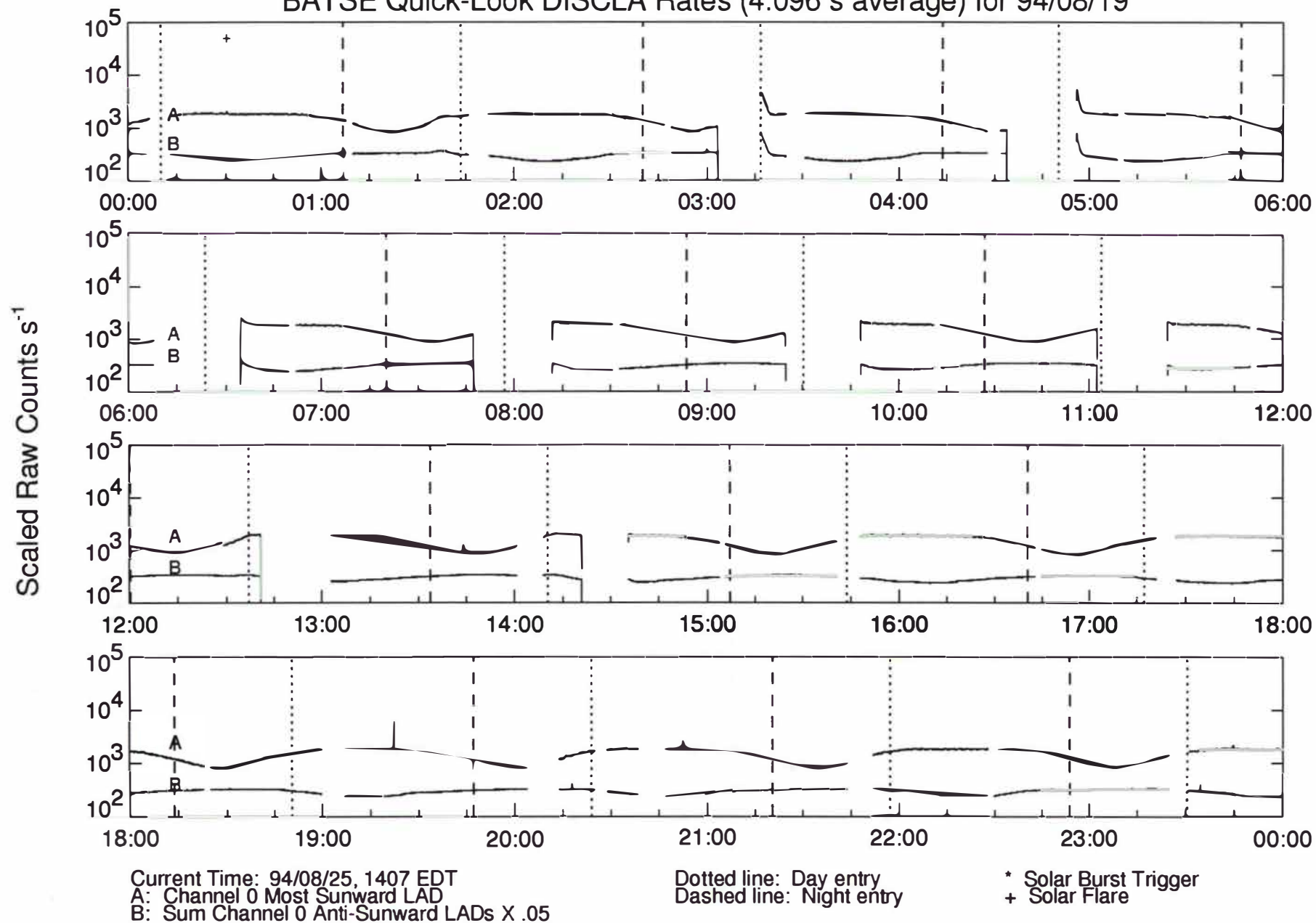
Data Start: 94/08/19, 0000:01

Plot created: 94/09/02, 1903

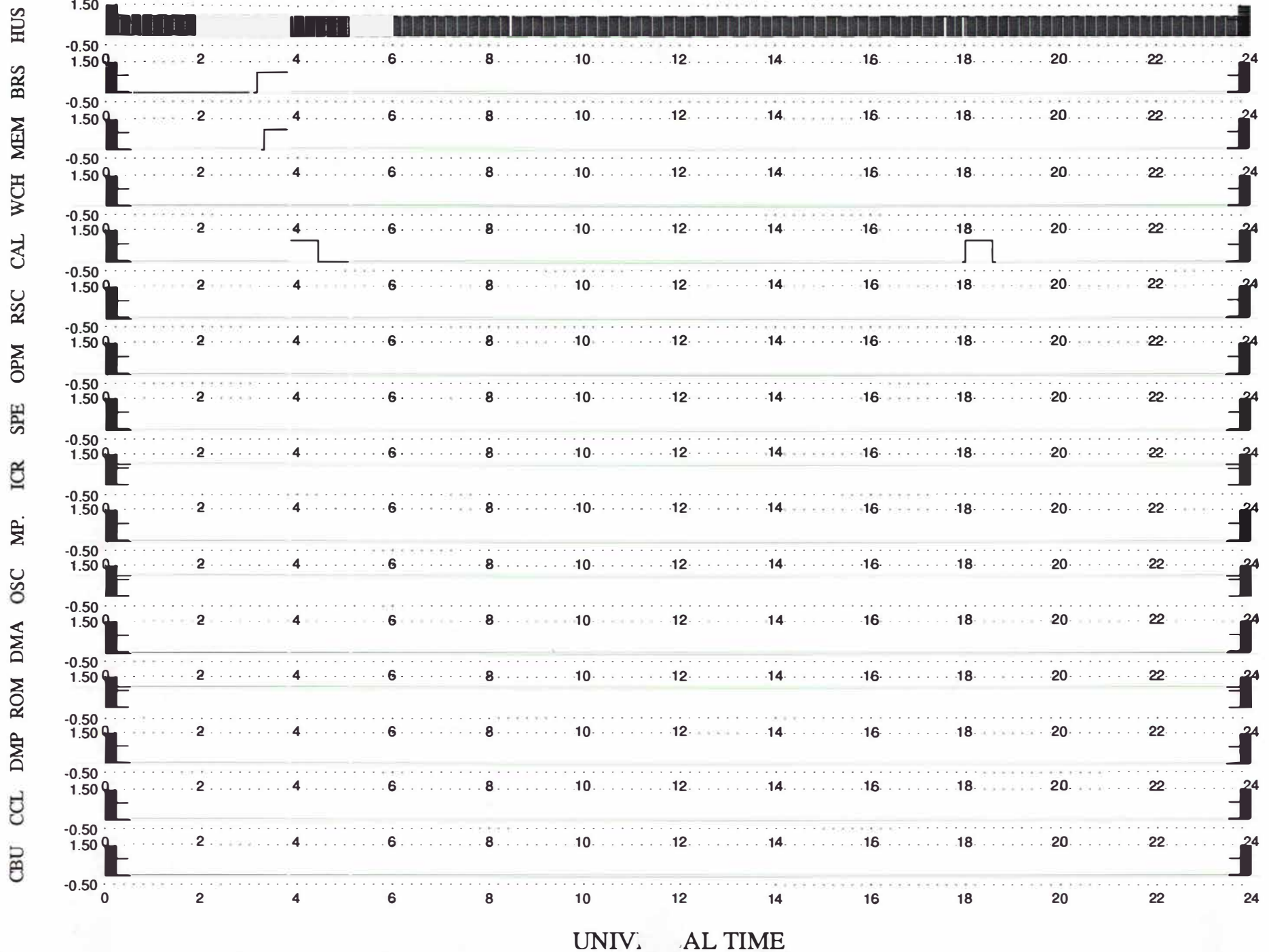
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

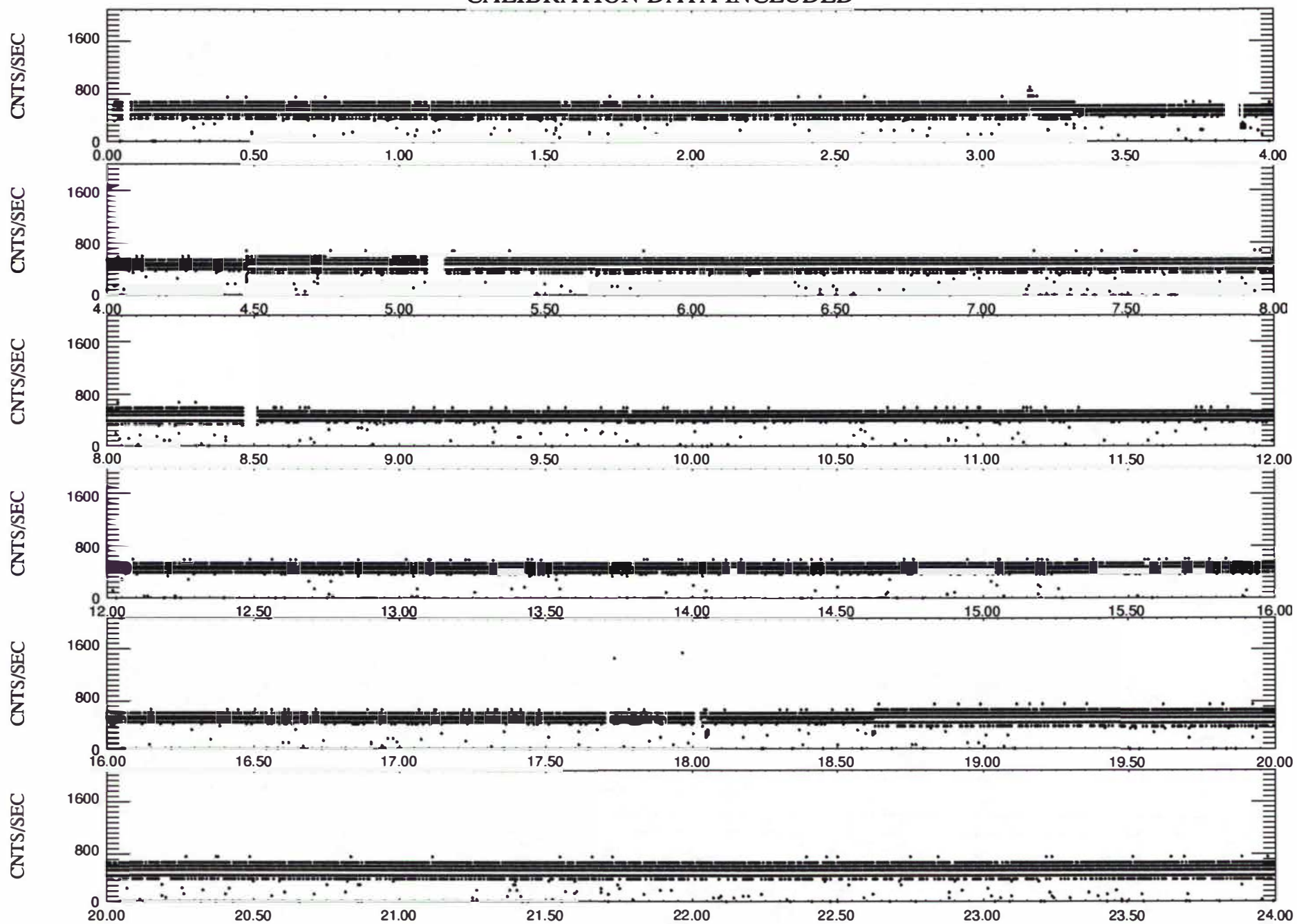
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/19



BURST NUMBER 3

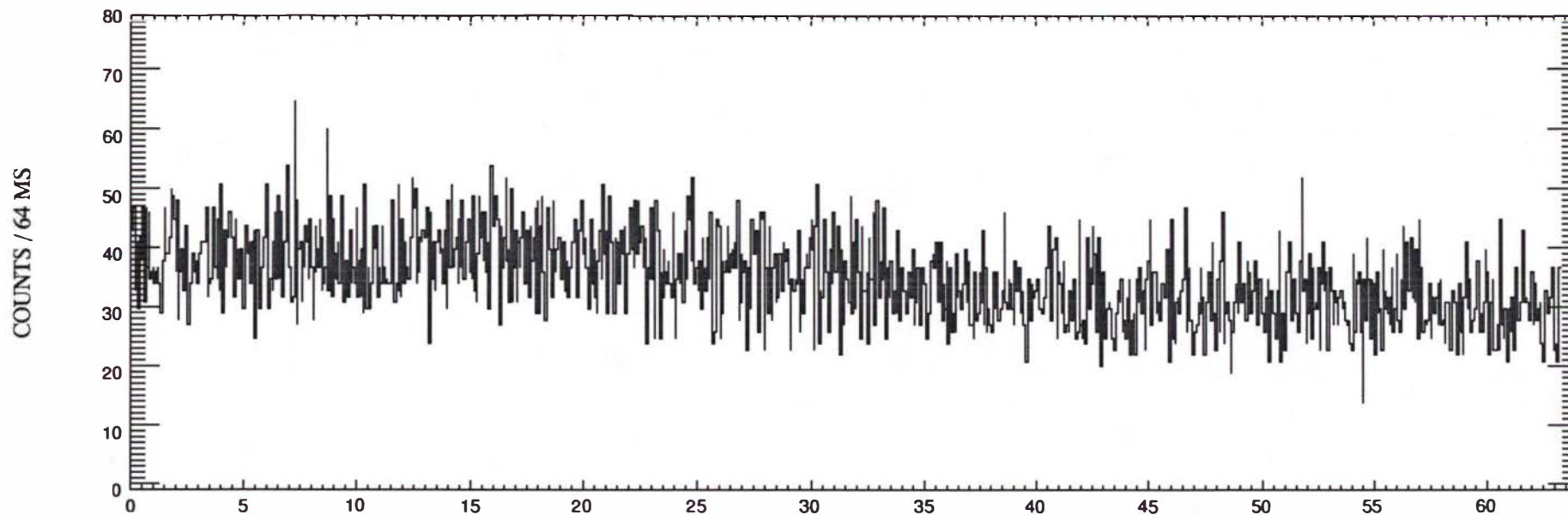


CALIBRATION DATA INCLUDED

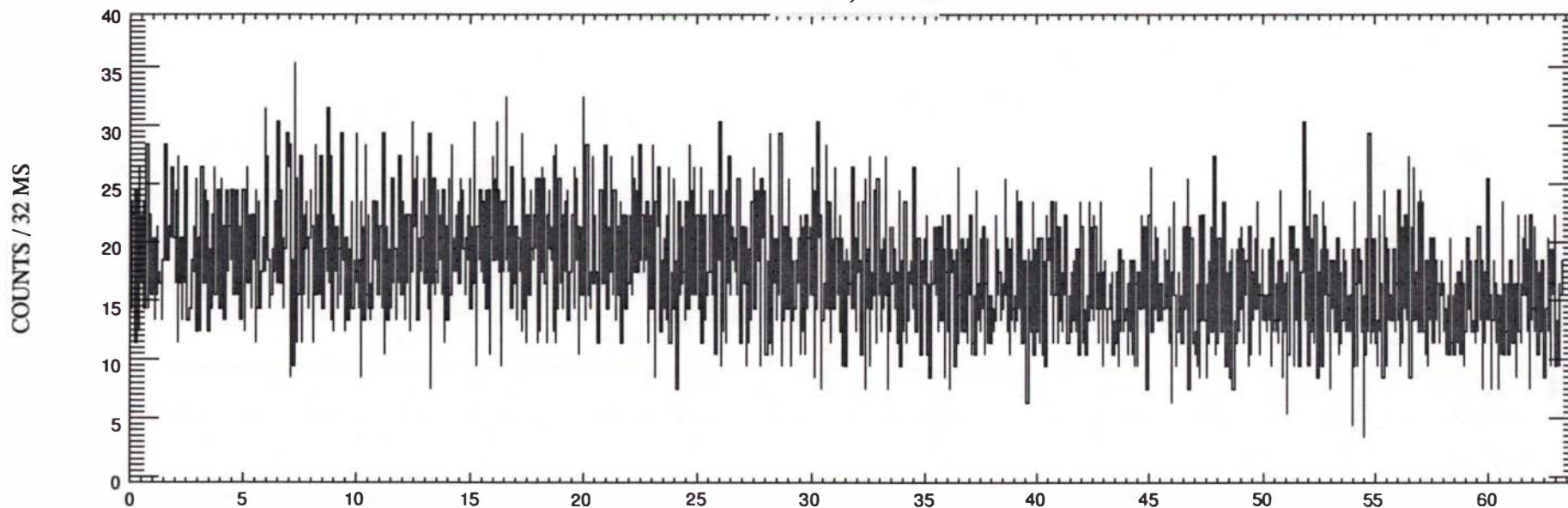


UNIV AL TIME

Burst Counter 3 at UT= 3.162539965312 h=11385.144 s 03:09:45.144

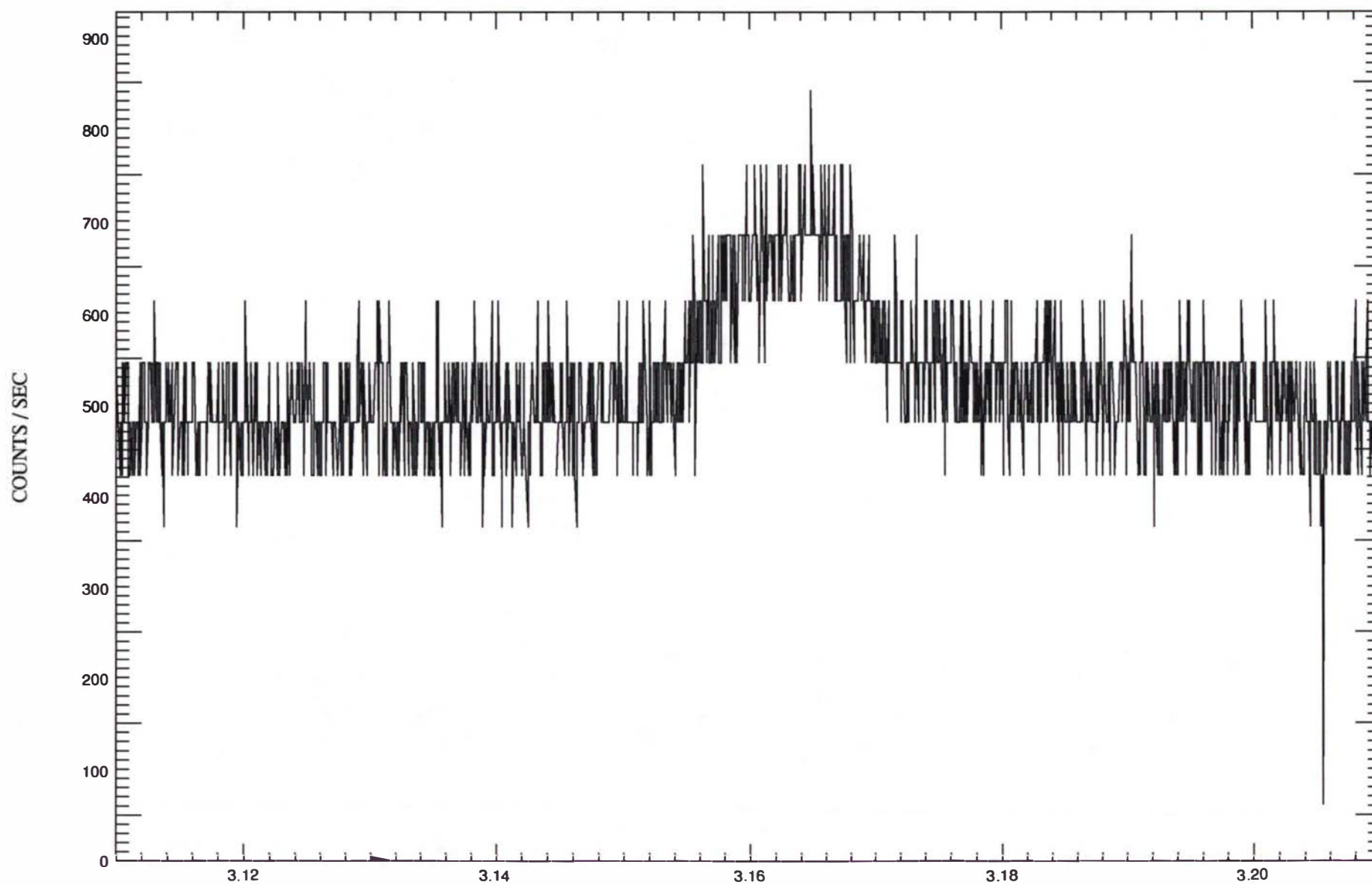


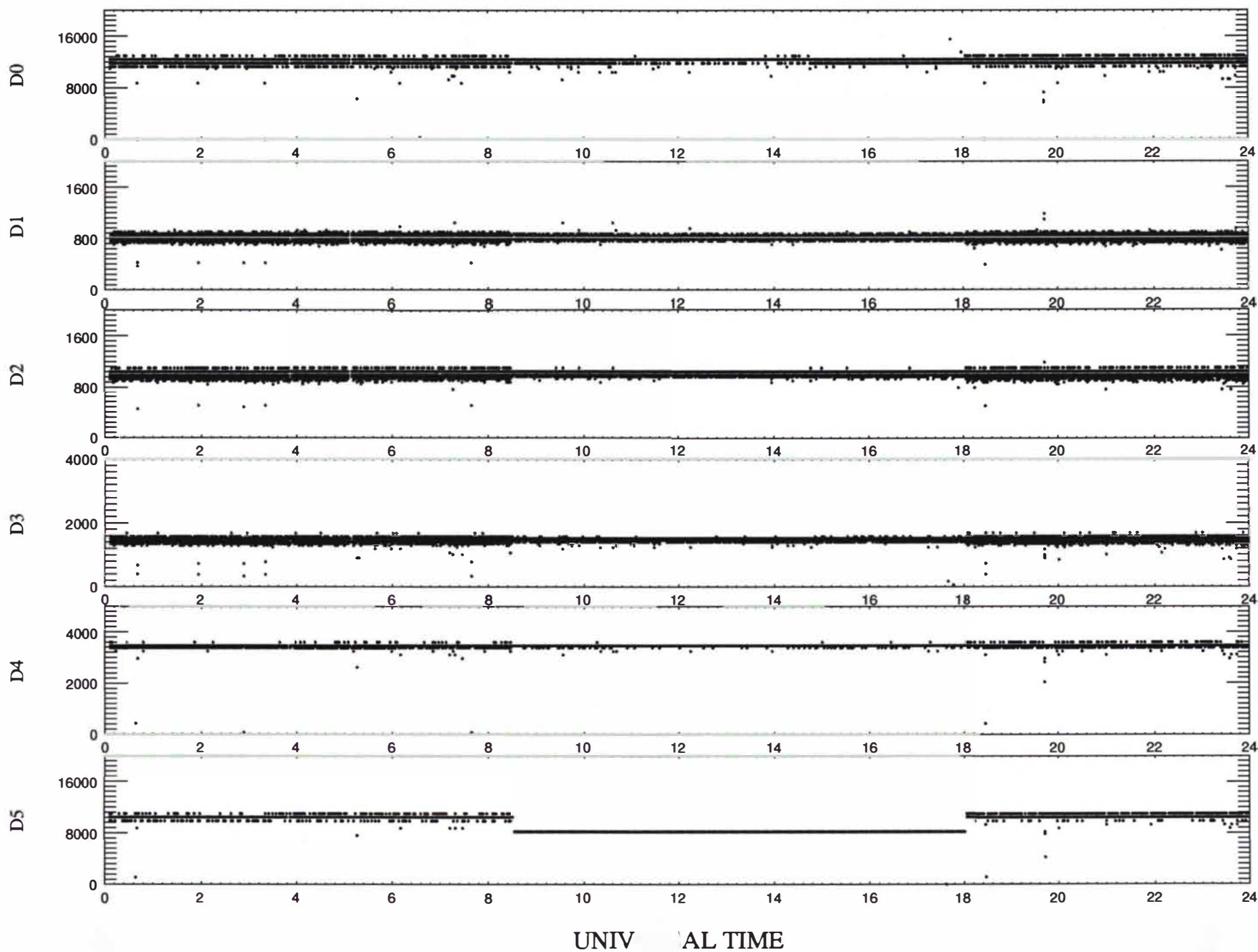
TIME, SECS

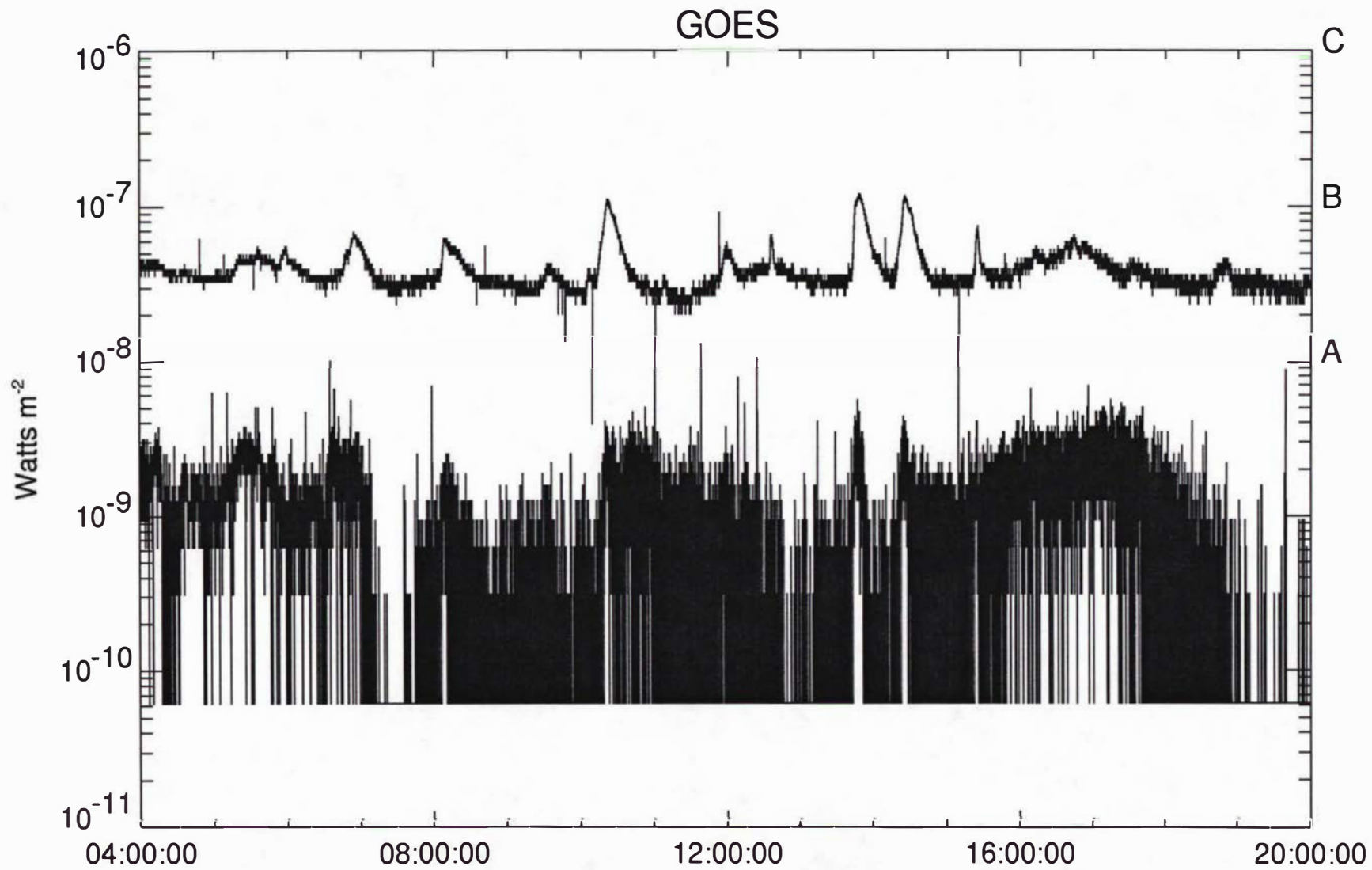


TIME, SECS

CALIBRATION DATA INCLUDED







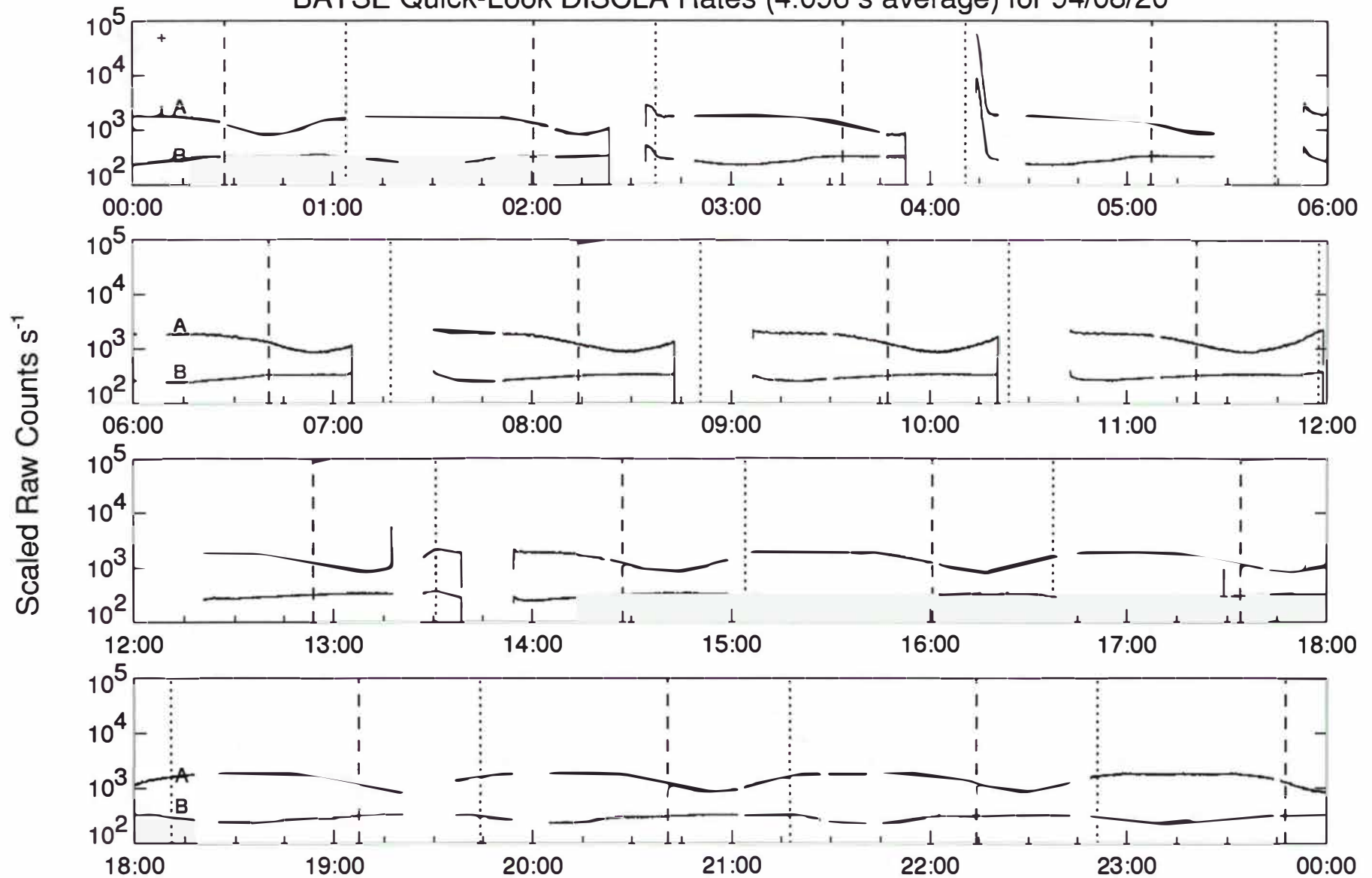
Data Start: 94/08/20, 0000:02

Plot created: 94/09/02, 1904

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/20

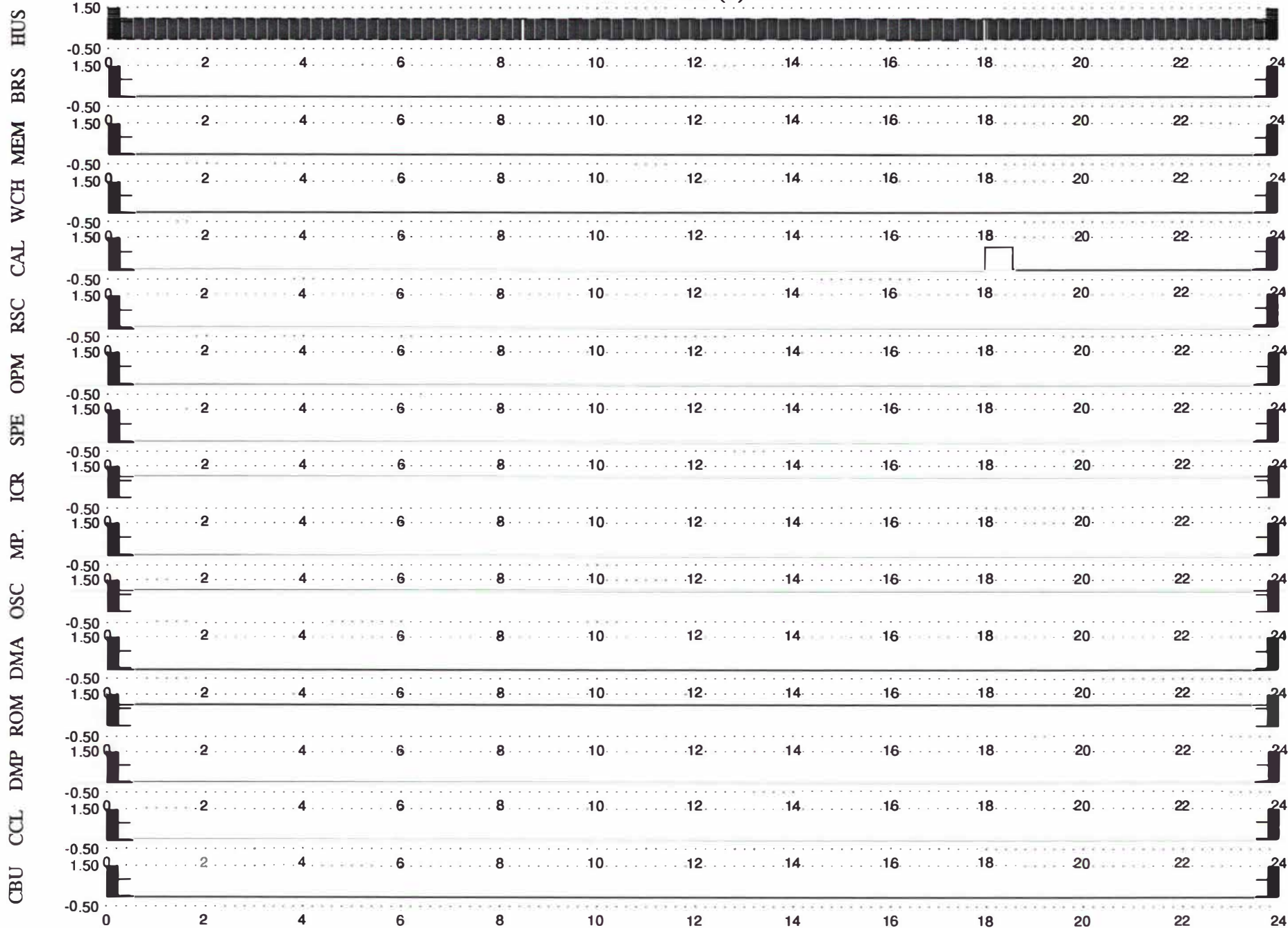


Current Time: 94/08/25, 1408 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

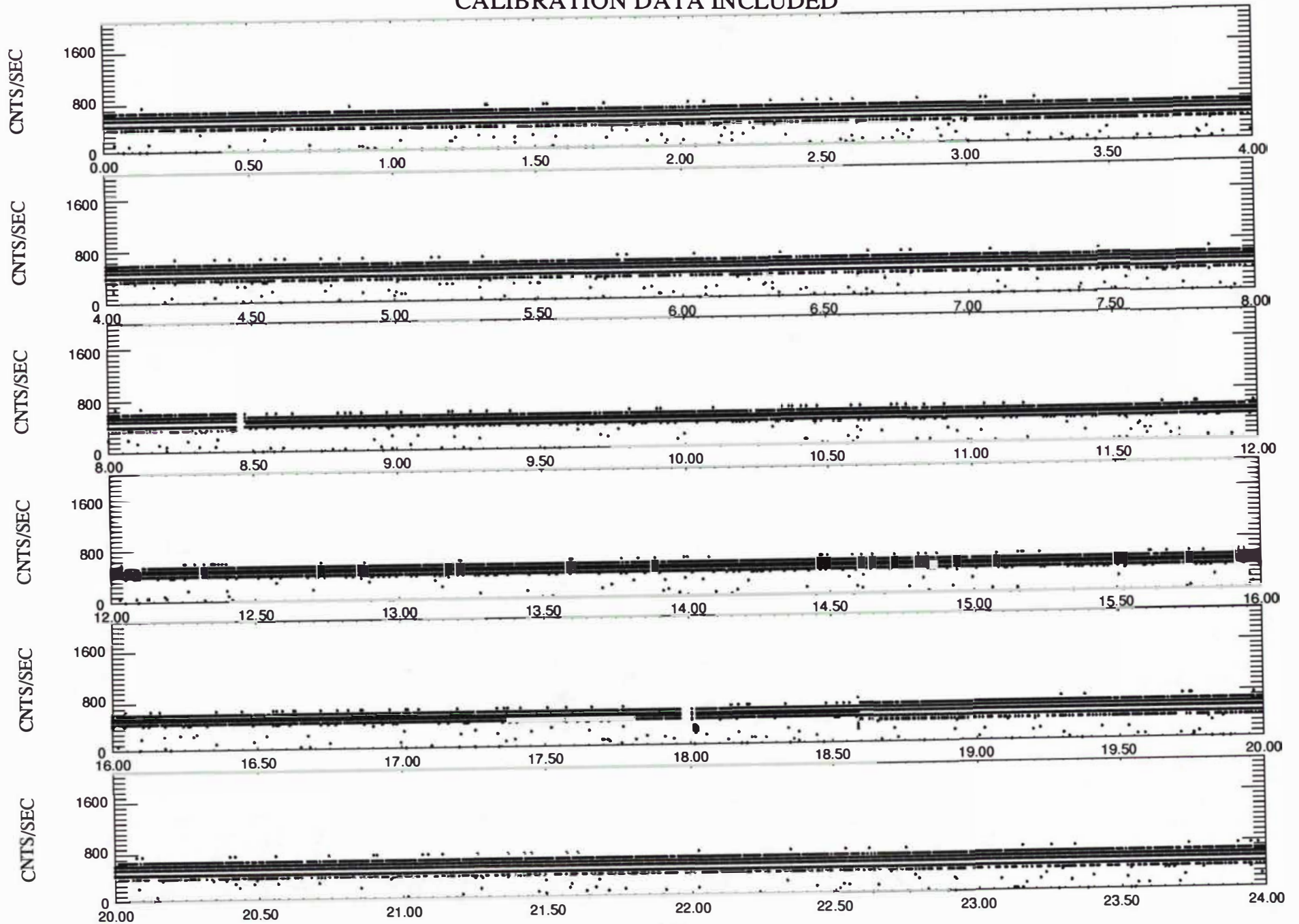
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

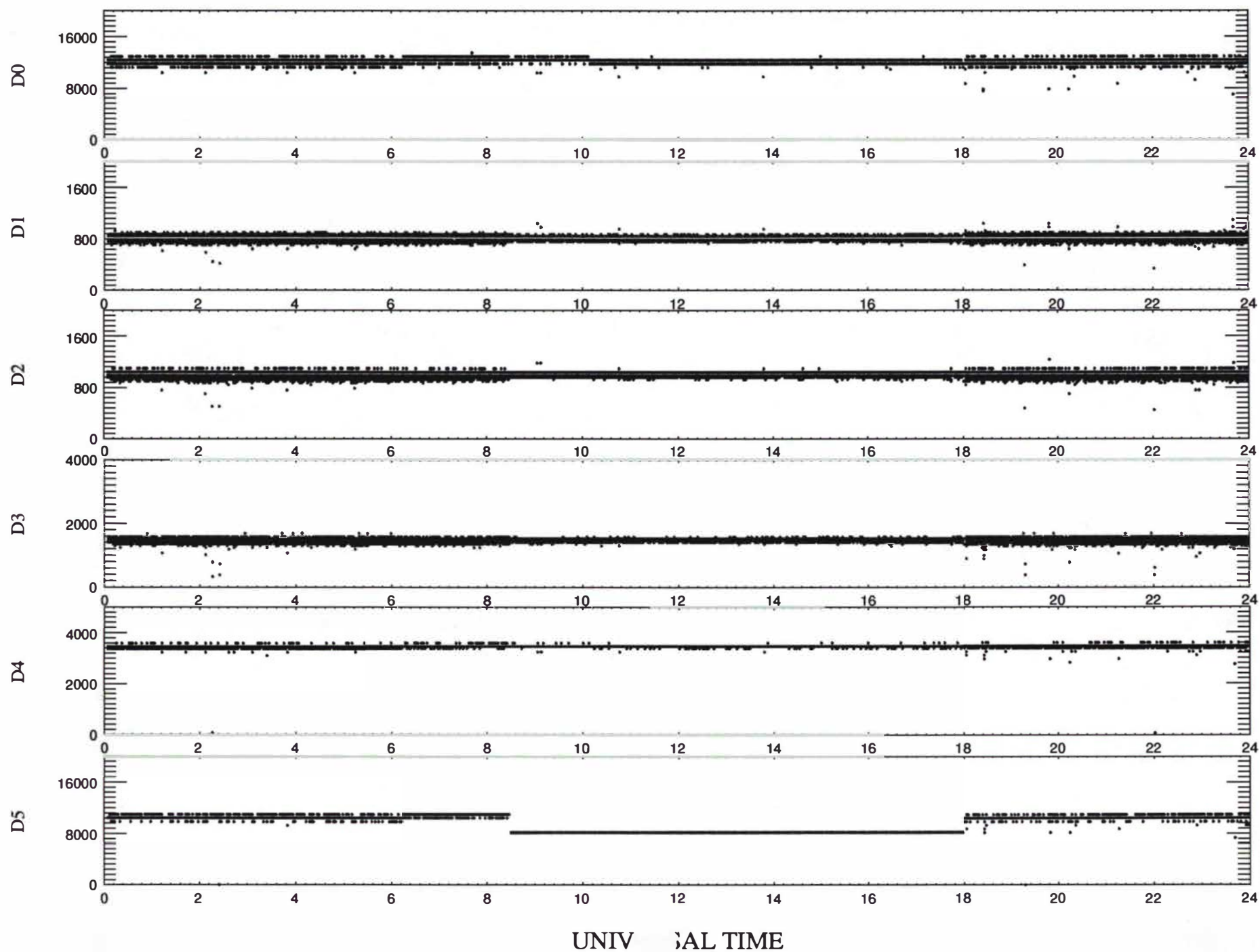
UNIV. AL TIME



CALIBRATION DATA INCLUDED



UNIV. AL TIME



From HAGEDON@fender.msfc.nasa.gov Mon Aug 22 13:22 PDT 1994
Date: Mon, 22 Aug 1994 15:22:58 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3130

BATSEARCH PROGRAM

BATSE BURST # 3130
EVENT OF 1994 AUG 21 DAY OF YEAR=233
EVENT CROSSING TIME AT BATSE : 15858. S. OR 04:24:18.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 335.000 -45.000
BATSE PEAK COUNTING RATE: 2200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/ 8/ 94 IS:
RA= 140.937 DEC= -45.473 DIST= 2.829 AU
BATSE-ULYSSES DISTANCE = 423238587. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 91.32 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -32.64 SECS.
CROSSING TIME AT ULYSSES IS 15825. S. OR 04:23:45 +/- 294.54 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/ 8/ 94 IS:
RA= 92.983 DEC= 23.663 DIST= 1.823 AU
MARS-BATSE DISTANCE = 272723616. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 54.01 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 534.63 SECS.
CROSSING TIME AT MARS IS 16393. S. OR 04:33:12 +/- 135.91 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3130	940821	9585	15858	2200	335	-45

BATSE BURST TRIGGER

NO.: 3130

TIME: TJD=9585 SECONDS=15858

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=106.6 AZIMUTH=188.3 ERROR= DEGREES

COMMENTS:

BURST. WEAK PULSE WITH FAST RISE AND SLOWER DECAY FOLLOWED BY
VERY WEAK PULSE AT ~T+60 SEC. TOTAL DUR.~70 SEC.
MARGINALLY VISIBLE ABOVE 300 KEV.

26 / 8 / 94

ULYSSES RT

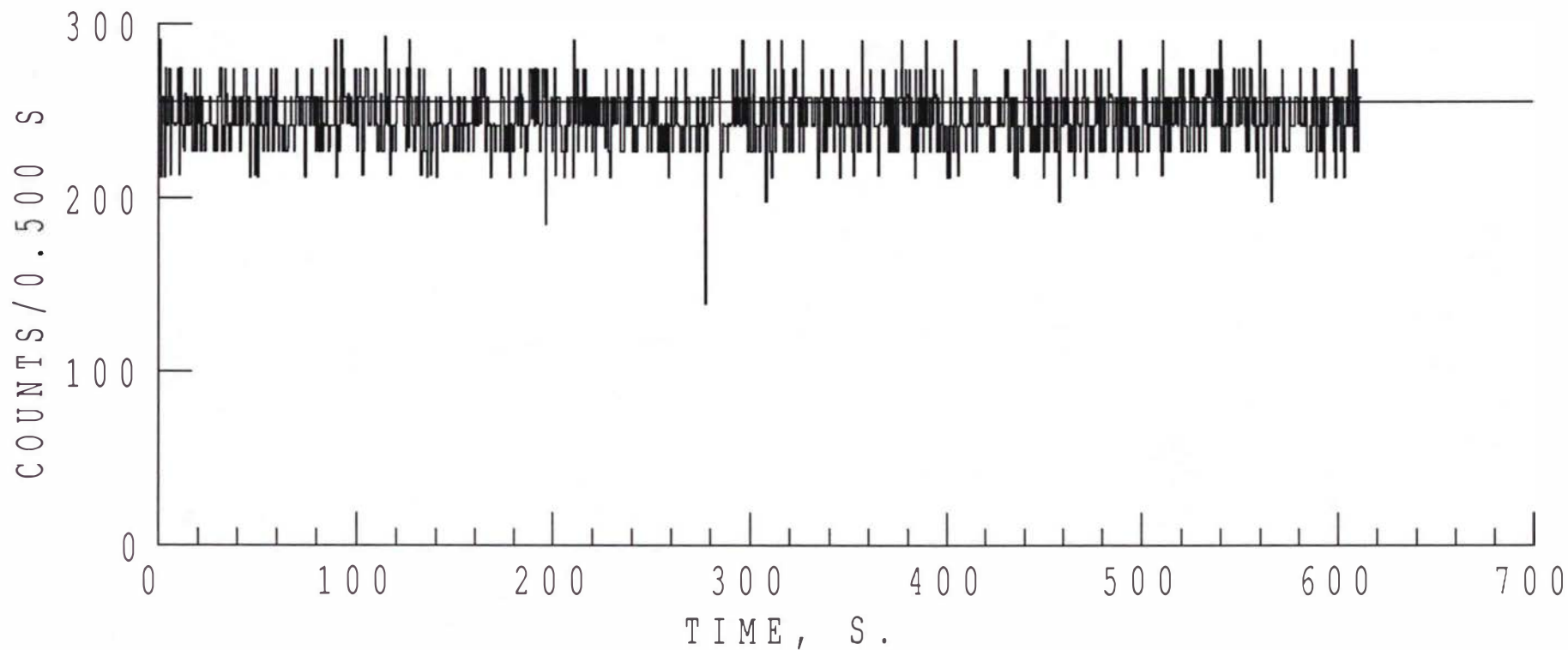
21 / 8 / 94 15516.203 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@fender.msfc.nasa.gov Mon Aug 22 13:27 PDT 1994
Date: Mon, 22 Aug 1994 15:27:50 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3131

BATSEARCH PROGRAM

BATSE BURST # 3131
EVENT OF 1994 AUG 21 DAY OF YEAR=233
EVENT CROSSING TIME AT BATSE : 78687. S. OR 21:51:27.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 295.000 43.000
BATSE PEAK COUNTING RATE: 7600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/ 8/ 94 IS:
RA= 141.210 DEC= -45.645 DIST= 2.824 AU
BATSE-ULYSSES DISTANCE = 422487360. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 18.85 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1333.68 SECS.
CROSSING TIME AT ULYSSES IS 80021. S. OR 22:13:40 +/- 149.31 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/ 8/ 94 IS:
RA= 92.983 DEC= 23.663 DIST= 1.823 AU
MARS-BATSE DISTANCE = 272723616. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 69.68 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 315.94 SECS.
CROSSING TIME AT MARS IS 79003. S. OR 21:56:42 +/- 152.91 SECONDS

RT

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3131	940821	9585	78687	7600	295	+43

BATSE BURST TRIGGER

NO.: 3131

TIME: TJD=9585 SECONDS=78687

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=130.2 AZIMUTH=77.0 ERROR= DEGREES

COMMENTS:

BURST. DOUBLE PULSE. TOTAL DUR.~65 SEC. FIRST PULSE IS VERY WEAK,
OCCURS ENTIRELY PRE-TRIGGER. SECOND PEAK IS MUCH STRONGER. MAX AT ~T+6 SEC.
NOT VISIBLE ABOVE 300 KEV.

Date:

Helio corr removed
Nov 19 '97

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T_0 ?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?

- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

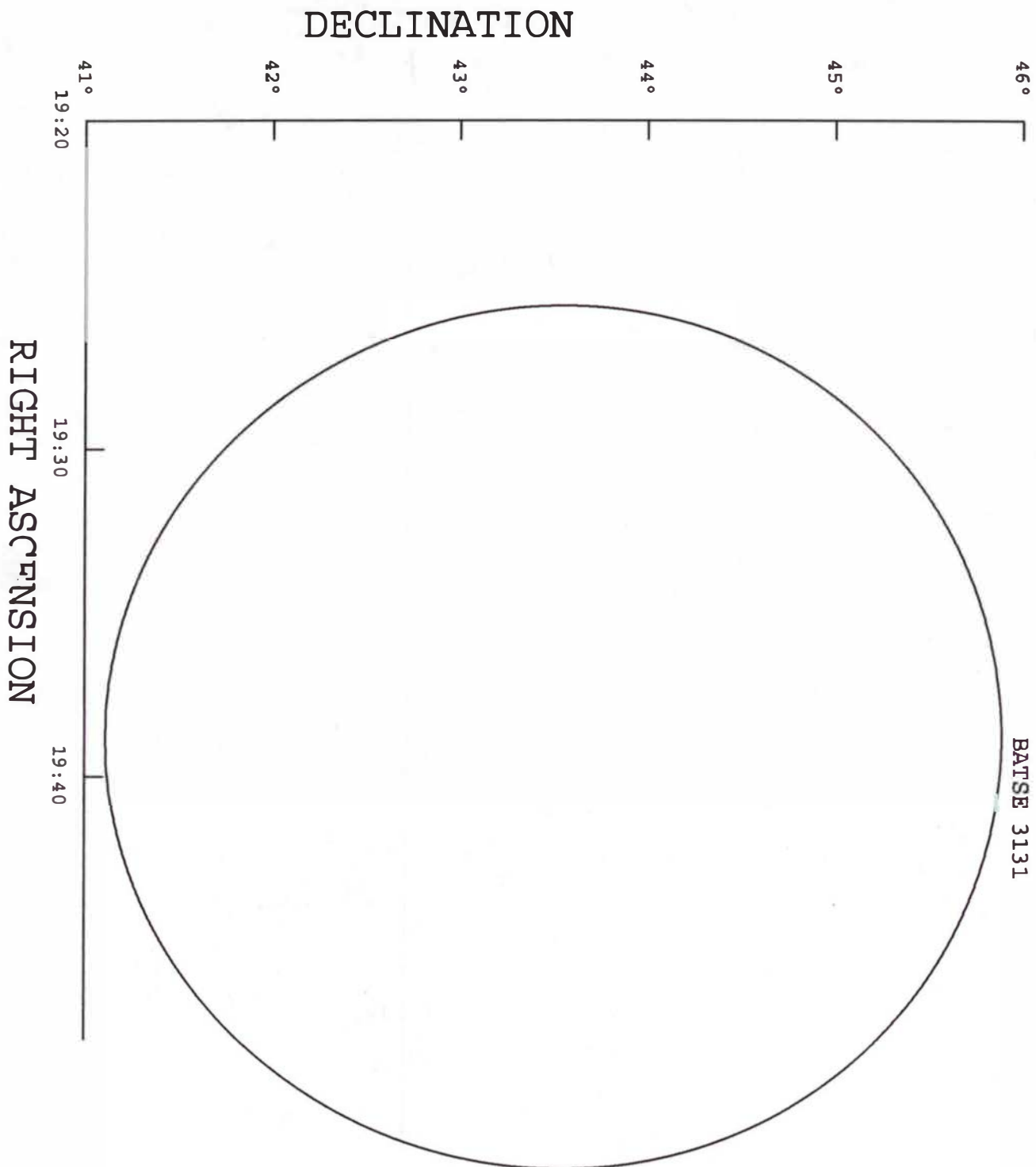
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 21, 1994 22:13

19/11/97



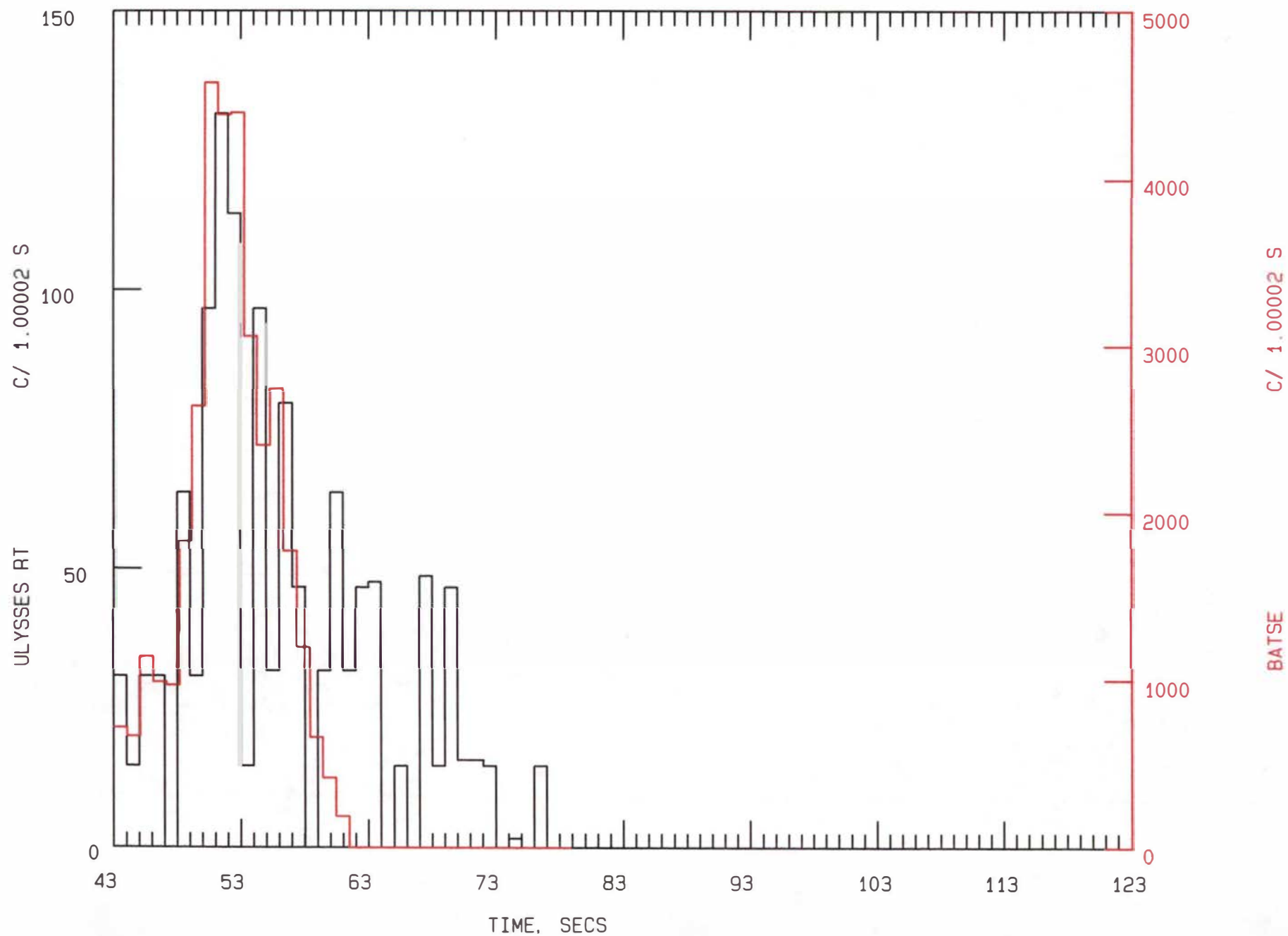
ULYSSES RT-BATSE

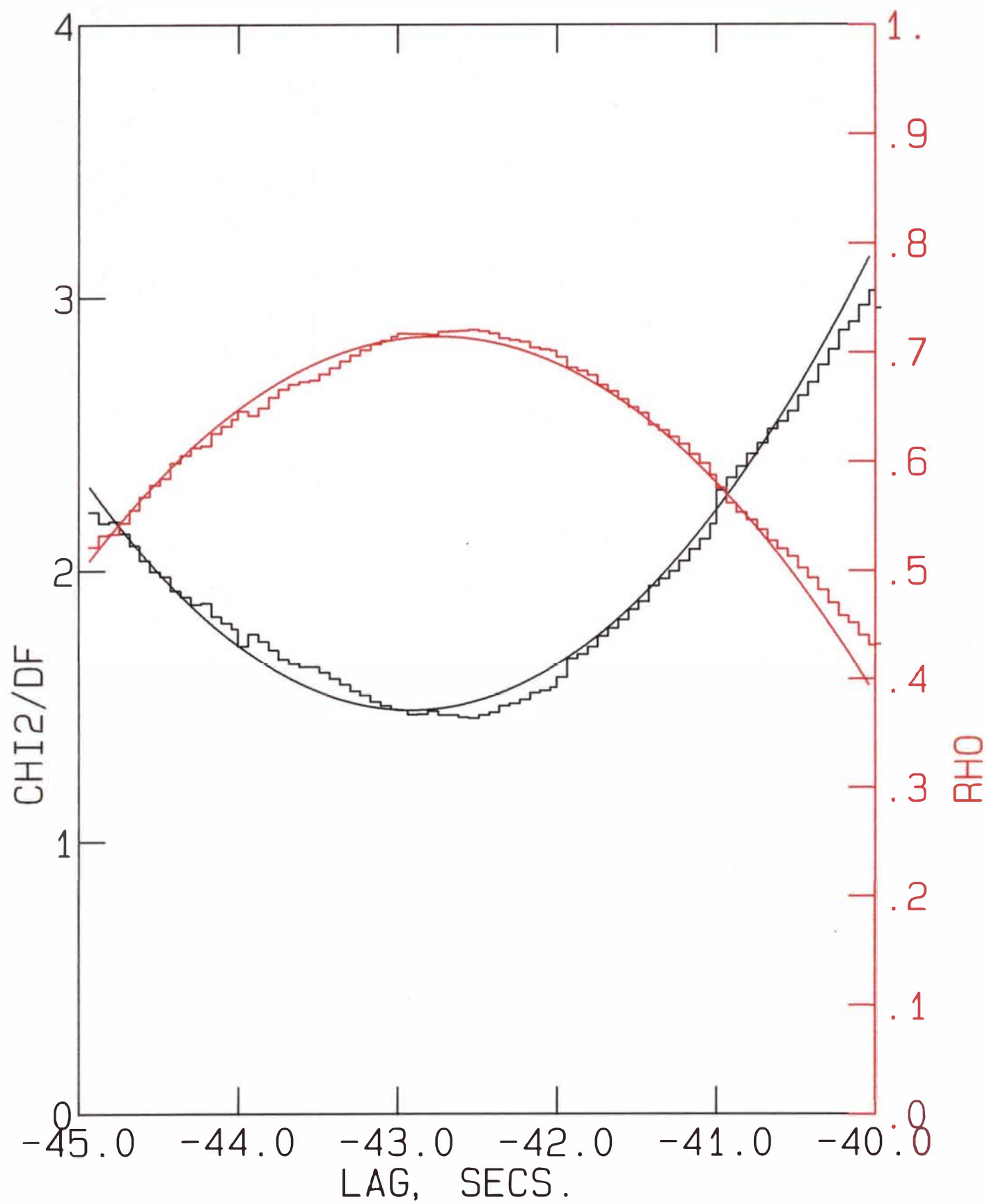
CORRELATION

21/ 8/94

79996.964

19/11/97





ULYSSES RT

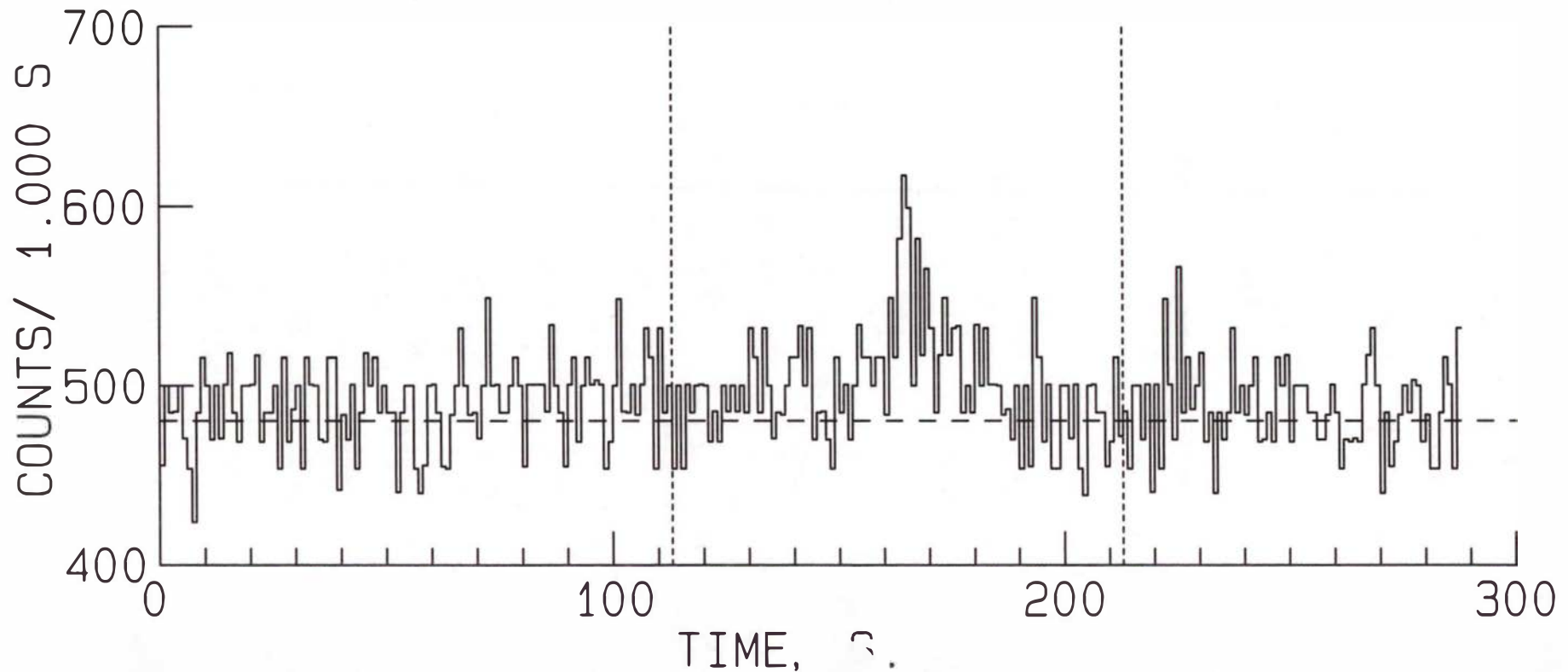
19/11/97

21/ 8/94 79884.000 s

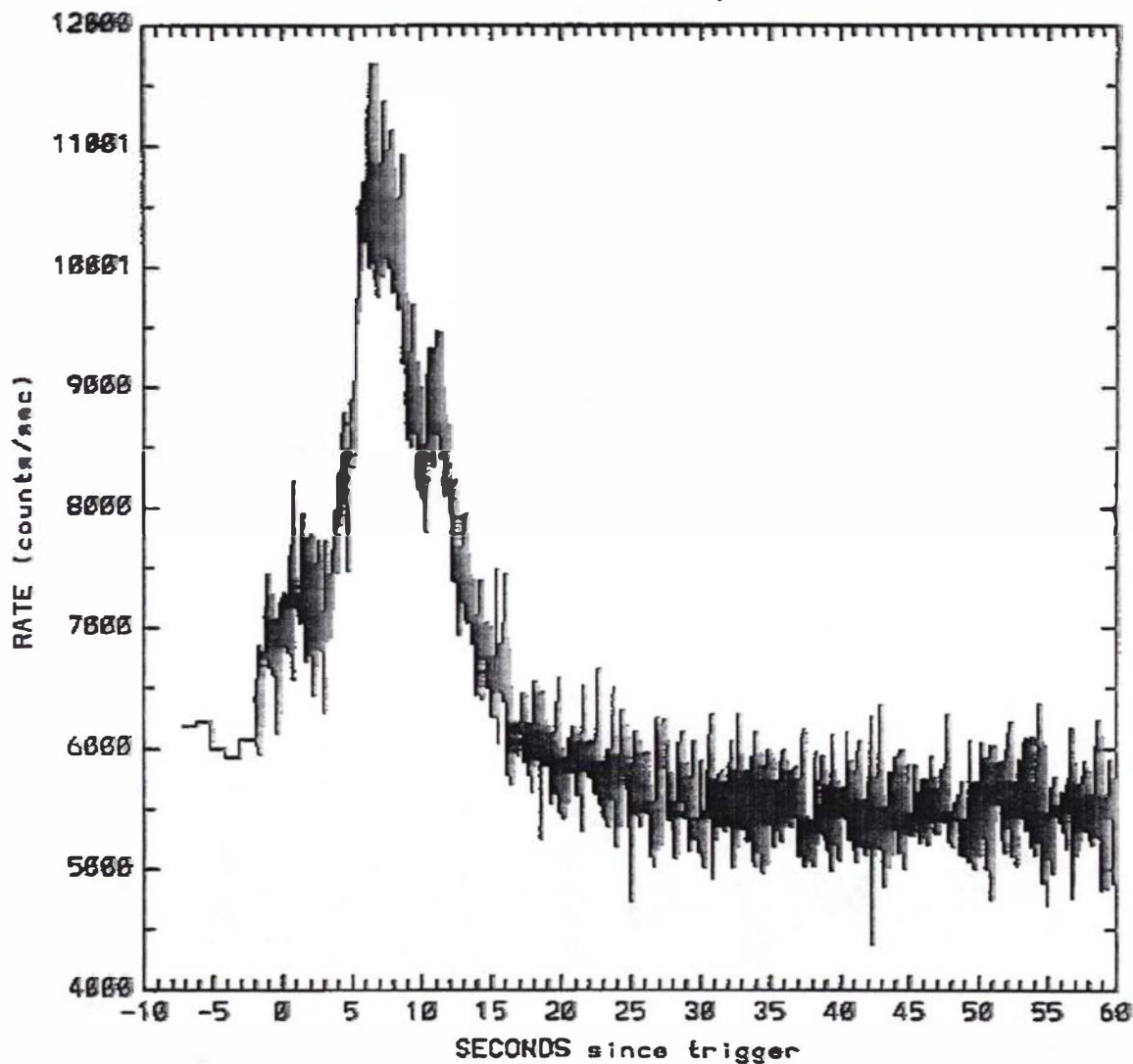
0.250 S INTERVALS REGROUPED BY 4

22- 147 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



DISCSC Data for K. Hurley, No. 3131



26-OCT-1994 14:01.43

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger = 3131

Trigger Time:
9585 / 70687.922

Burst Data Type:
DISCSC

Decdtime
Corrected: K

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
8.664 second(s)

Detectors [7..8]:
--5--1-

Discriminators:
[1, 2]

Quality Mask:
BDISP1

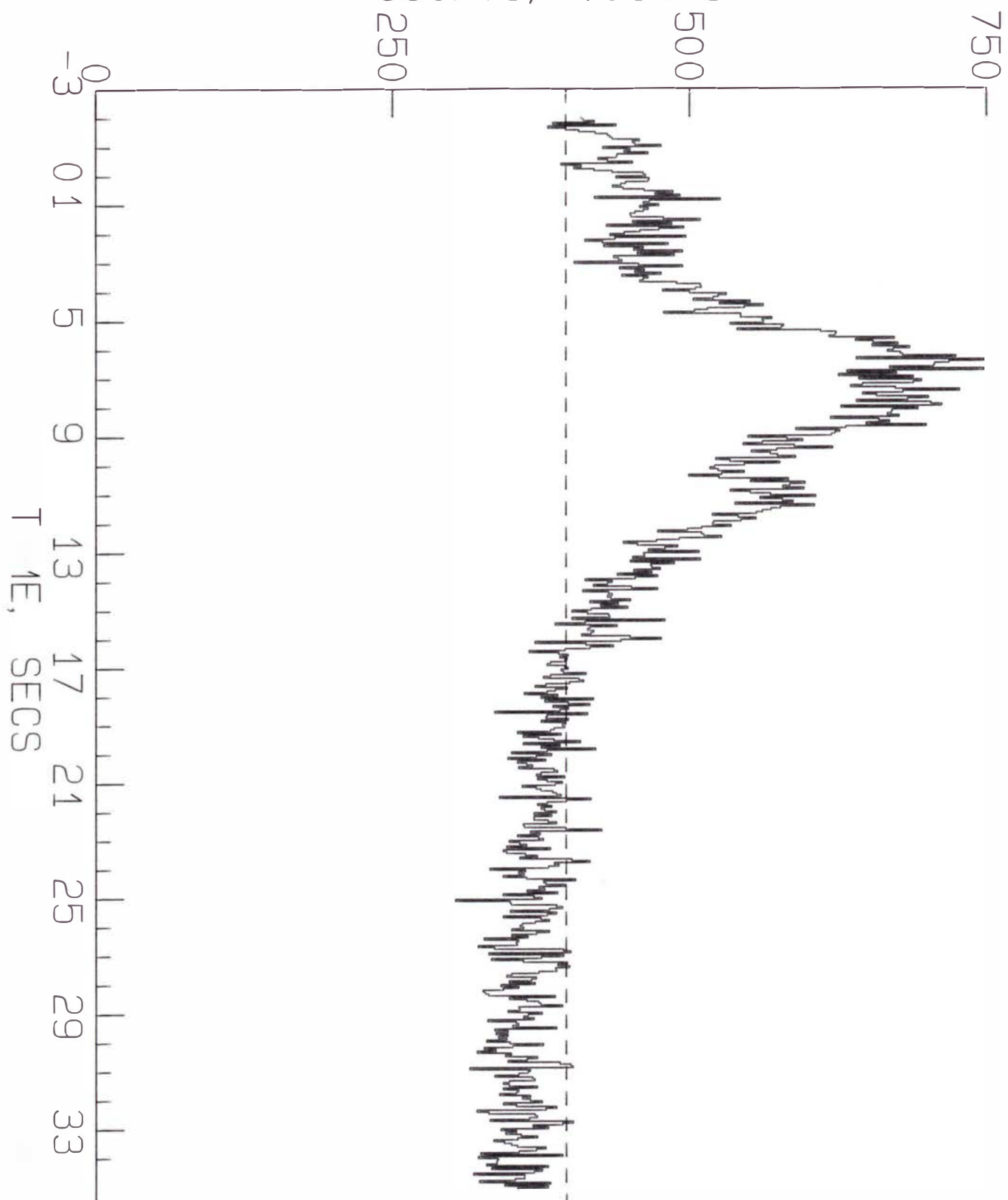
BATSE

21/08/94

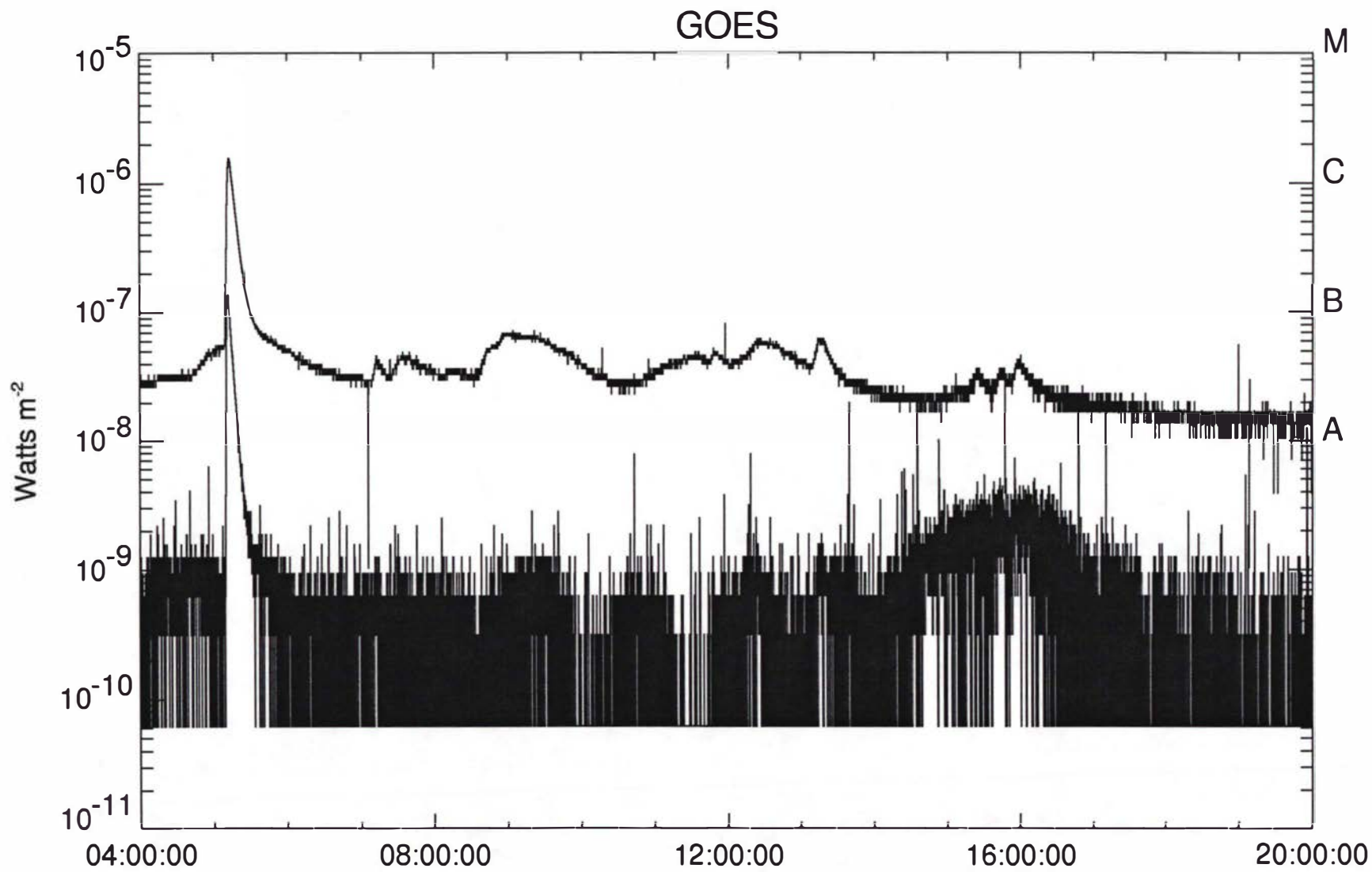
78687.922

25- 100 keV

COUNTS/ .064 S



5/11/94



Data Start: 94/08/21, 0000:00

Plot created: 94/09/02, 1904

Channel

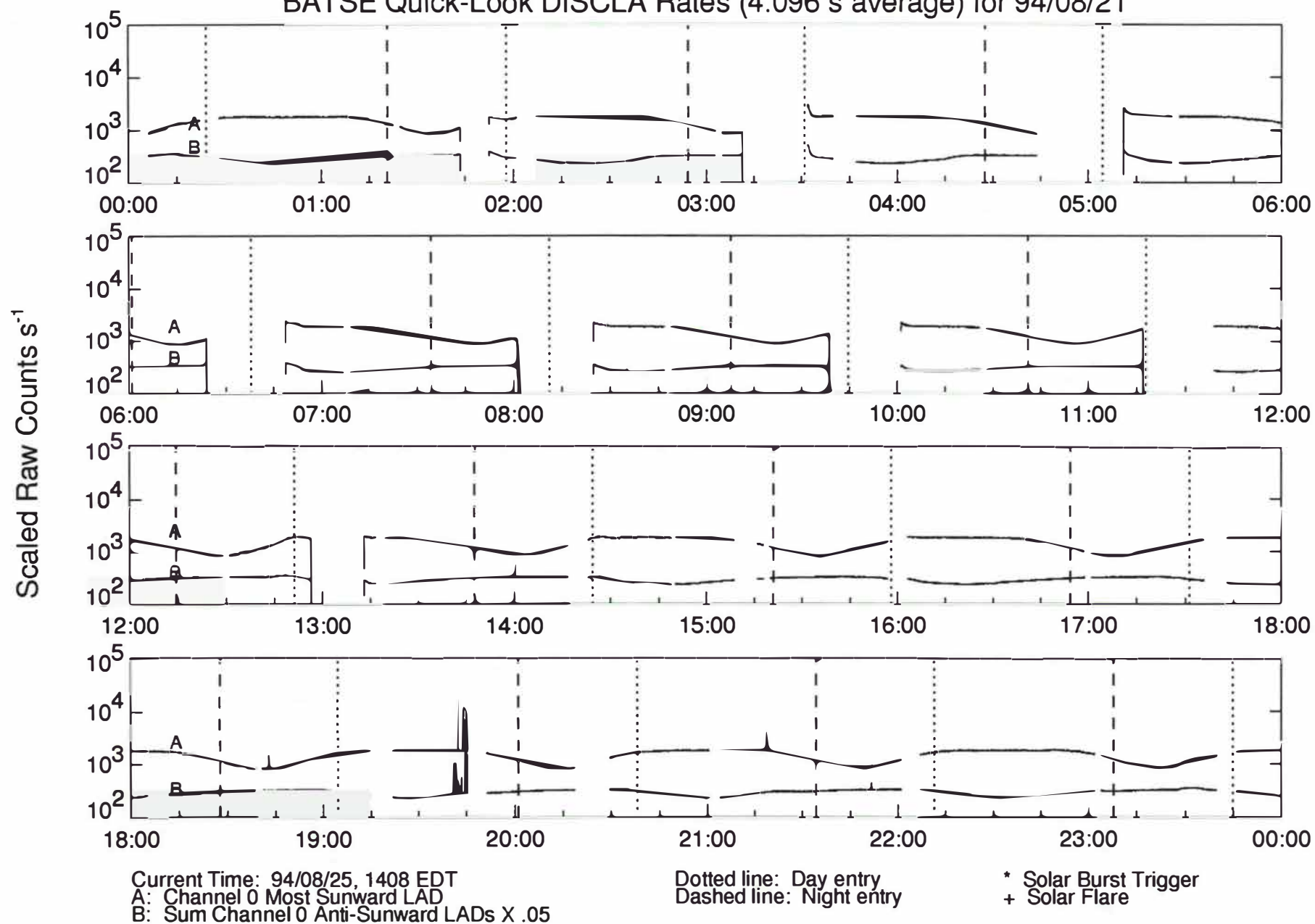
1 (1.0 - 8.0 Angstroms)

Background not subtracted

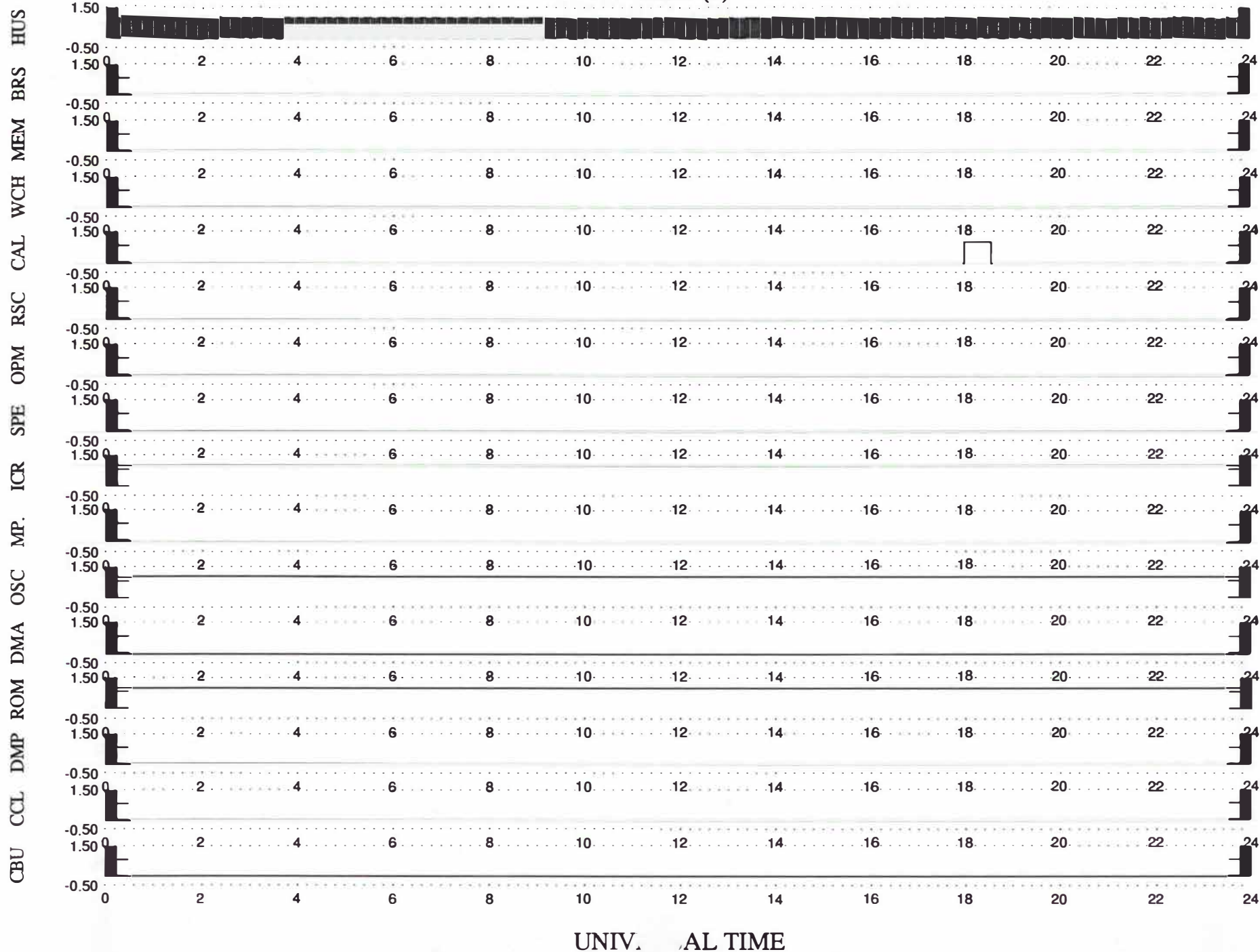
2 (0.5 - 4.0 Angstroms)

Background not subtracted

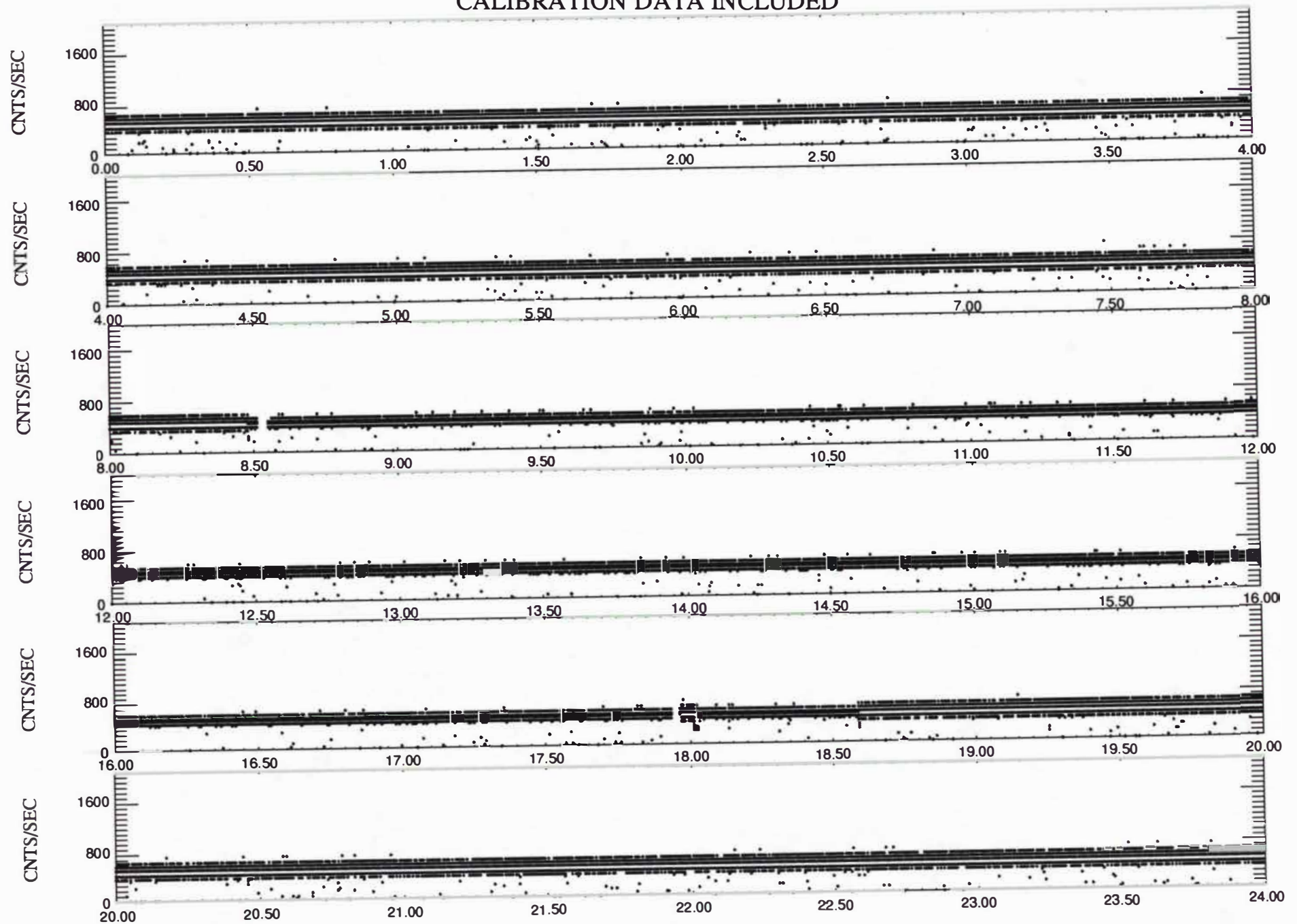
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/21



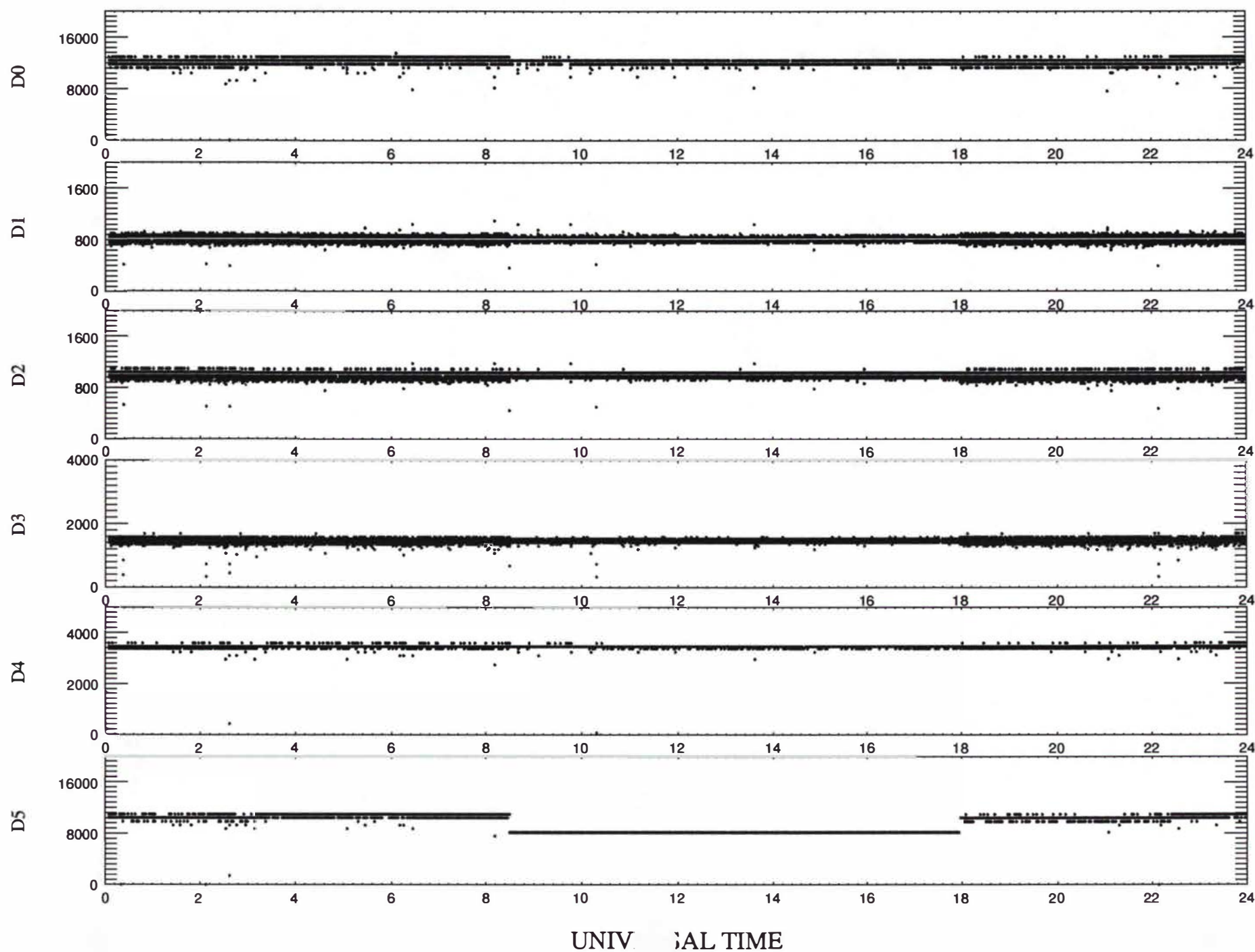
NO BURST (3)



CALIBRATION DATA INCLUDED



UNIV AL TIME



 BATSEARCH PROGRAM

TSE BURST # 3132
 EVENT OF 1994 AUG 22 DAY OF YEAR=234
 EVENT CROSSING TIME AT BATSE : 33965. S. OR 09:26:05.0
 COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
 BURST ARRIVAL DIRECTION: 132.000 -8.000
 BATSE PEAK COUNTING RATE: 3500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
 INTERPOLATED POSITION OF ULYSSES ON 22/ 8/ 94 IS:
 RA= 141.392 DEC= -45.761 DIST= 2.821 AU
 BATSE-ULYSSES DISTANCE = 421984307. KM.
 ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=141.38 DEG.
 LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1099.77 SECS.
 CROSSING TIME AT ULYSSES IS 32865. S. OR 09:07:45 +/- 185.82 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
 POSITION OF MARS ON 22/ 8/ 94 IS:
 RA= 93.691 DEC= 23.663 DIST= 1.818 AU
 MARS-BATSE DISTANCE = 271956704. KM.
 ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=130.98 DEG.
 LIGHT TRAVEL TIME ALONG PROJECTED PATH= -594.96 SECS.
 CROSSING TIME AT MARS IS 33370. S. OR 09:16:10 +/- 109.86 SECONDS
 BATSE BURST TRIGGER

NO.: 03132

E: TJD=9586 SECONDS=33965

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=046.0 AZIMUTH=307.8 ERROR= DEGREES

COMMENTS:

DOUBLE PEAK BURST LASTING APPROX. 24S. NOT VISIBLE ABOVE 300KEV.

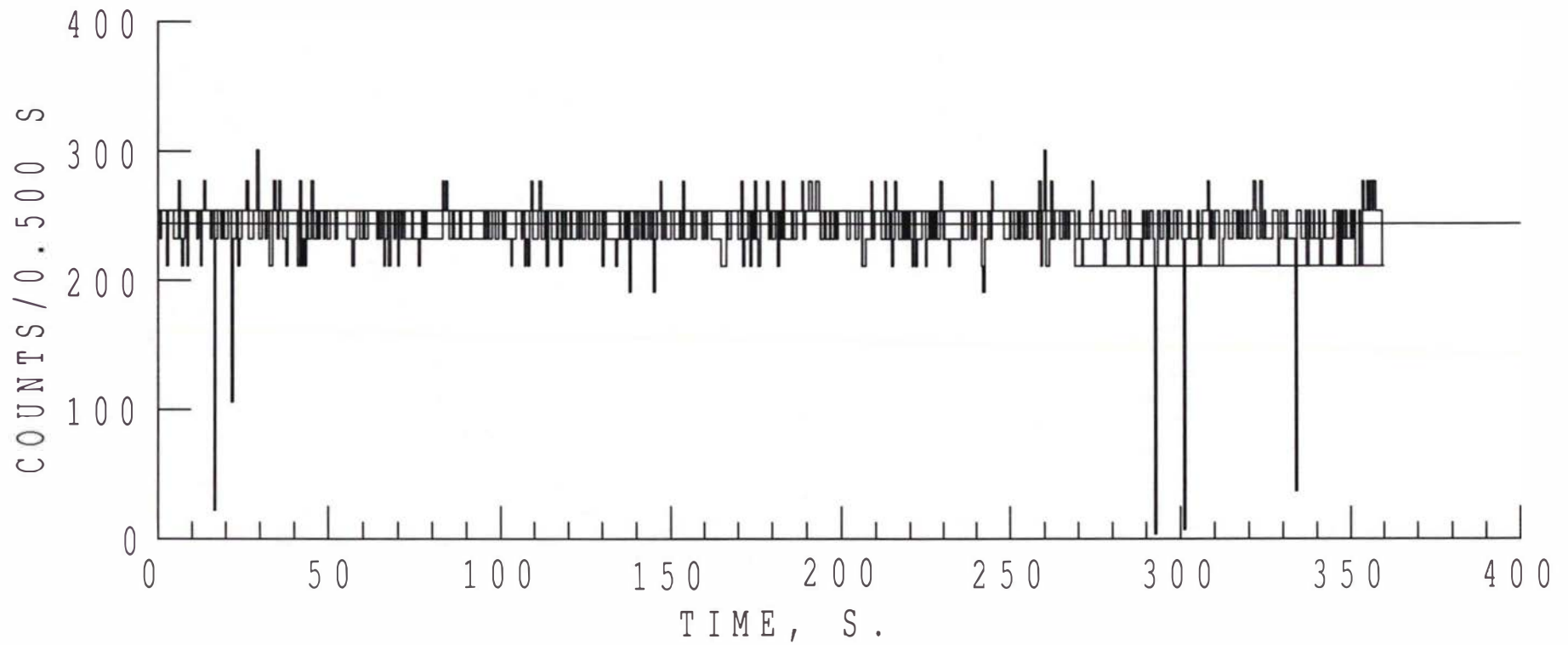
BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3132	940822	9586	33965	3500	132	-08

No

26 / 8 / 94

ULYSSES RT
22 / 8 / 94 32688.385 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From root Tue Oct 4 14:06 1994
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA01789; Tue, 4 Oct 94 14:06:16
 Received: from sangam.ncst.ernet.in by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA09220; Tue, 4 Oct 1994 14:15:47 +0800
 Received: from soochak.ncst.ernet.in (soochak.ncst.ernet.in [144.16.11.100]) by sangam.ncst.ernet.in
 From: kmarar@isac.ernet.in
 Received: from nic.iisc.ernet.in (twisha.ece.iisc.ernet.in [144.16.64.4]) by soochak.ncst.ernet.in
 Received: by nic.iisc.ernet.in (ERNET-IISc/AT&T UNIX SYS V.3.2)
 id AA15091; Wed, 5 Oct 94 02:51:30 EST
 Message-Id: <9410050751.AA15091@nic.iisc.ernet.in>
 Received: by vigyan.iisc.ernet.in (smail2.3)
 id AA24209; 5 Oct 94 02:18:52 EST (Wed)
 To: vigyan!khurley@sunspot.ssl.berkeley.edu, vigyan!kmarar@isac.ncst.ernet.in
 Date: Mon Oct 3 14:14:08 1994
 Content-Length: 2592
 Status: R

Oct 3, 1994

Dear Kevin,

Kindly recall my fax to you dated 25 June 94. Since then the SROSS-C2 orbit has been brought down to 430 x 620 km. Our instrument is working very satisfactorily. I am giving below the times of trigger of a few more events from our experiment. Kindly check them with your list. The events marked ** may please be looked up first.

SROSS-C2 GRB CANDIDATE EVENTS

Event orbit	Event date (d m y)	time(UT)			
		h	m	s	
1126	19 July 94	06	00	05	** 110 TRIG
1296	30 July 94	11	01	31	** 110 DATA 1/27
1358	3 Aug 94	13	14	52	110 TRIG
1448	9 Aug 94	11	52	31	110 DATA 1/27
1650	22 Aug 94	20	23	20	** TRIGGED
2095	21 sep 94	05	08	19	** RI

** Most likely genuine from temporal profile

2. You had asked for the earth centre position and distance of SROSS-C2 for the events. Is it enough if we give you the state vector of the satellite corresponding to equator crossing for an orbit close to our event?

3. Do you have a software which we can use for determining the area of the celestial sphere blocked by the earth at the event time when our SROSS-C2 detects the events? I suppose this is what you had asked earlier. We wish to use your software to double-check our calculations. Can you send me a copy of your software through email with a sample input and output for checking the same.

My email address is : kmarar@isac.ernet.in (Please note the change)

In case you have problem in getting the correct gateway Please contact Prof.Edward Nather at the U of Texas at Austin (Astronomy Department) and check with him how he contacts me regularly.

His email address is nather@astro.as.utexas.edu

Kindly inform me when you receive this message.

Many thanks
Krishnan

Date: Aug 9 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Were data checked by Joe Springer for 0.5 s errors?
- ☐ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

Done by eye

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)?
- ☐ BATSE ephemeris for T_0 ?
- ☐ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included?

3. PVO Data

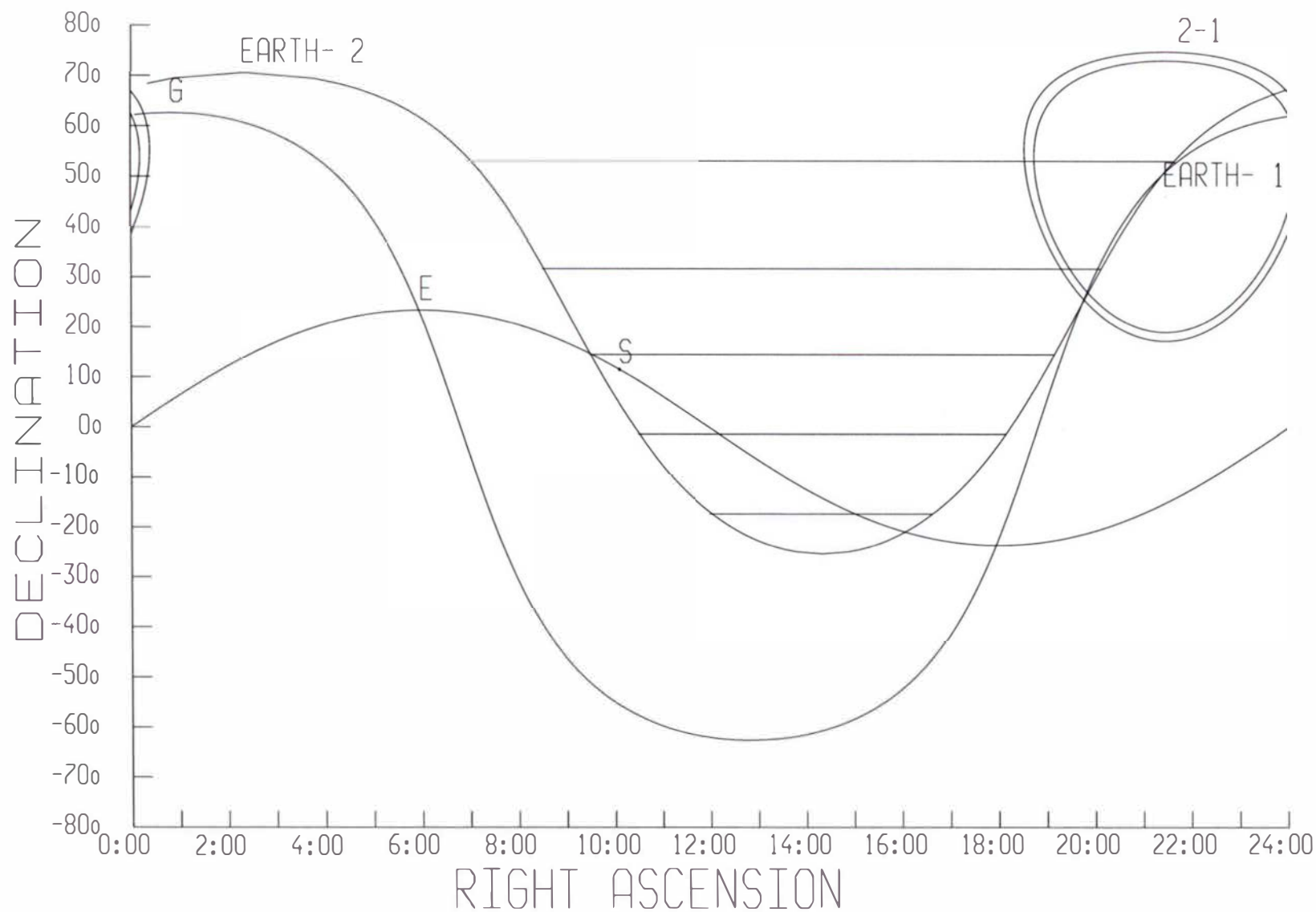
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?

☒ ACCESS and MBL databases updated with identical times?

EVENT OF AUG 22, 1994 20:44

09/08/2011

N-M = CORRELATION BETWEEN SATELLITES N AND M
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN
E=ECLIPTIC
G= GALACTIC EQUATOR
1 ULYSSES 2 CROSS



SROSS 19940822 74642

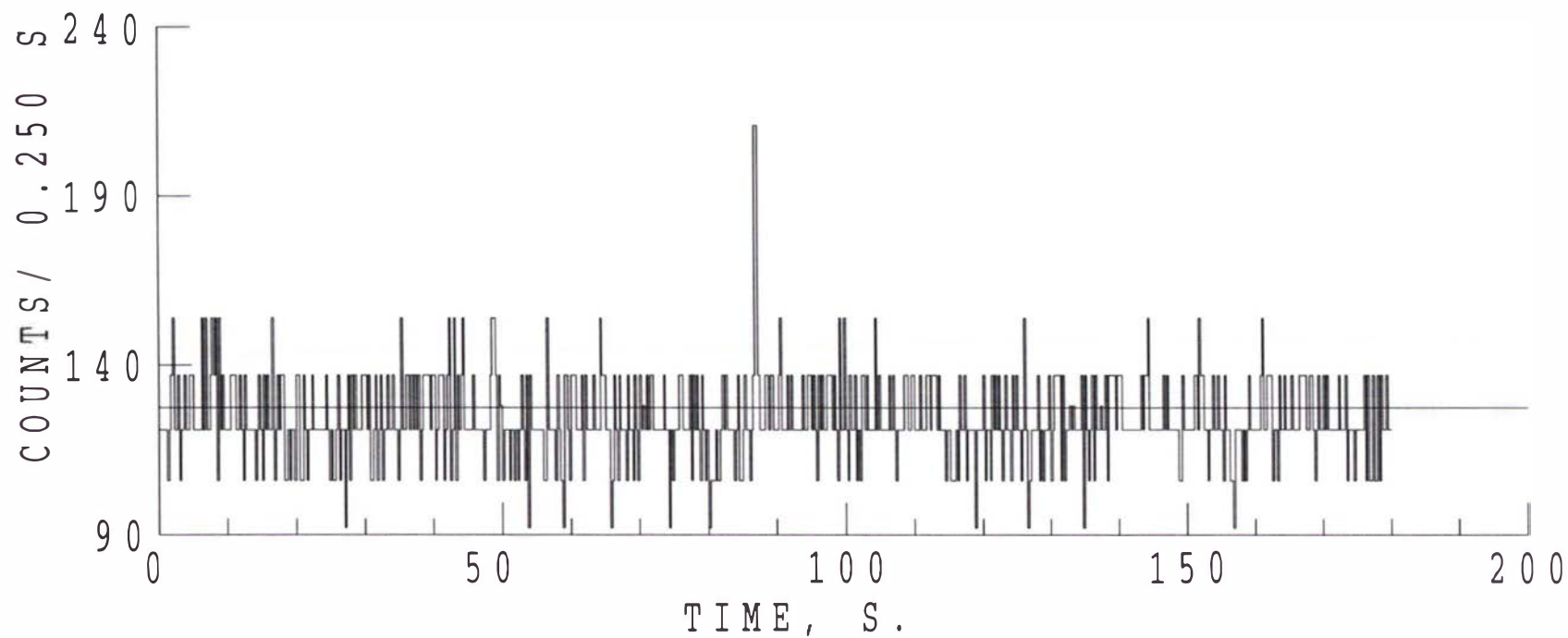
ULYSSES RT

09/08/11

22/08/94 74556.062 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



इसरो उपग्रह केन्द्र

अन्तरिक्ष विभाग

भारत सरकार

हवाई पट्टा मार्ग, विमानपुरा डाक घर,

बैंगलूर-560 017, भारत

तार : "उपग्रह" टेलिफोन : 0845-325 और 769

दूरभाषी : 566251



ISRO SATELLITE CENTRE

DEPARTMENT OF SPACE

GOVERNMENT OF INDIA

AIRPORT ROAD, VILMANAPURA P.O.

BANGALORE-560 017, INDIA

Telegram : UPAGRAH Telfax : 0845-325 & 769

Telephone : 566251

Nov 29, 1994

Dear Kevin,

I am extremely thankful to your letter dated Oct 31. I am very sorry that our mail does not work always. Our fax numbers have changed and the new numbers are : 91-80-526-9490 or 91-80-526-5407.

I am enclosing the time histories of SROSS-C2 GRB events in orbits 1126 (19 Jul 94), 1296 (30 Jul 94), 1650 (22 Aug 94) and 2095 (21 Sep 94) all of which I believe were detected by Ulysses also. The time profile of our event in orbit 1448 for which you had written a possible rate increase is also enclosed. I do not now believe that this event (Orbit 1448) is confirmed. ALL PROFILES CORRESPOND TO THE ENERGY RANGE 100 - 1024 KEV.

In addition we are sending the temporal profiles of our new events in orbit 2234 (30 Sep 94) and 2492 (17 Oct 94). I hope that you will receive this fax message satisfactorily and that the annotations in the figures are clear. If not, please let me know.

New events

Event orbit	Event date (d m y)	time(UT) h m s
2234	30 Sep 94	10 2 6.008
2492	17 Oct 94	10 19 59.748

Kindly check in your Ulysses data the above two new events and confirm.

I am now hopeful that we can start contributing to your interplanetary network. I wonder whether any of our four Ulysses/SROSS-C2 events could be confirmed by GRAMAT satellite also!

With best regards,

sincerely yours,

Krishnan

(Krishnan)

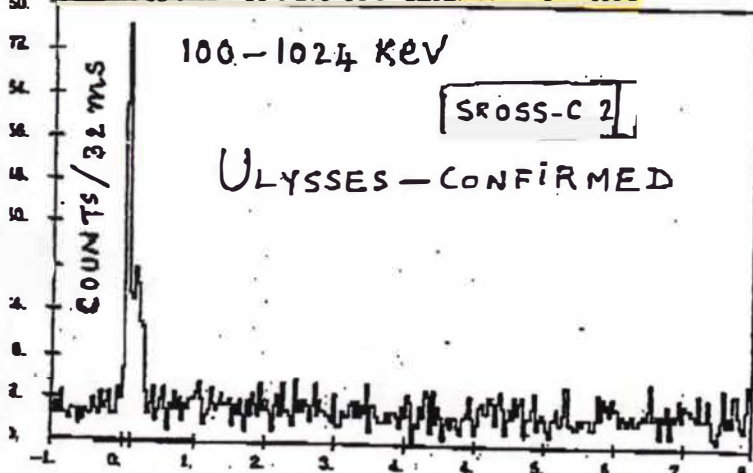
t- 1s to t+ 8s 32 ms res. north=1650/2 ra= 35.1 dec=-42.1

TIME = 20 : 23 : 19 . 878 UT : DATE: 22 - 8 - 1994

100-1024 KeV

SROSS-C 2

ULYSSES - CONFIRMED

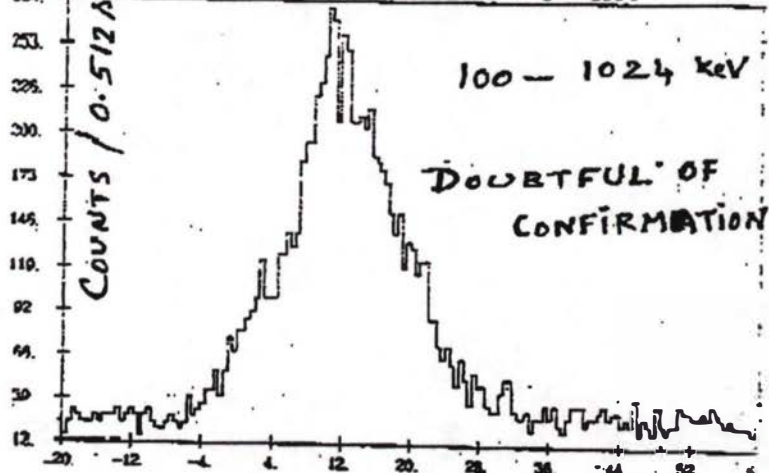


t-20s - t+60s 512 ms ch2. north=1448/1 ra= 96.0 dec=-46.0

TIME = 11 : 52 : 31 . 508 UT : DATE: 9 - 8 - 1994

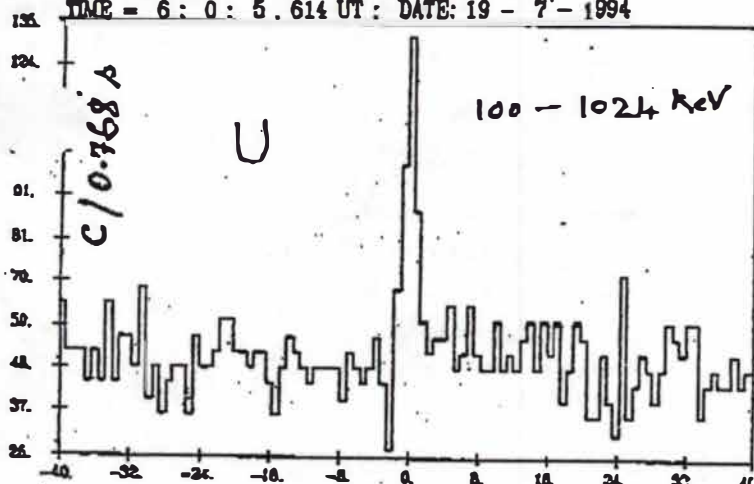
100-1024 KeV

DOUBTFUL OF
CONFIRMATION

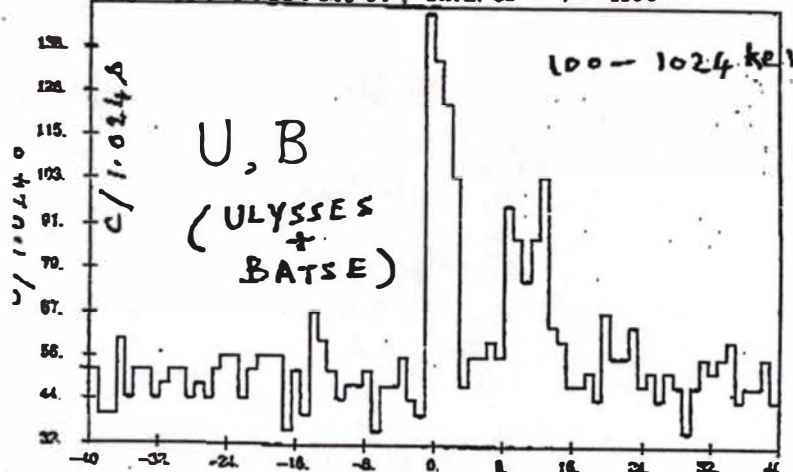


CROSS-C2 GRB CANDIDATES

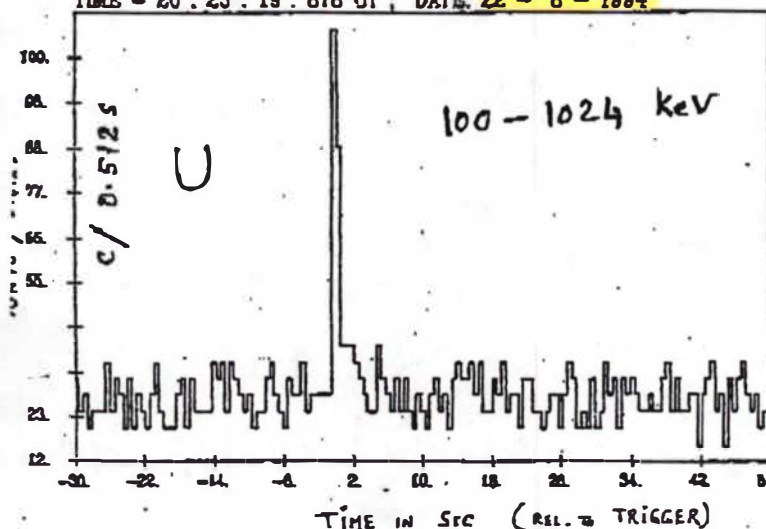
t-40s - t+ 65s 768 ms ch2. norb= 11284 ra=196.7 dec=-40.4
TIME = 6: 0: 5.614 UT; DATE: 19 - 7 - 1994



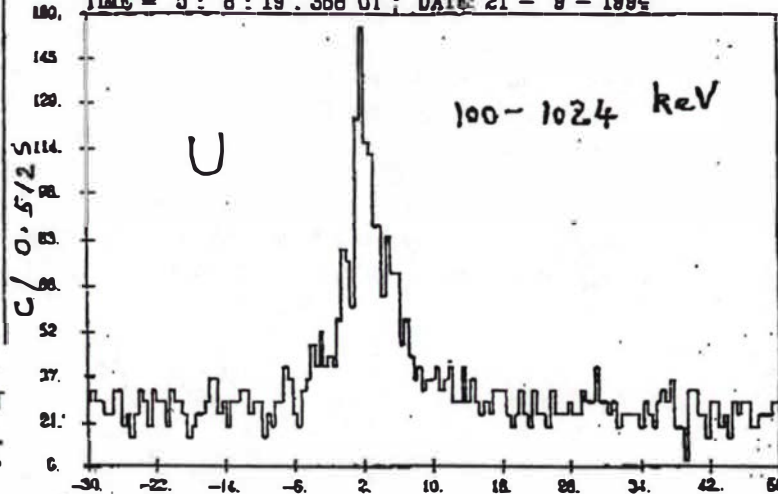
t-40s - t+ 65s 1024 ms ch2. norb= 12966 ra=154.8 dec=-45.3
TIME = 11: 1: 30.926 UT; DATE: 30 - 7 - 1994



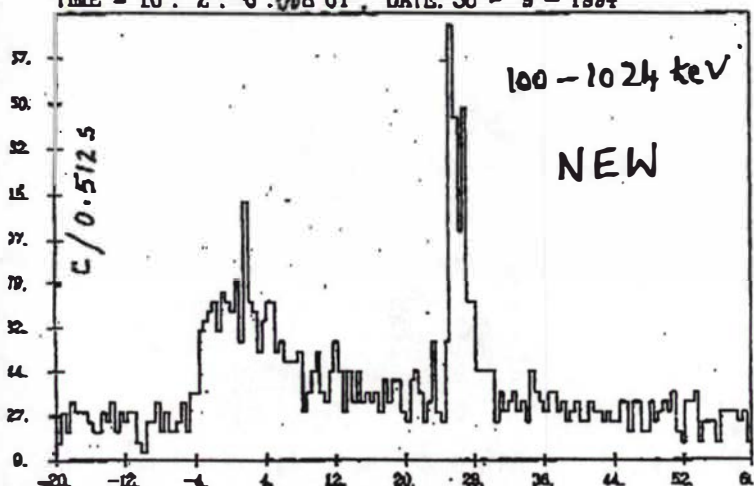
t-30s - t+ 50s 512 ms ch2. norb= 18502 ra=35.1 dec=-42.1
TIME = 20: 23: 19.878 UT; DATE: 22 - 8 - 1994



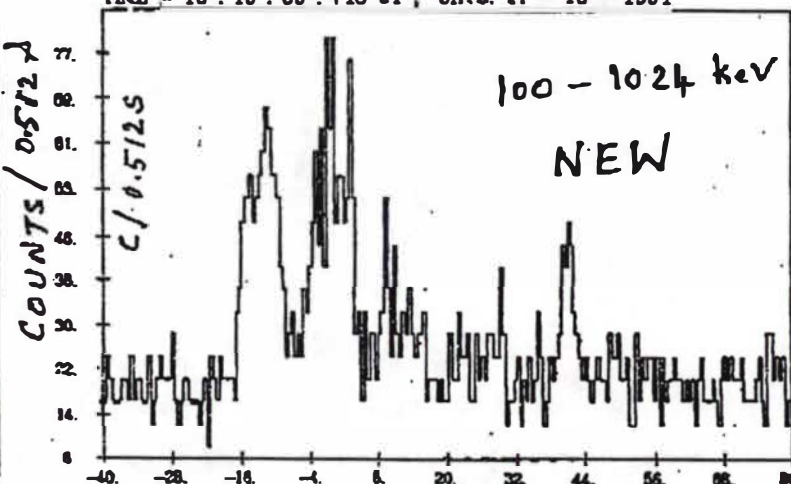
t-30s - t+ 50s 512 ms ch2. norb= 20951 ra=238.5 dec=-47.3
TIME = 5: 8: 19.368 UT; DATE: 21 - 9 - 1994



t-20s - t+ 60s 512 ms ch2. norb= 22341 ra=182.5 dec=-45.9
TIME = 10: 2: 6.008 UT; DATE: 30 - 9 - 1994



t-40s - t+ 60s 512 ms ch2. norb= 24922 ra=98.5 dec=-41.8
TIME = 10: 18: 59.748 UT; DATE: 17 - 10 - 1994



TIME IN SEC.

PAGE 2 OF
2

U = CONFIRMED BY ULYSSES

To : DR. KEVIN HURLEY

2 PAGES

इसरो उपग्रह केन्द्र
अन्तरिक्ष विभाग
भारत सरकार

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New events

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With best regards,

sincerely yours,

Krishnan
(Krishnan)

t-1s to t+8s 32 ms res. north=16502 ra=35.1 dec=-42.1
TIME = 20:23:19.878 UT : DATE: 22 - 8 - 1994

100-1024 KEV

SROSS-C2

ULYSSES - CONFIRMED

t-20s to t+60s 512 ms ch2. north=14481 ra=96.0 dec=-40.0
TIME = 11:52:31.500 UT : DATE: 9 - 8 - 1994

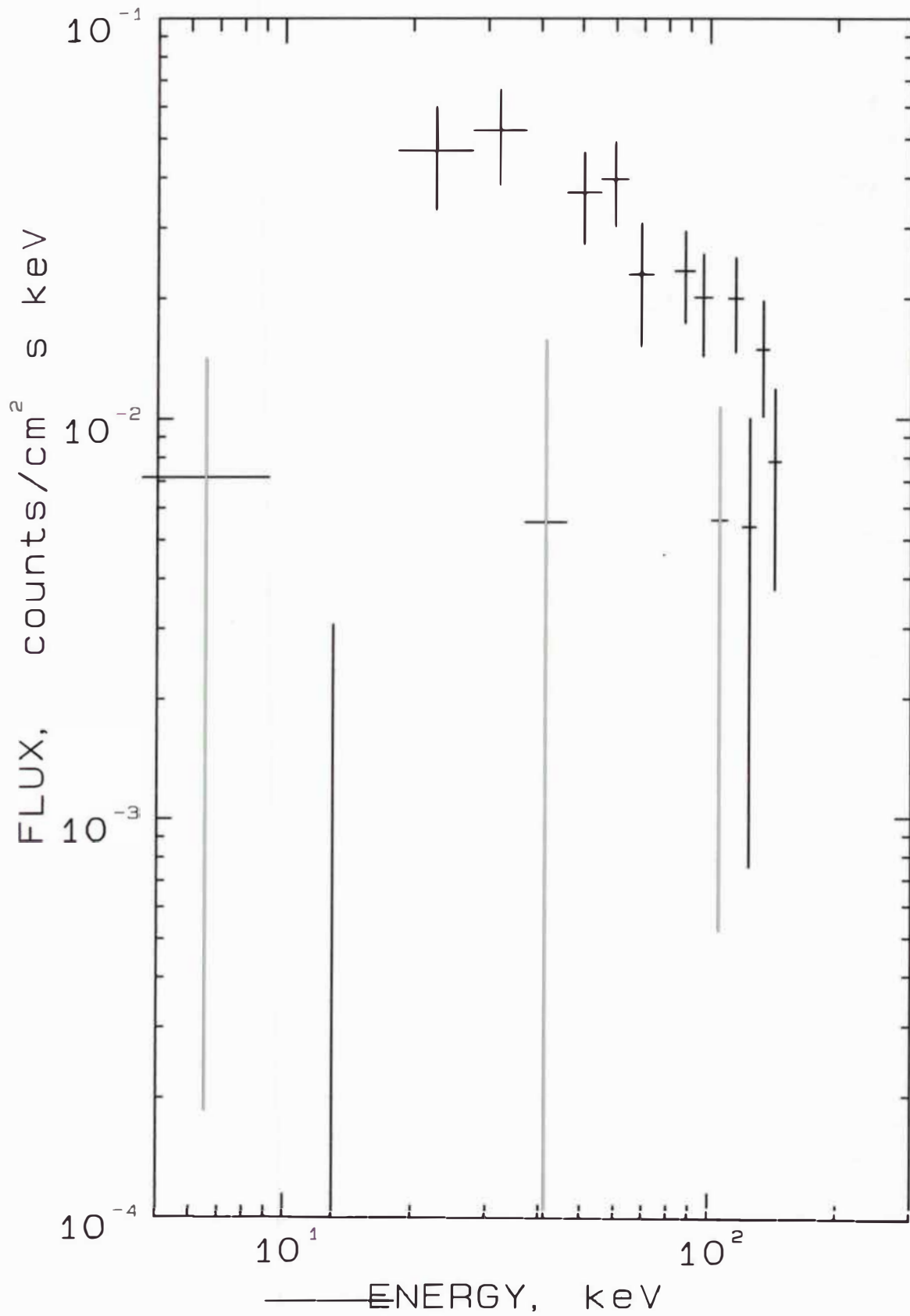
100-1024 KEV

DOUBTFUL OF CONFIRMATION

ULYSSES 22/08/94 74643.003

29/10/97

SPECTRUM INTEGRATED OVER 21.6 SECONDS, INTERVALS 2 TO 20



ULYSSES 22/08/94 74643.003 BURST SPECTRAL COUN. RATES

4- 18 keV

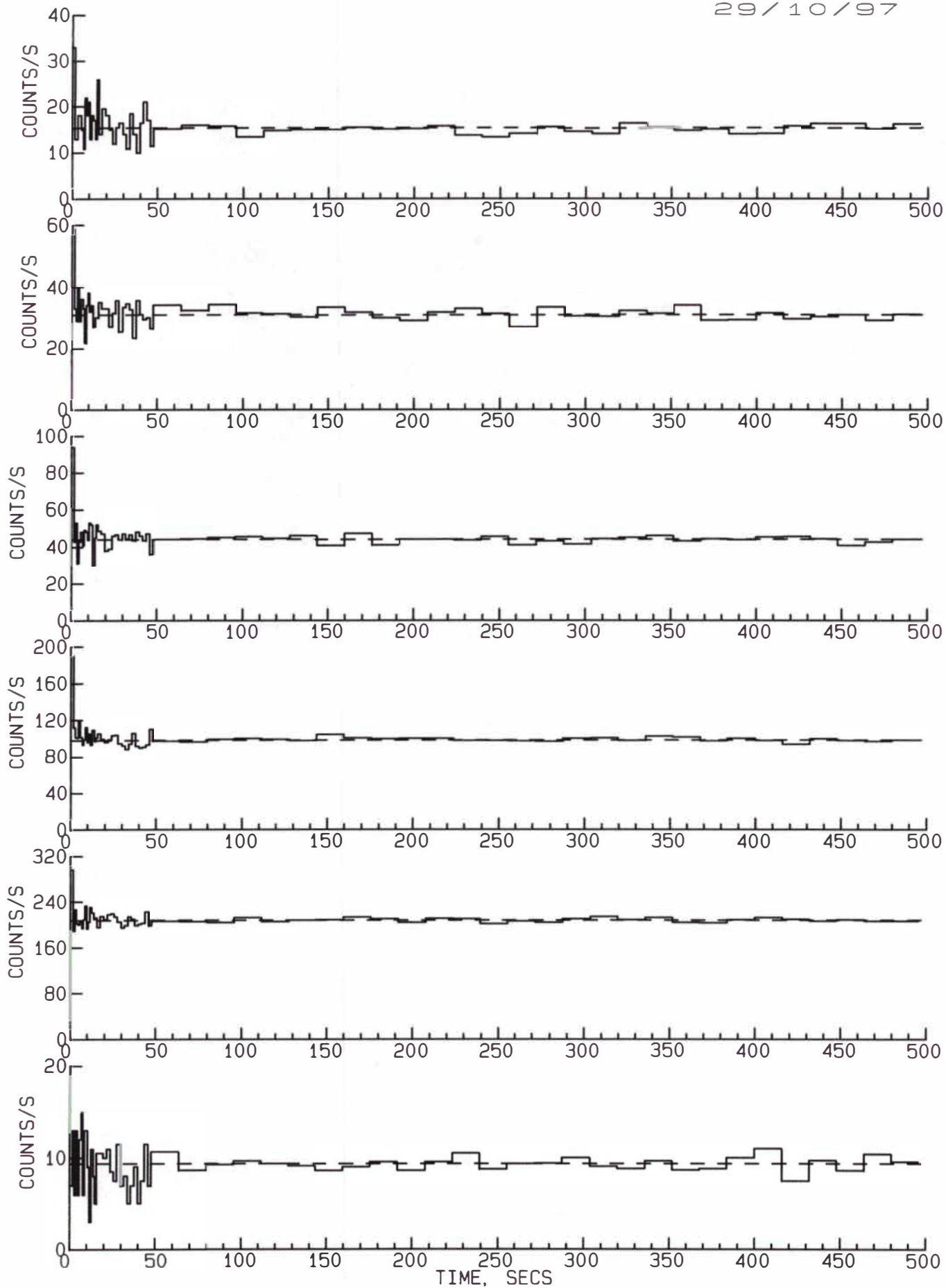
18- 46 keV

46- 73 keV

73-101 keV

101-129 keV

129-147 keV



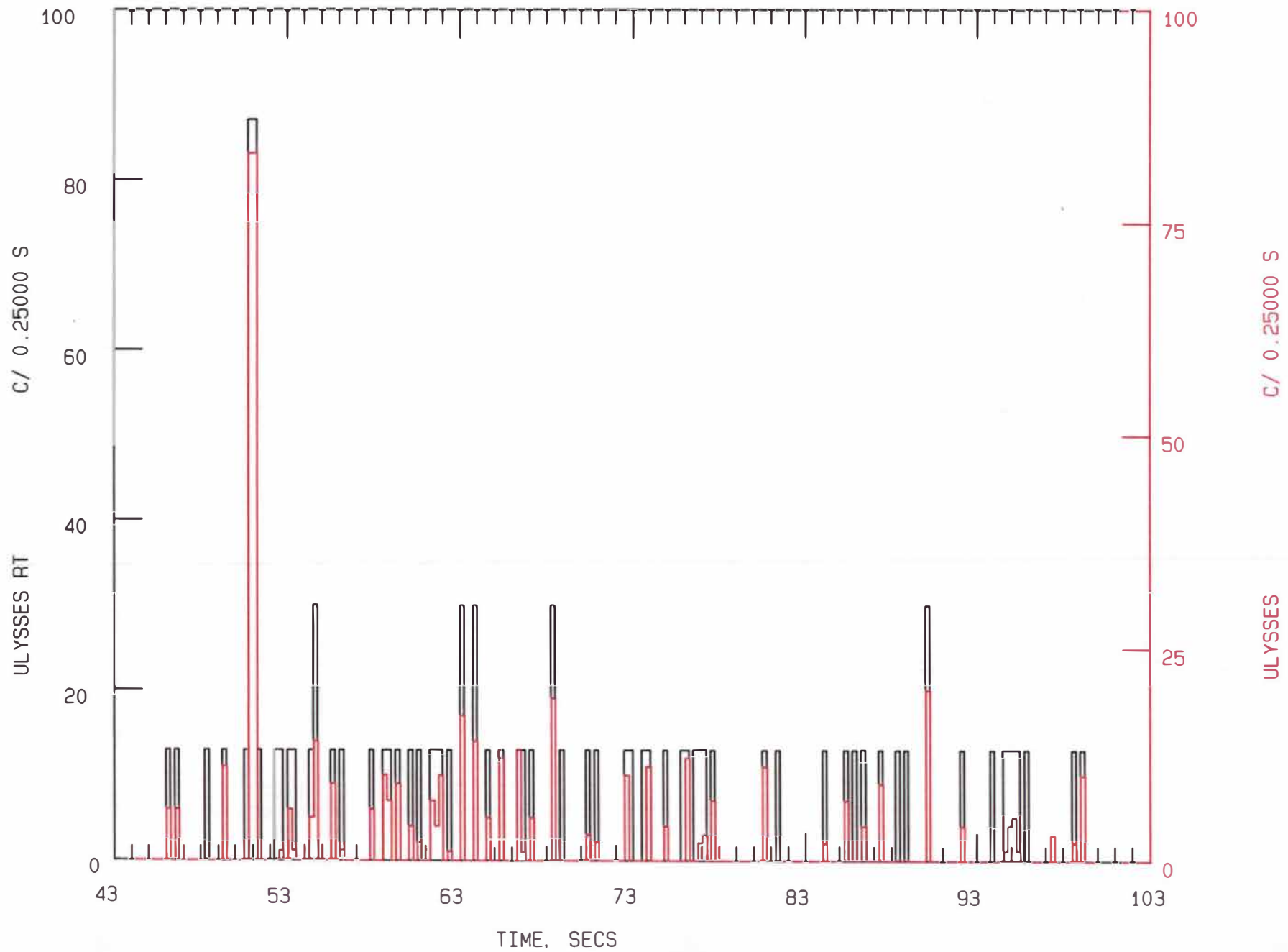
ULYSSES RT-ULYSSES

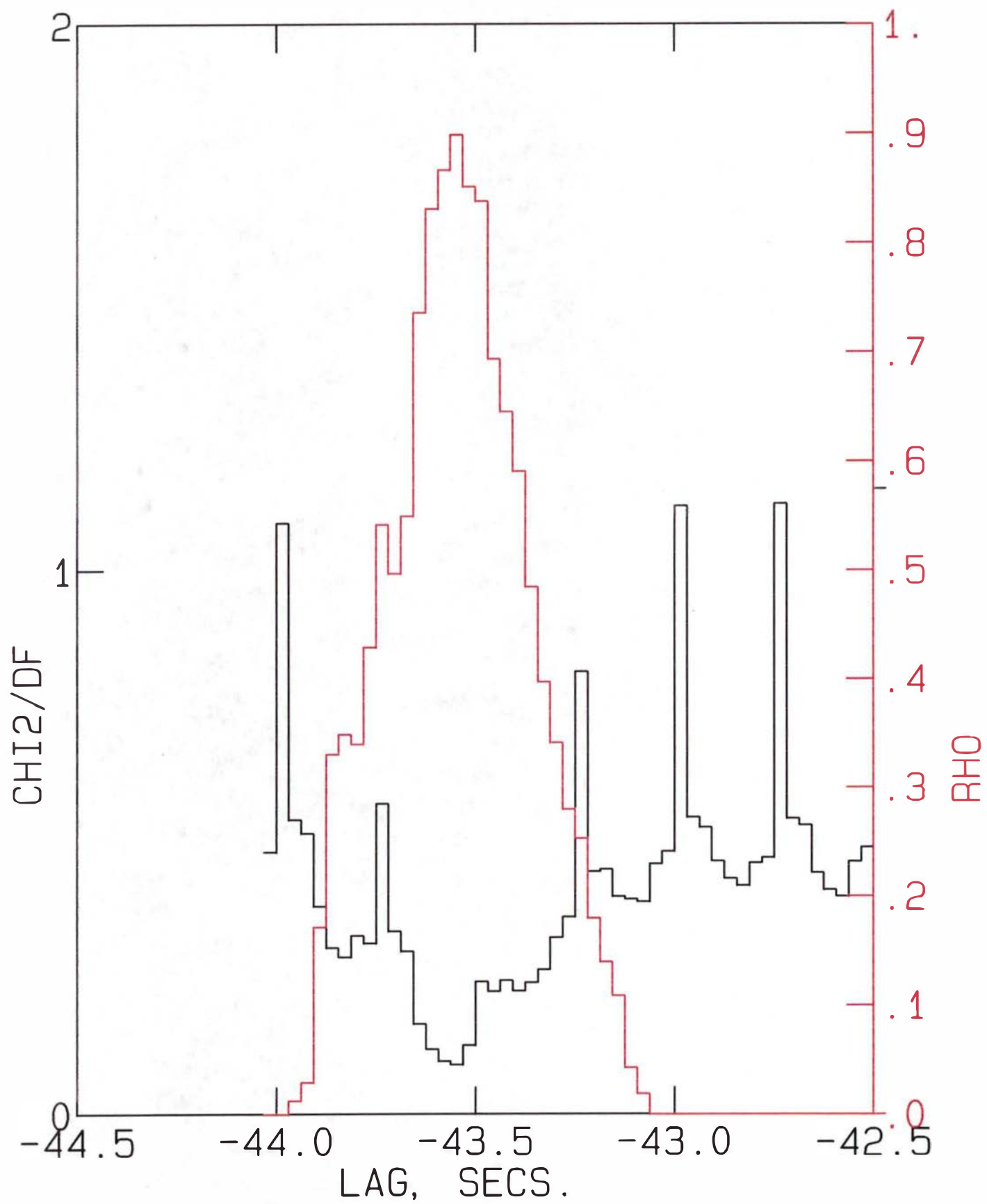
CORRELATION

22/ 8/94

74592.036

29/10/97





ULYSSES

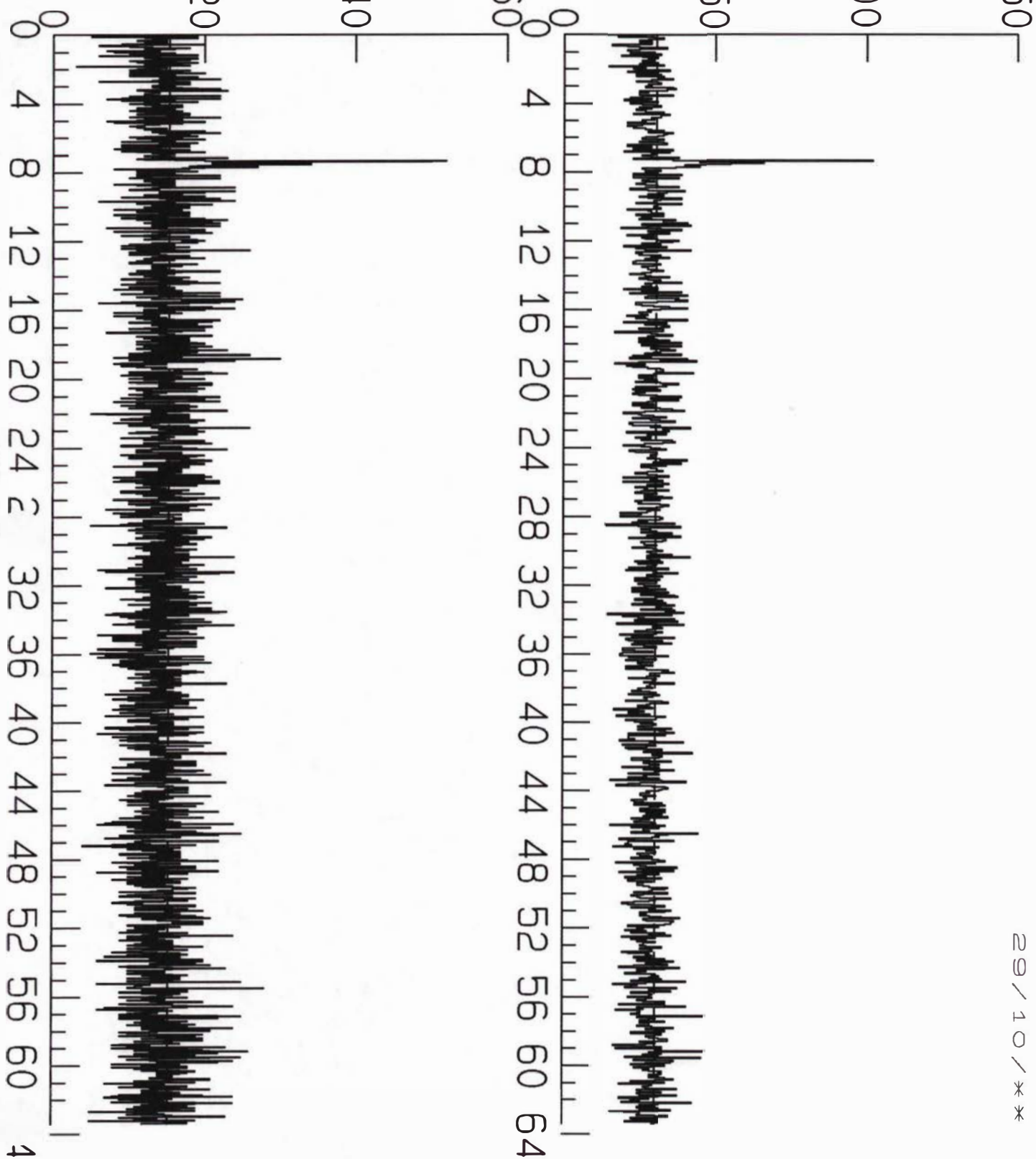
22/08/94

Ttrig=74642.976

22- 147 keV

COUNTS/0.031 S

COUNTS/0.062 S



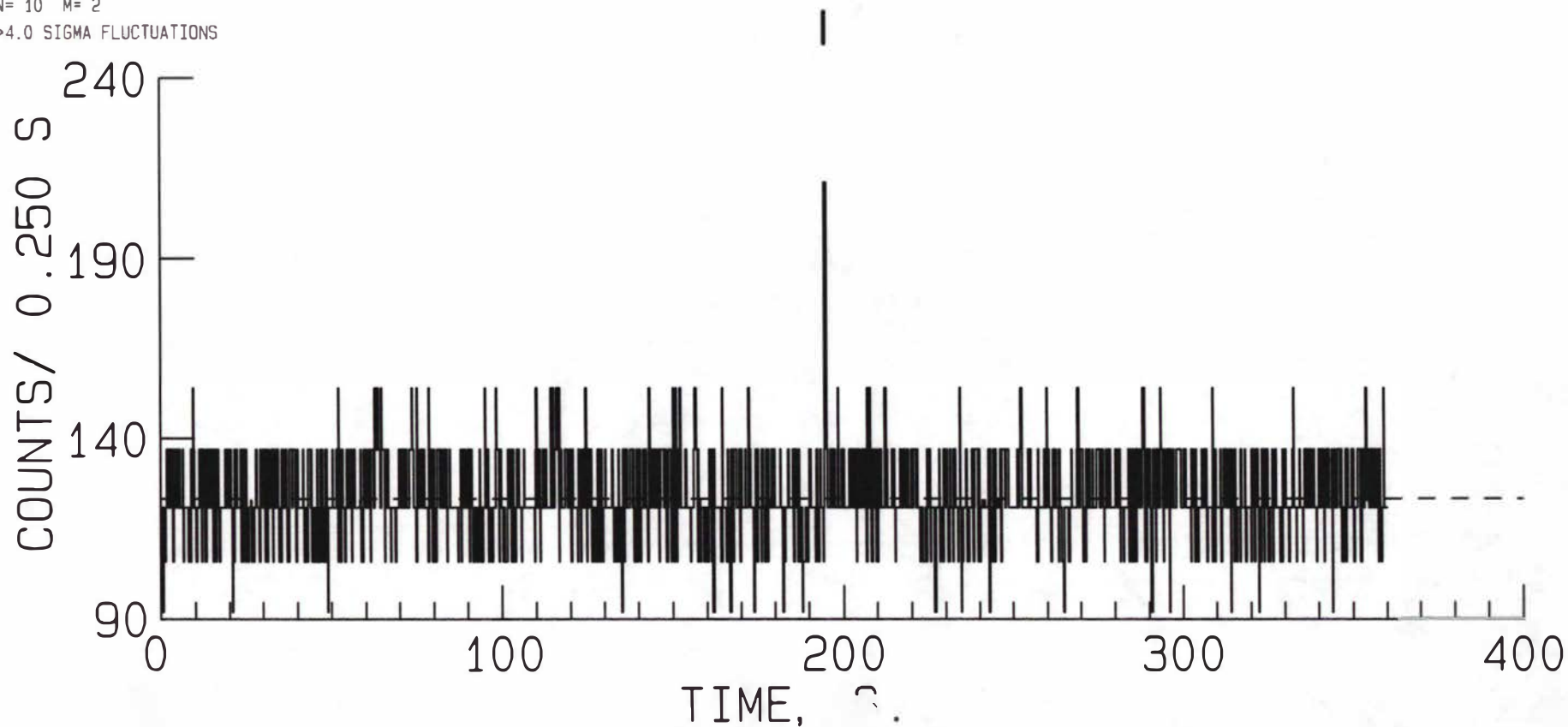
ULYSSES RT

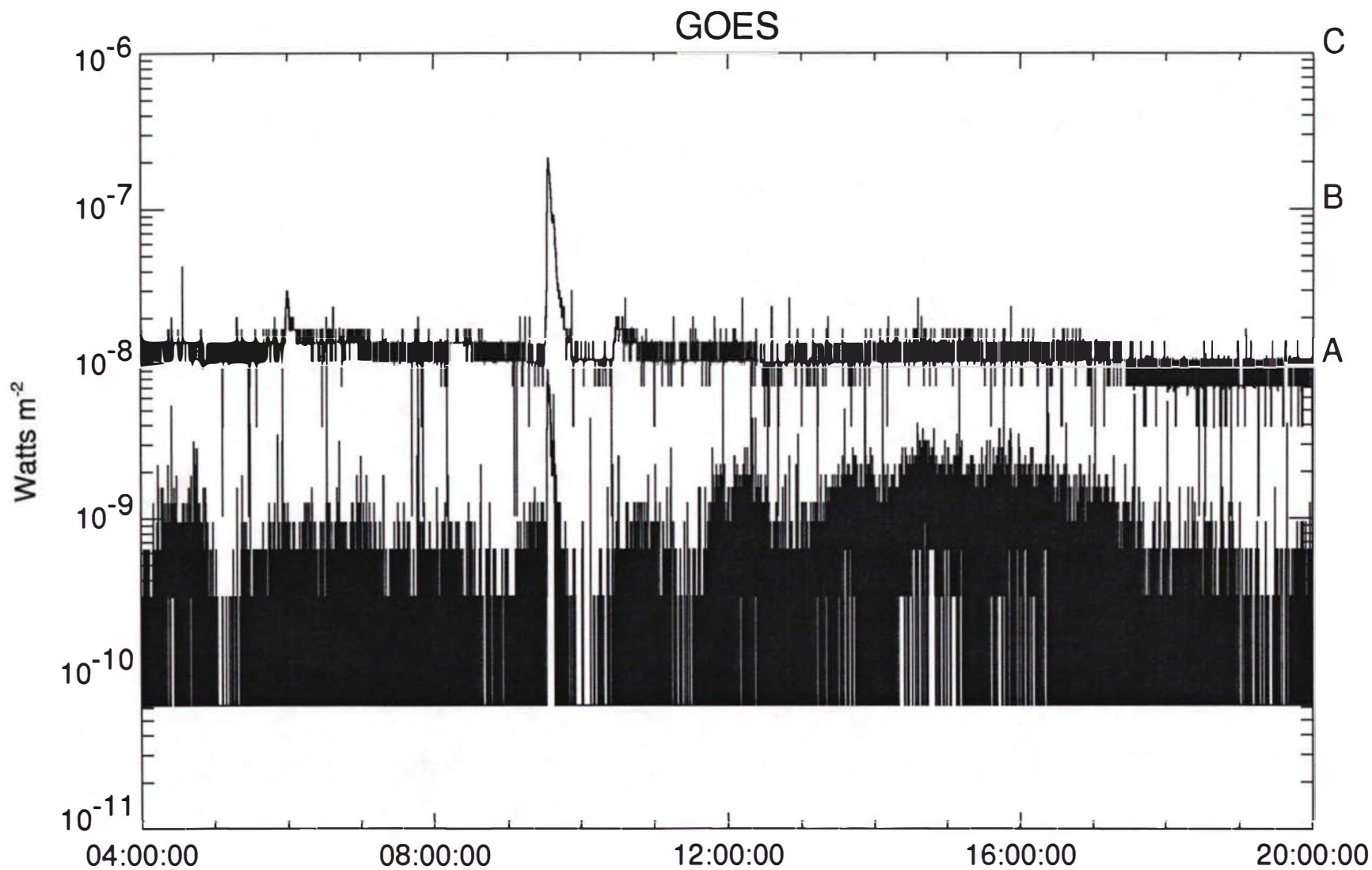
29/10/97

22/ 8/94 74448.065 s

22- 147 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





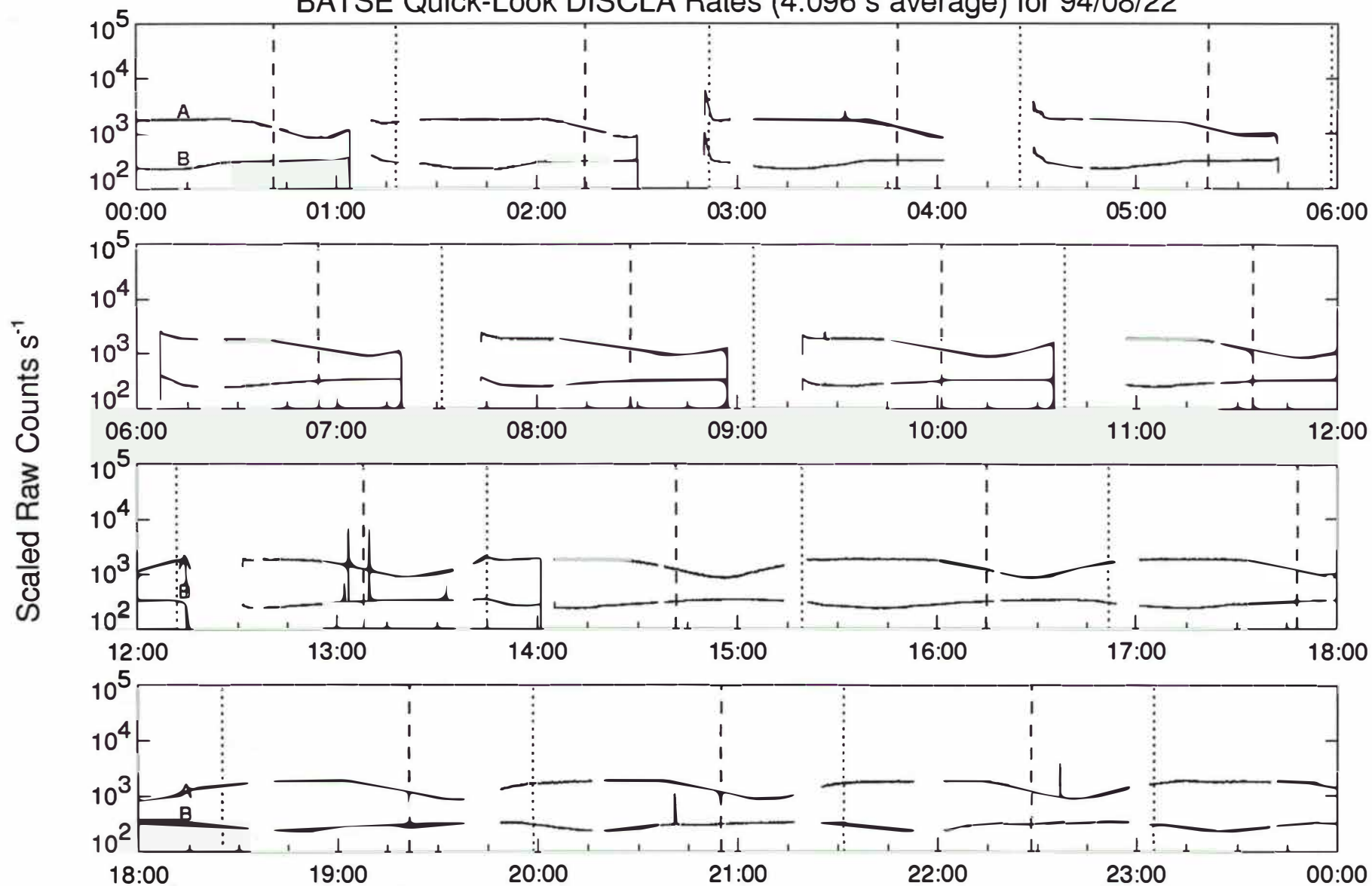
Data Start: 94/08/22, 0000:01

Plot created: 94/09/02, 1904

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/22

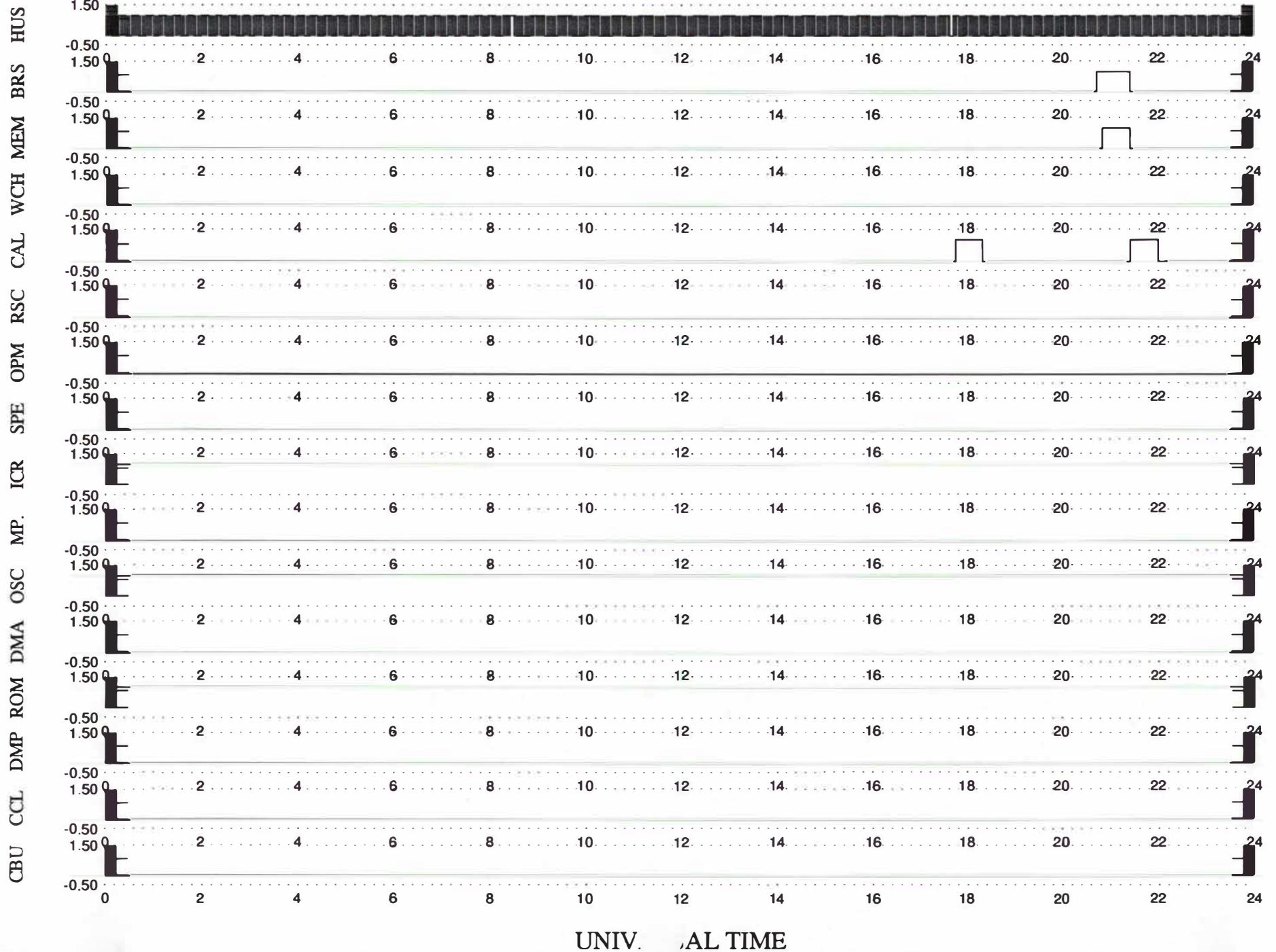


Current Time: 94/08/25, 1408 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

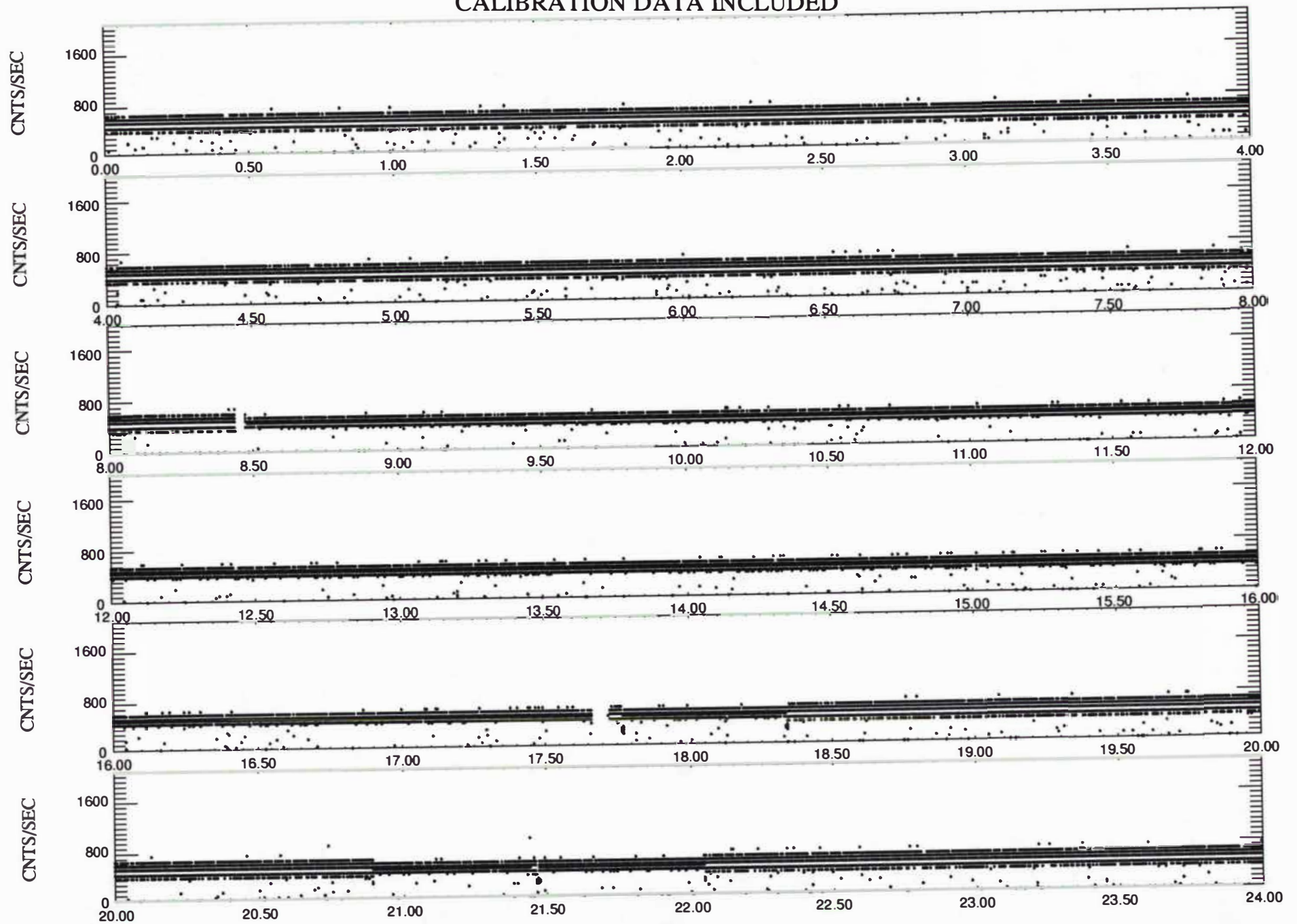
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 4

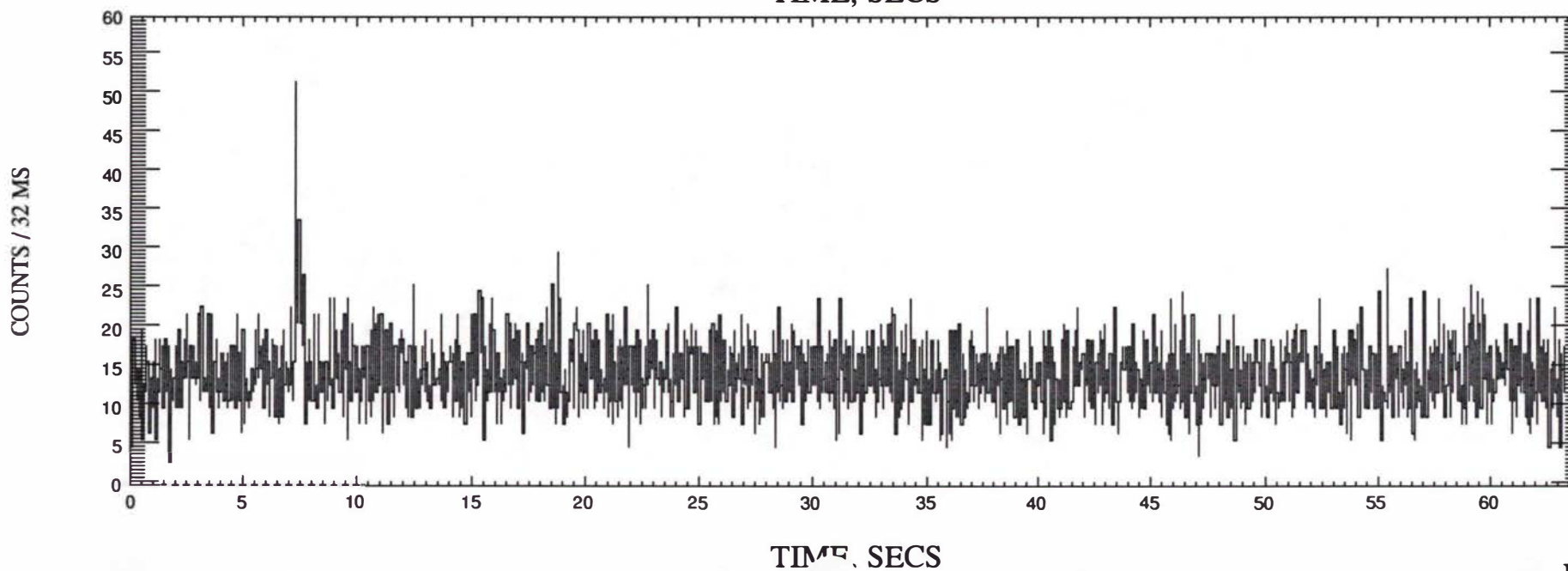
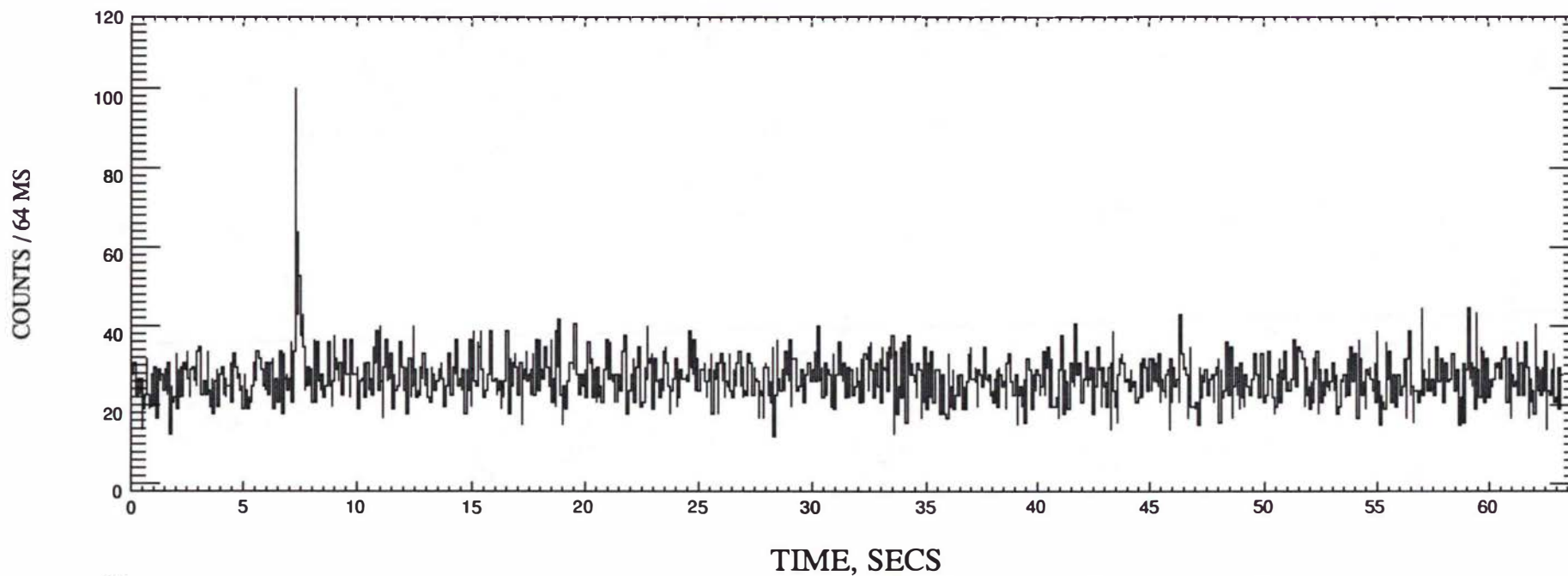


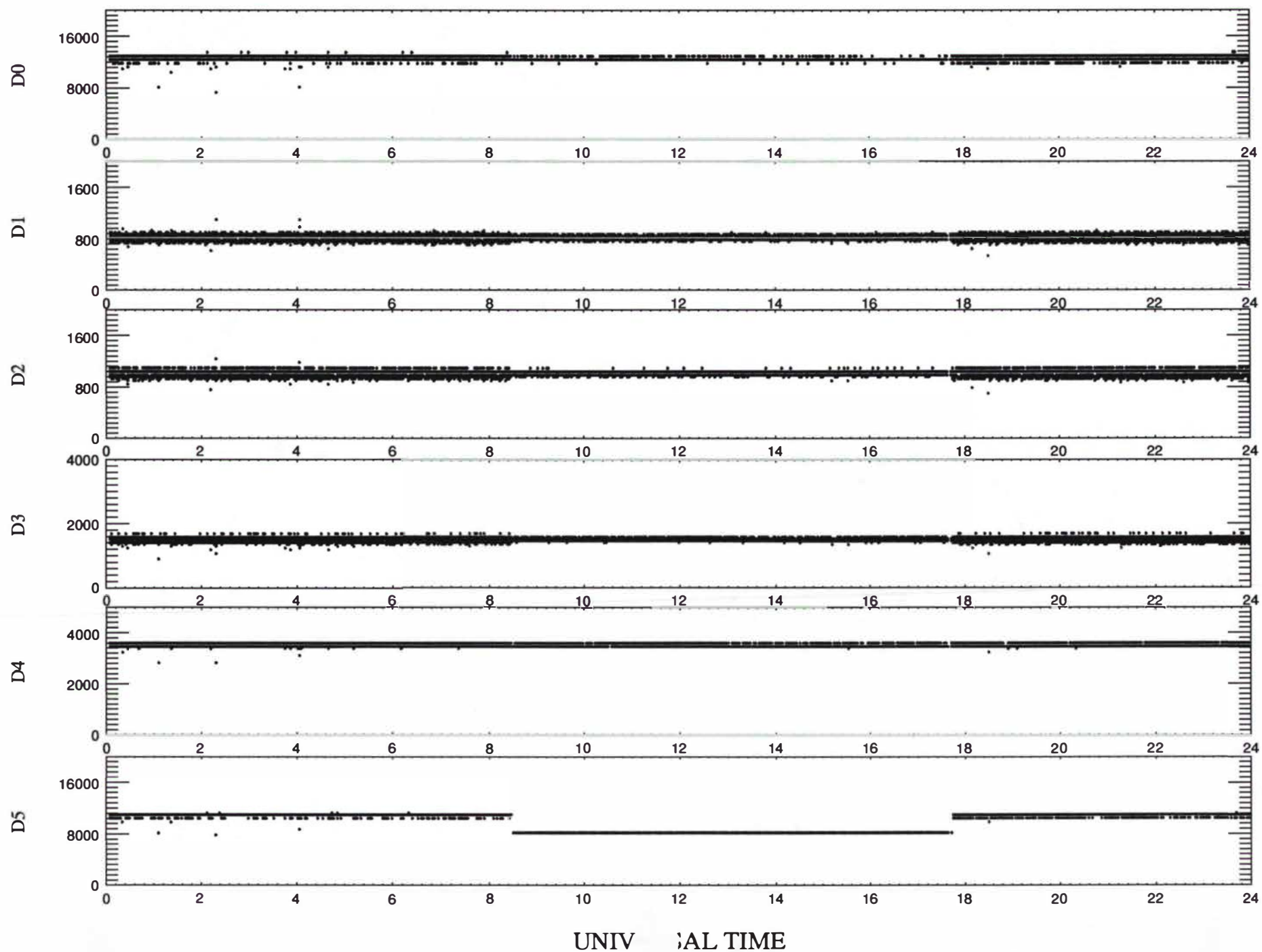
CALIBRATION DATA INCLUDED



UNIV AL TIME

Burst Counter 4 at UT=20.734167637295 h=74643.003 s 20:44:03.003





From KOSHUT@ssl.msfc.nasa.gov Wed Aug 24 11:10 PDT 1994
Date: Wed, 24 Aug 1994 13:10:18 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3134

BATSEARCH PROGRAM

BATSE BURST # 3134
EVENT OF 1994 AUG 23 DAY OF YEAR=235
EVENT CROSSING TIME AT BATSE : 11816. S. OR 03:16:56.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 45.000 7.000
BATSE PEAK COUNTING RATE: 2400 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 23/ 8/ 94 IS:
RA= 141.674 DEC= -45.940 DIST= 2.816 AU
BATSE-ULYSSES DISTANCE = 421203404. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.34 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 235.76 SECS.
CROSSING TIME AT ULYSSES IS 12052. S. OR 03:20:51 +/- 294.05 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 23/ 8/ 94 IS:
RA= 94.397 DEC= 23.660 DIST= 1.813 AU
MARS-BATSE DISTANCE = 271183520. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=129.83 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -579.44 SECS.
CROSSING TIME AT MARS IS 11237. S. OR 03:07:16 +/- 111.80 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3134	940823	9587	11816	2400	045	+07

BATSE BURST TRIGGER

NO.: 3134

TIME: TJD=9587 SECONDS=11816

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=43. AZIMUTH=132. ERROR= DEGREES

COMMENTS:

BURST OF ~ 20 SECONDS DURATION, NOT OBSERVED ABOVE 300 KEV. TIME HISTORY
CONSISTS OF A SINGLE PULSE, WITH NO SIGNIFICANT SUBSTRUCTURE.

26 / 8 / 94

ULYSSES RT

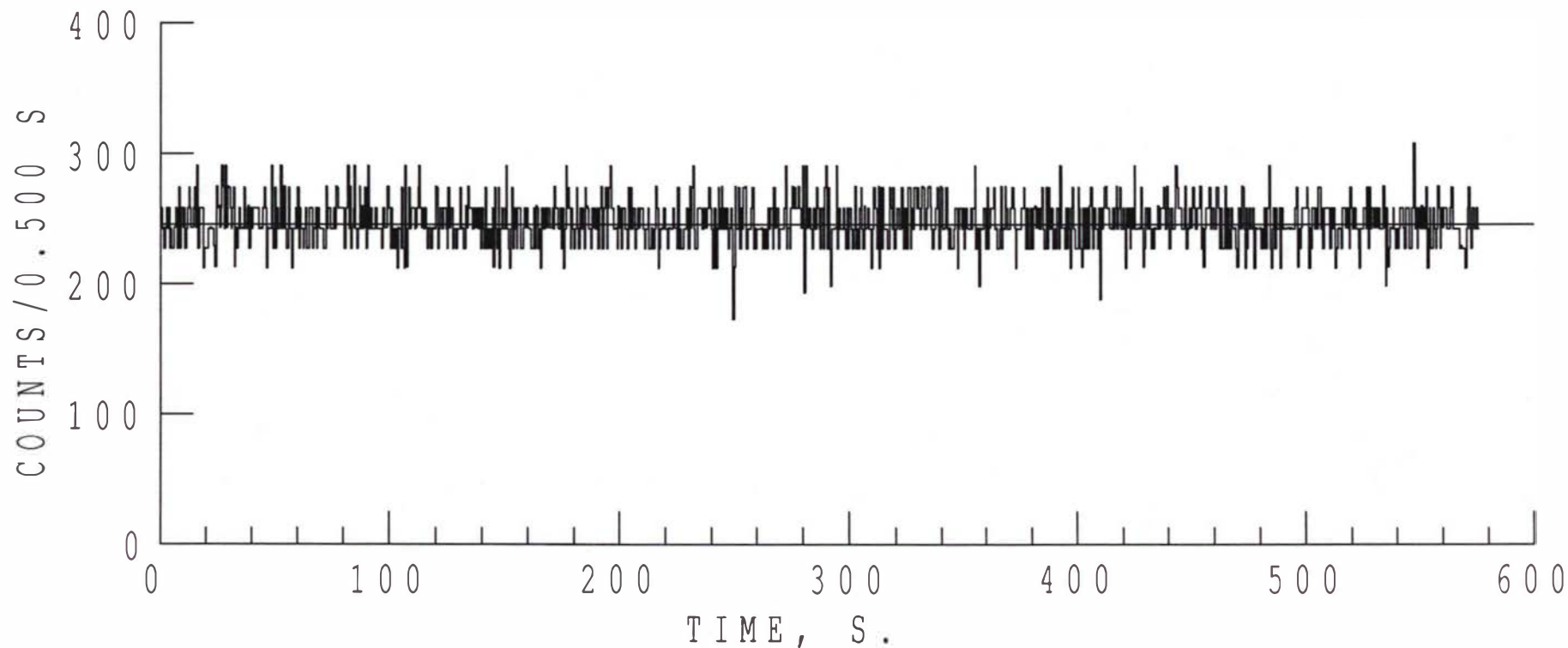
23 / 8 / 94 11772.202 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From KOSHUT@ssl.msfc.nasa.gov Thu Aug 25 06:03 PDT 1994
Date: Thu, 25 Aug 1994 8:03:27 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3135

BATSEARCH PROGRAM

BATSE BURST # 3135
EVENT OF 1994 AUG 23 DAY OF YEAR=235
EVENT CROSSING TIME AT BATSE : 37917. S. OR 10:31:57.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 103.000 6.000
BATSE PEAK COUNTING RATE: 3400 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 23/ 8/ 94 IS:
RA= 141.789 DEC= -46.014 DIST= 2.813 AU
BATSE-ULYSSES DISTANCE = 420883895. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=117.59 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -650.21 SECS.
CROSSING TIME AT ULYSSES IS 37267. S. OR 10:21:06 +/- 256.15 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 23/ 8/ 94 IS:
RA= 94.397 DEC= 23.660 DIST= 1.813 AU
MARS-BATSE DISTANCE = 271183520. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=160.50 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -852.67 SECS.
CROSSING TIME AT MARS IS 37064. S. OR 10:17:44 +/- 39.48 SECONDS

ND

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3135	940823	9587	37917	3400	103	+06

BATSE BURST TRIGGER

NO.: 3135

TIME: TJD=9587 SECONDS=37917

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=16. AZIMUTH=339. ERROR= DEGREES

COMMENTS:

BURST OF DURATION ~ 60 SECONDS, NOT OBSERVED ABOVE 300 KEV. TIME HISTORY
CONSISTS OF 2 PEAKS; THE FIRST PRIOR TO THE TRIGGER, AT ~ TRIGGER - 37 SECONDS,
AND THE SECOND PEAK IS AT THE TRIGGER TIME.

26 / 8 / 94

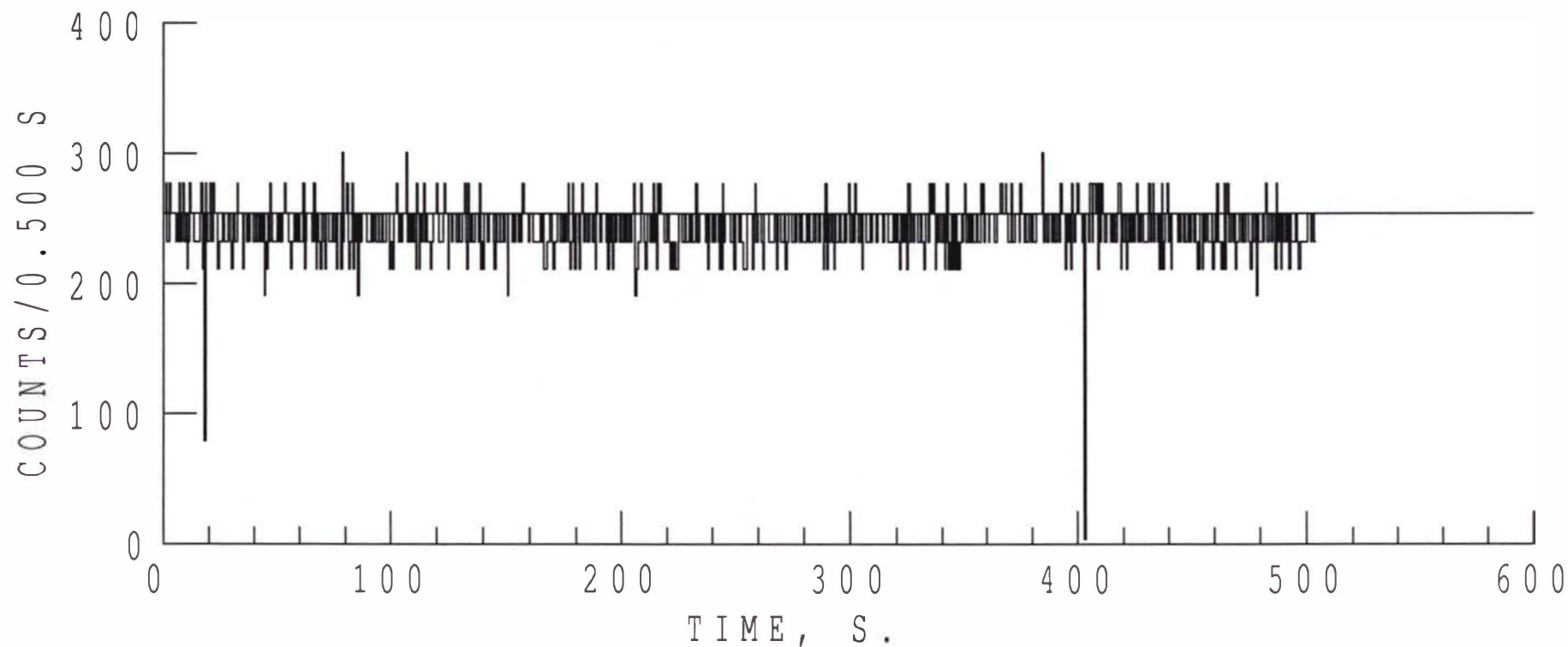
ULYSSES RT

23 / 8 / 94 37008.359 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From KOSHUT@ssl.msfc.nasa.gov Thu Aug 25 06:43 PDT 1994
Date: Thu, 25 Aug 1994 8:43:20 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3136

BATSEARCH PROGRAM

BATSE BURST # 3136
EVENT OF 1994 AUG 23 DAY OF YEAR=235
EVENT CROSSING TIME AT BATSE : 59028. S. OR 16:23:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 61.000 39.000
BATSE PEAK COUNTING RATE: 1500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 23/ 8/ 94 IS:
RA= 141.883 DEC= -46.074 DIST= 2.812 AU
BATSE-ULYSSES DISTANCE = 420623523. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 68.42 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 516.10 SECS.
CROSSING TIME AT ULYSSES IS 59544. S. OR 16:32:24 +/- 284.35 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 23/ 8/ 94 IS:
RA= 94.397 DEC= 23.660 DIST= 1.813 AU
MARS-BATSE DISTANCE = 271183520. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=147.87 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -766.02 SECS.
CROSSING TIME AT MARS IS 58262. S. OR 16:11:01 +/- 71.89 SECONDS

No

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3136	940823	9587	59028	1500	061	+39

BATSE BURST TRIGGER

NO.: 03136

TIME: TJD=9587 SECONDS=59028

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=45. AZIMUTH=81. ERROR= DEGREES

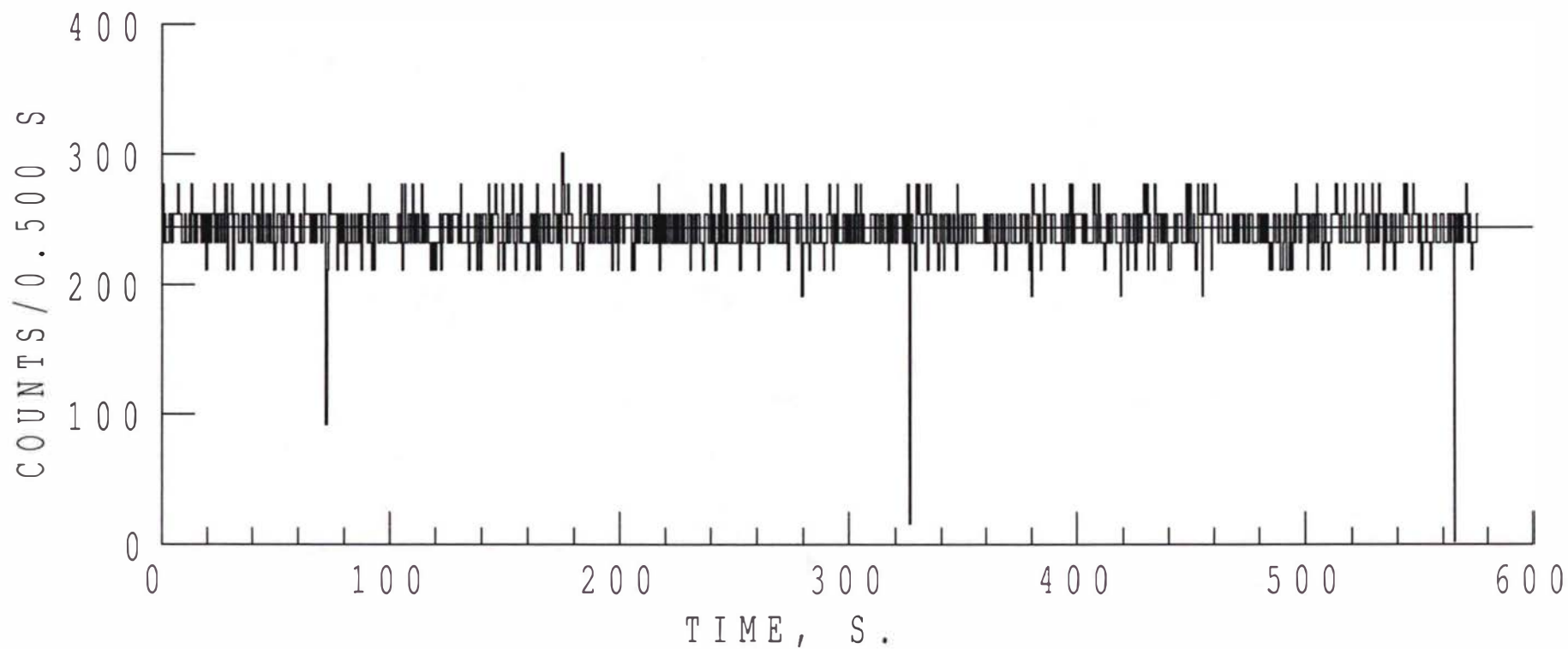
COMMENTS:

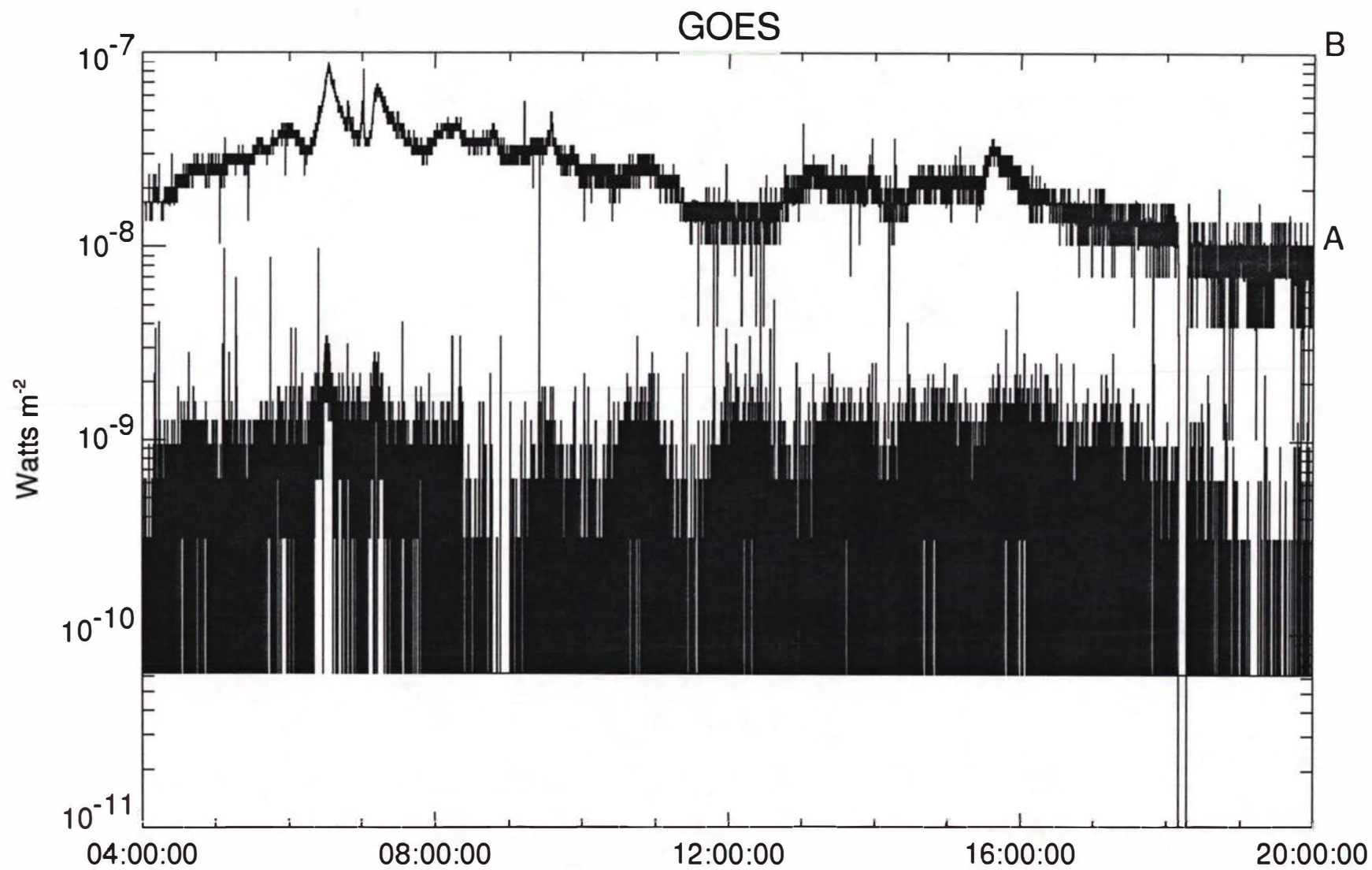
WEAK BURST OF ~ 10 SECONDS DURATION, NOT OBSERVED ABOVE 300 KEV. TIME
HISTORY CONSISTS OF A SINGLE PULSE, WITH NO SIGNIFICANT SUBSTRUCTURE.

26 / 8 / 94

ULYSSES RT
23 / 8 / 94 59256.219 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





Data Start: 94/08/23, 0000:02

Plot created: 94/09/02, 1905

Channel

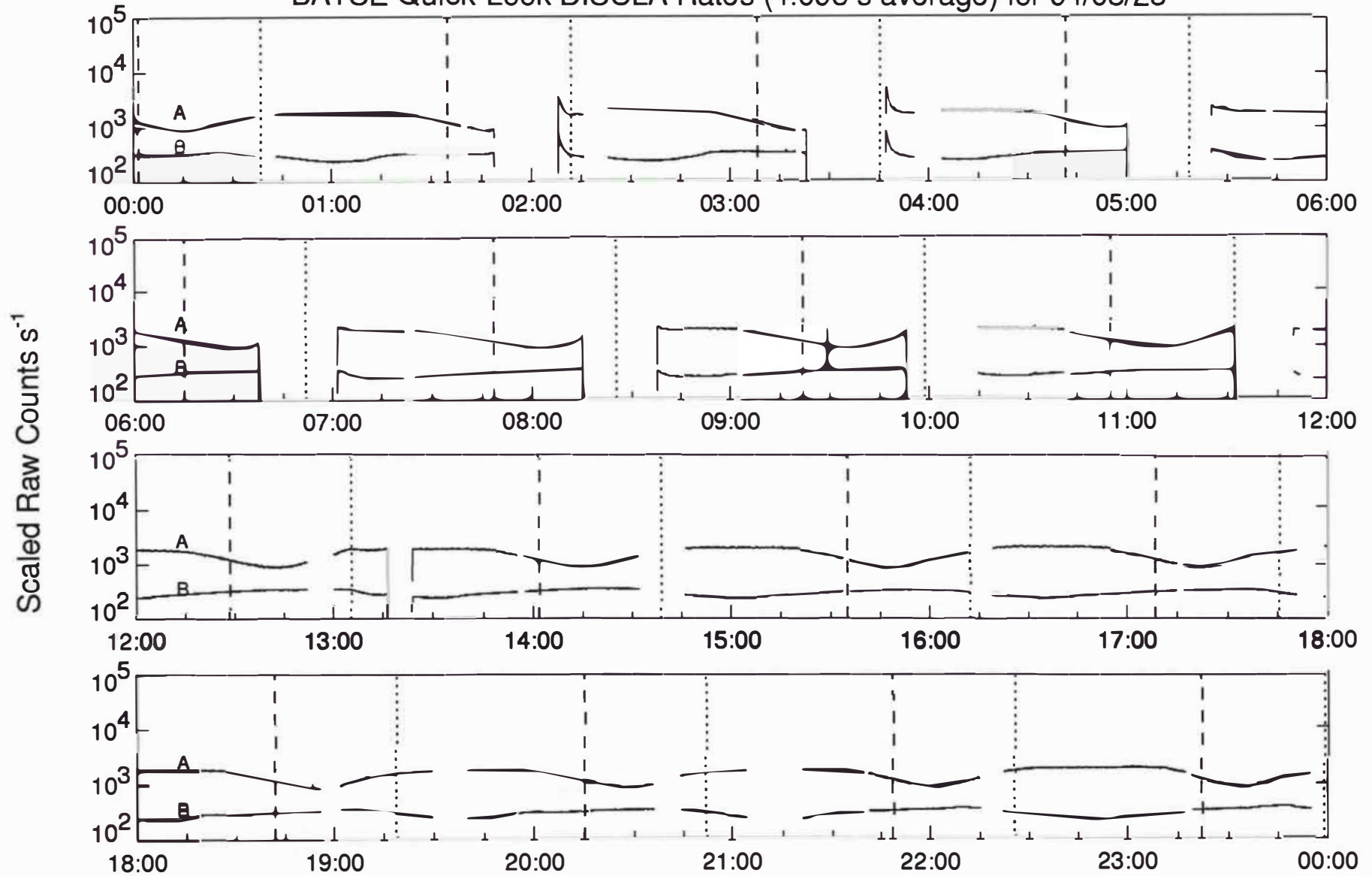
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/23

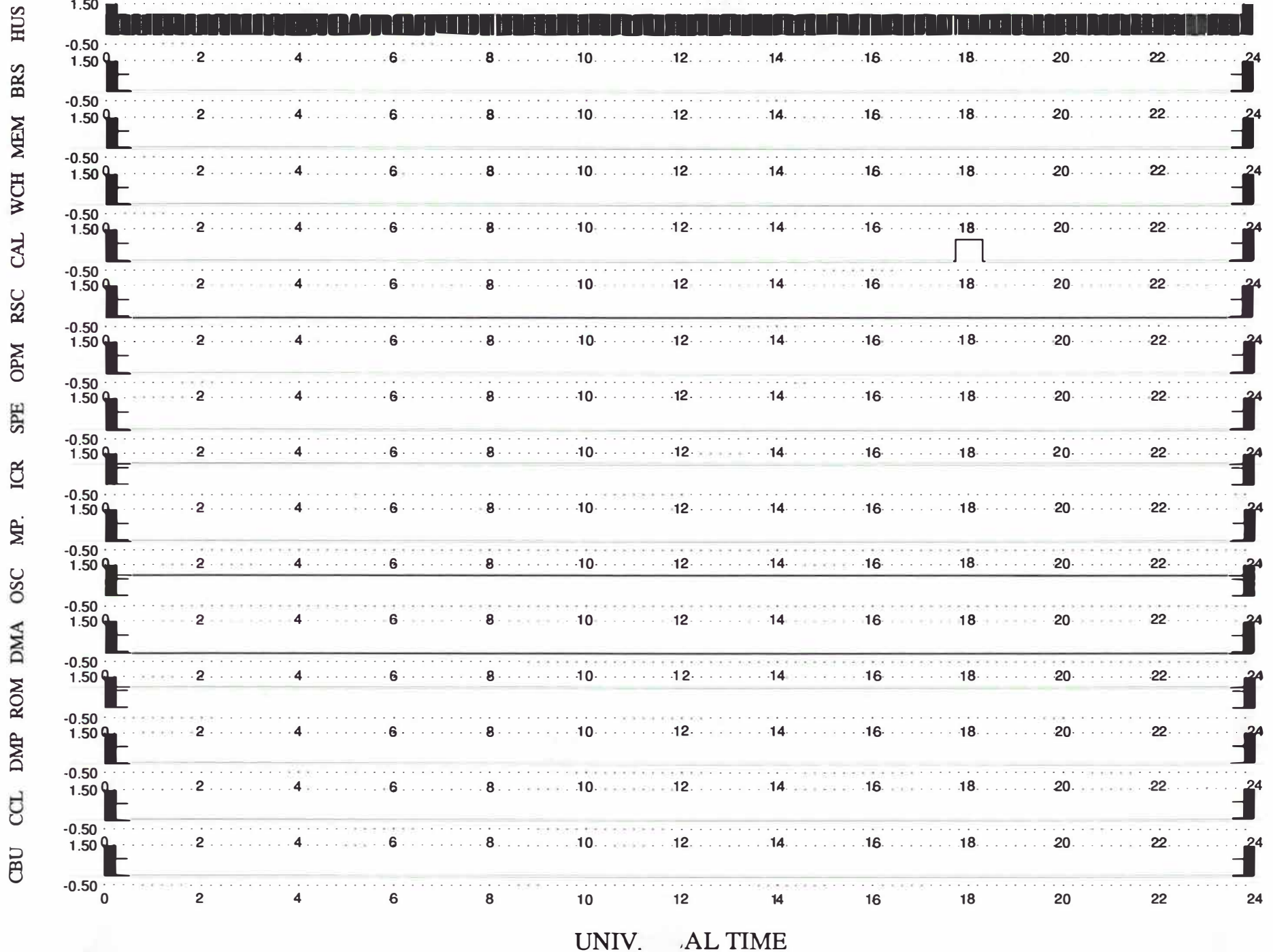


Current Time: 94/08/25, 1408 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

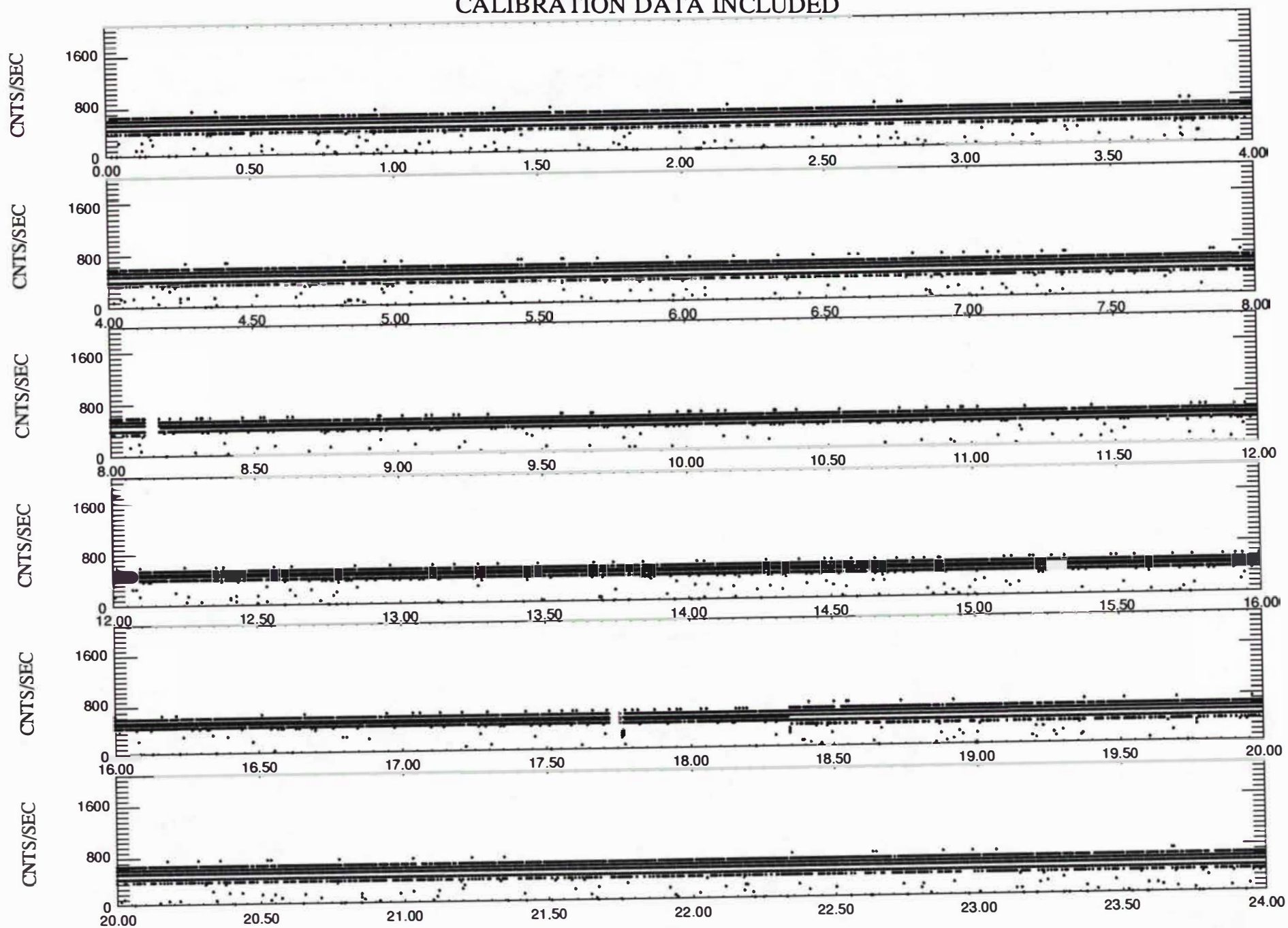
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

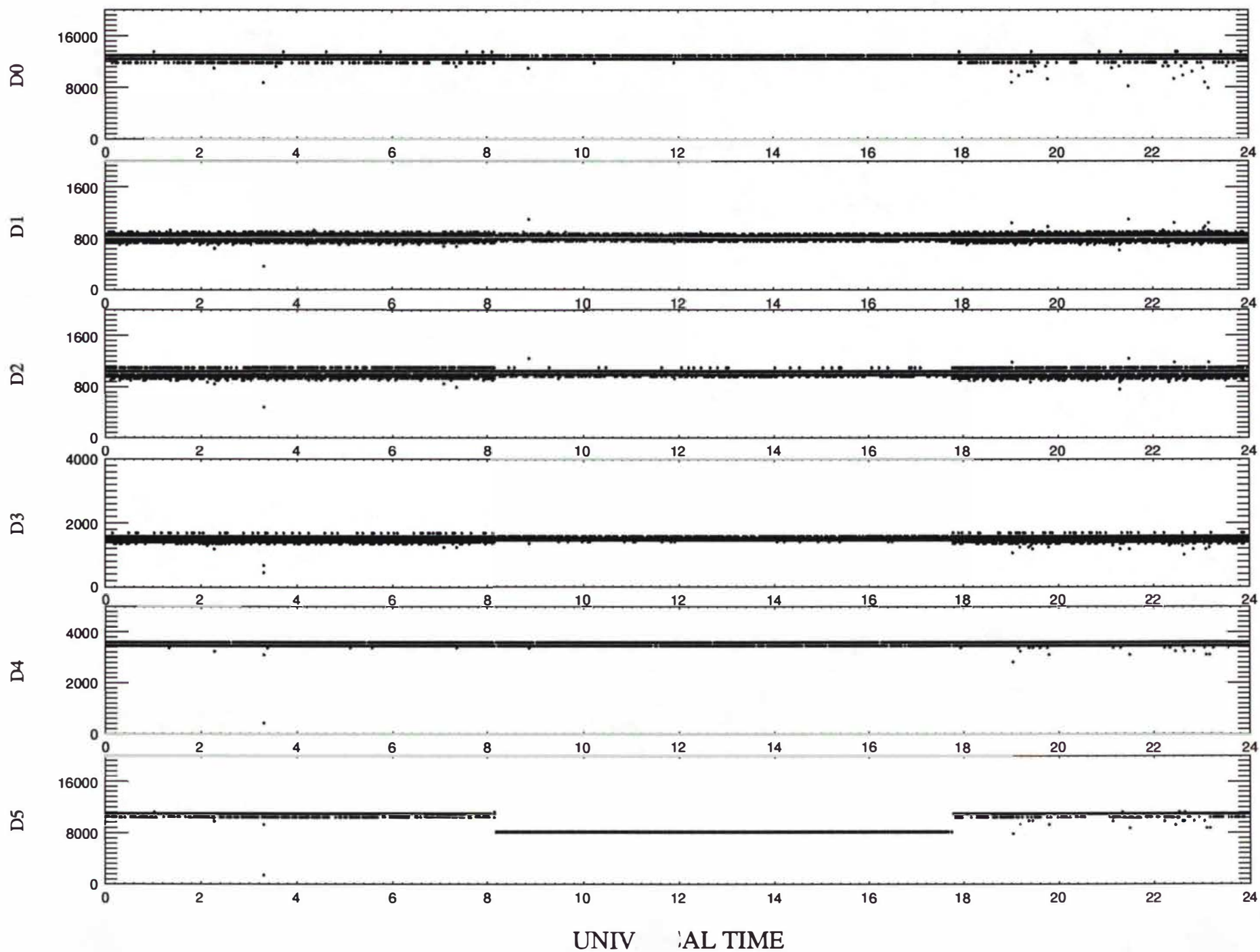
NO BURST (4)

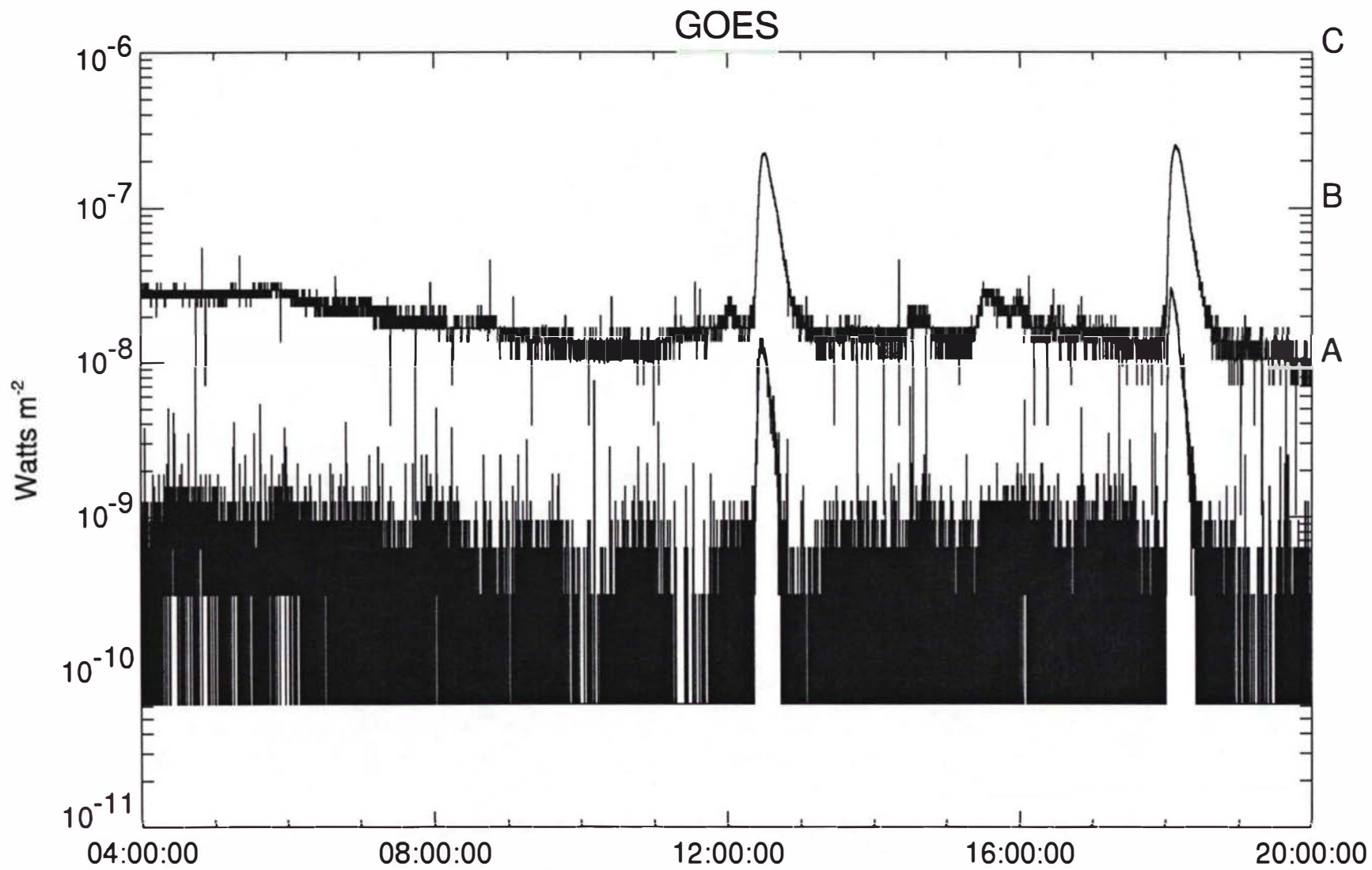


CALIBRATION DATA INCLUDED



UNIV: AL TIME





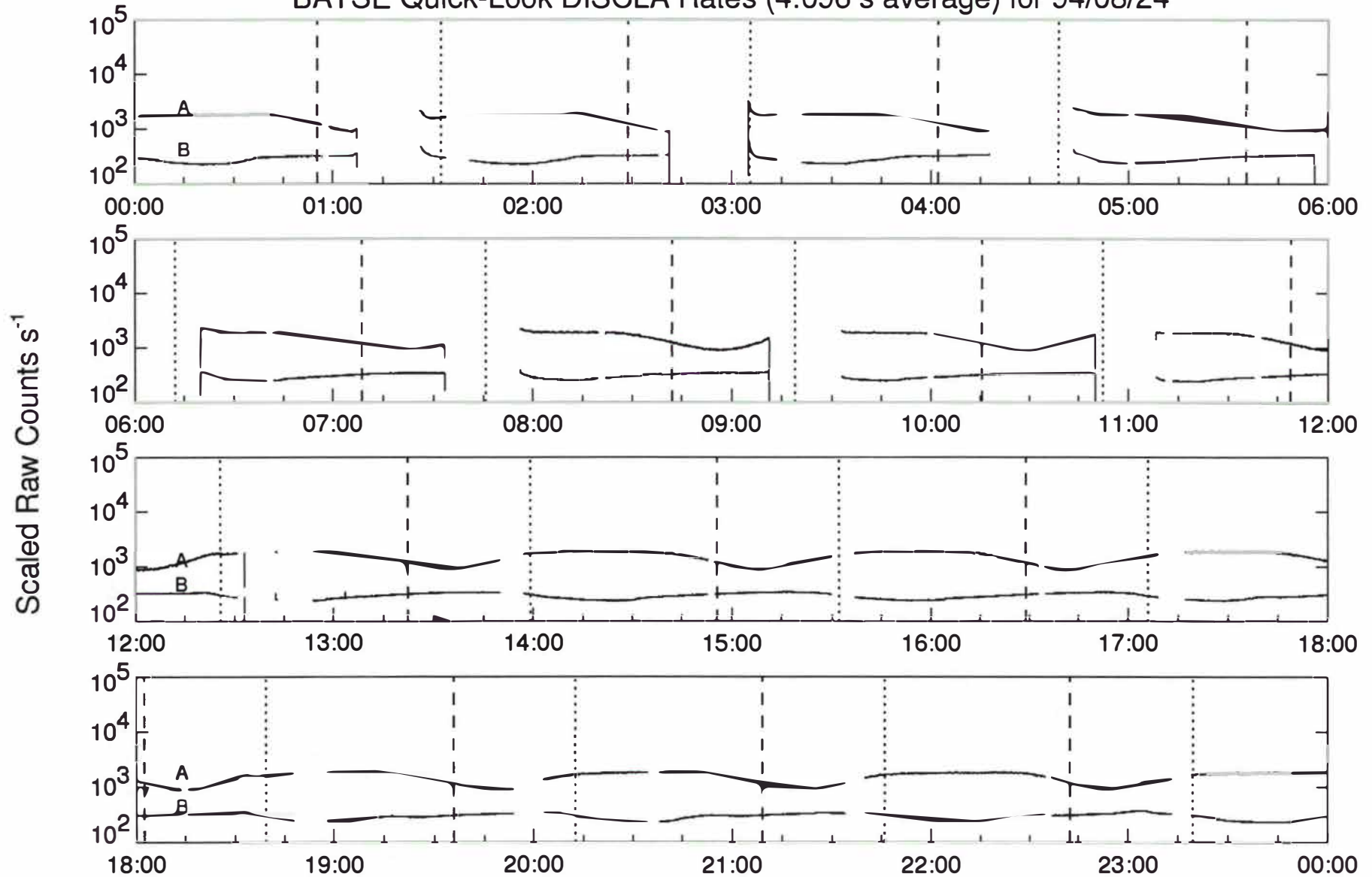
Data Start: 94/08/24, 0000:00

Plot created: 94/09/02, 1905

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/24

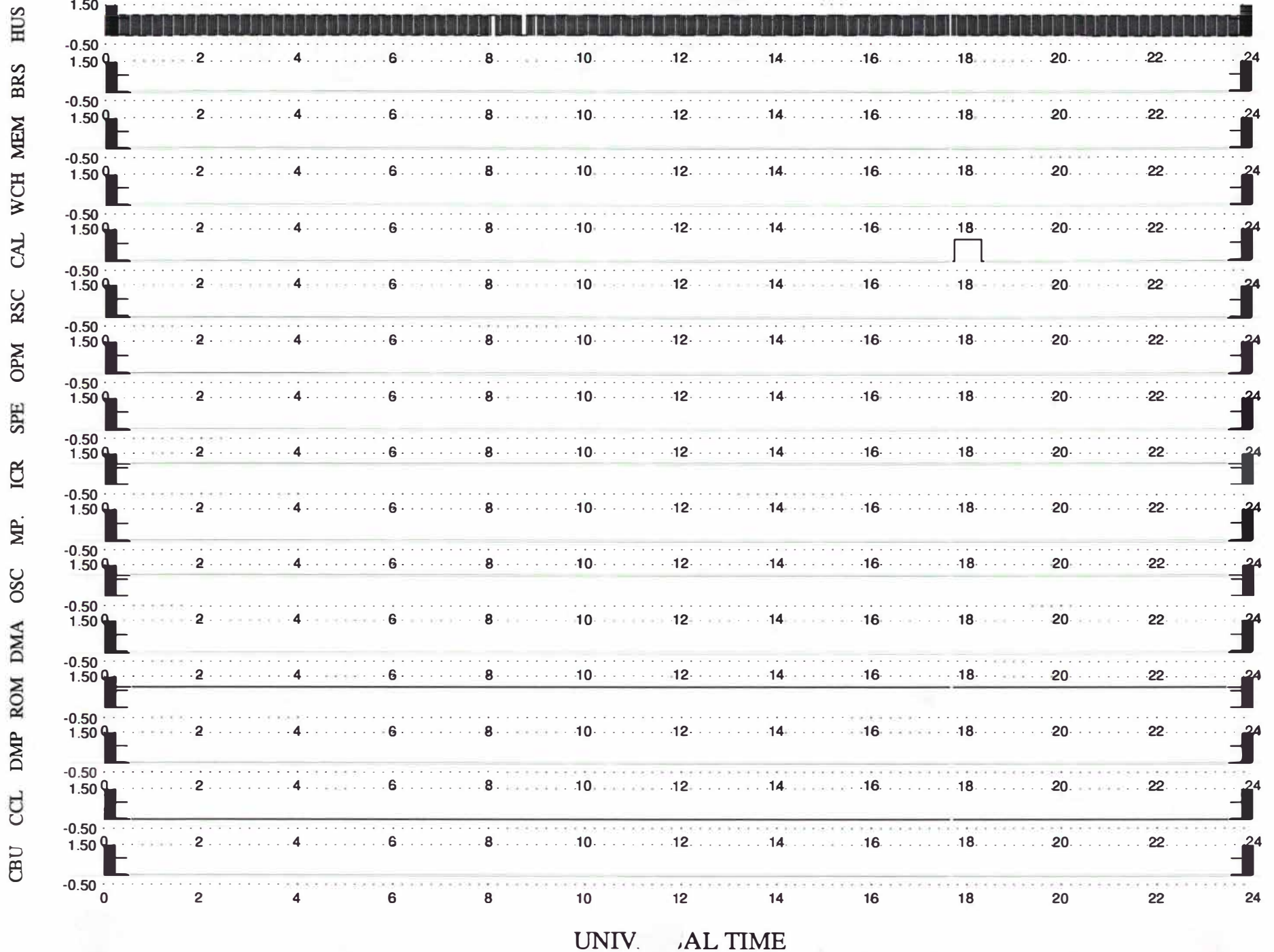


Current Time: 94/08/25, 1408 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

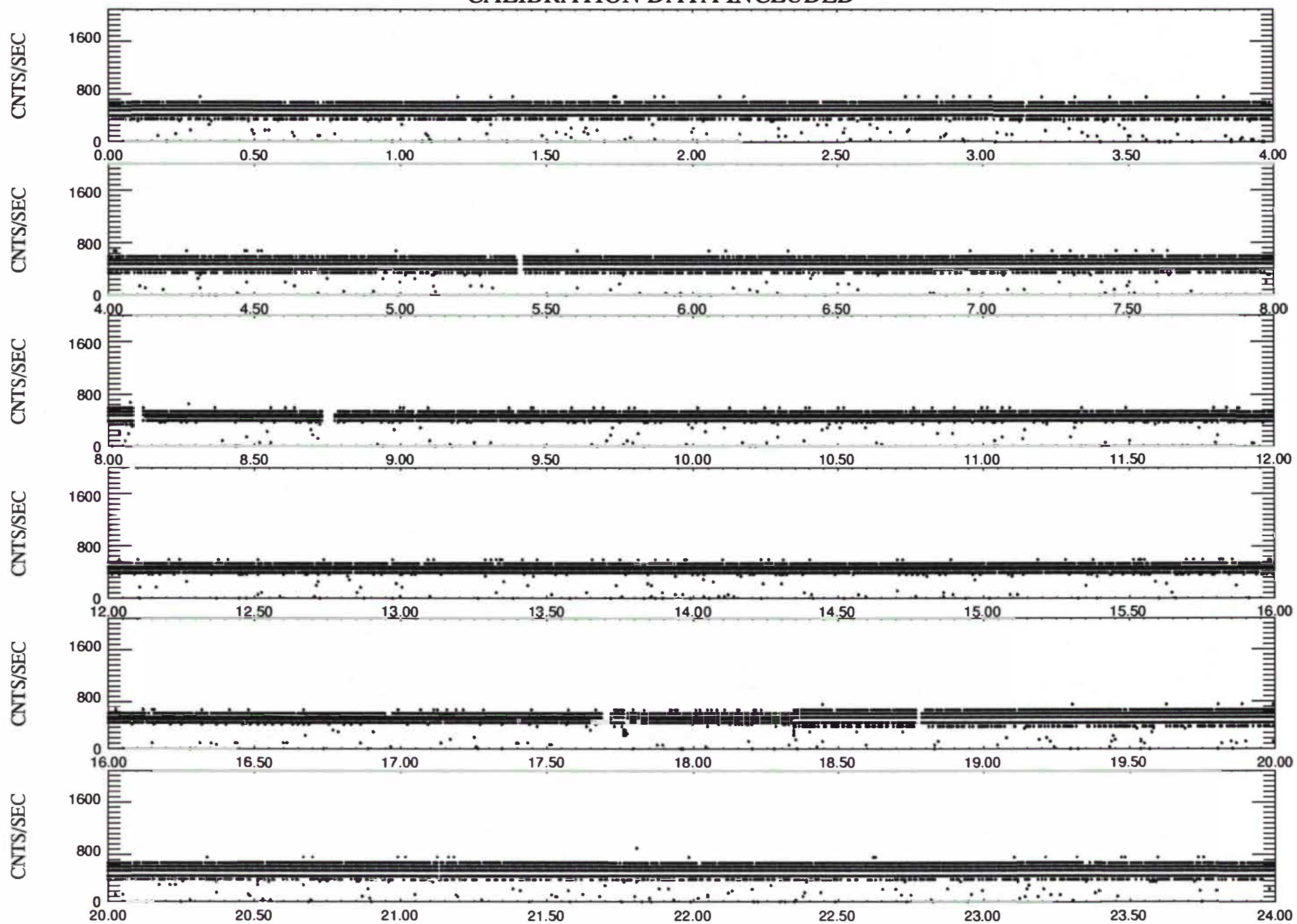
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

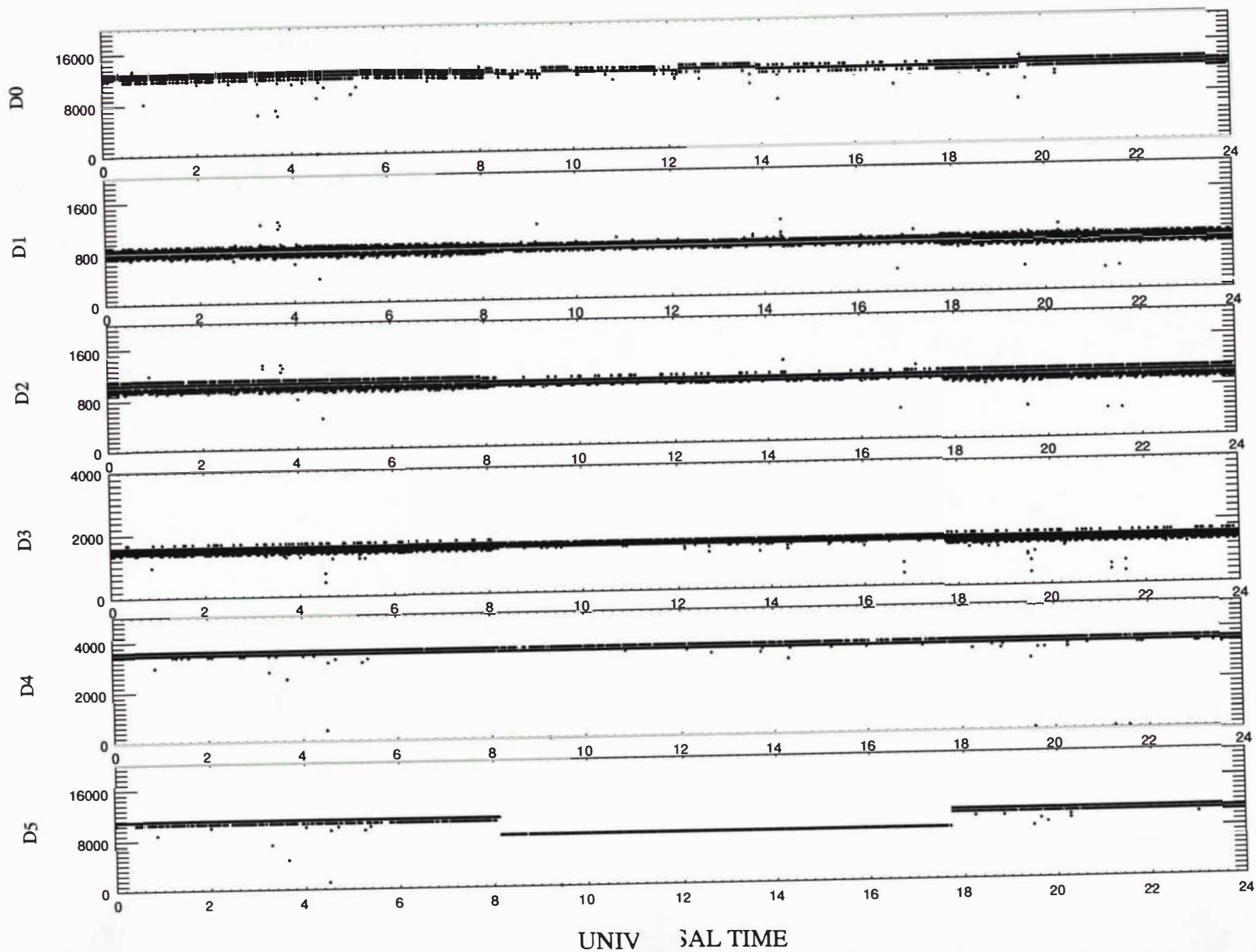
NO BURST (4)



CALIBRATION DATA INCLUDED



UNIV. AL TIME



From MALLOZZI@ssl.msfc.nasa.gov Fri Aug 26 07:59 PDT 1994
Date: Fri, 26 Aug 1994 9:59:37 -0500 (CDT)
From: MALLOZZI@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3137

BATSEARCH PROGRAM

BATSE BURST # 3137
EVENT OF 1994 AUG 25 DAY OF YEAR=237
EVENT CROSSING TIME AT BATSE : 4248. S. OR 01:10:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 96.000 -22.000
BATSE PEAK COUNTING RATE: 3500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 25/ 8/ 94 IS:
RA= 142.413 DEC= -46.414 DIST= 2.802 AU
BATSE-ULYSSES DISTANCE = 419169327. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=135.40 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -995.62 SECS.
CROSSING TIME AT ULYSSES IS 3252. S. OR 00:54:12 +/- 205.32 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 25/ 8/ 94 IS:
RA= 95.804 DEC= 23.645 DIST= 1.802 AU
MARS-BATSE DISTANCE = 269617952. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=134.35 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -628.73 SECS.
CROSSING TIME AT MARS IS 3619. S. OR 01:00:19 +/- 102.10 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3137	940825	9589	04248	3500	096	-22

BATSE BURST TRIGGER

NO.: 03137

TIME: TJD=9589 SECONDS=04248

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=024.5 AZIMUTH=249.8 ERROR= DEGREES

COMMENTS:

SINGLE SPIKE EVENT OF DURATION APPROX. 0.1 SECONDS.
EMISSION OBSERVED ABOVE 300 KEV.

30 / 8 / 94

ULYSSES RT

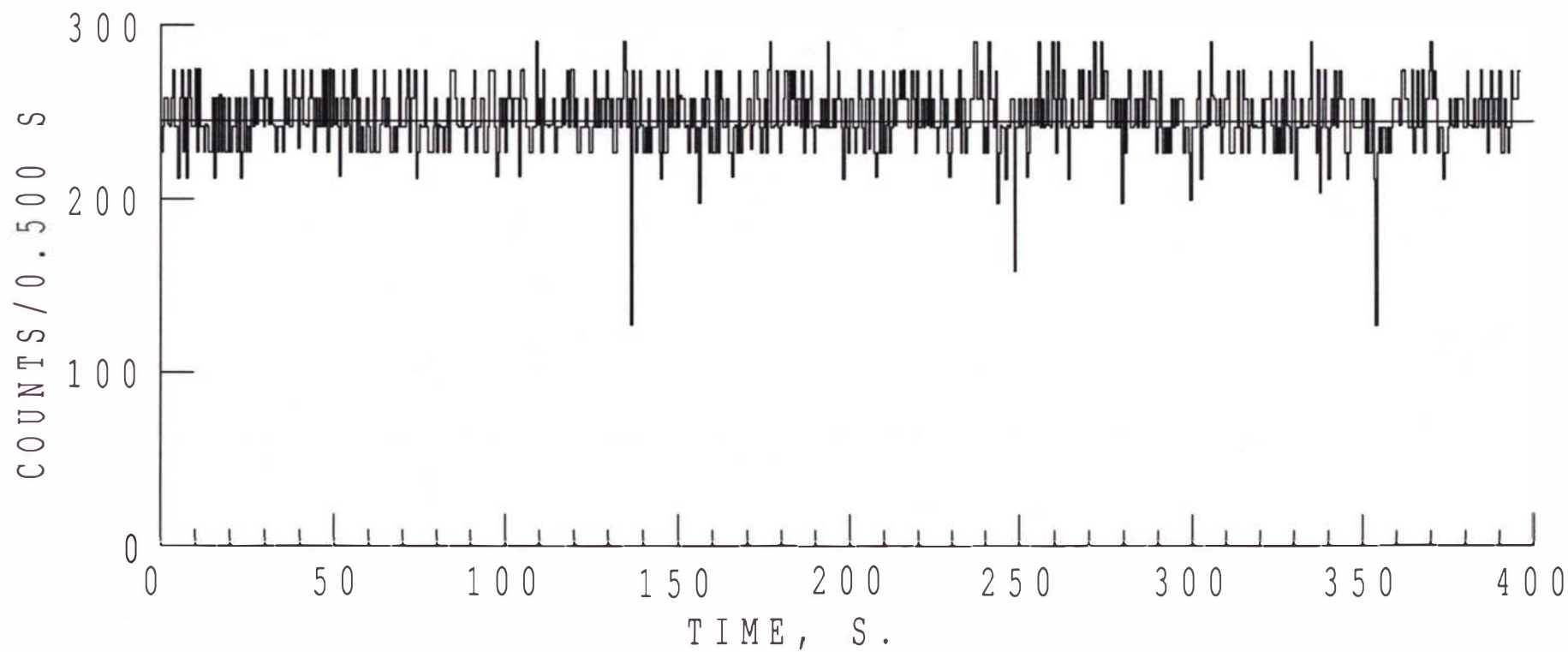
25 / 8 / 94 3060.119 s

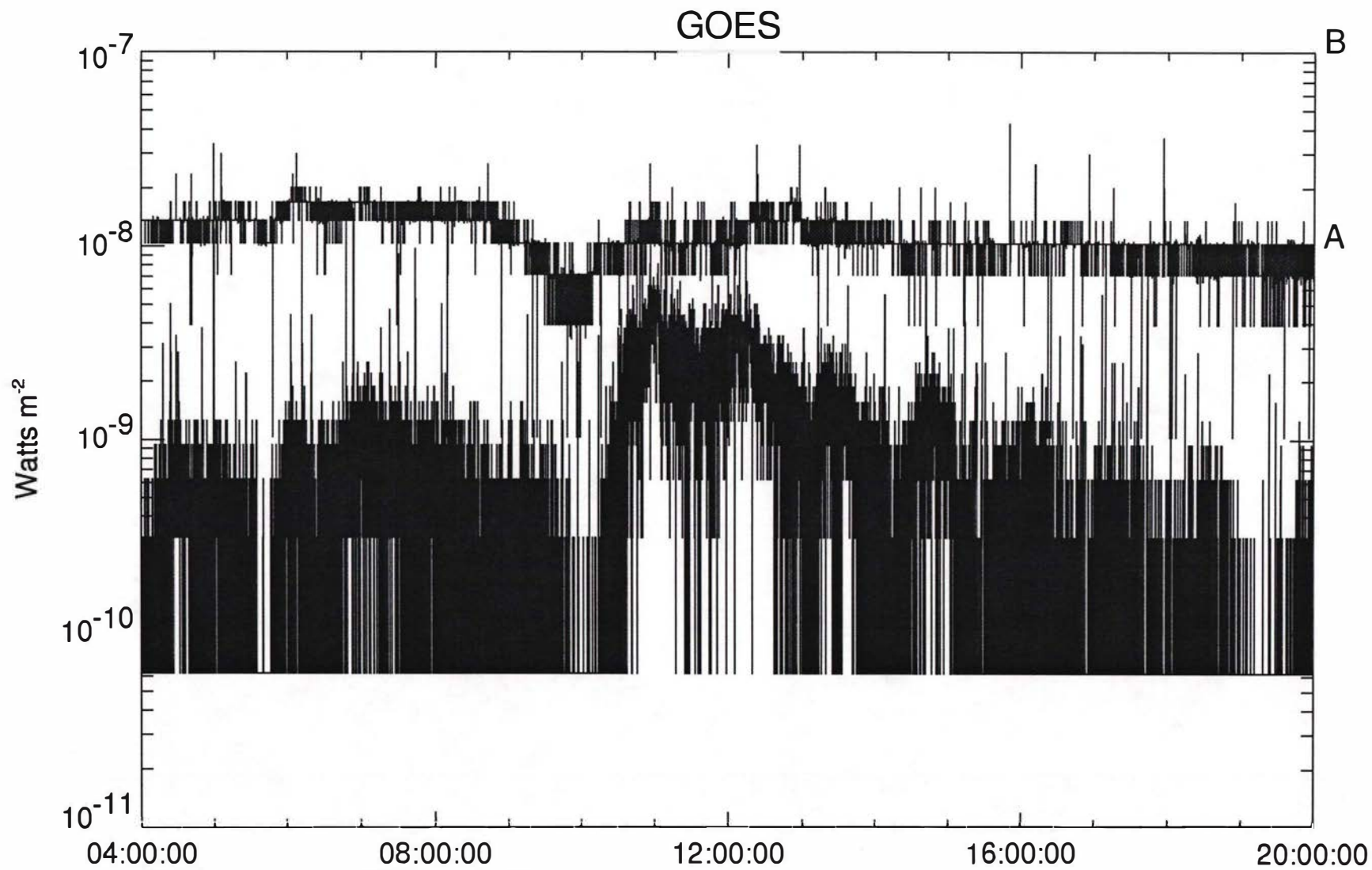
0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





Data Start: 94/08/25, 0000:00

Plot created: 94/09/02, 1906

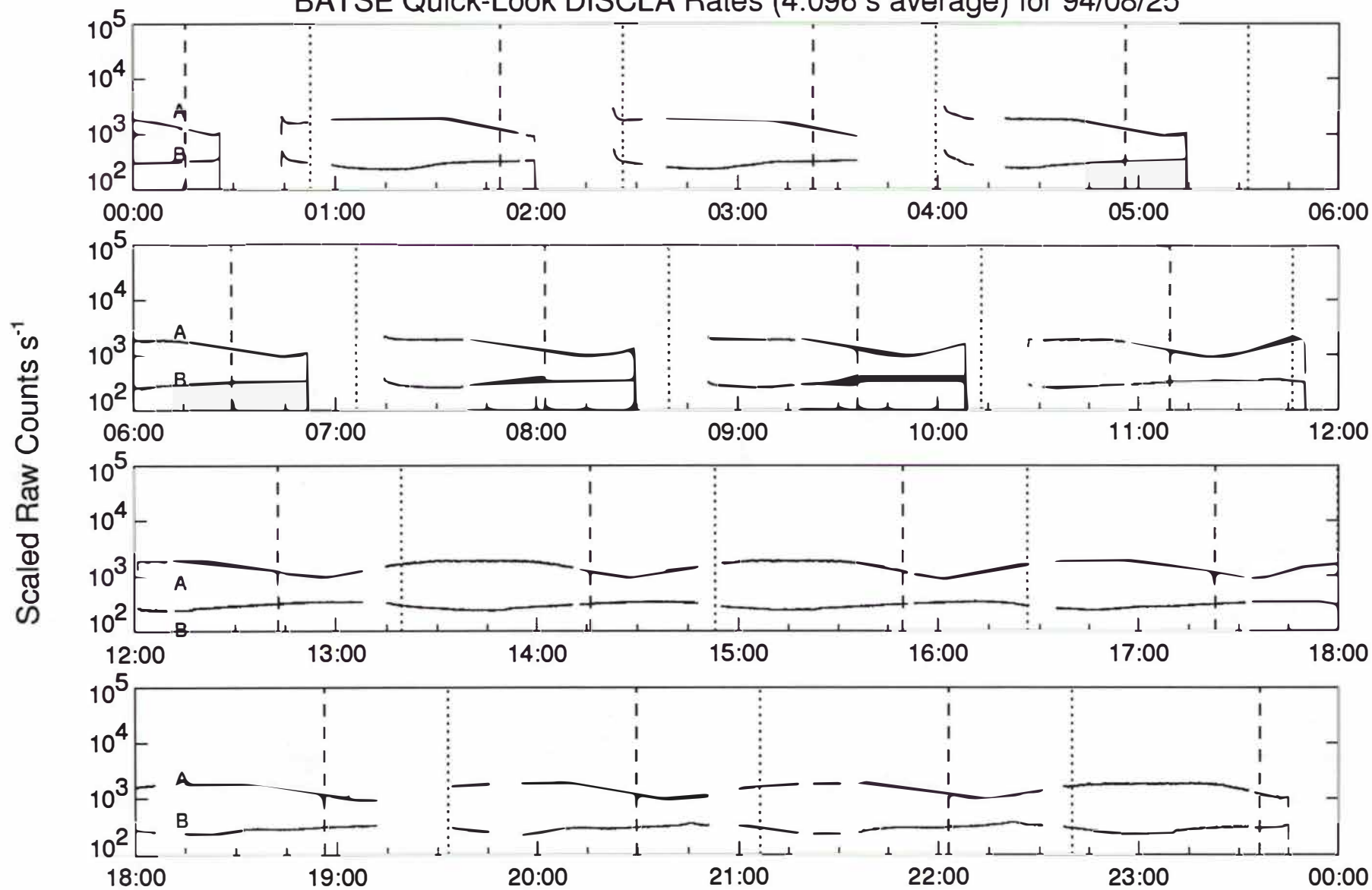
Channel 1 (1.0 - 8.0 Angstroms)

Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/25



Current Time: 94/08/31, 1331 EDT

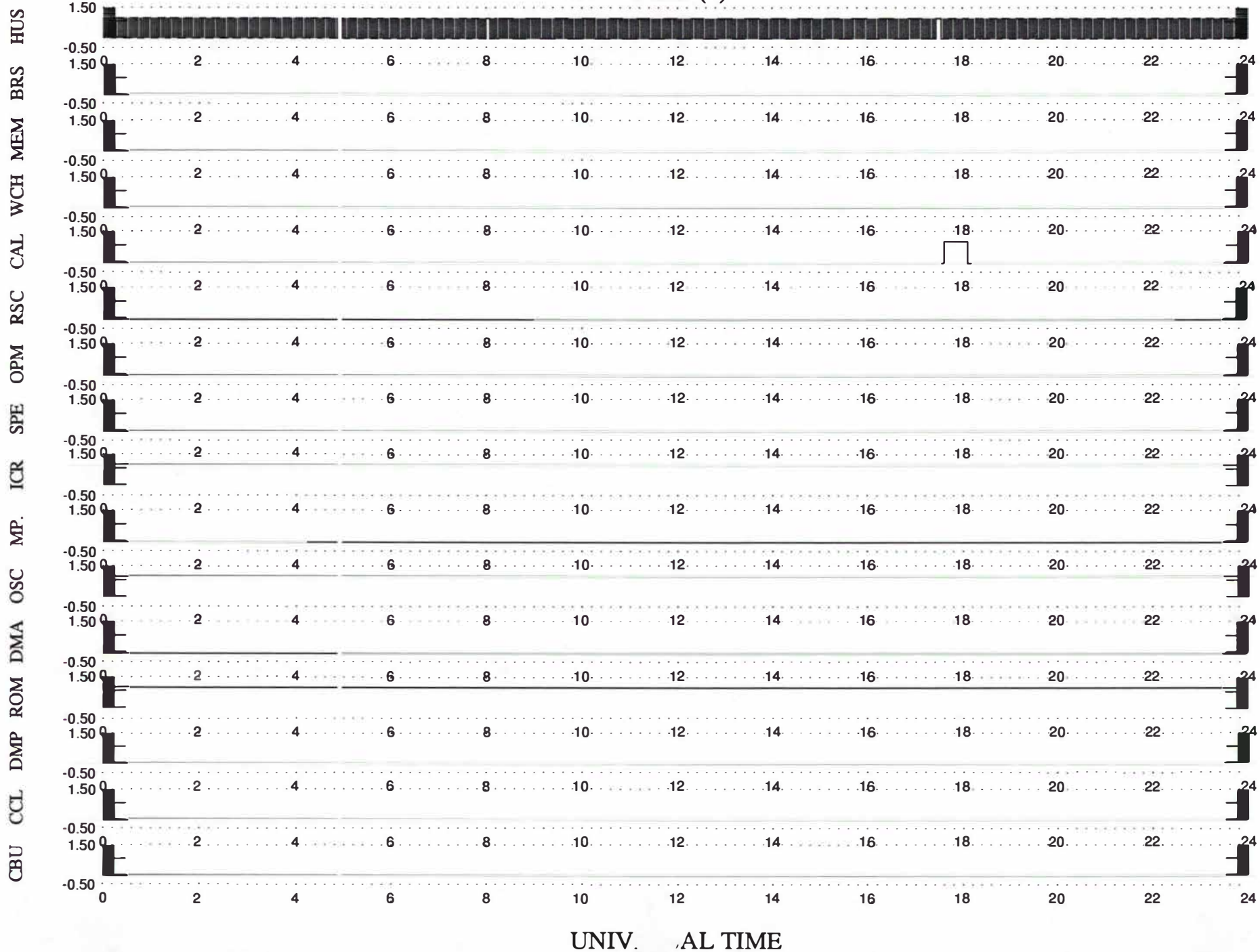
A: Channel 0 Most Sunward LAD

B: Sum Channel 0 Anti-Sunward LADs X .05

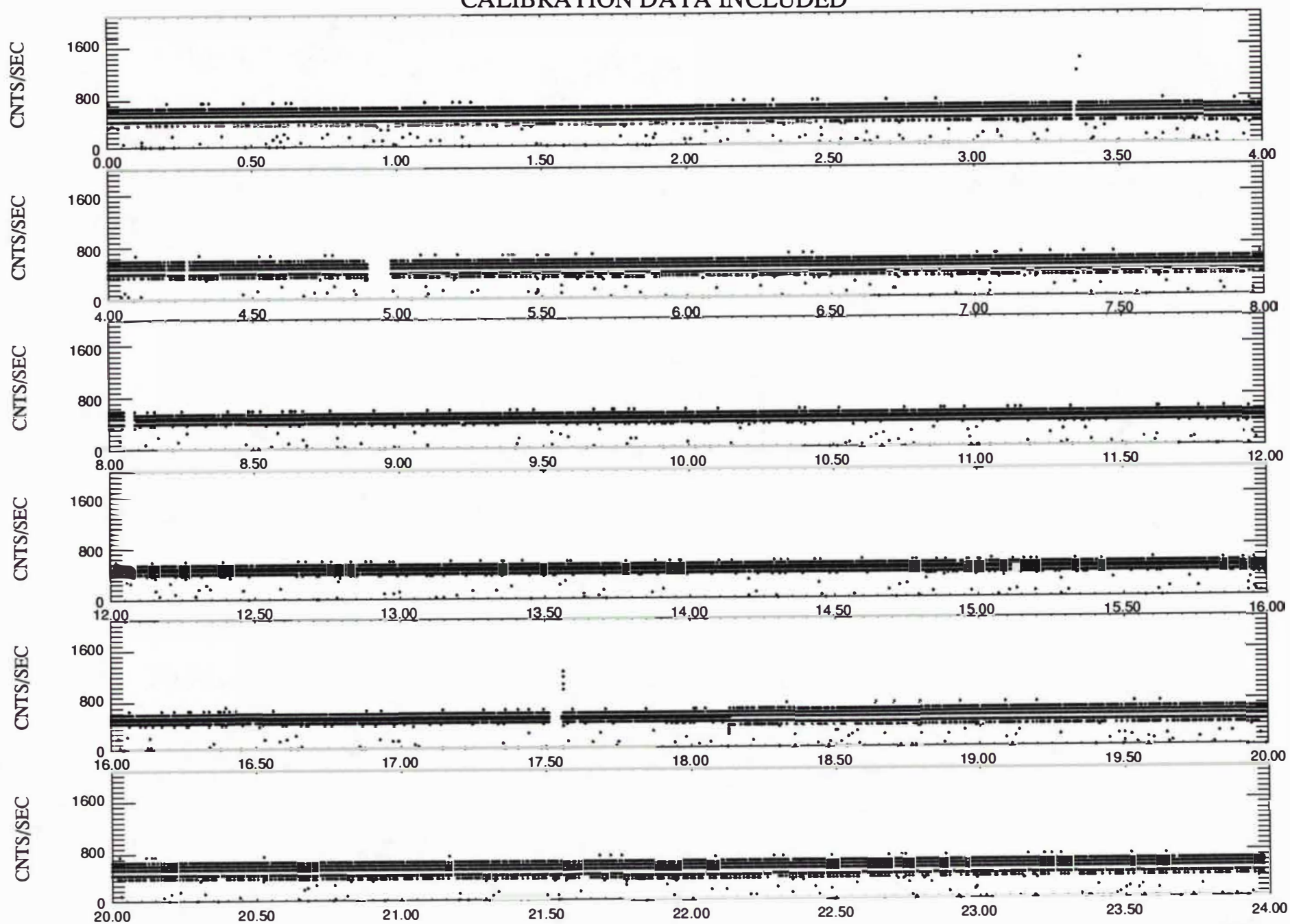
Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

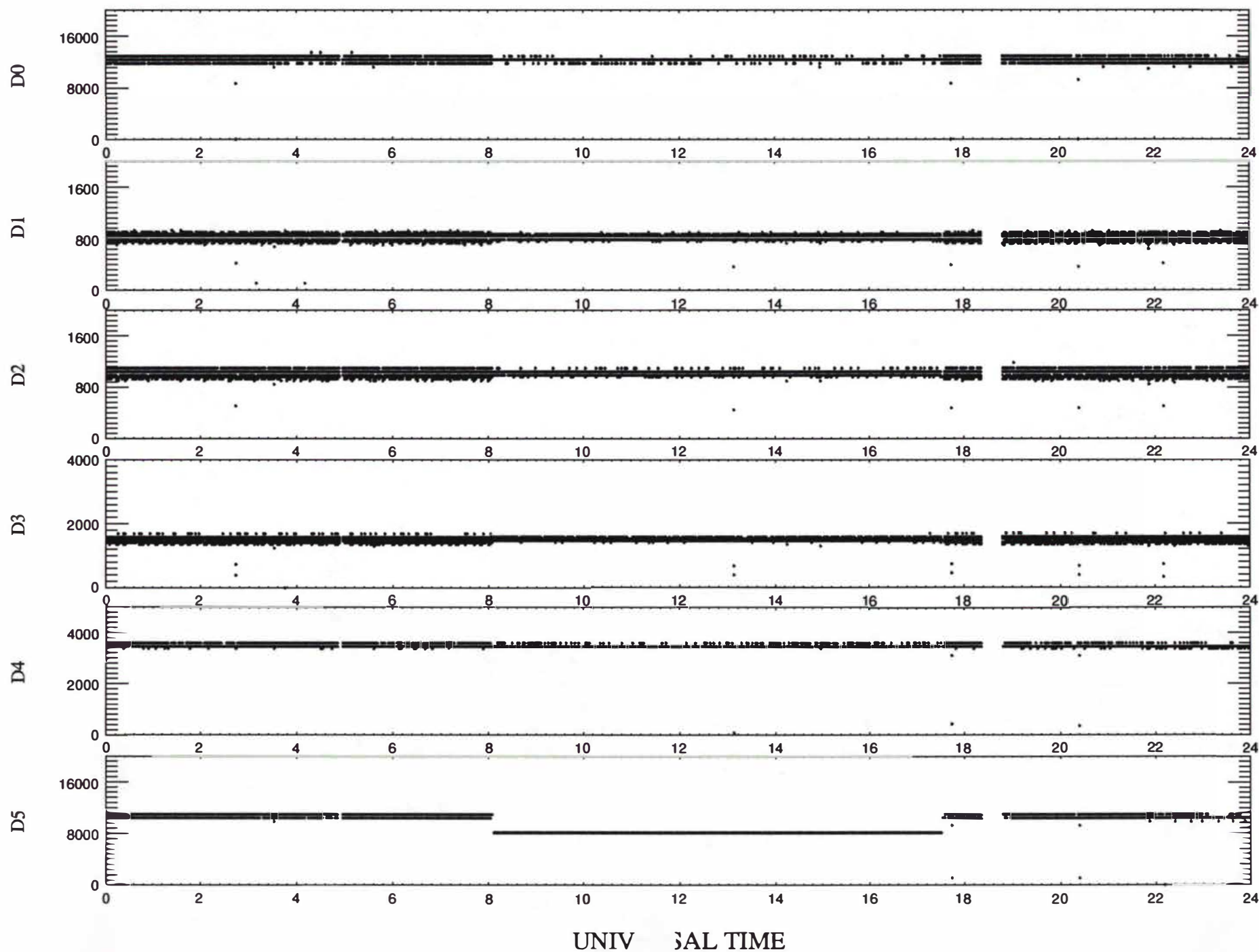
NO BURST (4)



CALIBRATION DATA INCLUDED



UNIV. AL TIME



From SHARIFF@ssl.msfc.nasa.gov Sat Aug 27 13:21 PDT 1994
Date: Sat, 27 Aug 1994 15:22:02 -0500 (CDT)
From: SHARIFF@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3138

BATSEARCH PROGRAM

BATSE BURST # 3138
EVENT OF 1994 AUG 26 DAY OF YEAR=238
EVENT CROSSING TIME AT BATSE : 75320. S. OR 20:55:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 93.000 -37.000
BATSE PEAK COUNTING RATE: 47000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/ 8/ 94 IS:
RA= 143.129 DEC= -46.881 DIST= 2.789 AU
BATSE-ULYSSES DISTANCE = 417179834. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=142.11 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1098.26 SECS.
CROSSING TIME AT ULYSSES IS 74222. S. OR 20:37:01 +/- 181.69 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/ 8/ 94 IS:
RA= 96.505 DEC= 23.633 DIST= 1.797 AU
MARS-BATSE DISTANCE = 268825600. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=119.28 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-438.52 SECS.
CROSSING TIME AT MARS IS 74881. S. OR 20:48:01 +/- 129.14 SECONDS

TRIGGER

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3138	940826	9590	75320	47000	093	-37

BATSE BURST TRIGGER

NO.: 03138

TIME: TJD=9590 SECONDS=75320

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=037.5 AZIMUTH=237.4 ERROR= DEGREES

COMMENTS:

BURST, TWO PULSES, FIRST PULSE IS WEAK AND LASTING ~2.5 SECONDS, SECOND AND MAIN PULSE IS STRONG LASTING ~7 SECONDS. TOTAL DUR. ~16 SECONDS. VISIBLE ABOVE 300KEV

Helio corr removed

Date: Feb 3 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T₀?
- ☐ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?

Large difference between this + previous version, due to transcription error in BATSE time

- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

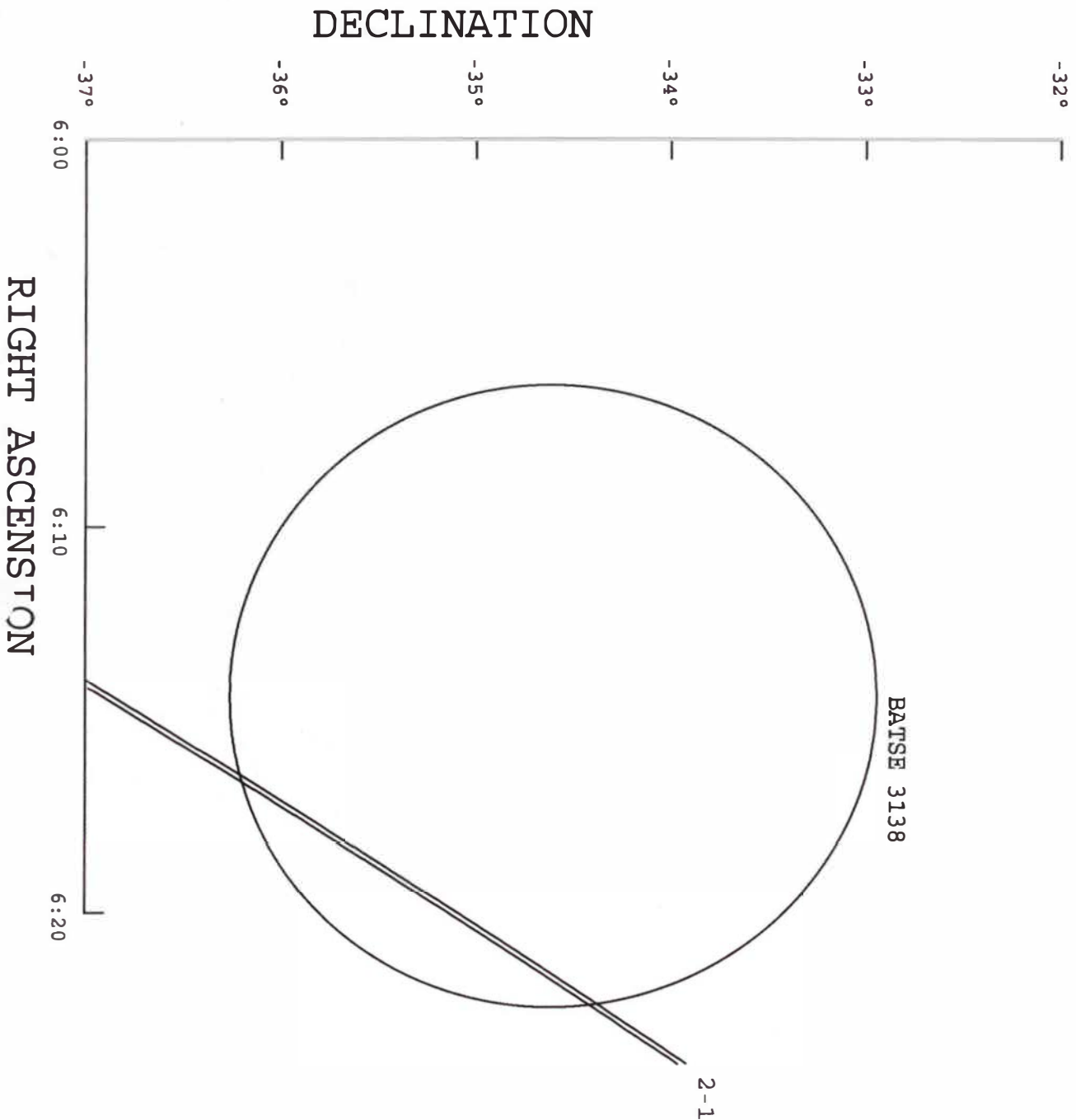
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF AUG 26, 1994 20:37

3 / 2/98



BATSE

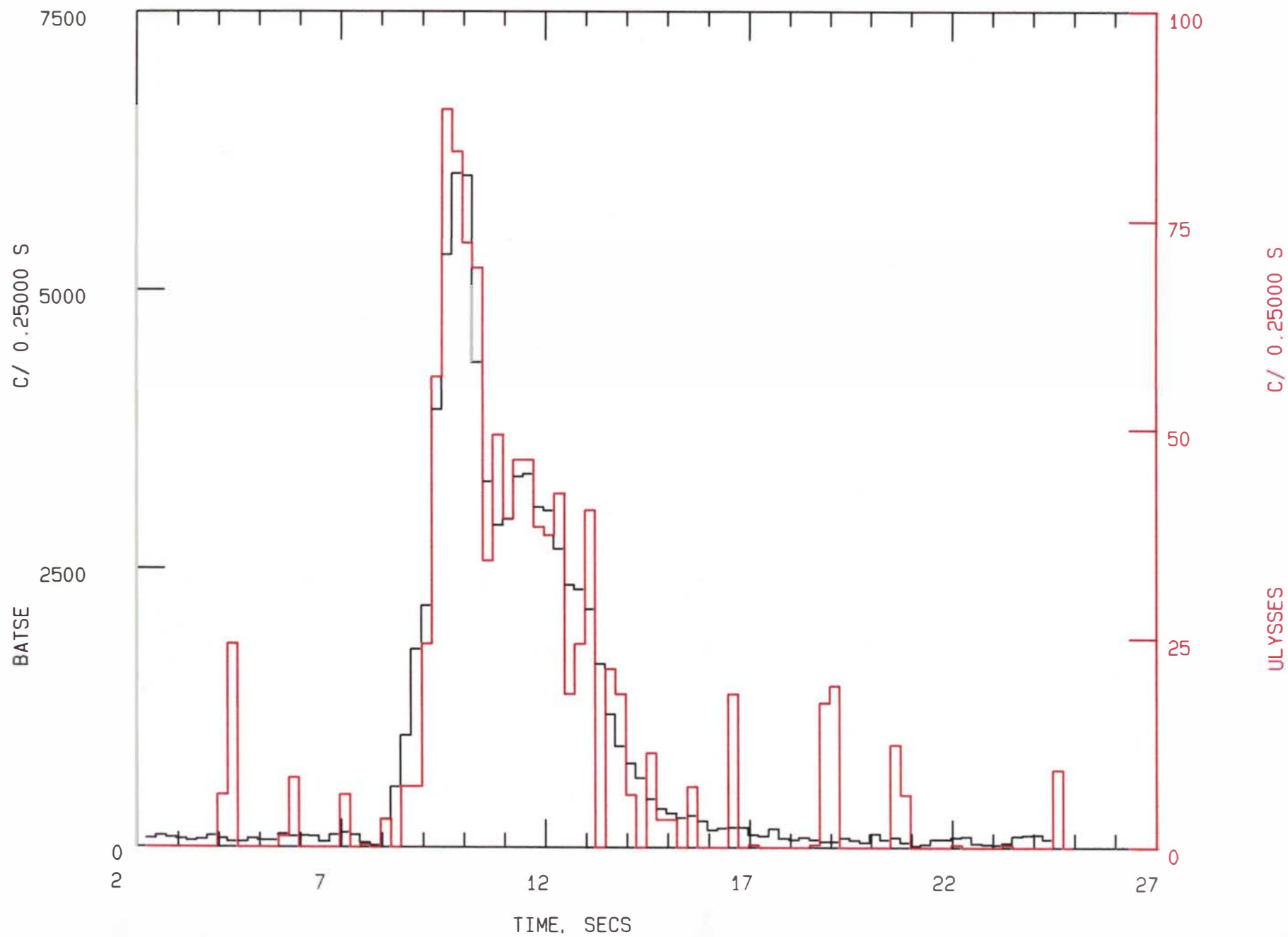
-ULYSSES

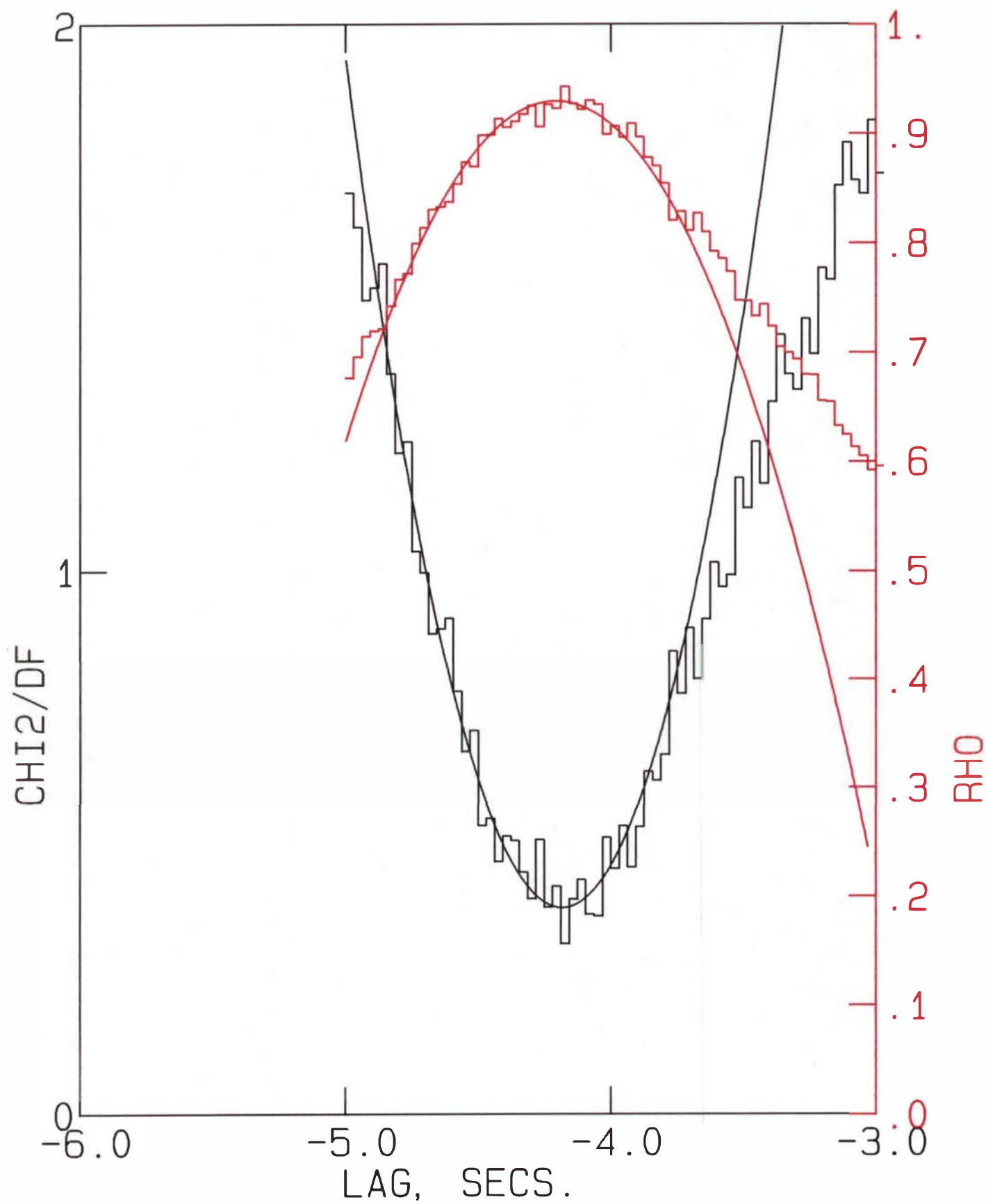
CORRELATION

26/ 8/94

75320.242

3/ 2/98





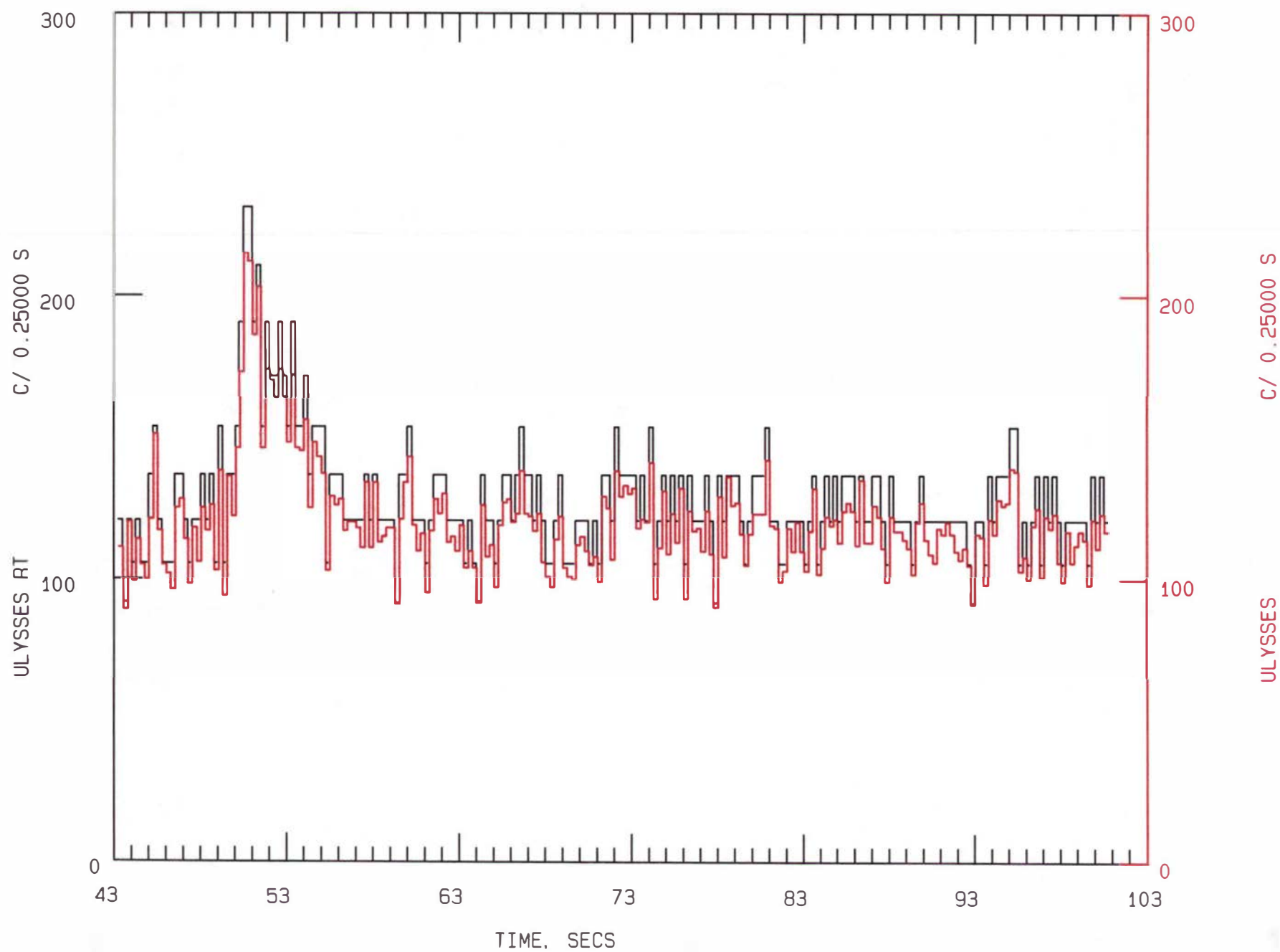
ULYSSES RT-ULYSSES

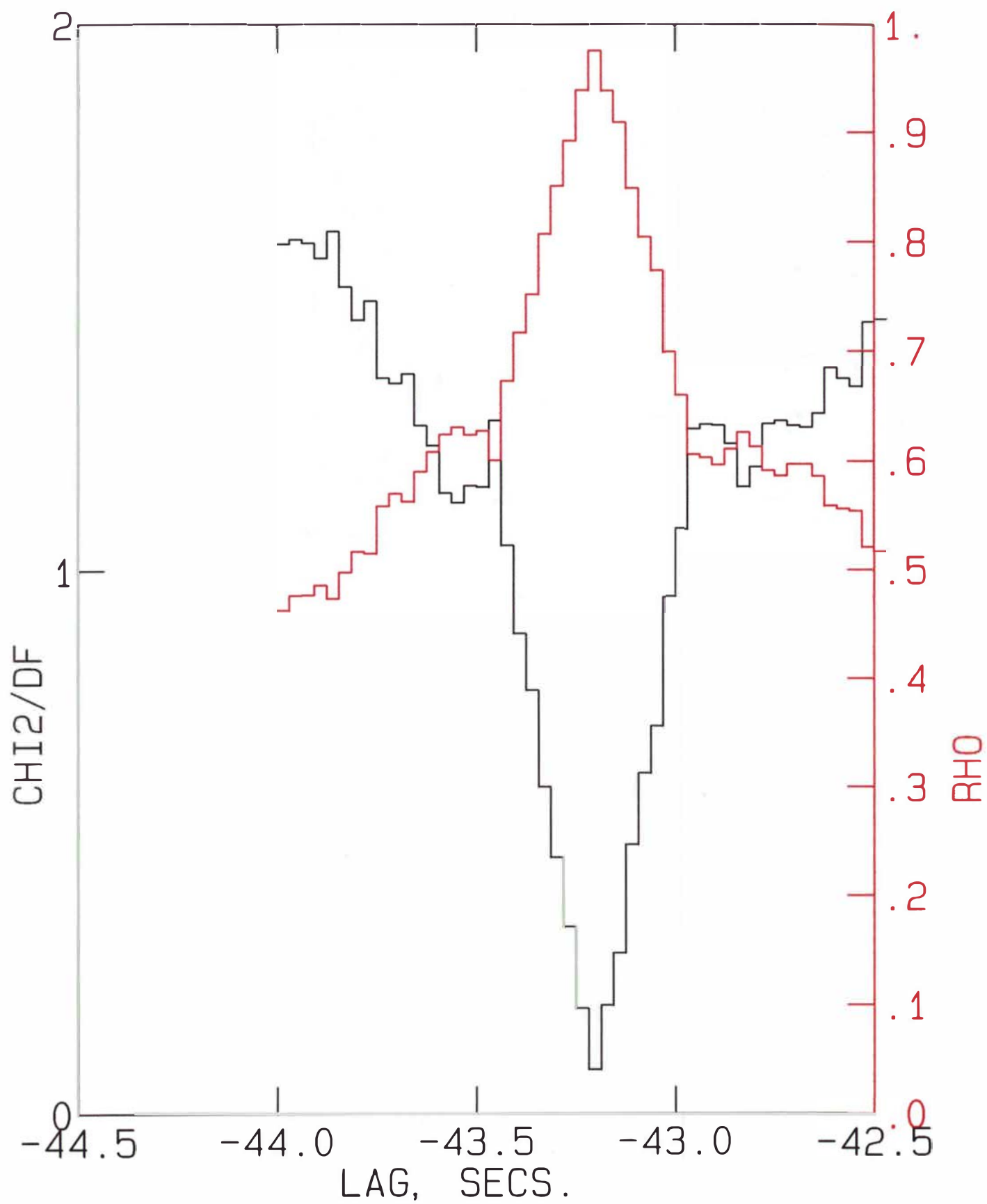
CORRELATION

26/ 8/94

74180.159

3/ 2/98

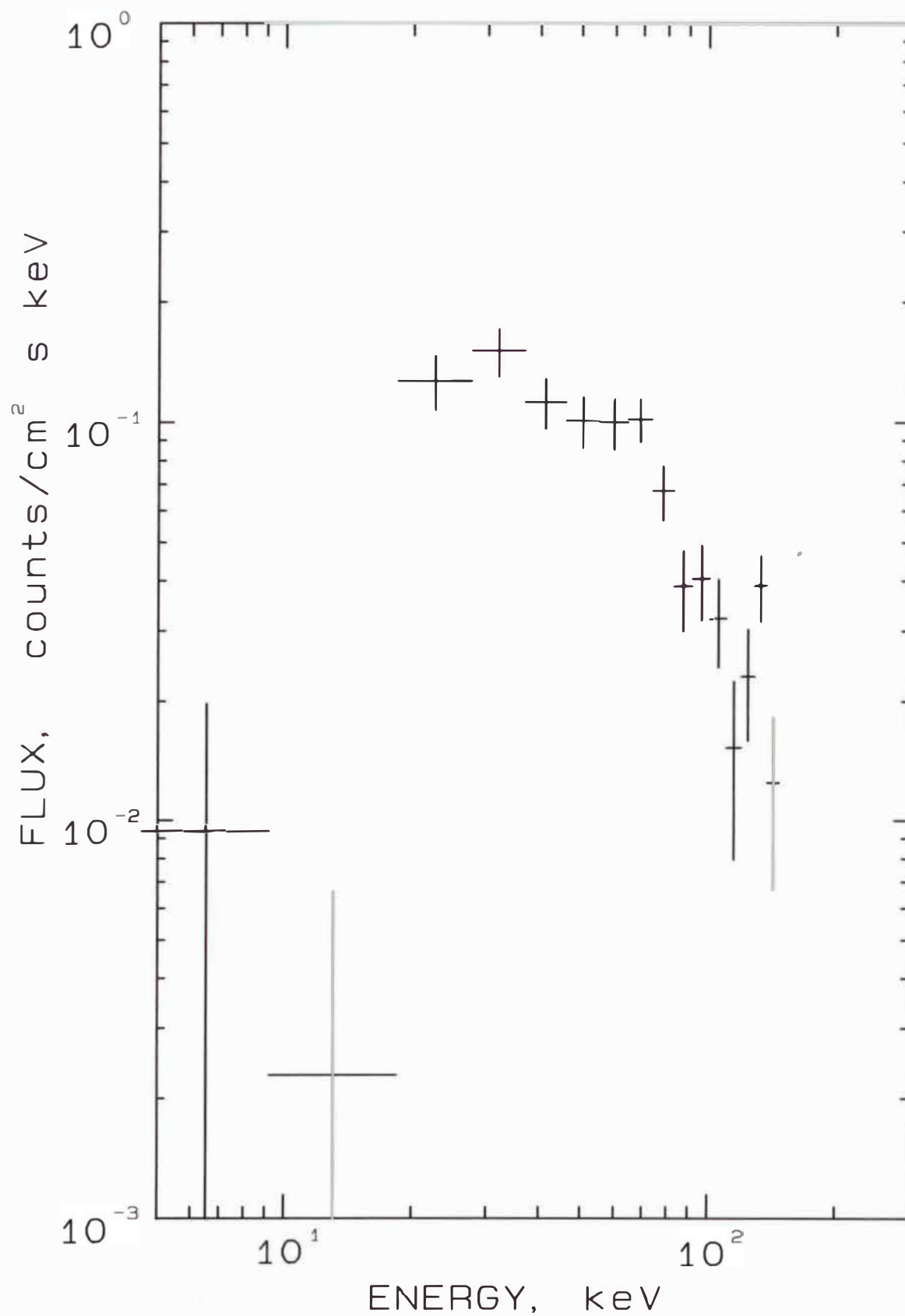




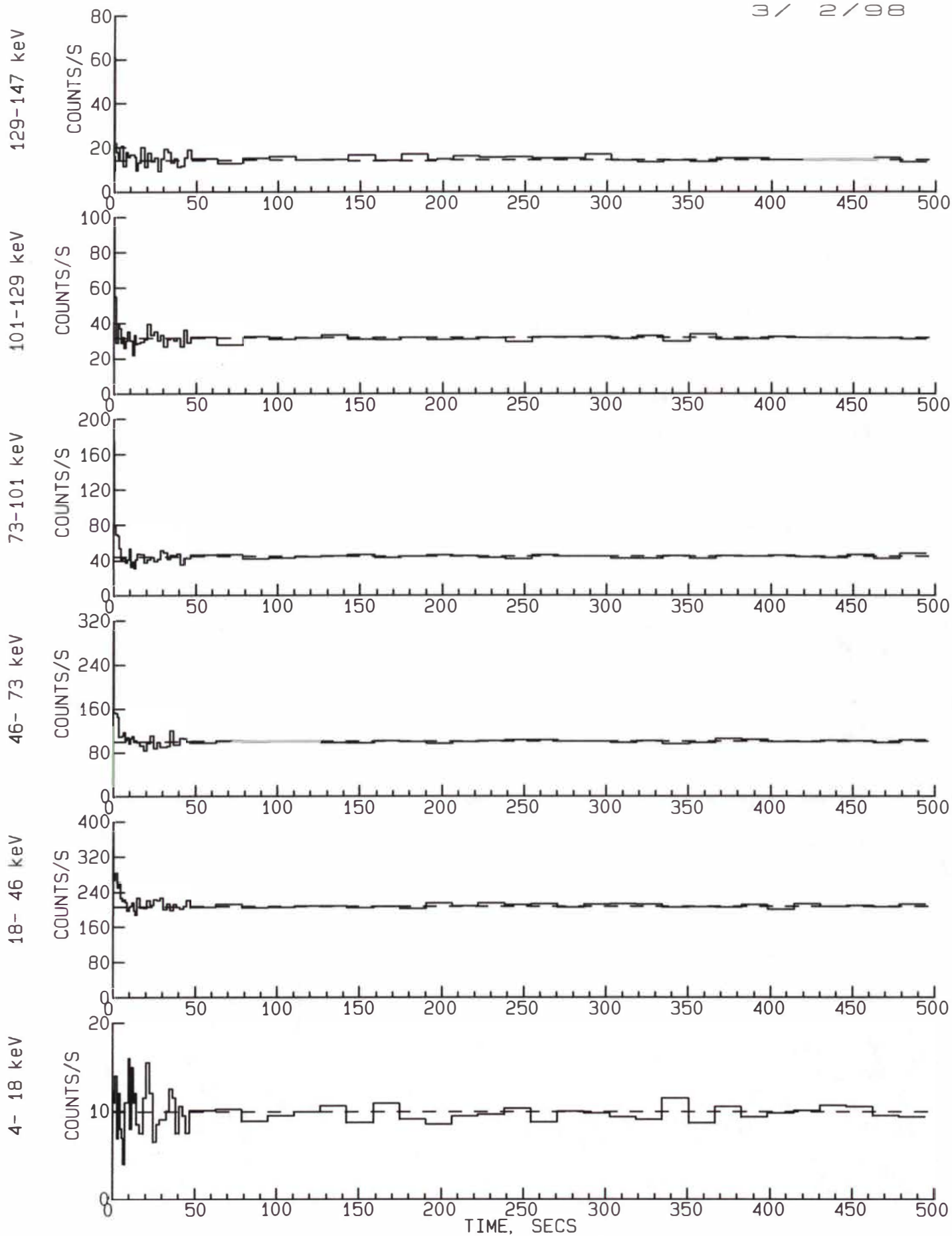
ULYSSES 26/08/94 74230.794

3/ 2/98

SPECTRUM INTEGRATED OVER 10.4 SECONDS, INTERVALS 2 TO 13



ULYSSES 26/08/94 74230.794 BURST SPECTRAL COUNT RATES



ULYSSES

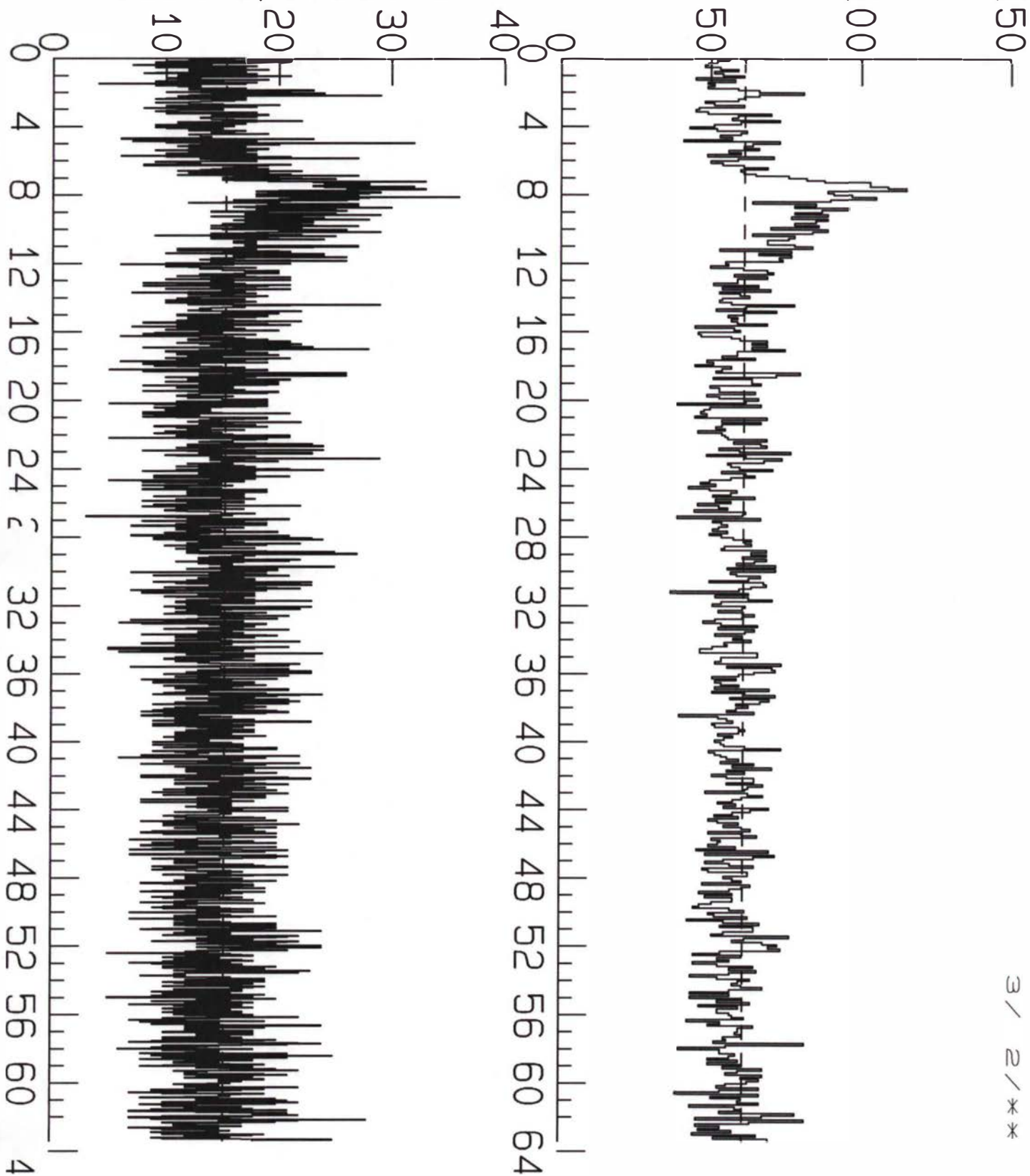
26/08/94

Ttrig=74230.783

22- 148 keV

COUNTS/0.031 S

COUNTS/0.125 S



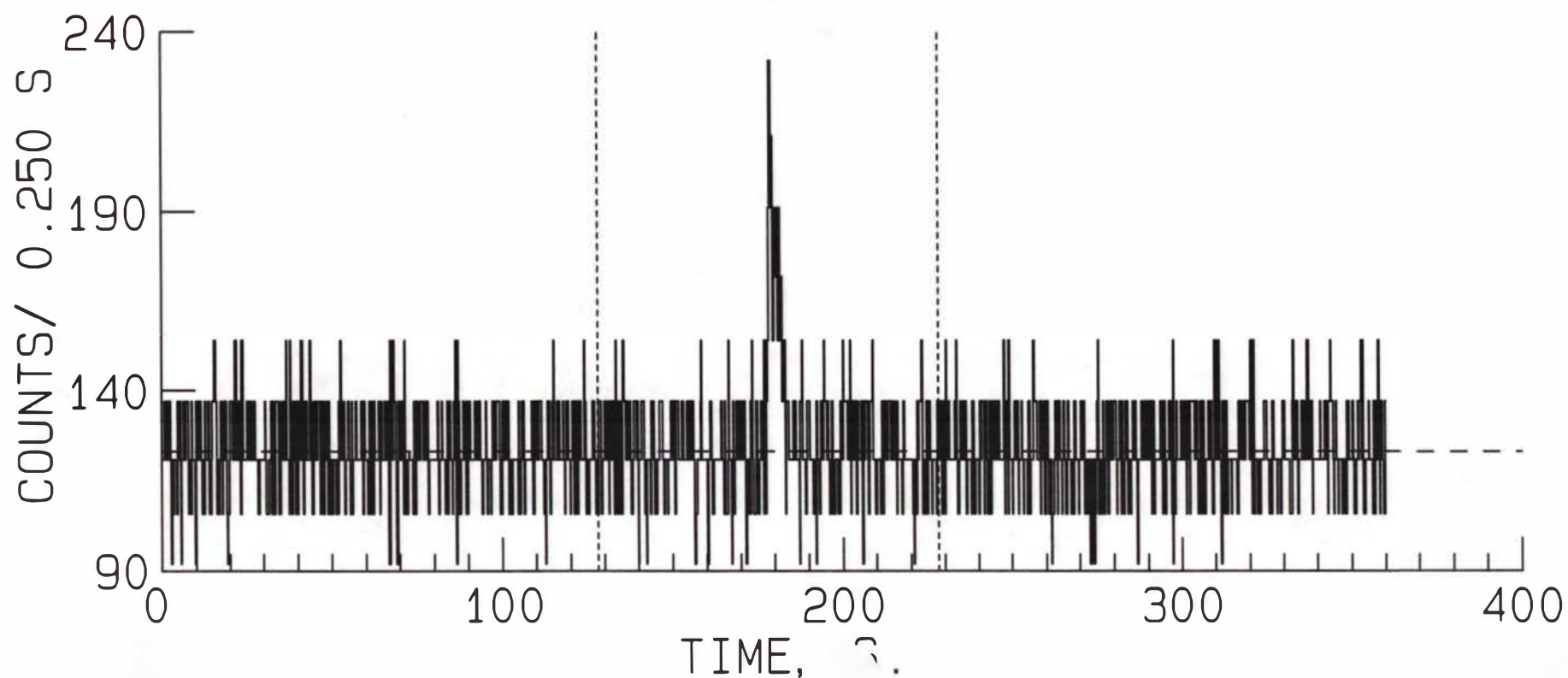
ULYSSES RT

3 / 2 / 98

26 / 8 / 94 74052.176 s

22- 148 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



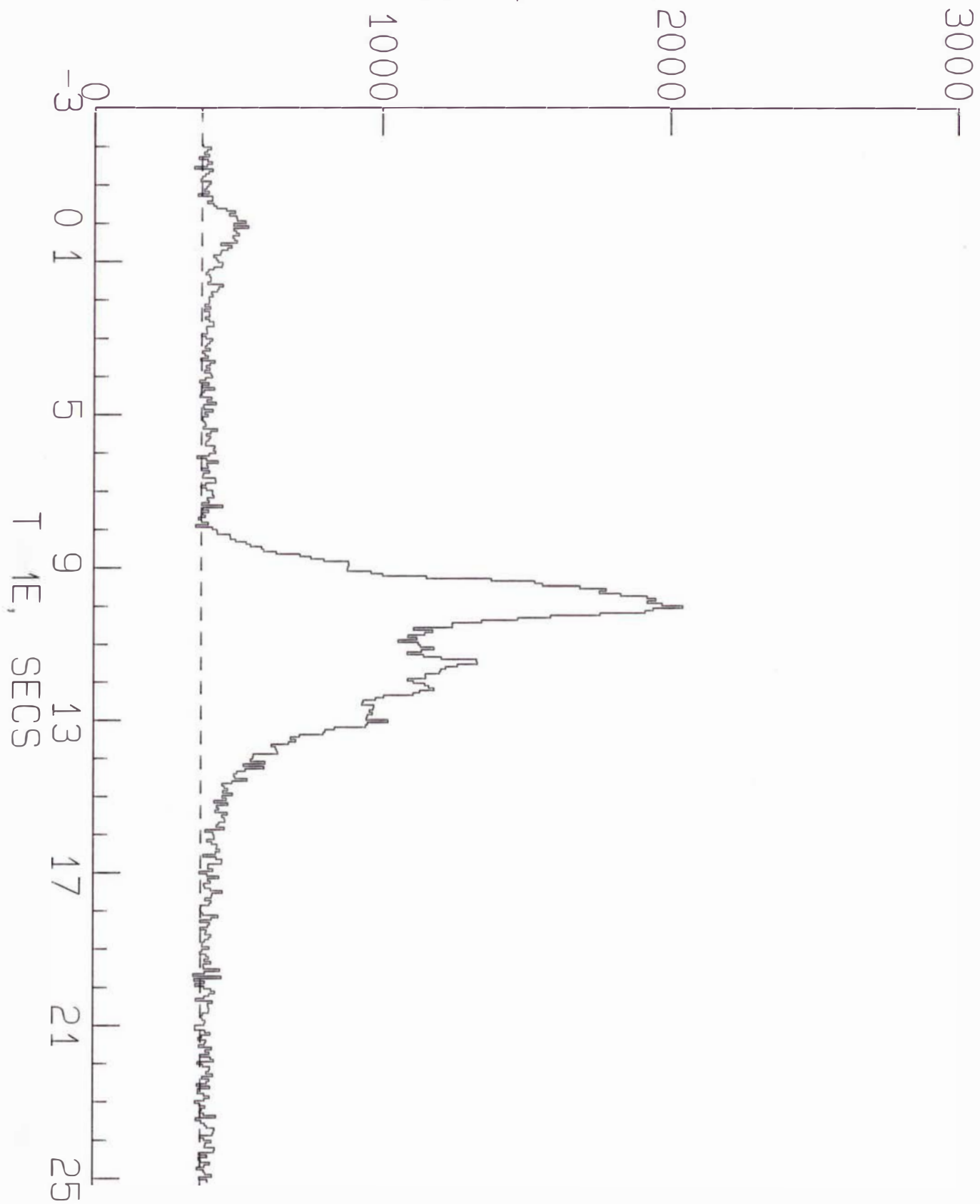
BATSE

26/08/94

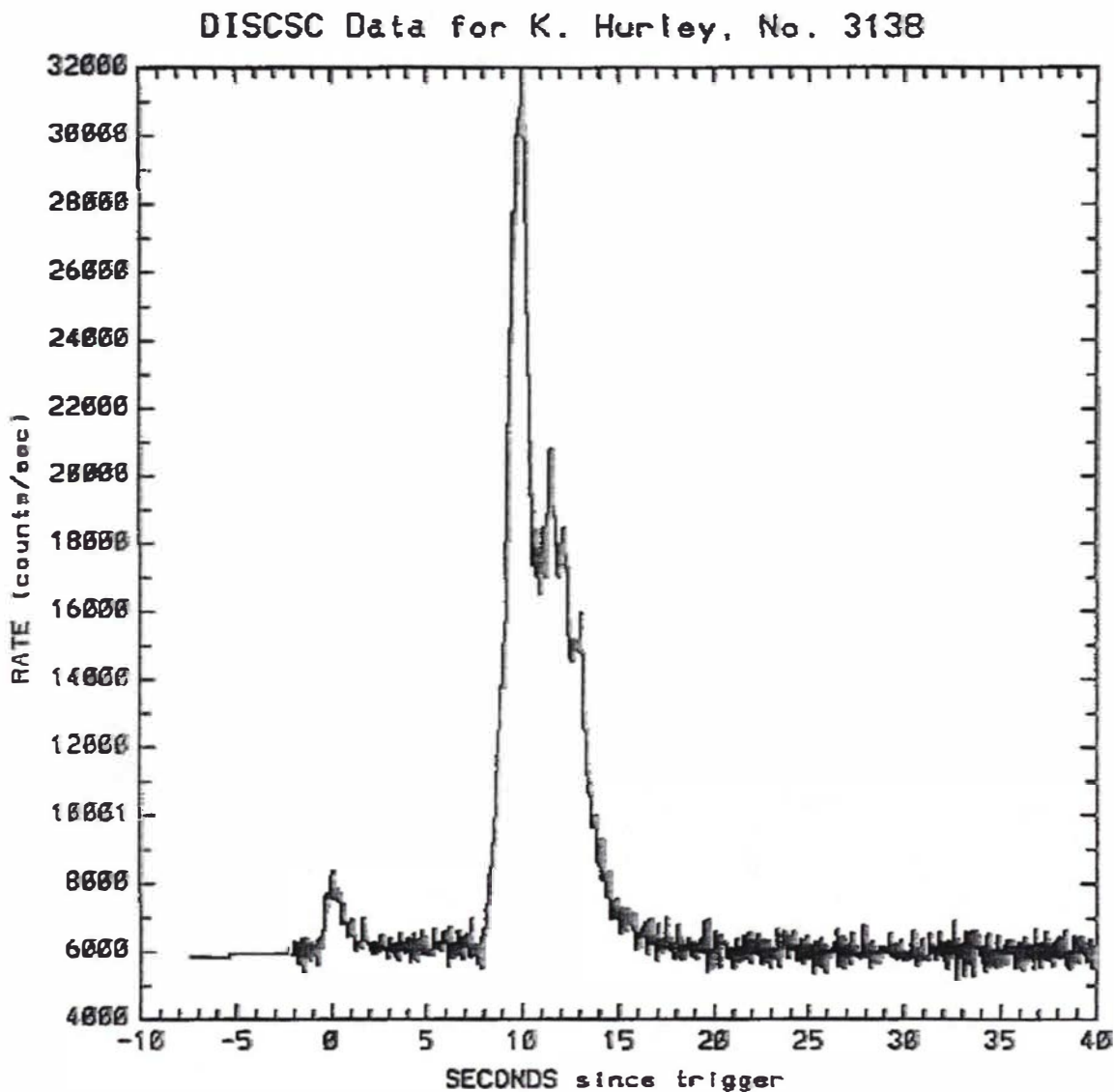
75320.242

25- 100 keV

COUNTS/ .064 S



5 / 11 / 94



26-OCT-1994 14:04.39

Created by KOPS 80
(Burst Display)
Version 2.22

Trigger # : 3138

Trigger Time:
9590 / 75326.242

Burst Data Type:
DISCSC

Deadtime:
Corrected: K

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
8.864 seconds

Detectors [7..0]:
-6-2-

Discriminators:
(1, 2)

Quality Mask:
80ISPI

From root Fri Dec 2 01:06 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA08685; Fri, 2 Dec 94 01:06:01
Received: from ax252.rikkyo.ac.jp by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA01032; Fri, 2 Dec 1994 01:04:42 +0800
Received: by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-MX9407011)
id AA14094; Fri, 2 Dec 94 18:04:59 JST
Received: from ax251.rikkyo.ac.jp by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-M
id AA14087; Fri, 2 Dec 94 18:04:51 JST
Received: by ax251.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-NoMX940525)
id AA07502; Fri, 2 Dec 94 18:04:50 JST
Date: Fri, 2 Dec 94 18:04:50 JST
From: M. Yoshimori <yosimori@rikkyo.ac.jp>
Return-Path: <yosimori@rikkyo.ac.jp>
Message-Id: <9412020904.AA07502@ax251.rikkyo.ac.jp>
To: khurley@space6.ssl.berkeley.edu
Subject: Burst positions
Cc: suga@flare2.solar.isas.ac.jp
Content-Length: 297
Status: R

Dear Dr.Hurley,

In addition to the previous three events, we found the following
five events:

1992.Oct.04	14:00:21 UT	✓
1992.Dec.07	16:00:48	✓
1993.Jan.06	15:37:39	✓
1994.Aug.09	12:00:06	NO POSITION AVAILABLE
1994.Aug.26	20:55:20	✓

We would appreciate receiving their positions.

Thank you.

Regards,

M.Yoshimori

From root Wed Nov 30 03:00 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA07664; Wed, 30 Nov 94 03:00:48
Received: from ax252.rikkyo.ac.jp by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA11098; Wed, 30 Nov 1994 02:59:29 +0800
Received: by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-MX9407011)
id AA22039; Wed, 30 Nov 94 19:59:42 JST
Received: from ax251.rikkyo.ac.jp by ax252.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-M
id AA22032; Wed, 30 Nov 94 19:59:27 JST
Received: by ax251.rikkyo.ac.jp (5.67+1.6W/6.4JAIN-rky-NoMX940525)
id AA18391; Wed, 30 Nov 94 19:59:27 JST
Date: Wed, 30 Nov 94 19:59:27 JST
From: M. Yoshimori <yosimori@rikkyo.ac.jp>
Return-Path: <yosimori@rikkyo.ac.jp>
Message-Id: <9411301059.AA18391@ax251.rikkyo.ac.jp>
To: khurley@space6.ssl.berkeley.edu
Cc: suga@flare2.solar.isas.ac.jp, morimoto@flare2.solar.isas.ac.jp
Subject: Yohkoh GBD events
Content-Length: 362
Status: R

Dear Dr.Hurley,

Yohkoh observed the following four events.

1. 1994 Feb.06 00:08:37 UT
2. 1994 Feb.18 19:32:28 UT
3. 1994 Mar.02 05:08:31 UT
4. 1994 Jul.03 04:40:46 UT

We like to know the locations of the following three events,

1. 1994 Feb.06 00:08:37 UT ✓
2. 1994 Feb.18 19:32:28 UT ✓
3. 1994 Mar.02 05:08:31 UT (~~rough location only~~) ✓

Thank you.

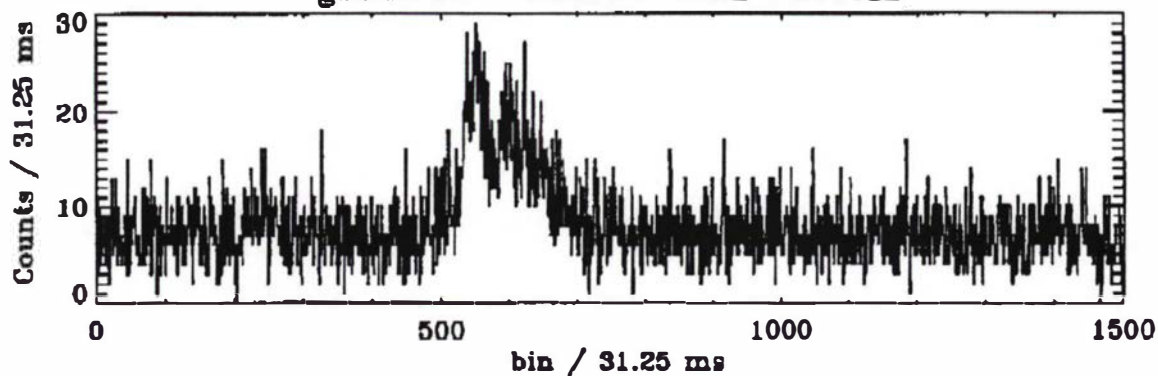
Regards,

M.Yoshimori

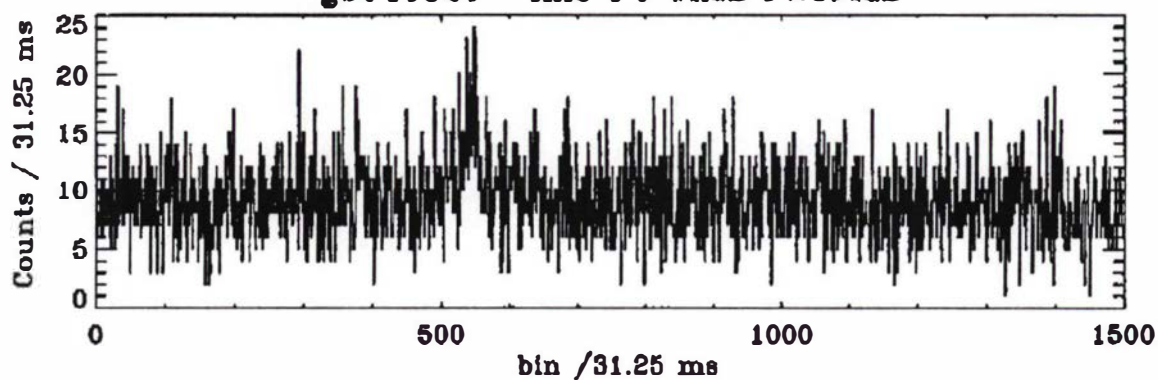
19/19

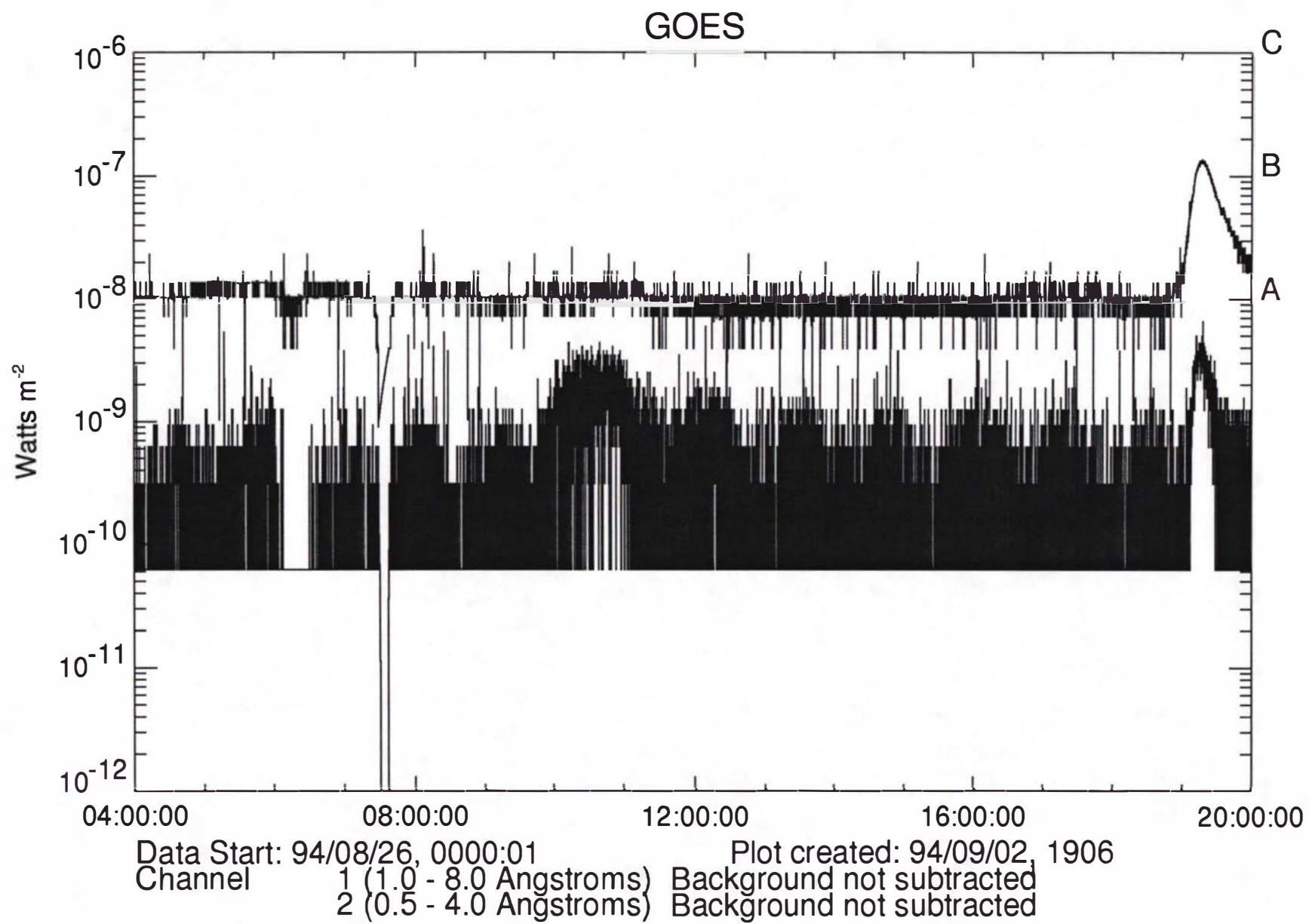
Yohkoh

gb940826 RBM PC TIME PROFILE

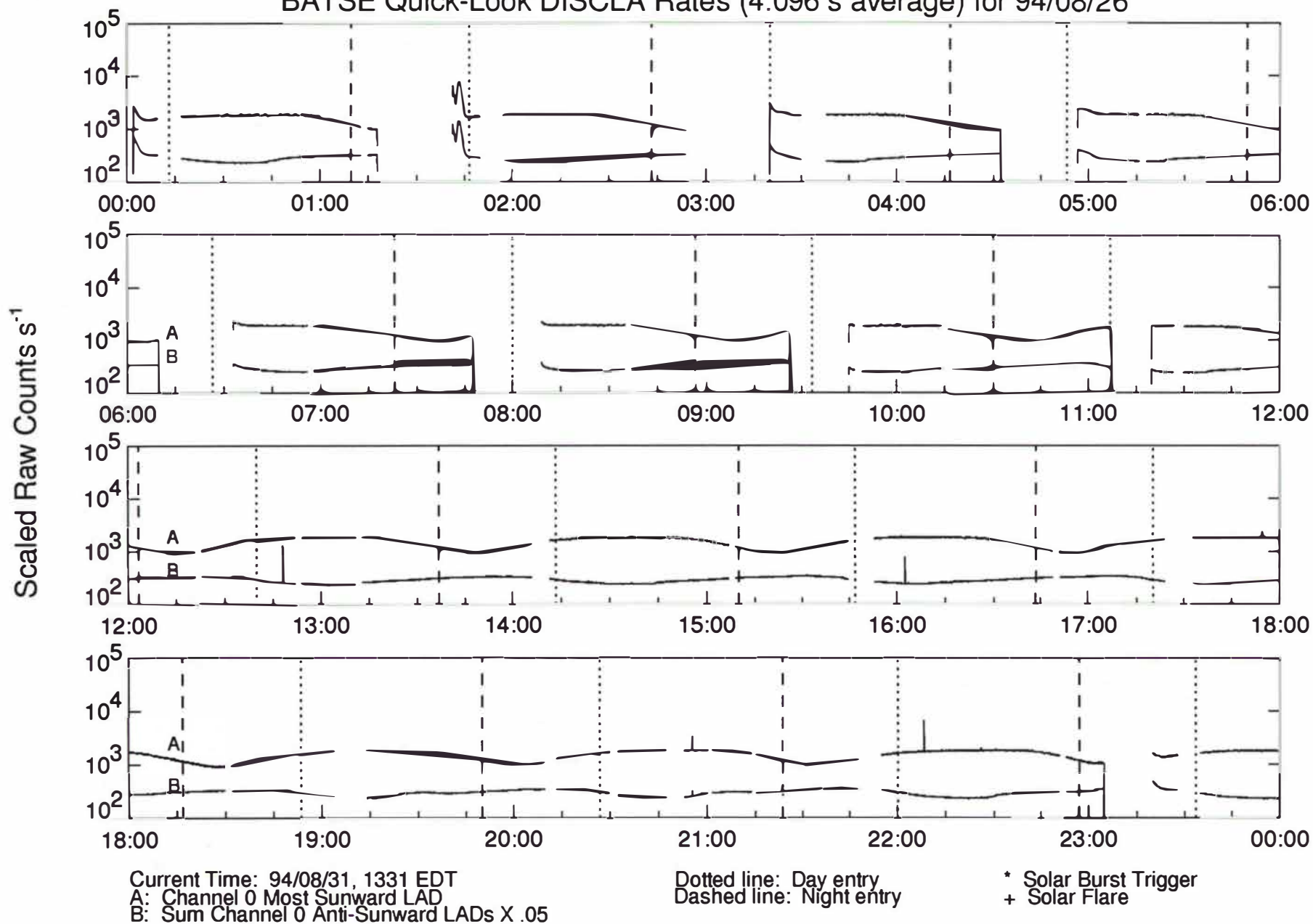


gb940826 HXS PC TIME PROFILE

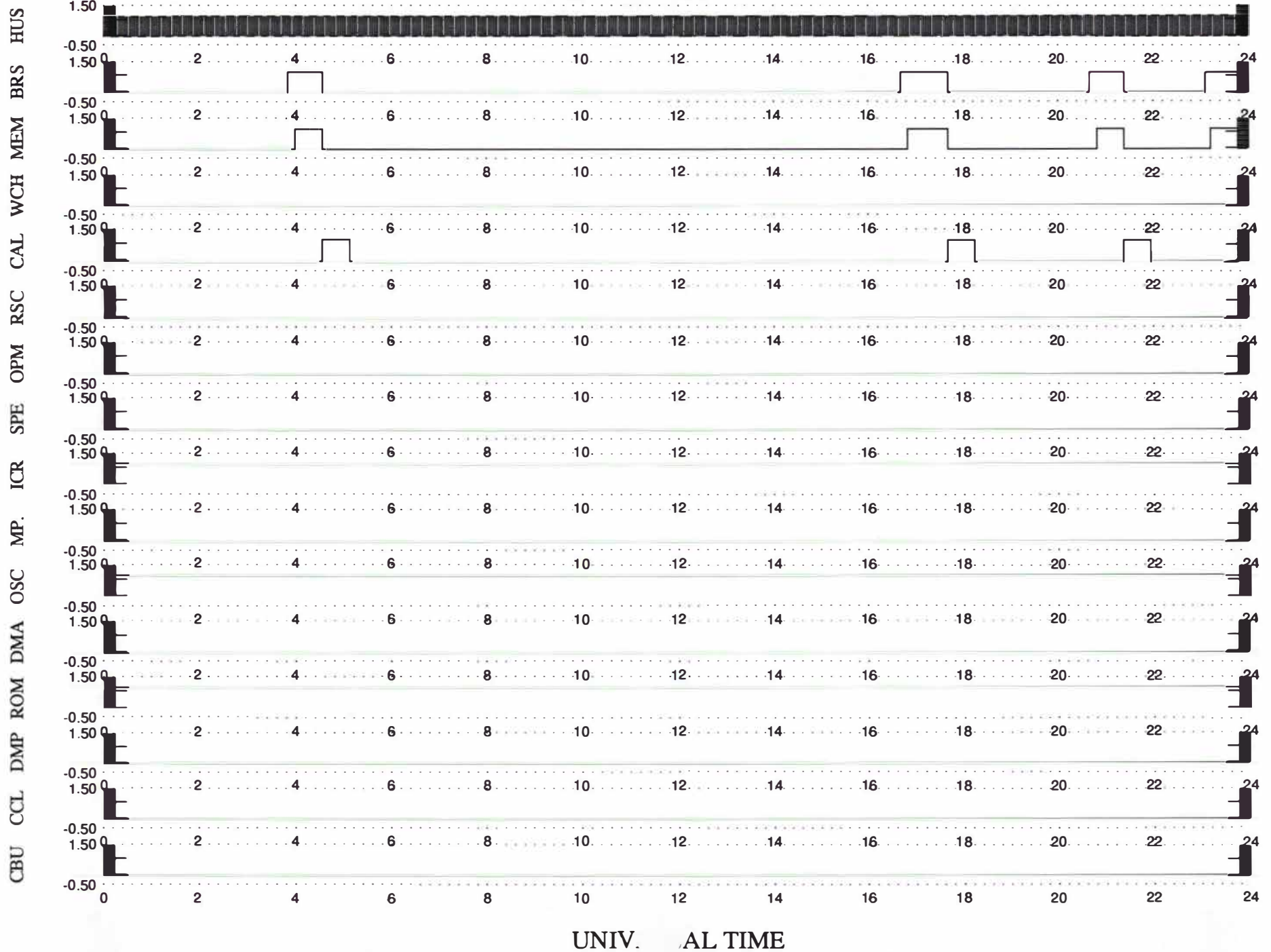




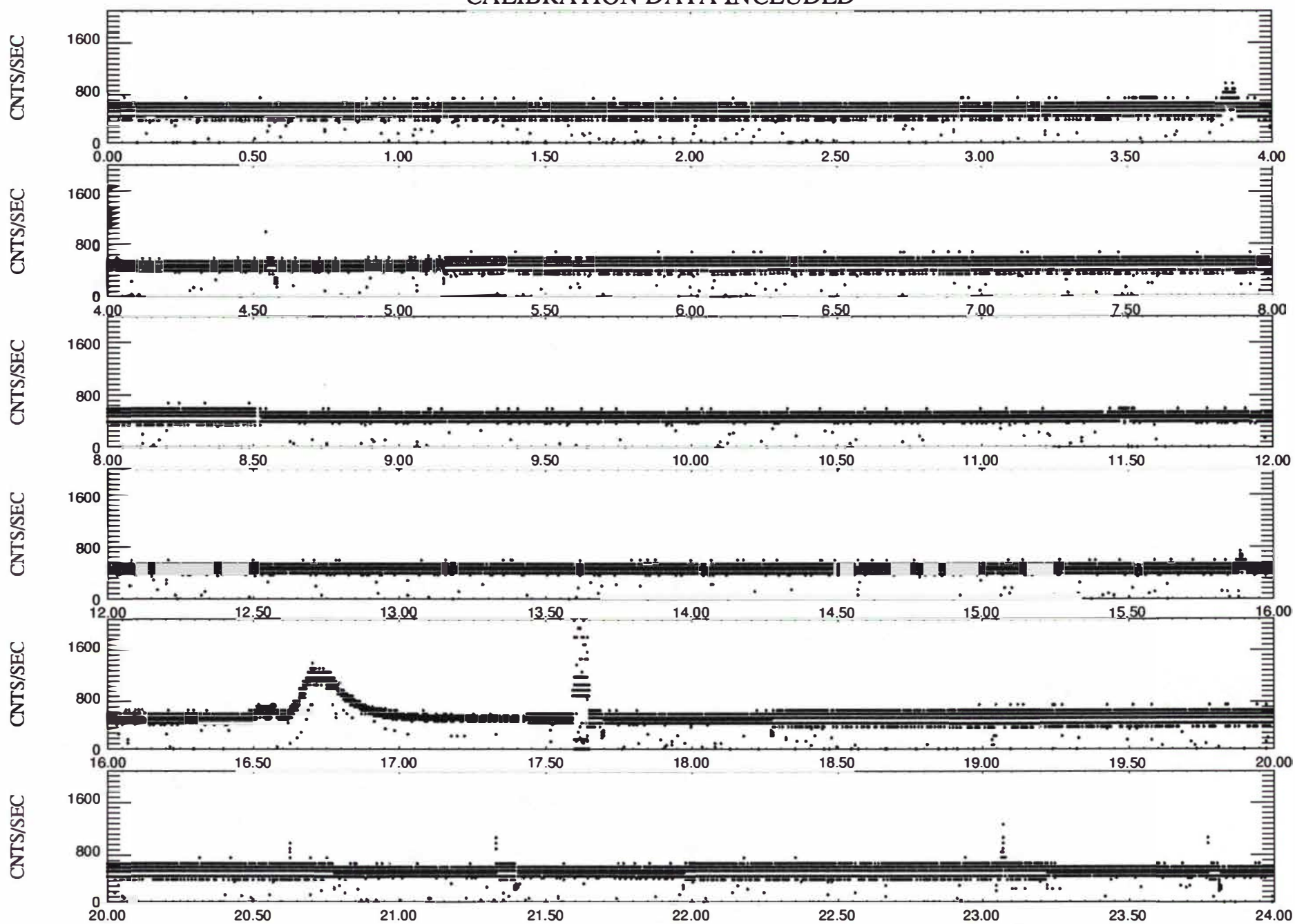
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/26



BURST NUMBER 5 - 8

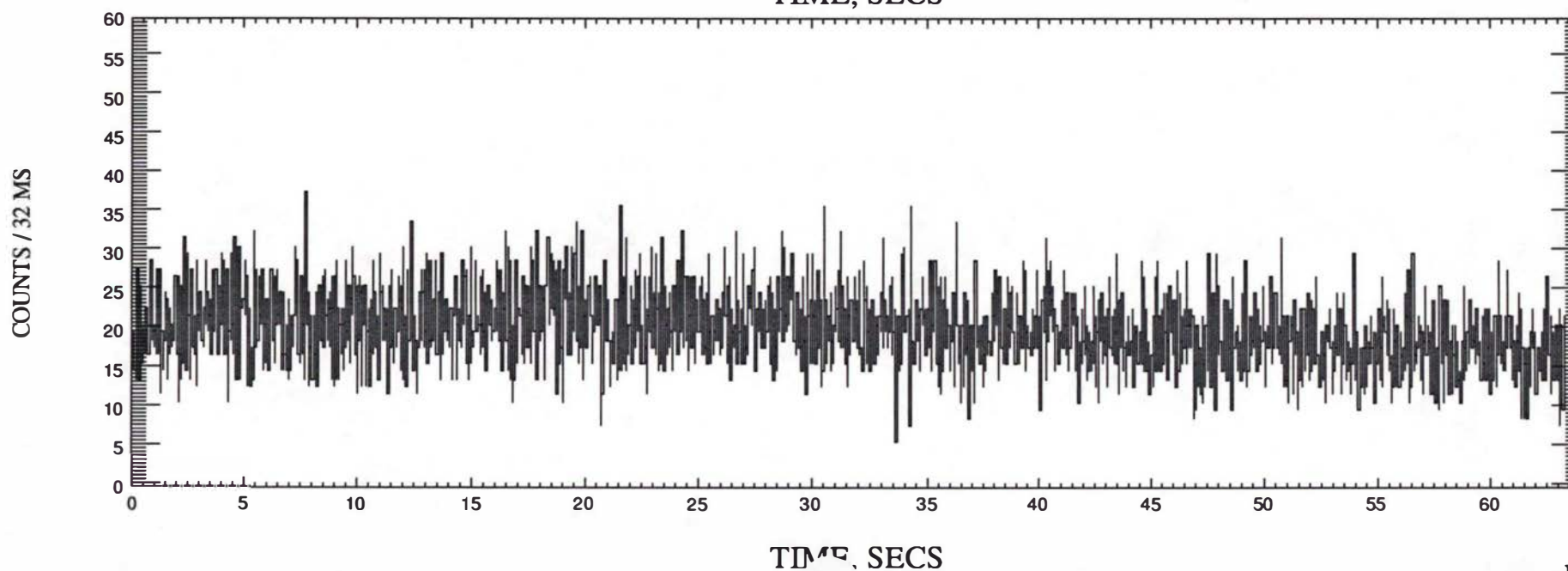
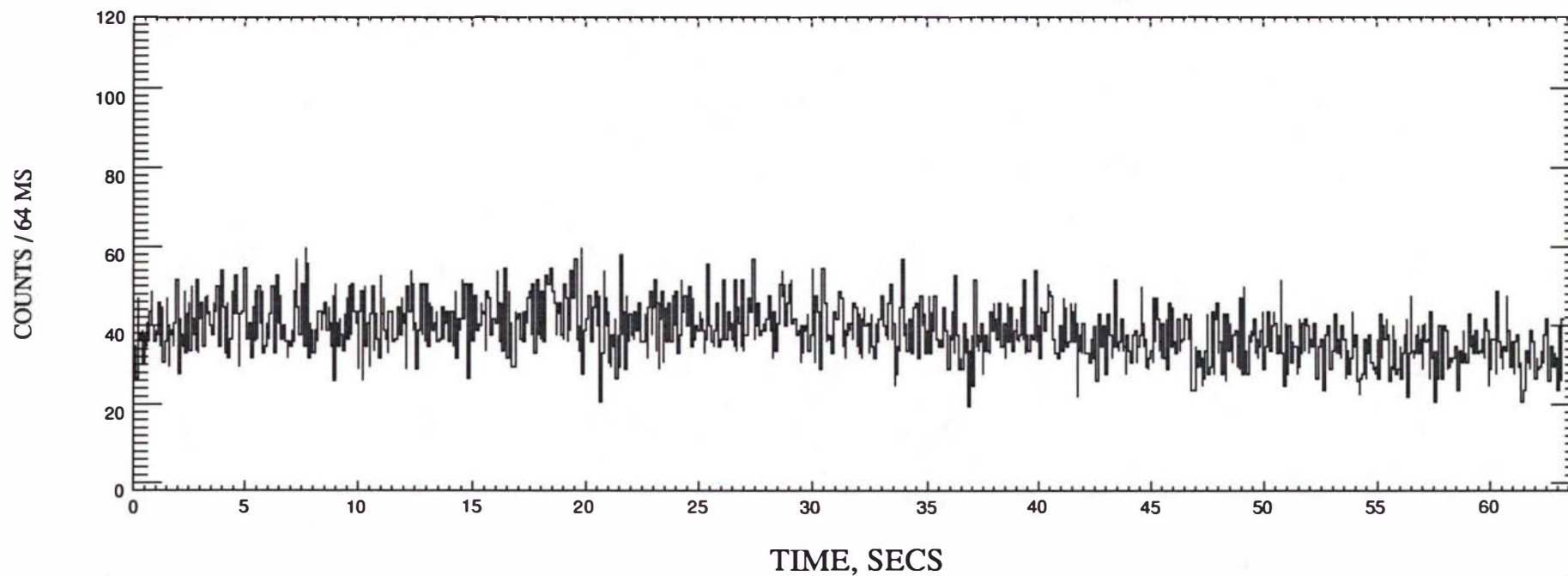


CALIBRATION DATA INCLUDED

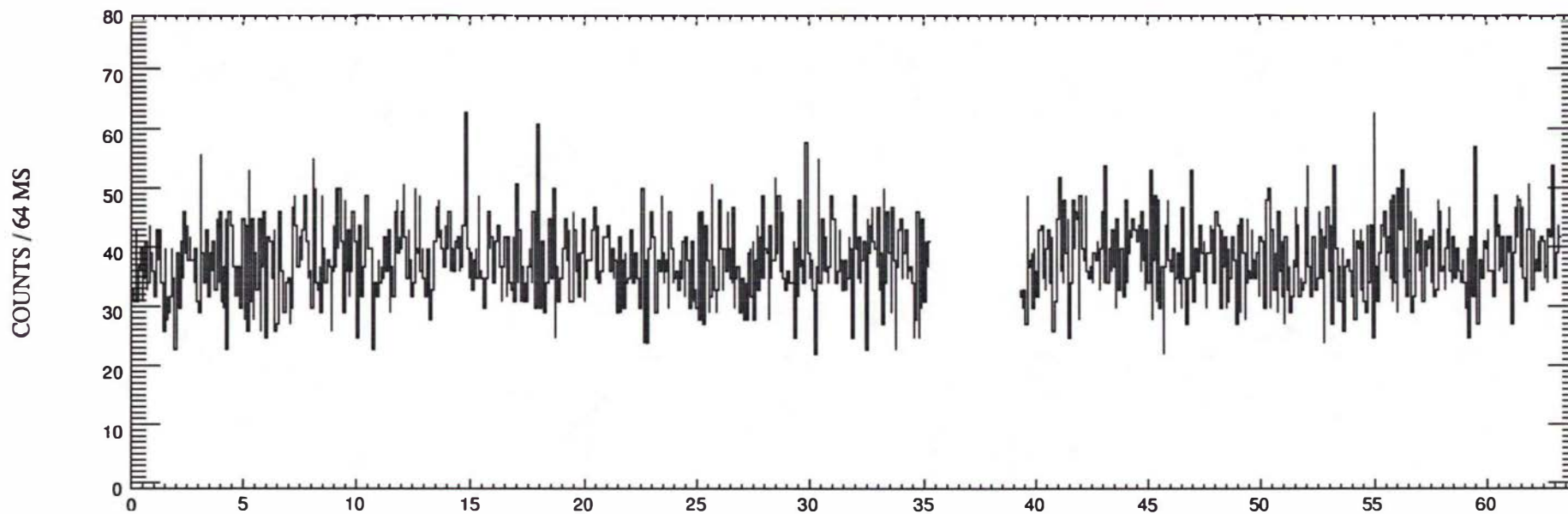


UNIV: AL TIME

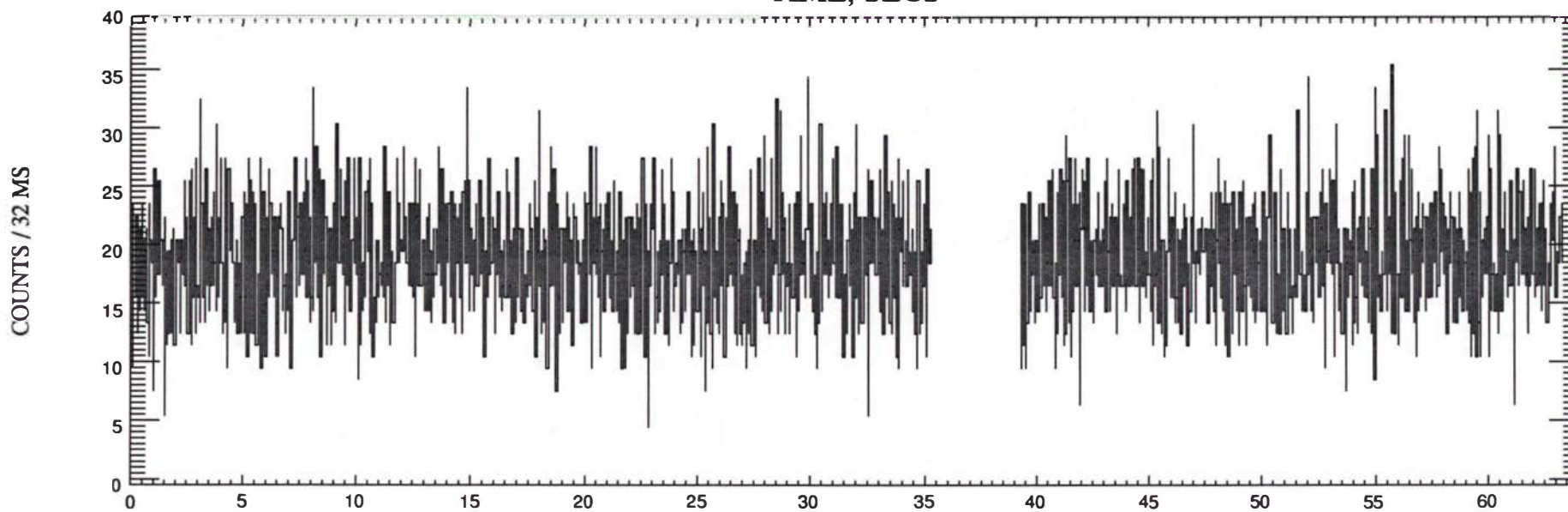
Burst Counter 5 at UT= 3.837827322218 h=13816.178 s 03:50:16.178



Burst Counter 6 at UT=16.631544439528 h=59873.560 s 16:37:53.560

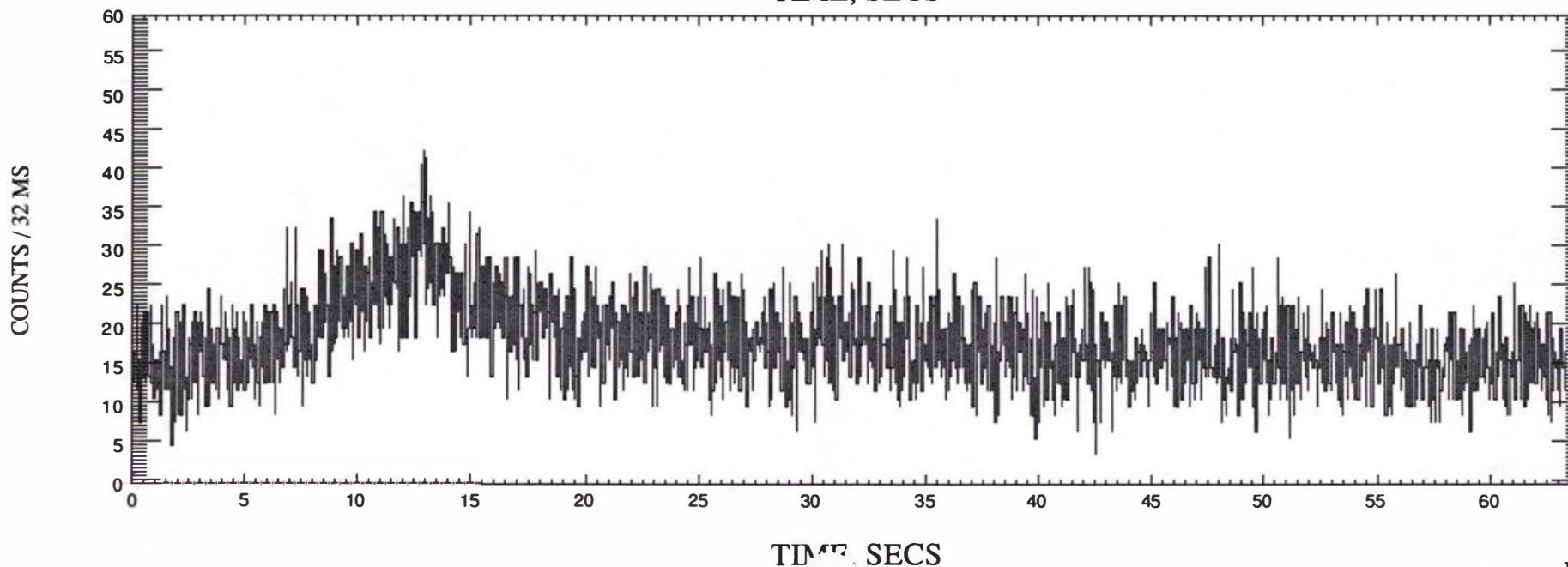
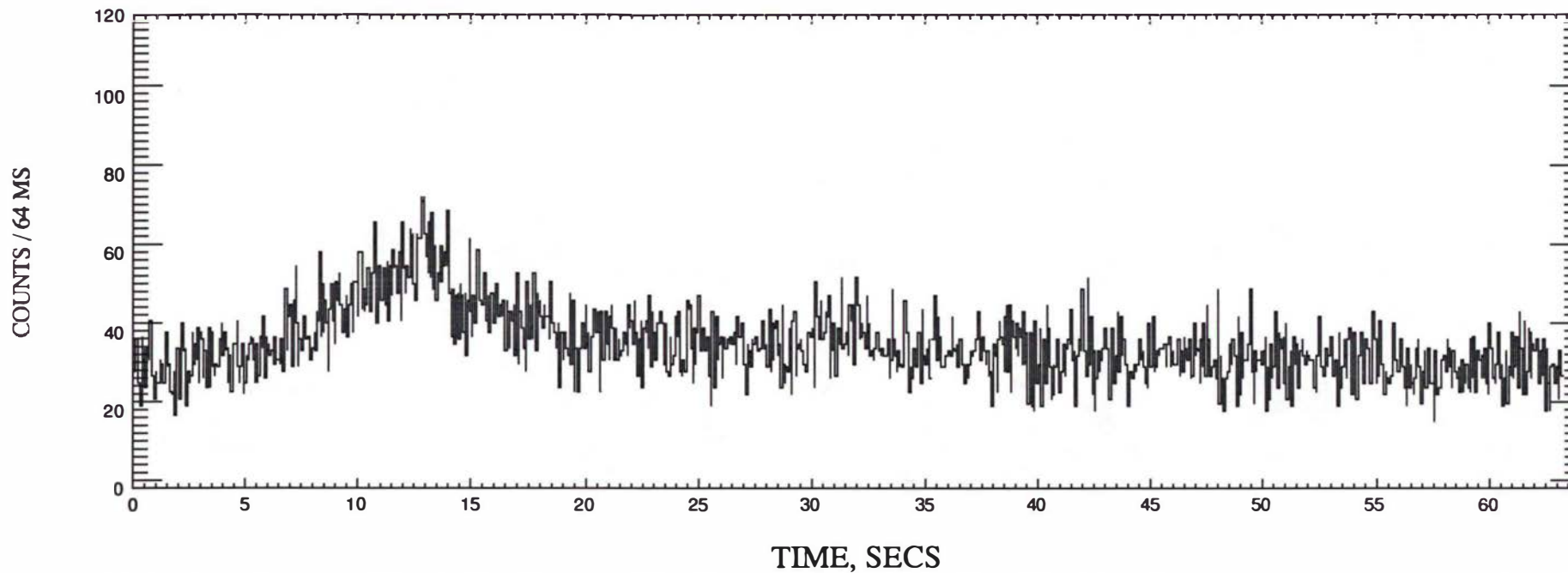


TIME, SECS

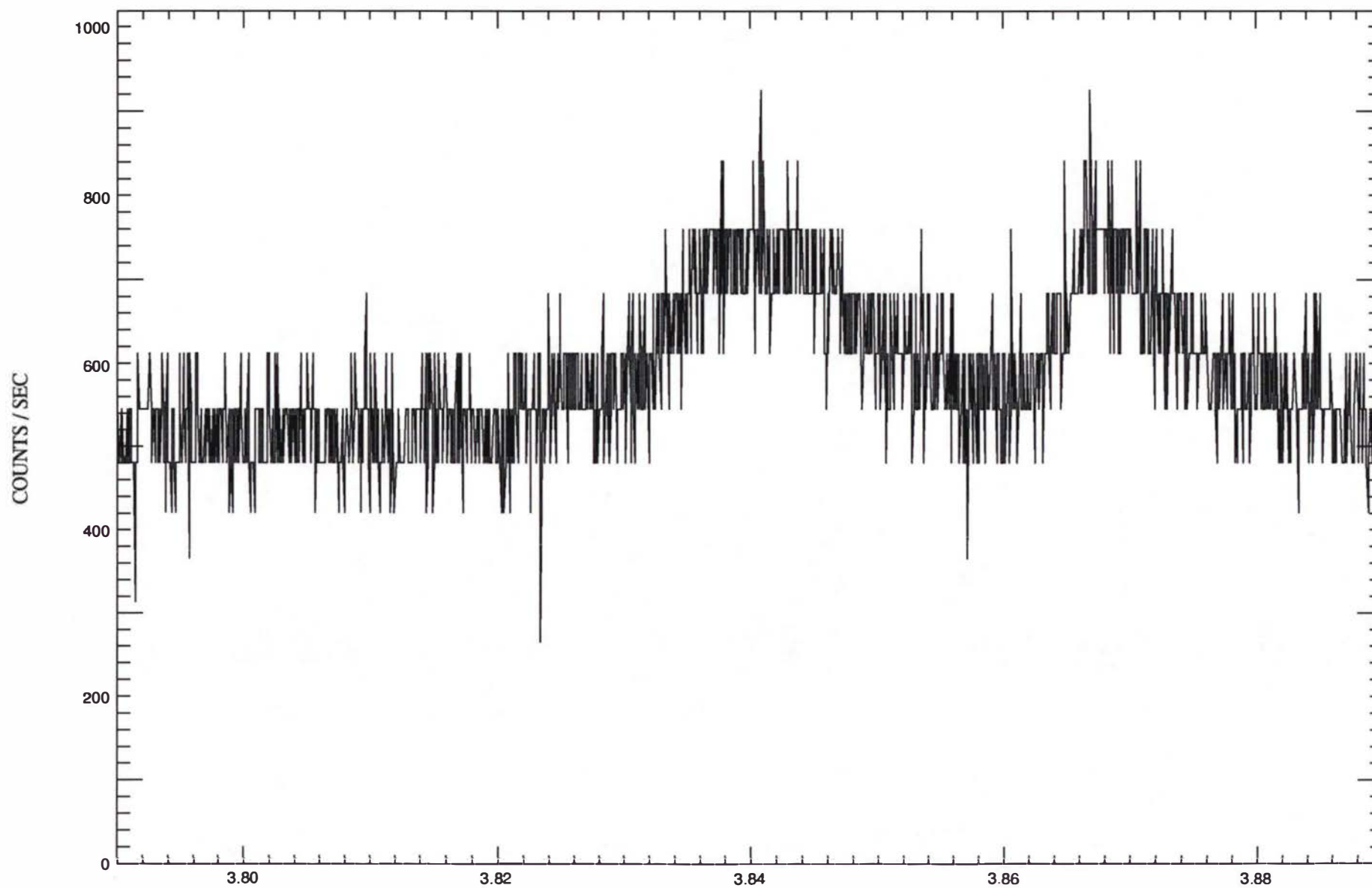


TIME, SECS

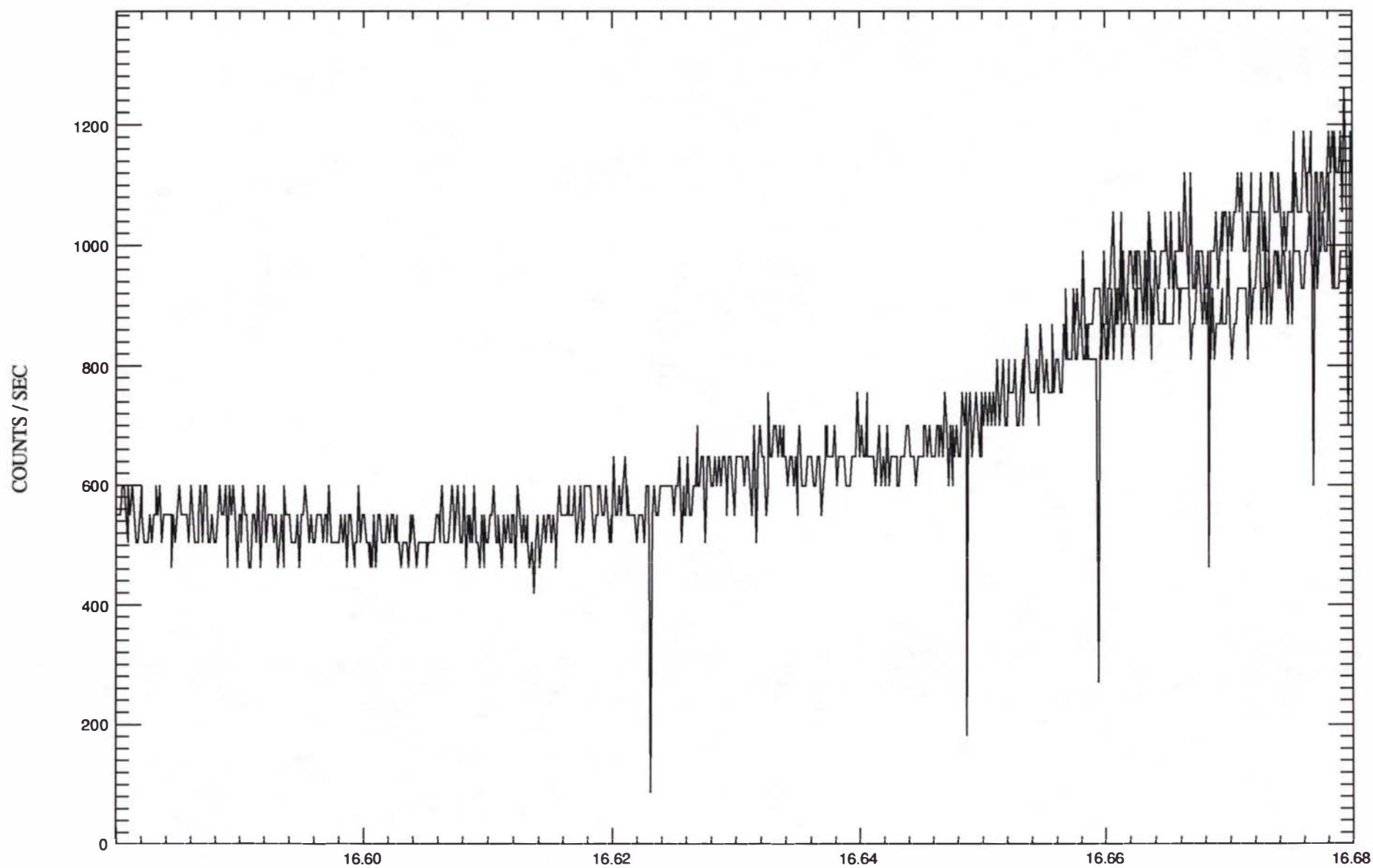
Burst Counter 8 at UT=23.064285443624 h=83031.428 s 23:03:51.428



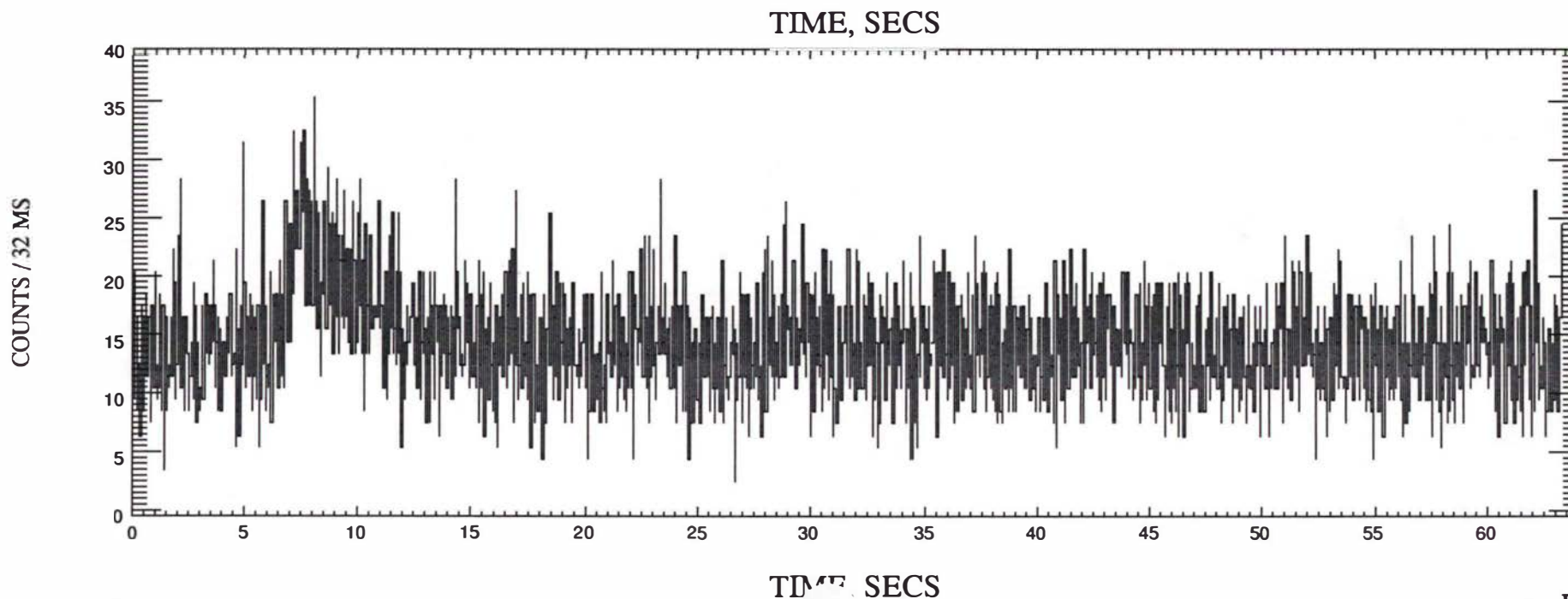
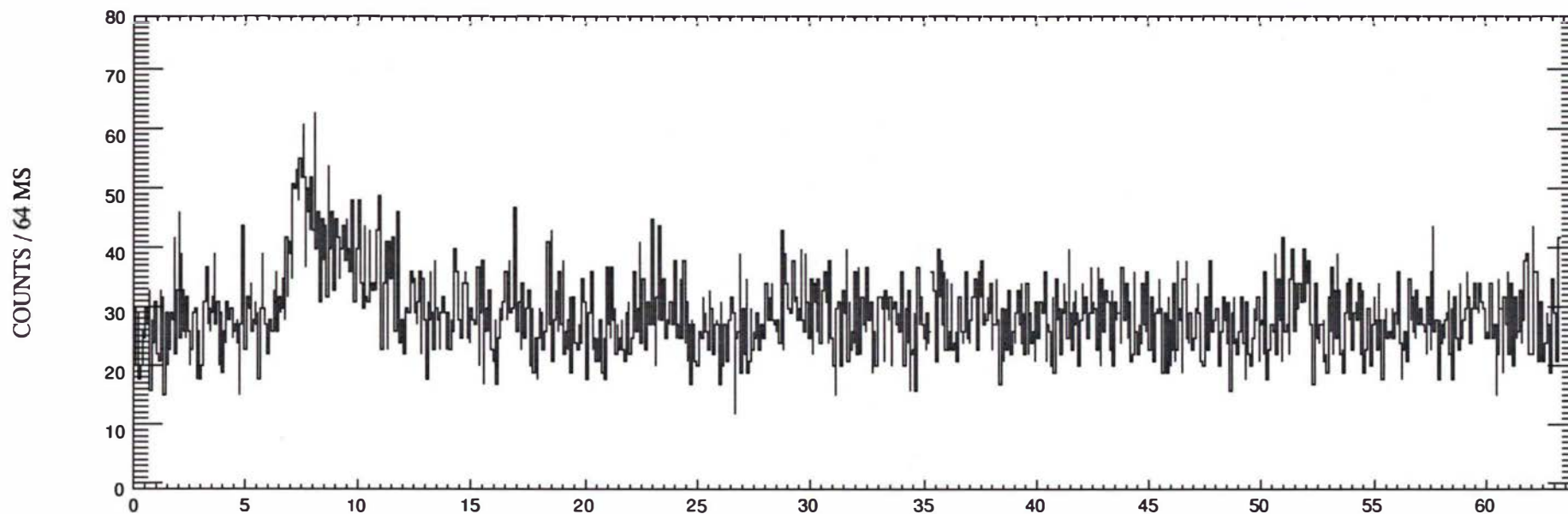
CALIBRATION DATA INCLUDED

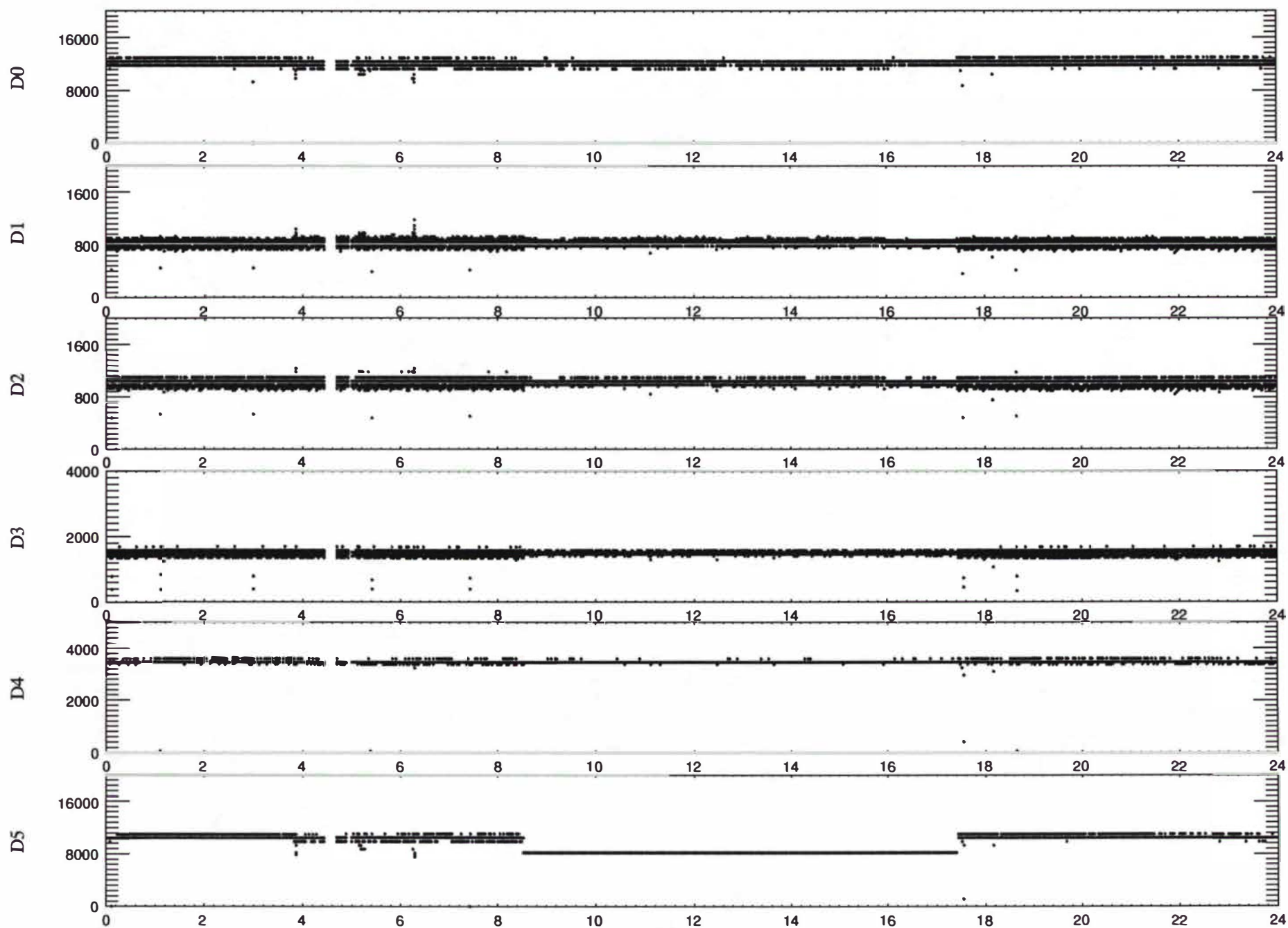


CALIBRATION DATA INCLUDED



Burst Counter 7 at UT=20.619664993286 h=74230.794 s 20:37:10.794





UNIV JAL TIME

From DEAL@ssl.msfc.nasa.gov Mon Aug 29 09:31 PDT 1994
Date: Mon, 29 Aug 1994 11:31:41 -0500 (CDT)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3139

BATSEARCH PROGRAM

BATSE BURST # 3139
EVENT OF 1994 AUG 27 DAY OF YEAR=239
EVENT CROSSING TIME AT BATSE : 19087. S. OR 05:18:07.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 280.000 -5.000
BATSE PEAK COUNTING RATE: 7600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 27/ 8/ 94 IS:
RA= 143.268 DEC= -46.972 DIST= 2.786 AU
BATSE-ULYSSES DISTANCE = 416796302. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 64.45 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 599.57 SECS.
CROSSING TIME AT ULYSSES IS 19687. S. OR 05:28:06 +/- 276.88 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 27/ 8/ 94 IS:
RA= 97.204 DEC= 23.618 DIST= 1.792 AU
MARS-BATSE DISTANCE = 268026704. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 18.81 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 846.28 SECS.
CROSSING TIME AT MARS IS 19933. S. OR 05:32:13 +/- 62.90 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3139	940827	9591	19087	7600	280	-05

SUBJECT: BATSE BURST 3139

BATSE BURST TRIGGER

NO.: 03139

TIME: TJD=9591 SECONDS=19087

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=166.6 AZIMUTH=159.3 ERROR= DEGREES

COMMENTS:

BURST LASTING APPROX. 12S. NOT VISIBLE ABOVE 300KEV.

30 / 8 / 94

ULYSSES RT

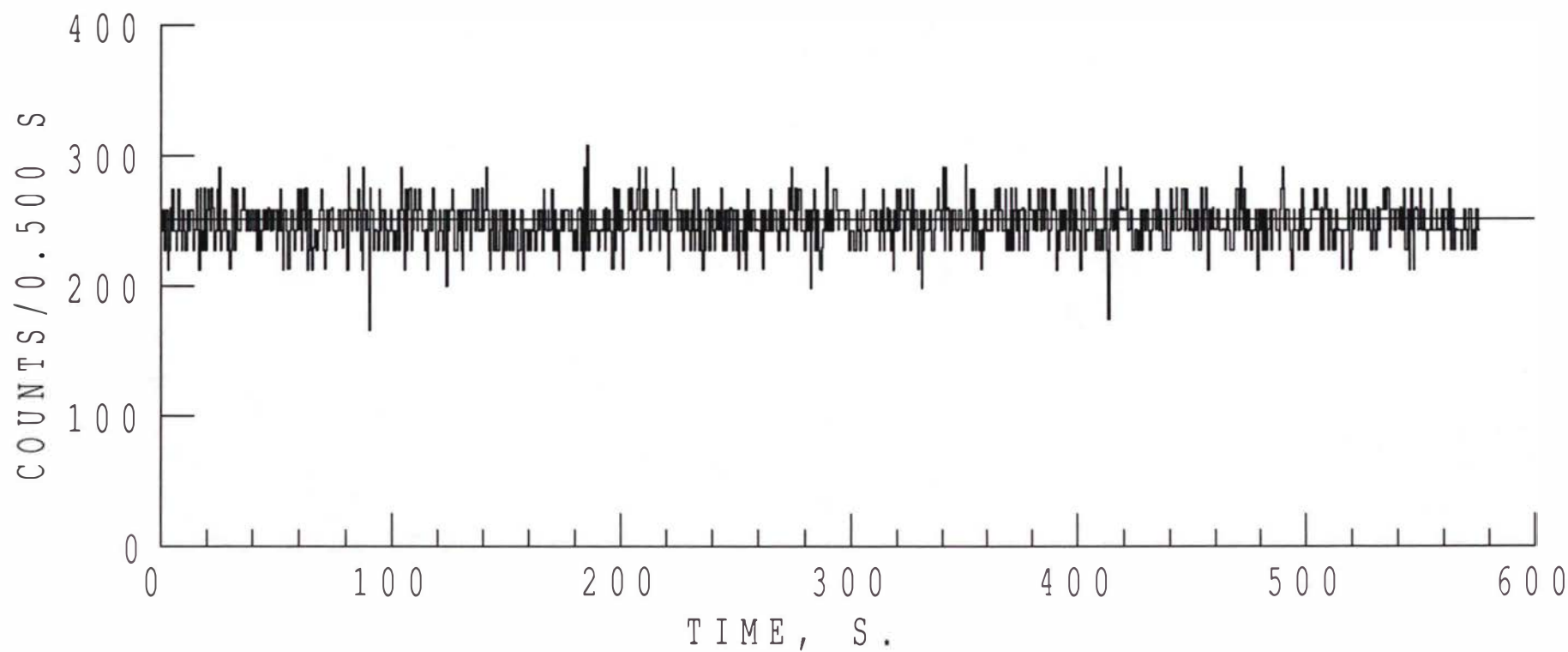
27 / 8 / 94 19404.191 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

M= 10 N= 2

>4.0 SIGMA FLUCTUATIONS



From DEAL@ssl.msfc.nasa.gov Mon Aug 29 09:29 PDT 1994
Date: Mon, 29 Aug 1994 11:29:59 -0500 (CDT)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3140

BATSEARCH PROGRAM

BATSE BURST # 3140
EVENT OF 1994 AUG 27 DAY OF YEAR=239
EVENT CROSSING TIME AT BATSE : 82093. S. OR 22:48:13.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 134.000 -16.000
BATSE PEAK COUNTING RATE: 4300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 27/ 8/ 94 IS:
RA= 143.560 DEC= -47.164 DIST= 2.781 AU
BATSE-ULYSSES DISTANCE = 415988364. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=147.85 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1174.75 SECS.
CROSSING TIME AT ULYSSES IS 80918. S. OR 22:28:38 +/- 160.37 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 27/ 8/ 94 IS:
RA= 97.204 DEC= 23.618 DIST= 1.792 AU
MARS-BATSE DISTANCE = 268026704. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=126.50 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -531.82 SECS.
CROSSING TIME AT MARS IS 81561. S. OR 22:39:21 +/- 116.70 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3140	940827	9591	82093	4300	134	-16

BATSE BURST TRIGGER

NO.: 03140

TIME: TJD=9591 SECONDS=82093

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=049.3 AZIMUTH=298.1 ERROR= DEGREES

COMMENTS:

BURST LASTING APPROX. 10S. MARGINALLY VISIBLE ABOVE 300KEV.

30 / 8 / 94

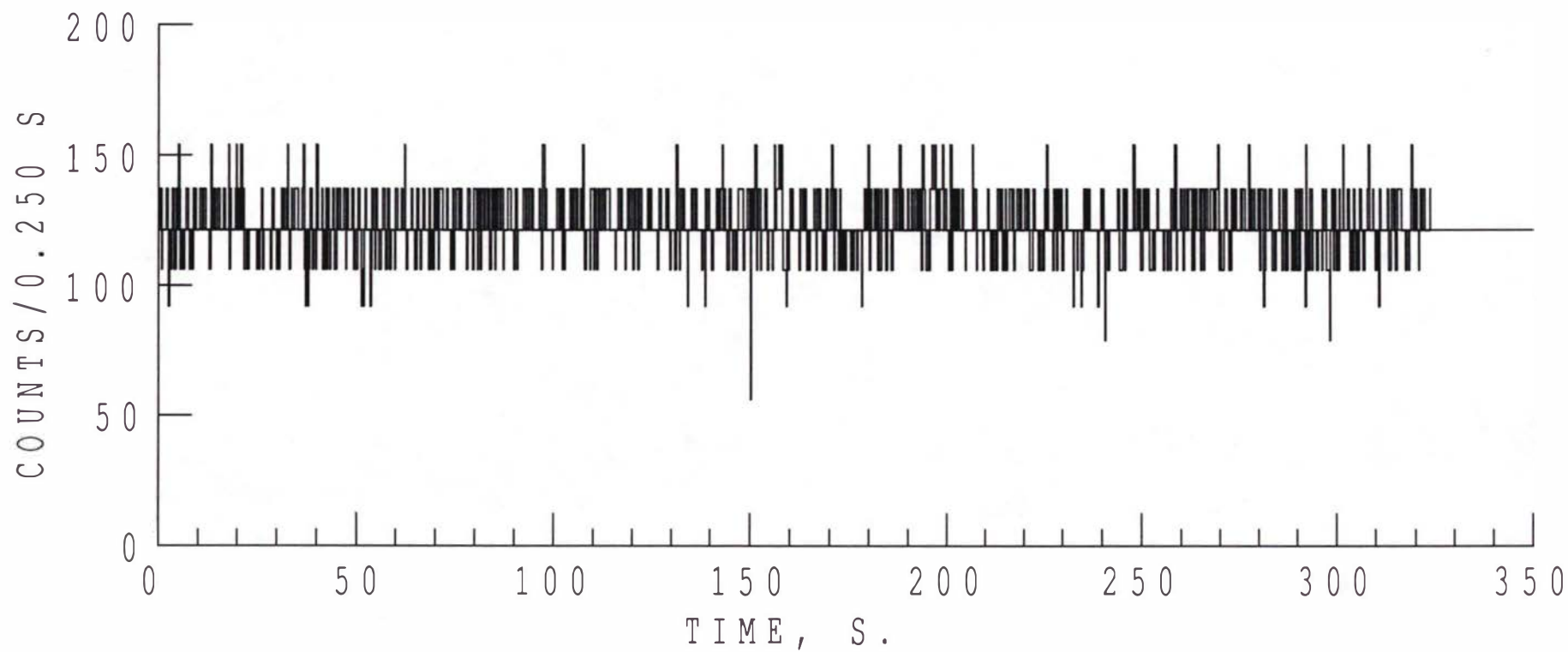
ULYSSES RT

27 / 8 / 94 80748.188 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



GROCSE/LLNL

burstlog

Tue Sep 13 10:49:58 1994

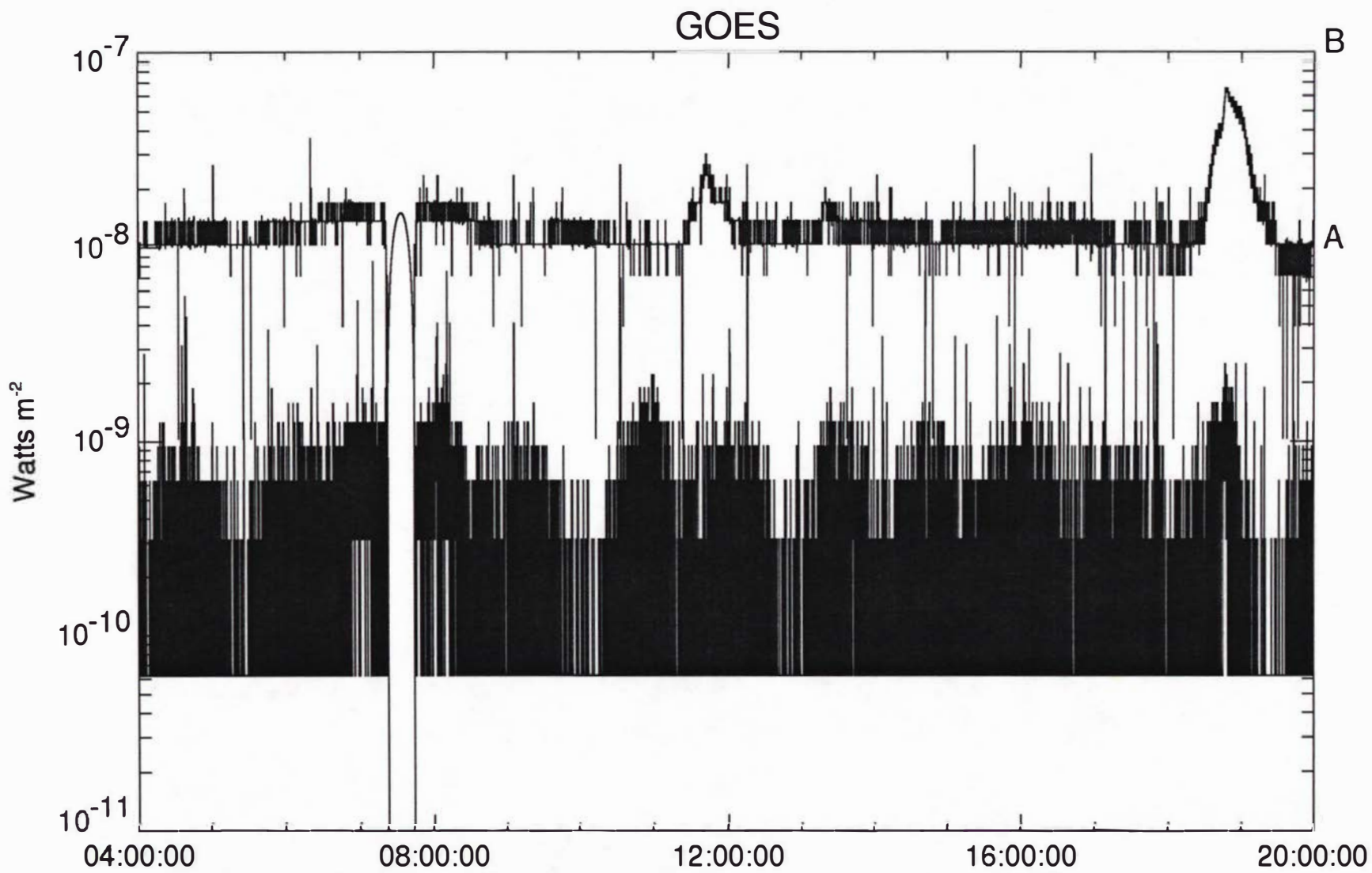
4

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SUMMARY

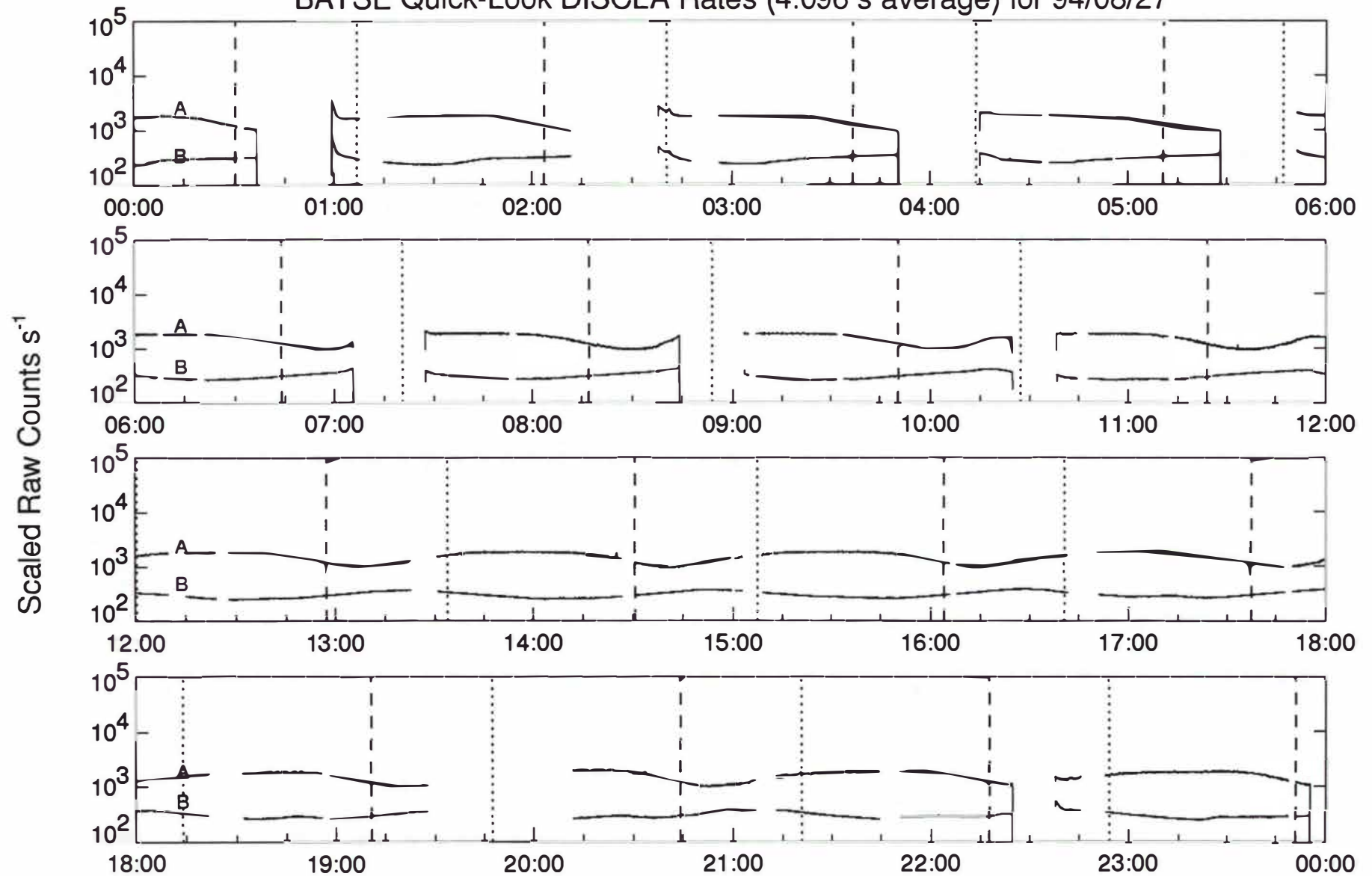
=====

Date (UTC)	TJD	SOD	Trig#	Hunts_RA (J2000)	Hunts_DEC	Hunts_error	BACO-Hunts	Raw data
1/29/94	9381	38599	2793	125.75	27.73	? 0.6035	4.3 deg	
3/29/94	9440	42636	2896	179.98	8.24	? 1.731	~4 deg	
4/28/94	9470	38193	2952	350.59	-0.98	2063 3200	deg 59	deg
6/23/94	9526	19547	3040	249.88	11.22	7809 2000	deg 5.3	deg
8/27/94	9591	19087	3139	280.42	-5.11	4365 ?	9.6 deg	-19115
8/28/94	9592	24439	3141	340.56	50.57	? 3839	8.3 deg	-19048
9/07/94	9602	30336	3159	105.71	73.56	? 6252	18.6 deg	-22318



Data Start: 94/08/27, 0000:02 Plot created: 94/09/02, 1911
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/27

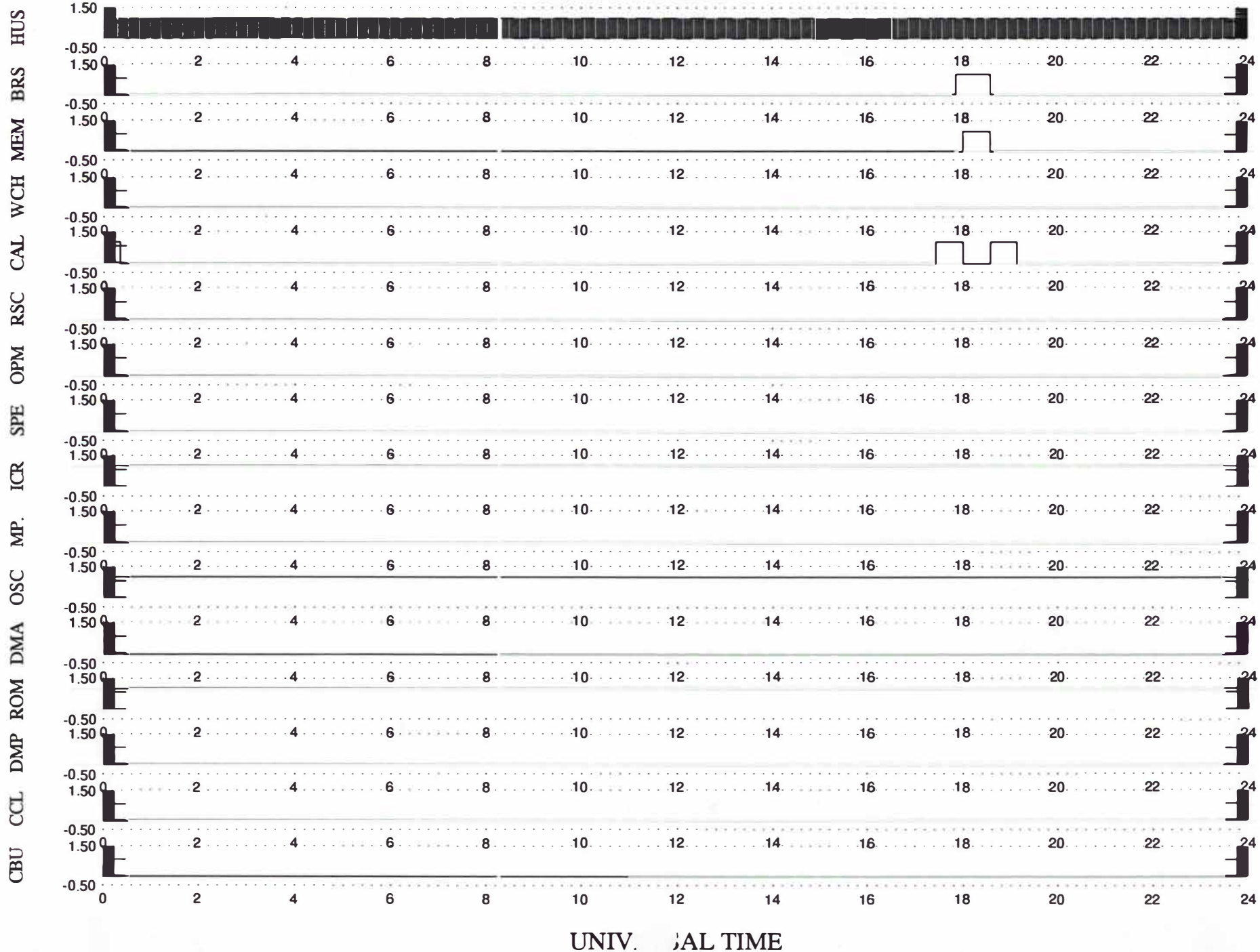


Current Time: 94/08/31, 1331 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

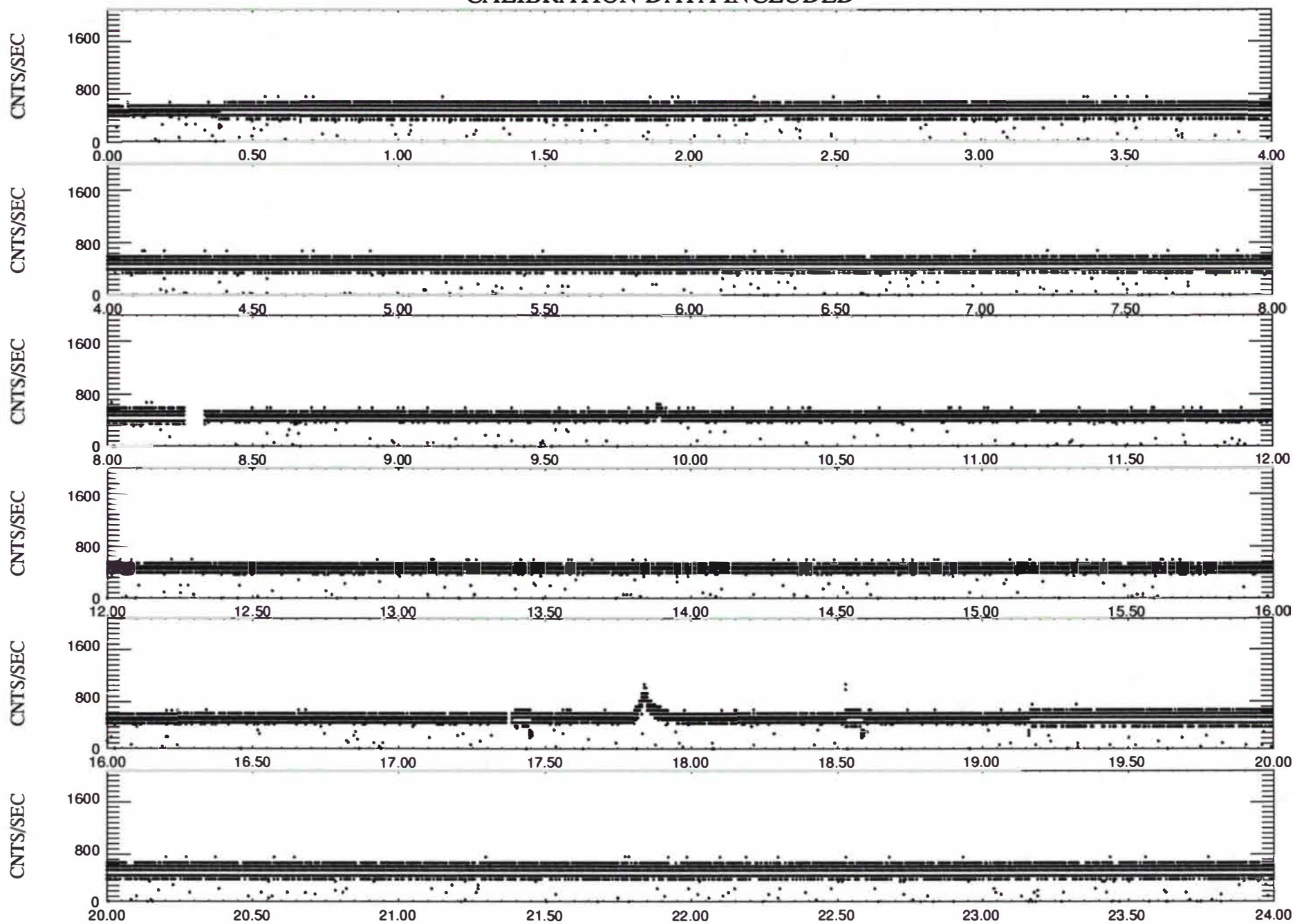
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 9

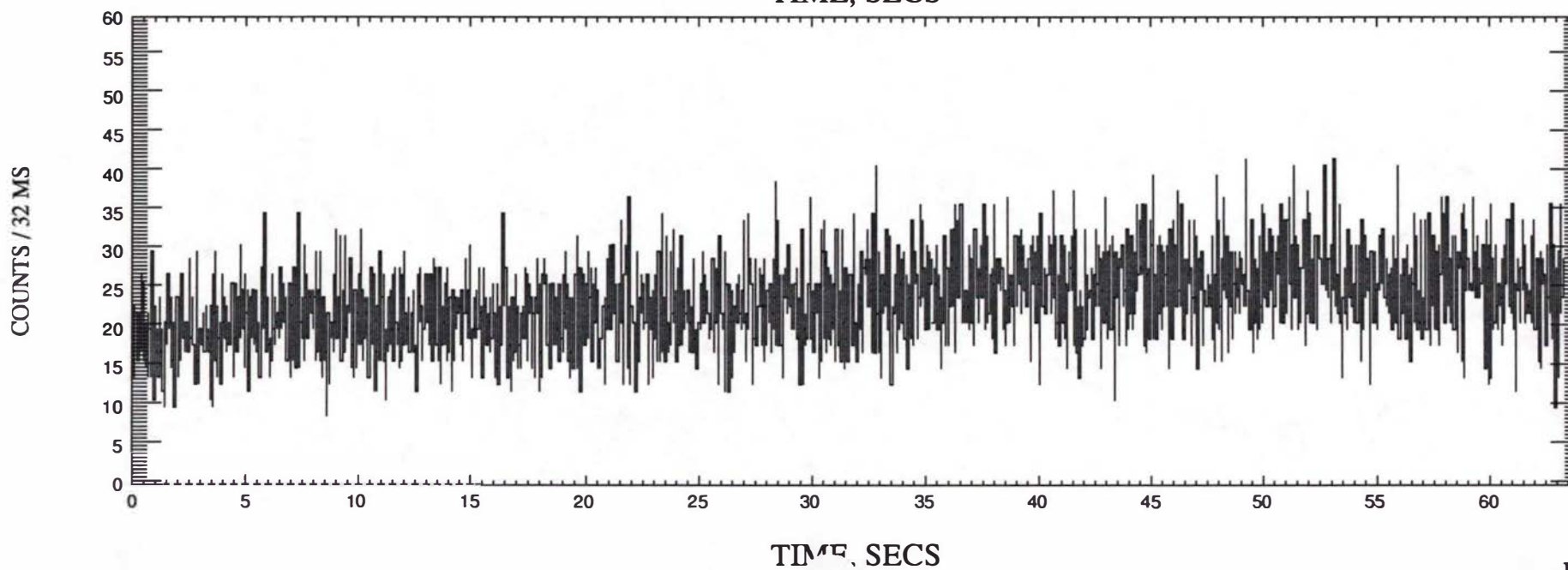
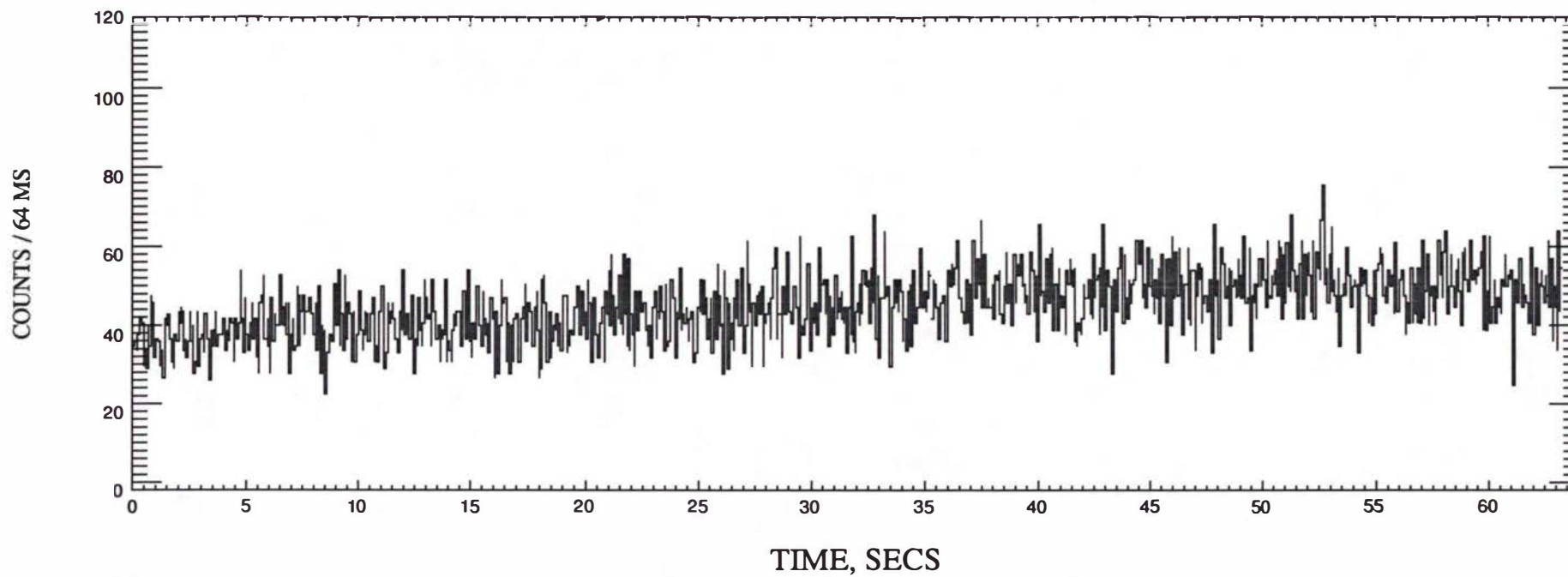


CALIBRATION DATA INCLUDED

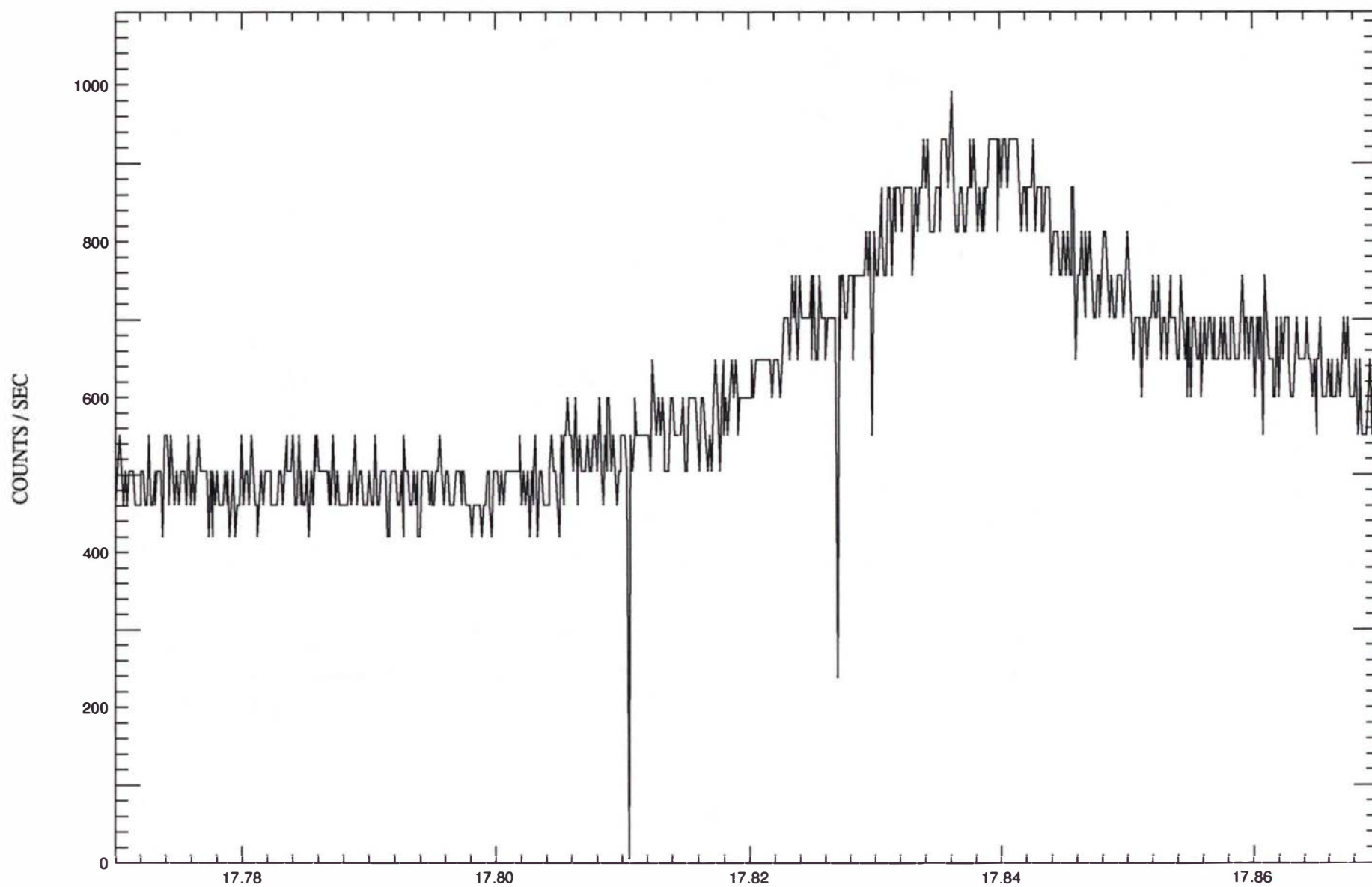


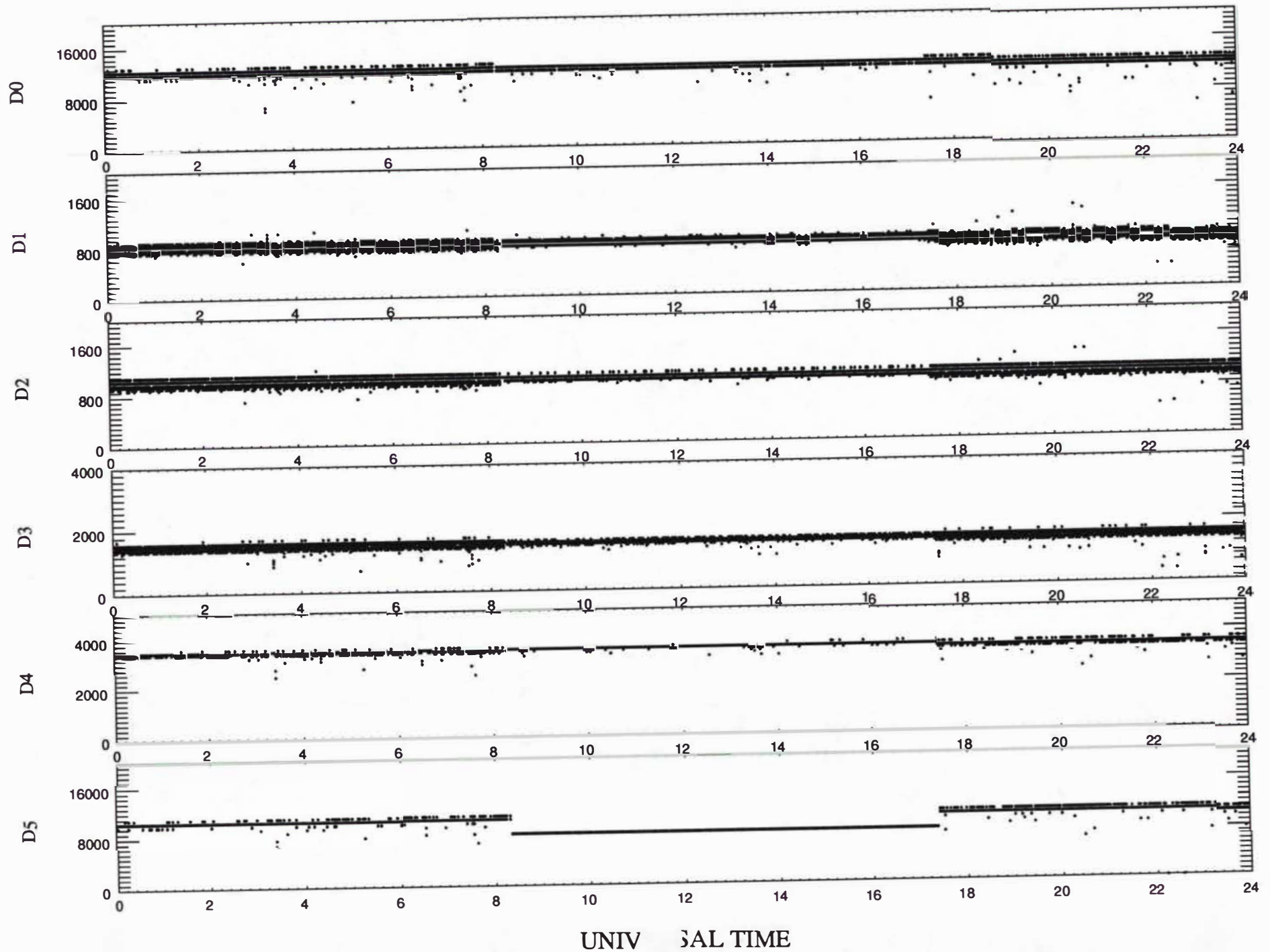
UNIVERSAL TIME

Burst Counter 9 at UT=17.823689905802 h=64165.284 s 17:49:25.284



CALIBRATION DATA INCLUDED





From HAGEDON@fender.msfc.nasa.gov Tue Aug 30 06:58 PDT 1994
Date: Tue, 30 Aug 1994 8:59:04 -0500 (CDT)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3141

BATSEARCH PROGRAM

BATSE BURST # 3141
EVENT OF 1994 AUG 28 DAY OF YEAR=240
EVENT CROSSING TIME AT BATSE : 24439. S. OR 06:47:19.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 340.000 50.000
BATSE PEAK COUNTING RATE: 2100 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 28/ 8/ 94 IS:
RA= 143.695 DEC= -47.253 DIST= 2.778 AU
BATSE-ULYSSES DISTANCE = 415614070. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 11.10 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1360.42 SECS.
CROSSING TIME AT ULYSSES IS 25799. S. OR 07:09:59 +/- 116.98 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 28/ 8/ 94 IS:
RA= 97.901 DEC= 23.600 DIST= 1.786 AU
MARS-BATSE DISTANCE = 267221200. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 91.78 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -27.67 SECS.
CROSSING TIME AT MARS IS 24411. S. OR 06:46:51 +/- 154.26 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3141	940828	9592	24439	2100	340	+50

BATSE BURST TRIGGER

NO.: 3141

TIME: TJD=9592 SECONDS=24439

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=100 AZIMUTH=89 ERROR= DEGREES

COMMENTS:

BURST. WEAK SINGLE PULSE. DUR.~4 SEC. TRIGGERED JUST AFTER SAA EXIT.
NOT VISIBLE ABOVE 300 KEV.

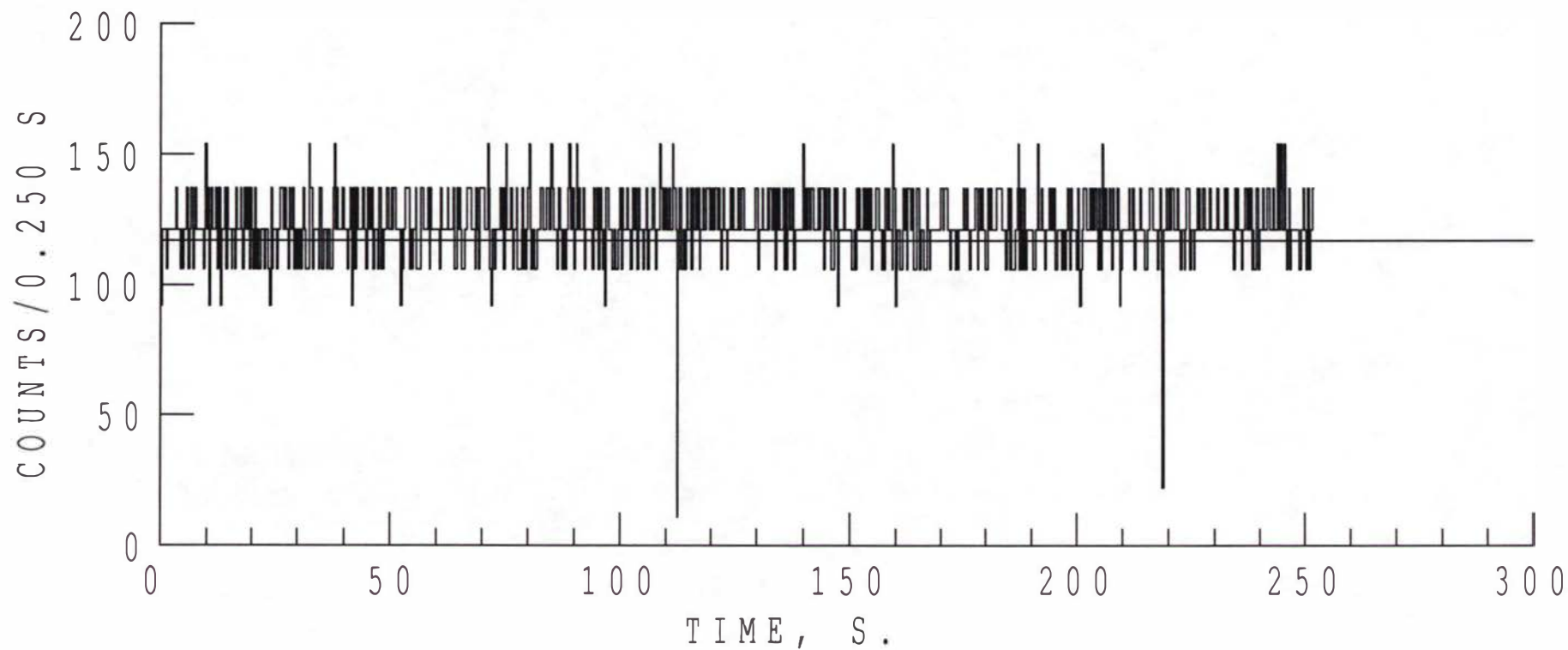
30 / 8 / 94

ULYSSES RT

28 / 8 / 94 25668.197 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



GROCSE/LLNL

burstlog

Tue Sep 13 10:49:58 1994

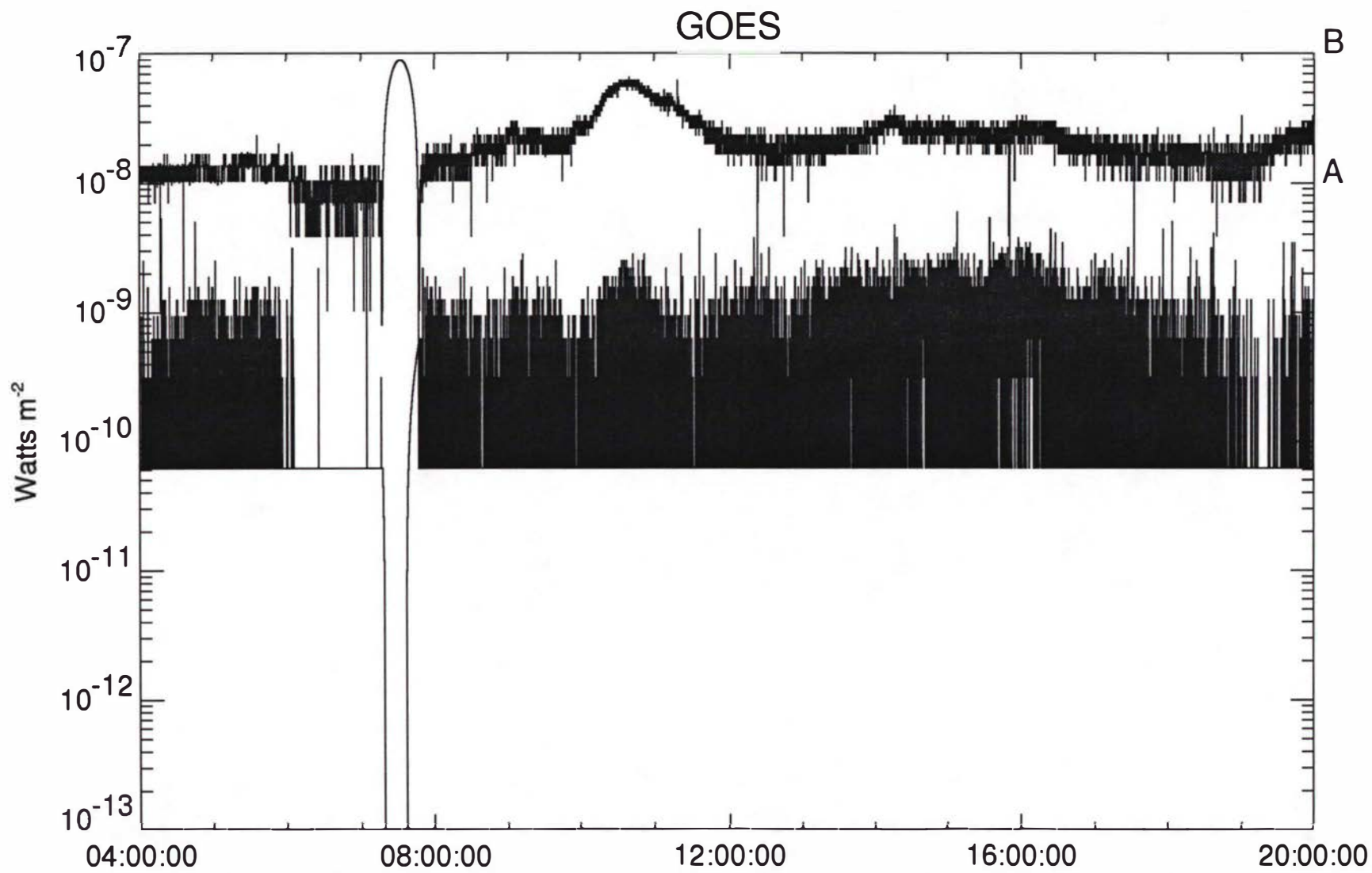
4

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SUMMARY

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Date (UTC)	TJD	SOD	Trig#	Hunts_RA (J2000)	Hunts_DEC	Hunts_error	BACO-Hunts	Raw data
1/29/94	9381	38599	2793	125.75	27.73	? 0.6035	4.3 deg	
3/29/94	9440	42636	2896	179.98	8.24	? 1.731	~4 deg	
4/28/94	9470	38193	2952	350.59	-0.98	2.063 32.8 deg	59. deg	
6/23/94	9526	19547	3040	249.88	11.22	7.809 2.8 deg	5.3 deg	
8/27/94	9591	19087	3139	280.42	-5.11	4.365 ?	9.6 deg - 19.115	
8/28/94	9592	24439	3141	340.56	50.57	? 3.839	8.3 deg - 19.448	
9/07/94	9602	30336	3159	105.71	73.56	? 6.252	18.6 deg - 22.313	



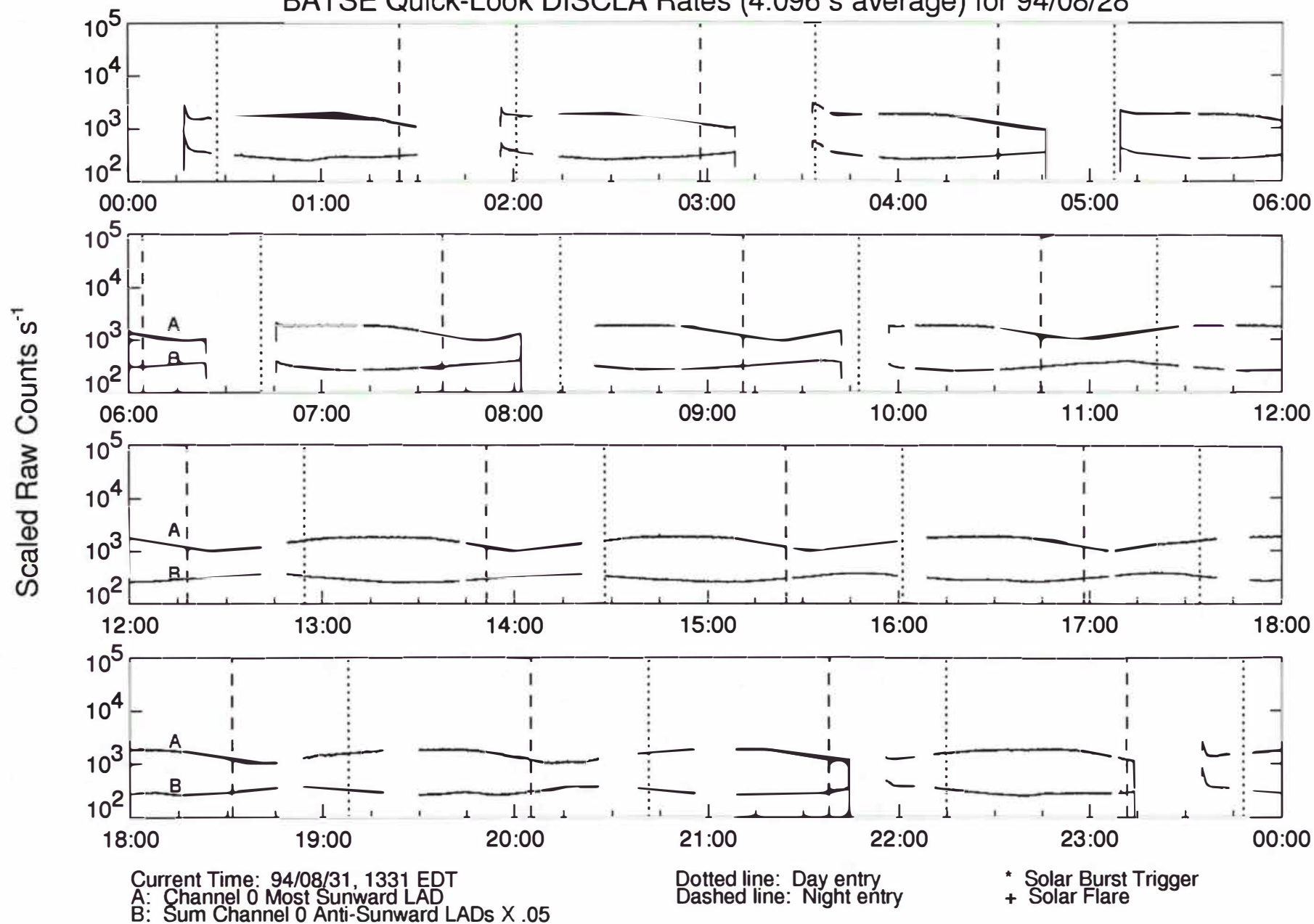
Data Start: 94/08/28, 0000:00

Plot created: 94/09/02, 1911

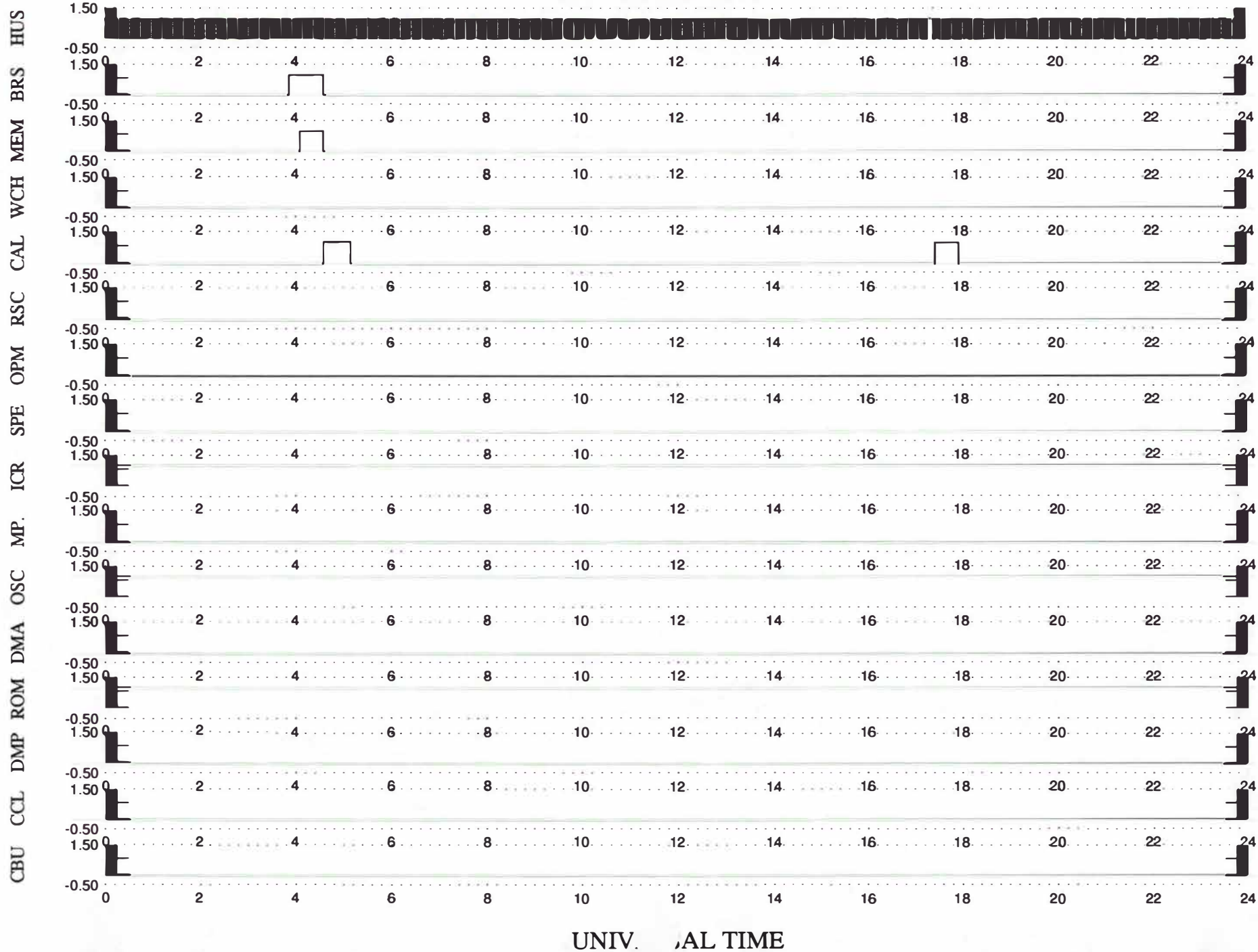
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

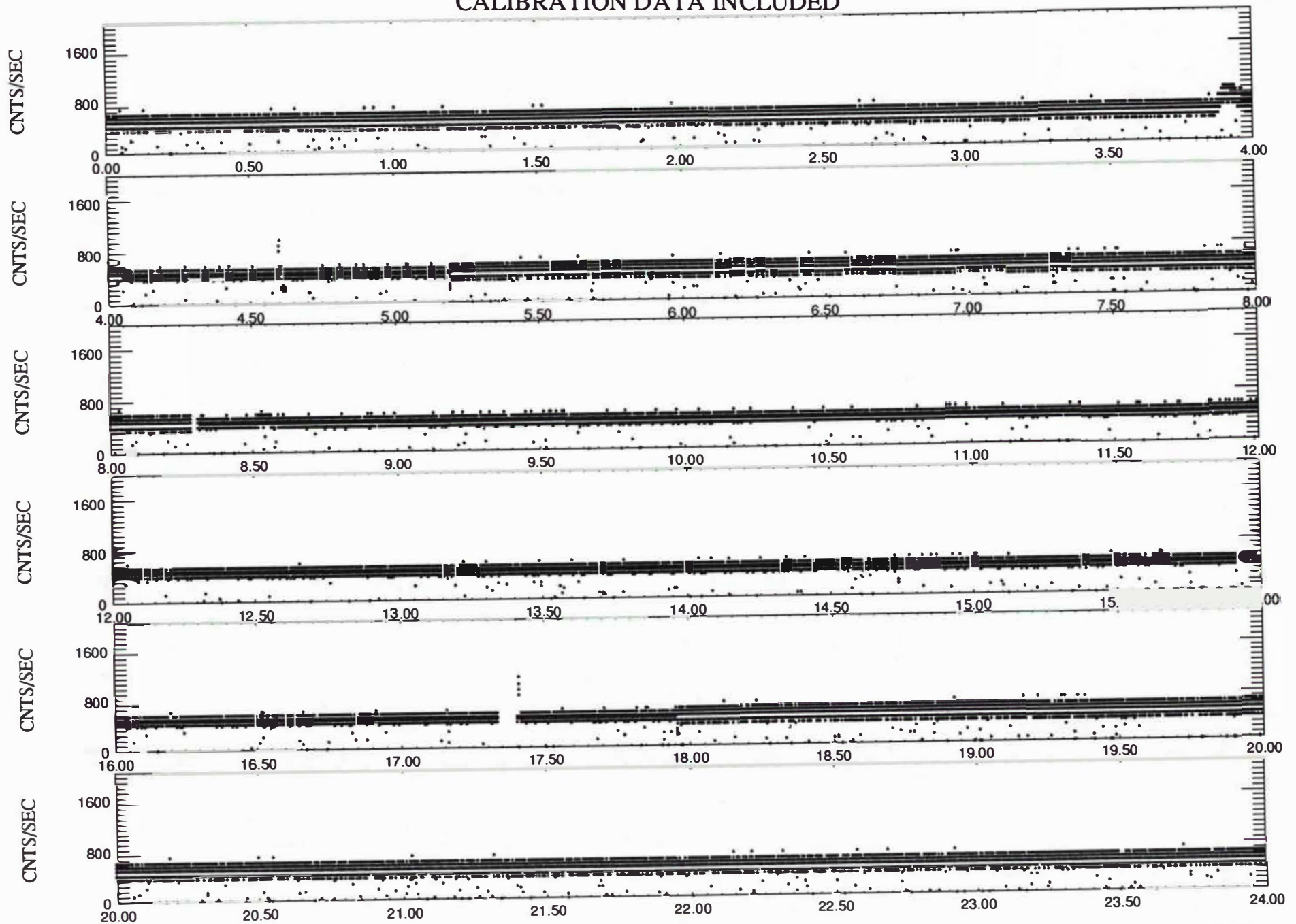
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/28



BURST NUMBER 10

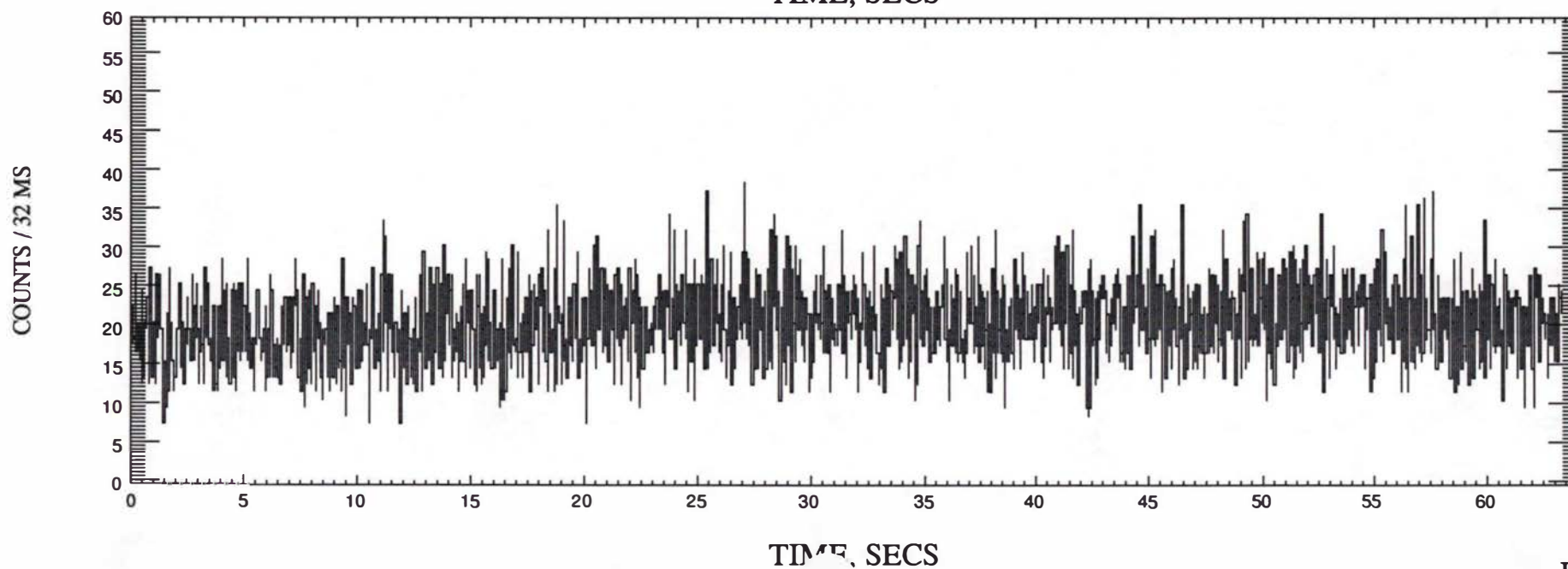
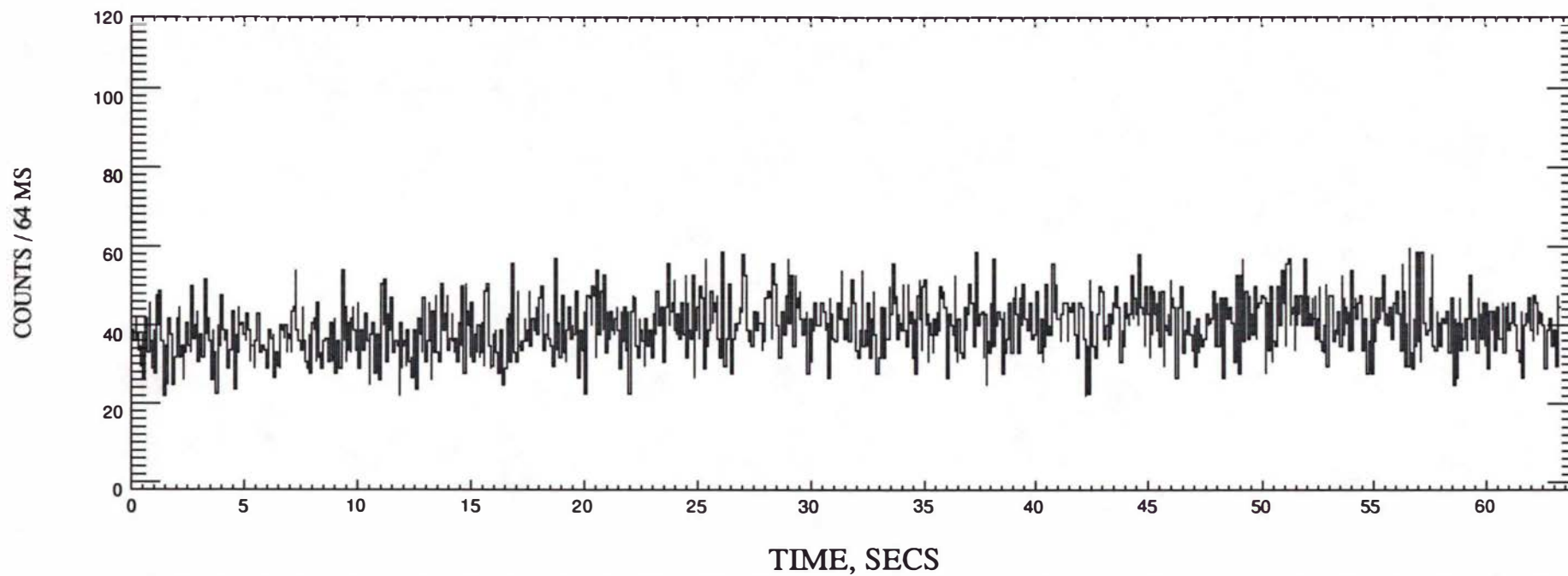


CALIBRATION DATA INCLUDED

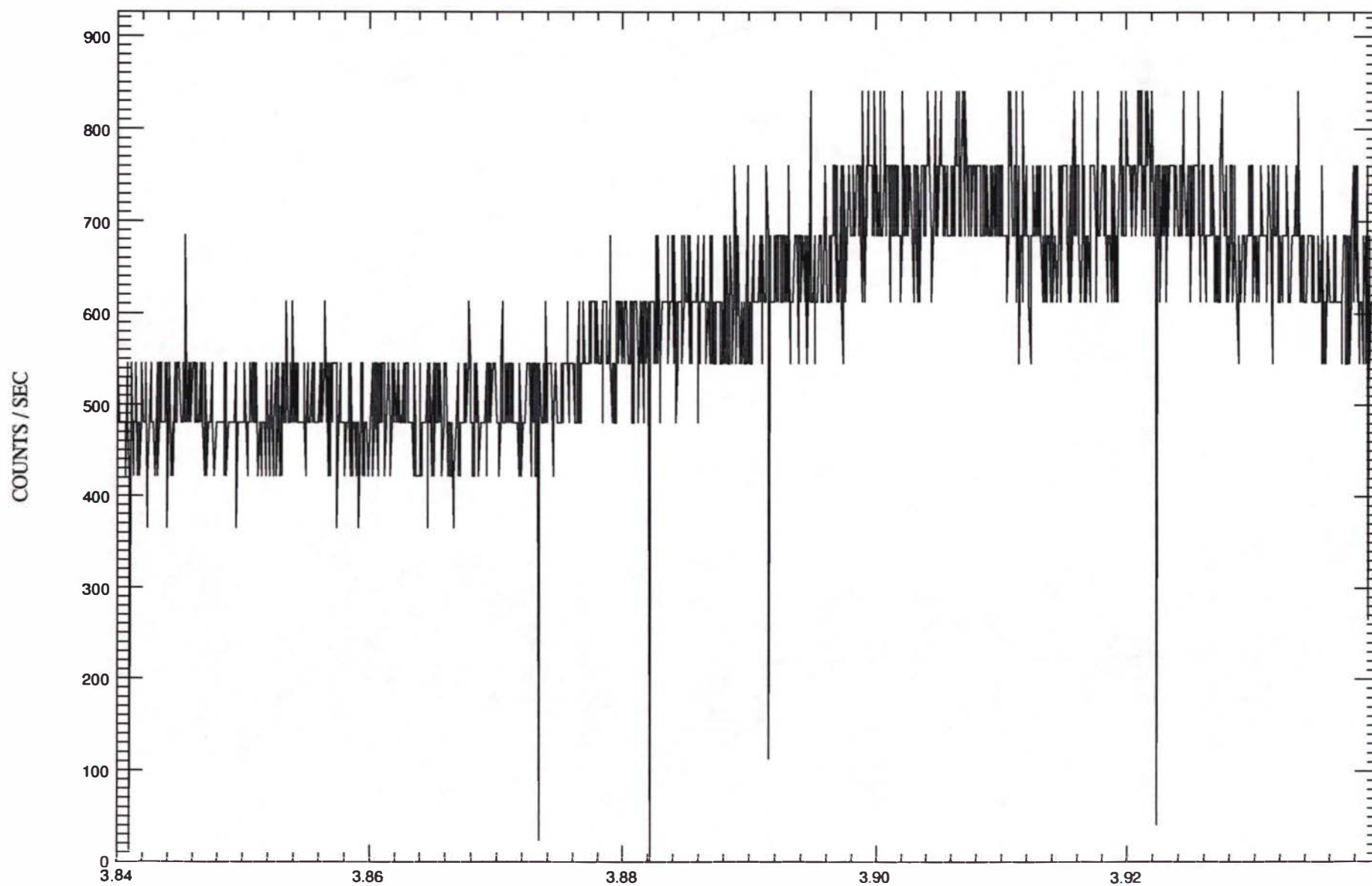


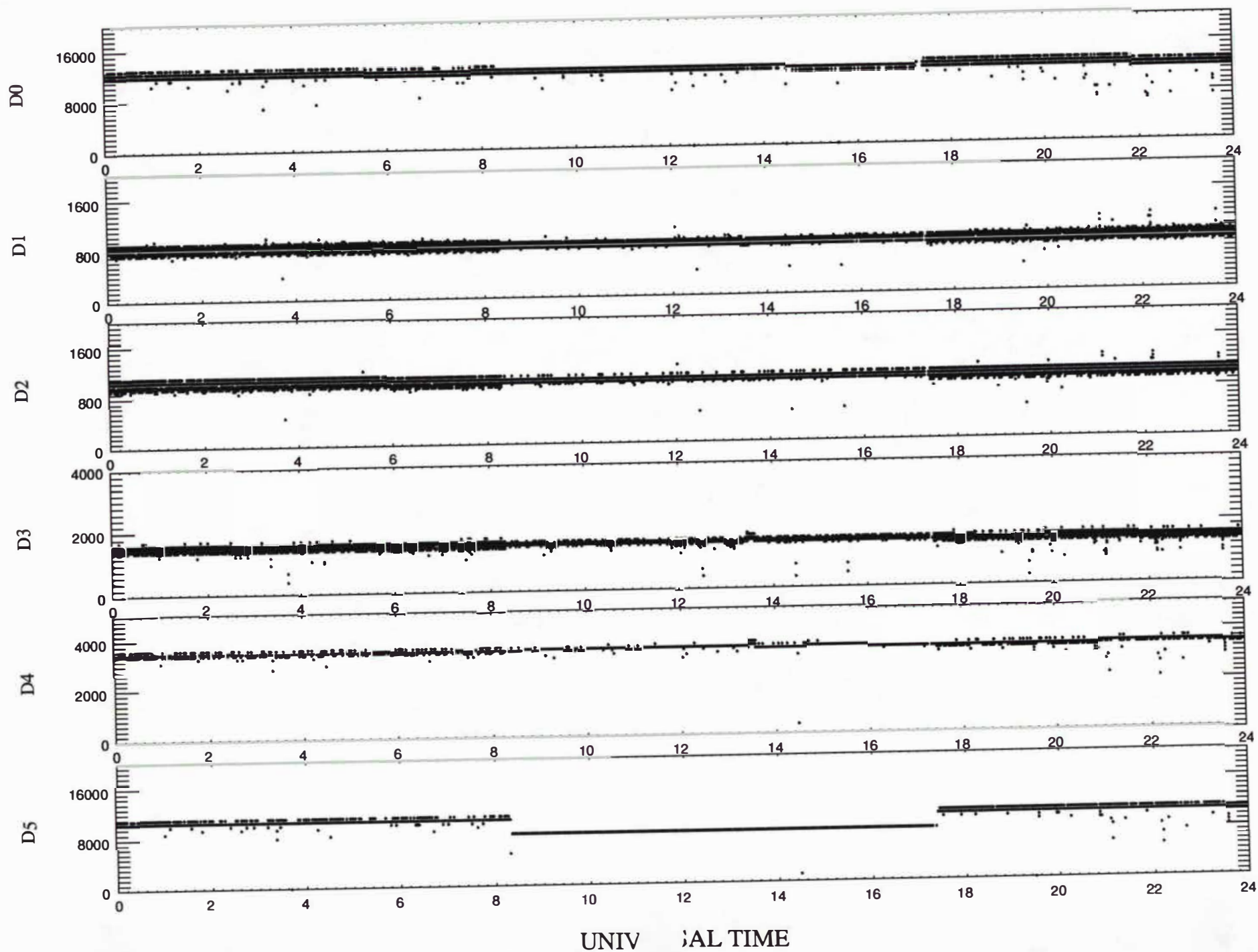
UNIV. CAL TIME

Burst Counter 10 at UT= 3.894929224650 h=14021.745 s 03:53:41.745



CALIBRATION DATA INCLUDED





From DEAL@fender.msfc.nasa.gov Wed Aug 31 09:23 PDT 1994
Date: Wed, 31 Aug 1994 11:23:52 -0500 (CDT)
From: DEAL@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3142

BATSEARCH PROGRAM

BATSE BURST # 3142
EVENT OF 1994 AUG 29 DAY OF YEAR=241
EVENT CROSSING TIME AT BATSE : 34037. S. OR 09:27:17.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 129.000 -16.000
BATSE PEAK COUNTING RATE: 5800 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 29/ 8/ 94 IS:
RA= 144.147 DEC= -47.553 DIST= 2.770 AU
BATSE-ULYSSES DISTANCE = 414361145. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=146.06 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1146.67 SECS.
CROSSING TIME AT ULYSSES IS 32890. S. OR 09:08:10 +/- 166.57 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 29/ 8/ 94 IS:
RA= 98.596 DEC= 23.579 DIST= 1.781 AU
MARS-BATSE DISTANCE = 266409072. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=130.51 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -577.26 SECS.
CROSSING TIME AT MARS IS 33460. S. OR 09:17:39 +/- 108.53 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3142	940829	9593	34037	5800	129	-16

BATSE BURST TRIGGER

NO.: 03142

TIME: TJD=9593 SECONDS=34037

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=044.8 AZIMUTH=295.7 ERROR= DEGREES

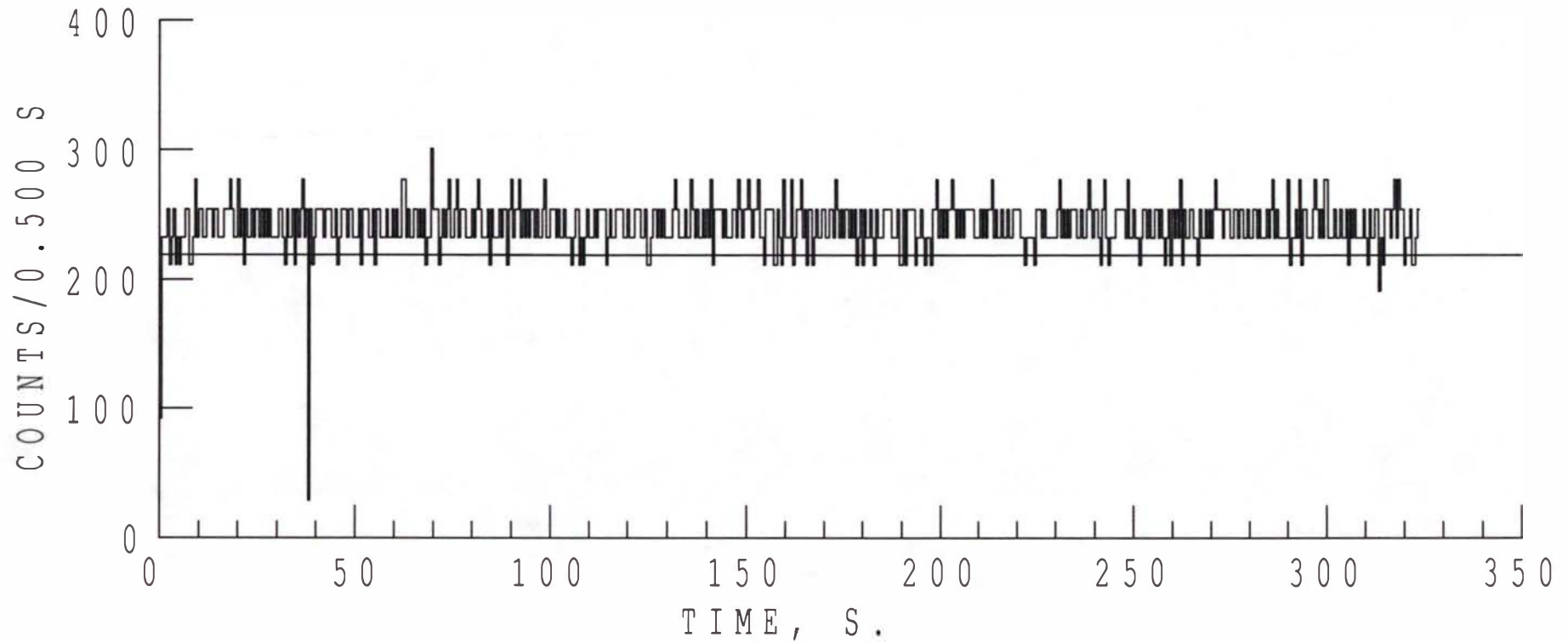
COMMENTS:

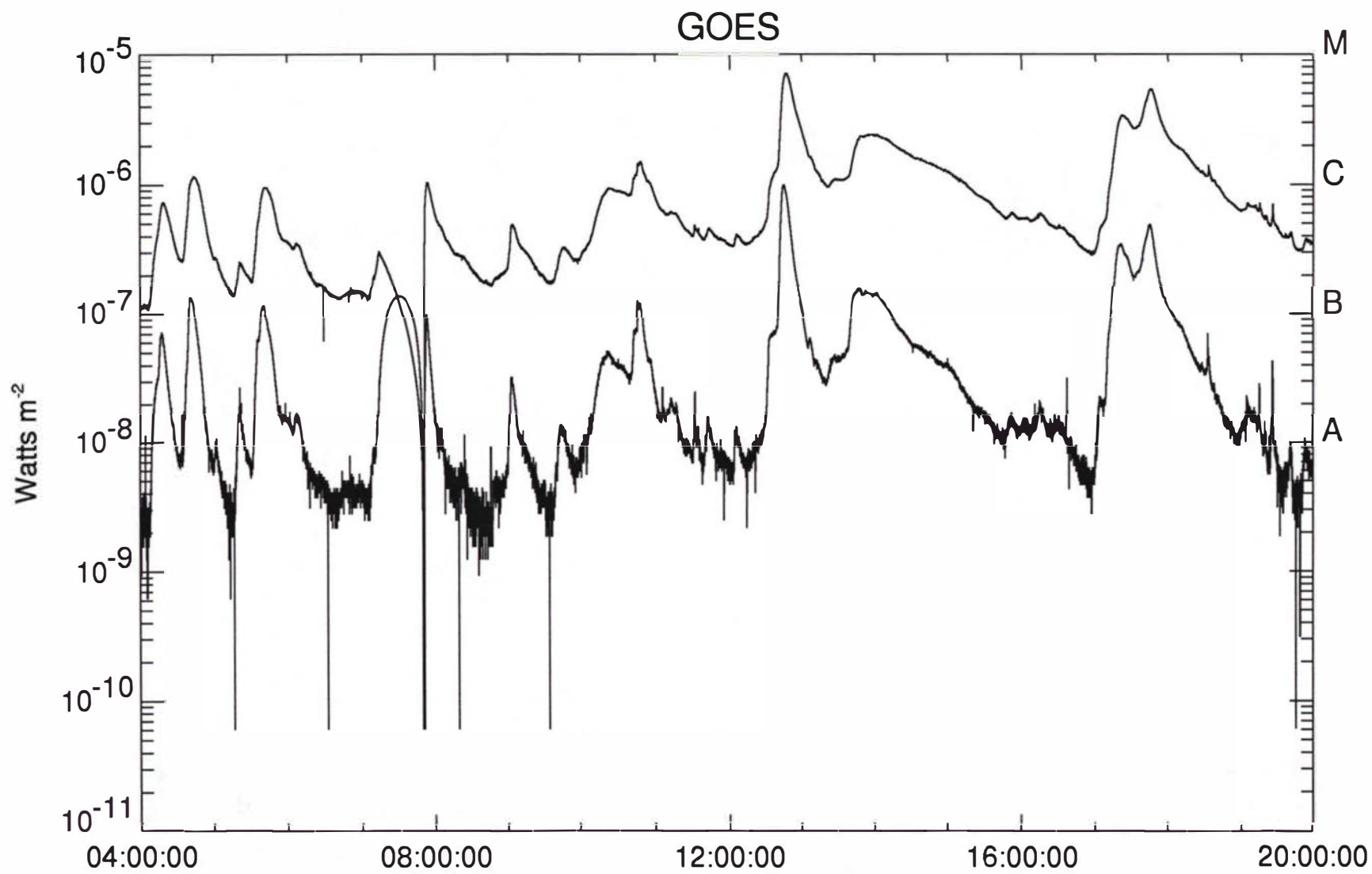
DOUBLE PEAK BURST LASTING APPROX. 14S. VISIBLE ABOVE 300 KEV.

31 / 8 / 94

ULYSSES RT
29 / 8 / 94 32724.246 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



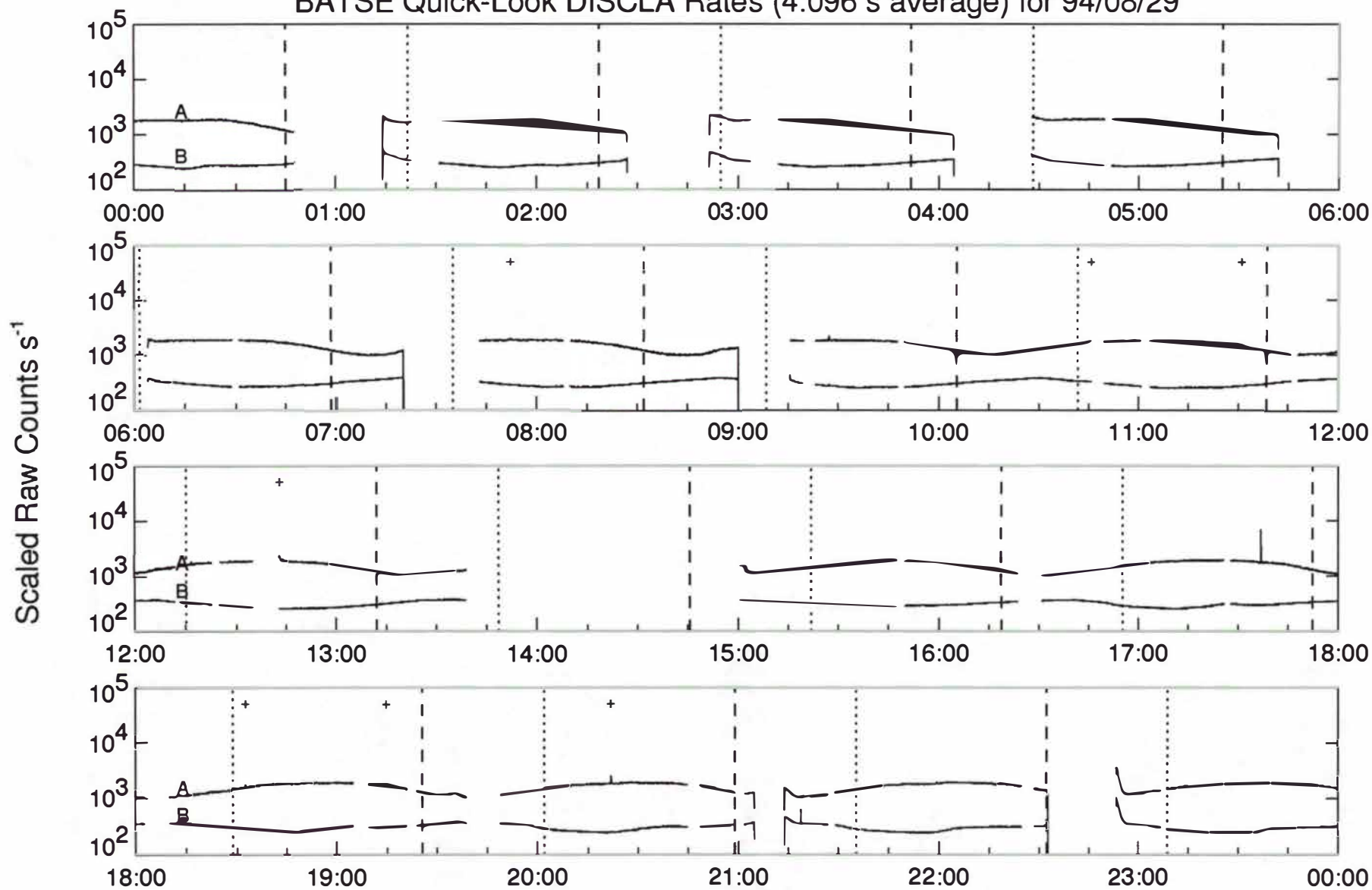


Data Start: 94/08/29, 0000:01

Plot created: 94/09/02, 1912

Channel	1 (1.0 - 8.0 Angstroms)	Background not subtracted
	2 (0.5 - 4.0 Angstroms)	Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/29

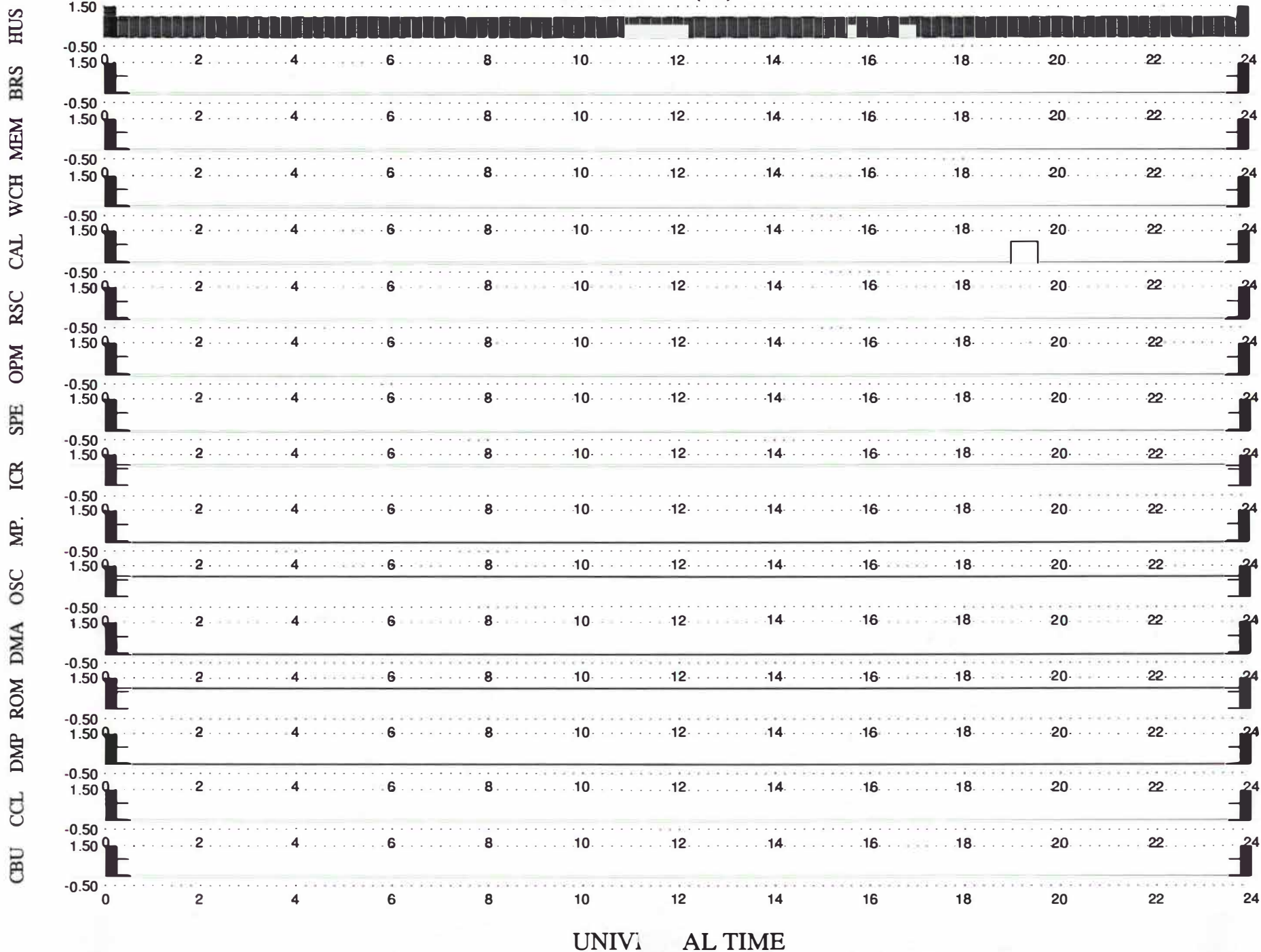


Current Time: 94/08/31, 1331 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

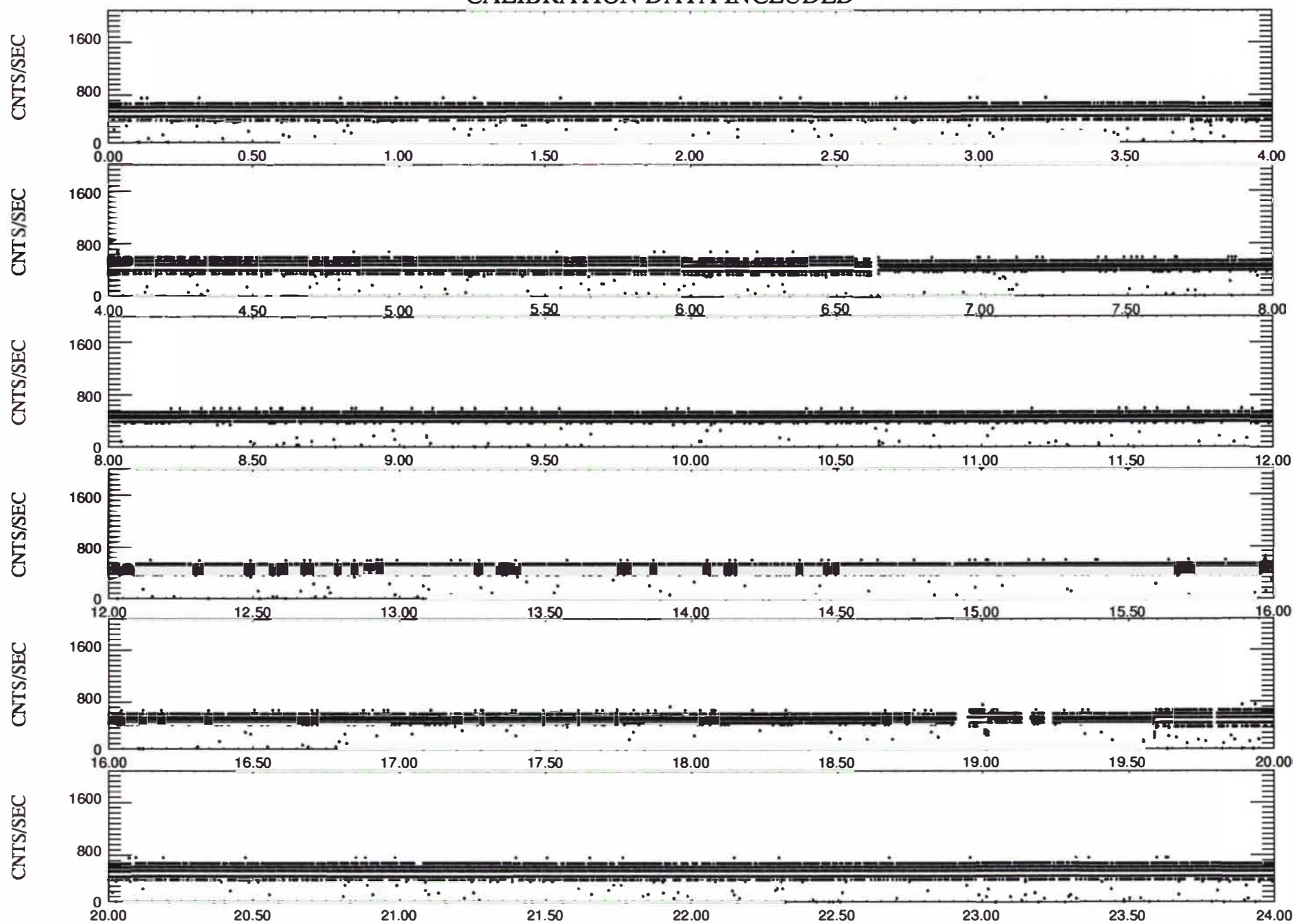
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

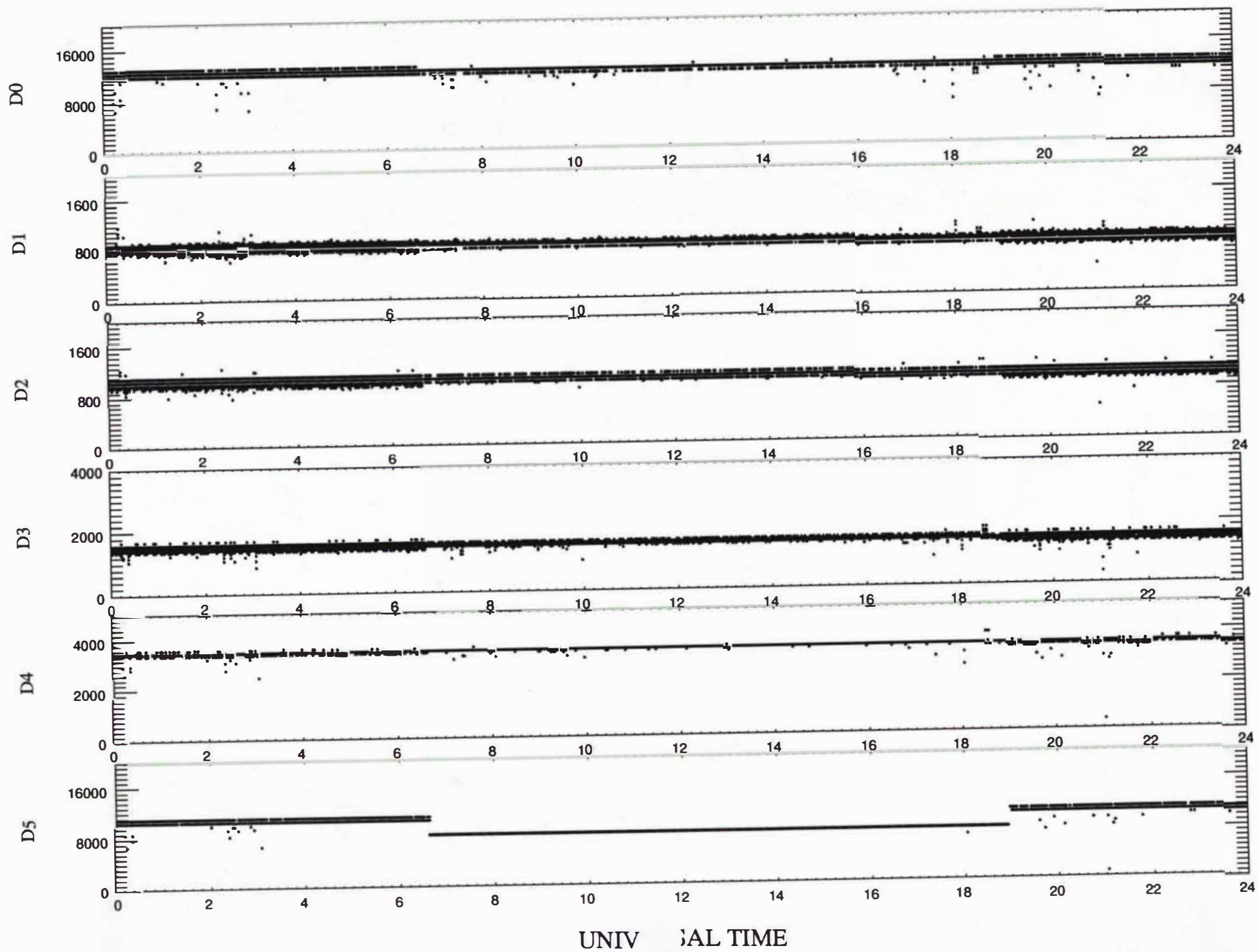
NO BURST (10)



CALIBRATION DATA INCLUDED



UNIV AL TIME



From KOSHUT@ssl.msfc.nasa.gov Wed Aug 31 11:10 PDT 1994
Date: Wed, 31 Aug 1994 13:10:35 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3143

BATSEARCH PROGRAM

BATSE BURST # 3143
EVENT OF 1994 AUG 30 DAY OF YEAR=242
EVENT CROSSING TIME AT BATSE : 32396. S. OR 08:59:56.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 191.000 27.000
BATSE PEAK COUNTING RATE: 9000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 30/ 8/ 94 IS:
RA= 144.550 DEC= -47.821 DIST= 2.762 AU
BATSE-ULYSSES DISTANCE = 413246360. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 94.35 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -104.44 SECS.
CROSSING TIME AT ULYSSES IS 32292. S. OR 08:58:11 +/- 287.05 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 30/ 8/ 94 IS:
RA= 99.290 DEC= 23.555 DIST= 1.775 AU
MARS-BATSE DISTANCE = 265590224. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 99.04 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -139.14 SECS.
CROSSING TIME AT MARS IS 32257. S. OR 08:57:36 +/- 149.79 SECONDS

RI

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3143	940830	9594	32396	9000	191	+27

BATSE BURST TRIGGER

NO.: 3143

TIME: TJD=9594 SECONDS=32396

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=88. AZIMUTH=300. ERROR= DEGREES

COMMENTS:

BURST OF ~ 8 SECONDS DURATION, WITH EMISSION OBSERVED ABOVE 300 KEV.
TIME HISTORY CONSISTS OF SINGLE PULSE, WITH NO SIGNIFICANT SUBSTRUCTURE.

Helio corr removed

Date: Nov 5 '97

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution? *No - bad stats*

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for T_0 ?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

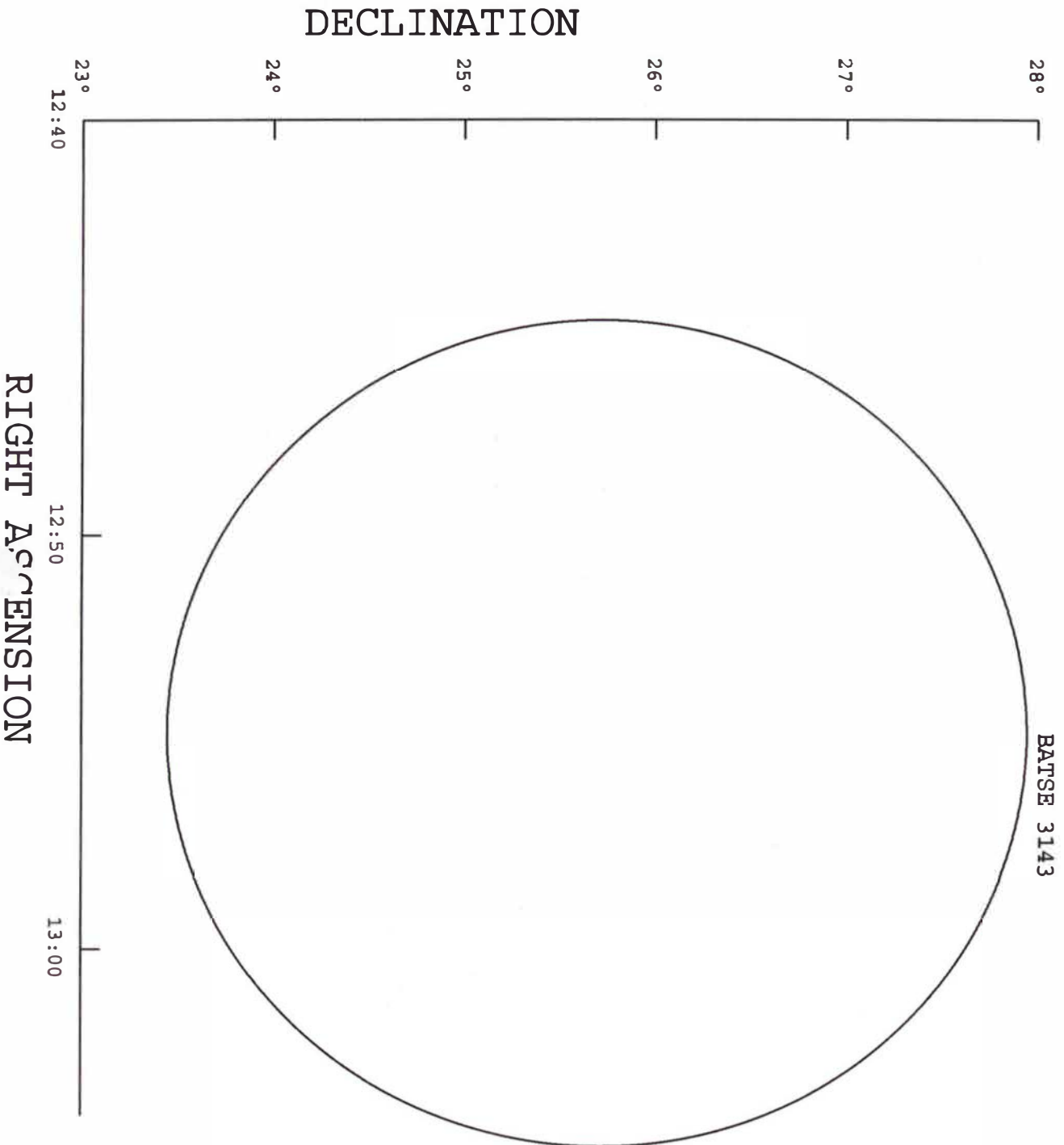
3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
1 ULYSSES 2 BATSE

EVENT OF AUG 30, 1994 8:58

5/11/97



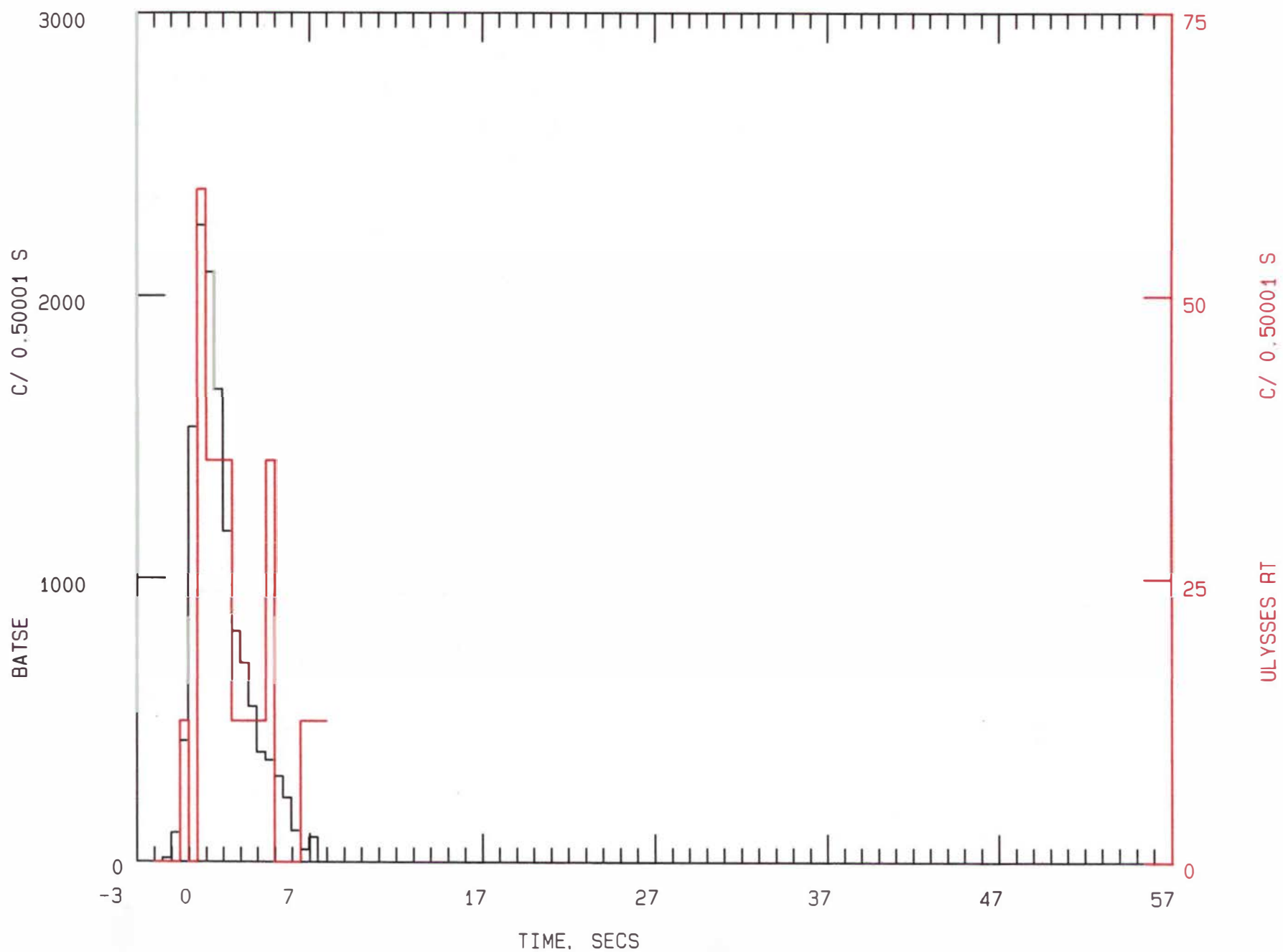
BATSE

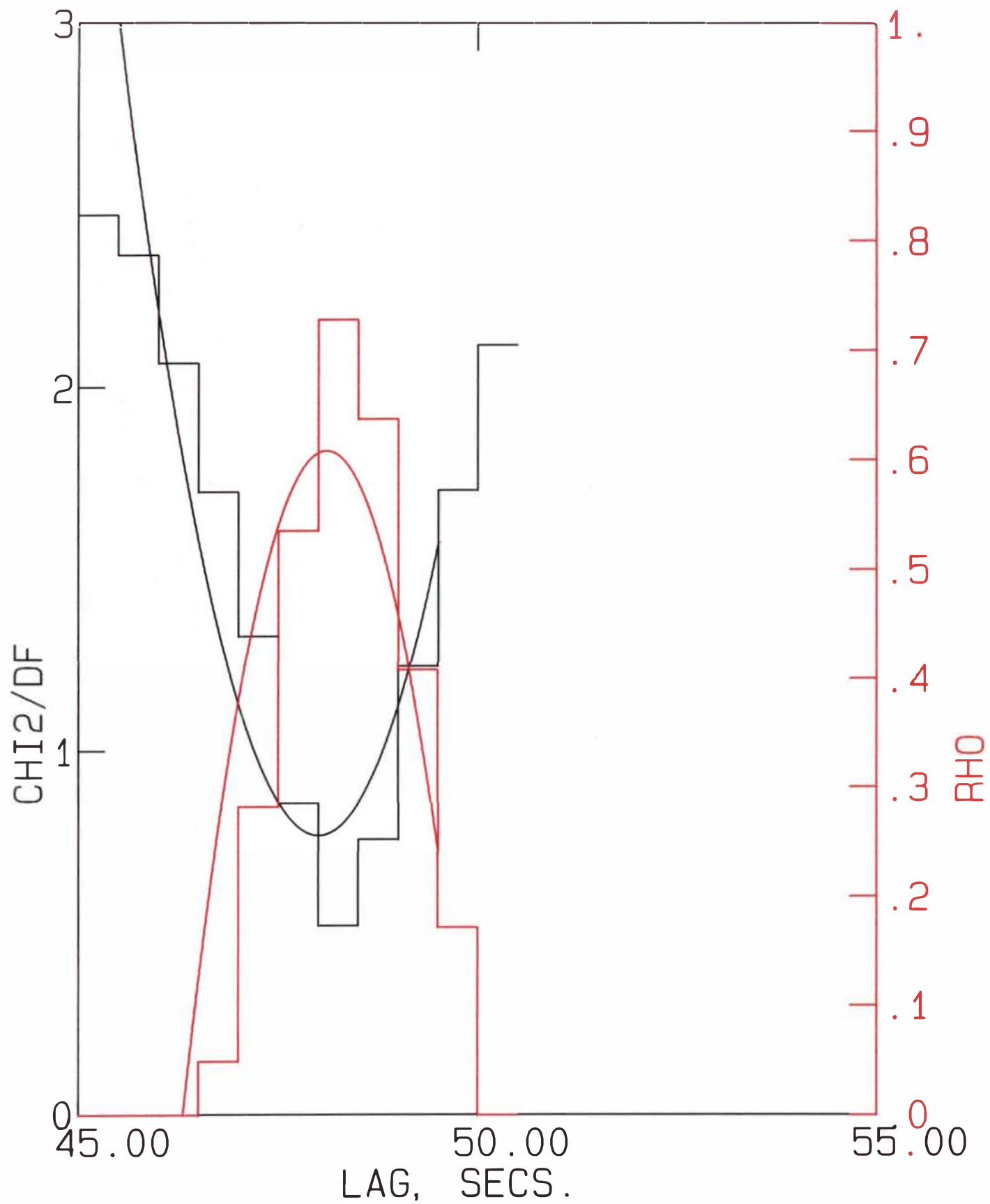
-ULYSSES RT CORRELATION

30/ 8/94

32396.722

5/11/97





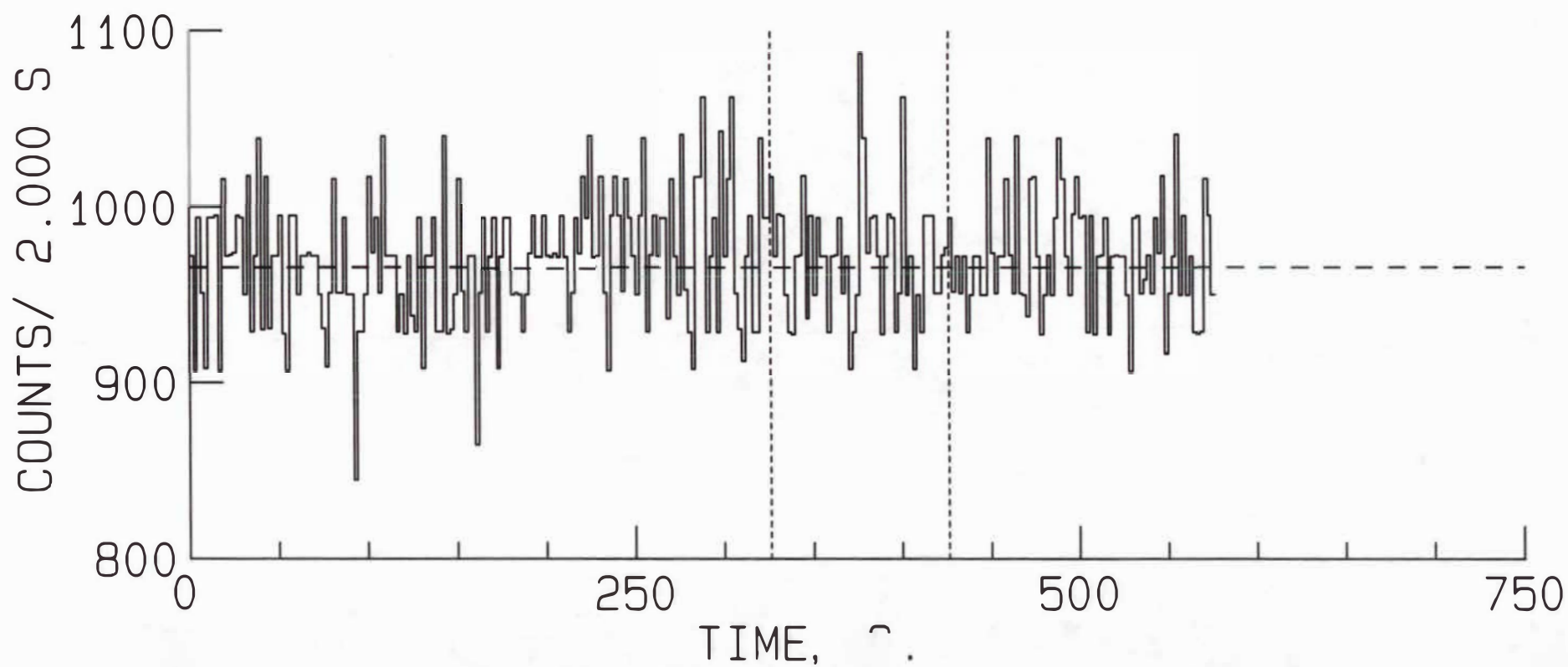
ULYSSES RT

5 / 11 / 97

30 / 8 / 94 32004.151 s

0.500 S INTERVALS REGROUPED BY 4

22- 147 keV



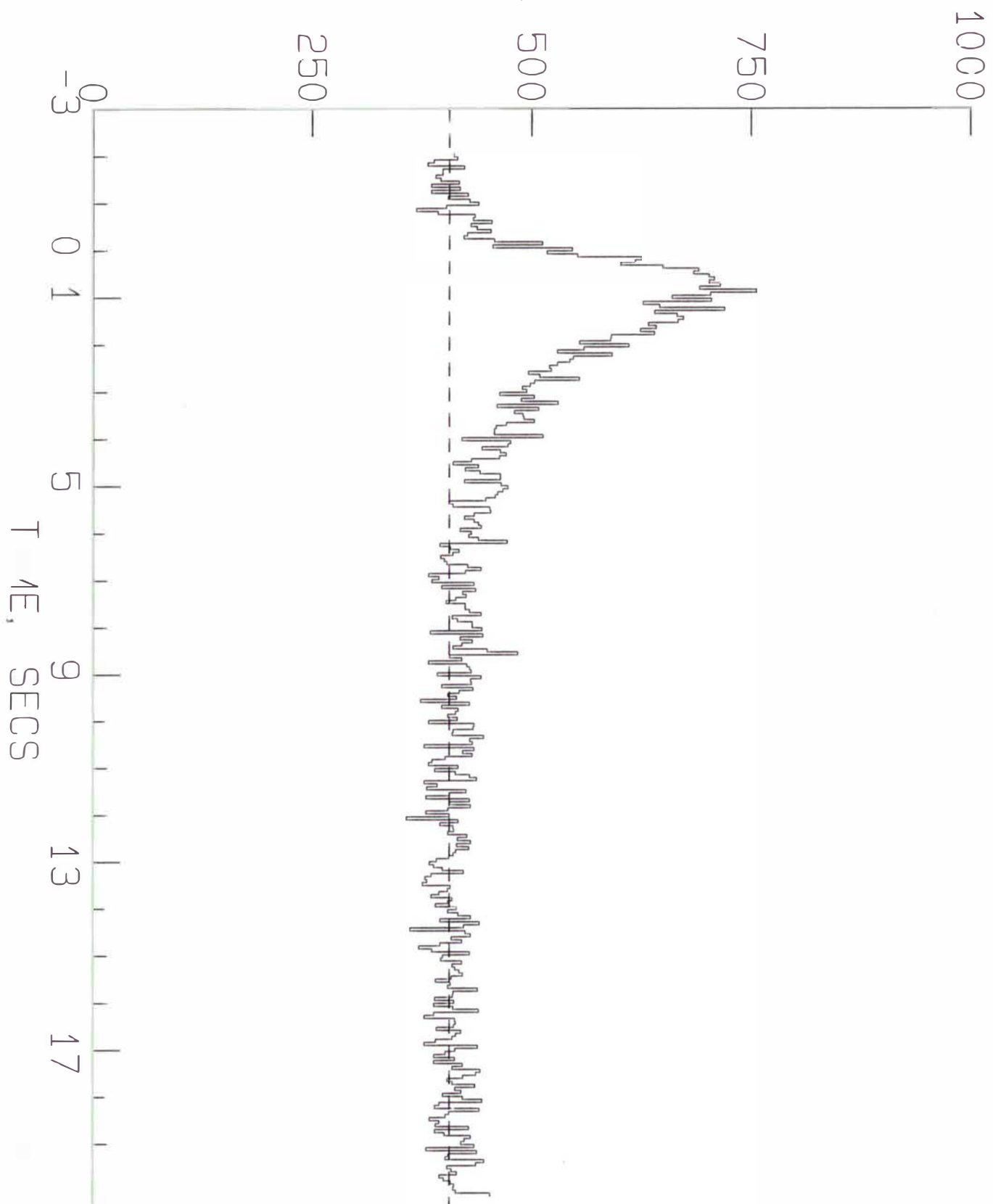
BATSE

30/08/94

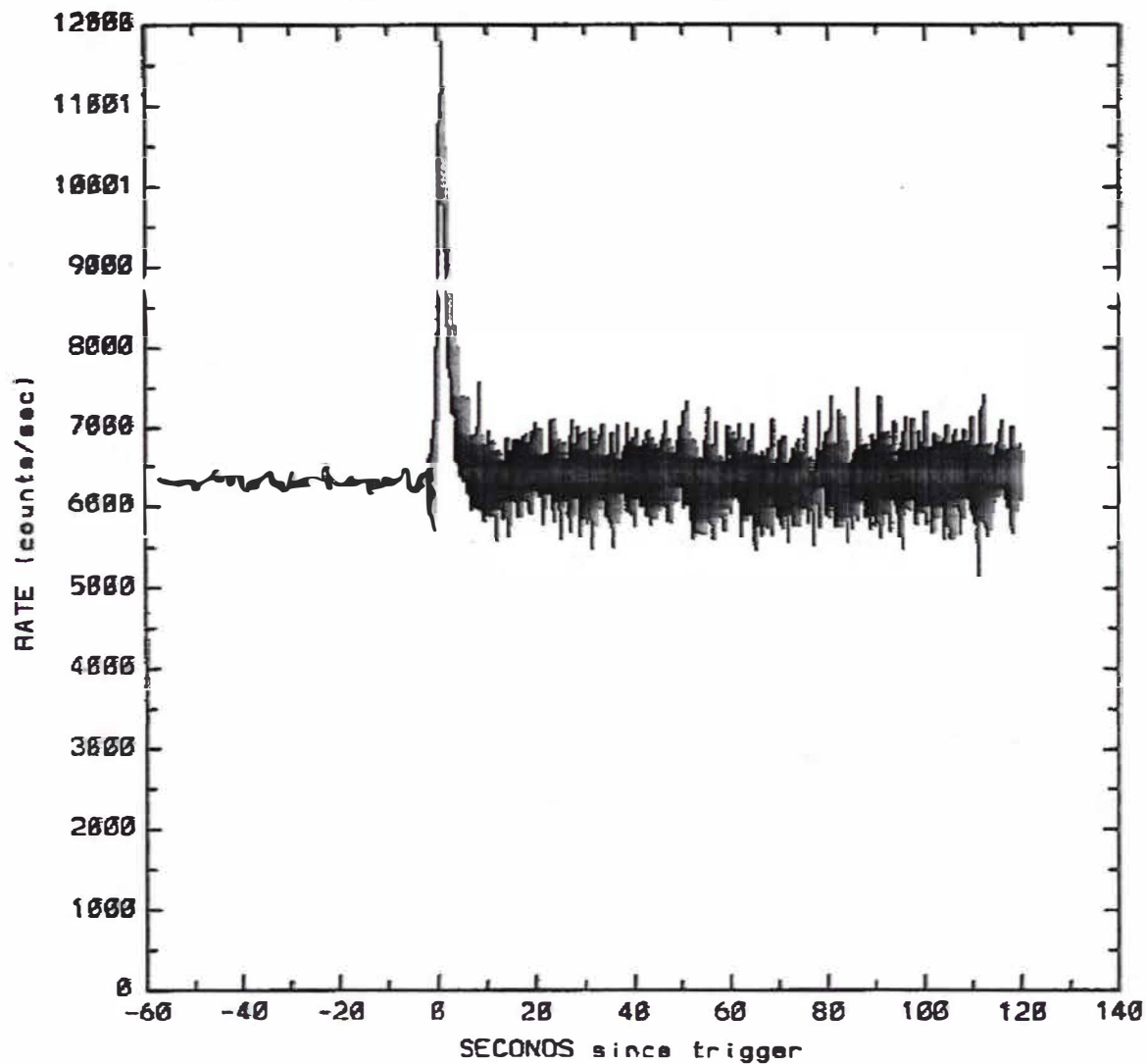
32396.722

25- 100 keV

COUNTS/ .064 S



DISCSC Data for K. Hurley. No. 3143



28-SEP-1994 11:53:59

Created by MOPS 80
(Burst Display)
Version t2.22

Trigger = , 3143

Trigger Time:
9594 / 32396.722Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 second(s)Detectors [7..8]:
----32--Discriminators:
(1, 2)Quality Mask:
BDISP1

From KOSHUT@ssl.msfc.nasa.gov Wed Aug 31 12:26 PDT 1994
Date: Wed, 31 Aug 1994 14:26:49 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 2144

BATSEARCH PROGRAM

BATSE BURST # ³2144
EVENT OF 1994 AUG 30 DAY OF YEAR=242
EVENT CROSSING TIME AT BATSE : 41839. S. OR 11:37:19.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 2.000 -8.000
BATSE PEAK COUNTING RATE: 2300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 30/ 8/ 94 IS:
RA= 144.595 DEC= -47.851 DIST= 2.762 AU
BATSE-ULYSSES DISTANCE = 413122843. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 64.87 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 585.24 SECS.
CROSSING TIME AT ULYSSES IS 42424. S. OR 11:47:04 +/- 275.49 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 30/ 8/ 94 IS:
RA= 99.290 DEC= 23.555 DIST= 1.775 AU
MARS-BATSE DISTANCE = 265590224. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 151.32 SECS.
CROSSING TIME AT MARS IS 41990. S. OR 11:39:50 +/- 153.85 SECONDS

110

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
³ 2144	940830	9594	41839	2300	002	-08

BATSE BURST TRIGGER

NO.: 03144

TIME: TJD=9594 SECONDS=41839

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=99. AZIMUTH=140. ERROR= DEGREES

COMMENTS:

WEAK BURST OF ~ 7 SECONDS DURATION, NOT OBSERVED ABOVE 300 KEV. TIME HISTORY
CONSISTS OF A SINGLE PULSE, WITH NO SIGNIFICANT SUBSTRUCTURE.

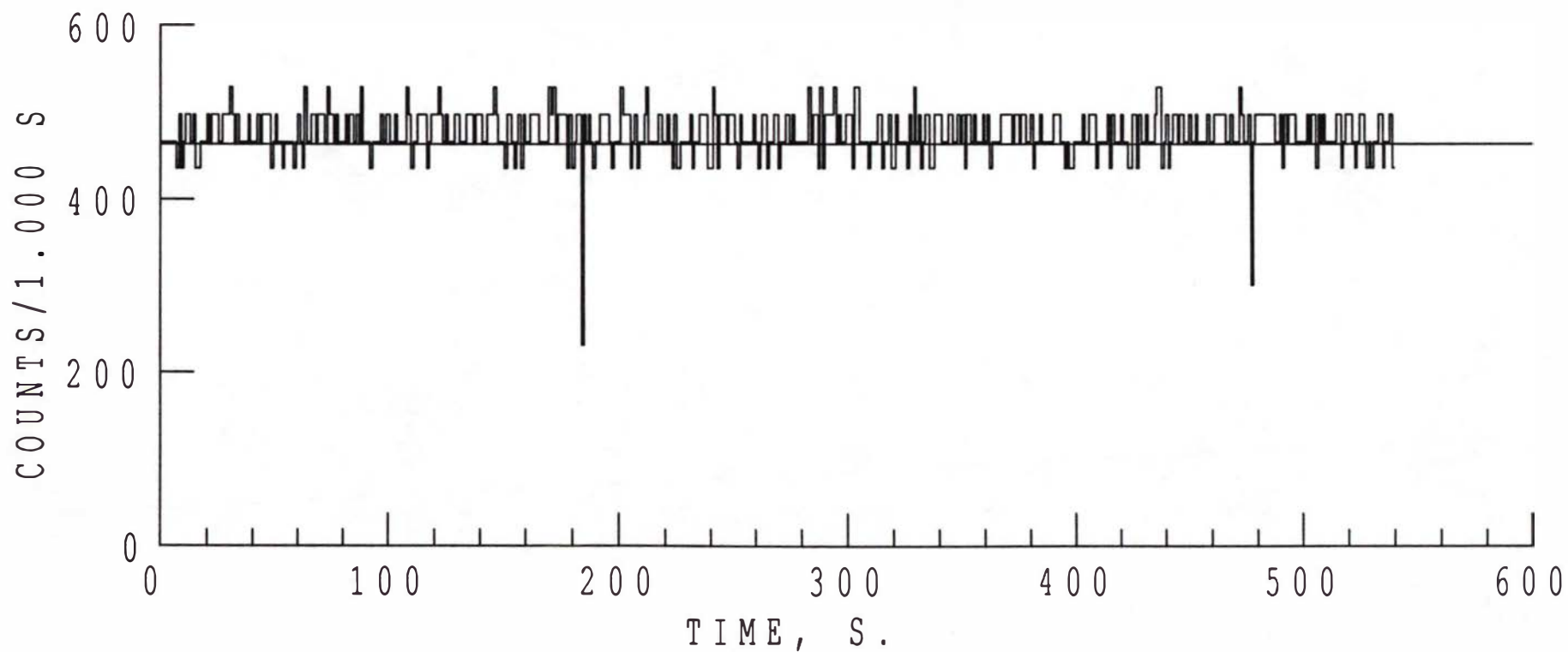
6 / 9 / 94

ULYSSES RT

30 / 8 / 94 42156.820 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From KOSHUT@ssl.msfc.nasa.gov Thu Sep 1 09:33 PDT 1994
Date: Thu, 1 Sep 1994 11:33:47 -0500 (CDT)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3145

BATSEARCH PROGRAM

BATSE BURST # 3145
EVENT OF 1994 AUG 30 DAY OF YEAR=242
EVENT CROSSING TIME AT BATSE : 47034. S. OR 13:03:54.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 9.000 14.000
BATSE PEAK COUNTING RATE: 2500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 30/ 8/ 94 IS:
RA= 144.621 DEC= -47.868 DIST= 2.761 AU
BATSE-ULYSSES DISTANCE = 413053185. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 49.86 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 888.17 SECS.
CROSSING TIME AT ULYSSES IS 47922. S. OR 13:18:42 +/- 246.36 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 30/ 8/ 94 IS:
RA= 99.290 DEC= 23.555 DIST= 1.775 AU
MARS-BATSE DISTANCE = 265590224. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 95.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -81.66 SECS.
CROSSING TIME AT MARS IS 46952. S. OR 13:02:32 +/- 151.91 SECONDS

NO

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3145	940830	9594	47034	2500	009	+14

BATSE BURST TRIGGER

NO.: 3145

TIME: TJD=9594 SECONDS=47034

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=118. AZIMUTH=153. ERROR= DEGREES

COMMENTS:

LIMITED DATA AVAILABLE FOR THIS BURST. DURATION IS ~ 190 SECONDS.
TIME HISTORY CONSISTS OF A SLOW RISE BEGINNING AT TRIGGER - 10
SECONDS, AND CONTINUING UNTIL THE PEAK (~2500 C/S) AT TRIGGER + 5
SECONDS. THIS IS FOLLOWED BY A SMOOTH, RELATIVELY LINEAR, DECAY TO
BACKGROUND. EMISSION ABOVE 300 KEV IS MARGINAL.

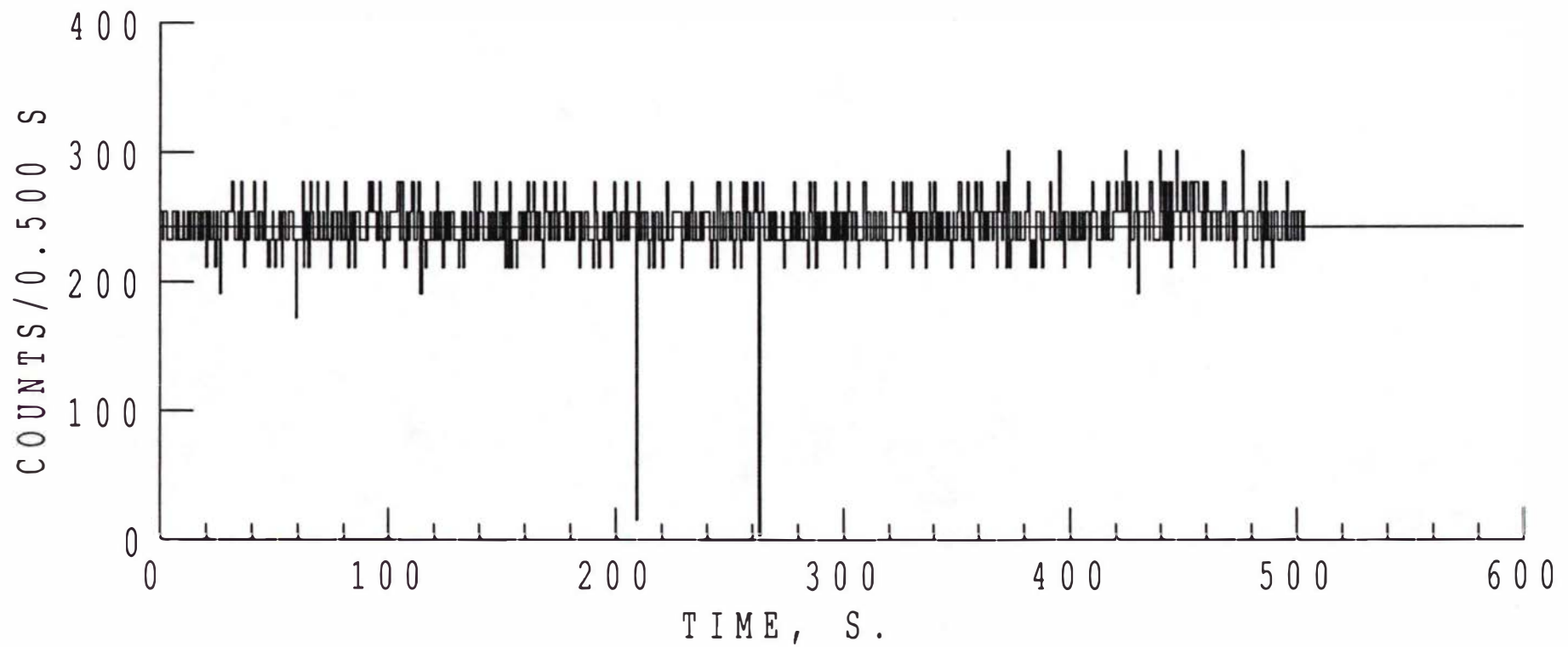
6 / 9 / 94

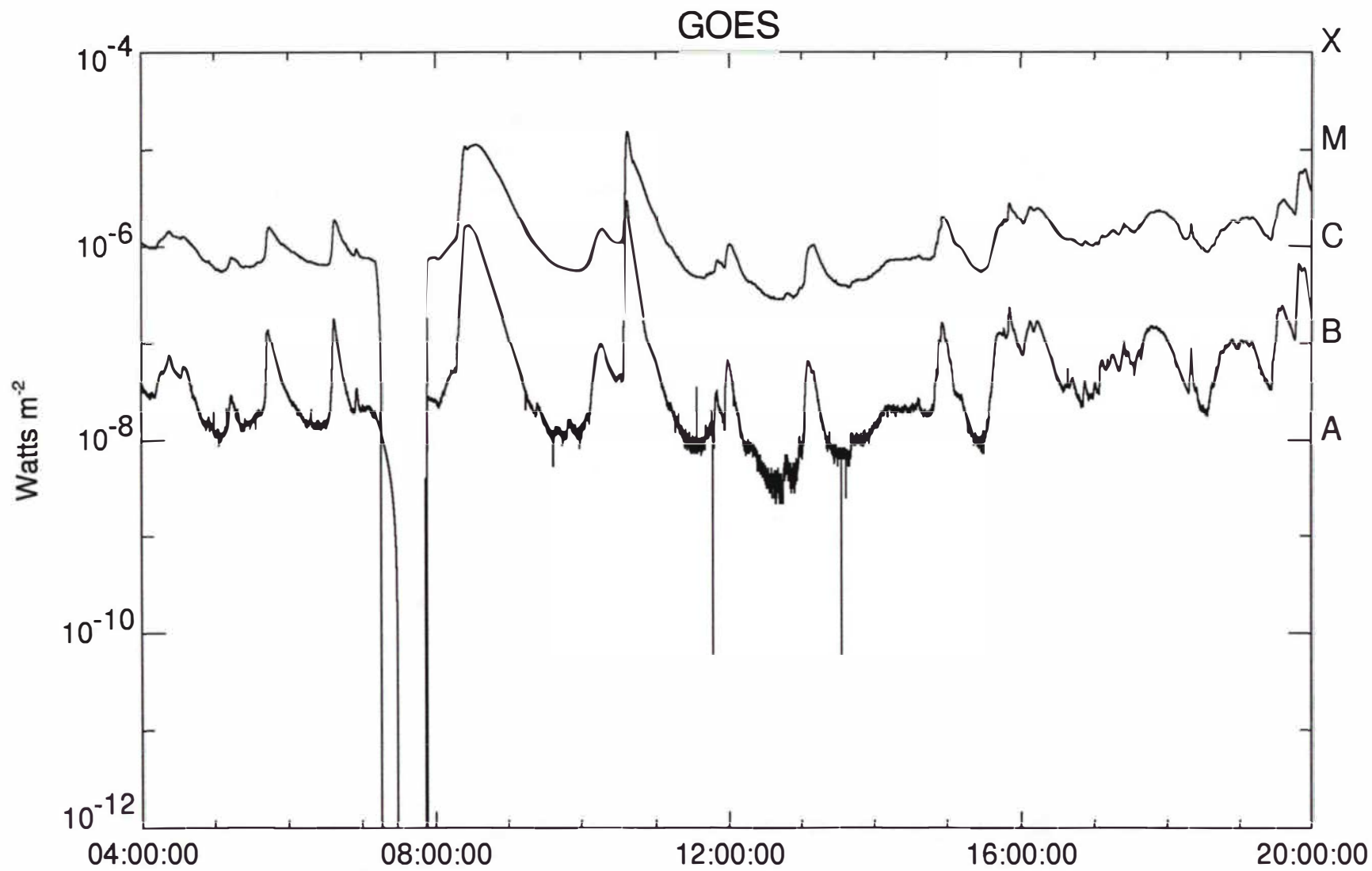
ULYSSES RT

30 / 8 / 94 47664.414 s

0 - 0 keV

M= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





Data Start: 94/08/30, 0000:01

Plot created: 94/09/02, 1912

Channel

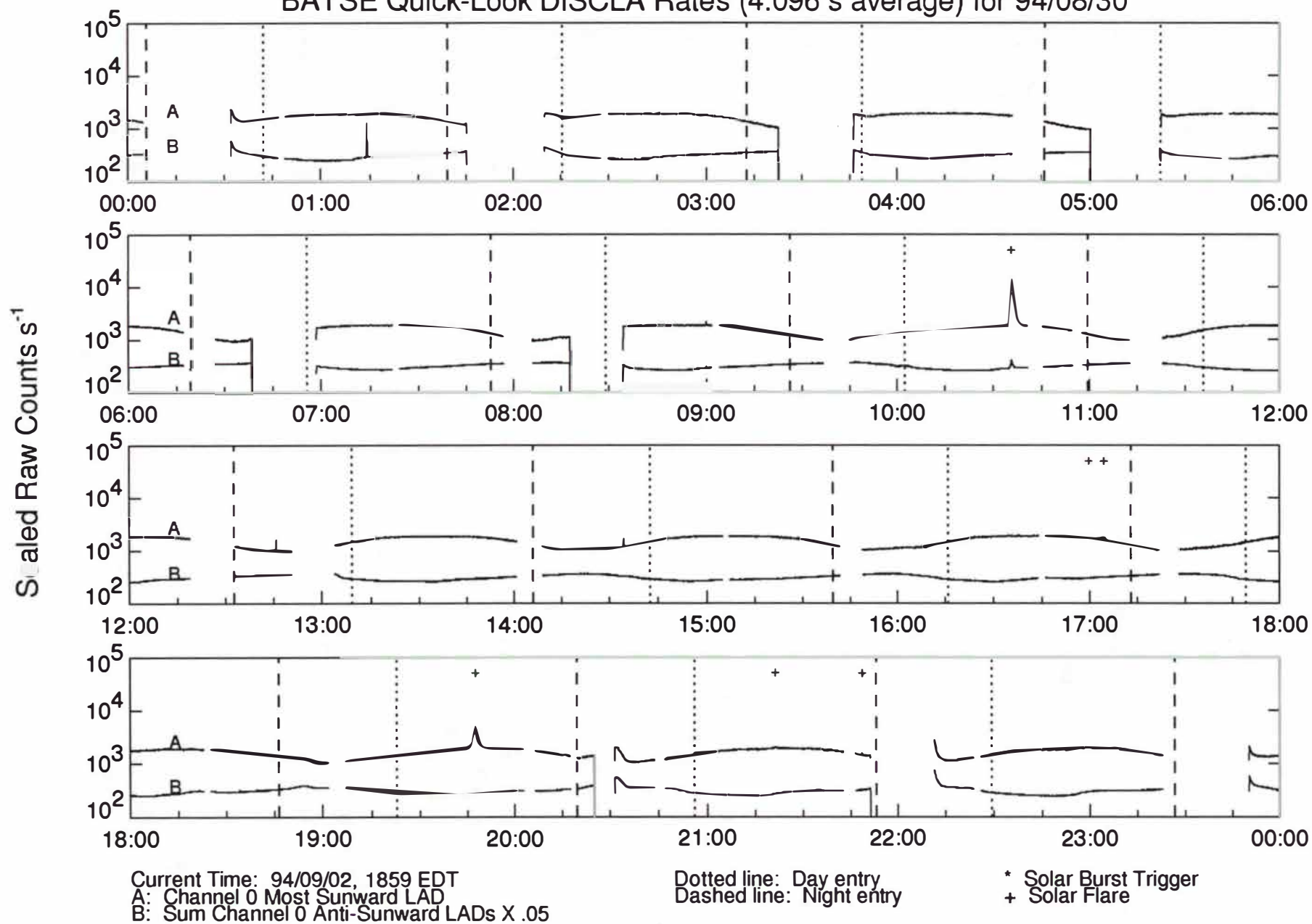
1 (1.0 - 8.0 Angstroms)

Background not subtracted

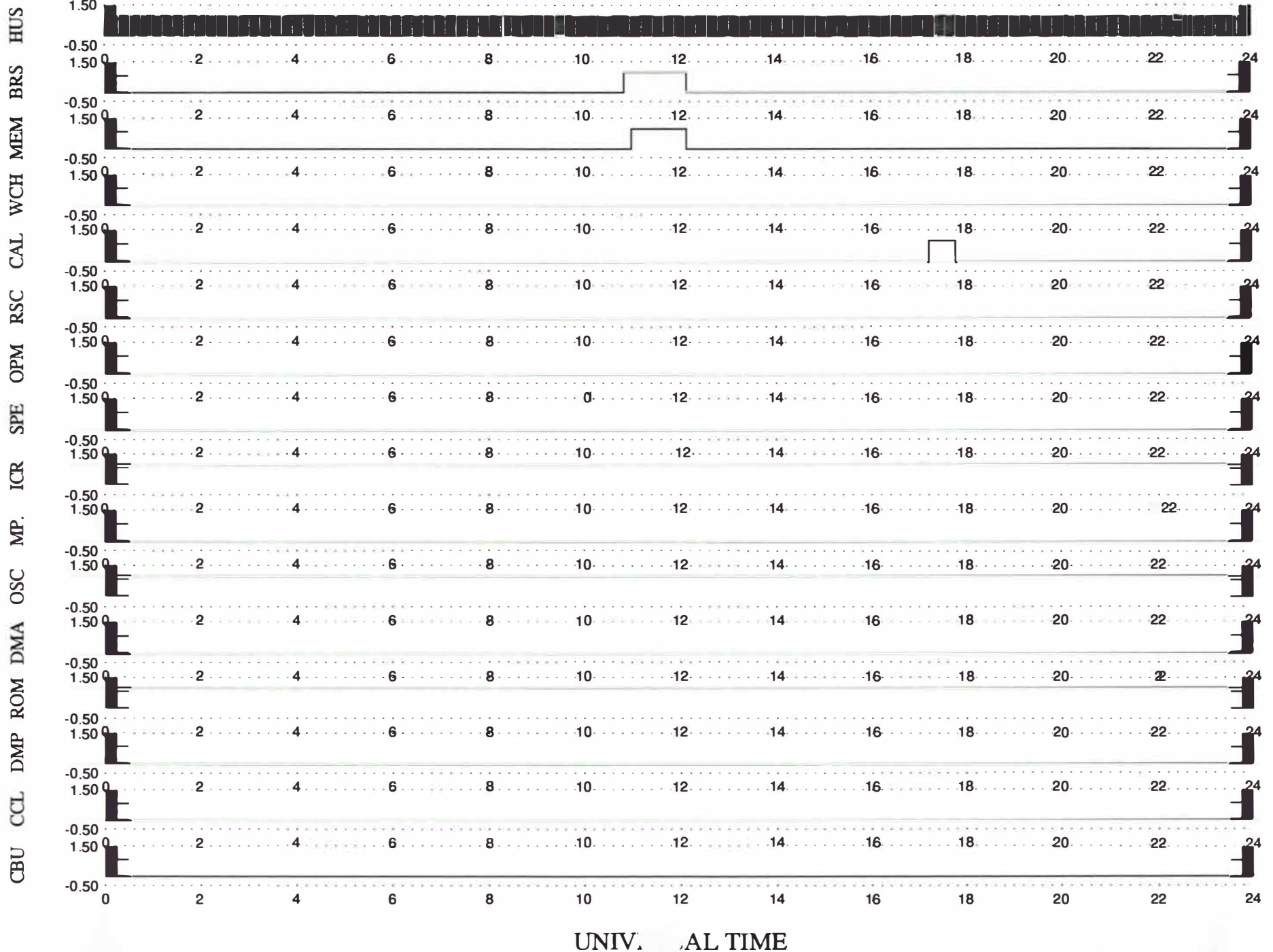
2 (0.5 - 4.0 Angstroms)

Background not subtracted

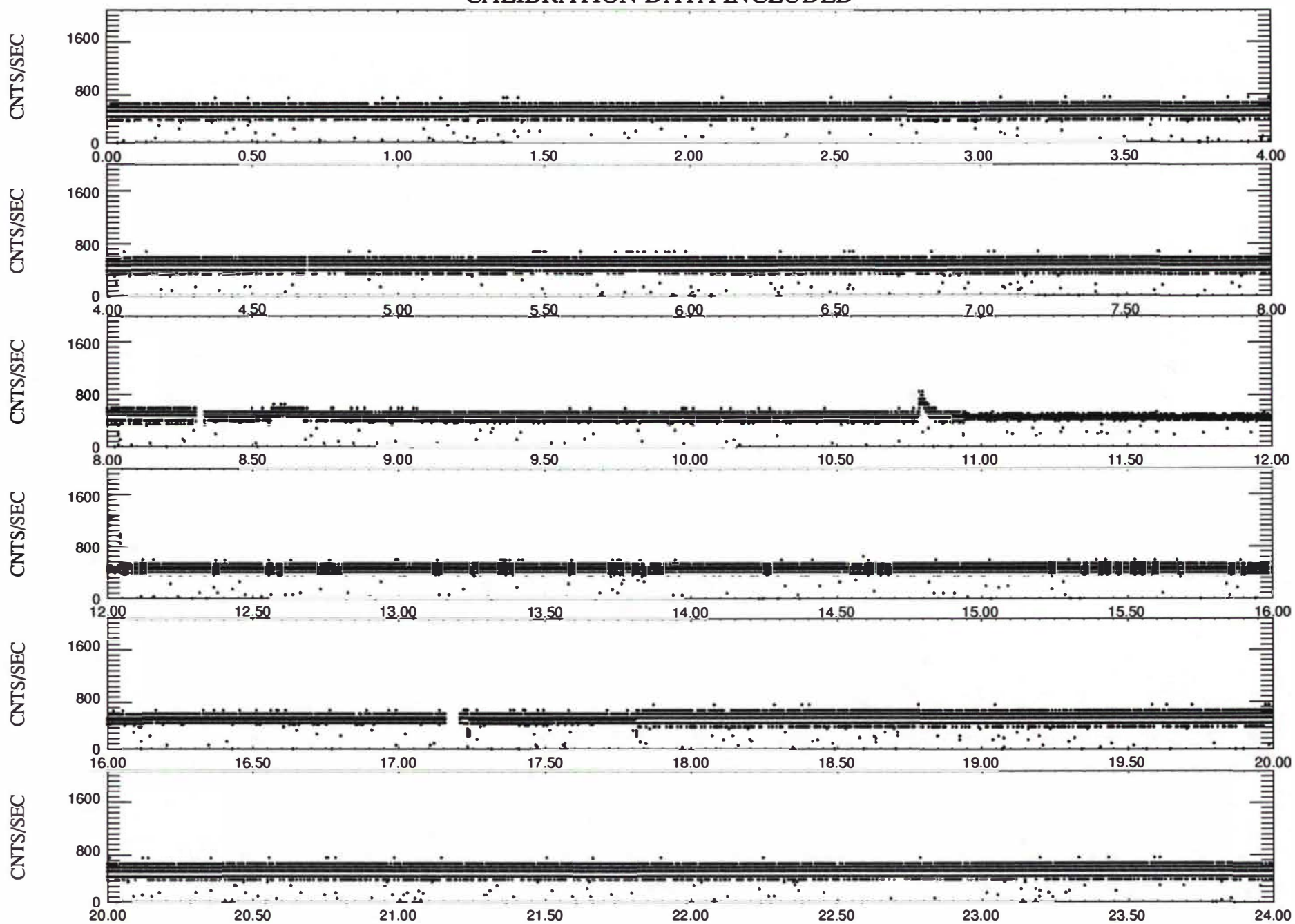
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/30



BURST NUMBER 11

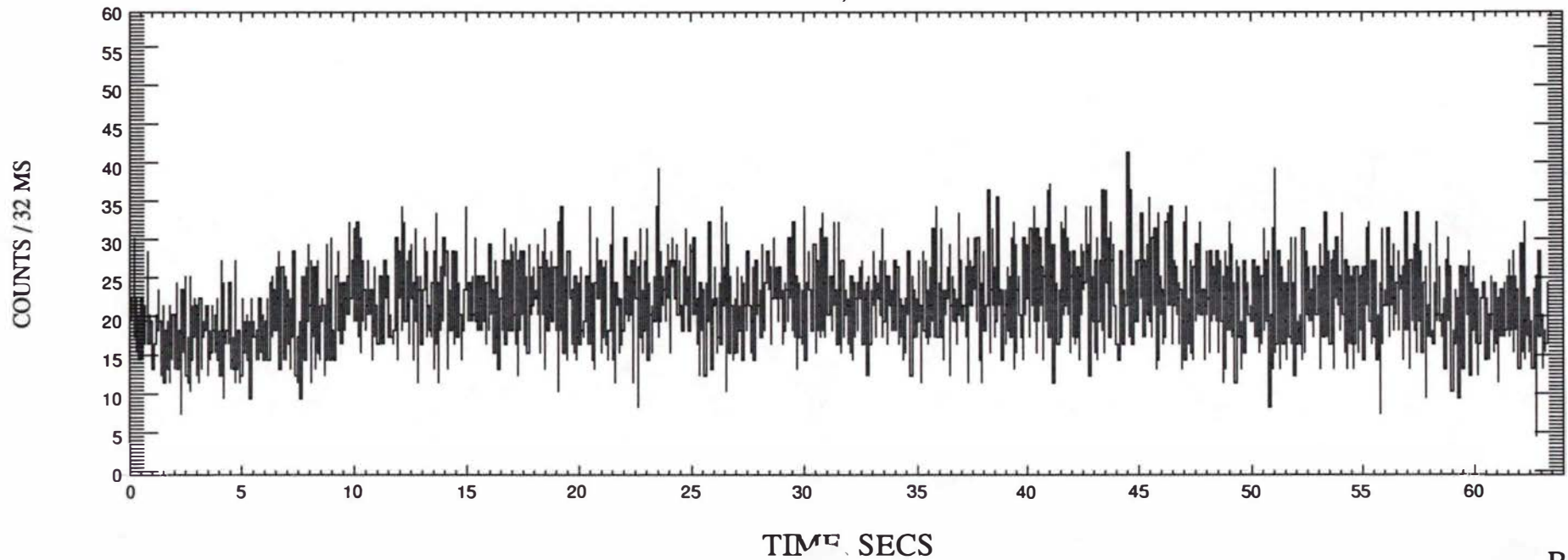
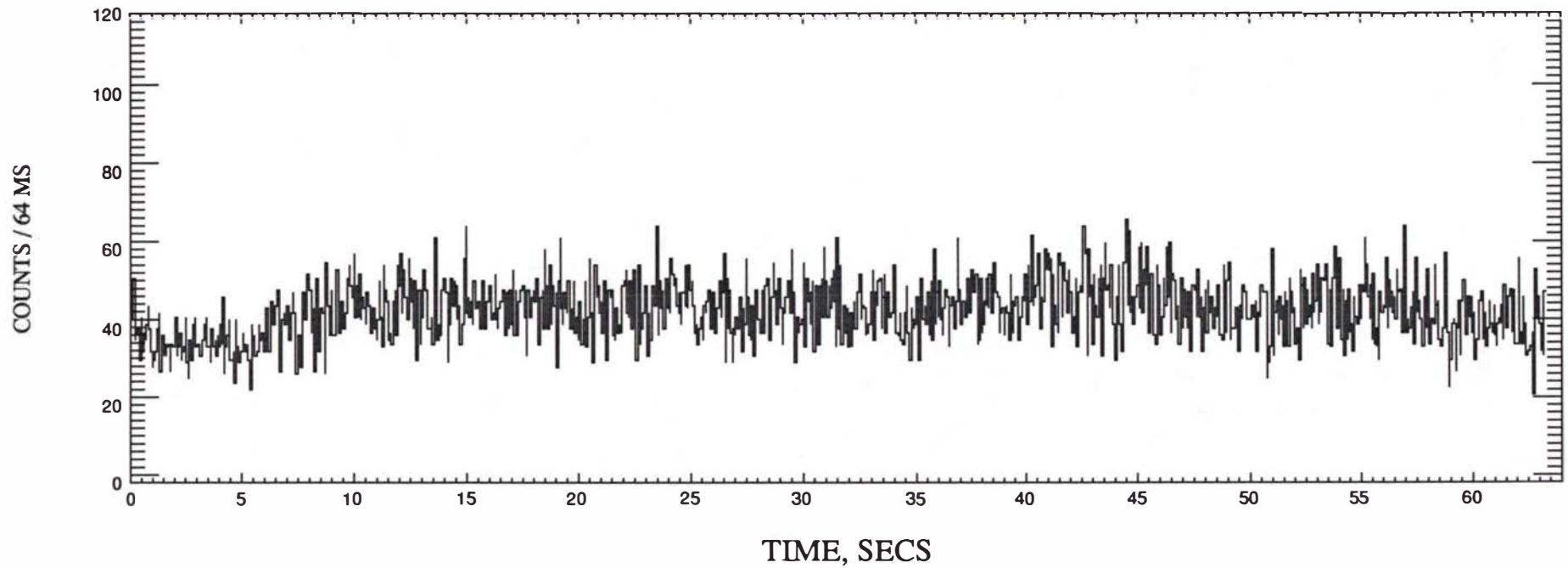


CALIBRATION DATA INCLUDED

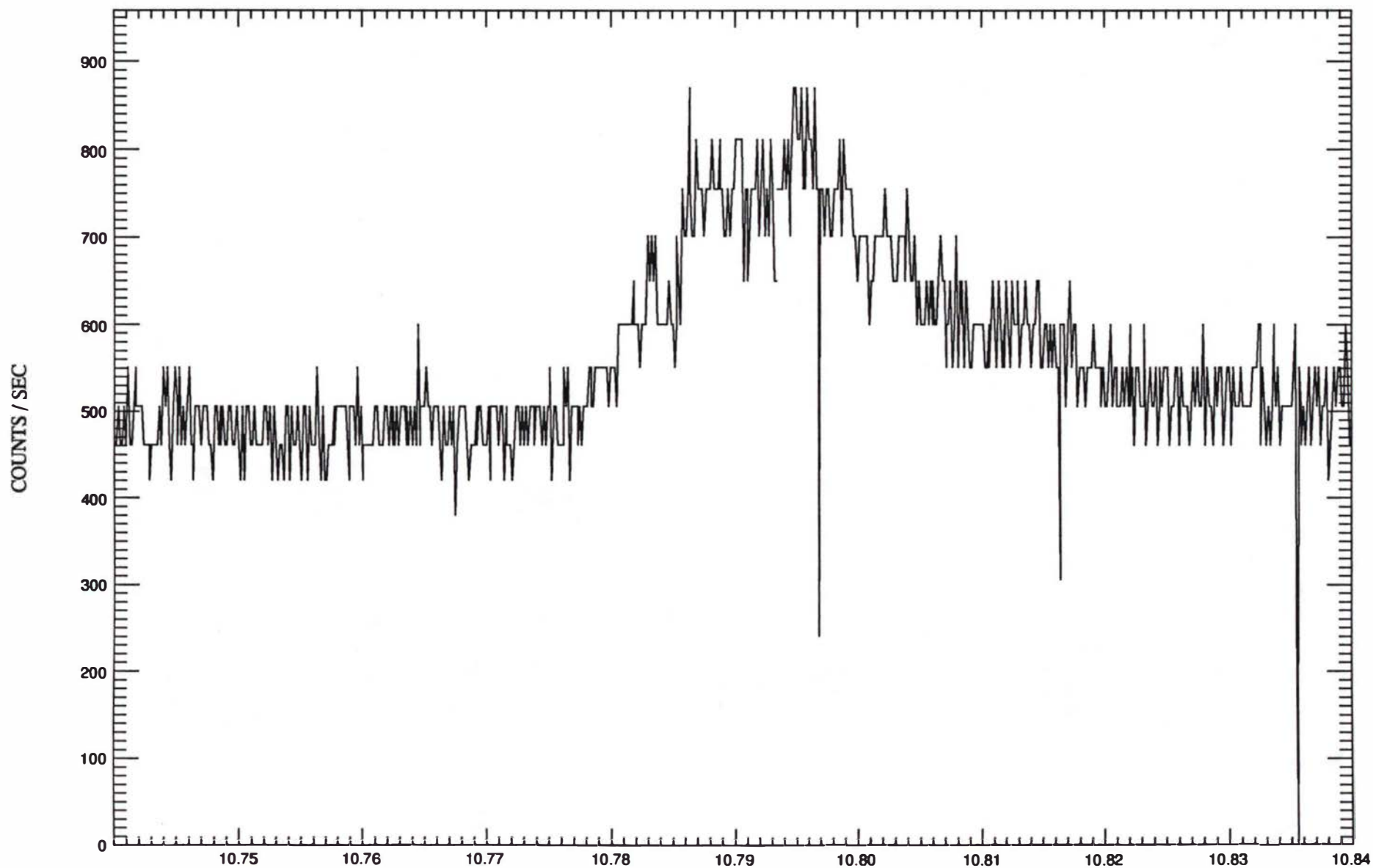


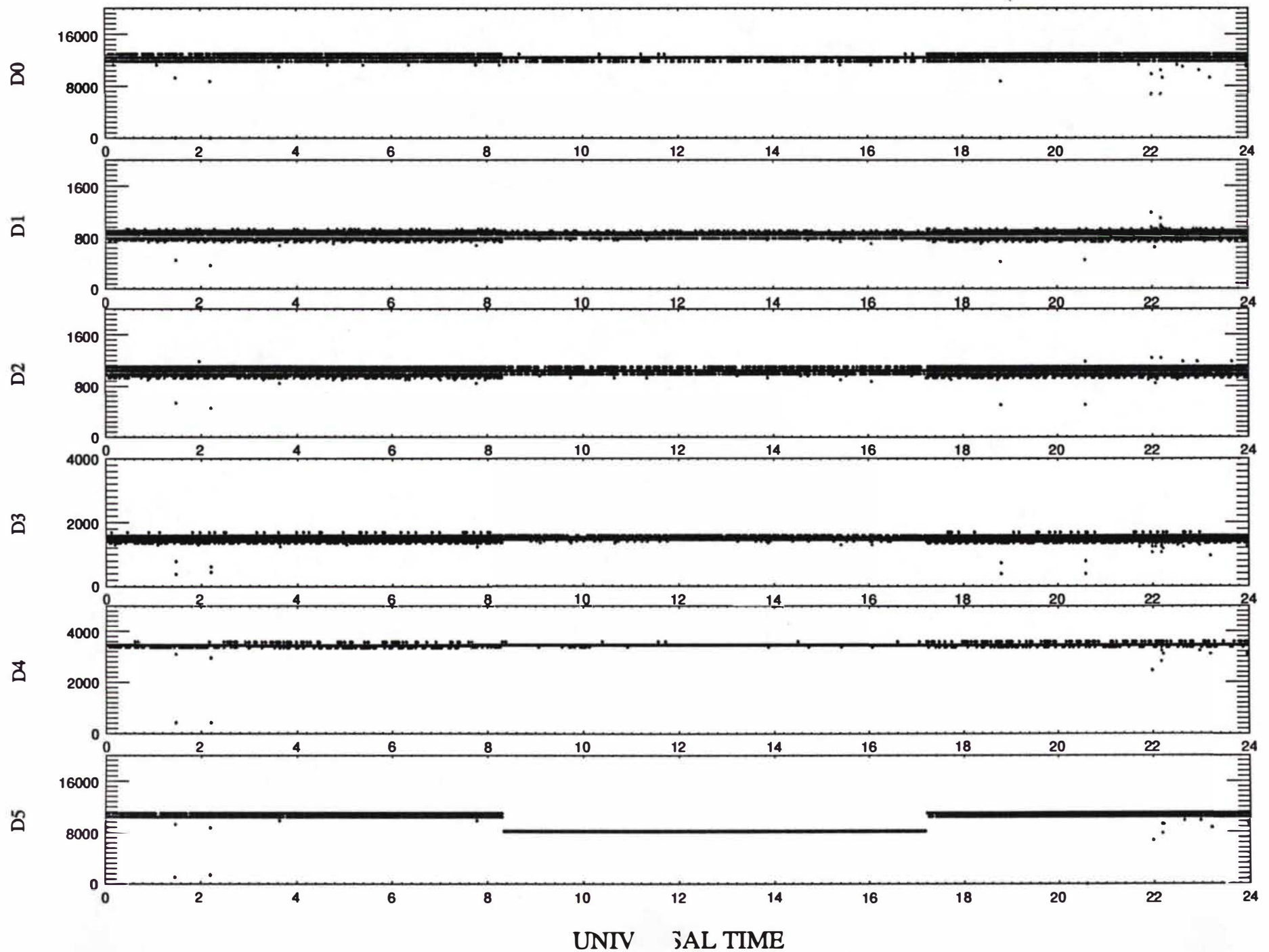
UNIV AL TIME

Burst Counter 11 at UT=10.785802213881 h=38828.888 s 10:47:08.888



CALIBRATION DATA INCLUDED





From PREECE@ssl.msfc.nasa.gov Fri Sep 2 06:31 PDT 1994
Date: Fri, 2 Sep 1994 8:32:17 -0500 (CDT)
From: PREECE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3146

BATSEARCH PROGRAM

BATSE BURST # 3146
EVENT OF 1994 AUG 31 DAY OF YEAR=243
EVENT CROSSING TIME AT BATSE : 47115. S. OR 13:05:15.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 267.000 7.000
BATSE PEAK COUNTING RATE: 3000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 31/ 8/ 94 IS:
RA= 145.282 DEC= -48.313 DIST= 2.749 AU
BATSE-ULYSSES DISTANCE = 411235538. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 64.02 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 600.89 SECS.
CROSSING TIME AT ULYSSES IS 47716. S. OR 13:15:15 +/- 273.21 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 31/ 8/ 94 IS:
RA= 99.981 DEC= 23.529 DIST= 1.770 AU
MARS-BATSE DISTANCE = 264764640. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 33.06 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 740.19 SECS.
CROSSING TIME AT MARS IS 47855. S. OR 13:17:35 +/- 94.88 SECONDS

ND

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3146	940831	9595	47115	3000	267	+07

BATSE BURST TRIGGER

NO.: 03146

TIME: TJD=9595 SECONDS=47115

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=048.2 AZIMUTH=230.0 ERROR=004.6 DEGREES

COMMENTS:

GRB. WEAK SPIKE, 7 S. DURATION. NOT VISIBLE ABOVE 300 KEV.

6 / 9 / 94

ULYSSES RT

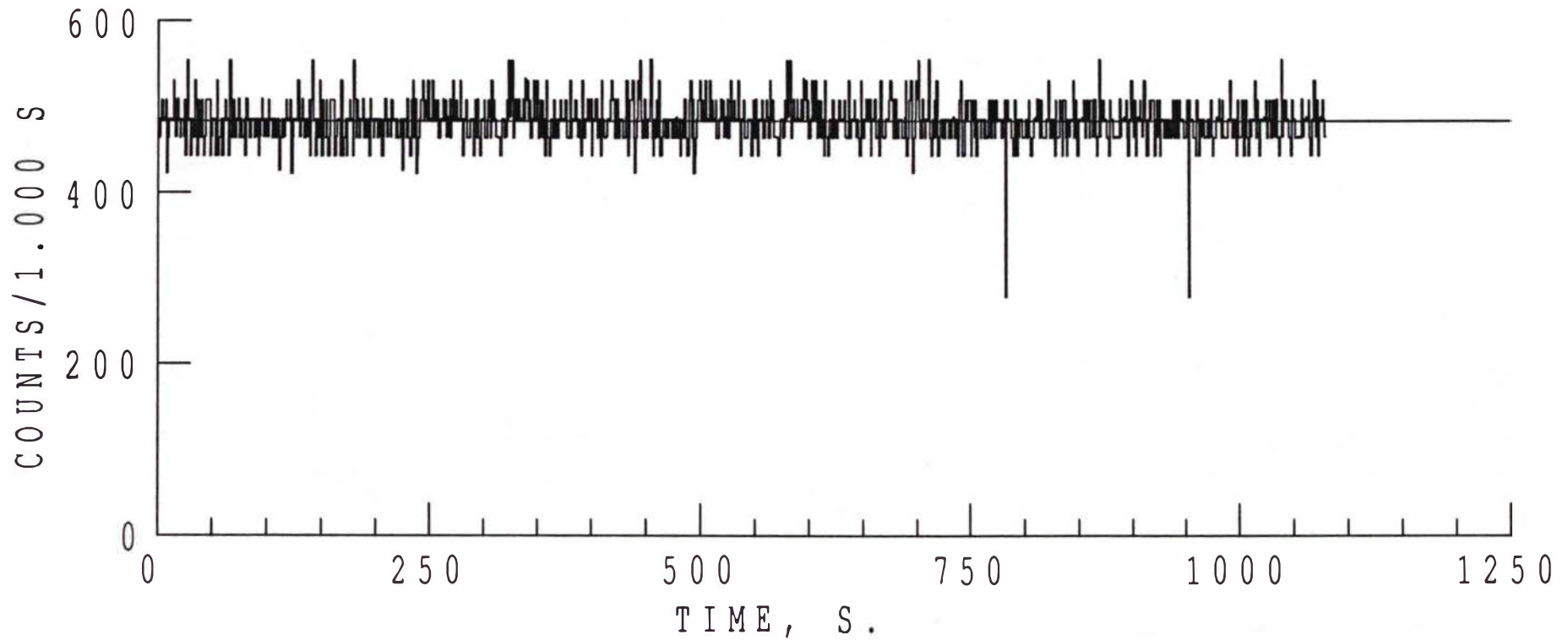
31 / 8 / 94 47448.328 s

0.500 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From PREECE@ssl.msfc.nasa.gov Fri Sep 2 06:28 PDT 1994
Date: Fri, 2 Sep 1994 8:28:32 -0500 (CDT)
From: PREECE@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03147

TIME: TJD=9595 SECONDS=76201

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From PREECE@ssl.msfc.nasa.gov Wed Sep 7 08:21 PDT 1994
Date: Wed, 7 Sep 1994 10:21:59 -0500 (CDT)
From: PREECE@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03148

TIME: TJD=9595 SECONDS=81410

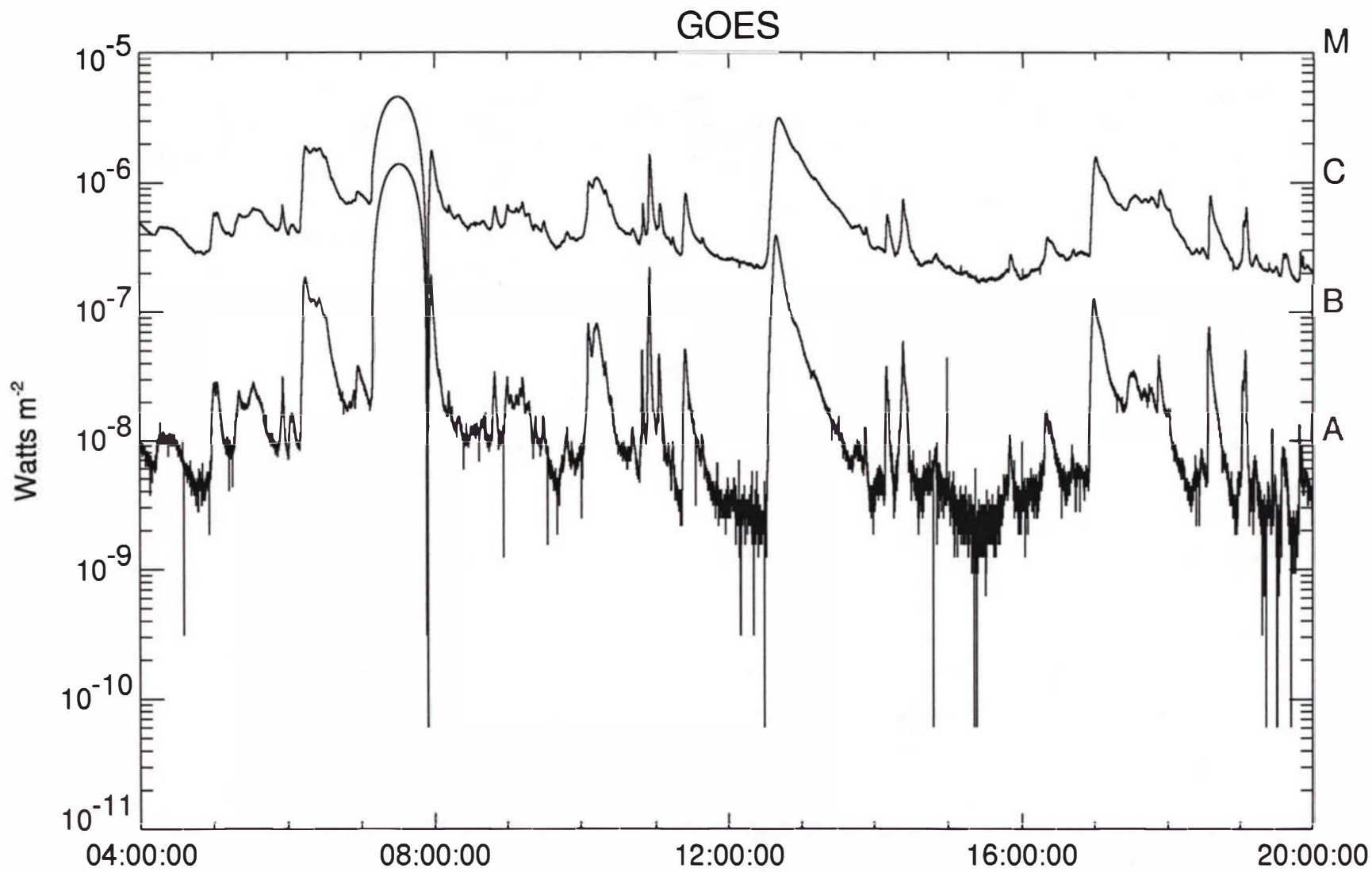
TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
TGF. DURATION ~0.005 S. NOT VISIBLE BELOW 50 KEV. GEOCENTER ANGLE 66 DEG.



Data Start: 94/08/31, 0000:02

Plot created: 94/09/02, 1913

Channel

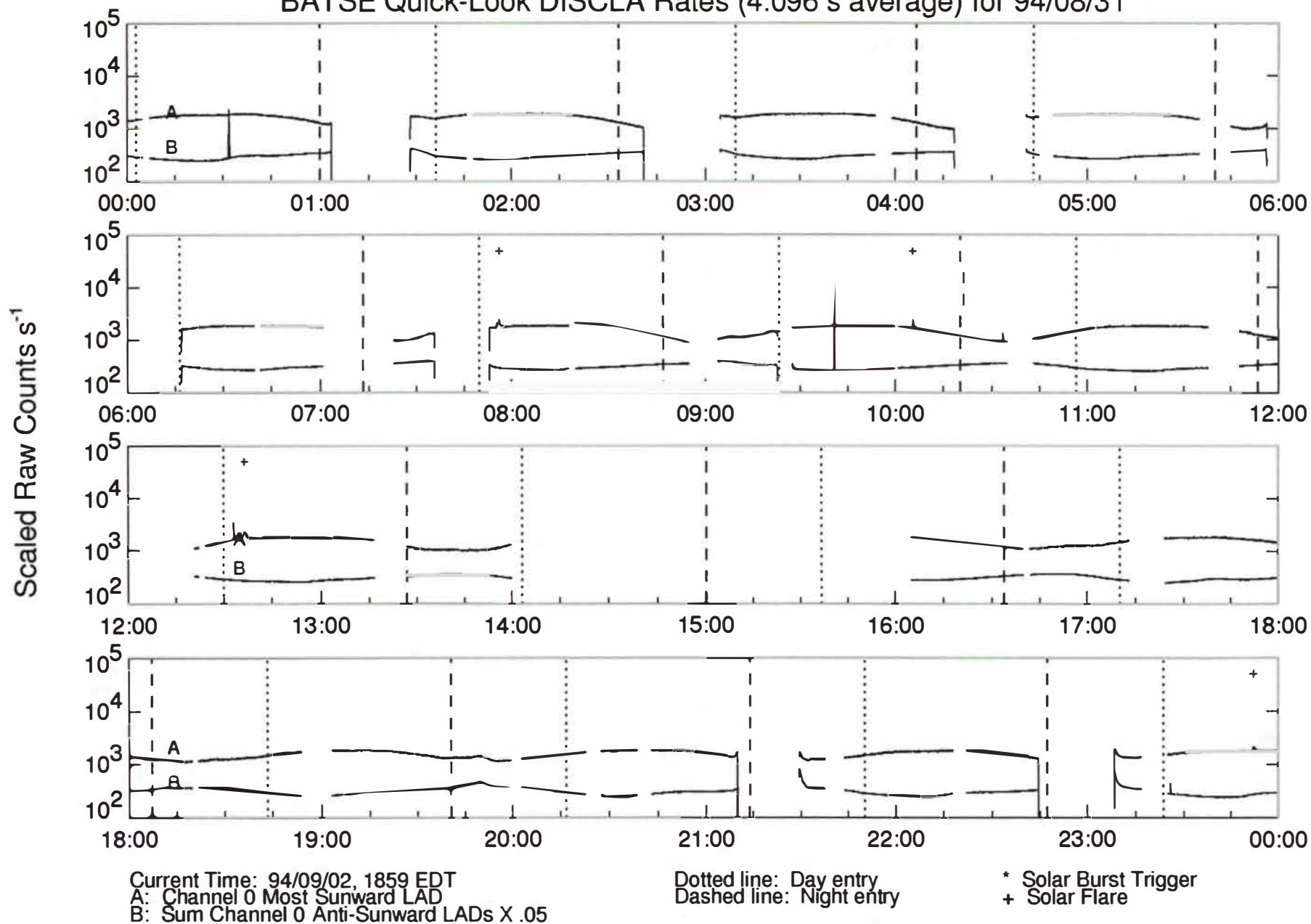
1 (1.0 - 8.0 Angstroms)

Background not subtracted

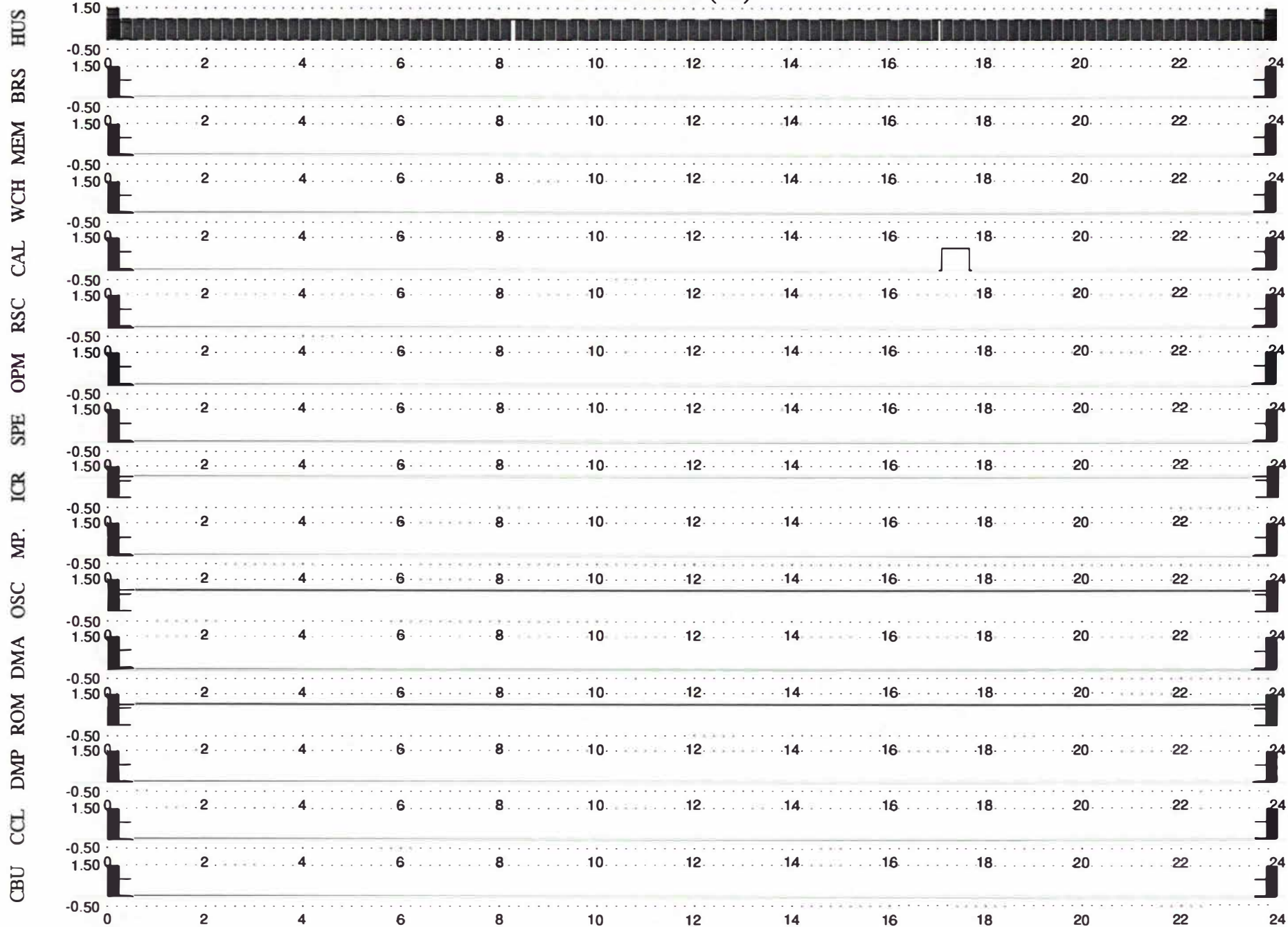
2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/08/31

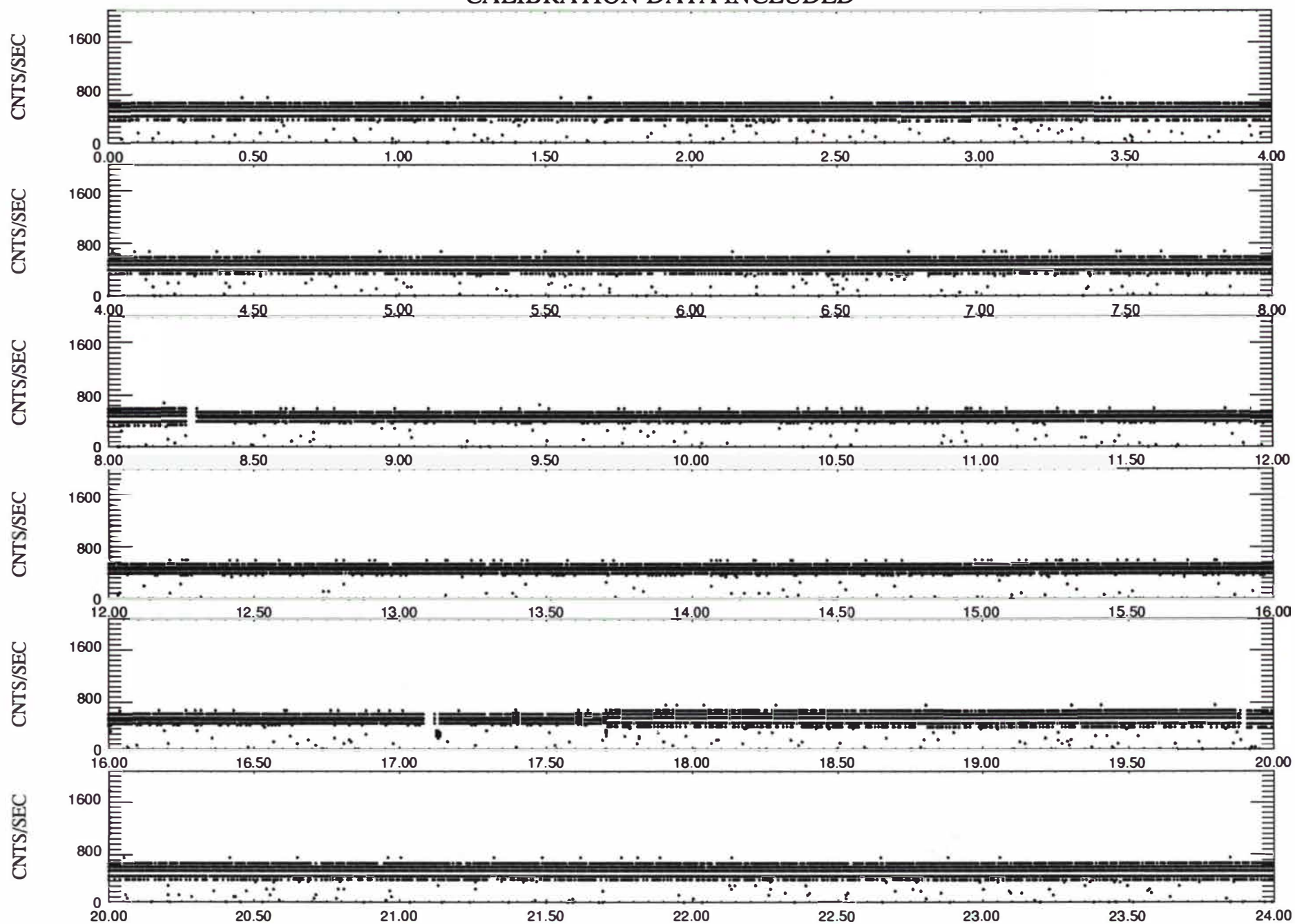


NO BURST (11)



UNIV. AL TIME

CALIBRATION DATA INCLUDED



UNIV AL TIME

1102 35 000113 VLEC CHUR 354 513 1001 10 194 2101 1001

1102 35

