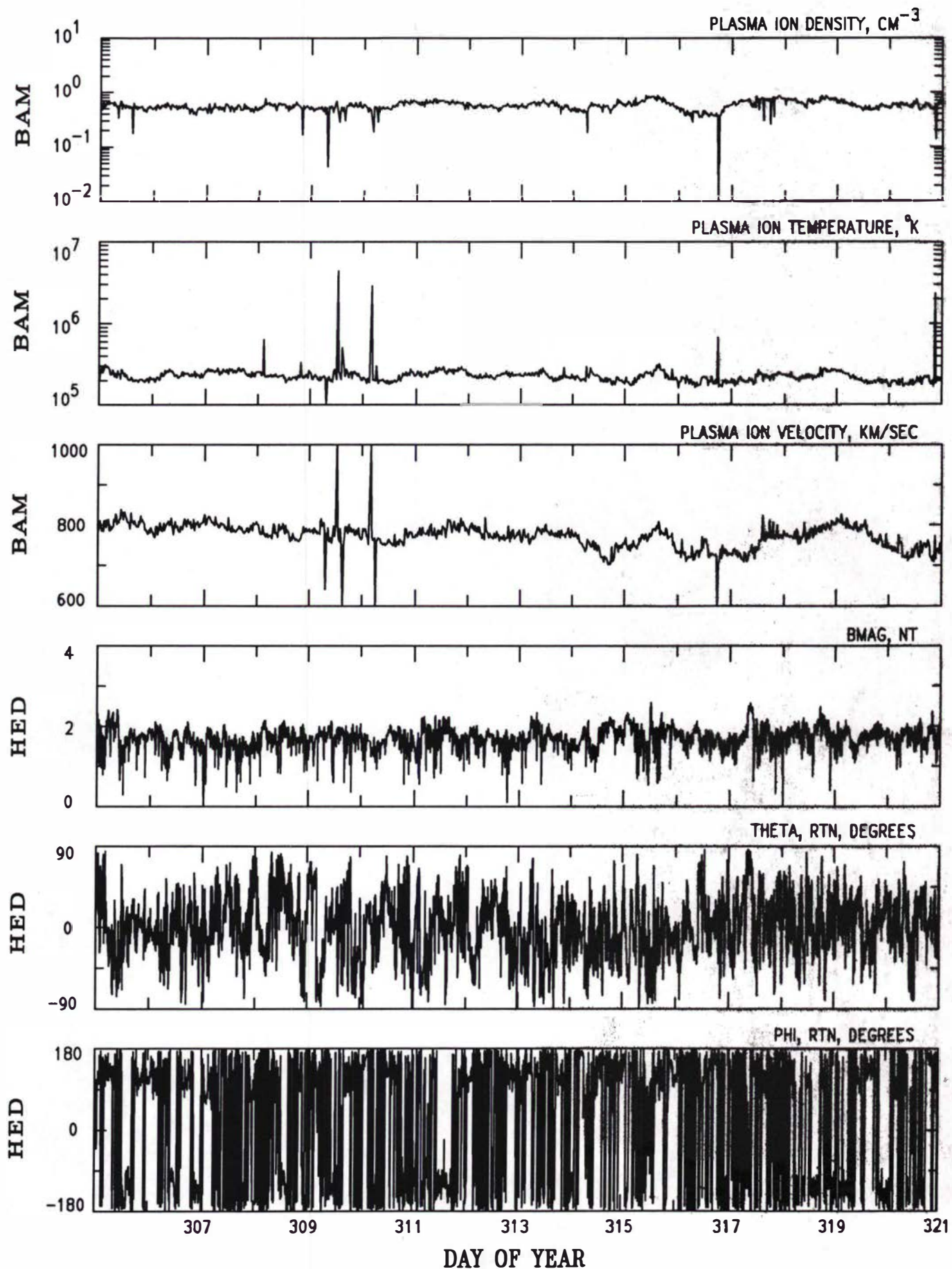
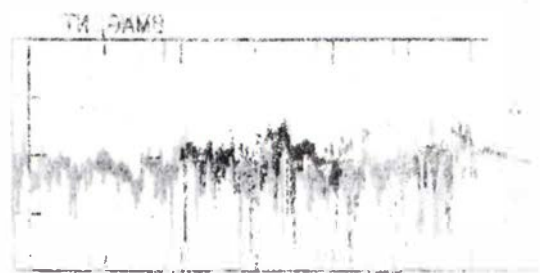
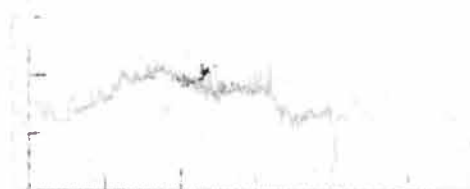
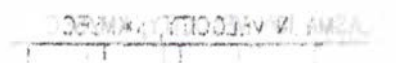


ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

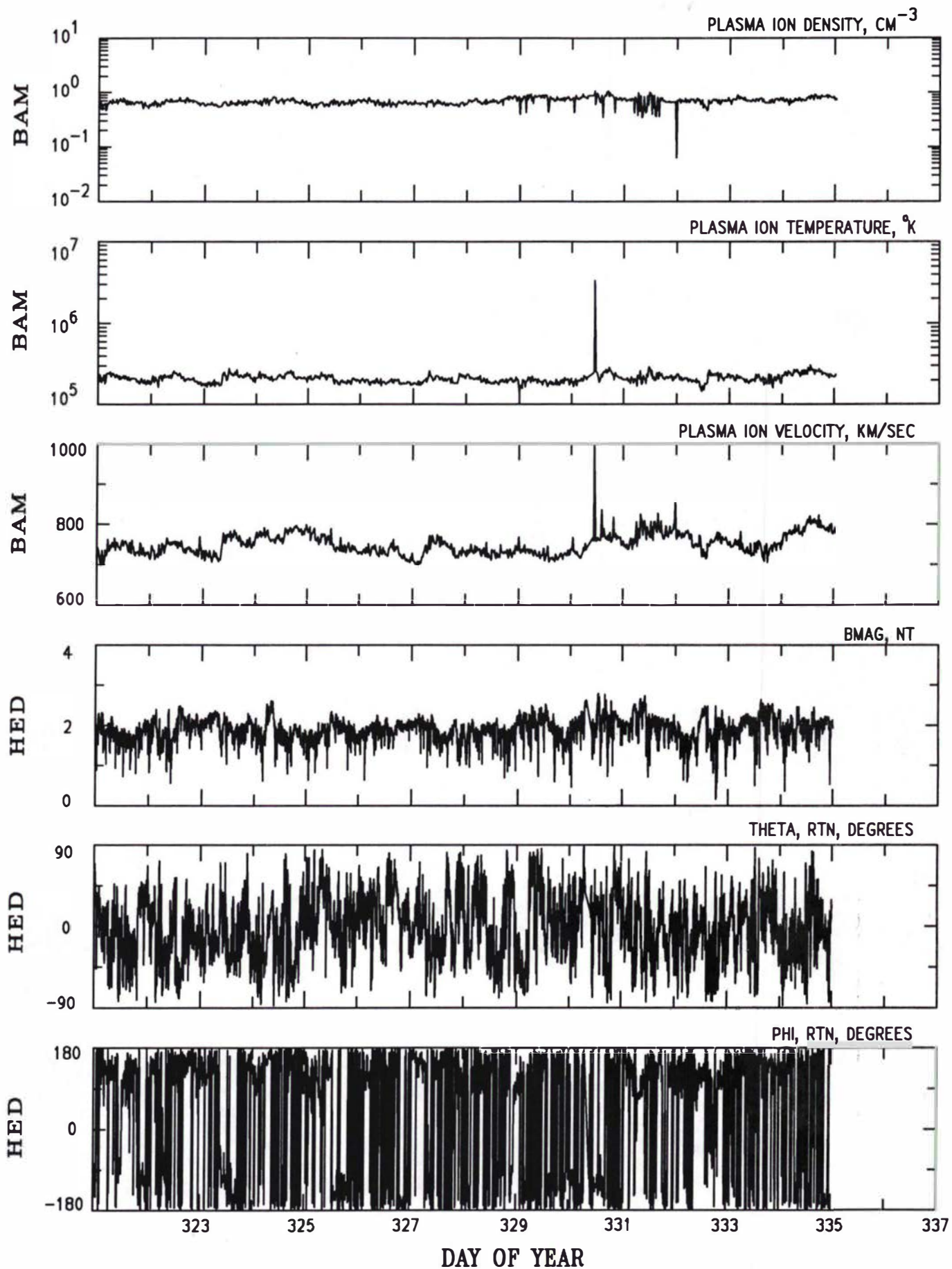
94 305 NOV 1 00:00:00.000 - 94 321 NOV 17 00:00:00.000





ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

94 321 NOV 17 00:00:00.000 - 94 337 DEC 3 00:00:00.000



MEM 872 012

V 1 10 012

RATE (1.8 - 8 MEV) COUNT/SEC



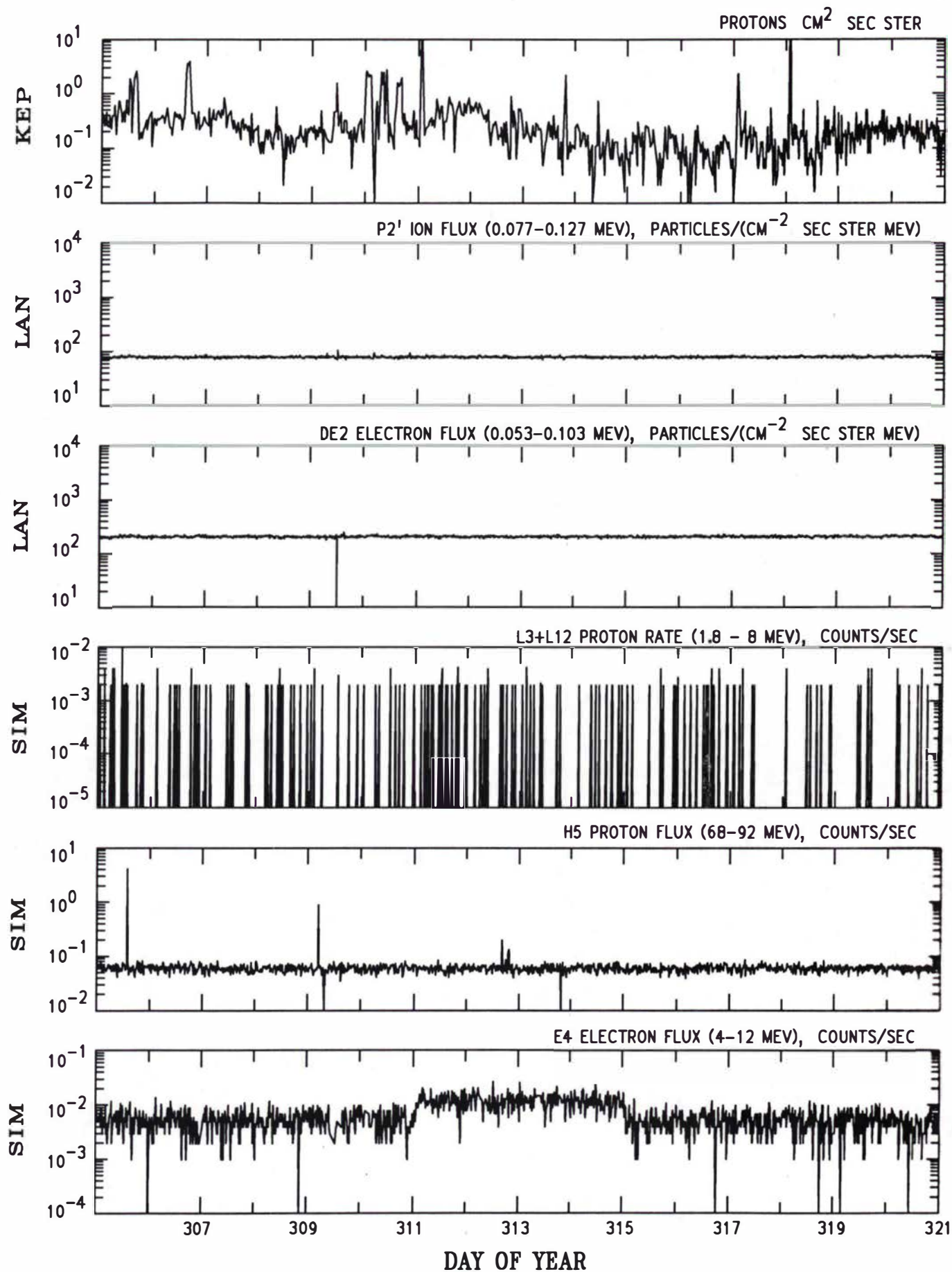
1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

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

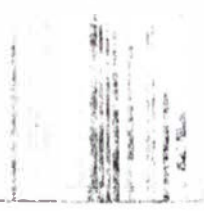
94 305 NOV 1 00:00:00.000 - 94 321 NOV 17 00:00:00.000



100-100000

100-100000

100-100000

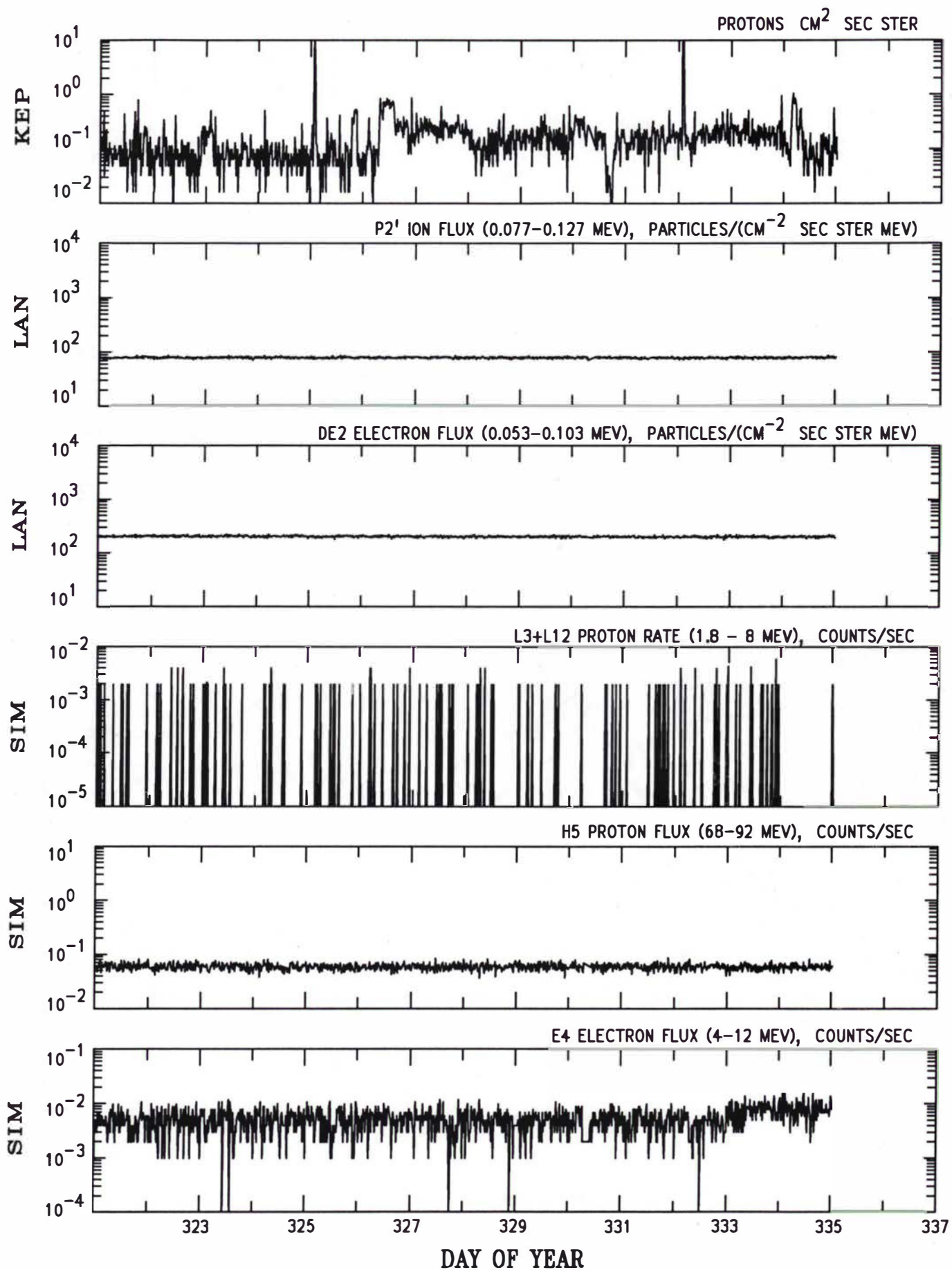


100-100000

100-100000

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

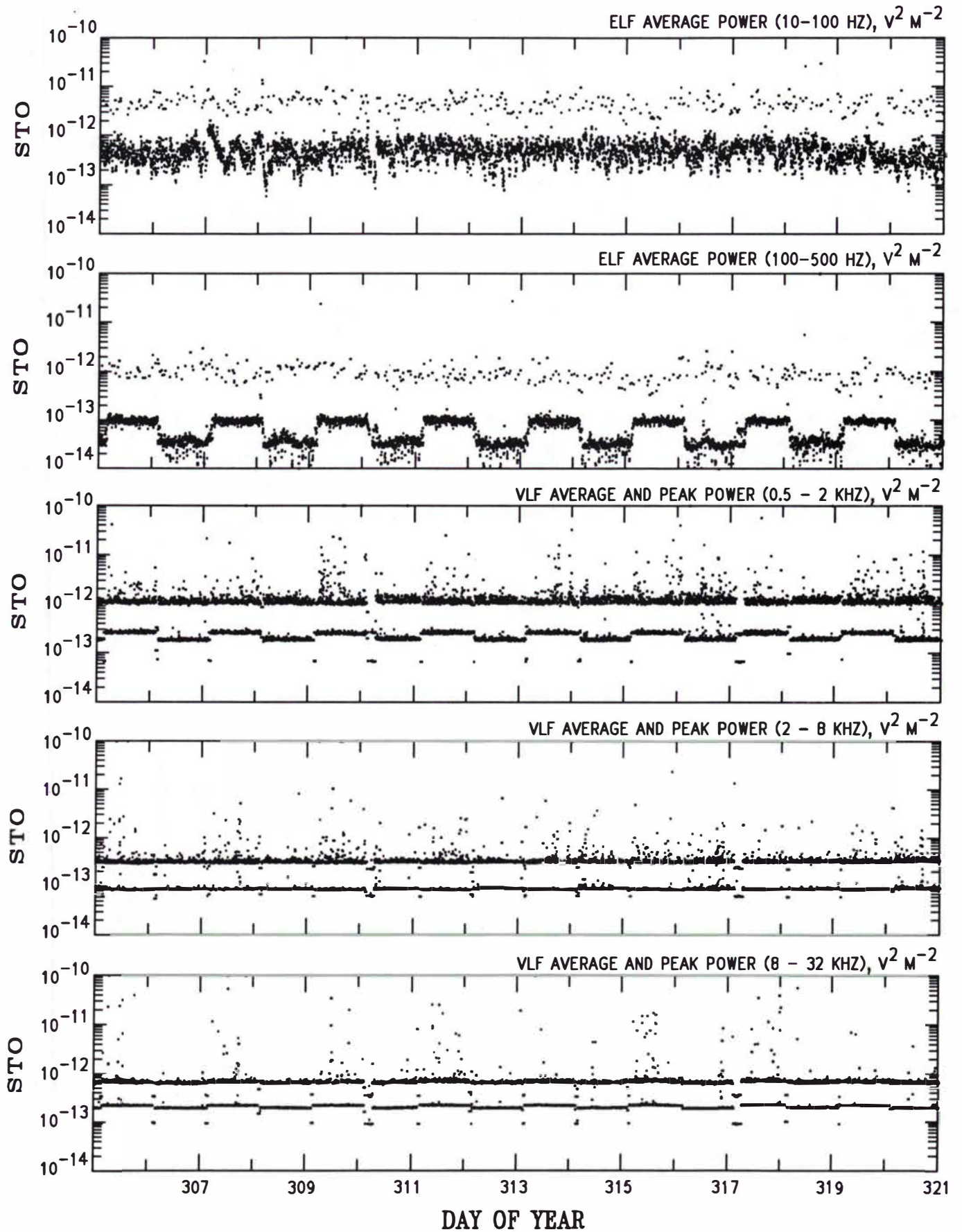
94 321 NOV 17 00:00:00.000 - 94 337 DEC 3 00:00:00.000



1 (SIX 6 - 8) 1994

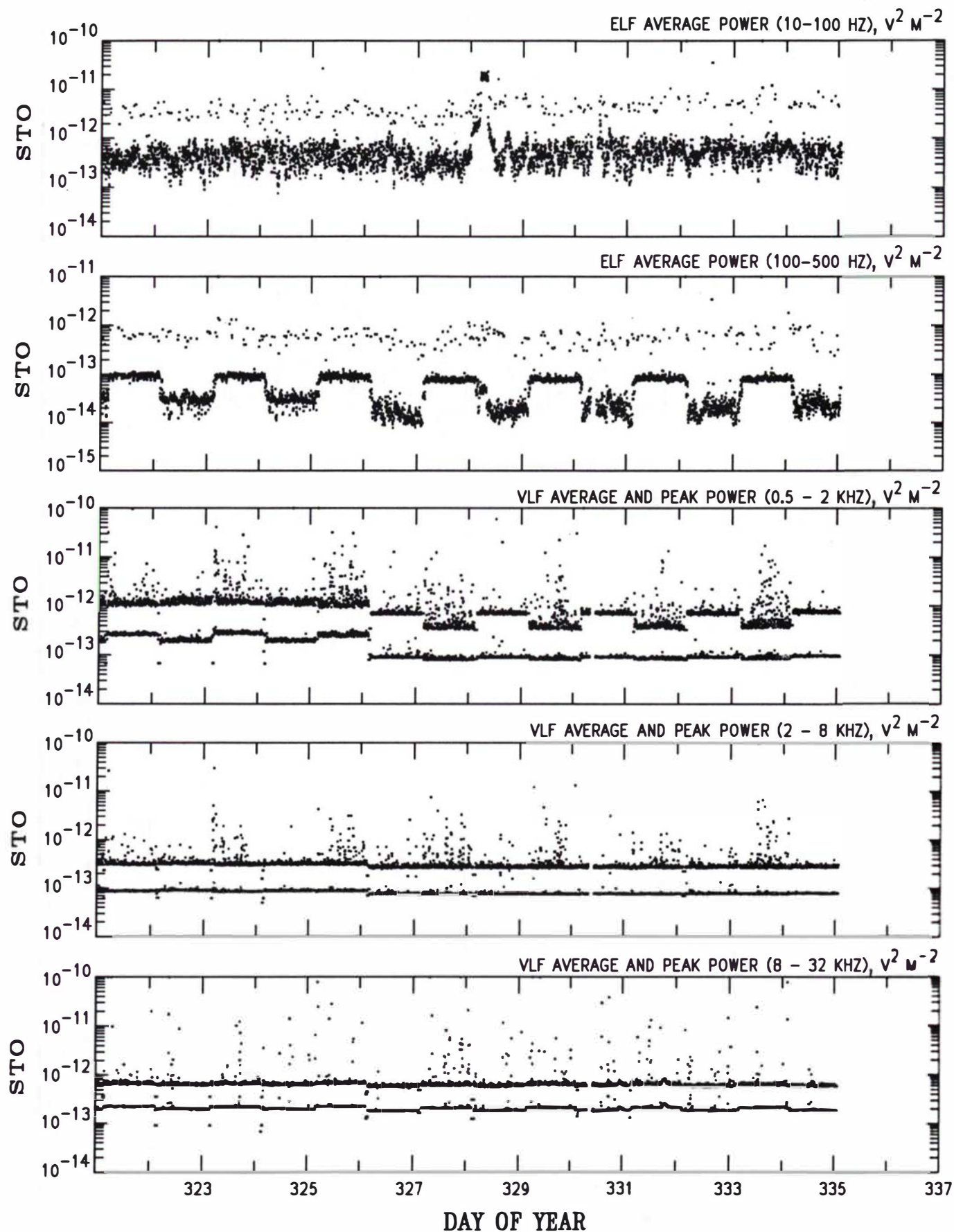
ULYSSES CDR - PLASMA WAVE

94 305 NOV 1 00:00:00.000 - 94 321 NOV 17 00:00:00.000



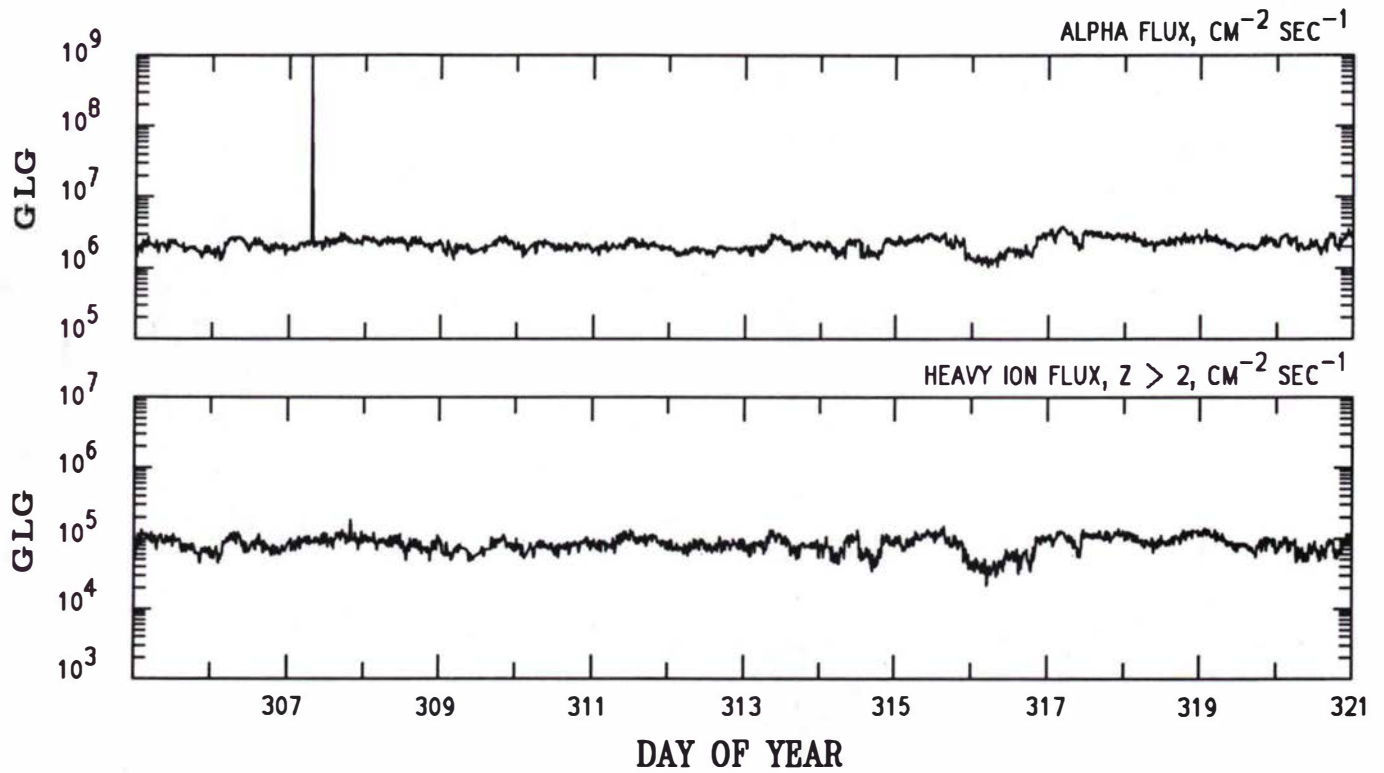
ULYSSES CDR - PLASMA WAVE

94 321 NOV 17 00:00:00.000 - 94 337 DEC 3 00:00:00.000



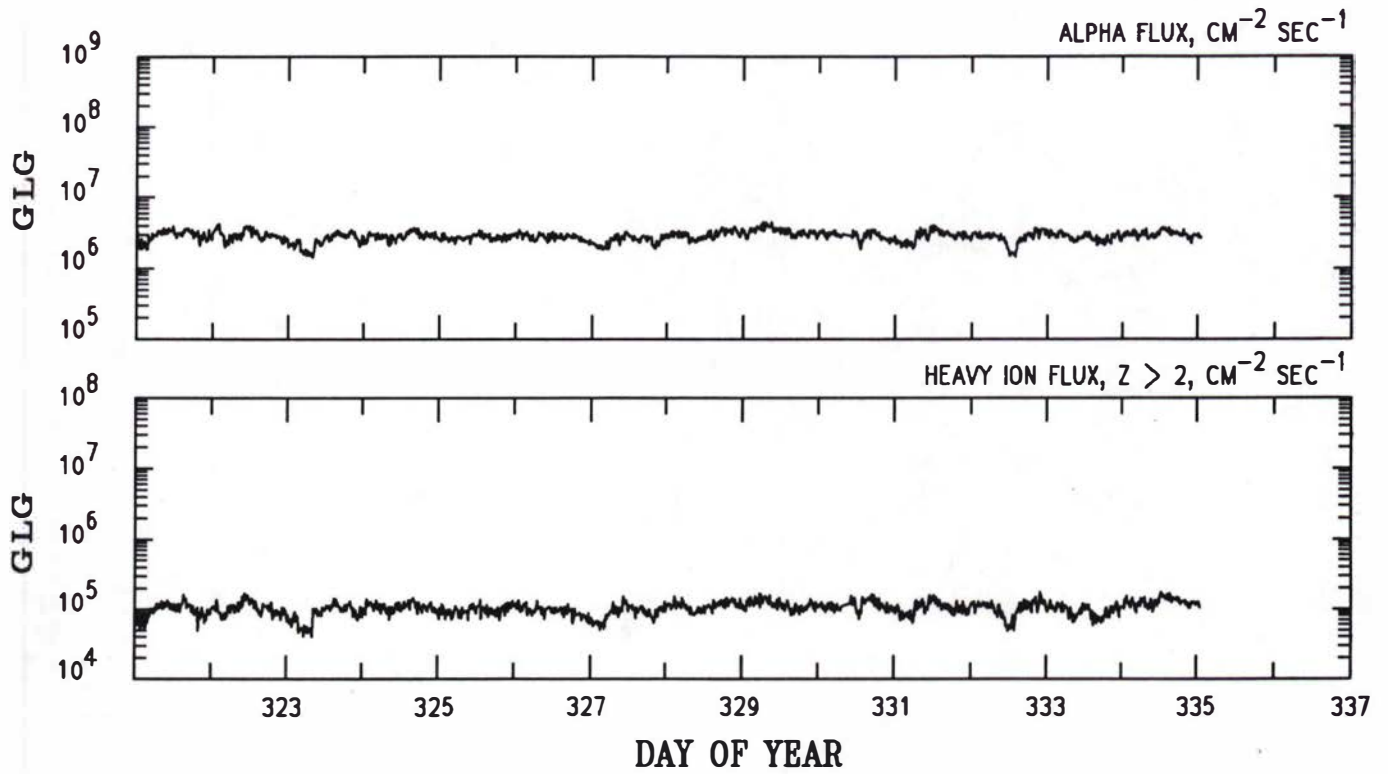
ULYSSES CDR - SOLAR WIND ION COMPOSITION

94 305 NOV 1 00:00:00.000 - 94 321 NOV 17 00:00:00.000



ULYSSES CDR - SOLAR WIND ION COMPOSITION

94 321 NOV 17 00:00:00.000 - 94 337 DEC 3 00:00:00.000



From DEAL@ssl.msfc.nasa.gov Wed Nov 2 11:44 PST 1994
Date: Wed, 2 Nov 1994 13:44:32 -0600 (CST)
From: DEAL@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.: 3272

TIME: TJD=9657 SECONDS=32374

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From DEAL@ssl.msfc.nasa.gov Thu Nov 3 09:33 PST 1994
Date: Thu, 3 Nov 1994 11:32:56 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3273

BATSEARCH PROGRAM

BATSE BURST # 3273
EVENT OF 1994 NOV 1 DAY OF YEAR=305
EVENT CROSSING TIME AT BATSE : 74127. S. OR 20:35:27.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 235.000 62.000
BATSE PEAK COUNTING RATE: 5000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 1/11/ 94 IS:
RA= 199.677 DEC= -72.509 DIST= 2.260 AU
BATSE-ULYSSES DISTANCE = 338103489. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 43.37 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 819.90 SECS.
CROSSING TIME AT ULYSSES IS 74947. S. OR 20:49:06 +/- 196.90 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 1/11/ 94 IS:
RA= 137.351 DEC= 18.019 DIST= 1.344 AU
MARS-BATSE DISTANCE = 201052928. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=102.34 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -143.32 SECS.
CROSSING TIME AT MARS IS 73984. S. OR 20:33:03 +/- 111.57 SECONDS

ND
Subject: Burst Trigger Message

BATSE BURST TRIGGER
NO.: 3273

TIME: TJD=9567 SECONDS=74127

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=29.3 AZIMUTH=231.6 ERROR= DEGREES

COMMENTS:

MULTIPLE PEAKS ~100 S. LONG. NOT VISIBLE ABOVE 300 KEV. IN COMPTTEL'S FIELD OF VIEW.

From DEAL@ssl.msfc.nasa.gov Thu Nov 3 09:32 PST 1994
Date: Thu, 3 Nov 1994 11:32:26 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: DEAL@ssl.msfc.nasa.gov
Subject: BATSE Burst 3273

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3273	941101	9657	74127	5000	235	+62

3 / 11 / 94

ULYSSES RT

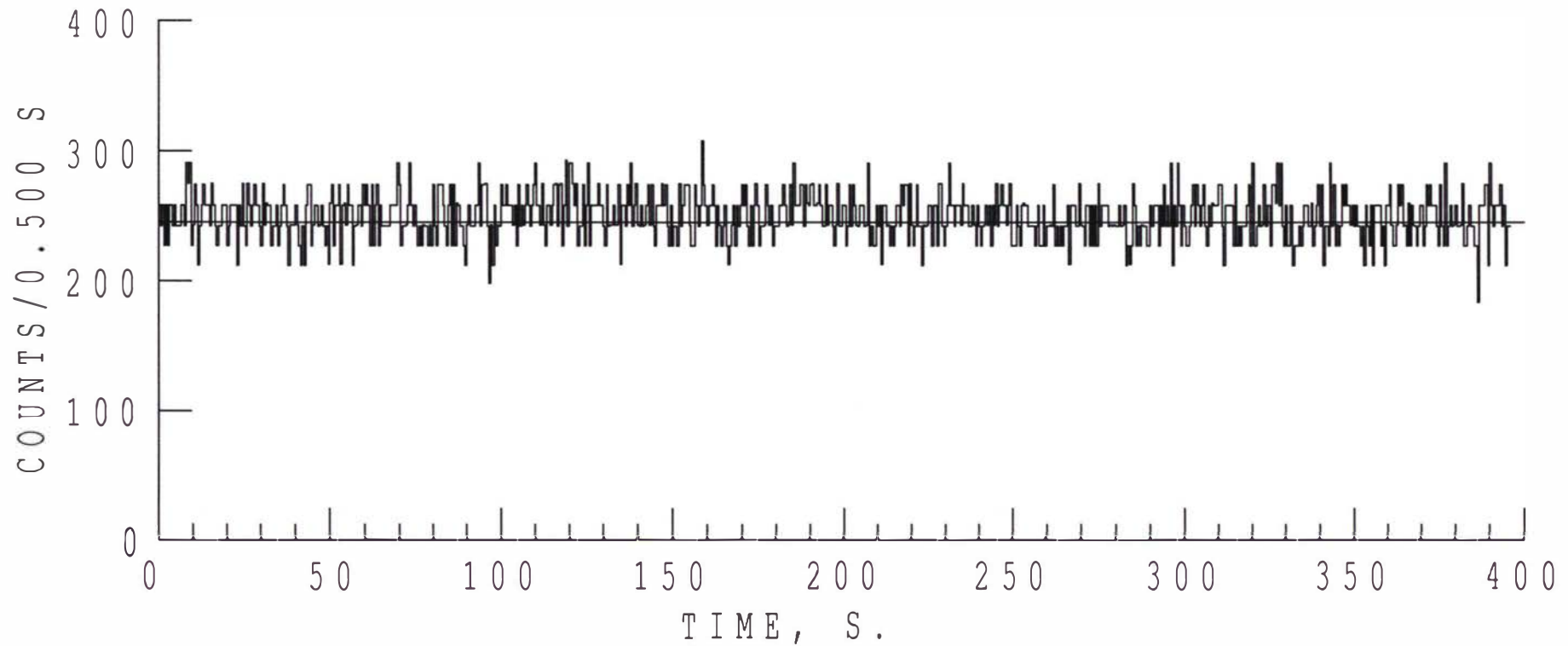
1 / 11 / 94 74736.031 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 N= 2

>4.0 SIGMA FLUCTUATIONS



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?

DMSP 11 Saw the Ulysses Nov 1 1994

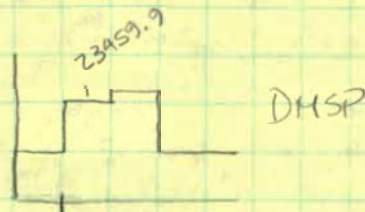
23459.9 Middle of 1st 2s channel
Continues for 2nd 2s channel.

Strong in 50-100 keV channel

$$\alpha = 136.19 \quad \delta = 27.16 \quad (2000)$$

$$R = 843.$$

$$+ 6378. = 7221$$



$$23458.9 = 06:30:58.9$$

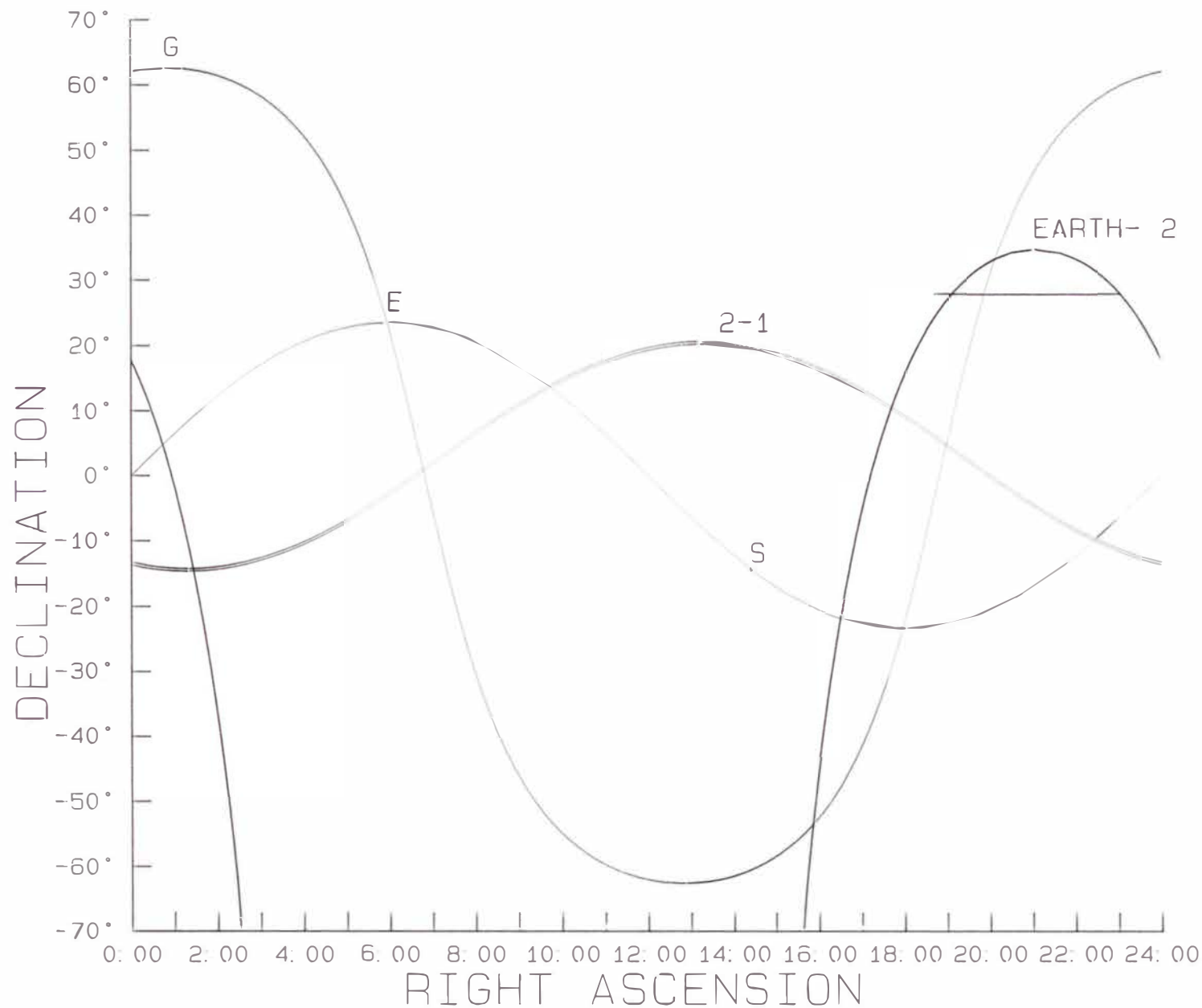


$$T_0 = 06:31:58.634$$

EVENT OF NOV 1, 1994 6:31

11/ 3/95

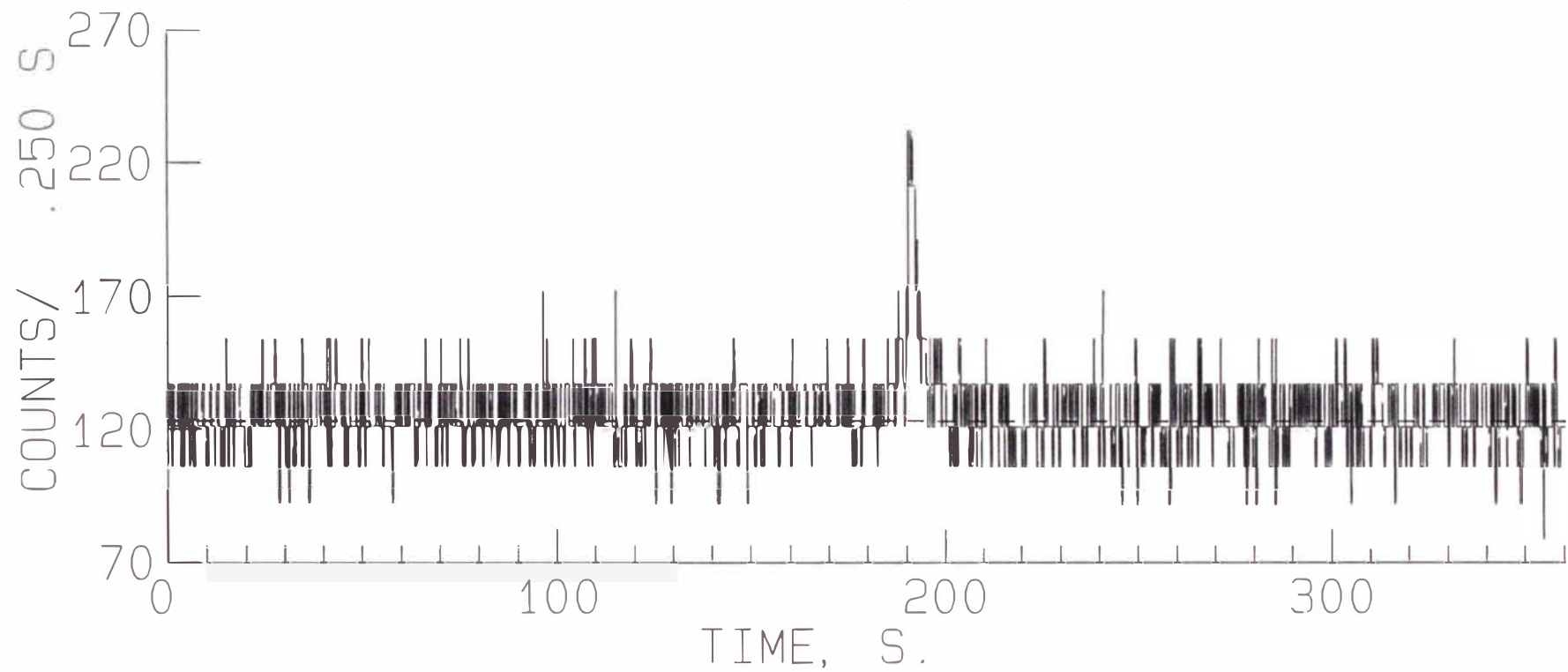
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
1 ULYSSES 2 DMSP-11



ULYSSES RT
1/11/94 23328.012 s
0- 0 keV

11 / 3/95

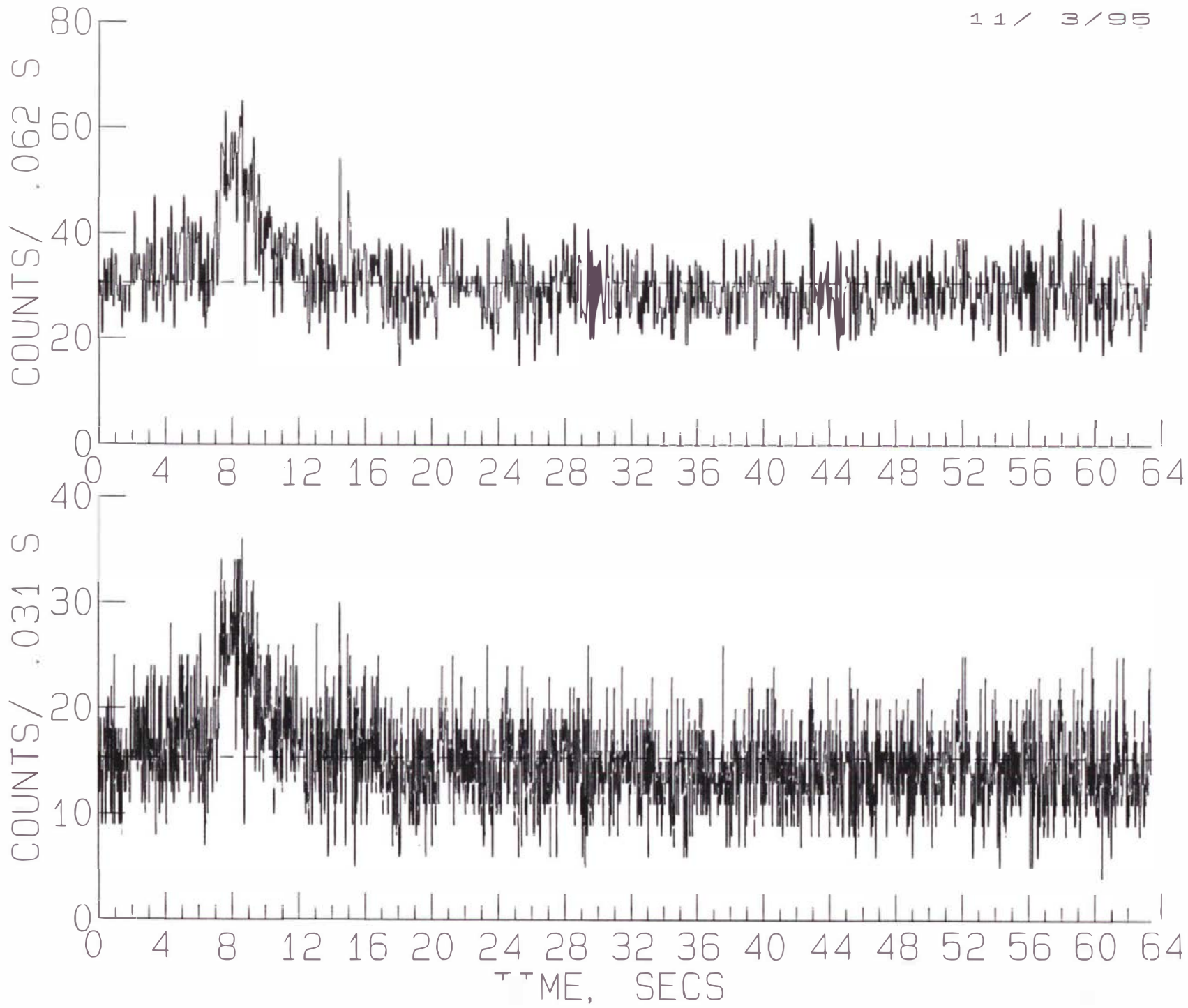
N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS

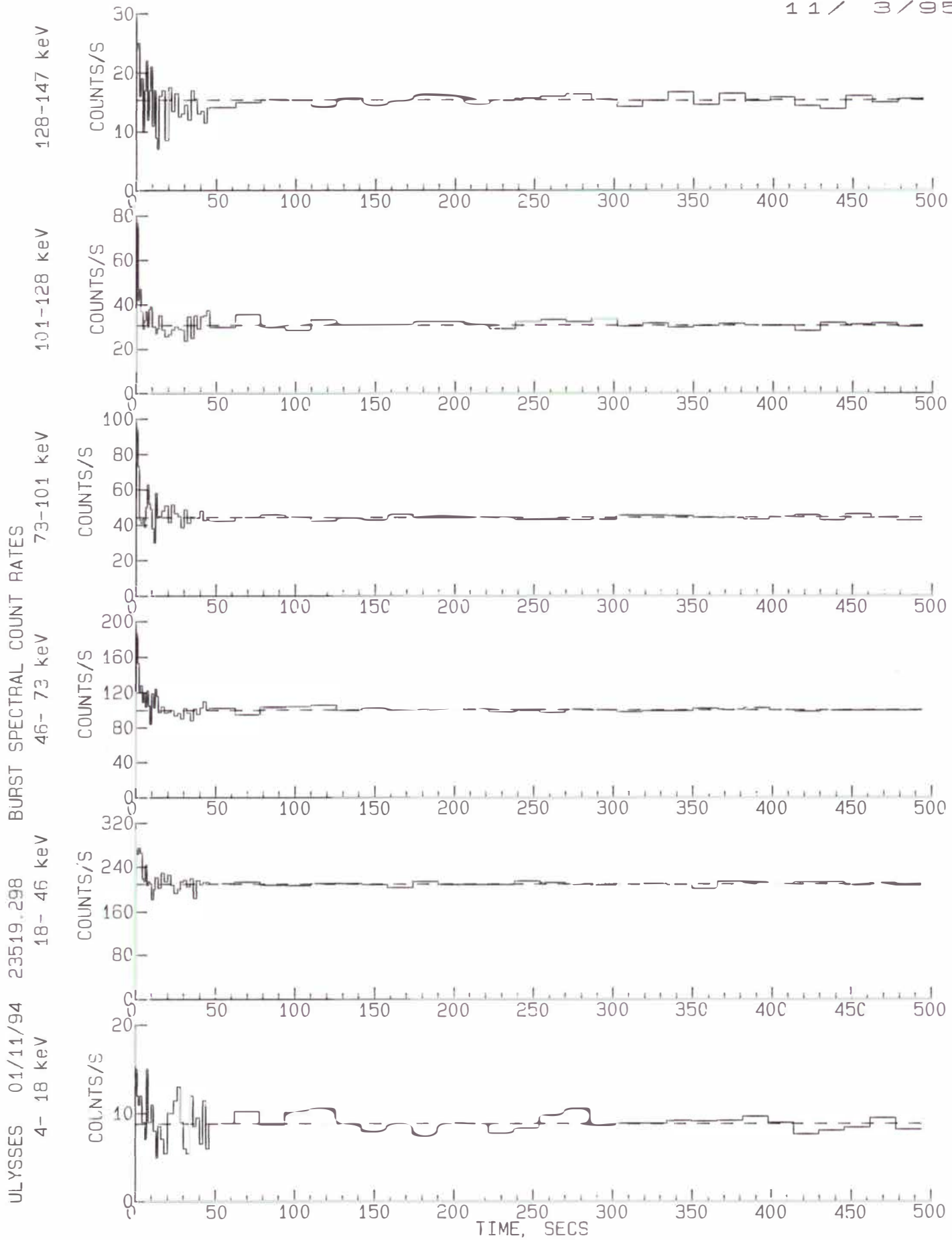


ULYSSES

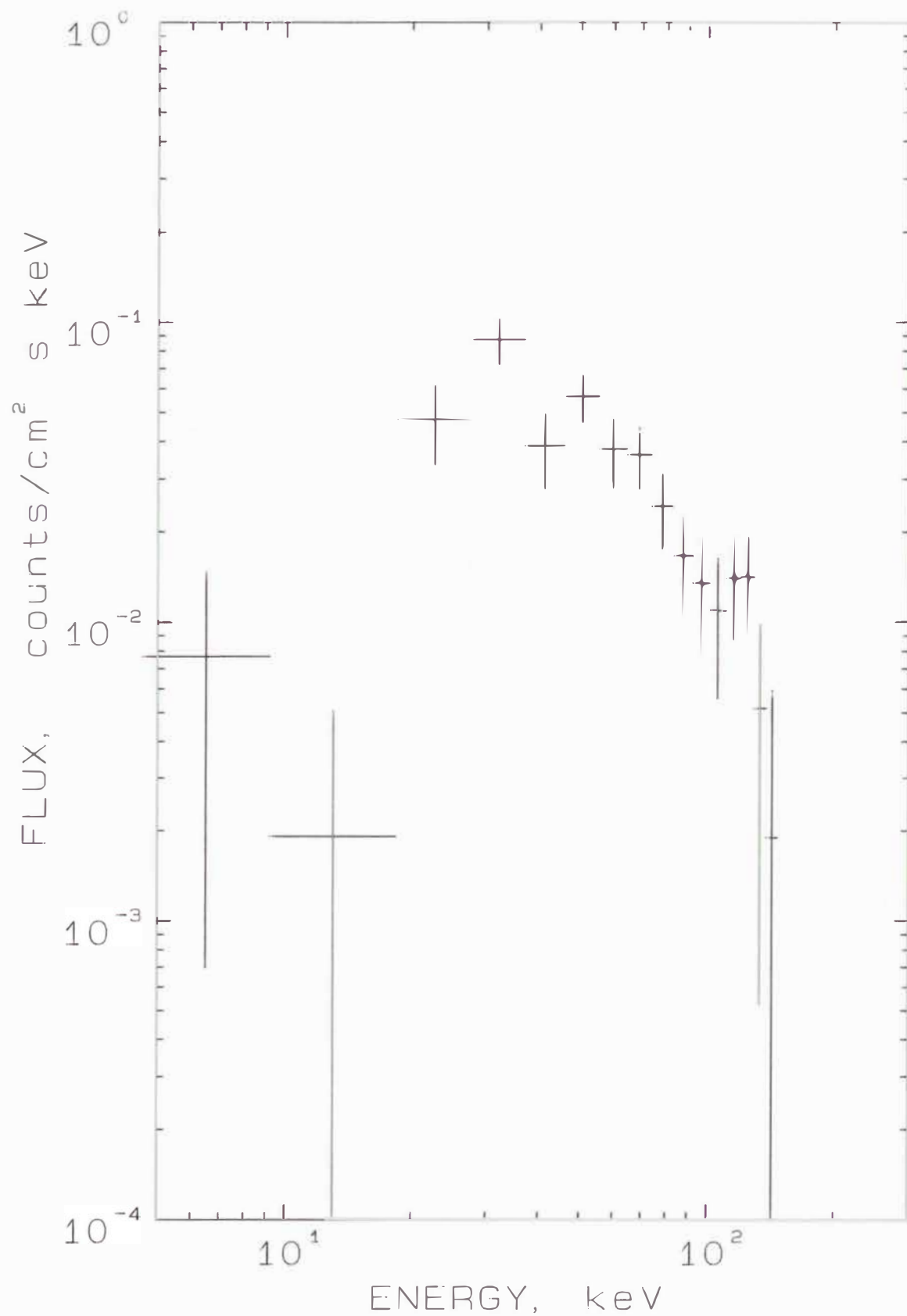
01/11/94

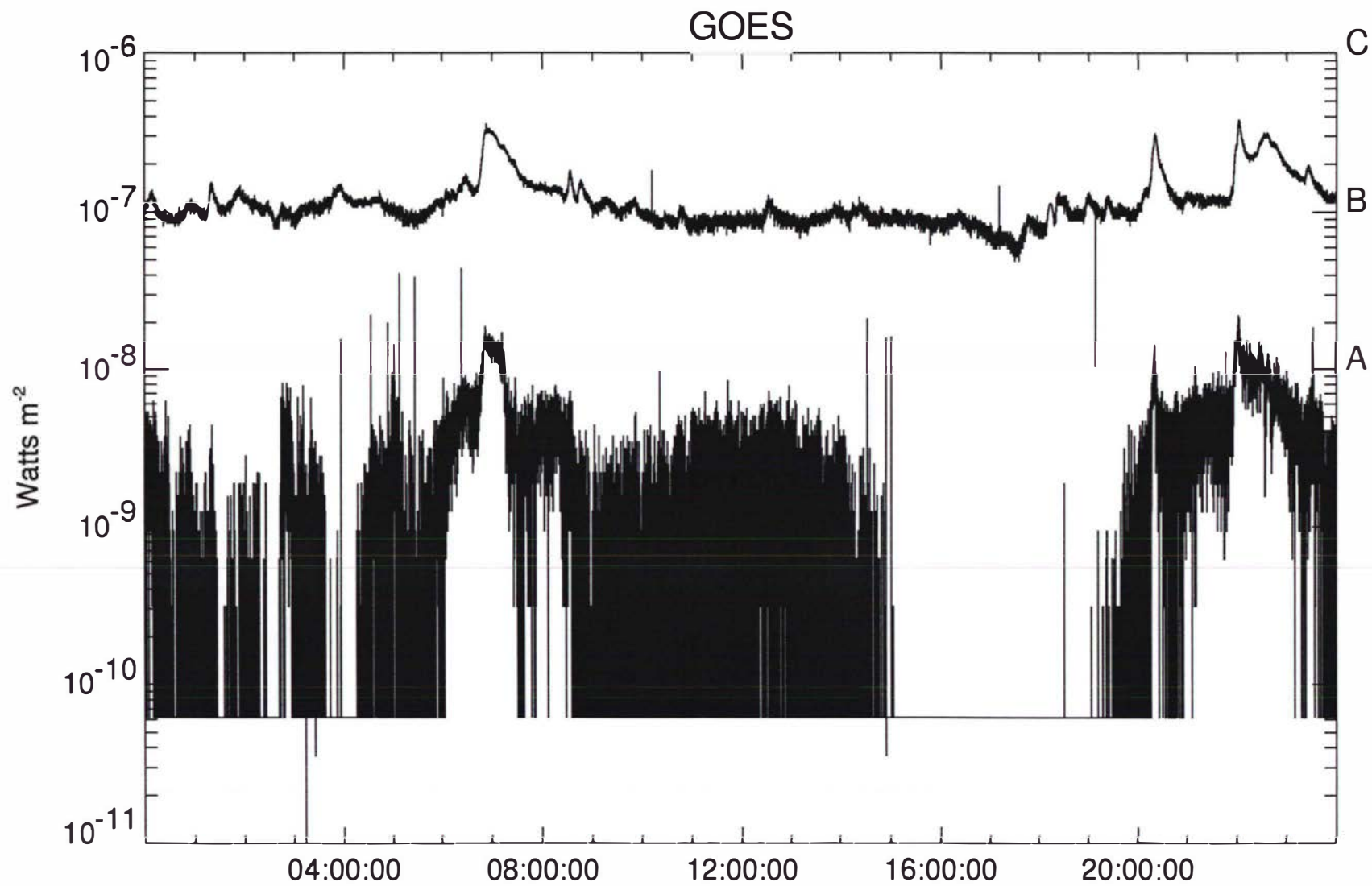
Ttrig=23518.634





SPECTRUM INTEGRATED OVER 20.0 SECONDS, INTERVALS 2 TO 19





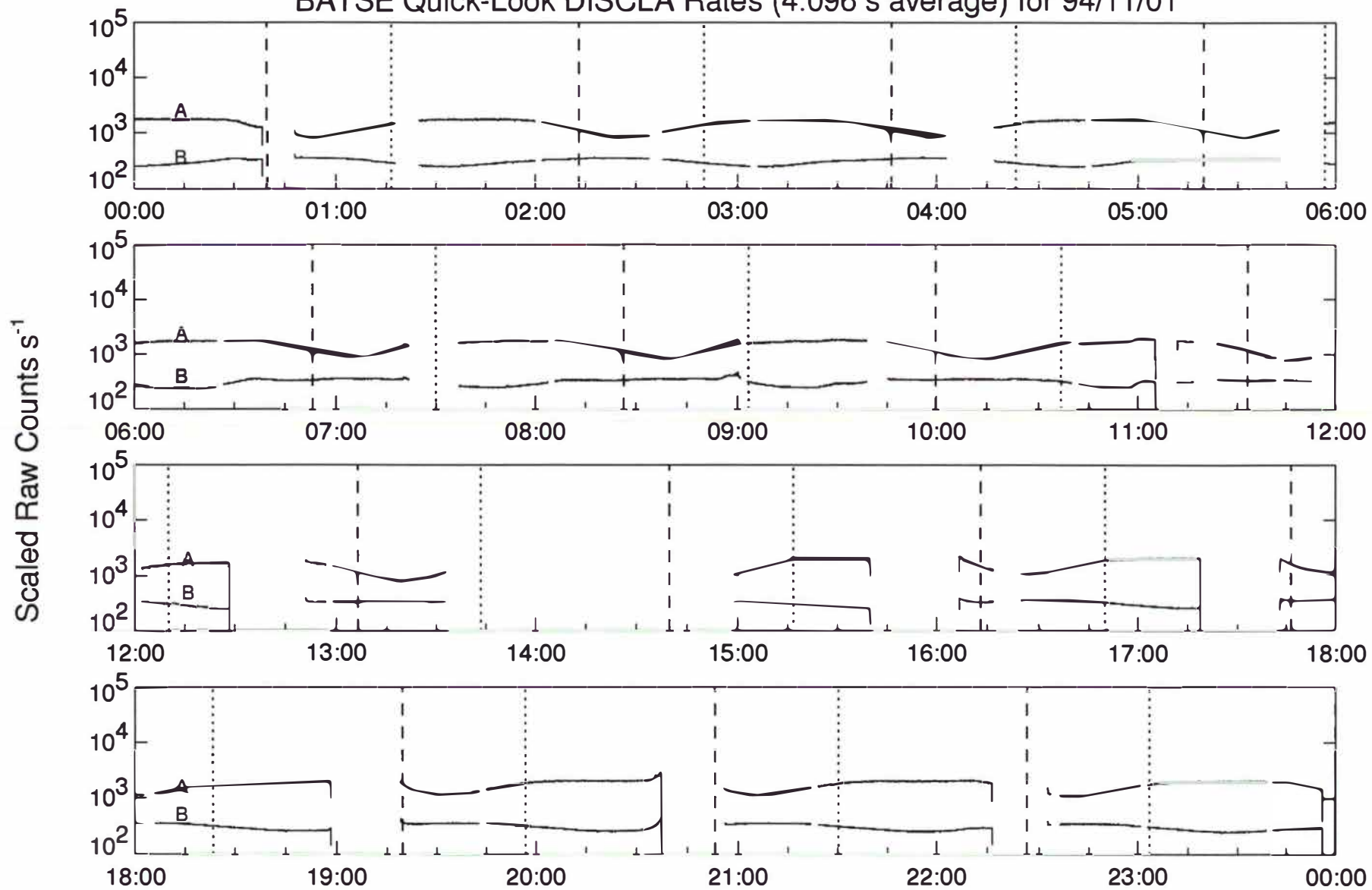
Data Start: 94/11/01, 0000:01

Plot created: 94/11/08, 1339

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 94/11/01

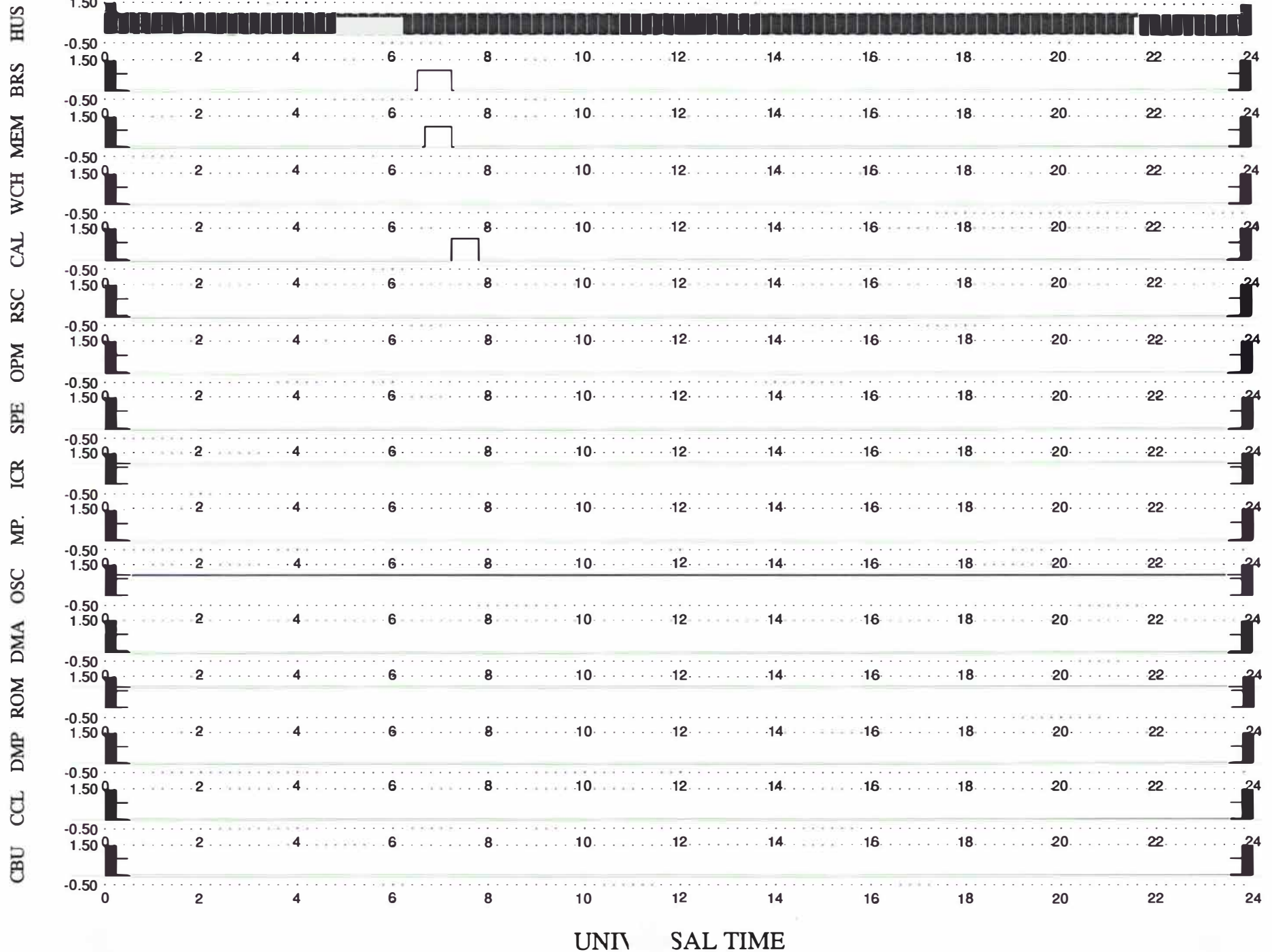


Current Time: 94/11/08, 1320 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

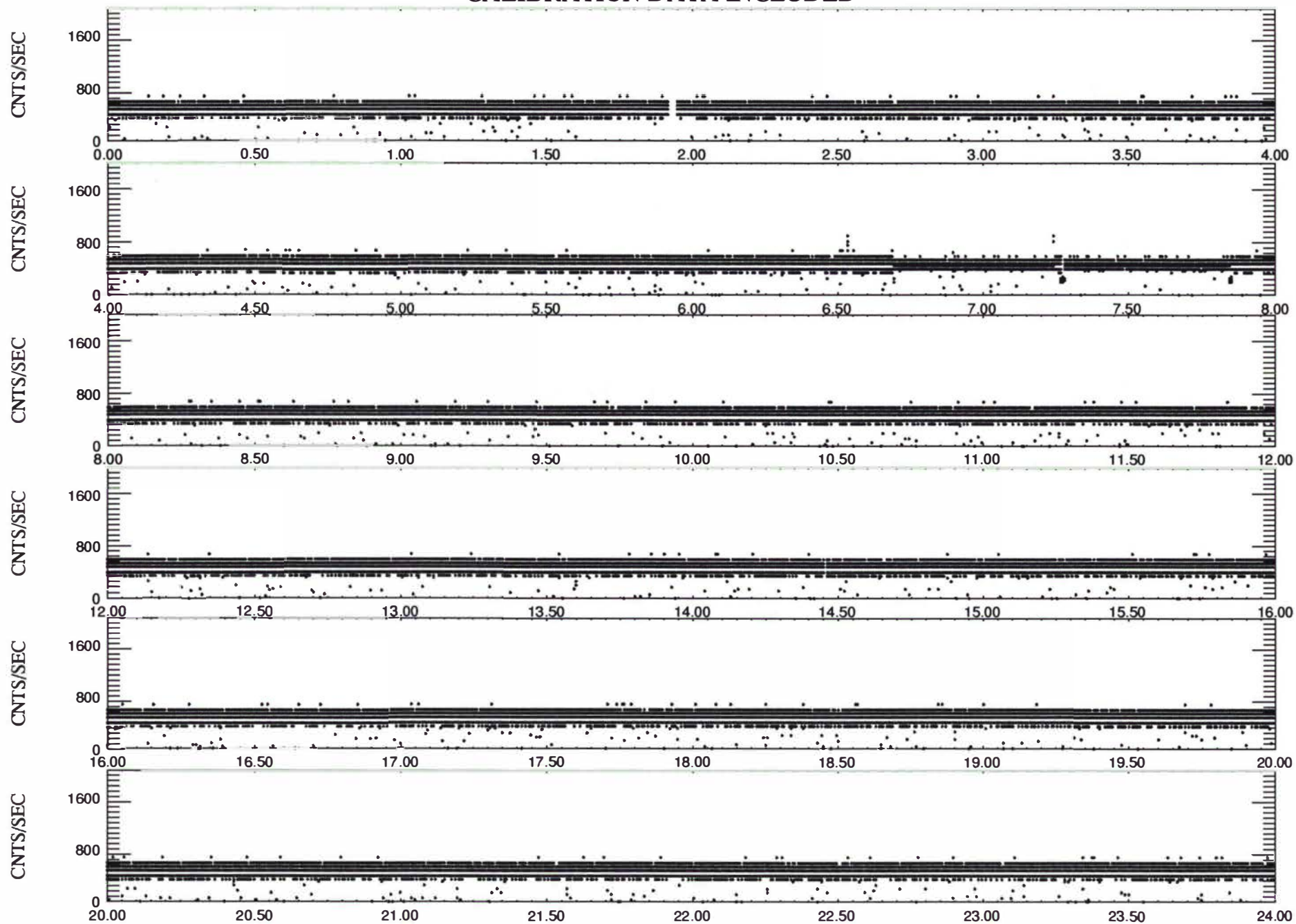
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 8, 5 - 5, 8

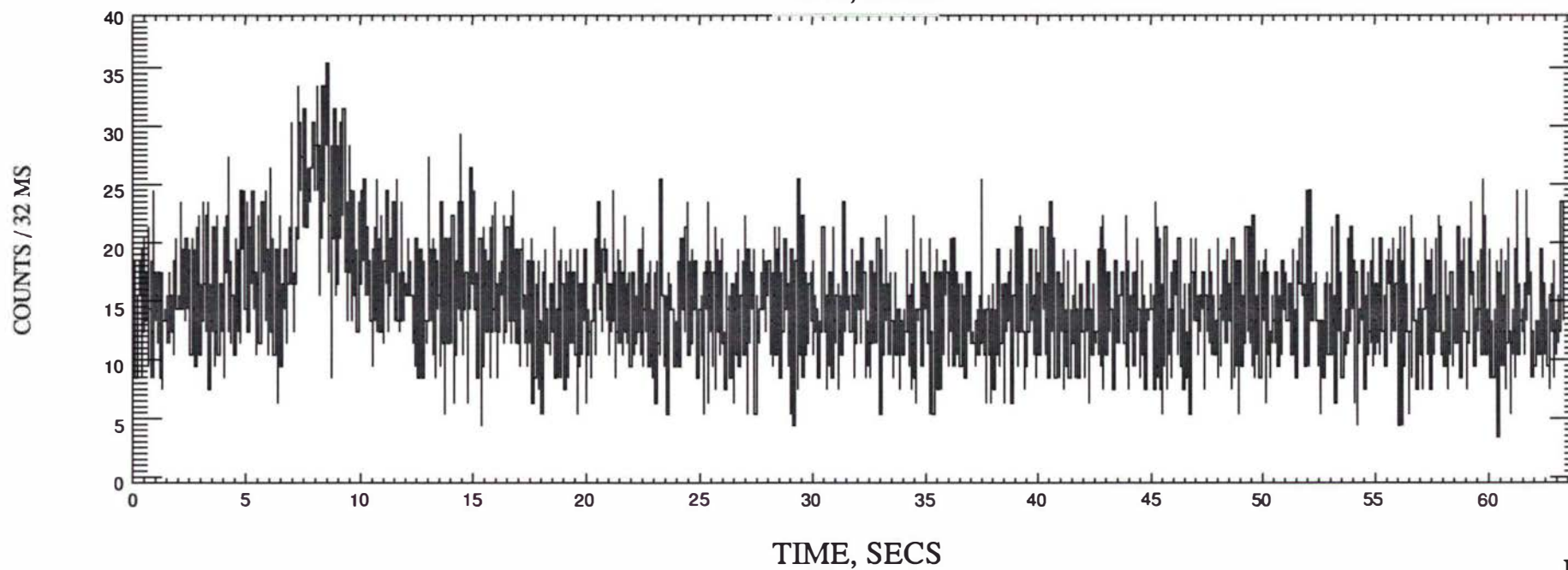
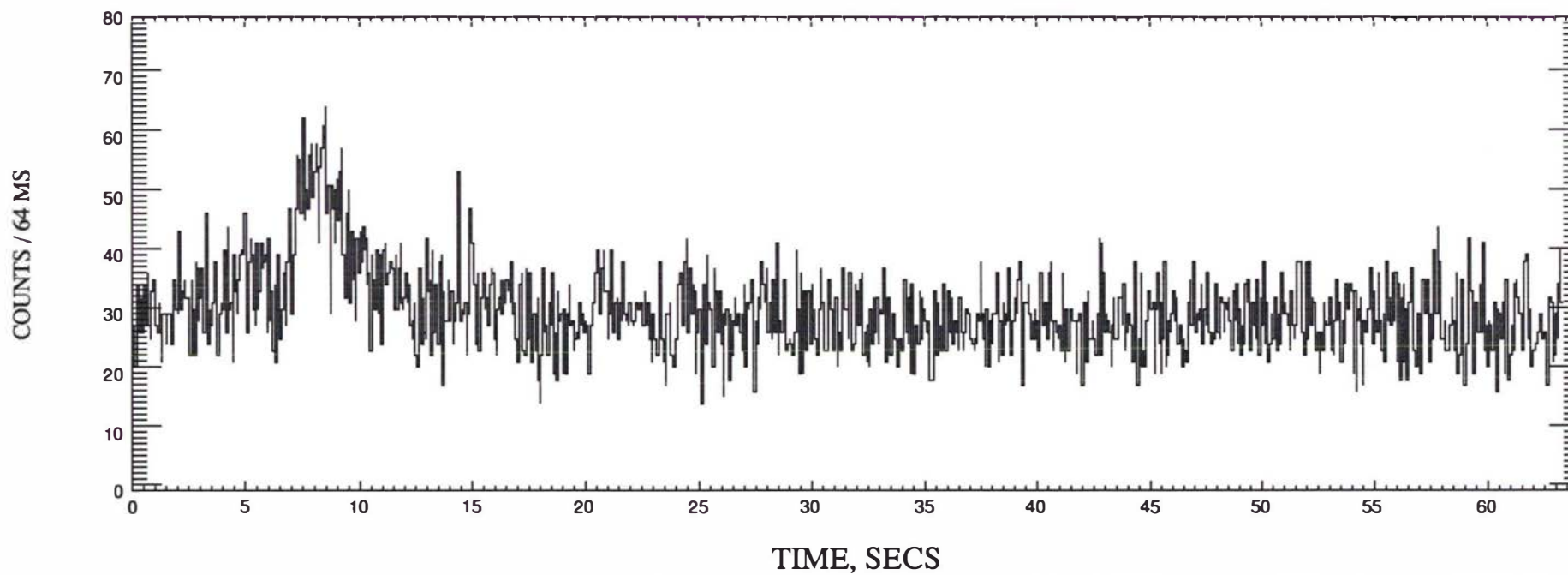


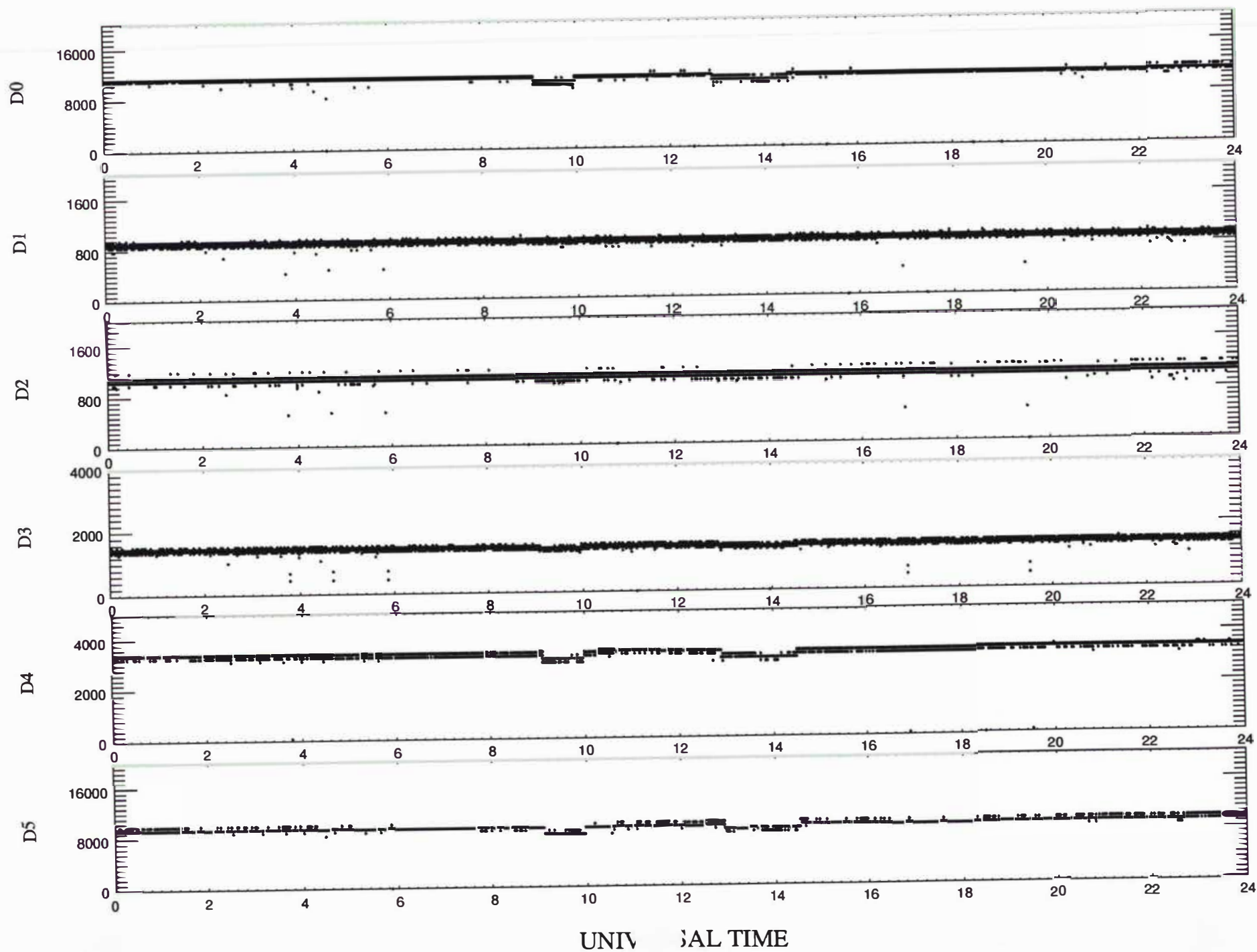
CALIBRATION DATA INCLUDED

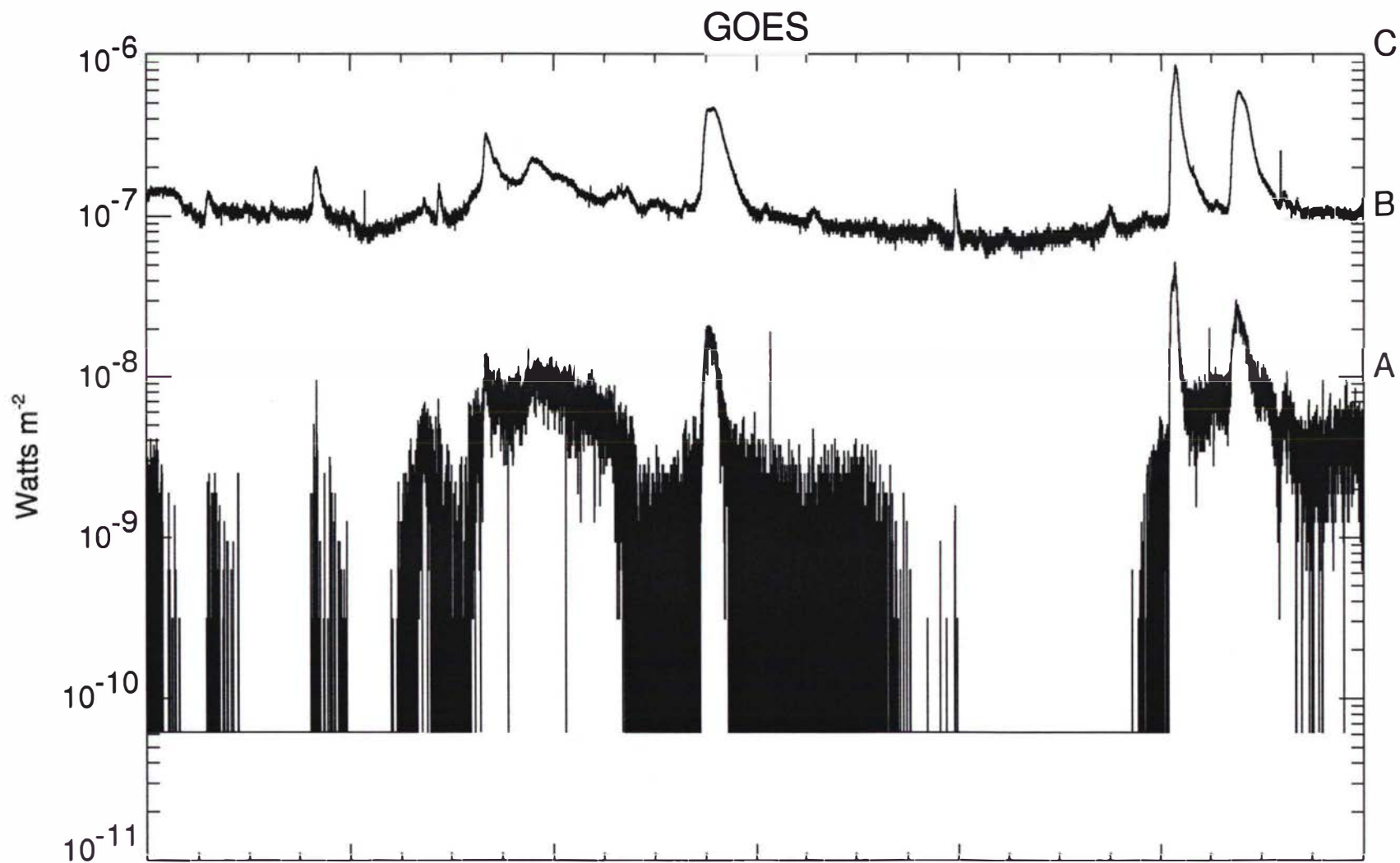


UNIV SAL TIME

Burst Counter 8 at UT= 6.532950592041 h=23518.622 s 06:31:58.622







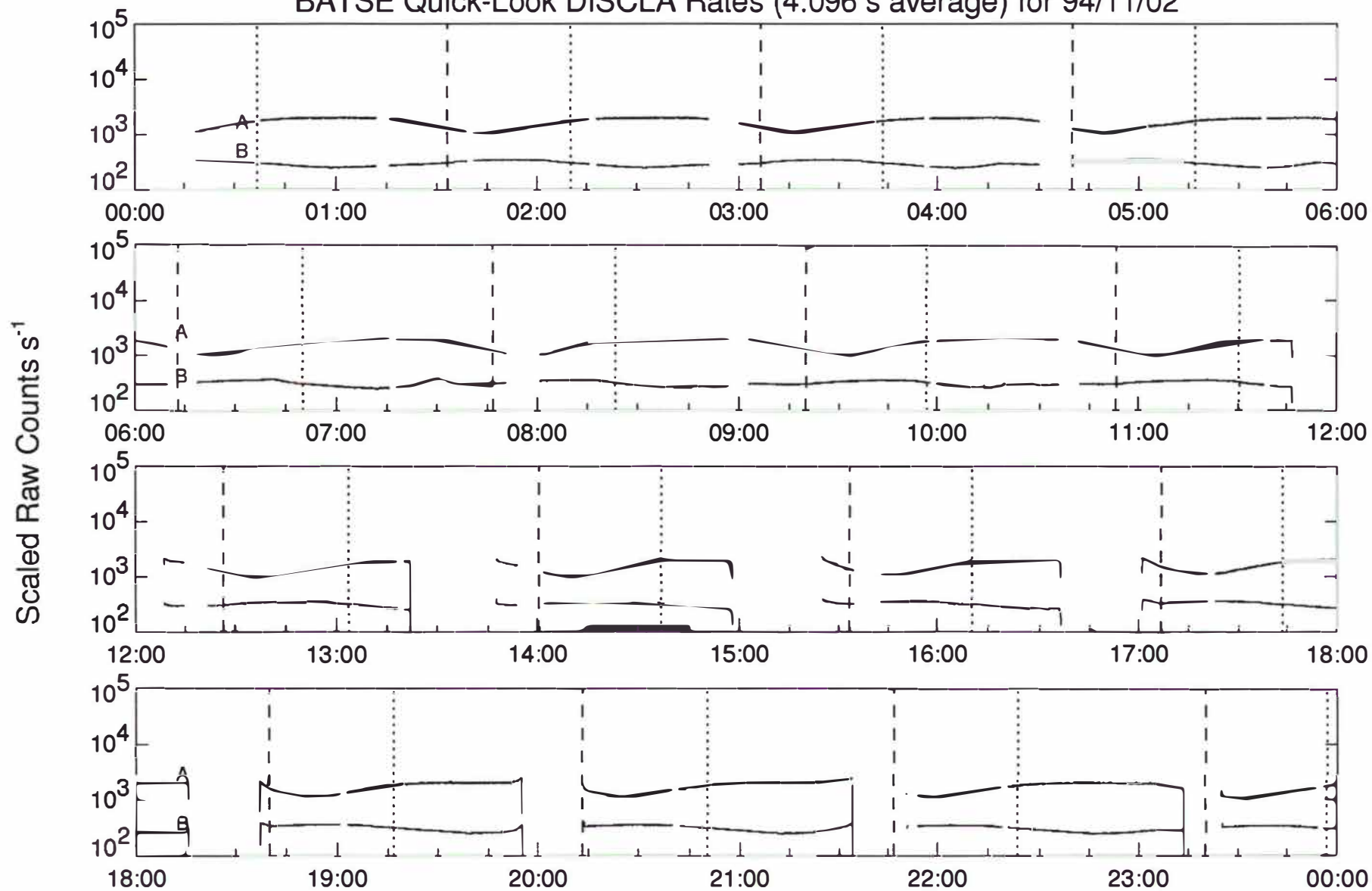
Data Start: 94/11/02, 0000:02

Plot created: 94/11/08, 1340

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 94/11/02

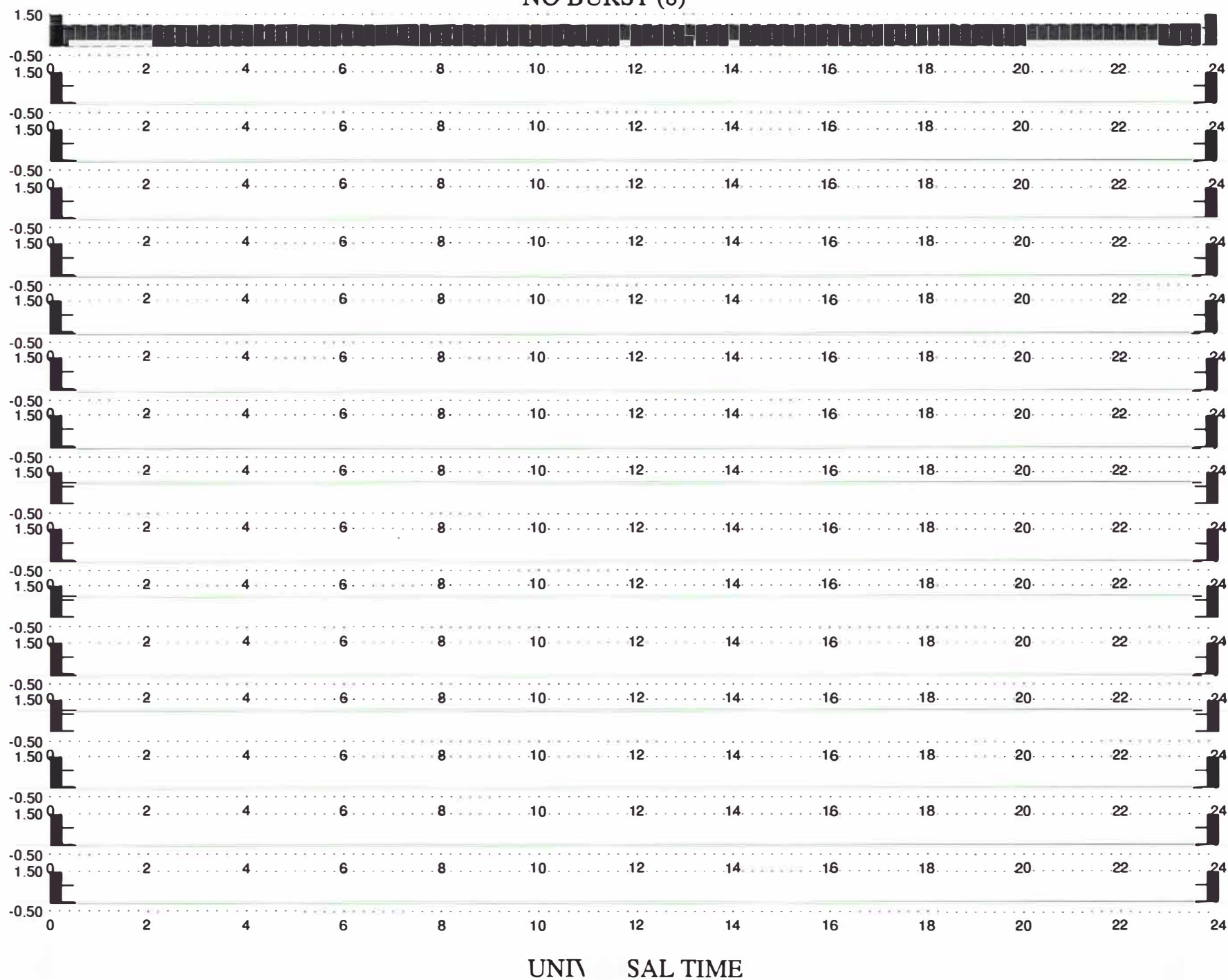


Current Time: 94/11/08, 1320 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

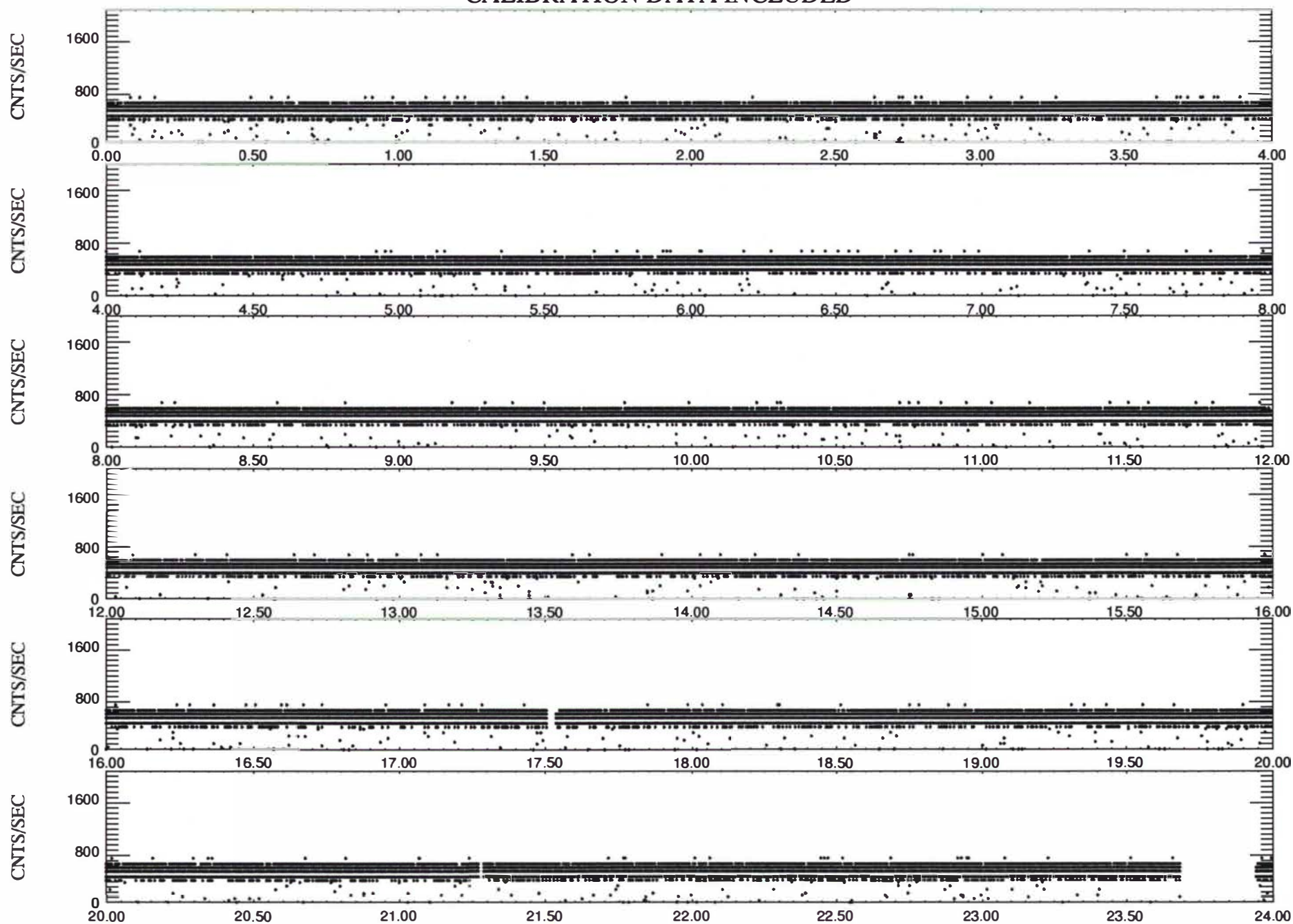
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

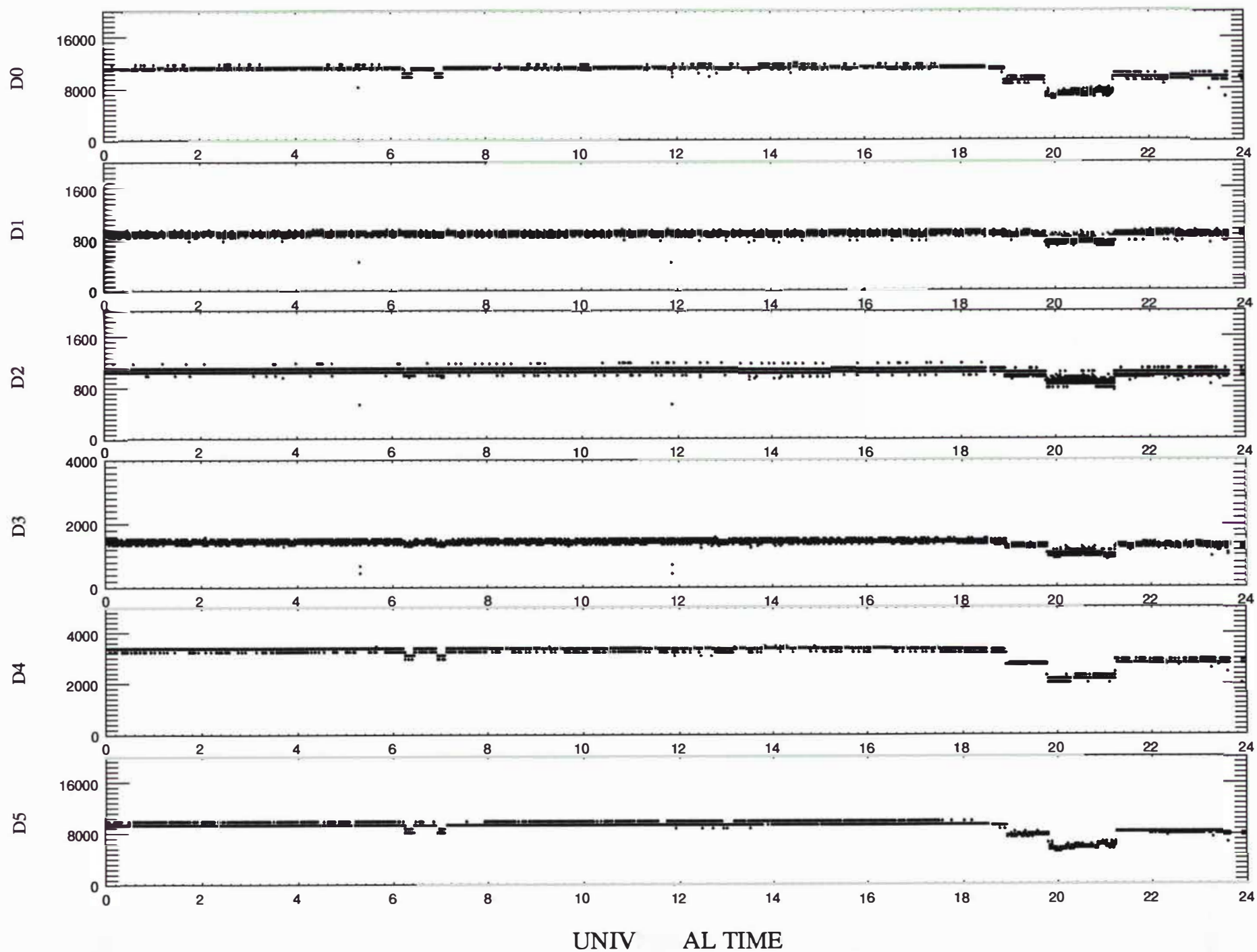
CBU	CCL	DMP	ROM	DMA	OSC	MP.	ICR	SPE	OPM	RSC	CAL	WCH	MEM	BRS	HUS
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

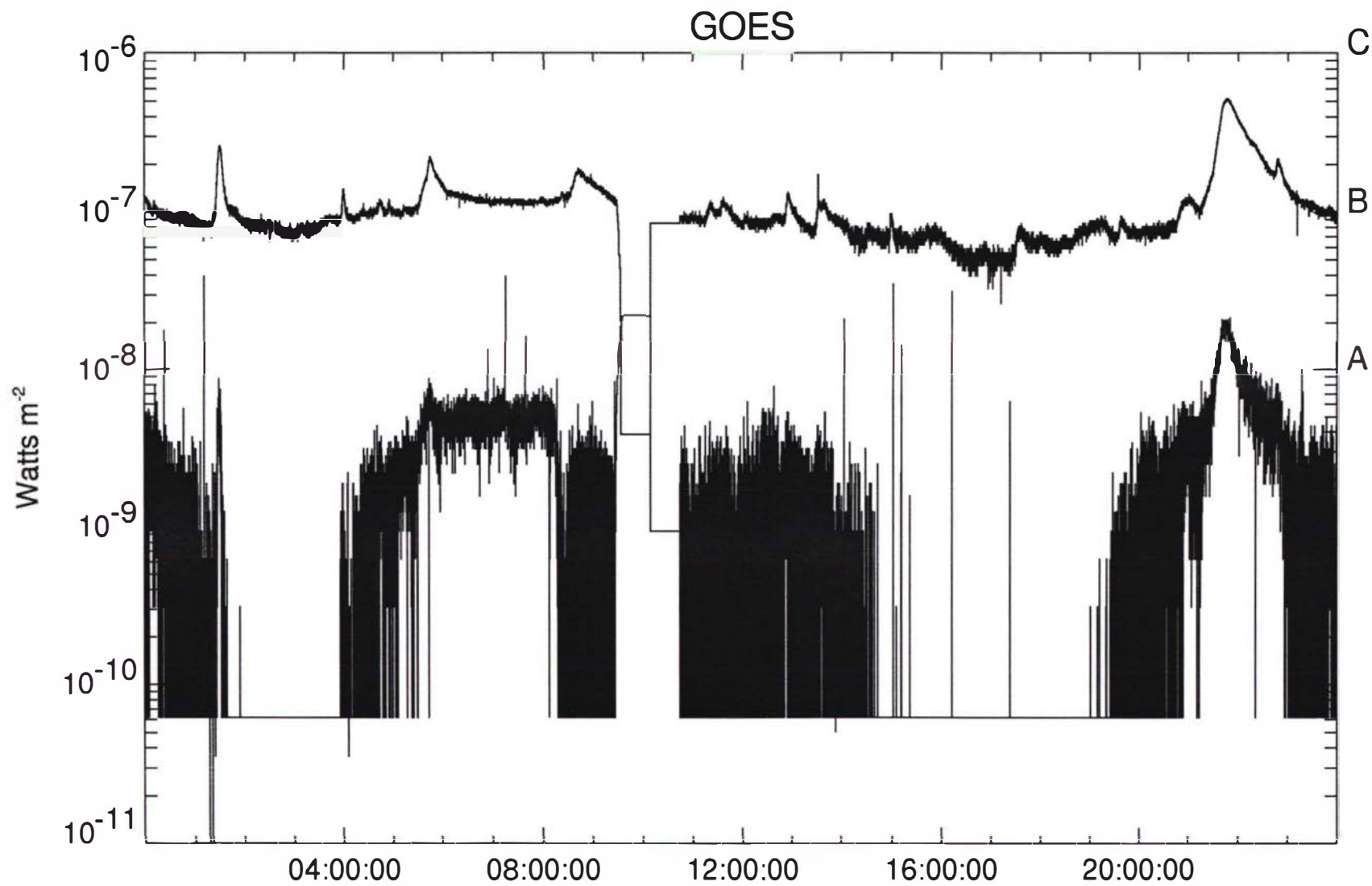


CALIBRATION DATA INCLUDED



UNIV SAL TIME





Data Start: 94/11/03, 0000:00

Plot created: 94/11/08, 1340

Channel

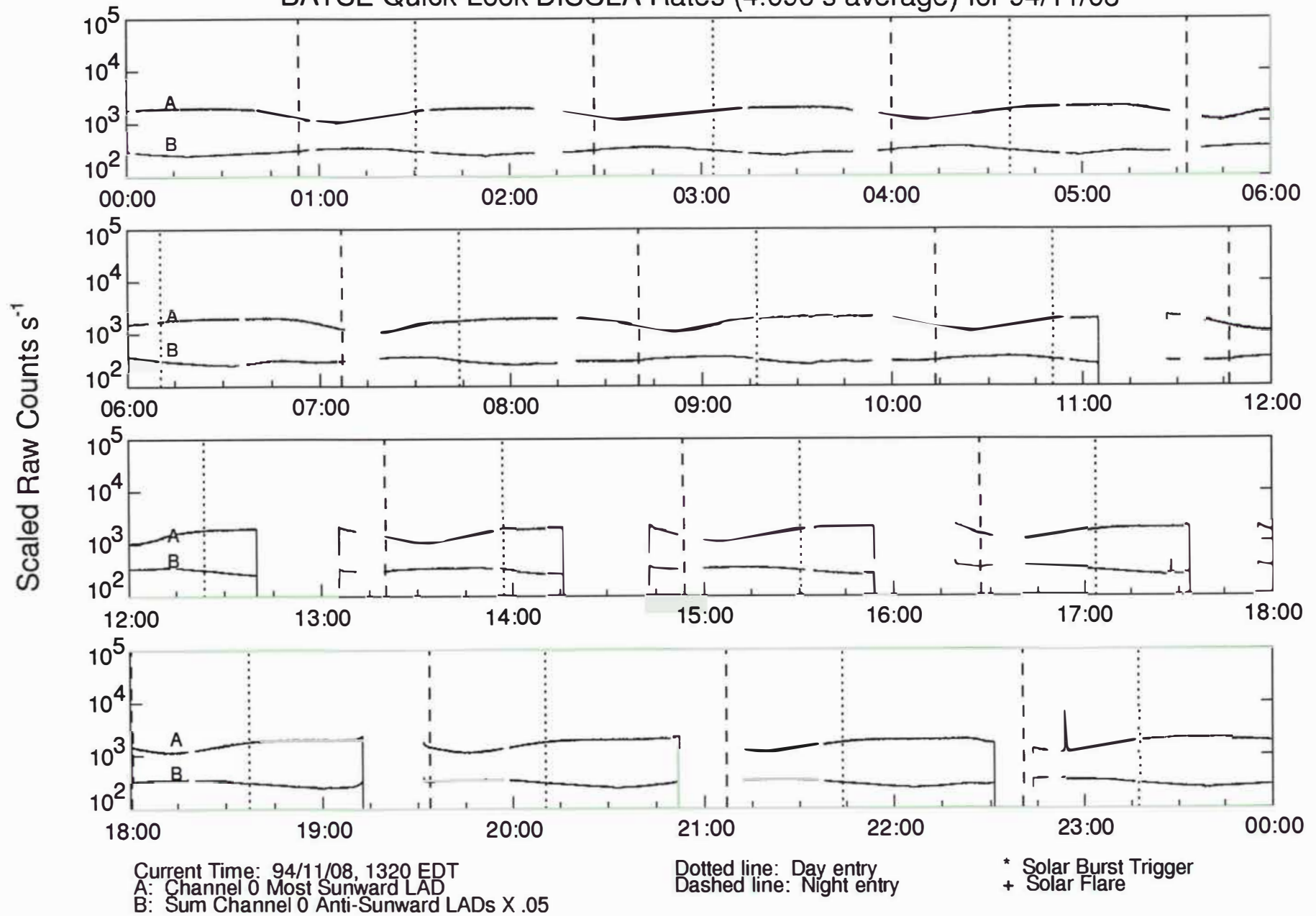
1 (1.0 - 8.0 Angstroms)

Background not subtracted

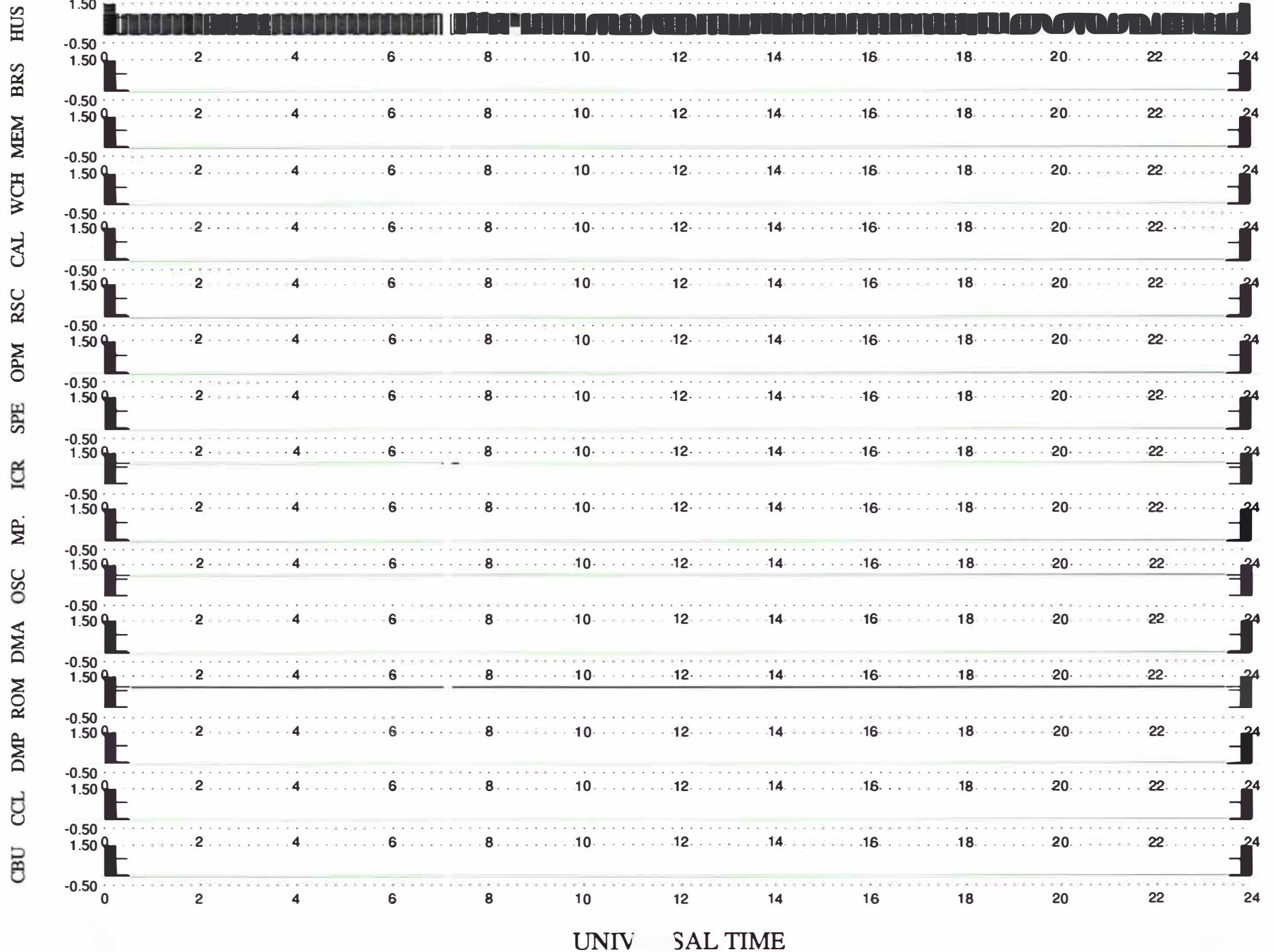
2 (0.5 - 4.0 Angstroms)

Background not subtracted

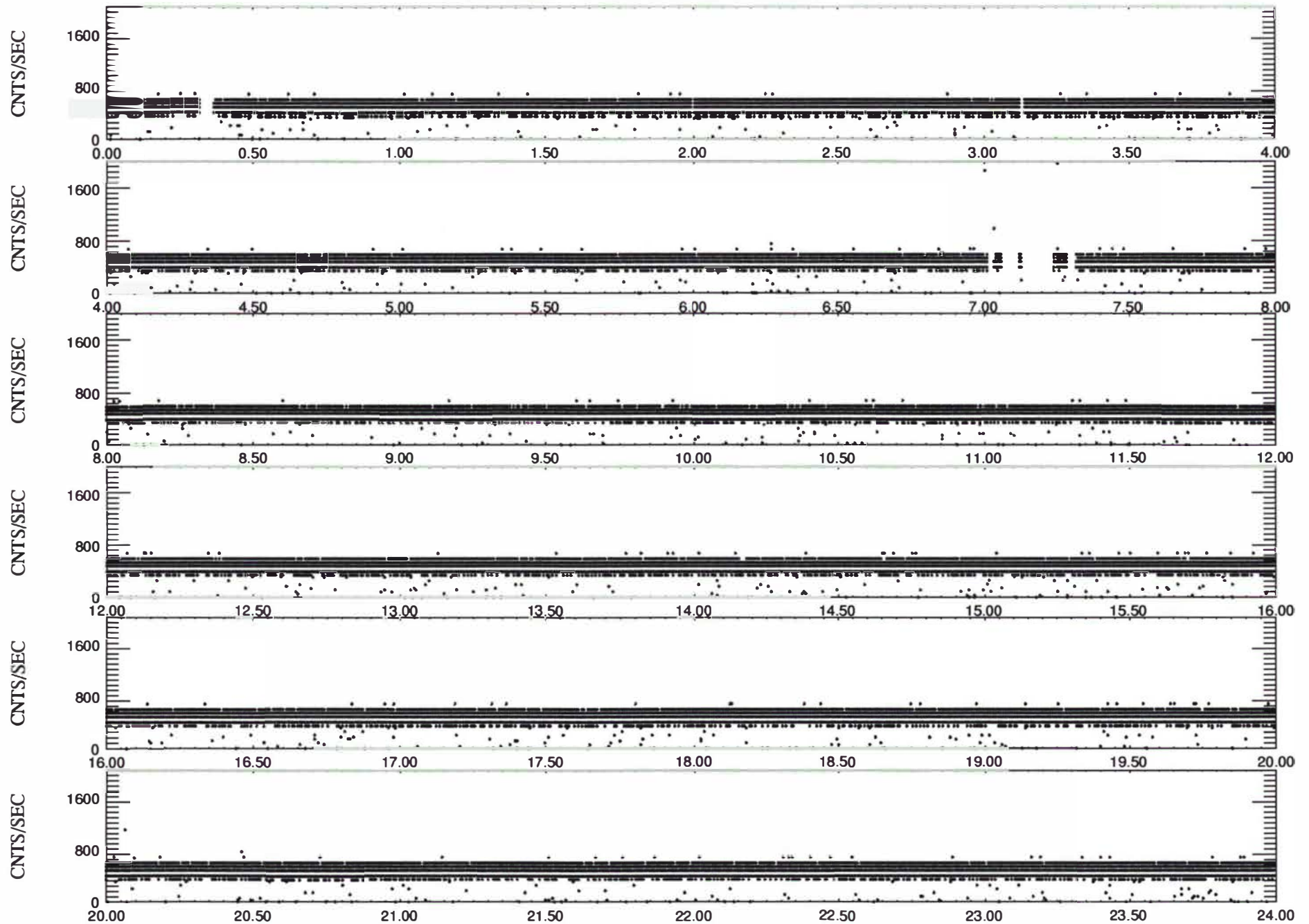
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/03



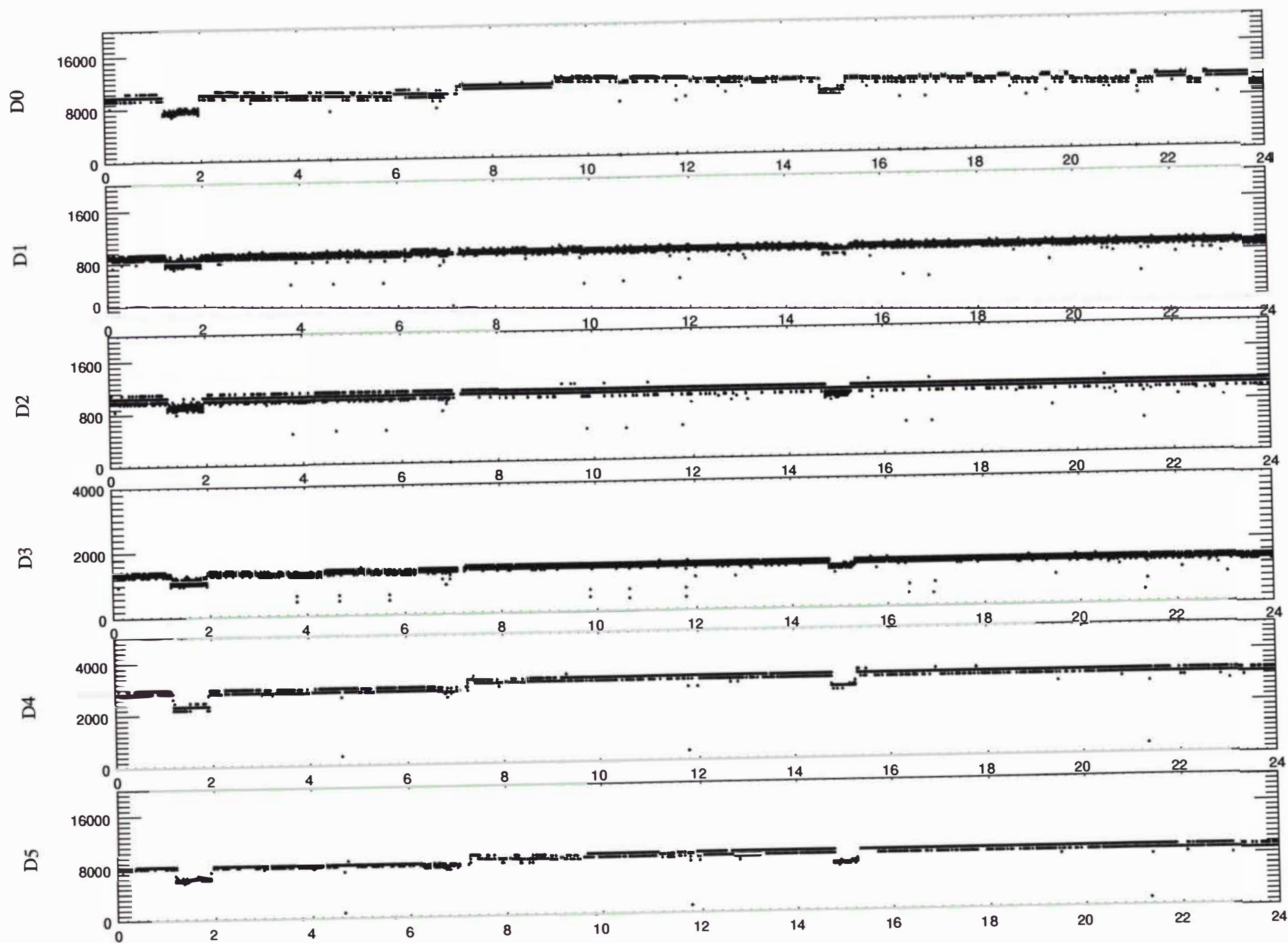
NO BURST (8)



CALIBRATION DATA INCLUDED



UNIV SAL TIME



UNIV: AL TIME

Date: June 23 '03

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ ~~Jim~~ Jim Schmidling's stat file correction applied?
- ☒ ~~Final~~ Final ephemeris used?
- ☒ ~~Final~~ Final, CDROM data used?
- ☒ ~~Is~~ 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

- ☐ BATSE ephemeris for T_0 ? *N/A*
- ☐ Error circle position and radius from public catalog used? *N/A*
- ☐ If MER data were used, is a 30 ms systematic error included? *N/A*

3. NEAR Data

- ☐ Final, correct time used? (Files postmarked vwx@boccl, from from Teresa Sheets, postmarked May 2 1999 or later have the correct time; files on website have incorrect times)
- ☐ BATSE >100 keV data used for NEAR correlation?
- ☒ ~~ACCESS~~ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

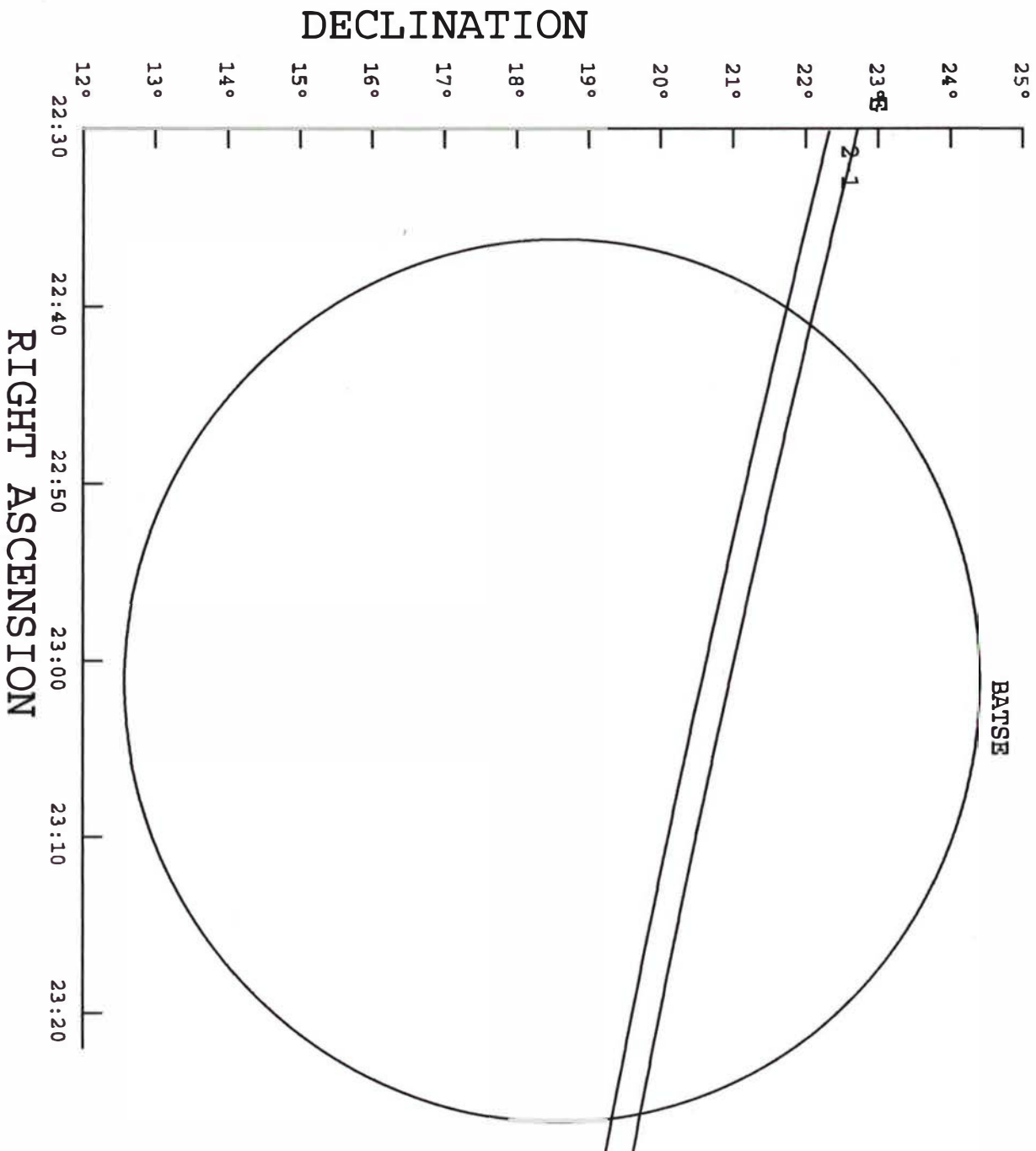
G=GALACTIC EQUATOR

1 BATSE

2 ULYSSES

EVENT OF NOV 4, 1994 9:46

23 / 6 / 3



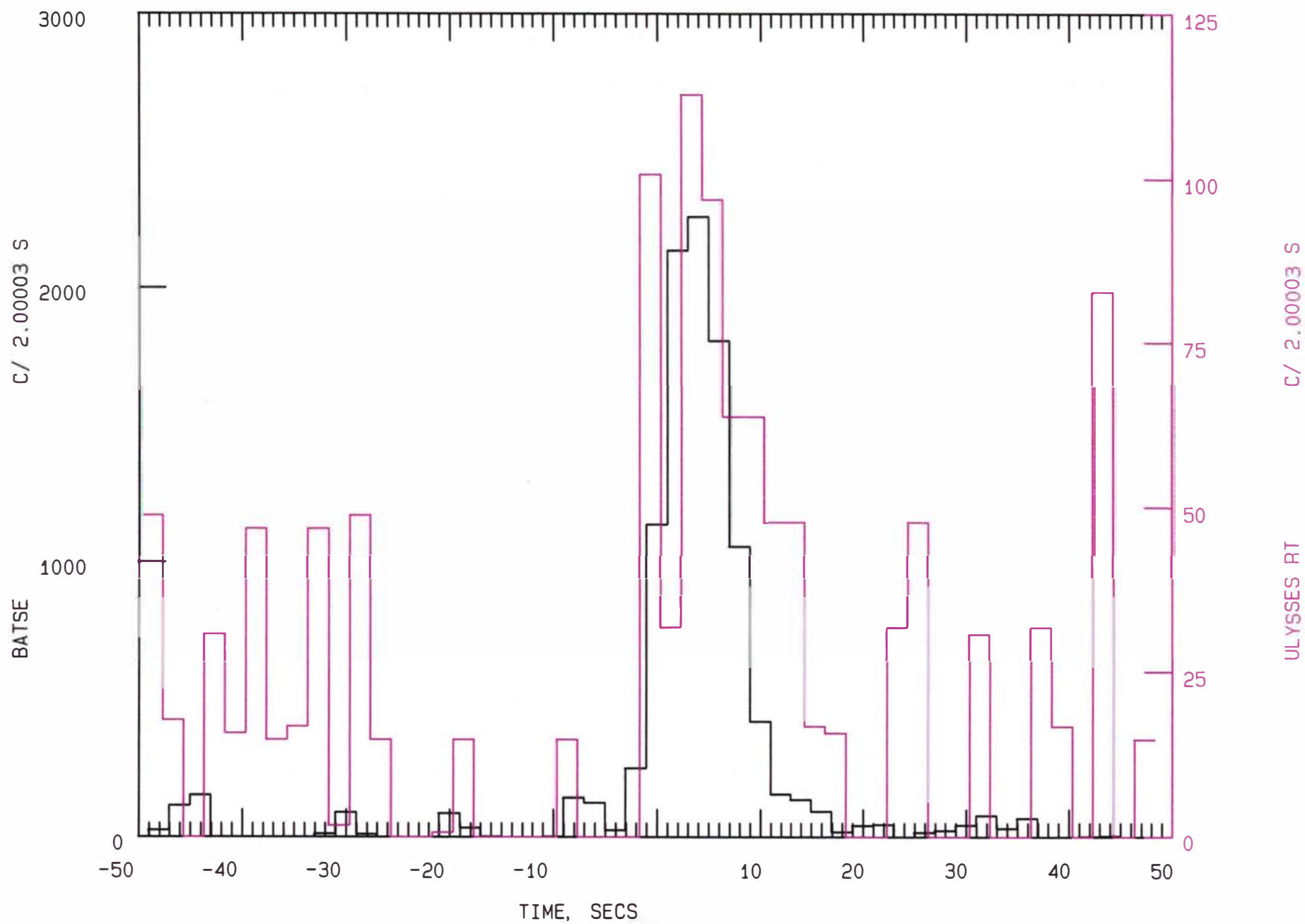
BATSE

-ULYSSES RT CORRELATION

04/11/94

35177.649

23/ 6/ 3

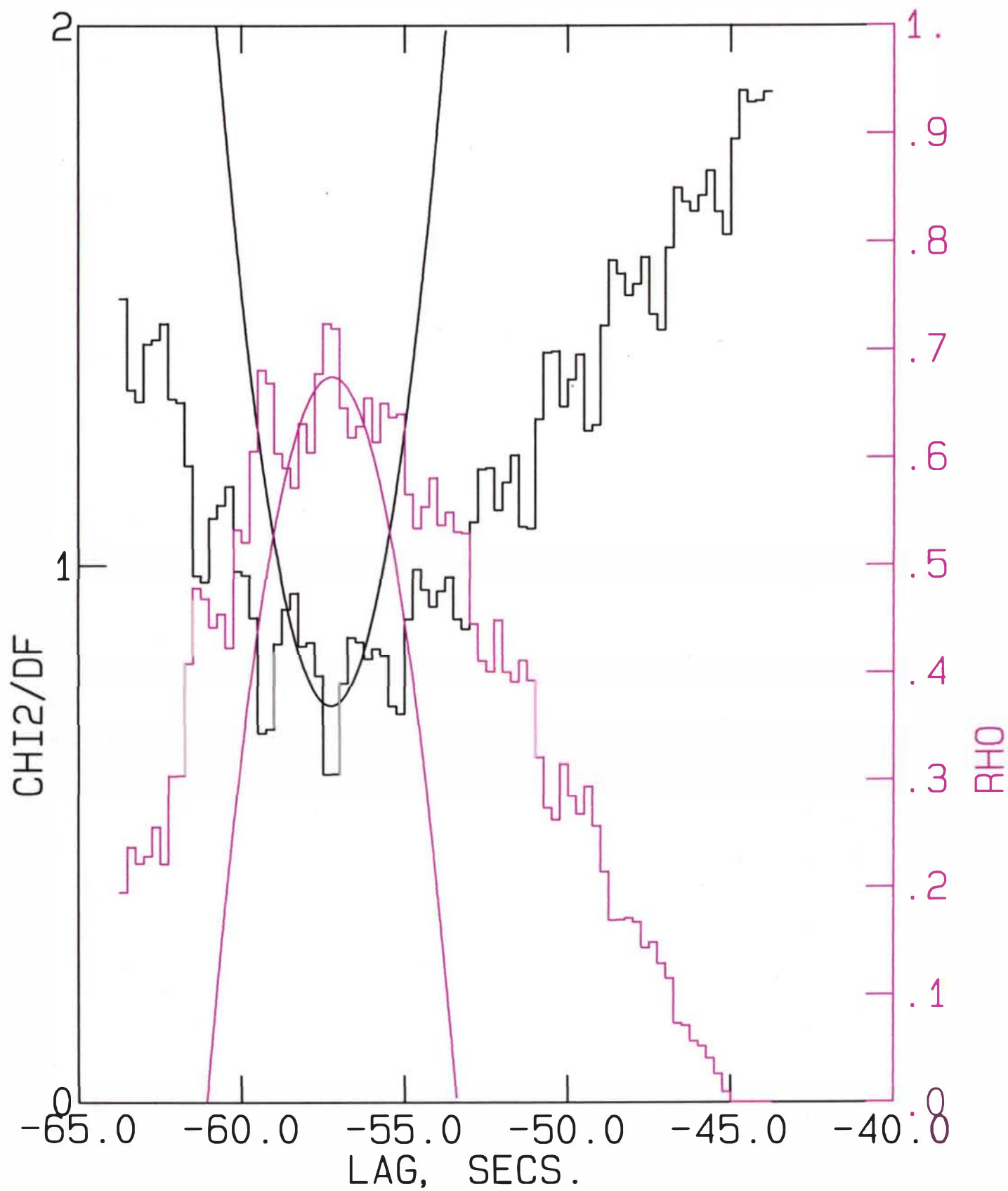


BATSE

-ULYSSES RT CORRELATION

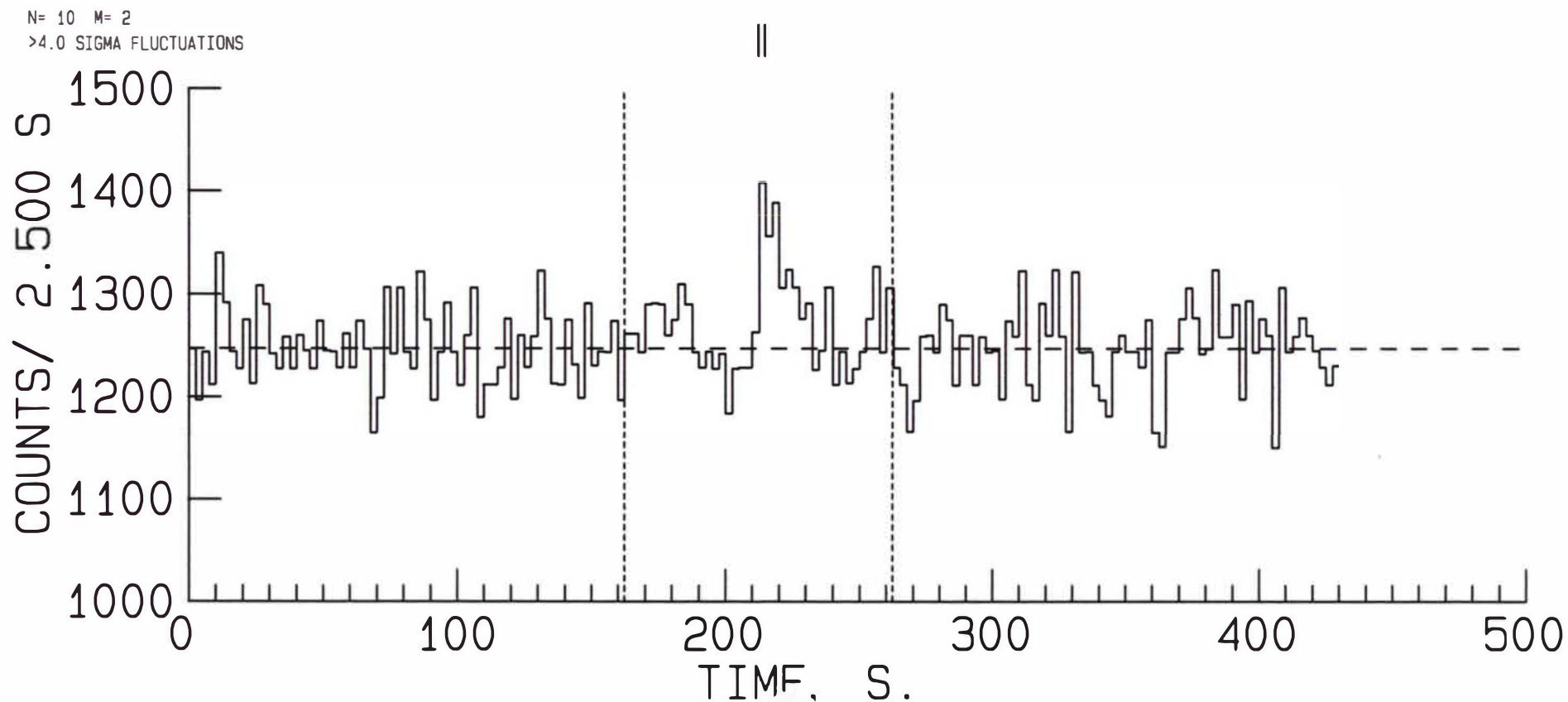
04/11/94

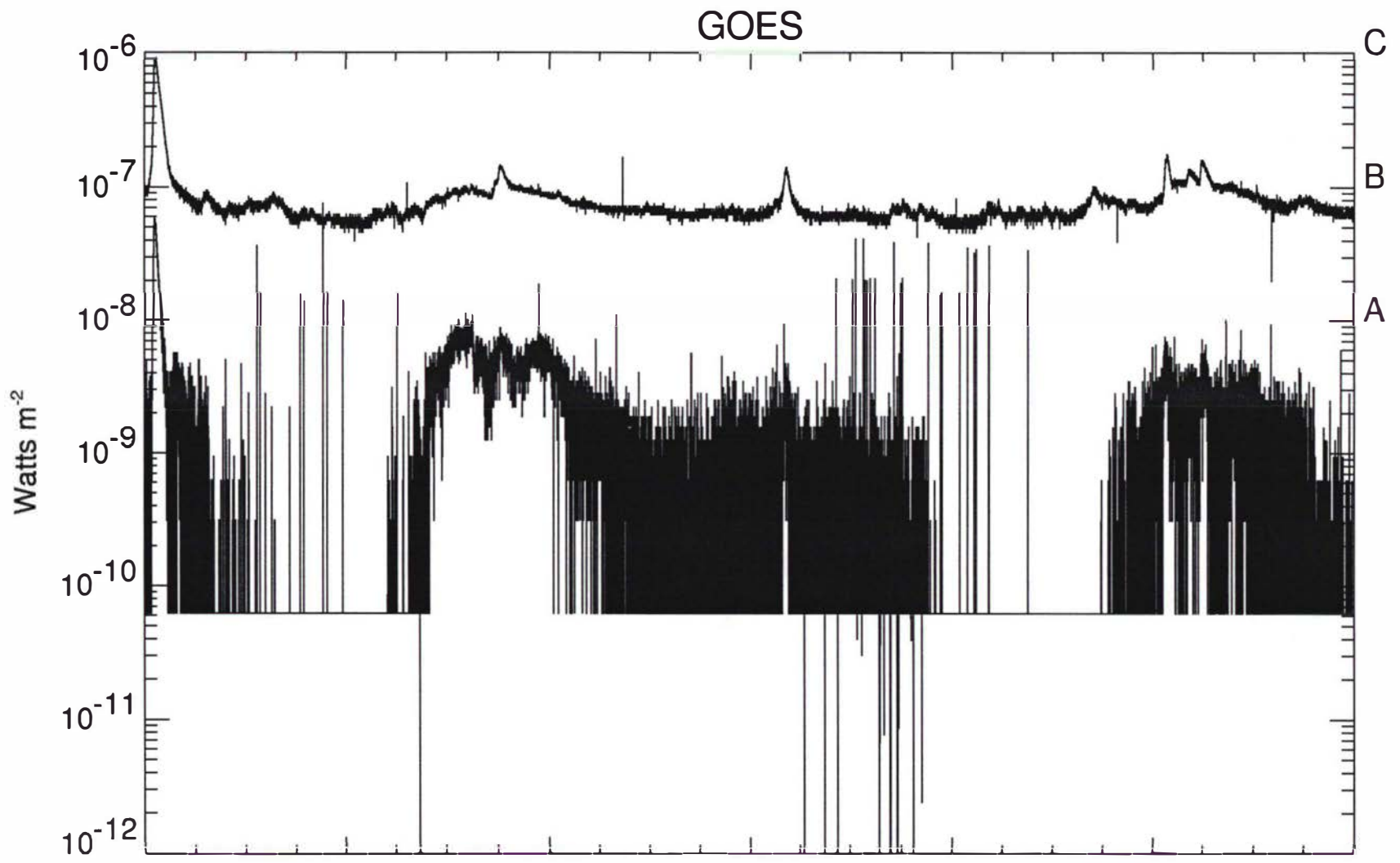
35177.649



ULYSSES RT
4/11/94 35568.141 s
0.250 S INTERVALS REGROUPED BY 10
22- 147 keV

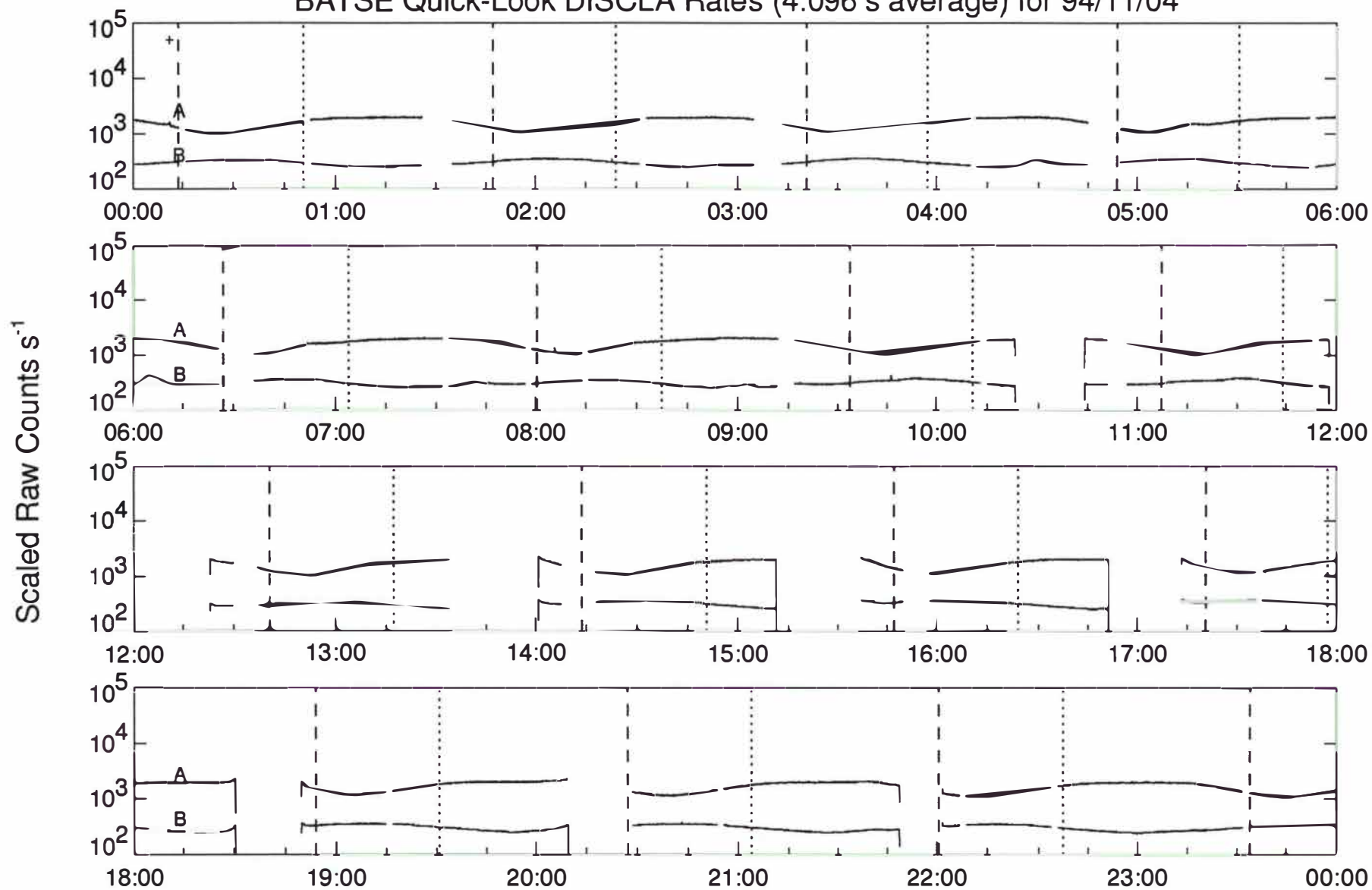
23/ 6/ 3





Data Start: 94/11/04, 0000:01 Plot created: 94/11/08, 1341
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 94/11/04

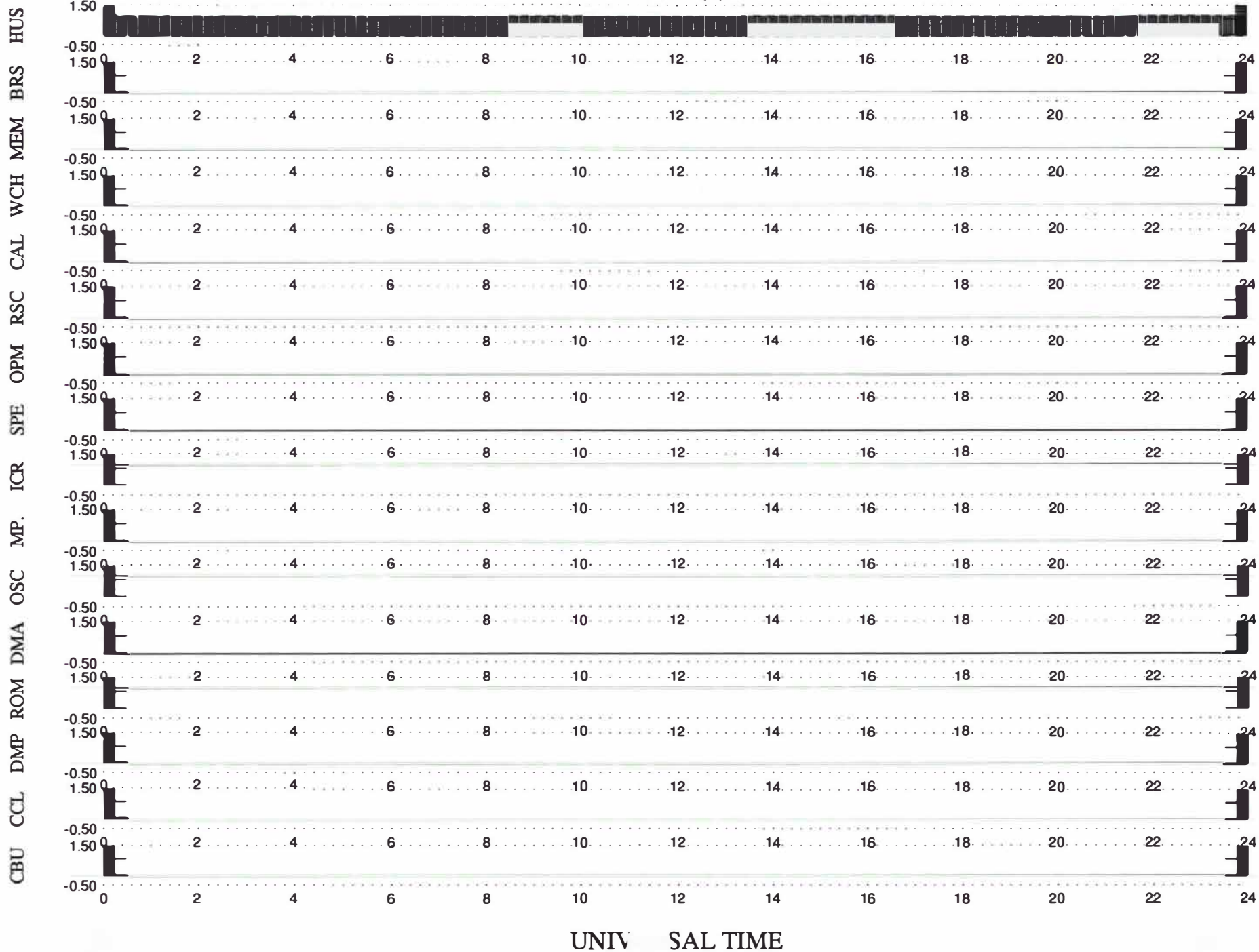


Current Time: 94/11/08, 1321 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

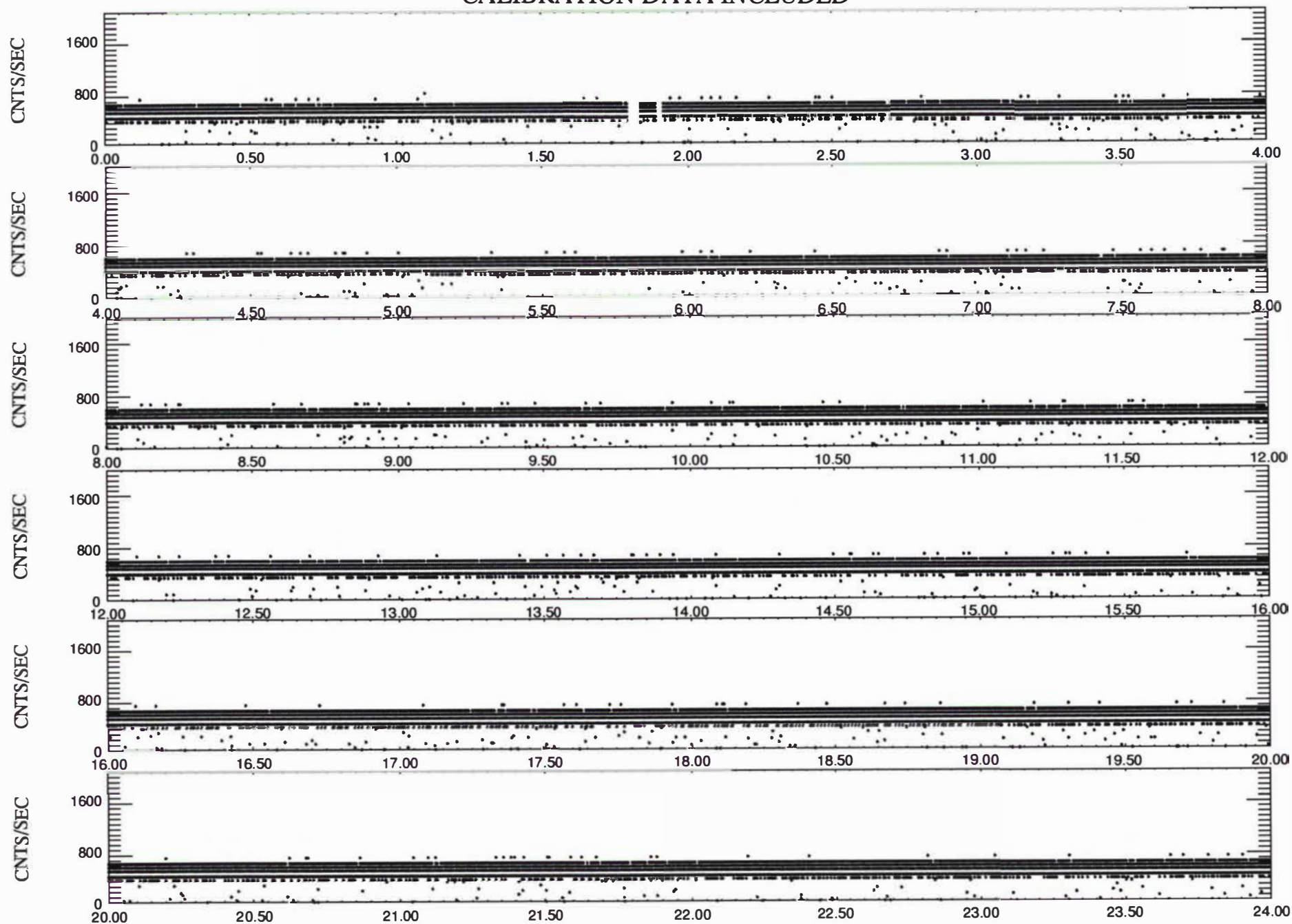
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

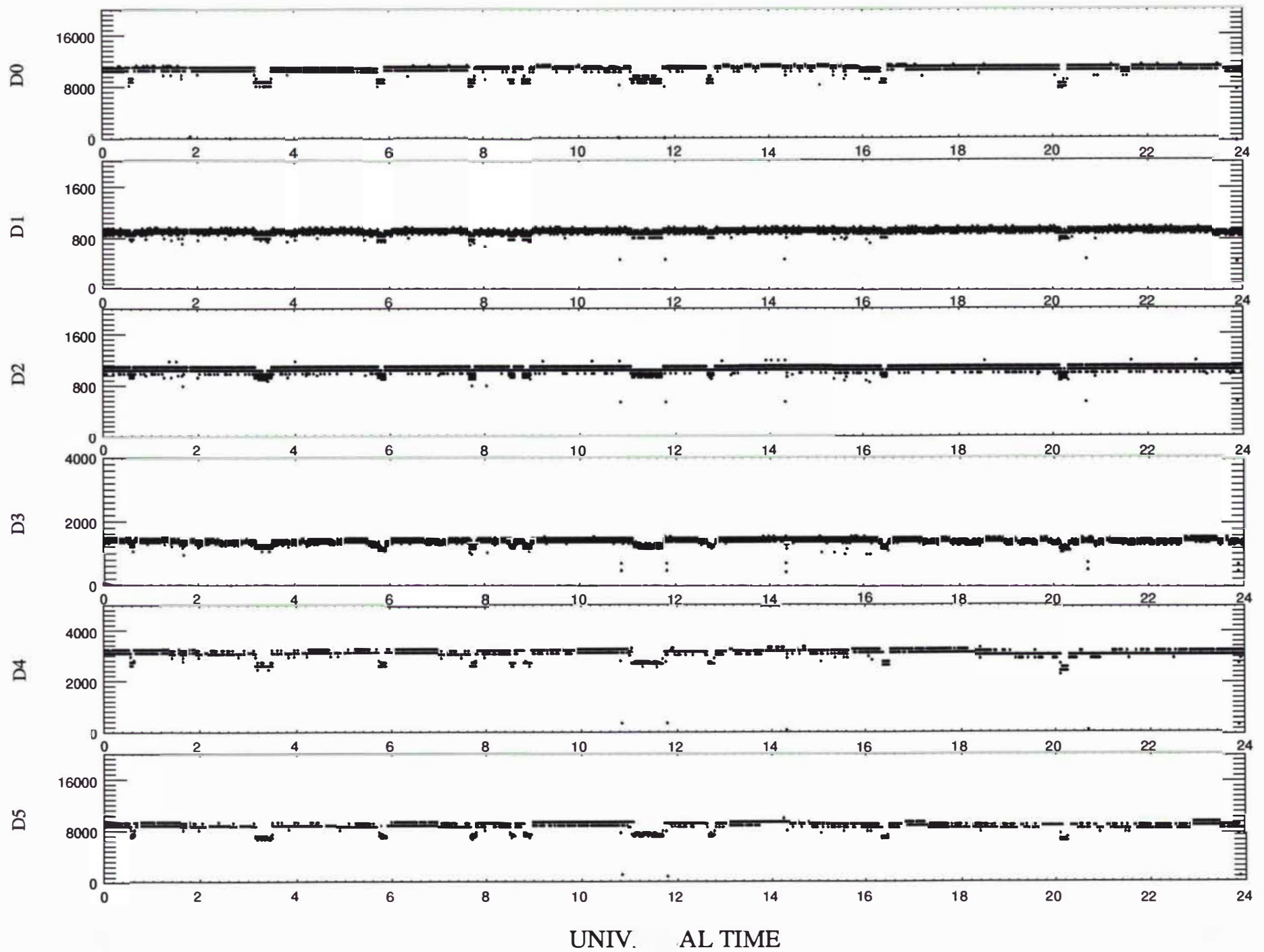
NO BURST (8)



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From DEAL@ssl.msfc.nasa.gov Mon Nov 7 10:45 PST 1994
Date: Mon, 7 Nov 1994 12:45:25 -0600 (CST)
From: DEAL@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.: 03274

TIME: TJD=9661 SECONDS=04380

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

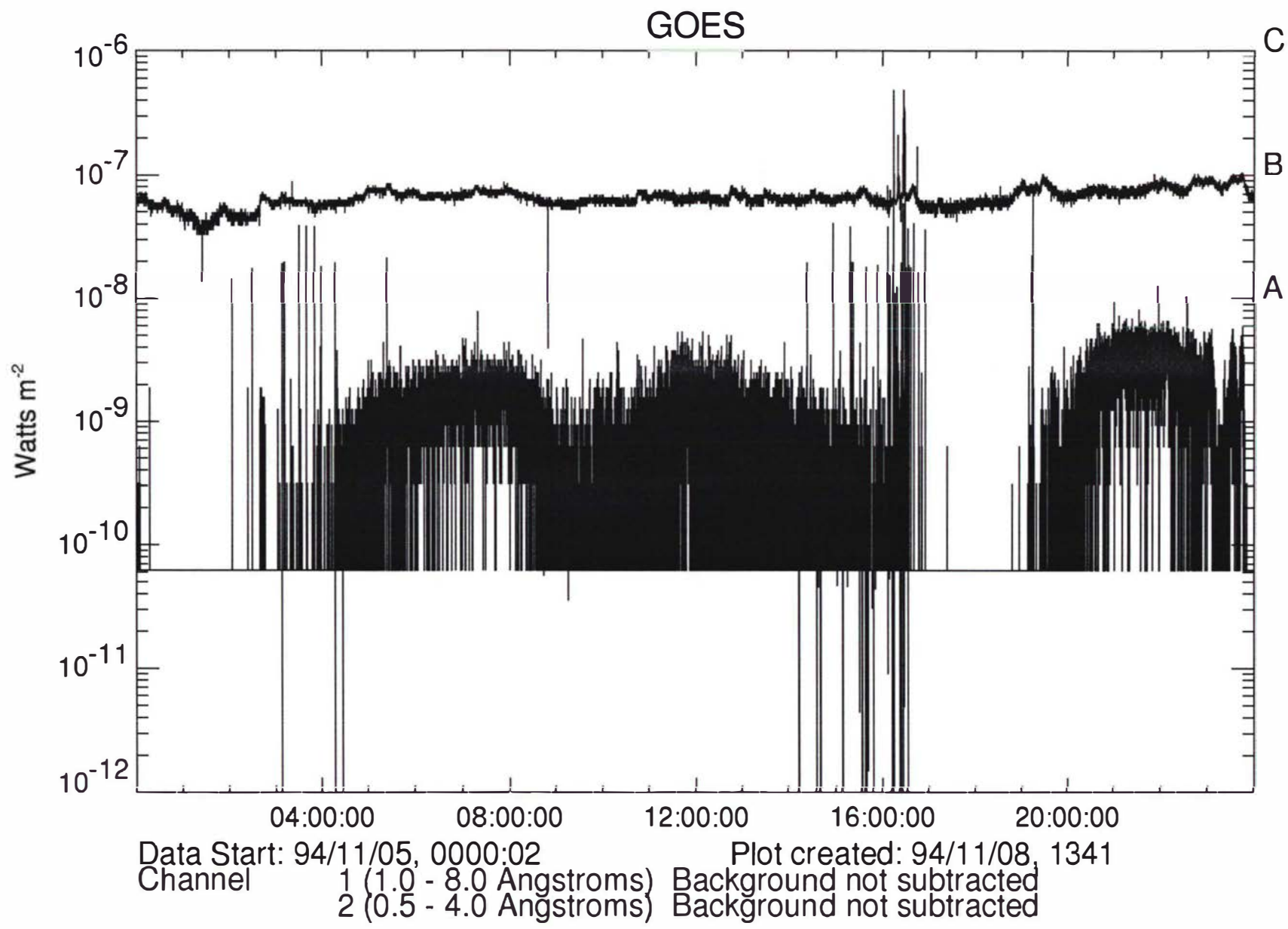
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

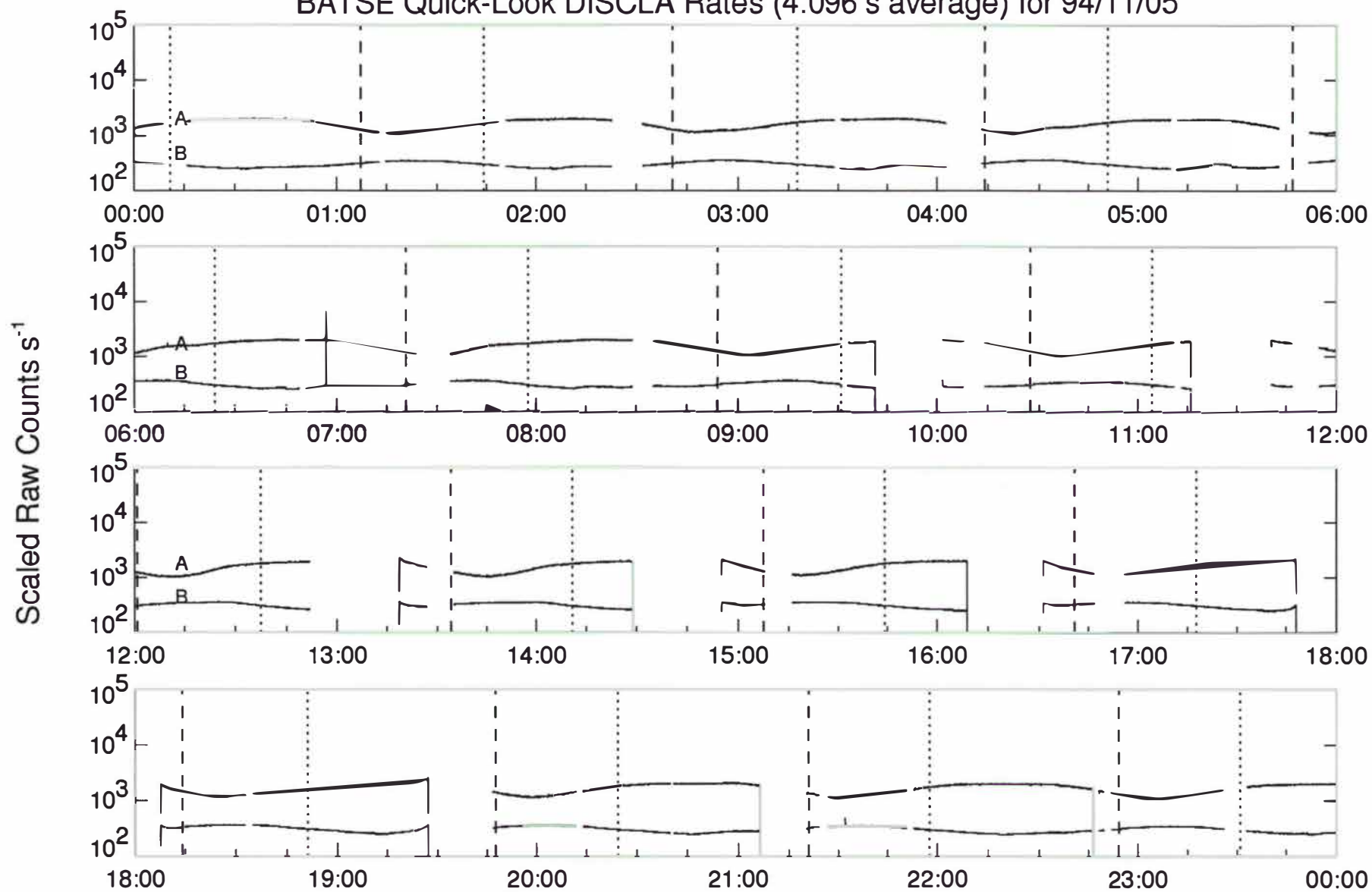
LOCATION: ZENITH=118.4 AZIMUTH=330.3 ERROR= DEGREES

COMMENTS:

TGF. DURATION ~2.5 MS. NOT SEEN BELOW 100KEV.



BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/05

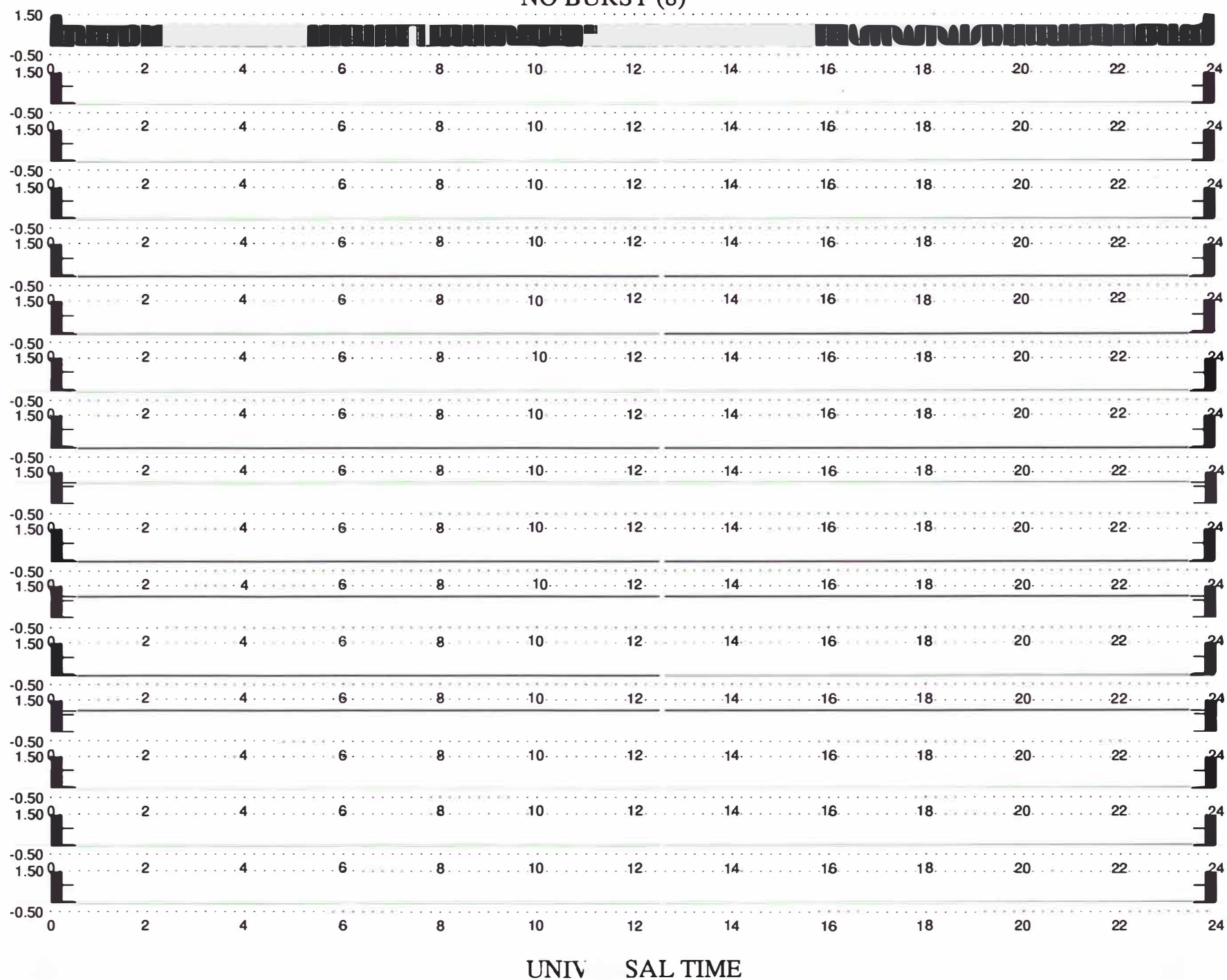


Current Time: 94/11/08, 1321 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

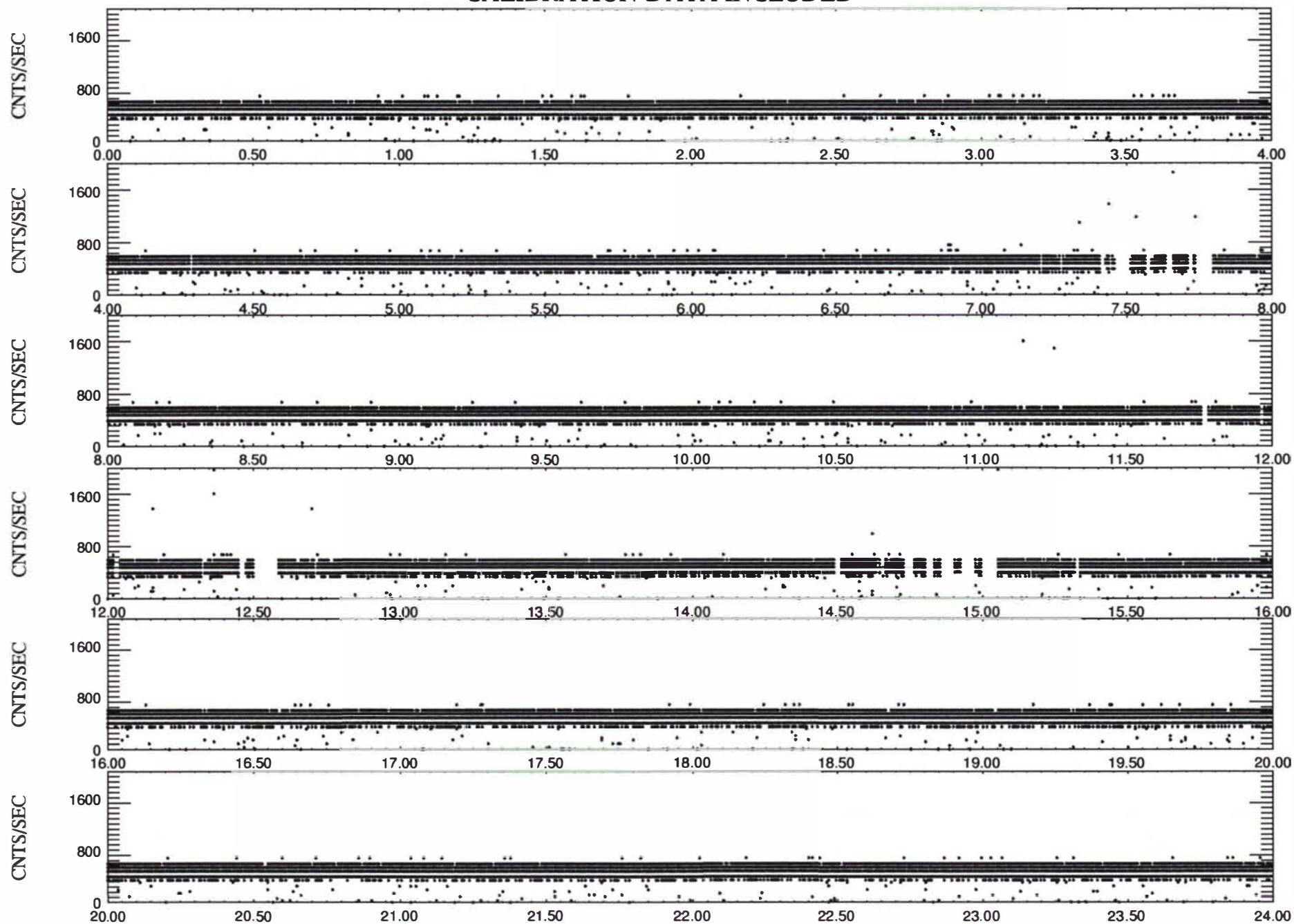
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

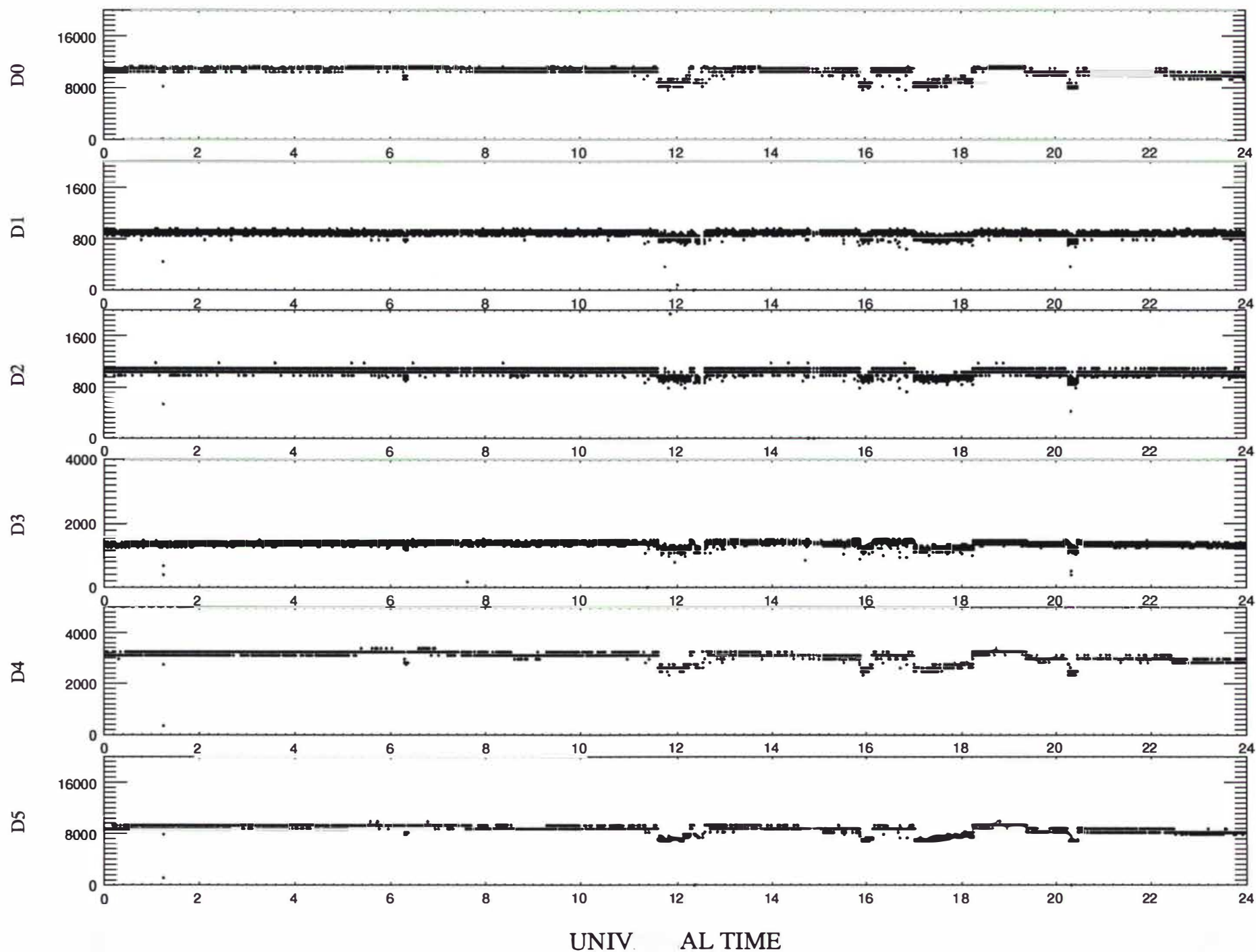
CBU	CCL	DMP	ROM	DMA	OSC	MP.	ICR	SPE	OPM	RSC	CAL	WCH	MEM	BRS	HUS
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From RICHARDSON@ssl.msfc.nasa.gov Tue Nov 8 07:44 PST 1994
Date: Tue, 8 Nov 1994 9:44:03 -0600 (CST)
From: RICHARDSON@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.: 3275

TIME: TJD=9662 SECONDS=28186

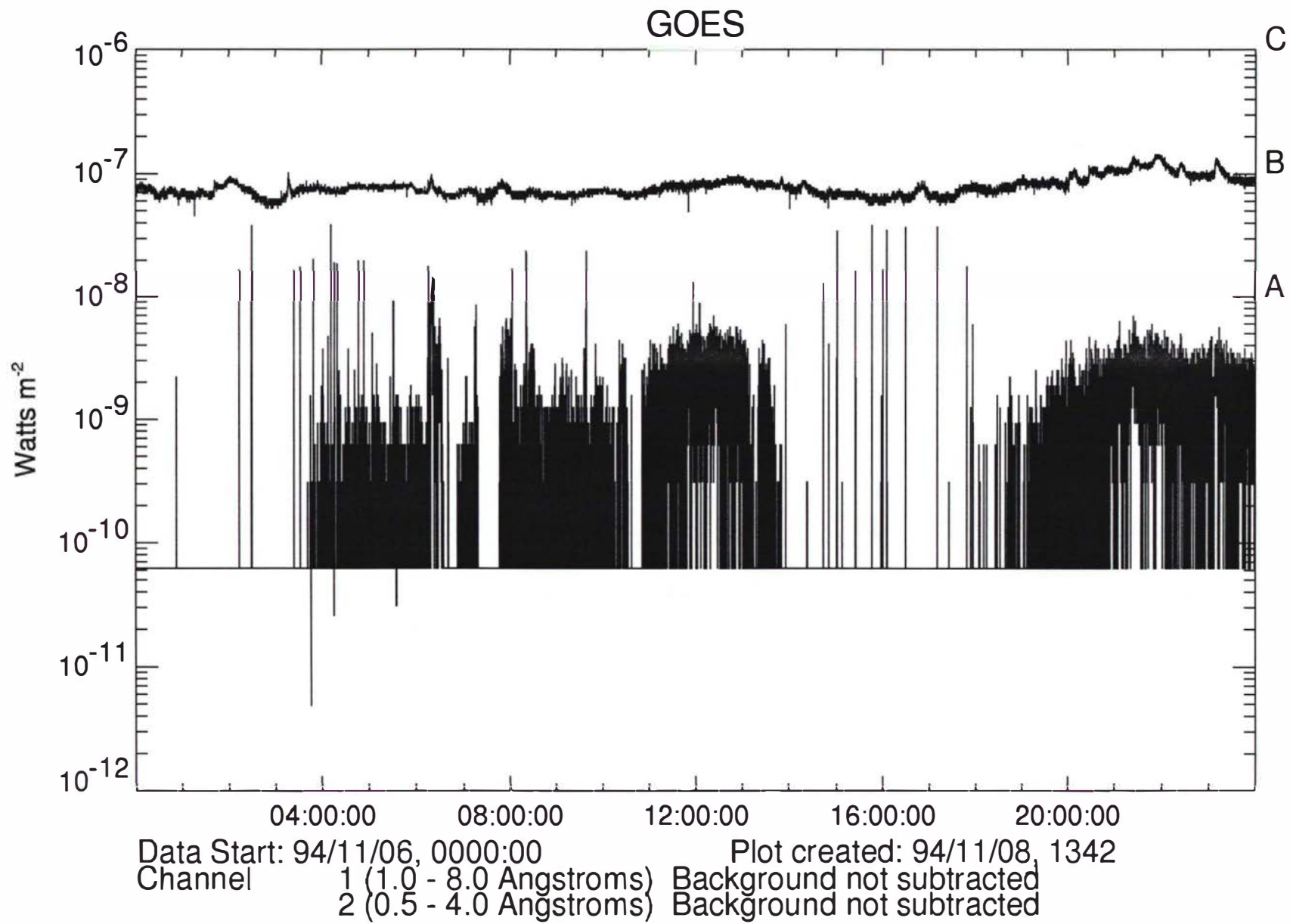
TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

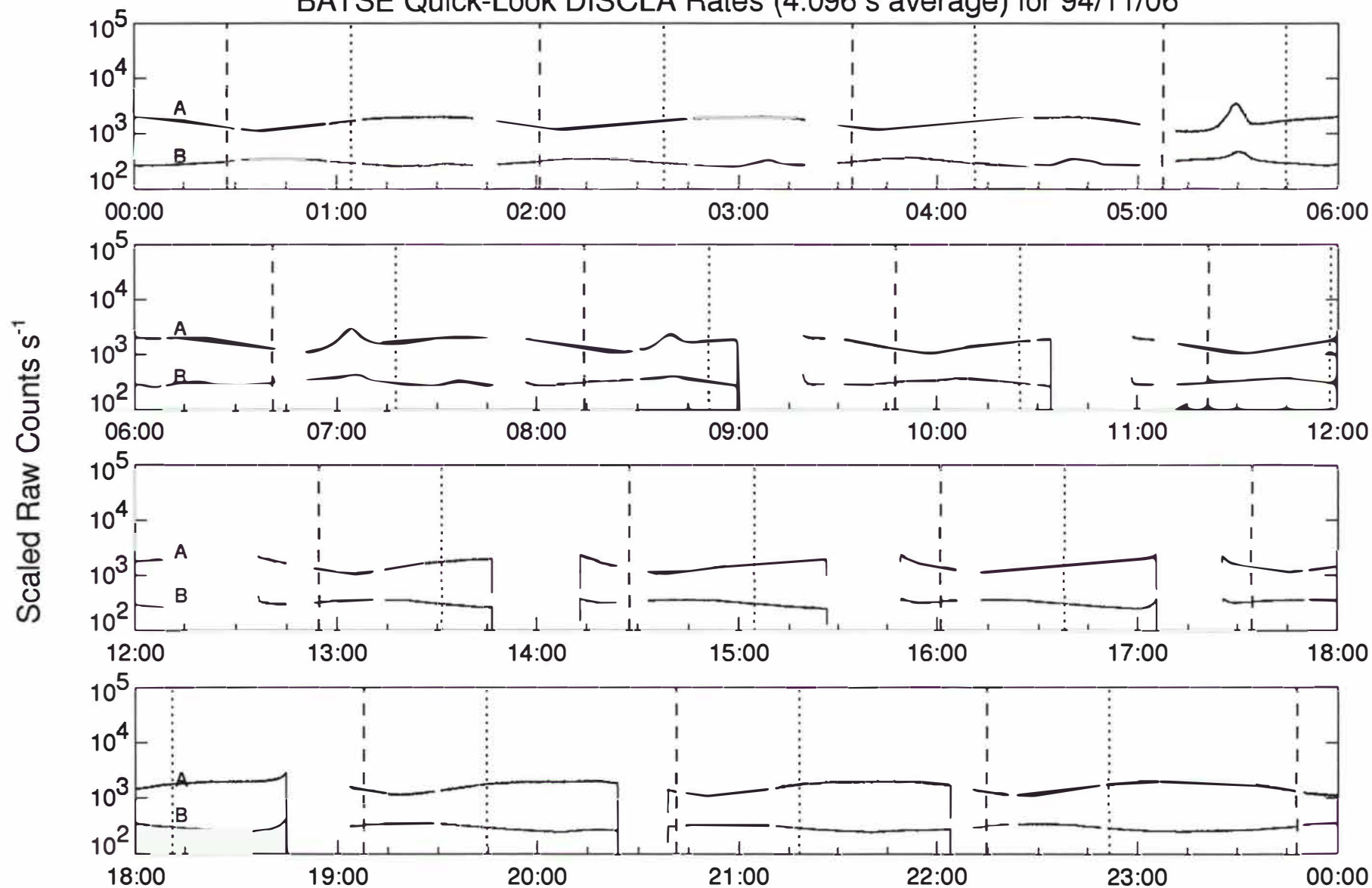
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
PARTICLES AT A DISTANCE



BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/06

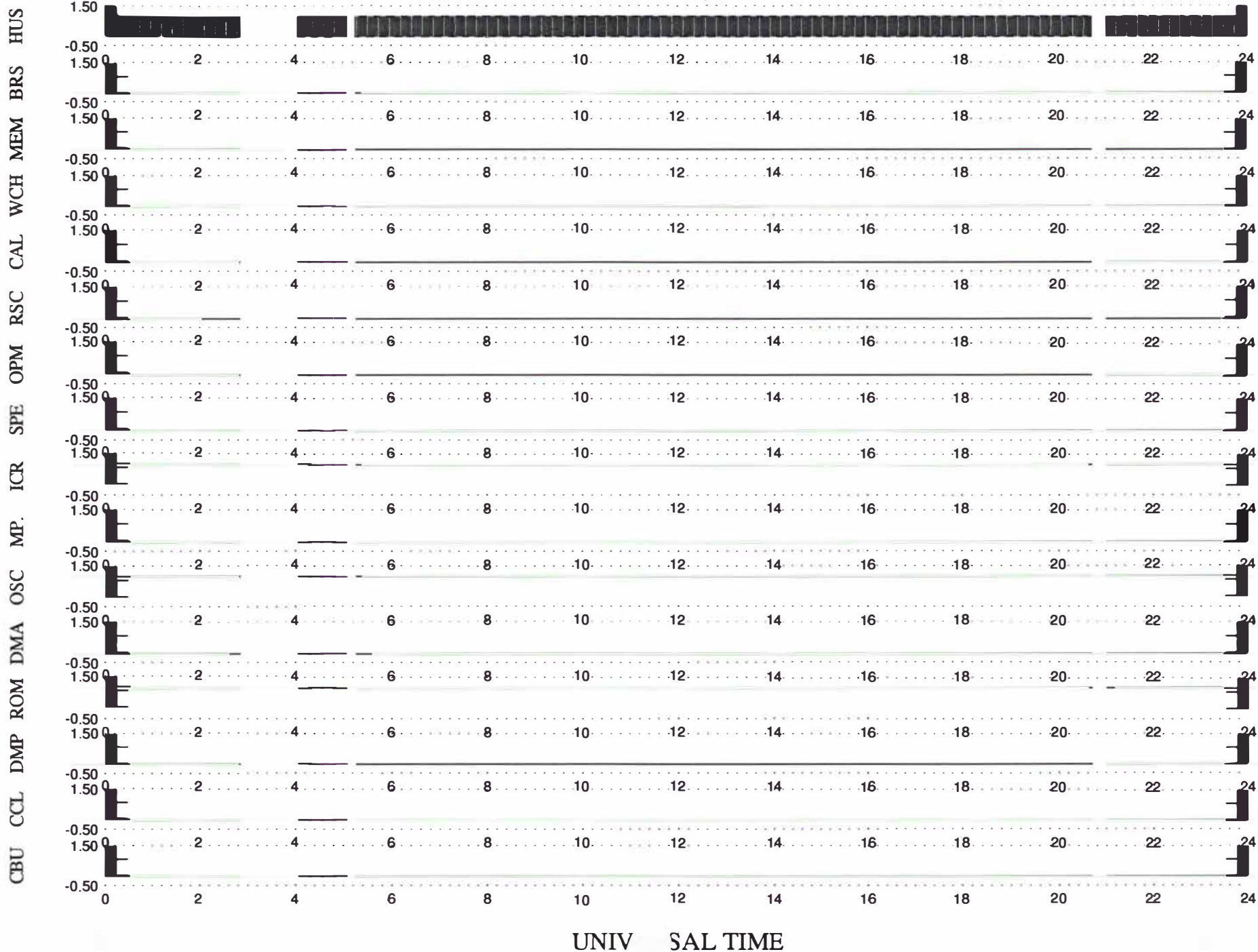


Current Time: 94/11/08, 1321 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

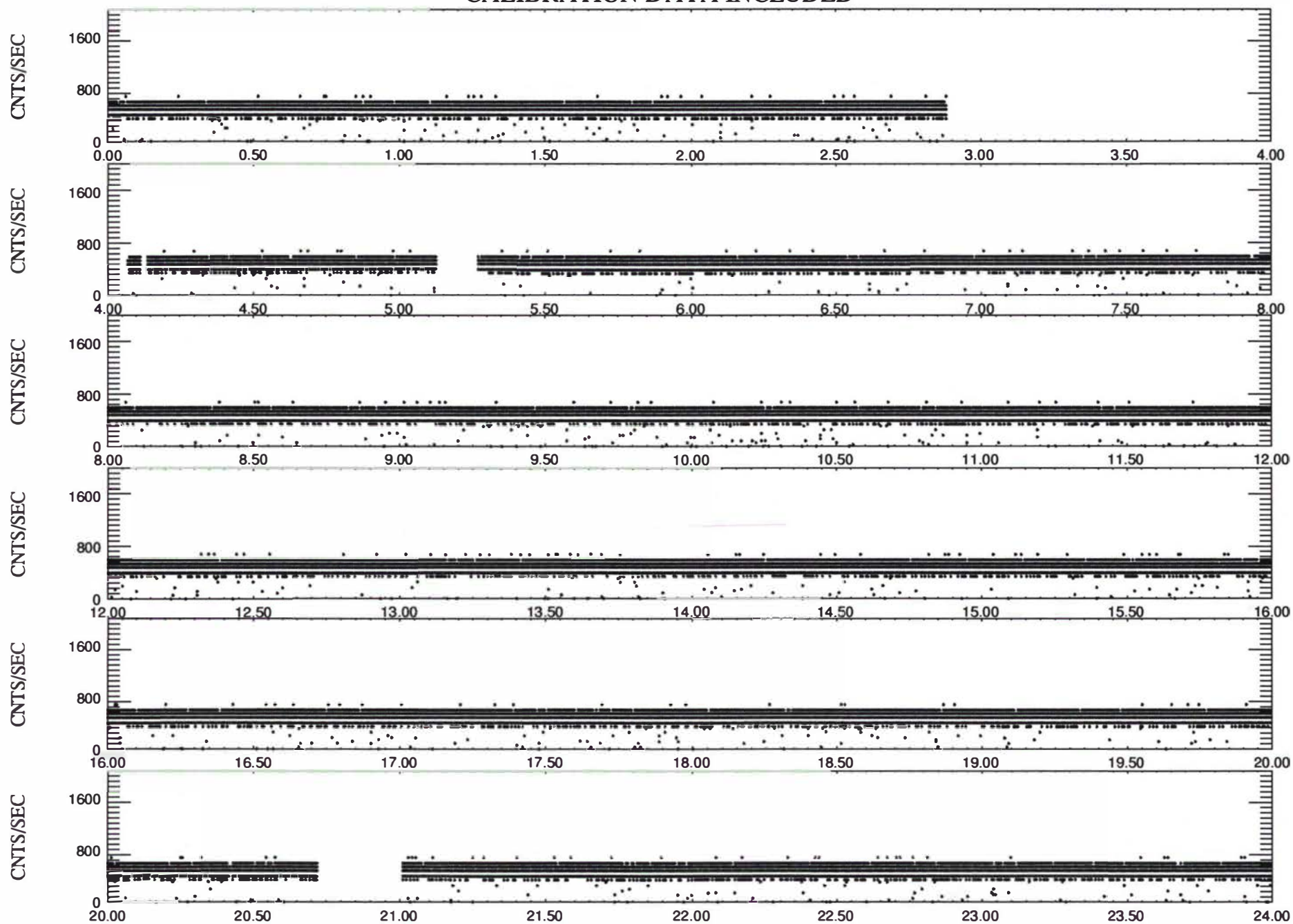
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

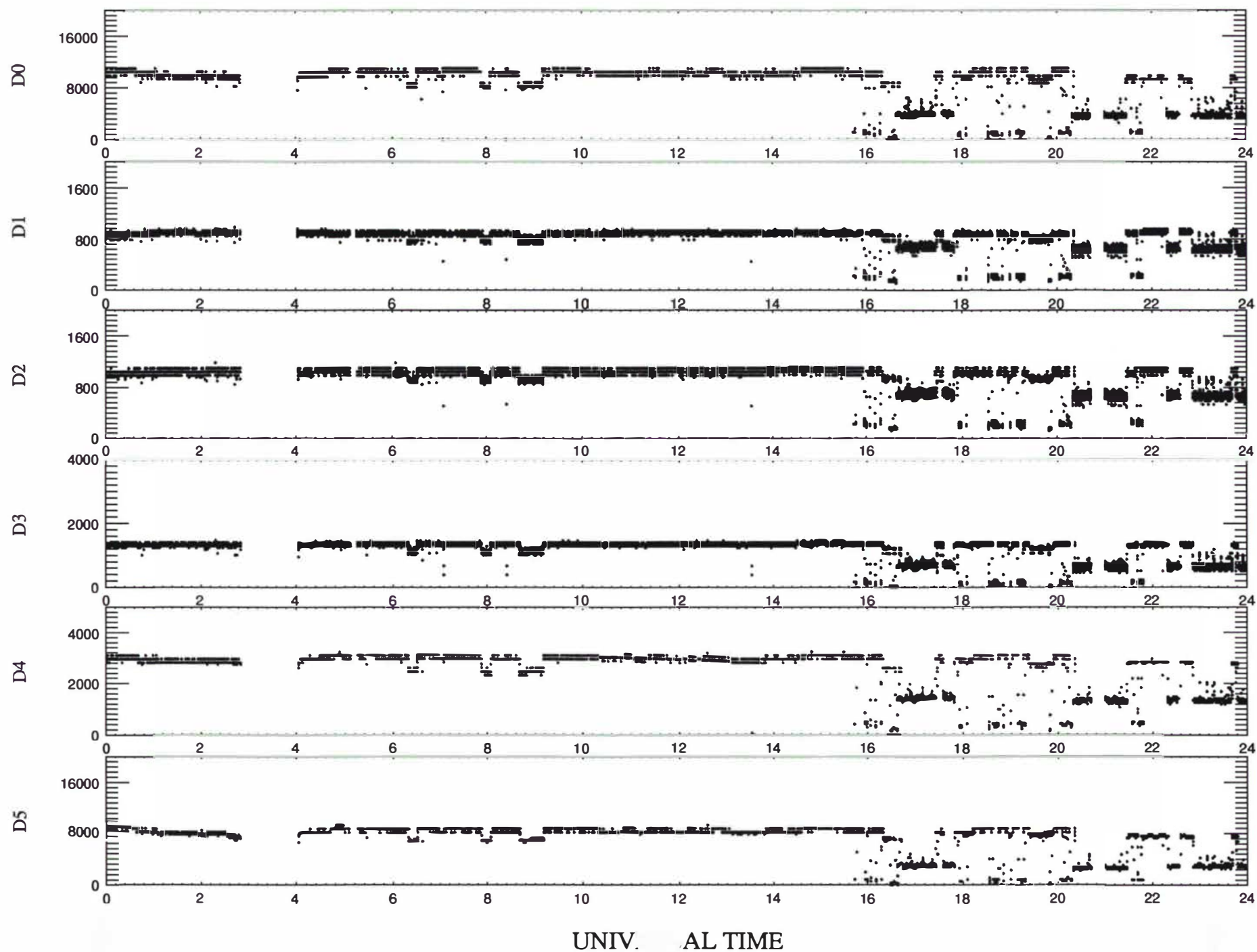
NO BURST (8)

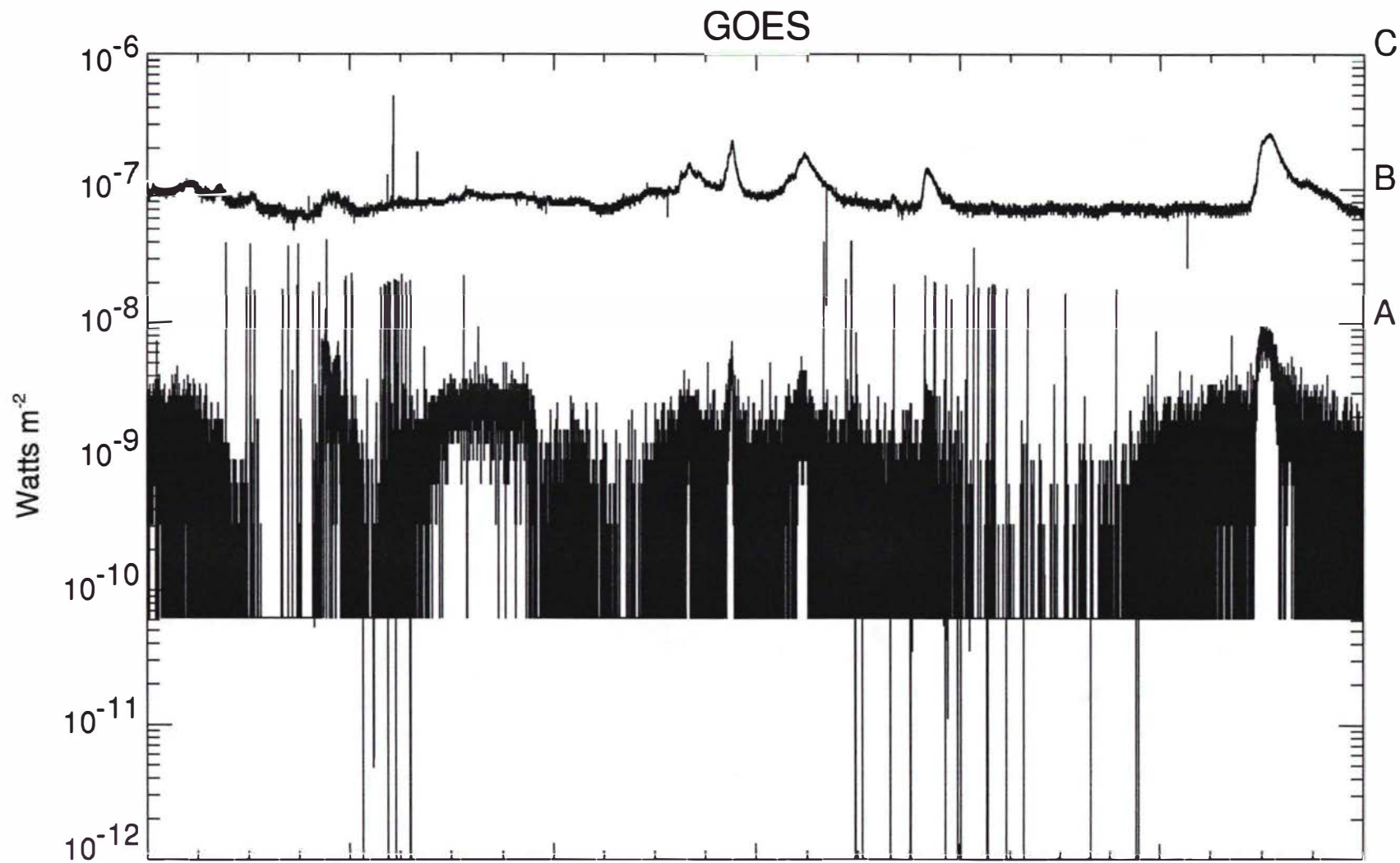


CALIBRATION DATA INCLUDED



UNIV SAL TIME





Data Start: 94/11/07, 0000:01

Plot created: 94/11/08, 1342

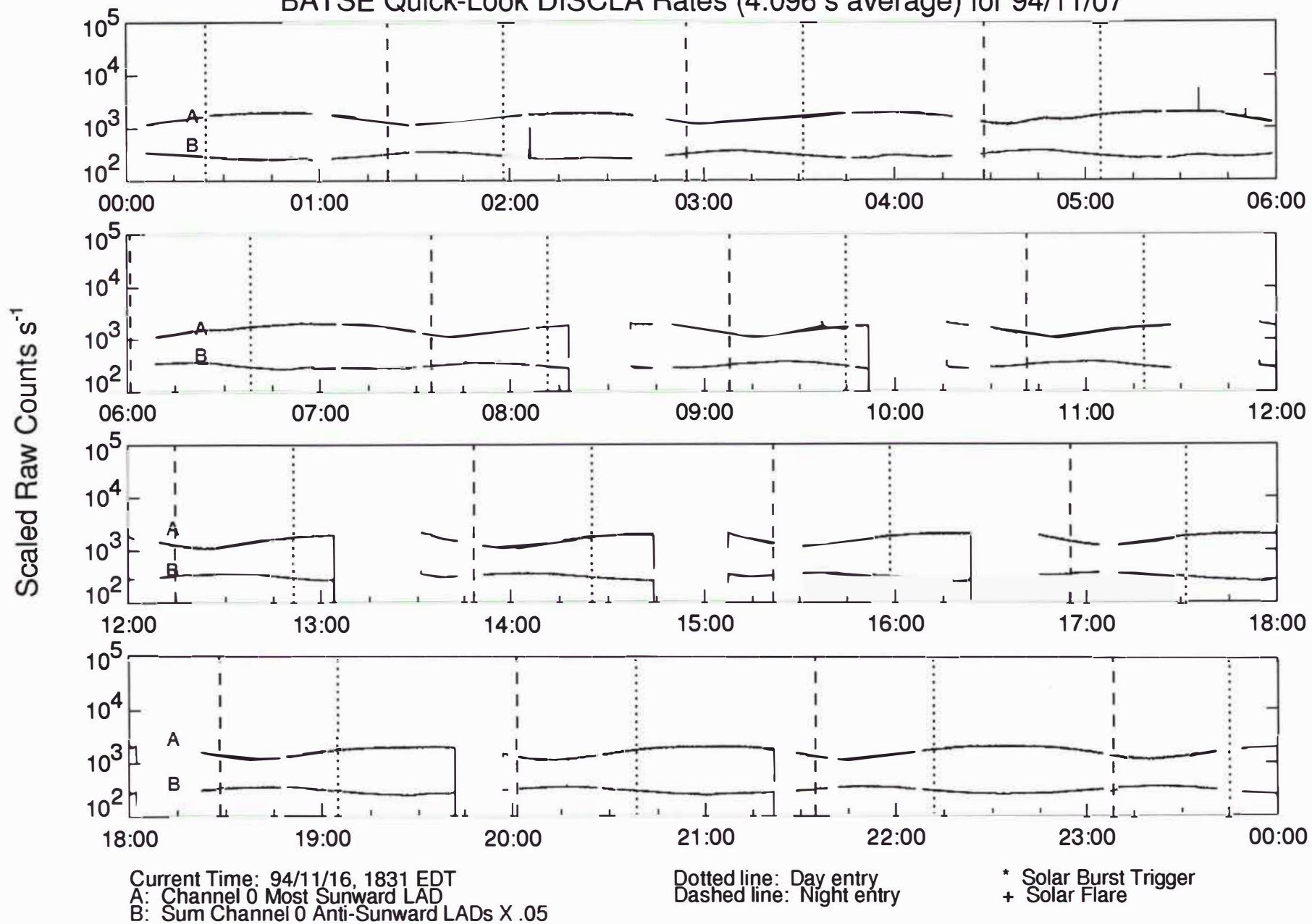
Channel 1 (1.0 - 8.0 Angstroms)

Background not subtracted

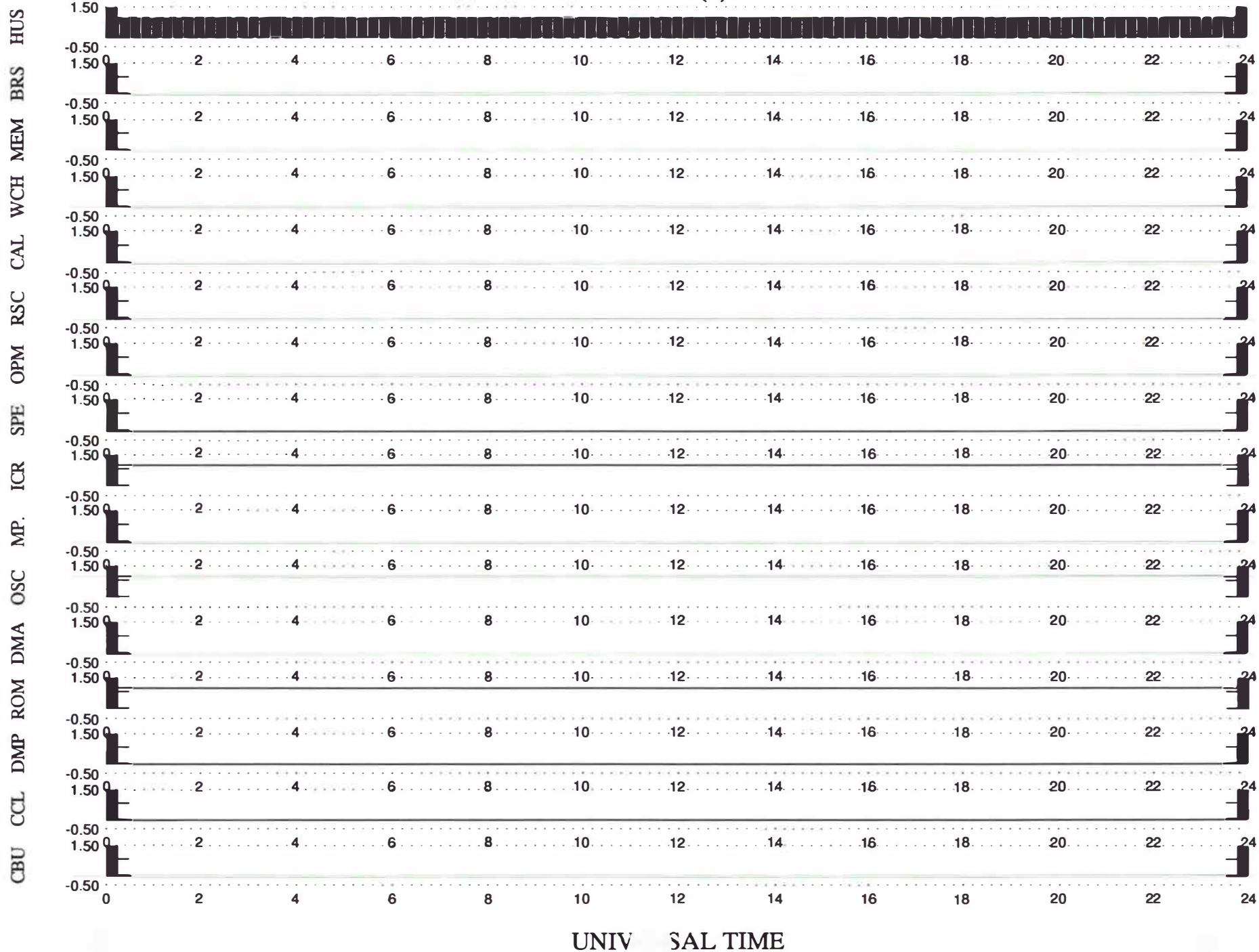
Channel 2 (0.5 - 4.0 Angstroms)

Background not subtracted

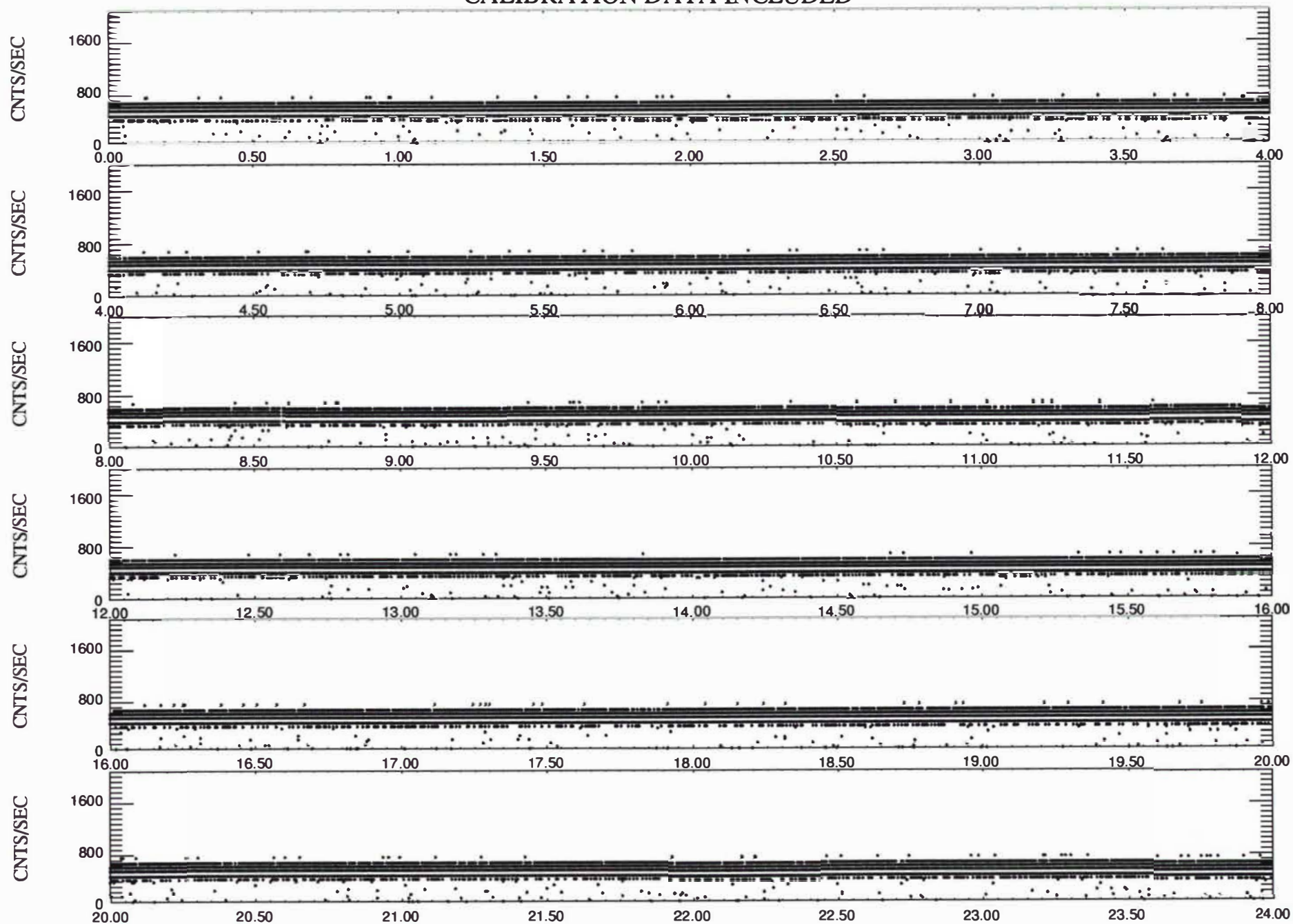
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/07



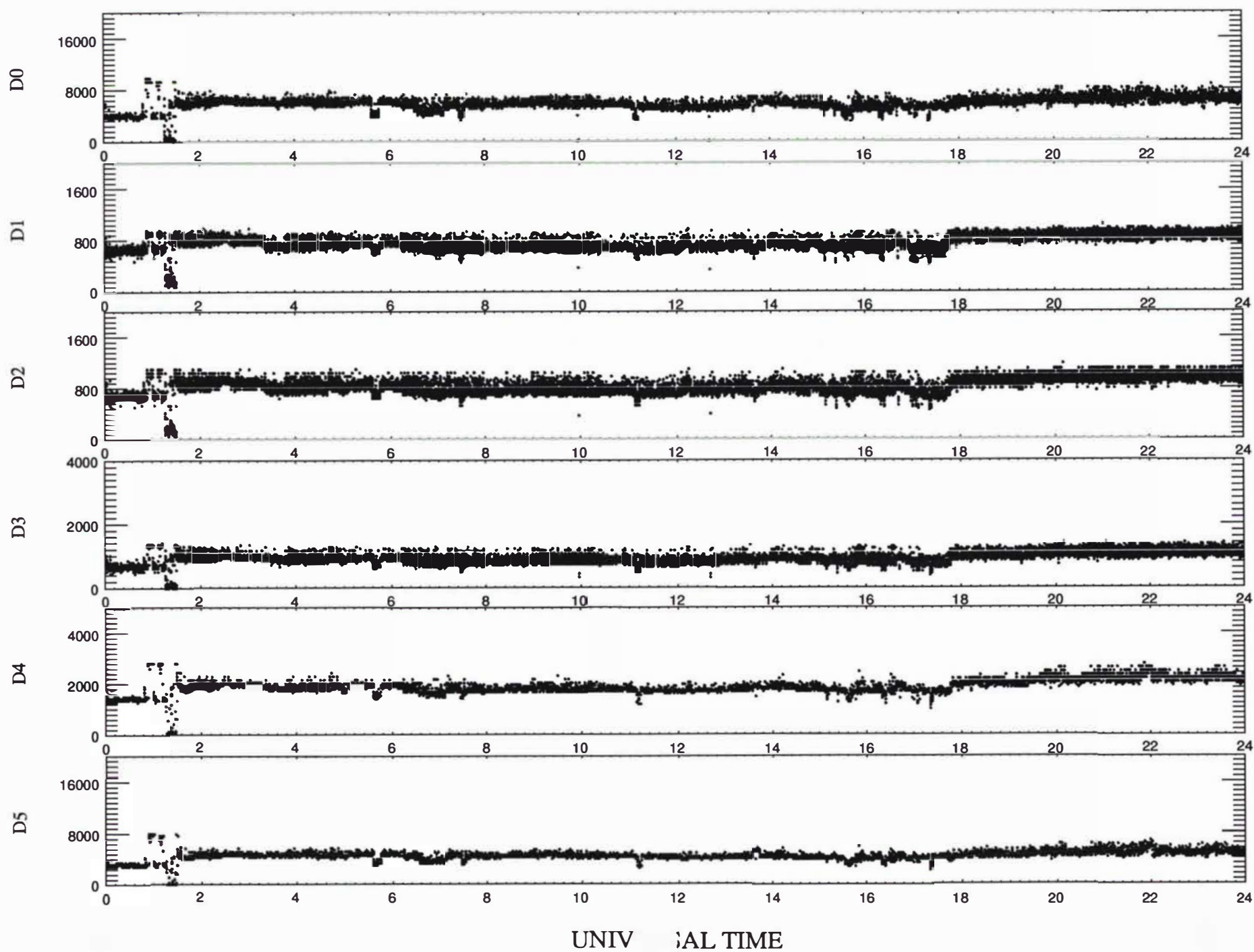
NO BURST (8)

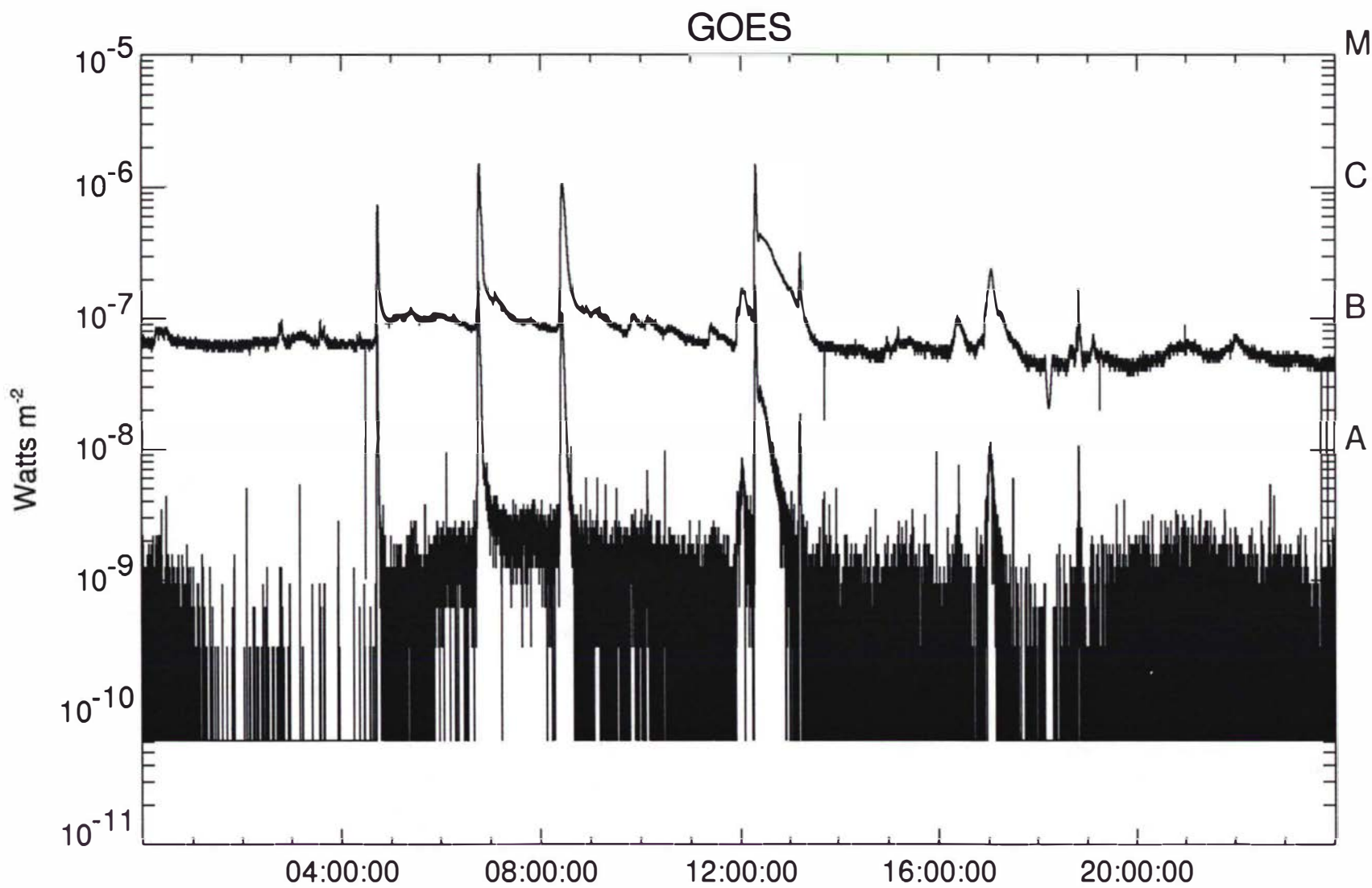


CALIBRATION DATA INCLUDED



UNIV SAL TIME





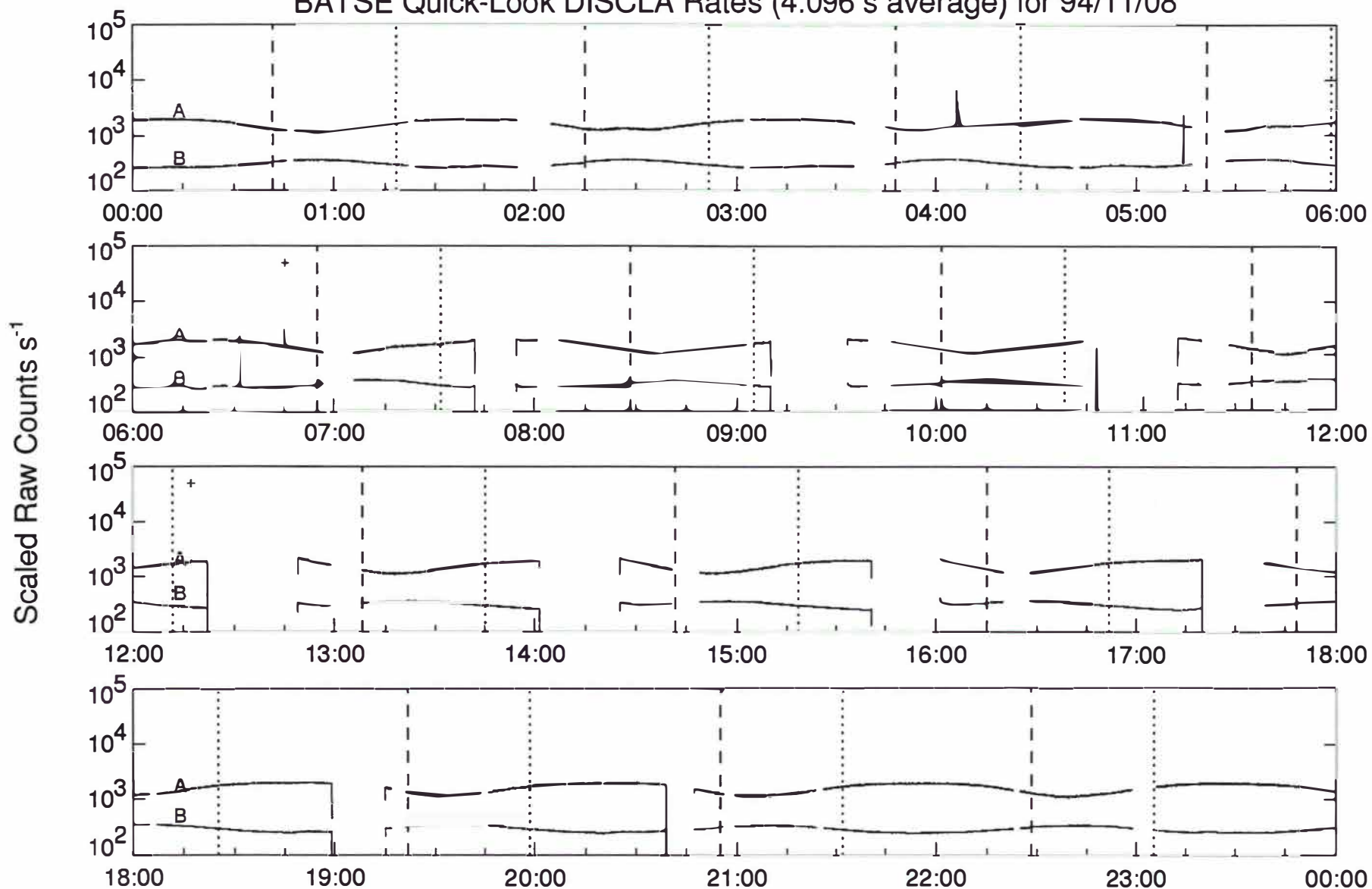
Data Start: 94/11/08, 0000:02

Plot created: 94/11/16, 1833

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 94/11/08

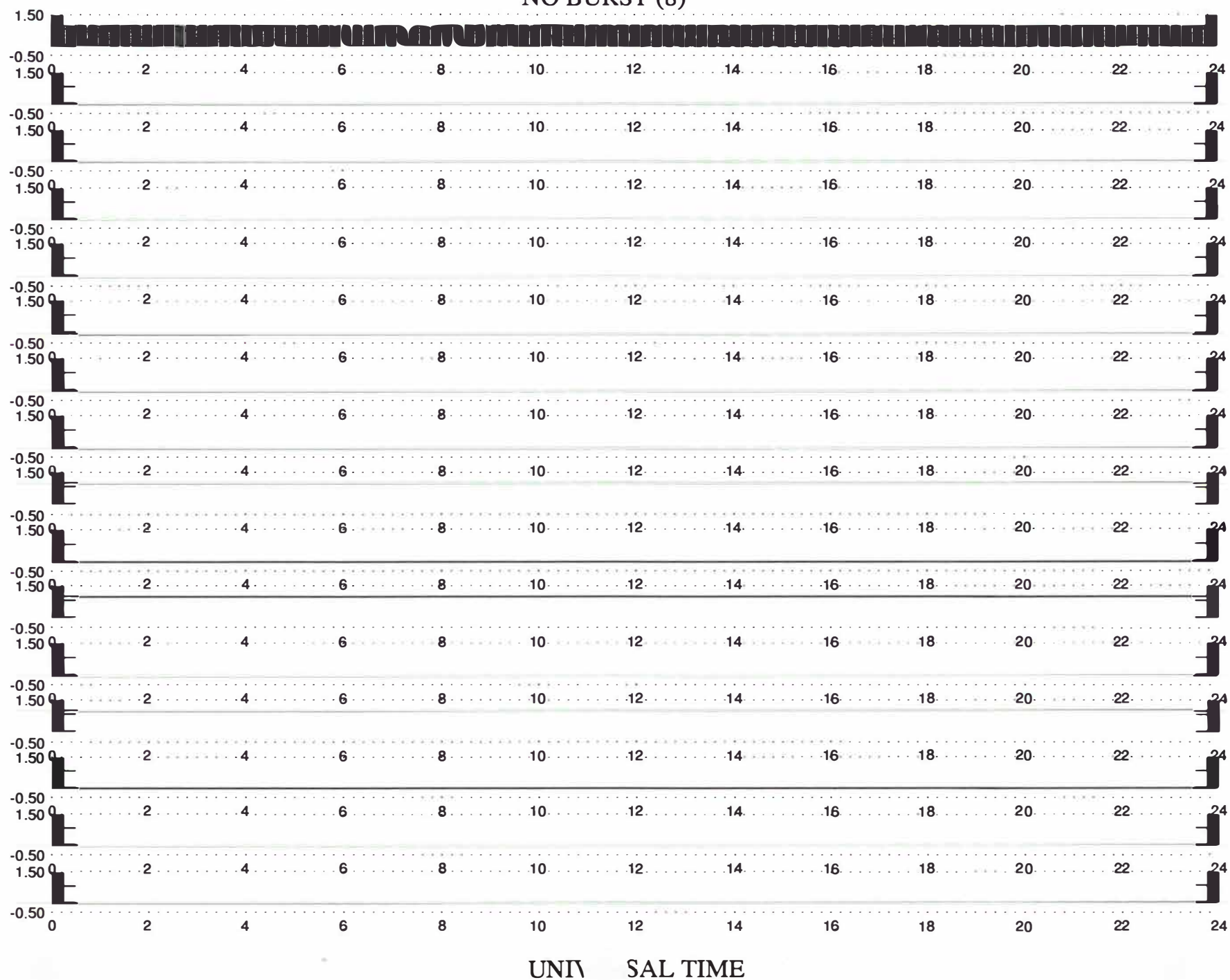


Current Time: 94/11/16, 1831 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

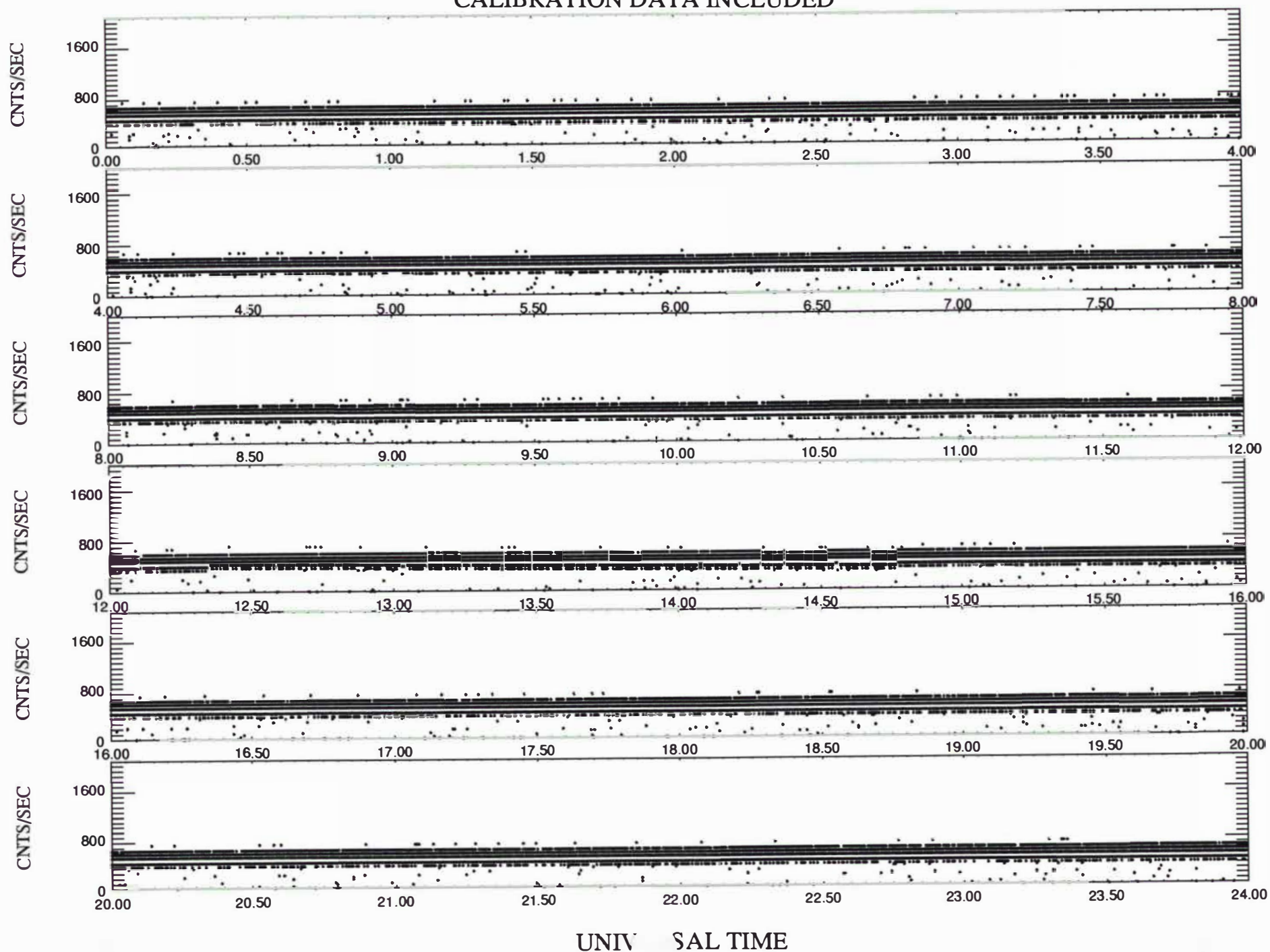
Dotted line: Day entry
 Dashed line: Night entry

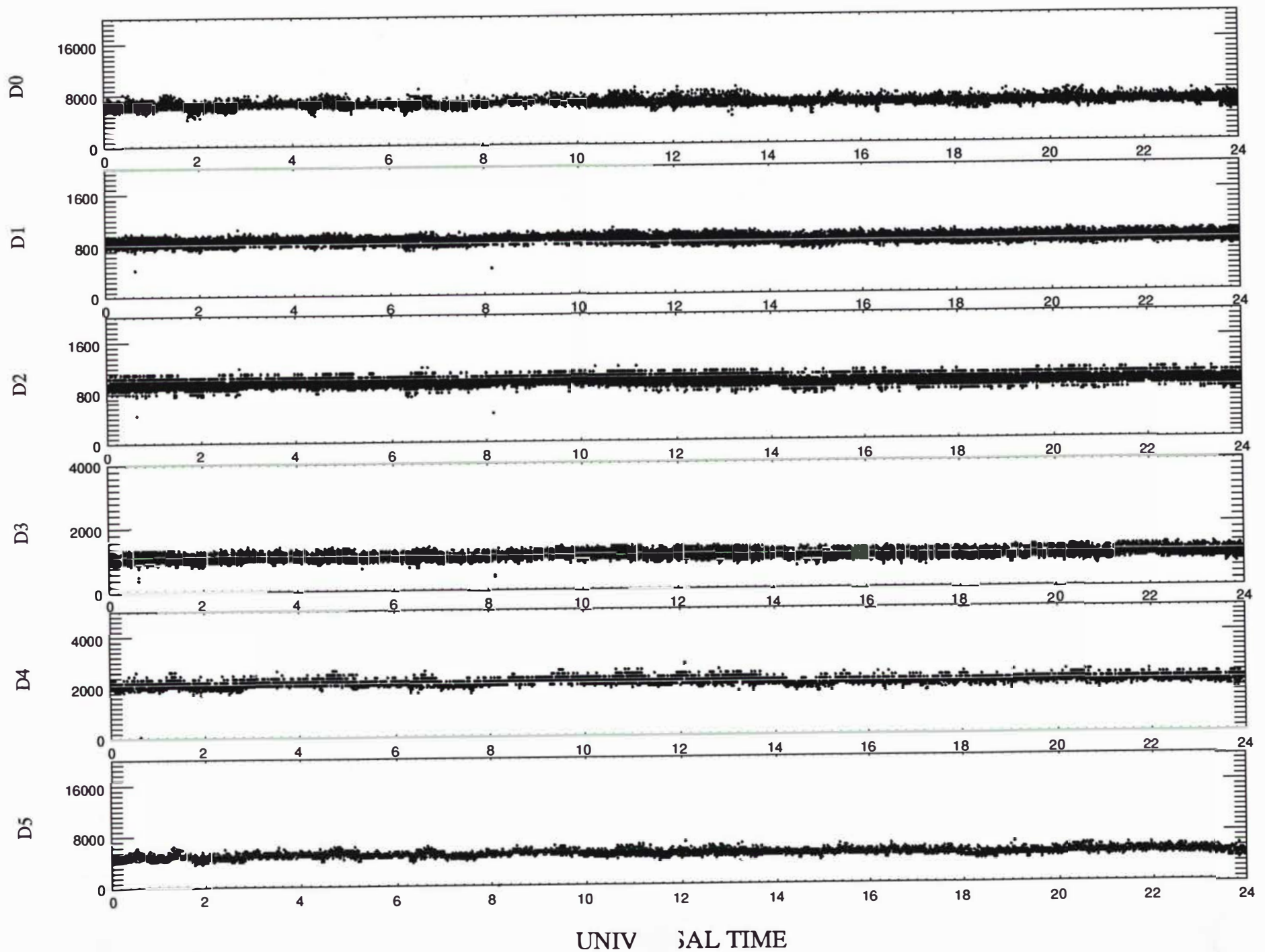
* Solar Burst Trigger
 + Solar Flare

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



CALIBRATION DATA INCLUDED





From HAGEDON@ssl.msfc.nasa.gov Mon Nov 14 09:44 PST 1994
Date: Mon, 14 Nov 1994 11:43:58 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3276

BATSEARCH PROGRAM

BATSE BURST # 3276
EVENT OF 1994 NOV 9 DAY OF YEAR=313
EVENT CROSSING TIME AT BATSE : 36. S. OR 00:00:36.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 35.000 66.000
BATSE PEAK COUNTING RATE: 4800 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
POSITION OF ULYSSES ON 9/11/ 94 IS:
RA= 216.969 DEC= -74.533 DIST= 2.221 AU
BATSE-ULYSSES DISTANCE = 332306480. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 8.56 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1096.11 SECS.
CROSSING TIME AT ULYSSES IS 1132. S. OR 00:18:52 +/- 95.28 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 9/11/ 94 IS:
RA= 141.140 DEC= 17.079 DIST= 1.279 AU
MARS-BATSE DISTANCE = 191286224. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 99.22 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -102.23 SECS.
CROSSING TIME AT MARS IS 86334. S. OR 23:58:53 +/- 107.79 SECONDS

No

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3276

TIME: TJD=9665 SECONDS=00036

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=75 AZIMUTH=198 ERROR= DEGREES

COMMENTS:

BURST. TRIPLE PEAKED EVENT BEGINNING AT ~T-12 SEC. TRIGGERED ON
THIRD PEAK. TOTAL DUR. ~17 SEC. NOT VISIBLE ABOVE 300 KEV.

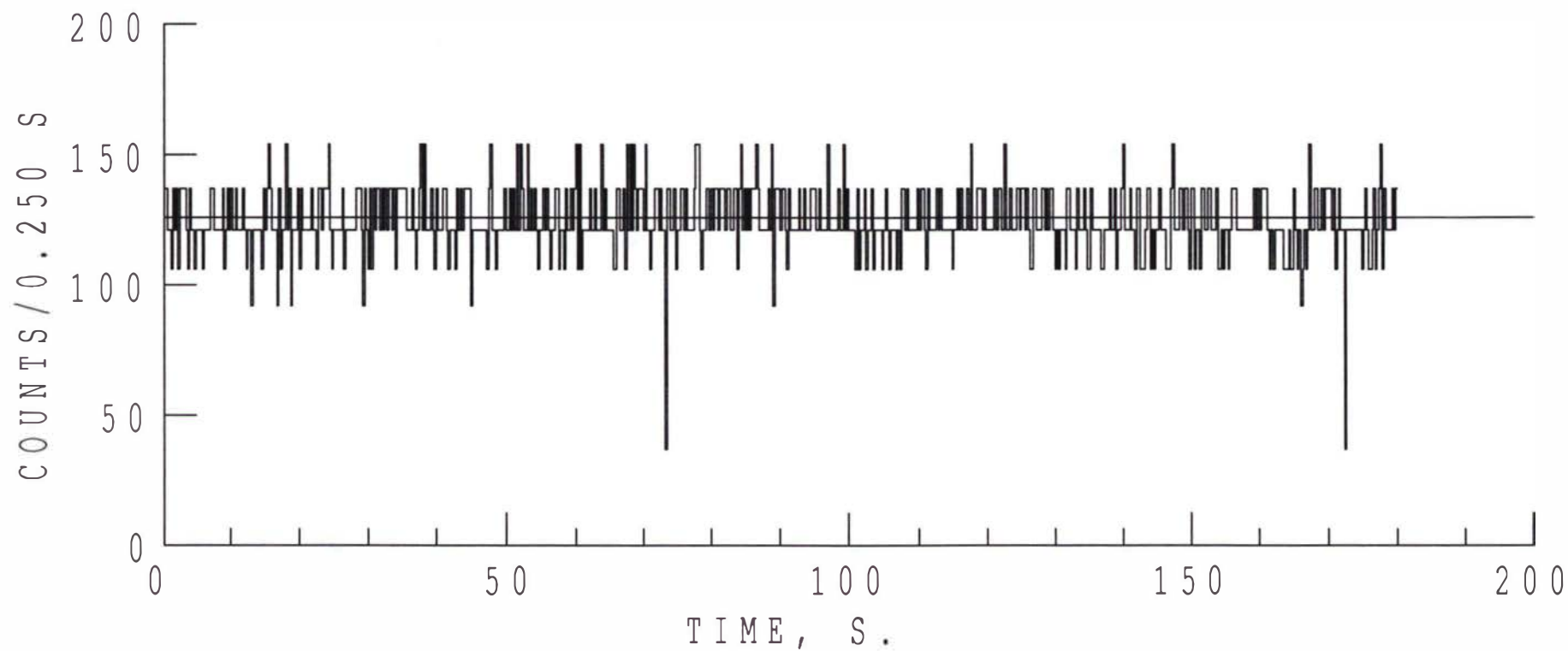
From HAGEDON@ssl.msfc.nasa.gov Mon Nov 14 09:43 PST 1994
Date: Mon, 14 Nov 1994 11:43:23 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@ssl.msfc.nasa.gov
Subject: BATSE Burst 3276

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3276	941109	9665	00036	4800	035	+66

14 / 11 / 94

ULYSSES RT
9 / 11 / 94 1044.113 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From HAGEDON@ssl.msfc.nasa.gov Mon Nov 14 10:11 PST 1994
Date: Mon, 14 Nov 1994 12:10:41 -0600 (CST)
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.: 3277

TIME: TJD=9665 SECONDS=75087

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

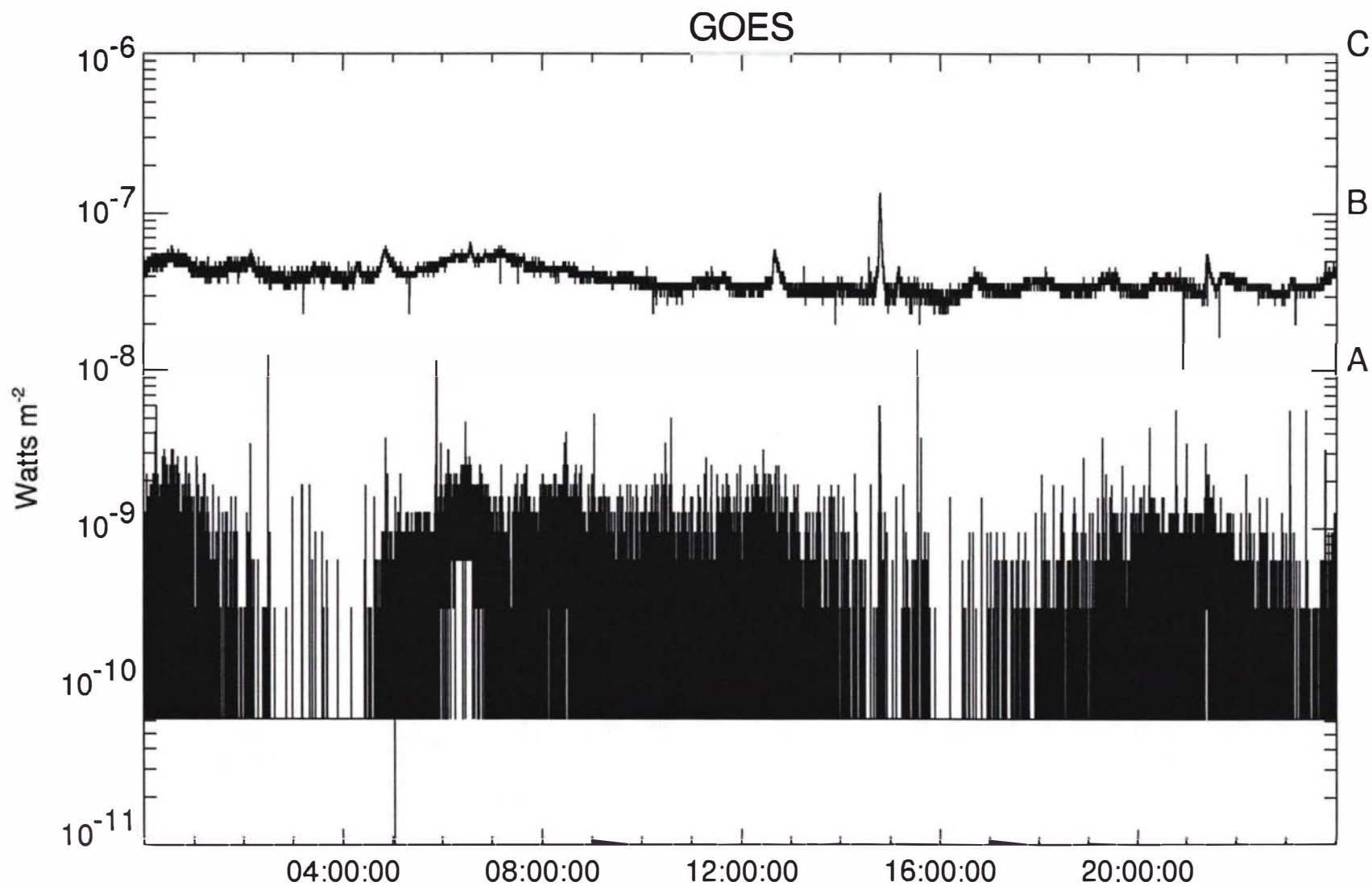
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

TGF. DUR.~ 0.2MS. SECOND TGF AT ~T+16.5 SEC. BOTH ARE NOT VISIBLE BELOW
50 KEV AND STRONGLY VISIBLE ABOVE 300 KEV.



Data Start: 94/11/09, 0000:00

Plot created: 94/11/16, 1834

Channel

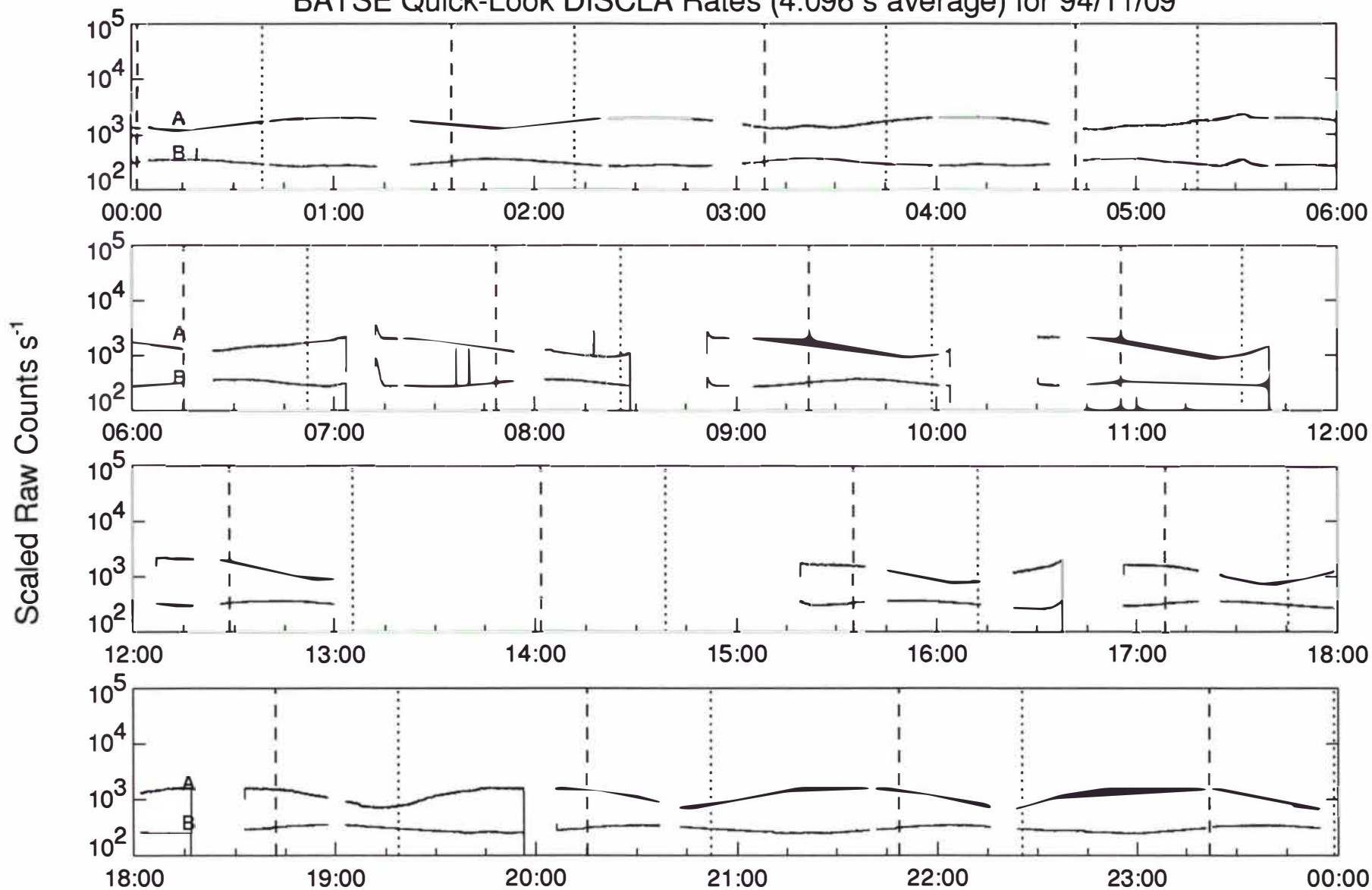
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/09

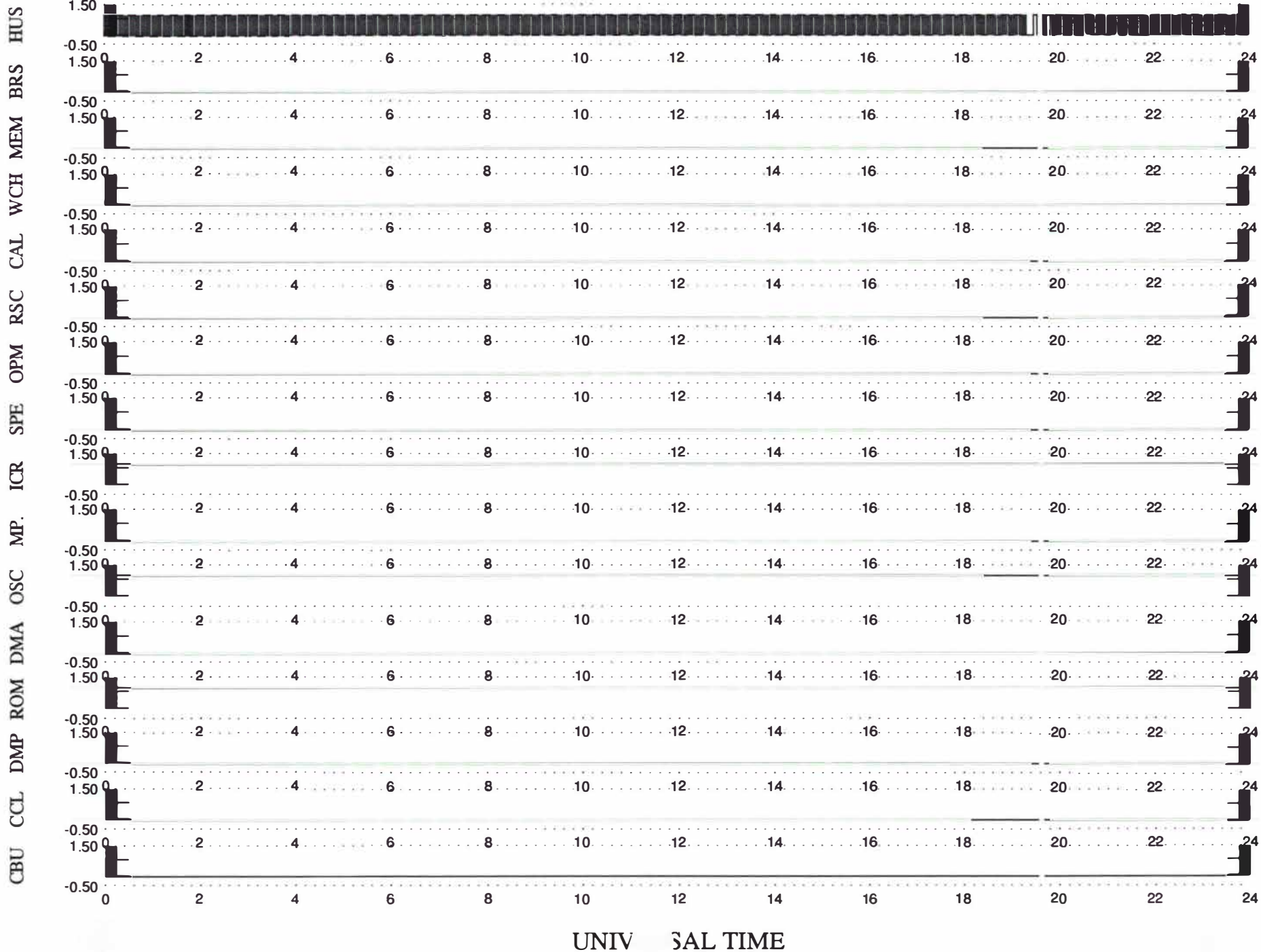


Current Time: 94/11/16, 1831 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

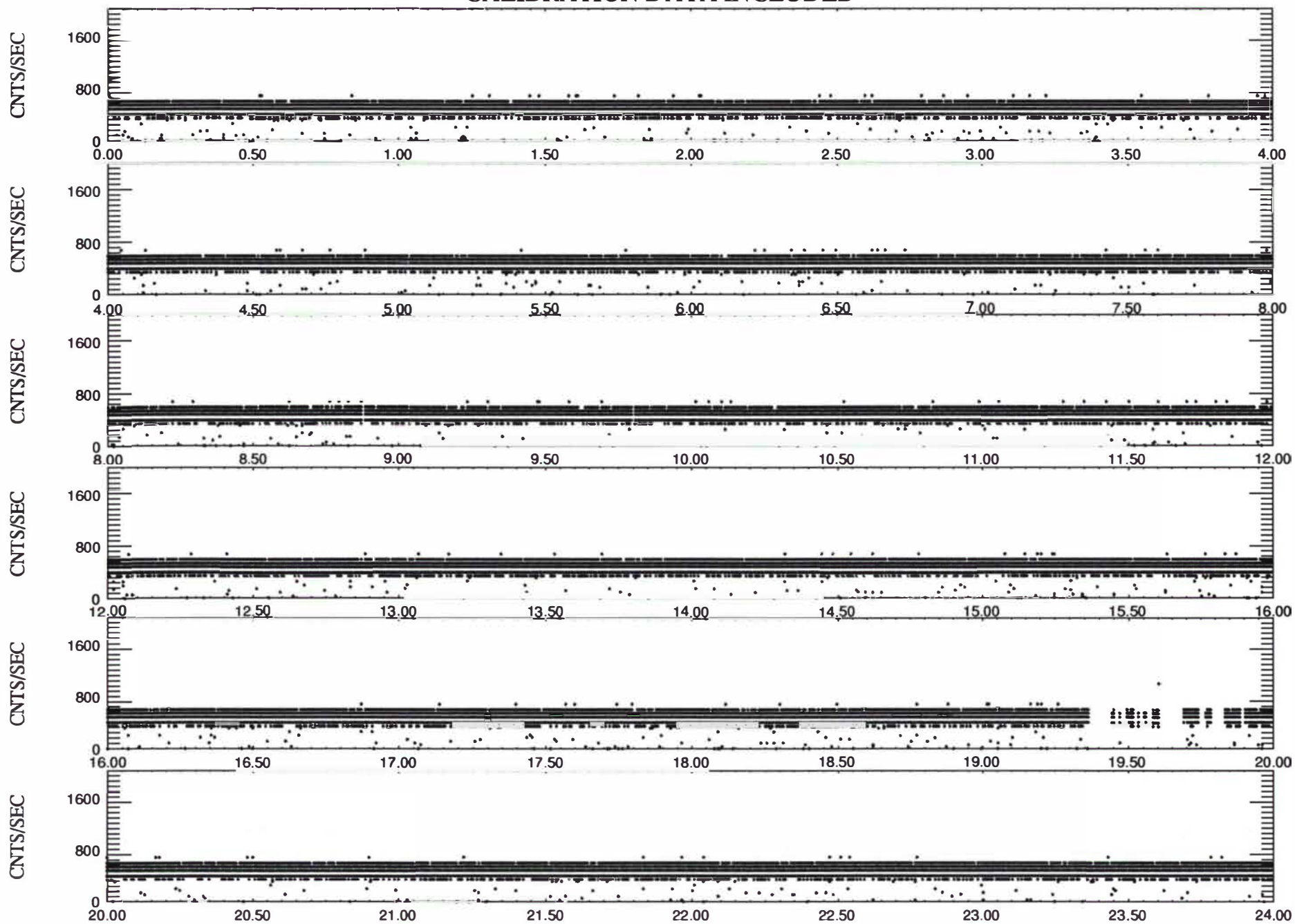
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

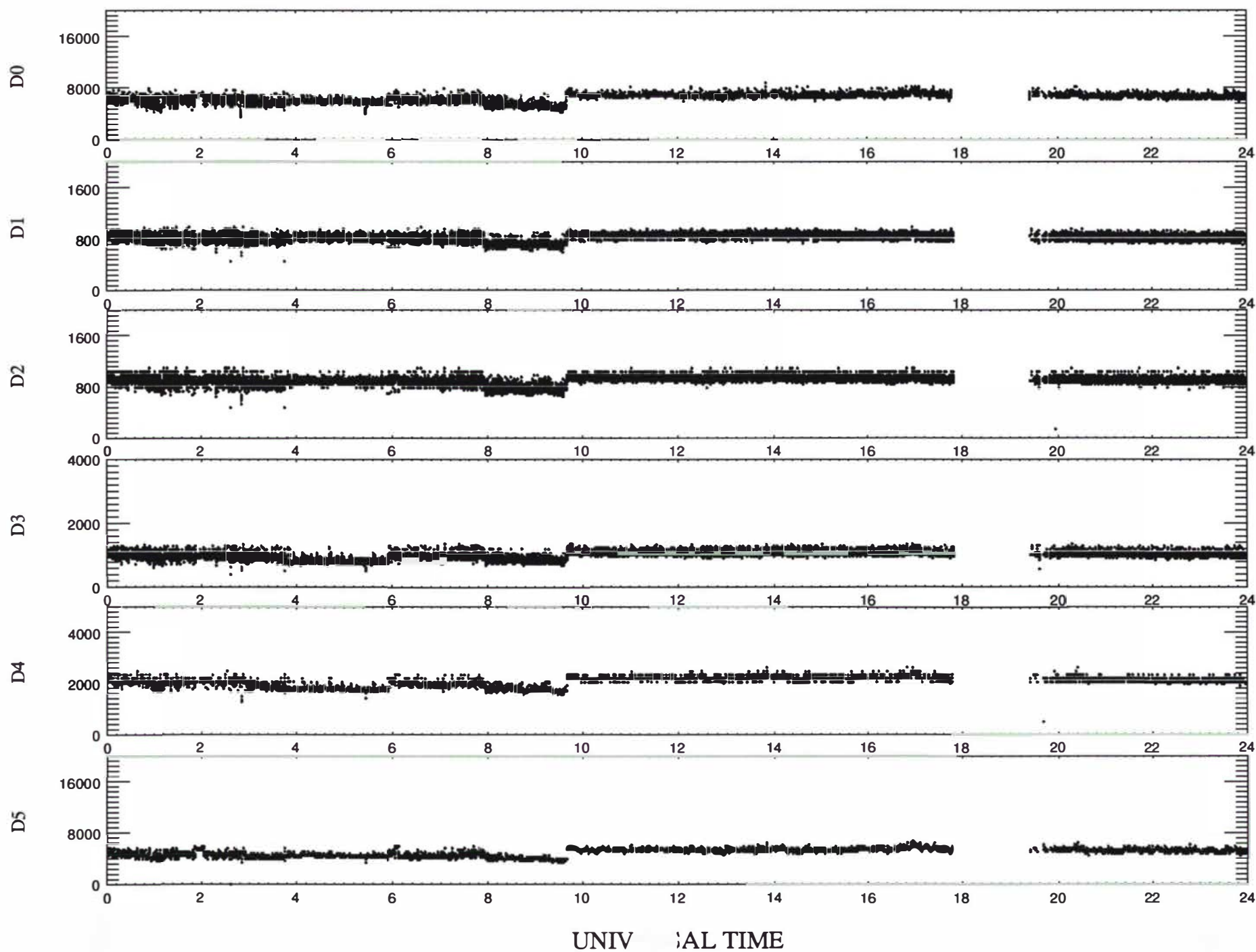
NO BURST (8)



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From HENZE@fender.msfc.nasa.gov Mon Nov 14 11:17 PST 1994
Date: Mon, 14 Nov 1994 13:17:19 -0600 (CST)
From: HENZE@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3278

BATSEARCH PROGRAM

BATSE BURST # 3278
EVENT OF 1994 NOV 10 DAY OF YEAR=314
EVENT CROSSING TIME AT BATSE : 17064. S. OR 04:44:24.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 128.000 -43.000
BATSE PEAK COUNTING RATE: 3300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 10/11/ 94 IS:
RA= 220.299 DEC= -74.752 DIST= 2.216 AU
BATSE-ULYSSES DISTANCE = 331449339. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=130.56 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -718.94 SECS.
CROSSING TIME AT ULYSSES IS 16345. S. OR 04:32:25 +/- 184.91 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 10/11/ 94 IS:
RA= 141.592 DEC= 16.964 DIST= 1.270 AU
MARS-BATSE DISTANCE = 190049728. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=118.75 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -304.89 SECS.
CROSSING TIME AT MARS IS 16759. S. OR 04:39:19 +/- 91.87 SECONDS

NO

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03278

TIME: TJD=9666 SECONDS=17064

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=063.3 AZIMUTH=282.0 ERROR= DEGREES

COMMENTS:

SINGLE PULSE, DUR. ~2 S. VISIBLE ABOVE 300 KEV.

From HENZE@fender.msfc.nasa.gov Mon Nov 14 11:16 PST 1994
Date: Mon, 14 Nov 1994 13:16:45 -0600 (CST)
From: HENZE@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HENZE@fender.msfc.nasa.gov
Subject: BATSE Burst 3278

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3278	941110	9666	17064	3300	128	-43

14 / 11 / 94

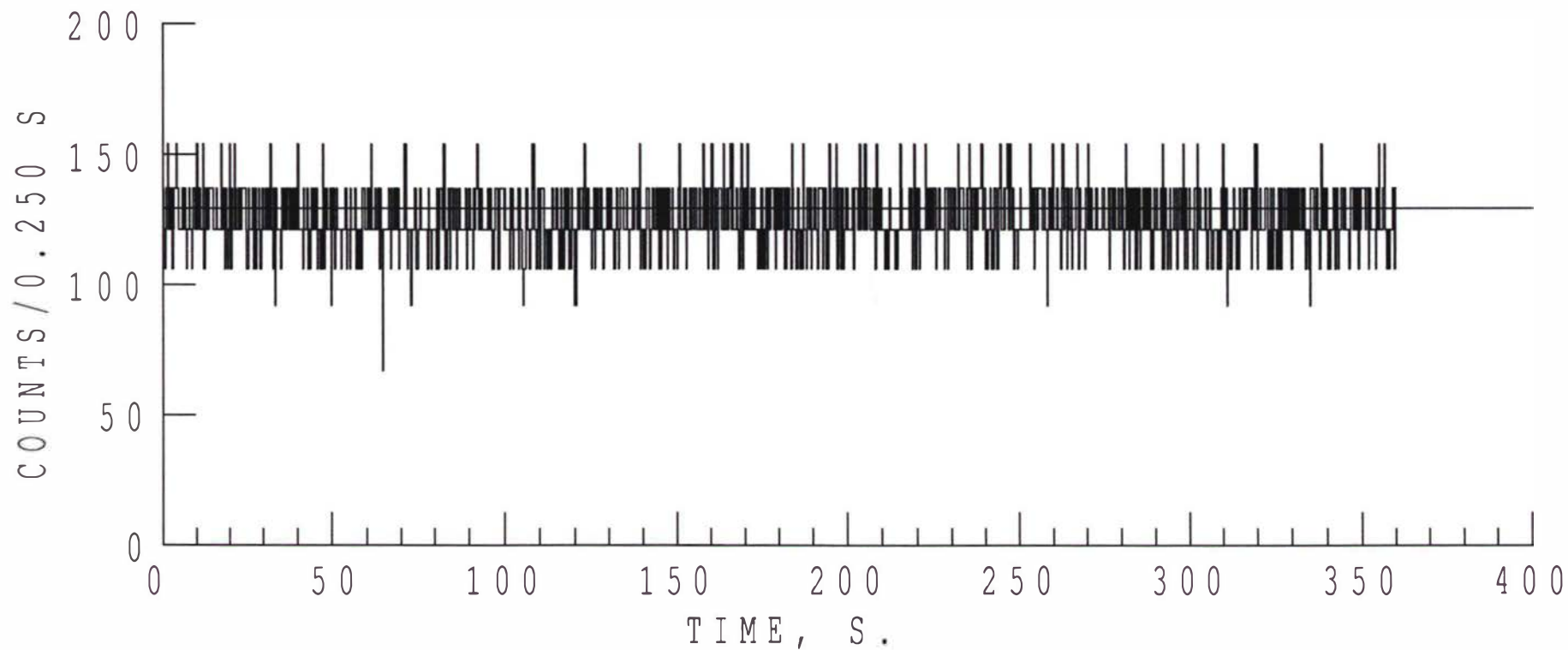
ULYSSES RT

10 / 11 / 94 16164.024 s

0 - 0 keV

W= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HENZE@fender.msfc.nasa.gov Mon Nov 14 11:19 PST 1994
Date: Mon, 14 Nov 1994 13:19:49 -0600 (CST)
From: HENZE@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3279

BATSEARCH PROGRAM

BATSE BURST # 3279
EVENT OF 1994 NOV 10 DAY OF YEAR=314
EVENT CROSSING TIME AT BATSE : 53270. S. OR 14:47:50.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 299.000 14.000
BATSE PEAK COUNTING RATE: 4300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 10/11/ 94 IS:
RA= 221.494 DEC= -74.819 DIST= 2.214 AU
BATSE-ULYSSES DISTANCE = 331153621. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 79.72 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 197.19 SECS.
CROSSING TIME AT ULYSSES IS 53467. S. OR 14:51:07 +/- 241.69 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 10/11/ 94 IS:
RA= 141.592 DEC= 16.964 DIST= 1.270 AU
MARS-BATSE DISTANCE = 190049728. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 38.16 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 498.45 SECS.
CROSSING TIME AT MARS IS 53768. S. OR 14:56:08 +/- 75.57 SECONDS

NO

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03279

TIME: TJD=9666 SECONDS=53270

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=142.7 AZIMUTH=082.5 ERROR= DEGREES

COMMENTS:

MULTIPLE PULSES, TOTAL DUR. ~70 S. NOT VISIBLE ABOVE 300 KEV

From HENZE@fender.msfc.nasa.gov Mon Nov 14 11:19 PST 1994
Date: Mon, 14 Nov 1994 13:19:27 -0600 (CST)
From: HENZE@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HENZE@fender.msfc.nasa.gov
Subject: BATSE Burst 3279

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3279	941110	9666	53270	4300	299	+14

14 / 11 / 94

ULYSSES RT

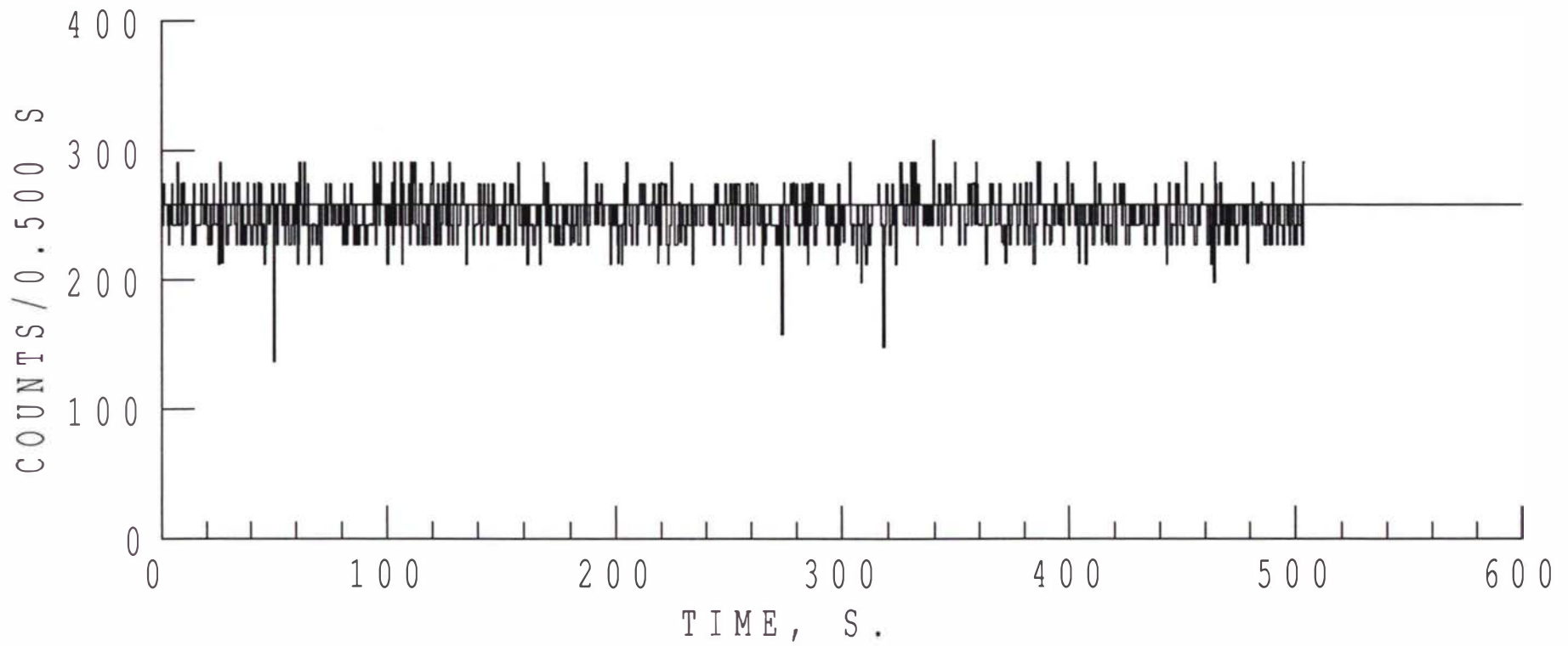
10 / 11 / 94 53208.230 s

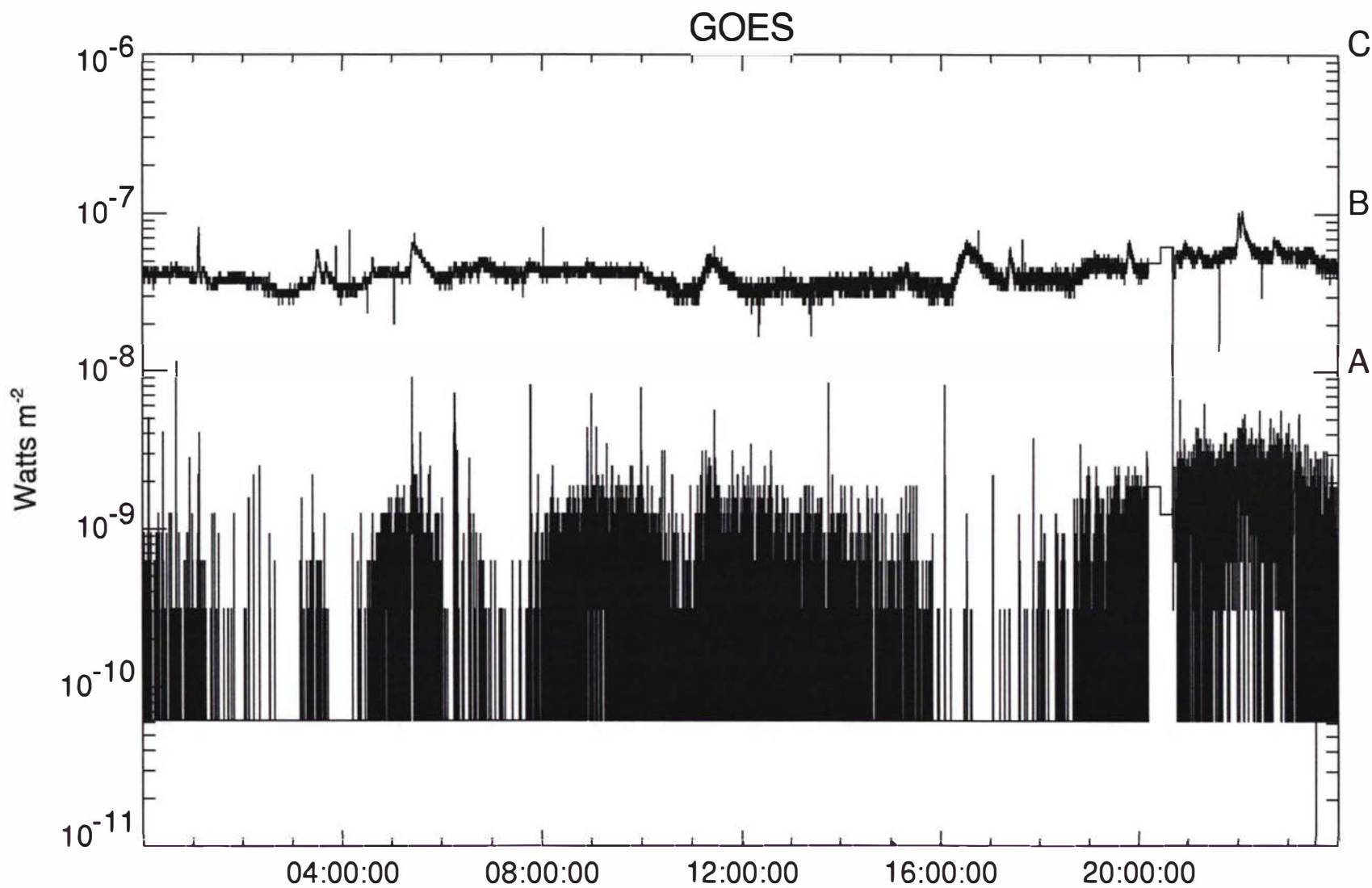
0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





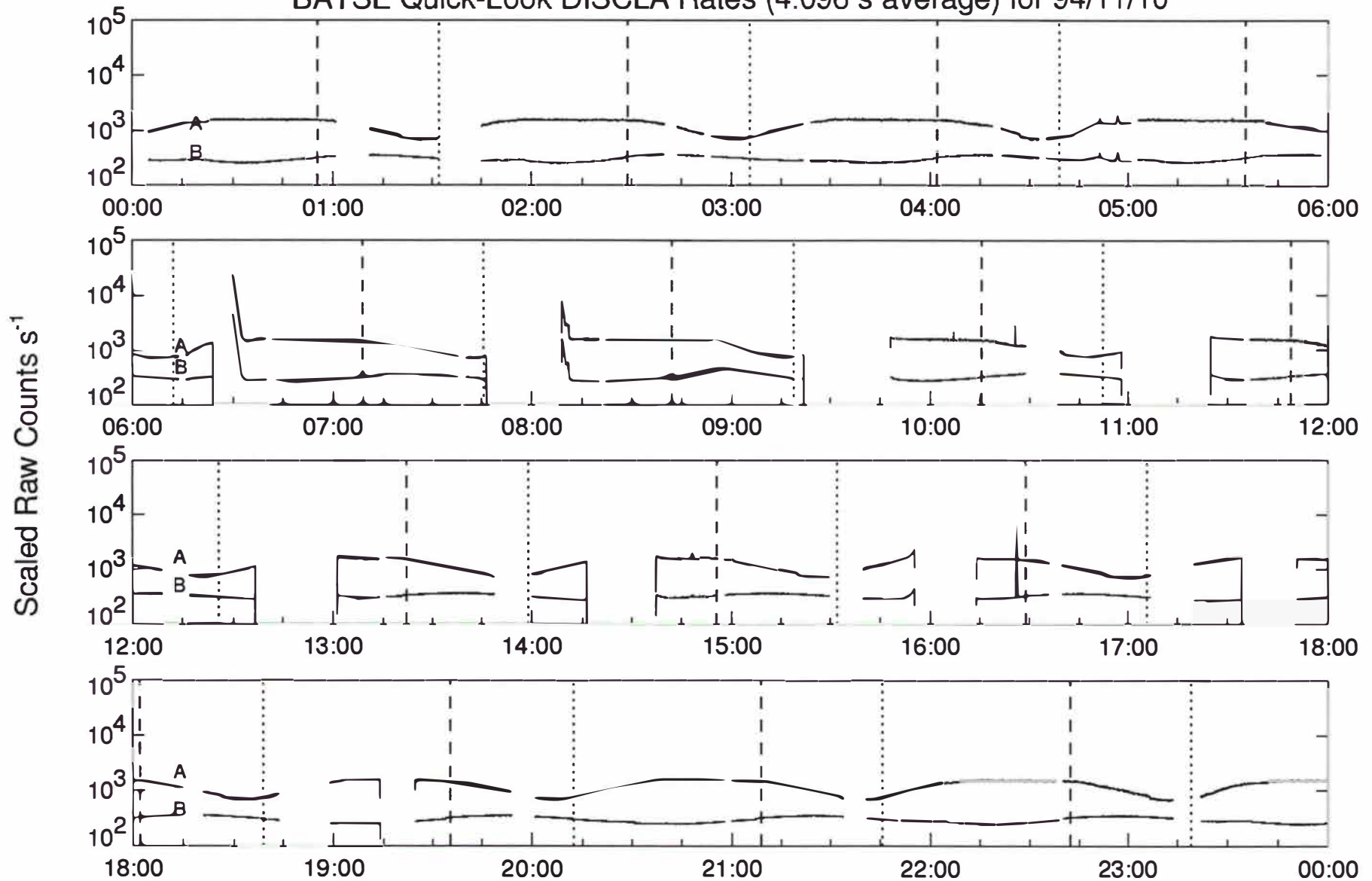
Data Start: 94/11/10, 0000:01

Plot created: 94/11/16, 1834

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 94/11/10

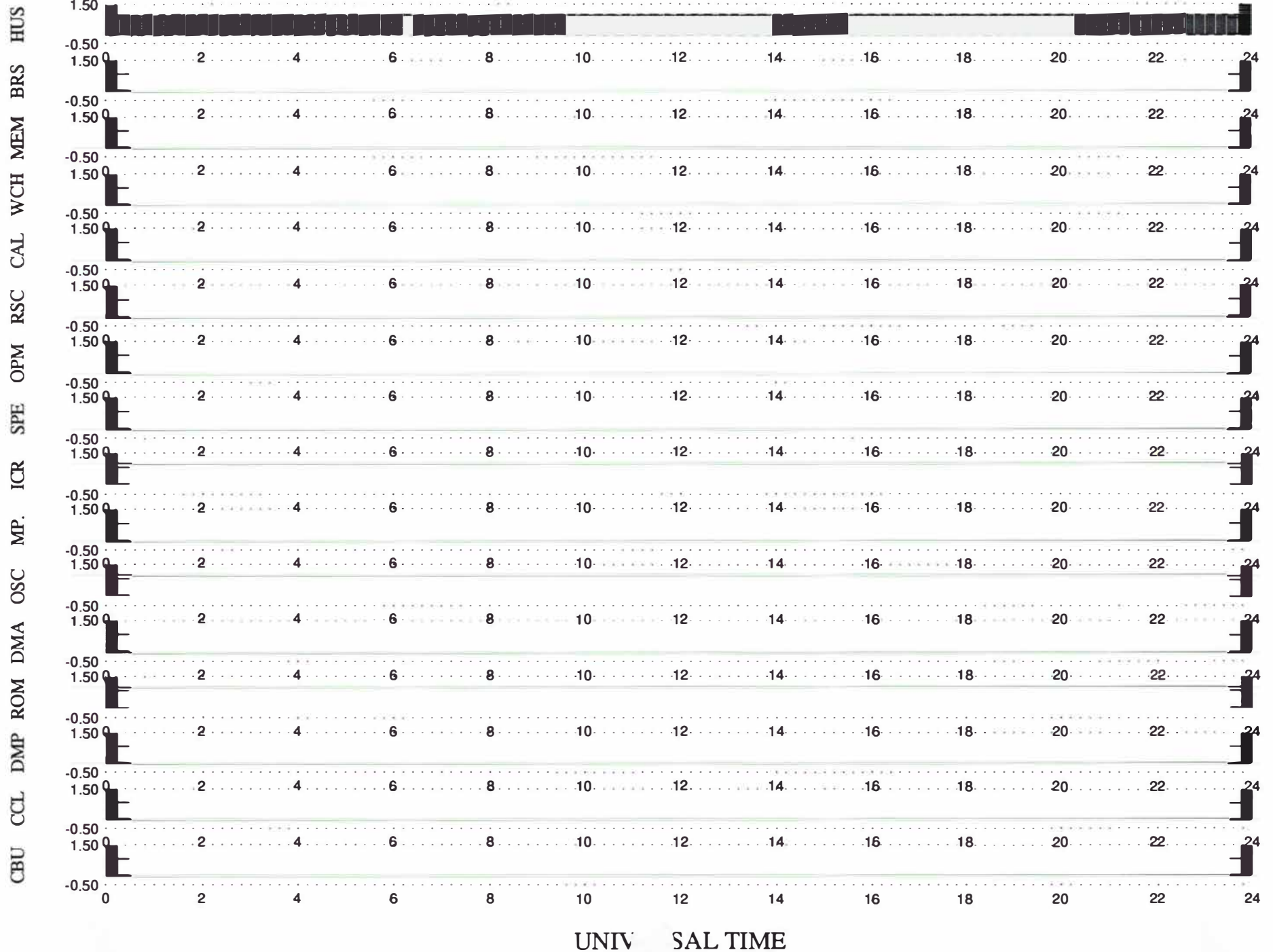


Current Time: 94/11/16, 1831 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

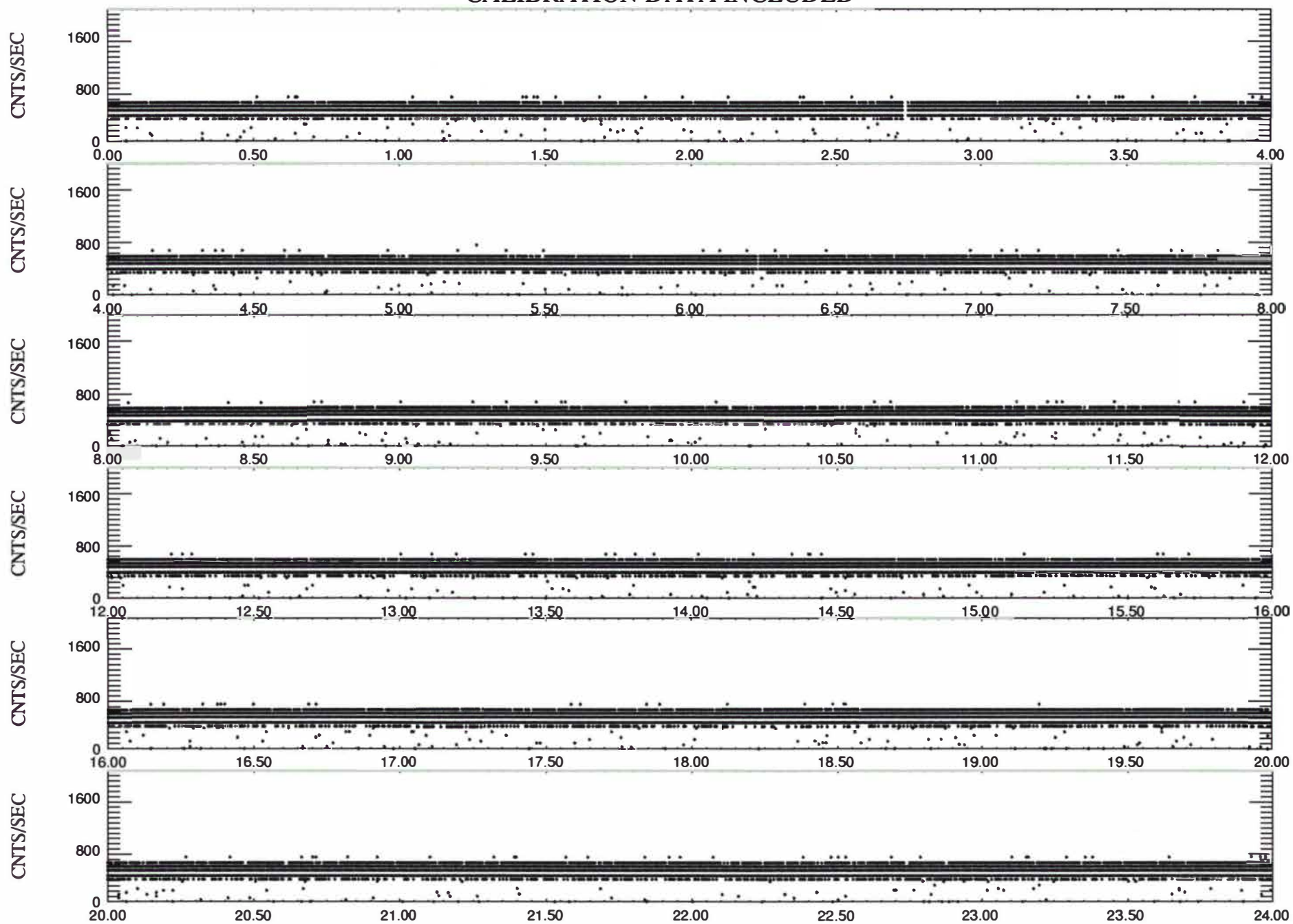
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

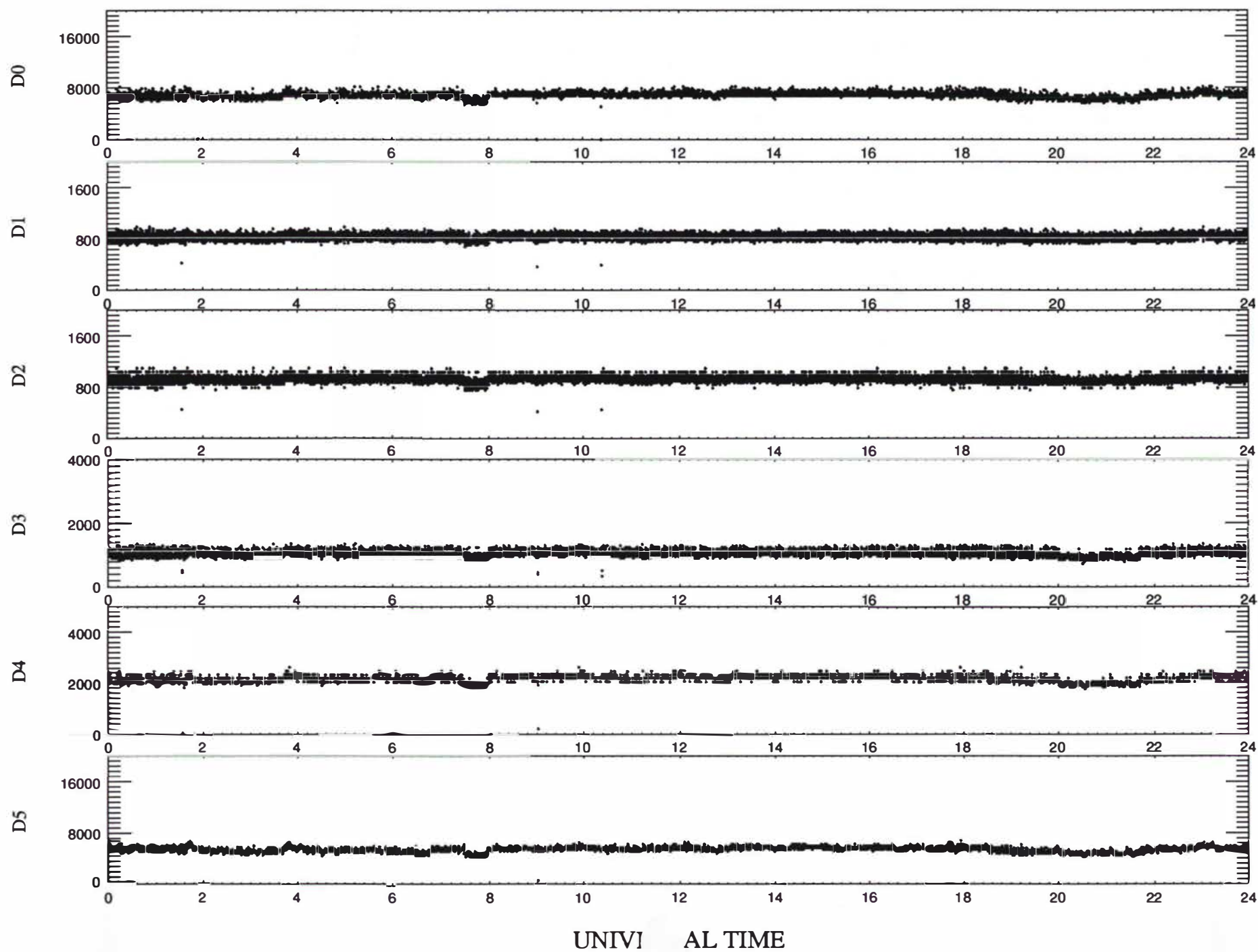
NO BURST (8)



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From HAGEDON@fender.msfc.nasa.gov Mon Nov 14 09:54 PST 1994
Date: Mon, 14 Nov 1994 11:54:55 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3280

BATSEARCH PROGRAM

BATSE BURST # 3280
EVENT OF 1994 NOV 11 DAY OF YEAR=315
EVENT CROSSING TIME AT BATSE : 8400. S. OR 02:20:00.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 96.000 39.000
BATSE PEAK COUNTING RATE: 2400 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/11/ 94 IS:
RA= 222.860 DEC= -74.893 DIST= 2.211 AU
BATSE-ULYSSES DISTANCE = 330819845. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 43.19 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 804.53 SECS.
CROSSING TIME AT ULYSSES IS 9205. S. OR 02:33:24 +/- 193.35 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/11/ 94 IS:
RA= 142.039 DEC= 16.850 DIST= 1.262 AU
MARS-BATSE DISTANCE = 188810320. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=134.32 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -440.06 SECS.
CROSSING TIME AT MARS IS 7960. S. OR 02:12:39 +/- 71.54 SECONDS

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3280

TIME: TJD=9667 SECONDS=08400

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=37 AZIMUTH=158 ERROR= DEGREES

COMMENTS:

BURST. SINGLE PULSE. DUR.~4 SEC. NOT VISIBLE ABOVE 300 KEV

From HAGEDON@fender.msfc.nasa.gov Mon Nov 14 09:54 PST 1994
Date: Mon, 14 Nov 1994 11:54:24 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3280

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3280	941111	9667	08400	2400	096	+39

14 / 11 / 94

ULYSSES RT

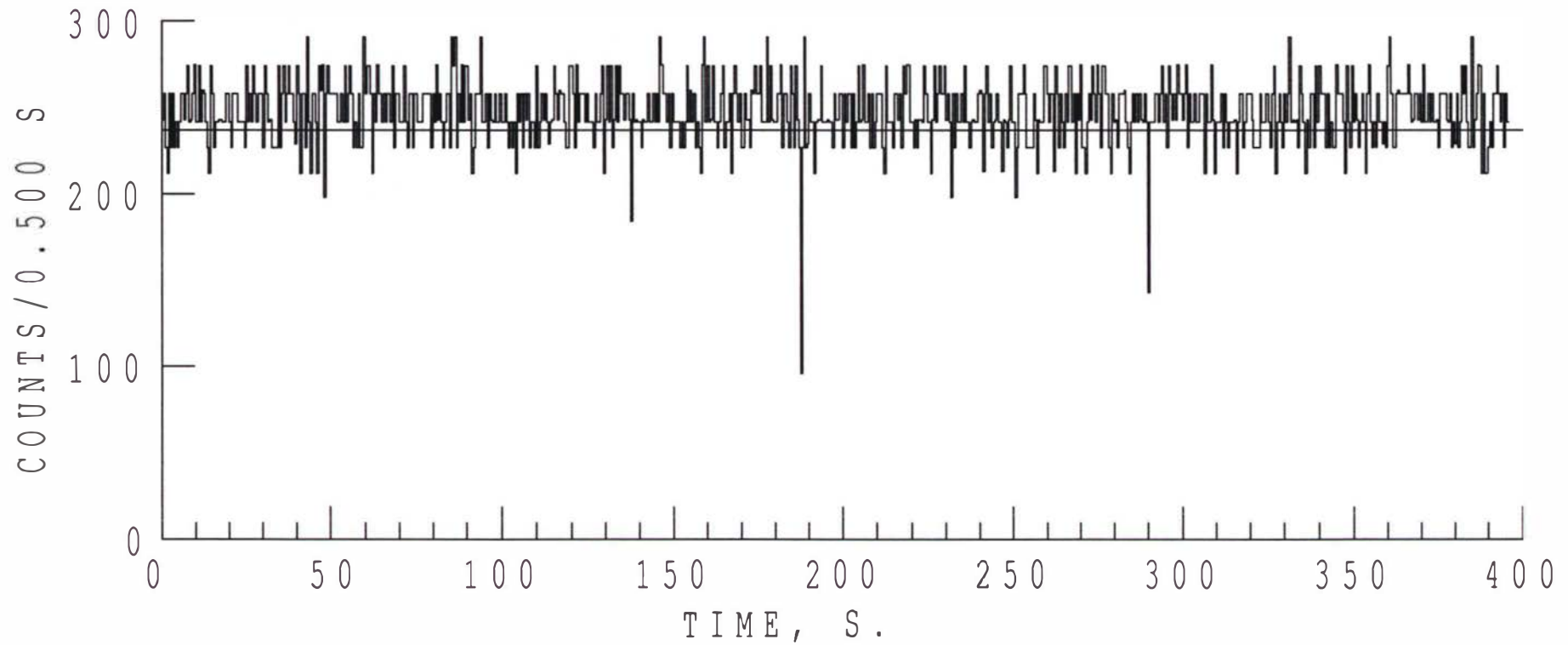
11 / 11 / 94 9000.037 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From RICHARDSON@ssl.msfc.nasa.gov Mon Nov 14 07:11 PST 1994
Date: Mon, 14 Nov 1994 9:11:18 -0600 (CST)
From: RICHARDSON@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.: 3281

TIME: TJD=9667 SECONDS=20669

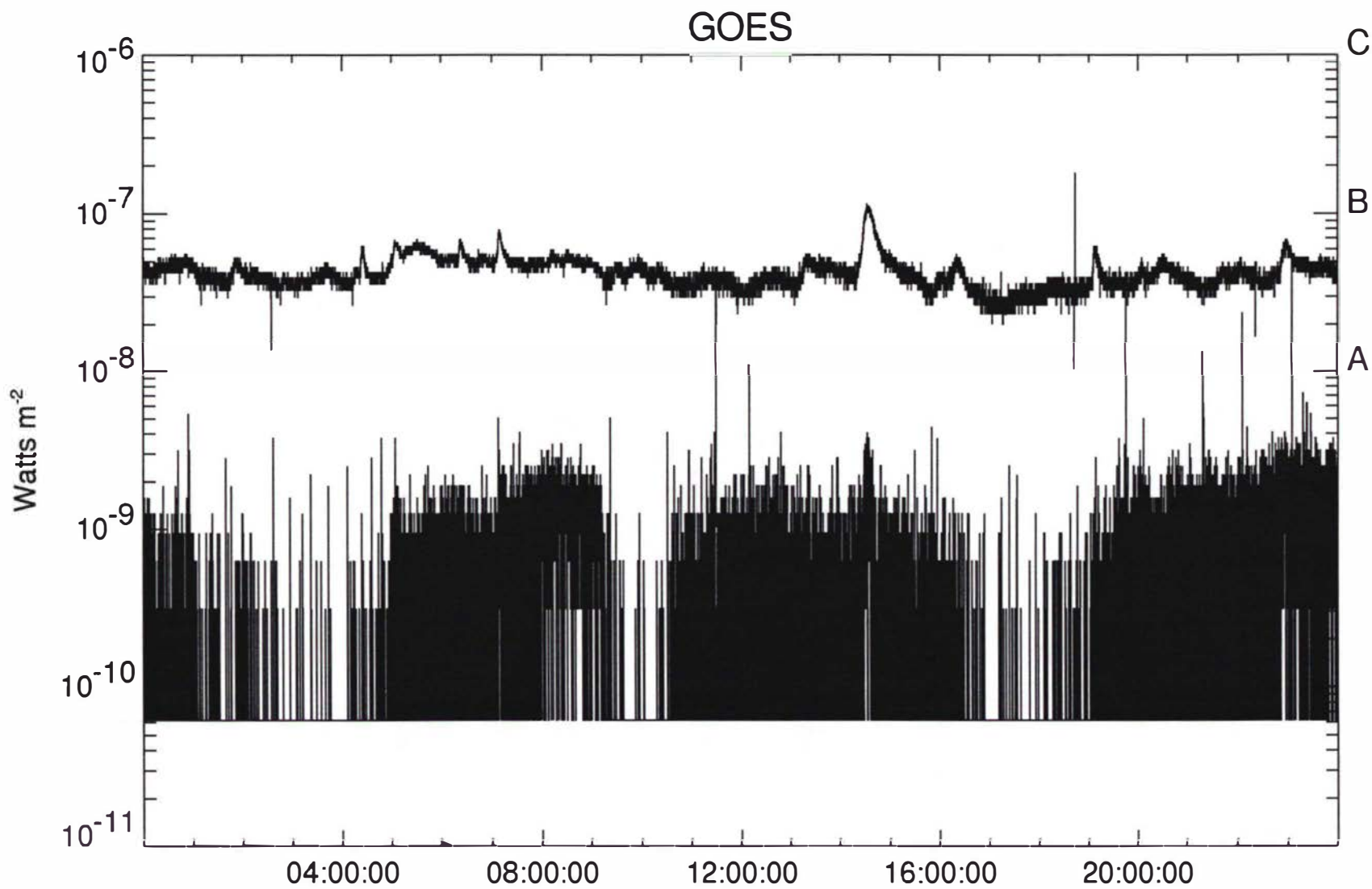
TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT



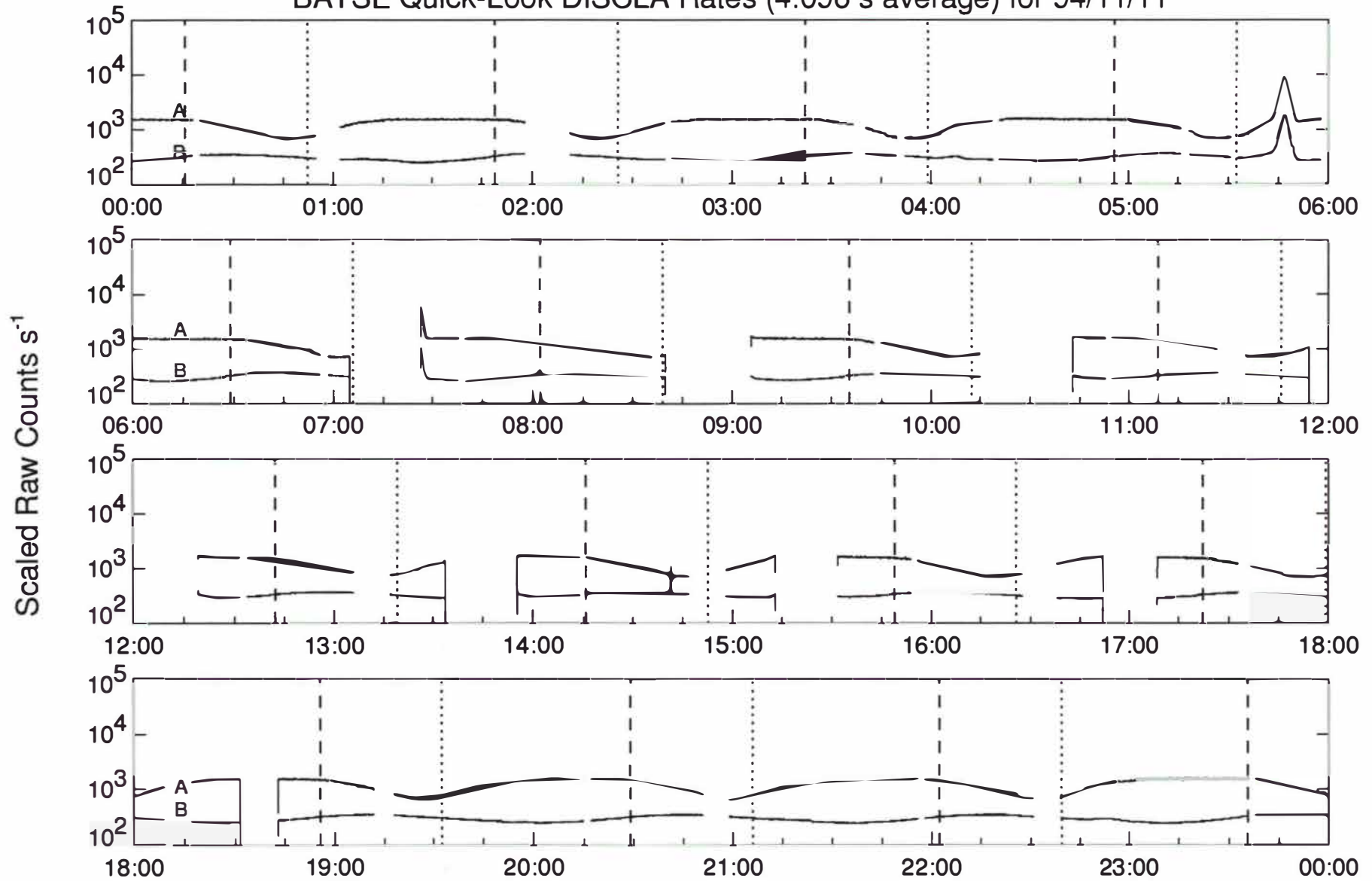
Data Start: 94/11/11, 0000:02

Plot created: 94/11/16, 1837

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 94/11/11

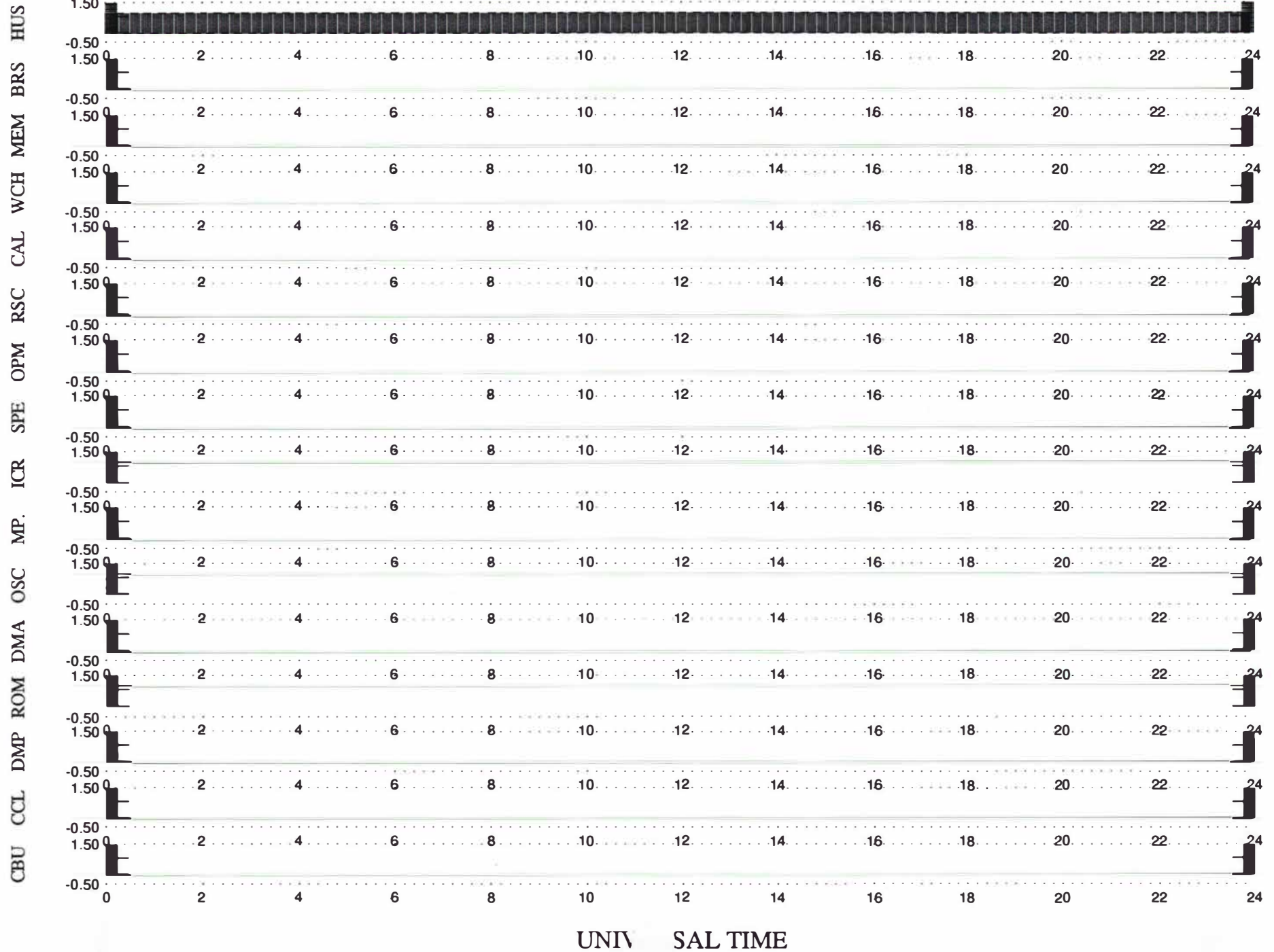


Current Time: 94/11/16, 1831 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

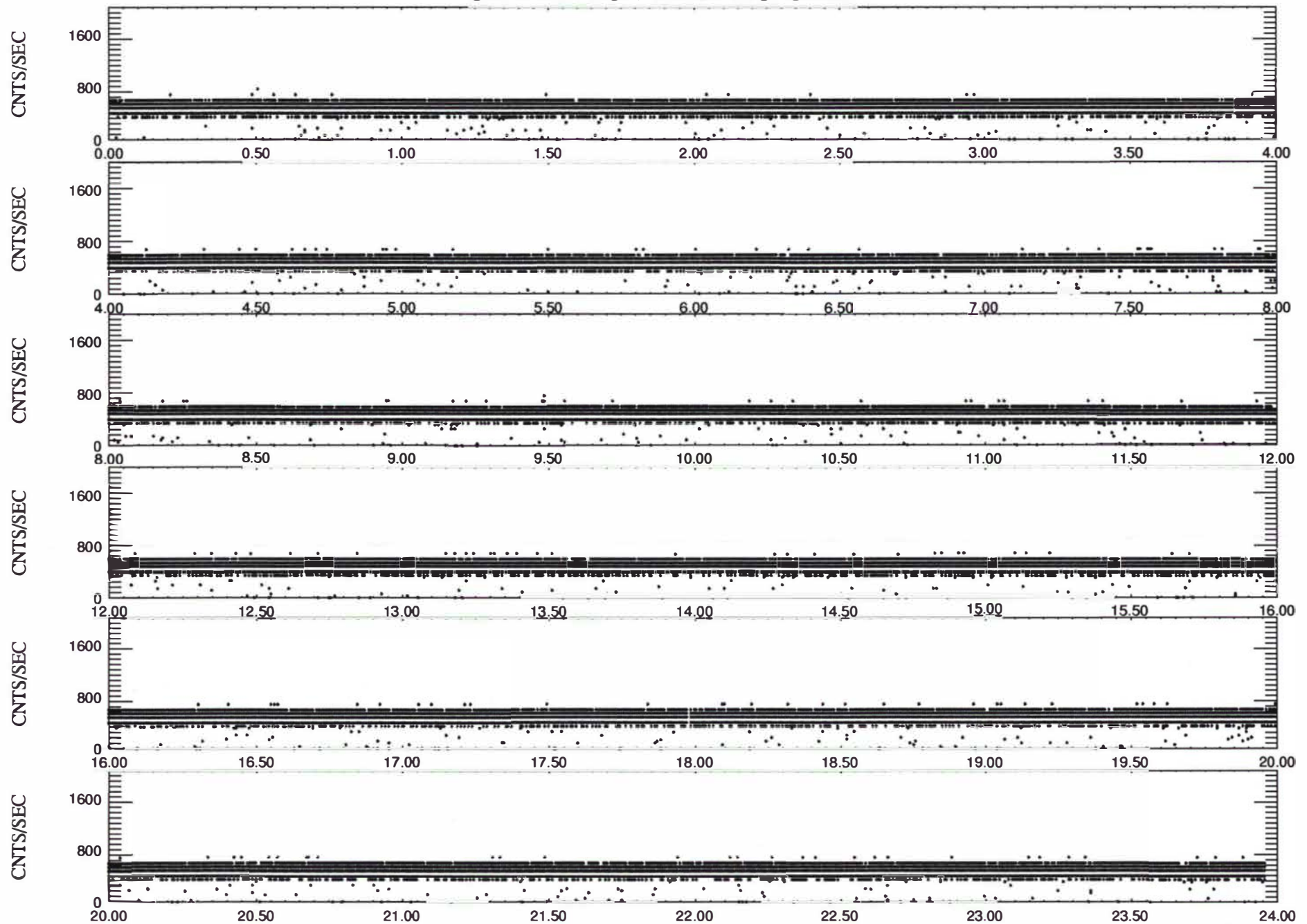
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

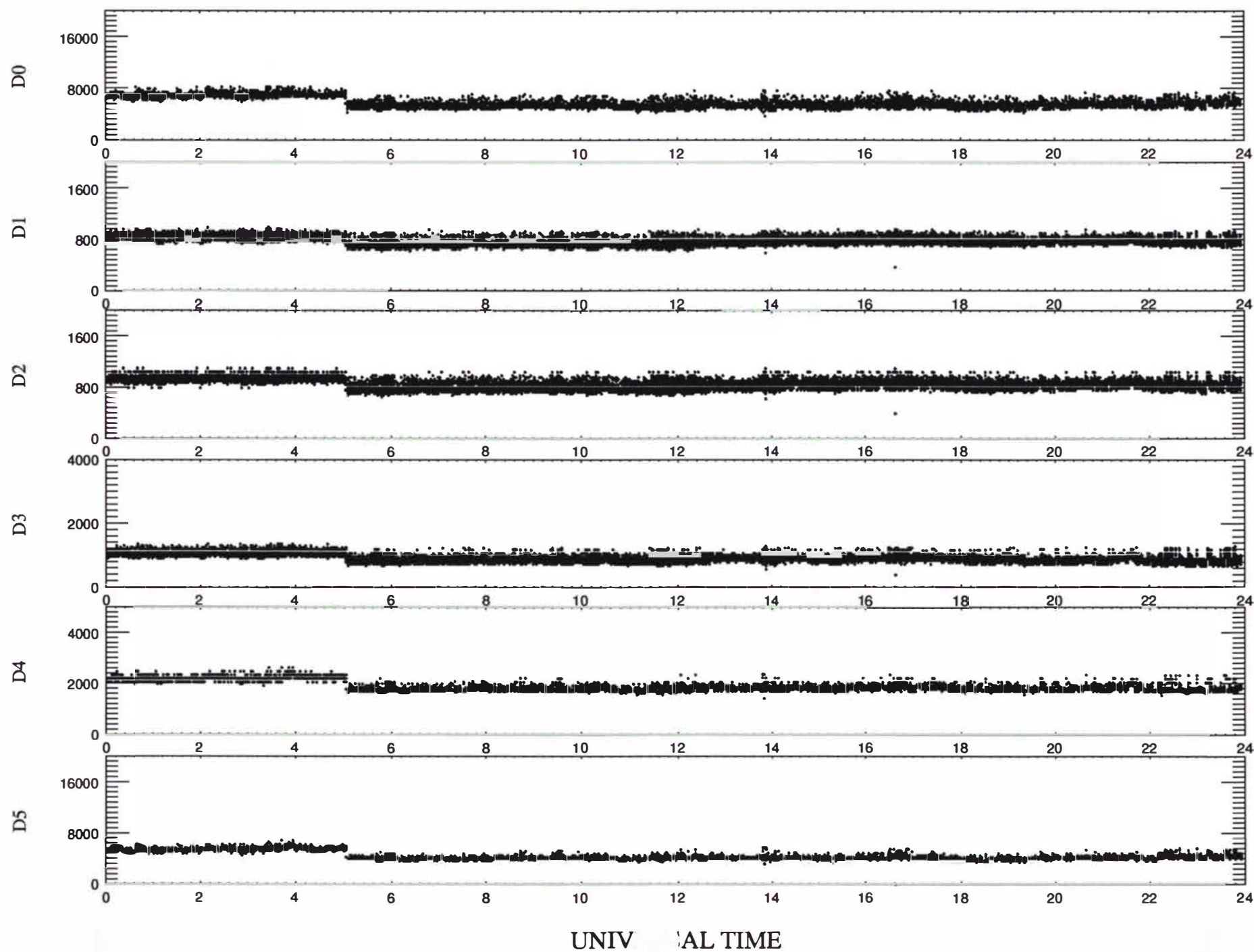
NO BURST (8)

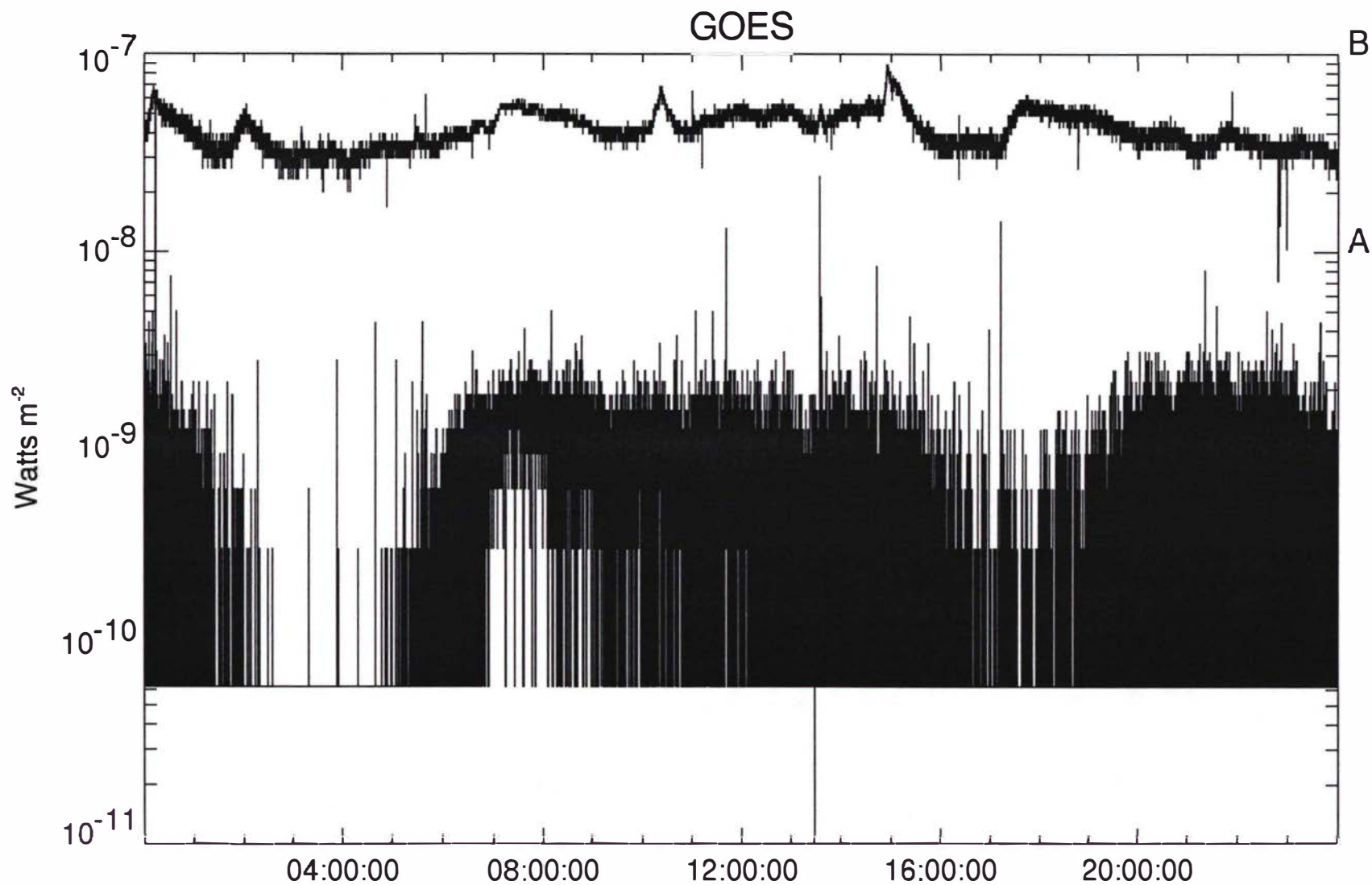


CALIBRATION DATA INCLUDED



UNIV SAL TIME





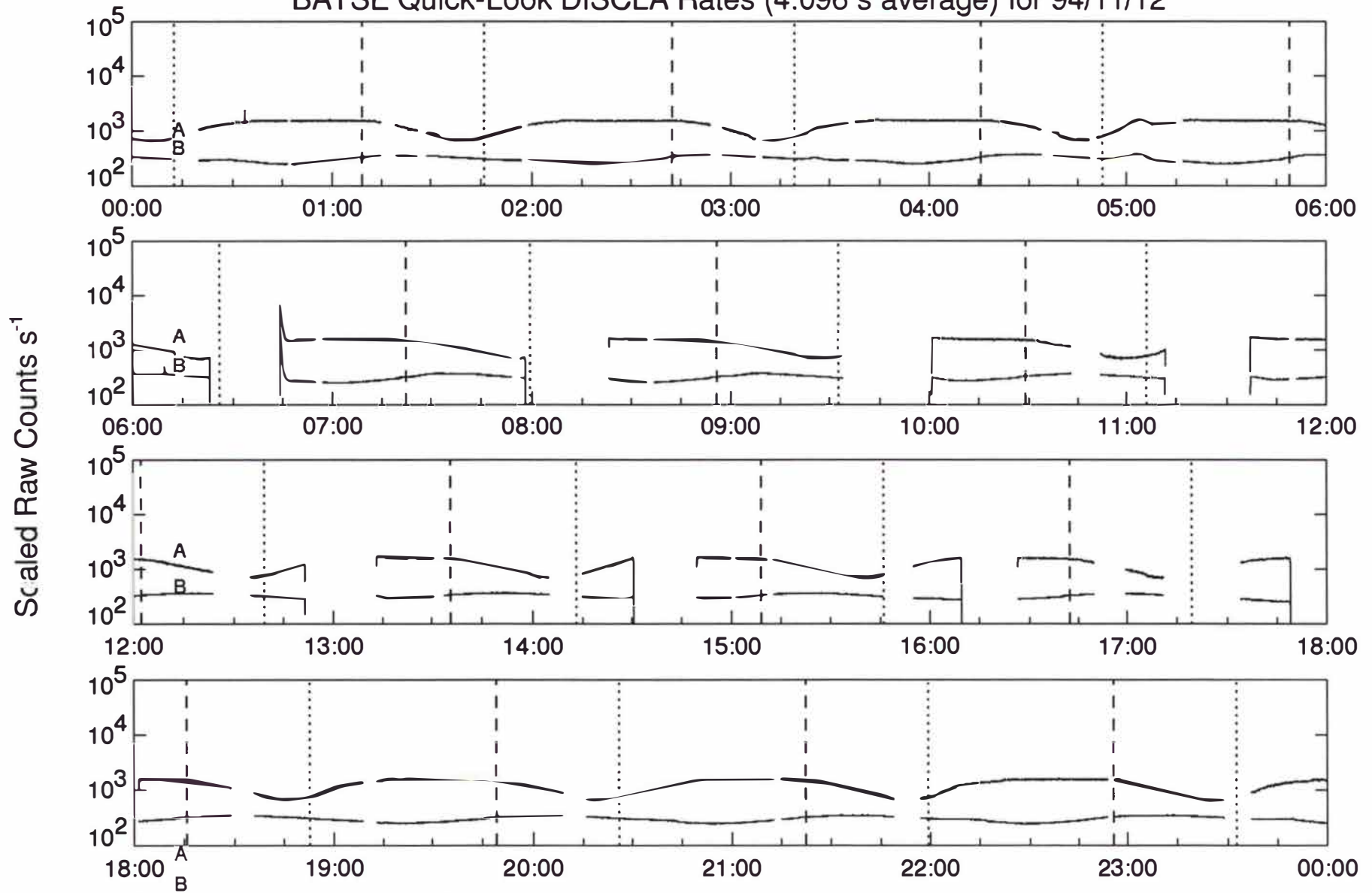
Data Start: 94/11/12, 0000:00

Plot created: 94/11/16, 1838

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 94/11/12

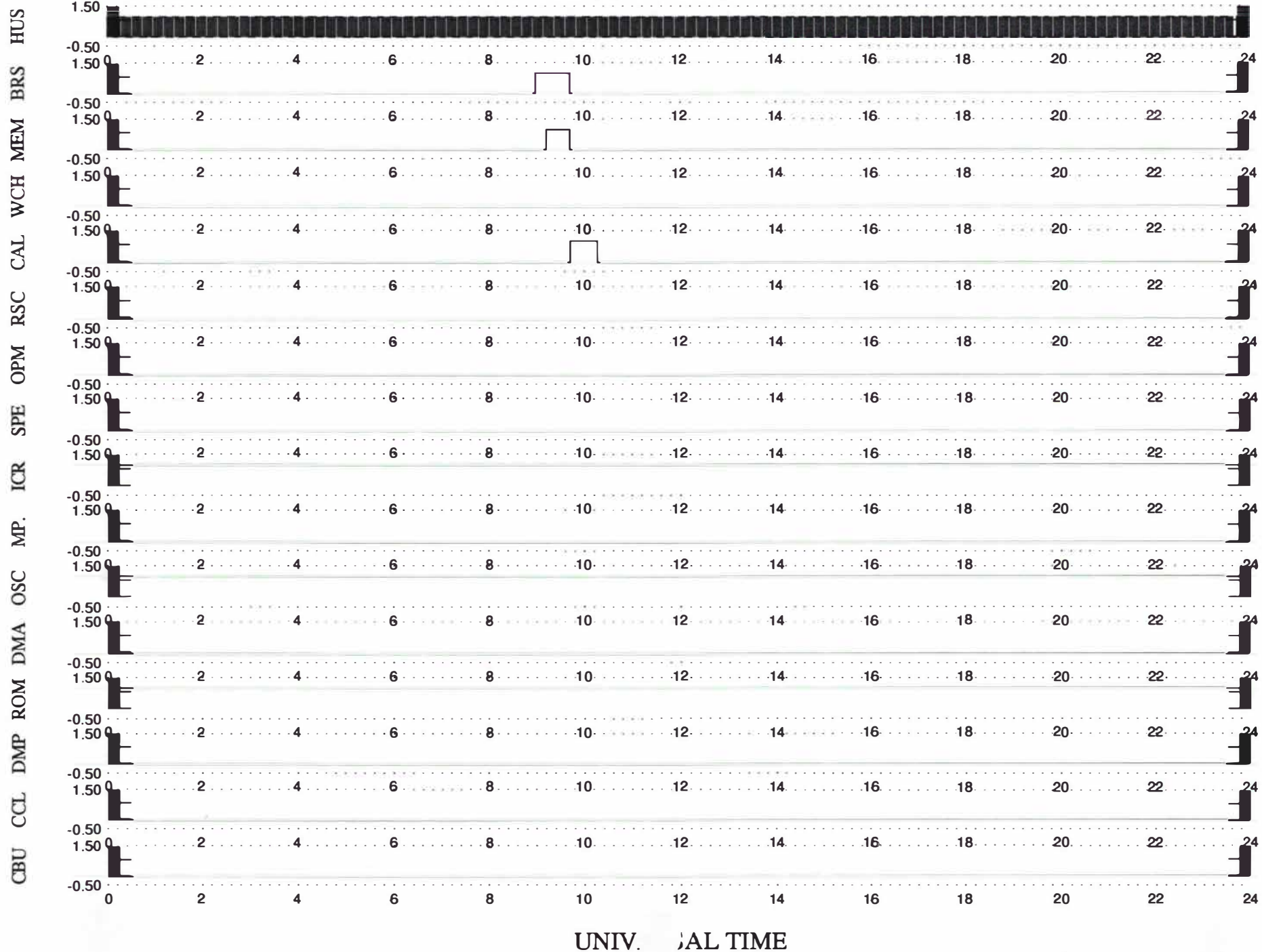


Current Time: 94/11/16, 1832 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

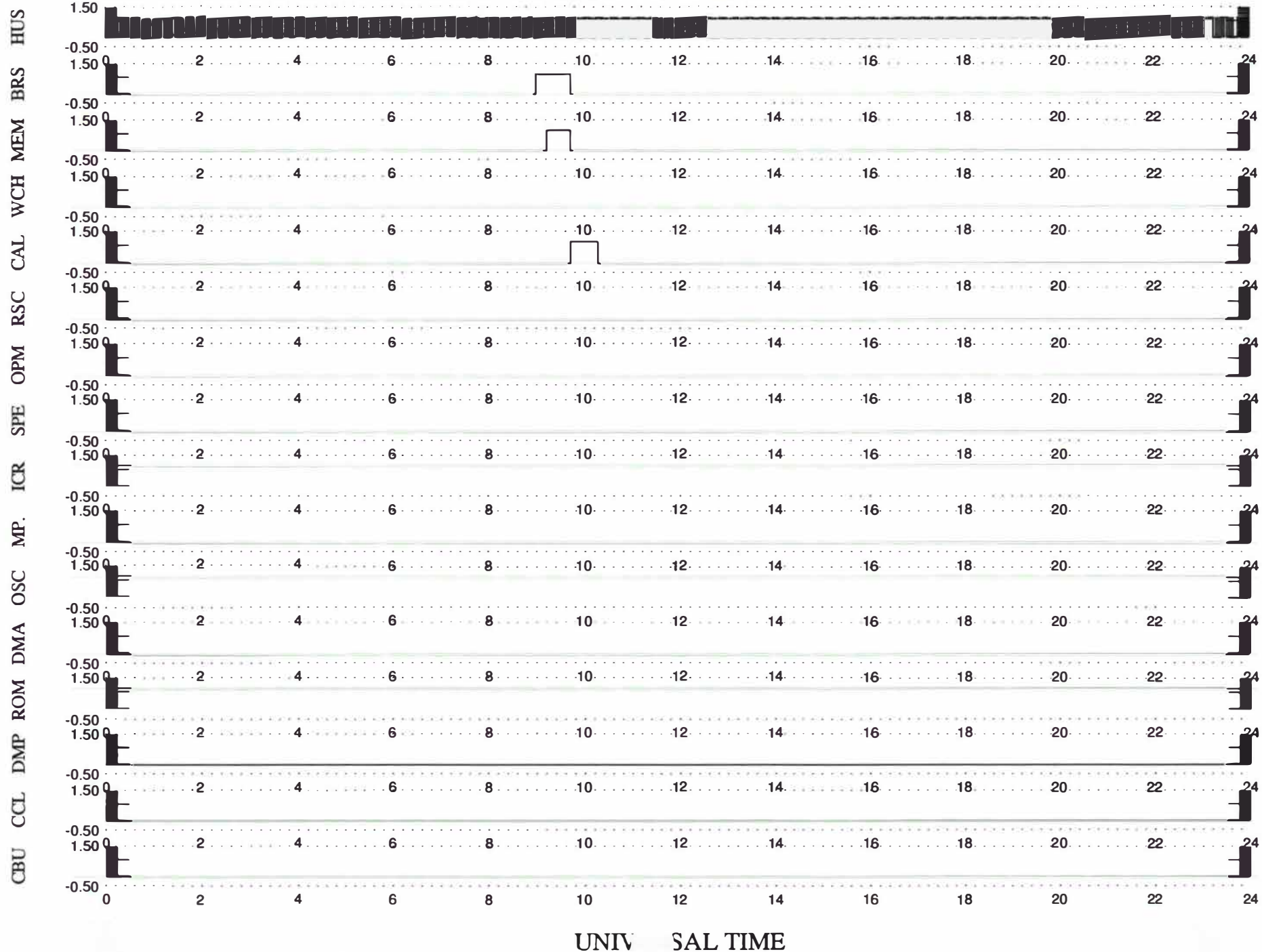
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

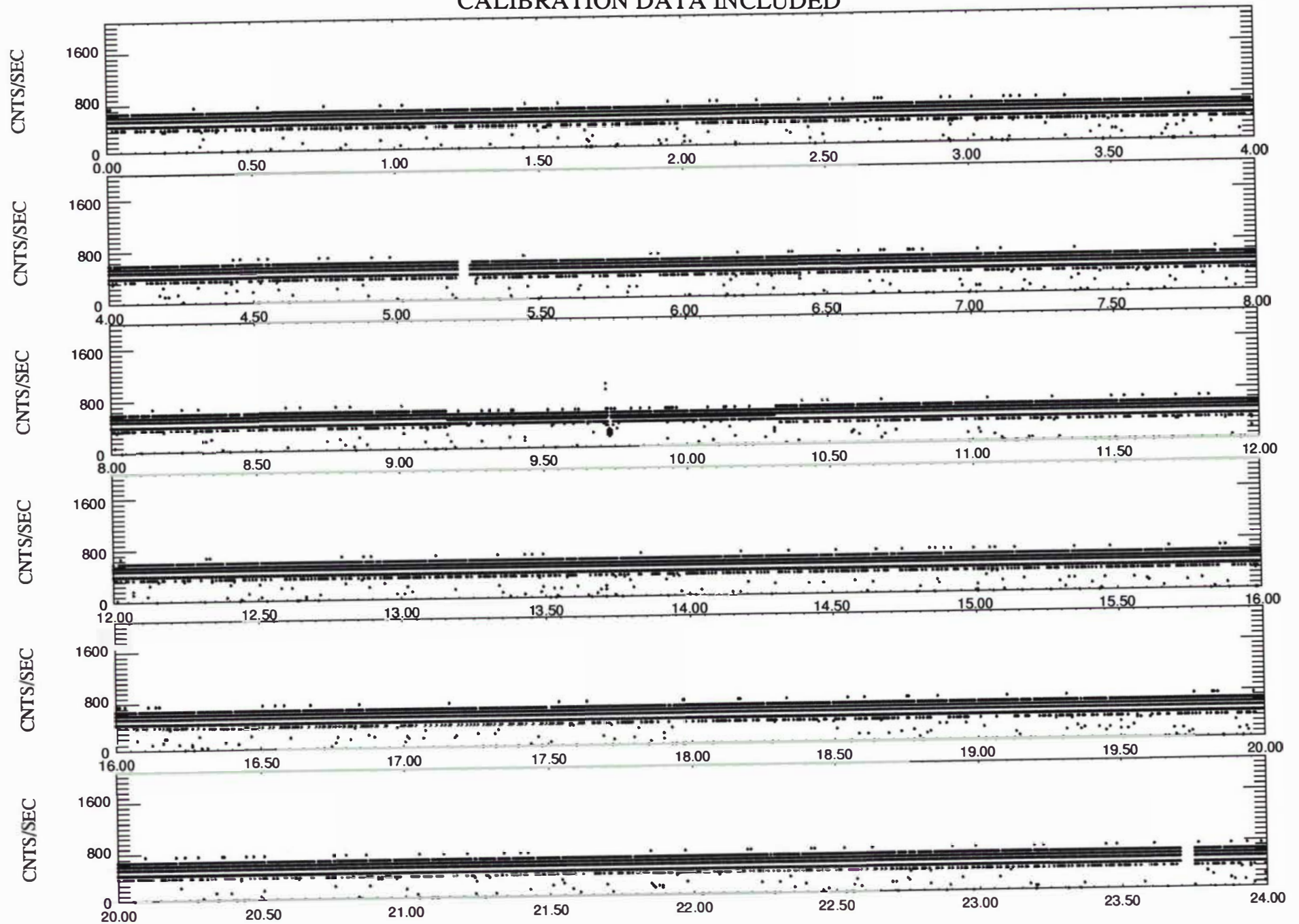
BURST NUMBER 9



BURST NUMBER 9

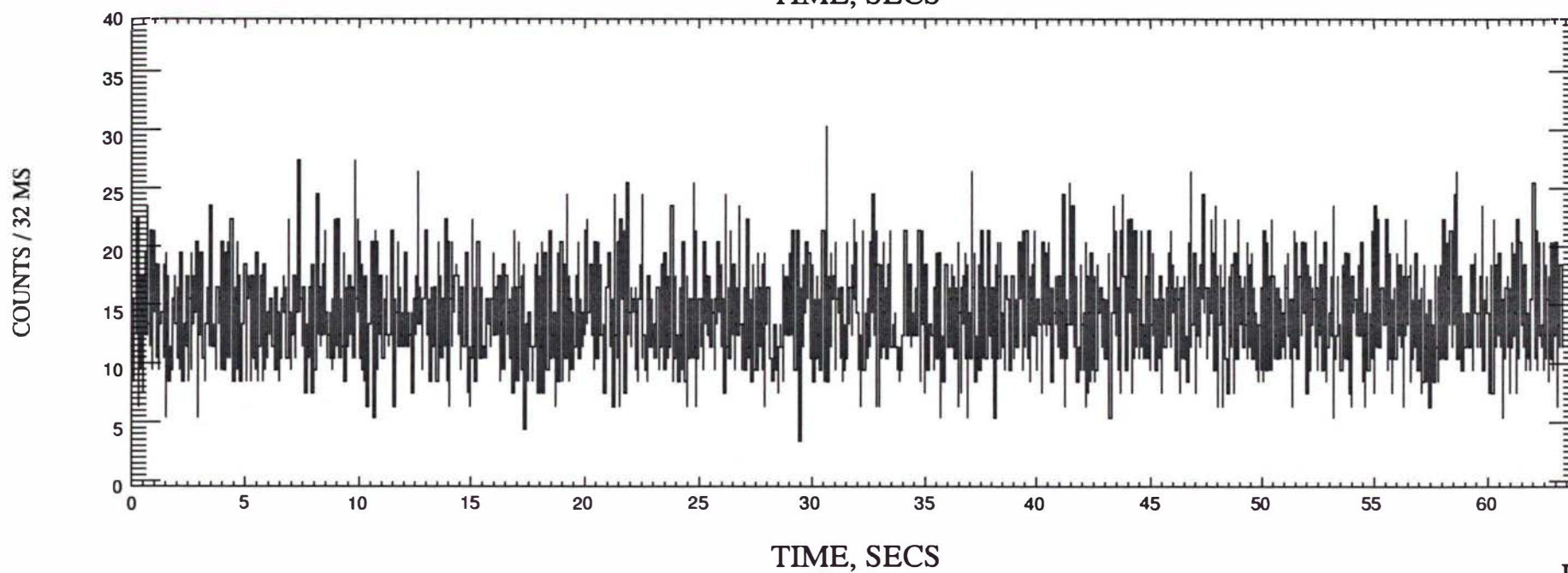
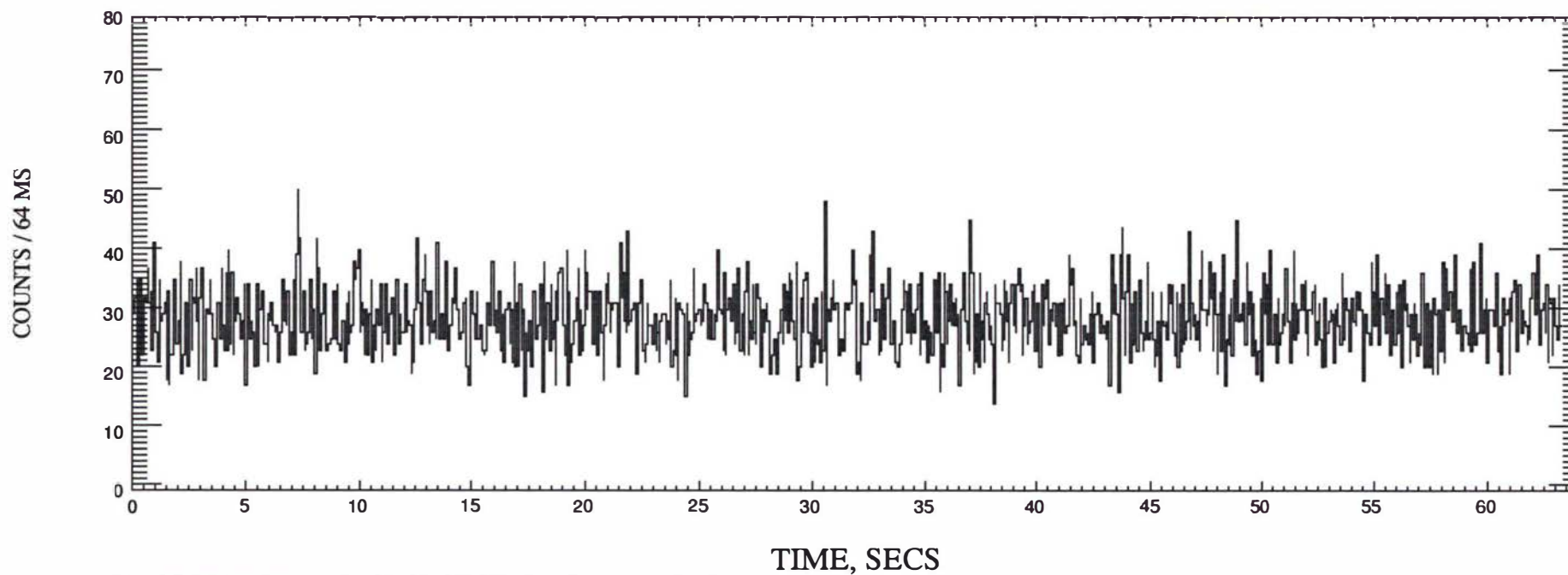


CALIBRATION DATA INCLUDED

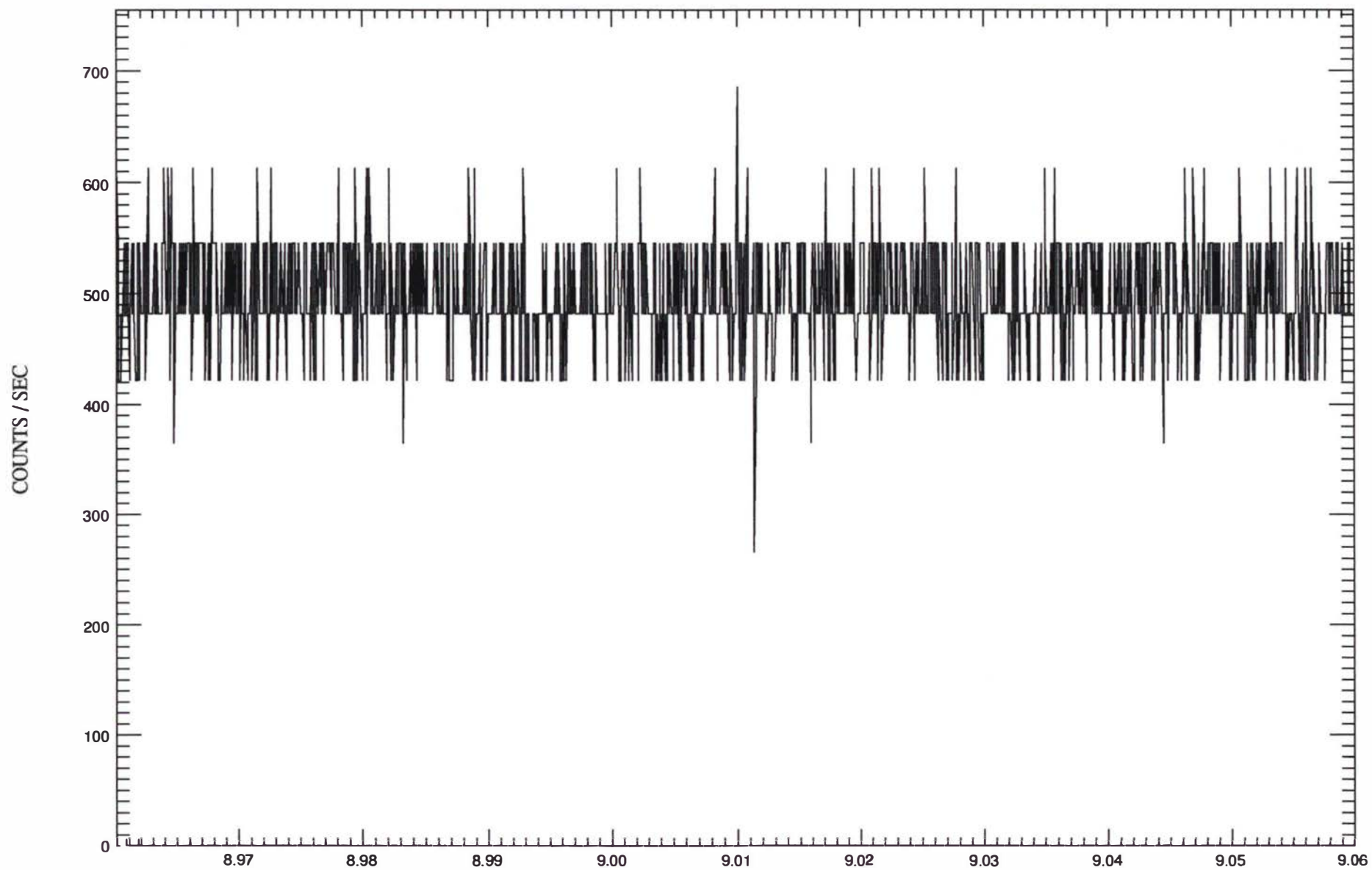


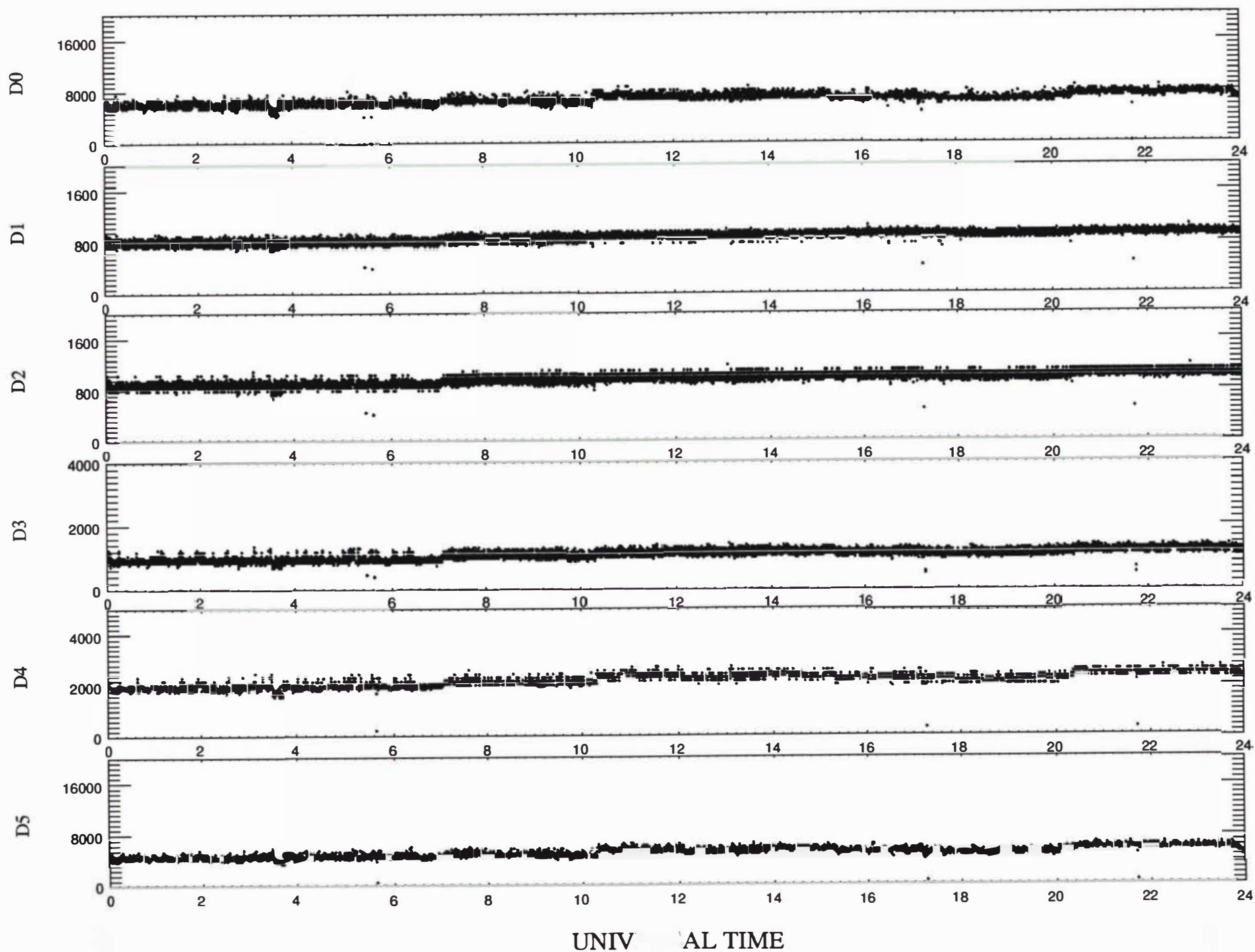
UNIV SAL TIME

Burst Counter 9 at UT= 9.010174018012 h=32436.626 s 09:00:36.626



CALIBRATION DATA INCLUDED





From HAGEDON@fender.msfc.nasa.gov Tue Nov 15 09:33 PST 1994
Date: Tue, 15 Nov 1994 11:33:37 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3282

BATSEARCH PROGRAM

BATSE BURST # 3282
EVENT OF 1994 NOV 13 DAY OF YEAR=317
EVENT CROSSING TIME AT BATSE : 11603. S. OR 03:13:23.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 196.000 87.000
BATSE PEAK COUNTING RATE: 11500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 13/11/ 94 IS:
RA= 228.843 DEC= -75.117 DIST= 2.202 AU
BATSE-ULYSSES DISTANCE = 329469833. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 17.48 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1048.26 SECS.
CROSSING TIME AT ULYSSES IS 12651. S. OR 03:30:51 +/- 123.22 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 13/11/ 94 IS:
RA= 142.918 DEC= 16.624 DIST= 1.245 AU
MARS-BATSE DISTANCE = 186323360. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=108.41 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -196.29 SECS.
CROSSING TIME AT MARS IS 11407. S. OR 03:10:06 +/- 99.40 SECONDS

NO

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3282

TIME: TJD=9669 SECONDS=11603

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=69 AZIMUTH=104 ERROR= DEGREES

COMMENTS:

BURST. SINGLE SPIKE WITH SUBSTRUCTURE. DUR.~0.10 SEC.
WEAKLY VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Tue Nov 15 09:33 PST 1994
Date: Tue, 15 Nov 1994 11:33:06 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3282

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3282	941113	9669	11603	11500	196	+87

15 / 11 / 94

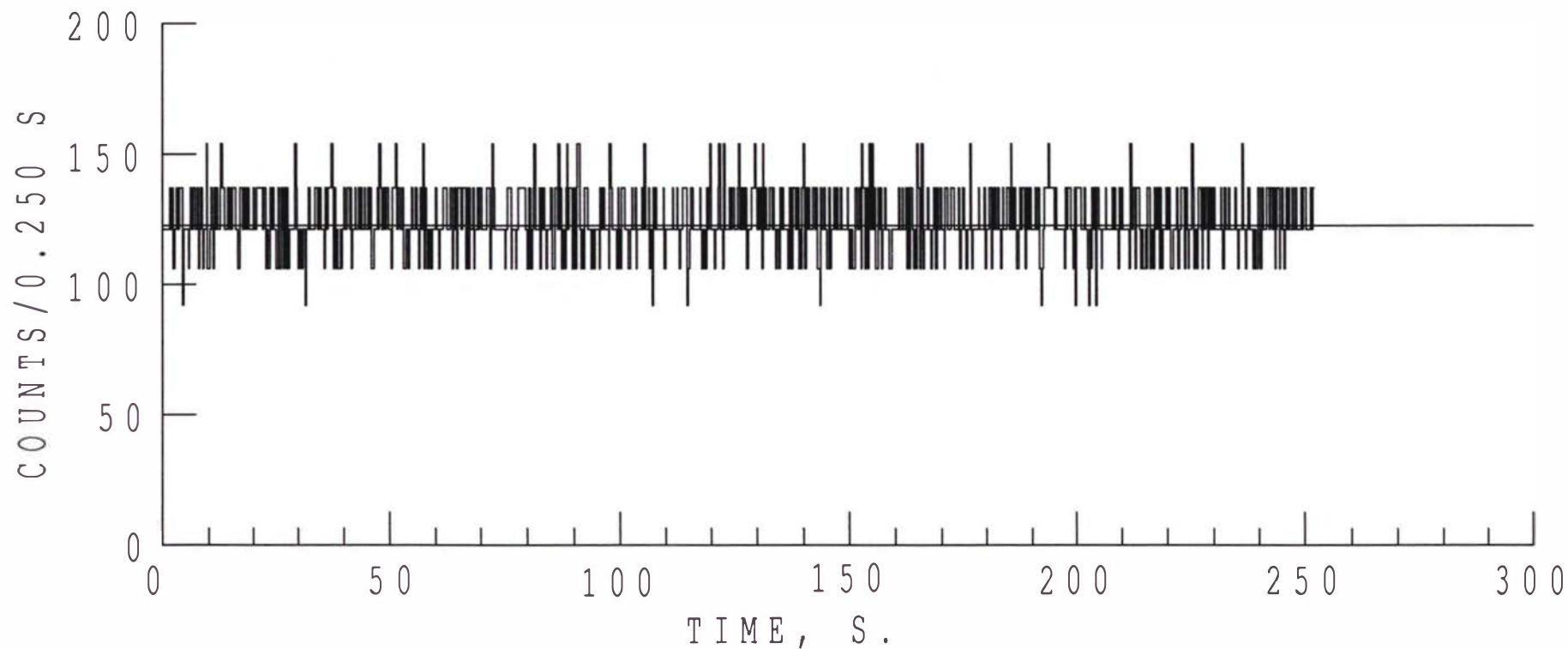
ULYSSES RT

13 / 11 / 94 12528.163 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



Date: Fri, 10 Feb 1995 04:54:34 +0800
 Message-Id: <9502101254.AA19784@sunspot.ssl.berkeley.edu>
 Mime-Version: 1.0
 To: KHURLEY@space6.ssl.berkeley.edu
 m: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Improved list.
 Cc: TGRS::Palmer@tgrs.gsfc.nasa.gov
 X-Lines: 81
 Status: RO
 Content-Length: 4056
 X-Sun-Content-Length: 4056

KONUS // ULYSSES // CGRO-BATSE Event List from Wind launch to 95-01-17:

63 Konus days to 1/17: 22 backgnd-GRBs, 21 triggered-GRBs, 1 flare.

Date	Tzero (UT)	Konus sensor	Max c/s G1 G2 G3	N(1)/N(2) =G2 t<Tz t>Tz	Duration T#	BATSE Uly T# d* d*	TGRS T#	BACODINE RA Dec
941113	12 09 15	S1	145 85	2.5 115	BG			
941114	02 02 40	S2	110 128	30 0.25 12	BG	3283		92 37
941115	06 22 --					3284 (U)		149 11
941117	03 14 38.191	S2	406 550	74 0.17 40	5 2			
941117	14 07 57	S2	150 140	<0.15 5	BG			
941119	19 31 09.175	S2	370 703	160 0.23 7	20 4	3287* U*	#13	188 22
941120	20 23 17.924	S1	215 328	30 >15 2	25 5			
941121	17 25 00.945	S1	1652 1656	300 21 3	50 6	3290* U*	#15	004 -63
941123	19 51 --					3294 (U)		190 02
941125	22 04 30.156	S2	115 308	109 0.95 1.5	5 7	3295* U*	BG	
941126	00 20 46	S1	150 205	200 >14 18	BG	3296	BG	
941126	03 55 --					3297 (U)		323 38
941126	12 22 37.952	S1	860 1430	330 4.2 40	45 8	3298* U*	#28	
941126	16 54 20	S1	55 75	>10 26	BG			
941126	19 56 49.732	S1	290 390	211 6.7 20	26 9	3301* U*	#--	
941127	14 30 25.680	S2	200 400	95 0.17 8	7 10	3303* U*		070 50
941127	15 39 10	S1	210 57	2.7 260	BG			
941128	15 37 00	S1	75 90	32 >15 55	BG	3305	no d	
941128	18 41 --					3306 (U)		011 -32
941205	23 33 40.074	S2	370 460	188 0.06 6	30 11			
941207	22 10 32	S2	265 175	<0.2 7	BG			
941210	03 10 52.523	S2	900 2350	1385 0.12 1	15 14	U*	BG	
941214	17 03 51	S1	40 45	29 >6 12	BG			
941214	05 38 45.226	S1	3479 1266	14 1.0 12	240 SF	3318	BG	259 -06
941221	07 44 08	S2	55 115	30 0.8 20	BG			
941221	22 14 35.215	S1	260 496	165 1.5 55	11 19		BG	
941222	05 36 00.243	S2	334 1360	1066 0.36 7	105 20		#145	
941228	07 39 45.915	S1	300 637	519 4.4 5	90 28	3330* U*	no d	339 -52
941228	16 55 23	S2	40 36	23 0.25 25	BG			
941229	12 58 05	S1	46 108	31 1.8 15	BG			
941229	22 51 08.781	S2	396 381	140 0.09 7	25 29	3334* U*	no d	
941230	20 52 53	S1	74 117	52 8.4 158	BG		no d	
941230	23 43 44	S2	55 70	16 <0.2 4.5	BG		no d	
950104	00 48 +/-1200					(U)		
950104	07 18 39.613	S2	258 550	219 0.75 2.8	20 31	3345* U*	#250	310 -11
950104	09 00 58	S2	140 143	40 <0.1 25	BG			
950108	02 04 --					3349 (U)		020 -14
950110	06 02 15	S2	332 180	<0.1 3600	BG			
950110	13 37 57.084	S2	234 422	213 0.05 38	100 32			
950111	04 49 12.241	S1	586 620	100 >19 92	24 33	3351 U*	BG	319 -65
950111	12 18 49.196	S1	225 435	164 1.85 26	50 34	3352 U*	BG	024 -14
950112	07 45 37.120	S2	1305 1800	336 0.04 2.5	44 35		(?)	
950113	05 59 13	S1	283 180	26 >10 52	BG			
950113	17 38 32	S2	85 162	35 <0.06 75	BG			

950114	01 00 38	S1	46	110	1.6	6	BG	
950114	04 03 01	S2	23	76	0.5	70	BG	U
950114	07 30 30.766	S2	205	406	60 <0.05	1 100	36	
950114	13 10 34.865	S1	1320	2828	516 3.1	1 10	37	U* #258
950115	02 49 32	S2	40	47	34 <0.15	24	BG	BG
950117	01 36 00	S2	56	82	42 0.22	108	BG	3360* U* 298 05
950118	17 05 --							3366 (U) 061 -63

G1:14-50, G2:50-225, G3:225-900 keV, >94/12/12: 12.5-43, 43-190, 90-760 keV.
 N(1)/N(2)=G2-ratio, *=data at GSFC; BG=background rate increase = event visible.

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

1 3 / 2 / 9 5

U L Y S S E S R T

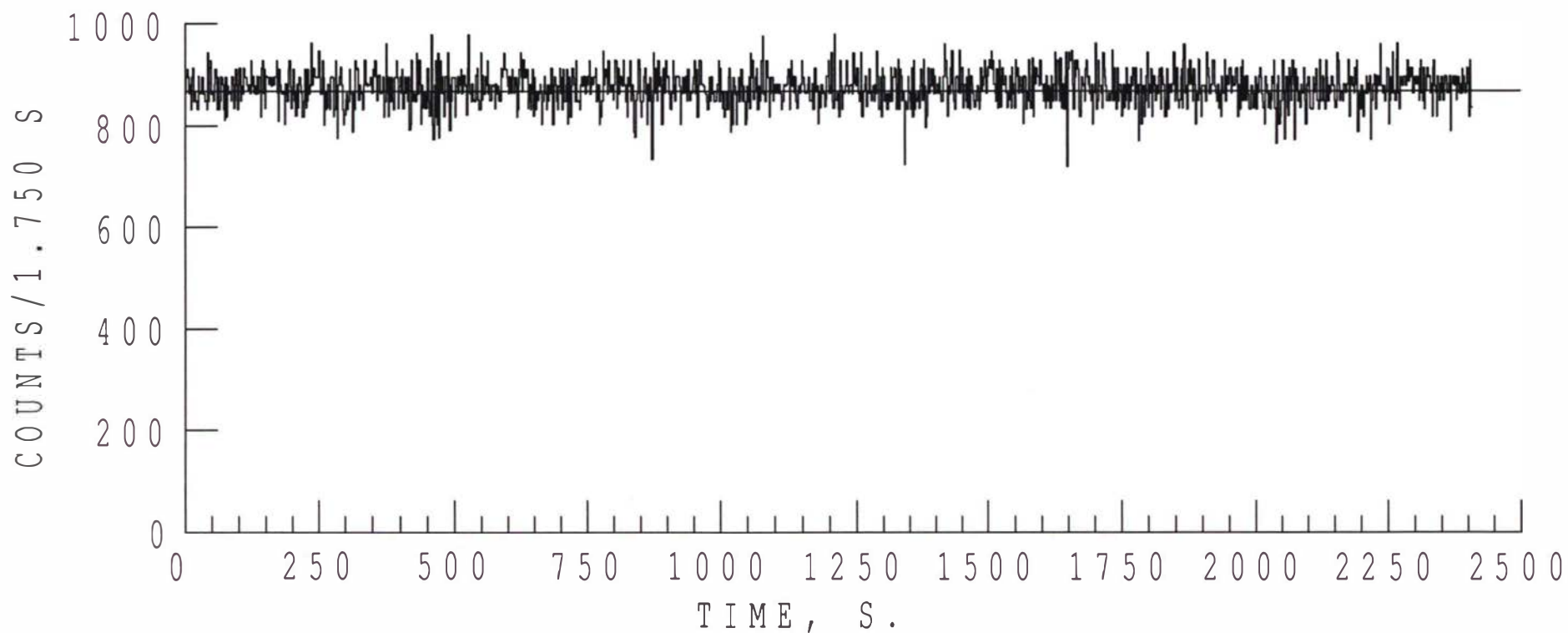
1 3 / 1 1 / 9 4 4 2 5 5 2 . 2 3 0 s

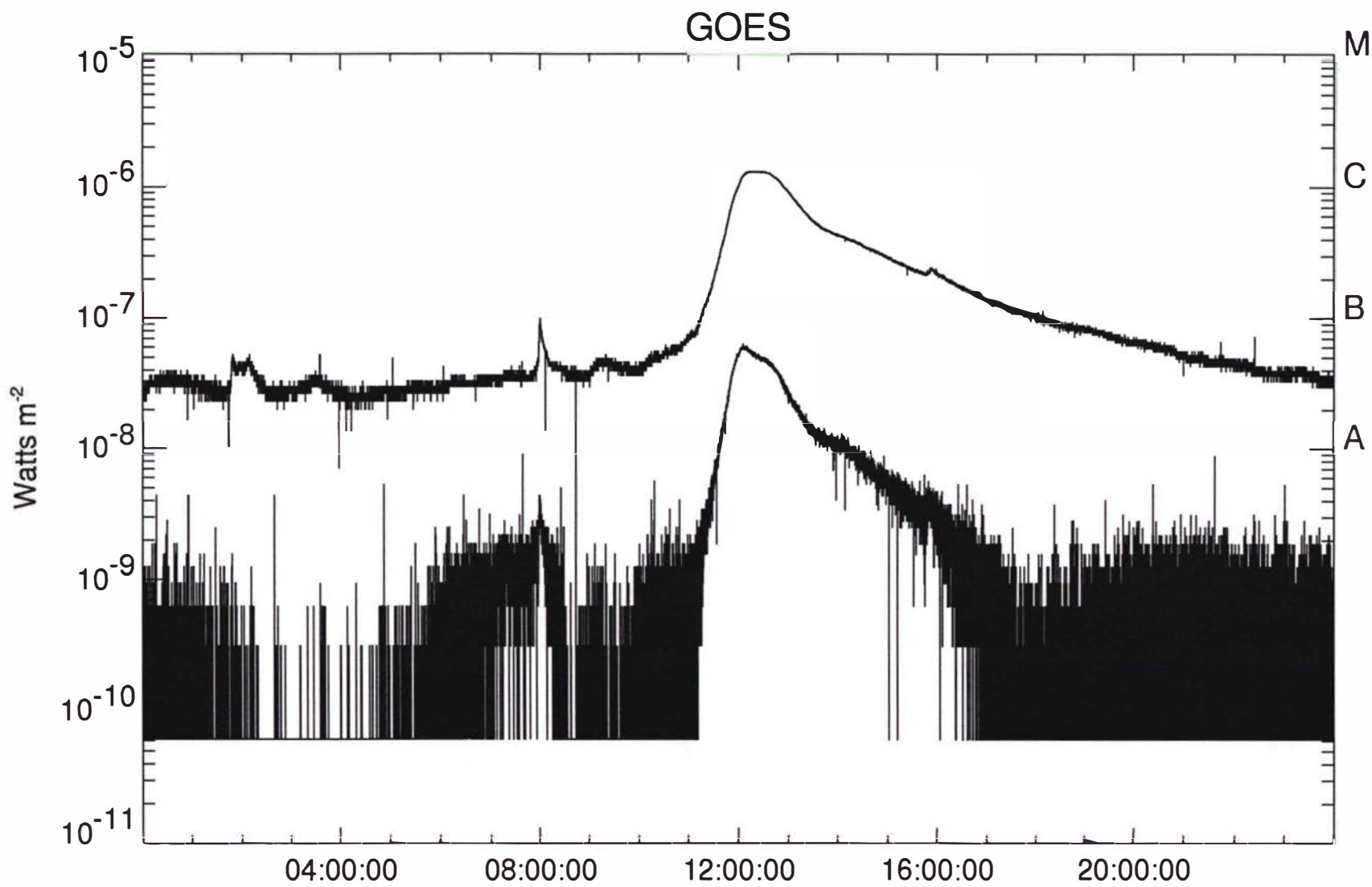
0 . 2 5 0 s I N T E R V A L S R E G R O U P E D B Y 7

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS





Data Start: 94/11/13, 0000:01

Plot created: 94/11/16, 1838

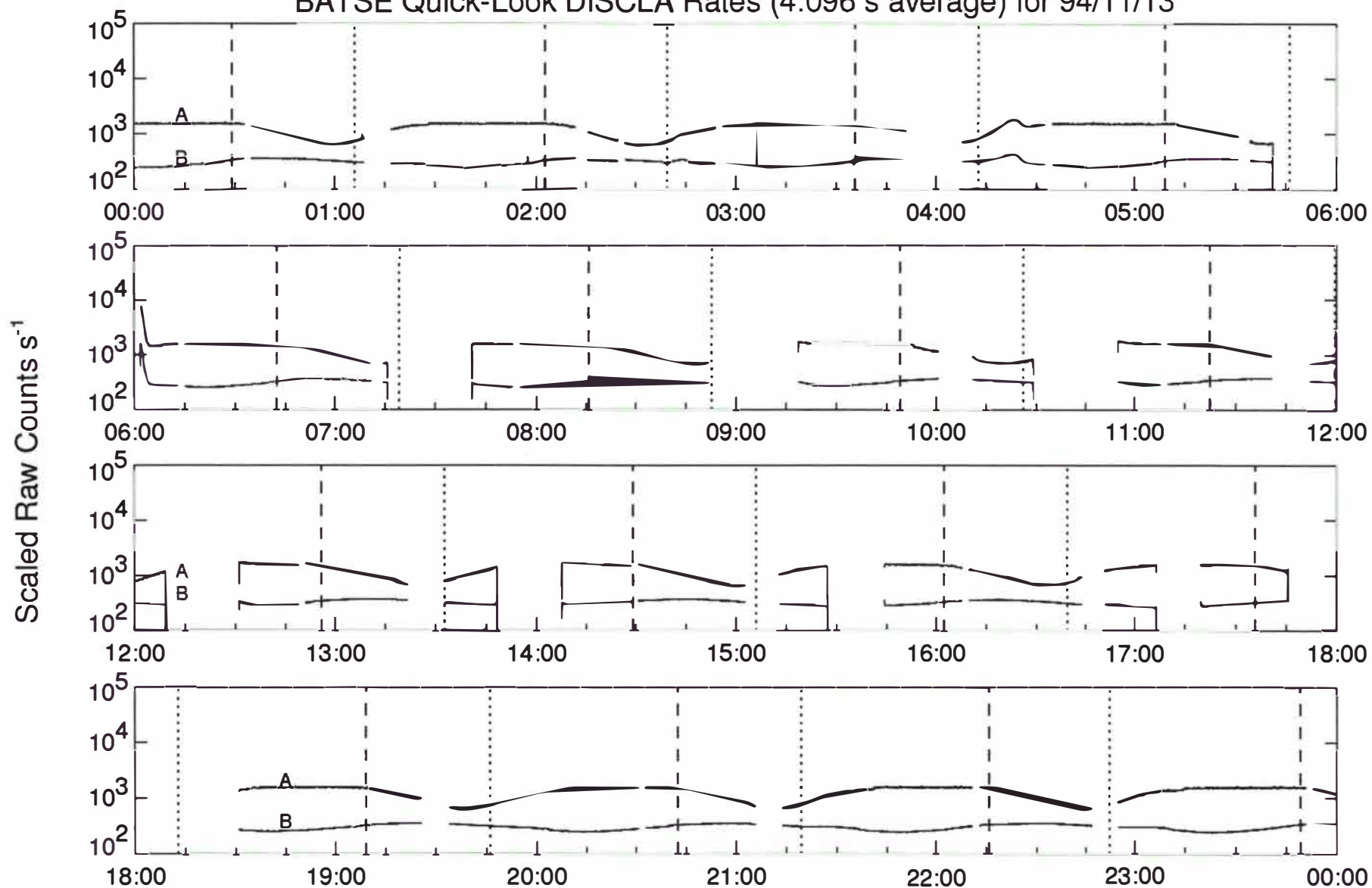
Channel 1 (1.0 - 8.0 Angstroms)

Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/13

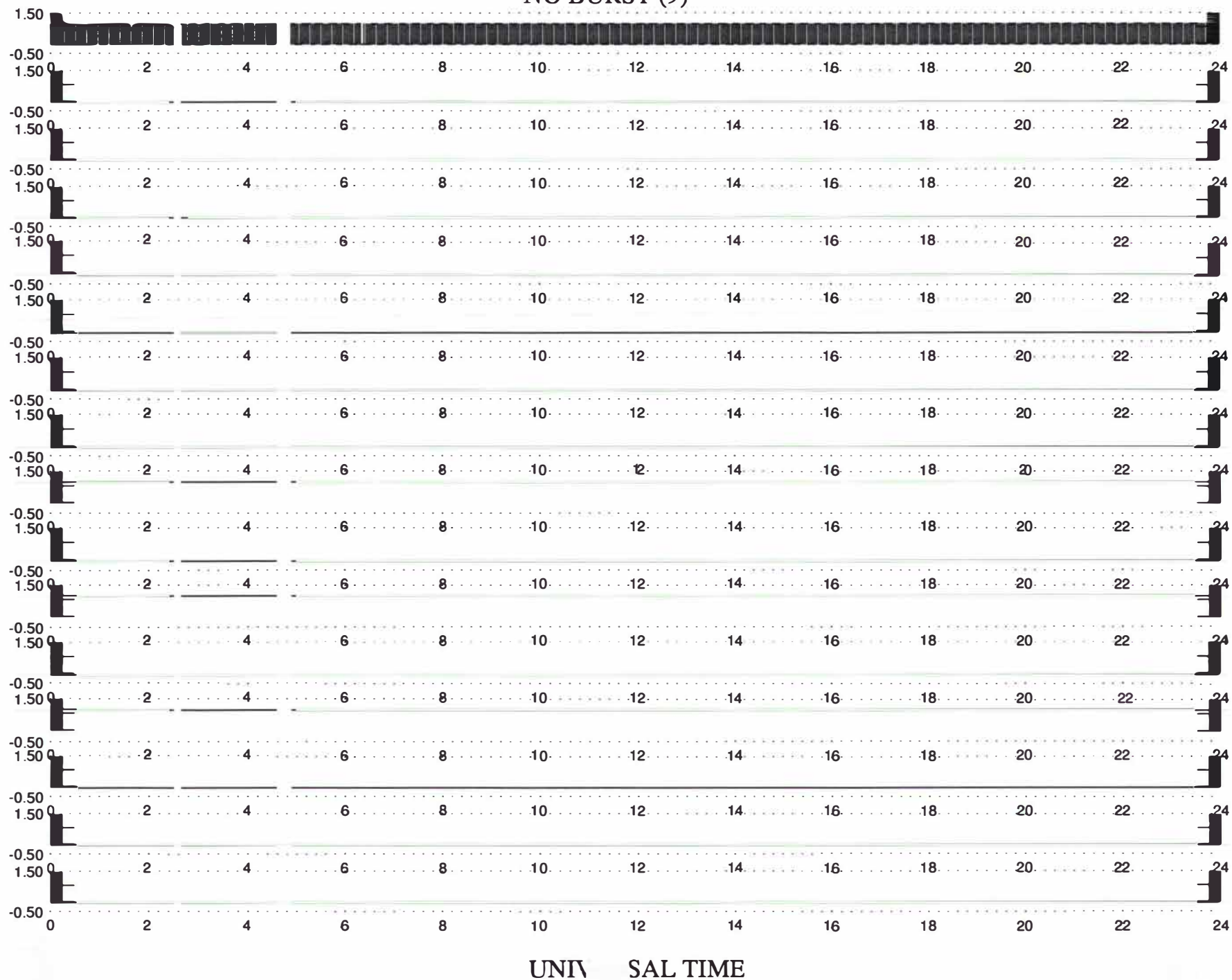


Current Time: 94/11/16, 1832 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

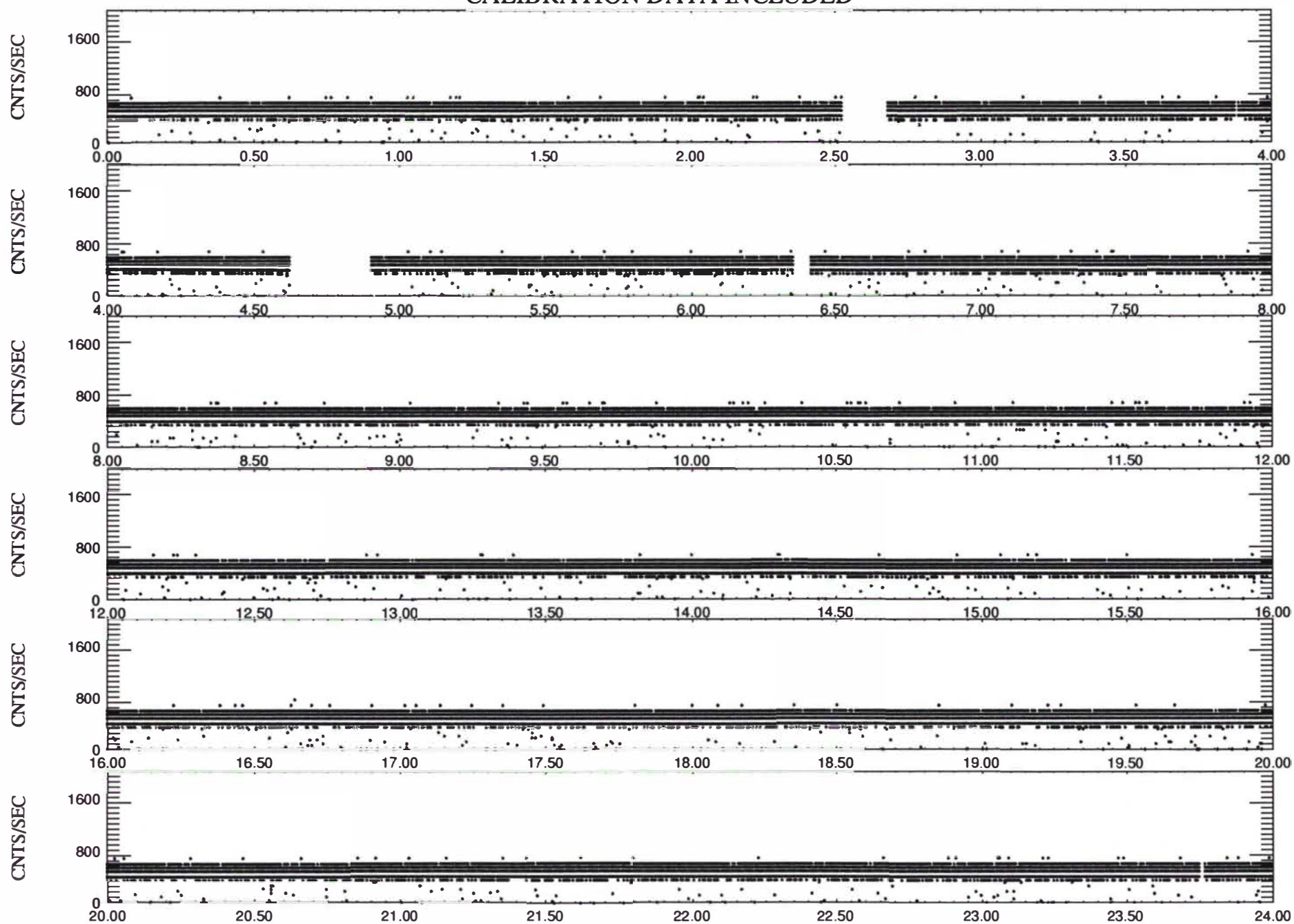
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

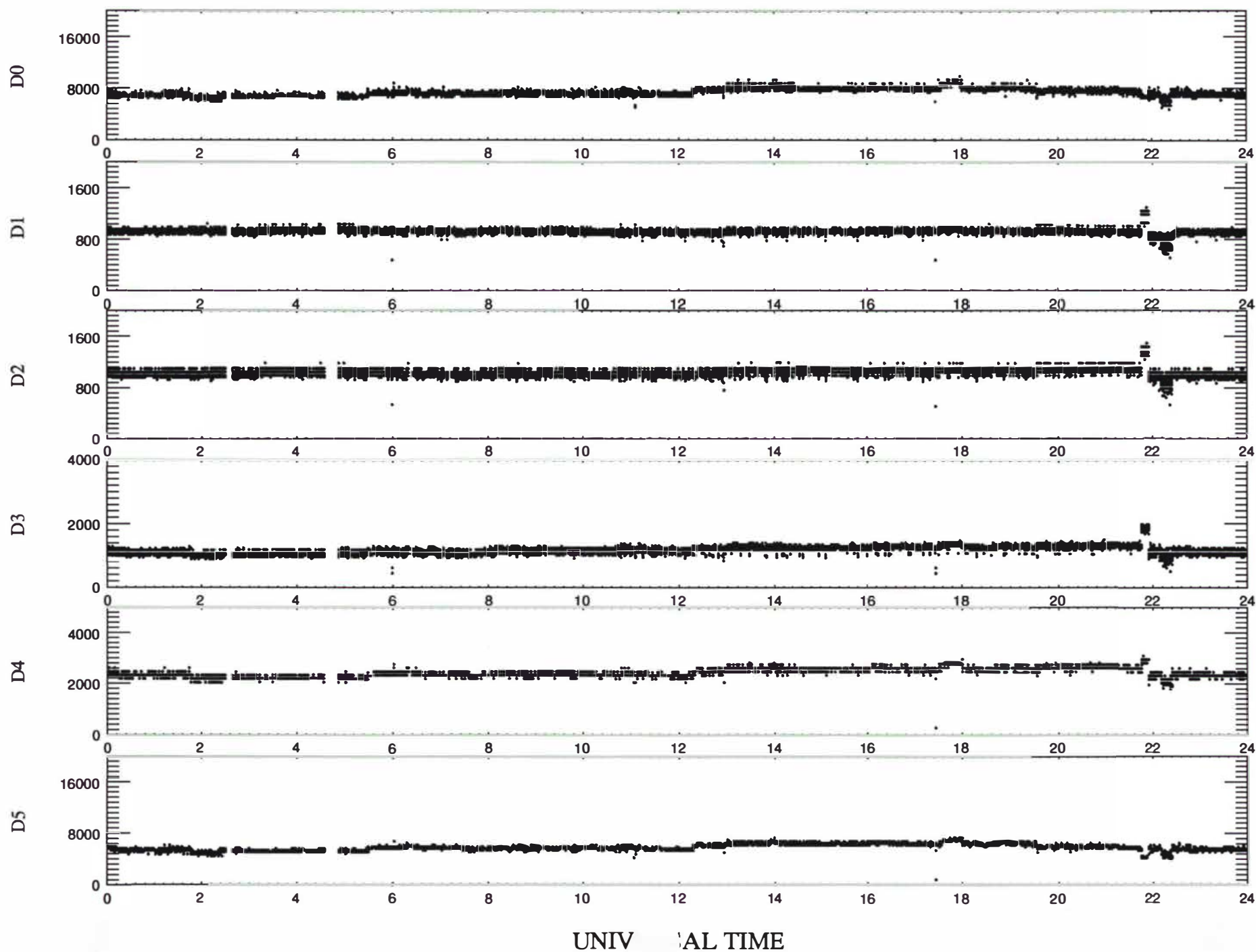
CBU	CCL	DMP	ROM	DMA	OSC	MP.	ICR	SPE	OPM	RSC	CAL	WCH	MEM	BRS	HUS
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From DEAL@ssl.msfc.nasa.gov Wed Nov 16 11:23 PST 1994
Date: Wed, 16 Nov 1994 13:23:24 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3283

BATSEARCH PROGRAM

BATSE BURST # 3283
EVENT OF 1994 NOV 14 DAY OF YEAR=318
EVENT CROSSING TIME AT BATSE : 7358. S. OR 02:02:38.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 95.000 35.000
BATSE PEAK COUNTING RATE: 10000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 14/11/ 94 IS:
RA= 231.699 DEC= -75.176 DIST= 2.198 AU
BATSE-ULYSSES DISTANCE = 328875507. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 45.01 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 775.60 SECS.
CROSSING TIME AT ULYSSES IS 8134. S. OR 02:15:33 +/- 196.47 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 14/11/ 94 IS:
RA= 143.350 DEC= 16.513 DIST= 1.237 AU
MARS-BATSE DISTANCE = 185076080. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=133.23 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -422.86 SECS.
CROSSING TIME AT MARS IS 6935. S. OR 01:55:35 +/- 71.67 SECONDS

10

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3283

TIME: TJD=9670 SECONDS=07358

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=36.8 AZIMUTH=163.3 ERROR= DEGREES

COMMENTS:

MULTI-PEAK BURST LASTING ~12S. WEAKLY VISIBLE ABOVE 300 KEV.

From DEAL@ssl.msfc.nasa.gov Wed Nov 16 11:22 PST 1994
Date: Wed, 16 Nov 1994 13:22:49 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: DEAL@ssl.msfc.nasa.gov
Subject: BATSE Burst 3283

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3283	941114	9670	07358	10000	095	+35

From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996
 Date: Fri, 26 Jan 1996 13:00:45 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: Improved list; same question.

Dear Kevin,
 I'm making a little progress here, tracking down these events. This is a slightly improved list, with a few more BATSE triggers identified. - TLC

Yr	Mn	Dy	Konus#	Konus Tzero	BATSE Tz, #	Ulysses
94	11	14	BGR	07360	07358 3283	- NO
94	11	19	4	70269.175	70250 3287	R I
94	11	21	6	62700.945	62697 3290	trig.
94	11	25	7	79470.156	79470 3295	R I
94	11	26	BGR	01246	01245 3296	
94	11	26	8	44557.952	44521 3298	trig.
94	11	26	BGR	60860	60861 3299	
94	11	26	9	71809.732	71798 3301	R I
94	11	27	10	52225.68	52217 3303	R I
94	11	28	BGR	56220	56217 3305	
94	12	28	28	27585.915	27581 3330	R I
94	12	29	29	82268.781	82258 3334	R I
95	1	4	31	26319.613	26319 3345	R I
95	1	11	33	17352.241	17263 3351	R I
95	1	11	34	44329	44310 3352	
95	1	17	BGR	05760	05761 3360	
95	1	18	BGR	44574	44589 3364	
95	2	7	BGR	02774	02781 3406	
95	2	8	45	07824	07824 3408	
95	2	10	47	08424	08421 3410	
95	2	11	48	08697	08697 3412	trig.
95	2	11	50	72469	72468 3415	
95	2	21	BGR	74701	74705 3436	
95	2	26	54	53351	53336 3442	
95	3	1	BGR	75731	75761 3448	
95	3	4	56	37661	37657 3453	
95	3	5	58	54309	54304 3458	
95	3	10	BGR	78388	78395 3464	
95	3	25	63	25841	25844 3480	
95	3	25	64	63392	63391 3481	
95	3	27	BGR	26323	26347 3485	
95	3	27	BGR	85672	85671 3486	
95	4	1	69	42647	42642 3488	
95	4	1	70	74635	74634 3489	
95	4	3	71	47985	47987 3491	
95	4	3	72	84828	84826 3492	
95	4	16	BGR	48420	48419 3509	
95	4	18	81	83793	83795 3512	
95	4	25	86	00923	00919 3523	
95	4	30	BGR	54224	54229 3527	
95	5	3	88	66971	66970 3537	
95	5	10	90	28083	28079 3569	
95	5	13	93	81706	81703 3571	
95	5	21	97	25161	25157 3588	
95	5	22	98	23898	23896 3590	
95	5	22	100	85280	85283 3593	
95	5	24	102	14902	14899 3598	
95	6	2	104	25592	25592 3618	
95	6	10	107	6849	06849 3637	
95	6	24	111	84124	84084 3648	
95	6	25	113	14626	14601 3649	
95	6	29	115	37033	37036 3654	
95	7	1	116	12762	12758 3657	

95	7	1	117	23737	23737	3658
95	7	6	121	42735	42735	3662
95	7	11	123	13789	13789	3663
95	7	13	BGR	32133	32176	3664
95	7	30	128	76149	76124	3720
95	8	4	131	7135	07134	3734
95	8	4	133	45377	45376	3735
95	8	8	BGR	13023	12974	3745
95	8	9	136	85945	85945	3750
95	8	18	137	5065	05002	3765
95	8	22	140	13751	13749	3767
95	9	4	142	52692	52688	3776
95	9	9	145	85473	85452	3788
95	9	19	151	51465	51447	3806
95	9	21	152	20947	20947	3811
95	9	22	BGR	15495		
95	9	22	BGR	25929		
95	9	26	BGR	63919		
95	10	1	153	41907		
95	10	2	BGR	77583		3843
95	10	4	BGR	83974		
95	10	5	154	14842.112		
95	10	8	156	46287.863		
95	10	10	BGR	11774		
95	10	11	157	77693.094		3860
95	10	13	159	57097.299		
95	10	14	160	13108.167		
95	10	14	161	43561.3		
95	10	16	162	02484.285		3870
95	10	16	BGR	71607		3871
95	10	18	163	19832.069		
95	10	19	64	11712.625		
95	10	19	165	48244.594		3875
95	10	25	167	85239.738		
95	11	2	168	07085.879		
95	11	2	69	21209.015		3891
95	11	2	BGR	28693		
95	11	5	BGR	01745		
95	11	5	170	05868.077		3893
95	11	5	171	46827.808		
95	11	7	BGR	27298		
95	11	11	BGR	34960		
95	11	12	172	66495.244		
95	11	13	173	84358.872		3906
95	11	15	BGR	38929		
95	11	17	175	10123.762		
95	11	18	BGR	82560		
95	11	19	176	29831.402		3912
95	11	19	177	46457.519		
95	11	19		59448		
95	11	21		22280		
95	11	22	179	09841.38		
95	11	22	180	17107.738		
95	11	23	BGR	65408		
95	11	24	BGR	21266		3918
95	11	24	BGR	25132		

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

16 / 11 / 94

ULYSSES RT

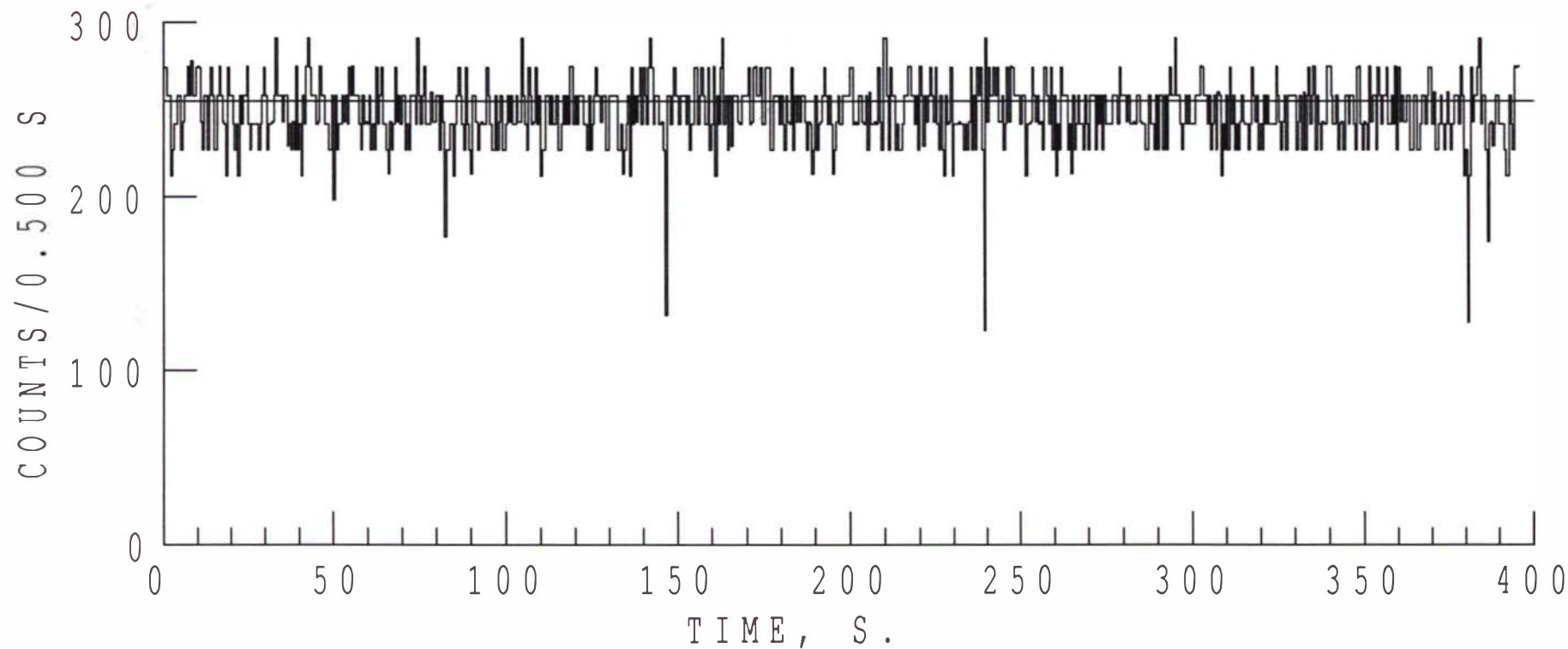
14 / 11 / 94 7920.227 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 N= 2

>4.0 SIGMA FLUCTUATIONS



From root Sun Nov 13 19:38 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA06461; Sun, 13 Nov 94 19:34:44
Received: from xtelab.gsfc.nasa.gov by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA05466; Sun, 13 Nov 1994 19:33:15 +0800
Received: (from scott@localhost) by xtelab.gsfc.nasa.gov (LHEA9404/940426.s1) id WAA06795; Sun
Date: Sun, 13 Nov 1994 22:27:28 -0500
From: Scott Barthelmy <scott@xtelab.gsfc.nasa.gov>
Message-Id: <199411140327.WAA06795@xtelab.gsfc.nasa.gov>
To: BEASLEY@xtelab.gsfc.nasa.gov, MCNARAMA@xtelab.gsfc.nasa.gov, ables@sl.gov,
akerlof@mich.physics.lsa.umich.edu, astmph@earn.cvut.cz,
astroin%bgearn.BITNET@cunyvms.cuny.edu, bmcnamar@nmsu.edu,
butterworth@heavax.gsfc.nasa.gov, caroline@mrso.cam.ac.uk,
cline@tgrs.gsfc.nasa.gov, dag@mrso.cam.ac.uk, ddupre@sstcxl.lanl.gov,
djt@mrso.cam.ac.uk, emwl@mrso.cam.ac.uk, fishman@ssl.msfc.nasa.gov,
gehrels@lhevax.gsfc.nasa.gov, glangsto@sadira.gb.nrao.edu,
grb%bgcict.BITNET@cunyvms.cuny.edu, jbloch@lanl.gov,
jmacri@6865.dnet.nasa.gov, jryan@unh.edu,
khurley@space6.ssl.berkeley.edu, klet@virgo.jcu.cz,
kouveliotou@ssl.msfc.nasa.gov, kroll@nova.tat.physik.uni-tuebingen.de,
lee@mich.physics.lsa.umich.edu, llo@sl.gov,
lpicciri@bartol.bartol.udel.edu, meegan@ssl.msfc.nasa.gov,
mlimon@florero.ll.iac.es, neils@unh.edu, palmer@tgrs.gsfc.nasa.gov,
park@sl.gov, pjw@mrso.cam.ac.uk, ppravec@asu.cas.cz, rhudec@asu.cas.cz,
rmb@sl.gov, rmkippen@unh.edu, schaefer@tgrs.gsfc.nasa.gov,
scott@xtelab.gsfc.nasa.gov, sperka@sbhep.physics.ucsb.edu,
tony@ucscloc.ucsc.edu, varadi@asu.cas.cz, wilkerson@csa2.lbl.gov
Subject: BACODINE update on trigger 3283 -- it seems real!
Content-Length: 1075
Status: R

BACODINE sites:

03:20 14 Nov 94 UT

BACODINE sent out a notice on trigger 3283 at 02:02:38 UT (about 90 min ago) which had a comment appended that said ignore this message. This message appears to be a screw-up of the trigger identification code. The location calculation code is working fine. I have looked at the light curves and looked at the MAXBC location (which uses independent data from the spacecraft) and all looks like this is a real GRB and that the location is in fact valid.

So please ignore the "Ignore" message and follow-up on this burst if you have the opportunity.

Again, the trigger is 3283.
Trigger time is 02:02:38 UT 14 Nov 94
RA= 91.54, Dec=36.94 (J2000)
Intensity=3517.

There was a second (half as intense) pulse 8 sec after the initial pulse, and there appears to be a hint of a 3rd pulse at T+50sec. (I don't have light curves for later than T+50.)

My apologies for the misleading message in the original announcement. I will be tracking that problem down tomorrow.

Sincerely
Scott Barthelmy

TO: Kevin Hurley
U.C. Berkeley

PHONE: 510-643-9173

FAX: 510-643-8302

FROM: Scott Barthelmy
NASA-GSFC
Code 661
Greenbelt, MD 20771

PHONE: 301-286-3106

FAX: 301-286-1684

DATE: 14 Nov 94

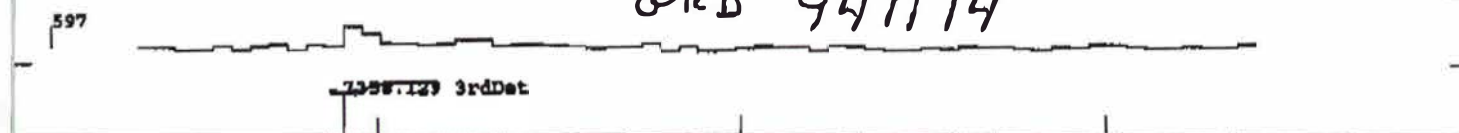
PAGES SENT: 5 including cover

COMMENT:

Attached are the **BACODINE** light curves for GRB941114 for the 8 detectors. The 3 brightest detectors are marked (Dets 4,6,0). The count rates are the **DISCLA** rates for the middle 2 E bins (50-300keV). The first page shows the combination longterm pretrigger background 10.24sec averages plus the 10 1.024sec samples pre-trigger & 26 1.024sec during the burst. The next page is the same for the CPDs. The the 3rd page is blowup of the 1.024sec sample data (10 samples of pre-trigger and then 26 samples during & post-trigger). And the 4th page is the same time sampling for the CPDs. The peak intensity time is 7360.18 +/- 1 sec.

--scott

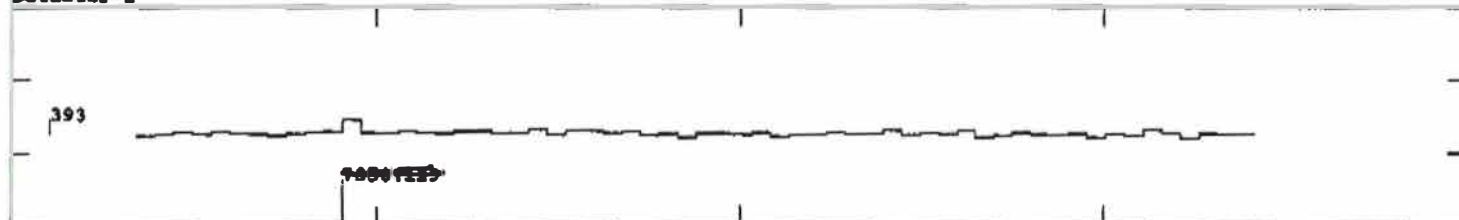
NASA GSFC/BLDG 2 2ND FLOOR
11/12/83 3283
GRB 941114



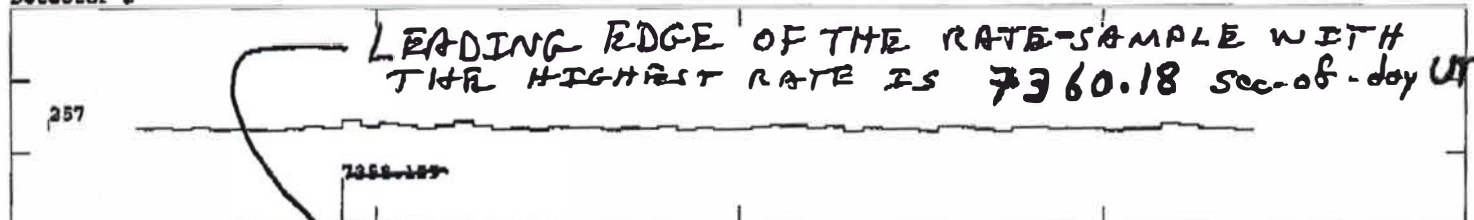
Detector 0



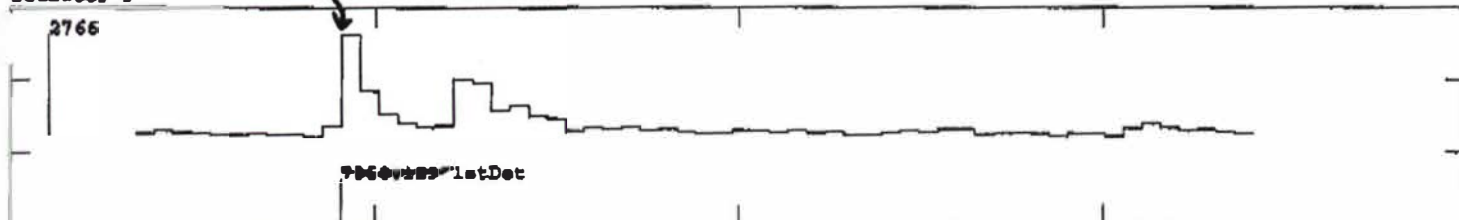
Detector 1



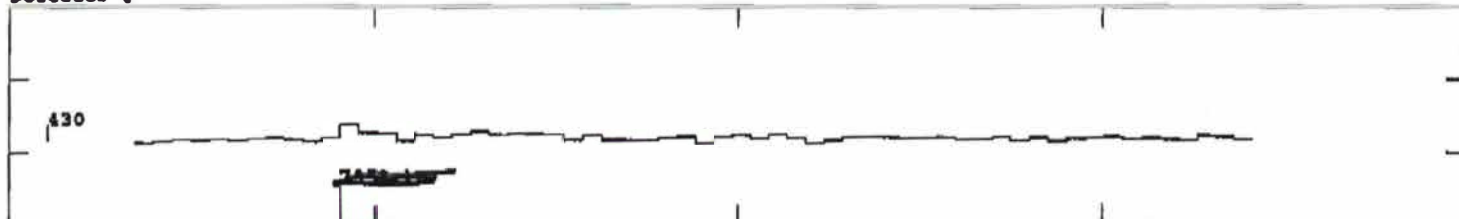
Detector 2



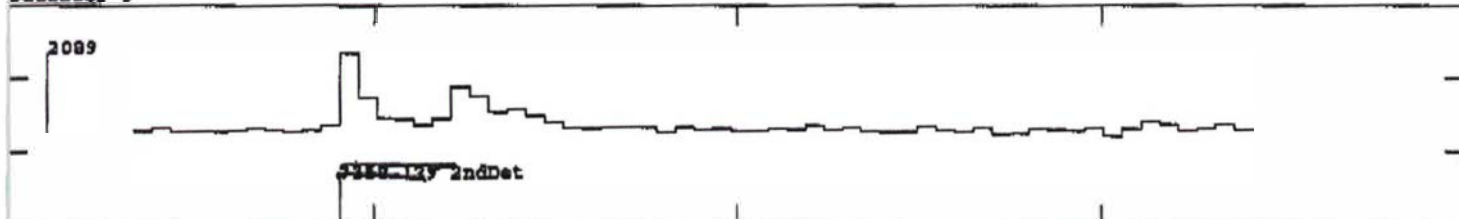
Detector 3



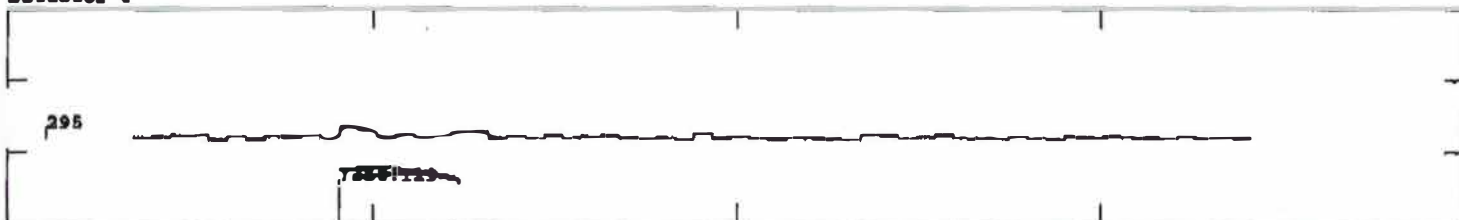
Detector 6

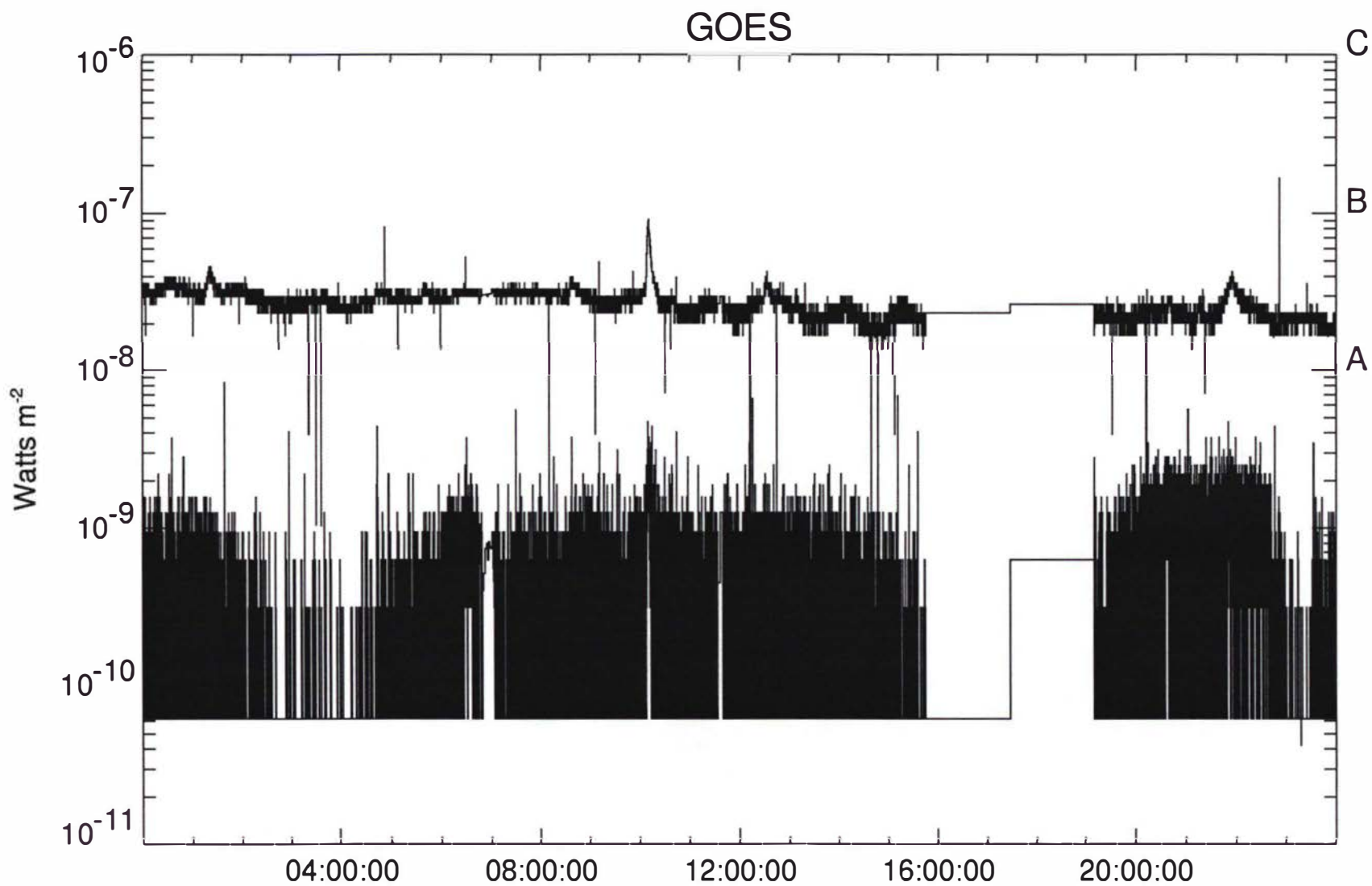


Detector 5



Detector 6





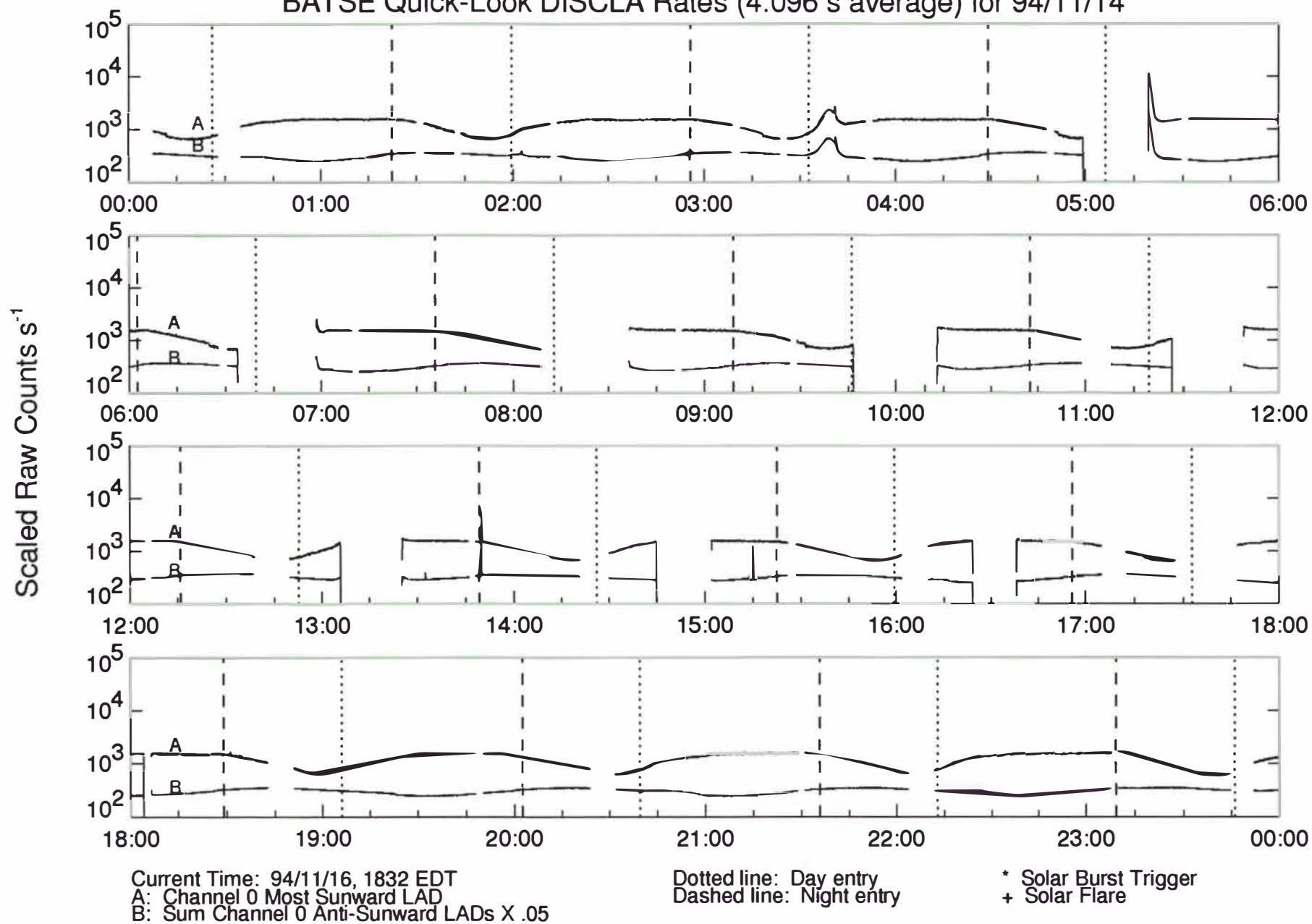
Data Start: 94/11/14, 0000:03

Plot created: 94/11/16, 1845

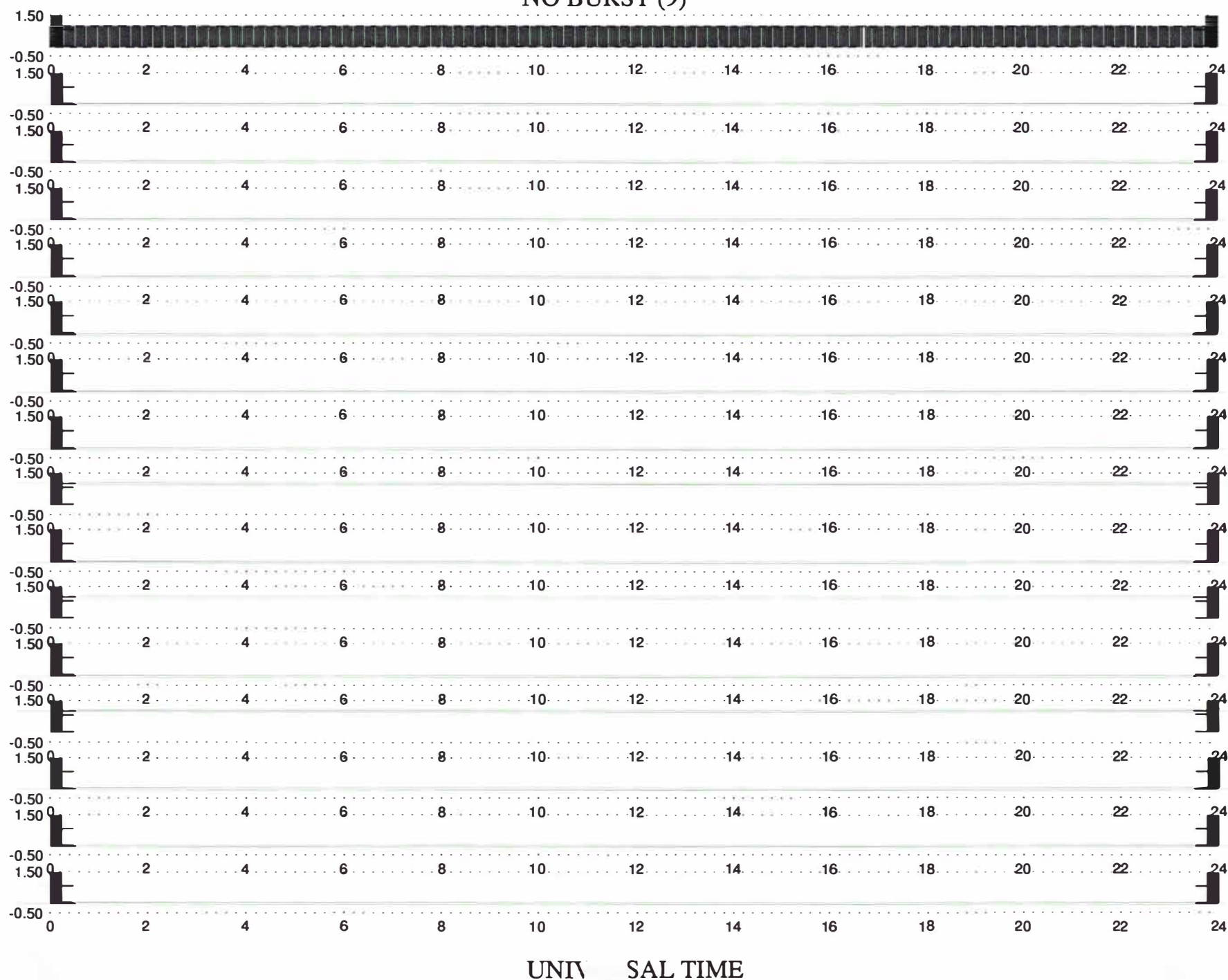
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

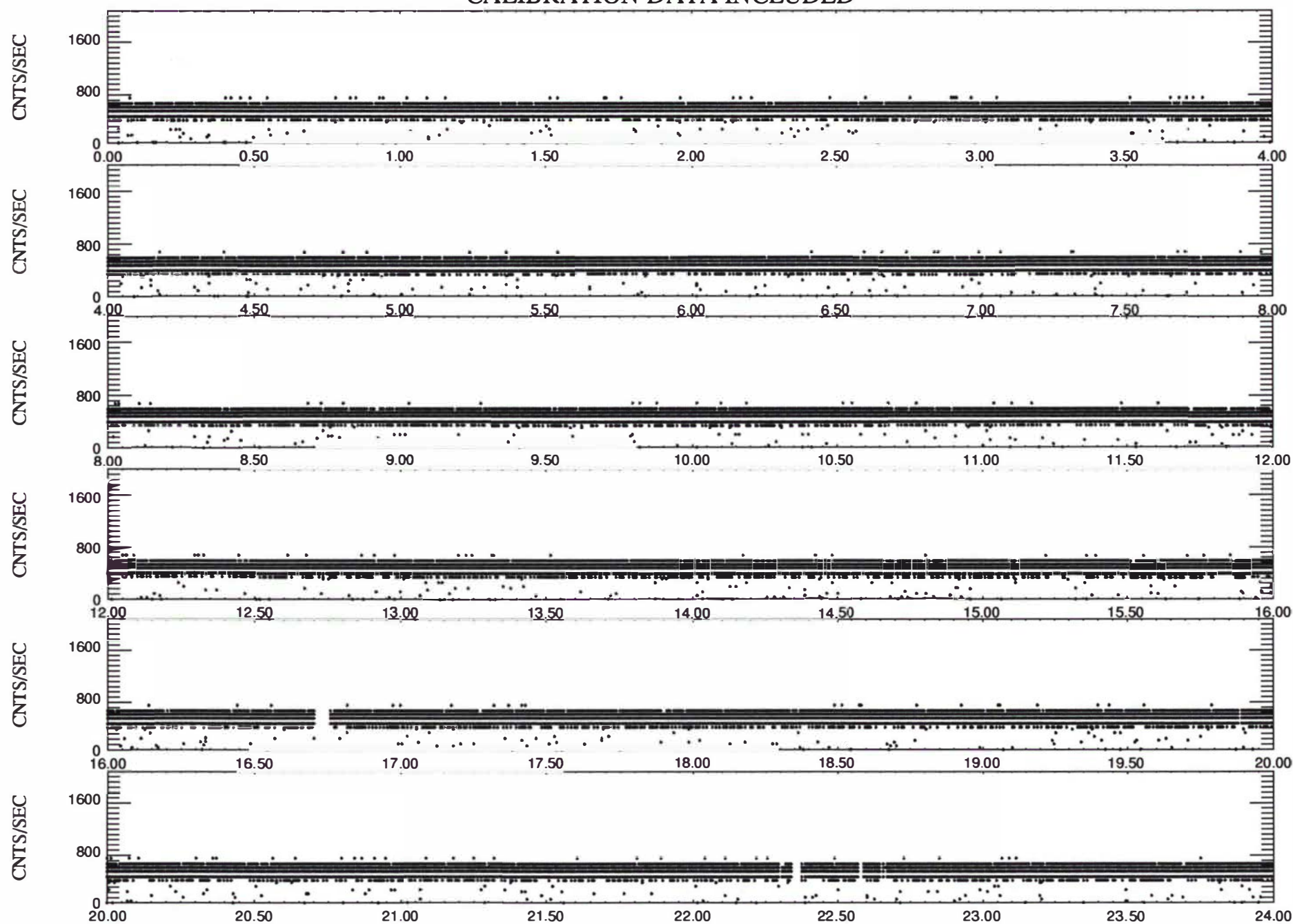
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/14



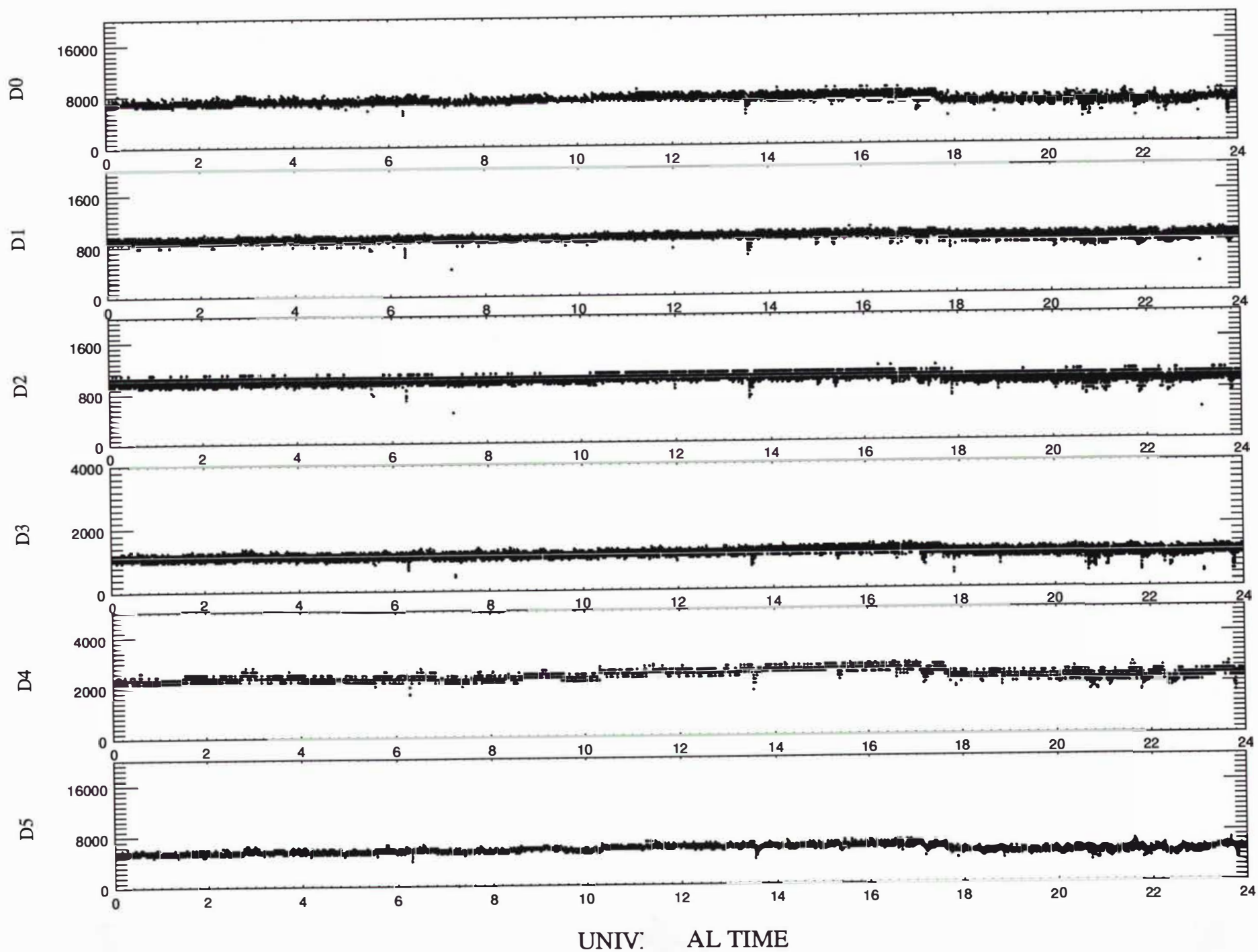
CBU	CCL	DMP	ROM	DMA	OSC	MP.	ICR	SPE	OPM	RSC	CAL	WCH	MEM	BRS	HUS
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From HAGEDON@fender.msfc.nasa.gov Thu Nov 17 09:30 PST 1994
Date: Thu, 17 Nov 1994 11:30:40 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3284

BATSEARCH PROGRAM

BATSE BURST # 3284
EVENT OF 1994 NOV 15 DAY OF YEAR=319
EVENT CROSSING TIME AT BATSE : 22970. S. OR 06:22:50.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 150.000 -6.000
BATSE PEAK COUNTING RATE: 5400 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 15/11/ 94 IS:
RA= 235.288 DEC= -75.204 DIST= 2.194 AU
BATSE-ULYSSES DISTANCE = 328172716. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 97.00 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -133.46 SECS.
CROSSING TIME AT ULYSSES IS 22837. S. OR 06:20:36 +/- 236.61 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 15/11/ 94 IS:
RA= 143.777 DEC= 16.402 DIST= 1.229 AU
MARS-BATSE DISTANCE = 183826464. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=156.77 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -563.46 SECS.
CROSSING TIME AT MARS IS 22407. S. OR 06:13:26 +/- 33.44 SECONDS

RI

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3284

TIME: TJD=9671 SECONDS=22970

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=30 AZIMUTH=321 ERROR= DEGREES

COMMENTS:

BURST. SINGLE PULSE, DUR.~2 SEC. POSSIBLE WEAK SECOND PULSE AT ~T+4 SEC.
MARGINALLY VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Thu Nov 17 09:30 PST 1994
Date: Thu, 17 Nov 1994 11:30:12 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3284

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3284	941115	9671	22970	5400	150	-06

17/11/94

ULYSSES RT

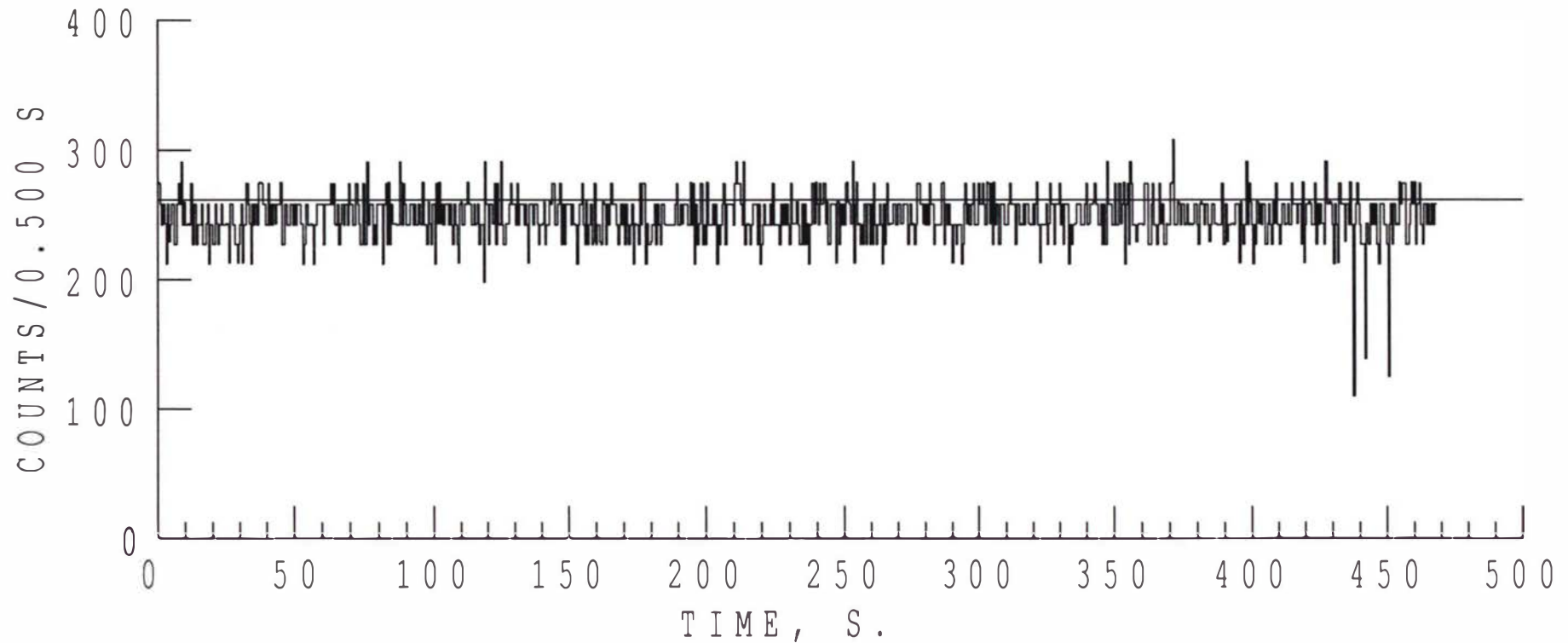
15/11/94 22608.207 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



ULYSSES RT

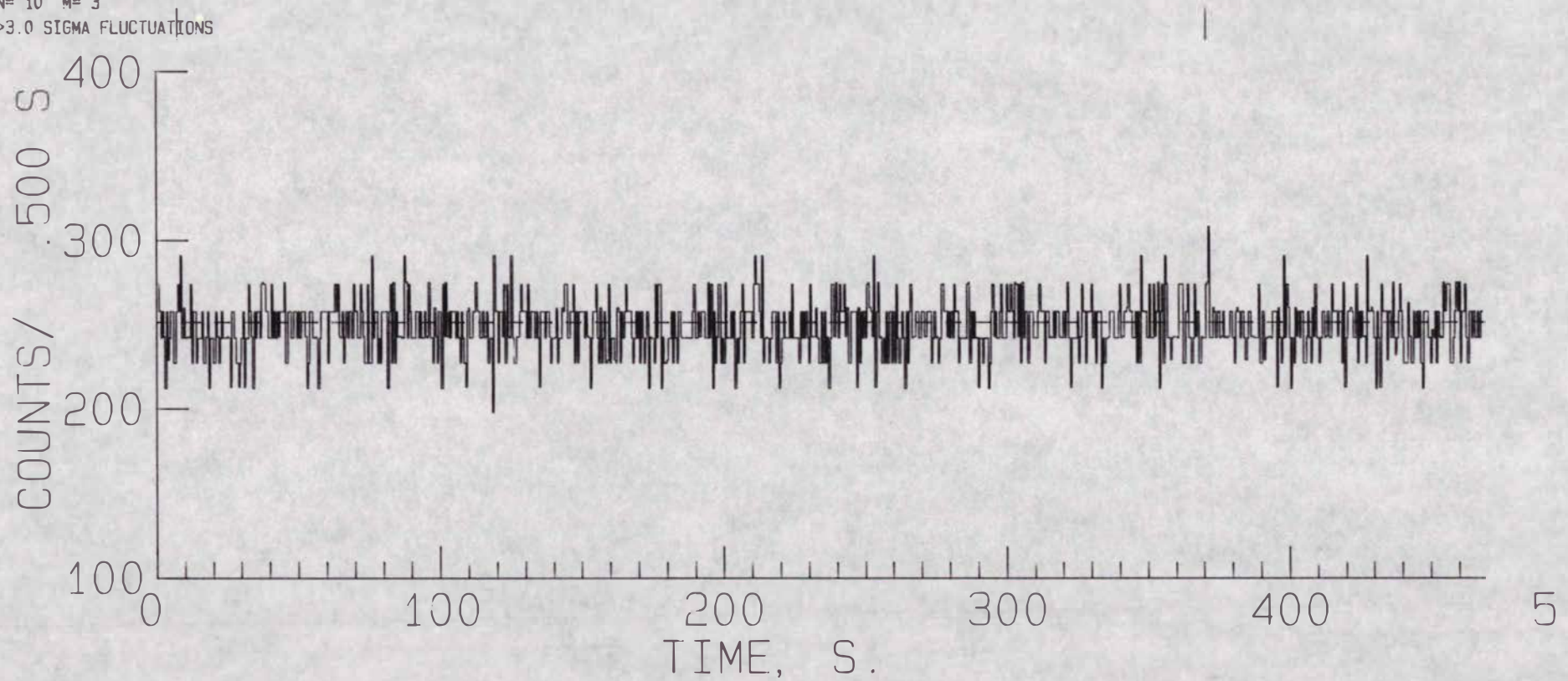
26/11/94

15/11/94 22608.207 s

.250 S INTERVALS REGROUPED BY 2

0- 0 keV

N= 10 M= 3
>3.0 SIGMA FLUCTUATIONS



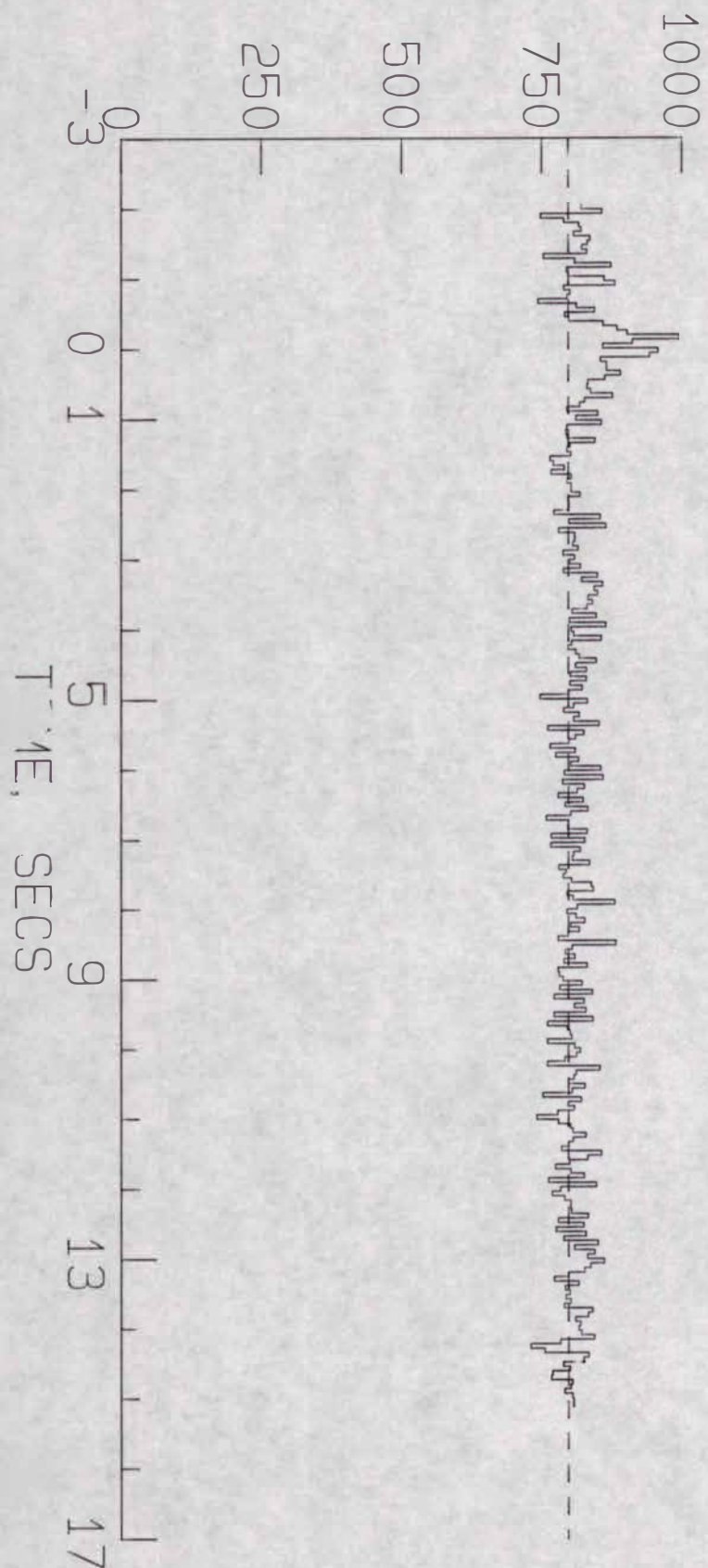
BATSE

15/11/94

22970.290

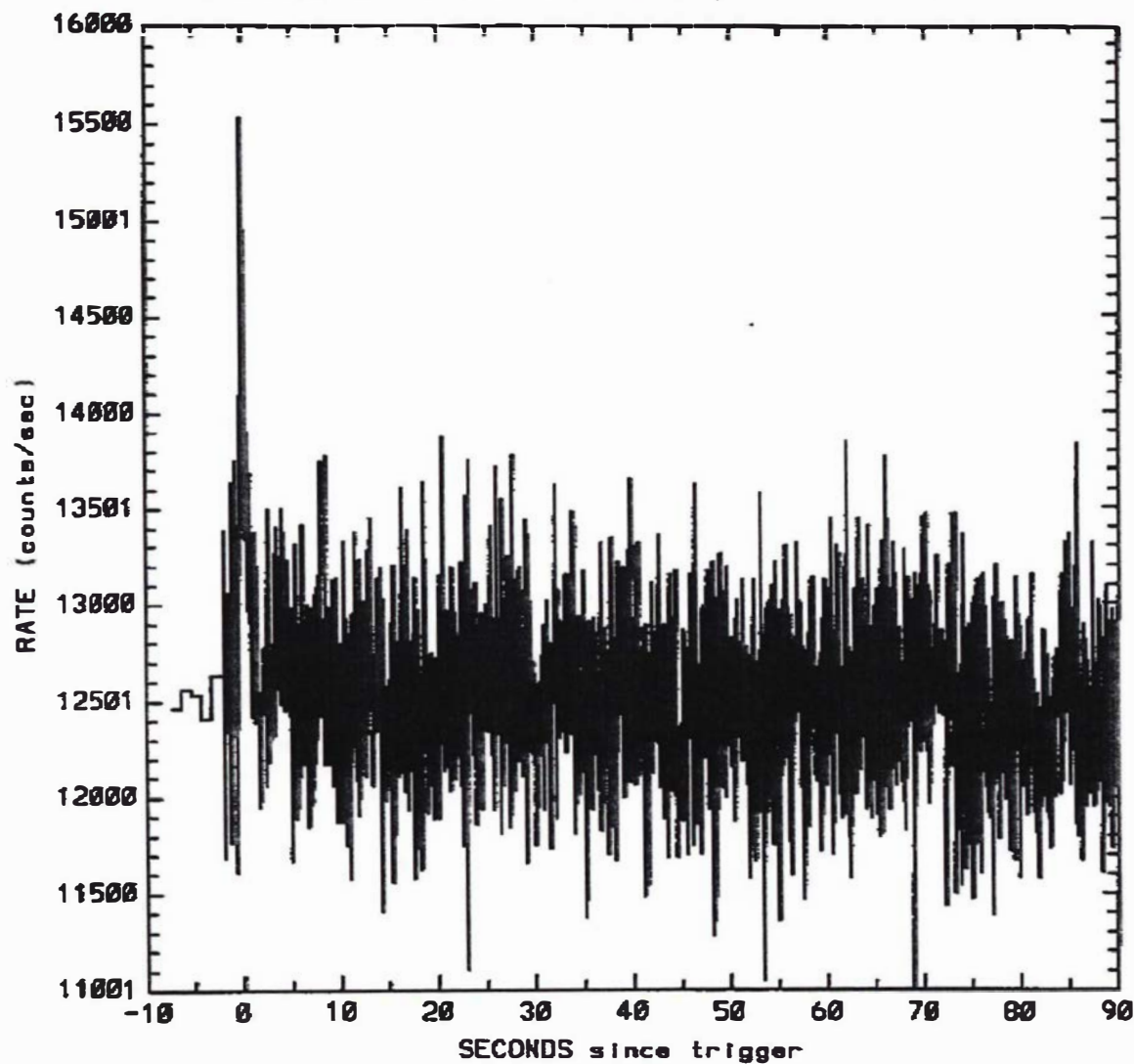
25- 100 keV

COUNTS/ .064 S



26/11/94

DISCSC Data for K. Hurley. No. 3284



21-NOV-1994 15:00.43

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger = 3284

Trigger Time:
0671 / 22970.200

Burst Data Type:
DISCSC

Deadtime
Corrected: N

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
0.064 second(s)

Detectors [7..8]:
-6-32-8

Discriminators:
[1, 2]

Quality Mask:
BDISP1

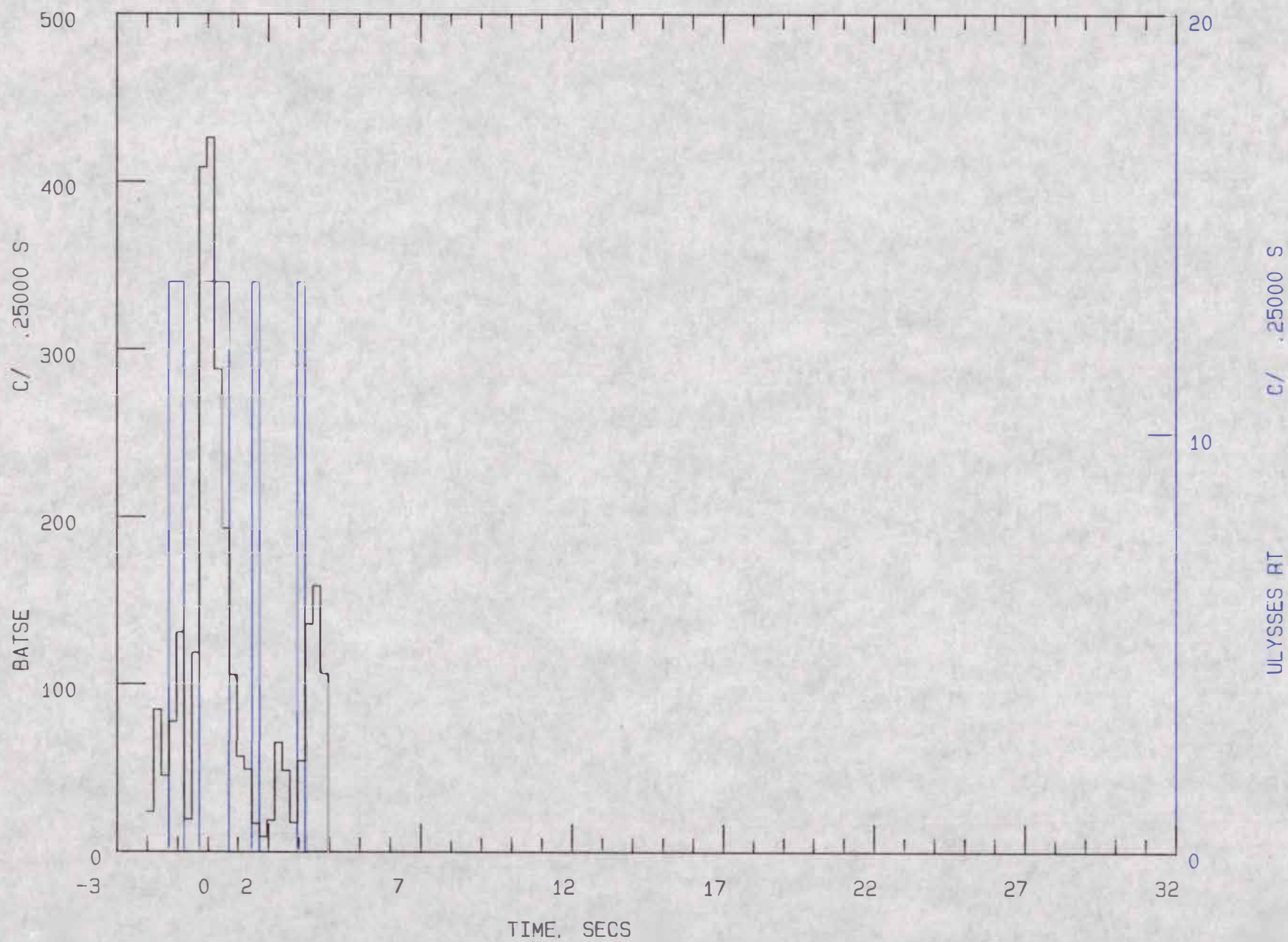
BATSE

-ULYSSES RT CORRELATION

15/11/94

22970.290

26/11/94

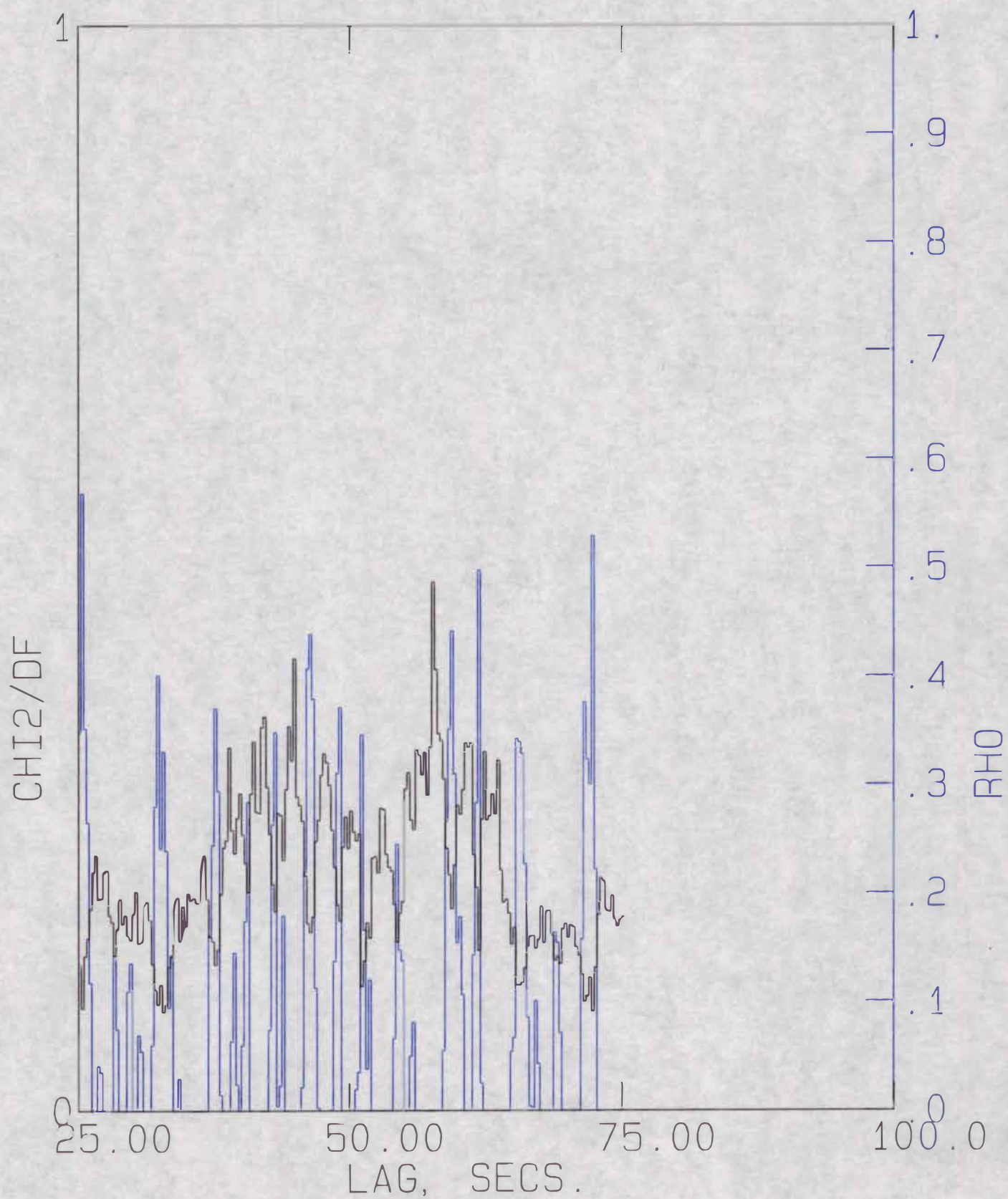


BATSE

-ULYSSES RT CORRELATION

15/11/94

26/11/94
22970.290



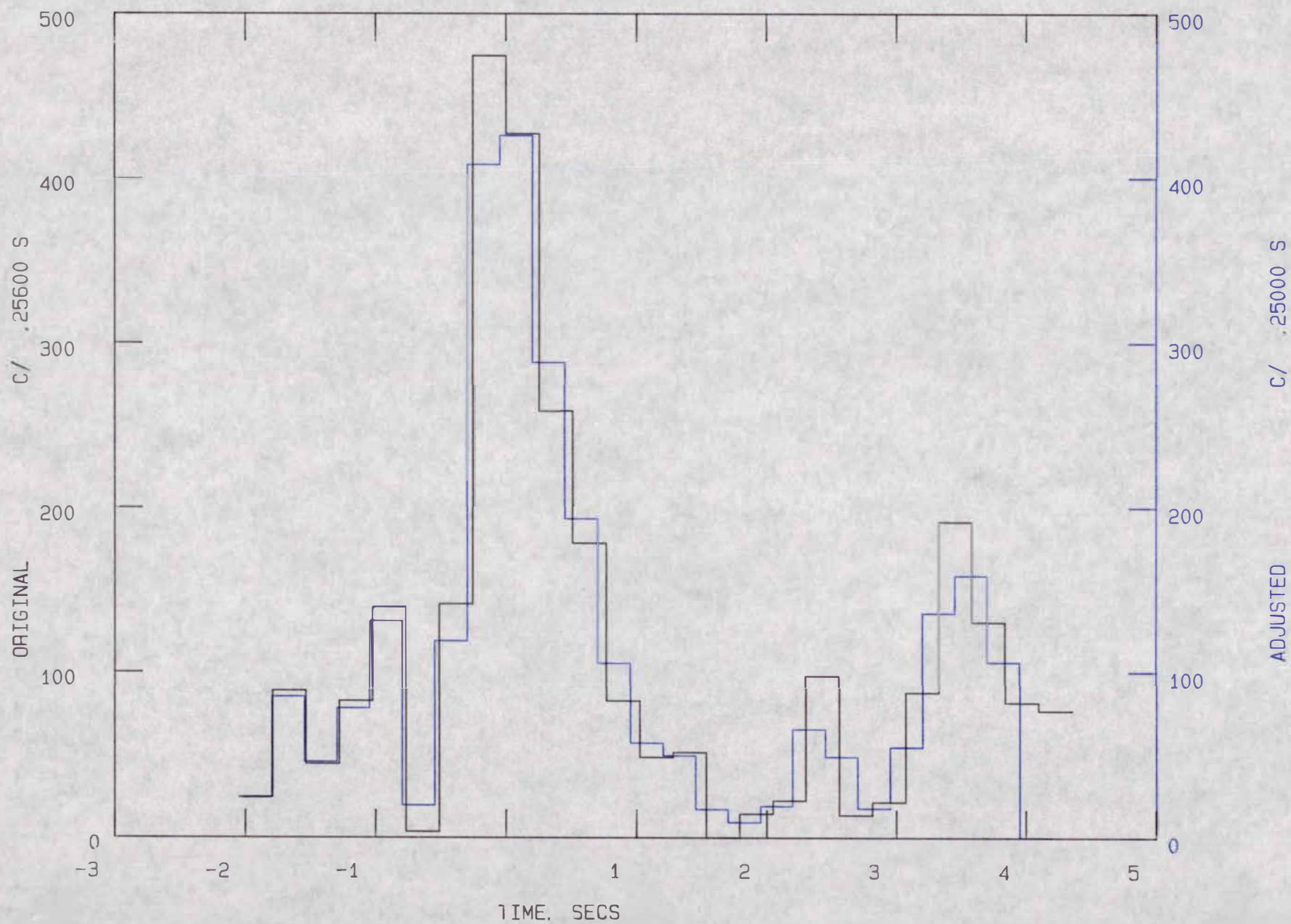
ORIGINAL AND ADJUSTED BATSE

TIME HISTORIES

15/11/94

22970.290

26/11/94



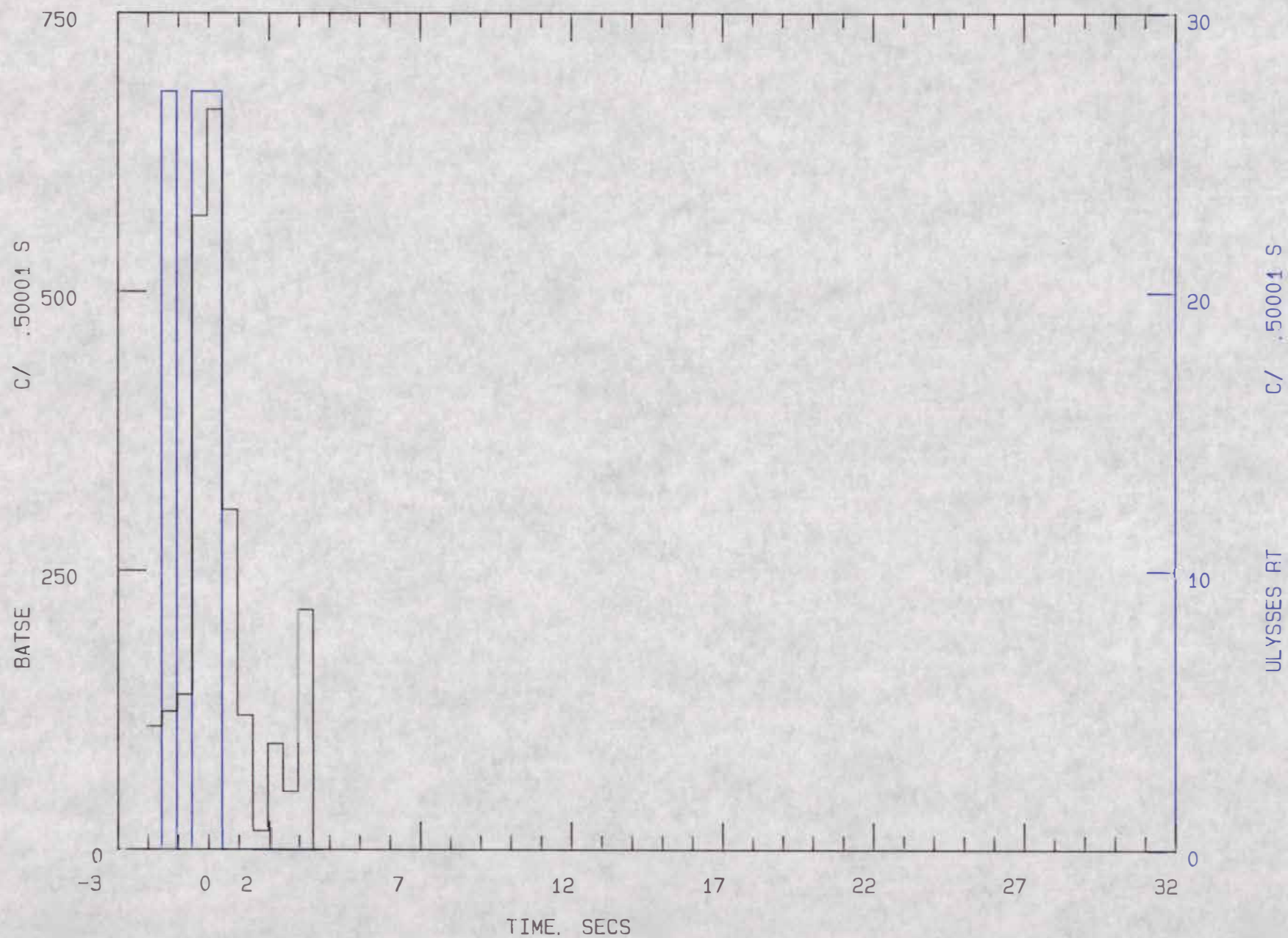
BATSE

-ULYSSES RT CORRELATION

15/11/94

22970.290

26/11/94



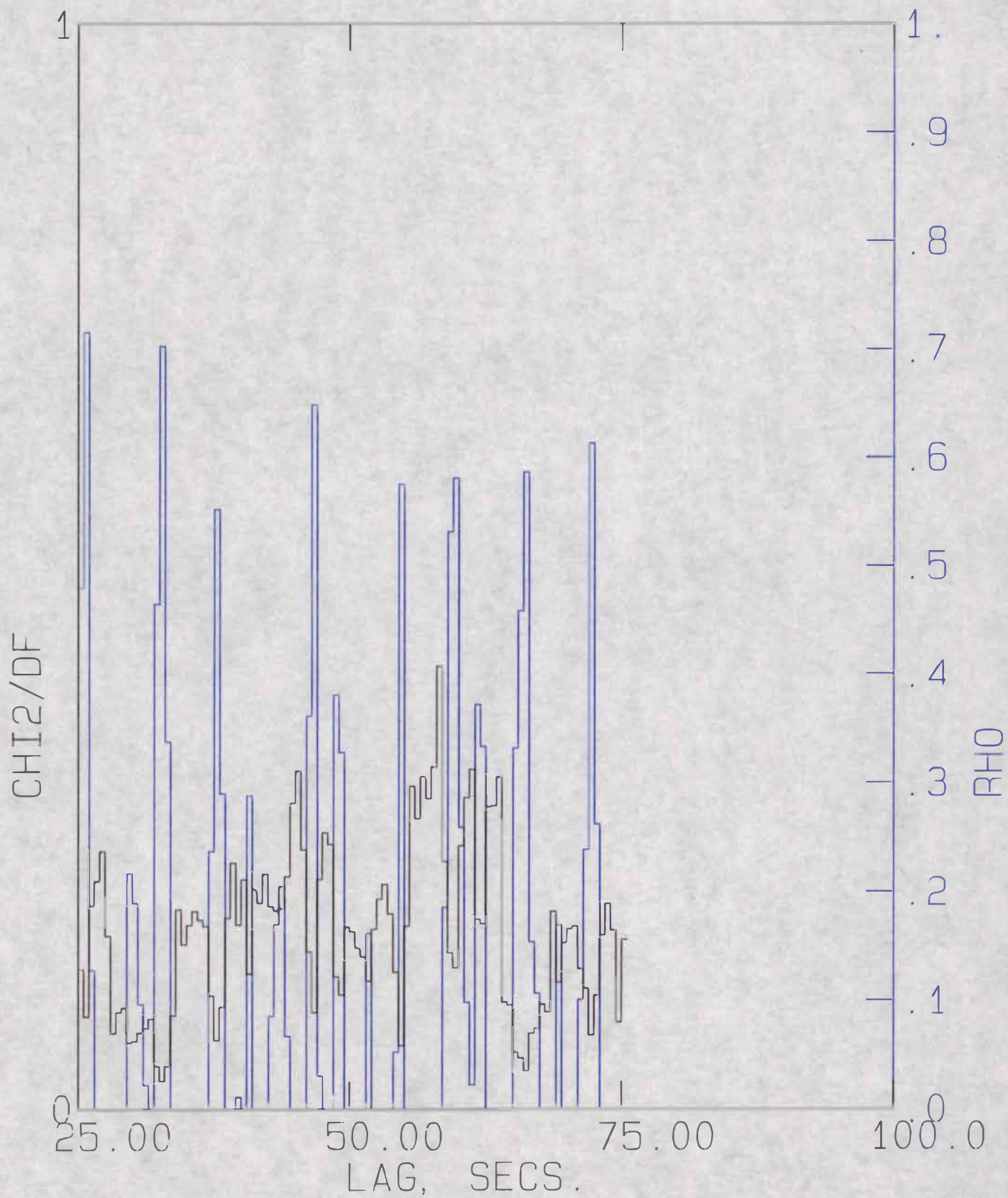
SATSE

-ULYSSES RT CORRELATION

15/11/94

22970.290

26/11/94



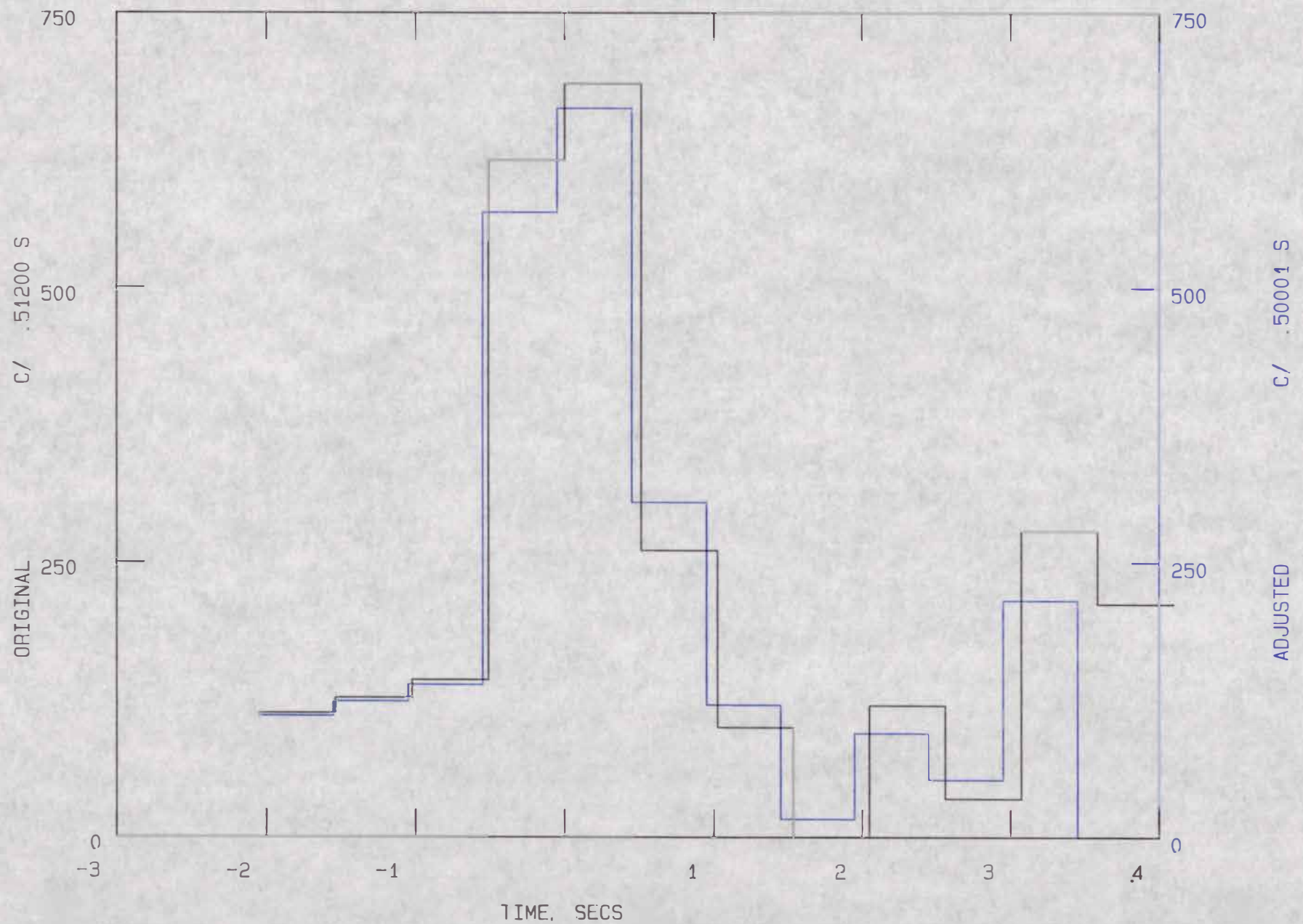
ORIGINAL AND ADJUSTED BATSE

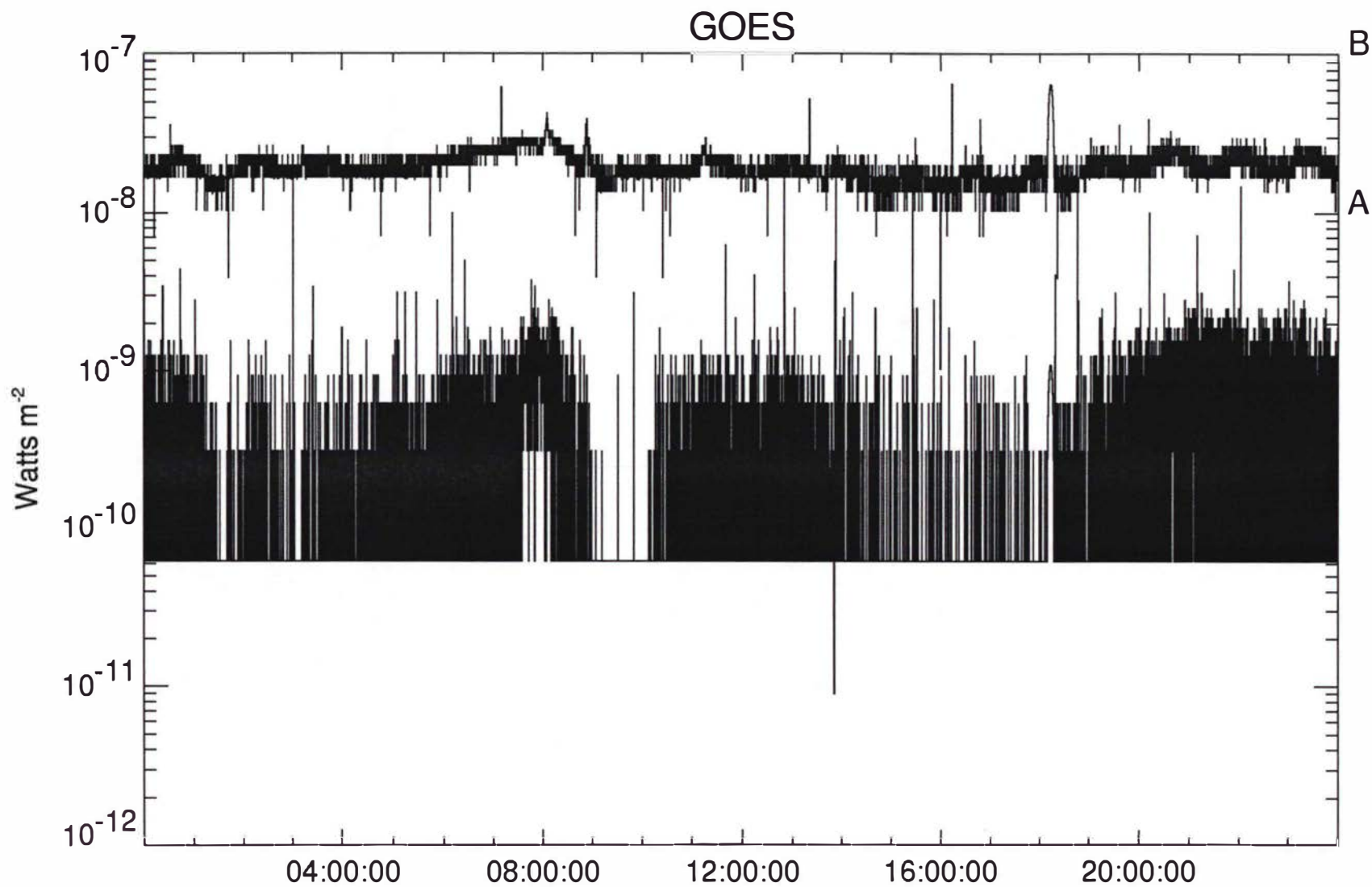
TIME HISTORIES

15/11/94

22970.290

26/11/94





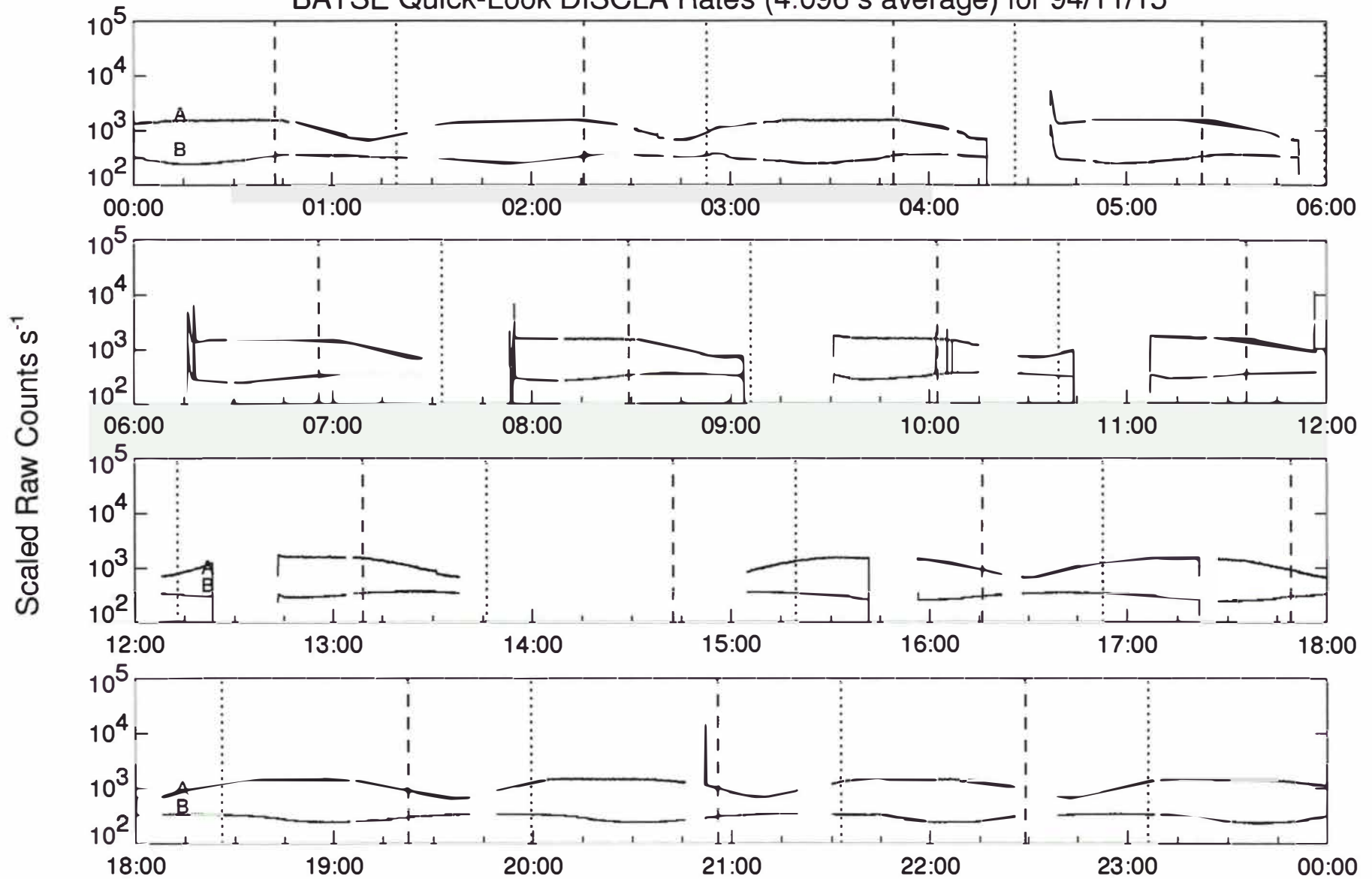
Data Start: 94/11/15, 0000:01

Plot created: 94/11/16, 1845

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 94/11/15

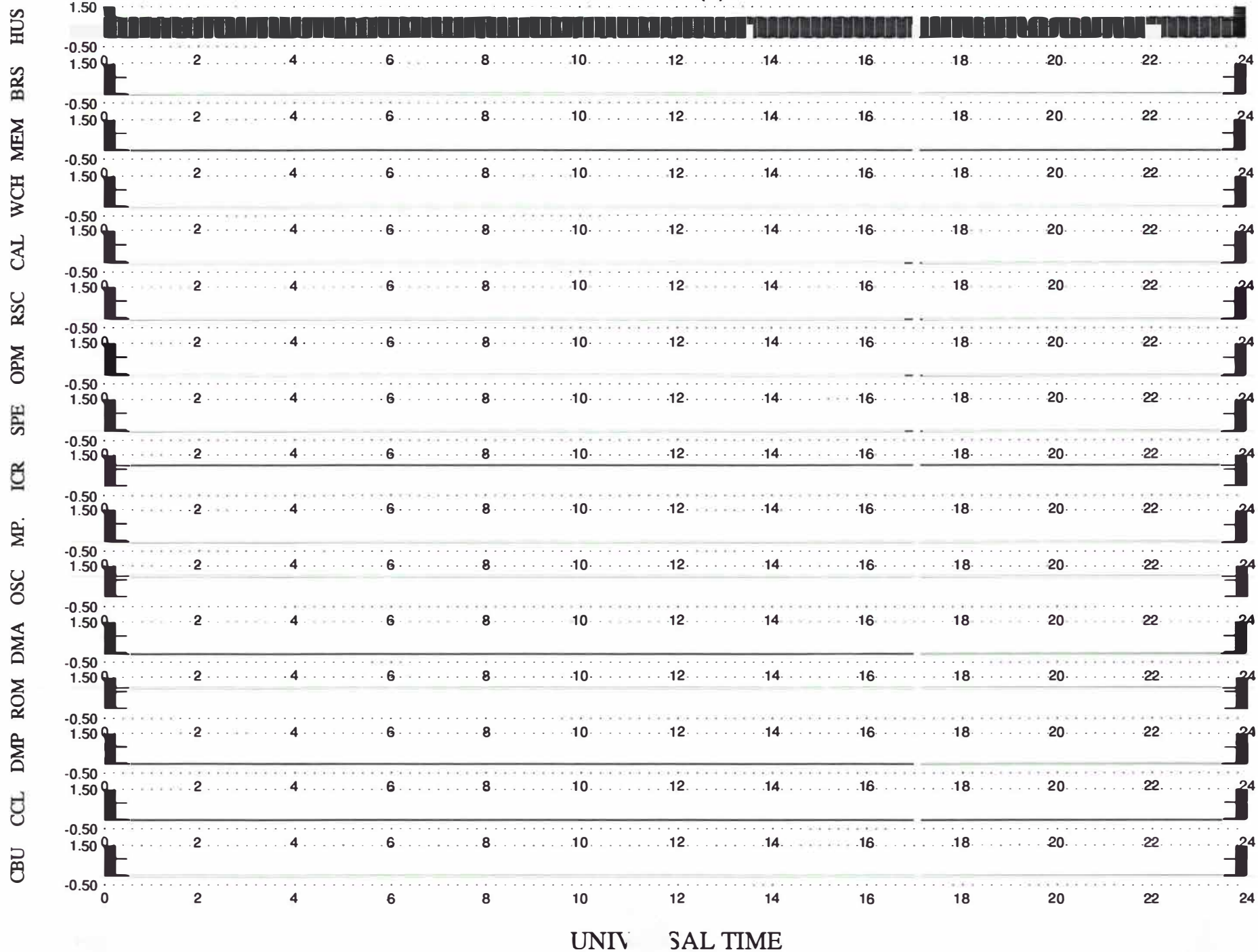


Current Time: 94/11/16, 1832 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

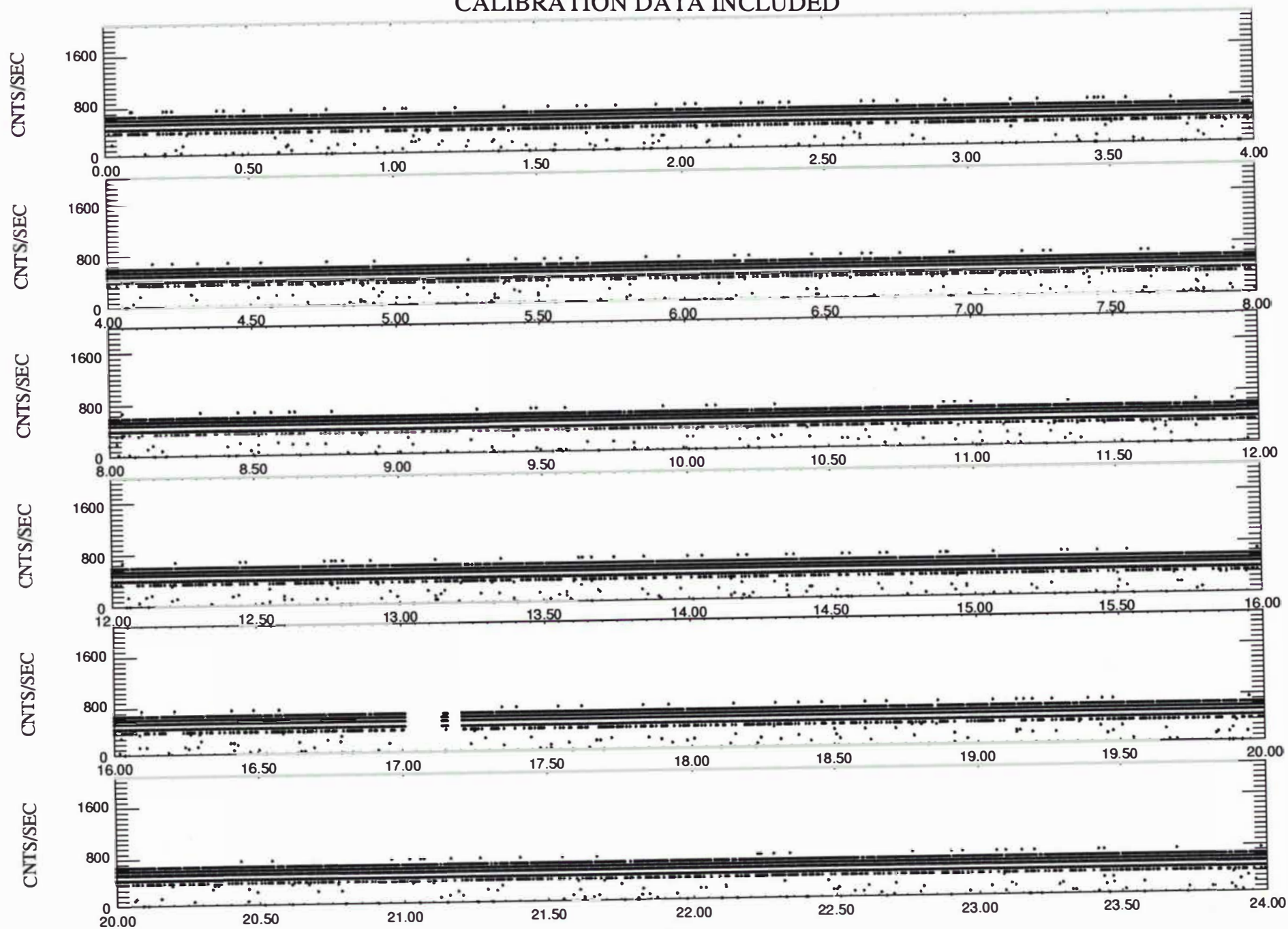
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

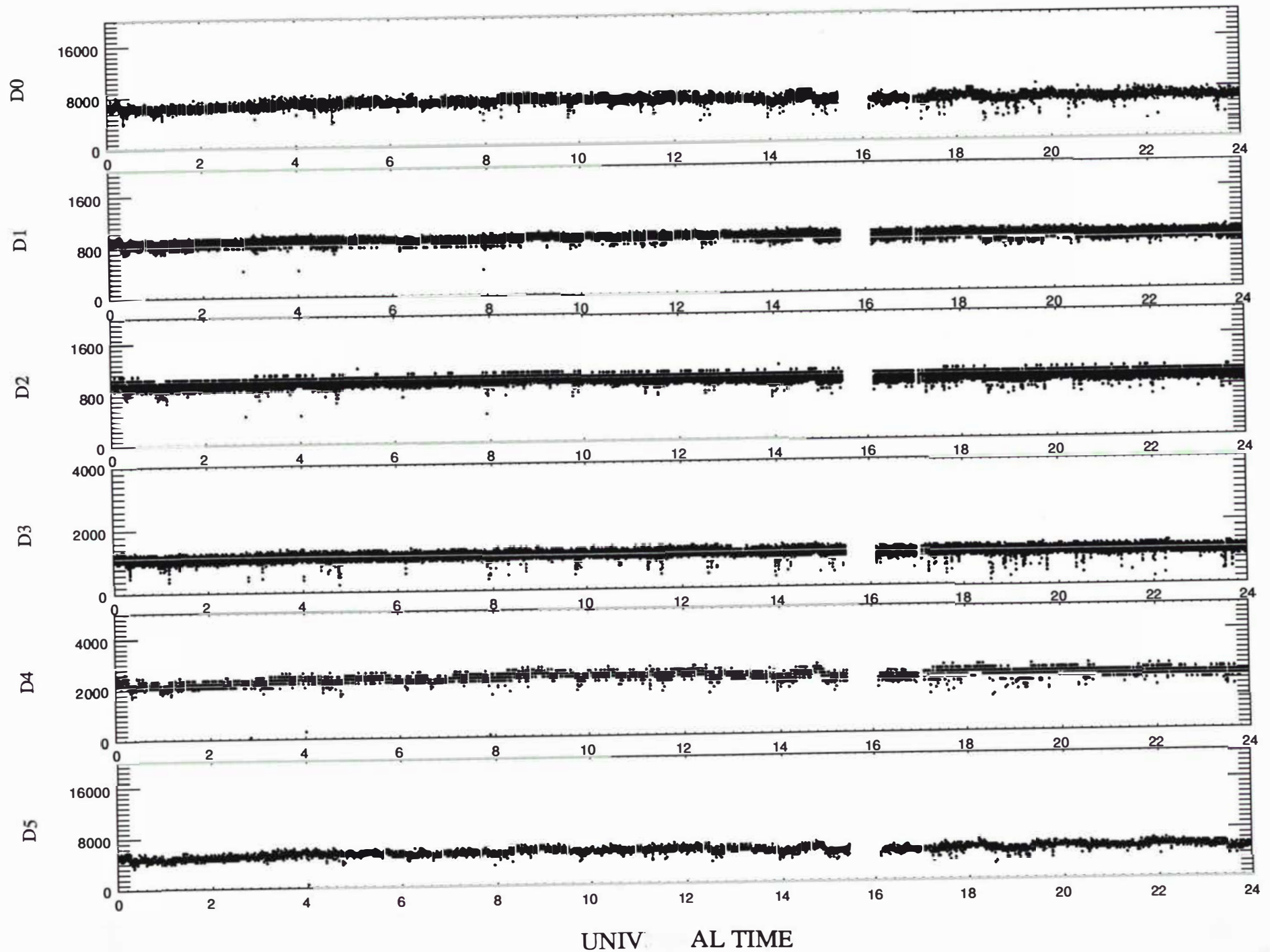
NO BURST (9)



CALIBRATION DATA INCLUDED



UNIV SAL TIME



From KOSHUT@ssl.msfc.nasa.gov Thu Nov 17 15:08 PST 1994
Date: Thu, 17 Nov 1994 17:07:54 -0600 (CST)
From: KOSHUT@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.: 3285

TIME: TJD=9672 SECONDS=01703

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

TERRESTIAL GAMMA FLASH OF ~ 1 MS DURATION.

From KOSHUT@ssl.msfc.nasa.gov Thu Nov 17 13:11 PST 1994
Date: Thu, 17 Nov 1994 15:11:47 -0600 (CST)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3286

BATSEARCH PROGRAM

BATSE BURST # 3286
EVENT OF 1994 NOV 16 DAY OF YEAR=320
EVENT CROSSING TIME AT BATSE : 69630. S. OR 19:20:30.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 125.000 -66.000
BATSE PEAK COUNTING RATE: 2500 C/S

NO

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 16/11/ 94 IS:
RA= 239.997 DEC= -75.172 DIST= 2.188 AU
BATSE-ULYSSES DISTANCE = 327298080. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=147.05 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -916.13 SECS.
CROSSING TIME AT ULYSSES IS 68714. S. OR 19:05:13 +/- 139.18 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 16/11/ 94 IS:
RA= 144.198 DEC= 16.292 DIST= 1.220 AU
MARS-BATSE DISTANCE = 182574768. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 96.45 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -68.46 SECS.
CROSSING TIME AT MARS IS 69562. S. OR 19:19:21 +/- 104.02 SECONDS

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3286

TIME: TJD=9672 SECONDS=69630

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=74 AZIMUTH=95 ERROR= DEGREES

COMMENTS:

WEAK BURST OF ~ 2 SECONDS DURATION, OBSERVED ABOVE 300 KEV. TIME HISTORY
CONSISTS OF 2 PULSES, SEPARATED BY ~ 1 SECOND.

From KOSHUT@ssl.msfc.nasa.gov Thu Nov 17 13:10 PST 1994
Date: Thu, 17 Nov 1994 15:10:53 -0600 (CST)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: KOSHUT@ssl.msfc.nasa.gov
Subject: BATSE Burst 3286

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3286	941116	9672	69630	2500	125	-66

17 / 11 / 94

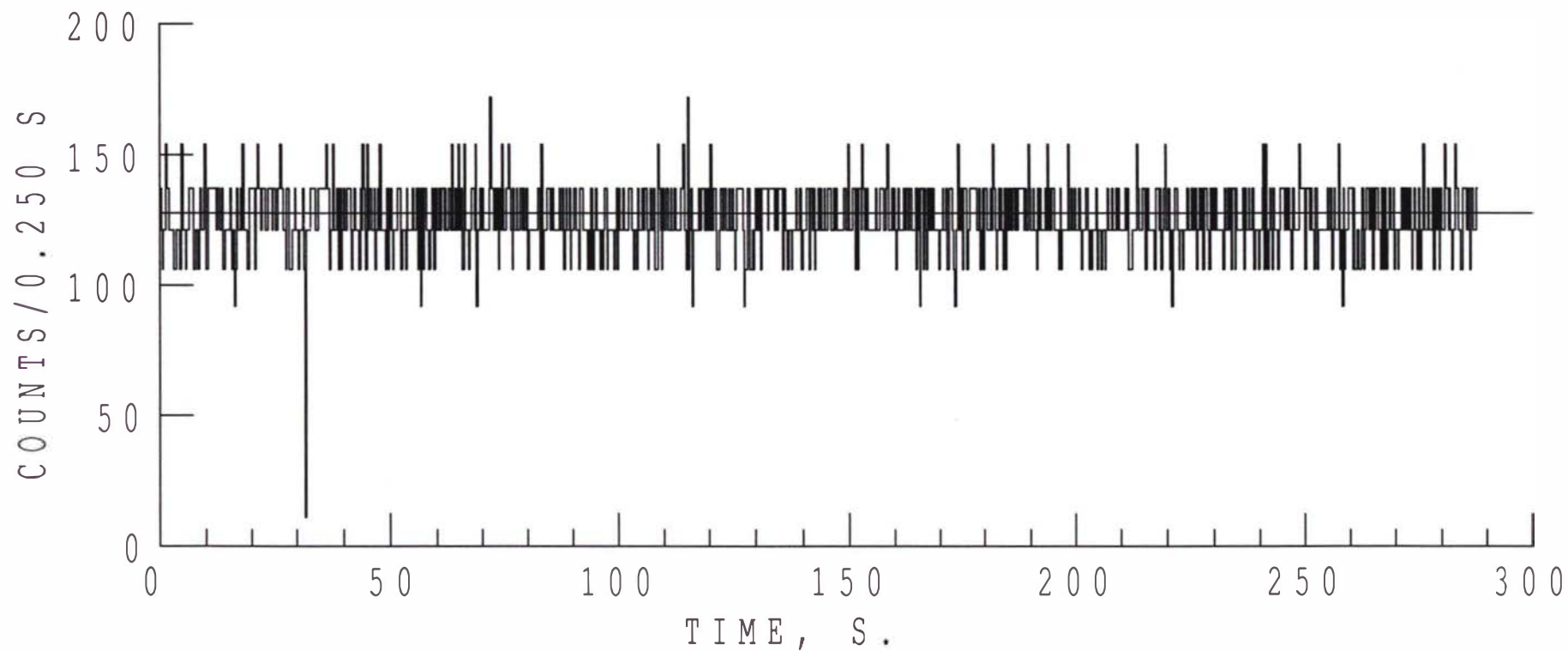
ULYSSES RT

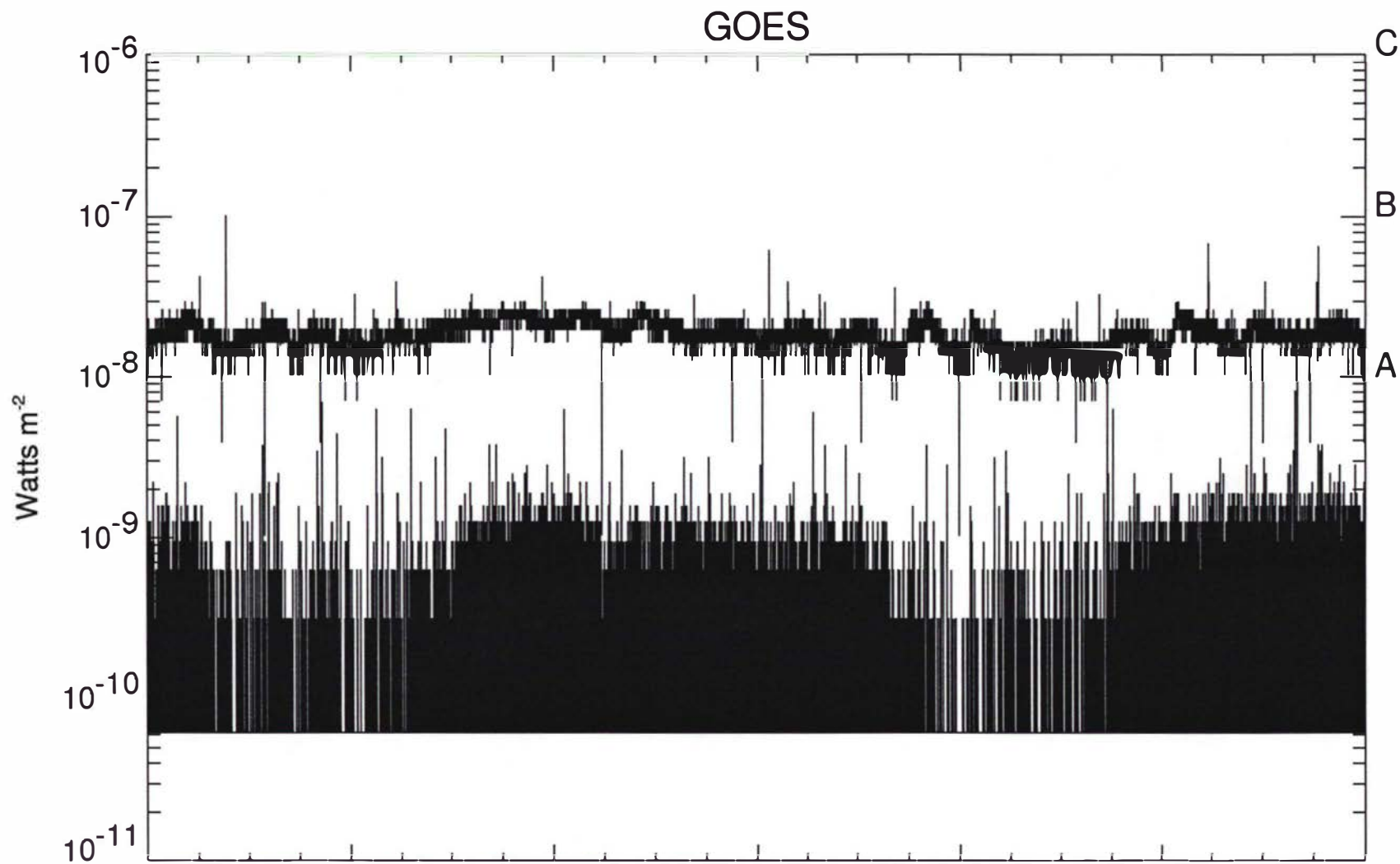
16 / 11 / 94 68580.008 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





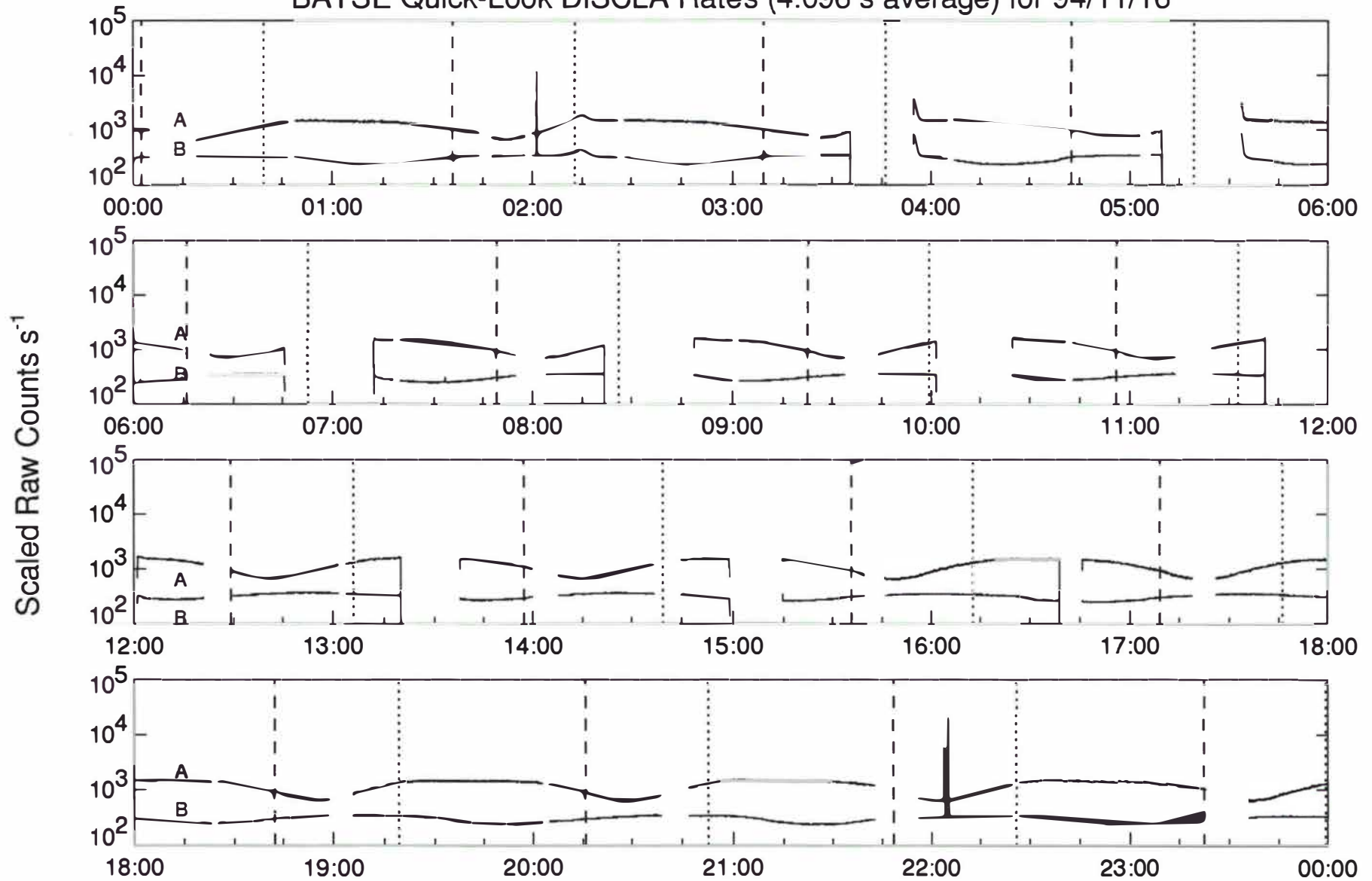
Data Start: 94/11/16, 0000:02

Plot created: 94/12/01, 2041

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 94/11/16

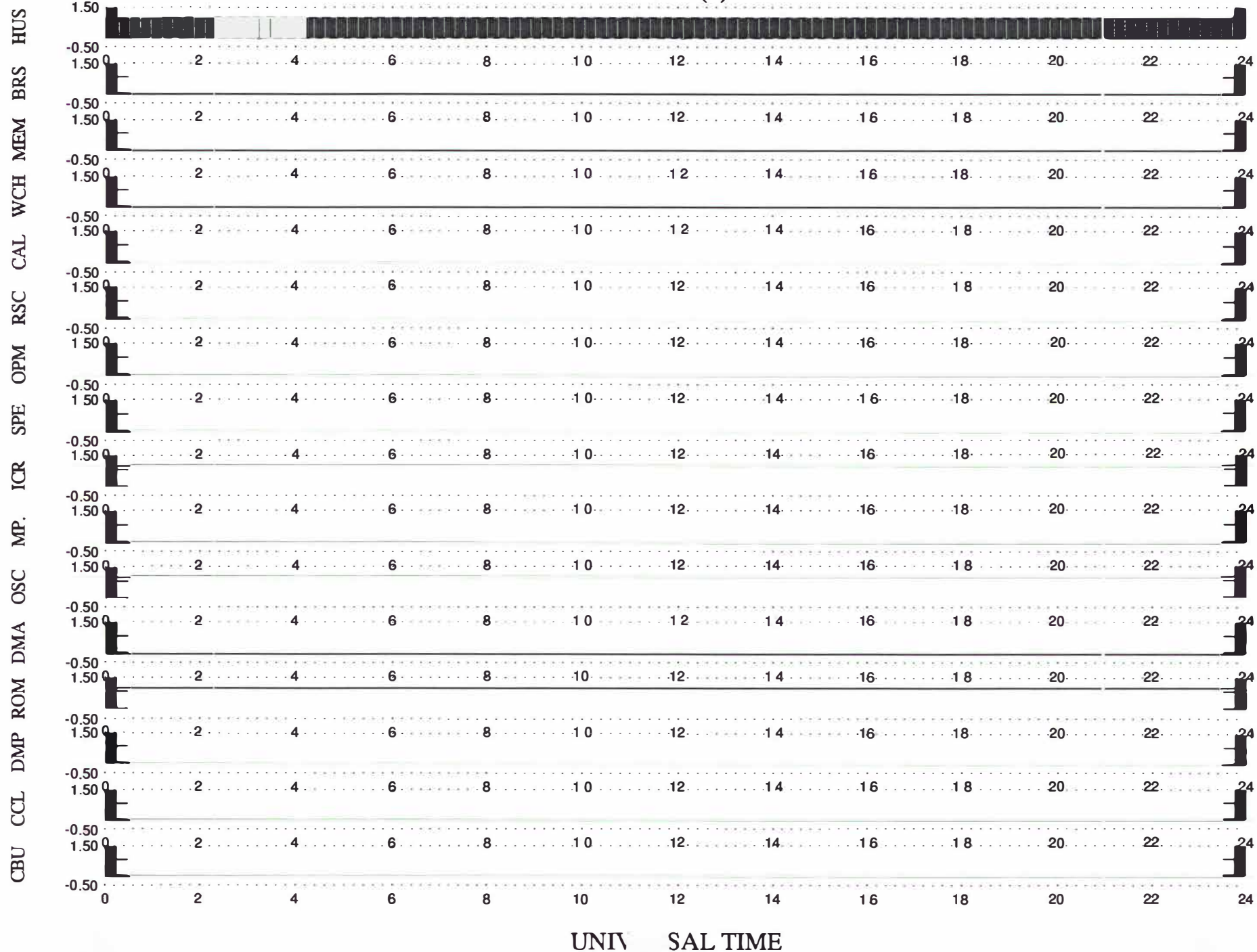


Current Time: 94/12/01, 2036 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

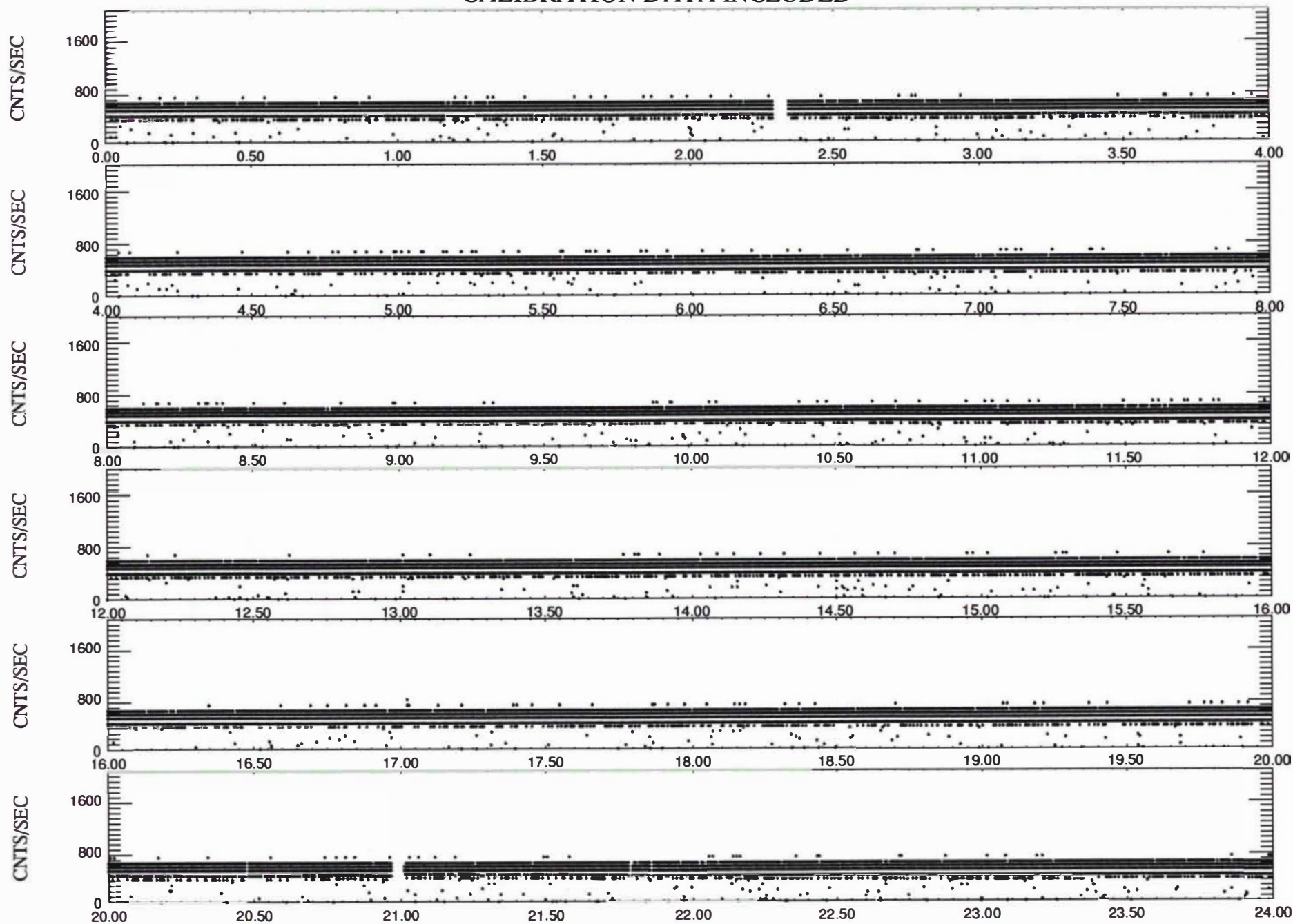
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

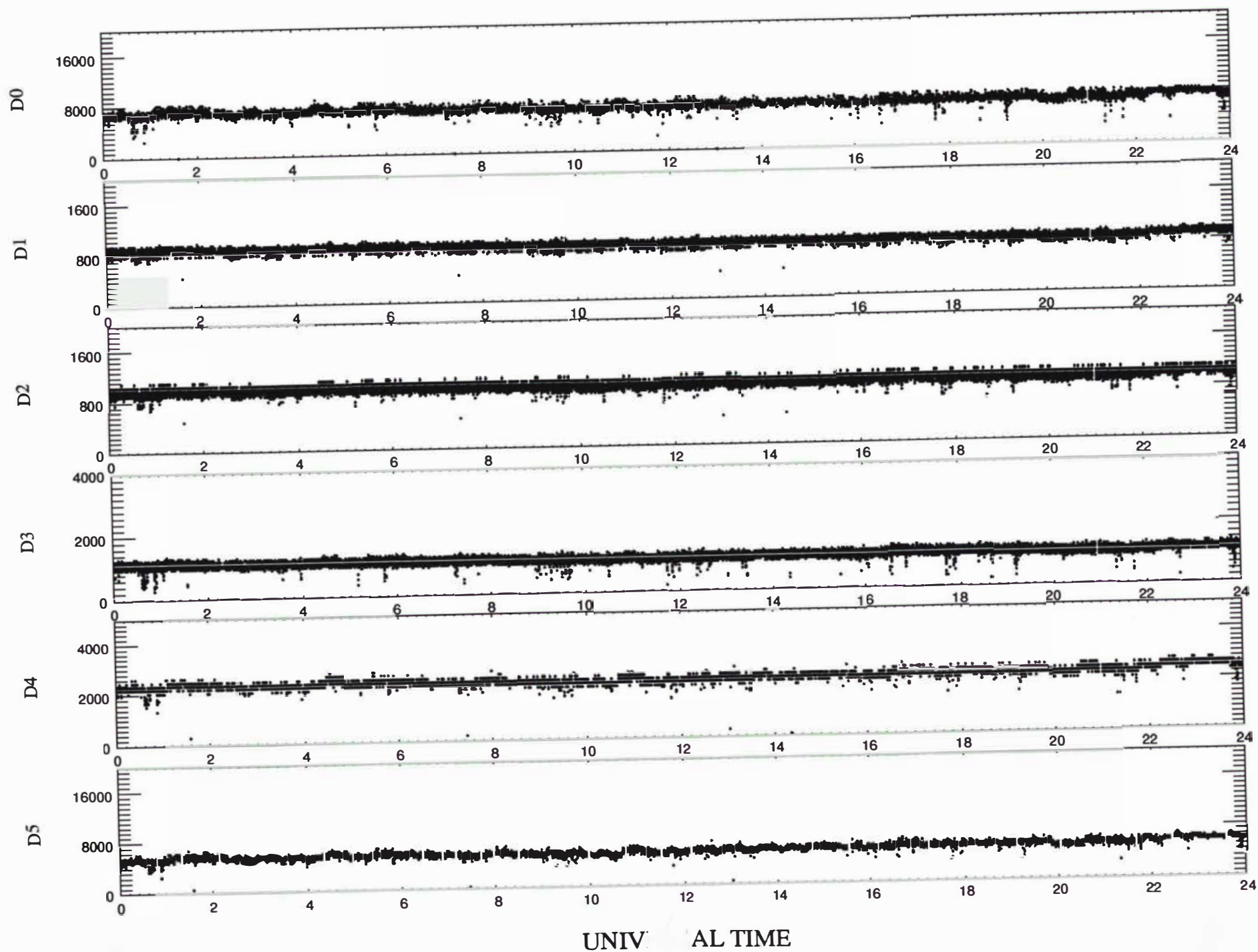
NO BURST (9)



CALIBRATION DATA INCLUDED



UNIT SAL TIME



From williams@sunspot Thu Sep 10 18:05 PDT 1998
Date: Thu, 10 Sep 1998 18:09:58 -0700
From: williams@sunspot (Roger Williams)
To: khurley@sunspot
Subject: RT Event Problems 94258-96229
: williams@sunspot

Kevin,

The next wave of results is finished relative to differences in ascii files for events from your realtime event list. These results are for yyddd's from your list in the range 94258-96229 or Sep 15, 1994 to August 16, 1996.

Using yyddd's from your list we investigated ALL ascii files that we have made on that day and compared old vs. new decom versions. Again, this was because times in the list were Earth times and thus not easily related to a Ulysses window. Thus the list of files may contain irrelevant entries.

The list of files is attached.

Roger and J

<This message contains 1 attachments (not printed)>

e94321_2A1_02.91_03.58.ascii.diff.Z
e94324_2A1_20.05_20.72.ascii.diff.Z
e94331_2A1_15.32_15.99.ascii.diff.Z
e94356_2A1_05.27_05.93.ascii.diff.Z
e94356_2A1_07.32_07.44.ascii.diff.Z
e95013_2A1_05.65_06.32.ascii.diff.Z
e95042_2A1_02.31_02.45.ascii.diff.Z
e95042_2A1_04.10_04.76.ascii.diff.Z
e95076_2A1_20.14_20.81.ascii.diff.Z
e95091_2A1_20.66_20.80.ascii.diff.Z
e95135_2A1_06.08_06.74.ascii.diff.Z
e95176_2A1_02.36_03.02.ascii.diff.Z
e95221_2A1_23.76_23.89.ascii.diff.Z
e95274_2A1_11.27_12.02.ascii.diff.Z
e95275_2A1_22.78_22.91.ascii.diff.Z
e95306_2A1_05.54_05.66.ascii.diff.Z
e95323_2A1_11.72_14.09.ascii.diff.Z
e95359_2A1_09.18_09.96.ascii.diff.Z
e96007_2A1_05.00_05.78.ascii.diff.Z
e96007_2A1_18.67_19.45.ascii.diff.Z
e96015_2A1_17.16_17.31.ascii.diff.Z
e96106_2A1_01.13_01.31.ascii.diff.Z
e96142_2A1_16.64_18.08.ascii.diff.Z
e96149_2A1_02.19_02.42.ascii.diff.Z
e96185_2A1_13.93_14.38.ascii.diff.Z
e96185_2A1_14.02_14.24.ascii.diff.Z
e96209_2A1_11.24_12.68.ascii.diff.Z
e96226_2A1_10.12_11.51.ascii.diff.Z

Date: Fri, 10 Feb 1995 04:54:34 +0800
 Message-Id: <9502101254.AA19784@sunspot.ssl.berkeley.edu>
 Mime-Version: 1.0
 To: KHURLEY@space6.ssl.berkeley.edu
 m: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Improved list.
 Cc: TGRS::Palmer@tgrs.gsfc.nasa.gov
 X-Lines: 81
 Status: RO
 Content-Length: 4056
 X-Sun-Content-Length: 4056

KONUS // ULYSSES // CGRO-BATSE Event List from Wind launch to 95-01-17:

63 Konus days to 1/17: 22 backgnd-GRBs, 21 triggered-GRBs, 1 flare.

Date	Tzero (UT)	Konus sensor	Max c/s G1 G2 G3	N(1)/N(2) =G2 t<Tz t>Tz	Duration T#	BATSE Uly T# d* d*	TGRS T#	BACODINE RA Dec
941113	12 09 15	S1	145 85	2.5 115	BG			
941114	02 02 40	S2	110 128	30 0.25 12	BG	3283		92 37
941115	06 22 --					3284 (U)		149 11
941117	03 14 38.191	S2	406 550	74 0.17 40	5 2			
941117	14 07 57	S2	150 140	<0.15 5	BG			
941119	19 31 09.175	S2	370 703	160 0.23 7	20 4	3287*	U*	#13 188 22
941120	20 23 17.924	S1	215 328	30 >15 2	25 5			
941121	17 25 00.945	S1	1652 1656	300 21 3	50 6	3290*	U*	#15 004 -63
941123	19 51 --					3294 (U)		190 02
941125	22 04 30.156	S2	115 308	109 0.95 1.5	5 7	3295*	U*	BG
941126	00 20 46	S1	150 205	200 >14 18	BG	3296		BG
941126	03 55 --					3297 (U)		323 38
941126	12 22 37.952	S1	860 1430	330 4.2 40	45 8	3298*	U*	#28
941126	16 54 20	S1	55 75	>10 26	BG			
941126	19 56 49.732	S1	290 390	211 6.7 20	26 9	3301*	U*	#--
941127	14 30 25.680	S2	200 400	95 0.17 8	7 10	3303*	U*	070 50
941127	15 39 10	S1	210 57	2.7 260	BG			
941128	15 37 00	S1	75 90	32 >15 55	BG	3305		no d
941128	18 41 --					3306 (U)		011 -32
941205	23 33 40.074	S2	370 460	188 0.06 6	30 11			
941207	22 10 32	S2	265 175	<0.2 7	BG			
941210	03 10 52.523	S2	900 2350	1385 0.12 1	15 14		U*	BG
941214	17 03 51	S1	40 45	29 >6 12	BG			
941214	05 38 45.226	S1	3479 1266	14 1.0 12	240 SF	3318		BG 259 -06
941221	07 44 08	S2	55 115	30 0.8 20	BG			
941221	22 14 35.215	S1	260 496	165 1.5 55	11 19			BG
941222	05 36 00.243	S2	334 1360	1066 0.36 7	105 20			#145
941228	07 39 45.915	S1	300 637	519 4.4 5	90 28	3330*	U*	no d 339 -52
941228	16 55 23	S2	40 36	23 0.25 25	BG			
941229	12 58 05	S1	46 108	31 1.8 15	BG			
941229	22 51 08.781	S2	396 381	140 0.09 7	25 29	3334*	U*	no d
941230	20 52 53	S1	74 117	52 8.4 158	BG			no d
941230	23 43 44	S2	55 70	16 <0.2 4.5	BG			no d
950104	00 48 +/-1200						(U)	
950104	07 18 39.613	S2	258 550	219 0.75 2.8	20 31	3345*	U*	#250 310 -11
950104	09 00 58	S2	140 143	40 <0.1 25	BG			
950108	02 04 --					3349 (U)		020 -14
950110	06 02 15	S2	332 180	<0.1 3600	BG			
950110	13 37 57.084	S2	234 422	213 0.05 38	100 32			
950111	04 49 12.241	S1	586 620	100 >19 92	24 33	3351	U*	BG 319 -65
950111	12 18 49.196	S1	225 435	164 1.85 26	50 34	3352	U*	BG 024 -14
950112	07 45 37.120	S2	1305 1800	336 0.04 2.5	44 35			(?)
950113	05 59 13	S1	283 180	26 >10 52	BG			
950113	17 38 32	S2	85 162	35 <0.06 75	BG			

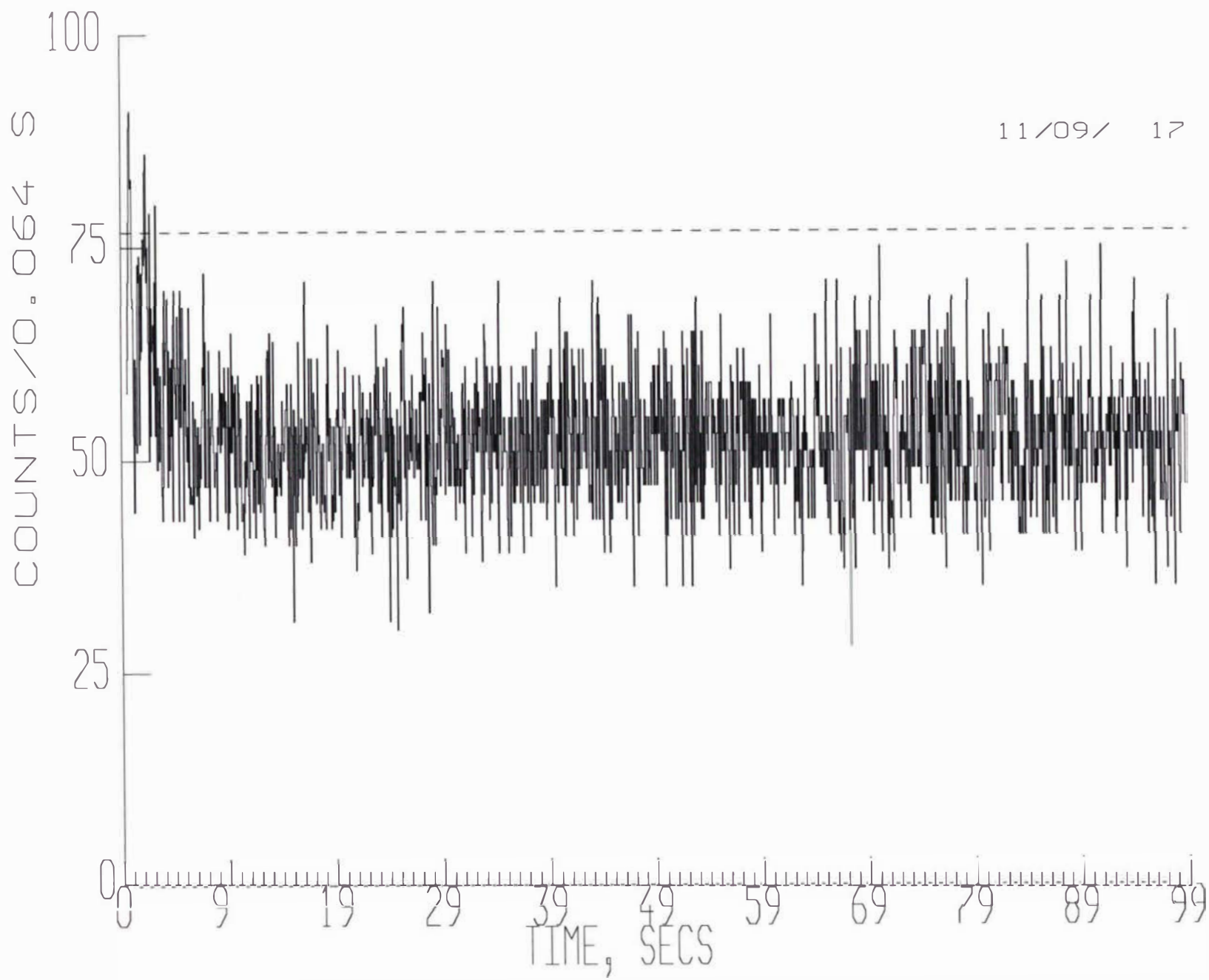
950114	01 00 38	S1	46	110	1.6	6	BG	
950114	04 03 01	S2	23	76	0.5	70	BG	U
950114	07 30 30.766	S2	205	406	60 <0.05	1 100	36	
950114	13 10 34.865	S1	1320	2828	516 3.1	1 10	37	U* #258
950115	02 49 32	S2	40	47	34 <0.15	24	BG	BG
950117	01 36 00	S2	56	82	42 0.22	108	BG	3360* U* 298 05
950118	17 05 --							3366 (U) 061 -63

G1:14-50, G2:50-225, G3:225-900 keV, >94/12/12: 12.5-43, 43-190, 90-760 keV.
 N(1)/N(2)=G2-ratio, *=data at GSFC; BG=background rate increase = event visible.

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

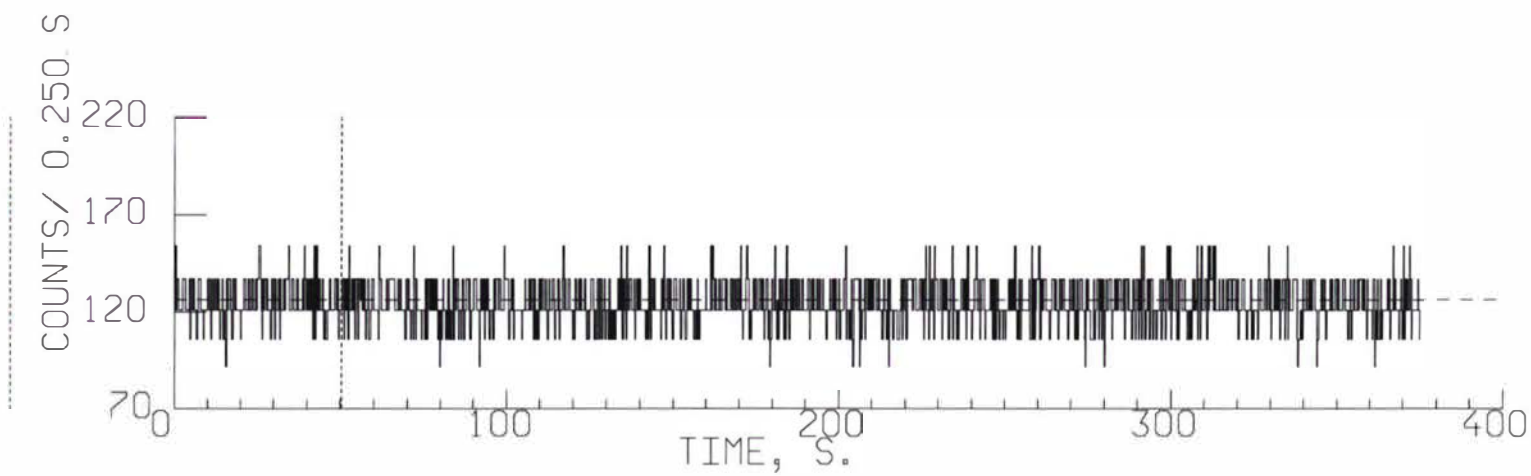
A

KONUS 17/11/94 11678.190
50- 200 keV



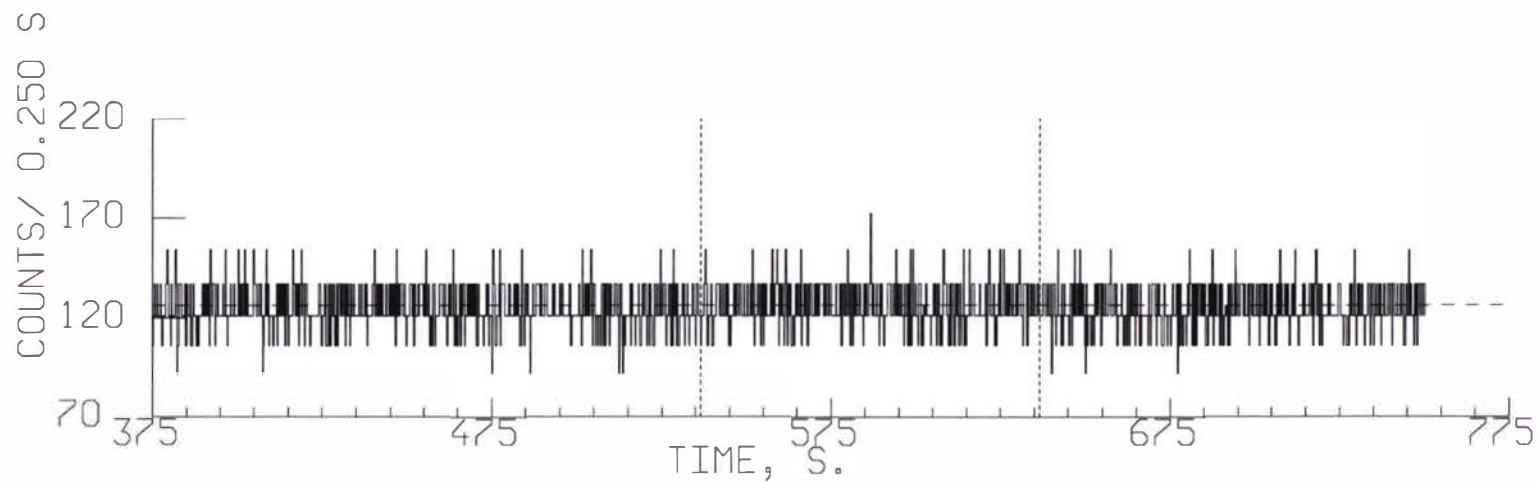
ULYSSES RT
17/11/94 10476.052 s
22- 148 keV

11/9/17



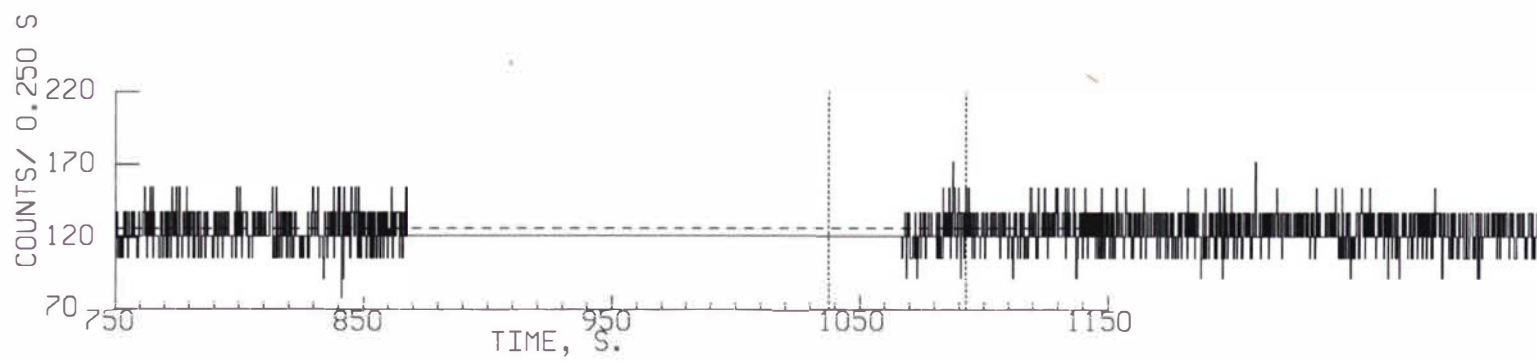
ULYSSES RT
17/11/94 10476.052 s
22- 148 keV

11 / 9 / 17



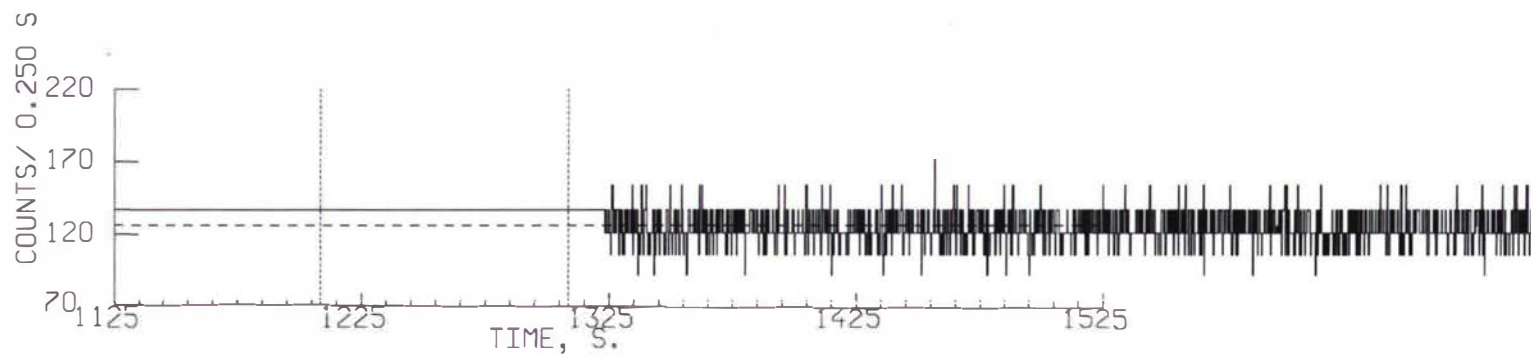
ULYSSES RT
17/11/94 10476.052 s
22- 148 keV

11/ 9/17



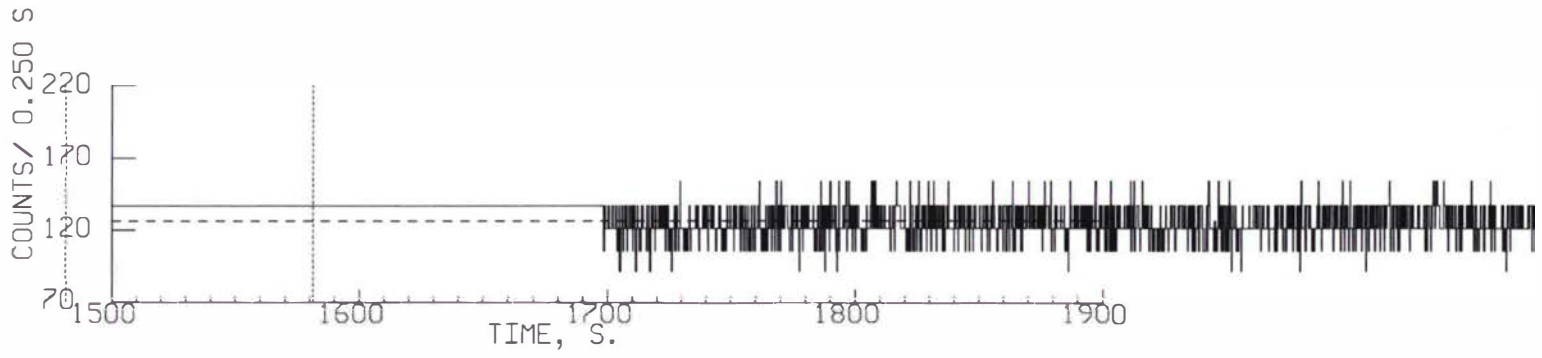
ULYSSES RT
17/11/94 10476.052 s
22- 148 keV

11 / 9 / 17



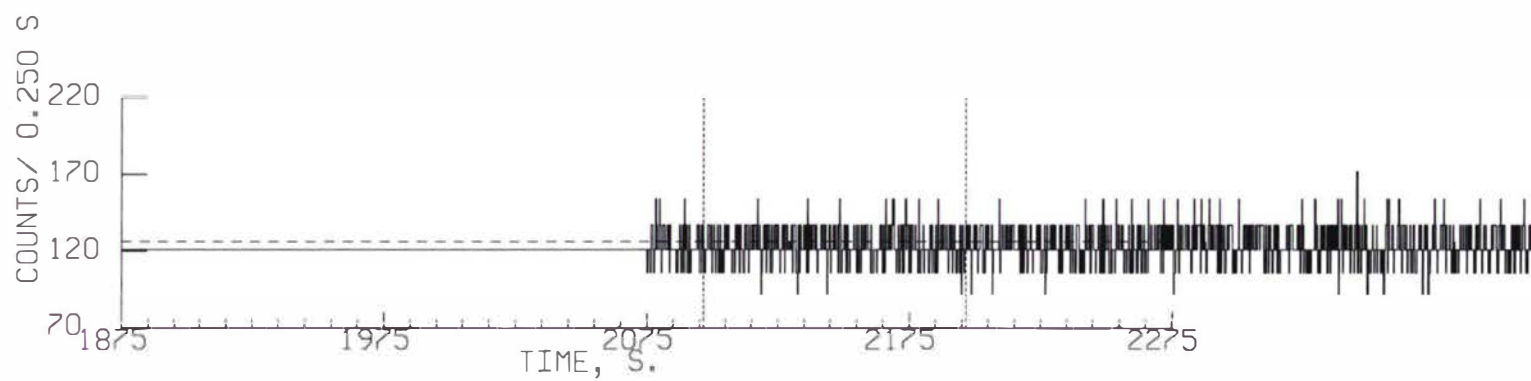
ULYSSES RT
17/11/94 10476.052 s
22- 148 keV

11 / 9 / 17



ULYSSES RT
17/11/94 10476.052 s
22- 148 keV

11 / 9 / 17



1 3 / 2 / 9 5

U L Y S S E S R T

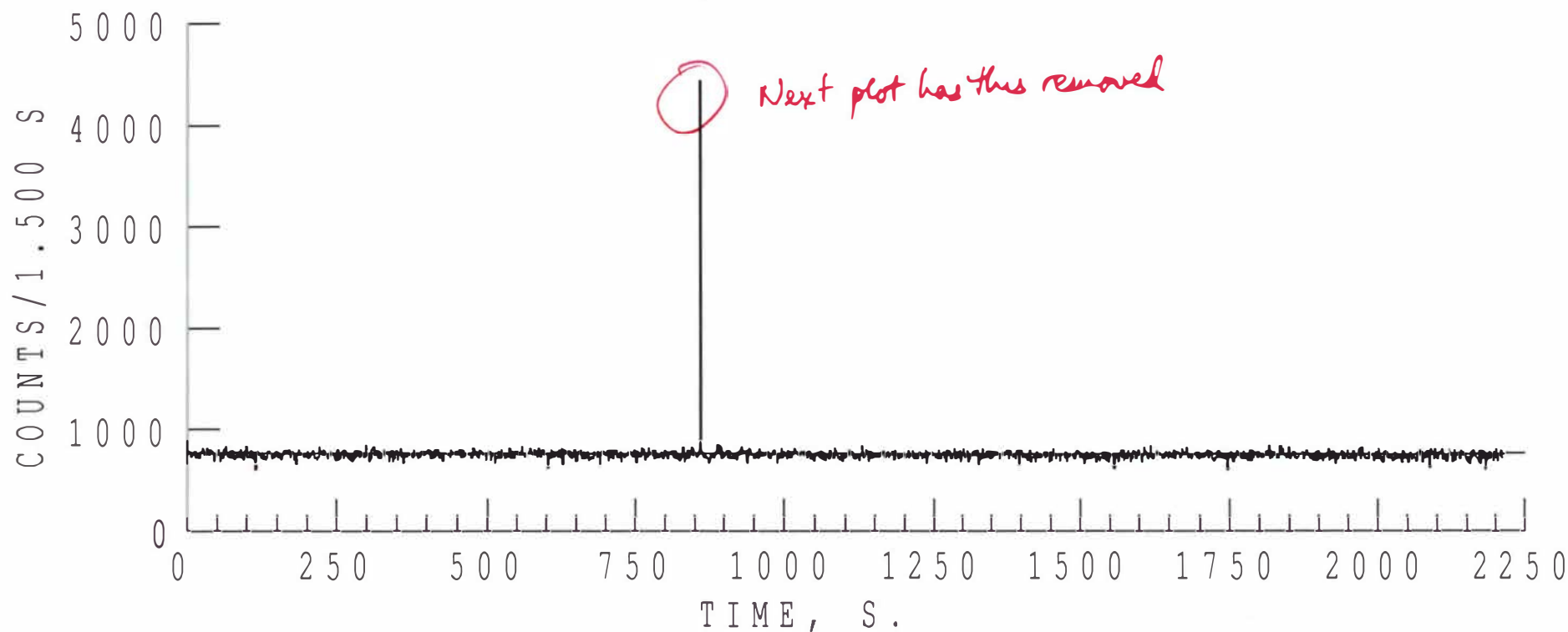
1 7 / 1 1 / 9 4 1 0 4 7 6 . 0 5 2 s

0 . 2 5 0 s I N T E R V A L S R E G R O U P E D B Y 6

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



1 3 / 2 / 9 5

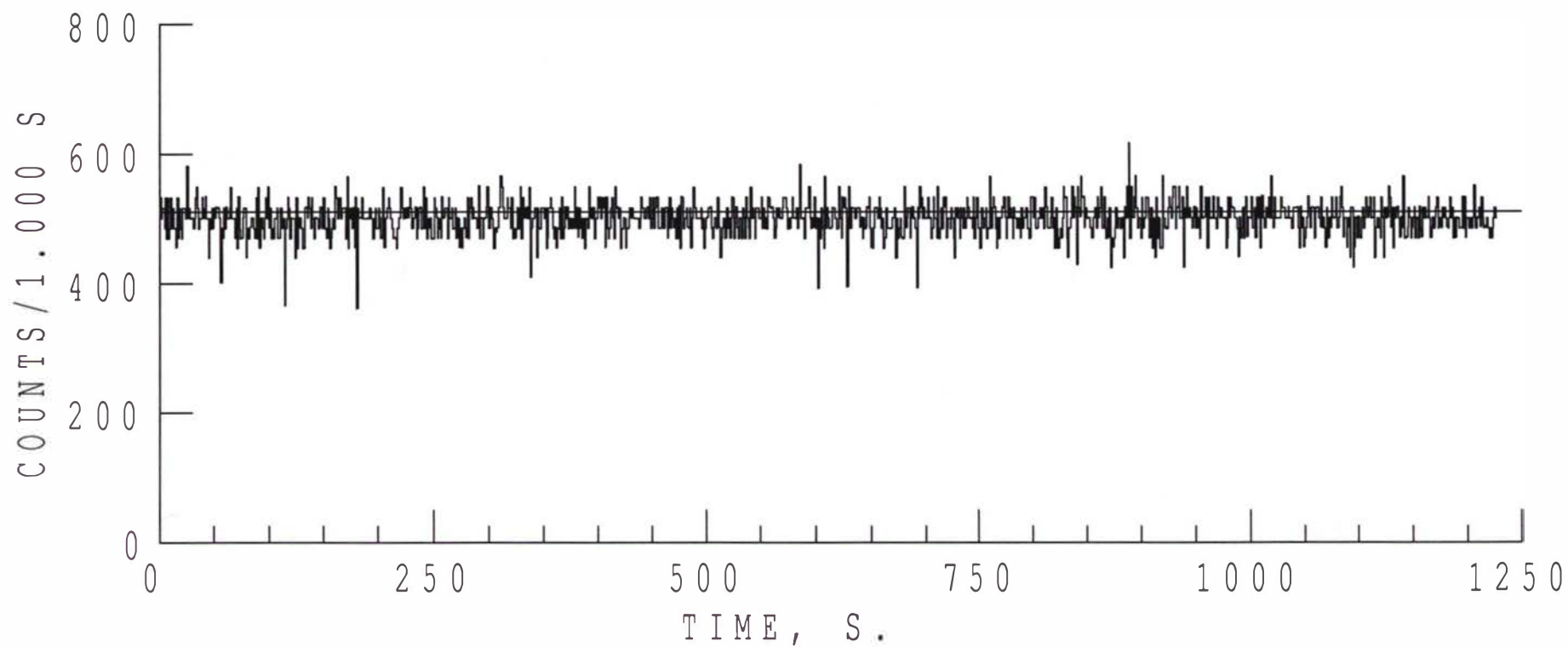
U L Y S S E S R T

1 7 / 1 1 / 9 4 1 0 4 7 6 . 0 5 2 s

0 . 2 5 0 s I N T E R V A L S R E G R O U P E D B Y 4

0 - 0 k e V

N = 10 M = 2
> 4.0 SIGMA FLUCTUATIONS



From root Wed Nov 16 13:51 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA00758; Wed, 16 Nov 94 13:51:06
Received: from mx.nsi.nasa.gov by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA09903; Wed, 16 Nov 1994 13:49:33 +0800
Received: Wed, 16 Nov 94 13:44:02 PST from JPLSP1.dnet by mx.nsi.nasa.gov (4.1/1.2)
Message-Id: <9411162144.AA02171@mx.nsi.nasa.gov>
Received: from JPLSP1.dnet by AMES.dnet with MAIL-11
(utk-maill1d v1.7); Wed, 16 Nov 94 13:49:34 PST
Date: Wed, 16 Nov 94 13:49:34 PST
From: "Fernando Castro (reply to ULSSCI)" <ULSFC@jplsp1.span.nasa.gov>
X-To: AMES::"khurley@space6.ssl.berkeley.edu"
X-Cc: ULSFC
Subject: HUS DATATION TEST
To: khurley@space6.ssl.berkeley.edu
Content-Length: 279
Status: R

We are going to perform the HUS DATATION test. Scheduled start time is 94.321.04.45 ETT and end time is 94.321.13.35 ETT. The test will be performed during DSS-45 support. We will use the same set of commands as in 28-Mar-94.

Kind regards,

Fernando Castro
Ulysses S/C Analyst

From root Thu Nov 17 17:05 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA02475; Thu, 17 Nov 94 17:05:34
Received: from mx.nsi.nasa.gov by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA12783; Thu, 17 Nov 1994 17:03:59 +0800
Received: Thu, 17 Nov 94 16:48:22 PST from JPLSP1.dnet by mx.nsi.nasa.gov (4.1/1.2)
Message-Id: <9411180048.AA23819@mx.nsi.nasa.gov>
Received: from JPLSP1.dnet by AMES.dnet with MAIL-11
(utk-maill1d v1.7); Thu, 17 Nov 94 17:03:33 PST
Date: Thu, 17 Nov 94 17:03:33 PST
From: "Fernando Castro (reply to ULSSCI)" <ULSFC@jplsp1.span.nasa.gov>
X-To: AMES::"khurley@space6.ssl.berkeley.edu"
X-Cc: ULSFC
Subject: HUS DATATION TEST
To: khurley@space6.ssl.berkeley.edu
Content-Length: 379
Status: R

Datation test was performed as scheduled starting 94.321.04.45 ETT. The first burst command went through DSS42 as a change in coverage (later uplink transfer) not known to the S/C Control Team took place. All other burst events took place as scheduled via DSS 45, with the experiment reconfigured back at 94.321.13.35.00 ETT.

Kind regards,

Fernando Castro
Ulysses S/C Analyst

From ULSAM@jplsp2.jpl.nasa.gov Sat Nov 12 17:53 PST 1994
Date: Sat, 12 Nov 1994 17:52:24 -0800 (PST)
From: Andy McGarry (reply to ULSSCI) <ULSAM@jplsp1.jpl.nasa.gov>
To: "APLSP::GOLD"@jplsp1.jpl.nasa.gov, "APLSP::HAWKINS"@jplsp1.jpl.nasa.gov,
LJL@PHYSICS.ATT.COM, "28673::LINMPI::KEPPLER"@jplsp1.jpl.nasa.gov,
"28673::LINMPI::WITTE"@jplsp1.jpl.nasa.gov,
"DIRAC2::MAZUK"@jplsp1.jpl.nasa.gov
Cc: ULSAM@jplsp1.jpl.nasa.gov
X-Vmsmail-To: LANTEAM, KEPTEAM, GRUTEAM, HUSTEAM
X-Vmsmail-Cc: ULSAM
Subject: s/c thermal reconfiguration on 11/17/94

The next s/c thermal reconfiguration is being planned for November 17th (~DOY 94.321.17:00 SCET. This will result in decreases in general internal s/c temperatures of around 1 to 3 degrees. We will dumping a further 10W of power externally.

If you have any questions or concerns regarding this operation, please do not hesitate to contact me.

Best regards,

Andy McGarry
Systems Engineer
Ulysses FCT

Date: Fri, 10 Feb 1995 04:54:34 +0800
 Message-Id: <9502101254.AA19784@sunspot.ssl.berkeley.edu>
 Mime-Version: 1.0
 To: KHURLEY@space6.ssl.berkeley.edu
 From: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Improved list.
 Cc: TGRS::Palmer@tgrs.gsfc.nasa.gov
 X-Lines: 81
 Status: RO
 Content-Length: 4056
 X-Sun-Content-Length: 4056

KONUS // ULYSSES // CGRO-BATSE Event List from Wind launch to 95-01-17:

63 Konus days to 1/17: 22 backgnd-GRBs, 21 triggered-GRBs, 1 flare.

Date	Tzero (UT)	Konus sensor	Max c/s G1 G2 G3	N(1)/N(2) =G2 t<Tz t>Tz	Duration T#	BATSE Uly T# d* d*	TGRS T# RA Dec
941113	12 09 15	S1	145 85	2.5 115	BG		
941114	02 02 40	S2	110 128	30 0.25 12	BG	3283	92 37
941115	06 22 --					3284 (U)	149 11
941117	03 14 38.191	S2	406 550	74 0.17 40	5 2		
941117	14 07 57	S2	150 140	<0.15 5	BG		
941119	19 31 09.175	S2	370 703	160 0.23 7	20 4	3287* U*	#13 188 22
941120	20 23 17.924	S1	215 328	30 >15 2	25 5		
941121	17 25 00.945	S1	1652 1656	300 21 3	50 6	3290* U*	#15 004 -63
941123	19 51 --					3294 (U)	190 02
941125	22 04 30.156	S2	115 308	109 0.95 1.5	5 7	3295* U*	BG
941126	00 20 46	S1	150 205	200 >14 18	BG	3296	BG
941126	03 55 --					3297 (U)	323 38
941126	12 22 37.952	S1	860 1430	330 4.2 40	45 8	3298* U*	#28
941126	16 54 20	S1	55 75	>10 26	BG		
941126	19 56 49.732	S1	290 390	211 6.7 20	26 9	3301* U*	#--
941127	14 30 25.680	S2	200 400	95 0.17 8	7 10	3303* U*	070 50
941127	15 39 10	S1	210 57	2.7 260	BG		
941128	15 37 00	S1	75 90	32 >15 55	BG	3305	no d
941128	18 41 --					3306 (U)	011 -32
941205	23 33 40.074	S2	370 460	188 0.06 6	30 11		
941207	22 10 32	S2	265 175	<0.2 7	BG		
941210	03 10 52.523	S2	900 2350	1385 0.12 1	15 14	U*	BG
941214	17 03 51	S1	40 45	29 >6 12	BG		
941214	05 38 45.226	S1	3479 1266	14 1.0 12	240 SF	3318	BG 259 -06
941221	07 44 08	S2	55 115	30 0.8 20	BG		
941221	22 14 35.215	S1	260 496	165 1.5 55	11 19		BG
941222	05 36 00.243	S2	334 1360	1066 0.36 7	105 20		#145
941228	07 39 45.915	S1	300 637	519 4.4 5	90 28	3330* U*	no d 339 -52
941228	16 55 23	S2	40 36	23 0.25 25	BG		
941229	12 58 05	S1	46 108	31 1.8 15	BG		
941229	22 51 08.781	S2	396 381	140 0.09 7	25 29	3334* U*	no d
941230	20 52 53	S1	74 117	52 8.4 158	BG		no d
941230	23 43 44	S2	55 70	16 <0.2 4.5	BG		no d
950104	00 48 +/-1200					(U)	
950104	07 18 39.613	S2	258 550	219 0.75 2.8	20 31	3345* U*	#250 310 -11
950104	09 00 58	S2	140 143	40 <0.1 25	BG		
950108	02 04 --					3349 (U)	020 -14
950110	06 02 15	S2	332 180	<0.1 3600	BG		
950110	13 37 57.084	S2	234 422	213 0.05 38	100 32		
950111	04 49 12.241	S1	586 620	100 >19 92	24 33	3351 U*	BG 319 -65
950111	12 18 49.196	S1	225 435	164 1.85 26	50 34	3352 U*	BG 024 -14
950112	07 45 37.120	S2	1305 1800	336 0.04 2.5	44 35		(?)
950113	05 59 13	S1	283 180	26 >10 52	BG		
950113	17 38 32	S2	85 162	35 <0.06 75	BG		

950114	01 00 38	S1	46	110	1.6	6	BG	
950114	04 03 01	S2	23	76	0.5	70	BG	U
950114	07 30 30.766	S2	205	406	60 <0.05	1 100	36	
950114	13 10 34.865	S1	1320	2828	516 3.1	1 10	37	U* #258
950115	02 49 32	S2	40	47	34 <0.15	24	BG	BG
950117	01 36 00	S2	56	82	42 0.22	108	BG	3360* U* 298 05
950118	17 05 --							3366 (U) 061 -63

G1:14-50, G2:50-225, G3:225-900 keV, >94/12/12: 12.5-43, 43-190, 90-760 keV.
 N(1)/N(2)=G2-ratio, *=data at GSFC; BG=background rate increase = event visible.

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

From williams Fri Jul 12 18:37 PDT 1996
Date: Fri, 12 Jul 1996 18:37:40 -0700
From: williams (Roger Williams)
To: khurley@sunspot
Subject: LIST_OF_PROBS

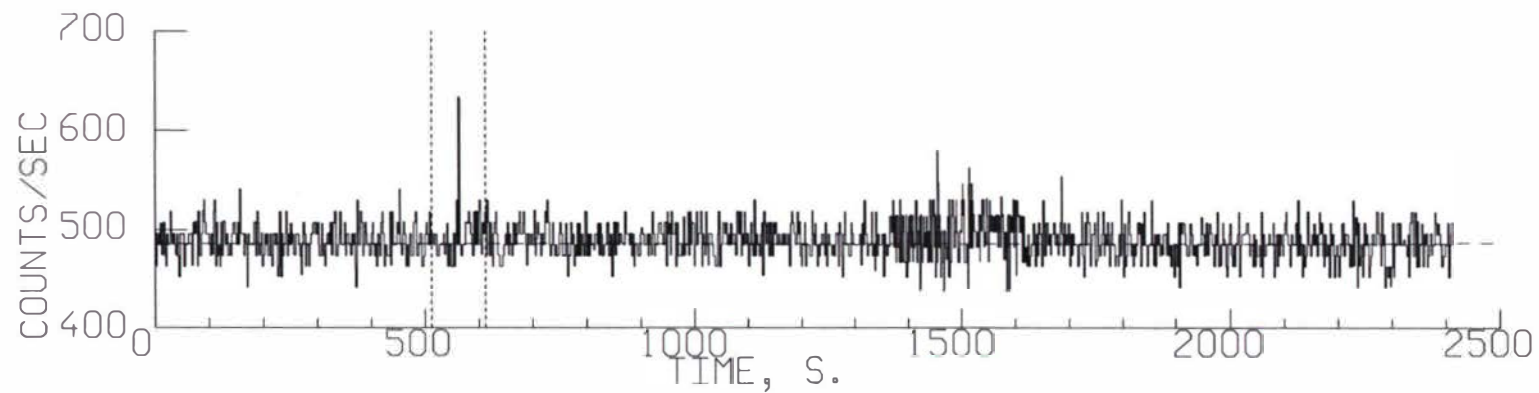
Possible ~ 1/2 timing error

1 hour time range from beginning of burst that extract falls in:

b03:0219	extract	beg time:0244	e91270_2A1_02.73_02.84.ascii.Z	BATSE 825; not det.
b09:0932	extract	beg time:1025	e92010_2A1_10.42_10.48.ascii.Z	BATSE 1269; not det.
b01:0629	extract	beg time:0634	e92174_2A1_06.57_06.87.ascii.Z	BATSE 1662; not det.
b01:0541	extract	beg time:0549	e92190_2A1_5.76_5.90.ascii.Z	SGR 1900 - could have been used for
b02:2032	extract	beg time:2058	e92205_2A1_20.97_22.66.ascii.Z	PVO/WATCH; trigger - ^{is data part of use} not used
b01:1202	extract	beg time:1240	e92209_2A1_12.67_12.85.ascii.Z	BATSE 1726; not det.
b15:1825	extract	beg time:1905	q92314_2A1_19.08_19.30.ascii.Z	BATSE 2044; not det.
b03:0322	extract	beg time:0344	e92315_2A1_3.10_3.36.ascii.Z	BATSE 2045; not det.
b06:0819	extract	beg time:0844	e92315_2A1_8.71_8.85.ascii.Z	BATSE 2046; not det.
b02:0600	extract	beg time:0644	e92316_2A1_6.76_7.04.ascii.Z	BATSE 2048; not det.
b04:0315	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	BATSE 2127; RT detect.
b01:1105	extract	beg time:1150	q93077_2A1_11.83_12.05.ascii.Z	BATSE 2255; RT detect.
b01:0745	extract	beg time:0756	q93096_2A1_7.71_7.85.ascii.Z	BATSE 2269; trigger data used
b01:1445	extract	beg time:1530	e93126_2A1_15.50_15.65.ascii.Z	Not used
b01:0334	extract	beg time:0434	e93265_2A1_04.56_04.64.ascii.Z	Not used
b01:0900	extract	beg time:0943	e93272_2A1_09.71_09.98.ascii.Z	SGR 1806 - maybe used for net syn
b01:1654	extract	beg time:1707	e93287_2A1_17.11_17.37.ascii.Z	BATSE 2586; RT detect.
b01:2215	extract	beg time:2240	e93294_2A1_22.67_22.85.ascii.Z	BATSE 2598; not detect.
b01:0824	extract	beg time:0840	e93303_2A1_08.66_08.81.ascii.Z	Not used
b05:1140	extract	beg time:1240	e94044_2A1_12.66_12.76.ascii.Z	BATSE 2819; RT detect.
b01:0113	extract	beg time:0124	e94049_2A1_01.40_02.50.ascii.Z	Not used
b01:0047	extract	beg time:0128	e94062_2A1_01.47_01.63.ascii.Z	BATSE 2857; not det.
b01:2113	extract	beg time:2142	e94202_2A1_21.70_21.98.ascii.Z	Not used
b01:2113	extract	beg time:2144	e94202_2A1_21.74_22.14.ascii.Z	Not used
b01:1047	extract	beg time:1143	e94242_2A1_11.71_11.86.ascii.Z	BATSE 3144; not det.
b01:0647	extract	beg time:0728	e94298_2A1_07.47_07.51.ascii.Z	Not used
b11:1328	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	Konus; RT det.
b01:1952	extract	beg time:2040	e94326_2A1_20.66_20.78.ascii.Z	
b01:0144	extract	beg time:0158	e95216_2A1_01.96_02.09.ascii.Z	
b02:1628	extract	beg time:1718	e95339_2A1_17.30_17.45.ascii.Z	
b03:1718	extract	beg time:1718	e95339_2A1_17.30_17.45.ascii.Z	
b01:1124	extract	beg time:1205	e95362_2A1_12.09_12.87.ascii.Z	
b05:1516	extract	beg time:1540	e95362_2A1_15.67_15.84.ascii.Z	
b05:1516	extract	beg time:1541	e95362_2A1_15.69_15.85.ascii.Z	
b02:0216	extract	beg time:0251	e96002_2A1_02.85_03.62.ascii	
b20:1956	extract	beg time:2041	e96002_2A1_20.68_20.76.ascii	
b20:1956	extract	beg time:2041	e96002_2A1_20.69_20.76.ascii	
b03:0235	extract	beg time:0305	e96004_2A1_03.09_03.87.ascii.Z	
b05:1621	extract	beg time:1656	e96006_2A1_16.93_17.08.ascii.Z	
b01:0116	extract	beg time:0150	e96007_2A1_01.84_01.95.ascii	
b01:0116	extract	beg time:0152	e96007_2A1_01.87_01.99.ascii	
b01:0208	extract	beg time:0233	e96030_2A1_02.55_02.66.ascii.Z	
b01:0208	extract	beg time:0235	e96030_2A1_02.58_02.73.ascii.Z	
b01:0208	extract	beg time:0235	e96030_2A1_02.59_02.73.ascii.Z	
b01:0849	extract	beg time:0949	qp96032_2A1_09.81_09.94.ascii.Z	

ULYSSES RT
17/11/94 49680.062 s
INTERVALS REGROUPED BY 4
22- 148 keV

9/ 8/11



1 3 / 2 / 9 5

U L Y S S E S R T

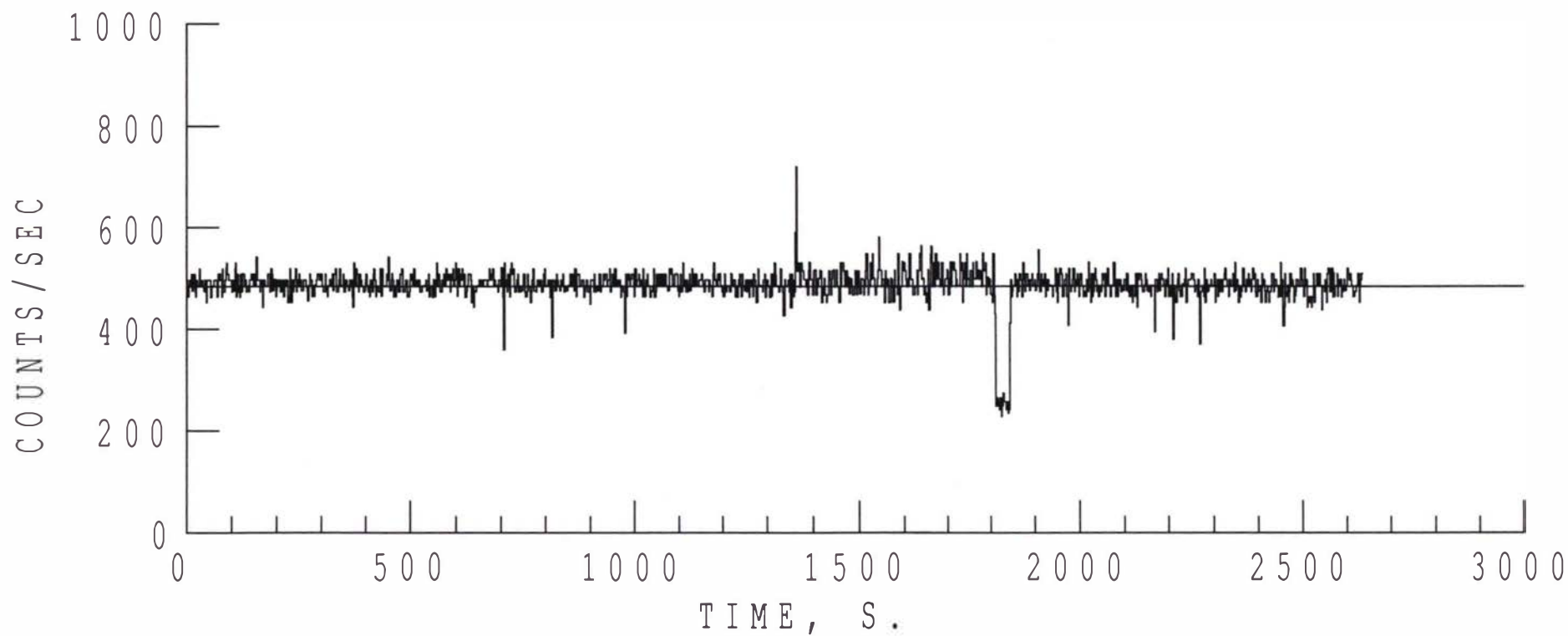
1 7 / 1 1 / 9 4 4 9 6 8 0 . 0 6 2 s

0 . 5 0 0 s I N T E R V A L S R E G R O U P E D B Y 4

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



KONUS 19941117 50230

ULYSSES RT

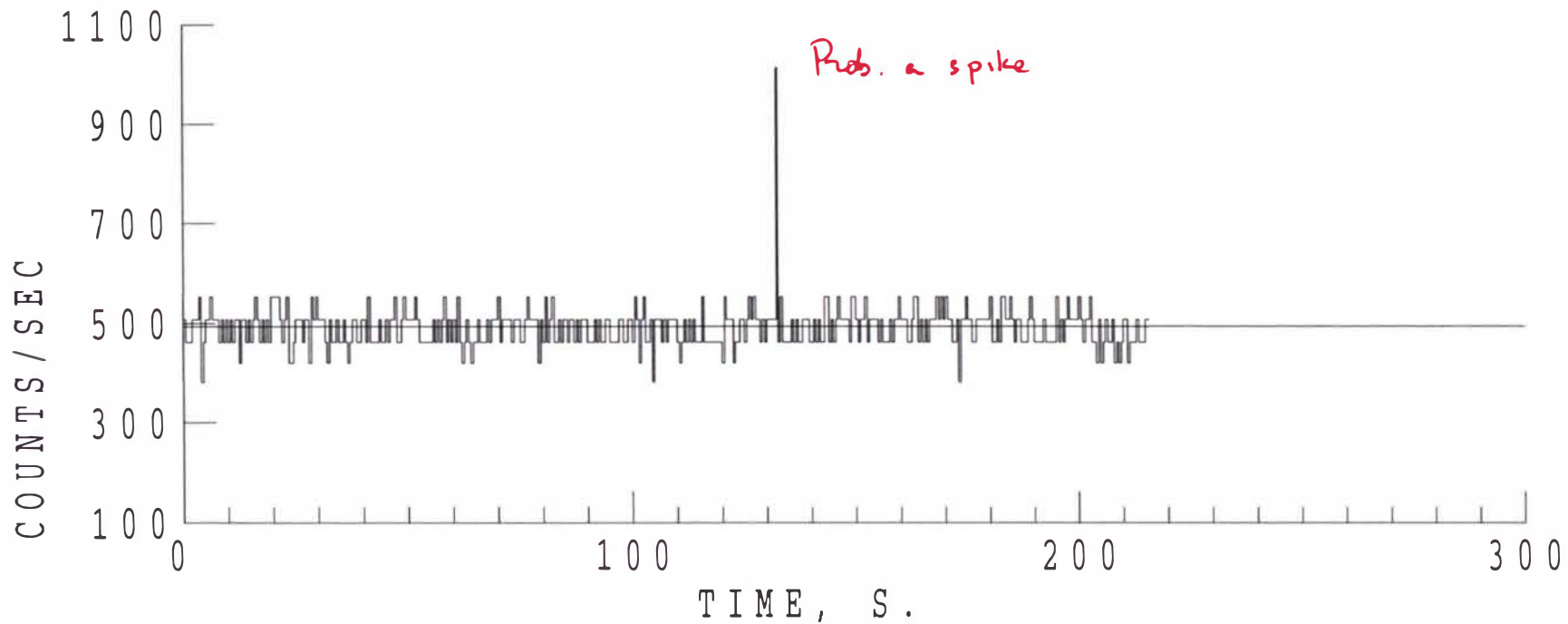
09/08/11

17/11/94 50112.066 s

0 - 0 keV

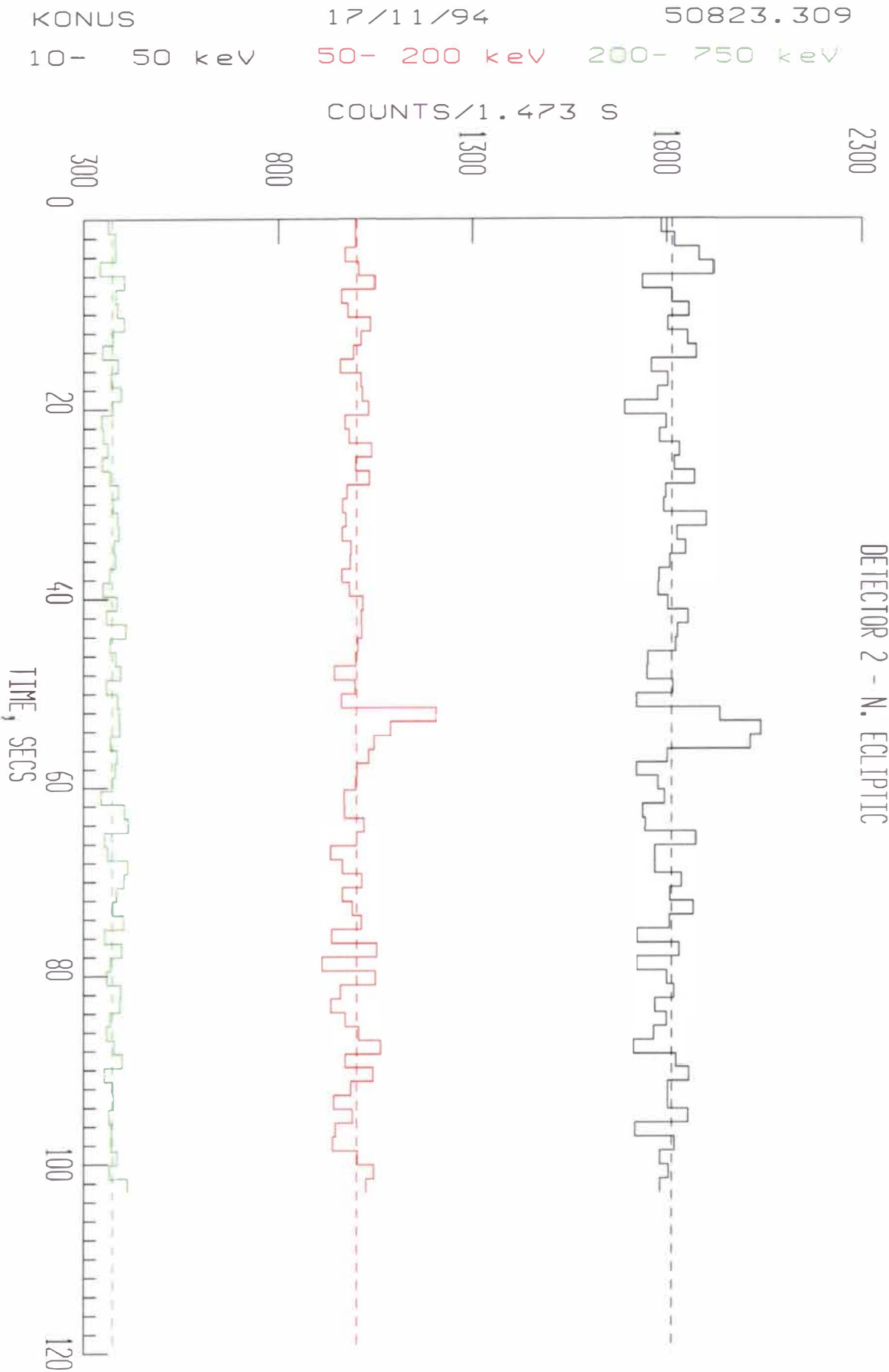
N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



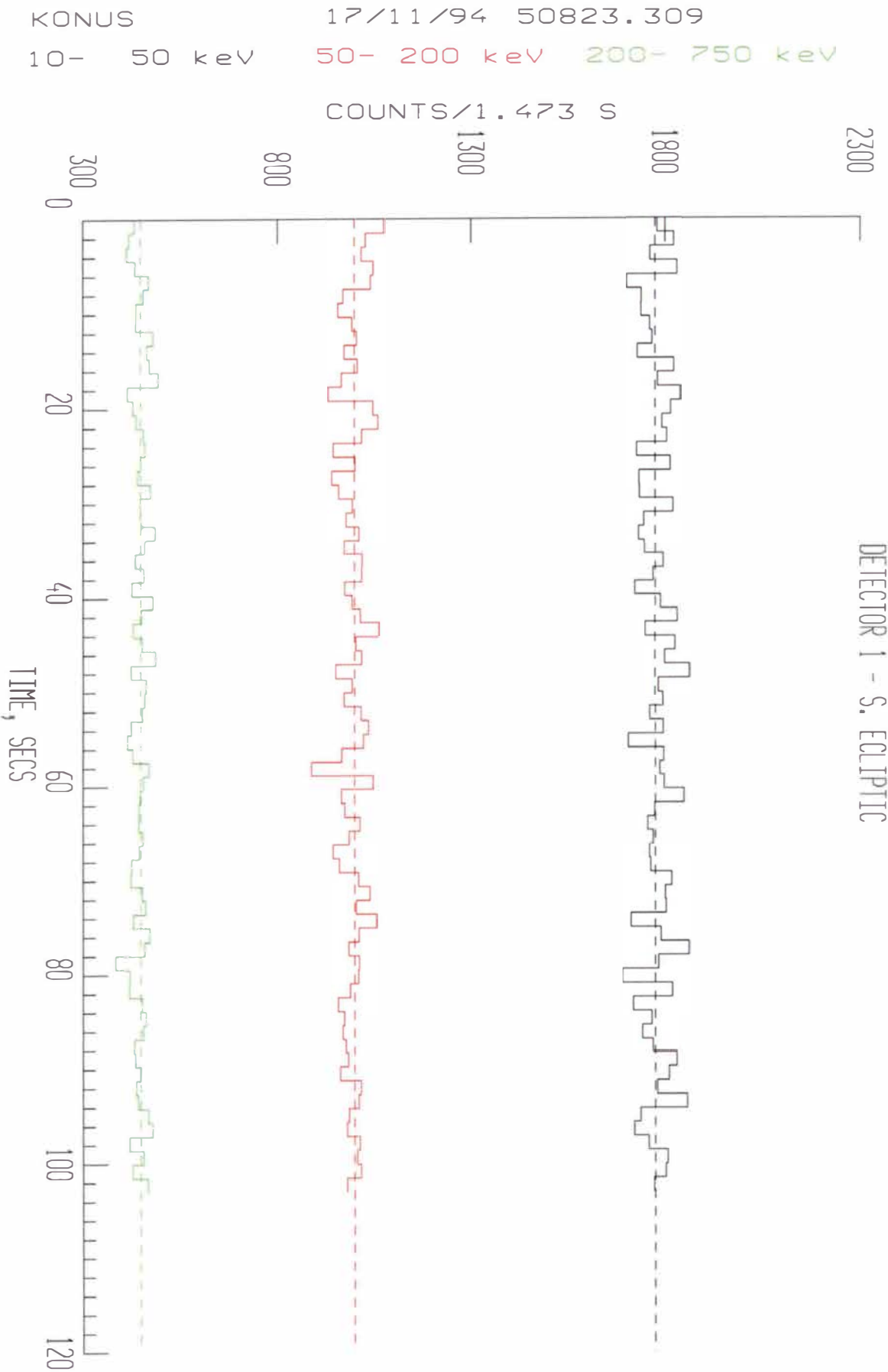
09/08/2011

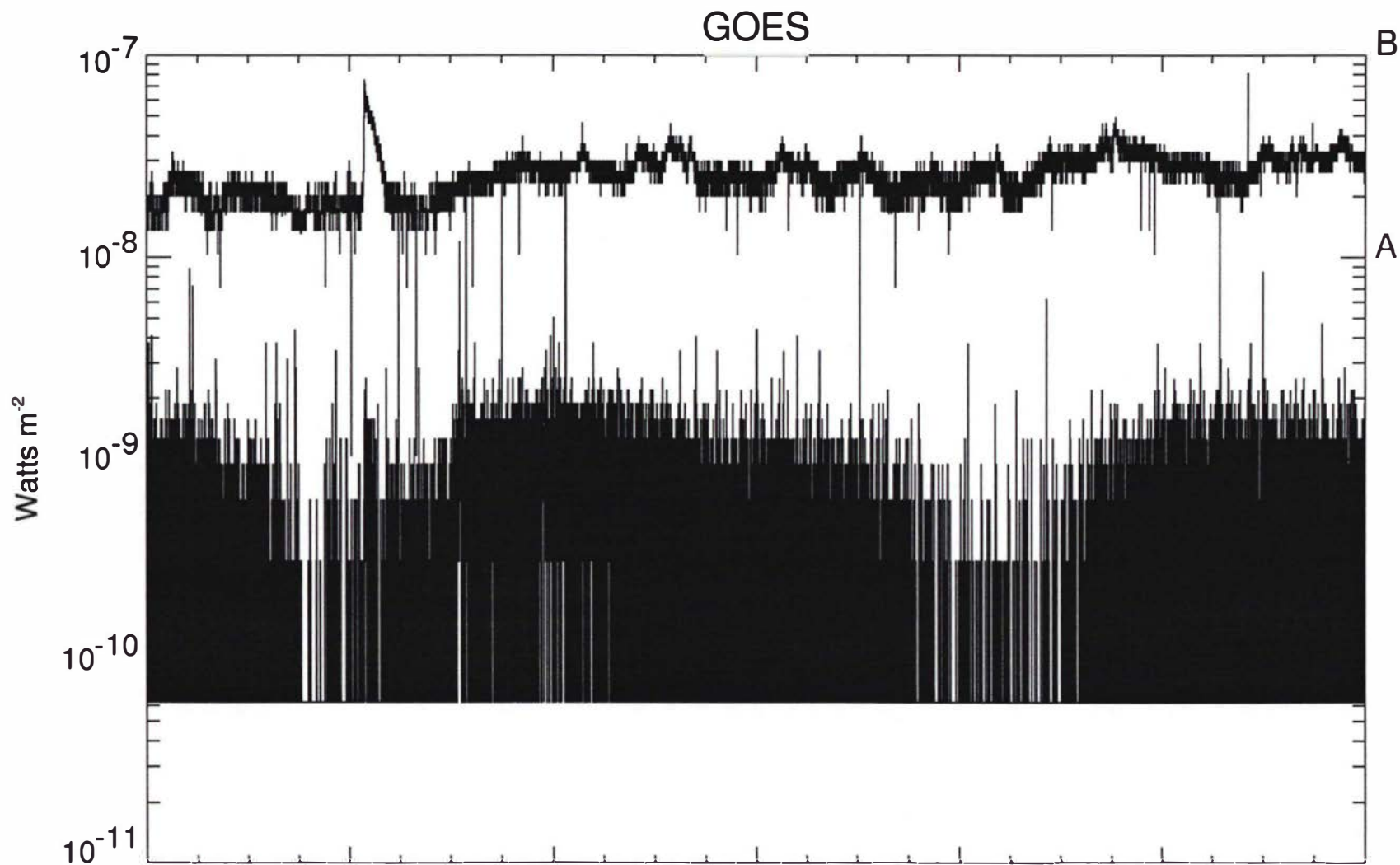
DETECTOR 2 - N. ECLIPSE



09/08/2011

DETECTOR 1 - S. ECLIPSE





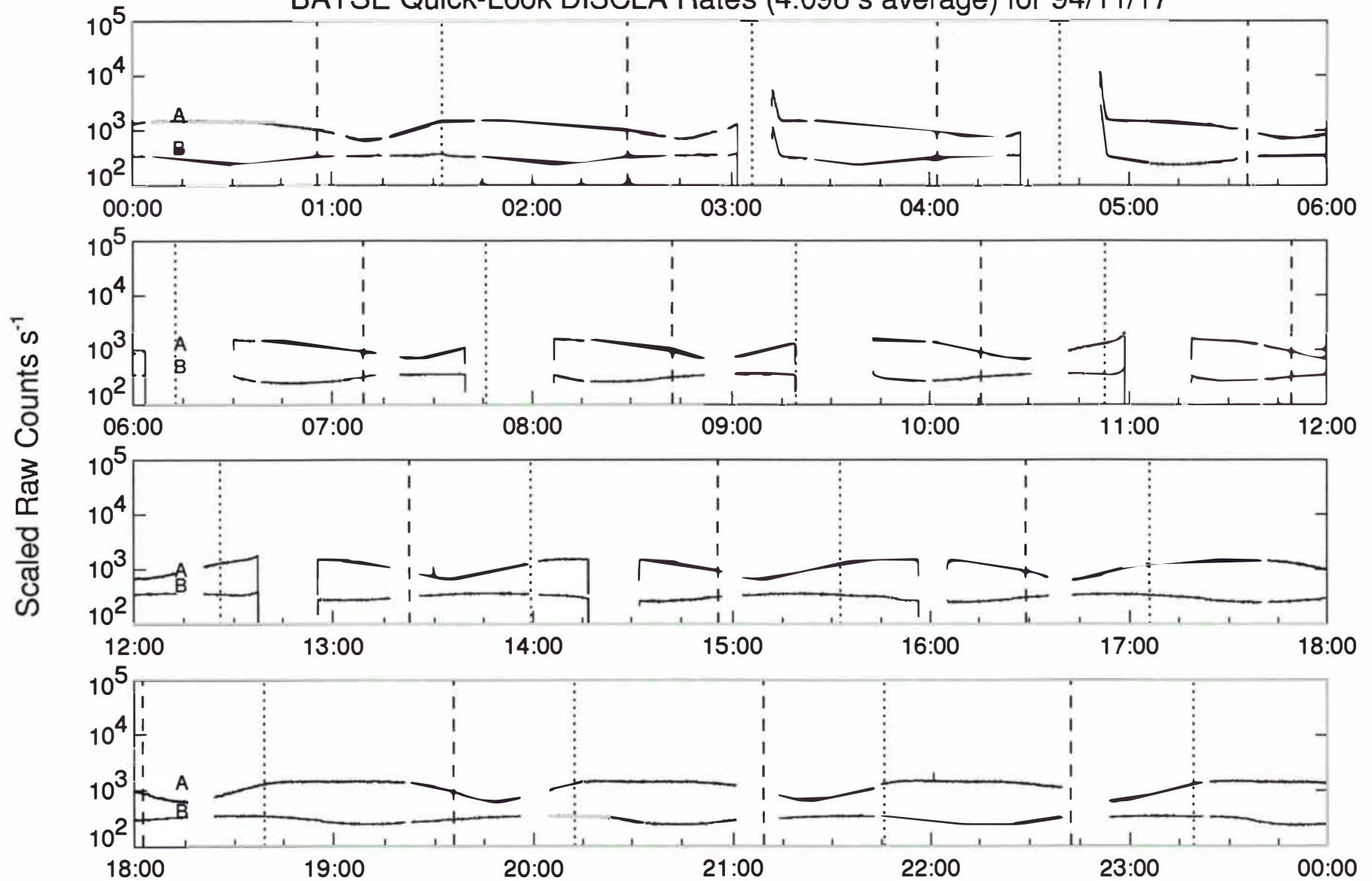
Data Start: 94/11/17, 0000:00

Plot created: 94/12/01, 2041

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 94/11/17

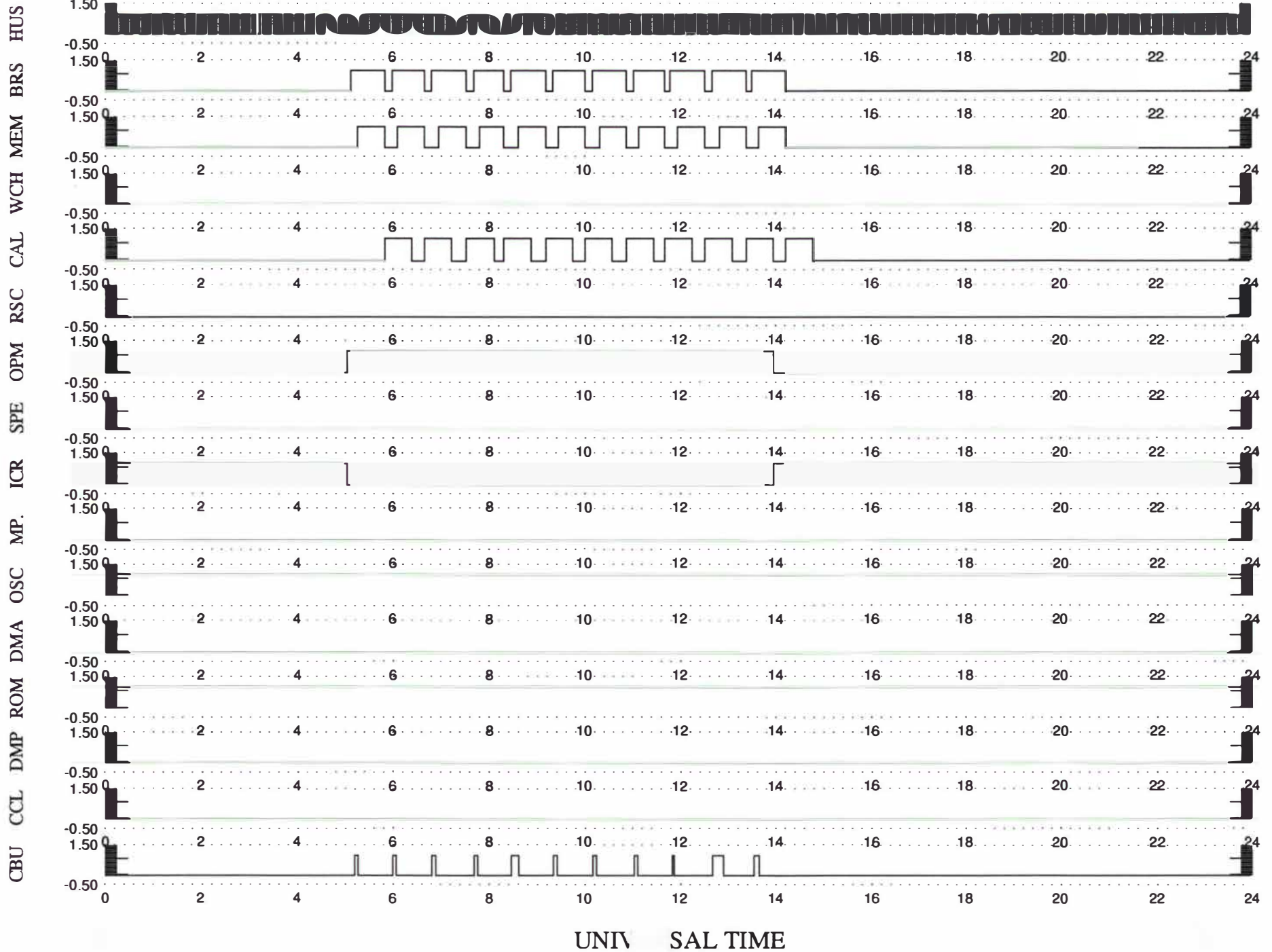


Current Time: 94/12/01, 2036 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

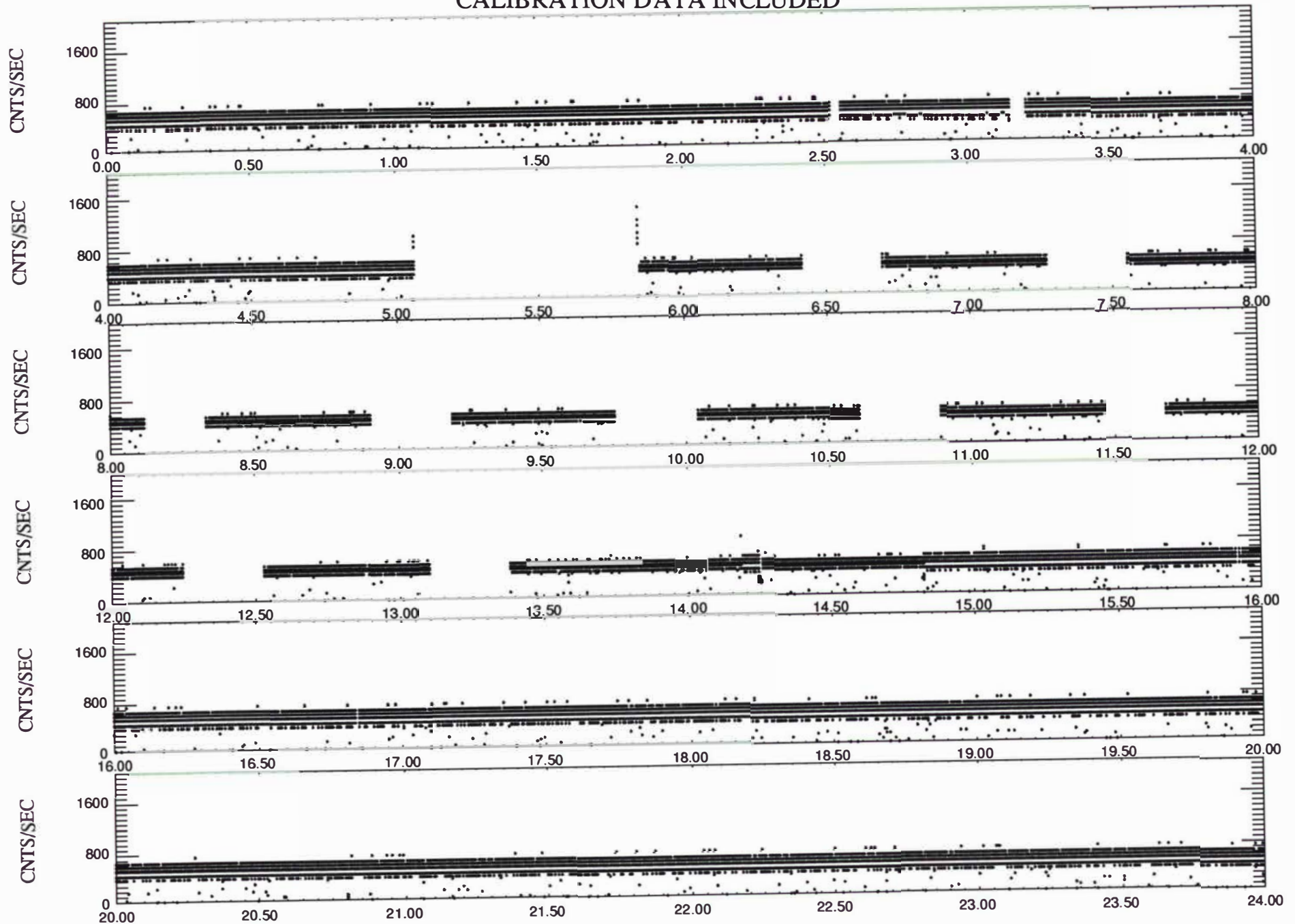
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 10 - 15, 0 - 4

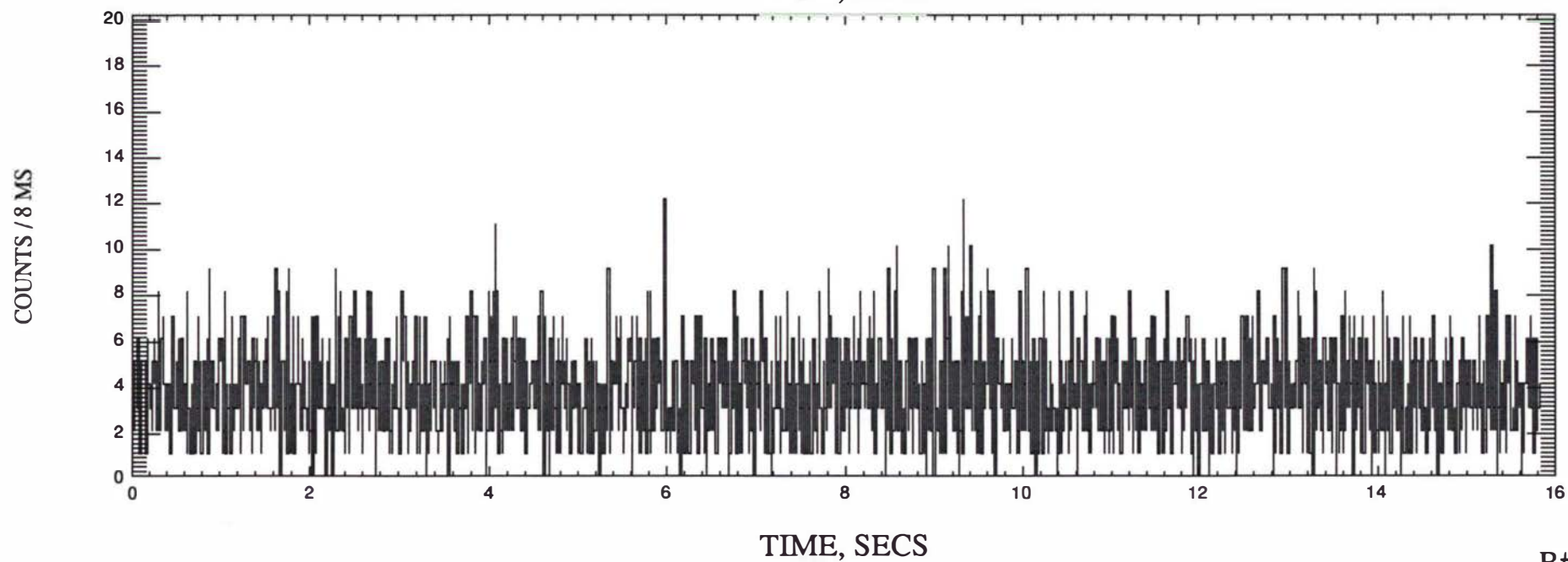
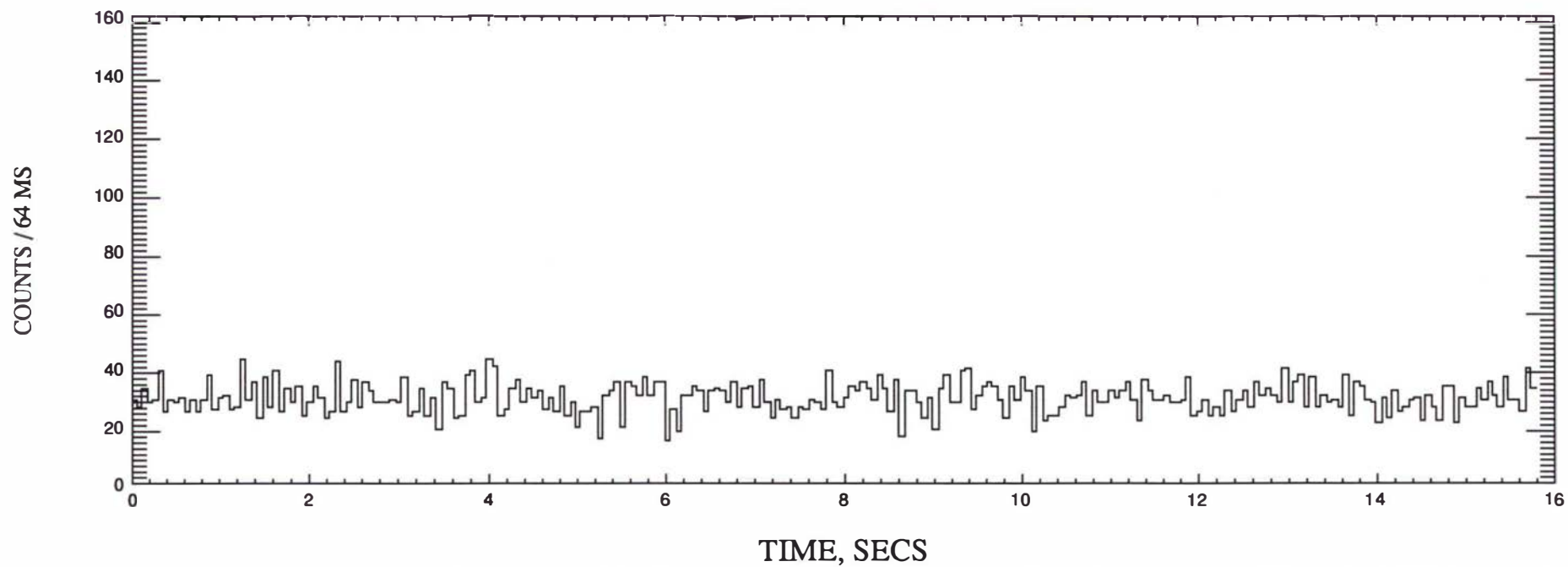


CALIBRATION DATA INCLUDED

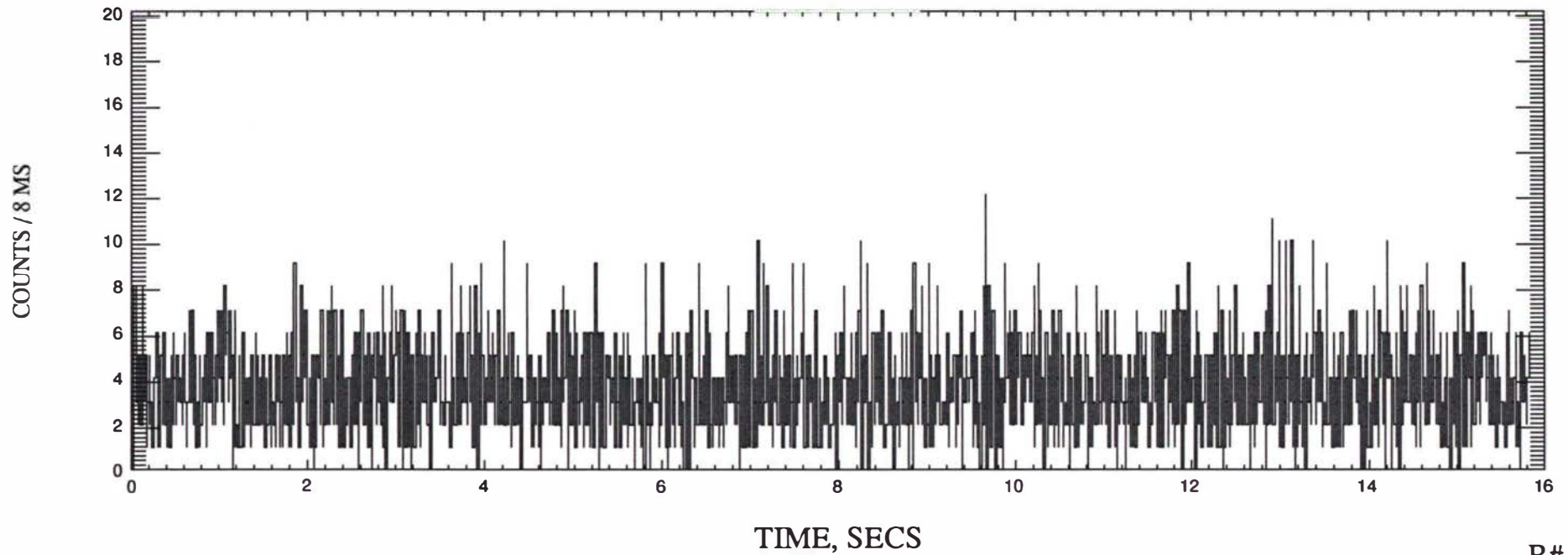
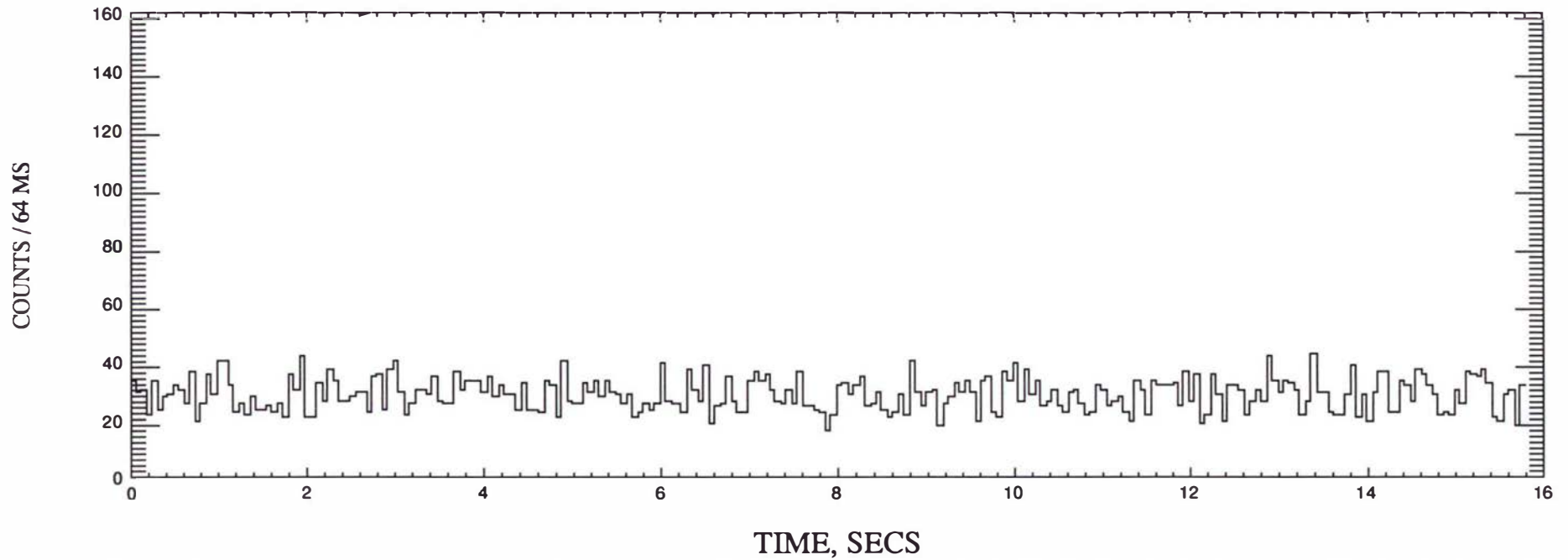


UNIV SAL TIME

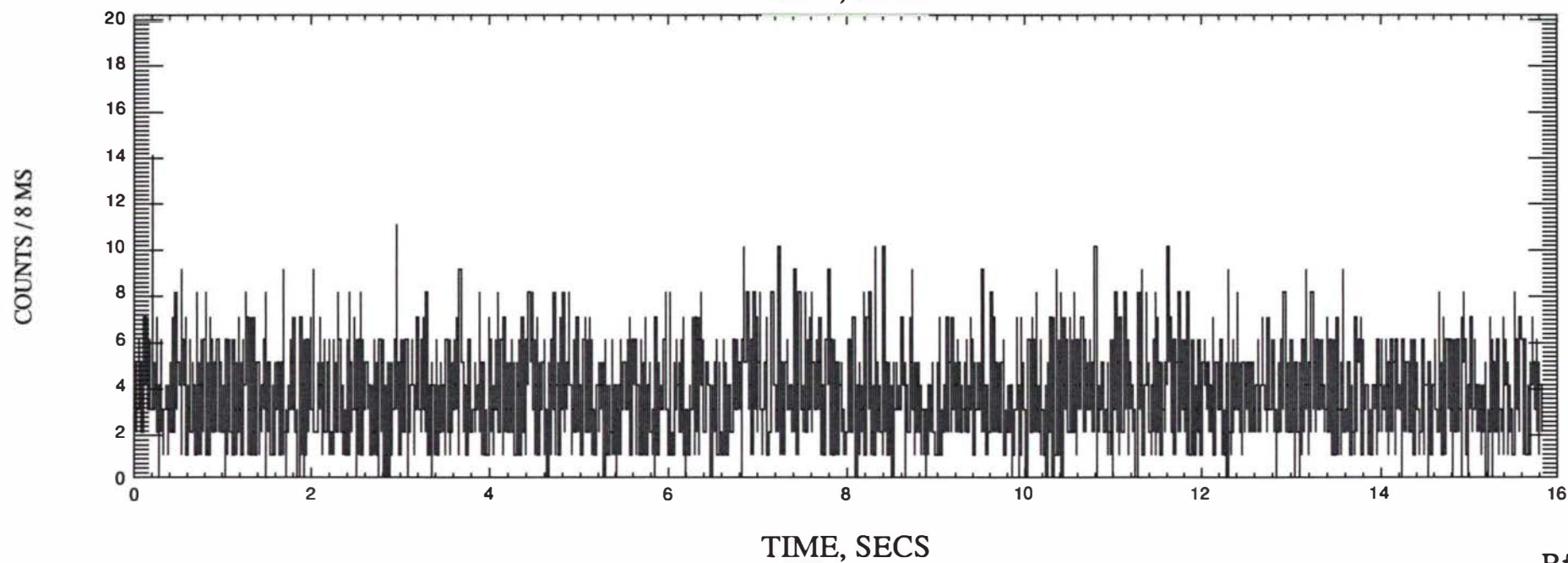
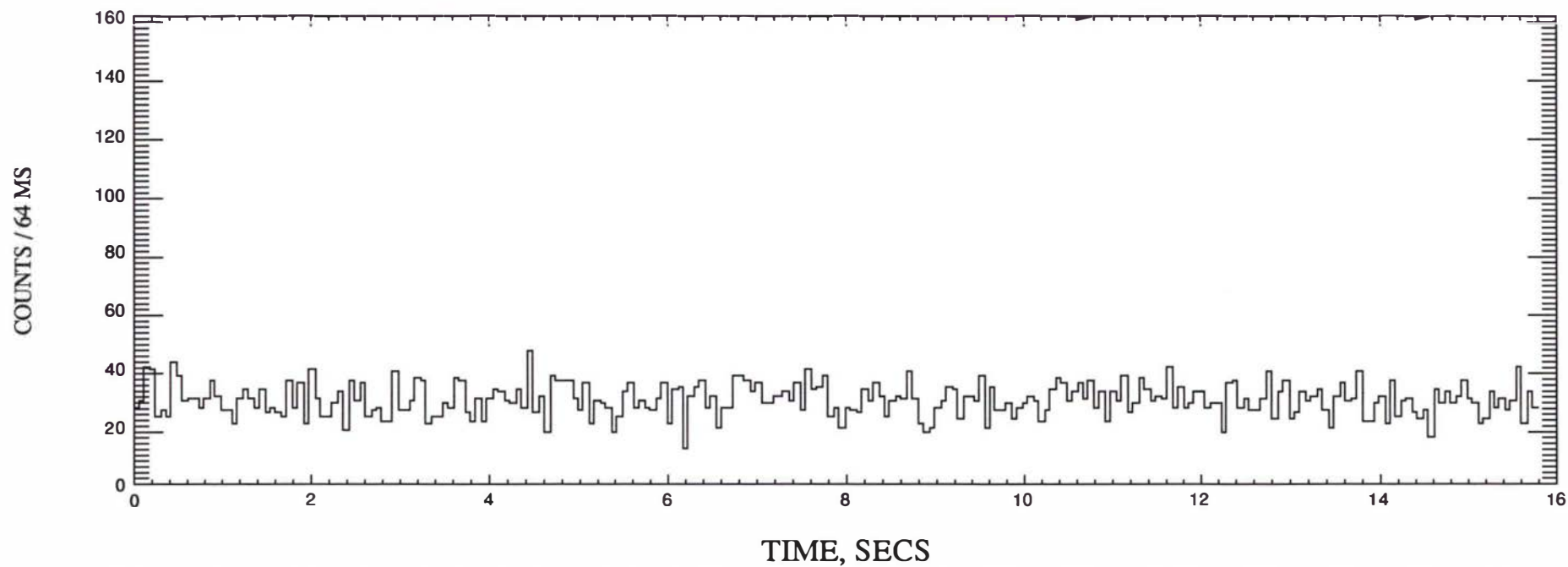
Burst Counter 10 at UT= 5.091639018589 h=18329.900 s 05:05:29.900



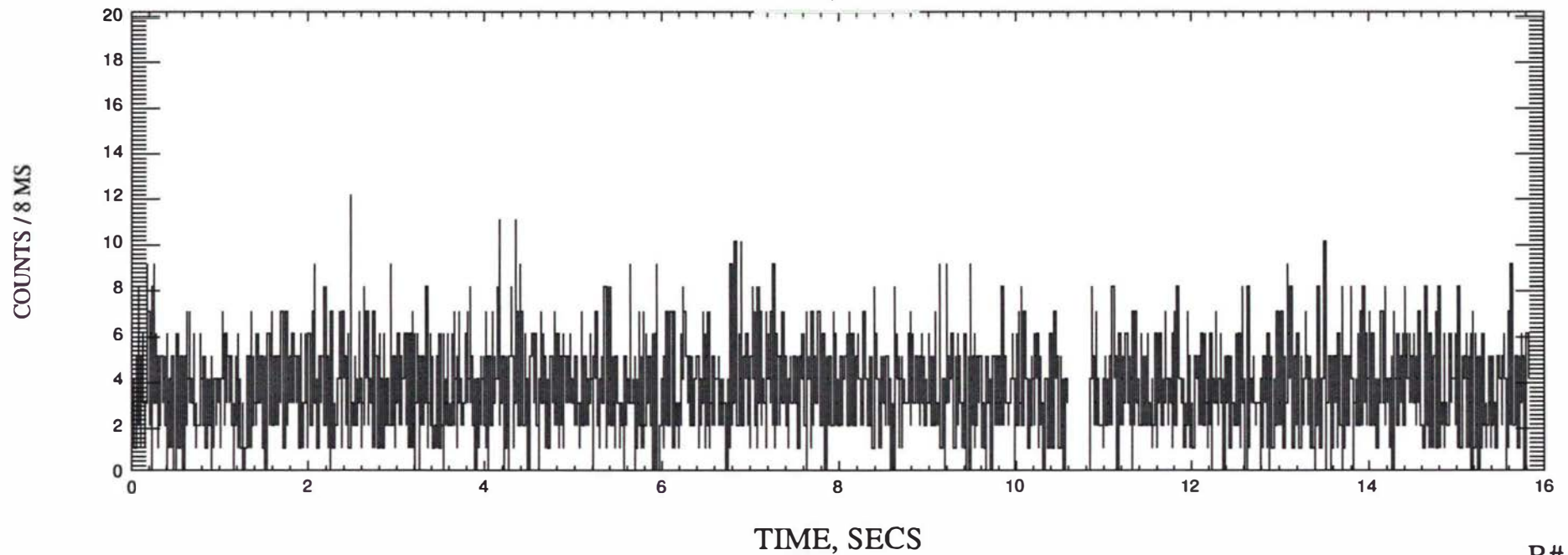
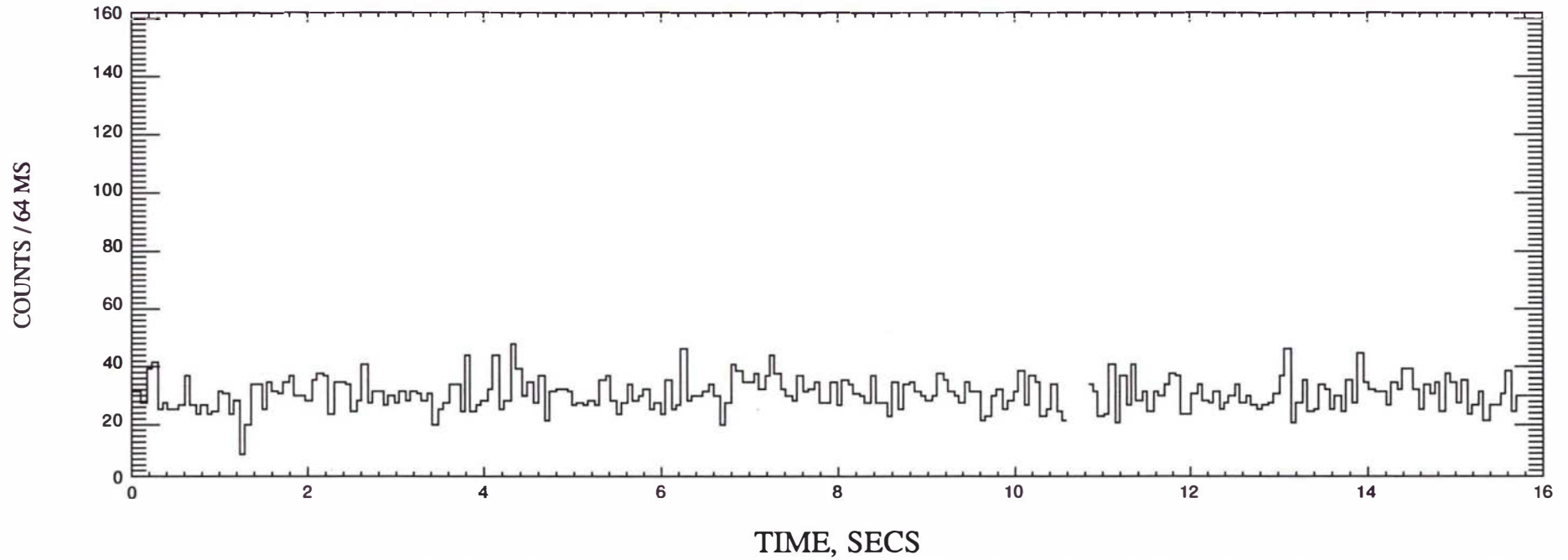
Burst Counter 11 at UT= 5.974005728828 h=21506.421 s 05:58:26.421



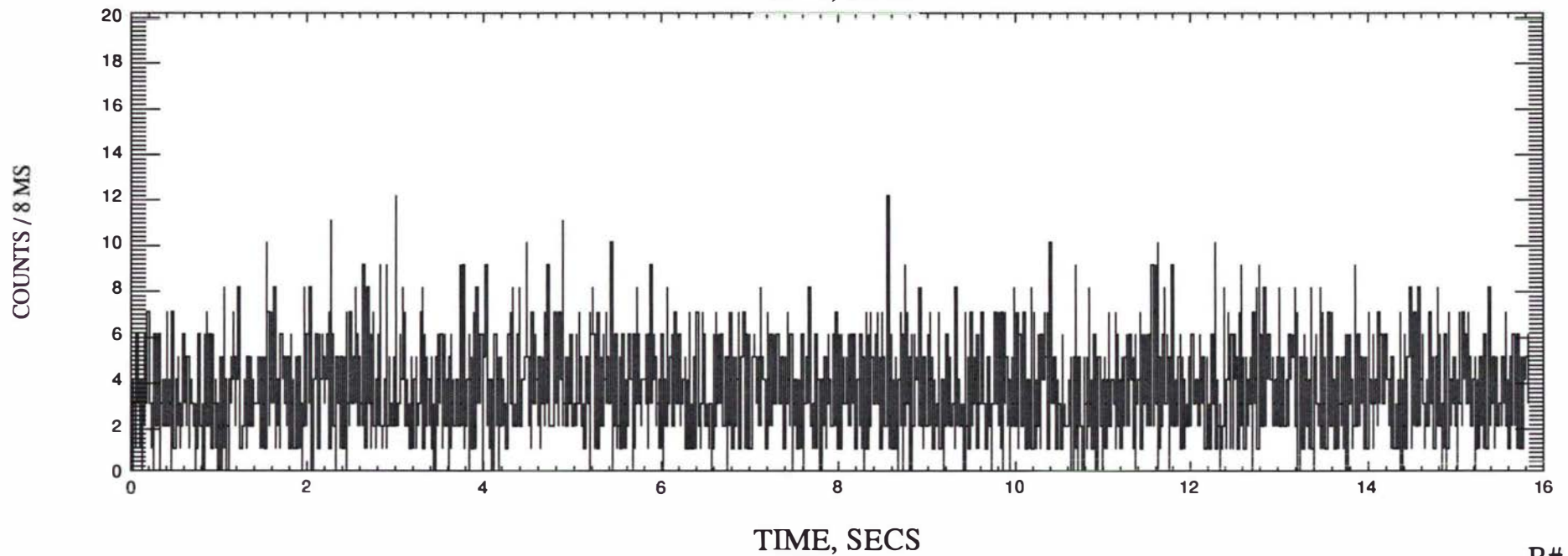
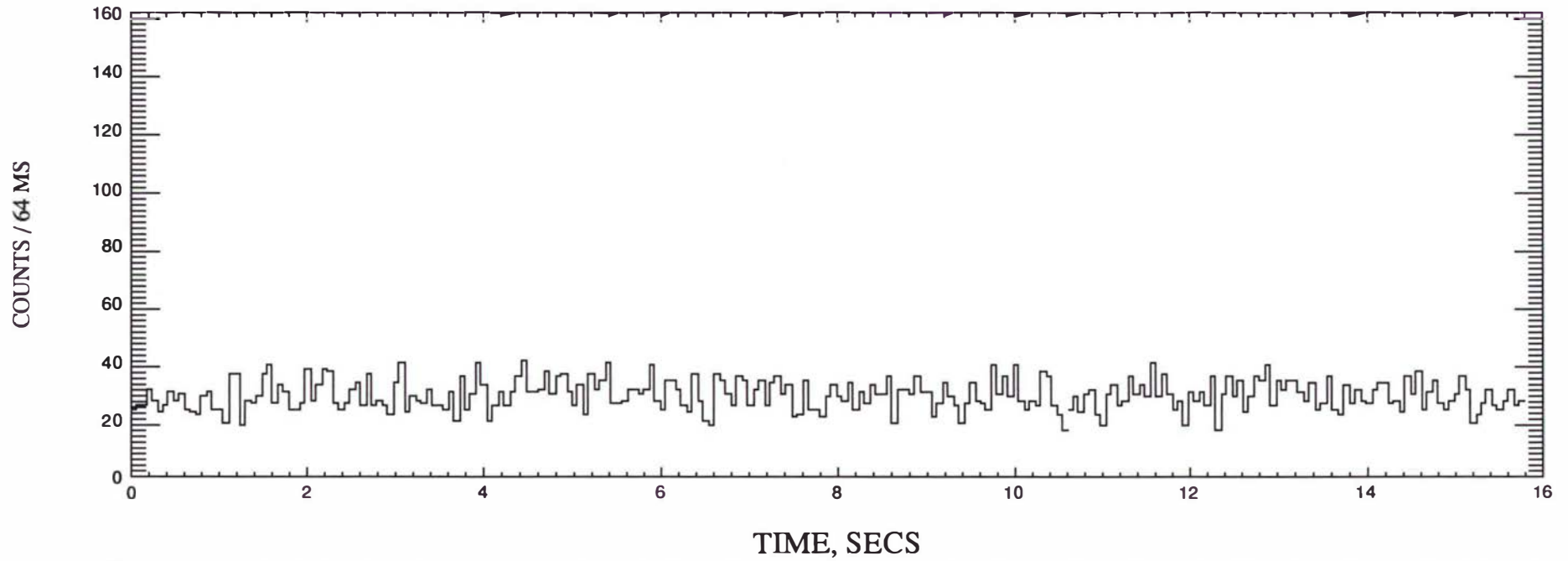
Burst Counter 12 at UT= 6.807320794000 h=24506.355 s 06:48:26.355



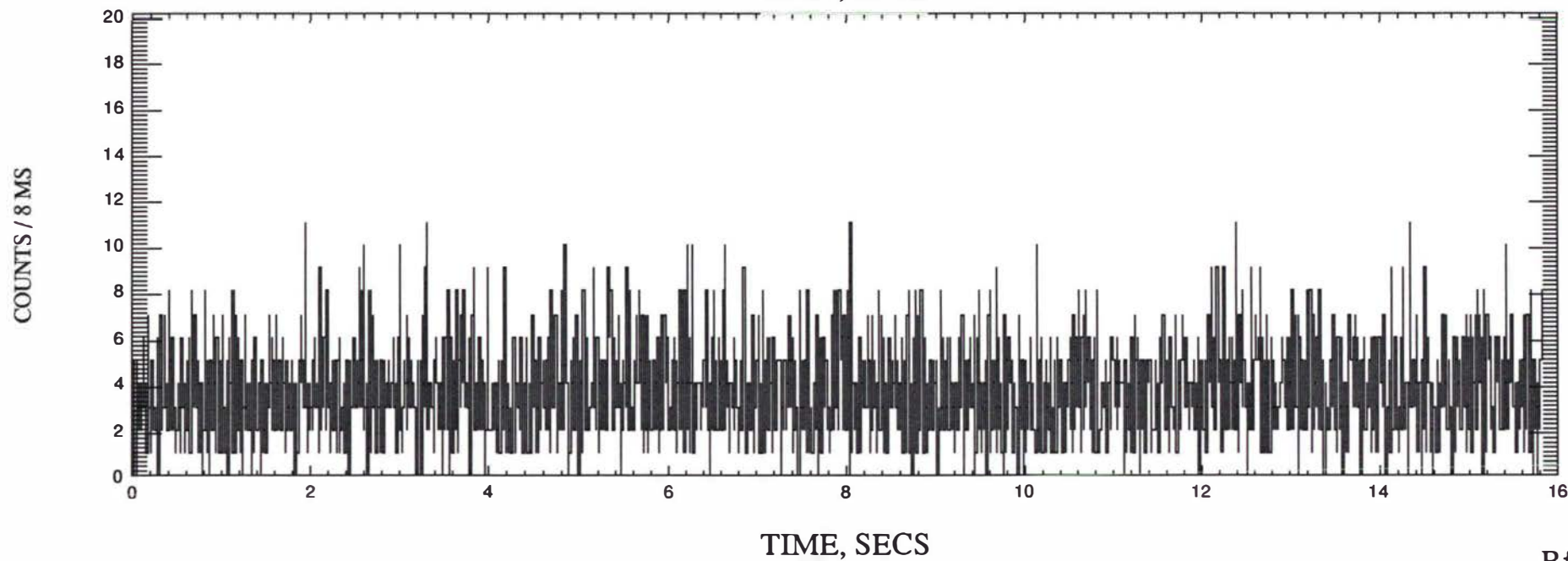
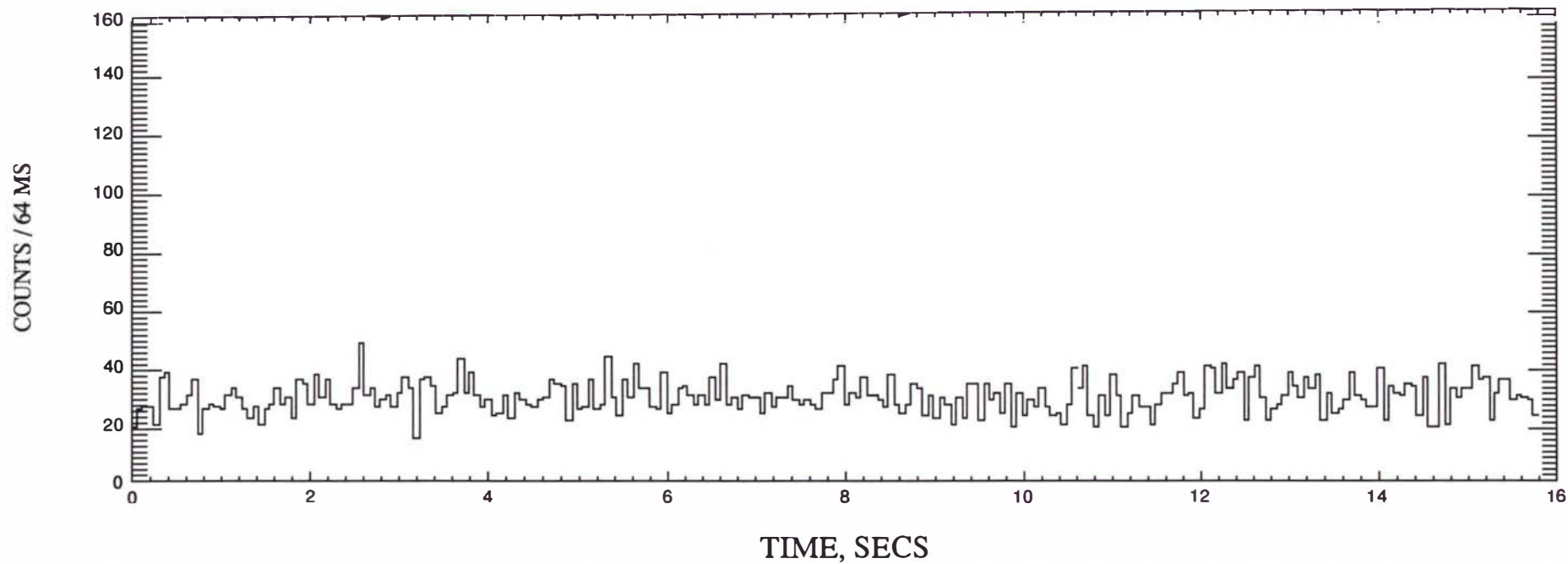
Burst Counter 13 at UT= 7.640635859172 h=27506.289 s 07:38:26.289



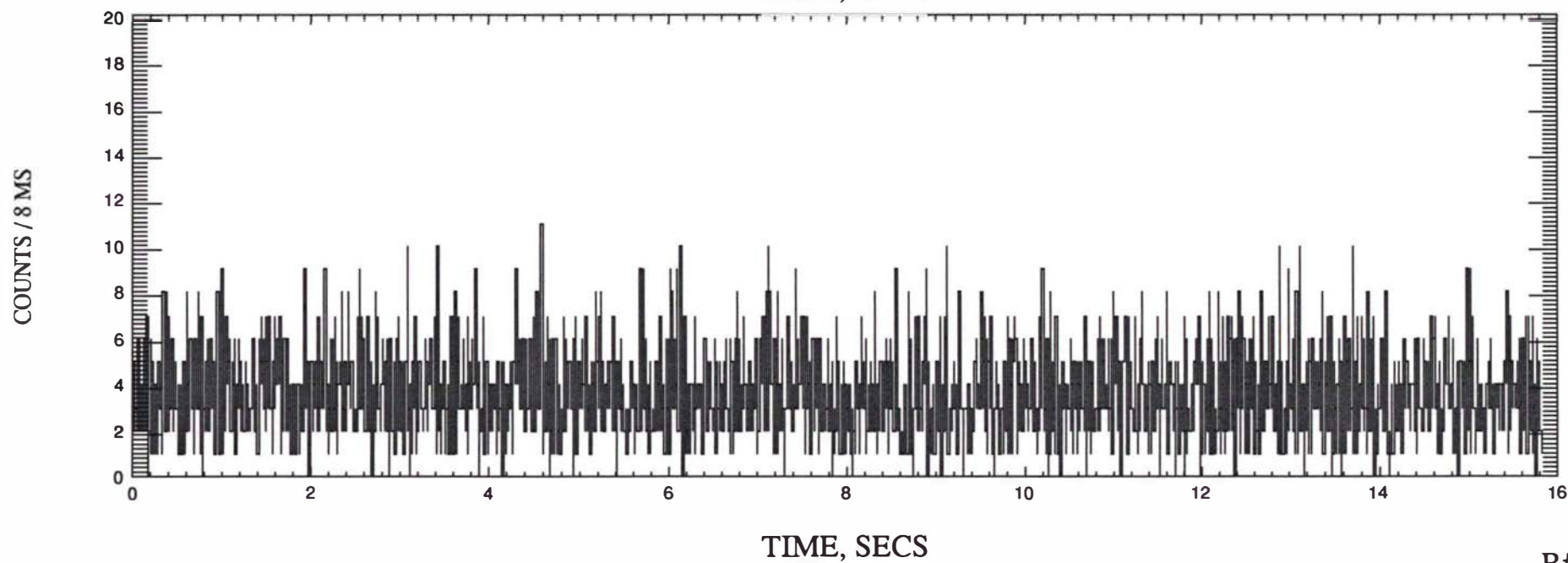
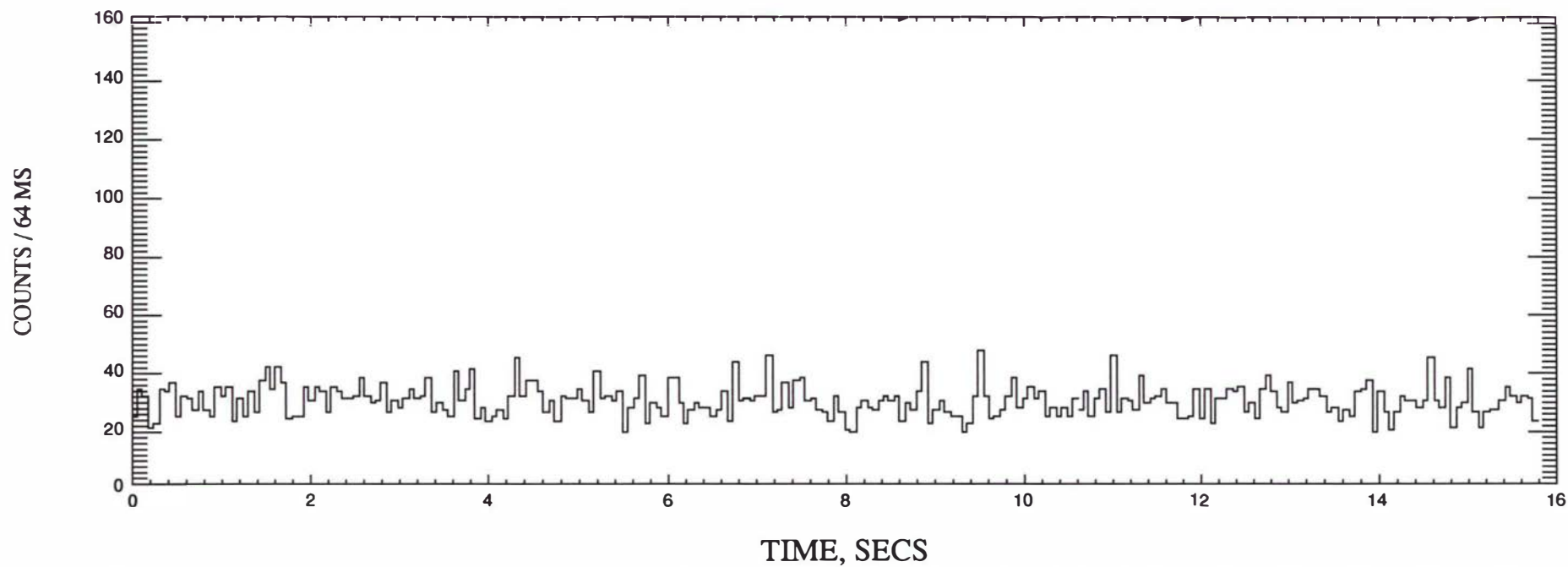
Burst Counter 14 at UT= 8.473949551053 h=30506.218 s 08:28:26.218



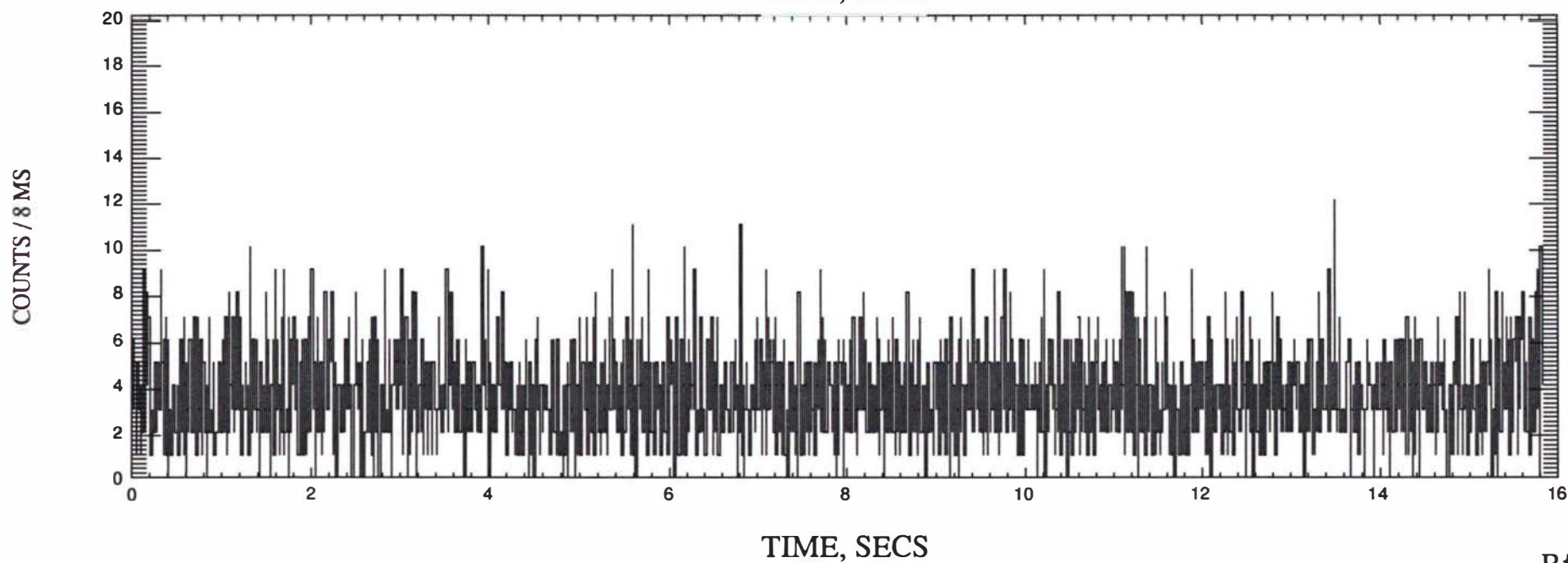
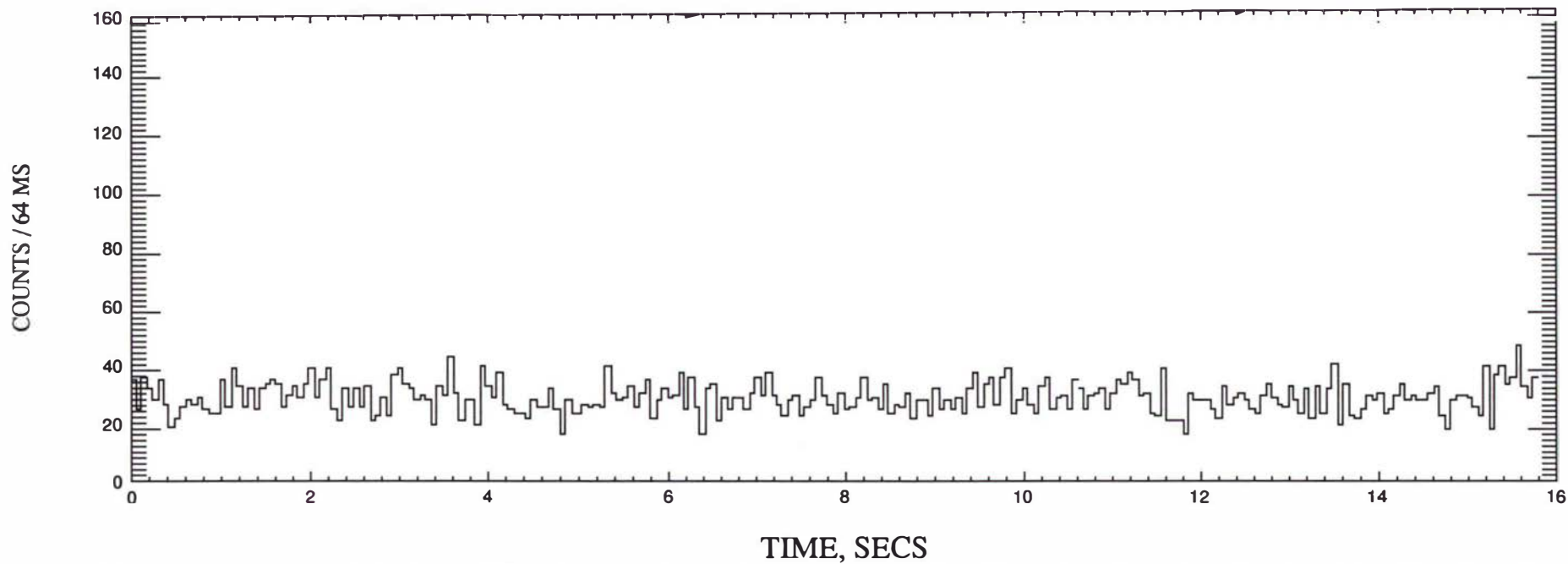
Burst Counter 15 at UT= 9.307264611986 h=33506.153 s 09:18:26.153



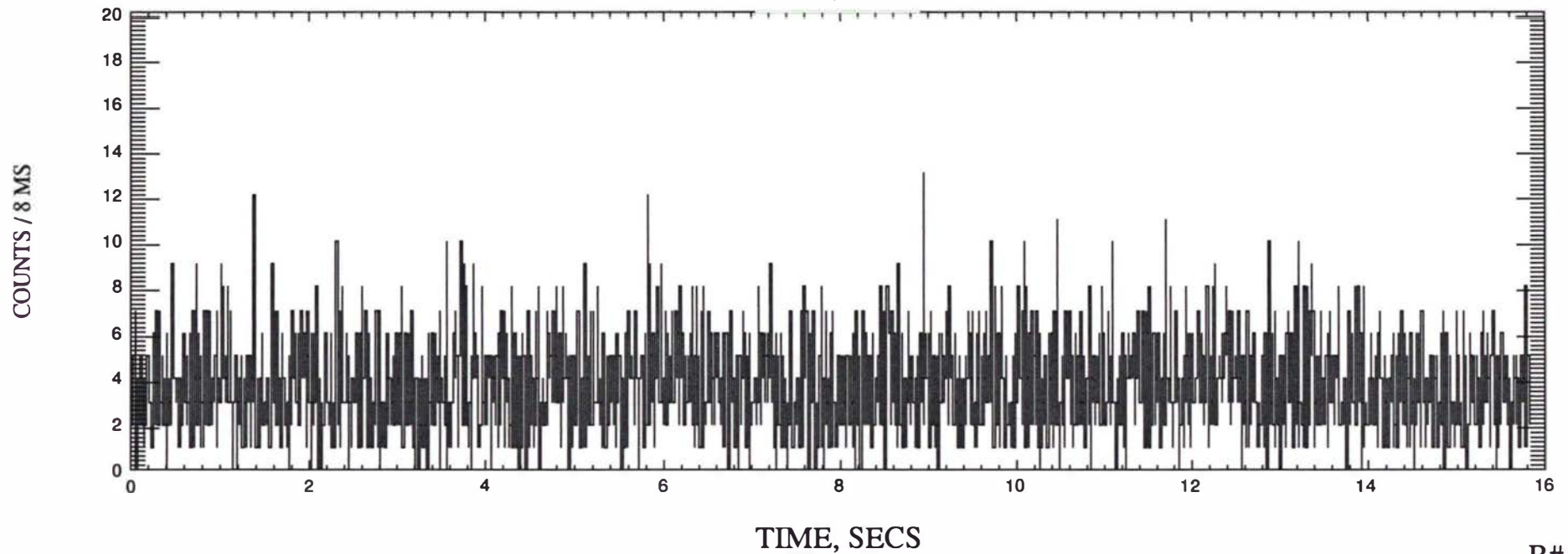
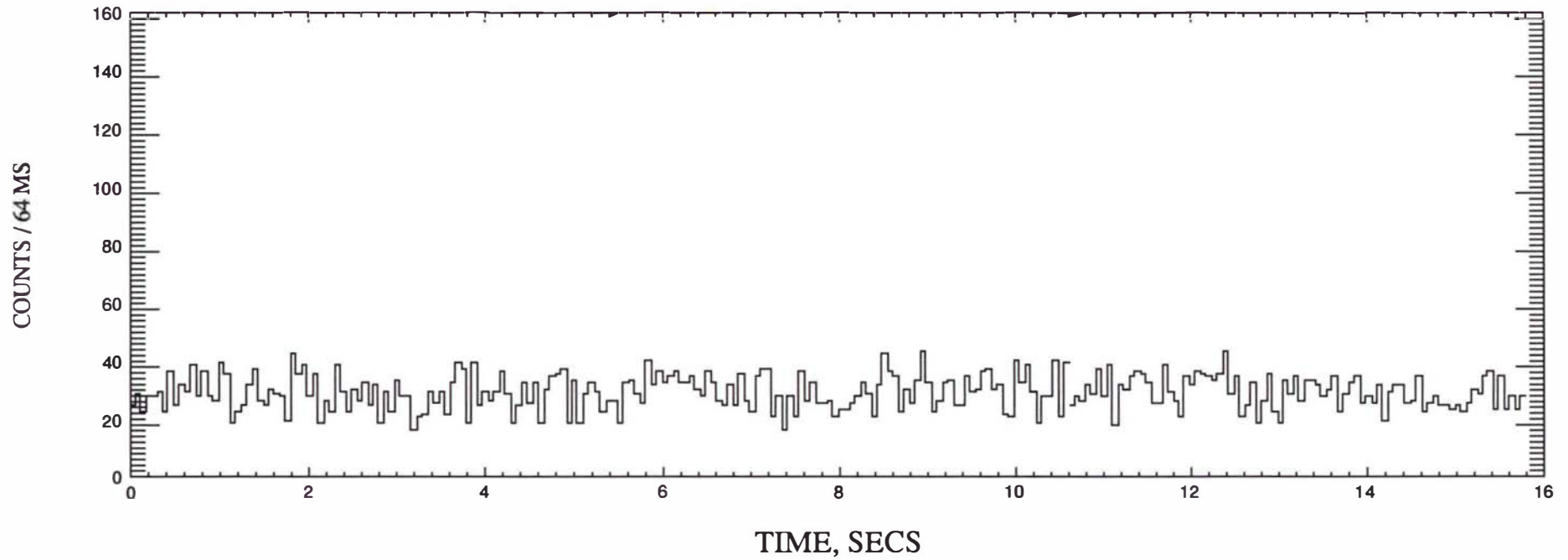
Burst Counter 0 at UT=10.140614399380 h=36506.212 s 10:08:26.212



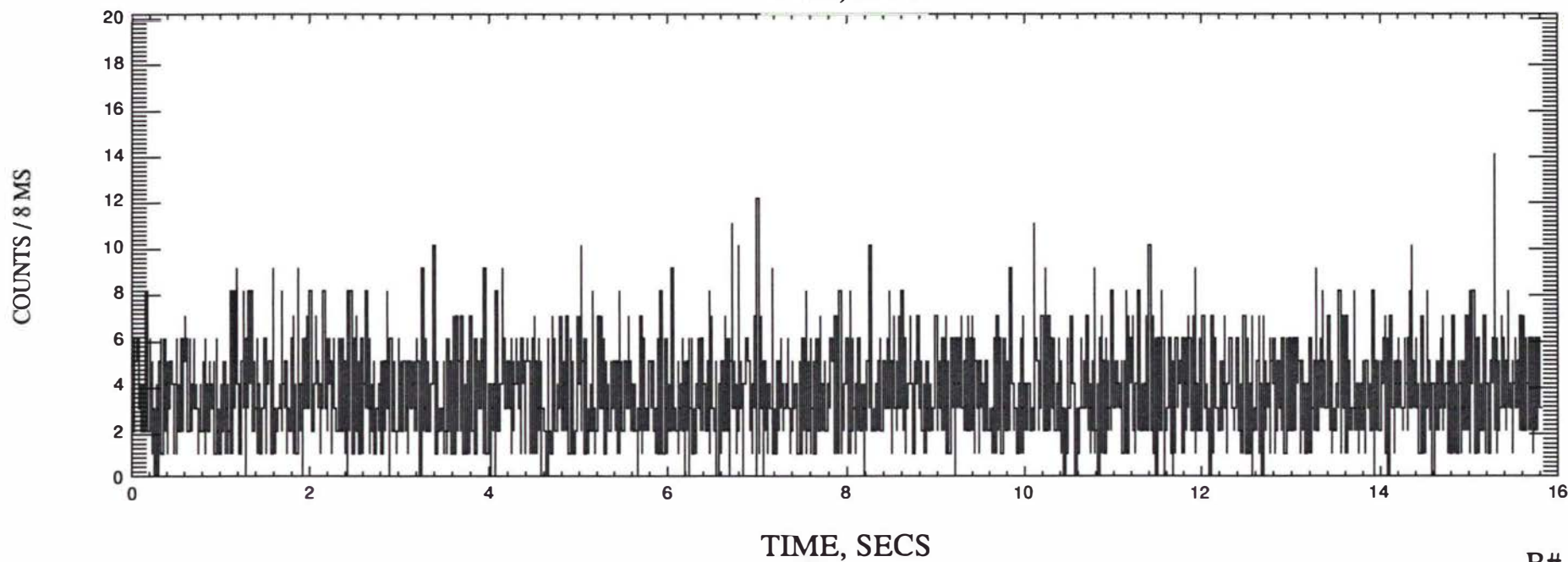
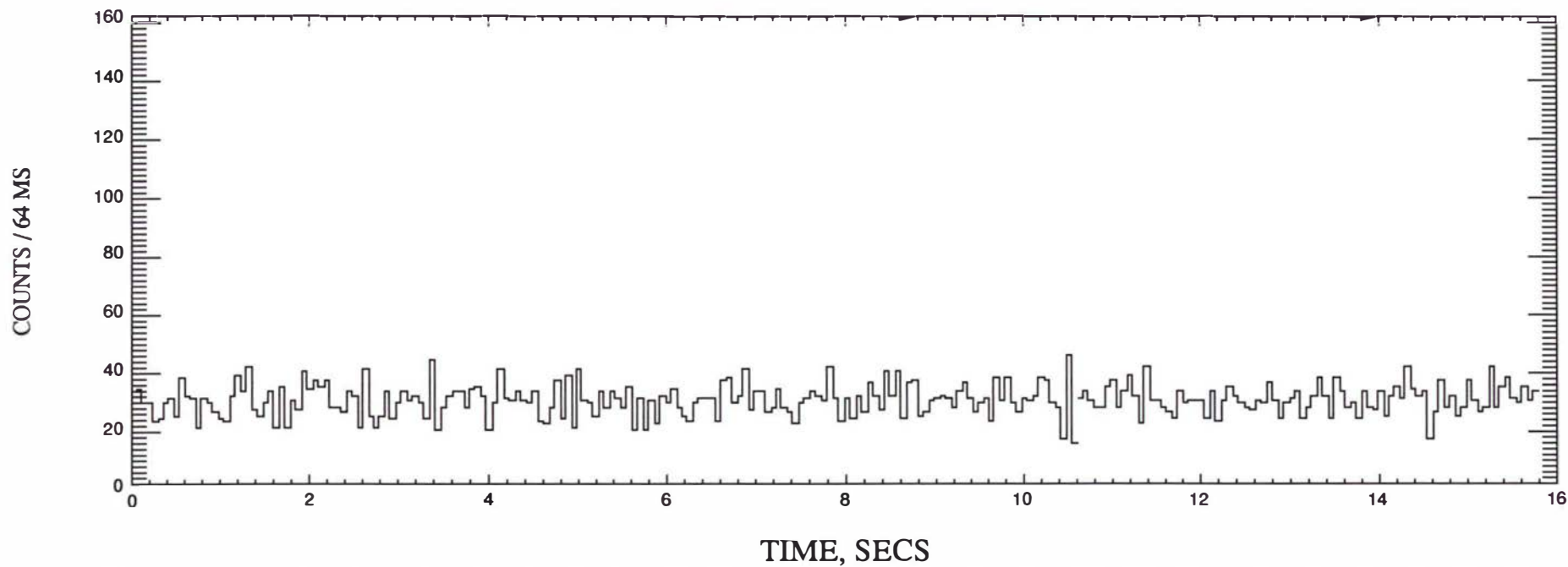
Burst Counter 1 at UT=10.973929464552 h=39506.146 s 10:58:26.146



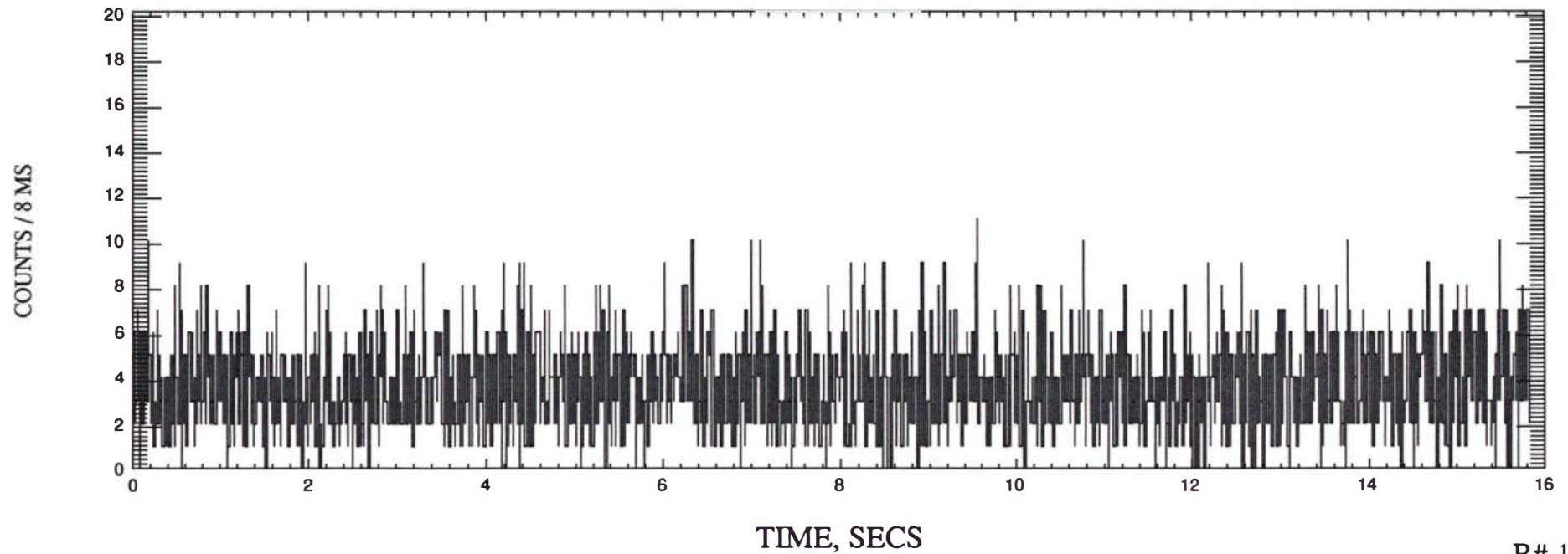
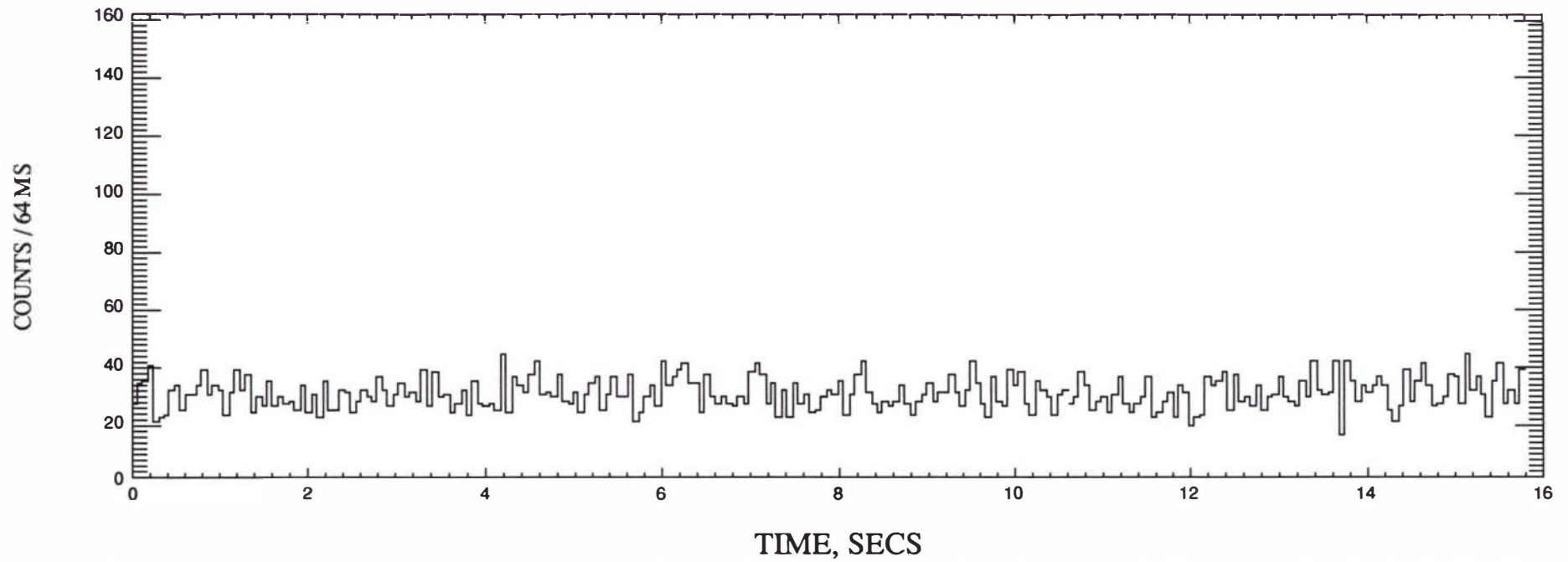
Burst Counter 2 at UT=11.807208434211 h=42505.950 s 11:48:25.950



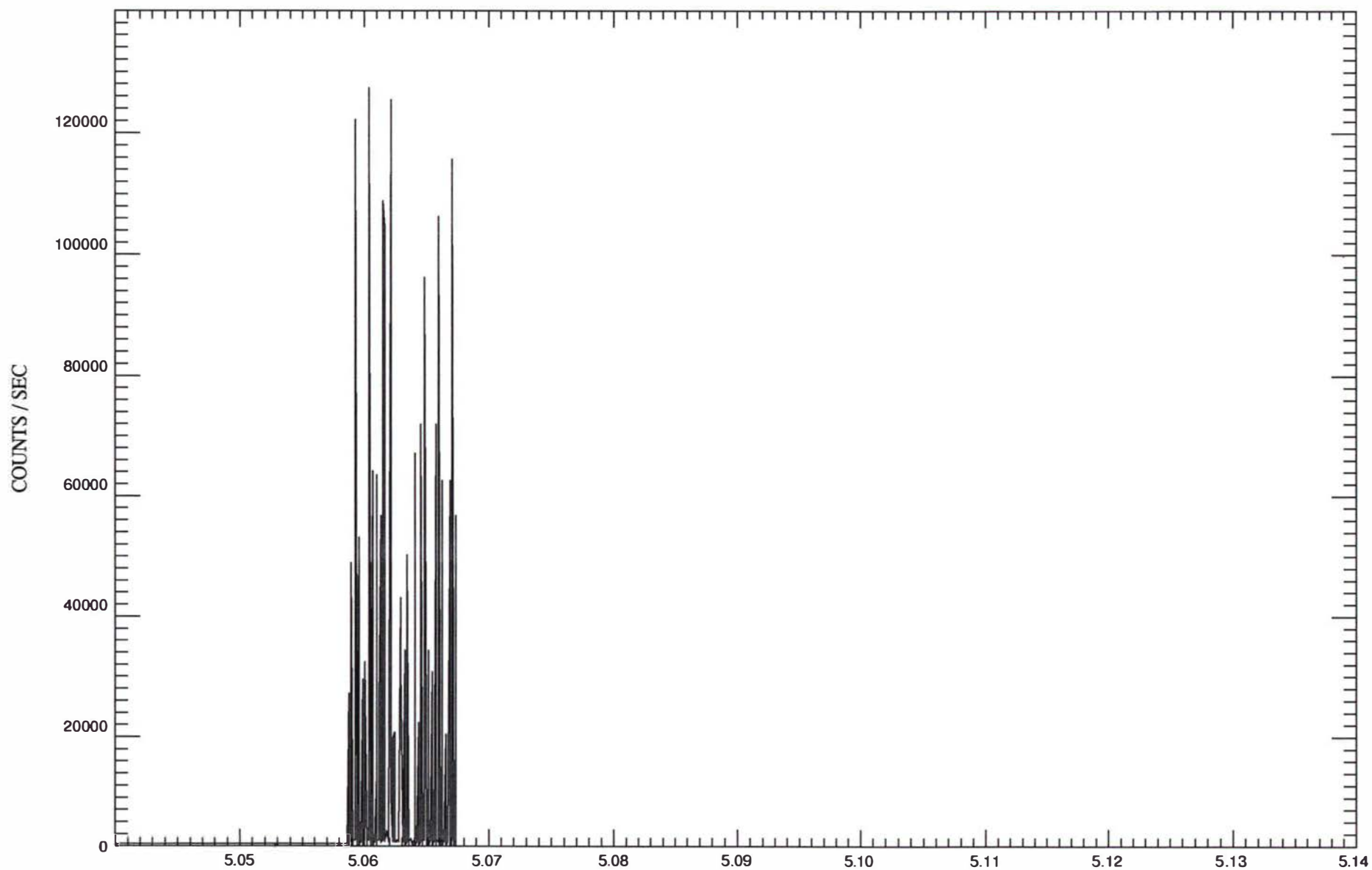
Burst Counter 3 at UT=12.640558221605 h=45506.010 s 12:38:26.010



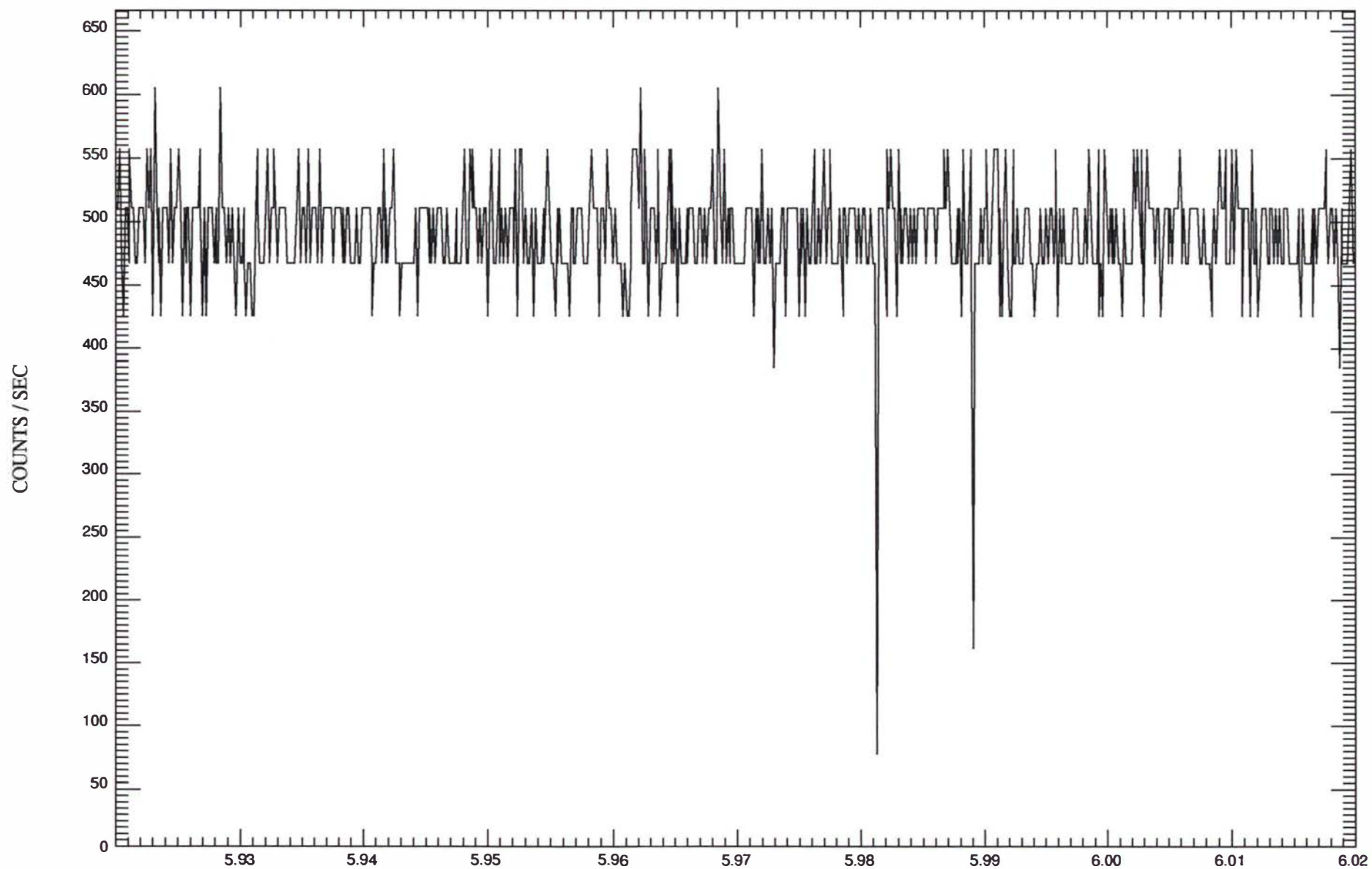
Burst Counter 4 at UT=13.473873282539 h=48505.944 s 13:28:25.944



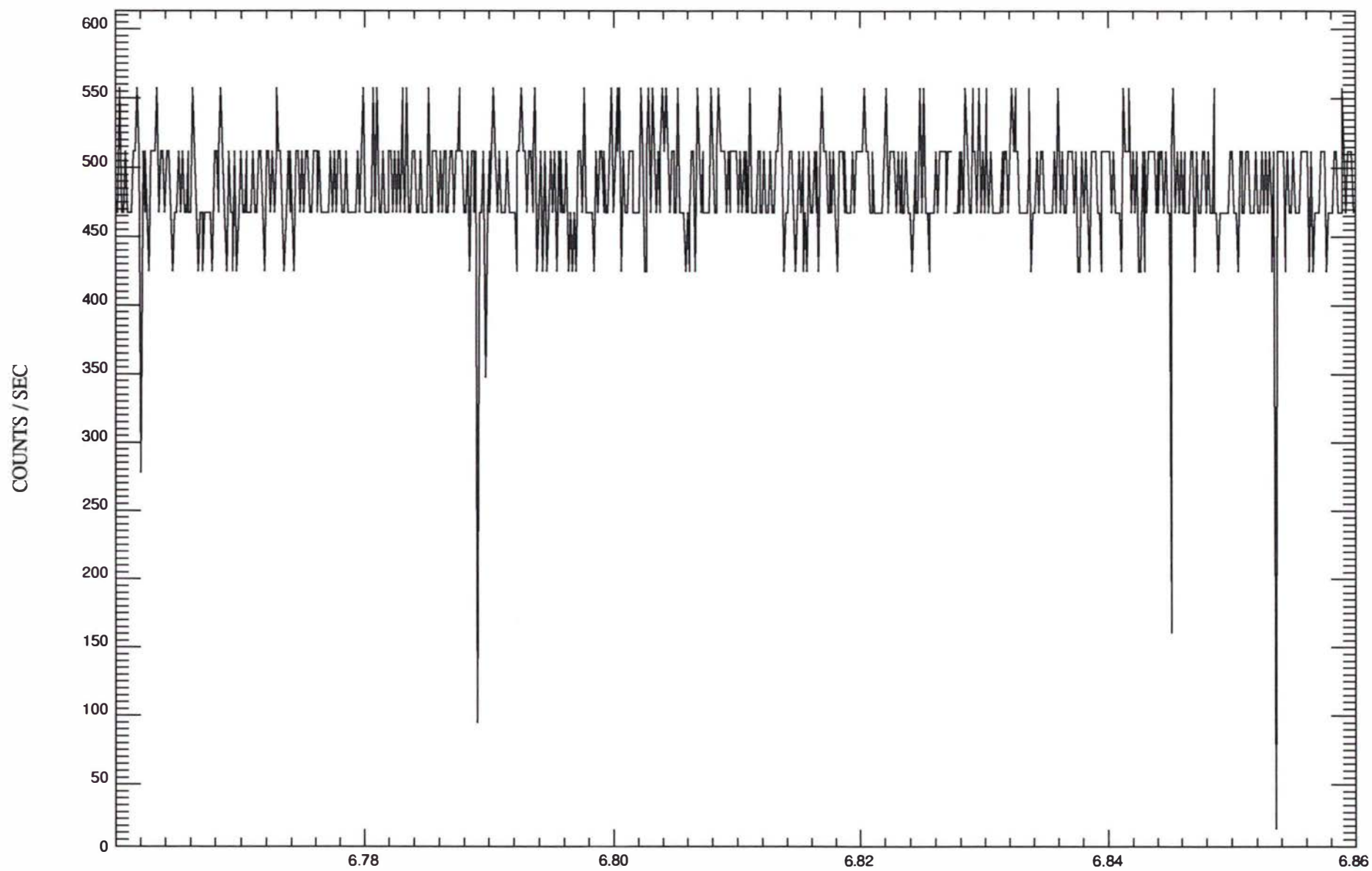
CALIBRATION DATA INCLUDED



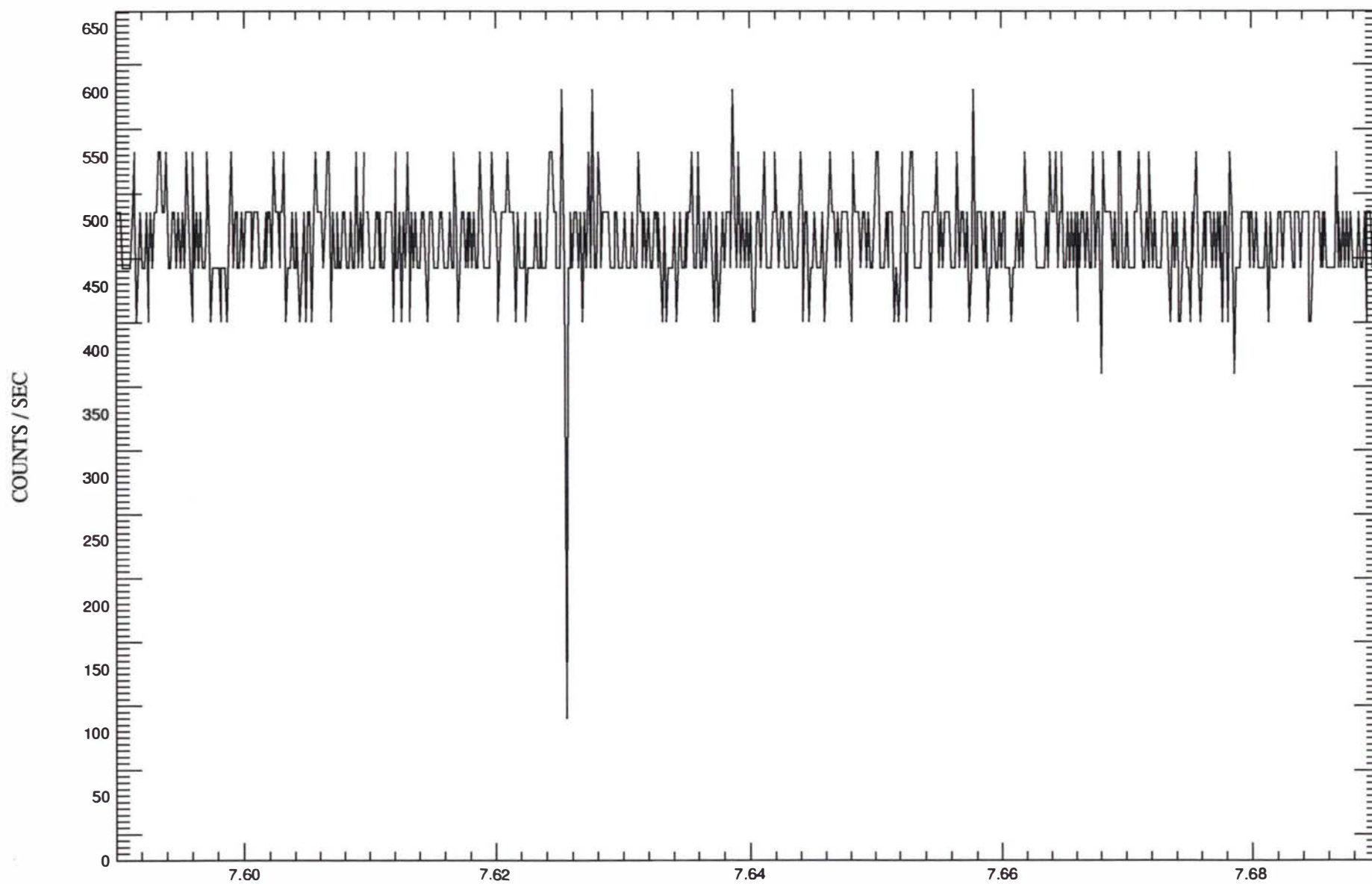
CALIBRATION DATA INCLUDED



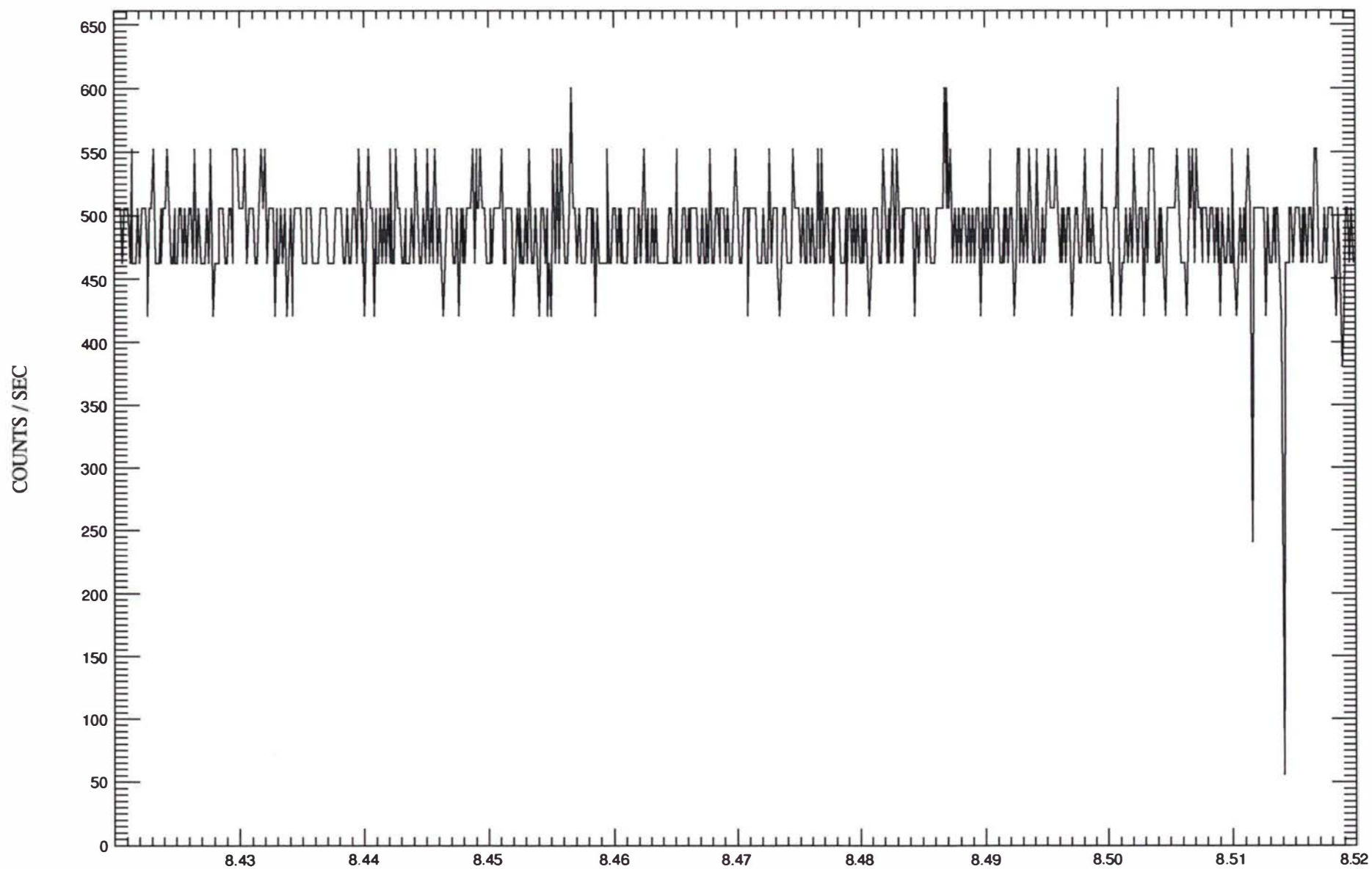
CALIBRATION DATA INCLUDED



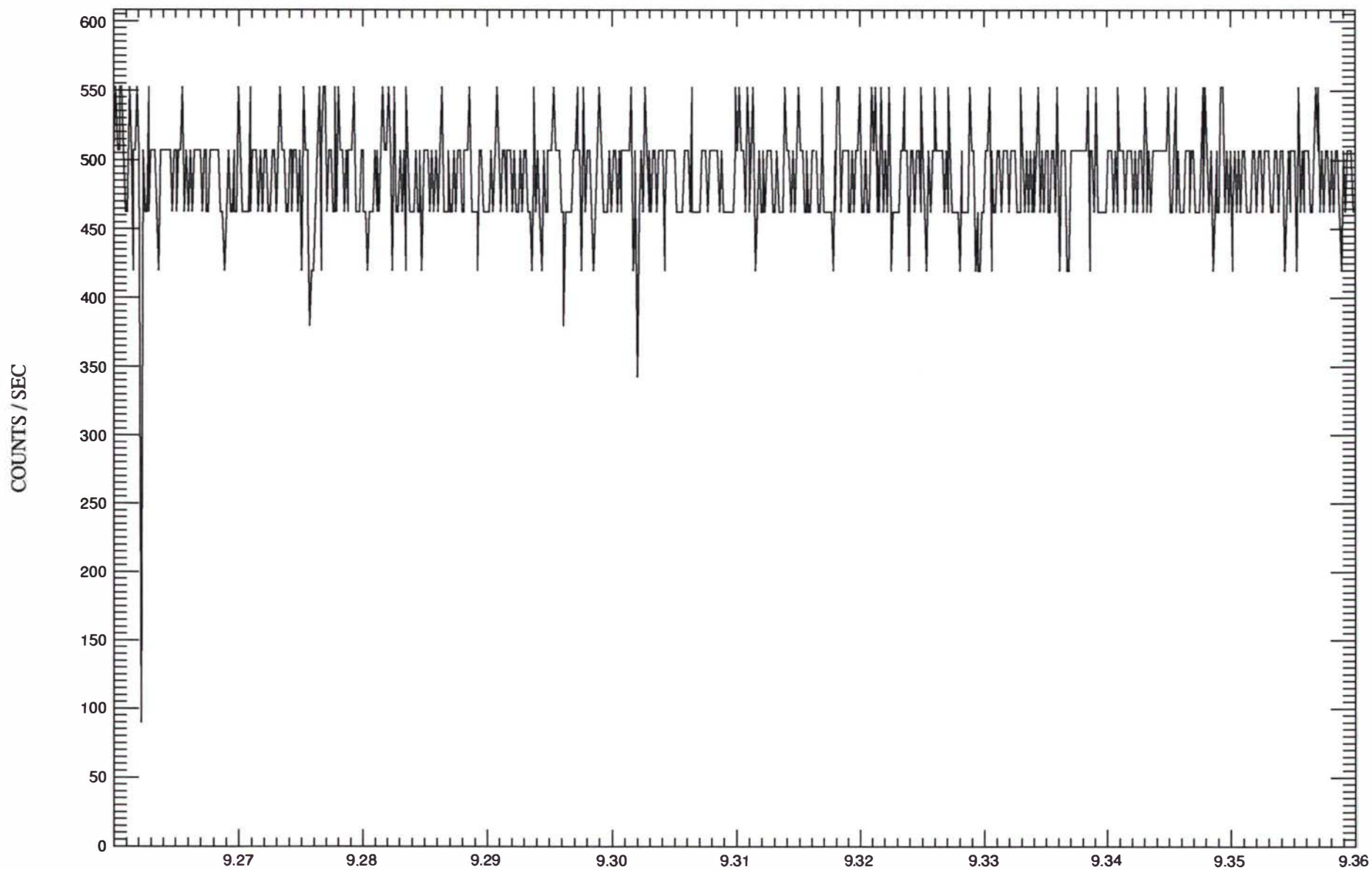
CALIBRATION DATA INCLUDED



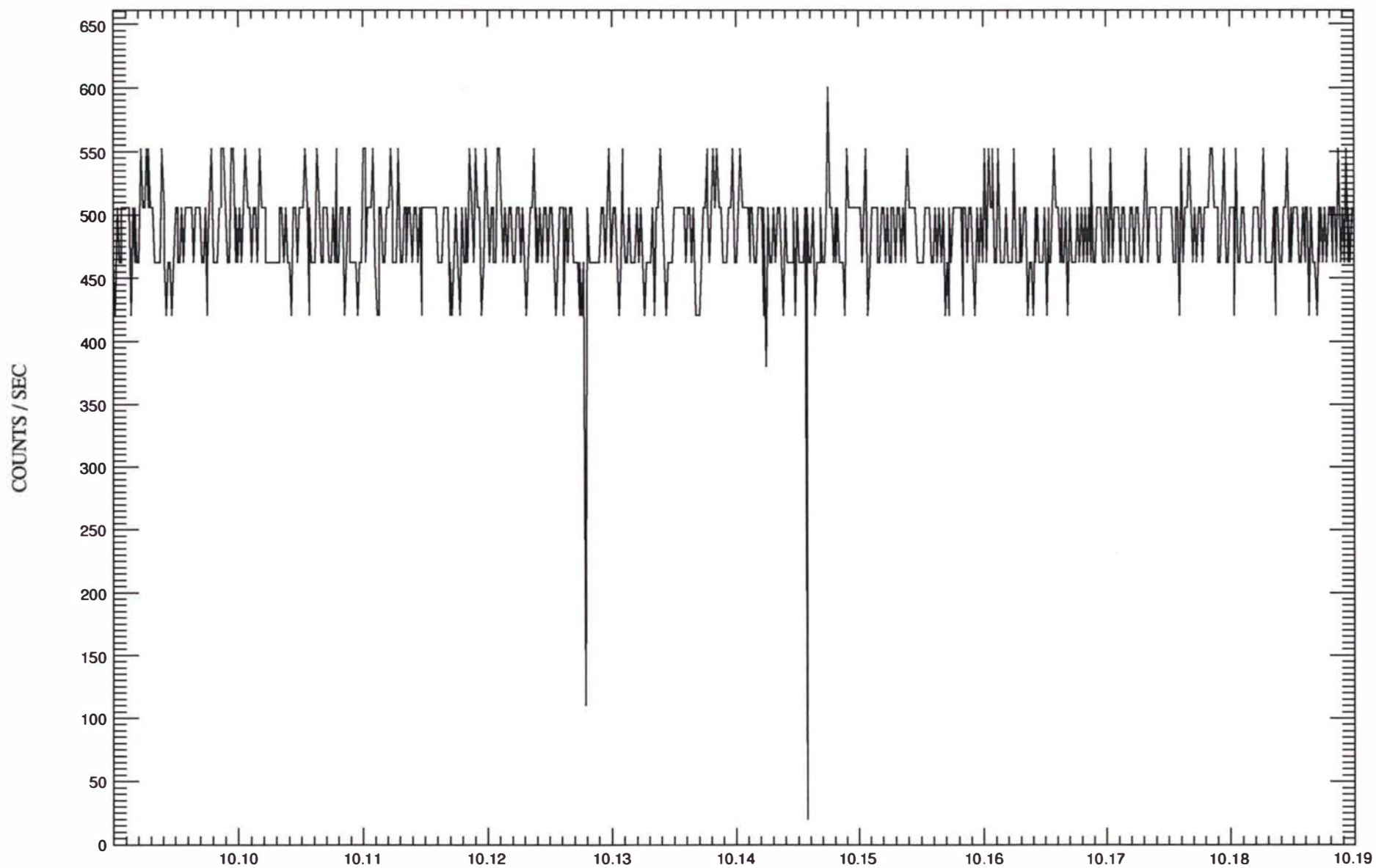
CALIBRATION DATA INCLUDED



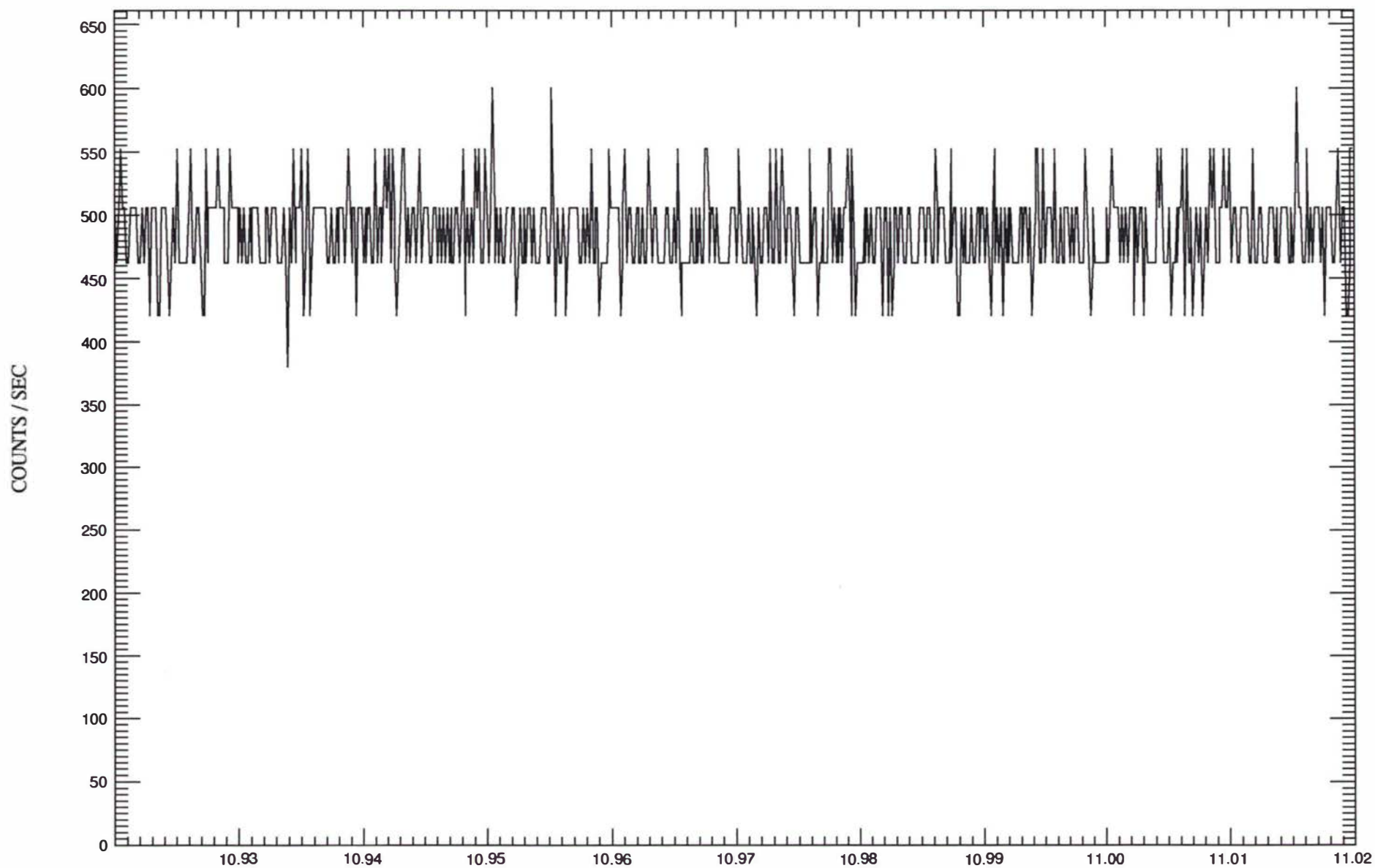
CALIBRATION DATA INCLUDED



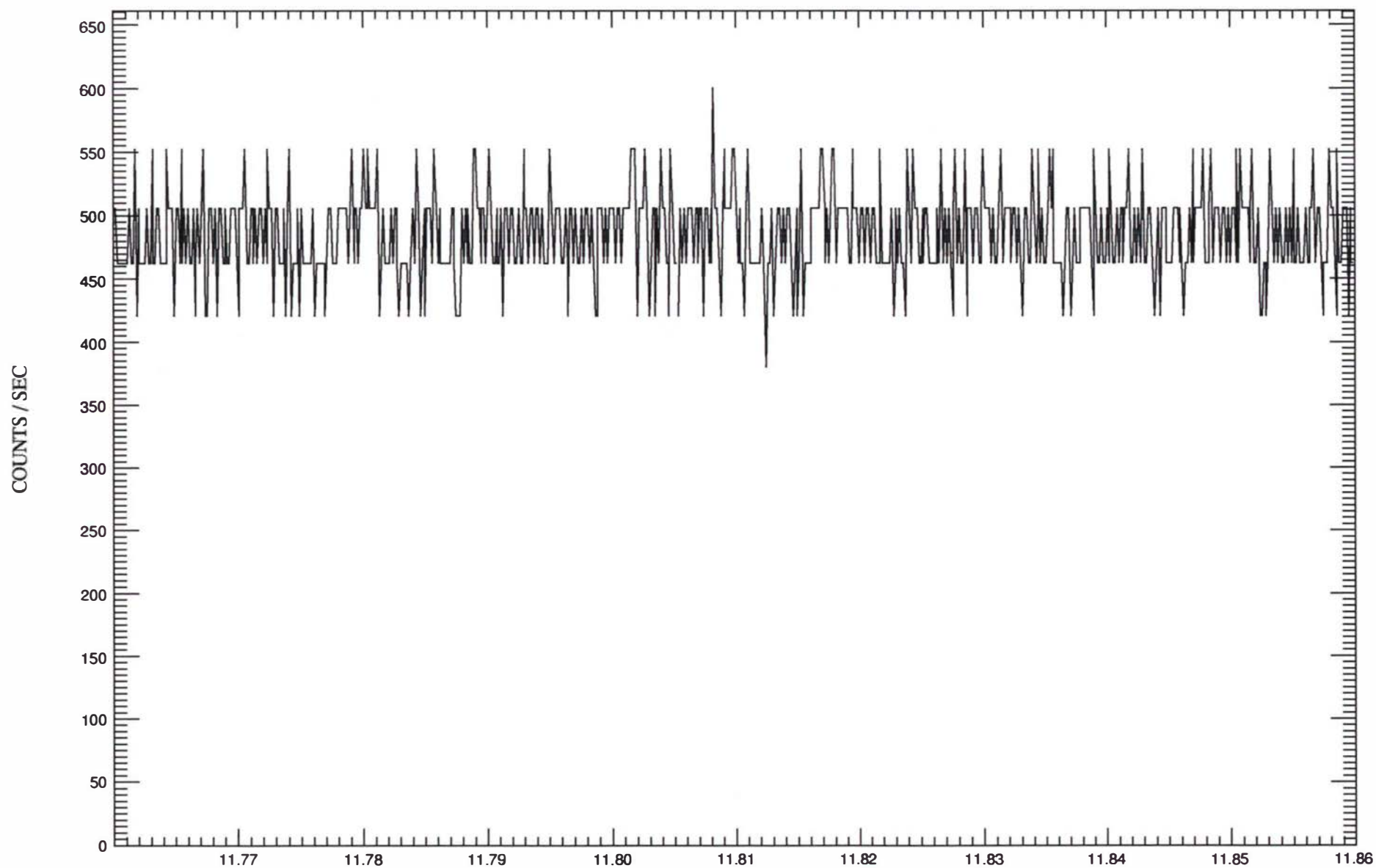
CALIBRATION DATA INCLUDED



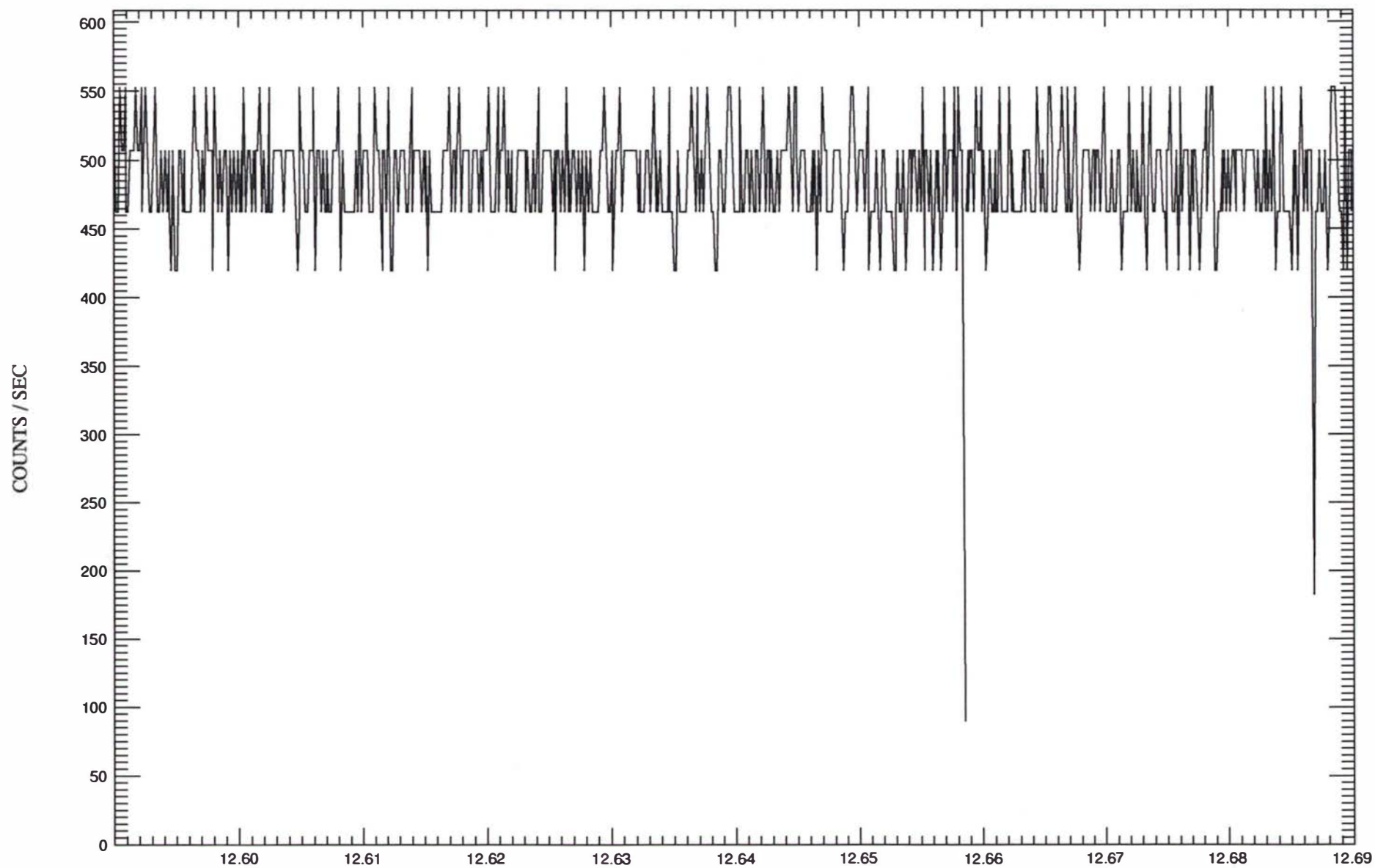
CALIBRATION DATA INCLUDED



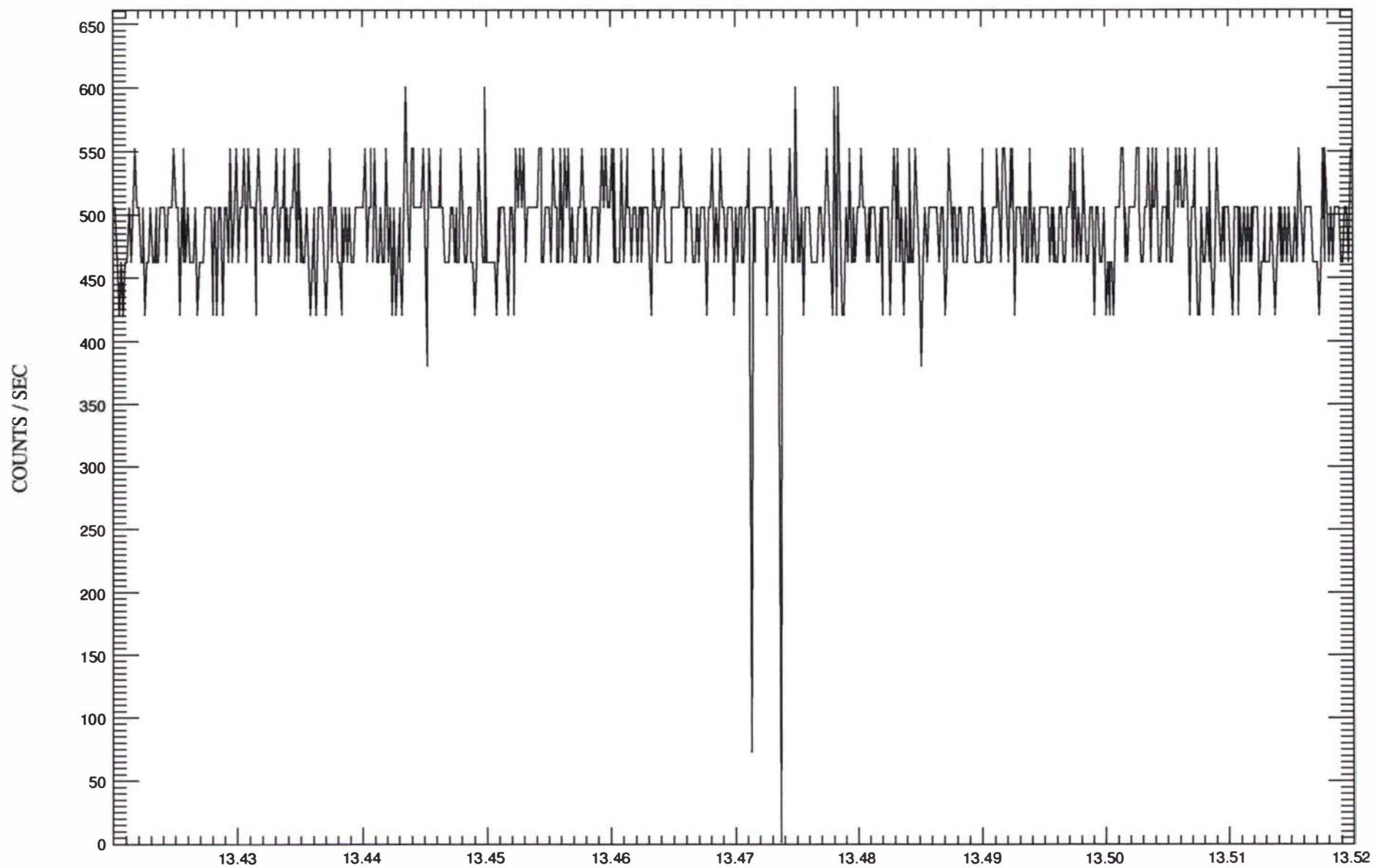
CALIBRATION DATA INCLUDED

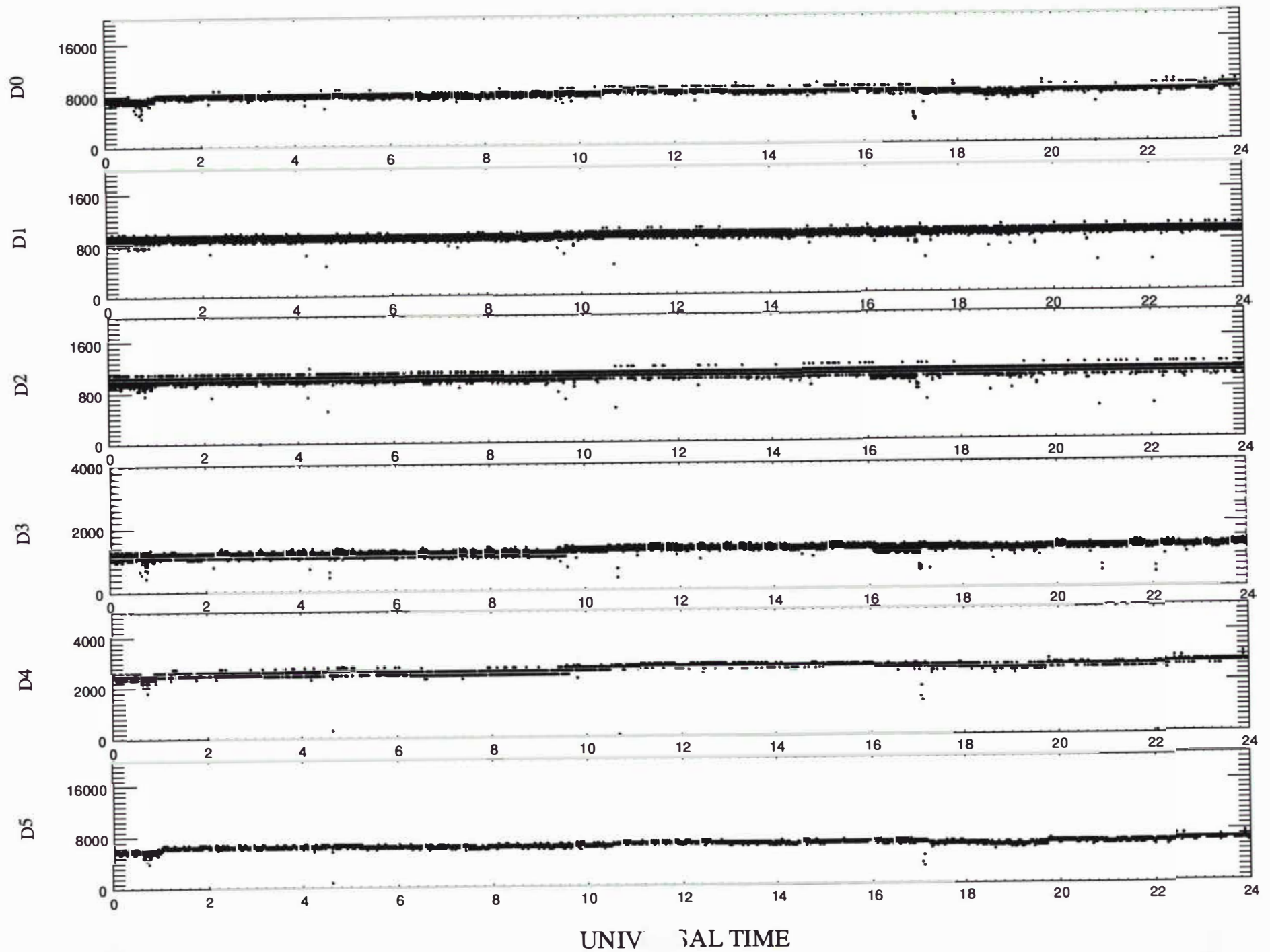


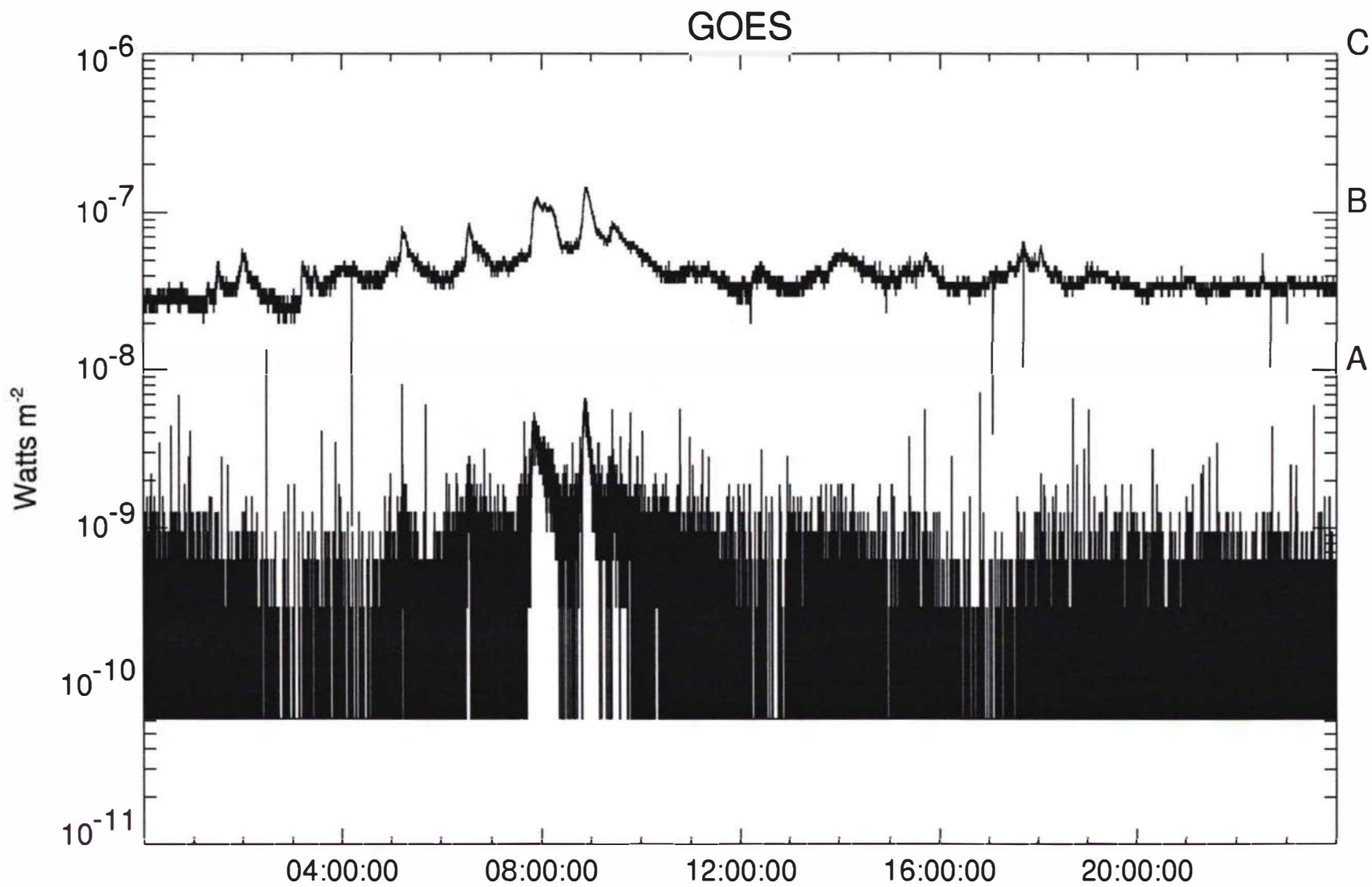
CALIBRATION DATA INCLUDED



CALIBRATION DATA INCLUDED







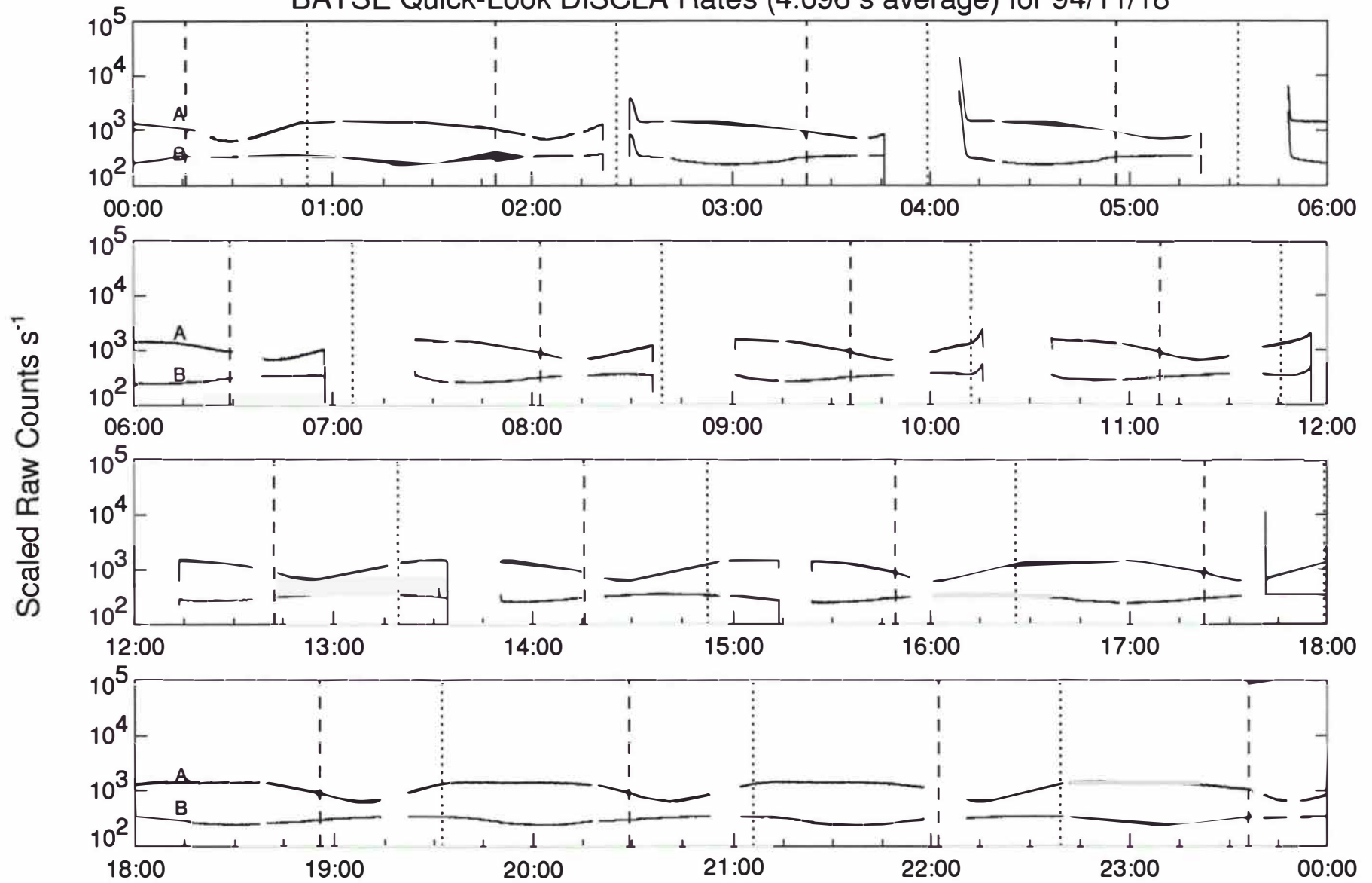
Data Start: 94/11/18, 0000:01

Plot created: 94/12/01, 2041

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 94/11/18

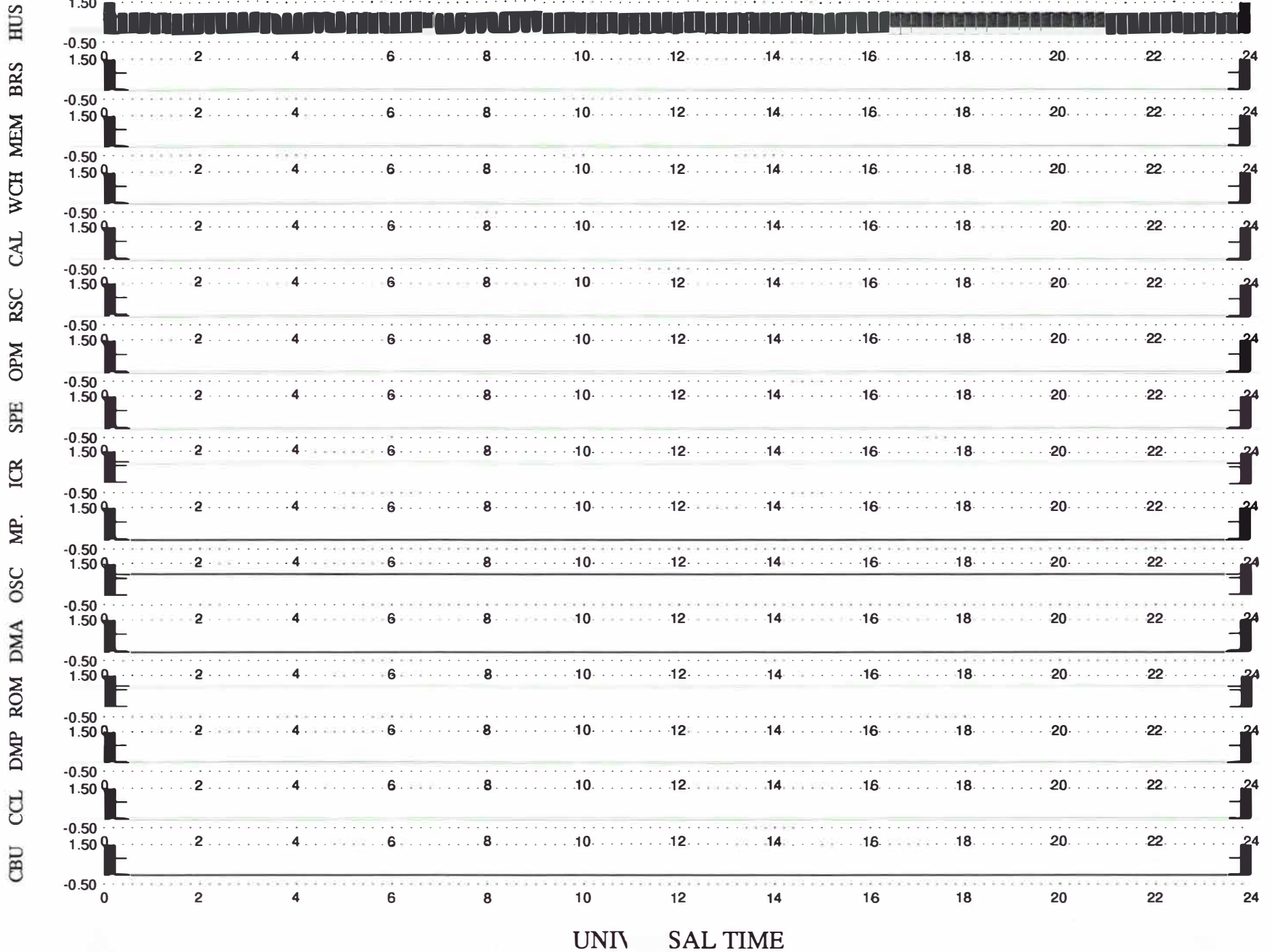


Current Time: 94/12/01, 2036 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

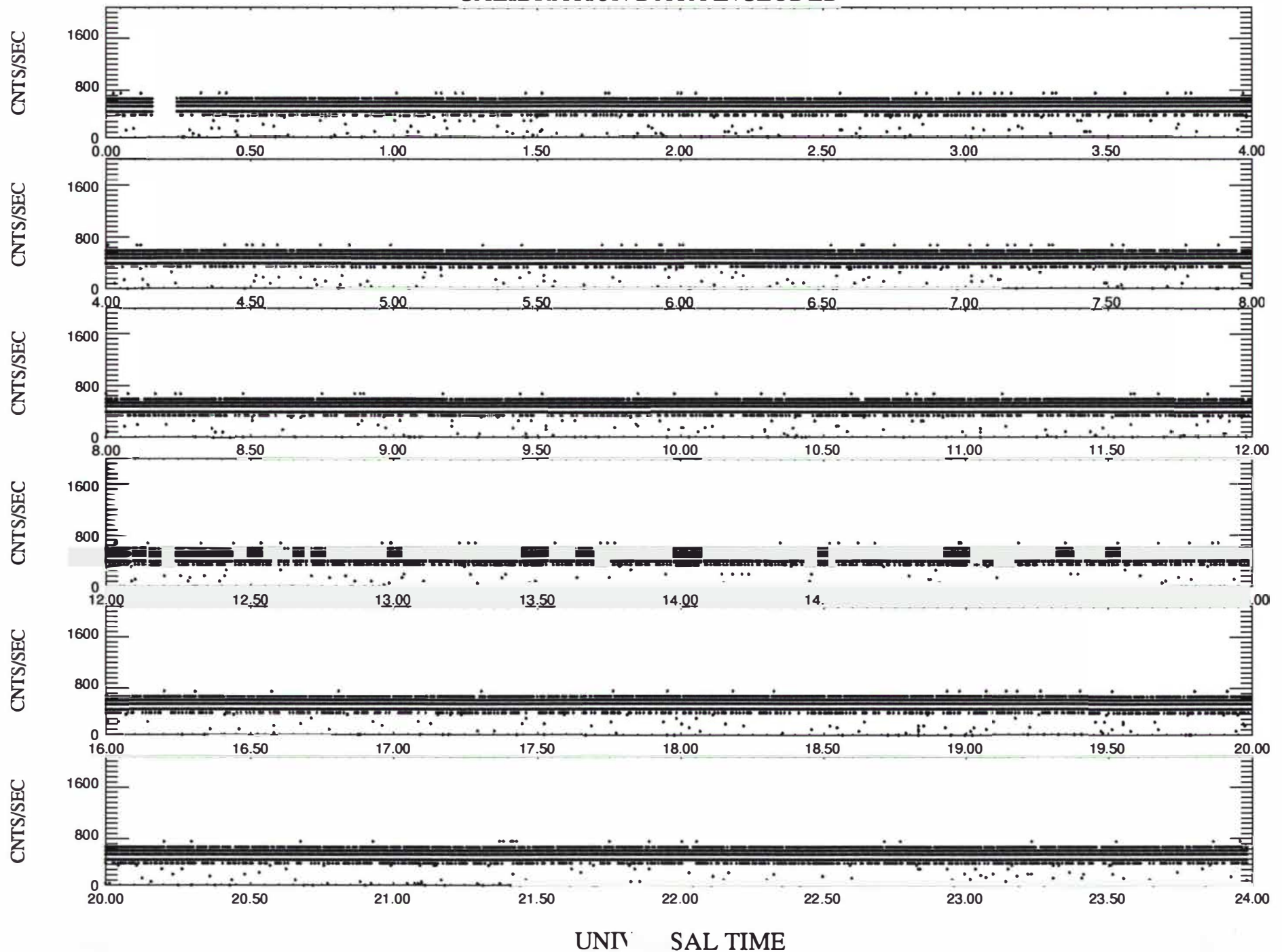
Dotted line: Day entry
 Dashed line: Night entry

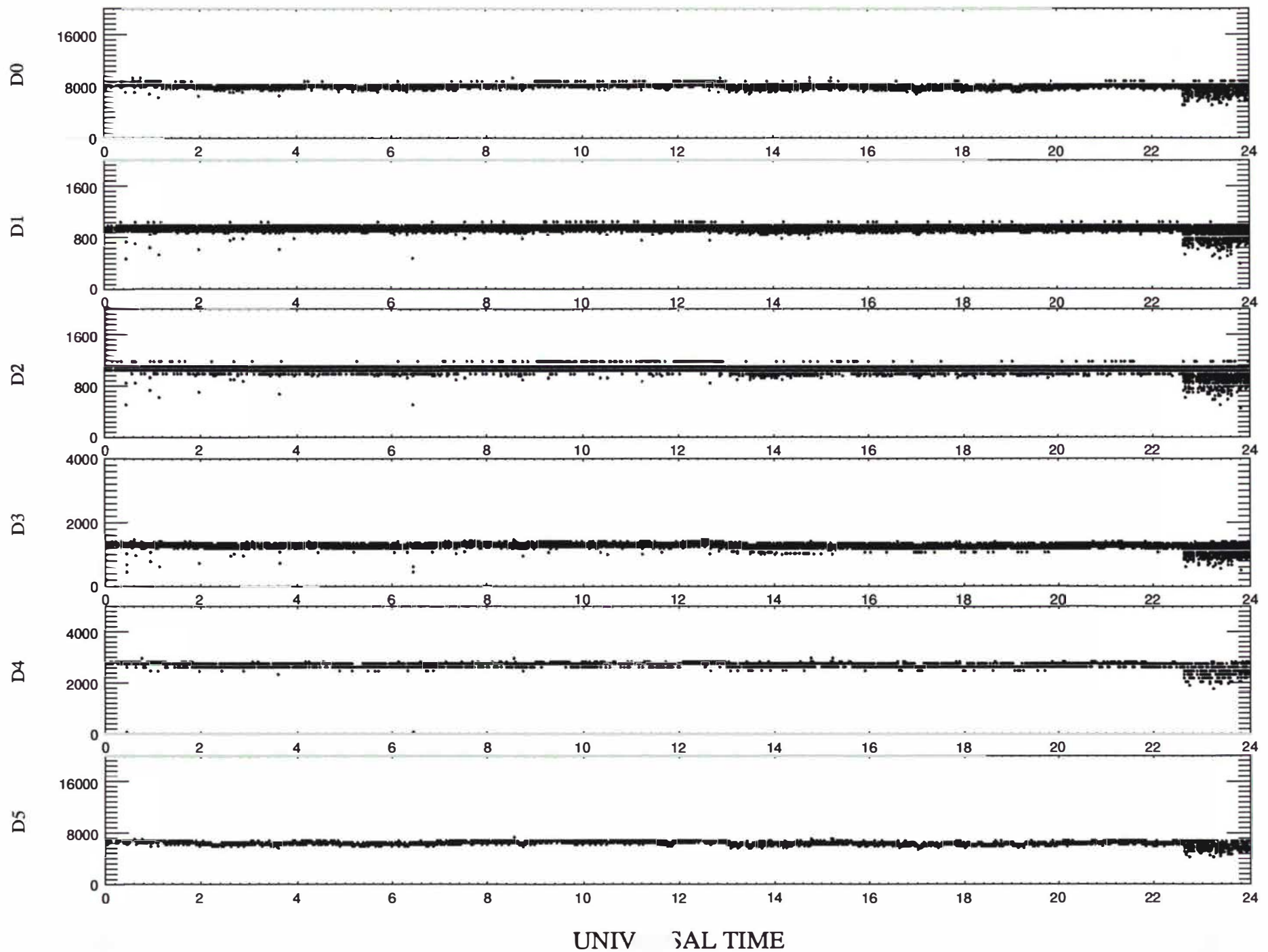
* Solar Burst Trigger
 + Solar Flare

NO BURST (4)



CALIBRATION DATA INCLUDED





 BATSEARCH PROGRAM

BATSE BURST # 3287
 EVENT OF 1994 NOV 19 DAY OF YEAR=323
 EVENT CROSSING TIME AT BATSE : 70250. S. OR 19:30:50.0
 COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
 BURST ARRIVAL DIRECTION: 182.000 22.000
 BATSE PEAK COUNTING RATE: 31000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
 INTERPOLATED POSITION OF ULYSSES ON 19/11/ 94 IS:
 RA= 249.112 DEC= -74.870 DIST= 2.178 AU
 BATSE-ULYSSES DISTANCE = 325768554. KM.
 ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 74.48 DEG.
 LIGHT TRAVEL TIME ALONG PROJECTED PATH= 290.67 SECS.
 CROSSING TIME AT ULYSSES IS 70541. S. OR 19:35:40 +/- 236.20 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
 POSITION OF MARS ON 19/11/ 94 IS:
 RA= 145.429 DEC= 15.971 DIST= 1.195 AU
 MARS-BATSE DISTANCE = 178807216. KM.
 ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=144.98 DEG.
 LIGHT TRAVEL TIME ALONG PROJECTED PATH= -488.46 SECS.
 CROSSING TIME AT MARS IS 69762. S. OR 19:22:41 +/- 52.00 SECONDS
 BATSE BURST TRIGGER

NO.: 3287

ME: TJD=9675 SECONDS=70250

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=167.1 AZIMUTH=044.7 ERROR= DEGREES

COMMENTS:

BURST, MULTYPEAKED, LASTING ~35S. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3287	941119	9675	70250	31000	182	+22

RI

Helio corr removed

Date: Feb 6 '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

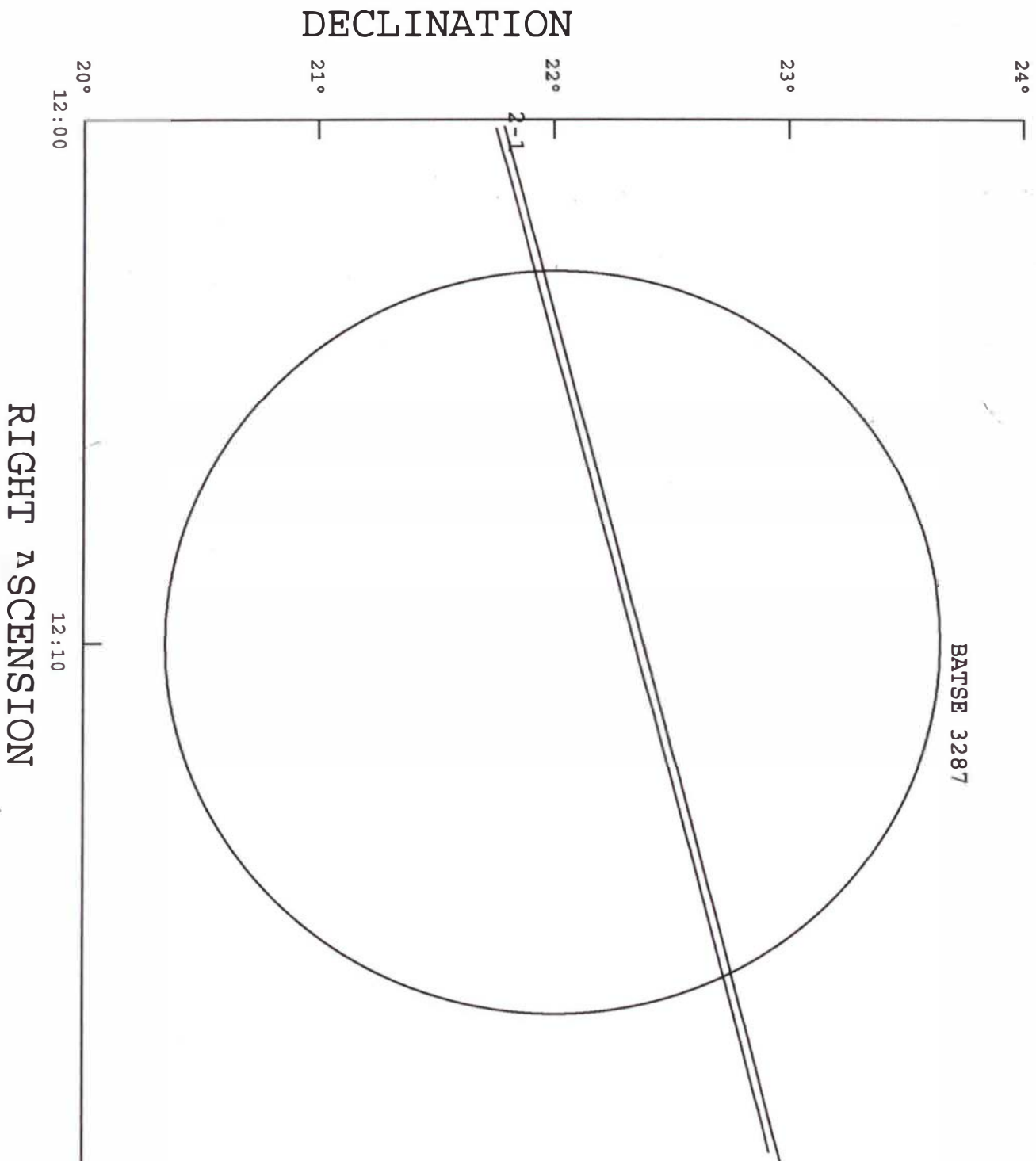
G=GALACTIC EQUATOR

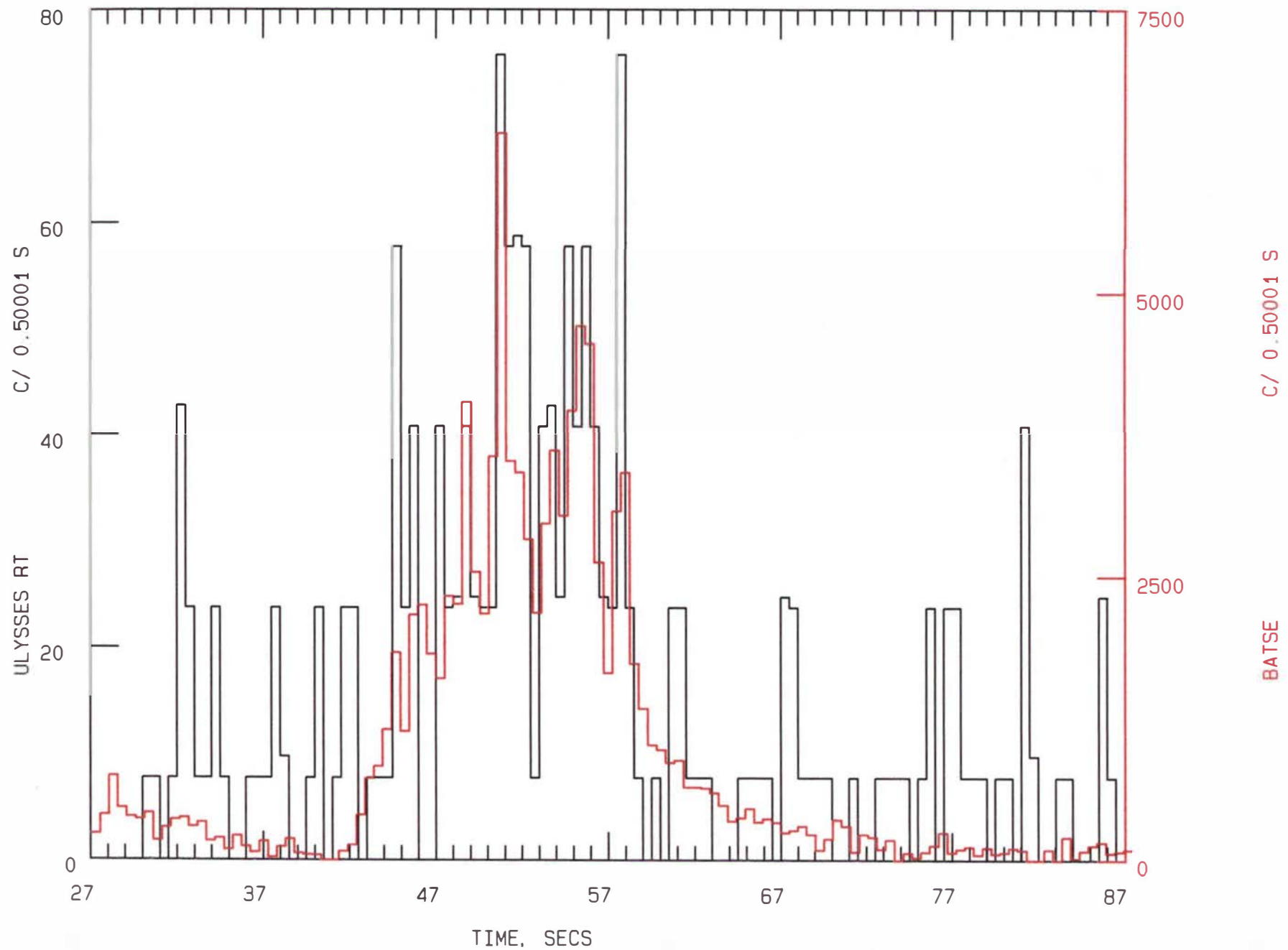
1 ULYSSES

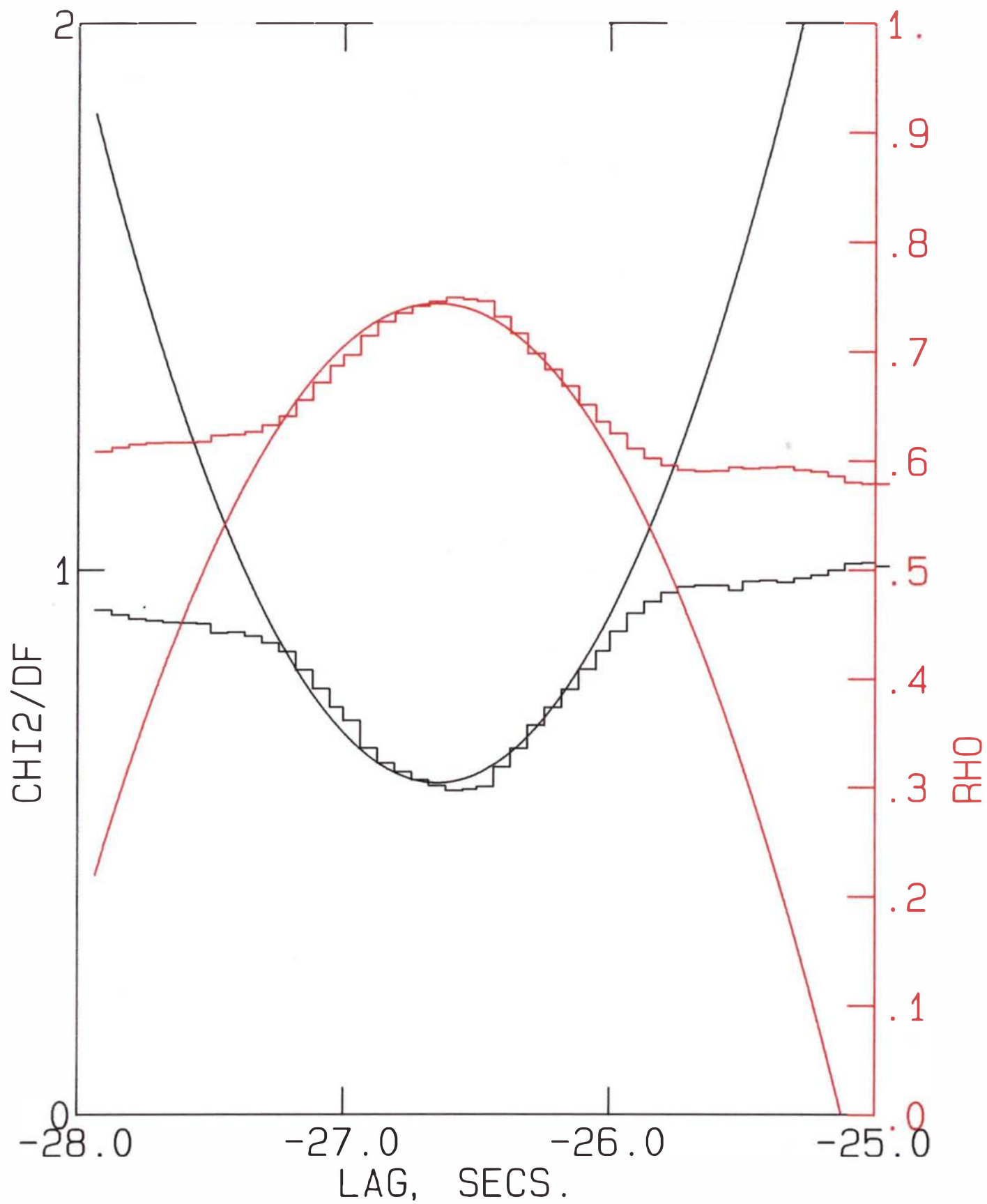
2 BATSE

EVENT OF NOV 19, 1994 19:35

6 / 2/98







ULYSSES RT

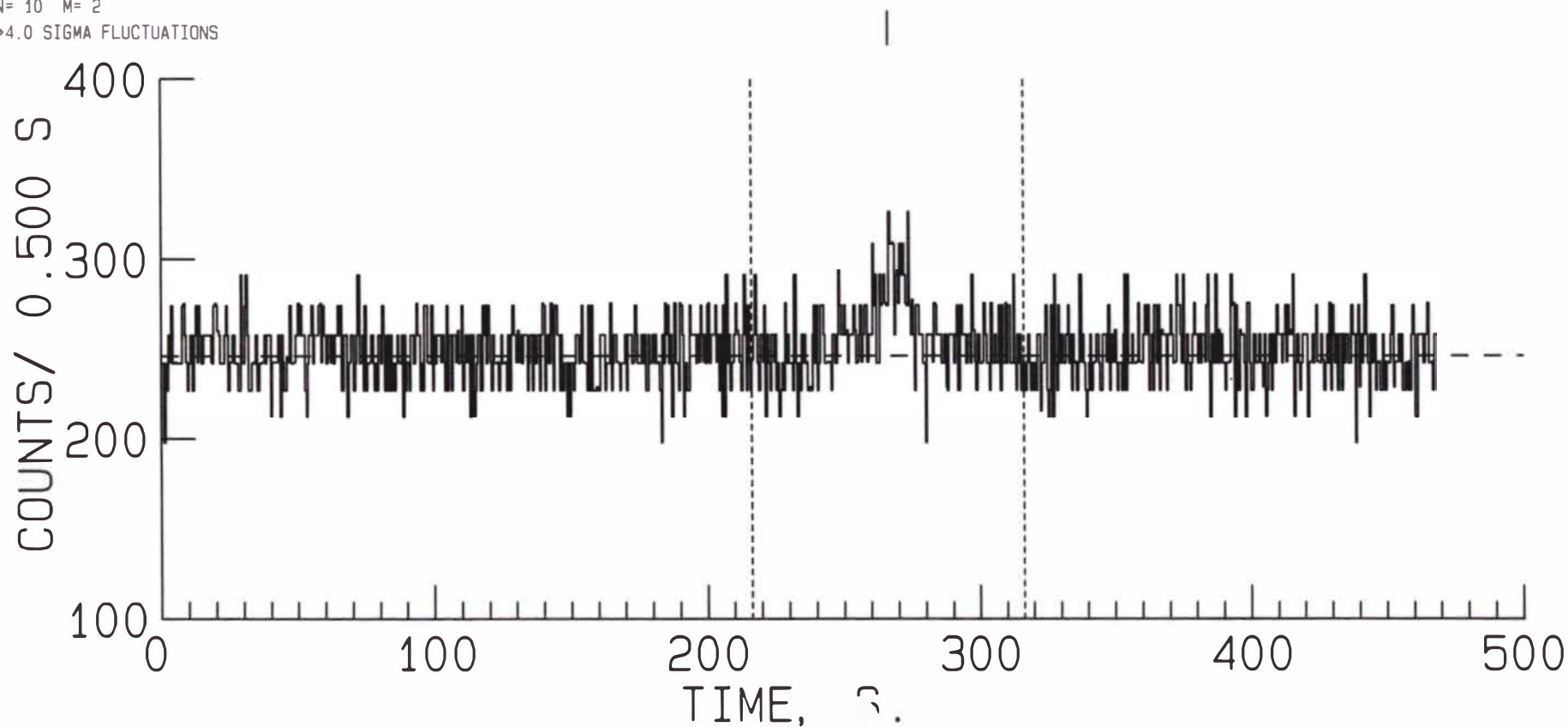
6 / 2 / 98

19/11/94 70308.224 s

0.250 S INTERVALS REGROUPED BY 2

22- 148 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From cline@tgrs.gsfc.nasa.gov Wed Feb 15 06:04 PST 1995
Return-Path: <cline@tgrs.gsfc.nasa.gov>
Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
Wed, 15 Feb 1995 9:07:45 -0500 (EST)

.e: Wed, 15 Feb 1995 06:04:37 +0800
Message-Id: <9502151404.AA10549@sunspot.ssl.berkeley.edu>
e6.ssl.berkeley.edu

From: cline@tgrs.gsfc.nasa.gov (T L Cline)
Subject: Data, again

X-Lines: 36

Status: RO

Mime-Version: 1.0

To: KHURLEY@space6.ssl.berkeley.edu

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

Subject: Data, again

X-Lines: 36

Status: RO

text/plain; charset="us-ascii"

Content-Length: 1284

X-Sun-Content-Length: 1284

Kevin:

The first 5 events, so far, exhibit all 4 results: Ulysses, BATSE, Konus and BACODINE.

so I am working on them first. However, I would add more, if you could send me the

BATSE 3352 (and 3412, with the Feb. 11 Ulysses data - is it a solar flare ?) - TLC

	Time	Tzero (UT)	Konus sensor G1	Max c/s G2	N(1)/N(2) G3 =G2	Duration t<Tz t>Tz T#	BATSE T#	Uly d* d*	TGRS T#	BACODINE RA Dec
941119	19 31	09.175	S2 370	703	160	0.23 7 20 4	3287*	BG* #13	188 22	
941121	17 25	00.945	S1 1652	1656	300	21. 3 50 6	3290*	T* #15	004 -63	
941127	14 30	25.680	S2 200	400	95	0.17 8 7 10	3303*	U*	070 50	
941228	07 39	45.915	S1 300	637	519	4.4 5 90 28	3330*	BG* no d	339 -52	
950104	07 18	39.613	S2 258	550	219	.0.75 2.8 20 31	3345*	BG* #250	310 -11	
950111	12 18	49.196	S1 225	435	164	1.85 26 50 34	3352	BG* BG	024 -14	
950211	02 24	57.749	S2 2750	11630	6560	<0.06 0.03 0.14 48	3412			

U....(08697 sec)

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

From root Thu Jan 26 12:09 1995
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA09916; Thu, 26 Jan 95 12:09:38
 eived: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA01181; Thu, 26 Jan 1995 12:08:59 +0800
 Date: Thu, 26 Jan 1995 12:08:59 +0800
 Message-Id: <9501262008.AA01181@sunspot.ssl.berkeley.edu>
 Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
 Thu, 26 Jan 1995 15:11:15 -0500 (EST)
 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: KONUS/BATSE/ULYSSES EVENT LIST TO 95 JAN 17
 Cc: Mazets@mz.pti.spb.su
 Content-Length: 1824
 Status: R

KEVIN:
 BASED ON WHAT I HAVE FROM SERGEI GOLENETSKII AND FROM YOU, THIS IS THE
 CURRENT LIST OF ALL KONUS-ULYSSES EVENTS UP TO 95 JAN 17 WITH ALL BUT TWO
 ALSO BATSE.

x means sent with planning
✓ means sent to TLC

Date	KONUS-Tzero Sensor	Max c/s	N(1)/N(2)	Duration	Event	BATSE	ULYSSES	BATSE
(UT)		G1 G2 G3	(G2)	t<Tz t>Tz	K-no	T-no	EVENT	
941119 19 31 09.175	S2	370 703 160	0.23	7 20	4	3287	ULY ✓	✓
941121 17 25 00.945	S1	1652 1656 300	21	3 50	6	3290	ULY ✓	✓
941125 22 04 30.156	S2	115 308 109	0.95	1.5 5	7	3295	ULY ✗	✓
941126 12 22 37.952	S1	860 1430 330	4.2	40 45	8	3298	ULY ✓	✓
941126 19 56 49.732	S1	290 390 211	6.7	20 26	9	3301	ULY ✗	✓
941127 14 30 25.680	S2	200 400 95	0.17	8 7	10	3303	ULY ✓	✓
941210 03 10 52.523	S2	900 2350 1385	0.12	1 15	14	----	ULY ✓	✓
941228 07 39 45.915	S1	300 637 519	4.4	5 90	28	3330	ULY ✗	✓
941229 22 51 08.781	S2	396 381 140	0.09	7 25	29	3334	ULY ✗	✓
950104 07 18 39.613	S2	258 550 219	0.75	2.8 20	31	3345	ULY ✗	✓
950111 04 49 12.241	S1	586 620 100	>19	92 24	33	3351	ULY ✗	✓
950114 04 03 01	S2	23 76	0.5	70	BG	----	ULY ✓	✓
950117 01 36 00	S2	56 82 42	0.22	108	BG	3360	ULY ✗	✓

Energy intervals G1, G2, G3: 14 - 50, 50 - 225 and 225 - 900 keV.
 Since 12th December: 12.5 - 43, 43 - 190 and 190 - 760 keV.
 N(1)/N(2) is ratio of sensor 1 to sensor 2 counts in G2.

WHEN YOU HAVE A CHANCE, PLEASE SEND THESE TIME HISTORIES FIRST. THANKS. TLC

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

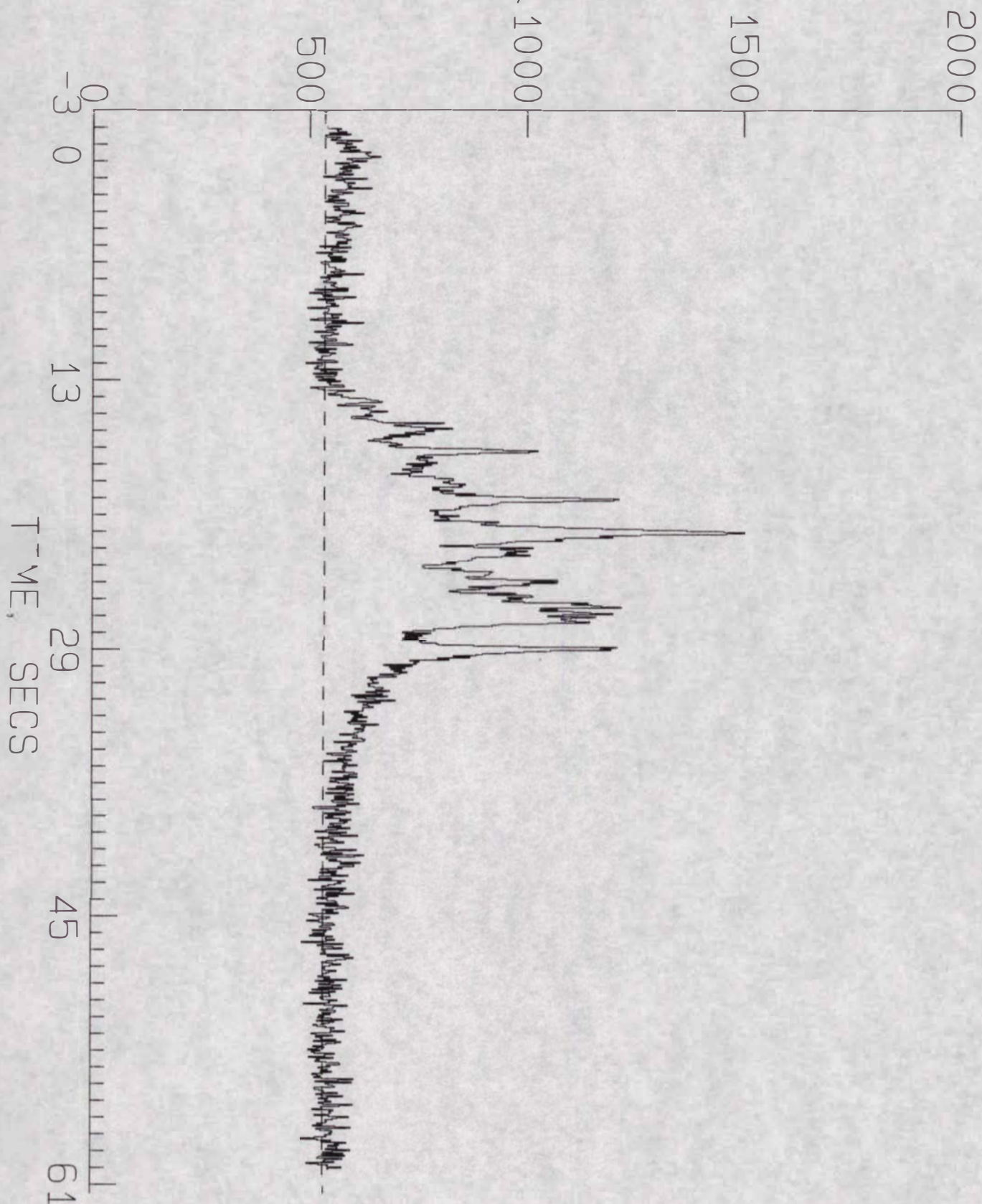
BATSE

19/11/94

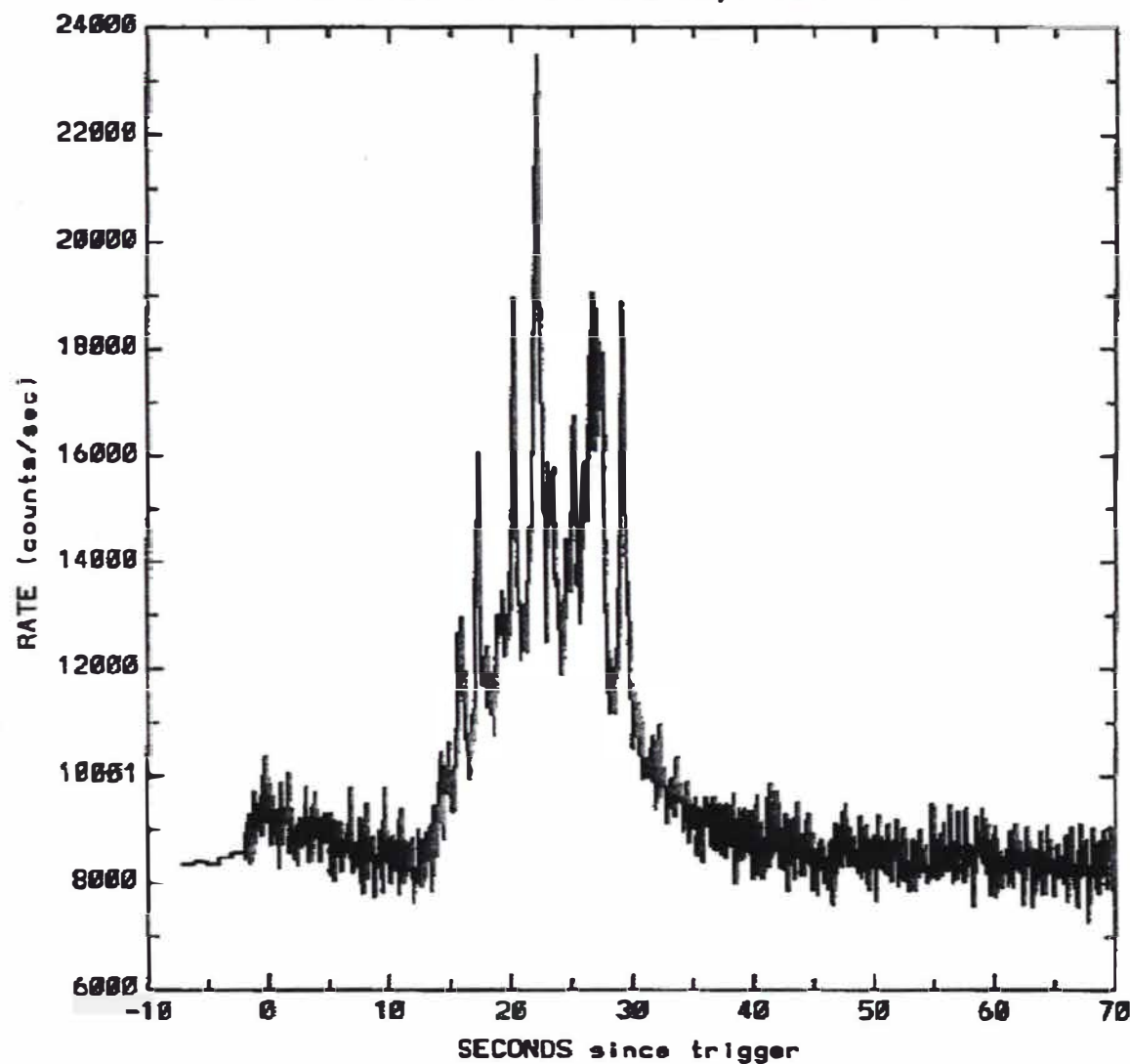
70250.162

25- 100 keV

COUNTS/ .064 S



DISCSC Data for K. Hurley, No. 3287

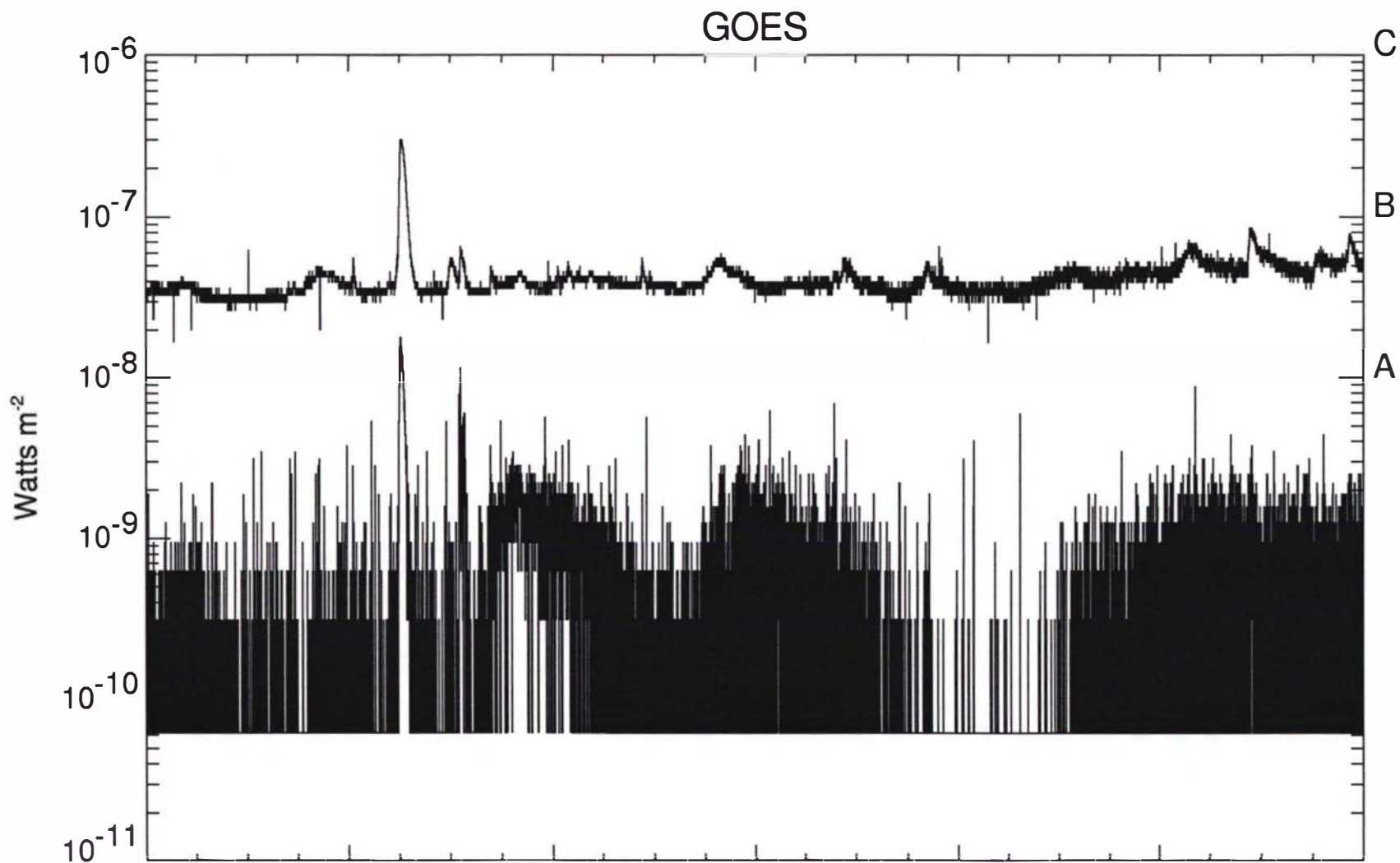


28-NOV-1994 12:42:22

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger = . 3287

Trigger Time:
9675 / 78238.162Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + 0(SCLA)Minimum Integ. Time:
0.064 secondsDetectors (7..01.
--5-3-1-Discriminators:
(1. 2)Quality Mask:
801SP1



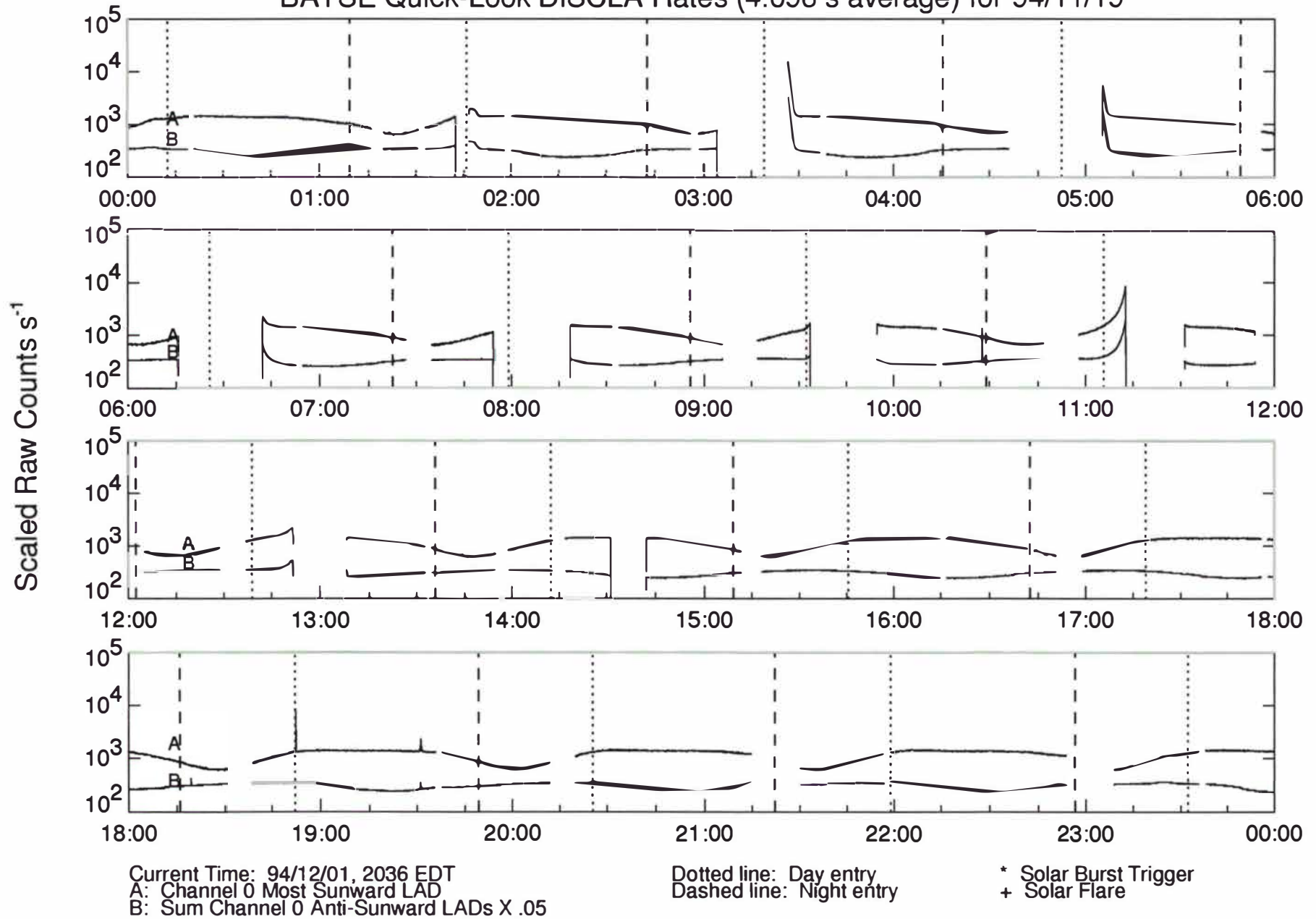
Data Start: 94/11/19, 0000:02

Plot created: 94/12/01, 2043

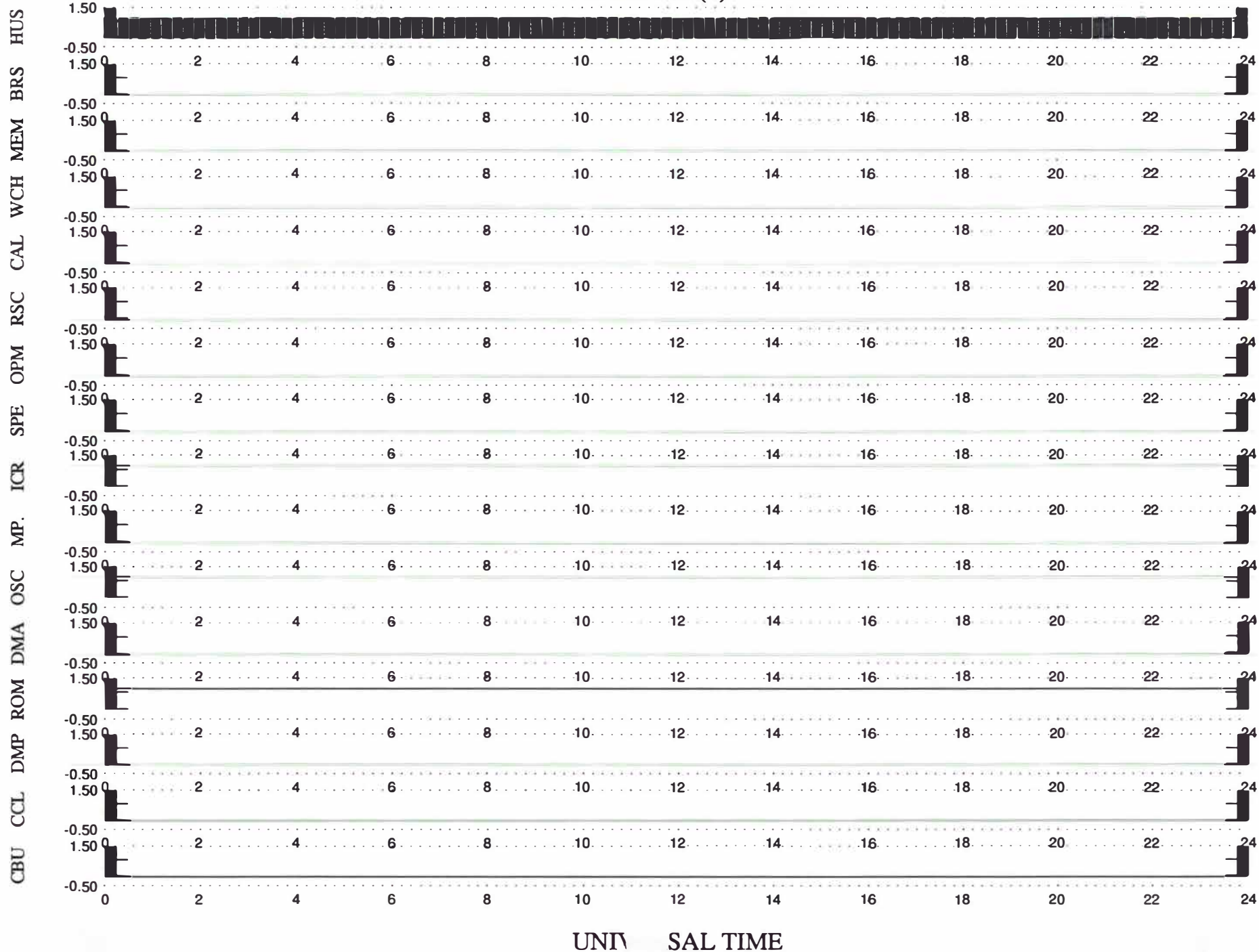
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

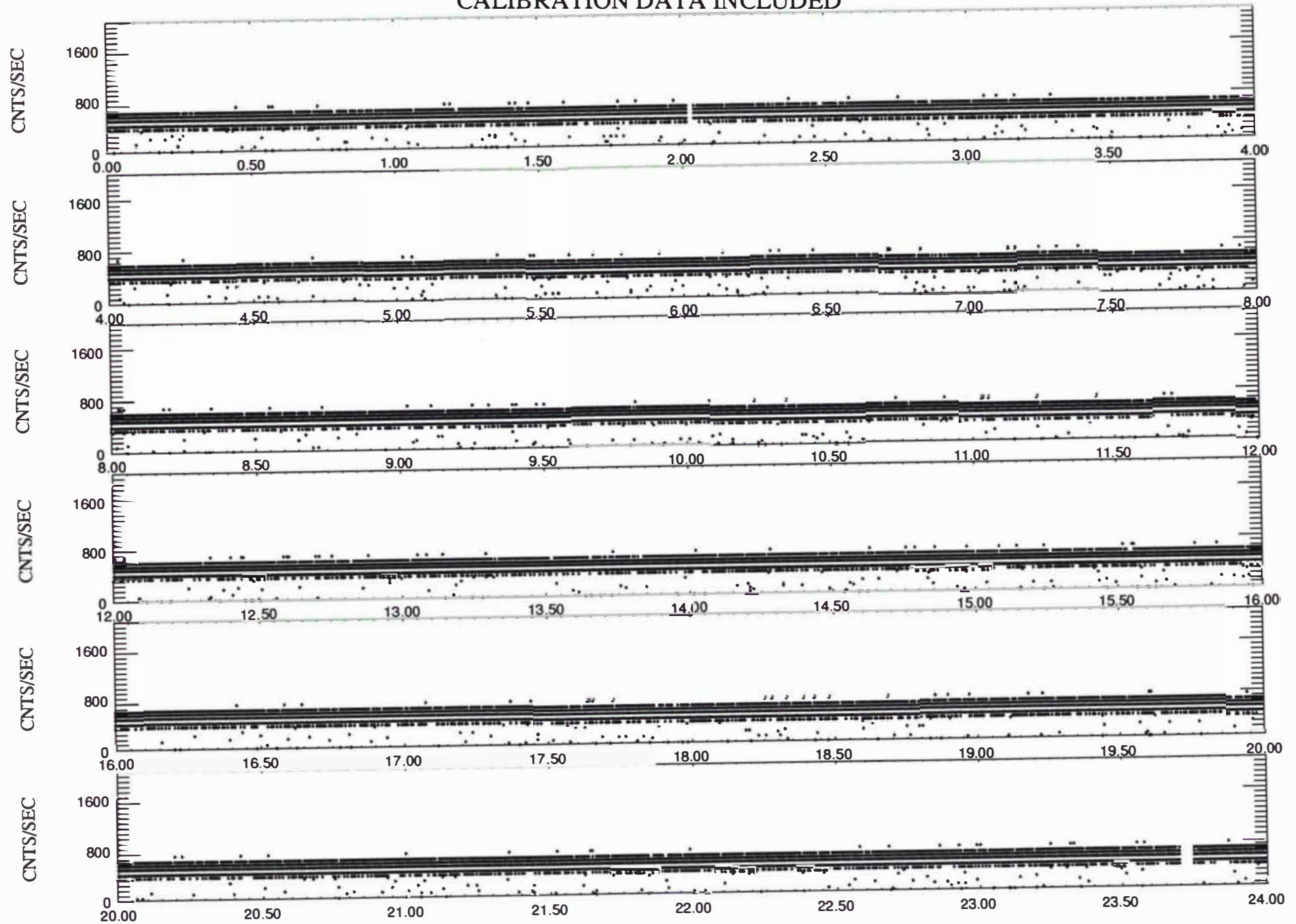
BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/19



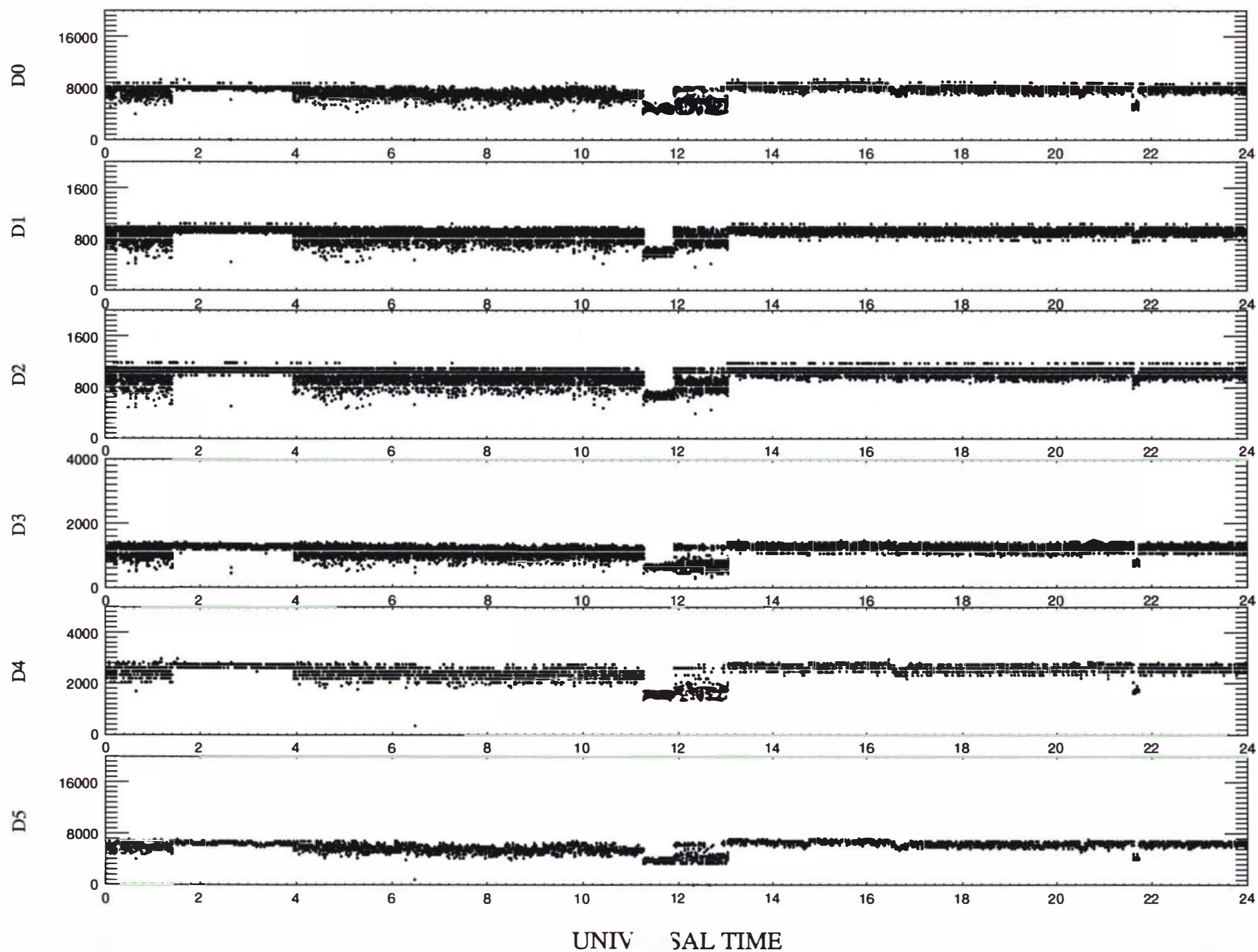
NO BURST (4)



CALIBRATION DATA INCLUDED



UNIT SAL TIME



From williams@sunspot Thu Sep 10 18:05 PDT 1998
Date: Thu, 10 Sep 1998 18:09:58 -0700
From: williams@sunspot (Roger Williams)
To: khurley@sunspot
Subject: RT Event Problems 94258-96229
Cc: williams@sunspot

Kevin,

The next wave of results is finished relative to differences in ascii files for events from your realtime event list. These results are for yyddds from your list in the range 94258-96229 or Sep 15, 1994 to August 16, 1996.

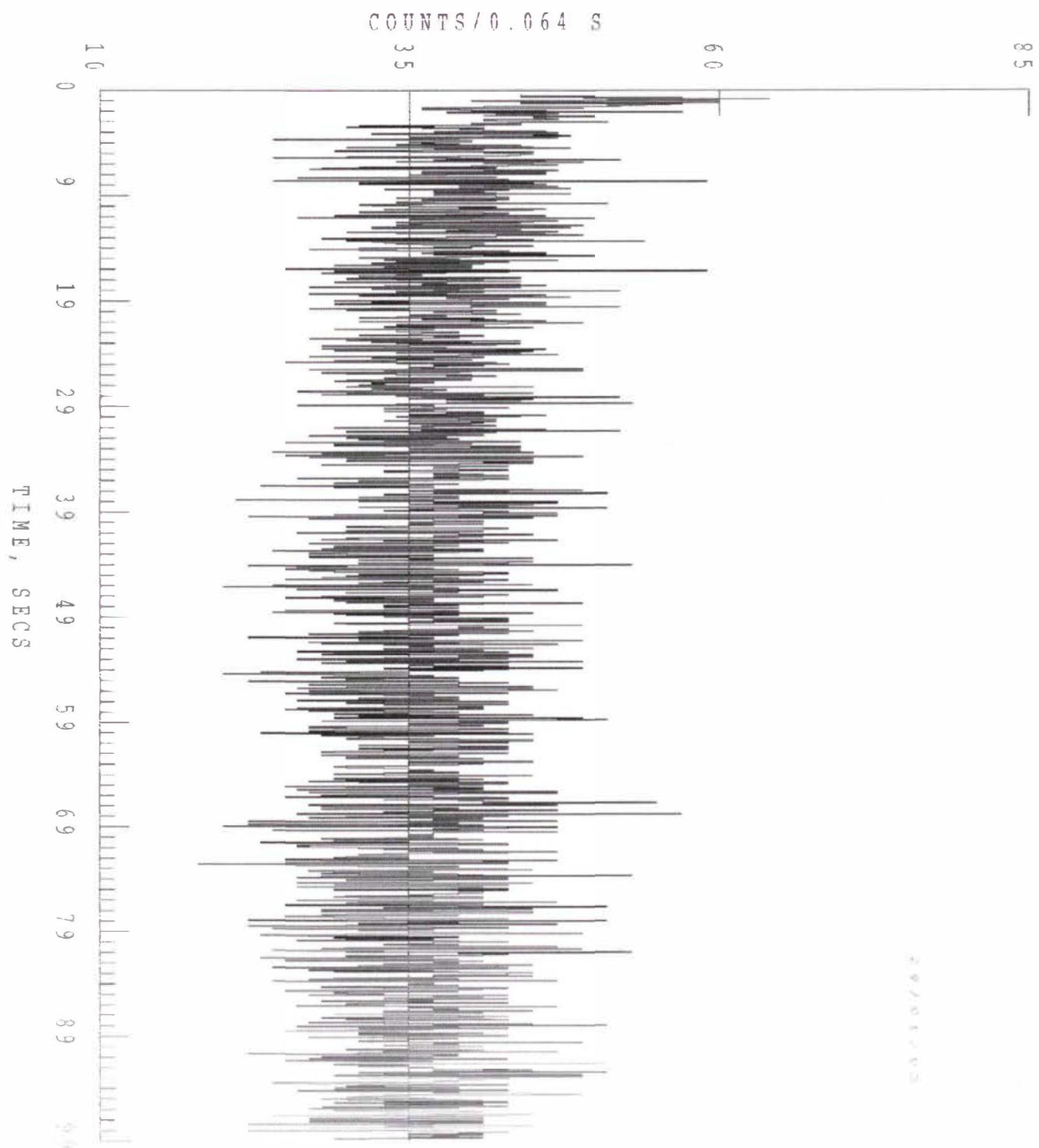
Using yyddds from your list we investigated ALL ascii files that we have made on that day and compared old vs. new decom versions. Again, this was because times in the list were Earth times and thus not easily related to a Ulysses window. Thus the list of files may contain irrelevant entries.

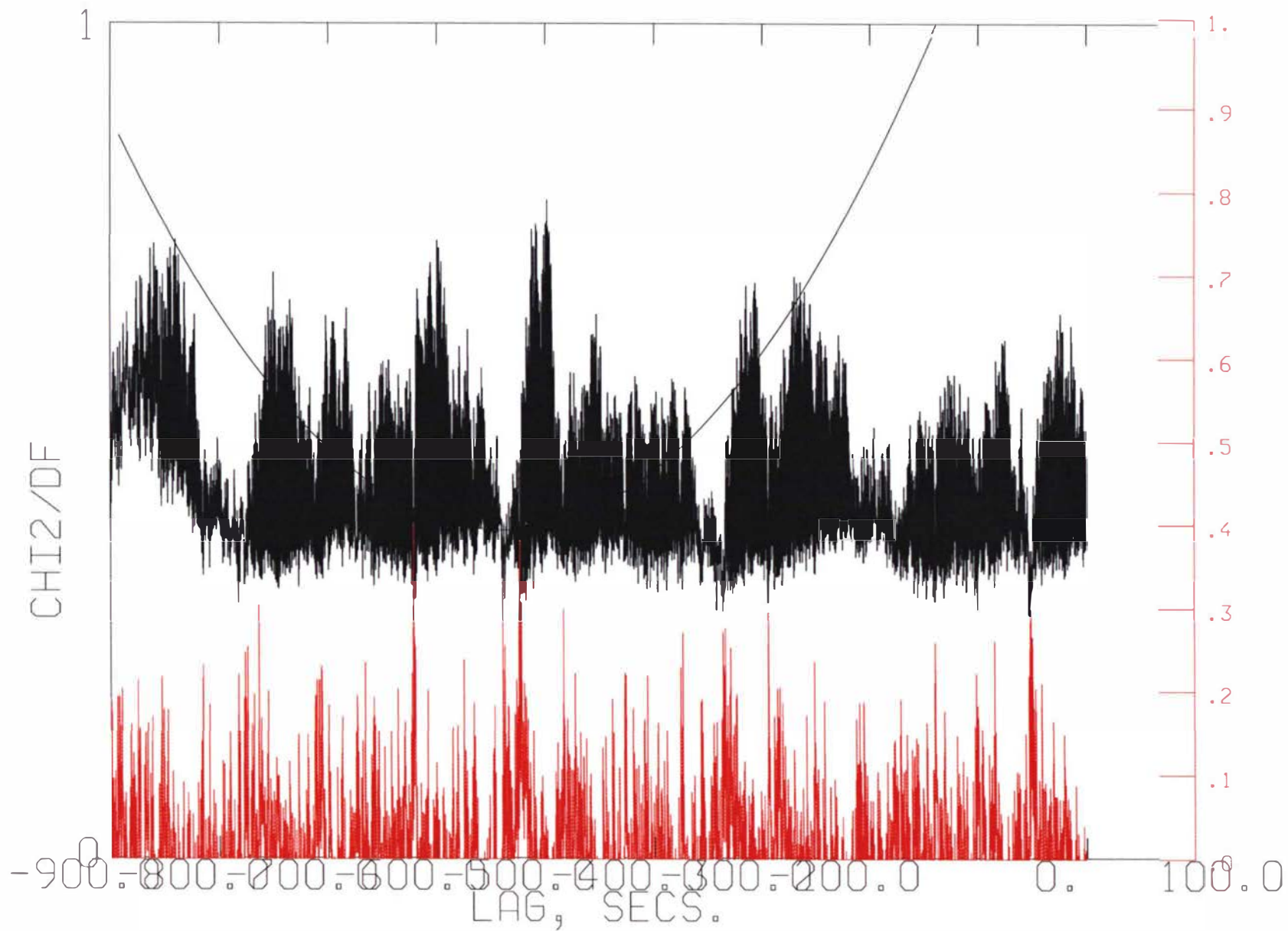
The list of files is attached.

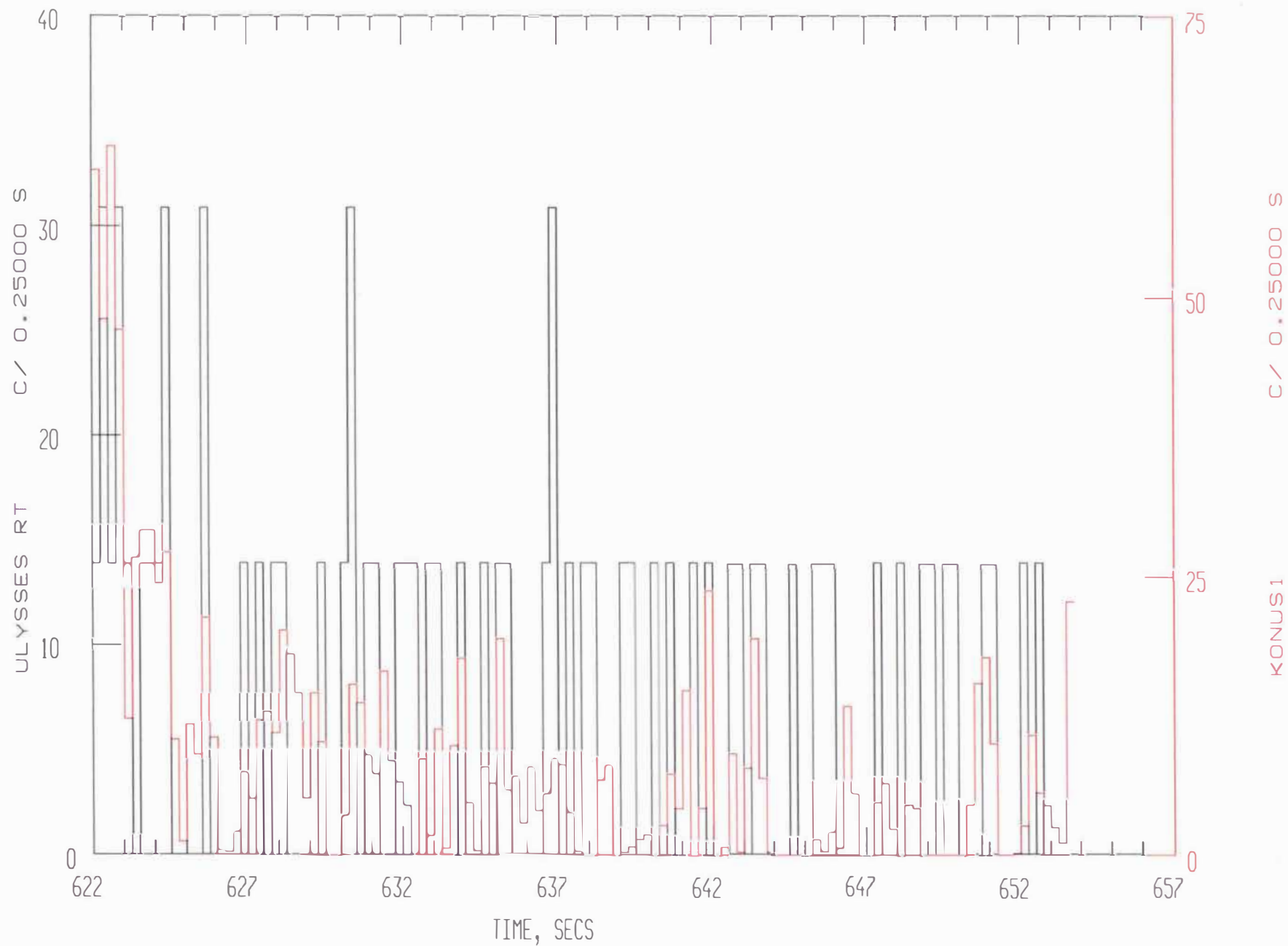
Roger and J

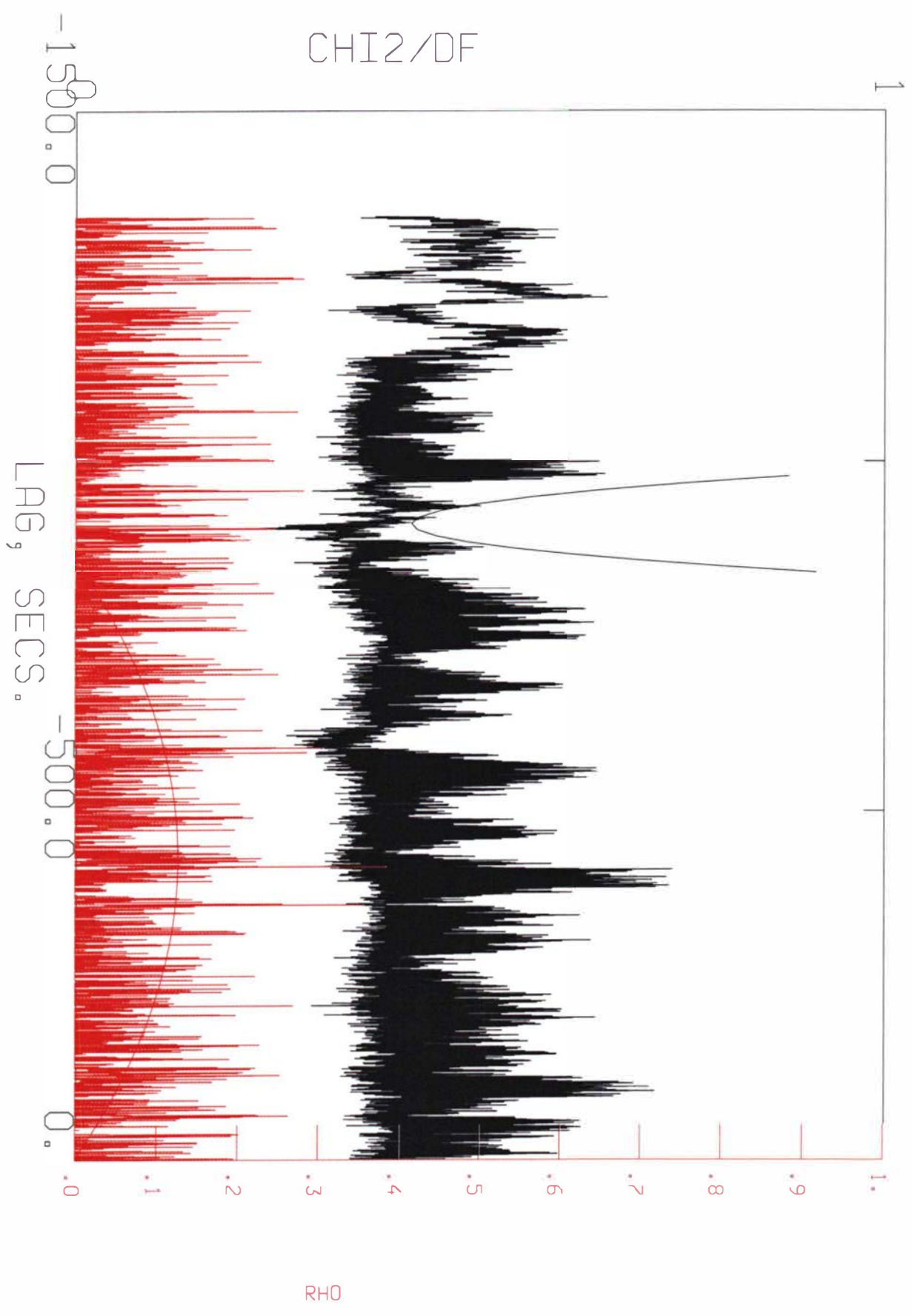
<This message contains 1 attachments (not printed)>

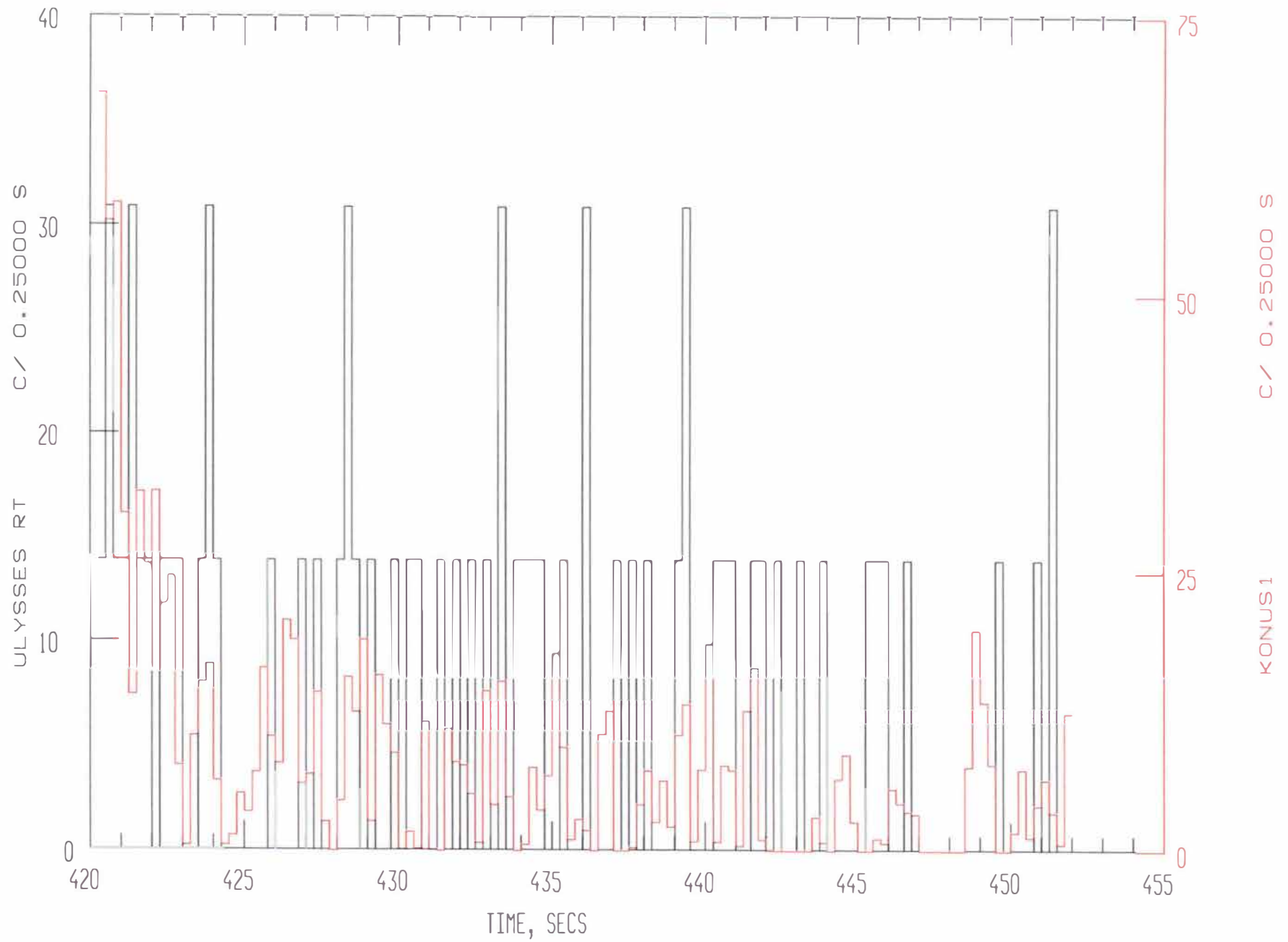
e94321_2A1_02.91_03.58.ascii.diff.Z
e94324_2A1_20.05_20.72.ascii.diff.Z
e94331_2A1_15.32_15.99.ascii.diff.Z
e94356_2A1_05.27_05.93.ascii.diff.Z
e94356_2A1_07.32_07.44.ascii.diff.Z
e95013_2A1_05.65_06.32.ascii.diff.Z
e95042_2A1_02.31_02.45.ascii.diff.Z
e95042_2A1_04.10_04.76.ascii.diff.Z
e95076_2A1_20.14_20.81.ascii.diff.Z
e95091_2A1_20.66_20.80.ascii.diff.Z
e95135_2A1_06.08_06.74.ascii.diff.Z
e95176_2A1_02.36_03.02.ascii.diff.Z
e95221_2A1_23.76_23.89.ascii.diff.Z
e95274_2A1_11.27_12.02.ascii.diff.Z
e95275_2A1_22.78_22.91.ascii.diff.Z
e95306_2A1_05.54_05.66.ascii.diff.Z
e95323_2A1_11.72_14.09.ascii.diff.Z
e95359_2A1_09.18_09.96.ascii.diff.Z
e96007_2A1_05.00_05.78.ascii.diff.Z
e96007_2A1_18.67_19.45.ascii.diff.Z
e96015_2A1_17.16_17.31.ascii.diff.Z
e96106_2A1_01.13_01.31.ascii.diff.Z
e96142_2A1_16.64_18.08.ascii.diff.Z
e96149_2A1_02.19_02.42.ascii.diff.Z
e96185_2A1_13.93_14.38.ascii.diff.Z
e96185_2A1_14.02_14.24.ascii.diff.Z
e96209_2A1_11.24_12.68.ascii.diff.Z
e96226_2A1_10.12_11.51.ascii.diff.Z





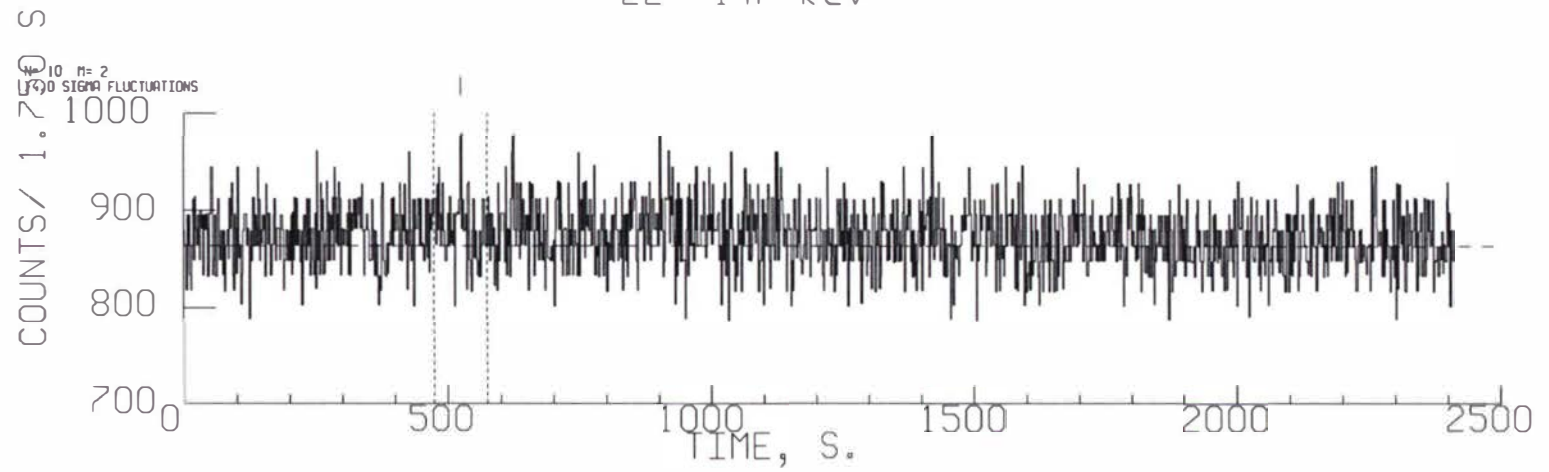






ULYSSES RT
20/11/94 72180.125 s
0.250 S INTERVALS REGROUPED BY 7
22- 147 keV

9/ 8/11



KONUS1 19941120 73397

ULYSSES RT

29 / 01 / 02

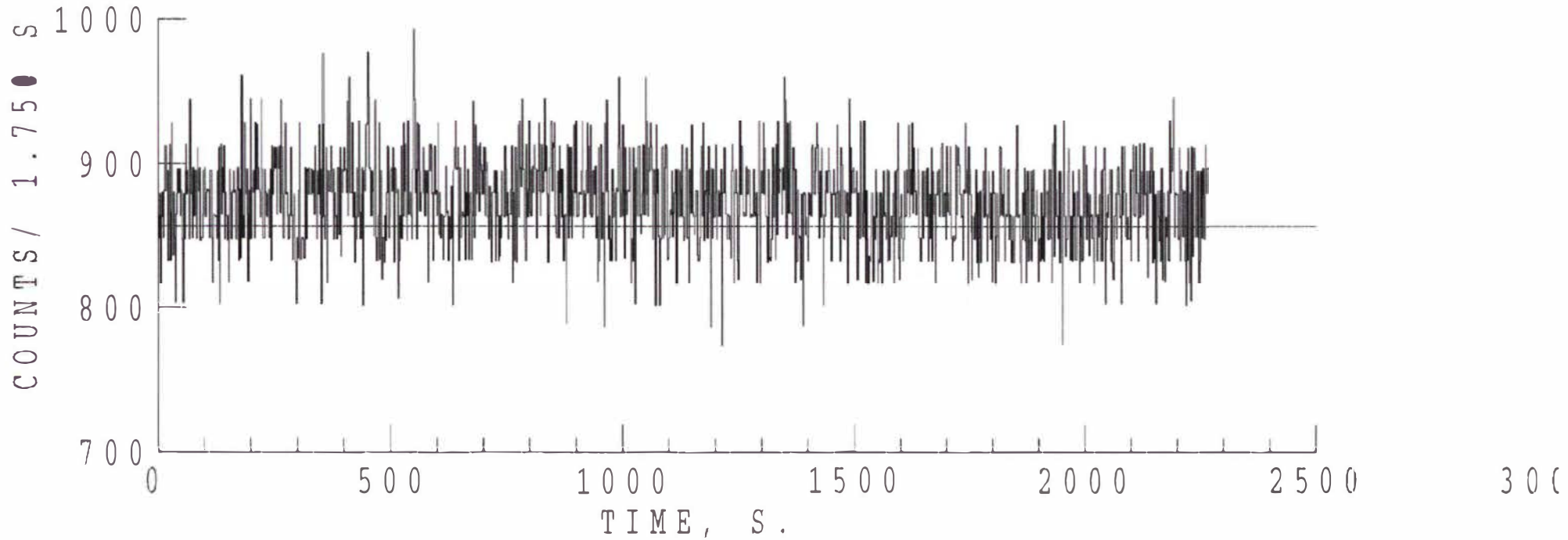
20/11/94 72252.125 s

0.250 S INTERVALS REGROUPED BY 7

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From DEAL@ssl.msfc.nasa.gov Mon Nov 21 12:16 PST 1994
Date: Mon, 21 Nov 1994 14:15:53 -0600 (CST)
From: DEAL@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.: 3288

TIME: TJD=9676 SECONDS=77127

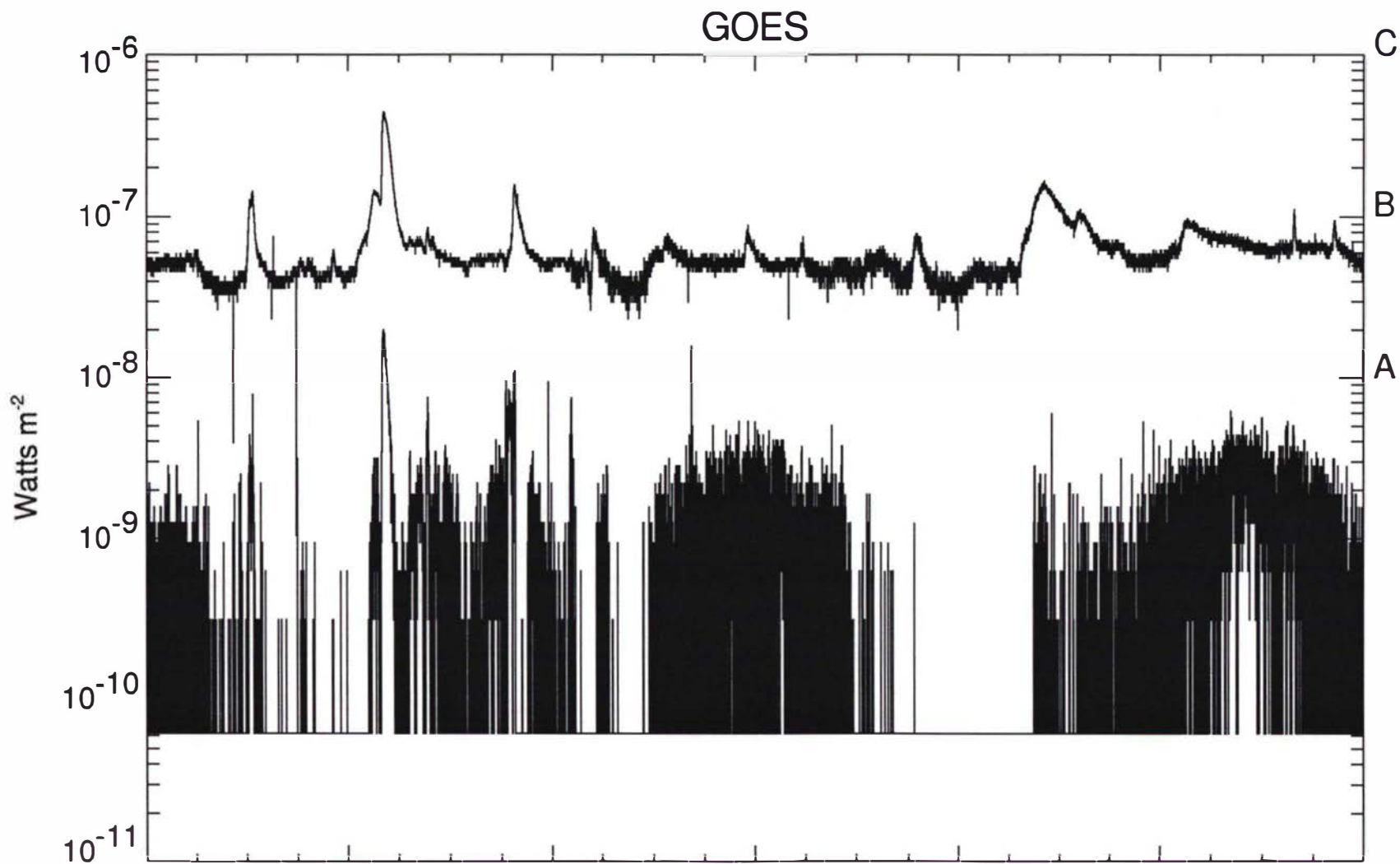
TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT



Data Start: 94/11/20, 0000:00

Plot created: 94/12/01, 2043

Channel

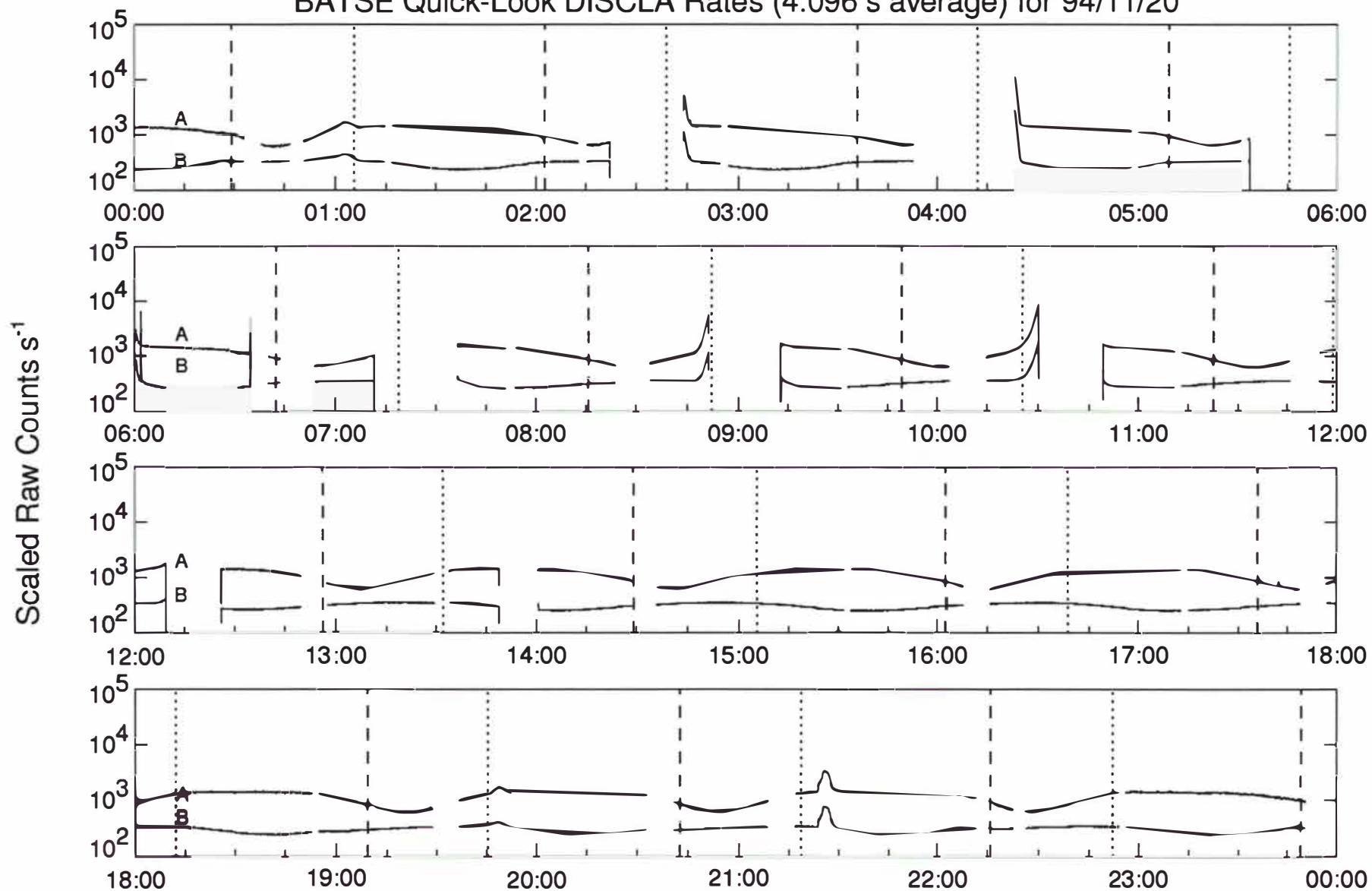
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/20



Current Time: 94/12/01, 2036 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

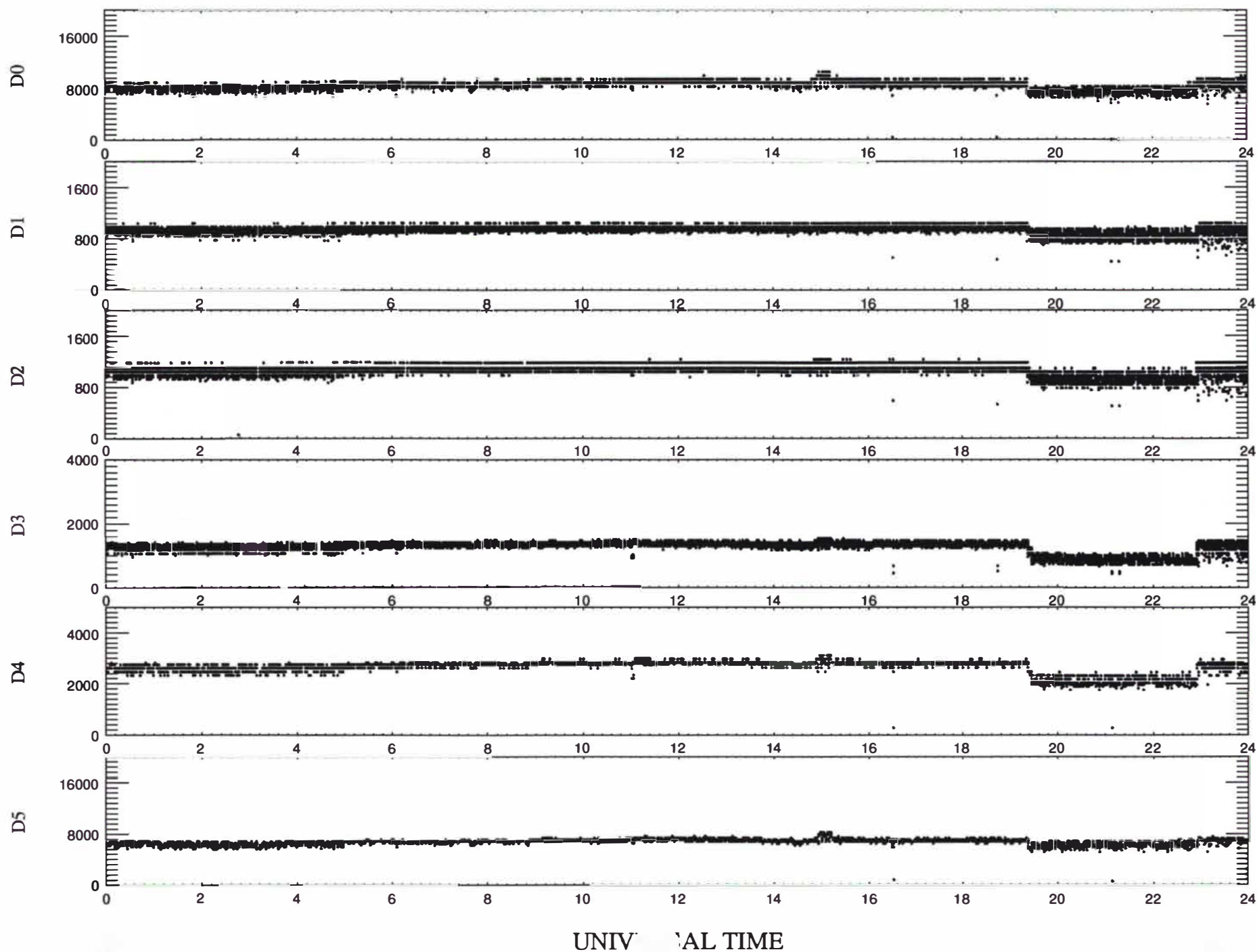
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

CALIBRATION DATA INCLUDED



UNIV SAL TIME



From KOSHUT@ssl.msfc.nasa.gov Tue Nov 22 12:51 PST 1994
Date: Tue, 22 Nov 1994 14:51:35 -0600 (CST)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3289

BATSEARCH PROGRAM

BATSE BURST # 3289
EVENT OF 1994 NOV 21 DAY OF YEAR=325
EVENT CROSSING TIME AT BATSE : 33943. S. OR 09:25:43.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 3.000 -50.000
BATSE PEAK COUNTING RATE: 1100 C/S

NO

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/11/ 94 IS:
RA= 253.761 DEC= -74.584 DIST= 2.173 AU
BATSE-ULYSSES DISTANCE = 325065192. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=133.01 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -739.68 SECS.
CROSSING TIME AT ULYSSES IS 33203. S. OR 09:13:23 +/- 176.41 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/11/ 94 IS:
RA= 146.222 DEC= 15.763 DIST= 1.178 AU
MARS-BATSE DISTANCE = 176286784. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 45.28 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 413.74 SECS.
CROSSING TIME AT MARS IS 34357. S. OR 09:32:36 +/- 78.83 SECONDS

khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03289

TIME: TJD=9677 SECONDS=33943

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=18. AZIMUTH=93. ERROR= DEGREES

COMMENTS:

WEAK BURST (~ 1100 C/S ABOVE BACKGROUND) OF AT LEAST 10 SECONDS DURATION.
WEAK EMISSION OBSERVED ABOVE 300 KEV. LIMITED DATA DUE TO TELEMTRY GAP.

From KOSHUT@ssl.msfc.nasa.gov Tue Nov 22 12:51 PST 1994
Date: Tue, 22 Nov 1994 14:51:05 -0600 (CST)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: KOSHUT@ssl.msfc.nasa.gov
Subject: BATSE Burst 3289

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3289	941121	9677	33943	1100	003	-50

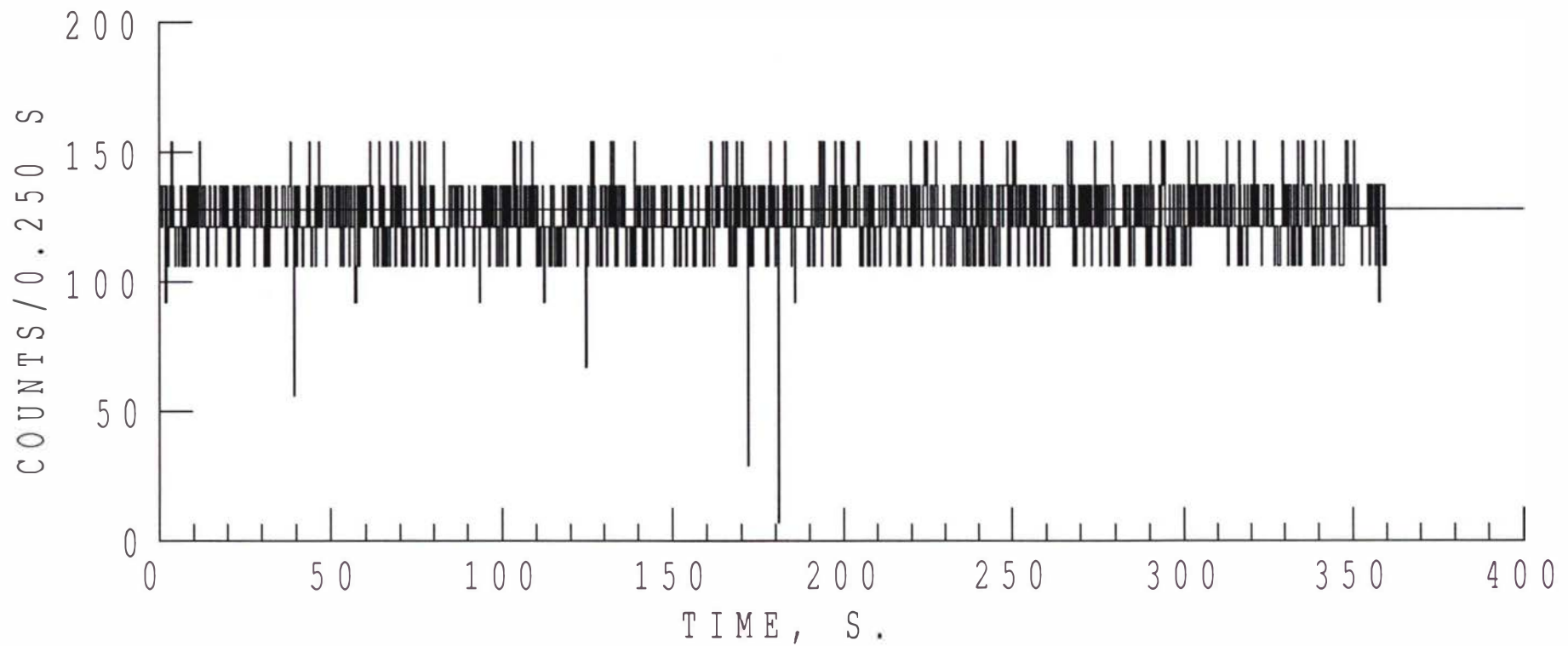
23 / 11 / 94

ULYSSES RT

21 / 11 / 94 33012.215 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From KOSHUT@ssl.msfc.nasa.gov Tue Nov 22 12:53 PST 1994
Date: Tue, 22 Nov 1994 14:53:07 -0600 (CST)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3290

BATSEARCH PROGRAM

TRIGGER

BATSE BURST # 3290
EVENT OF 1994 NOV 21 DAY OF YEAR=325
EVENT CROSSING TIME AT BATSE : 62697. S. OR 17:24:57.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 29.000 -67.000
BATSE PEAK COUNTING RATE: 40000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/11/ 94 IS:
RA= 254.717 DEC= -74.514 DIST= 2.172 AU
BATSE-ULYSSES DISTANCE = 324926731. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=144.51 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -882.51 SECS.
CROSSING TIME AT ULYSSES IS 61814. S. OR 17:10:14 +/- 145.83 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/11/ 94 IS:
RA= 146.222 DEC= 15.763 DIST= 1.178 AU
MARS-BATSE DISTANCE = 176286784. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 65.03 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 248.20 SECS.
CROSSING TIME AT MARS IS 62945. S. OR 17:29:05 +/- 96.32 SECONDS

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03290

TIME: TJD=9677 SECONDS=62697

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=39. AZIMUTH=97. ERROR= DEGREES

COMMENTS:

STRONG BURST (BACKGROUND SUBTRACTED PEAK RATE ~ 40000 C/S) OF ~ 55 SECONDS DURATION. THE TIME HISTORY CONSISTS OF 3 PEAKS, OBSERVED AT THE TRIGGER TIME, TRIGGER + 4 SECONDS, AND TRIGGER + 40 SECONDS. THE THIRD PEAK IS THE MOST INTENSE. EMISSION ABOVE 300 KEV IS OBSERVED.

From KOSHUT@ssl.msfc.nasa.gov Tue Nov 22 12:52 PST 1994
Date: Tue, 22 Nov 1994 14:52:45 -0600 (CST)
From: KOSHUT@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: KOSHUT@ssl.msfc.nasa.gov
Subject: BATSE Burst 3290

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3290	941121	9677	62697	40000	029	-67

Helio corr removed

Date: Feb 6 '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*

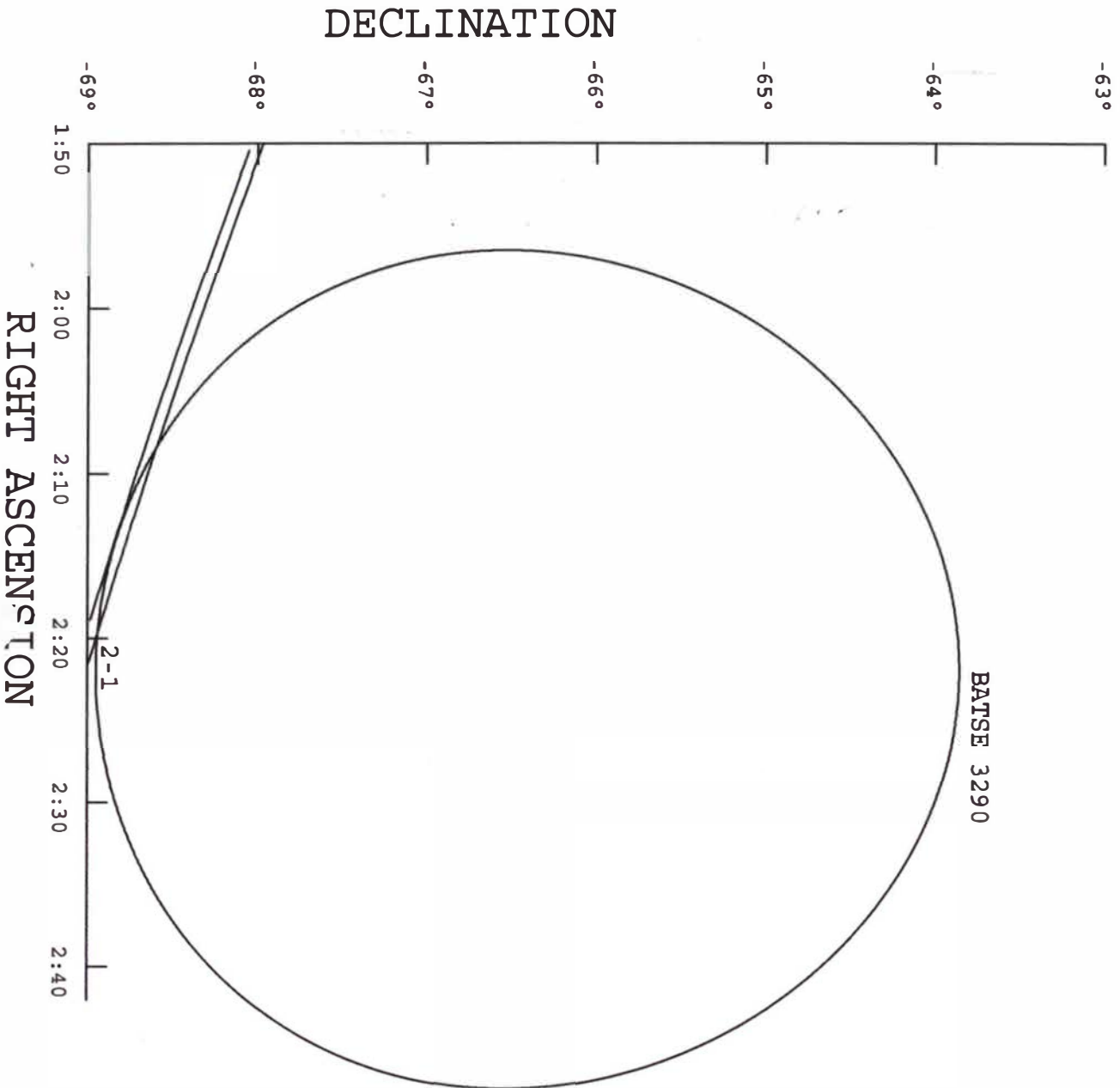
3. PVO Data

- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ 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 NOV 21, 1994 17:10

6 / 2/98



ULYSSES

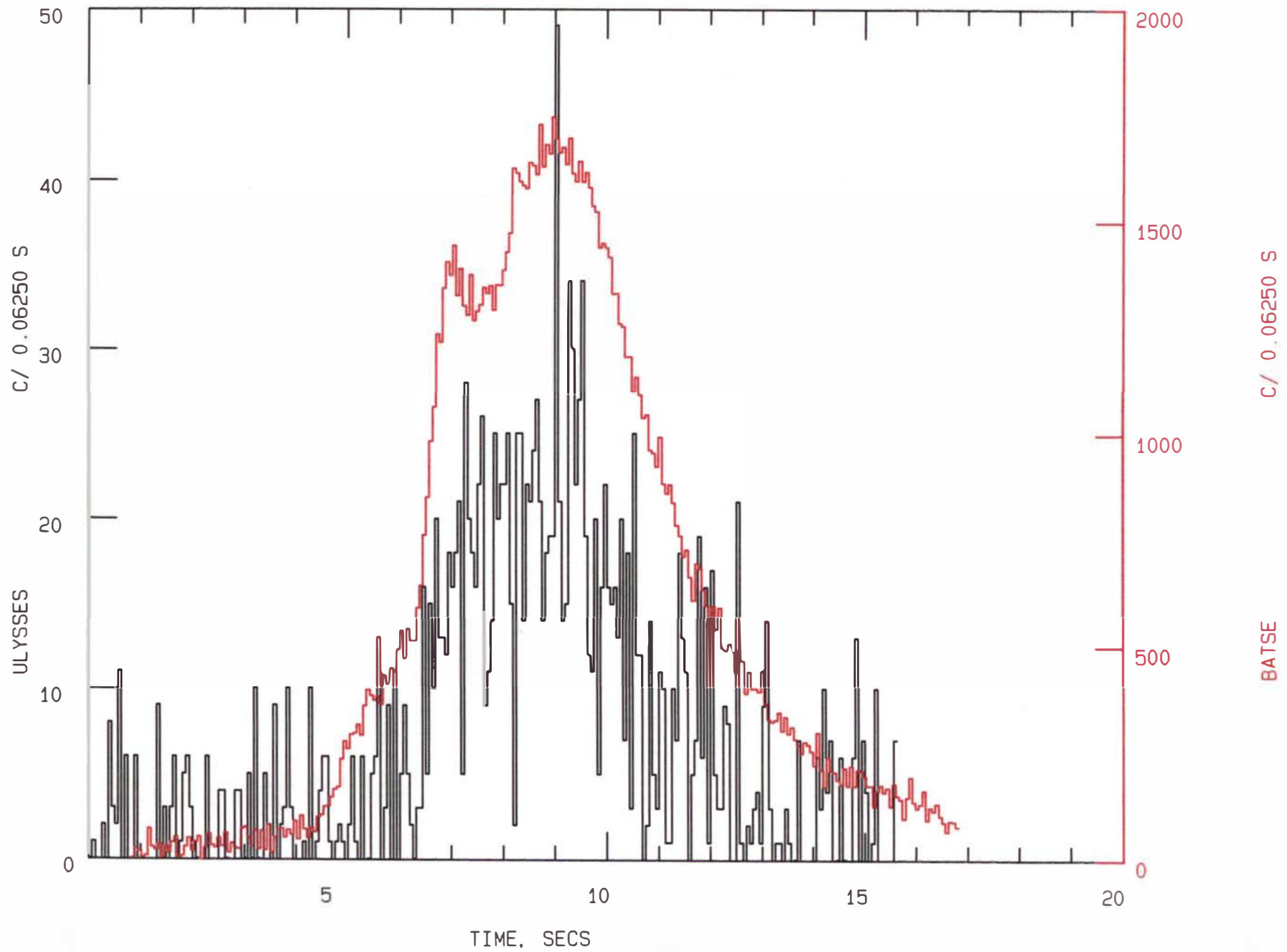
-BATSE

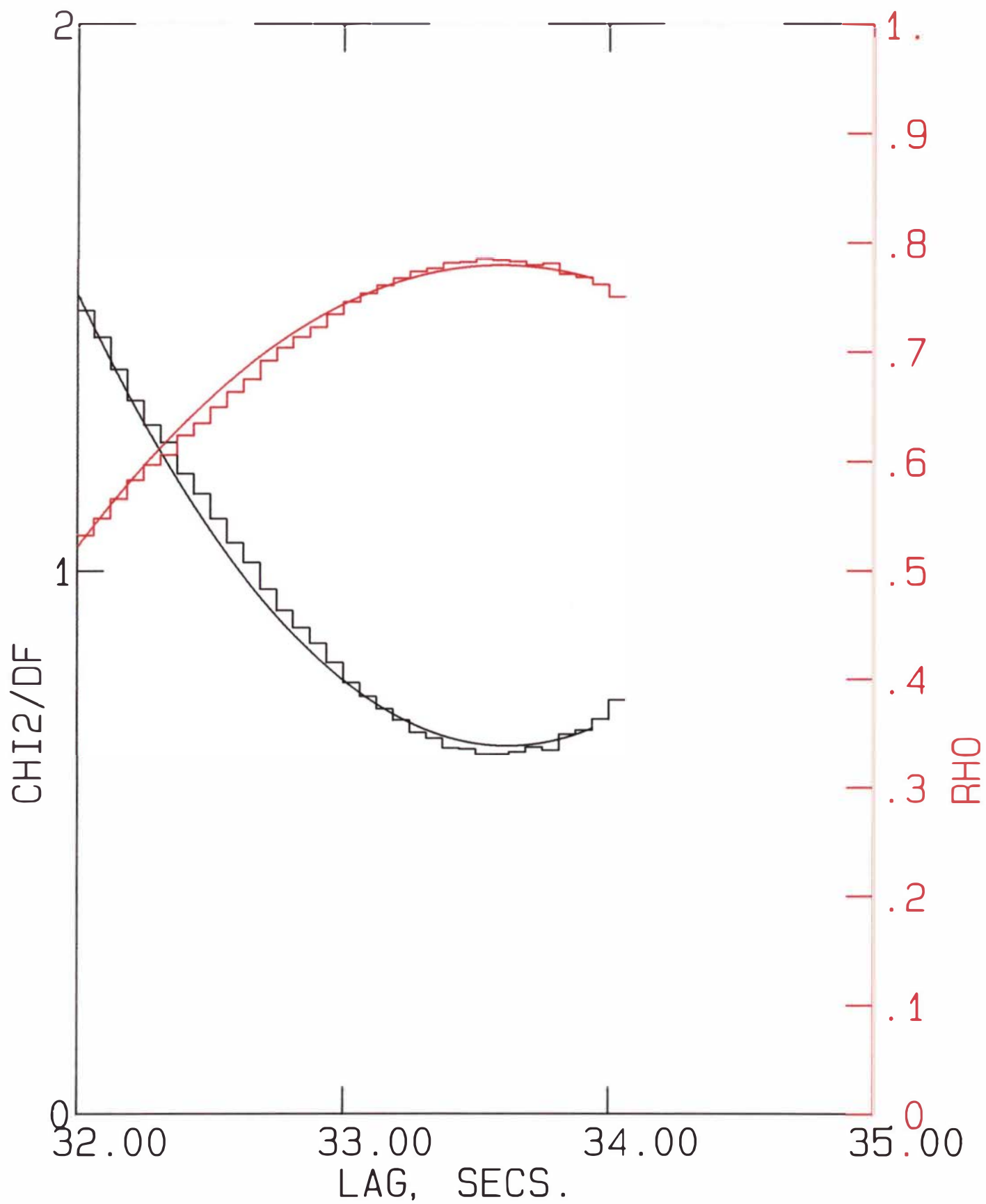
CORRELATION

21/11/94

61838.971

6/ 2/98





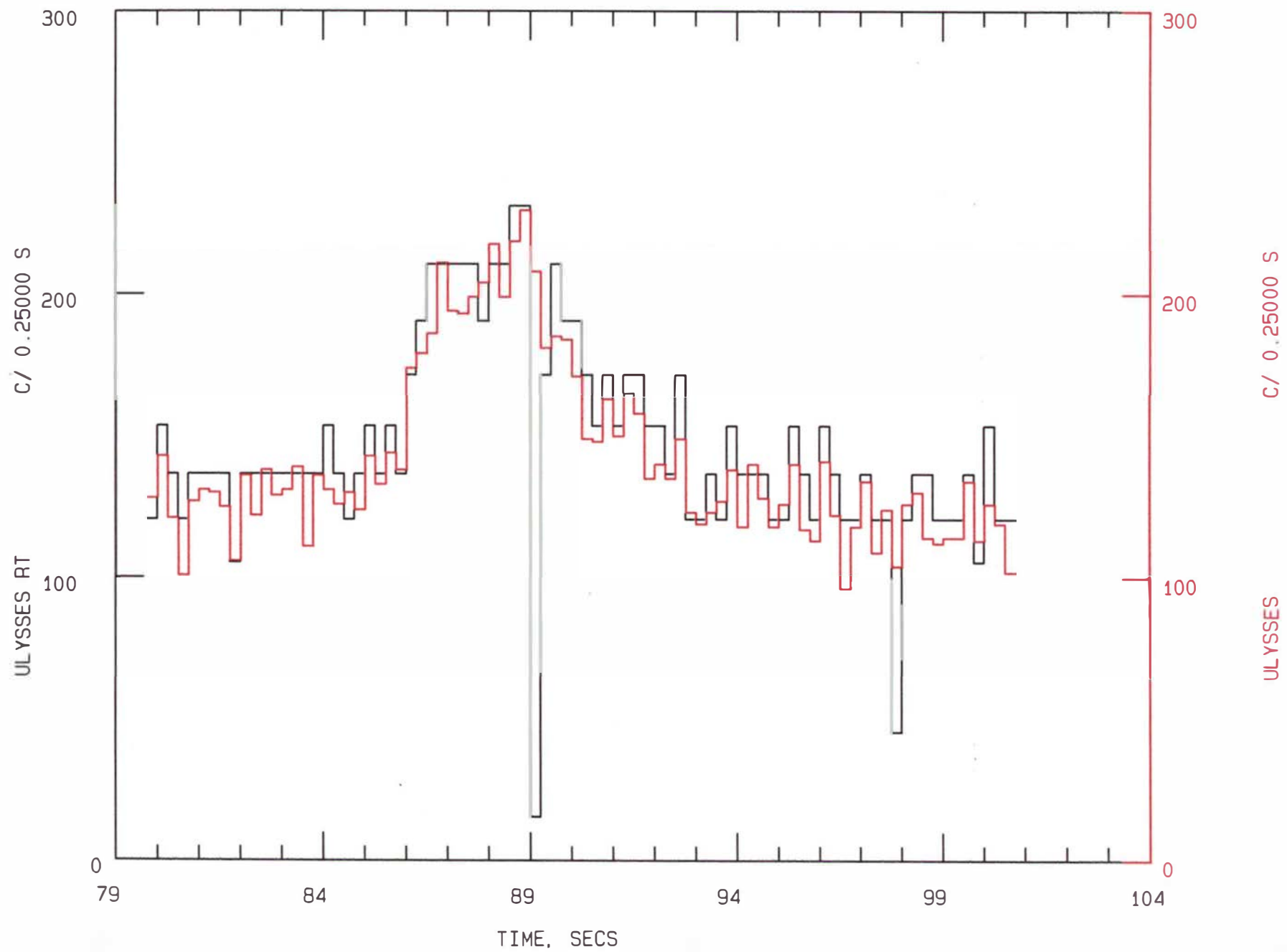
ULYSSES RT-ULYSSES

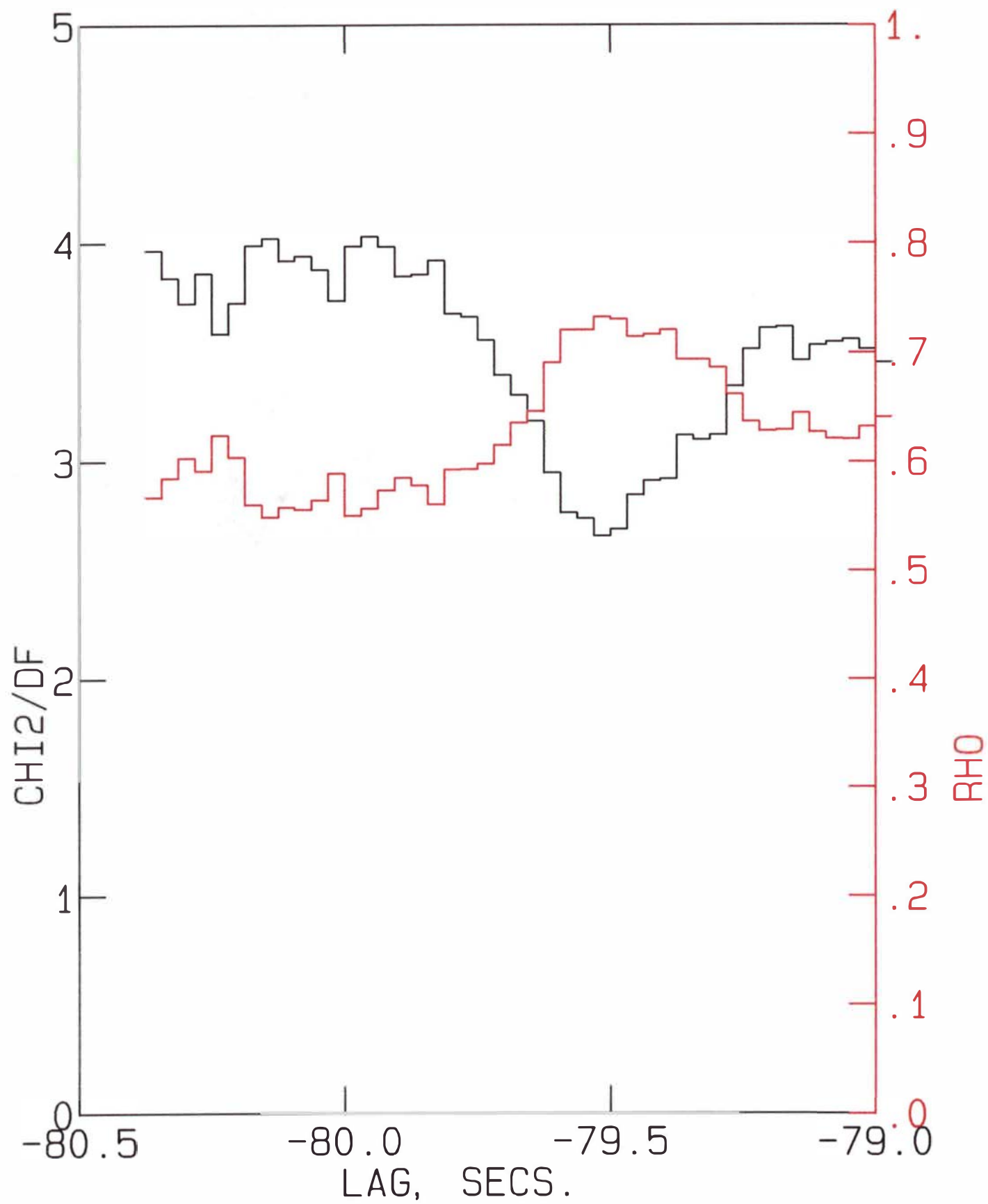
CORRELATION

21/11/94

61751.969

6/ 2/98

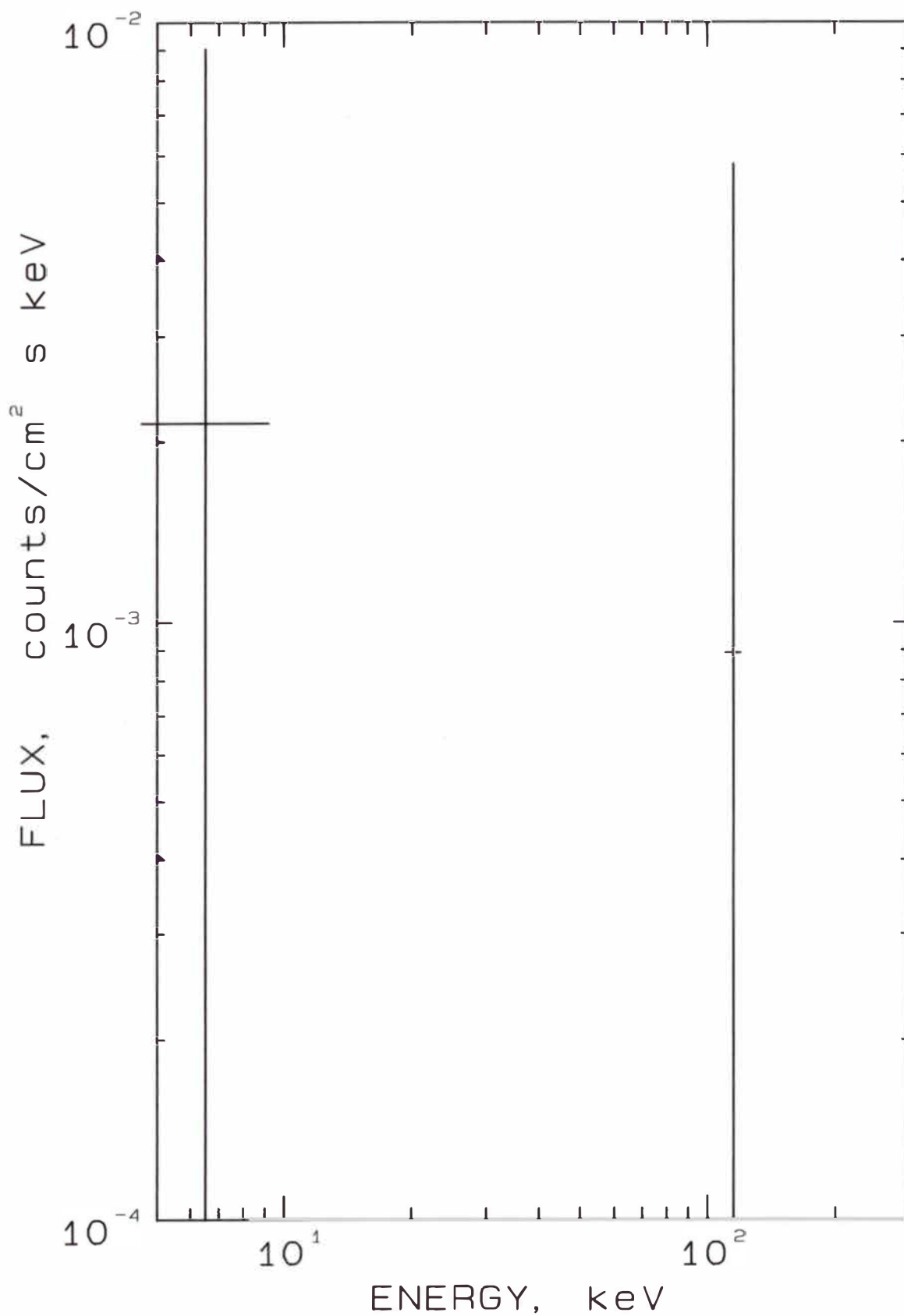




ULYSSES 21/11/94 61839.001

6/ 2/98

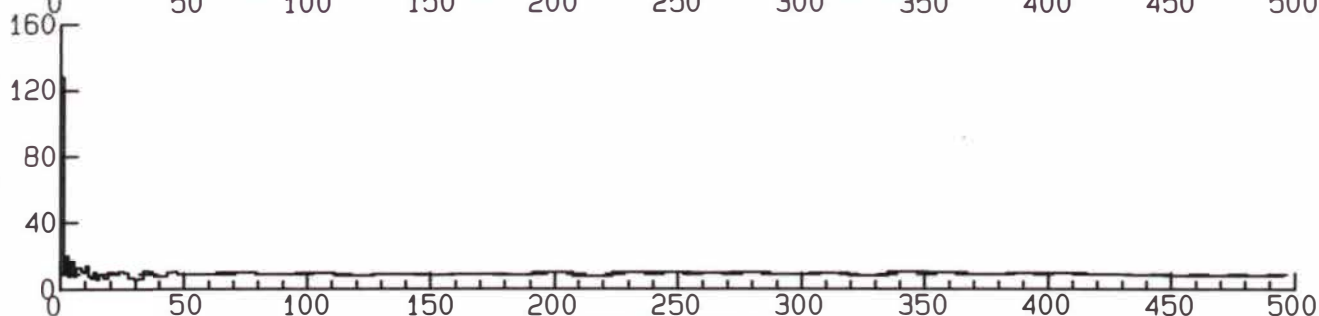
SPECTRUM INTEGRATED OVER 21.3 SECONDS, INTERVALS 2 TO 20



ULYSSES 21/11/94 61839.001 BURST SPECTRAL COUNT RATES

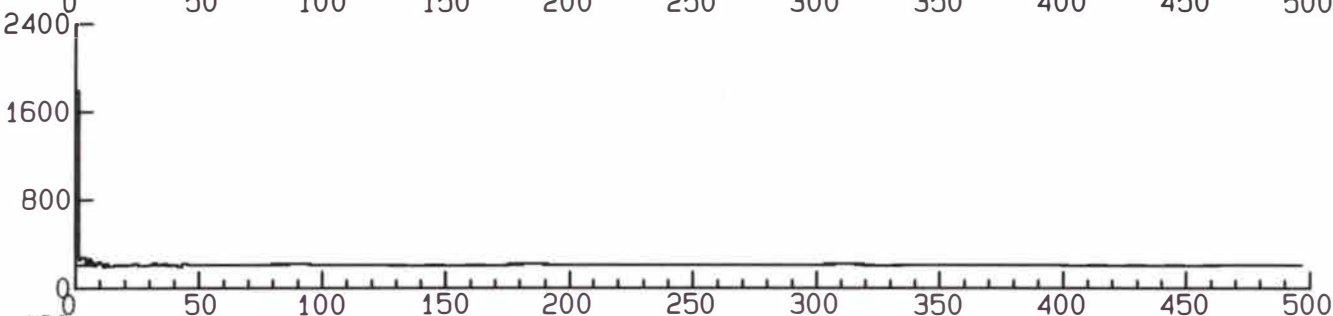
4- 18 keV

COUNTS/S



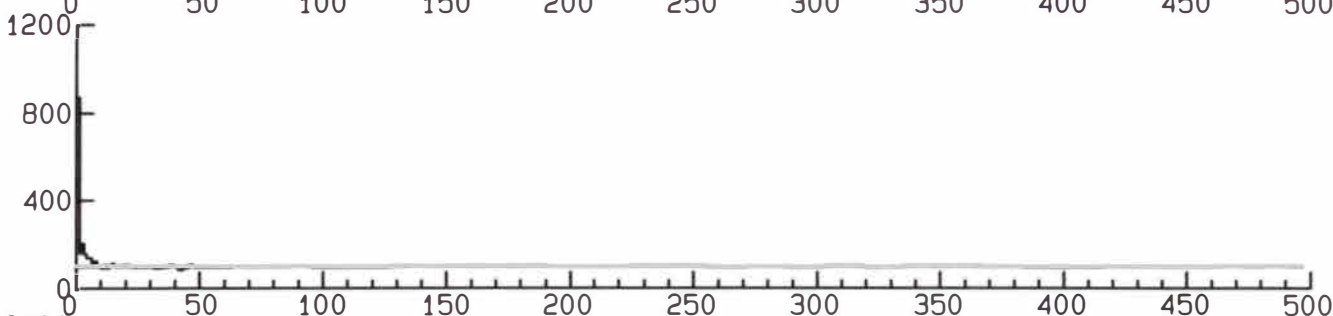
18- 46 keV

COUNTS/S



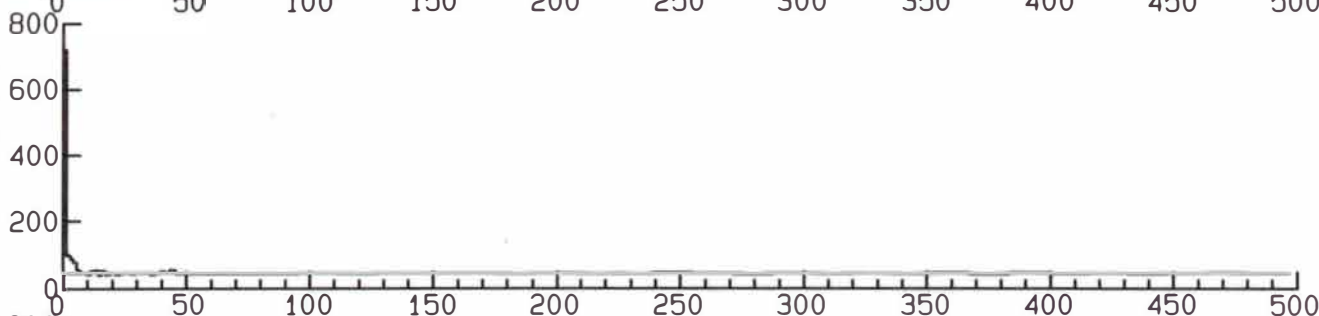
46- 73 keV

COUNTS/S



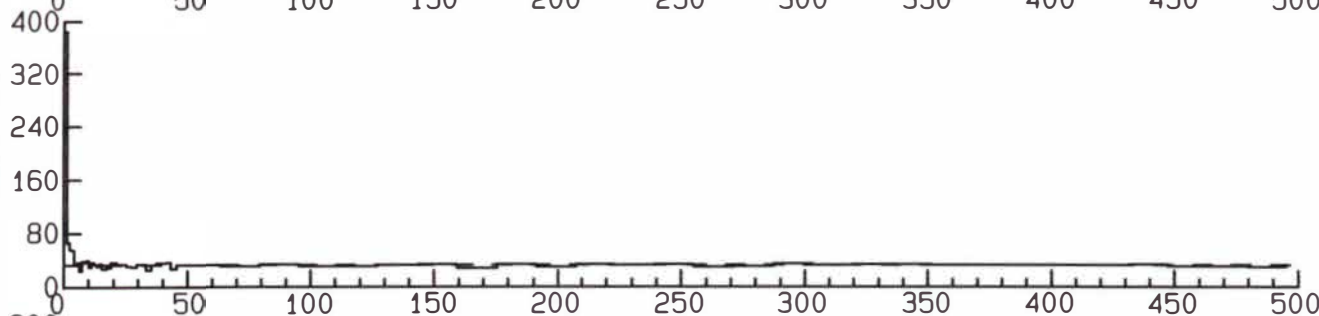
73-101 keV

COUNTS/S



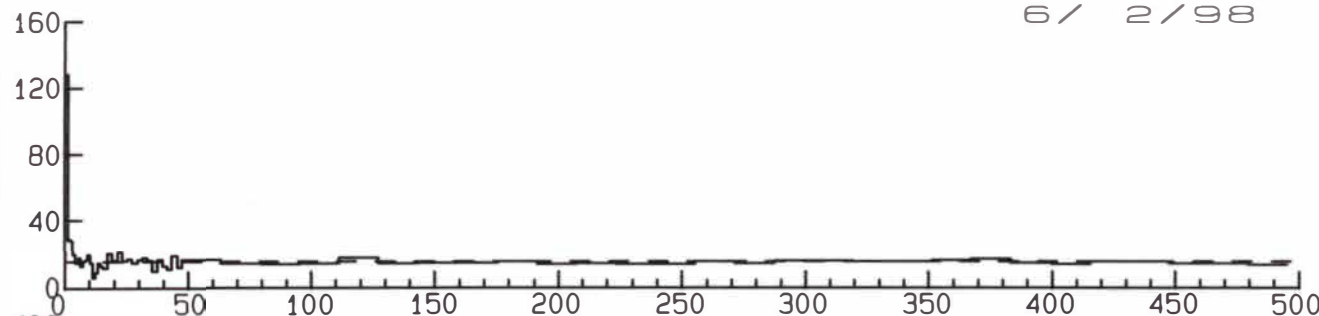
101-128 keV

COUNTS/S



128-147 keV

COUNTS/S



6 / 2 / 98

ULYSSES

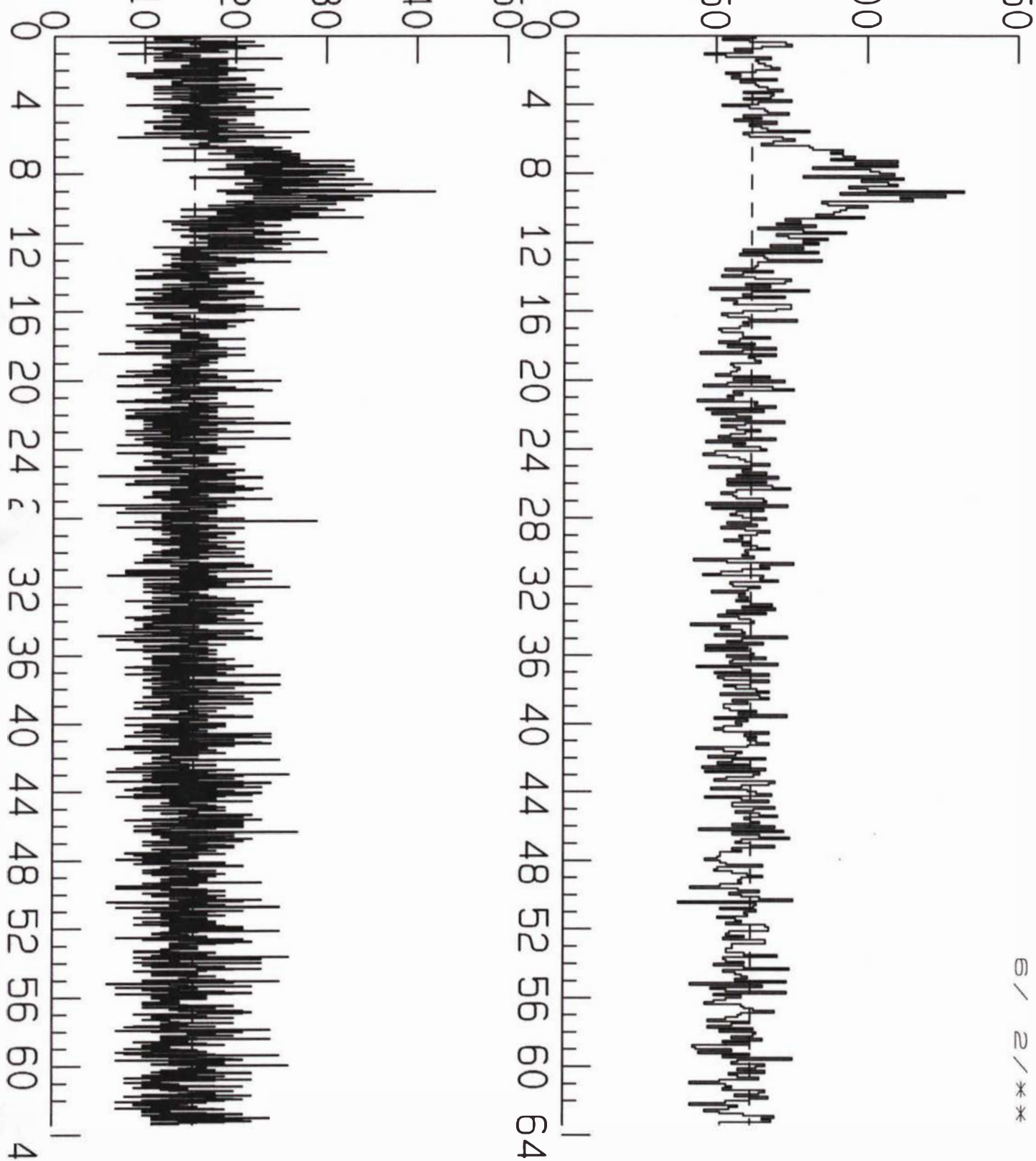
21/11/94

Ttrig=61838.971

22- 147 keV

COUNTS/0.031 S

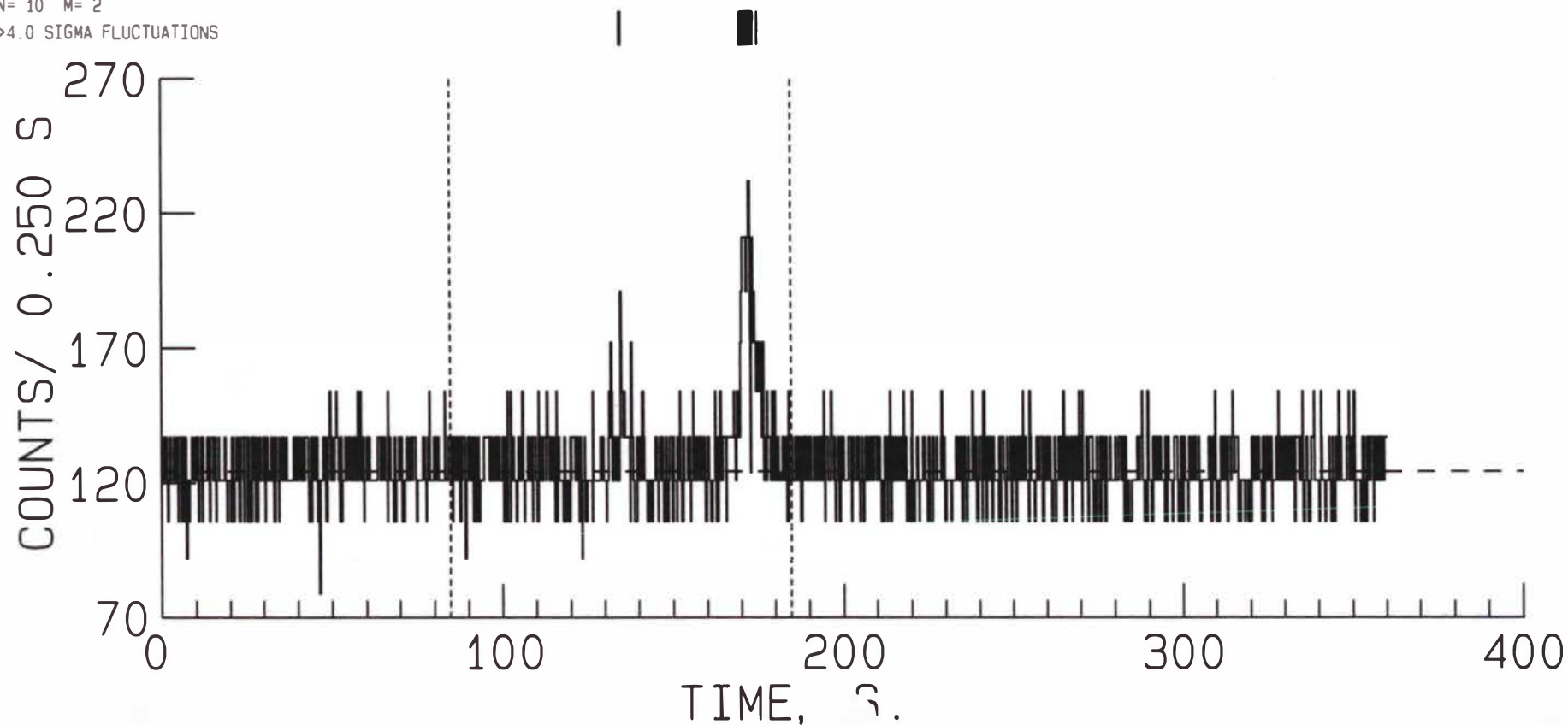
COUNTS/0.125 S



ULYSSES RT
21/11/94 61668.246 s
22- 147 keV

6 / 2 / 98

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From cline@tgrs.gsfc.nasa.gov Wed Feb 15 06:04 PST 1995
 Return-Path: <cline@tgrs.gsfc.nasa.gov>
 Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
 Wed, 15 Feb 1995 9:07:45 -0500 (EST)
 Date: Wed, 15 Feb 1995 06:04:37 +0800
 Message-Id: <9502151404.AA10549@sunspot.ssl.berkeley.edu>
 e6.ssl.berkeley.edu
 From: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Data, again
 X-Lines: 36
 Status: RO
 Mime-Version: 1.0
 To: KHURLEY@space6.ssl.berkeley.edu
 From: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Data, again
 X-Lines: 36
 Status: RO
 text/plain; charset="us-ascii"
 Content-Length: 1284
 X-Sun-Content-Length: 1284

Kevin:

The first 5 events, so far, exhibit all 4 results: Ulysses, BATSE, Konus and BACODINE.

so I am working on them first. However, I would add more, if you could send me the

BATSE 3352 (and 3412, with the Feb. 11 Ulysses data - is it a solar flare ?) - TLC

Date	Tzero (UT)	Konus sensor	G1	Max c/s G2	G3	N(1)/N(2) =G2	Duration t<Tz t>Tz	T#	BATSE T#	Uly d* d*	TGRS T#	BACODINE RA Dec
941119	19 31	09.175	S2	370	703	160	0.23	7 20	4	3287*	BG* #13	188 22
941121	17 25	00.945	S1	1652	1656	300	21.	3 50	6	3290*	T* #15	004 -63
941127	14 30	25.680	S2	200	400	95	0.17	8 7	10	3303*	U*	070 50
941228	07 39	45.915	S1	300	637	519	4.4	5 90	28	3330*	BG* no d	339 -52
950104	07 18	39.613	S2	258	550	219	.0.75	2.8 20	31	3345*	BG* #250	310 -11
950111	12 18	49.196	S1	225	435	164	1.85	26 50	34	3352	BG* BG	024 -14
950211	02 24	57.749	S2	2750	11630	6560	<0.06	0.03 0.14	48	3412		

U....(08697 sec)

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

From root Thu Jan 26 12:09 1995
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA09916; Thu, 26 Jan 95 12:09:38
 Received: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA01181; Thu, 26 Jan 1995 12:08:59 +0800
 Date: Thu, 26 Jan 1995 12:08:59 +0800
 Message-Id: <9501262008.AA01181@sunspot.ssl.berkeley.edu>
 Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
 Thu, 26 Jan 1995 15:11:15 -0500 (EST)
 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: KONUS/BATSE/ULYSSES EVENT LIST TO 95 JAN 17
 Cc: Mazets@mz.pti.spb.su
 Content-Length: 1824
 Status: R

KEVIN:

BASED ON WHAT I HAVE FROM SERGEI GOLENETSKII AND FROM YOU, THIS IS THE
 CURRENT LIST OF ALL KONUS-ULYSSES EVENTS UP TO 95 JAN 17 WITH ALL BUT TWO
 ALSO BATSE.

x means sent with planning

✓ means sent by TLC

Date	KONUS-Tzero Sensor	Max c/s	N(1)/N(2)	Duration	Event	BATSE	ULYSSES	
(UT)		G1 G2 G3	(G2)	t<Tz t>Tz	K-no T-no	EVENT		
941119 19 31 09.175	S2	370 703 160	0.23	7 20	4 3287	ULY	✓	✓
941121 17 25 00.945	S1	1652 1656 300	21	3 50	6 3290	ULY	✓	✓
941125 22 04 30.156	S2	115 308 109	0.95	1.5 5	7 3295	ULY	✓	✓
941126 12 22 37.952	S1	860 1430 330	4.2	40 45	8 3298	ULY	✓	✓
941126 19 56 49.732	S1	290 390 211	6.7	20 26	9 3301	ULY	✓	✓
941127 14 30 25.680	S2	200 400 95	0.17	8 7	10 3303	ULY	✓	✓
941210 03 10 52.523	S2	900 2350 1385	0.12	1 15	14 ----	ULY	✓	✓
941228 07 39 45.915	S1	300 637 519	4.4	5 90	28 3330	ULY	✓	✓
941229 22 51 08.781	S2	396 381 140	0.09	7 25	29 3334	ULY	✓	✓
950104 07 18 39.613	S2	258 550 219	0.75	2.8 20	31 3345	ULY	✓	✓
950111 04 49 12.241	S1	586 620 100	>19	92 24	33 3351	ULY	✓	✓
950114 04 03 01	S2	23 76	0.5	70	BG ----	ULY	✓	✓
950117 01 36 00	S2	56 82 42	0.22	108	BG 3360	ULY	✓	✓

Energy intervals G1, G2, G3: 14 - 50, 50 - 225 and 225 - 900 keV.

Since 12th December: 12.5 - 43, 43 - 190 and 190 - 760 keV.

N(1)/N(2) is ratio of sensor 1 to sensor 2 counts in G2.

WHEN YOU HAVE A CHANCE, PLEASE SEND THESE TIME HISTORIES FIRST. THANKS. TLC

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

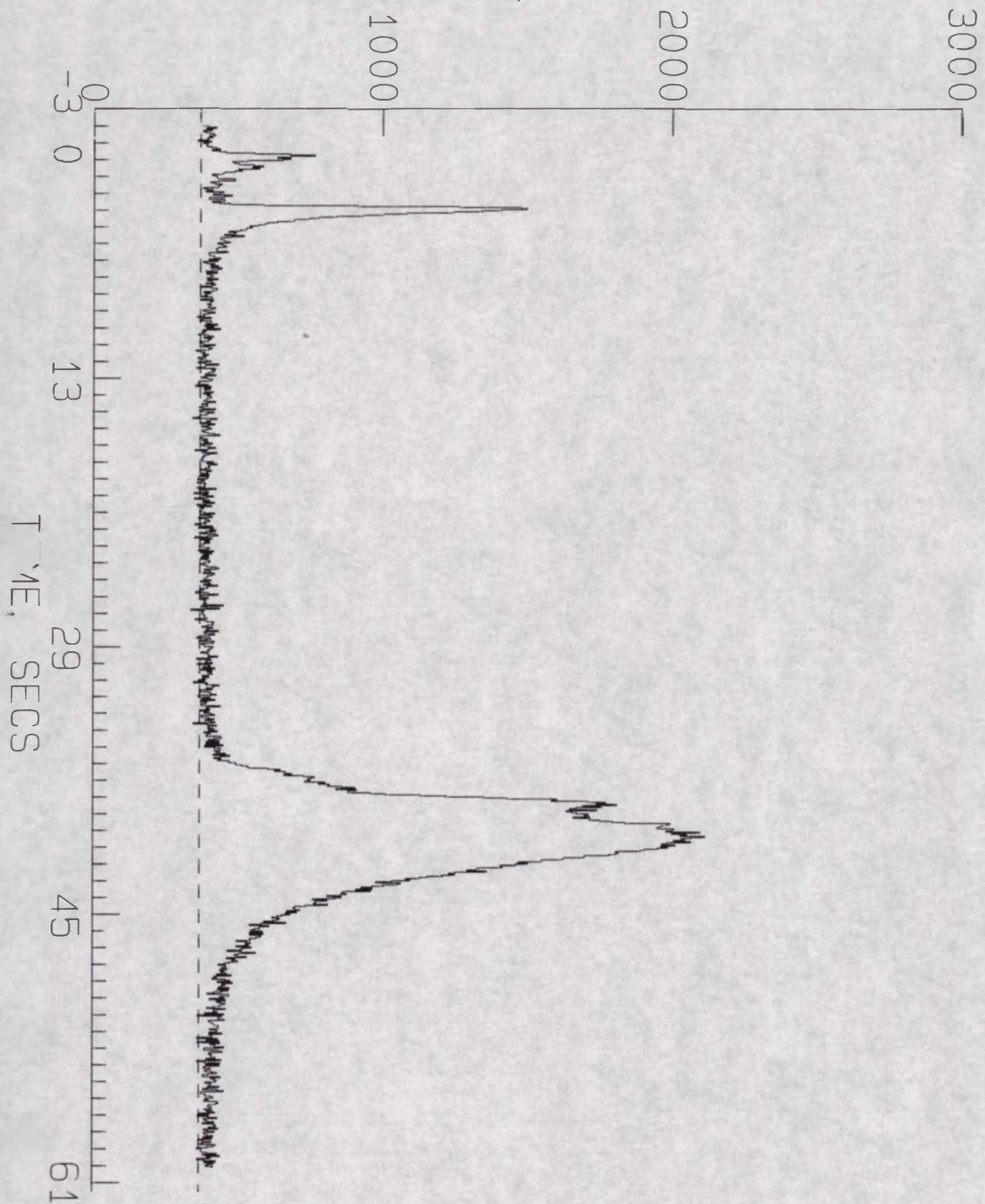
BATSE

21/11/94

62697.970

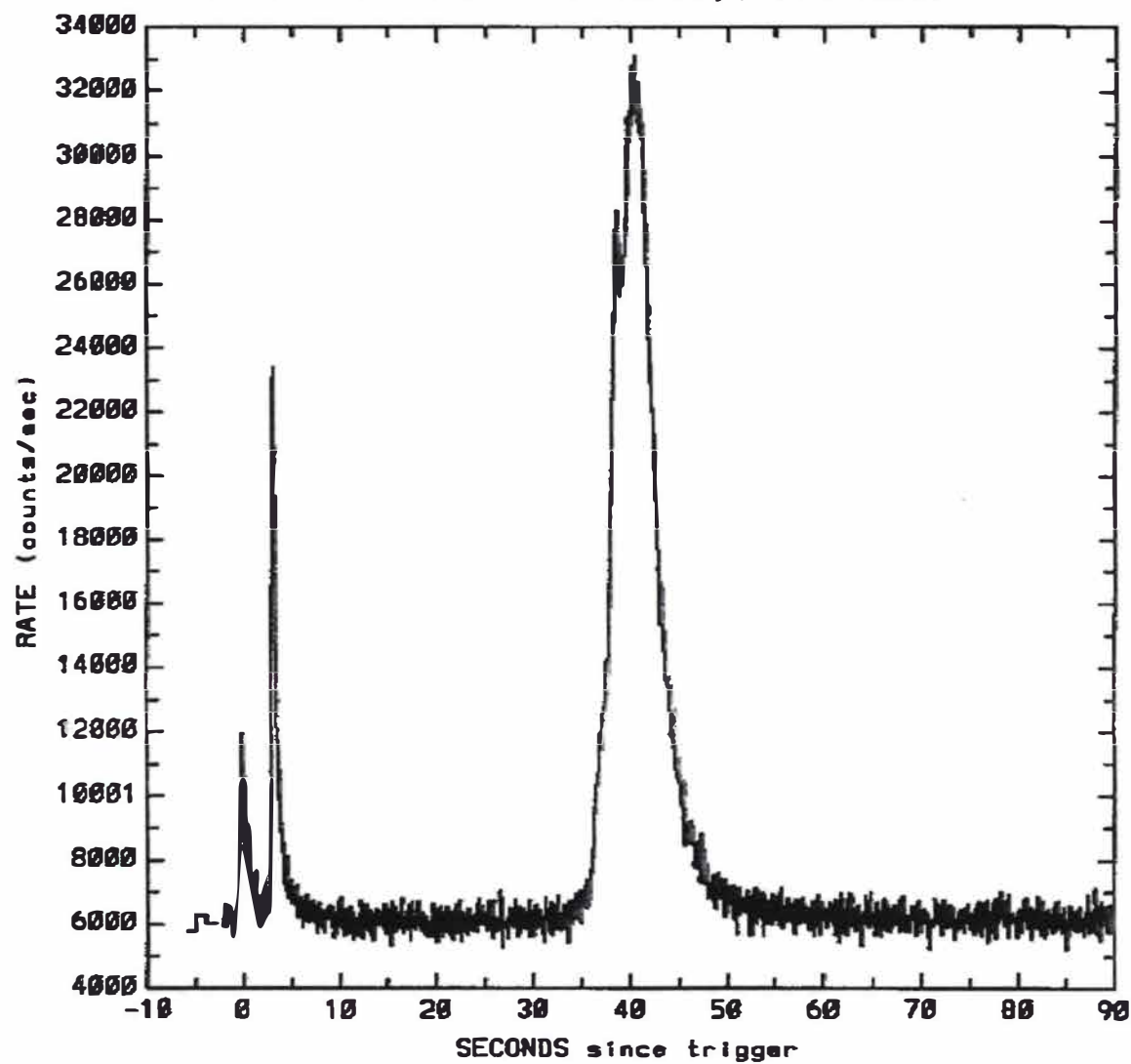
25- 100 keV

COUNTS/ .064 S



3 / 12 / 94

DISCSC Data for K. Hurley, No. 3290



28-NOV-1994 12:45:02

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger # : 3290

Trigger Time:
9677 / 62697.978Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum [Integ. Time:
0.064 seconds]Datafile [7..0]:
---4---8Discriminators:
[1, 2]Quality Mask:
BDTSP1

From root Mon Nov 21 11:05 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA03285; Mon, 21 Nov 94 11:05:55
Received: from xtelab.gsfc.nasa.gov by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA03587; Mon, 21 Nov 1994 11:04:34 +0800
Received: (from scott@localhost) by xtelab.gsfc.nasa.gov (LHEA9404/940426.s1) id
Date: Mon, 21 Nov 1994 14:02:37 -0500
From: Scott Barthelmy <scott@xtelab.gsfc.nasa.gov>
Message-Id: <199411211902.OAA16741@xtelab.gsfc.nasa.gov>
To: khurley@space6.ssl.berkeley.edu
Subject: fax of trigger 3290
Content-Length: 947
Status: R

Kevin,
I am just now fax-ing you the usual light curves of a bright burst.
It is in the Comptel & Egret FOV. I do not know what they have seen
yet because they got started about an hour after the burst because
it had a small pre-pulse which is what bacodine triggered off of and
it wasn't bright enough to send to them automatically (but I did send
it to them manually after I looked at the light curves).

Konus and Tgrs also saw it but it is unknown what the specifics are.

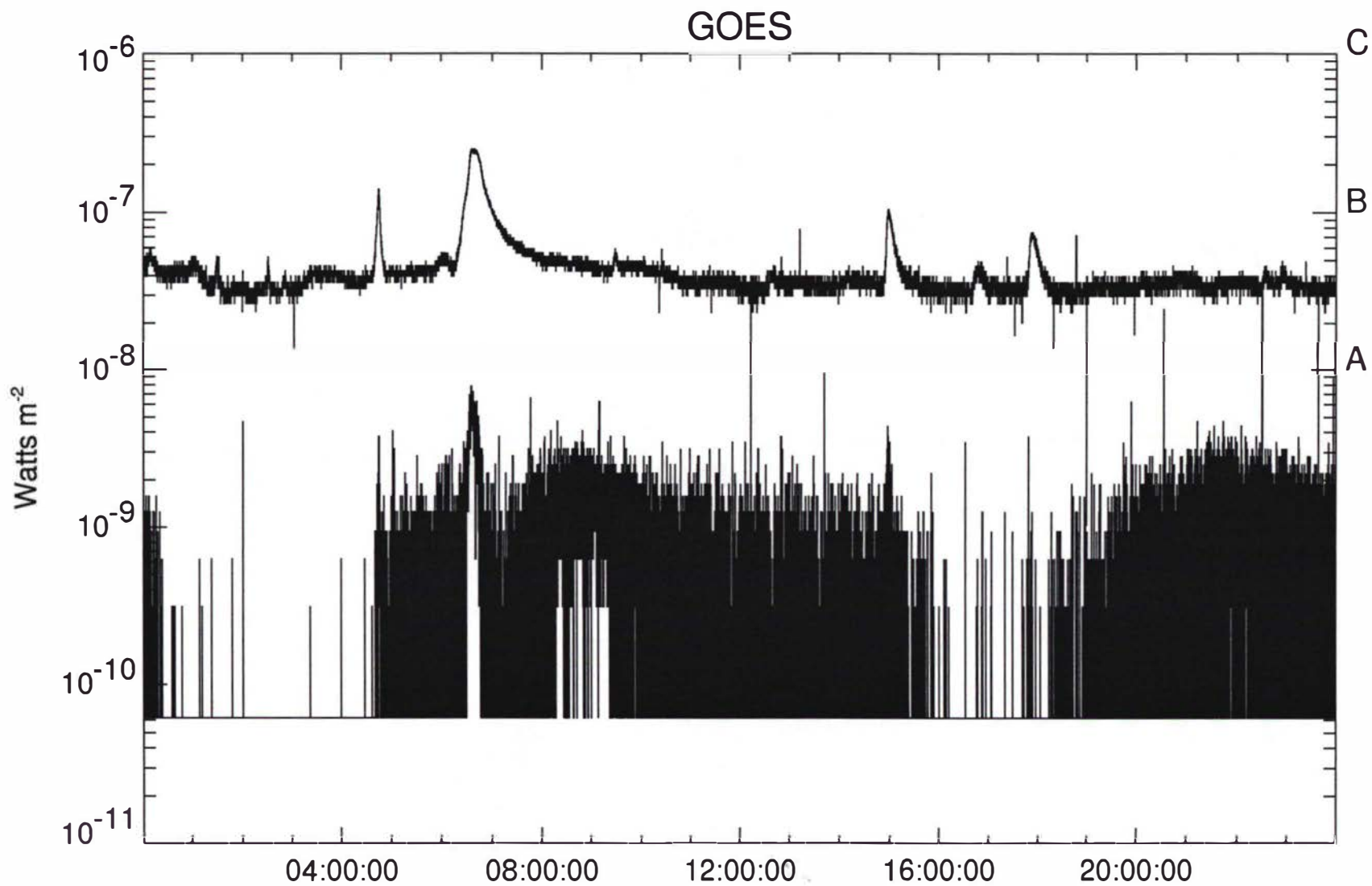
Unfortunately this is a outhern hemisphere target (ra=9.6 dec=-66 j2000 baco)
so I guess the utility of an IPN on top of a maybe comptel is somewaht
less than a normal northern hemisphere burst. I guess most of my
excitement and enthusiasm about this one is a reuslt of having all the
Konus & tgrs people around asking the question: "Any bursts yet?".

scott

Tom wanted to get Jake Trombka involve in the conference call but he
was not in today. So I guess later.

From root Mon Nov 21 11:45 1994
Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
id AA03334; Mon, 21 Nov 94 11:44:56
Received: from xtelab.gsfc.nasa.gov by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA04135; Mon, 21 Nov 1994 11:43:34 +0800
Received: (from scott@localhost) by xtelab.gsfc.nasa.gov (LHEA9404/940426.s1) id
Date: Mon, 21 Nov 1994 14:41:39 -0500
From: Scott Barthelmy <scott@xtelab.gsfc.nasa.gov>
Message-Id: <199411211941.OAA16795@xtelab.gsfc.nasa.gov>
To: khurley@space6.ssl.berkeley.edu
Subject: Comptel did NOT see it
Content-Length: 164
Status: R

Kevin,
Marc Kippen says "COMPTTEL did not detect any significant emission from
this burst." So I suspect that takes the interest off any IPN determination.
--scott



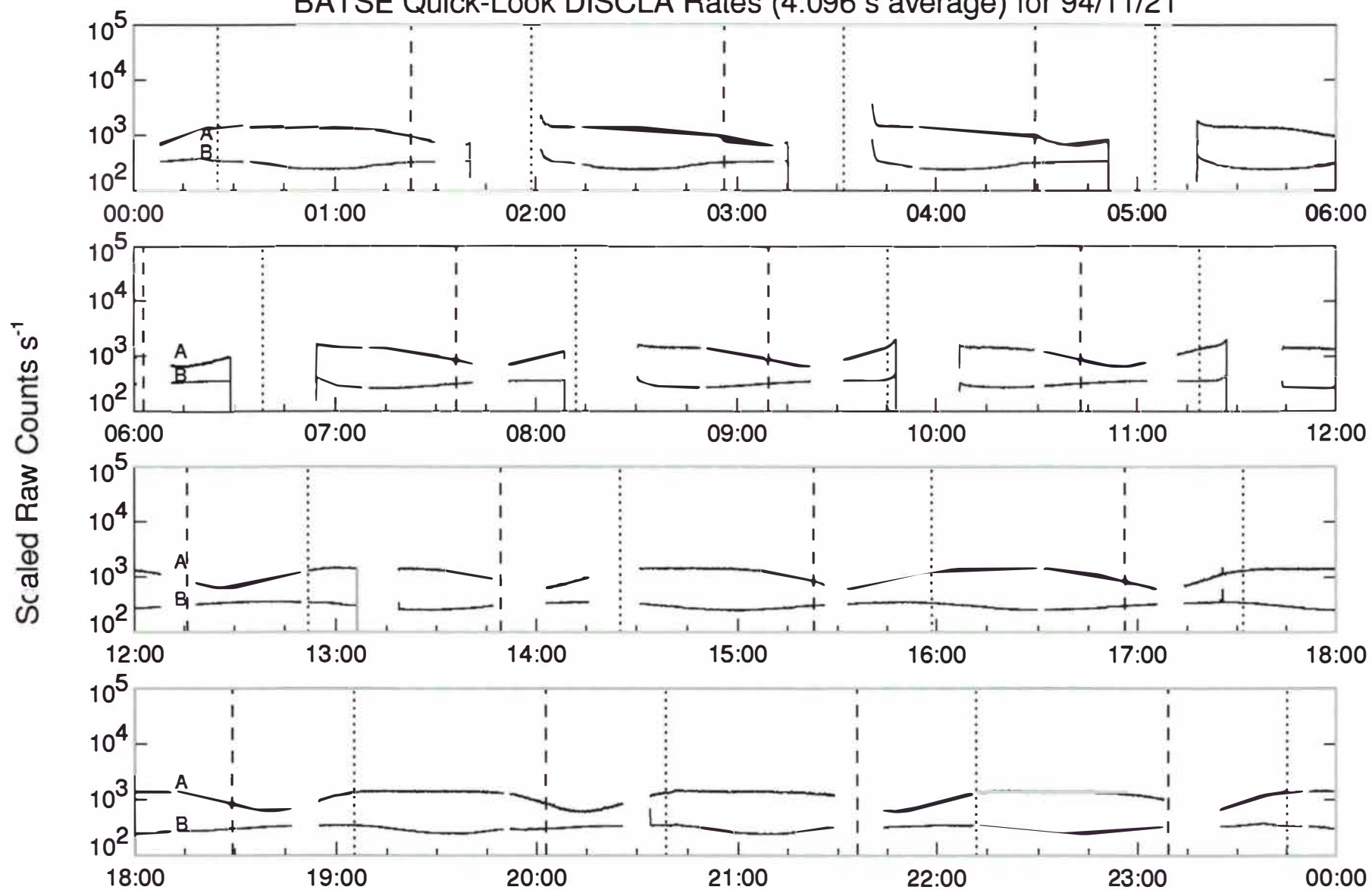
Data Start: 94/11/21, 0000:01

Plot created: 94/12/01, 2044

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 94/11/21

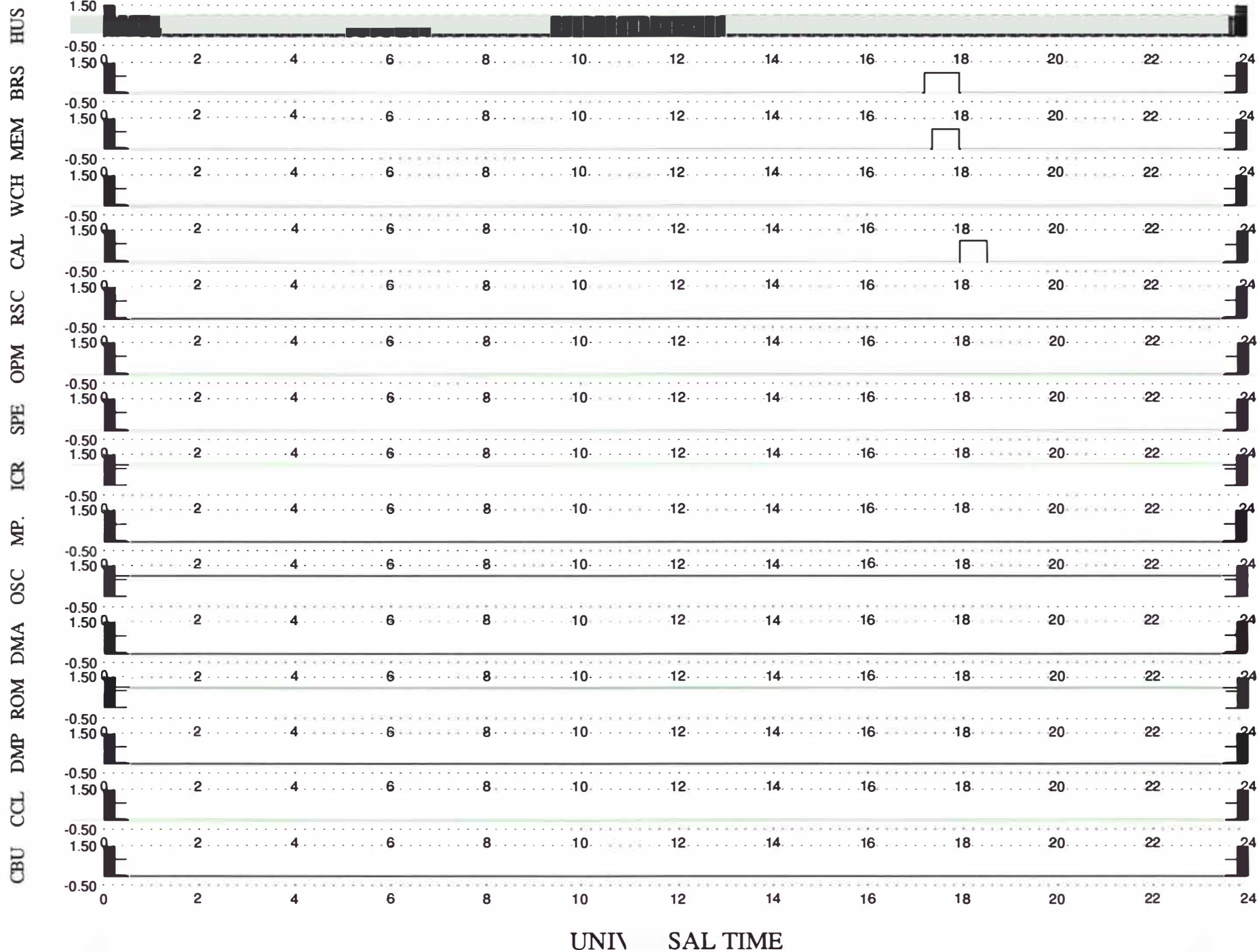


Current Time: 94/12/01, 2036 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

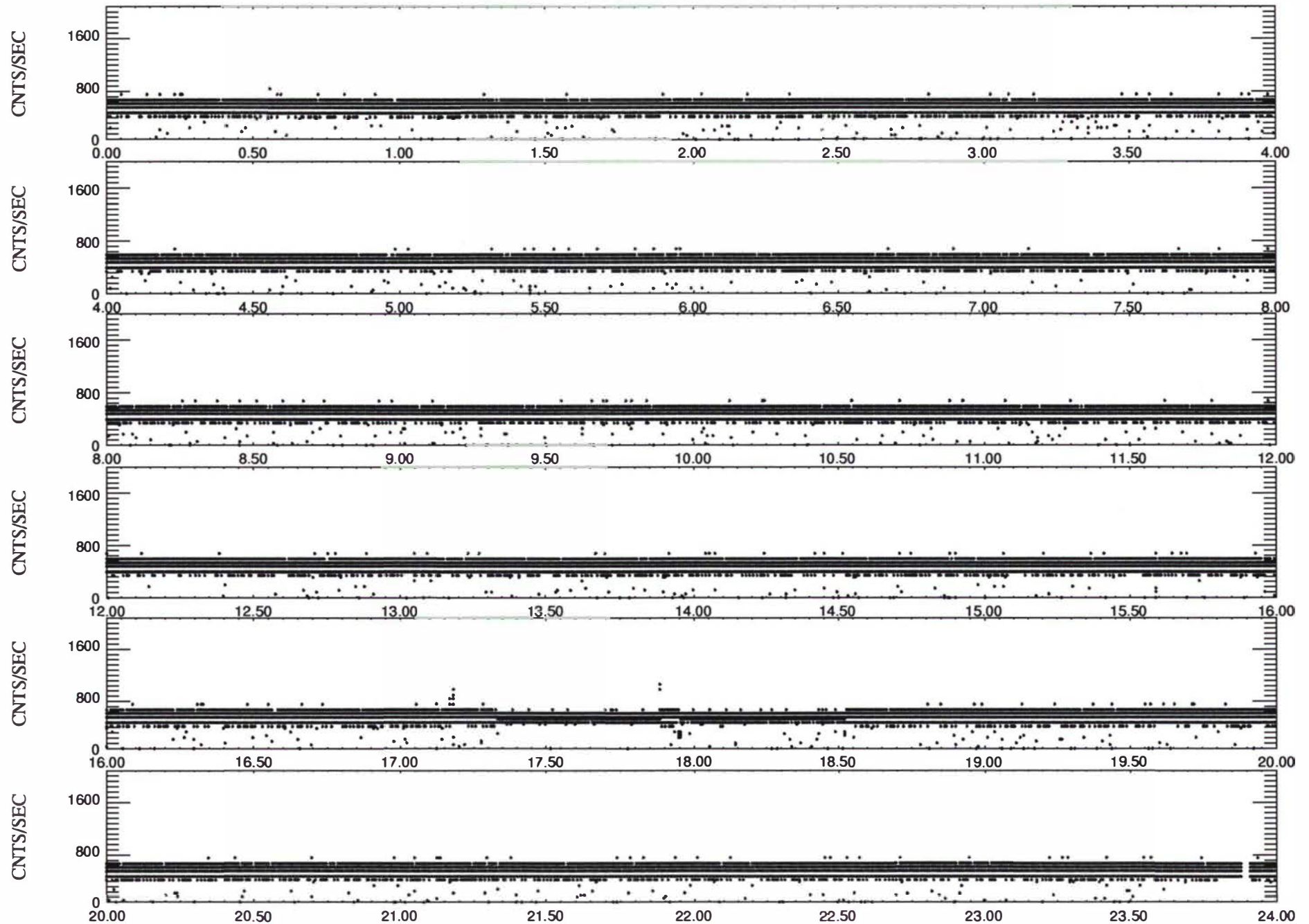
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 5

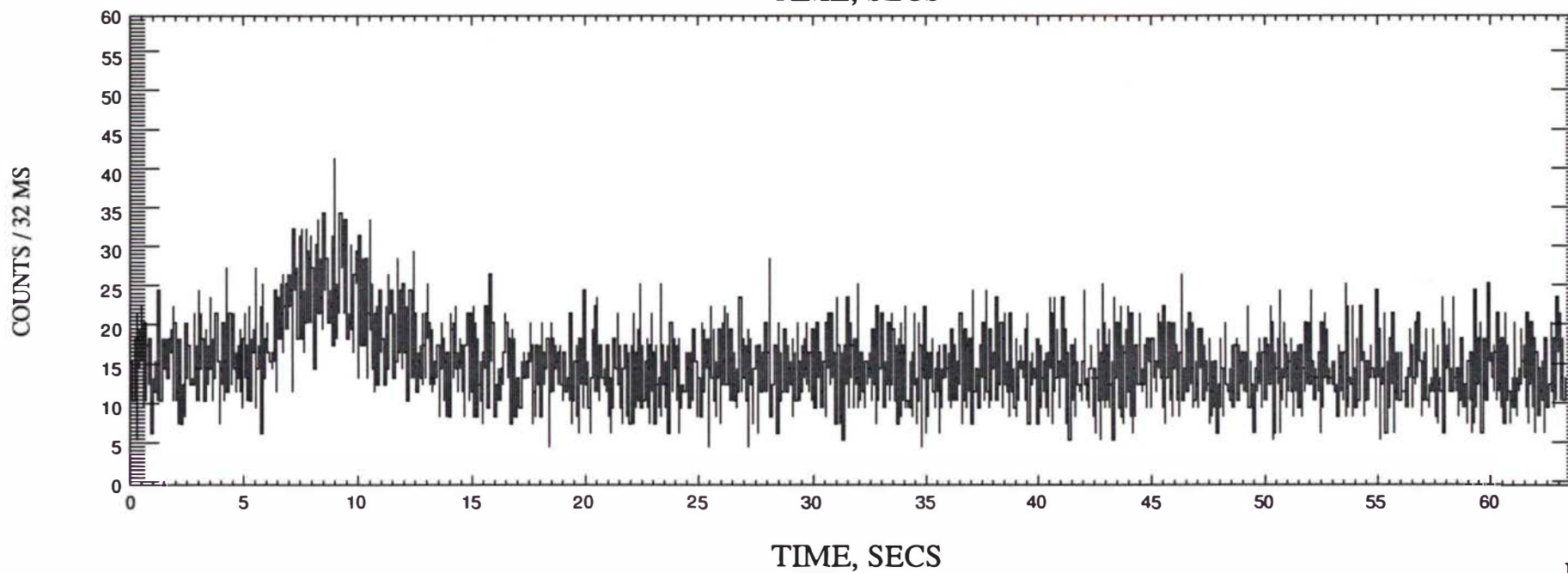
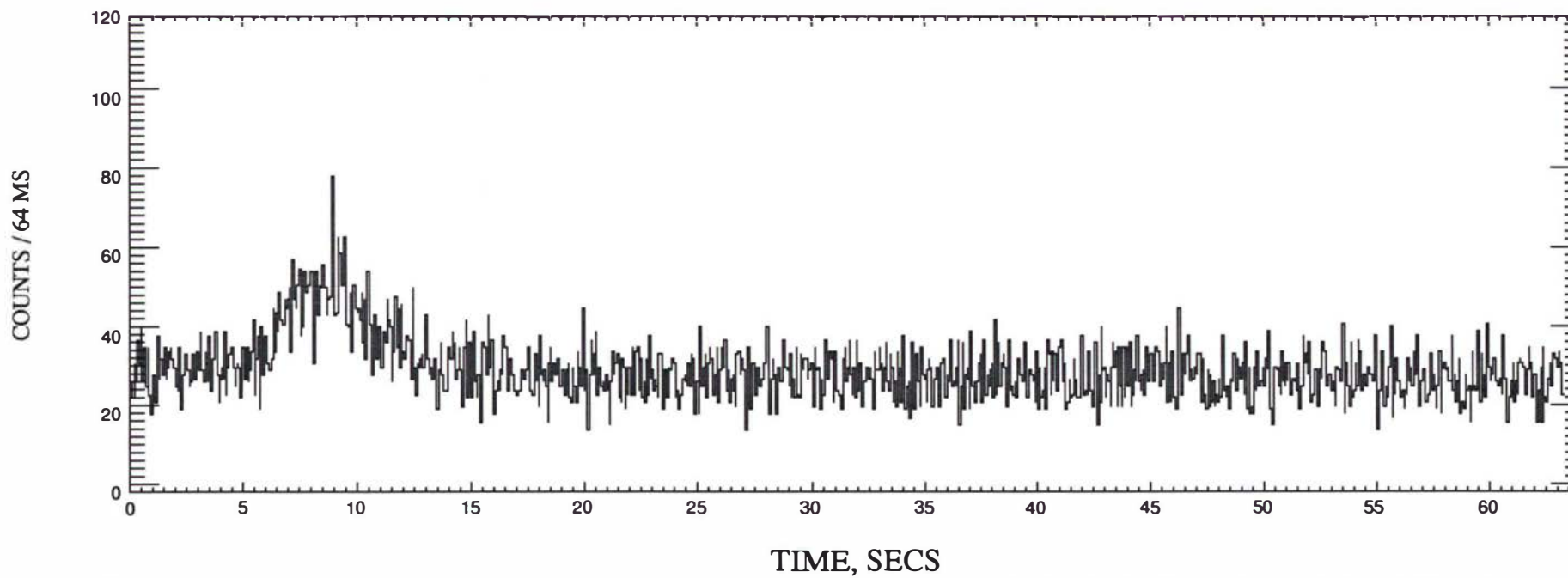


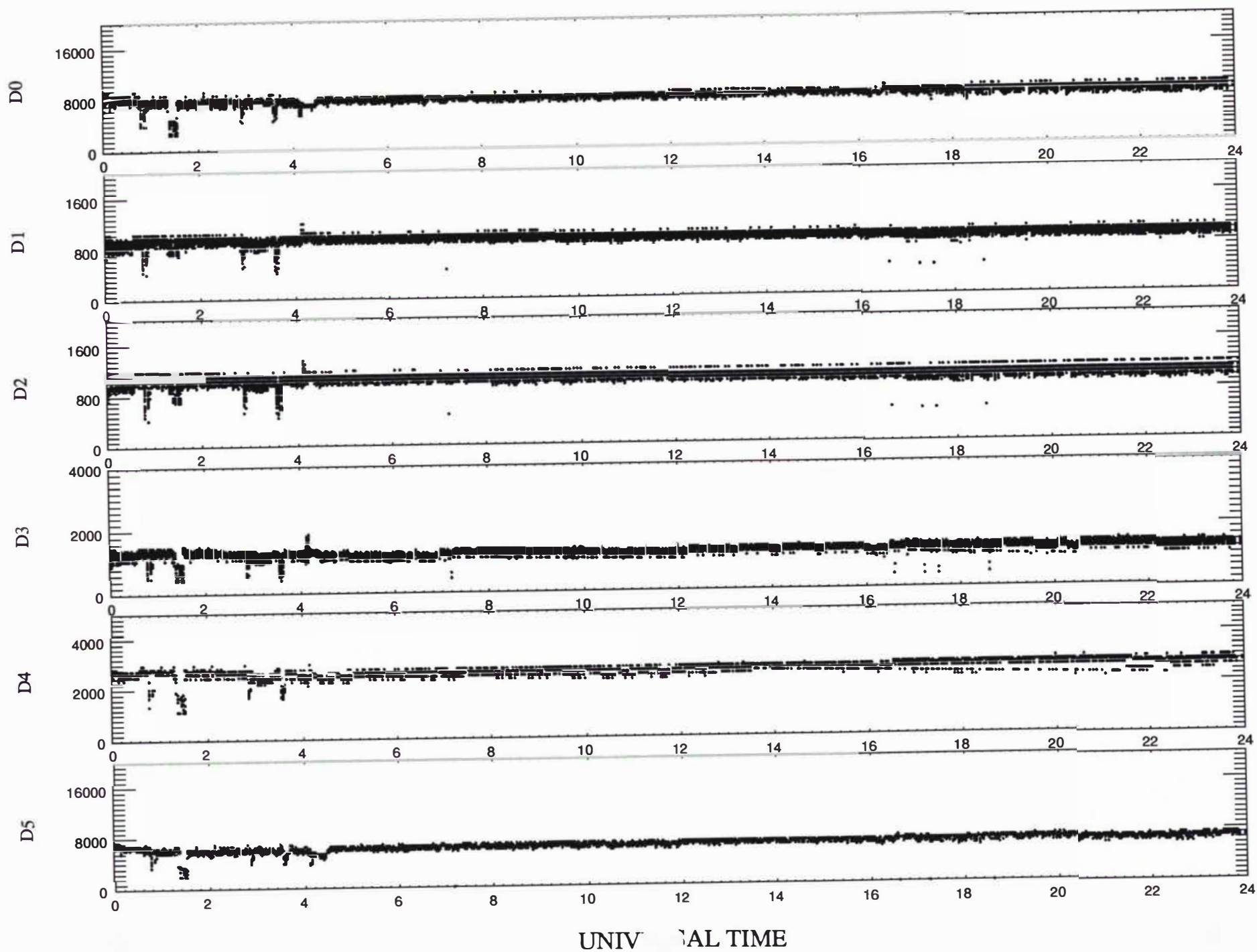
CALIBRATION DATA INCLUDED



UNIT SAL TIME

Burst Counter 5 at UT=17.177500258552 h=61839.001 s 17:10:39.001





From PREECE@ssl.msfc.nasa.gov Wed Nov 23 14:14 PST 1994
Date: Wed, 23 Nov 1994 16:14:37 -0600 (CST)
From: PREECE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3291

BATSEARCH PROGRAM

BATSE BURST # 3291
EVENT OF 1994 NOV 22 DAY OF YEAR=326
EVENT CROSSING TIME AT BATSE : 47616. S. OR 13:13:36.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 252.000 -6.000
BATSE PEAK COUNTING RATE: 2300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 22/11/ 94 IS:
RA= 257.064 DEC= -74.324 DIST= 2.170 AU
BATSE-ULYSSES DISTANCE = 324589853. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=111.61 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -398.78 SECS.
CROSSING TIME AT ULYSSES IS 47217. S. OR 13:06:57 +/- 218.71 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 22/11/ 94 IS:
RA= 146.610 DEC= 15.662 DIST= 1.170 AU
MARS-BATSE DISTANCE = 175024400. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 73.60 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 164.84 SECS.
CROSSING TIME AT MARS IS 47781. S. OR 13:16:20 +/- 99.74 SECONDS

NO
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03291

TIME: TJD=9678 SECONDS=47616

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=097.5 AZIMUTH=358.3 ERROR=007.0 DEGREES

COMMENTS:

SHORT, WEAK GRB. DURATION .3S. NOT VISIBLE ABOVE 300 KEV.

From PREECE@ssl.msfc.nasa.gov Wed Nov 23 14:14 PST 1994
Date: Wed, 23 Nov 1994 16:14:14 -0600 (CST)
From: PREECE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: PREECE@ssl.msfc.nasa.gov
Subject: BATSE Burst 3291

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3291	941122	9678	47616	2300	252	-06

23 / 11 / 94

ULYSSES RT

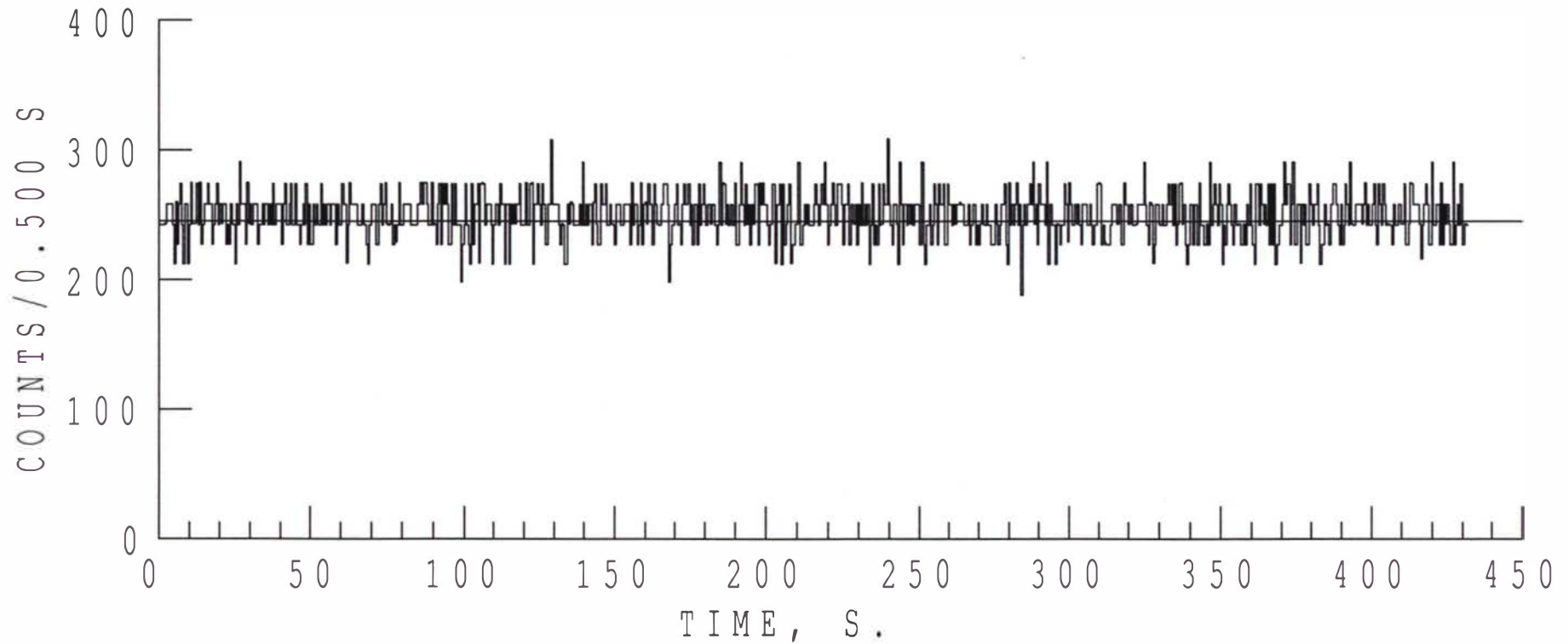
22/11/94 47016.078 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From PREECE@ssl.msfc.nasa.gov Wed Nov 23 14:16 PST 1994
Date: Wed, 23 Nov 1994 16:16:49 -0600 (CST)
From: PREECE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3292

BATSEARCH PROGRAM

BATSE BURST # 3292
EVENT OF 1994 NOV 22 DAY OF YEAR=326
EVENT CROSSING TIME AT BATSE : 73975. S. OR 20:32:55.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 156.000 32.000
BATSE PEAK COUNTING RATE: 3200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 22/11/ 94 IS:
RA= 257.931 DEC= -74.249 DIST= 2.169 AU
BATSE-ULYSSES DISTANCE = 324466087. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 56.11 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 603.51 SECS.
CROSSING TIME AT ULYSSES IS 74579. S. OR 20:42:58 +/- 215.15 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 22/11/ 94 IS:
RA= 146.610 DEC= 15.662 DIST= 1.170 AU
MARS-BATSE DISTANCE = 175024400. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=161.56 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -553.85 SECS.
CROSSING TIME AT MARS IS 73421. S. OR 20:23:41 +/- 23.64 SECONDS

BJO
Subject: Burst Trigger Message

BATSE BURST TRIGGER
NO.: 03292

TIME: TJD=9678 SECONDS=73975

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=164.1 AZIMUTH=166.0 ERROR=004.0 DEGREES

COMMENTS:

GRB WITH 3 MAIN PEAKS, WELL SEPARATED. TOTAL DURATION 112S. NOT VISIBLE ABOVE 300 KEV.

From PREECE@ssl.msfc.nasa.gov Wed Nov 23 14:16 PST 1994
Date: Wed, 23 Nov 1994 16:16:33 -0600 (CST)
From: PREECE@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: PREECE@ssl.msfc.nasa.gov
Subject: BATSE Burst 3292

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3292	941122	9678	73975	3200	156	+32

23 / 11 / 94

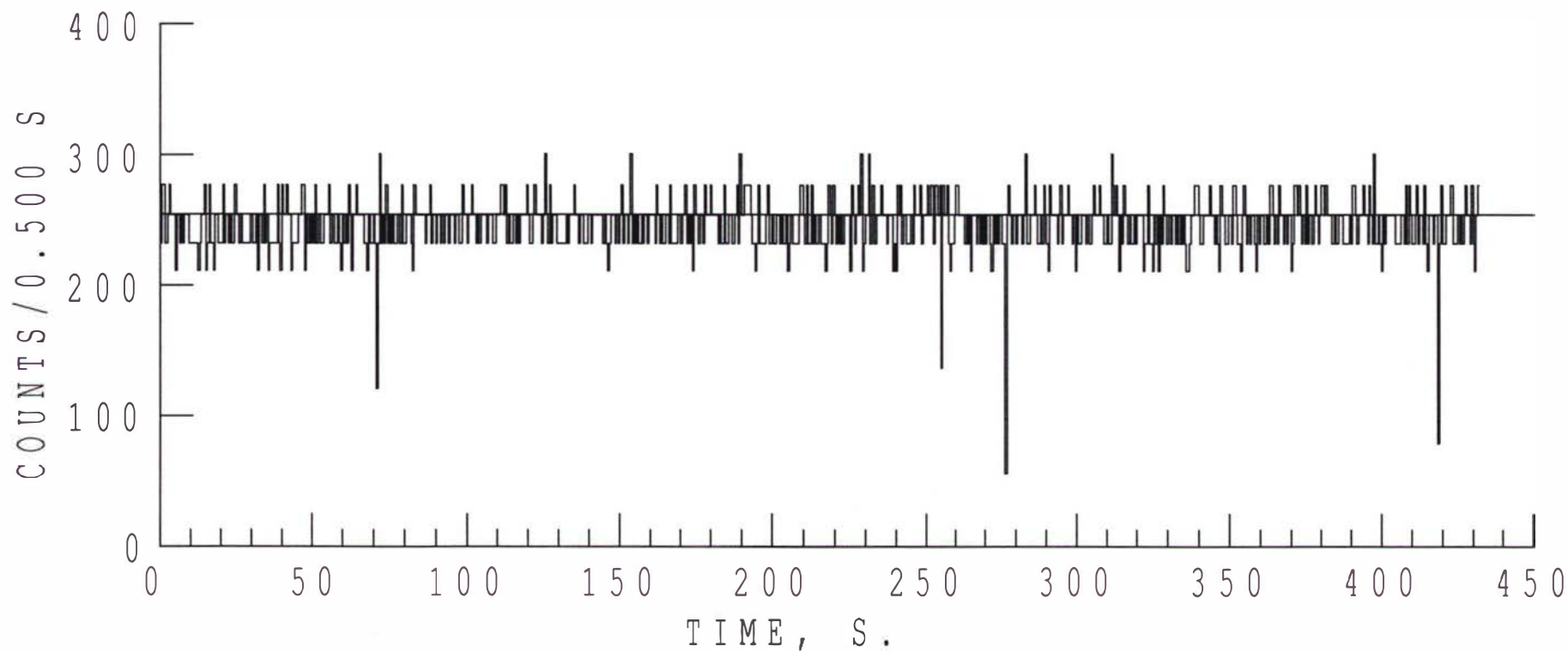
ULYSSES RT

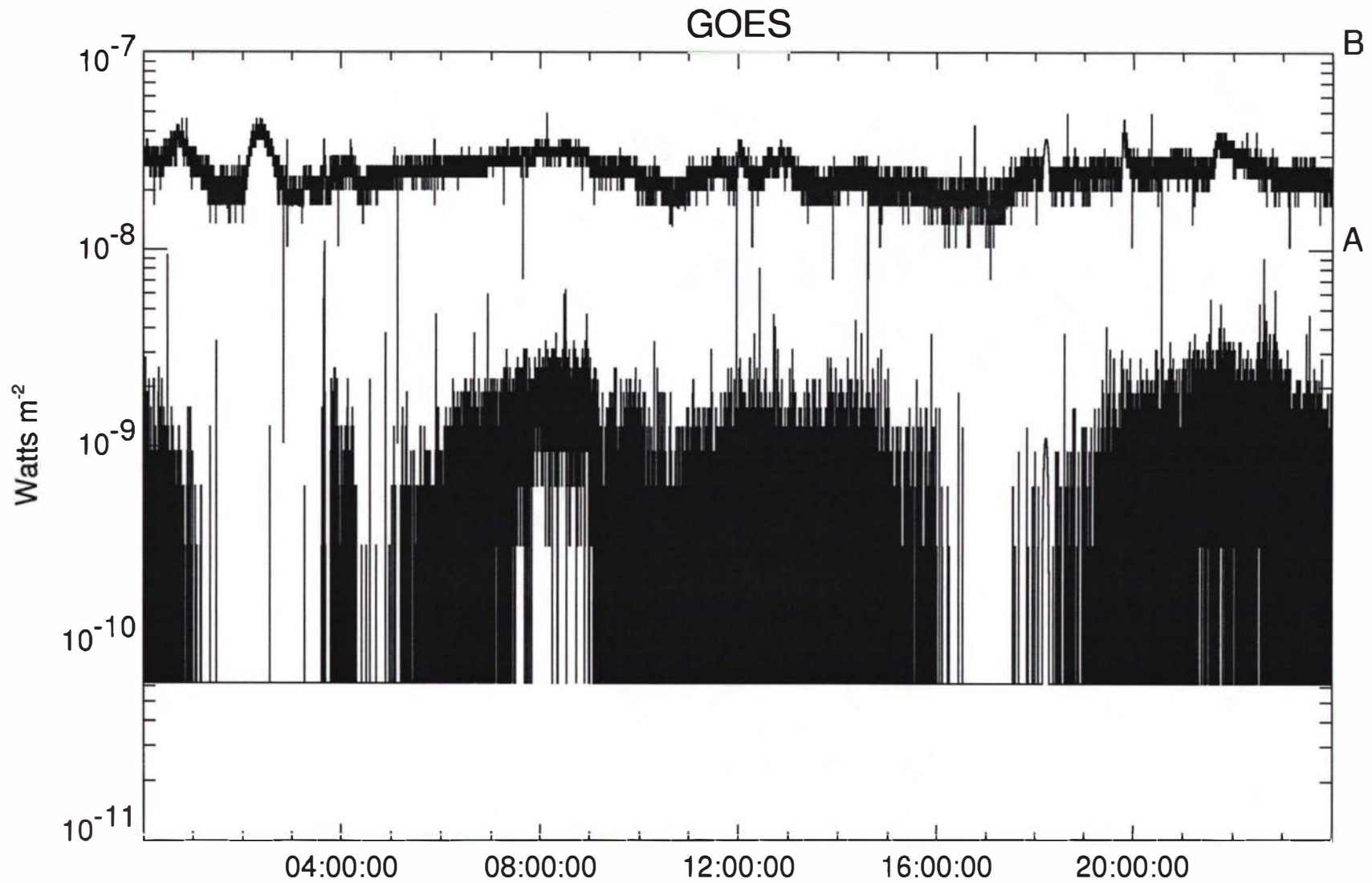
22 / 11 / 94 74376.078 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





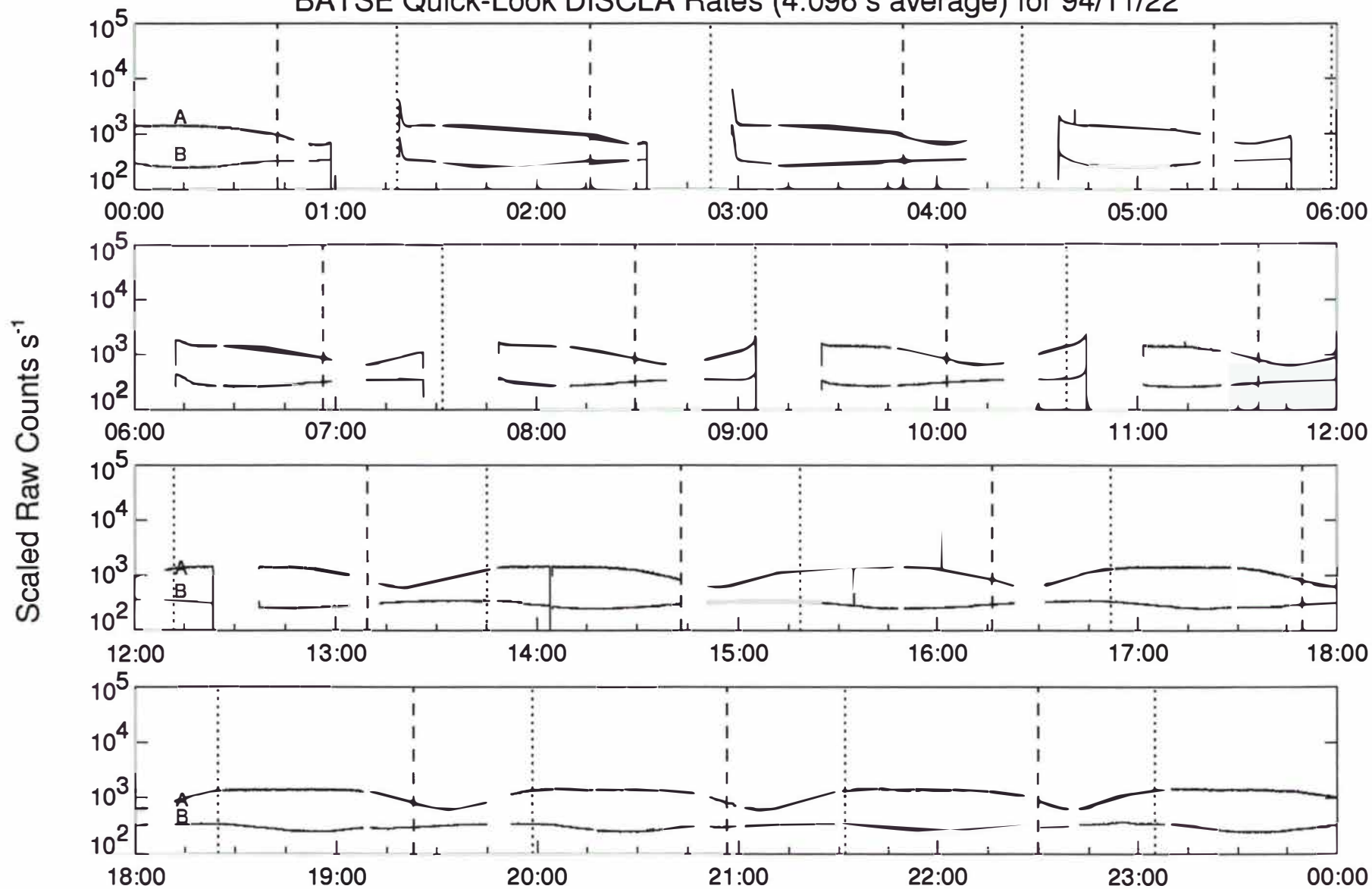
Data Start: 94/11/22, 0000:02

Plot created: 94/12/01, 2047

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 94/11/22

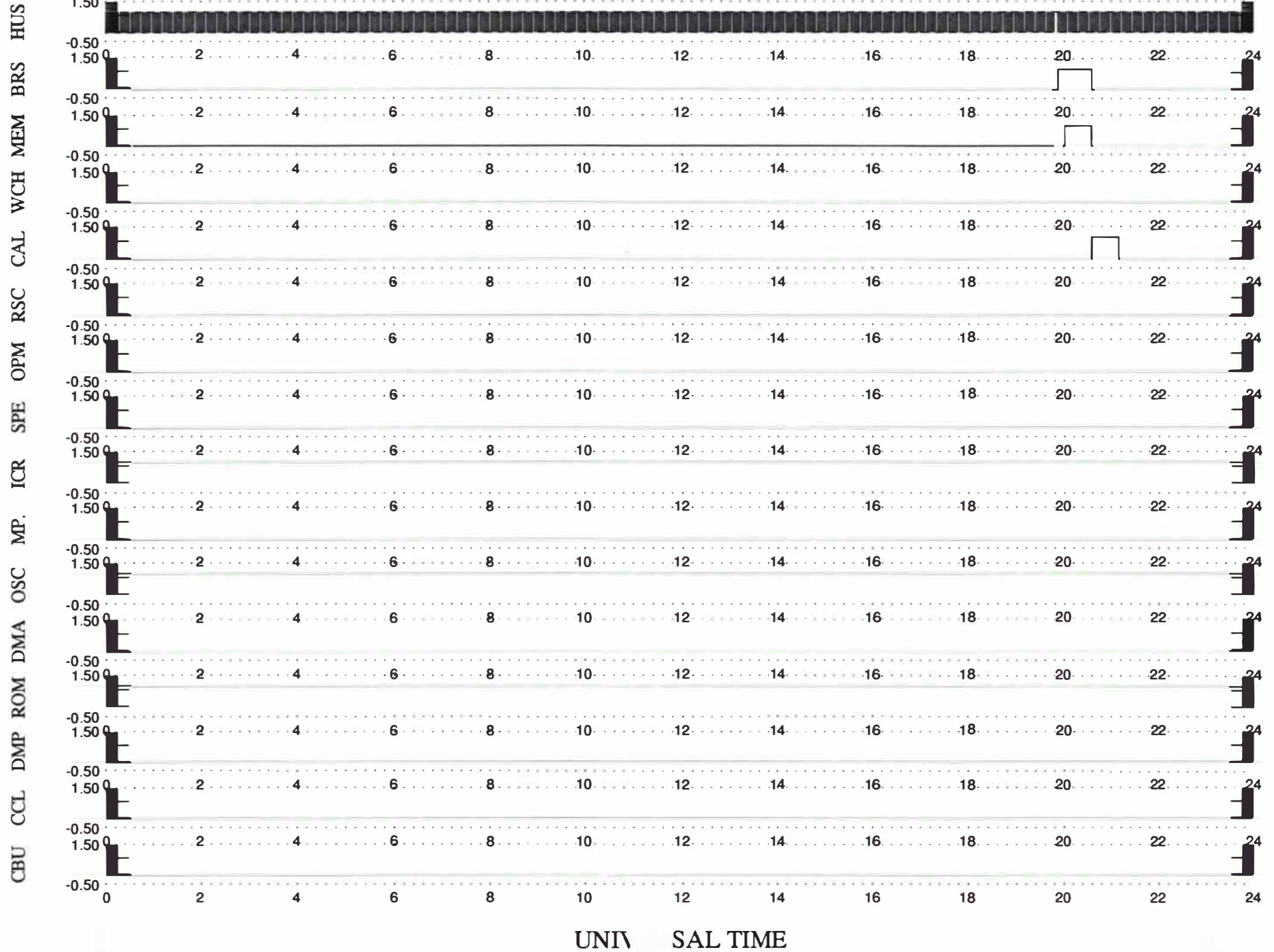


Current Time: 94/12/01, 2037 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

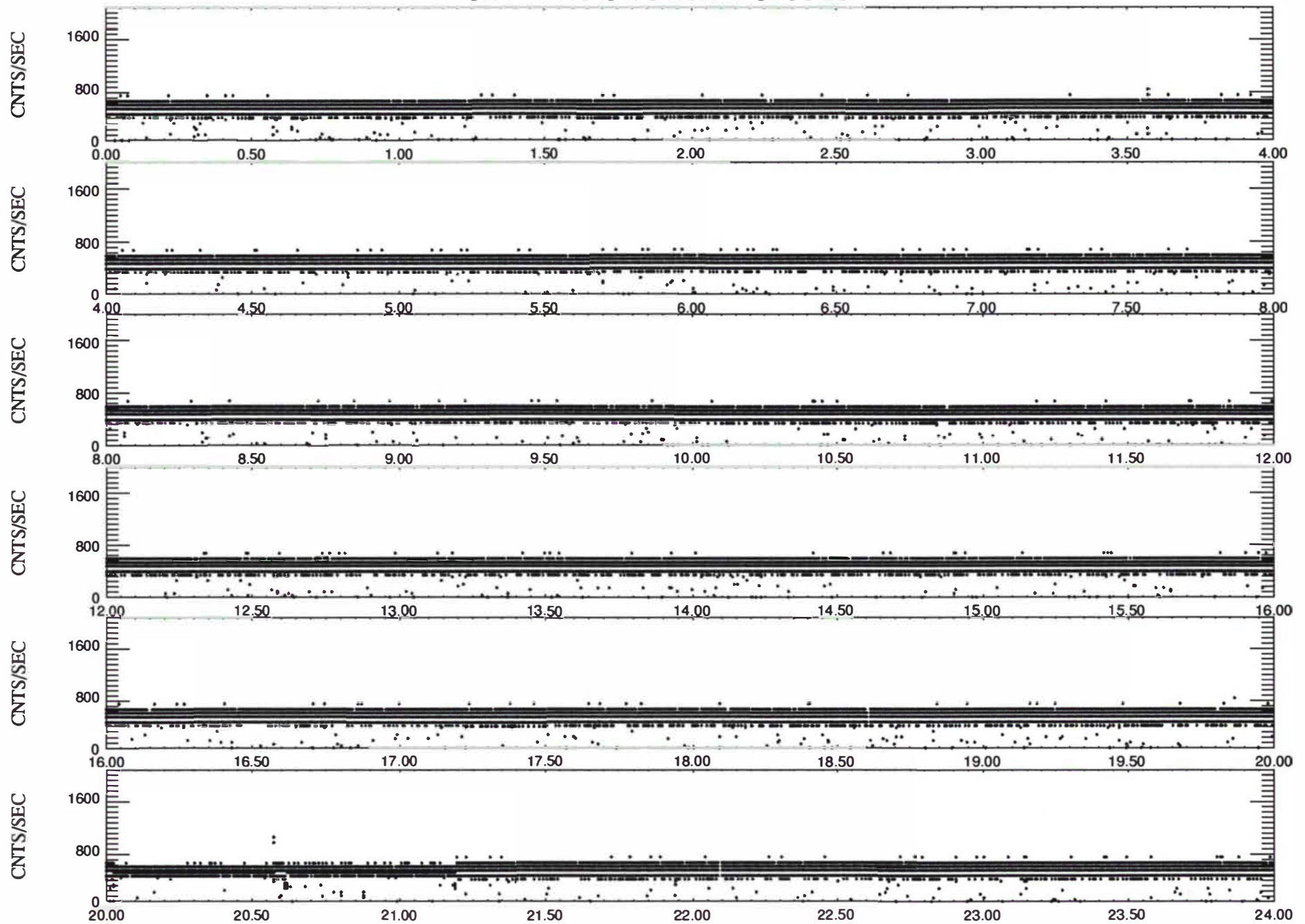
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

BURST NUMBER 6

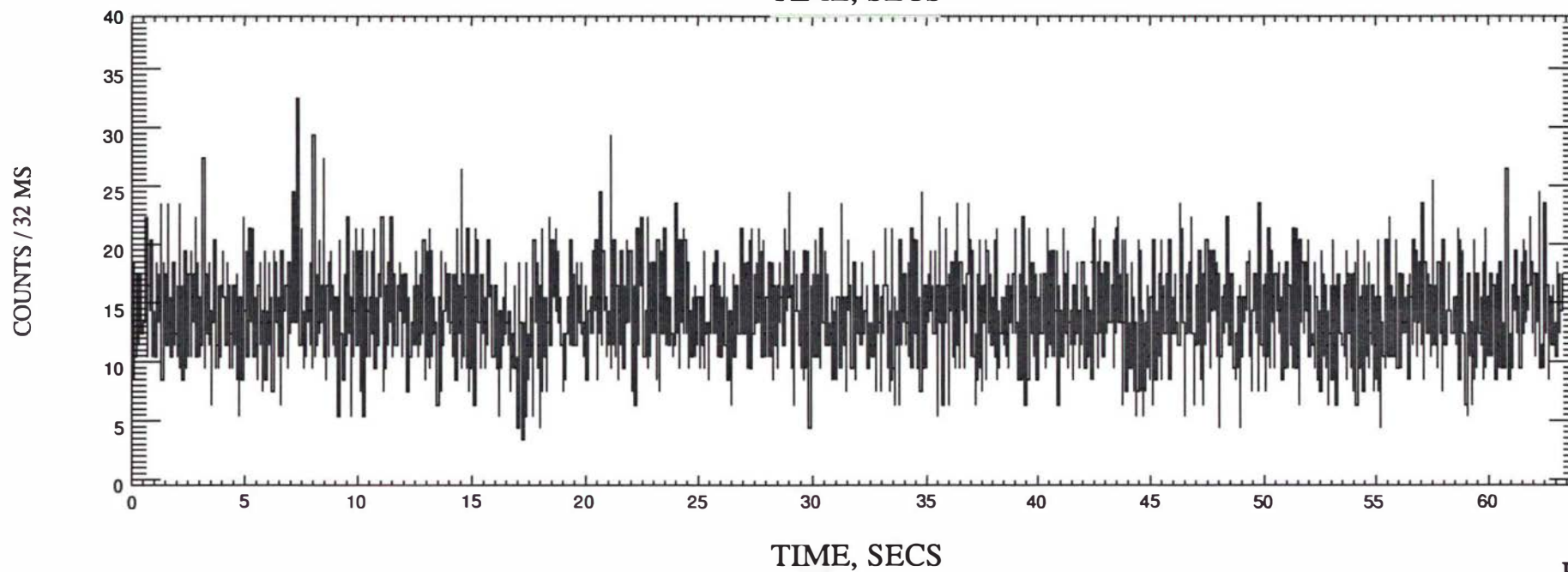
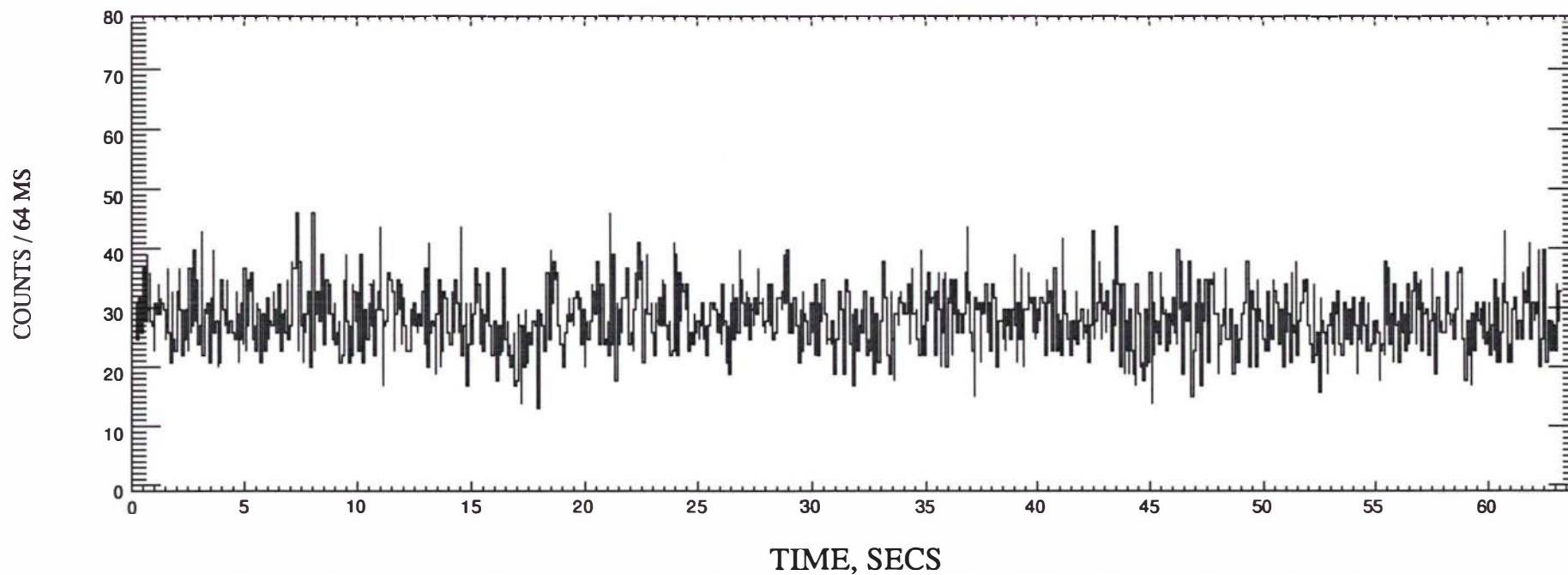


CALIBRATION DATA INCLUDED

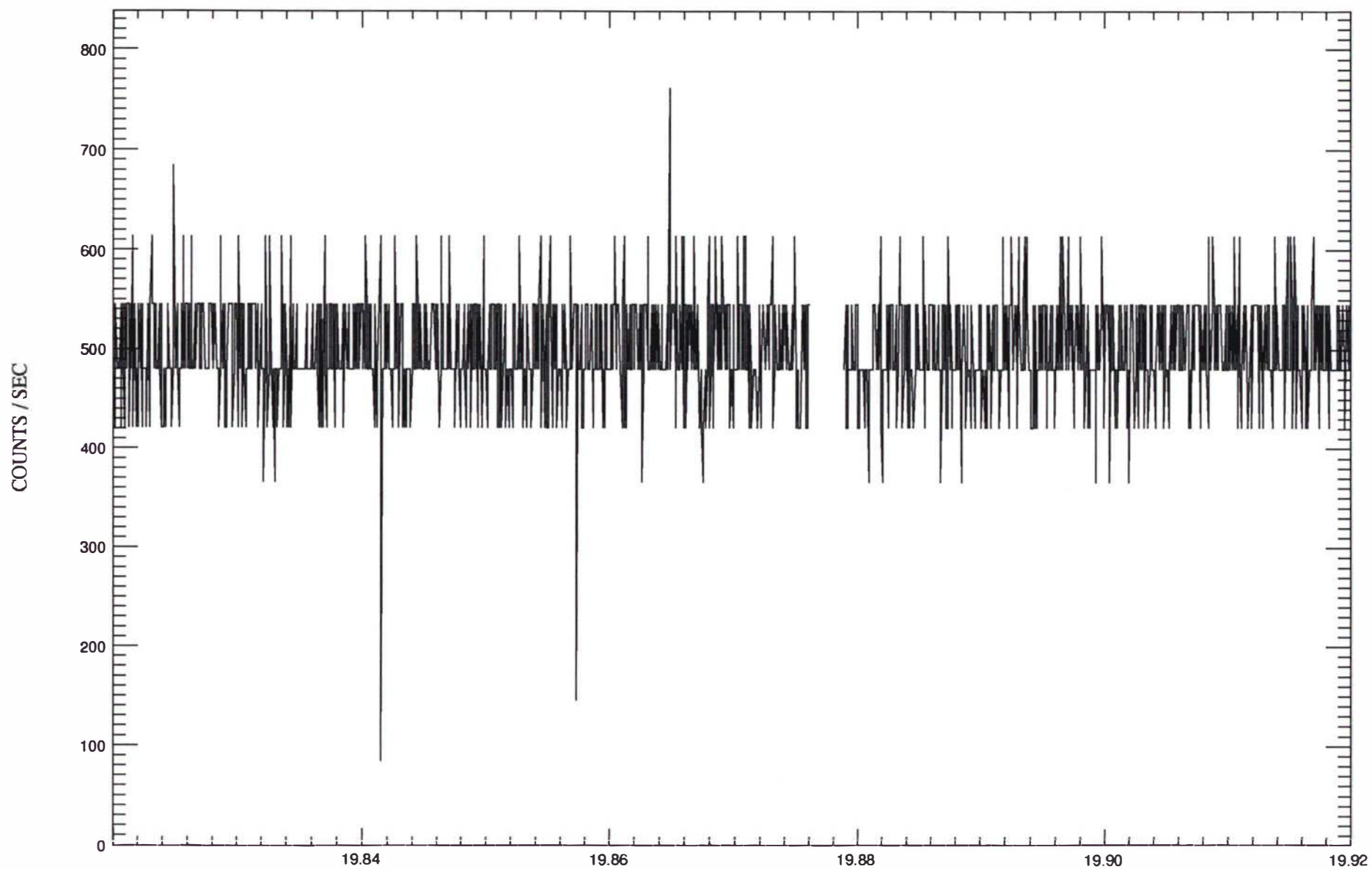


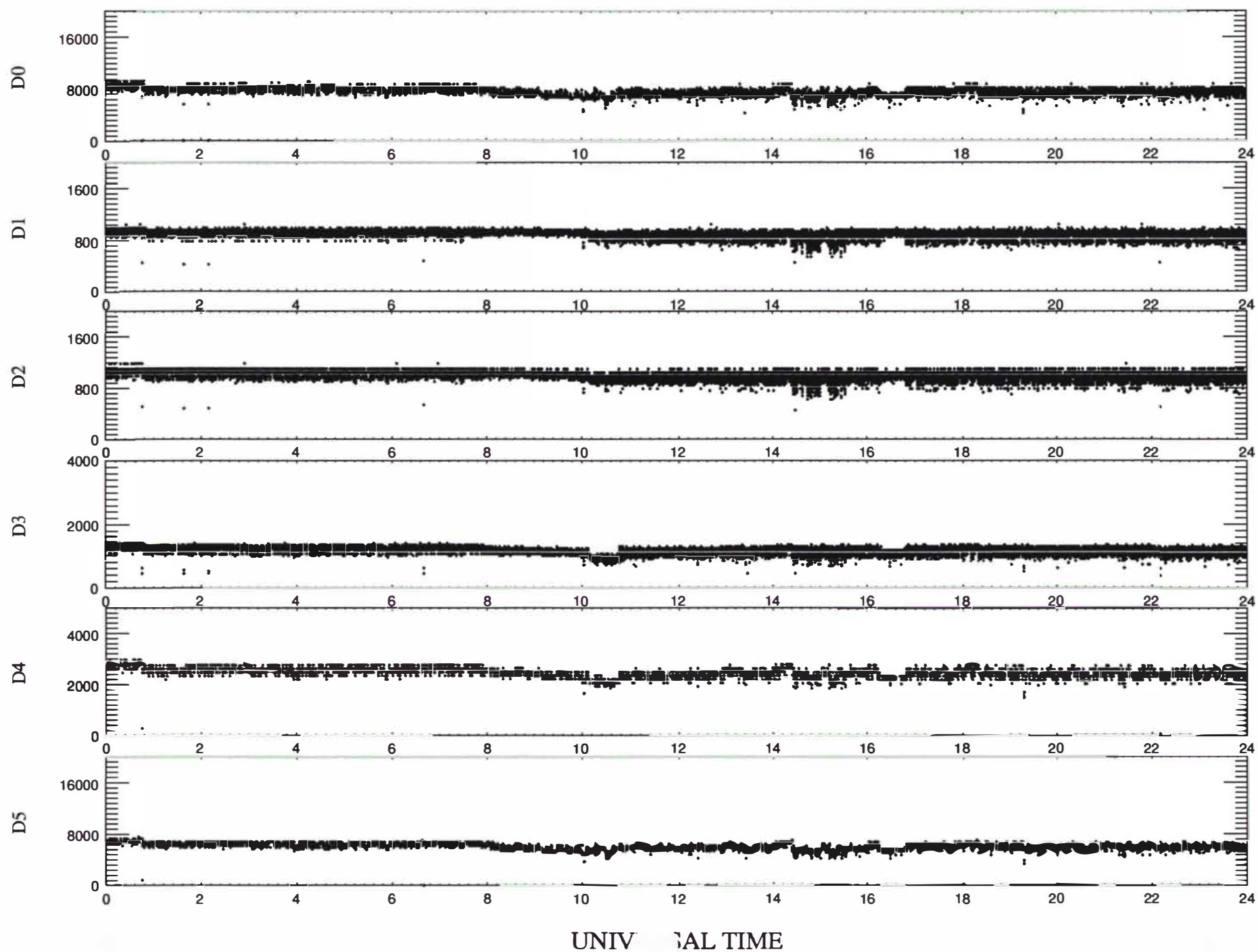
UNIV SAL TIME

Burst Counter 6 at UT=19.867715305752 h=71523.775 s 19:52:03.775



CALIBRATION DATA INCLUDED





 BATSEARCH PROGRAM

TSE BURST # 3293 No
 EVENT OF 1994 NOV 23 DAY OF YEAR=327
 EVENT CROSSING TIME AT BATSE : 67477. S. OR 18:44:37.0
 COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
 BURST ARRIVAL DIRECTION: 70.000 6.000
 BATSE PEAK COUNTING RATE: 2600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
 INTERPOLATED POSITION OF ULYSSES ON 23/11/ 94 IS:
 RA= 260.487 DEC= -74.001 DIST= 2.166 AU
 BATSE-ULYSSES DISTANCE = 324104241. KM.
 ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 68.28 DEG.
 LIGHT TRAVEL TIME ALONG PROJECTED PATH= 400.02 SECS.
 CROSSING TIME AT ULYSSES IS 67877. S. OR 18:51:17 +/- 230.45 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
 POSITION OF MARS ON 23/11/ 94 IS:
 RA= 146.992 DEC= 15.562 DIST= 1.162 AU
 MARS-BATSE DISTANCE = 173760752. KM.
 ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=104.10 DEG.
 LIGHT TRAVEL TIME ALONG PROJECTED PATH= -141.24 SECS.
 CROSSING TIME AT MARS IS 67336. S. OR 18:42:15 +/- 95.45 SECONDS

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3293	941123	9679	67477	2600	070	+06

BATSE BURST TRIGGER

.: 3293

TIME: TJD=9679 SECONDS=67477

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=80.3 AZIMUTH=179.7 ERROR= DEGREES

COMMENTS:

GRB. SINGLE SPIKE, LASTING APROX. 0.5SEC. MARGINALLY VISIBLE ABOVE 300 KEV.
 BATSE BURST TRIGGER

29 / 11 / 94

ULYSSES RT

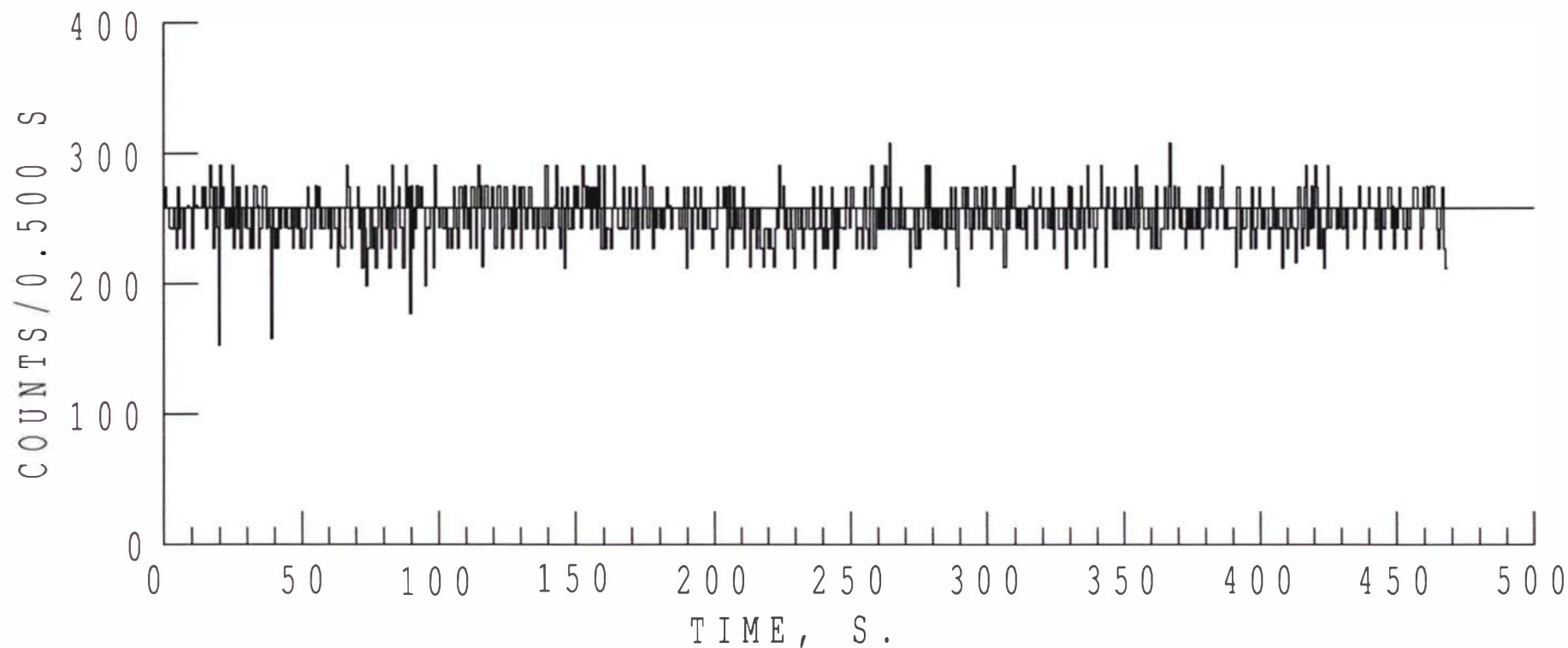
23 / 11 / 94 67644.062 s

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 Nov 28 10:58 PST 1994
Date: Mon, 28 Nov 1994 12:58:12 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3294

BATSEARCH PROGRAM

BATSE BURST # 3294
EVENT OF 1994 NOV 23 DAY OF YEAR=327
EVENT CROSSING TIME AT BATSE : 71433. S. OR 19:50:33.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 198.000 -6.000
BATSE PEAK COUNTING RATE: 6800 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 23/11/ 94 IS:
RA= 260.618 DEC= -73.988 DIST= 2.166 AU
BATSE-ULYSSES DISTANCE = 324085801. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=103.10 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -245.01 SECS.
CROSSING TIME AT ULYSSES IS 71188. S. OR 19:46:27 +/- 229.08 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 23/11/ 94 IS:
RA= 146.992 DEC= 15.562 DIST= 1.162 AU
MARS-BATSE DISTANCE = 173760752. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=125.08 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -333.15 SECS.
CROSSING TIME AT MARS IS 71100. S. OR 19:44:59 +/- 77.29 SECONDS

RI NO

khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER
NO.: 3294
TIME: TJD=9679 SECONDS=71433
TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N
SIGNIFICANCE: SIGMA
INTENSITY: COUNTS/CM2
LOCATION: ZENITH=136 AZIMUTH=43 ERROR= DEGREES

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 10:57 PST 1994
Date: Mon, 28 Nov 1994 12:57:36 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3294

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3294	941123	9679	71433	6800	198	-06

BATSE

23/11/94

71433.202

25- 100 keV

COUNTS/ .064 S

750
500
250
0

-3

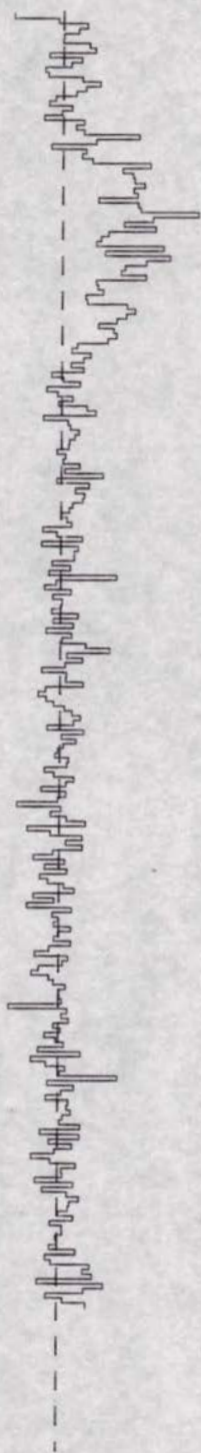
0 1

5
TIME, SECS

9

13

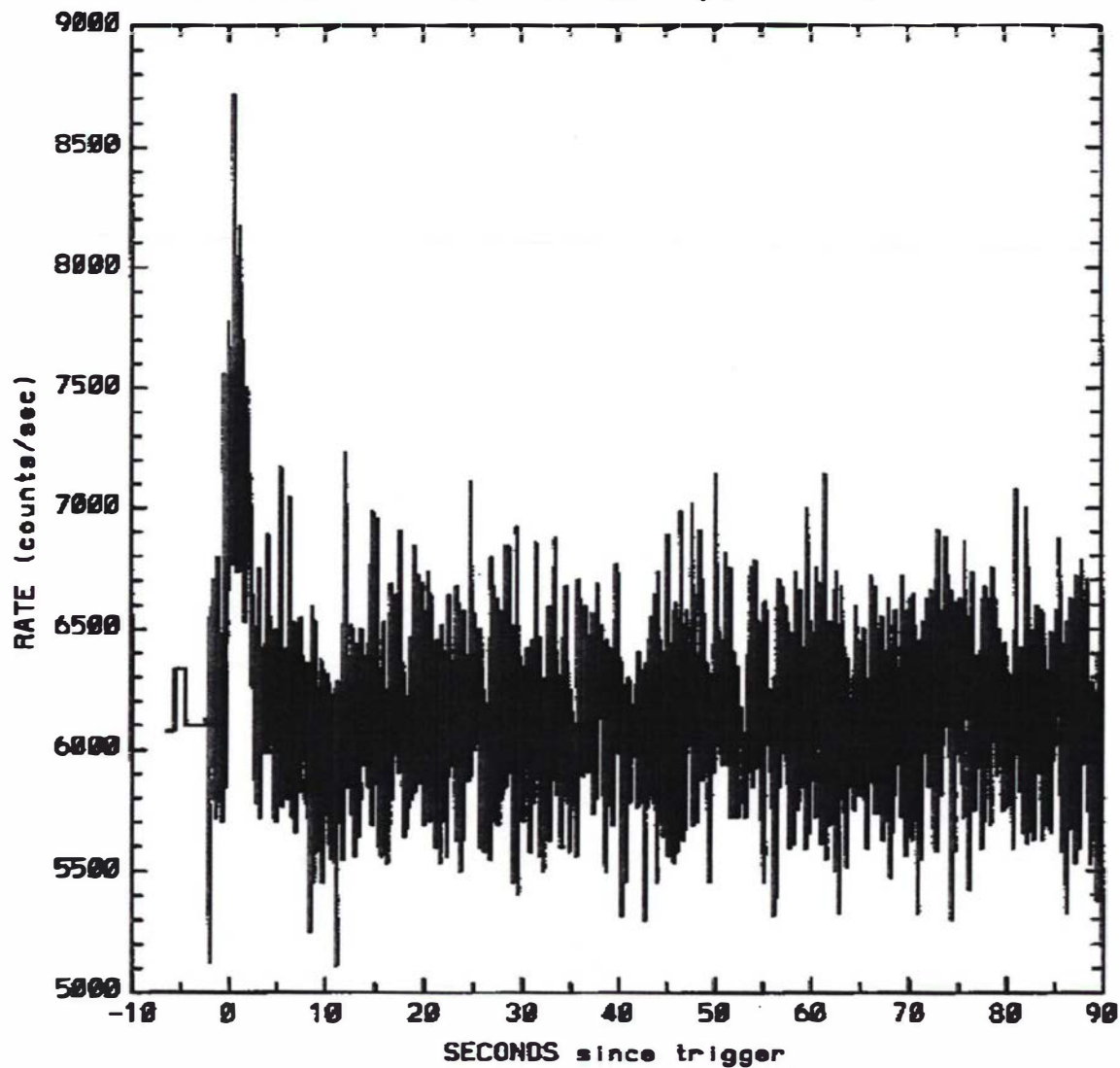
17



3 / 12 / 94

Nov 23

DISCSC Data for K. Hurley. No. 3294



29-NOV-1994 15:46:03

Created by MOPS BD
(Burst Display)
Version 2.22

Trigger # : 3294

Trigger Time:
9679 / 71433.282

Burst Data Type:
DISCSC

Deadtime
Corrected: N

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
0.064 second(s)

Detectors [7..8]:
----3-1-

Discriminators:
(1. 2)

Quality Mask:
BDISP1

ULYSSES RT

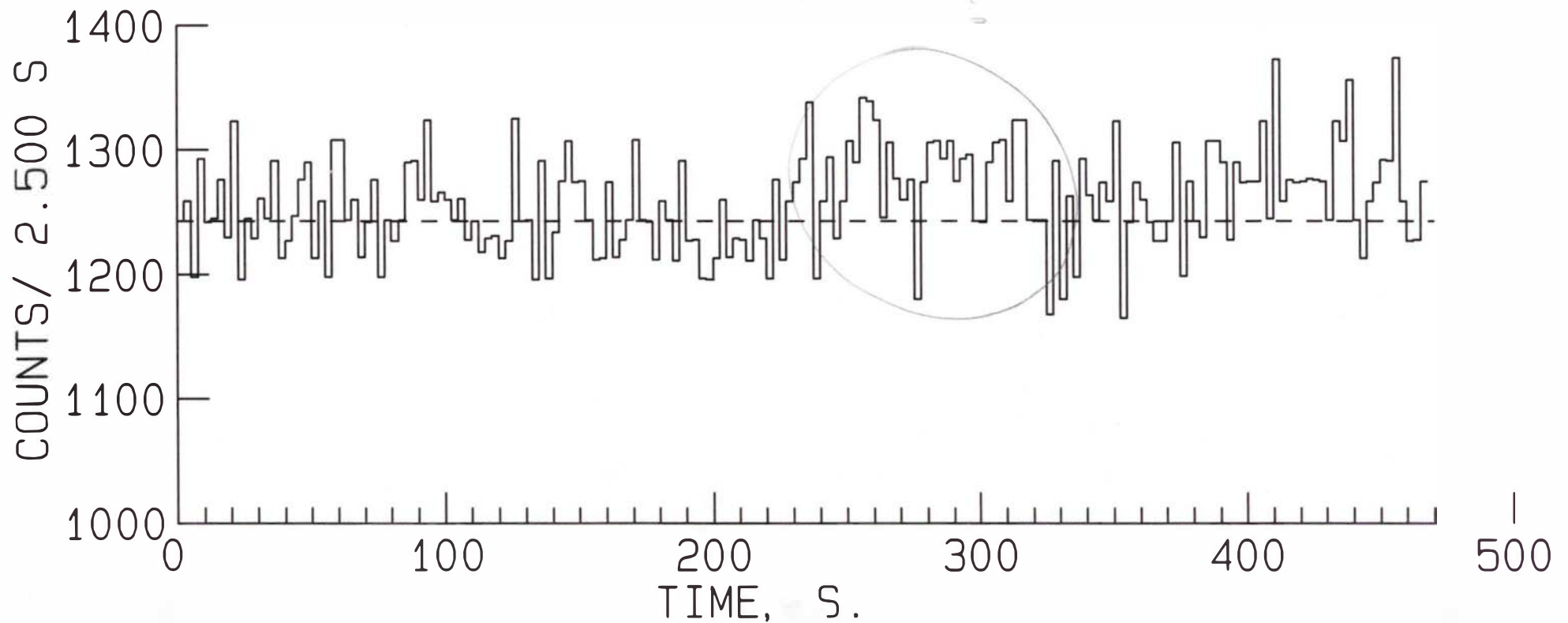
19/12/95

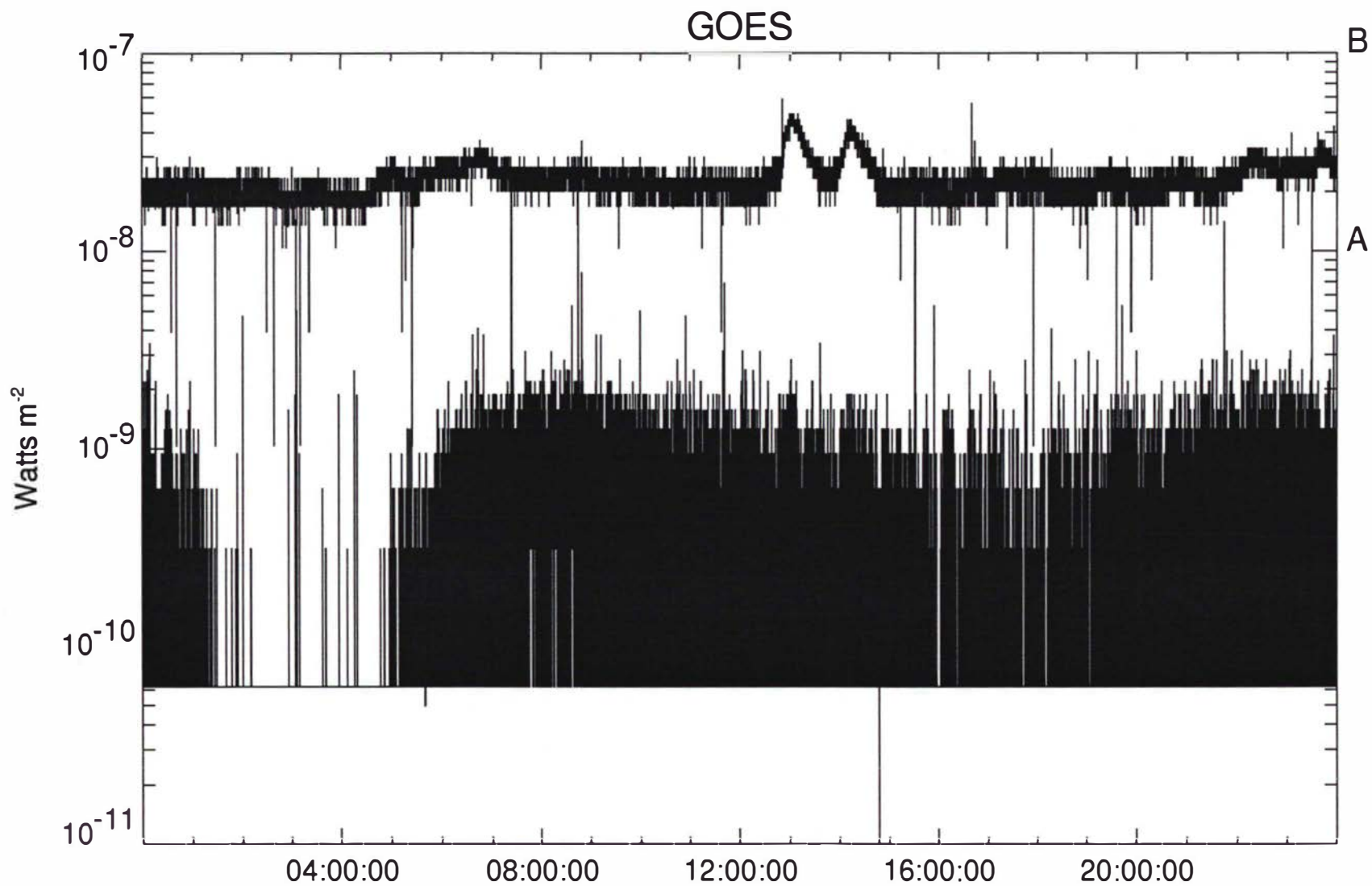
23/11/94 70956.123 s

0.250 S INTERVALS REGROUPED BY 10

22- 147 keV

N= 10 M= 2
>3.0 SIGMA FLUCTUATIONS





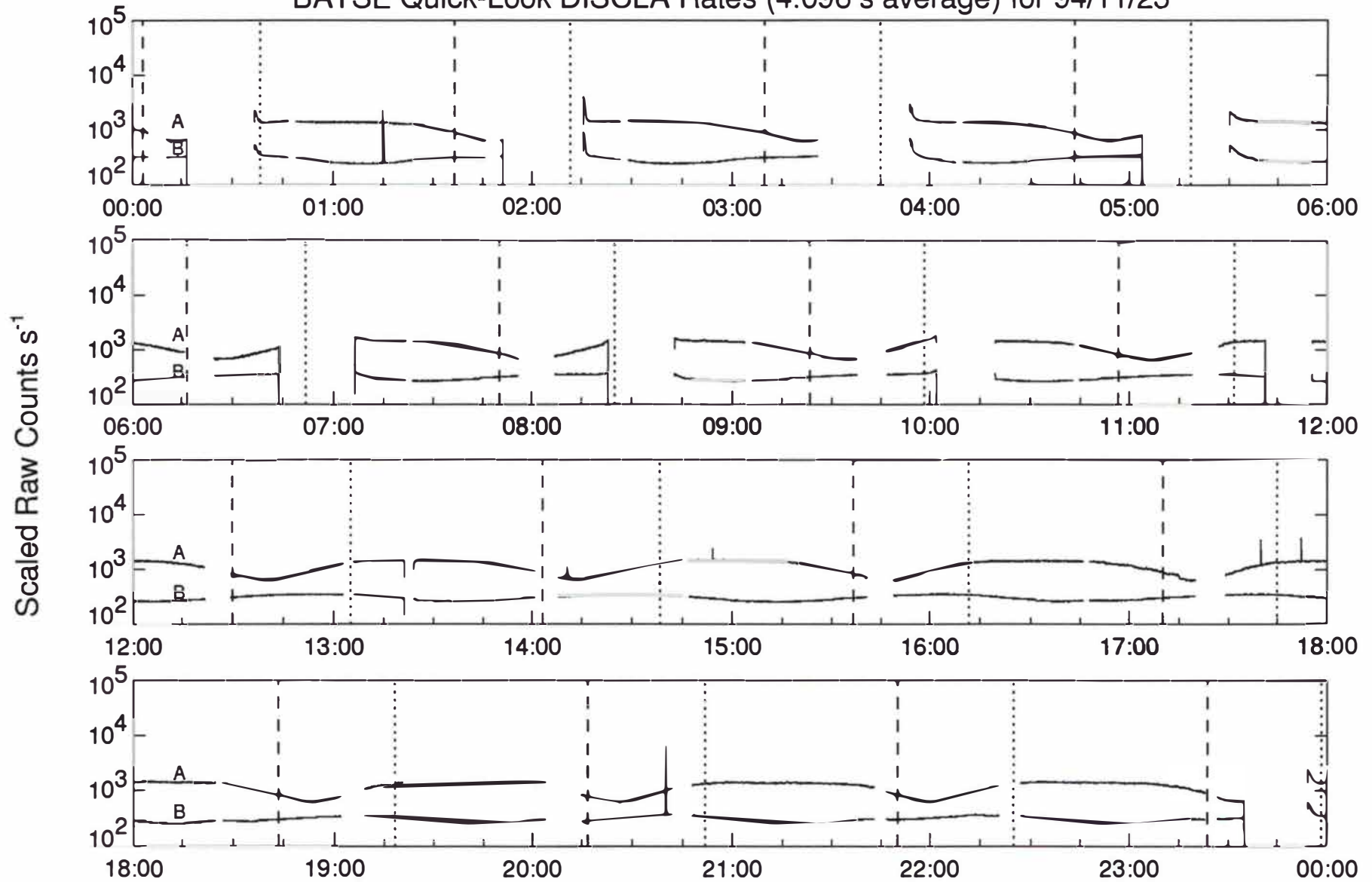
Data Start: 94/11/23, 0000:00

Plot created: 94/12/01, 2047

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 94/11/23

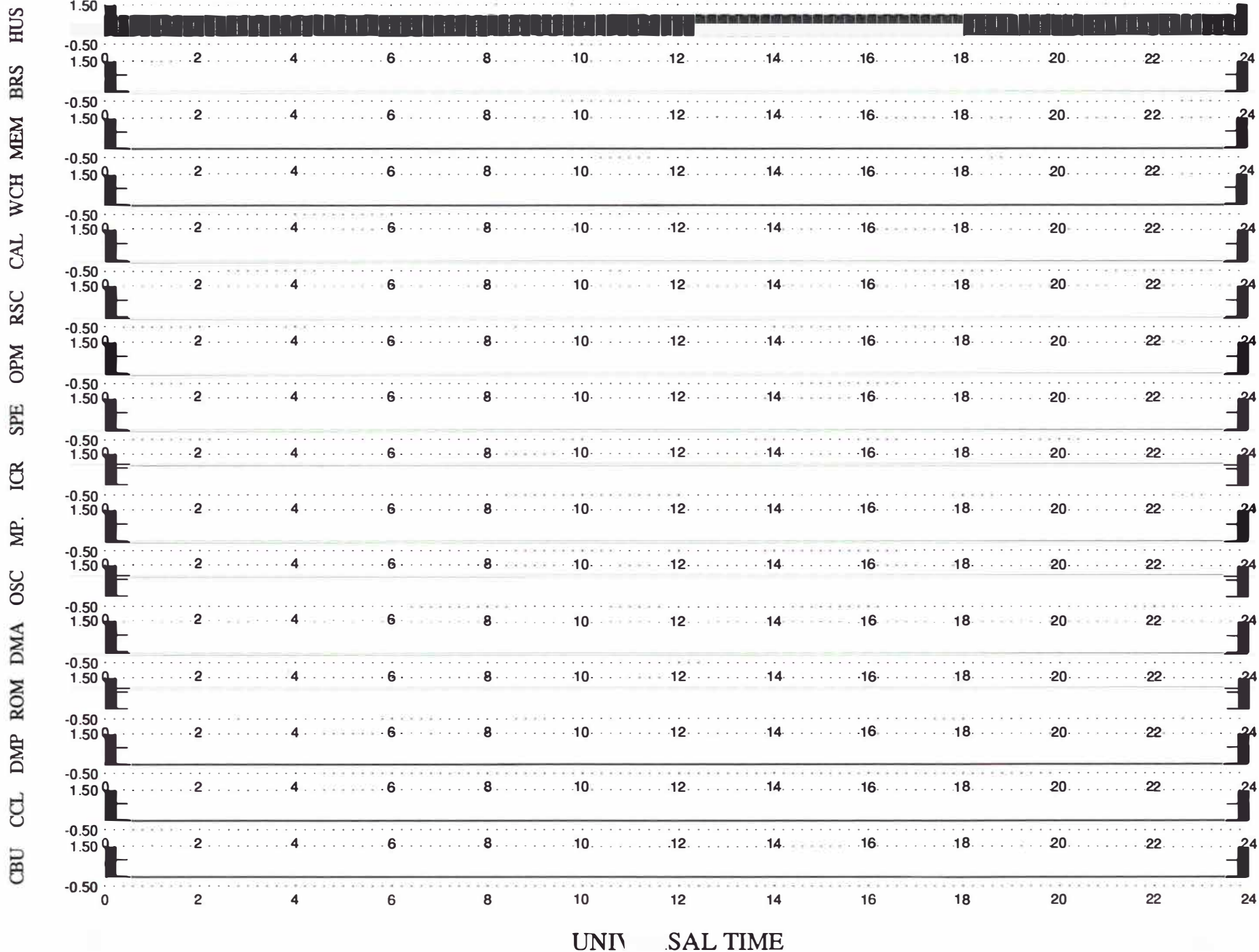


Current Time: 94/12/01, 2037 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

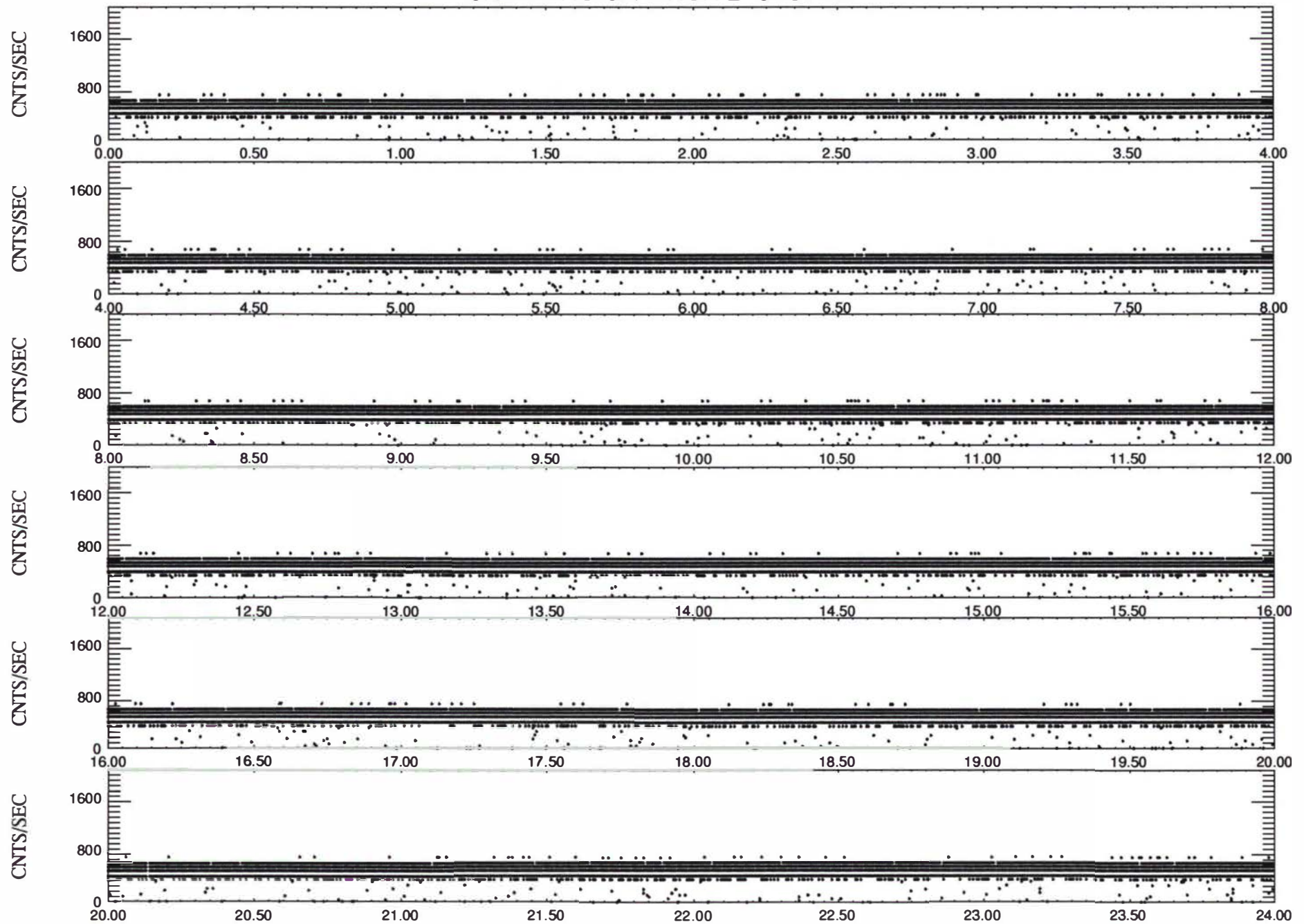
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

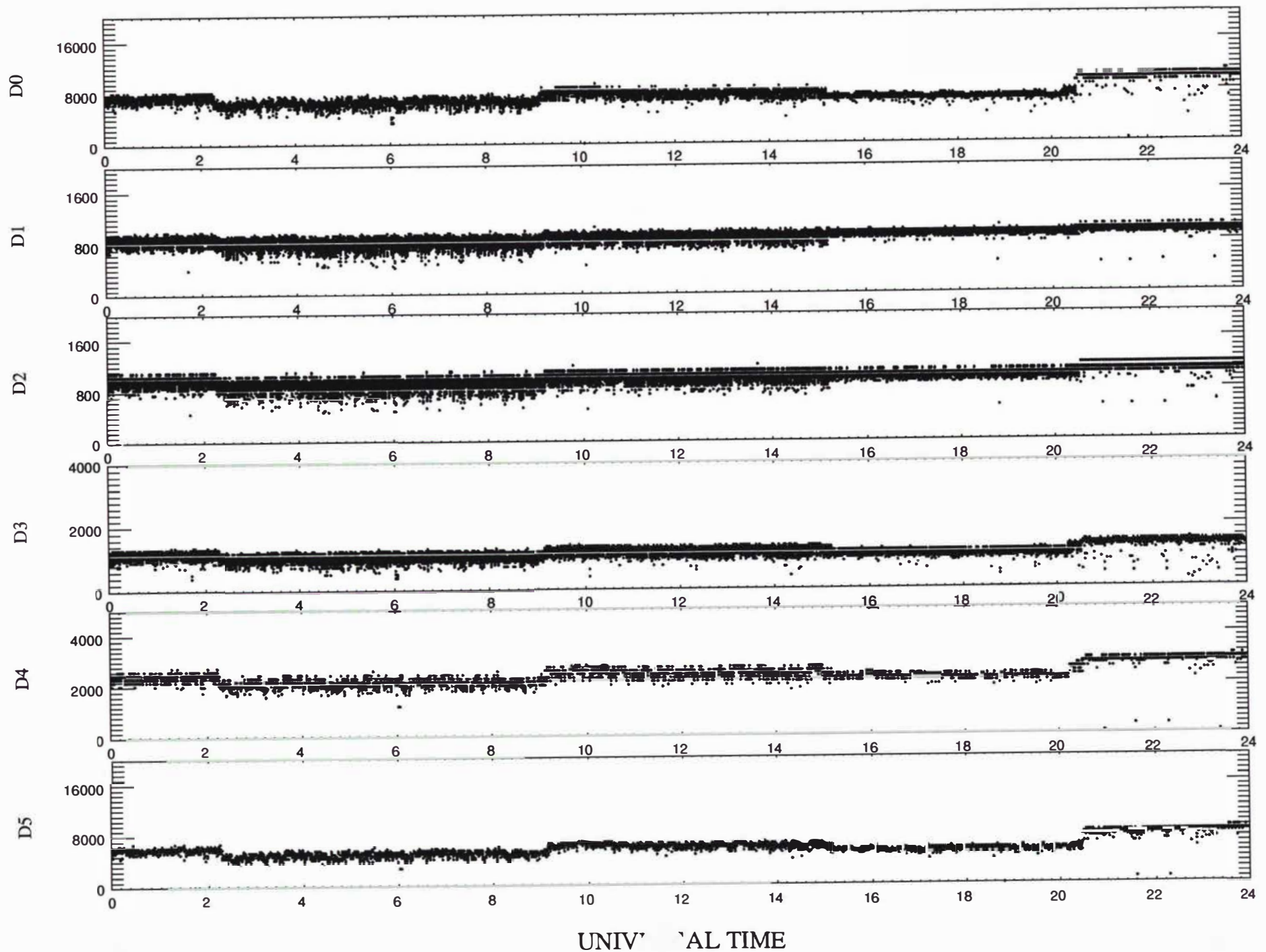
NO BURST (6)

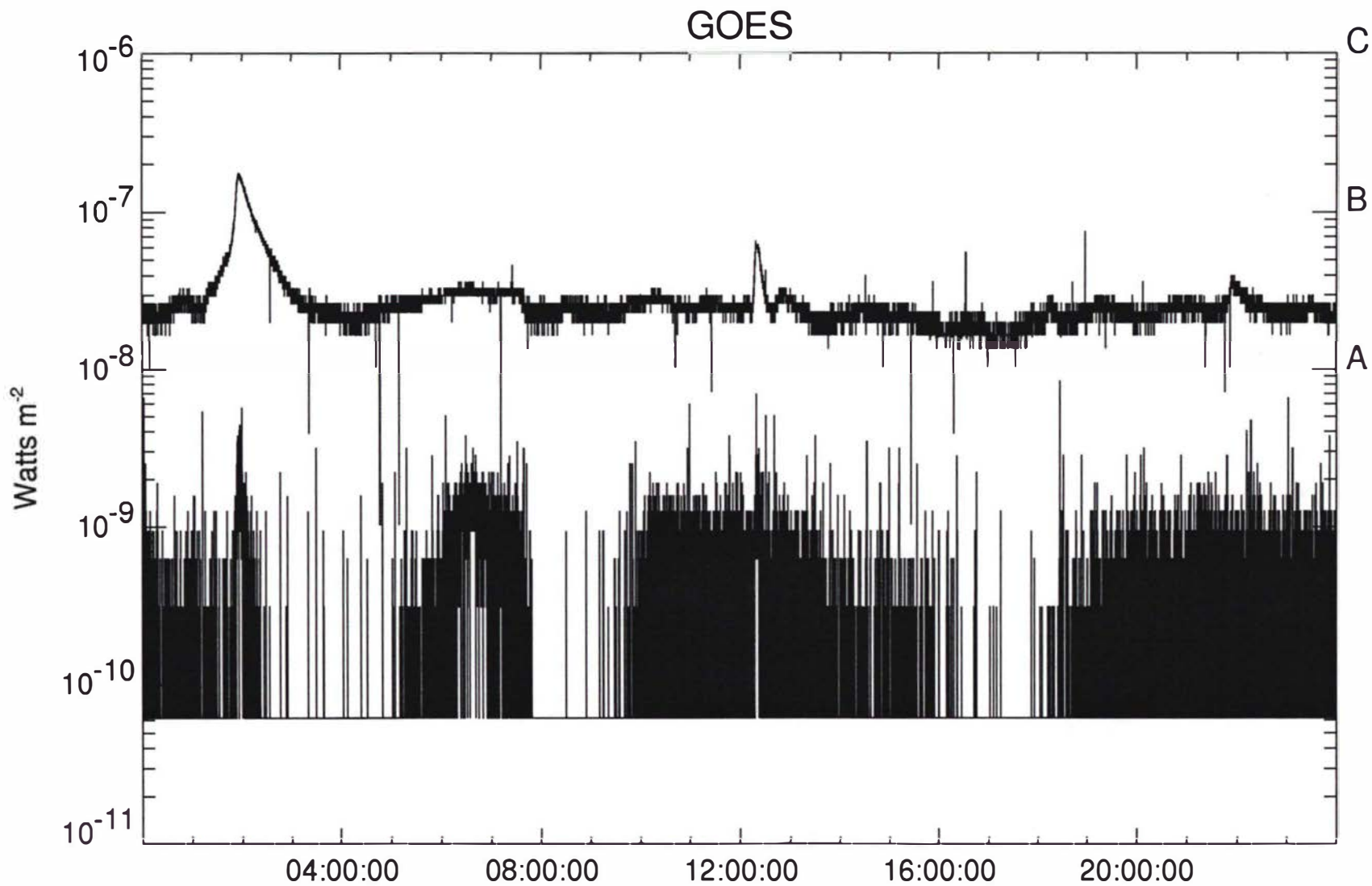


CALIBRATION DATA INCLUDED



UNF SAL TIME





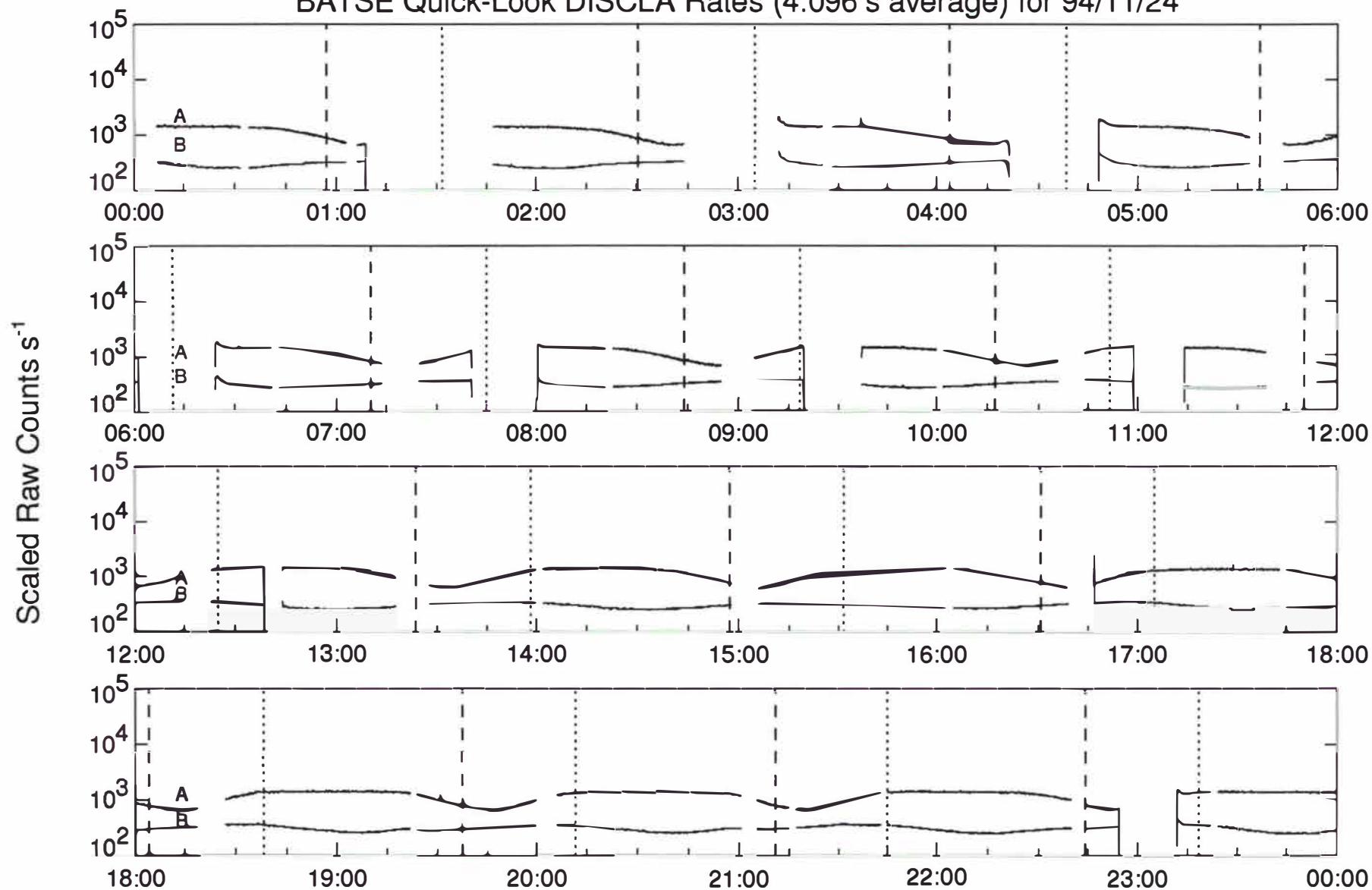
Data Start: 94/11/24, 0000:01

Plot created: 94/12/01, 2048

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 94/11/24

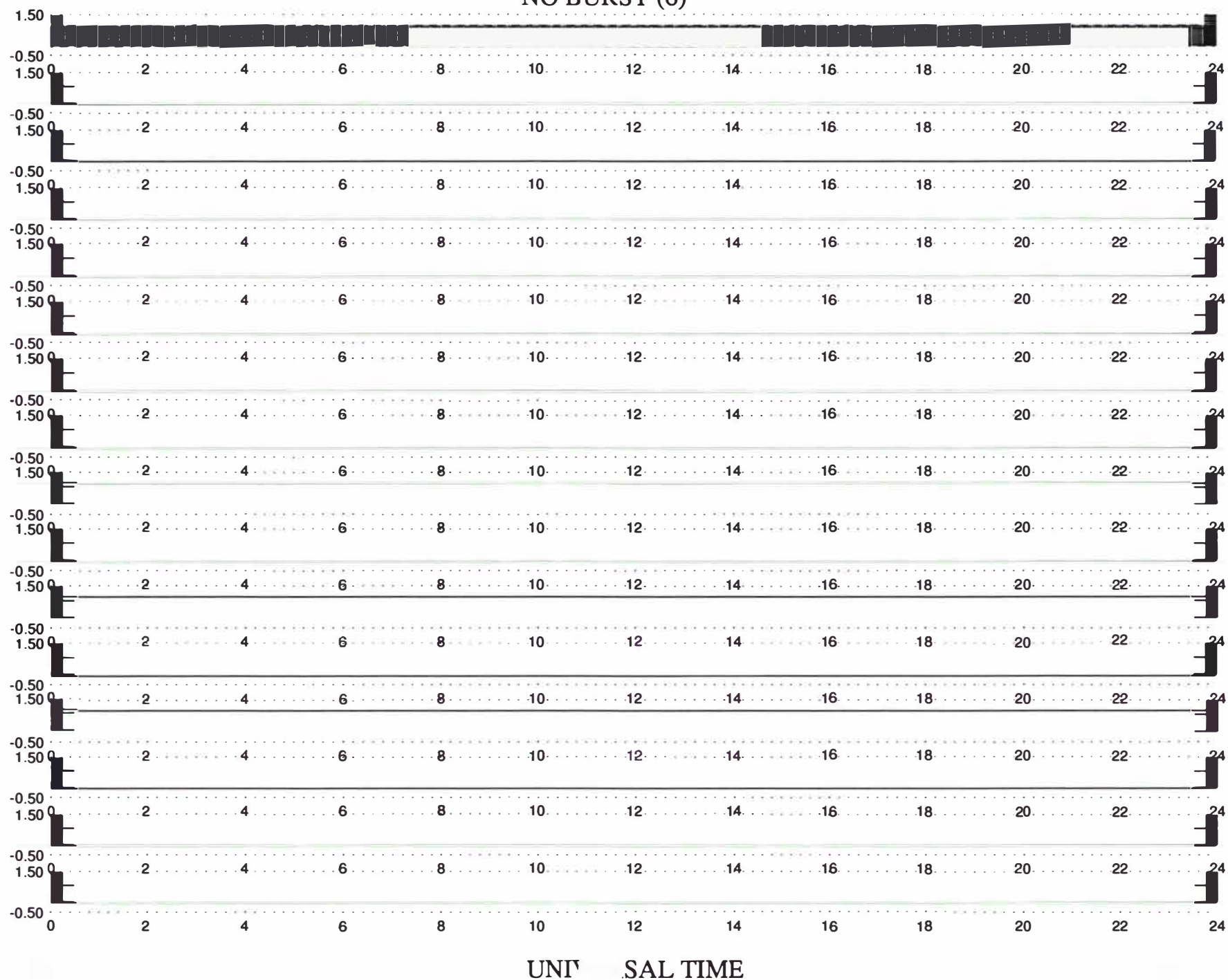


Current Time: 94/12/01, 2037 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

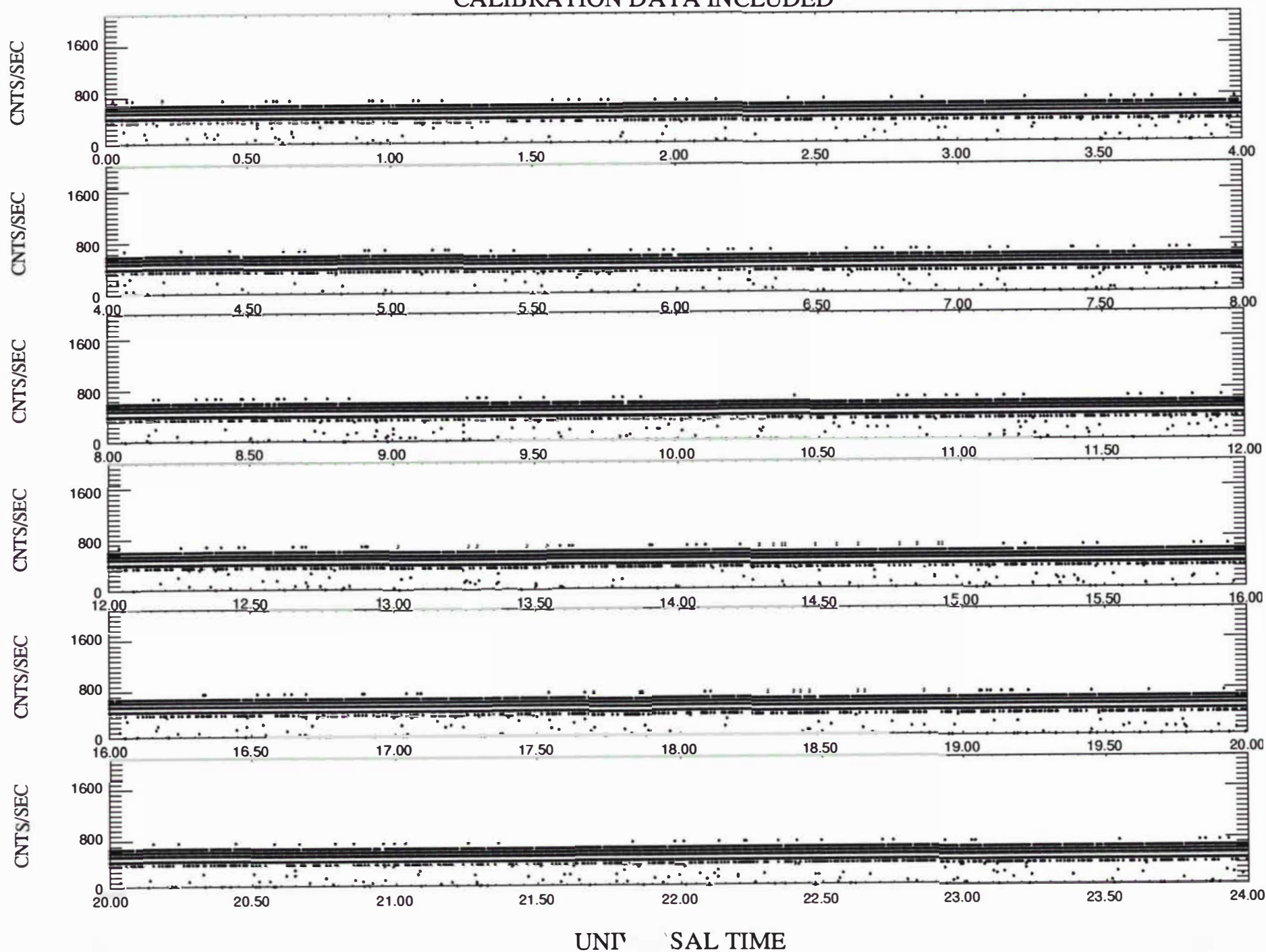
Dotted line: Day entry
 Dashed line: Night entry

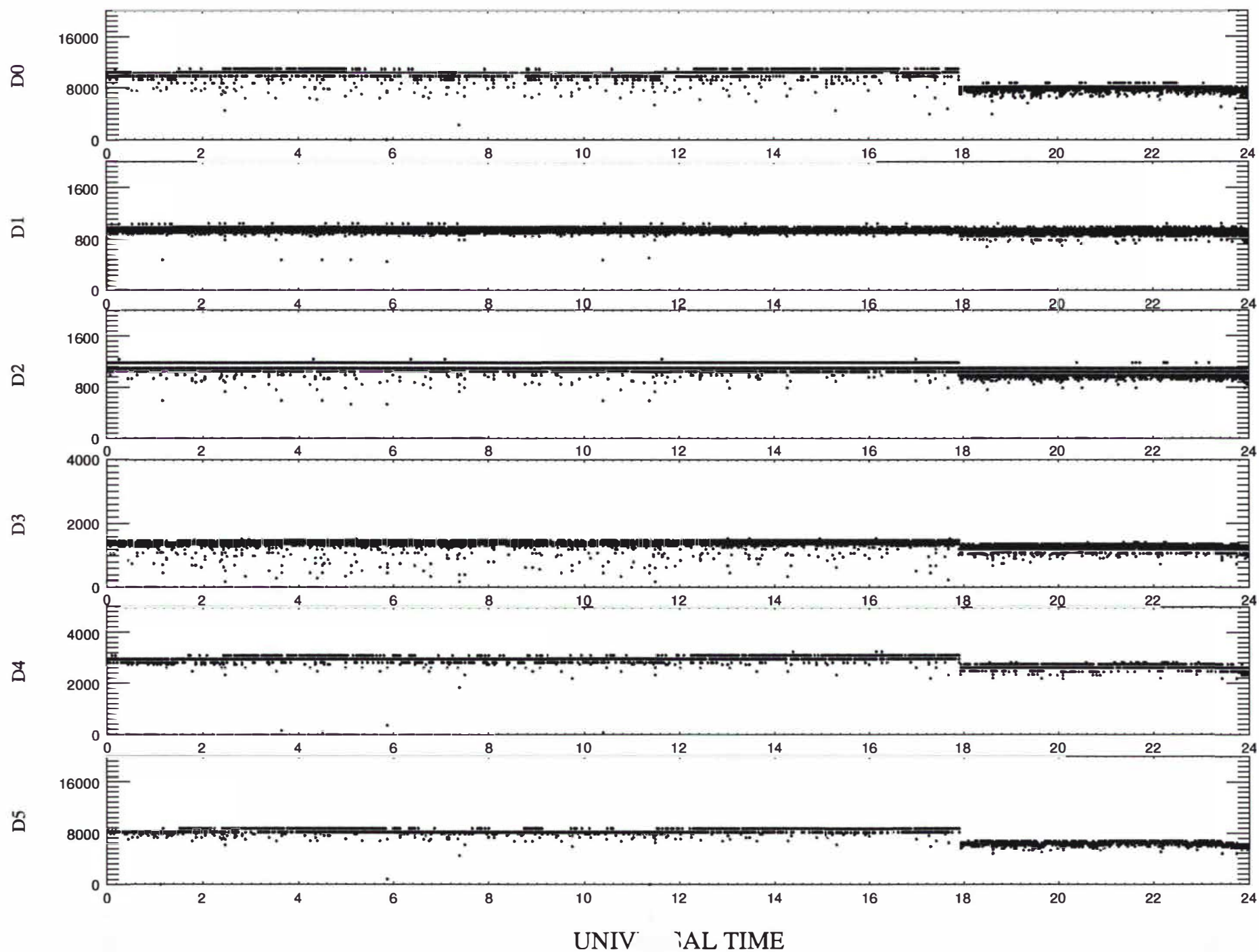
* Solar Burst Trigger
 + Solar Flare

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



CALIBRATION DATA INCLUDED





BATSEARCH PROGRAM

RT

BATSE BURST # 3295
EVENT OF 1994 NOV 25 DAY OF YEAR=329
EVENT CROSSING TIME AT BATSE : 79470. S. OR 22:04:30.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 240.000 -19.000
BATSE PEAK COUNTING RATE: 10000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 25/11/ 94 IS:
RA= 266.145 DEC= -73.333 DIST= 2.162 AU
BATSE-ULYSSES DISTANCE = 323372024. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=123.73 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -599.01 SECS.
CROSSING TIME AT ULYSSES IS 78871. S. OR 21:54:30 +/- 196.64 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 25/11/ 94 IS:
RA= 147.738 DEC= 15.367 DIST= 1.145 AU
MARS-BATSE DISTANCE = 171230464. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 82.98 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 69.83 SECS.
CROSSING TIME AT MARS IS 79540. S. OR 22:05:39 +/- 99.48 SECONDS

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3295	941125	9681	79470	10000	240	-19

BATSE BURST TRIGGER

NO.: 3295

TIME: TJD=9681 SECONDS=79470

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=98.9 AZIMUTH=15.9 ERROR= DEGREES

COMMENTS:

GRB. SINGLE PEAK LASTING APROX. 17SEC. VISIBLE ABOVE 300KEV.

From root Thu Jan 26 12:09 1995
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA09916; Thu, 26 Jan 95 12:09:38
 Received: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA01181; Thu, 26 Jan 1995 12:08:59 +0800
 Date: Thu, 26 Jan 1995 12:08:59 +0800
 Message-Id: <9501262008.AA01181@sunspot.ssl.berkeley.edu>
 Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
 Thu, 26 Jan 1995 15:11:15 -0500 (EST)
 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: KONUS/BATSE/ULYSSES EVENT LIST TO 95 JAN 17
 Cc: Mazets@mz.pti.spb.su
 Content-Length: 1824
 Status: R

KEVIN:
 BASED ON WHAT I HAVE FROM SERGEI GOLENETSKII AND FROM YOU, THIS IS THE
 CURRENT LIST OF ALL KONUS-ULYSSES EVENTS UP TO 95 JAN 17 WITH ALL BUT TWO
 ALSO BATSE.

X means sent with planning
✓ means sent to TLC

Date	KONUS-Tzero Sensor	Max c/s	N(1)/N(2)	Duration	Event	BATSE	ULYSSES	
(UT)		G1 G2 G3	(G2)	t<Tz t>Tz	K-no T-no	EVENT		
941119 19 31 09.175	S2	370 703 160	0.23	7 20	4 3287	ULY ✓		
941121 17 25 00.945	S1	1652 1656 300	21	3 50	6 3290	ULY ✓		
941125 22 04 30.156	S2	115 308 109	0.95	1.5 5	7 3295	ULY X		
941126 12 22 37.952	S1	860 1430 330	4.2	40 45	8 3298	ULY ✓		
941126 19 56 49.732	S1	290 390 211	6.7	20 26	9 3301	ULY X		
941127 14 30 25.680	S2	200 400 95	0.17	8 7	10 3303	ULY ✓		
941210 03 10 52.523	S2	900 2350 1385	0.12	1 15	14 ----	ULY ✓		
941228 07 39 45.915	S1	300 637 519	4.4	5 90	28 3330	ULY X		
941229 22 51 08.781	S2	396 381 140	0.09	7 25	29 3334	ULY X		
950104 07 18 39.613	S2	258 550 219	0.75	2.8 20	31 3345	ULY X		
950111 04 49 12.241	S1	586 620 100	>19	92 24	33 3351	ULY X		
950114 04 03 01	S2	23 76	0.5	70	BG ----	ULY ✓		
950117 01 36 00	S2	56 82 42	0.22	108	BG 3360	ULY X		

Energy intervals G1, G2, G3: 14 - 50, 50 - 225 and 225 - 900 keV.

Since 12th December: 12.5 - 43, 43 - 190 and 190 - 760 keV.

N(1)/N(2) is ratio of sensor 1 to sensor 2 counts in G2.

WHEN YOU HAVE A CHANCE, PLEASE SEND THESE TIME HISTORIES FIRST. THANKS. TLC

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

Helio corr removed
Date: Feb 6 '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?
- ☒ ACCESS database updated?

EVENT OF NOV 25, 1994 21:53

6 / 2/98

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

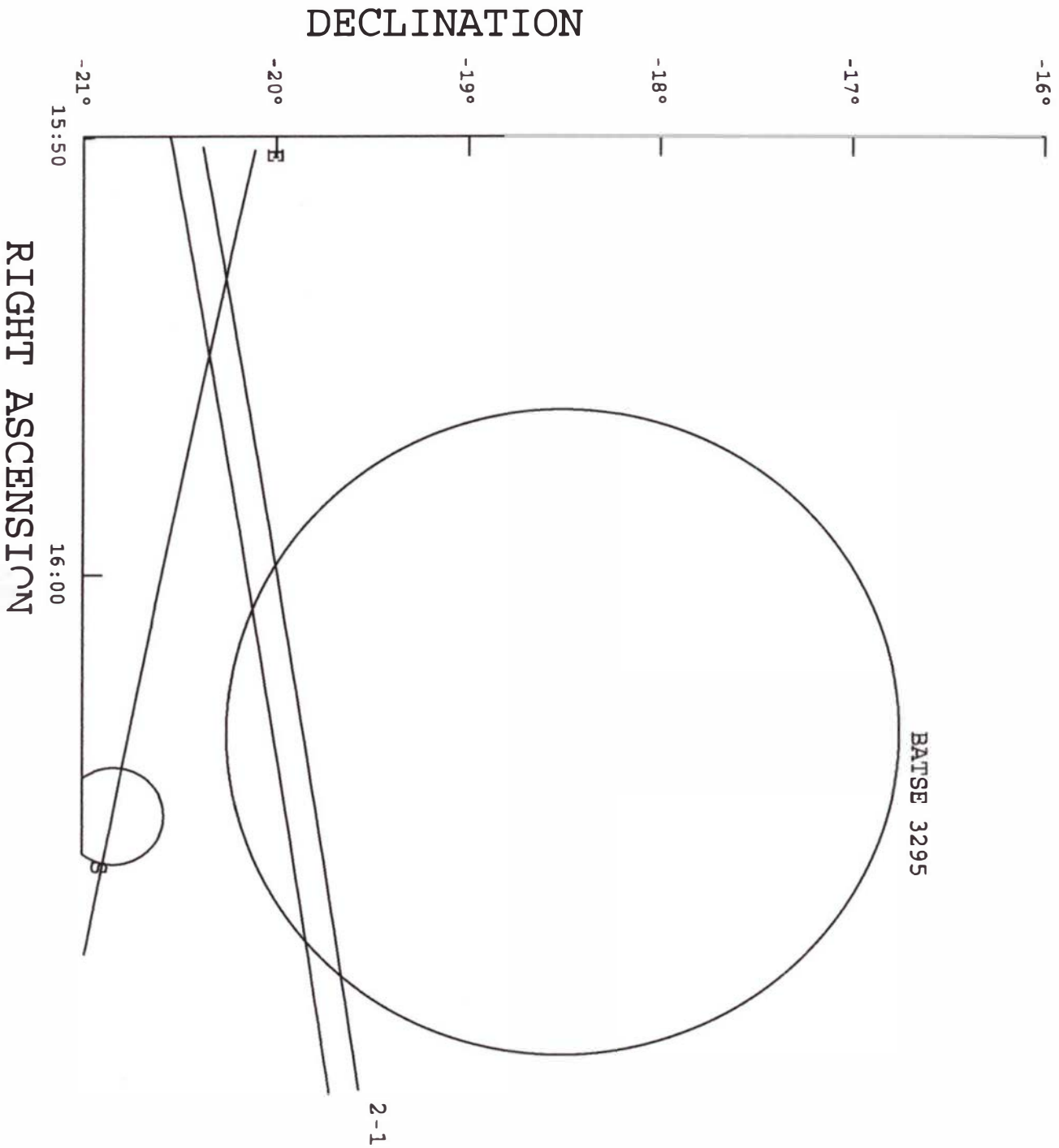
S=SUN

E=ECLIPTIC

G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE



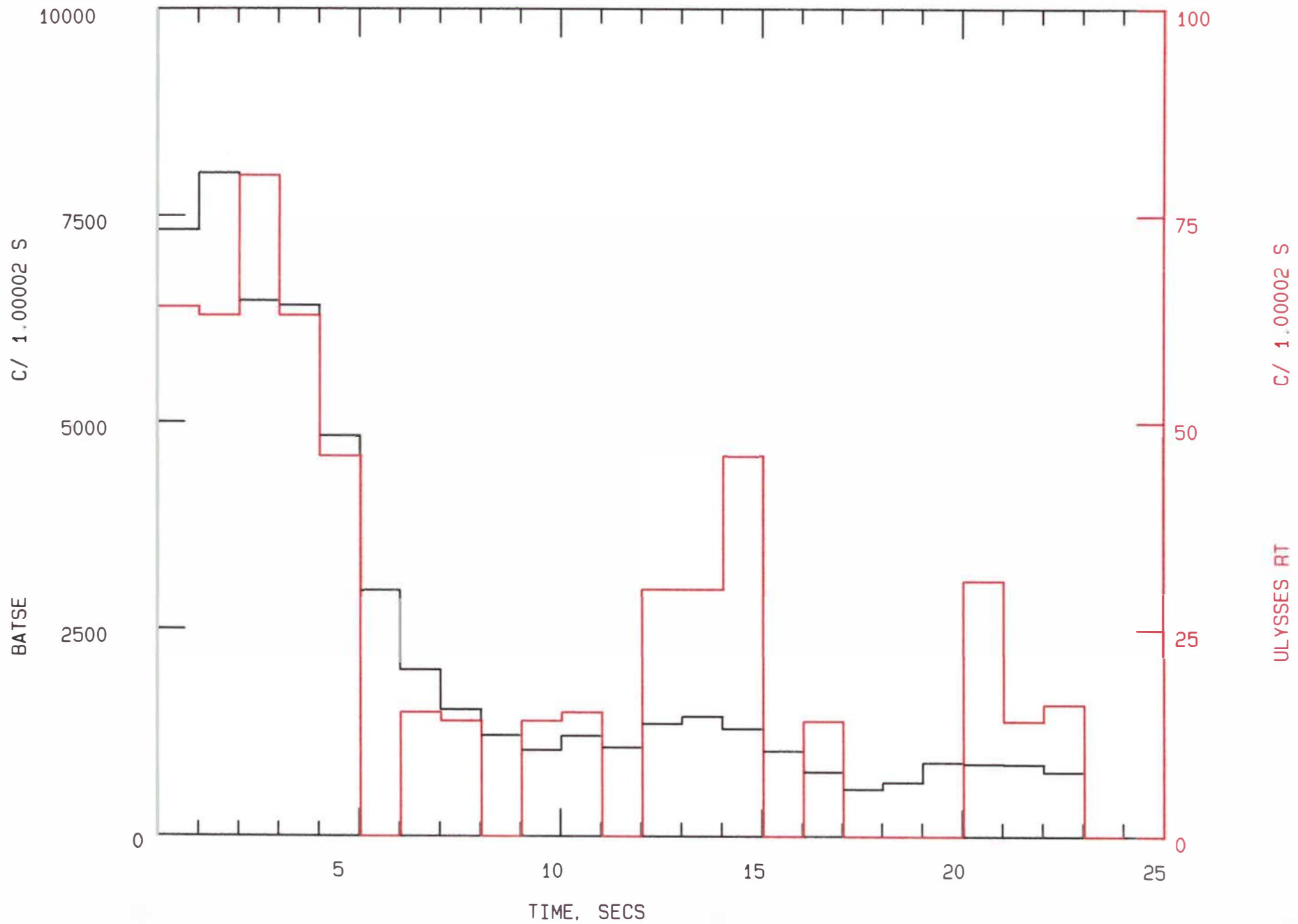
BATSE

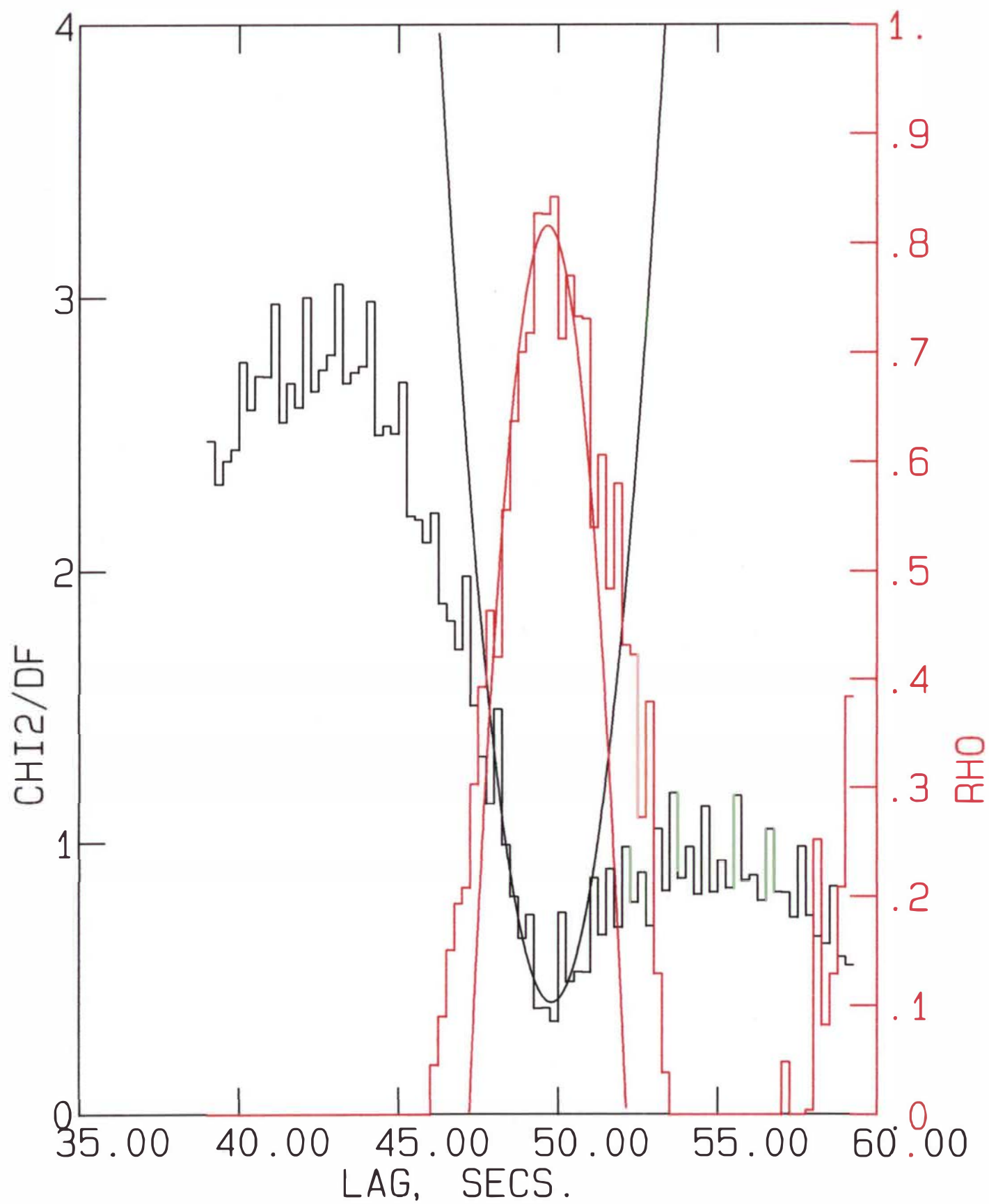
-ULYSSES RT CORRELATION

25/11/94

79470.578

6/ 2/98





ULYSSES RT

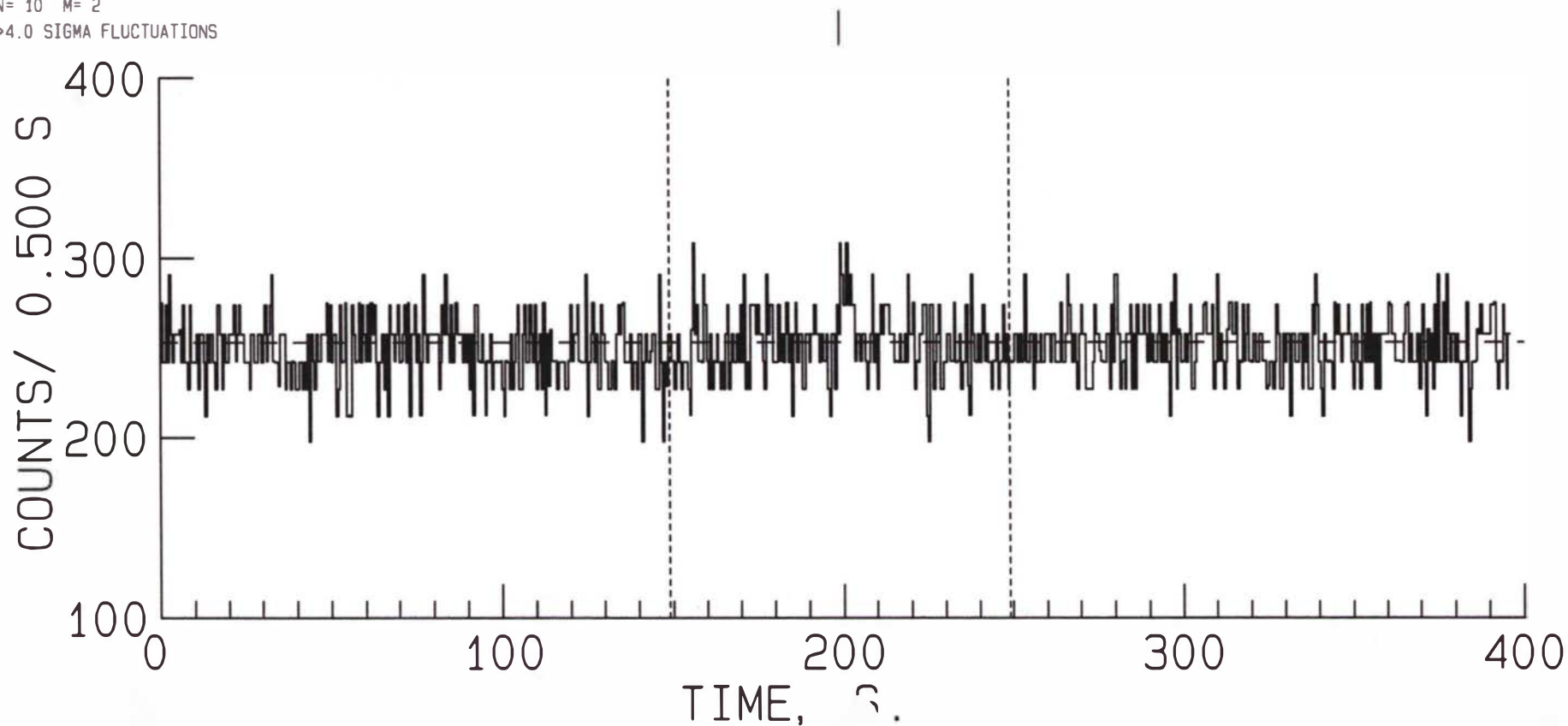
6 / 2 / 98

25/11/94 78660.221 s

0.250 S INTERVALS REGROUPED BY 2

21- 146 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



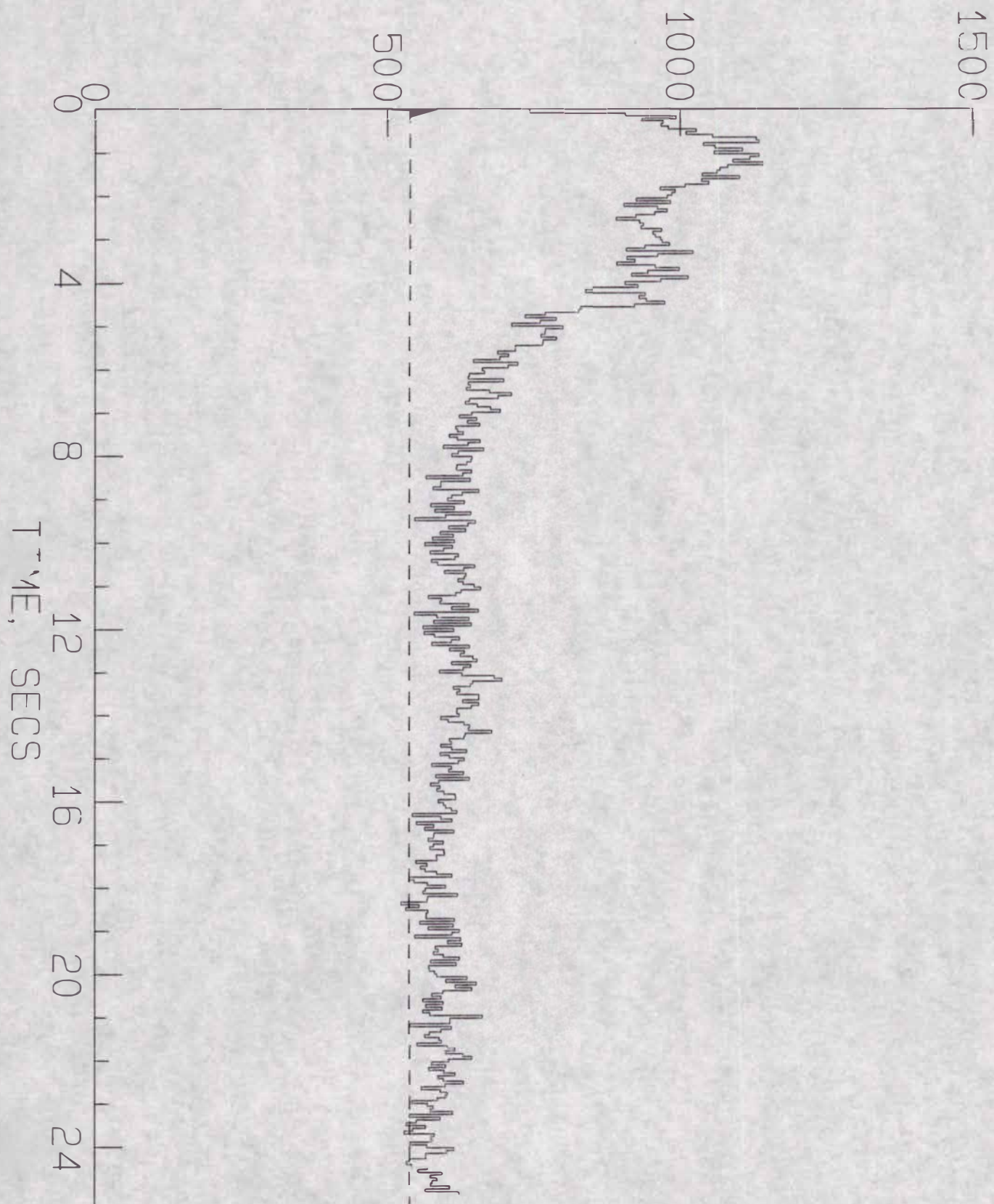
BATSE

25/11/94

79470.578

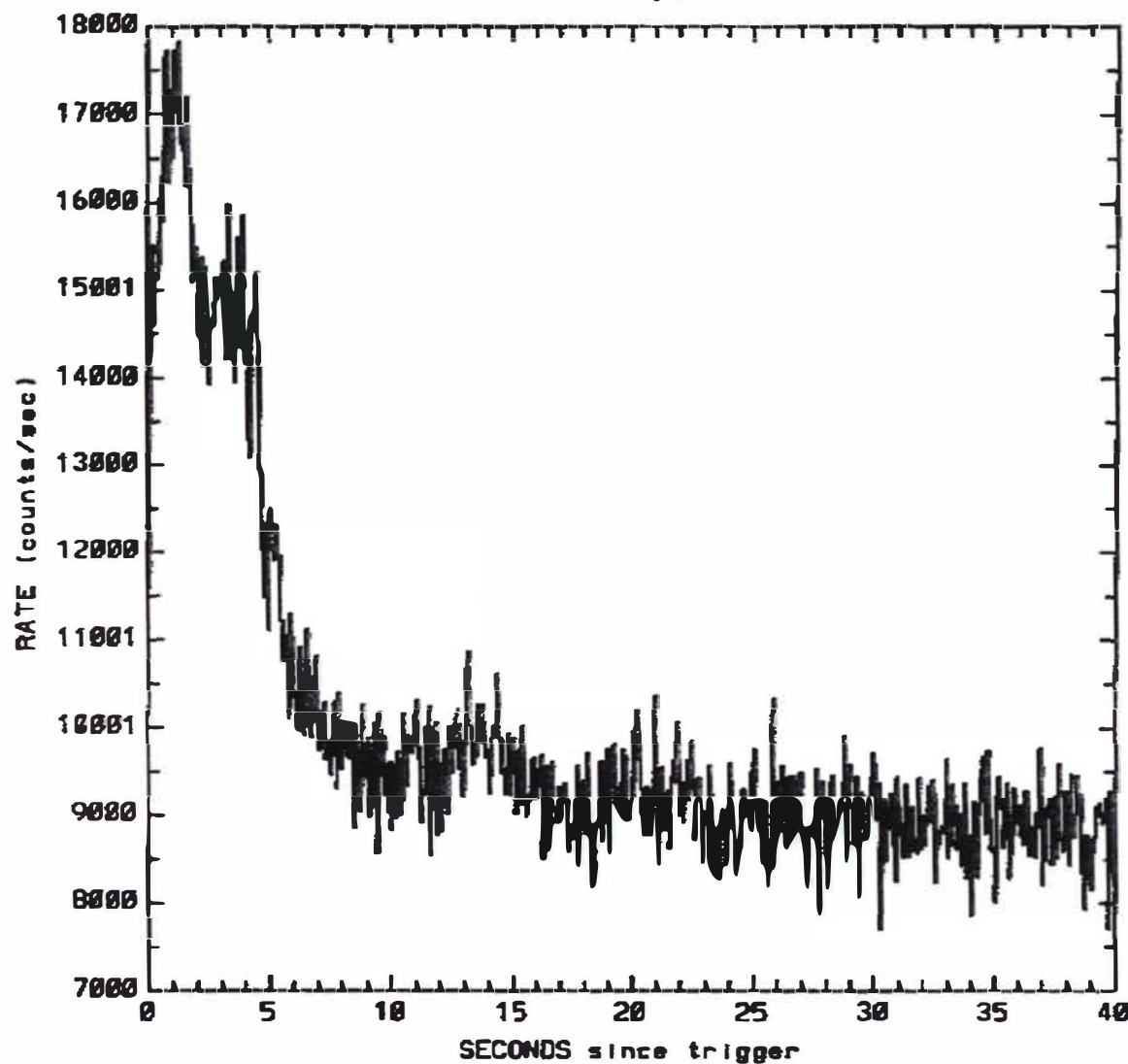
25- 100 keV

COUNTS/ .064 S



Nov 25

MER Data for K. Hurley, No. 3295



30-NOV-1994 14:26:26

Created by BOPS 80
(Burst Display)
Version t2.23

Trigger # . 3295

Trigger Time:
9681 / 79478.578Burst Data Type:
MERDeadtime
Corrected: N
Background Data
Type: CONT
Minimum Integ. Time:
0.064 secondsDetectors [7..8].
---3-18Channels:
(8. 6)Quality Mask:
BD[SP]

NOV 25

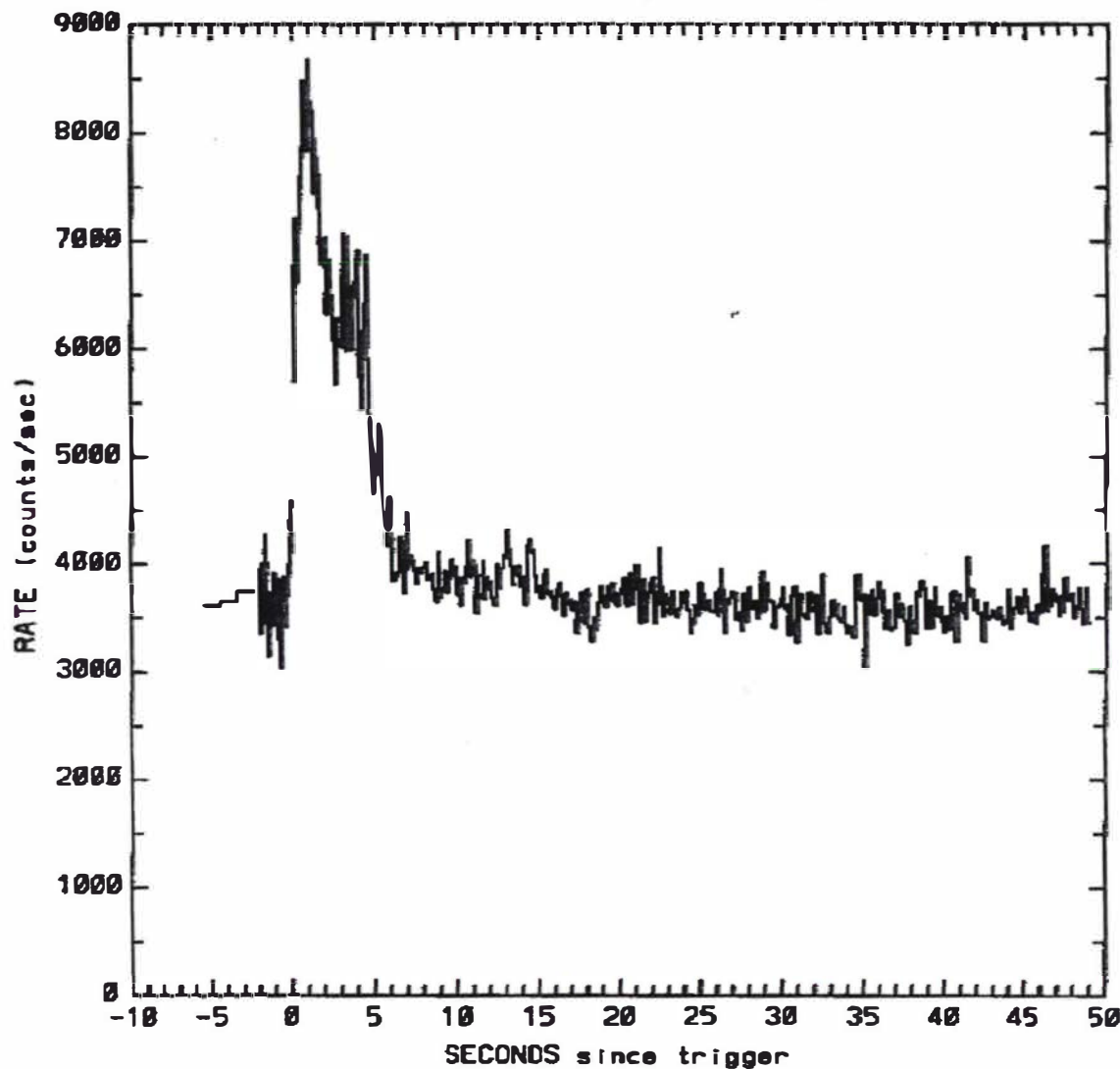
11-30-1994 15:21

205 544 5800

BATSE

P.02

TTS Data for K. Hurley, No. 3295



38-NOV-1994 14:23:59

Created by MDPS 80
(Burst Display)
Version 12.23

Trigger # . 3295

Trigger Time:
9681 / 79479.578

Burst Data Type:
TTS

Time Corrected: Y

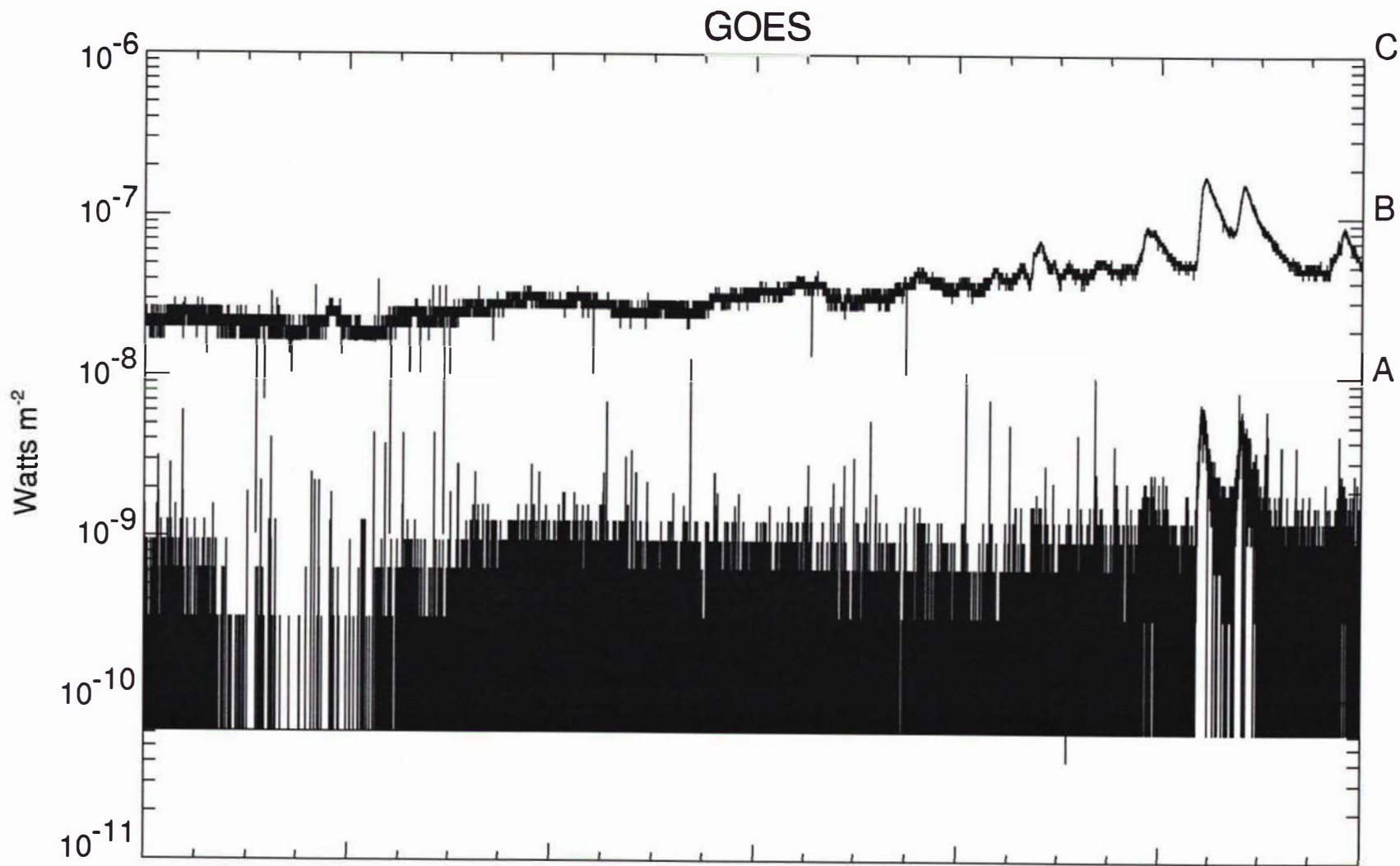
Maximum Time Error:
0.12282 second(s)

Deadtime
Corrected: N
Background Data
Type: PREB + DISCLA

Bin Count: 8
Detectors [7..8].
----3-18

Discriminators:
[2, 2]

Quality Mask:
801SP1



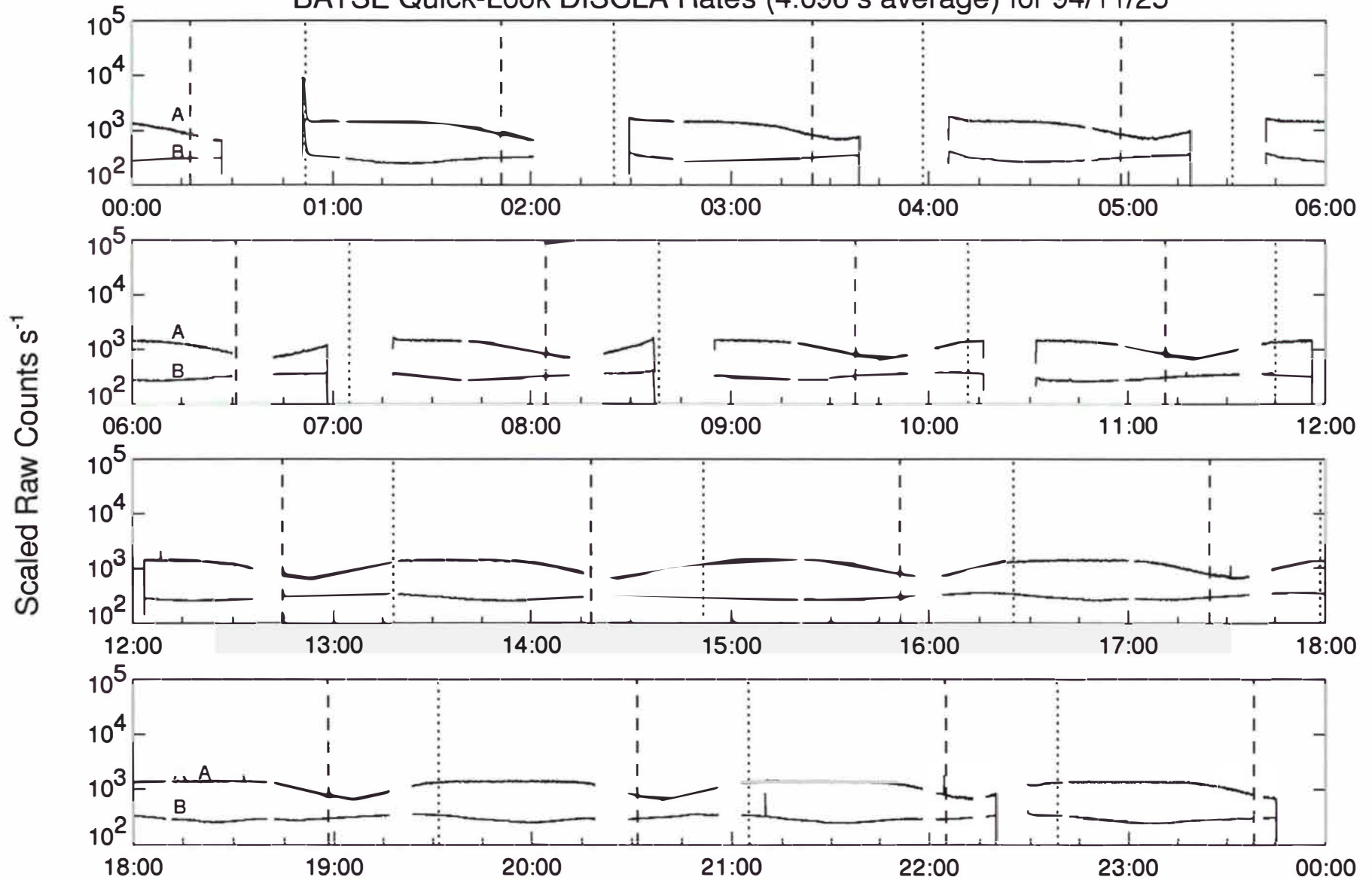
Data Start: 94/11/25, 0000:02

Plot created: 94/12/01, 2049

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 94/11/25

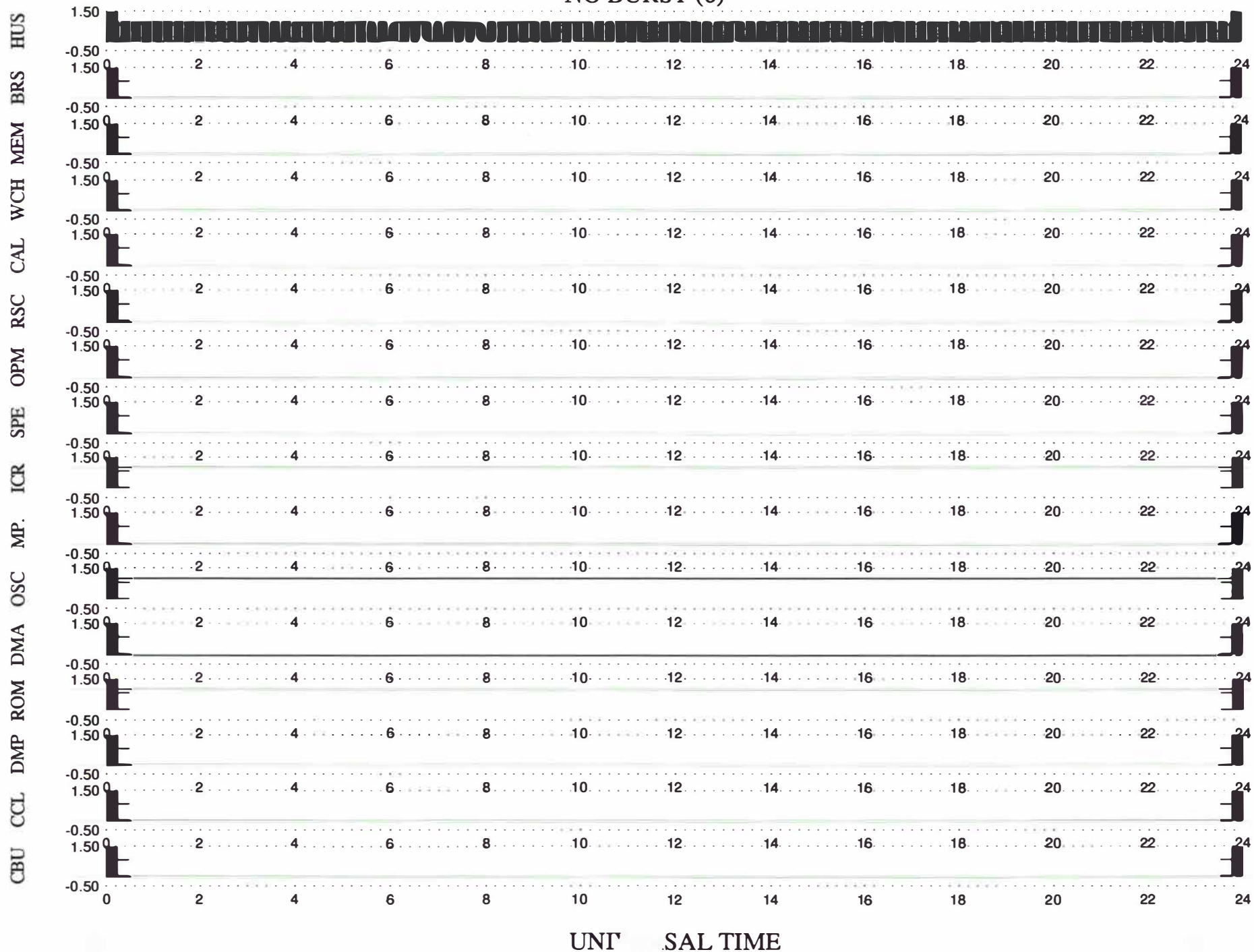


Current Time: 94/12/01, 2037 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

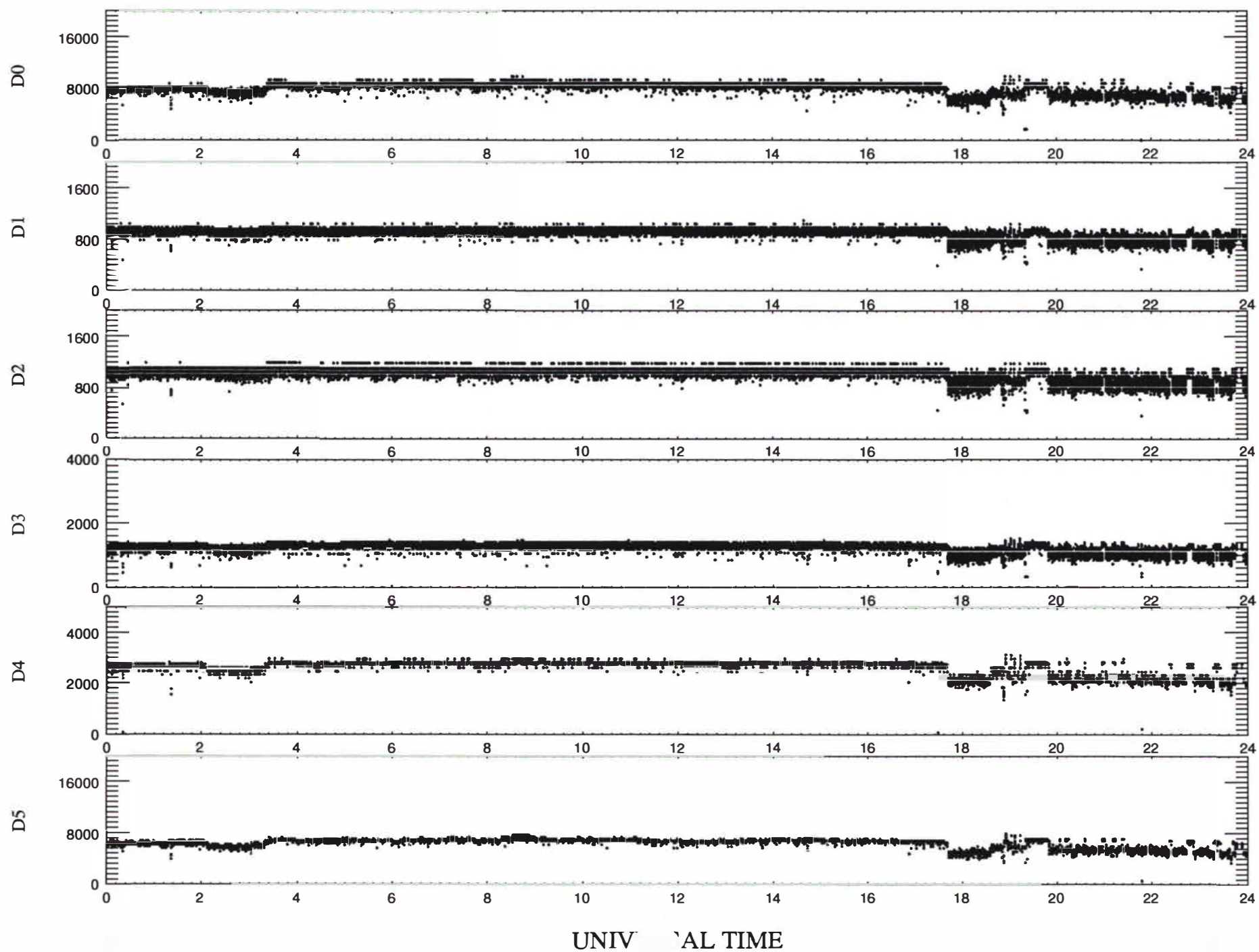
NO BURST (6)



CALIBRATION DATA INCLUDED



UNT SAL TIME



From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:01 PST 1994
Date: Mon, 28 Nov 1994 13:01:04 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3296

BATSEARCH PROGRAM

BATSE BURST # 3296
EVENT OF 1994 NOV 26 DAY OF YEAR=330
EVENT CROSSING TIME AT BATSE : 1245. S. OR 00:20:45.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 14.000 -64.000
BATSE PEAK COUNTING RATE: 6000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/11/ 94 IS:
RA= 266.389 DEC= -73.301 DIST= 2.161 AU
BATSE-ULYSSES DISTANCE = 323341279. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=145.36 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -887.41 SECS.
CROSSING TIME AT ULYSSES IS 358. S. OR 00:05:57 +/- 142.95 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/11/ 94 IS:
RA= 148.102 DEC= 15.272 DIST= 1.136 AU
MARS-BATSE DISTANCE = 169964208. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 57.92 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 301.07 SECS.
CROSSING TIME AT MARS IS 1546. S. OR 00:25:46 +/- 87.98 SECONDS

khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3296

TIME: TJD=9682 SECONDS=01245

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=33 AZIMUTH=91 ERROR= DEGREES

COMMENTS:

BURST. COMPLEX EVENT. DUR.~25 SEC. VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:00 PST 1994
Date: Mon, 28 Nov 1994 13:00:30 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3296

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3296	941126	9682	01245	6000	014	-64

From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996
 Date: Fri, 26 Jan 1996 13:00:45 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: Improved list; same question.

Dear Kevin,

I'm making a little progress here, tracking down these events. This is a slightly improved list, with a few more BATSE triggers identified. - TLC

Yr	Mn	Dy	Konus#	Konus Tzero	BATSE Tz, #	Ulysses
94	11	14	BGR	07360	07358 3283	- NO
94	11	19	4	70269.175	70250 3287	R I
94	11	21	6	62700.945	62697 3290	trig.
94	11	25	7	79470.156	79470 3295	R I
94	11	26	BGR	01246	01245 3296	NO
94	11	26	8	44557.952	44521 3298	trig.
94	11	26	BGR	60860	60861 3299	
94	11	26	9	71809.732	71798 3301	R I
94	11	27	10	52225.68	52217 3303	R I
94	11	28	BGR	56220	56217 3305	
94	12	28	28	27585.915	27581 3330	R I
94	12	29	29	82268.781	82258 3334	R I
95	1	4	31	26319.613	26319 3345	R I
95	1	11	33	17352.241	17263 3351	R I
95	1	11	34	44329	44310 3352	
95	1	17	BGR	05760	05761 3360	
95	1	18	BGR	44574	44589 3364	
95	2	7	BGR	02774	02781 3406	
95	2	8	45	07824	07824 3408	
95	2	10	47	08424	08421 3410	
95	2	11	48	08697	08697 3412	trig.
95	2	11	50	72469	72468 3415	
95	2	21	BGR	74701	74705 3436	
95	2	26	54	53351	53336 3442	
95	3	1	BGR	75731	75761 3448	
95	3	4	56	37661	37657 3453	
95	3	5	58	54309	54304 3458	
95	3	10	BGR	78388	78395 3464	
95	3	25	63	25841	25844 3480	
95	3	25	64	63392	63391 3481	
95	3	27	BGR	26323	26347 3485	
95	3	27	BGR	85672	85671 3486	
95	4	1	69	42647	42642 3488	
95	4	1	70	74635	74634 3489	
95	4	3	71	47985	47987 3491	
95	4	3	72	84828	84826 3492	
95	4	16	BGR	48420	48419 3509	
95	4	18	81	83793	83795 3512	
95	4	25	86	00923	00919 3523	
95	4	30	BGR	54224	54229 3527	
95	5	3	88	66971	66970 3537	
95	5	10	90	28083	28079 3569	
95	5	13	93	81706	81703 3571	
95	5	21	97	25161	25157 3588	
95	5	22	98	23898	23896 3590	
95	5	22	100	85280	85283 3593	
95	5	24	102	14902	14899 3598	
95	6	2	104	25592	25592 3618	
95	6	10	107	6849	06849 3637	
95	6	24	111	84124	84084 3648	
95	6	25	113	14626	14601 3649	
95	6	29	115	37033	37036 3654	
95	7	1	116	12762	12758 3657	

95	7	1	117	23737	23737	3658
95	7	6	121	42735	42735	3662
95	7	11	123	13789	13789	3663
95	7	13	BGR	32133	32176	3664
95	7	30	128	76149	76124	3720
95	8	4	131	7135	07134	3734
95	8	4	133	45377	45376	3735
95	8	8	BGR	13023	12974	3745
95	8	9	136	85945	85945	3750
95	8	18	137	5065	05002	3765
95	8	22	140	13751	13749	3767
95	9	4	142	52692	52688	3776
95	9	9	145	85473	85452	3788
95	9	19	151	51465	51447	3806
95	9	21	152	20947	20947	3811
95	9	22	BGR	15495		
95	9	22	BGR	25929		
95	9	26	BGR	63919		
95	10	1	153	41907		
95	10	2	BGR	77583		3843
95	10	4	BGR	83974		
95	10	5	154	14842.112		
95	10	8	156	46287.863		
95	10	10	BGR	11774		
95	10	11	157	77693.094		3860
95	10	13	159	57097.299		
95	10	14	160	13108.167		
95	10	14	161	43561.3		
95	10	16	162	02484.285		3870
95	10	16	BGR	71607		3871
95	10	18	163	19832.069		
95	10	19	64	11712.625		
95	10	19	165	48244.594		3875
95	10	25	167	85239.738		
95	11	2	168	07085.879		
95	11	2	69	21209.015		3891
95	11	2	BGR	28693		
95	11	5	BGR	01745		
95	11	5	170	05868.077		3893
95	11	5	171	46827.808		
95	11	7	BGR	27298		
95	11	11	BGR	34960		
95	11	12	172	66495.244		
95	11	13	173	84358.872		3906
95	11	15	BGR	38929		
95	11	17	175	10123.762		
95	11	18	BGR	82560		
95	11	19	176	29831.402		3912
95	11	19	177	46457.519		
95	11	19		59448		
95	11	21		22280		
95	11	22	179	09841.38		
95	11	22	180	17107.738		
95	11	23	BGR	65408		
95	11	24	BGR	21266		3918
95	11	24	BGR	25132		

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

28 / 11 / 94

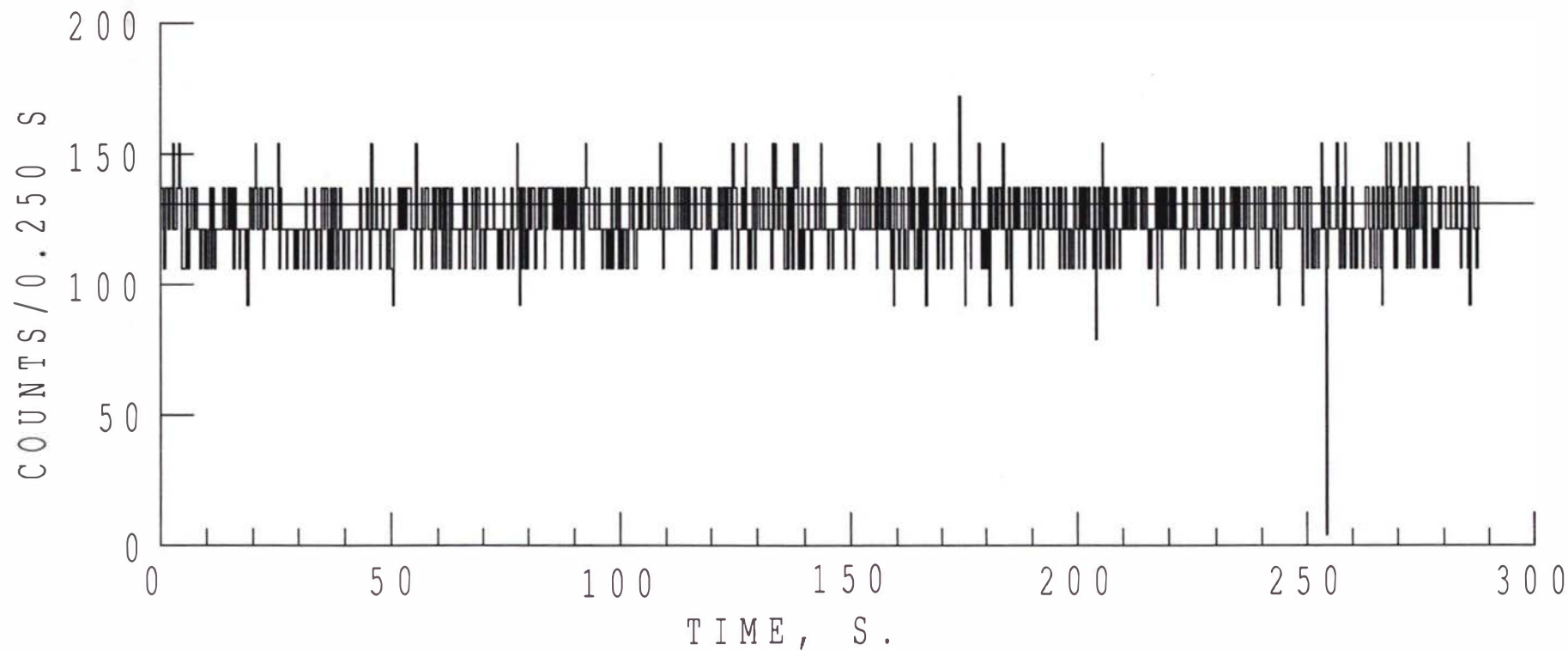
ULYSSES RT

26 / 11 / 94 216.123 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:03 PST 1994
Date: Mon, 28 Nov 1994 13:02:58 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3297

BATSEARCH PROGRAM

A

BATSE BURST # 3297
EVENT OF 1994 NOV 26 DAY OF YEAR=330
EVENT CROSSING TIME AT BATSE : 14113. S. OR 03:55:13.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 306.000 23.000
BATSE PEAK COUNTING RATE: 14600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/11/ 94 IS:
RA= 266.765 DEC= -73.247 DIST= 2.161 AU
BATSE-ULYSSES DISTANCE = 323296267. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 181.86 SECS.
CROSSING TIME AT ULYSSES IS 14295. S. OR 03:58:14 +/- 237.31 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/11/ 94 IS:
RA= 148.102 DEC= 15.272 DIST= 1.136 AU
MARS-BATSE DISTANCE = 169964208. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 43.96 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 408.10 SECS.
CROSSING TIME AT MARS IS 14521. S. OR 04:02:01 +/- 74.52 SECONDS

RI - Maybe - but too weak to be sure

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3297

TIME: TJD=9682 SECONDS=14113

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=73 AZIMUTH=303 ERROR= DEGREES

COMMENTS:

BURST. SINGLE SPIKE, NEARLY SYMMETRIC. DUR. ~0.5 SEC.
VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:02 PST 1994
Date: Mon, 28 Nov 1994 13:02:23 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3297

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3297	941126	9682	14113	14600	306	+23

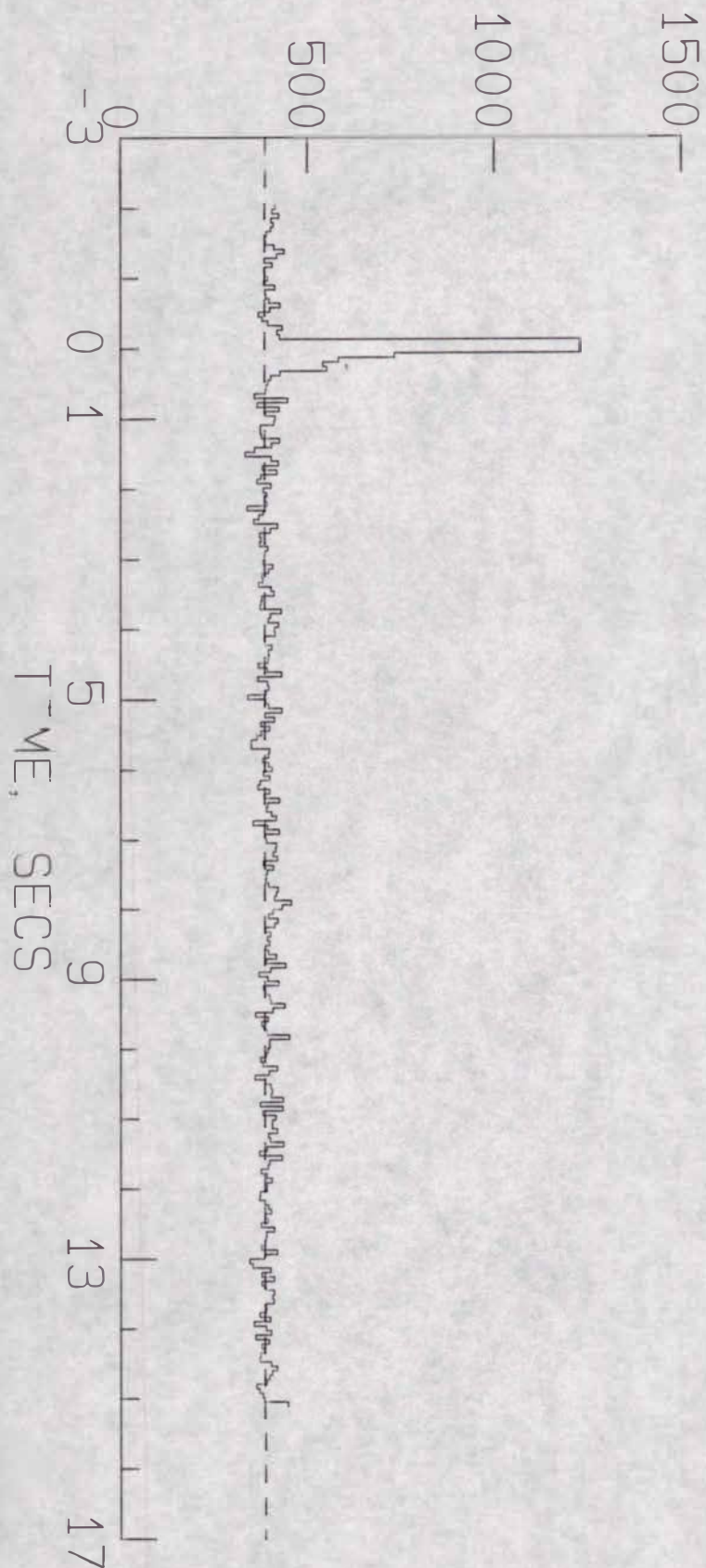
BATSE

26/11/94

14113.394

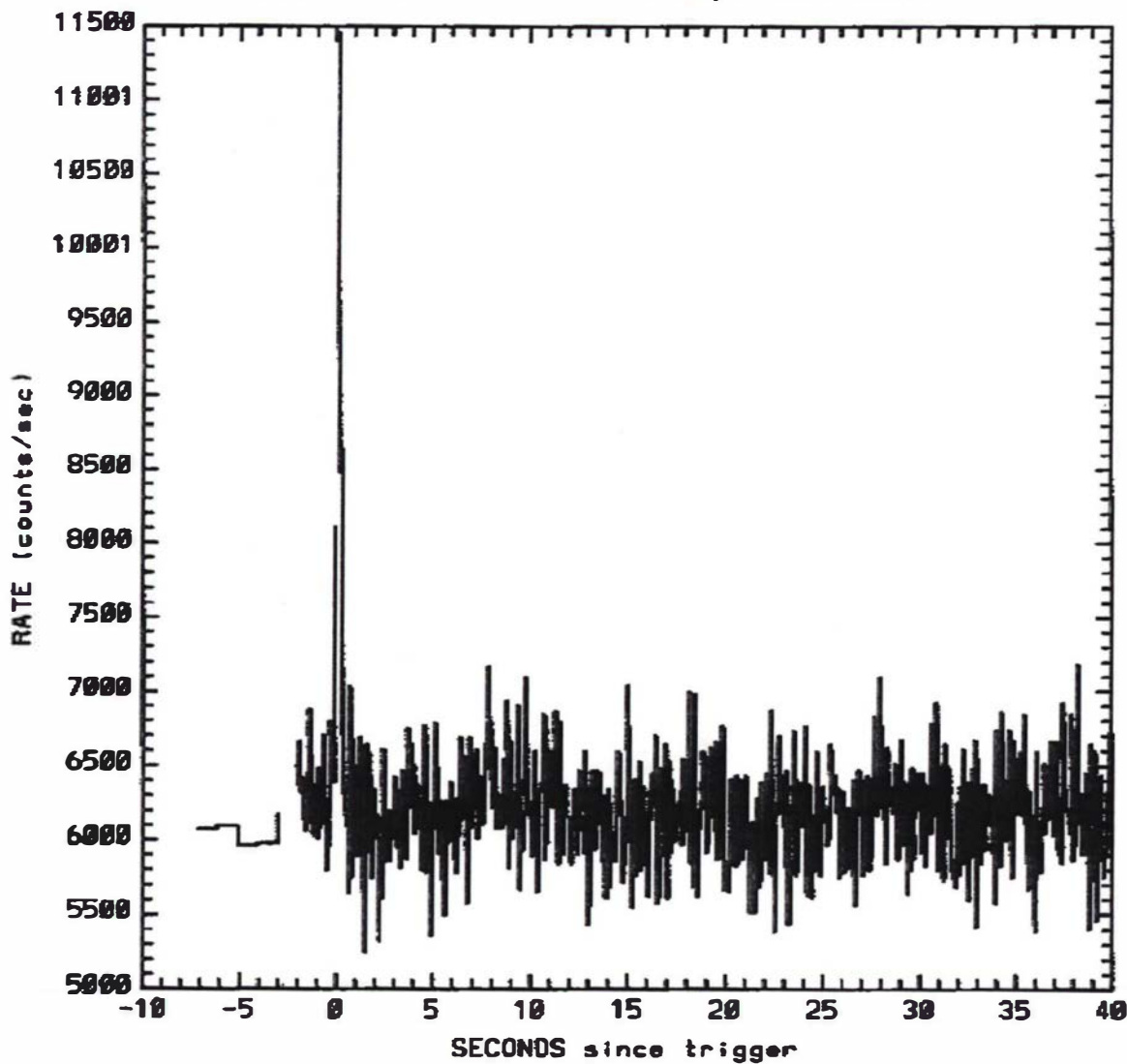
25- 100 keV

COUNTS/ .064 S



3 / 12 / 94

DISCSC Data for K. Hurley. No. 3297



29-NOV-1994 15:53:01

Created by MOPS 80
(Burst Display)
Version 2.22

Trigger = 3297

Trigger Time:
9682 / 14113.394Burst Data Type:
DISCSCDeadtime
Corrected: N
Background Data
Type: PRED + DISCLA
Minimum Integ. Time:
0.064 secondsDetectors (7..8):
-6--2--Discriminators:
(1. 2)Quality Mask:
BDISP1

Nov 26A

28 / 11 / 94

ULYSSES RT

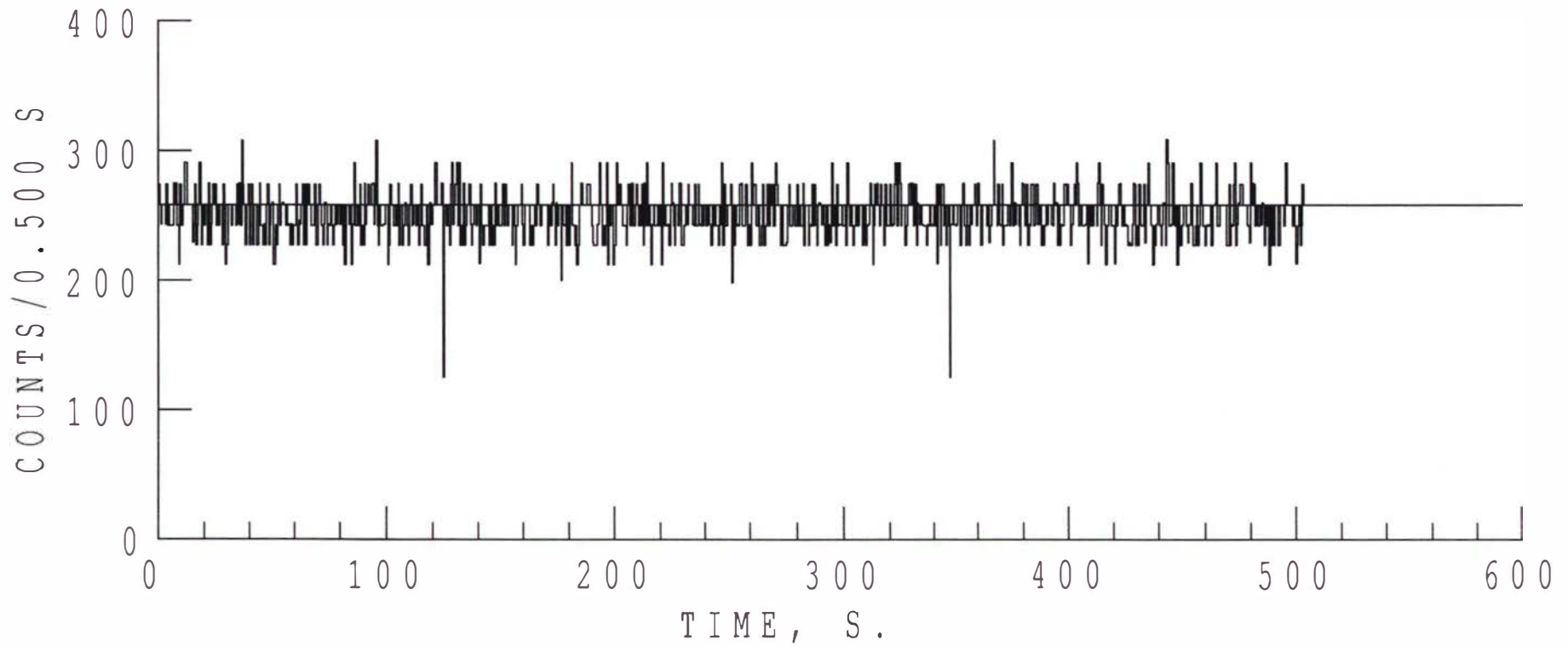
26 / 11 / 94 14040.130 s

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 Nov 28 11:05 PST 1994
Date: Mon, 28 Nov 1994 13:05:26 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3298

B

BATSEARCH PROGRAM

BATSE BURST # 3298
EVENT OF 1994 NOV 26 DAY OF YEAR=330
EVENT CROSSING TIME AT BATSE : 44521. S. OR 12:22:01.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 265.000 -59.000
BATSE PEAK COUNTING RATE: 29500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/11/ 94 IS:
RA= 267.642 DEC= -73.122 DIST= 2.160 AU
BATSE-ULYSSES DISTANCE = 323191262. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=165.84 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1045.30 SECS.
CROSSING TIME AT ULYSSES IS 43476. S. OR 12:04:35 +/- 79.91 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/11/ 94 IS:
RA= 148.102 DEC= 15.272 DIST= 1.136 AU
MARS-BATSE DISTANCE = 169964208. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 63.22 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 255.44 SECS.
CROSSING TIME AT MARS IS 44776. S. OR 12:26:16 +/- 91.75 SECONDS

RE TRIGGER

BATSE BURST TRIGGER

NO.: 3298

TIME: TJD=9682 SECONDS=44521

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=66 AZIMUTH=34 ERROR= DEGREES

COMMENTS:

BURST. STRONG, COMPLEX EVENT. DUR.~125 SEC. VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:05 PST 1994
Date: Mon, 28 Nov 1994 13:04:58 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3298

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3298	941126	9682	44521	29500	265	-59

From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996
 Date: Fri, 26 Jan 1996 13:00:45 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: Improved list; same question.

Dear Kevin,

I'm making a little progress here, tracking down these events. This is a slightly improved list, with a few more BATSE triggers identified. - TLC

Yr	Mn	Dy	Konus#	Konus Tzero	BATSE Tz, #	Ulysses
94	11	14	BGR	07360	07358	3283 - NO
94	11	19	4	70269.175	70250	3287 R I
94	11	21	6	62700.945	62697	3290 trig.
94	11	25	7	79470.156	79470	3295 R I
94	11	26	BGR	01246	01245	3296
94	11	26	8	44557.952	44521	3298 trig.
94	11	26	BGR	60860	60861	3299
94	11	26	9	71809.732	71798	3301 R I
94	11	27	10	52225.68	52217	3303 R I
94	11	28	BGR	56220	56217	3305
94	12	28	28	27585.915	27581	3330 R I
94	12	29	29	82268.781	82258	3334 R I
95	1	4	31	26319.613	26319	3345 R I
95	1	11	33	17352.241	17263	3351 R I
95	1	11	34	44329	44310	3352
95	1	17	BGR	05760	05761	3360
95	1	18	BGR	44574	44589	3364
95	2	7	BGR	02774	02781	3406
95	2	8	45	07824	07824	3408
95	2	10	47	08424	08421	3410
95	2	11	48	08697	08697	3412 trig.
95	2	11	50	72469	72468	3415
95	2	21	BGR	74701	74705	3436
95	2	26	54	53351	53336	3442
95	3	1	BGR	75731	75761	3448
95	3	4	56	37661	37657	3453
95	3	5	58	54309	54304	3458
95	3	10	BGR	78388	78395	3464
95	3	25	63	25841	25844	3480
95	3	25	64	63392	63391	3481
95	3	27	BGR	26323	26347	3485
95	3	27	BGR	85672	85671	3486
95	4	1	69	42647	42642	3488
95	4	1	70	74635	74634	3489
95	4	3	71	47985	47987	3491
95	4	3	72	84828	84826	3492
95	4	16	BGR	48420	48419	3509
95	4	18	81	83793	83795	3512
95	4	25	86	00923	00919	3523
95	4	30	BGR	54224	54229	3527
95	5	3	88	66971	66970	3537
95	5	10	90	28083	28079	3569
95	5	13	93	81706	81703	3571
95	5	21	97	25161	25157	3588
95	5	22	98	23898	23896	3590
95	5	22	100	85280	85283	3593
95	5	24	102	14902	14899	3598
95	6	2	104	25592	25592	3618
95	6	10	107	6849	06849	3637
95	6	24	111	84124	84084	3648
95	6	25	113	14626	14601	3649
95	6	29	115	37033	37036	3654
95	7	1	116	12762	12758	3657

95	7	1	117	23737	23737	3658
95	7	6	121	42735	42735	3662
95	7	11	123	13789	13789	3663
95	7	13	BGR	32133	32176	3664
95	7	30	128	76149	76124	3720
95	8	4	131	7135	07134	3734
95	8	4	133	45377	45376	3735
95	8	8	BGR	13023	12974	3745
95	8	9	136	85945	85945	3750
95	8	18	137	5065	05002	3765
95	8	22	140	13751	13749	3767
95	9	4	142	52692	52688	3776
95	9	9	145	85473	85452	3788
95	9	19	151	51465	51447	3806
95	9	21	152	20947	20947	3811
95	9	22	BGR	15495		
95	9	22	BGR	25929		
95	9	26	BGR	63919		
95	10	1	153	41907		
95	10	2	BGR	77583		3843
95	10	4	BGR	83974		
95	10	5	154	14842.112		
95	10	8	156	46287.863		
95	10	10	BGR	11774		
95	10	11	157	77693.094		3860
95	10	13	159	57097.299		
95	10	14	160	13108.167		
95	10	14	161	43561.3		
95	10	16	162	02484.285		3870
95	10	16	BGR	71607		3871
95	10	18	163	19832.069		
95	10	19	64	11712.625		
95	10	19	165	48244.594		3875
95	10	25	167	85239.738		
95	11	2	168	07085.879		
95	11	2	69	21209.015		3891
95	11	2	BGR	28693		
95	11	5	BGR	01745		
95	11	5	170	05868.077		3893
95	11	5	171	46827.808		
95	11	7	BGR	27298		
95	11	11	BGR	34960		
95	11	12	172	66495.244		
95	11	13	173	84358.872		3906
95	11	15	BGR	38929		
95	11	17	175	10123.762		
95	11	18	BGR	82560		
95	11	19	176	29831.402		3912
95	11	19	177	46457.519		
95	11	19		59448		
95	11	21		22280		
95	11	22	179	09841.38		
95	11	22	180	17107.738		
95	11	23	BGR	65408		
95	11	24	BGR	21266		3918
95	11	24	BGR	25132		

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

I am enclosing in Table 1 the detection times of events shortlisted during Nov-Jan. Kindly confirm whether Ulysses detected these events. Also kindly reconfirm the status of our 17th Oct. event (Ref: your fax).

Table 1

Orbit	Date	Time (UT)
3099	26 Nov 94	12:23:05.244
3305	10 Dec 94	03:10:53.906
3719	6 Jan 95	10:39:57.330

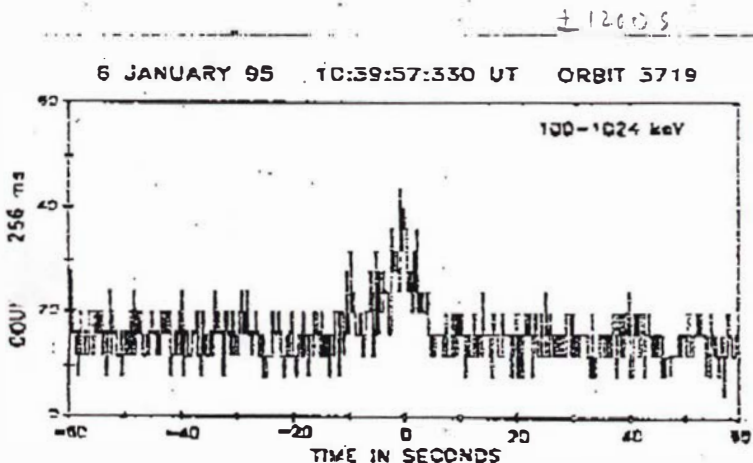
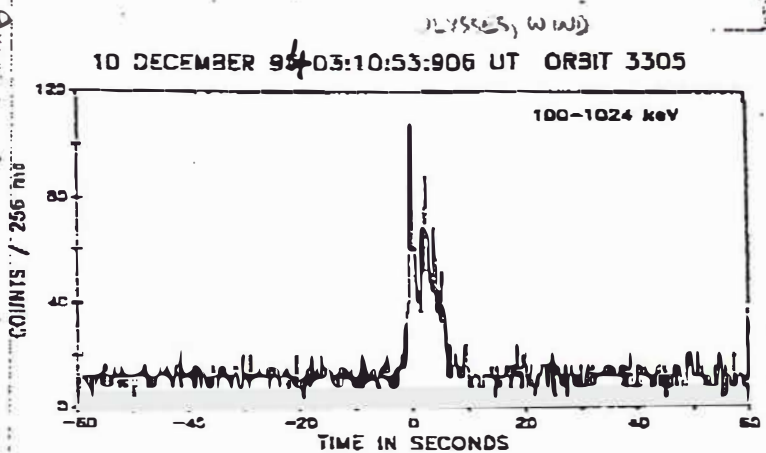
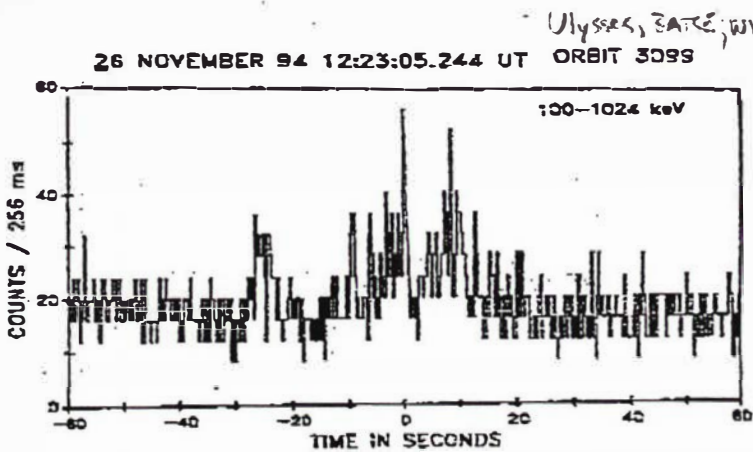
I shall send the profiles after getting your fax No. again.

With best regards,

sincerely yours,

Krishnan
(Krishnan)

Profiles follow:



The same message sent by e-mail also (without profiles)

To : PROF. K. HURLEY (P.I., ULYSSES)

इसरो उपग्रह केन्द्र

अन्तरिक्ष विभाग

भारत सरकार

हवाई पत्तन मार्ग, विमानपुर डाक घर,

बैंगलूर-560 017, भारत

तार: 'उपग्रह' टेलक्स : 0845-2325 और 2769

दूरभाष : 566251

UC BERKELEY



ISRO SATELLITE CENTRE

DEPARTMENT OF SPACE

GOVERNMENT OF INDIA

AIRPORT ROAD, VIMANAPURA P. O.,

BANGALORE-560 017. INDIA

Telegram : UPAGRAH Telex : 0845-2325 & 2769

Telephone : 566251

Dr TMK Marar

Head, Technical Physics Div

Feb 13, 1995

Dear Kevin,

HAPPY NEW YEAR!

I received your fax dated Nov 30, 94 and two emails which came through two different routes. I replied those emails immediately, but I am not sure whether you received them or not. I had sent a fax on Jan 14 for which also I did not get a reply yet. Perhaps you have not received my fax so far. Please send me your fax no again. Our fax Nos are

91-80-526 5407 or 91-80-526 9490

Our email system is unreliable at present. Hence I am requesting you to send emails to me through Mrs Christina of Indian Institute of Astrophysics Library who has agreed to call me whenever she receives any email addressed to me. Her address is as follows:

chris@iiap.ernet.in

(Please write as subject: attention: DR MARAR)

Important messages should however be exchanged via fax.

With reference to your letter of Nov 30, Dr K Kasturirangan, Chairman of ISRO expressed his agreement to the exchange of data between our two groups for joint investigations. We do not at present have a software to calculate the annulus of GRB location using two spacecraft data. We will be happy to receive your help in implementing your software on our computers.

Helio corr removed

Date: Nov 14 '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?

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

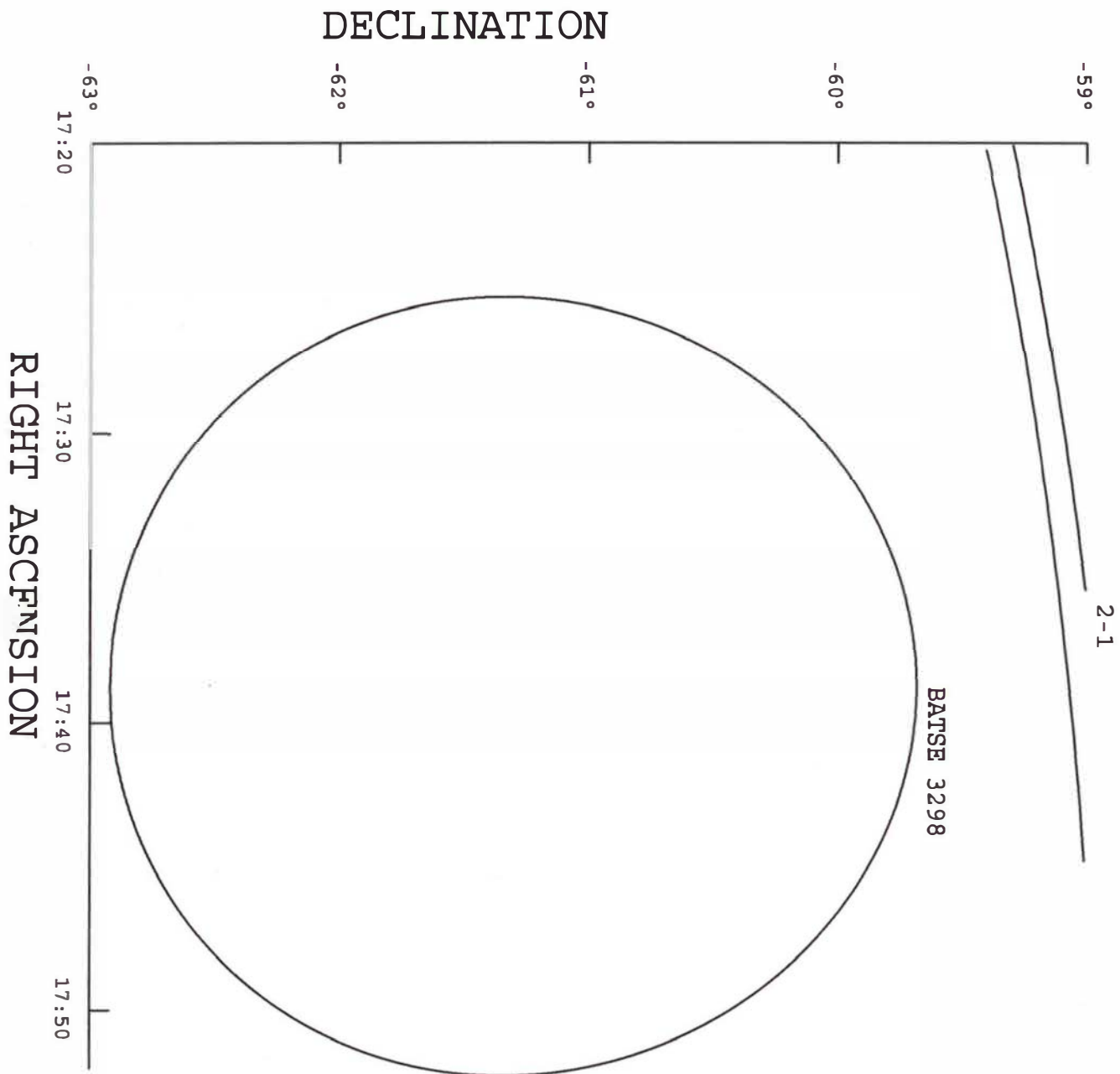
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 26, 1994 12:04

14/11/97



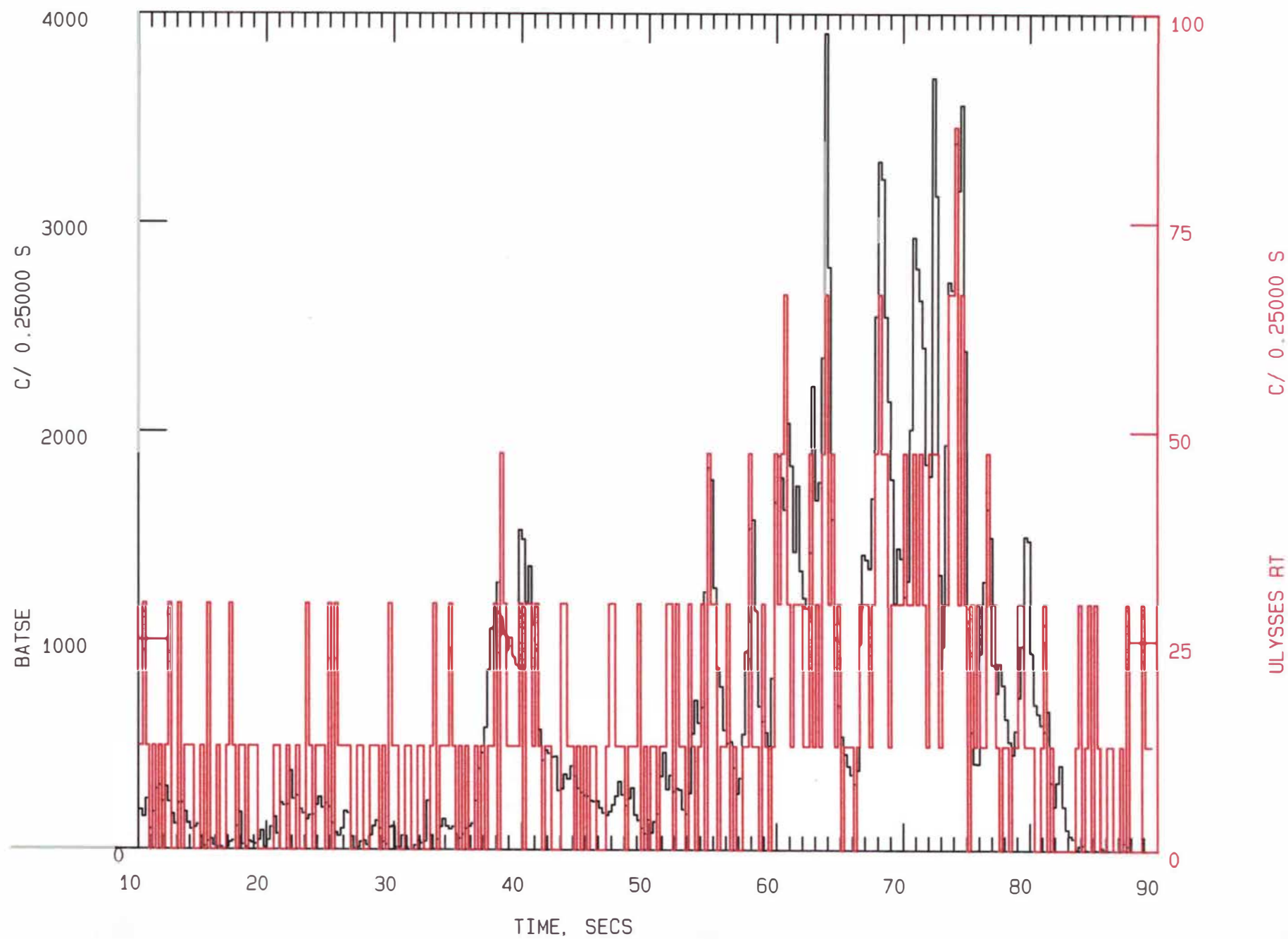
BATSE

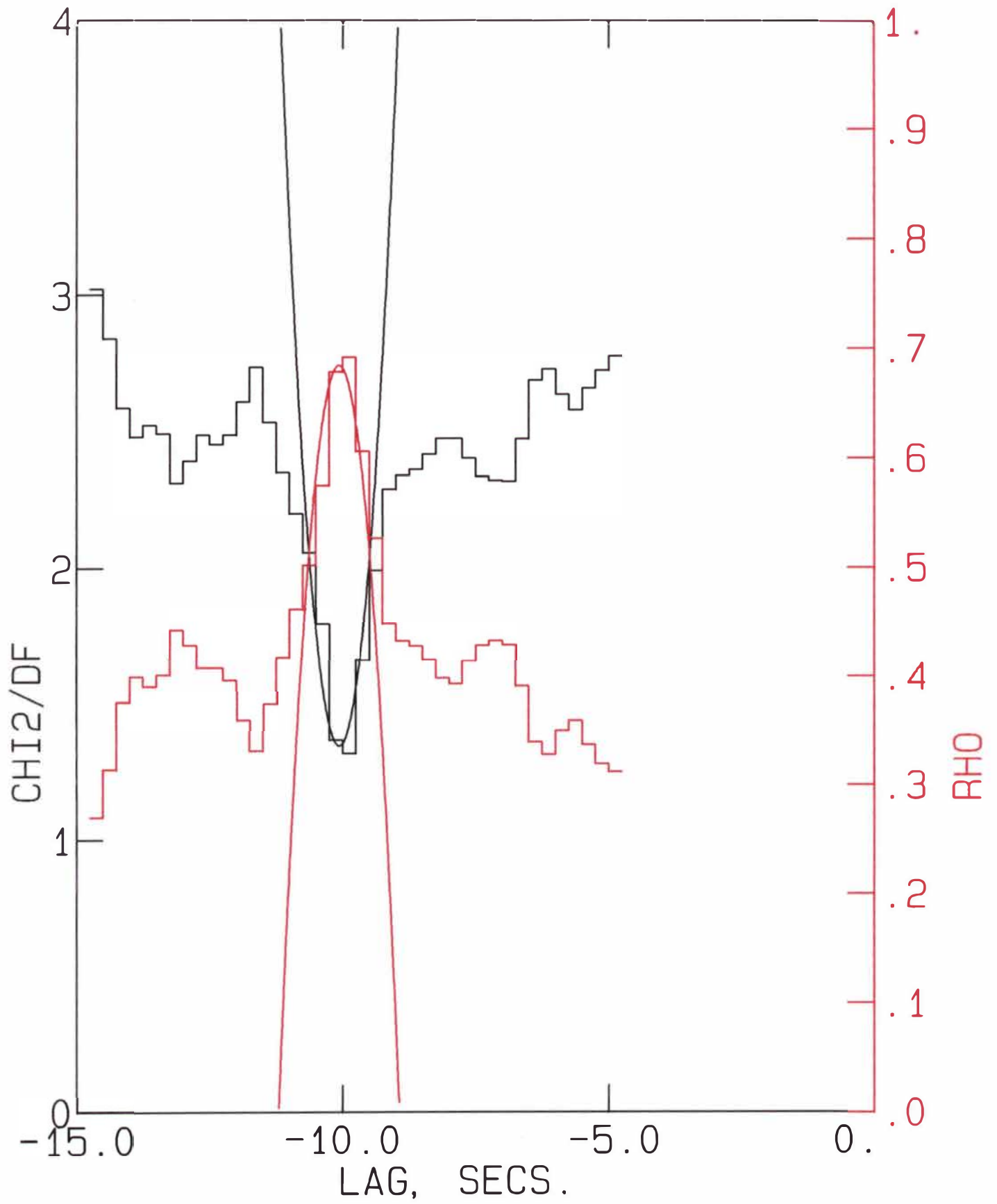
-ULYSSES RT CORRELATION

26/11/94

44521.138

14/11/97





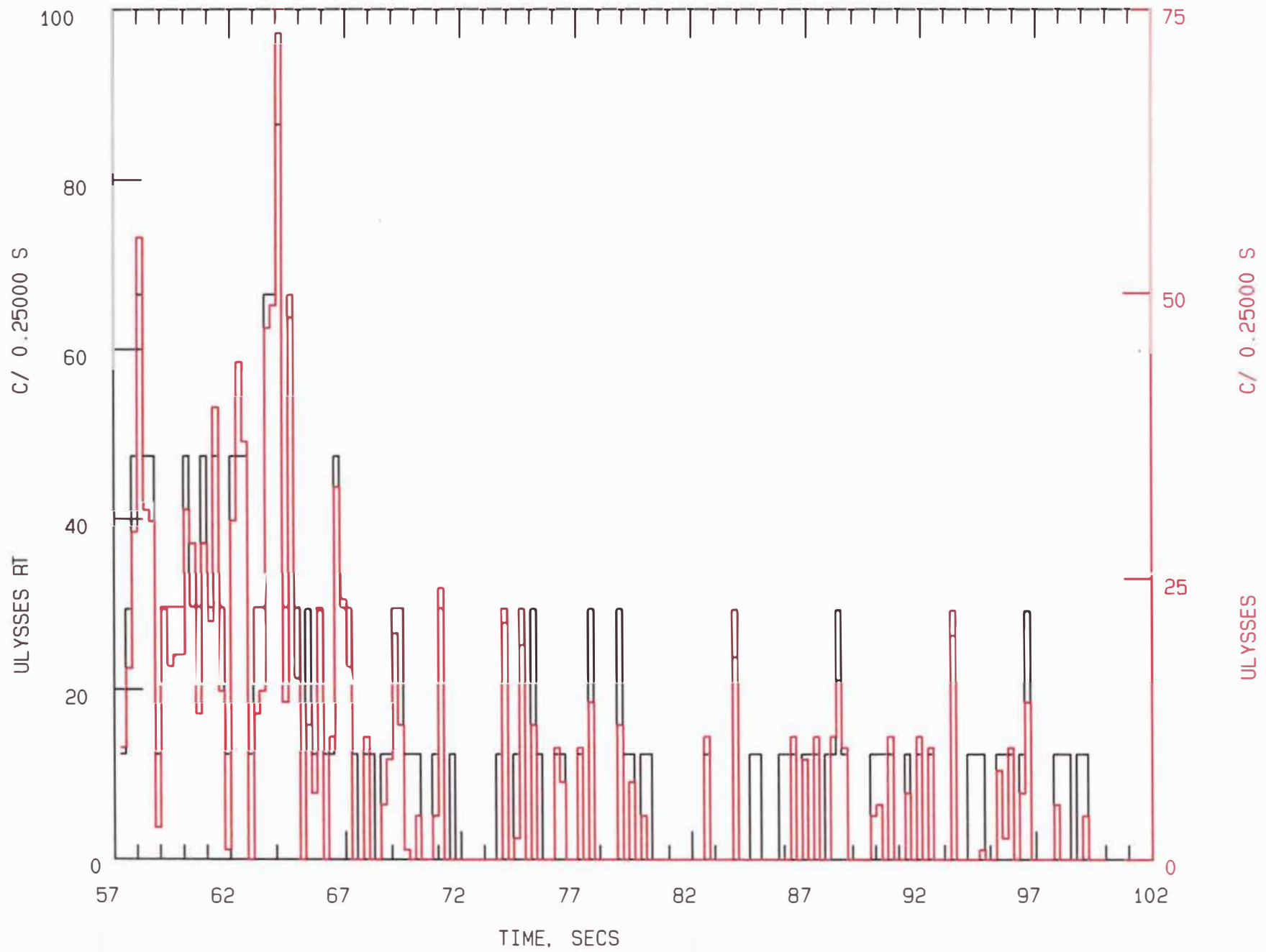
ULYSSES RT-ULYSSES

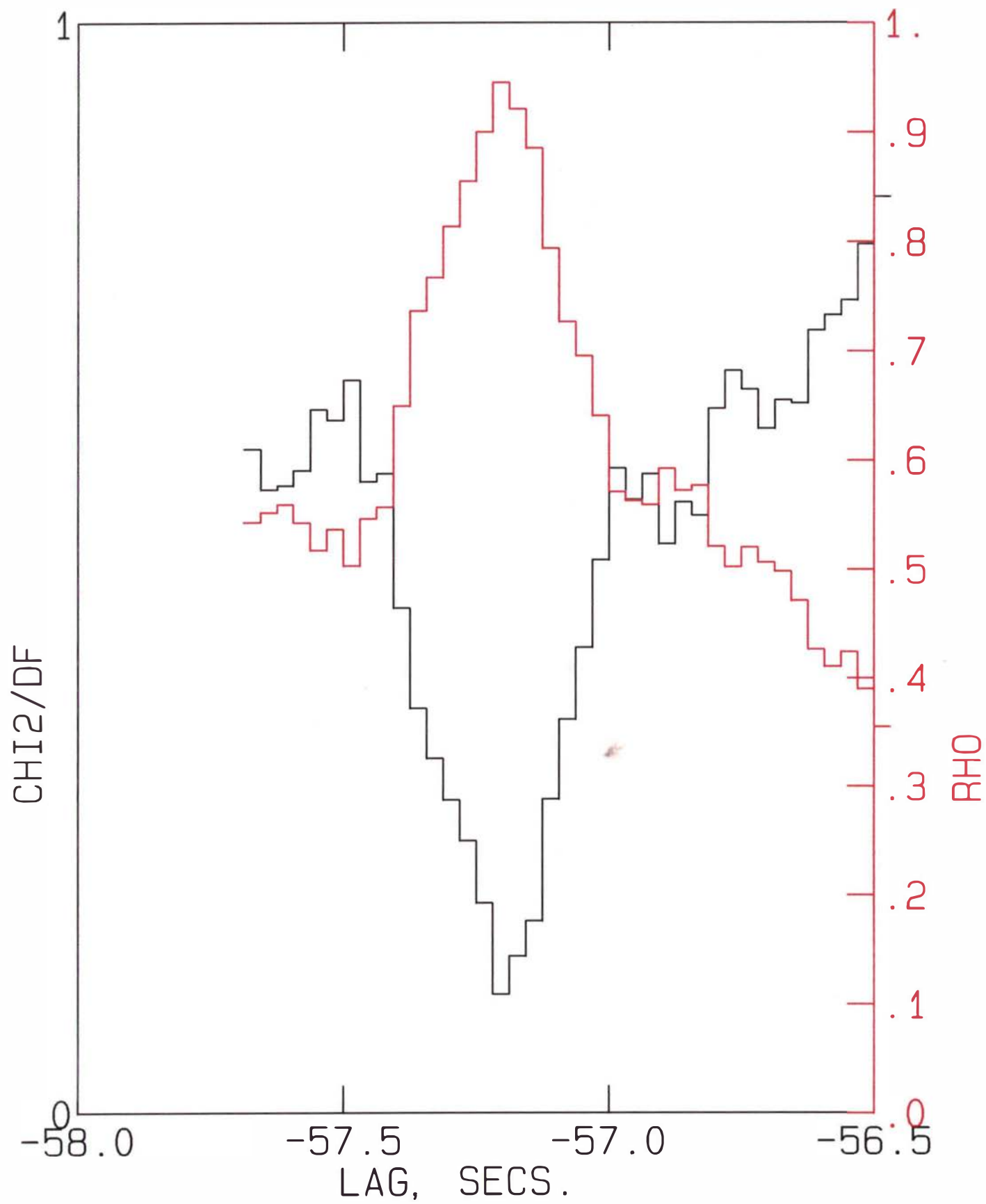
CORRELATION

26/11/94

43486.150

14/11/97

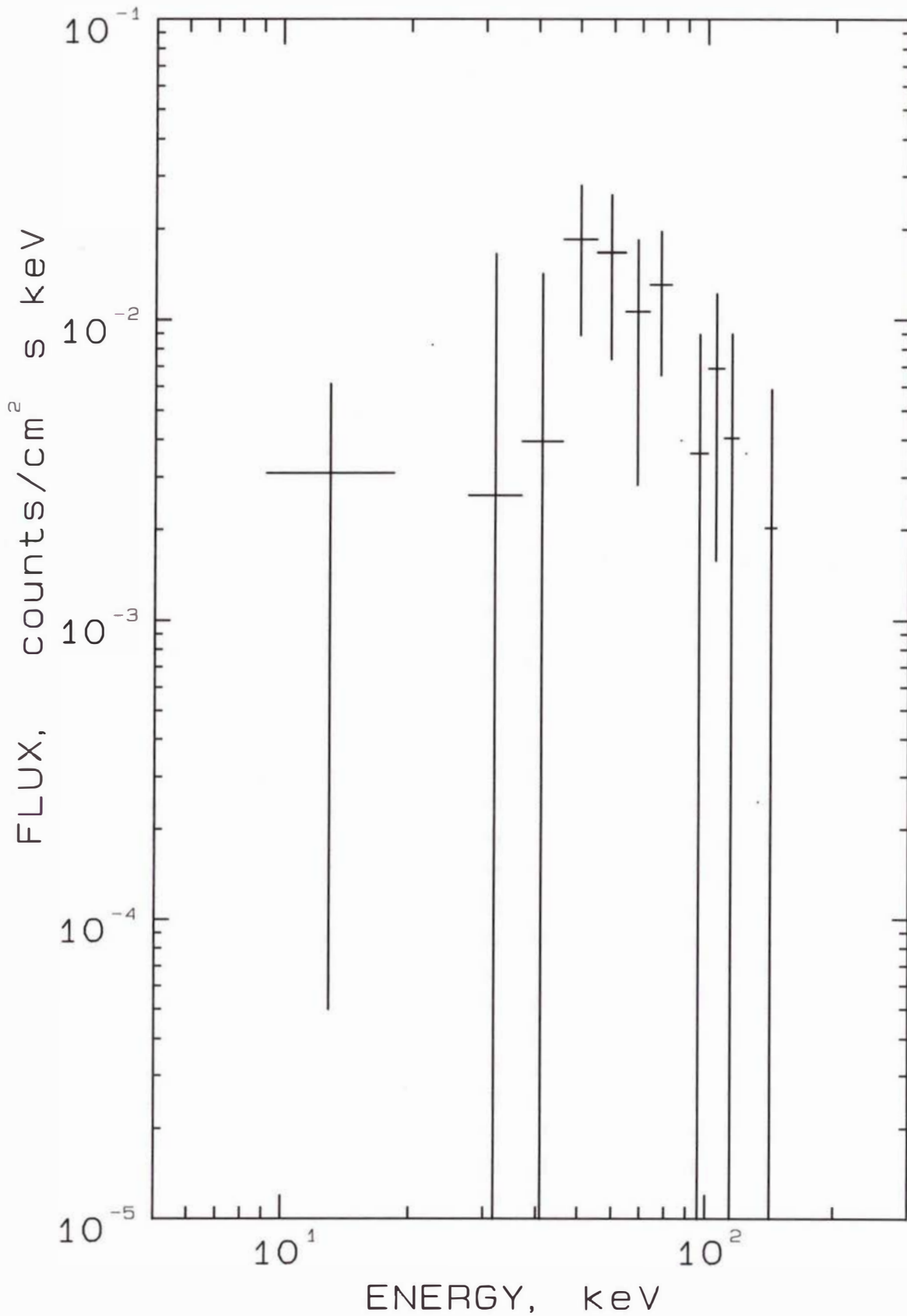




ULYSSES 26/11/94 43550.793

14/11/97

SPECTRUM INTEGRATED OVER 21.2 SECONDS, INTERVALS 2 TO 20



ULYSSES 26/11/94 43550.793 BURST SPECTRAL COUNT RATES

4- 18 keV

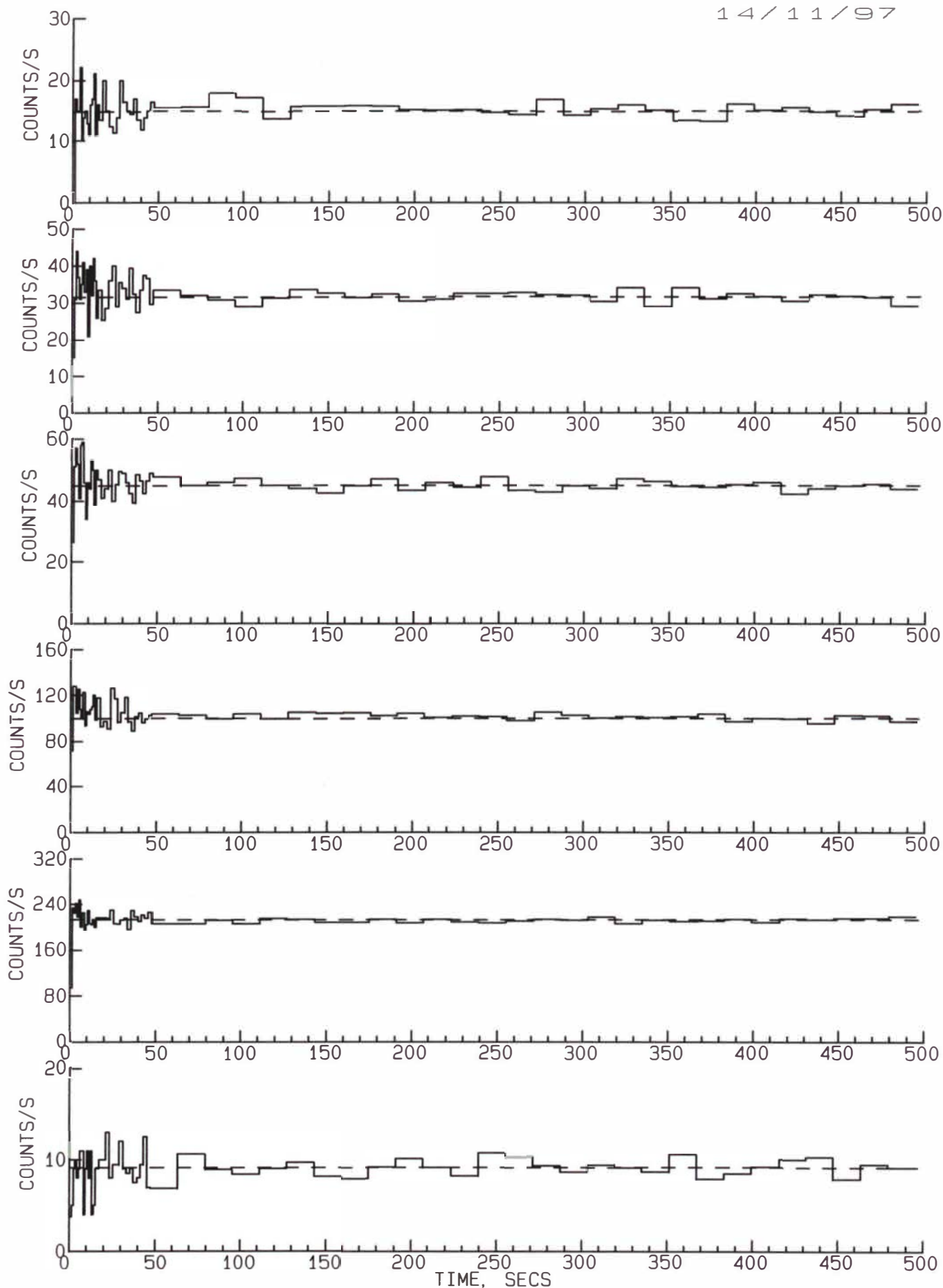
18- 45 keV

45- 73 keV

73-100 keV

100-128 keV

128-146 keV



ULYSSES

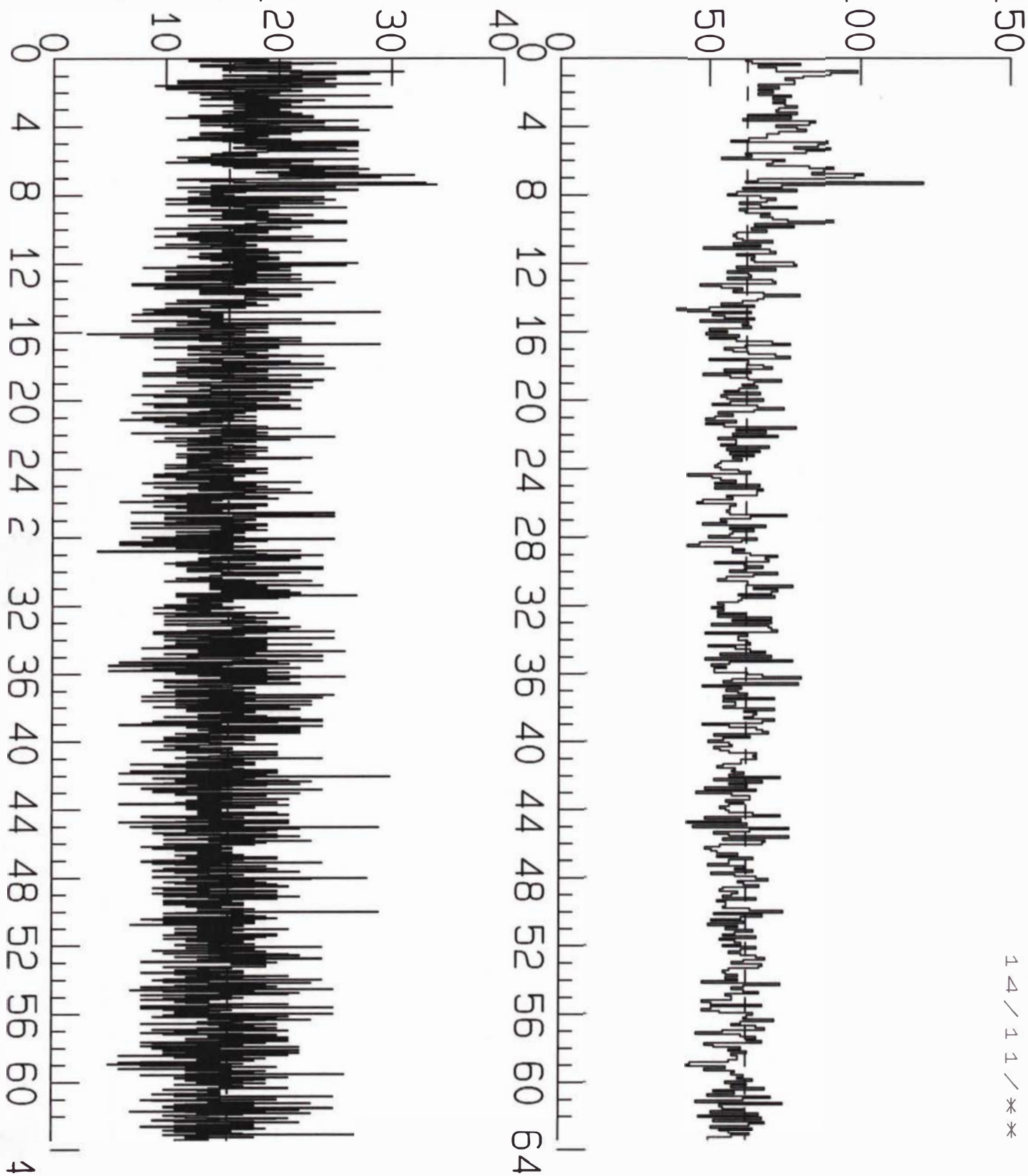
26/11/94

Ttrig=43550.774

21- 146 keV

COUNTS/0.031 S

COUNTS/0.125 S

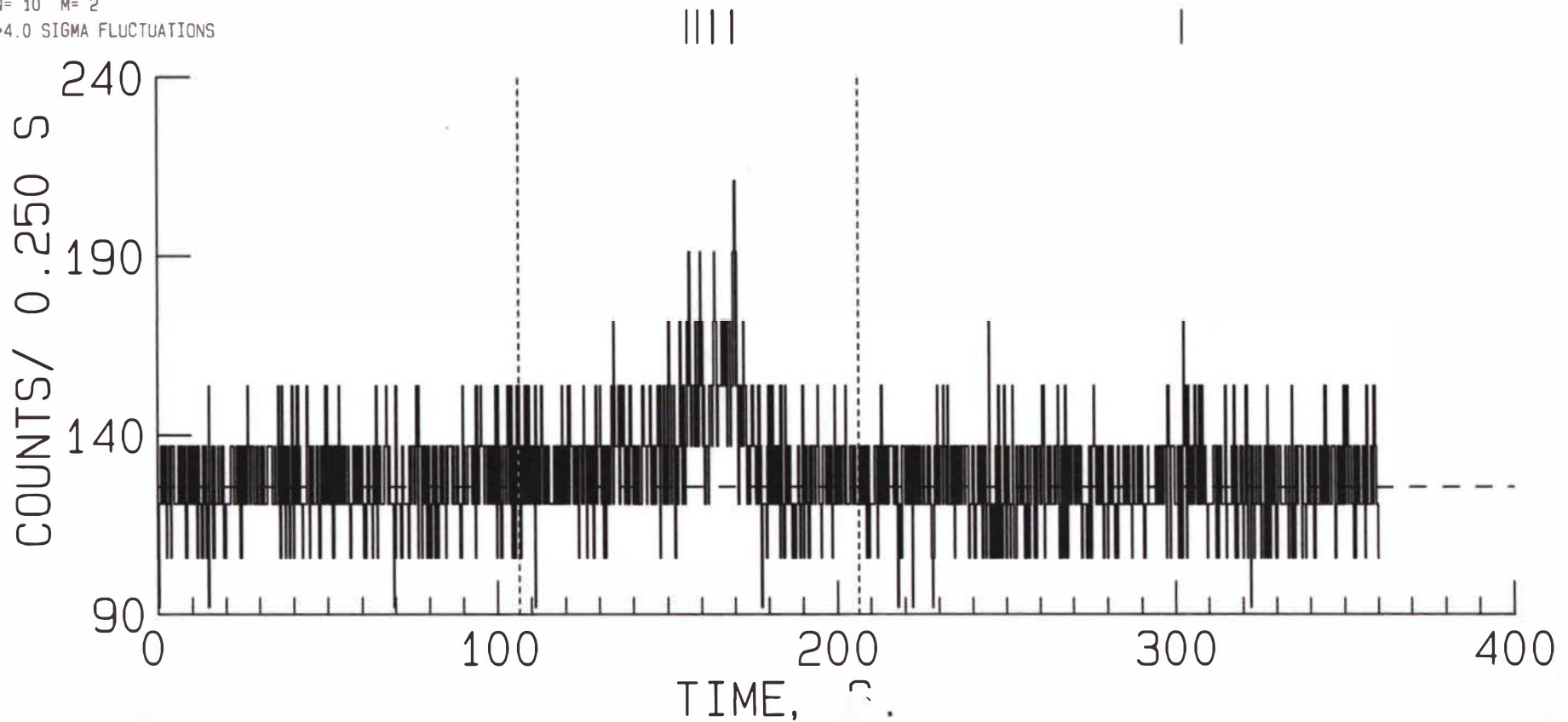


14/11/88

ULYSSES RT
26/11/94 43380.171 s
21- 146 keV

14/11/97

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



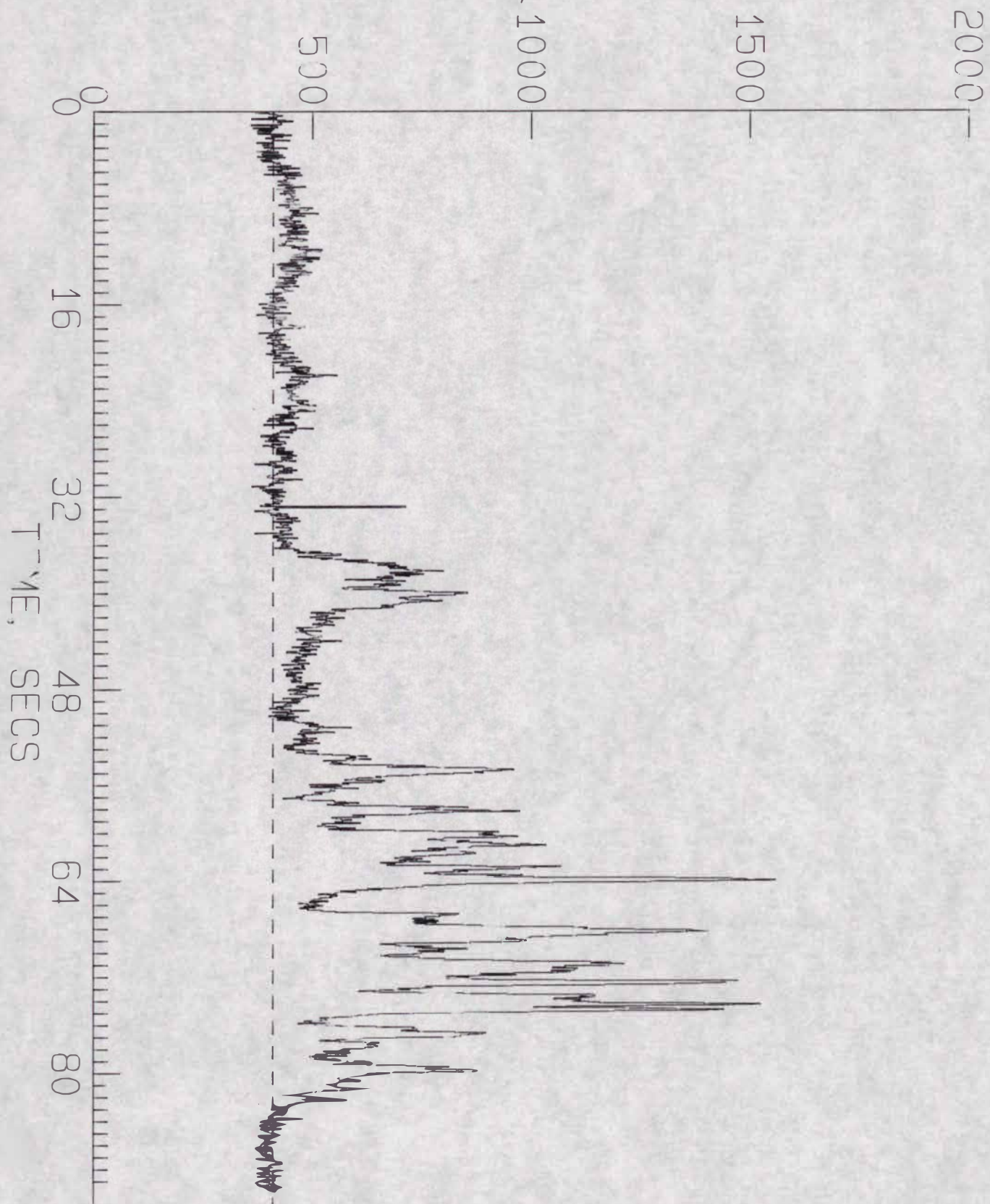
BATSE

26/11/94

44521.138

25- 100 keV

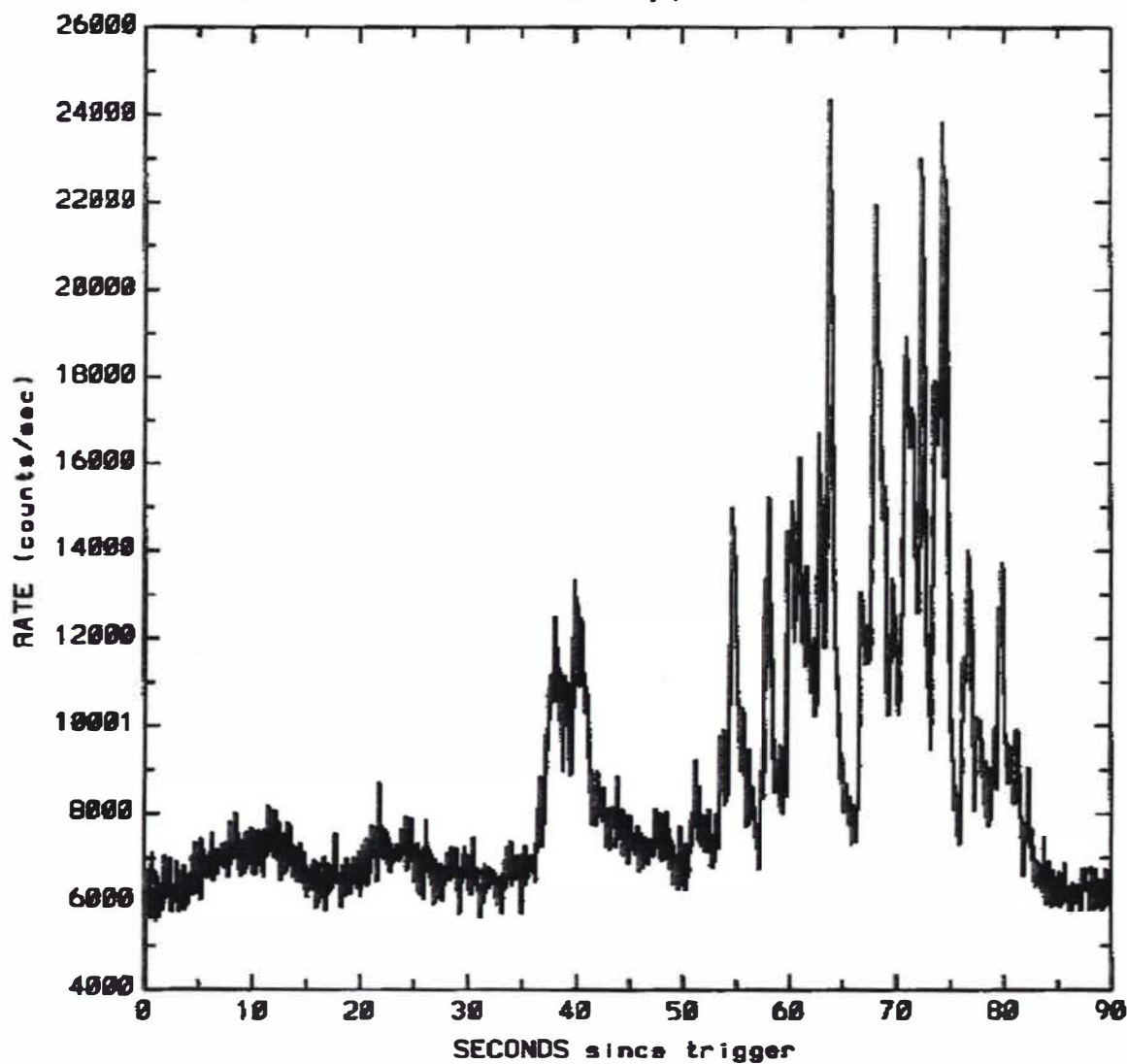
COUNTS/ .064 S



3 / 12 / 94

NOV 26 B

MER Data for K. Hurley, No. 3298



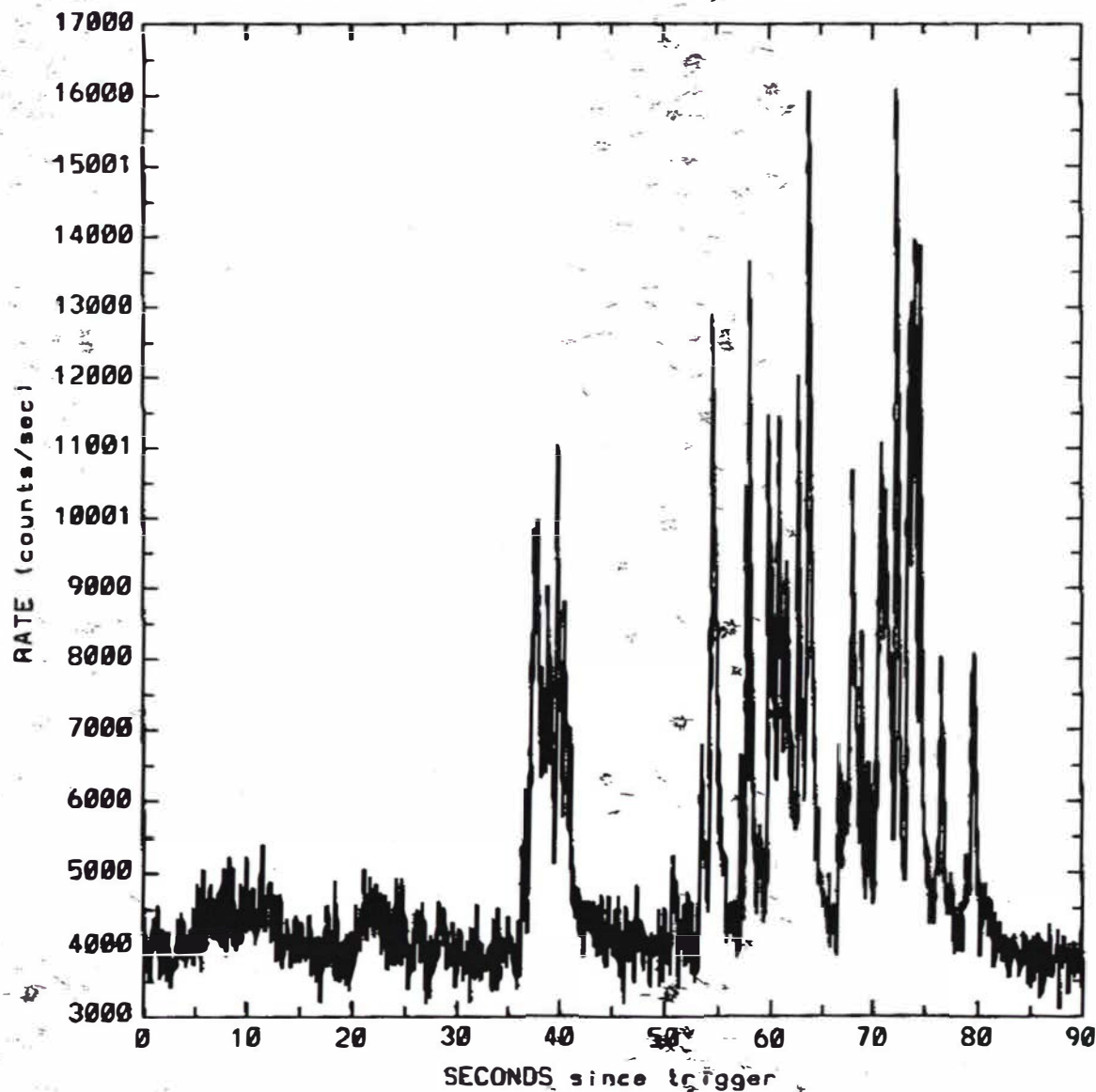
29-NOV-1994 15:58:25

Created by MDPS 8D
(Burst Display)
Version 2.22

Trigger # . 3298

Trigger Time:
9682 / 44521.138Burst Data Type:
MERDeadtime
Corrected: NBackground Data
Type: CONTMinimum Integ. Time:
0.064 second(s)Detectors [7..8],
-----18Channels:
1 8. 6)Quality Mask:
B0ISP1

MER Data for K. Hurley, No. 3298



18-SEP-2000 08:33.10

Created by MOPS 80
(Burst Display)
Version 12.26

Trigger * . 3298

Trigger Time:
9682 / 44521.130Burst Data Type:
MERDeadtime
Corrected: NBackground Data
Type: CONTMinimum Integ. Time:
0.064 secondDetectors [7..8].
-----10Channels:
17.151Quality Mask:
B01SP1

BATSE

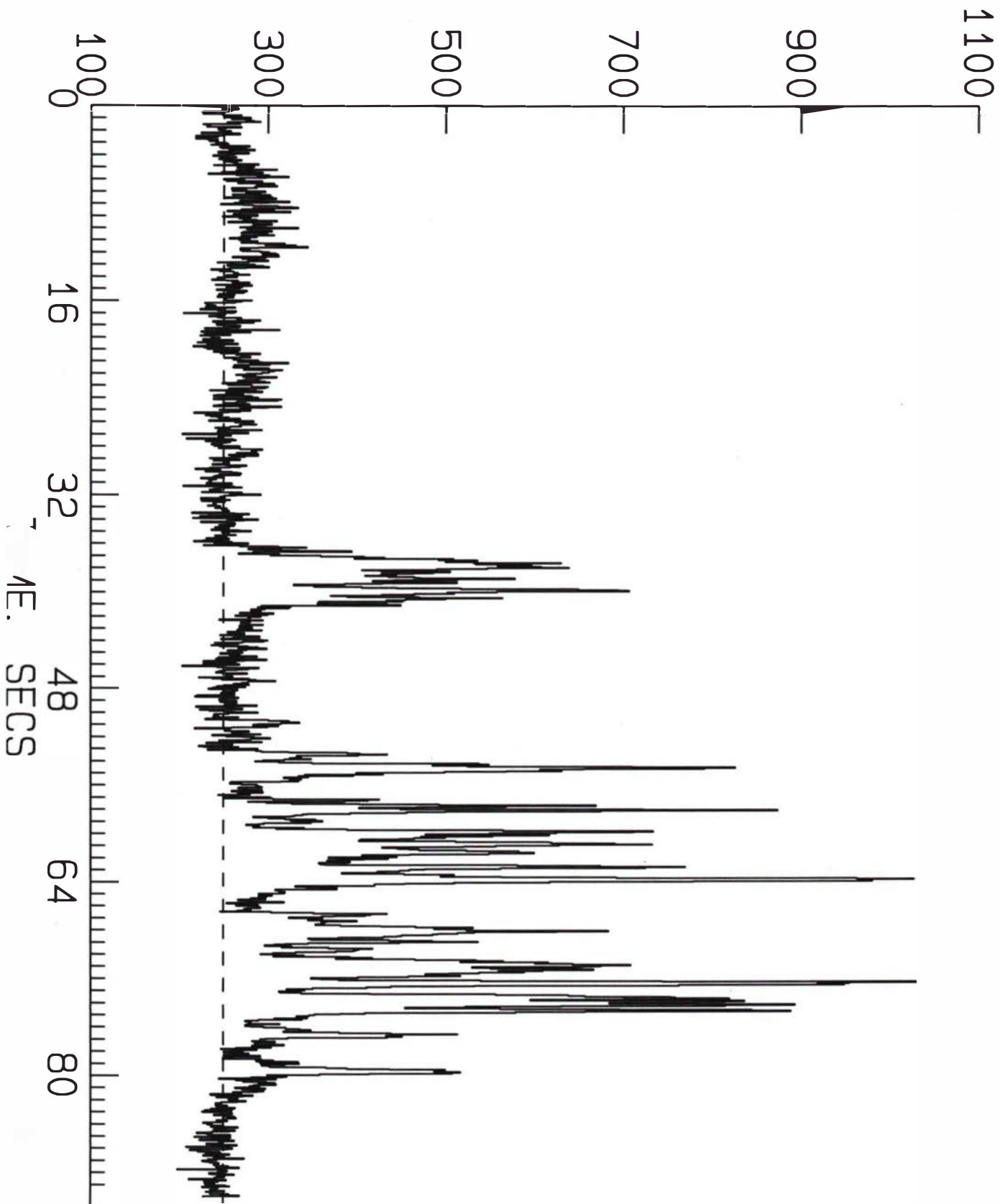
26/11/94

44521.137

100-1000 keV

COUNTS/0.064 S

20 / 9 / 0



GRB

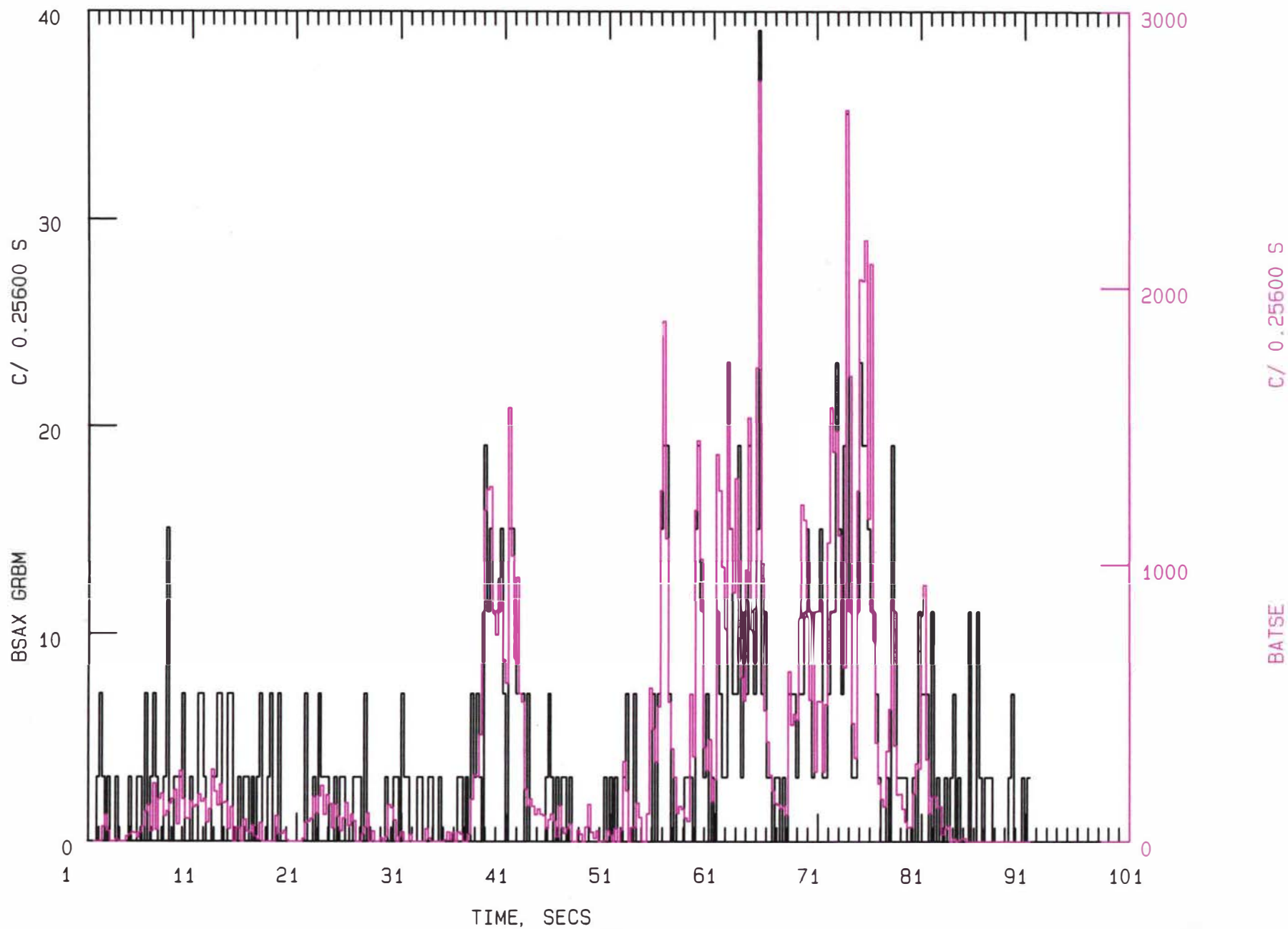
~~BSAX GRBM~~ -BATSE

CORRELATION

26/11/94

44519.825

22/ 9/ 0



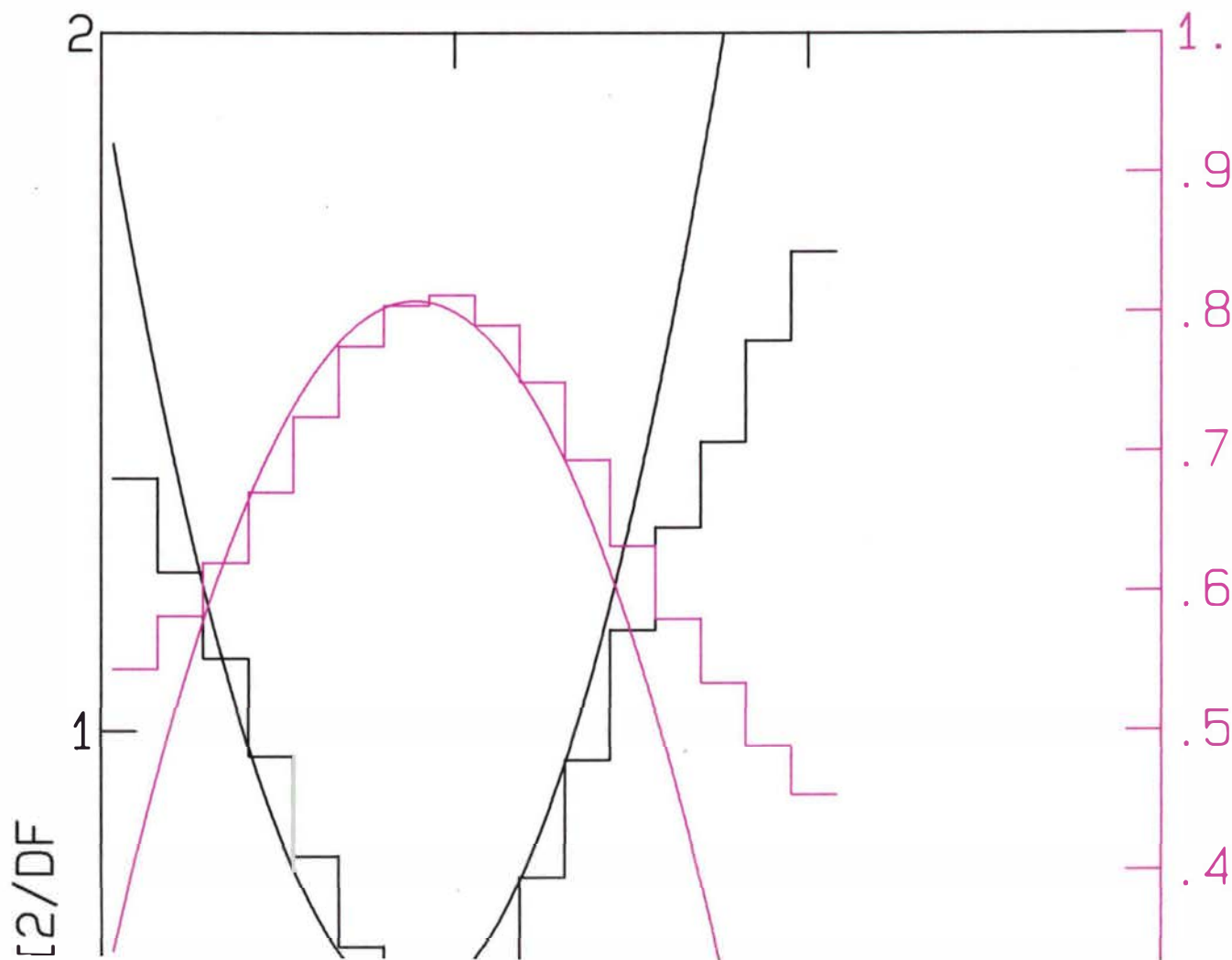
~~BSAX GRM~~ -BATSE

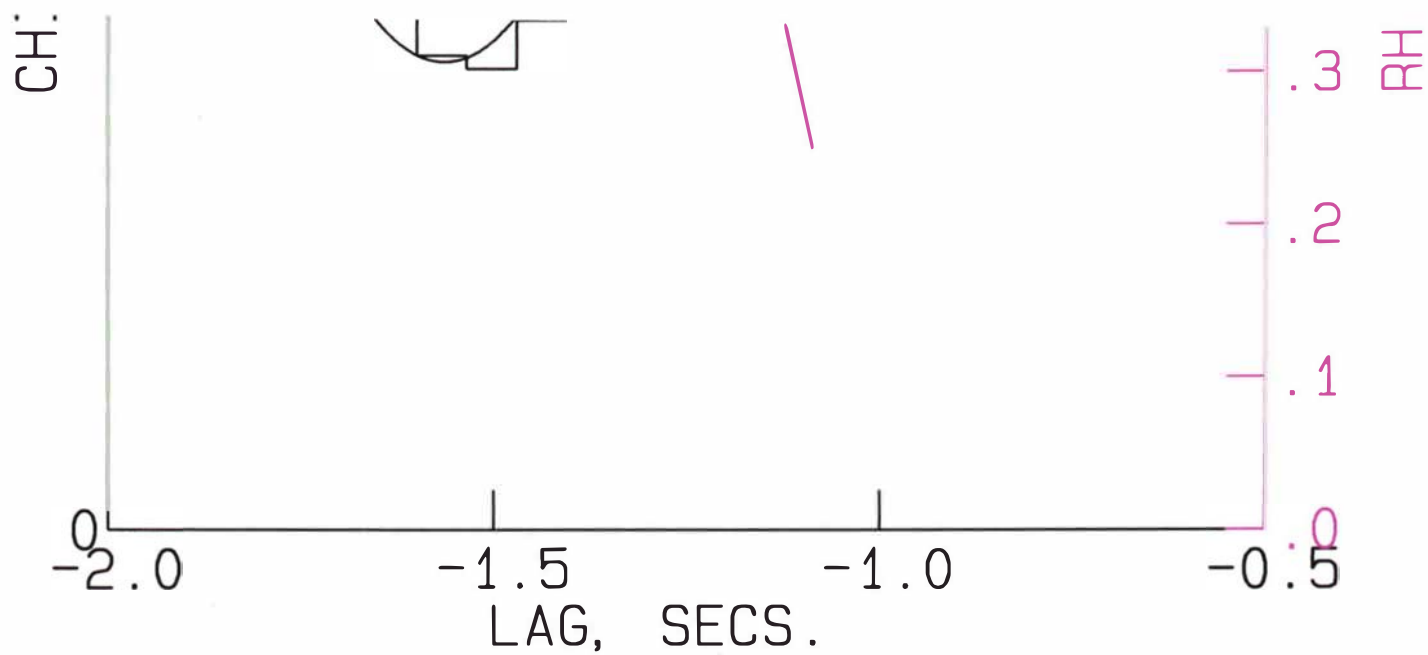
CORRELATION

26/11/94

44519.825

22/ 9/ 0





From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:08 PST 1994
Date: Mon, 28 Nov 1994 13:08:05 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3299

BATSEARCH PROGRAM

BATSE BURST # 3299
EVENT OF 1994 NOV 26 DAY OF YEAR=330
EVENT CROSSING TIME AT BATSE : 60861. S. OR 16:54:21.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 76.000 -28.000
BATSE PEAK COUNTING RATE: 3100 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/11/ 94 IS:
RA= 268.116 DEC= -73.054 DIST= 2.160 AU
BATSE-ULYSSES DISTANCE = 323134586. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=101.39 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -212.83 SECS.
CROSSING TIME AT ULYSSES IS 60648. S. OR 16:50:48 +/- 230.22 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/11/ 94 IS:
RA= 148.102 DEC= 15.272 DIST= 1.136 AU
MARS-BATSE DISTANCE = 169964208. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 97.94 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -78.30 SECS.
CROSSING TIME AT MARS IS 60783. S. OR 16:53:02 +/- 96.30 SECONDS

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3299

TIME: TJD=9682 SECONDS=60861

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=68 AZIMUTH=147 ERROR= DEGREES

COMMENTS:

BURST. COMPLEX EVENT. DUR.~27 SEC. NOT VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:07 PST 1994
Date: Mon, 28 Nov 1994 13:07:36 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3299

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3299	941126	9682	60861	3100	076	-28

28 / 11 / 94

ULYSSES RT

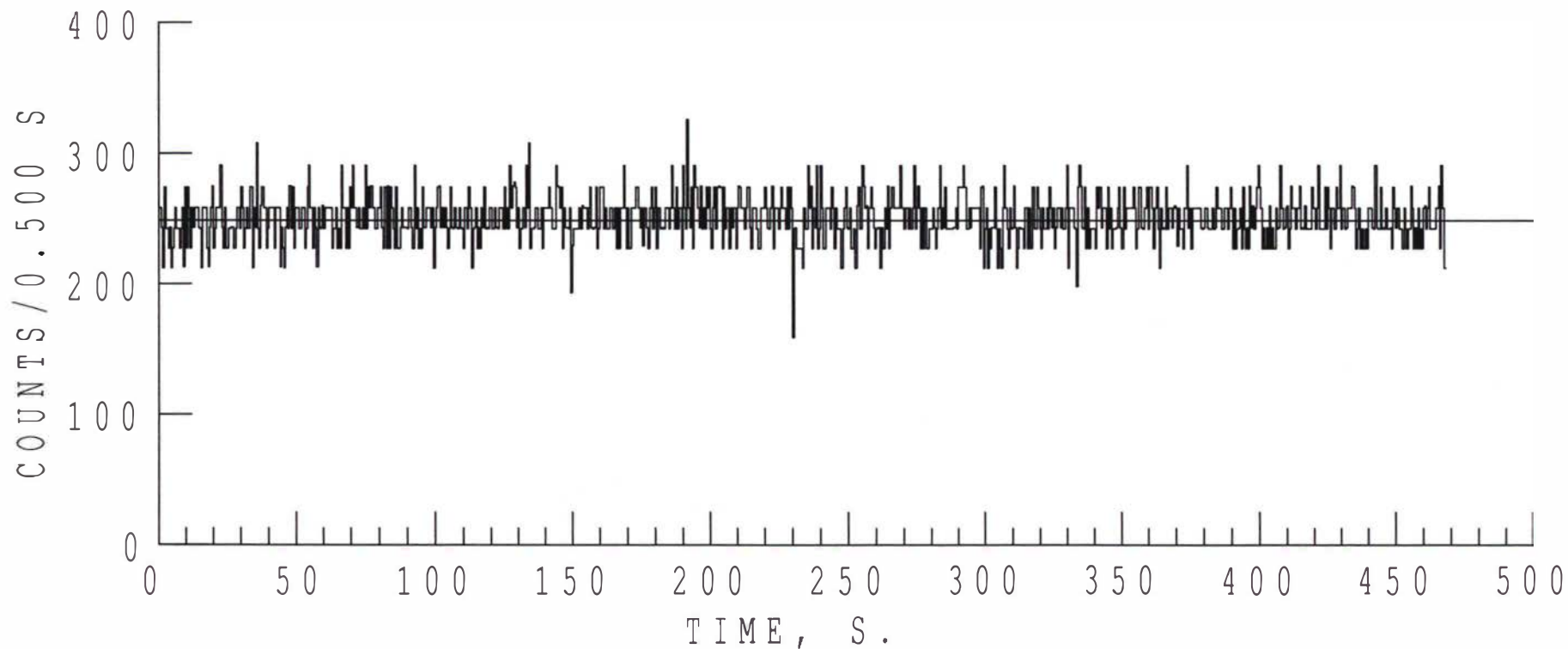
26 / 11 / 94 60408.238 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



Date: Fri, 10 Feb 1995 04:54:34 +0800
 Message-Id: <9502101254.AA19784@sunspot.ssl.berkeley.edu>
 Mime-Version: 1.0
 To: KHURLEY@space6.ssl.berkeley.edu
 From: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Improved list.
 Cc: TGRS::Palmer@tgrs.gsfc.nasa.gov
 X-Lines: 81
 Status: RO
 Content-Length: 4056
 X-Sun-Content-Length: 4056

KONUS // ULYSSES // CGRO-BATSE Event List from Wind launch to 95-01-17:

63 Konus days to 1/17: 22 backgnd-GRBs, 21 triggered-GRBs, 1 flare.

Date	Tzero (UT)	Konus sensor	G1	G2	G3	N(1)/N(2) =G2 t<Tz t>Tz	Duration T#	BATSE Uly T# d* d*	TGRS T# RA	BACODINE Dec
941113	12 09 15	S1	145	85		2.5 115	BG			
941114	02 02 40	S2	110	128	30	0.25 12	BG	3283		92 37
941115	06 22 --							3284 (U)	149	11
941117	03 14 38.191	S2	406	550	74	0.17 40	5 2			
941117	14 07 57	S2	150	140		<0.15 5	BG			
941119	19 31 09.175	S2	370	703	160	0.23 7	20 4	3287* U*	#13	188 22
941120	20 23 17.924	S1	215	328	30	>15 2	25 5			
941121	17 25 00.945	S1	1652	1656	300	21 3	50 6	3290* U*	#15	004 -63
941123	19 51 --							3294 (U)		190 02
941125	22 04 30.156	S2	115	308	109	0.95 1.5	5 7	3295* U*	BG	
941126	00 20 46	S1	150	205	200	>14 18	BG	3296	BG	
941126	03 55 --							3297 (U)		323 38
941126	12 22 37.952	S1	860	1430	330	4.2 40	45 8	3298* U*	#28	
941126	16 54 20	S1	55	75		>10 26	BG	3299		
941126	19 56 49.732	S1	290	390	211	6.7 20	26 9	3301* U*	#--	
941127	14 30 25.680	S2	200	400	95	0.17 8	7 10	3303* U*		070 50
941127	15 39 10	S1	210	57		2.7 260	BG			
941128	15 37 00	S1	75	90	32	>15 55	BG	3305	no d	
941128	18 41 --							3306 (U)		011 -32
941205	23 33 40.074	S2	370	460	188	0.06 6	30 11			
941207	22 10 32	S2	265	175		<0.2 7	BG			
941210	03 10 52.523	S2	900	2350	1385	0.12 1	15 14		U*	BG
941214	17 03 51	S1	40	45	29	>6 12	BG			
941214	05 38 45.226	S1	3479	1266	14	1.0 12	240 SF	3318	BG	259 -06
941221	07 44 08	S2	55	115	30	0.8 20	BG			
941221	22 14 35.215	S1	260	496	165	1.5 55	11 19		BG	
941222	05 36 00.243	S2	334	1360	1066	0.36 7	105 20		#145	
941228	07 39 45.915	S1	300	637	519	4.4 5	90 28	3330* U*	no d	339 -52
941228	16 55 23	S2	40	36	23	0.25 25	BG			
941229	12 58 05	S1	46	108	31	1.8 15	BG			
941229	22 51 08.781	S2	396	381	140	0.09 7	25 29	3334* U*	no d	
941230	20 52 53	S1	74	117	52	8.4 158	BG		no d	
941230	23 43 44	S2	55	70	16	<0.2 4.5	BG		no d	
950104	00 48 +/-1200							(U)		
950104	07 18 39.613	S2	258	550	219	0.75 2.8	20 31	3345* U*	#250	310 -11
950104	09 00 58	S2	140	143	40	<0.1 25	BG			
950108	02 04 --							3349 (U)		020 -14
950110	06 02 15	S2	332	180		<0.1 3600	BG			
950110	13 37 57.084	S2	234	422	213	0.05 38	100 32			
950111	04 49 12.241	S1	586	620	100	>19 92	24 33	3351 U*	BG	319 -65
950111	12 18 49.196	S1	225	435	164	1.85 26	50 34	3352 U*	BG	024 -14
950112	07 45 37.120	S2	1305	1800	336	0.04 2.5	44 35		(?)	
950113	05 59 13	S1	283	180	26	>10 52	BG			
950113	17 38 32	S2	85	162	35	<0.06 75	BG			

950114	01	00	38	S1	46	110	1.6	6	BG		
950114	04	03	01	S2	23	76	0.5	70	BG	U	
950114	07	30	30.766	S2	205	406	60	<0.05	1	100	36
950114	13	10	34.865	S1	1320	2828	516	3.1	1	10	37
											U* #258
950115	02	49	32	S2	40	47	34	<0.15	24	BG	BG
950117	01	36	00	S2	56	82	42	0.22	108	BG	3360* U* 298 05
950118	17	05	--								3366 (U) 061 -63

G1:14-50, G2:50-225, G3:225-900 keV, >94/12/12: 12.5-43, 43-190, 90-760 keV.
 N(1)/N(2)=G2-ratio, *=data at GSFC; BG=background rate increase = event visible.

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

1 3 / 2 / 9 5

U L Y S S E S R T

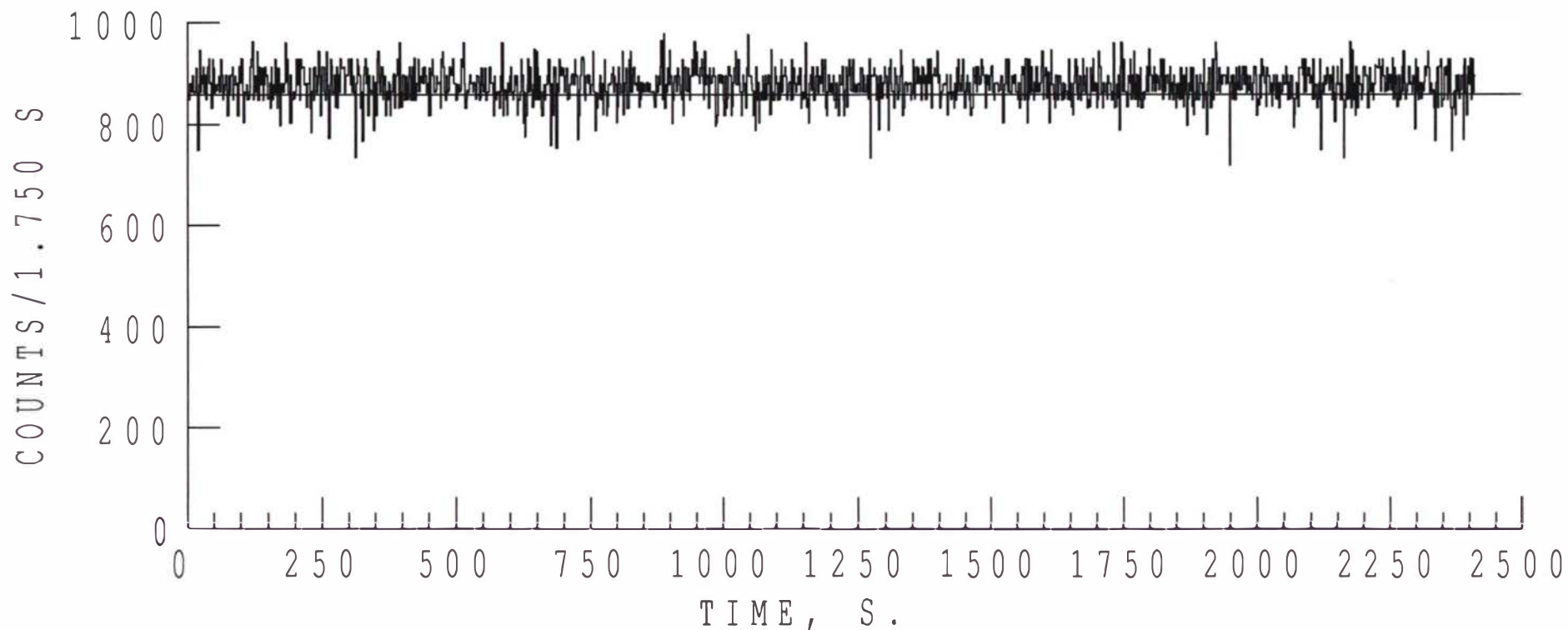
2 6 / 1 1 / 9 4 5 9 6 5 2 . 2 2 3 s

0 . 2 5 0 s I N T E R V A L S R E G R O U P E D B Y 7

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



From HAGEDON@ssl.msfc.nasa.gov Mon Nov 28 10:48 PST 1994
Date: Mon, 28 Nov 1994 12:47:56 -0600 (CST)
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.: 3300

TIME: TJD=9682 SECONDS=70182

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT.

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:11 PST 1994
Date: Mon, 28 Nov 1994 13:11:02 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3301

BATSEARCH PROGRAM

BATSE BURST # 3301
EVENT OF 1994 NOV 26 DAY OF YEAR=330
EVENT CROSSING TIME AT BATSE : 71798. S. OR 19:56:38.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 113.000 -31.000
BATSE PEAK COUNTING RATE: 11000 C/S

*RF Too weak to triangulate
reliably
6/2/98*

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/11/ 94 IS:
RA= 268.429 DEC= -73.009 DIST= 2.160 AU
BATSE-ULYSSES DISTANCE = 323097064. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=105.35 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -285.33 SECS.
CROSSING TIME AT ULYSSES IS 71513. S. OR 19:51:52 +/- 226.10 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/11/ 94 IS:
RA= 148.102 DEC= 15.272 DIST= 1.136 AU
MARS-BATSE DISTANCE = 169964208. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=122.74 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -306.63 SECS.
CROSSING TIME AT MARS IS 71491. S. OR 19:51:31 +/- 78.13 SECONDS

khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3301

TIME: TJD=9682 SECONDS=71798

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=94 AZIMUTH=126 ERROR= DEGREES

COMMENTS:

BURST. DOUBLE PEAKED WITH SOME SUBSTRUCTURE. DUR.~40 SEC.
VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Mon Nov 28 11:10 PST 1994
Date: Mon, 28 Nov 1994 13:10:24 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3301

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3301	941126	9682	71798	11000	113	-31

ULYSSES RT

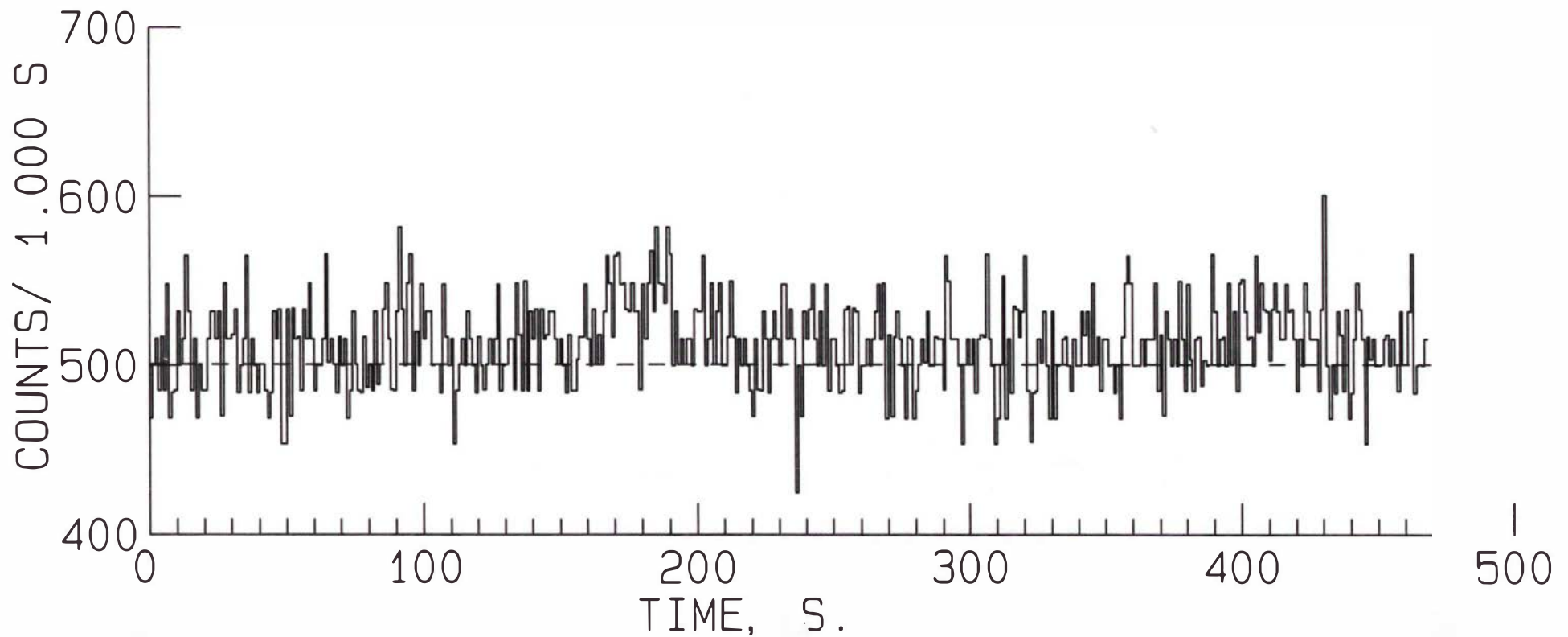
20 / 12 / 95

26/11/94 71280.189 s

0.250 S INTERVALS REGROUPED BY 4

21- 146 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

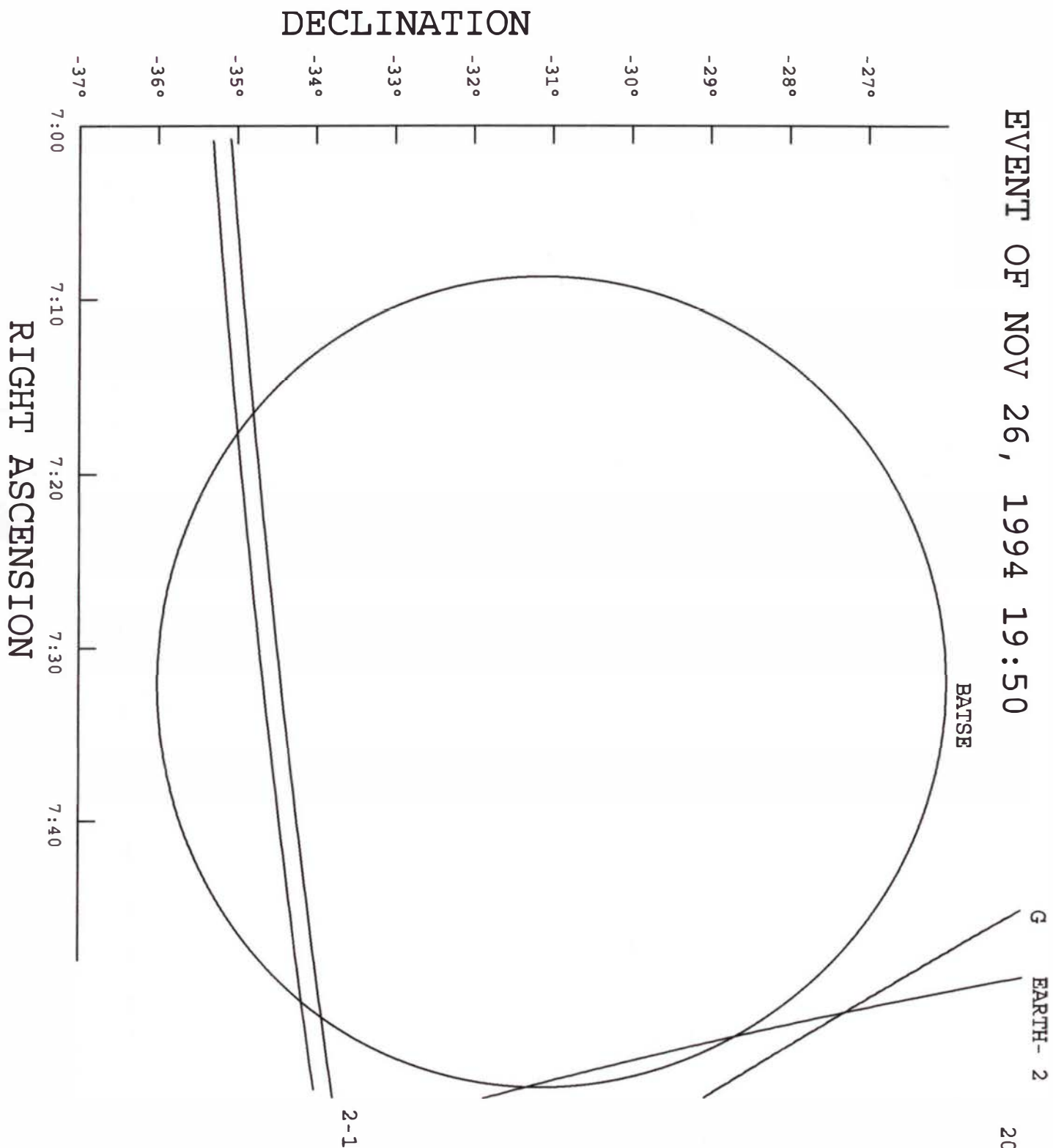
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 26, 1994 19:50

20/12/95



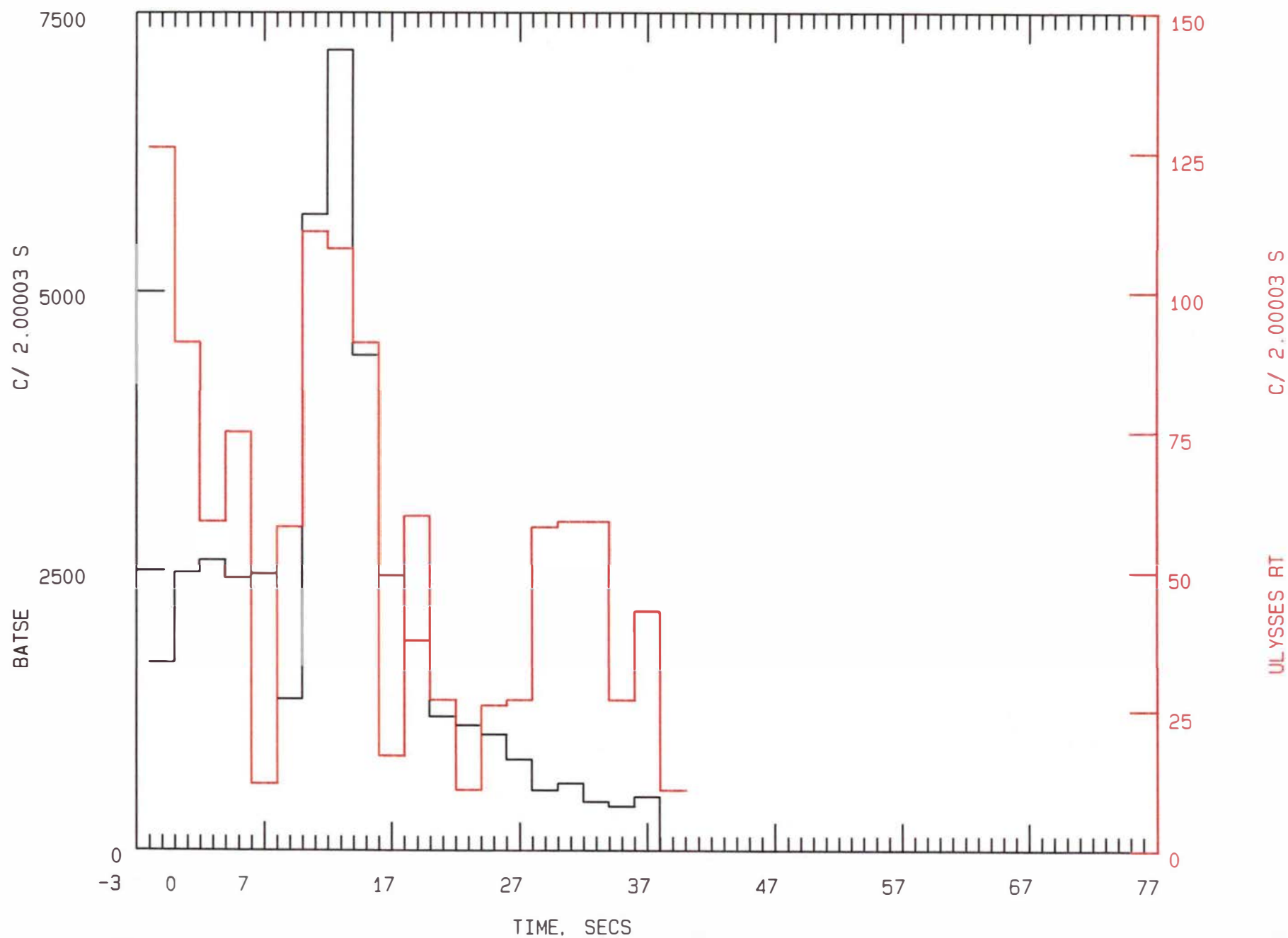
BATSE

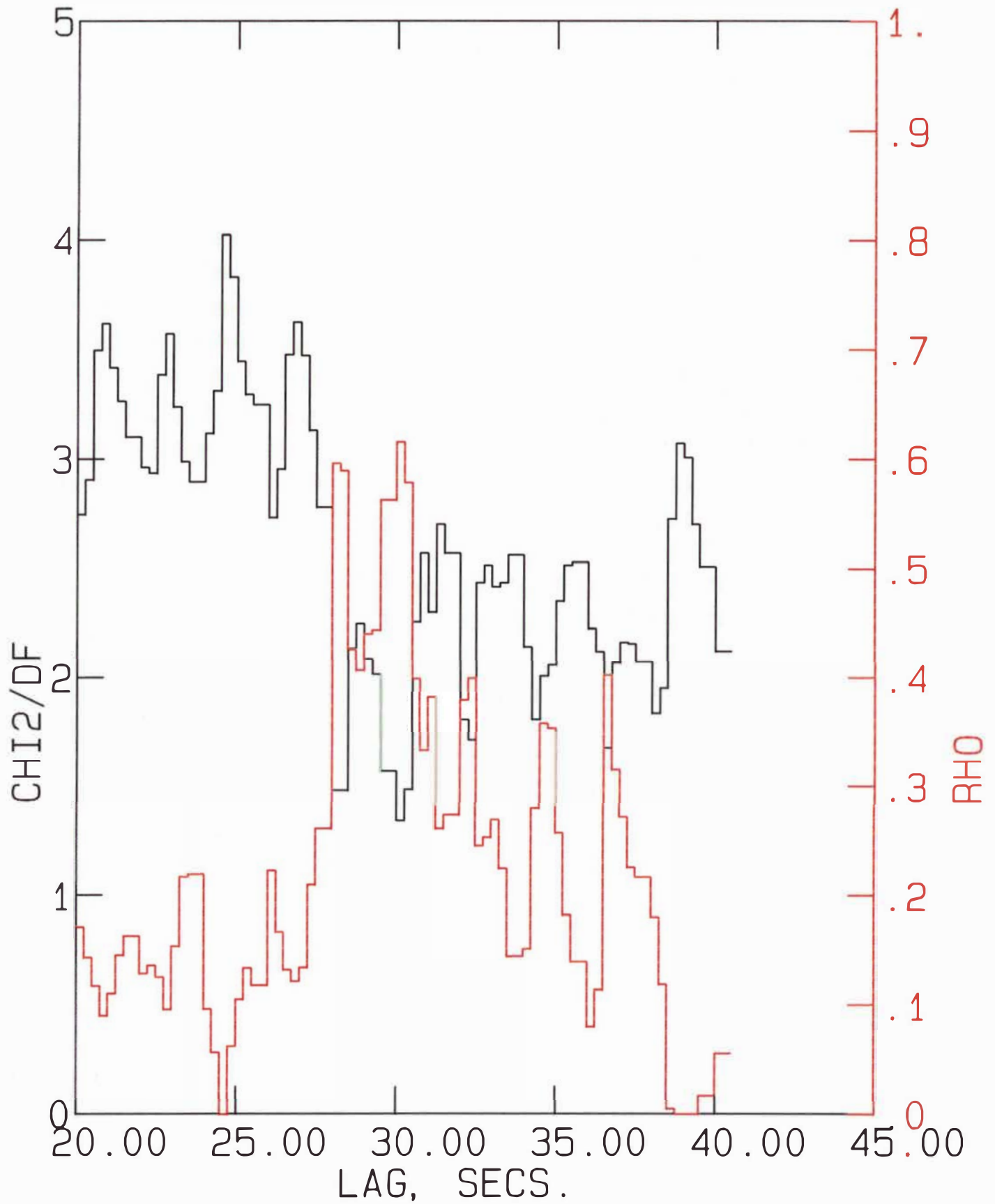
-ULYSSES RT CORRELATION

26/11/94

71798.194

20/12/95





From root Thu Jan 26 12:09 1995
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA09916; Thu, 26 Jan 95 12:09:38
 Received: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA01181; Thu, 26 Jan 1995 12:08:59 +0800
 Date: Thu, 26 Jan 1995 12:08:59 +0800
 Message-Id: <9501262008.AA01181@sunspot.ssl.berkeley.edu>
 Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
 Thu, 26 Jan 1995 15:11:15 -0500 (EST)
 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: KONUS/BATSE/ULYSSES EVENT LIST TO 95 JAN 17
 Cc: Mazets@mz.pti.spb.su
 Content-Length: 1824
 Status: R

KEVIN:

BASED ON WHAT I HAVE FROM SERGEI GOLENETSKII AND FROM YOU, THIS IS THE
 CURRENT LIST OF ALL KONUS-ULYSSES EVENTS UP TO 95 JAN 17 WITH ALL BUT TWO
 ALSO BATSE.

X means sent with explanation

✓ means sent to TLC

Date	KONUS-Tzero Sensor	Max c/s	N(1)/N(2)	Duration	Event	BATSE	ULYSSES	BATSE
(UT)		G1 G2 G3	(G2)	t<Tz t>Tz	K-no	T-no	EVENT	
941119 19 31 09.175	S2	370 703 160	0.23	7 20	4	3287	ULY ✓	✓
941121 17 25 00.945	S1	1652 1656 300	21	3 50	6	3290	ULY ✓	✓
941125 22 04 30.156	S2	115 308 109	0.95	1.5 5	7	3295	ULY ✓	✓
126 12 22 37.952	S1	860 1430 330	4.2	40 45	8	3298	ULY ✓	✓
941126 19 56 49.732	S1	290 390 211	6.7	20 26	9	3301	ULY ✓	✓
941127 14 30 25.680	S2	200 400 95	0.17	8 7	10	3303	ULY ✓	✓
941210 03 10 52.523	S2	900 2350 1385	0.12	1 15	14	----	ULY ✓	✓
941228 07 39 45.915	S1	300 637 519	4.4	5 90	28	3330	ULY ✓	✓
941229 22 51 08.781	S2	396 381 140	0.09	7 25	29	3334	ULY ✓	✓
950104 07 18 39.613	S2	258 550 219	0.75	2.8 20	31	3345	ULY ✓	✓
950111 04 49 12.241	S1	586 620 100	>19	92 24	33	3351	ULY ✓	✓
950114 04 03 01	S2	23 76	0.5	70	BG	----	ULY ✓	✓
950117 01 36 00	S2	56 82 42	0.22	108	BG	3360	ULY ✓	✓

Energy intervals G1, G2, G3: 14 - 50, 50 - 225 and 225 - 900 keV.

Since 12th December: 12.5 - 43, 43 - 190 and 190 - 760 keV.

N(1)/N(2) is ratio of sensor 1 to sensor 2 counts in G2.

WHEN YOU HAVE A CHANCE, PLEASE SEND THESE TIME HISTORIES FIRST. THANKS. TLC

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

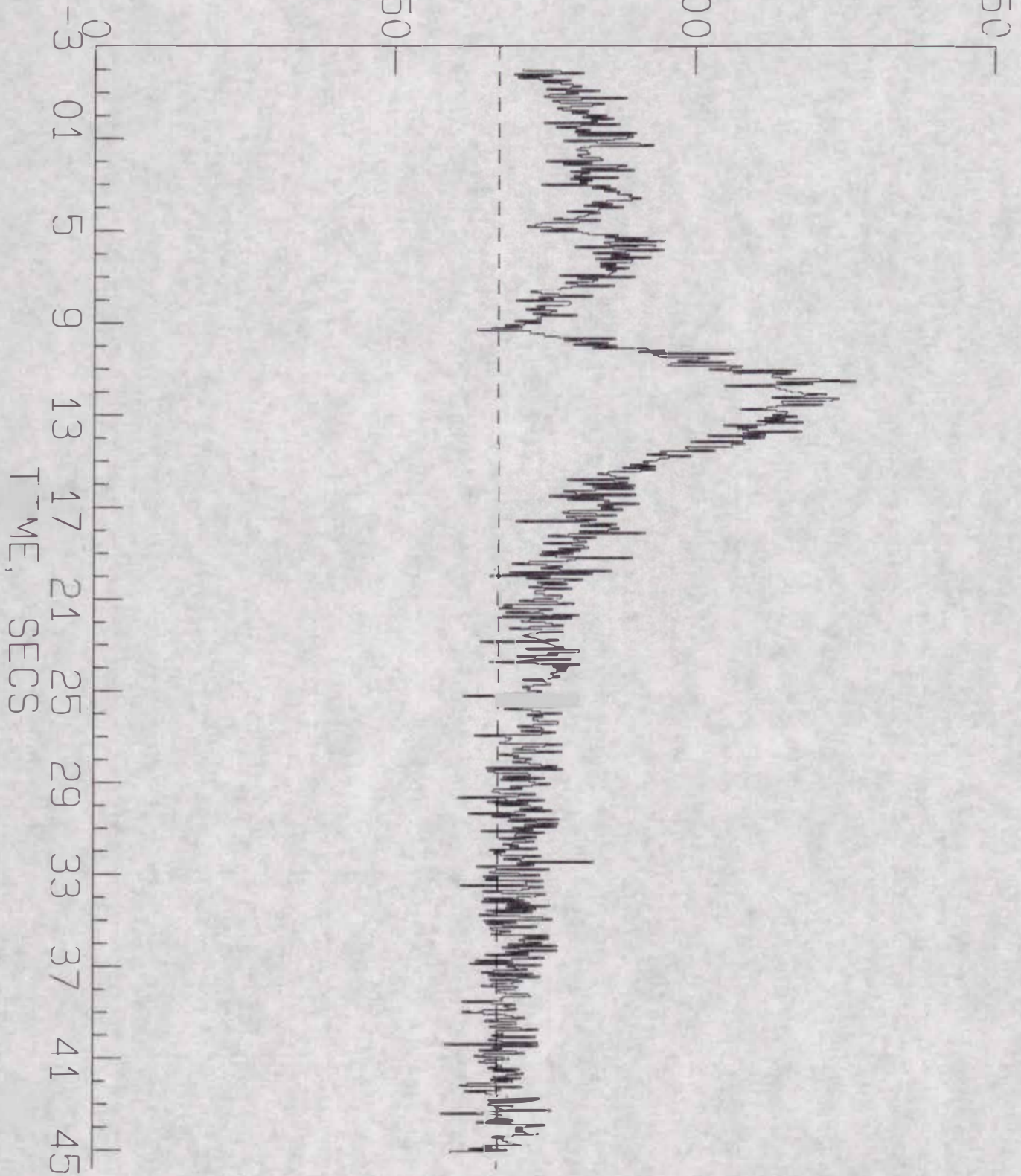
BATSE

26/11/94

71798.194

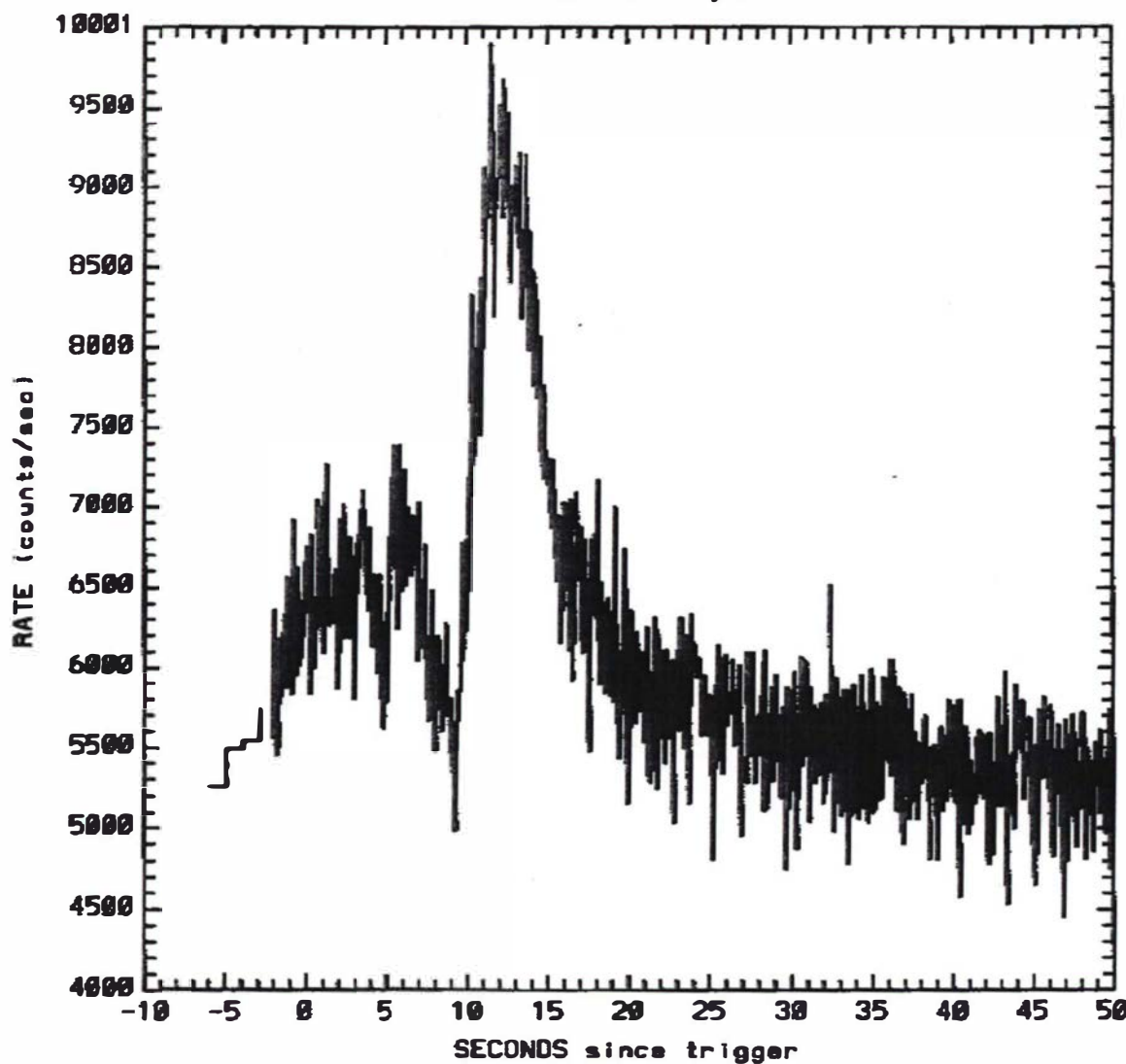
25- 100 keV

COUNTS/ .064 S



NOV 26 C

DISCSC Data for K. Hurley, No. 3301

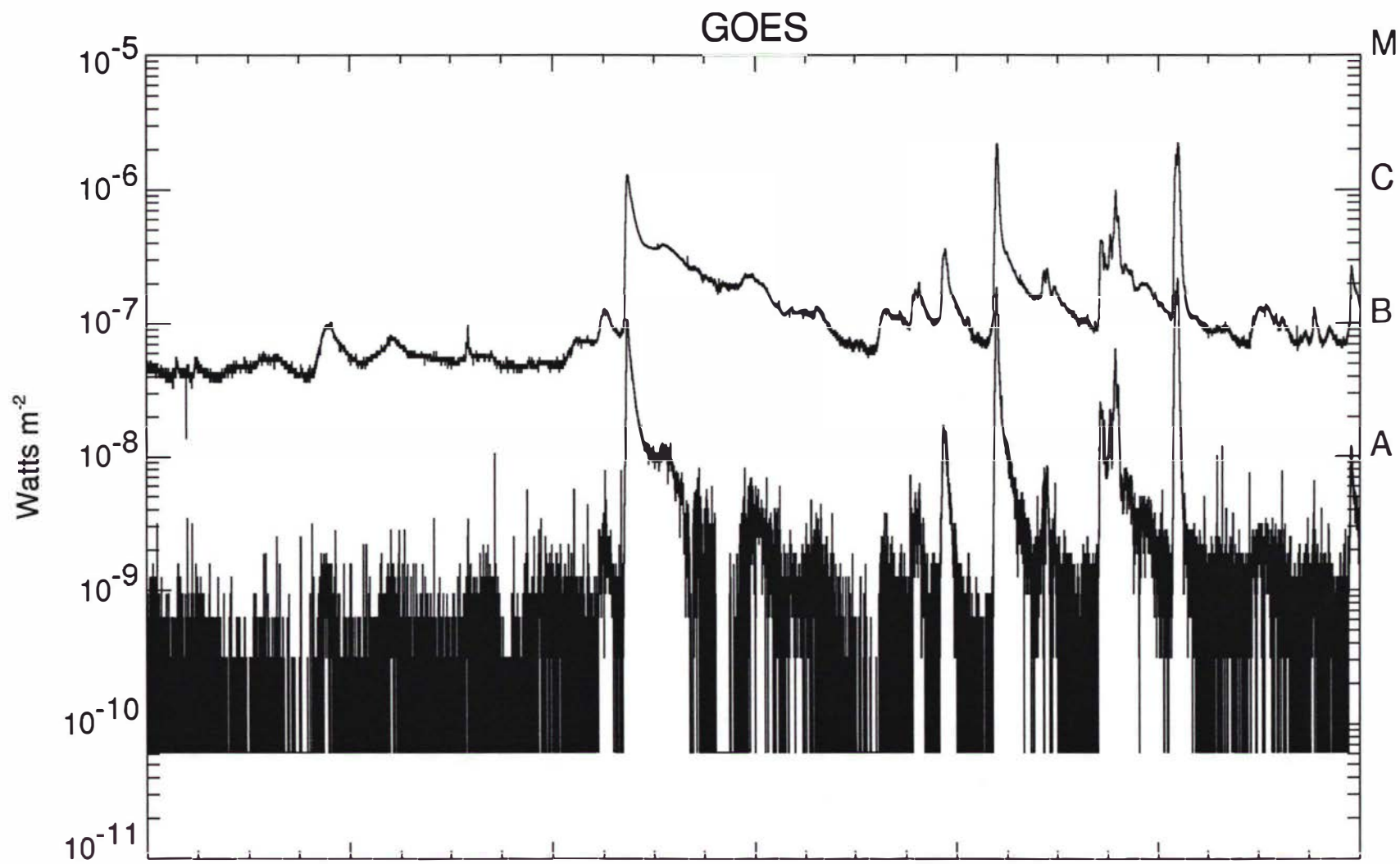


29-NOV-1994 16:01:12

Created by MOPS 8D
(Burst Display)
Version 2.22

Trigger # : 3301

Trigger Time:
9682 / 71798.194Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.004 secondsDetectors (7..8):
--54----Discriminators:
(1..2)Quality Mask:
BDISP1

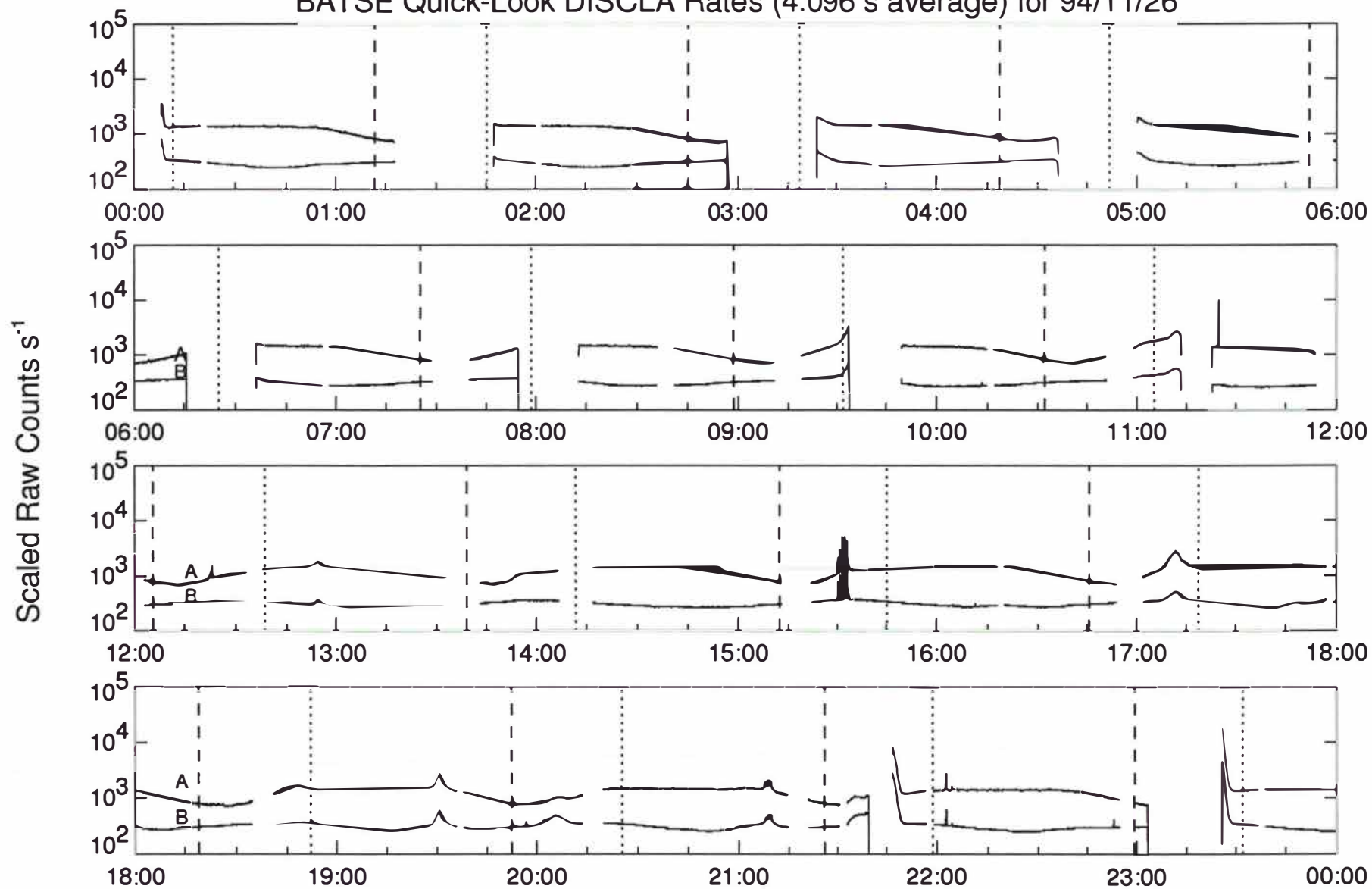


Data Start: 94/11/26, 0000:00

Plot created: 94/12/01, 2050

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 94/11/26



Current Time: 94/12/01, 2037 EDT

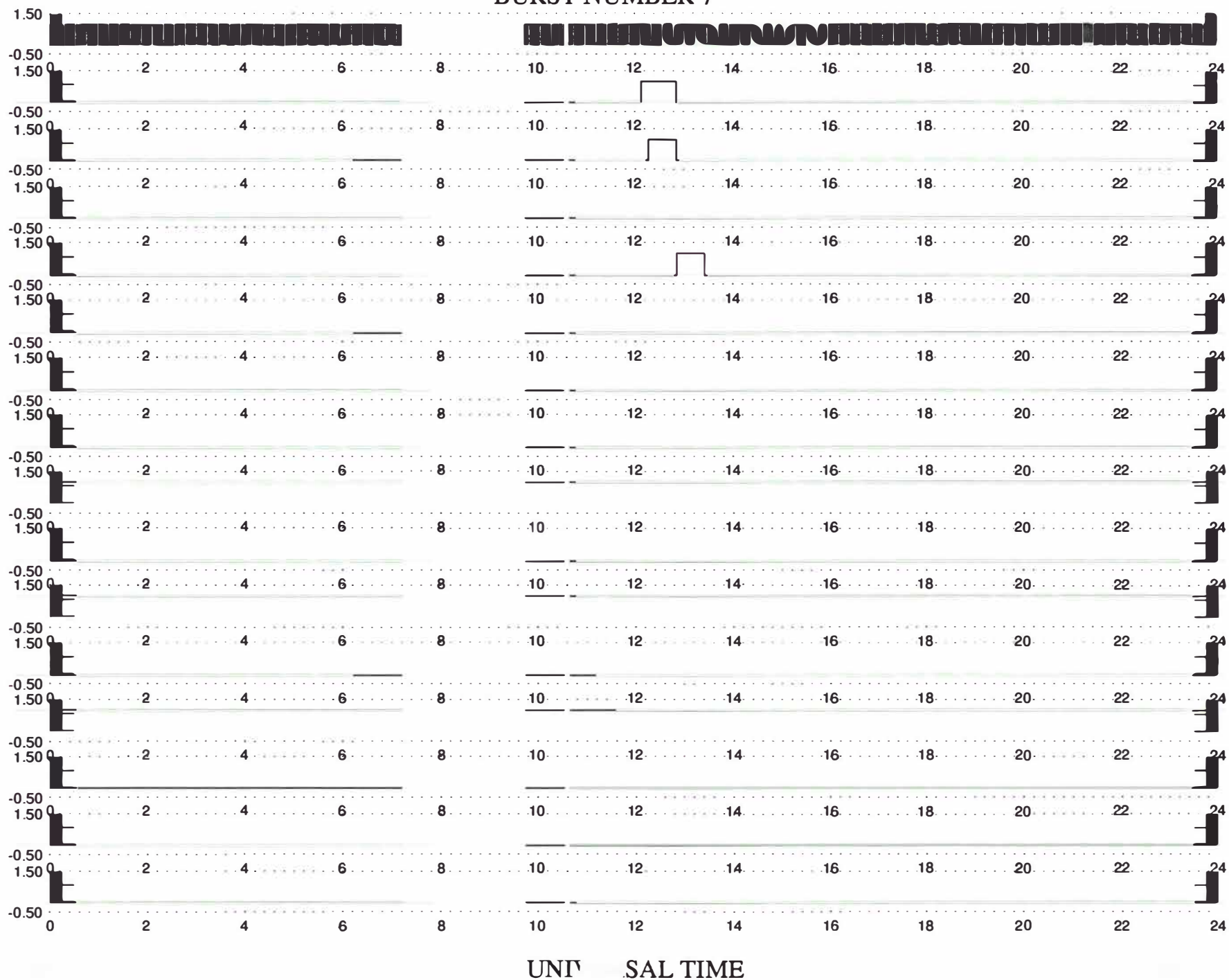
A: Channel 0 Most Sunward LAD

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

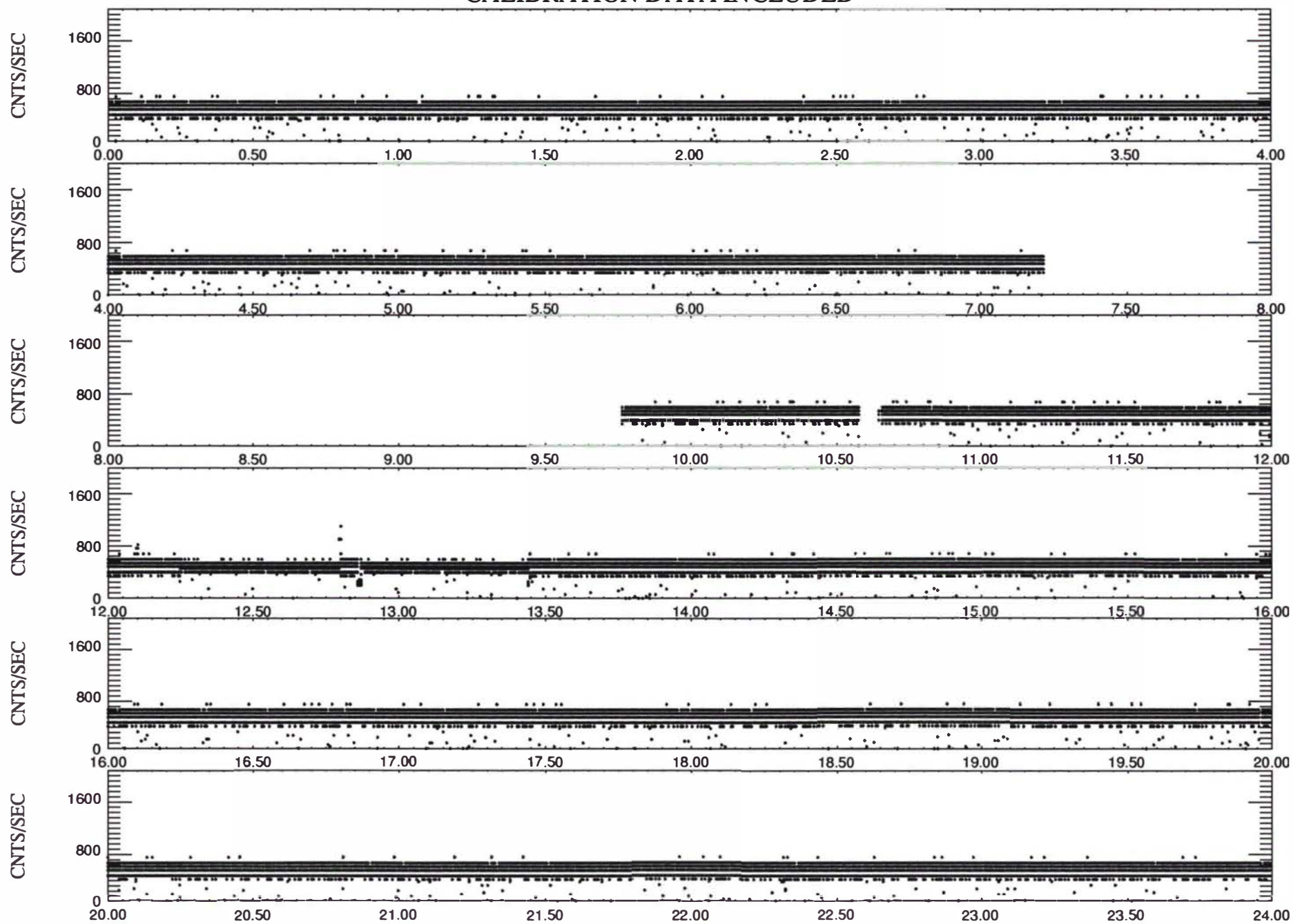
Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

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

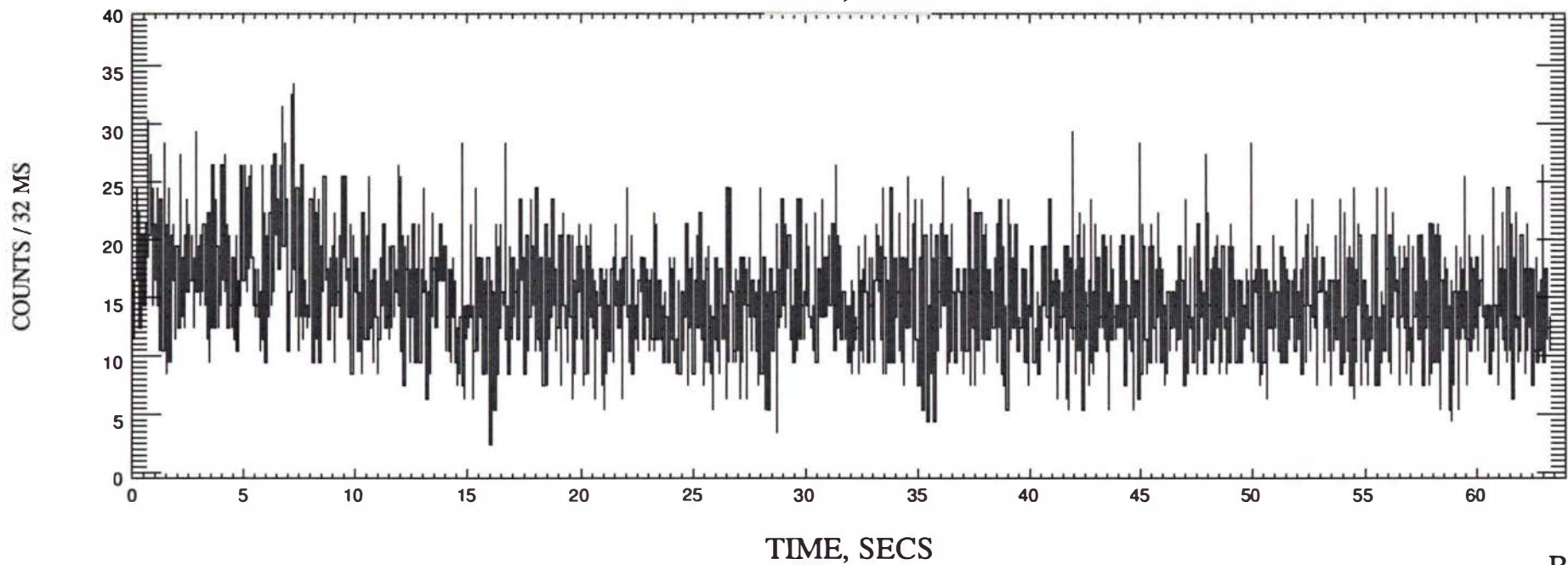
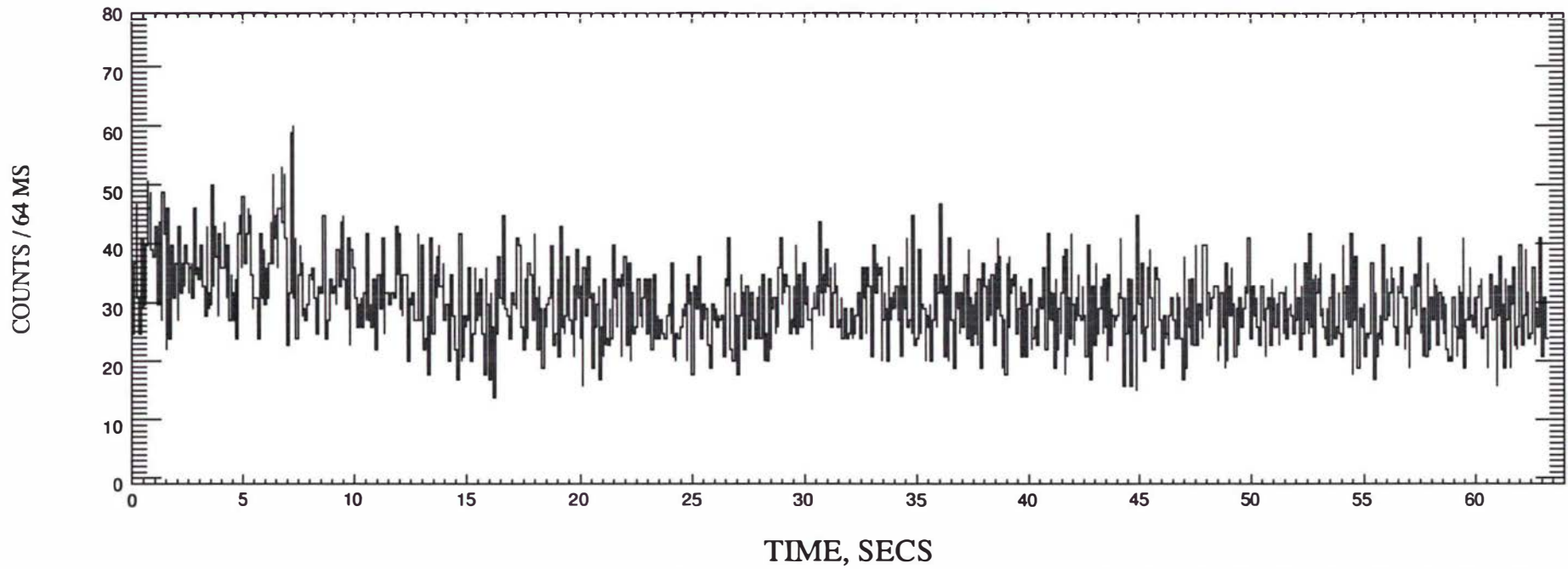


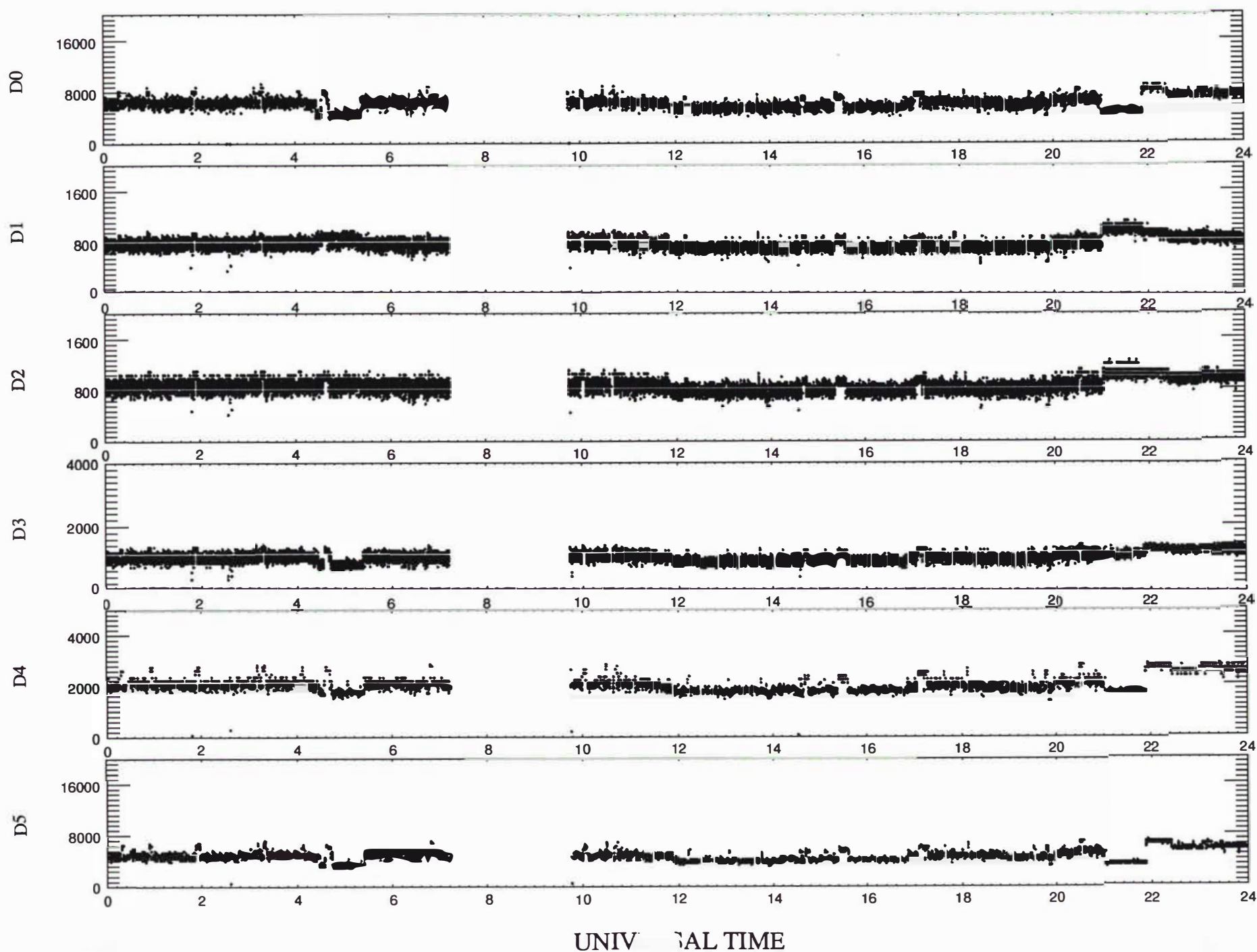
CALIBRATION DATA INCLUDED



UNIVERSAL TIME

Burst Counter 7 at UT=12.097442601522 h=43550.793 s 12:05:50.793





From williams@sunspot Thu Sep 10 18:05 PDT 1998
Date: Thu, 10 Sep 1998 18:09:58 -0700
From: williams@sunspot (Roger Williams)
To: khurley@sunspot
Subject: RT Event Problems 94258-96229
CC: williams@sunspot

Kevin,

The next wave of results is finished relative to differences in ascii files for events from your realtime event list. These results are for yyddd's from your list in the range 94258-96229 or Sep 15, 1994 to August 16, 1996.

Using yyddd's from your list we investigated ALL ascii files that we have made on that day and compared old vs. new decom versions. Again, this was because times in the list were Earth times and thus not easily related to a Ulysses window. Thus the list of files may contain irrelevant entries.

The list of files is attached.

Roger and J

<This message contains 1 attachments (not printed)>

BATSE burst not in bad time window

94321_2A1_02.91_03.58.ascii.diff.Z
94324_2A1_20.05_20.72.ascii.diff.Z
94331_2A1_15.32_15.99.ascii.diff.Z
94356_2A1_05.27_05.93.ascii.diff.Z
94356_2A1_07.32_07.44.ascii.diff.Z
95013_2A1_05.65_06.32.ascii.diff.Z
95042_2A1_02.31_02.45.ascii.diff.Z
95042_2A1_04.10_04.76.ascii.diff.Z
95076_2A1_20.14_20.81.ascii.diff.Z
95091_2A1_20.66_20.80.ascii.diff.Z
95135_2A1_06.08_06.74.ascii.diff.Z
95176_2A1_02.36_03.02.ascii.diff.Z
95221_2A1_23.76_23.89.ascii.diff.Z
95274_2A1_11.27_12.02.ascii.diff.Z
95275_2A1_22.78_22.91.ascii.diff.Z
95306_2A1_05.54_05.66.ascii.diff.Z
95323_2A1_11.72_14.09.ascii.diff.Z
95359_2A1_09.18_09.96.ascii.diff.Z
96007_2A1_05.00_05.78.ascii.diff.Z
96007_2A1_18.67_19.45.ascii.diff.Z
96015_2A1_17.16_17.31.ascii.diff.Z
96106_2A1_01.13_01.31.ascii.diff.Z
96142_2A1_16.64_18.08.ascii.diff.Z
96149_2A1_02.19_02.42.ascii.diff.Z
96185_2A1_13.93_14.38.ascii.diff.Z
96185_2A1_14.02_14.24.ascii.diff.Z
96209_2A1_11.24_12.68.ascii.diff.Z
96226_2A1_10.12_11.51.ascii.diff.Z

From DEAL@ssl.msfc.nasa.gov Tue Nov 29 06:01 PST 1994
Date: Tue, 29 Nov 1994 8:01:09 -0600 (CST)
From: DEAL@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.: 3302

TIME: TJD=9683 SECONDS=47040

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=103.5 AZIMUTH=2.0 ERROR= DEGREES

COMMENTS:

TGF LASTING ~7 MS.

BATSEARCH PROGRAM

RI

BATSE BURST # 3303
EVENT OF 1994 NOV 27 DAY OF YEAR=331
EVENT CROSSING TIME AT BATSE : 52217. S. OR 14:30:17.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 68.000 45.000
BATSE PEAK COUNTING RATE: 15000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 27/11/ 94 IS:
RA= 270.311 DEC= -72.715 DIST= 2.158 AU
BATSE-ULYSSES DISTANCE = 322883452. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 29.59 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 936.52 SECS.
CROSSING TIME AT ULYSSES IS 53154. S. OR 14:45:53 +/- 156.57 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 27/11/ 94 IS:
RA= 148.459 DEC= 15.179 DIST= 1.128 AU
MARS-BATSE DISTANCE = 168697536. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=107.35 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -167.84 SECS.
CROSSING TIME AT MARS IS 52049. S. OR 14:27:29 +/- 90.70 SECONDS

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3303	941127	9683	52217	15000	068	+45

BATSE BURST TRIGGER

NO.: 3303

TIME: TJD=9683 SECONDS=52217

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=102.8 AZIMUTH=212.1 ERROR= DEGREES

COMMENTS:

BURST LASTING ~ 30S. VISIBLE ABOVE 300 KEV.

Helio corr removed

Date: Feb 6 '28

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?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

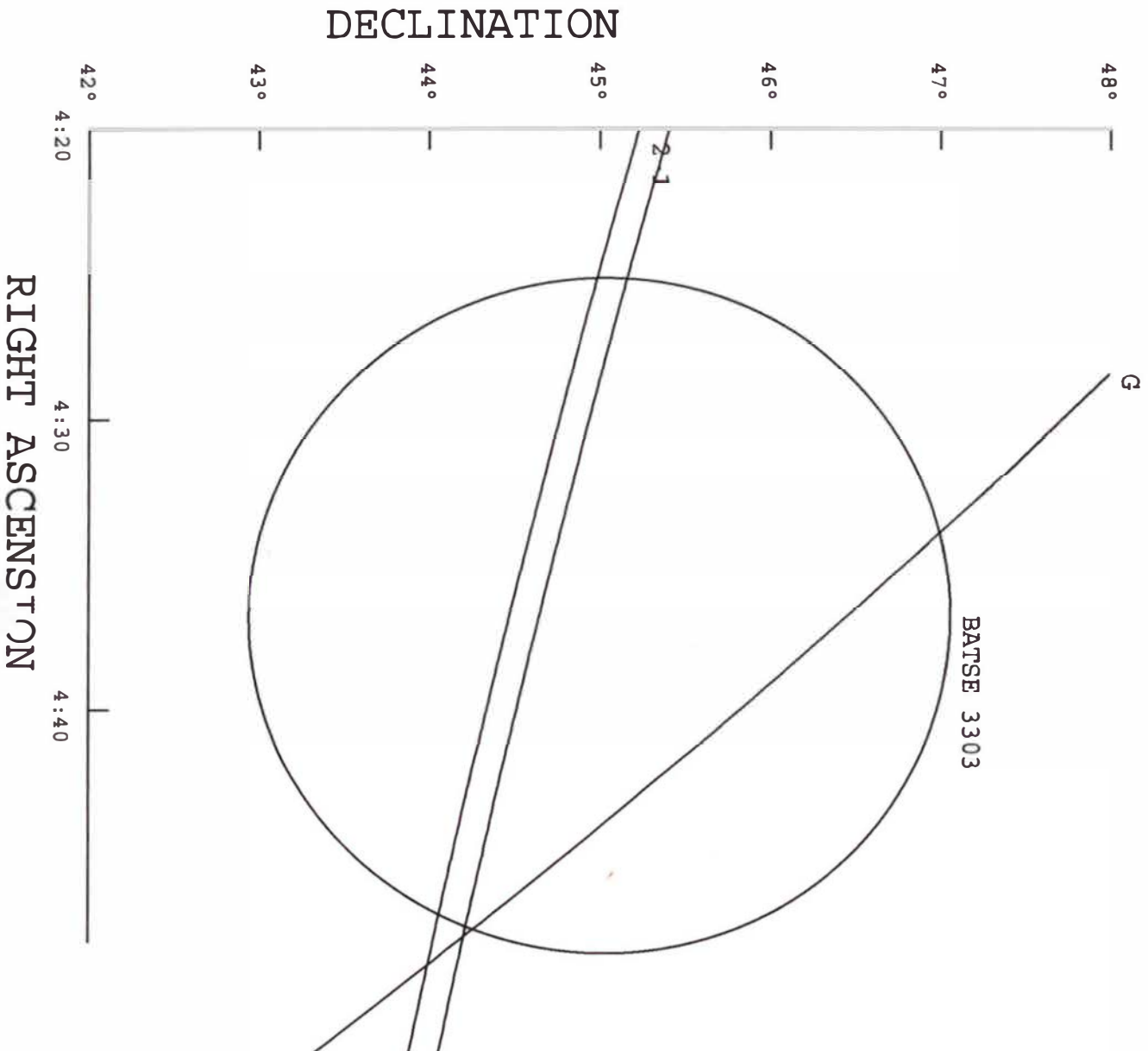
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 27, 1994 14:45

6 / 2/98



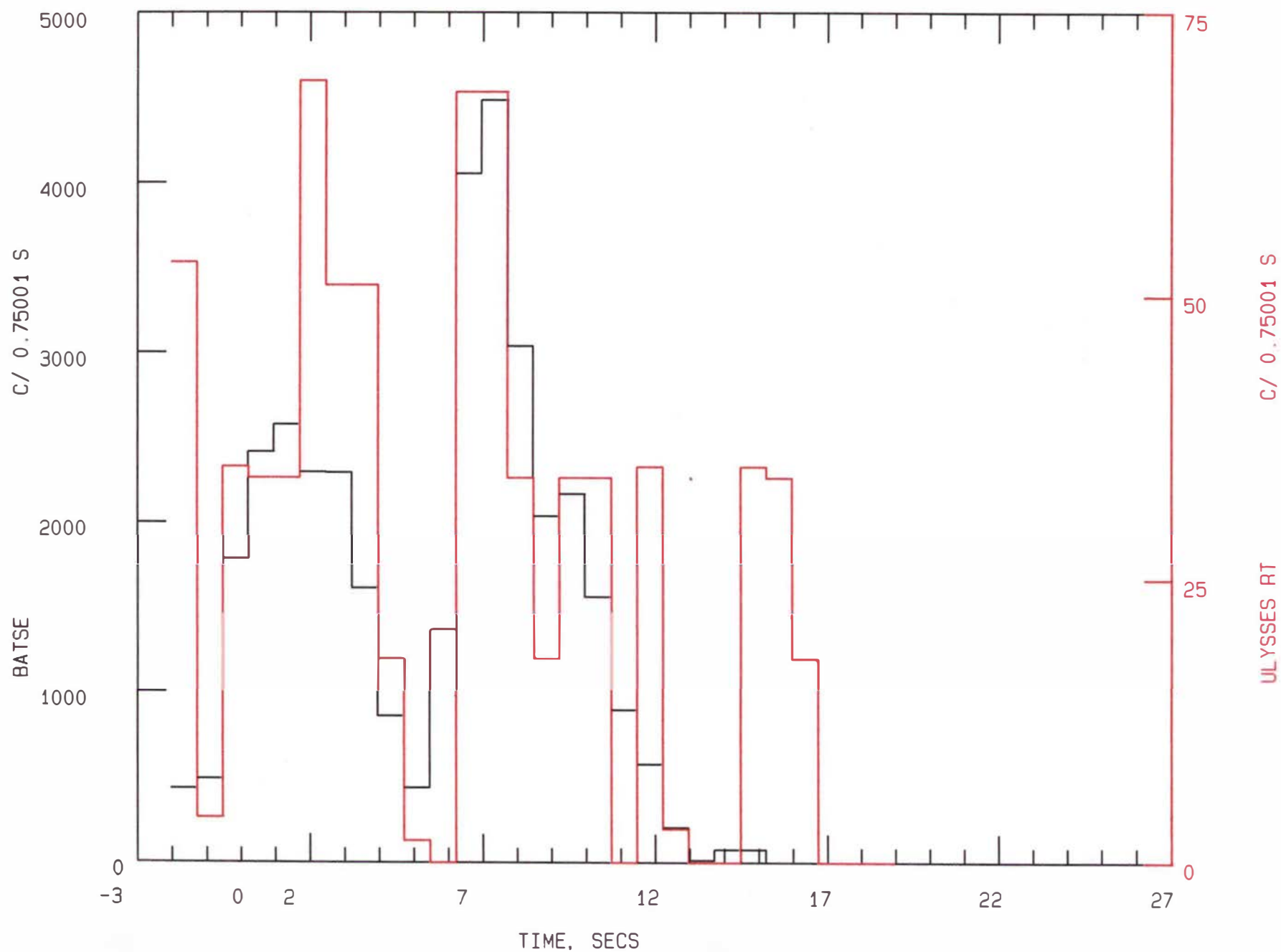
BATSE

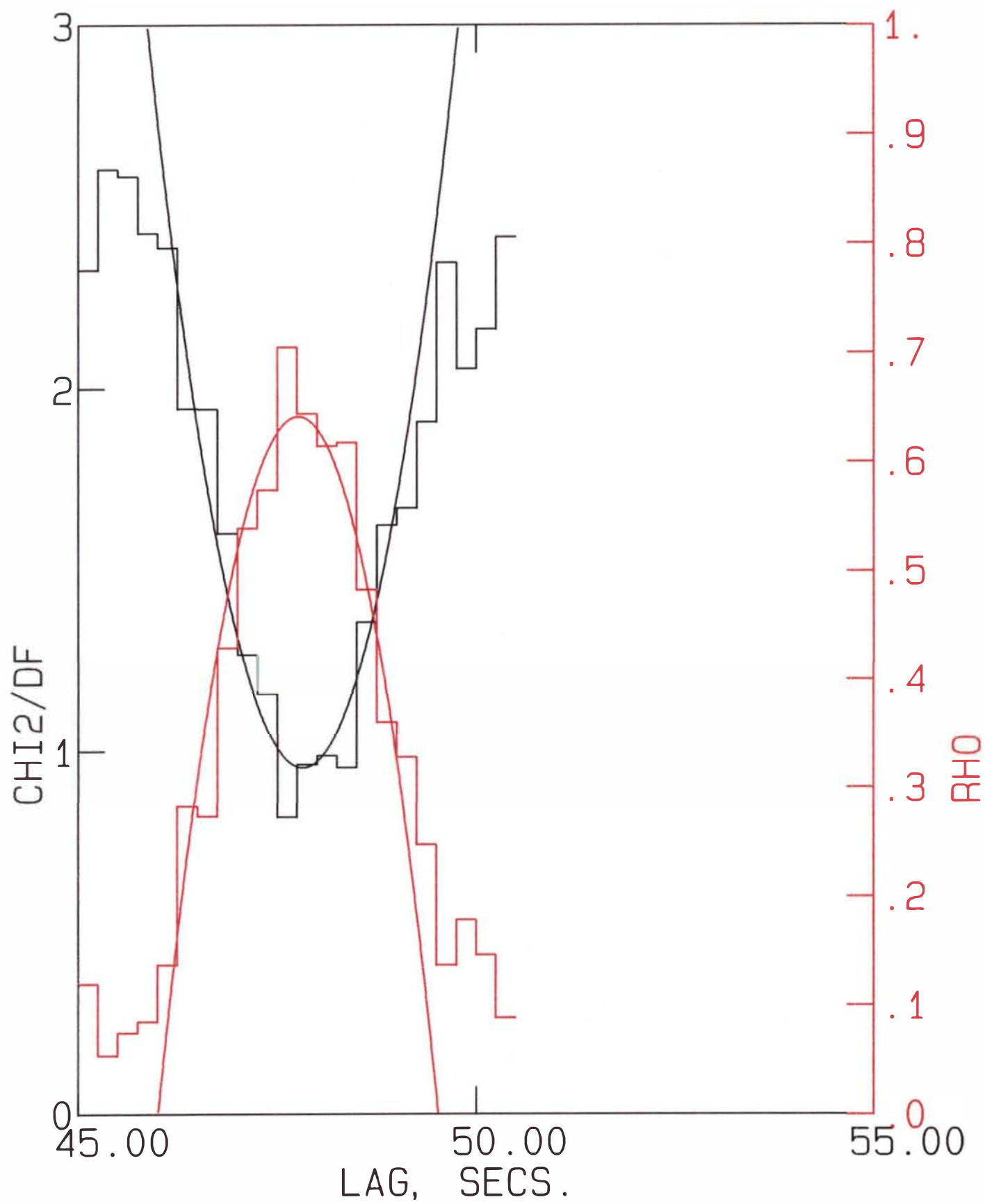
-ULYSSES RT CORRELATION

27/11/94

52217.778

6/ 2/98





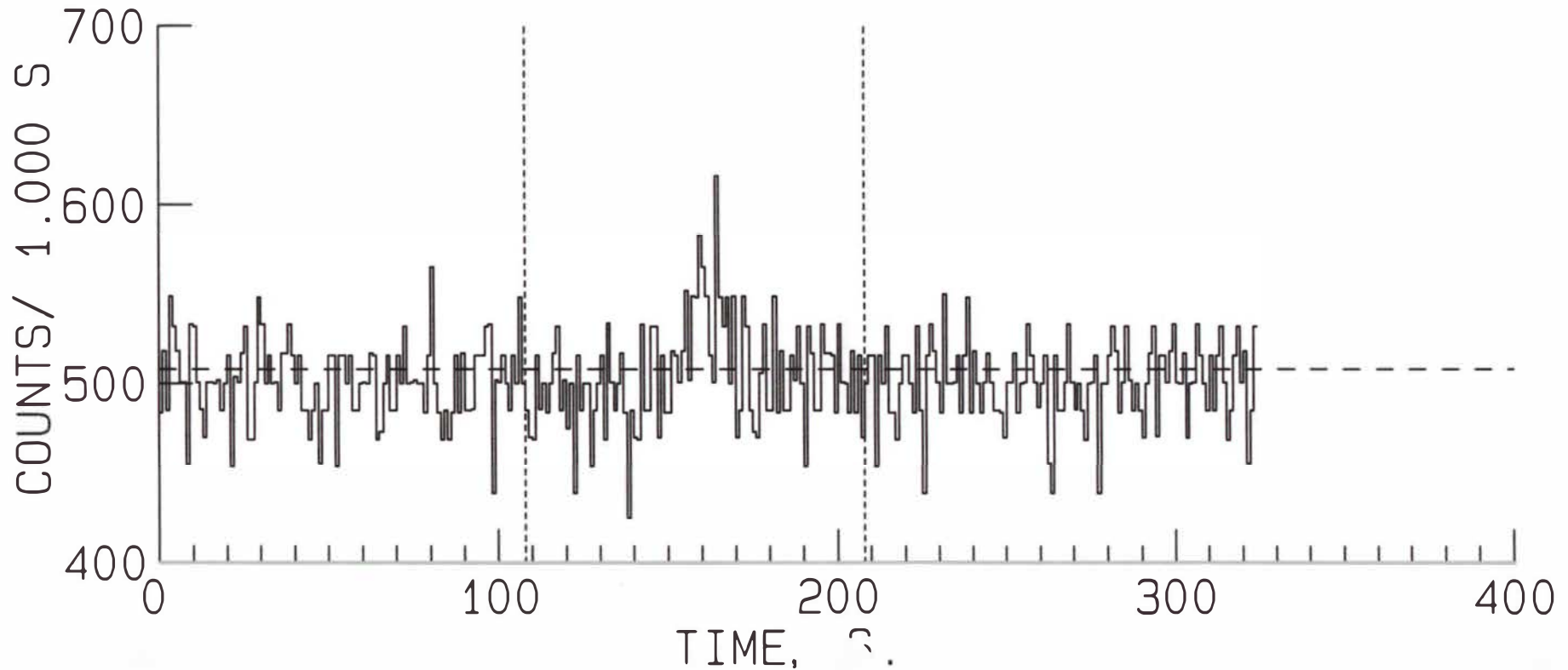
ULYSSES RT

6 / 2 / 98

27/11/94 52992.202 s

0.250 S INTERVALS REGROUPED BY 4
21- 146 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From root Thu Jan 26 12:09 1995
 Received: by space6.ssl.berkeley.edu (AIX 2.1 2/4.03)
 id AA09916; Thu, 26 Jan 95 12:09:38
 eived: from TGRS.GSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
 id AA01181; Thu, 26 Jan 1995 12:08:59 +0800
 Date: Thu, 26 Jan 1995 12:08:59 +0800
 Message-Id: <9501262008.AA01181@sunspot.ssl.berkeley.edu>
 Received: from [128.183.8.198] ([128.183.8.198]) by TGRS.GSFC.NASA.GOV with SMTP;
 Thu, 26 Jan 1995 15:11:15 -0500 (EST)
 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: KONUS/BATSE/ULYSSES EVENT LIST TO 95 JAN 17
 Cc: Mazets@mz.pti.spb.su
 Content-Length: 1824
 Status: R

KEVIN:

BASED ON WHAT I HAVE FROM SERGEI GOLENETSKII AND FROM YOU, THIS IS THE
 CURRENT LIST OF ALL KONUS-ULYSSES EVENTS UP TO 95 JAN 17 WITH ALL BUT TWO
 ALSO BATSE.

X means sent with planning
✓ means sent to TLC

Date	KONUS-Tzero Sensor	Max c/s	N(1)/N(2)	Duration	Event	BATSE	ULYSSES	
(UT)		G1 G2 G3 (G2)	t<Tz t>Tz	K-no	T-no	EVENT		
941119 19 31 09.175	S2	370 703 160	0.23	7 20	4	3287	ULY ✓	✓
941121 17 25 00.945	S1	1652 1656 300	21	3 50	6	3290	ULY ✓	✓
941125 22 04 30.156	S2	115 308 109	0.95	1.5 5	7	3295	ULY X	✓
941126 12 22 37.952	S1	860 1430 330	4.2	40 45	8	3298	ULY ✓	✓
941126 19 56 49.732	S1	290 390 211	6.7	20 26	9	3301	ULY X	✓
941127 14 30 25.680	S2	200 400 95	0.17	8 7	10	3303	ULY ✓	✓
941210 03 10 52.523	S2	900 2350 1385	0.12	1 15	14	----	ULY ✓	✓
941228 07 39 45.915	S1	300 637 519	4.4	5 90	28	3330	ULY ✓	✓
941229 22 51 08.781	S2	396 381 140	0.09	7 25	29	3334	ULY X	✓
950104 07 18 39.613	S2	258 550 219	0.75	2.8 20	31	3345	ULY X	✓
950111 04 49 12.241	S1	586 620 100	>19	92 24	33	3351	ULY X	✓
950114 04 03 01	S2	23 76	0.5	70	BG	----	ULY ✓	
950117 01 36 00	S2	56 82 42	0.22	108	BG	3360	ULY X	

BATSE

Energy intervals G1, G2, G3: 14 - 50, 50 - 225 and 225 - 900 keV.

Since 12th December: 12.5 - 43, 43 - 190 and 190 - 760 keV.

N(1)/N(2) is ratio of sensor 1 to sensor 2 counts in G2.

WHEN YOU HAVE A CHANCE, PLEASE SEND THESE TIME HISTORIES FIRST. THANKS. TLC

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

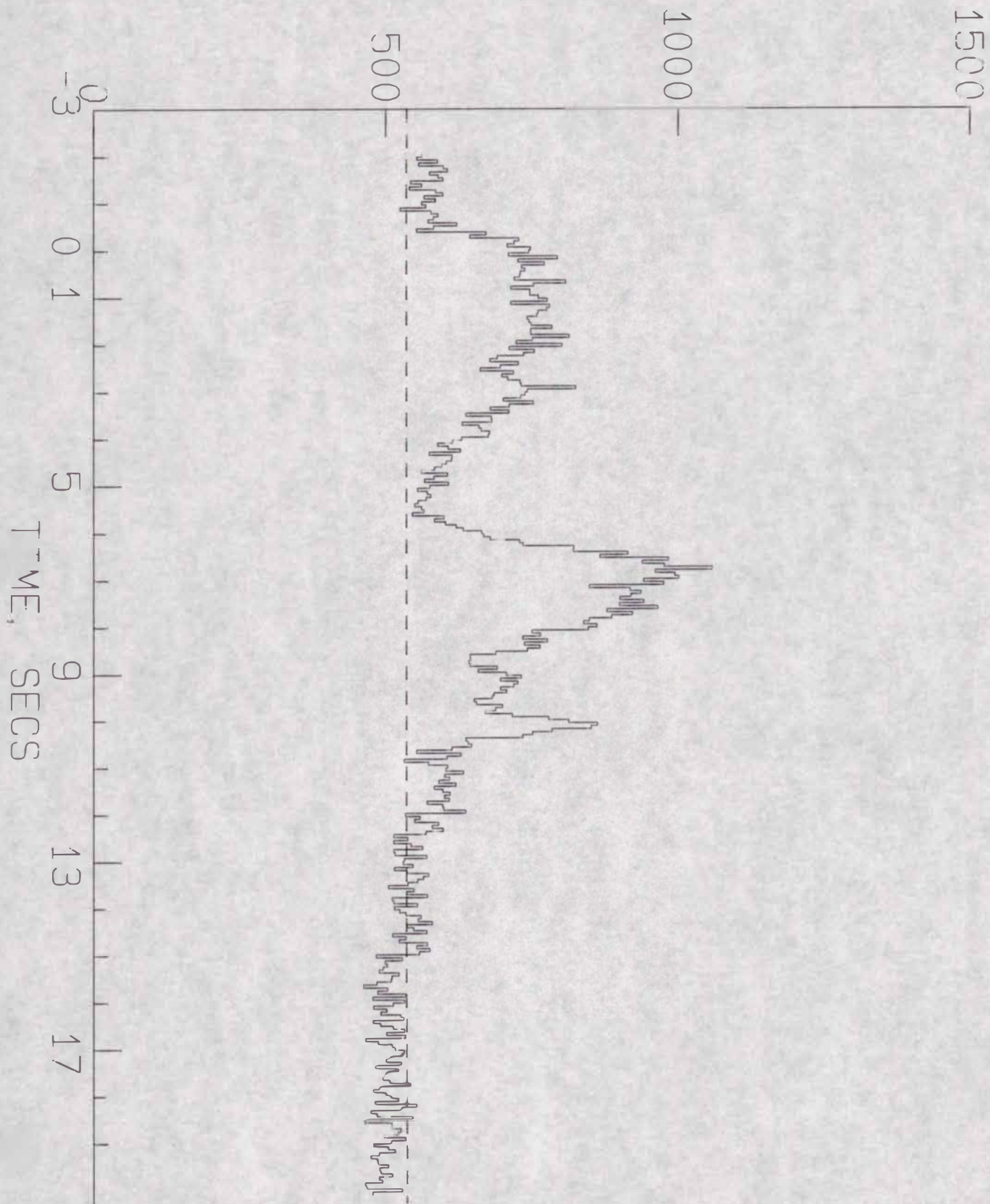
BATSE

27/11/94

52217.778

25- 100 keV

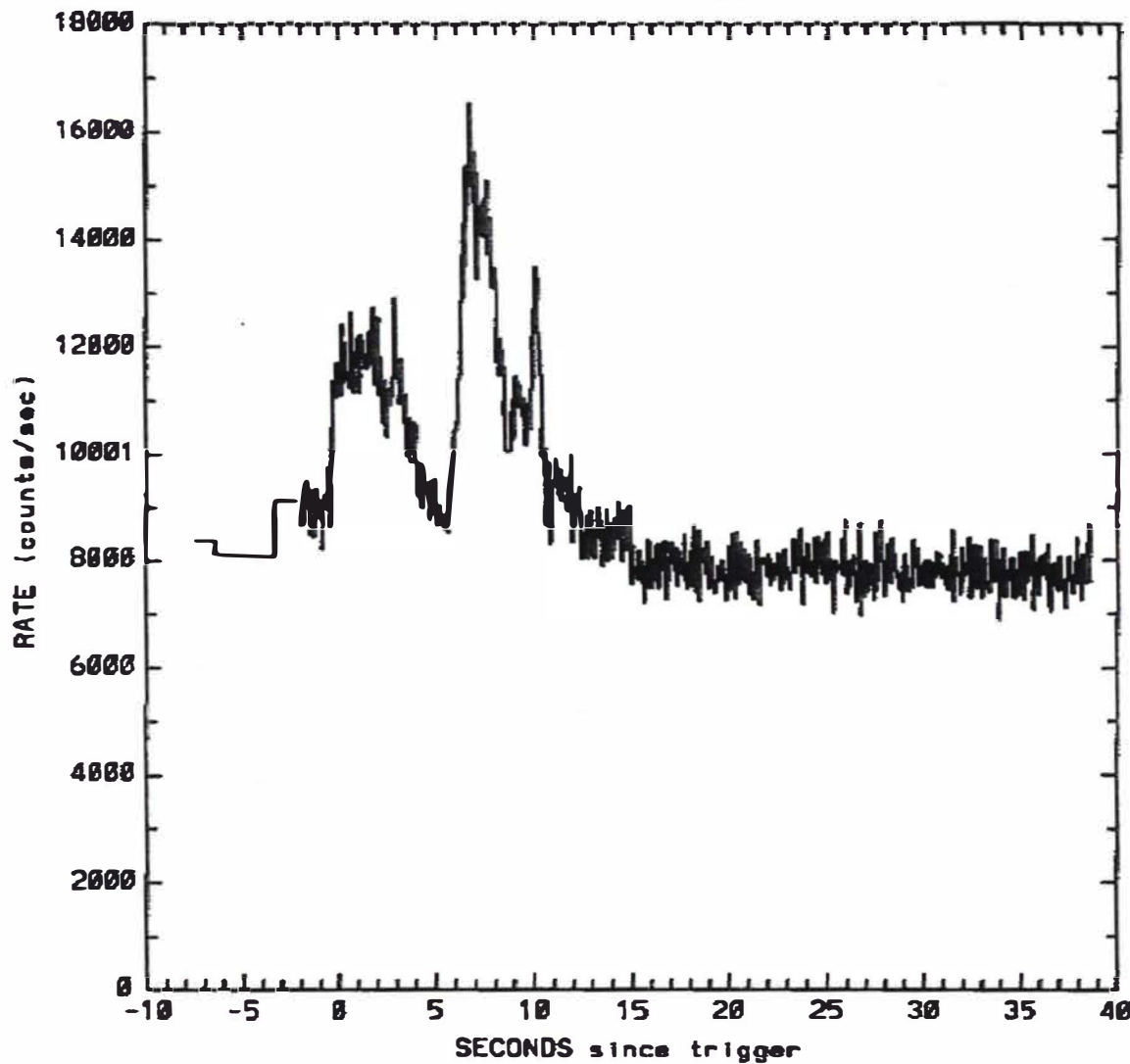
COUNTS/ .064 S



3 / 12 / 94

Nov 27

DISCSC Data for K. Hurley, No. 3303



28-NOV-1994 14:32:05

Created by MDPS BD
(Burst Display)
Version t2.23

Trigger = . 3303

Trigger Time:
9683 / 52217.778Burst Data Type:
DISCSCDeadtime
Corrected. NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
8.864 secondsDetectors [7..8],
765----Discriminators:
(1, 2)Quality Mask:
BDISPI

Date: Fri, 10 Feb 1995 04:54:34 +0800
 Message-Id: <9502101254.AA19784@sunspot.ssl.berkeley.edu>
 Mime-Version: 1.0
 To: KHURLEY@space6.ssl.berkeley.edu
 From: cline@tgrs.gsfc.nasa.gov (T L Cline)
 Subject: Improved list.
 X-GRS: Palmer@tgrs.gsfc.nasa.gov
 X-Lines: 81
 Status: RO
 Content-Length: 4056
 X-Sun-Content-Length: 4056

KONUS // ULYSSES // CGRO-BATSE Event List from Wind launch to 95-01-17:

63 Konus days to 1/17: 22 backgnd-GRBs, 21 triggered-GRBs, 1 flare.

Date	Tzero (UT)	Konus sensor	Max c/s G1 G2 G3	N(1)/N(2) =G2 t<Tz t>Tz	Duration T#	BATSE Uly T# d* d*	TGRS T# RA Dec	BACODINE
941113	12 09 15	S1	145 85	2.5 115	BG			
941114	02 02 40	S2	110 128	30 0.25 12	BG	3283	92 37	
941115	06 22 --					3284 (U)	149 11	
941117	03 14 38.191	S2	406 550	74 0.17 40	5 2			
941117	14 07 57	S2	150 140	<0.15 5	BG			
941119	19 31 09.175	S2	370 703	160 0.23 7	20 4	3287*	U* #13 188 22	
941120	20 23 17.924	S1	215 328	30 >15 2	25 5			
941121	17 25 00.945	S1	1652 1656	300 21 3	50 6	3290*	U* #15 004 -63	
941123	19 51 --					3294 (U)	190 02	
941125	22 04 30.156	S2	115 308	109 0.95 1.5	5 7	3295*	U* BG	
941126	00 20 46	S1	150 205	200 >14 18	BG	3296	BG	
941126	03 55 --					3297 (U)	323 38	
941126	12 22 37.952	S1	860 1430	330 4.2 40	45 8	3298*	U* #28	
941126	16 54 20	S1	55 75	>10 26	BG			
941126	19 56 49.732	S1	290 390	211 6.7 20	26 9	3301*	U* #--	
941127	14 30 25.680	S2	200 400	95 0.17 8	7 10	3303*	U* 070 50	
941127	15 39 10	S1	210 57	2.7 260	BG			
941128	15 37 00	S1	75 90	32 >15 55	BG	3305	no d	
941128	18 41 --					3306 (U)	011 -32	
941205	23 33 40.074	S2	370 460	188 0.06 6	30 11			
941207	22 10 32	S2	265 175	<0.2 7	BG			
941210	03 10 52.523	S2	900 2350 1385	0.12 1	15 14		U* BG	
941214	17 03 51	S1	40 45	29 >6 12	BG			
941214	05 38 45.226	S1	3479 1266	14 1.0 12	240 SF	3318	BG 259 -06	
941221	07 44 08	S2	55 115	30 0.8 20	BG			
941221	22 14 35.215	S1	260 496	165 1.5 55	11 19		BG	
941222	05 36 00.243	S2	334 1360 1066	0.36 7	105 20		#145	
941228	07 39 45.915	S1	300 637 519	4.4 5	90 28	3330*	U* no d 339 -52	
941228	16 55 23	S2	40 36	23 0.25 25	BG			
941229	12 58 05	S1	46 108	31 1.8 15	BG			
941229	22 51 08.781	S2	396 381	140 0.09 7	25 29	3334*	U* no d	
941230	20 52 53	S1	74 117	52 8.4 158	BG		no d	
941230	23 43 44	S2	55 70	16 <0.2 4.5	BG		no d	
950104	00 48 +/-1200						(U)	
950104	07 18 39.613	S2	258 550	219 0.75 2.8	20 31	3345*	U* #250 310 -11	
950104	09 00 58	S2	140 143	40 <0.1 25	BG			
950108	02 04 --					3349 (U)	020 -14	
950110	06 02 15	S2	332 180	<0.1 3600	BG			
950110	13 37 57.084	S2	234 422	213 0.05 38	100 32			
950111	04 49 12.241	S1	586 620	100 >19 92	24 33	3351	U* BG 319 -65	
950111	12 18 49.196	S1	225 435	164 1.85 26	50 34	3352	U* BG 024 -14	
950112	07 45 37.120	S2	1305 1800	336 0.04 2.5	44 35		(?)	
950113	05 59 13	S1	283 180	26 >10 52	BG			
950113	17 38 32	S2	85 162	35 <0.06 75	BG			

950114	01	00	38	S1	46	110	1.6	6	BG		
950114	04	03	01	S2	23	76	0.5	70	BG	U	
950114	07	30	30.766	S2	205	406	60	<0.05	1	100	36
950114	13	10	34.865	S1	1320	2828	516	3.1	1	10	37
											U* #258
950115	02	49	32	S2	40	47	34	<0.15	24	BG	BG
950117	01	36	00	S2	56	82	42	0.22	108	BG	3360* U* 298 05
950118	17	05	--								3366 (U) 061 -63

G1:14-50, G2:50-225, G3:225-900 keV, >94/12/12: 12.5-43, 43-190, 90-760 keV.
 N(1)/N(2)=G2-ratio, *=data at GSFC; BG=background rate increase = event visible.

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

1 3 / 2 / 9 5

U L Y S S E S R T

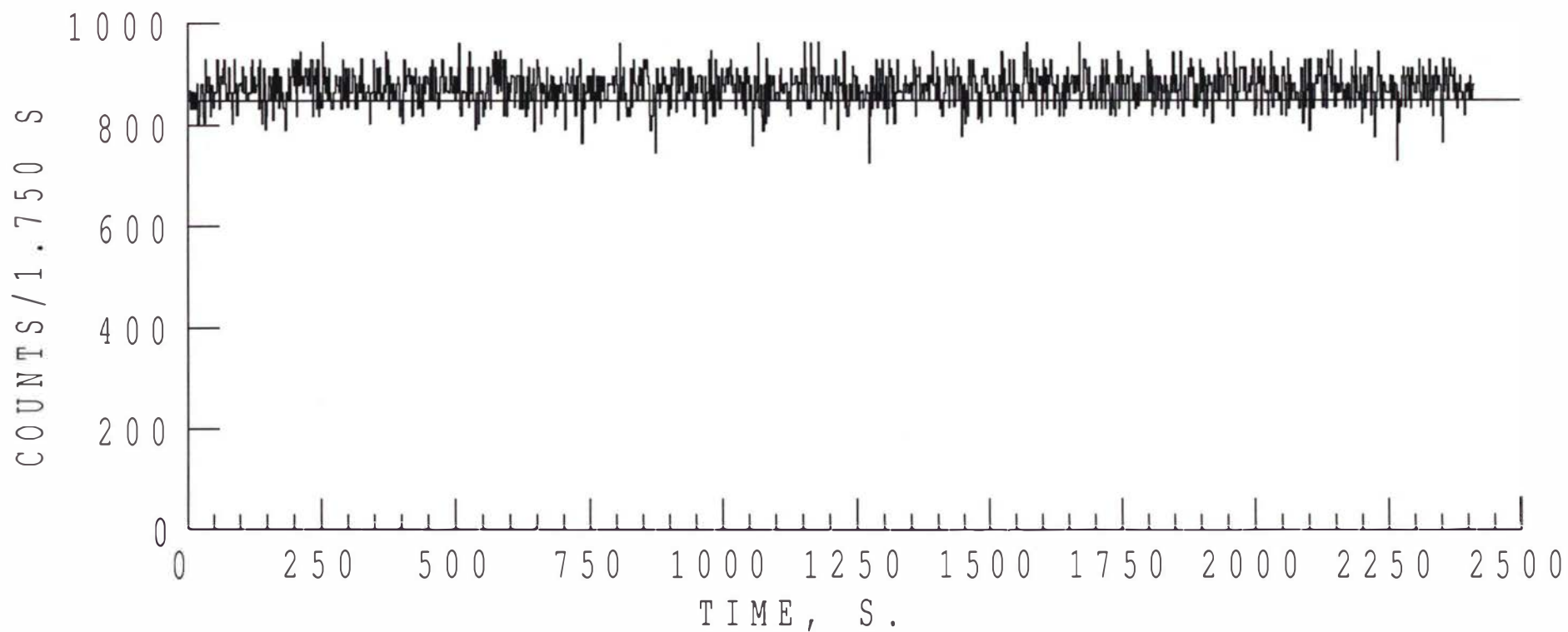
2 7 / 1 1 / 9 4 5 5 1 5 2 . 2 4 2 s

0 . 2 5 0 s I N T E R V A L S R E G R O U P E D B Y 7

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



From DEAL@ssl.msfc.nasa.gov Mon Nov 28 11:04 PST 1994
Date: Mon, 28 Nov 1994 13:04:03 -0600 (CST)
From: DEAL@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.: 3304

TIME: TJD=9683 SECONDS=75759

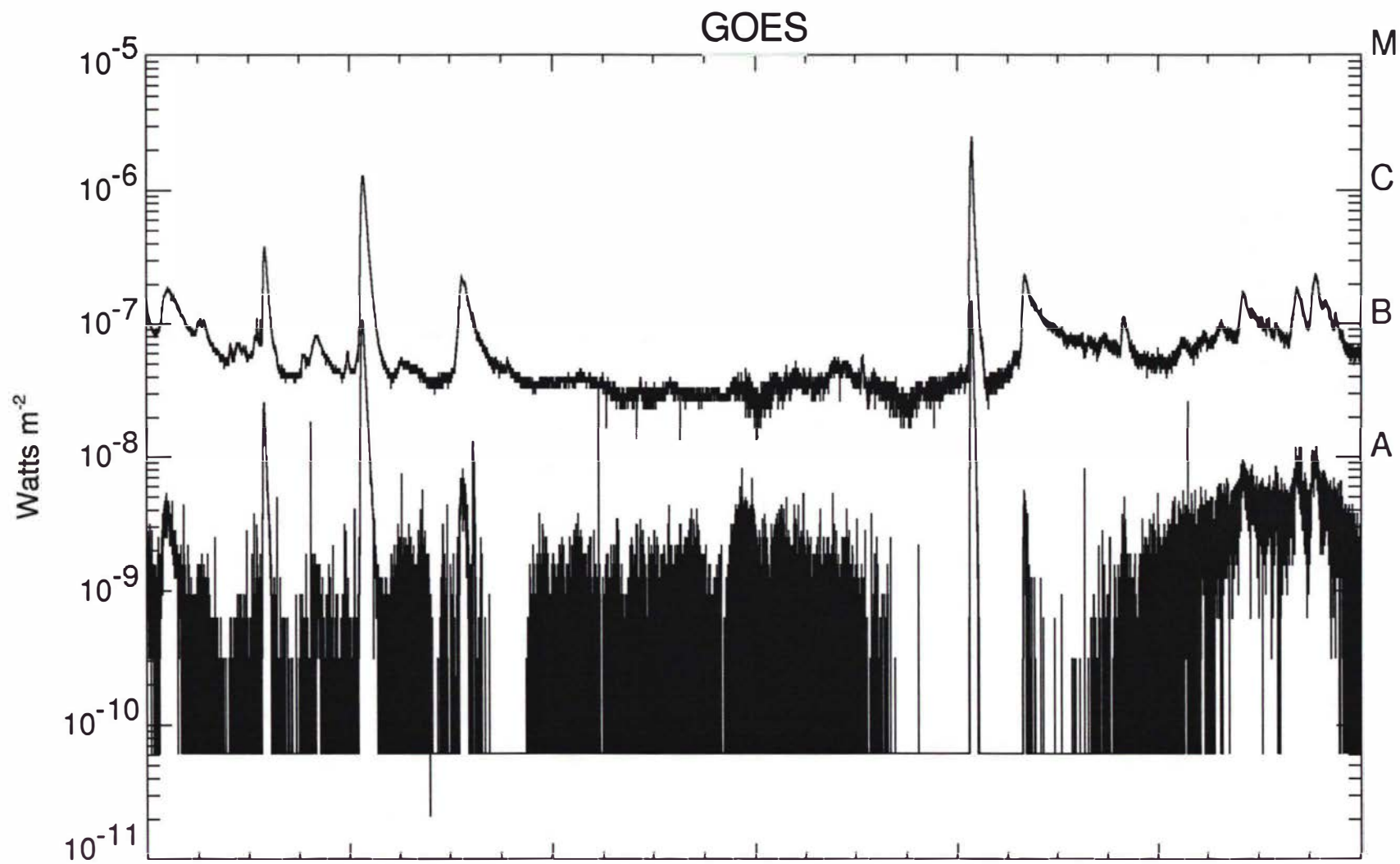
TYPE: SAA ENT SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY



Data Start: 94/11/27, 0000:01

Plot created: 94/12/01, 2050

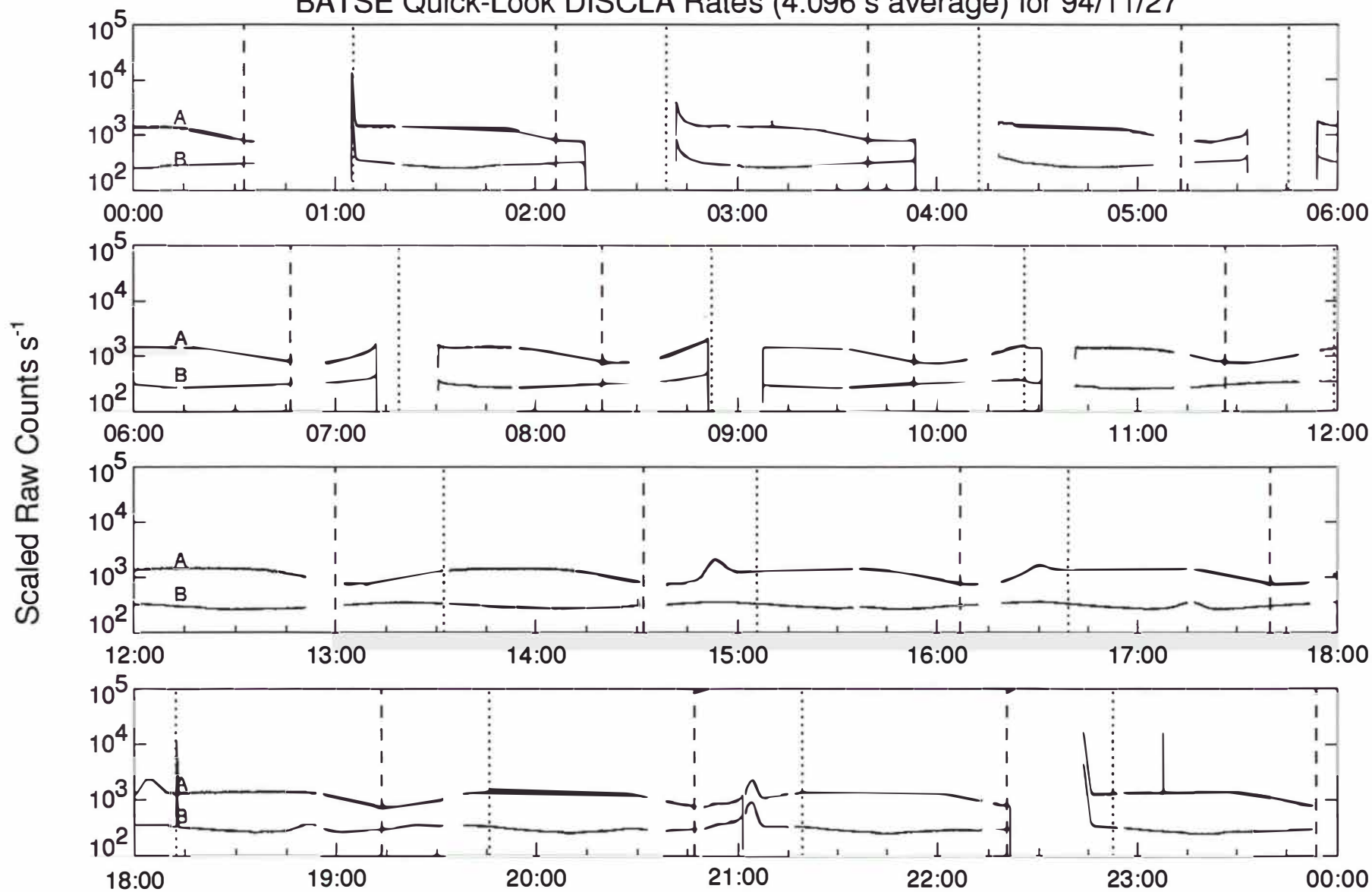
Channel 1 (1.0 - 8.0 Angstroms)

Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/27

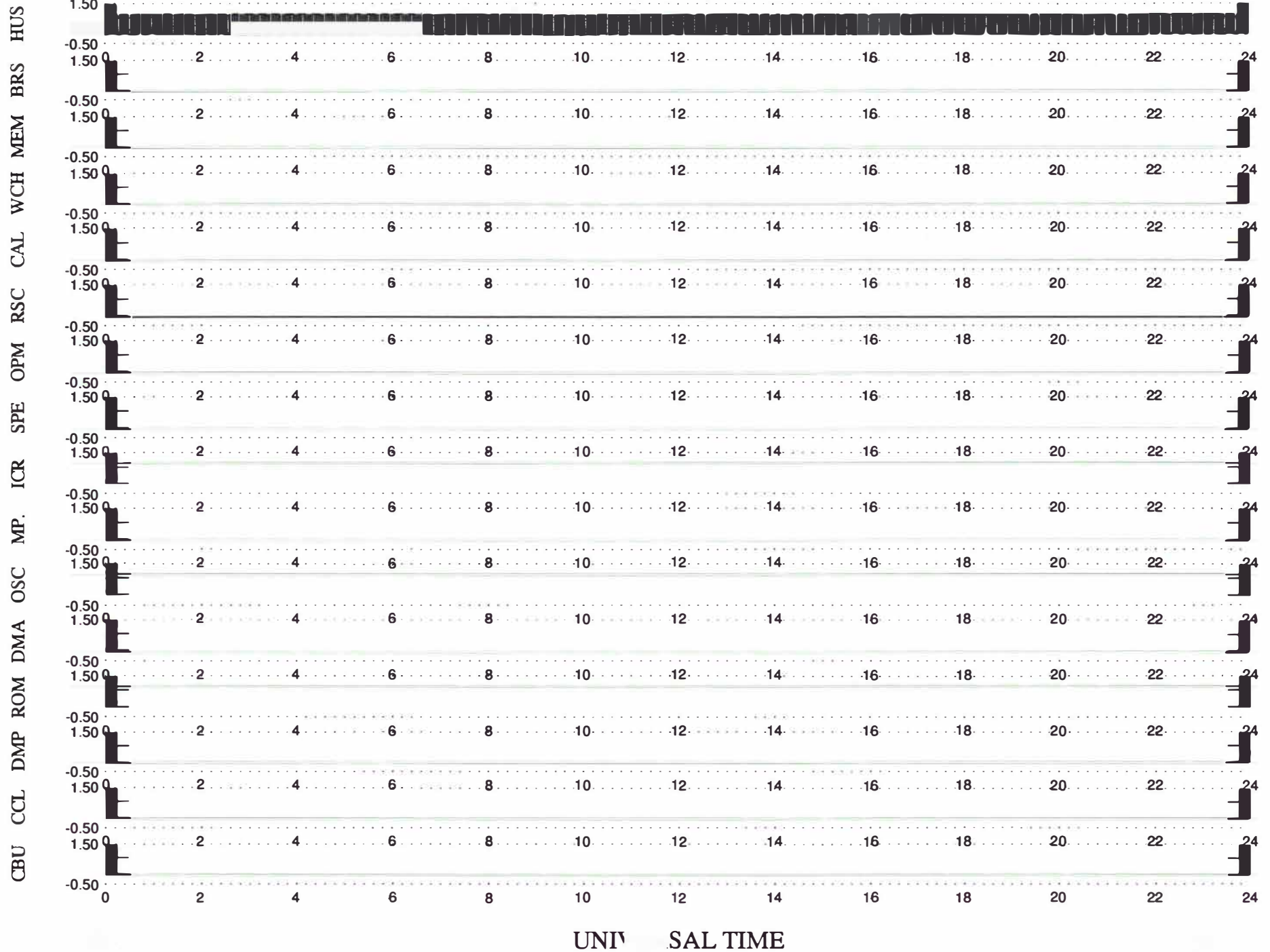


Current Time: 94/12/01, 2037 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

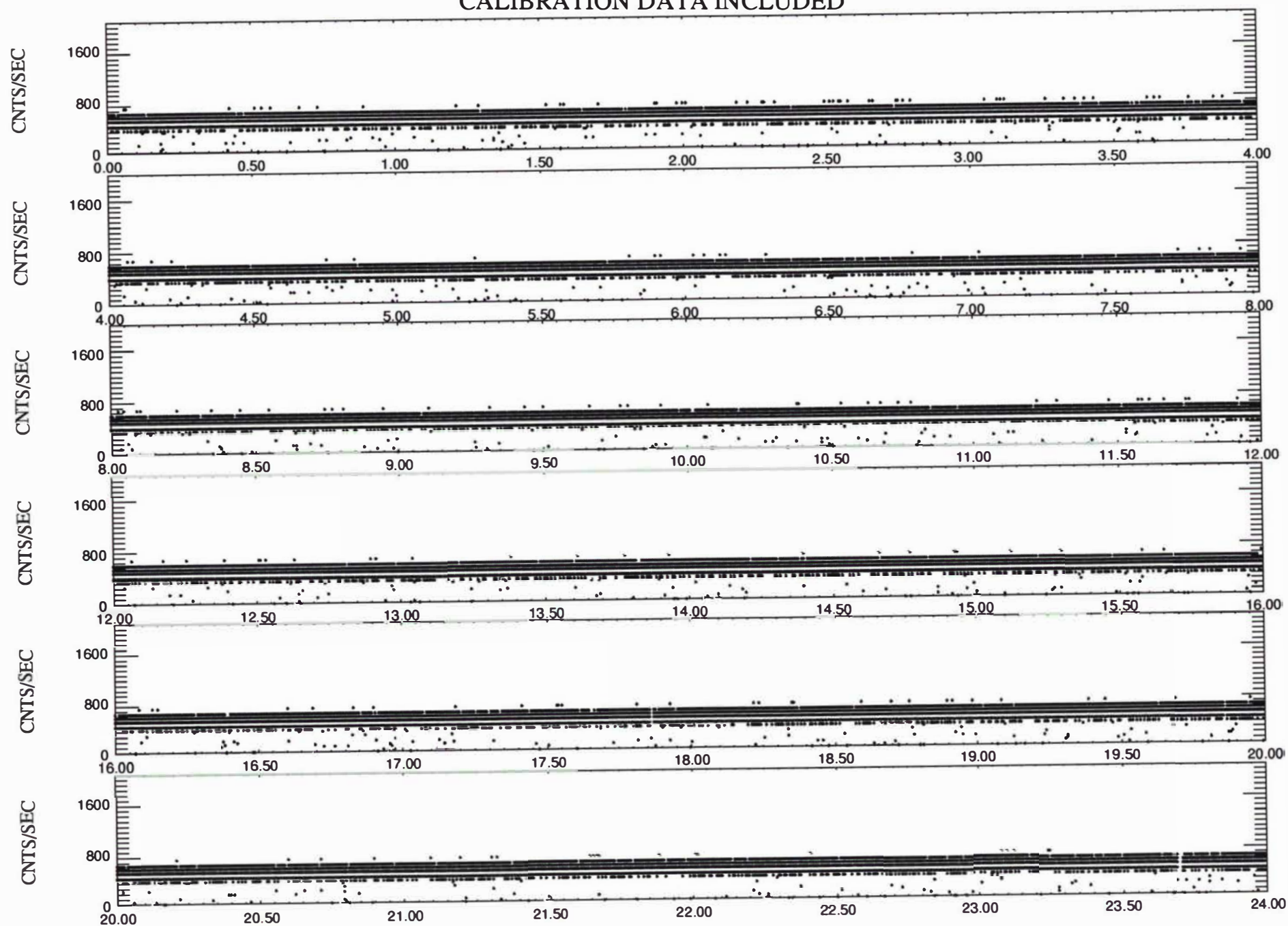
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

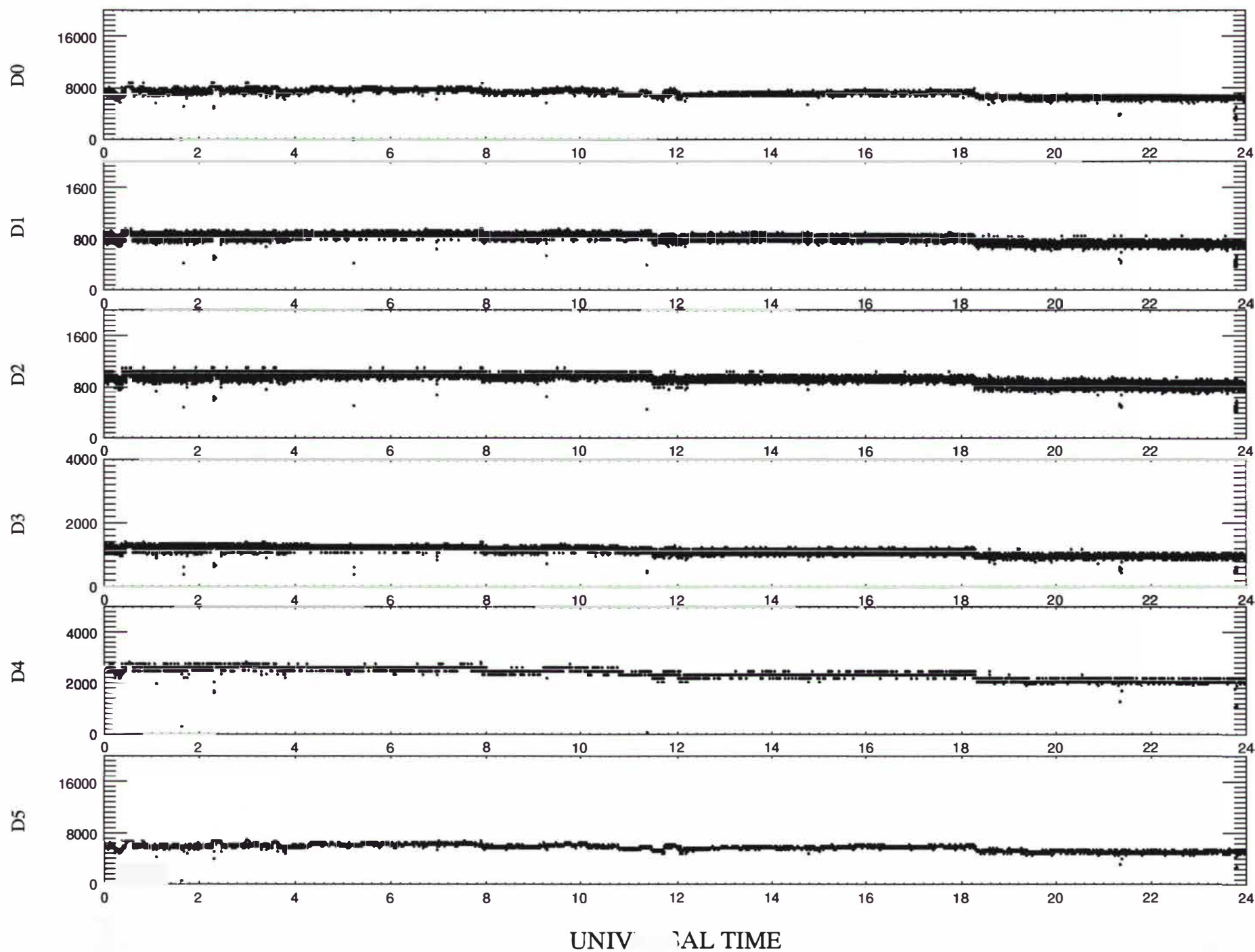
NO BURST (7)



CALIBRATION DATA INCLUDED



UNIT SAL TIME



From HAGEDON@fender.msfc.nasa.gov Wed Nov 30 09:32 PST 1994
Date: Wed, 30 Nov 1994 11:32:06 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3305

BATSEARCH PROGRAM

BATSE BURST # 3305
EVENT OF 1994 NOV 28 DAY OF YEAR=332
EVENT CROSSING TIME AT BATSE : 56217. S. OR 15:36:57.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 35.000 -74.000
BATSE PEAK COUNTING RATE: 3000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 28/11/ 94 IS:
RA= 272.777 DEC= -72.297 DIST= 2.156 AU
BATSE-ULYSSES DISTANCE = 322611202. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=150.58 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -937.35 SECS.
CROSSING TIME AT ULYSSES IS 55280. S. OR 15:21:19 +/- 127.54 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 28/11/ 94 IS:
RA= 148.810 DEC= 15.088 DIST= 1.119 AU
MARS-BATSE DISTANCE = 167430672. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 69.04 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 199.75 SECS.
CROSSING TIME AT MARS IS 56417. S. OR 15:40:16 +/- 93.58 SECONDS

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3305

TIME: TJD=9684 SECONDS=56217

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=45 AZIMUTH=90 ERROR= DEGREES

COMMENTS:

BURST. DOUBLE PEAKED EVENT. SLOW DECAY. DUR.~70 SEC.
NOT VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Wed Nov 30 09:31 PST 1994
Date: Wed, 30 Nov 1994 11:31:51 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3305

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3305	941128	9684	56217	3000	035	-74

30 / 11 / 94

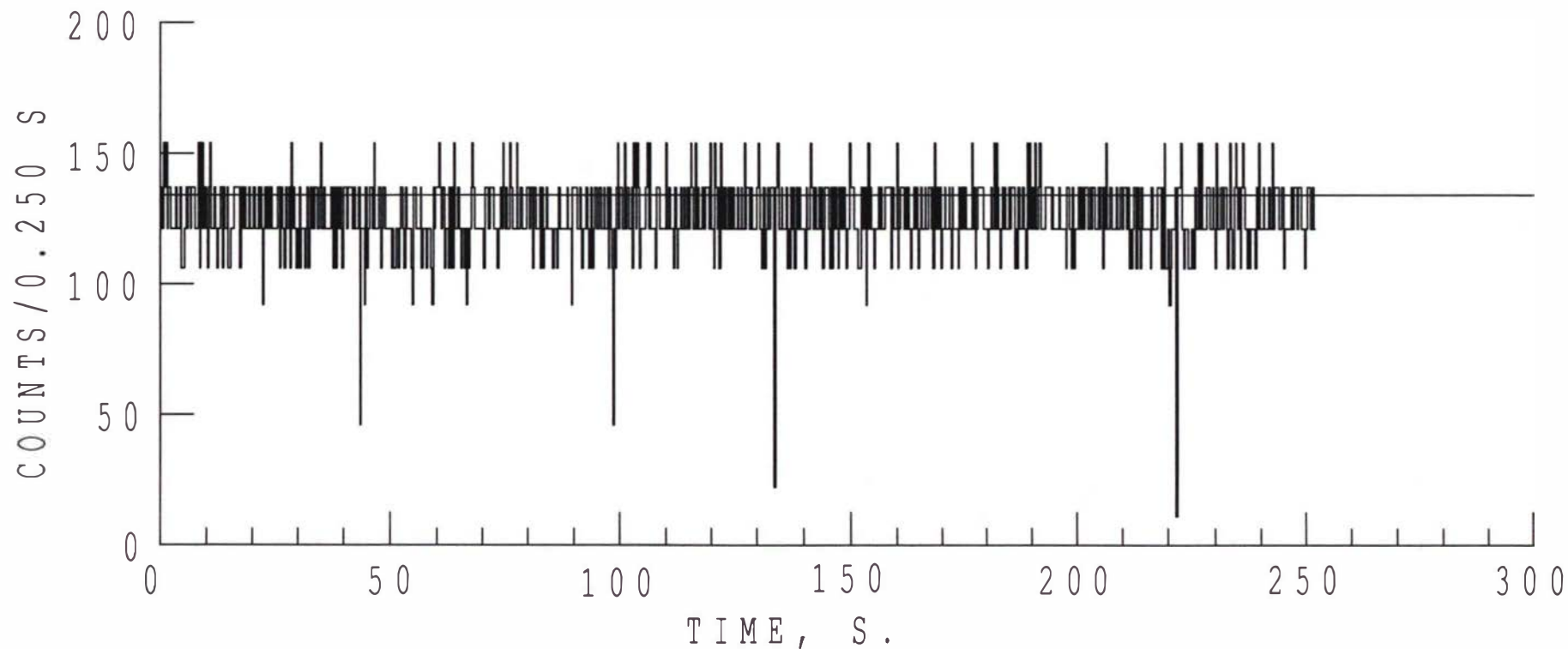
ULYSSES RT

28 / 11 / 94 55152.098 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996
 Date: Fri, 26 Jan 1996 13:00:45 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: Improved list; same question.

Dear Kevin,

I'm making a little progress here, tracking down these events. This is a slightly improved list, with a few more BATSE triggers identified. - TLC

Yr	Mn	Dy	Konus#	Konus Tzero	BATSE Tz, #	Ulysses
94	11	14	BGR	07360	07358	3283 - NO
94	11	19	4	70269.175	70250	3287 R I
94	11	21	6	62700.945	62697	3290 trig.
94	11	25	7	79470.156	79470	3295 R I
94	11	26	BGR	01246	01245	3296
94	11	26	8	44557.952	44521	3298 trig.
94	11	26	BGR	60860	60861	3299
94	11	26	9	71809.732	71798	3301 R I
94	11	27	10	52225.68	52217	3303 R I
94	11	28	BGR	56220	56217	3305 NO
94	12	28	28	27585.915	27581	3330 R I
94	12	29	29	82268.781	82258	3334 R I
95	1	4	31	26319.613	26319	3345 R I
95	1	11	33	17352.241	17263	3351 R I
95	1	11	34	44329	44310	3352
95	1	17	BGR	05760	05761	3360
95	1	18	BGR	44574	44589	3364
95	2	7	BGR	02774	02781	3406
95	2	8	45	07824	07824	3408
95	2	10	47	08424	08421	3410
95	2	11	48	08697	08697	3412 trig.
95	2	11	50	72469	72468	3415
95	2	21	BGR	74701	74705	3436
95	2	26	54	53351	53336	3442
95	3	1	BGR	75731	75761	3448
95	3	4	56	37661	37657	3453
95	3	5	58	54309	54304	3458
95	3	10	BGR	78388	78395	3464
95	3	25	63	25841	25844	3480
95	3	25	64	63392	63391	3481
95	3	27	BGR	26323	26347	3485
95	3	27	BGR	85672	85671	3486
95	4	1	69	42647	42642	3488
95	4	1	70	74635	74634	3489
95	4	3	71	47985	47987	3491
95	4	3	72	84828	84826	3492
95	4	16	BGR	48420	48419	3509
95	4	18	81	83793	83795	3512
95	4	25	86	00923	00919	3523
95	4	30	BGR	54224	54229	3527
95	5	3	88	66971	66970	3537
95	5	10	90	28083	28079	3569
95	5	13	93	81706	81703	3571
95	5	21	97	25161	25157	3588
95	5	22	98	23898	23896	3590
95	5	22	100	85280	85283	3593
95	5	24	102	14902	14899	3598
95	6	2	104	25592	25592	3618
95	6	10	107	6849	06849	3637
95	6	24	111	84124	84084	3648
95	6	25	113	14626	14601	3649
95	6	29	115	37033	37036	3654
95	7	1	116	12762	12758	3657

95	7	1	117	23737	23737	3658
95	7	6	121	42735	42735	3662
95	7	11	123	13789	13789	3663
95	7	13	BGR	32133	32176	3664
95	7	30	128	76149	76124	3720
95	8	4	131	7135	07134	3734
95	8	4	133	45377	45376	3735
95	8	8	BGR	13023	12974	3745
95	8	9	136	85945	85945	3750
95	8	18	137	5065	05002	3765
95	8	22	140	13751	13749	3767
95	9	4	142	52692	52688	3776
95	9	9	145	85473	85452	3788
95	9	19	151	51465	51447	3806
95	9	21	152	20947	20947	3811
95	9	22	BGR	15495		
95	9	22	BGR	25929		
95	9	26	BGR	63919		
95	10	1	153	41907		
95	10	2	BGR	77583		3843
95	10	4	BGR	83974		
95	10	5	154	14842.112		
95	10	8	156	46287.863		
95	10	10	BGR	11774		
95	10	11	157	77693.094		3860
95	10	13	159	57097.299		
95	10	14	160	13108.167		
95	10	14	161	43561.3		
95	10	16	162	02484.285		3870
95	10	16	BGR	71607		3871
95	10	18	163	19832.069		
95	10	19	64	11712.625		
95	10	19	165	48244.594		3875
95	10	25	167	85239.738		
95	11	2	168	07085.879		
95	11	2	69	21209.015		3891
95	11	2	BGR	28693		
95	11	5	BGR	01745		
95	11	5	170	05868.077		3893
95	11	5	171	46827.808		
95	11	7	BGR	27298		
95	11	11	BGR	34960		
95	11	12	172	66495.244		
95	11	13	173	84358.872		3906
95	11	15	BGR	38929		
95	11	17	175	10123.762		
95	11	18	BGR	82560		
95	11	19	176	29831.402		3912
95	11	19	177	46457.519		
95	11	19		59448		
95	11	21		22280		
95	11	22	179	09841.38		
95	11	22	180	17107.738		
95	11	23	BGR	65408		
95	11	24	BGR	21266		3918
95	11	24	BGR	25132		

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

From HAGEDON@fender.msfc.nasa.gov Wed Nov 30 09:34 PST 1994
Date: Wed, 30 Nov 1994 11:34:17 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3306

BATSEARCH PROGRAM

RI

BATSE BURST # 3306
EVENT OF 1994 NOV 28 DAY OF YEAR=332
EVENT CROSSING TIME AT BATSE : 67286. S. OR 18:41:26.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 19.000 -34.000
BATSE PEAK COUNTING RATE: 14000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 28/11/ 94 IS:
RA= 273.074 DEC= -72.245 DIST= 2.156 AU
BATSE-ULYSSES DISTANCE = 322578602. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=117.59 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -498.39 SECS.
CROSSING TIME AT ULYSSES IS 66788. S. OR 18:33:07 +/- 208.00 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 28/11/ 94 IS:
RA= 148.810 DEC= 15.088 DIST= 1.119 AU
MARS-BATSE DISTANCE = 167430672. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 48.85 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 367.51 SECS.
CROSSING TIME AT MARS IS 67654. S. OR 18:47:33 +/- 78.59 SECONDS

khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3306

TIME: TJD=9684 SECONDS=67286

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=20 AZIMUTH=158 ERROR= DEGREES

COMMENTS:

BURST. COMPLEX EVENT. DUR.~110 SEC. MAX @~T+90 SEC.
WEAKLY VISIBLE ABOVE 300 KEV.

From HAGEDON@fender.msfc.nasa.gov Wed Nov 30 09:34 PST 1994
Date: Wed, 30 Nov 1994 11:33:59 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Cc: HAGEDON@fender.msfc.nasa.gov
Subject: BATSE Burst 3306

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3306	941128	9684	67286	14000	019	-34

Hello corr removed

Date: Feb 6 '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?
- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

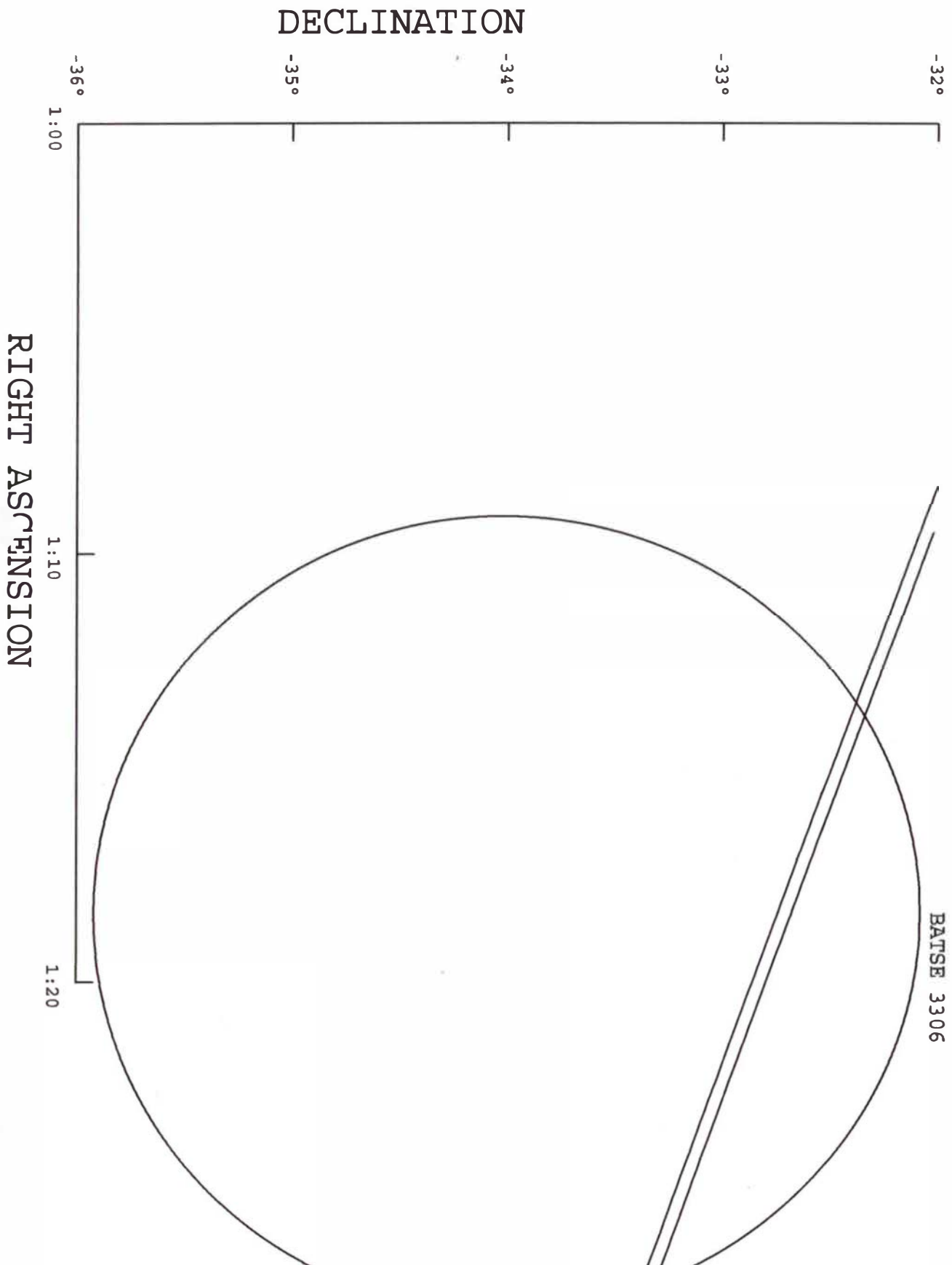
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 28, 1994 18:34

6 / 2/98



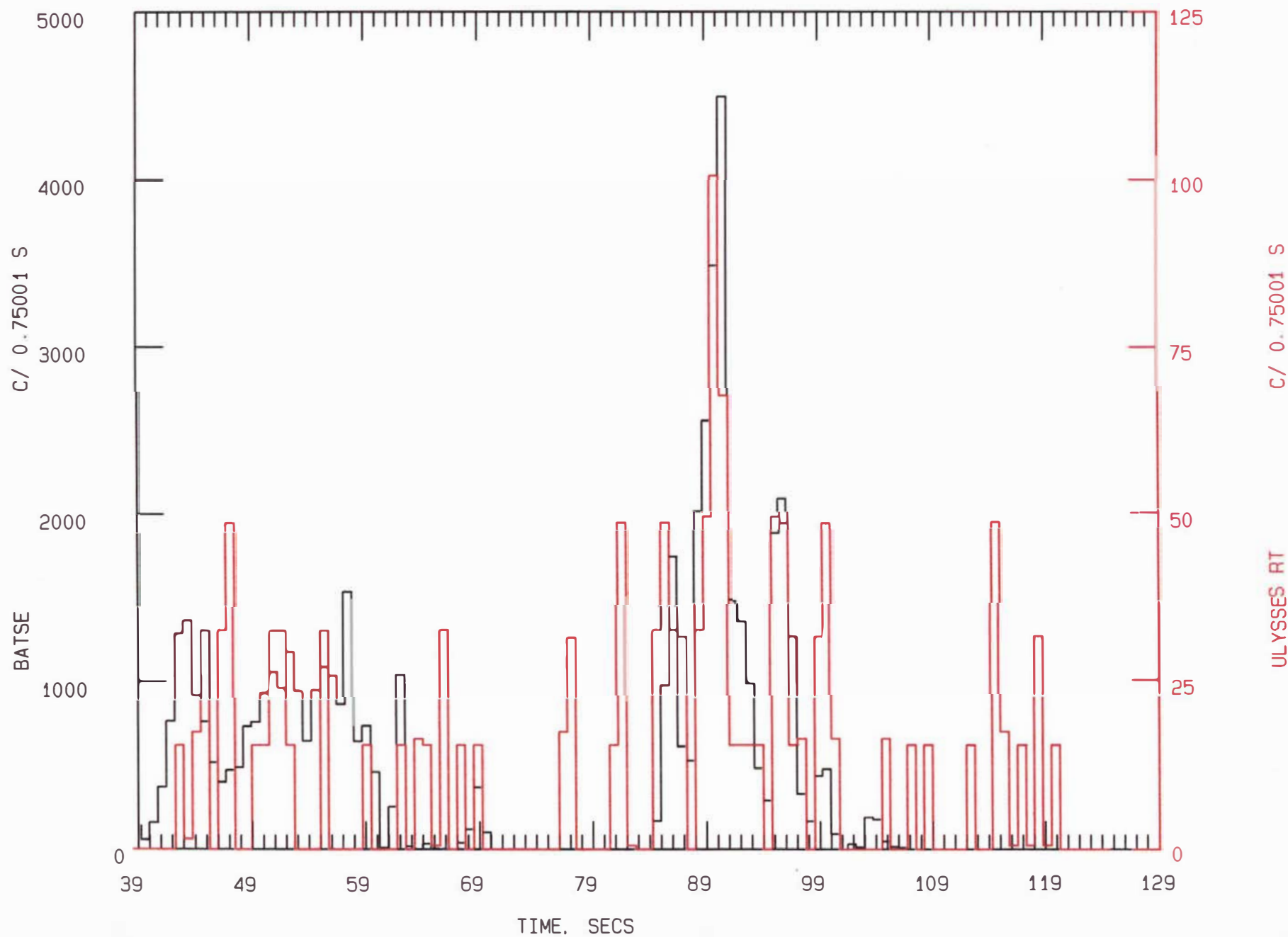
BATSE

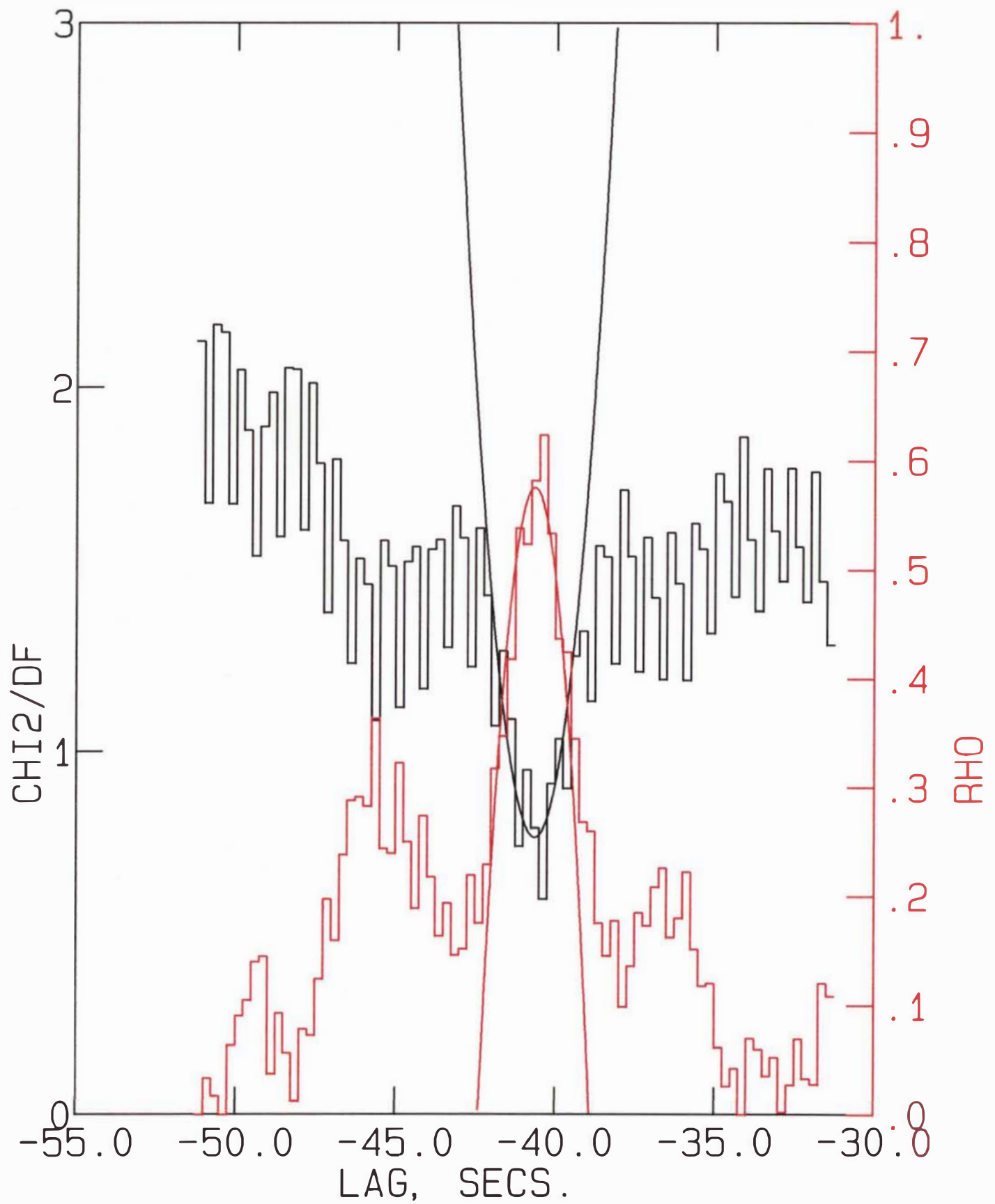
-ULYSSES RT CORRELATION

28/11/94

67286.706

6/ 2/98





ULYSSES RT

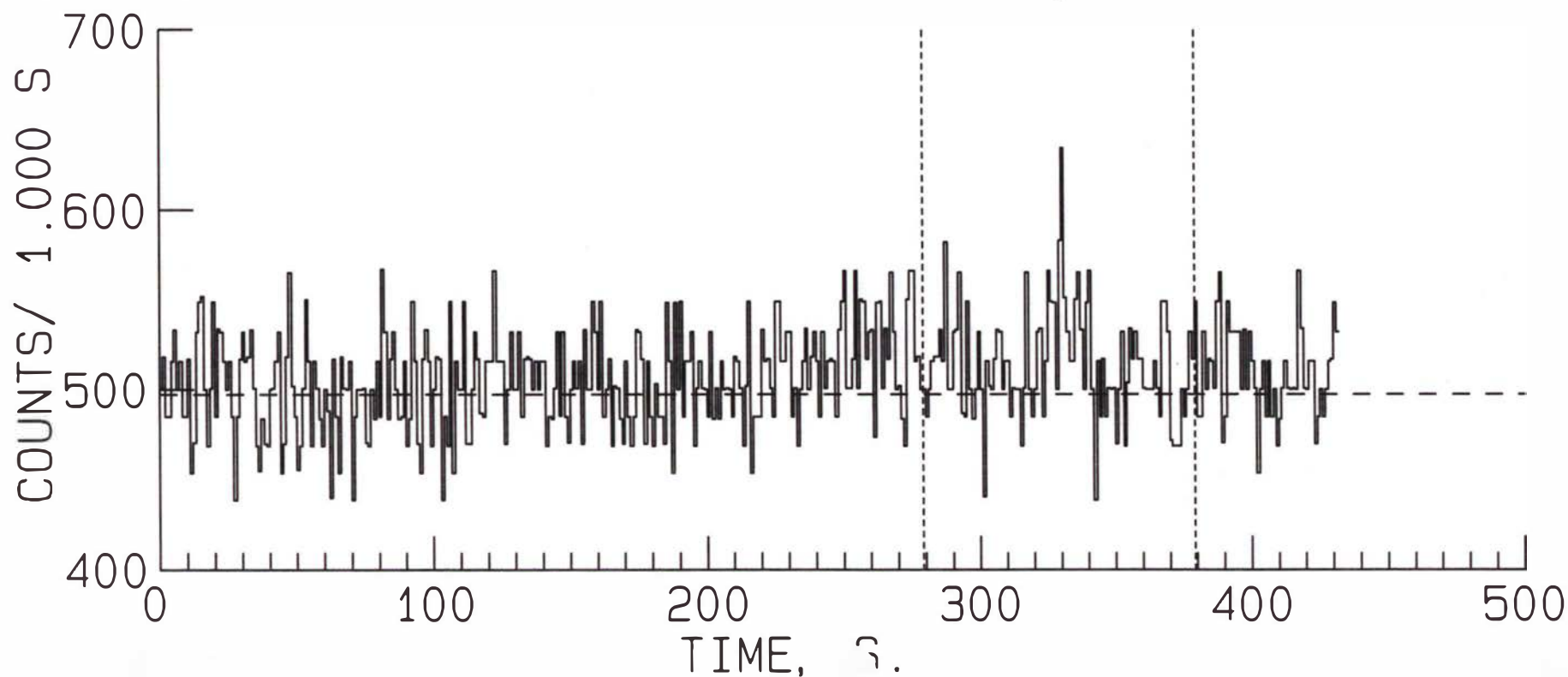
6 / 2 / 98

28/11/94 66564.088 s

0.250 S INTERVALS REGROUPED BY 4

21- 146 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



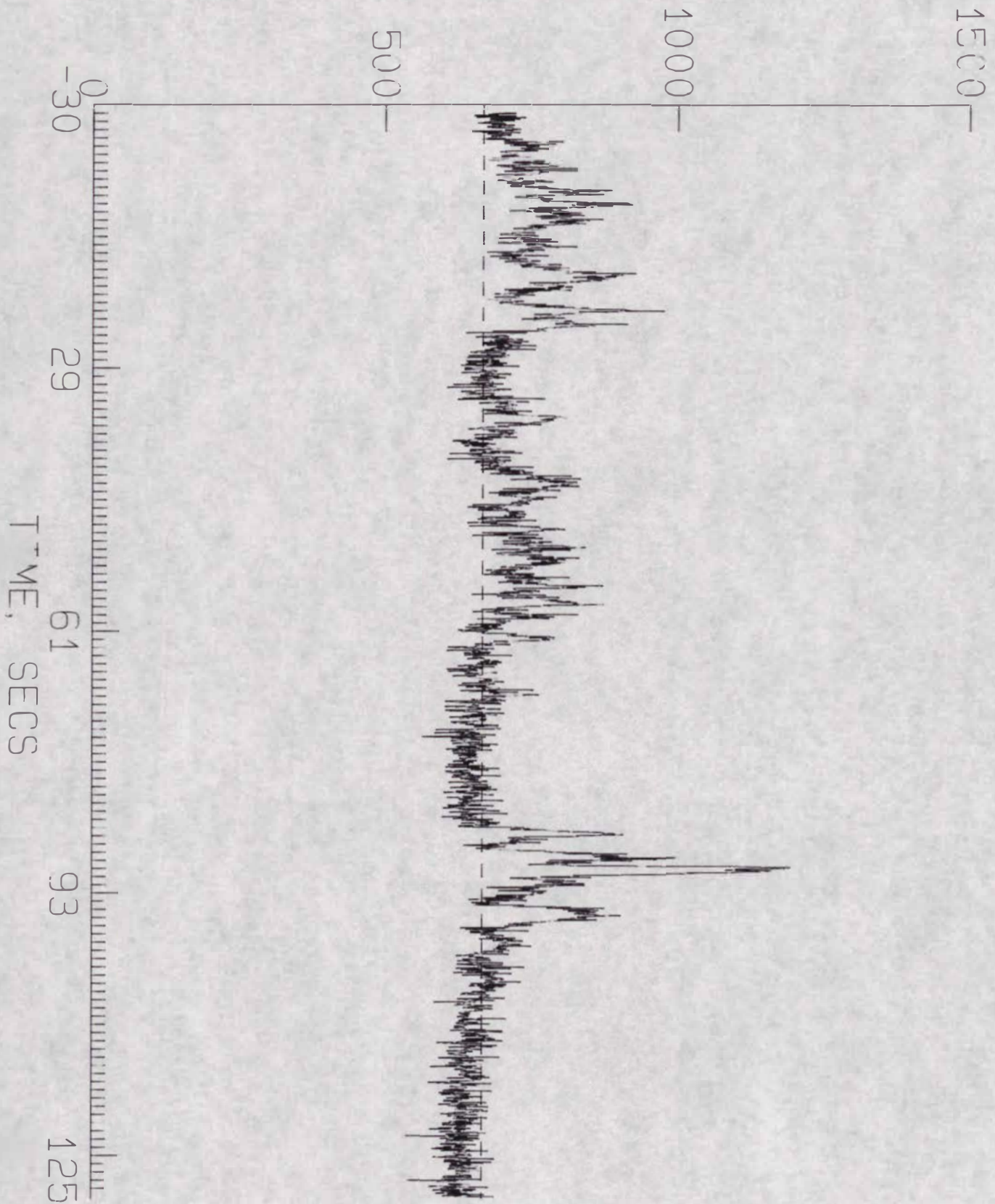
BATSE

28/11/94

67286.706

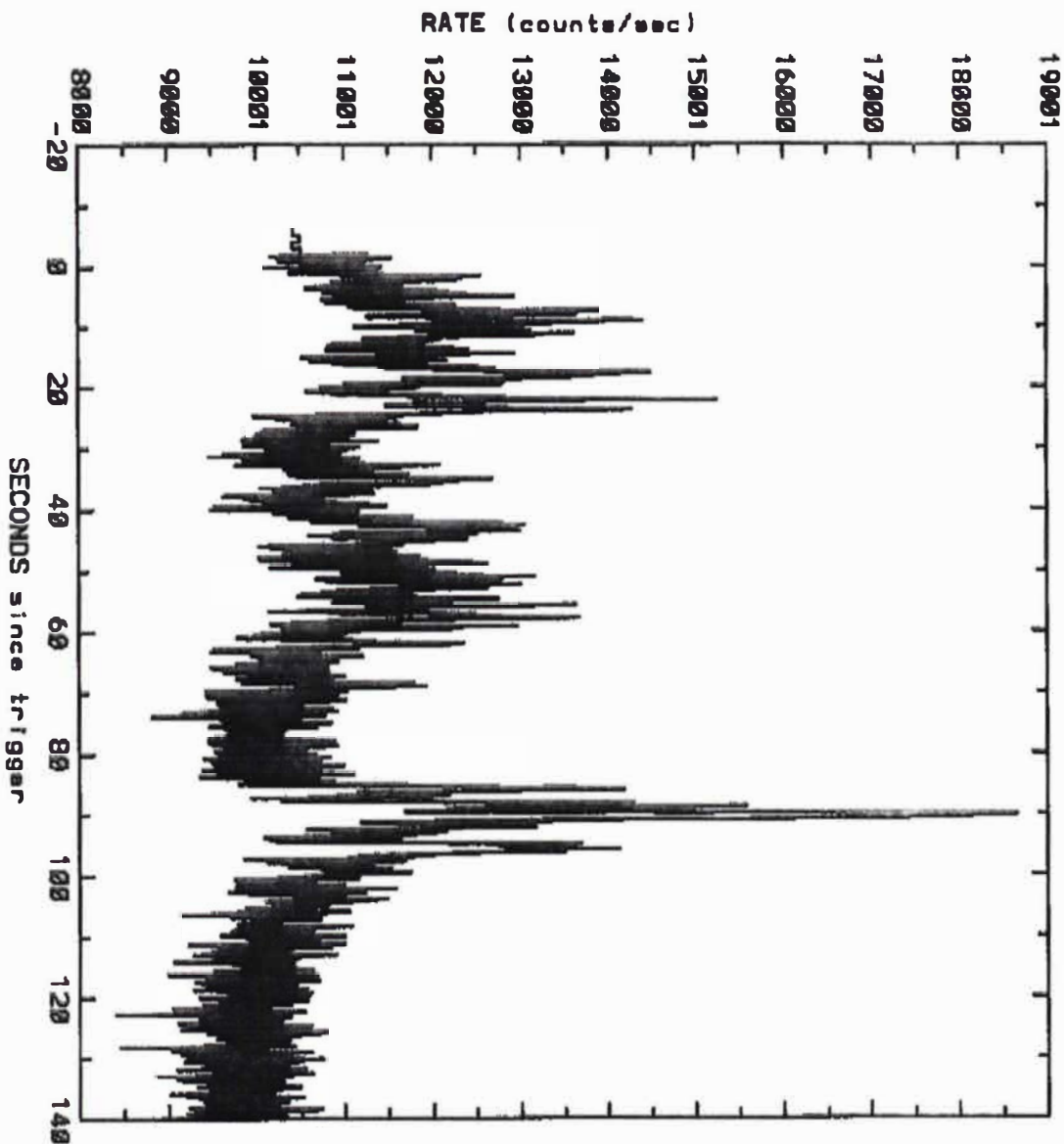
25- 100 keV

COUNTS/ .064 S



Nov 28

DISCSC Data for K. Hurley, No. 3306

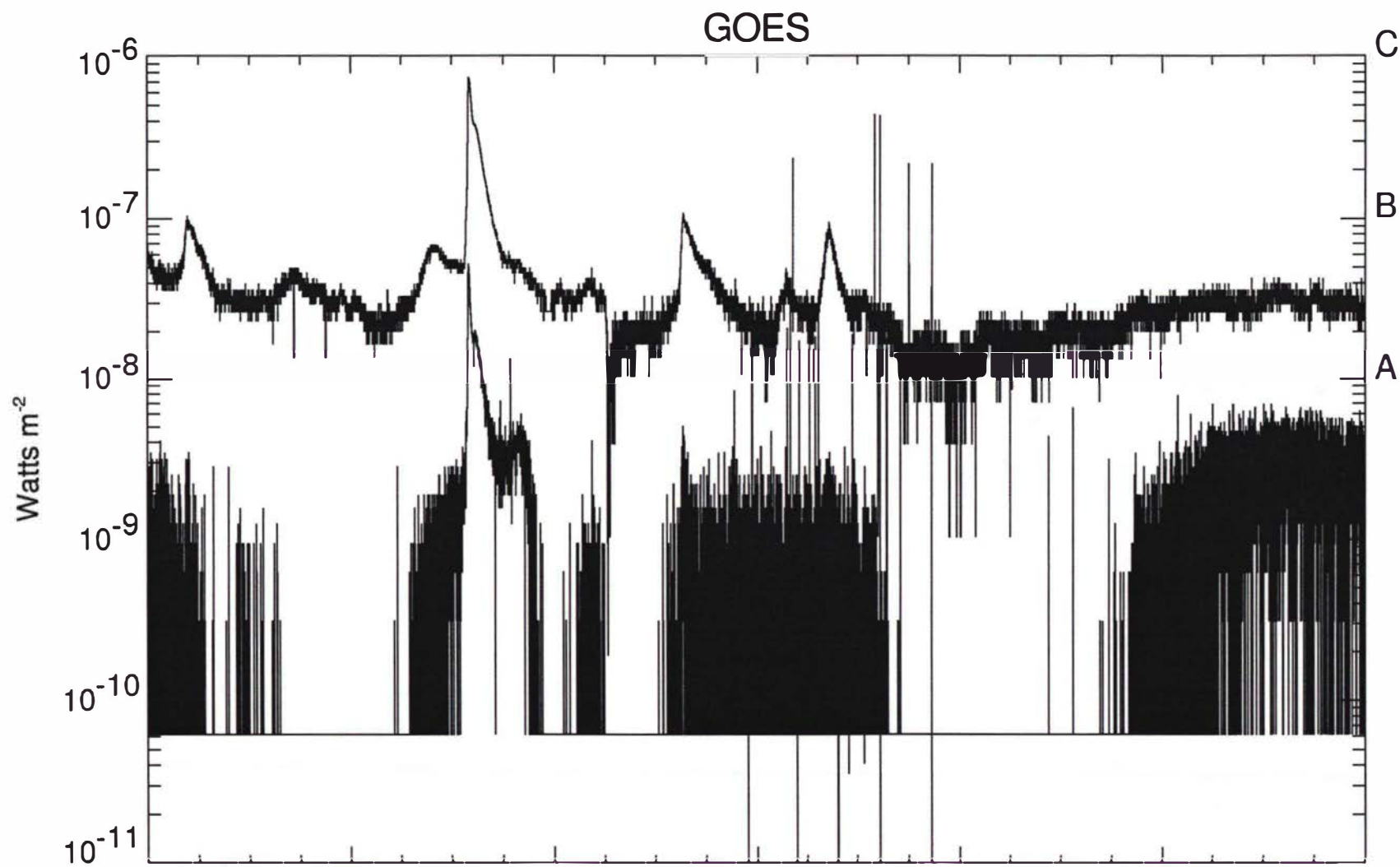


2-DEC-1994 09:38:58

Created by NOPS 80
(Burst Display)
Version 12.23

Trigger # : 3306

Trigger Time:
9584 / 67286.786Burst Data Type:
DISCSCDeadtime
Corrected. NBackground Data
Type: PREB + DISCSCMinimum Integ. Time:
0.064 secondsDetector: (7.0).
-0-4--0Discriminators:
(1.2)Quality Mask:
30ISP1



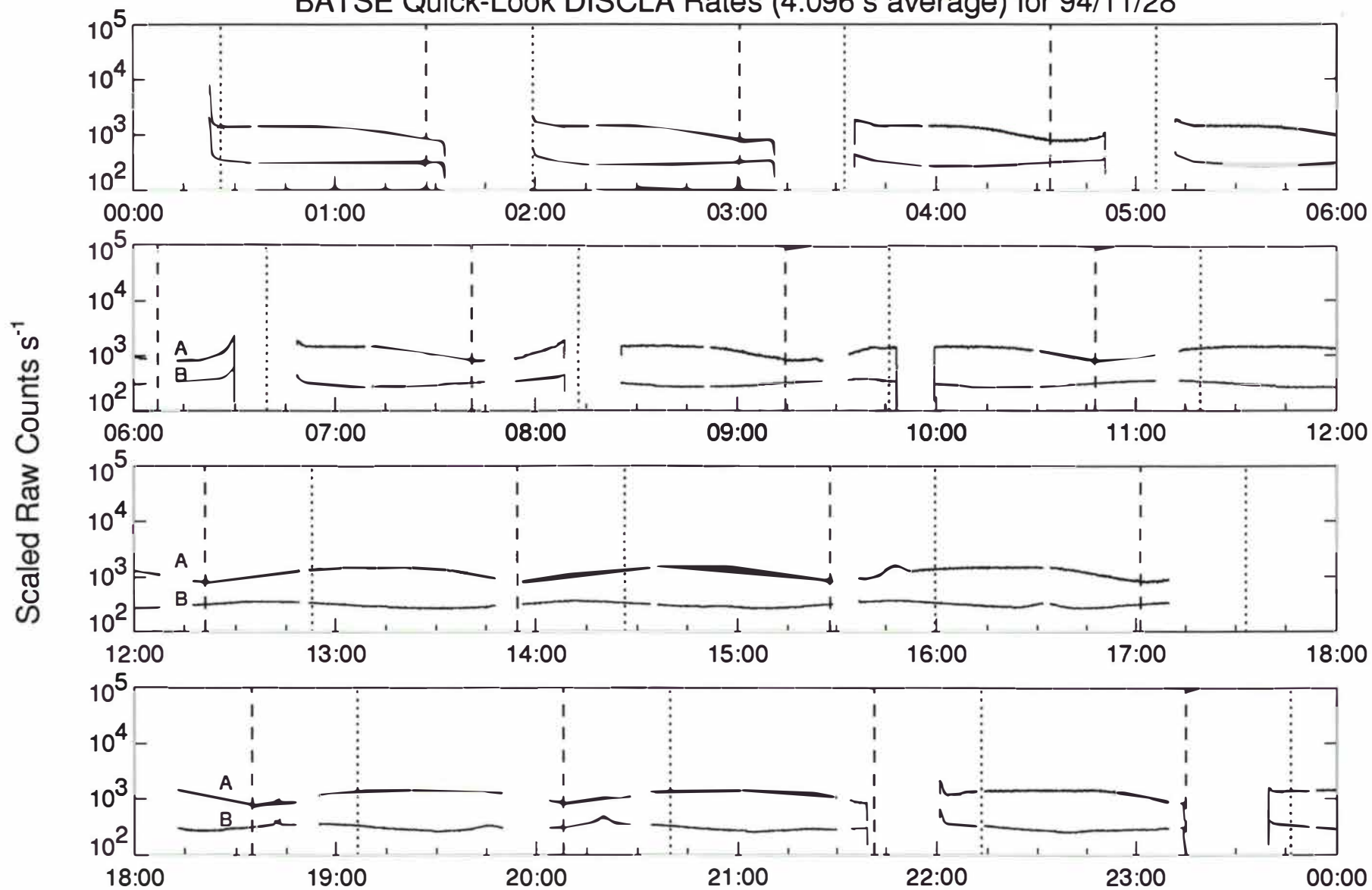
Data Start: 94/11/28, 0000:02

Plot created: 94/12/01, 2051

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 94/11/28

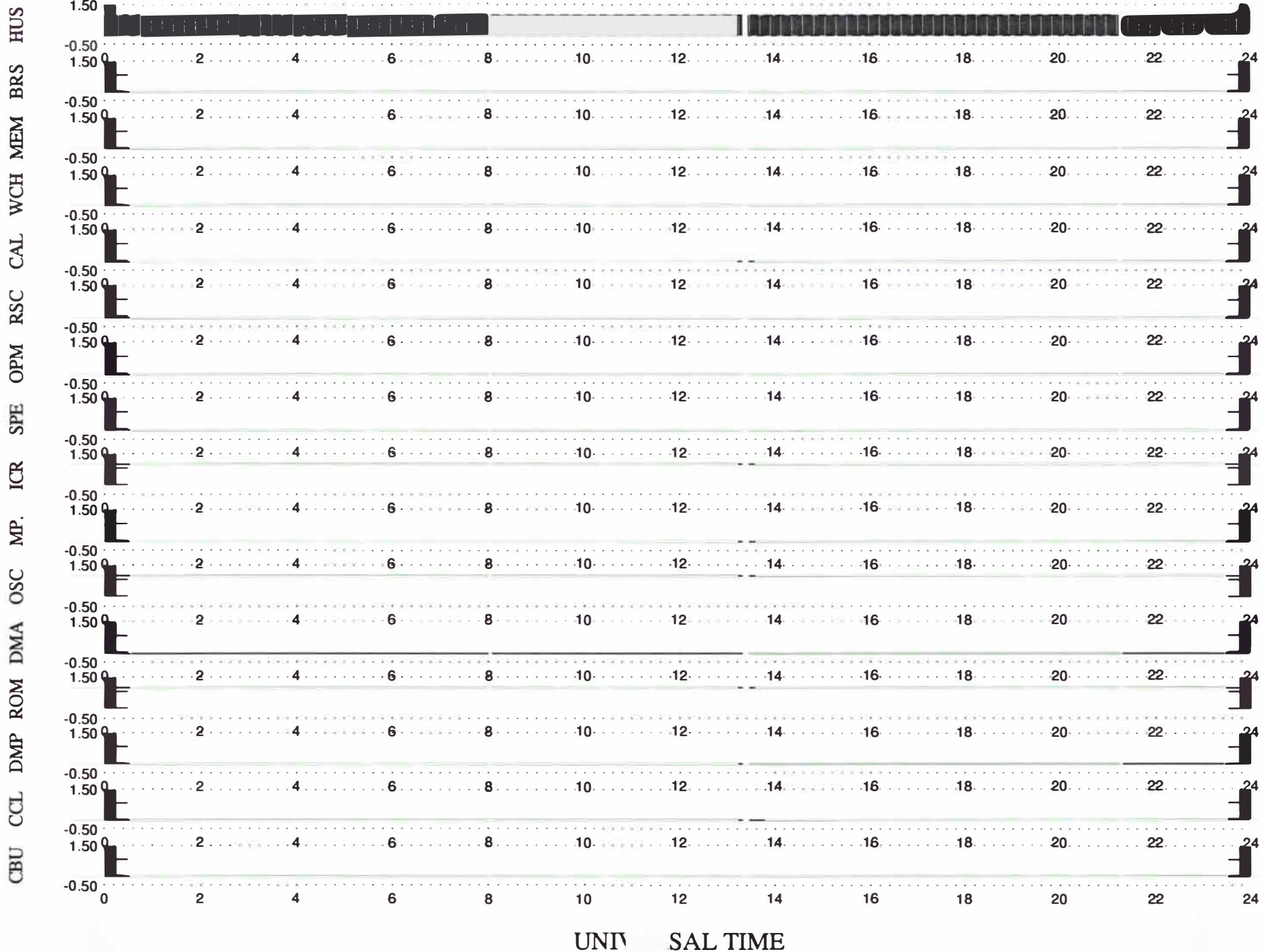


Current Time: 94/12/01, 2037 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

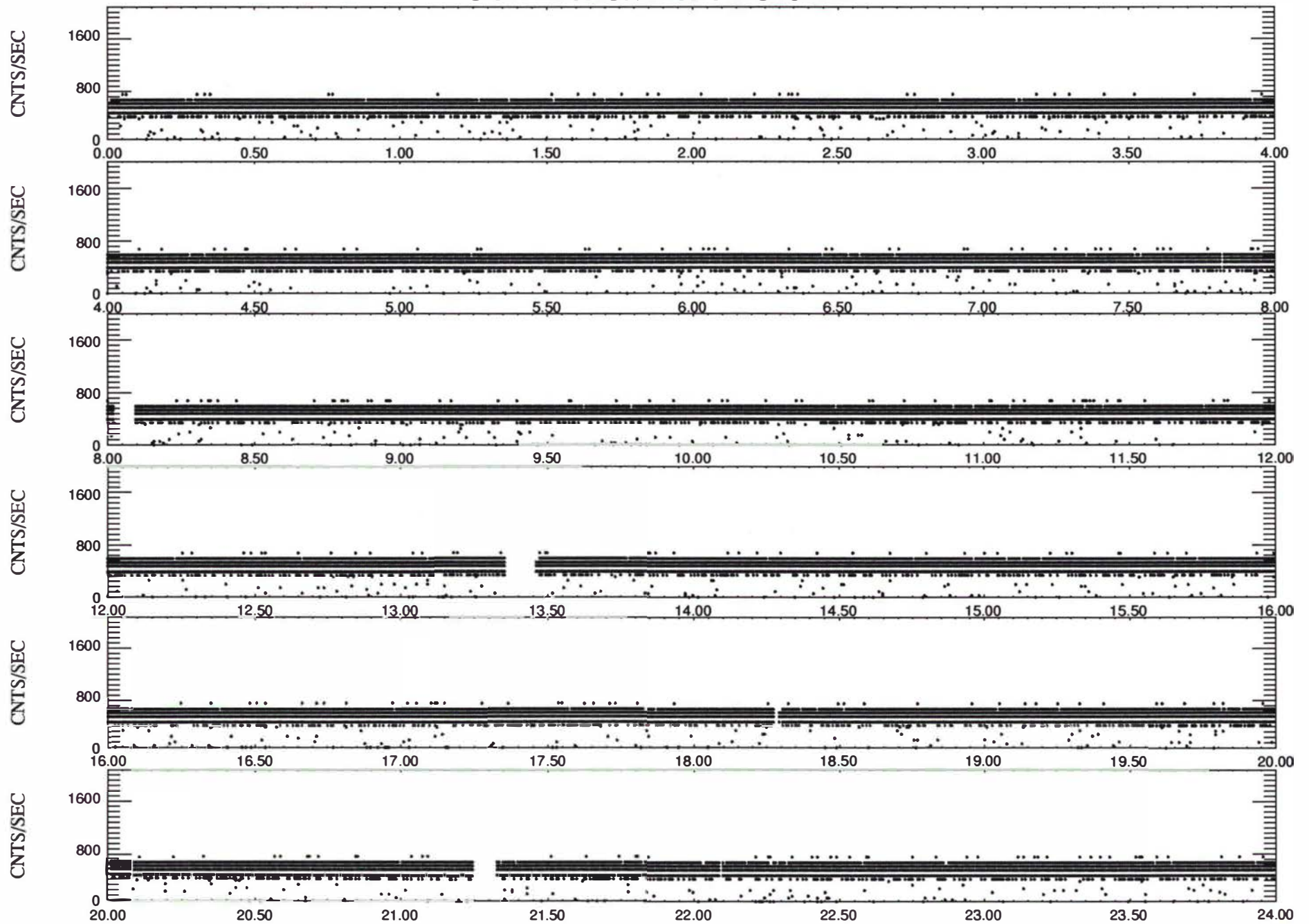
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

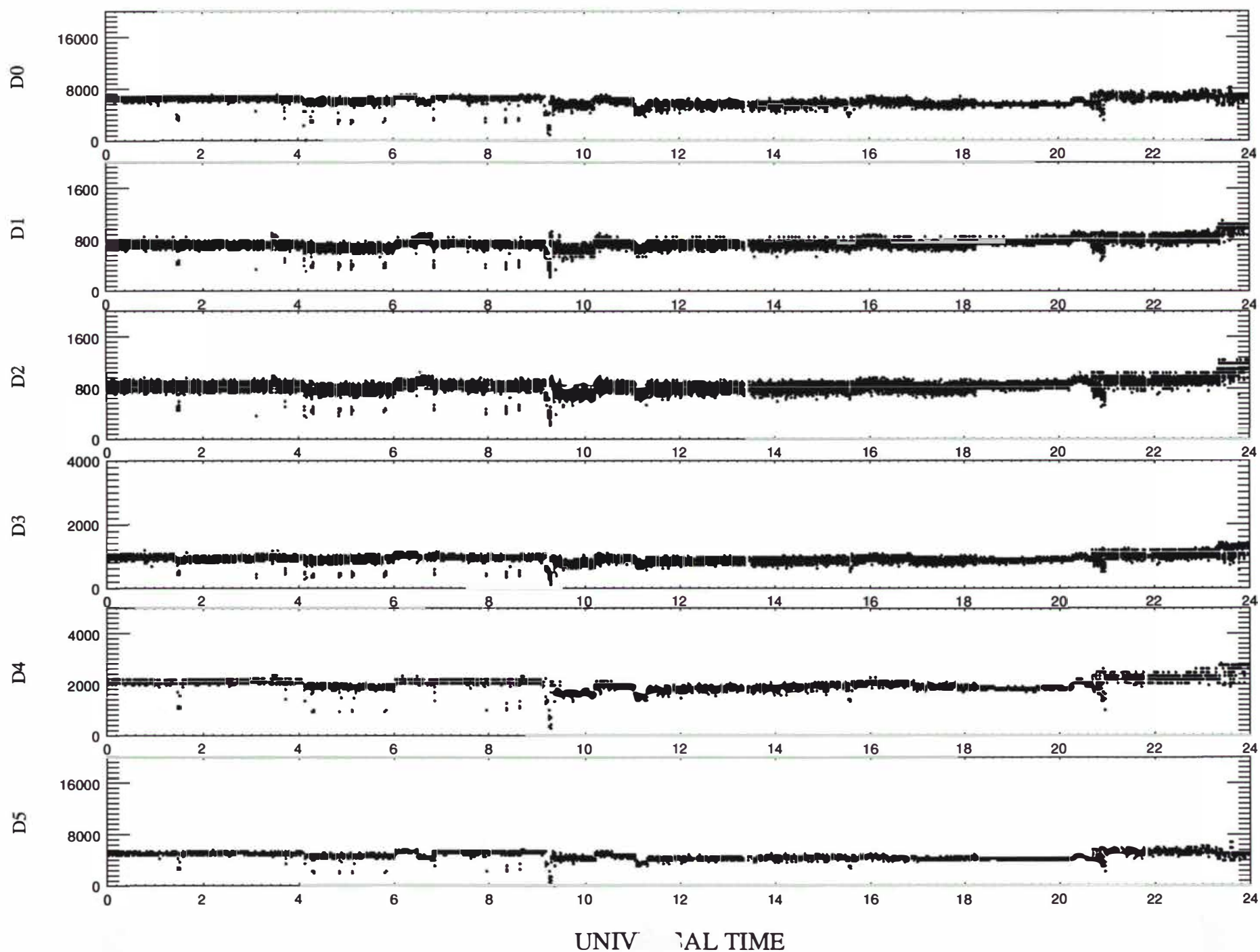
NO BURST (7)

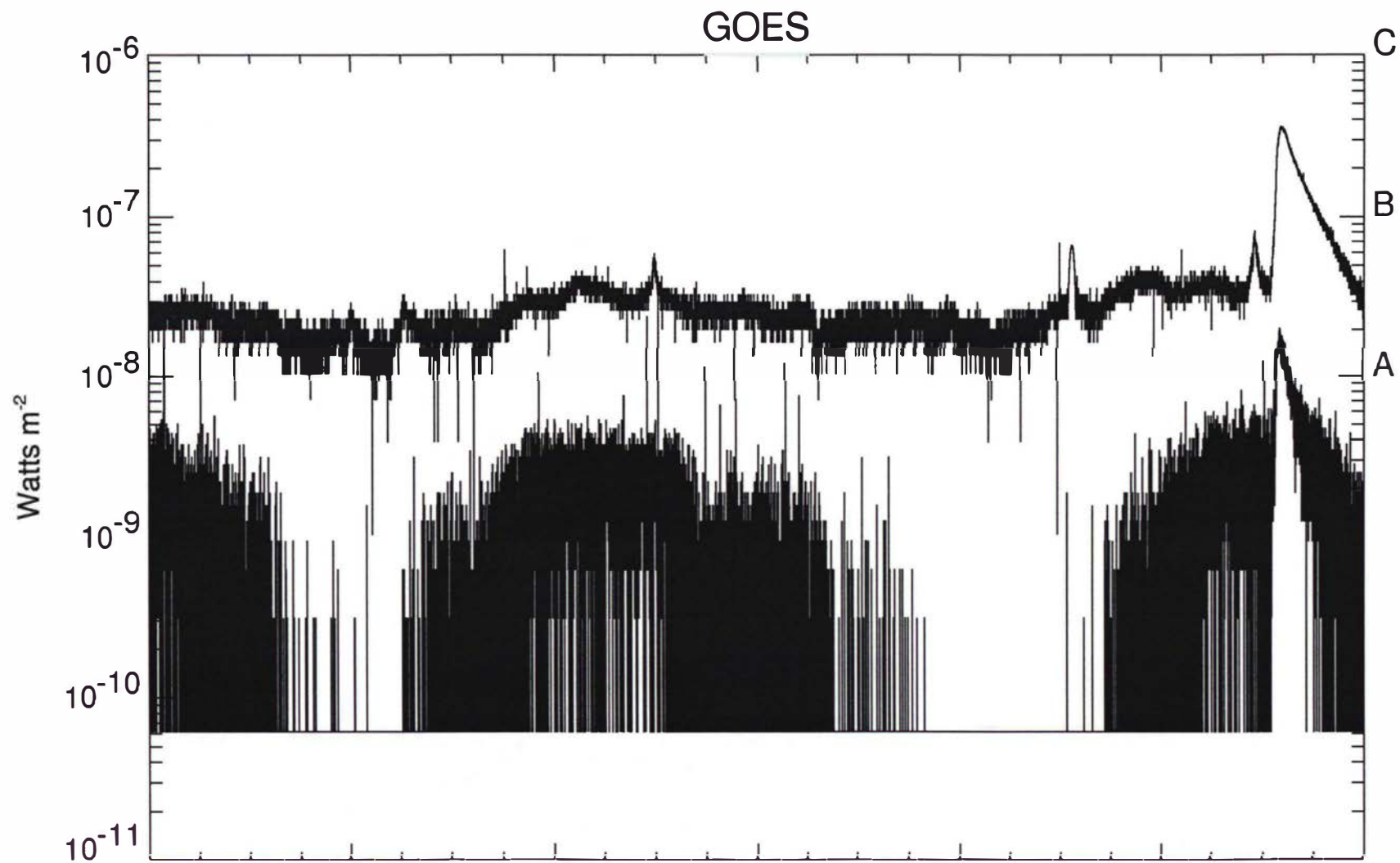


CALIBRATION DATA INCLUDED



UNITS SAL TIME





Data Start: 94/11/29, 0000:00

Plot created: 94/12/01, 2051

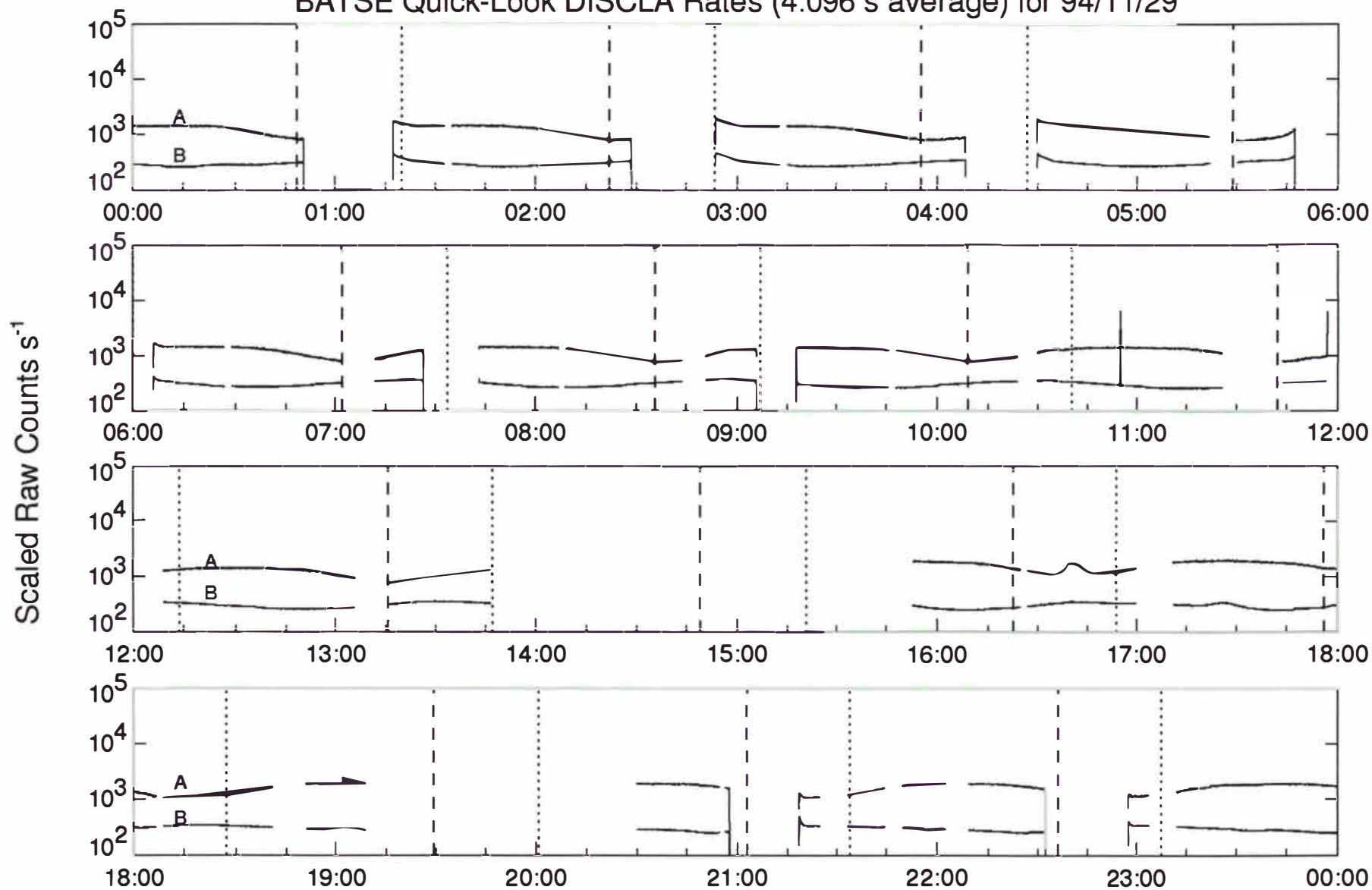
Channel 1 (1.0 - 8.0 Angstroms)

Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 94/11/29

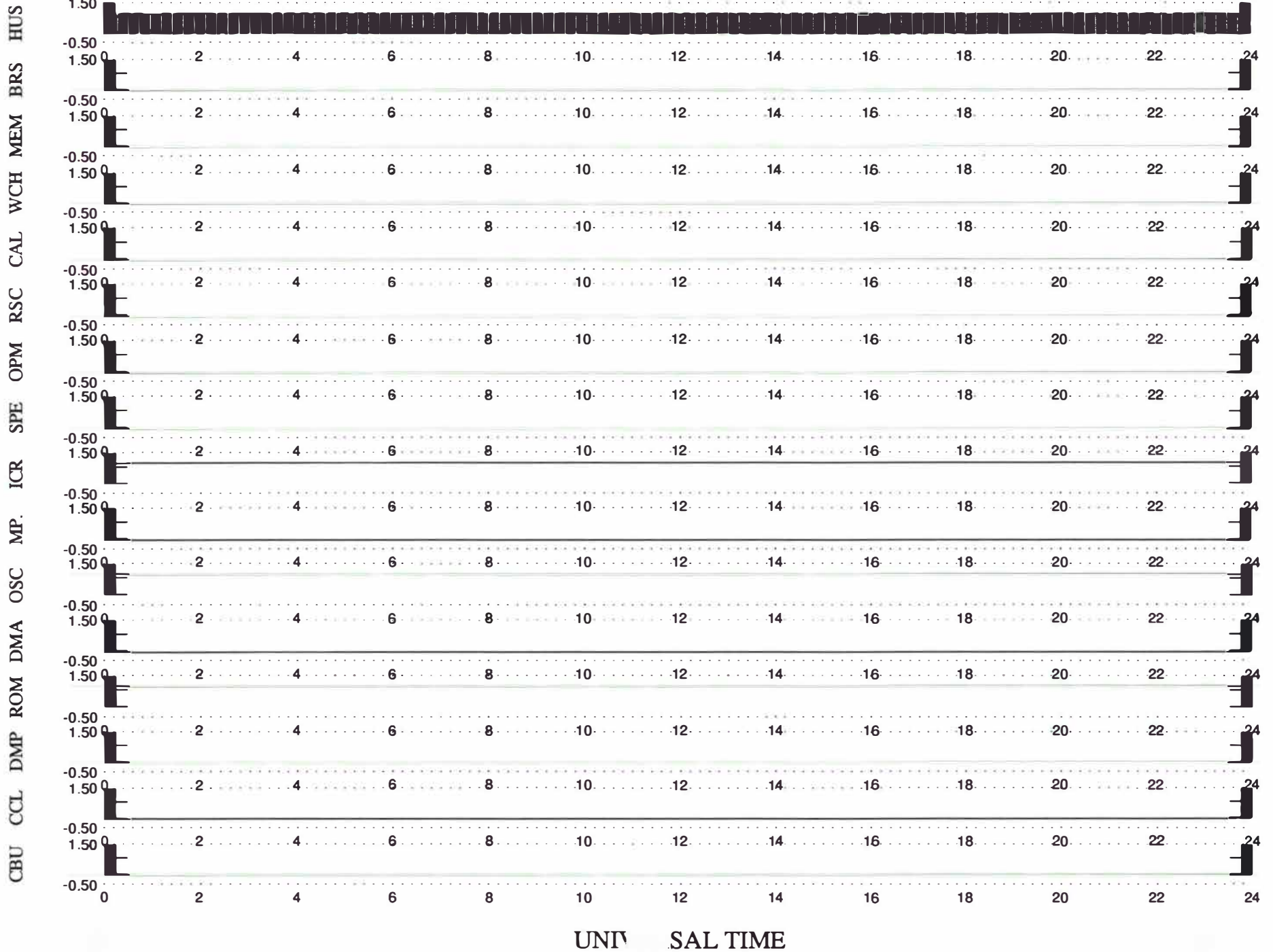


Current Time: 94/12/01, 2038 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

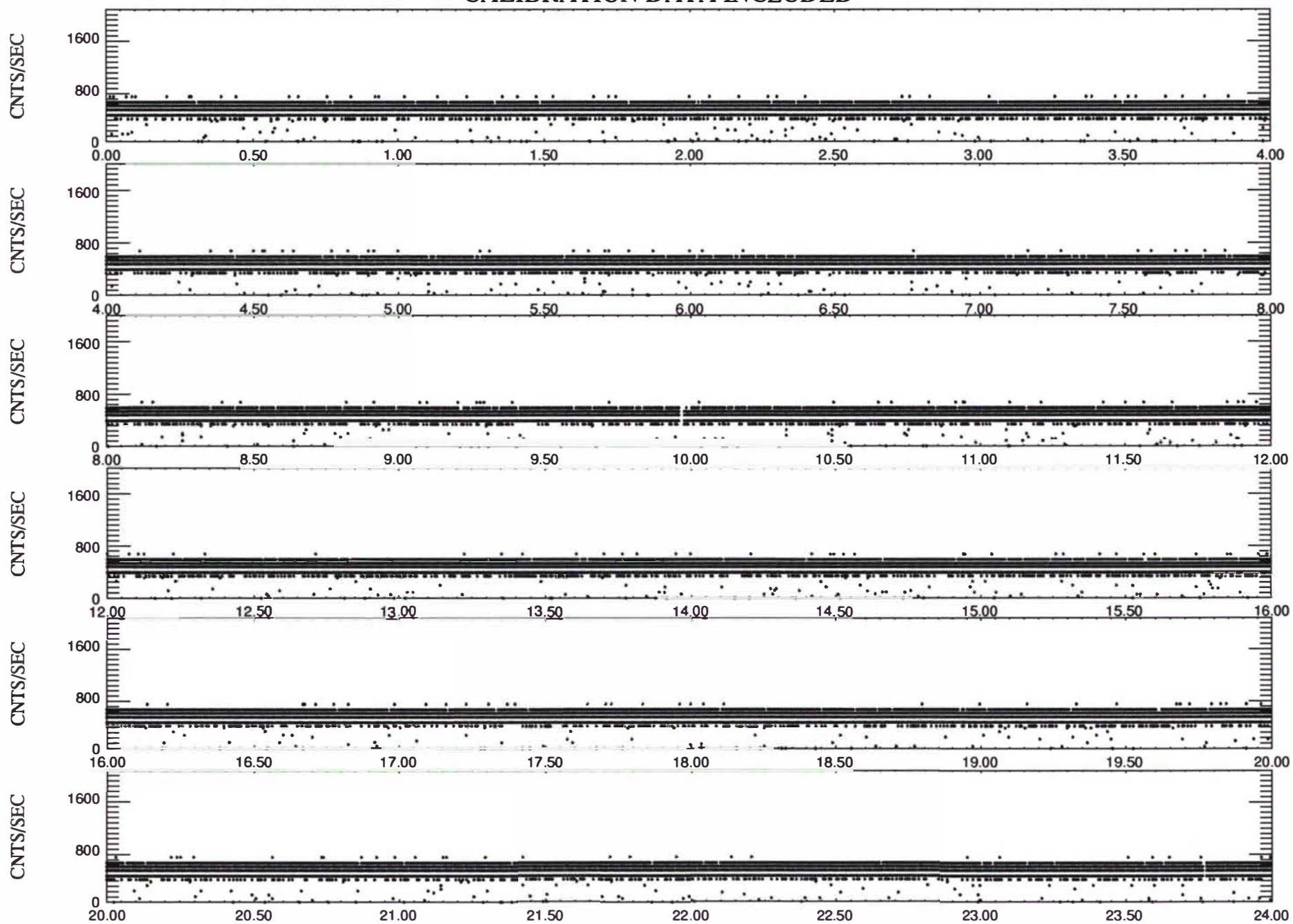
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

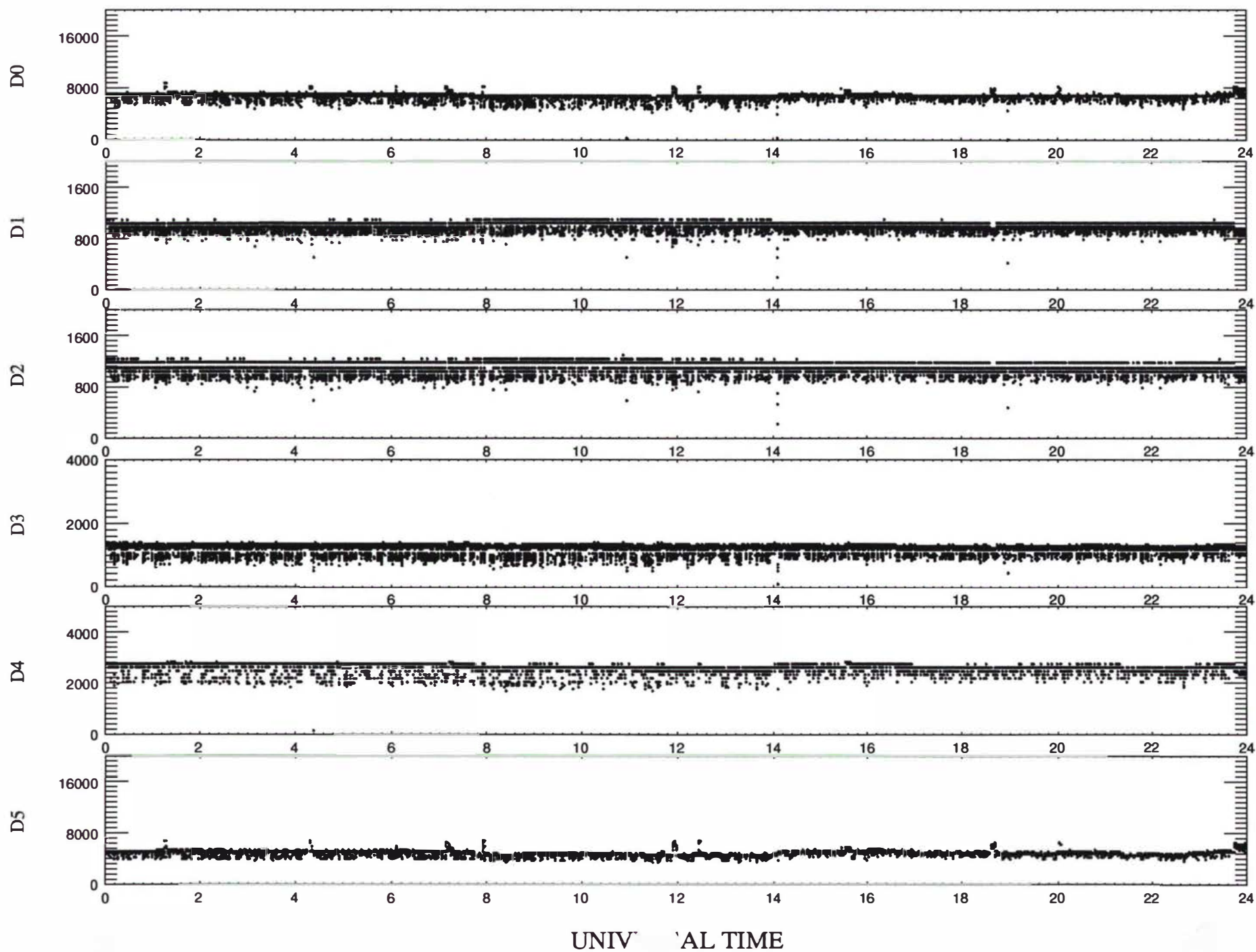
NO BURST (7)

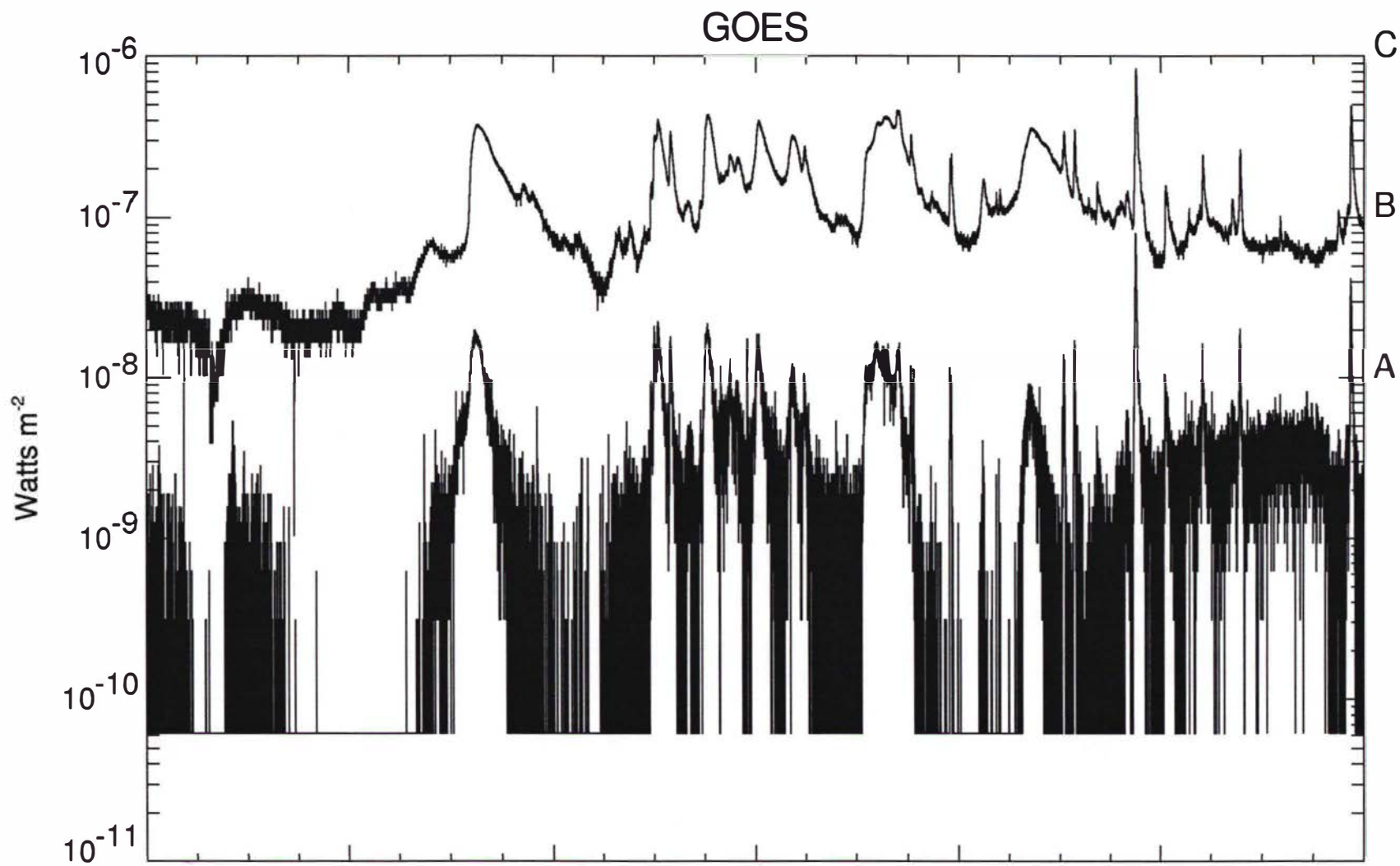


CALIBRATION DATA INCLUDED



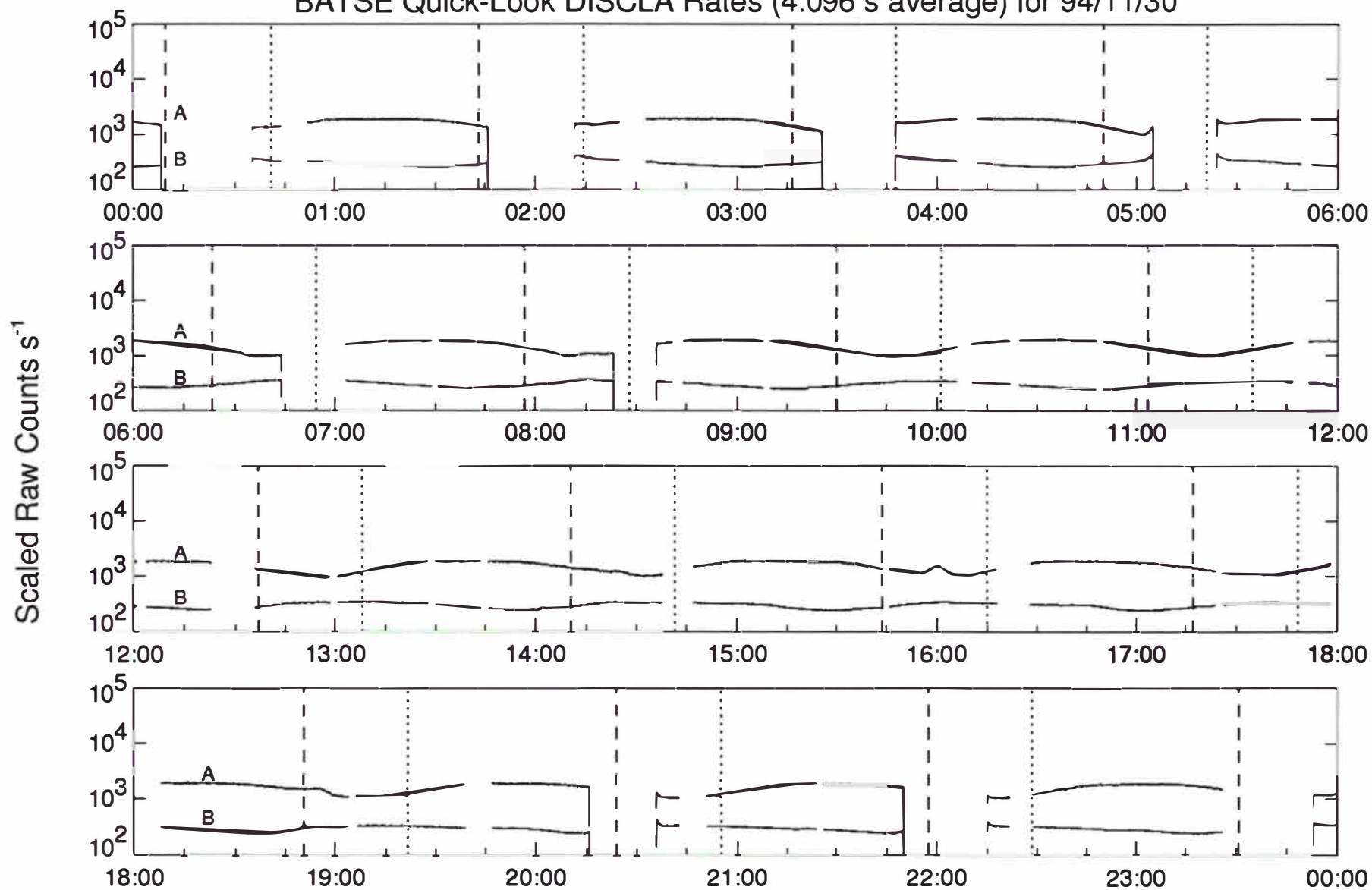
UNIT SAL TIME





Data Start: 94/11/30, 0000:01 Plot created: 94/12/01, 2051
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 94/11/30



Current Time: 94/12/01, 2038 EDT

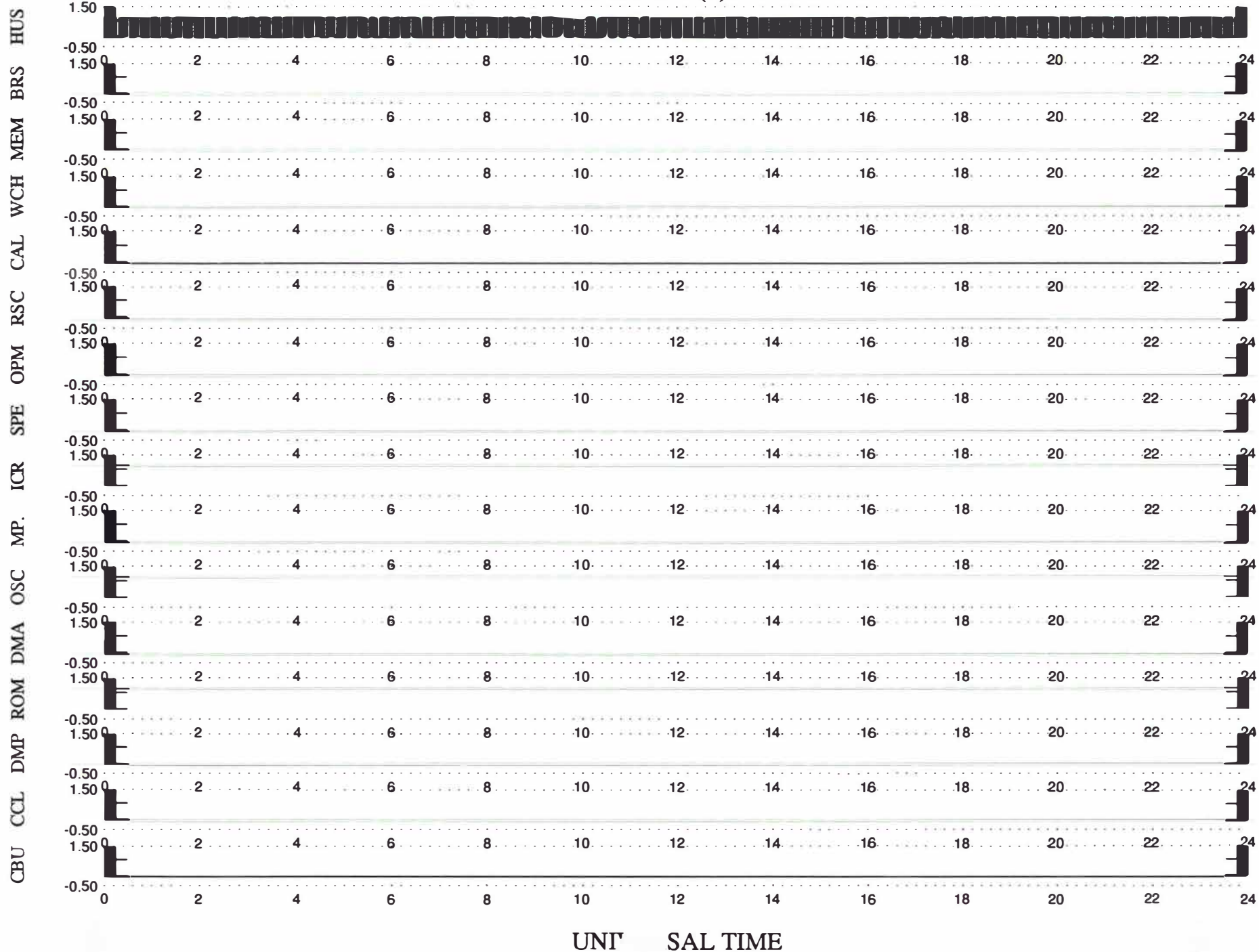
A: Channel 0 Most Sunward LAD

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

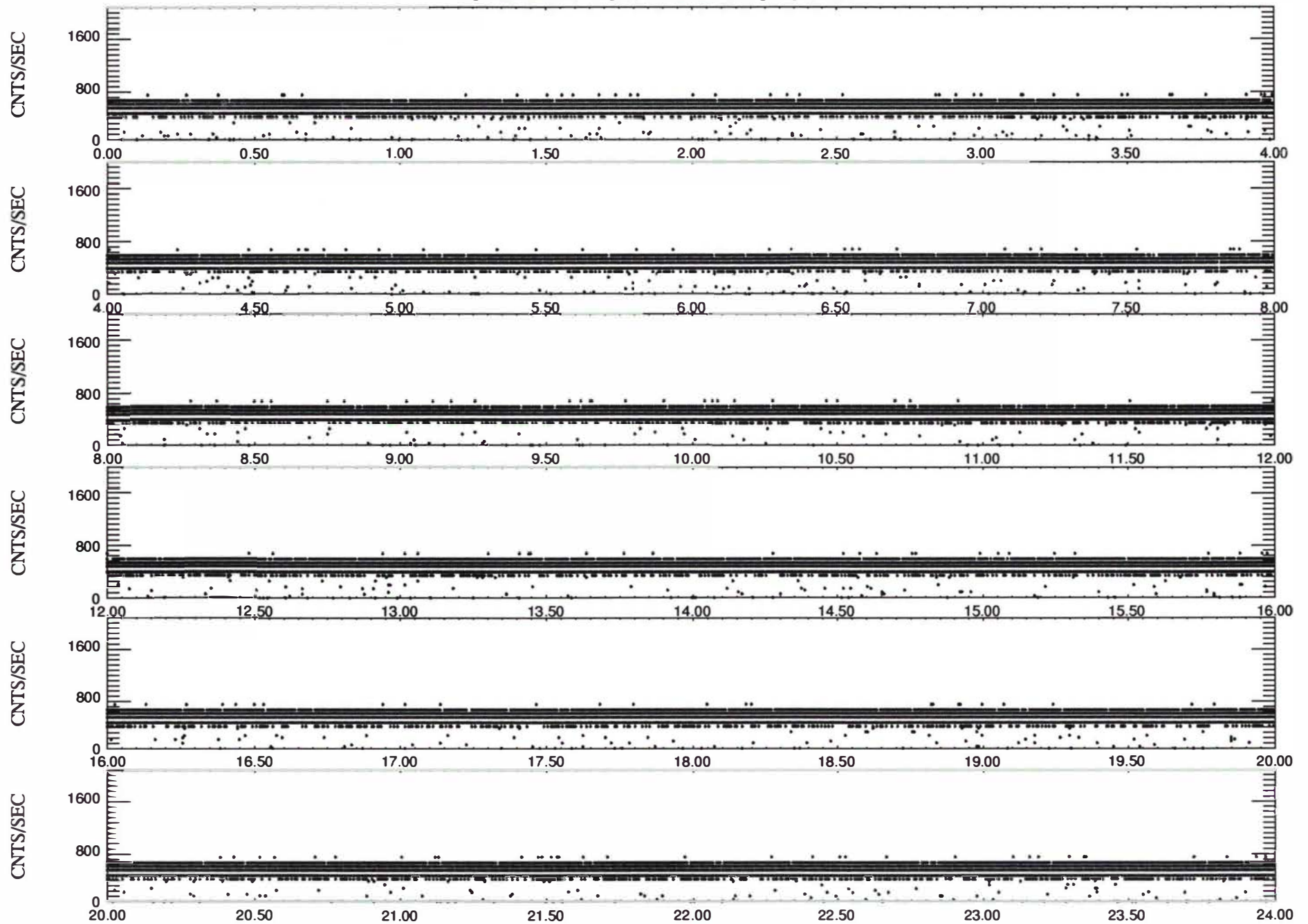
Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

NO BURST (7)



CALIBRATION DATA INCLUDED



UNITS SAL TIME

