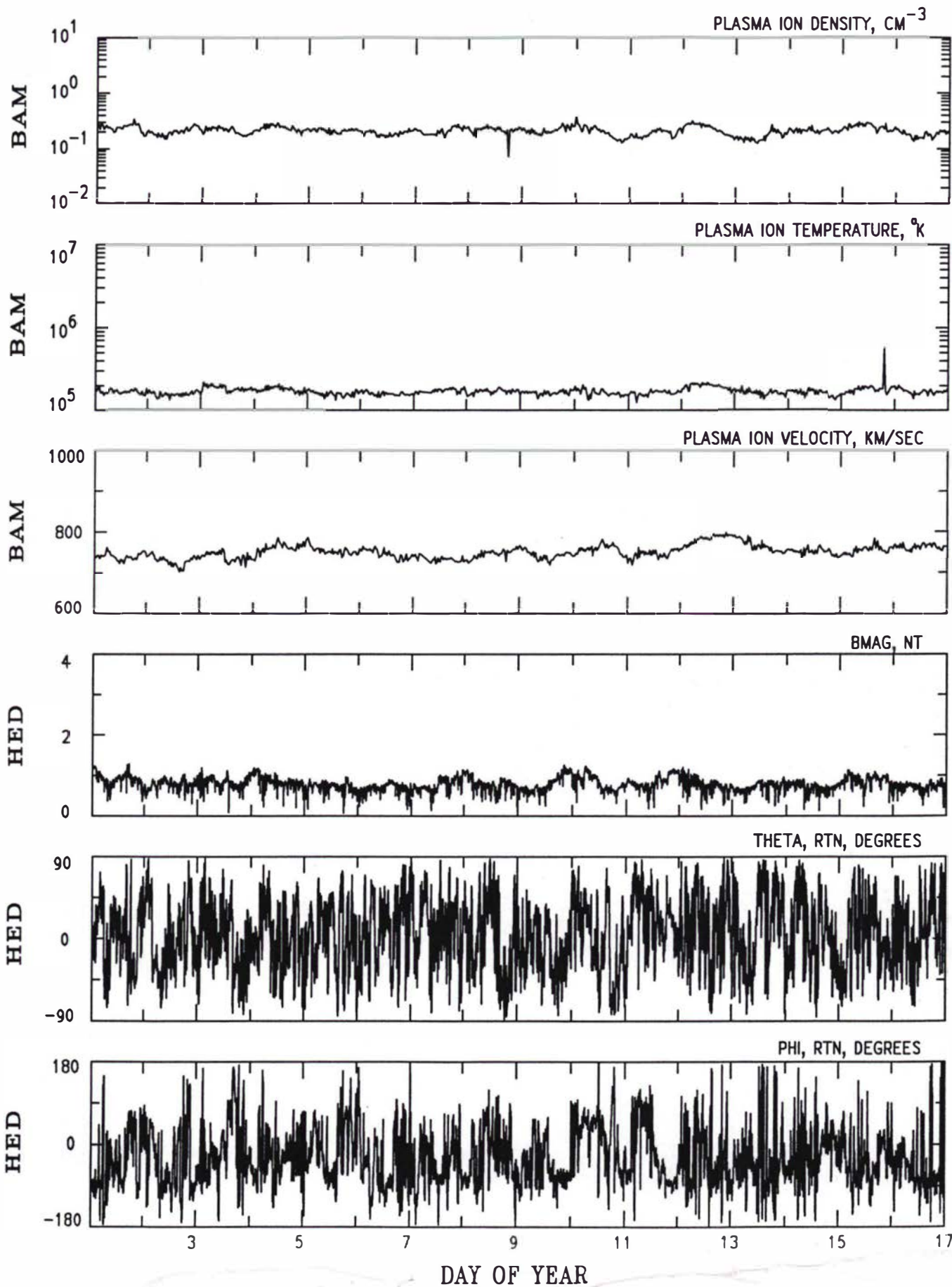


SUN

ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

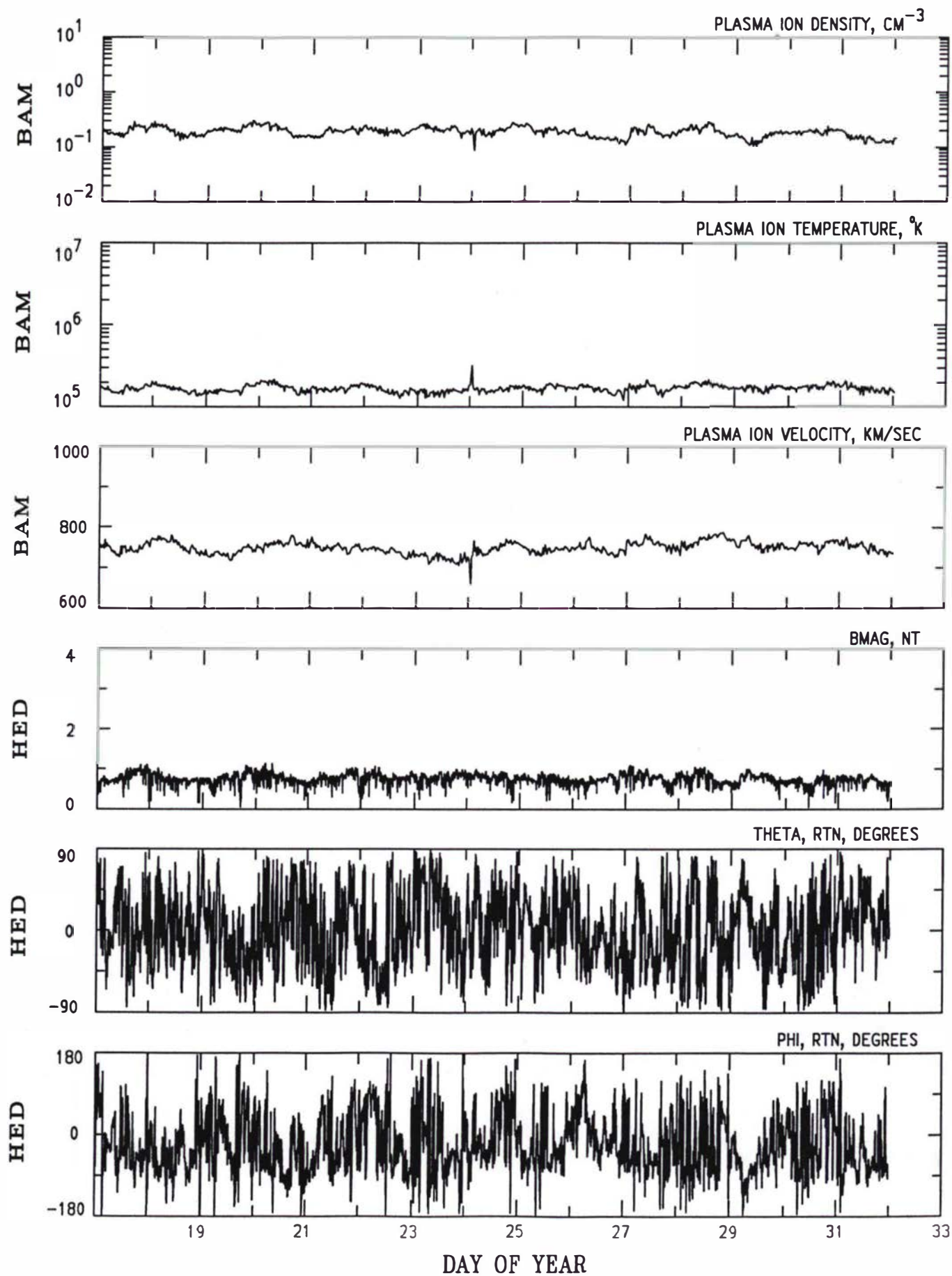
96 001 JAN 1 00:00:00.000 - 96 017 JAN 17 00:00:00.000



SUN

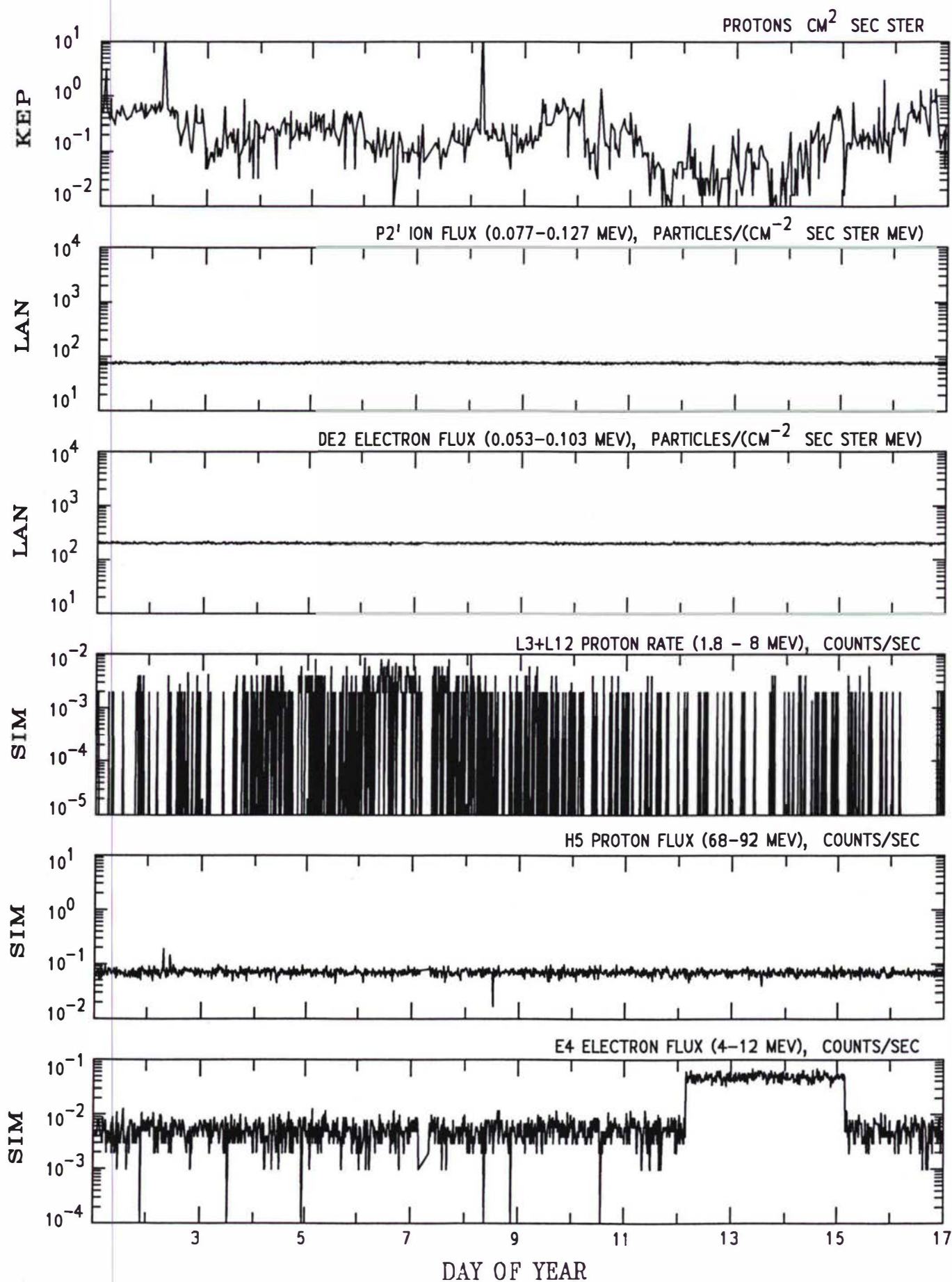
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

96 017 JAN 17 00:00:00.000 - 96 033 FEB 2 00:00:00.000



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

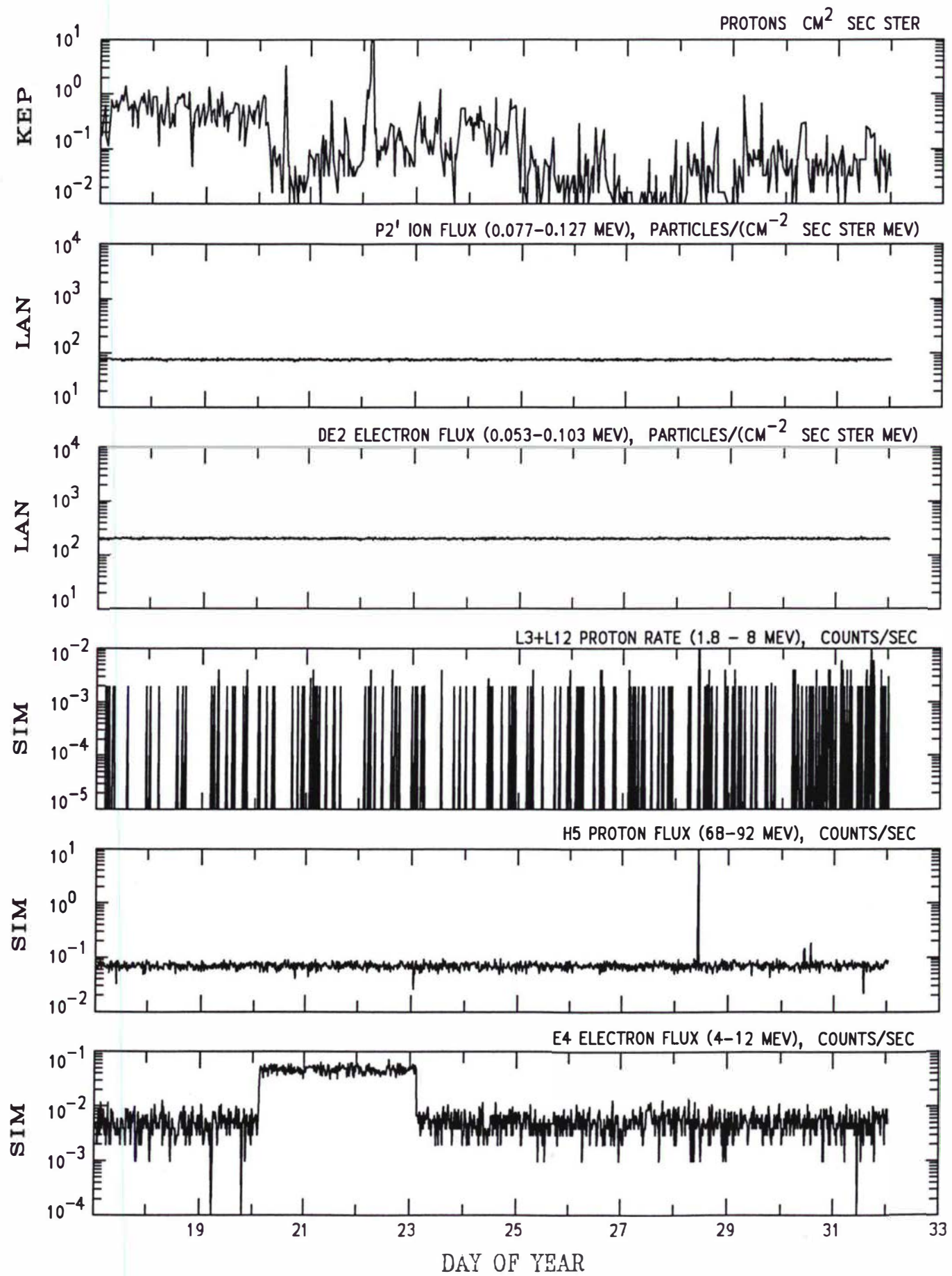
96 001 JAN 1 00:00:00.000 - 96 017 JAN 17 00:00:00.000



SUN

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

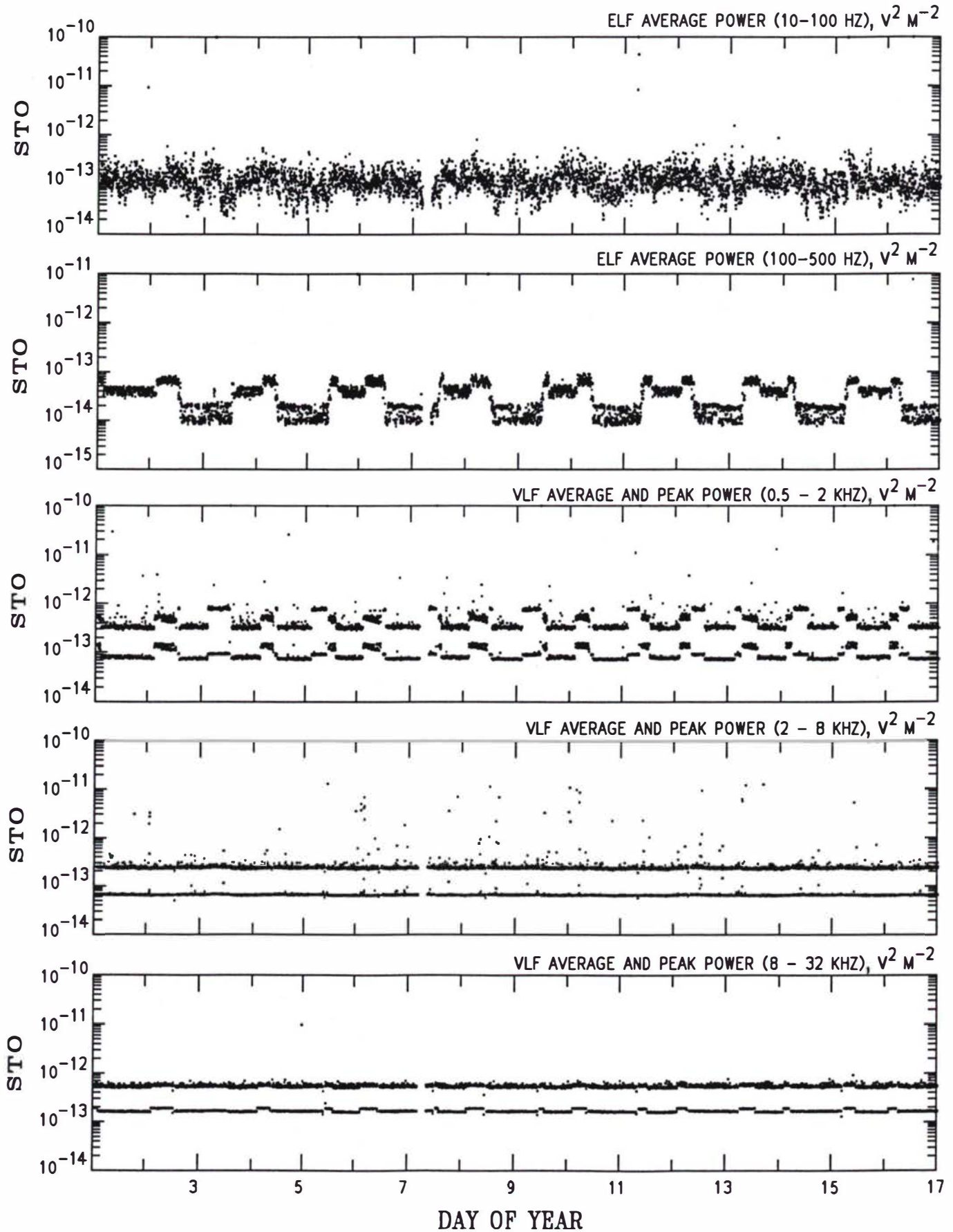
96 017 JAN 17 00:00:00.000 - 96 033 FEB 2 00:00:00.000



SUN

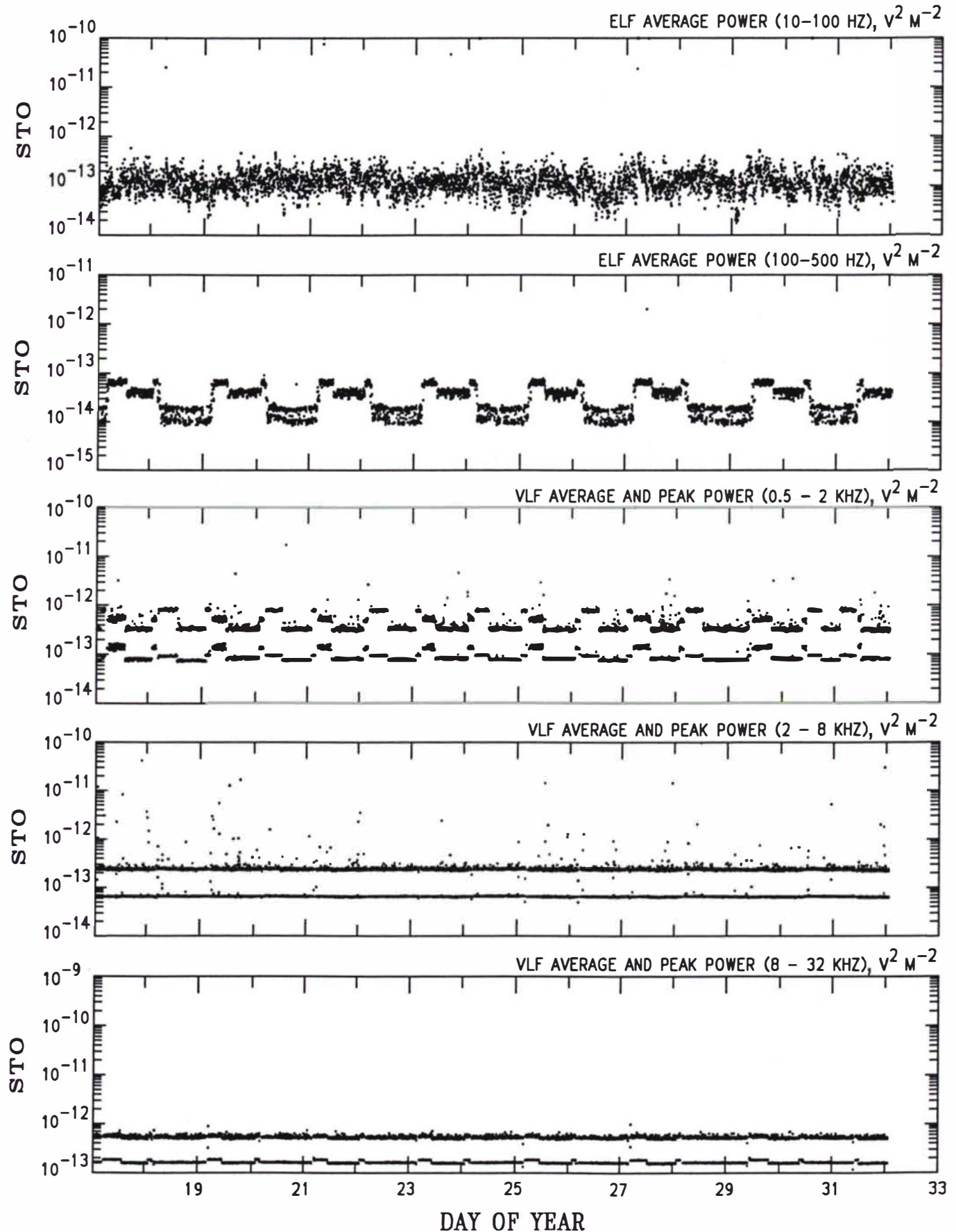
ULYSSES CDR - PLASMA WAVE

96 001 JAN 1 00:00:00.000 - 96 017 JAN 17 00:00:00.000



ULYSSES CDR - PLASMA WAVE

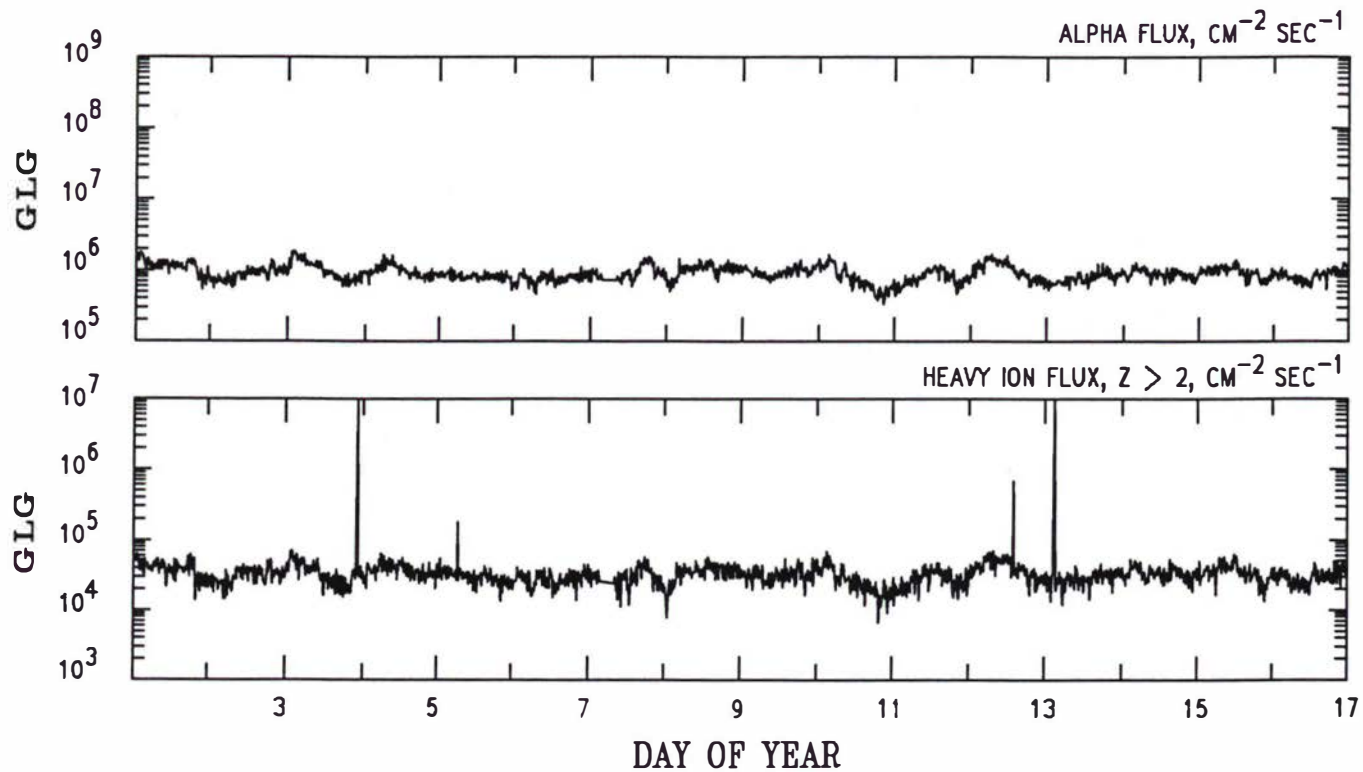
96 017 JAN 17 00:00:00.000 - 96 033 FEB 2 00:00:00.000



SUN

ULYSSES CDR - SOLAR WIND ION COMPOSITION

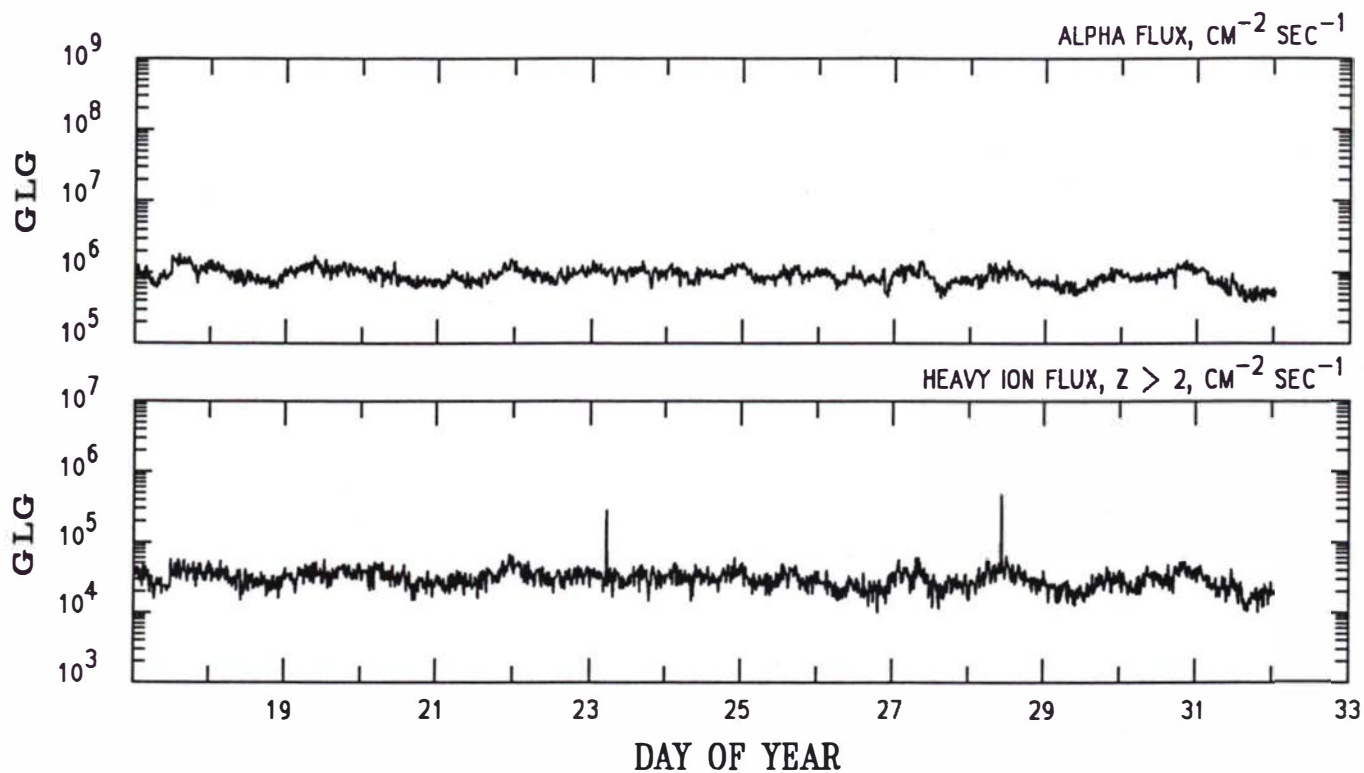
96 001 JAN 1 00:00:00.000 - 96 017 JAN 17 00:00:00.000



SUN

ULISSES CDR - SOLAR WIND ION COMPOSITION

96 017 JAN 17 00:00:00.000 - 96 033 FEB 2 00:00:00.000



From springer@pop.jpl.nasa.gov Tue Feb 25 10:31 PST 1997
X-Sender: springer@pop.jpl.nasa.gov
Date: Tue, 25 Feb 1997 10:31:09 -0800
To: khurley@sunspot.ssl.berkeley.edu
From: Joe Springer <springer@pop.jpl.nasa.gov>
Subject: Time Tag Error Final Report
Cc: Ed.B.Massey@jpl.nasa.gov, Eugene.G.Herrington@jpl.nasa.gov
Mime-Version: 1.0

Kevin,

We have the final results of our examination of time tag accuracy at the 950-odd data points you specified. The results are quite favorable in the sense that, statistically speaking, I would have expected more 'hits'.

Roger Williams established some 'ground rules' for this task. Those data points listed as 'ULYSSES RT' were to be checked for a period extending from ten minutes before the point to an hour after the point. Those listed as 'ULYSSES' were to be checked for a period extending ten minutes before and ten minutes after the point.

Within those bounds, there were 2 bad points. We typically checked a much longer period than required and found 6 additional errors, each well outside of the required period but 'in the neighborhood'.

It is interesting to note that ALL of the identified timing errors were the result of mis-timed tape recorder carryover data; none of the 'off by one minor frame' timing errors were found to coincide with these data points.

Regards,

Joe

The results are as follows:

ERRORS WITHIN YOUR BOUNDS:

	Your time Designation (mm/dd/yy)	Error	Magnitude of error
1.	9/26/91 68462.643	32 frames wrong 13 min 24 seconds after data pt.	64 SCLK counts 128 seconds high
2.	9/18/92 36388.026	32 frames wrong 39 min after data point	10176 SCLK ~5 hr 39 min low

HER ERRORS 'in the neighborhood':

3.	7/17/91 21785.887	32 frames wrong 1 hour after data point	64 SCLK counts 128 seconds high
----	-------------------	--	------------------------------------

4.	9/25/92	77152.249	32 frames wrong between	4940 SCLK counts
	and	84728.363	2 data points but out of	~3 hr 6 min low
			range	
	12/8/95	85564.438	32 frames wrong 47 min	52672 SCLK
	counts		before data point	~29 hr 15 min
6.	12/13/95	78120.000	32 frames wrong between	53760 SCLK
	counts		2 data points but out of	~29 hr 52 min
	and	84420.000	range	
7.	1/1/96	4320.000	32 frames wrong 11 minutes	99200 SCLK
	counts		before data point	~27 hr 33 min low
8.	1/2/96	50472.000	1 frame wrong 33 minutes	123328 SCLK
	counts		after data point	~34 hr 15 min low

1996:

~001.02:45 SCET	should be	~364.23:12 SCET
~002.14:35 SCET	should be	~001.04:22 SCET
~029.19:35 SCET	should be	~028.13:43 SCET
~033.19:10 SCET	should be	~032.13:18 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~048.17:29 SCET	should be	~047.13:45 SCET
~054.08:59 SCET	should be	~053.11:46 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~039.18:34 SCET	should be	~038.12:14 SCET

We see data gaps for each of the correct times, so it looks like your theory of AMMOS mis-correcting times when there is carry-over data on the tape is correct.

I hope this is enough information. I would have to do a bit more calculation to get the approximate ERTs. Let me know if you want them.

Best regards,

Nigel

From ulsdtmt@jplsp.DNET.NASA.GOV Mon Mar 18 17:13 PST 1996
From: ulsdtmt@jplsp.DNET.NASA.GOV
Date: Mon, 18 Mar 96 20:13:12 -0500
To: "khurley@sunspot.ssl.berkeley.edu"@east.DNET.NASA.GOV (SENT TO @LIST1)
Subject: Misplaced Major Frames in EDRs

Greetings,

We have identified an operations technique that produces data that will be improperly time tagged by the MGDS (telemetry system). Instances of EDR errors (major frames out of order) have been found in the CDROM archival products for December 1995 and January 1996. Errors will also be found in the still to be shipped February 1996 data.

When major frames are recorded but not transmitted during the next track, but are eventually downlinked with data from a succeeding day, the embedded SCLKs are 'assumed' to be incorrect by the frame syncer and are re-tagged with SCETs and SCLKs matching the adjacent (but newer) data.

For each major frame processed in this manner, a gap will exist, representing the time the data was actually acquired, and a major frame or realtime data, representing the time period the data now errently represents, will be replaced by the misplaced playback data.

Yes. Confusing. See the attached memo detailing the times involved.

Approximately 17 such instances are known to have occured. The total time involved is about twenty minutes. Because the data loss is small and the cost of reprocessing would be so large, the Project has determined that it would be imprudent to reprocess.

For your information, however, we included a memo from Nigel Angold which itemizes each instance.

We thank Toni Galvin and Nigel for identifying the problem and assisting in the diagnosis.

Regards,

Joe

To: <ulsdtmt@jplsp.jpl.nasa.gov>
From: Nigel Angold <nangold@jplsp2.jpl.nasa.gov>
Subject: Mis-corrected S/C clocks / SCETs
Cc: chris.leech@jpl.nasa.gov

I have looked at our recent tape recorder usage and predict that you will see major frames with mis-corrected spacecraft clocks / SCETs at the following times (give or take a few minutes):

1995:

~342.22:59 SCET	should be	~341.17:47 SCET
~347.22:39 SCET	should be	~346.16:46 SCET
~350.21:54 SCET	should be	~349.16:22 SCET
~355.22:14 SCET	should be	~354.15:42 SCET
~359.14:04 SCET	should be	~359.05:36 SCET
~360.14:59 SCET	should be	~359.00:20 SCET
~362.20:55 SCET	should be	~361.16:06 SCET

BATSE BURST TRIGGER

NO.: 4197

TIME: TJD=0083 SECONDS=4480

TYPE: TRANSIE

Jan 1

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4198

TIME: TJD=0083 SECONDS=9371

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4200

TIME: TJD=0083 SECONDS=14992

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4201

TIME: TJD=0083 SECONDS=26791

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4202

TIME: TJD=0083 SECONDS=38199

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4203

TIME: TJD=0083 SECONDS=49433

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4204

TIME: TJD=0083 SECONDS=58735

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

Subject: Burst trigger message

BATSE BURST TRIGGER

NO.: 4205

TIME: TJD=0083 SECONDS=70060

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

Subject: Burst trigger message

BATSE BURST TRIGGER

NO.: 4206

TIME: TJD=0083 SECONDS=75469

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

Subject: Burst trigger message

BATSE BURST TRIGGER

NO.: 4207

TIME: TJD=0083 SECONDS=81319

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

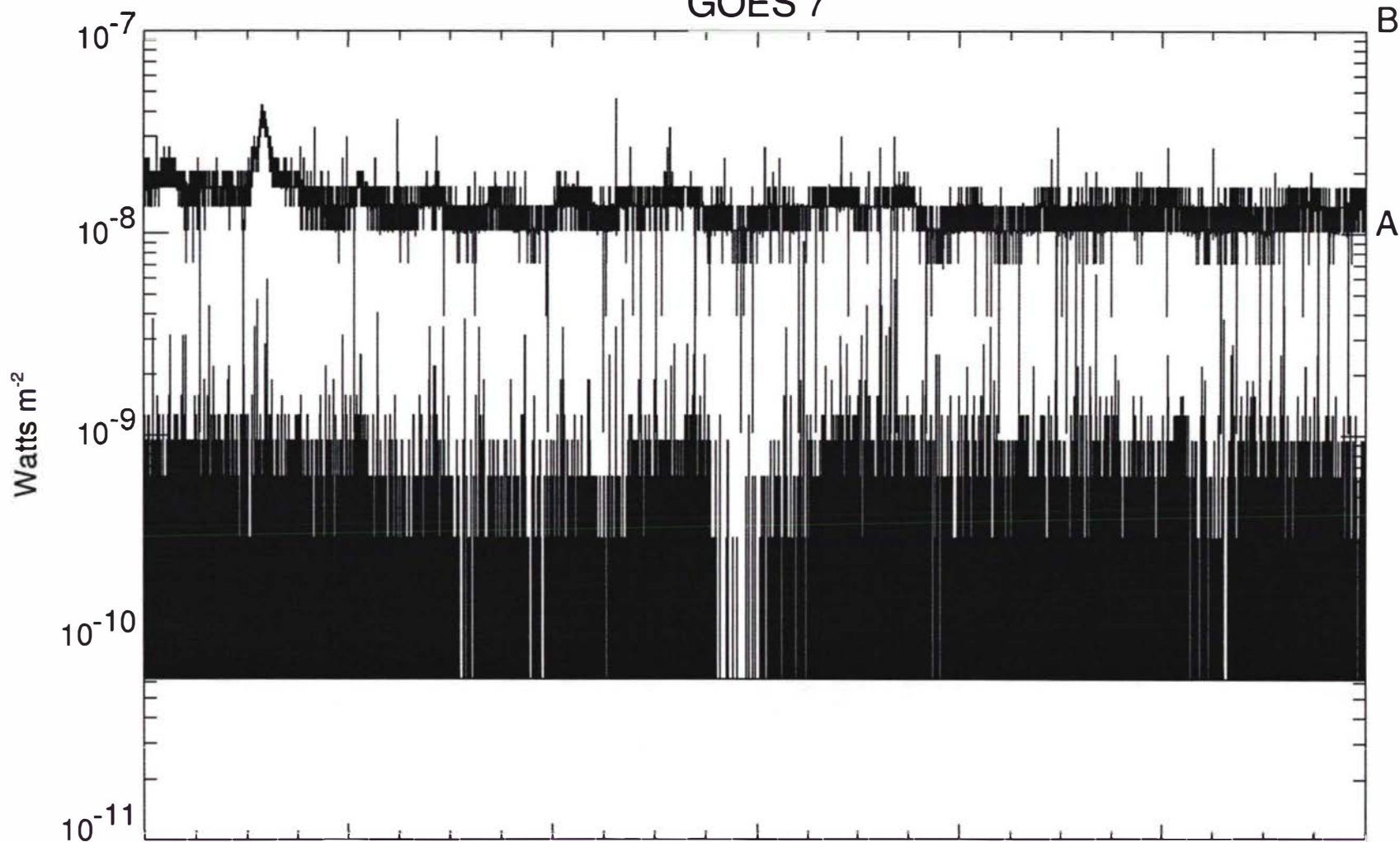
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

GOES 7



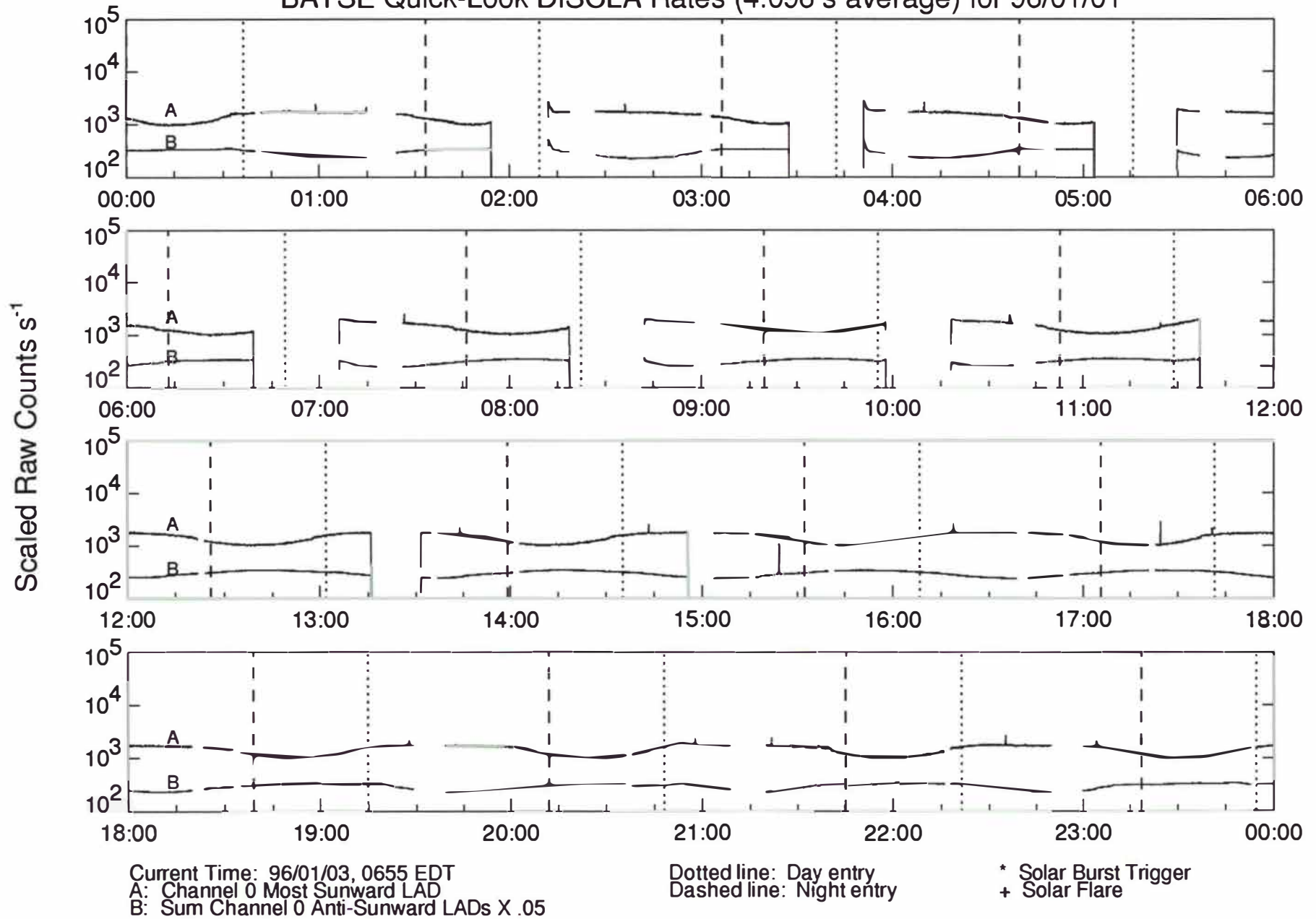
Data Start: 96/01/01, 0000:00

Plot created: 96/01/03, 0655

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

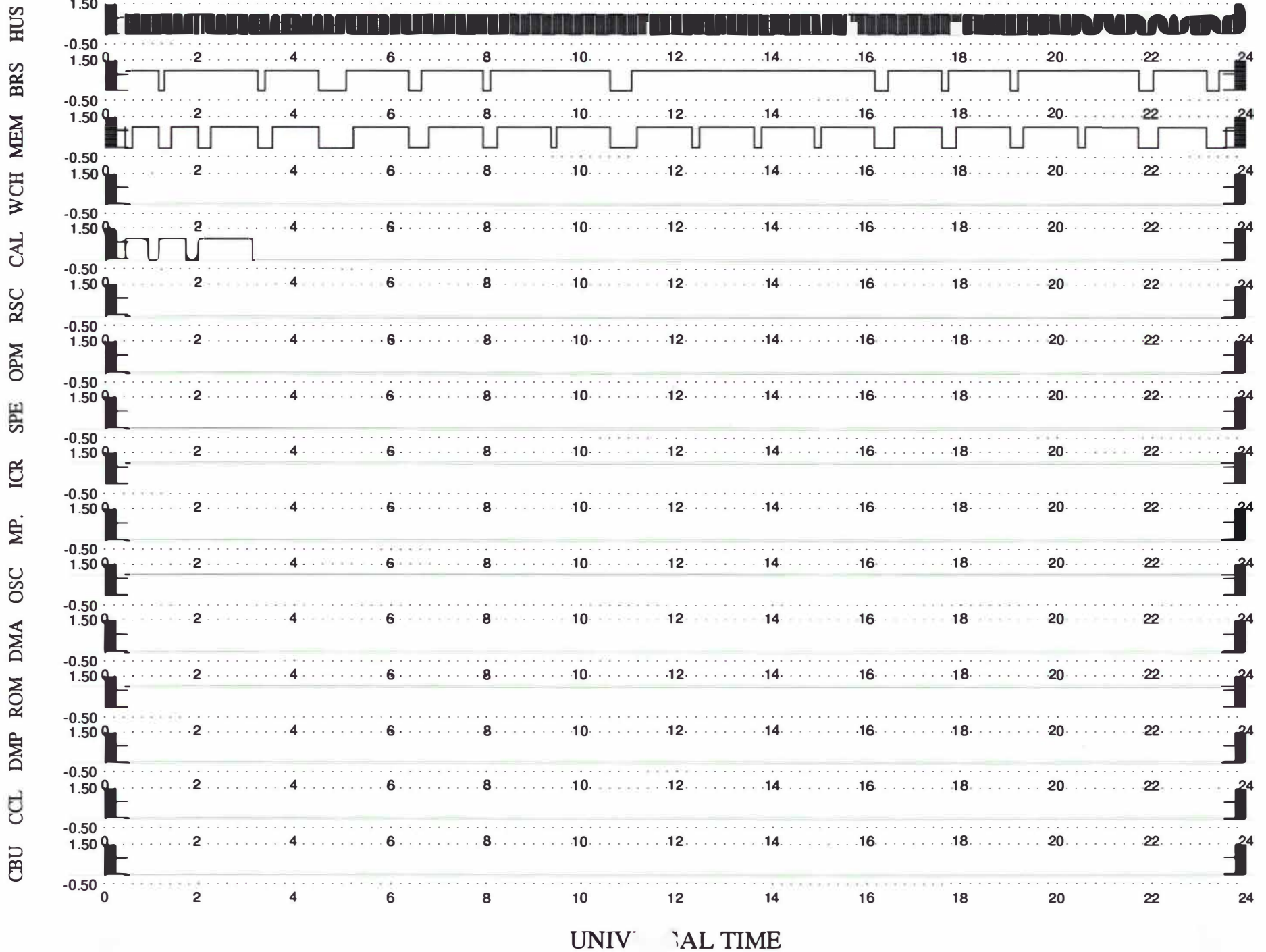
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/01



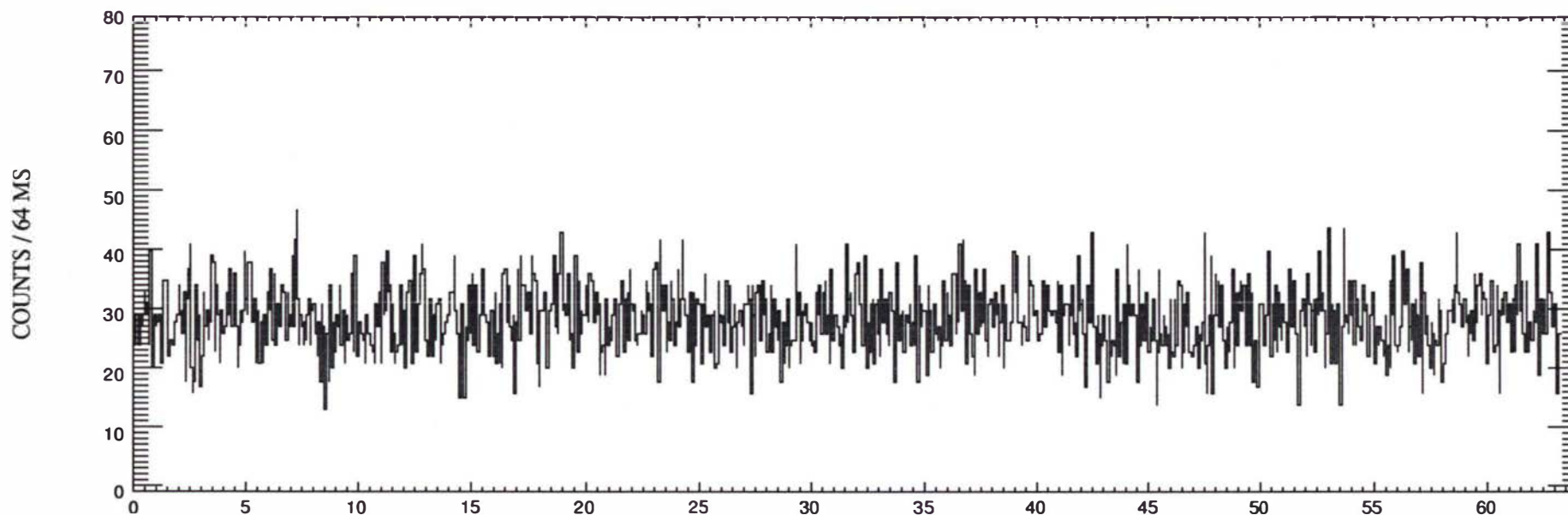
HUS MODES EDR day 1, year 1996 to day 1, year 1996
BURST NUMBER 3 - 15, 0 - 4

4/30/96

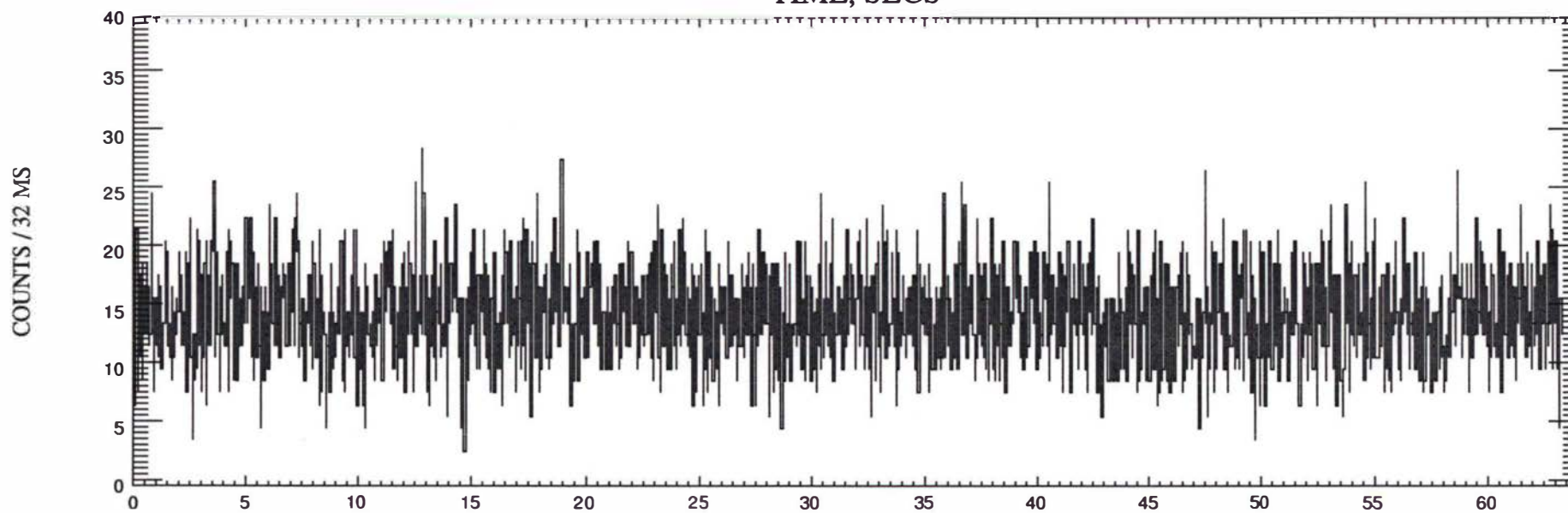


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 5 at UT= 1.993447795444 h= 7176.412 s 01:59:36.412

1/3/96



TIME, SECS

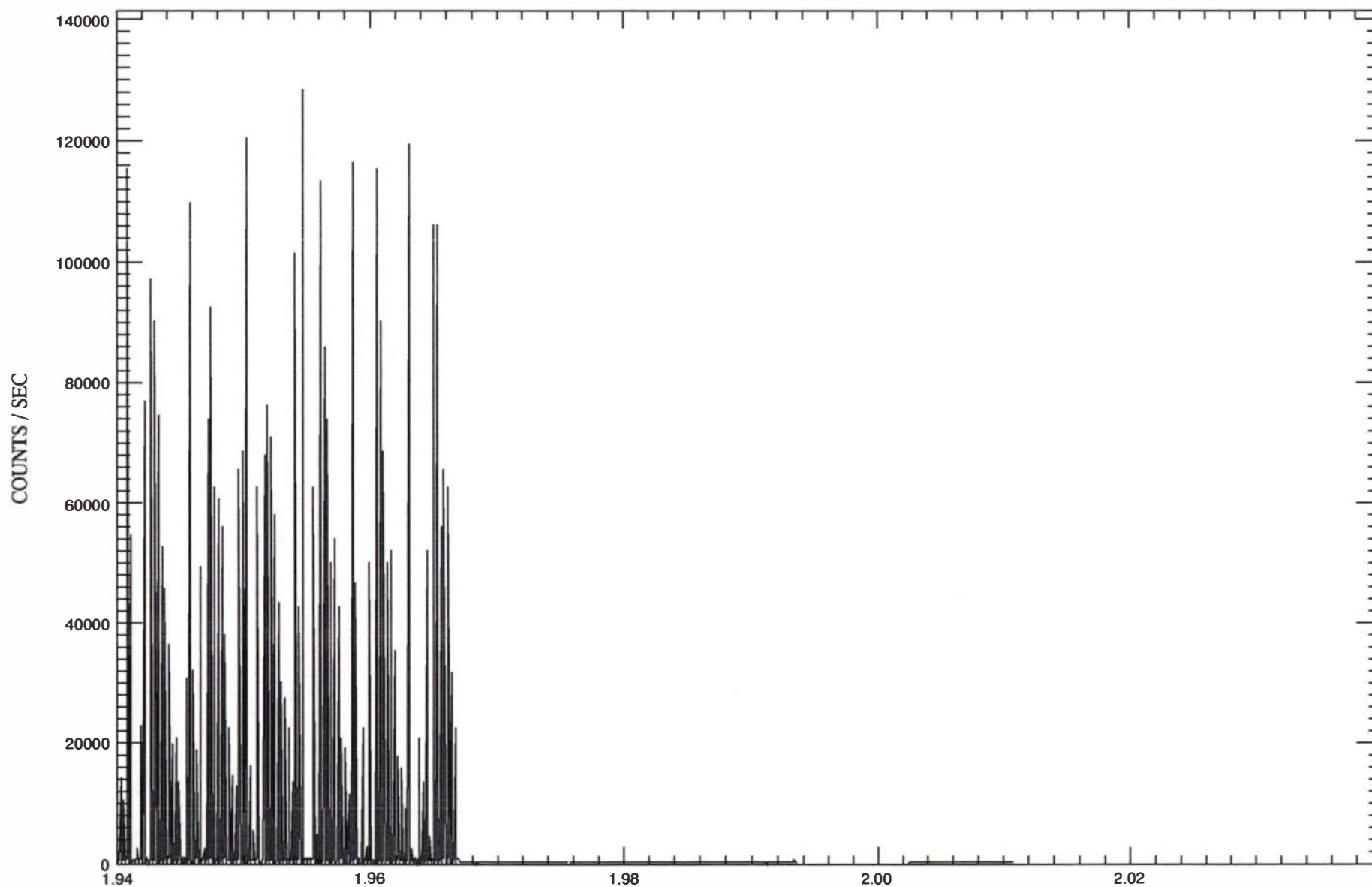


TIME, SECS

B# 1

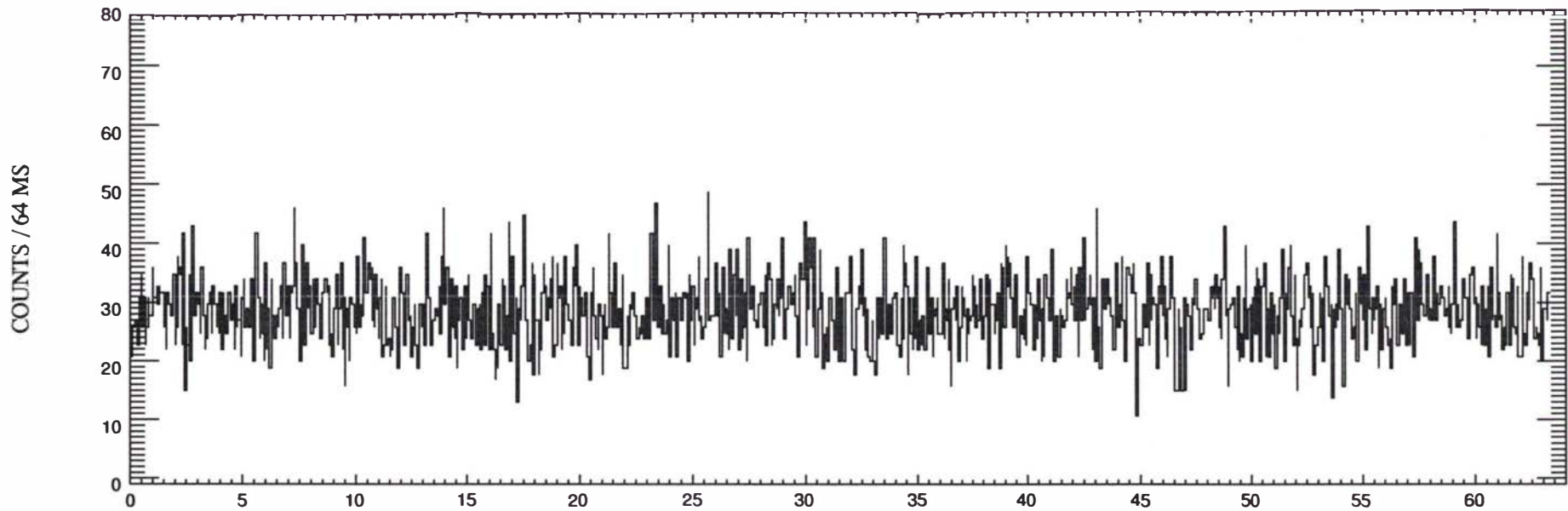
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

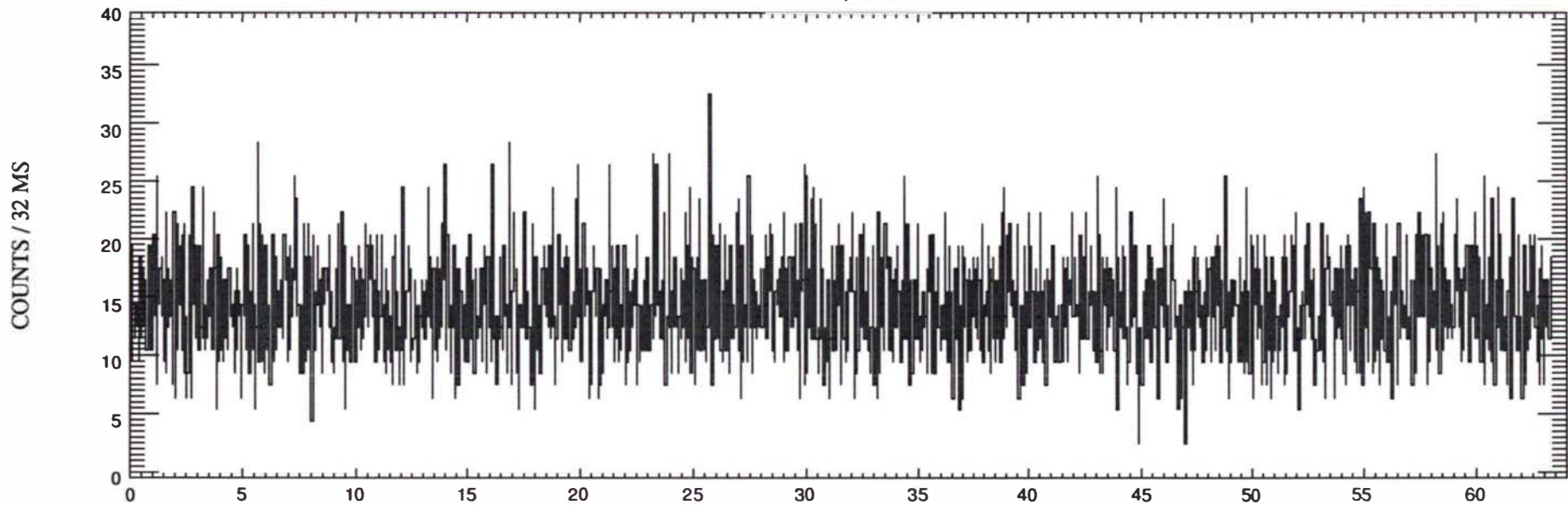


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 6 at UT= 3.260063870748 h=11736.230 s 03:15:36.230

1/3/96



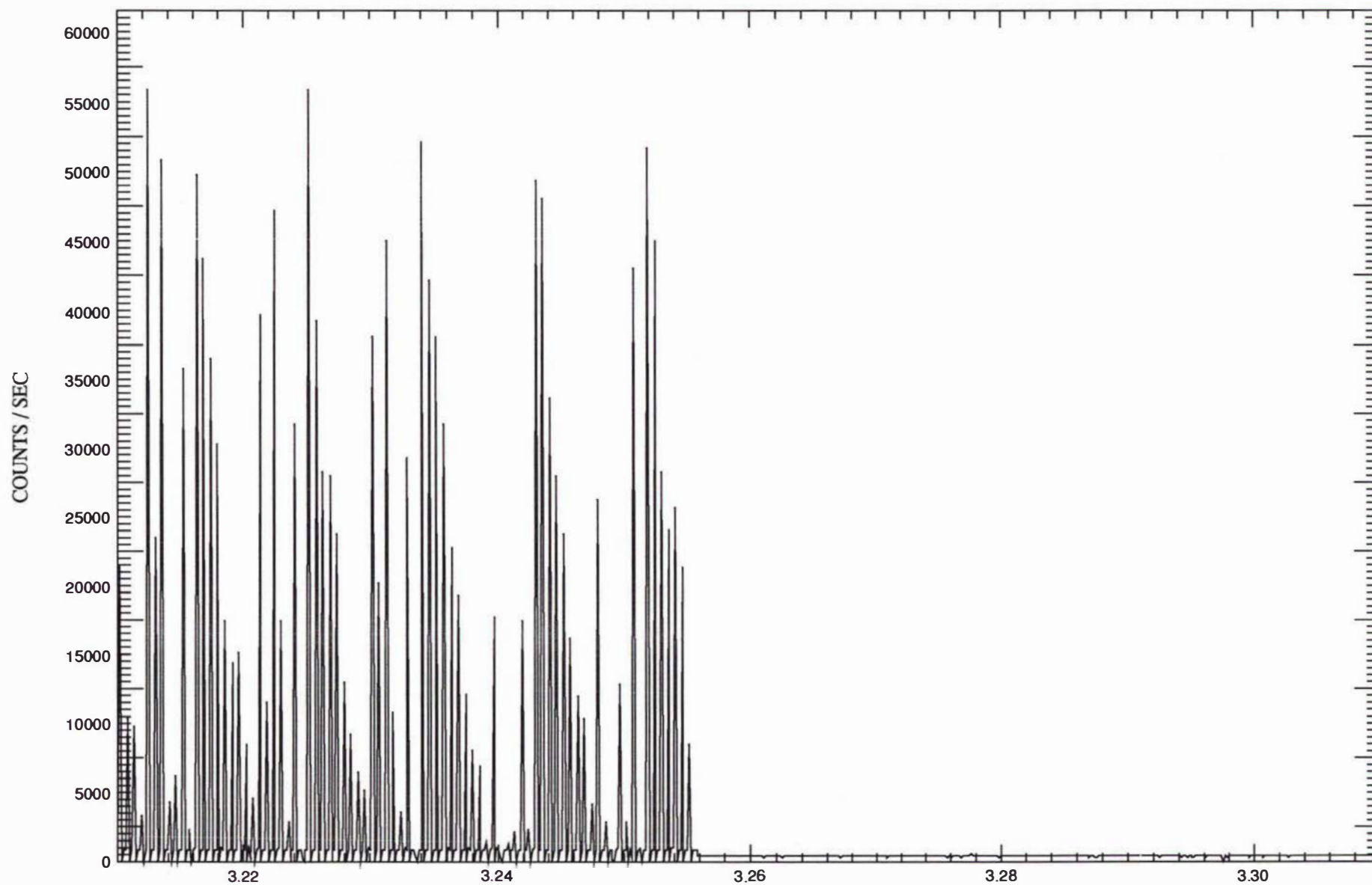
TIME, SECS



TIME, SECS

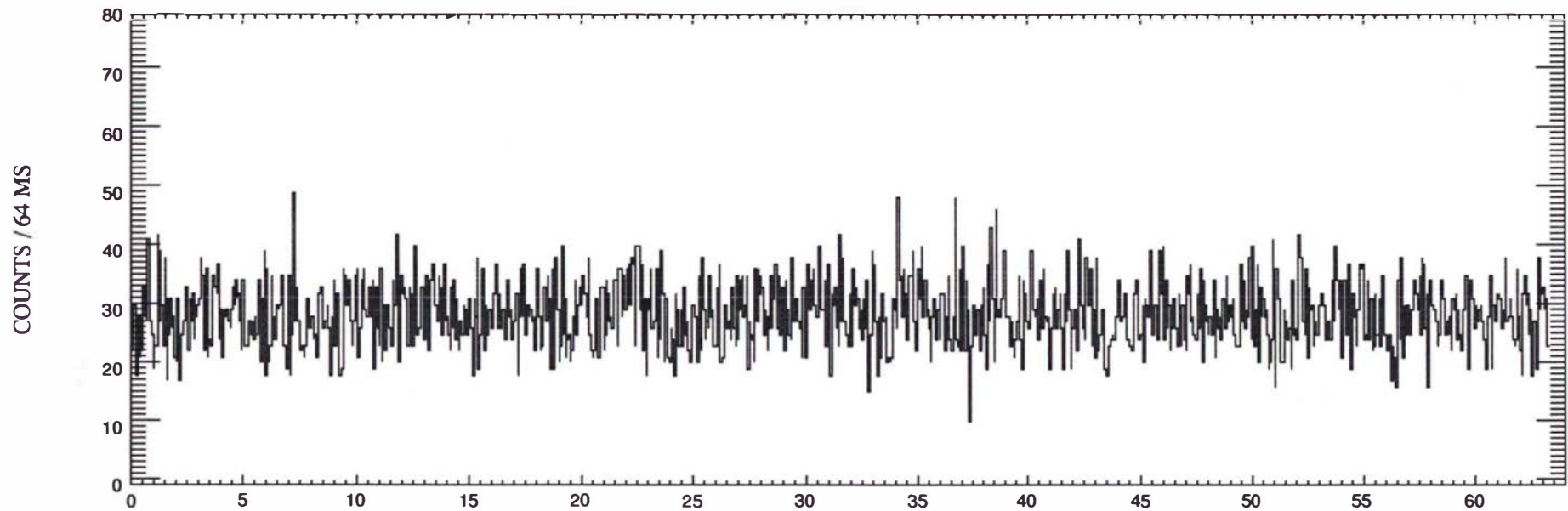
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

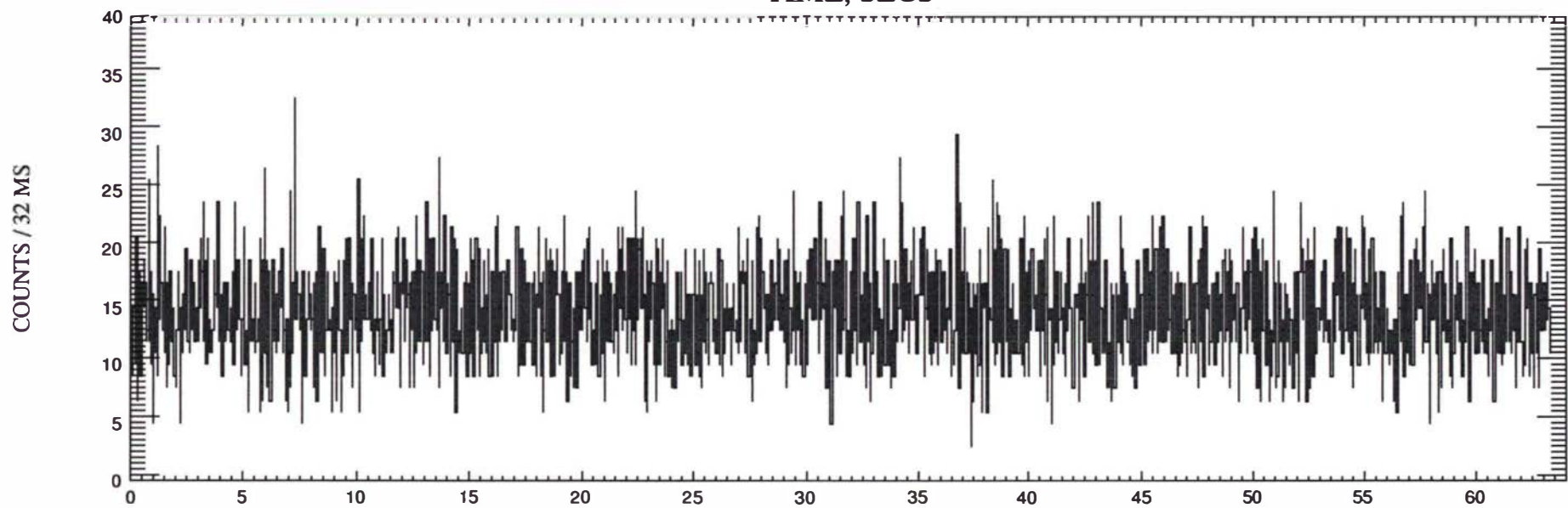


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 7 at UT= 5.005191726685 h=18018.690 s 05:00:18.690

1/3/96



TIME, SECS

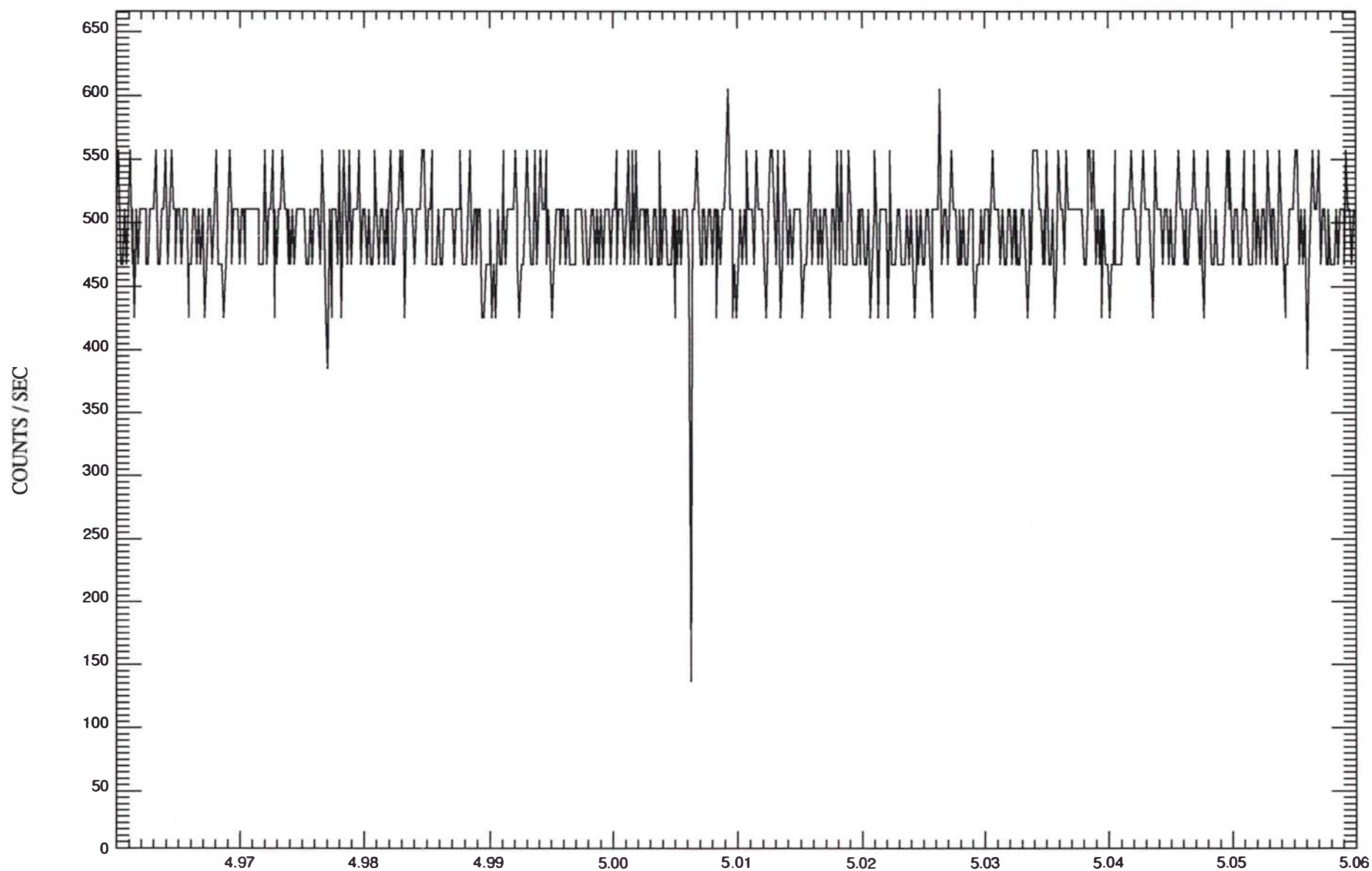


TIME, SECS

B# 3

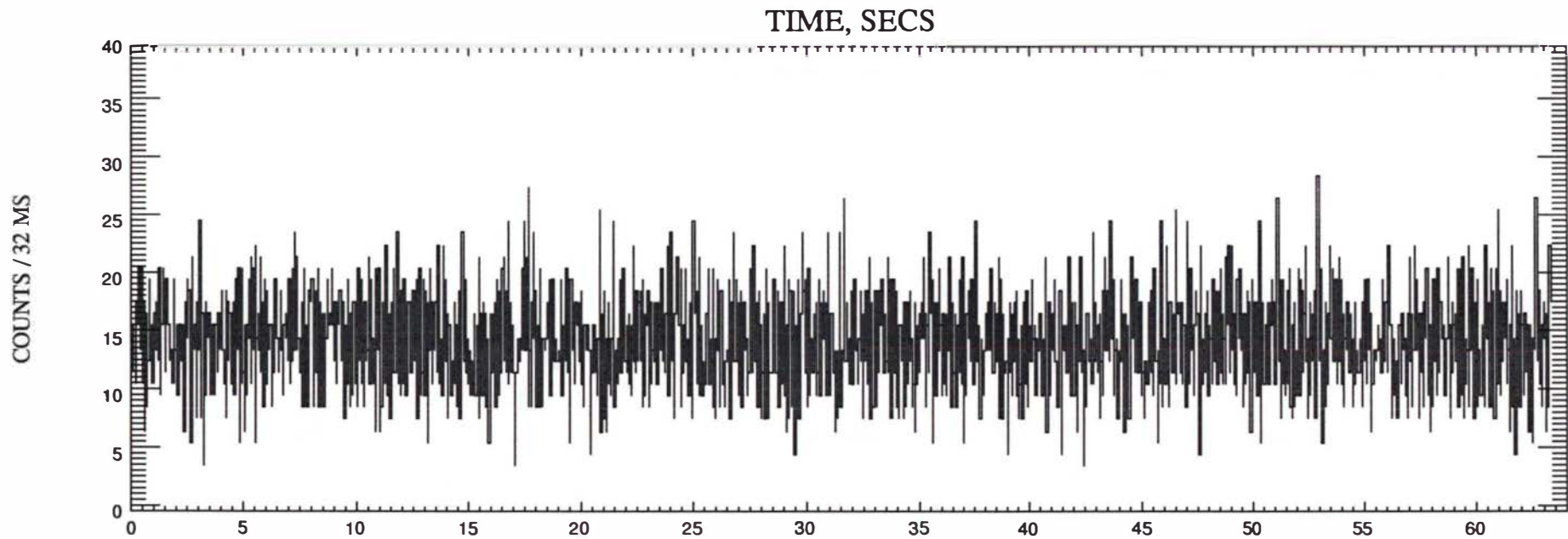
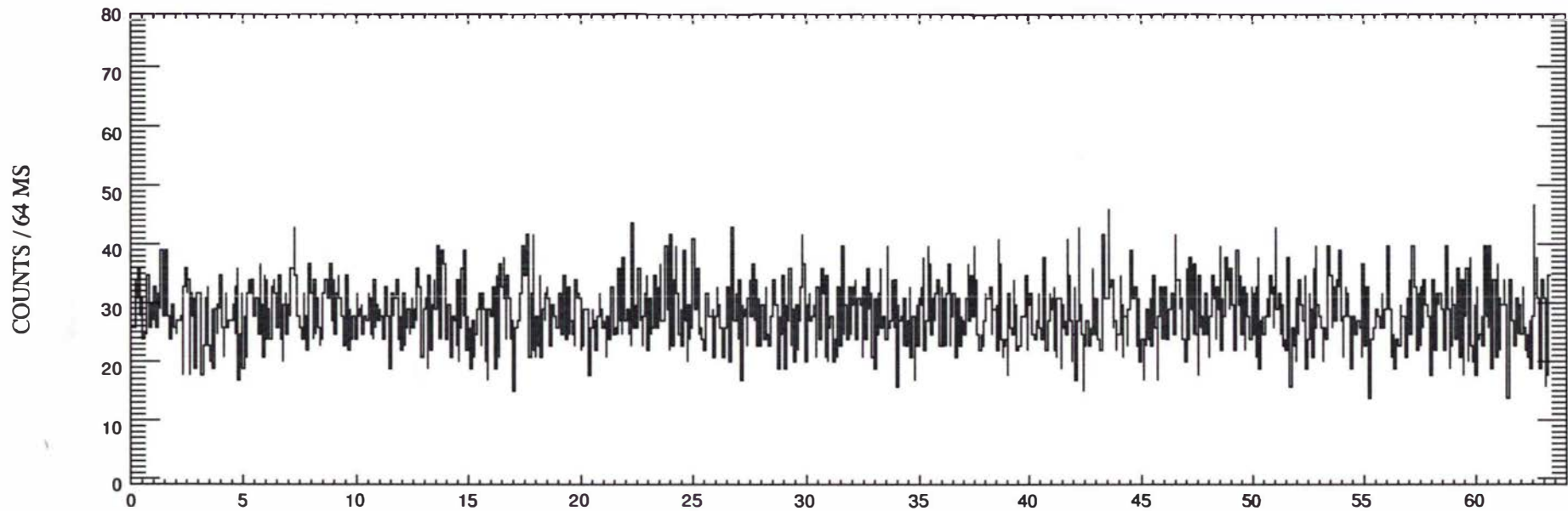
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



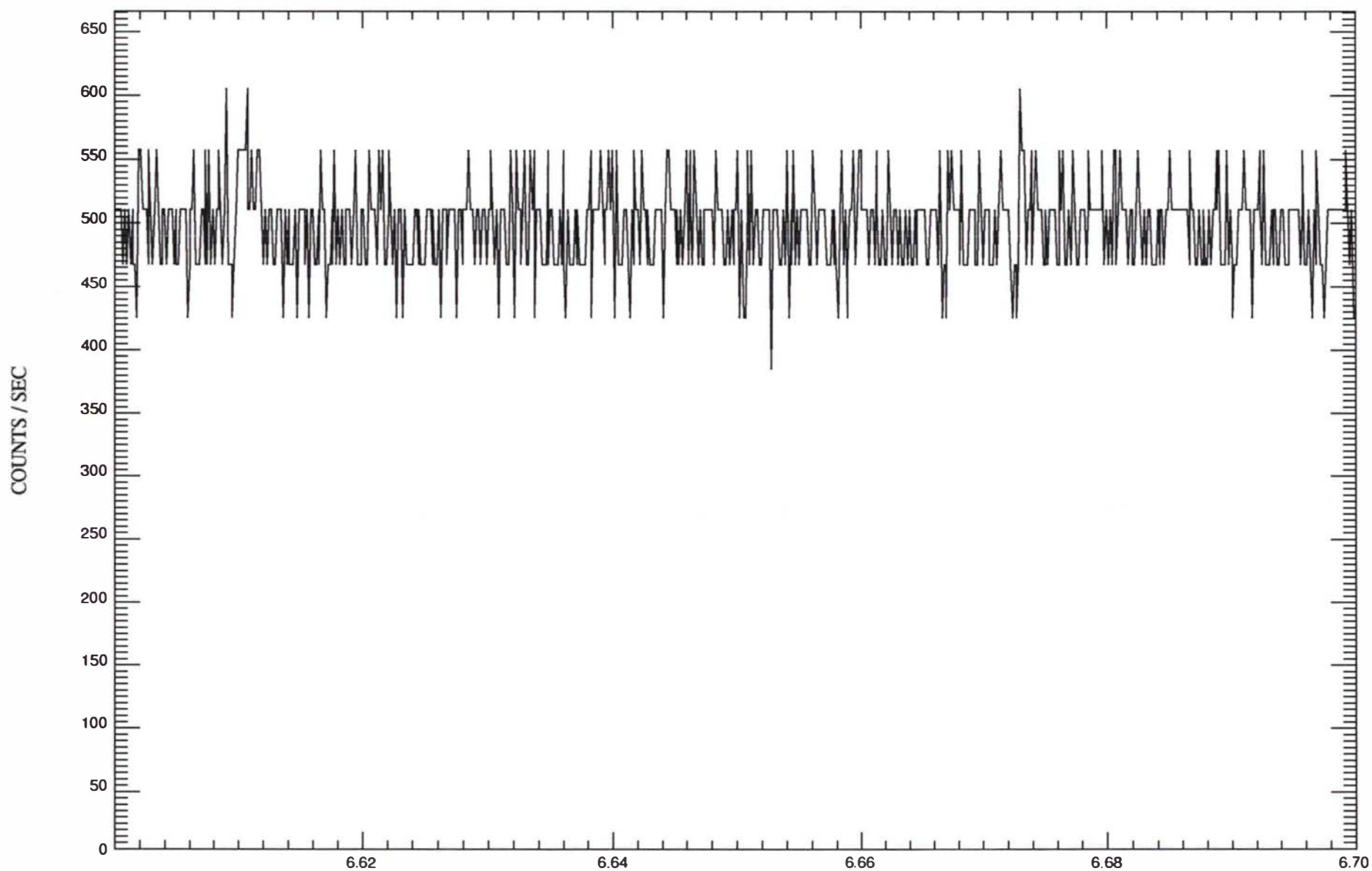
HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 8 at UT= 6.648481483459 h=23934.533 s 06:38:54.533

1/3/96



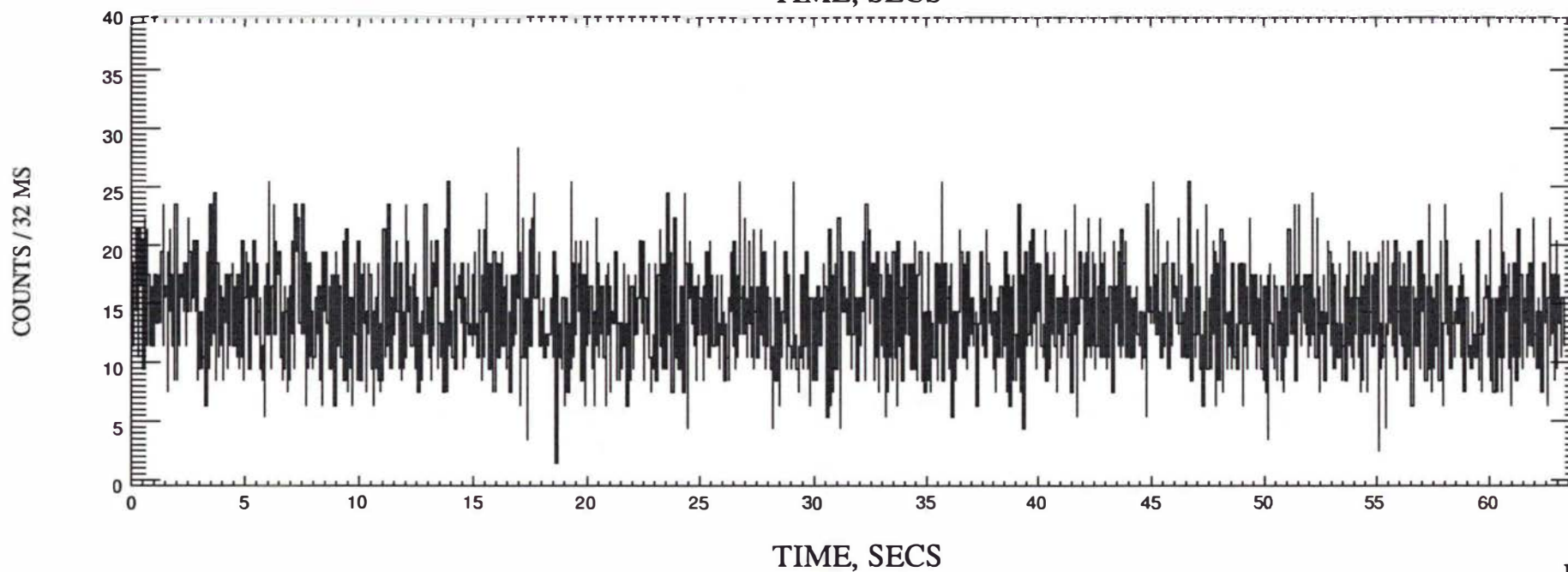
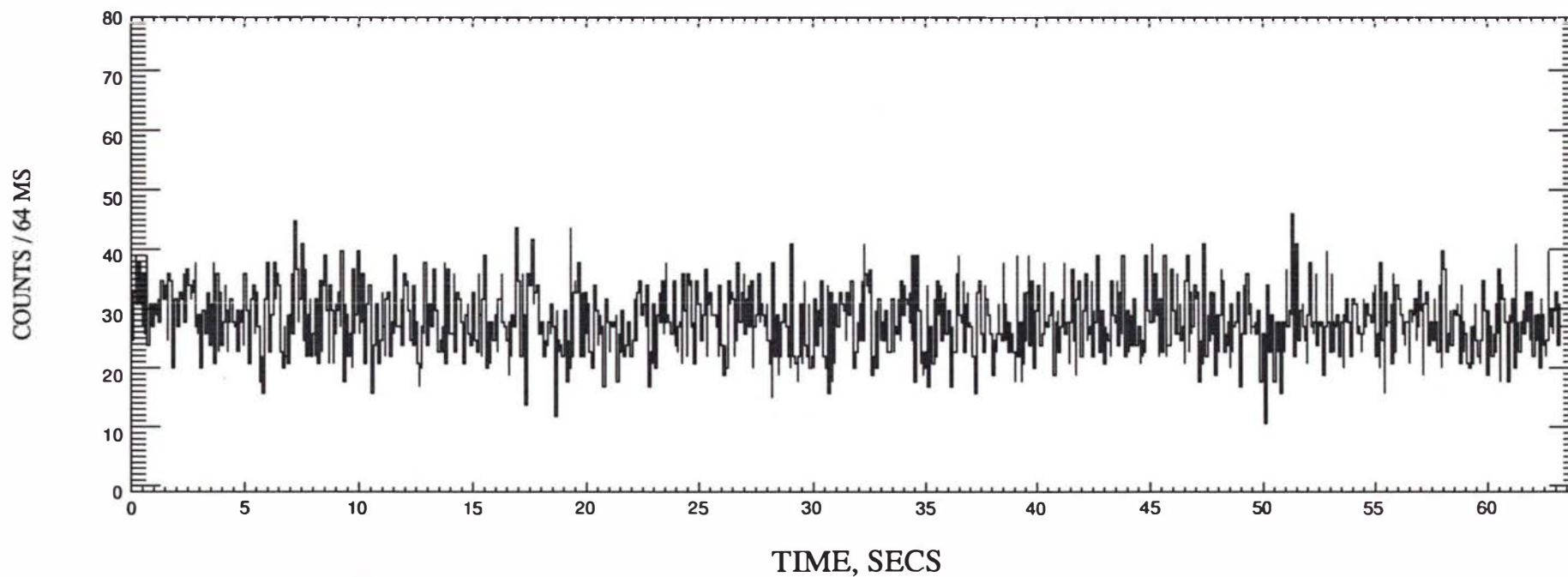
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 9 at UT= 8.036280810038 h=28930.611 s 08:02:10.611

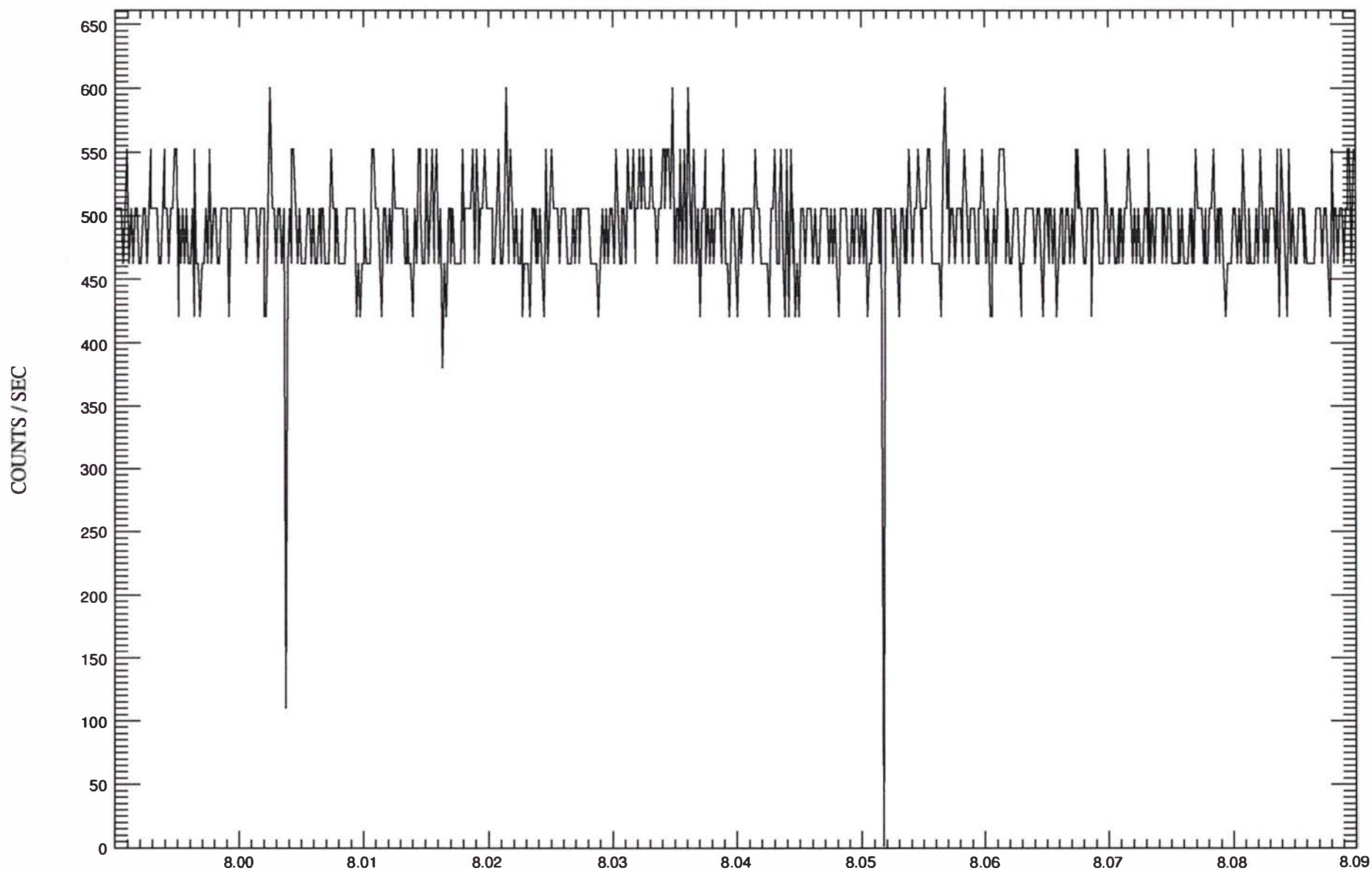
1/3/96



B# 5

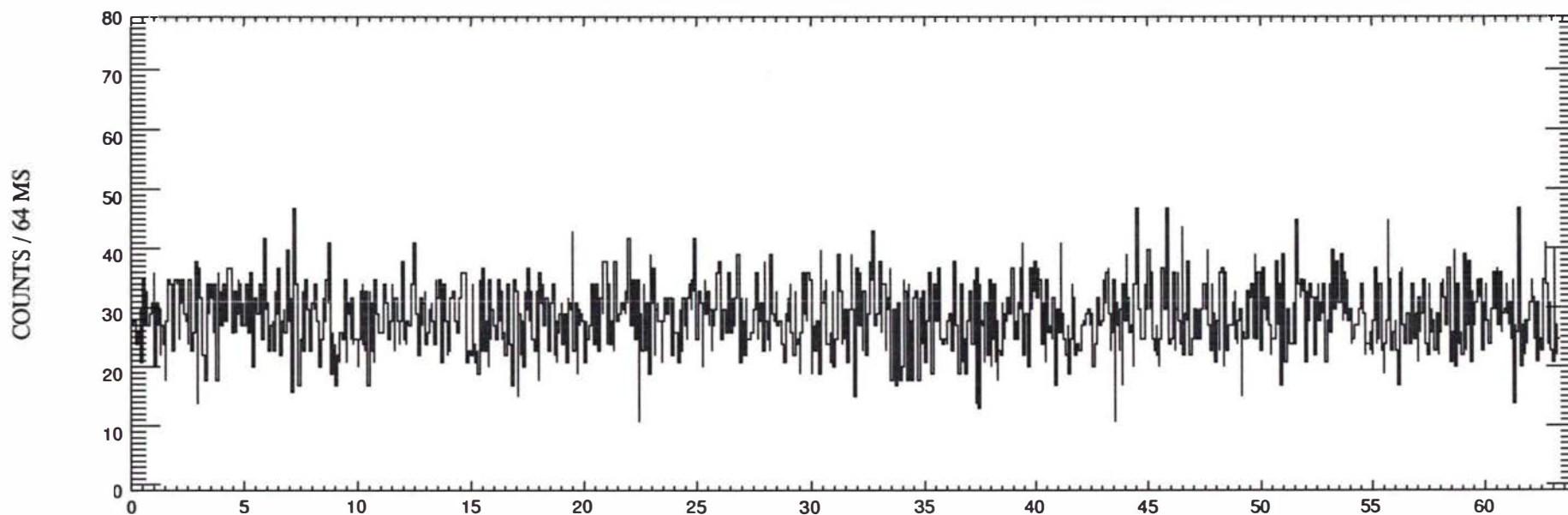
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

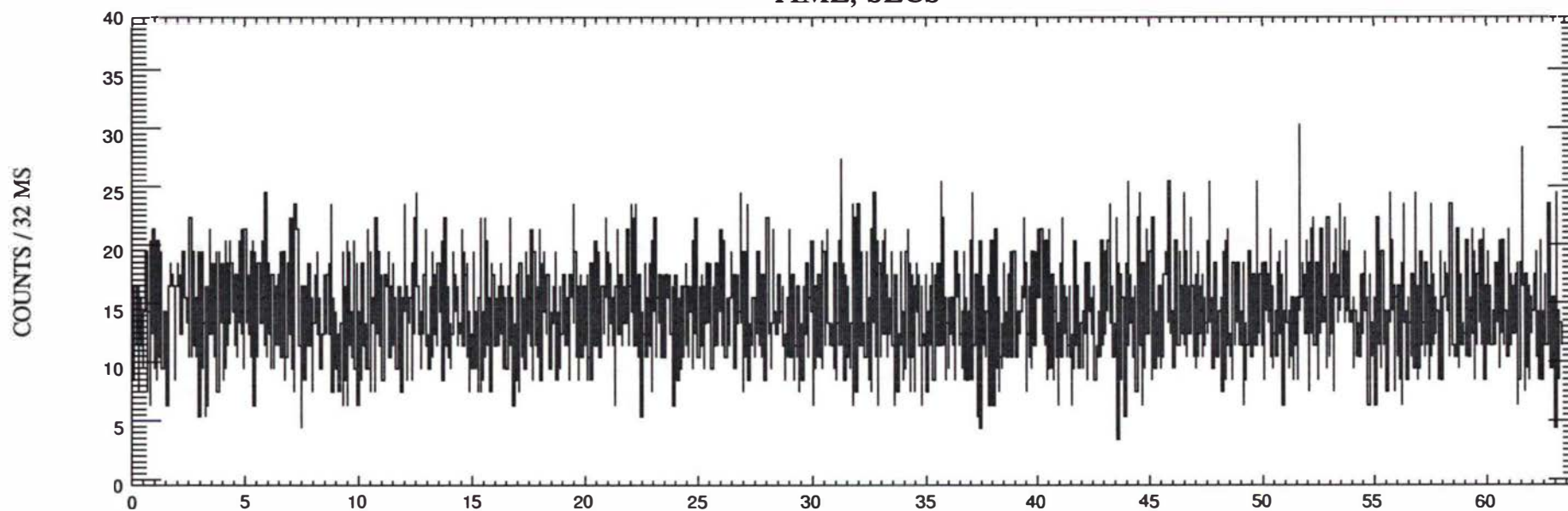


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 10 at UT= 9.306196034749 h=33502.306 s 09:18:22.306

1/3/96



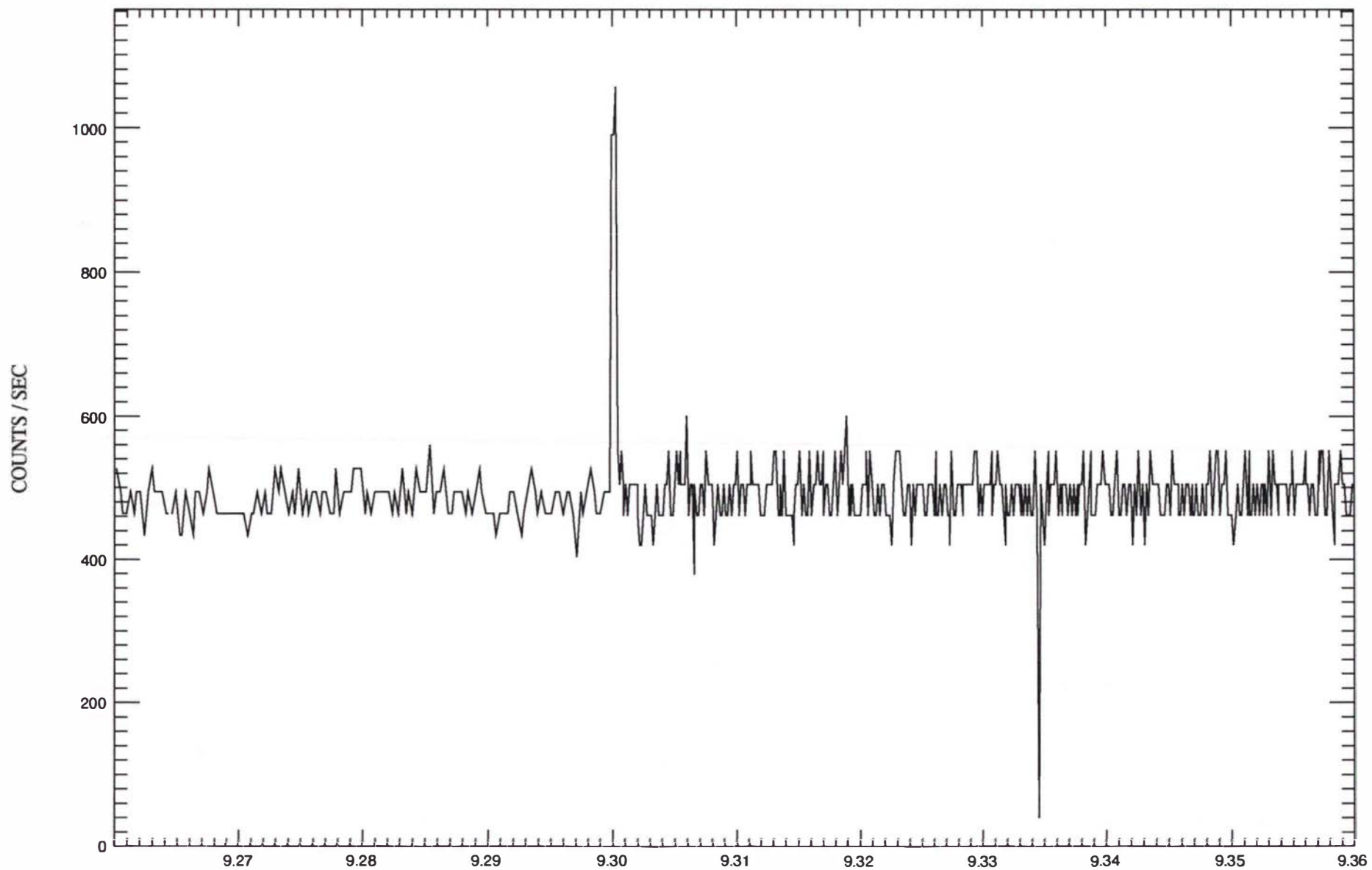
TIME, SECS



TIME, SECS

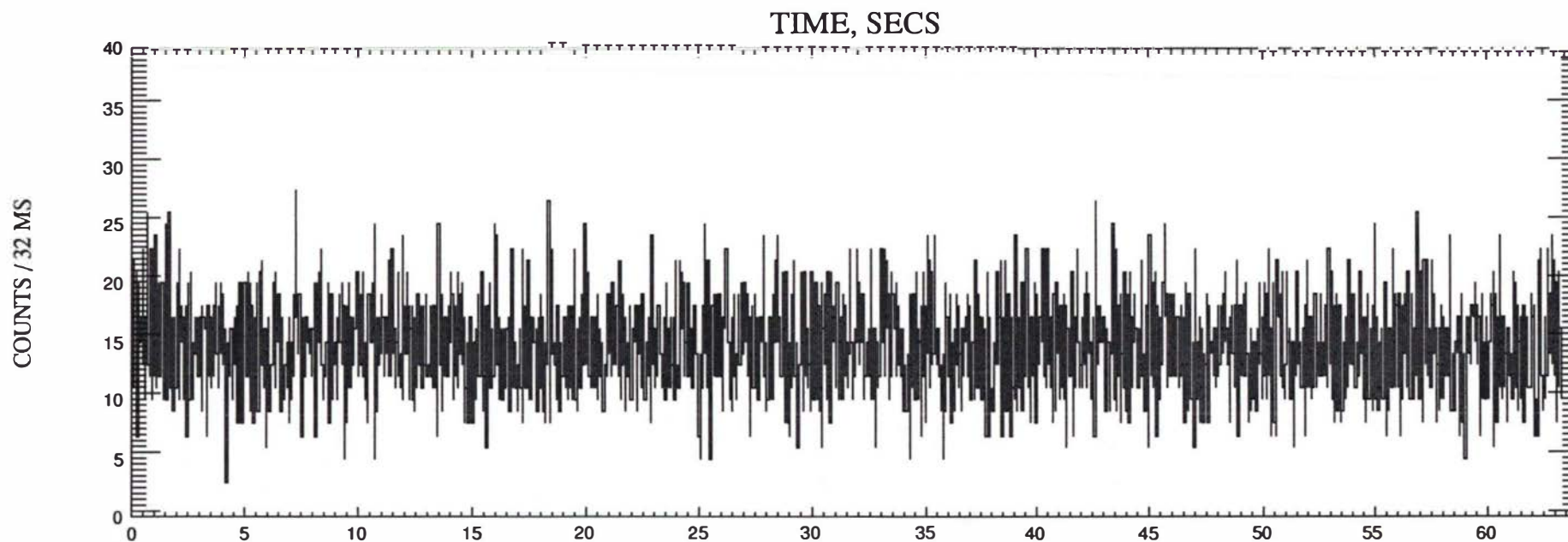
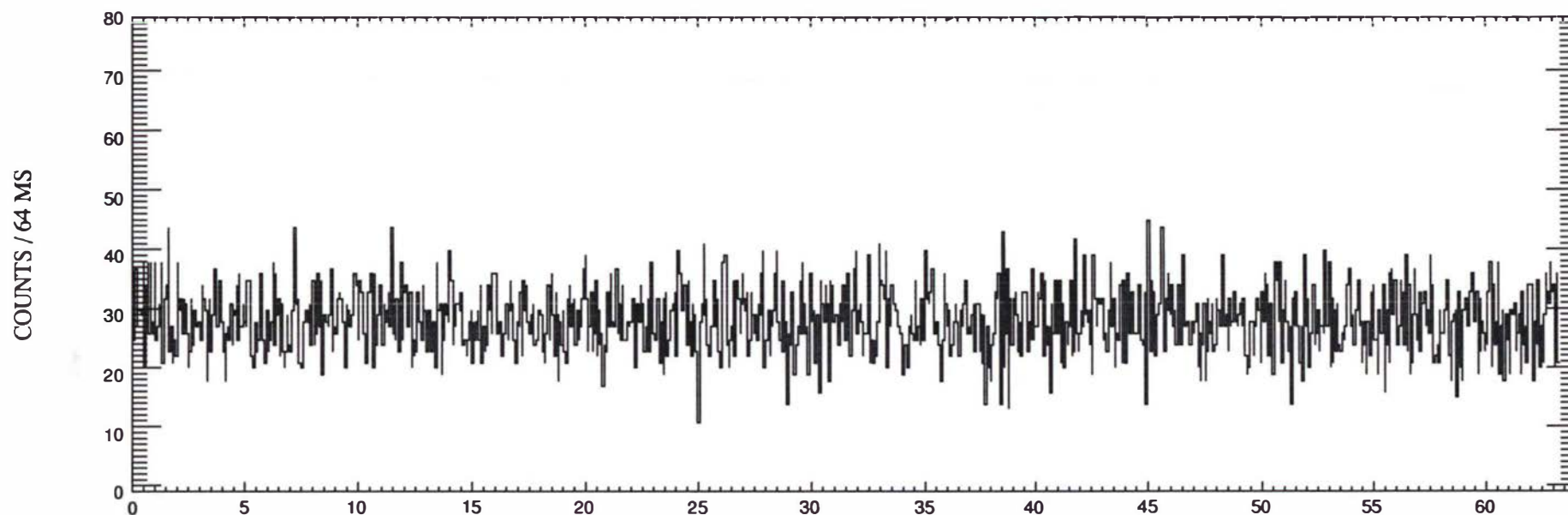
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



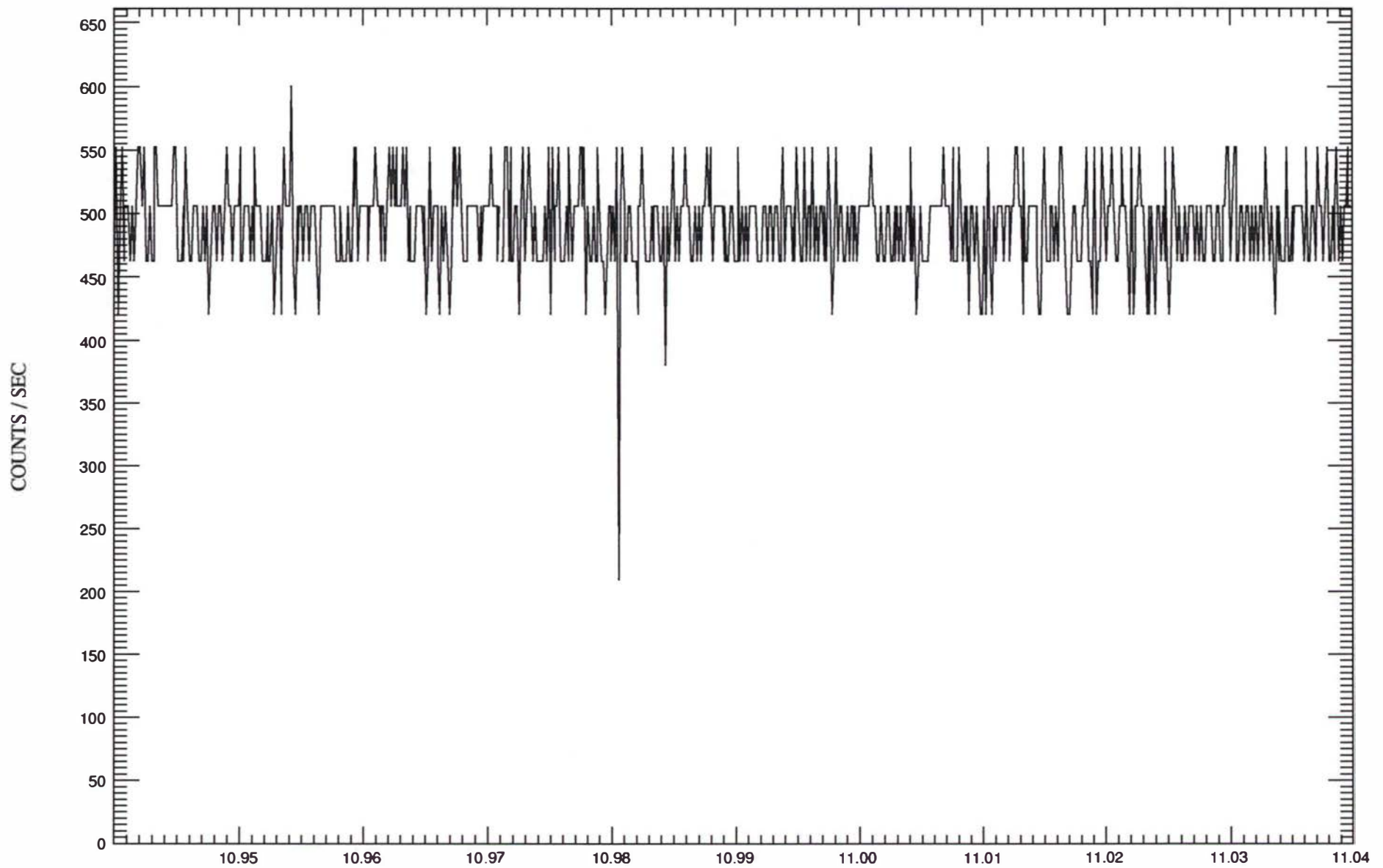
HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 11 at UT=10.990527445475 h=39565.899 s 10:59:25.899

1/3/96



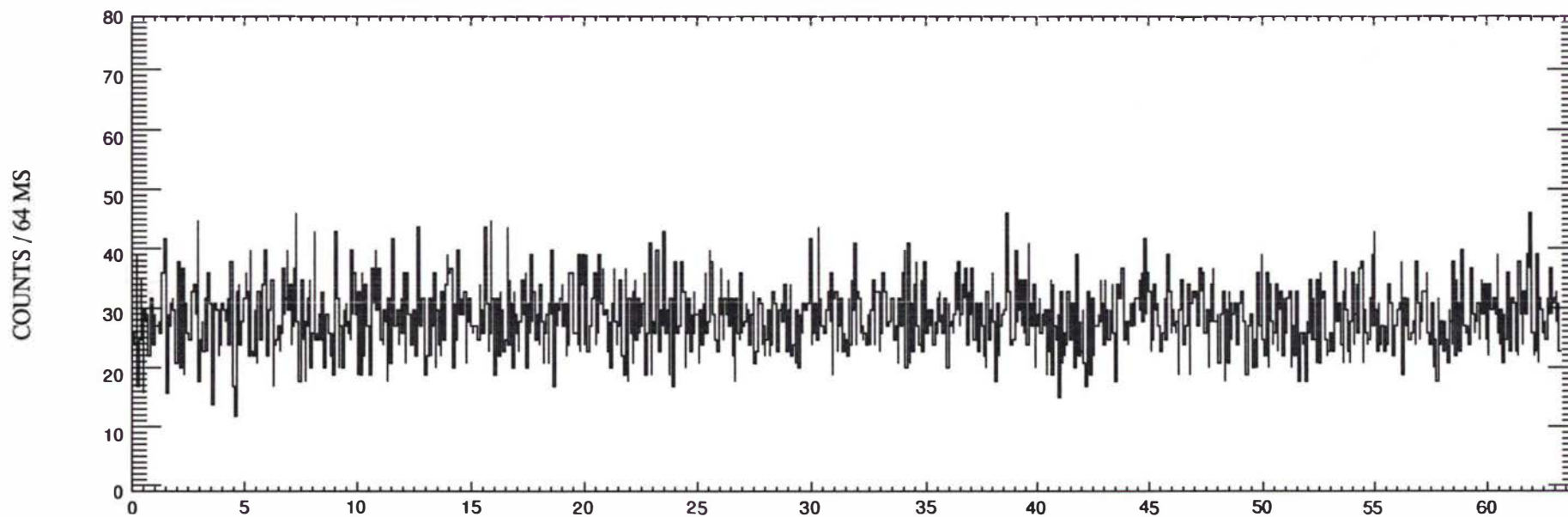
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

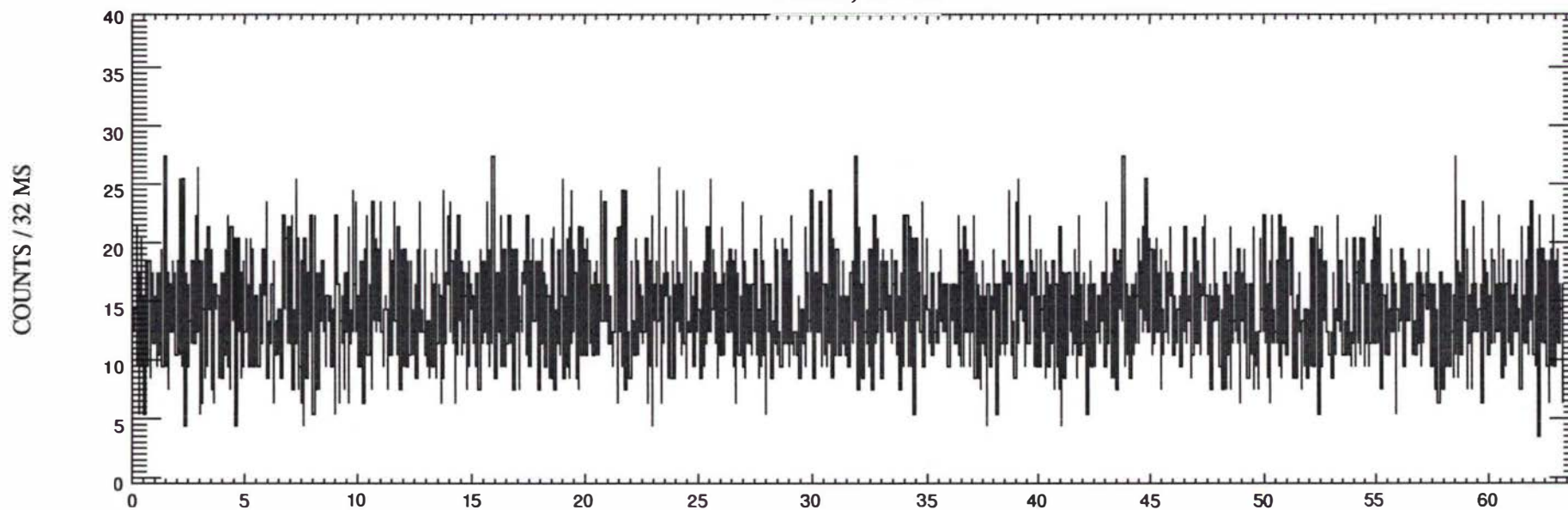


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 12 at UT=12.249016888936 h=44096.461 s 12:14:56.461

1/3/96



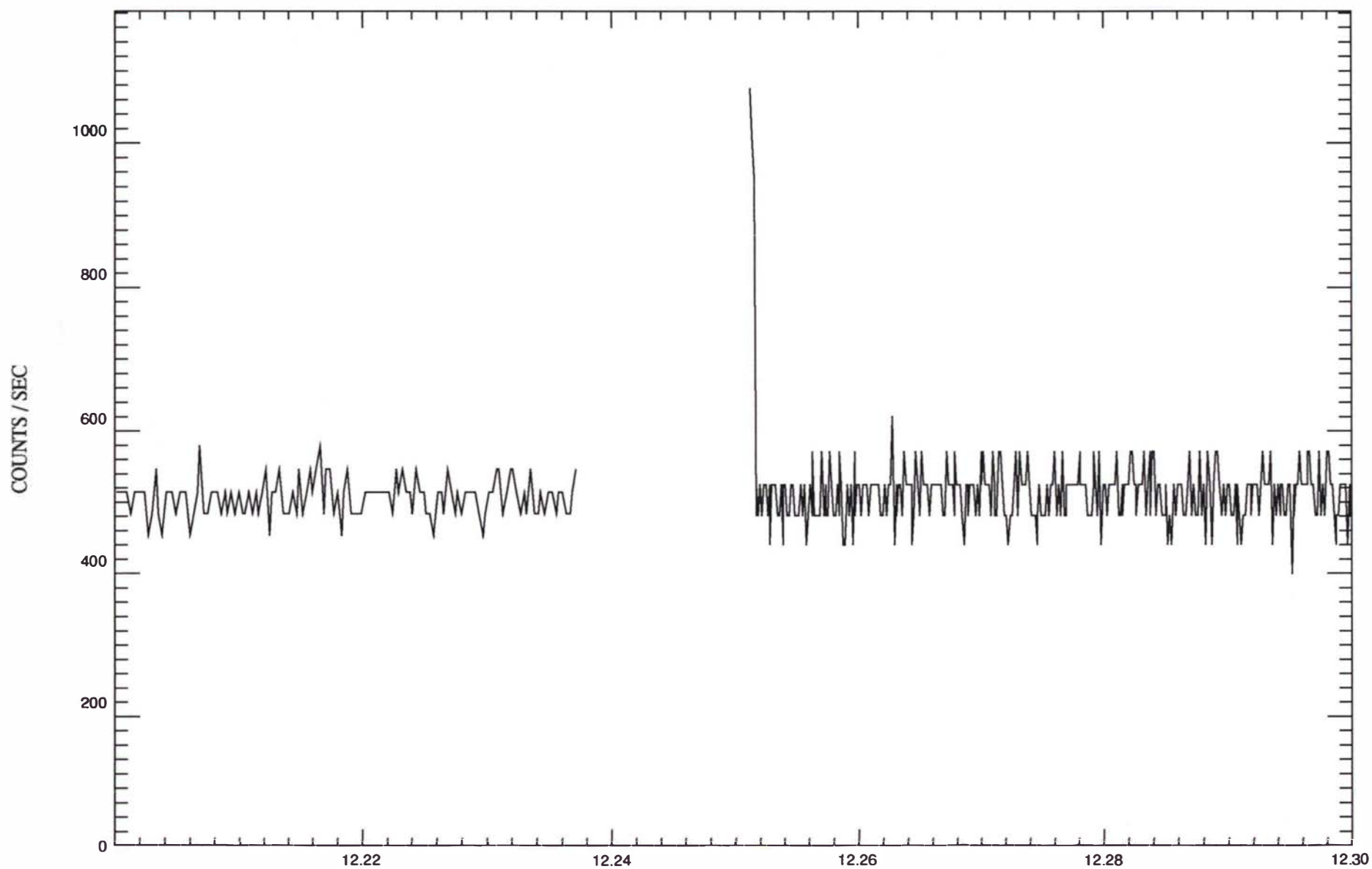
TIME, SECS



TIME, SECS

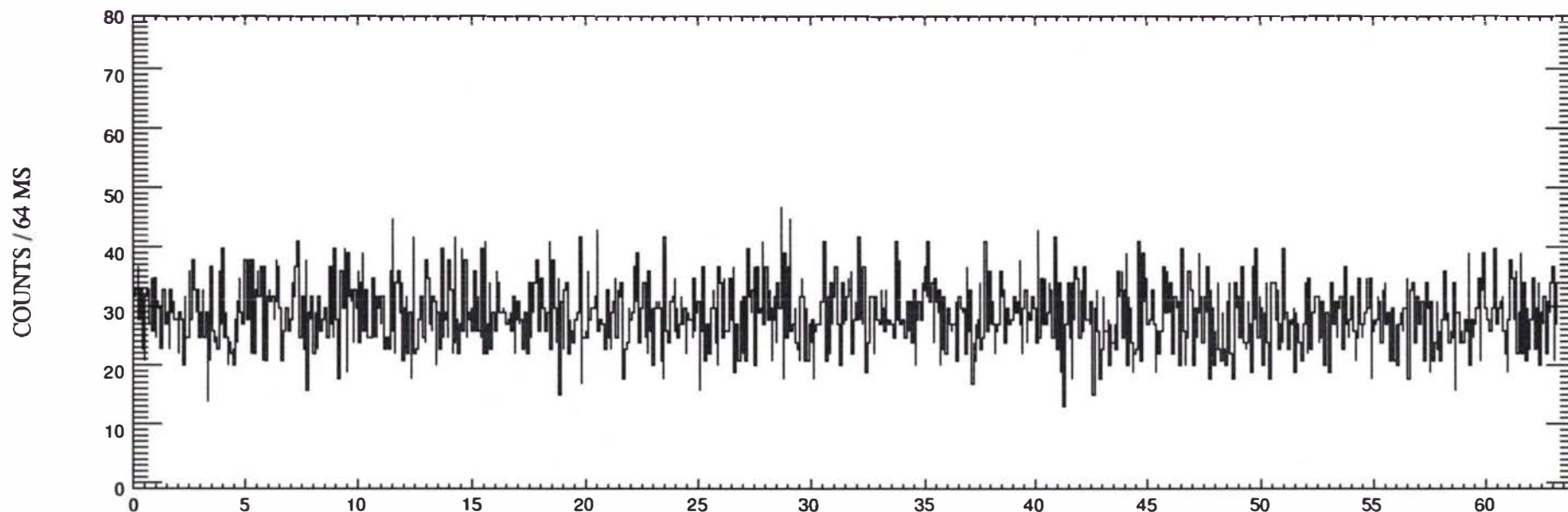
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

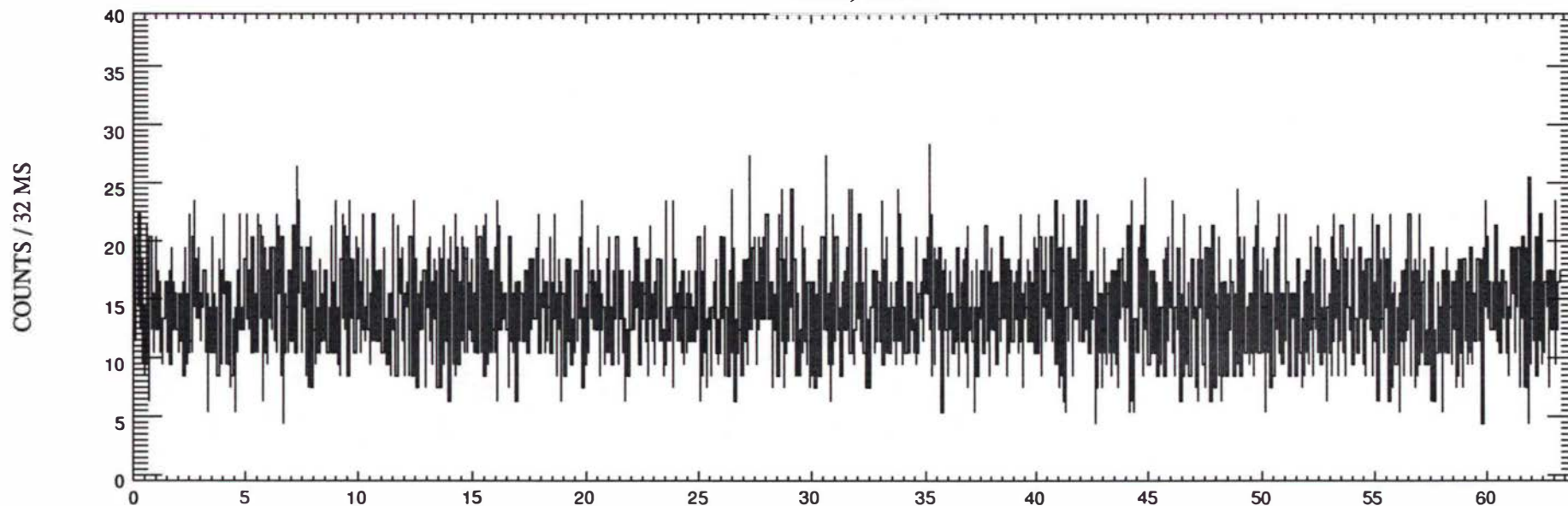


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 13 at UT=13.604487673442 h=48976.156 s 13:36:16.156

1/3/96



TIME, SECS

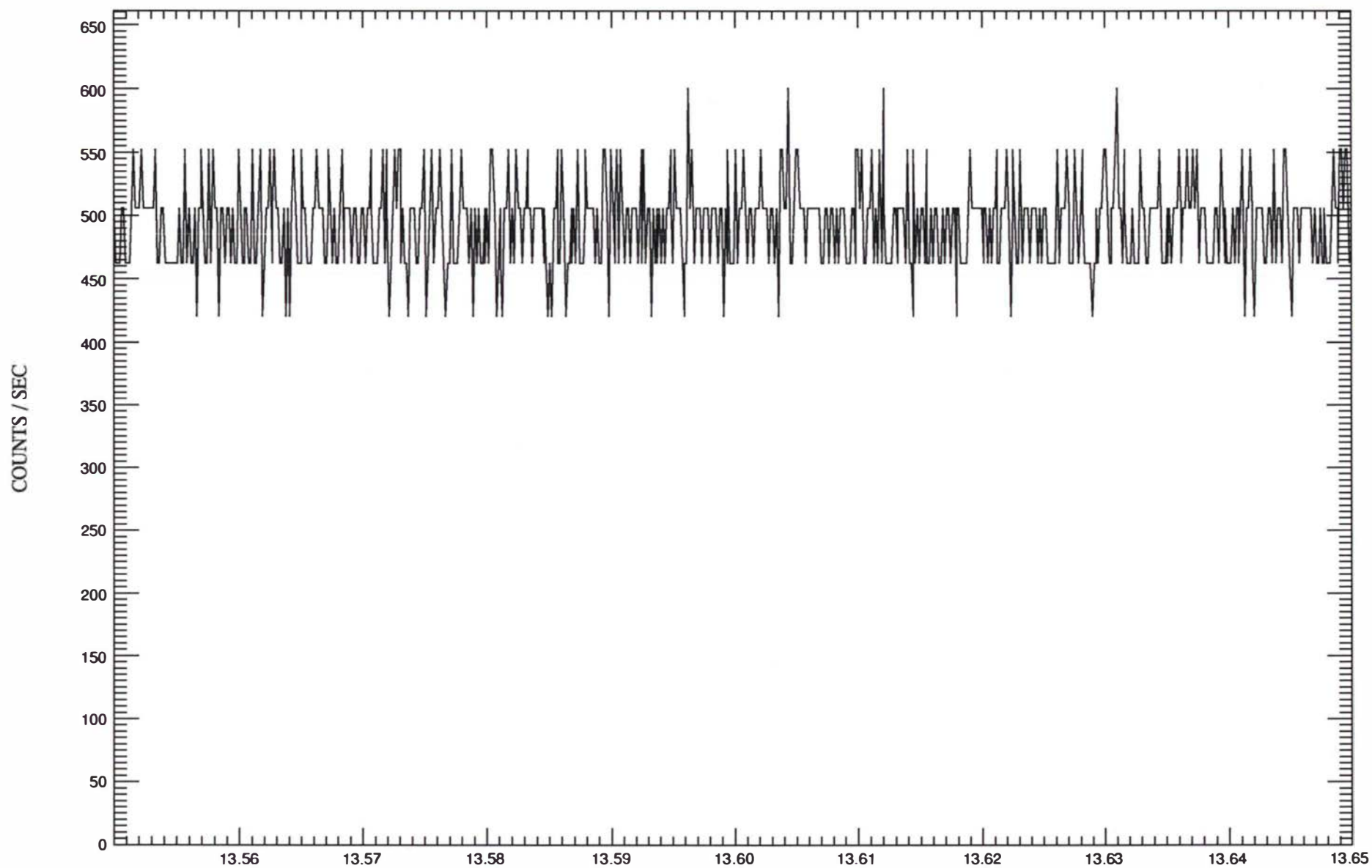


TIME, SECS

B# 9

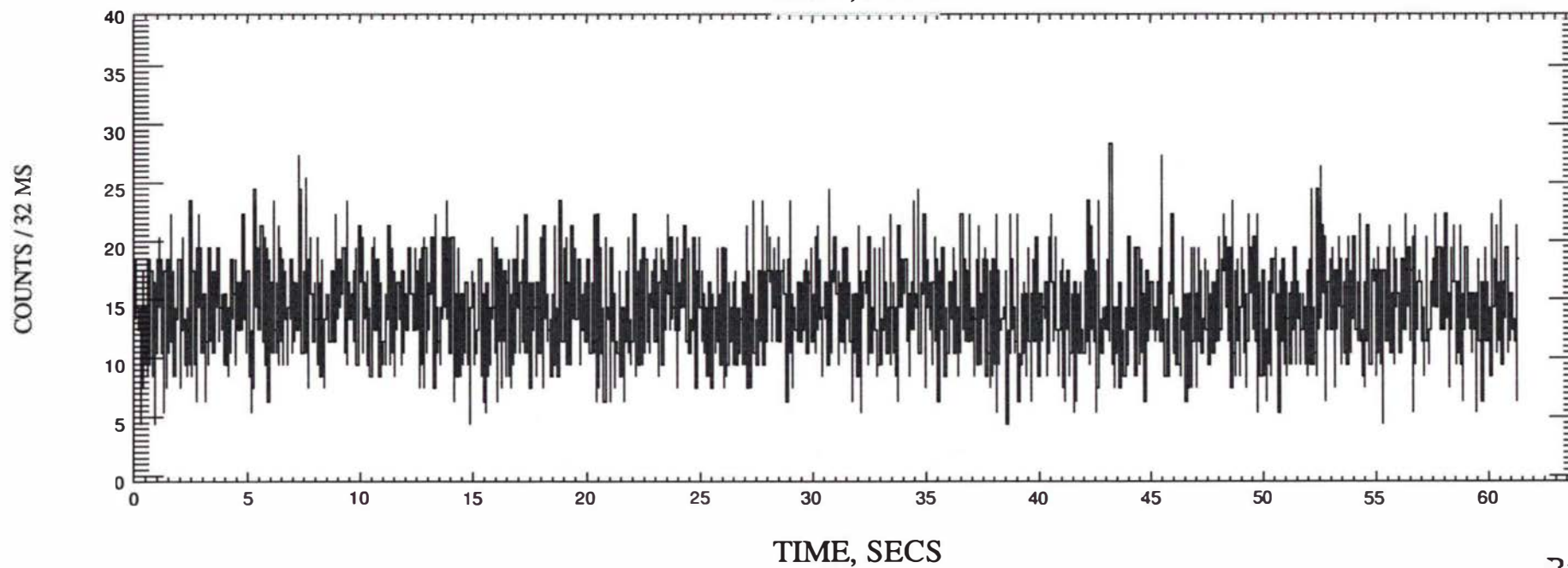
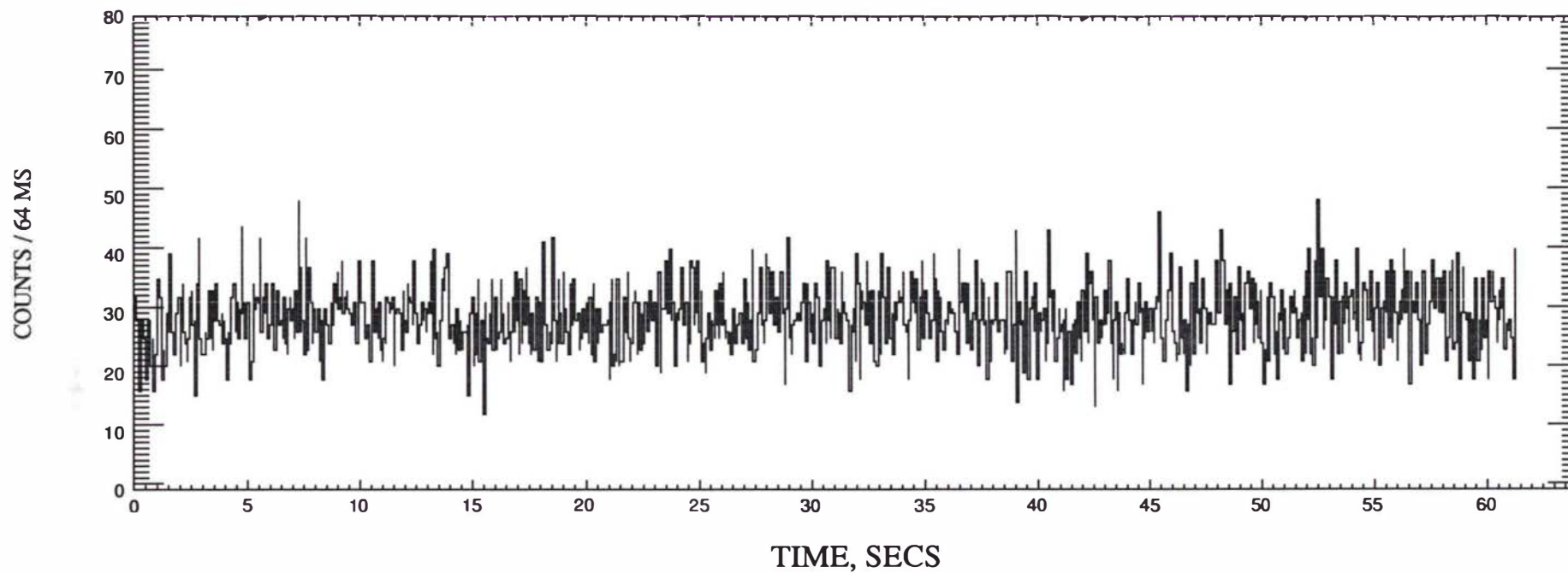
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



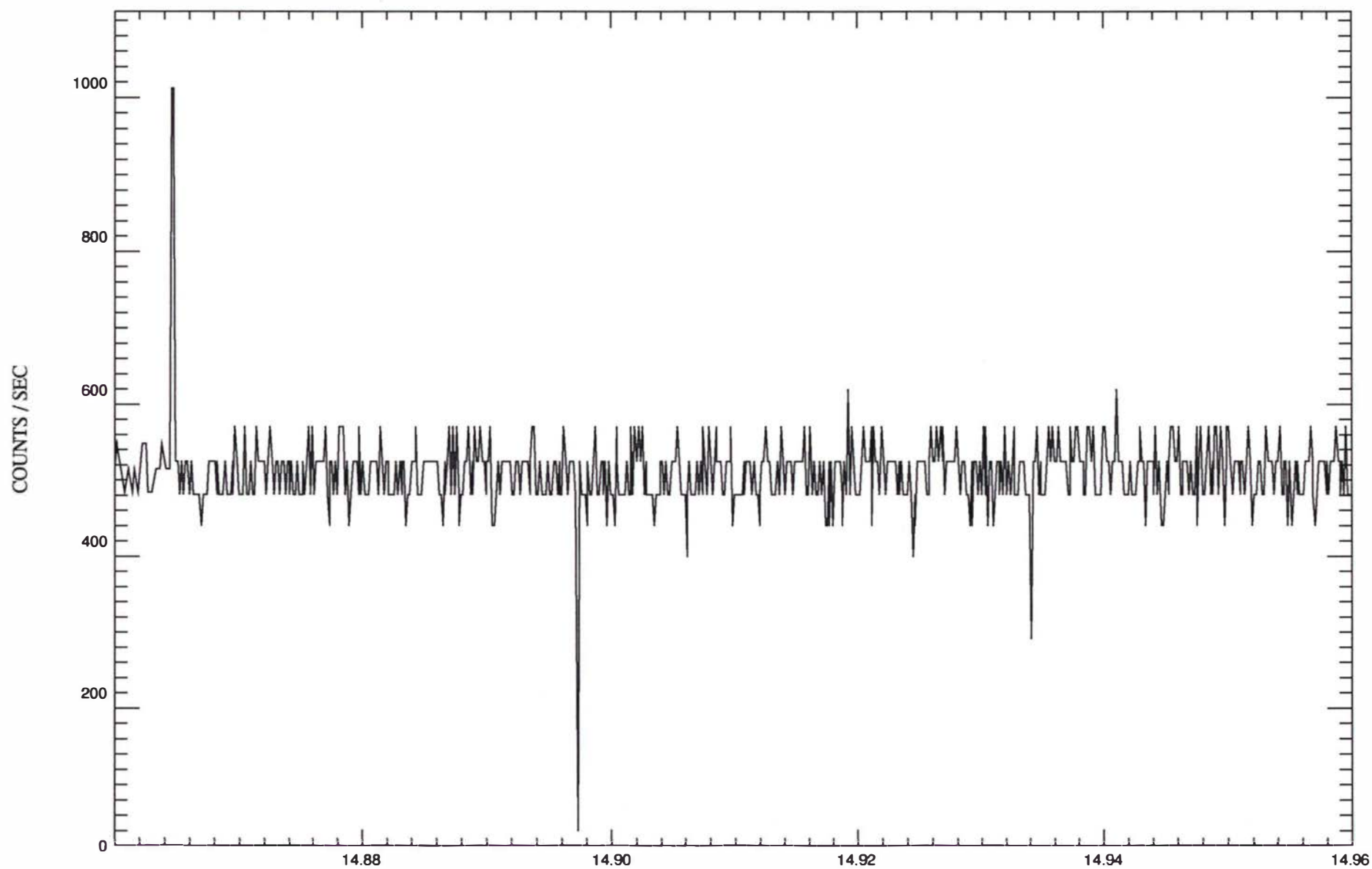
HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 14 at UT=14.908053071764 h=53668.991 s 14:54:28.991

1/3/96



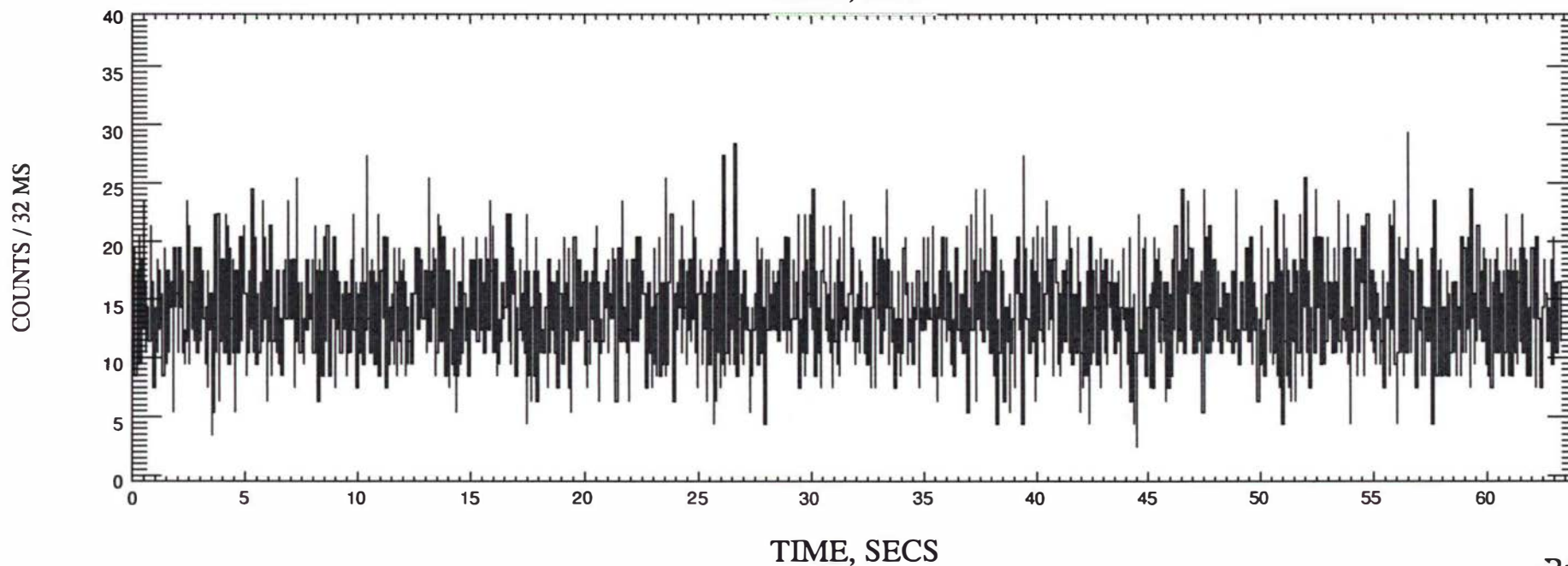
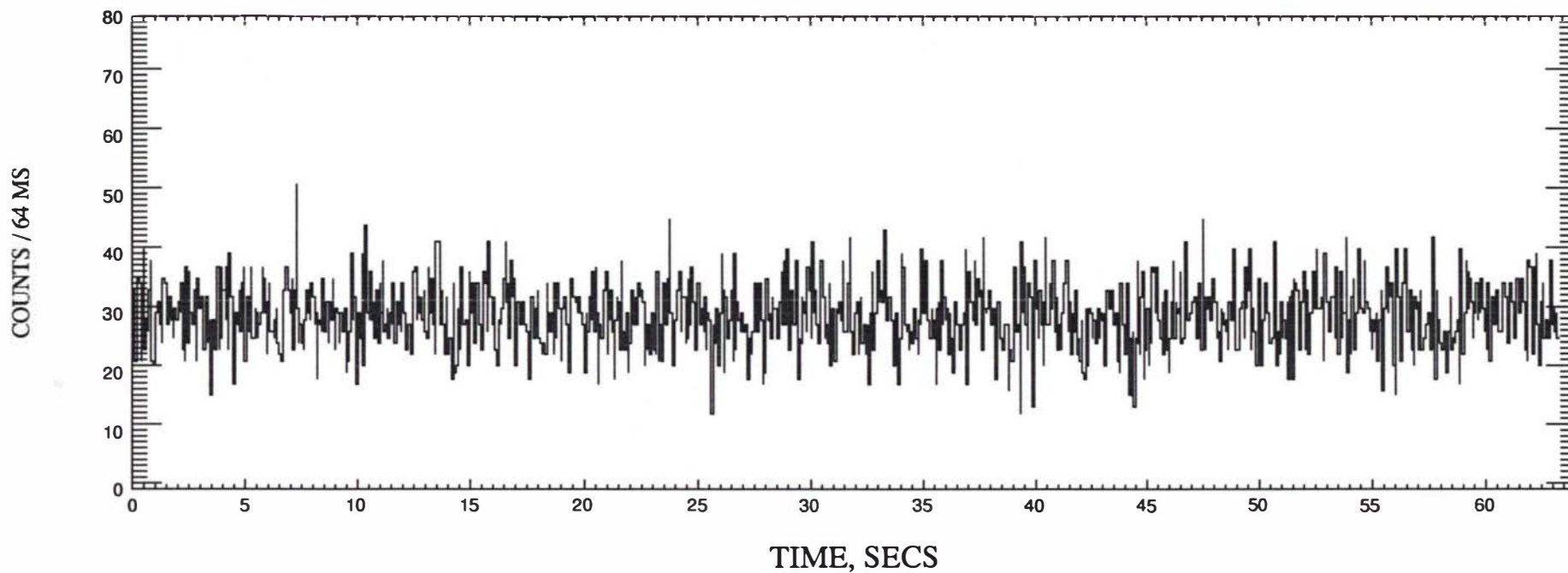
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



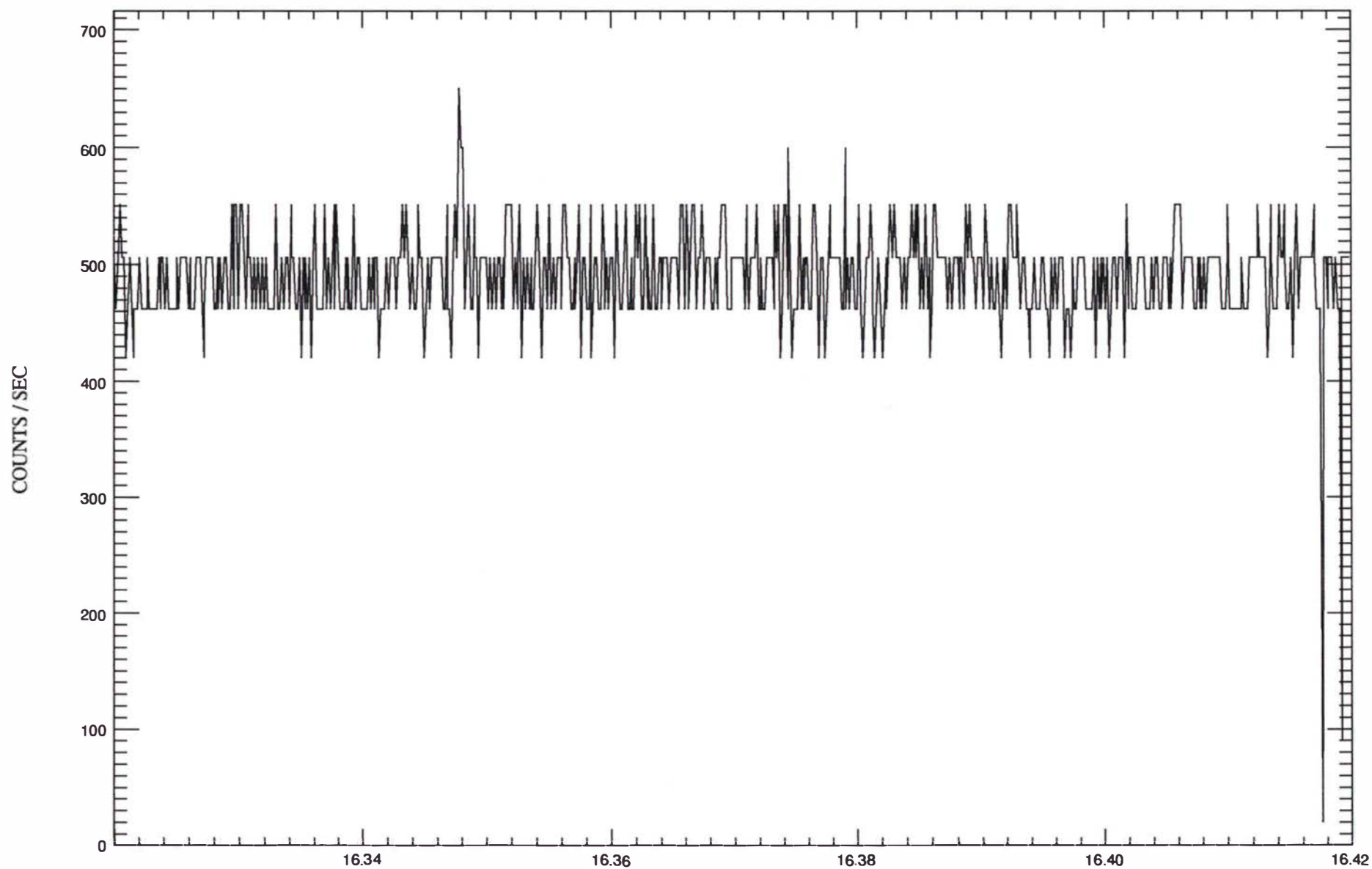
HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 15 at UT=16.371963492499 h=58939.069 s 16:22:19.069

1/3/96



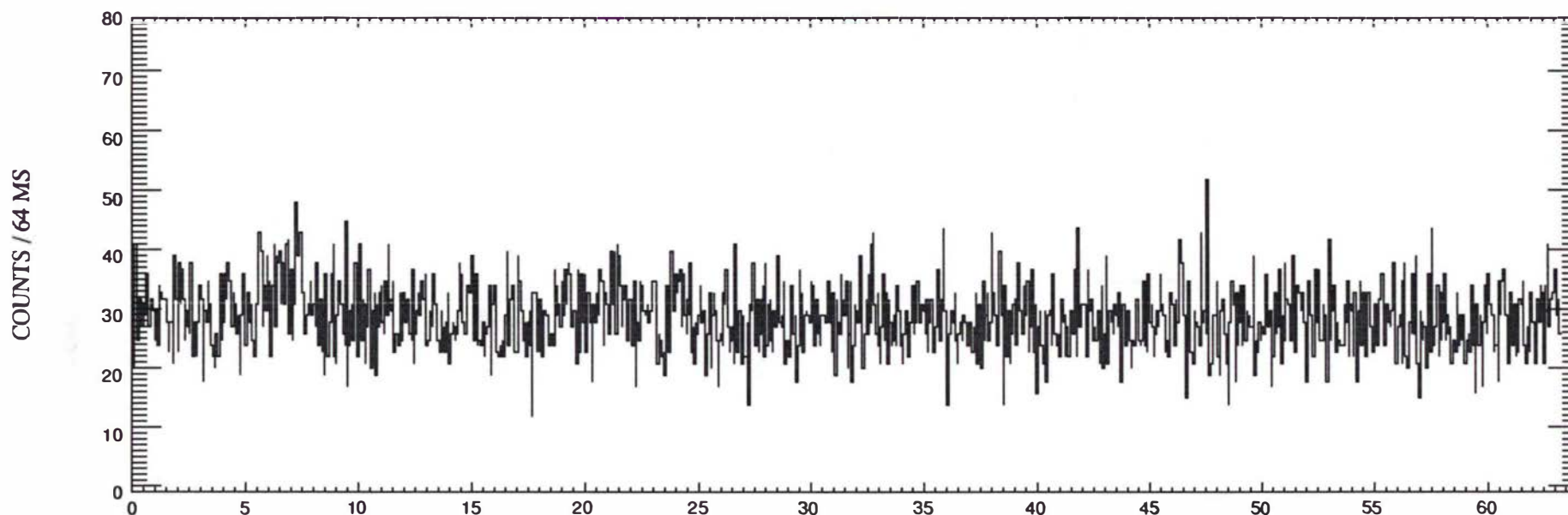
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

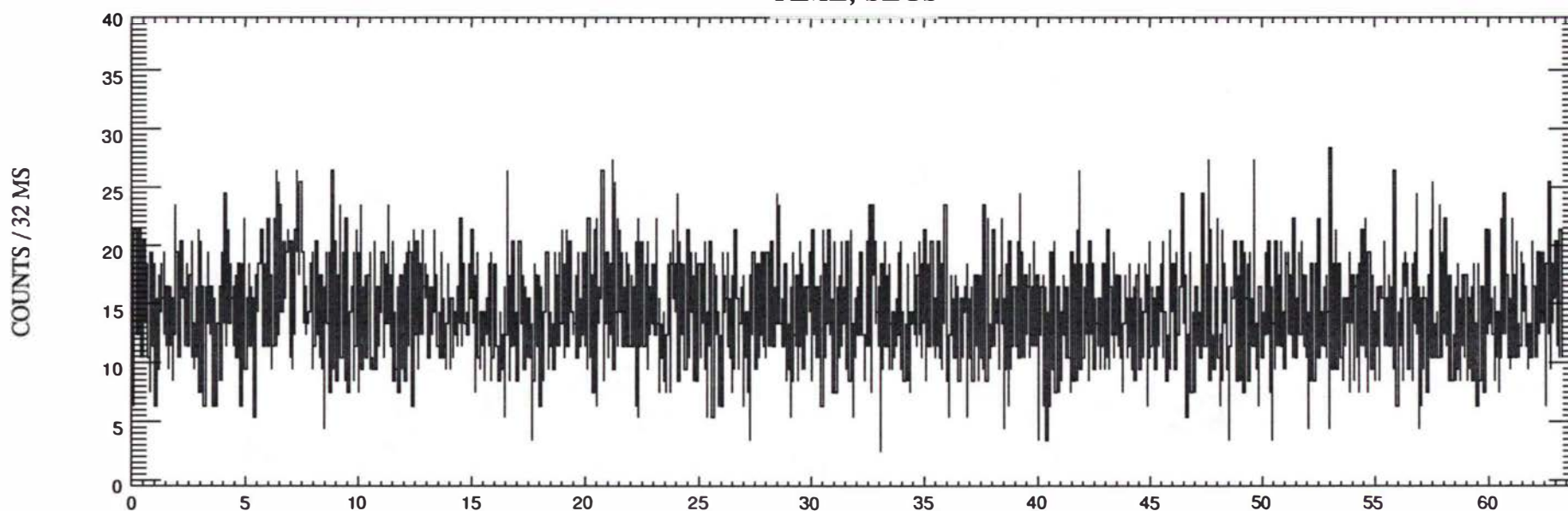


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 0 at UT=17.714409099155 h=63771.873 s 17:42:51.873

1/3/96



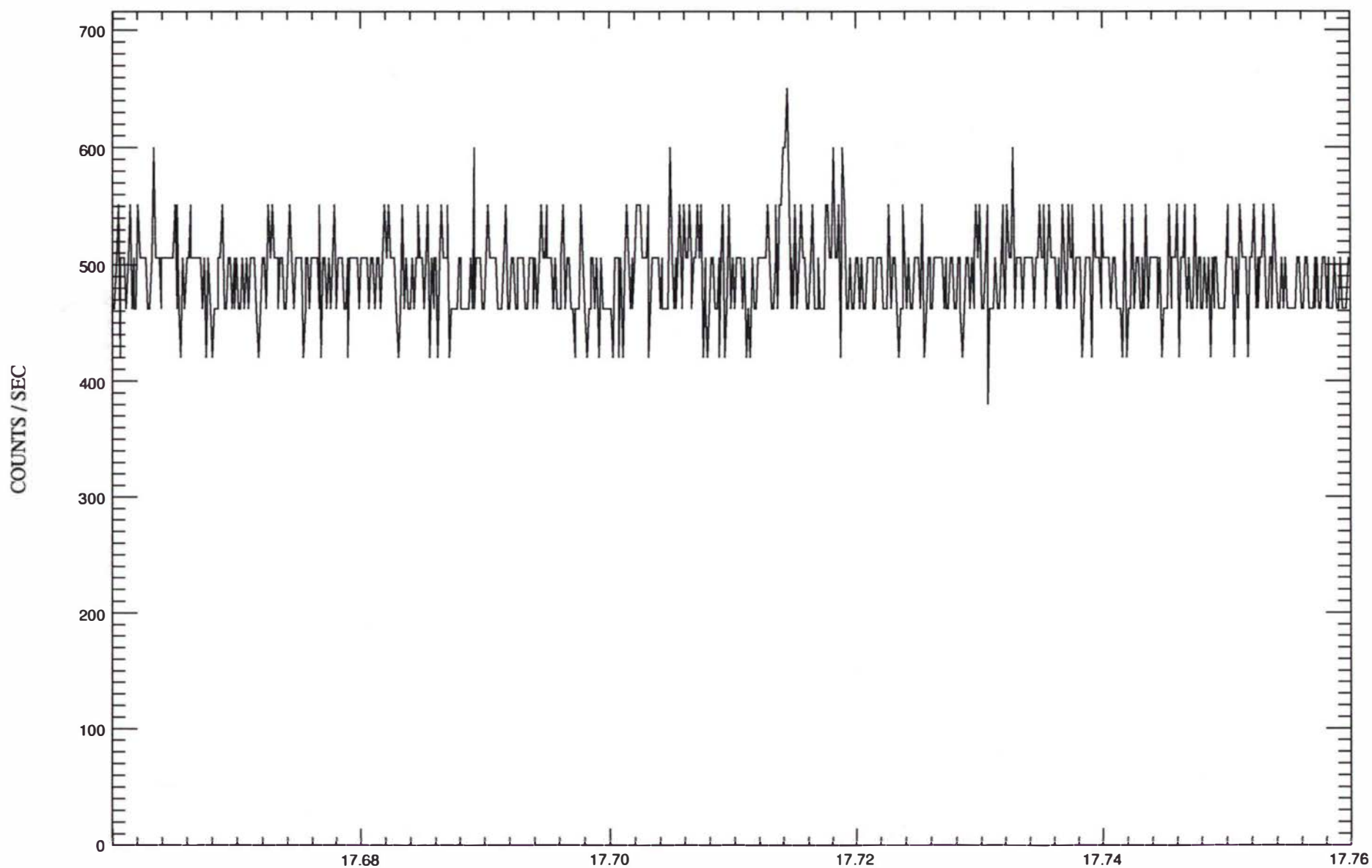
TIME, SECS



TIME, SECS

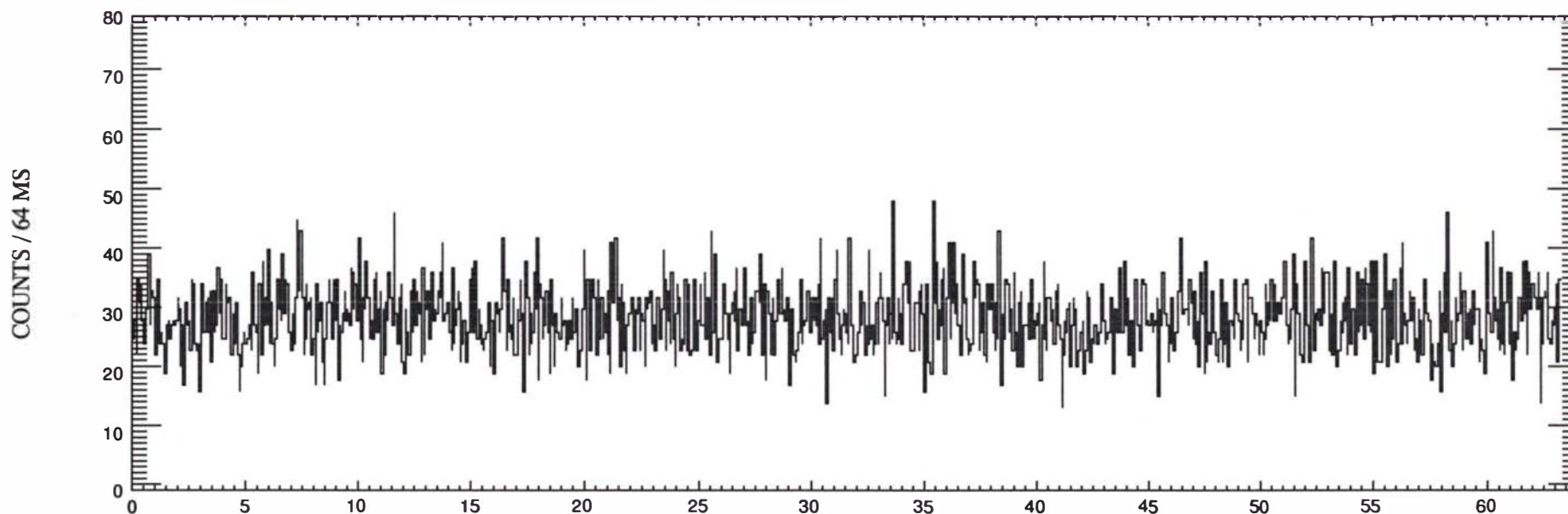
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

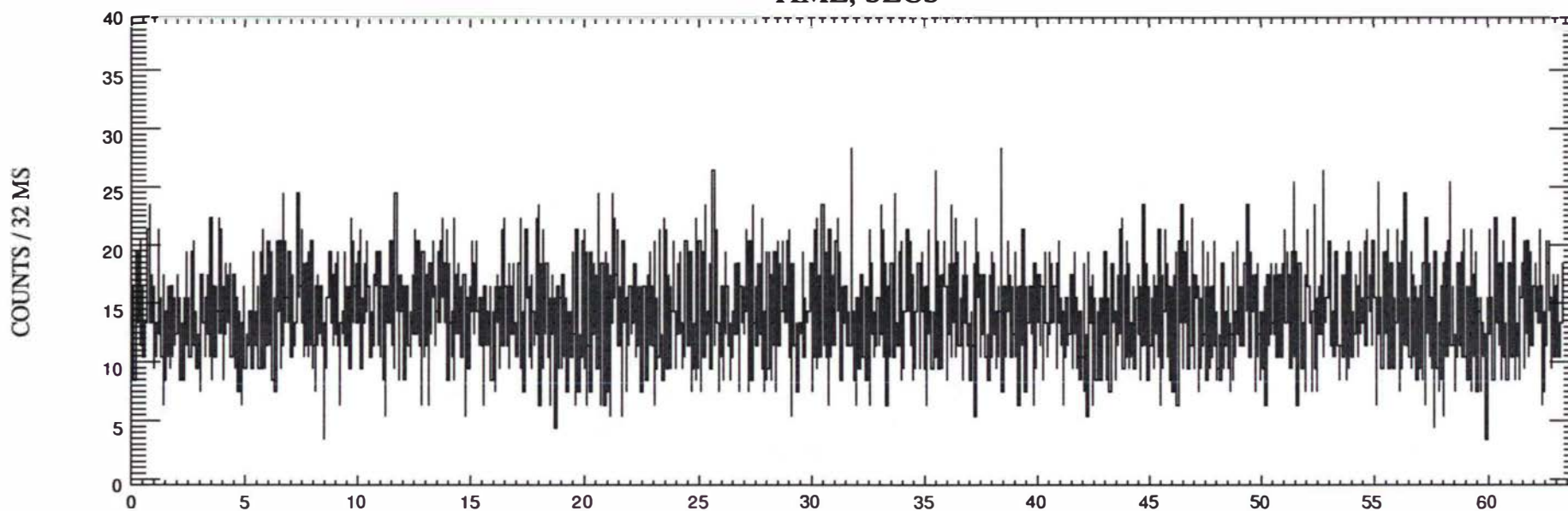


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 1 at UT=19.100511372884 h=68761.841 s 19:06:01.841

1/3/96



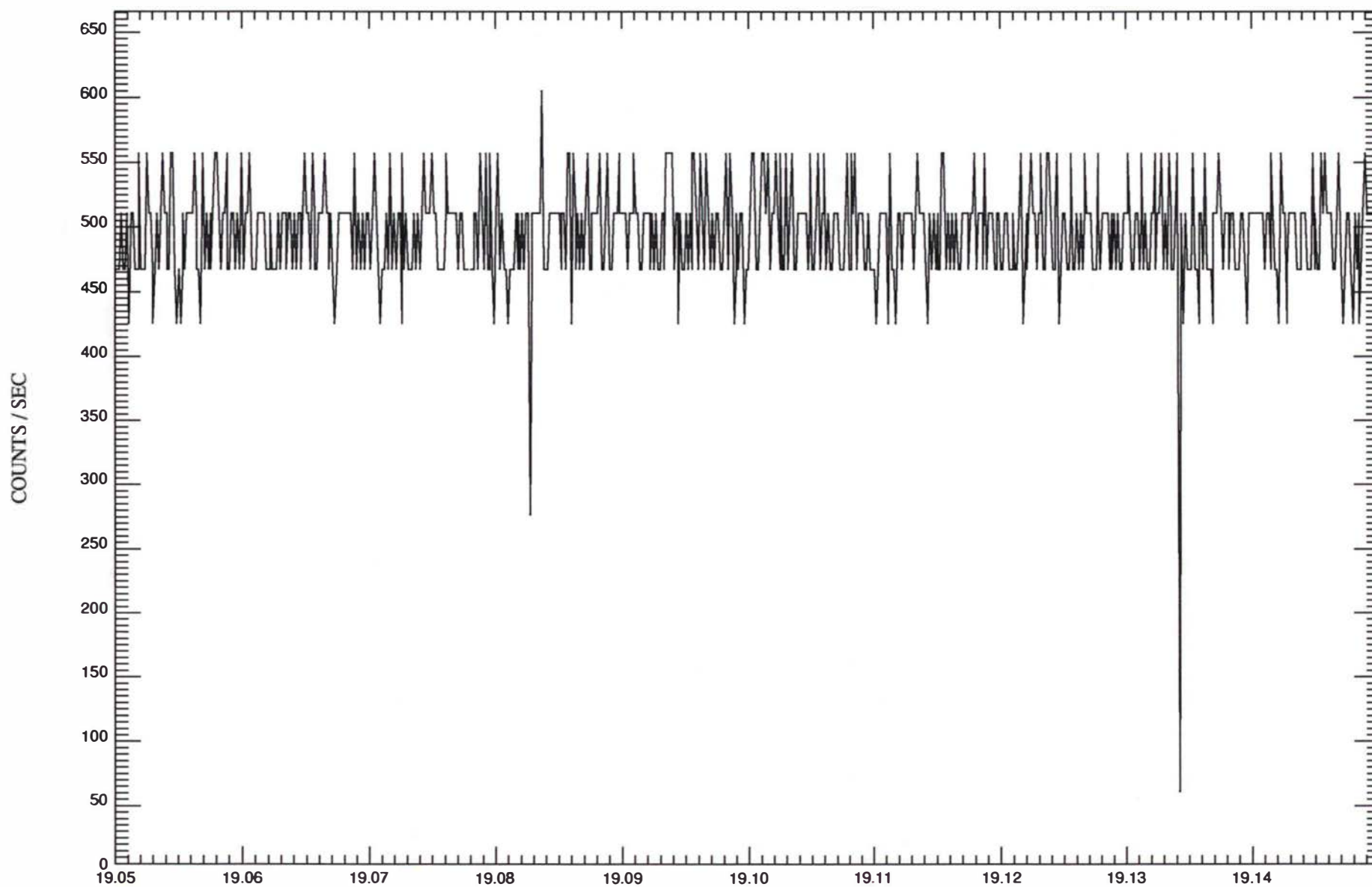
TIME, SECS



TIME, SECS

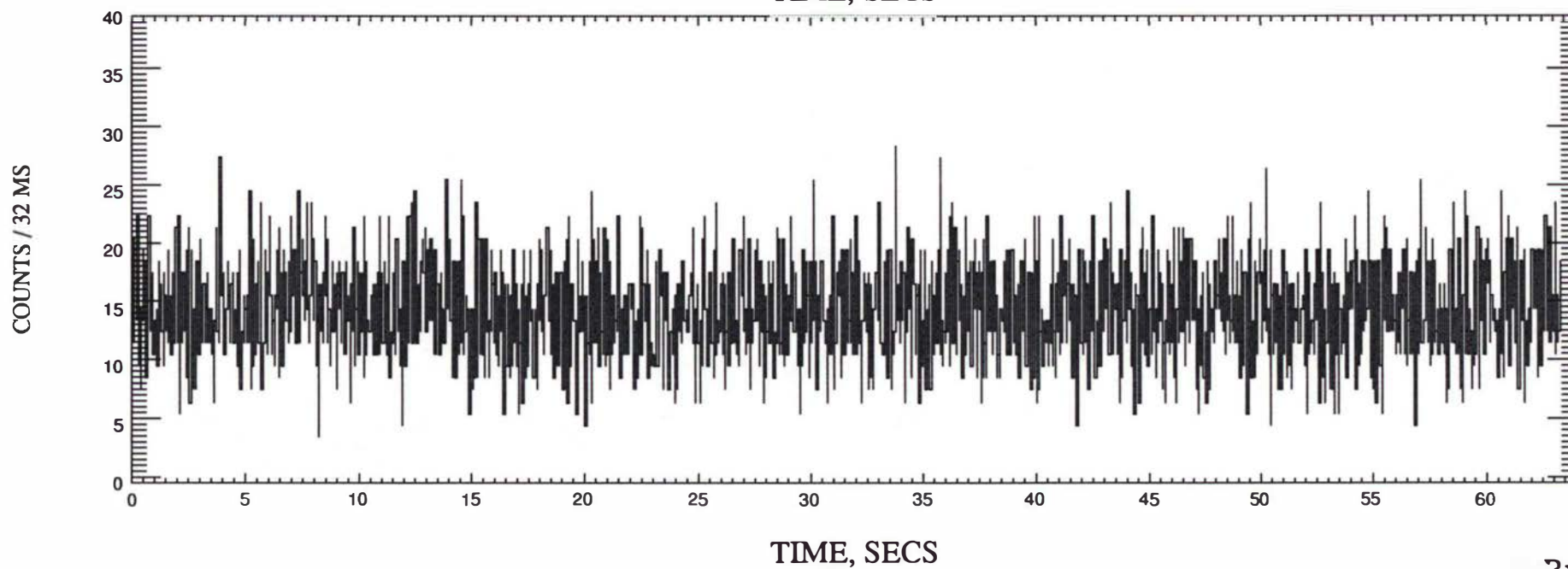
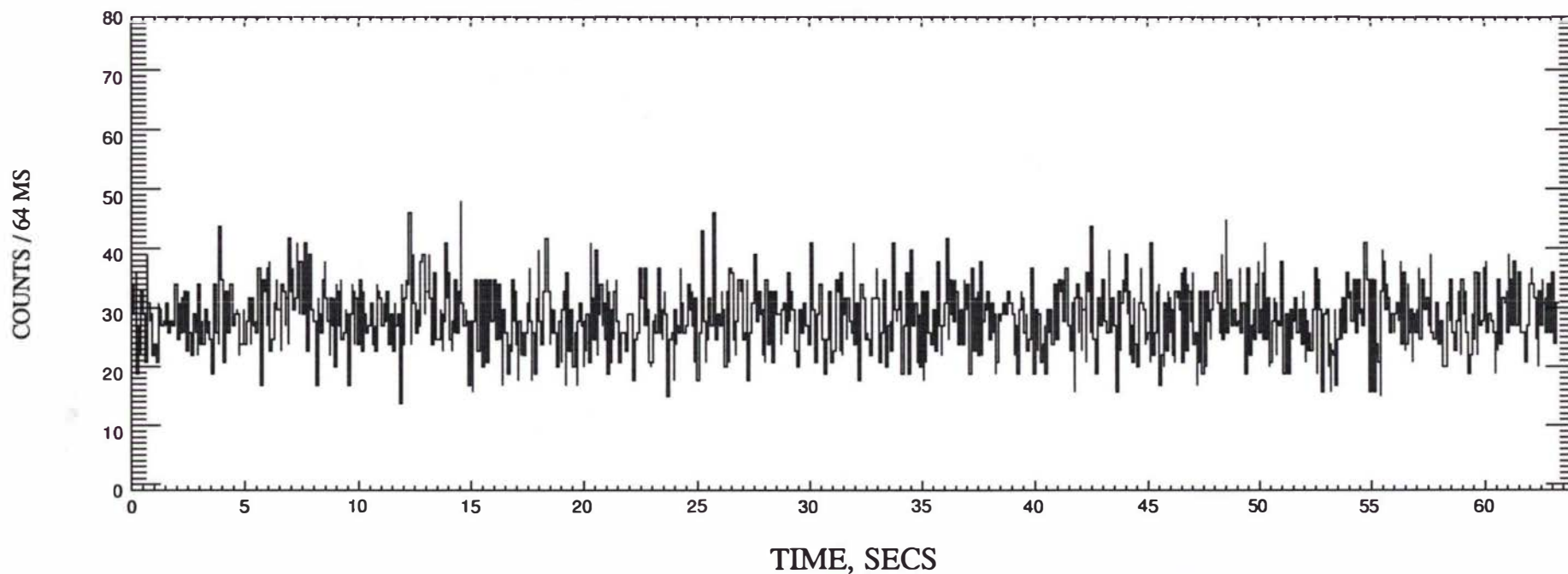
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



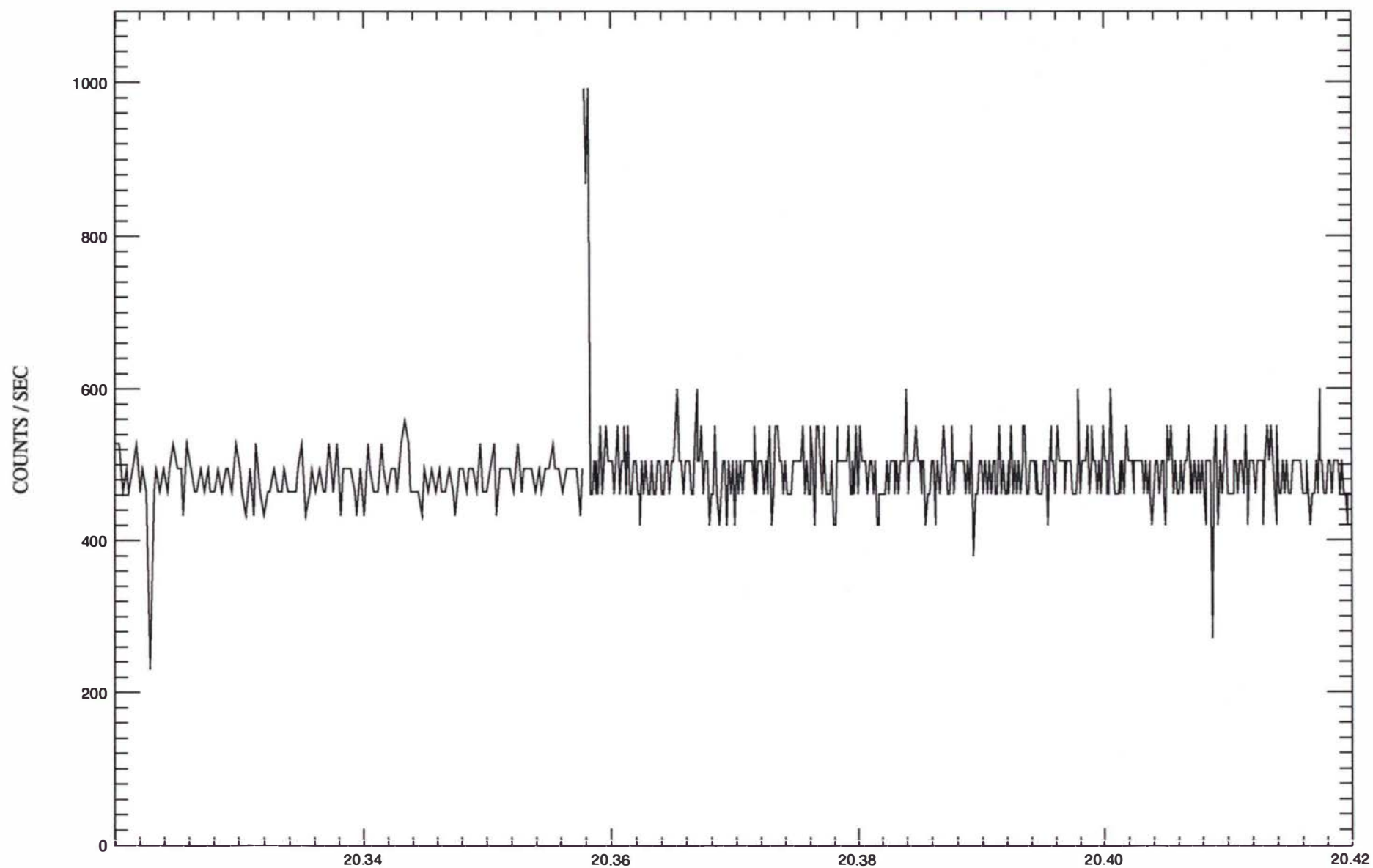
HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 2 at UT=20.365426597595 h=73315.536 s 20:21:55.536

1/3/96



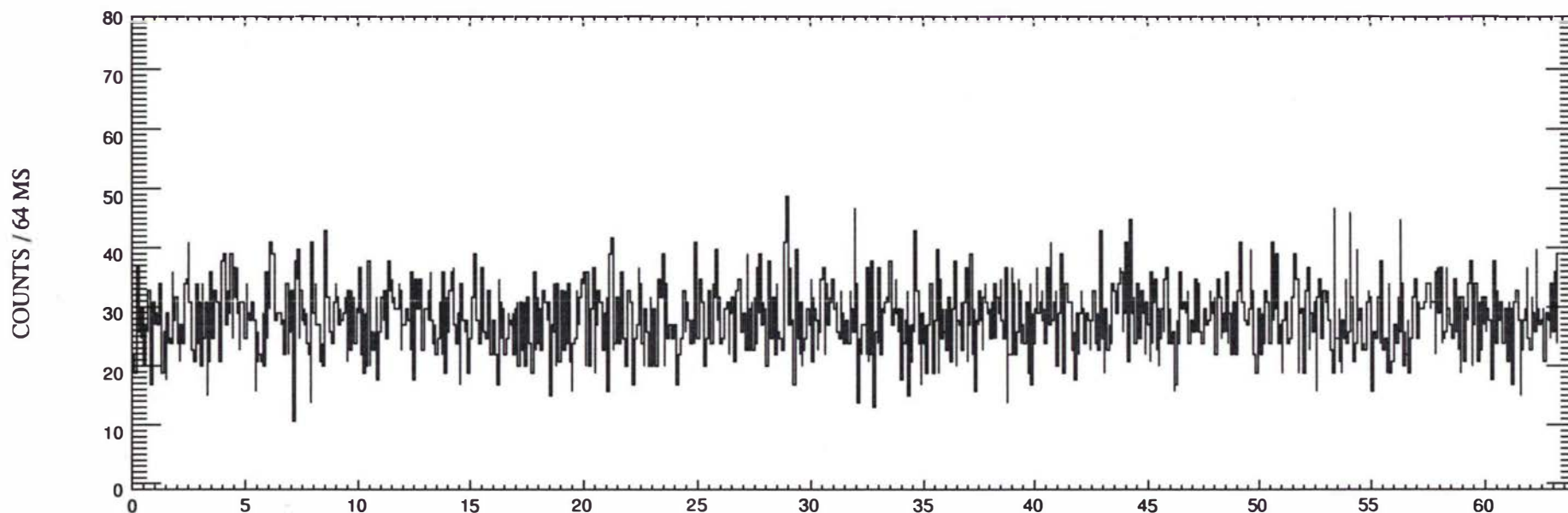
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

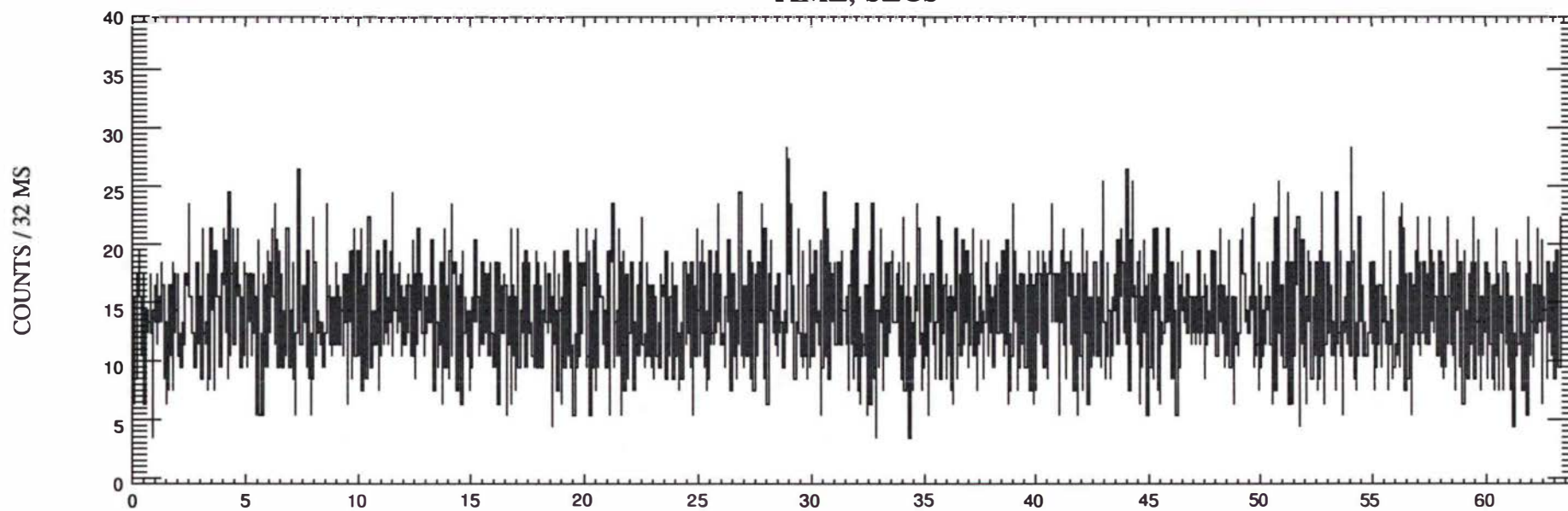


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 3 at UT=21.897672521803 h=78831.621 s 21:53:51.621

1/3/96



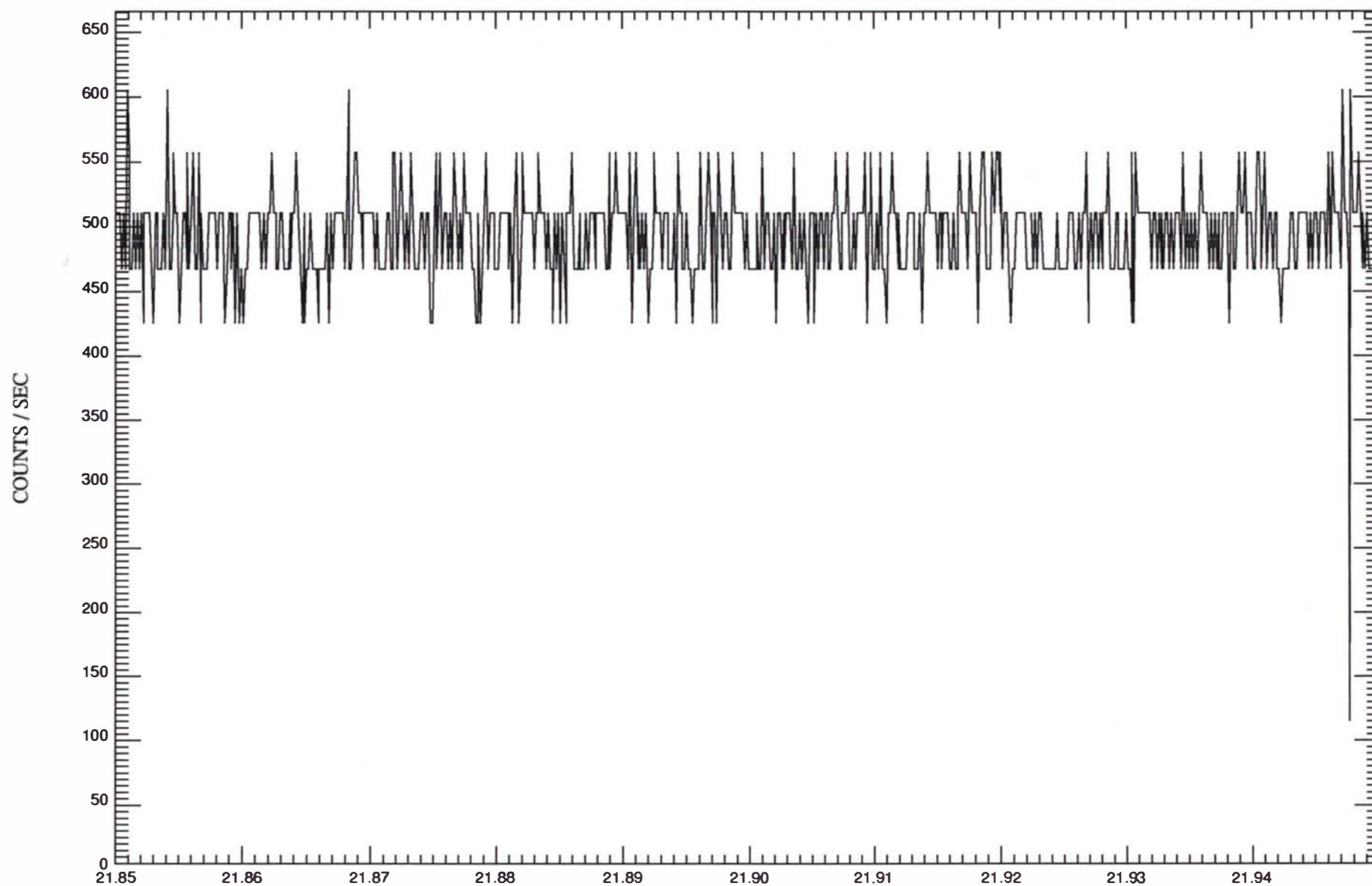
TIME, SECS



TIME, SECS

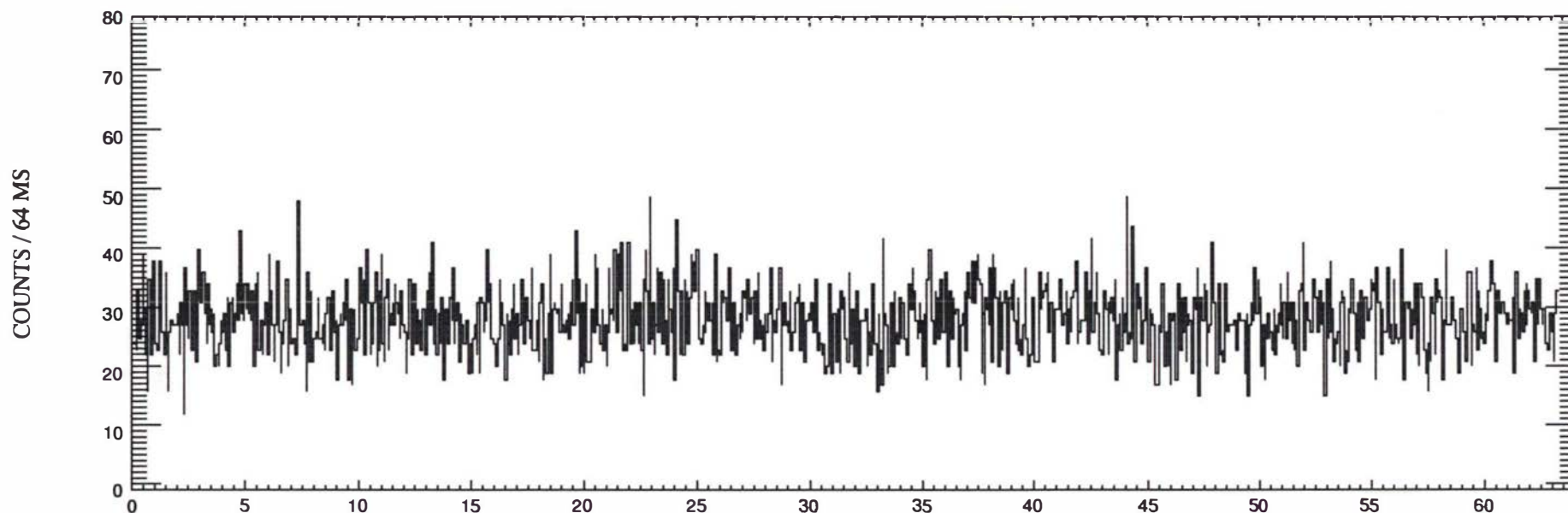
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96

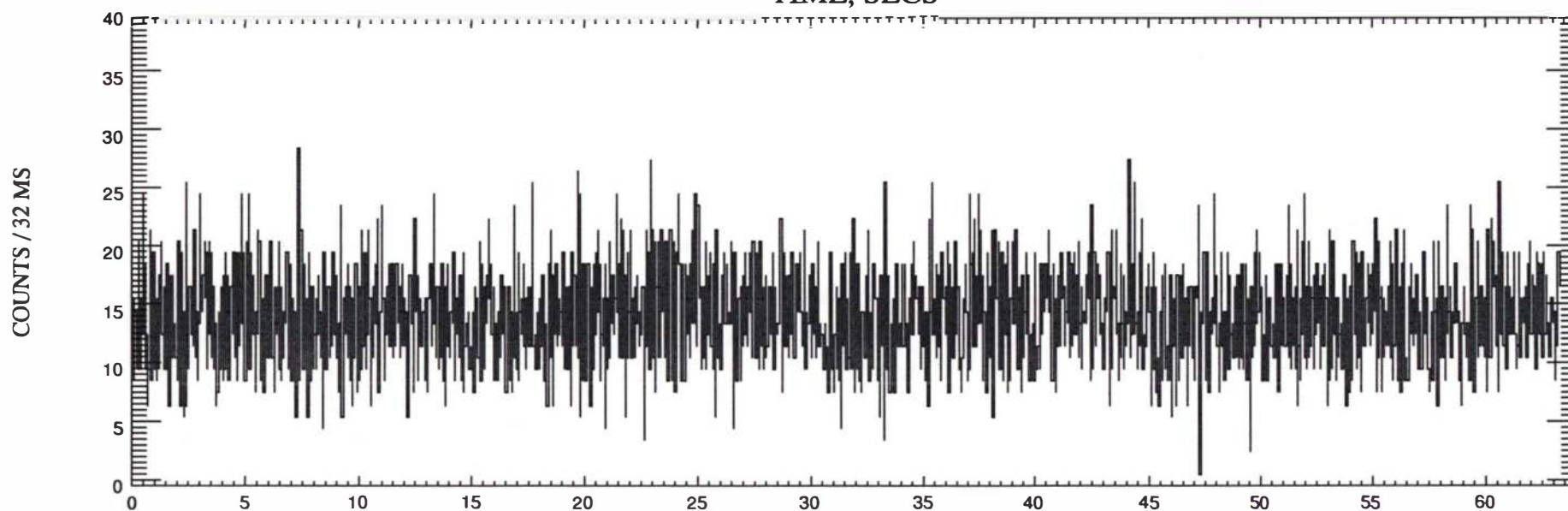


HUS 2A TRIGGERED DATA QEDR day 1, year 1996
Burst Counter 4 at UT=23.352971848382 h=84070.699 s 23:21:10.699

1/3/96



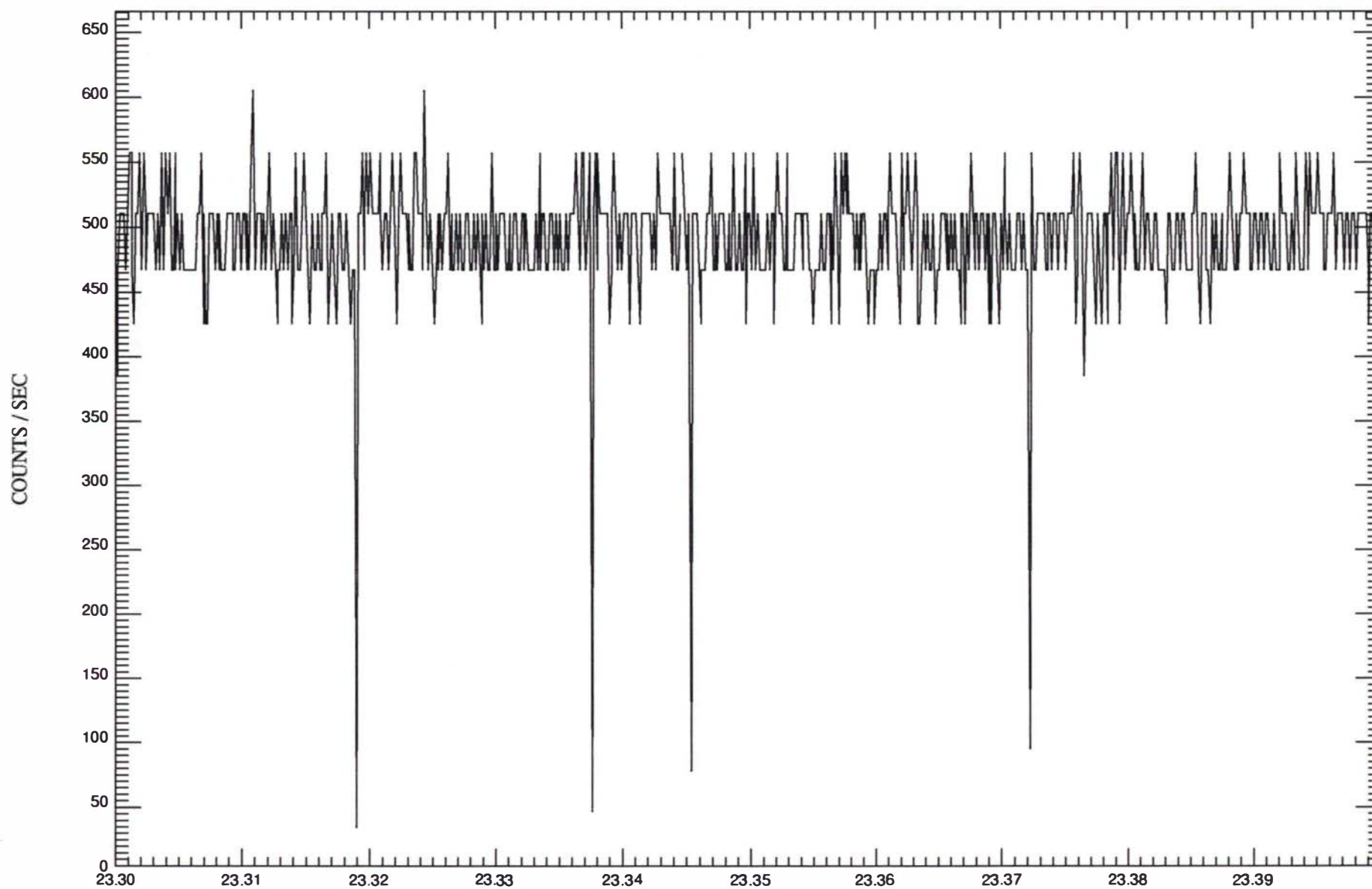
TIME, SECS



TIME, SECS

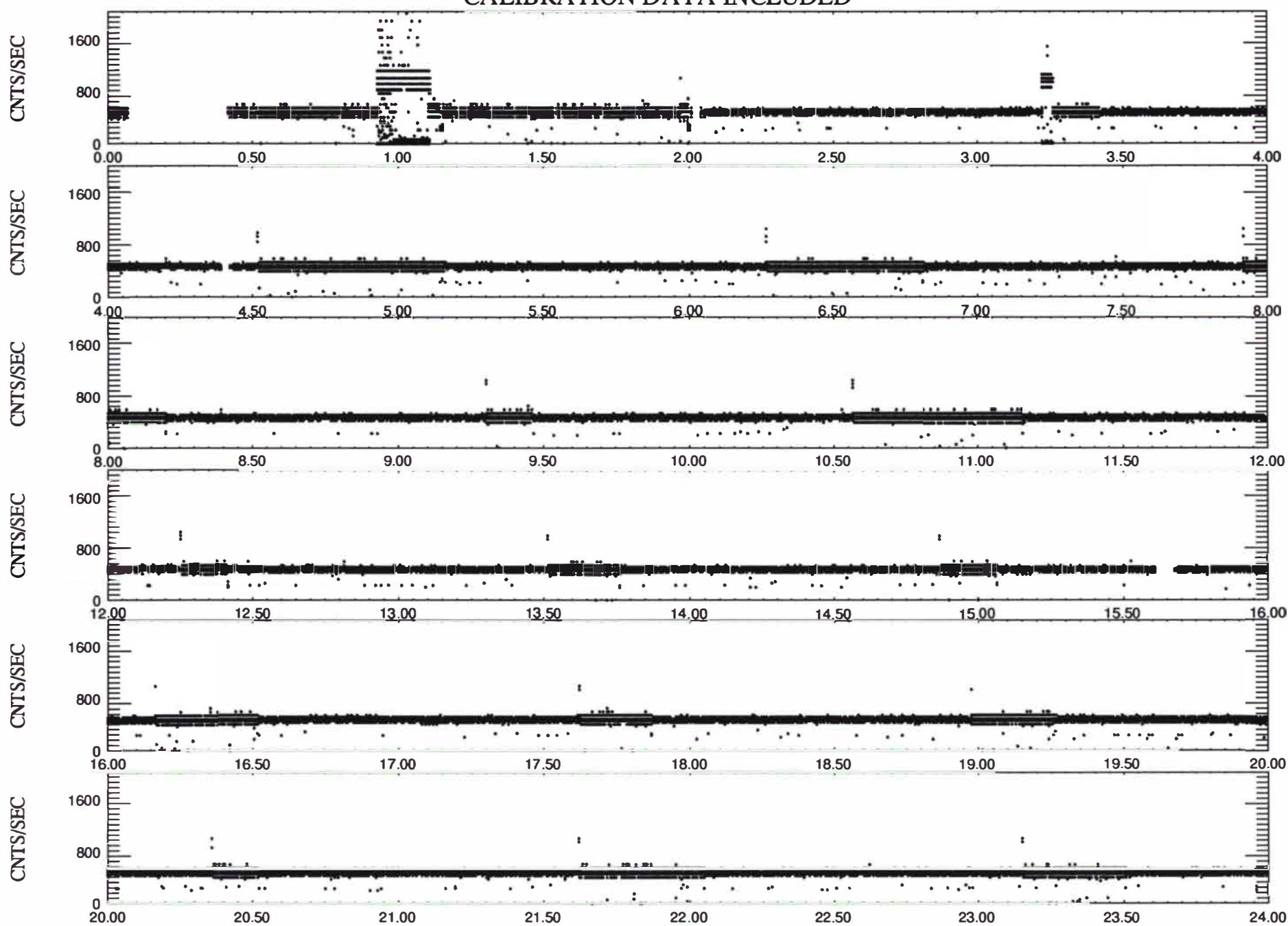
HUS 2A, MODE 1, NOT AVERAGED QEDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 1, year 1996 to day 1, year 1996
CALIBRATION DATA INCLUDED

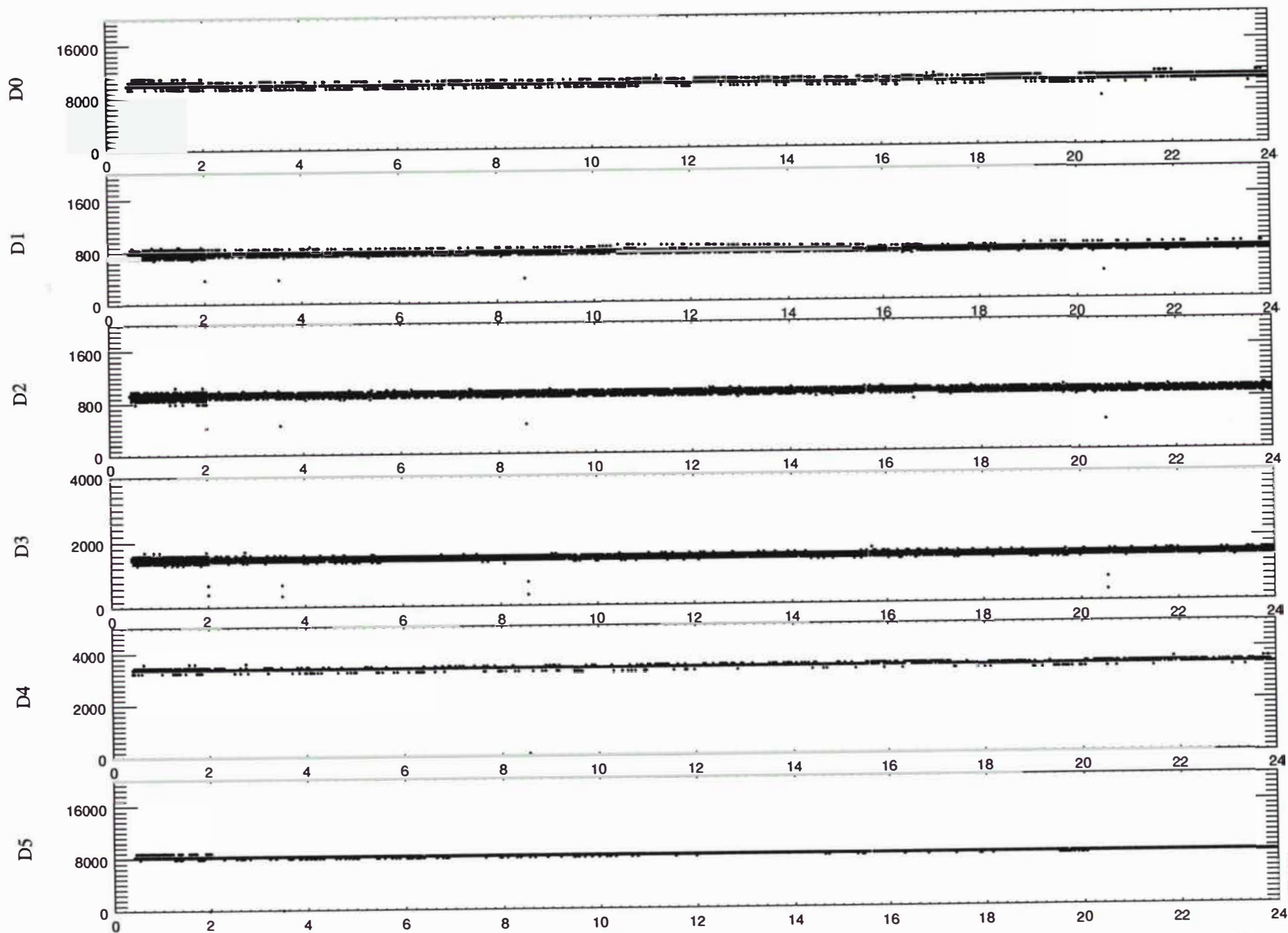
4/30/96



UNIV. CAL TIME

HUS 2B COUNTS / SEC QEDR day 1, year 1996 to day 1, year 1996

1/3/96



UNIV' 'AL TIME

From springer@pop.jpl.nasa.gov Tue Feb 25 10:31 PST 1997
X-Sender: springer@pop.jpl.nasa.gov
Date: Tue, 25 Feb 1997 10:31:09 -0800
To: khurley@sunspot.ssl.berkeley.edu
From: Joe Springer <springer@pop.jpl.nasa.gov>
Subject: Time Tag Error Final Report
Cc: Ed.B.Massey@jpl.nasa.gov, Eugene.G.Herrington@jpl.nasa.gov
Mime-Version: 1.0

Kevin,

We have the final results of our examination of time tag accuracy at the 950-odd data points you specified. The results are quite favorable in the sense that, statistically speaking, I would have expected more 'hits'.

Roger Williams established some 'ground rules' for this task. Those data points listed as 'ULYSSES RT' were to be checked for a period extending from ten minutes before the point to an hour after the point. Those listed as 'ULYSSES' were to be checked for a period extending ten minutes before and ten minutes after the point.

Within those bounds, there were 2 bad points. We typically checked a much longer period than required and found 6 additional errors, each well outside of the required period but 'in the neighborhood'.

It is interesting to note that ALL of the identified timing errors were the result of mis-timed tape recorder carryover data; none of the 'off by one minor frame' timing errors were found to coincide with these data points.

Regards,

Joe

The results are as follows:

ERRORS WITHIN YOUR BOUNDS:

	Your time Designation (mm/dd/yy)	Error	Magnitude of error
1.	9/26/91 68462.643	32 frames wrong 13 min 24 seconds after data pt.	64 SCLK counts 128 seconds high
2.	9/18/92 36388.026	32 frames wrong 39 min after data point	10176 SCLK ~5 hr 39 min low

OTHER ERRORS 'in the neighborhood':

3.	7/17/91 21785.887	32 frames wrong 1 hour after data point	64 SCLK counts 128 seconds high
----	-------------------	--	------------------------------------

4.	9/25/92	77152.249	32 frames wrong between	4940 SCLK counts
	and	84728.363	2 data points but out of	~3 hr 6 min low
			range	
	12/8/95	85564.438	32 frames wrong 47 min	52672 SCLK
	counts		before data point	~29 hr 15 min
				low
6.	12/13/95	78120.000	32 frames wrong between	53760 SCLK
	counts		2 data points but out of	~29 hr 52 min
	and	84420.000	range	
				low
7.	1/1/96	4320.000	32 frames wrong 11 minutes	99200 SCLK
	counts		before data point	~27 hr 33 min low
8.	1/2/96	50472.000	1 frame wrong 33 minutes	123328 SCLK
	counts		after data point	~34 hr 15 min low

1996:

~001.02:45 SCET	should be	~364.23:12 SCET
~002.14:35 SCET	should be	~001.04:22 SCET
~029.19:35 SCET	should be	~028.13:43 SCET
~033.19:10 SCET	should be	~032.13:18 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~048.17:29 SCET	should be	~047.13:45 SCET
~054.08:59 SCET	should be	~053.11:46 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~039.18:34 SCET	should be	~038.12:14 SCET

We see data gaps for each of the correct times, so it looks like your theory of AMMOS mis-correcting times when there is carry-over data on the tape is correct.

I hope this is enough information. I would have to do a bit more calculation to get the approximate ERTs. Let me know if you want them.

Best regards,

Nigel

From ulsdtmt@jplsp.DNET.NASA.GOV Mon Mar 18 17:13 PST 1996
From: ulsdtmt@jplsp.DNET.NASA.GOV
Date: Mon, 18 Mar 96 20:13:12 -0500
To: "khurley@sunspot.ssl.berkeley.edu"@east.DNET.NASA.GOV (SENT TO @LIST1)
Subject: Misplaced Major Frames in EDRs

Greetings,

We have identified an operations technique that produces data that will be improperly time tagged by the MGDS (telemetry system). Instances of EDR errors (major frames out of order) have been found in the CDROM archival products for December 1995 and January 1996. Errors will also be found in the still to be shipped February 1996 data.

When major frames are recorded but not transmitted during the next track, but are eventually downlinked with data from a succeeding day, the embedded SCLKs are 'assumed' to be incorrect by the frame syncer and are re-tagged with SCETs and SCLKs matching the adjacent (but newer) data.

For each major frame processed in this manner, a gap will exist, representing the time the data was actually acquired, and a major frame or realtime data, representing the time period the data now errently represents, will be replaced by the misplaced playback data.

Yes. Confusing. See the attached memo detailing the times involved.

Approximately 17 such instances are known to have occured. The total time involved is about twenty minutes. Because the data loss is small and the cost of reprocessing would be so large, the Project has determined that it would be imprudent to reprocess.

For your information, however, we included a memo from Nigel Angold which itemizes each instance.

We thank Toni Galvin and Nigel for identifying the problem and assisting in the diagnosis.

Regards,

Joe

To: <ulsdtmt@jplsp.jpl.nasa.gov>
From: Nigel Angold <nangold@jplsp2.jpl.nasa.gov>
Subject: Mis-corrected S/C clocks / SCETs
Cc: chris.leech@jpl.nasa.gov

I have looked at our recent tape recorder usage and predict that you will see major frames with mis-corrected spacecraft clocks / SCETs at the following times (give or take a few minutes):

1995:

~342.22:59 SCET	should be	~341.17:47 SCET
~347.22:39 SCET	should be	~346.16:46 SCET
~350.21:54 SCET	should be	~349.16:22 SCET
~355.22:14 SCET	should be	~354.15:42 SCET
~359.14:04 SCET	should be	~359.05:36 SCET
~360.14:59 SCET	should be	~359.00:20 SCET
~362.20:55 SCET	should be	~361.16:06 SCET

From cline@apache.gsfc.nasa.gov Wed Nov 20 14:32 PST 1996
 Date: Wed, 20 Nov 1996 14:32:12 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@apache.gsfc.nasa.gov (T L Cline)
 Subject: Search for (Konus mini-network) 3-sc triggers

Dear Kevin,

I'm sorry to report that the May 1996 mail from you was a list only to January 1996. If you have another later list, don't go to the trouble of plowing thru all this; I'll do it if you can e-mail/fax something. Thanks.

 SEARCH FOR 3-SC TRIGGERS ONLY -- Konus-W / Ulysses / BATSE or Konus-A

DATE	Konus-W Sensor (UT)	Max counts G1 G2 G3	N(S1)/N(S2) in G2	Duration T<T0 T>T0	Trigger # KW# BATSE/KA
94 11 21	62700.945 S1	1652 1656 300	21	3 50	6 3290
94 11 26	44557.952 S1	860 1430 330	4.2	40 45	8 3298
95 2 8	07824.432 S2	1144 1824 670	0.02	1 60	45 3408
95 2 10	08424.148 S1	1350 3900 700	3.2	0.04 0.16	47 3410
95 2 11	08697.749 S2	2750 11630 6560	<0.06	0.03 0.14	48 3412
95 2 11	72469.074 S1	1170 1570 460	60	12 60	50 3415
95 3 25	25841.574 S2	345 1460 1570	0.2	1 230	63 3480
95 3 25	63392.815 S1	1320 2710 900	3.2	1 43	64 3481
95 4 3	47985.179 S1	1030 2840 800	1.0	1 15	71 3491
95 4 3	84828.194 S2	4650 10000 4700	0.06	0.5 60	72 3492
95 4 25	00923.718 S1	1200 2780 1820	4.2	0.5 65	86 3523
95 5 3	66971.838 S1	1140 4200 3140	1.9	0.2 115	88 3537
95 5 13	81706.917 S1	720 1360 520	10	1 30	93 3571
95 7 1	12762.114 S1	340 1400 580	1.3	1 30	116 3657
95 7 1	23737.604 S2	570 1600 700	0.05	1 11	117 3658
95 8 4	07135.704 S2	3000 6650 3340	<0.03	0.2 3.5	131 3734
95 8 18	05065.640 S2	1960 4100 1350	0.05	60 50	137 3765
95 8 22	13751.048 S1	6070 12000 3770	9	0.4 60	140 3767
95 10 16	02484.285 S1	1960 1950 560	5	0.2 7	162 3870
95 12 3	03988.180 S2	260 720 420	0.85	1 16	196 3930
95 12 27	23005.042 S1	420 1200 320	1	1 1.5	218 ??? NO
96 1 11	46524.530 S2	1130 1280 190	0.2	0.5 6	222 4312
96 1 13	56024.261 S2	500 450 50	0.3	2 36	228 ??? NO
96 1 14	44104.737 S1	4900 7200 1400	1.8	1 60	233 4368, KA

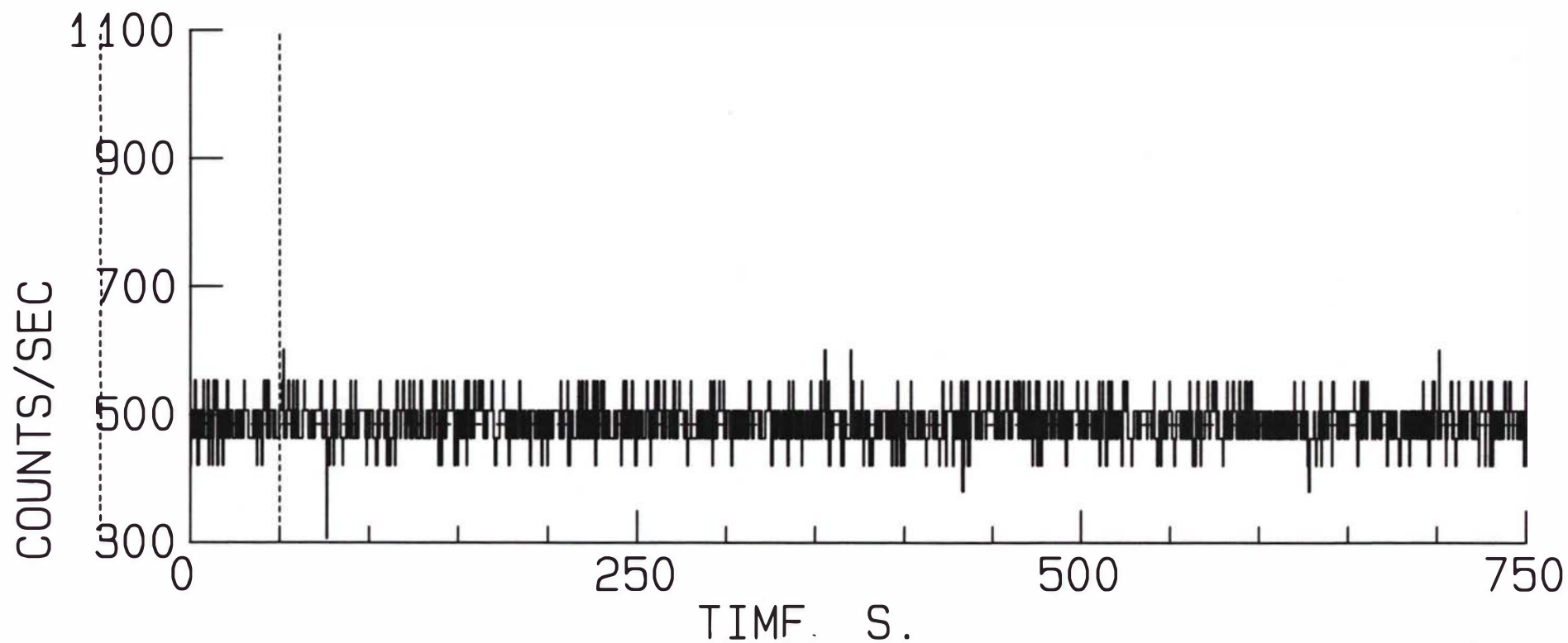
(ABOVE, ALL ARE ULYSSES TRIGGERS - ALL BUT 2 ARE CONFIRMED BATSE TRIGGERS)

 (BELOW, ULYSSES TRIGGERS INCOMPLETE, BUT KNOWN ULYSSES RI'S ARE DELETED:)

95 12 31	20231.668 S2	180 320 150	0.07	9 65	219 SEARCH	
96 1 2	11650.996 S1	140 300 80	1	1 0.2	220 NO	
96 1 19	45226.016 S2	210 460 190	0.2	6 85	237 SEARCH	
96 1 30	08756.848 S1	100 470 340	3	0.5 0.2	240 NO	4660
96 2 1	78530.582 S2	400 770 230	0.34	12 70	241 RI KA	4701
96 2 2	50750.813 S1	390 430 180	5	0.5 8	242 RI	4710
96 2 5	34499.021 S1	100 240 80	>15	7 250	243 RI	4745
96 2 6	17898.732 S1	120 520 260	1.05	1 36	244 Trig	4757
96 2 7	65075.063 S2	210 780 200	0.13	32 12	245 SEARCH	NO
96 2 10	35198.959 S2	220 550 360	<0.1	0.5 2	247 RI	4814
96 2 28	85760.241 S1	2360 7360 3350	4.3	0.1 2.5	249 Trig	NO

ULYSSES RT
2/ 1/96 10188.277 s
21- 144 keV

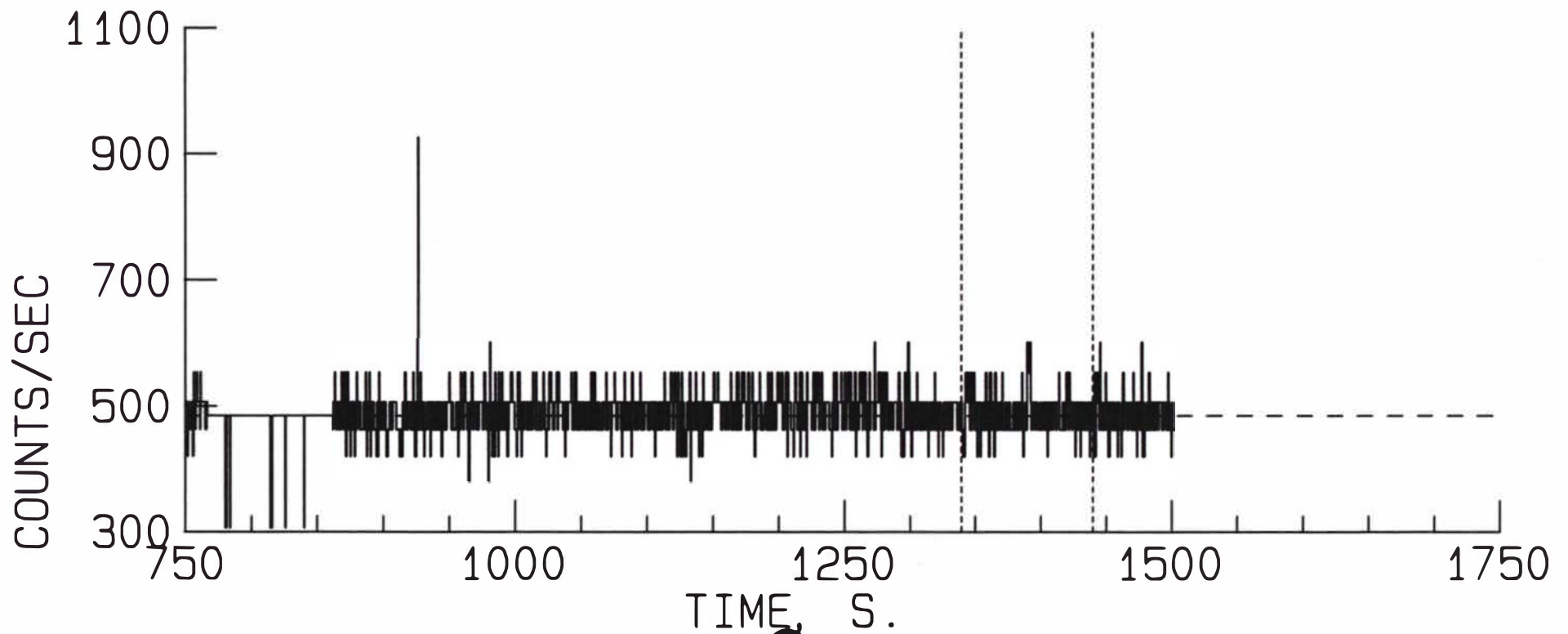
8/ 8/ 8



ULYSSES RT
2/ 1/96 10188.277 s
21- 144 keV

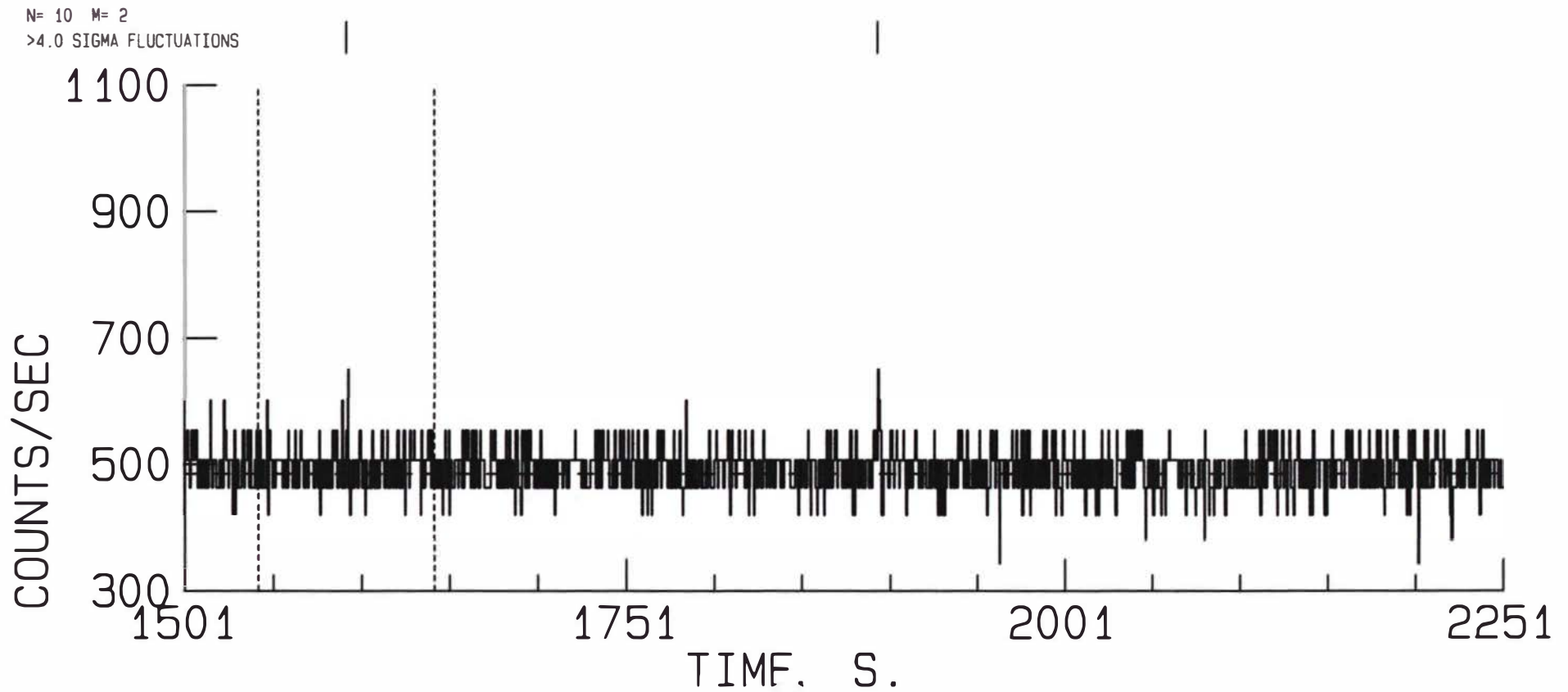
8 / 8 / 8

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



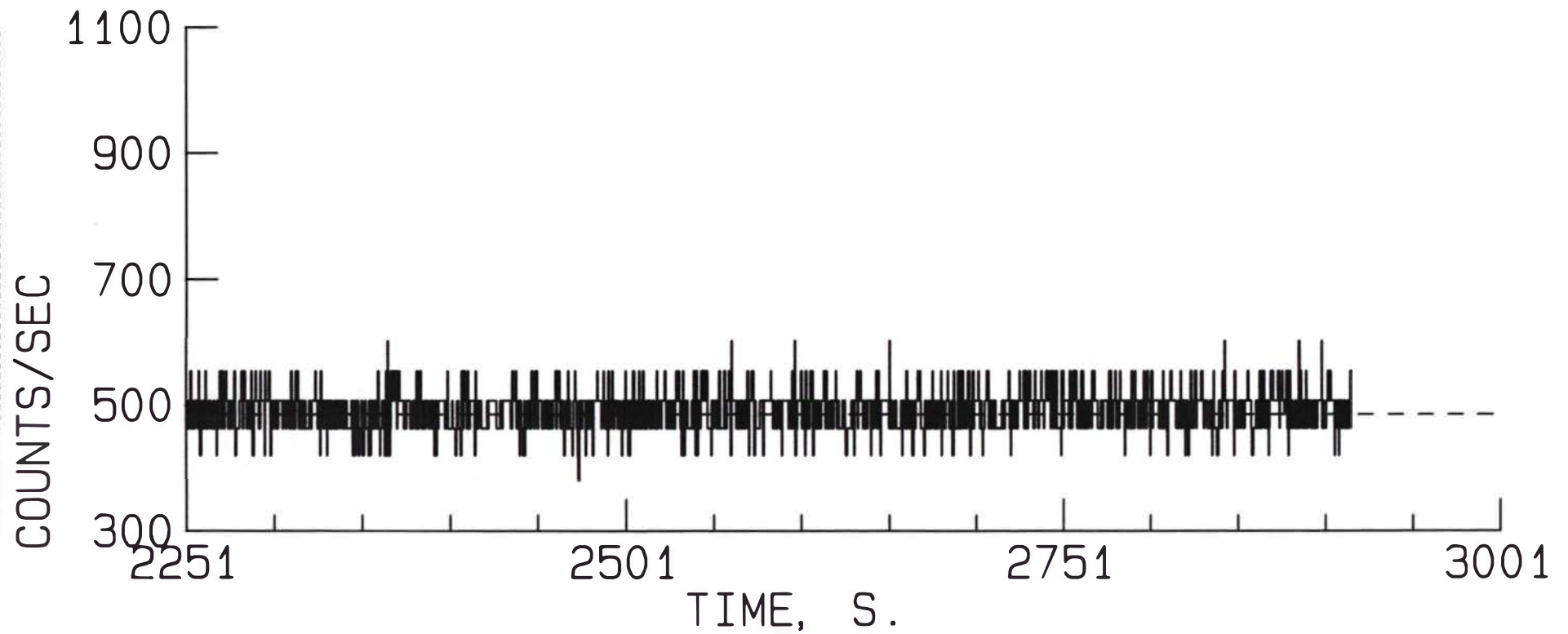
ULYSSES RT
2/ 1/96 10188.277 s
21- 144 keV

8/ 8/ 8



ULYSSES RT
2/ 1/96 10188.277 s
21- 144 keV

8/ 8/ 8



KONUS

27 / 01 / 00

ULYSSES RT

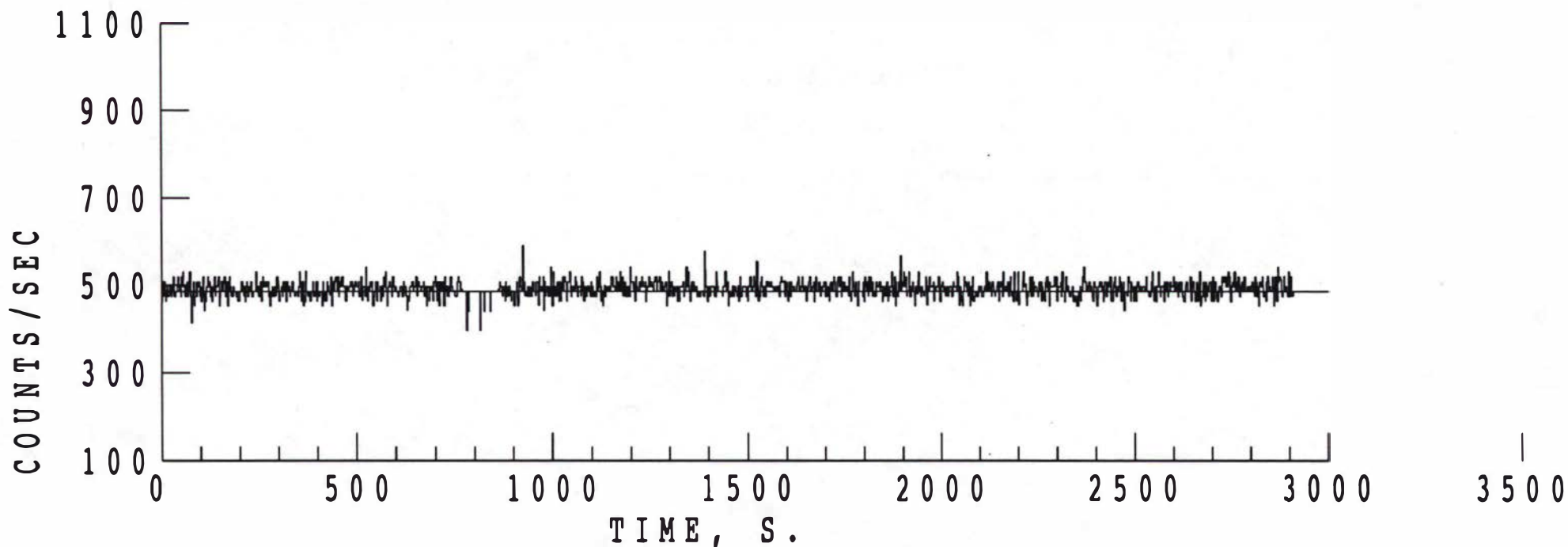
02 / 01 / 96 10188.277 s

INTERVALS REGROUPED BY 4

0 - 0 keV

W= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

W= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



K O N U S

2 2 / 2 / 9 6

U L Y S S E S R T

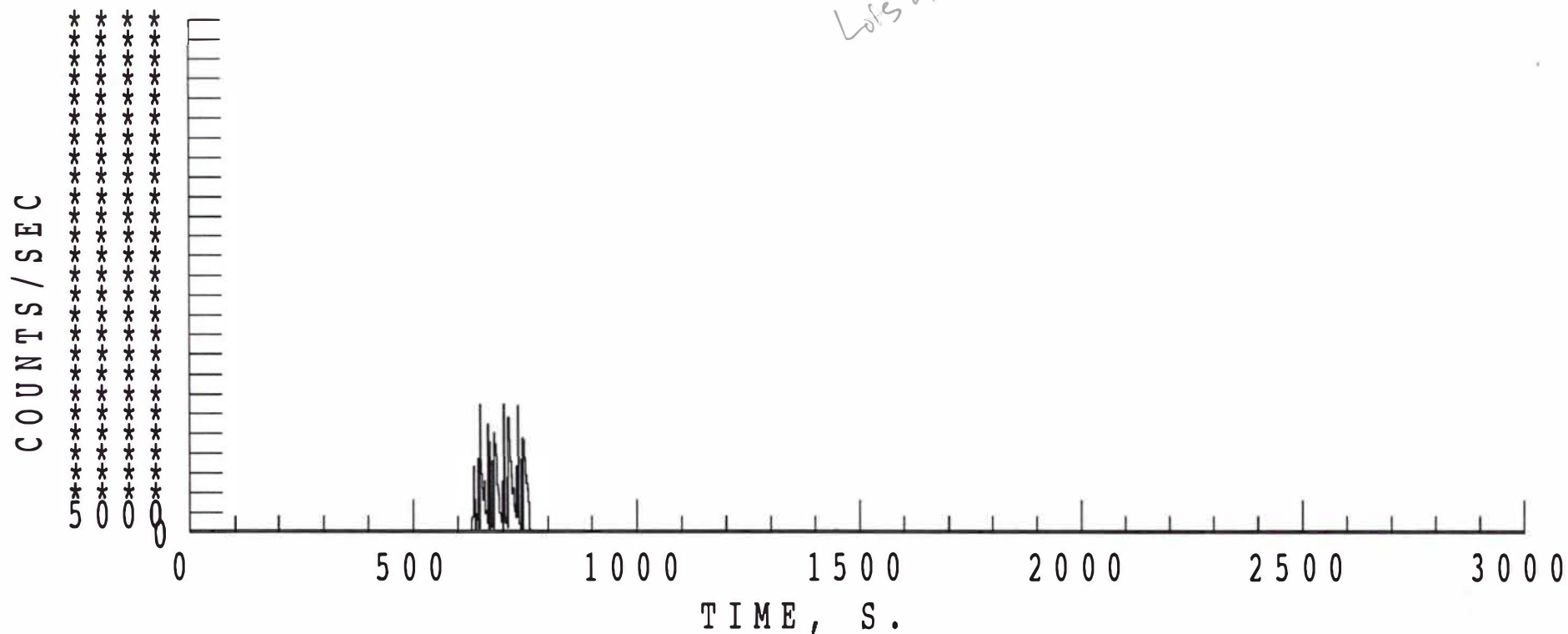
2 / 1 / 9 6 1 0 2 6 0 . 0 2 7 s

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



ULYSSES RT

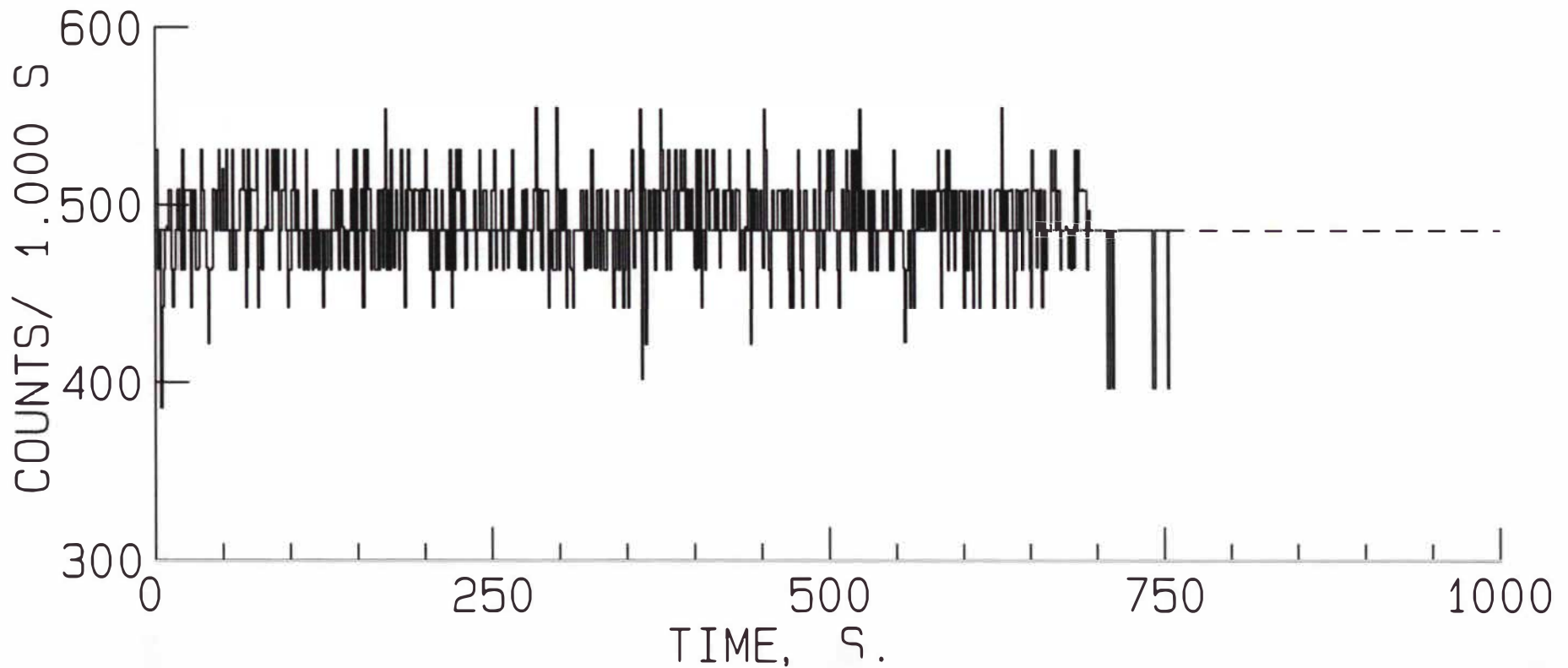
21 / 11 / 96

2/ 1/96 10260.277 s

0.500 S INTERVALS REGROUPED BY 2

21- 144 keV

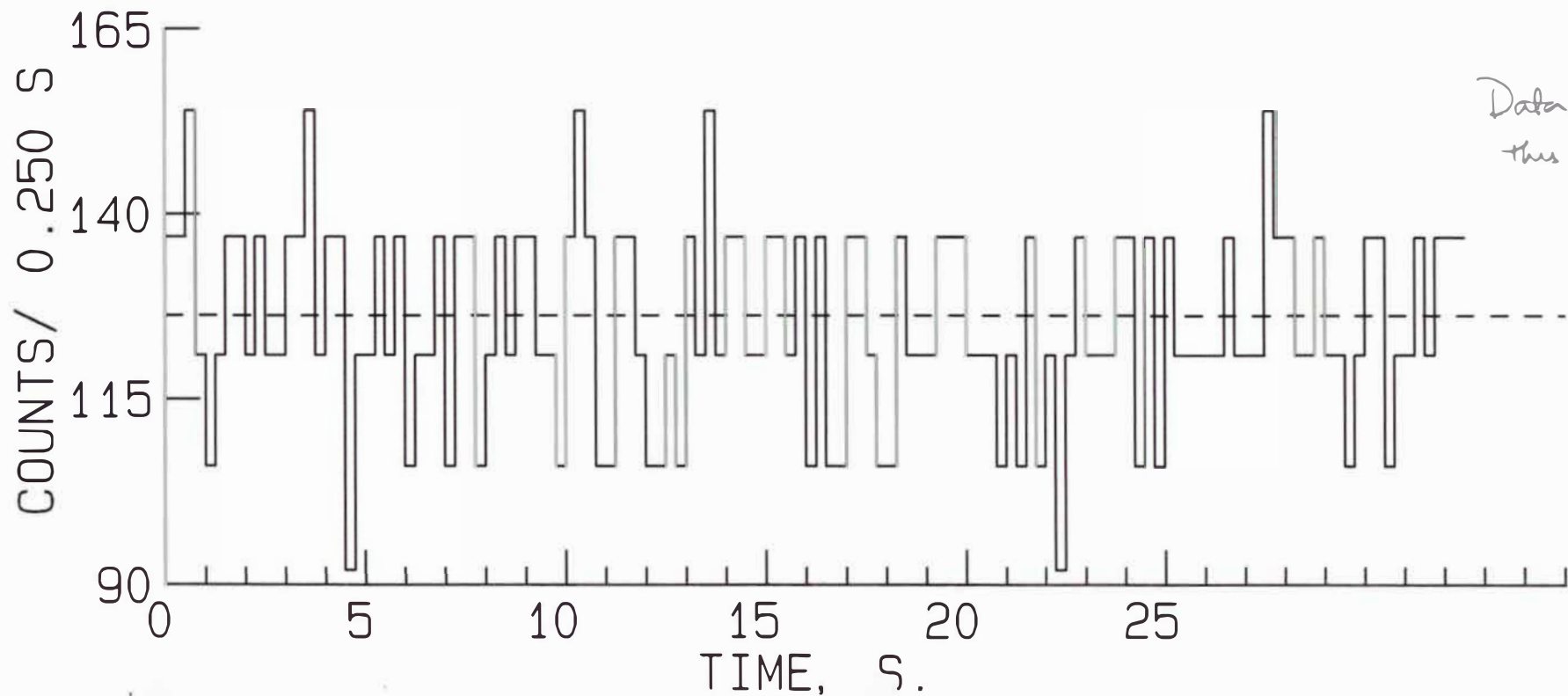
N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



ULYSSES RT
2/ 1/96 11018.038 s
21- 144 keV

21 / 11 / 96

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



BATSE BURST TRIGGER

NO.: 4208

A

TIME: TJD=0084 SECONDS=2697

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

----- trigger message

BATSE BURST TRIGGER

NO.: 4209

B

TIME: TJD=0084 SECONDS=11459

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

----- trigger message

BATSE BURST TRIGGER

NO.: 4210

TIME: TJD=0084 SECONDS=23756

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

----- trigger message

BATSE BURST TRIGGER

NO.: 4211

TIME: TJD=0084 SECONDS=30775

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4212

TIME: TJD=0084 SECONDS=34790

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4213

TIME: TJD=0084 SECONDS=50638

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4214

TIME: TJD=0084 SECONDS=63228

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4215

TIME: TJD=0084 SECONDS=68175

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

From WOODSP@ssl.msfc.nasa.gov Fri Jan 5 07:54 PST 1996
Date: Fri, 5 Jan 1996 9:54:23 -0600 (CST)
From: WOODSP@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4216

BATSEARCH PROGRAM

ND

BATSE BURST # 4216
EVENT OF 1996 JAN 2 DAY OF YEAR= 2
EVENT CROSSING TIME AT BATSE : 73254. S. OR 20:20:54.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 72.000 -62.000
BATSE PEAK COUNTING RATE: 5700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND

BATSE BURST TRIGGER

NO.: 4216

TIME: TJD=0084 SECONDS=73254

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=56.3 AZIMUTH=295.2 ERROR=2.8 DEGREES

COMMENTS:

GRB WITH MULTIPLE PULSES. DURATION ~36 SEC. VISIBLE ABOVE 300KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4216	960102	10084	73254	5700	072	-62	36

14 / 1 / 96

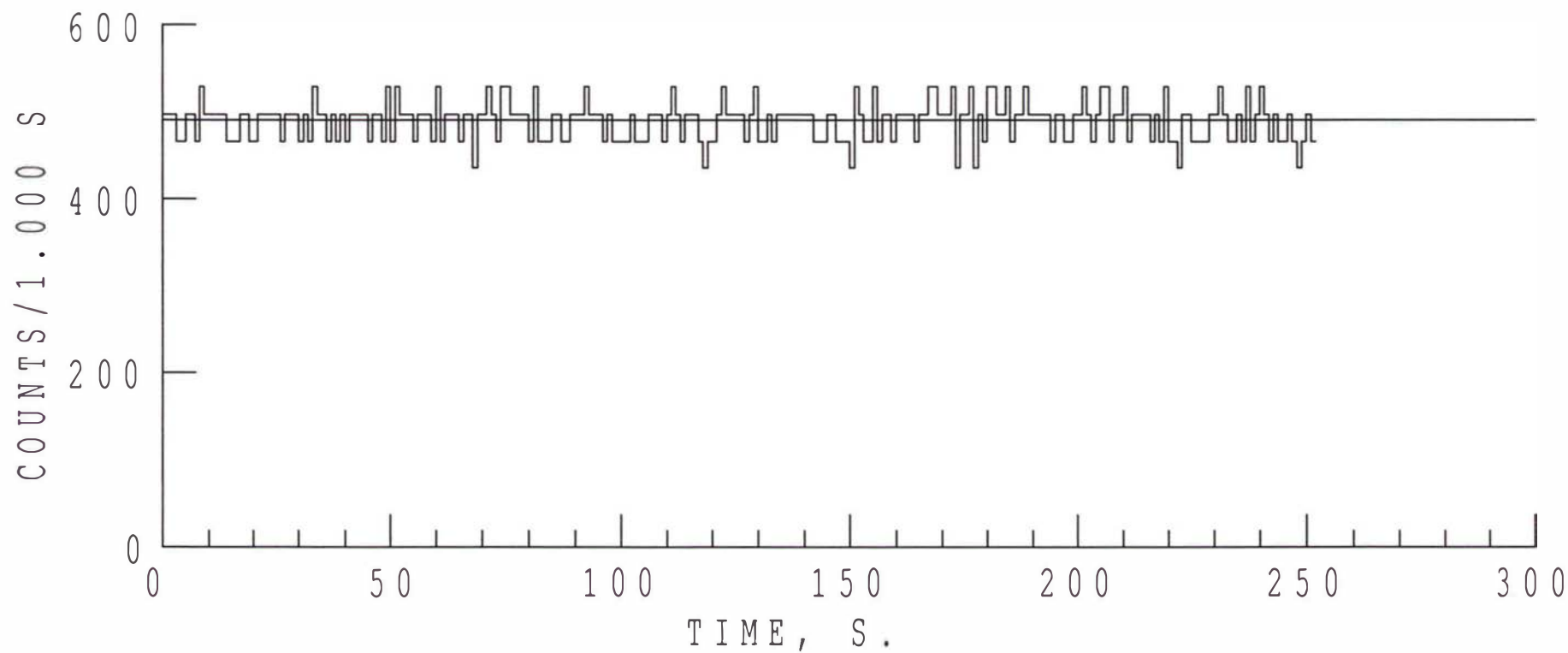
ULYSSES RT

2 / 1 / 96 74484.250 s

0 - 0 keV

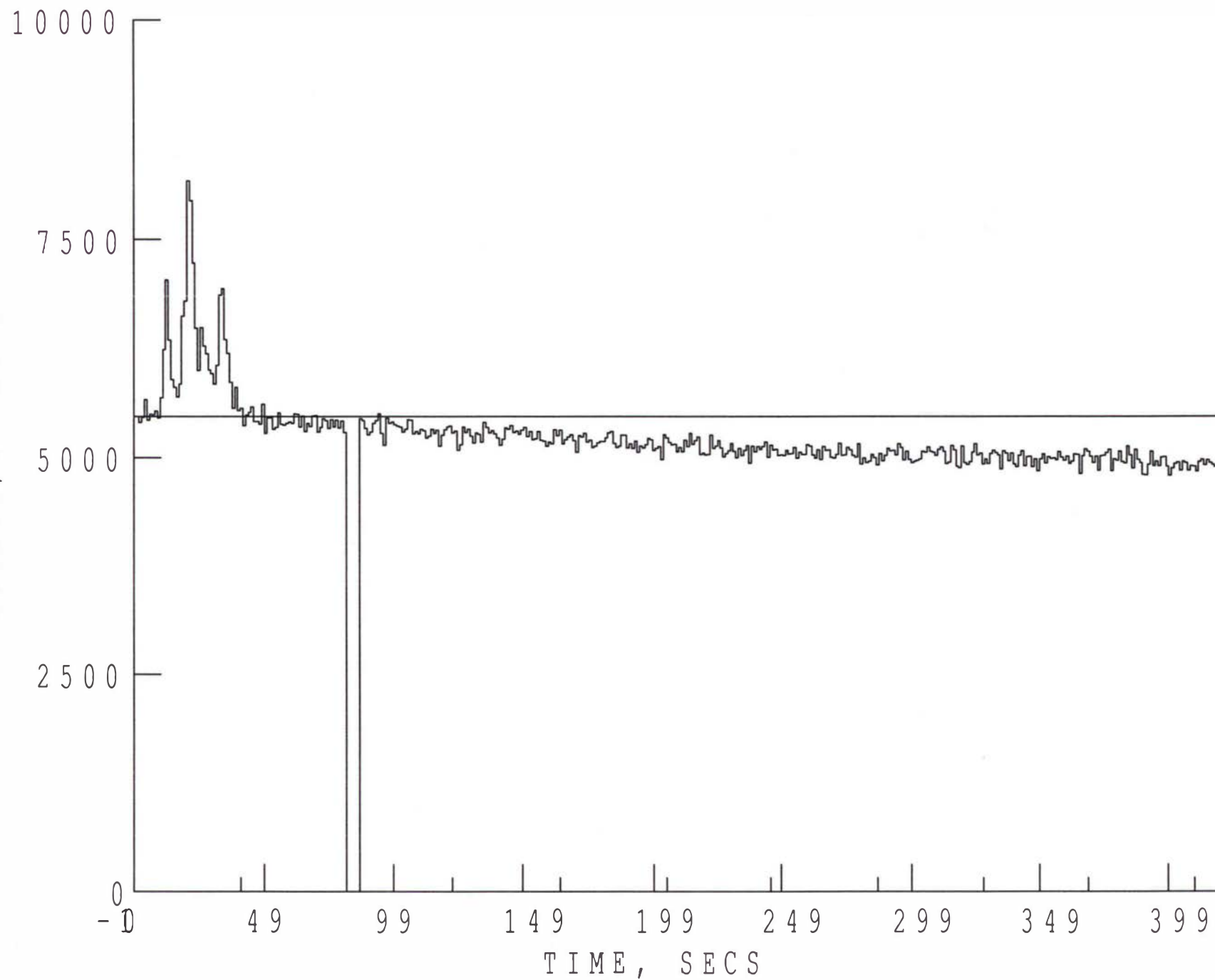
N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



BACODINE 02/01/96 73242.313

25- 100 keV
COUNTS/1.024 S



From WOODSP@SSLLES.MSFC.NASA.GOV Thu Jan 11 08:20 PST 1996
From: WOODSP@SSLLES.MSFC.NASA.GOV
Date: Thu, 11 Jan 1996 10:17:43 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4217

TIME: TJD=0084 SECONDS=80403

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

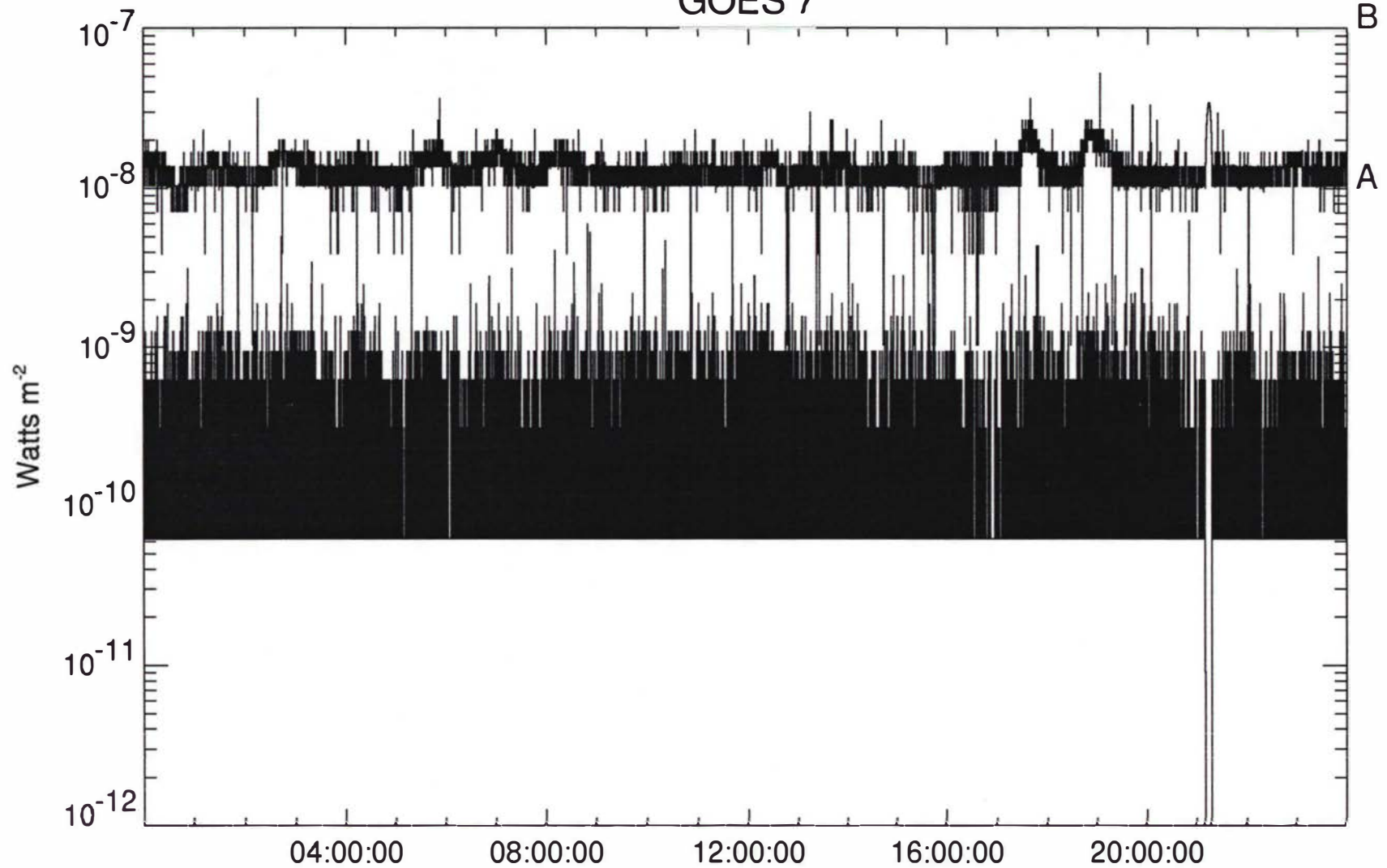
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

GOES 7

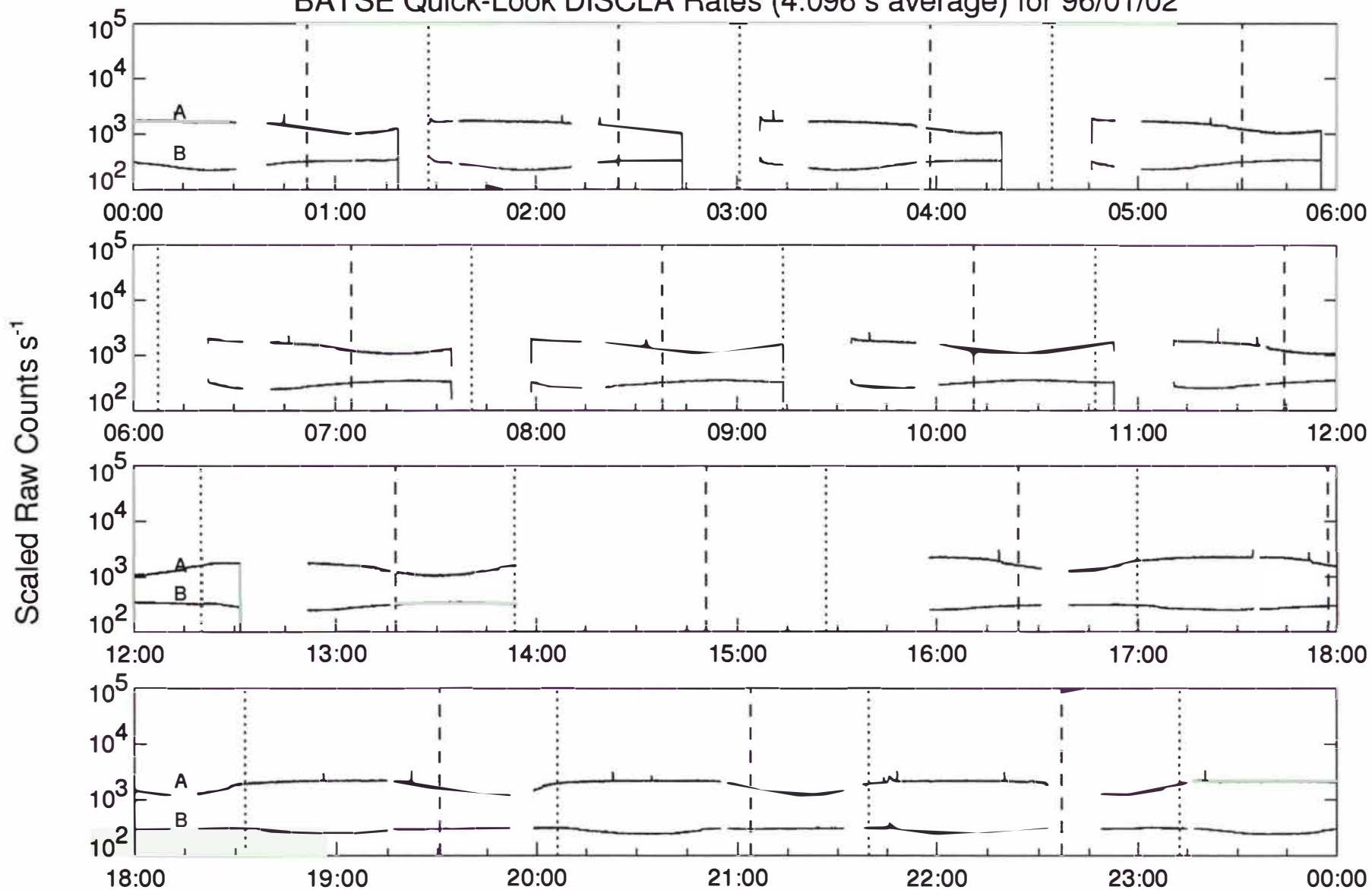


Data Start: 96/01/02, 0000:00

Plot created: 96/01/04, 0654

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 96/01/02



Current Time: 96/01/04, 0655 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

From HENZE@SSLLES.MSFC.NASA.GOV Wed Jan 3 14:57 PST 1996
From: HENZE@SSLLES.MSFC.NASA.GOV
Date: Wed, 3 Jan 1996 16:56:30 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4199

TIME: TJD=0083 SECONDS=14059

TYPE: CYGNUS SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

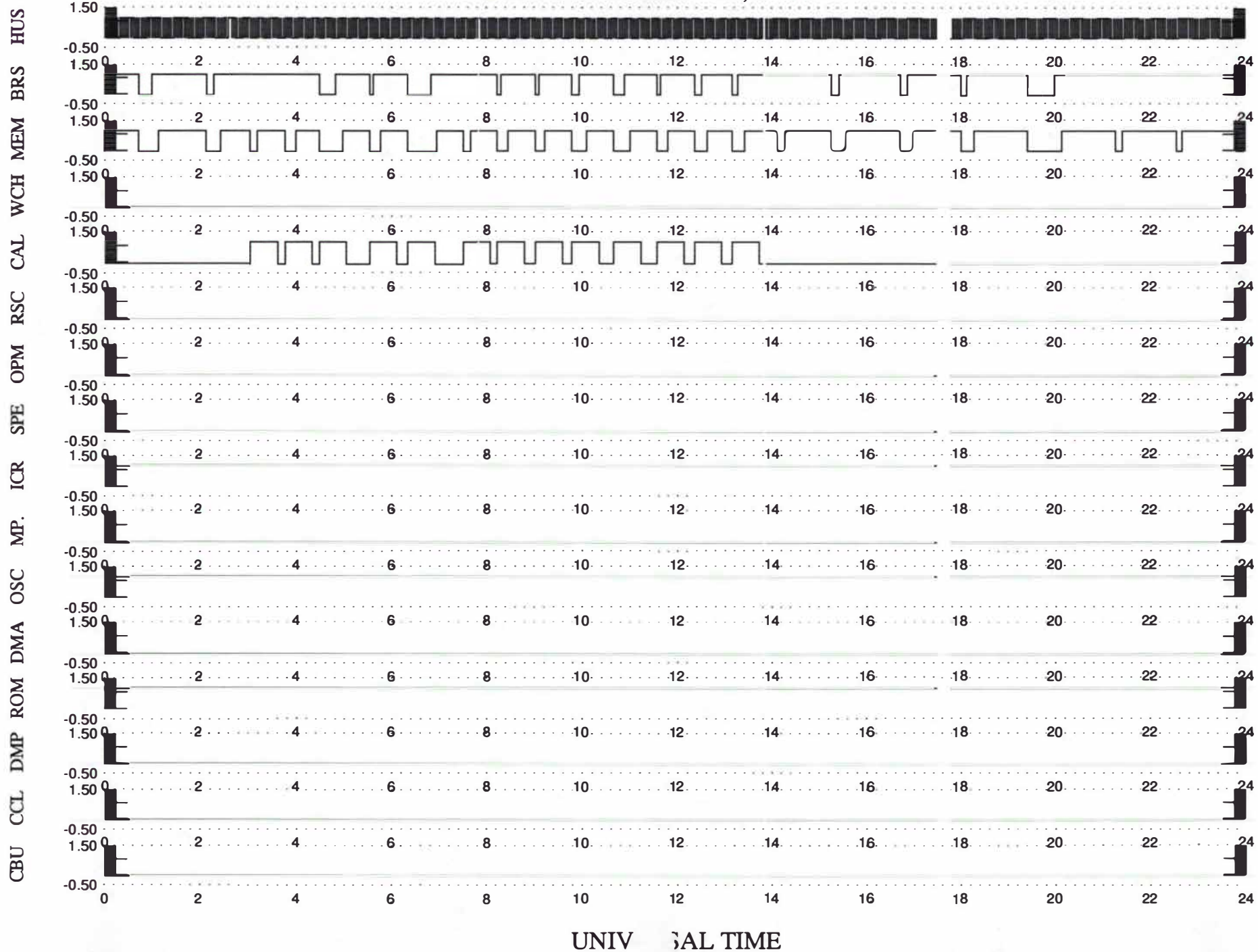
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
CYGNUS X-1 RISE

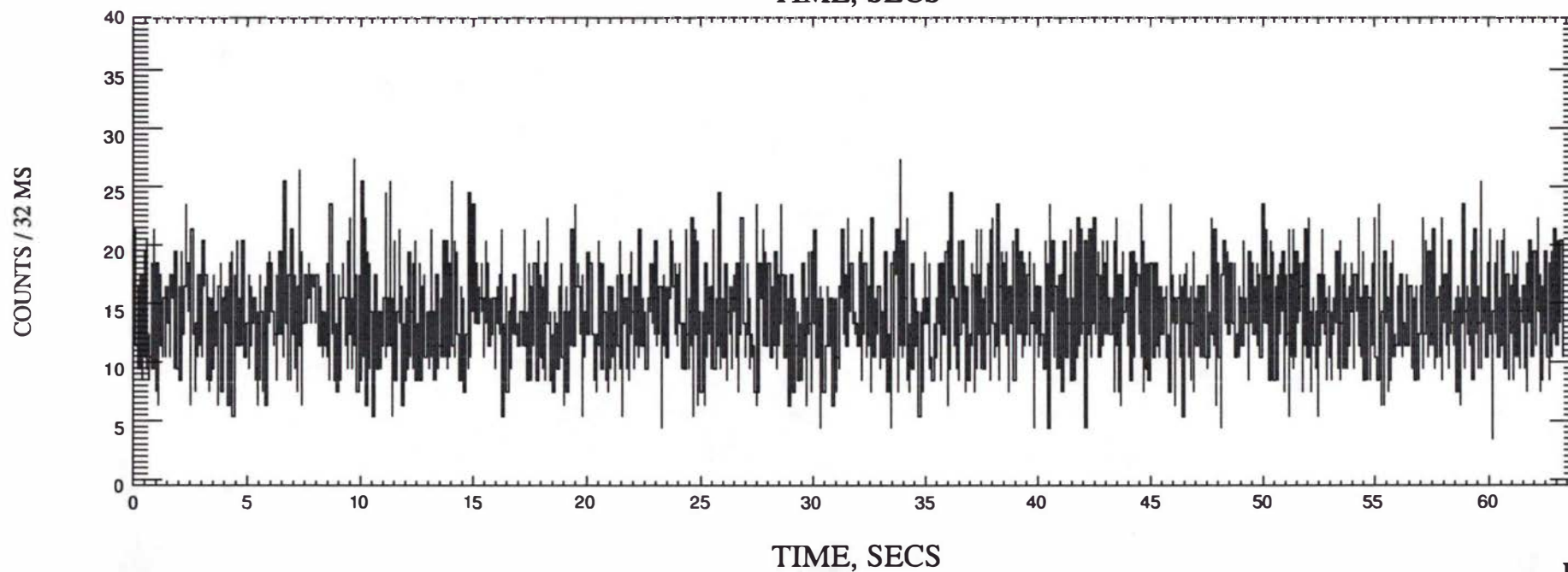
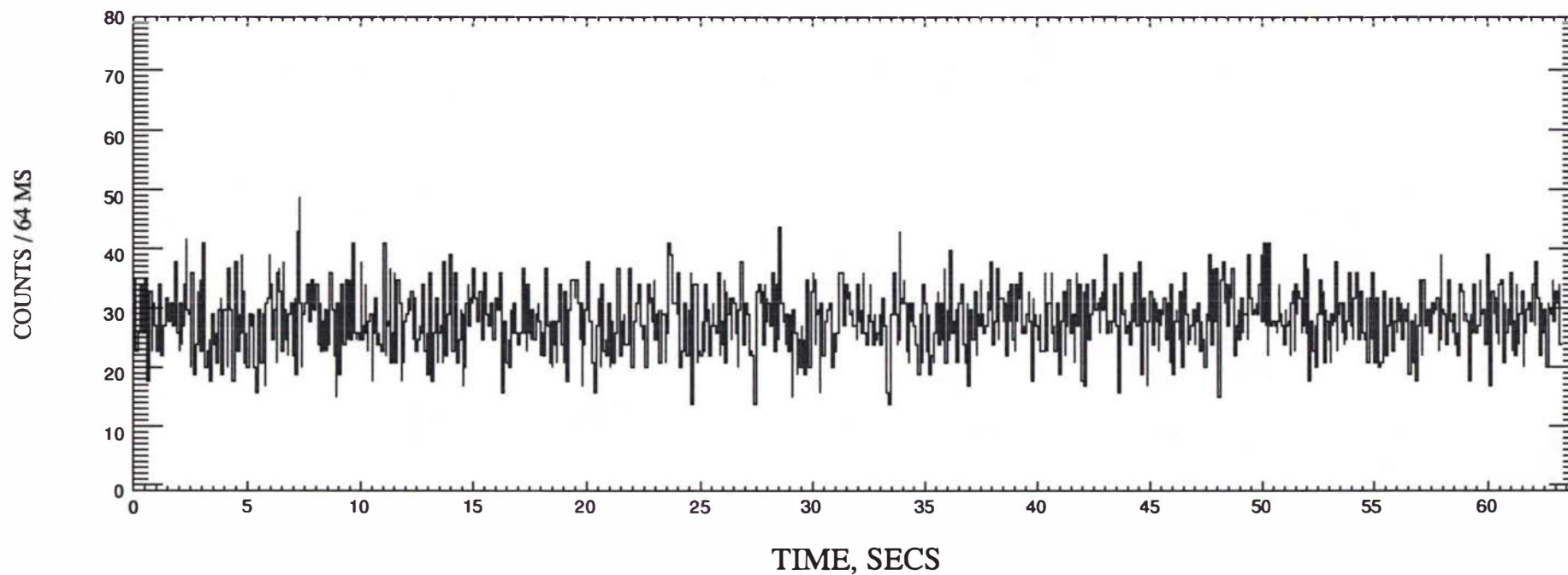
HUS MODES EDR day 2, year 1996 to day 2, year 1996
BURST NUMBER 5 - 15, 0 - 10

4/1/96



HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 5 at UT= 0.884176105923 h= 3183.034 s 00:53:03.034

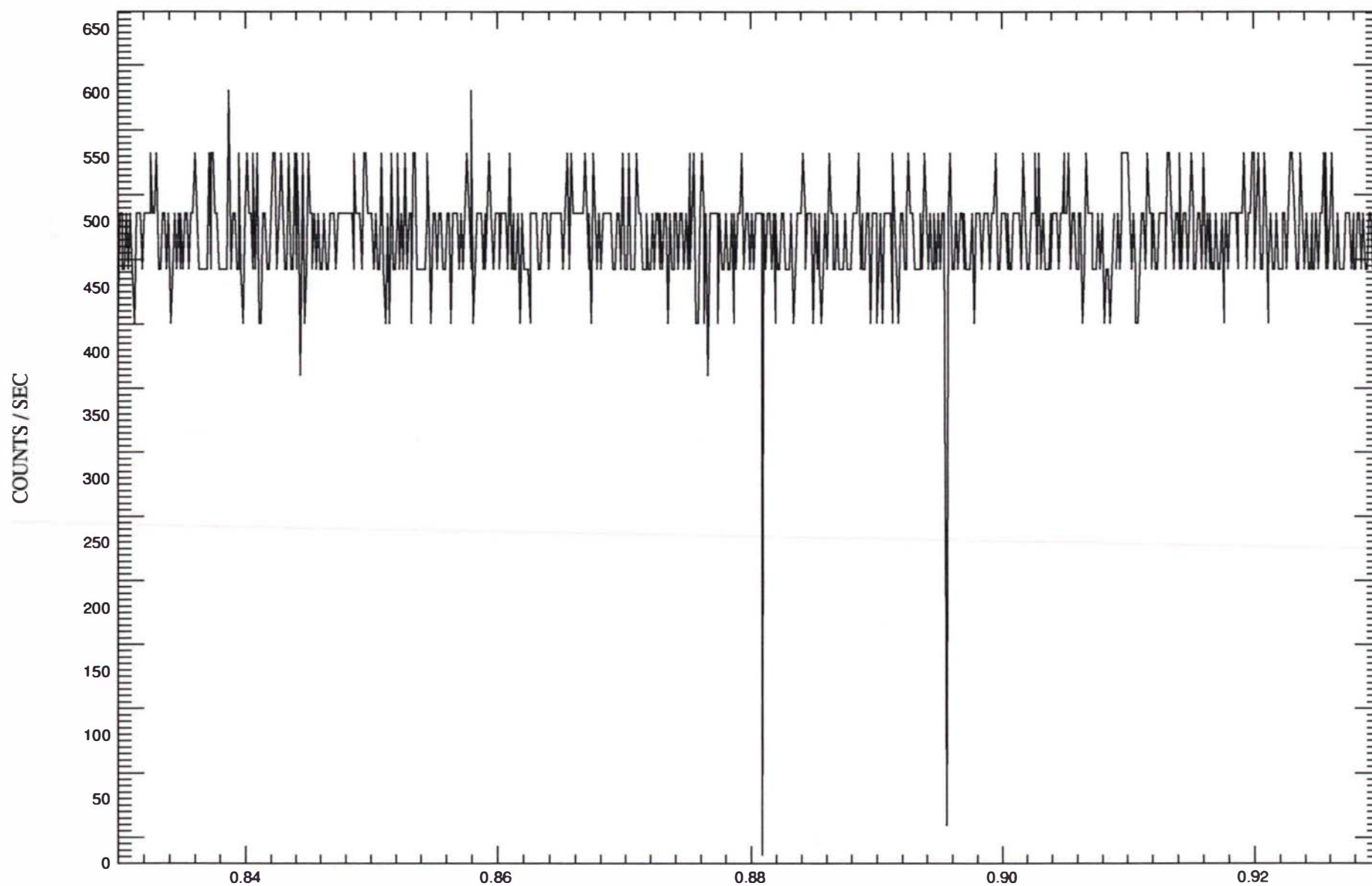
4/1/96



B# 1

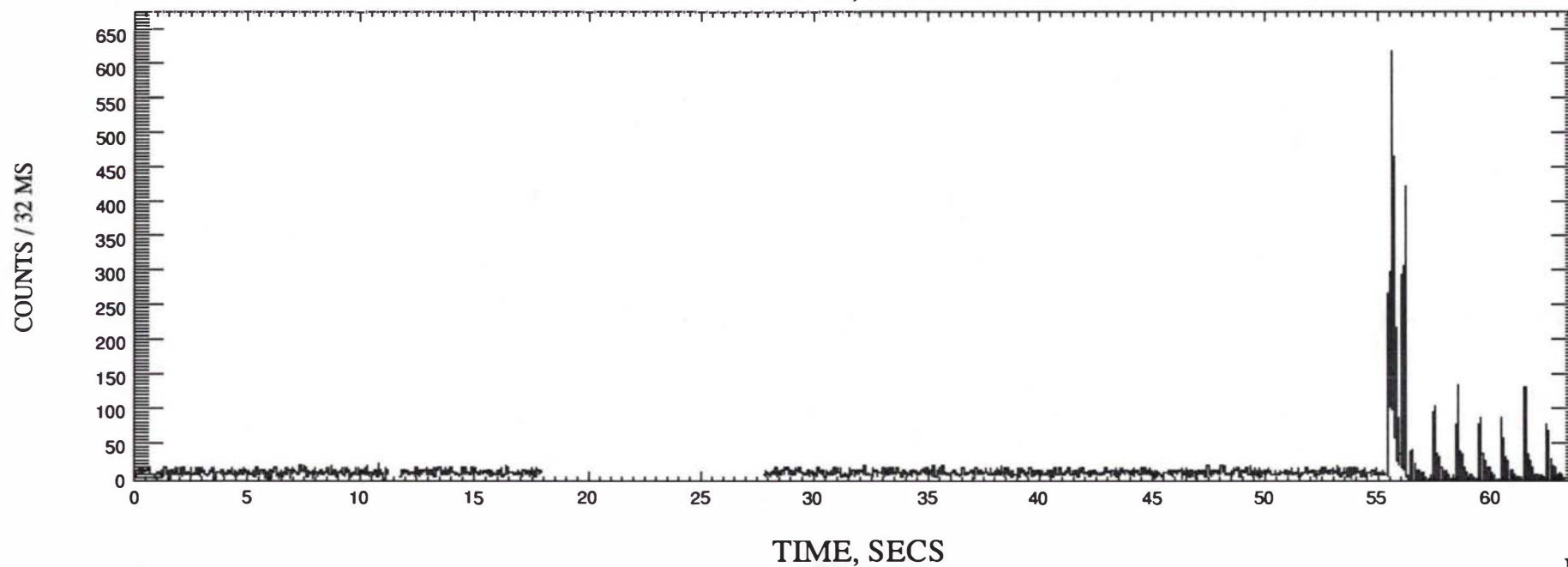
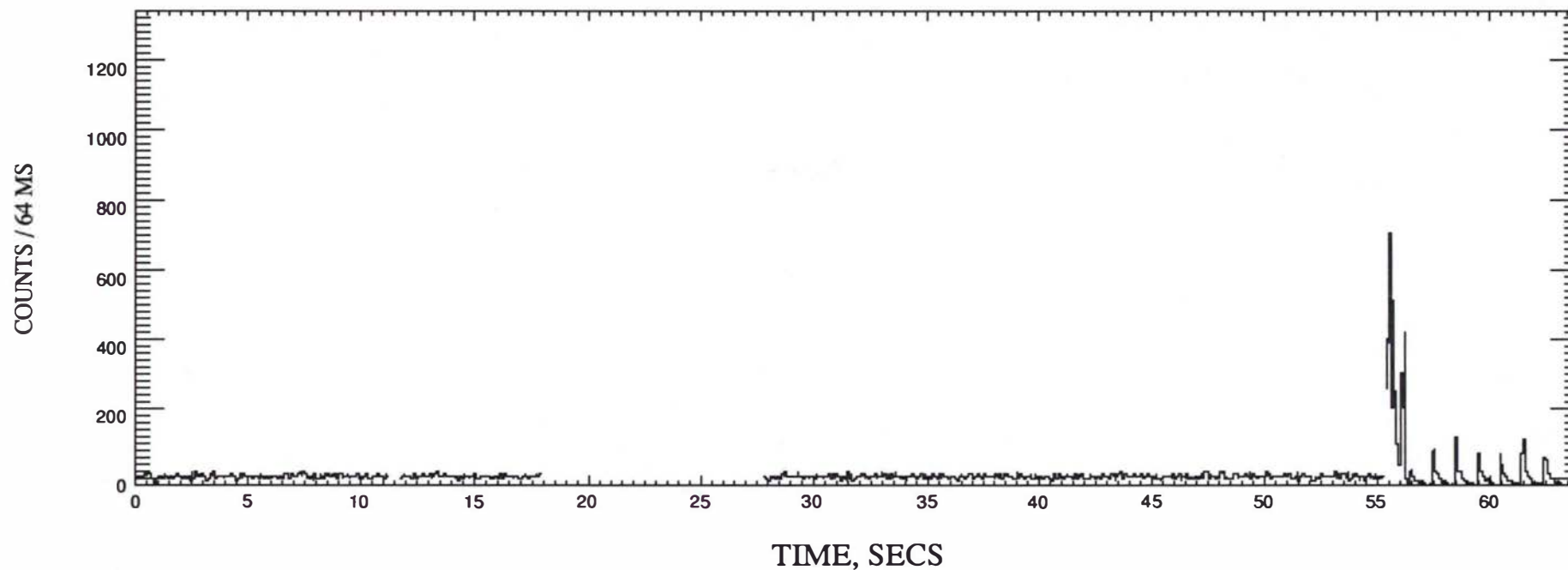
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 6 at UT= 2.282529907227 h= 8217.108 s 02:16:57.108

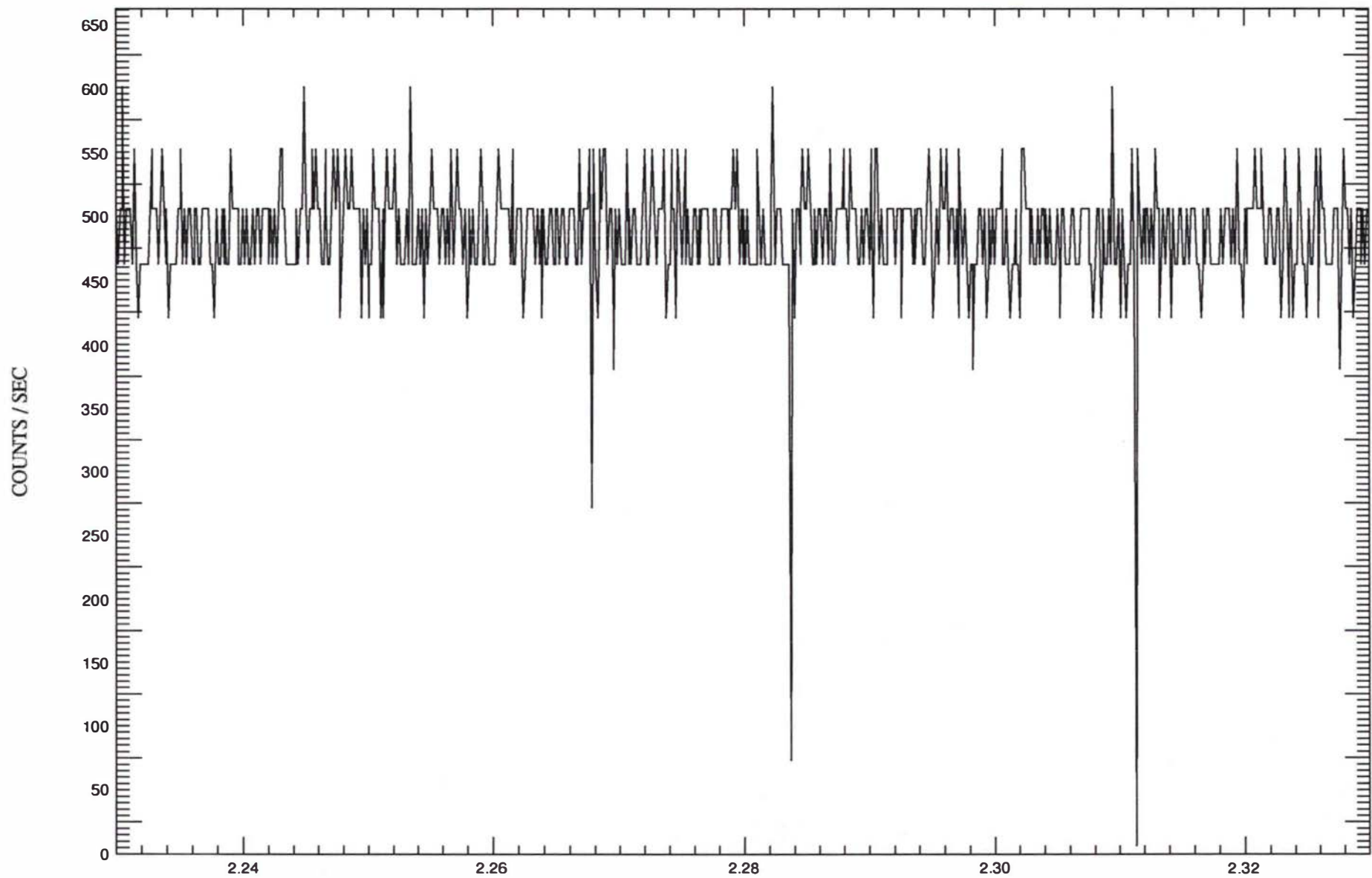
4/1/96



B# 2

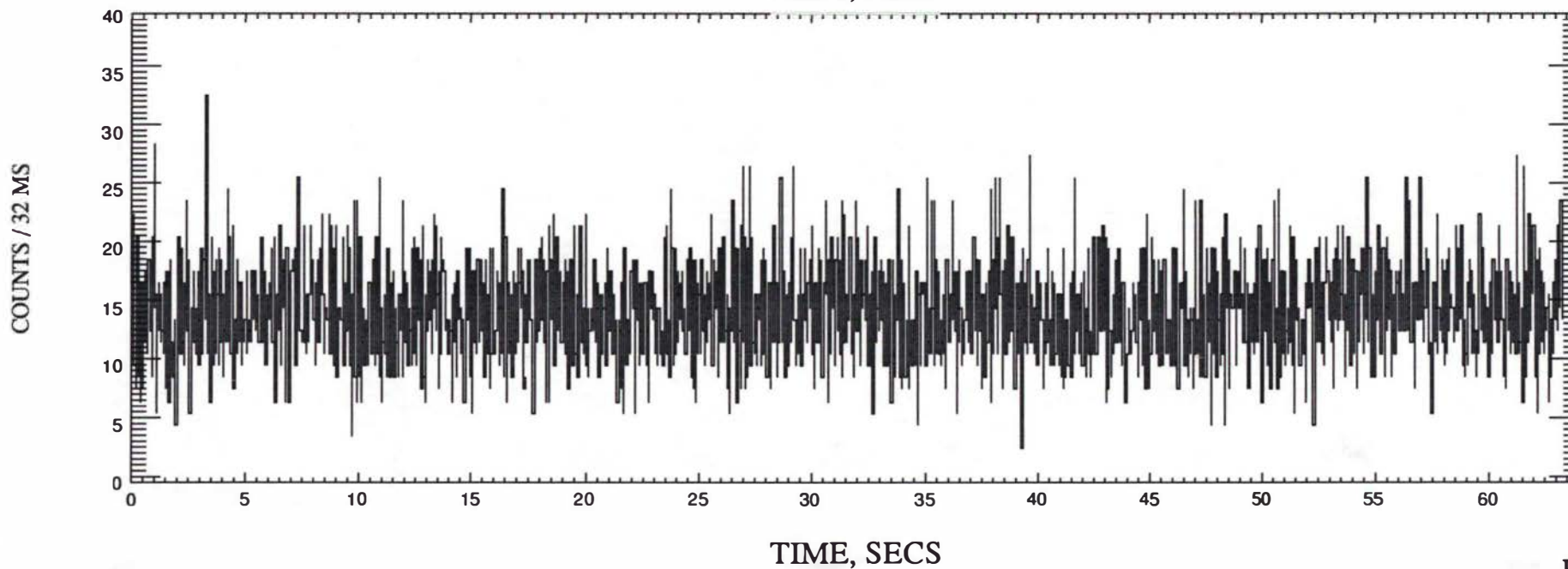
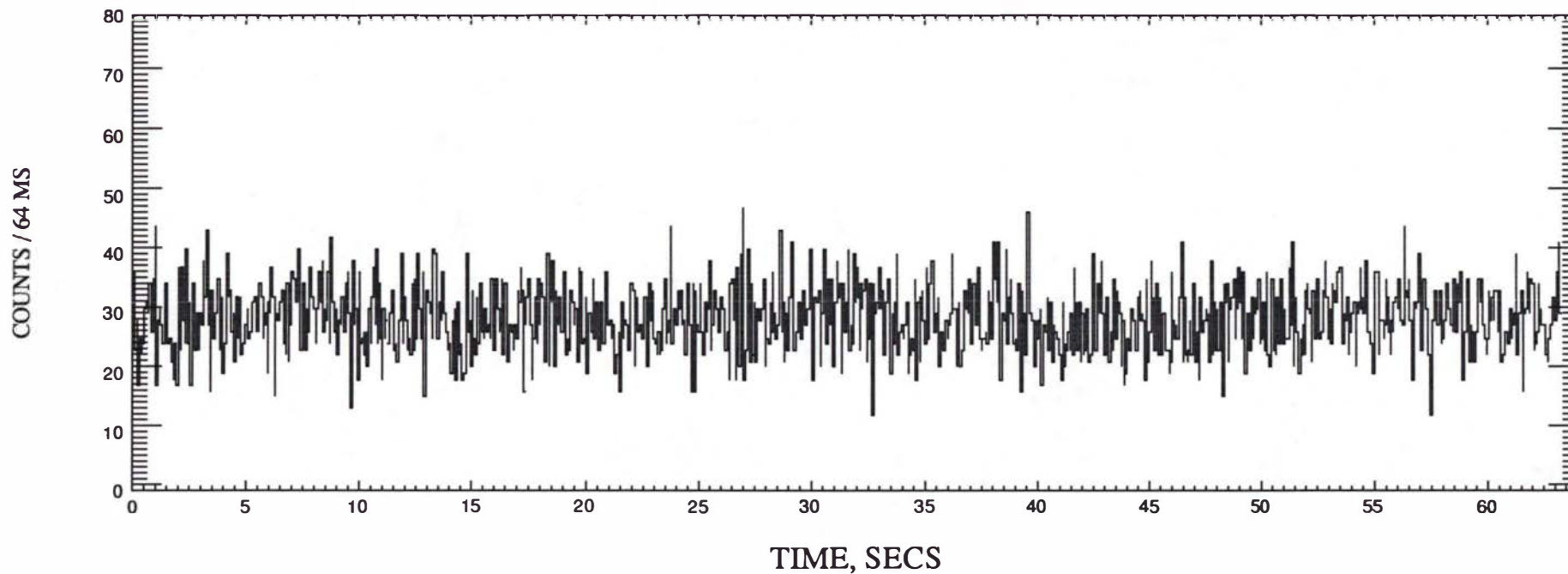
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 7 at UT= 3.047924240960 h=10972.527 s 03:02:52.527

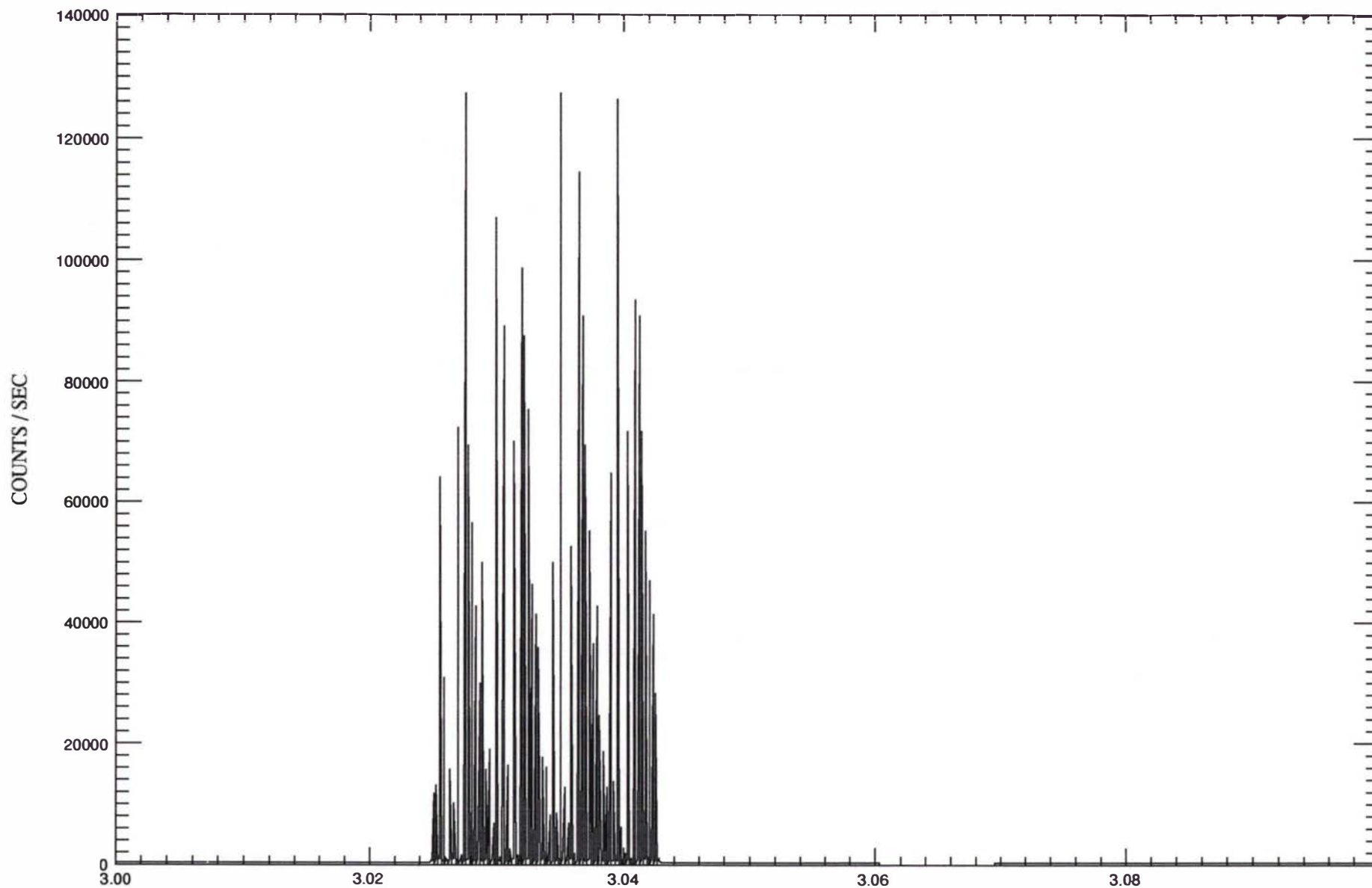
4/1/96



B# 3

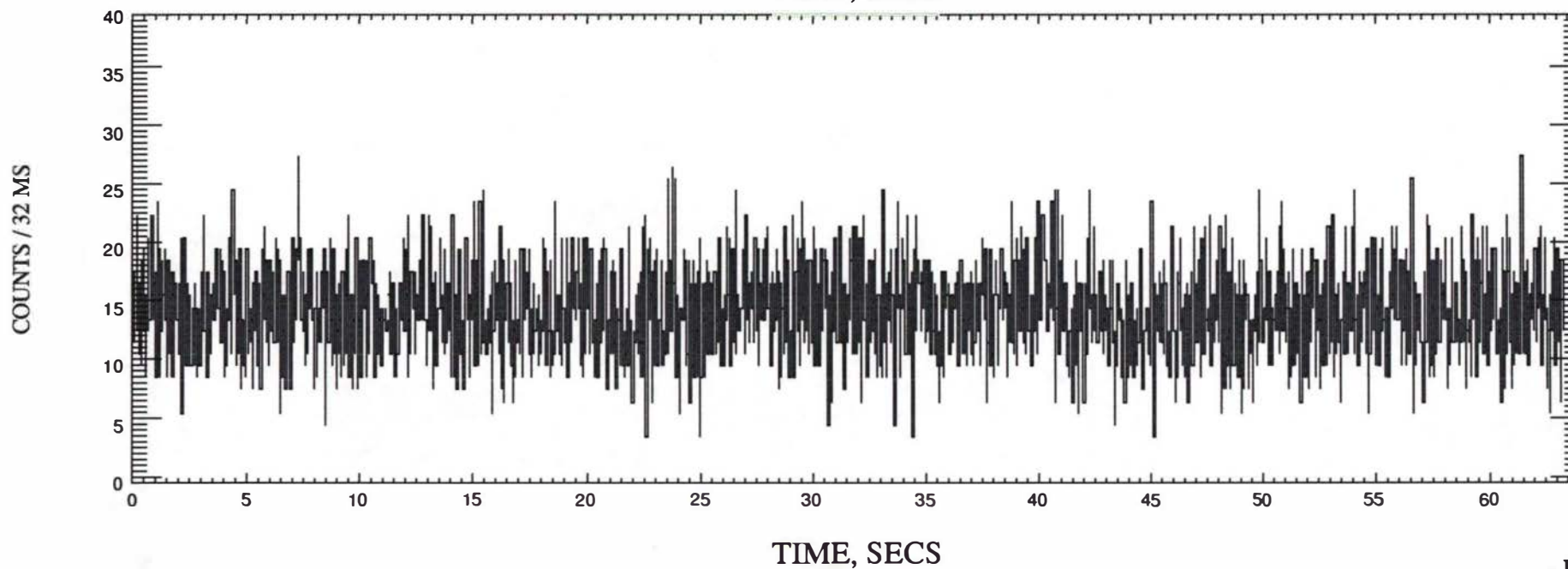
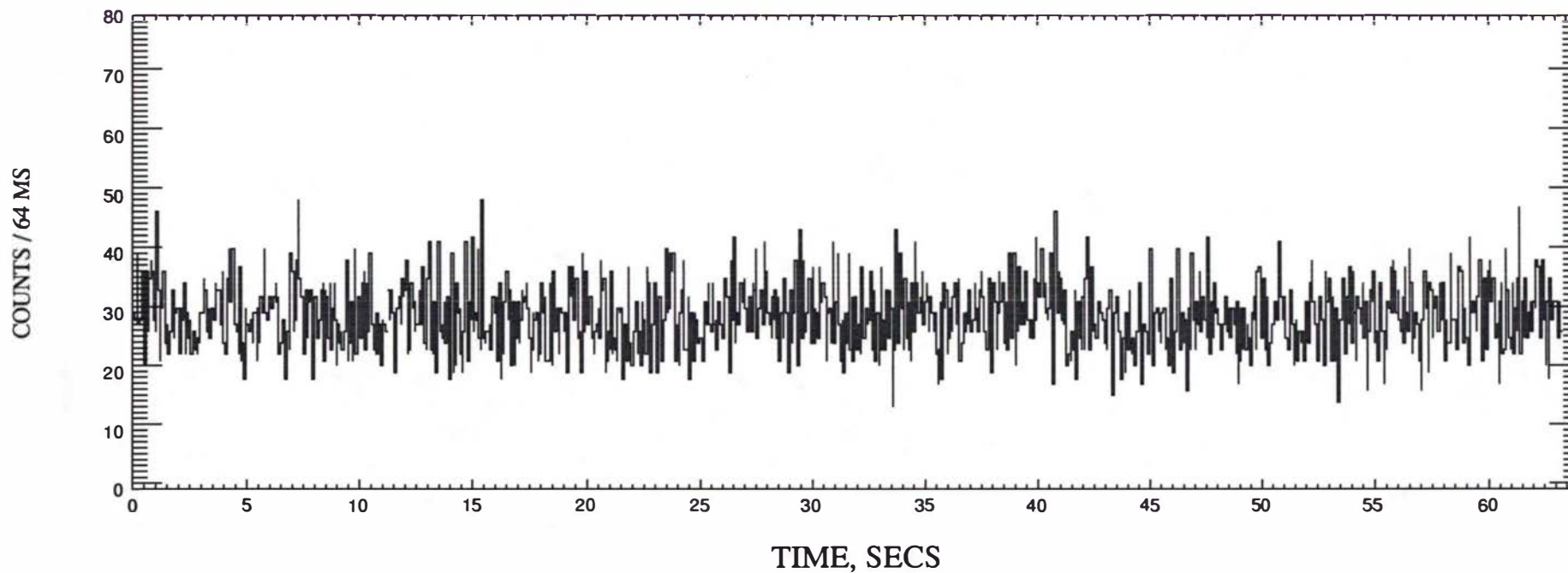
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



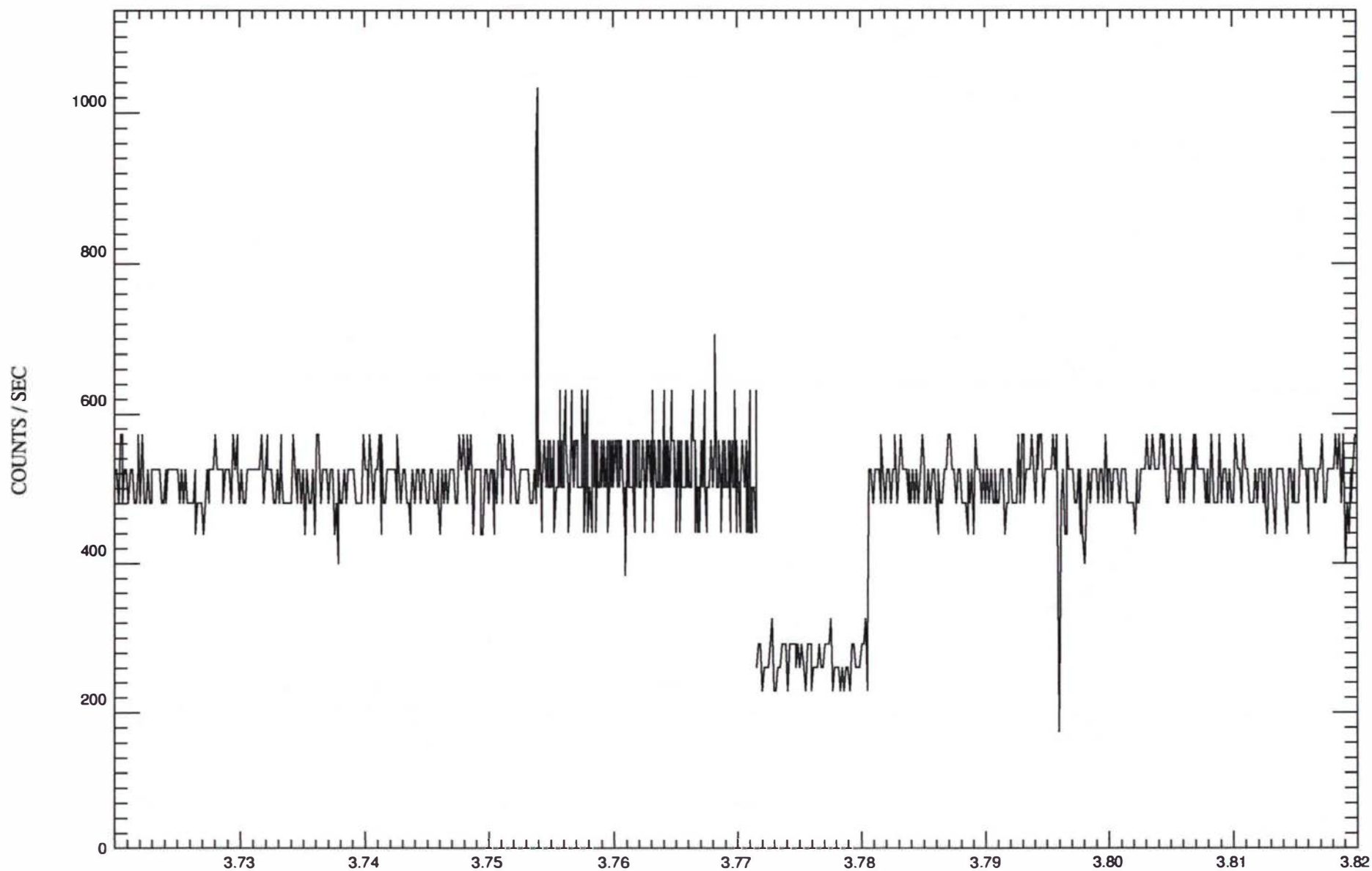
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 8 at UT= 3.768316959805 h=13565.941 s 03:46:05.941

4/1/96



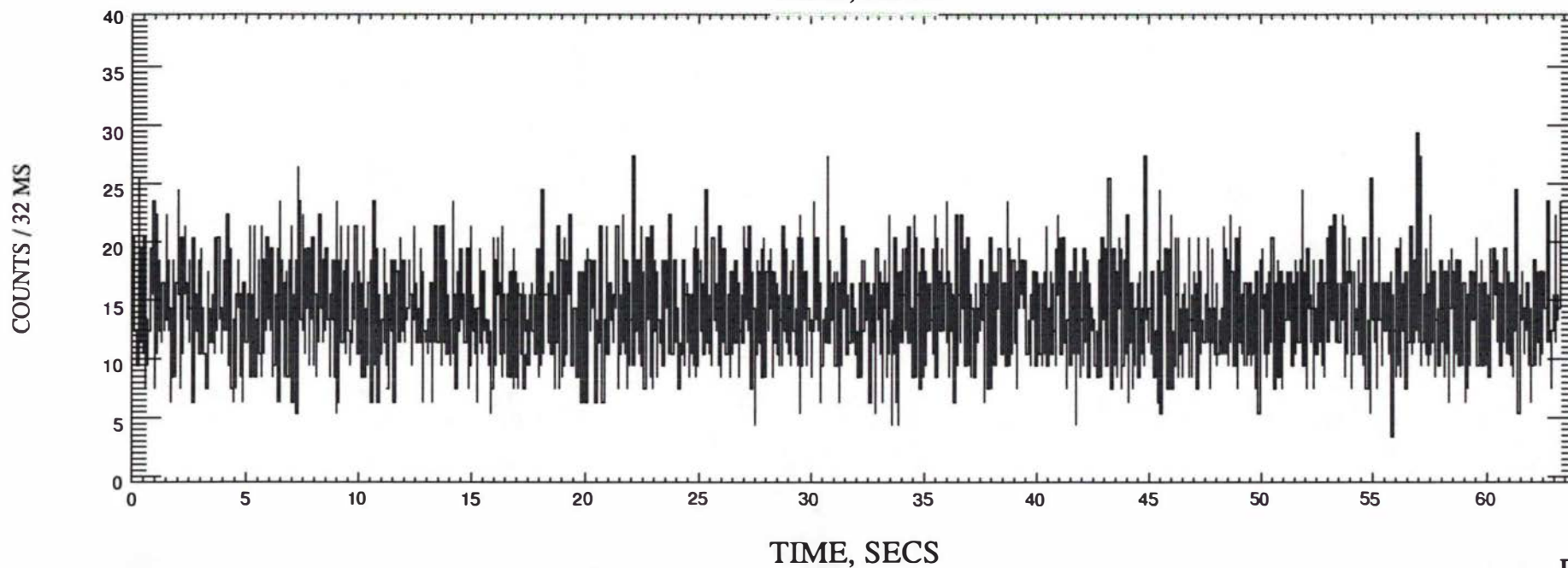
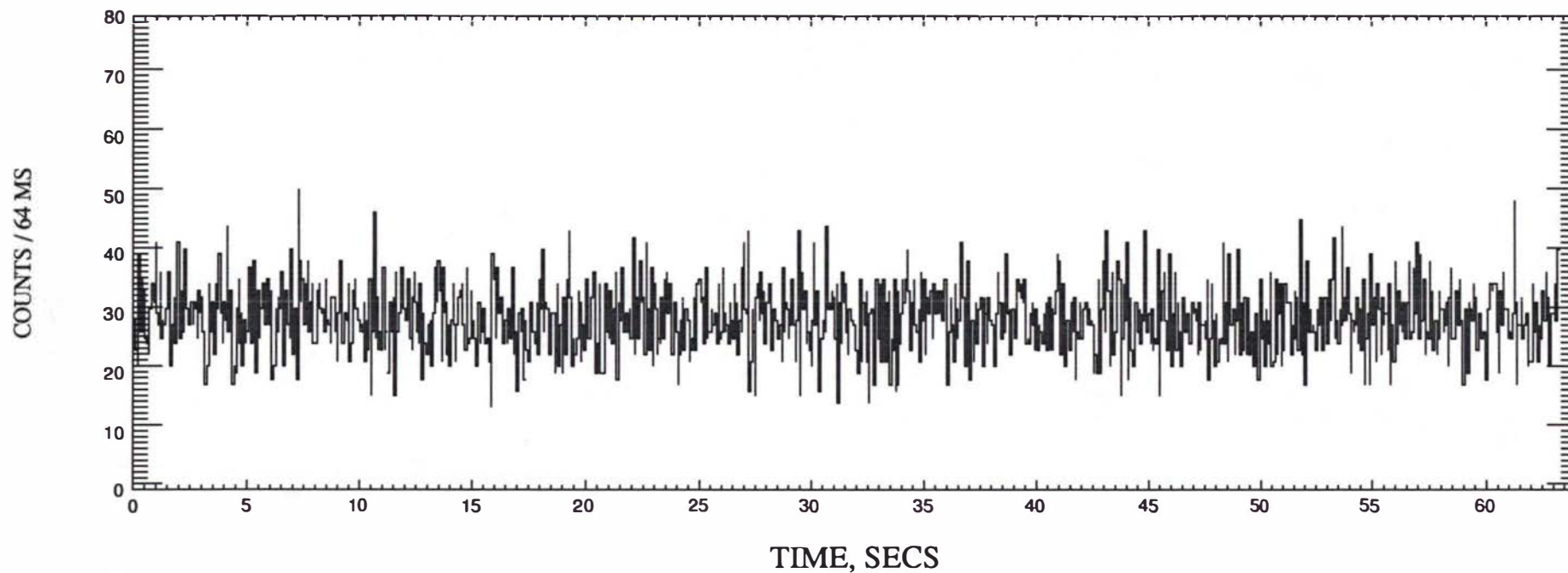
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 9 at UT= 4.790312283834 h=17245.124 s 04:47:25.124

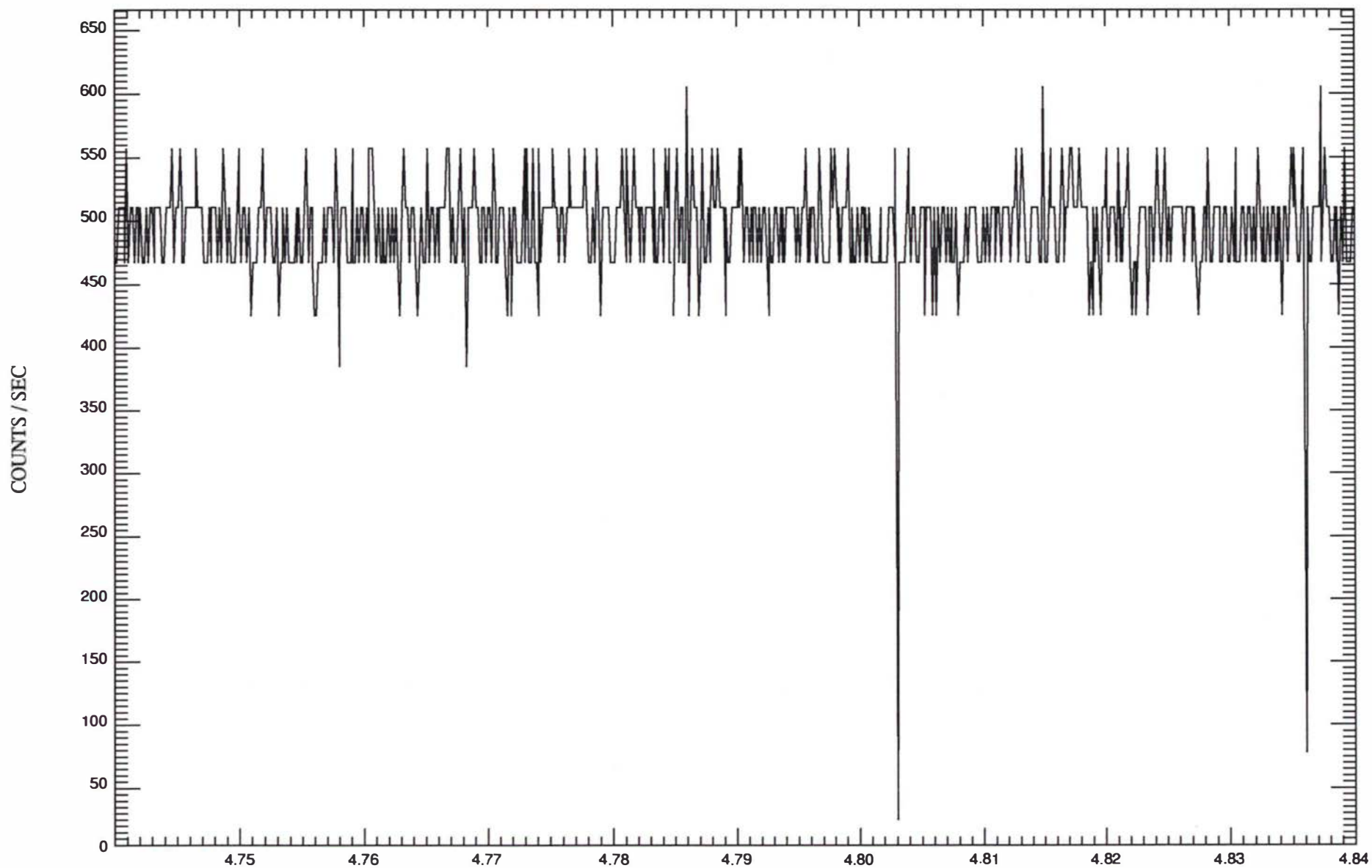
4/1/96



B# 5

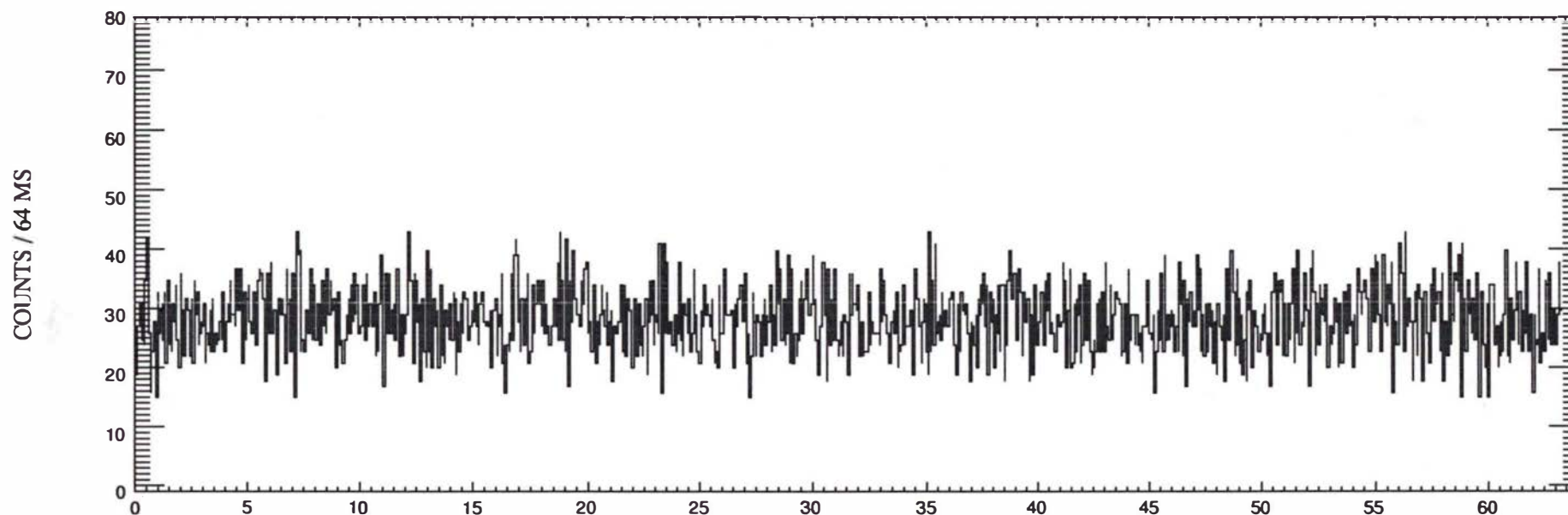
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96

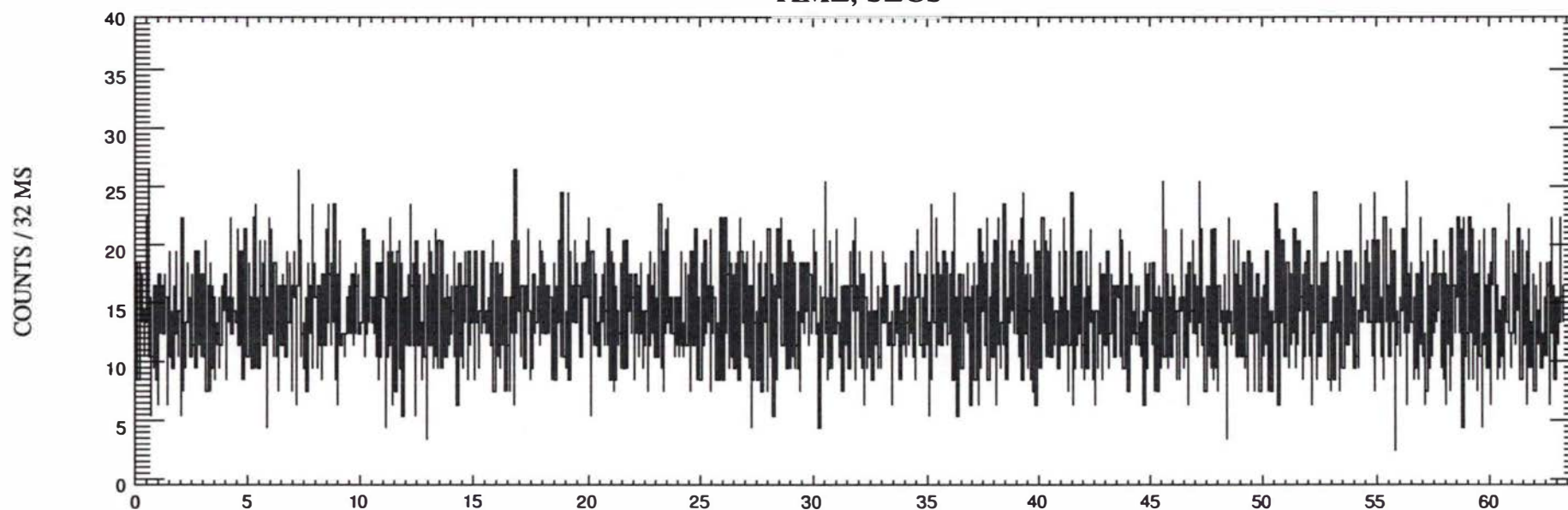


HUS 2A TRIGGERED DATA QEDR day 2, year 1996
Burst Counter 10 at UT= 5.570671357049 h=20054.417 s 05:34:14.417

1/3/96



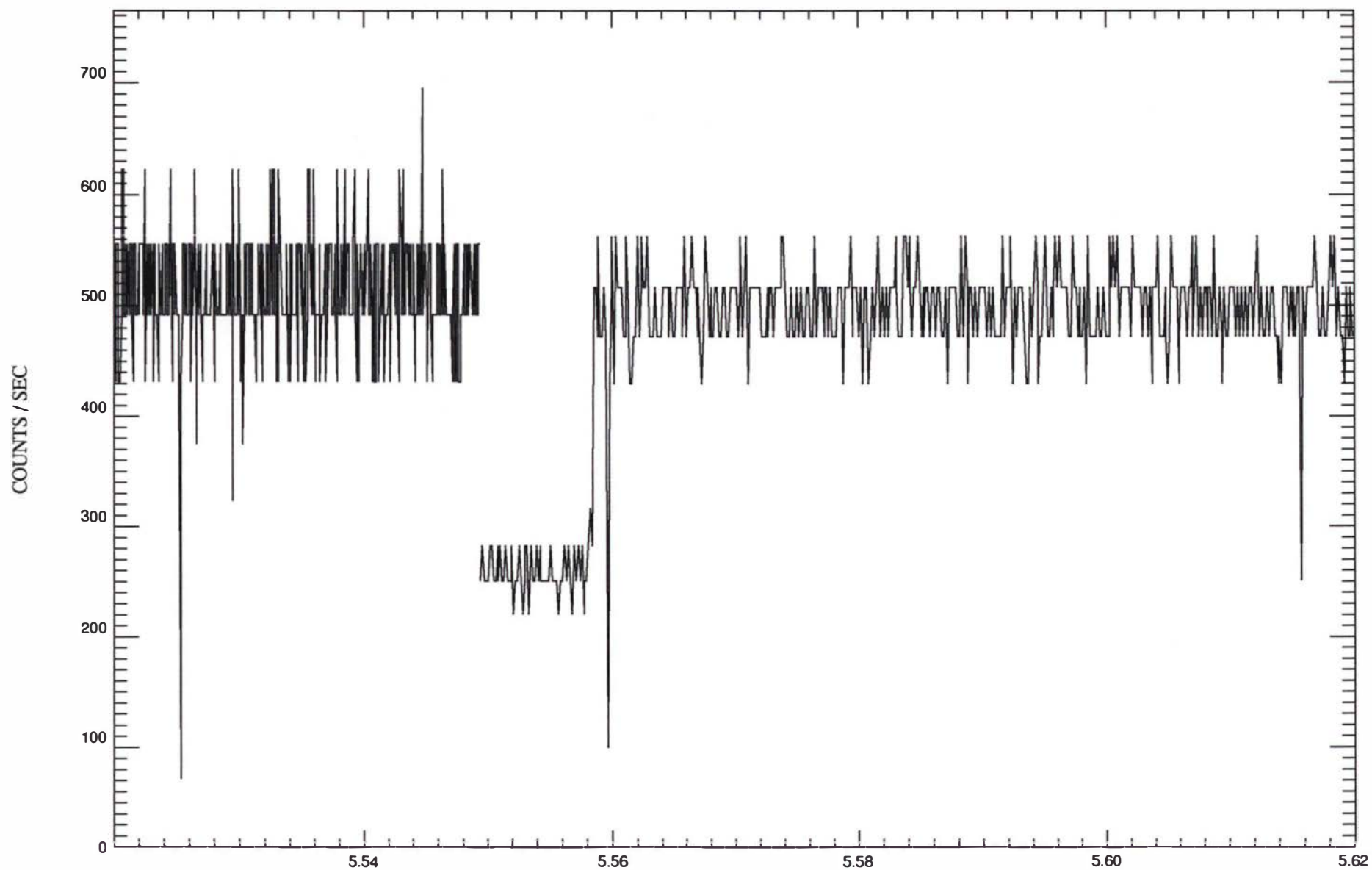
TIME, SECS



TIME, SECS

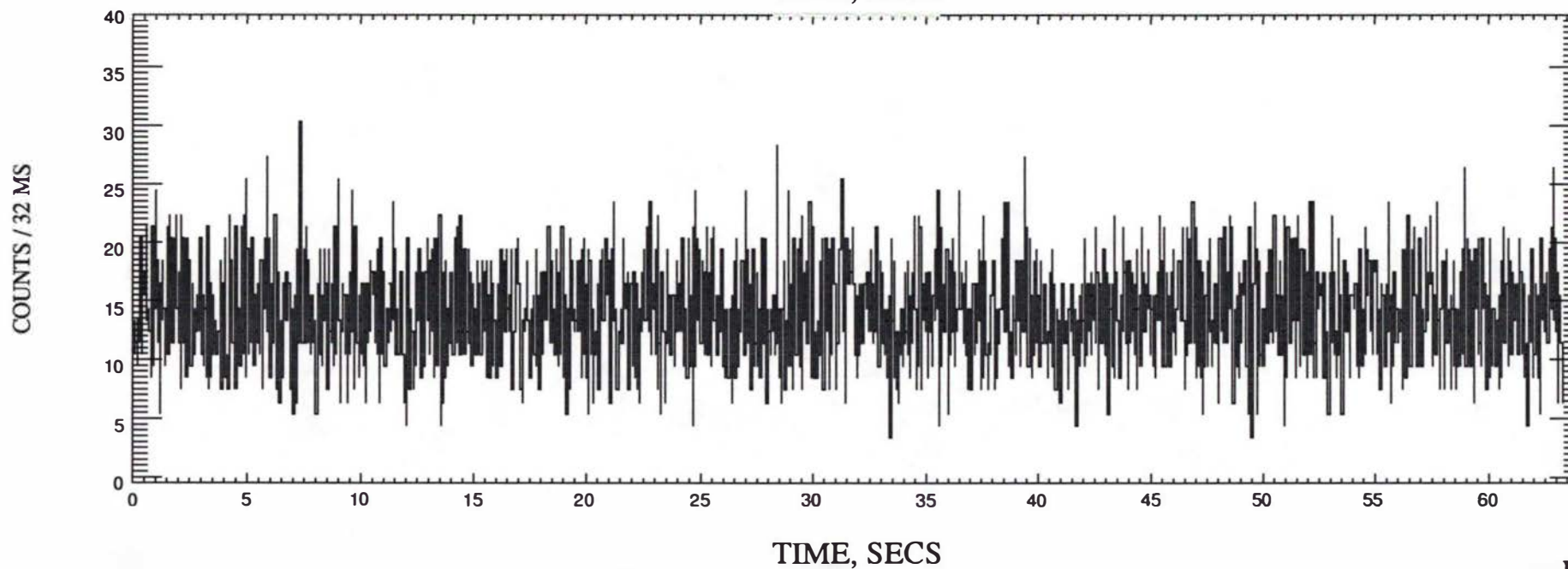
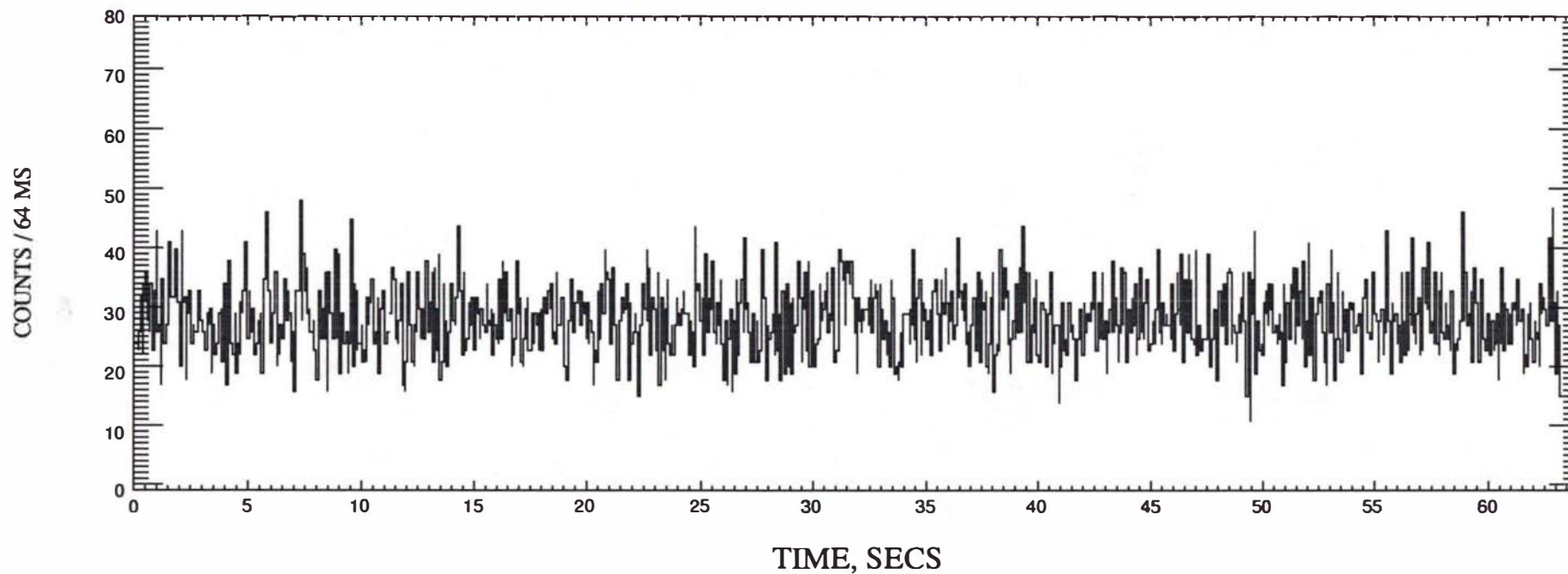
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 11 at UT= 6.773120227390 h=24383.233 s 06:46:23.233

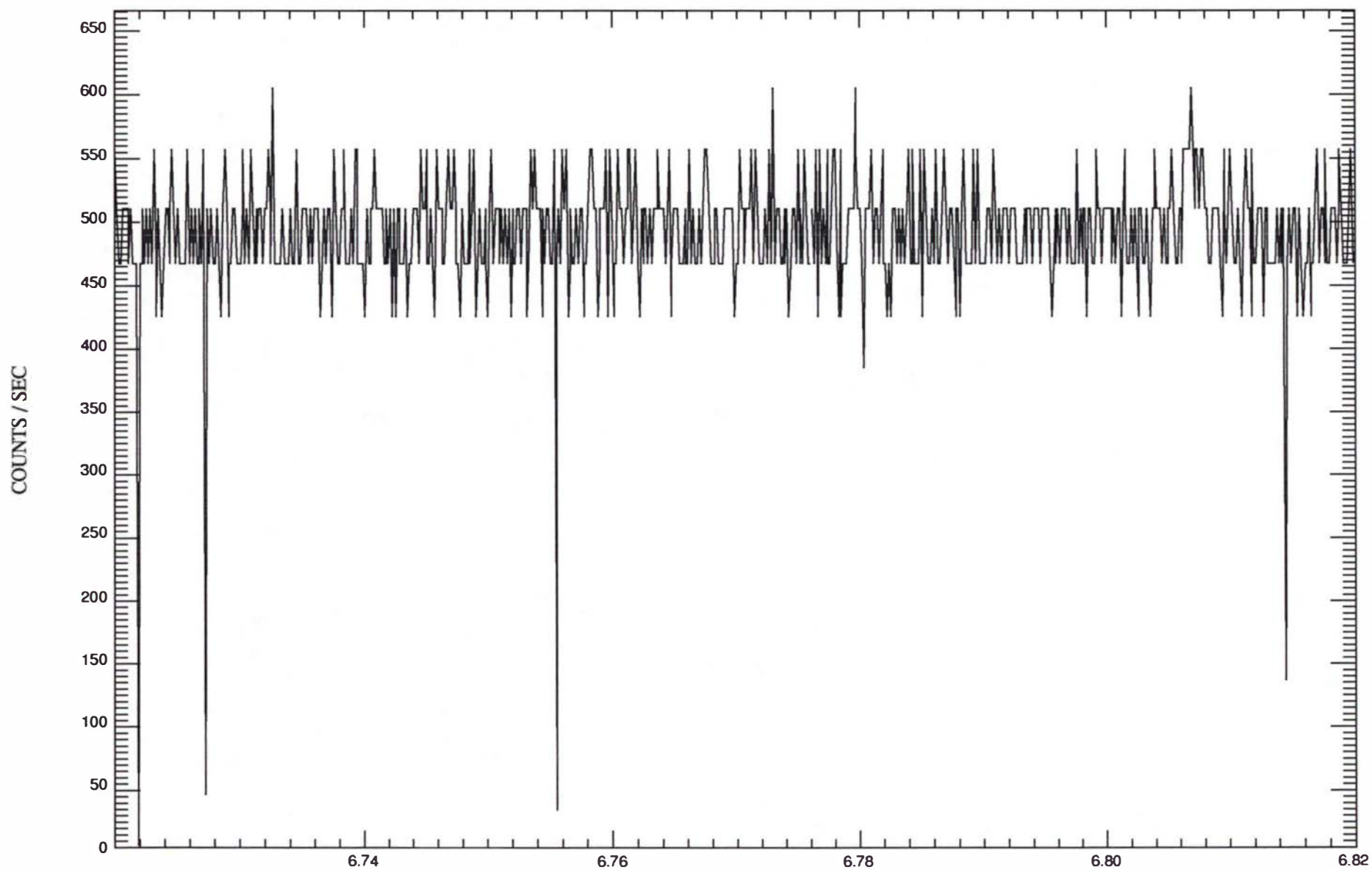
4/1/96



B# 7

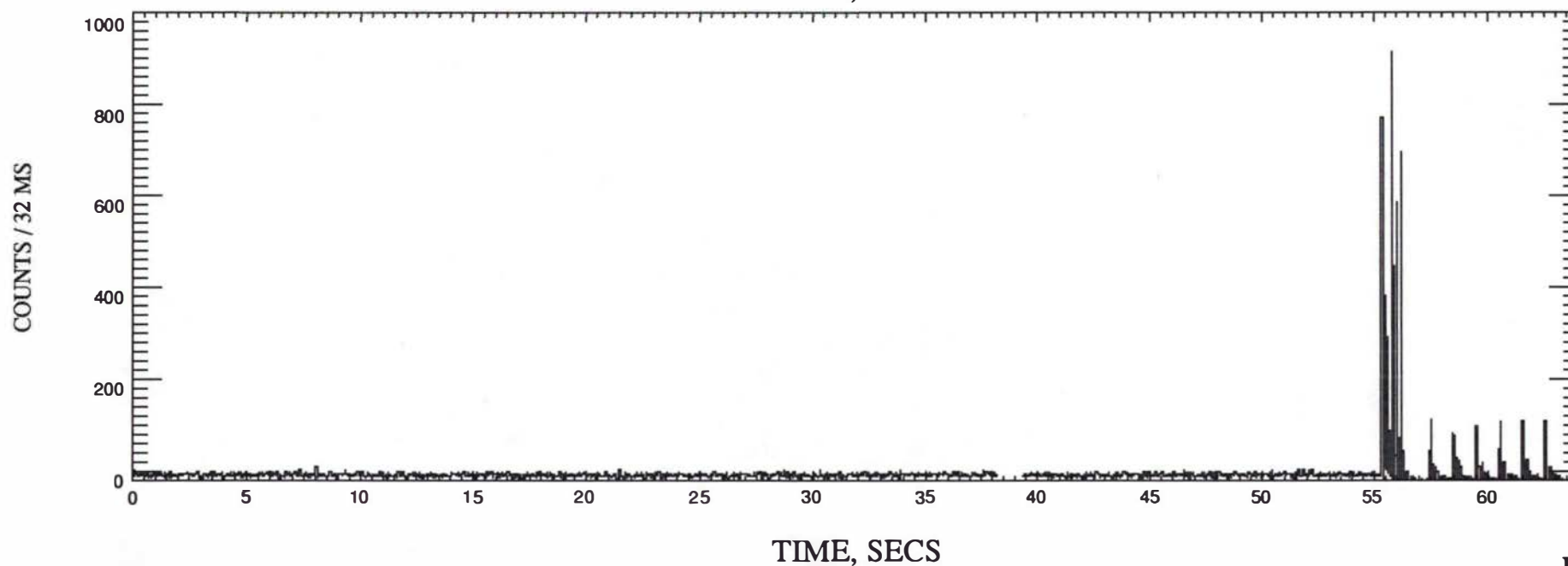
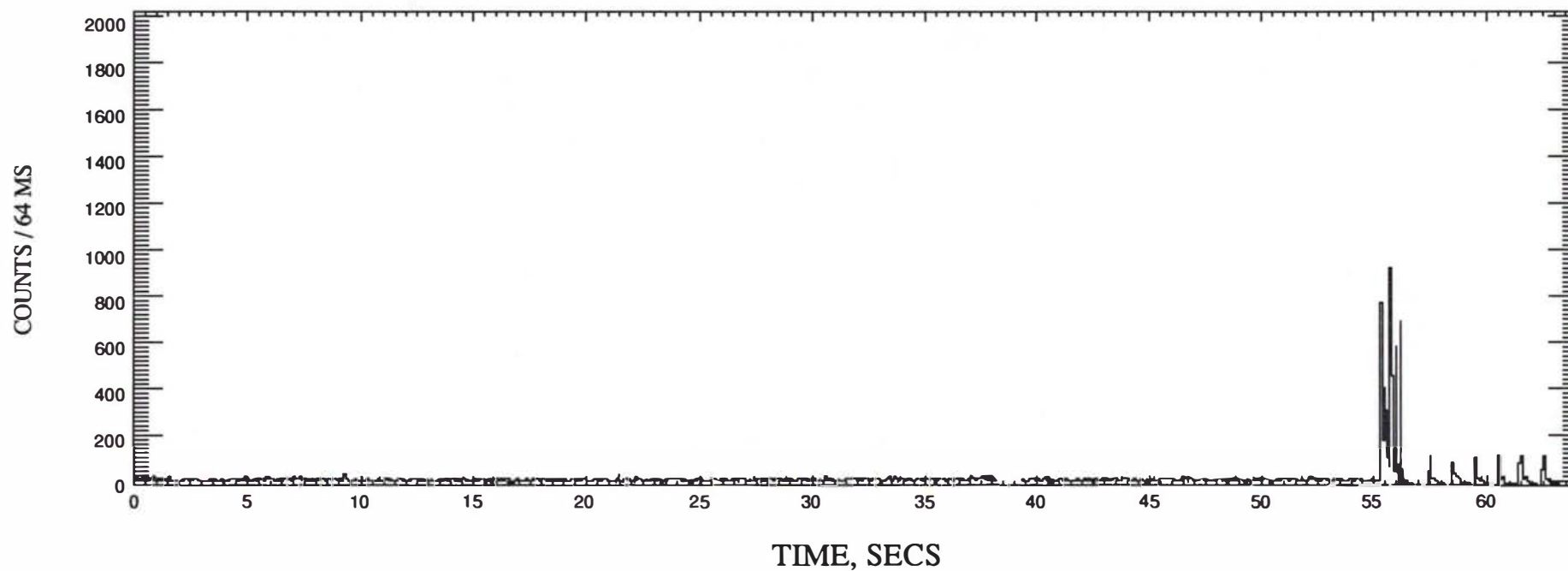
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 12 at UT= 7.510772060818 h=27038.779 s 07:30:38.779

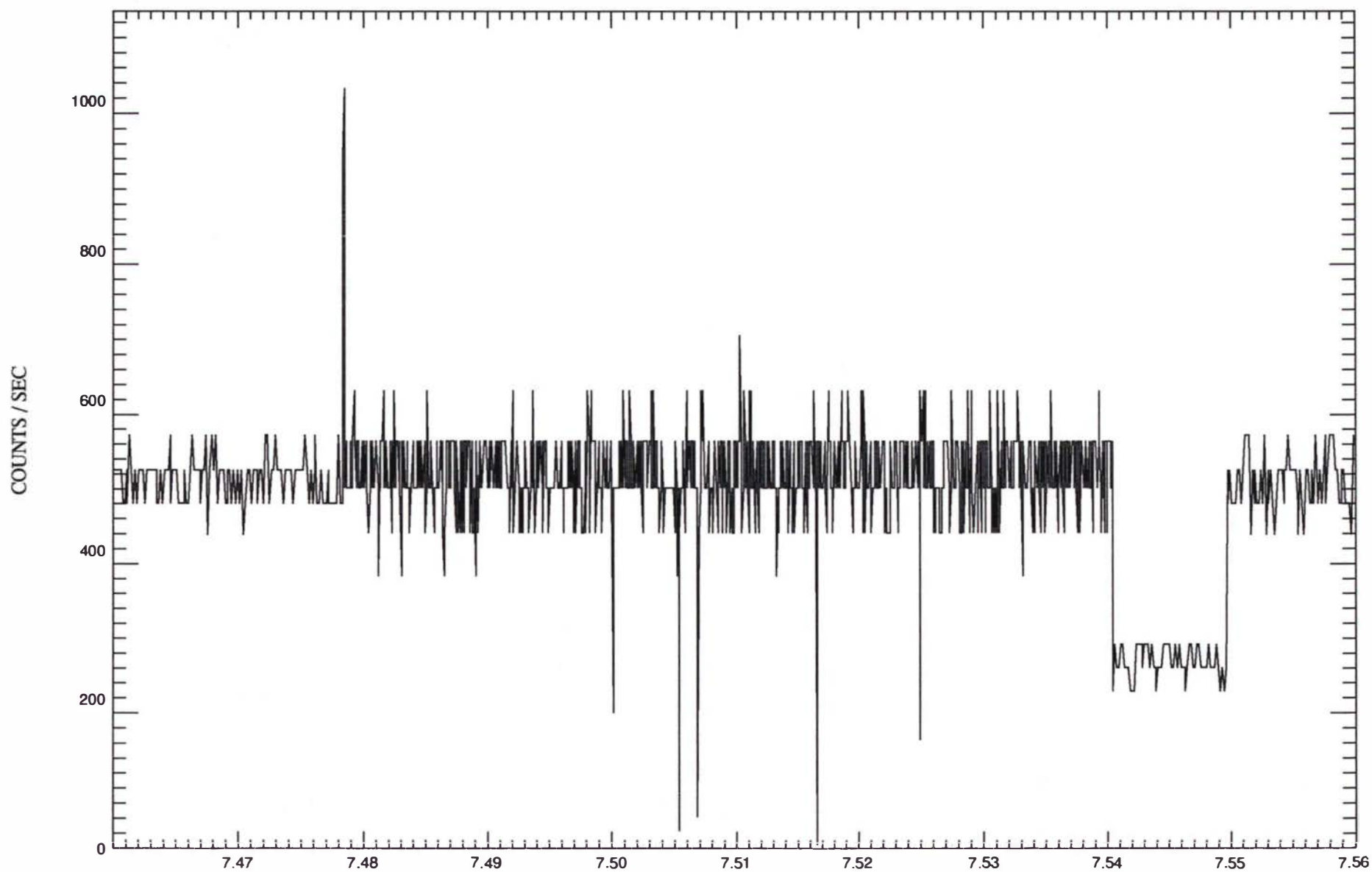
4/1/96



B# 8

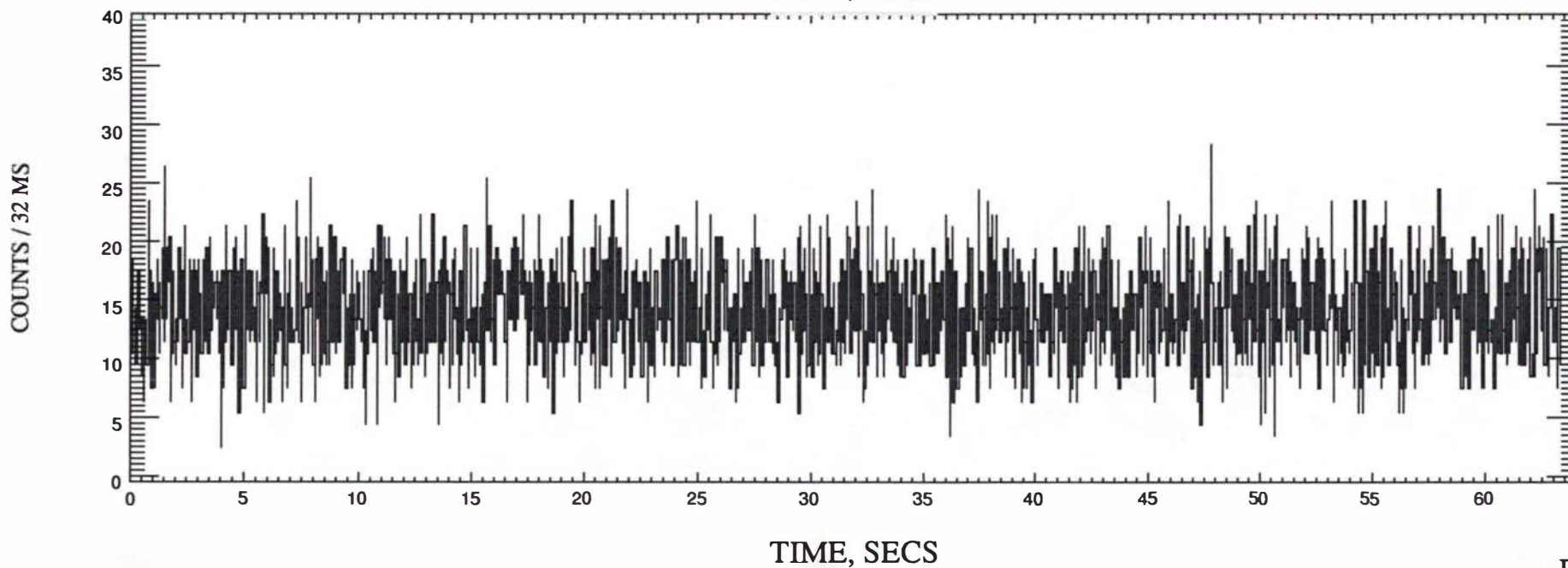
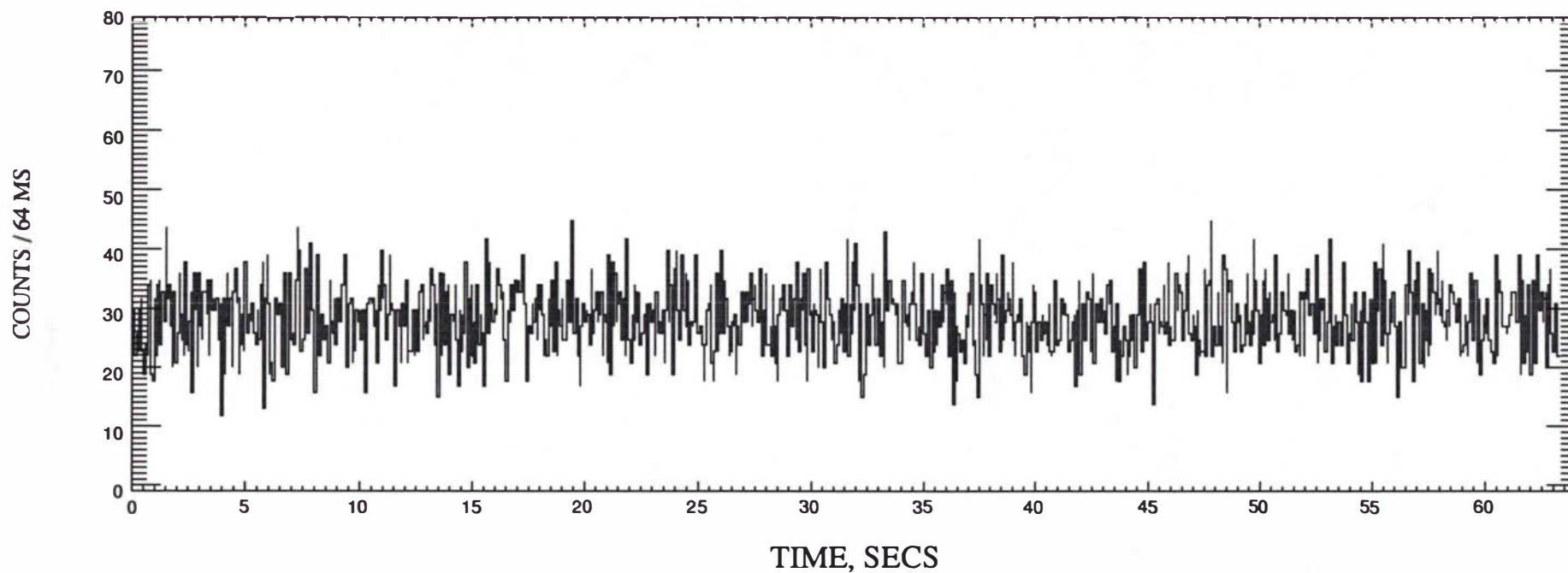
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



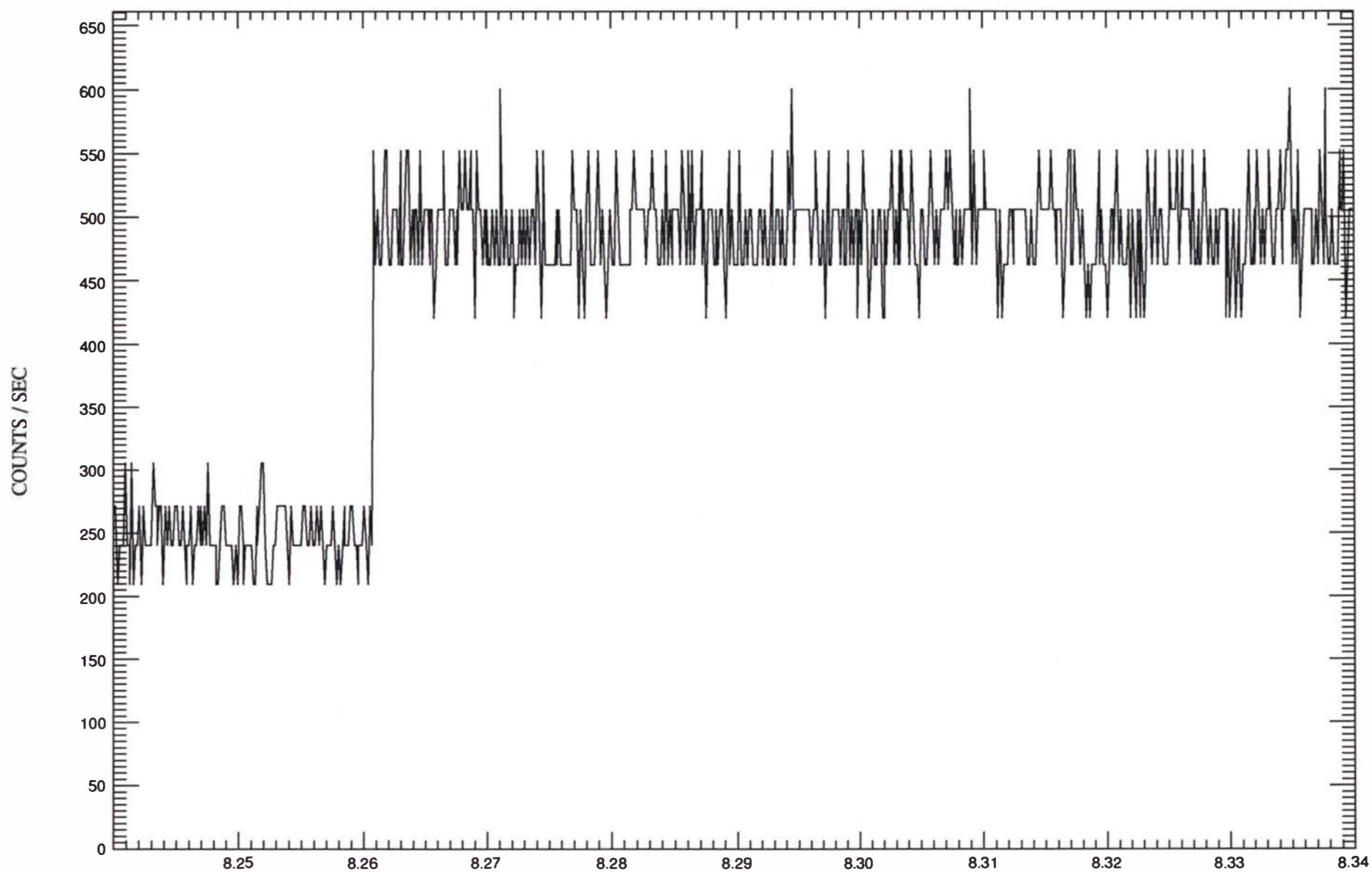
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 13 at UT= 8.291962835524 h=29851.066 s 08:17:31.066

4/1/96



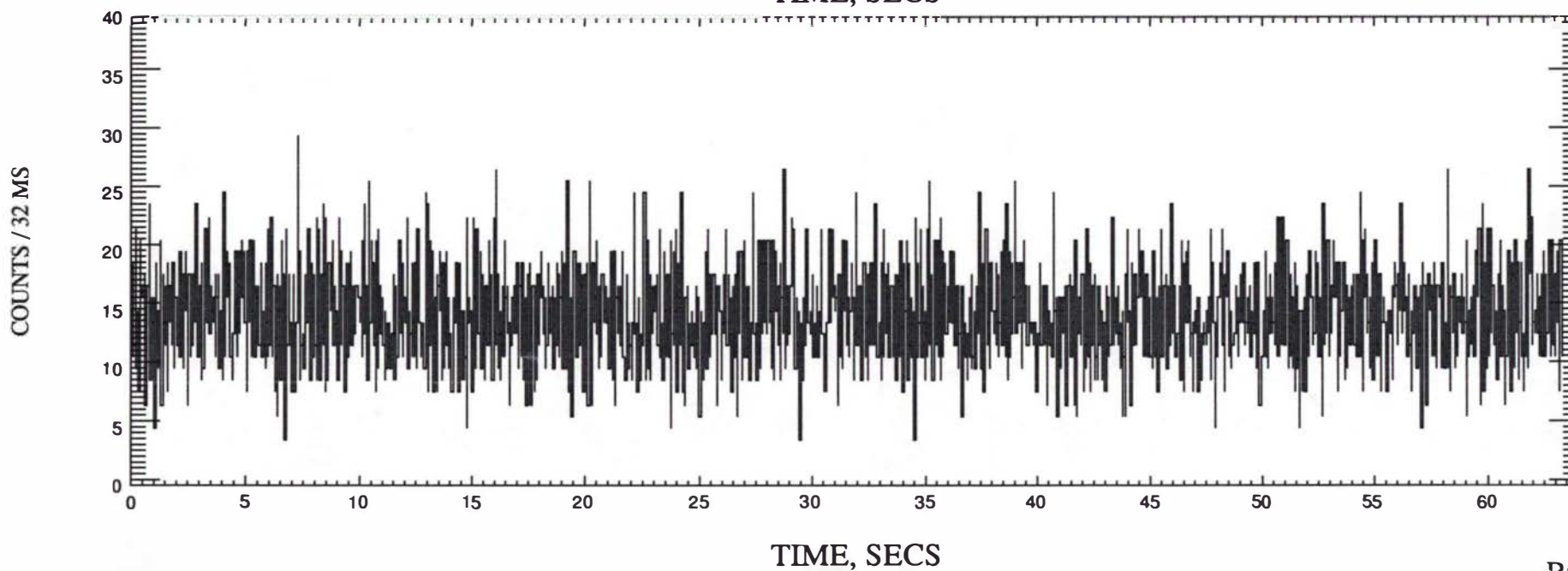
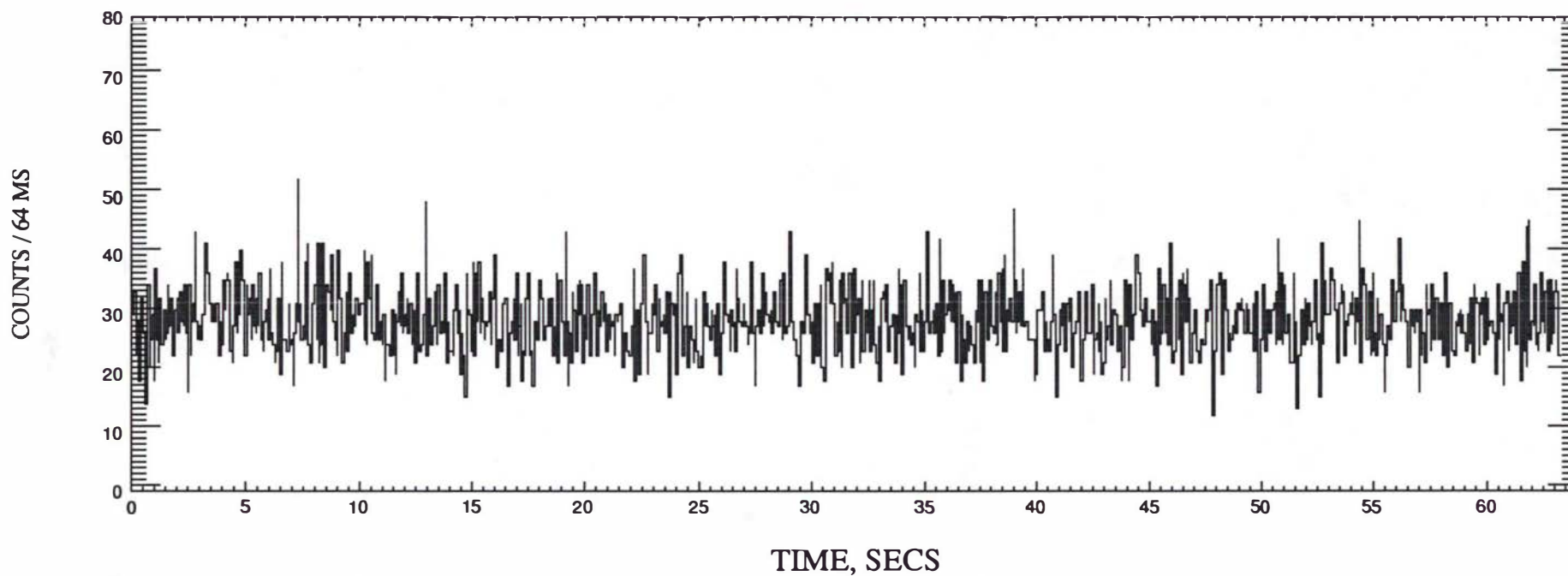
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



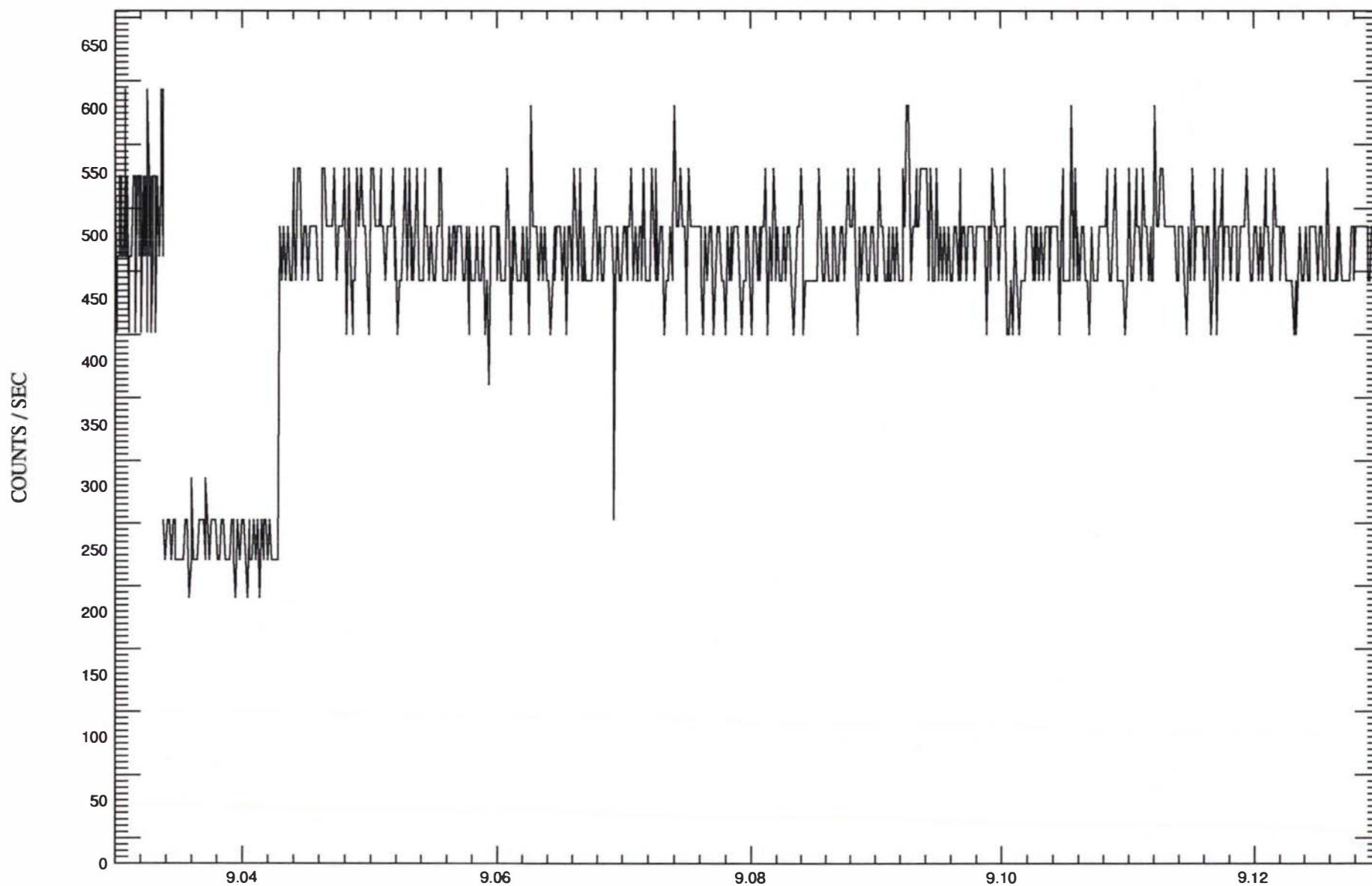
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 14 at UT= 9.075342742072 h=32671.234 s 09:04:31.234

4/1/96



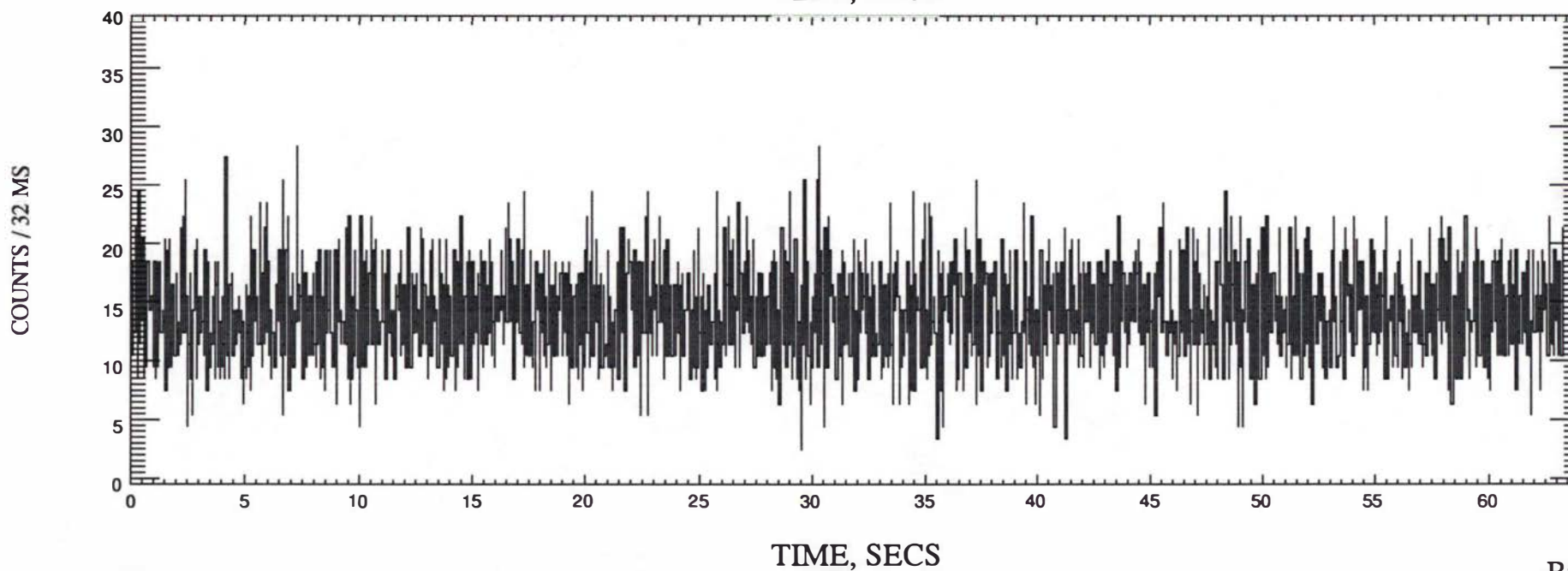
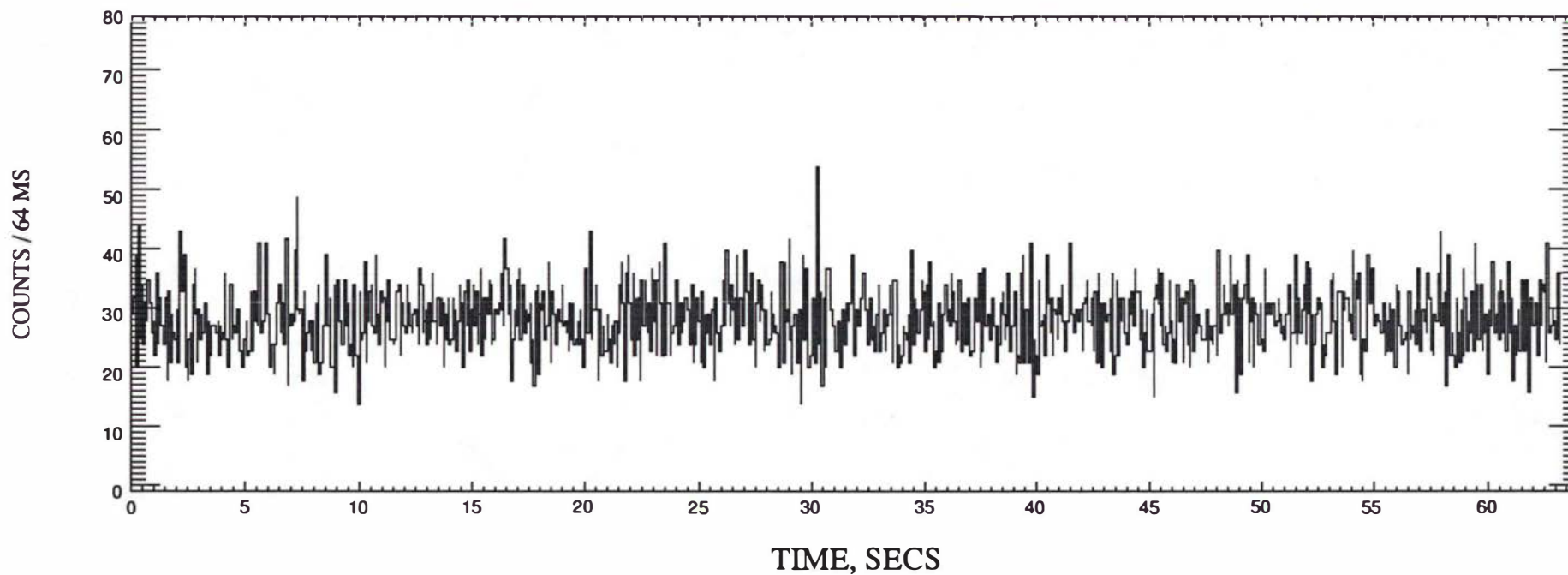
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



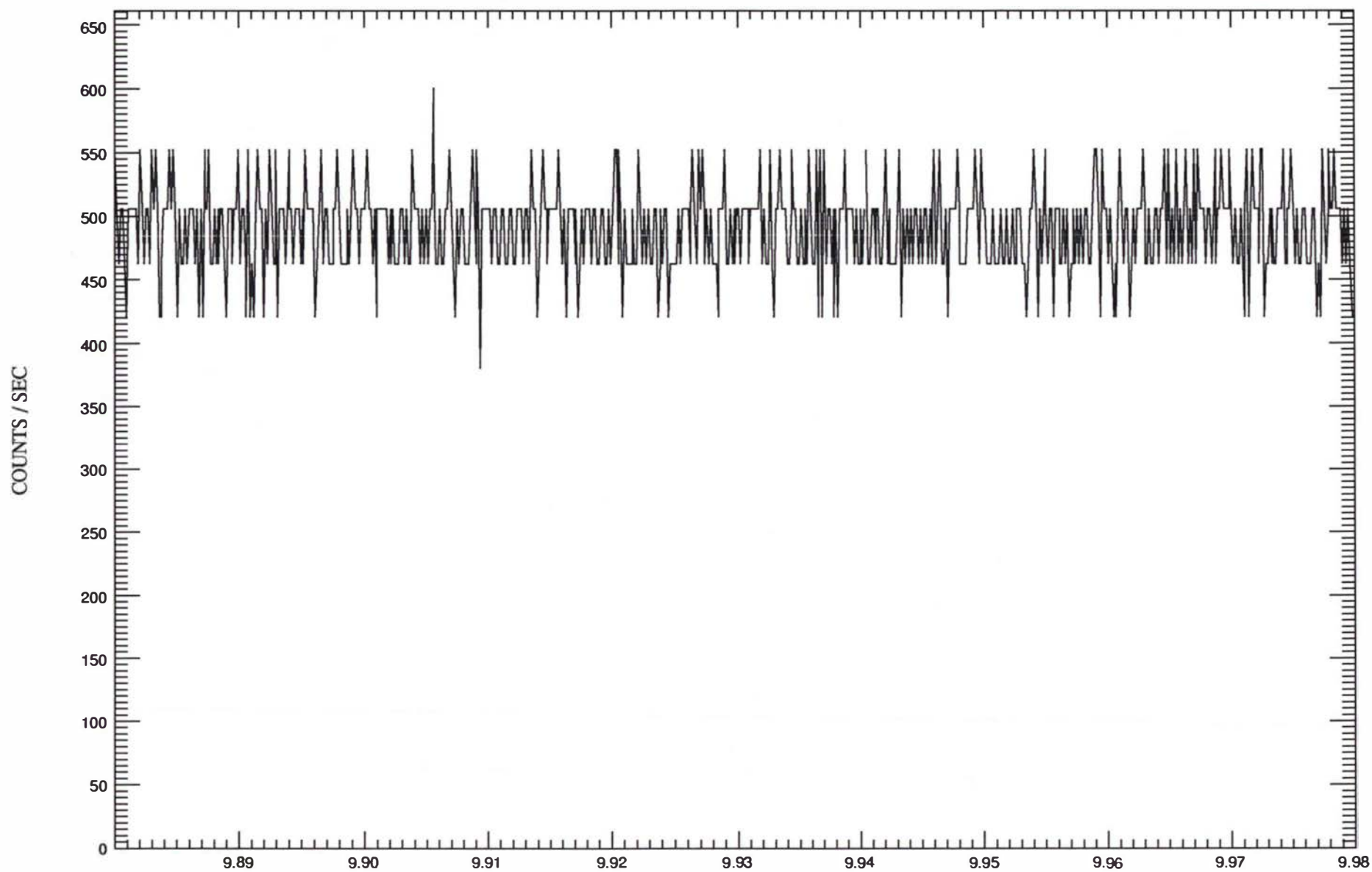
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 15 at UT= 9.929207666185 h=35745.148 s 09:55:45.148

4/1/96



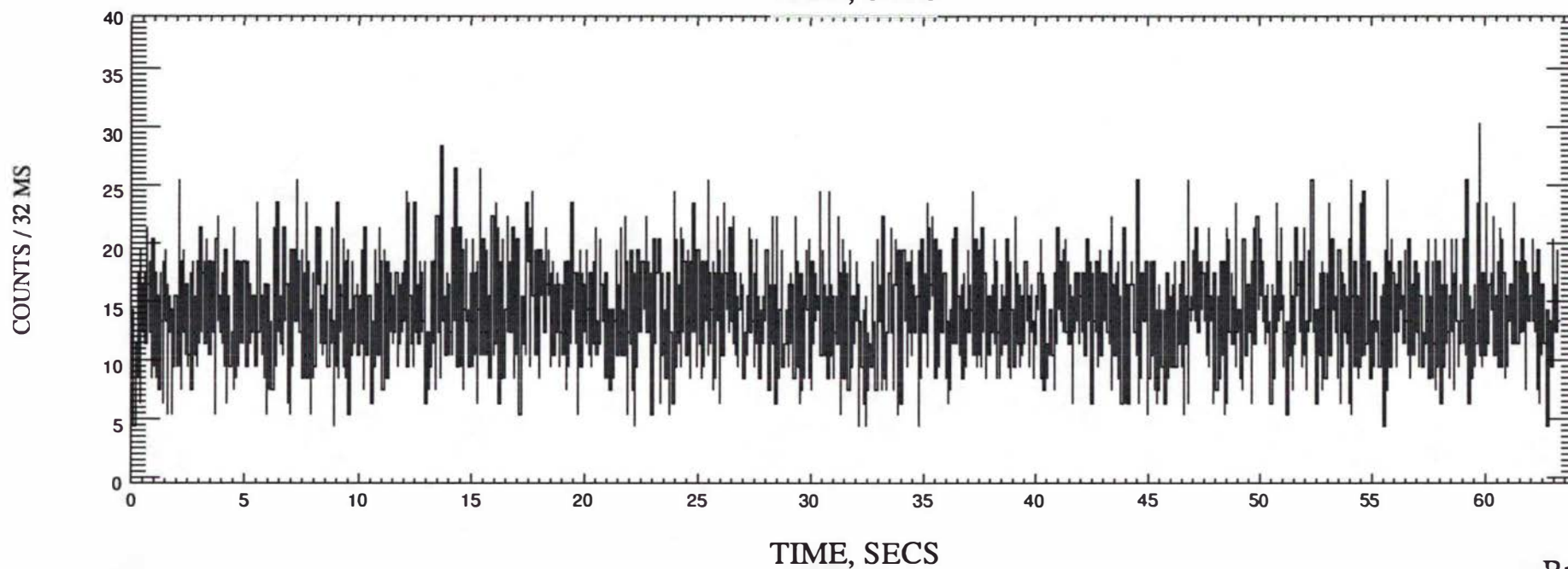
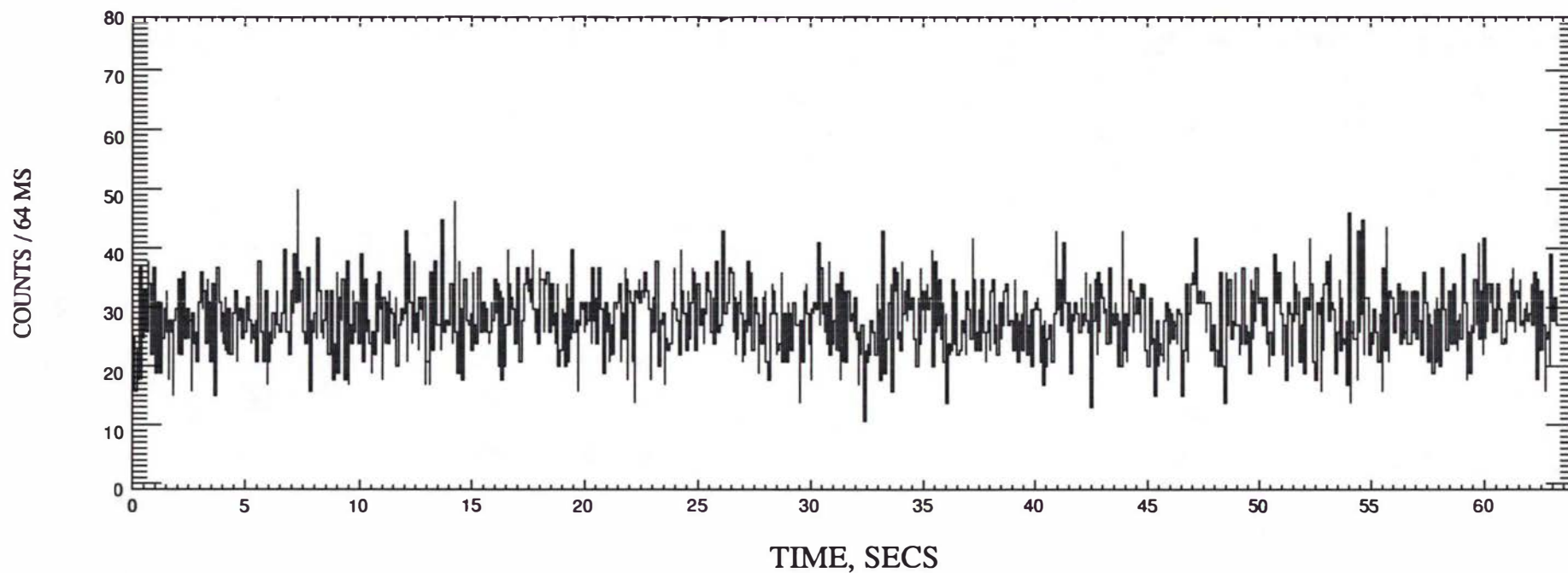
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



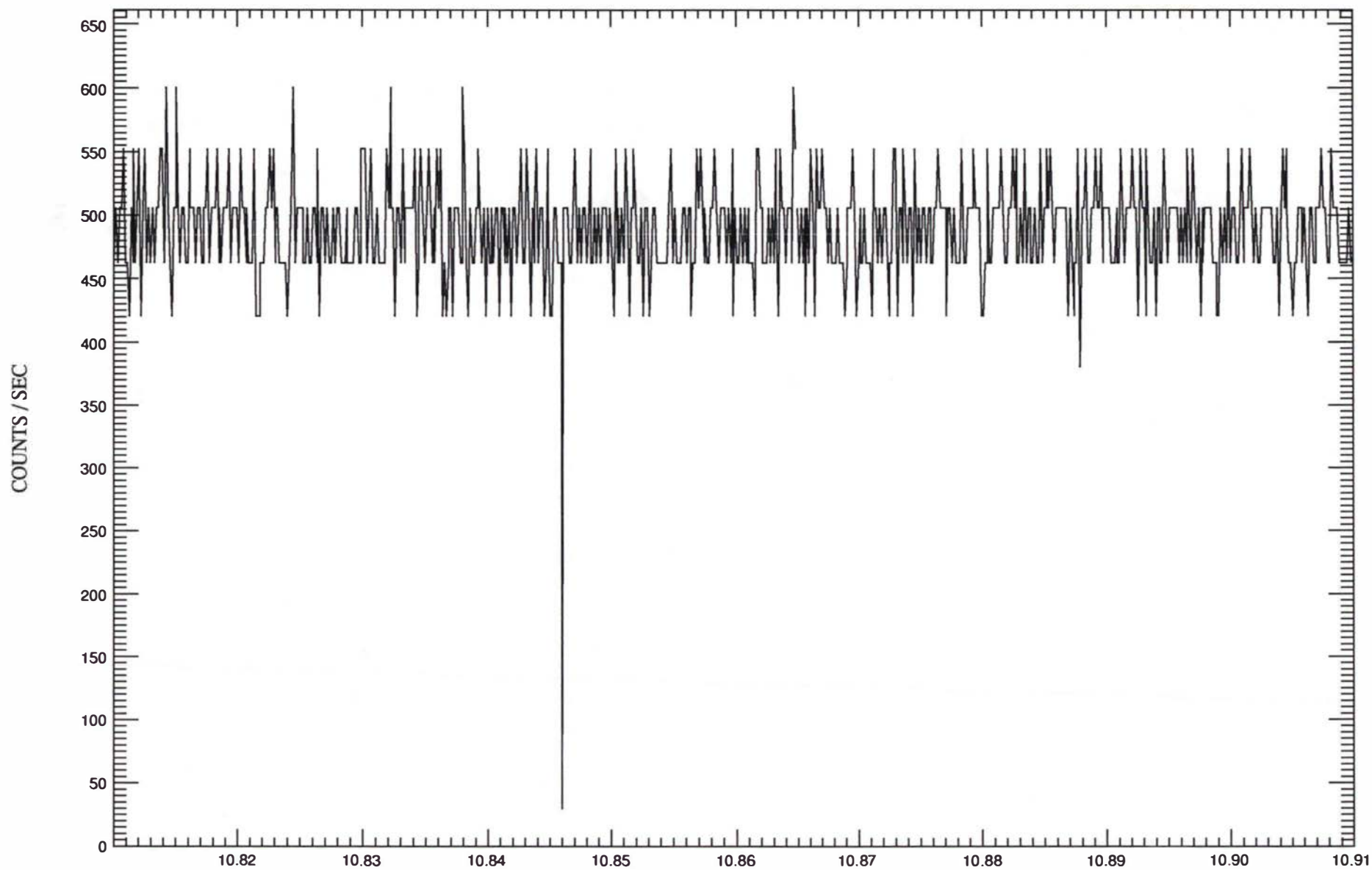
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 0 at UT=10.862001618279 h=39103.206 s 10:51:43.206

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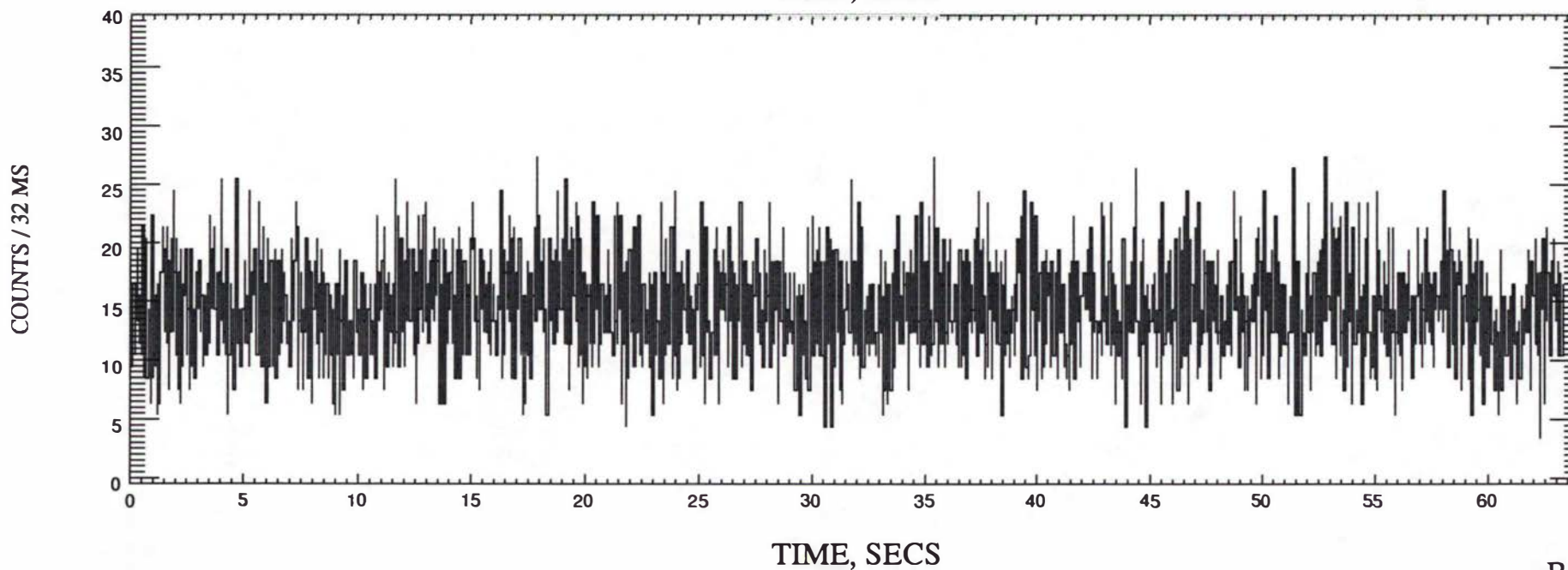
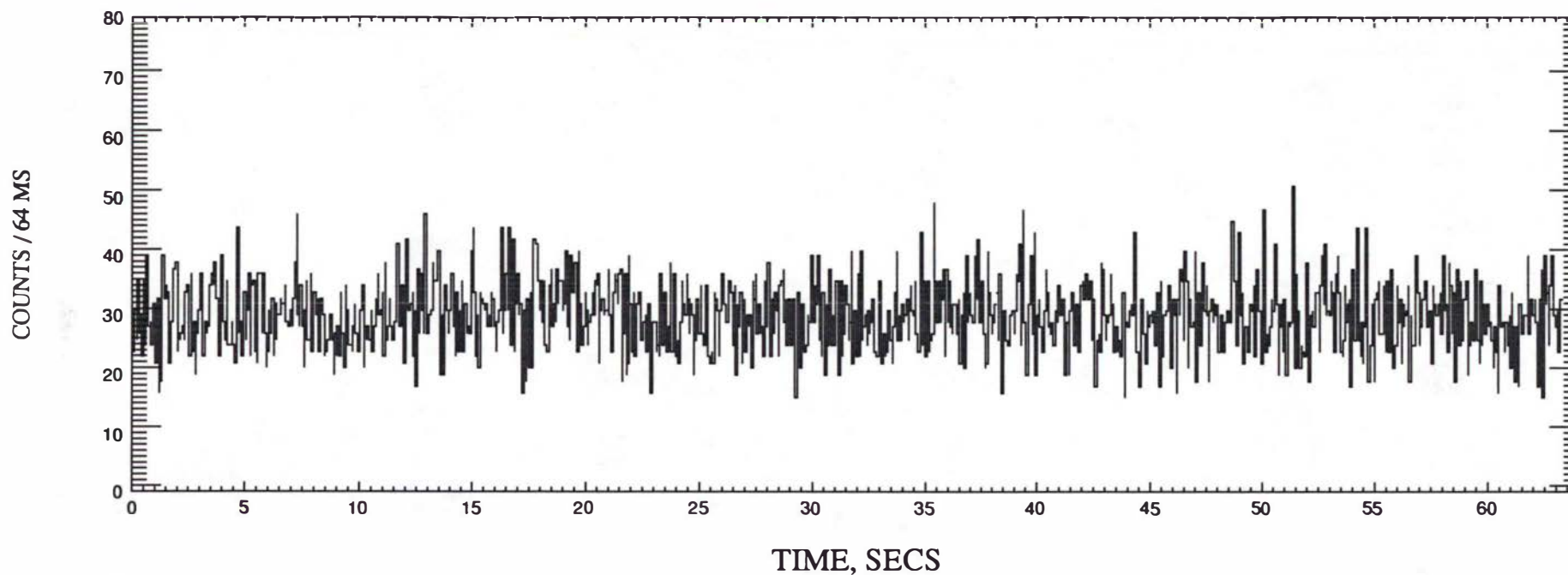
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



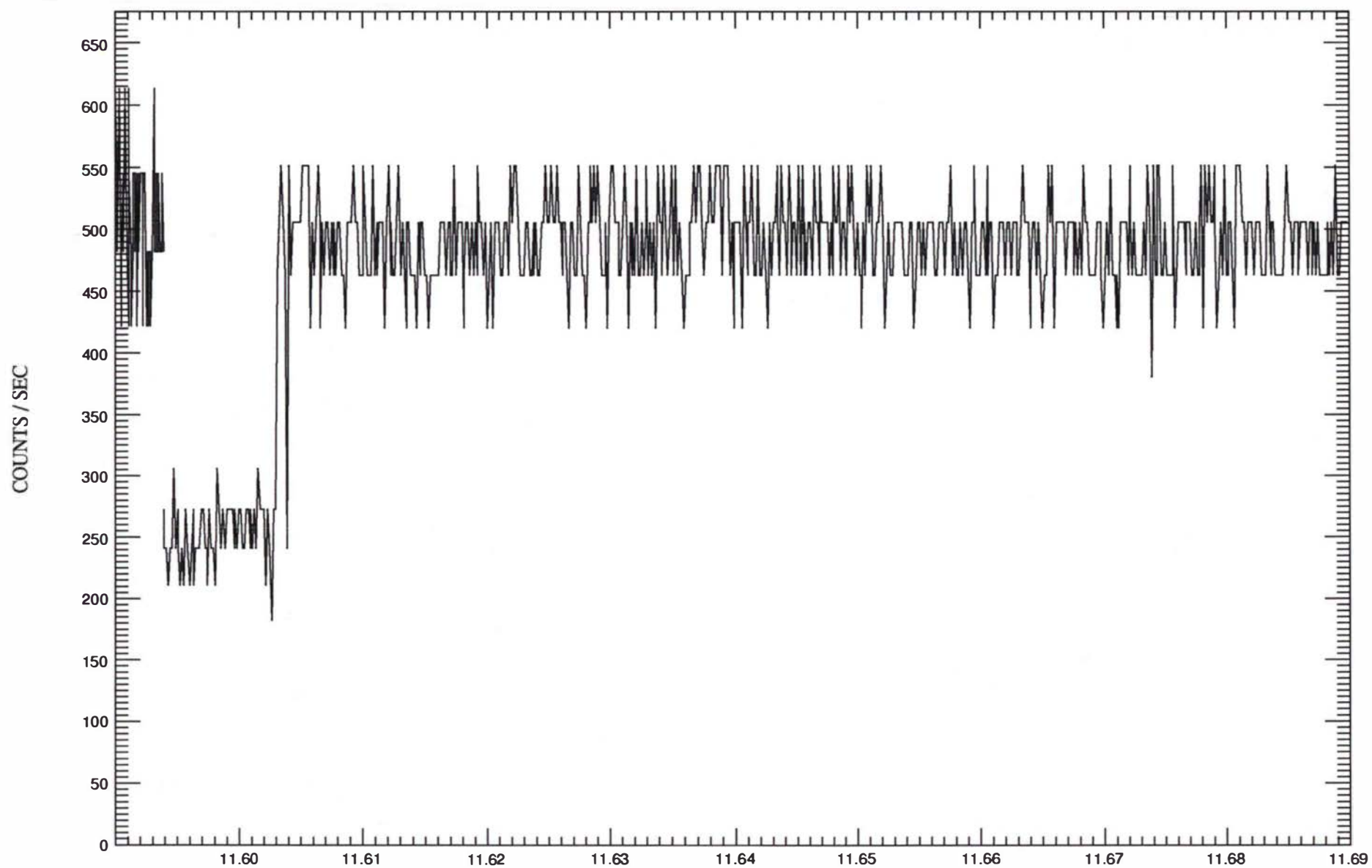
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 1 at UT=11.635624580383 h=41888.248 s 11:38:08.248

4/1/96



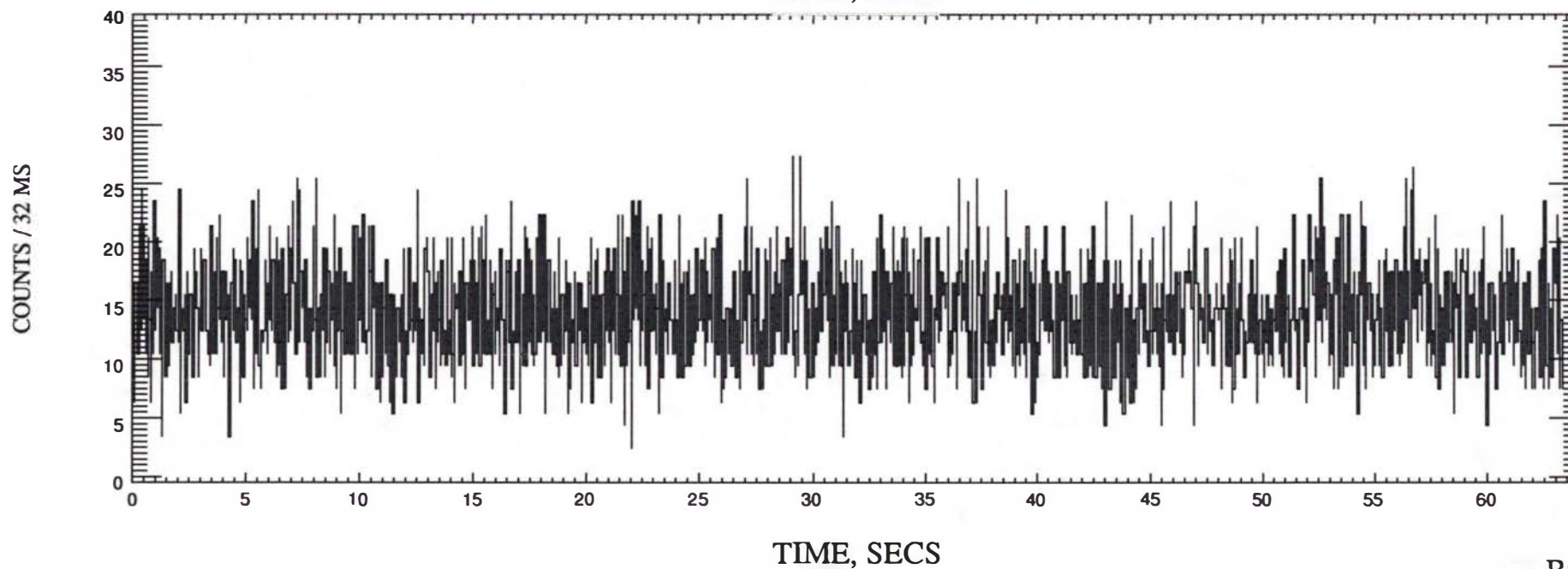
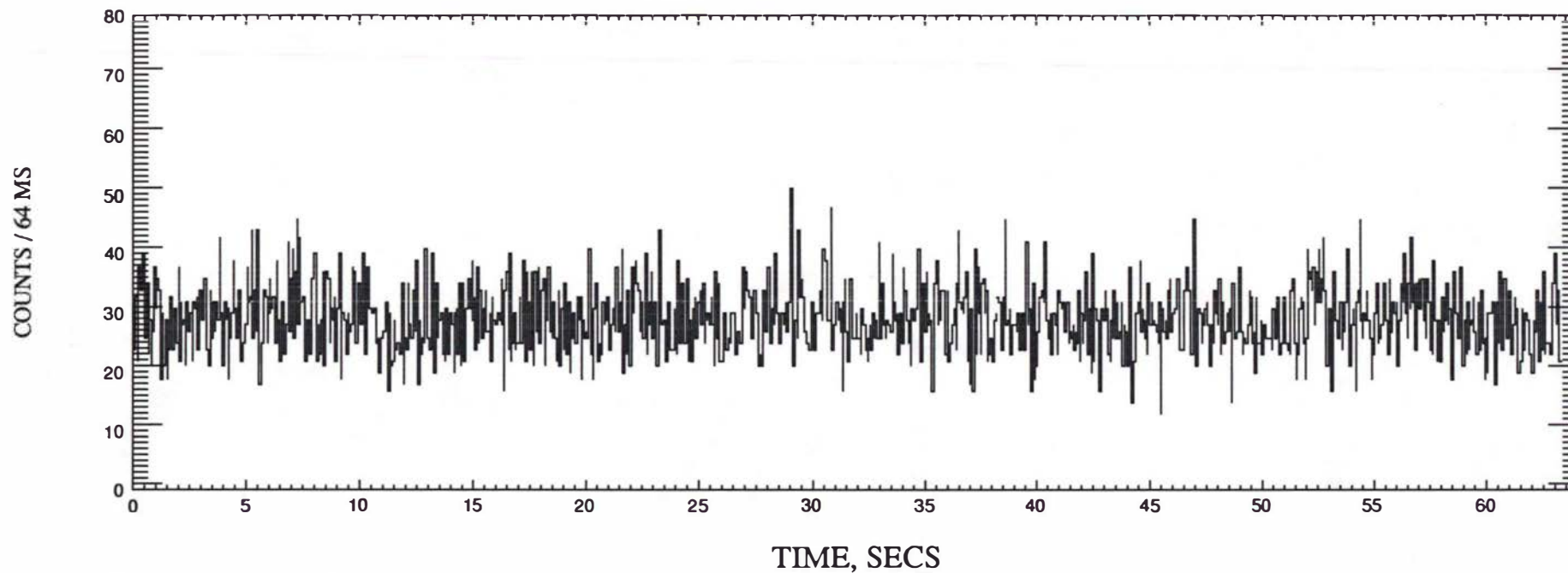
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



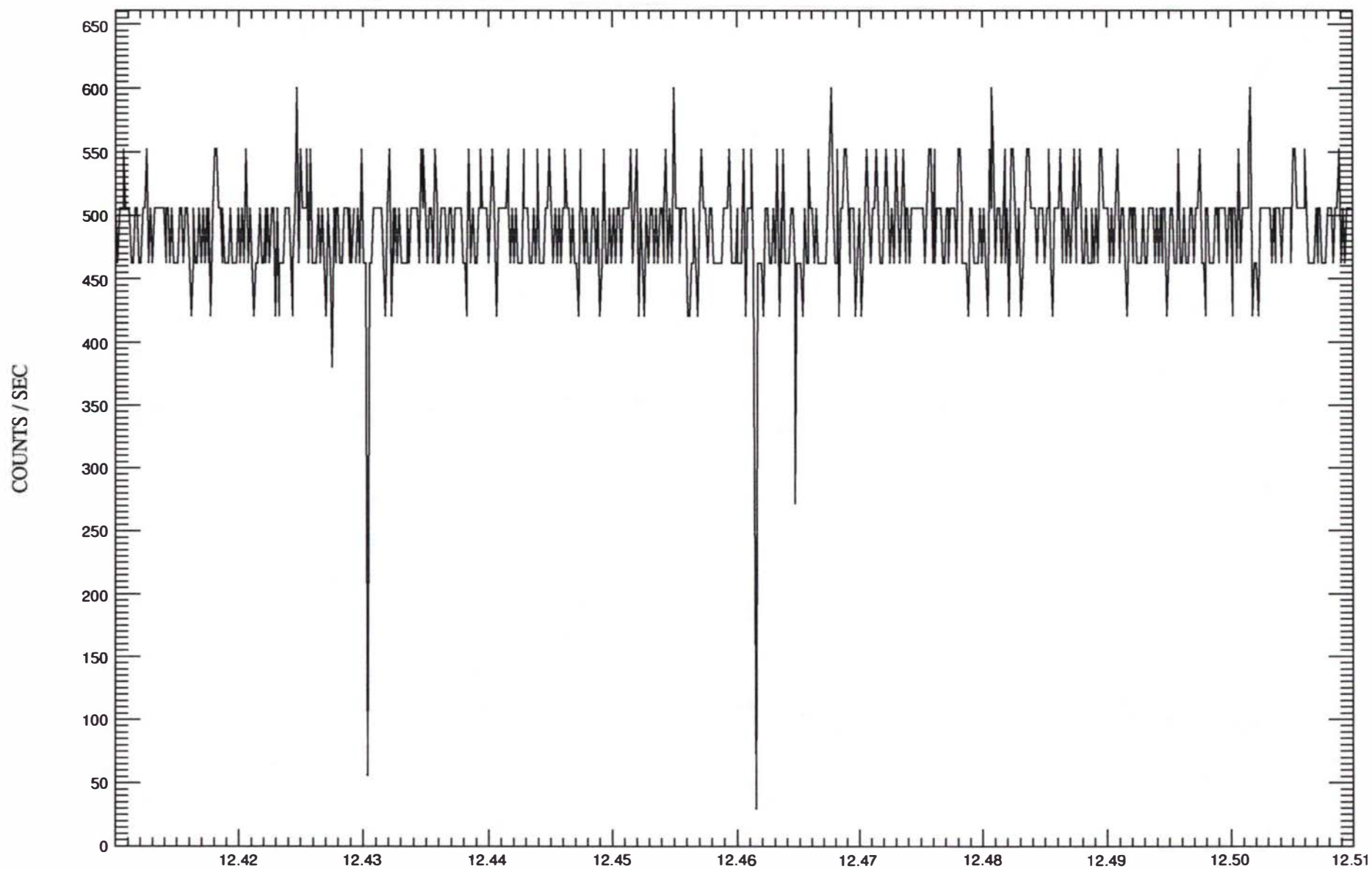
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 2 at UT=12.455220841302 h=44838.795 s 12:27:18.795

4/1/96



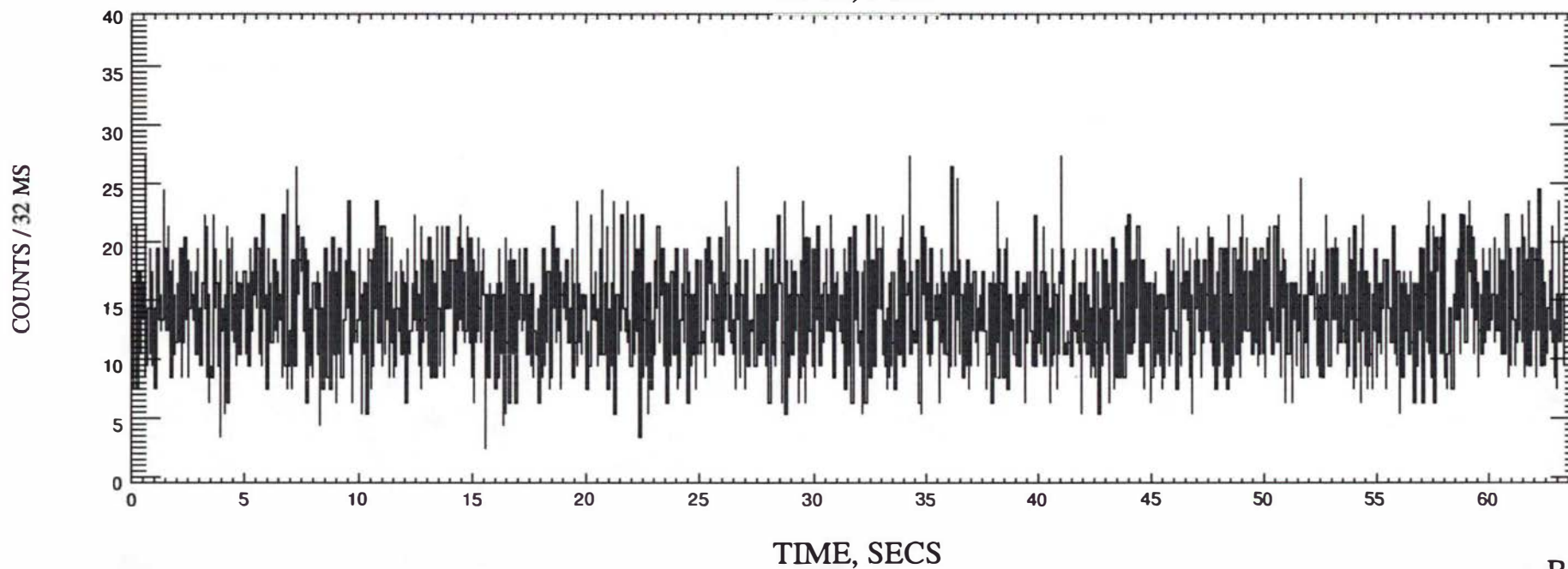
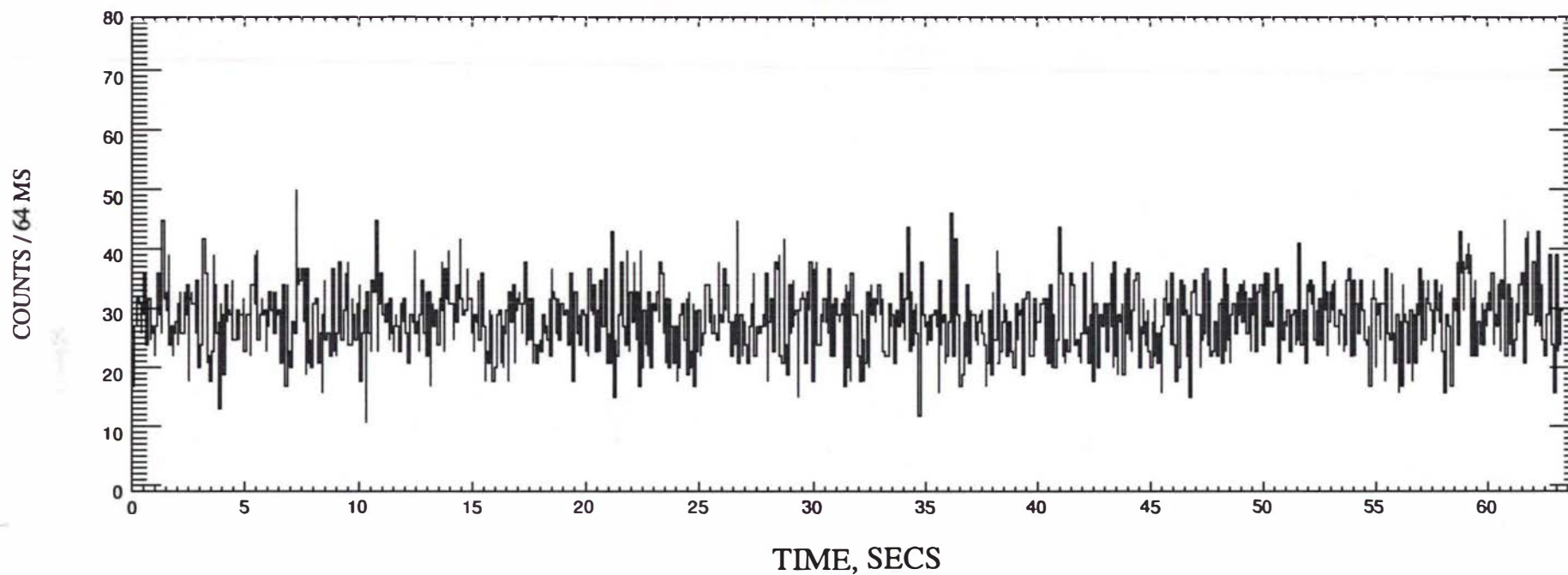
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



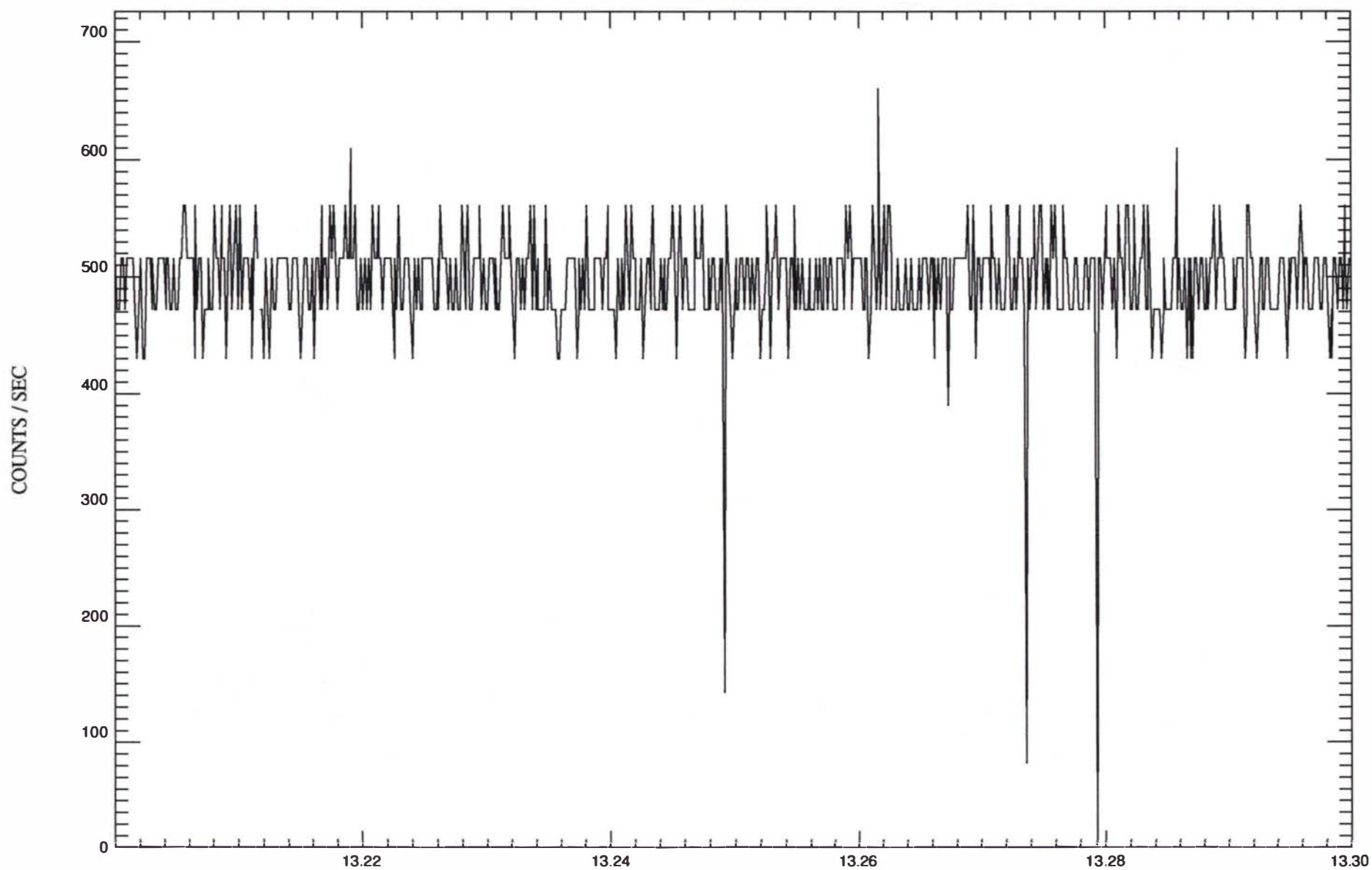
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 3 at UT=13.247454914517 h=47690.838 s 13:14:50.838

4/1/96



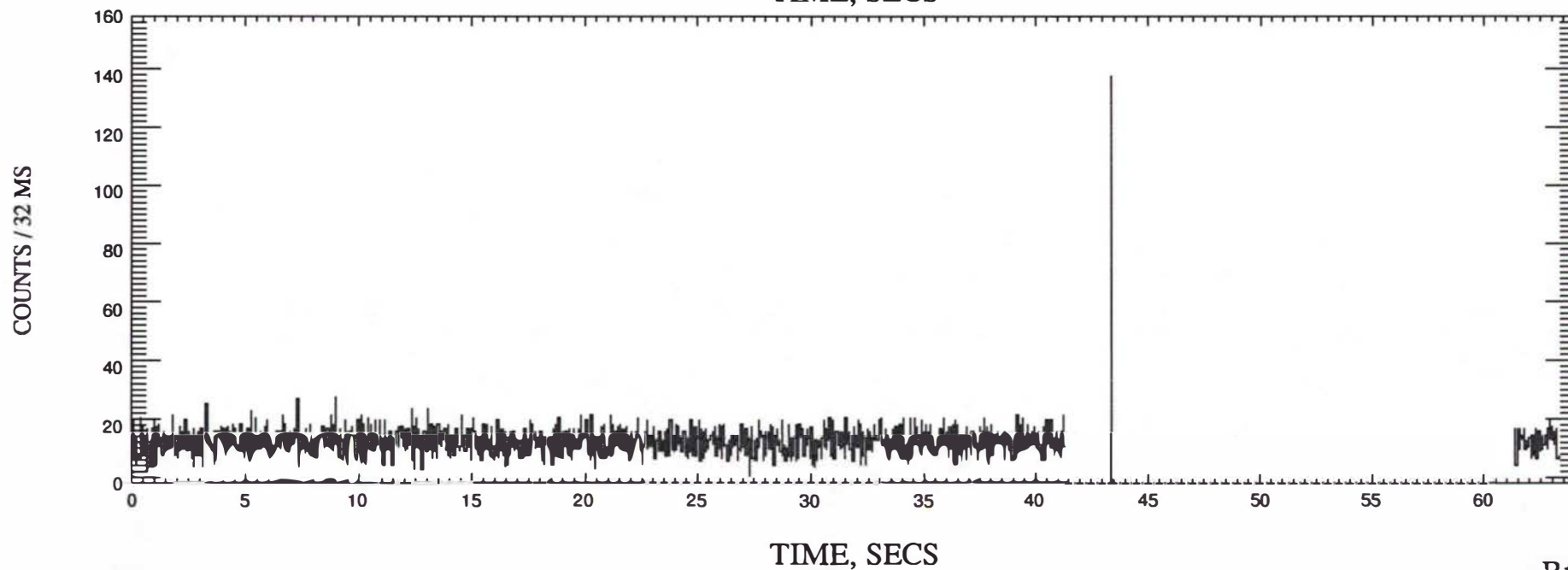
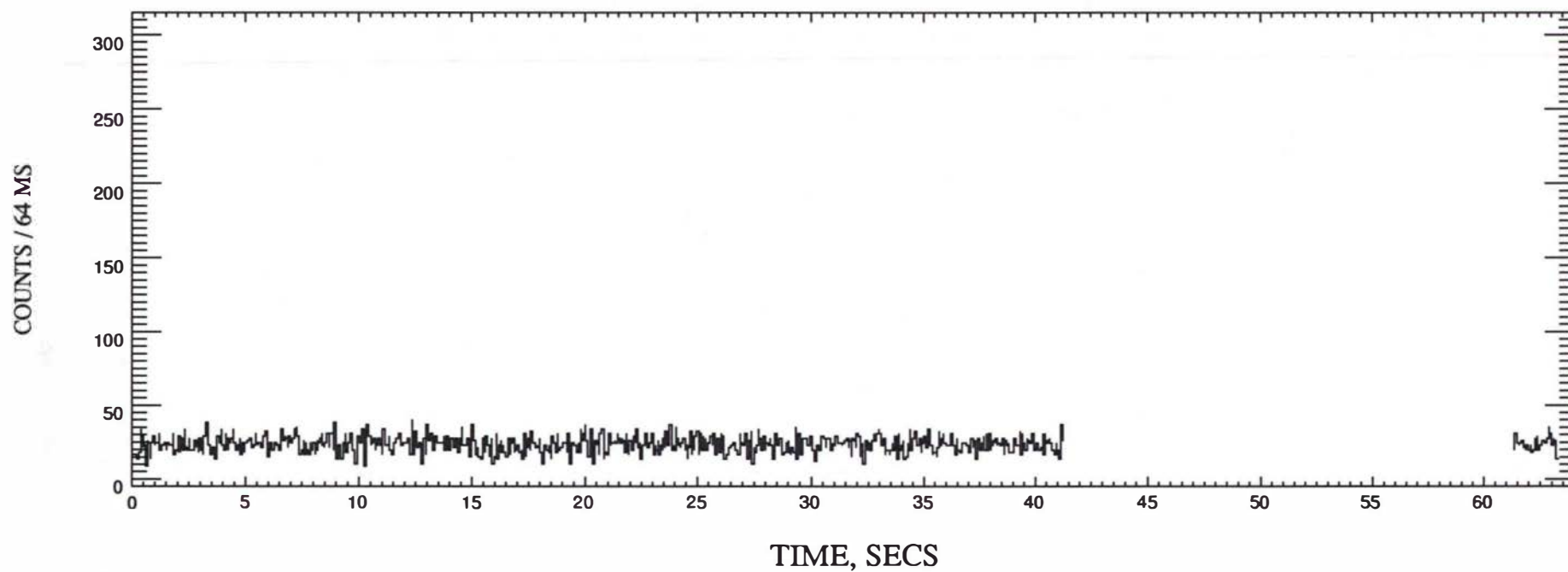
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



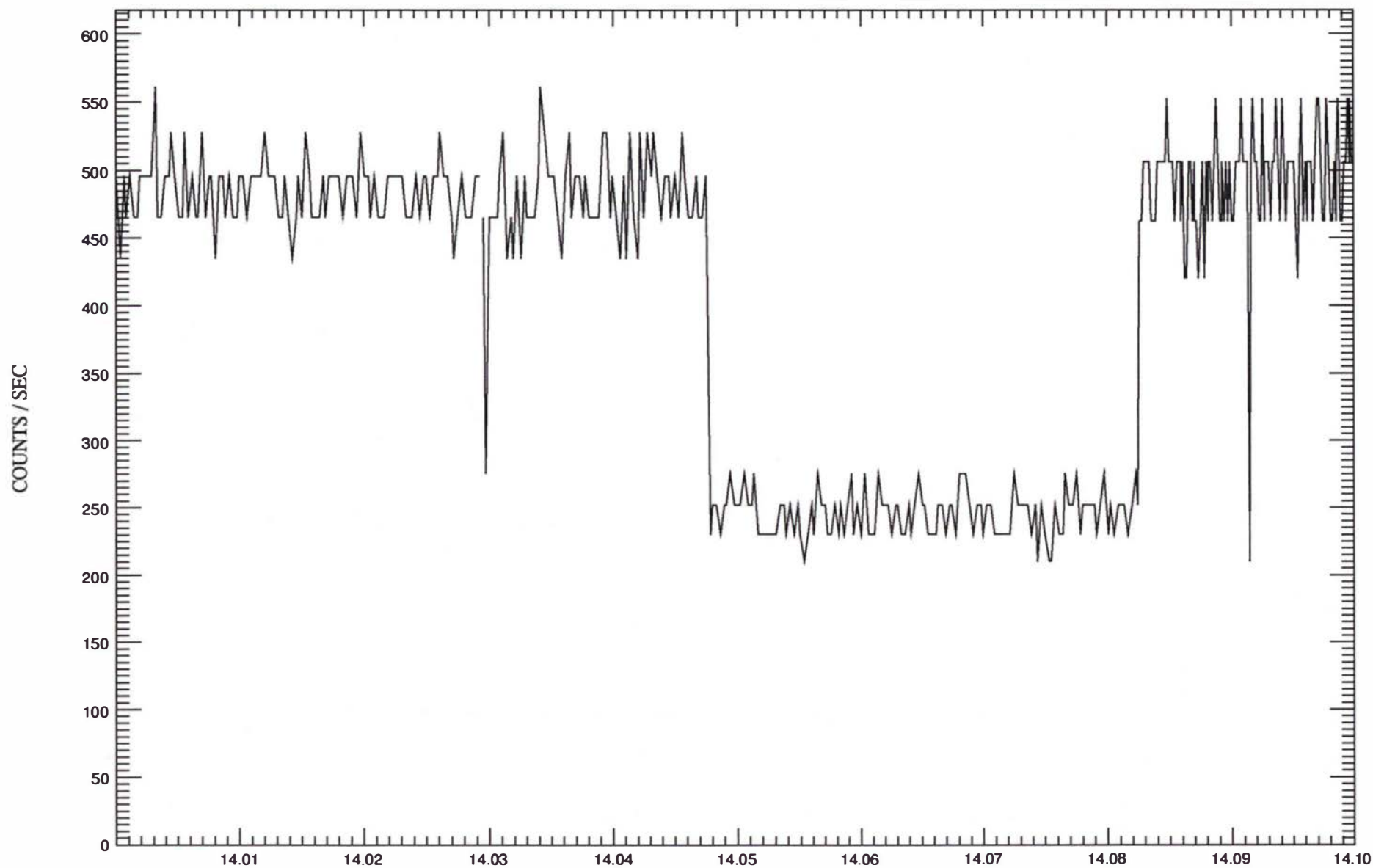
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 4 at UT=14.049168692695 h=50577.007 s 14:02:57.007

4/1/96



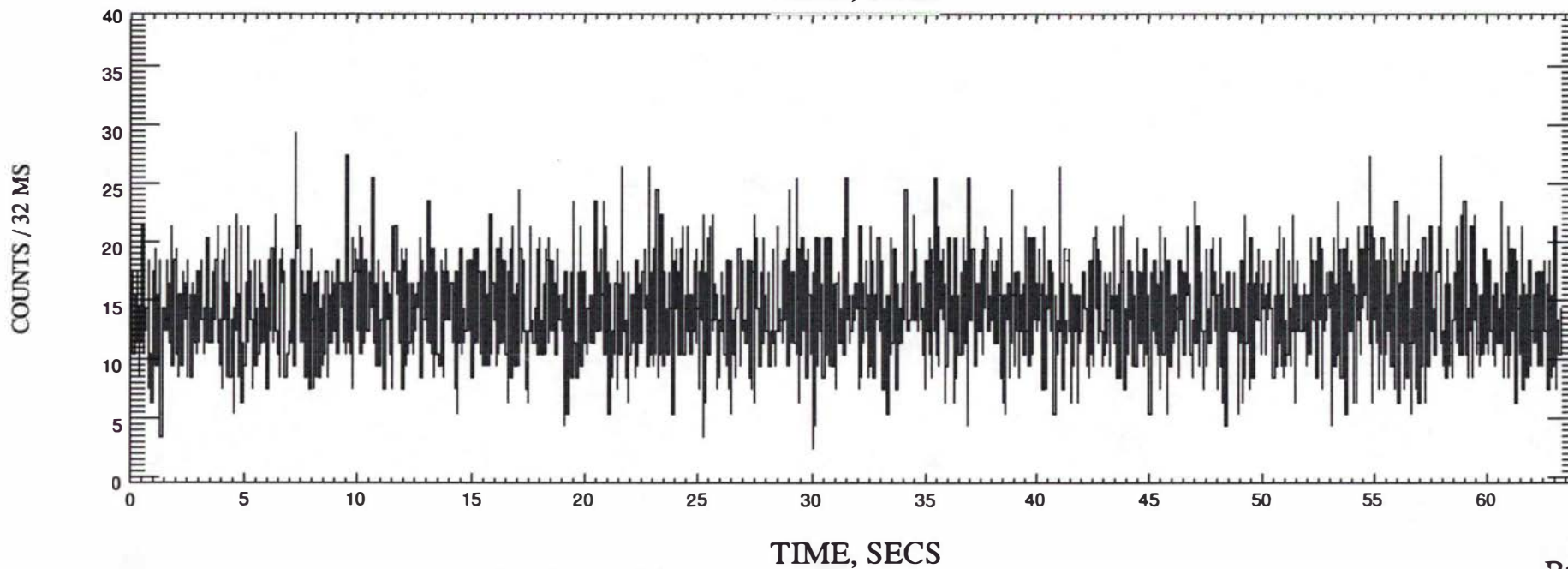
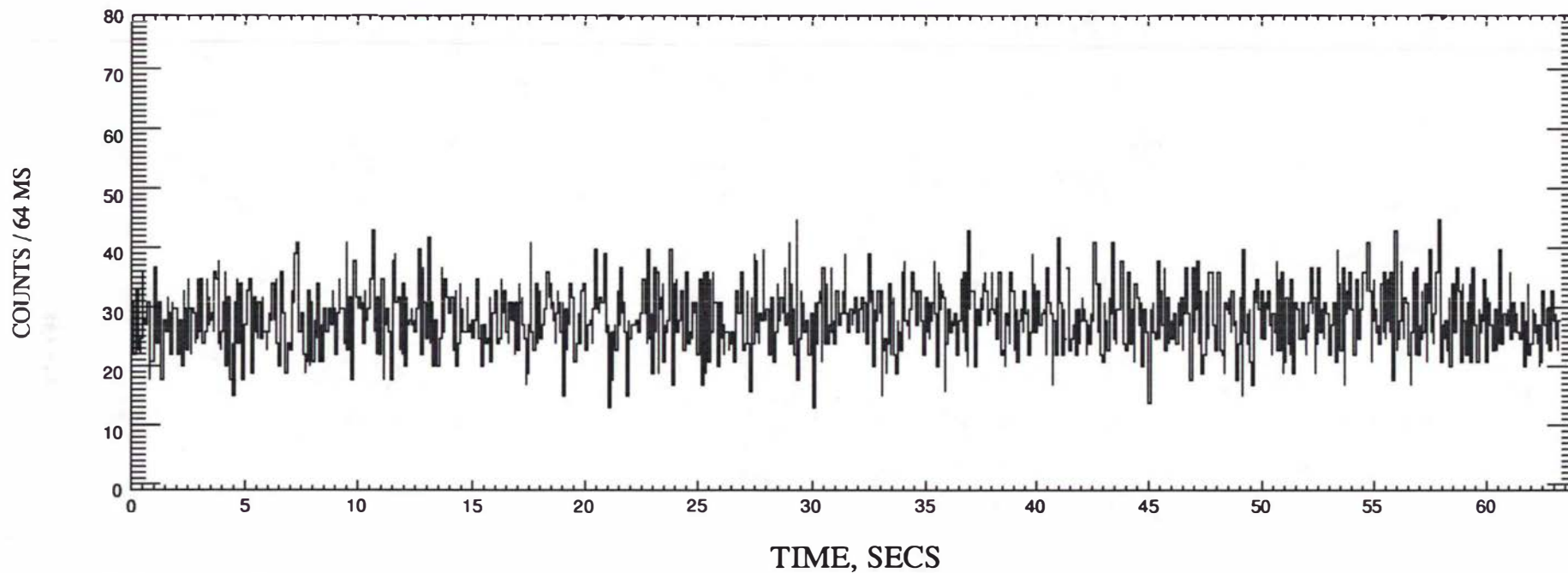
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



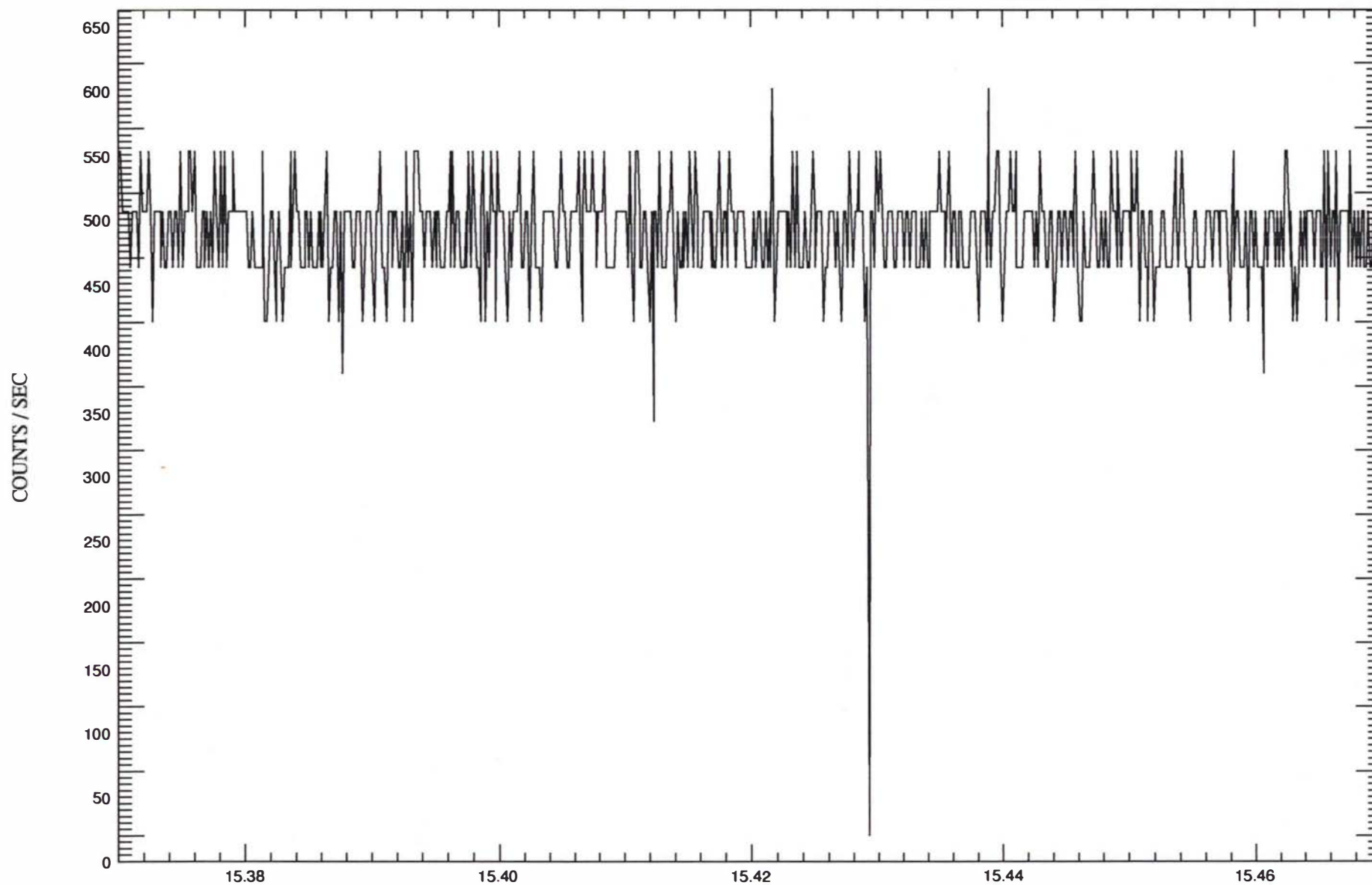
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 5 at UT=15.421856647068 h=55518.684 s 15:25:18.684

4/1/96



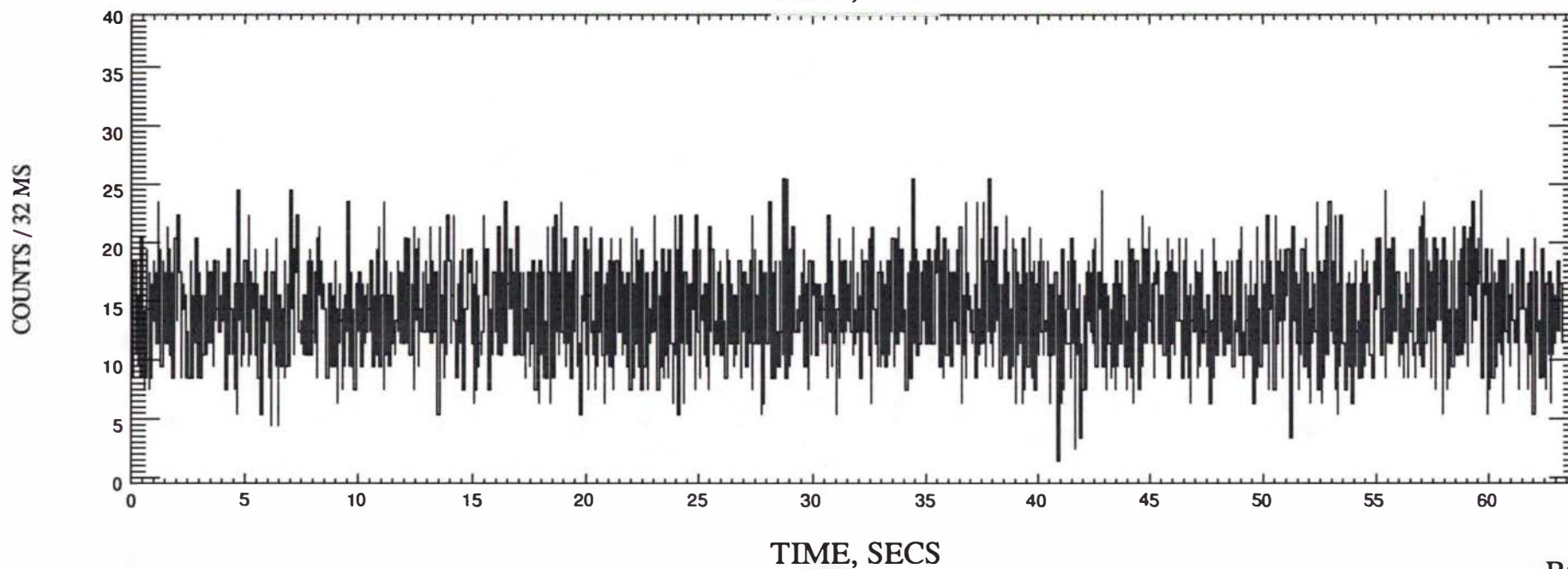
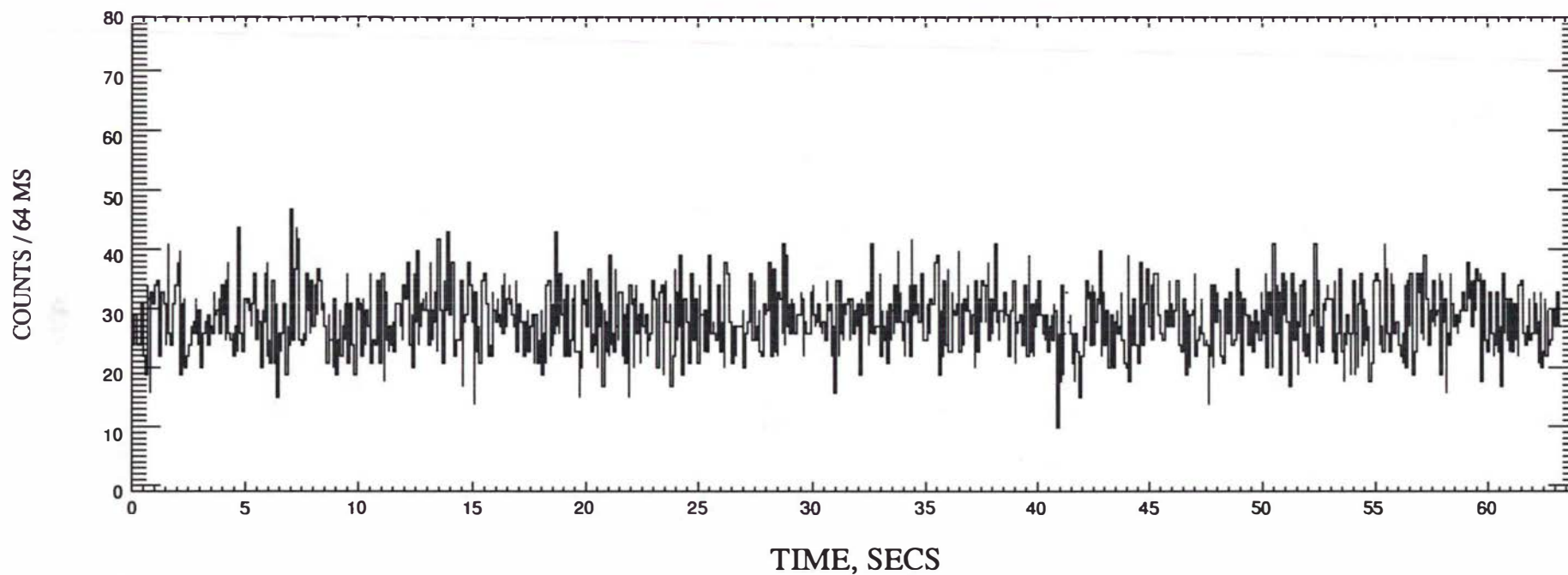
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



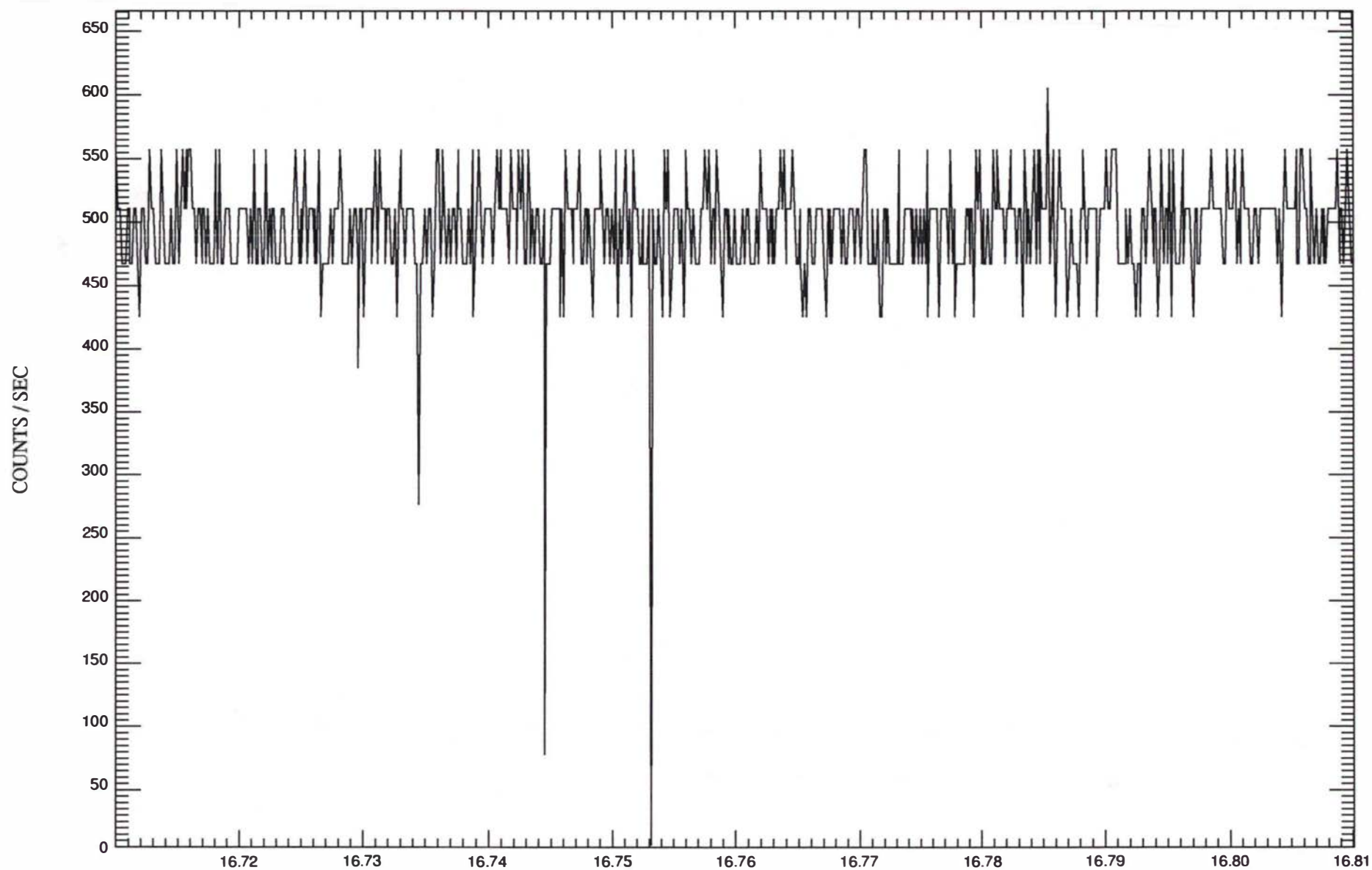
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 6 at UT=16.756141963535 h=60322.111 s 16:45:22.111

4/1/96



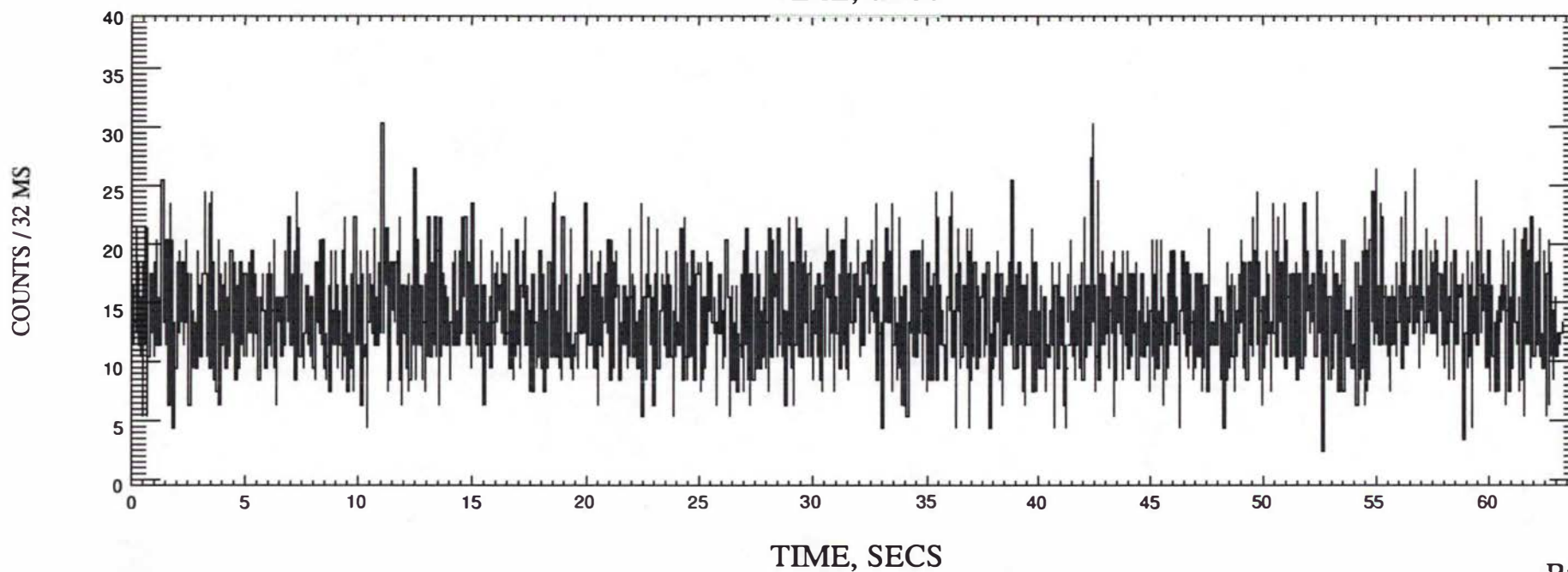
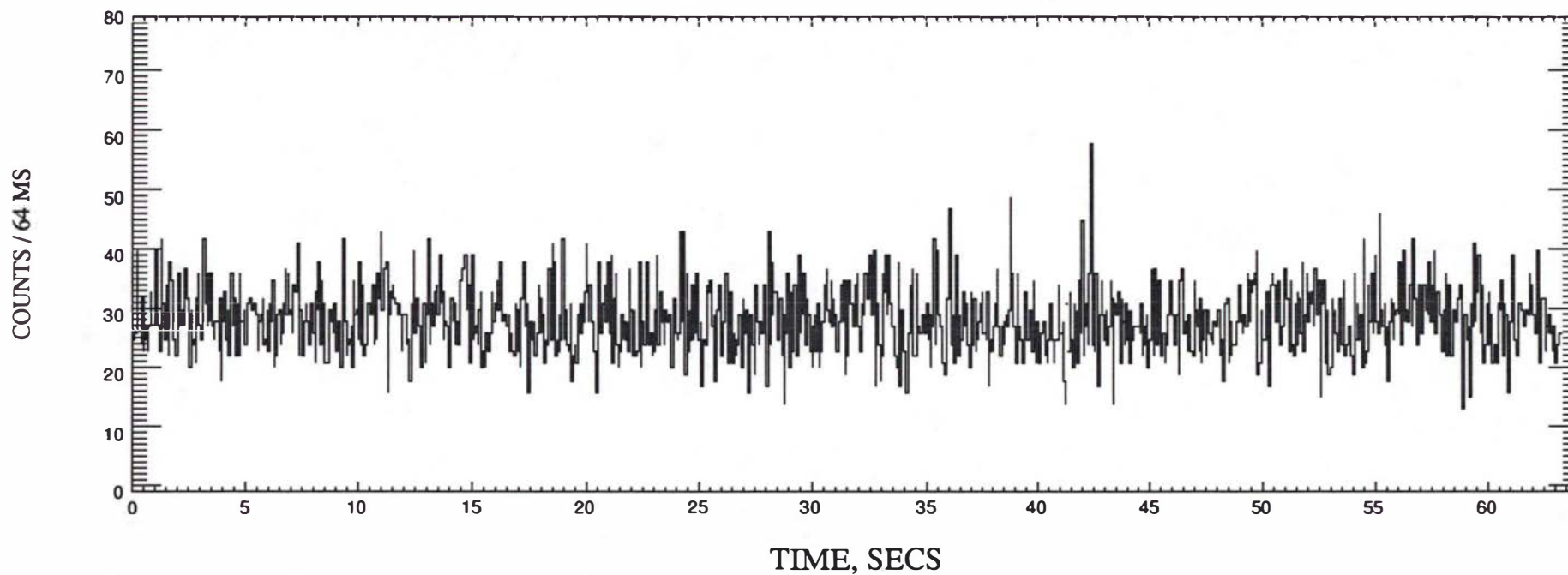
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



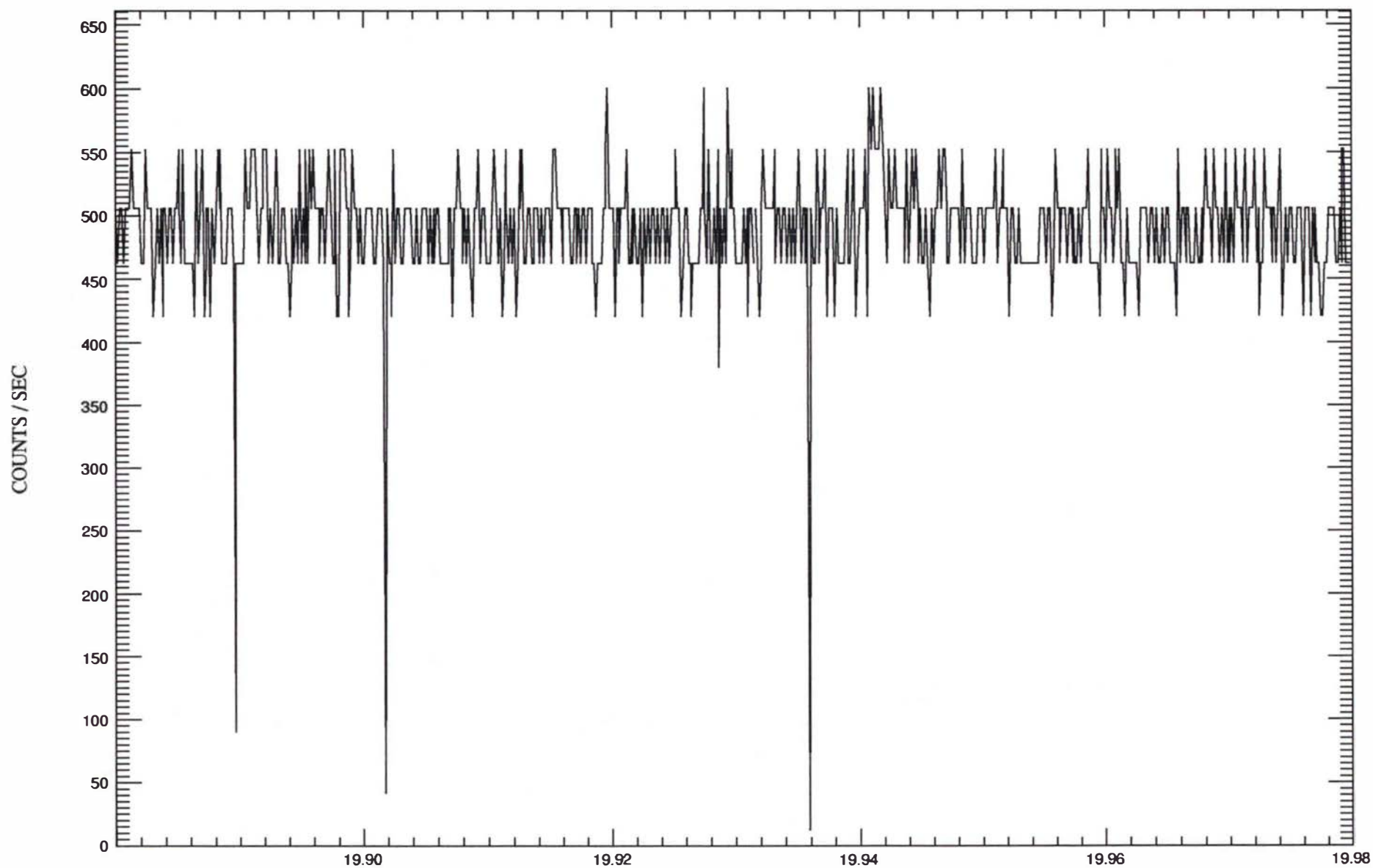
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 7 at UT=18.090847473145 h=65127.051 s 18:05:27.051

4/1/96



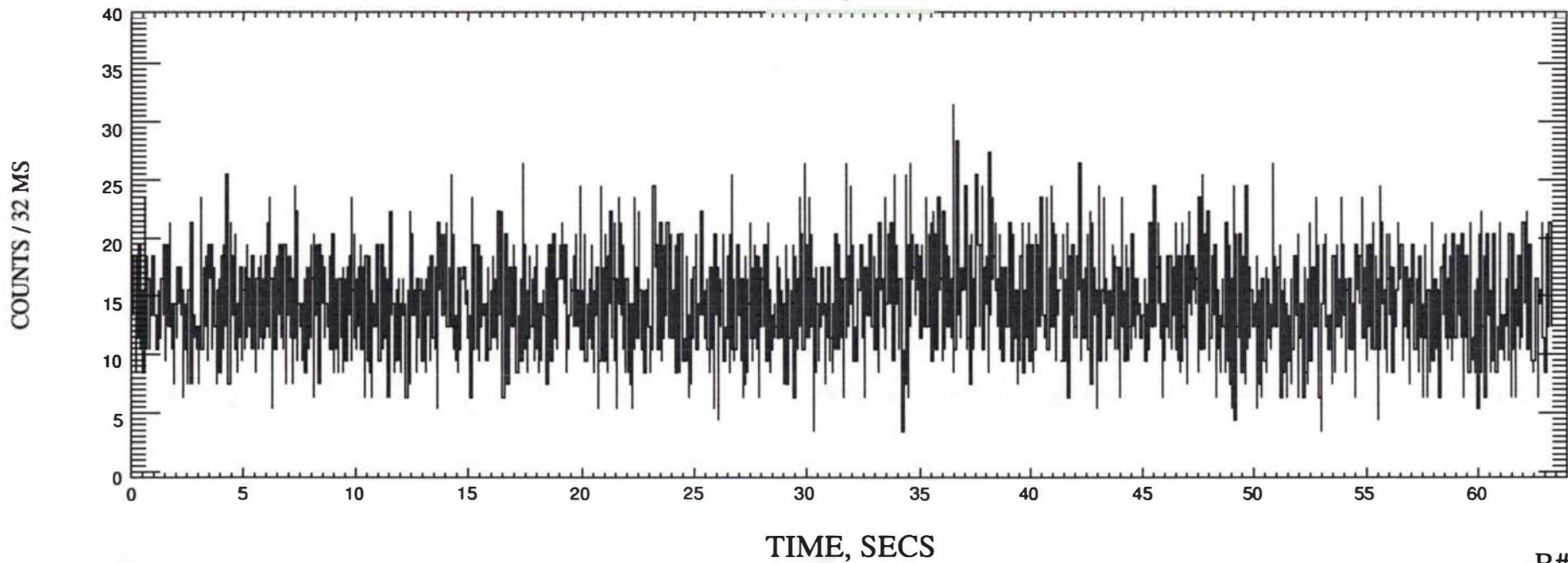
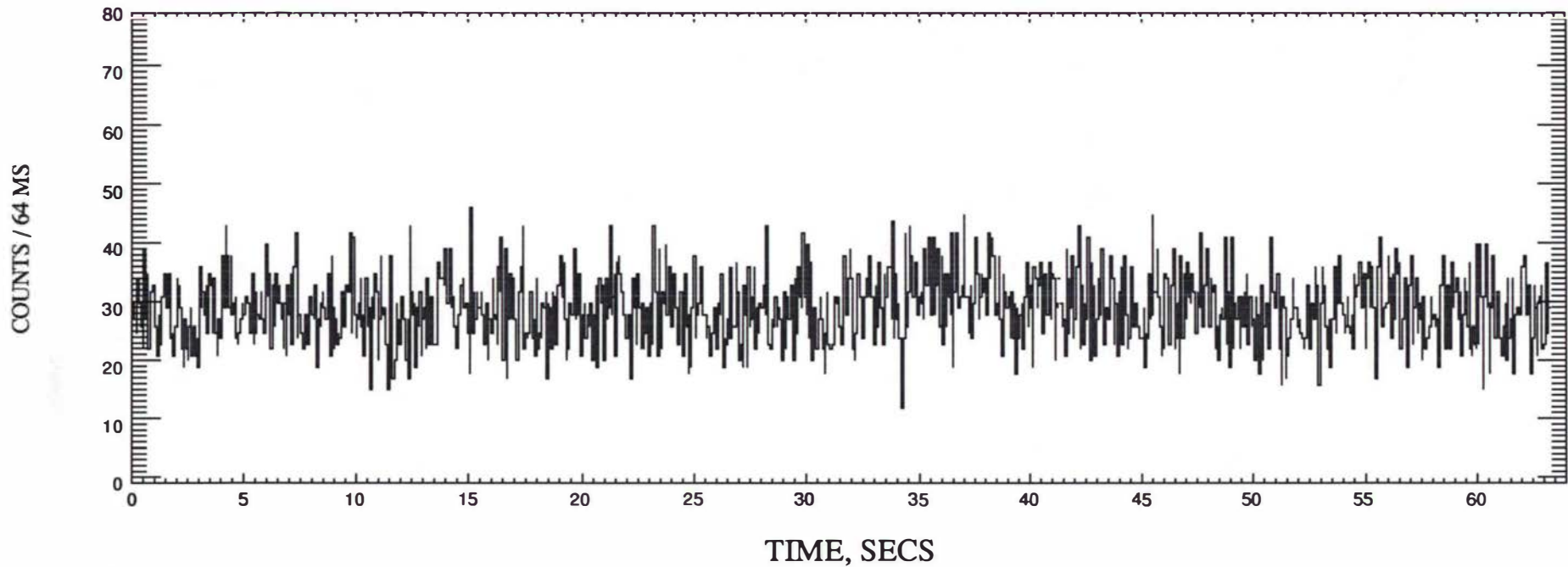
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



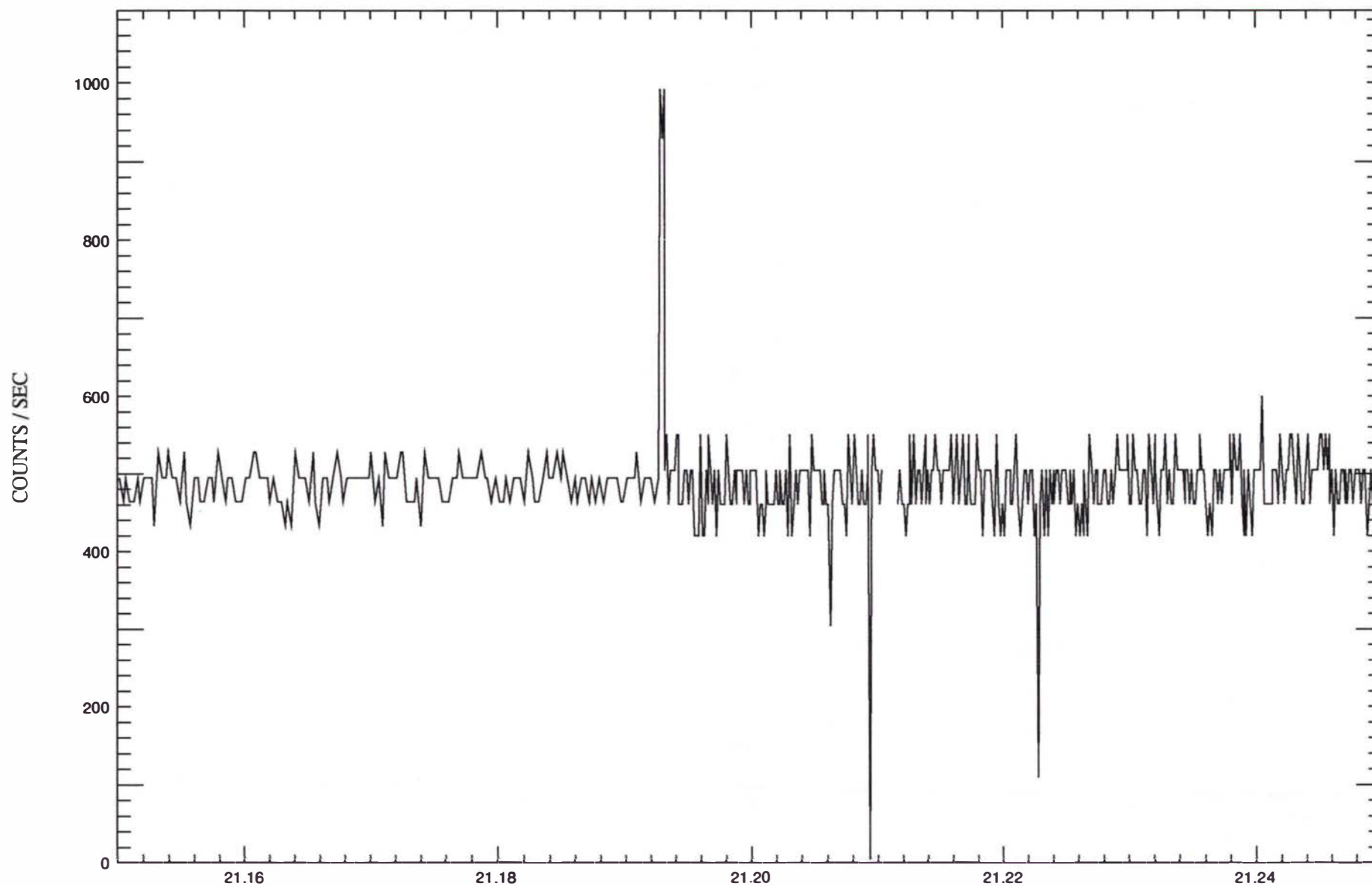
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 8 at UT=19.933375023736 h=71760.150 s 19:56:00.150

4/1/96



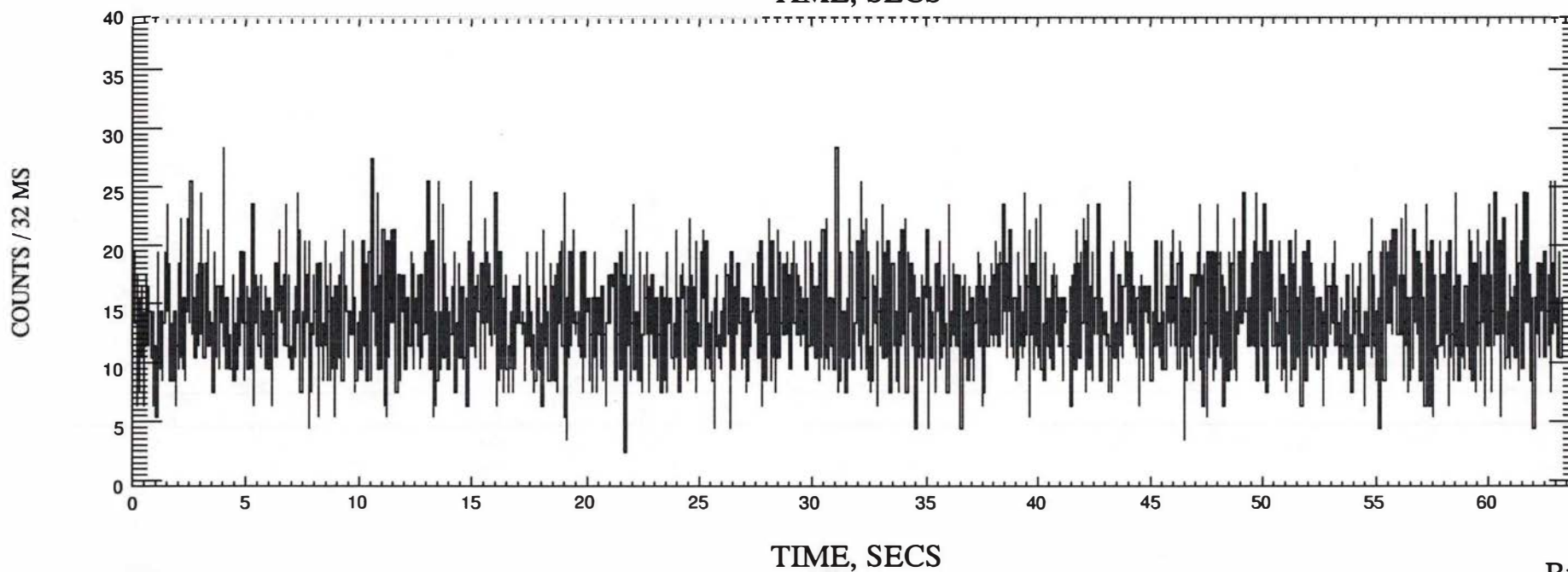
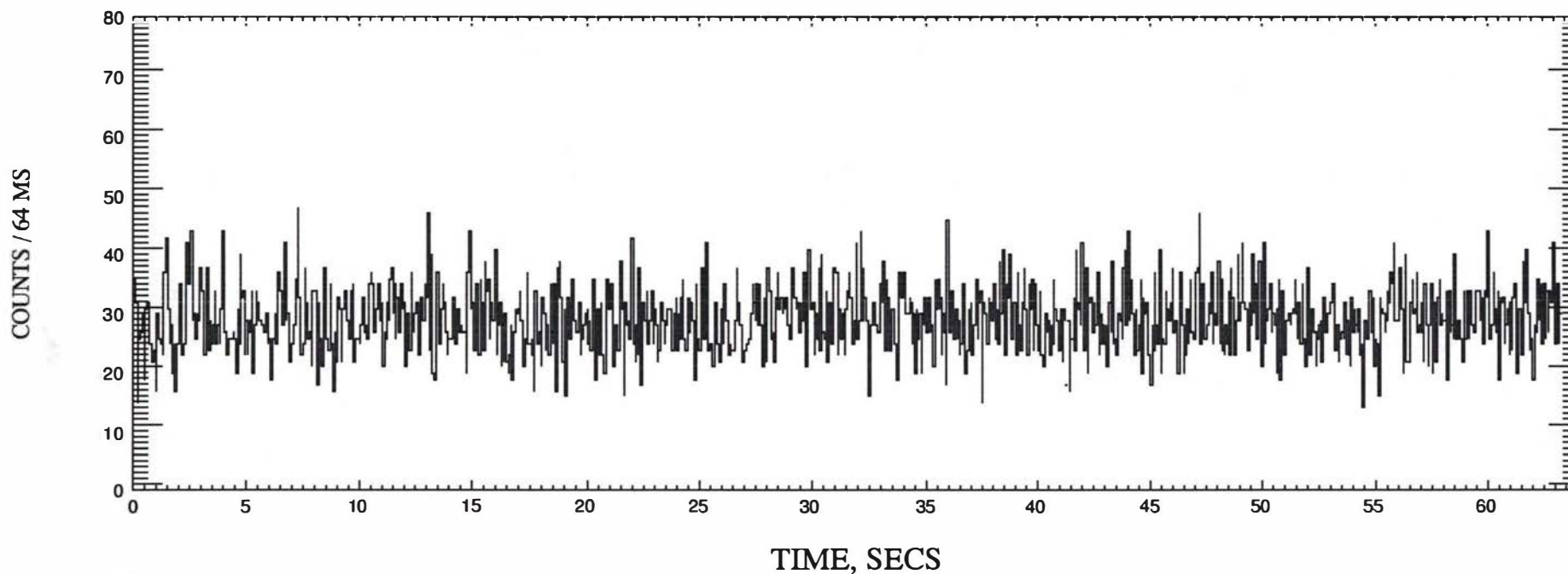
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



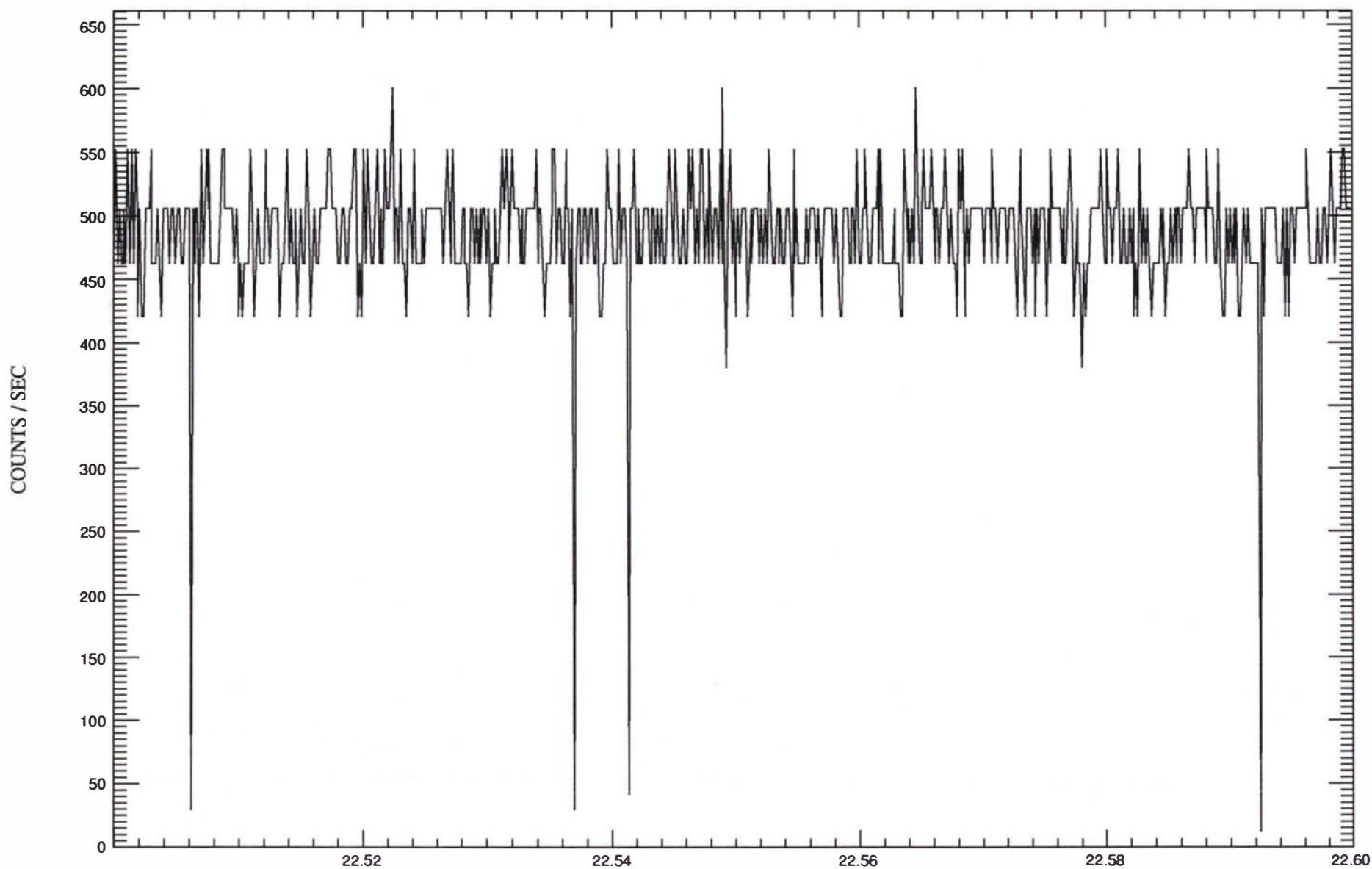
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 9 at UT=21.199296870761 h=76317.469 s 21:11:57.469

4/1/96



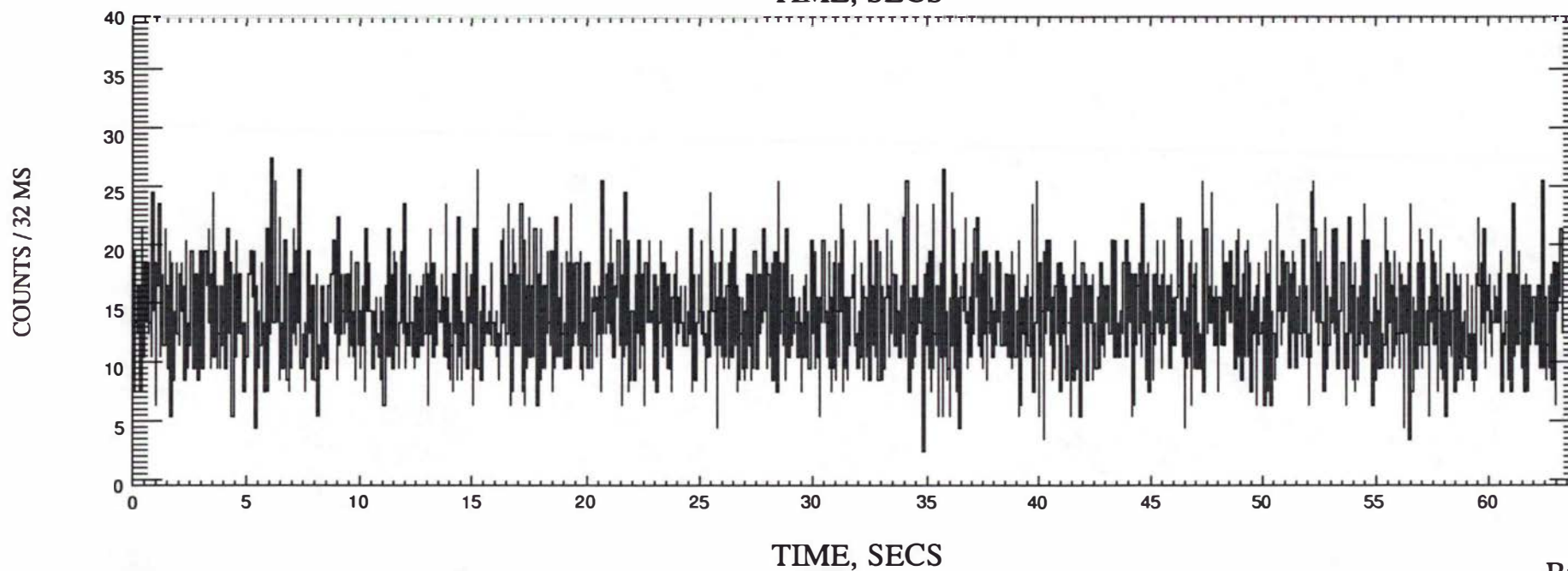
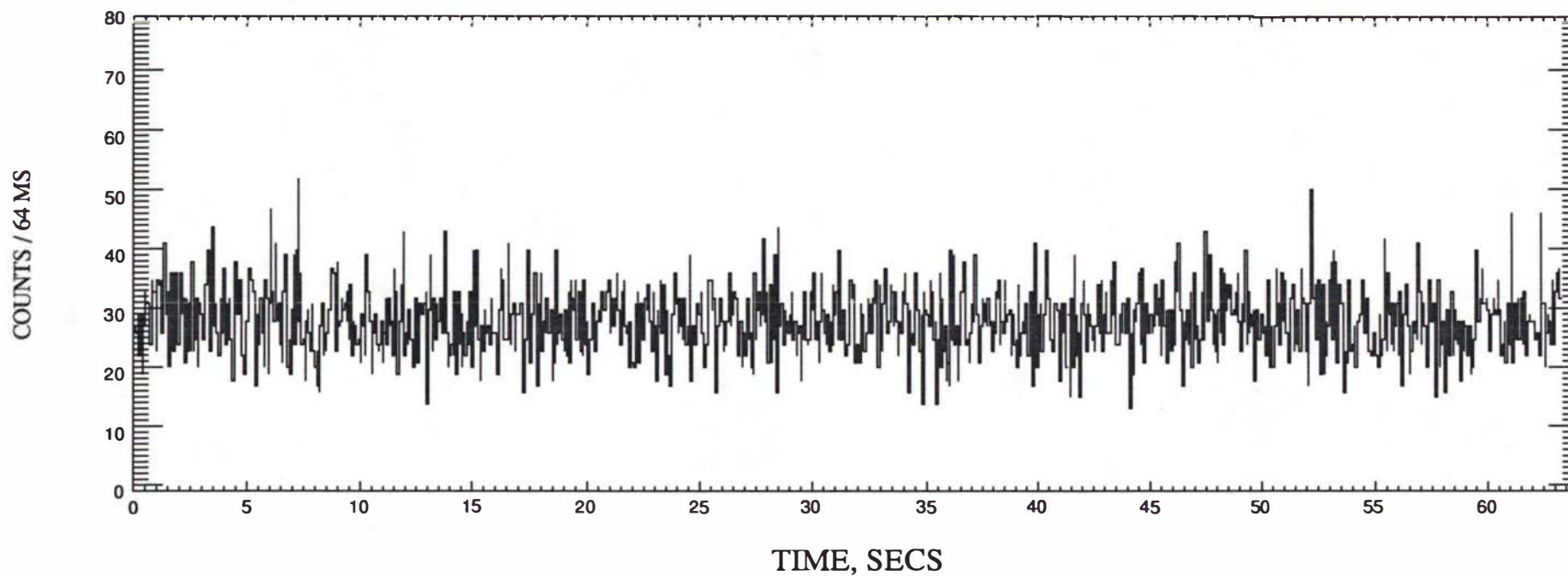
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



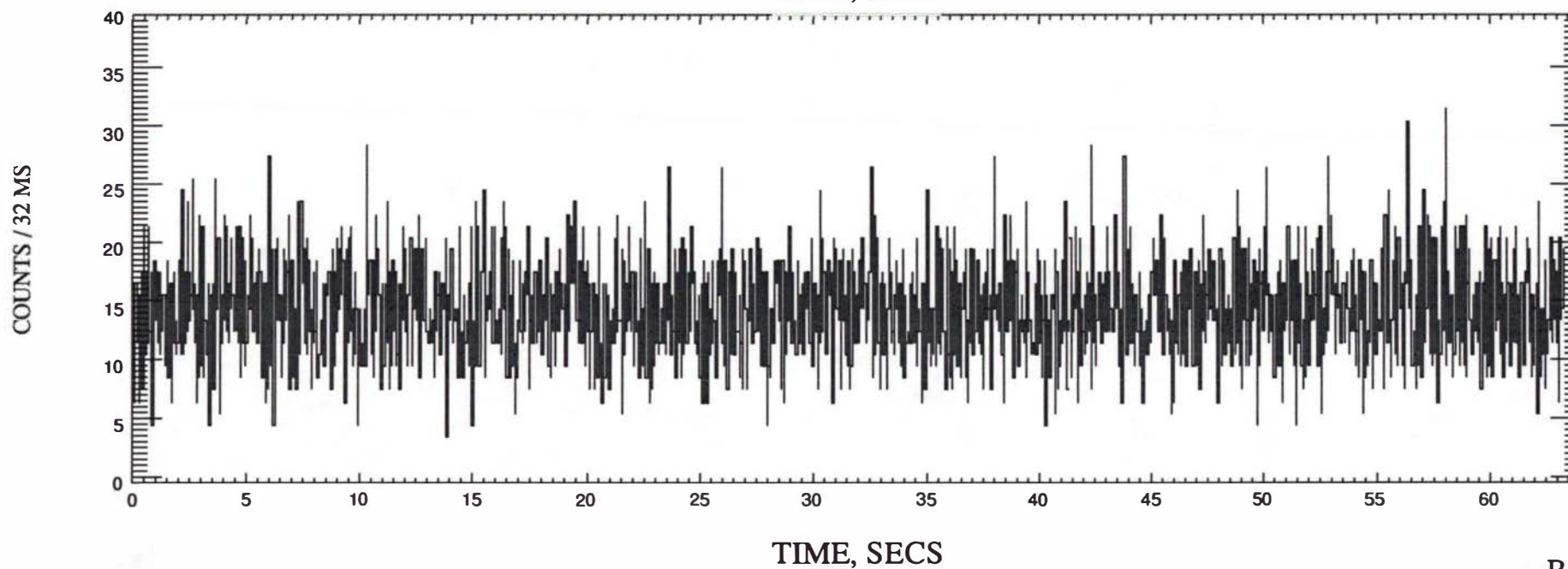
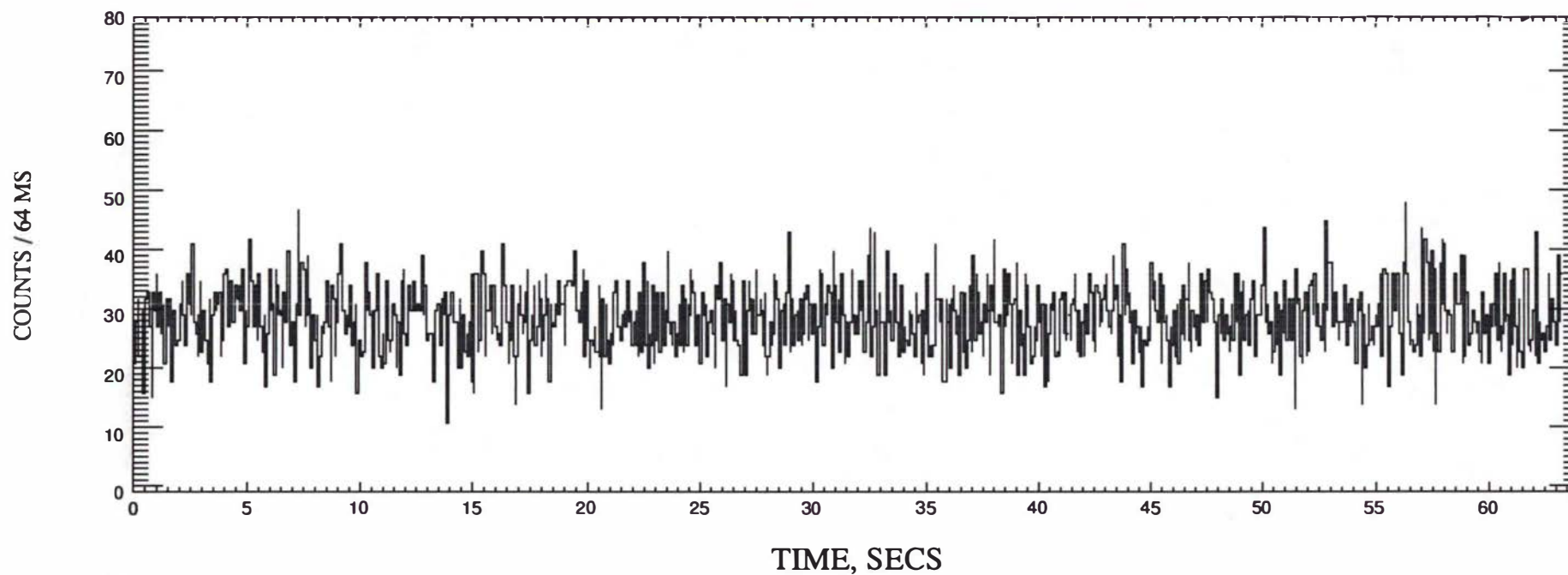
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 10 at UT=22.549211777581 h=81177.162 s 22:32:57.162

4/1/96



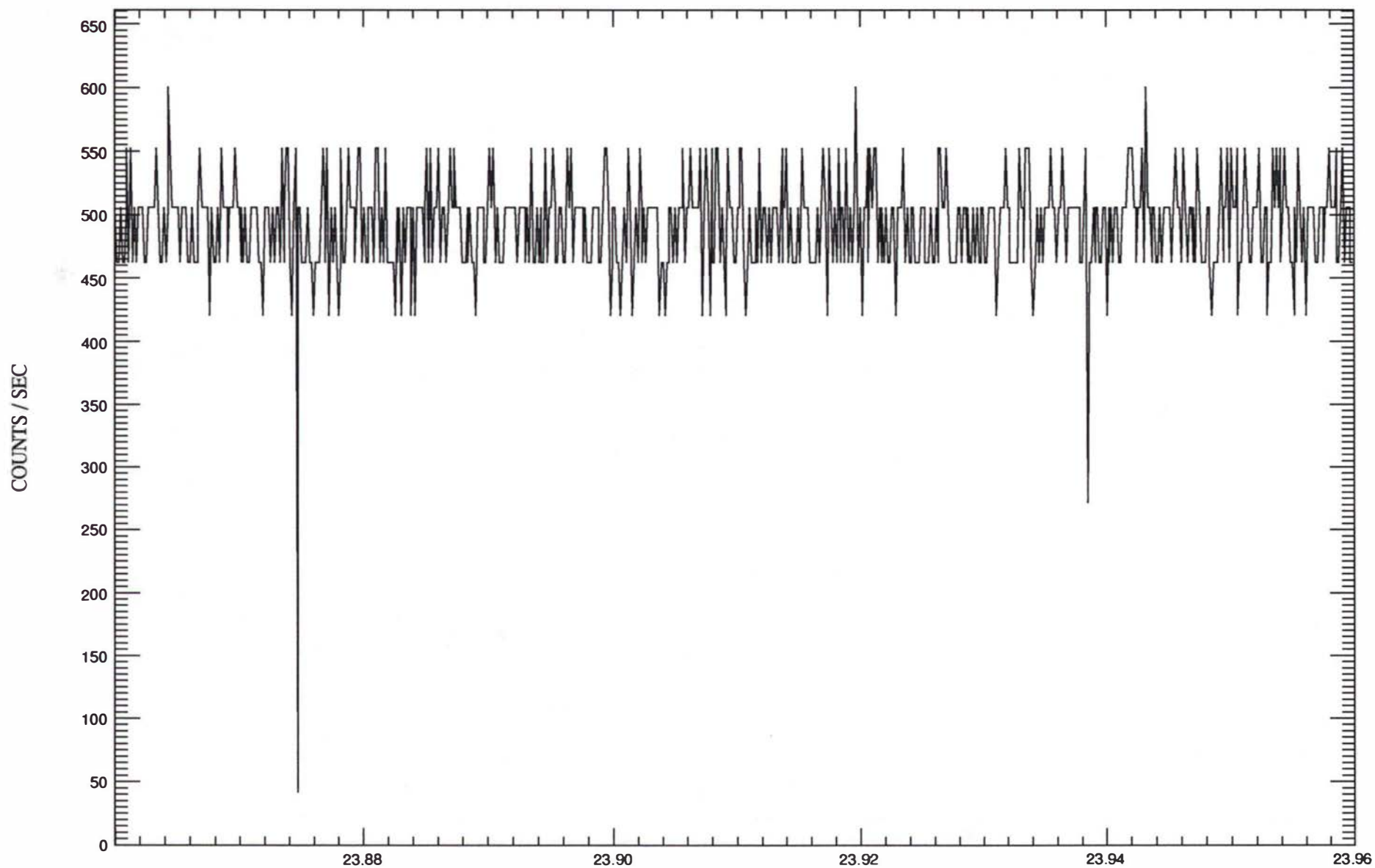
HUS 2A TRIGGERED DATA EDR day 2, year 1996
Burst Counter 11 at UT=23.907184359233 h=86065.864 s 23:54:25.864

4/1/96



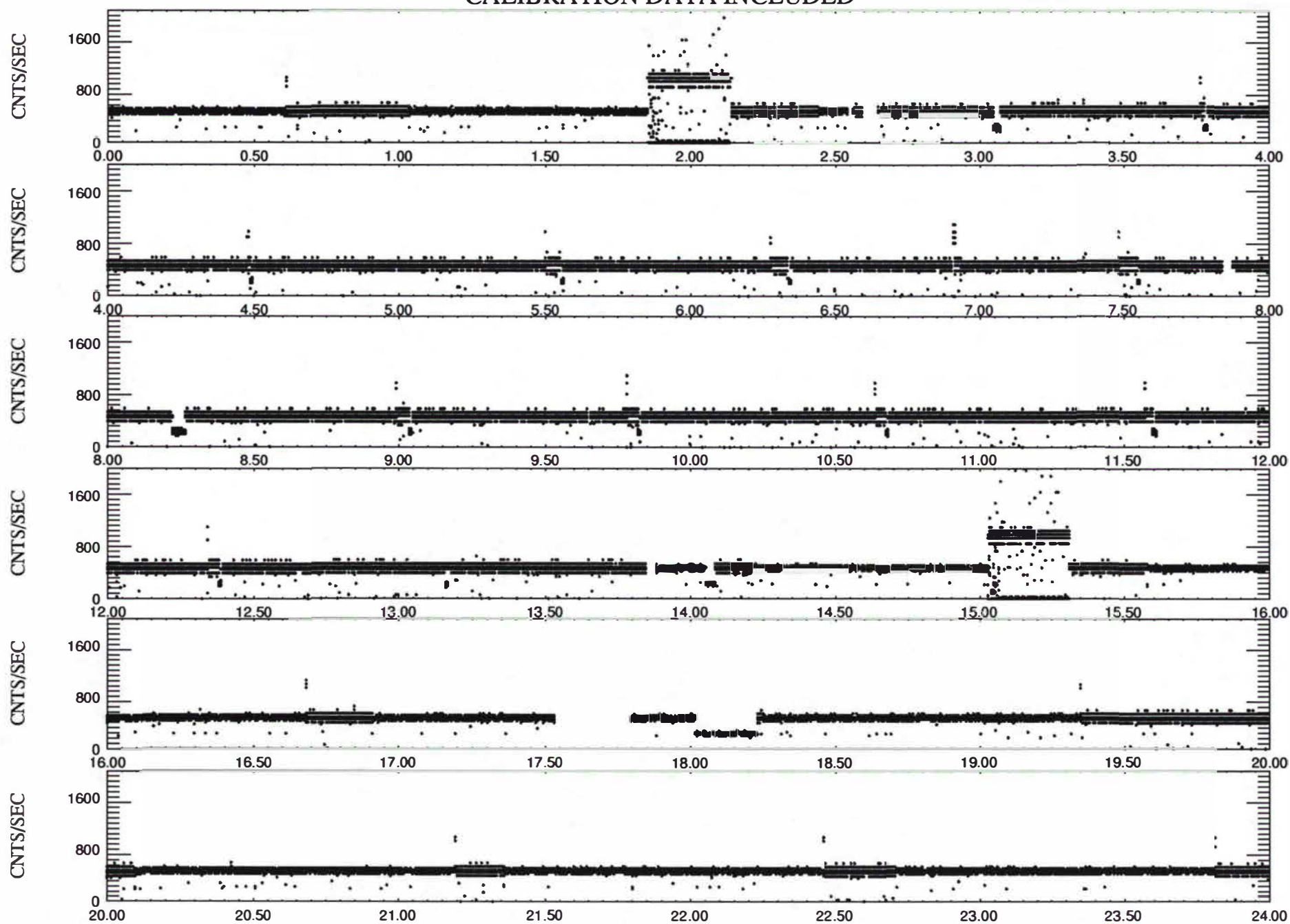
HUS 2A, MODE 1, NOT AVERAGED QEDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

1/3/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 2, year 1996 to day 2, year 1996
CALIBRATION DATA INCLUDED

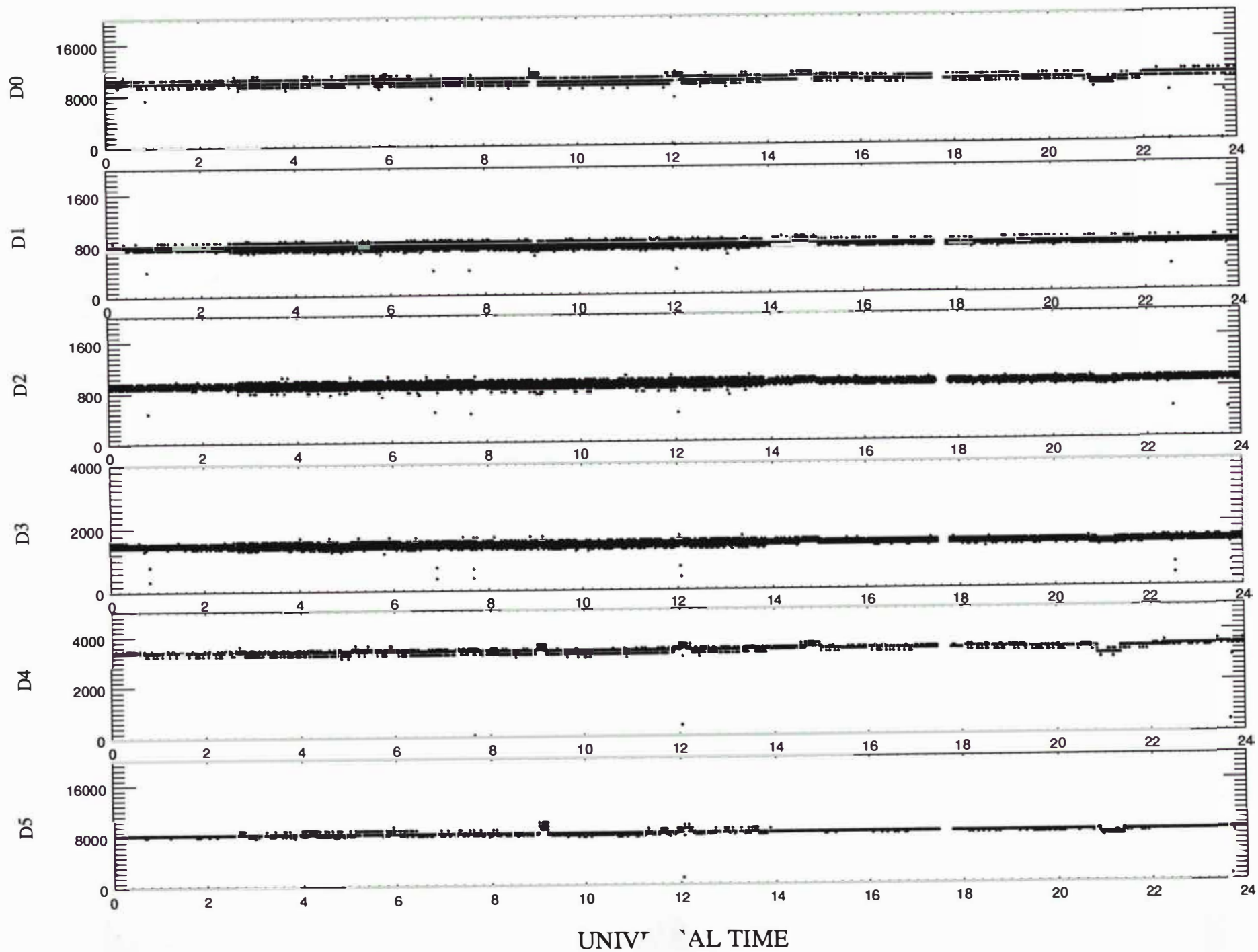
4/1/96



UNIVERSAL TIME

HUS 2B COUNTS / SEC QEDR day 2, year 1996 to day 2, year 1996

1/3/96



BATSE BURST TRIGGER
A
NO.: 4218
TIME: TJD=0085 SECONDS=2720
TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N
SIGNIFICANCE: SIGMA
INTENSITY: COUNTS/CM2
LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES
COMMENTS:
BATSE BURSTER

B
BATSE BURST TRIGGER
NO.: 4219
TIME: TJD=0085 SECONDS=11028
TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N
SIGNIFICANCE: SIGMA
INTENSITY: COUNTS/CM2
LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES
COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER
NO.: 4220
TIME: TJD=0085 SECONDS=15737
TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N
SIGNIFICANCE: SIGMA
INTENSITY: COUNTS/CM2
LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES
COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER
NO.: 4221
TIME: TJD=0085 SECONDS=27992
TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N
SIGNIFICANCE: SIGMA
INTENSITY: COUNTS/CM2
LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES
COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4222

TIME: TJD=0085 SECONDS=38947

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4223

TIME: TJD=0085 SECONDS=48027

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4224

TIME: TJD=0085 SECONDS=58850

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4225

TIME: TJD=0085 SECONDS=66139

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4226

TIME: TJD=0085 SECONDS=76041

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

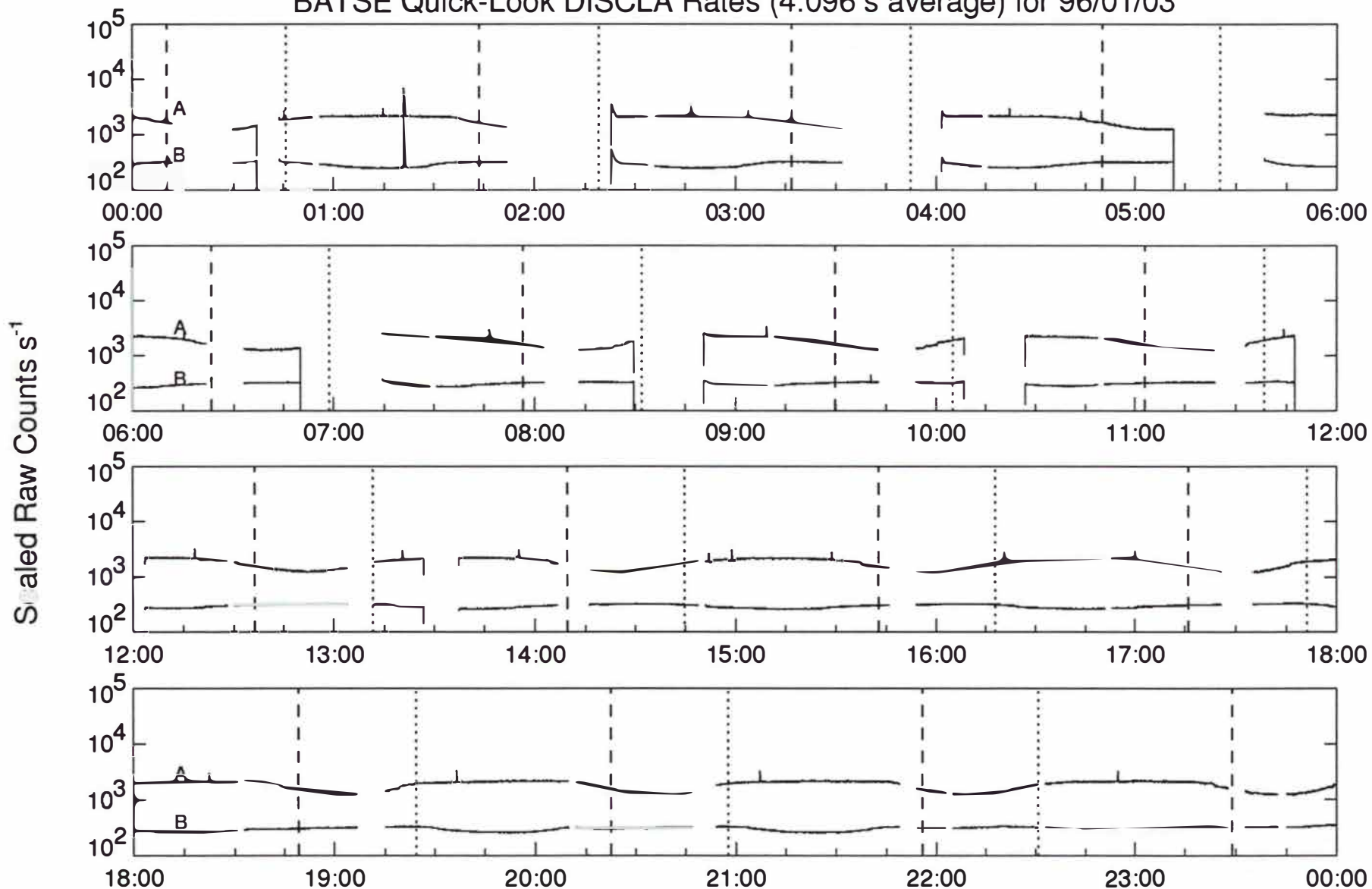
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/03



Current Time: 96/01/05, 0655 EDT

A: Channel 0 Most Sunward LAD

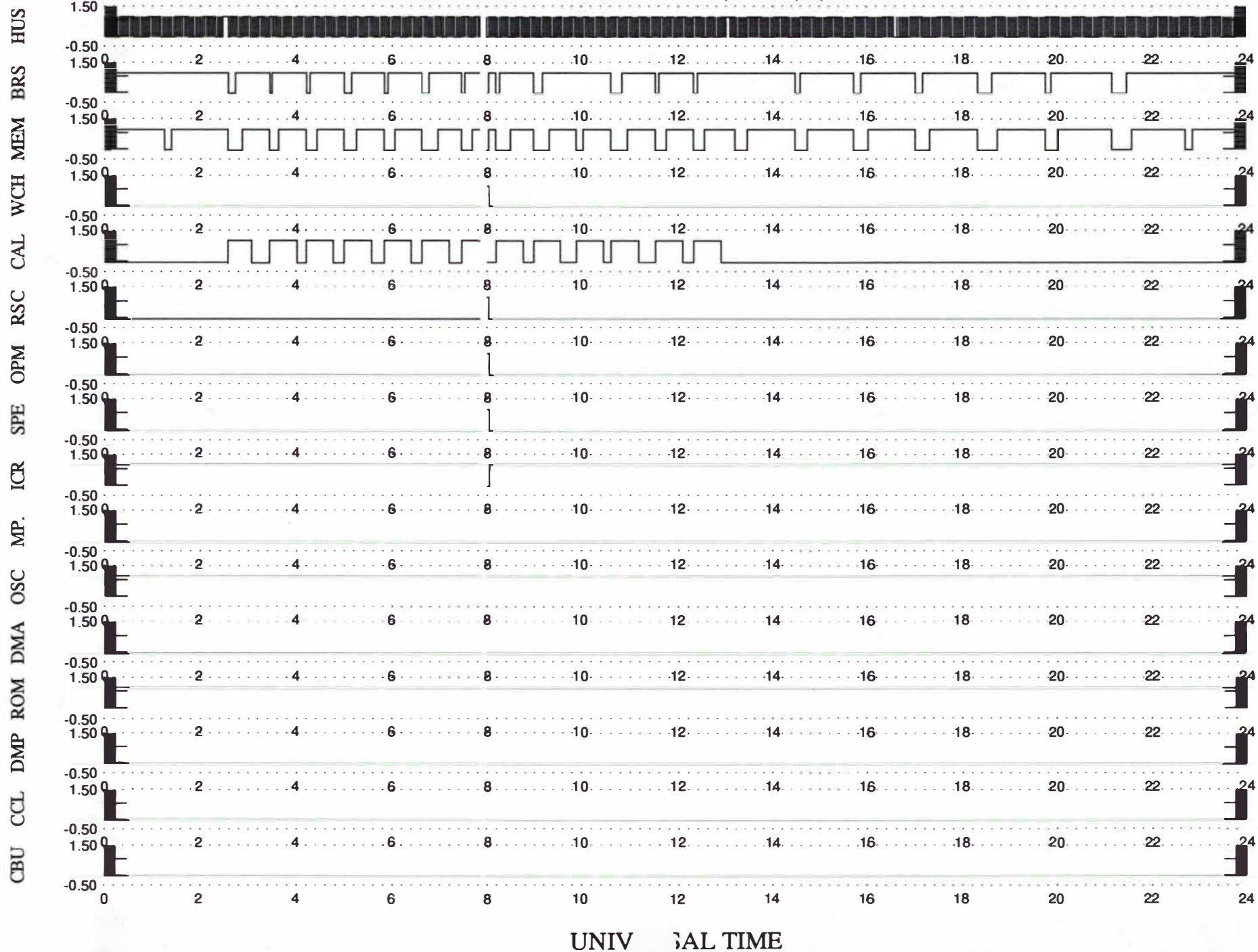
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

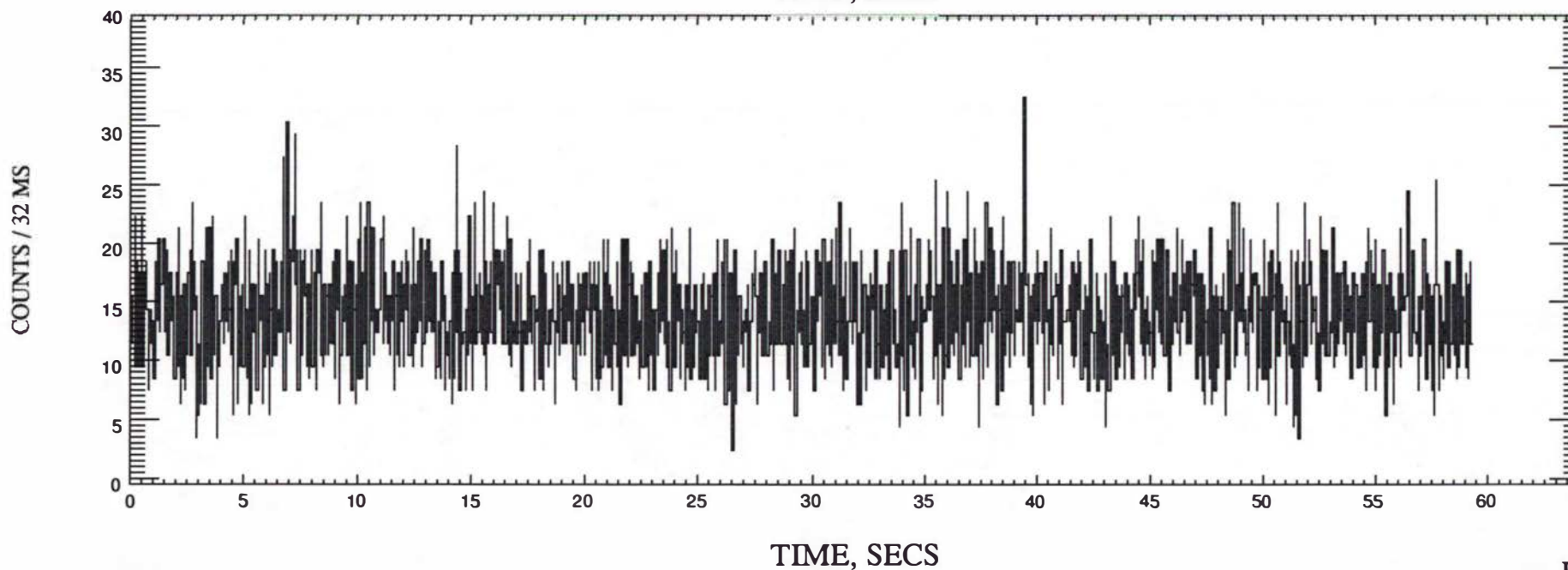
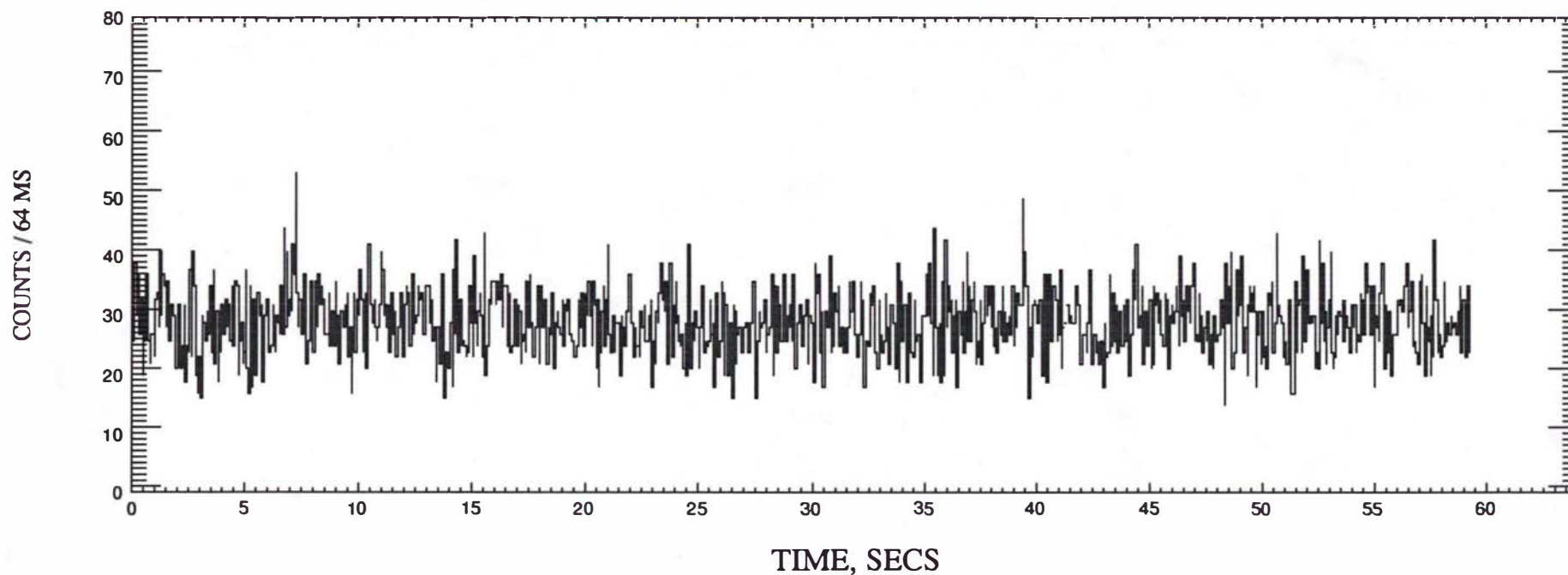
HUS MODES EDR day 3, year 1996 to day 3, year 1996
BURST NUMBER 12 - 15, 0 - 15, 0, 1

4/1/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 12 at UT= 1.234946484036 h= 4445.807 s 01:14:05.807

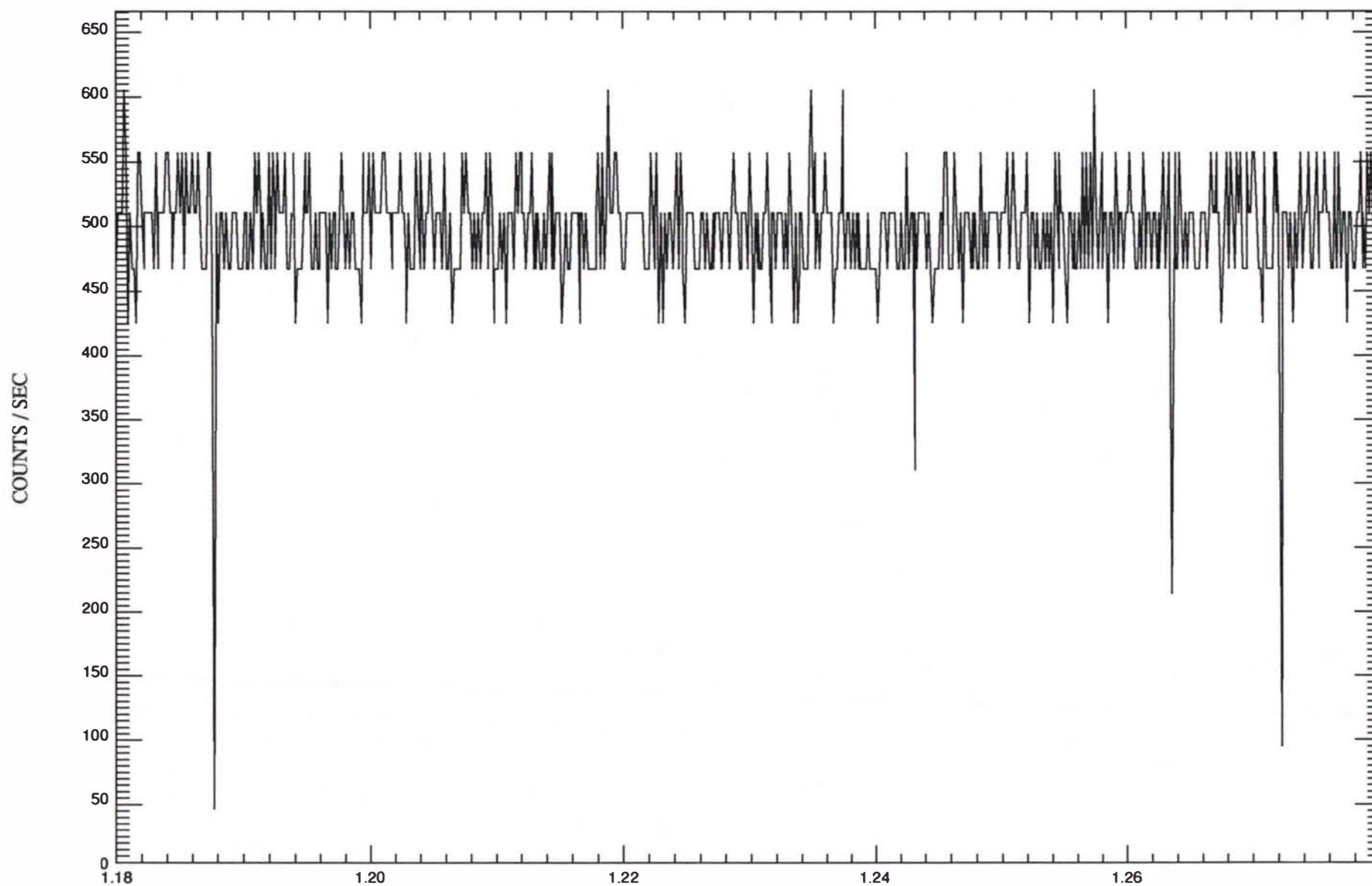
4/1/96



B# 1

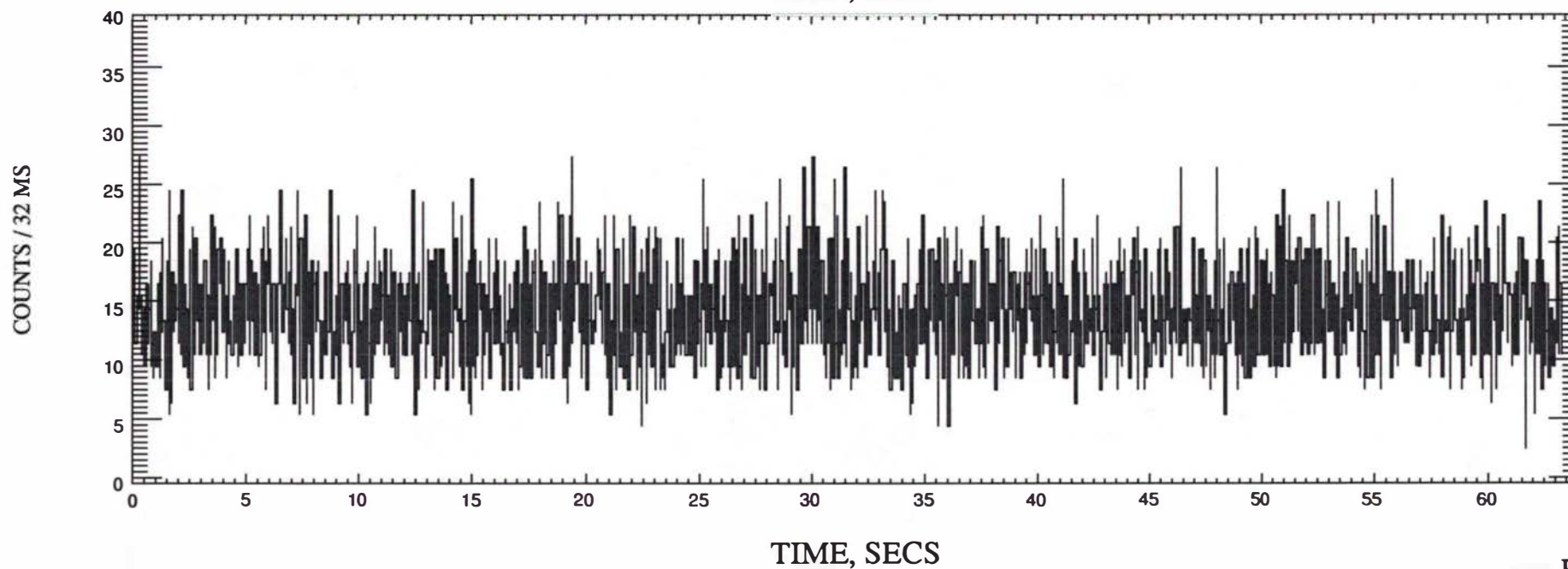
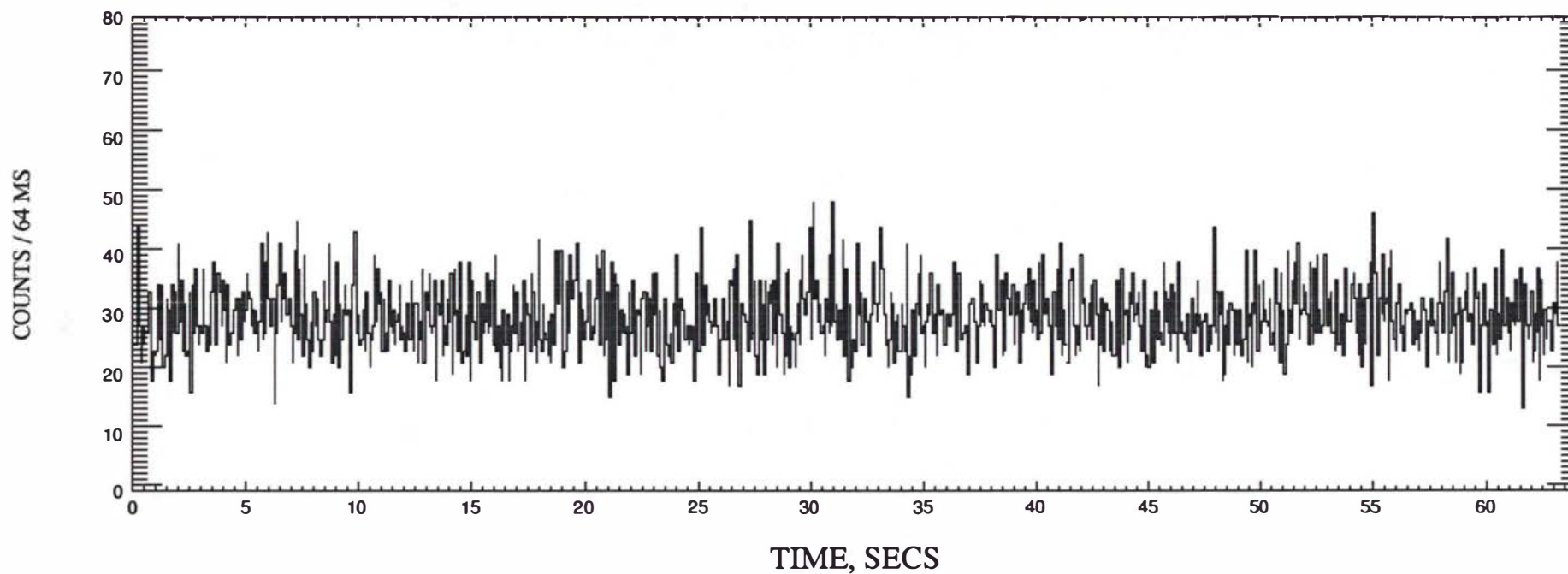
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 13 at UT= 2.694655655755 h= 9700.760 s 02:41:40.760

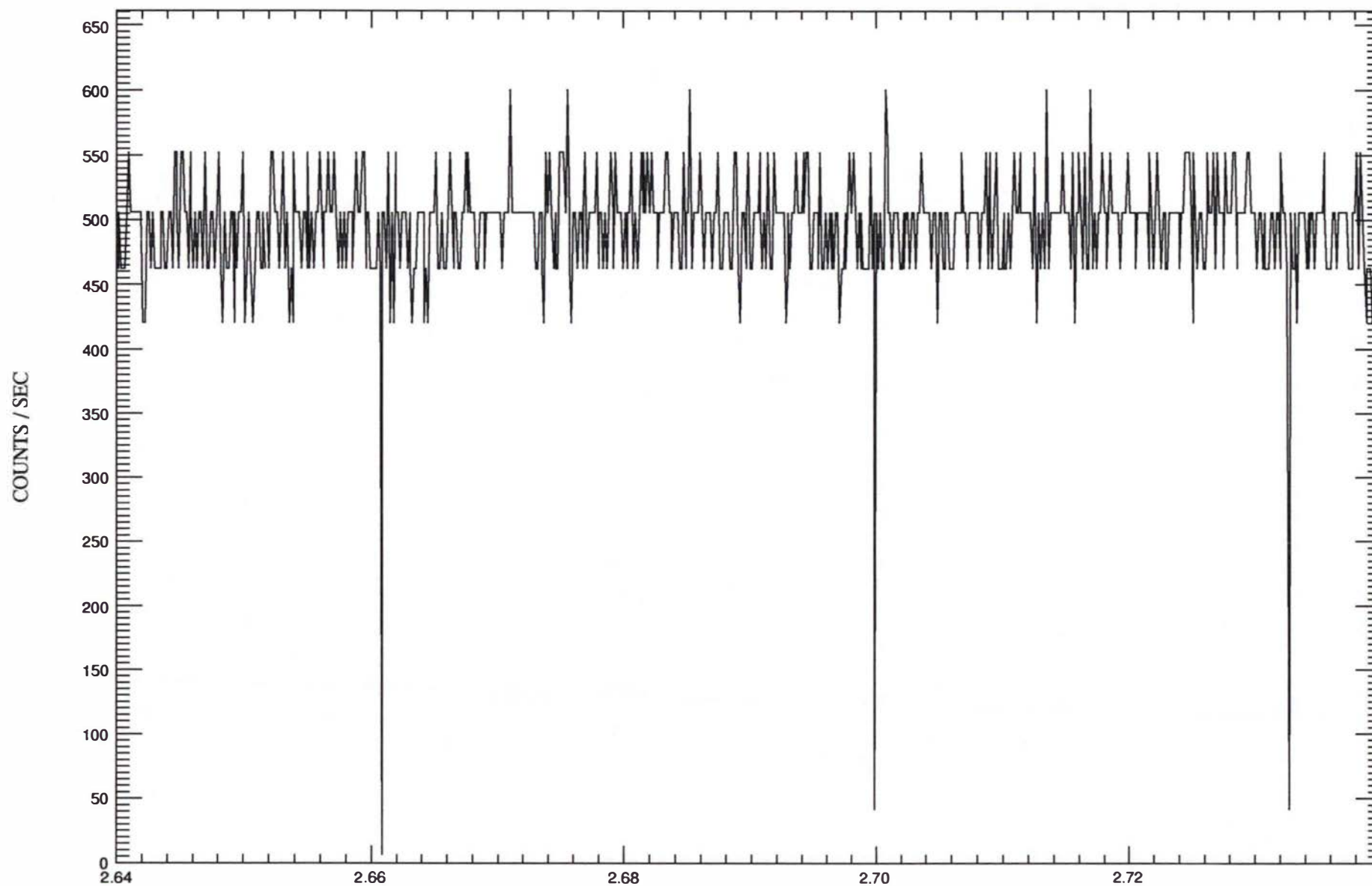
4/1/96



B# 2

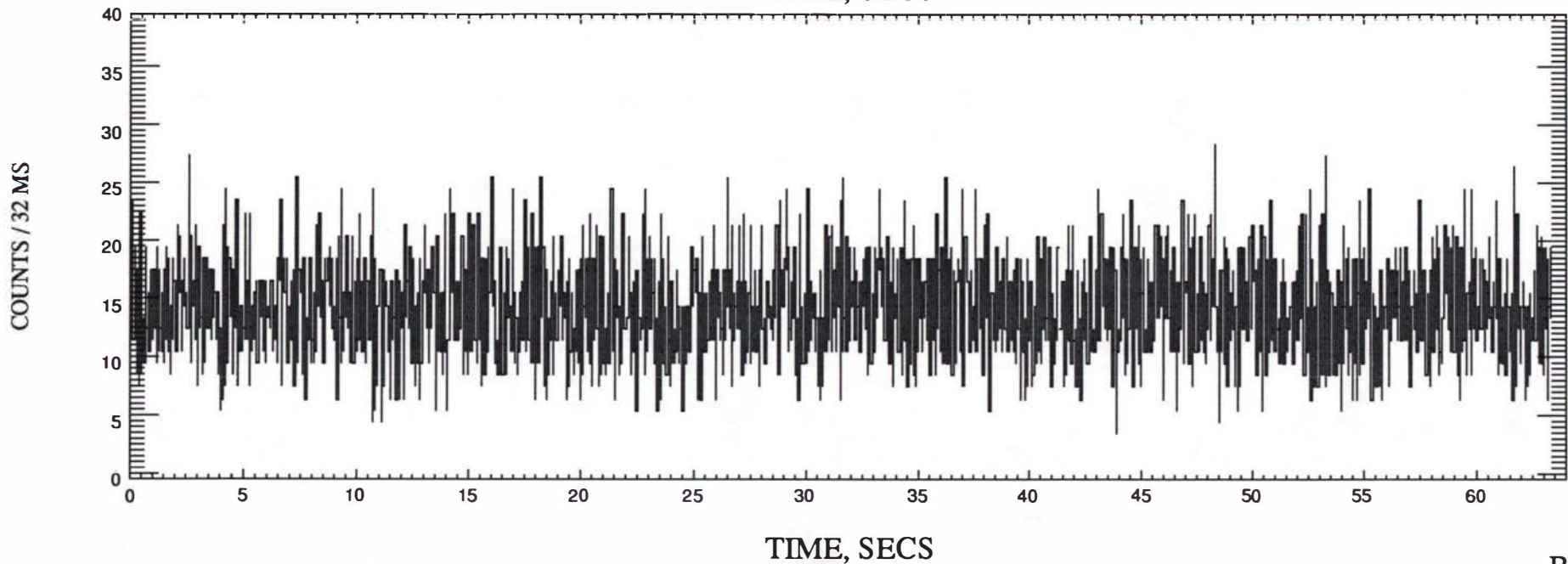
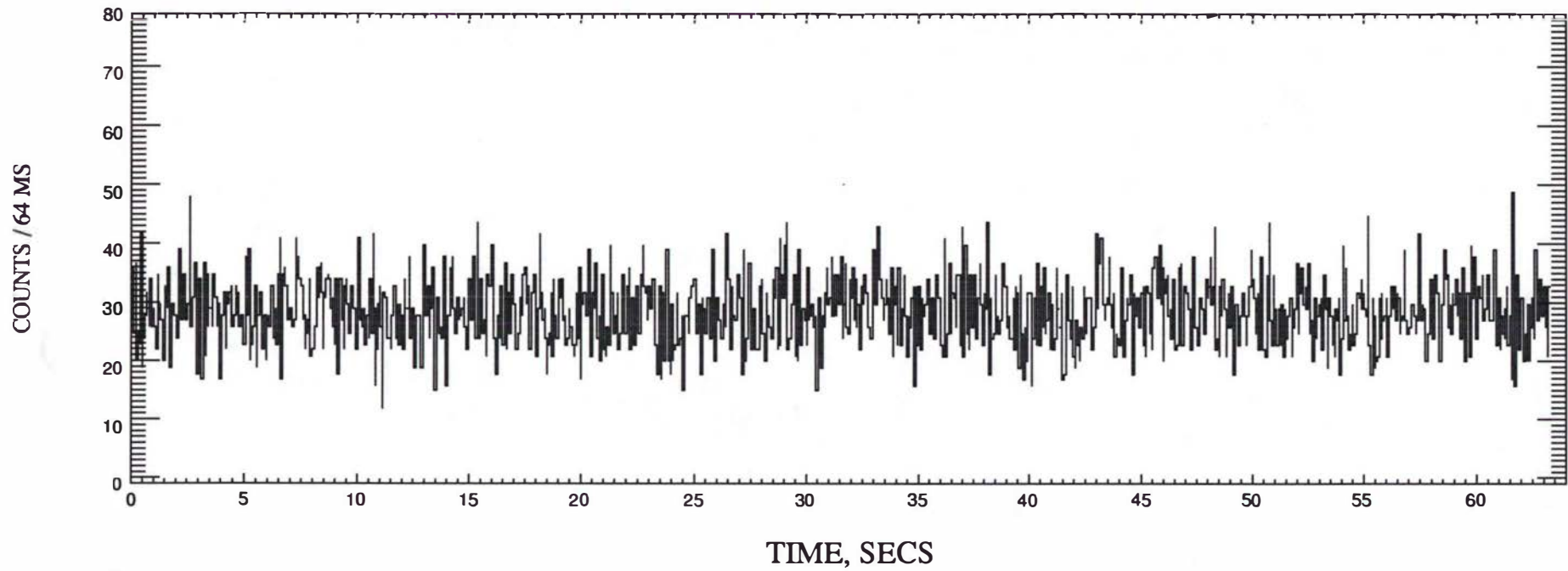
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 14 at UT= 3.504044481913 h=12614.560 s 03:30:14.560

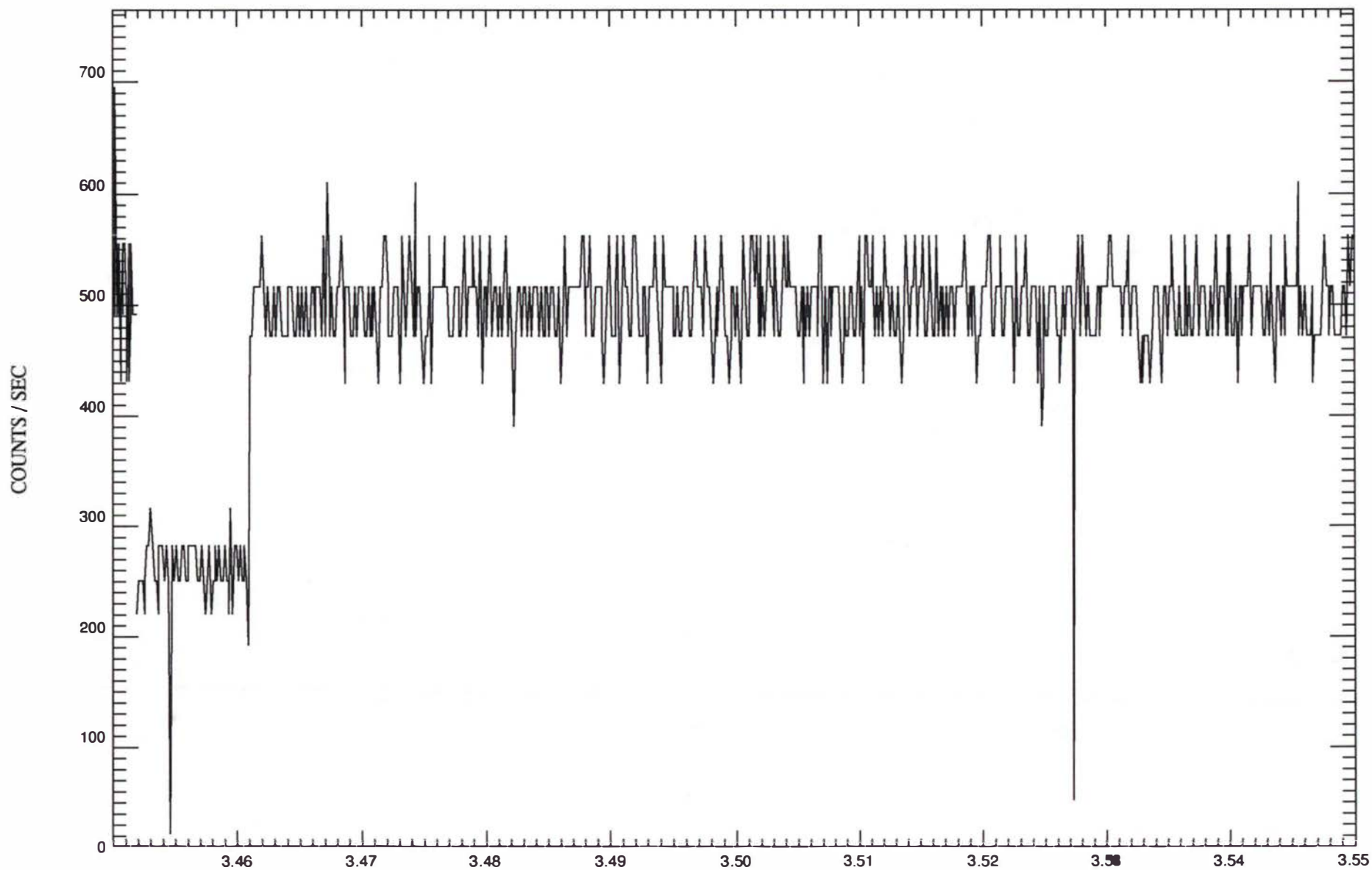
4/1/96



B# 3

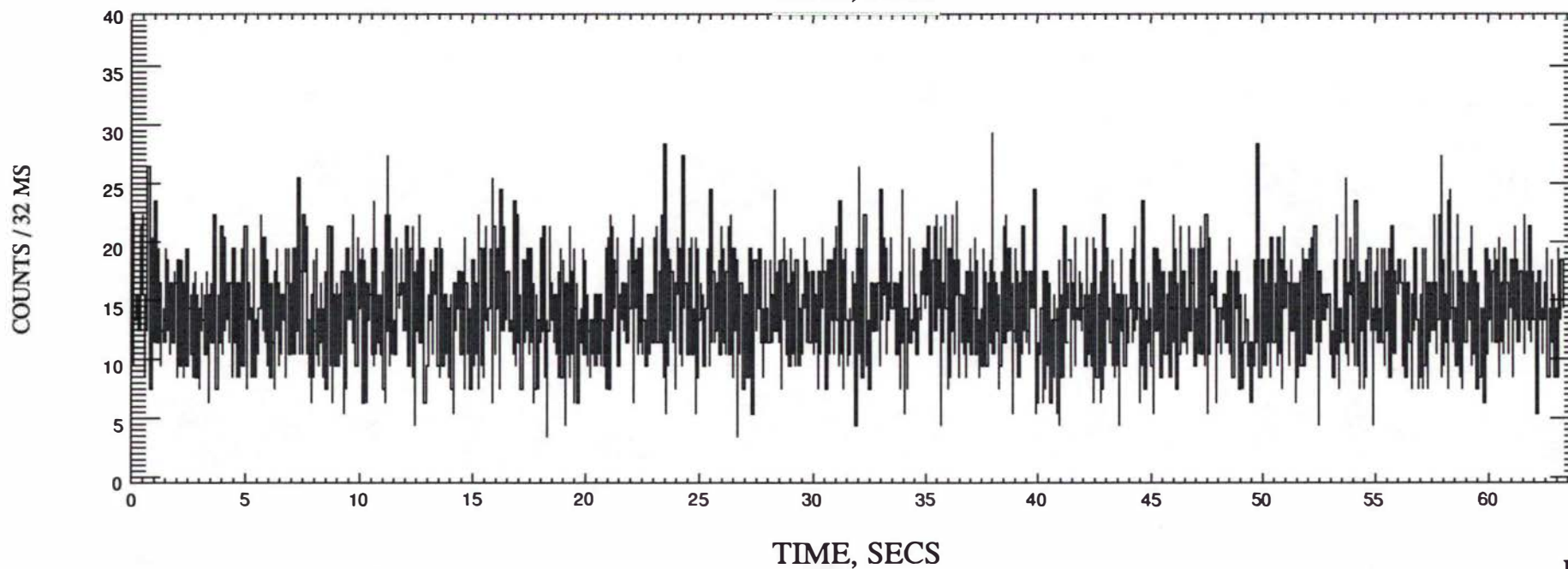
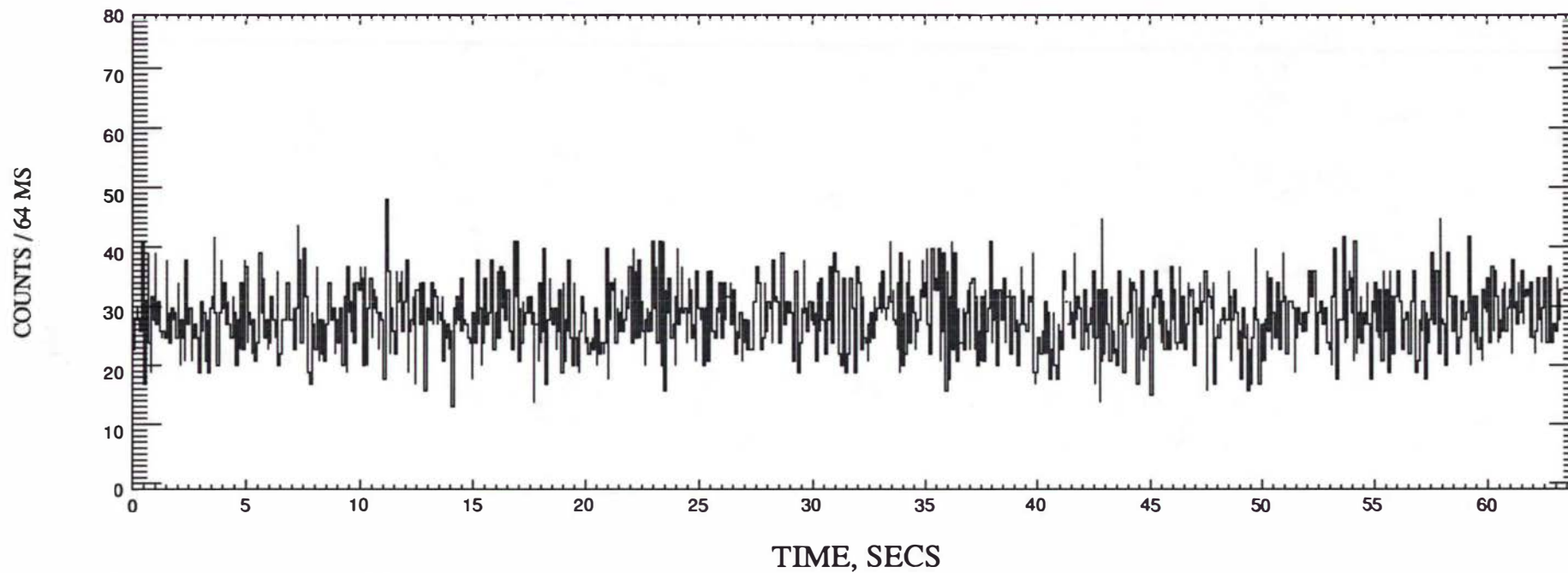
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



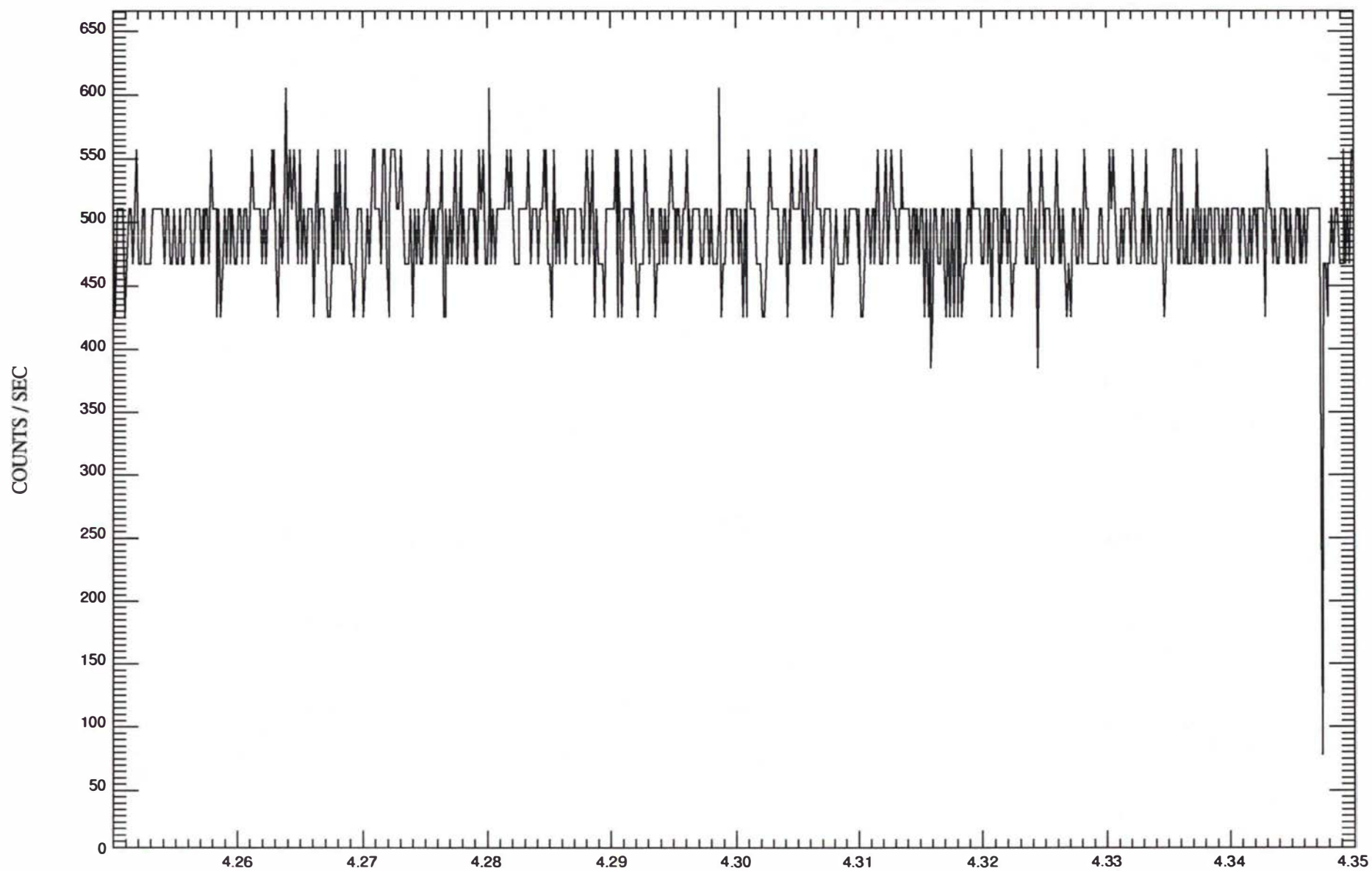
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 15 at UT= 4.298813078139 h=15475.727 s 04:17:55.727

4/1/96



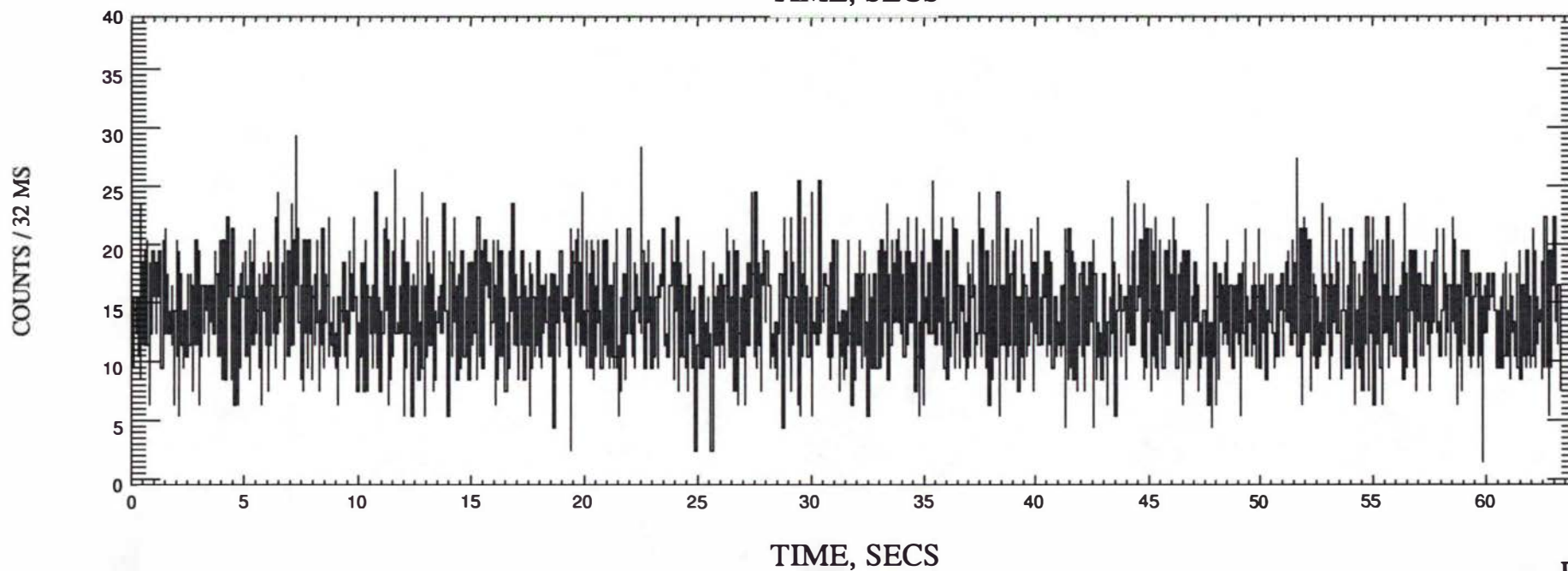
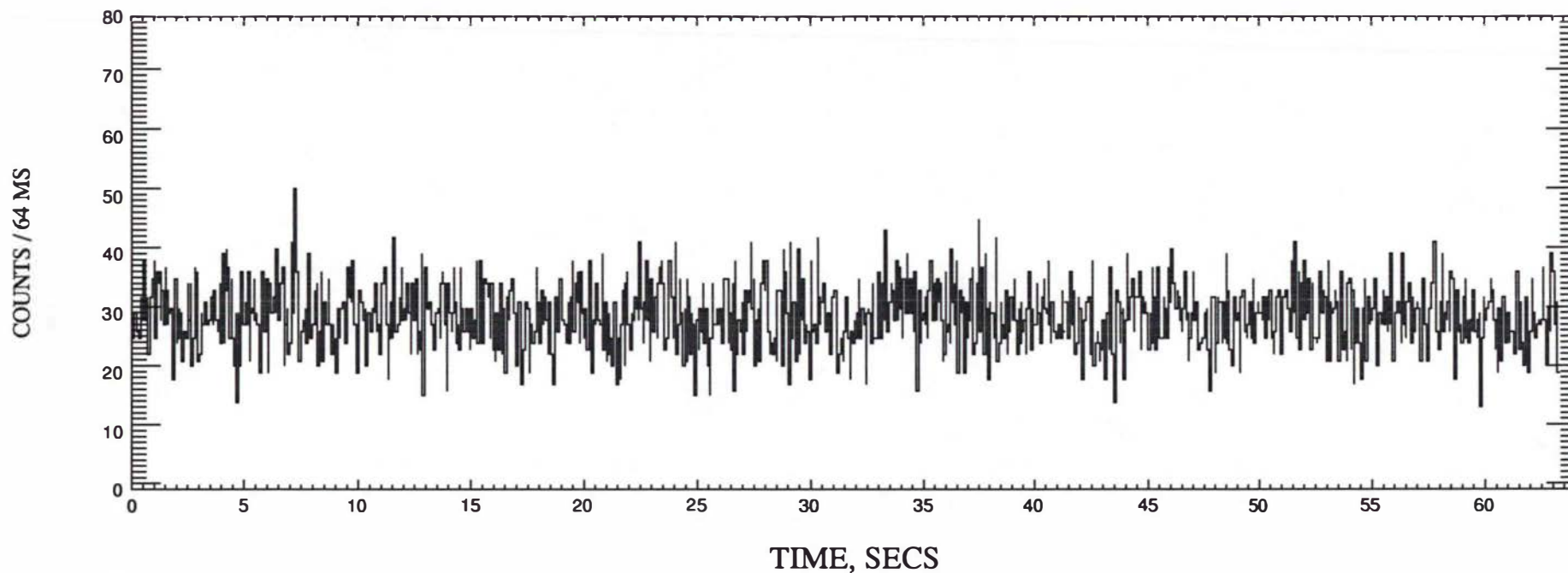
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 0 at UT= 5.137367460463 h=18494.523 s 05:08:14.523

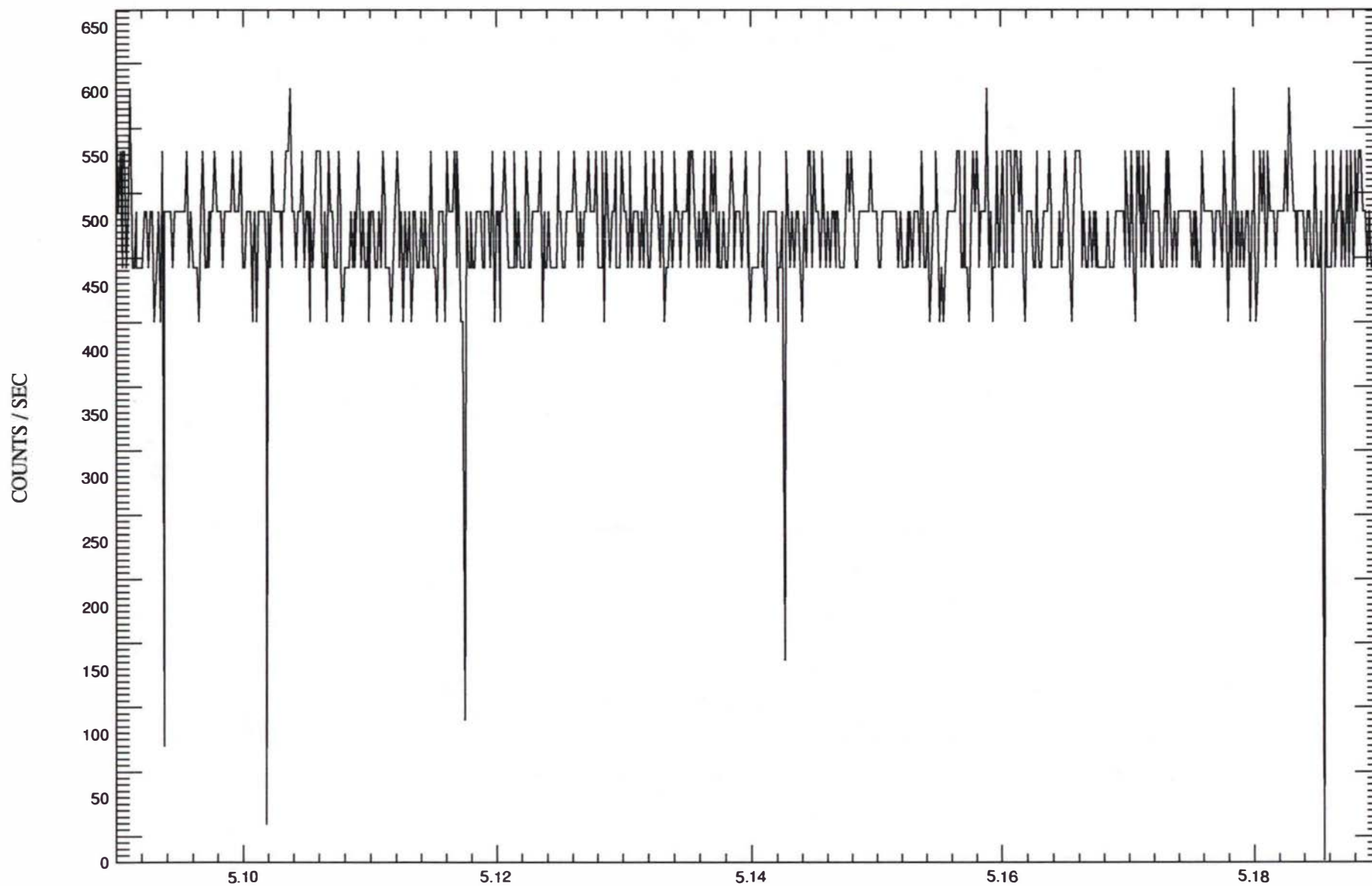
4/1/96



B# 5

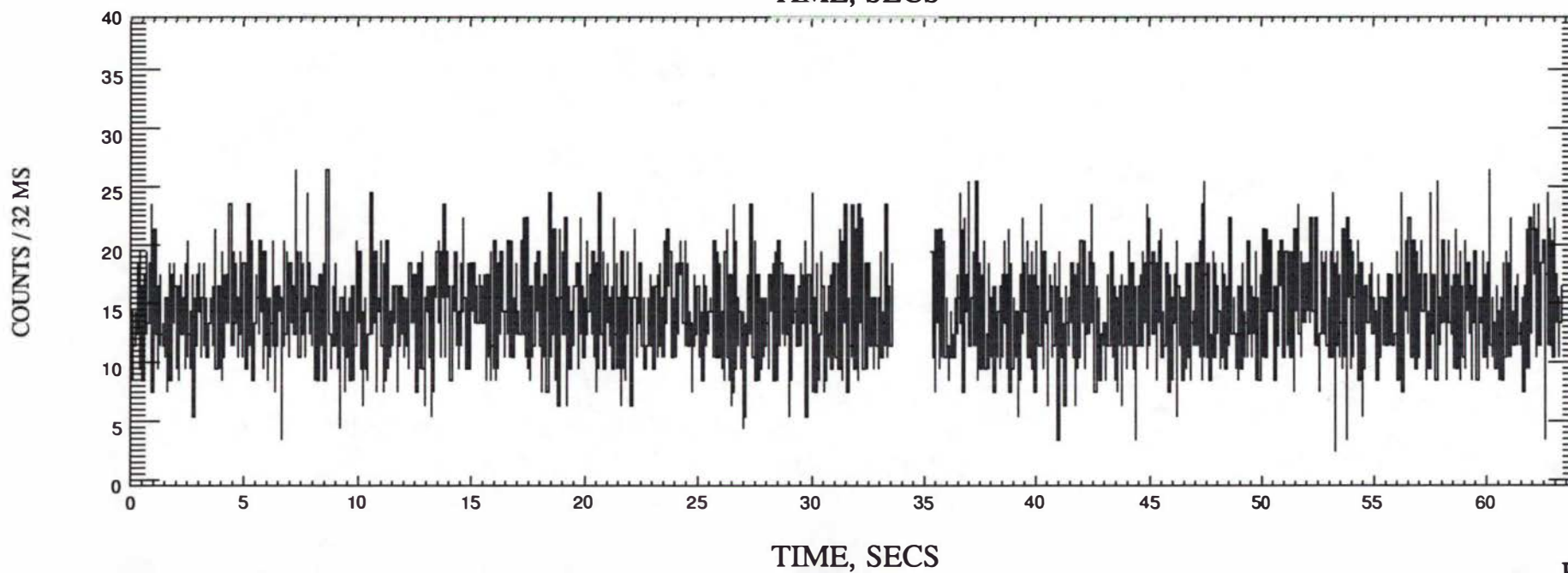
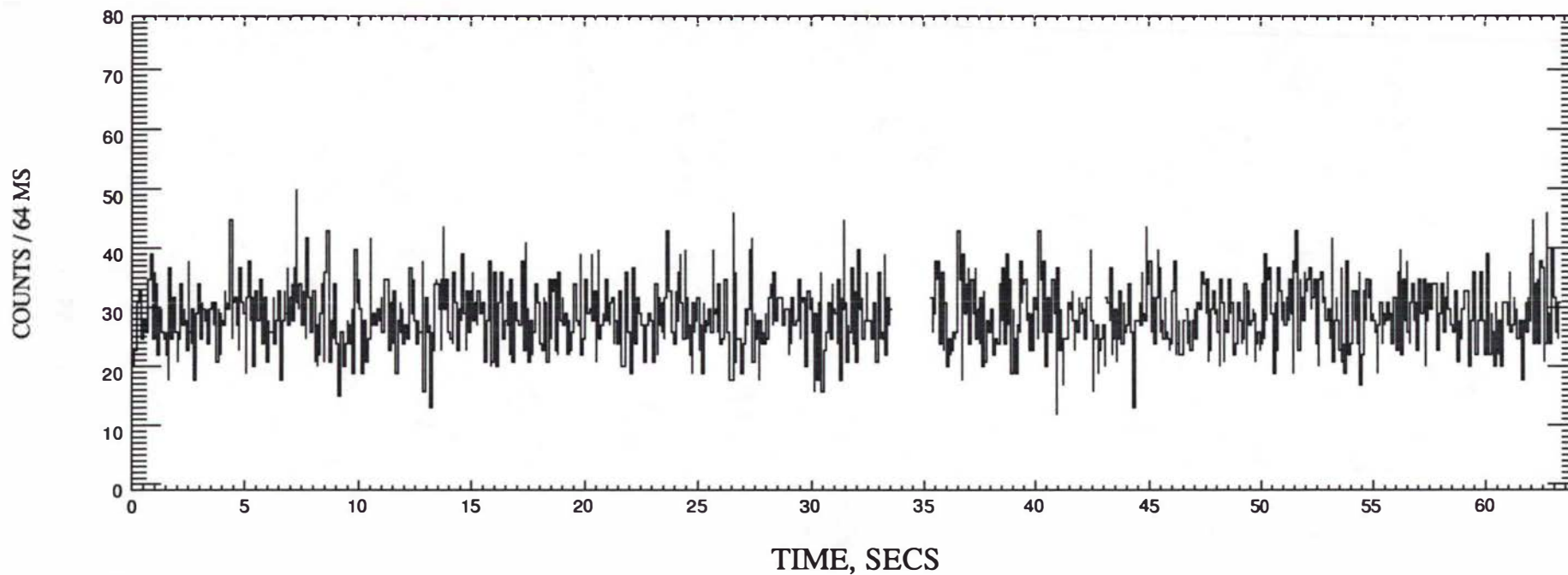
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



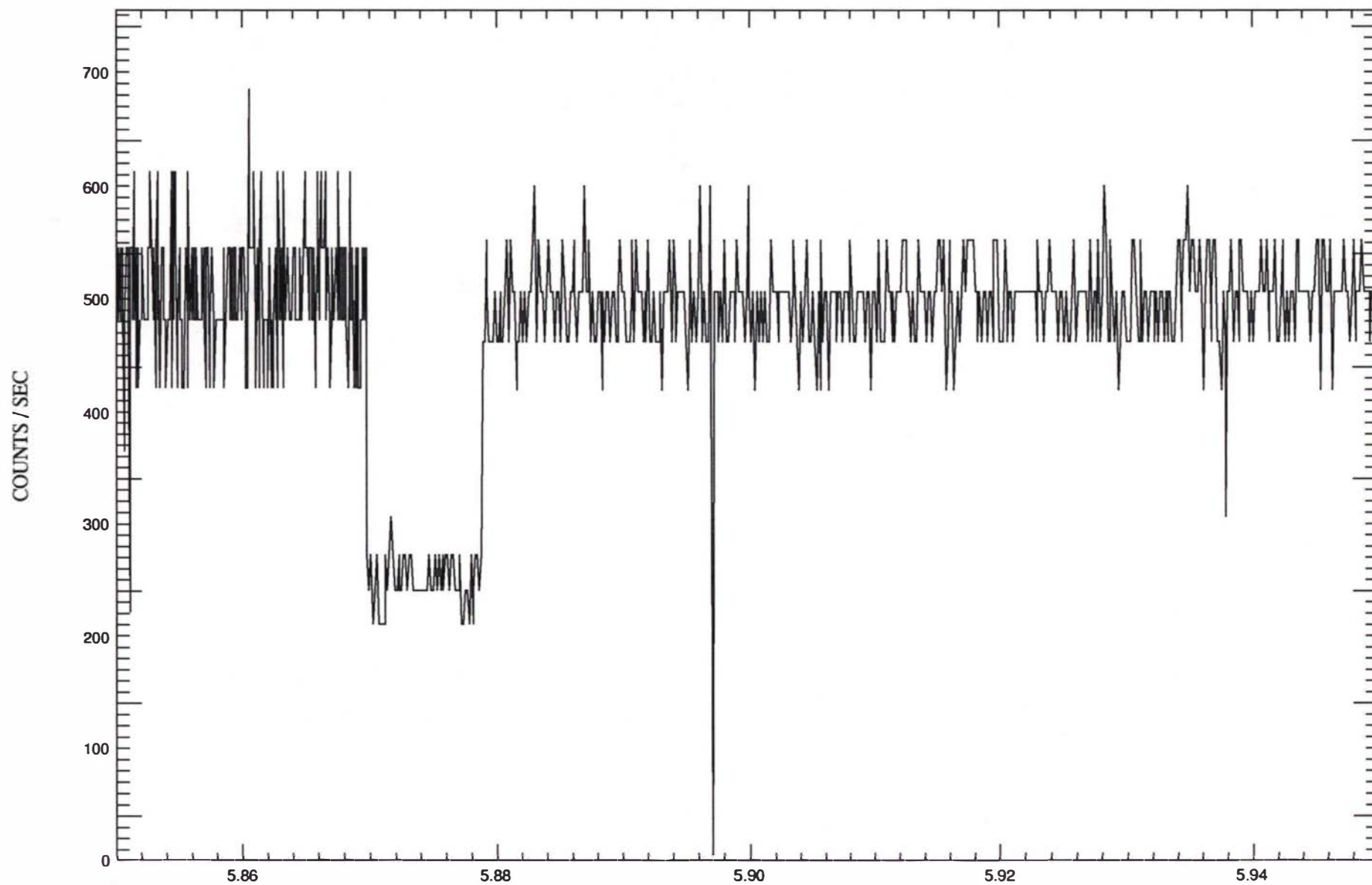
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 1 at UT= 5.899983283149 h=21239.940 s 05:53:59.940

4/1/96



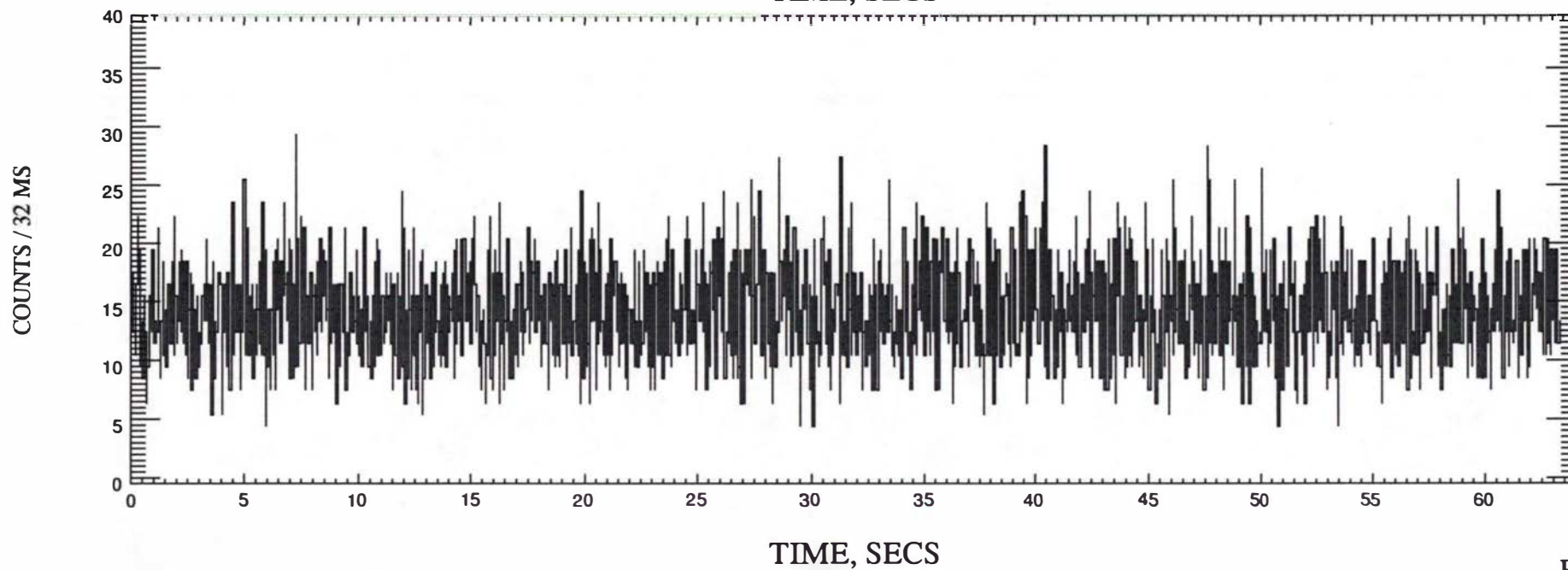
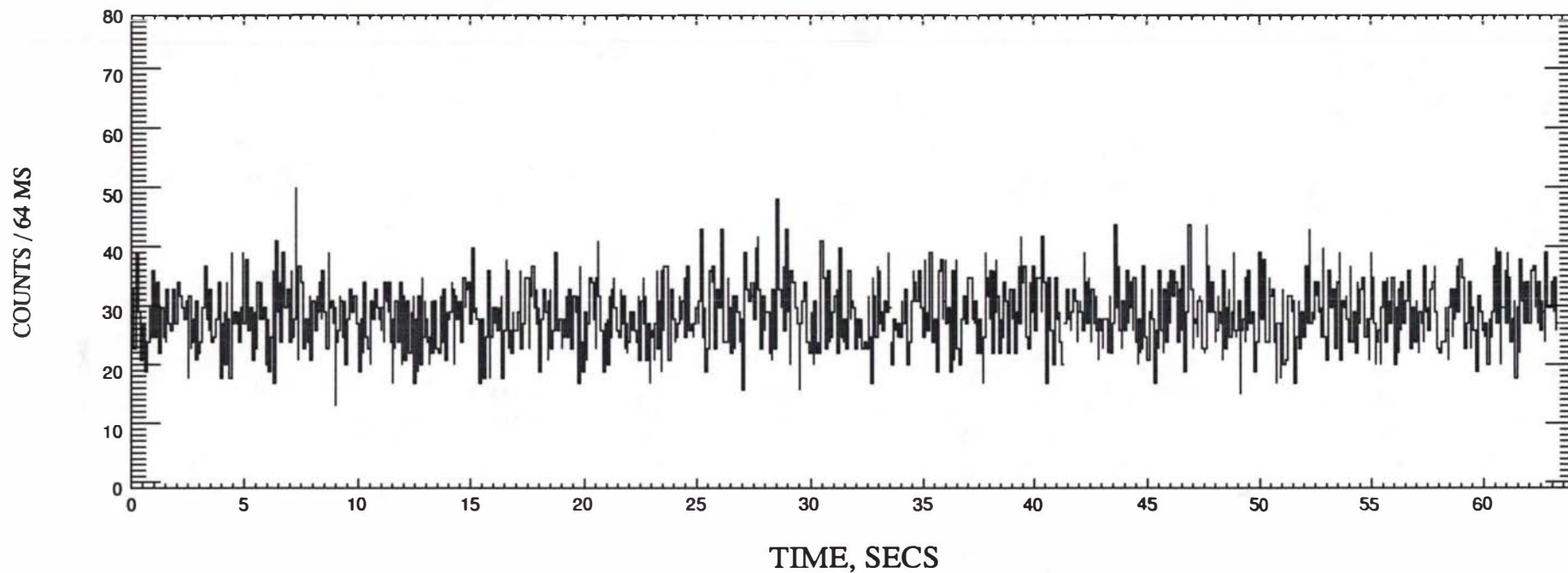
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 2 at UT= 6.794127943251 h=24458.861 s 06:47:38.861

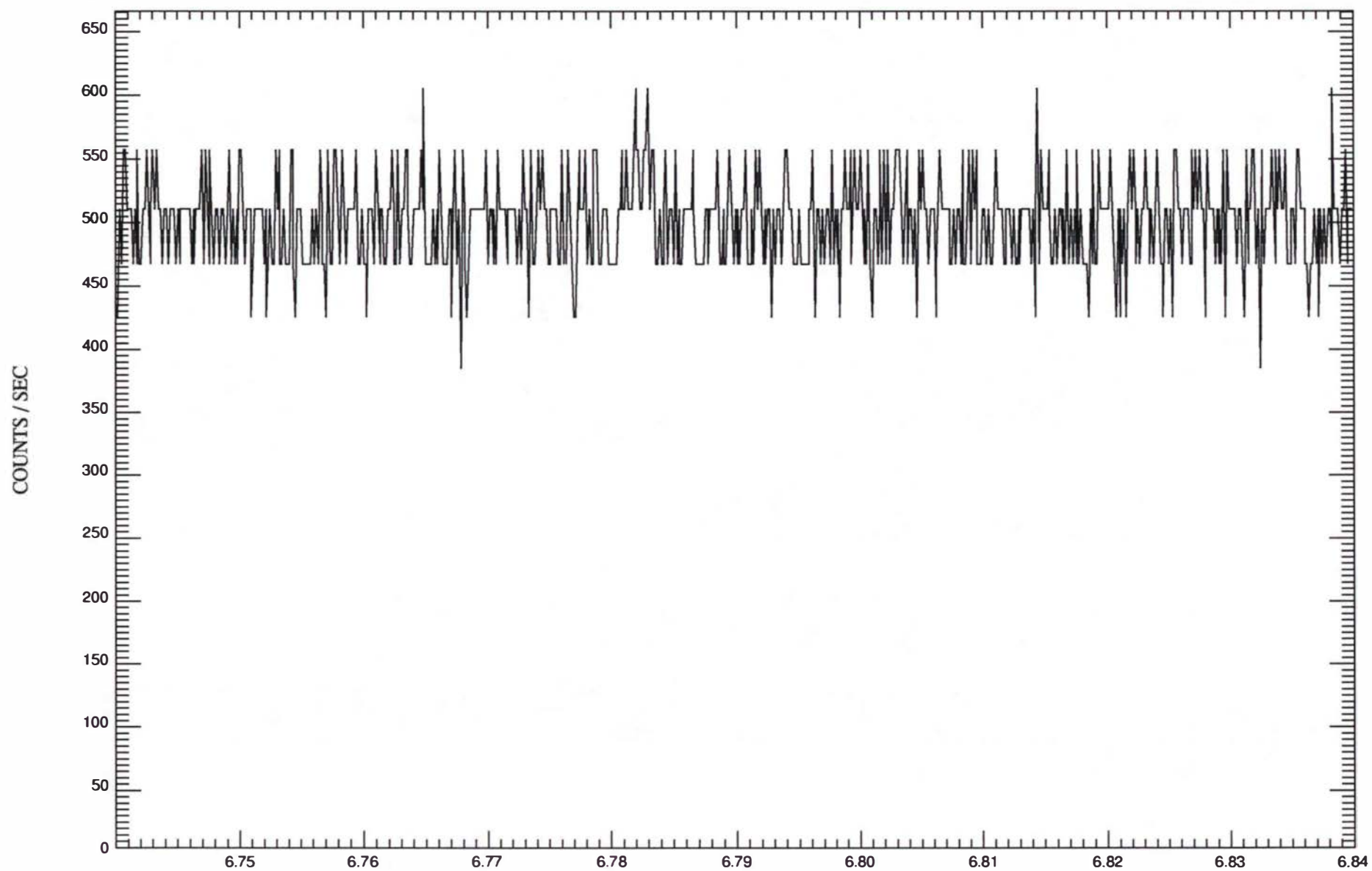
4/1/96



B# 7

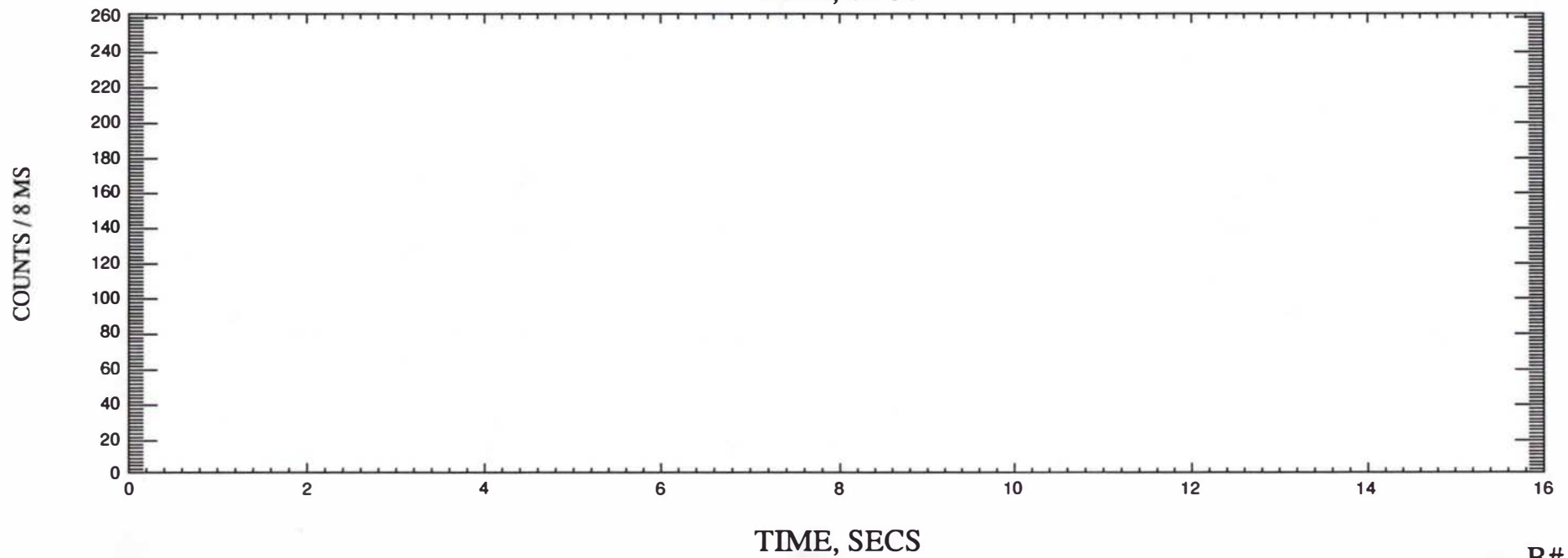
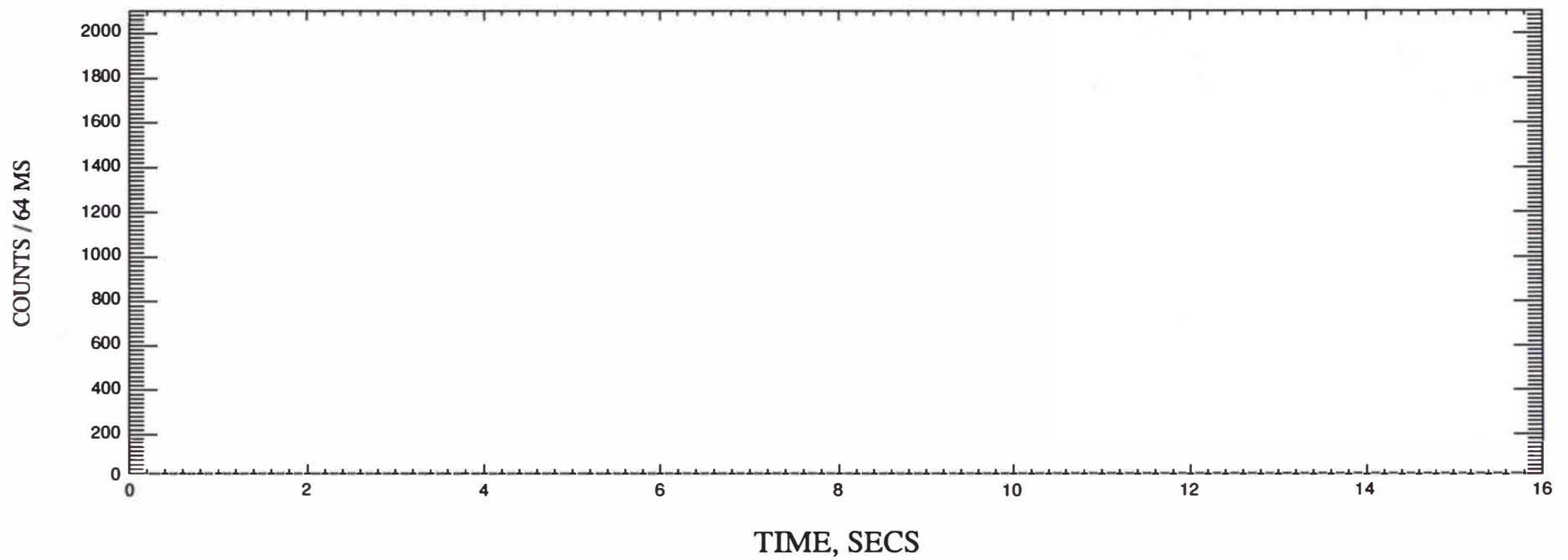
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 3 at UT= 7.511986821493 h=27043.153 s 07:30:43.153

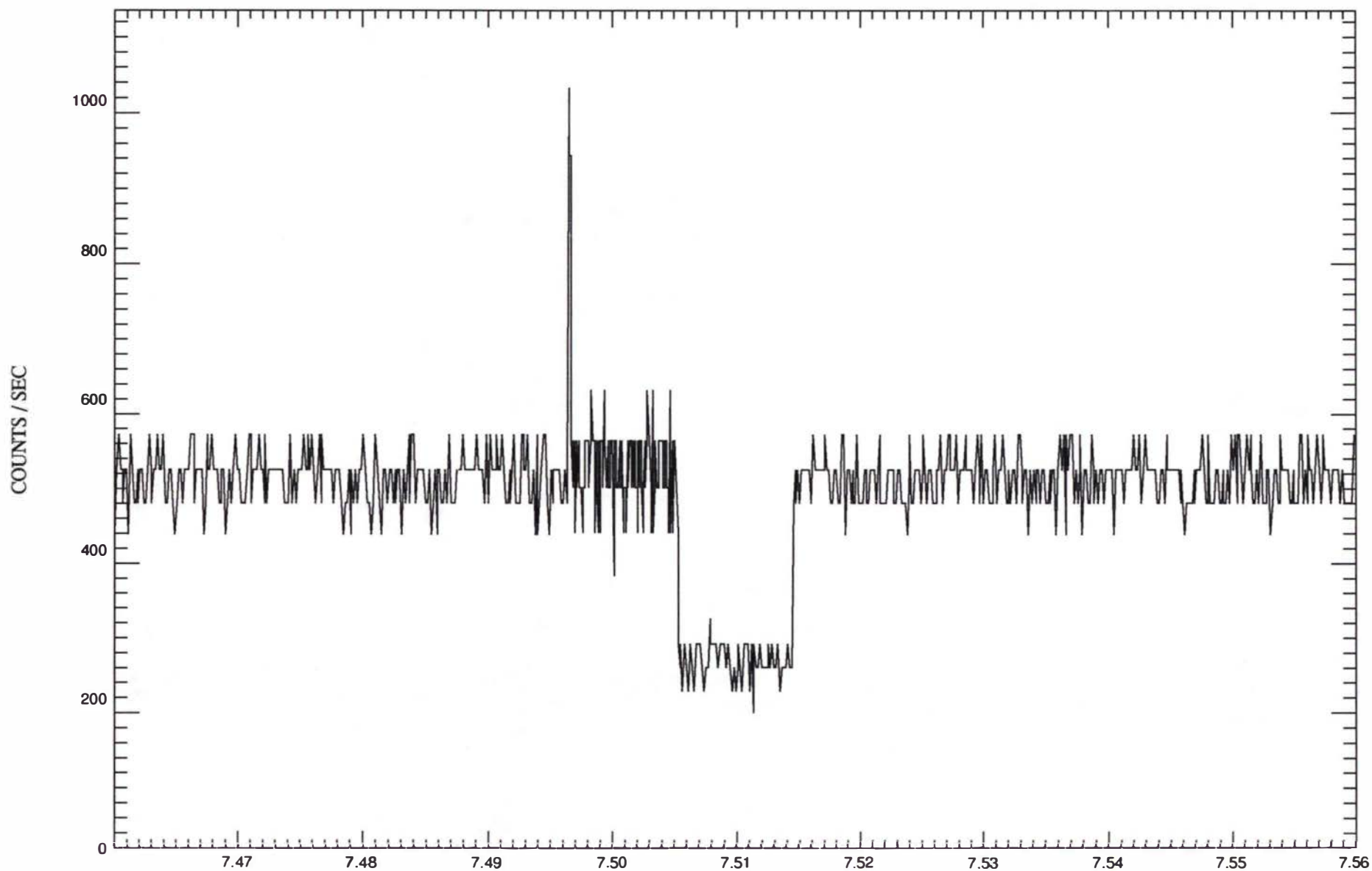
4/1/96



B# 8

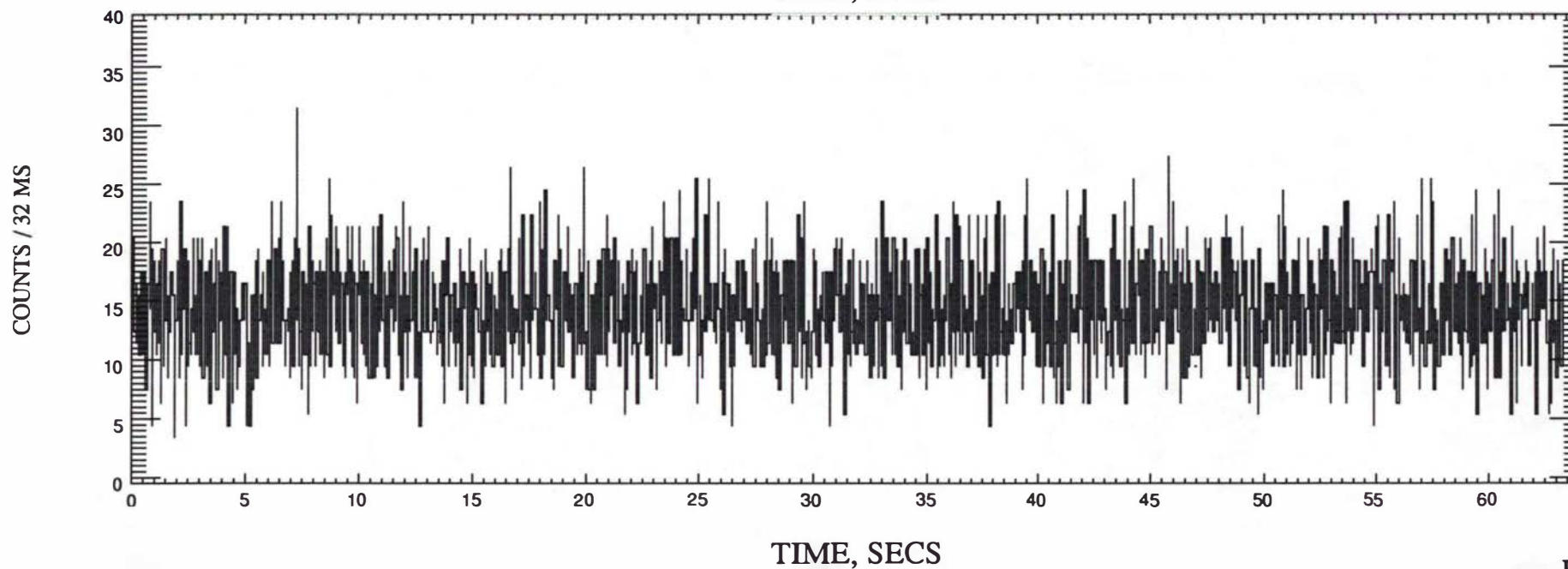
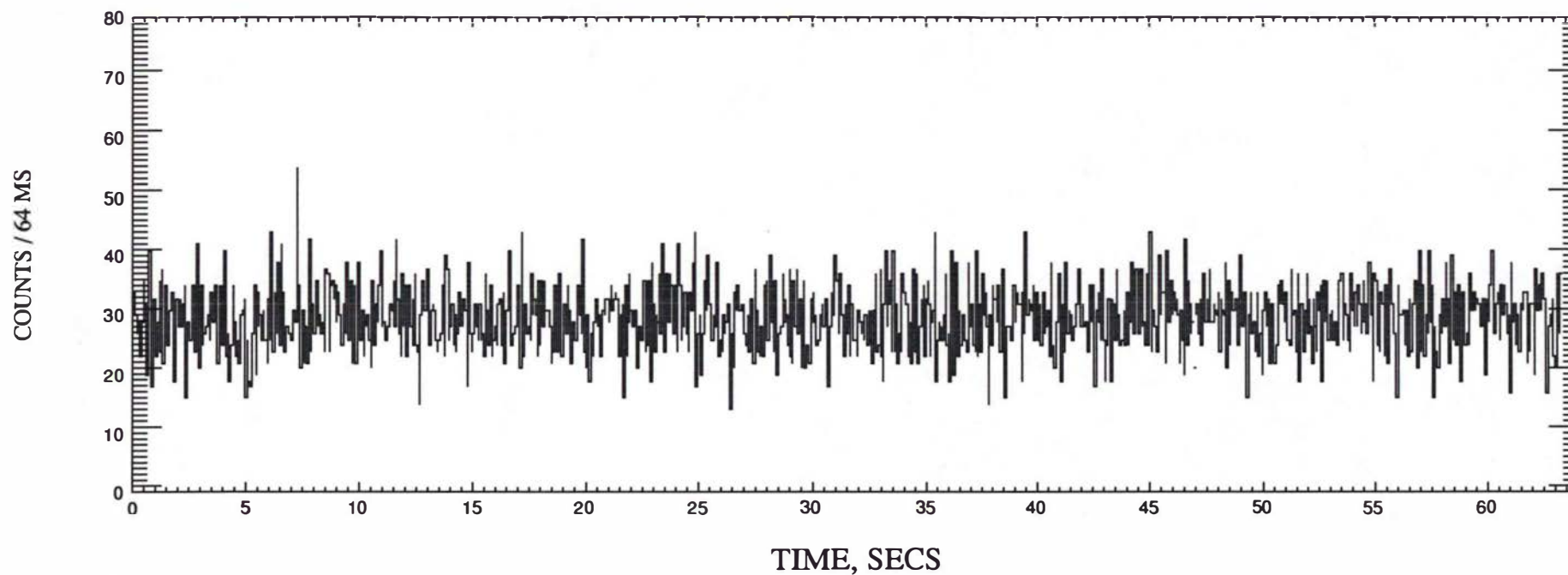
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



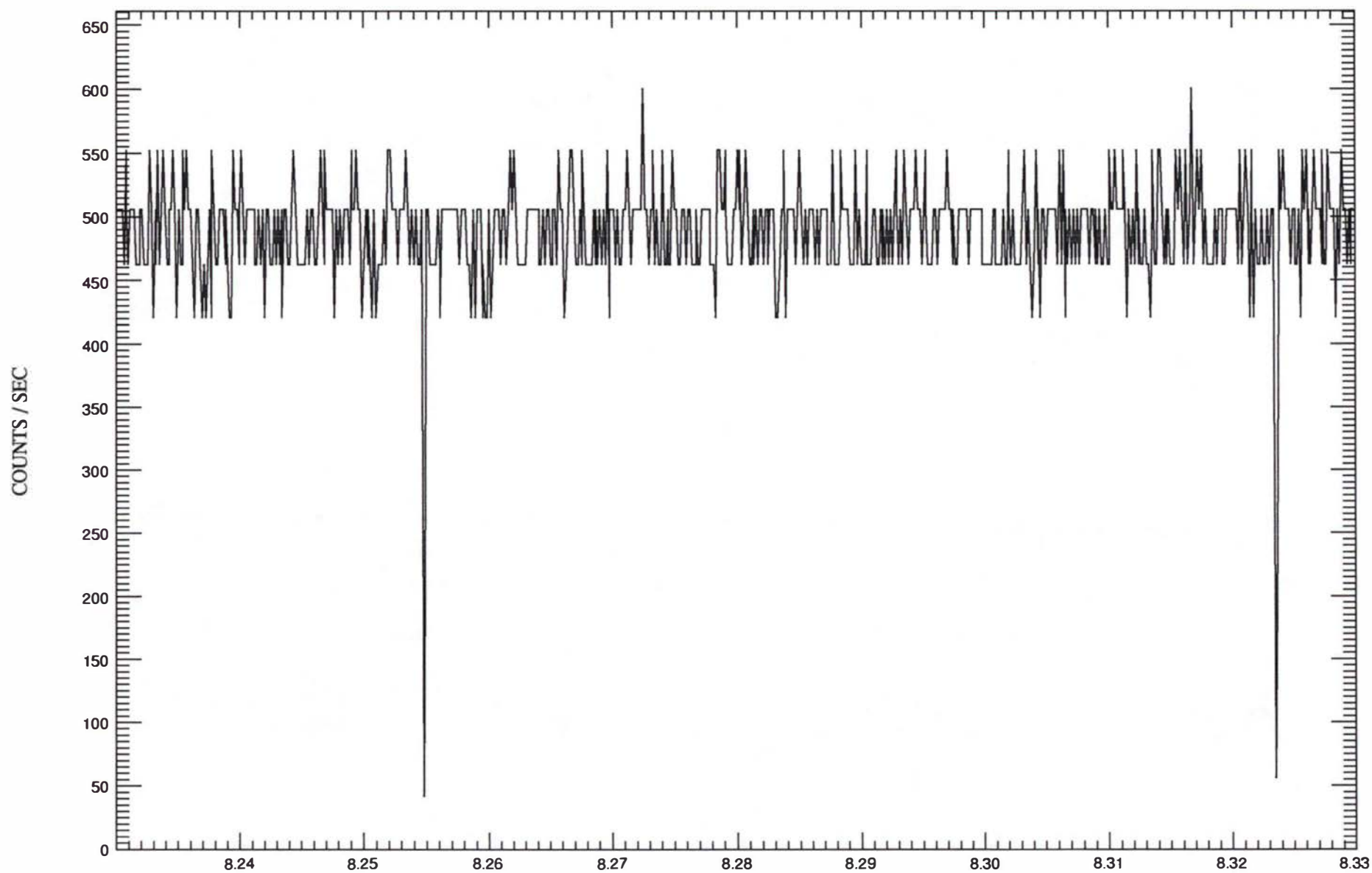
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 4 at UT= 8.283976847331 h=29822.317 s 08:17:02.317

4/1/96



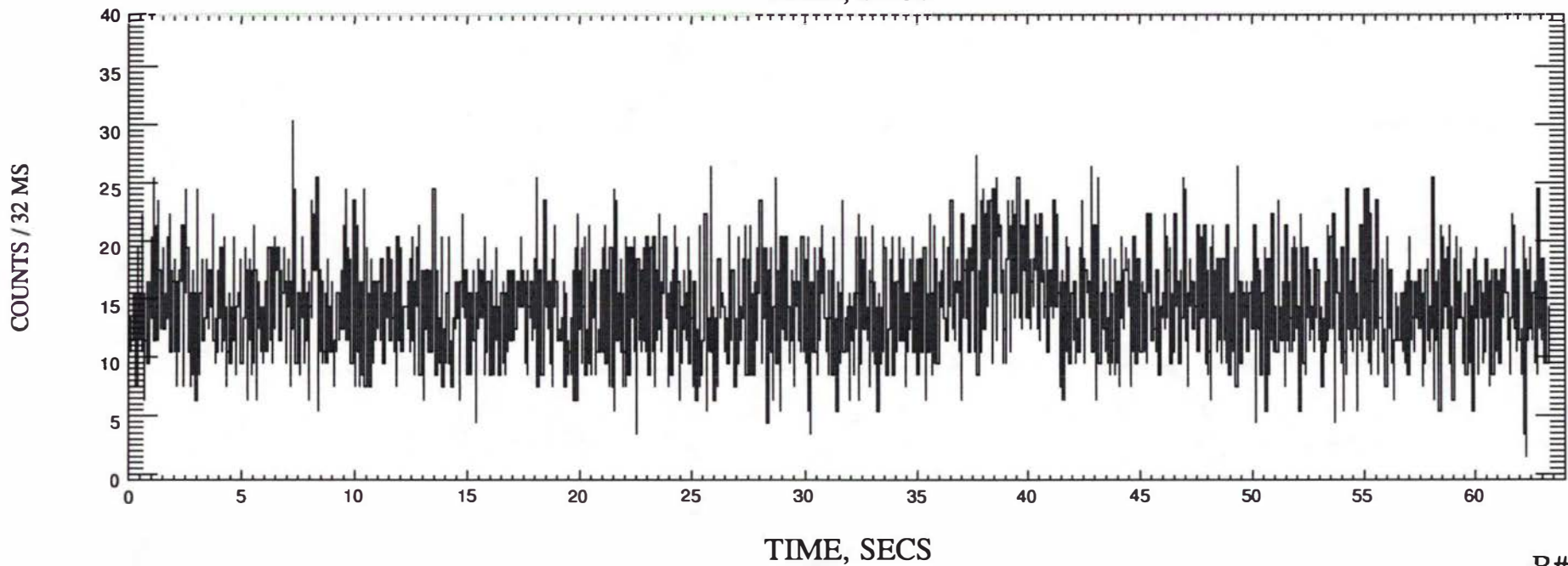
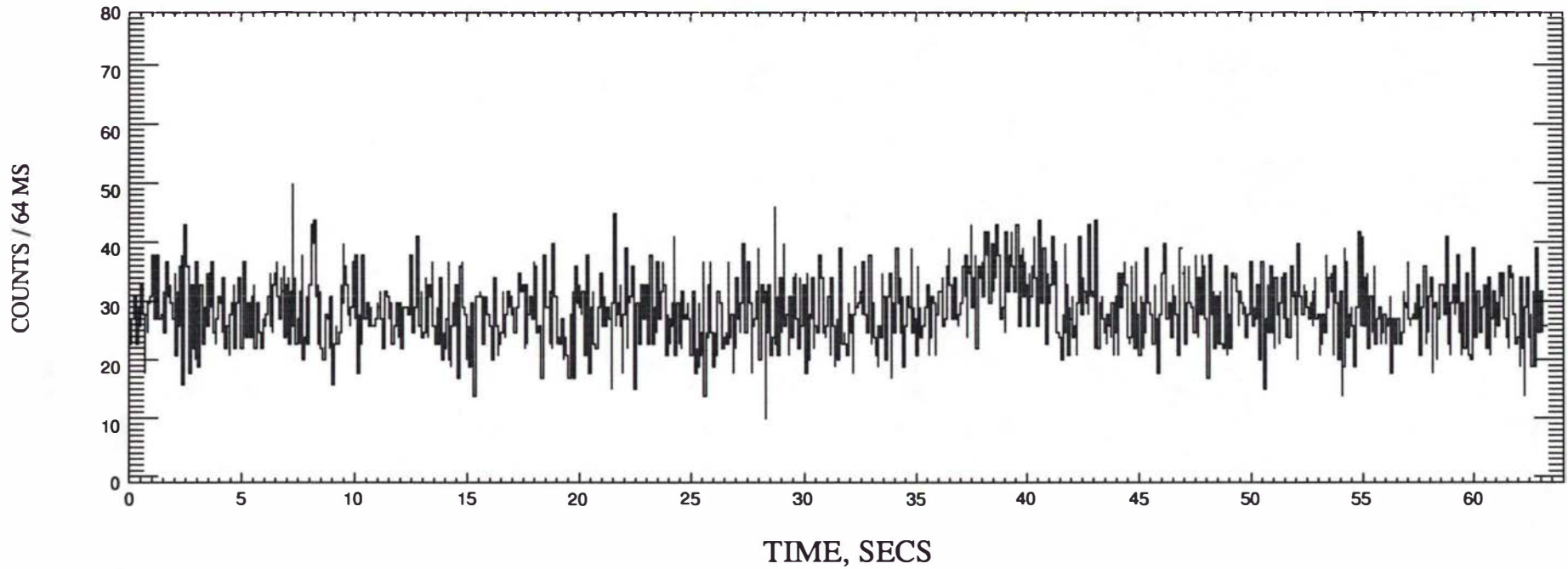
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



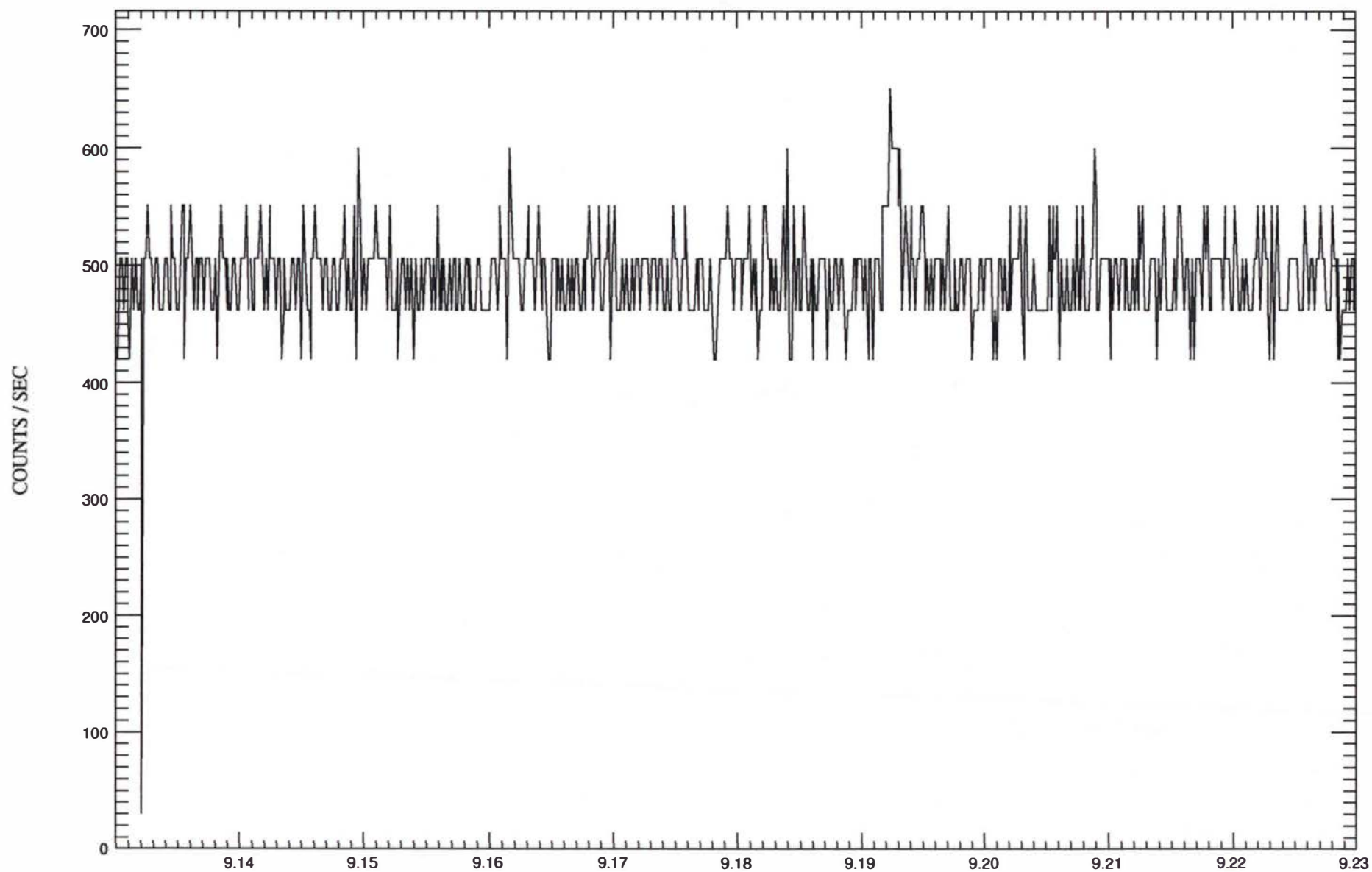
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 5 at UT= 9.183955900404 h=33062.241 s 09:11:02.241

4/1/96



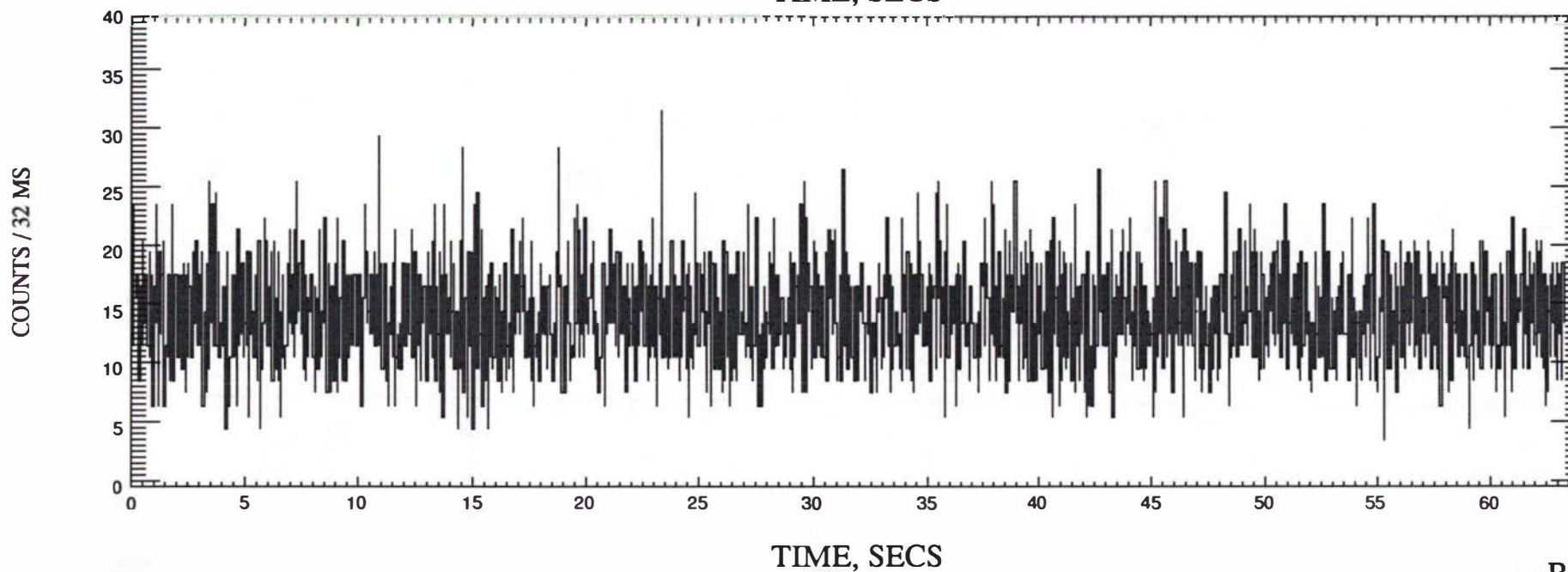
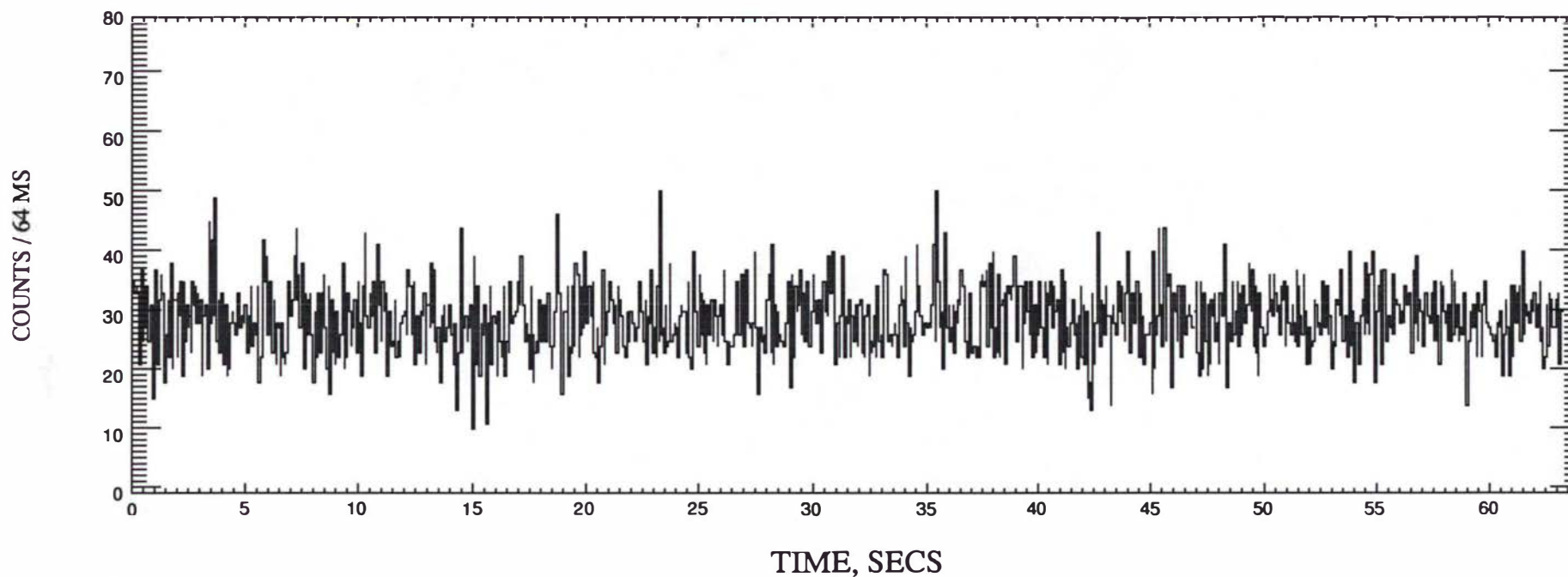
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



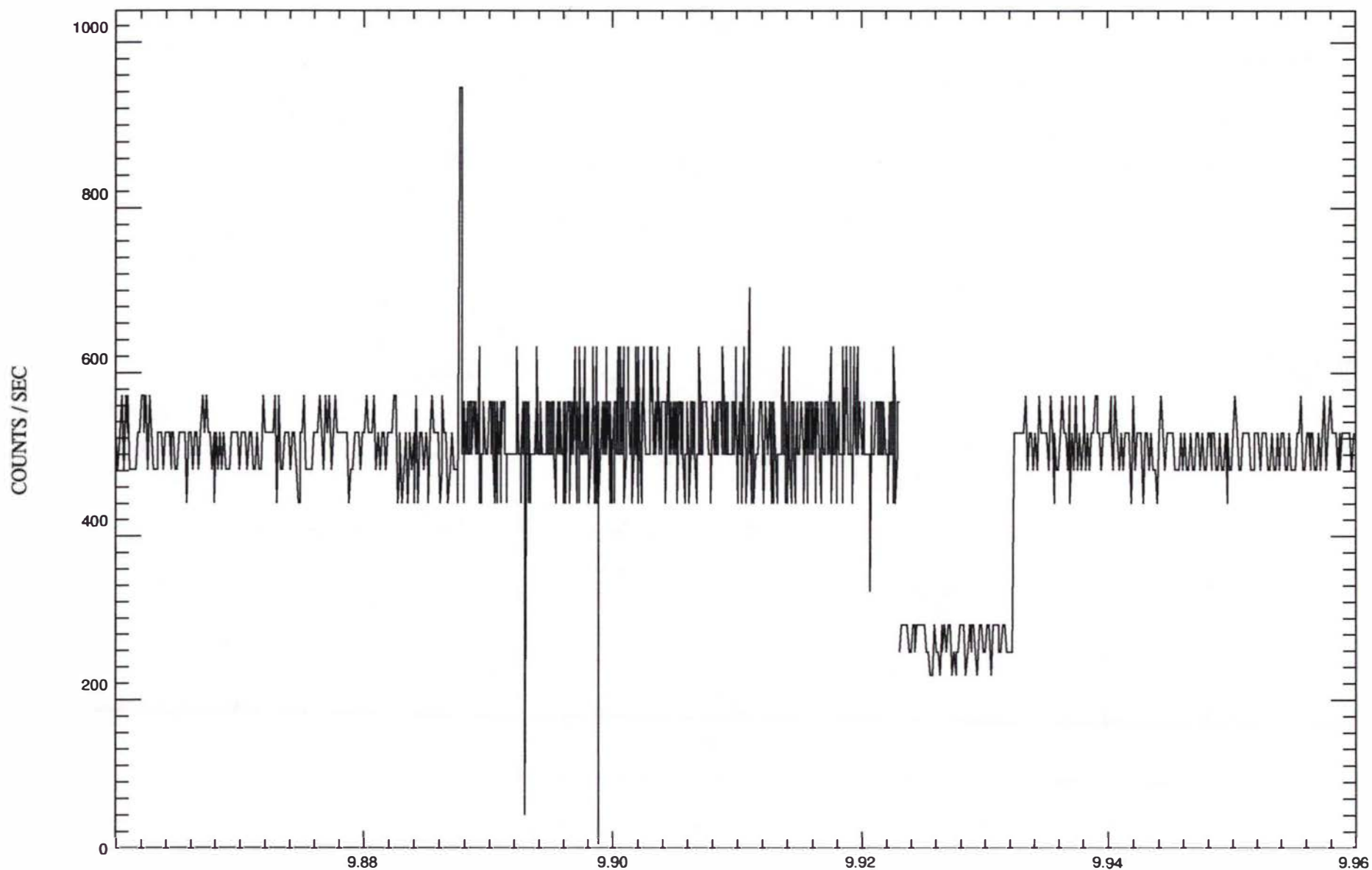
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 6 at UT= 9.911049825880 h=35679.779 s 09:54:39.779

4/1/96



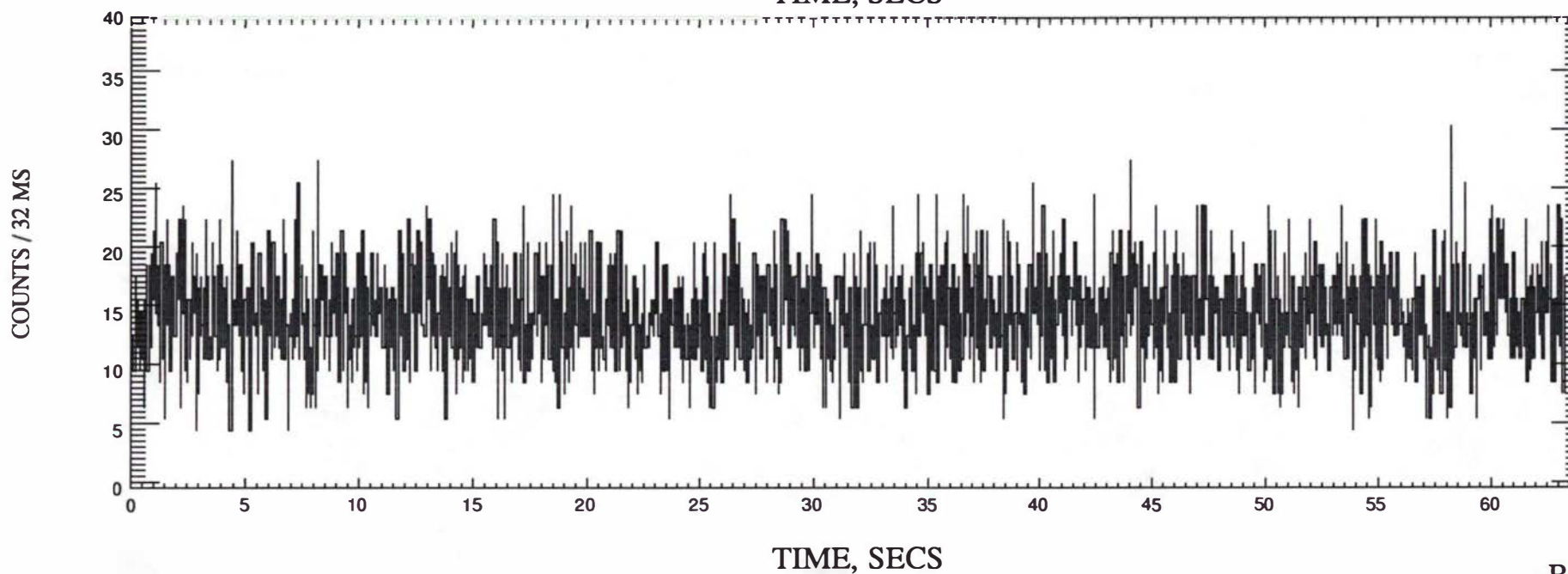
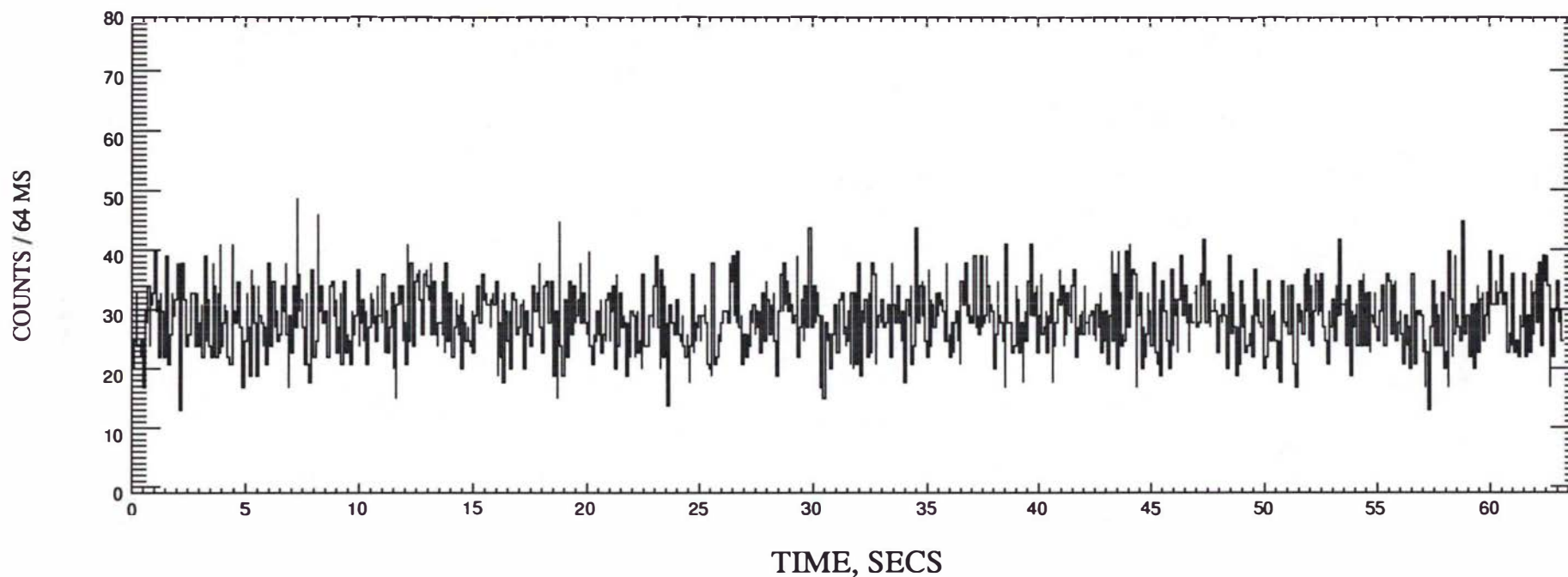
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



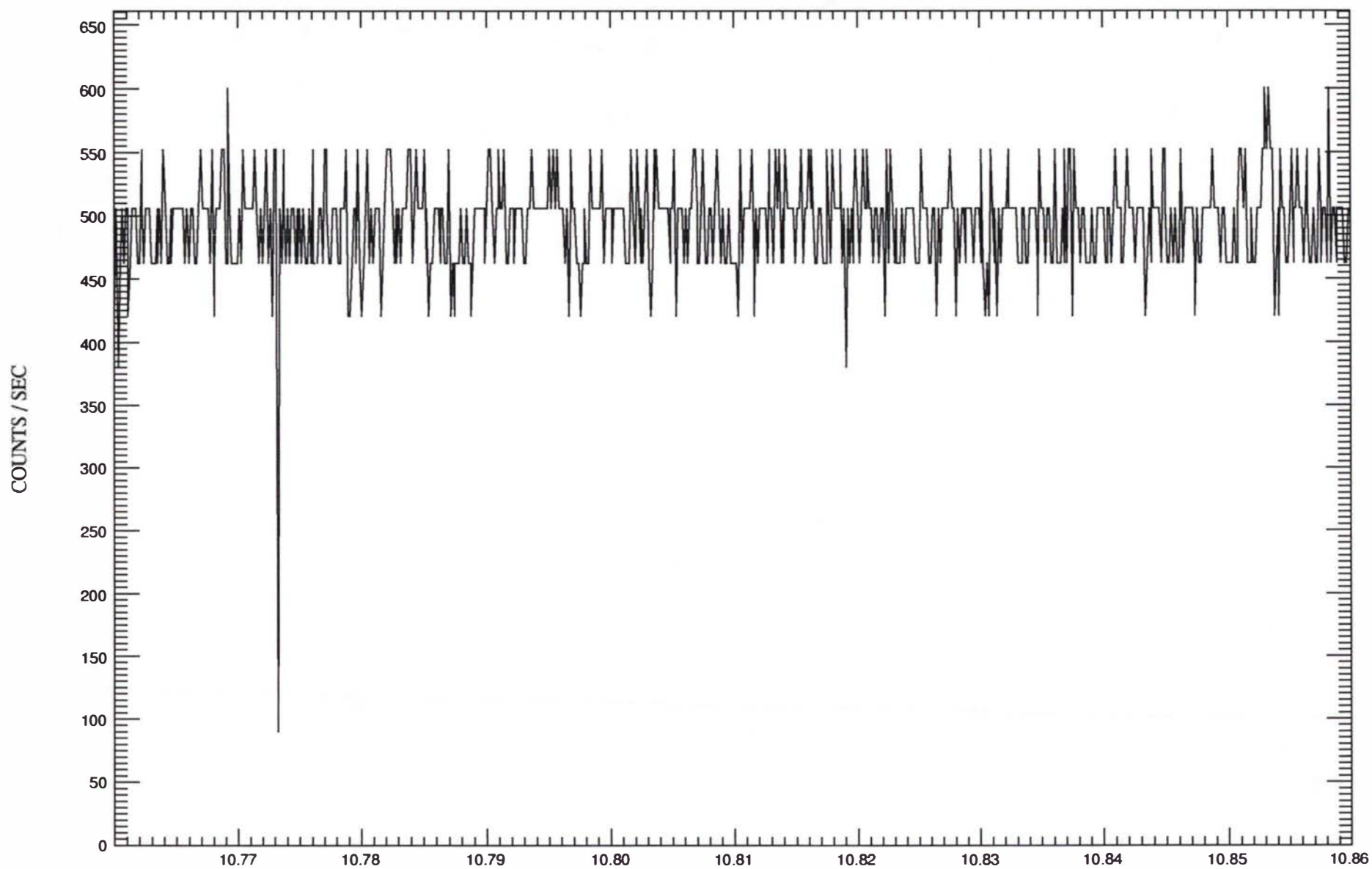
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 7 at UT=10.805369156731 h=38899.329 s 10:48:19.329

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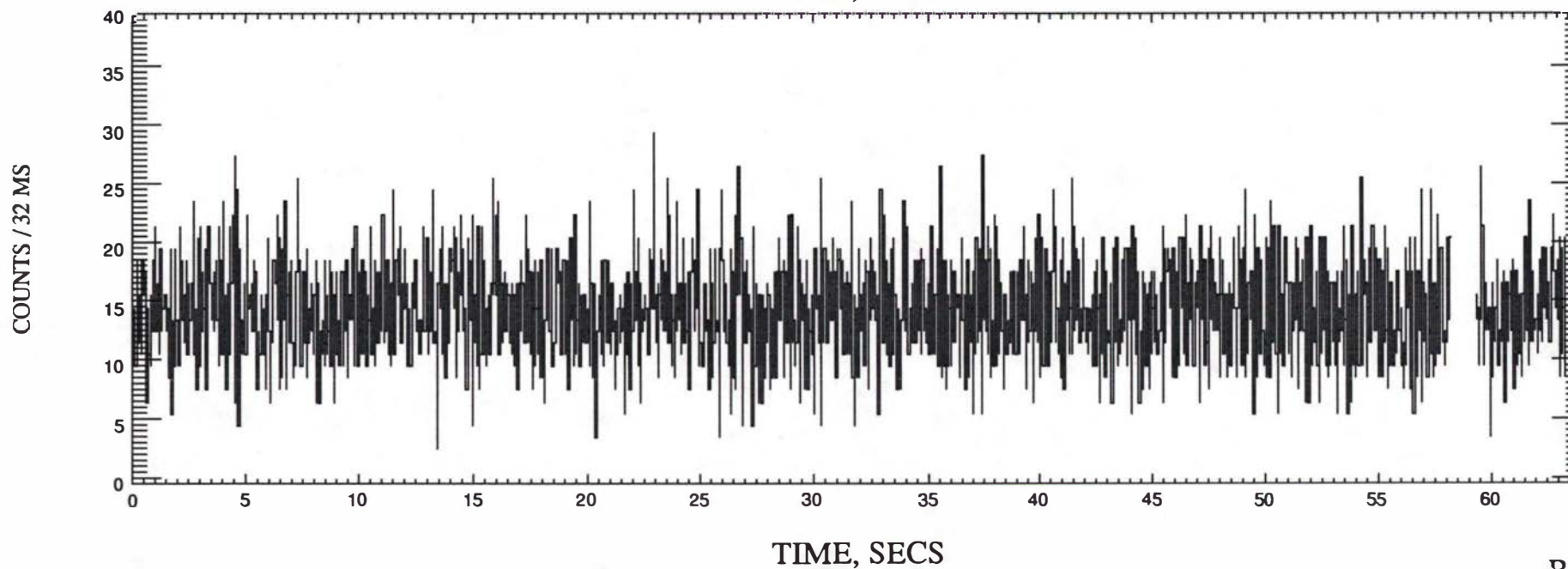
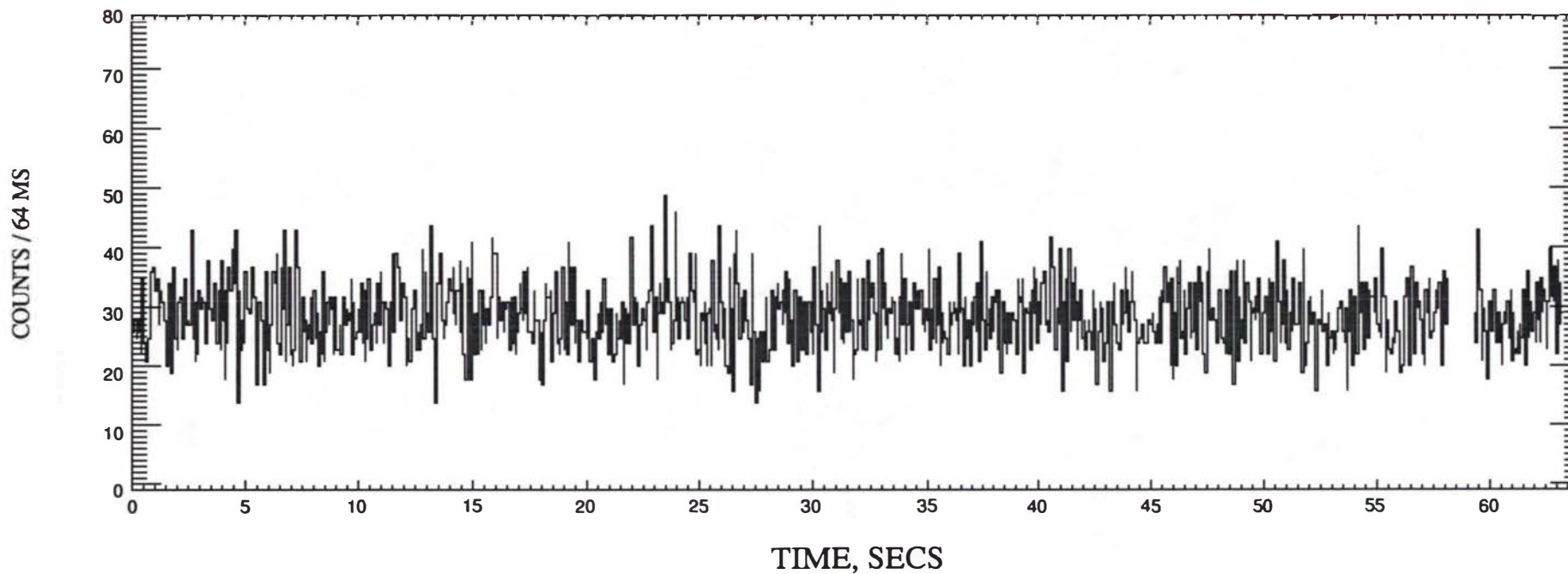
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



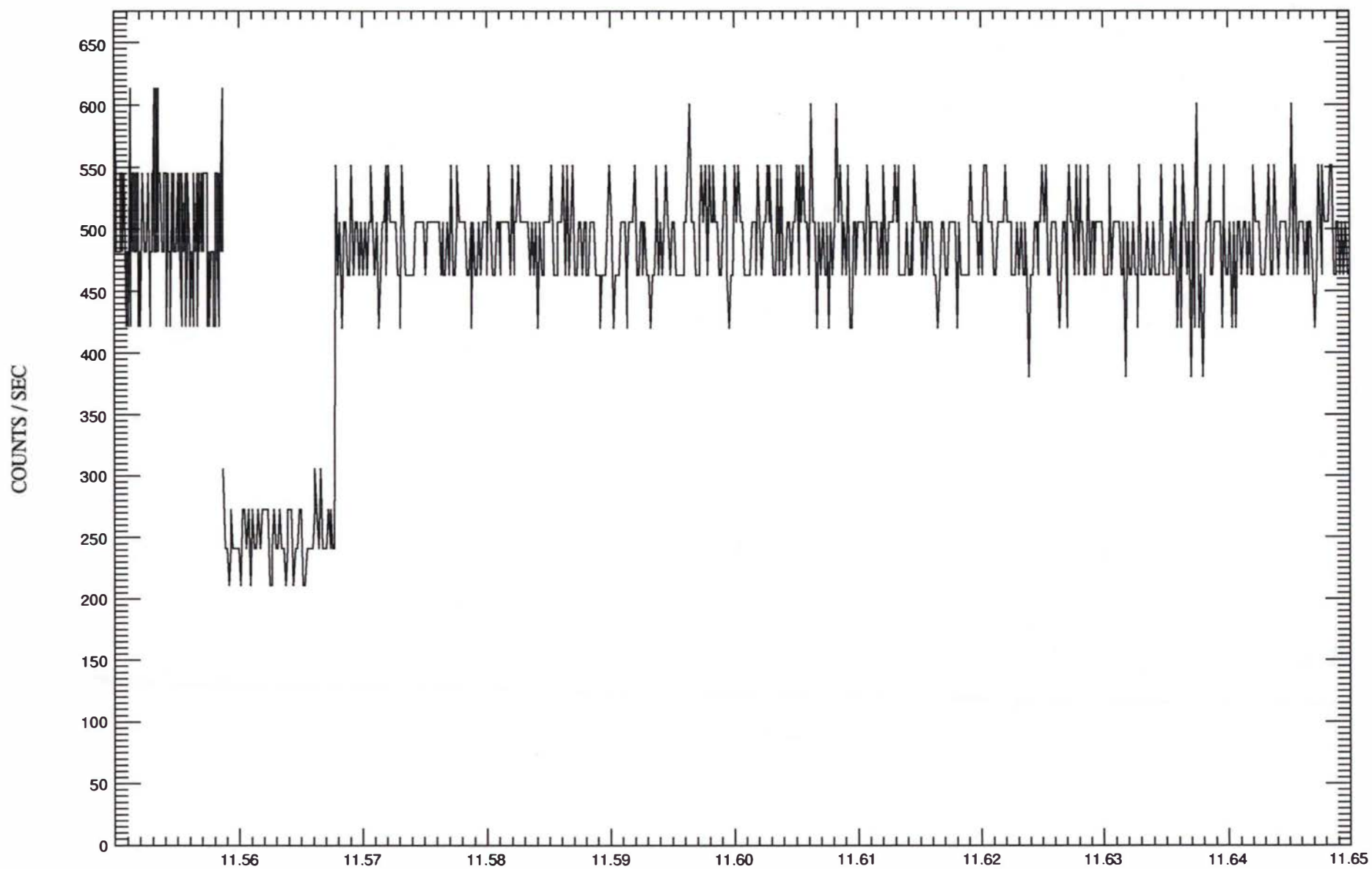
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 8 at UT=11.603922479418 h=41774.121 s 11:36:14.121

4/1/96



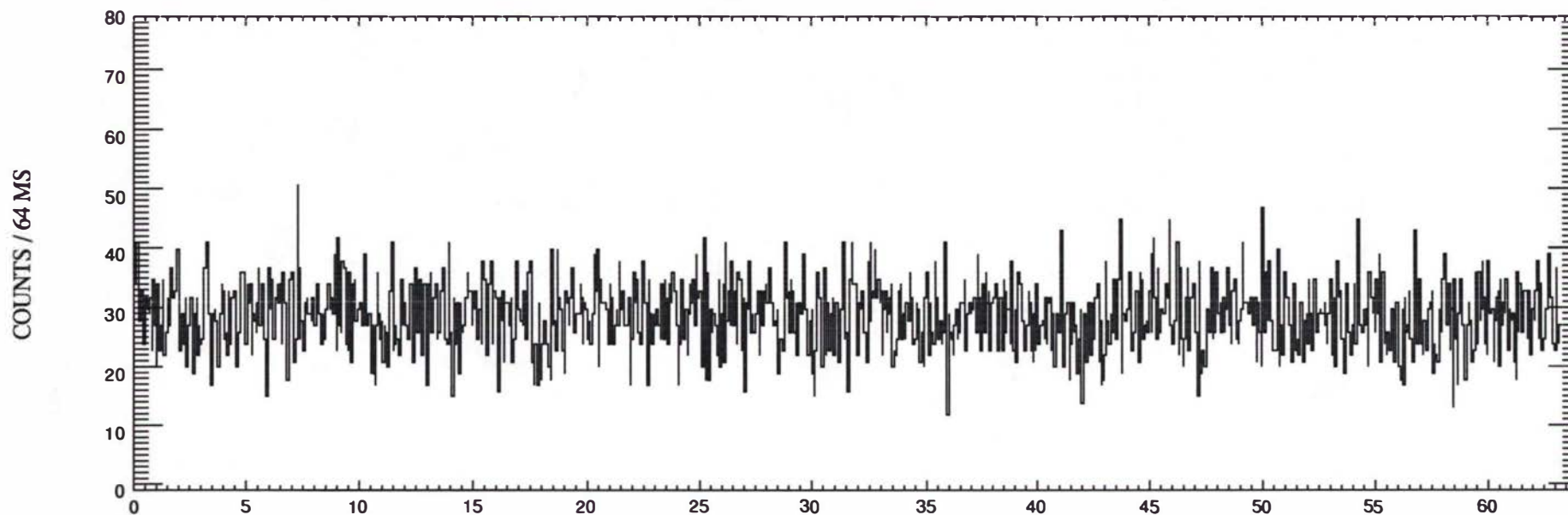
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96

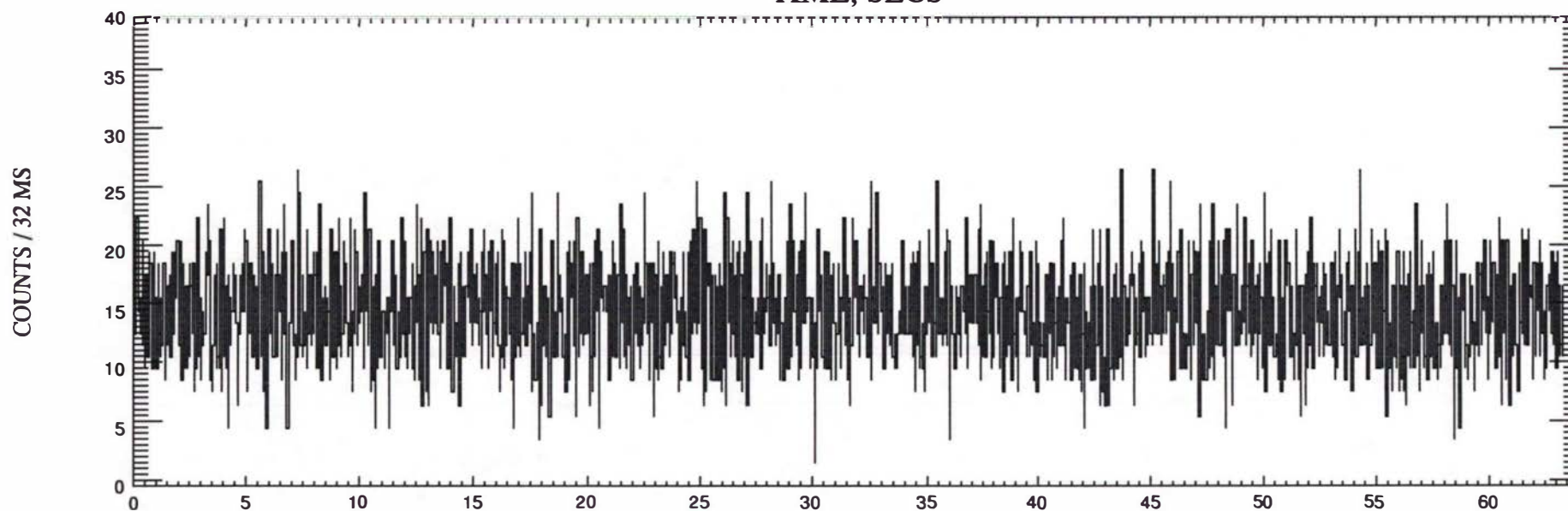


HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 9 at UT=12.343656357659 h=44437.163 s 12:20:37.163

4/1/96



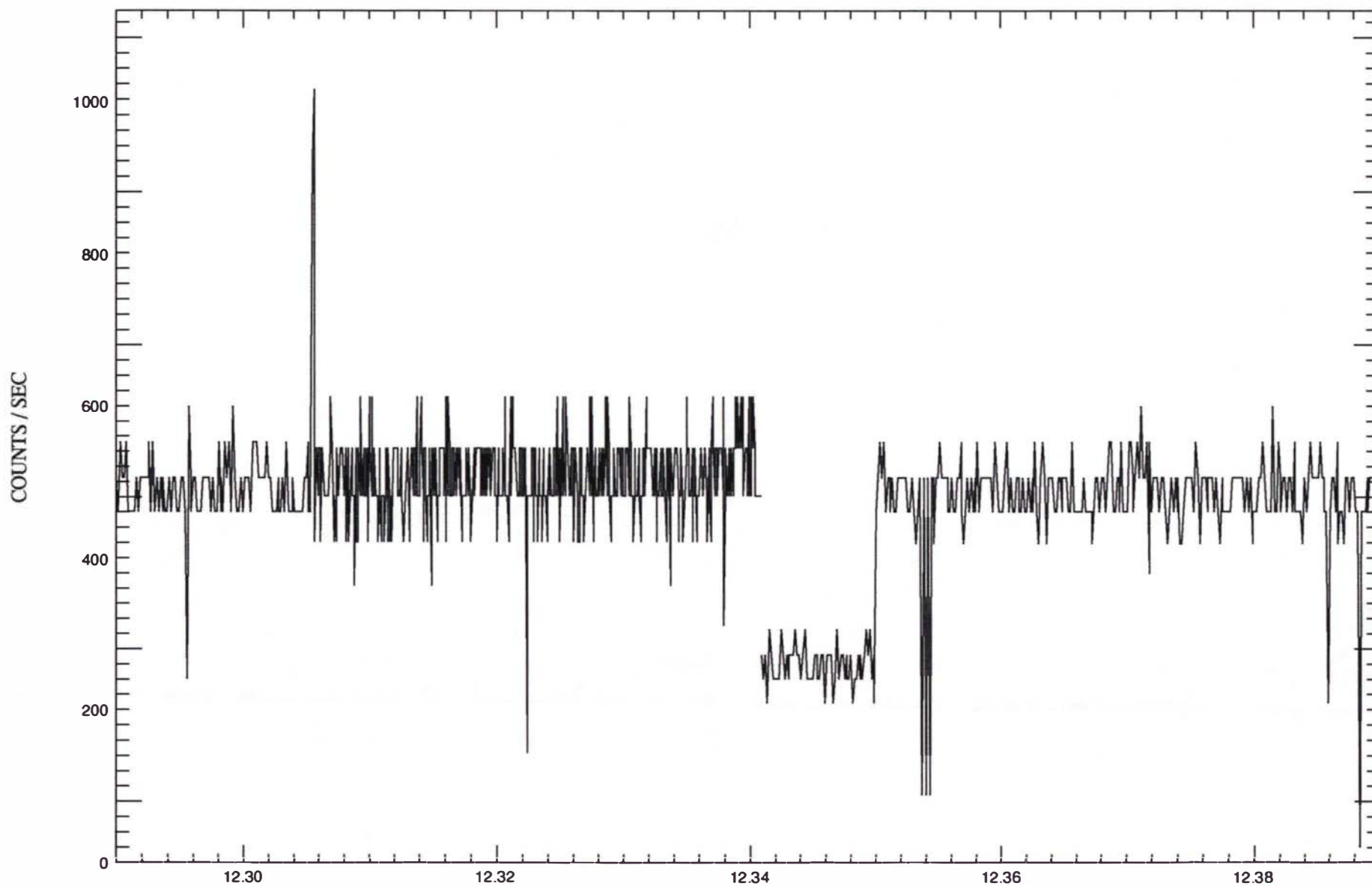
TIME, SECS



TIME, SECS

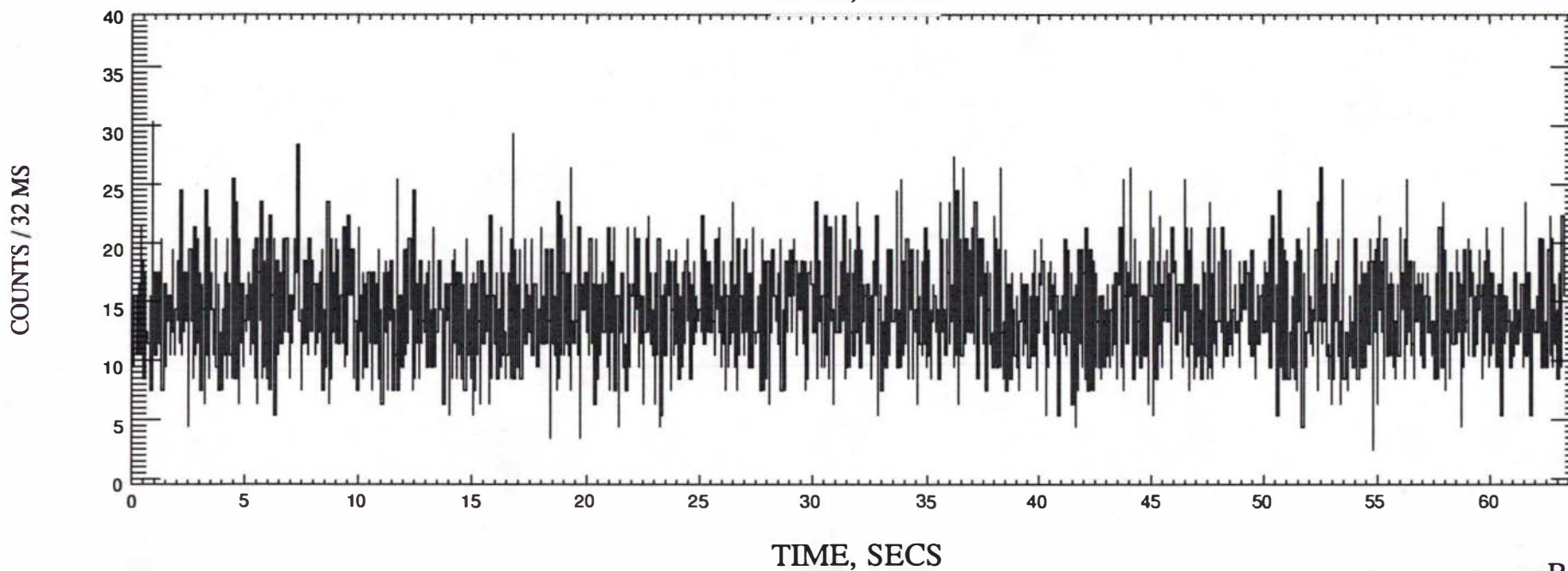
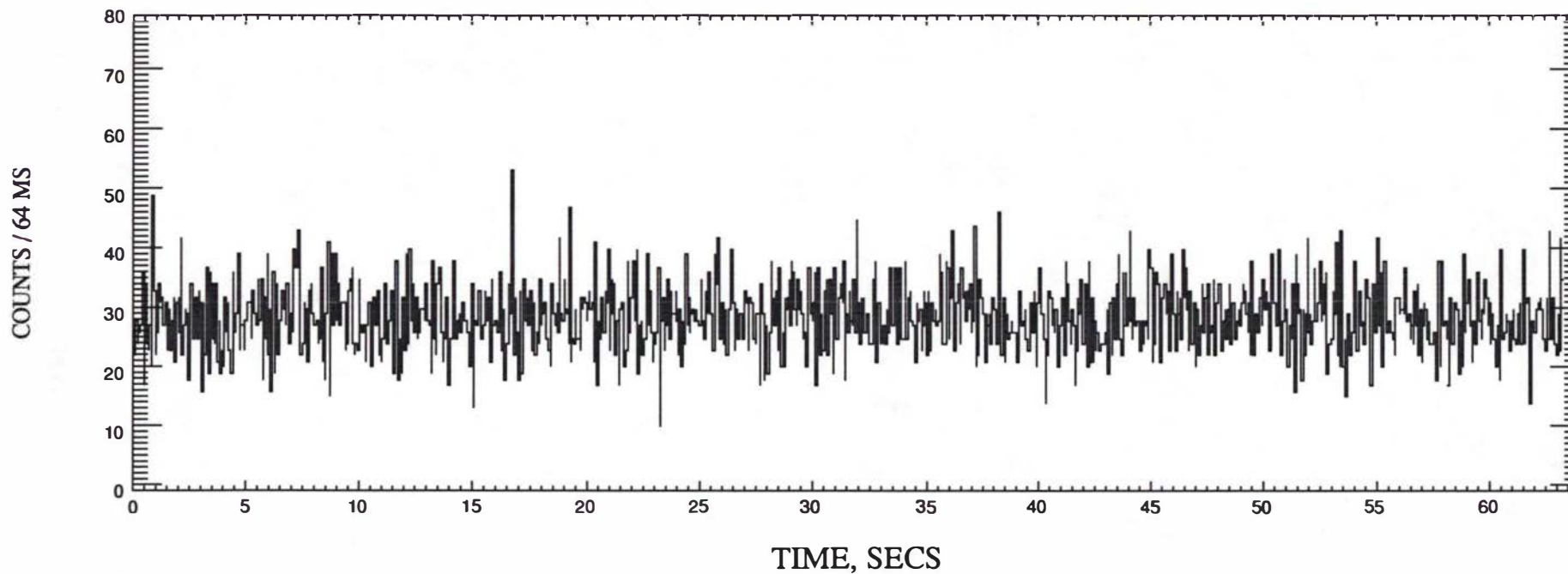
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



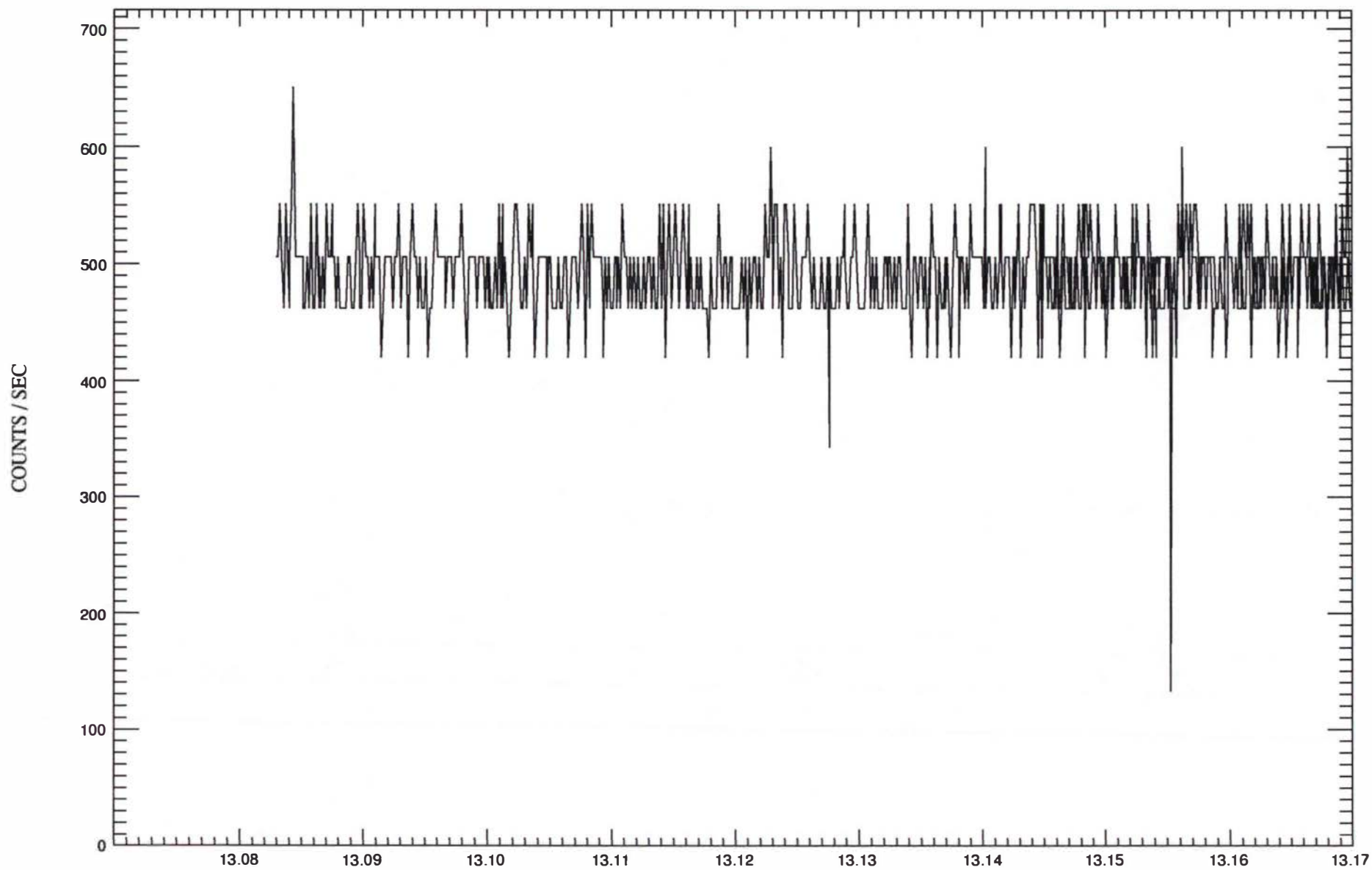
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 10 at UT=13.119950616625 h=47231.822 s 13:07:11.822

4/1/96



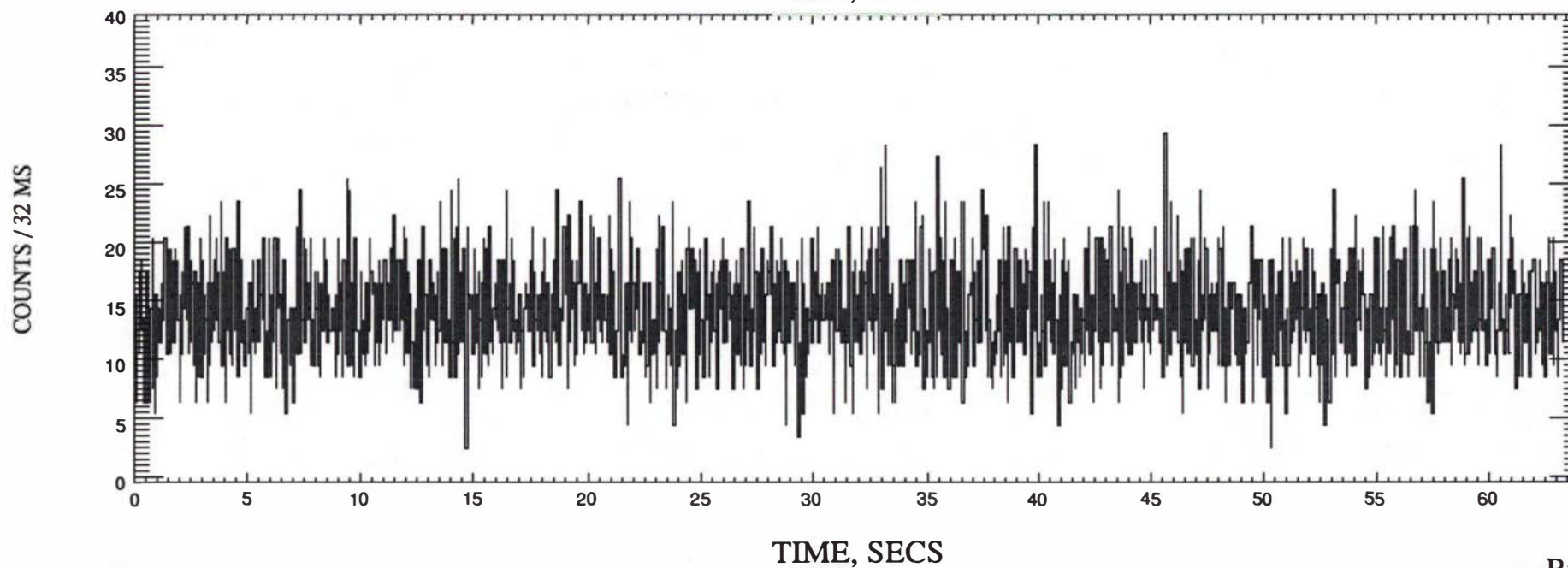
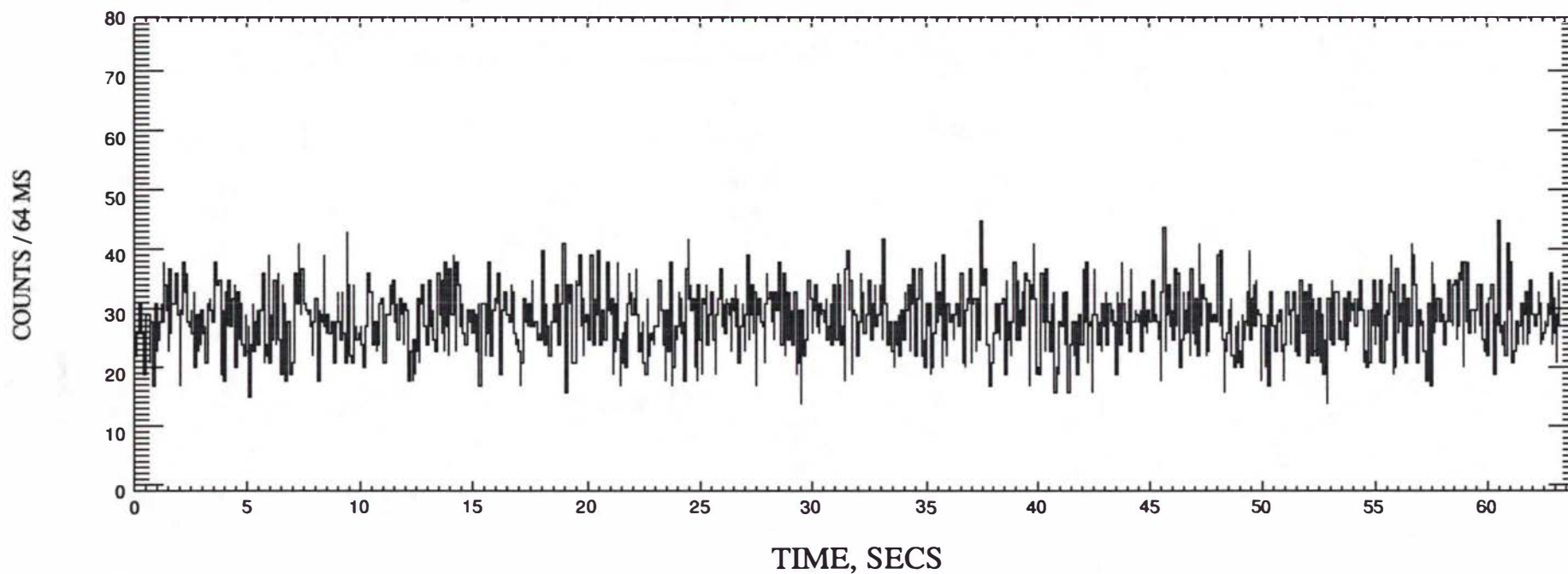
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



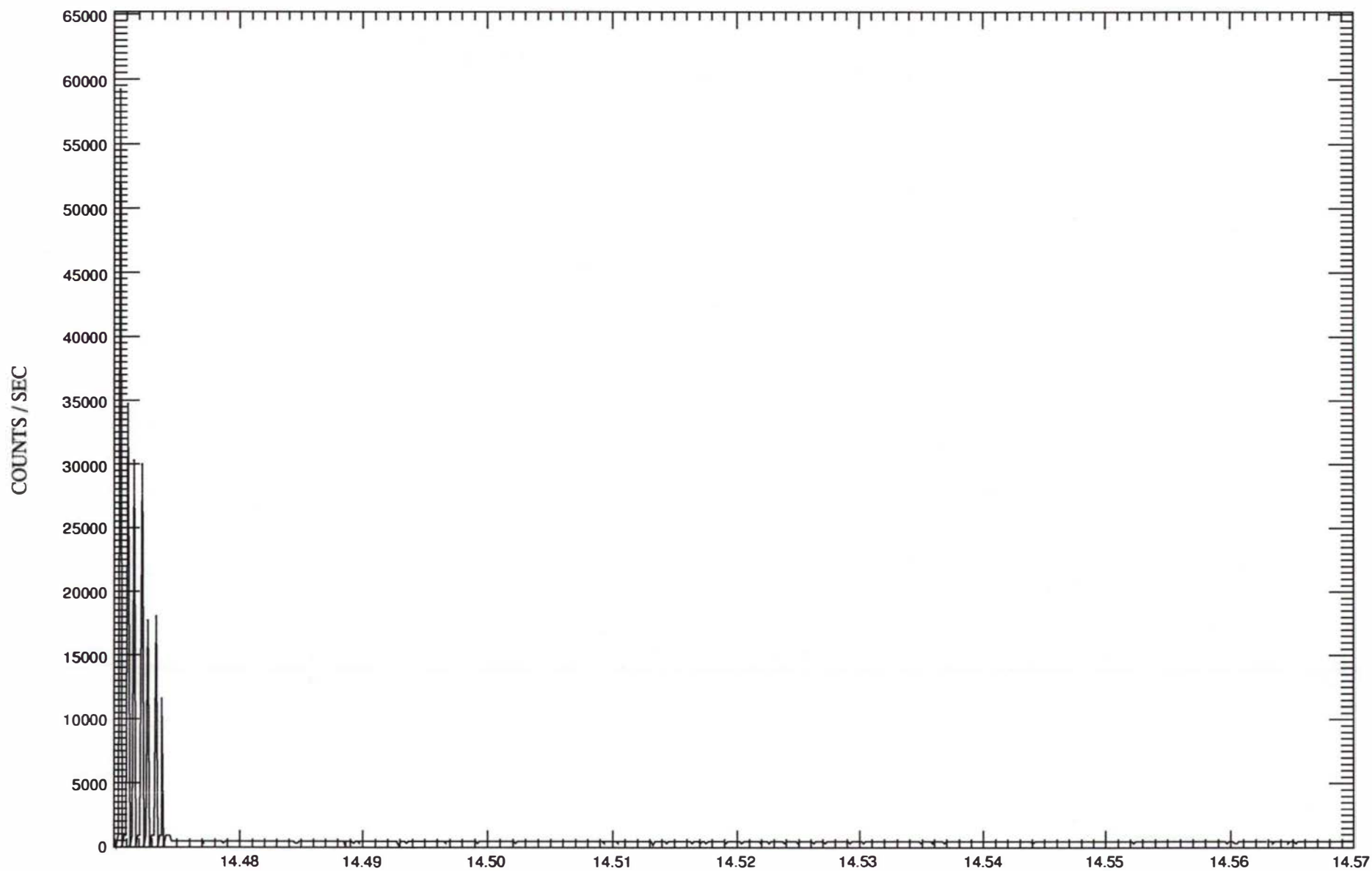
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 11 at UT=14.517853486803 h=52264.273 s 14:31:04.273

4/1/96



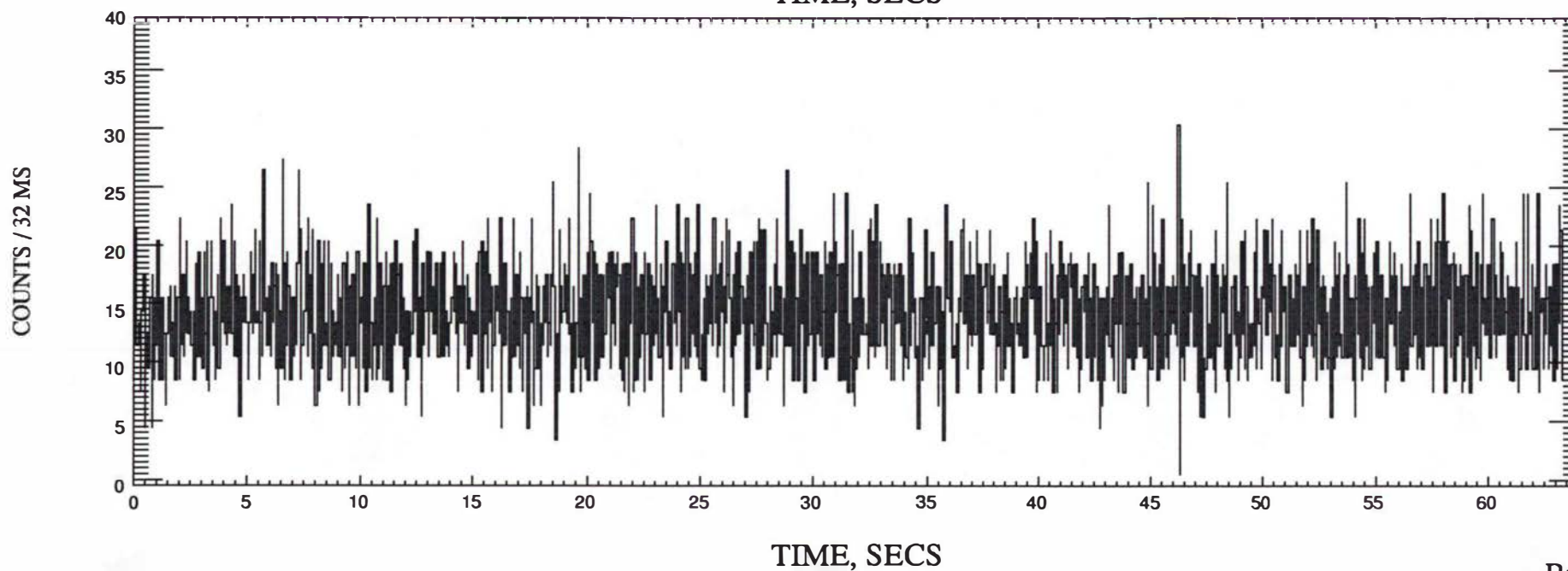
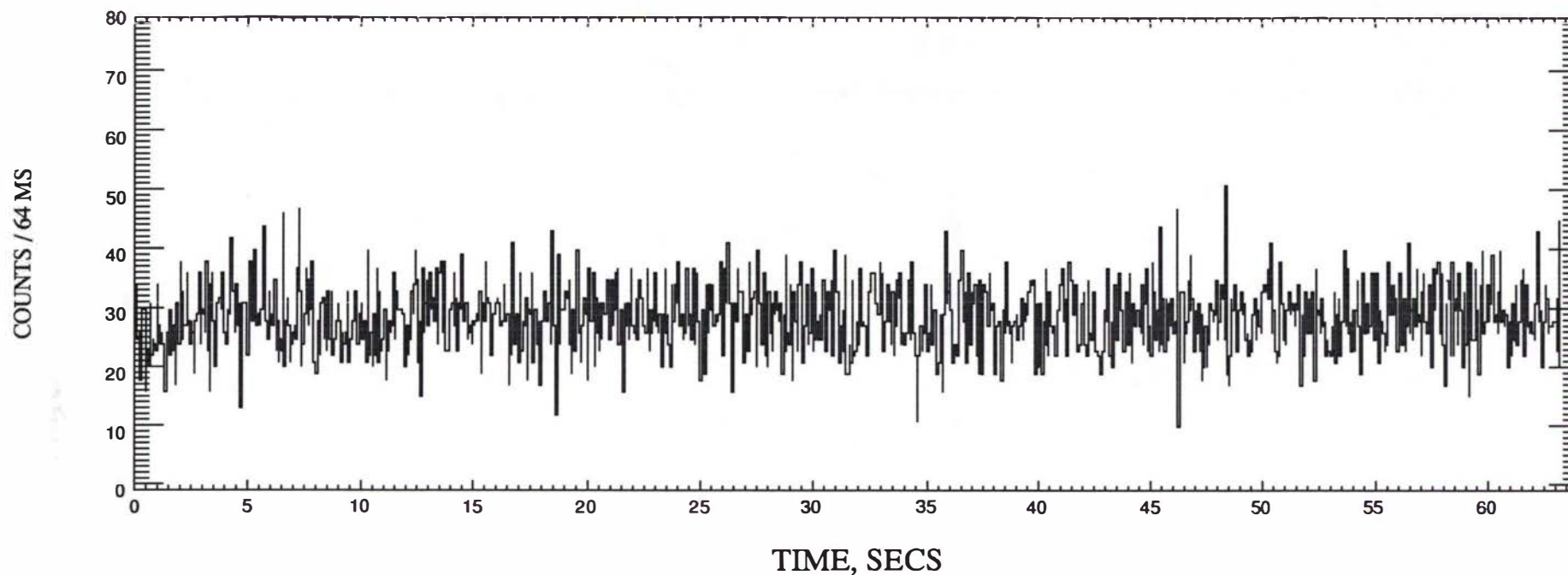
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



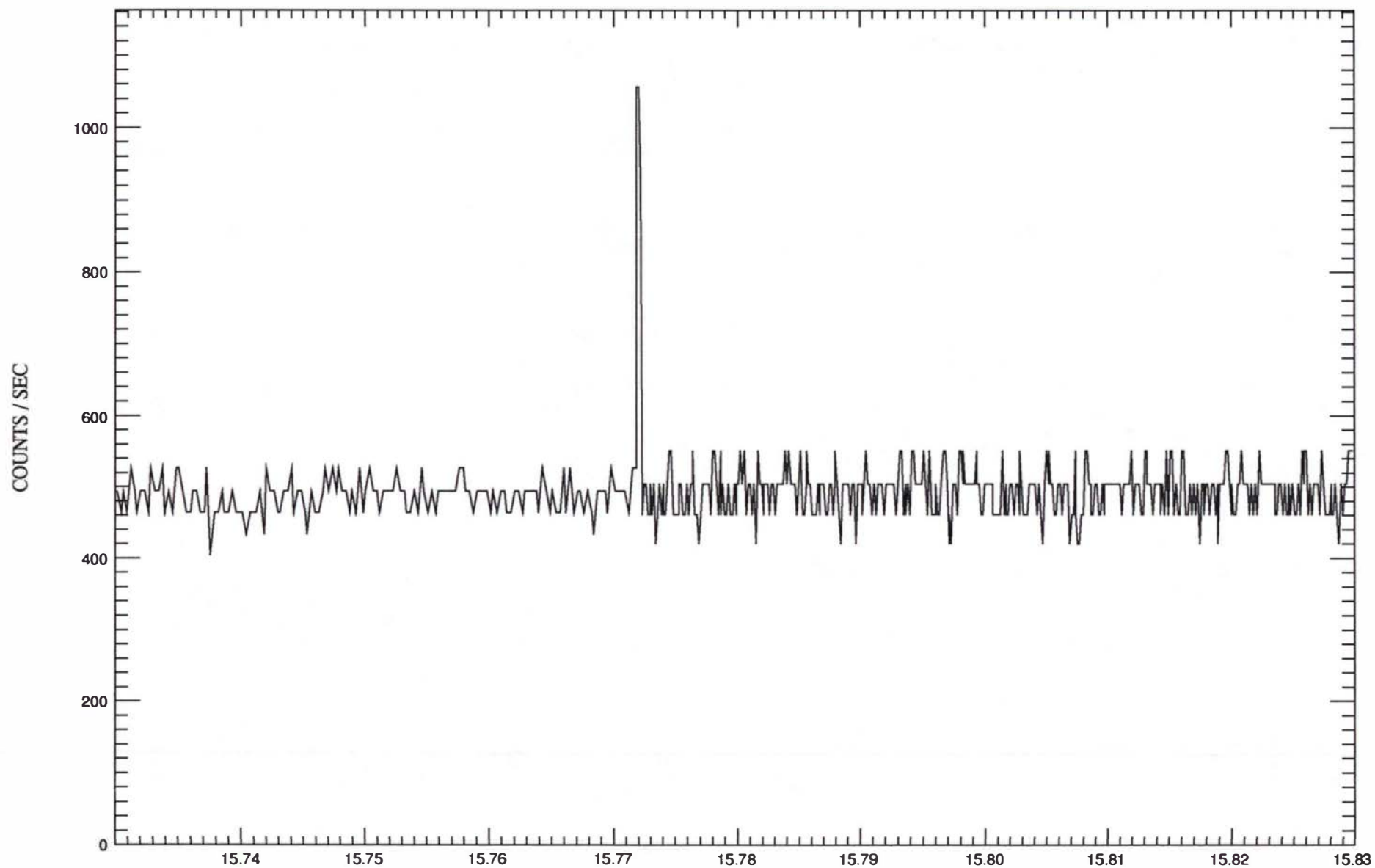
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 12 at UT=15.778740611606 h=56803.466 s 15:46:43.466

4/1/96



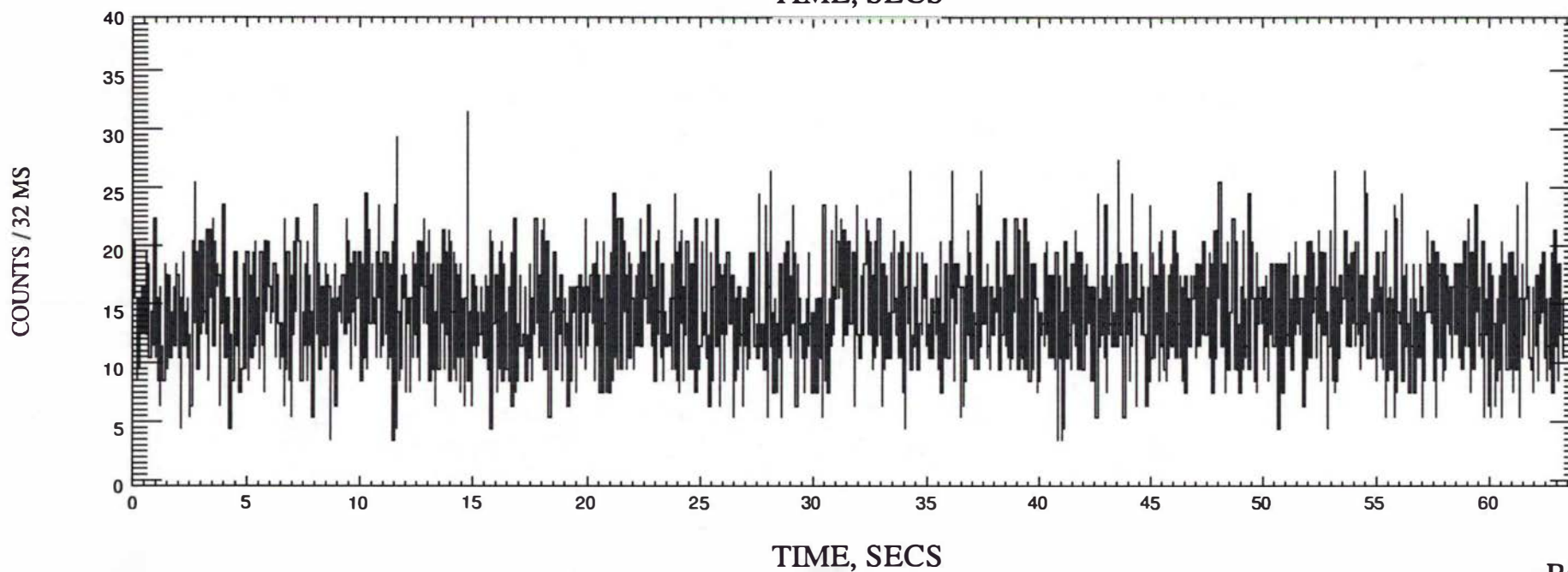
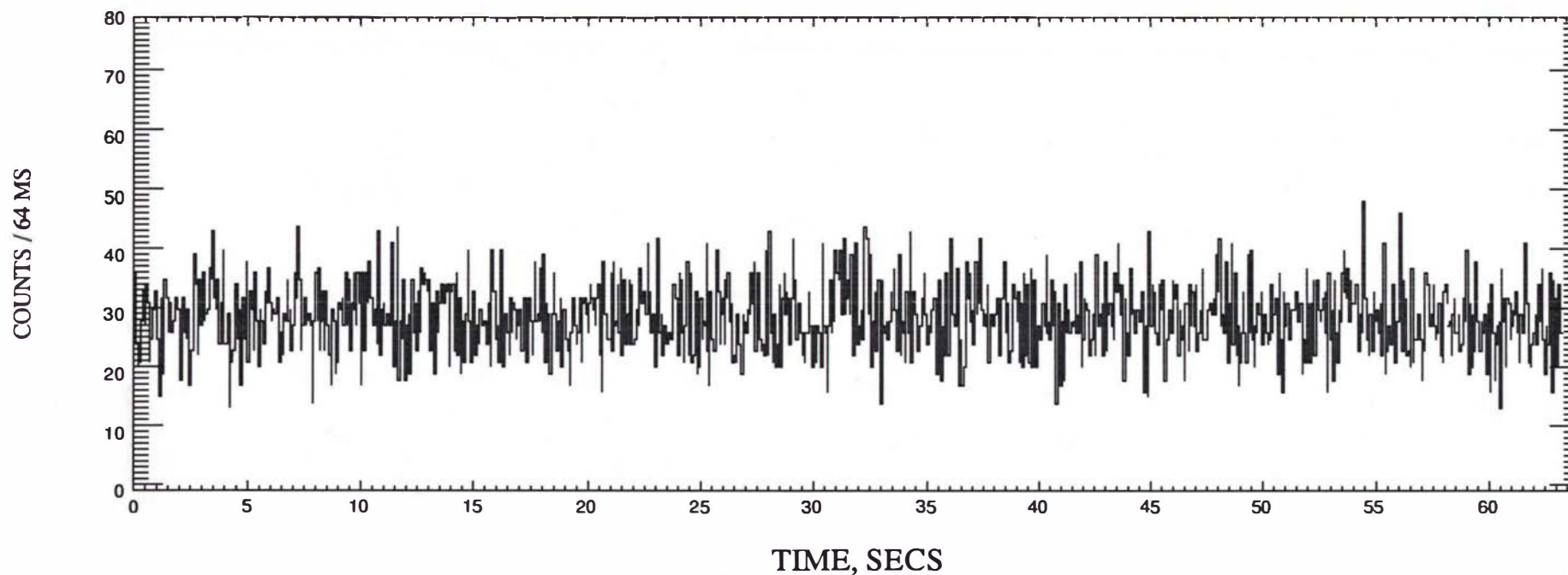
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



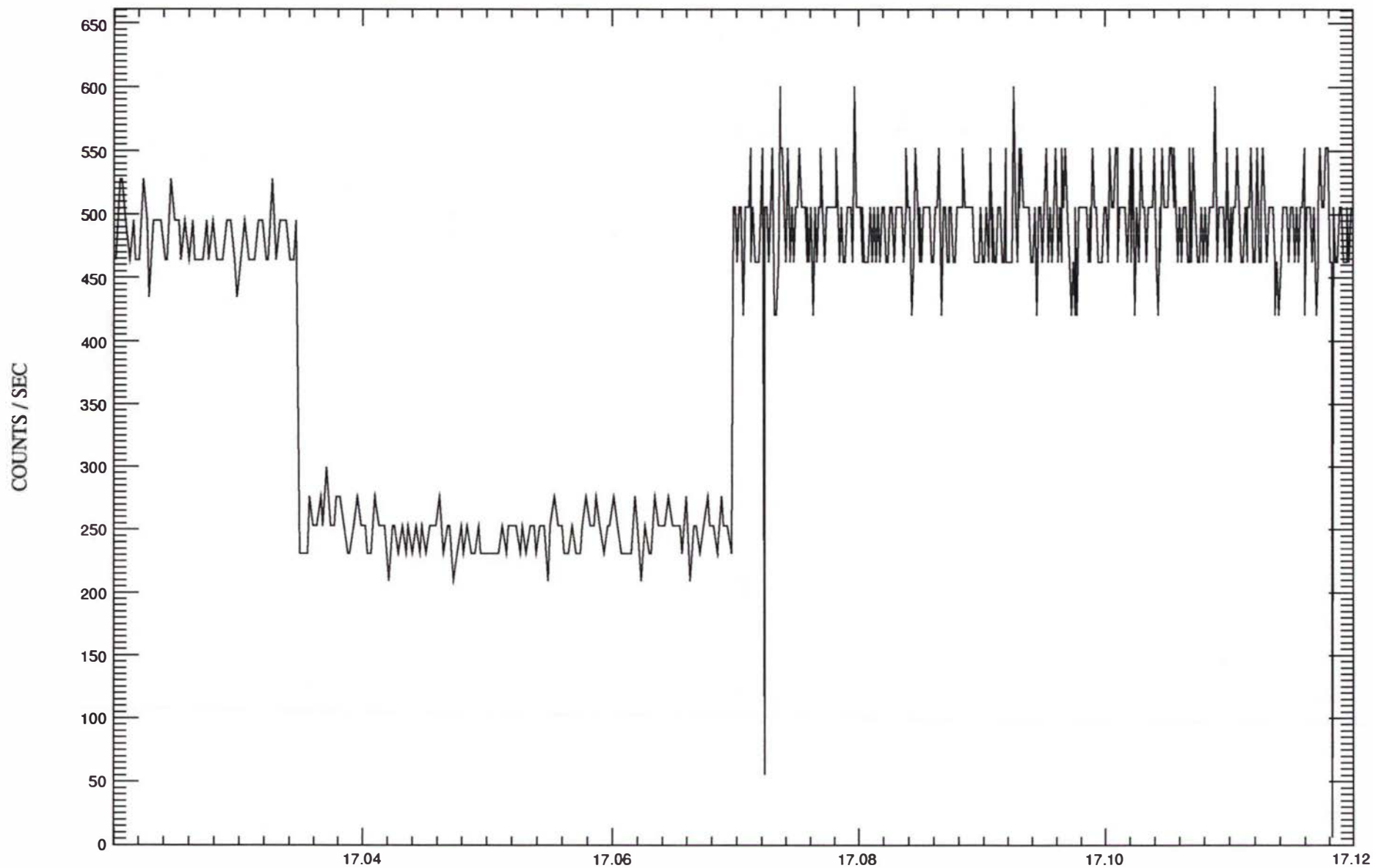
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 13 at UT=17.066988851759 h=61441.160 s 17:04:01.160

4/1/96



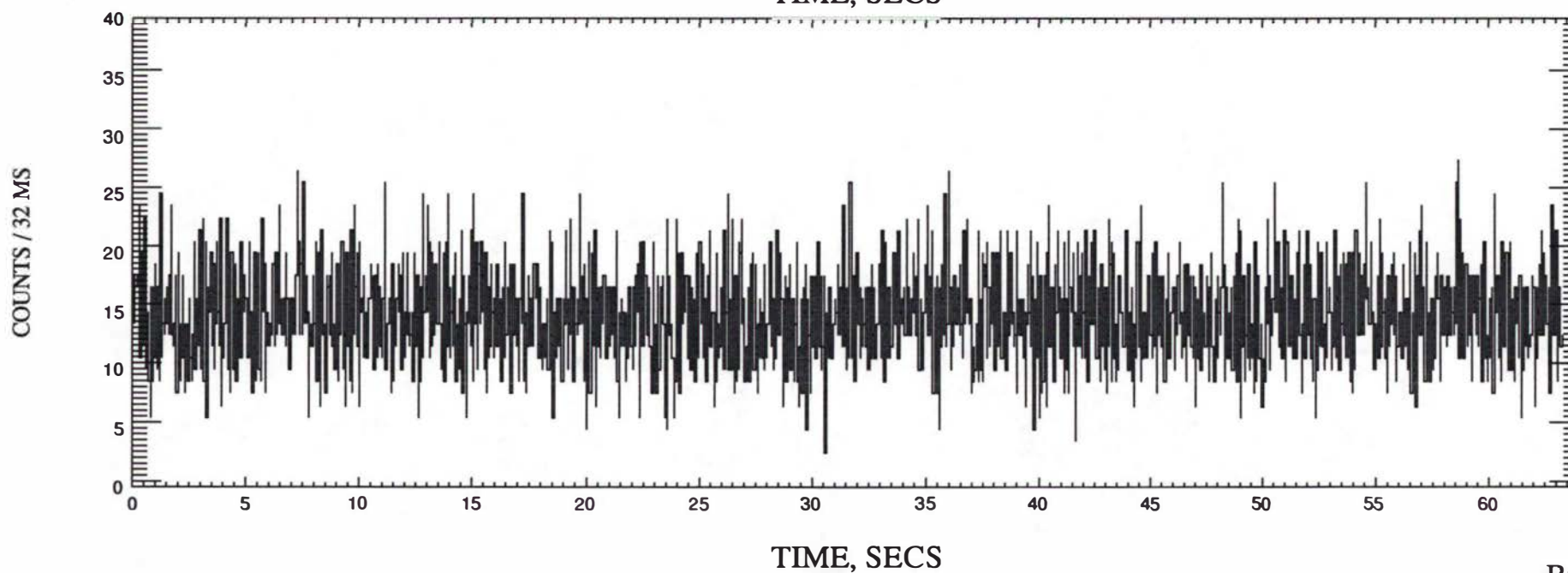
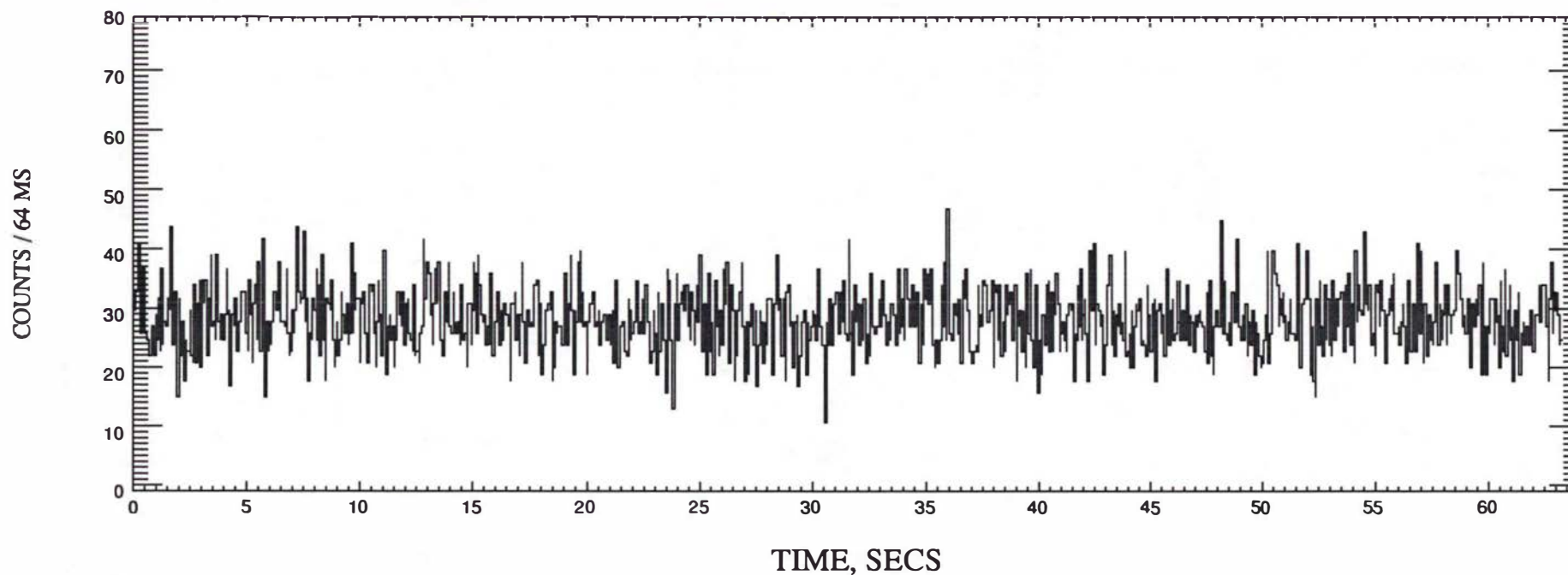
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



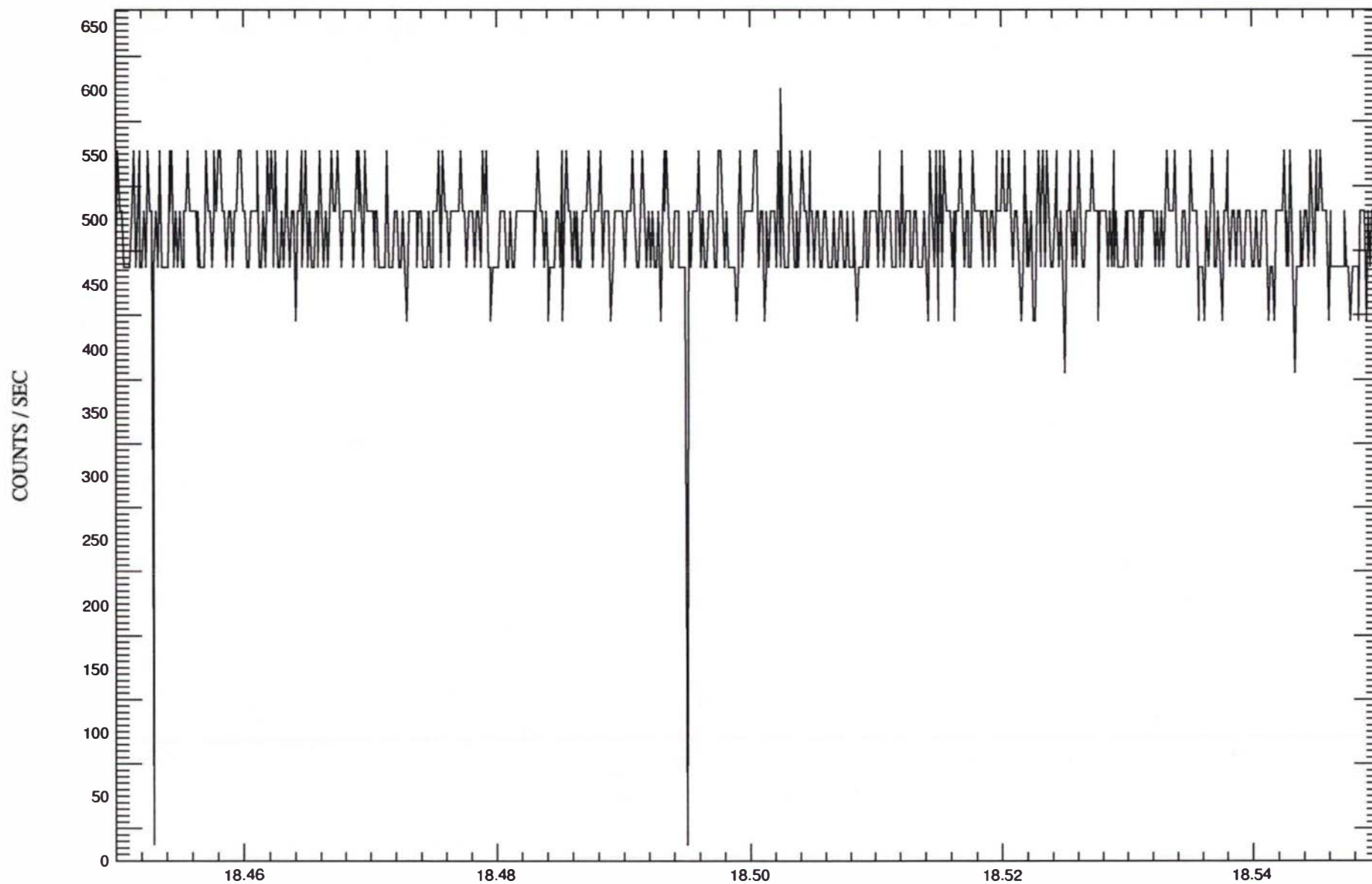
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 14 at UT=18.502669766744 h=66609.611 s 18:30:09.611

4/1/96



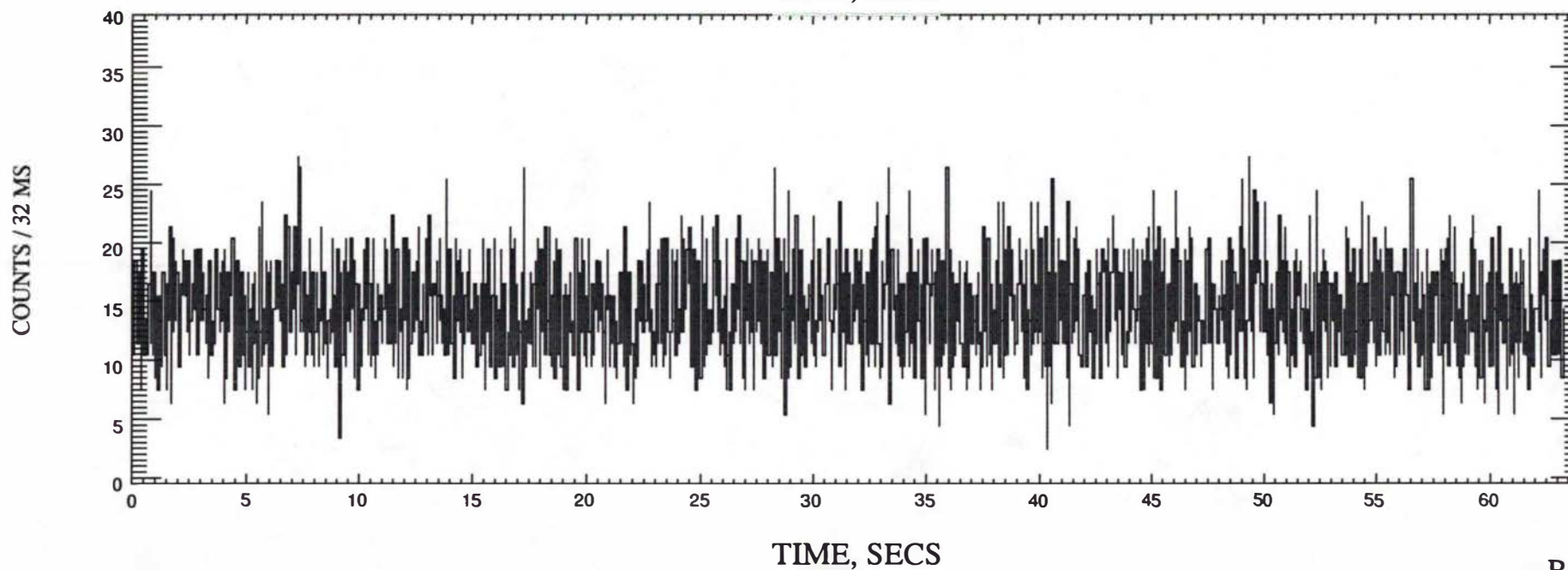
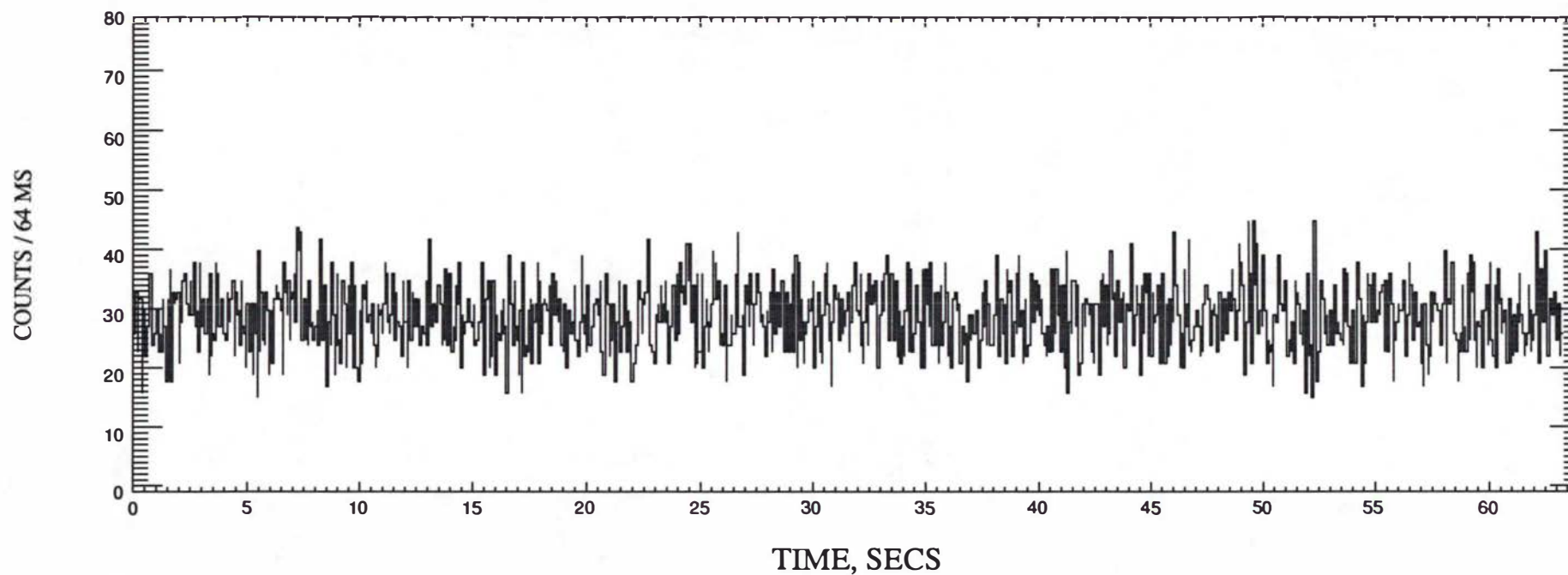
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



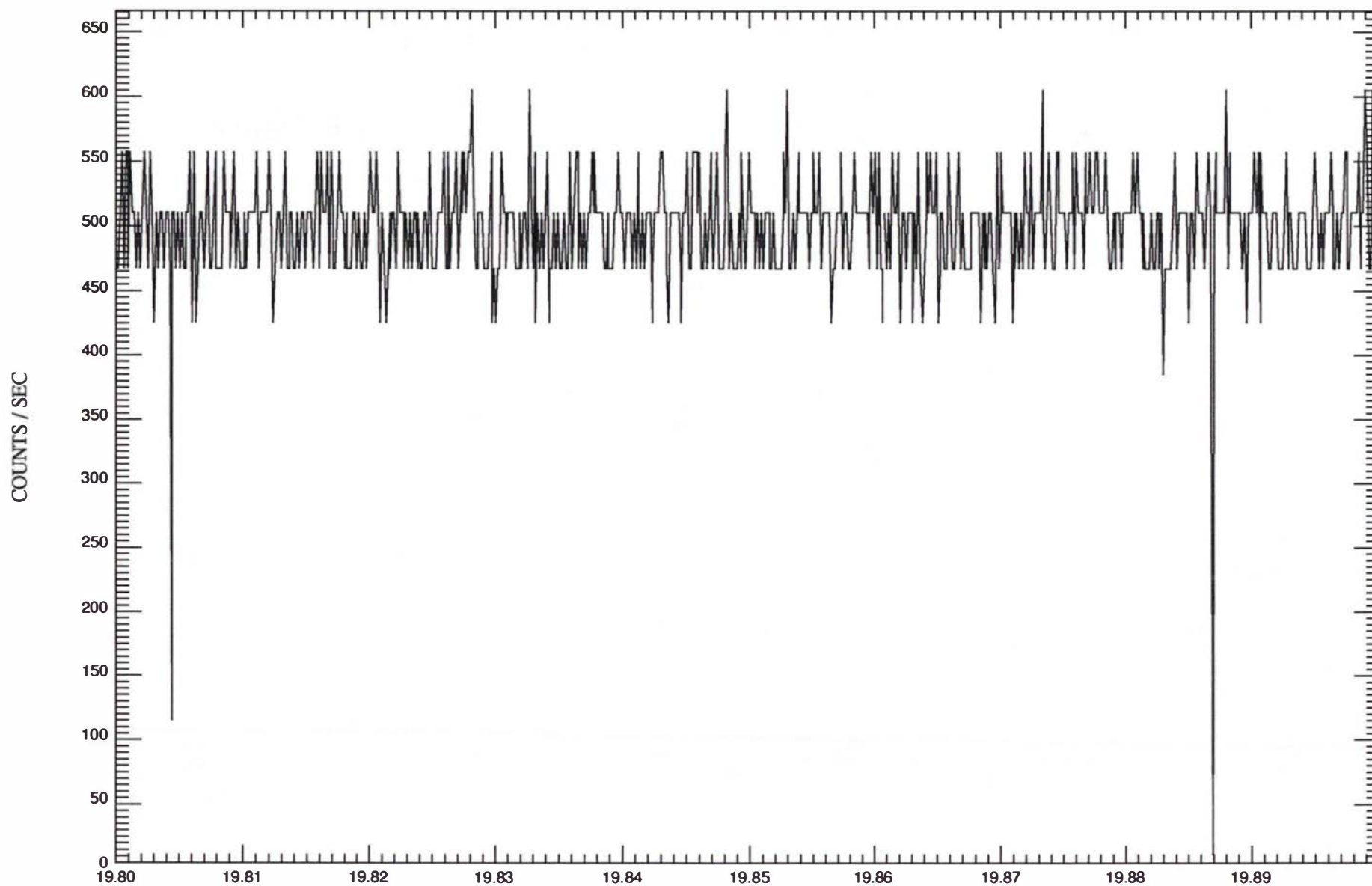
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 15 at UT=19.848383280436 h=71454.180 s 19:50:54.180

4/1/96



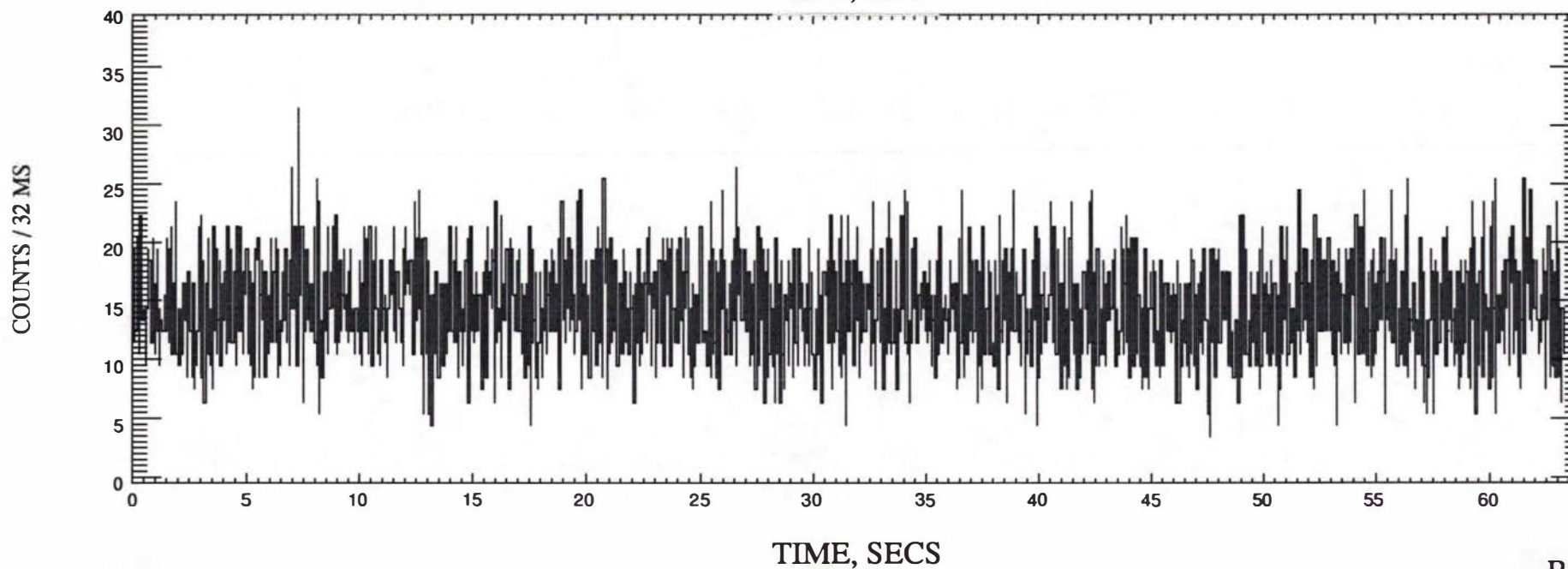
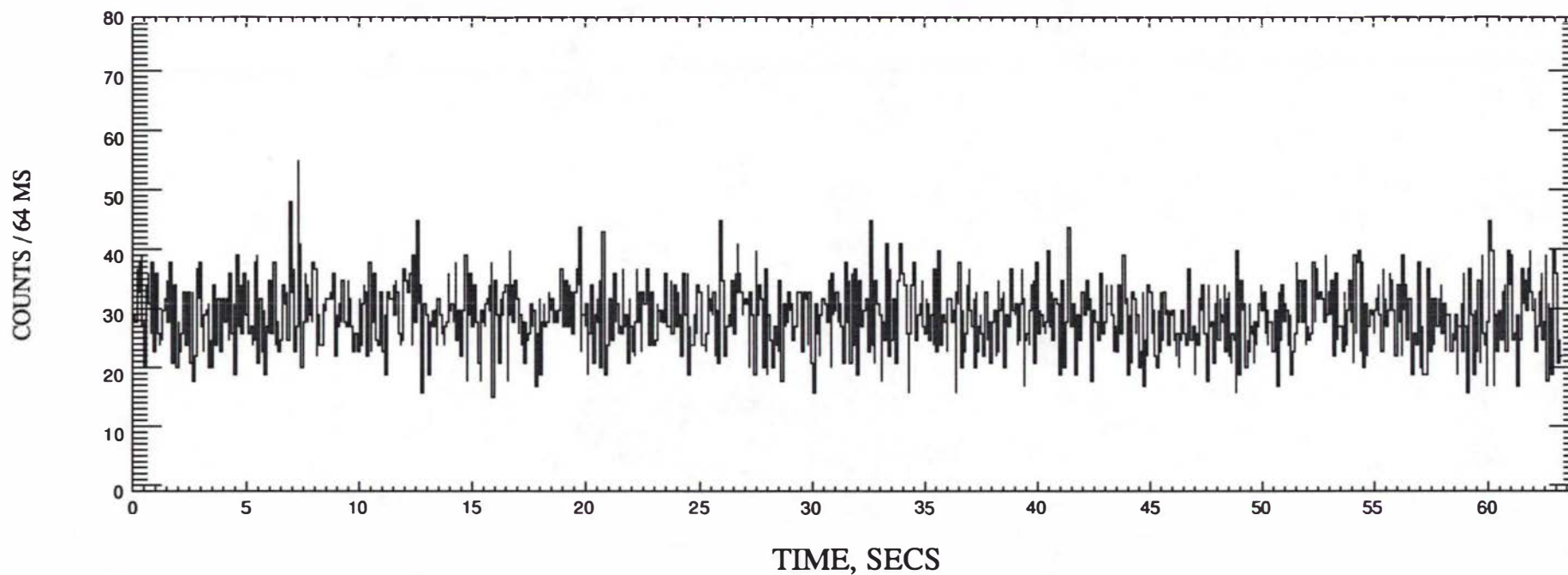
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



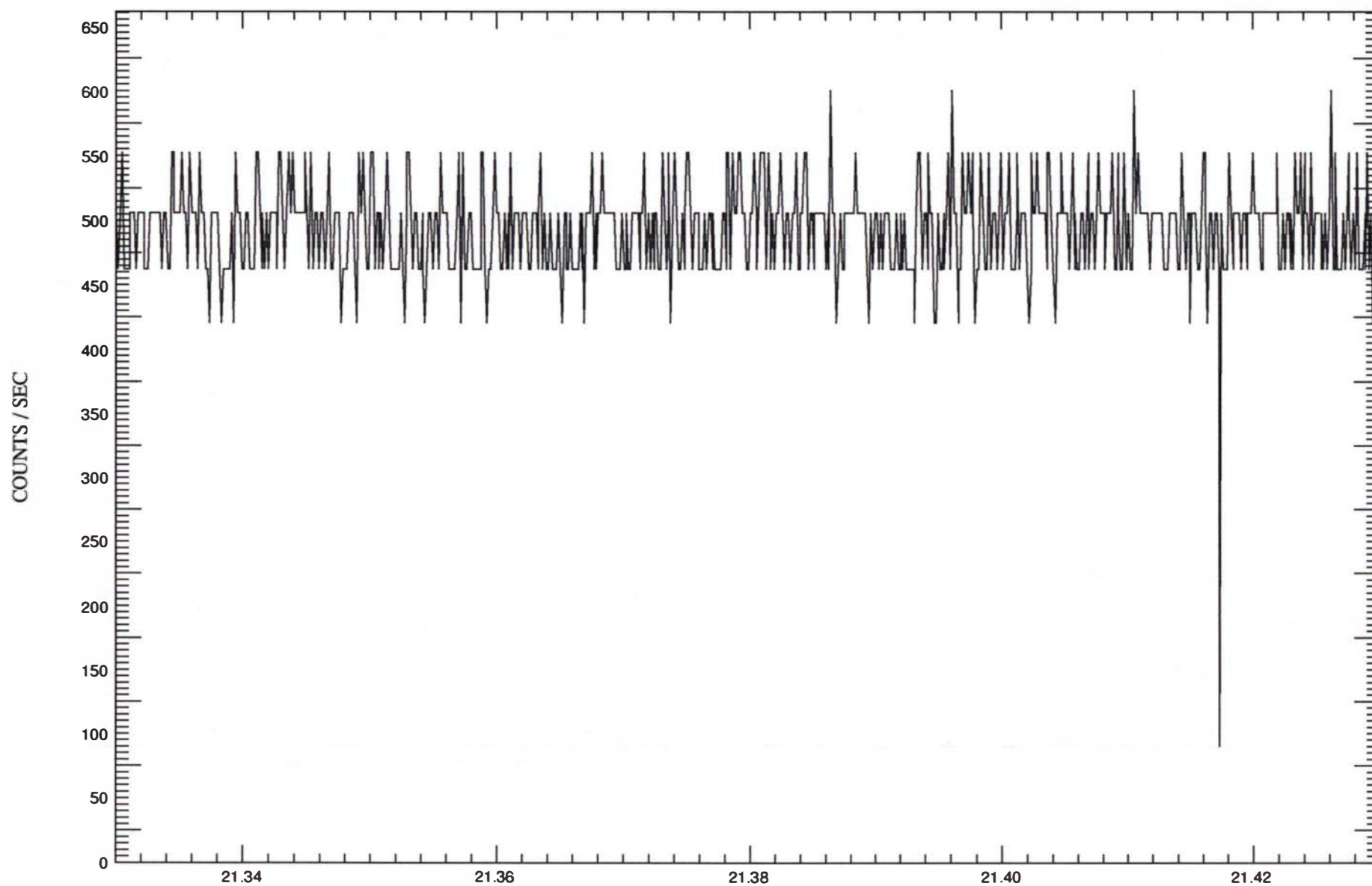
HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 0 at UT=21.381184370253 h=76972.264 s 21:22:52.264

4/1/96



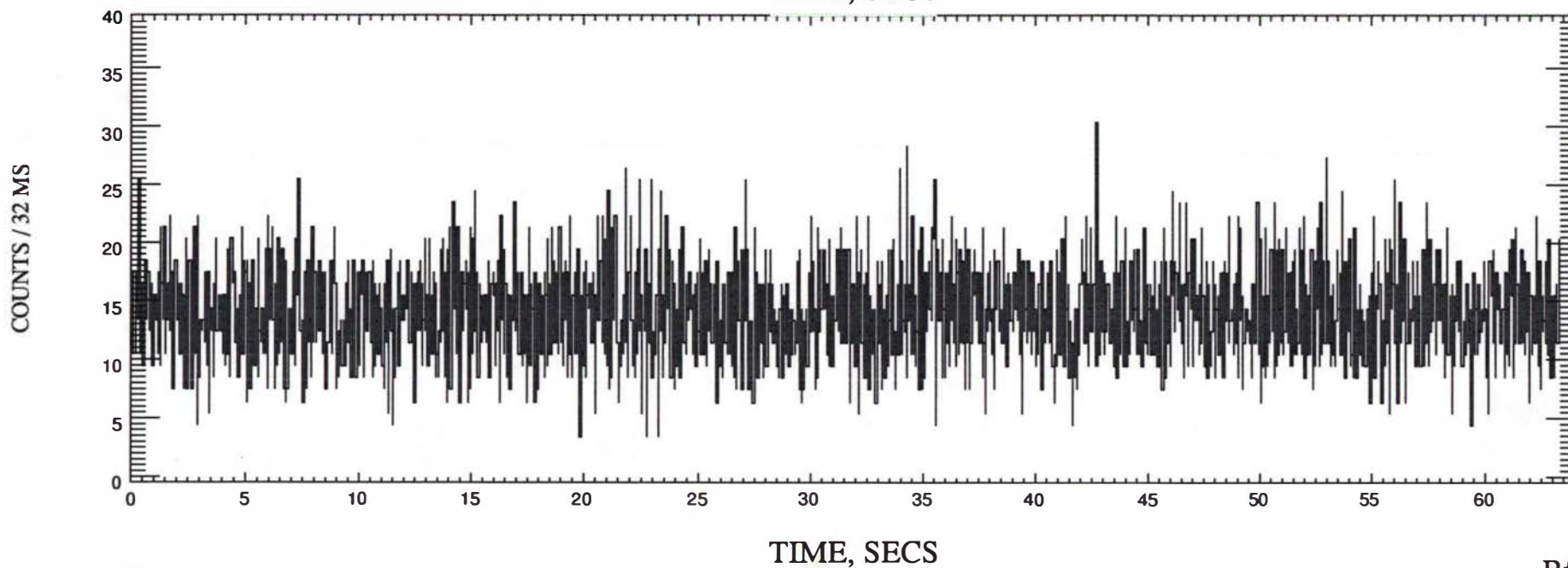
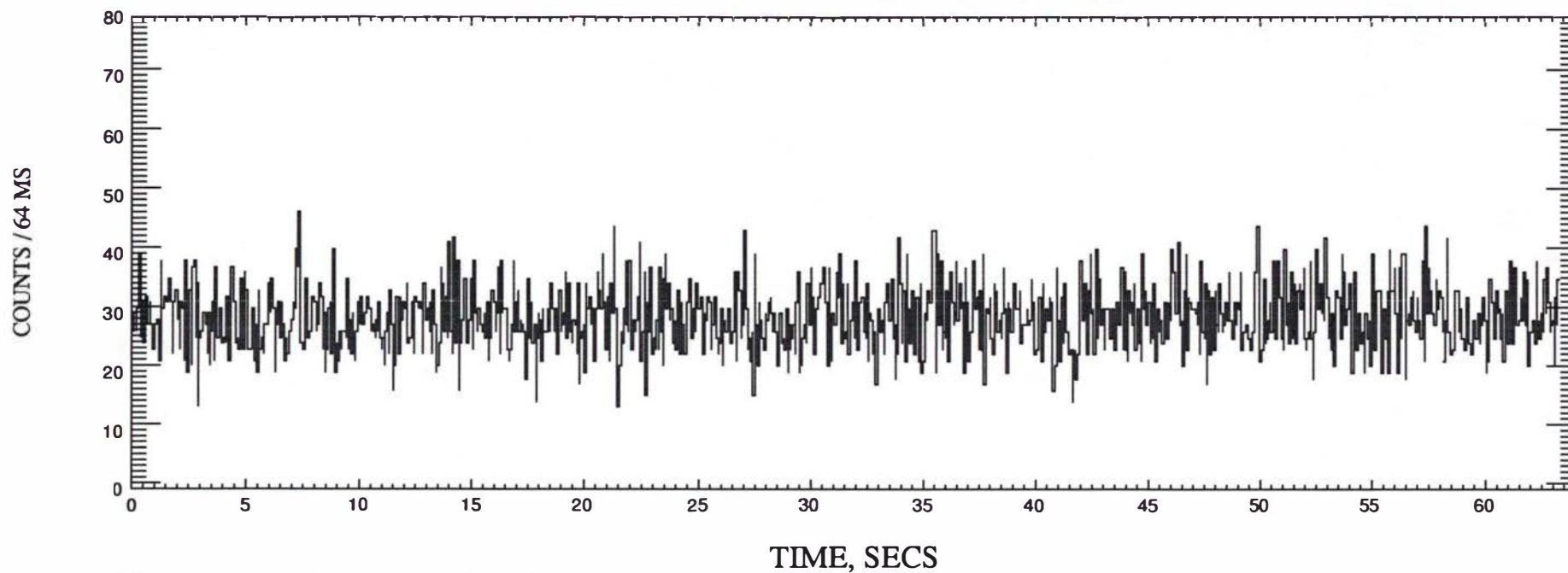
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 3, year 1996
Burst Counter 1 at UT=22.664397883945 h=81591.832 s 22:39:51.832

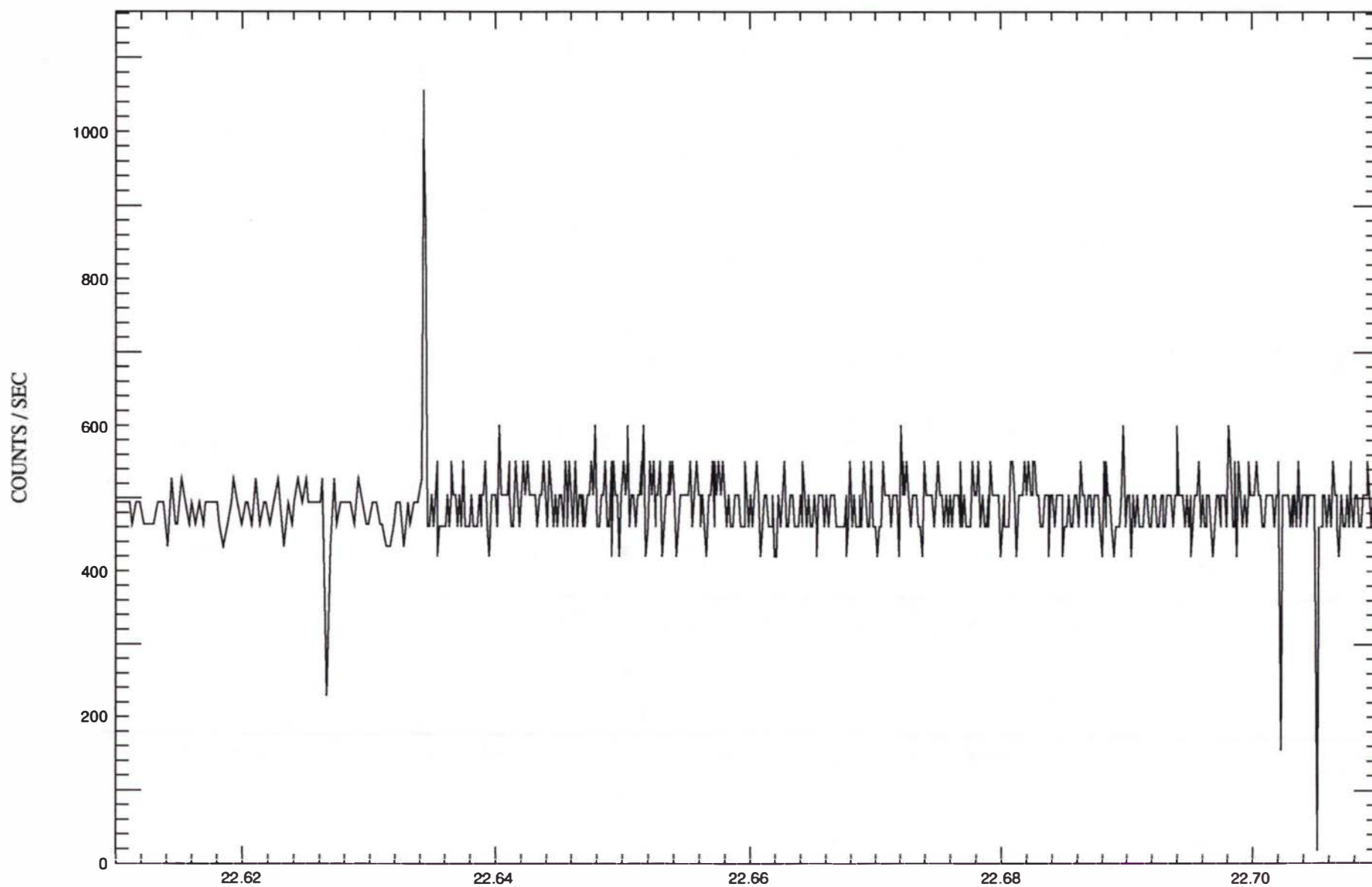
4/1/96



B# 22

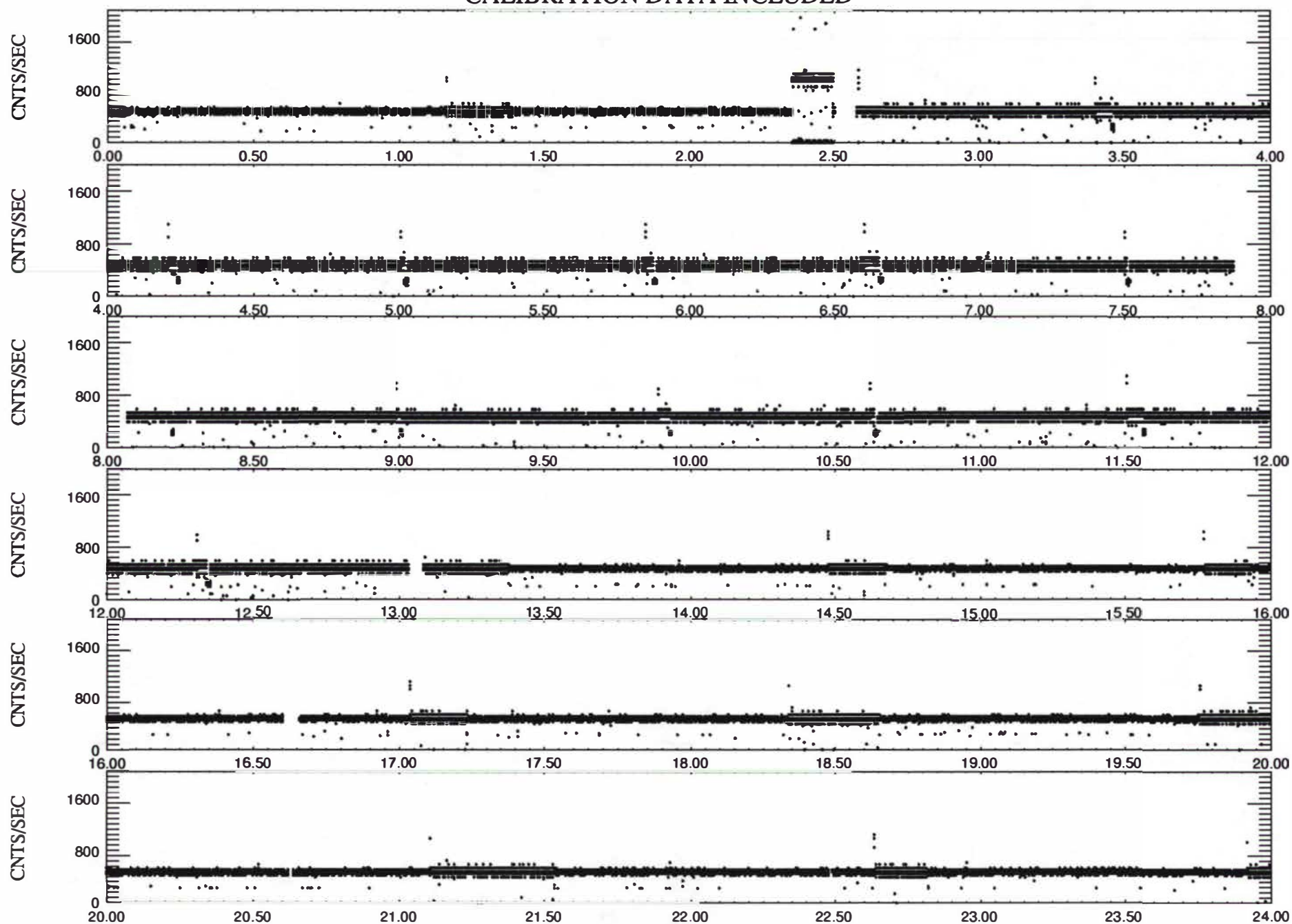
HUS 2A, MODE 1, NOT AVERAGED QEDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

1/5/96

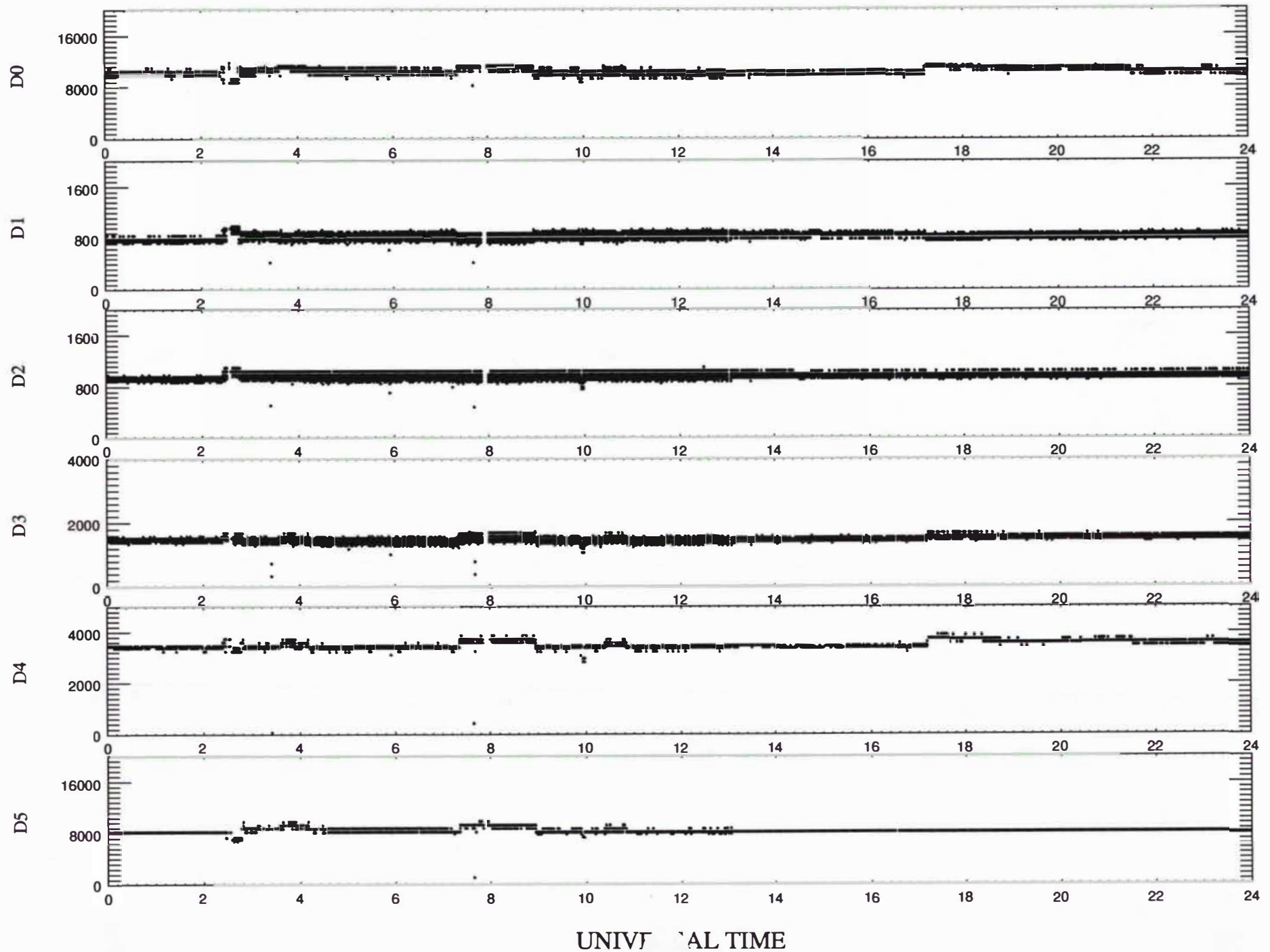


HUS 2A, MODE 1, NOT AVERAGED EDR day 3, year 1996 to day 3, year 1996
CALIBRATION DATA INCLUDED

4/1/96



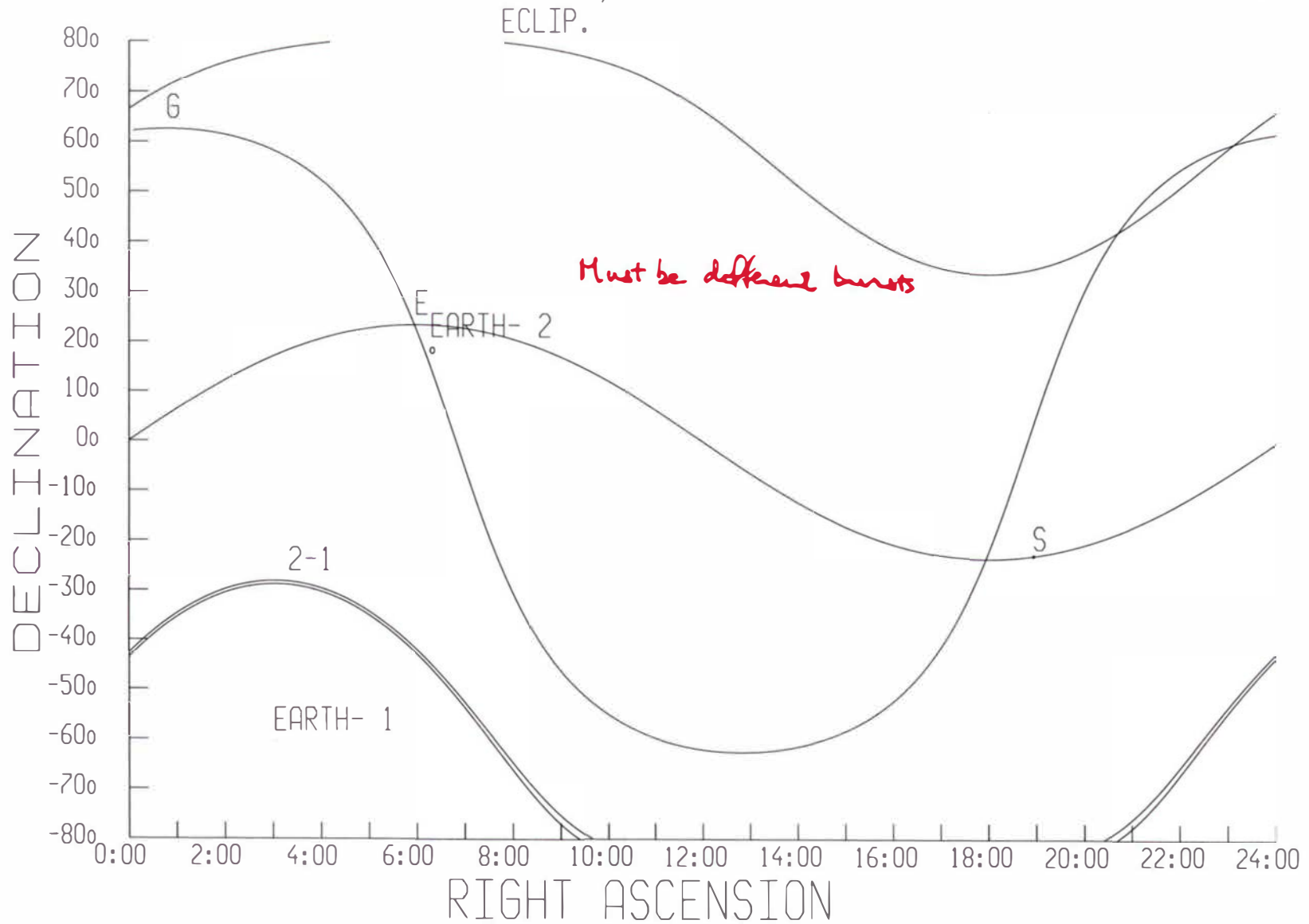
UNIV CAL TIME



EVENT OF JAN 4, 1996 3:47

15/09/2011

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



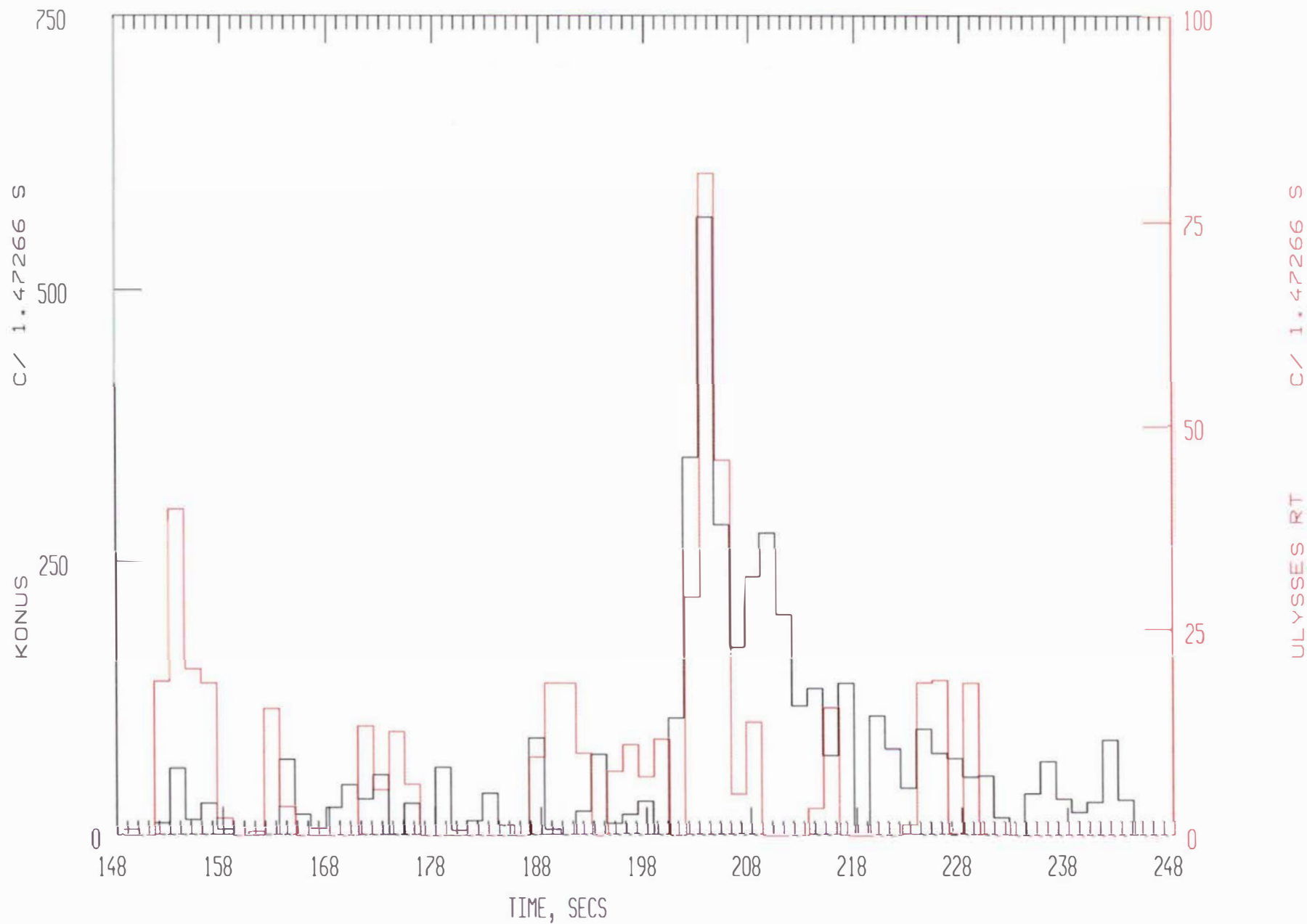
KONUS

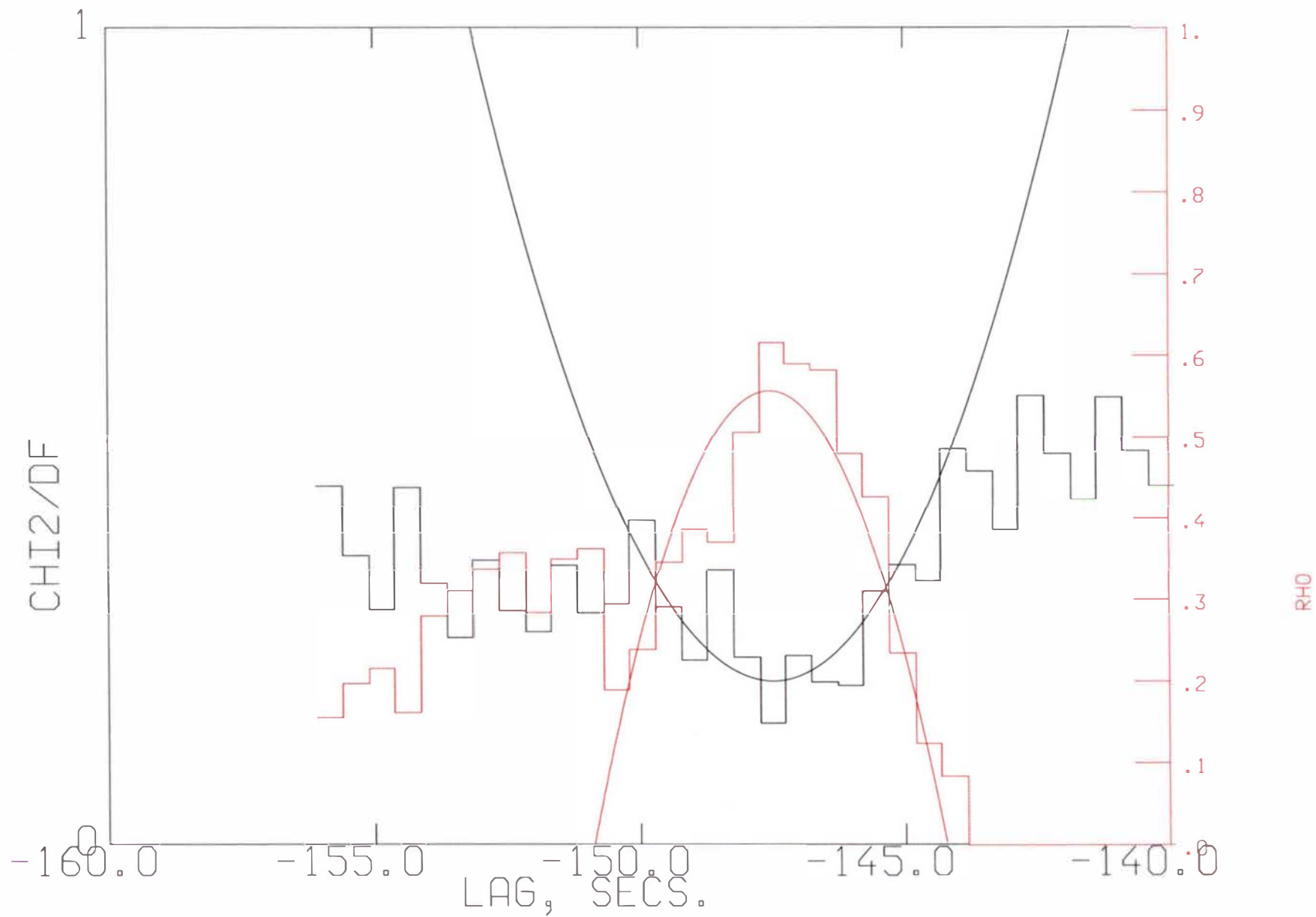
-ULYSSES RT CORRELATION

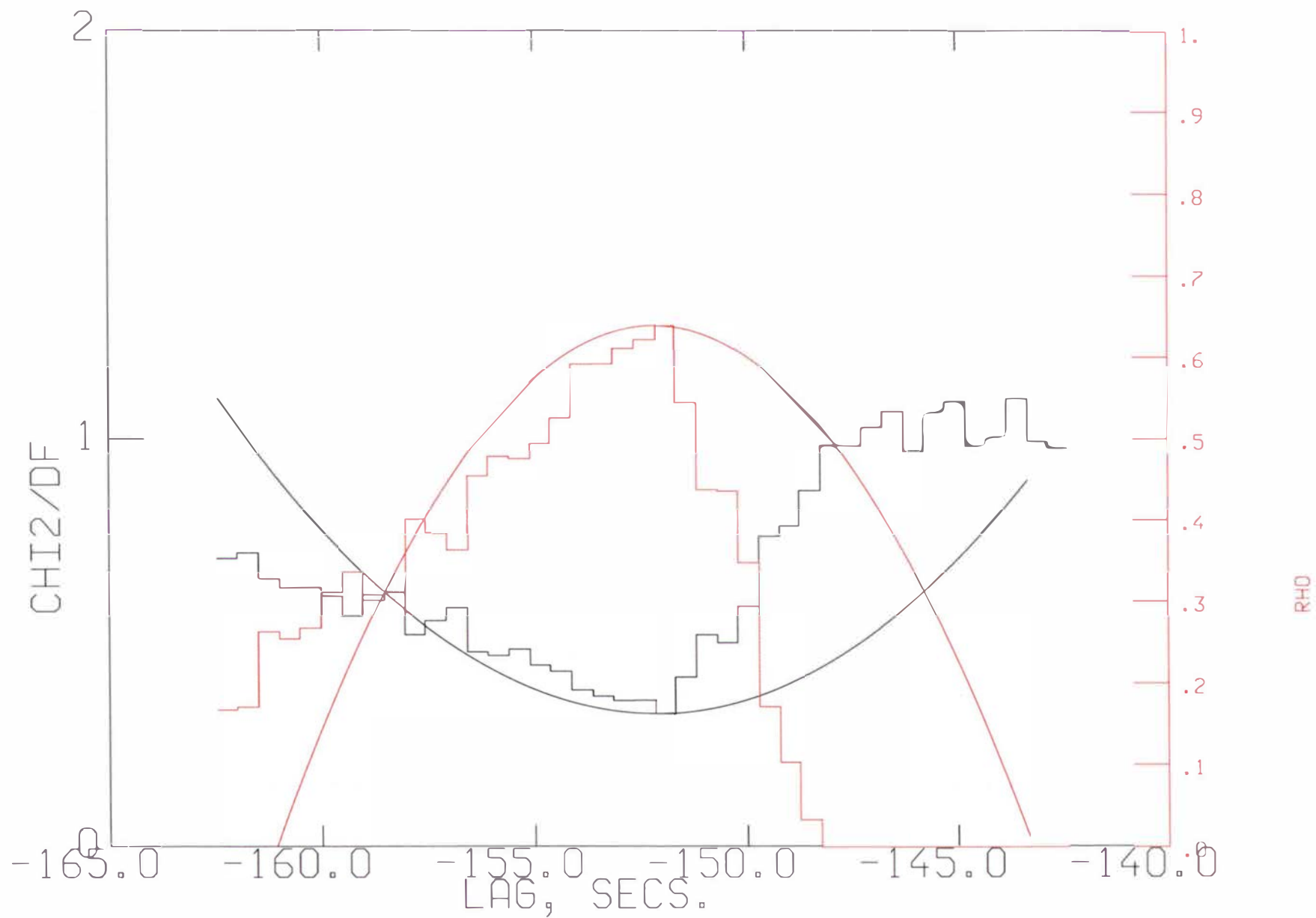
04/01/96

12318.076

15/ 9/11







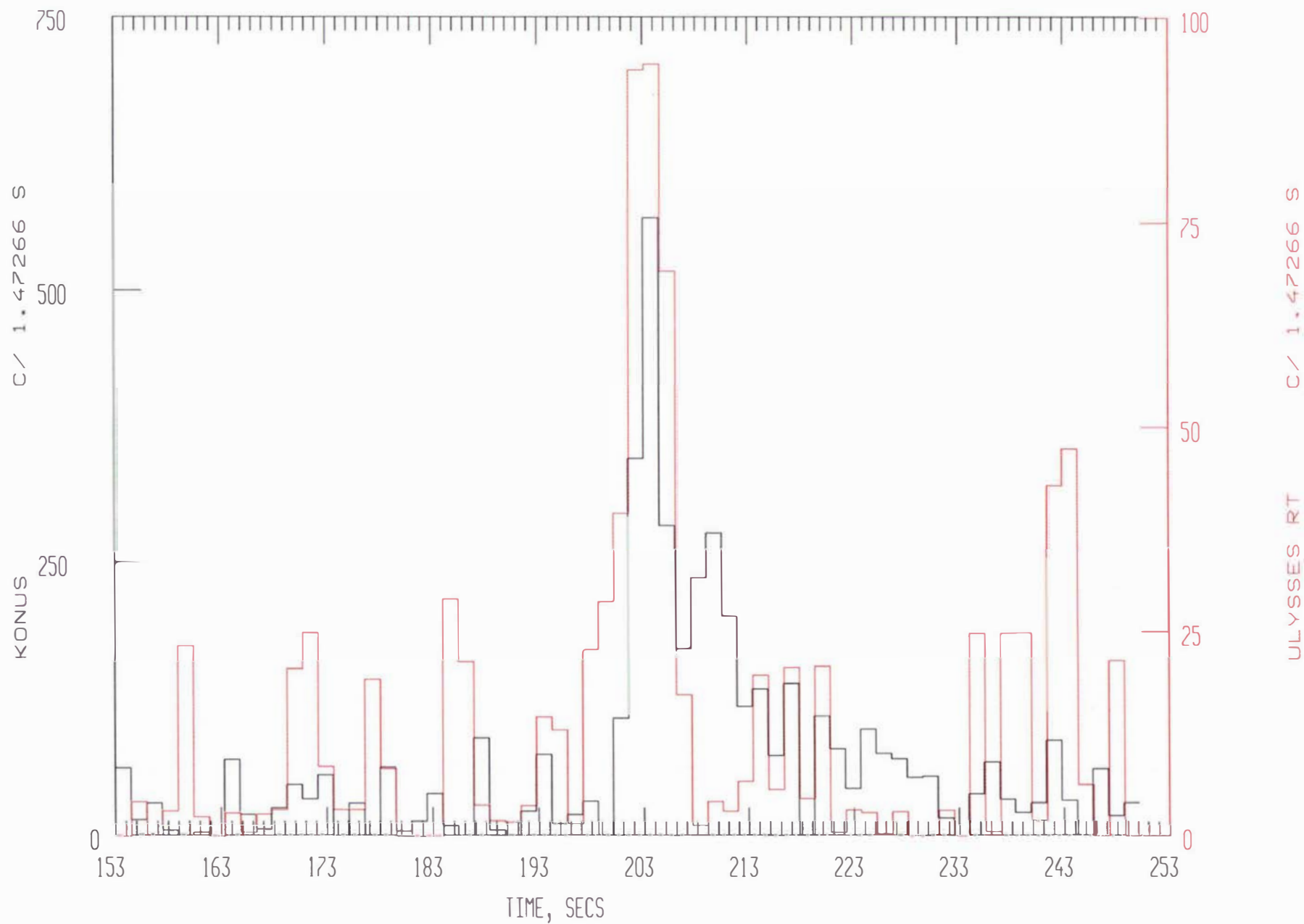
KONUS

-ULYSSES RT CORRELATION

04/01/96

12318.076

15/ 9/11



KONUS 19960104 13702

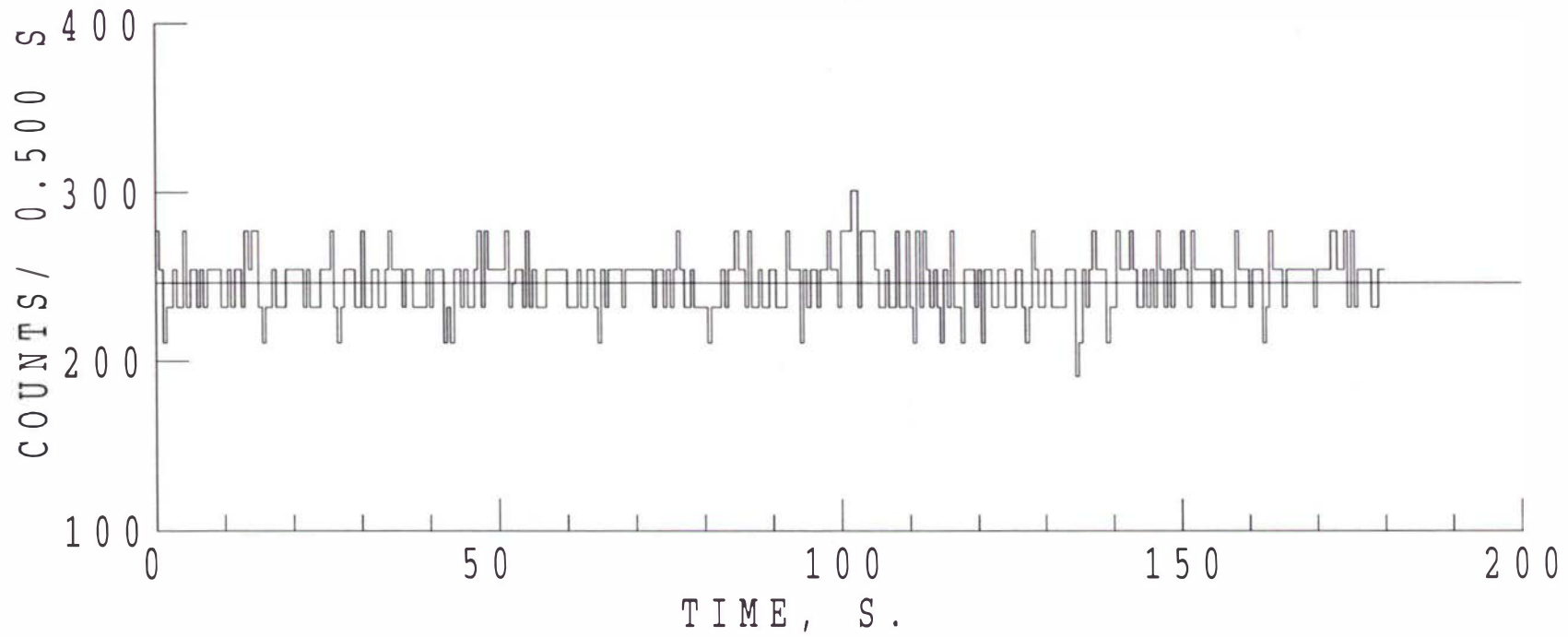
ULYSSES RT

12 / 09 / 11

04 / 01 / 96 13608.373 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



KONUS 19960104 11100

ULYSSES RT

12 / 09 / 11

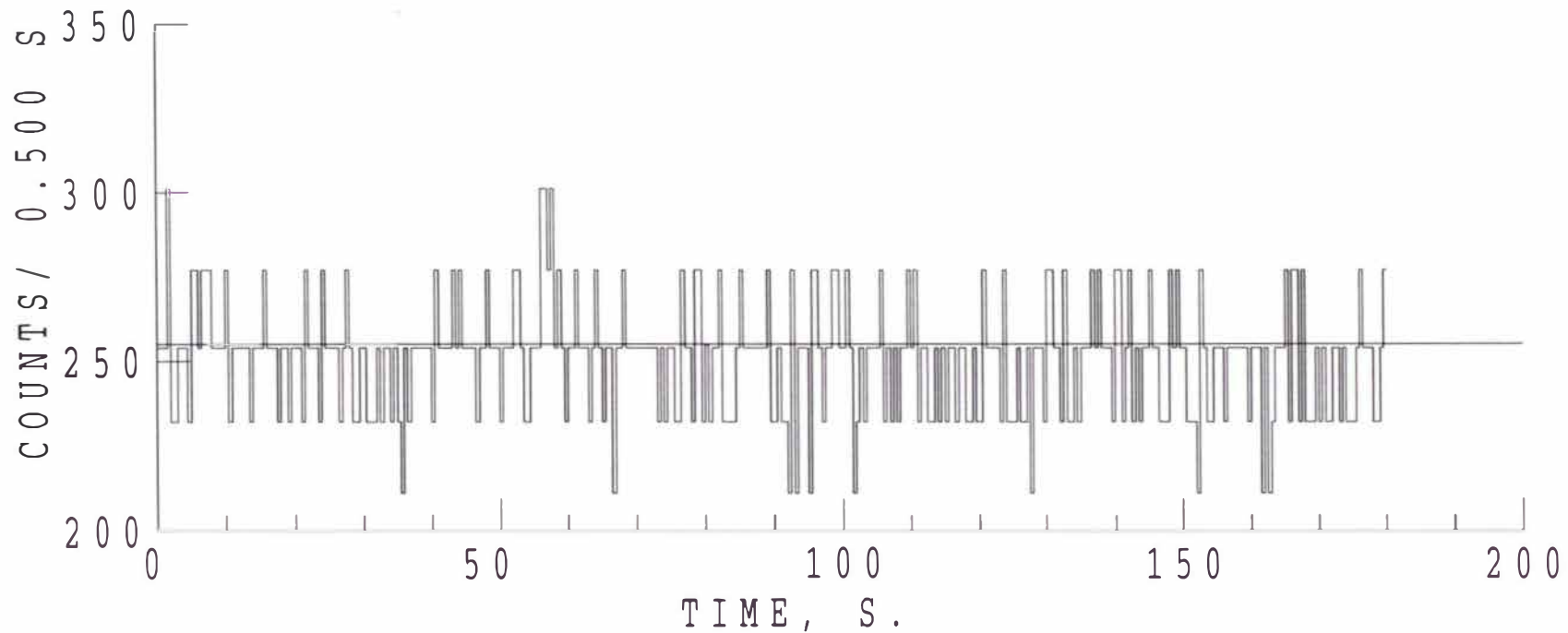
04 / 01 / 96 11016.331 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

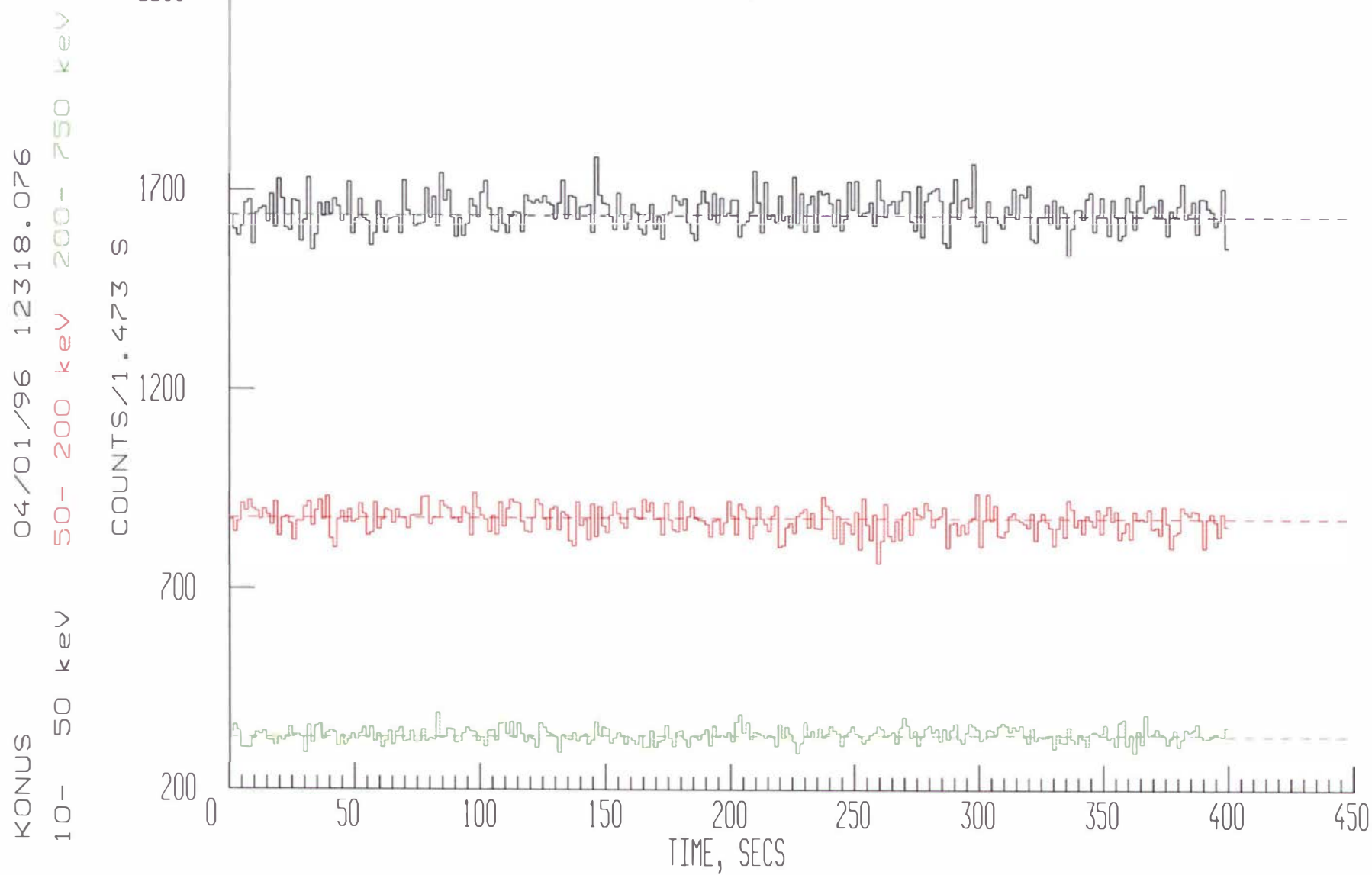
N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS

Violates light travel time



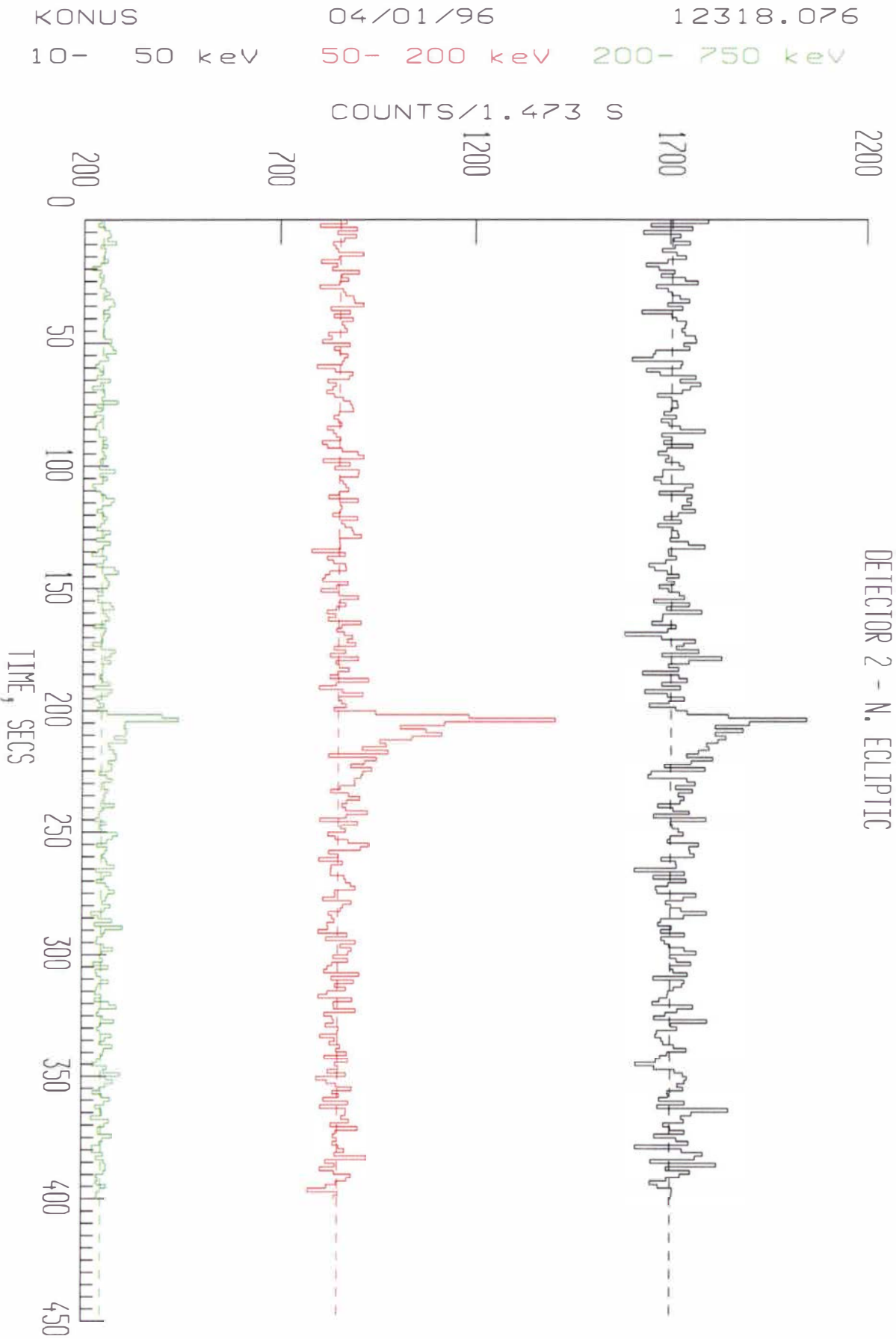
15/09/2011

DETECTOR 1 - S. ECLIPTIC



15/09/2011

DETECTOR 2 - N. ECLIP TIC

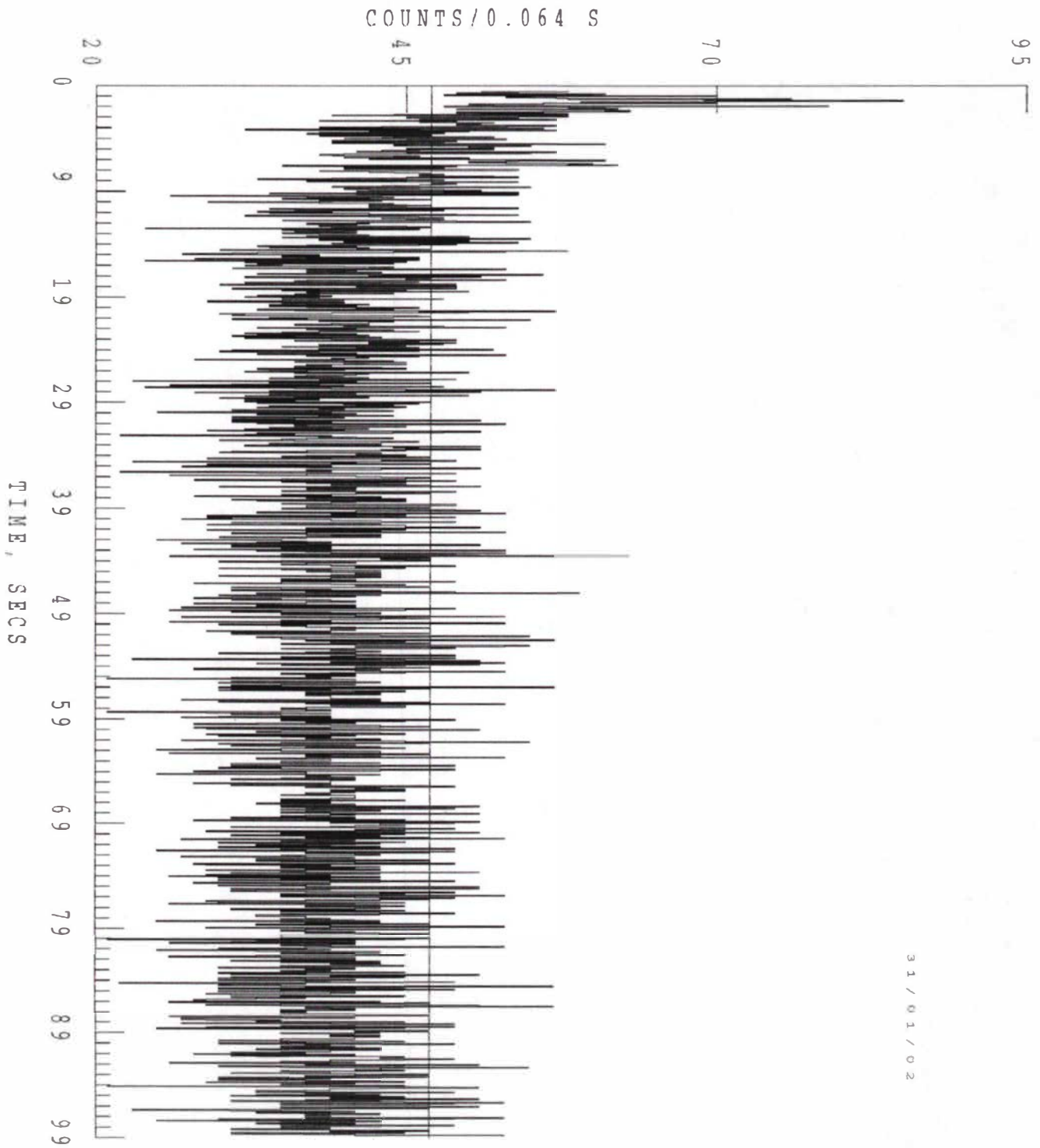


KONUS2

04/01/96

12521.062

50 - 200 keV



KONUS2 19960104 12521

ULYSSES RT

31 / 01 / 02

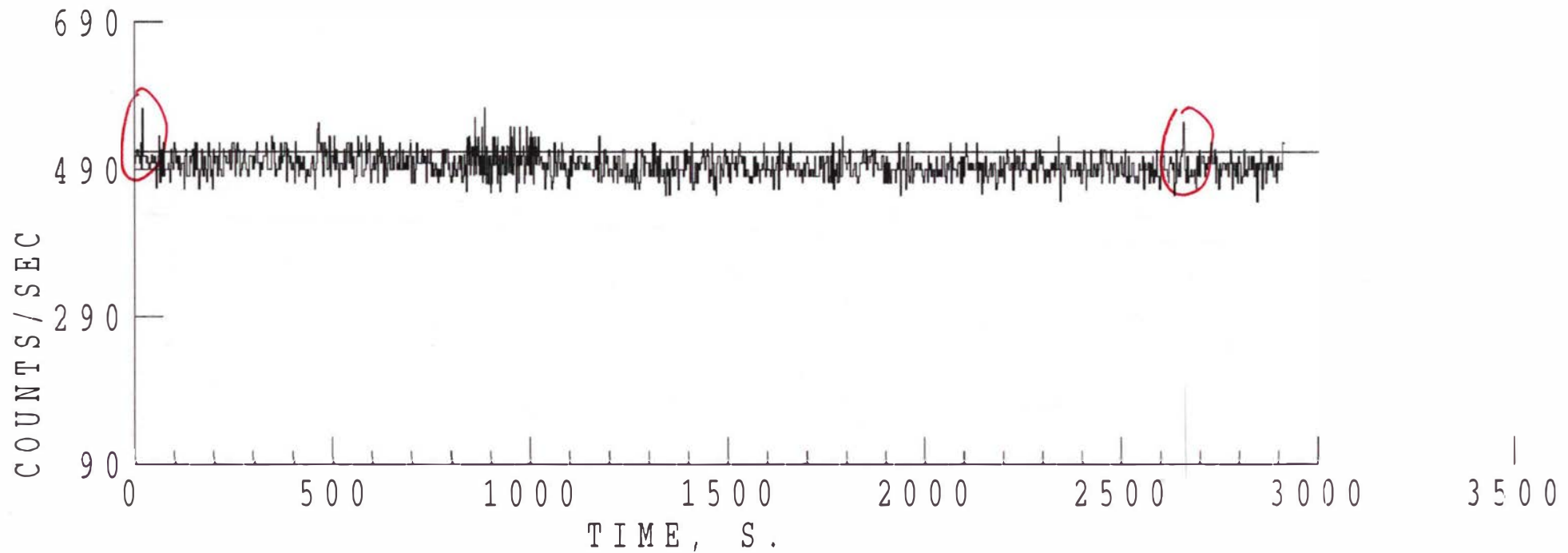
04 / 01 / 96 11052.335 s

INTERVALS REGROUPED BY 5

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



BATSE BURST TRIGGER

NO.: 4227

TIME: TJD=0086 SECONDS=377

TYPE: TRNSIEN

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4228

TIME: TJD=0086 SECONDS=1667

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4229

TIME: TJD=0086 SECONDS=13582

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4230

TIME: TJD=0086 SECONDS=24618

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

NO.: 4231

TIME: TJD=0086 SECONDS=35410

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4232

TIME: TJD=0086 SECONDS=46949

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4233

TIME: TJD=0086 SECONDS=58049

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4234

TIME: TJD=0086 SECONDS=68565

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From WOODSP@SSLLES.MSFC.NASA.GOV Thu Jan 11 09:26 PST 1996
From: WOODSP@SSLLES.MSFC.NASA.GOV
Date: Thu, 11 Jan 1996 11:10:36 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4235

TIME: TJD=0086 SECONDS=79259

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From cline@tgrs.gsfc.nasa.gov Thu Jan 4 06:57 PST 1996

Date: Thu, 4 Jan 1996 06:57:53 -0800

X-Sender: cline@pizza.gsfc.nasa.gov

Mime-Version: 1.0

To: mazets@mz.ioffe.rssi.ru, Butterworth@tgrs.gsfc.nasa.gov,

LHEAVX::STILWELL@tgrs.gsfc.nasa.gov, KHURLEY@sunspot.ssl.berkeley.edu

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

Subject: Relay of GGS-Wind-Konus message

Date: Thu, 4 Jan 1996 9:31:05 -0500 (EST)

From: "LHEAVX::ISTP::WAINWRIGHT"@PIZZA.GSFC.NASA.GOV

(John Wainwright, WIND/POLAR FOT. 301-286-0724)

Subject: Leap second adjustment to s/c clock

The leap second adjustment to the spacecraft clock executed on January 1 was in error. The s/c clock was advanced instead of retarded. Starting at 00:15:00 on January 4, the s/c clock was retarded in 20 increments of 100 msec. each, at 10 min. intervals, for a total of 2 sec. The adjustment was completed at 03:30:00. Consequently, the s/c clock has been 2 sec. ahead of GMT from 00:1:45 on January 1 until the start of the January 4 adjustment.

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

From khurley@sunspot Tue Jan 2 16:57 PST 1996
Date: Tue, 2 Jan 1996 15:12:33 -0800
From: khurley@sunspot (Kevin Hurley)
To: ULSSCI@JPLSP.SPAN.nasa.gov, khurley@sunspot
Subject: GRB commands

Dear Nigel,

Please send the following commands ASAP to the GRB experiment; the previous commands have put the instrument into a state where it is triggering constantly. It is not in any danger, but we lose data this way.

Z018 0637
Z018 1016

Confirmation:

E031: 24
E032: 0
E034: 64
E035: 0

Kevin

From ULSMG@jplsp2.jpl.nasa.gov Fri Jan 5 11:09 PST 1996
Date: Fri, 5 Jan 1996 11:08:32 -0800 (PST)
From: Peggy Greutert (reply to ULSSCI) <ULSMG@jplsp2.jpl.nasa.gov>
To: KHURLEY@SUNSPOT.ssl.berkeley.edu
CC: ULSMG@jplsp2.jpl.nasa.gov
Subject: GRB commands

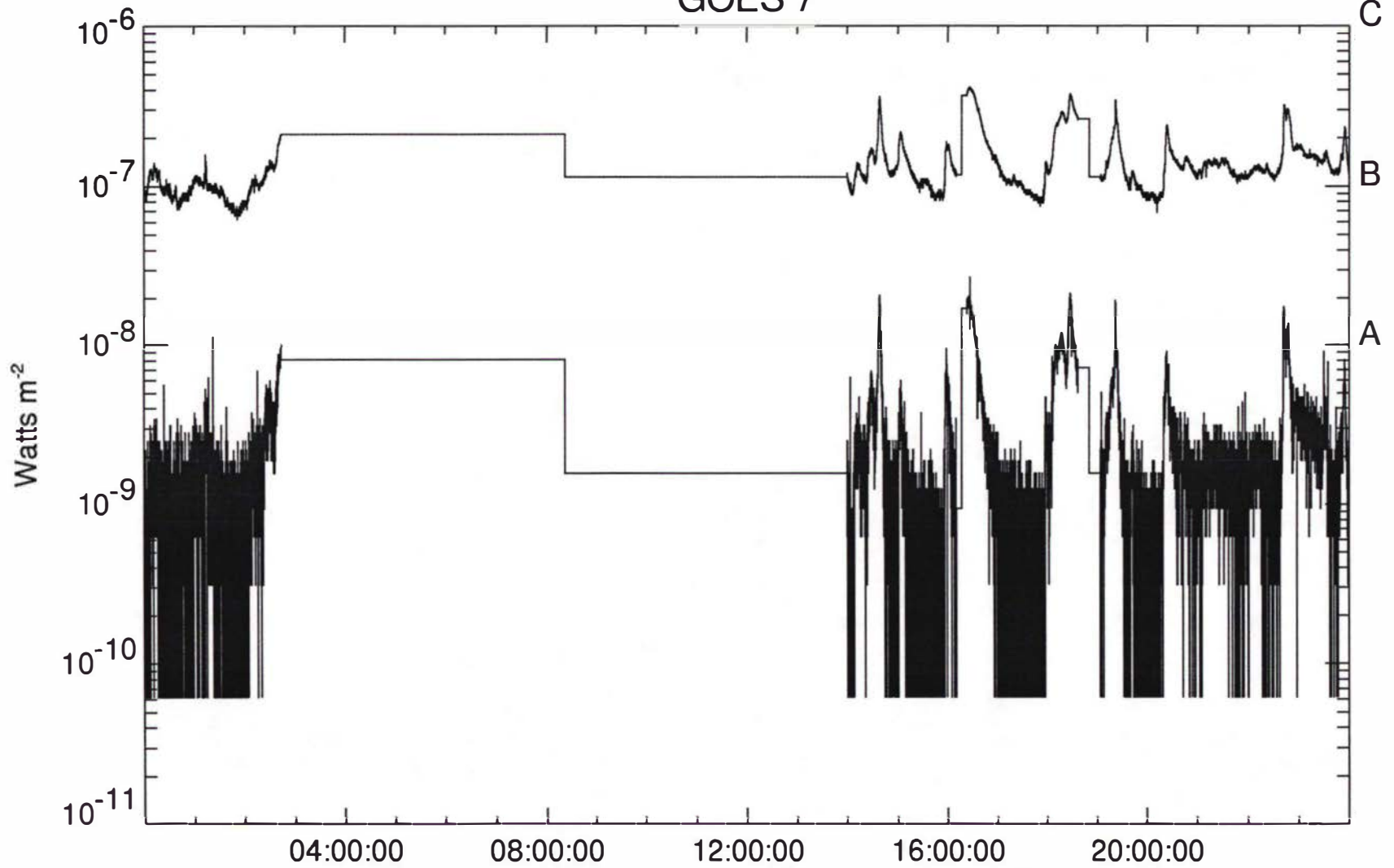
The commands Z018 0637 and Z018 1016 were executed on board the S/C on
January 4th at 02:54:38 SCET.

Regards

Bryan McMillan

Ulysses S/C Analyst

GOES 7

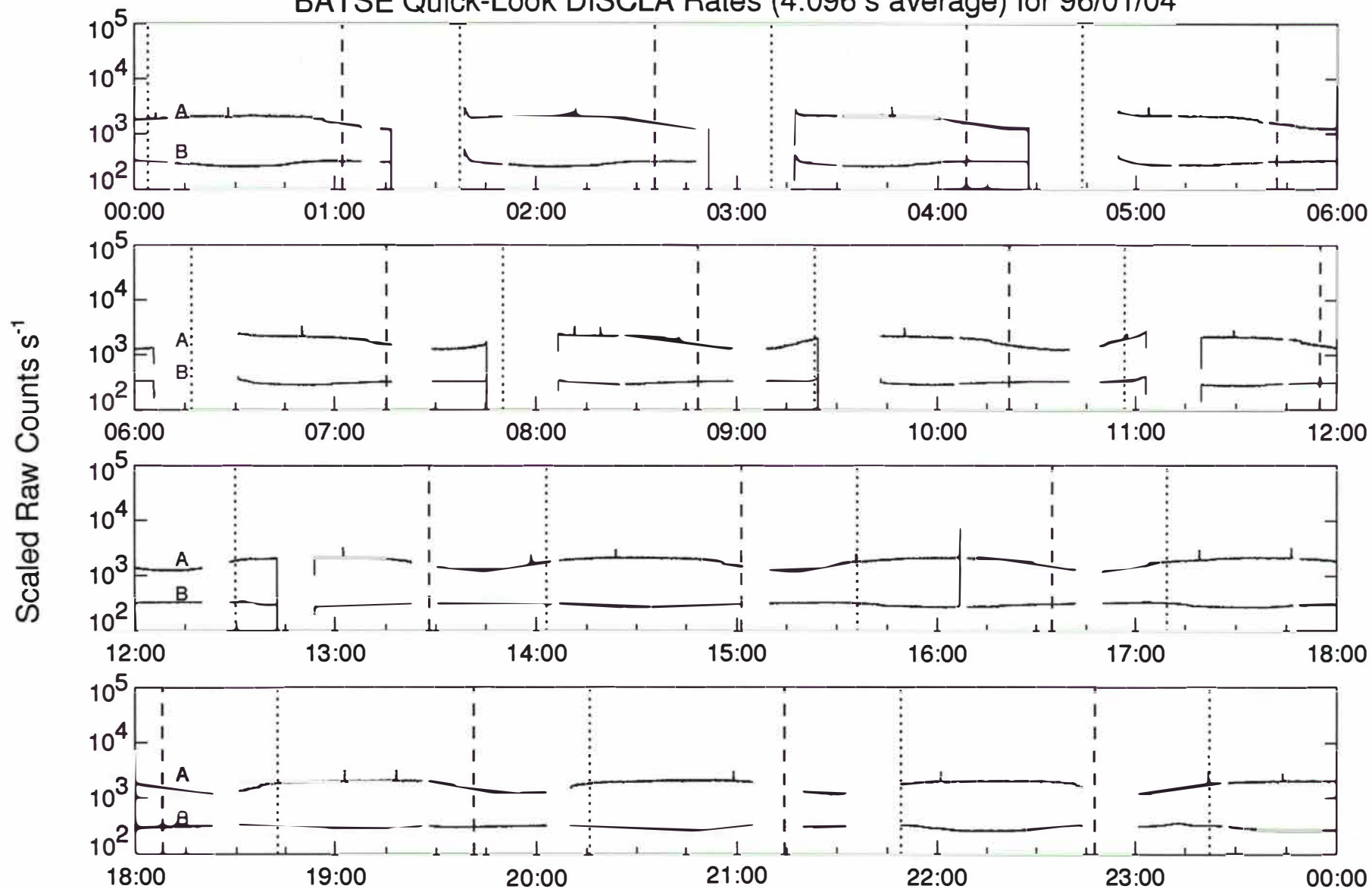


Data Start: 96/01/04, 0000:02

Plot created: 96/01/06, 0658

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 96/01/04



Current Time: 96/01/06, 0658 EDT

A: Channel 0 Most Sunward LAD

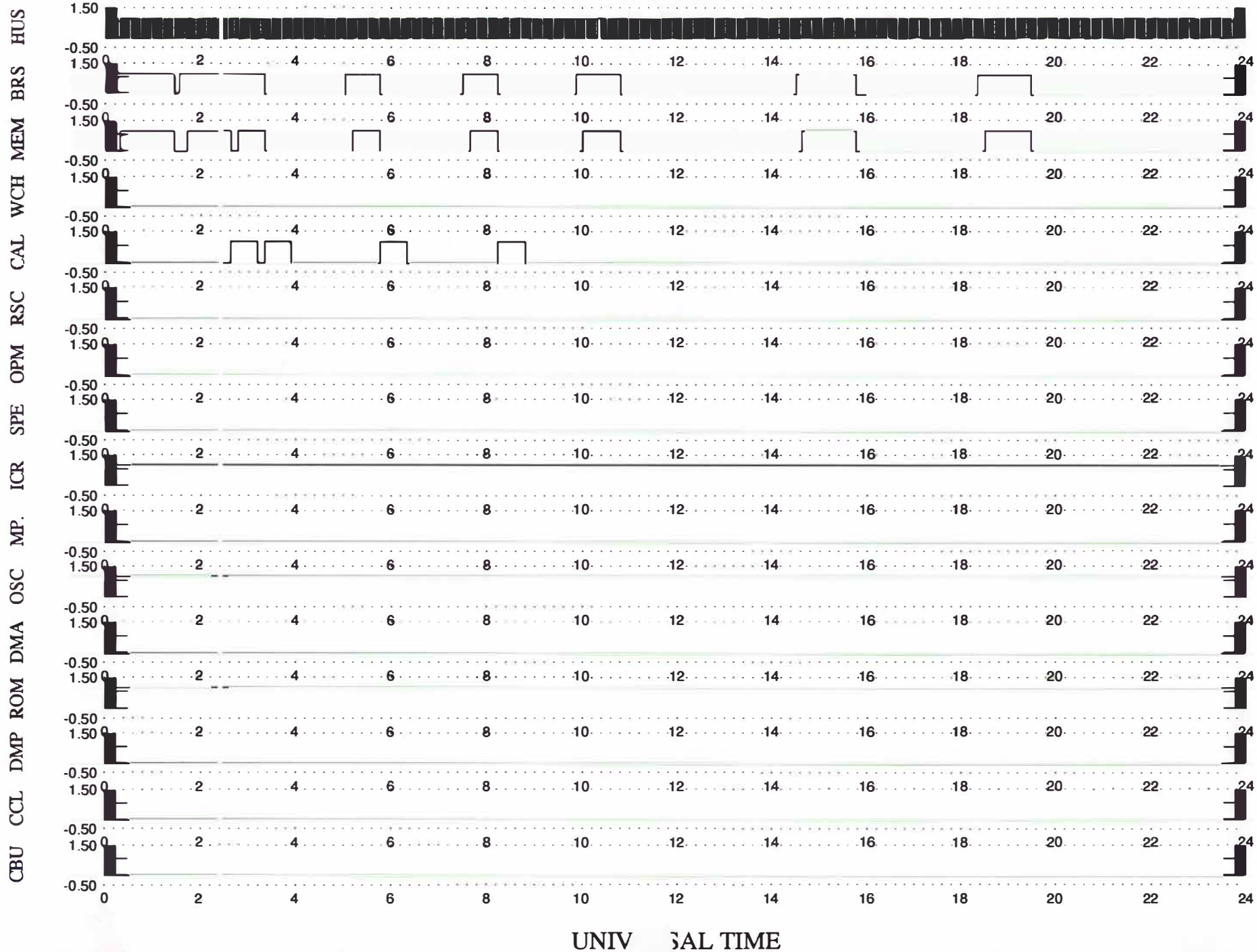
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

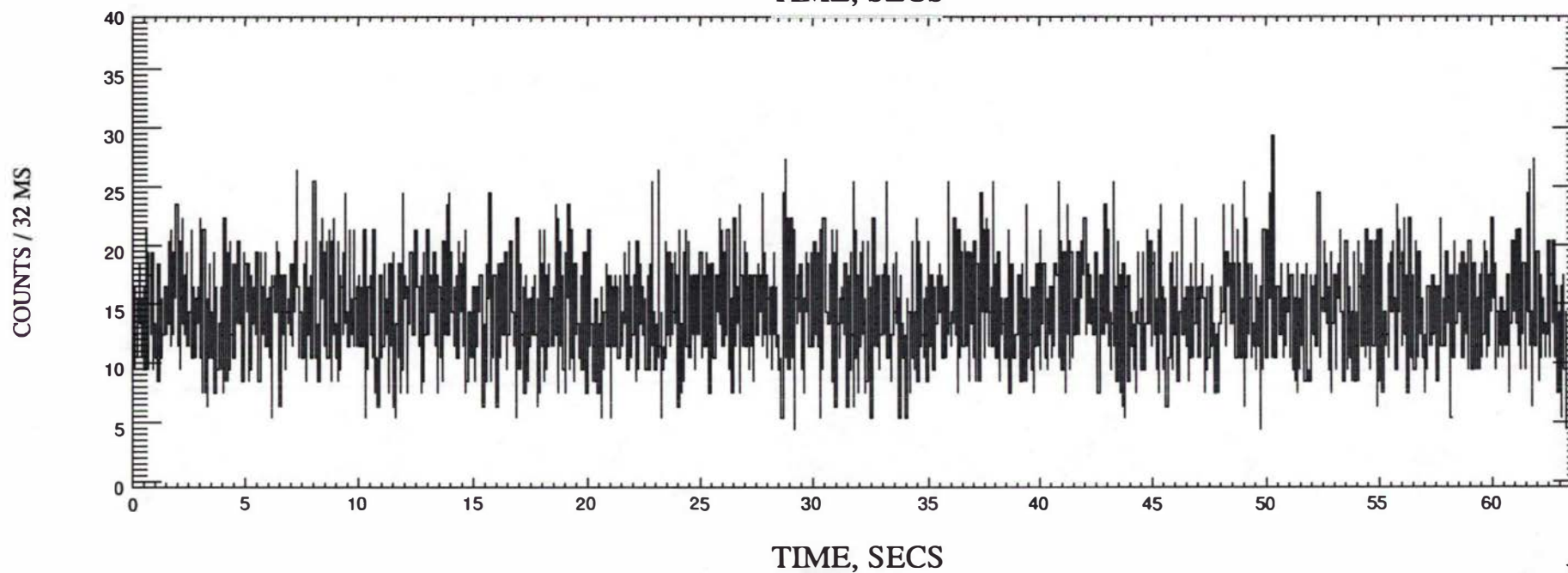
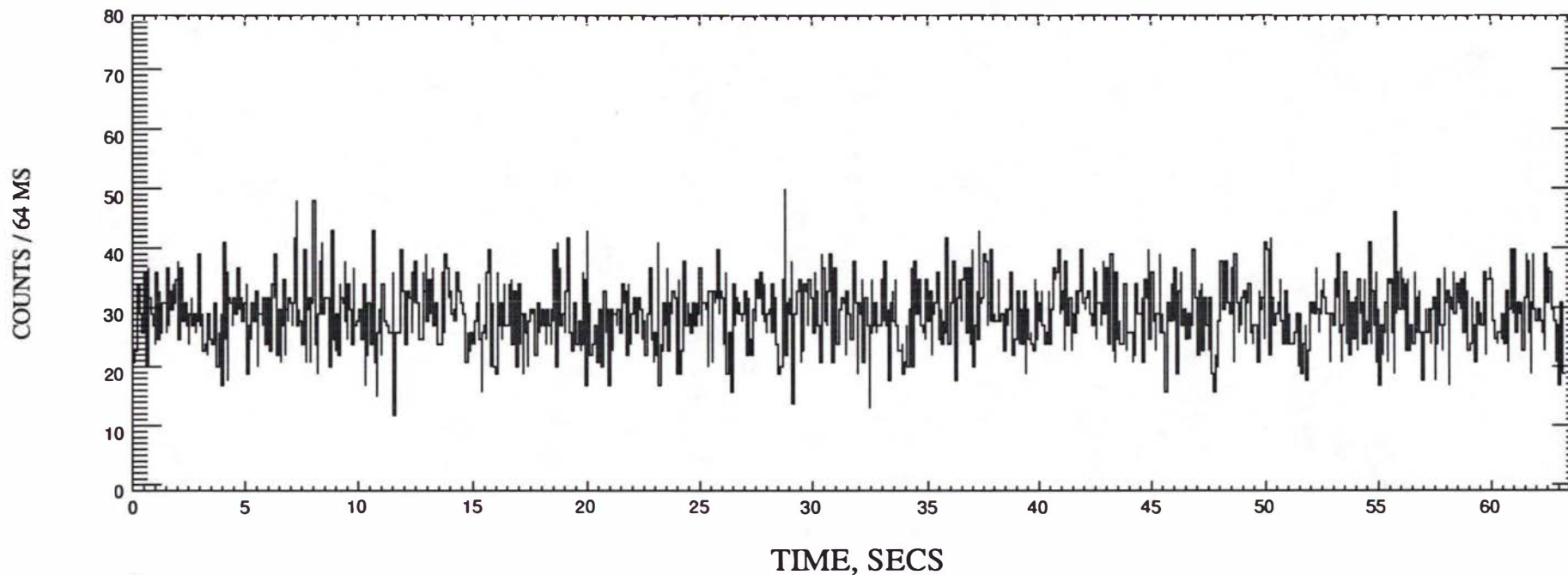
HUS MODES EDR day 4, year 1996 to day 4, year 1996 BURST NUMBER 2 - 9

4/1/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 2 at UT= 0.109766298930 h= 395.159 s 00:06:35.159

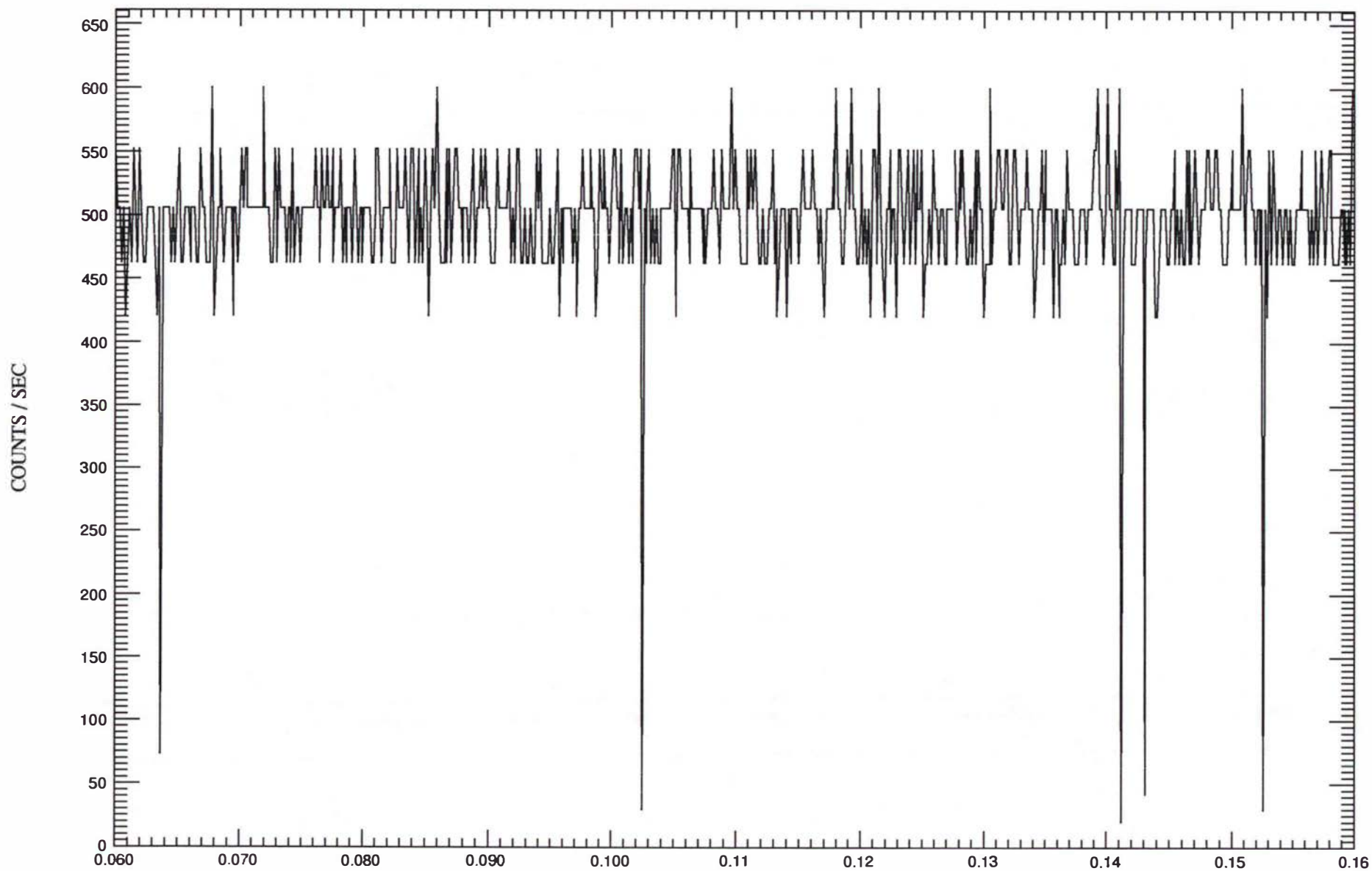
4/1/96



B# 1

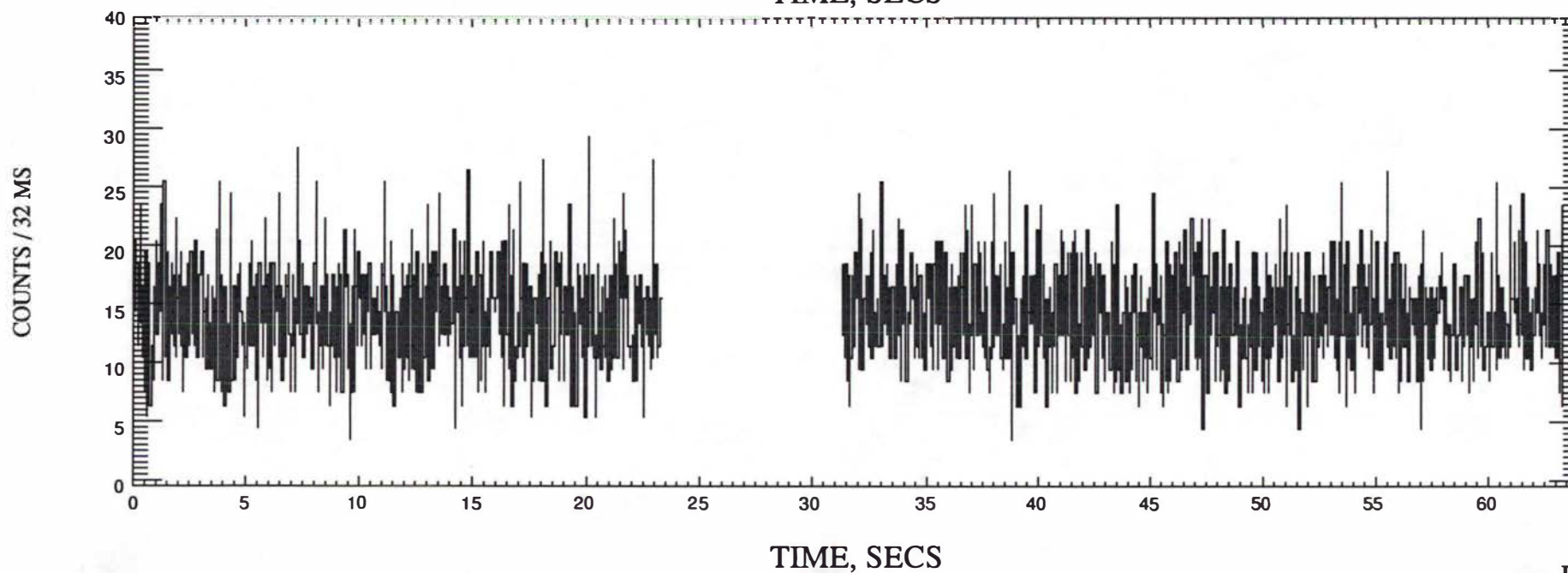
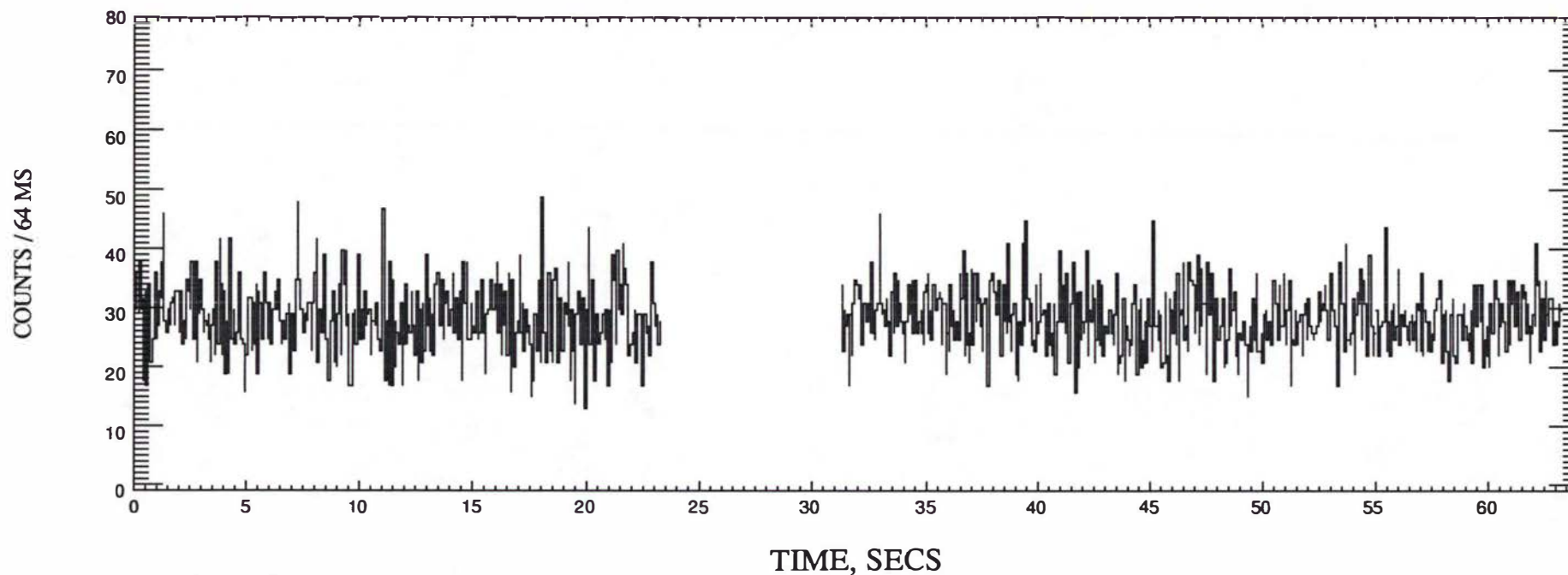
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 3 at UT= 1.480586102804 h= 5330.110 s 01:28:50.110

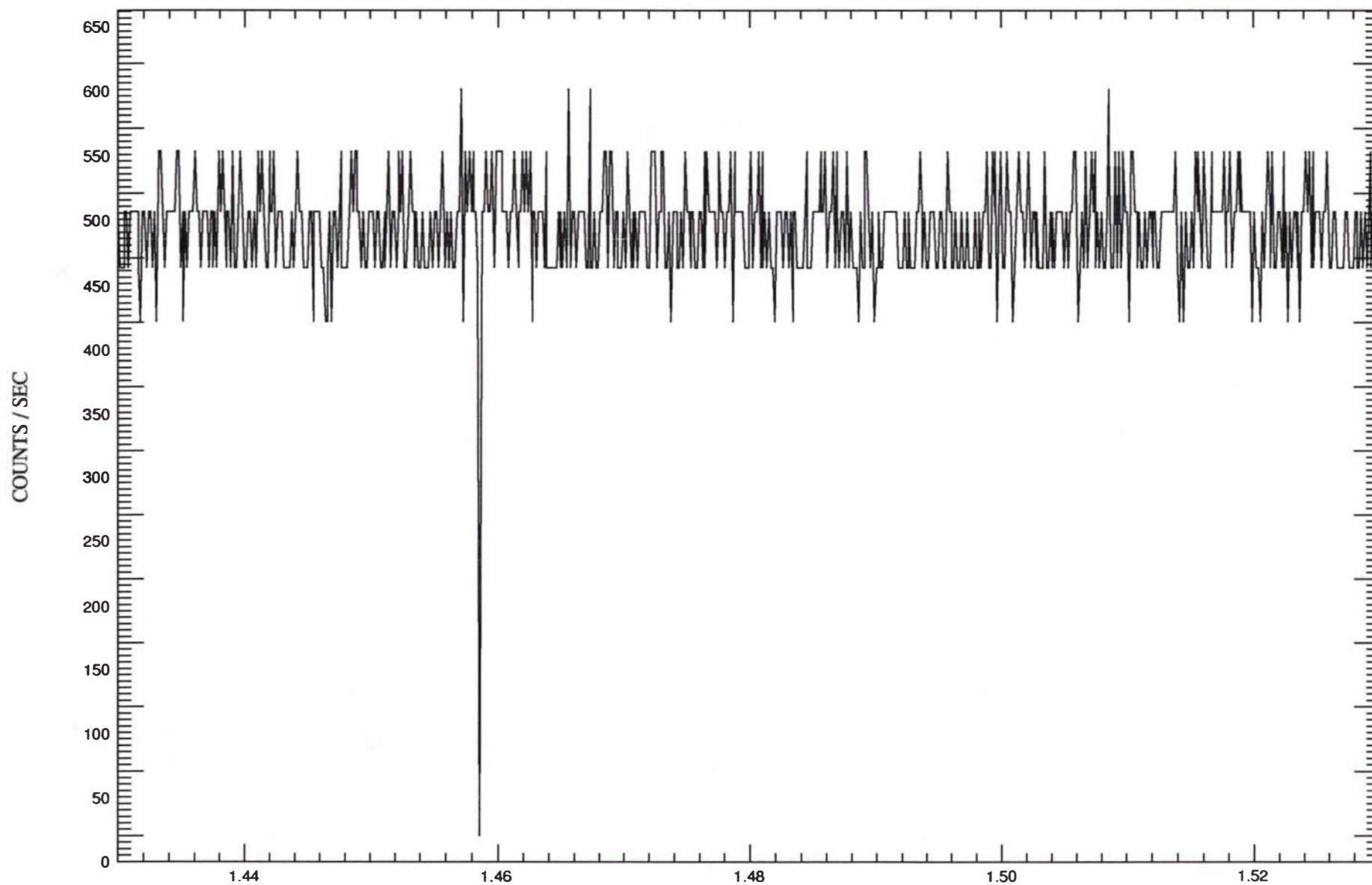
4/1/96



B# 2

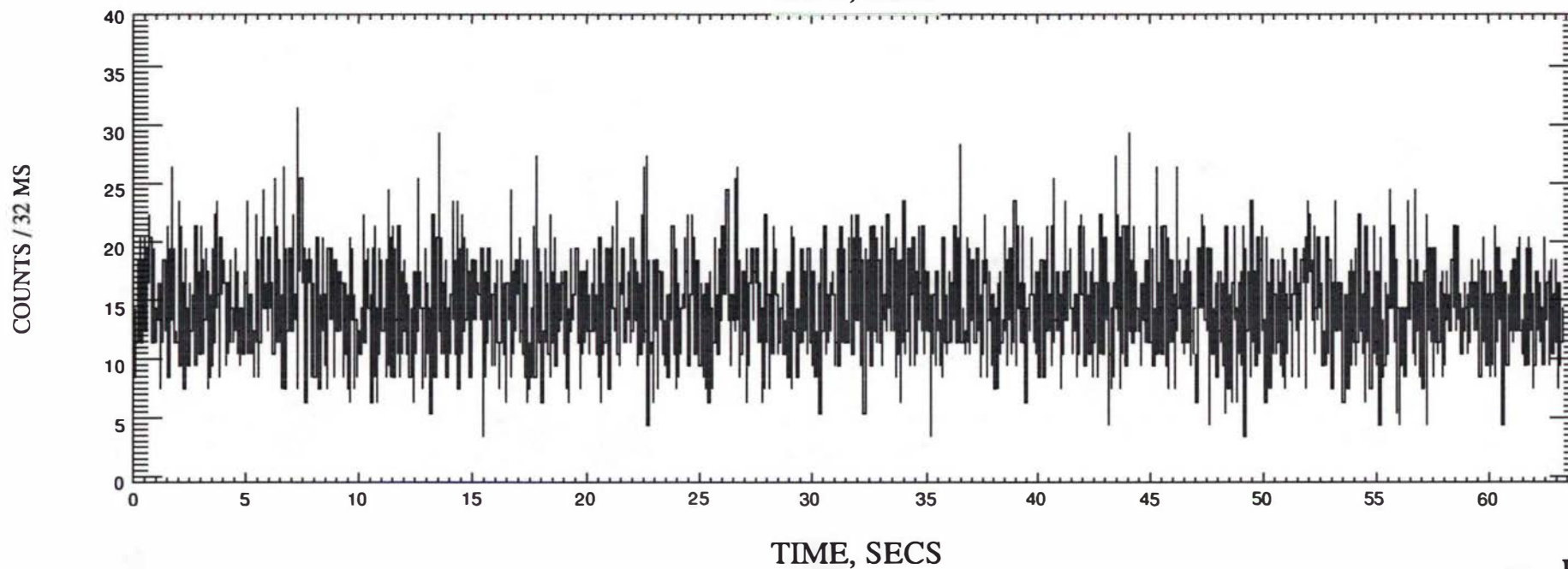
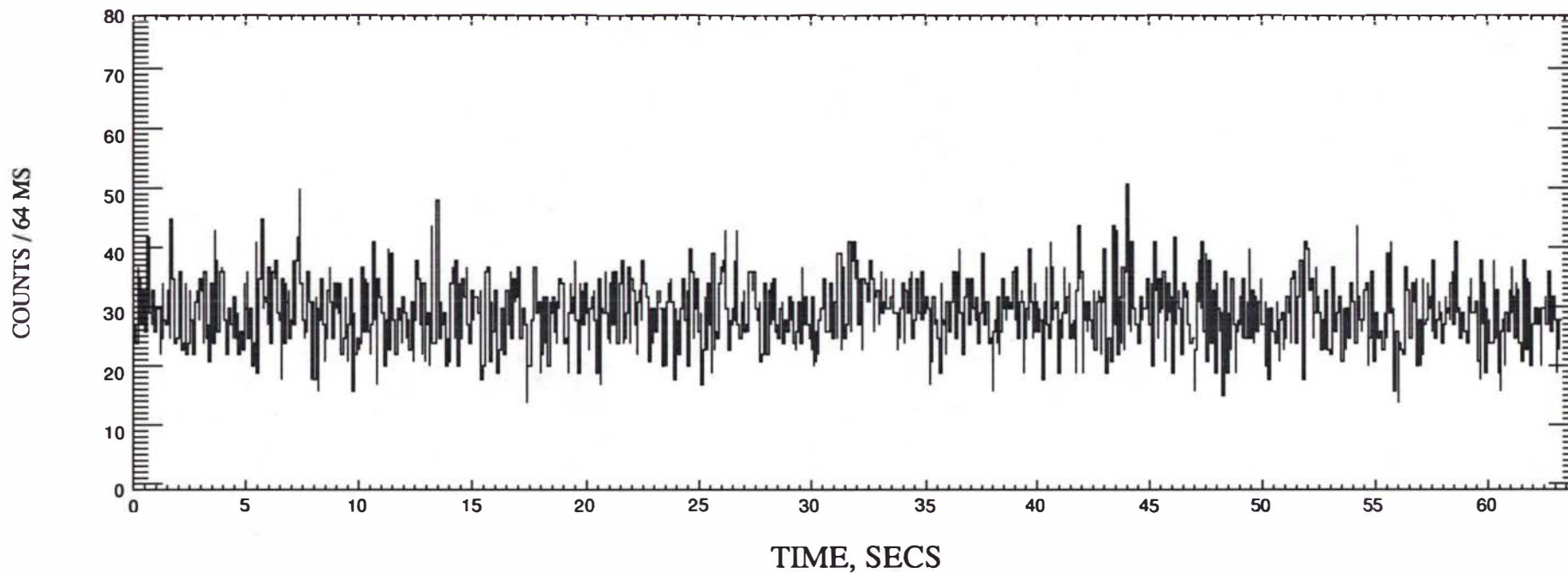
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 4 at UT= 2.599284934998 h= 9357.426 s 02:35:57.426

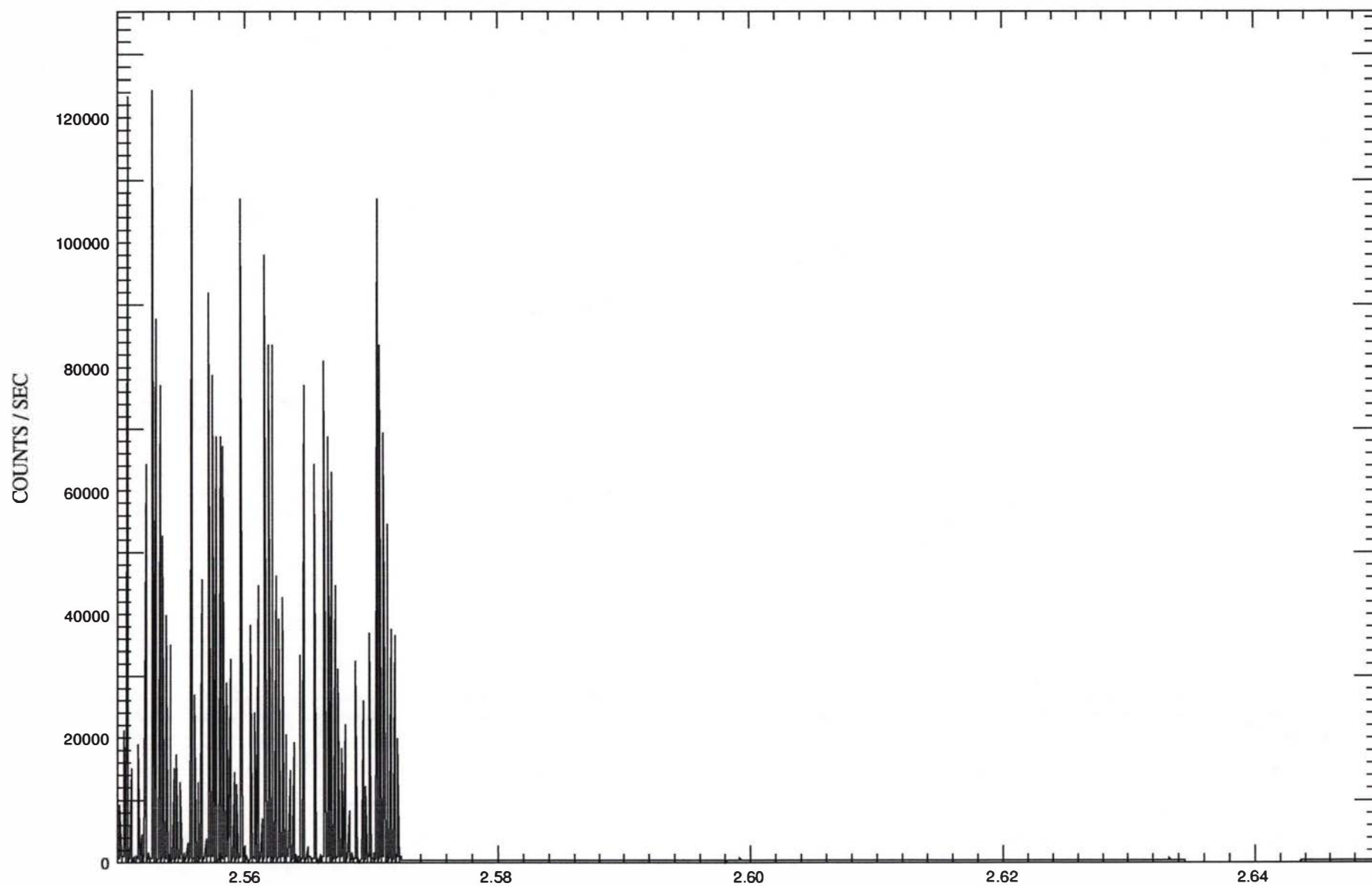
4/1/96



B# 3

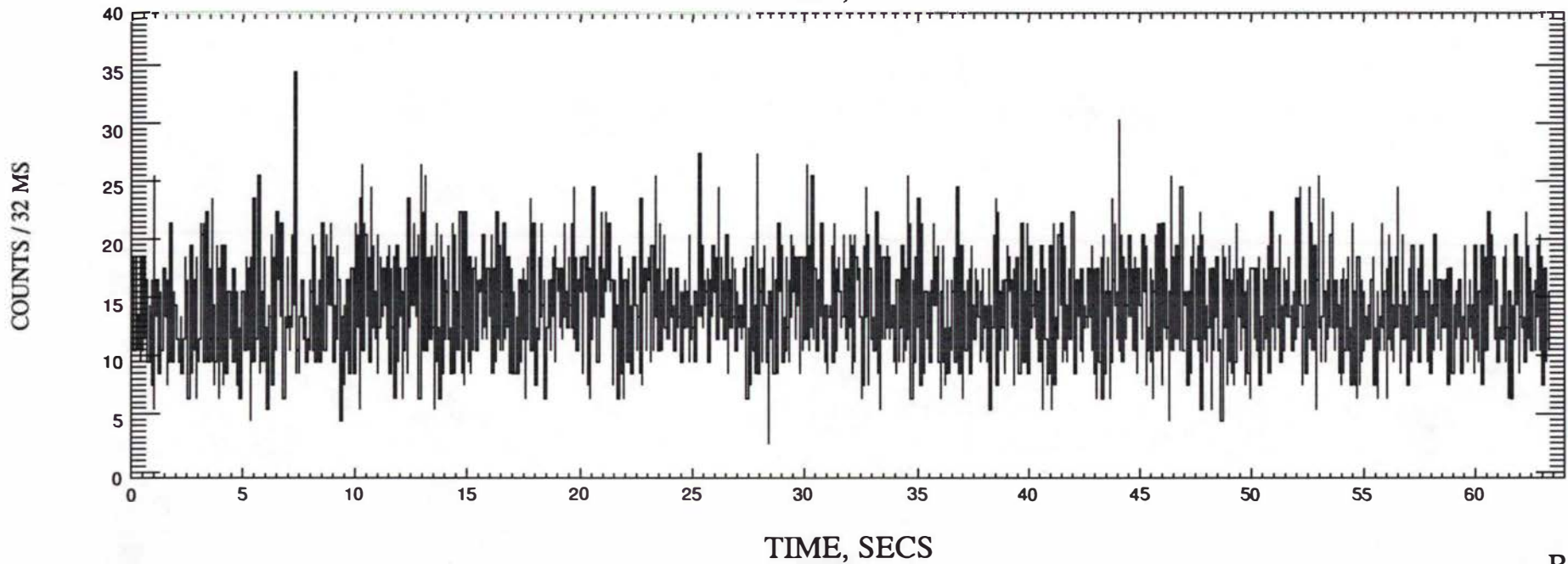
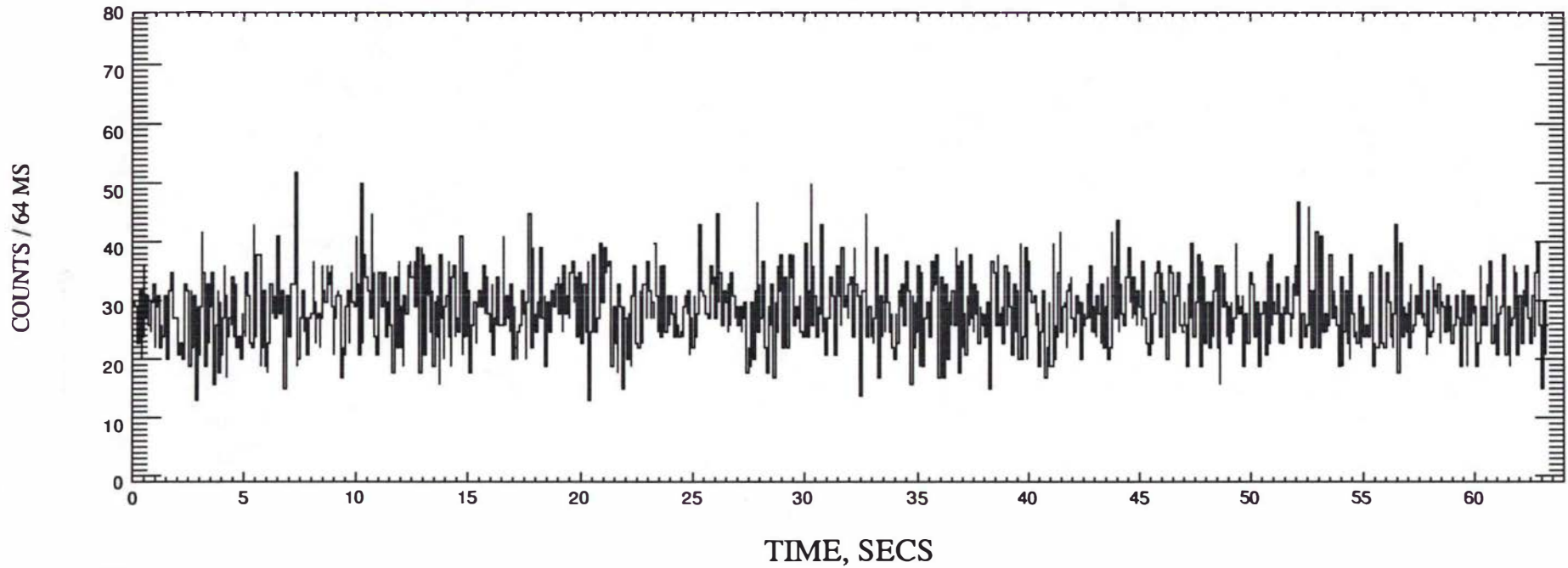
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 5 at UT= 5.004182069567 h=18015.055 s 05:00:15.055

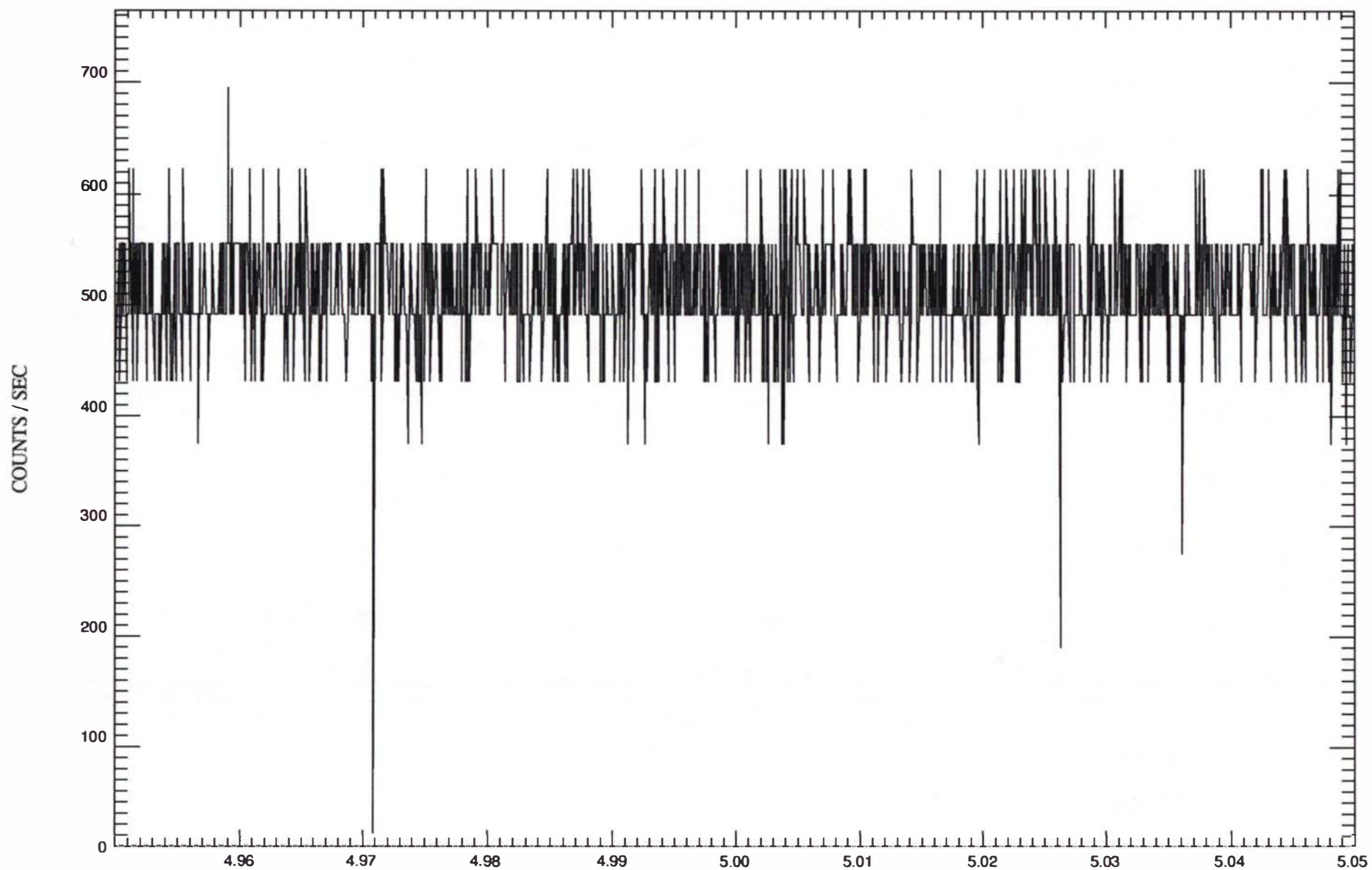
4/1/96



B# 4

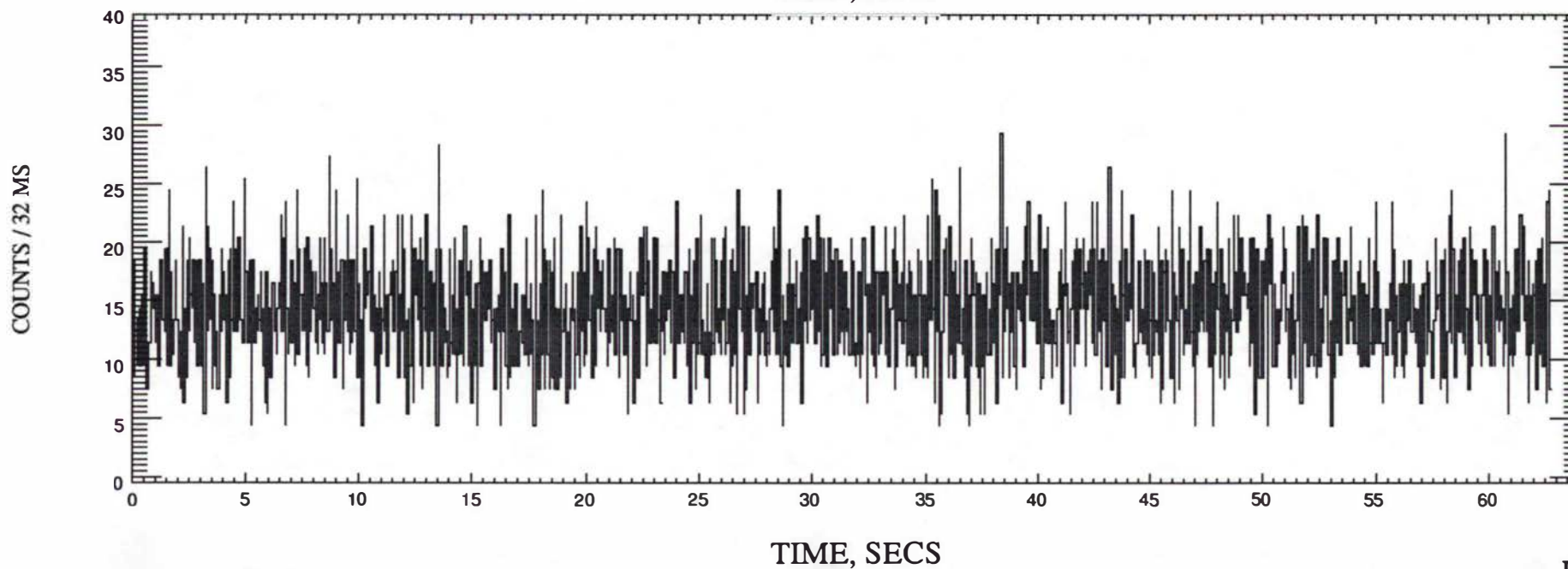
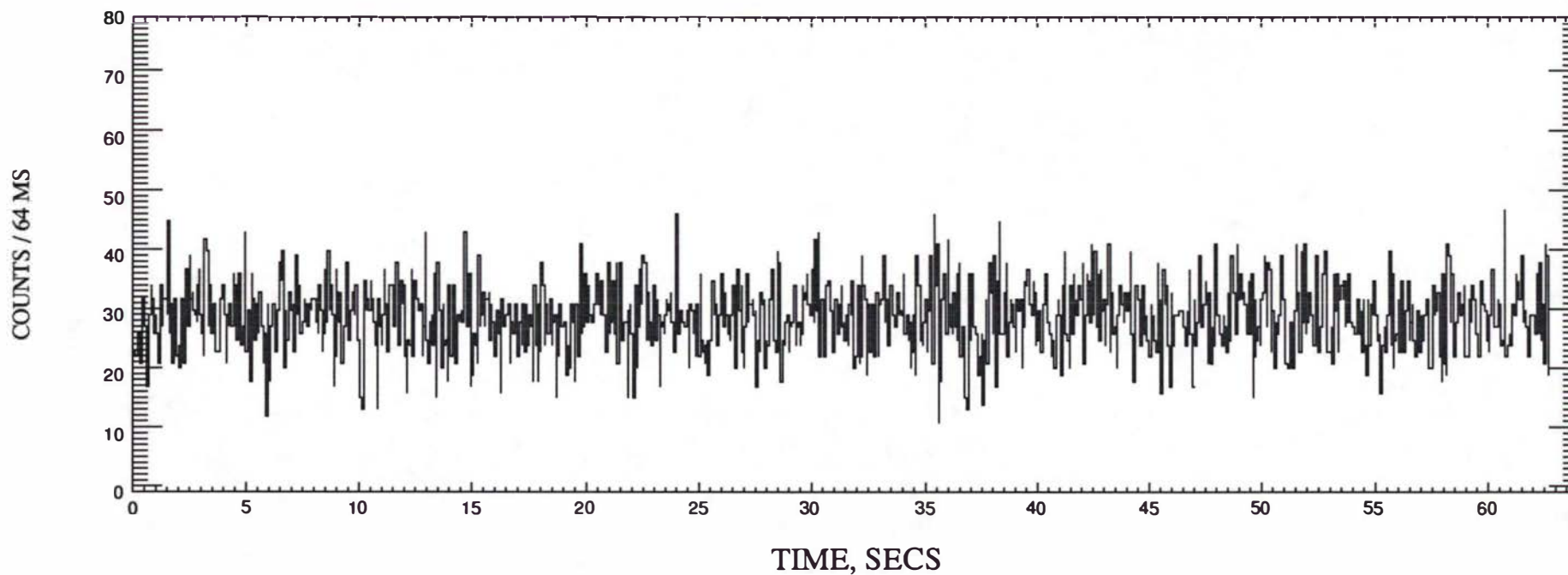
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 6 at UT= 7.515154482524 h=27054.556 s 07:30:54.556

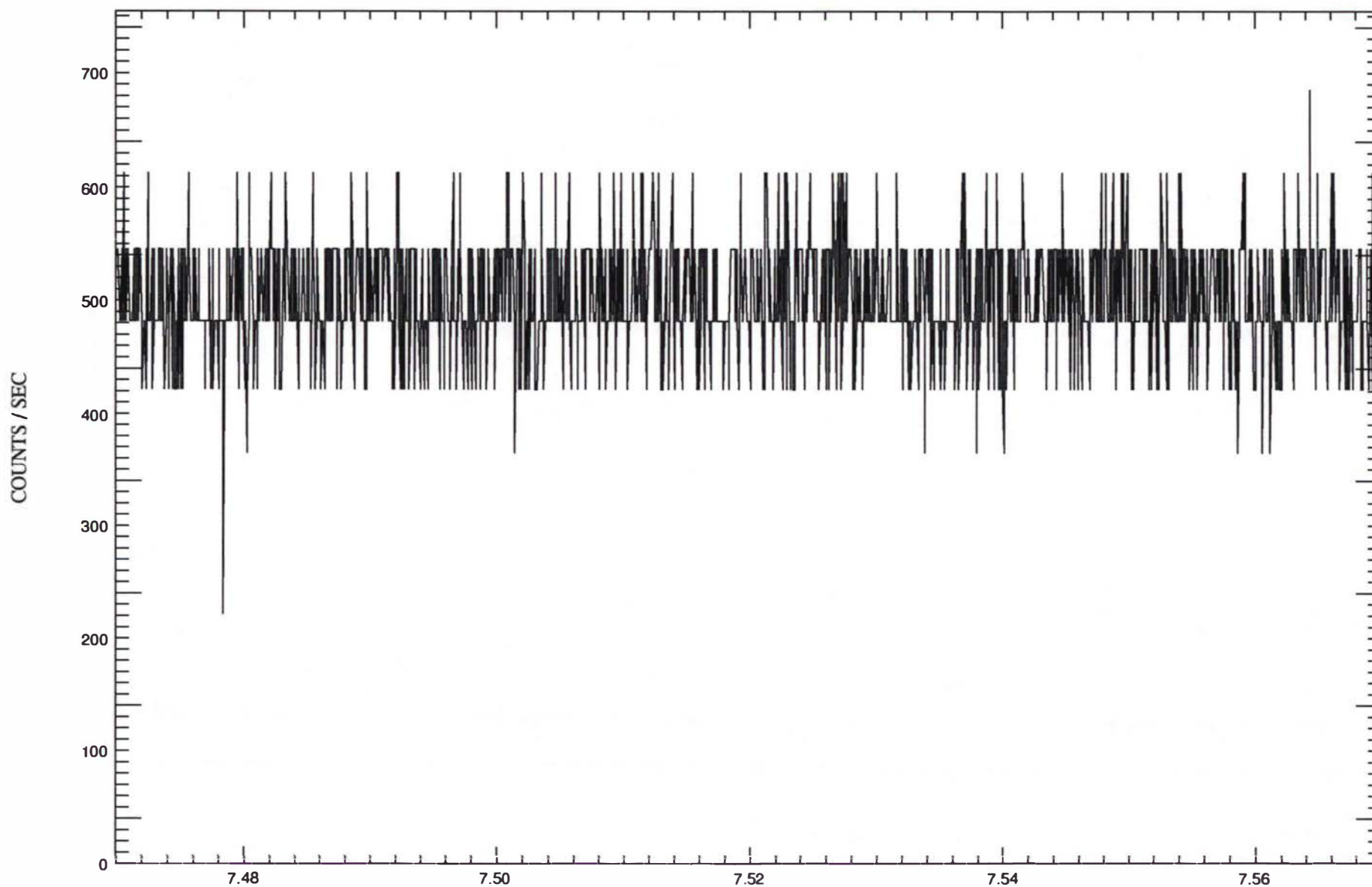
4/1/96



B# 5

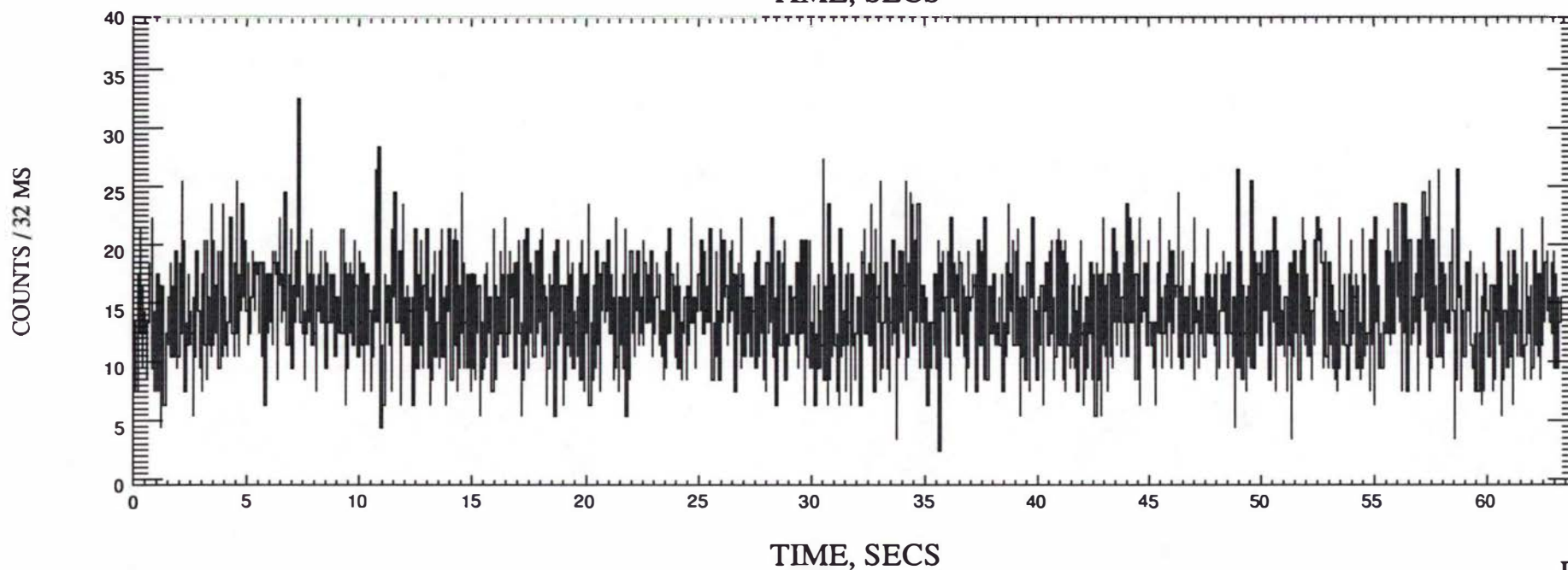
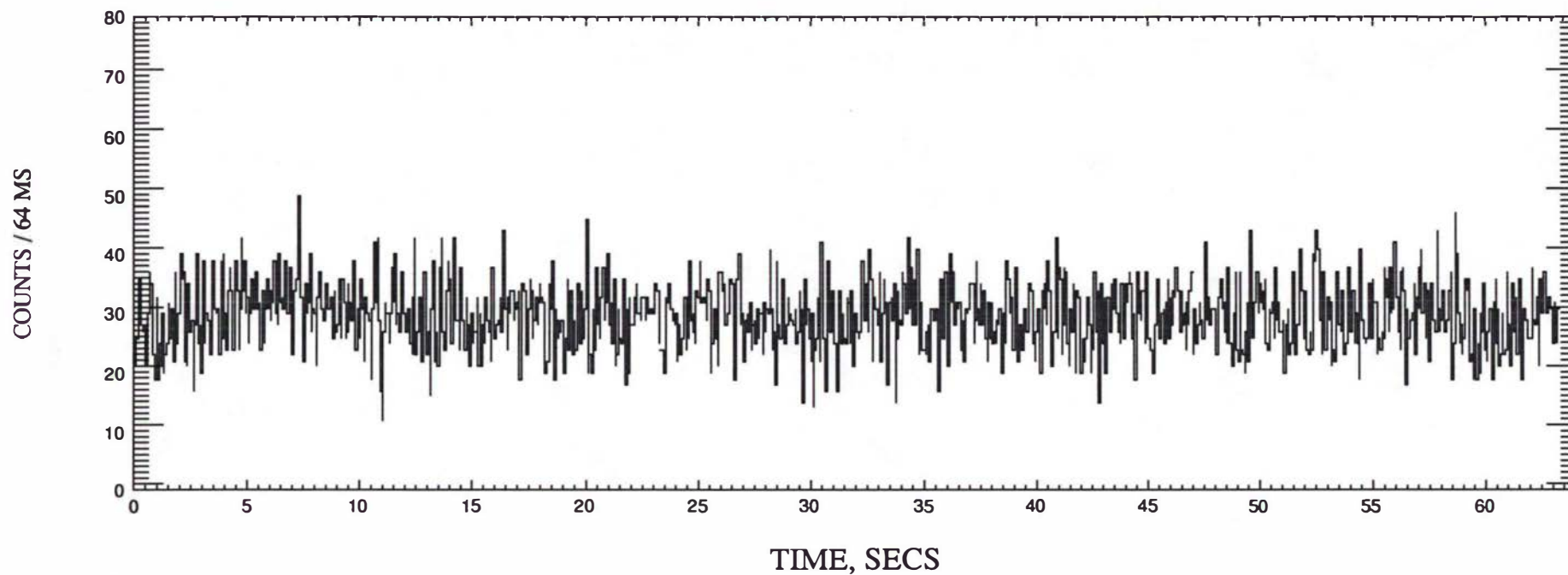
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



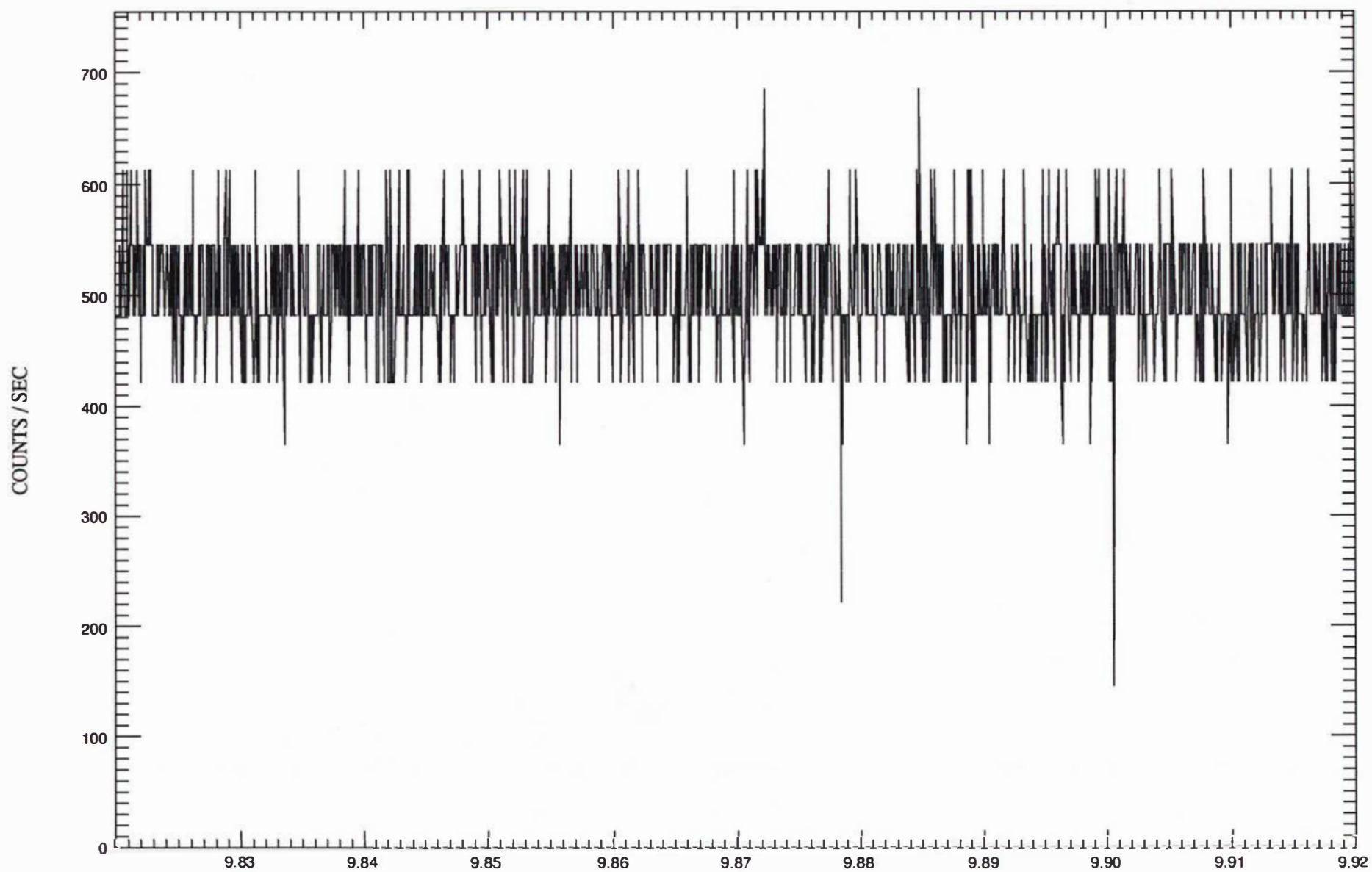
HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 7 at UT= 9.872378323873 h=35540.562 s 09:52:20.562

4/1/96



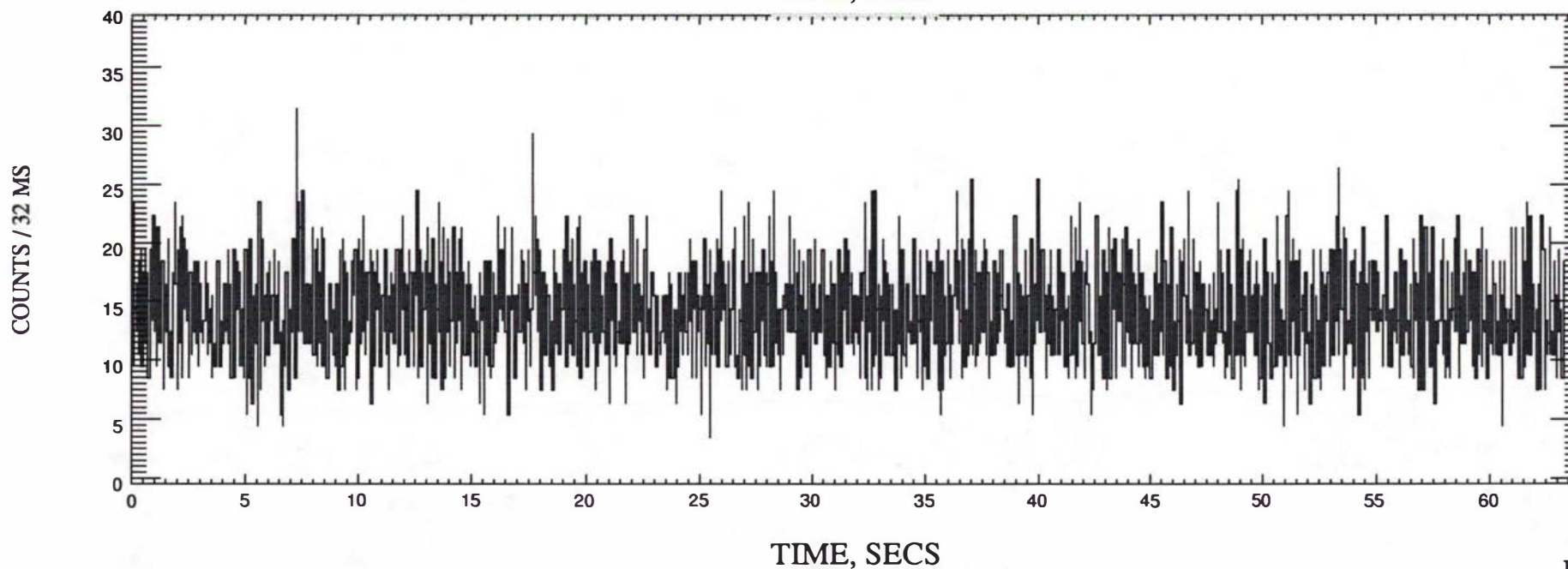
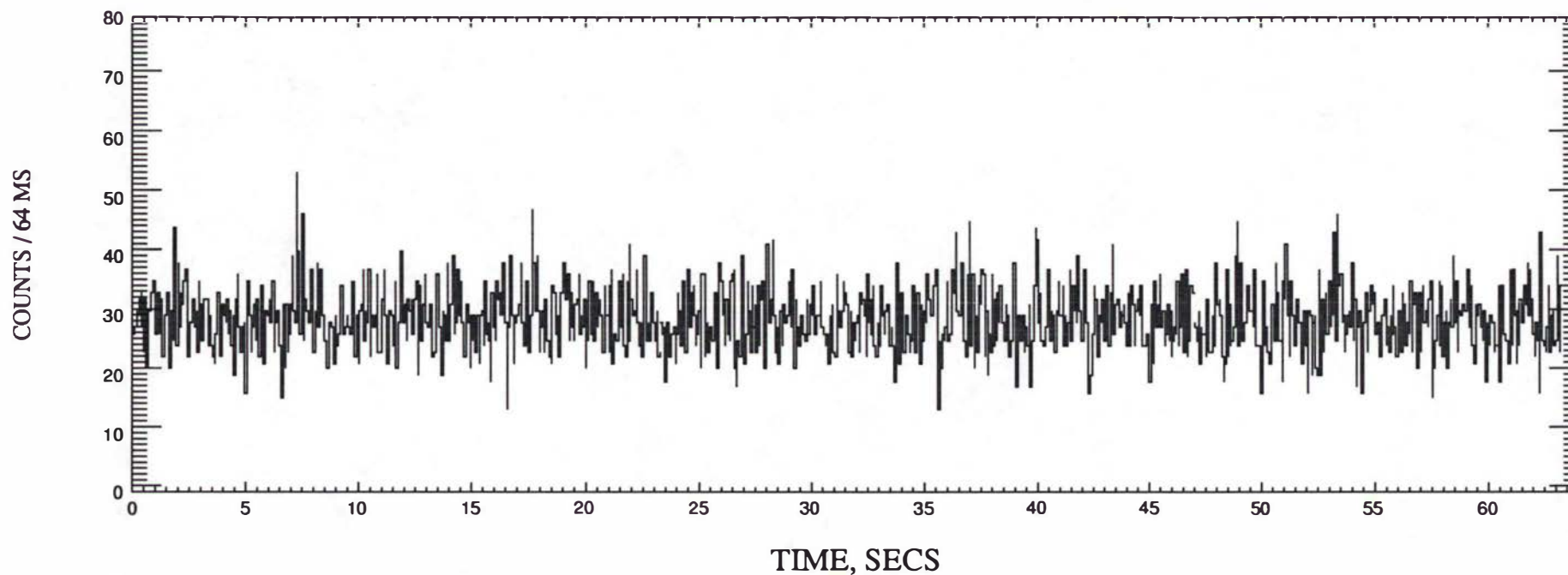
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 8 at UT=14.476681717767 h=52116.054 s 14:28:36.054

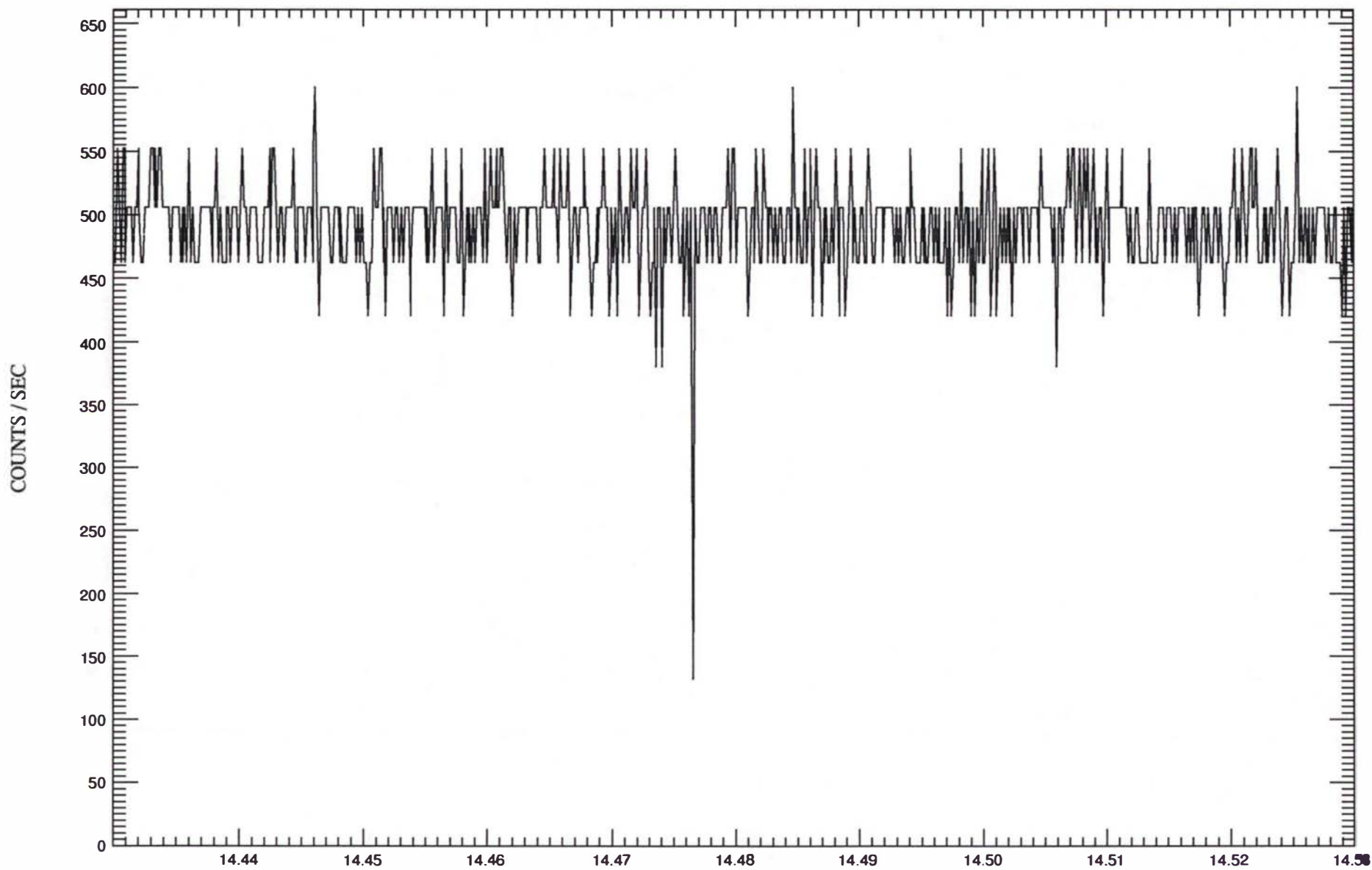
4/1/96



B# 7

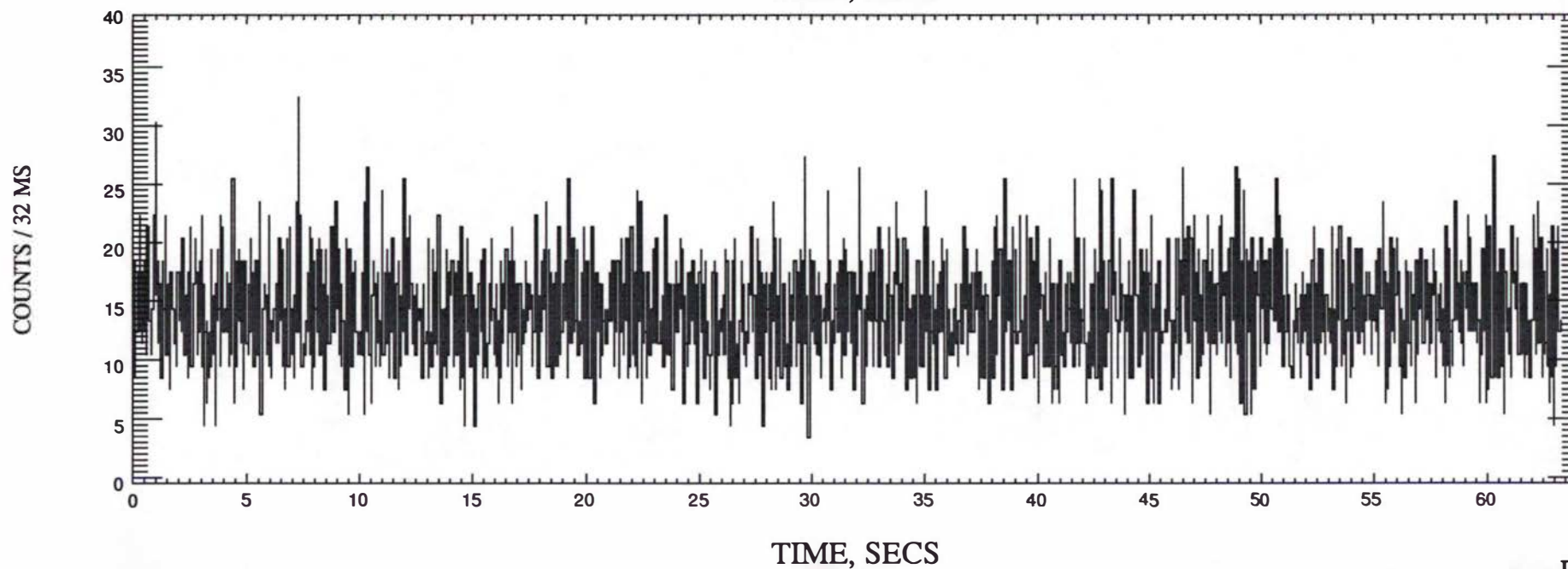
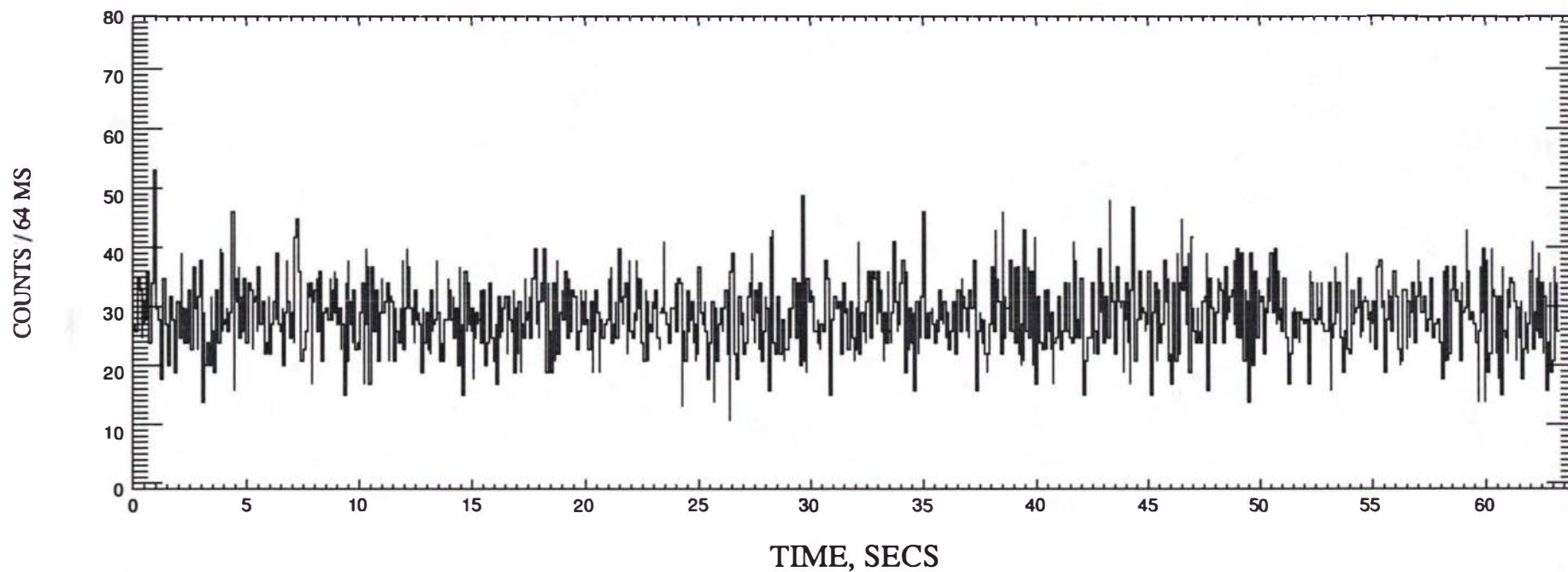
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A TRIGGERED DATA EDR day 4, year 1996
Burst Counter 9 at UT=18.243301433987 h=65675.885 s 18:14:35.885

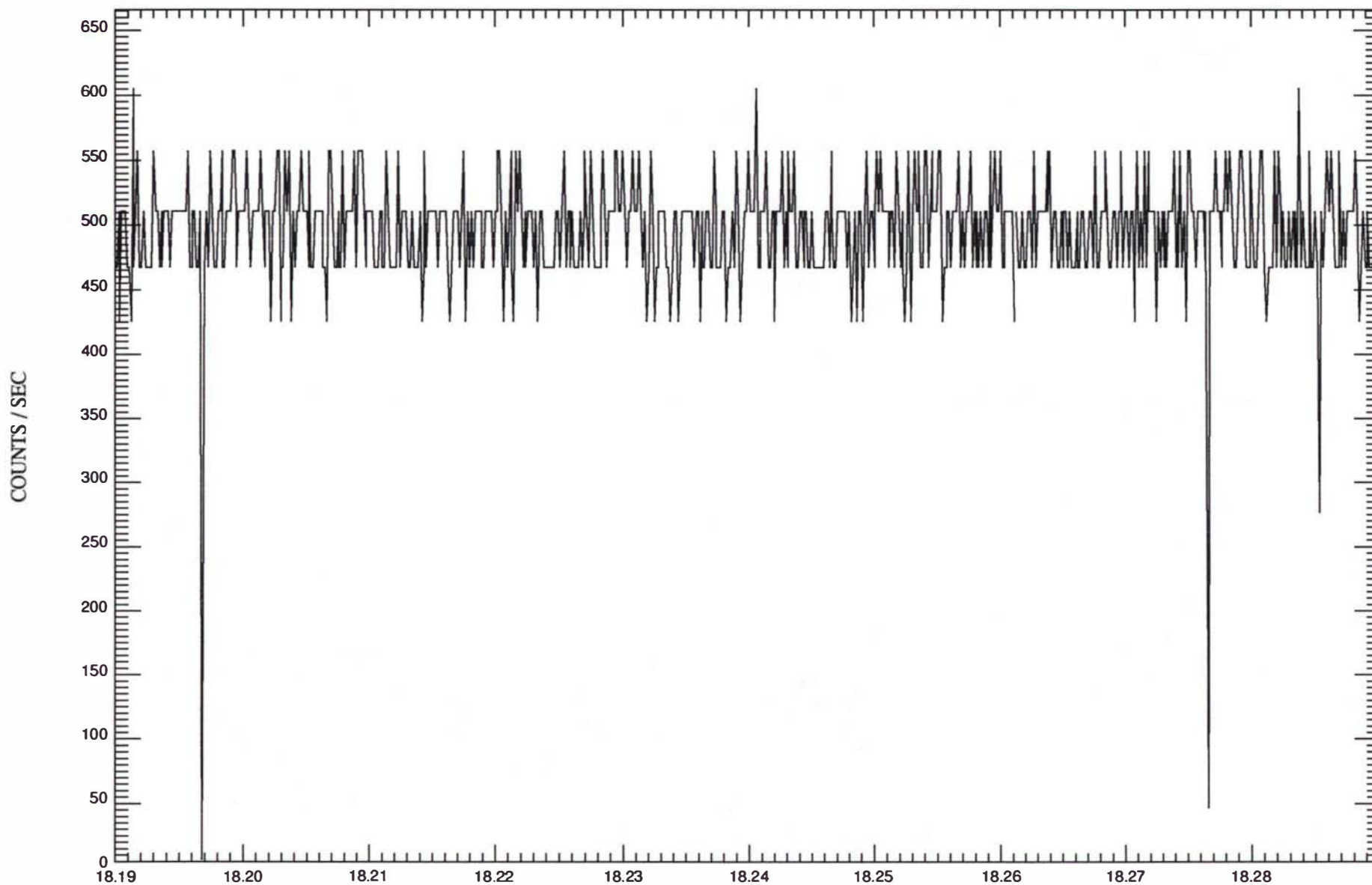
4/1/96



B# 8

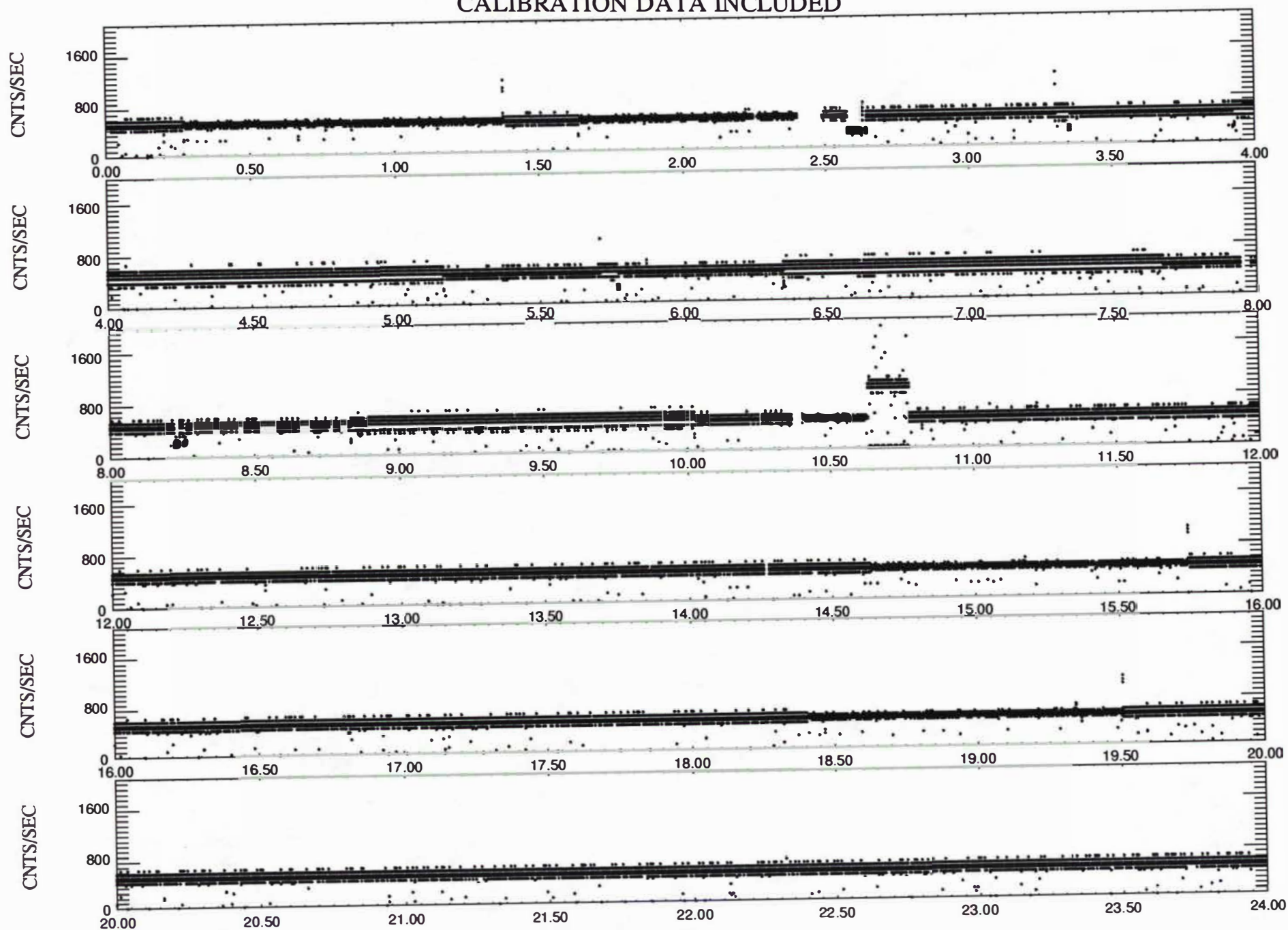
HUS 2A, MODE 1, NOT AVERAGED QEDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

1/5/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 4, year 1996 to day 4, year 1996
CALIBRATION DATA INCLUDED

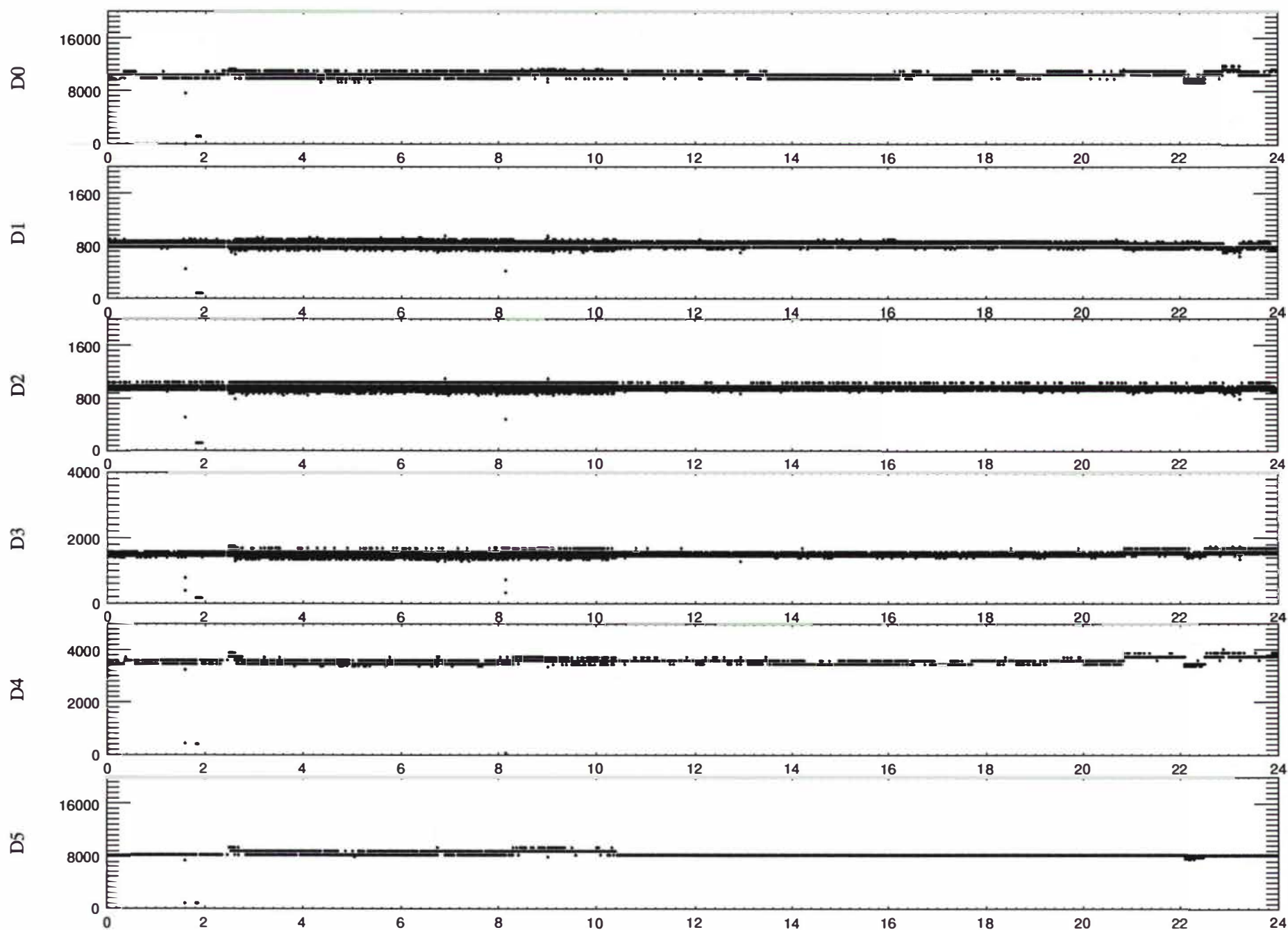
4/1/96



UNIV CAL TIME

HUS 2B COUNTS / SEC QEDR day 4, year 1996 to day 4, year 1996

1/5/96



UNIVERSAL TIME

951025	23	40	39.738	S1	190	400	120	1.7	3	60	167	✓
951102	01	58	05.879	S2	260	320	50	<0.1	100	3	168	✓
951102	05	53	29.015	S2	700	1560	600	0.1	5	18	169	✓
951102	07	58	13	S1	320	80		4	6		BGR	✓
951105	00	29	05	S2	40	50		0.6	40		BGR	✓
951105	01	37	48.077	S2	140	340	80	0.6	2	22	170	✓
951105	13	00	27.808	S1	160	380	120	9	2	9	171	✓
951107	07	34	58	S1	20	50	20	2	90		BGR	✓
951111	09	42	40	S1	80	160	20	1.1	15		BGR	✓
951112	18	28	15.244	S2	540	690	220	0.2	14	84	172	✓
951113	23	25	58.872	S1	260	330	260	4.4	1	15	173	✓
951115	10	48	49	S1	70	180	80	3	12		BGR	✓
951117	02	48	43.762	S2	650	530	120	0.1	9	10	175	✓
951118	22	56	00	S2	20	90	100	0.15	6		BGR	✓
951119	08	17	11.402	S1	200	420	110	3	1.5	12	176	✓
951119	12	54	17.519	S1	110	220	340	1.7	3	4	177	✓
951119	16	30	48	S2	30	40	10	0.4	110		BGR	✓
951121	06	11	20	S1	20	70	10	2	45		BGR	✓
951122	02	44	01.380	S2	770	920		0.15	0.5	1.5	179	✓
951122	04	45	07.738	S1	280	430	160	12	35	22	180	✓
951123	18	10	08	S1	30	60	30	1	30		BGR	✓
951124	05	54	26	S2	50	140	50	0.15	30		BGR	✓
951124	06	58	52	S2	30	100		0.25	280		BGR	✓
951202	10	51	41.744	S1	200	500	220	2.4	2	25	195	✓
951203	01	06	28.180	S2	260	720	420	0.85	1	16	196	✓
951208	05	26	57.151	S2	320	740	190	<0.04	1	3.5	197	✓
951208	10	57	32.057	S1	290	260		7	52	6.5	198	✓
951208	11	47	47.634	S1	240	510	190	10	23	98	199	✓
951208	23	24	12	S1	100	90		>10	30		BGR	✓
951209	08	42	29.607	S1	150	450	160	6	6	14	200	✓
951213	04	57	29.683	S2	360	940	330	0.4	2	8	201	✓
951213	09	04	34	S2	300	90		<0.15	4.5		BGR	✓
951214	01	29	47	S2	15	100	30	1	30		BGR	✓
951214	02	24	17.847	S2	200	450	150	0.8	4	6	202	✓
951215	20	23	45	S2	60	70	15	<0.15	60		BGR	✓
951216	22	39	42	S2	160	110		0.1	6		BGR	✓
951218	07	59	48	S1	70	130	30	2.3	22		BGR	✓
951219	16	51	19.732	S2	430	850	920	<0.03	1	54	203	✓
951220	08	51	23.560	S2	100	320	180	1	2	8	204	✓
951221	08	23	18	S1	110	150	70	>15	15		BGR	✓
951222	21	00	21	S2	280			<0.1	16		BGR	✓
951225	09	14	16	S2	200			<0.3	50		BGR	✓
951225	09	34	14	S1	500	150	25	2.2	60		BGR	✓
951225	15	21	35	S2	210	170	40	0.1	100		BGR	✓
951225	22	51	08	S1	80	150	50	2.4	40		BGR	✓
951226	08	38	15	S2	60	100	50	0.15	9		BGR	✓
951227	06	23	25.042	S1	420	1200	320	1	1	1.5	218	✓
951227	21	59	20	S1	50	50		3	65		BGR	✓
951228	12	28	42	S2	70	80	40	<0.07	110		BGR	✓
951228	15	47	26	S2	80	170		0.9	17		BGR	✓
951231	05	37	11.668	S2	180	320	150	0.07	9	65	219	✓
951231	21	24	34	S2	100	25		<0.2	20		BGR	✓
960102	03	14	10.996	S1	140	300	80	1	1	0.2	220	✓
960102	20	20	53	S1	200	120	40	>9	25		BGR	✓
960104	03	28	41.062	S2	360	630	230	<0.05	2	28	221	✓
960105	16	04	30	S1	80	60		5	30		BGR	✓
960107	05	23	20	S2	30	100		0.5	230		BGR	✓
960107	19	03	28	S2	30	120	150	<0.1	32		BGR	✓
960109	23	11	31	S2	60	130	20	0.3	5		BGR	✓
960111	12	55	24.530	S2	1130	1280	190	0.2	0.5	6	222	✓
960113	15	33	44.261	S2	500	450	50	0.3	2	36	228	✓
960114	12	15	04.737	S1	4900	7200	1400	1.8	1	60	233	✓
960115	08	52	36.506	S1	380	360	60	10	1	7	234	✓
960115	12	50	15	S2	120	60		0.7	22		BGR	✓
960116	02	02	18	S2	140	170		0.15	17		BGR	✓
960117	15	56	11.341	S1	250	360	30	4	5	20	235	✓

NO

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)		Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number	
				Max counts per sec							
				G1	G2	G3	in G2	T<T0	T>T0		
941113	12	09	15	S1	145	85		2.5	115		BGR ✓
941114	02	02	40	S2	110	128	30	0.25	12		BGR ✓
941117	03	14	38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14	07	57	S2	150	140		<0.15	5		BGR ✓
941119	19	31	09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22	04	30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00	20	46	S1	150	205	200	>14	18		BGR ✓
941126	12	22	37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16	54	20	S1	55	75		>10	26		BGR ✓
941126	19	56	49.732	S1	290	390	211	6.7	20	26	9 ✓
941127	14	30	25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15	39	10	S1	210	57		2.7	260		BGR ✓
941128	15	37	00	S1	75	90	32	>15	55		BGR ✓
941205	23	33	40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22	10	32	S2	265	175		<0.2	7		BGR ✓
941210	03	10	52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17	03	51	S1	40	45	29	>6	12		BGR ✓
941214	05	38	45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07	44	08	S2	55	115	30	0.8	20		BGR ✓
941221	22	14	35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05	36	00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07	39	45.915	S1	300	637	519	4.4	5	90	28 ✓
941228	16	55	23	S2	40	36	23	0.25	25		BGR ✓
941229	12	58	05	S1	46	108	31	1.8	15		BGR ✓
941229	22	51	08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20	52	53	S1	74	117	52	8.4	158		BGR ✓
941230	23	43	44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07	18	39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09	00	58	S2	140	143	40	<0.1	25		BGR ✓
950110	06	02	15	S2	332	180		<0.1	3600		BGR ✓
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 ✓
950111	12	18	49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17	38	32	S2	85	162	35	<0.06	75		BGR ✓
950114	01	00	38	S1	46	110		1.6	6		BGR ✓
950114	04	03	01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02	49	32	S2	40	47	34	<0.15	24		BGR ✓
950117	01	36	00	S2	56	82	42	0.2	108		BGR ✓
950118	12	22	54	S2	57	105	17	<0.1	35		BGR ✓
950125	14	51	52.253	S1	380	600	140	8.2	3.8	11	39 ✓

K O N U S

2 2 / 2 / 9 6

U L Y S S E S R T

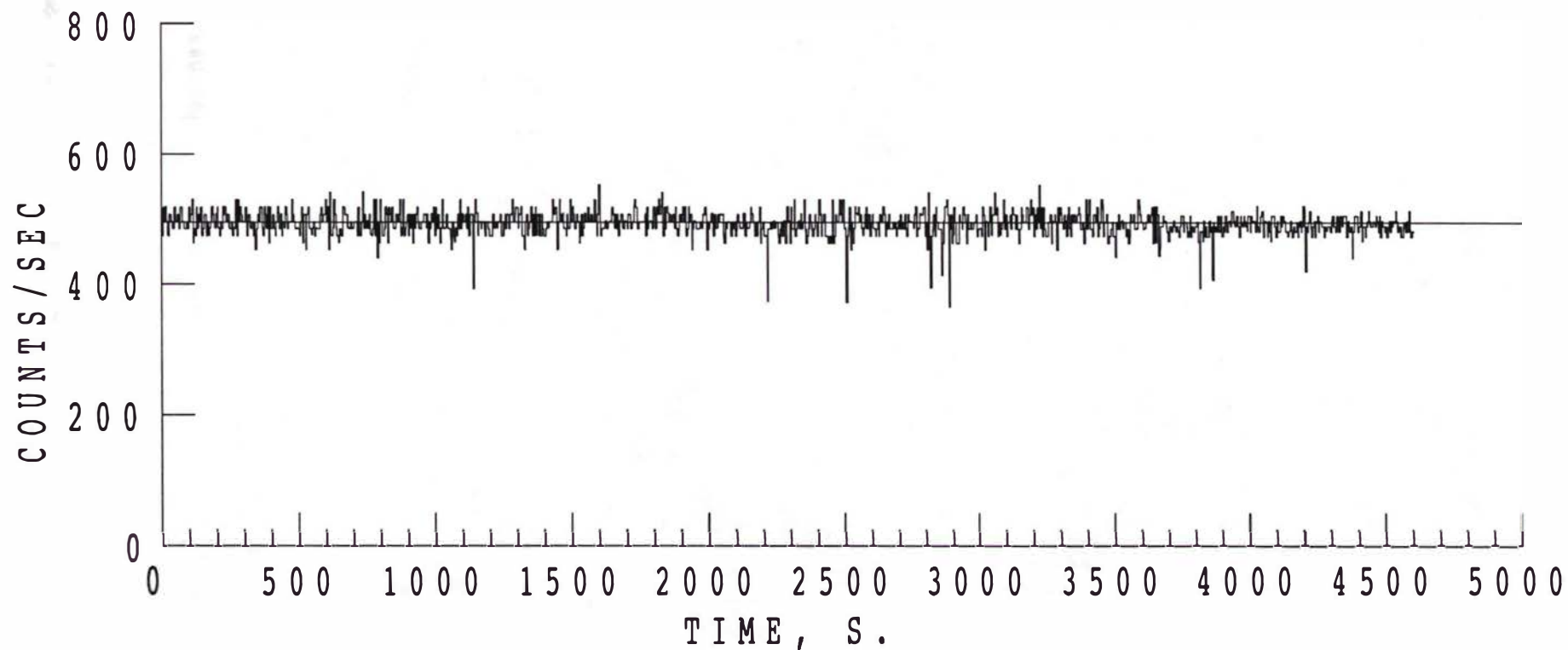
5 / 1 / 9 6 5 6 4 8 4 . 2 9 3 s

1 . 0 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

M = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



BATSE BURST TRIGGER

NO.: 4236

A

TIME: TJD=0087 SECONDS=04729

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4237

B

TIME: TJD=0087 SECONDS=15363

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4238

TIME: TJD=0087 SECONDS=27404

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4239

TIME: TJD=0087 SECONDS=39996

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

NO.: 4241

TIME: TJD=0087 SECONDS=54024

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURST TRIGGER

NO.: 4242

TIME: TJD=0087 SECONDS=61364

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4243

TIME: TJD=0087 SECONDS=71005

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4244

TIME: TJD=0087 SECONDS=83292

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

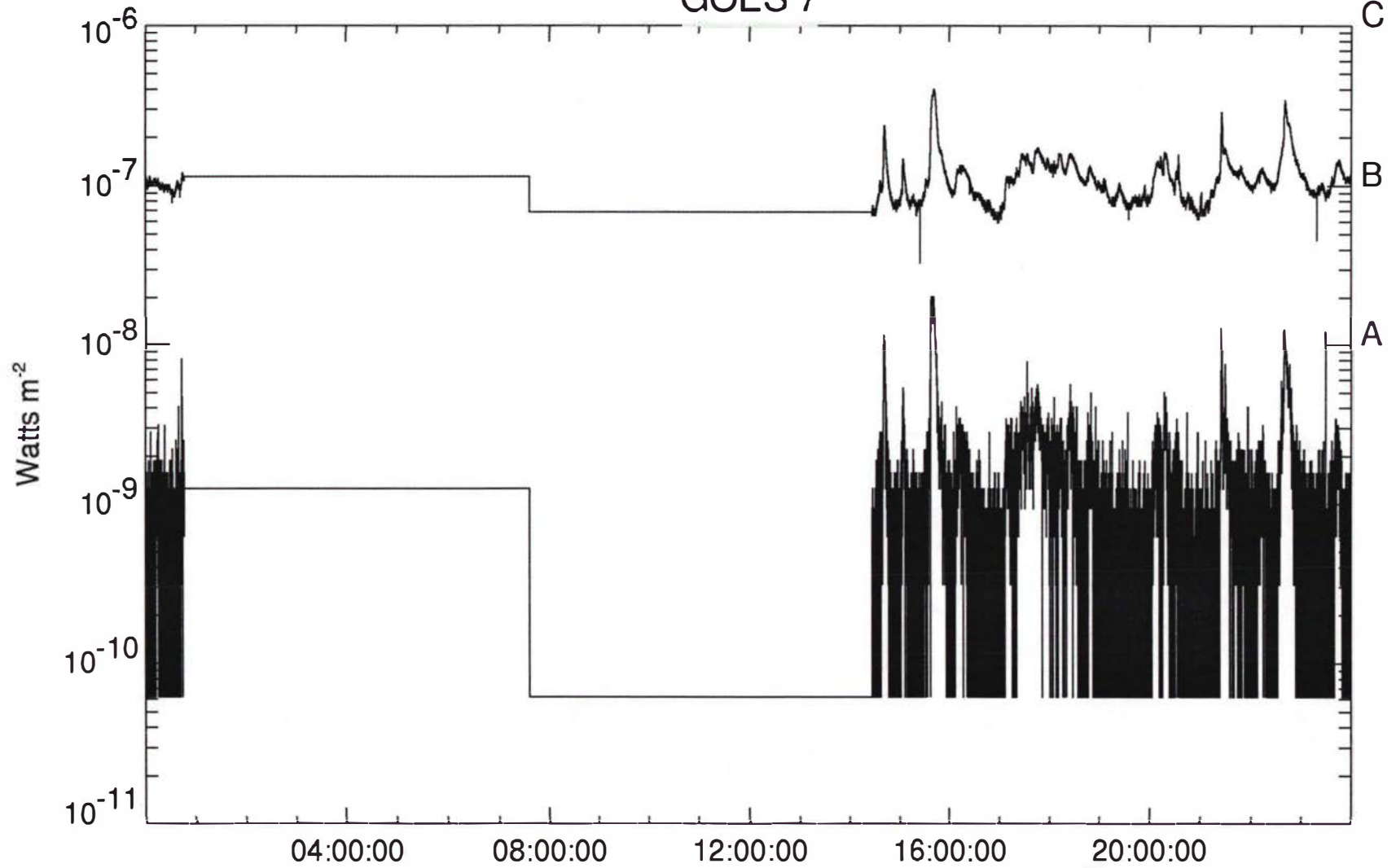
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

GOES 7

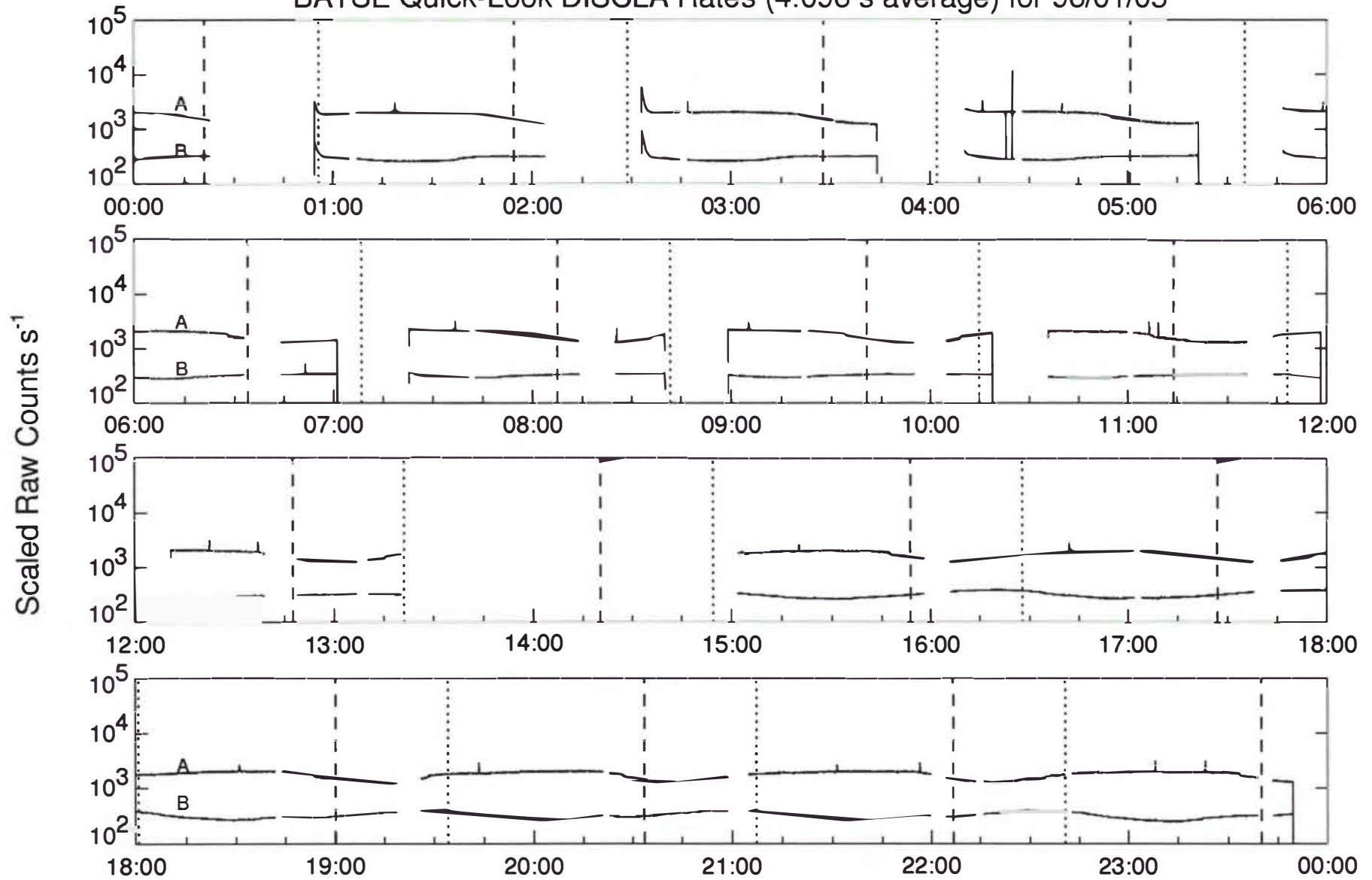


Data Start: 96/01/05, 0000:00

Plot created: 96/01/07, 0654

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 96/01/05



Current Time: 96/01/07, 0655 EDT
A: Channel 0 Most Sunward LAD
B: Sum Channel 0 Anti-Sunward LADs X .05

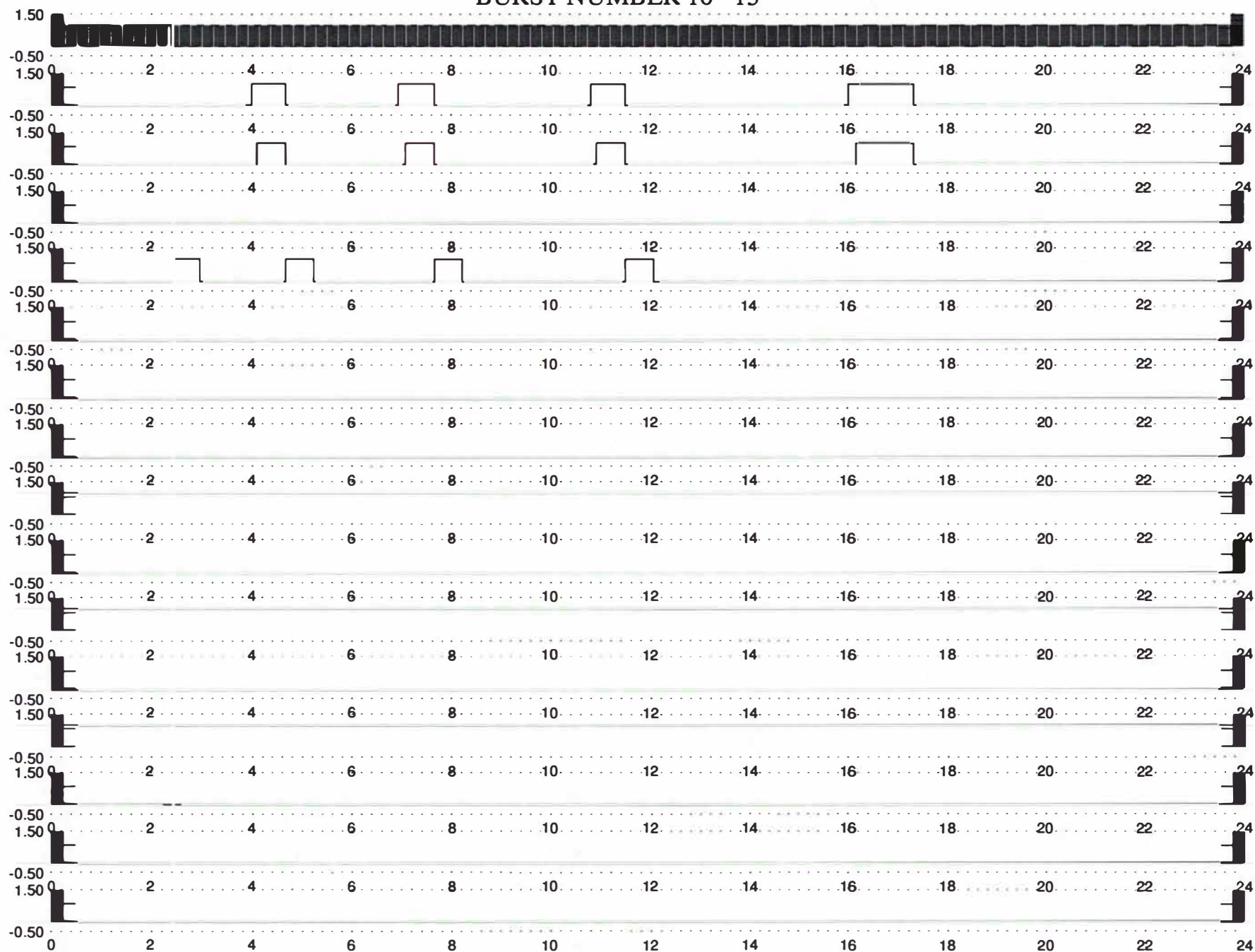
Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

HUS MODES EDR day 5, year 1996 to day 5, year 1996
BURST NUMBER 10 - 13

4/1/96

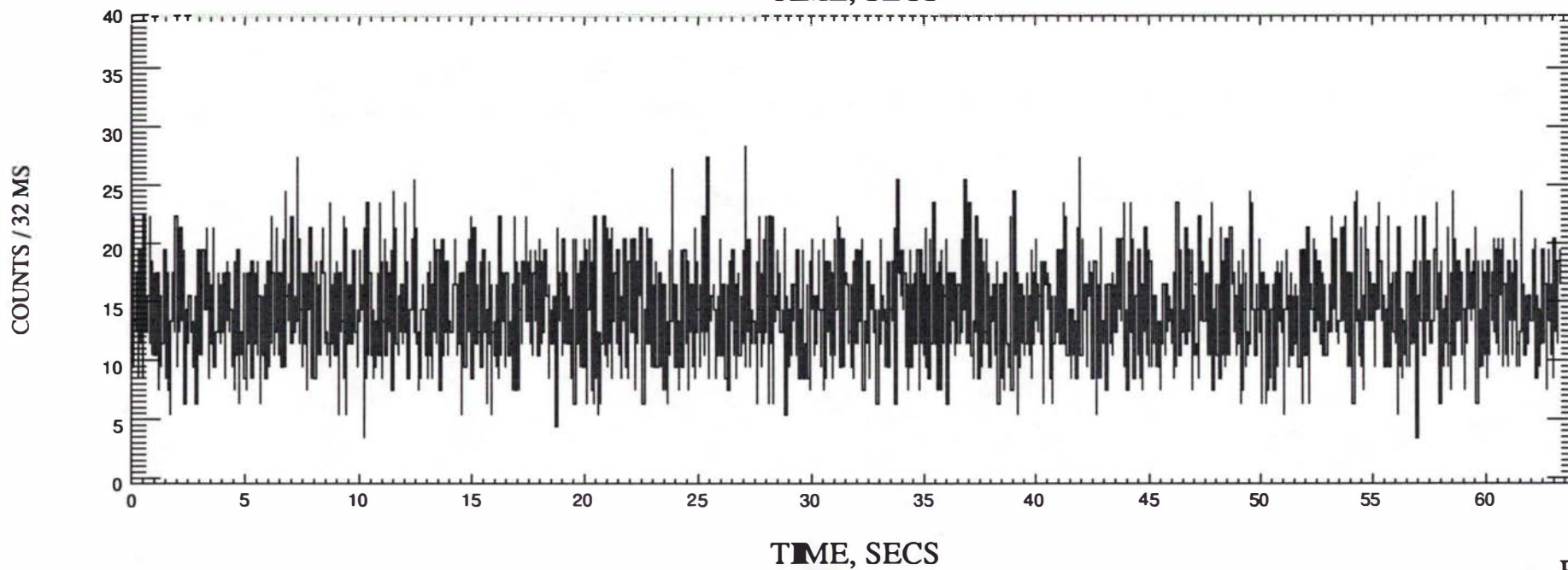
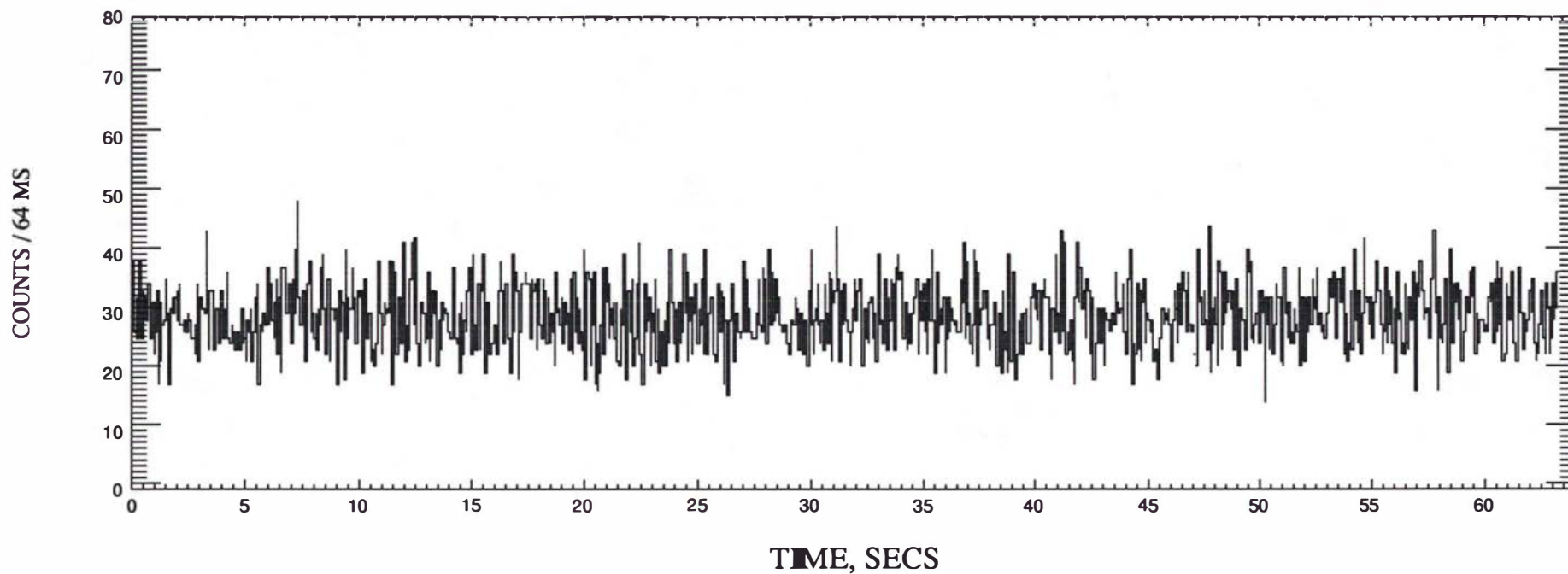
HUS
BRS
MEM
WCH
CAL
RSC
OPM
SPE
ICR
MP.
OSC
DMA
ROM
DMP
CCL
CBU



UNIV 3AL TIME

HUS 2A TRIGGERED DATA EDR day 5, year 1996
Burst Counter 10 at UT= 3.931398777432 h=14153.036 s 03:55:53.036

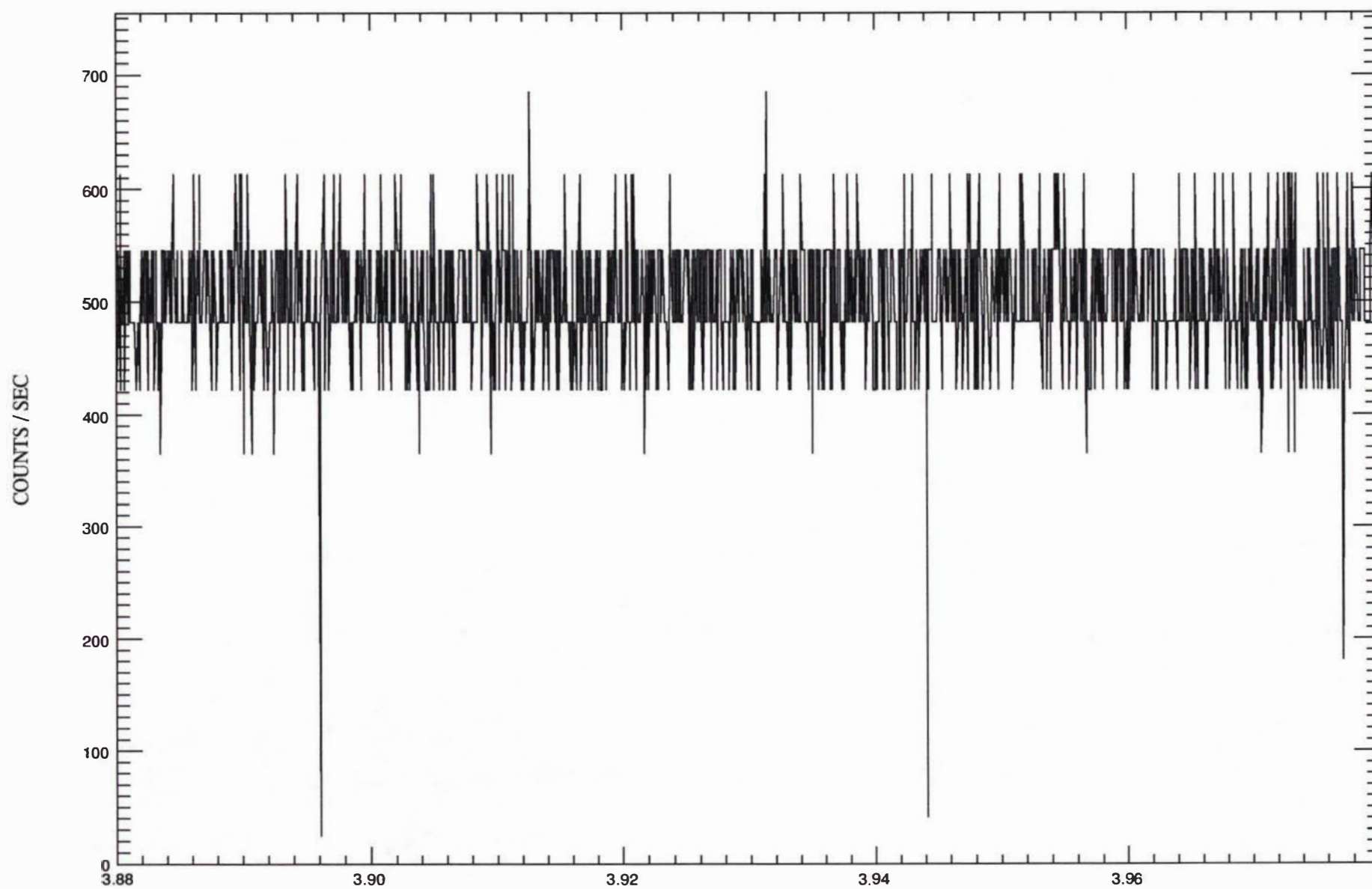
4/1/96



B# 1

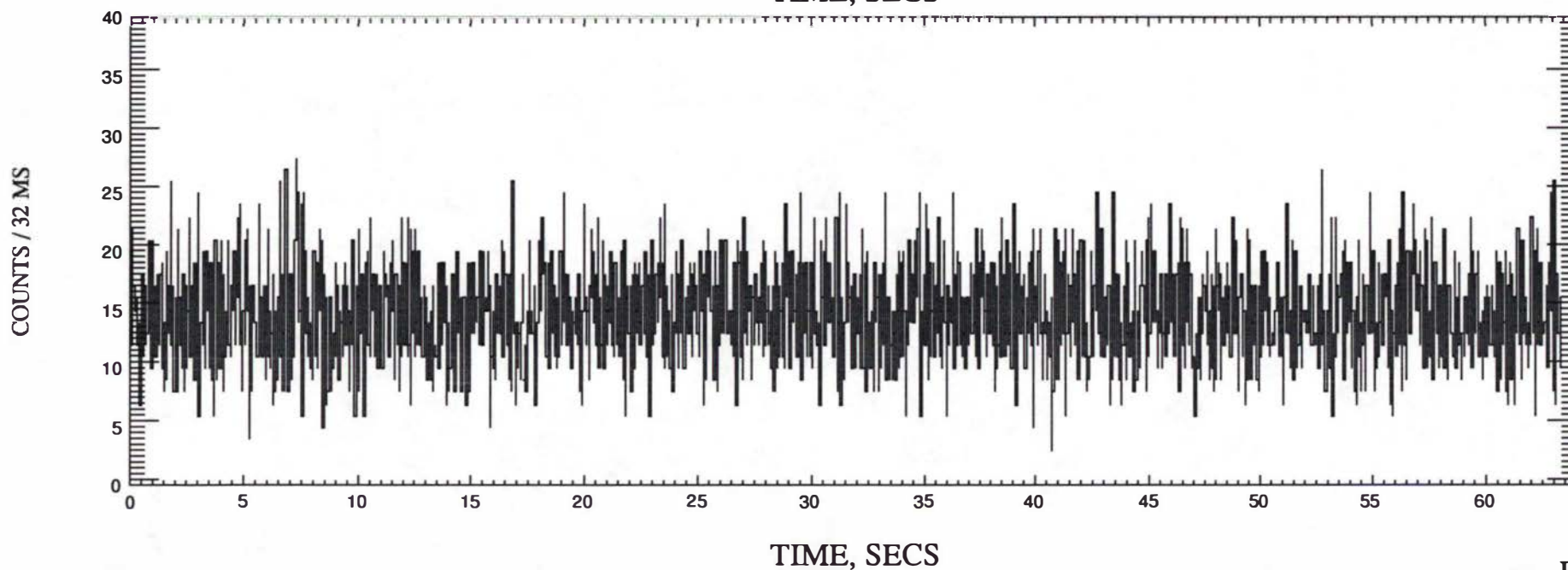
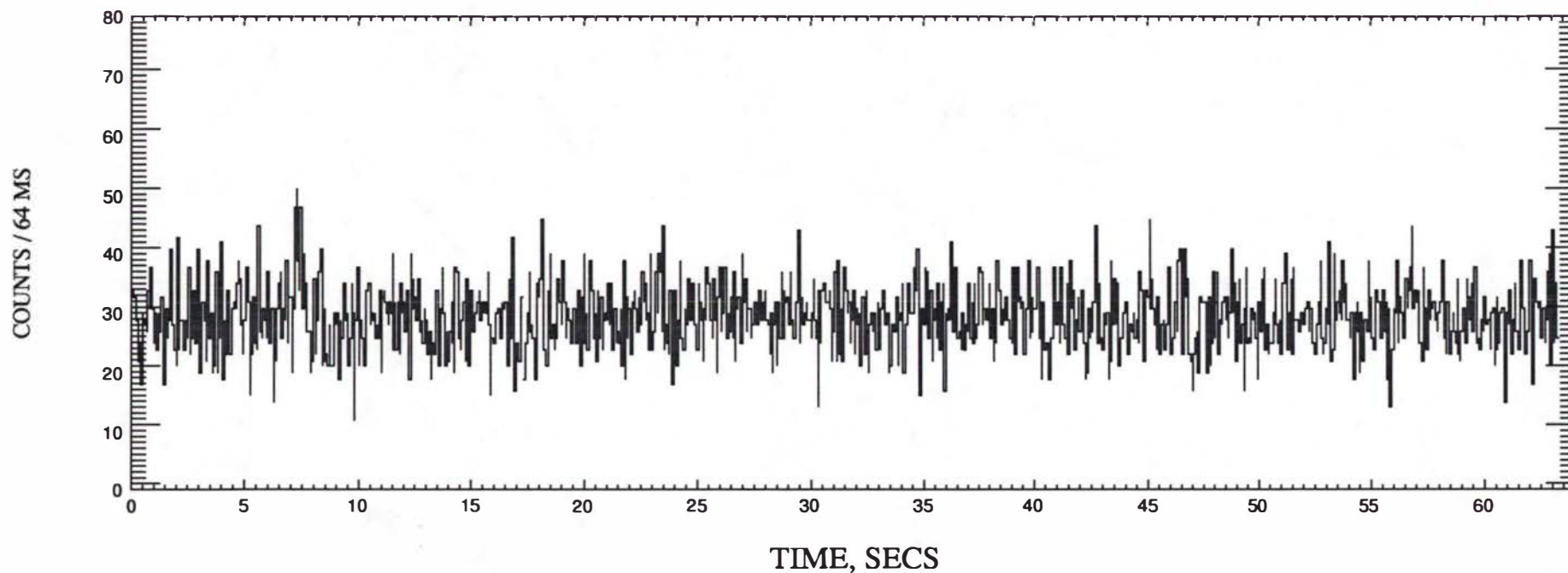
HUS 2A, MODE 1, NOT AVERAGED QEDR day 5, year 1996 to day 5, year 1996
CALIBRATION DATA INCLUDED

1/8/96



HUS 2A TRIGGERED DATA EDR day 5, year 1996
Burst Counter 11 at UT= 6.954776611328 h=25037.196 s 06:57:17.196

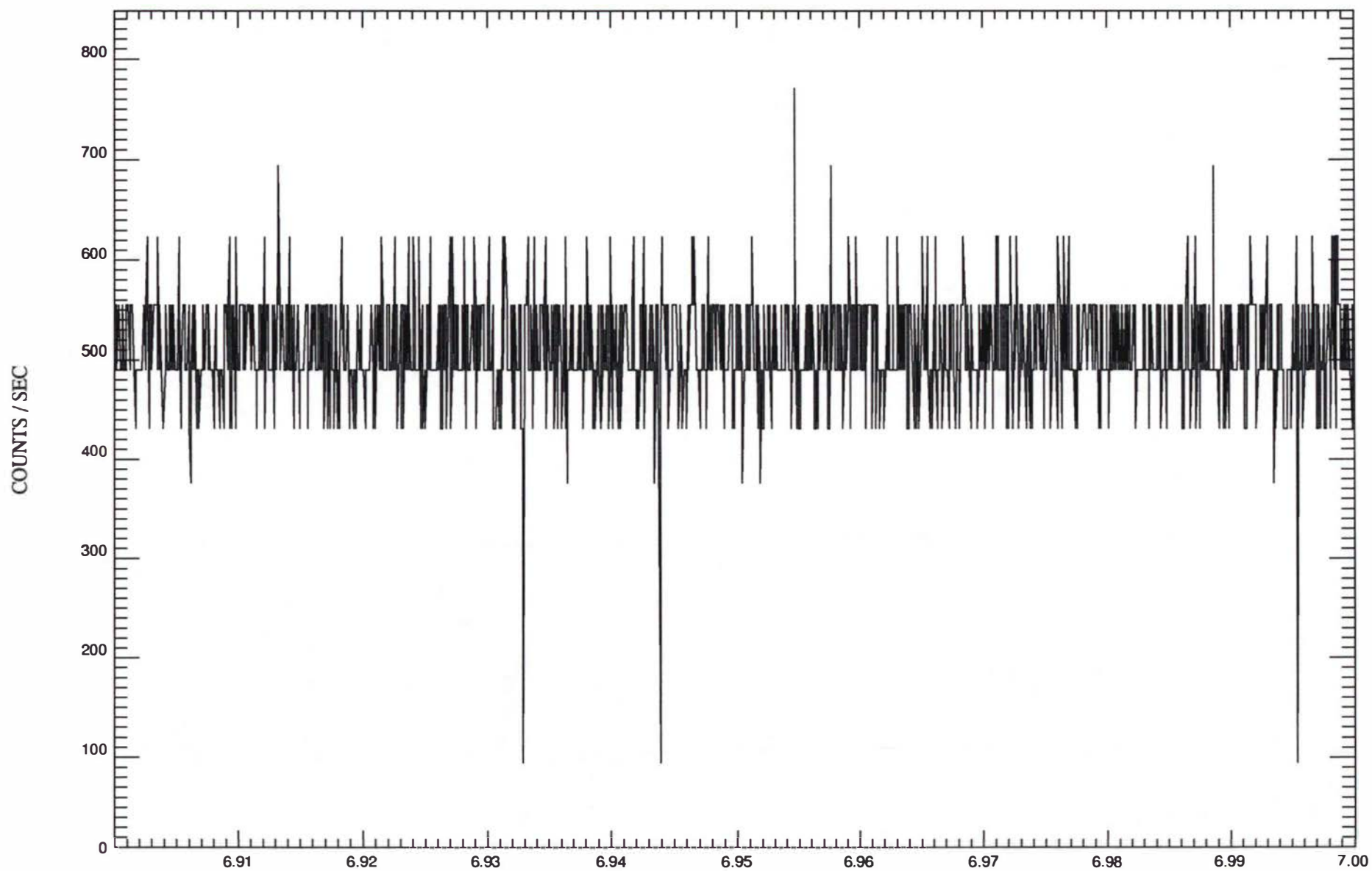
4/1/96



B# 2

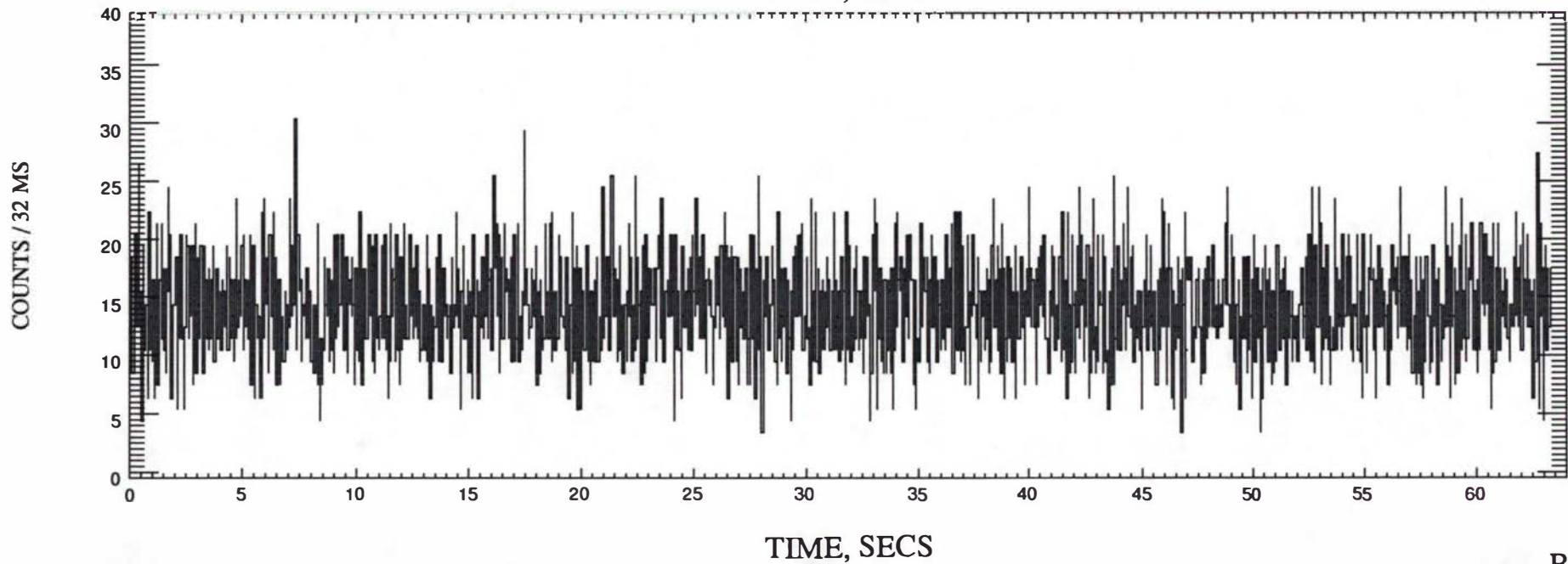
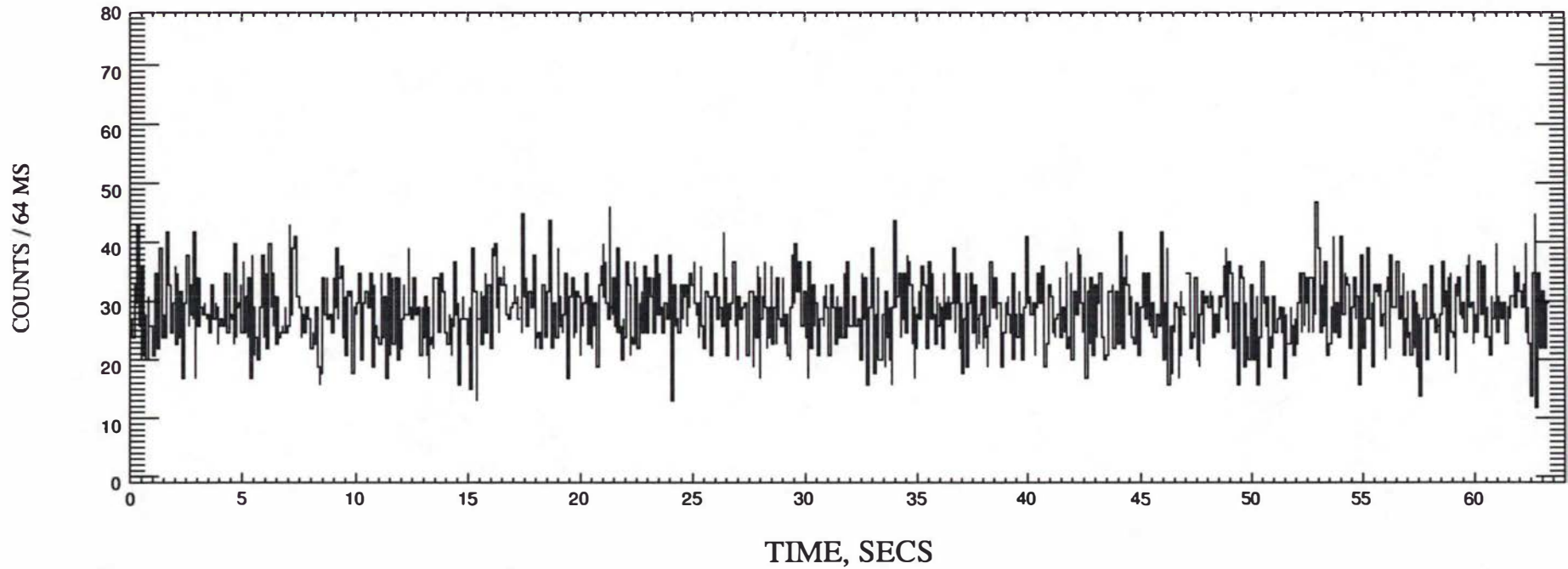
HUS 2A, MODE 1, NOT AVERAGED QEDR day 5, year 1996 to day 5, year 1996
CALIBRATION DATA INCLUDED

1/8/96



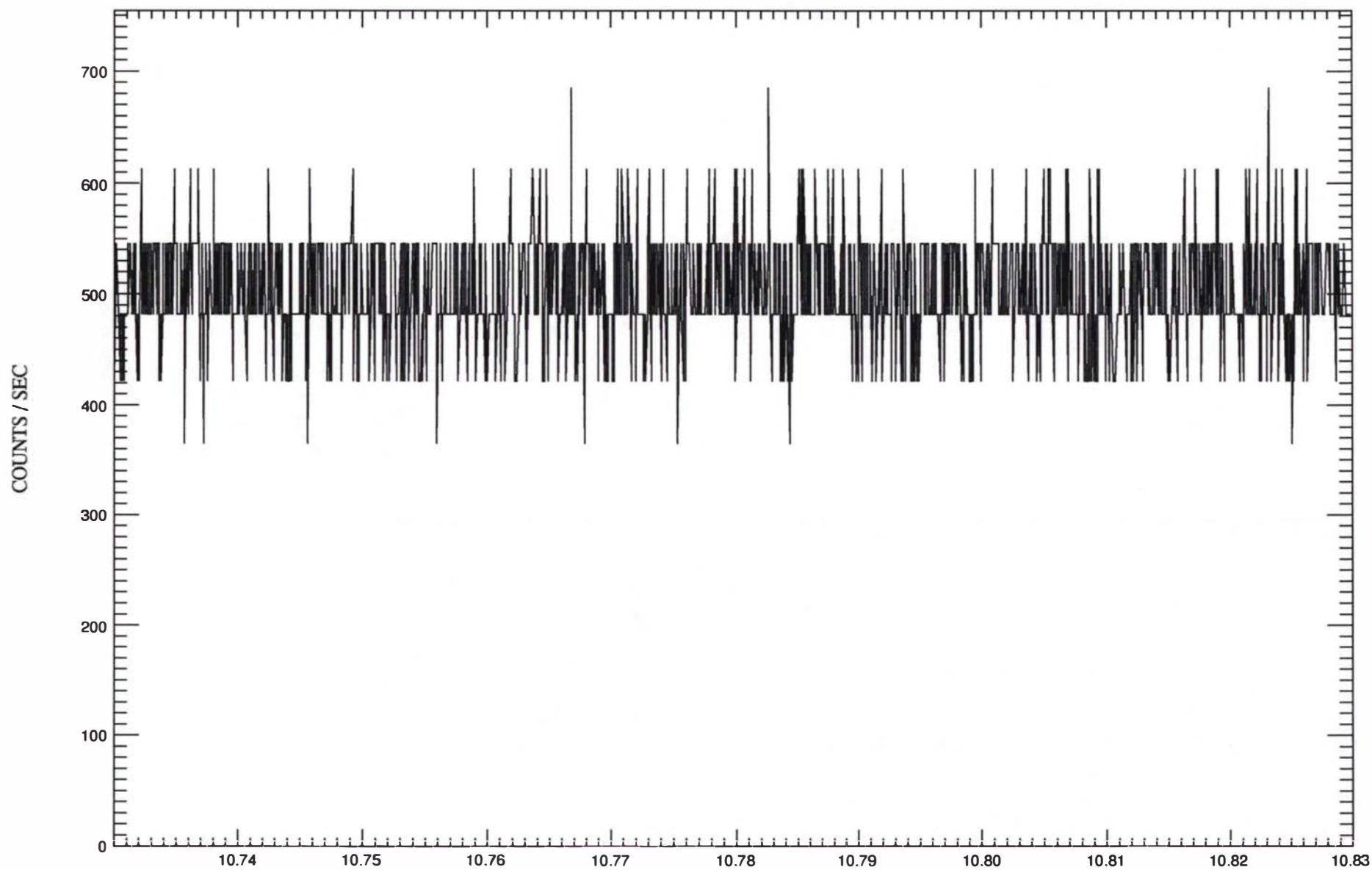
HUS 2A TRIGGERED DATA EDR day 5, year 1996
Burst Counter 12 at UT=10.782750494215 h=38817.902 s 10:46:57.902

4/1/96



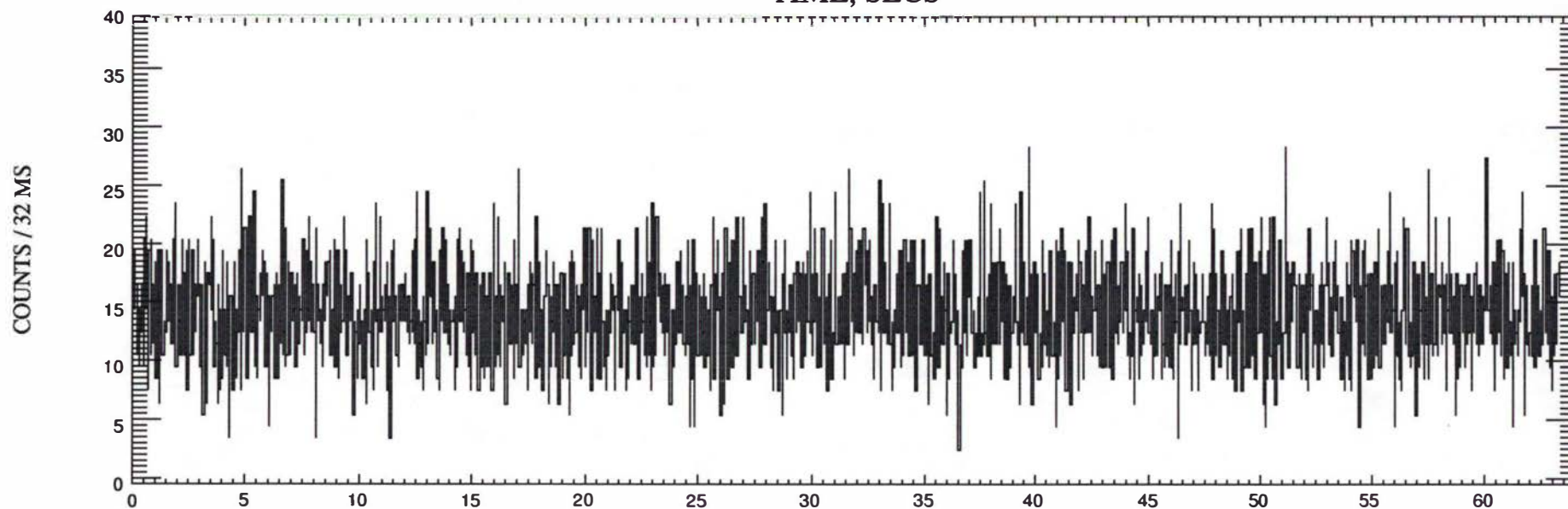
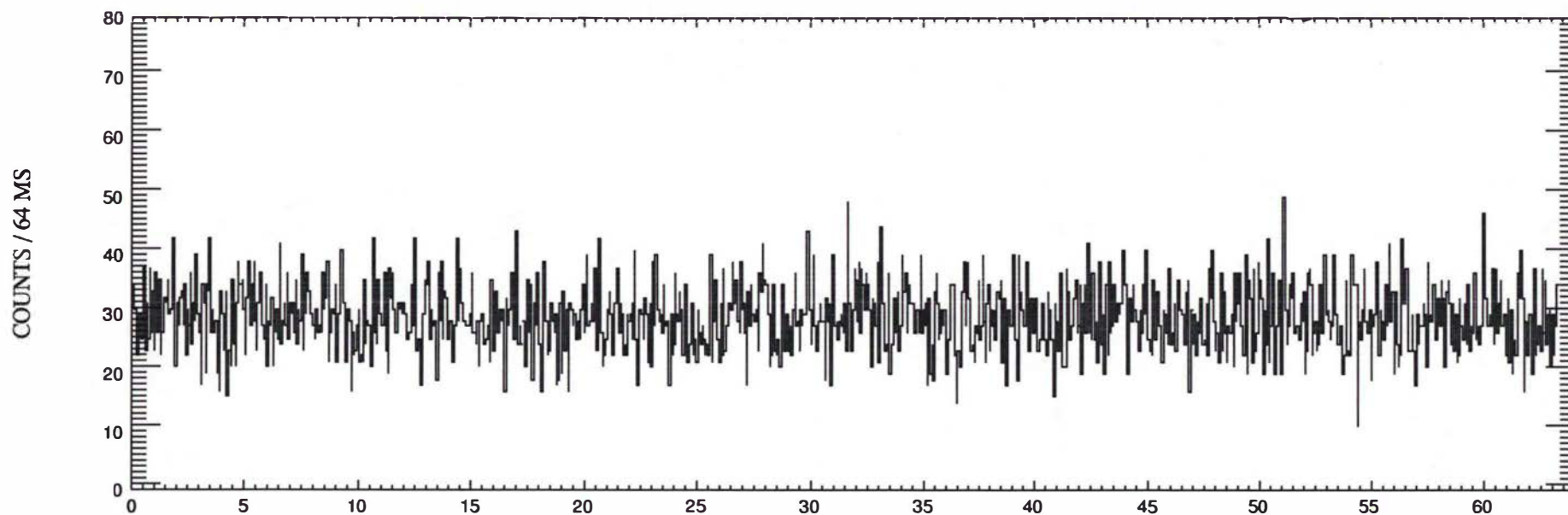
HUS 2A, MODE 1, NOT AVERAGED QEDR day 5, year 1996 to day 5, year 1996
CALIBRATION DATA INCLUDED

1/8/96



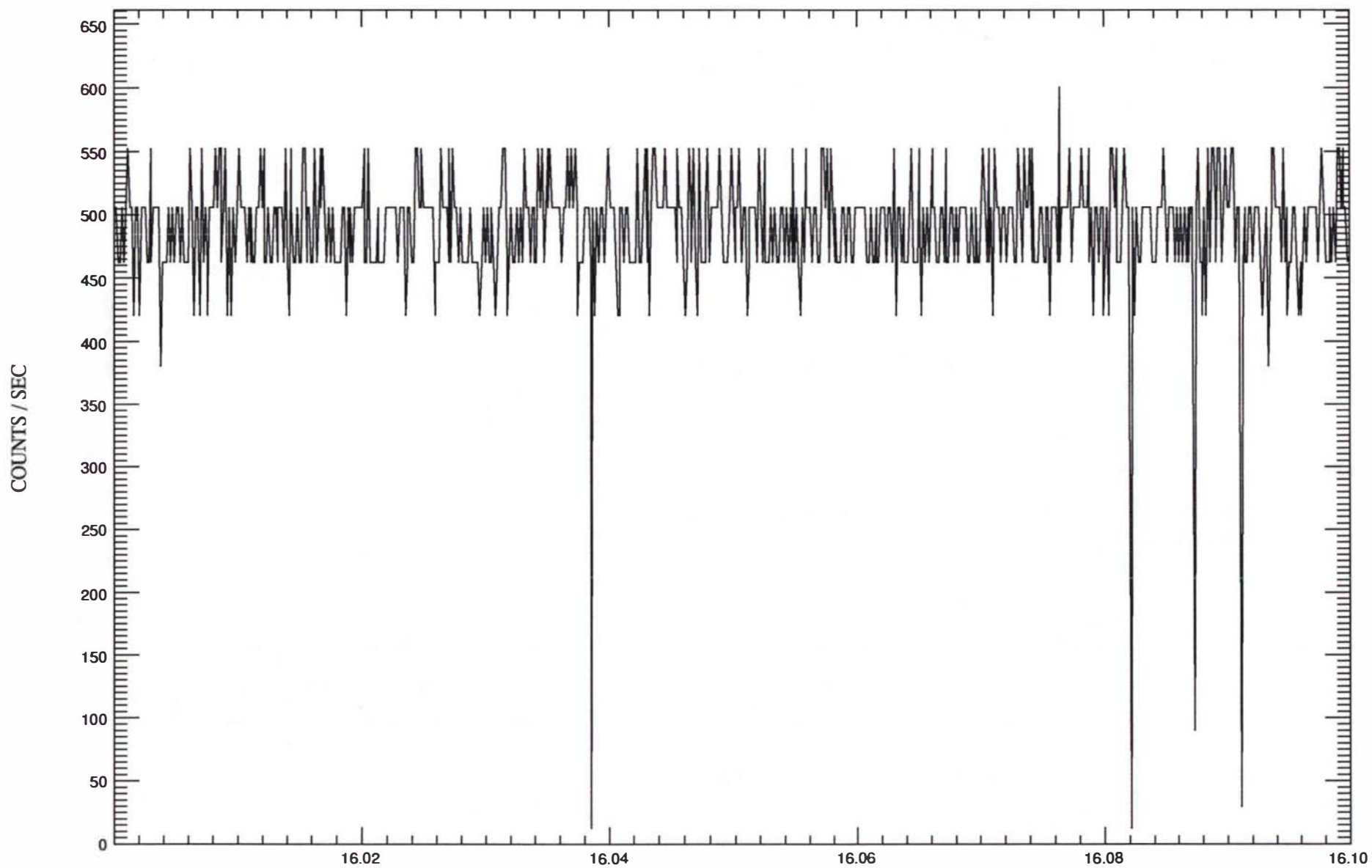
HUS 2A TRIGGERED DATA EDR day 5, year 1996
Burst Counter 13 at UT=16.050465405782 h=57781.675 s 16:03:01.675

4/1/96



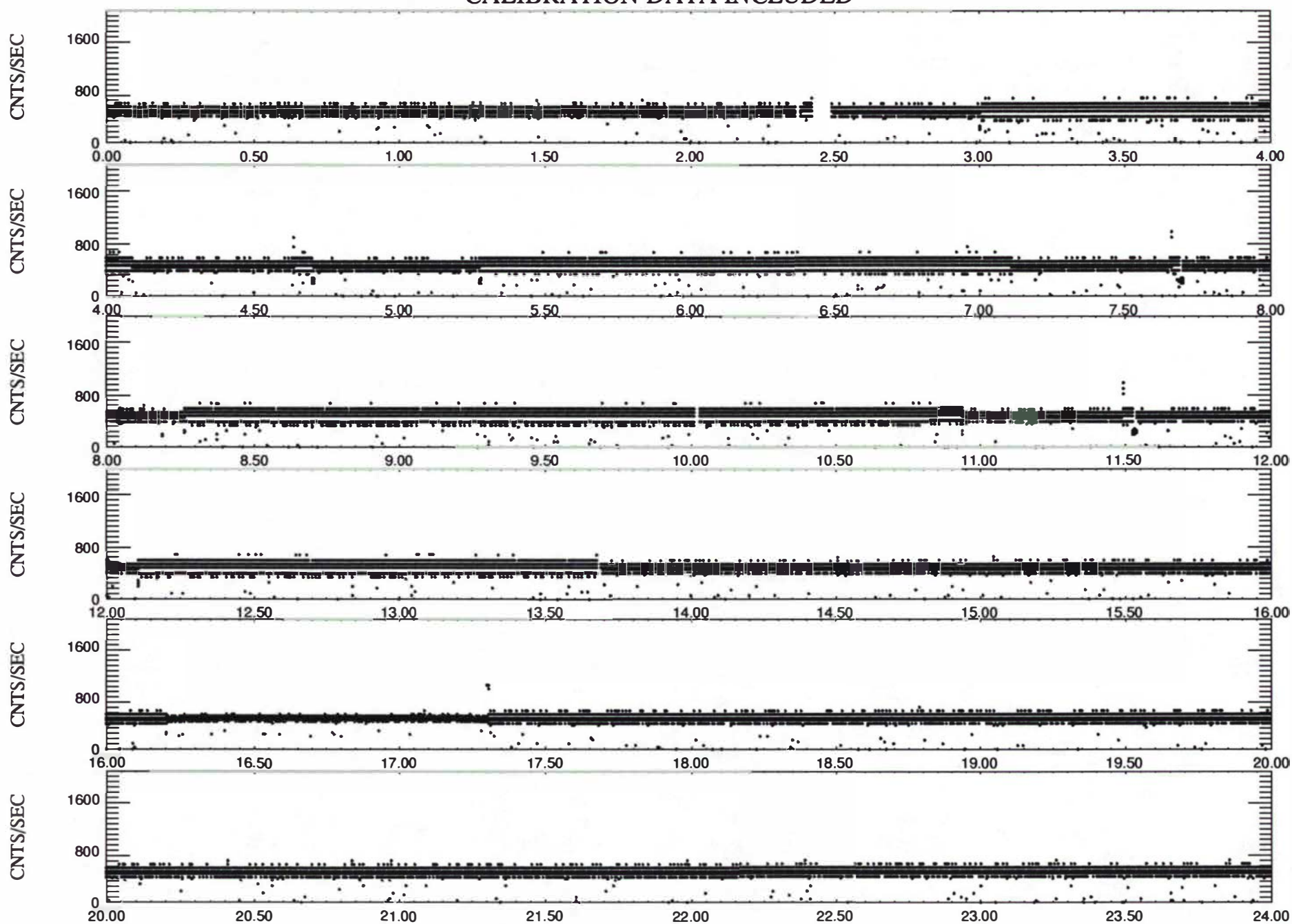
HUS 2A, MODE 1, NOT AVERAGED QEDR day 5, year 1996 to day 5, year 1996
CALIBRATION DATA INCLUDED

1/8/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 5, year 1996 to day 5, year 1996
CALIBRATION DATA INCLUDED

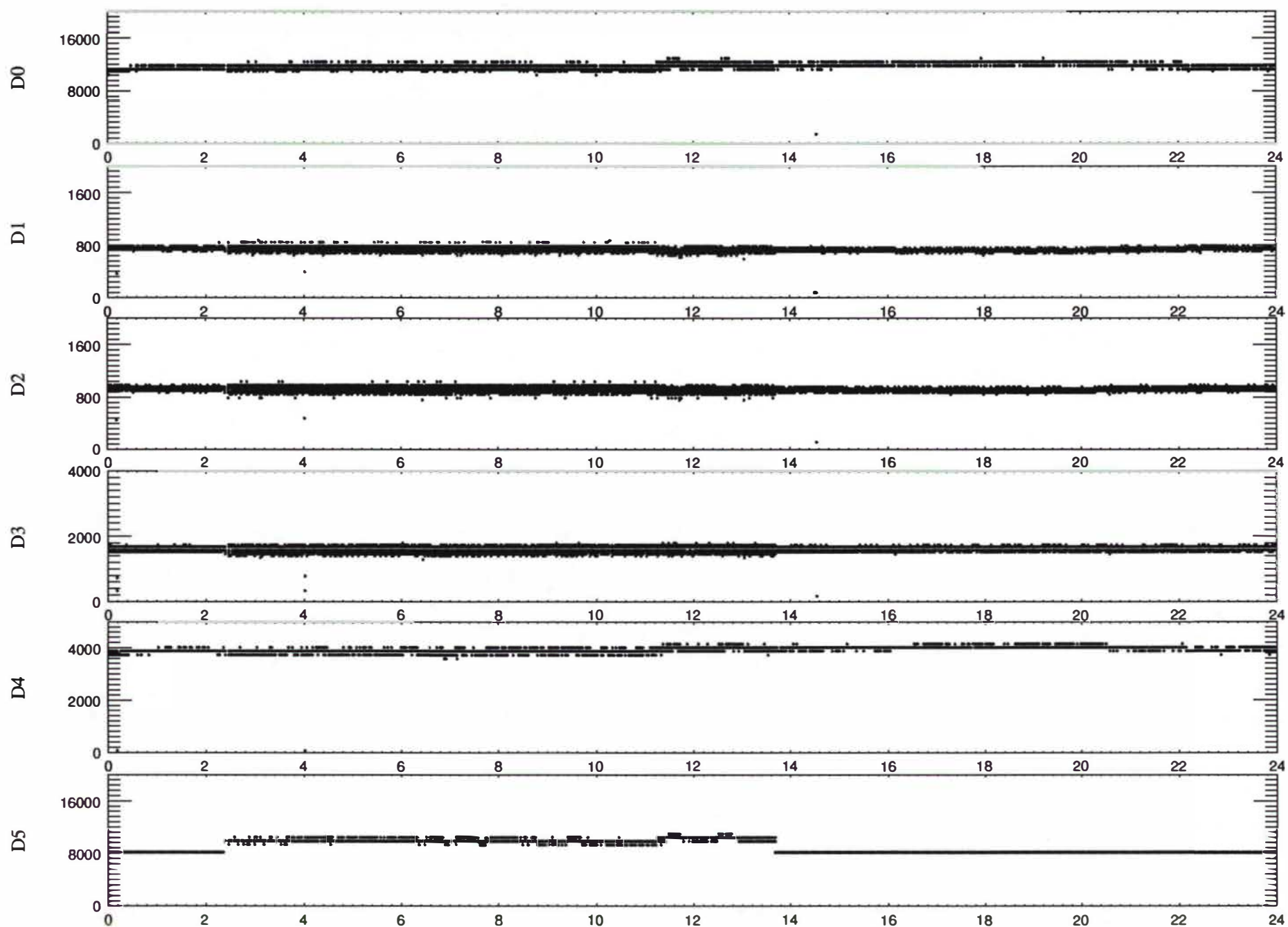
4/1/96



UNIV. TIME

HUS 2B COUNTS / SEC QEDR day 5, year 1996 to day 5, year 1996

1/8/96



UNIVERSAL TIME

BATSE BURST TRIGGER

NO.: 4245

A

TIME: TJD=0088 SECONDS=6831

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4246

B

TIME: TJD=0088 SECONDS=20670

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4247

B C

TIME: TJD=0088 SECONDS=29986

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4248

TIME: TJD=0088 SECONDS=39636

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

Galactic Center Source occultation rising step

From DEAL@SSLLES.MSFC.NASA.GOV Tue Jan 9 06:49 PST 1996
From: DEAL@SSLLES.MSFC.NASA.GOV
Date: Tue, 9 Jan 1996 8:48:48 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4249

TIME: TJD=0088 SECONDS=47482

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From DEAL@SSLLES.MSFC.NASA.GOV Tue Jan 9 06:51 PST 1996
From: DEAL@SSLLES.MSFC.NASA.GOV
Date: Tue, 9 Jan 1996 8:50:59 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4250

TIME: TJD=0088 SECONDS=51974

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From DEAL@ssl.msfc.nasa.gov Tue Jan 9 07:09 PST 1996
Date: Tue, 9 Jan 1996 9:09:02 -0600 (CST)
From: DEAL@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4251

BATSEARCH PROGRAM

BATSE BURST # 4251
EVENT OF 1996 JAN 6 DAY OF YEAR= 6
EVENT CROSSING TIME AT BATSE : 61510. S. OR 17:05:10.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 8.000 36.000
BATSE PEAK COUNTING RATE: 1600 C/S

RI
No - too weak

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 1/ 96 IS:
RA= 225.466 DEC= 61.548 DIST= 2.811 AU
BATSE-ULYSSES DISTANCE = 420517662. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=102.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -295.77 SECS.
CROSSING TIME AT ULYSSES IS 61214. S. OR 17:00:14 +/- 283.56 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 1/ 96 IS:
RA= 300.407 DEC= -21.605 DIST= 2.335 AU
MARS-BATSE DISTANCE = 349348128. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 94.03 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -81.90 SECS.
CROSSING TIME AT MARS IS 61428. S. OR 17:03:48 +/- 200.57 SECONDS

BATSE BURST TRIGGER

NO.: 4251

TIME: TJD=0088 SECONDS=61510

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=109.4 AZIMUTH=199.3 ERROR=6.2 DEGREES

COMMENTS:

BURST LASTING ~ 20 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4251	960106	10088	61510	1600	008	+36	20

ULYSSES RT

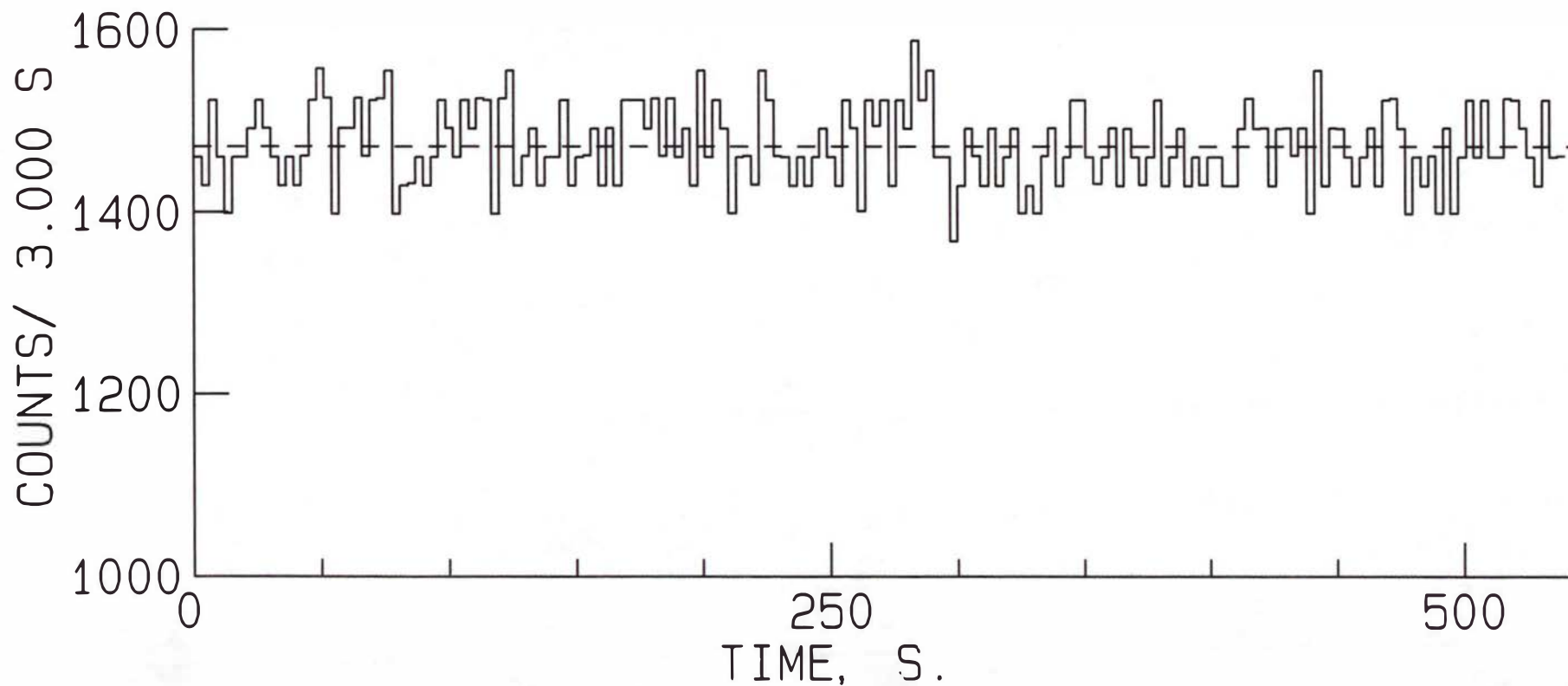
12 / 1 / 96

6 / 1 / 96 60948.150 s

1.000 S INTERVALS REGROUPED BY 3

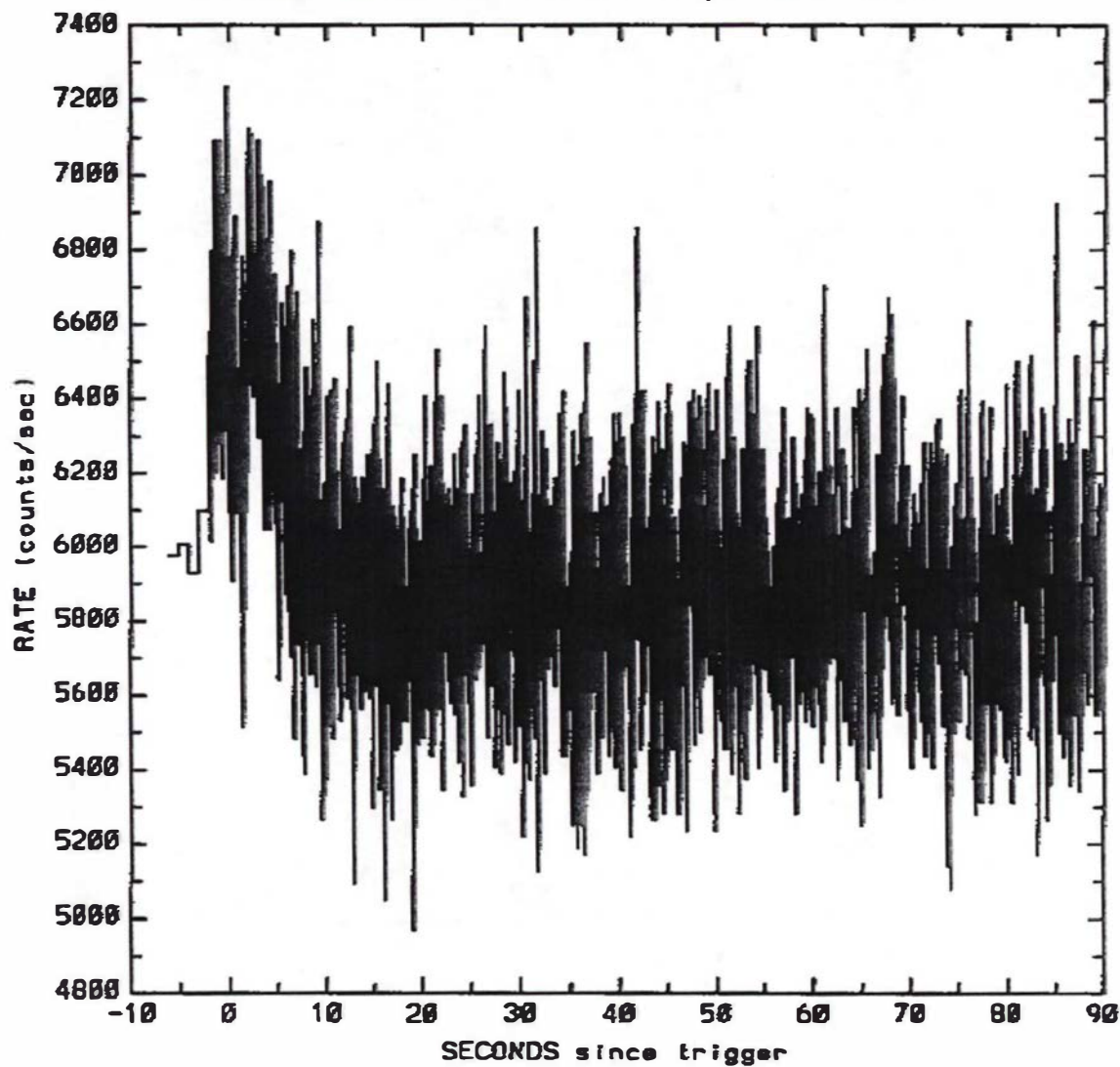
21- 141 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



Jan 6 1996

DISCSC Data for K. Hurley. No. 4251



12-JAN-1996 11:52:37

Created by NOPS 80
(Burst Display)
Version 12.25

Trigger # : 4251

Trigger Time:
10000 / 61510.346

Burst Data Type:
DISCSC

Deadtime
Corrected: N

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
0.064 second(s)

Detectors [7..8].
76-----

Discriminators:
[1 , 2]

Quality Mask:
BDISPT

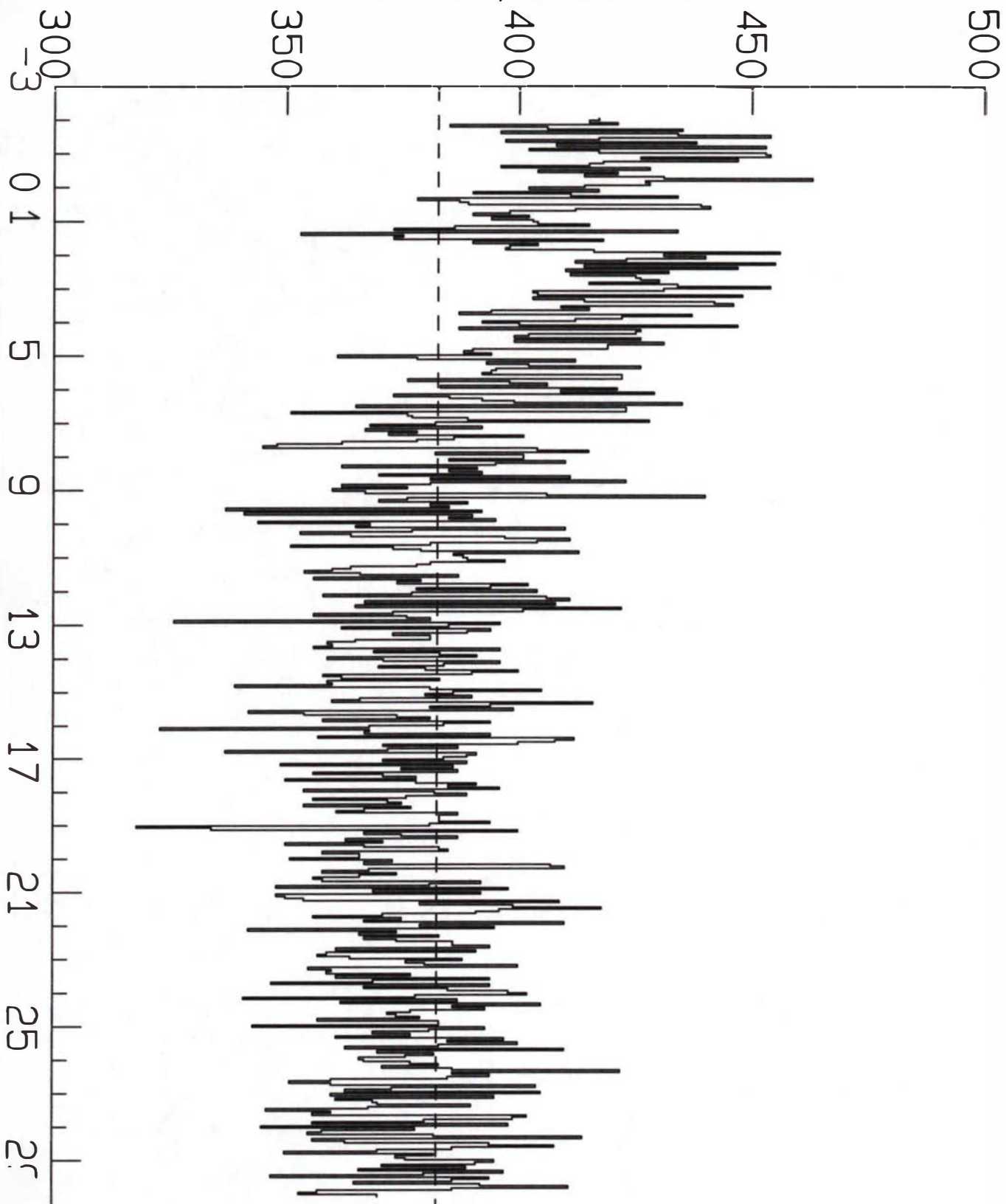
BATSE

06/01/96

61510.346

25- 100 keV

COUNTS/0.064 S



BATSE BURST TRIGGER

NO.: 4252

TIME: TJD=0088 SECONDS=62738

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4253

TIME: TJD=0088 SECONDS=70996

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4254

TIME: TJD=0088 SECONDS=78991

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

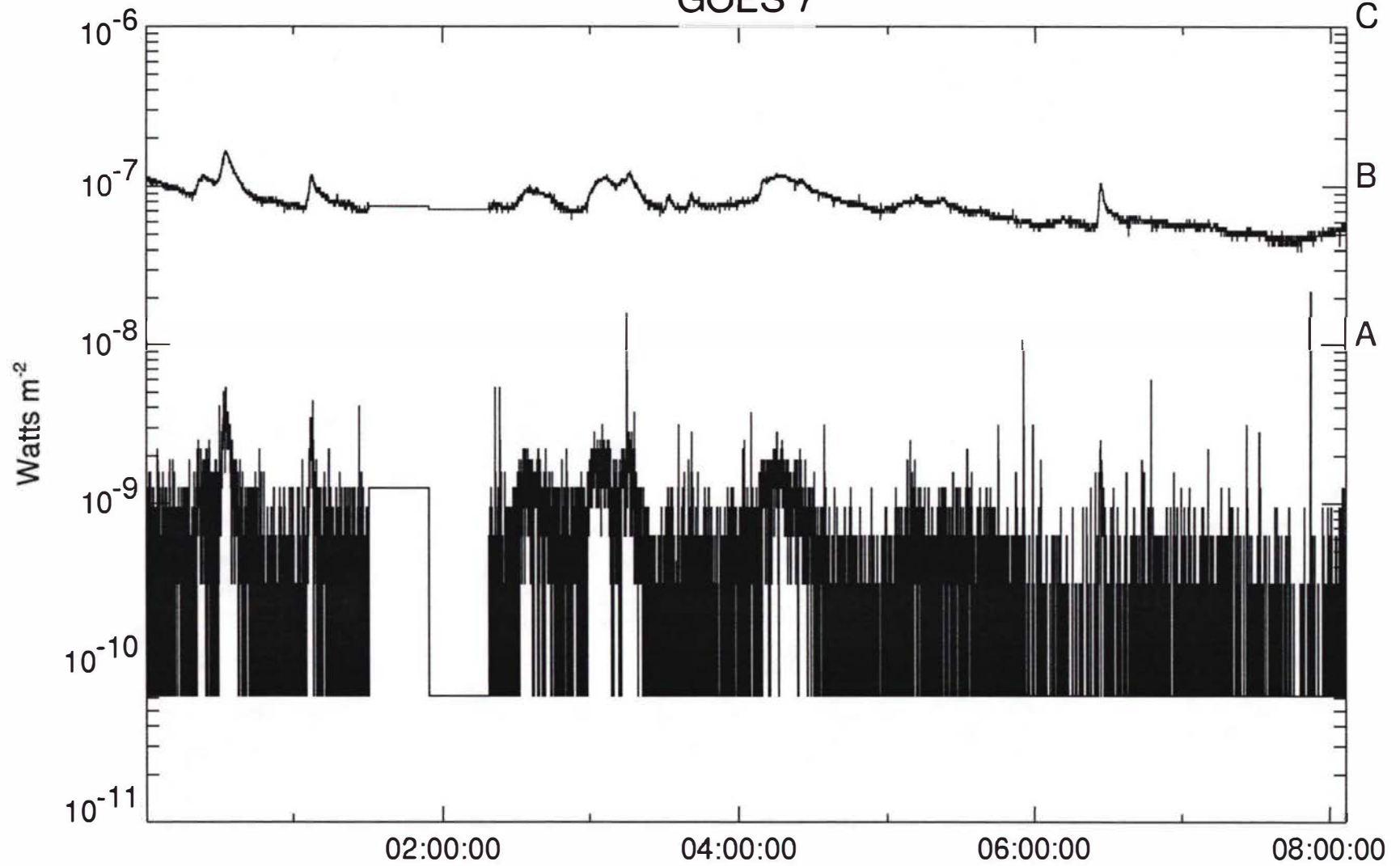
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

GOES 7



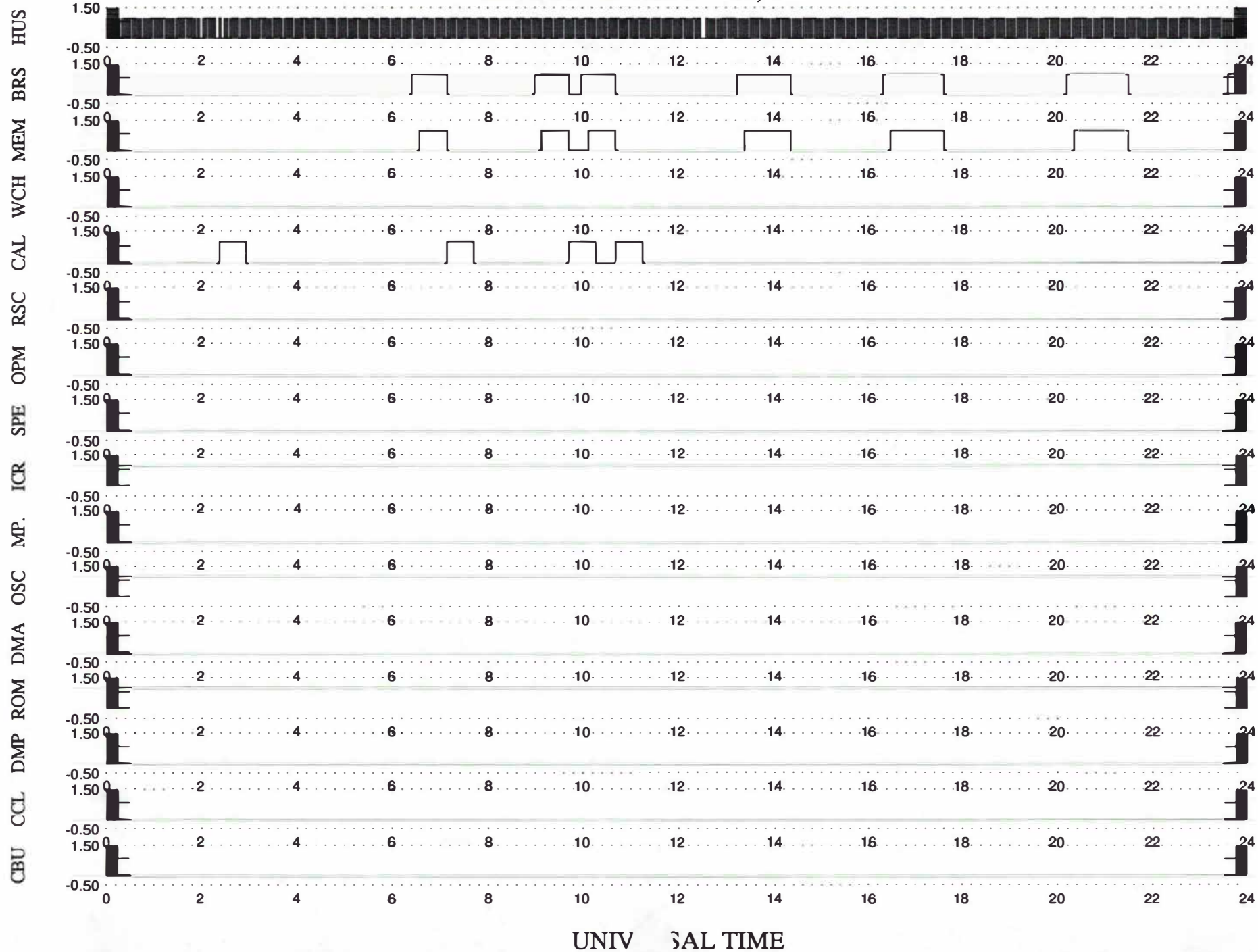
Data Start: 96/01/06, 0000:01

Plot created: 96/01/08, 0654

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

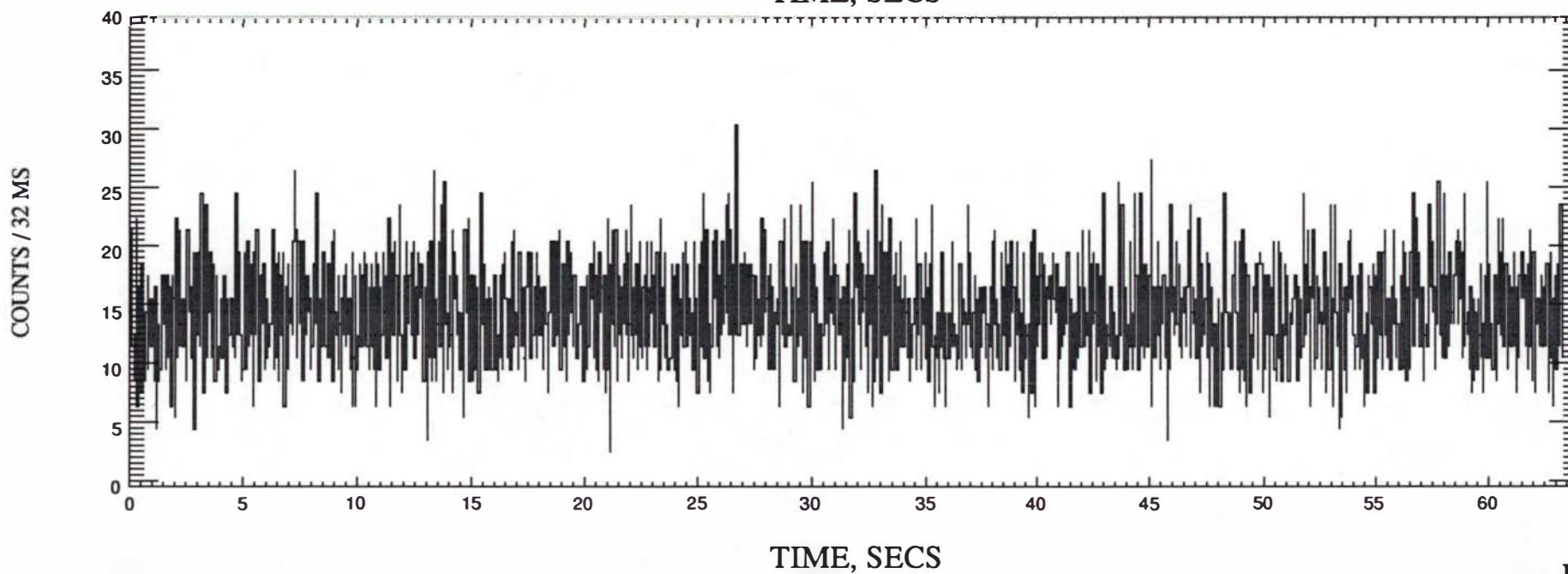
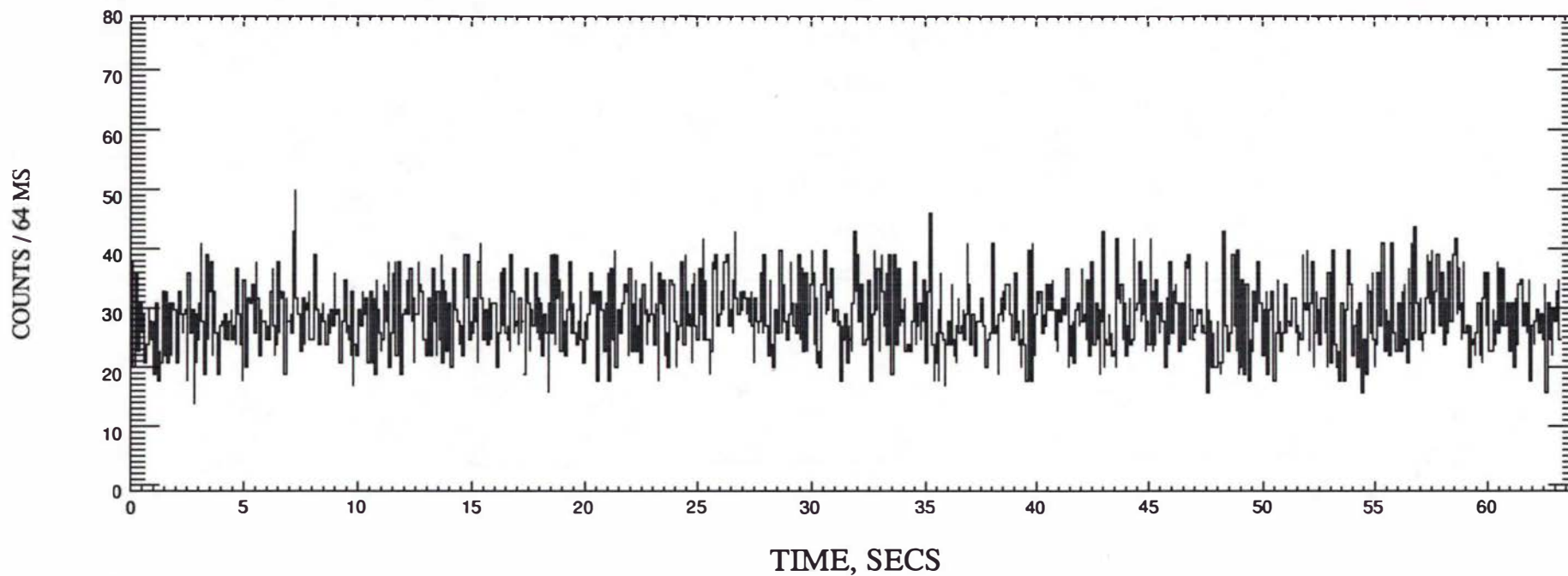
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

4/1/96



HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 14 at UT= 6.417107073466 h=23101.585 s 06:25:01.585

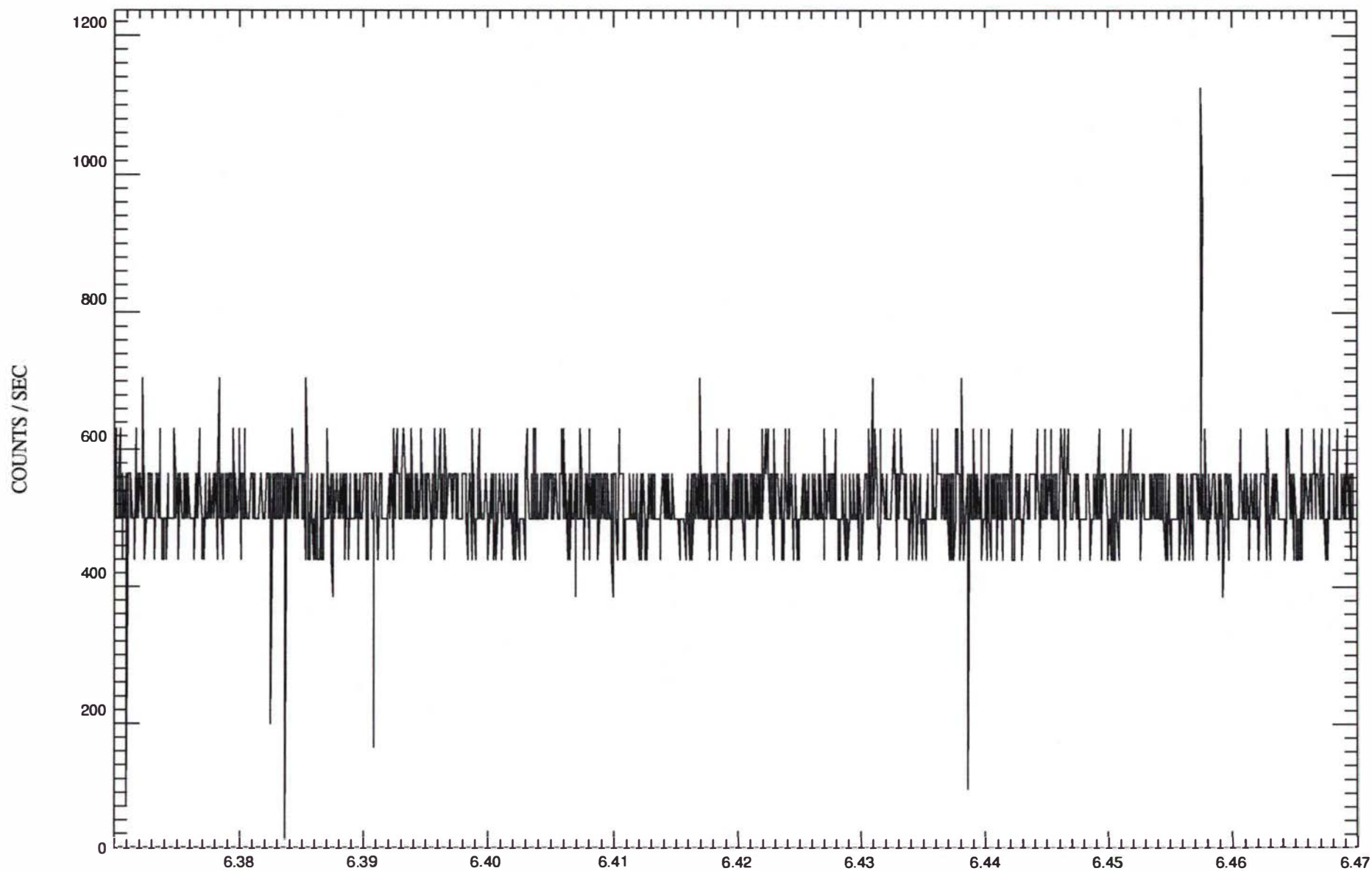
4/1/96



B# 1

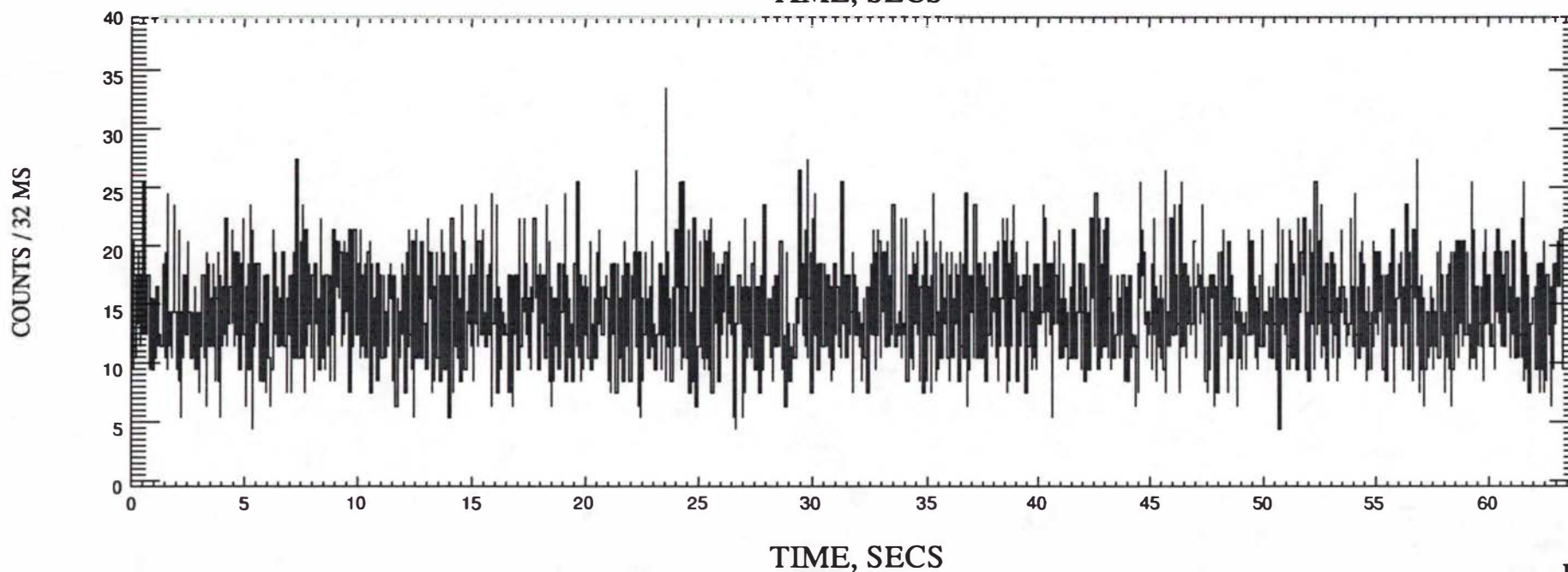
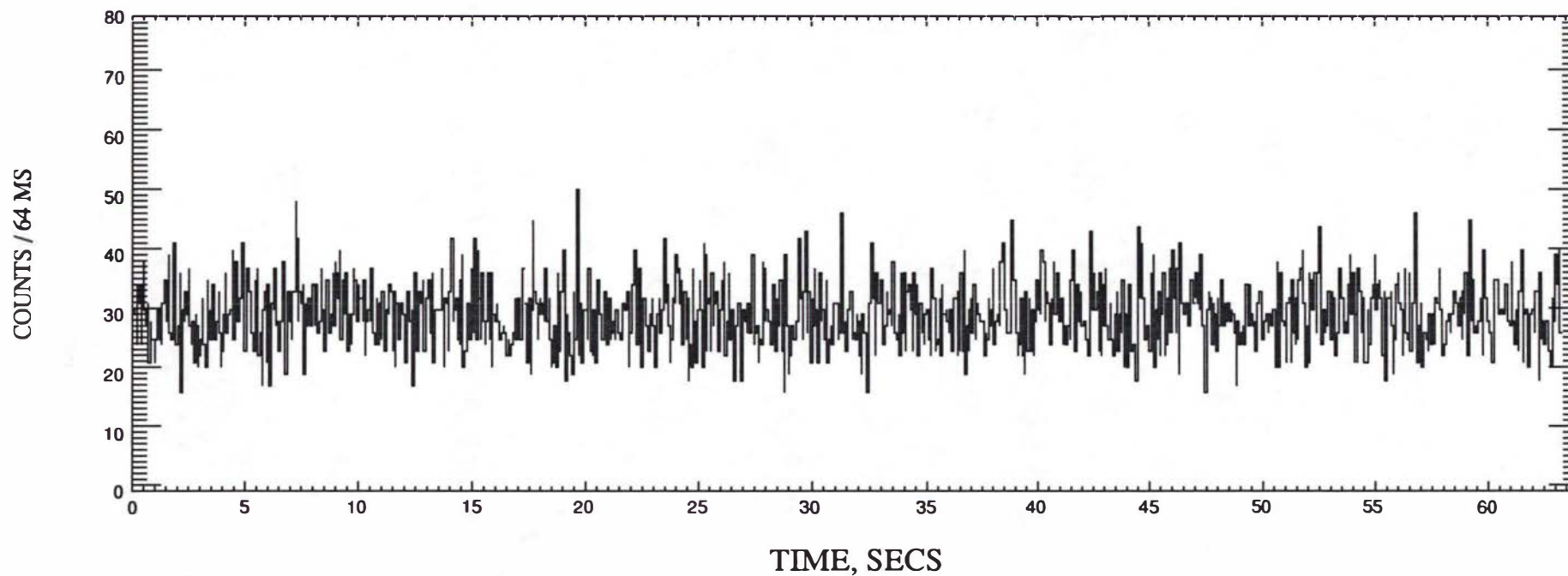
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96



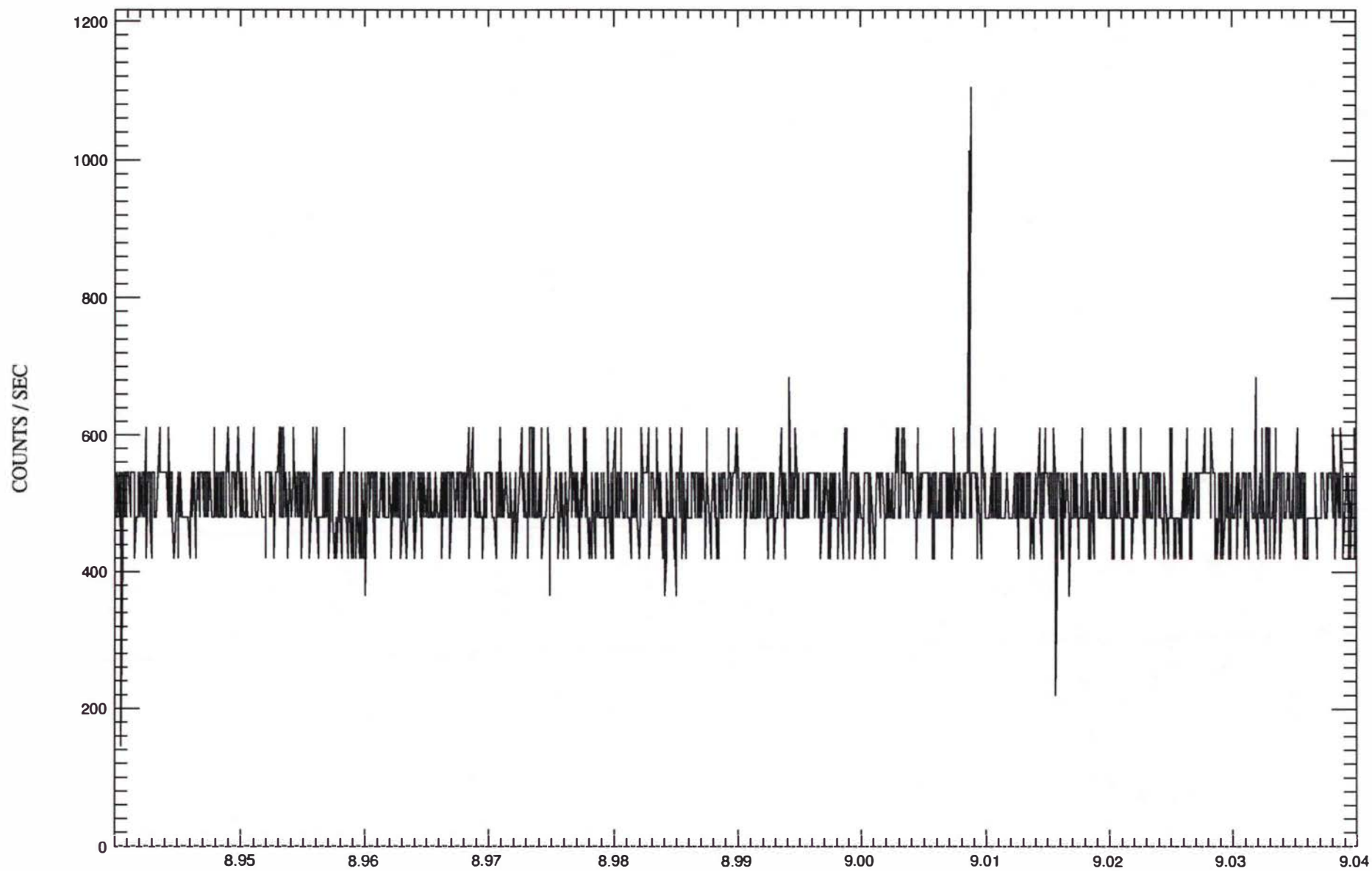
HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 15 at UT= 8.994330546061 h=32379.590 s 08:59:39.590

4/1/96



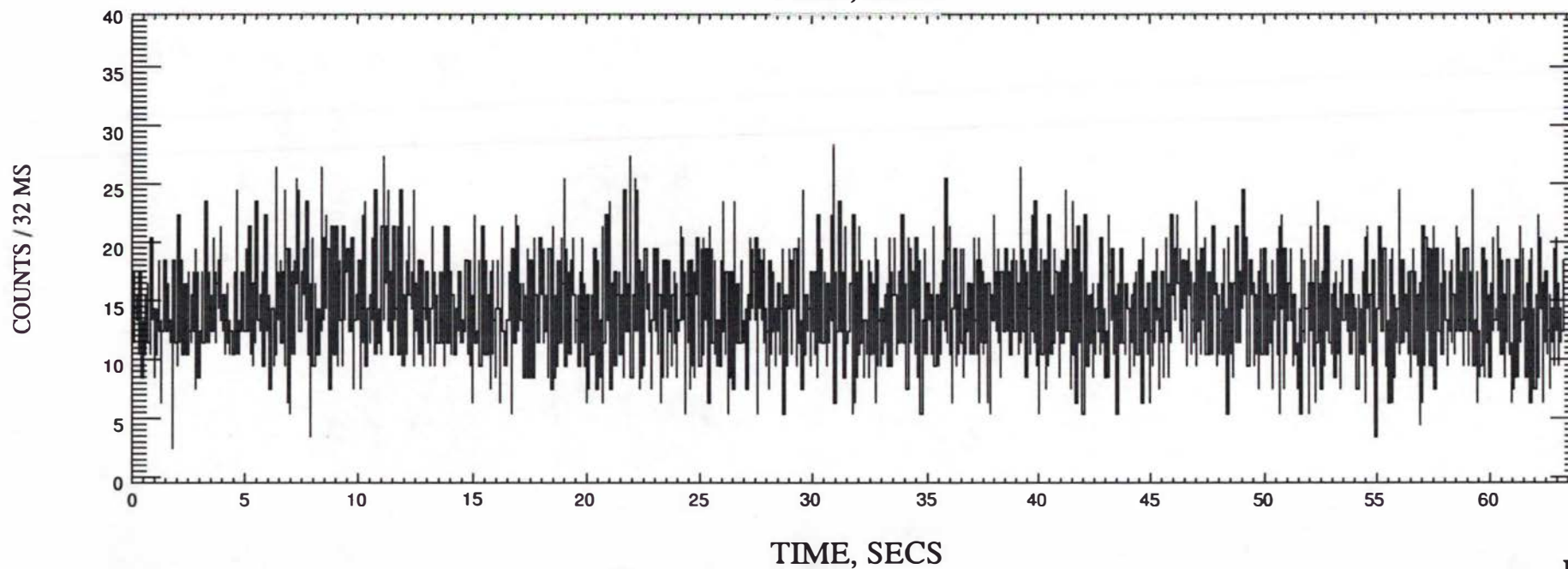
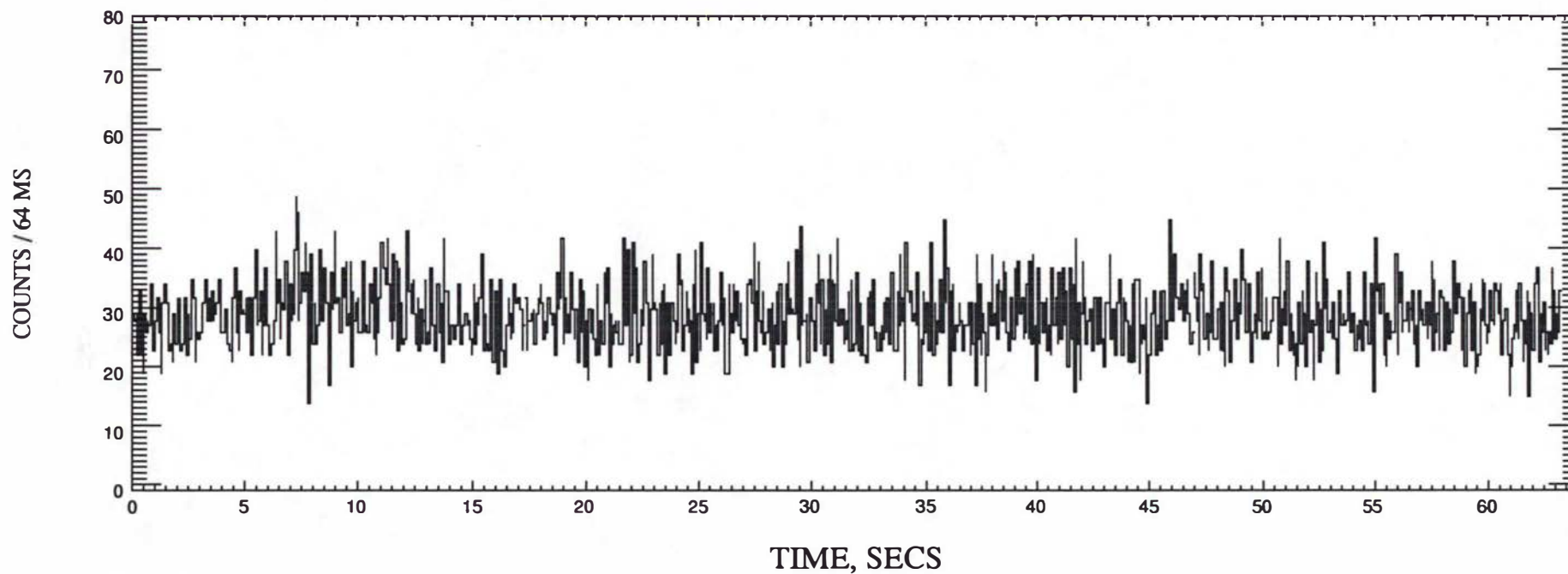
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96



HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 0 at UT= 9.939380103217 h=35781.768 s 09:56:21.768

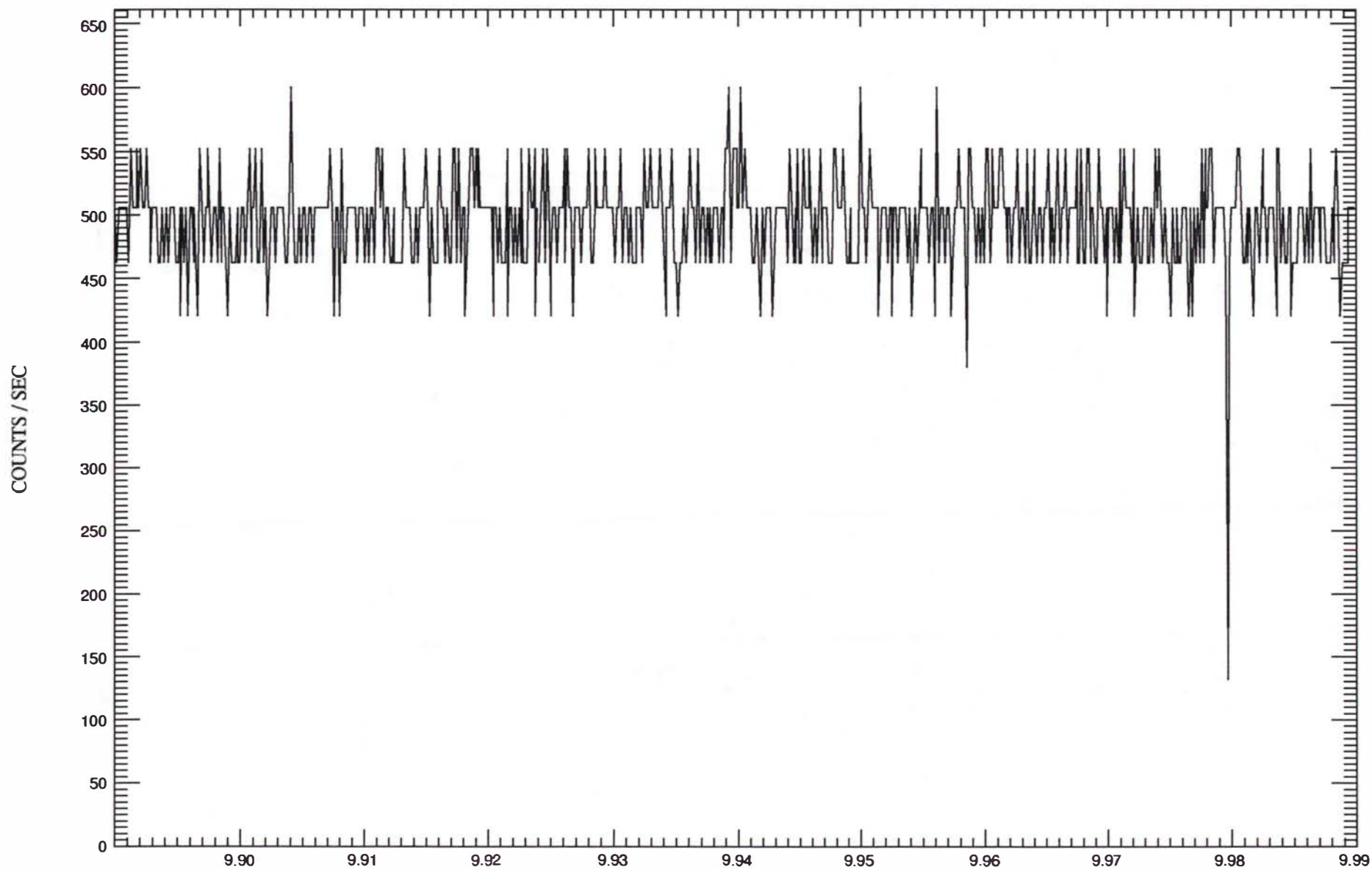
4/1/96



B# 3

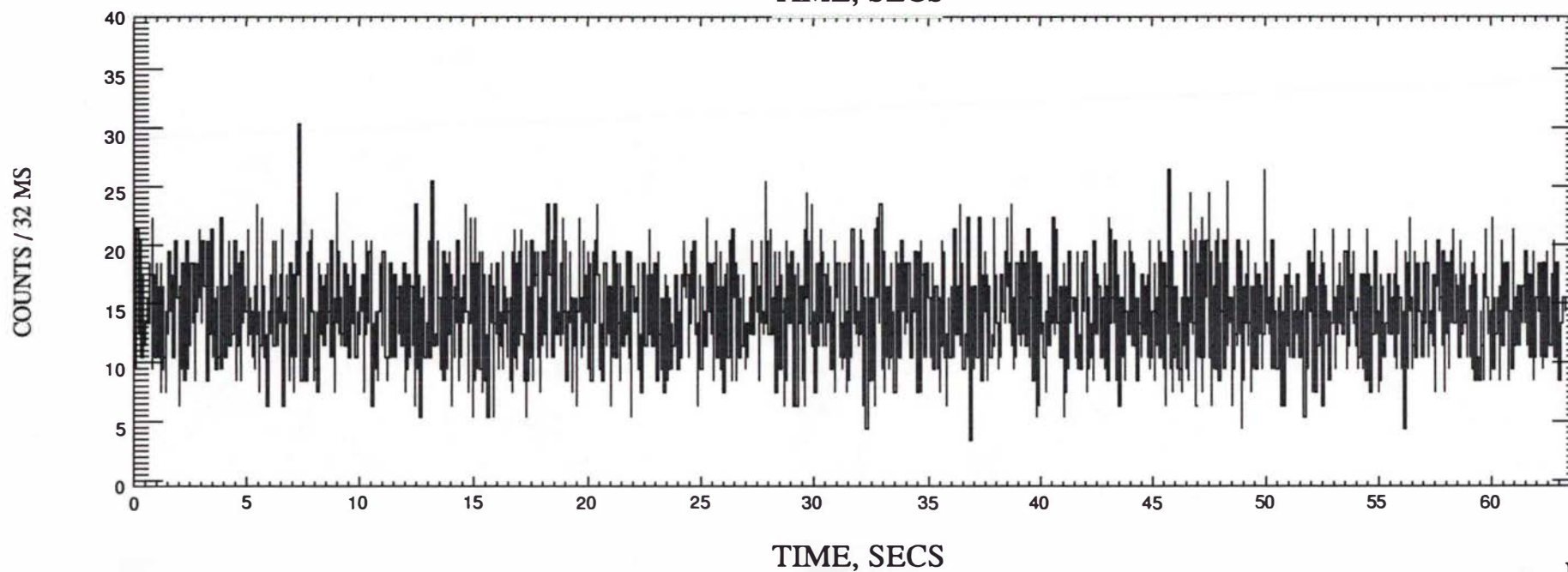
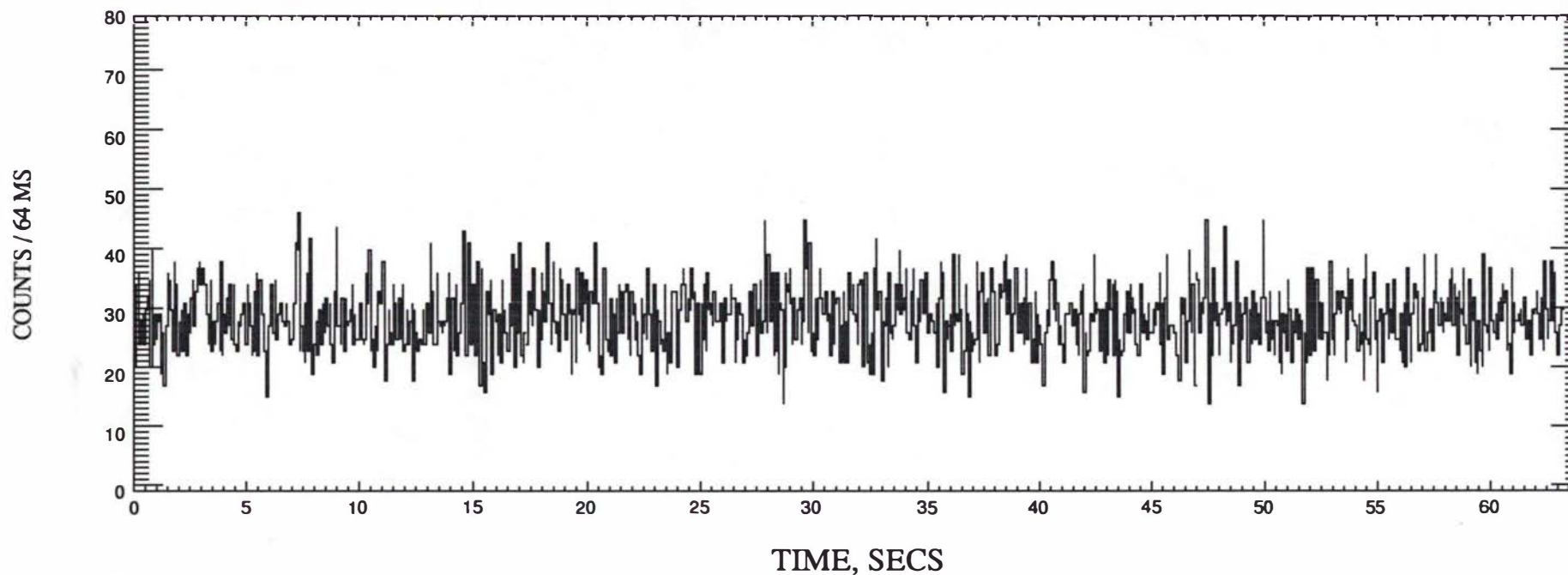
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96



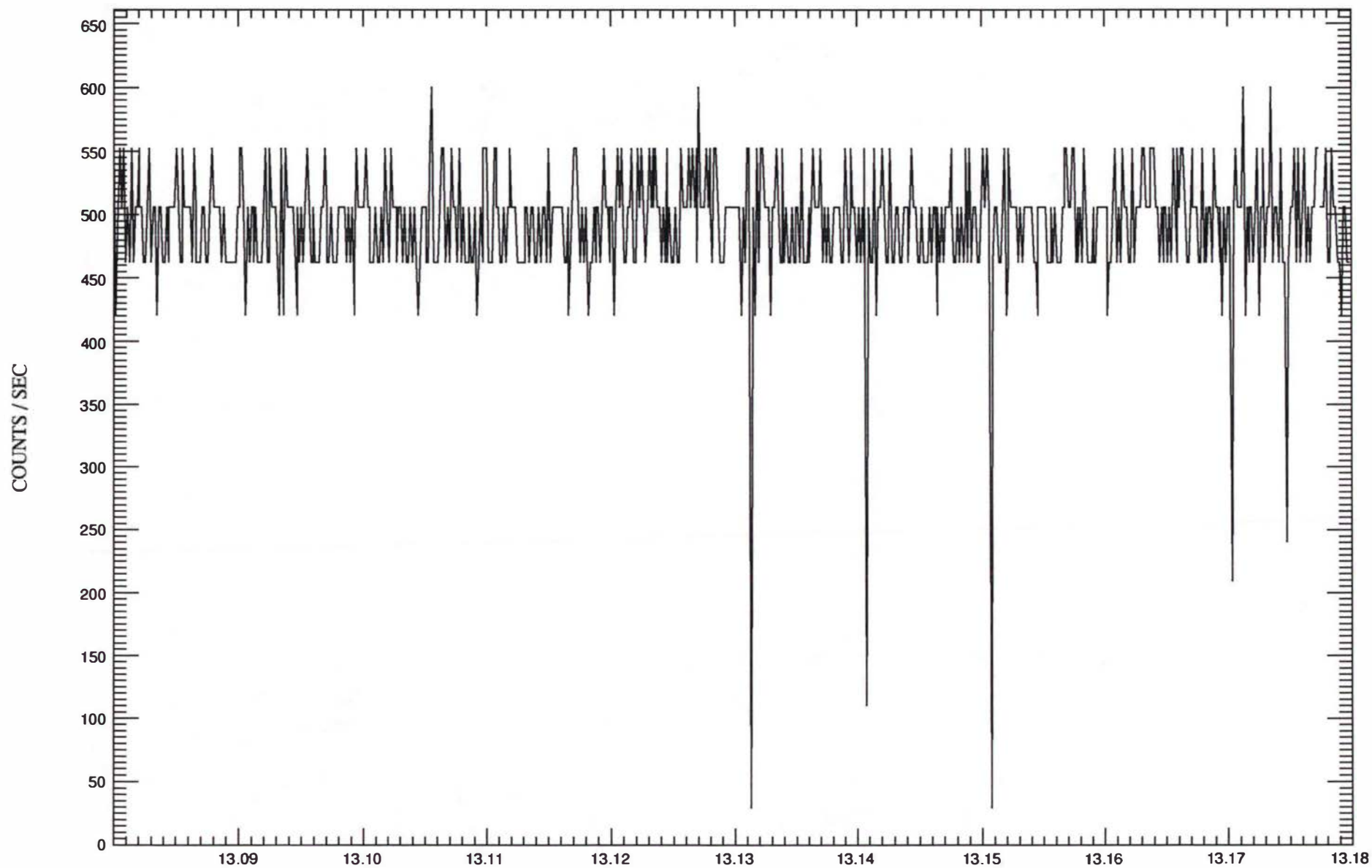
HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 1 at UT=13.133558930291 h=47280.812 s 13:08:00.812

4/1/96



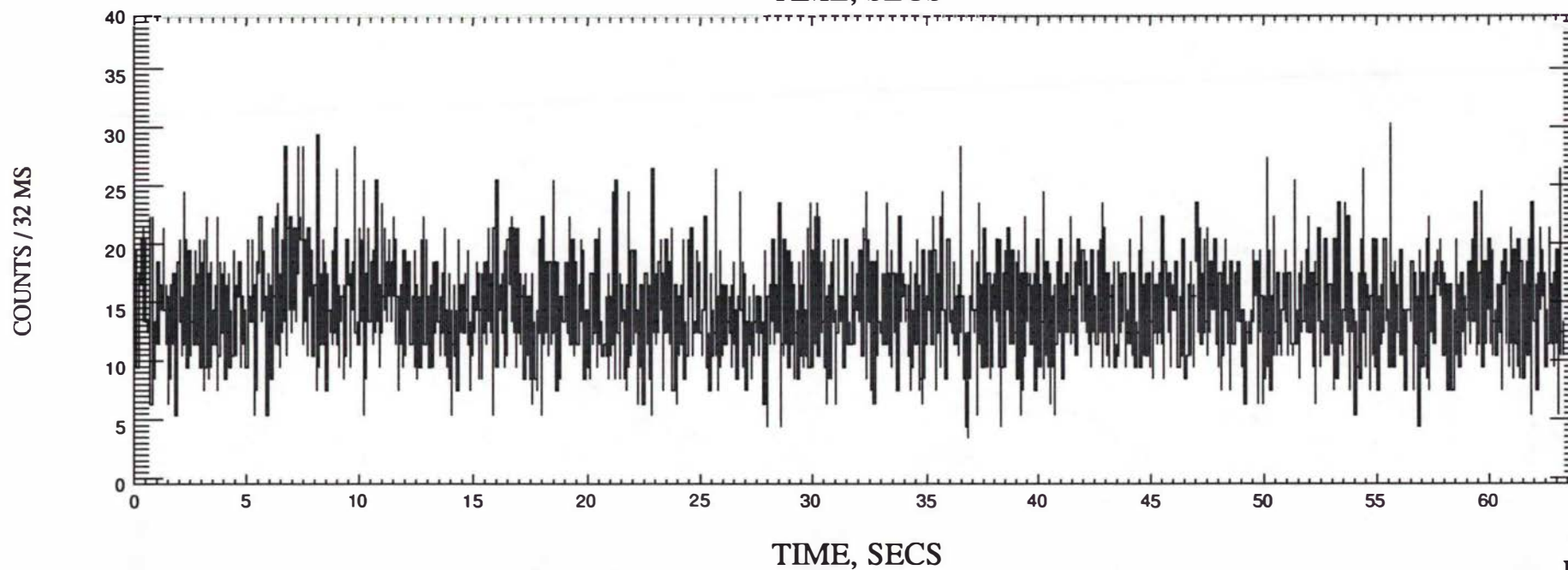
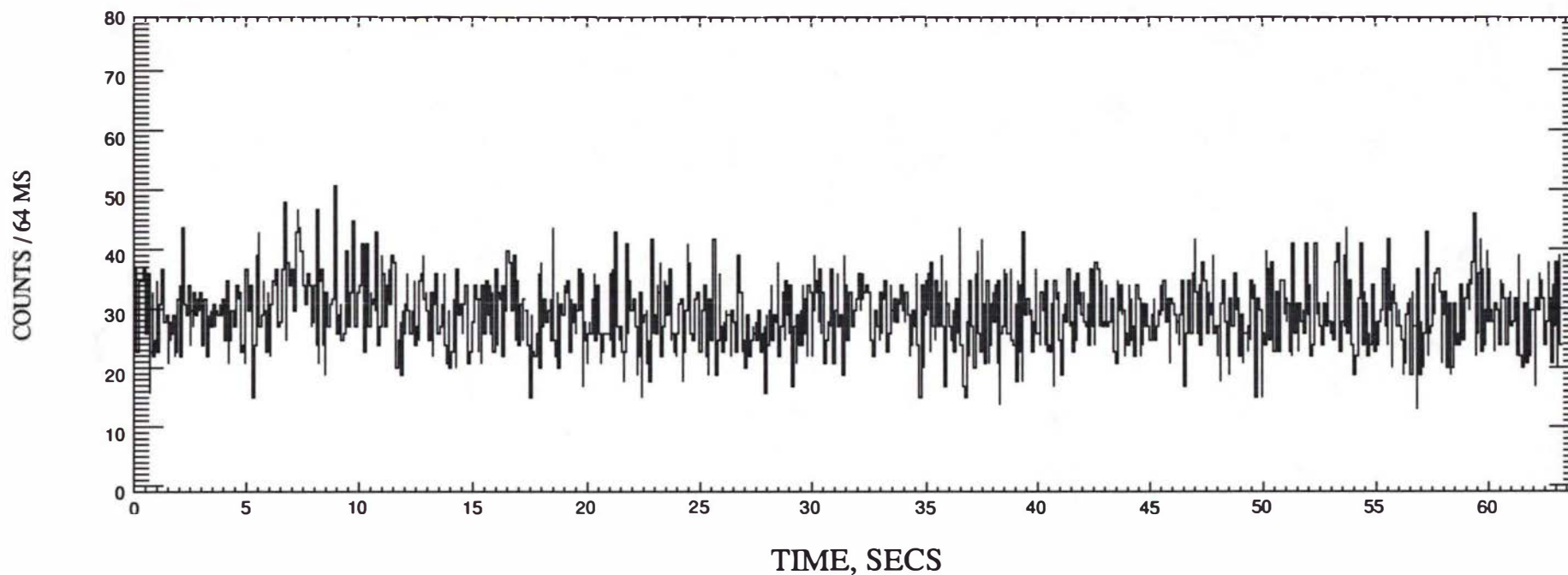
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96



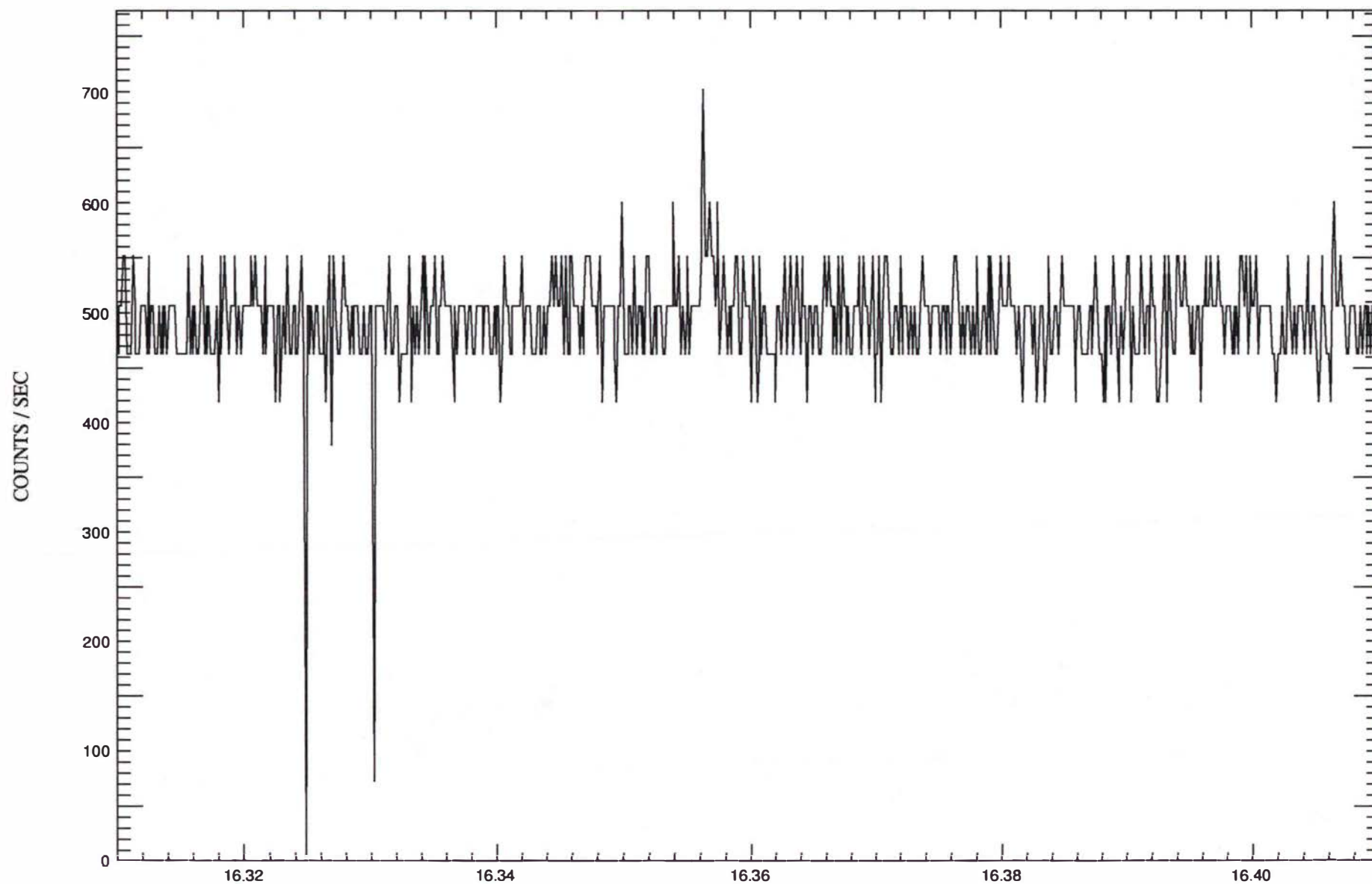
HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 2 at UT=16.356487494575 h=58883.355 s 16:21:23.355

4/1/96



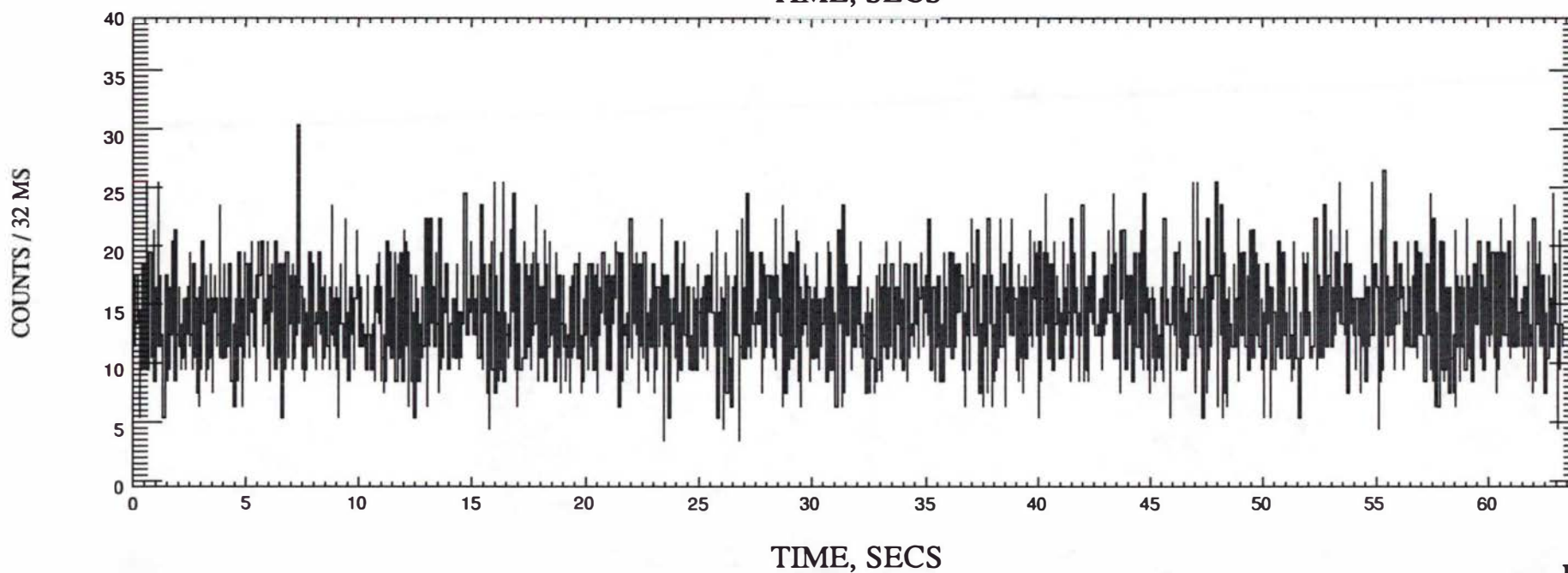
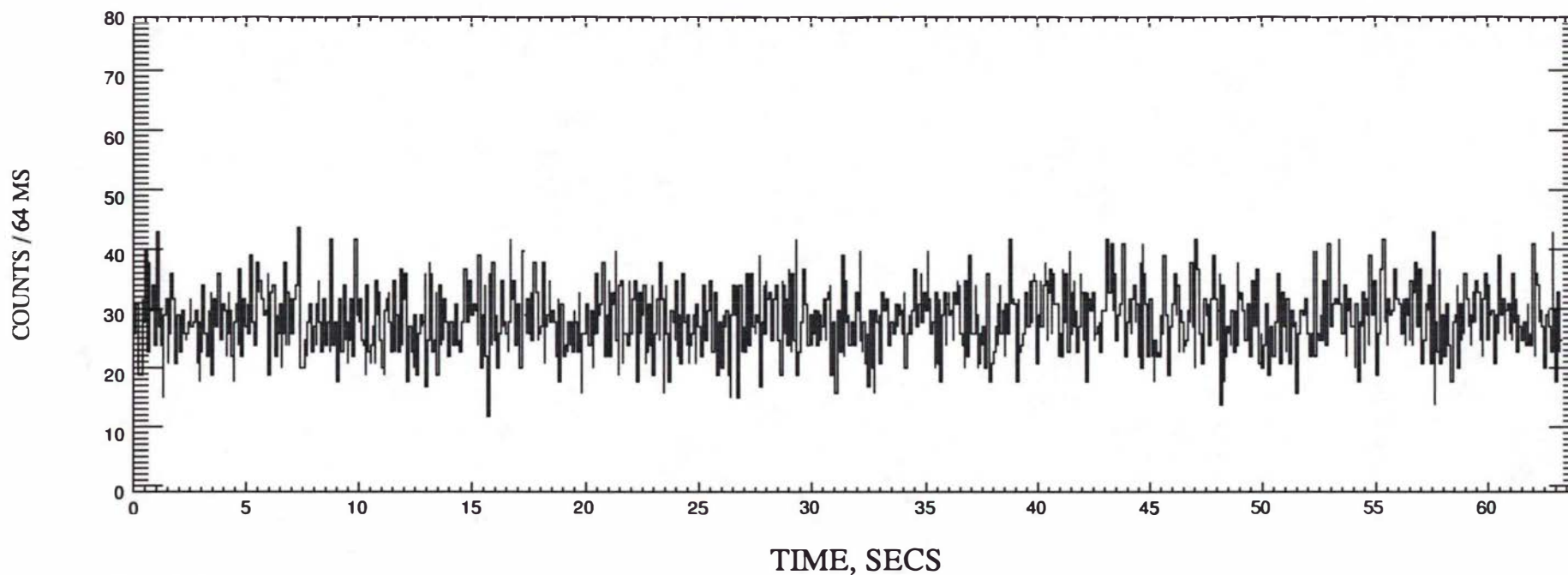
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96



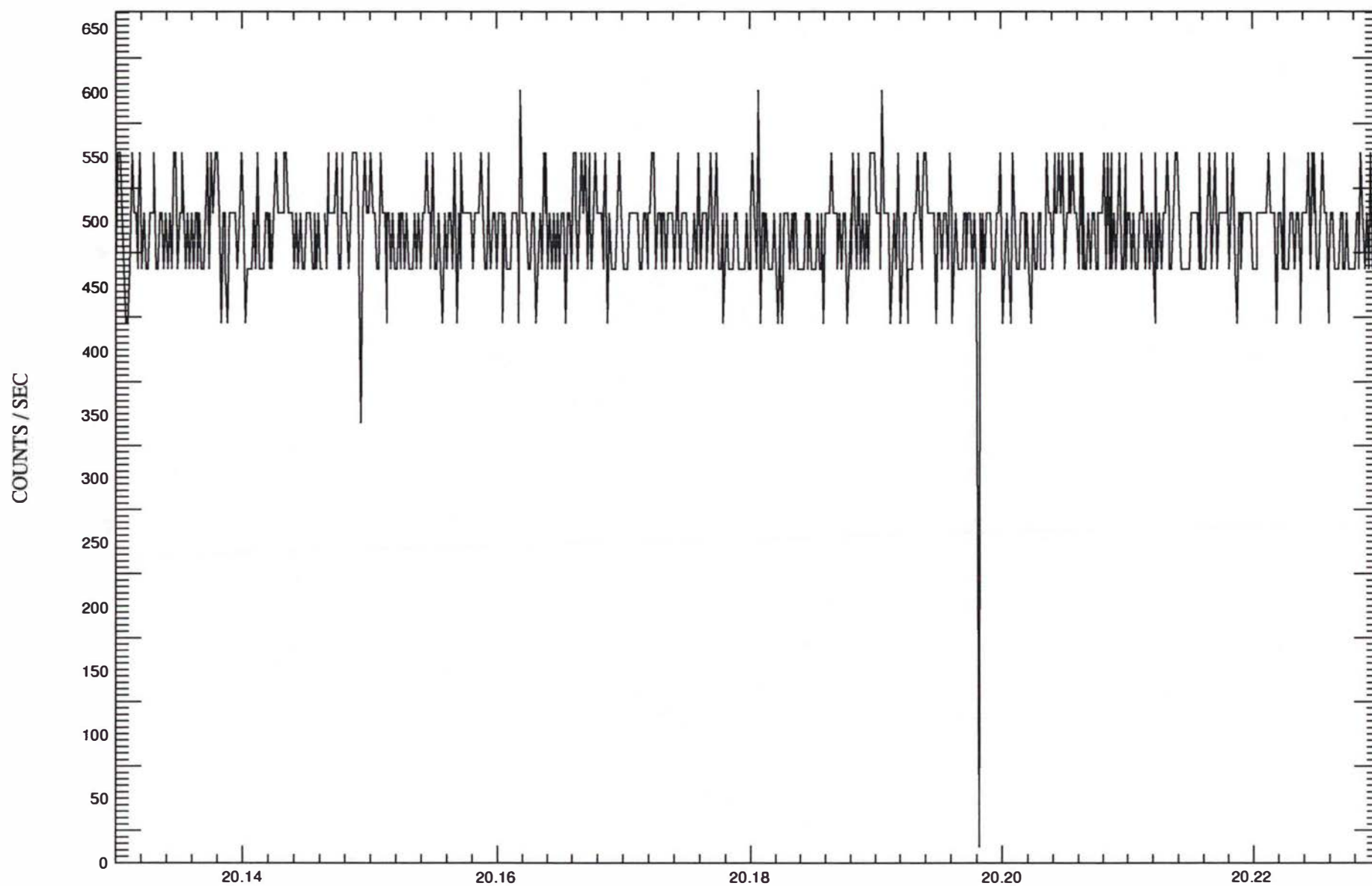
HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 3 at UT=20.180887158712 h=72651.194 s 20:10:51.194

4/1/96



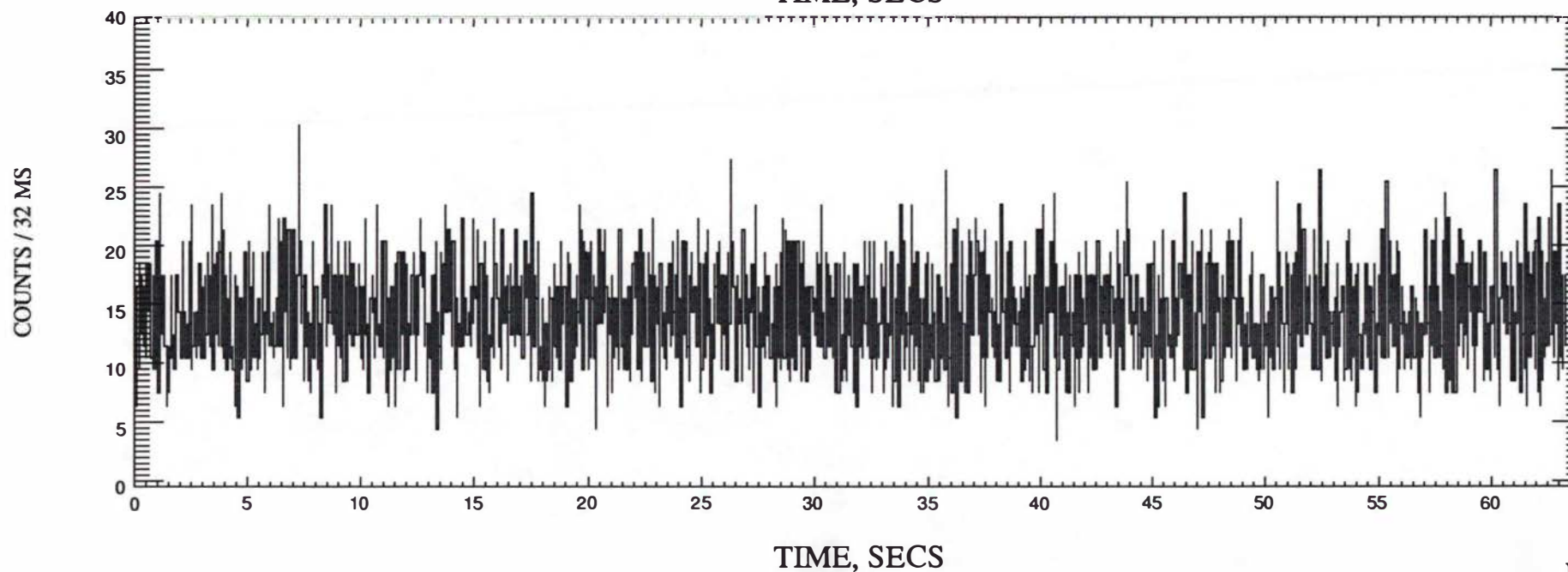
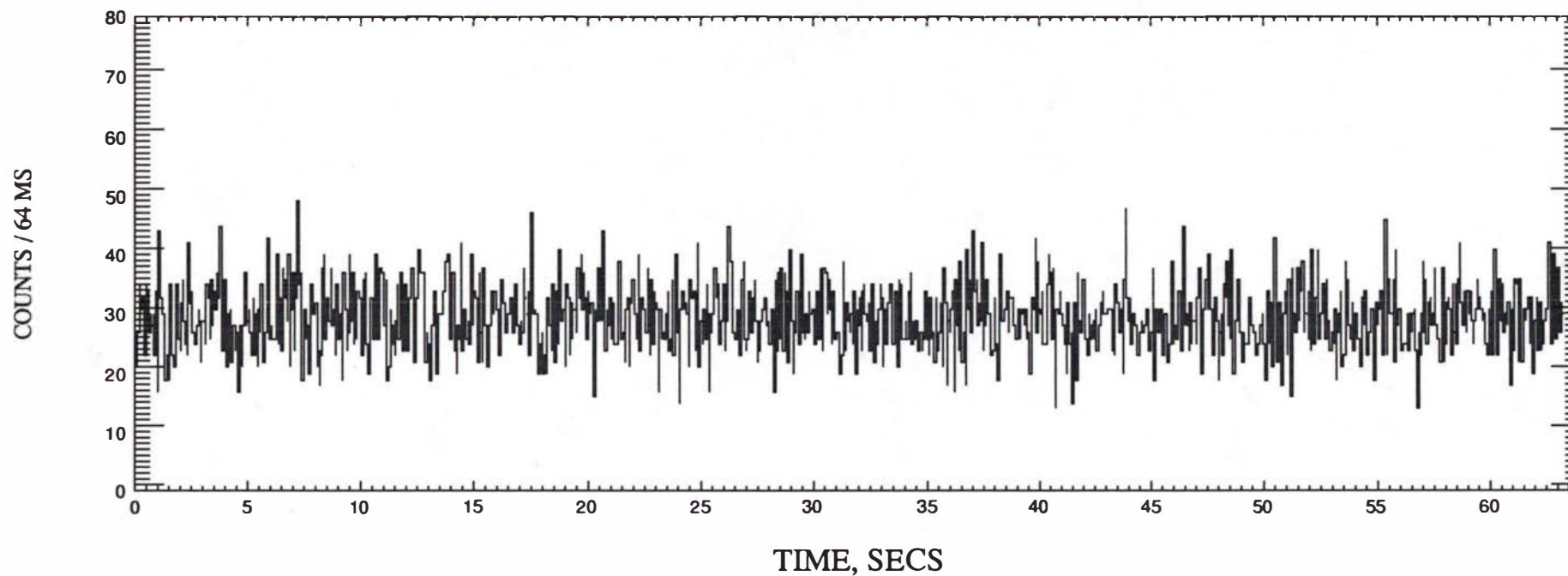
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96



HUS 2A TRIGGERED DATA EDR day 6, year 1996
Burst Counter 4 at UT=23.557741402520 h=84807.869 s 23:33:27.869

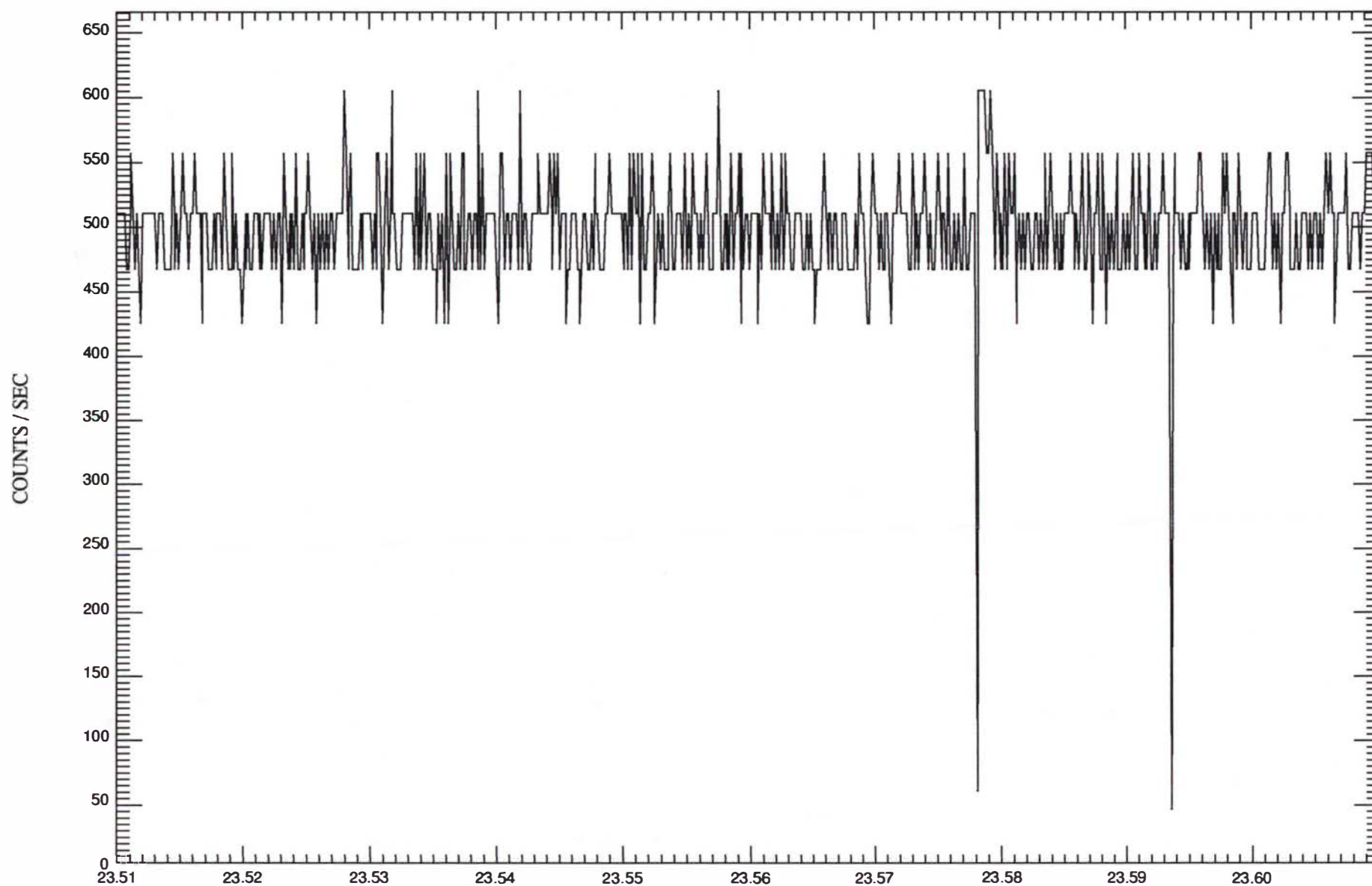
4/1/96



B# 7

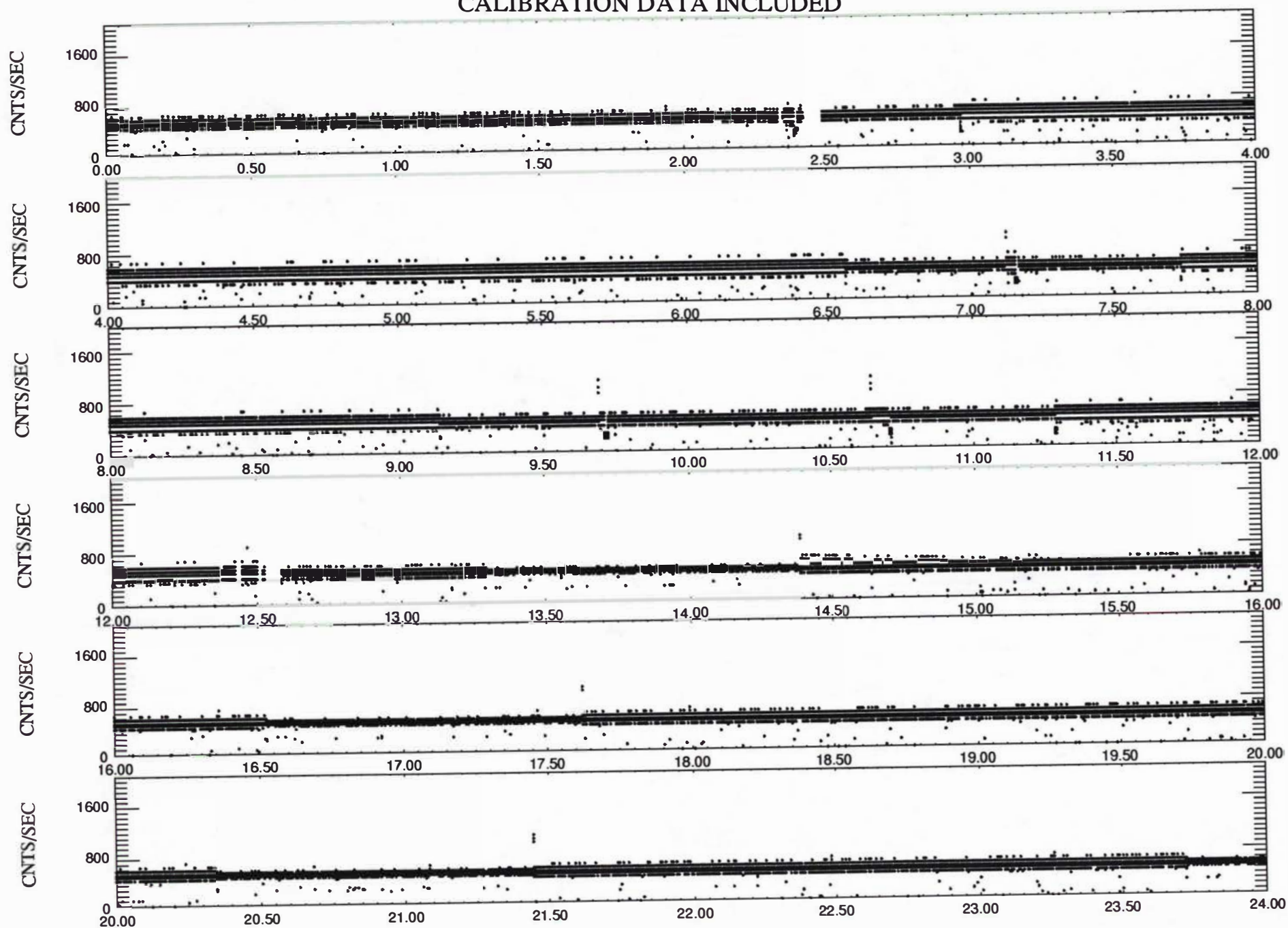
HUS 2A, MODE 1, NOT AVERAGED QEDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

1/8/96

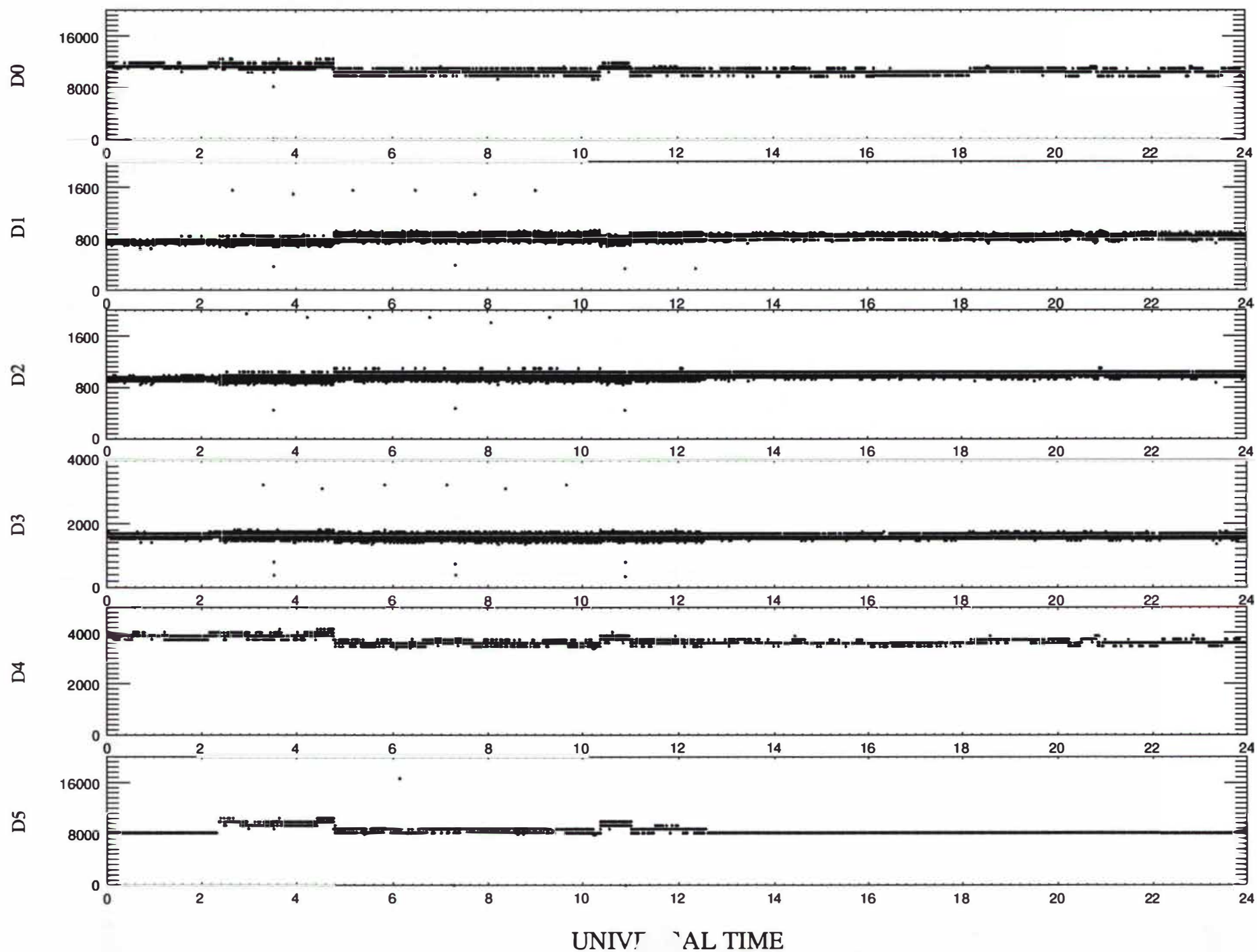


HUS 2A, MODE 1, NOT AVERAGED EDR day 6, year 1996 to day 6, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV SAL TIME



From WOODSP@ssl.msfc.nasa.gov Thu Jan 11 07:47 PST 1996
Date: Thu, 11 Jan 1996 9:47:14 -0600 (CST)
From: WOODSP@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4256

BATSEARCH PROGRAM

ND

BATSE BURST # 4256
EVENT OF 1996 JAN 7 DAY OF YEAR= 7
EVENT CROSSING TIME AT BATSE : 7880. S. OR 02:11:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 144.000 53.000
BATSE PEAK COUNTING RATE: 3800 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/ 1/ 96 IS:
RA= 225.466 DEC= 61.638 DIST= 2.811 AU
BATSE-ULYSSES DISTANCE = 420461807. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=138.18 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1045.14 SECS.
CROSSING TIME AT ULYSSES IS 6835. S. OR 01:53:54 +/- 196.50 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/ 1/ 96 IS:
RA= 301.230 DEC= -21.448 DIST= 2.336 AU
MARS-BATSE DISTANCE = 349487968. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 36.05 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 942.53 SECS.
CROSSING TIME AT MARS IS 8823. S. OR 02:27:02 +/- 133.42 SECONDS

BATSE BURST TRIGGER

NO.: 4256

TIME: TJD=0089 SECONDS=7880

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=70.2 AZIMUTH=124.4 ERROR=7.1 DEGREES

COMMENTS:

GRB LASTING ABOUT 90 SEC. MULTIPLE PEAKS. MARGINALLY VISIBLE ABOVE
300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4256	960107	10089	07880	3800	144	+53	90

11 / 1 / 96

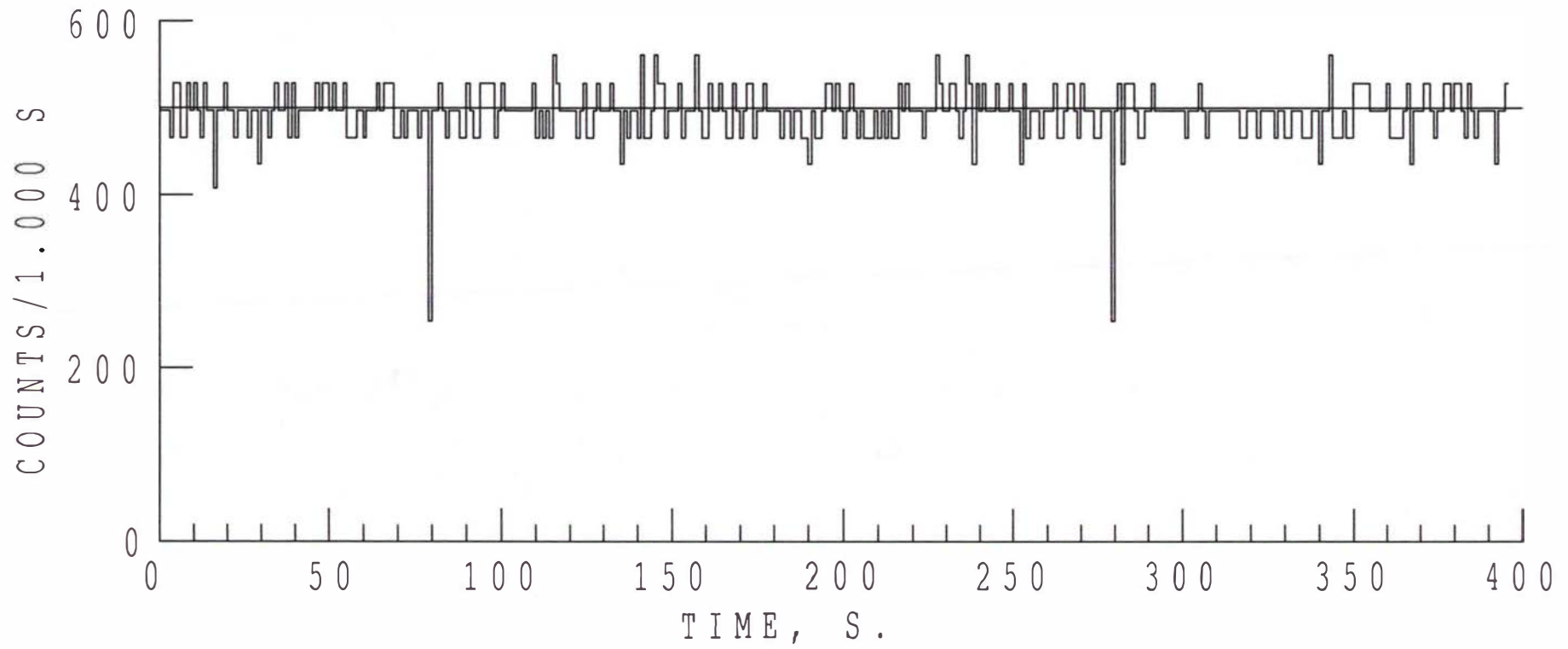
ULYSSES RT

7 / 1 / 96 6624.631 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS

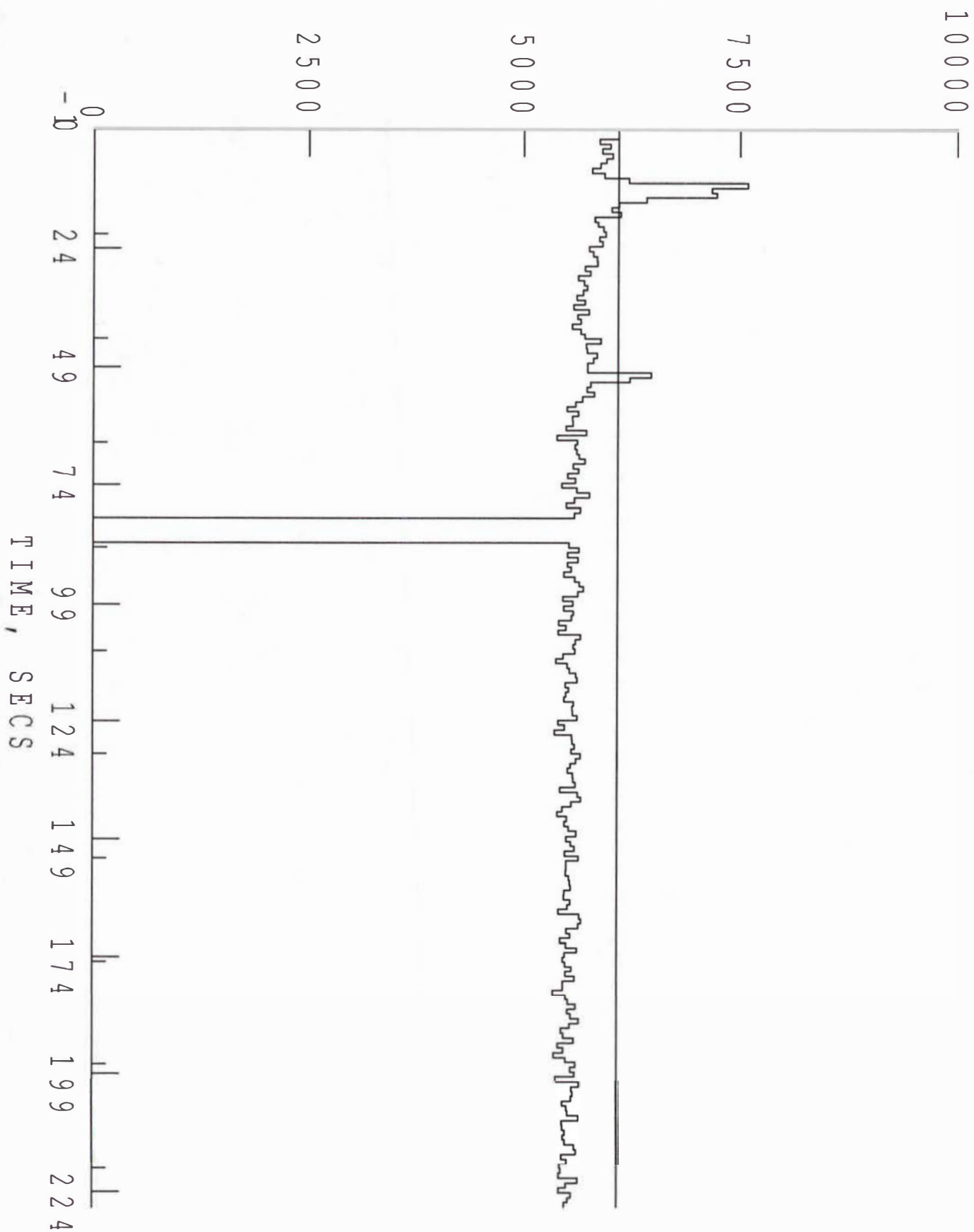


BACODINE

07/01/96

7869.129

25 - 100 keV
COUNTS/1.024 S



951025	23	40	39.738	S1	190	400	120	1.7	3	60	167	✓
951102	01	58	05.879	S2	260	320	50	<0.1	100	3	168	✓
951102	05	53	29.015	S2	700	1560	600	0.1	5	18	169	✓
951102	07	58	13	S1	320	80		4	6		BGR	✓
951105	00	29	05	S2	40	50		0.6	40		BGR	✓
951105	01	37	48.077	S2	140	340	80	0.6	2	22	170	✓
951105	13	00	27.808	S1	160	380	120	9	2	9	171	✓
951107	07	34	58	S1	20	50	20	2	90		BGR	✓
951111	09	42	40	S1	80	160	20	1.1	15		BGR	✓
951112	18	28	15.244	S2	540	690	220	0.2	14	84	172	✓
951113	23	25	58.872	S1	260	330	260	4.4	1	15	173	✓
951115	10	48	49	S1	70	180	80	3	12		BGR	✓
951117	02	48	43.762	S2	650	530	120	0.1	9	10	175	✓
951118	22	56	00	S2	20	90	100	0.15	6		BGR	✓
951119	08	17	11.402	S1	200	420	110	3	1.5	12	176	✓
951119	12	54	17.519	S1	110	220	340	1.7	3	4	177	✓
951119	16	30	48	S2	30	40	10	0.4	110		BGR	✓
951121	06	11	20	S1	20	70	10	2	45		BGR	✓
951122	02	44	01.380	S2	770	920		0.15	0.5	1.5	179	✓
951122	04	45	07.738	S1	280	430	160	12	35	22	180	✓
951123	18	10	08	S1	30	60	30	1	30		BGR	✓
951124	05	54	26	S2	50	140	50	0.15	30		BGR	✓
951124	06	58	52	S2	30	100		0.25	280		BGR	✓
951202	10	51	41.744	S1	200	500	220	2.4	2	25	195	✓
951203	01	06	28.180	S2	260	720	420	0.85	1	16	196	✓
951208	05	26	57.151	S2	320	740	190	<0.04	1	3.5	197	✓
951208	10	57	32.057	S1	290	260		7	52	6.5	198	✓
951208	11	47	47.634	S1	240	510	190	10	23	98	199	✓
951208	23	24	12	S1	100	90		>10	30		BGR	✓
951209	08	42	29.607	S1	150	450	160	6	6	14	200	✓
951213	04	57	29.683	S2	360	940	330	0.4	2	8	201	✓
951213	09	04	34	S2	300	90		<0.15	4.5		BGR	✓
951214	01	29	47	S2	15	100	30	1	30		BGR	✓
951214	02	24	17.847	S2	200	450	150	0.8	4	6	202	✓
951215	20	23	45	S2	60	70	15	<0.15	60		BGR	✓
951216	22	39	42	S2	160	110		0.1	6		BGR	✓
951218	07	59	48	S1	70	130	30	2.3	22		BGR	✓
951219	16	51	19.732	S2	430	850	920	<0.03	1	54	203	✓
951220	08	51	23.560	S2	100	320	180	1	2	8	204	✓
951221	08	23	18	S1	110	150	70	>15	15		BGR	✓
951222	21	00	21	S2	280			<0.1	16		BGR	✓
951225	09	14	16	S2	200			<0.3	50		BGR	✓
951225	09	34	14	S1	500	150	25	2.2	60		BGR	✓
951225	15	21	35	S2	210	170	40	0.1	100		BGR	✓
951225	22	51	08	S1	80	150	50	2.4	40		BGR	✓
951226	08	38	15	S2	60	100	50	0.15	9		BGR	✓
951227	06	23	25.042	S1	420	1200	320	1	1	1.5	218	✓
951227	21	59	20	S1	50	50		3	65		BGR	✓
951228	12	28	42	S2	70	80	40	<0.07	110		BGR	✓
951228	15	47	26	S2	80	170		0.9	17		BGR	✓
951231	05	37	11.668	S2	180	320	150	0.07	9	65	219	✓
951231	21	24	34	S2	100	25		<0.2	20		BGR	✓
960102	03	14	10.996	S1	140	300	80	1	1	0.2	220	✓
960102	20	20	53	S1	200	120	40	>9	25		BGR	✓
960104	03	28	41.062	S2	360	630	230	<0.05	2	28	221	✓
960105	16	04	30	S1	80	60		5	30		BGR	✓
960107	05	23	20	S2	30	100		0.5	230		BGR	✓
960107	19	03	28	S2	30	120	150	<0.1	32		BGR	✓
960109	23	11	31	S2	60	130	20	0.3	5		BGR	✓
960111	12	55	24.530	S2	1130	1280	190	0.2	0.5	6	222	✓
960113	15	33	44.261	S2	500	450	50	0.3	2	36	228	✓
960114	12	15	04.737	S1	4900	7200	1400	1.8	1	60	233	✓
960115	08	52	36.506	S1	380	360	60	10	1	7	234	✓
960115	12	50	15	S2	120	60		0.7	22		BGR	✓
960116	02	02	18	S2	140	170		0.15	17		BGR	✓
960117	15	56	11.341	S1	250	360	30	4	5	20	235	✓

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996
 Date: Fri, 2 Feb 1996 05:41:51 -0800
 Mime-Version: 1.0
 To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
 palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.
 - TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec						
			G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9 ✓
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28 ✓
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR
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 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39 ✓

KONUS 19960107 19400

ULYSSES RT

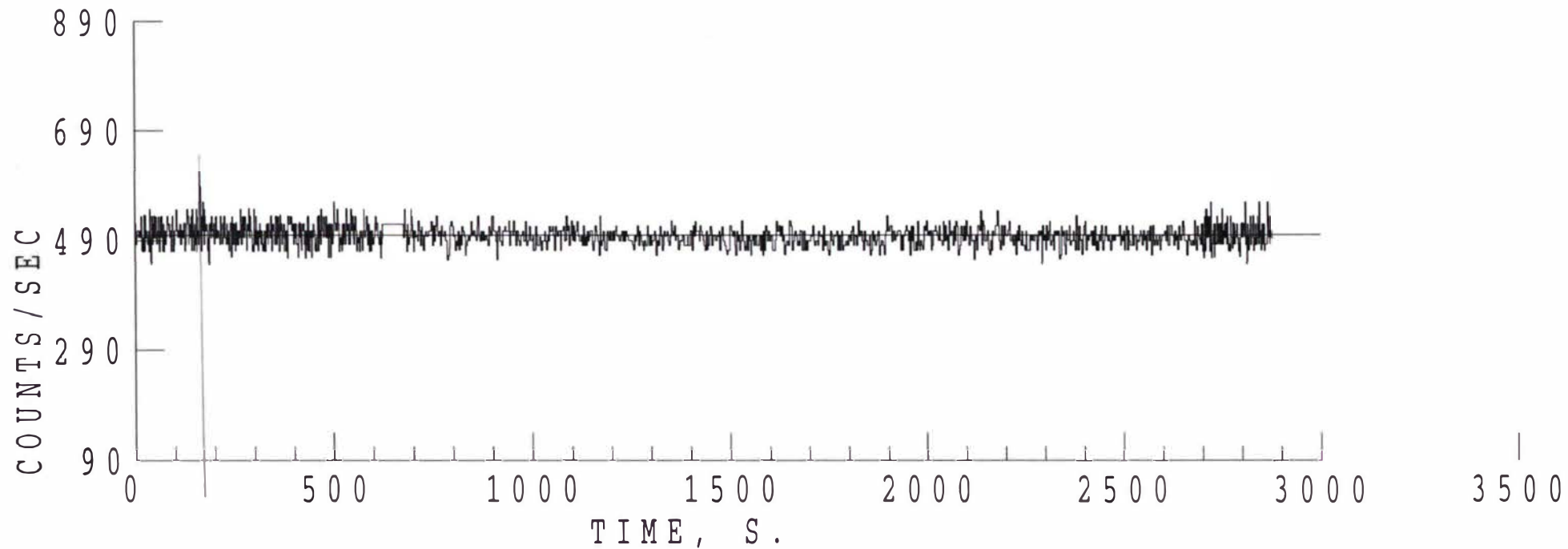
12 / 09 / 11

07/01/96 17964.049 s

INTERVALS REGROUPED BY 5

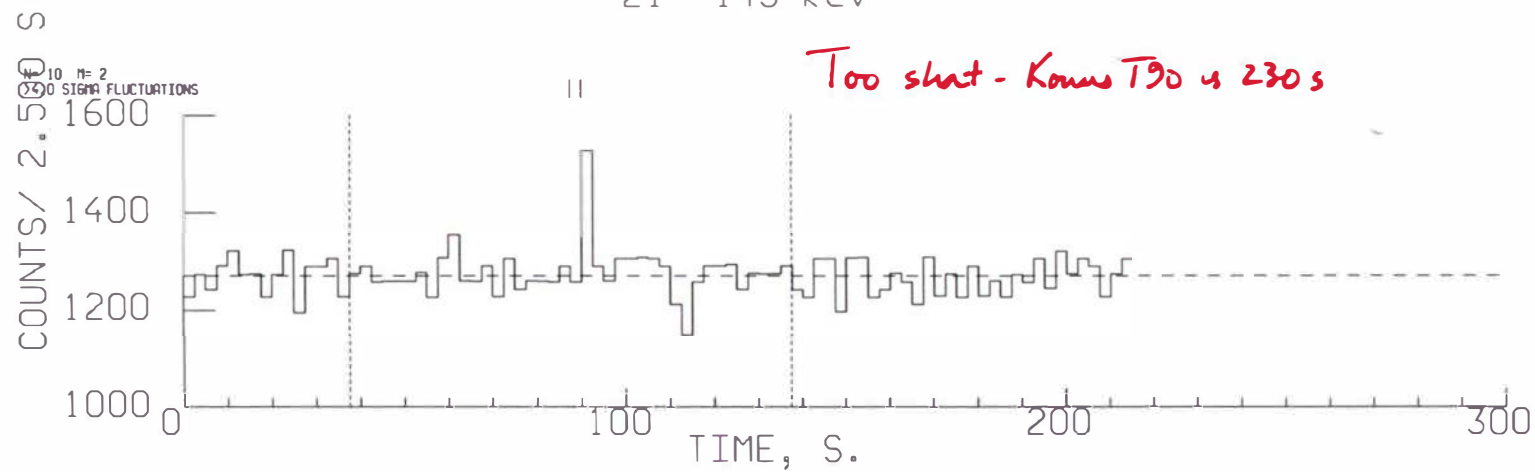
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



ULYSSES RT
7/ 1/96 18036.049 s
0.250 S INTERVALS REGROUPED BY 10
21- 145 keV

15/ 9/11



Stern counting

Too weak

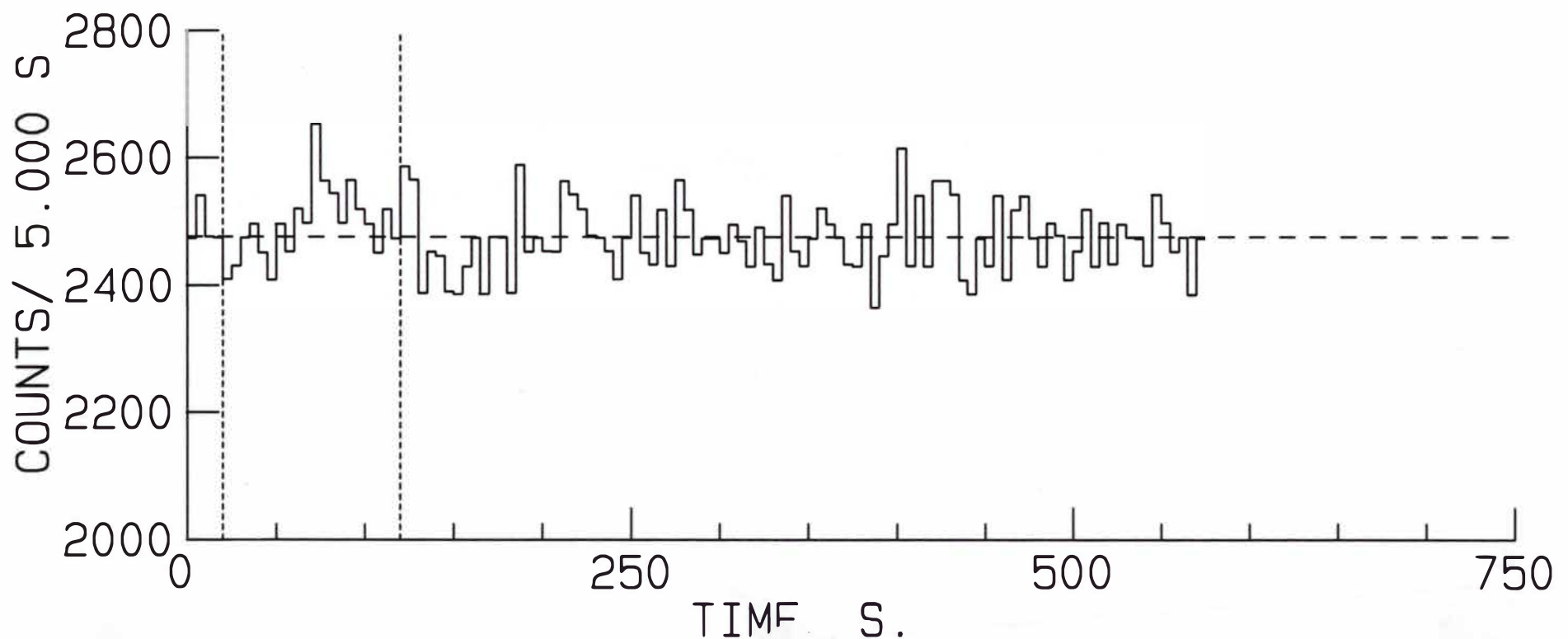
7/10/2

ULYSSES RT

7/ 1/96 44028.188 s

0.500 S INTERVALS REGROUPED BY 10

21- 145 keV



951025	23	40	39.738	S1	190	400	120	1.7	3	60	167	✓
951102	01	58	05.879	S2	260	320	50	<0.1	100	3	168	✓
951102	05	53	29.015	S2	700	1560	600	0.1	5	18	169	✓
951102	07	58	13	S1	320	80		4	6		BGR	✓
951105	00	29	05	S2	40	50		0.6	40		BGR	✓
951105	01	37	48.077	S2	140	340	80	0.6	2	22	170	✓
951105	13	00	27.808	S1	160	380	120	9	2	9	171	✓
951107	07	34	58	S1	20	50	20	2	90		BGR	✓
951111	09	42	40	S1	80	160	20	1.1	15		BGR	✓
951112	18	28	15.244	S2	540	690	220	0.2	14	84	172	✓
951113	23	25	58.872	S1	260	330	260	4.4	1	15	173	✓
951115	10	48	49	S1	70	180	80	3	12		BGR	✓
951117	02	48	43.762	S2	650	530	120	0.1	9	10	175	✓
951118	22	56	00	S2	20	90	100	0.15	6		BGR	✓
951119	08	17	11.402	S1	200	420	110	3	1.5	12	176	✓
951119	12	54	17.519	S1	110	220	340	1.7	3	4	177	✓
951119	16	30	48	S2	30	40	10	0.4	110		BGR	✓
951121	06	11	20	S1	20	70	10	2	45		BGR	✓
951122	02	44	01.380	S2	770	920		0.15	0.5	1.5	179	✓
951122	04	45	07.738	S1	280	430	160	12	35	22	180	✓
951123	18	10	08	S1	30	60	30	1	30		BGR	✓
951124	05	54	26	S2	50	140	50	0.15	30		BGR	✓
951124	06	58	52	S2	30	100		0.25	280		BGR	✓
951202	10	51	41.744	S1	200	500	220	2.4	2	25	195	✓
951203	01	06	28.180	S2	260	720	420	0.85	1	16	196	✓
951208	05	26	57.151	S2	320	740	190	<0.04	1	3.5	197	✓
951208	10	57	32.057	S1	290	260		7	52	6.5	198	✓
951208	11	47	47.634	S1	240	510	190	10	23	98	199	✓
951208	23	24	12	S1	100	90		>10	30		BGR	✓
951209	08	42	29.607	S1	150	450	160	6	6	14	200	✓
951213	04	57	29.683	S2	360	940	330	0.4	2	8	201	✓
951213	09	04	34	S2	300	90		<0.15	4.5		BGR	✓
951214	01	29	47	S2	15	100	30	1	30		BGR	✓
951214	02	24	17.847	S2	200	450	150	0.8	4	6	202	✓
951215	20	23	45	S2	60	70	15	<0.15	60		BGR	✓
951216	22	39	42	S2	160	110		0.1	6		BGR	✓
951218	07	59	48	S1	70	130	30	2.3	22		BGR	✓
951219	16	51	19.732	S2	430	850	920	<0.03	1	54	203	✓
951220	08	51	23.560	S2	100	320	180	1	2	8	204	✓
951221	08	23	18	S1	110	150	70	>15	15		BGR	✓
951222	21	00	21	S2	280			<0.1	16		BGR	✓
951225	09	14	16	S2	200			<0.3	50		BGR	✓
951225	09	34	14	S1	500	150	25	2.2	60		BGR	✓
951225	15	21	35	S2	210	170	40	0.1	100		BGR	✓
951225	22	51	08	S1	80	150	50	2.4	40		BGR	✓
951226	08	38	15	S2	60	100	50	0.15	9		BGR	✓
951227	06	23	25.042	S1	420	1200	320	1	1	1.5	218	✓
951227	21	59	20	S1	50	50		3	65		BGR	✓
951228	12	28	42	S2	70	80	40	<0.07	110		BGR	✓
951228	15	47	26	S2	80	170		0.9	17		BGR	✓
951231	05	37	11.668	S2	180	320	150	0.07	9	65	219	✓
951231	21	24	34	S2	100	25		<0.2	20		BGR	✓
960102	03	14	10.996	S1	140	300	80	1	1	0.2	220	✓
960102	20	20	53	S1	200	120	40	>9	25		BGR	✓
960104	03	28	41.062	S2	360	630	230	<0.05	2	28	221	✓
960105	16	04	30	S1	80	60		5	30		BGR	✓
960107	05	23	20	S2	30	100		0.5	230		BGR	✓
960107	19	03	28	S2	30	120	150	<0.1	32		BGR	✓
960109	23	11	31	S2	60	130	20	0.3	5		BGR	✓
960111	12	55	24.530	S2	1130	1280	190	0.2	0.5	6	222	✓
960113	15	33	44.261	S2	500	450	50	0.3	2	36	228	✓
960114	12	15	04.737	S1	4900	7200	1400	1.8	1	60	233	✓
960115	08	52	36.506	S1	380	360	60	10	1	7	234	✓
960115	12	50	15	S2	120	60		0.7	22		BGR	✓
960116	02	02	18	S2	140	170		0.15	17		BGR	✓
960117	15	56	11.341	S1	250	360	30	4	5	20	235	✓

RI?

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996
 Date: Fri, 2 Feb 1996 05:41:51 -0800
 Mime-Version: 1.0
 To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
 palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.
 - TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec		G3 in G2		T<T0 T>T0		
			G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR
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 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39

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)>

Timing problem

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

KONUS

+ Stern unreg
22 / 2 / 96

ULYSSES RT

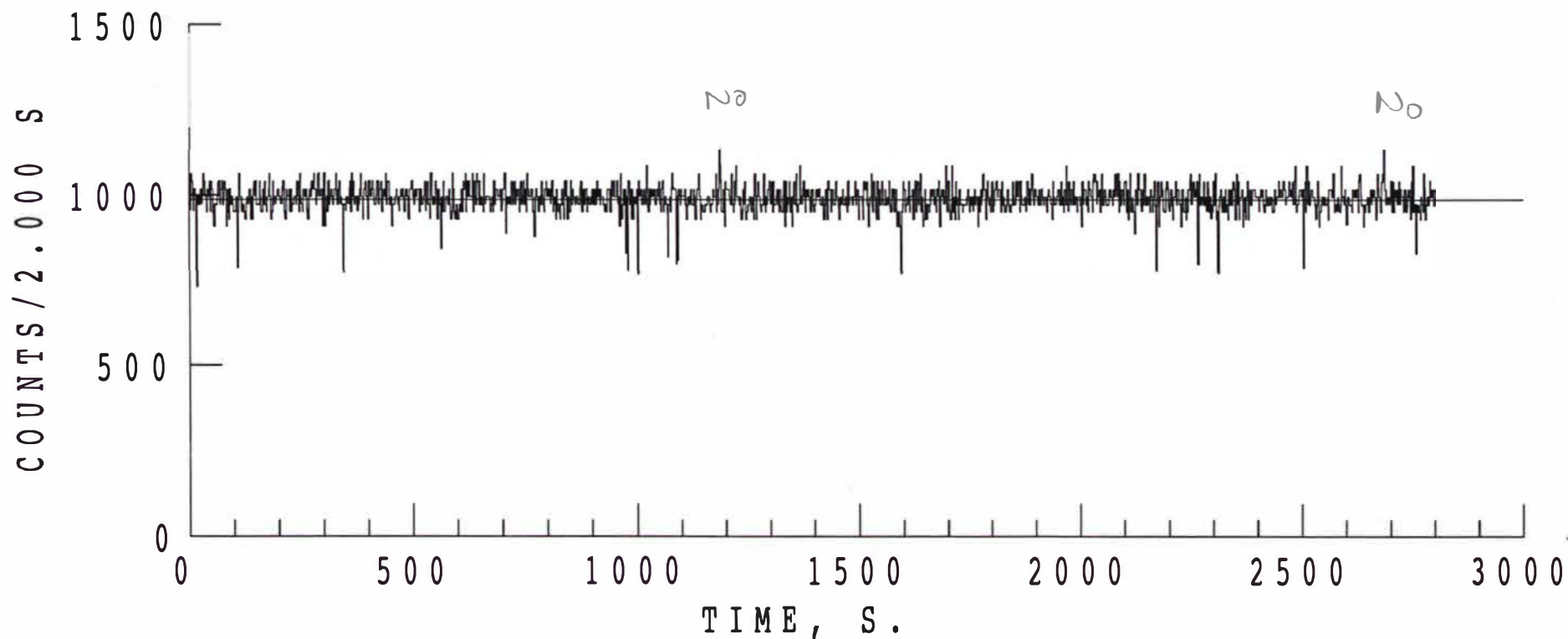
7 / 1 / 96 67212.031 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HENZE@fender.msfc.nasa.gov Tue Jan 9 08:00 PST 1996
From: HENZE@fender.msfc.nasa.gov
Date: Tue, 9 Jan 1996 9:59:24 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.gsfc.nasa.gov, butterworth@lheavx.gsfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, band@cass09.ucsd.edu,
gruber@cass09.ucsd.edu, matteson@cass09.ucsd.edu,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4263

TIME: TJD=0089 SECONDS=62939

TYPE: ACCIDEN SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

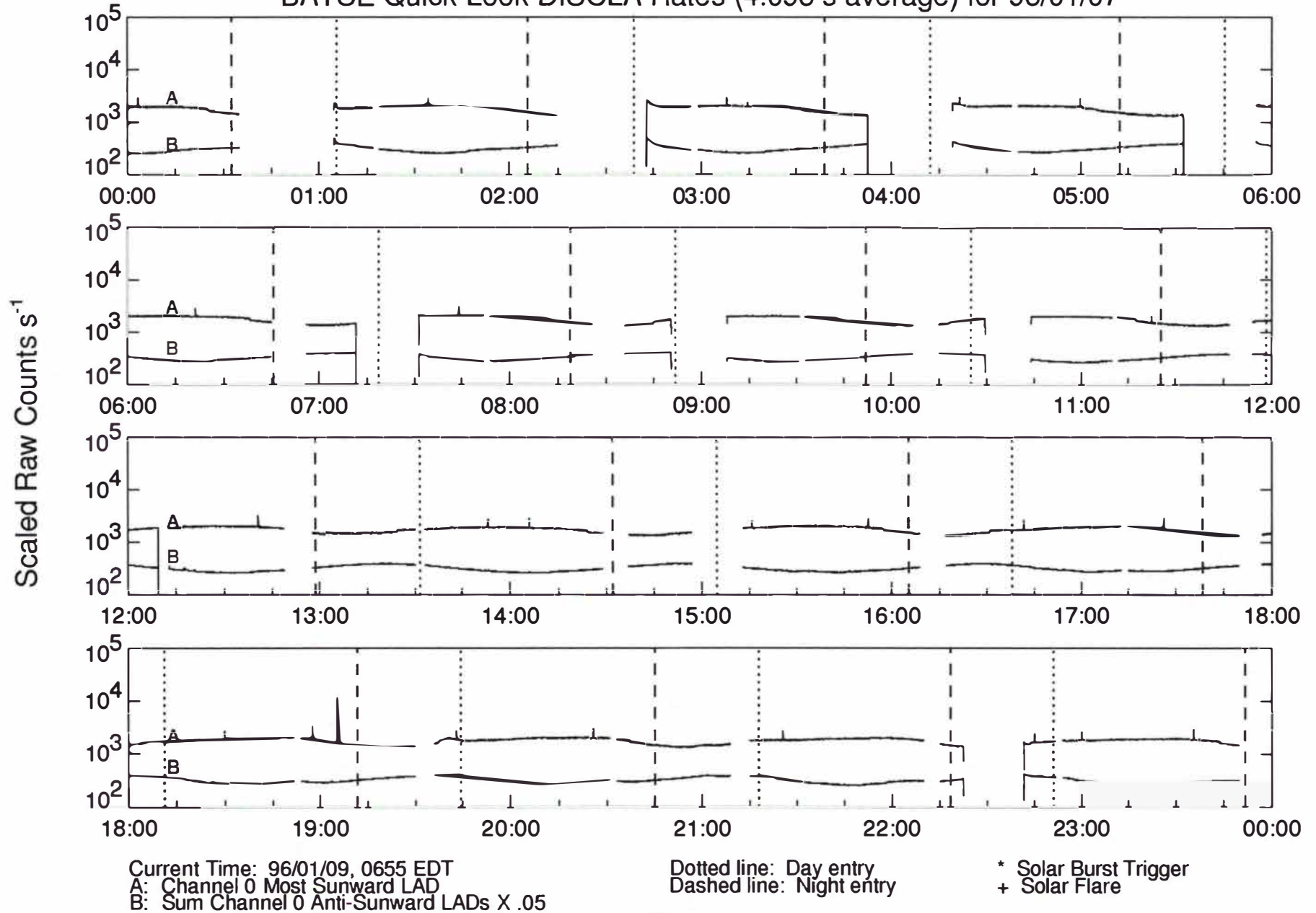
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

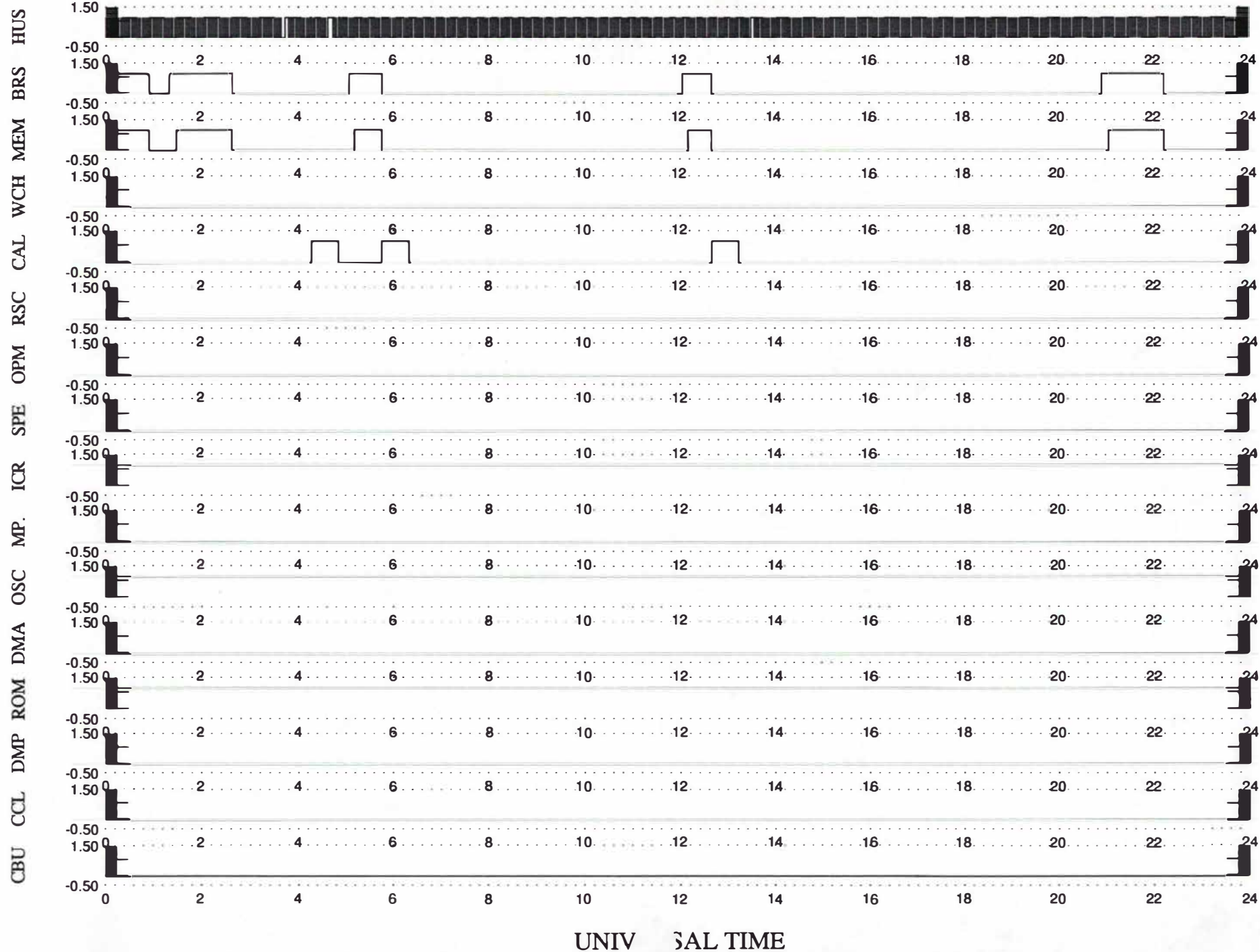
ACCIDENT. CAUSED BY COMMAND TO START NEW VERSION OF FLIGHT SOFTWARE.

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/07



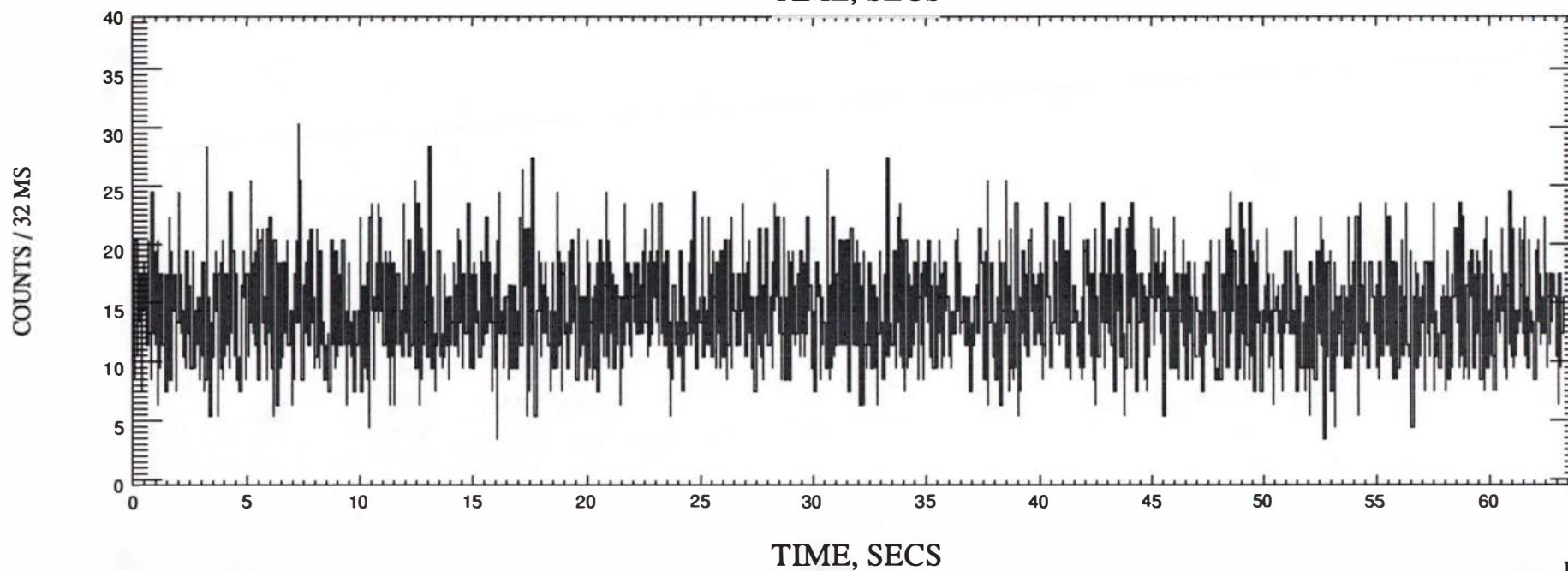
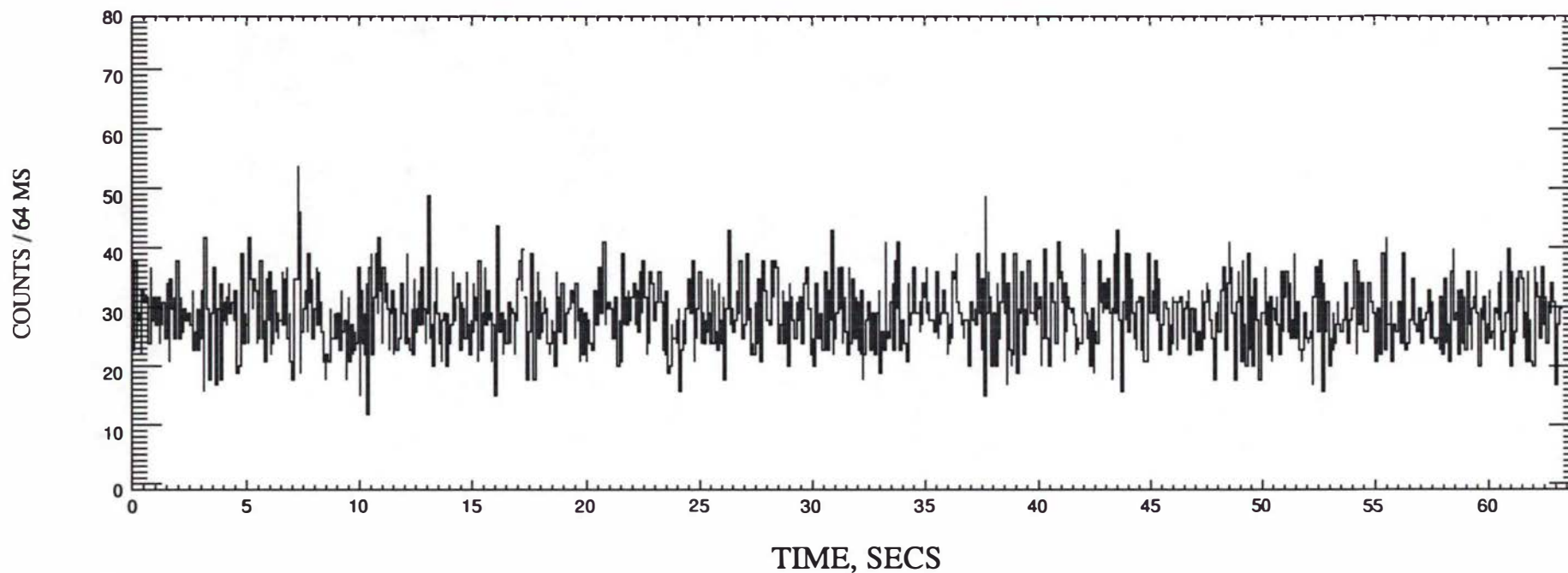
HUS MODES EDR day 7, year 1996 to day 7, year 1996 BURST NUMBER 5 - 9

4/1/96



HUS 2A TRIGGERED DATA EDR day 7, year 1996
Burst Counter 5 at UT= 1.272139663696 h= 4579.703 s 01:16:19.703

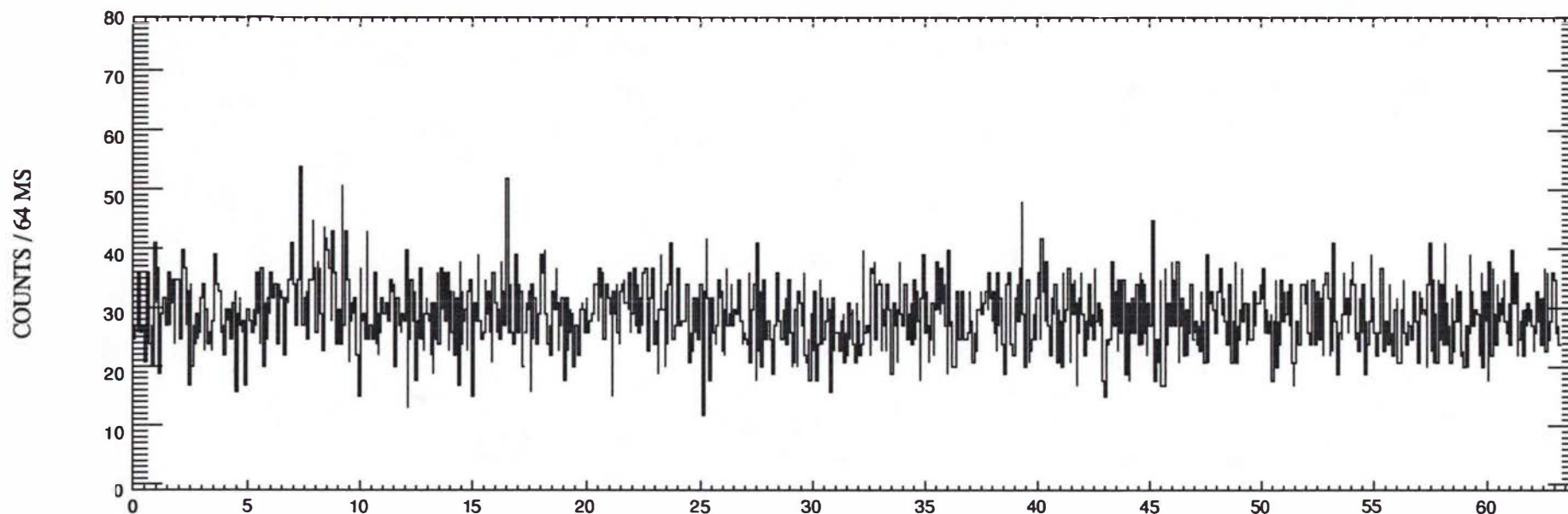
4/1/96



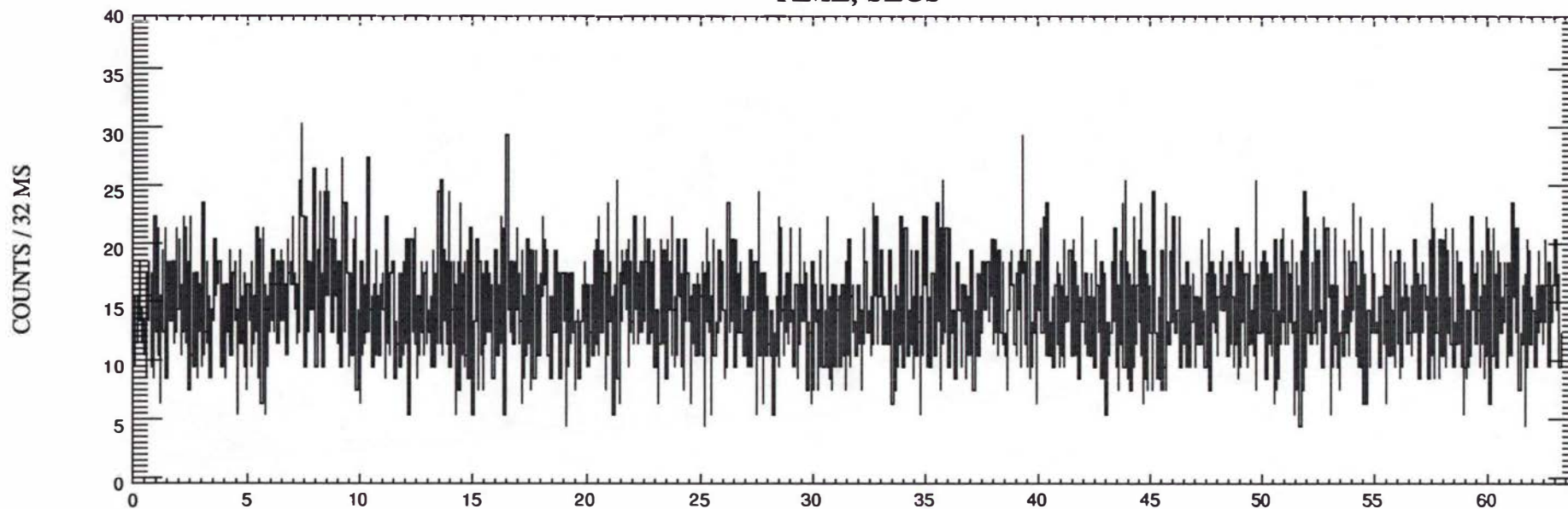
B# 1

HUS 2A TRIGGERED DATA EDR day 7, year 1996
Burst Counter 6 at UT= 5.035187331306 h=18126.674 s 05:02:06.674

4/1/96



TIME, SECS

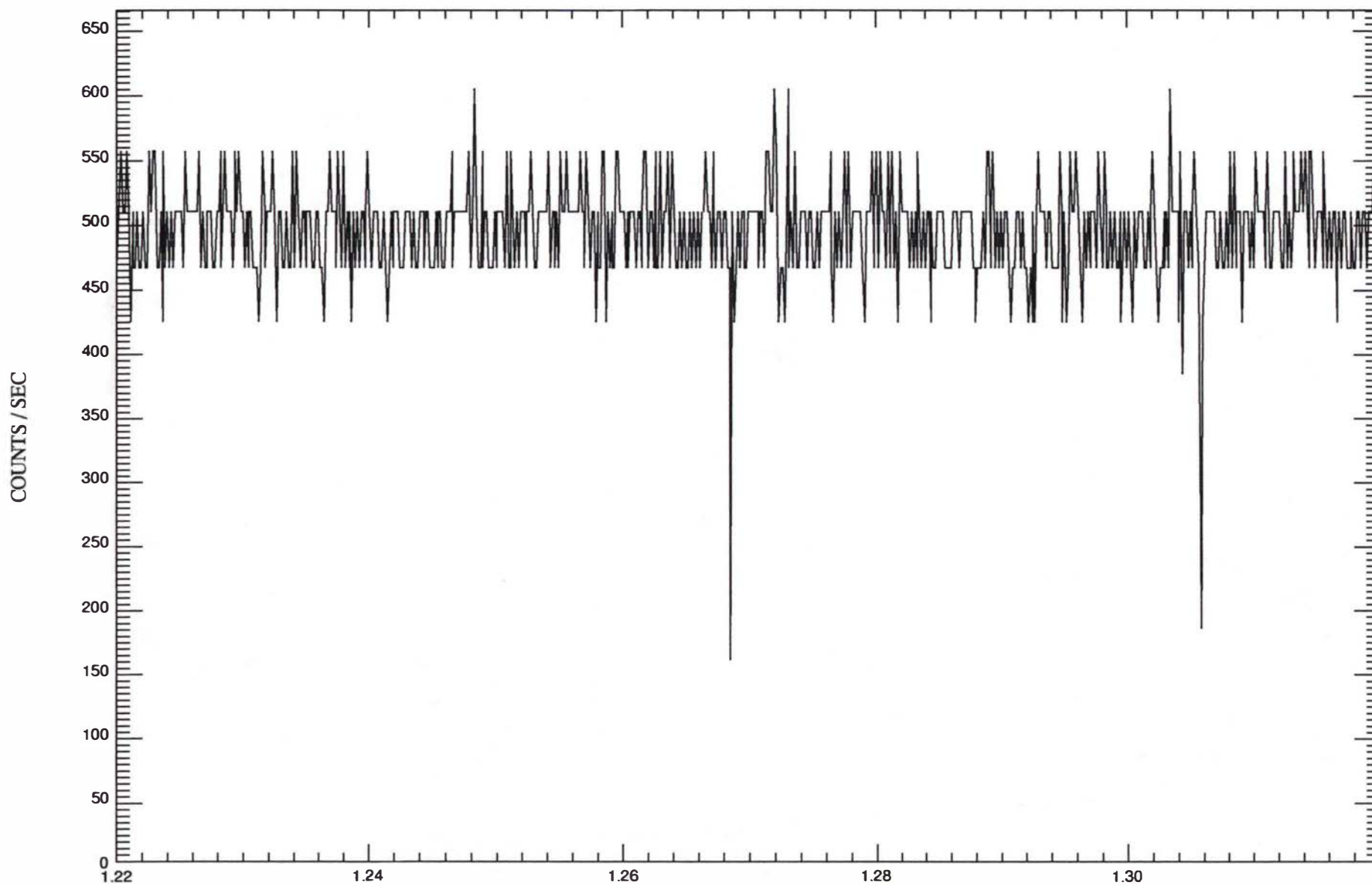


TIME, SECS

B# 2

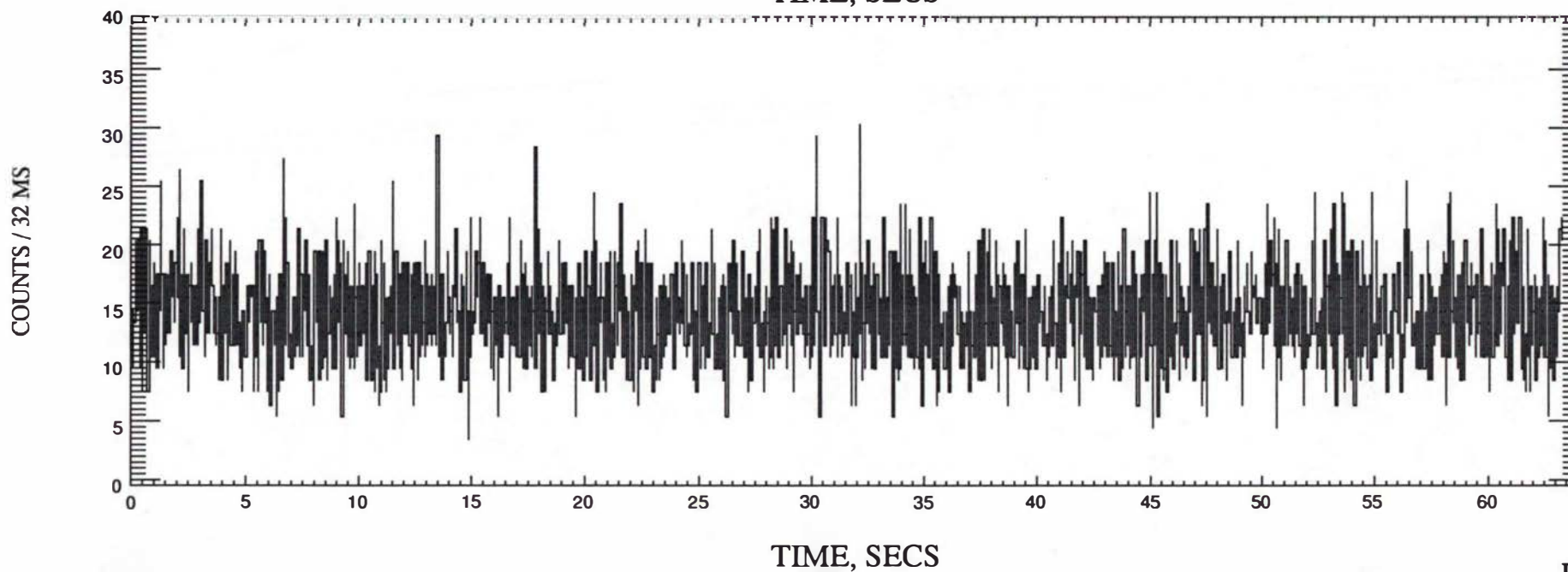
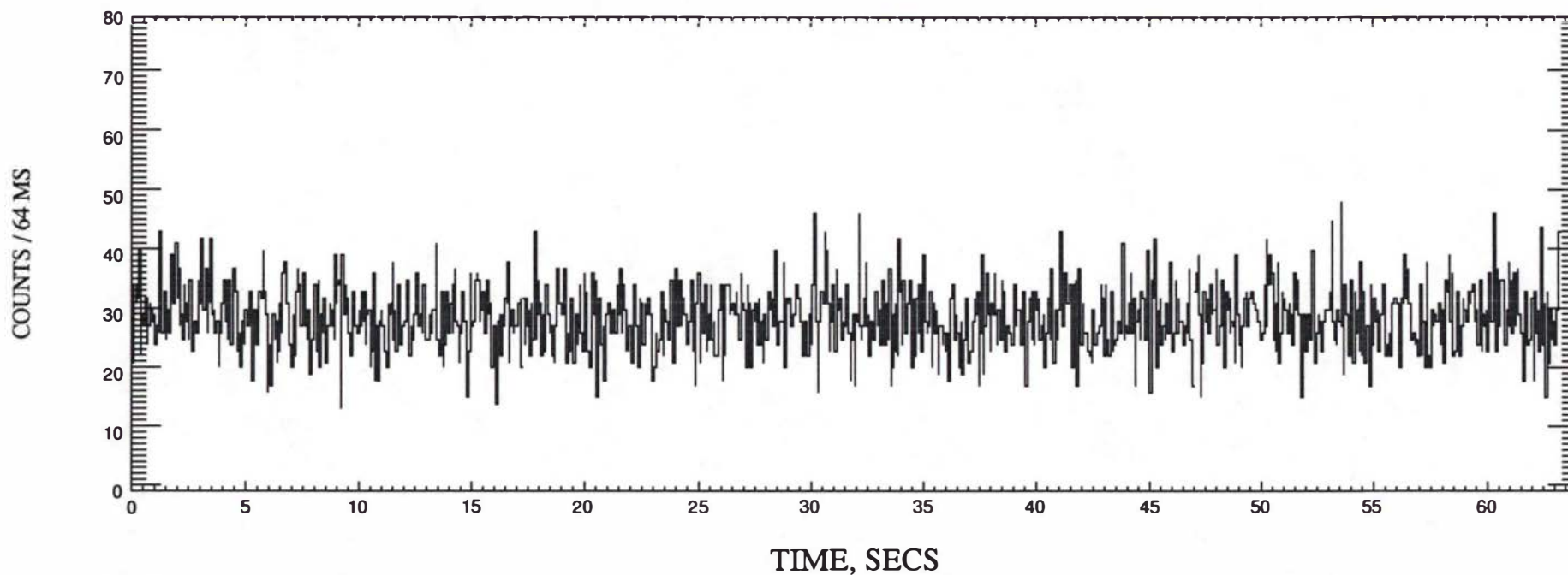
HUS 2A, MODE 1, NOT AVERAGED QEDR day 7, year 1996 to day 7, year 1996
CALIBRATION DATA INCLUDED

1/8/96



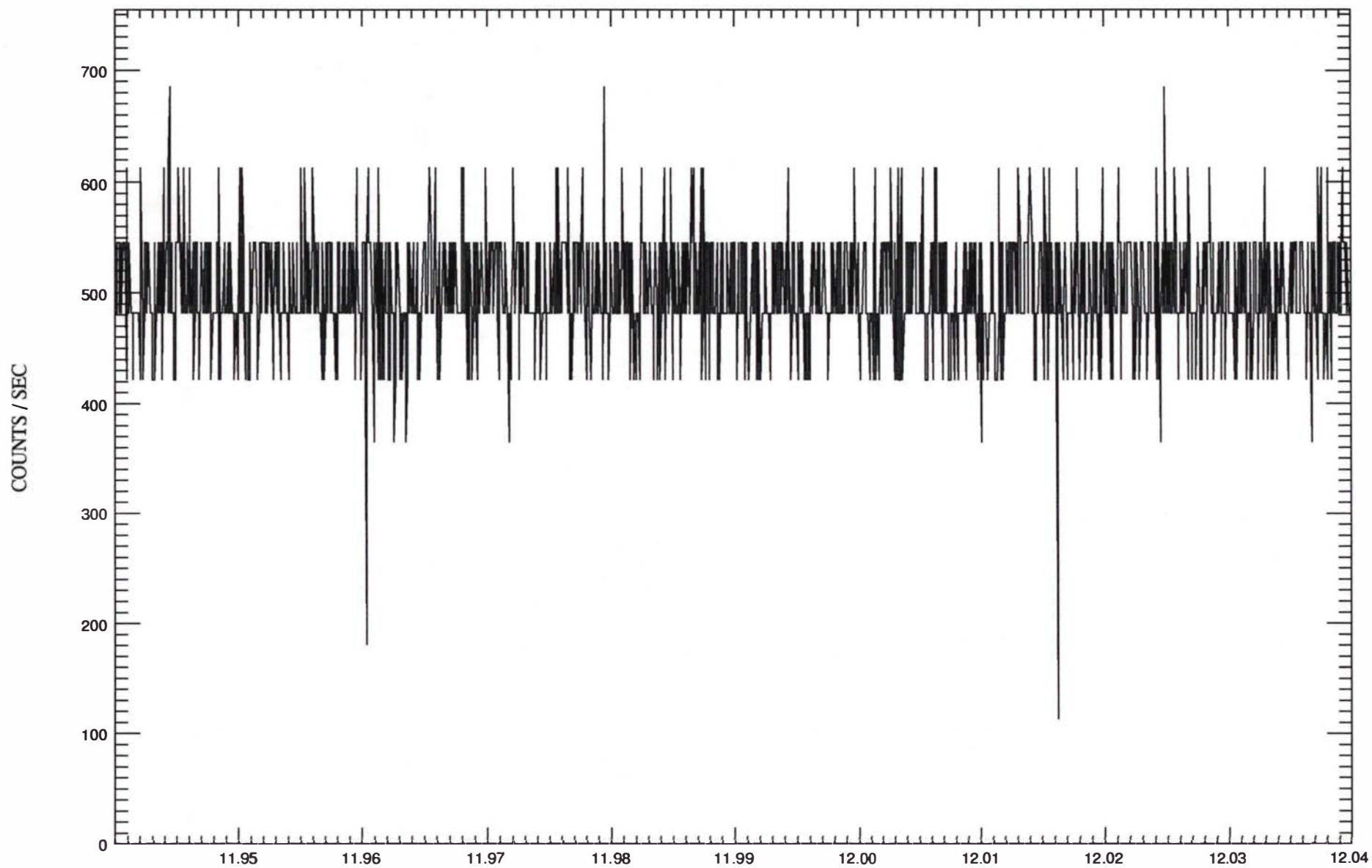
HUS 2A TRIGGERED DATA EDR day 7, year 1996
Burst Counter 7 at UT=11.987893163893 h=43156.415 s 11:59:16.415

4/1/96



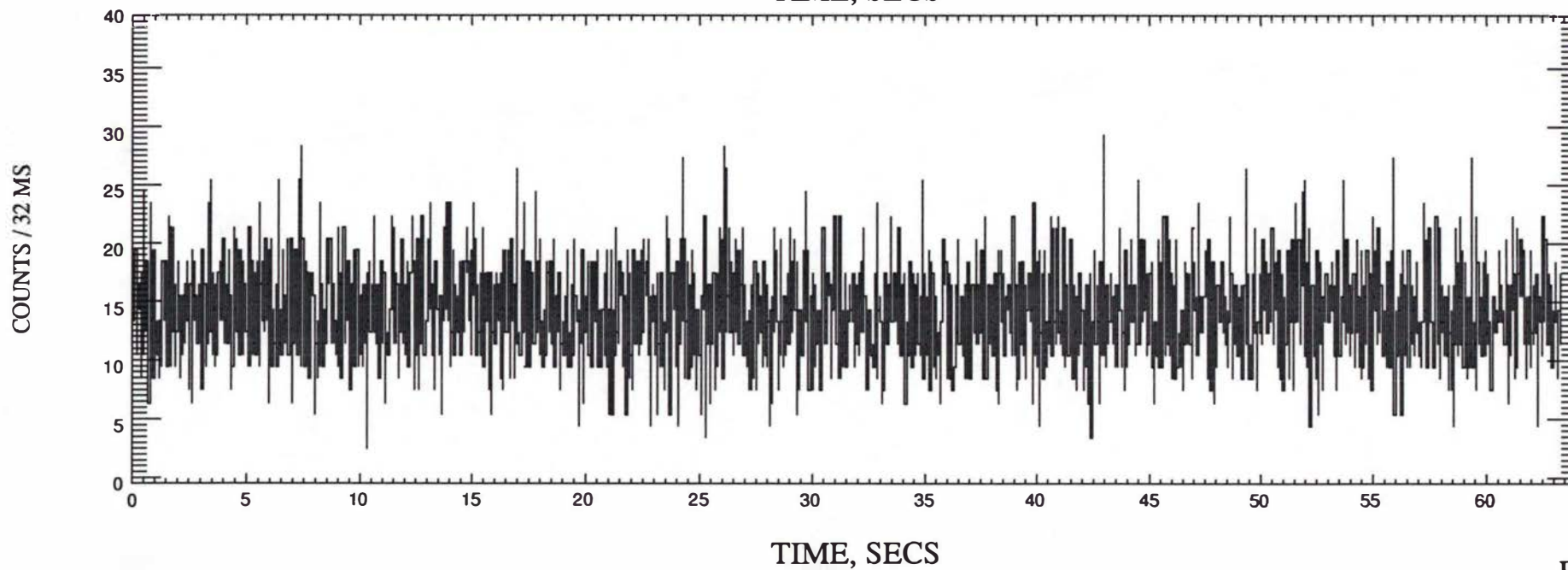
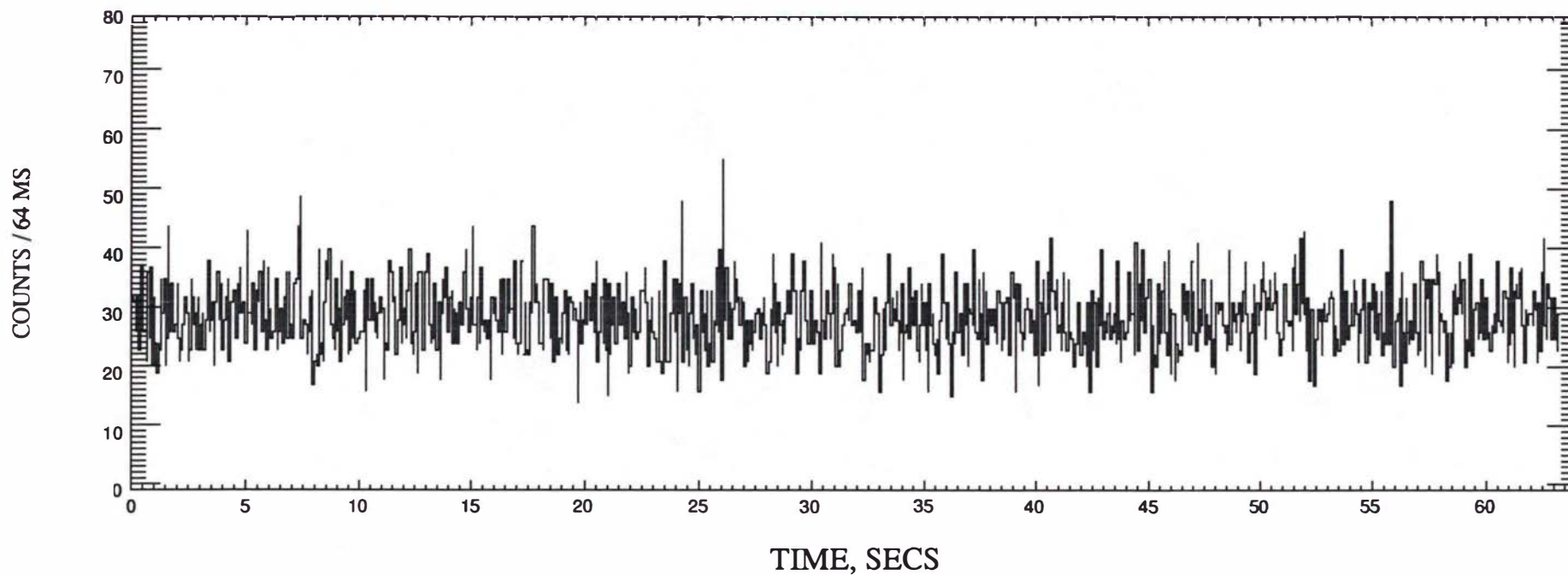
HUS 2A, MODE 1, NOT AVERAGED QEDR day 7, year 1996 to day 7, year 1996
CALIBRATION DATA INCLUDED

1/8/96



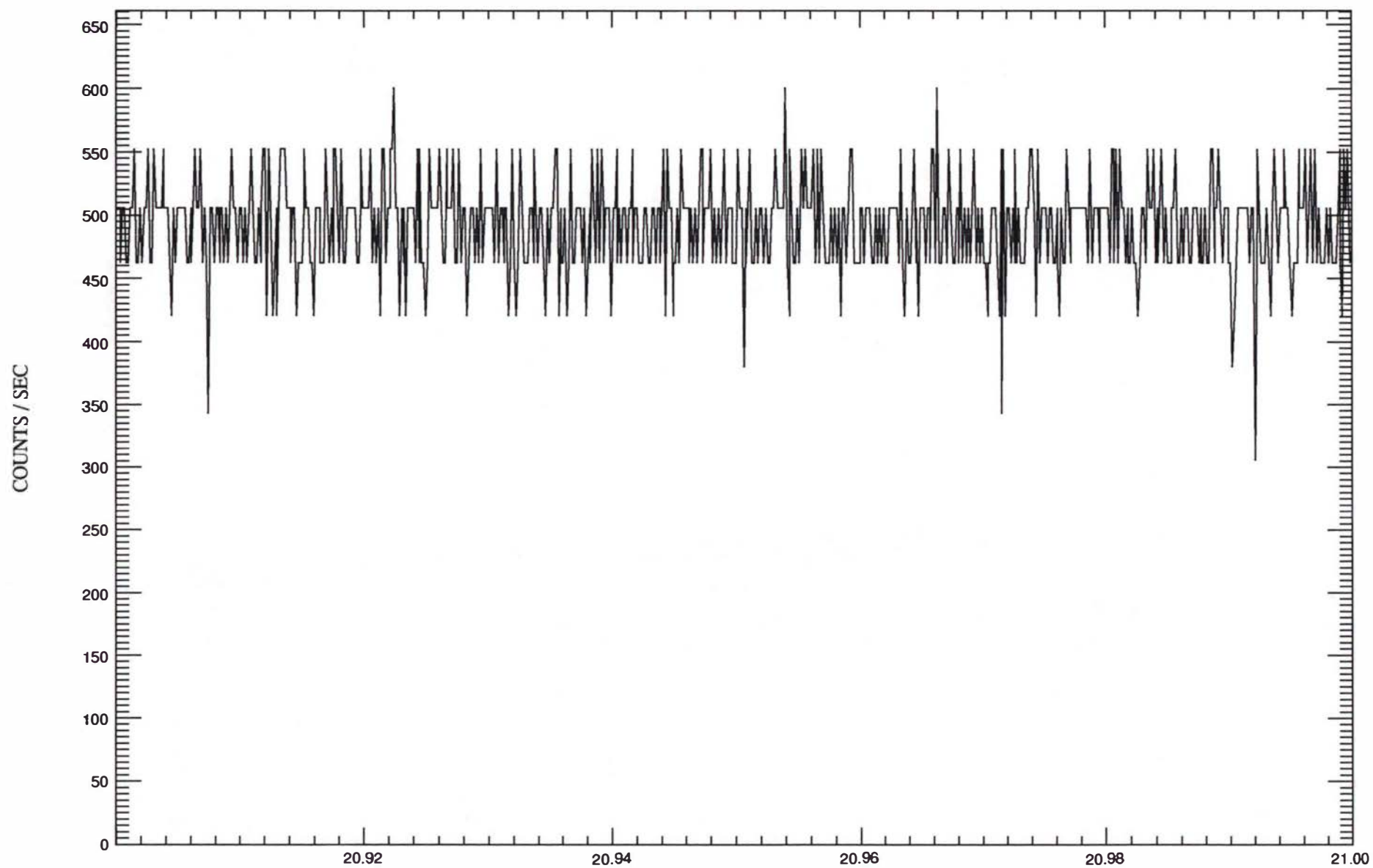
HUS 2A TRIGGERED DATA EDR day 7, year 1996
Burst Counter 8 at UT=20.954169854058 h=75435.011 s 20:57:15.011

4/1/96



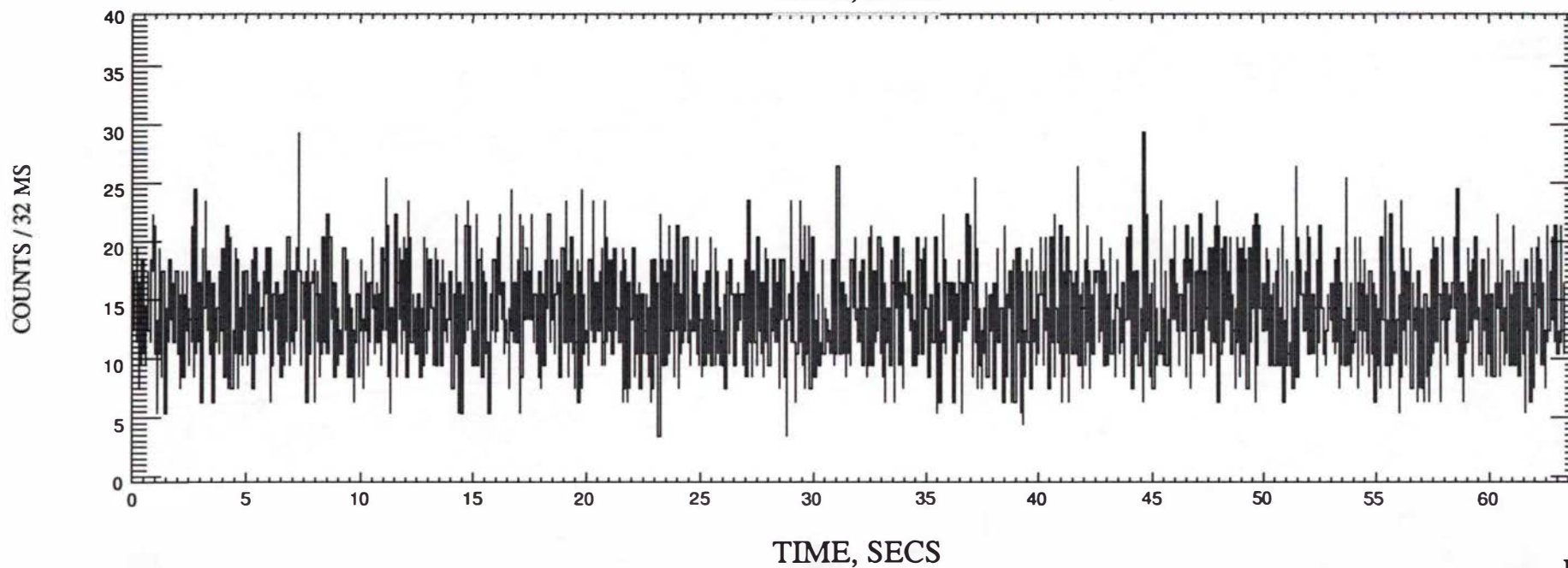
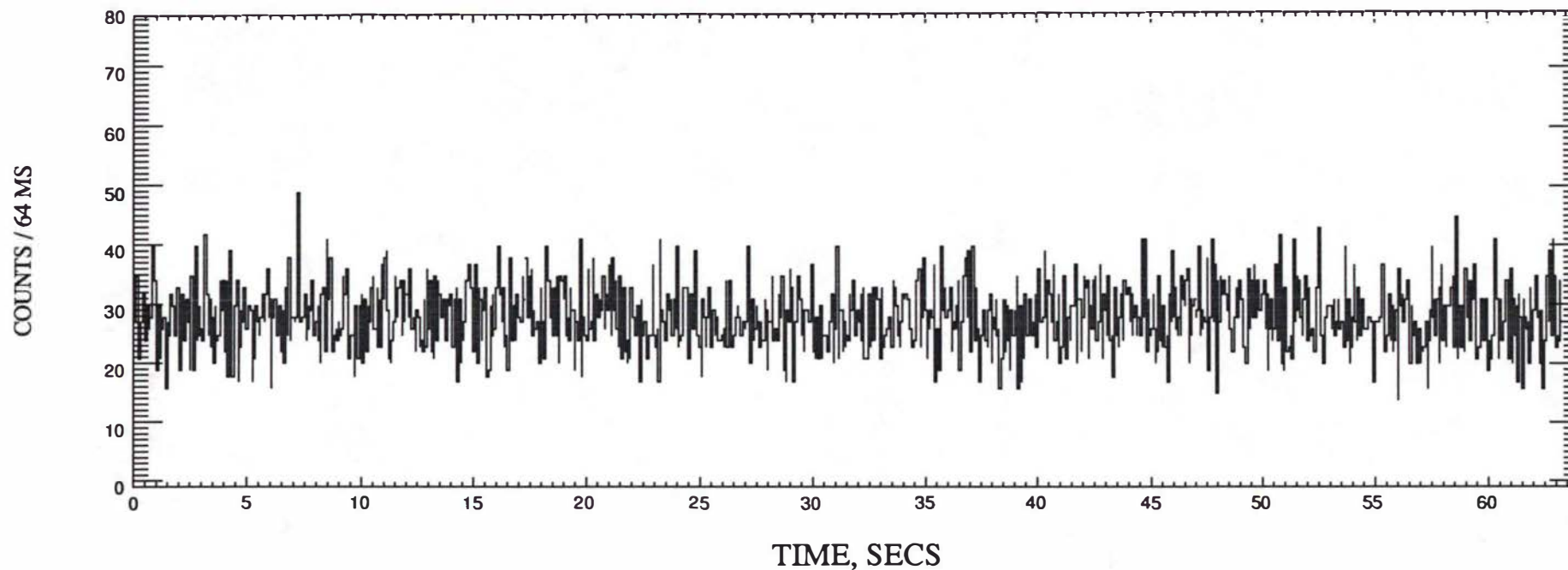
HUS 2A, MODE 1, NOT AVERAGED QEDR day 7, year 1996 to day 7, year 1996
CALIBRATION DATA INCLUDED

1/8/96



HUS 2A TRIGGERED DATA EDR day 7, year 1996
Burst Counter 9 at UT=23.734142790900 h=85442.914 s 23:44:02.914

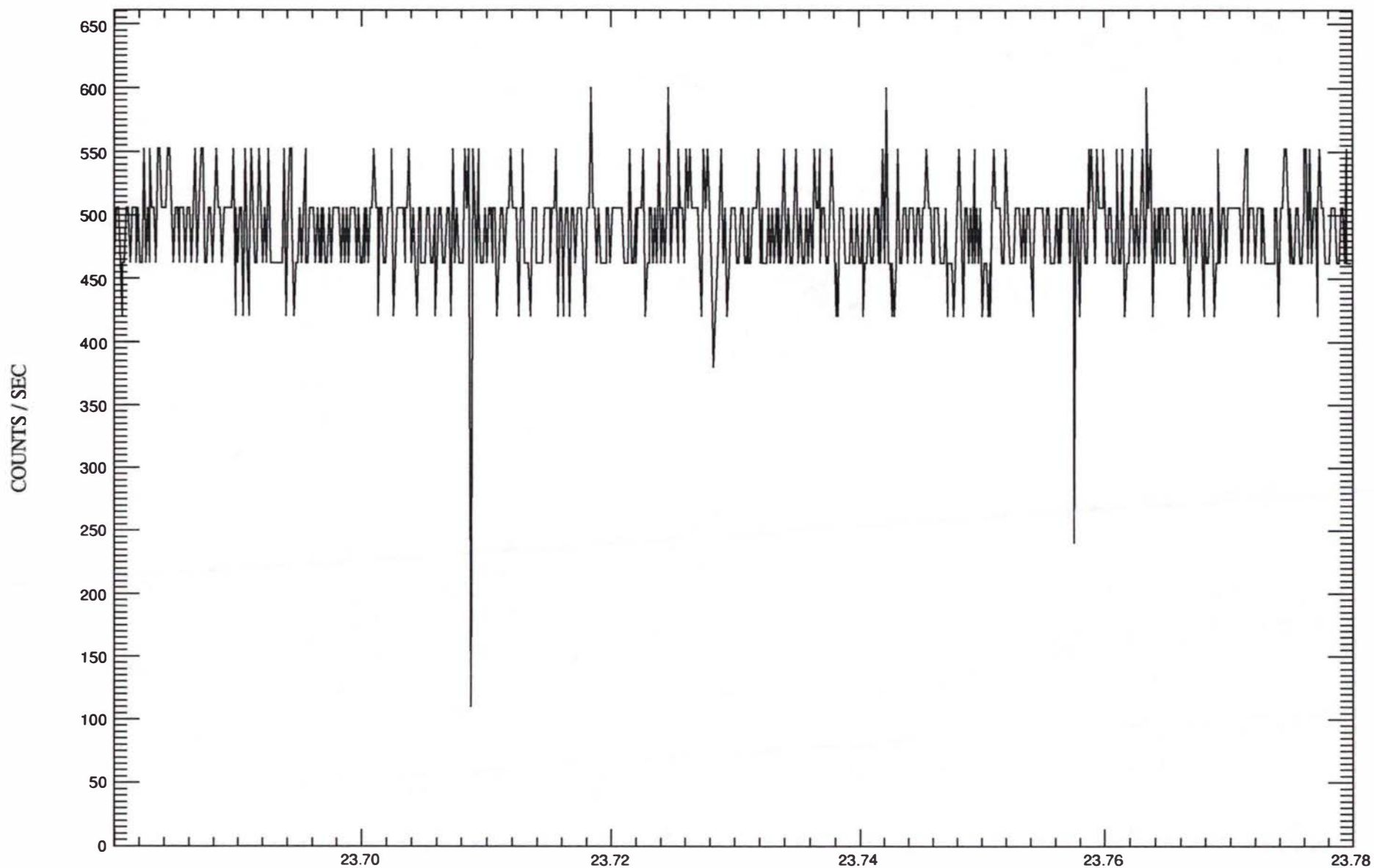
4/1/96



B# 5

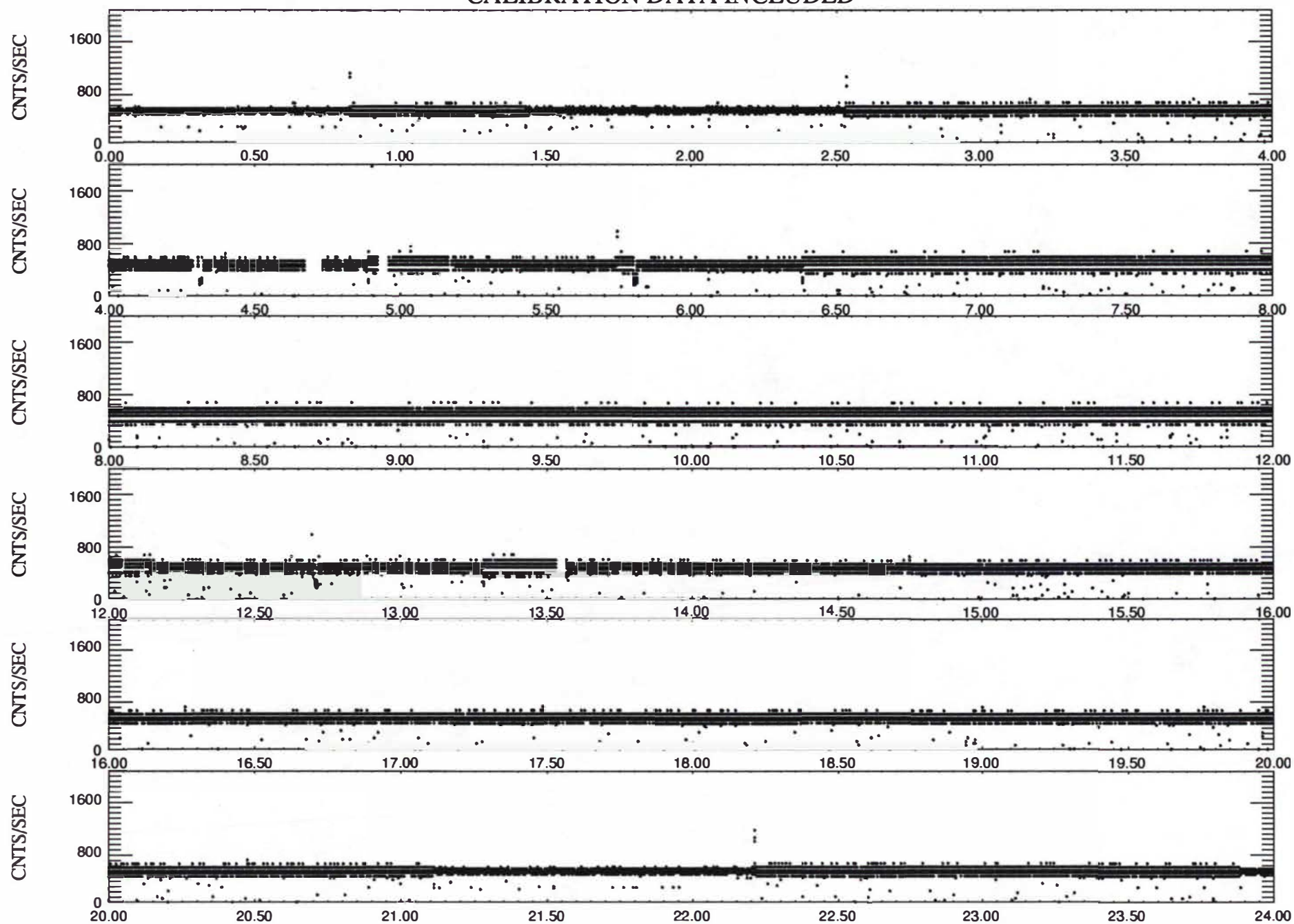
HUS 2A, MODE 1, NOT AVERAGED QEDR day 7, year 1996 to day 7, year 1996
CALIBRATION DATA INCLUDED

1/8/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 7, year 1996 to day 7, year 1996
CALIBRATION DATA INCLUDED

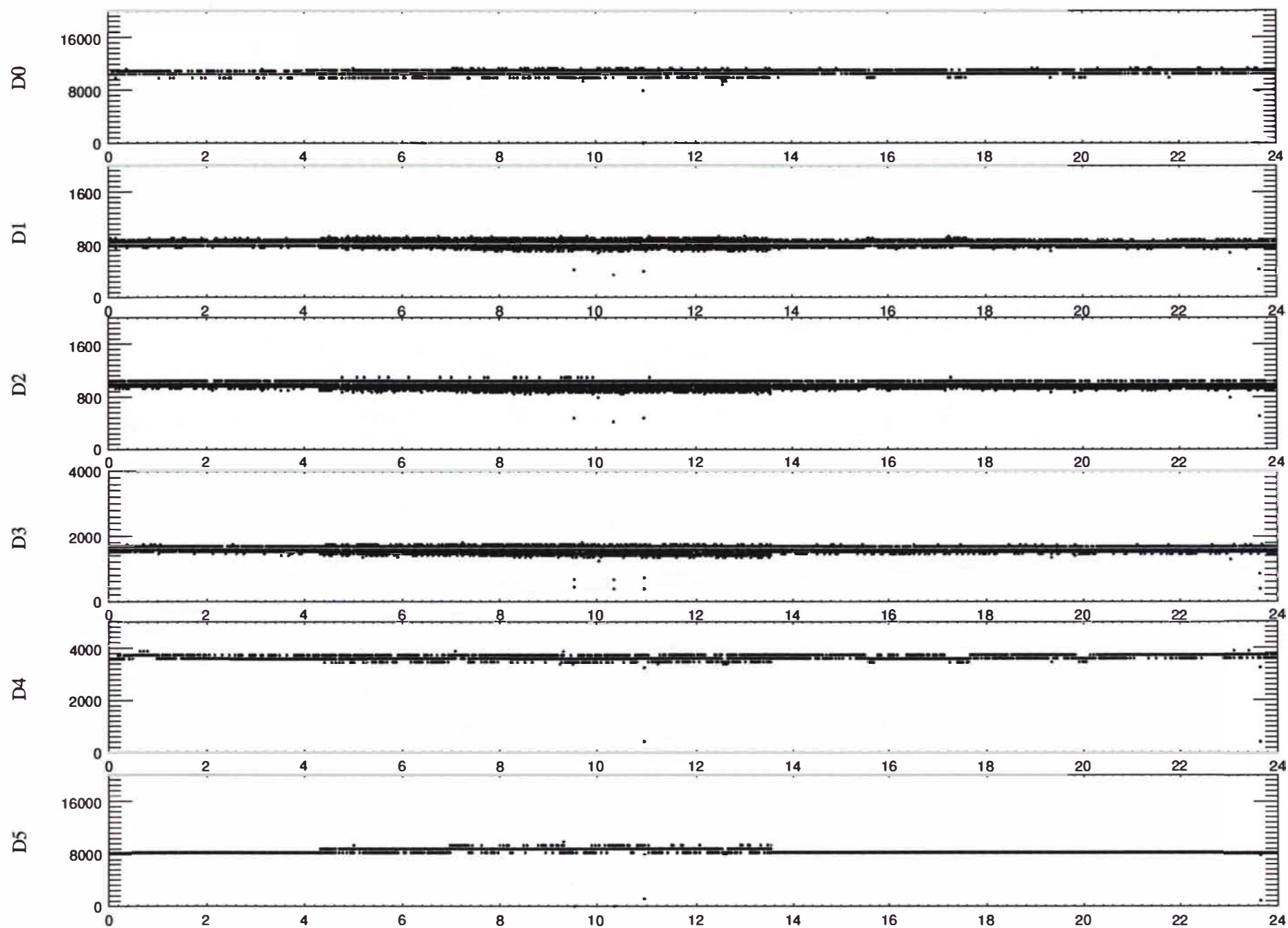
4/1/96



UNIV CAL TIME

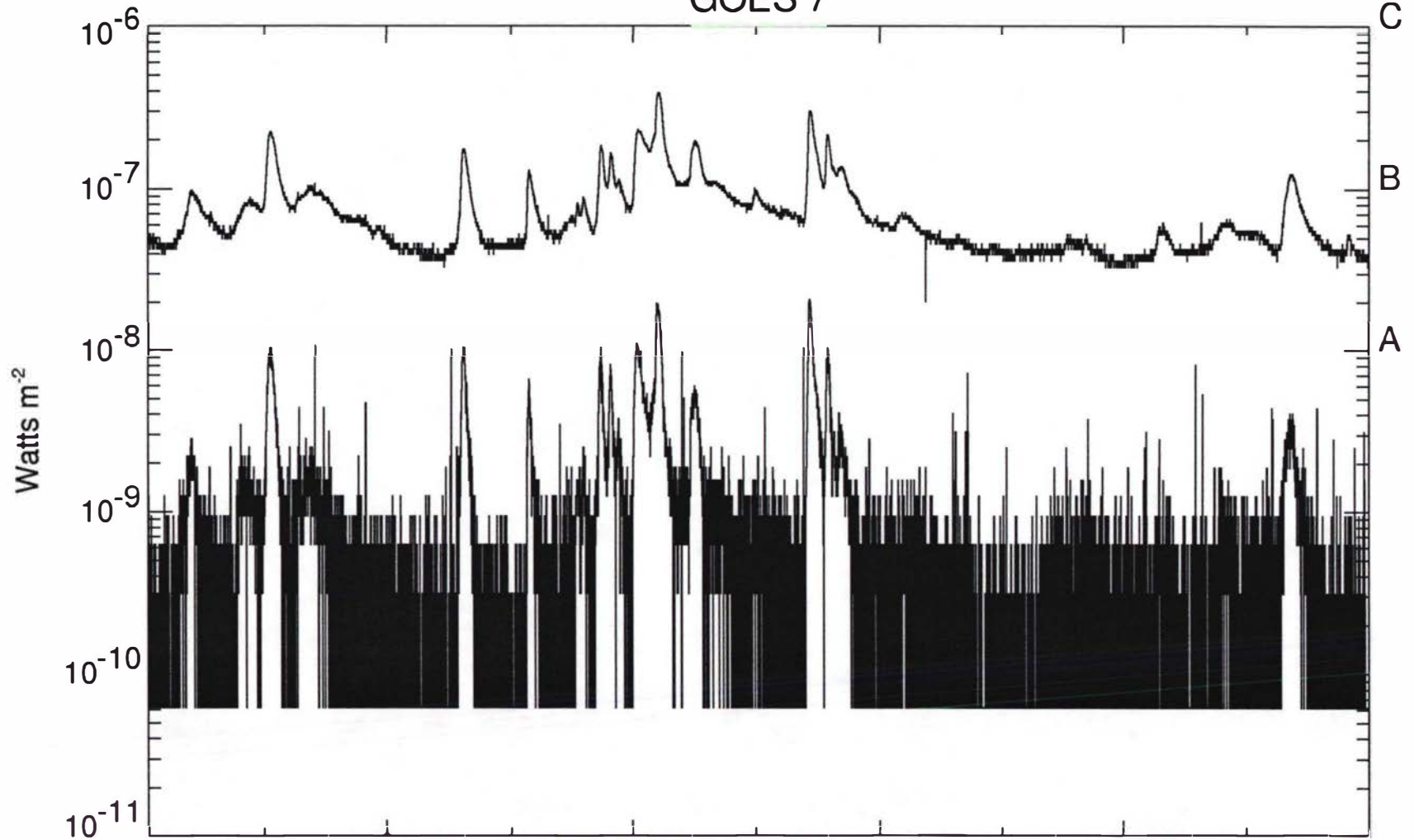
HUS 2B COUNTS / SEC QEDR day 7, year 1996 to day 7, year 1996

1/8/96



UNIV. CAL TIME

GOES 7



Data Start: 96/01/08, 1402:55

Plot created: 96/01/10, 0655

Channel

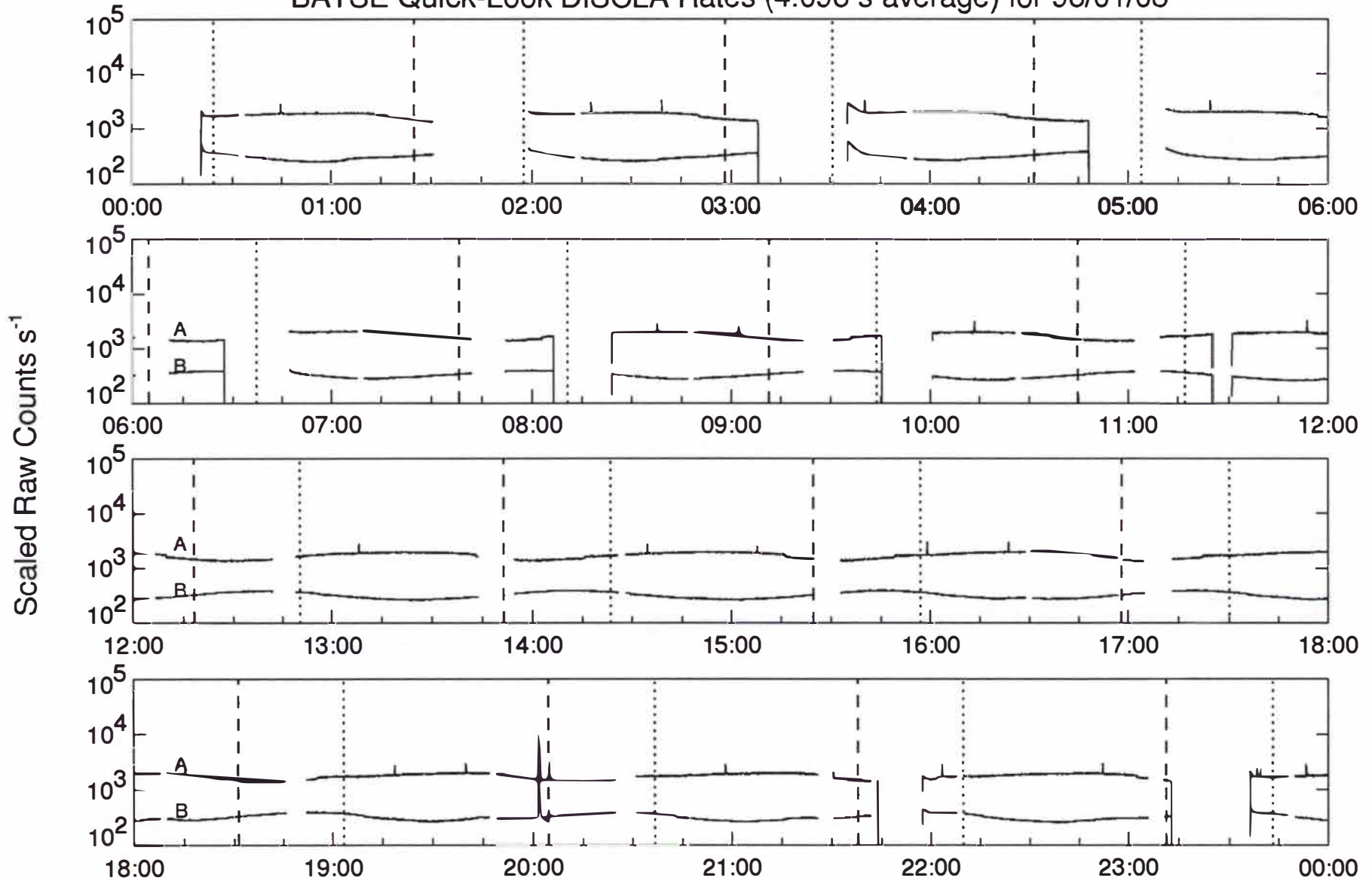
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

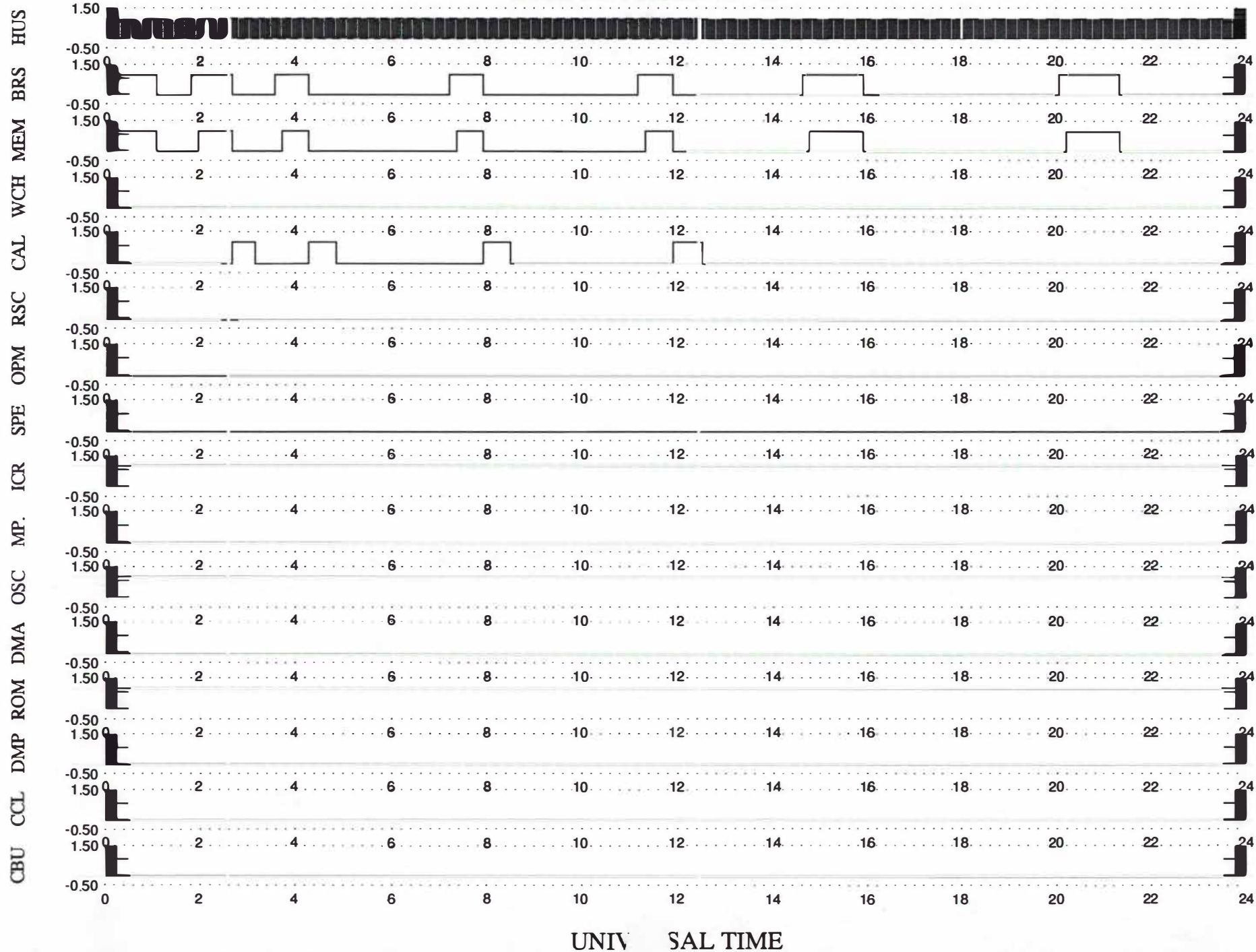
Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/08



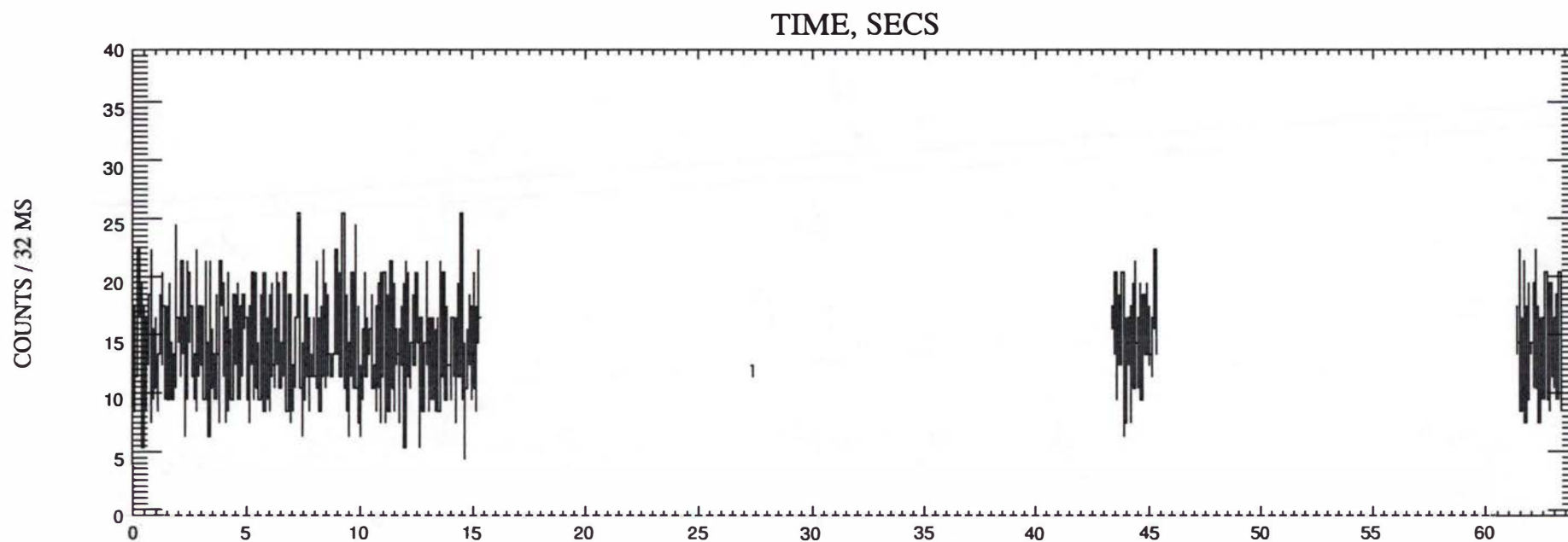
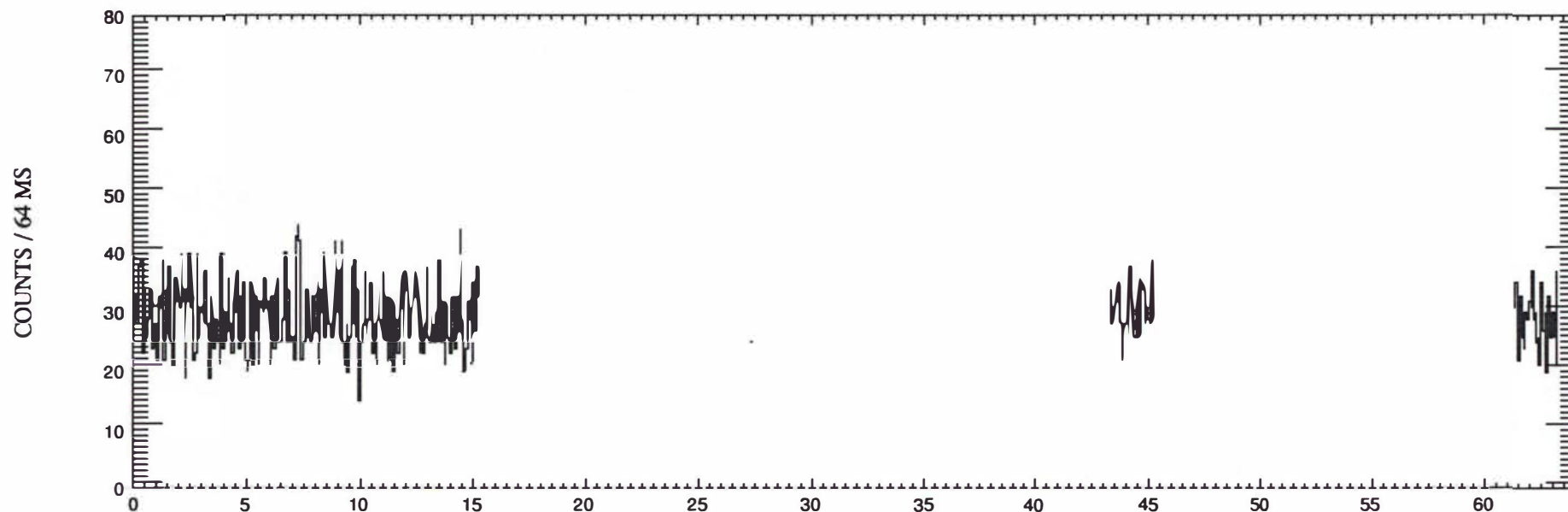
Current Time: 96/01/10, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

4/1/96



HUS 2A TRIGGERED DATA EDR day 8, year 1996
Burst Counter 10 at UT= 1.712158567641 h= 6163.771 s 01:42:43.771

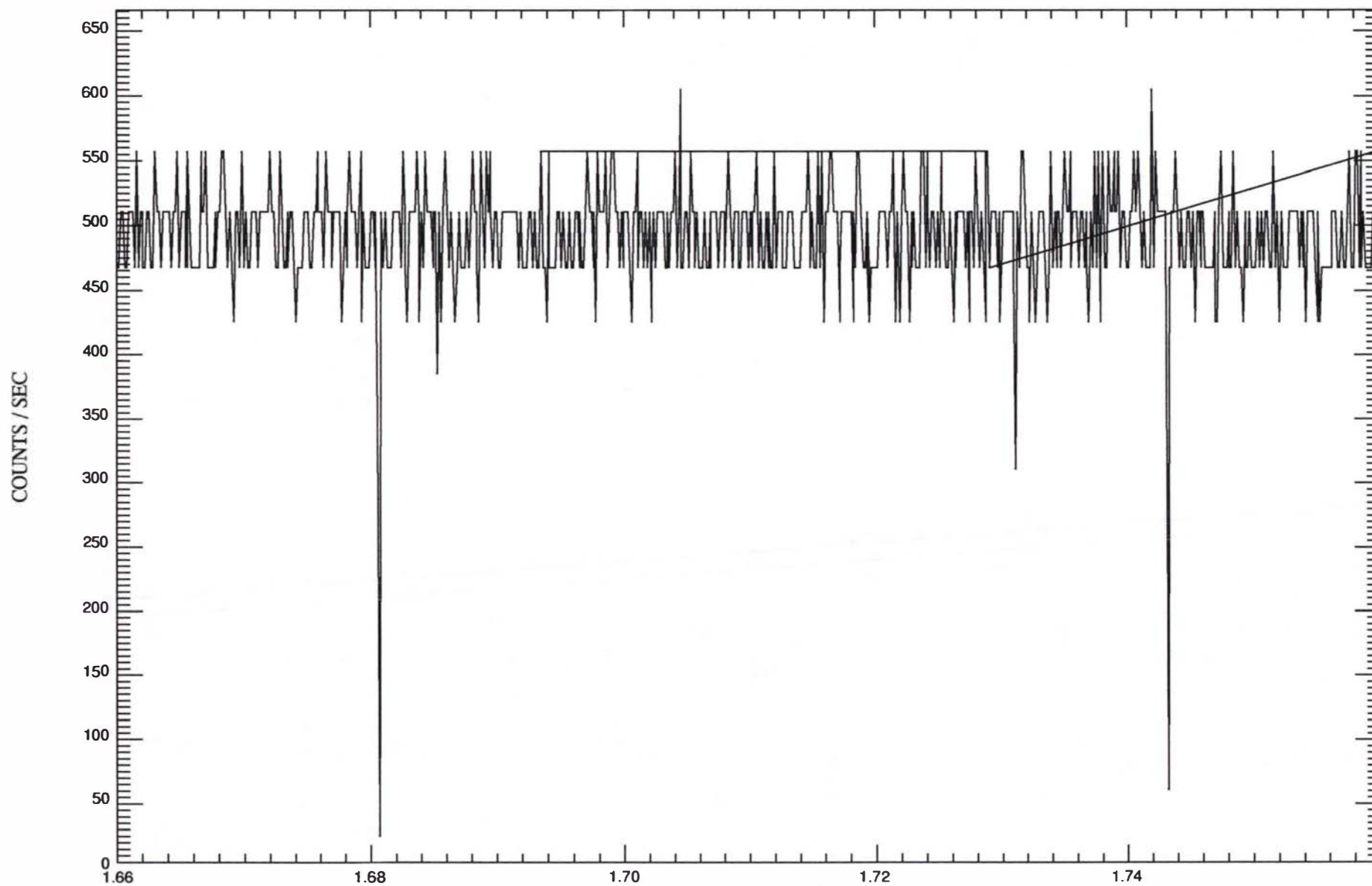
4/1/96



B# 1

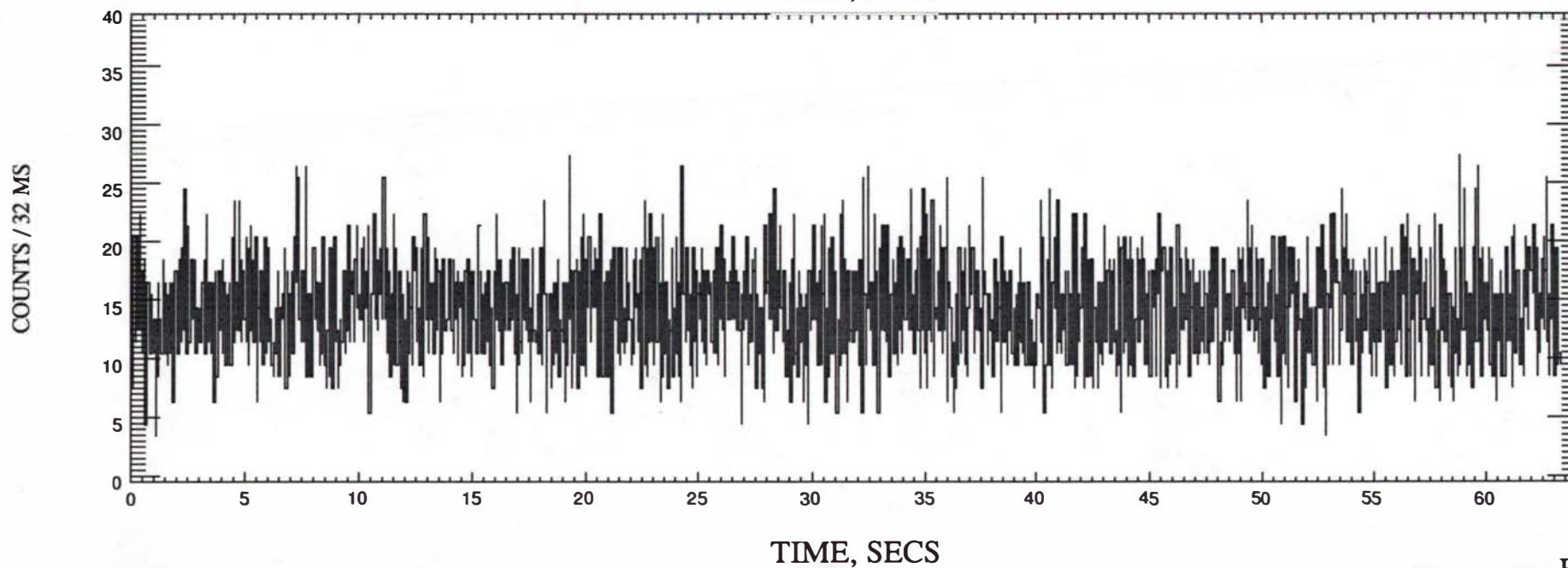
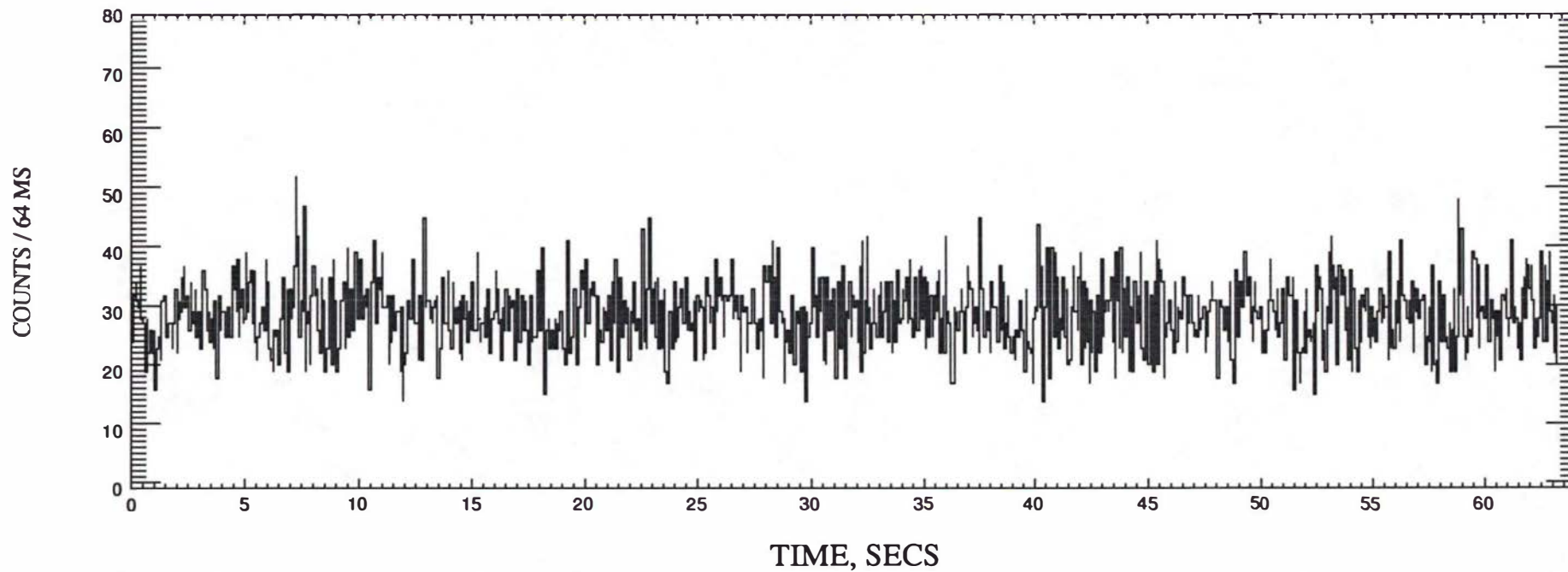
HUS 2A, MODE 1, NOT AVERAGED QEDR day 8, year 1996 to day 8, year 1996
CALIBRATION DATA INCLUDED

1/10/96



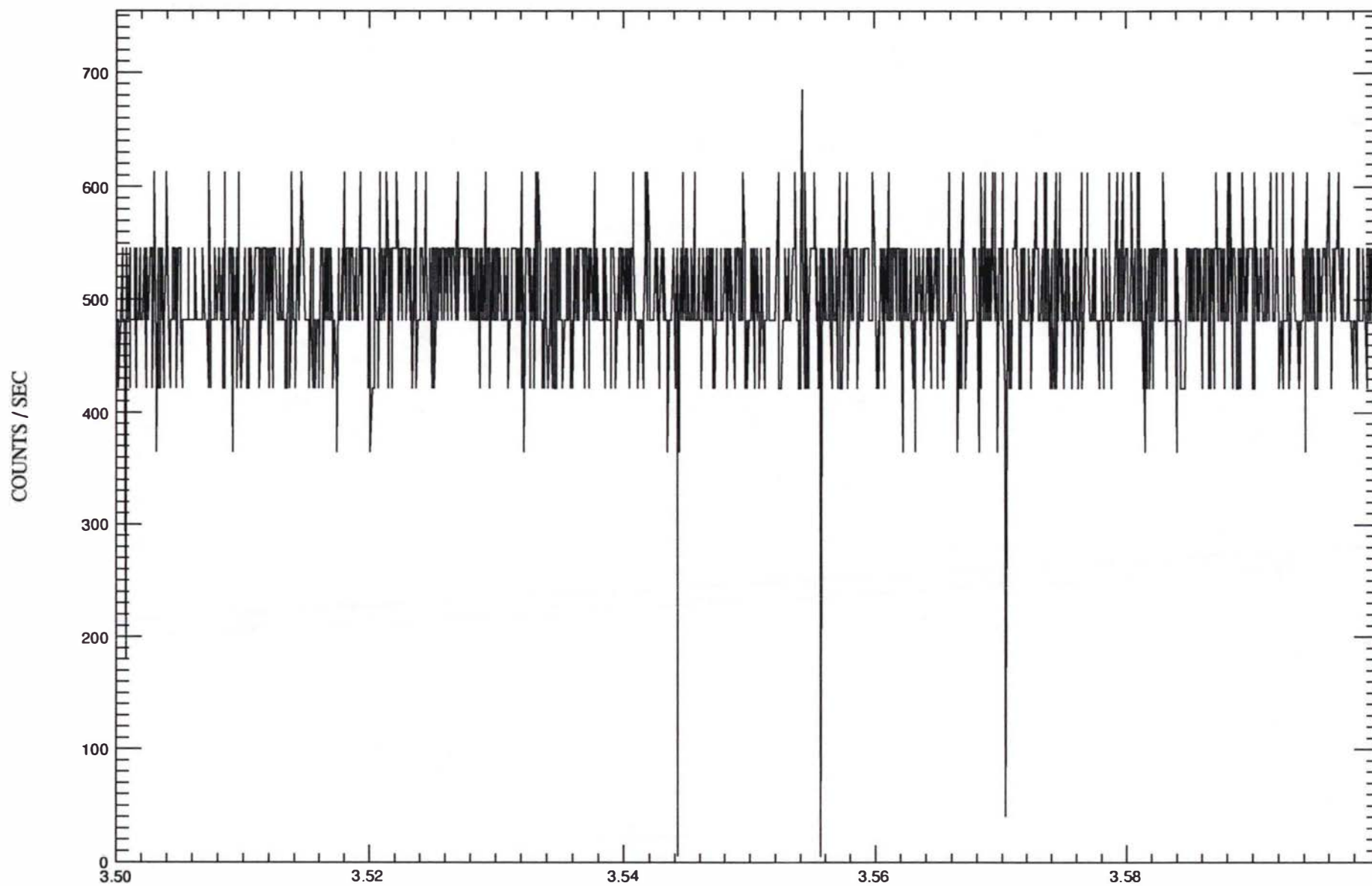
HUS 2A TRIGGERED DATA EDR day 8, year 1996
Burst Counter 11 at UT= 3.554271041022 h=12795.376 s 03:33:15.376

4/1/96



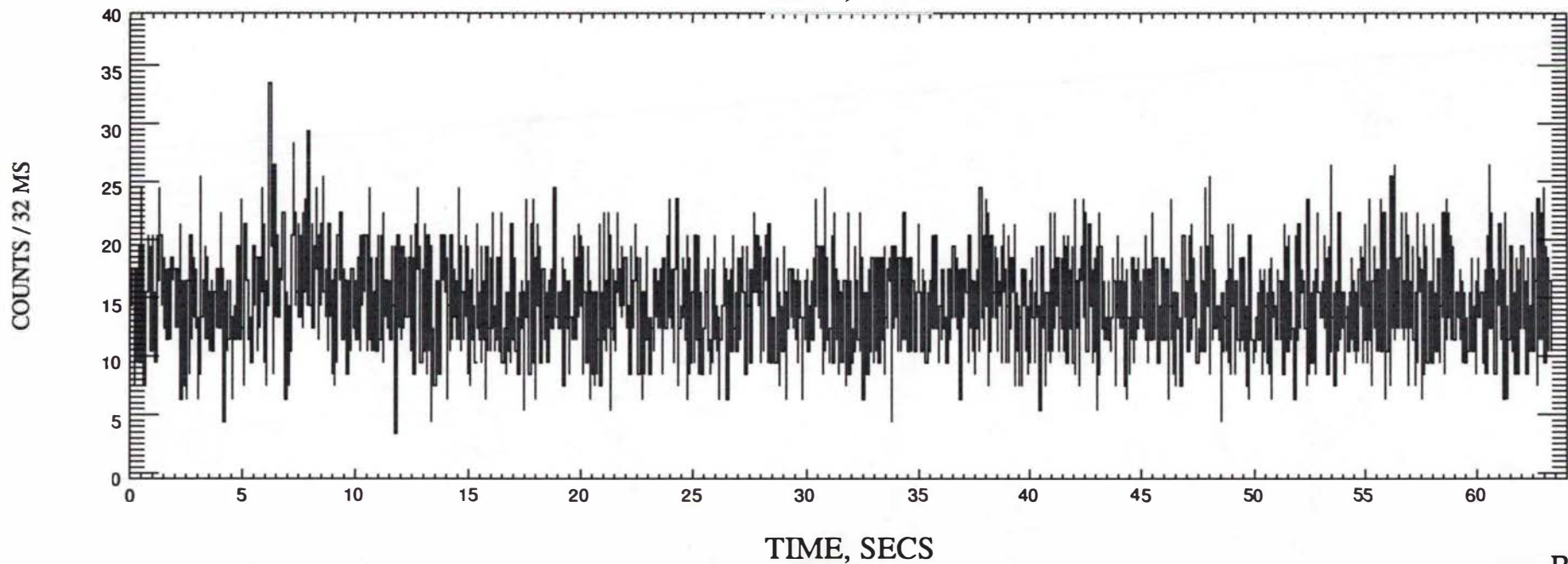
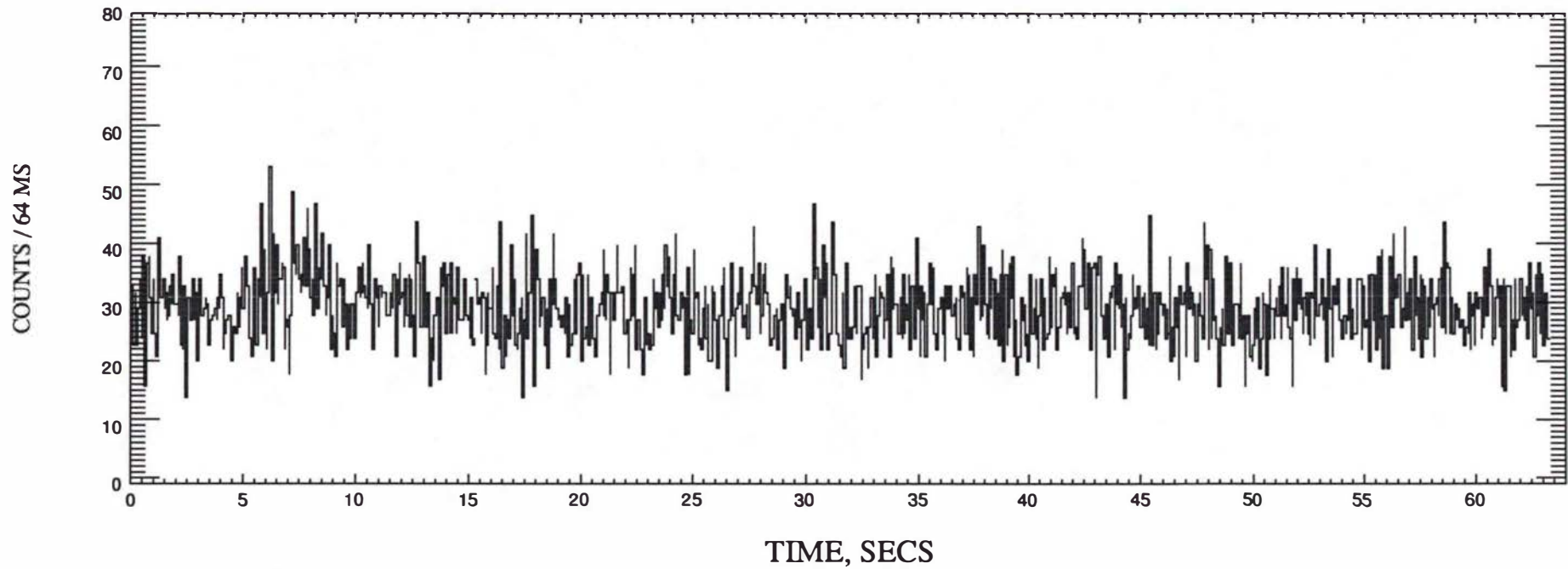
HUS 2A, MODE 1, NOT AVERAGED QEDR day 8, year 1996 to day 8, year 1996
CALIBRATION DATA INCLUDED

1/10/96



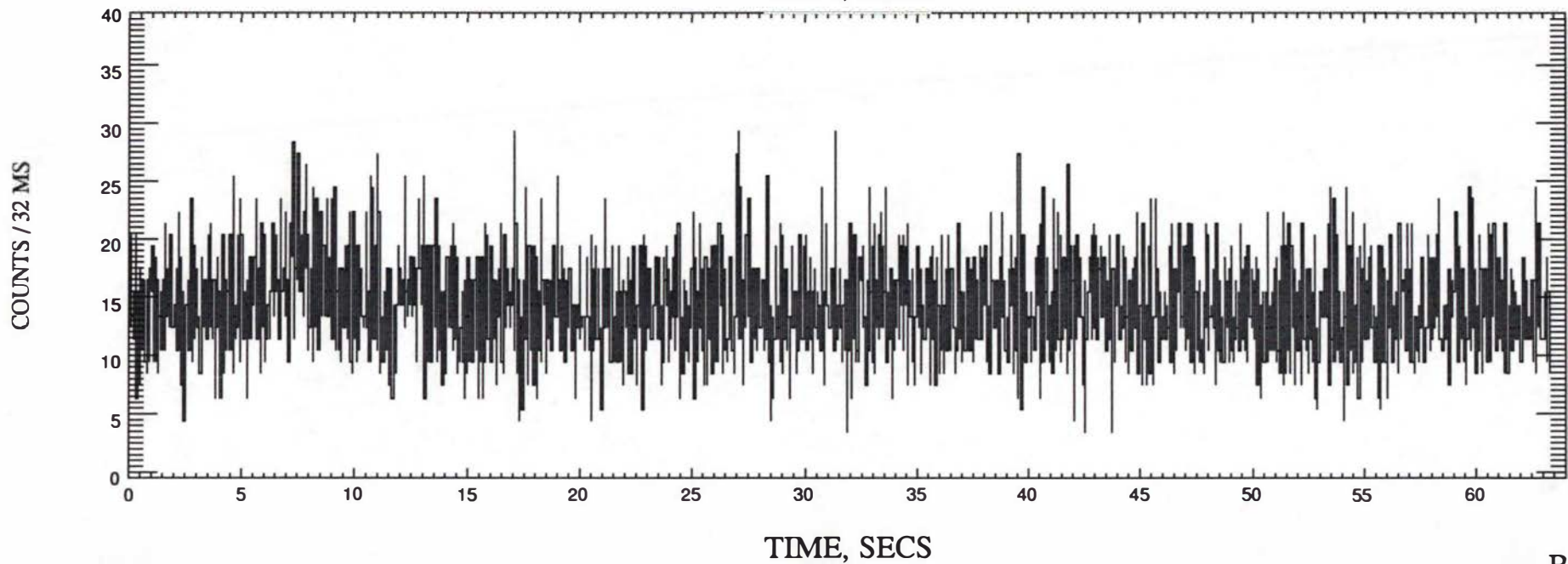
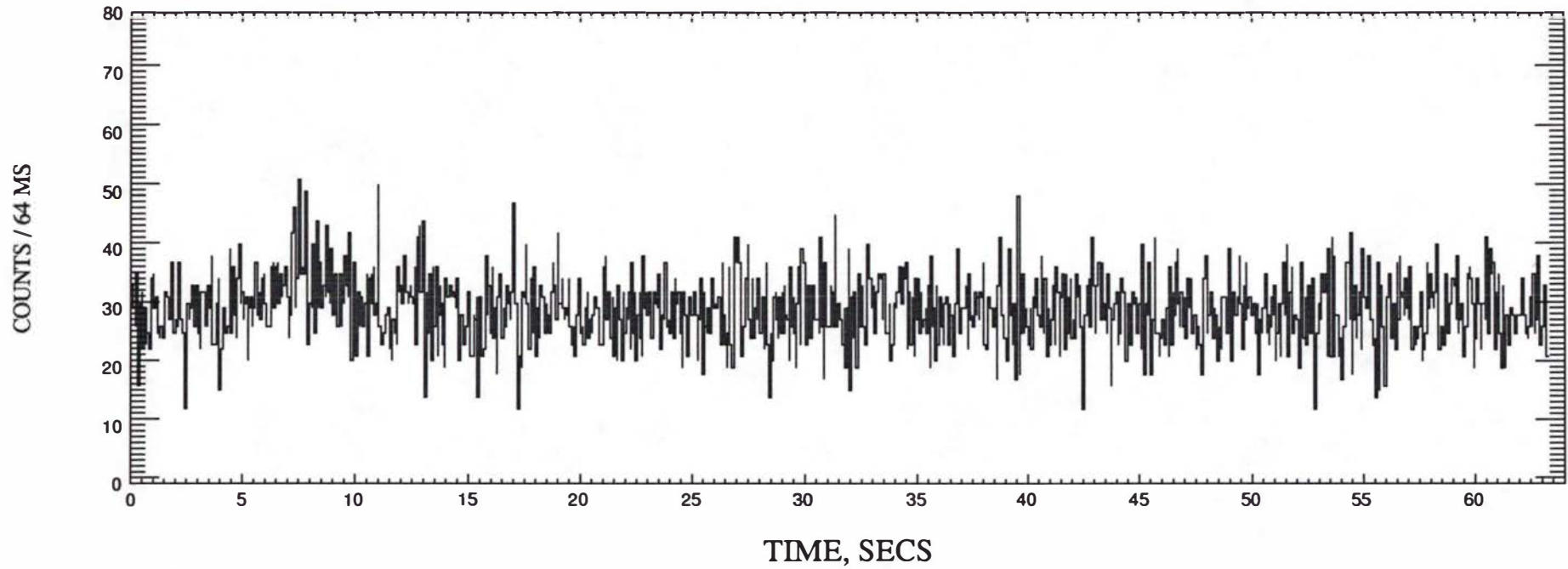
HUS 2A TRIGGERED DATA EDR day 8, year 1996
Burst Counter 12 at UT= 7.201165356106 h=25924.195 s 07:12:04.195

4/1/96



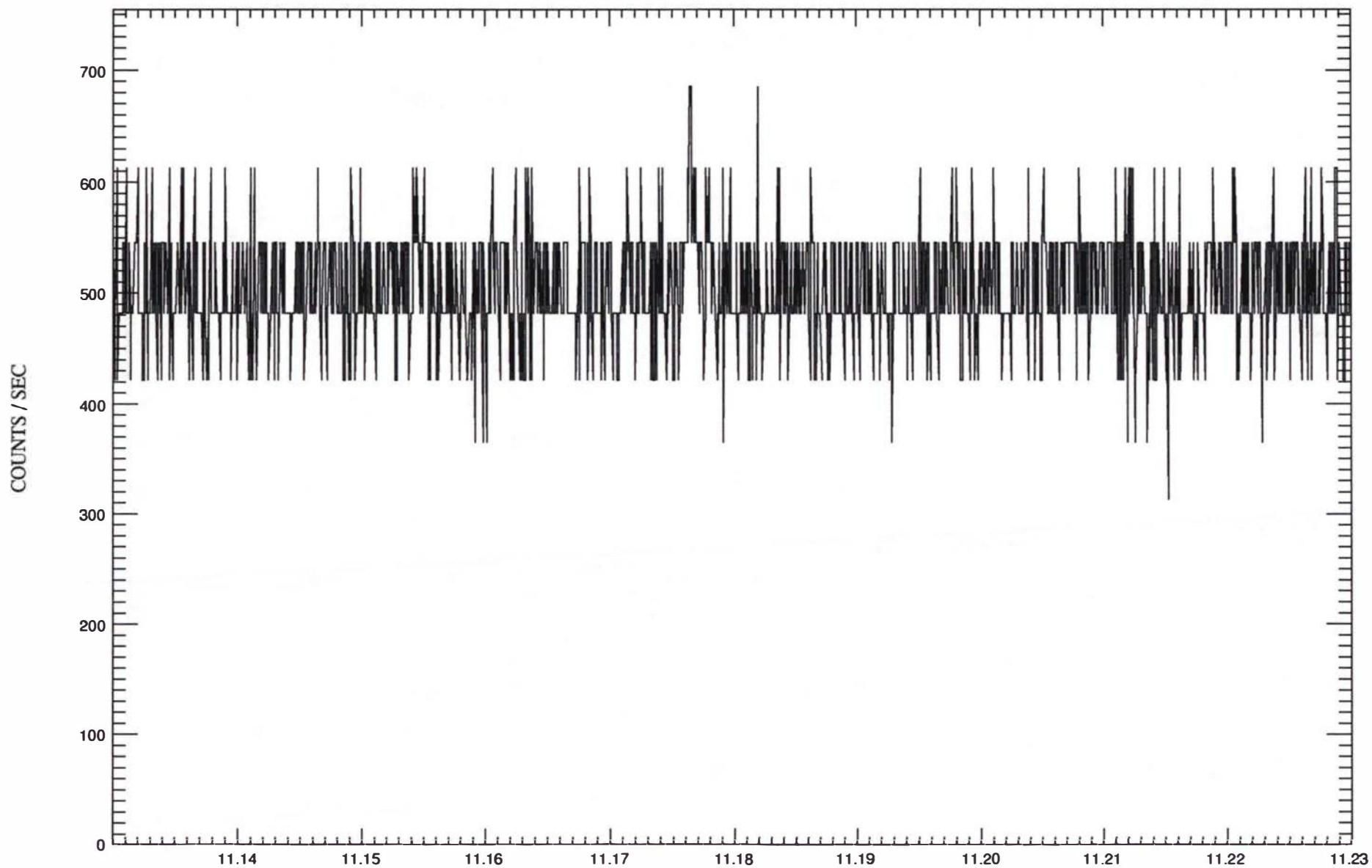
HUS 2A TRIGGERED DATA EDR day 8, year 1996
Burst Counter 13 at UT=11.176537191603 h=40235.534 s 11:10:35.534

4/1/96



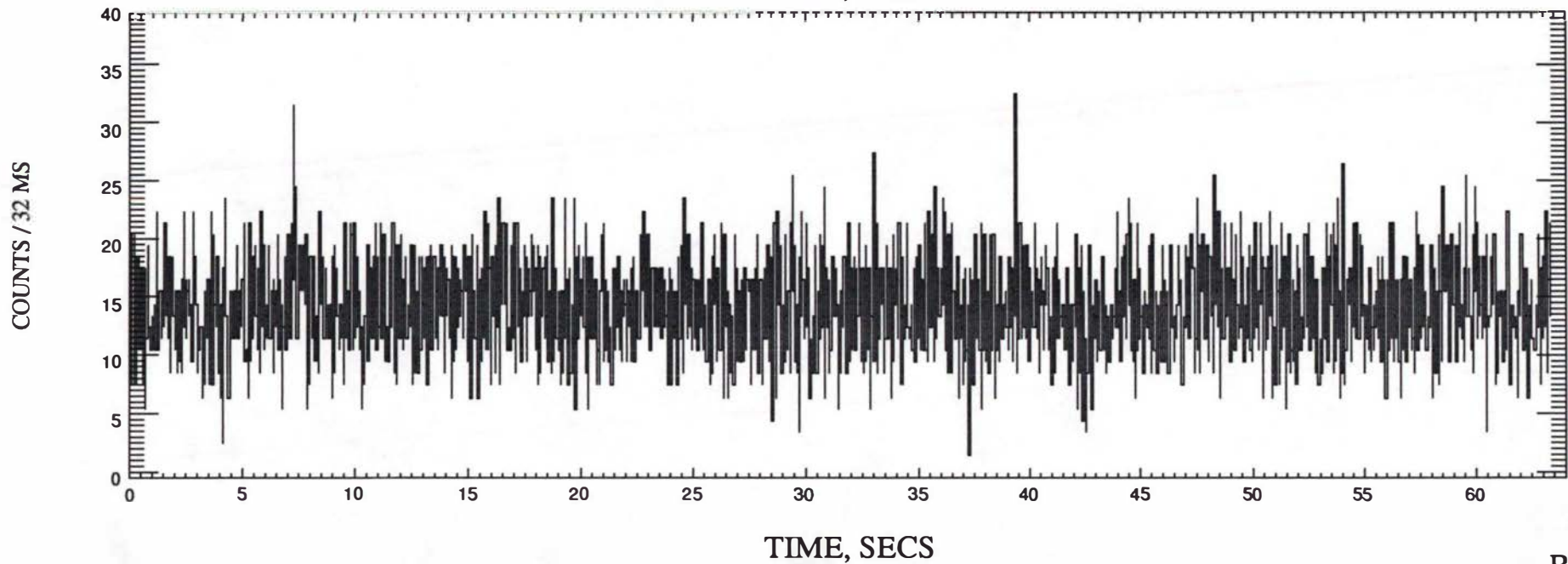
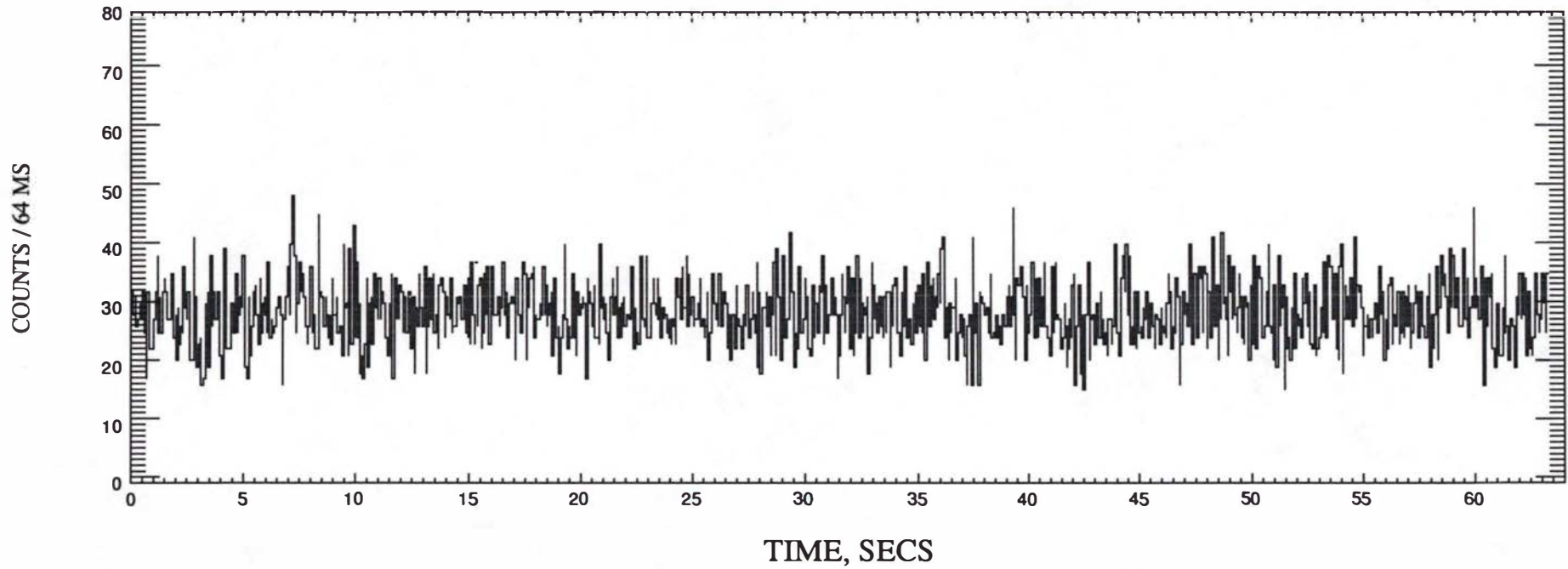
HUS 2A, MODE 1, NOT AVERAGED QEDR day 8, year 1996 to day 8, year 1996
CALIBRATION DATA INCLUDED

1/10/96



HUS 2A TRIGGERED DATA EDR day 8, year 1996
Burst Counter 14 at UT=14.658913909064 h=52772.090 s 14:39:32.090

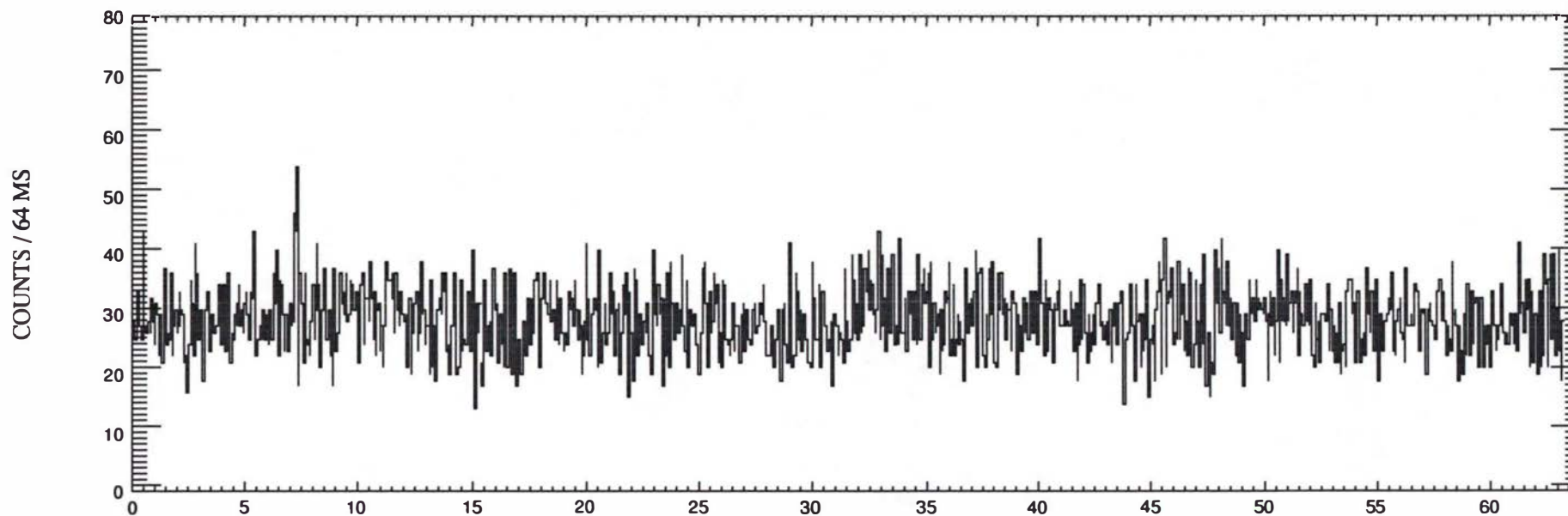
4/1/96



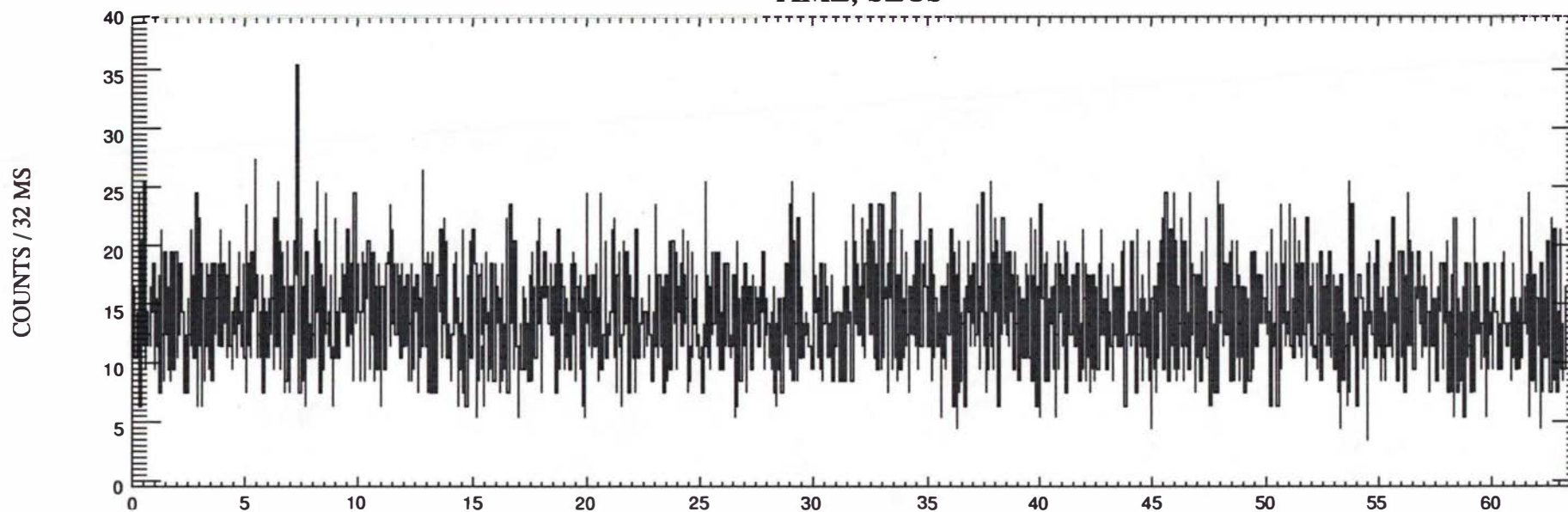
B# 5

HUS 2A TRIGGERED DATA EDR day 8, year 1996
Burst Counter 15 at UT=20.005313877530 h=72019.130 s 20:00:19.130

4/1/96

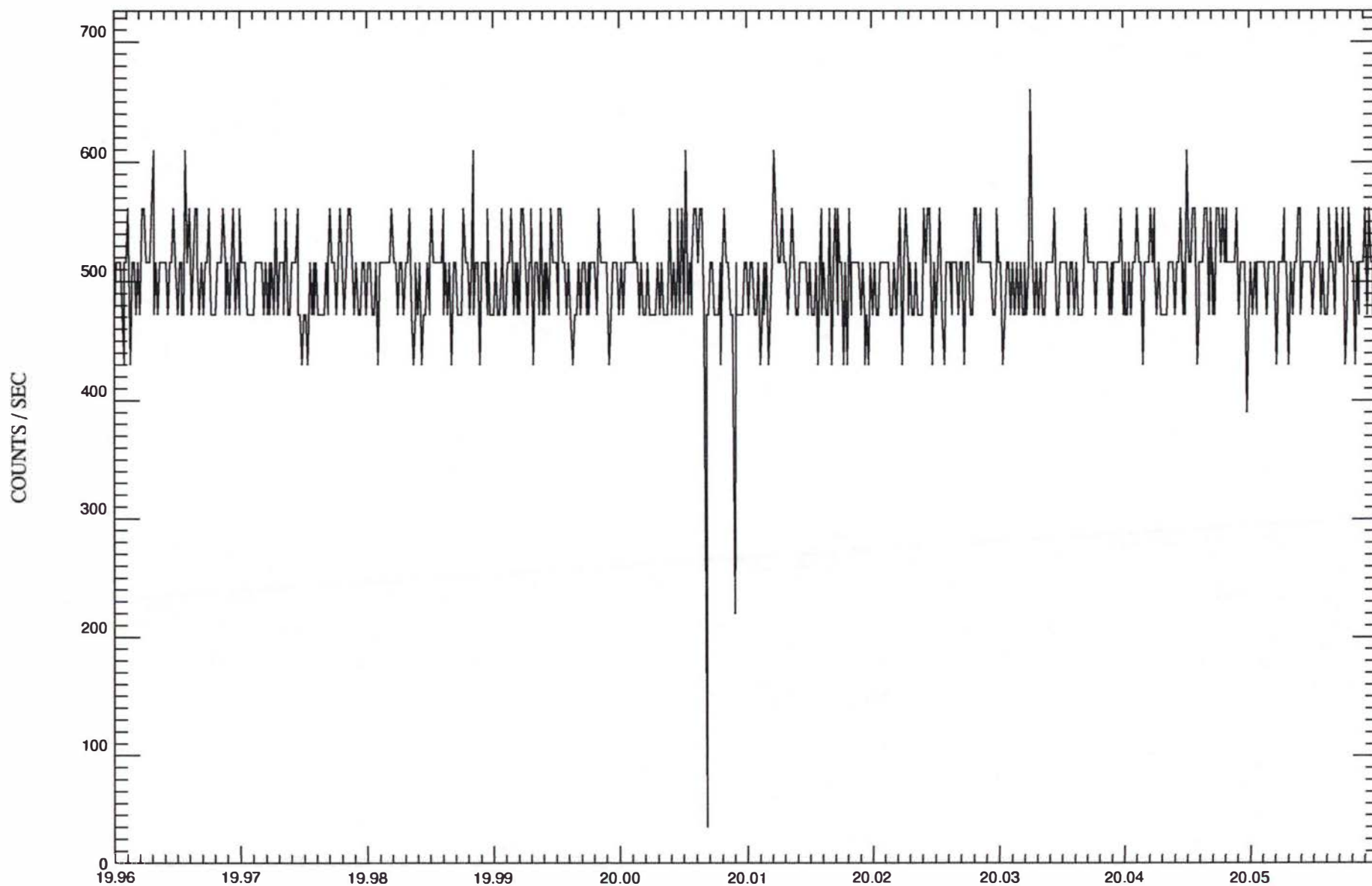


TIME, SECS



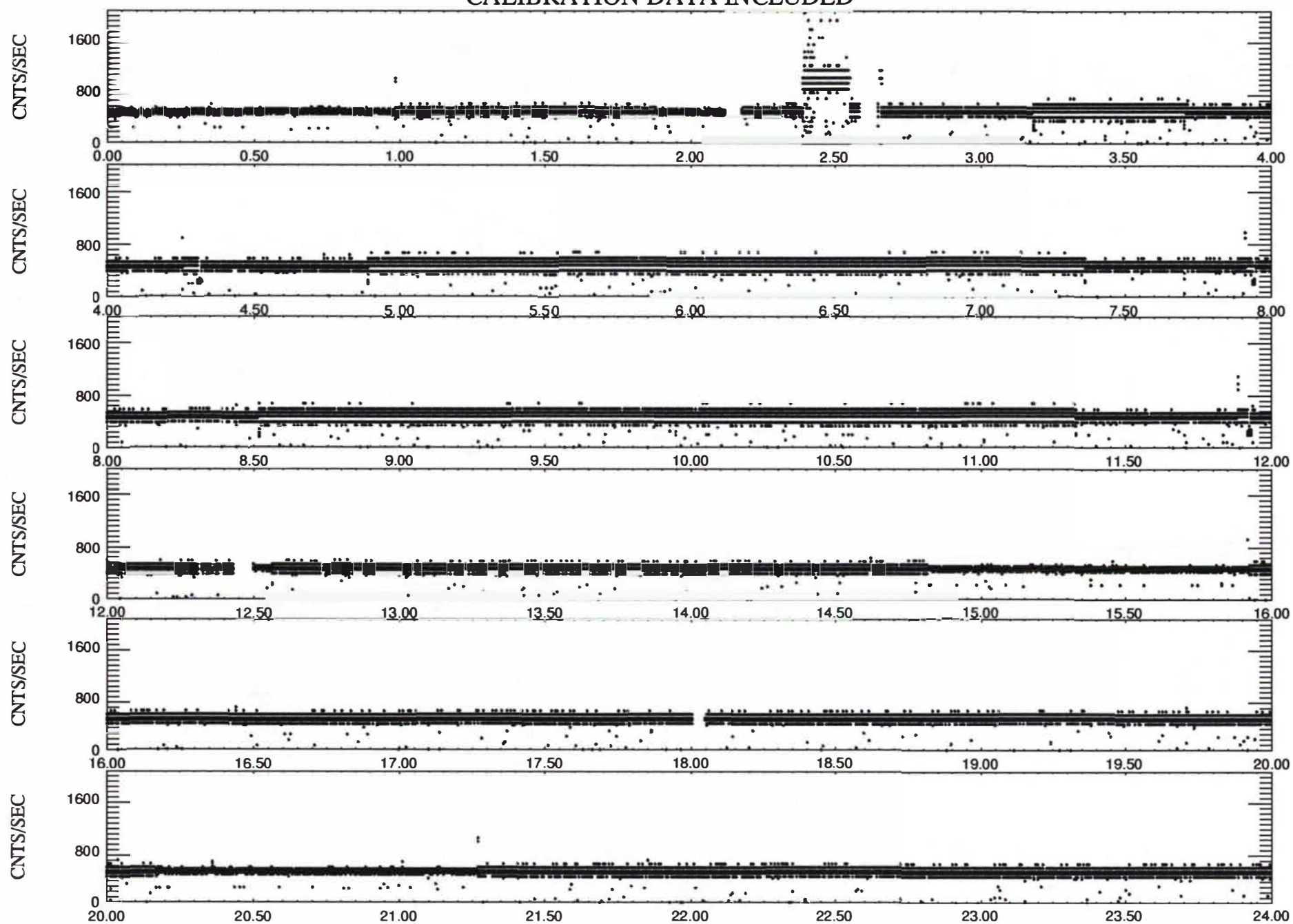
HUS 2A, MODE 1, NOT AVERAGED QEDR day 8, year 1996 to day 8, year 1996
CALIBRATION DATA INCLUDED

1/10/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 8, year 1996 to day 8, year 1996
CALIBRATION DATA INCLUDED

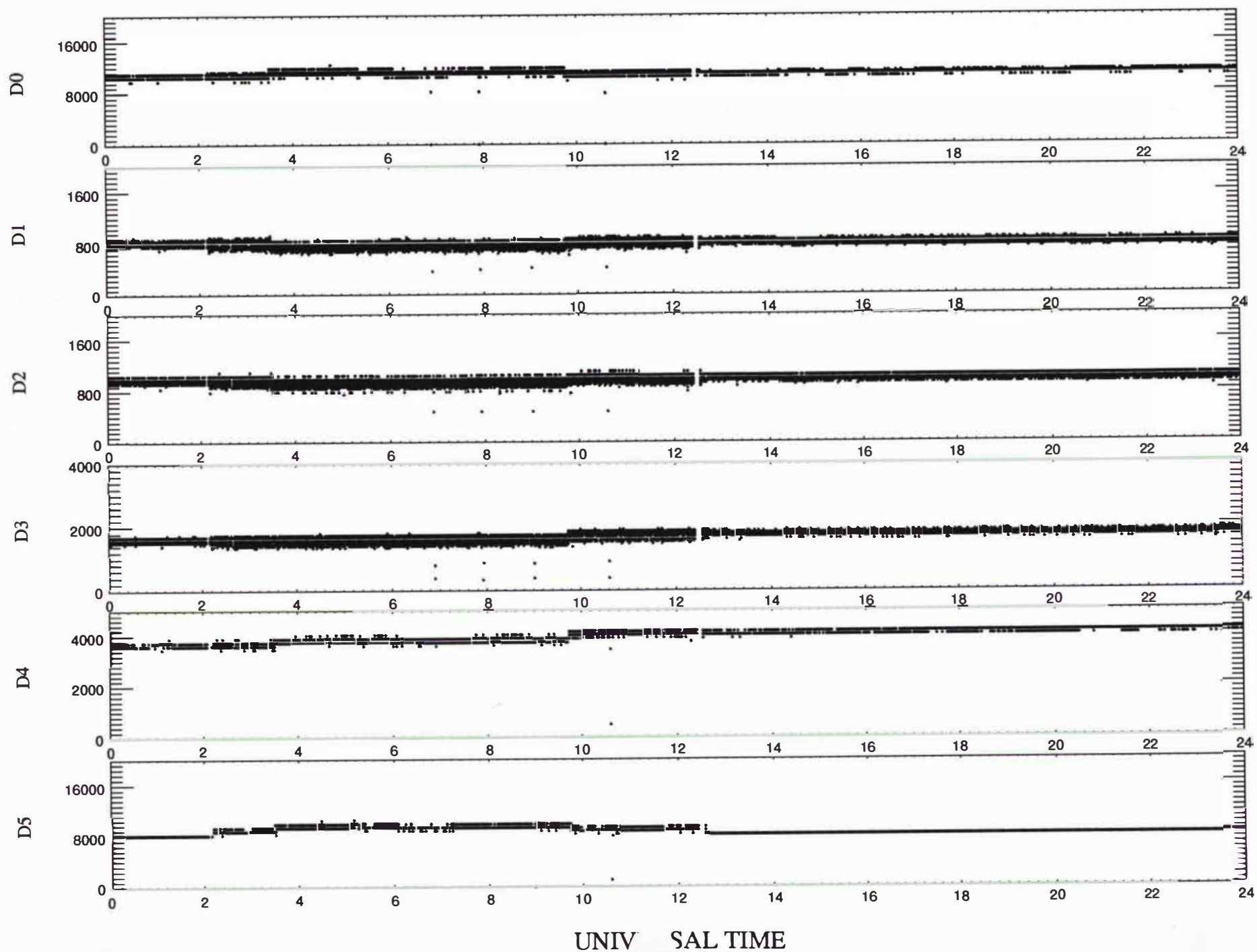
4/1/96



UNIV CAL TIME

HUS 2B COUNTS / SEC QEDR day 8, year 1996 to day 8, year 1996

1/10/96



951025	23	40	39.738	S1	190	400	120	1.7	3	60	167 ✓
951102	01	58	05.879	S2	260	320	50	<0.1	100	3	168 ✓
951102	05	53	29.015	S2	700	1560	600	0.1	5	18	169 ✓
951102	07	58	13	S1	320	80		4	6		BGR ✓
951105	00	29	05	S2	40	50		0.6	40		BGR ✓
951105	01	37	48.077	S2	140	340	80	0.6	2	22	170 ✓
951105	13	00	27.808	S1	160	380	120	9	2	9	171 ✓
951107	07	34	58	S1	20	50	20	2	90		BGR ✓
951111	09	42	40	S1	80	160	20	1.1	15		BGR ✓
951112	18	28	15.244	S2	540	690	220	0.2	14	84	172 ✓
951113	23	25	58.872	S1	260	330	260	4.4	1	15	173 ✓
951115	10	48	49	S1	70	180	80	3	12		BGR ✓
951117	02	48	43.762	S2	650	530	120	0.1	9	10	175 ✓
951118	22	56	00	S2	20	90	100	0.15	6		BGR ✓
951119	08	17	11.402	S1	200	420	110	3	1.5	12	176 ✓
951119	12	54	17.519	S1	110	220	340	1.7	3	4	177 ✓
951119	16	30	48	S2	30	40	10	0.4	110		BGR ✓
951121	06	11	20	S1	20	70	10	2	45		BGR ✓
951122	02	44	01.380	S2	770	920		0.15	0.5	1.5	179 ✓
951122	04	45	07.738	S1	280	430	160	12	35	22	180 ✓
951123	18	10	08	S1	30	60	30	1	30		BGR ✓
951124	05	54	26	S2	50	140	50	0.15	30		BGR ✓
951124	06	58	52	S2	30	100		0.25	280		BGR ✓
951202	10	51	41.744	S1	200	500	220	2.4	2	25	195 ✓
951203	01	06	28.180	S2	260	720	420	0.85	1	16	196 ✓
951208	05	26	57.151	S2	320	740	190	<0.04	1	3.5	197 ✓
951208	10	57	32.057	S1	290	260		7	52	6.5	198 ✓
951208	11	47	47.634	S1	240	510	190	10	23	98	199 ✓
951208	23	24	12	S1	100	90		>10	30		BGR ✓
951209	08	42	29.607	S1	150	450	160	6	6	14	200 ✓
951213	04	57	29.683	S2	360	940	330	0.4	2	8	201 ✓
951213	09	04	34	S2	300	90		<0.15	4.5		BGR ✓
951214	01	29	47	S2	15	100	30	1	30		BGR ✓
951214	02	24	17.847	S2	200	450	150	0.8	4	6	202 ✓
951215	20	23	45	S2	60	70	15	<0.15	60		BGR ✓
951216	22	39	42	S2	160	110		0.1	6		BGR ✓
951218	07	59	48	S1	70	130	30	2.3	22		BGR ✓
951219	16	51	19.732	S2	430	850	920	<0.03	1	54	203 ✓
951220	08	51	23.560	S2	100	320	180	1	2	8	204 ✓
951221	08	23	18	S1	110	150	70	>15	15		BGR ✓
951222	21	00	21	S2	280			<0.1	16		BGR ✓
951225	09	14	16	S2	200			<0.3	50		BGR ✓
951225	09	34	14	S1	500	150	25	2.2	60		BGR ✓
951225	15	21	35	S2	210	170	40	0.1	100		BGR ✓
951225	22	51	08	S1	80	150	50	2.4	40		BGR ✓
951226	08	38	15	S2	60	100	50	0.15	9		BGR ✓
951227	06	23	25.042	S1	420	1200	320	1	1	1.5	218 ✓
951227	21	59	20	S1	50	50		3	65		BGR ✓
951228	12	28	42	S2	70	80	40	<0.07	110		BGR ✓
951228	15	47	26	S2	80	170		0.9	17		BGR ✓
951231	05	37	11.668	S2	180	320	150	0.07	9	65	219 ✓
951231	21	24	34	S2	100	25		<0.2	20		BGR ✓
960102	03	14	10.996	S1	140	300	80	1	1	0.2	220 ✓
960102	20	20	53	S1	200	120	40	>9	25		BGR ✓
960104	03	28	41.062	S2	360	630	230	<0.05	2	28	221 ✓
960105	16	04	30	S1	80	60		5	30		BGR ✓
960107	05	23	20	S2	30	100		0.5	230		BGR ✓
960107	19	03	28	S2	30	120	150	<0.1	32		BGR ✓
960109	23	11	31	S2	60	130	20	0.3	5		BGR ✓
960111	12	55	24.530	S2	1130	1280	190	0.2	0.5	6	222 ✓
960113	15	33	44.261	S2	500	450	50	0.3	2	36	228 ✓
960114	12	15	04.737	S1	4900	7200	1400	1.8	1	60	233 ✓
960115	08	52	36.506	S1	380	360	60	10	1	7	234 ✓
960115	12	50	15	S2	120	60		0.7	22		BGR ✓
960116	02	02	18	S2	140	170		0.15	17		BGR ✓
960117	15	56	11.341	S1	250	360	30	4	5	20	235 ✓

RT

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

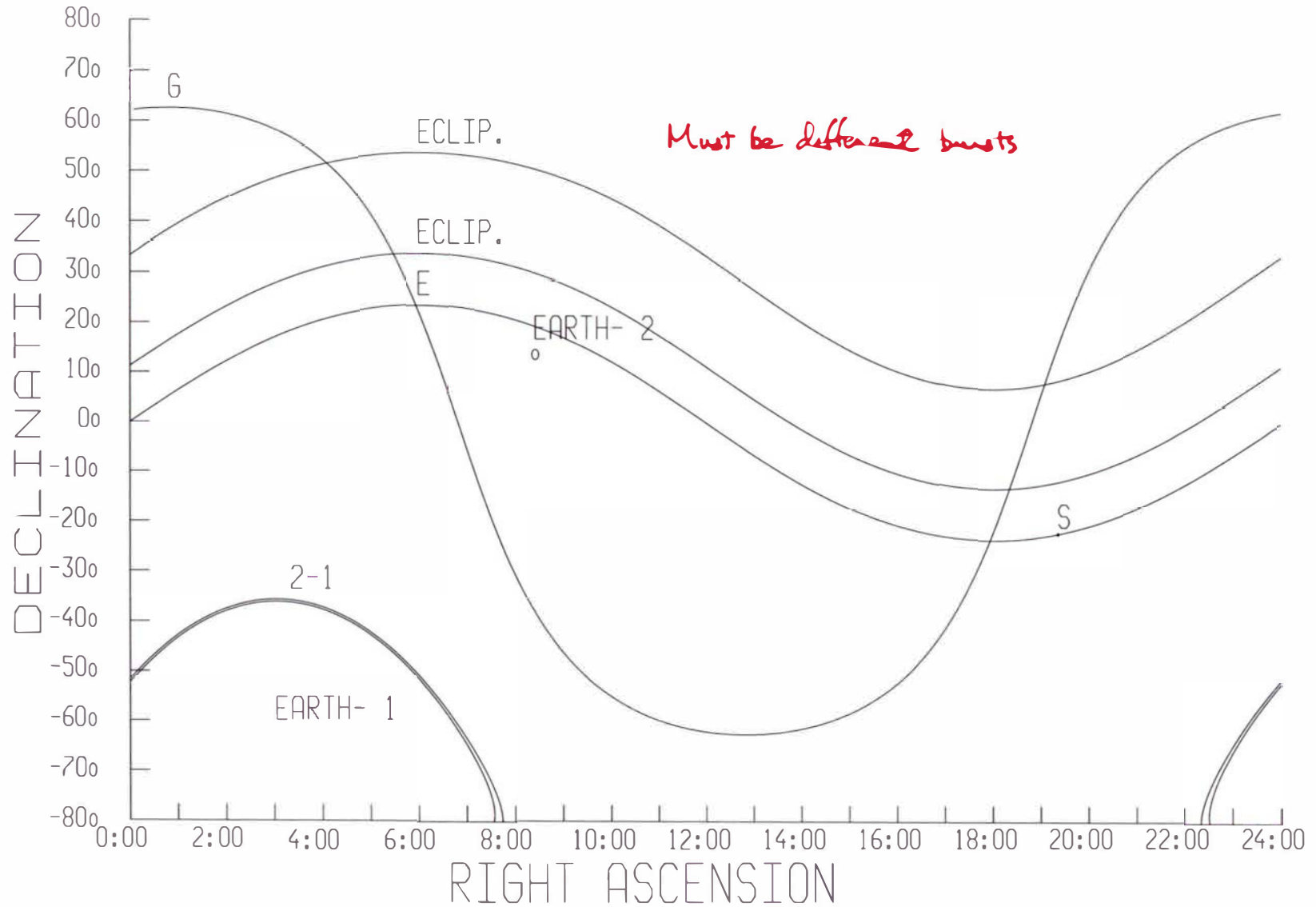
- TLC

DATE	Trigger T0 time (UT)		Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
				Max counts per sec						
				G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15		S1	145	85		2.5	115		BGR ✓
941114	02 02 40		S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191		S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57		S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175		S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22 04 30.156		S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46		S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952		S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20		S1	55	75		>10	26		BGR ✓
941126	19 56 49.732		S1	290	390	211	6.7	20	26	9 ✓
941127	14 30 25.680		S2	200	400	95	0.17	8	7	10 ✓
941127	15 39 10		S1	210	57		2.7	260		BGR ✓
941128	15 37 00		S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074		S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32		S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523		S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51		S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226		S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08		S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215		S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243		S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915		S1	300	637	519	4.4	5	90	28 ✓
941228	16 55 23		S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05		S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781		S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53		S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44		S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613		S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58		S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15		S2	332	180		<0.1	3600		BGR ✓
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 ✓
950111	12 18 49.196		S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17 38 32		S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38		S1	46	110		1.6	6		BGR ✓
950114	04 03 01		S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02 49 32		S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00		S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54		S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253		S1	380	600	140	8.2	3.8	11	39 ✓

EVENT OF JAN 9, 1996 23:31

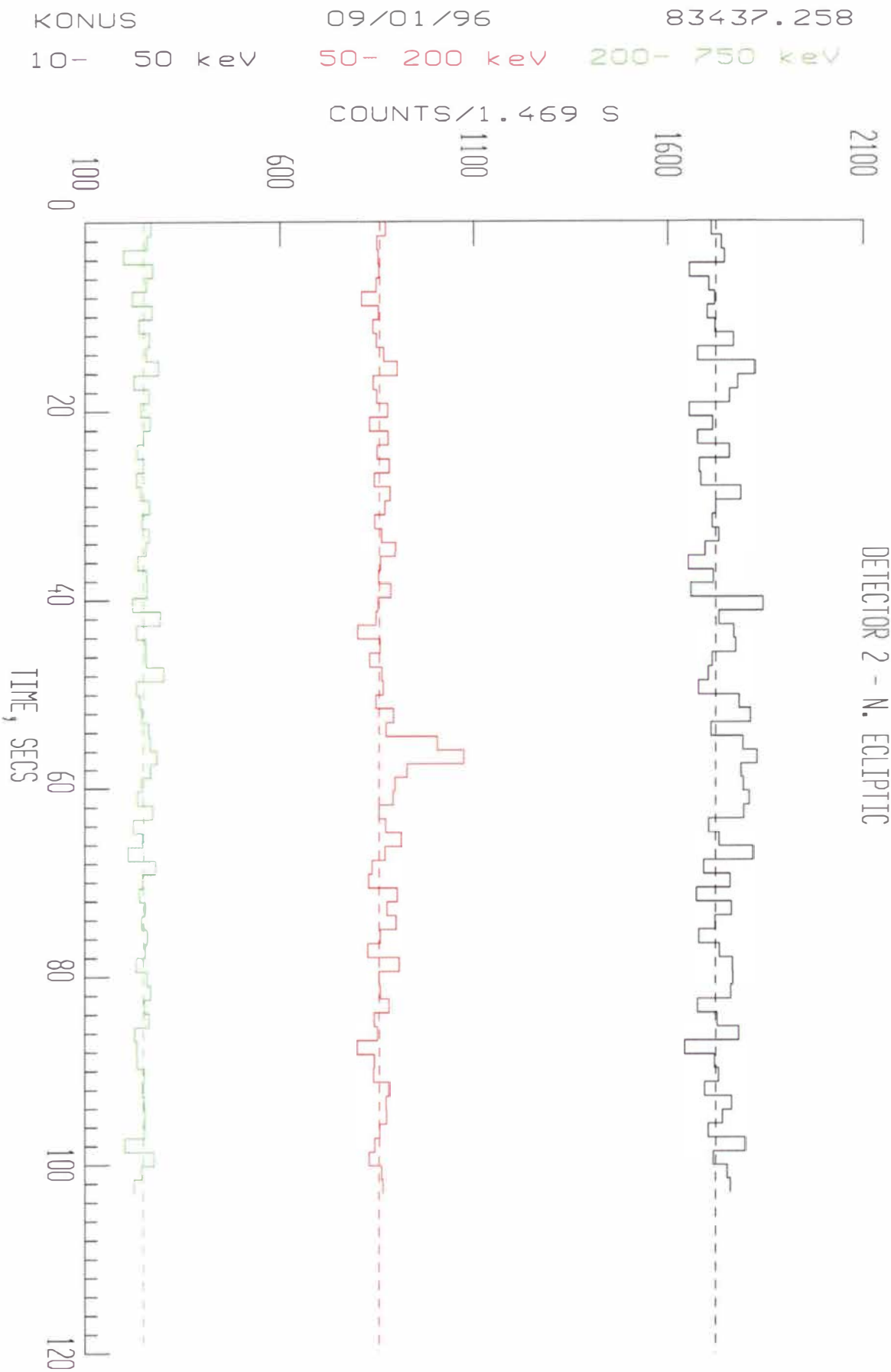
13/09/2011

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



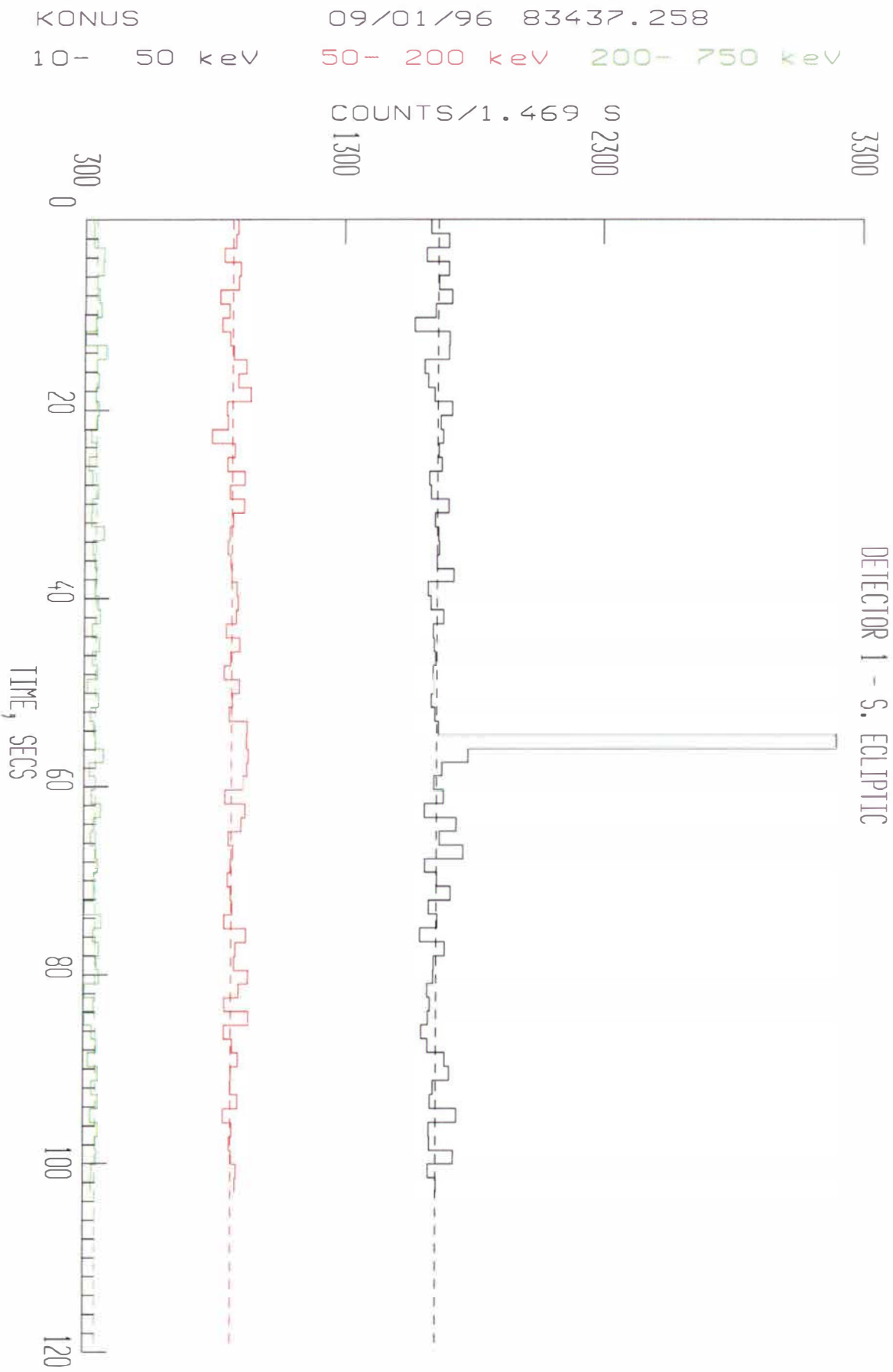
13/09/2011

DETECTOR 2 - N. ECLIPTEIC



13/09/2011

DETECTOR 1 - S. ECLIPTEIC



KONUS 19960109 84730

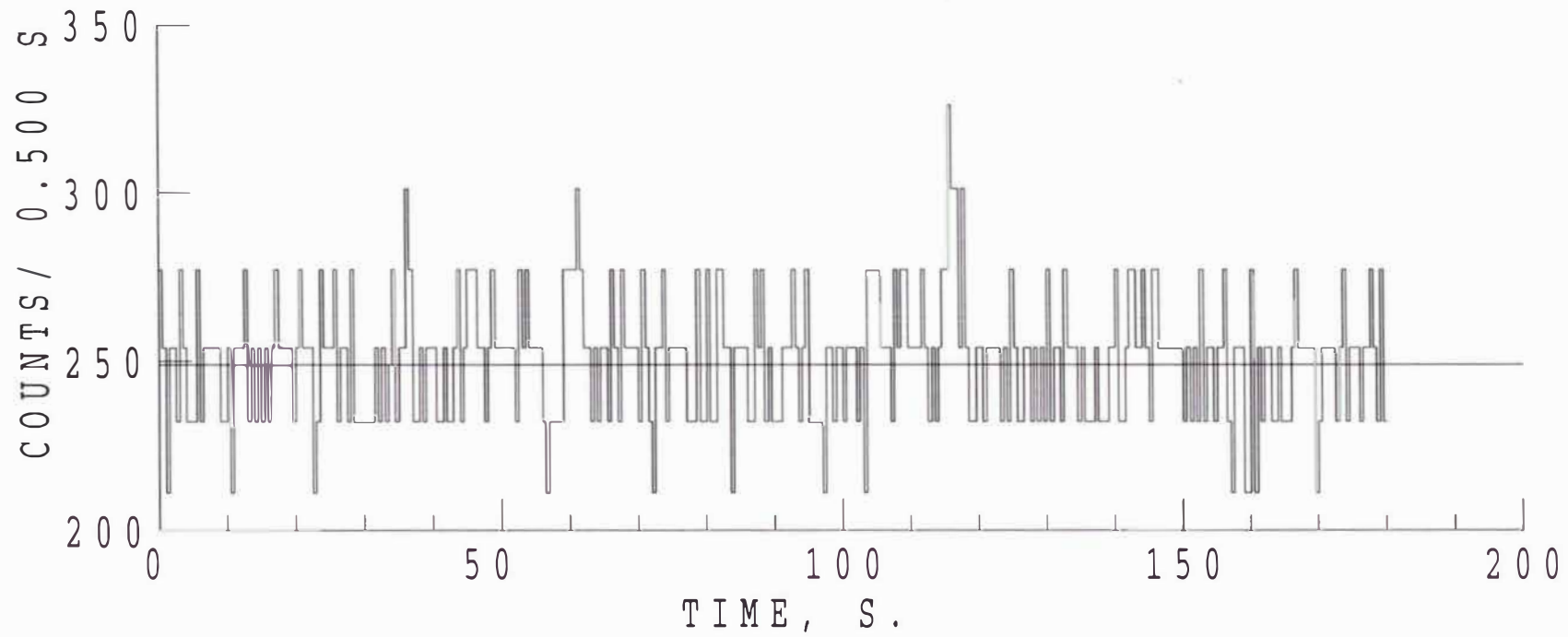
ULYSSES RT

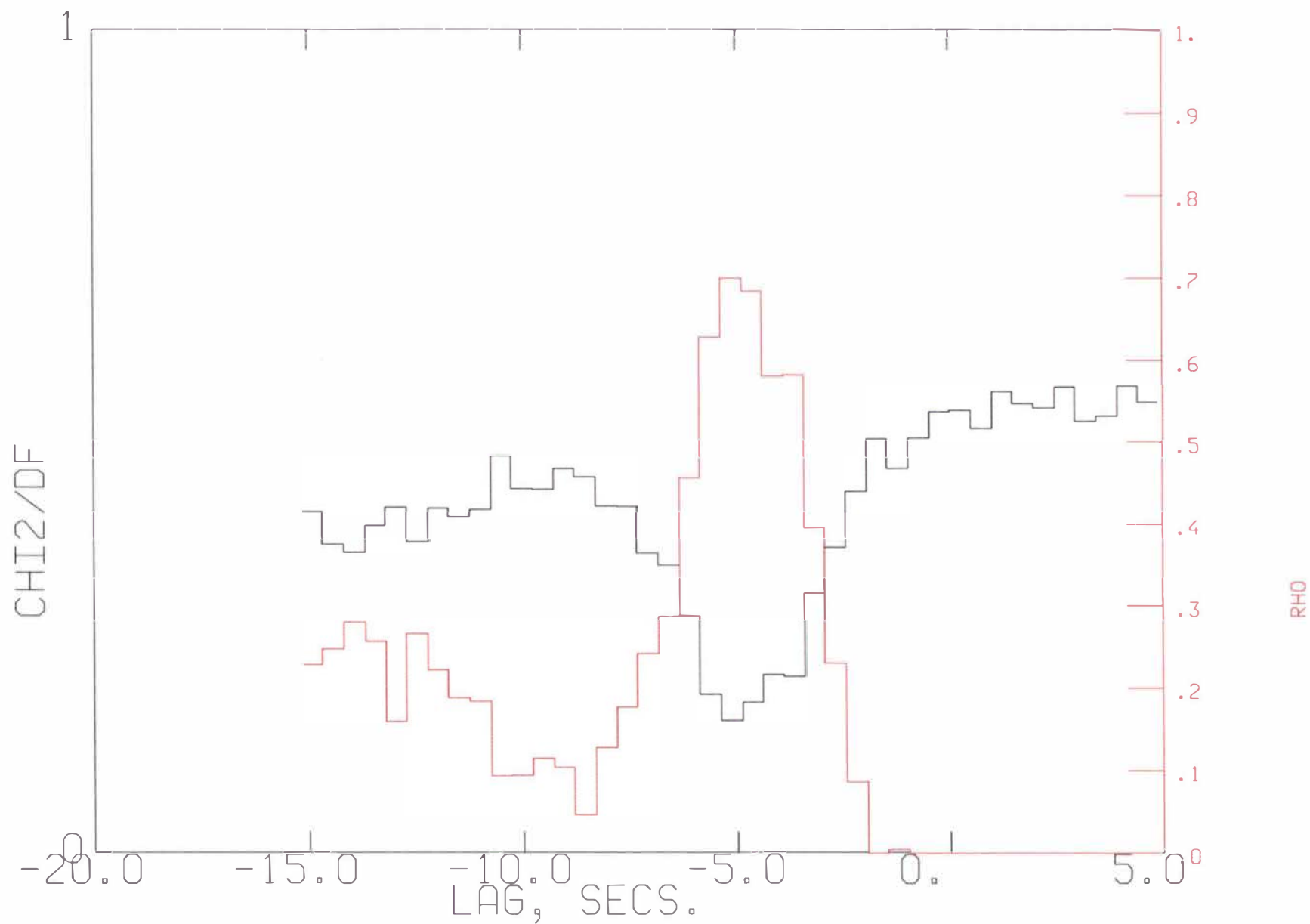
12 / 09 / 11

09 / 01 / 96 84636.359 s

0 - 0 keV

W= 10 N= 2
>4.0 SIGMA FLUCTUATIONS





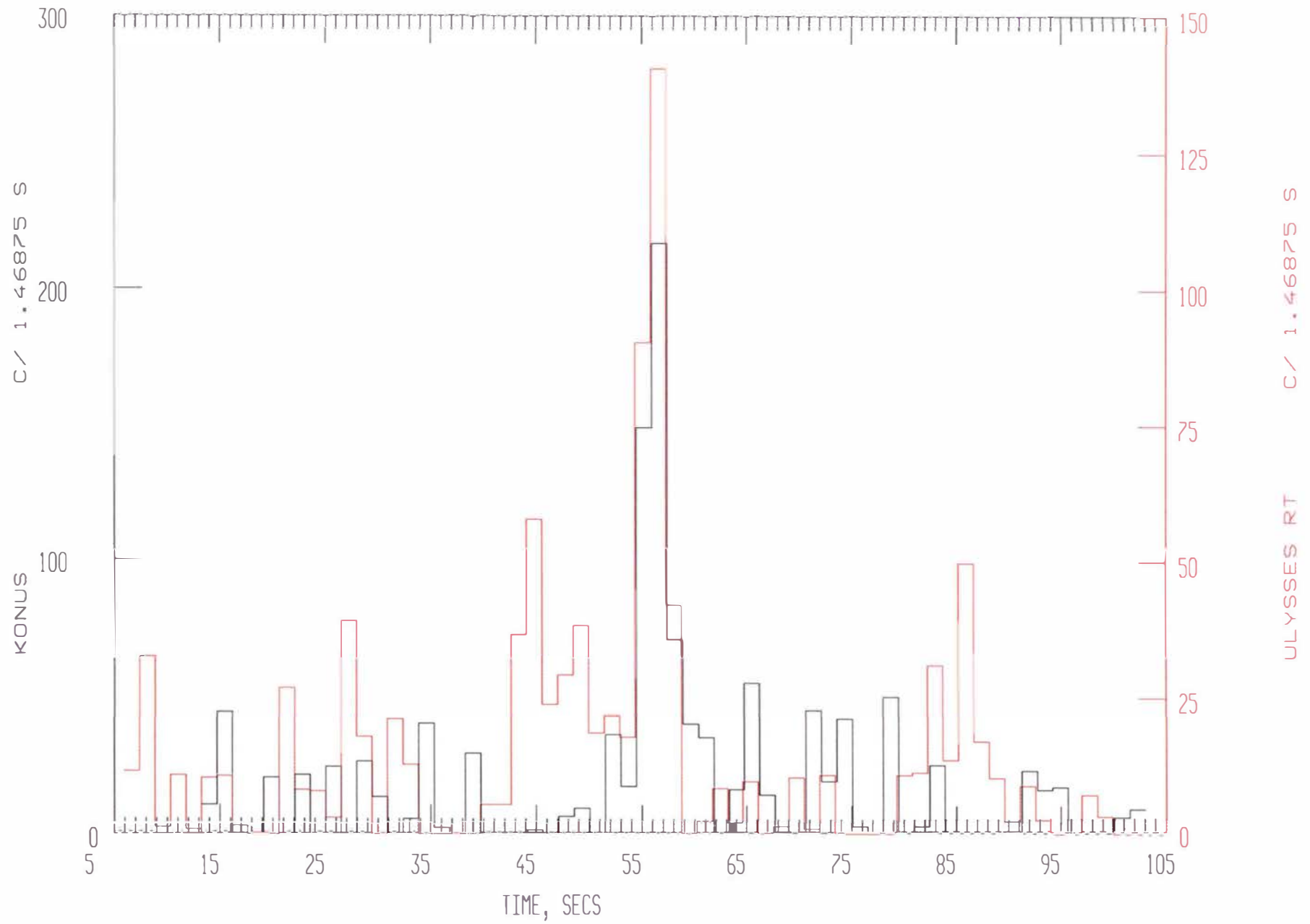
KONUS

-ULYSSES RT CORRELATION

09/01/96

83437.258

13/ 9/11



KONUS 19960107 18134

ULYSSES RT

13 / 09 / 11

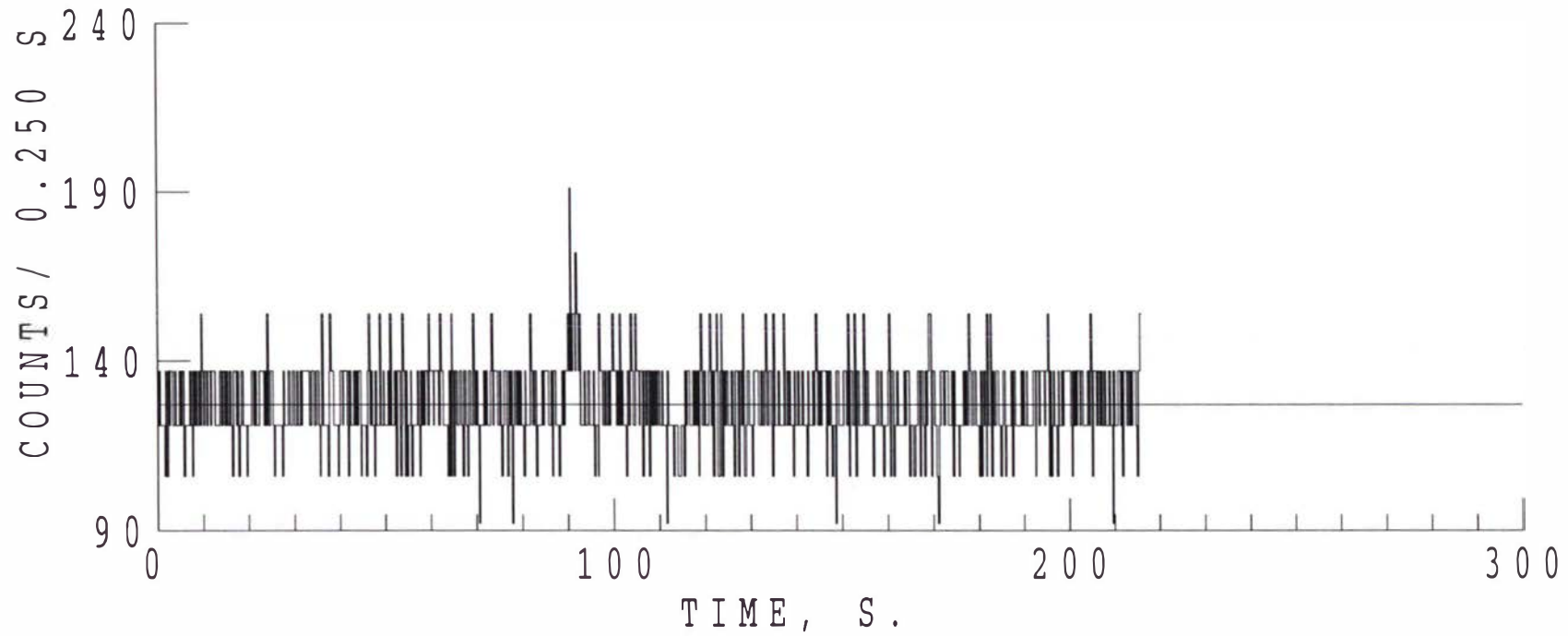
07/01/96 18036.049 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS



N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



K O N U S

2 2 / 2 / 9 6

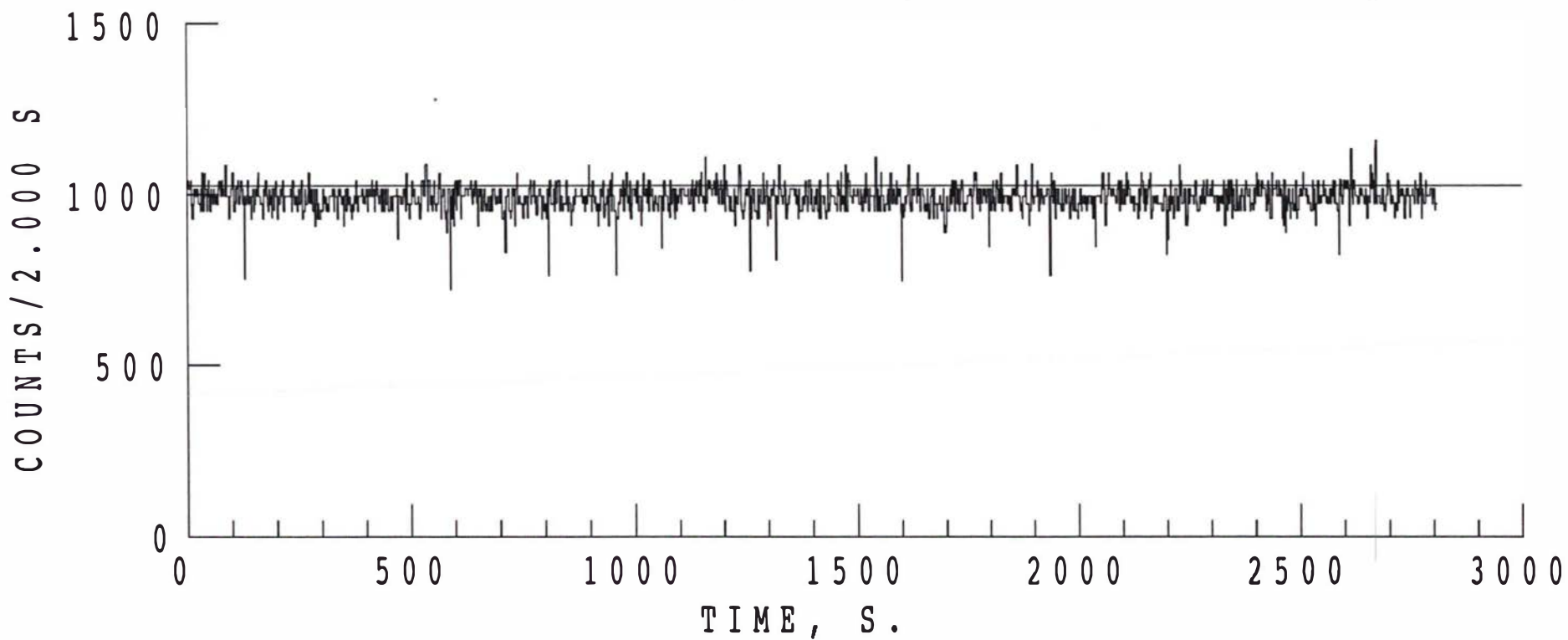
U L Y S S E S R T

9 / 1 / 9 6 8 2 0 8 0 . 3 2 8 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



BATSE BURST TRIGGER

NO.: 4278

A

TIME: TJD=0091 SECONDS=4918

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4279

TIME: TJD=0091 SECONDS=17532

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4280

B

TIME: TJD=0091 SECONDS=34459

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4281

C

TIME: TJD=0091 SECONDS=43492

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4282

TIME: TJD=0091 SECONDS=56193

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4283

TIME: TJD=0091 SECONDS=57713

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4284

TIME: TJD=0091 SECONDS=66804

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4285

TIME: TJD=0091 SECONDS=73503

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

From DEAL@fender.msfc.nasa.gov Fri Jan 12 07:34 PST 1996
From: DEAL@fender.msfc.nasa.gov
Date: Fri, 12 Jan 1996 9:34:18 -0600 (CST)
To: burst@compTEL.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.gsfc.nasa.gov, butterworth@lheavx.gsfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, band@cass09.ucsd.edu,
gruber@cass09.ucsd.edu, matteson@cass09.ucsd.edu,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4286

TIME: TJD=0091 SECONDS=82461

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From DEAL@fender.msfc.nasa.gov Fri Jan 12 07:38 PST 1996
From: DEAL@fender.msfc.nasa.gov
Date: Fri, 12 Jan 1996 9:38:09 -0600 (CST)
To: burst@compTEL.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.gsfc.nasa.gov, butterworth@lheavx.gsfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, band@cass09.ucsd.edu,
gruber@cass09.ucsd.edu, matteson@cass09.ucsd.edu,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4287

TIME: TJD=0091 SECONDS=84599

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From khurley@sunspot Mon Jan 8 08:49 PST 1996
Date: Mon, 8 Jan 1996 07:03:49 -0800
From: khurley@sunspot (Kevin Hurley)
To: ULSSCI@JPLSP.SPAN.nasa.gov, khurley@sunspot
Subject: GRB COMMANDS

Dear Nigel,

Please send the following commands to the GRB experiment as soon as possible.
We are still not at the correct sensitivity.

2018 0677 (Confirmation: E031=24, E032=1)
2018 1116 (Confirmation: E034=64, E035=4)

Kevin

From ULSMG@jplsp2.jpl.nasa.gov Tue Jan 9 08:51 PST 1996
Date: Tue, 9 Jan 1996 8:35:05 -0800 (PST)
From: Peggy Greutert (reply to ULSSCI) <ULSMG@jplsp2.jpl.nasa.gov>
To: KHURLEY@SUNSPOT.ssl.berkeley.edu
CC: ULSMG@jplsp2.jpl.nasa.gov
Subject: Command Request

The commands 2018 0677 and 2018 1116 were executed on board the S/C at
009/02:19:32.

Regards

Bryan McMillan

Ulysses Spacecraft Analyst

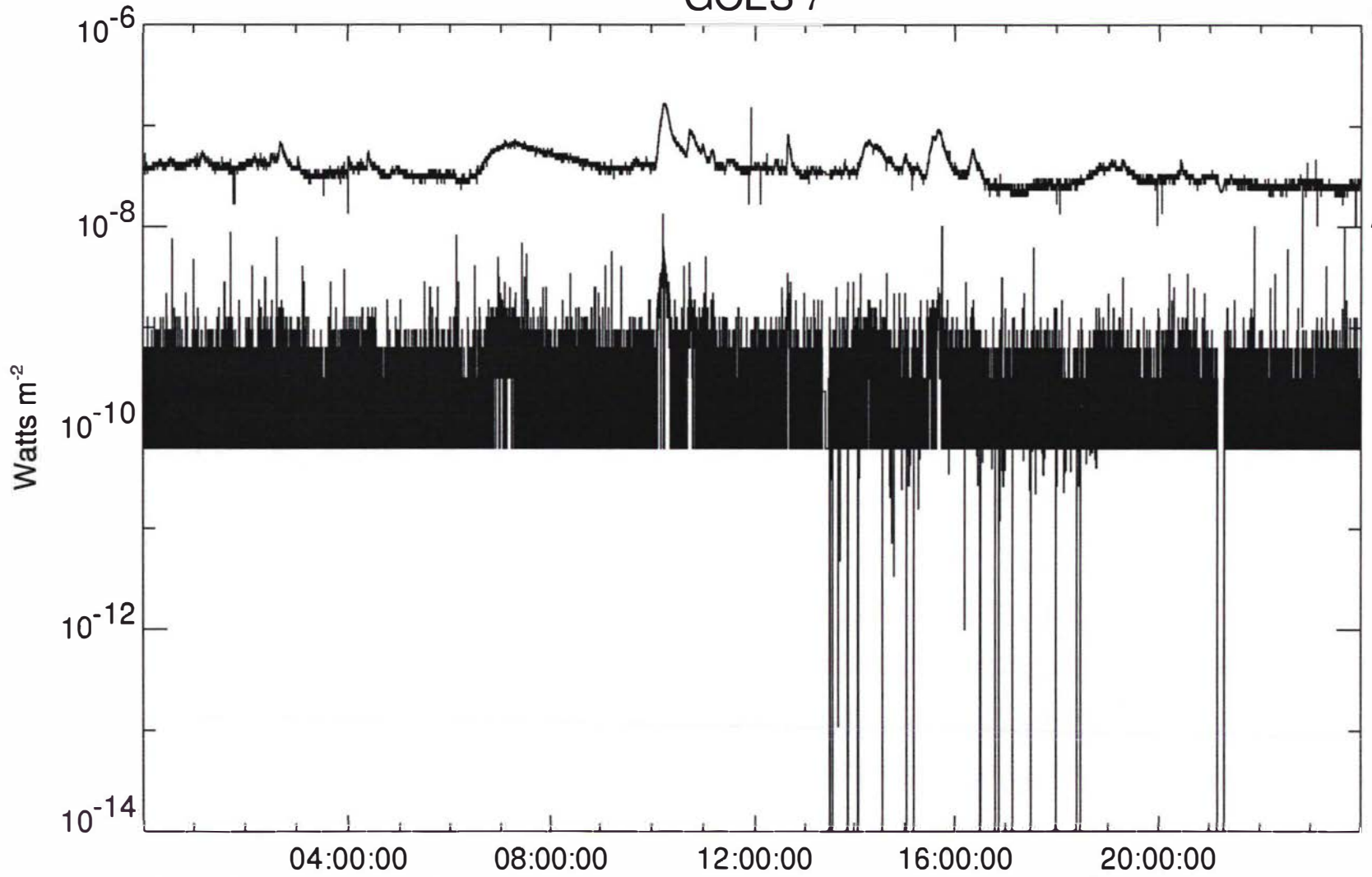
M

GOES 7

C

B

A



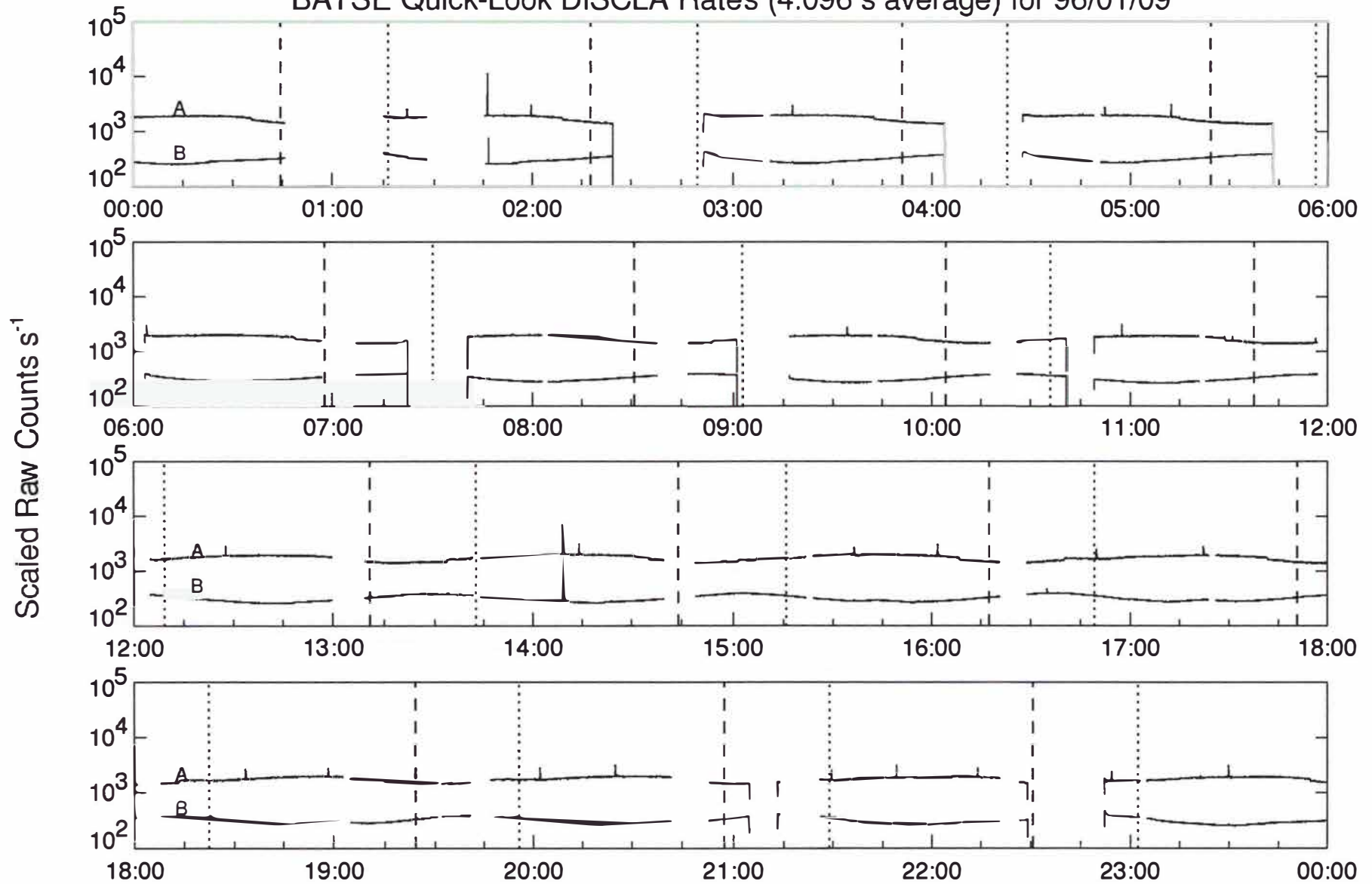
Data Start: 96/01/09, 0000:01

Plot created: 96/01/11, 0654

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 96/01/09



Current Time: 96/01/11, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

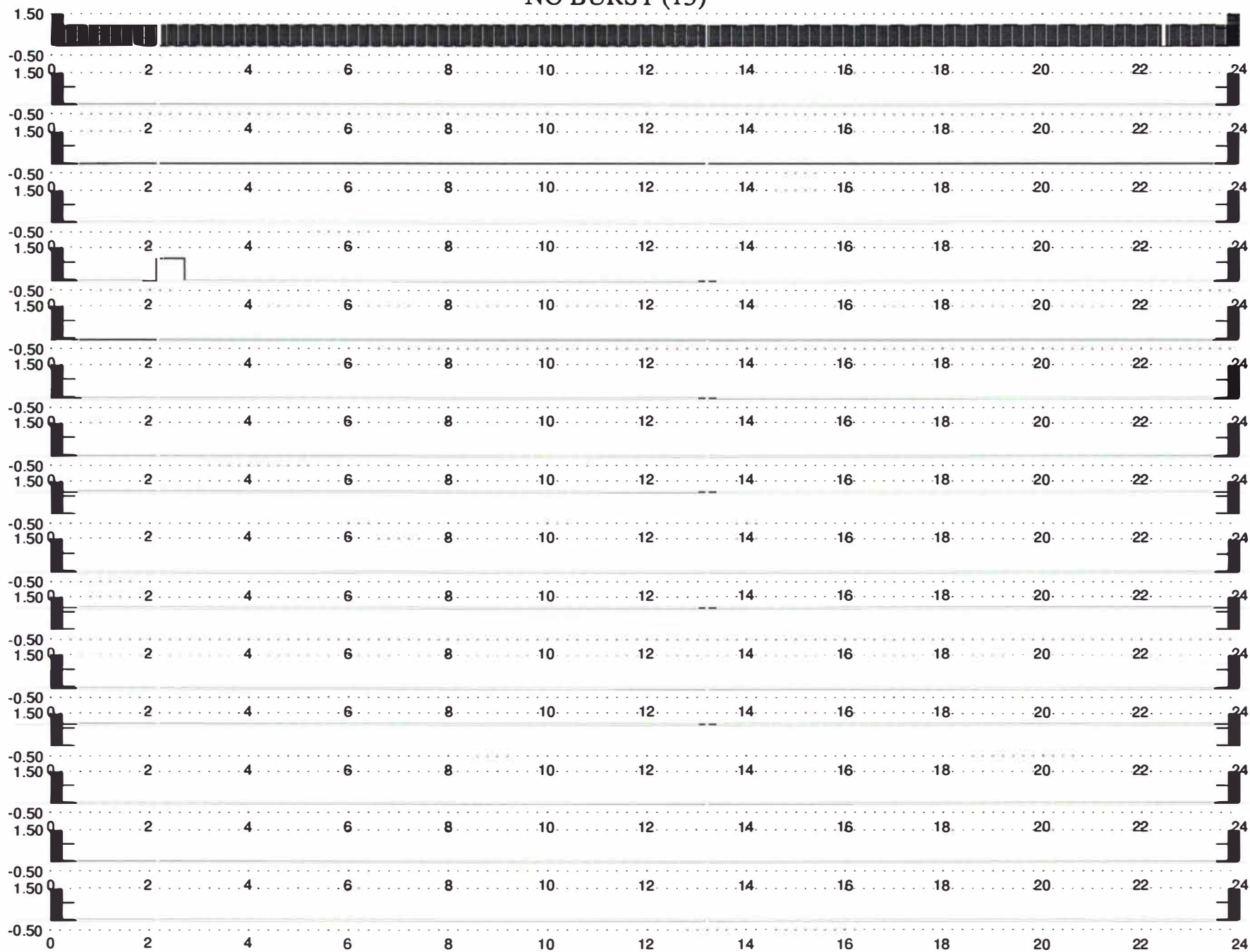
Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

HUS MODES EDR day 9, year 1996 to day 9, year 1996
NO BURST (15)

4/1/96

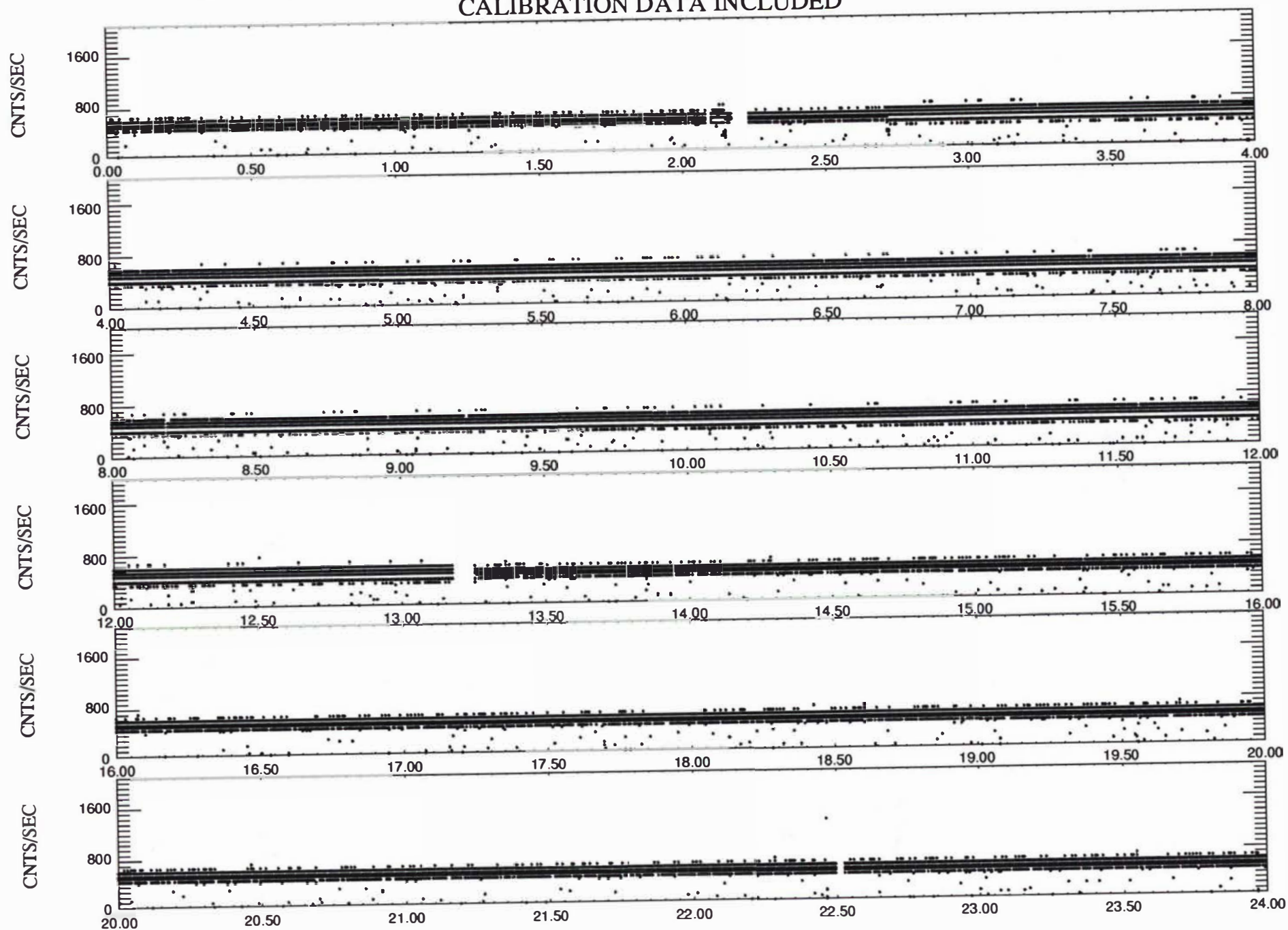
CBU CCL DMP ROM DMA OSC MP. ICR SPE OPM RSC CAL WCH MEM BRS HUS



UNIV SAL TIME

HUS 2A, MODE 1, NOT AVERAGED EDR day 9, year 1996 to day 9, year 1996
CALIBRATION DATA INCLUDED

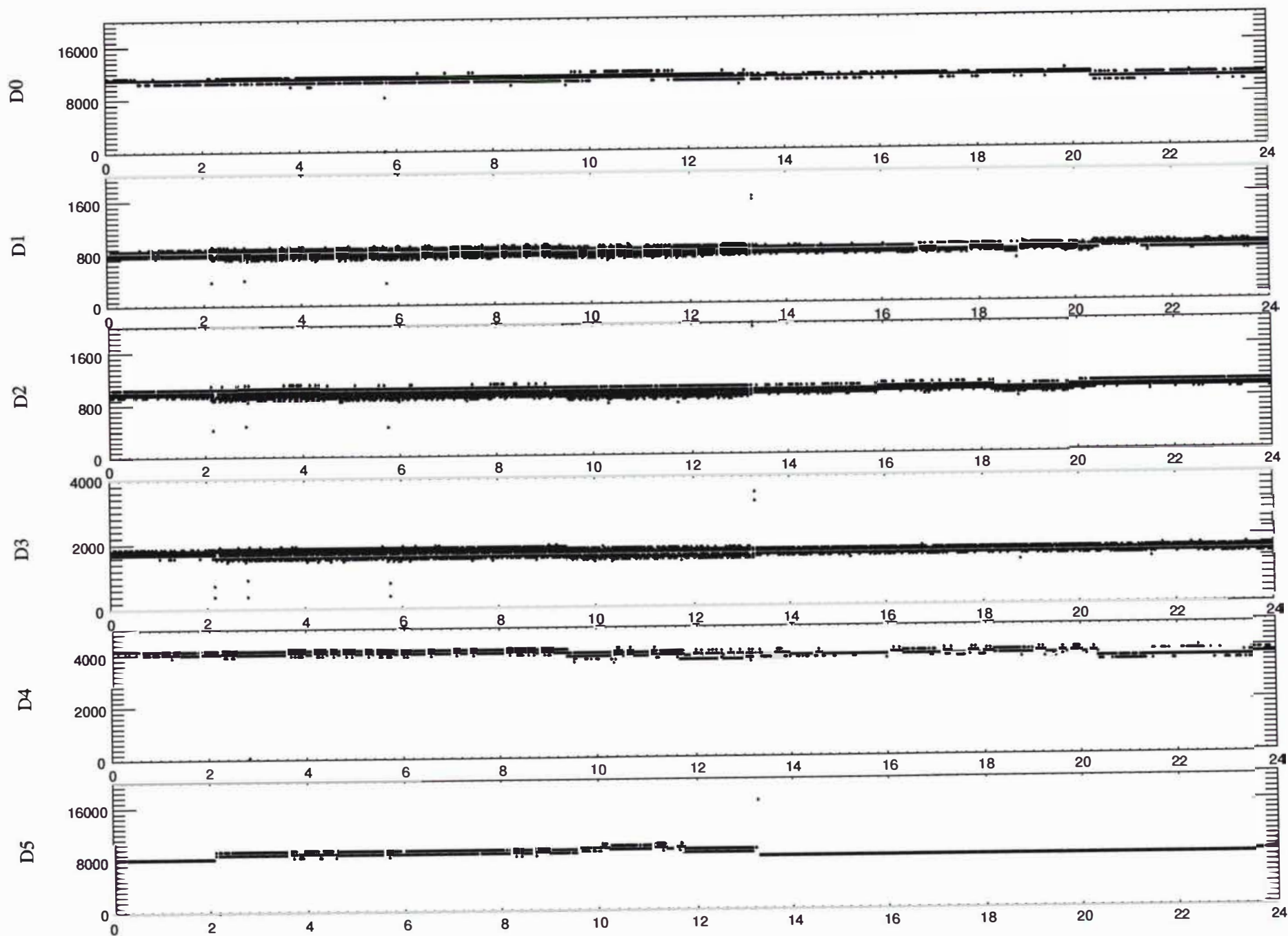
4/1/96



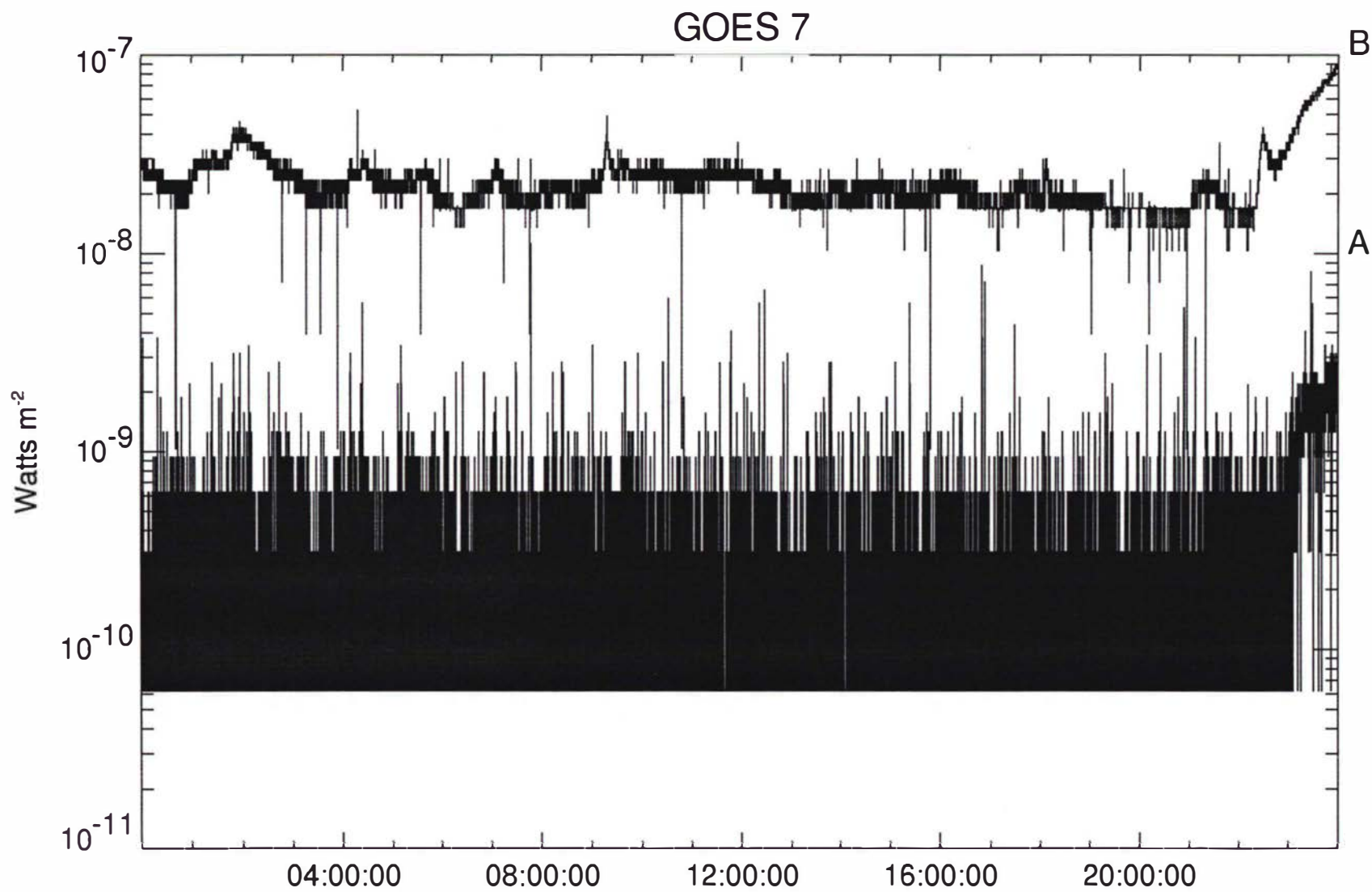
UNIV SAL TIME

HUS 2B COUNTS / SEC QEDR day 9, year 1996 to day 9, year 1996

1/10/96



UNIV `SAL TIME



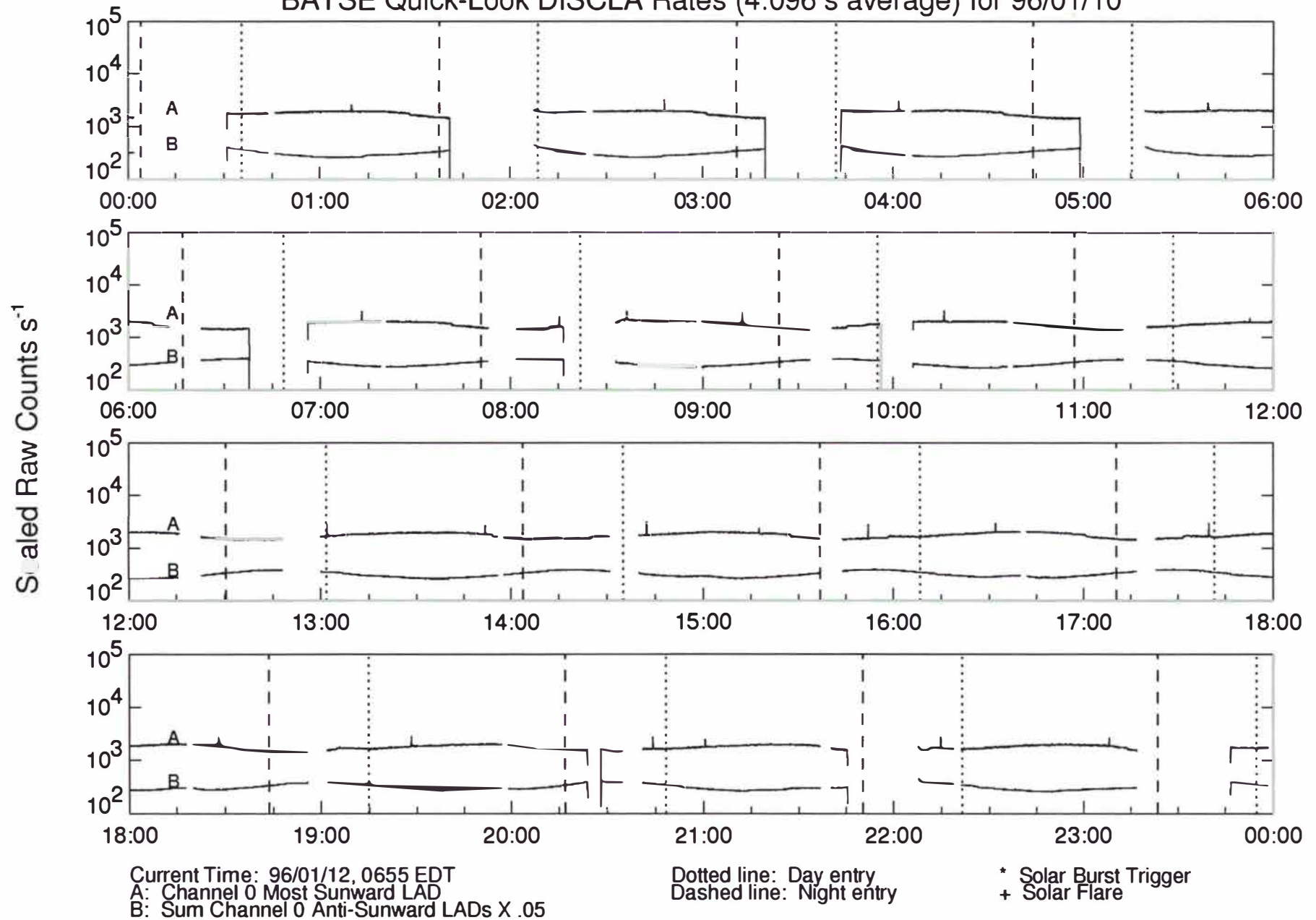
Data Start: 96/01/10, 0000:00

Plot created: 96/01/12, 0654

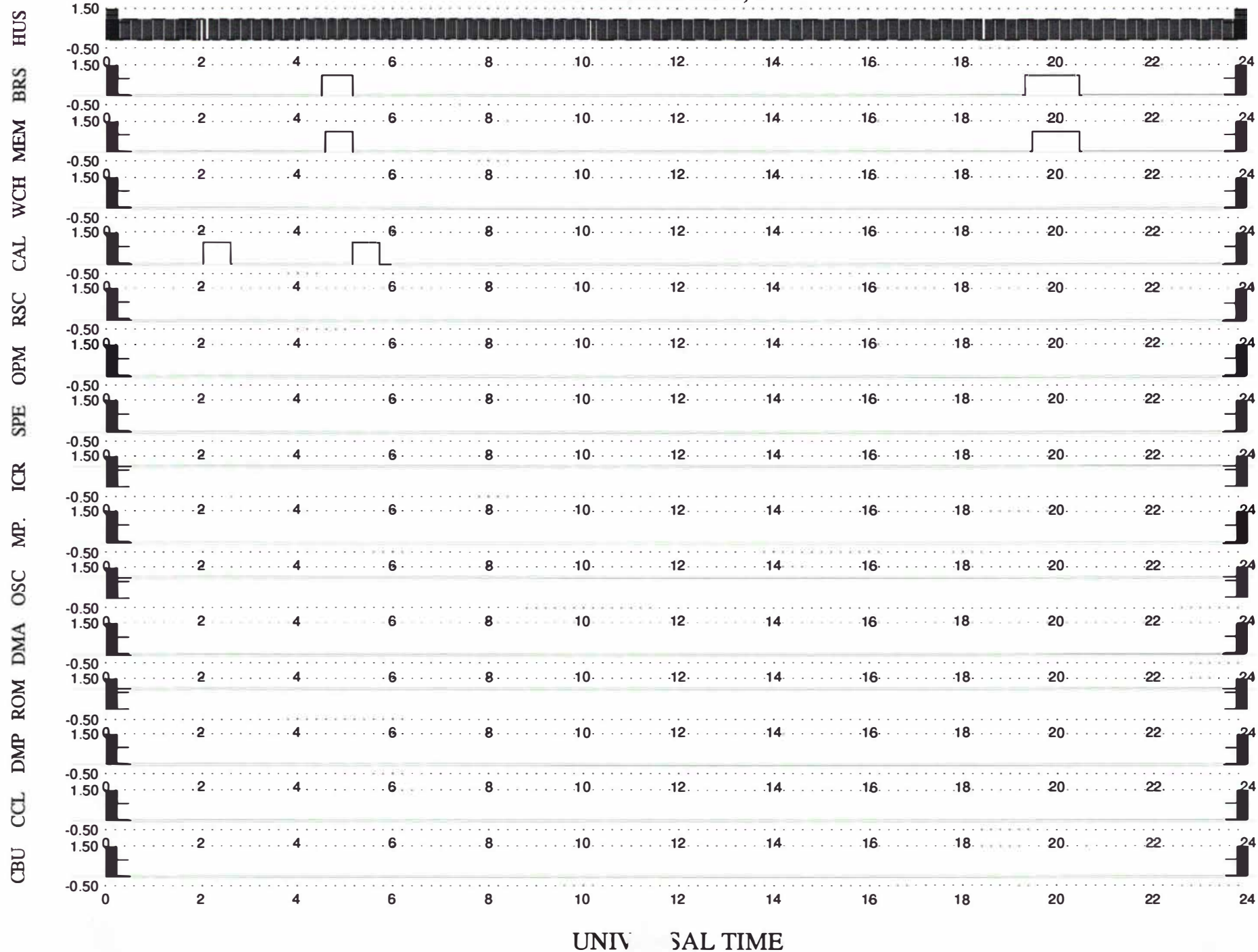
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/10

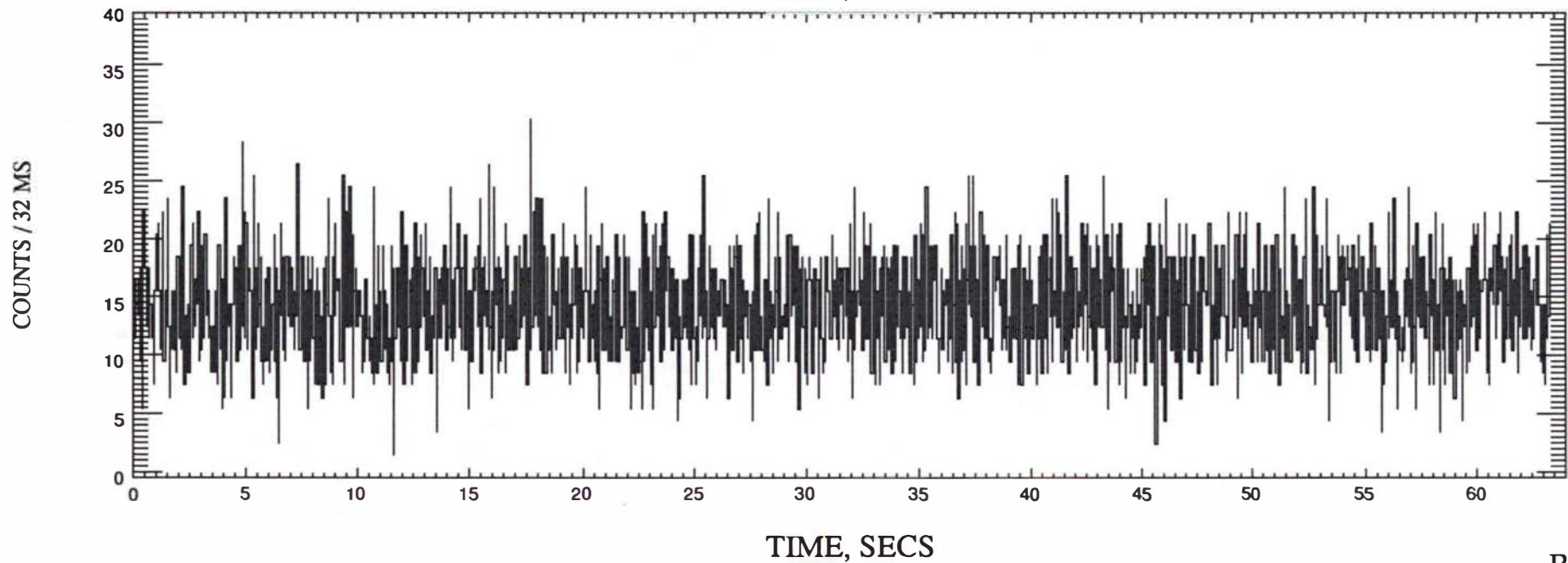
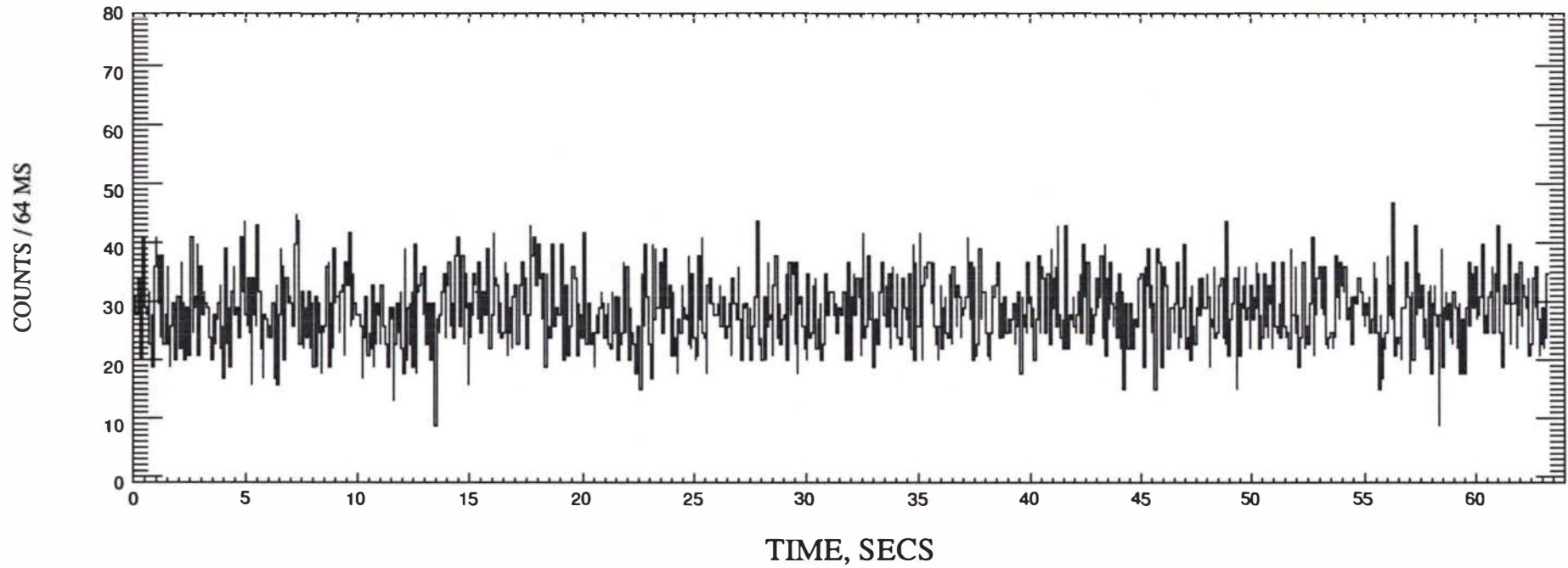


4/1/96



HUS 2A TRIGGERED DATA EDR day 10, year 1996
Burst Counter 0 at UT= 4.437221175300 h=15973.996 s 04:26:13.996

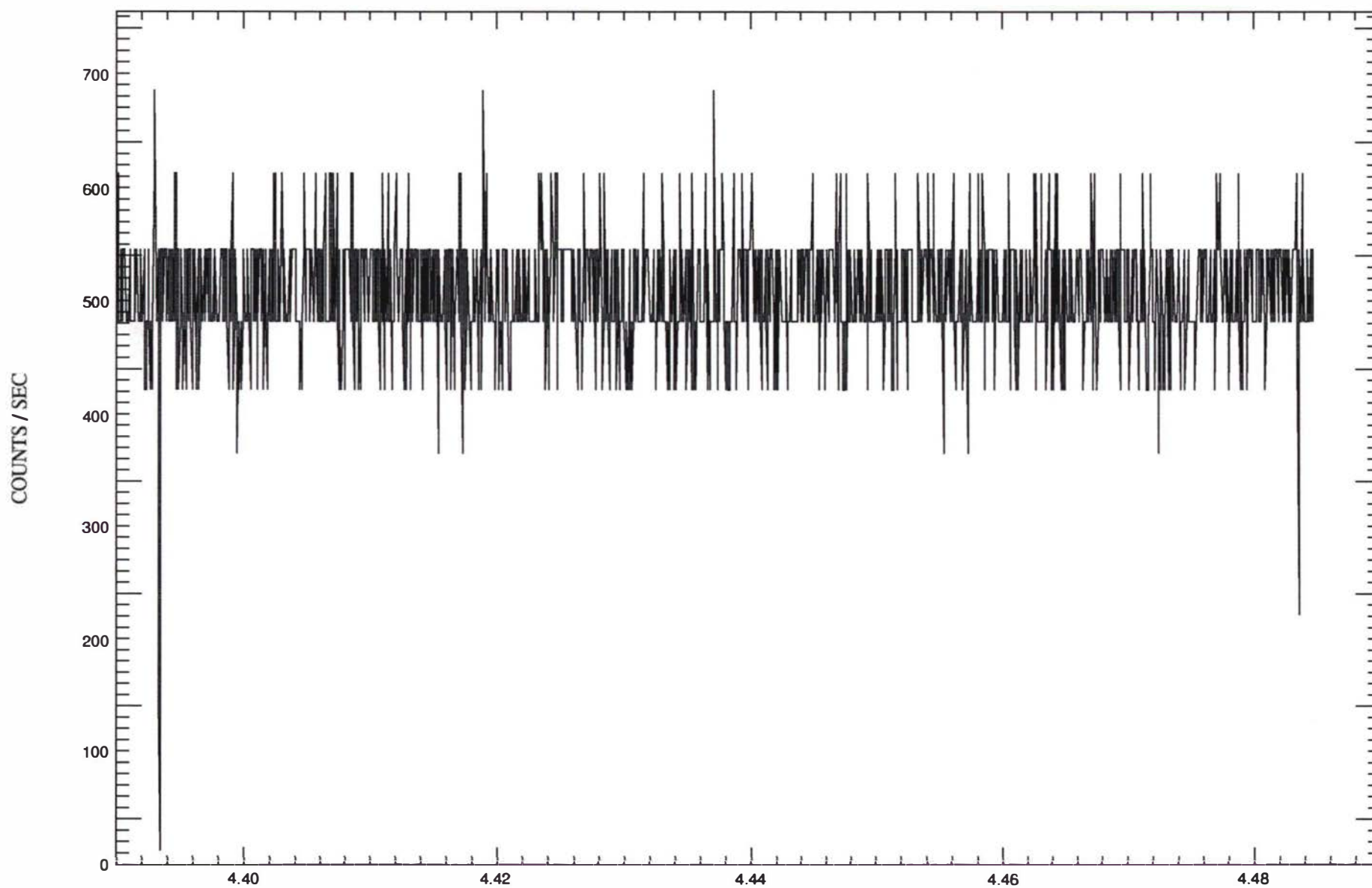
4/1/96



B# 1

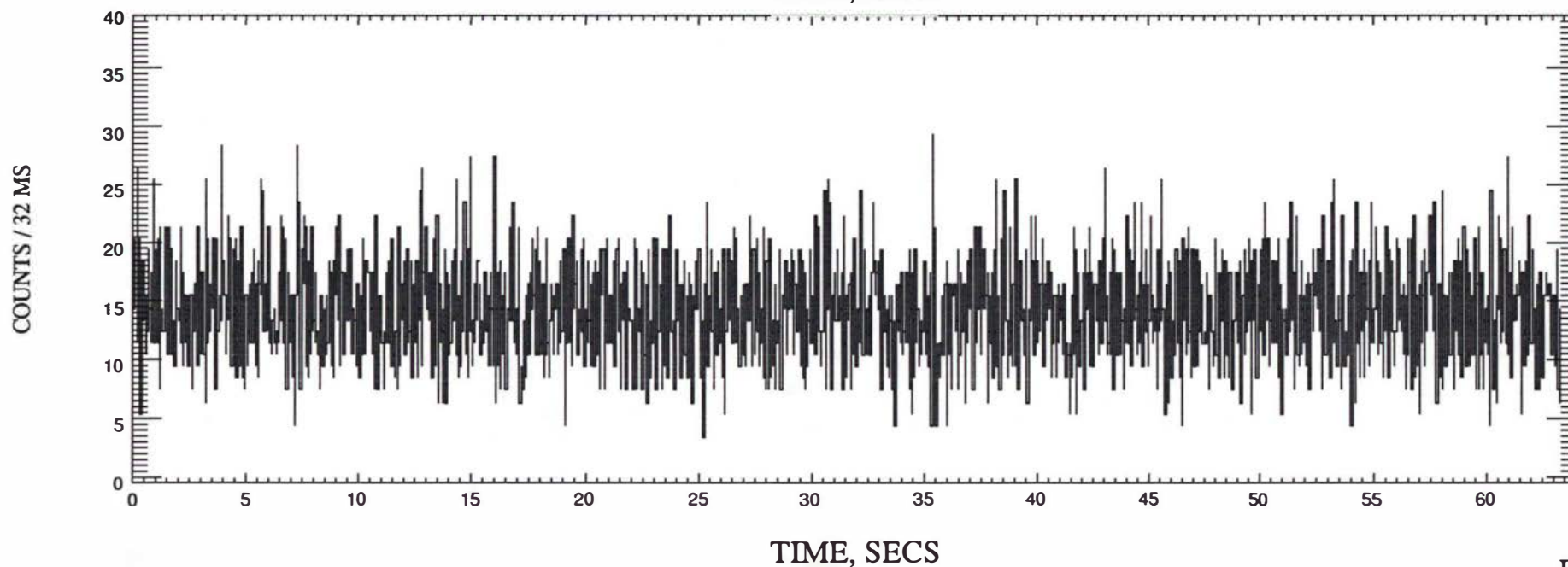
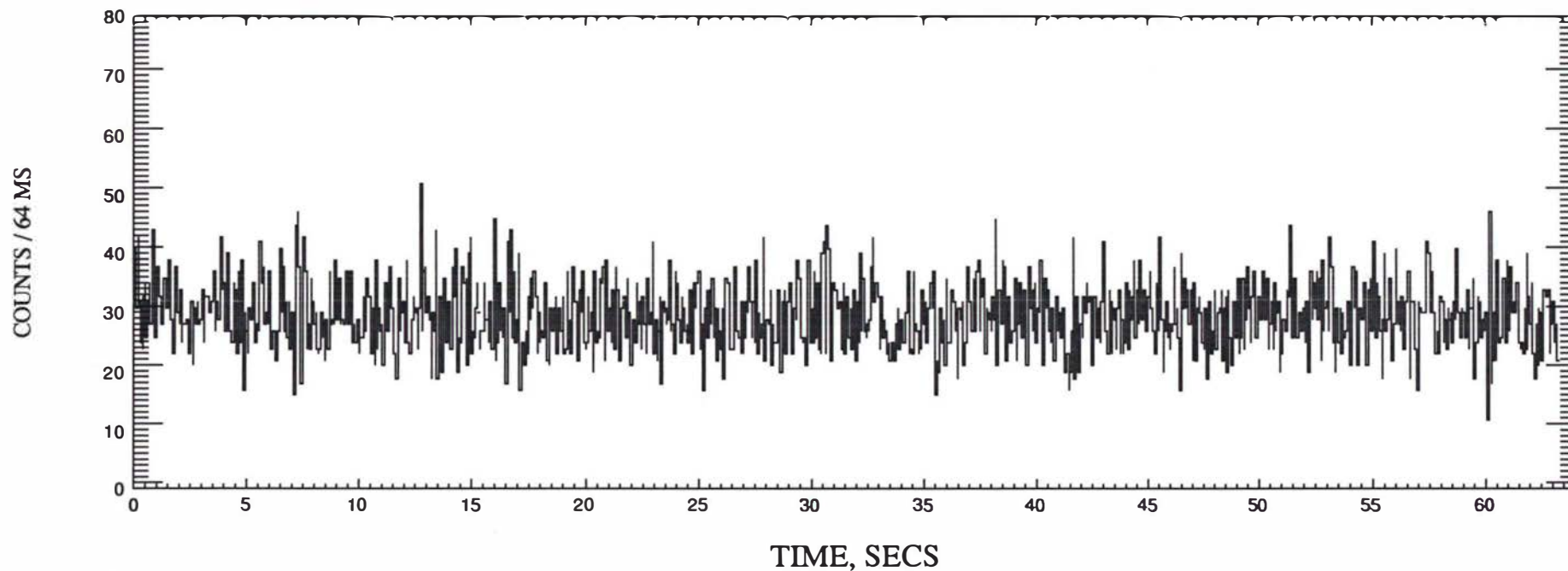
HUS 2A, MODE 1, NOT AVERAGED QEDR day 10, year 1996 to day 10, year 1996
CALIBRATION DATA INCLUDED

1/12/96



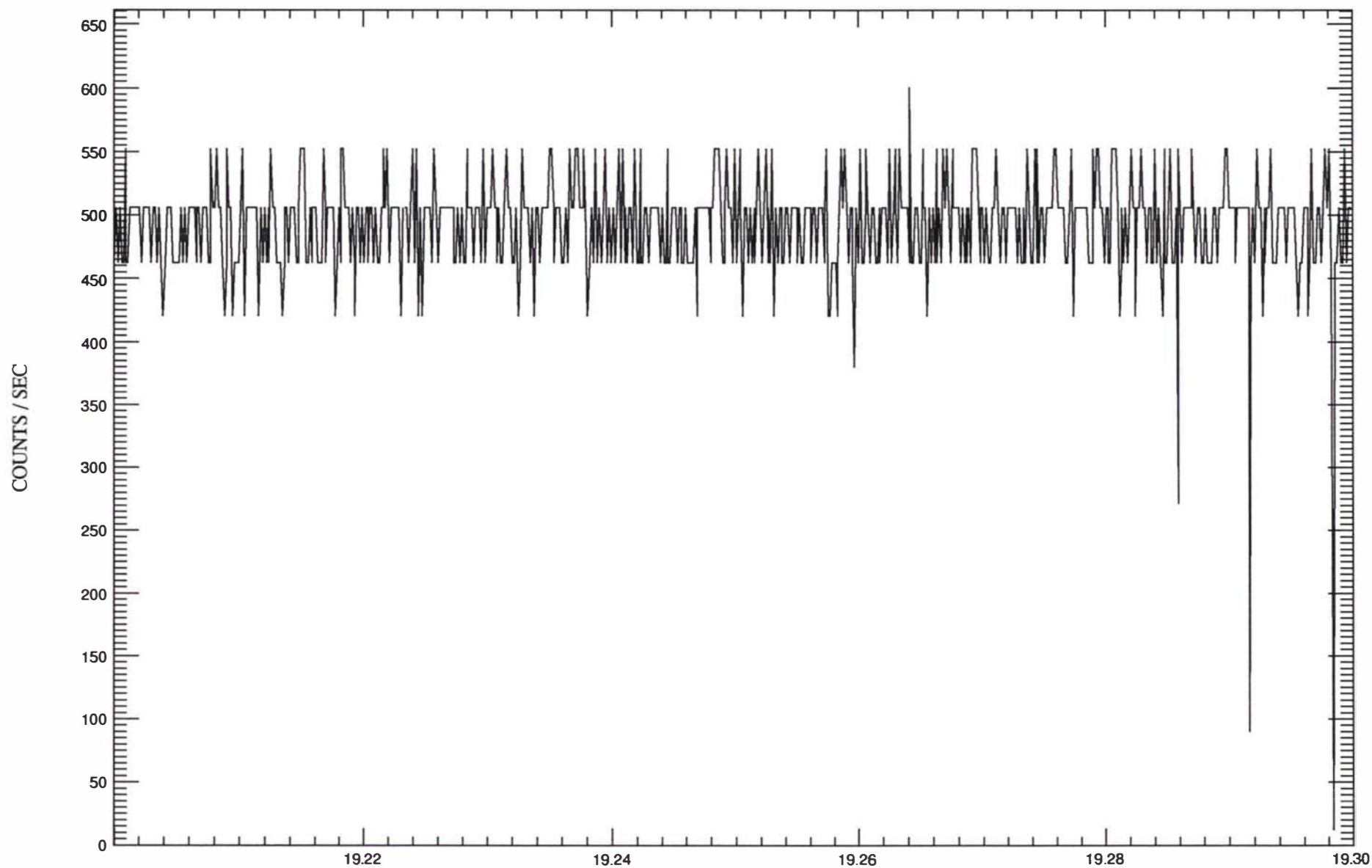
HUS 2A TRIGGERED DATA EDR day 10, year 1996
Burst Counter 1 at UT=19.250463456048 h=69301.668 s 19:15:01.668

4/1/96



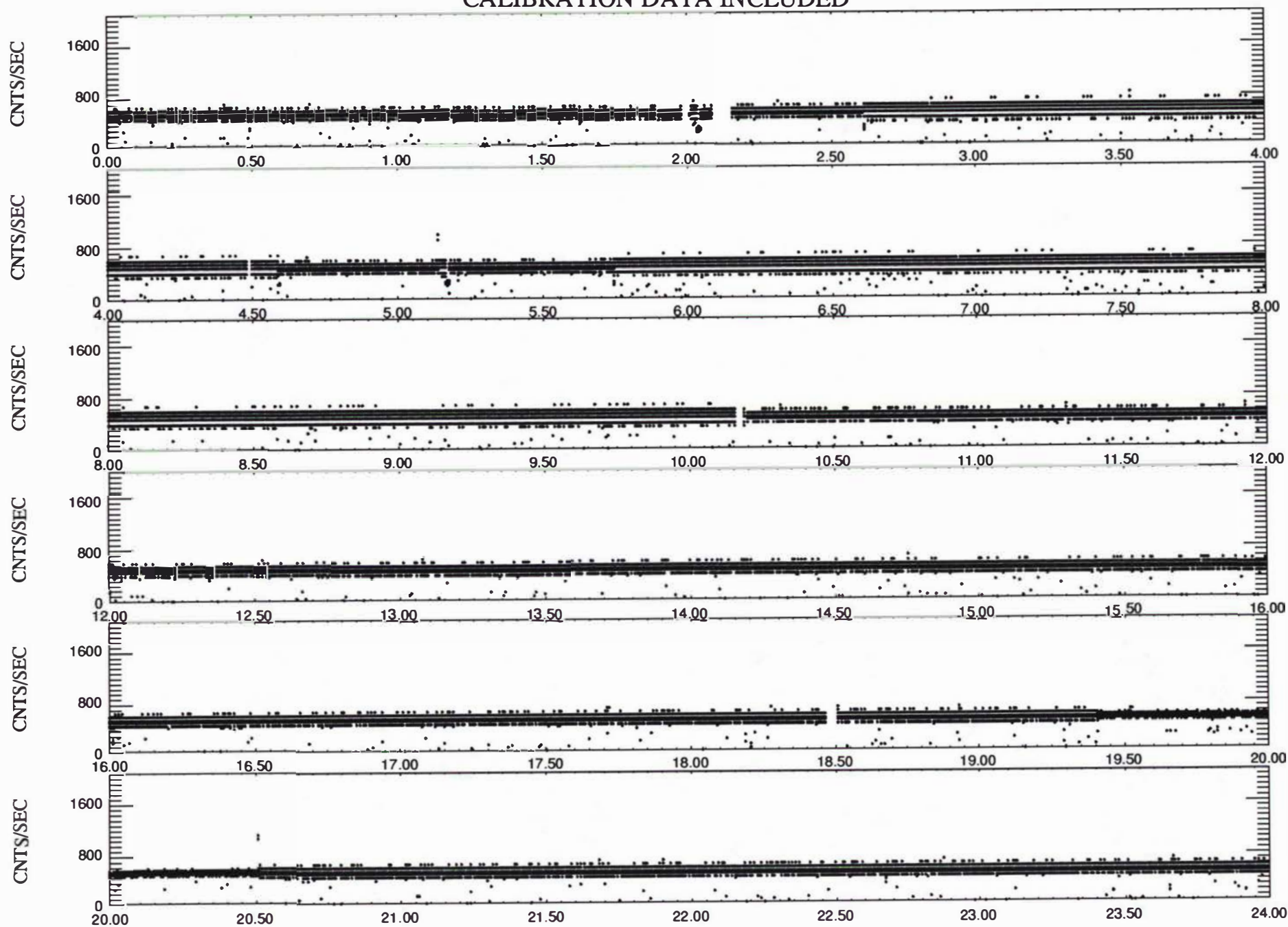
HUS 2A, MODE 1, NOT AVERAGED QEDR day 10, year 1996 to day 10, year 1996
CALIBRATION DATA INCLUDED

1/12/96

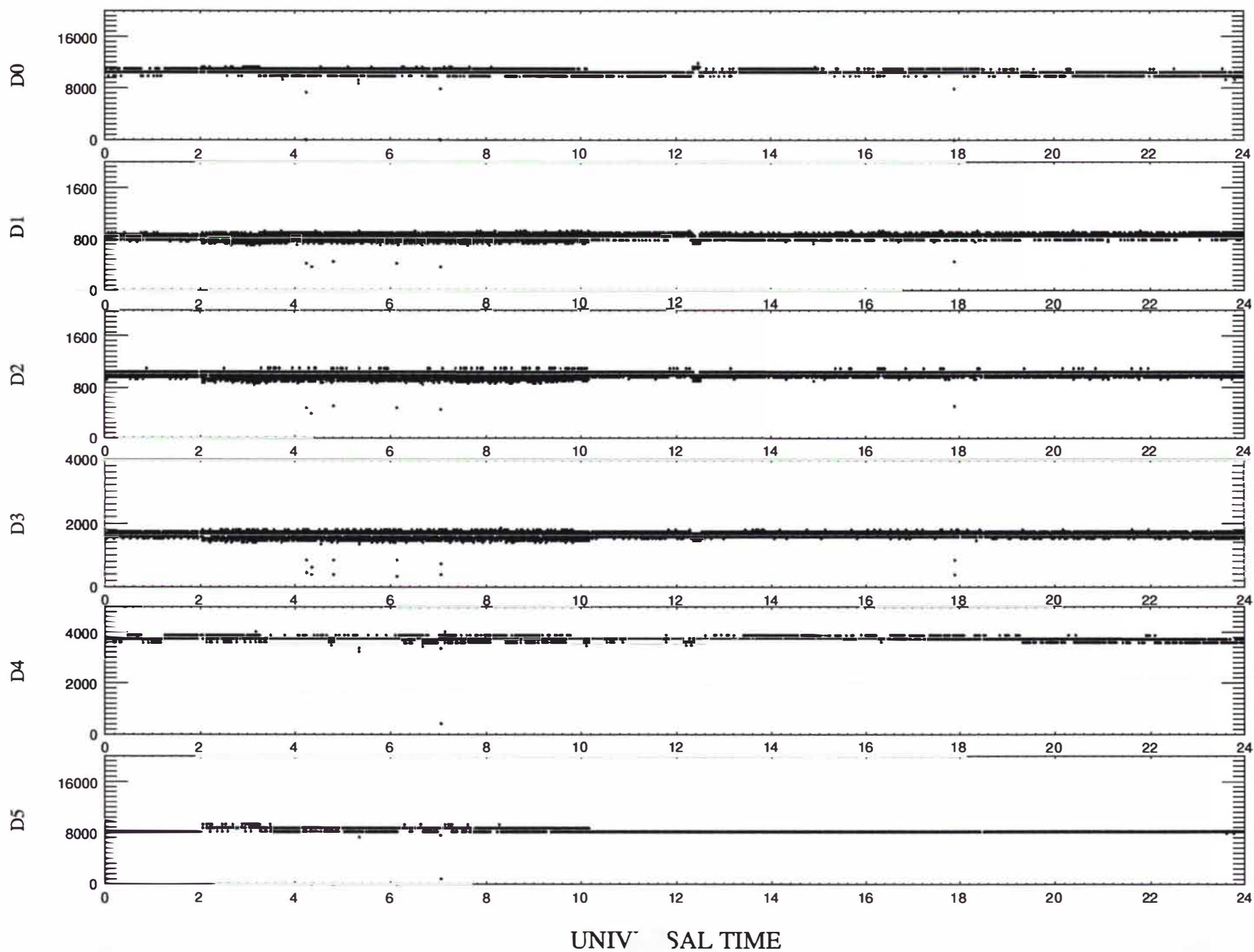


HUS 2A, MODE 1, NOT AVERAGED EDR day 10, year 1996 to day 10, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV SAL TIME



NO.: 4300

TIME: TJD=0093 SECONDS=01163

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4301

TIME: TJD=0093 SECONDS=11784

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4302

TIME: TJD=0093 SECONDS=13346

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4303

TIME: TJD=0093 SECONDS=18711

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER.

NO.: 4304

BATSE BURST TRIGGER

TIME: TJD=0093 SECONDS=23617

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4305

TIME: TJD=0093 SECONDS=24768

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4306

TIME: TJD=0093 SECONDS=30097

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4307

TIME: TJD=0093 SECONDS=34091

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4308

H

TIME: TJD=0093 SECONDS=35348

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

BATSE BURST TRIGGER

NO.: 4309

I

TIME: TJD=0093 SECONDS=40579

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER.

NO.: 4310

TIME: TJD=0093 SECONDS=44766

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

CYG X-1 RISE

Jan 15 14:07

batse.4312

1

From WOODSP@ssl.msfc.nasa.gov Sat Jan 13 16:01 PST 1996
Return-Path: <WOODSP@ssl.msfc.nasa.gov>
Received: from SSLMOR.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (SMI-8.6/SMI-SVR4)
id QAA20929; Sat, 13 Jan 1996 16:01:28 -0800
From: WOODSP@ssl.msfc.nasa.gov
Date: Sat, 13 Jan 1996 18:01:24 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <960113180124.20413765@ssl.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 4312
Content-Type: text
Content-Length: 1135
X-Lines: 26
Status: RO

Trigger

BATSEARCH PROGRAM

BATSE BURST # 4312
EVENT OF 1996 JAN 11 DAY OF YEAR= 11
EVENT CROSSING TIME AT BATSE : 46523. S. OR 12:55:23.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 138.000 48.000
BATSE PEAK COUNTING RATE: 30000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/ 1/ 96 IS:
RA= 225.347 DEC= 62.740 DIST= 2.807 AU
BATSE-ULYSSES DISTANCE = 419918985. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=132.44 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -945.18 SECS.
CROSSING TIME AT ULYSSES IS 45578. S. OR 12:39:37 +/- 215.12 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/ 1/ 96 IS:
RA= 304.511 DEC= -20.776 DIST= 2.340 AU
MARS-BATSE DISTANCE = 350031008. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 29.31 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1018.09 SECS.
CROSSING TIME AT MARS IS 47541. S. OR 13:12:21 +/- 114.70 SECONDS

BATSE BURST TRIGGER

NO.: 4312

TIME: TJD=0093 SECONDS=46523

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=64.6 AZIMUTH=125.3 ERROR=0.5 DEGREES

COMMENTS:

GRB LASTING 10 SEC. 3 - 4 PEAKS. FRED-LIKE STRUCTURE.
MARGINALLY VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4312	960111	10093	46523	30000	138	+48	10

From cline@lheavx.gsfc.nasa.gov Fri Mar 29 08:40 PST 1996
 Date: Fri, 29 Mar 1996 08:40:19 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: Konus Event List augmentation

Dear Kevin,

This list includes Sergei's latest Konus-W (GGS-Wind) and Konus-A (Kosmos-2326) events, for comparison with Ulysses, BATSE, TGRS, etc. The times listed are prioritized for Konus-W (i.e., Konus-A time given if Konus-W doesn't trigger).

Yr	Mn	Dy	UT (Konus)	BATSE	Ulysses	Konus	TGRS	Notes
95	11	2	07085.879	?	?	168	no	
95	11	2	21209.015	3891	R I	169	345	
95	11	4	05868.077	3893	R I	170	BGR	
95	11	5	46827.808	?	?	171	no	
95	11	12	66495.244	?	R I	172	no	
95	11	13	84358.872	3906	R I	173	BGR	
95	11	17	10123.762	3909	?	175	no	
95	11	19	29831.402	3912	R I	176	348	
95	11	19	46457.519	?	?	177	BGR	
95	11	22	09841.38	?	?	179	no	
95	11	22	17107.738	?	?	180	349	
95	12	2	39101.744	?	?	195	BGR	
95	12	3	03988.18	?	?	196	360	
	12	8	19617.151	?	?	197	no	
	12	8	39452.057	?	?	198	no	
95	12	8	42467.634	?	?	199	BGR	
95	12	9	31349.607	?	?	200	BGR	
95	12	13	17849.683	?	?	201	362	
95	12	14	08657.847	?	?	202	no	
95	12	19	60679.732	?	?	203	no	
95	12	20	31883.56	?	?	204	BGR	
95	12	22	25203.254	?	?	no	?	= K-A t.
95	12	27	23005.042	?	?	218	375	
96	12	31	20231.668	?	?	219	no	
96	1	2	11650.996	?	?	220	no	
96	1	4	12521.062	?	?	221	no	
96	1	11	46524.53	?	?	222	no	
96	1	13	56024.261	?	?	228	no	
96	1	14	44104.737	?	?	233	384	+ K-A t.
96	1	15	31956.506	?	?	234	BGR	
96	1	17	57371.341	?	?	235	no	
96	1	19	34679.317	?	?	236	no	
96	1	19	45226.016	?	?	237	no	
96	1	20	36768.974	?	?	238	no	
96	1	24	03388.008	?	?	239	385	+ K-A t.
96	1	24	76096.911	?	?	BGR	?	= K-A t.
96	1	30	08756.848	?	?	240	no	
96	2	1	78530.582	?	?	241	?	+ K-A t.
96	2	2	50750.813	?	?	242	?	
96	2	10	35198.959	?	?	247	?	
96	2	16	57796.347	?	?	BGR	?	= K-A t.
96	2	19	20589.684	?	?	BGR	?	= K-A t.
96	2	28	85760.241	?	?	249	?	
96	2	29	22445.141	?	?	250	?	

96	3	5	33645.352	?	?	251	?
96	3	12	35074.697	?	?	252	?
96	3	19	51992.828	?	?	253	?
96	3	21	76321.803	?	?	254	?
96	3	22	19642.728	?	?	255	?
96	3	24	80064.124	?	?	257	?
96	3	25	69892.978	?	?	258	?

--

TLC

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

Date:

Feb 24 '98

Helio corr removed

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

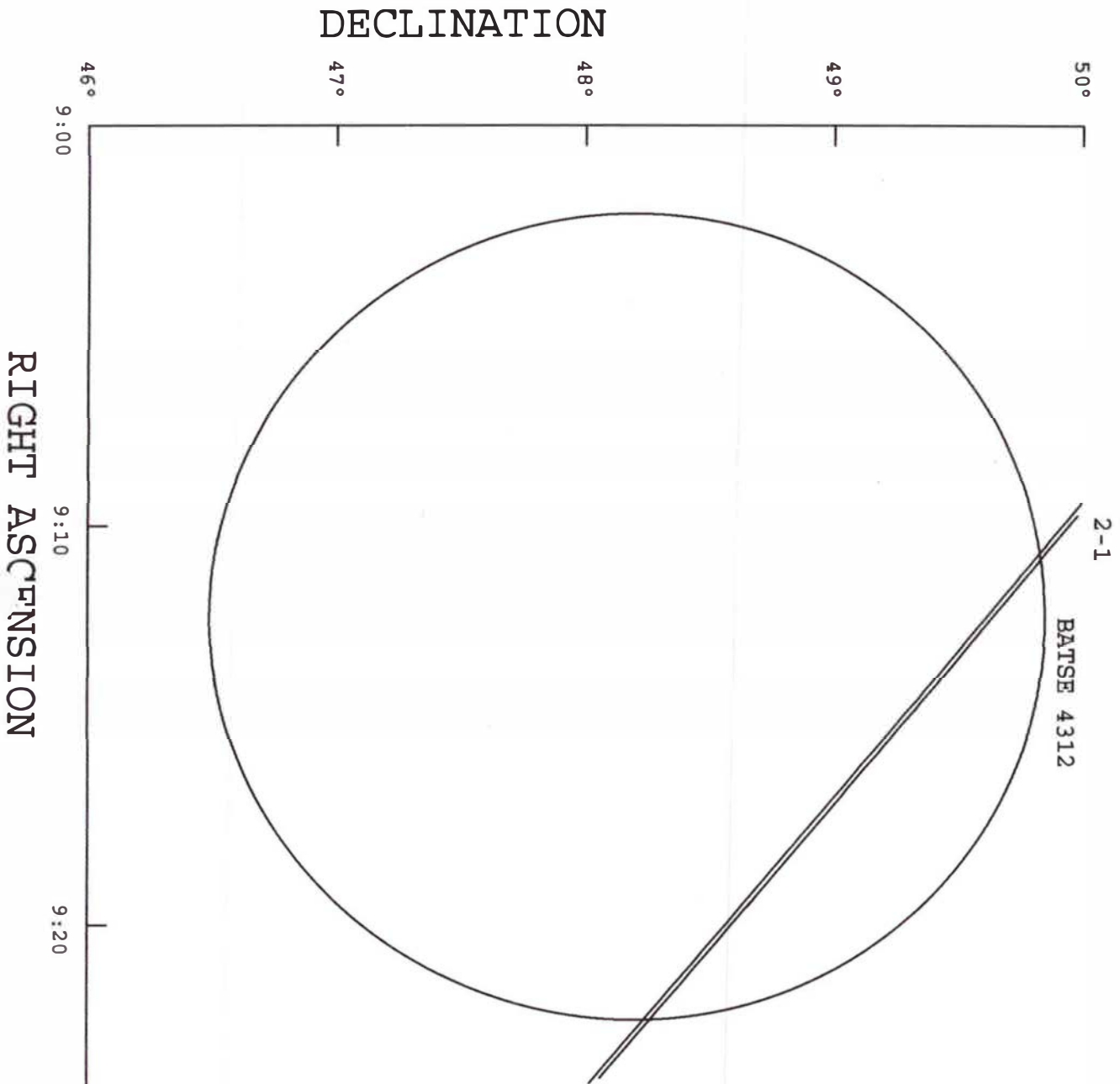
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF JAN 11, 1996 12:39

26 / 3/98



ULYSSES

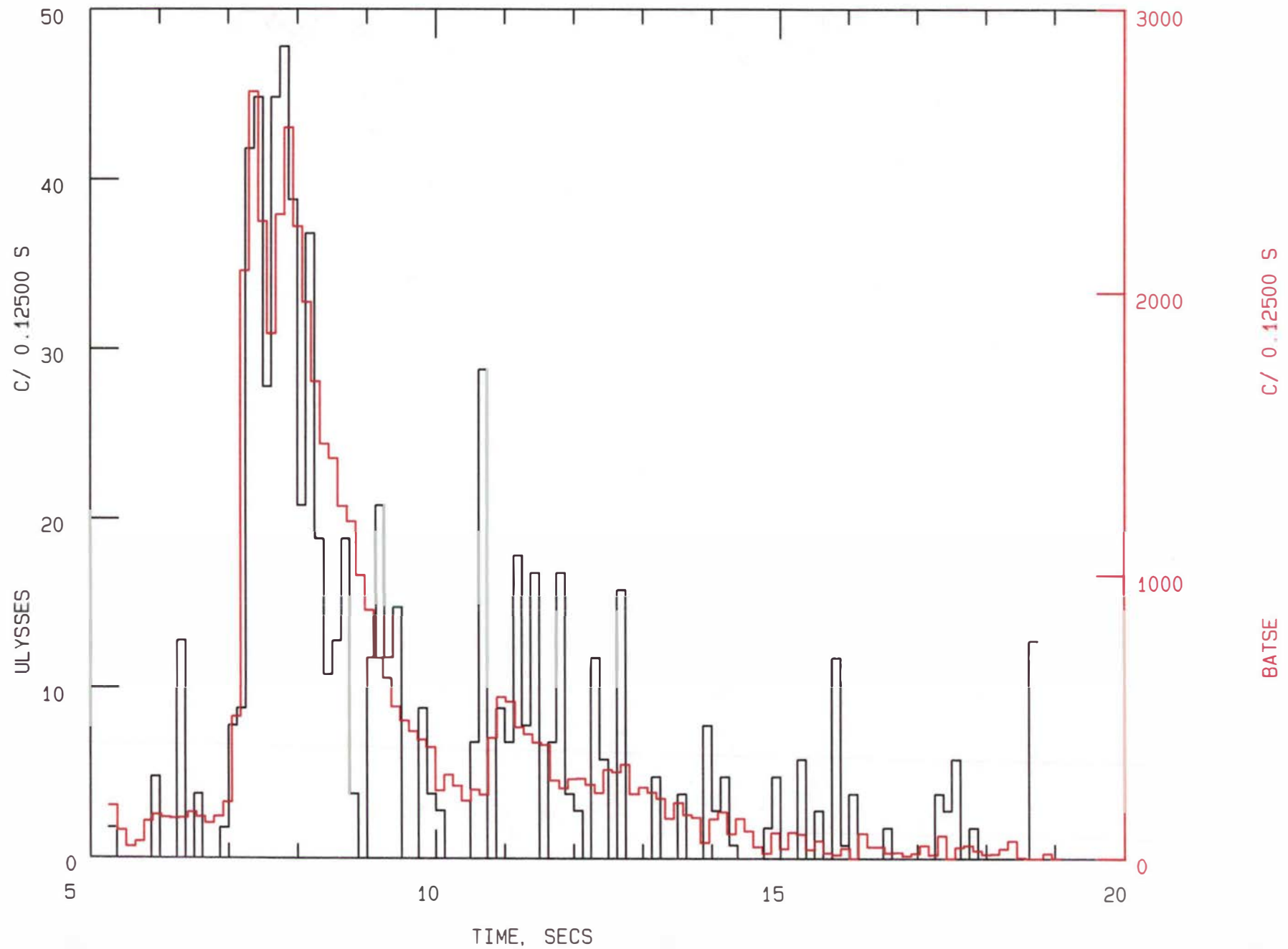
-BATSE

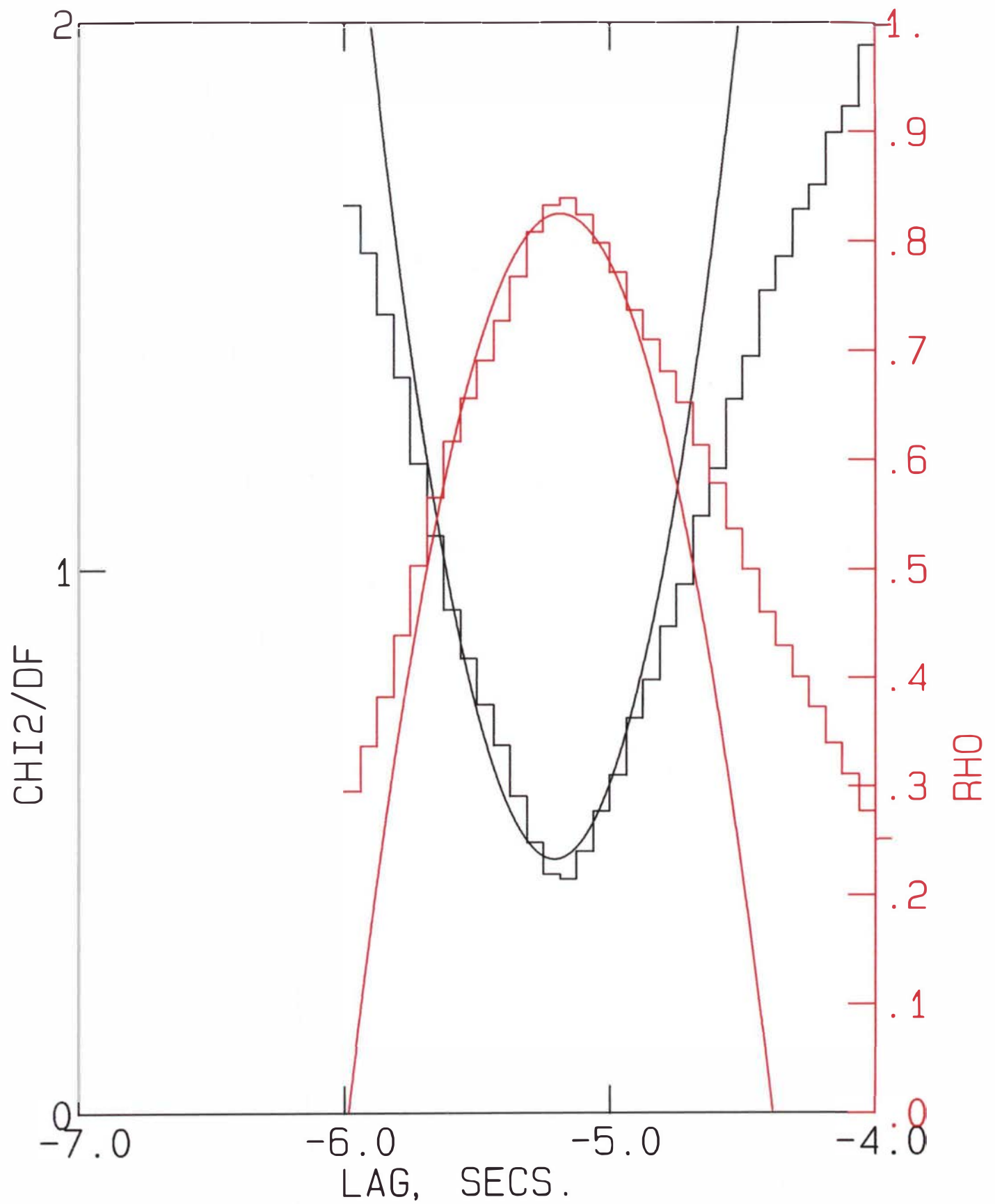
CORRELATION

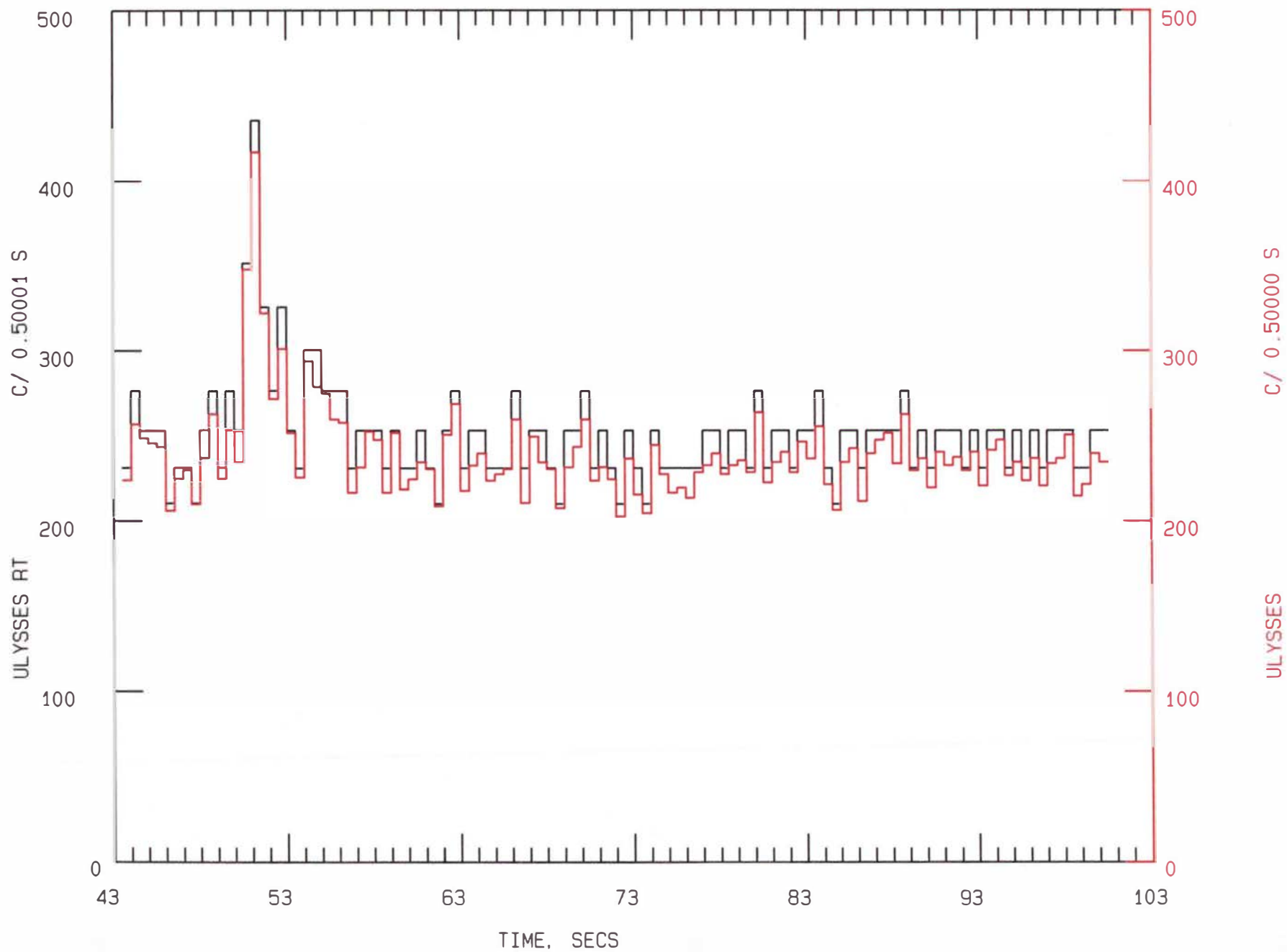
11/01/96

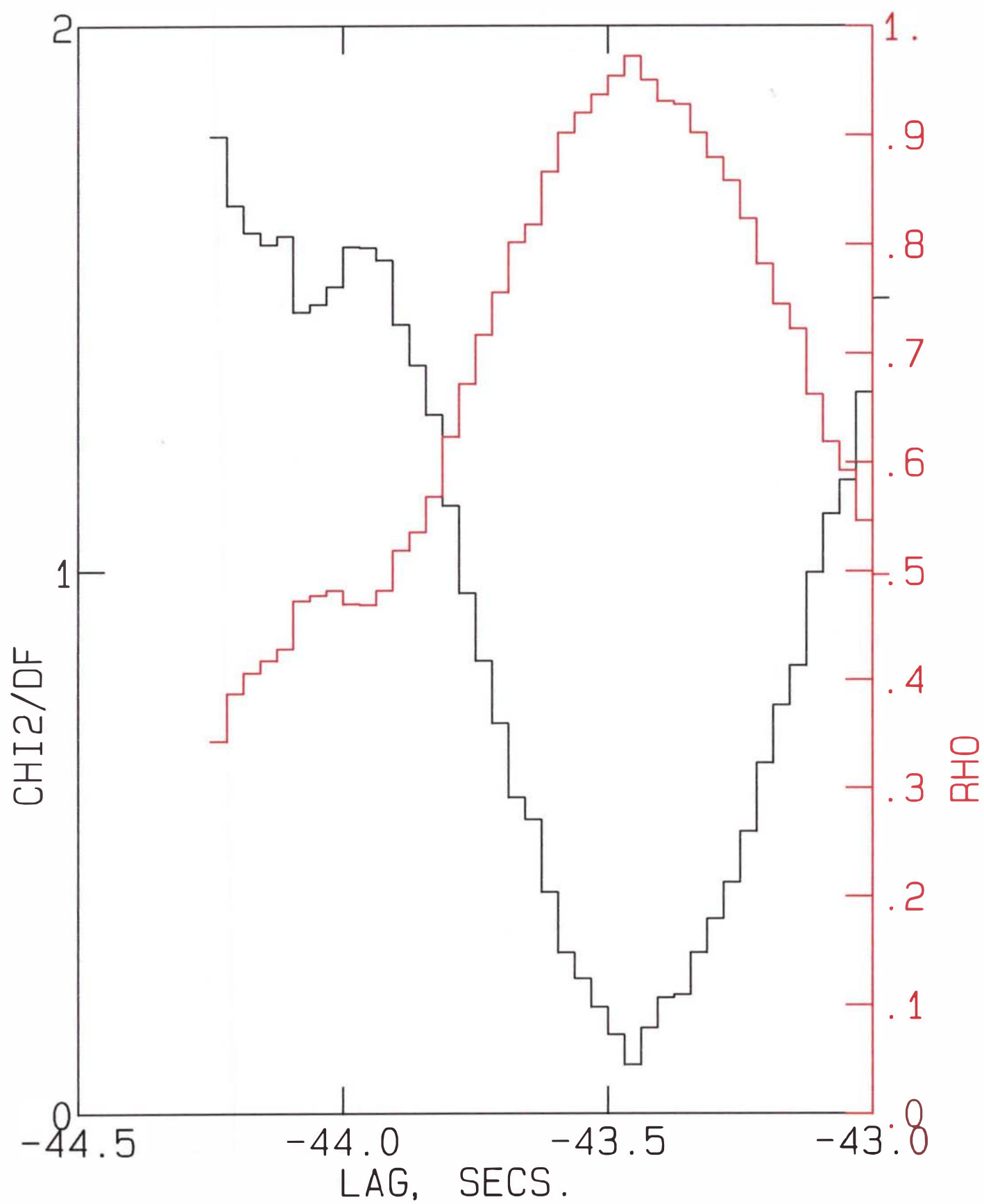
45561.327

26/ 3/98





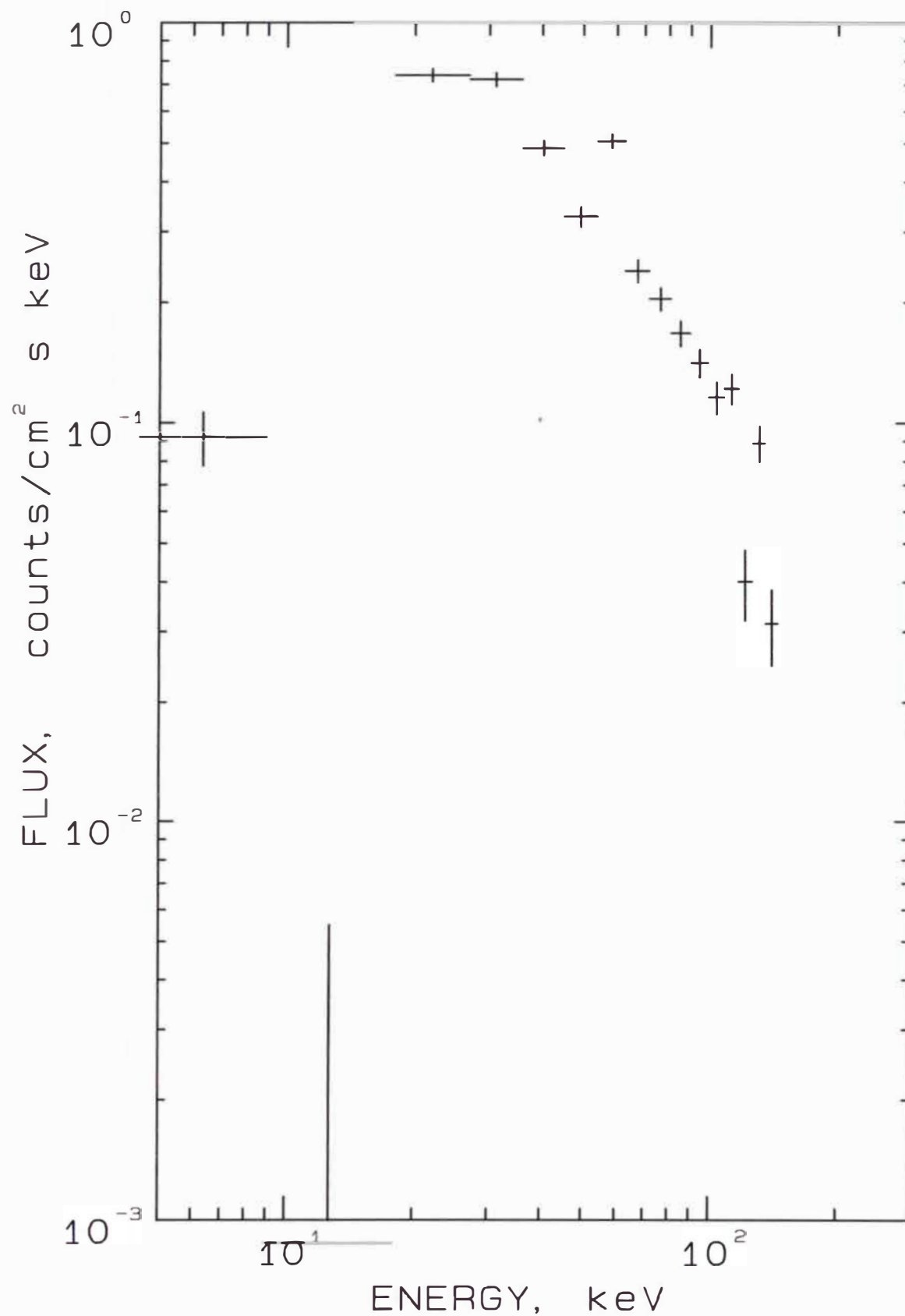




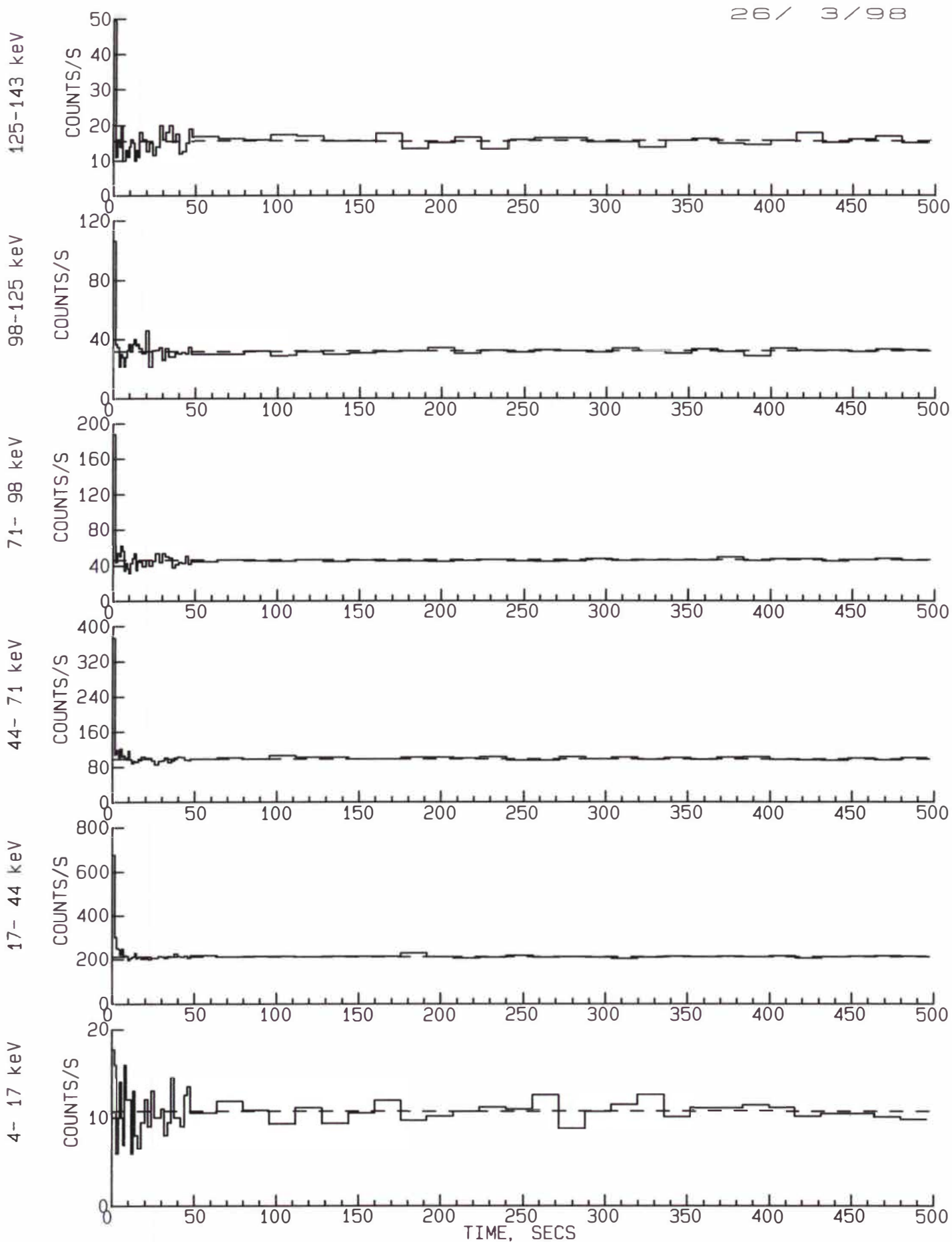
ULYSSES 11/01/96 45561.214

26/ 3/98

SPECTRUM INTEGRATED OVER 10.7 SECONDS, INTERVALS 2 TO 12



ULYS2.S 11/01/96 45561.214 BURST SPECTRAL COUNT RATES



ULYSSES

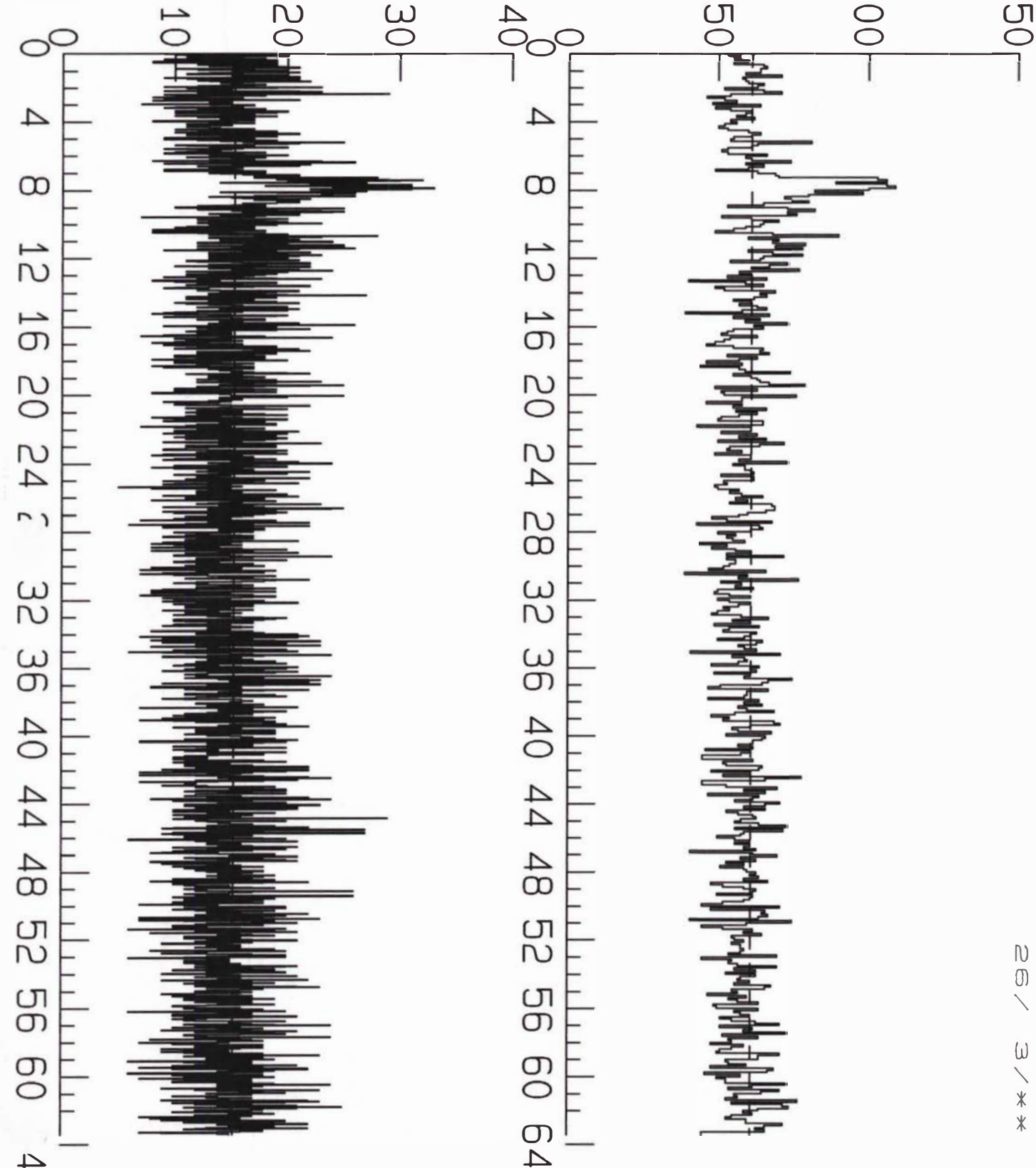
11/01/96

Ttrig=45561.327

21- 144 keV

COUNTS/0.031 S

COUNTS/0.125 S



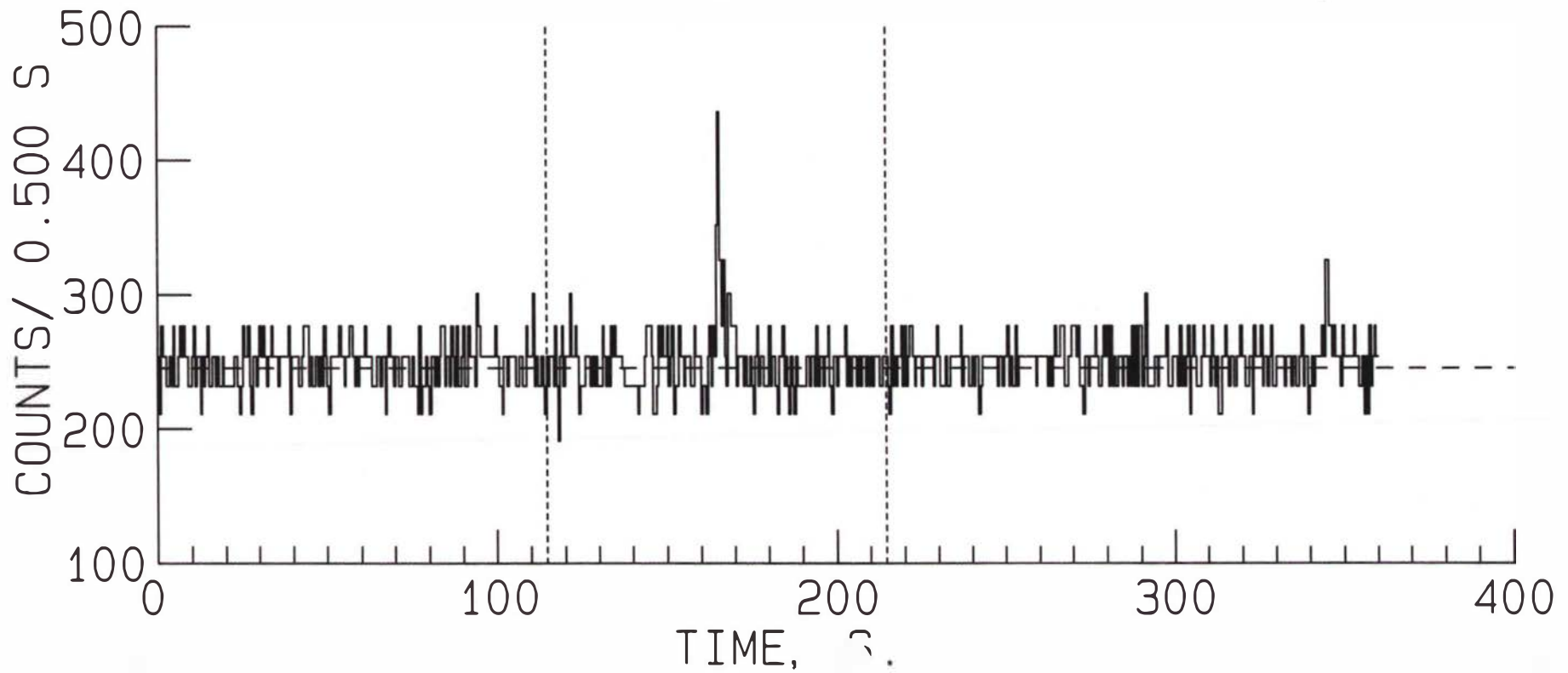
ULYSSES RT

26 / 3 / 98

11 / 1 / 96 45396.355 s

21- 144 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



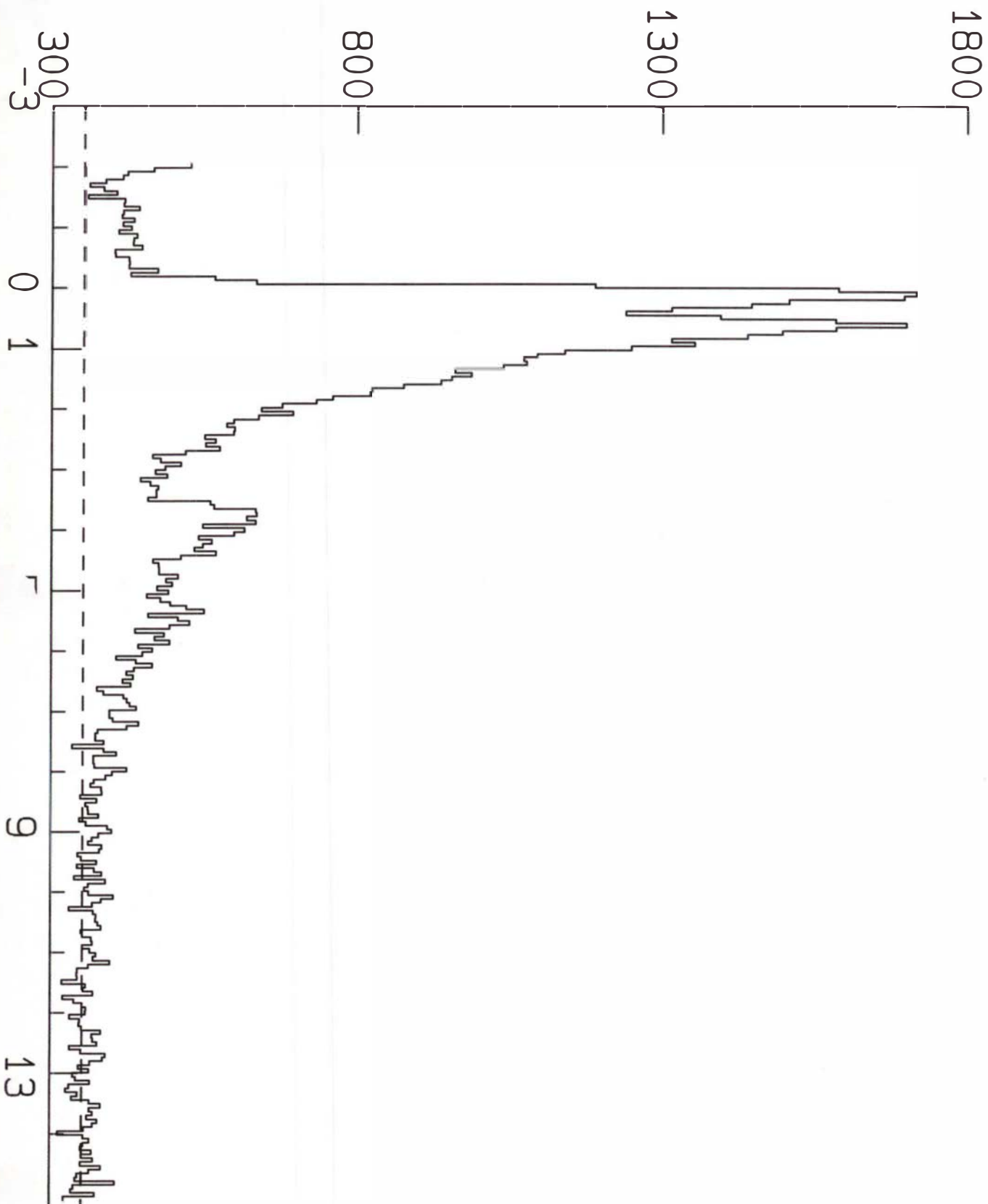
BATSE

11/01/96

46523.914

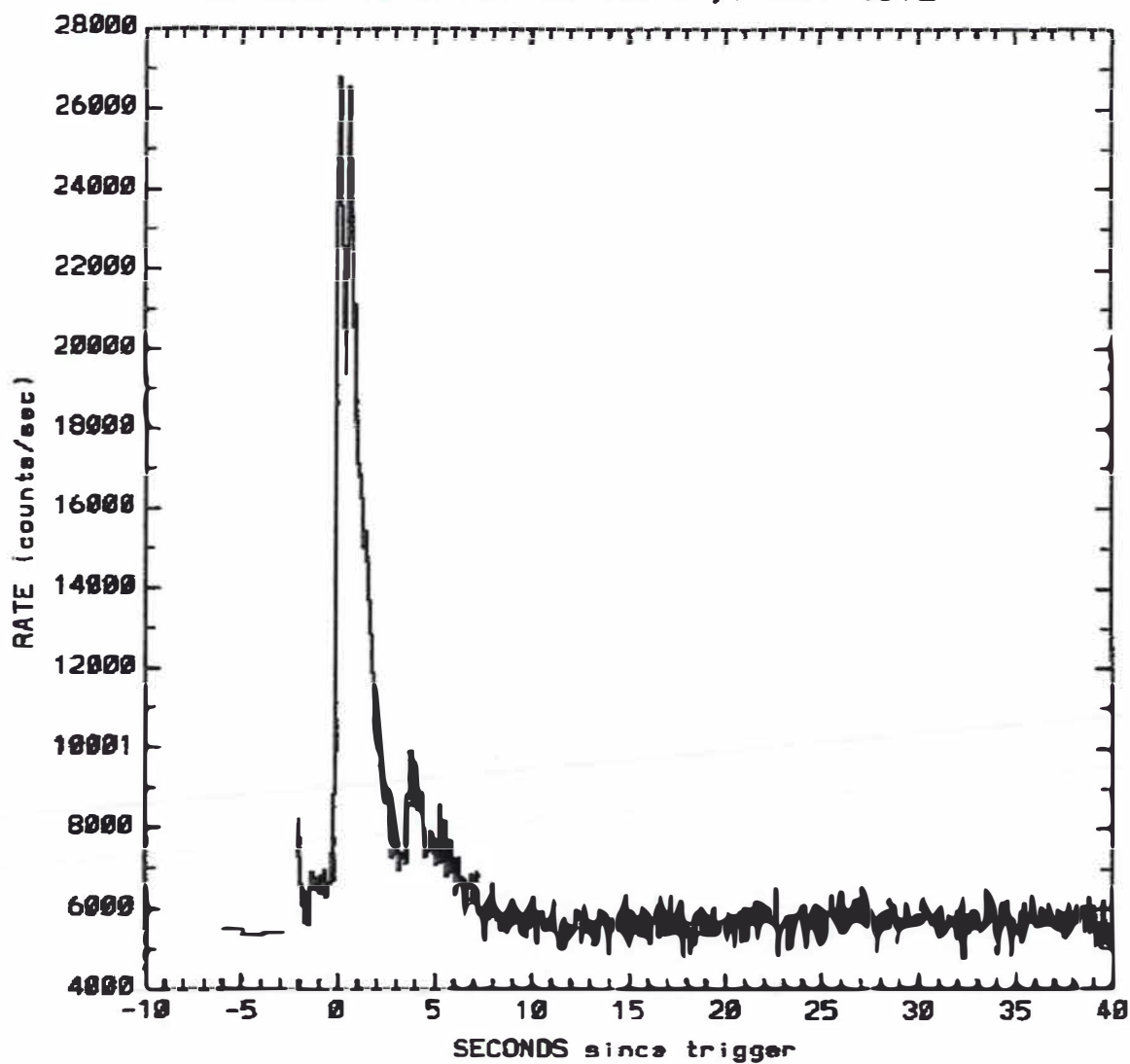
25- 100 keV

COUNTS/0.064 S



Jan 11 1996

DISCSC Data for K. Hurley. No. 4312



22-JAN-1996 14:22.83

Created by MDPS BD
(Burst Display)
Version 12.25

Trigger # : 4312

Trigger Time:
18893 / 46523.914

Burst Data Type:
DISCSC

Deadtime
Corrected: N

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
8.864 second(s)

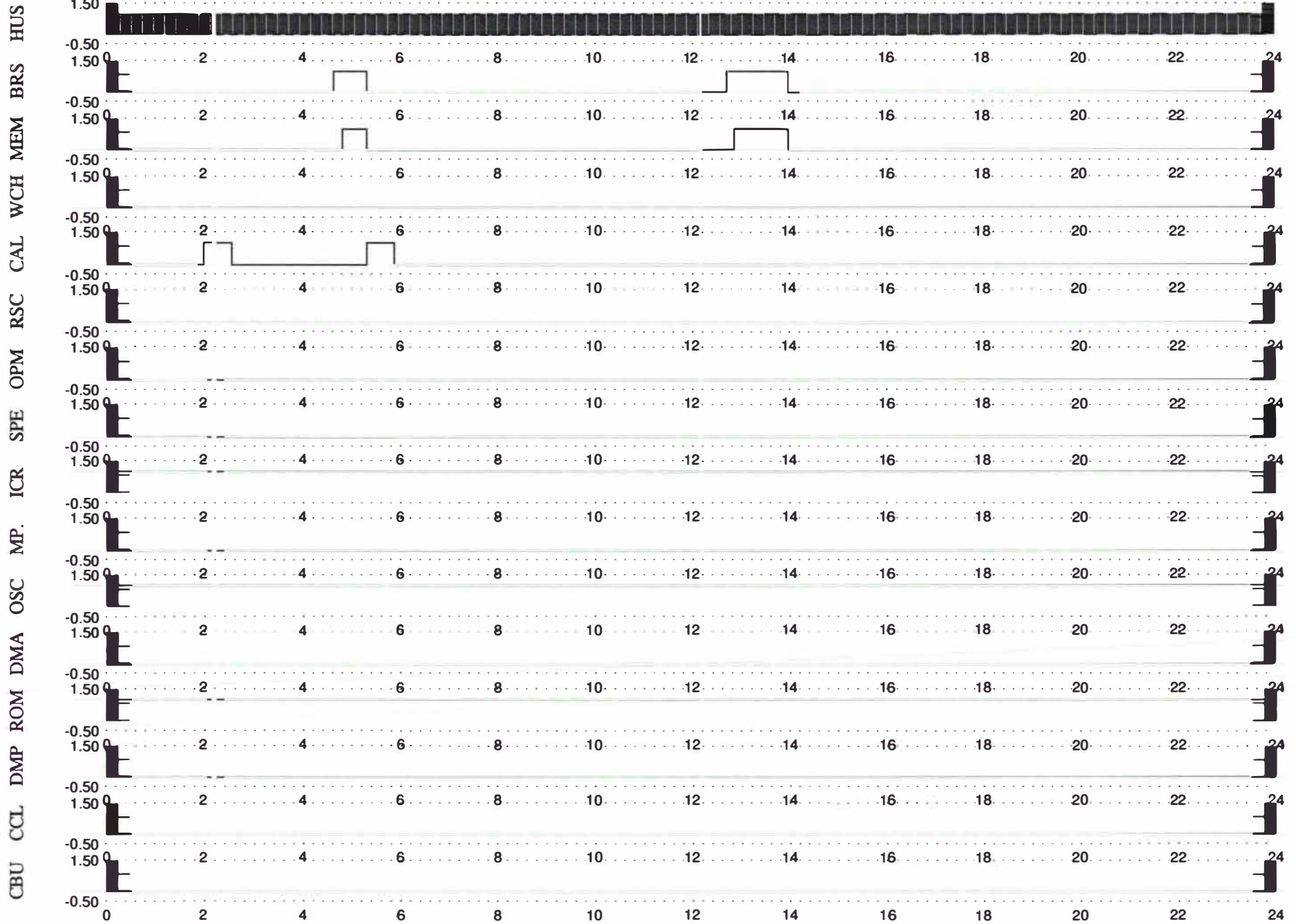
Detectors [7..8]:
--54----

Discriminators:
[1 . 2]

Quality Mask:
00ISP1

HUS MODES EDR day 11, year 1996 to day 11, year 1996
BURST NUMBER 2, 3

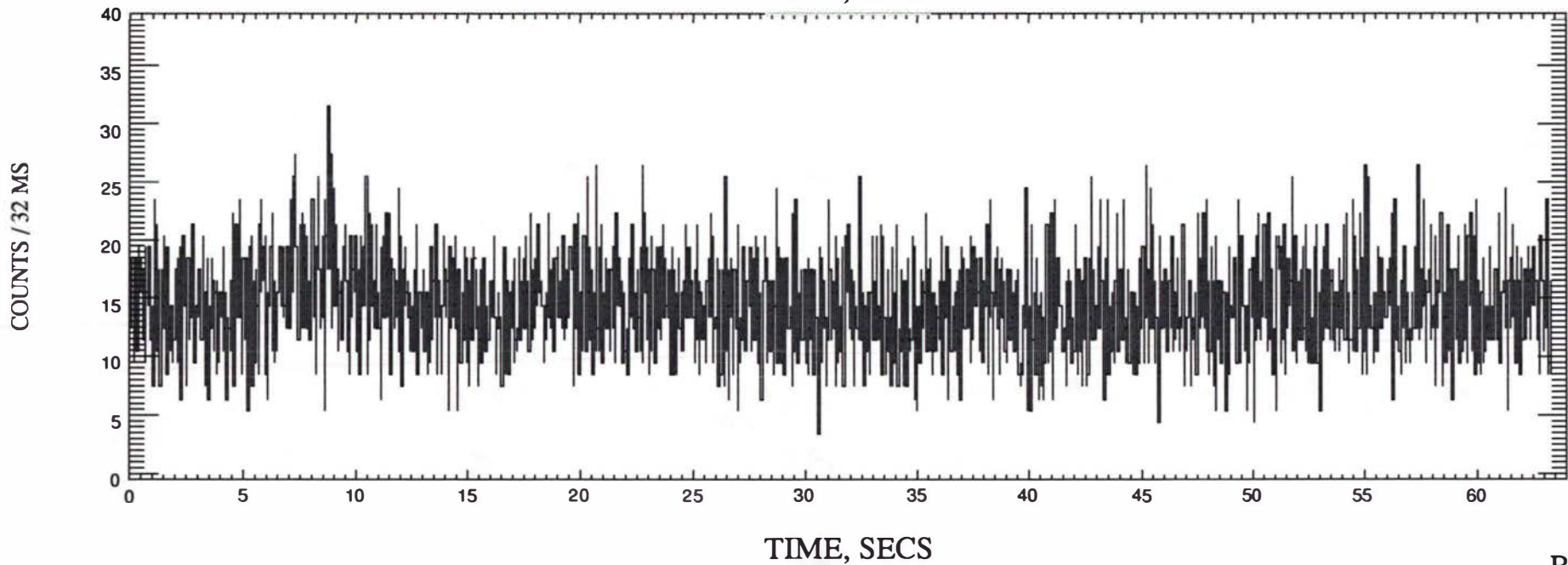
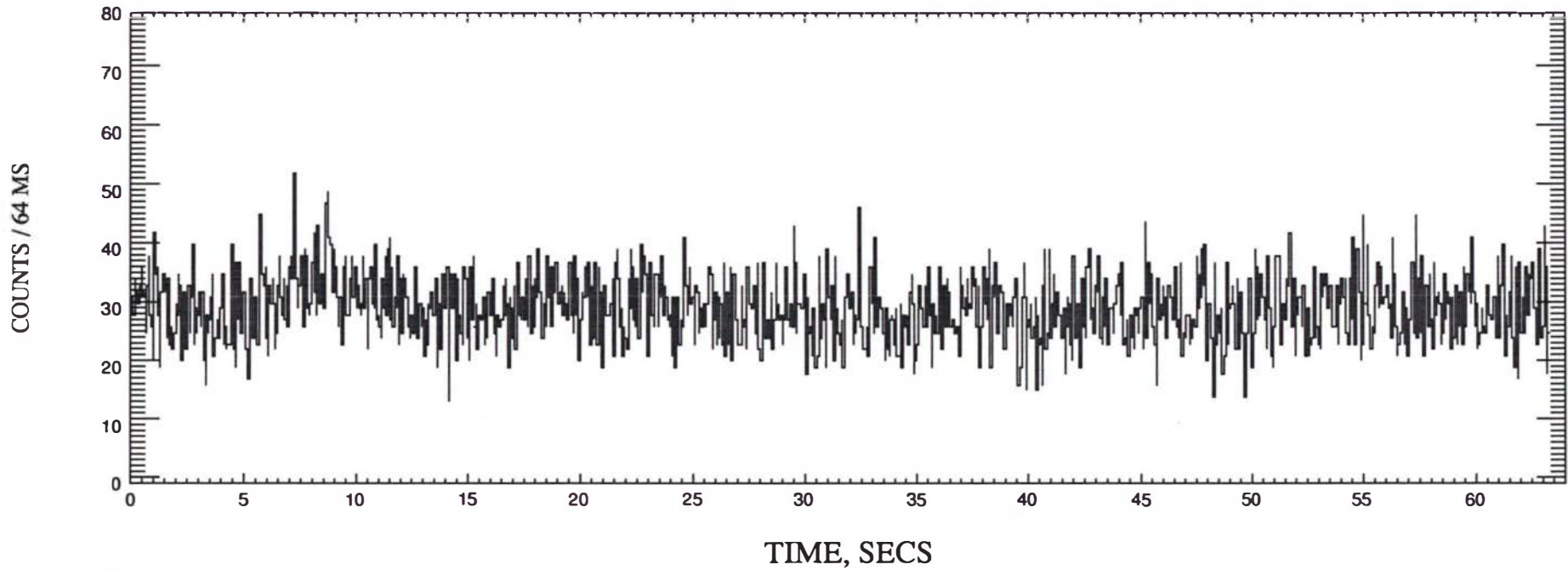
4/1/96



UNIV SAL TIME

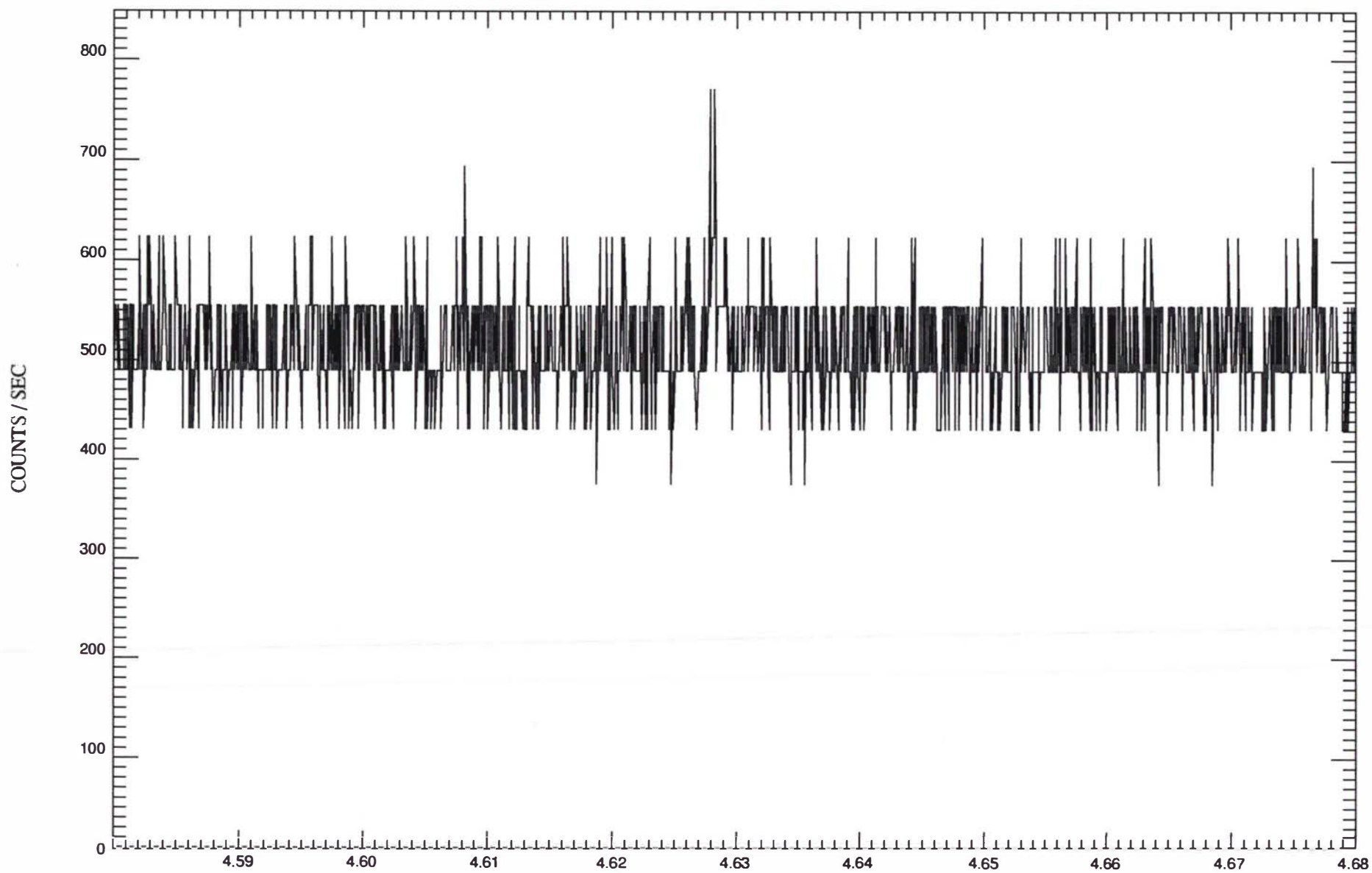
HUS 2A TRIGGERED DATA EDR day 11, year 1996
Burst Counter 2 at UT= 4.627962841458 h=16660.666 s 04:37:40.666

4/1/96



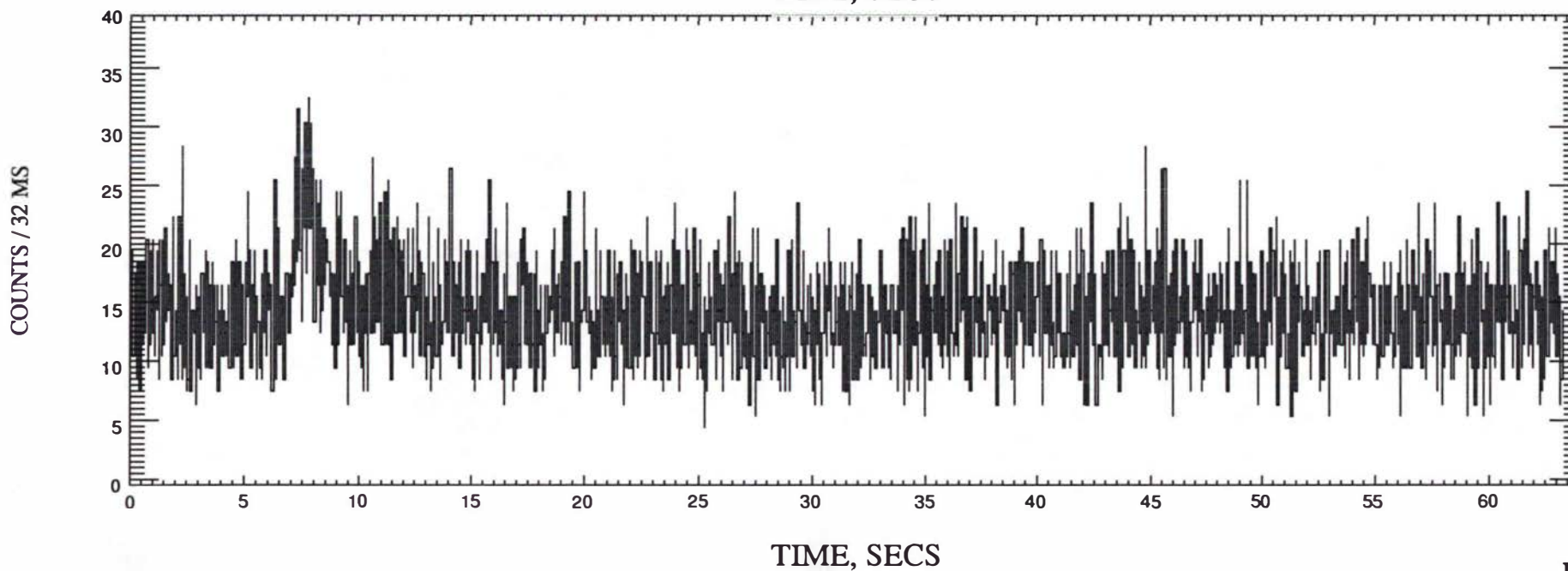
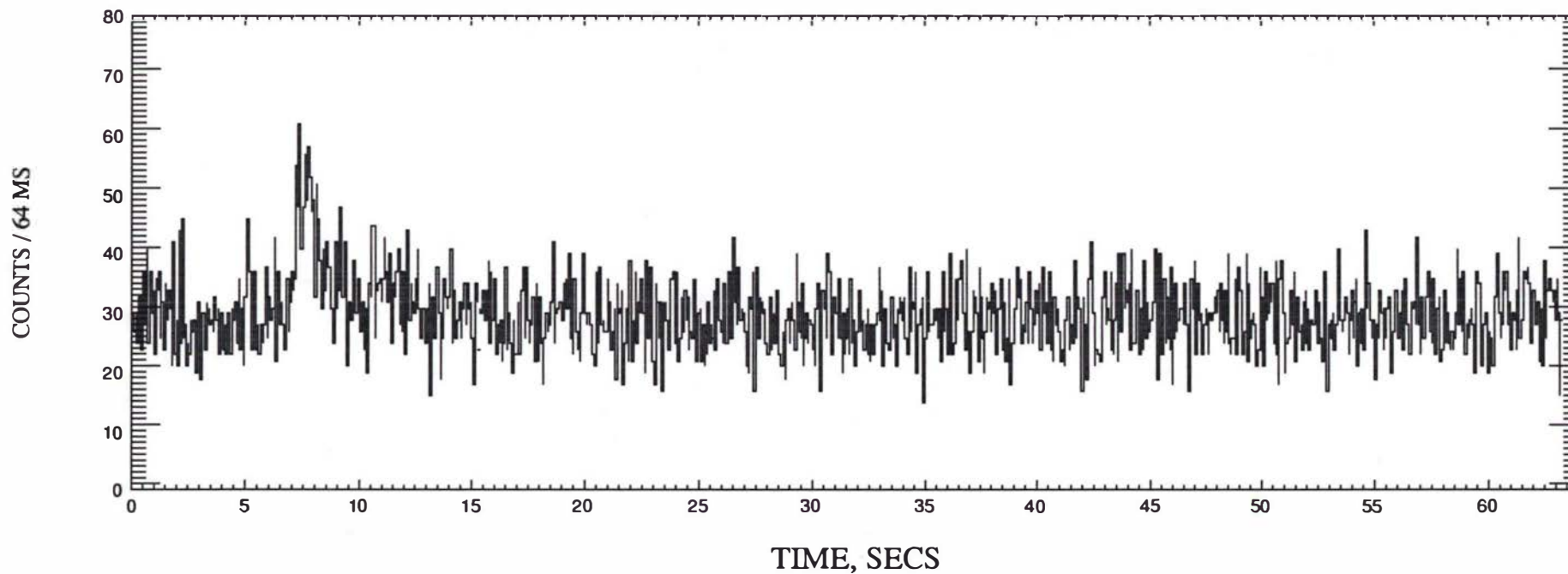
HUS 2A, MODE 1, NOT AVERAGED QEDR day 11, year 1996 to day 11, year 1996
CALIBRATION DATA INCLUDED

1/12/96



HUS 2A TRIGGERED DATA EDR day 11, year 1996
Burst Counter 3 at UT=12.655892901950 h=45561.214 s 12:39:21.214

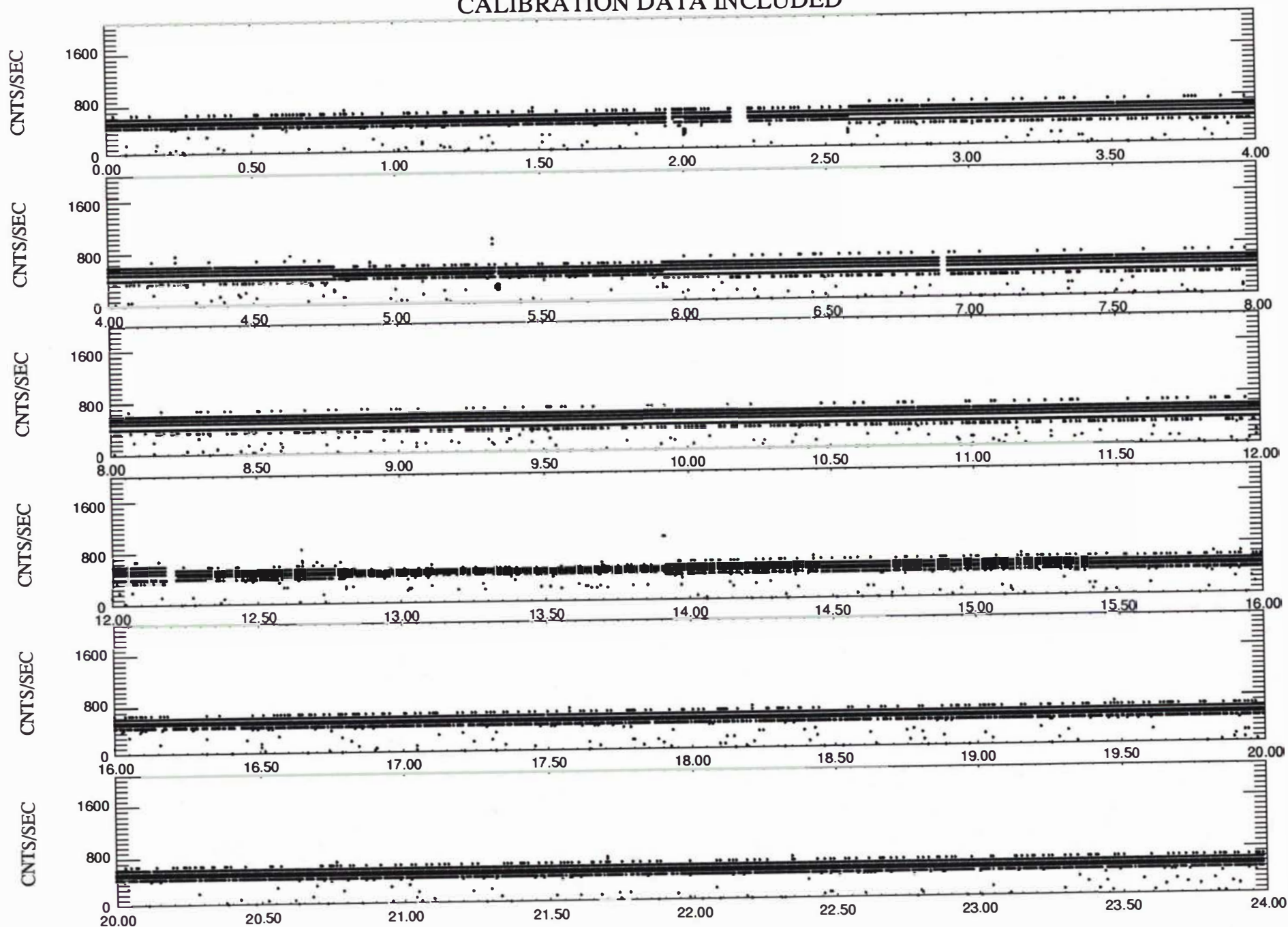
4/1/96



B# 2

HUS 2A, MODE 1, NOT AVERAGED EDR day 11, year 1996 to day 11, year 1996
CALIBRATION DATA INCLUDED

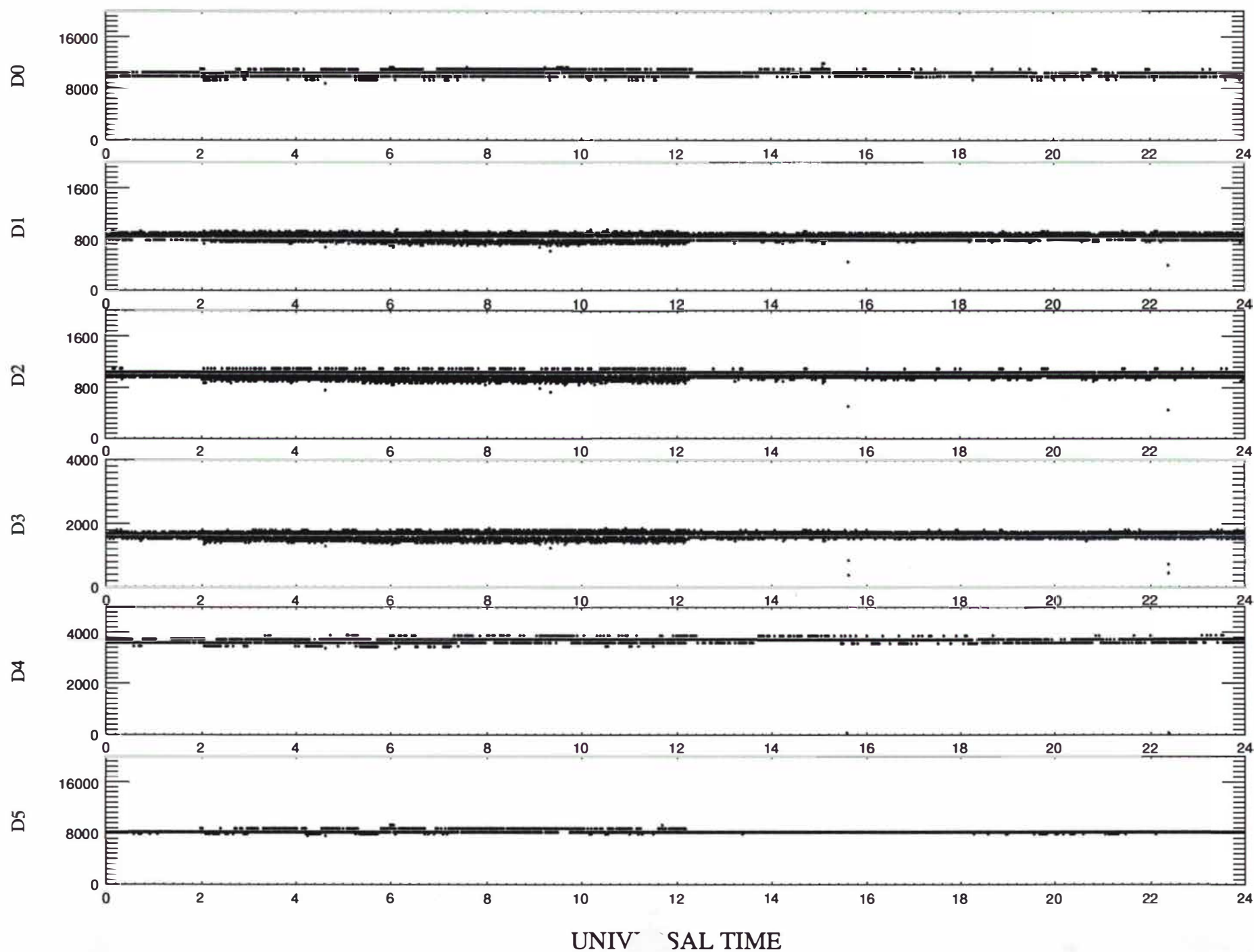
4/1/96



UNIV SAL TIME

HUS 2B COUNTS / SEC QEDR day 11, year 1996 to day 11, year 1996

1/12/96



From WOODSP@ssl.msfc.nasa.gov Tue Jan 16 09:38 PST 1996
Date: Tue, 16 Jan 1996 11:38:41 -0600 (CST)
From: WOODSP@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4327

BATSEARCH PROGRAM

BATSE BURST # 4327
EVENT OF 1996 JAN 12 DAY OF YEAR= 12
EVENT CROSSING TIME AT BATSE : 27118. S. OR 07:31:58.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 136.000 -3.000
BATSE PEAK COUNTING RATE: 46000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/ 1/ 96 IS:
RA= 225.303 DEC= 62.939 DIST= 2.806 AU
BATSE-ULYSSES DISTANCE = 419846009. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 87.65 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 57.53 SECS.
CROSSING TIME AT ULYSSES IS 27176. S. OR 07:32:55 +/- 293.81 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/ 1/ 96 IS:
RA= 305.328 DEC= -20.598 DIST= 2.341 AU
MARS-BATSE DISTANCE = 350162752. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 25.81 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1051.46 SECS.
CROSSING TIME AT MARS IS 28169. S. OR 07:49:29 +/- 104.27 SECONDS

BATSE BURST TRIGGER

NO.: 4327

TIME: TJD=0094 SECONDS=27118

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=93.5 AZIMUTH=175.1 ERROR=2.0 DEGREES

COMMENTS:

GRB LASTING 0.1 SEC. HARD SPECTRUM. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4327	960112	10094	27118	46000	136	-03	.1

16 / 1 / 96

ULYSSES RT

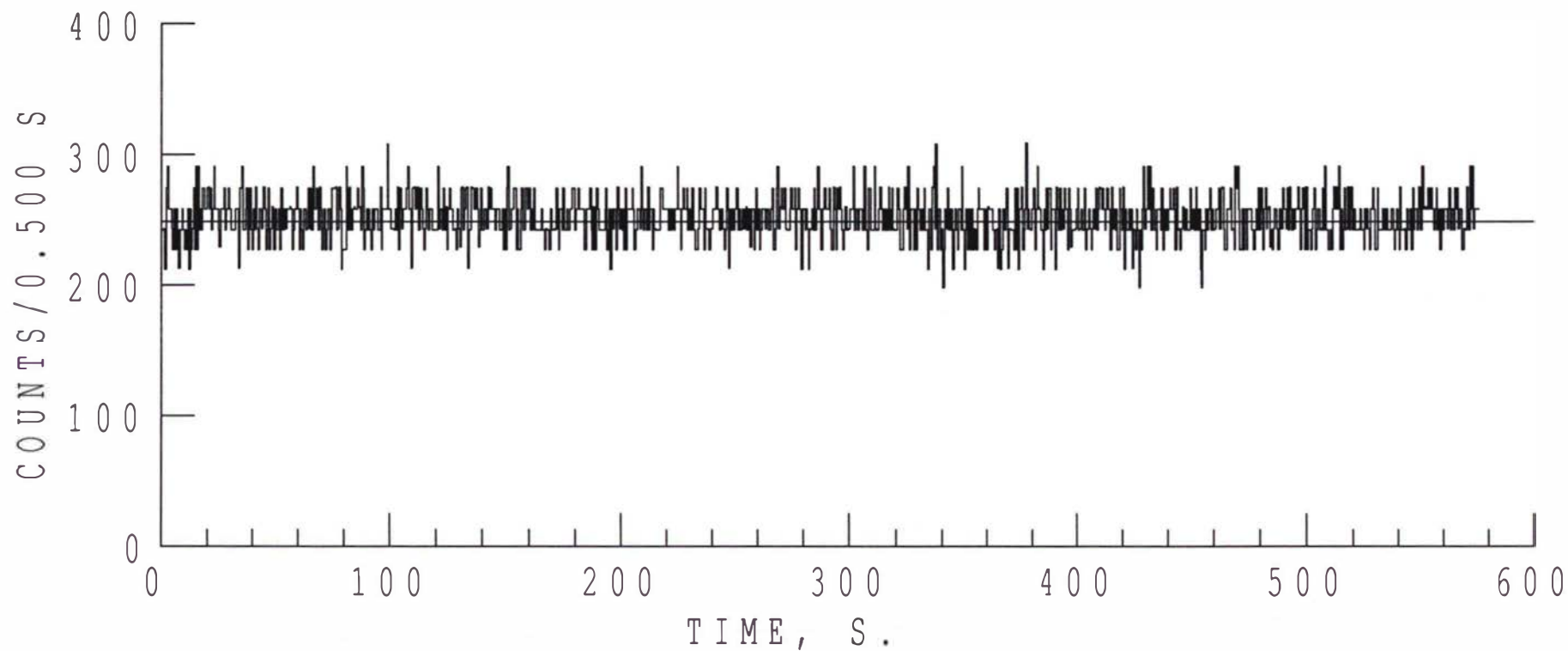
12 / 1 / 96 26892.119 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

W= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From WOODSP@ssl.msfc.nasa.gov Tue Jan 16 09:40 PST 1996
Date: Tue, 16 Jan 1996 11:40:30 -0600 (CST)
From: WOODSP@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4350

BATSEARCH PROGRAM

BATSE BURST # 4350
EVENT OF 1996 JAN 12 DAY OF YEAR= 12
EVENT CROSSING TIME AT BATSE : 56023. S. OR 15:33:43.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 230.000 6.000
BATSE PEAK COUNTING RATE: 15000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/ 1/ 96 IS:
RA= 225.281 DEC= 63.025 DIST= 2.806 AU
BATSE-ULYSSES DISTANCE = 419817047. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=122.87 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -760.03 SECS.
CROSSING TIME AT ULYSSES IS 55263. S. OR 15:21:02 +/- 242.66 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/ 1/ 96 IS:
RA= 305.328 DEC= -20.598 DIST= 2.341 AU
MARS-BATSE DISTANCE = 350162752. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=101.48 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -232.45 SECS.
CROSSING TIME AT MARS IS 55791. S. OR 15:29:50 +/- 195.20 SECONDS

BATSE BURST TRIGGER

NO.: 4350

TIME: TJD=0094 SECONDS=56023

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=117.5 AZIMUTH=53.7 ERROR=0.9 DEGREES

COMMENTS:

GRB LASTING 65 SEC. FOUR DISTINCT PEAKS, ALL HAVING FRED STRUCTURE.
VISIBLE ABOVE 300 KEV. SOFT TO HARD SPECTRAL EVOLUTION FOR THREE
TRIGGERED PEAKS.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4350	960112	10094	56023	15000	230	+06	65

16 / 1 / 96

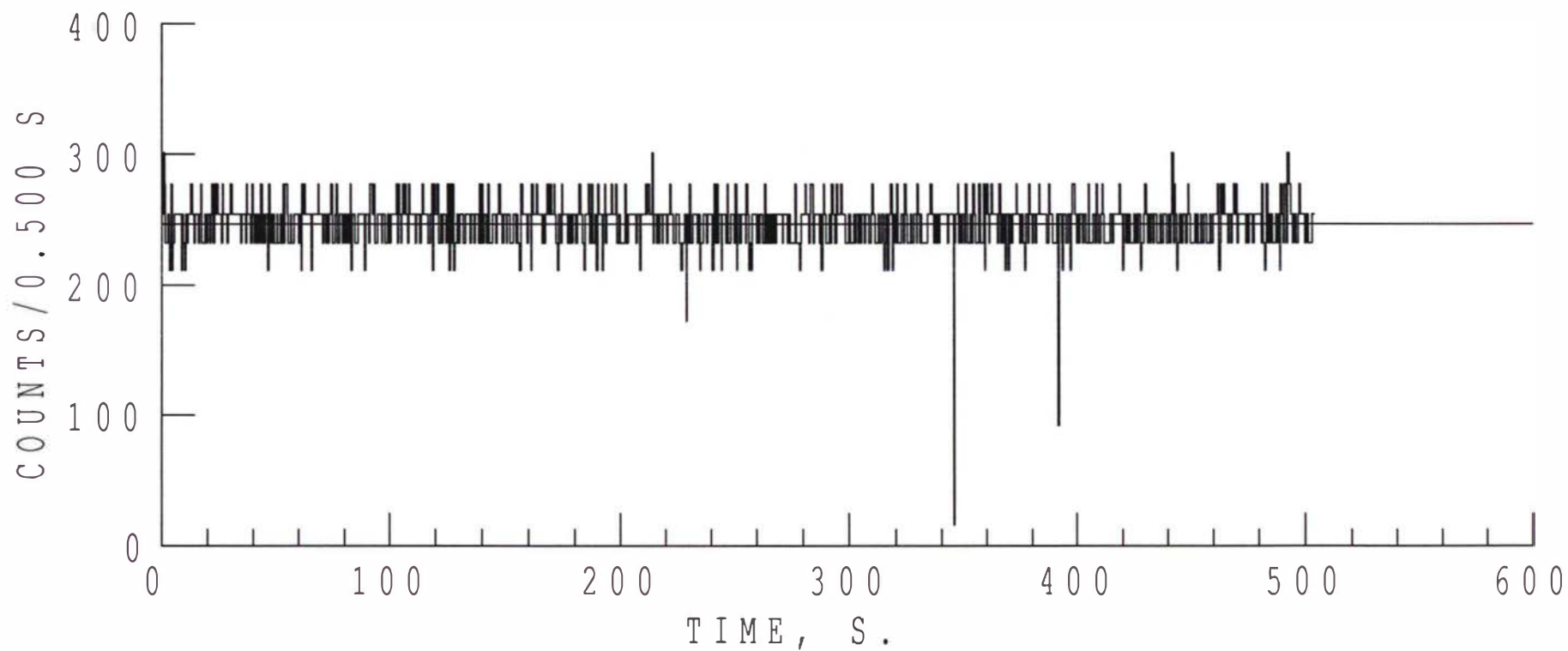
ULYSSES RT

12 / 1 / 96 55008.285 s

0 - 0 keV

W= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From WOODSP@SSLLES.MSFC.NASA.GOV Tue Jan 16 09:50 PST 1996
From: WOODSP@SSLLES.MSFC.NASA.GOV
Date: Tue, 16 Jan 1996 11:49:57 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4349

TIME: TJD=0094 SECONDS=55408

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

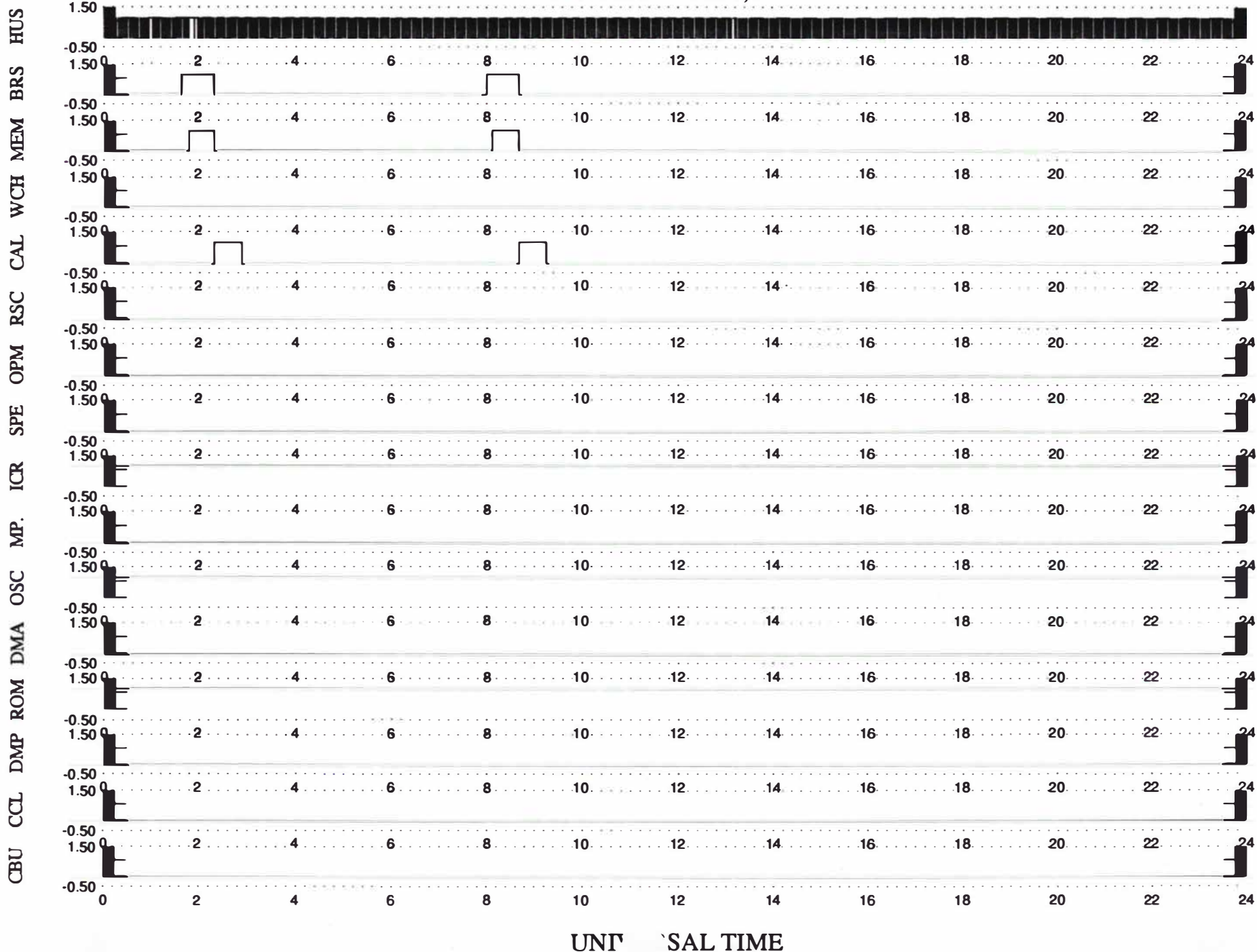
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
PARTICLE EVENT.

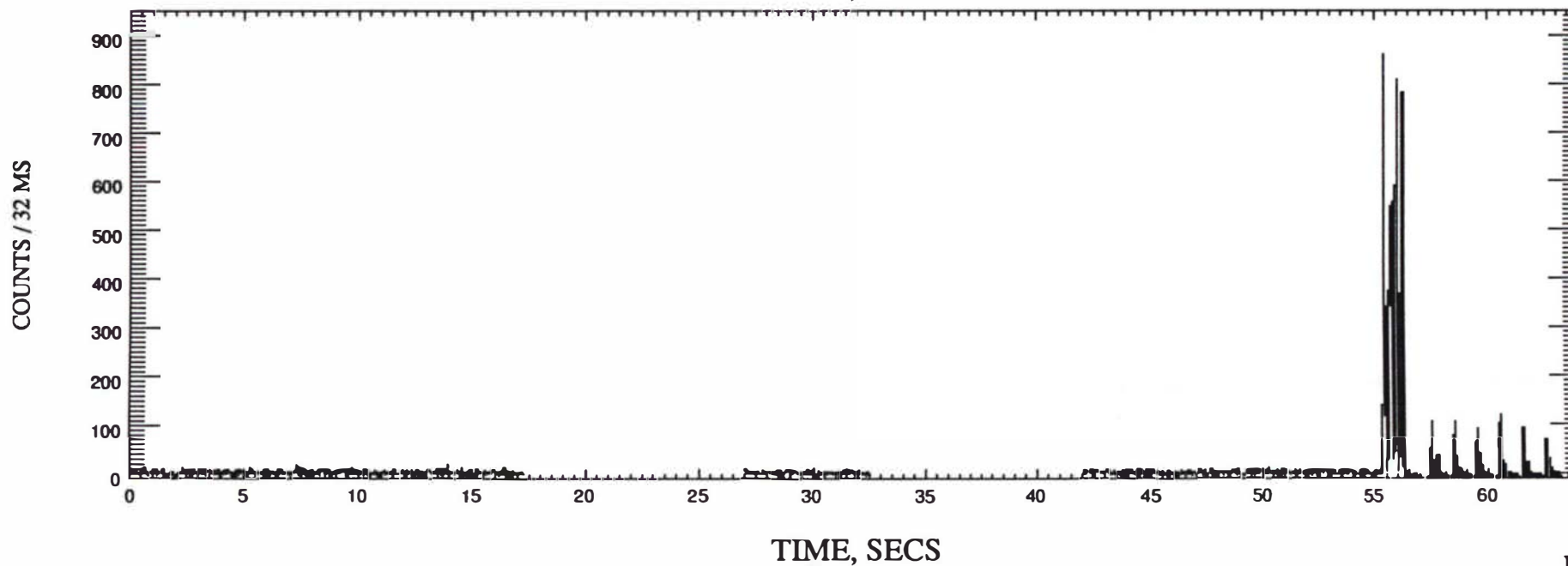
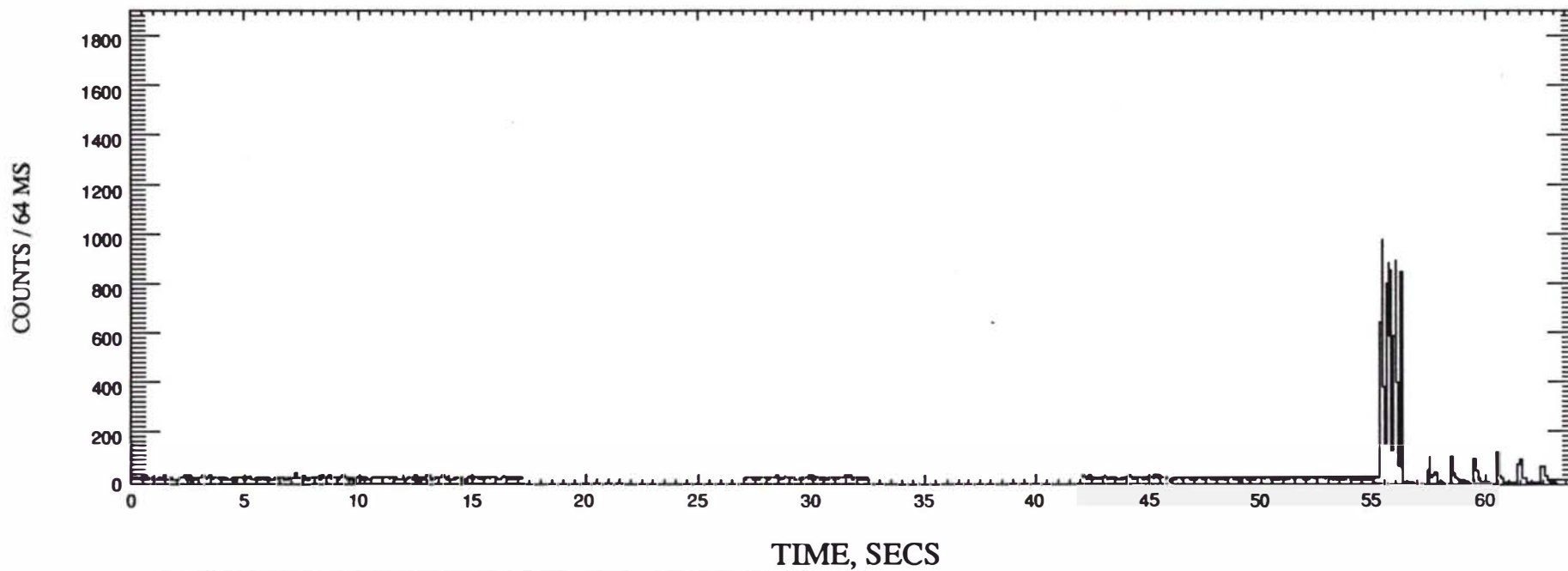
HUS MODES EDR day 12, year 1996 to day 12, year 1996 BURST NUMBER 4, 5

4/1/96



HUS 2A TRIGGERED DATA EDR day 12, year 1996
Burst Counter 4 at UT= 1.523692075941 h= 5485.291 s 01:31:25.291

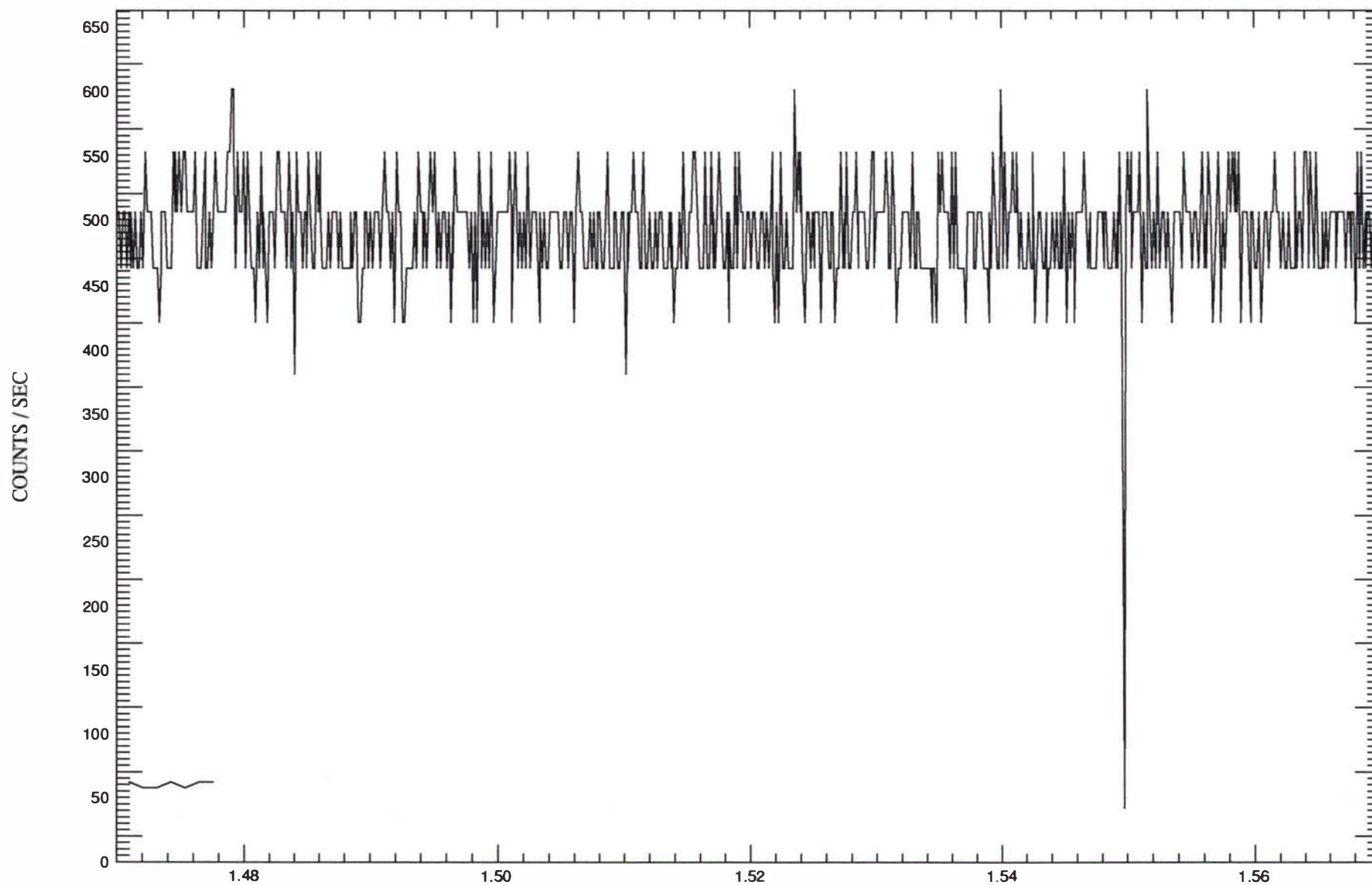
4/1/96



B# 1

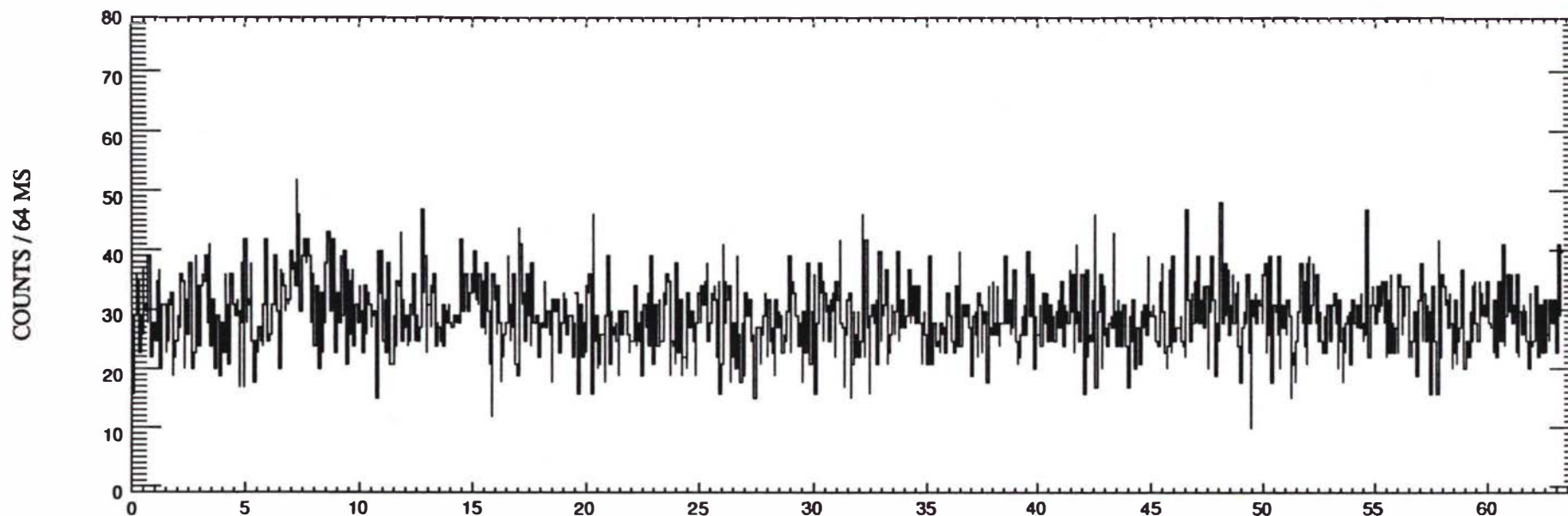
HUS 2A, MODE 1, NOT AVERAGED QEDR day 12, year 1996 to day 12, year 1996
CALIBRATION DATA INCLUDED

1/16/96

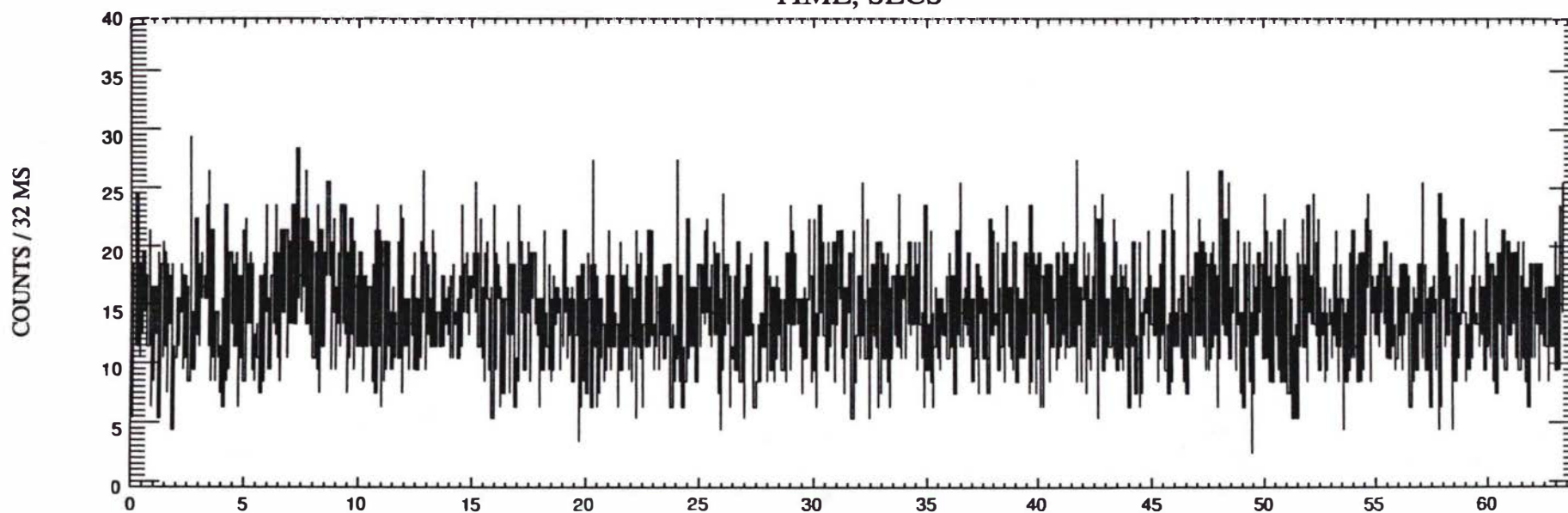


HUS 2A TRIGGERED DATA EDR day 12, year 1996
Burst Counter 5 at UT= 7.952329101563 h=28628.385 s 07:57:08.385

4/1/96



TIME, SECS

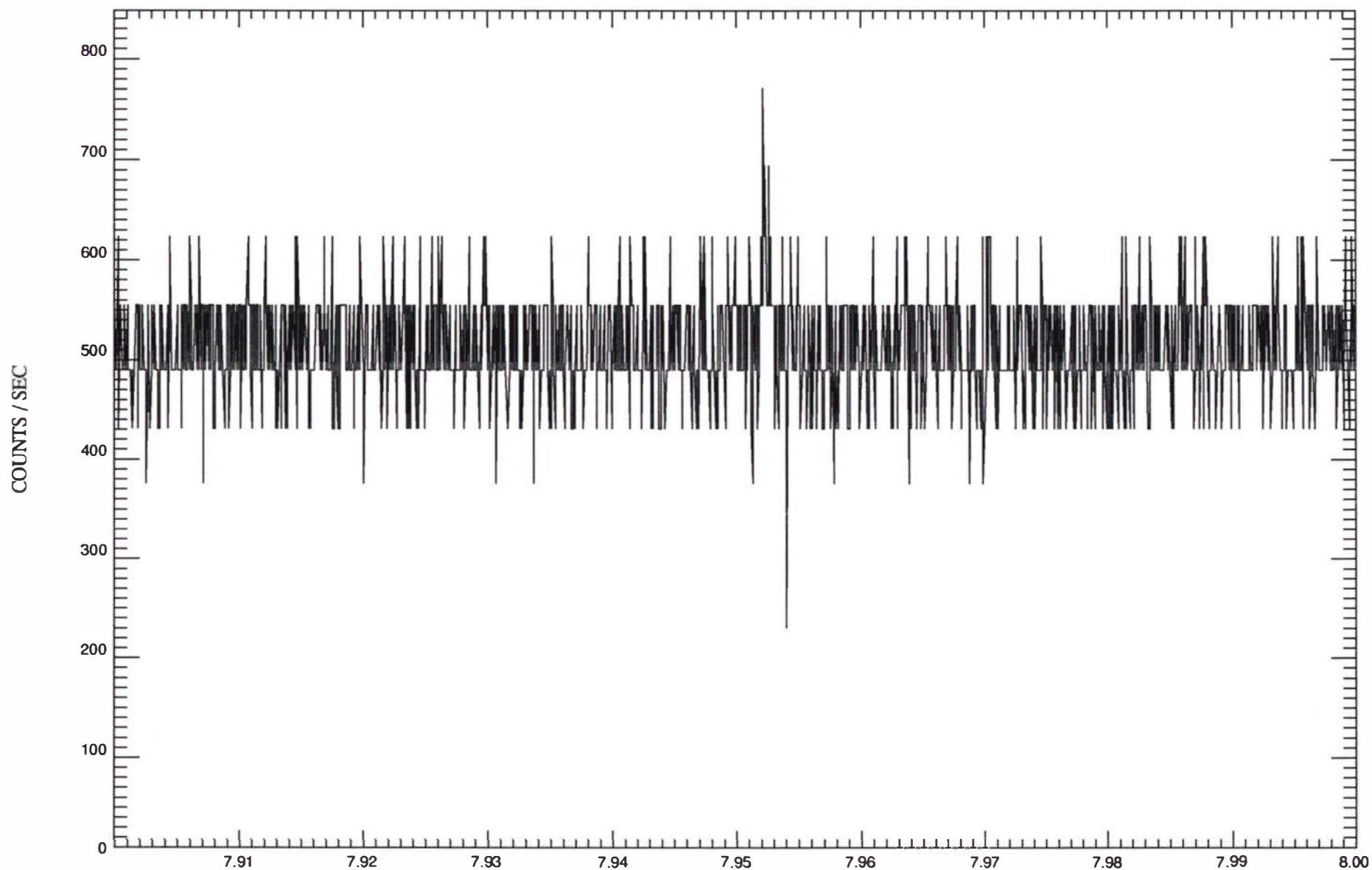


TIME, SECS

B# 2

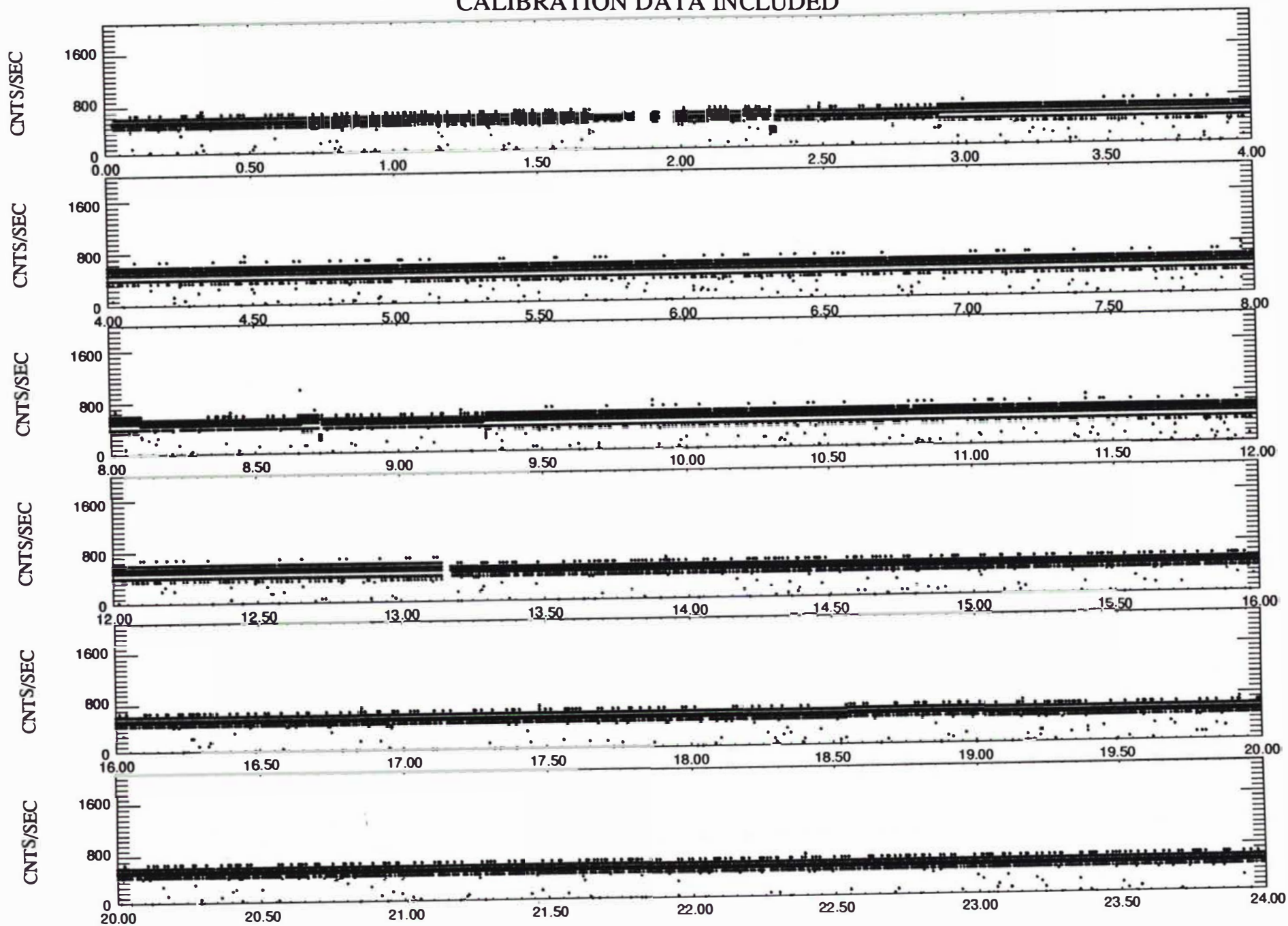
HUS 2A, MODE 1, NOT AVERAGED QEDR day 12, year 1996 to day 12, year 1996
CALIBRATION DATA INCLUDED

1/16/96

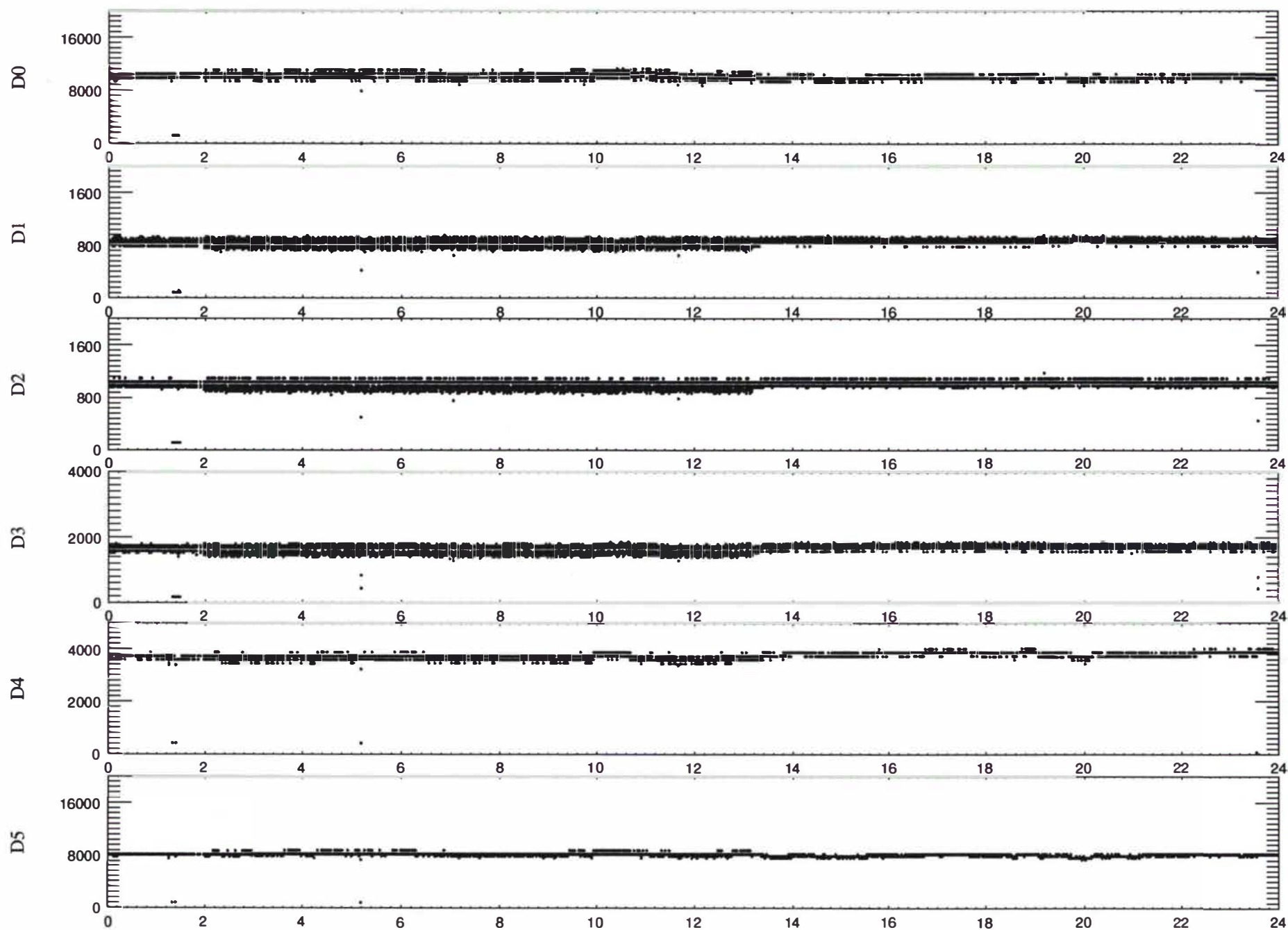


HUS 2A, MODE 1, NOT AVERAGED EDR day 12, year 1996 to day 12, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNT RSAL TIME



From WOODSP@SSLLES.MSFC.NASA.GOV Tue Jan 16 09:52 PST 1996
From: WOODSP@SSLLES.MSFC.NASA.GOV
Date: Tue, 16 Jan 1996 11:51:41 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@SSLLES.MSFC.NASA.GOV,
"LHEAVX::BARTHELMY"@SSLLES.MSFC.NASA.GOV, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4355

TIME: TJD=0095 SECONDS=81867

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

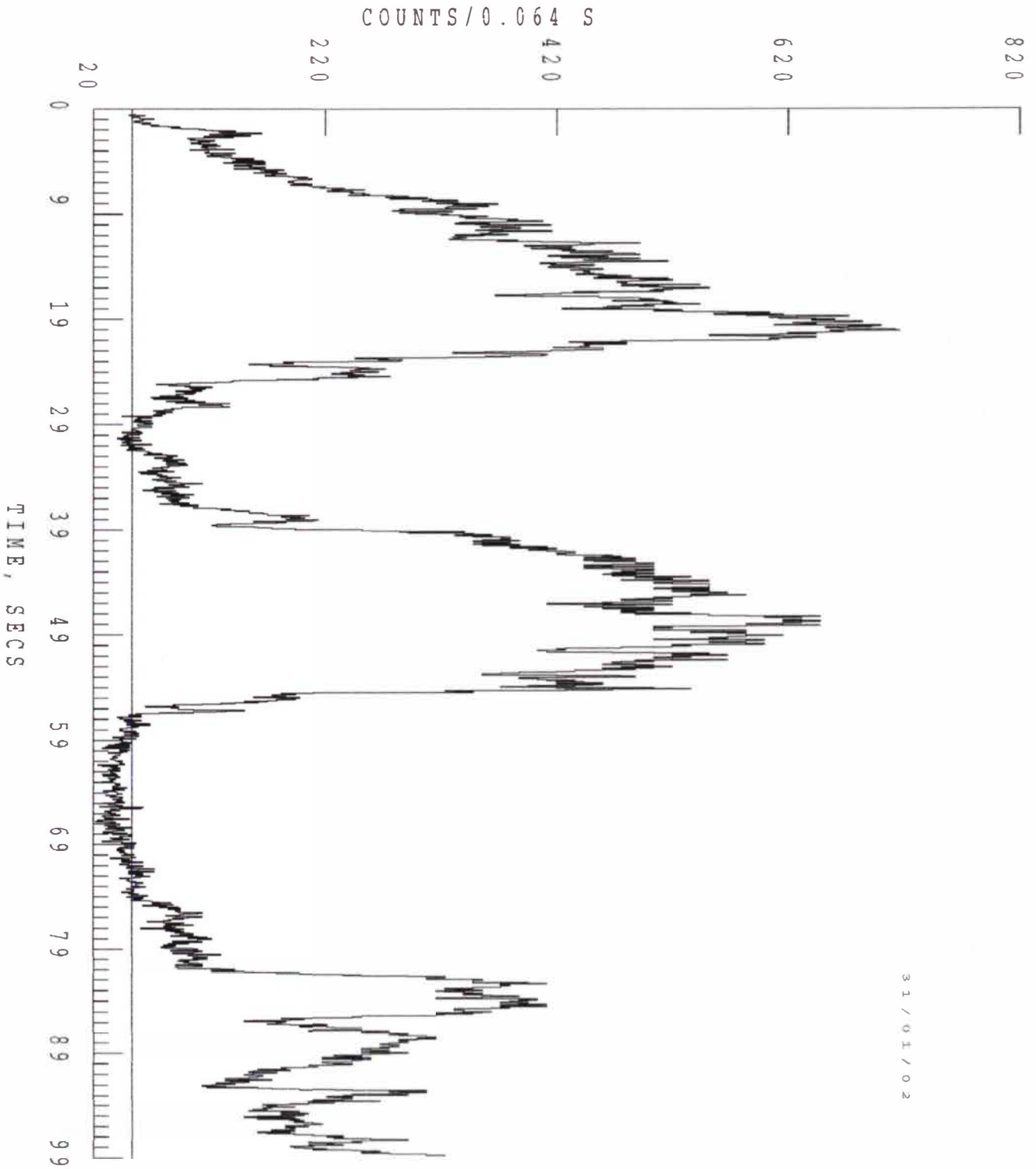
TGF WITH TWO PEAKS.

KONUS1

13/01/96

13256.300

50 - 200 keV



KONUS1 19960113 13256

ULYSSES RT

31 / 01 / 02

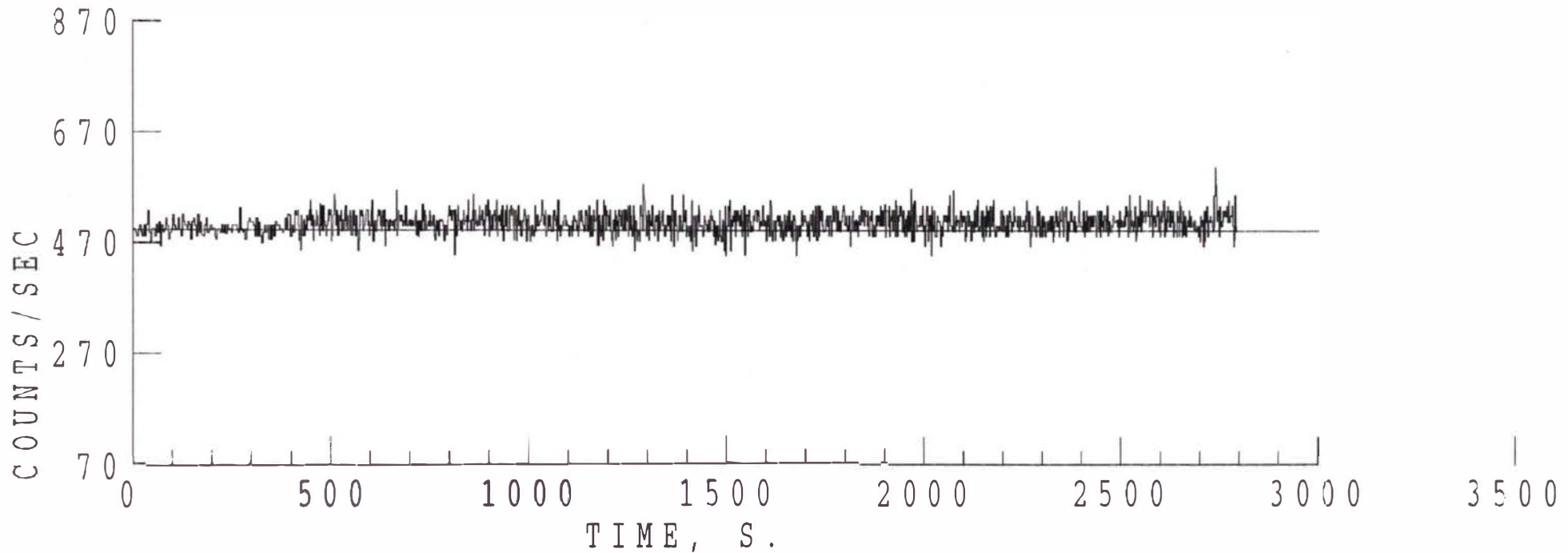
13 / 01 / 96 11927.934 s

INTERVALS REGROUPED BY 7

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



Date: Sep 14 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

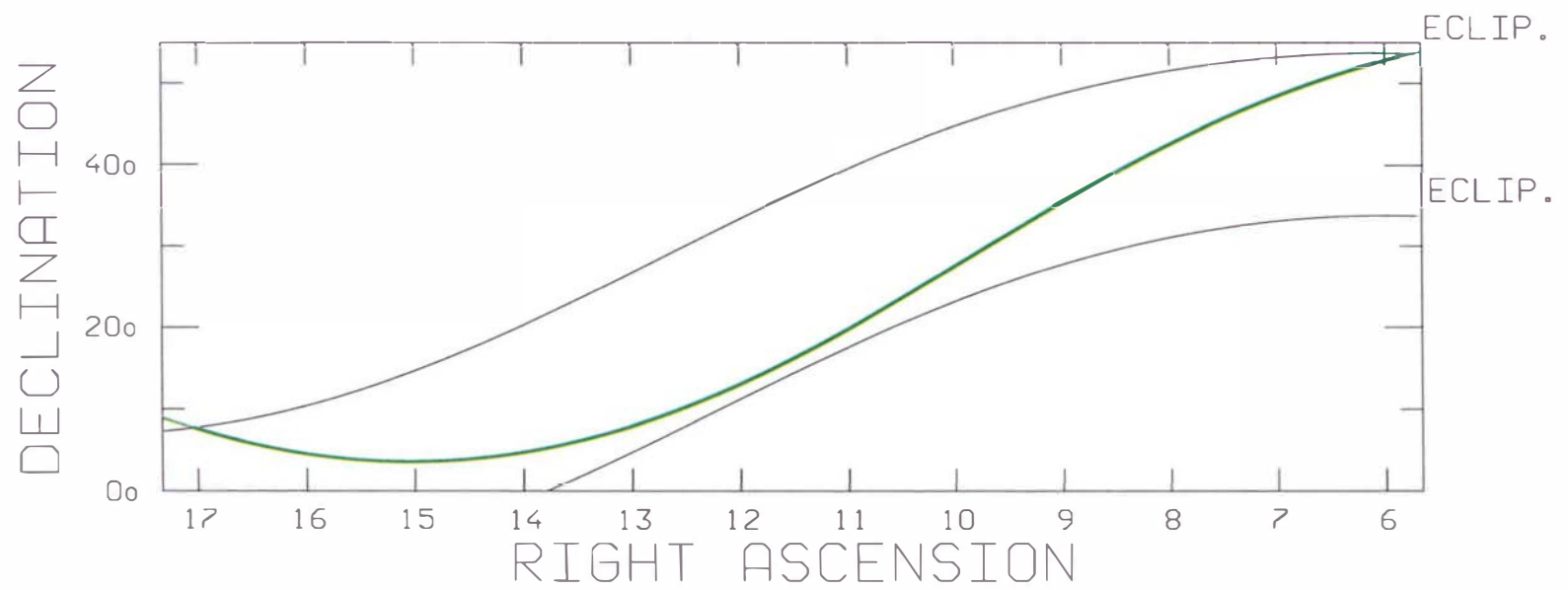
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

2. BATSE Data

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

3. PVO Data

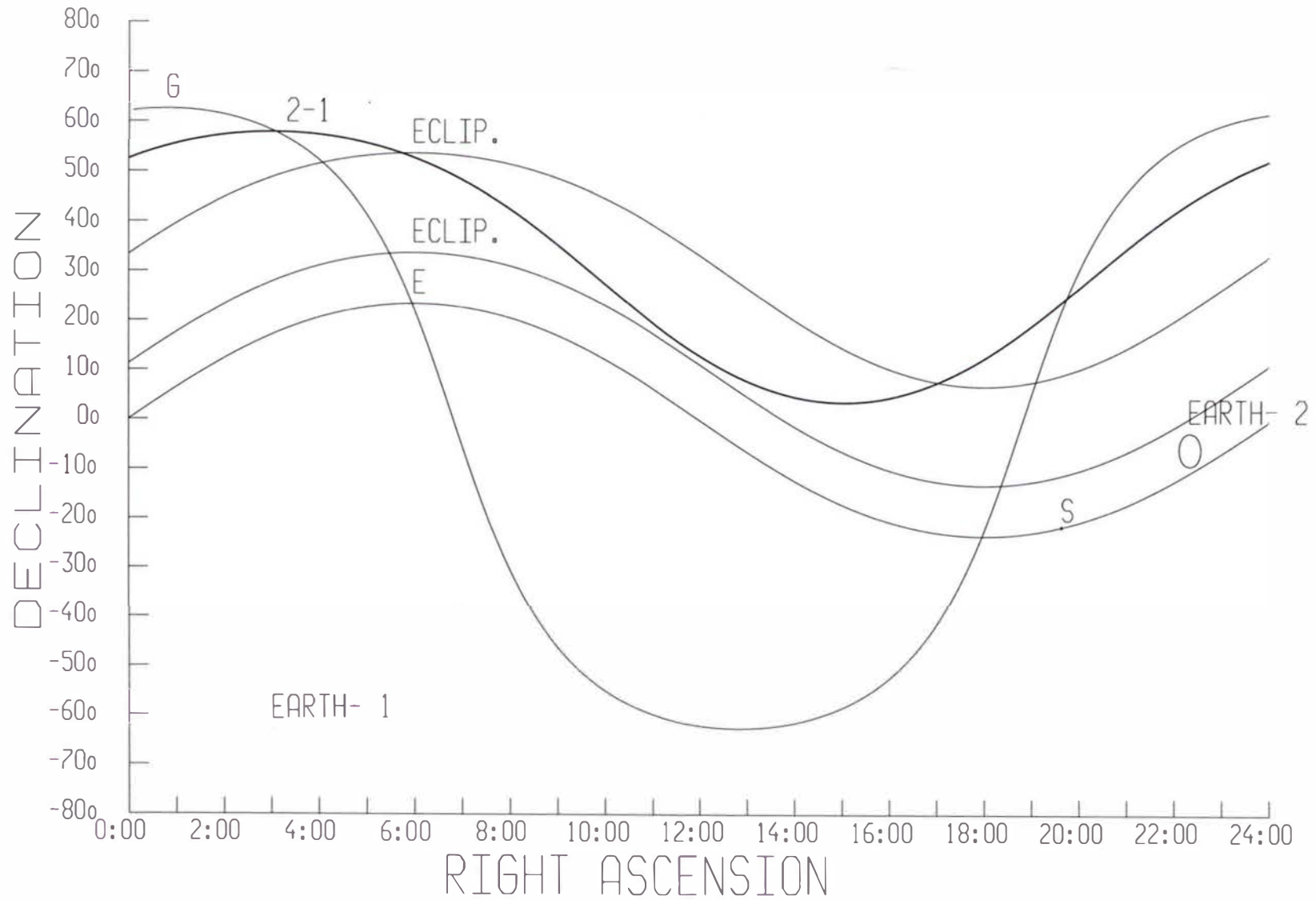
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

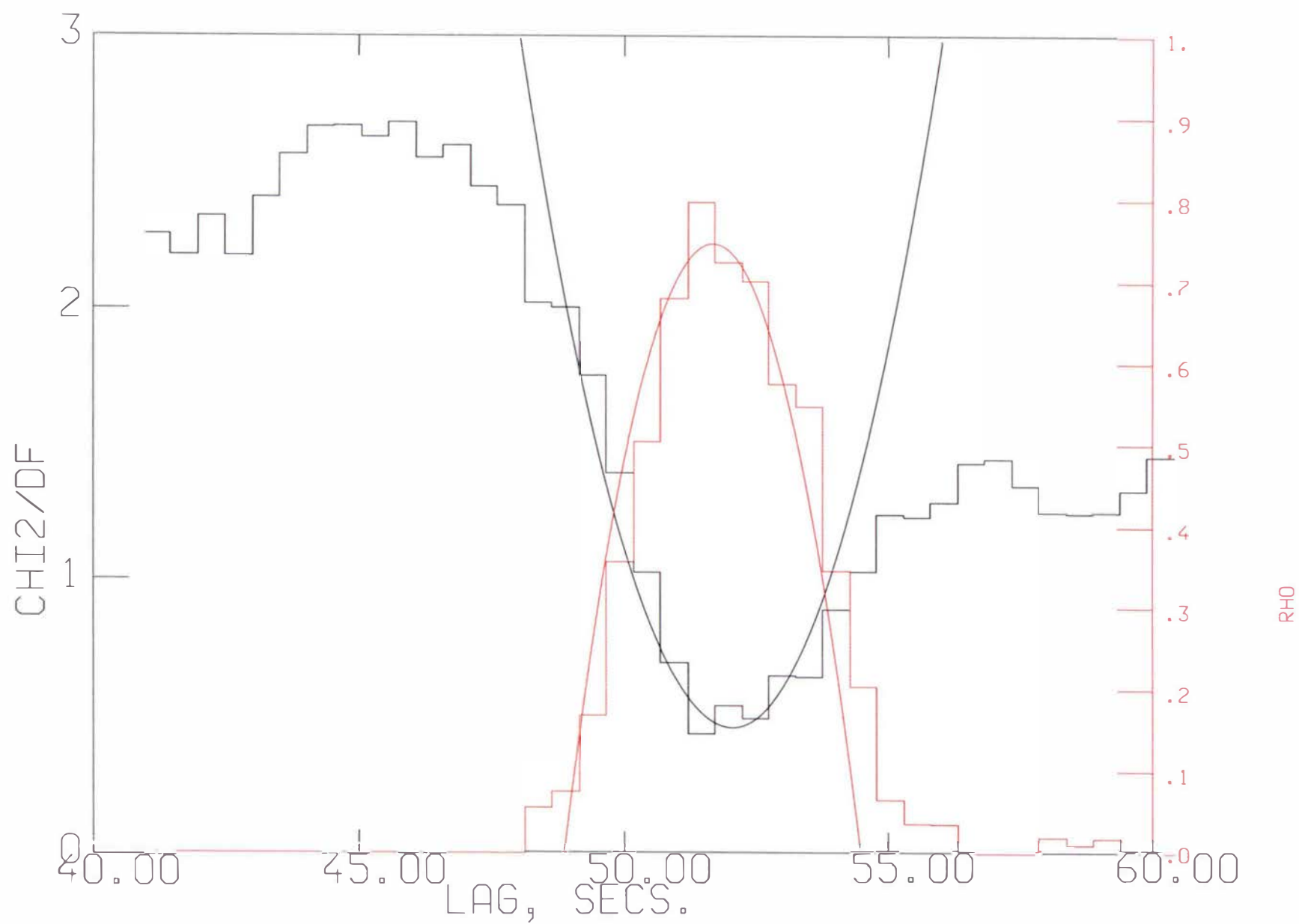


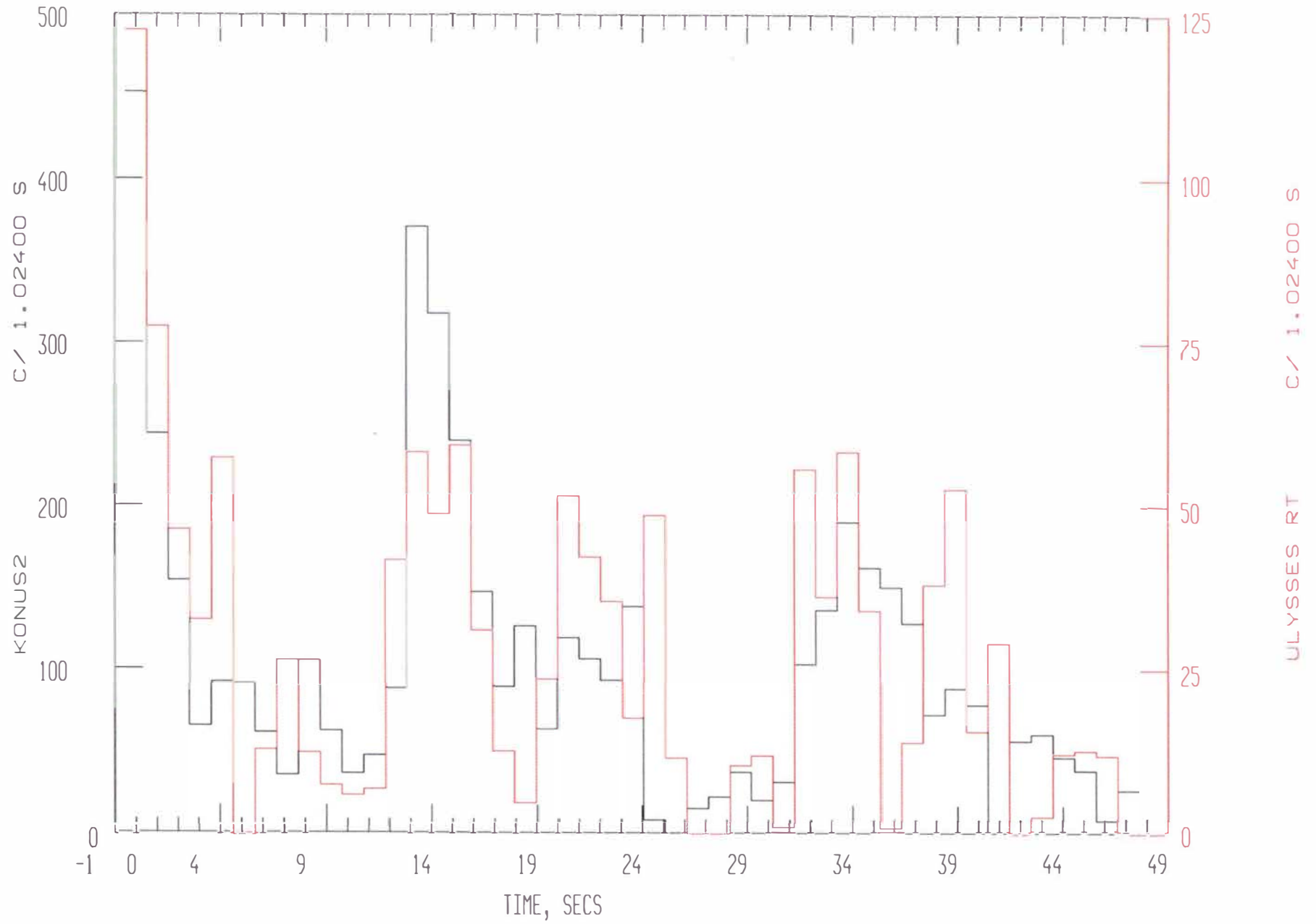
EVENT OF JAN 13, 1996 15:20

14/09/2011

N-M = CORRELATION BETWEEN SATELLITES N AND M
 EARTH-N = EARTH AS SEEN FROM SATELLITE N
 S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
 1 ULYSSES 2 KONUS2







KONUS 19960113 55296

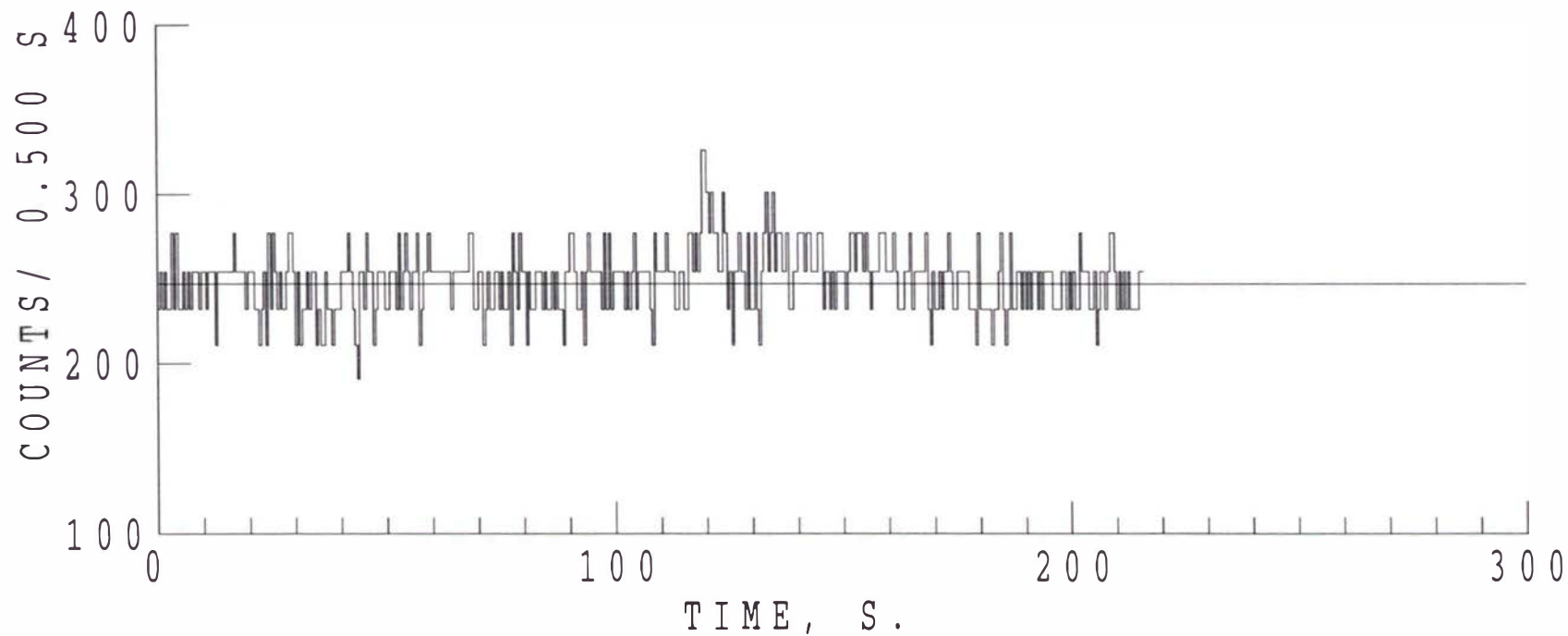
ULYSSES RT

13 / 09 / 11

13 / 01 / 96 55188.074 s

0 - 0 keV

N= 10 N= 2
>4.0 SIGMA FLUCTUATIONS



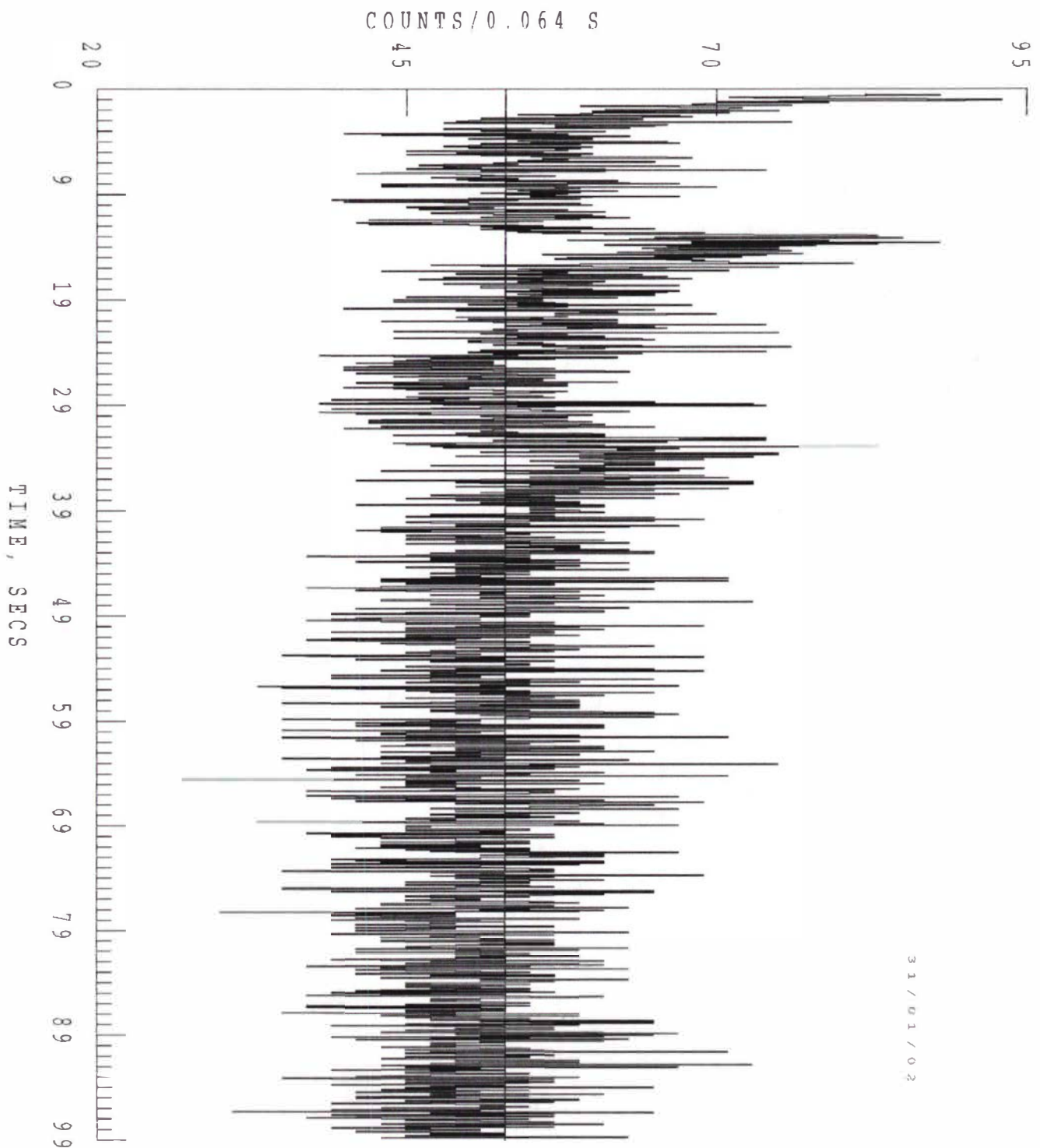
KONUS2

13/01/96

56024.261

50 - 200 keV

15:33:44



KONUS2 19960113 56024

ULYSSES RT

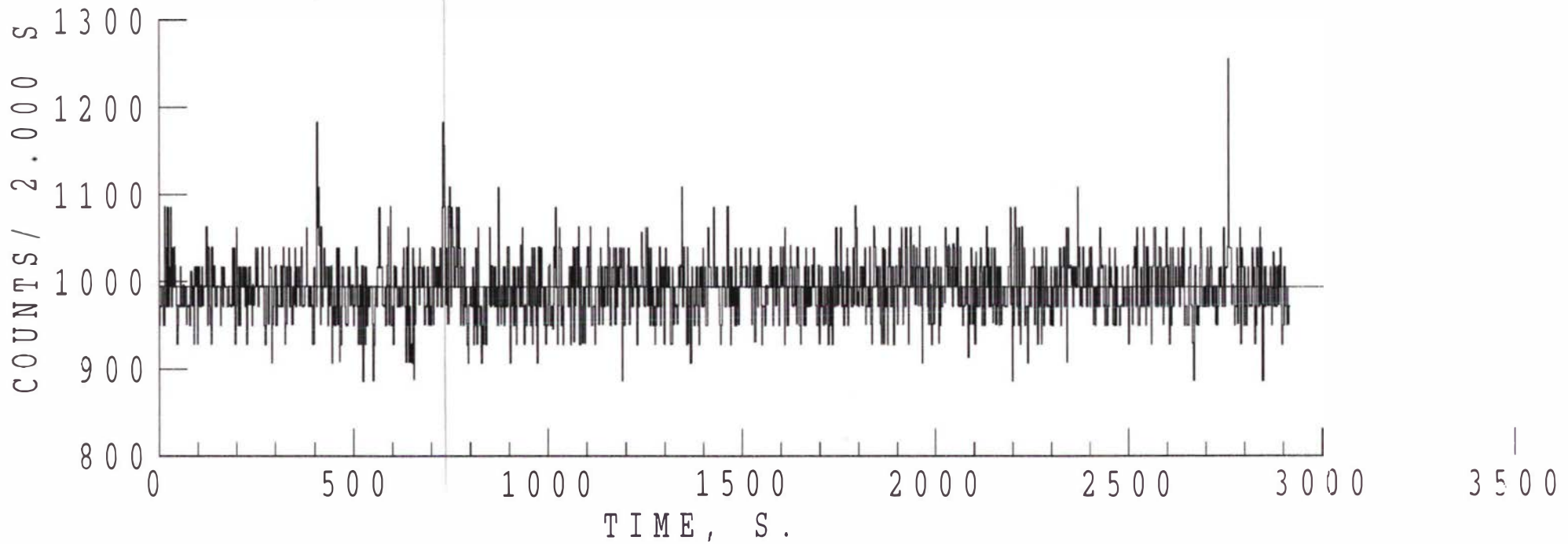
31 / 01 / 02

13 / 01 / 96 54576.066 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

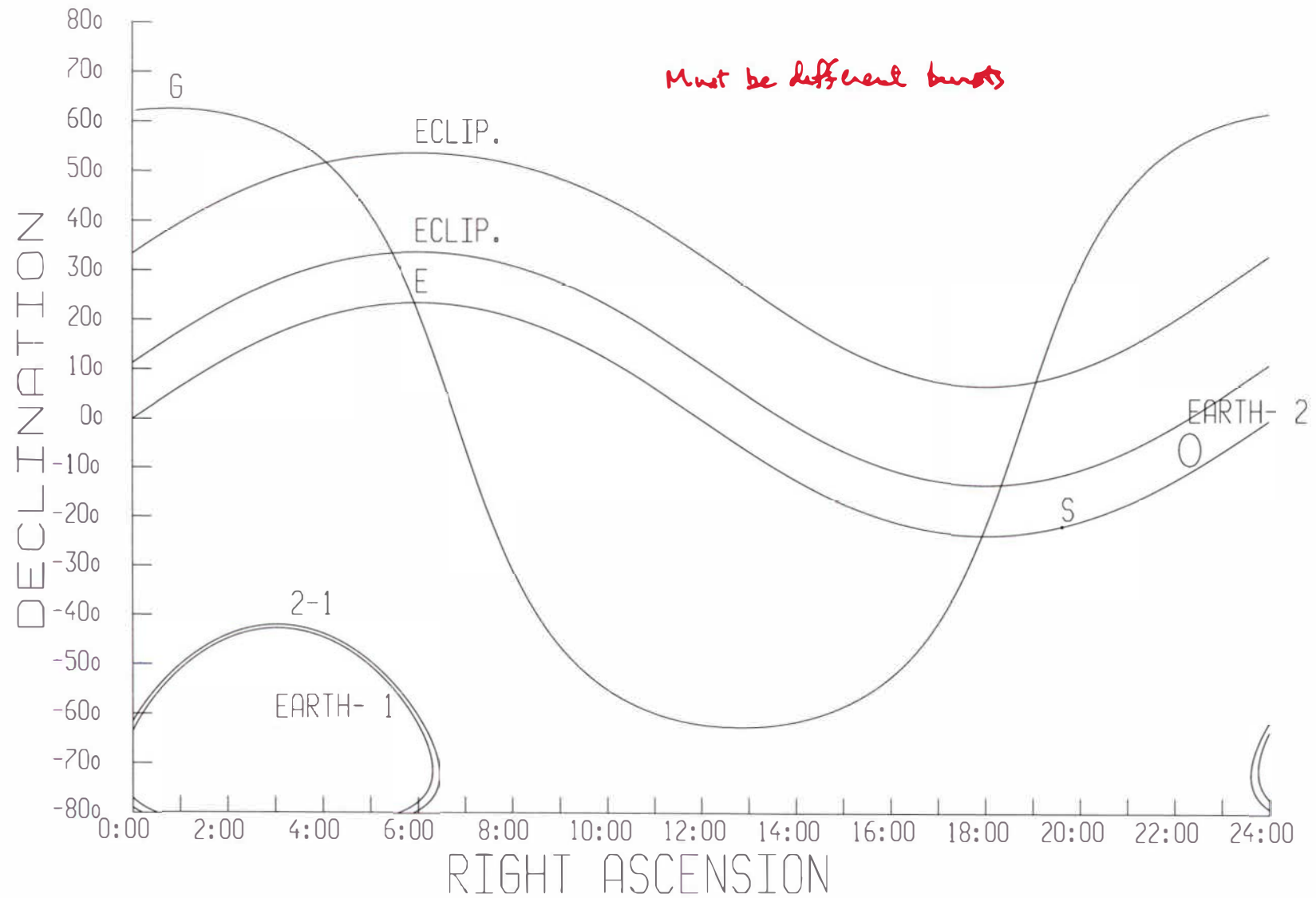
N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



EVENT OF JAN 13, 1996 15:54

13/09/2011

N-M = CORRELATION BETWEEN SATELLITES N AND M
 EARTH-N = EARTH AS SEEN FROM SATELLITE N
 S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
 1 ULYSSES 2 KONUS2



KONUS 19960113 57335

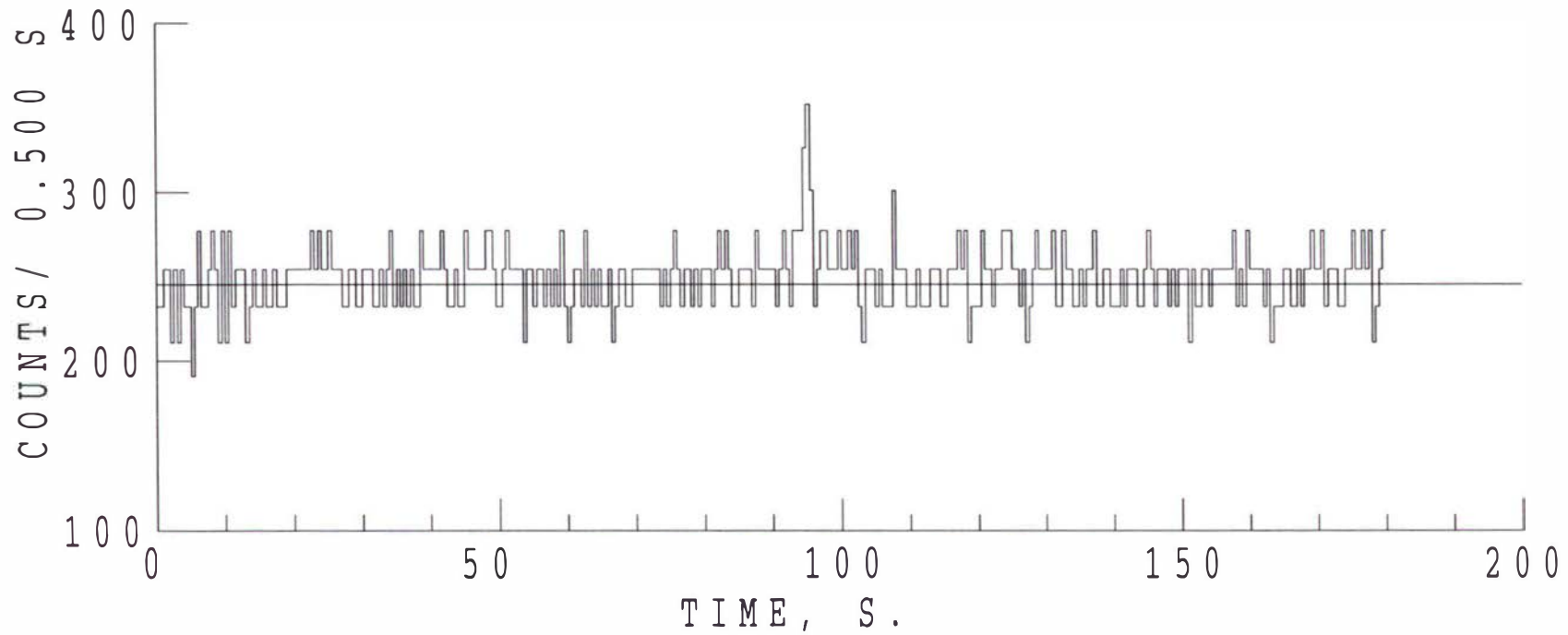
ULYSSES RT

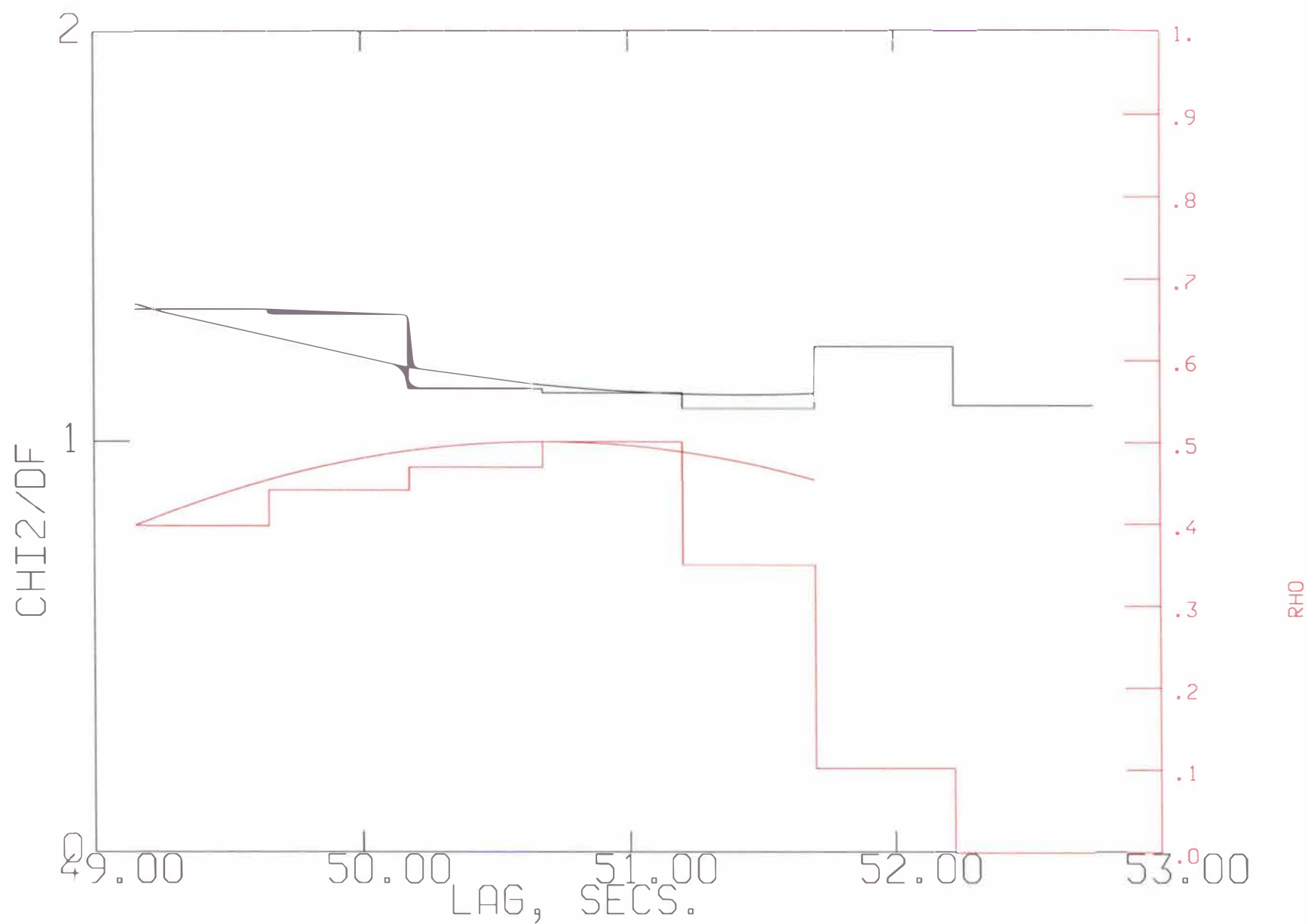
12 / 09 / 11

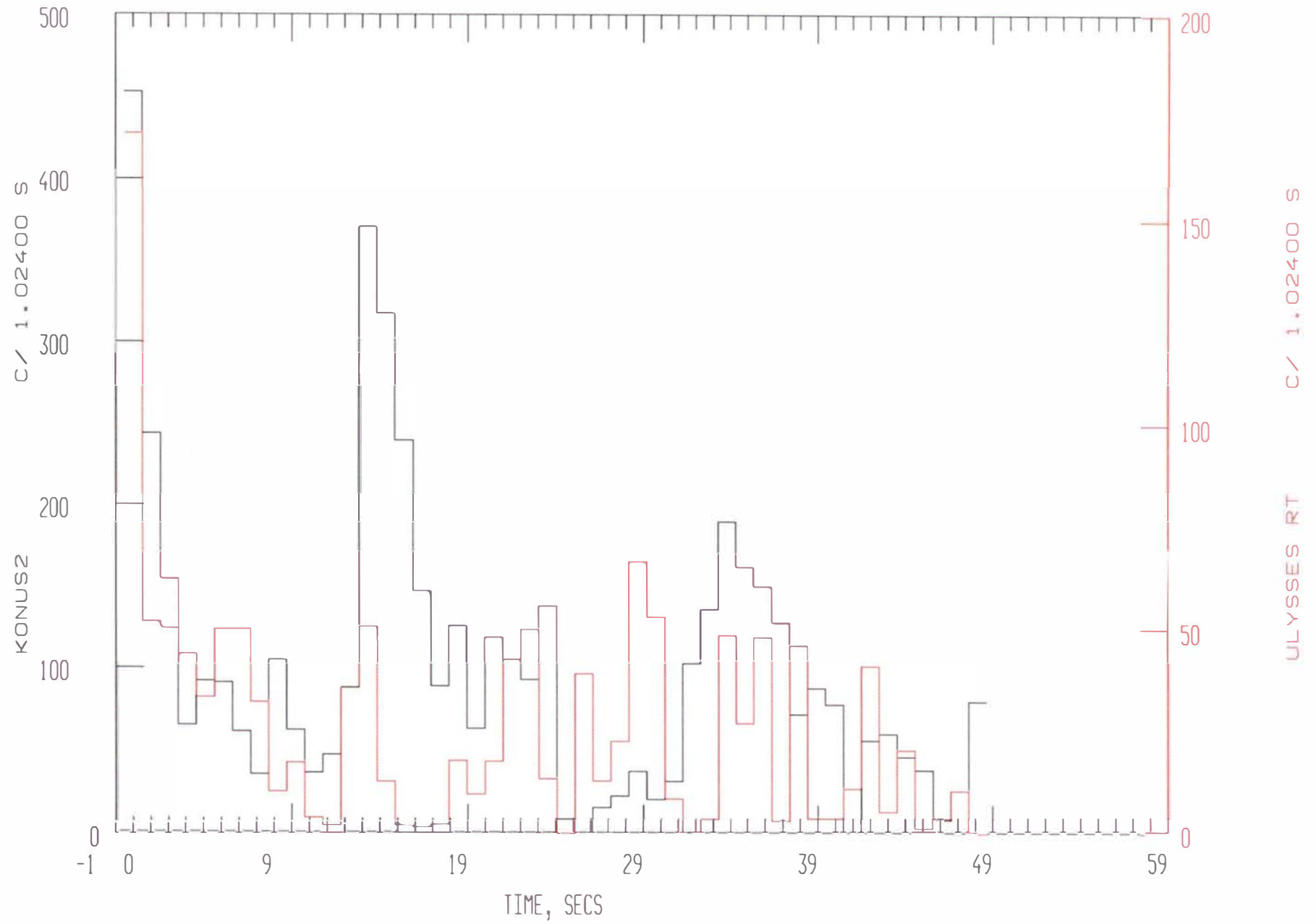
13 / 01 / 96 57240.109 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



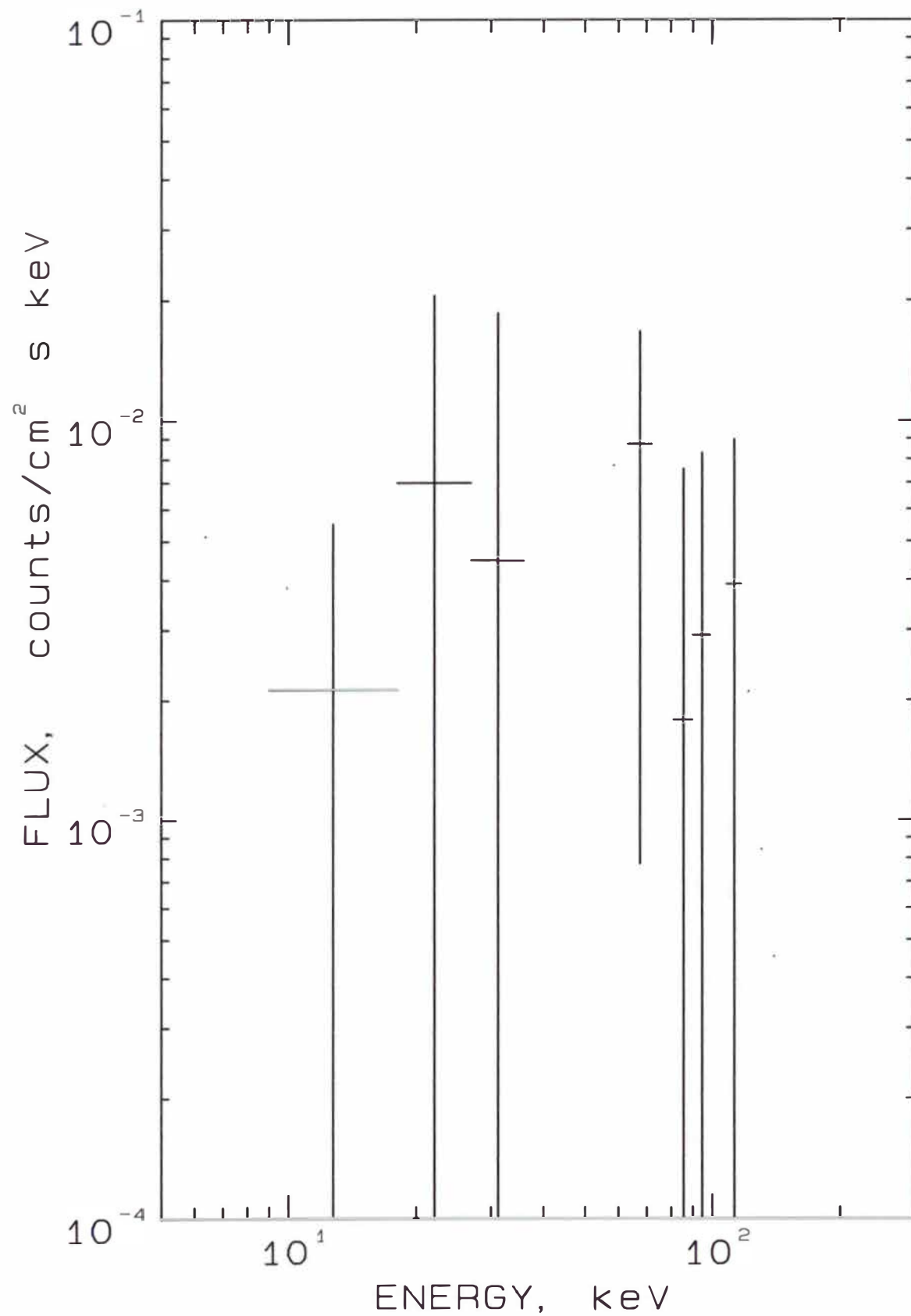




ULYSSES 13/01/96 57335.349

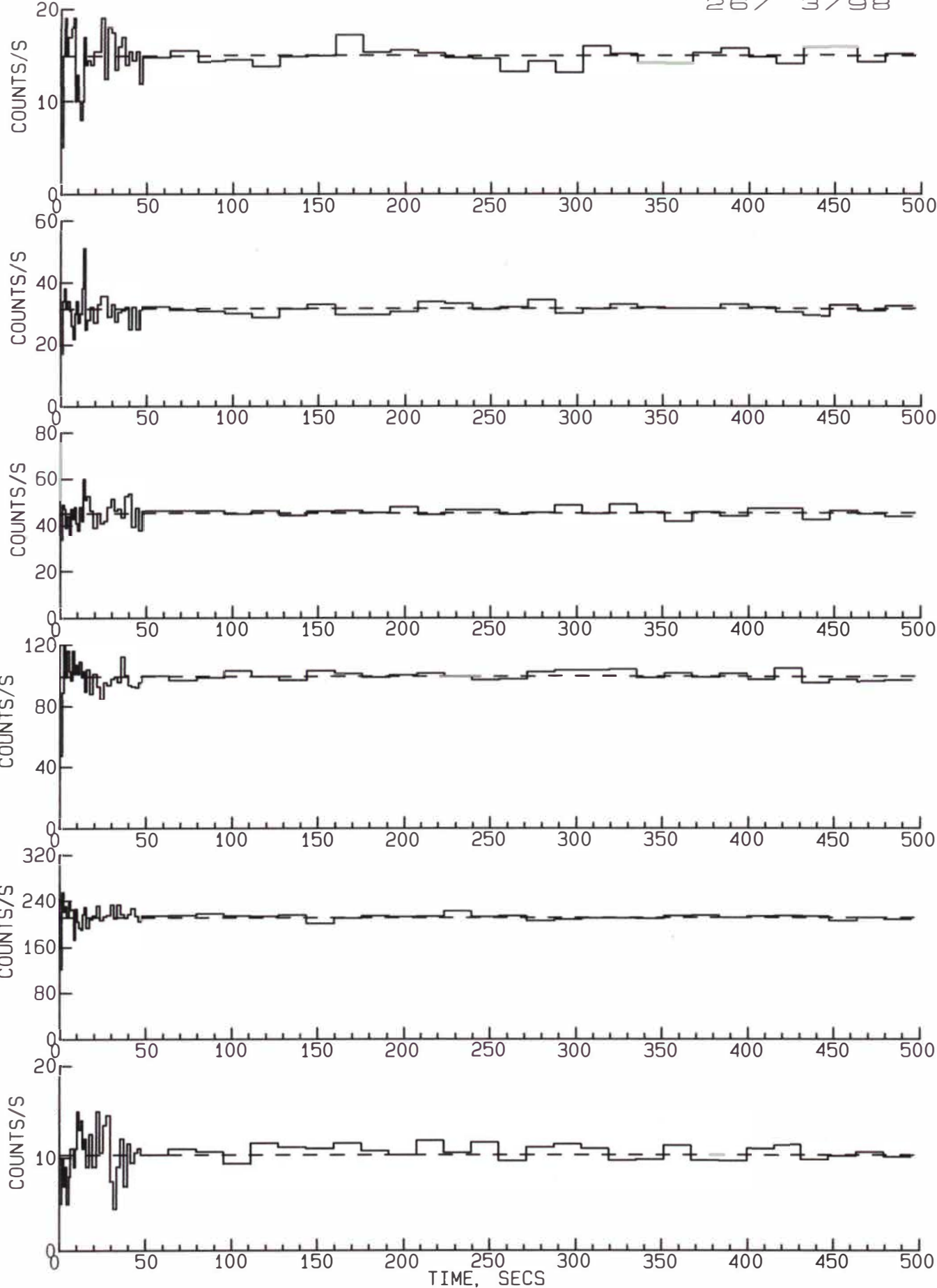
26/ 3/98

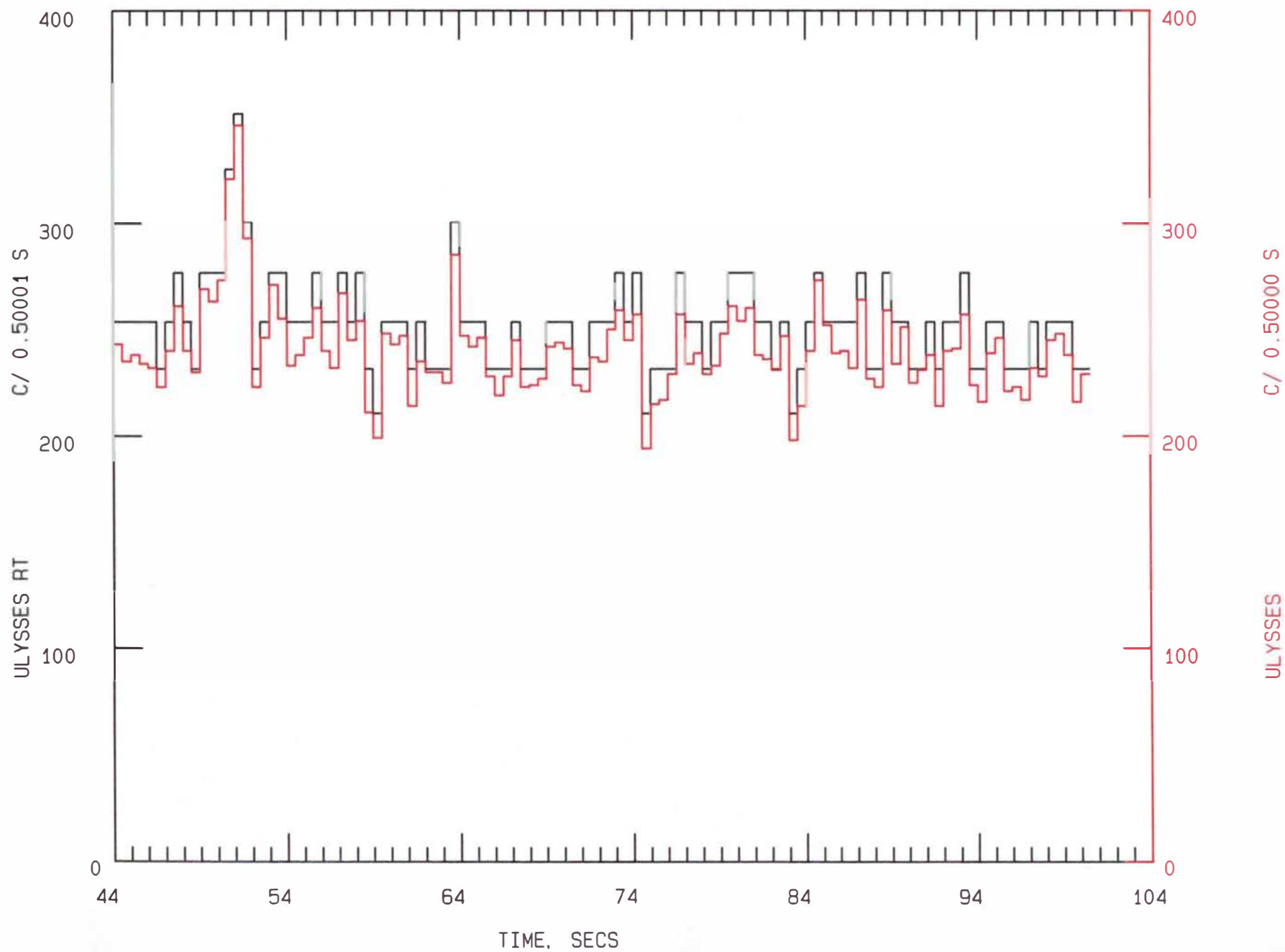
SPECTRUM INTEGRATED OVER 21.3 SECONDS, INTERVALS 2 TO 20

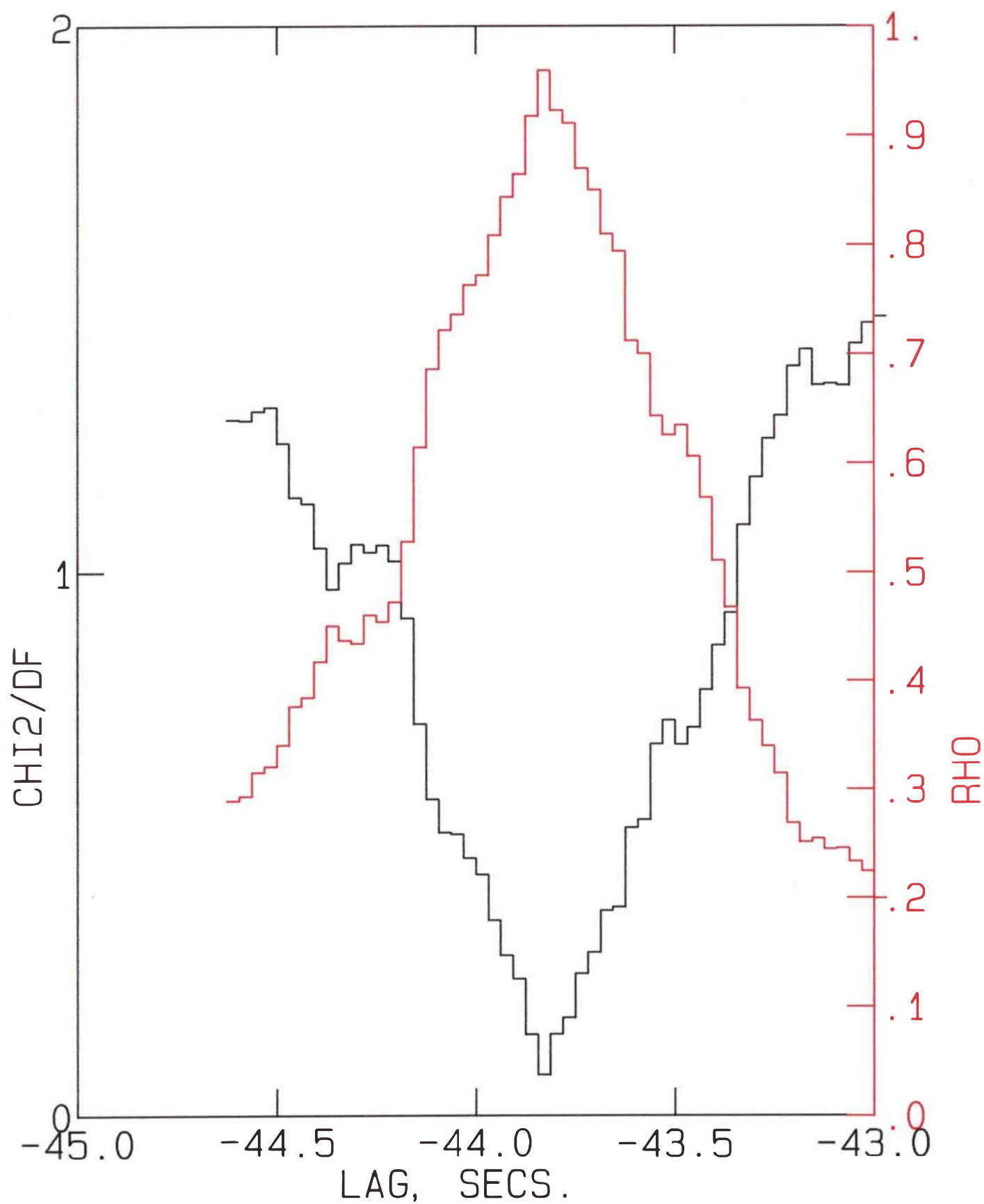


ULYSSES 13/01/96 57335.349 BURST SPECTRAL COUNT RATES

4- 18 keV







ULYSSES

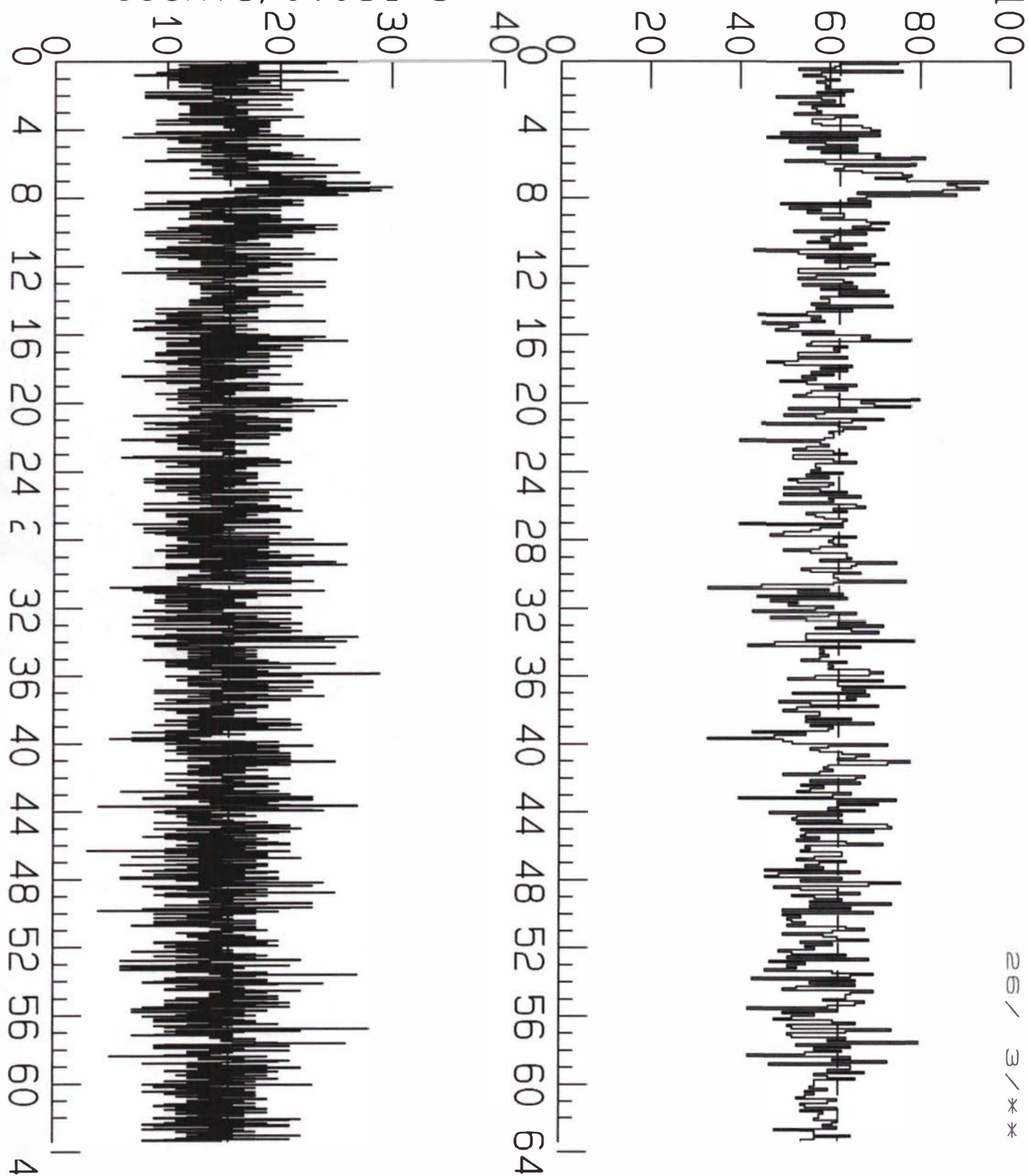
13/01/96

Ttrig=57335.457

21- 144 keV

COUNTS/0.031 S

COUNTS/0.125 S

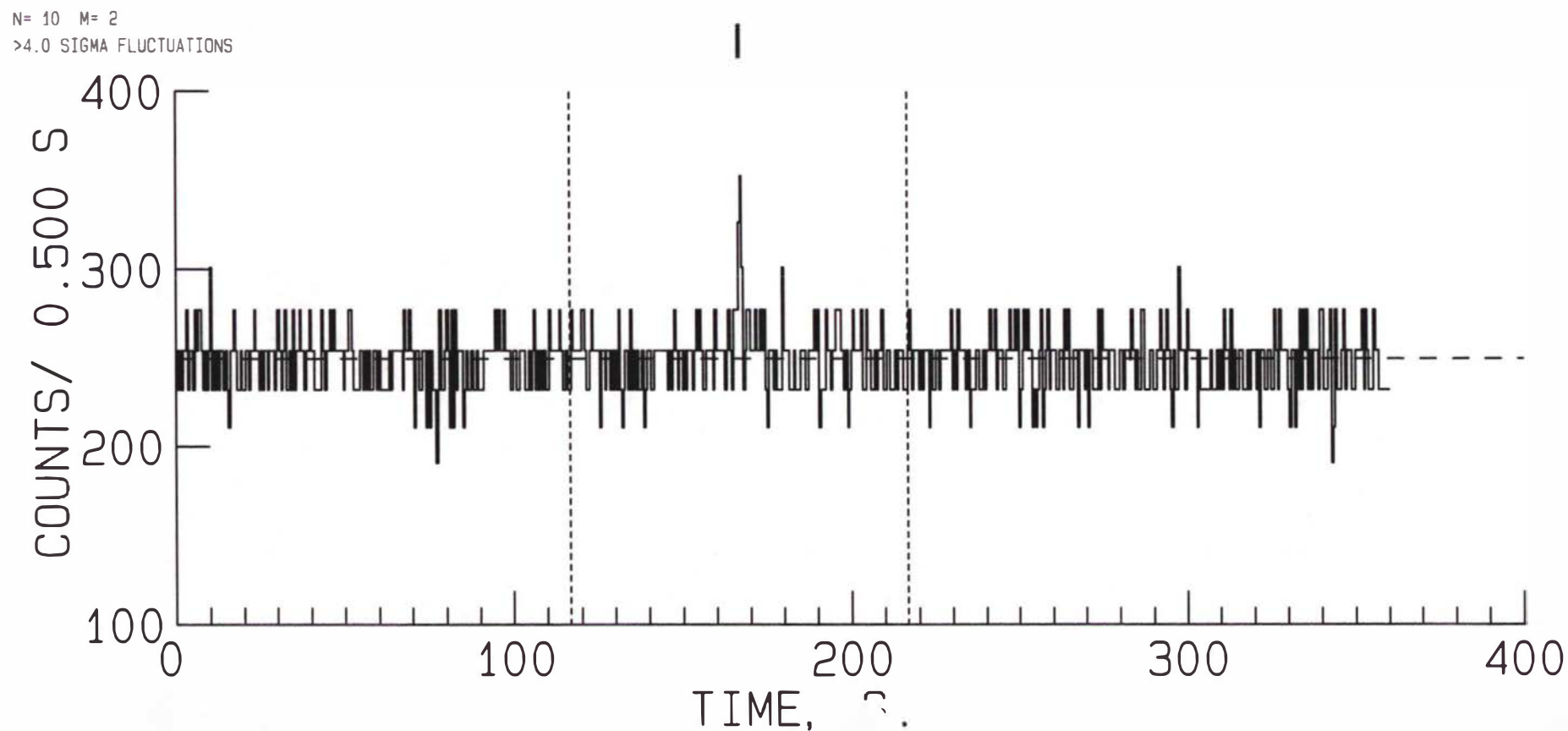


ULYSSES RT

26 / 3 / 98

13 / 1 / 96 57168.107 s

21- 144 keV

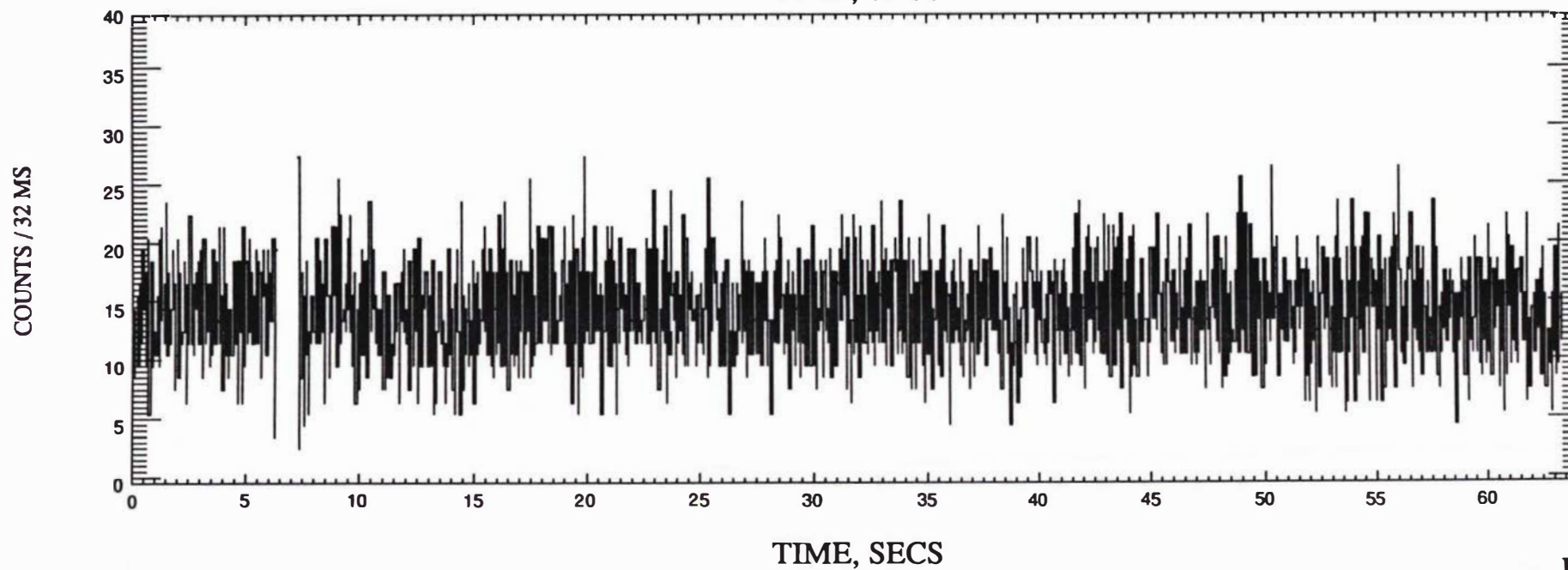
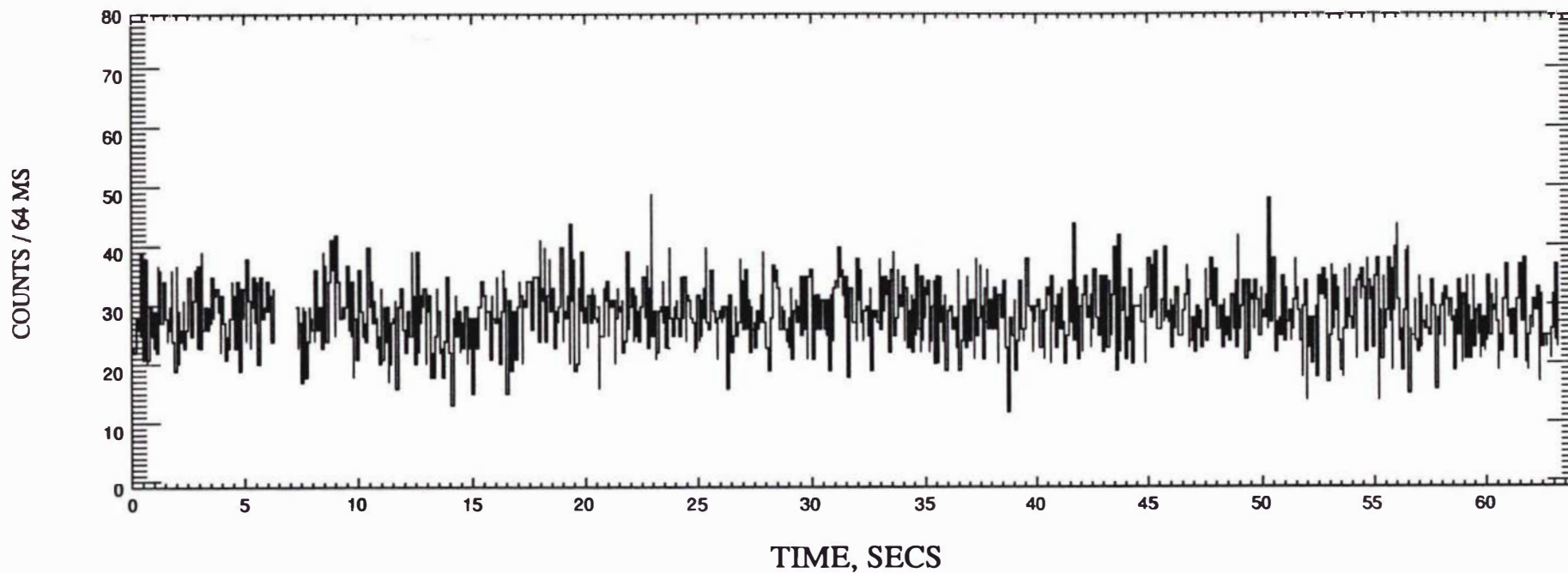


4/1/96

UNIV SAL TIME

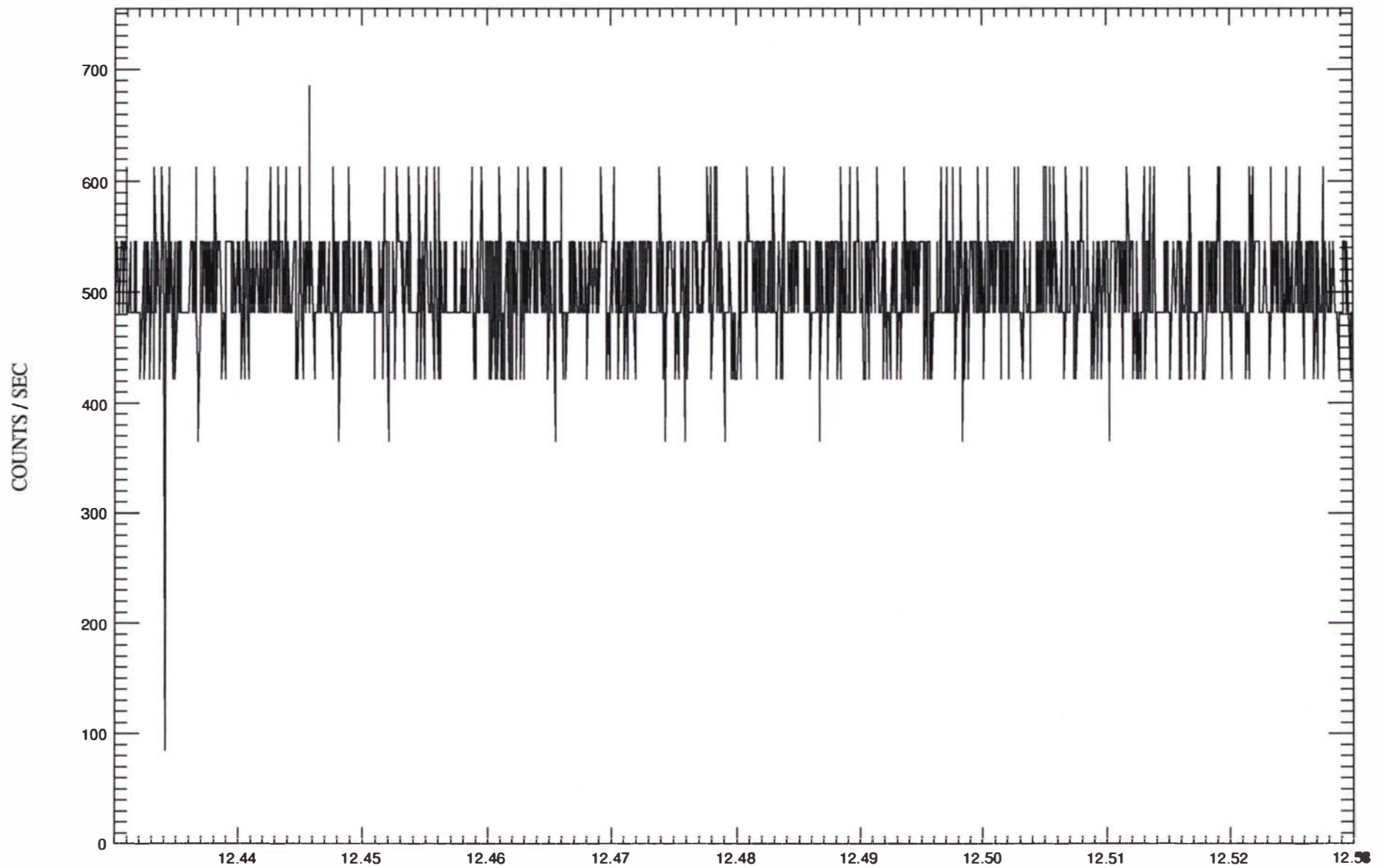
HUS 2A TRIGGERED DATA EDR day 13, year 1996
Burst Counter 6 at UT=12.478068919712 h=44921.048 s 12:28:41.048

4/1/96



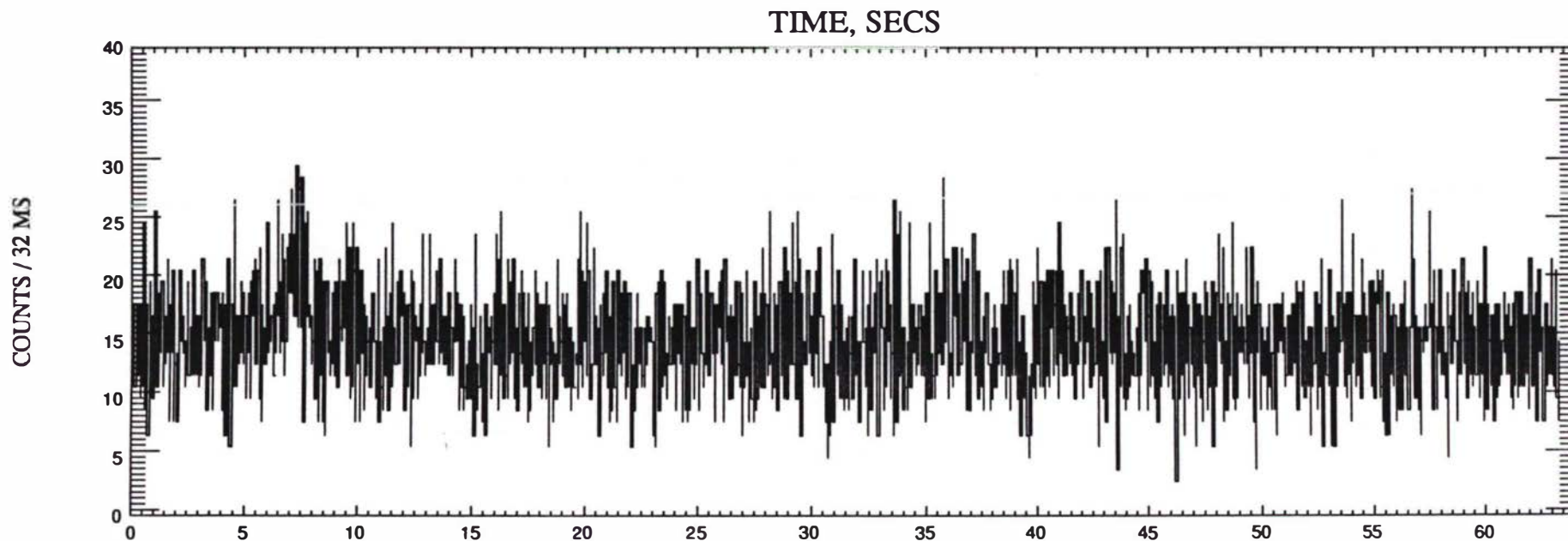
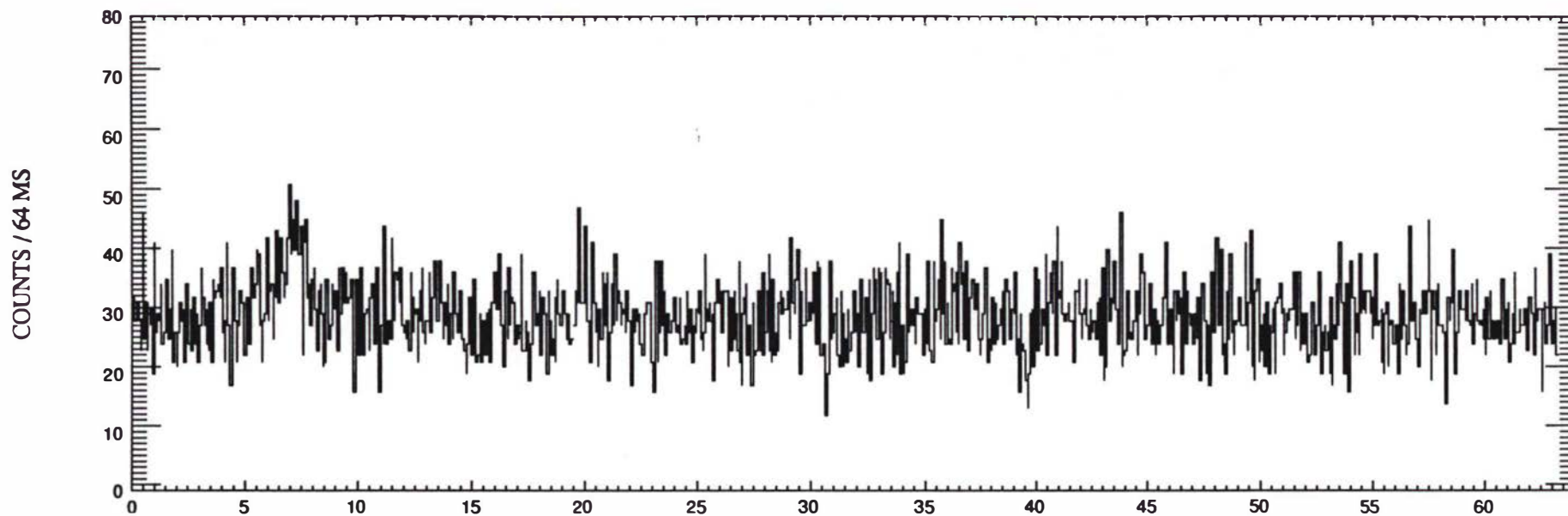
HUS 2A, MODE 1, NOT AVERAGED QEDR day 13, year 1996 to day 13, year 1996
CALIBRATION DATA INCLUDED

1/16/96



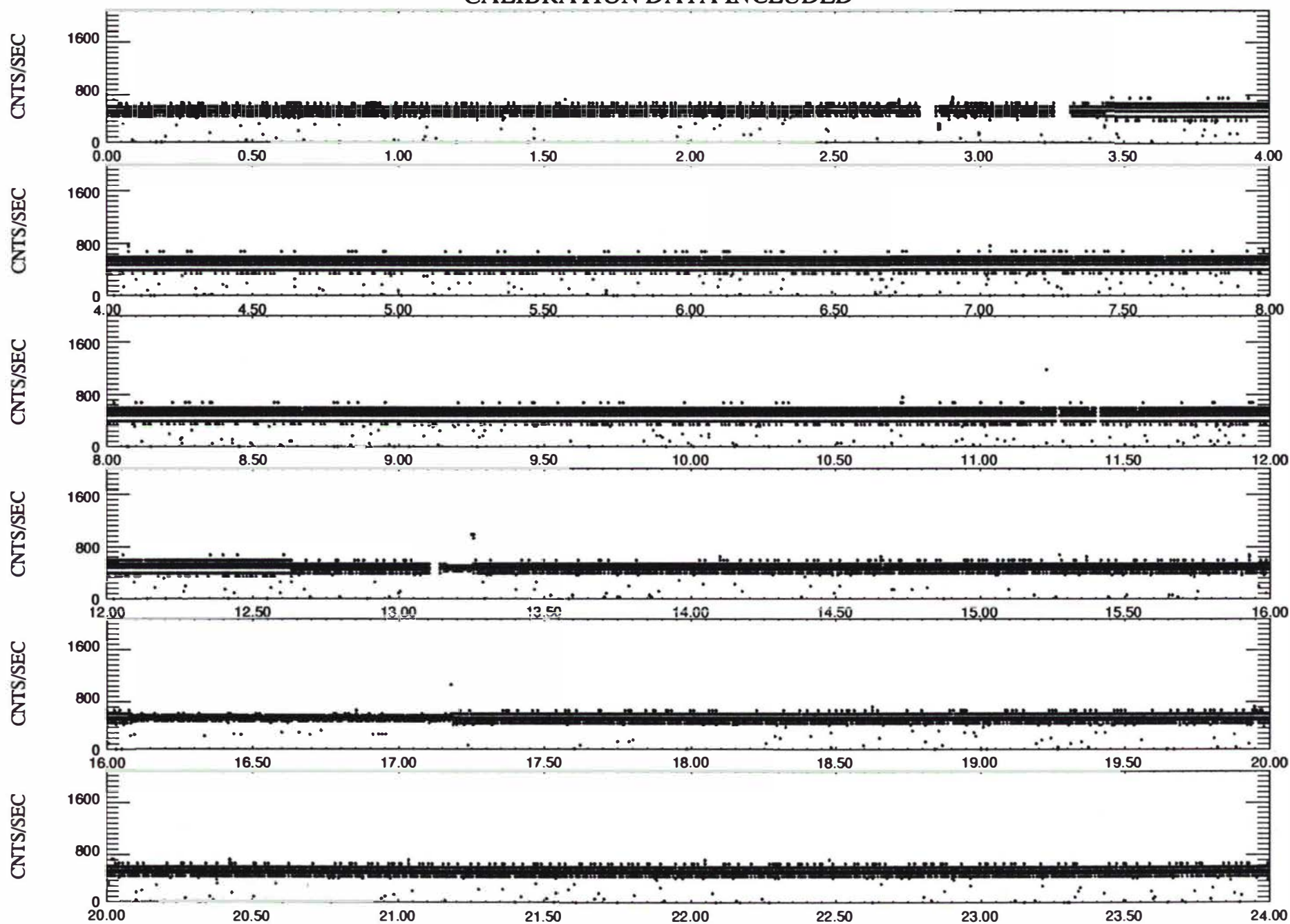
HUS 2A TRIGGERED DATA EDR day 13, year 1996
Burst Counter 7 at UT=15.926485926310 h=57335.349 s 15:55:35.349

4/1/96

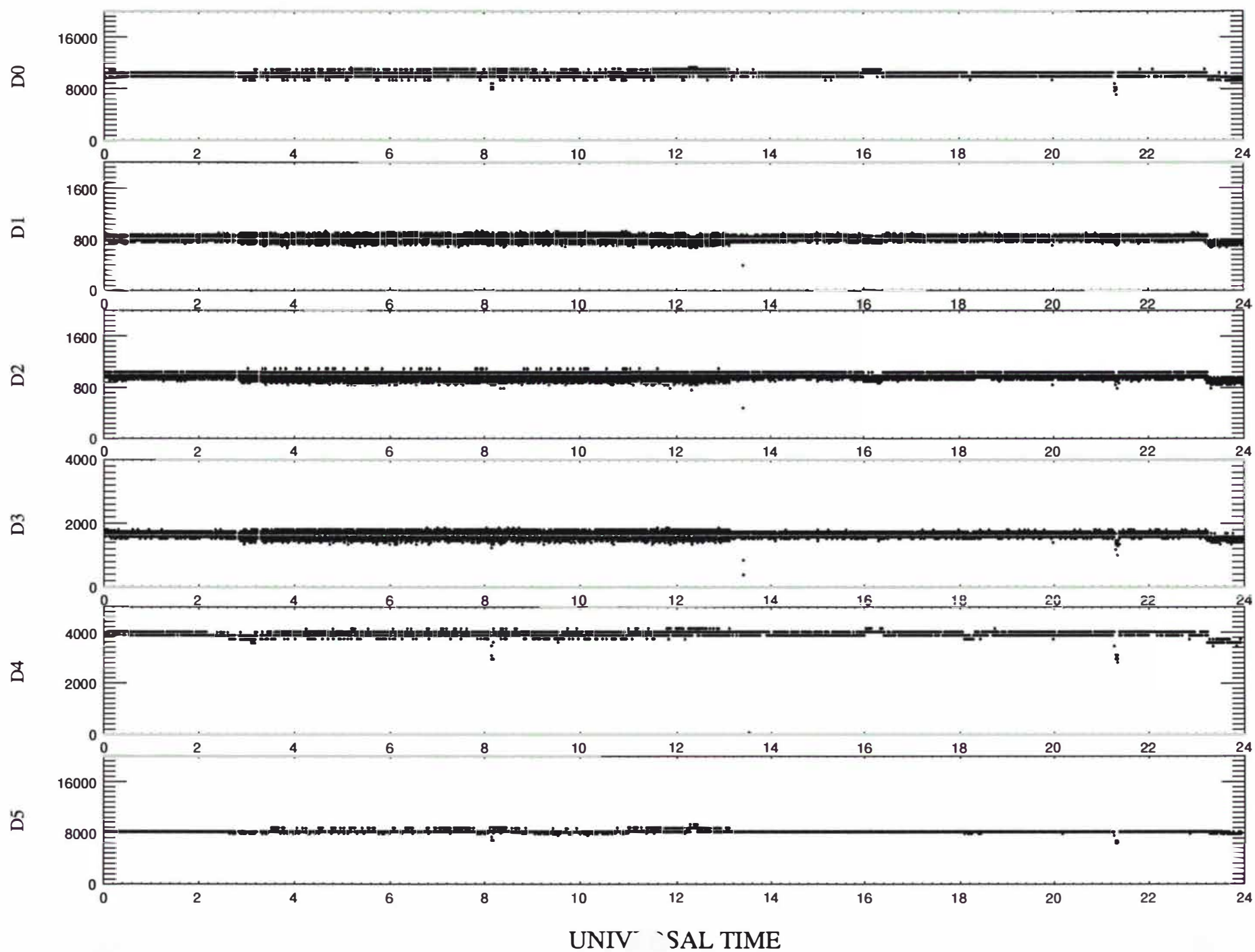


HUS 2A, MODE 1, NOT AVERAGED EDR day 13, year 1996 to day 13, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIVERSAL TIME



BATSE BURST TRIGGER

NO.: 4357

TIME: TJD=0096 SECONDS=3048

A

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4358

TIME: TJD=0096 SECONDS=5678

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4359

TIME: TJD=0096 SECONDS=8993

B

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4360

TIME: TJD=0096 SECONDS=11414

C

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4361

TIME: TJD=0096 SECONDS=16359

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4362

TIME: TJD=0096 SECONDS=23051

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4363

TIME: TJD=0096 SECONDS=26443

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4364

TIME: TJD=0096 SECONDS=29073

TYPE: TRANSIE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4365

TIME: TJD=0096 SECONDS=32273

G

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4366

TIME: TJD=0096 SECONDS=37543

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4367

H

TIME: TJD=0096 SECONDS=43579

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

From DEAL@fender.msfc.nasa.gov Thu Jan 18 06:02 PST 1996
From: DEAL@fender.msfc.nasa.gov
Date: Thu, 18 Jan 1996 8:02:45 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4368

BATSEARCH PROGRAM

BATSE BURST # 4368
EVENT OF 1996 JAN 14 DAY OF YEAR= 14
EVENT CROSSING TIME AT BATSE : 44104. S. OR 12:15:04.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 216.000 -30.000
BATSE PEAK COUNTING RATE: 190000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 14/ 1/ 96 IS:
RA= 225.136 DEC= 63.512 DIST= 2.805 AU
BATSE-ULYSSES DISTANCE = 419681297. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 86.21 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 92.61 SECS.
CROSSING TIME AT ULYSSES IS 44197. S. OR 12:16:36 +/- 293.92 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 14/ 1/ 96 IS:
RA= 306.957 DEC= -20.231 DIST= 2.342 AU
MARS-BATSE DISTANCE = 350421440. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 99.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -186.23 SECS.
CROSSING TIME AT MARS IS 43918. S. OR 12:11:57 +/- 197.52 SECONDS

BATSE BURST TRIGGER

NO.: 4368

TIME: TJD=0096 SECONDS=44104

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

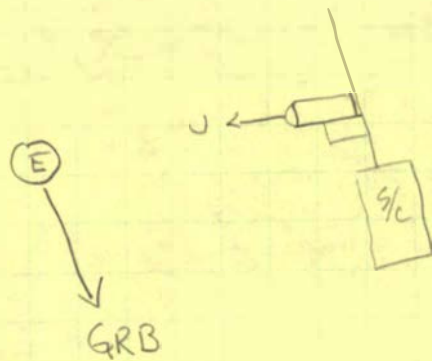
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=94.5 AZIMUTH=21.4 ERROR=0.1 DEGREES

COMMENTS:
CORRECTION!! PREVIOUSLY SENT. GRB WITH PRECURSOR LASTING ~ 133 S. VISIBLE ABOVE
300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4368	960114	10096	44104	190000	216	-30	70



If the angle between the Earth/Ulysses vector and the GRB vector is $\sim 90^\circ$, the S/C may occult the source

GRB is at $\alpha \delta = 216, -30$; S/C is at $225, 63$

Angle is $\sim 93^\circ$!

From cline@lheavx.gsfc.nasa.gov Fri Mar 29 08:40 PST 1996

Date: Fri, 29 Mar 1996 08:40:19 -0800

Mime-Version: 1.0

To: KHURLEY@sunspot.ssl.berkeley.edu

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

Subject: Konus Event List augmentation

Dear Kevin,

This list includes Sergei's latest Konus-W (GGS-Wind) and Konus-A (Kosmos-2326) events, for comparison with Ulysses, BATSE, TGRS, etc. The times listed are prioritized for Konus-W (i.e., Konus-A time given if Konus-W doesn't trigger).

Yr	Mn	Dy	UT (Konus)	BATSE	Ulysses	Konus	TGRS	Notes
95	11	2	07085.879	?	?	168	no	
95	11	2	21209.015	3891	R I	169	345	
95	11	4	05868.077	3893	R I	170	BGR	
95	11	5	46827.808	?	?	171	no	
95	11	12	66495.244	?	R I	172	no	
95	11	13	84358.872	3906	R I	173	BGR	
95	11	17	10123.762	3909	?	175	no	
95	11	19	29831.402	3912	R I	176	348	
95	11	19	46457.519	?	?	177	BGR	
95	11	22	09841.38	?	?	179	no	
95	11	22	17107.738	?	?	180	349	
95	12	2	39101.744	?	?	195	BGR	
95	12	3	03988.18	?	?	196	360	
	12	8	19617.151	?	?	197	no	
	12	8	39452.057	?	?	198	no	
95	12	8	42467.634	?	?	199	BGR	
95	12	9	31349.607	?	?	200	BGR	
95	12	13	17849.683	?	?	201	362	
95	12	14	08657.847	?	?	202	no	
95	12	19	60679.732	?	?	203	no	
95	12	20	31883.56	?	?	204	BGR	
95	12	22	25203.254	?	?	no	?	= K-A t.
95	12	27	23005.042	?	?	218	375	
96	12	31	20231.668	?	?	219	no	
96	1	2	11650.996	?	?	220	no	
96	1	4	12521.062	?	?	221	no	
96	1	11	46524.53	?	?	222	no	
96	1	13	56024.261	?	?	228	no	
96	1	14	44104.737	?	?	233	384	+ K-A t.
96	1	15	31956.506	?	?	234	BGR	
96	1	17	57371.341	?	?	235	no	
96	1	19	34679.317	?	?	236	no	
96	1	19	45226.016	?	?	237	no	
96	1	20	36768.974	?	?	238	no	
96	1	24	03388.008	?	?	239	385	+ K-A t.
96	1	24	76096.911	?	?	BGR	?	= K-A t.
96	1	30	08756.848	?	?	240	no	
96	2	1	78530.582	?	?	241	?	+ K-A t.
96	2	2	50750.813	?	?	242	?	
	2	10	35198.959	?	?	247	?	
96	2	16	57796.347	?	?	BGR	?	= K-A t.
96	2	19	20589.684	?	?	BGR	?	= K-A t.
96	2	28	85760.241	?	?	249	?	
96	2	29	22445.141	?	?	250	?	

96	3	5	33645.352	?	?	251	?
96	3	12	35074.697	?	?	252	?
96	3	19	51992.828	?	?	253	?
96	3	21	76321.803	?	?	254	?
96	3	22	19642.728	?	?	255	?
96	3	24	80064.124	?	?	257	?
96	3	25	69892.978	?	?	258	?

--

TLC

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

From isac.ernet.in!kmarar@vigyan.iisc.ernet.in Fri Jan 26 07:06 PST 1996
Date: Fri, 26 Jan 1996 10:42:59 +0000 (CUT)
From: kmarar@isac.ernet.in
X-Sender: kmarar@xs27
To: Kevin Hurley <khurley@sunspot.ssl.berkeley.edu>
Subject: Re: HETE
Mime-Version: 1.0

Pl see between dotted lines

Dear Kevin

I had discussed with our Director our great interest in HETE secondary ground station. He has passed on the letters to our chairman whose decision is final, in these matters of international collaboration.

So Please give me some more time, Please.

Now if we agree, u would send us the antenna, receiver, software etc. and instructions on how to set up the facility??? and we pay some money for the hardware? is that it ? And ofcourse try our best to track down on the GRB source whenever possible! Is that it?

Thank u Kevin and best regards

Krishnan

Pl excuse delay

We had an event on the 14th of Jan at 12:15:19.6 UT

Can u pl confirm it? The event was bright, lasted some 20 s with pre and post cursors.

Krishnan

BATSE + Ulysses

On Thu, 25 Jan 1996, Kevin Hurley wrote:

> Dear Krishnan,

>

> What are your thoughts about the HETE project? Do you think that
> it will be possible for you to install a secondary ground station
> in Bangalore? We are hoping to be launched this summer, so it is
> not too early to begin.

>

> Best regards,

>

> Kevin

>

Helio corr removed

Date: Oct 16 '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? *N/A*
- ☒ 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 - The event was S/C occulted, so RT data was used instead of triggered. However, vernier was done using BATSE*

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

3. PVO Data

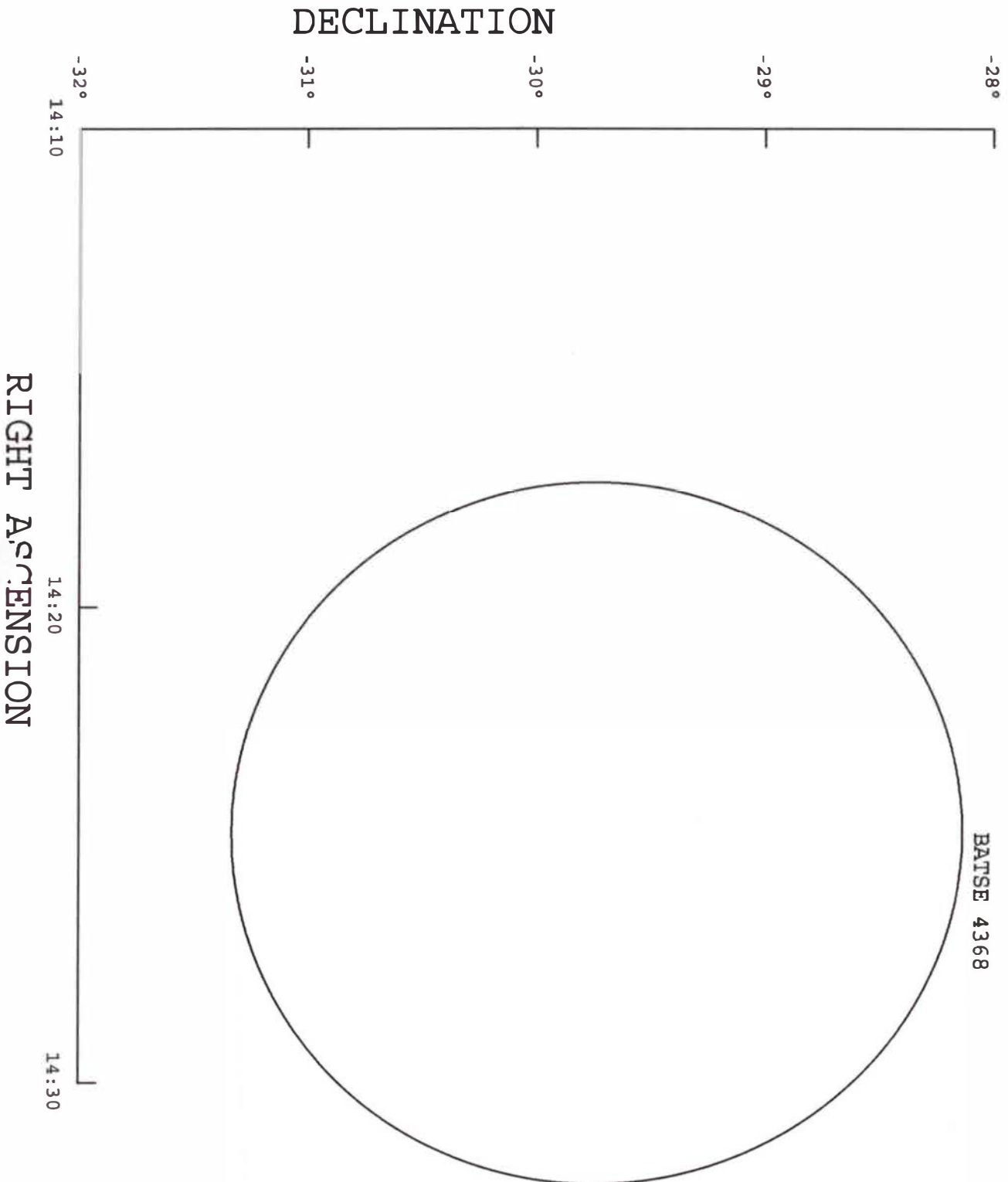
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?

☒ ACCESS database updated?

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

EVENT OF JAN 14, 1996 12:14

26 / 3 / 98



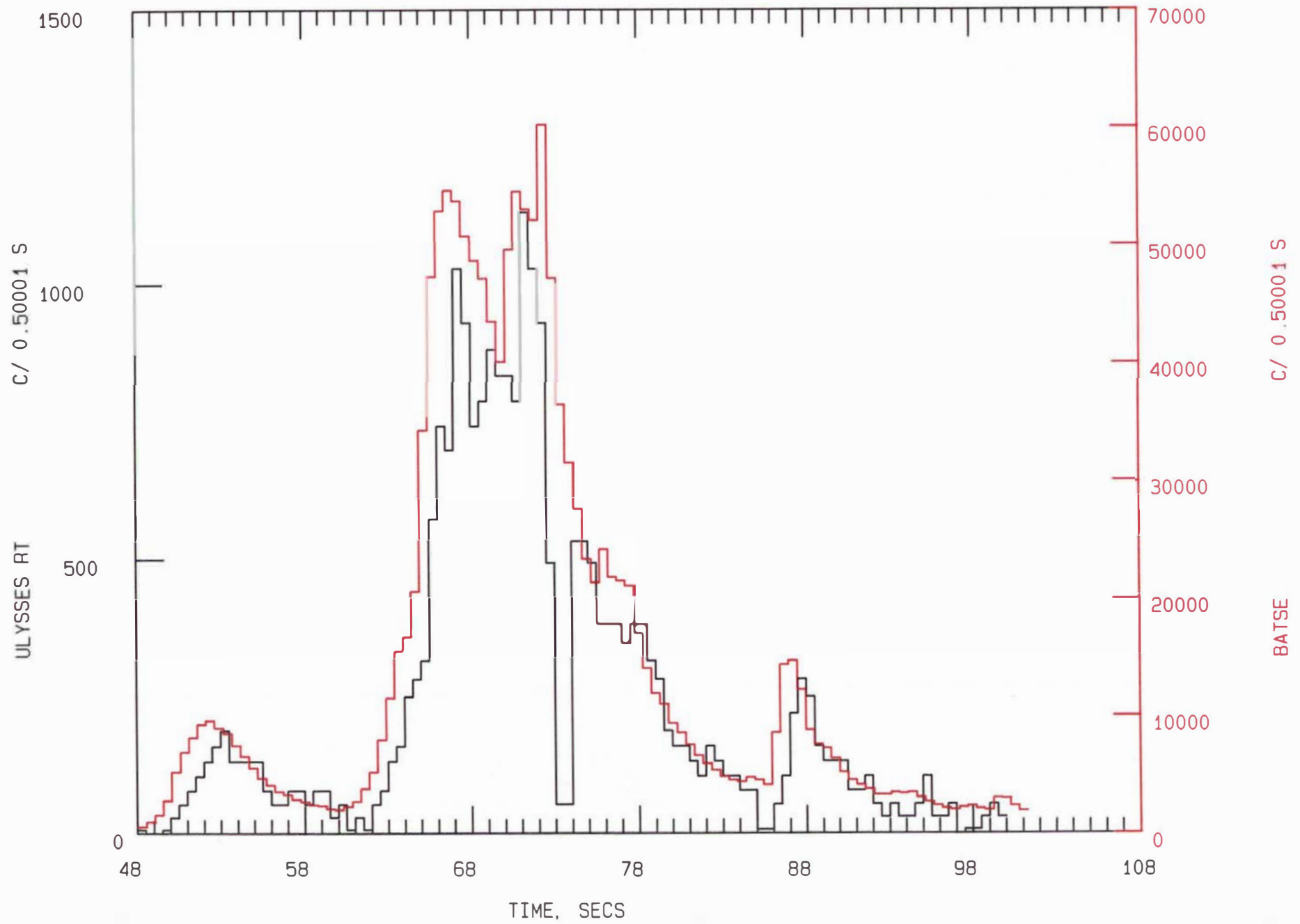
ULYSSES RT-BATSE

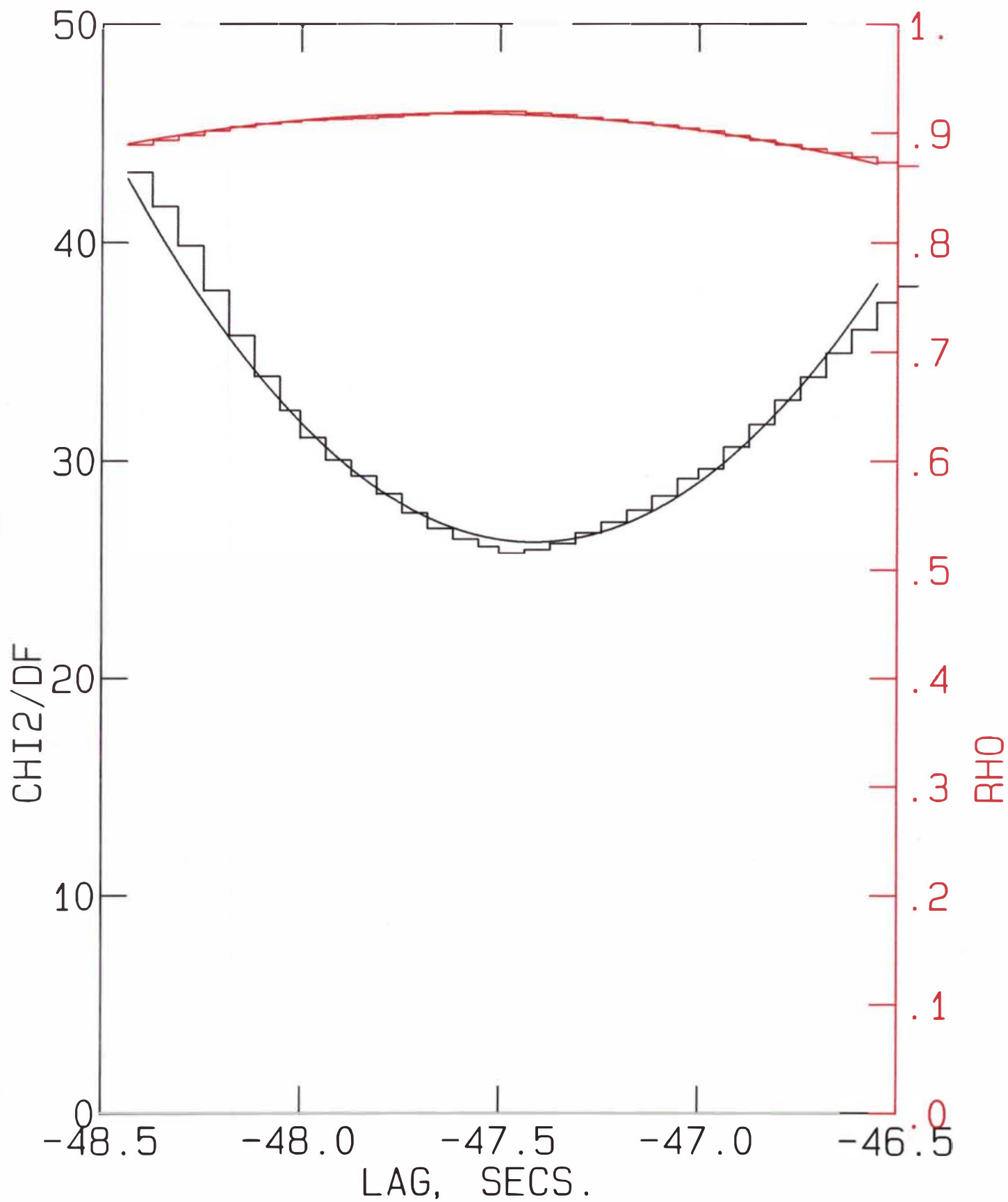
CORRELATION

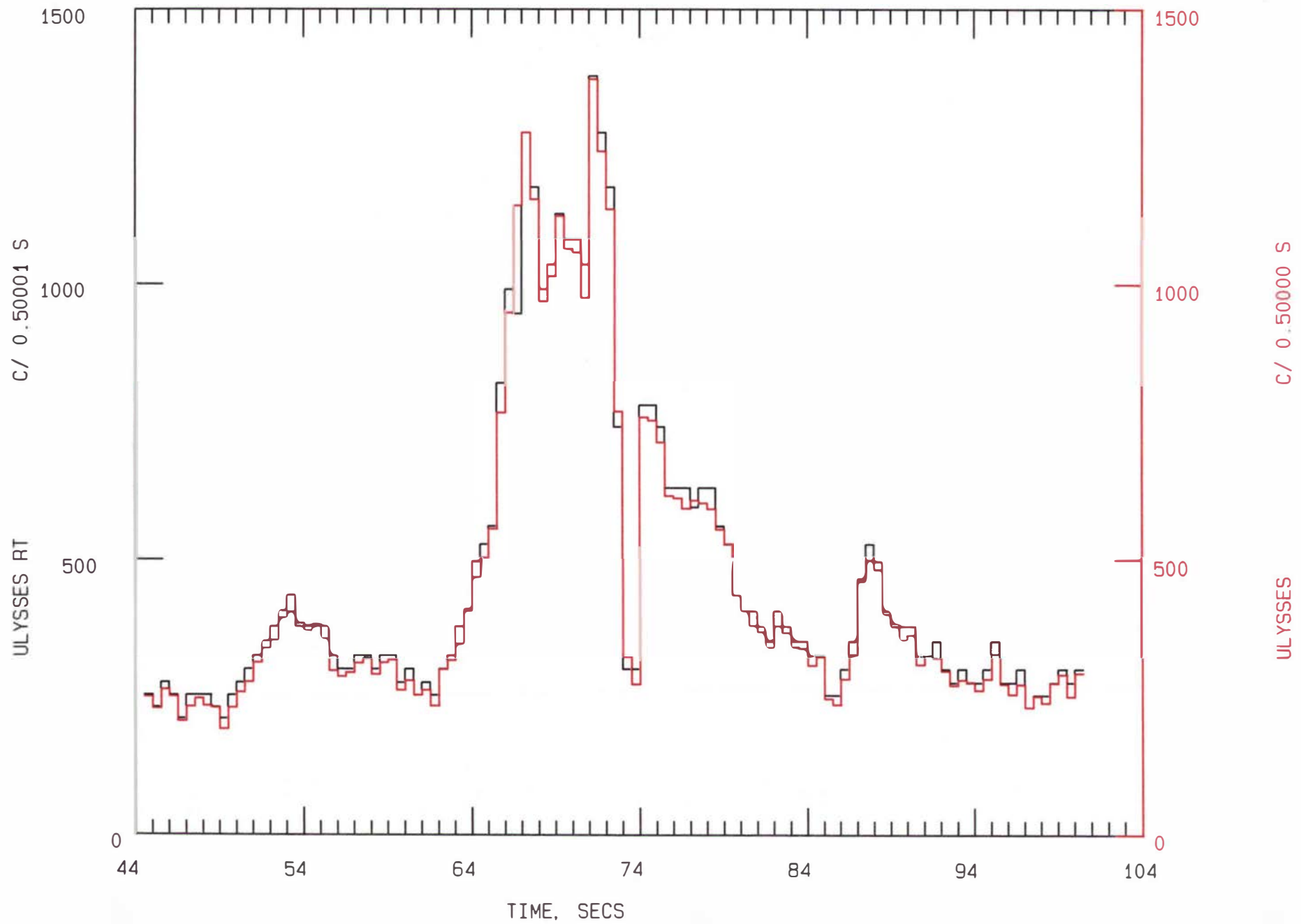
14/ 1/96

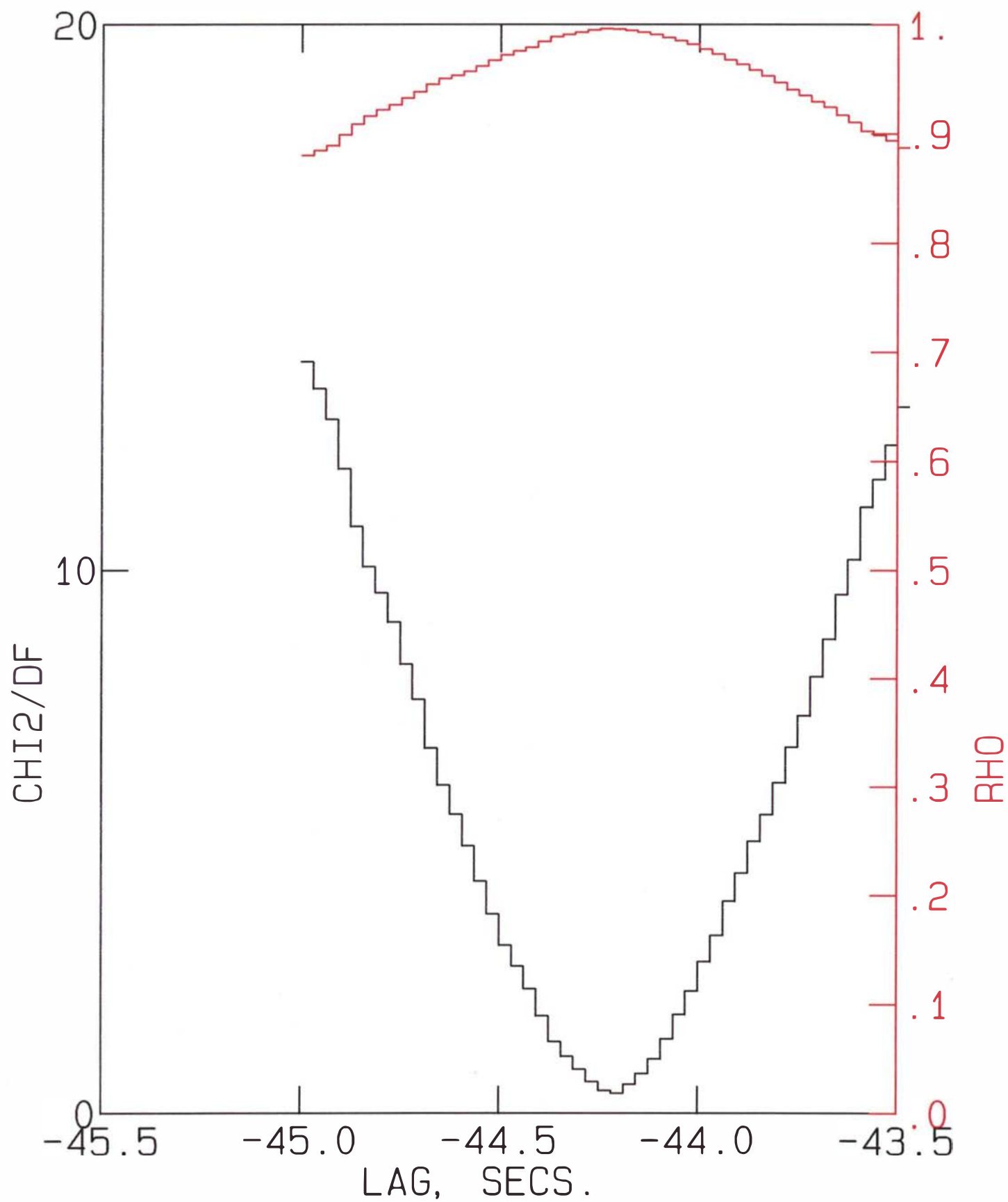
44040.296

26/ 3/98





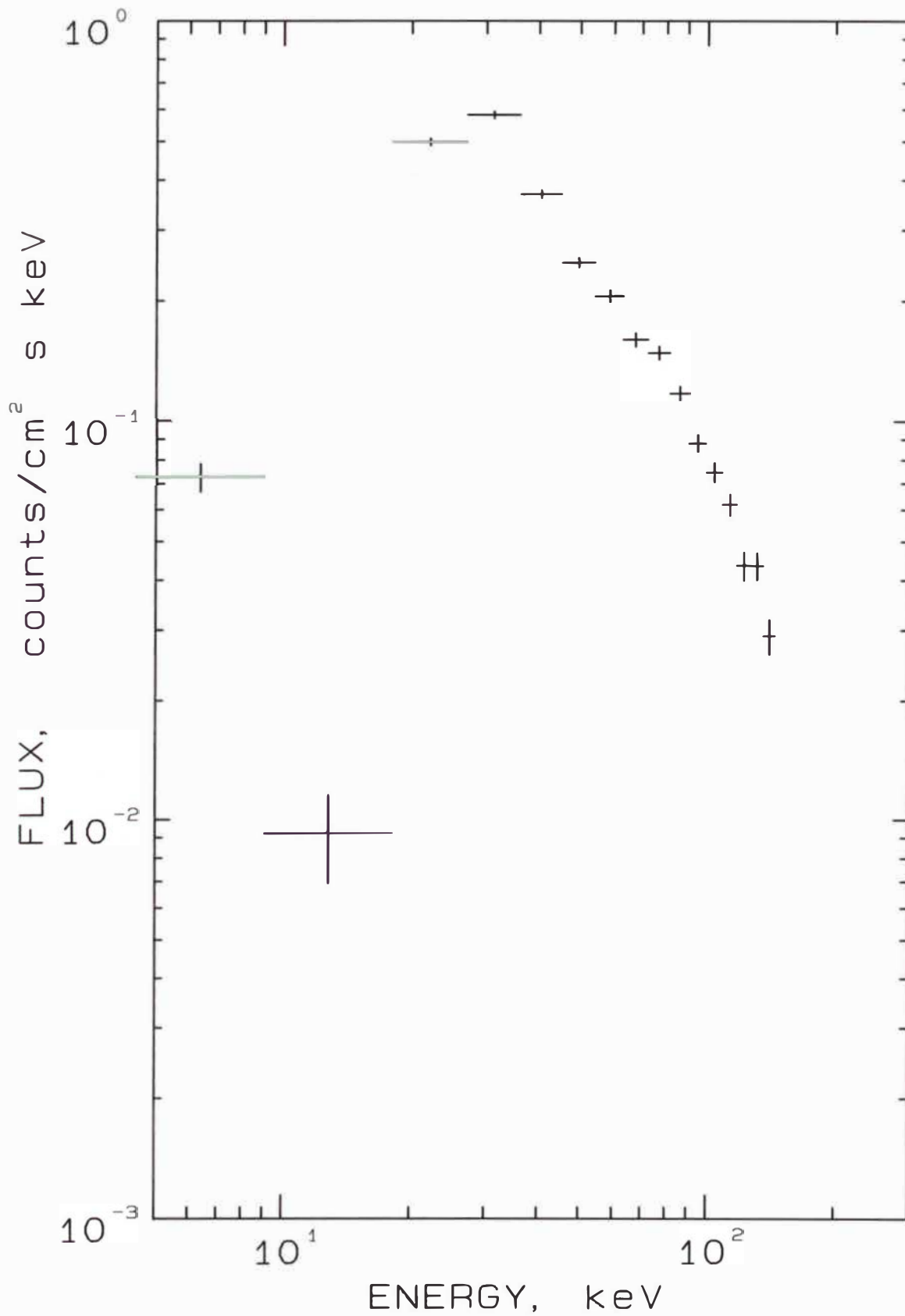




ULYSSES 14/01/96 44091.810

26/ 3/98

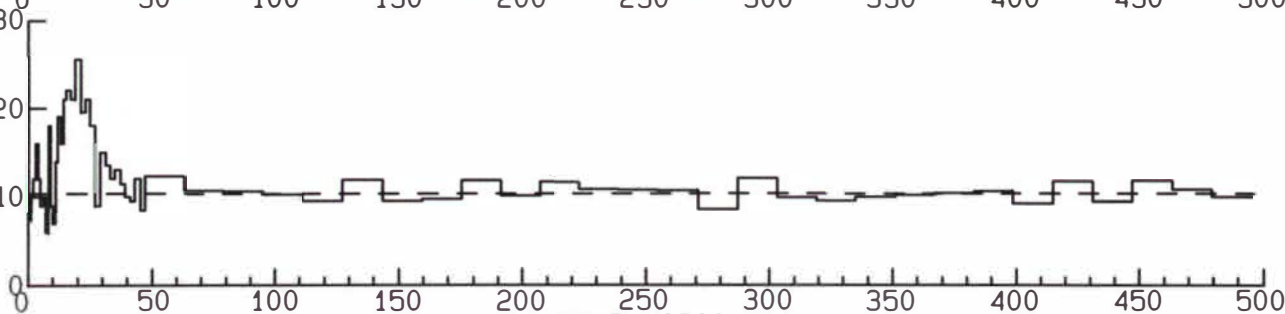
SPECTRUM INTEGRATED OVER 78.9 SECONDS, INTERVALS 2 TO 35



ULYSSES 14/01/96 44091.810 BURST SPECTRAL COUNT RATES

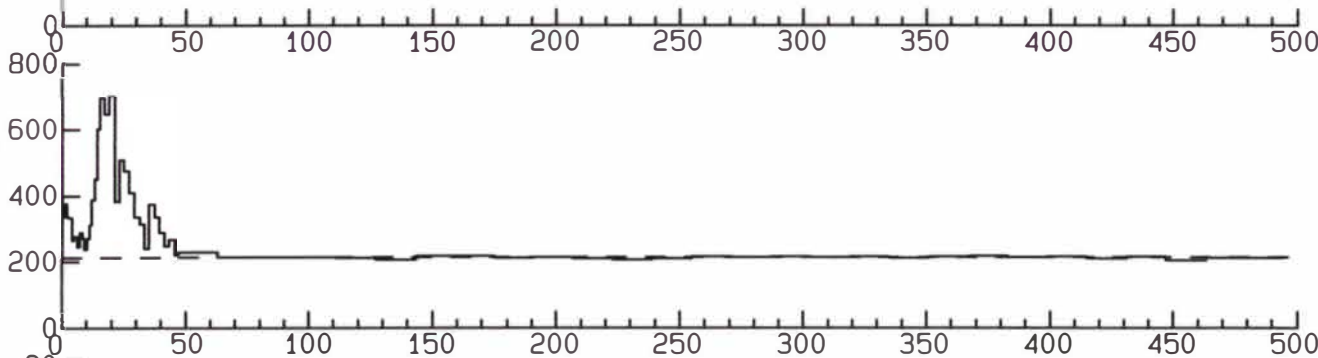
4- 18 keV

COUNTS/S



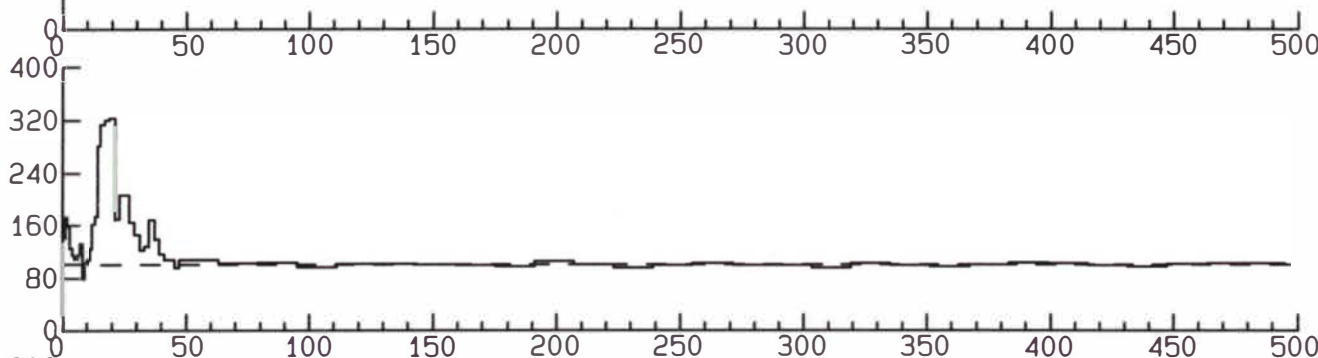
18- 45 keV

COUNTS/S



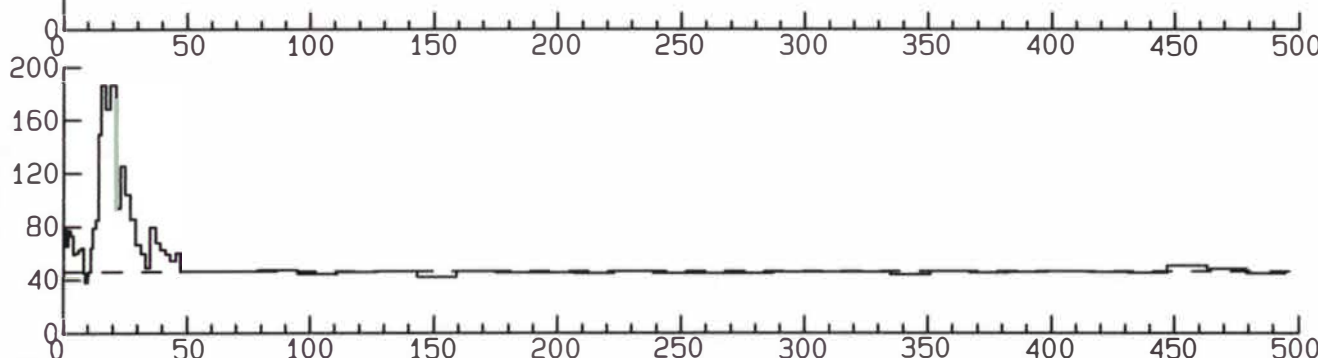
45- 72 keV

COUNTS/S



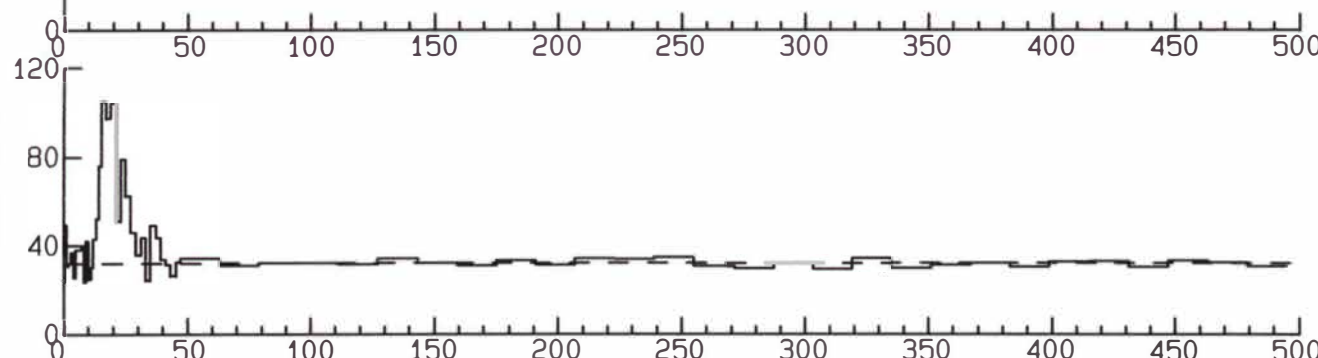
72- 99 keV

COUNTS/S



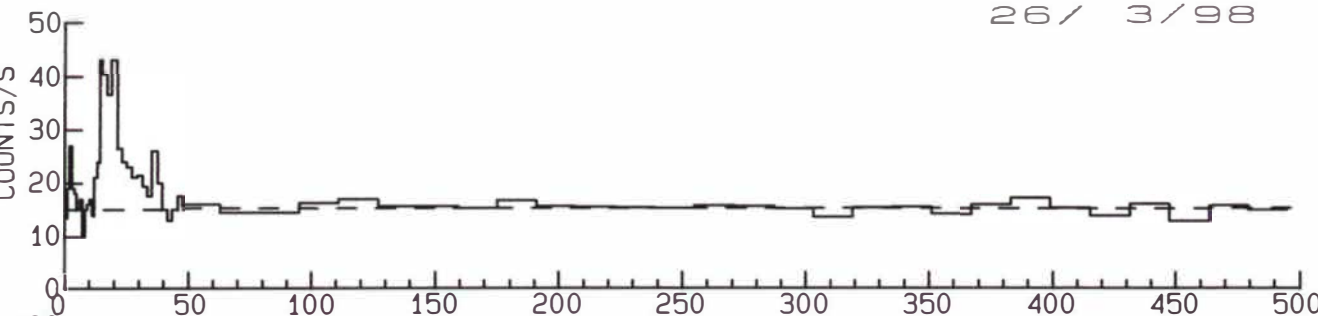
99-126 keV

COUNTS/S



126-144 keV

COUNTS/S



26 / 3 / 98

ULYSSES

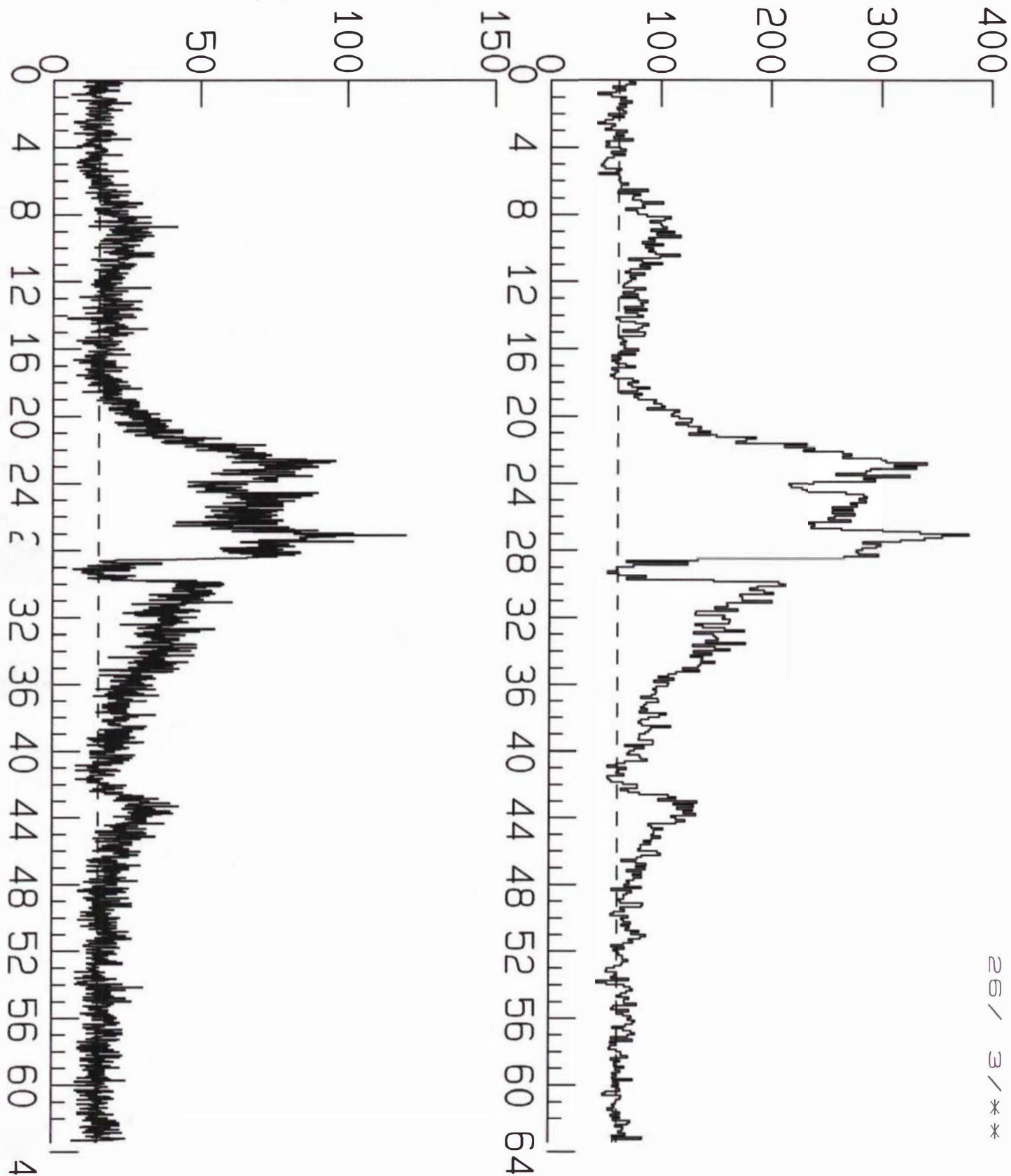
14/01/96

Ttrig=44091.922

21- 144 keV

COUNTS/0.031 S

COUNTS/0.125 S



ULYSSES RT

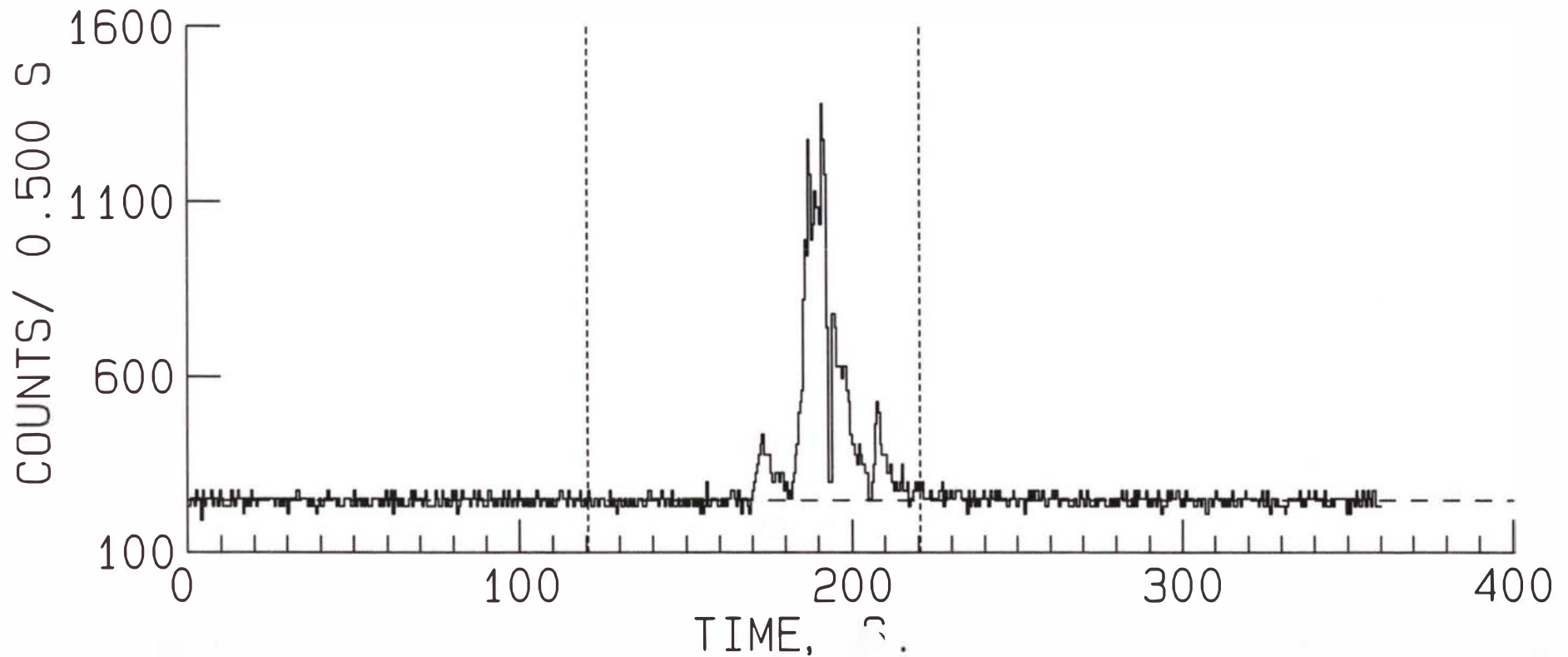
26 / 3 / 98

14 / 1 / 96 43920.192 s

21- 144 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS

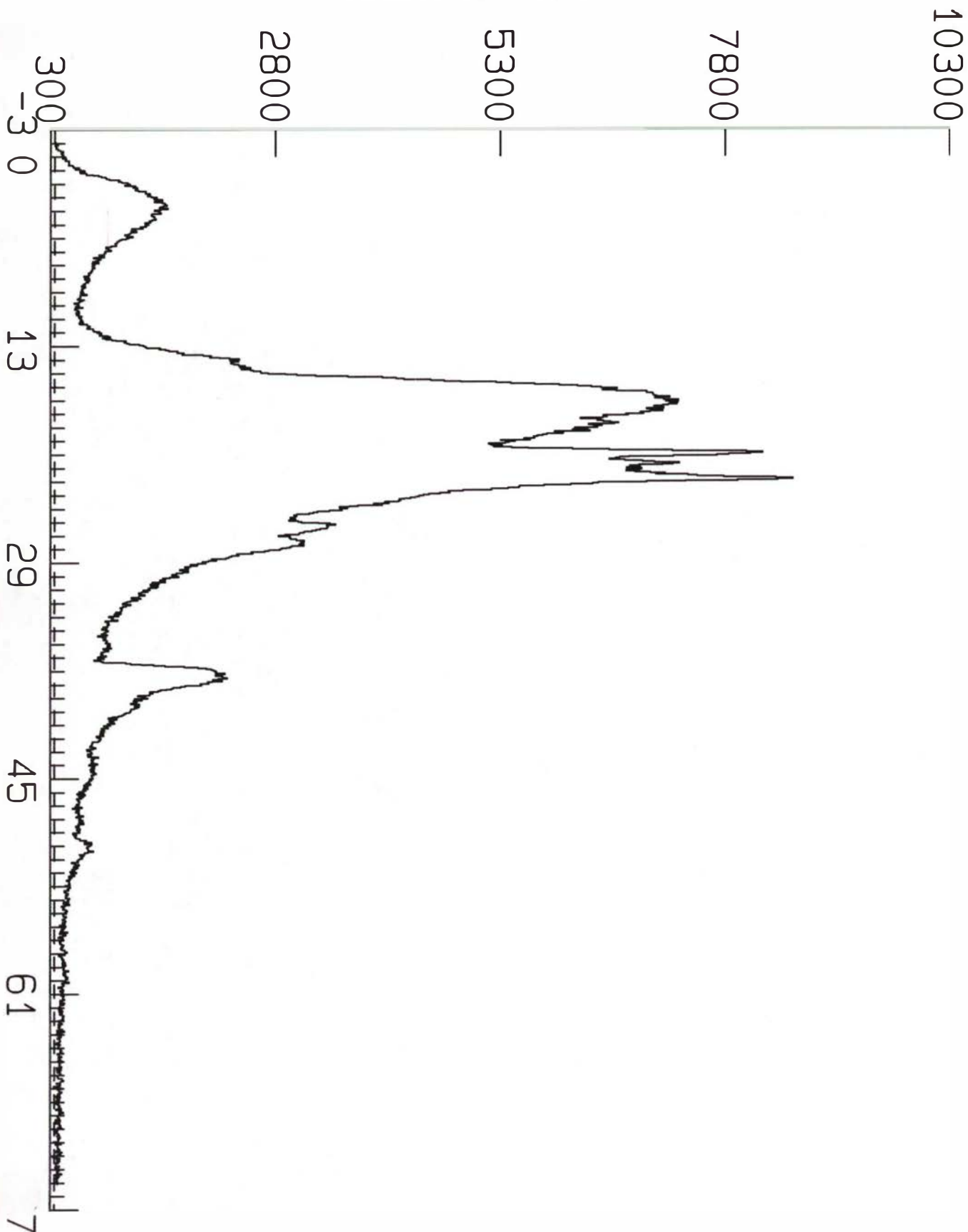


BATSE

14/01/96

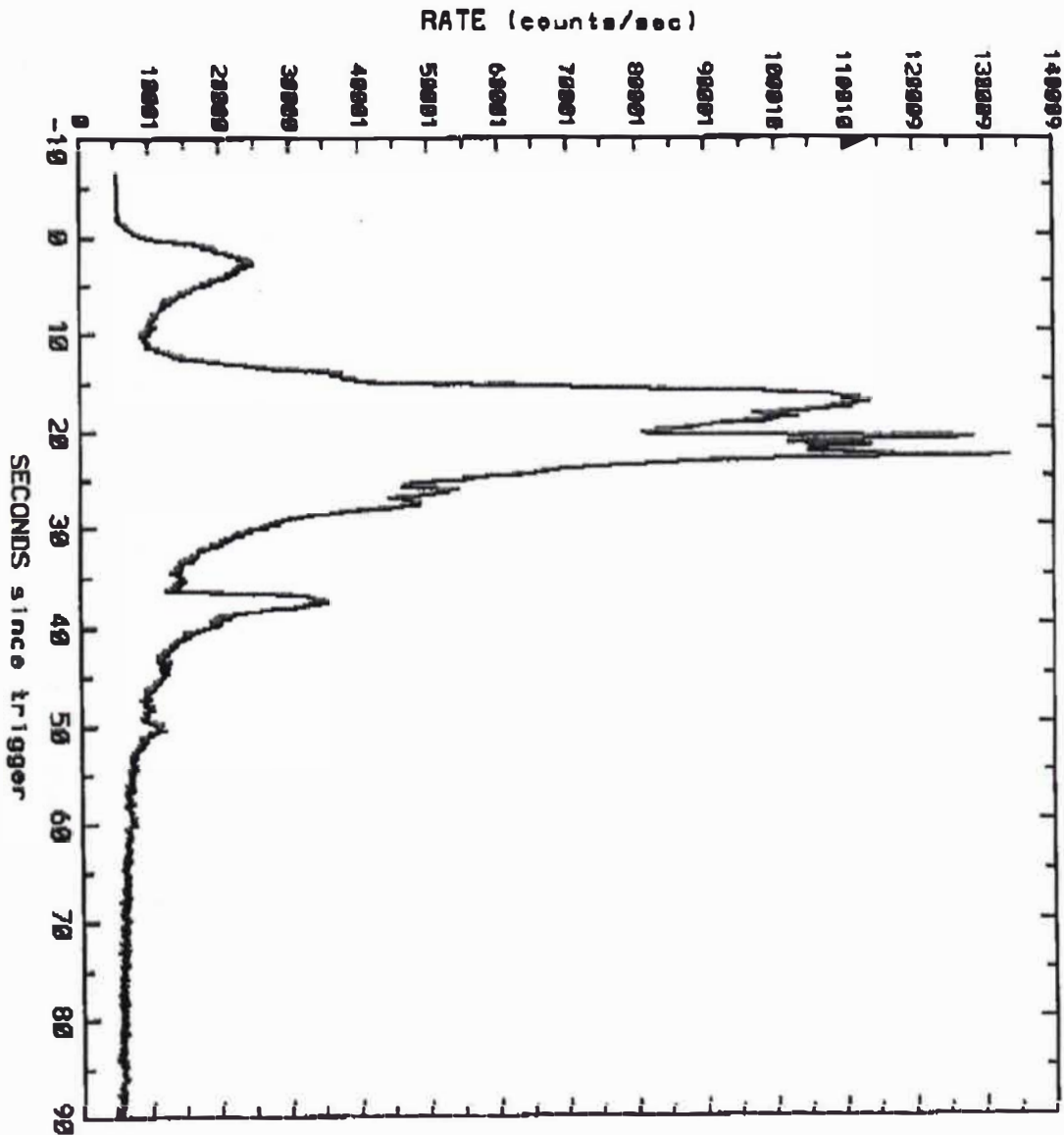
44104.778

25- 100 keV
COUNTS/0.064 S



Jan 14 1996

DISCSC Data for K. Hurley, No. 4368



22-JAN-1996 14:24:38

Created by MOPS BD
(Burst Display)
Version 12.25

Trigger #: 4368

Trigger Time:
1996 / 44184.778

Burst Data Type:
DISCSC

Deadtime
Corrected: N

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
9.004 seconds

Detectors [7.9].
-----19

Discriminators:
[1, 2]

Quality Mask:
BDISP1

NO.: 4369

BATSE BURST TRIGGER

TIME: TJD=0096 SECONDS=52209

TYPE: ELECTRO

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

BATSE BURST TRIGGER

NO.: 4370

I

TIME: TJD=0096 SECONDS=59966

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4371

TIME: TJD=0096 SECONDS=65163

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

J

NO.: 4372

TIME: TJD=0096 SECONDS=67714

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4373

TIME: TJD=0096 SECONDS=70645

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4374

TIME: TJD=0096 SECONDS=77068

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4375

TIME: TJD=0096 SECONDS=83175

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

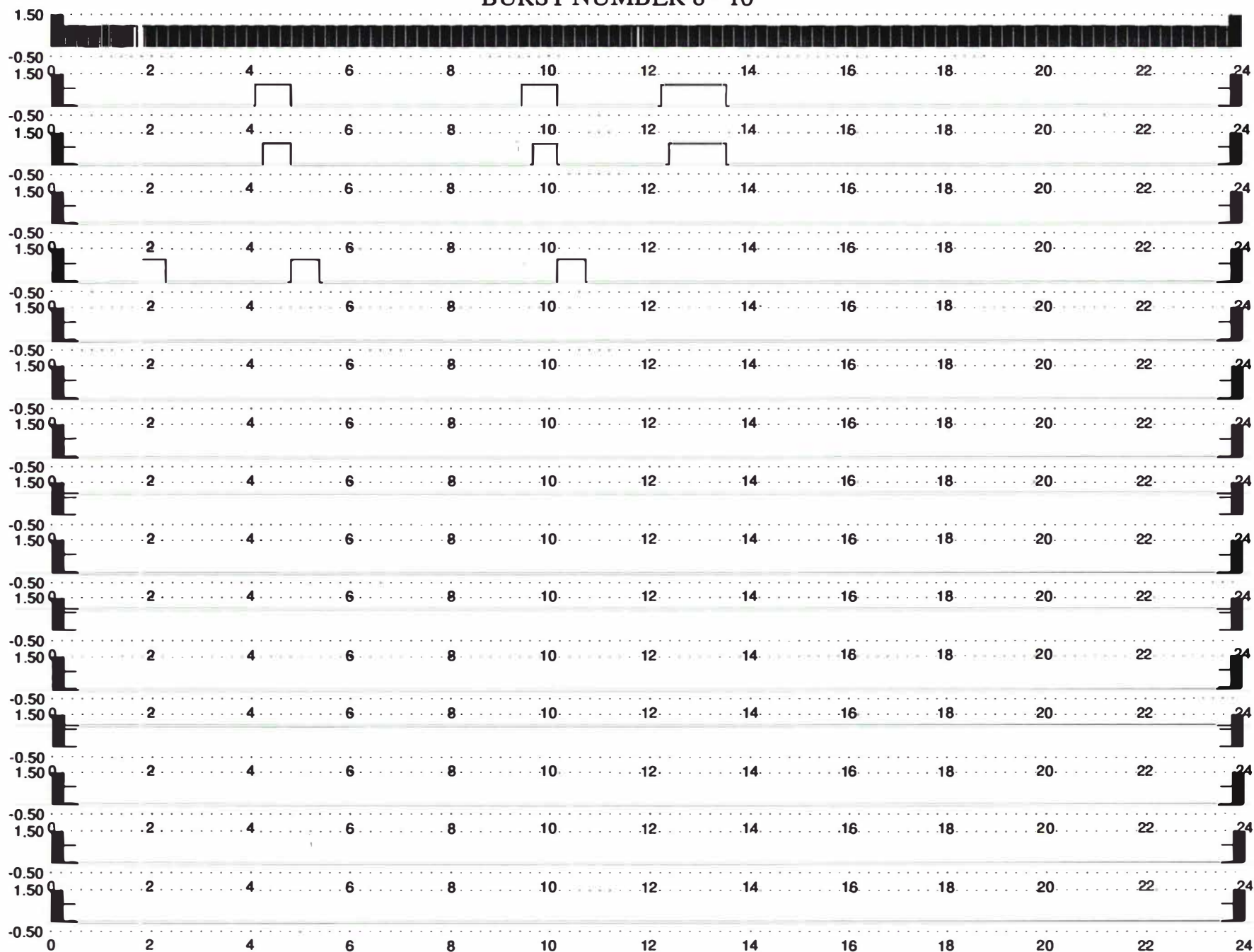
LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

HUS MODES EDR day 14, year 1996 to day 14, year 1996 BURST NUMBER 8 - 10

4/1/96

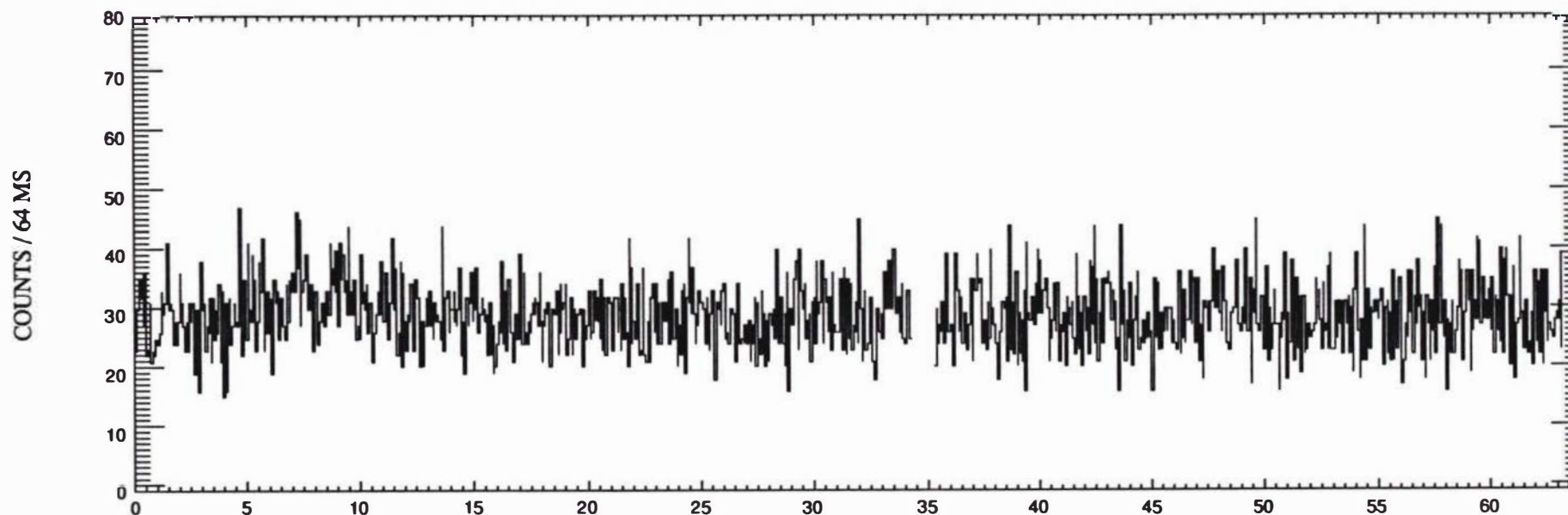
HUS
BRS
MEM
WCH
CAL
RSC
OPM
SPE
ICR
MP.
OSC
DMA
ROM
DMP
CCL
CBU



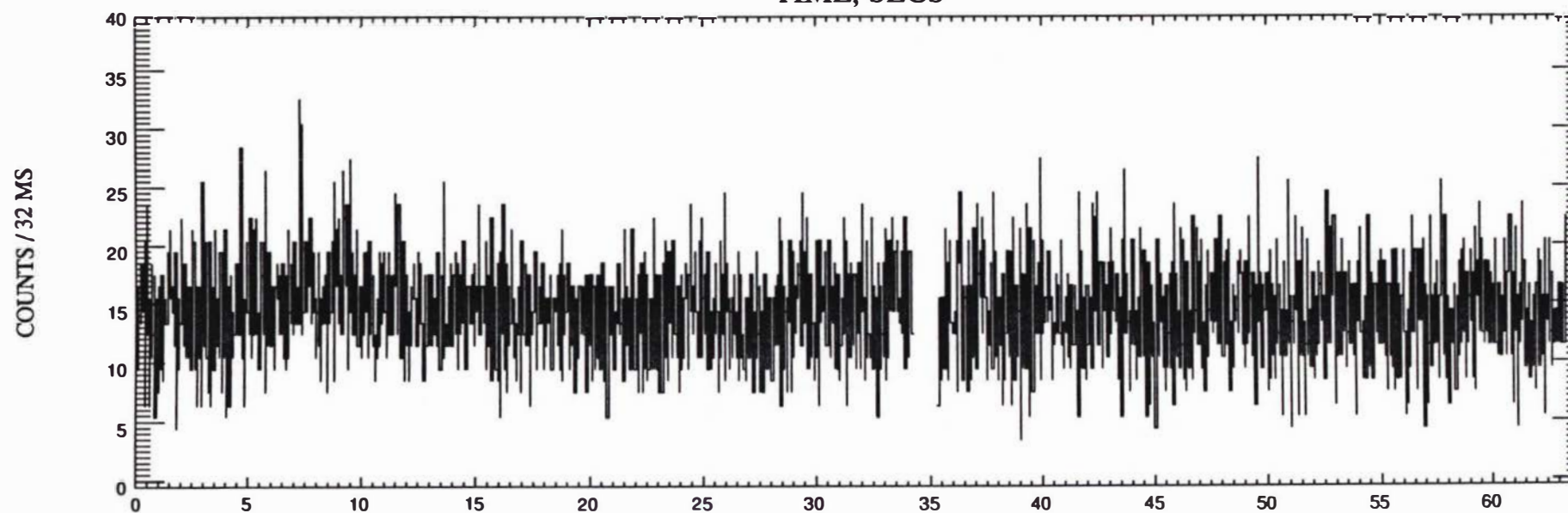
UNIV 3AL TIME

HUS 2A TRIGGERED DATA EDR day 14, year 1996
Burst Counter 8 at UT= 4.085452630785 h=14707.629 s 04:05:07.629

4/1/96



TIME, SECS

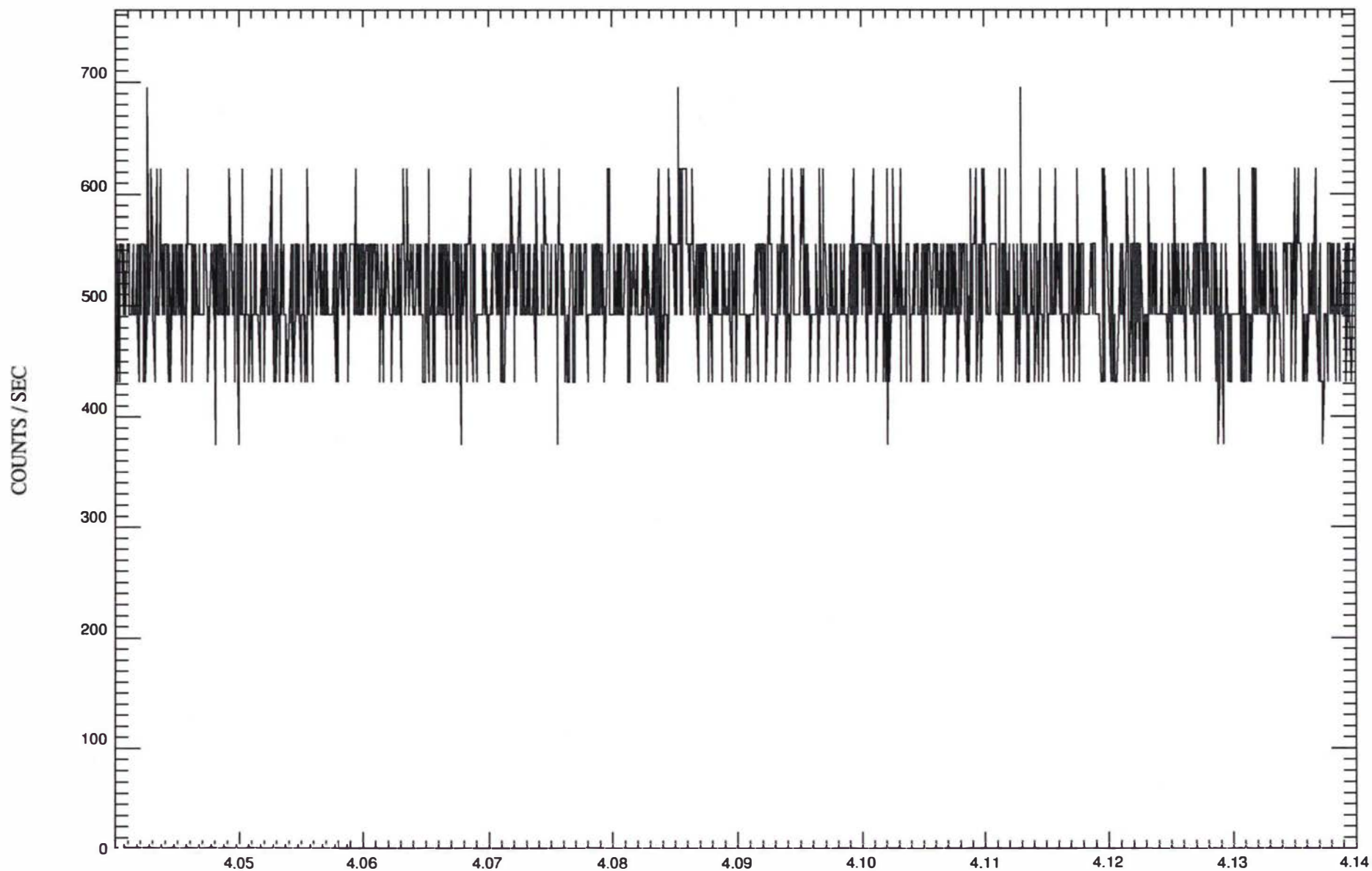


TIME, SECS

B# 1

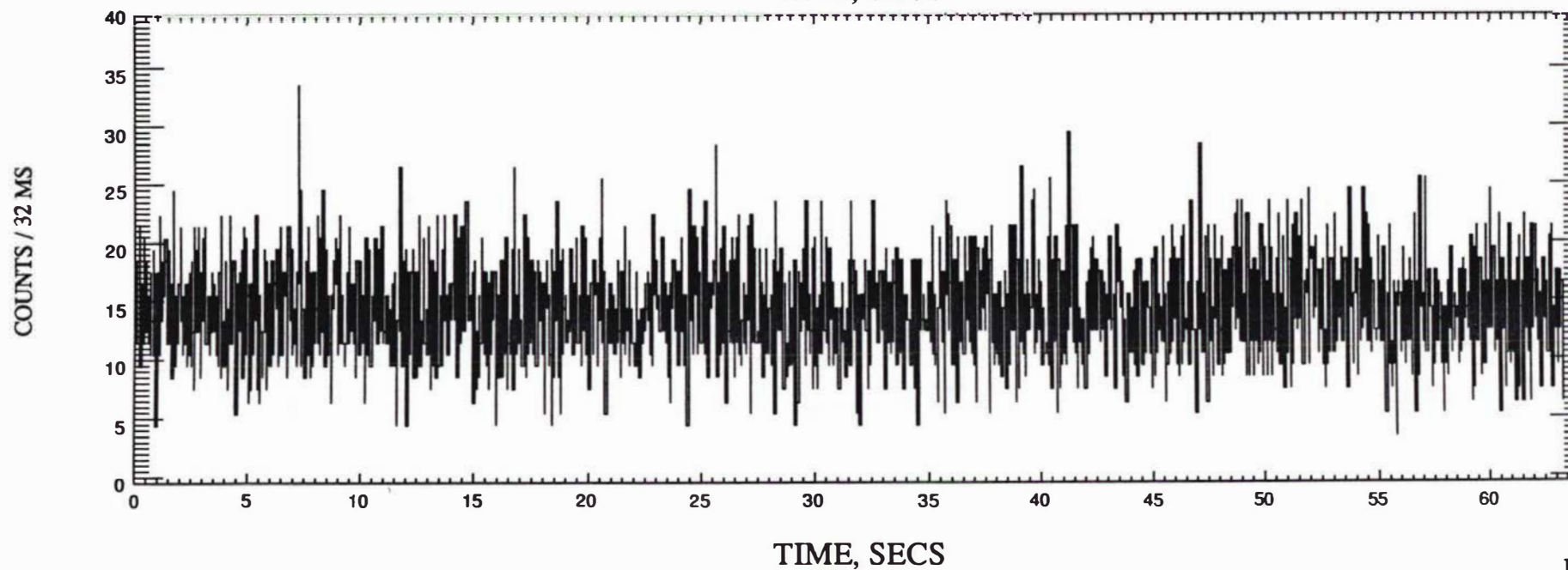
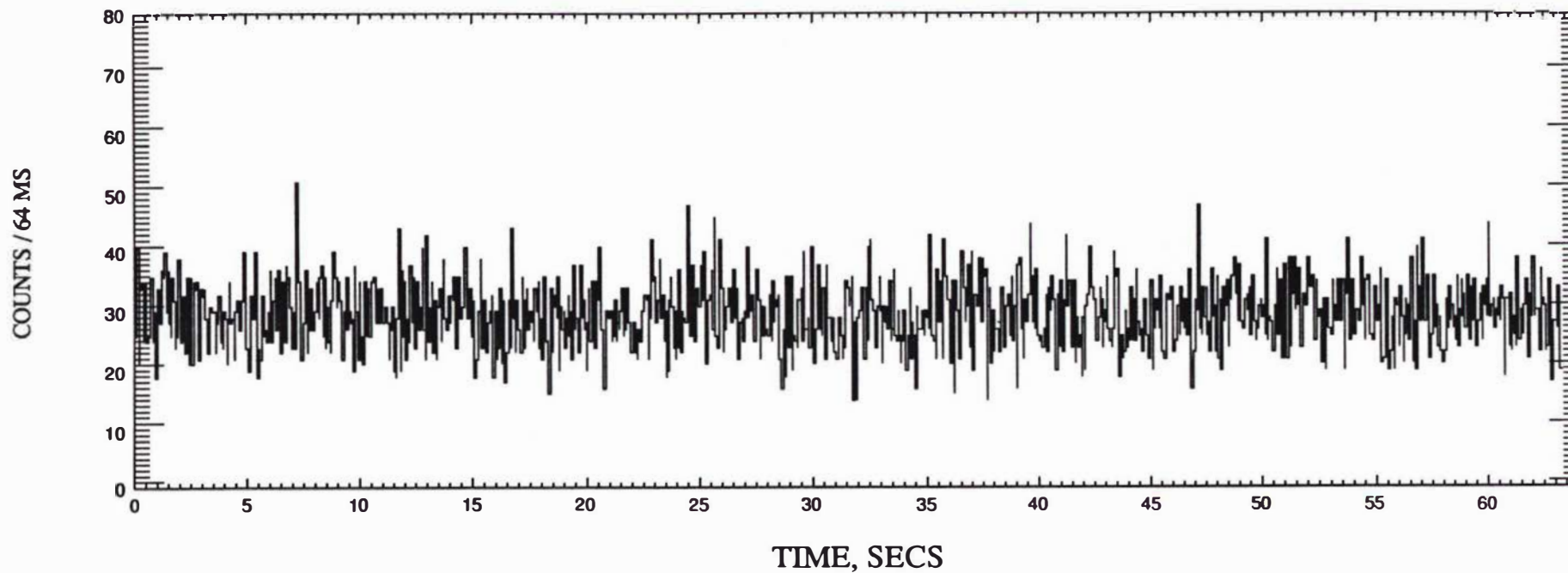
HUS 2A, MODE 1, NOT AVERAGED QEDR day 14, year 1996 to day 14, year 1996
CALIBRATION DATA INCLUDED

1/16/96



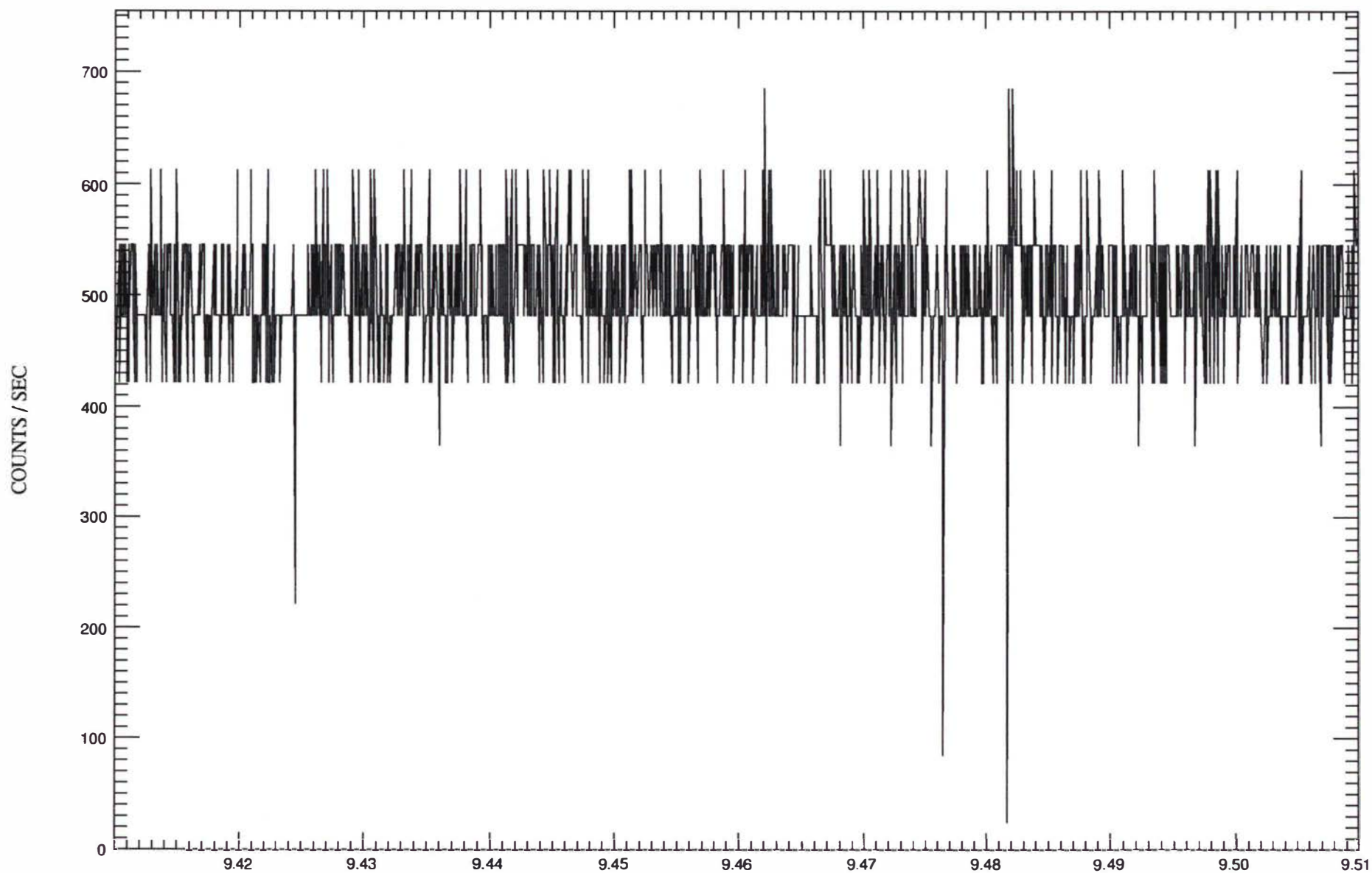
HUS 2A TRIGGERED DATA EDR day 14, year 1996
Burst Counter 9 at UT= 9.462302928501 h=34064.291 s 09:27:44.291

4/1/96



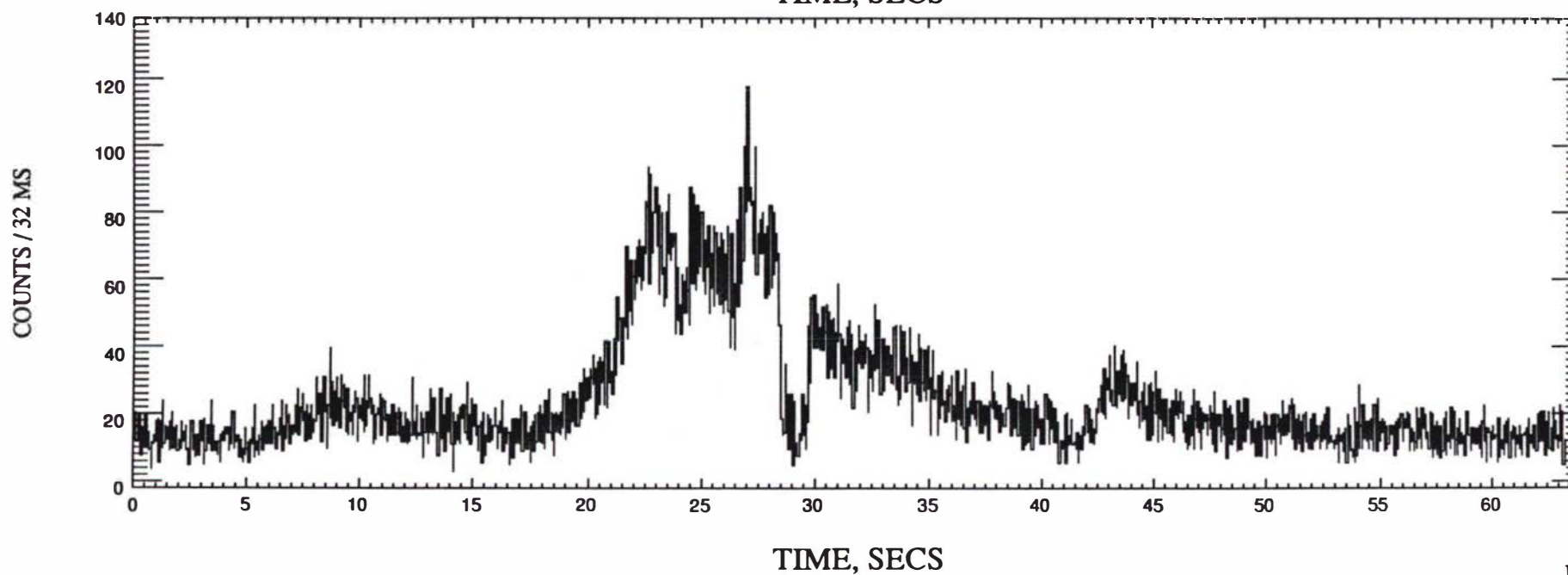
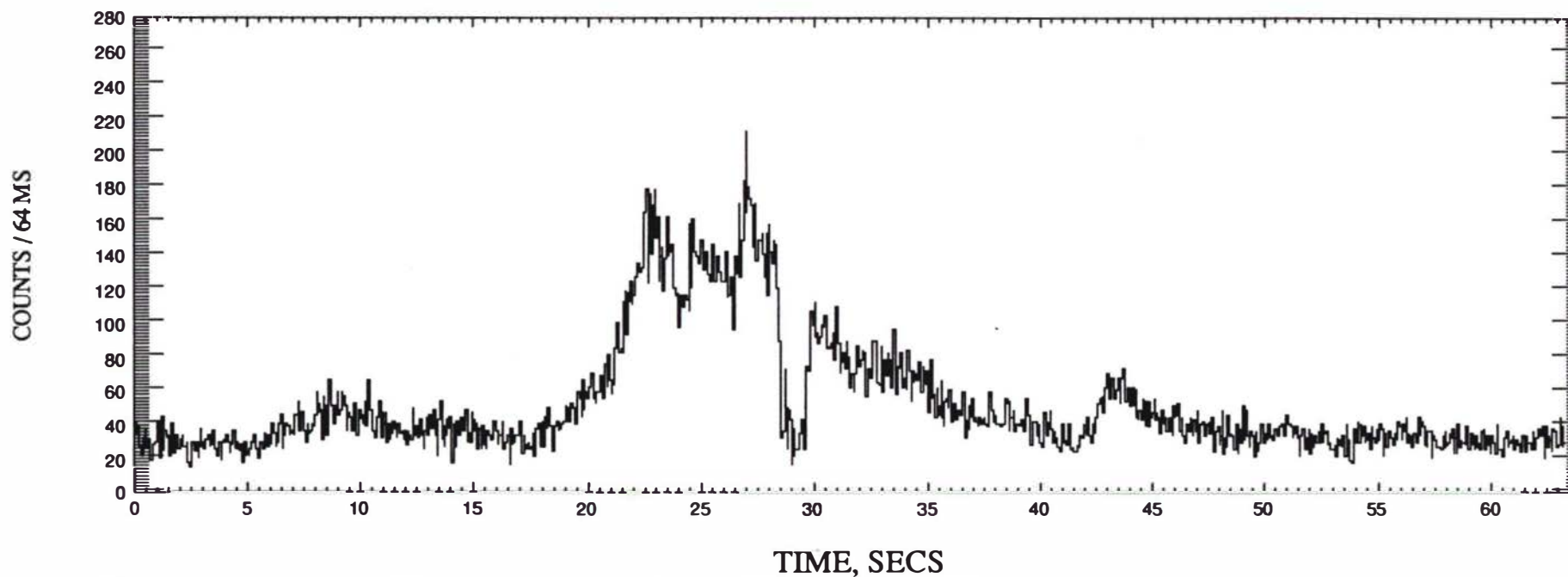
HUS 2A, MODE 1, NOT AVERAGED QEDR day 14, year 1996 to day 14, year 1996
CALIBRATION DATA INCLUDED

1/16/96



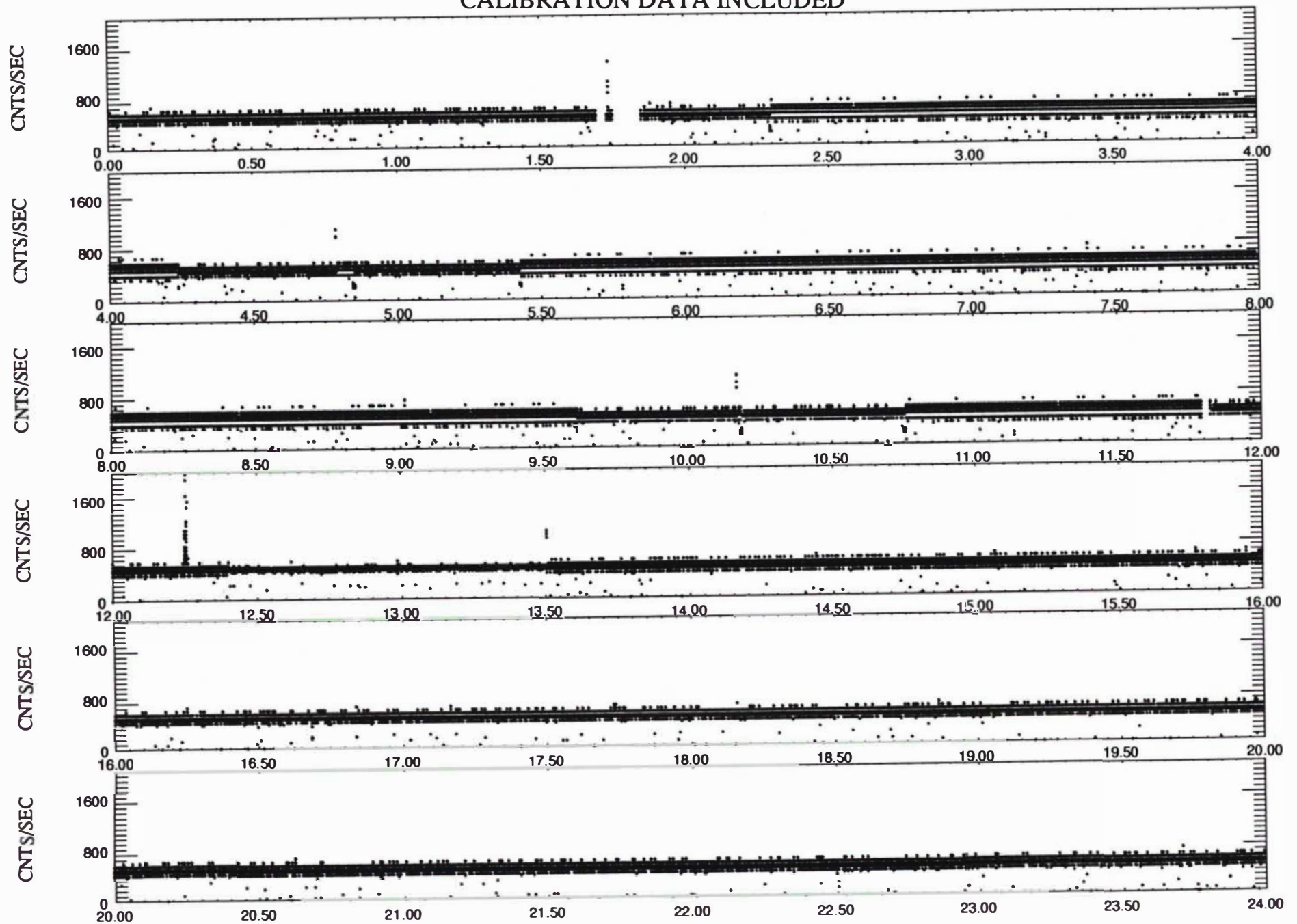
HUS 2A TRIGGERED DATA EDR day 14, year 1996
Burst Counter 10 at UT=12.247724872165 h=44091.810 s 12:14:51.810

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 14, year 1996 to day 14, year 1996
CALIBRATION DATA INCLUDED

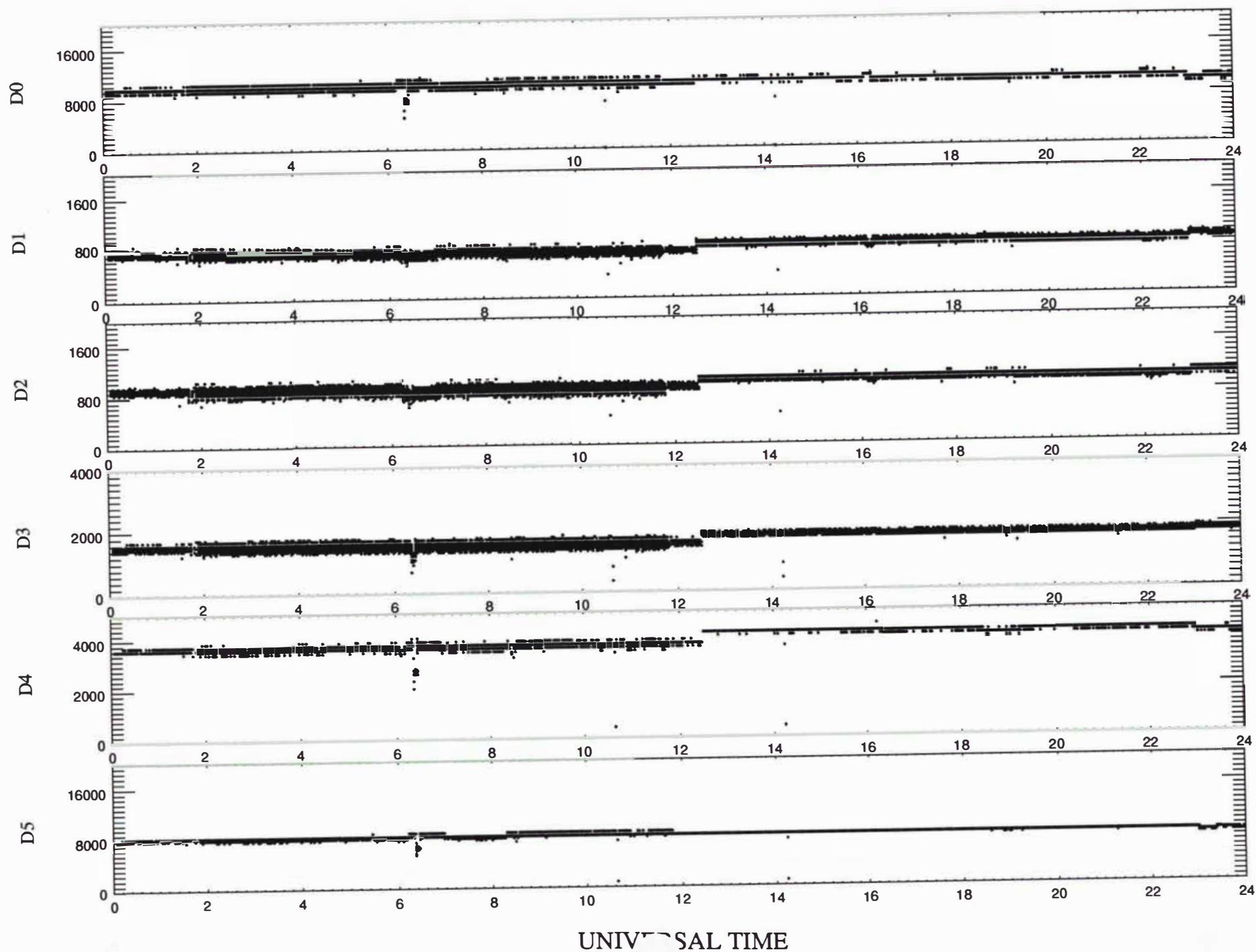
4/1/96



UNIV AL TIME

HUS 2B COUNTS / SEC QEDR day 14, year 1996 to day 14, year 1996

1/16/96



BATSE time corrected 10/02

Date: Jul 10 2002

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution? **No**

2. BATSE Data

- ☐ 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. 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 database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

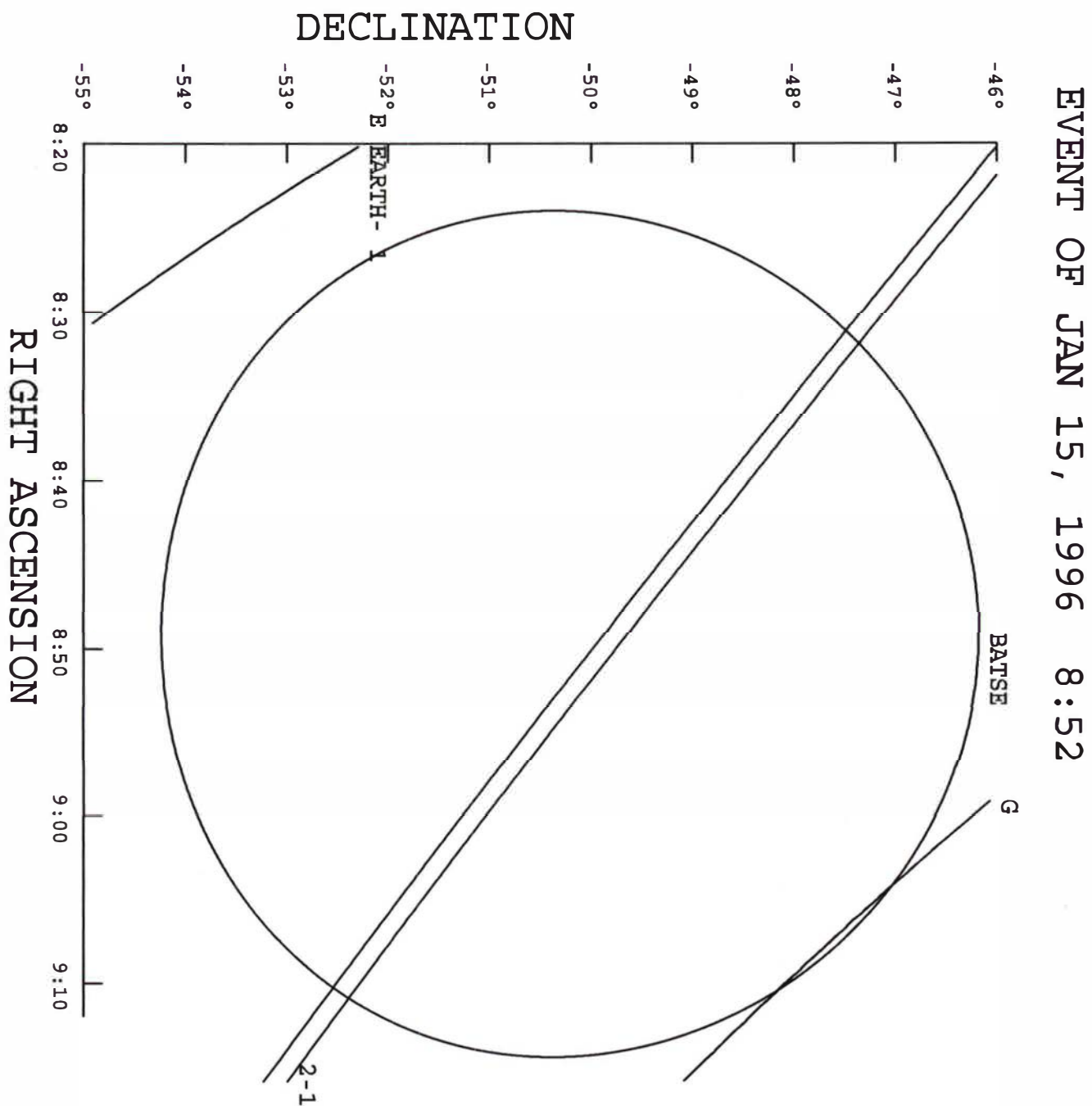
S=SUN

E=ECLIPTIC

G=GALACTIC EQUATOR

1 BATSE

2 ULYSSES



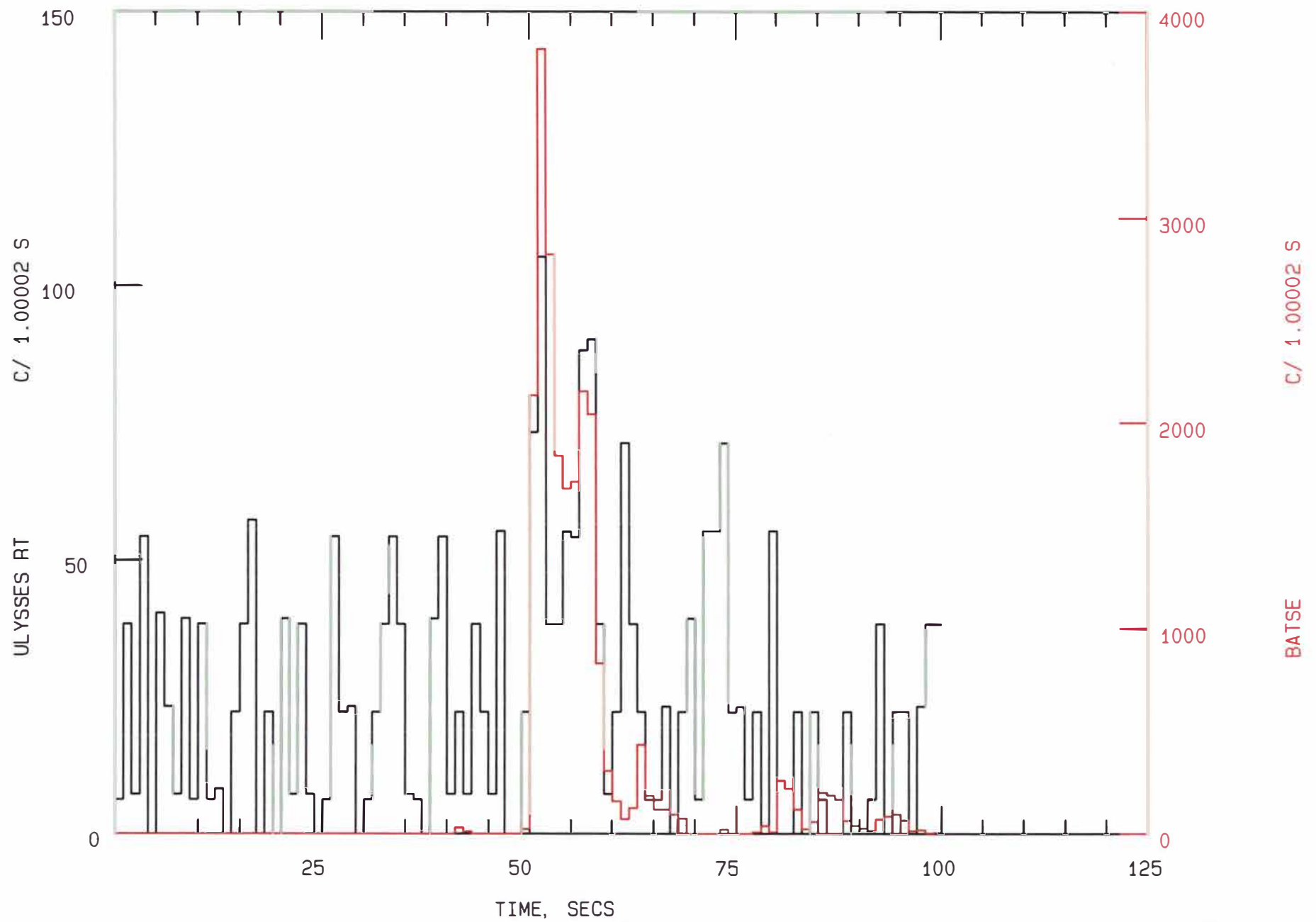
ULYSSES RT-BATSE

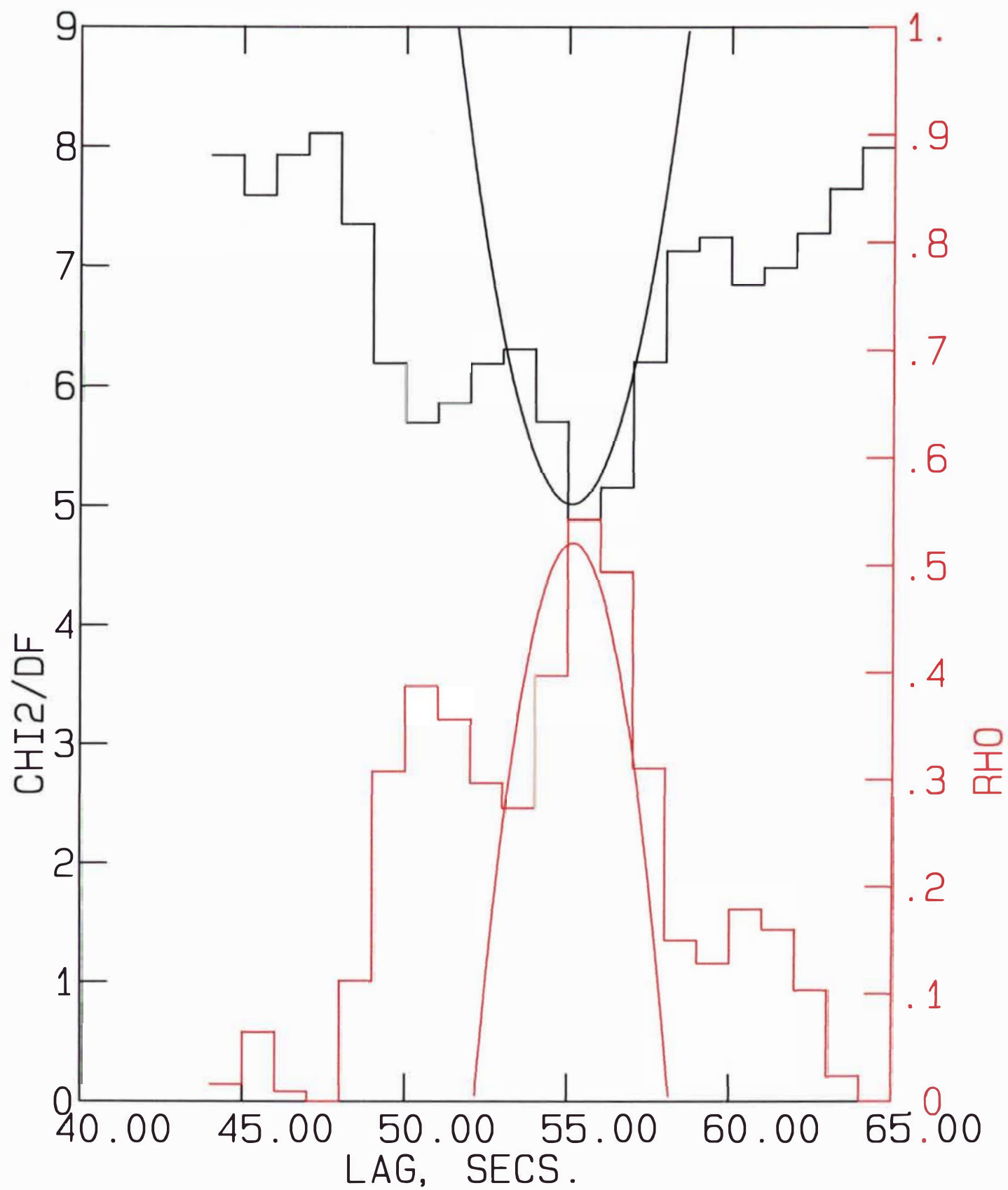
CORRELATION

15/ 1/96

32882.128

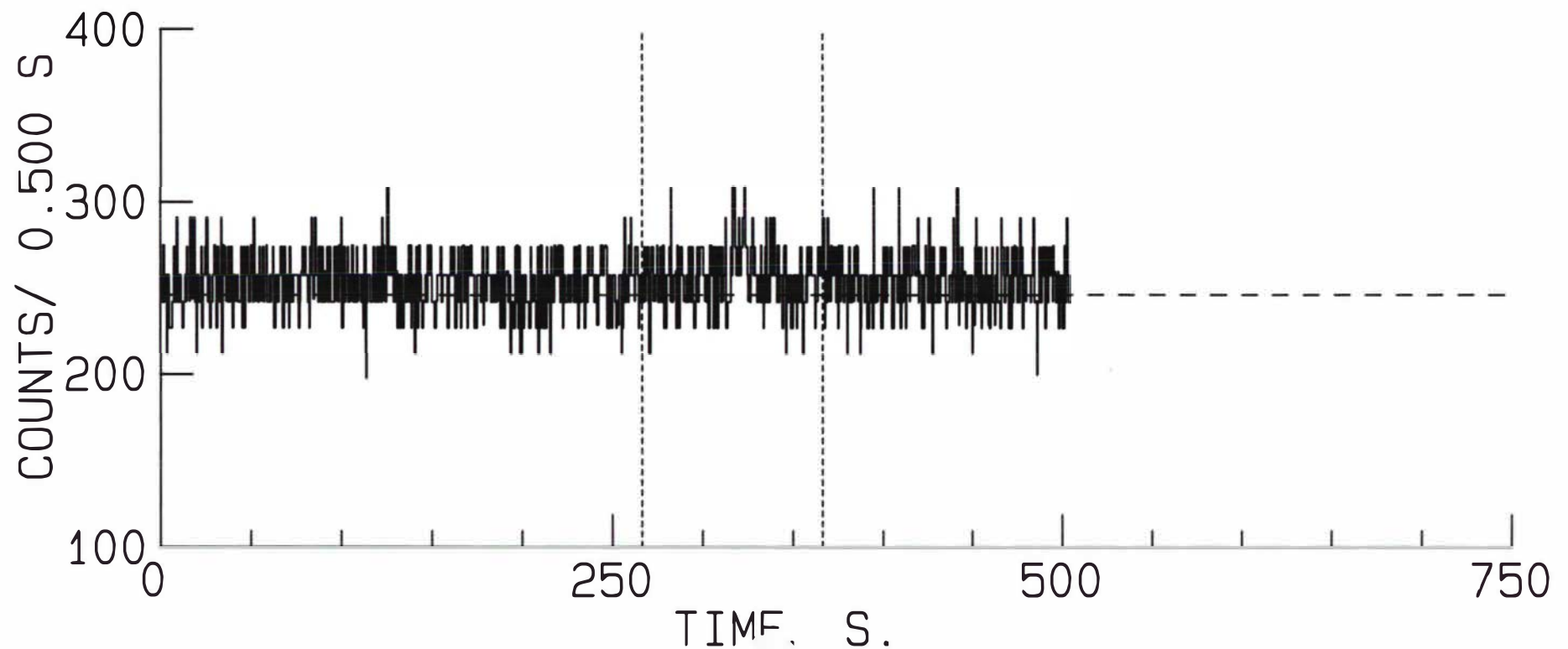
10/ 7/ 2





ULYSSES RT
15/ 1/96 32616.066 s
0.250 S INTERVALS REGROUPED BY 2
21- 145 keV

10 / 7 / 2

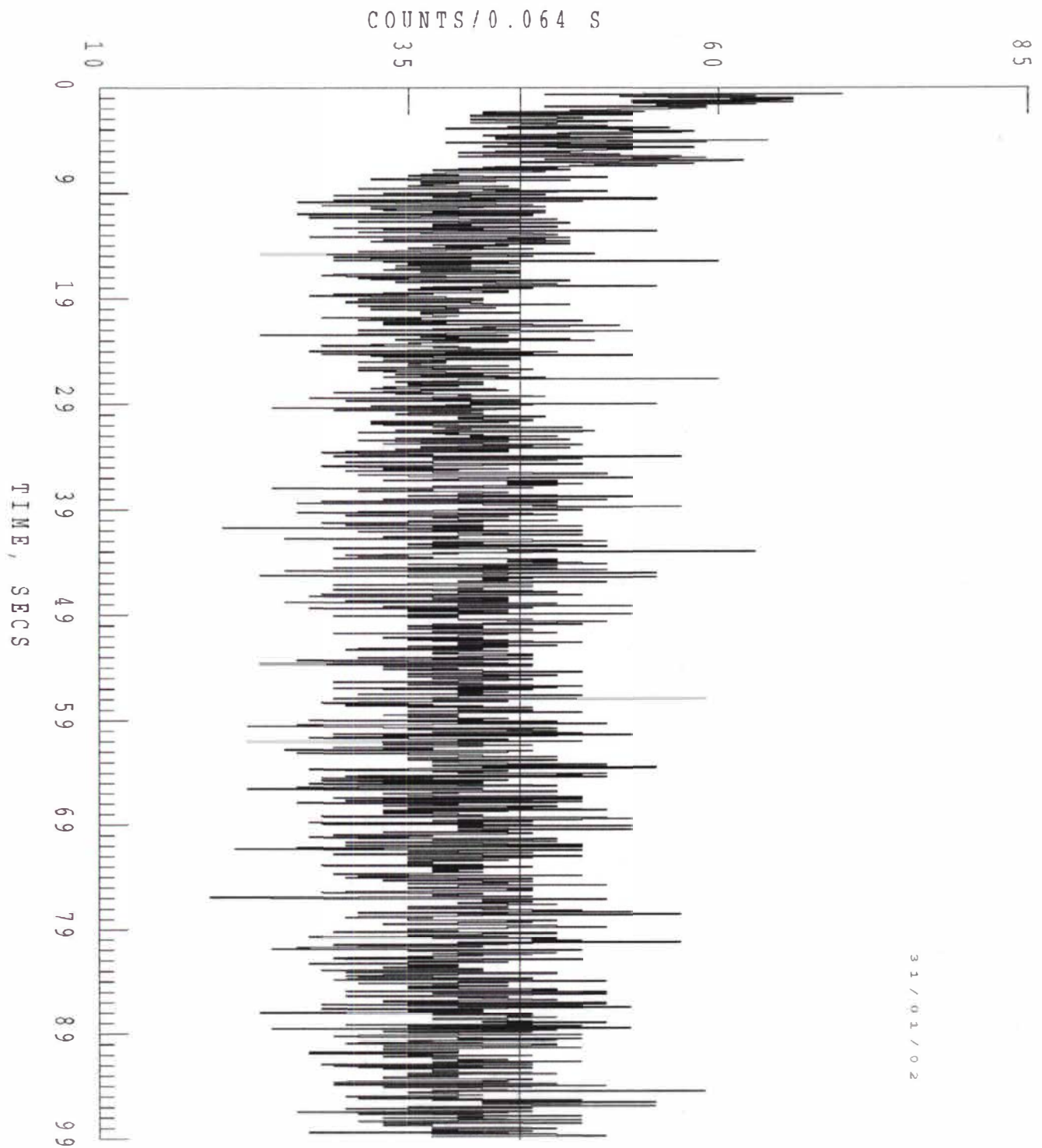


KONUS1

15/01/96

31956.506

50 - 200 keV



951025	23	40	39.738	S1	190	400	120	1.7	3	60	167	✓
951102	01	58	05.879	S2	260	320	50	<0.1	100	3	168	✓
951102	05	53	29.015	S2	700	1560	600	0.1	5	18	169	✓
951102	07	58	13	S1	320	80		4	6		BGR	✓
951105	00	29	05	S2	40	50		0.6	40		BGR	✓
951105	01	37	48.077	S2	140	340	80	0.6	2	22	170	✓
951105	13	00	27.808	S1	160	380	120	9	2	9	171	✓
951107	07	34	58	S1	20	50	20	2	90		BGR	✓
951111	09	42	40	S1	80	160	20	1.1	15		BGR	✓
951112	18	28	15.244	S2	540	690	220	0.2	14	84	172	✓
951113	23	25	58.872	S1	260	330	260	4.4	1	15	173	✓
951115	10	48	49	S1	70	180	80	3	12		BGR	✓
951117	02	48	43.762	S2	650	530	120	0.1	9	10	175	✓
951118	22	56	00	S2	20	90	100	0.15	6		BGR	✓
951119	08	17	11.402	S1	200	420	110	3	1.5	12	176	✓
951119	12	54	17.519	S1	110	220	340	1.7	3	4	177	✓
951119	16	30	48	S2	30	40	10	0.4	110		BGR	✓
951121	06	11	20	S1	20	70	10	2	45		BGR	✓
951122	02	44	01.380	S2	770	920		0.15	0.5	1.5	179	✓
951122	04	45	07.738	S1	280	430	160	12	35	22	180	✓
951123	18	10	08	S1	30	60	30	1	30		BGR	✓
951124	05	54	26	S2	50	140	50	0.15	30		BGR	✓
951124	06	58	52	S2	30	100		0.25	280		BGR	✓
951202	10	51	41.744	S1	200	500	220	2.4	2	25	195	✓
951203	01	06	28.180	S2	260	720	420	0.85	1	16	196	✓
951208	05	26	57.151	S2	320	740	190	<0.04	1	3.5	197	✓
951208	10	57	32.057	S1	290	260		7	52	6.5	198	✓
951208	11	47	47.634	S1	240	510	190	10	23	98	199	✓
951208	23	24	12	S1	100	90		>10	30		BGR	✓
951209	08	42	29.607	S1	150	450	160	6	6	14	200	✓
951213	04	57	29.683	S2	360	940	330	0.4	2	8	201	✓
951213	09	04	34	S2	300	90		<0.15	4.5		BGR	✓
951214	01	29	47	S2	15	100	30	1	30		BGR	✓
951214	02	24	17.847	S2	200	450	150	0.8	4	6	202	✓
951215	20	23	45	S2	60	70	15	<0.15	60		BGR	✓
951216	22	39	42	S2	160	110		0.1	6		BGR	✓
951218	07	59	48	S1	70	130	30	2.3	22		BGR	✓
951219	16	51	19.732	S2	430	850	920	<0.03	1	54	203	✓
951220	08	51	23.560	S2	100	320	180	1	2	8	204	✓
951221	08	23	18	S1	110	150	70	>15	15		BGR	✓
951222	21	00	21	S2	280			<0.1	16		BGR	✓
951225	09	14	16	S2	200			<0.3	50		BGR	✓
951225	09	34	14	S1	500	150	25	2.2	60		BGR	✓
951225	15	21	35	S2	210	170	40	0.1	100		BGR	✓
951225	22	51	08	S1	80	150	50	2.4	40		BGR	✓
951226	08	38	15	S2	60	100	50	0.15	9		BGR	✓
951227	06	23	25.042	S1	420	1200	320	1	1	1.5	218	✓
951227	21	59	20	S1	50	50		3	65		BGR	✓
951228	12	28	42	S2	70	80	40	<0.07	110		BGR	✓
951228	15	47	26	S2	80	170		0.9	17		BGR	✓
951231	05	37	11.668	S2	180	320	150	0.07	9	65	219	✓
951231	21	24	34	S2	100	25		<0.2	20		BGR	✓
960102	03	14	10.996	S1	140	300	80	1	1	0.2	220	✓
960102	20	20	53	S1	200	120	40	>9	25		BGR	✓
960104	03	28	41.062	S2	360	630	230	<0.05	2	28	221	✓
960105	16	04	30	S1	80	60		5	30		BGR	✓
960107	05	23	20	S2	30	100		0.5	230		BGR	✓
960107	19	03	28	S2	30	120	150	<0.1	32		BGR	✓
960109	23	11	31	S2	60	130	20	0.3	5		BGR	✓
960111	12	55	24.530	S2	1130	1280	190	0.2	0.5	6	222	✓
960113	15	33	44.261	S2	500	450	50	0.3	2	36	228	✓
960114	12	15	04.737	S1	4900	7200	1400	1.8	1	60	233	✓
960115	08	52	36.506	S1	380	360	60	10	1	7	234	✓
960115	12	50	15	S2	120	60		0.7	22		BGR	✓
960116	02	02	18	S2	140	170		0.15	17		BGR	✓
960117	15	56	11.341	S1	250	360	30	4	5	20	235	✓

RT

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)		Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
				Max counts per sec		G3	in G2	T<T0	T>T0	
				G1	G2					
941113	12	09 15	S1	145	85		2.5	115		BGR ✓
941114	02	02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03	14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14	07 57	S2	150	140		<0.15	5		BGR ✓
941119	19	31 09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22	04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00	20 46	S1	150	205	200	>14	18		BGR ✓
941126	12	22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16	54 20	S1	55	75		>10	26		BGR ✓
941126	19	56 49.732	S1	290	390	211	6.7	20	26	9 ✓
941127	14	30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15	39 10	S1	210	57		2.7	260		BGR ✓
941128	15	37 00	S1	75	90	32	>15	55		BGR ✓
941205	23	33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22	10 32	S2	265	175		<0.2	7		BGR ✓
941210	03	10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17	03 51	S1	40	45	29	>6	12		BGR ✓
941214	05	38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07	44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22	14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05	36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07	39 45.915	S1	300	637	519	4.4	5	90	28 ✓
941228	16	55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12	58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22	51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20	52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23	43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07	18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09	00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06	02 15	S2	332	180		<0.1	3600		BGR ✓
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 ✓
950111	12	18 49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17	38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01	00 38	S1	46	110		1.6	6		BGR ✓
950114	04	03 01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02	49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01	36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12	22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14	51 52.253	S1	380	600	140	8.2	3.8	11	39 ✓

Date: Sep 13 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

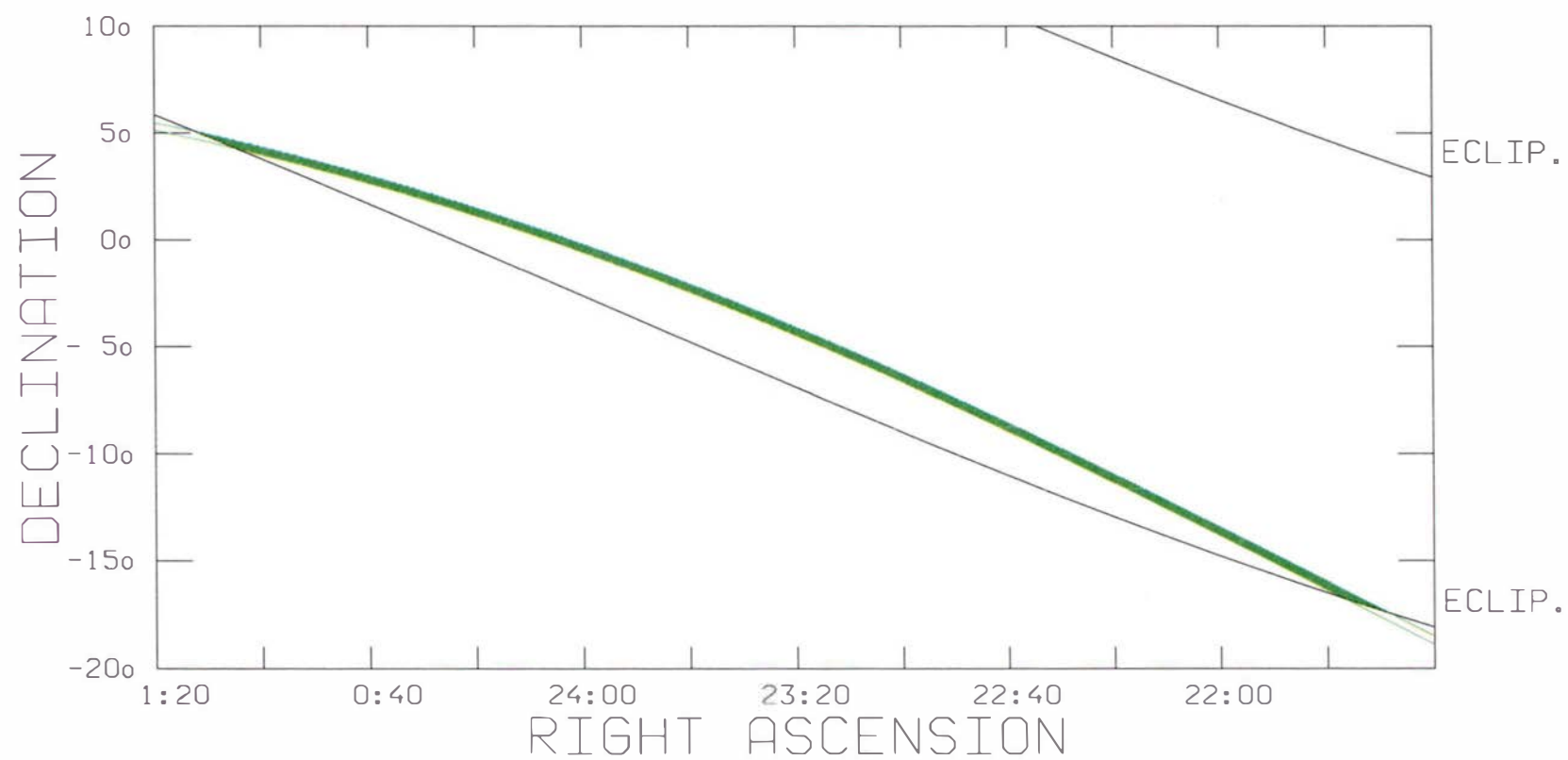
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

2. BATSE Data

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

3. PVO Data

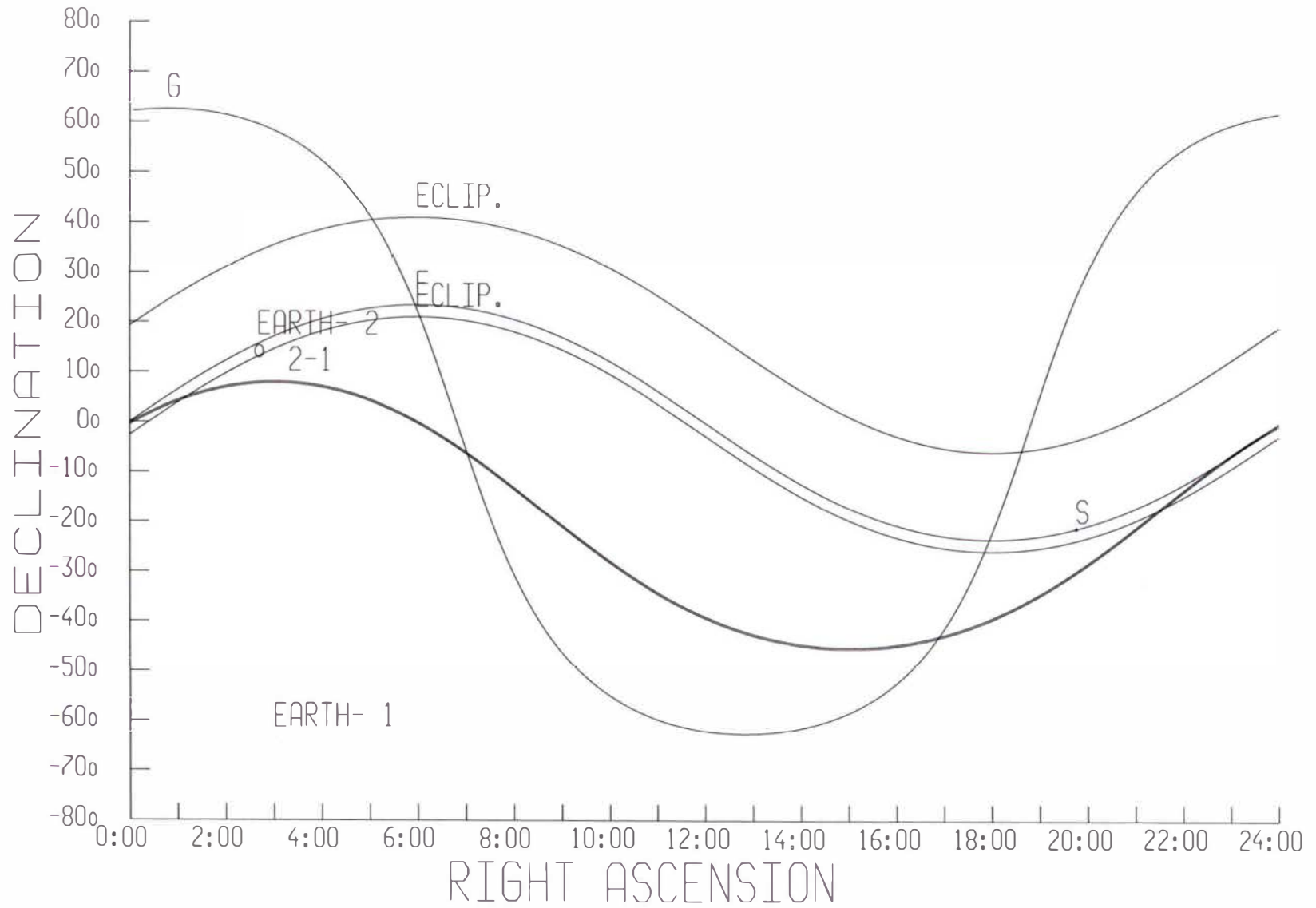
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?



EVENT OF JAN 15, 1996 12:57

13/09/2011

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



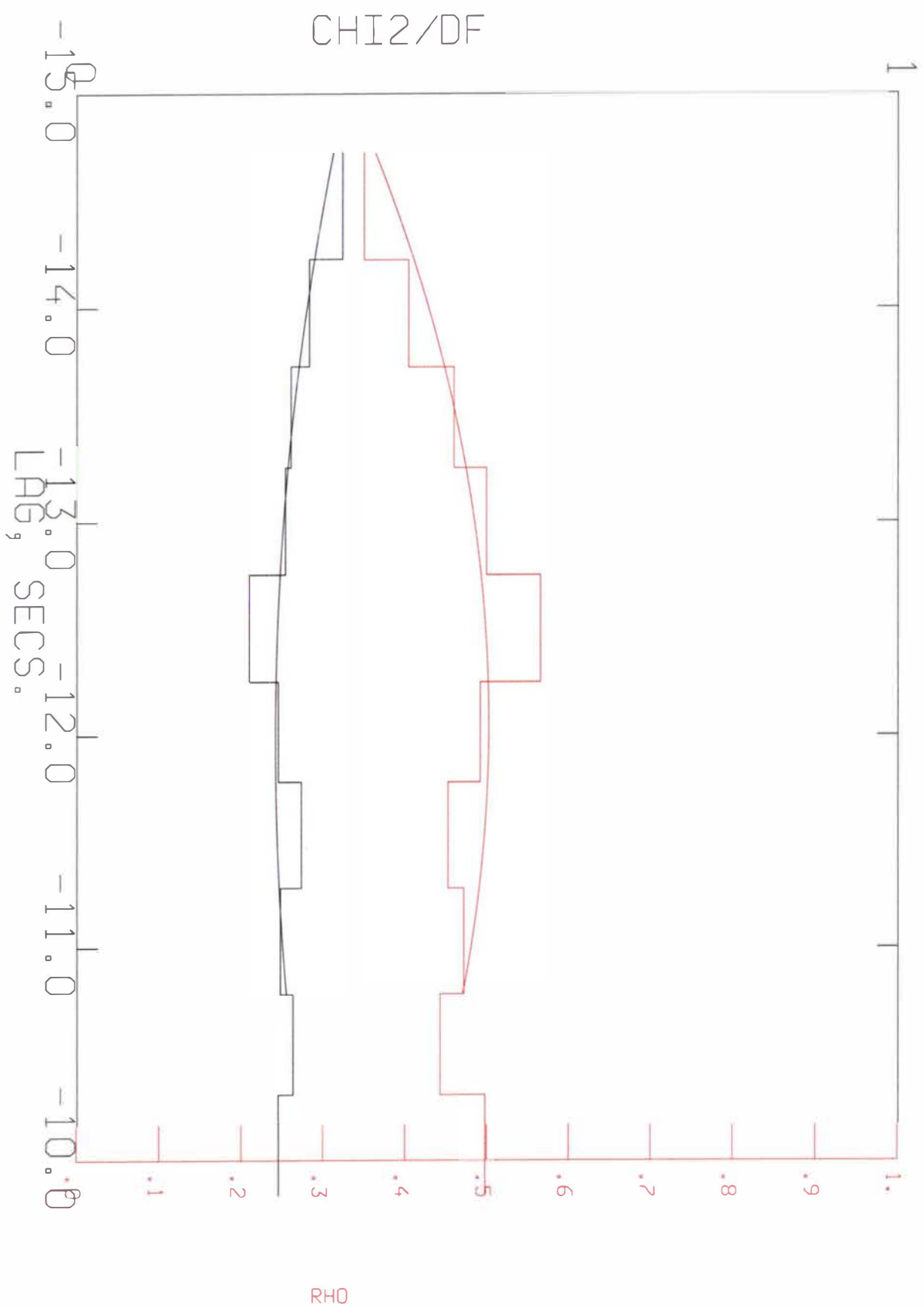
KONUS

-ULYSSES RT CORRELATION

15/01/96

46161.902

13/ 9/11



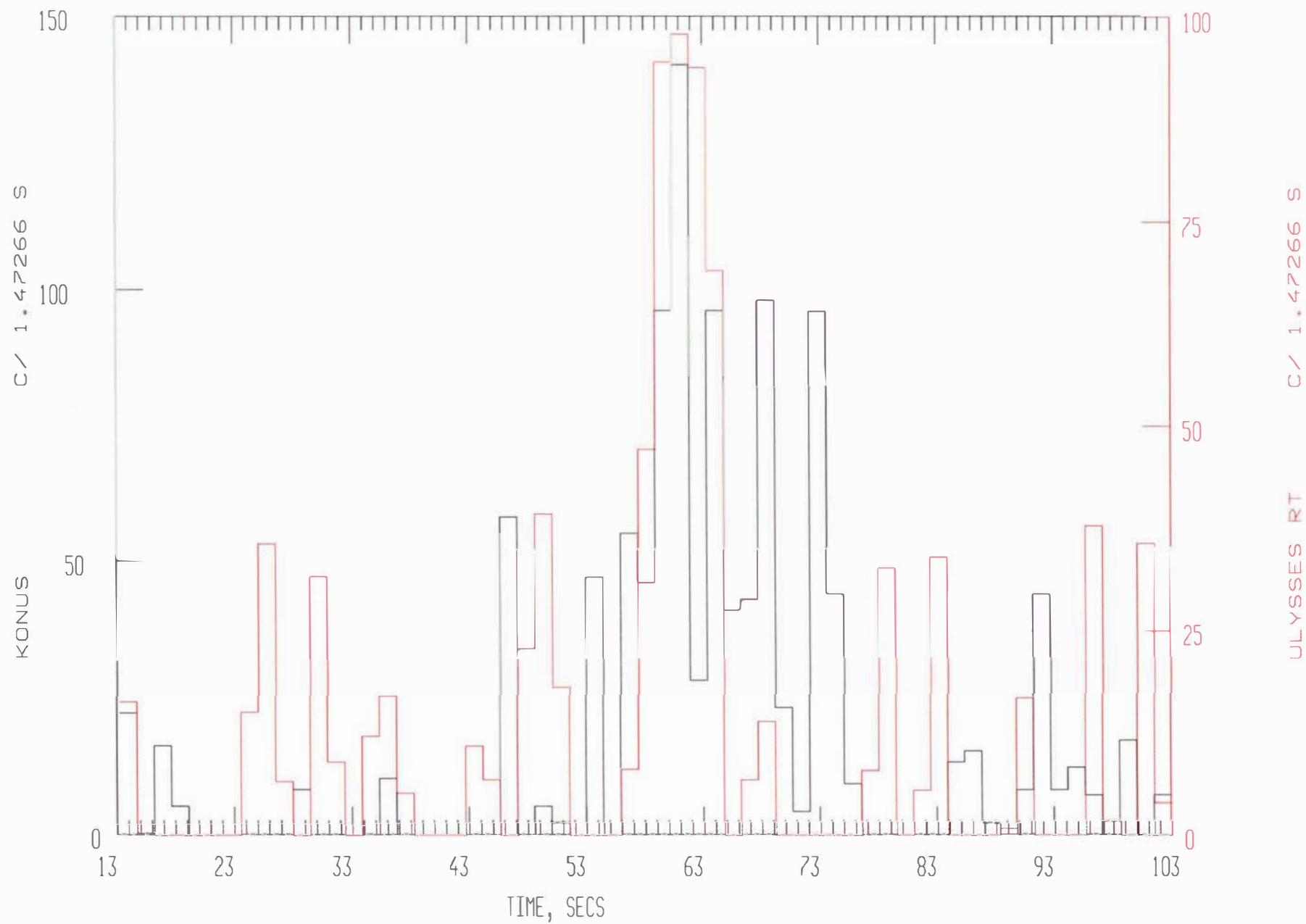
KONUS

-ULYSSES RT CORRELATION

15/01/96

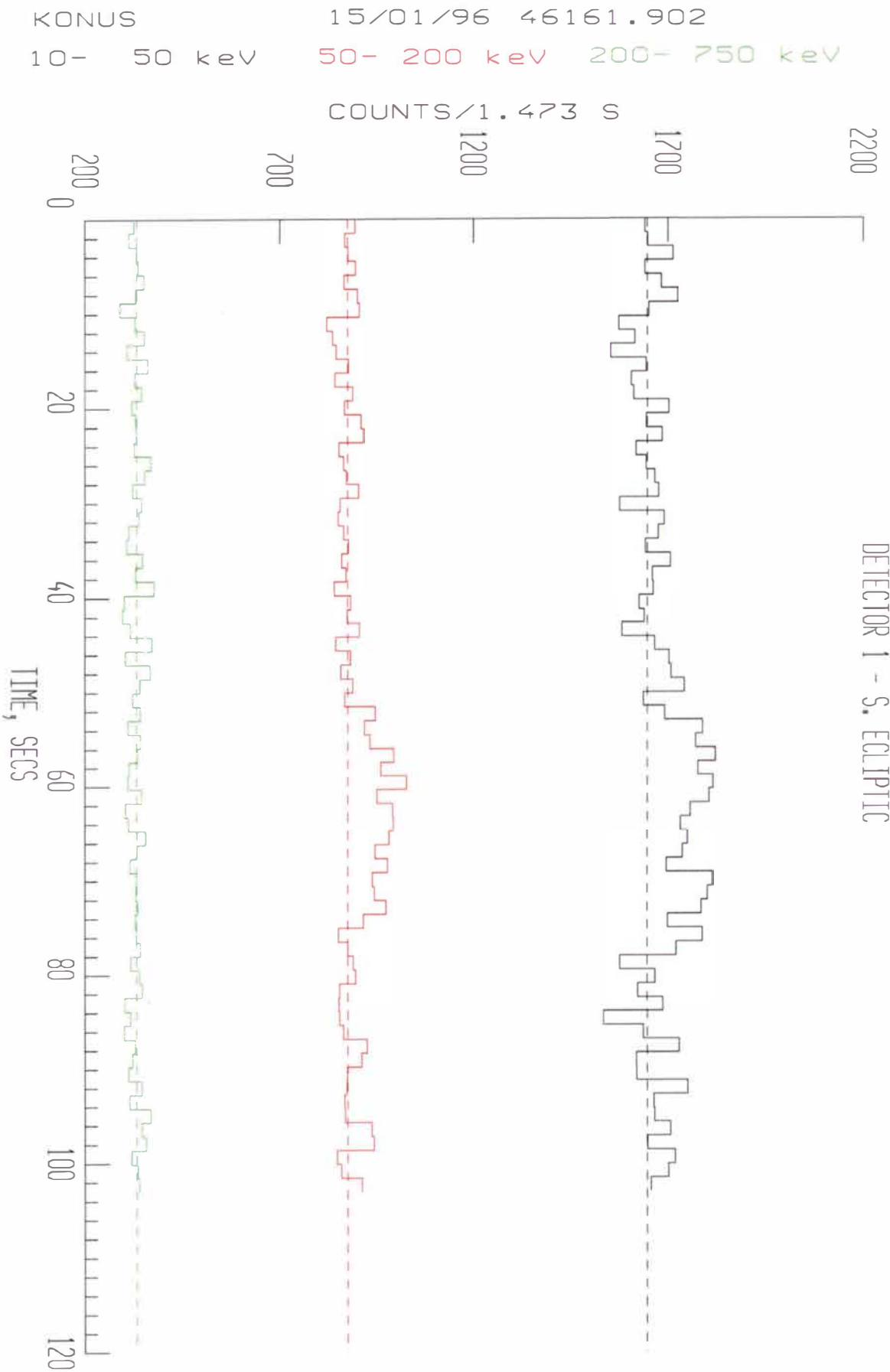
46161.902

13/ 9/11

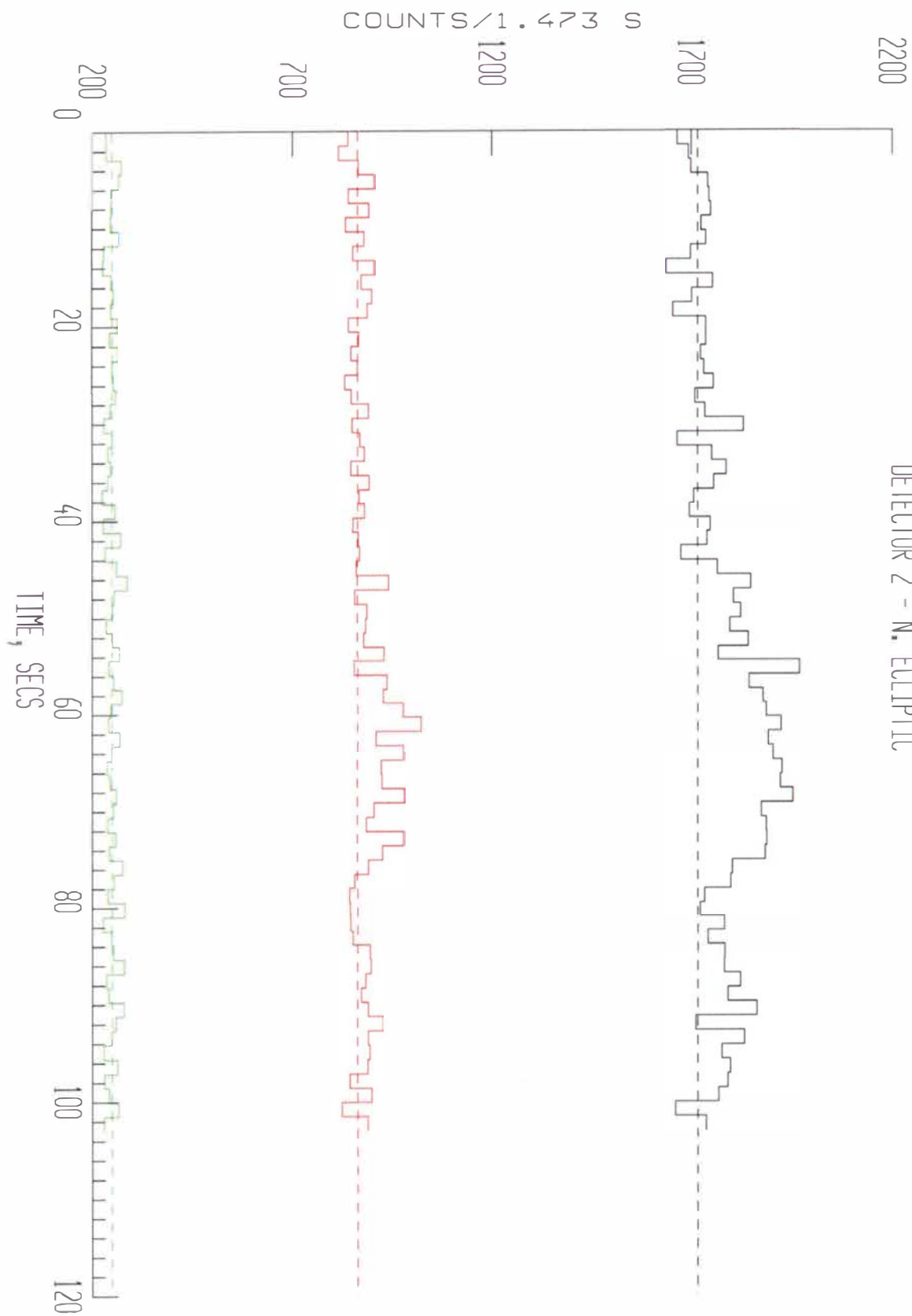


13/09/2011

DETECTOR 1 - S. ECLIPSE



KONUS 15/01/96 46161.902
10- 50 keV 50- 200 keV 200- 750 keV



KONUS 19960115 46670

ULYSSES RT

12 / 09 / 11

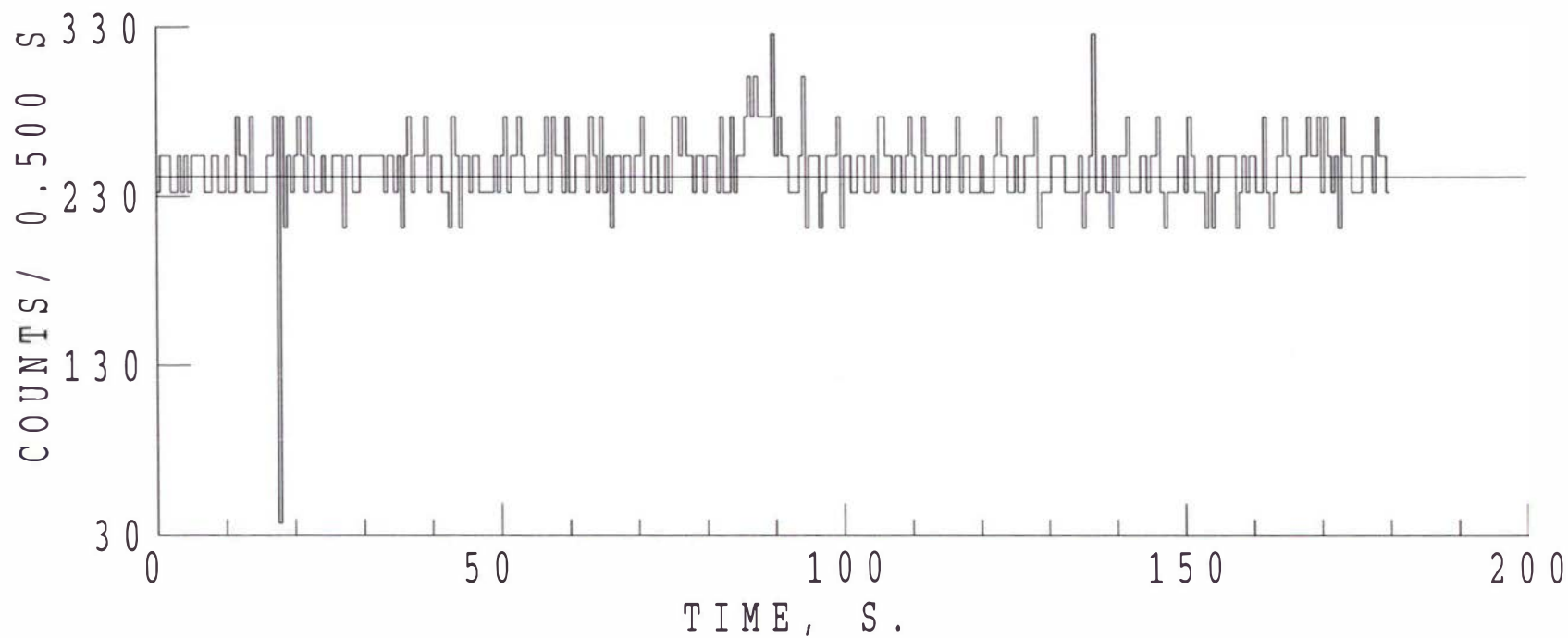
15 / 01 / 96 46584.020 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS



N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



K O N U S

2 2 / 2 / 9 6

U L Y S S E S R T

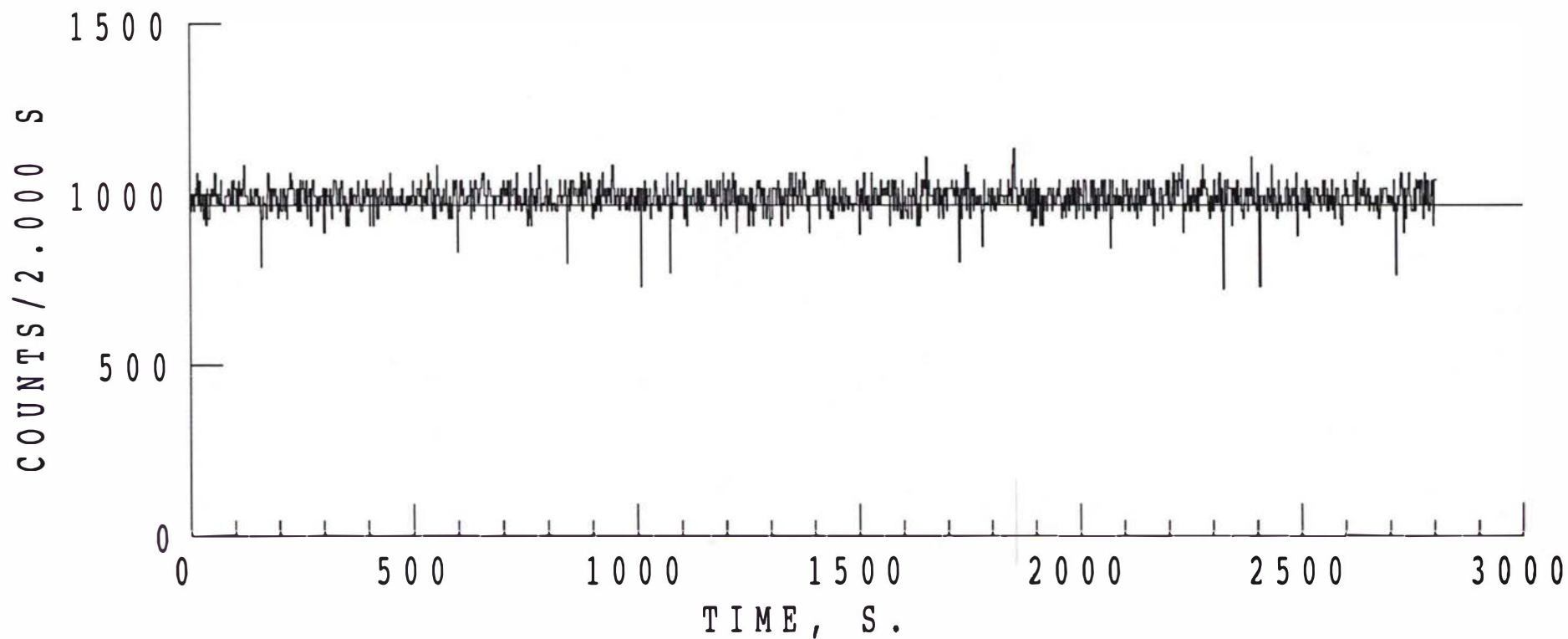
1 5 / 1 / 9 6 4 4 8 2 0 . 4 9 6 s

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



BATSE BURST TRIGGER

NO.: 4376

TIME: TJD=0097 SECONDS=1746

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4377

TIME: TJD=0097 SECONDS=4629

TYPE: SAA ENT

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

SAA ENTRY

BATSE BURST TRIGGER

NO.: 4378

TIME: TJD=0097 SECONDS=6116

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4379

TIME: TJD=0097 SECONDS=11979

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4380

TIME: TJD=0097 SECONDS=18699

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4381

TIME: TJD=0097 SECONDS=24266

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4382

TIME: TJD=0097 SECONDS=28410

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4383

TIME: TJD=0097 SECONDS=31039

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4384

TIME: TJD=0097 SECONDS=41070

H

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4385

TIME: TJD=0097 SECONDS=44009

TYPE: ELECTRO

SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

ELECTRON EVENT

BATSE BURST TRIGGER

NO.: 4386

TIME: TJD=0097 SECONDS=53370

I

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4387

TIME: TJD=0097 SECONDS=57546

J

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

BATSE BURSTER

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 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)>

Timing problem

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

From DEAL@fender.msfc.nasa.gov Thu Jan 18 09:28 PST 1996
From: DEAL@fender.msfc.nasa.gov
Date: Thu, 18 Jan 1996 11:28:28 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4388

BATSEARCH PROGRAM

BATSE BURST # 4388
EVENT OF 1996 JAN 15 DAY OF YEAR= 15
EVENT CROSSING TIME AT BATSE : 62492. S. OR 17:21:32.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 229.000 17.000
BATSE PEAK COUNTING RATE: 1900 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 15/ 1/ 96 IS:
RA= 225.016 DEC= 63.834 DIST= 2.805 AU
BATSE-ULYSSES DISTANCE = 419617274. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=133.09 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -956.13 SECS.
CROSSING TIME AT ULYSSES IS 61536. S. OR 17:05:35 +/- 212.96 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 15/ 1/ 96 IS:
RA= 307.770 DEC= -20.042 DIST= 2.343 AU
MARS-BATSE DISTANCE = 350548352. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 94.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -87.42 SECS.
CROSSING TIME AT MARS IS 62405. S. OR 17:20:04 +/- 201.11 SECONDS

BATSE BURST TRIGGER

NO.: 4388

TIME: TJD=0097 SECONDS=62492

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=117.4 AZIMUTH=66.2 ERROR=4.8 DEGREES

COMMENTS:

BURST LASTING ~ 80 S. NOT VISIBLE ABOVE 300 KEV. A CYGX-1 OCCULTATION STEP
FOLLOWS THE BURST.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4388	960115	10097	62492	1900	229	+17	80

1 8 / 1 / 9 6

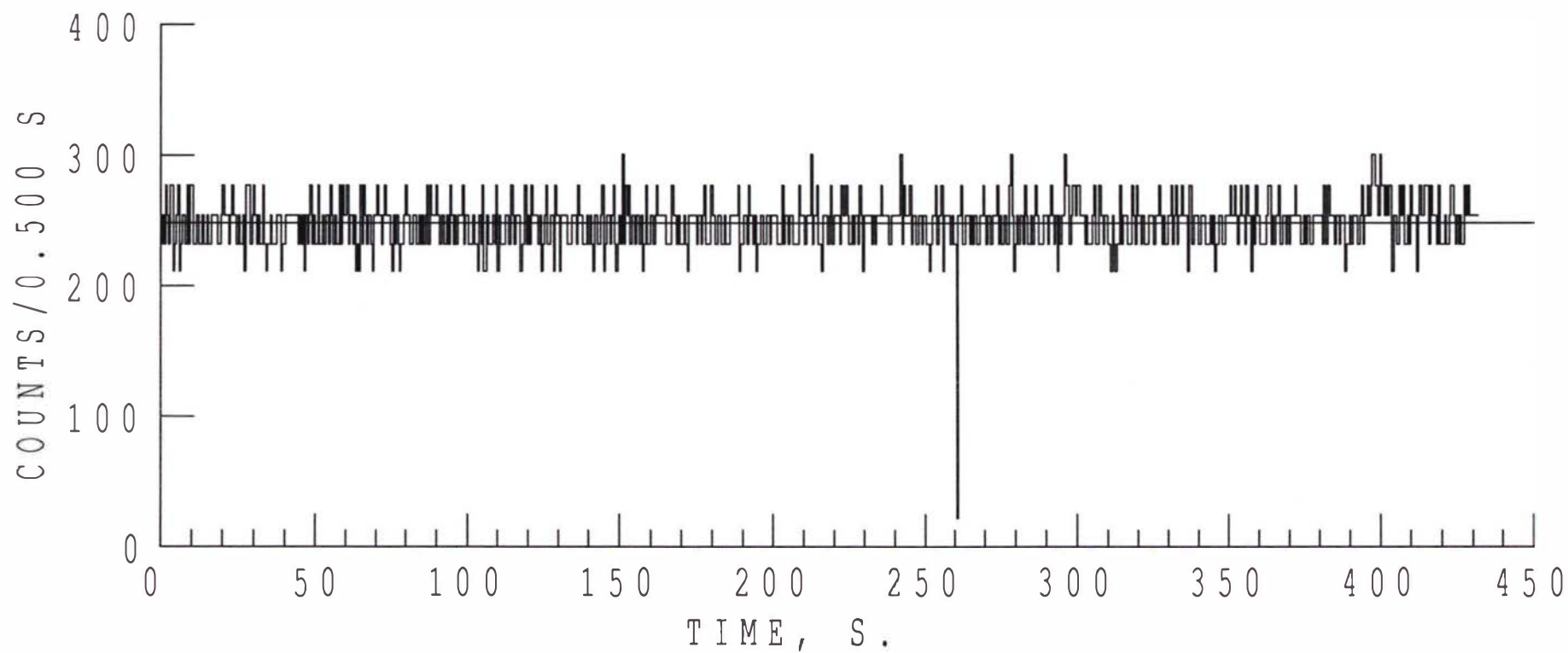
U L Y S S E S R T

1 5 / 1 / 9 6 6 1 3 0 8 . 2 3 8 s

0 - 0 k e V

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



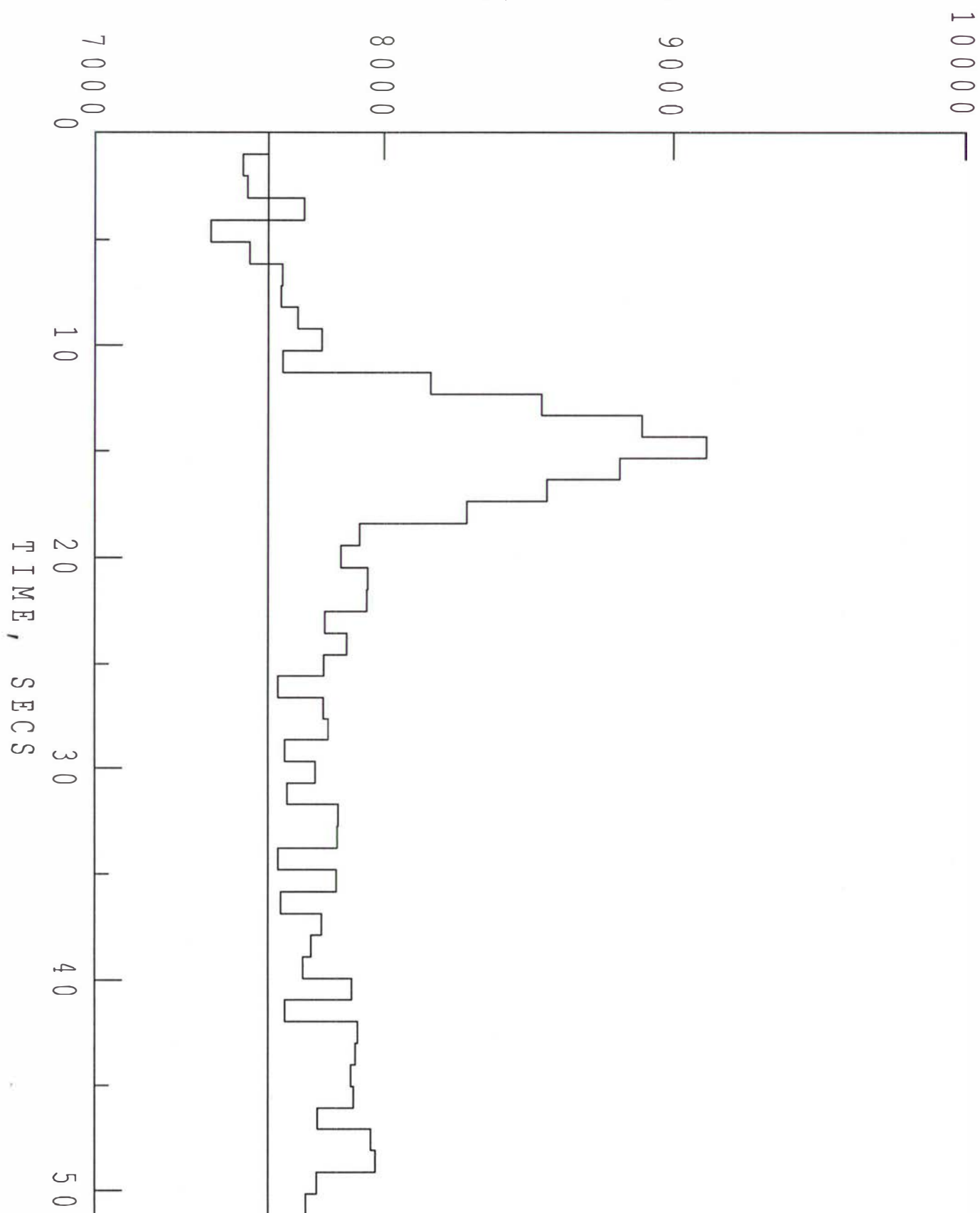
BACODINE

29/01/96

55448.265

25 - 100 keV

COUNTS/1.024 S



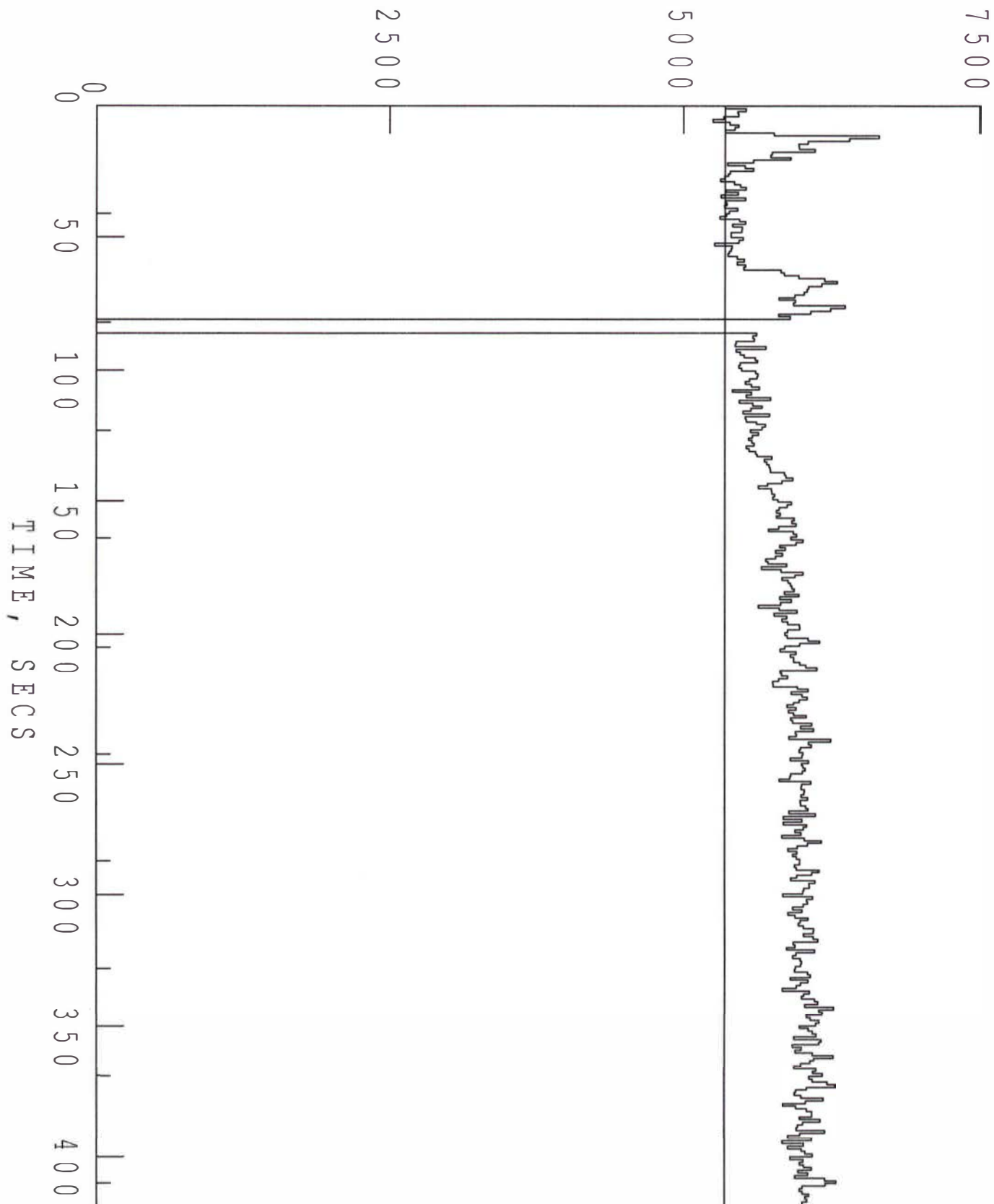
BACODINE

15/01/96

62481.097

25- 100 keV

COUNTS/1.024 S



BATSE BURST TRIGGER

NO.: 4389

TIME: TJD=0097 SECONDS=67740

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4390

TIME: TJD=0097 SECONDS=75891

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4391

TIME: TJD=0097 SECONDS=79750

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

BATSE BURST TRIGGER

NO.: 4392

TIME: TJD=0097 SECONDS=85127

TYPE: TRANSIE

SOLAR FLARE TRIGGER SIGNAL:N

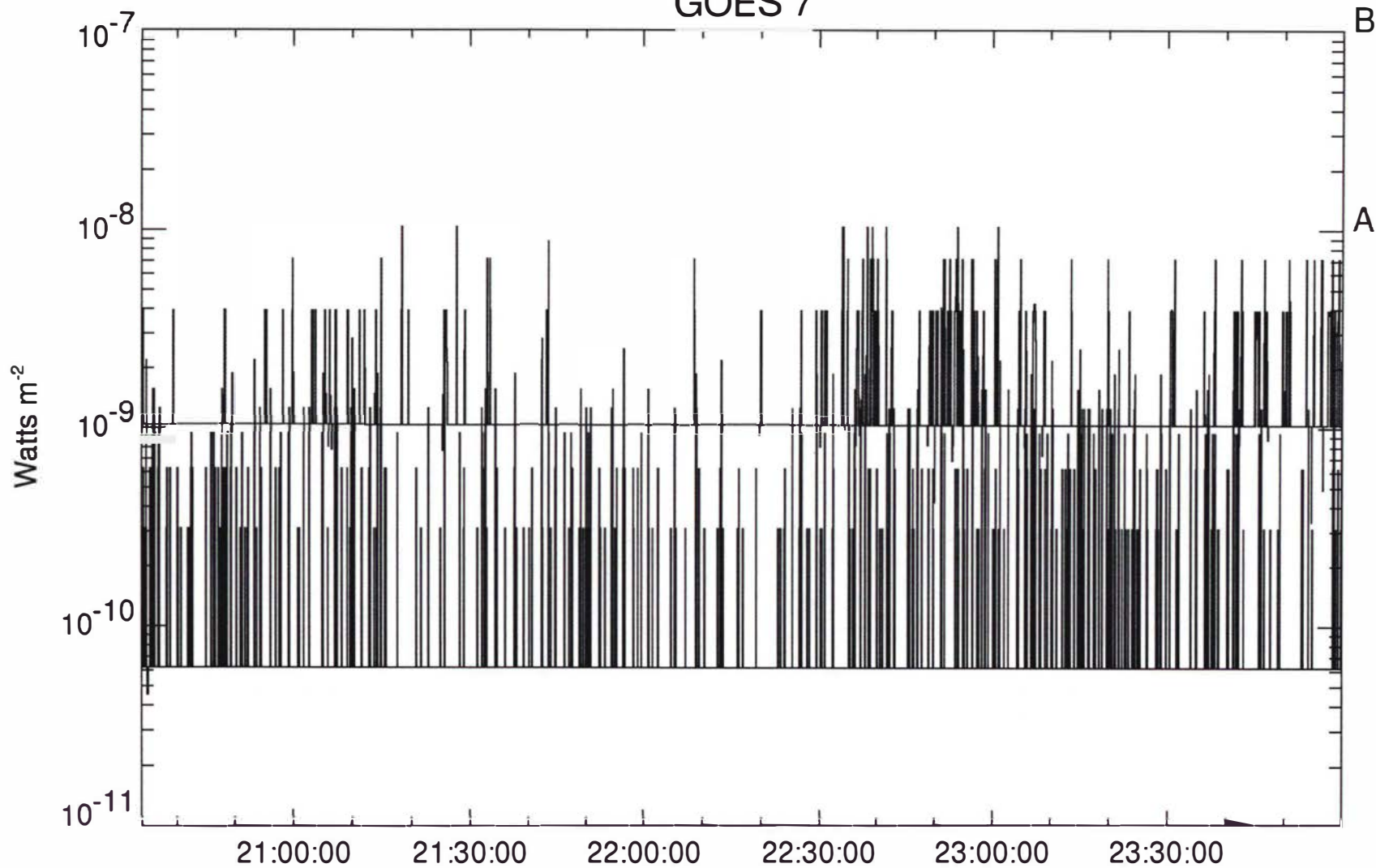
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
BATSE BURSTER

GOES 7



Data Start: 96/01/15, 2033:55

Plot created: 96/01/17, 0655

Channel

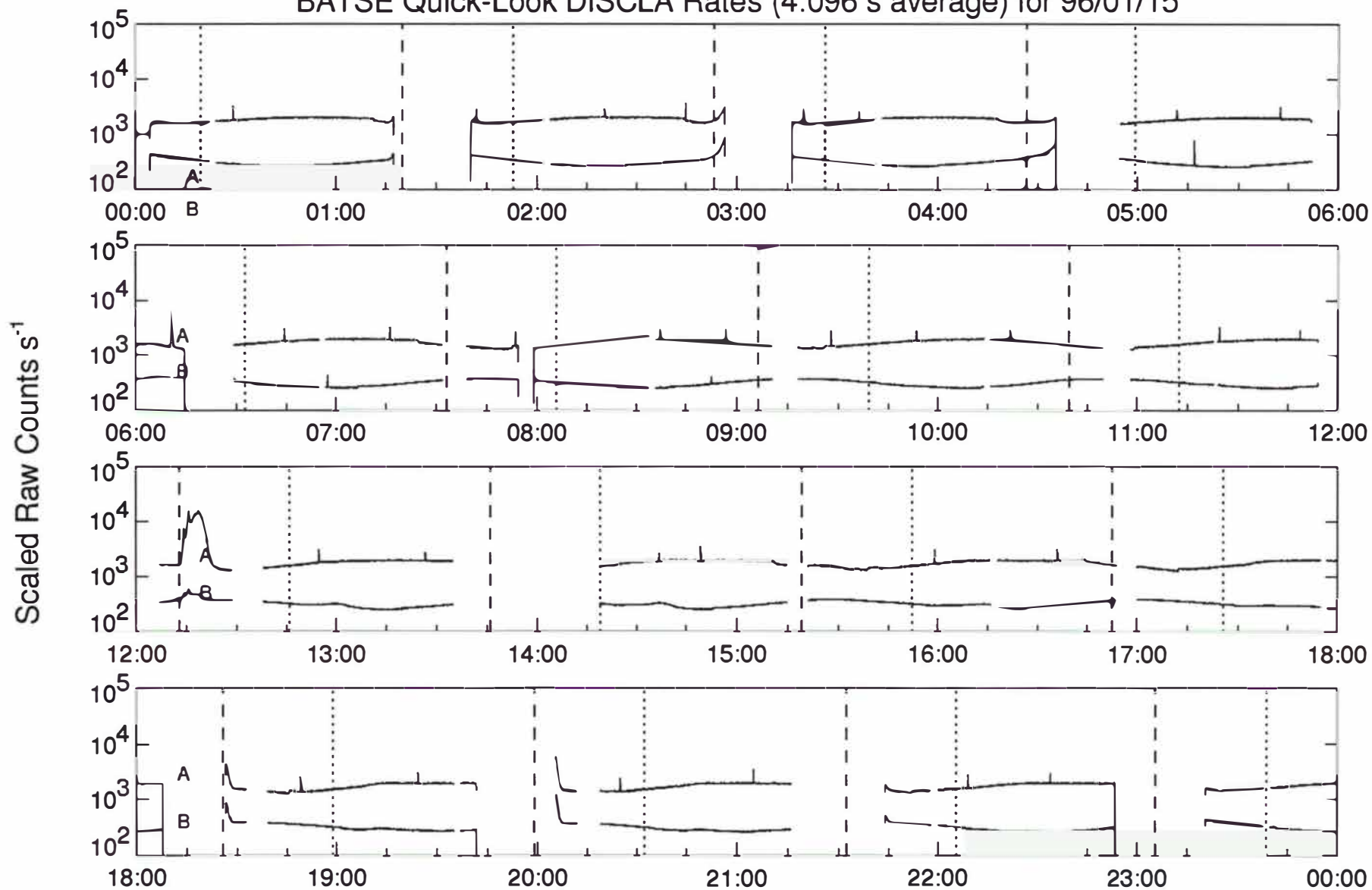
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/15



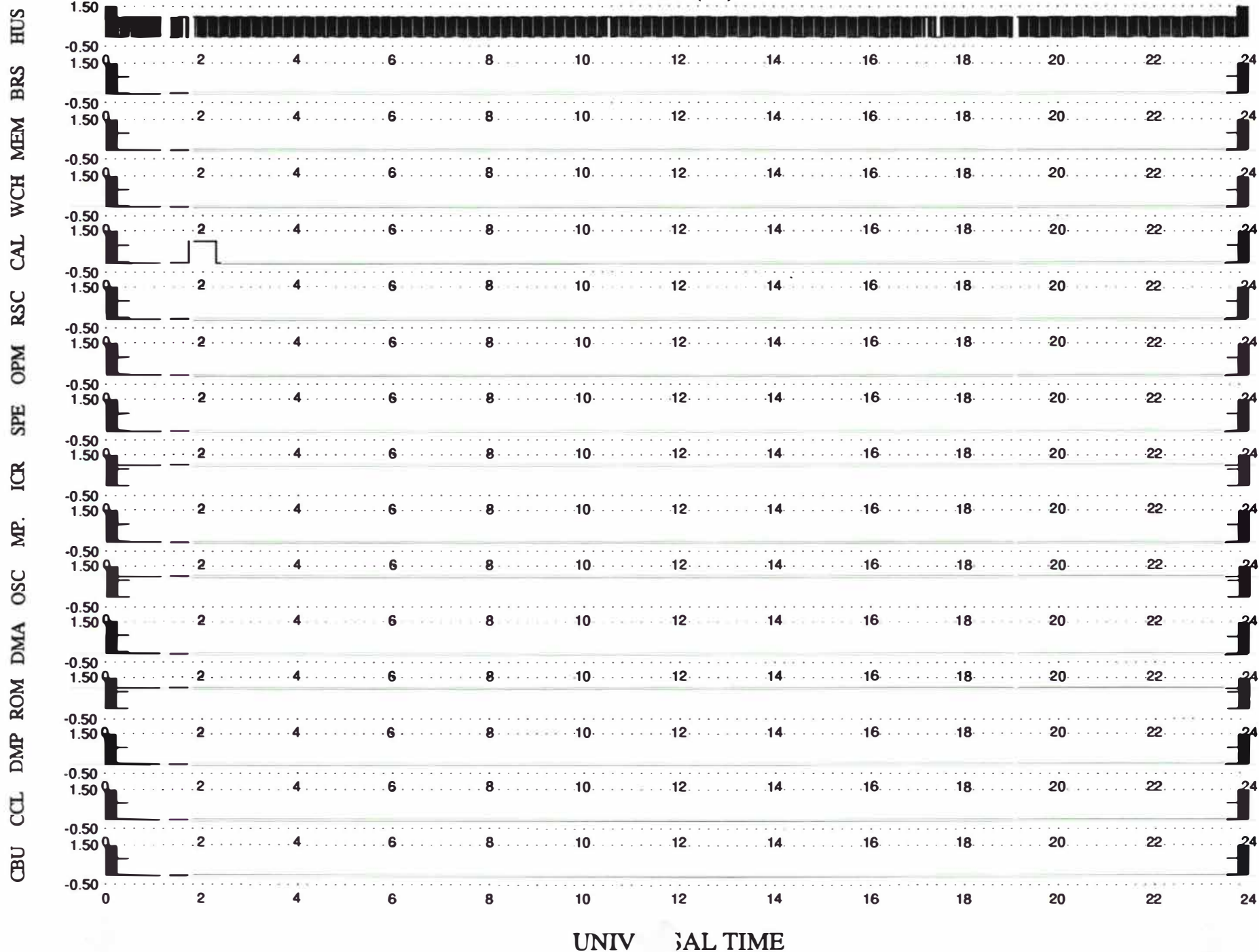
Current Time: 96/01/17, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

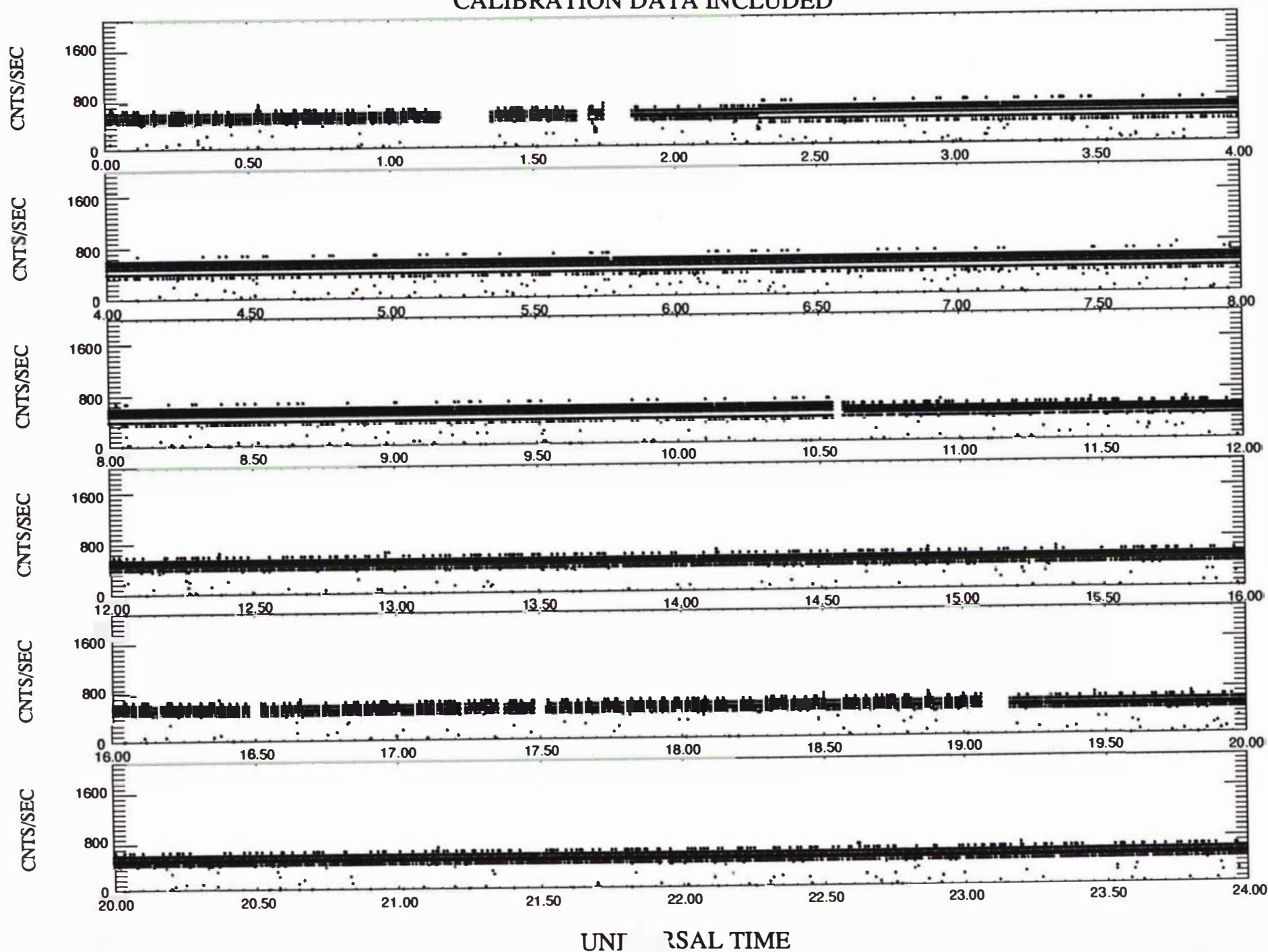
HUS MODES EDR day 15, year 1996 to day 15, year 1996 NO BURST (10)

4/1/96



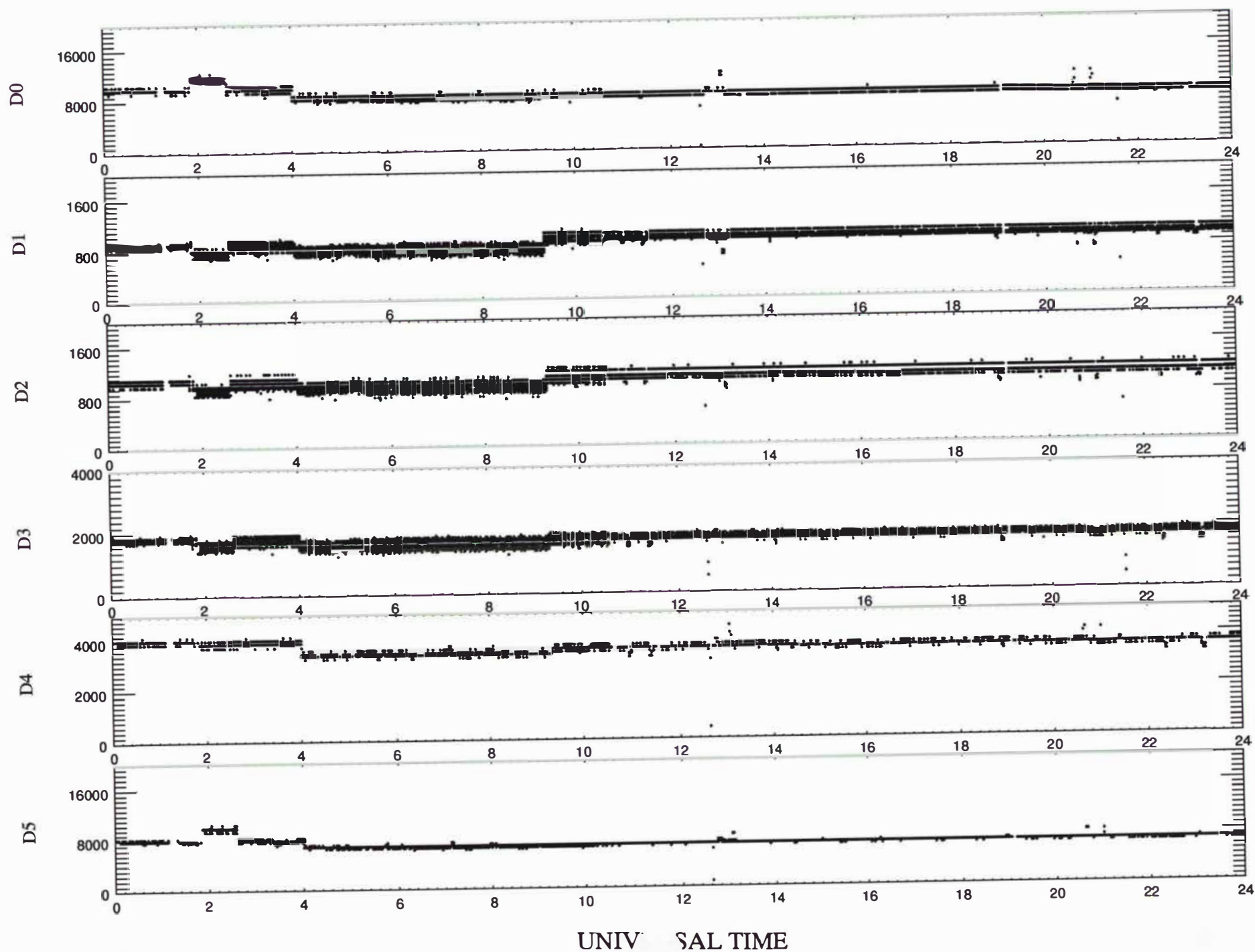
HUS 2A, MODE 1, NOT AVERAGED EDR day 15, year 1996 to day 15, year 1996
CALIBRATION DATA INCLUDED

4/1/96



HUS 2B COUNTS / SEC QEDR day 15, year 1996 to day 15, year 1996

1/17/96



951025	23	40	39.738	S1	190	400	120	1.7	3	60	167	✓
951102	01	58	05.879	S2	260	320	50	<0.1	100	3	168	✓
951102	05	53	29.015	S2	700	1560	600	0.1	5	18	169	✓
951102	07	58	13	S1	320	80		4	6		BGR	✓
951105	00	29	05	S2	40	50		0.6	40		BGR	✓
951105	01	37	48.077	S2	140	340	80	0.6	2	22	170	✓
951105	13	00	27.808	S1	160	380	120	9	2	9	171	✓
951107	07	34	58	S1	20	50	20	2	90		BGR	✓
951111	09	42	40	S1	80	160	20	1.1	15		BGR	✓
951112	18	28	15.244	S2	540	690	220	0.2	14	84	172	✓
951113	23	25	58.872	S1	260	330	260	4.4	1	15	173	✓
951115	10	48	49	S1	70	180	80	3	12		BGR	✓
951117	02	48	43.762	S2	650	530	120	0.1	9	10	175	✓
951118	22	56	00	S2	20	90	100	0.15	6		BGR	✓
951119	08	17	11.402	S1	200	420	110	3	1.5	12	176	✓
951119	12	54	17.519	S1	110	220	340	1.7	3	4	177	✓
951119	16	30	48	S2	30	40	10	0.4	110		BGR	✓
951121	06	11	20	S1	20	70	10	2	45		BGR	✓
951122	02	44	01.380	S2	770	920		0.15	0.5	1.5	179	✓
951122	04	45	07.738	S1	280	430	160	12	35	22	180	✓
951123	18	10	08	S1	30	60	30	1	30		BGR	✓
951124	05	54	26	S2	50	140	50	0.15	30		BGR	✓
951124	06	58	52	S2	30	100		0.25	280		BGR	✓
951202	10	51	41.744	S1	200	500	220	2.4	2	25	195	✓
951203	01	06	28.180	S2	260	720	420	0.85	1	16	196	✓
951208	05	26	57.151	S2	320	740	190	<0.04	1	3.5	197	✓
951208	10	57	32.057	S1	290	260		7	52	6.5	198	✓
951208	11	47	47.634	S1	240	510	190	10	23	98	199	✓
951208	23	24	12	S1	100	90		>10	30		BGR	✓
951209	08	42	29.607	S1	150	450	160	6	6	14	200	✓
951213	04	57	29.683	S2	360	940	330	0.4	2	8	201	✓
951213	09	04	34	S2	300	90		<0.15	4.5		BGR	✓
951214	01	29	47	S2	15	100	30	1	30		BGR	✓
951214	02	24	17.847	S2	200	450	150	0.8	4	6	202	✓
951215	20	23	45	S2	60	70	15	<0.15	60		BGR	✓
951216	22	39	42	S2	160	110		0.1	6		BGR	✓
951218	07	59	48	S1	70	130	30	2.3	22		BGR	✓
951219	16	51	19.732	S2	430	850	920	<0.03	1	54	203	✓
951220	08	51	23.560	S2	100	320	180	1	2	8	204	✓
951221	08	23	18	S1	110	150	70	>15	15		BGR	✓
951222	21	00	21	S2	280			<0.1	16		BGR	✓
951225	09	14	16	S2	200			<0.3	50		BGR	✓
951225	09	34	14	S1	500	150	25	2.2	60		BGR	✓
951225	15	21	35	S2	210	170	40	0.1	100		BGR	✓
951225	22	51	08	S1	80	150	50	2.4	40		BGR	✓
951226	08	38	15	S2	60	100	50	0.15	9		BGR	✓
951227	06	23	25.042	S1	420	1200	320	1	1	1.5	218	✓
951227	21	59	20	S1	50	50		3	65		BGR	✓
951228	12	28	42	S2	70	80	40	<0.07	110		BGR	✓
951228	15	47	26	S2	80	170		0.9	17		BGR	✓
951231	05	37	11.668	S2	180	320	150	0.07	9	65	219	✓
951231	21	24	34	S2	100	25		<0.2	20		BGR	✓
960102	03	14	10.996	S1	140	300	80	1	1	0.2	220	✓
960102	20	20	53	S1	200	120	40	>9	25		BGR	✓
960104	03	28	41.062	S2	360	630	230	<0.05	2	28	221	✓
960105	16	04	30	S1	80	60		5	30		BGR	✓
960107	05	23	20	S2	30	100		0.5	230		BGR	✓
960107	19	03	28	S2	30	120	150	<0.1	32		BGR	✓
960109	23	11	31	S2	60	130	20	0.3	5		BGR	✓
960111	12	55	24.530	S2	1130	1280	190	0.2	0.5	6	222	✓
960113	15	33	44.261	S2	500	450	50	0.3	2	36	228	✓
960114	12	15	04.737	S1	4900	7200	1400	1.8	1	60	233	✓
960115	08	52	36.506	S1	380	360	60	10	1	7	234	✓
960115	12	50	15	S2	120	60		0.7	22		BGR	✓
960116	02	02	18	S2	140	170		0.15	17		BGR	✓
960117	15	56	11.341	S1	250	360	30	4	5	20	235	✓

RT

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

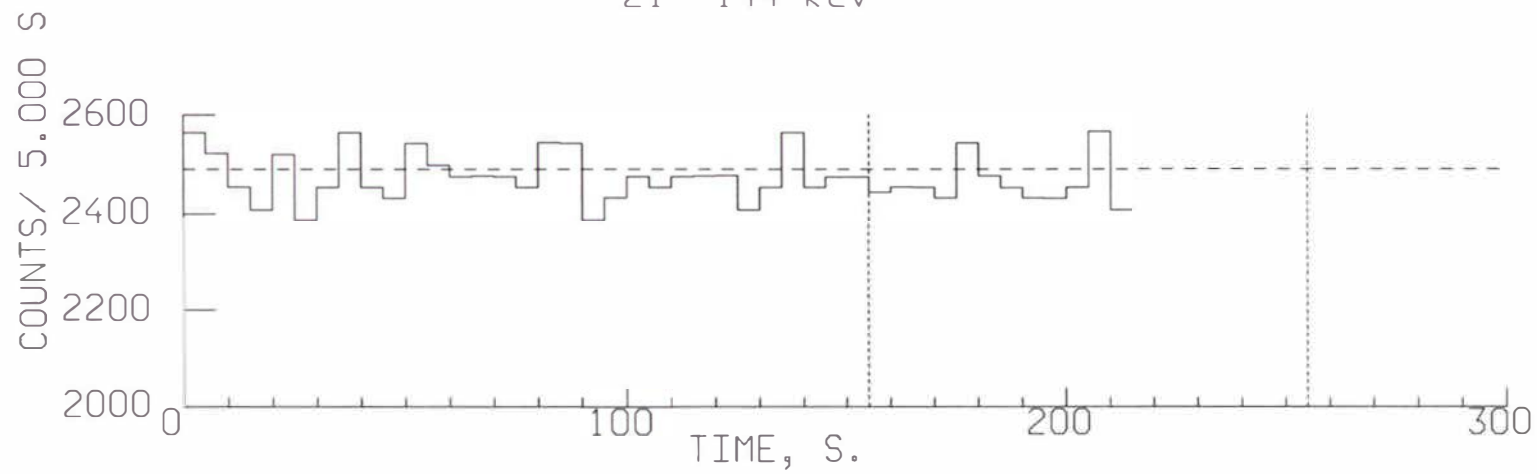
Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number	
			Max counts per sec							
			G1	G2	G3	in G2	T<T0	T>T0		
941113	12 09 15	S1	145	85		2.5	115		BGR ✓	
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓	
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓	
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓	
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓	
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 ✓	
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓	
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓	
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓	
941126	16 54 20	S1	55	75		>10	26		BGR ✓	
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9 ✓	
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓	
941127	15 39 10	S1	210	57		2.7	260		BGR ✓	
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓	
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓	
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓	
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓	
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓	
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol	
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓	
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓	
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓	
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28 ✓	
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓	
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓	
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓	
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓	
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓	
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓	
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓	
950110	06 02 15	S2	332	180		<0.1	3600		BGR ✓	
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 ✓	
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓	
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		BGR ✓	
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓	
950114	01 00 38	S1	46	110		1.6	6		BGR ✓	
950114	04 03 01	S2	23	76		0.5	70		BGR ✓	
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 ✓	
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓	
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓	
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓	
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39 ✓	

ULYSSES RT
16/ 1/96 6084.208 s
0.500 S INTERVALS REGROUPED BY 10
21- 144 keV

13/ 9/11



KONUS 19960116 06190

ULYSSES RT

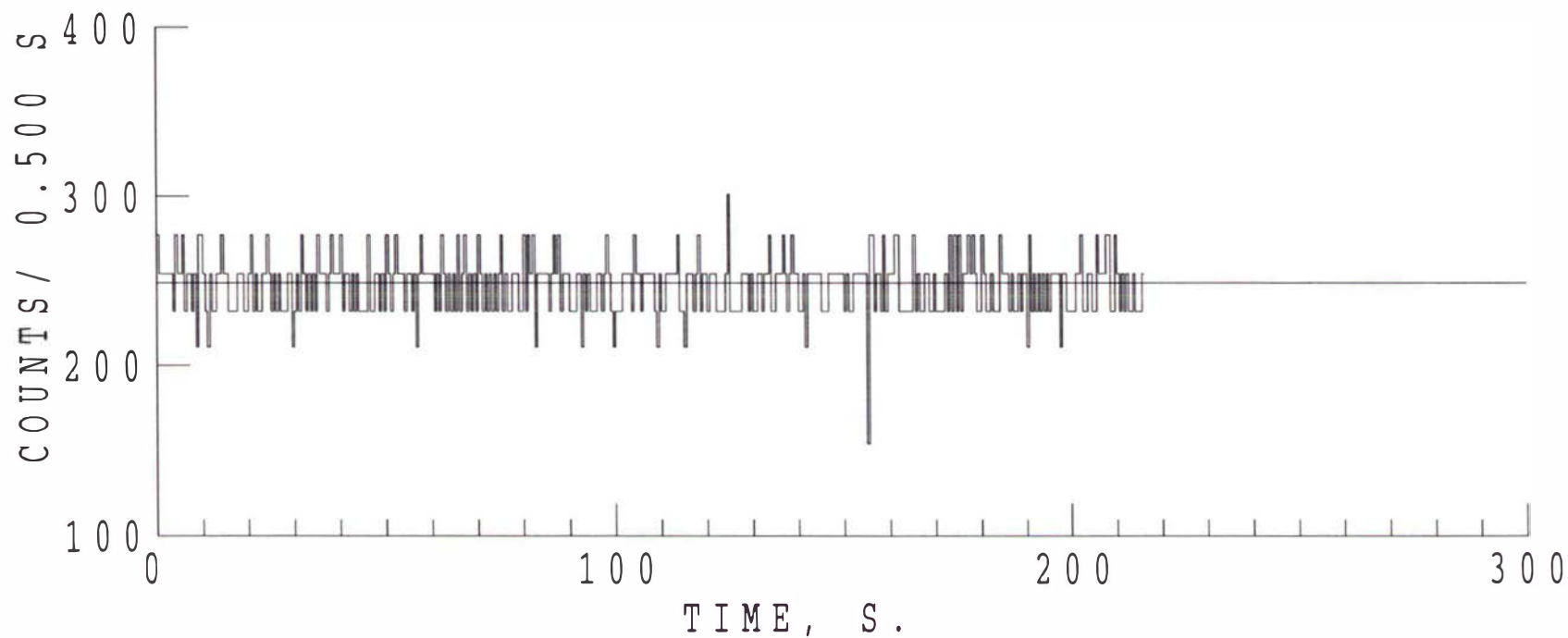
12 / 09 / 11

16 / 01 / 96 6084.208 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



KONUS

22 / 2 / 96

ULYSSES RT

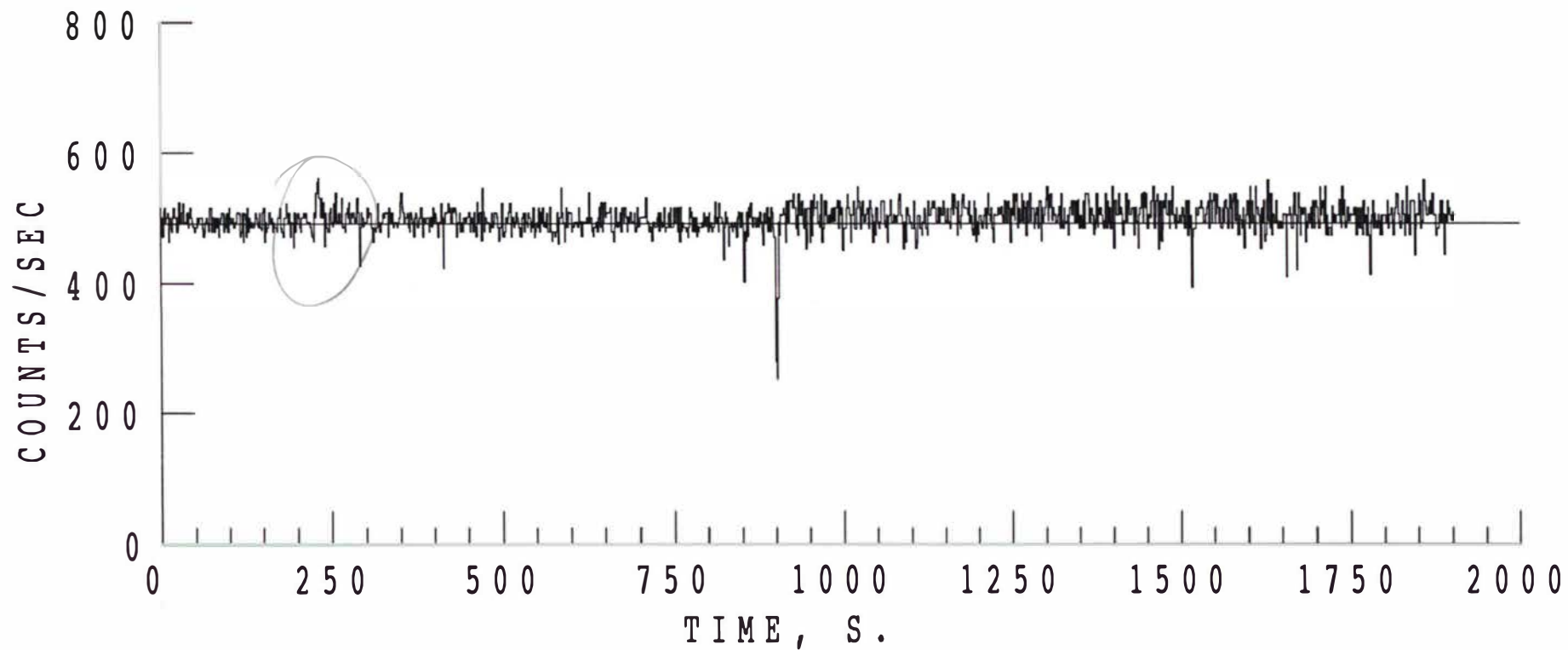
16 / 1 / 96 5940.204 s

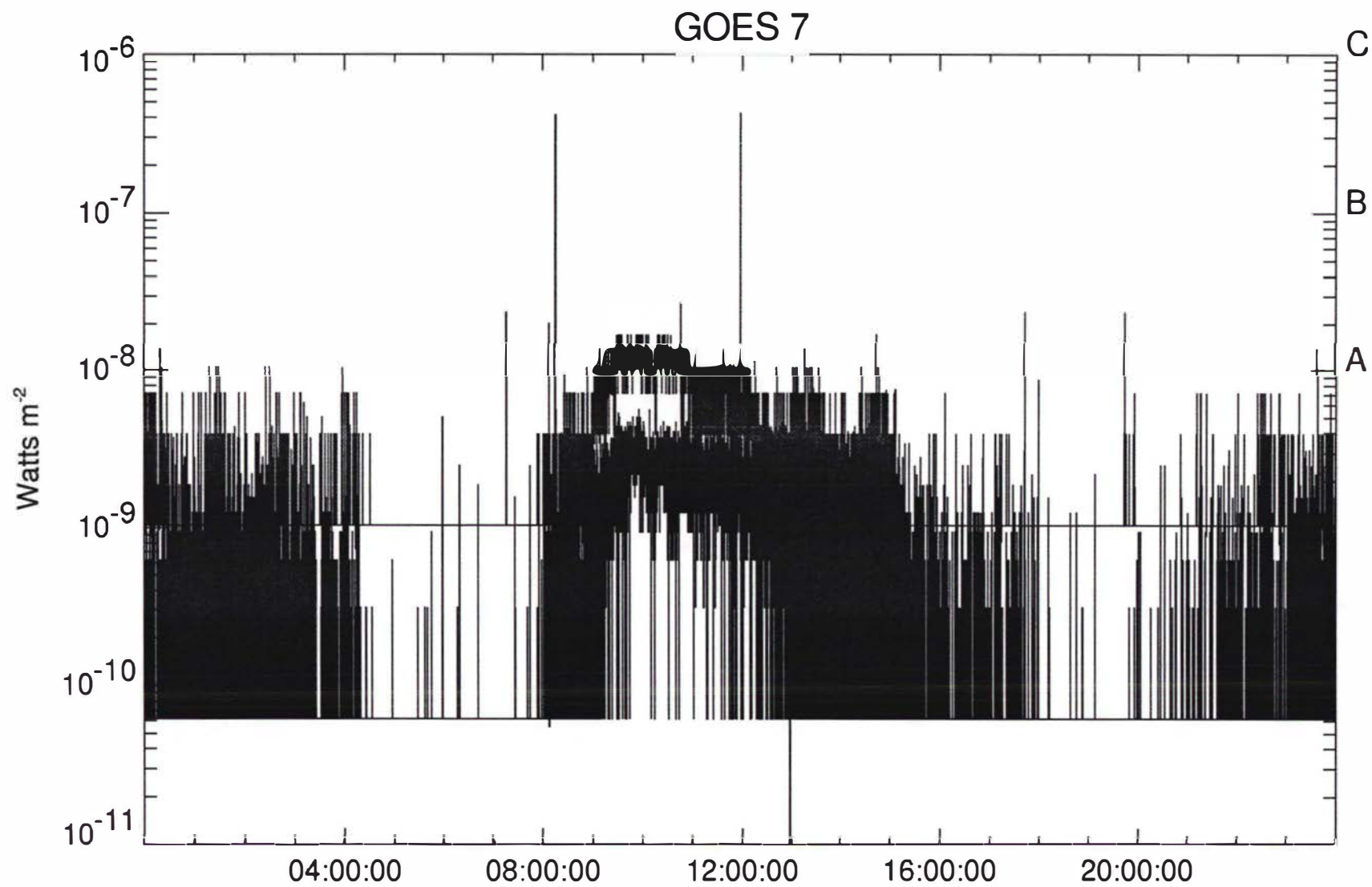
0.250 S INTERVALS REGROUPED BY 6

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





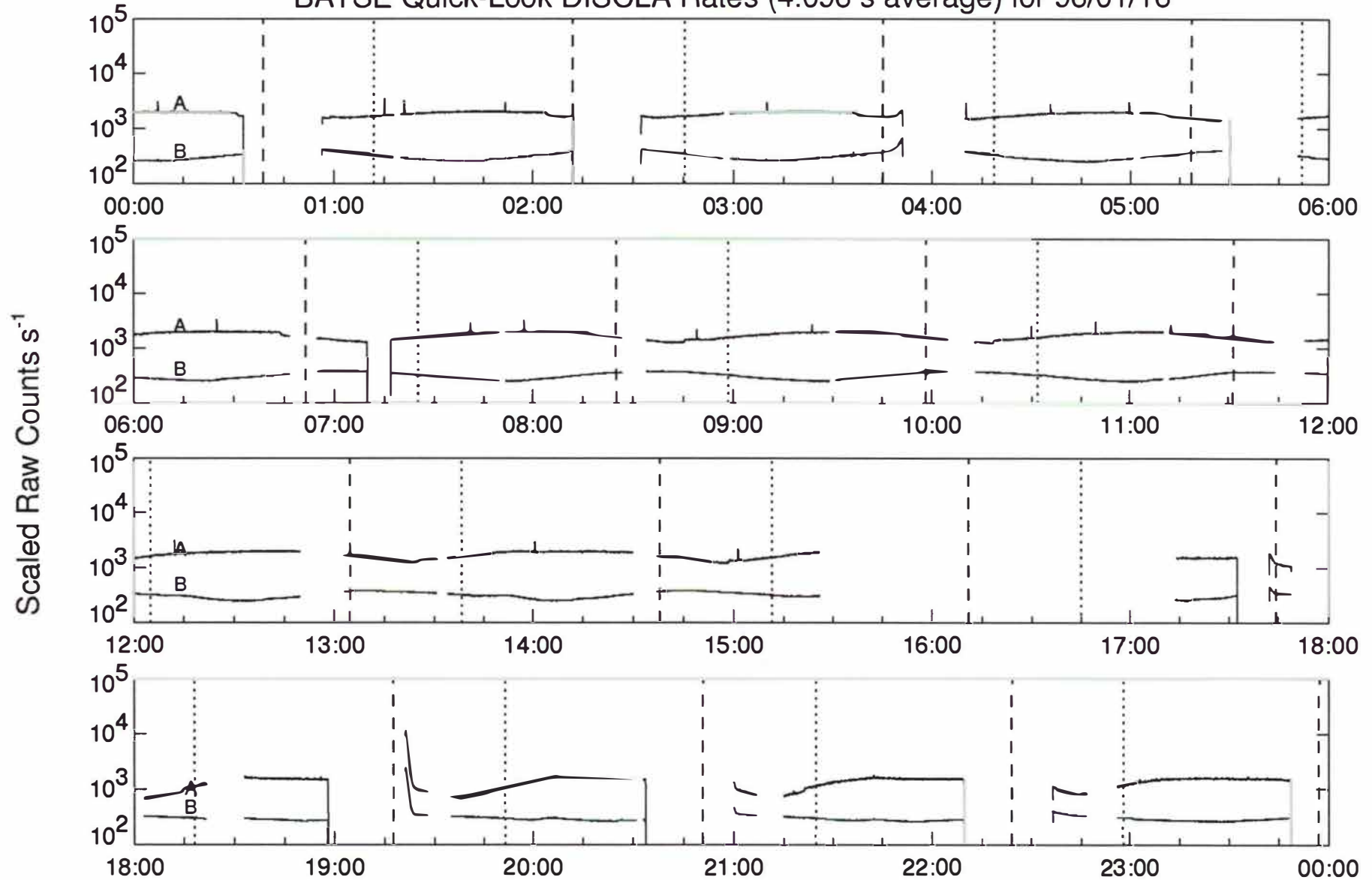
Data Start: 96/01/16, 0000:01

Plot created: 96/01/18, 0655

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 96/01/16



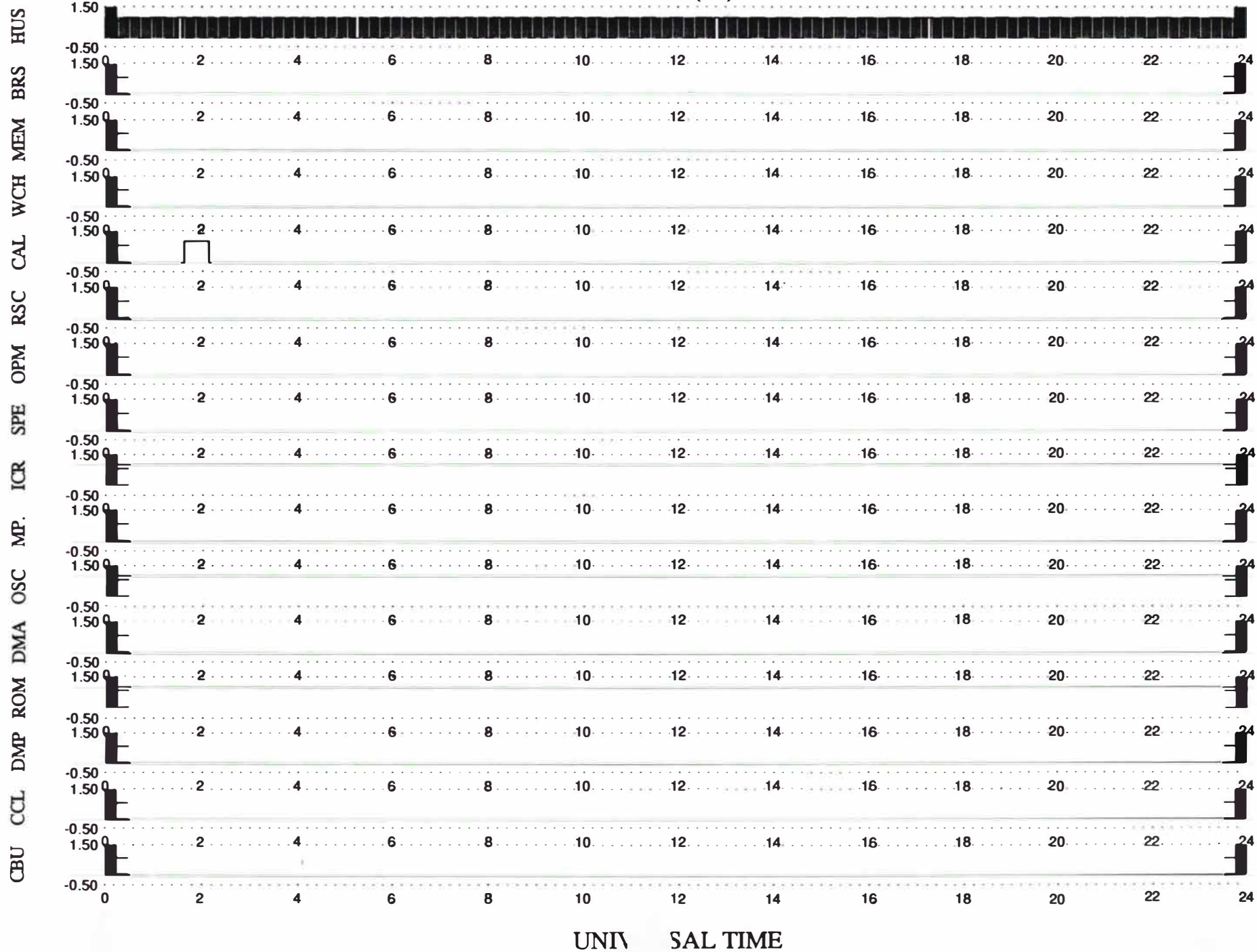
Current Time: 96/01/18, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

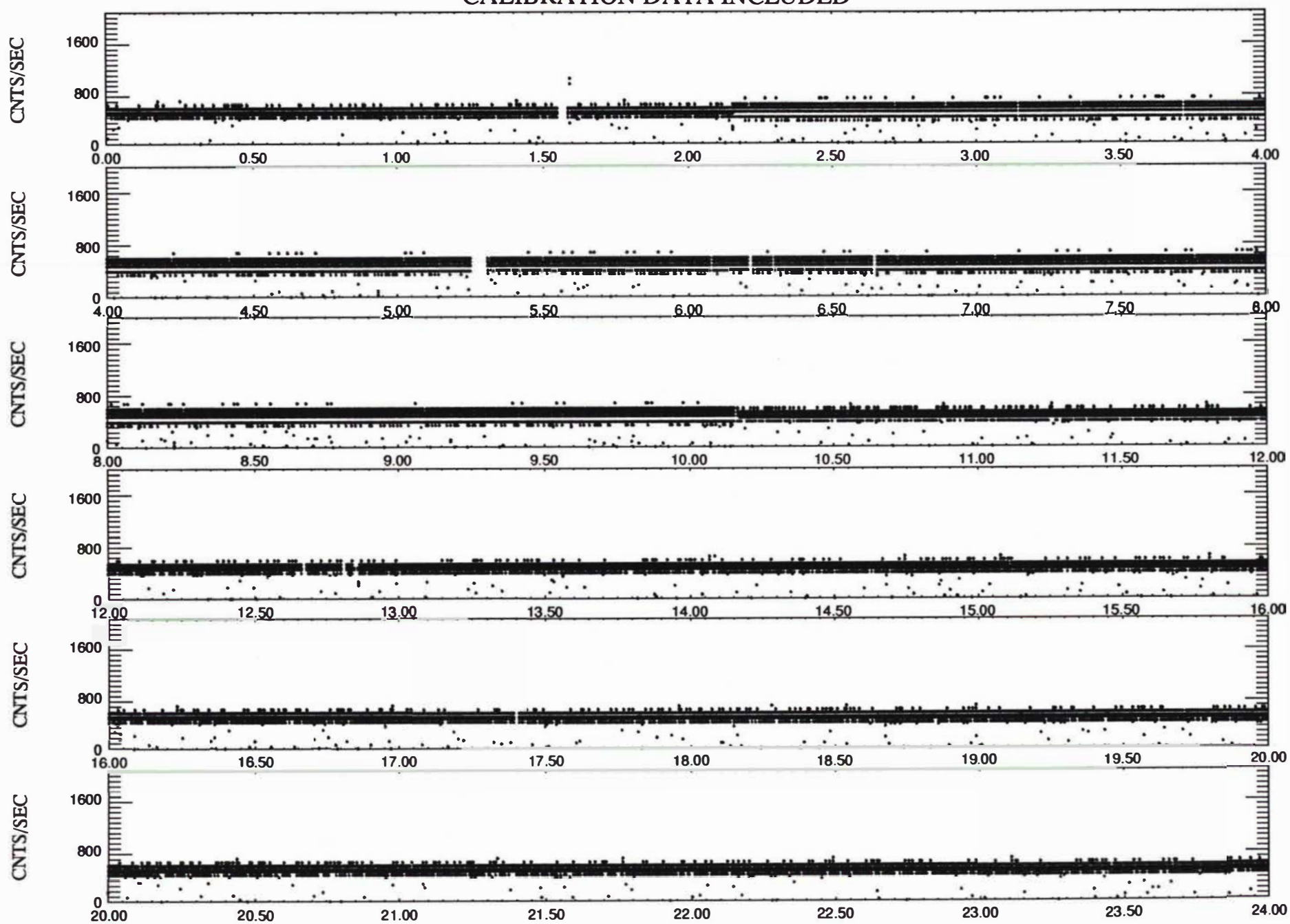
HUS MODES EDR day 16, year 1996 to day 16, year 1996
NO BURST (10)

4/1/96

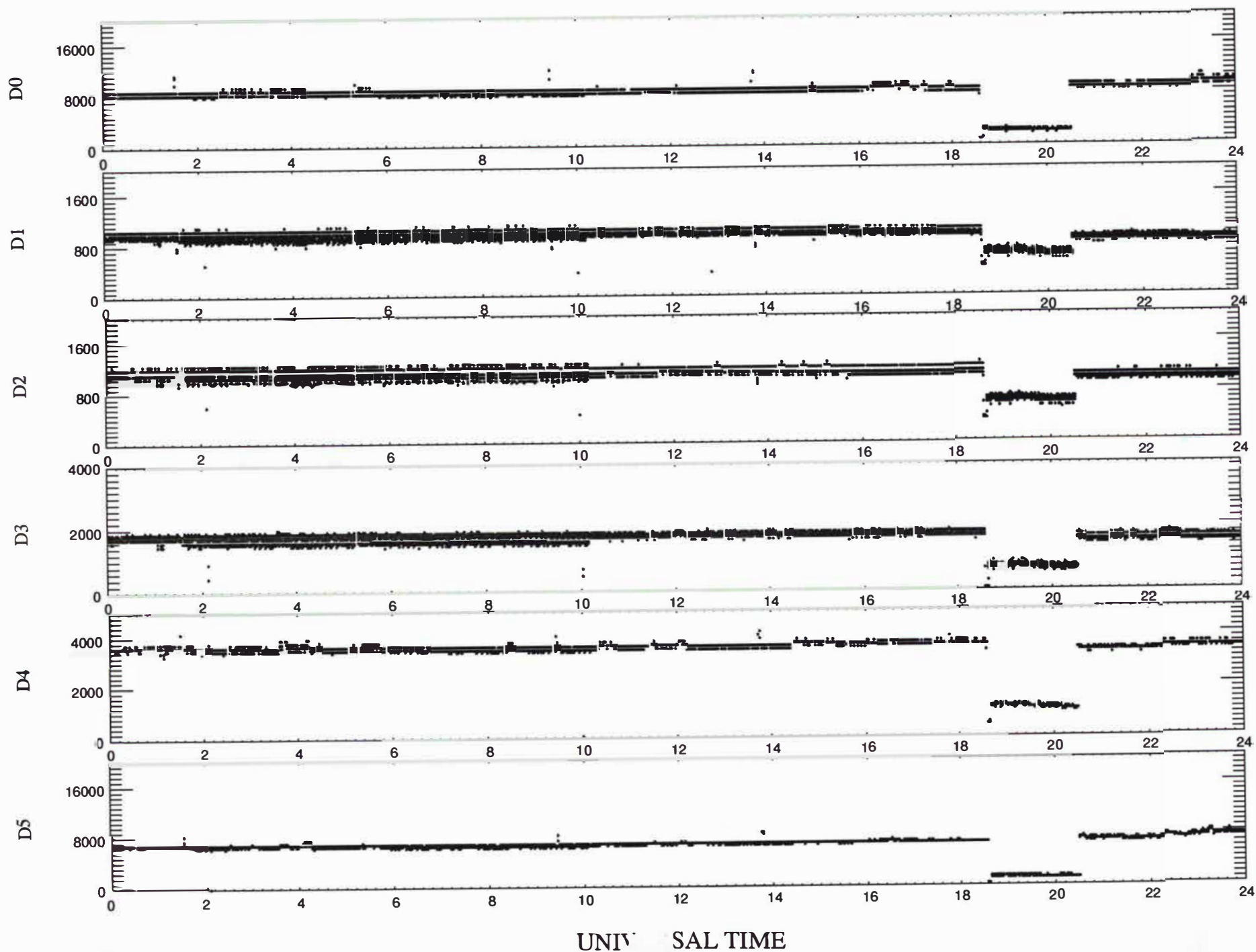


HUS 2A, MODE 1, NOT AVERAGED EDR day 16, year 1996 to day 16, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIVERSAL TIME



Date: Sep 15 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?

2. BATSE Data

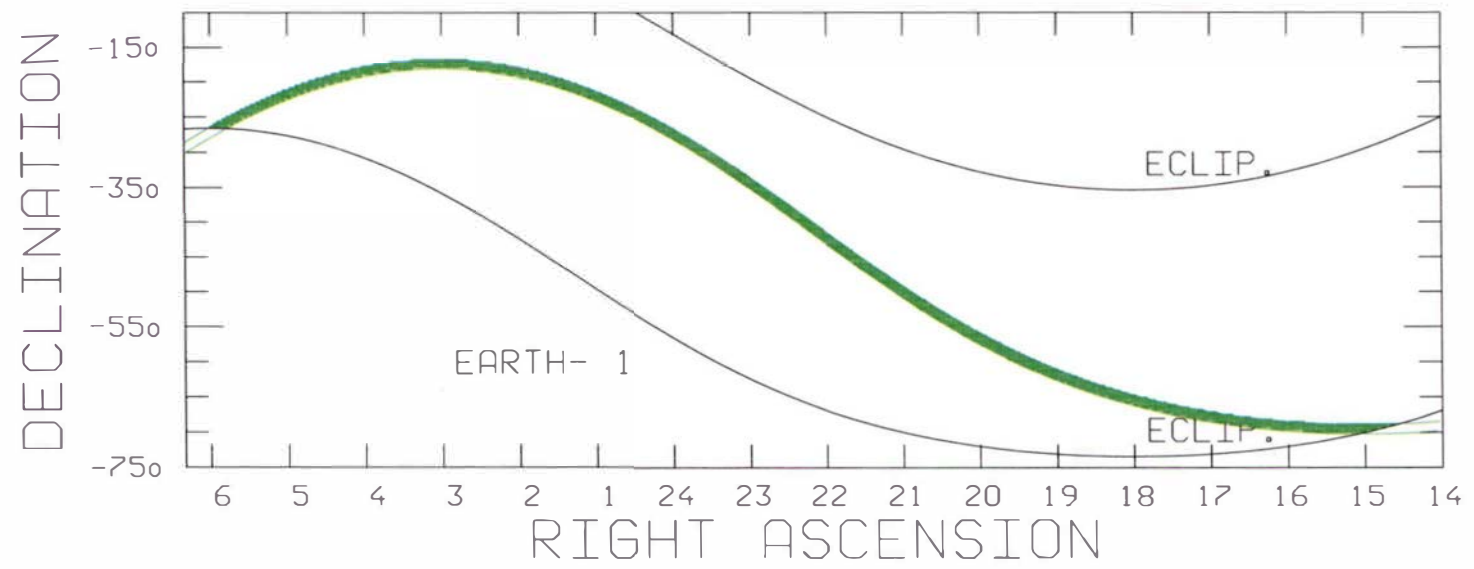
- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)?
- ☐ BATSE ephemeris for T_0 ?
- ☐ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included?

3. PVO Data

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

- ☒ ACCESS and MBL databases updated with identical times?

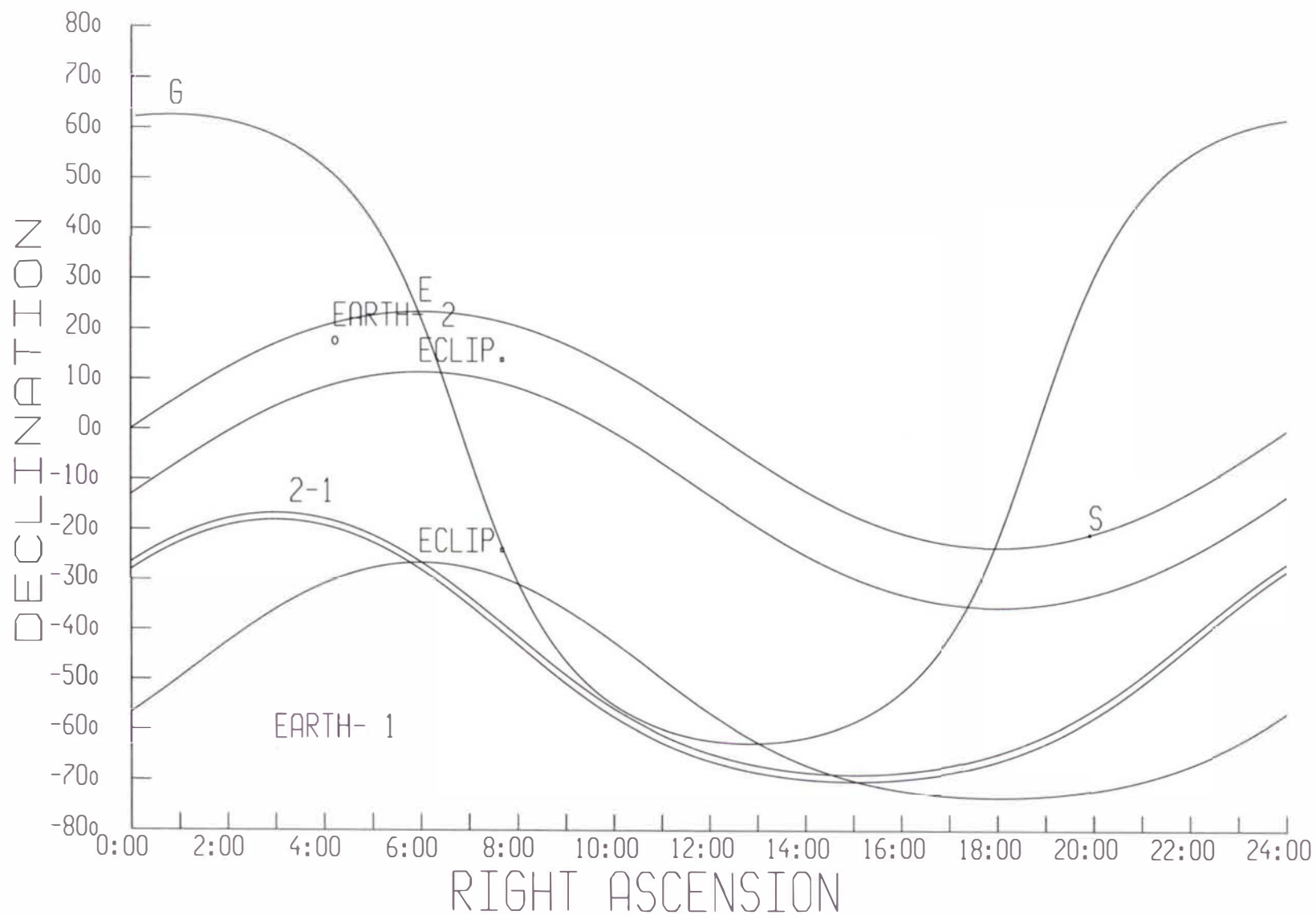
Later Ulysses RI corresponds to Korus burst in the 15-50 keV channel

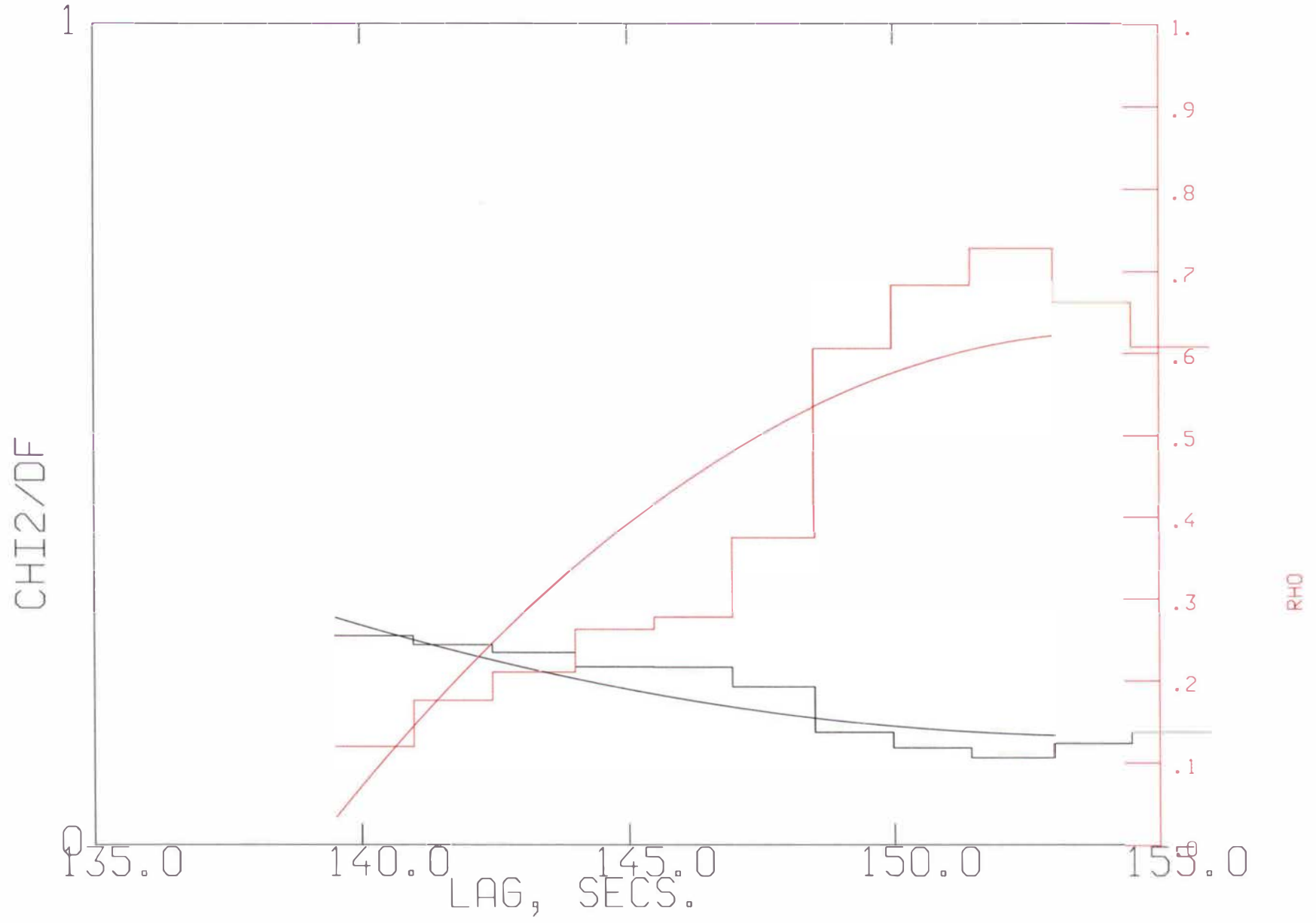


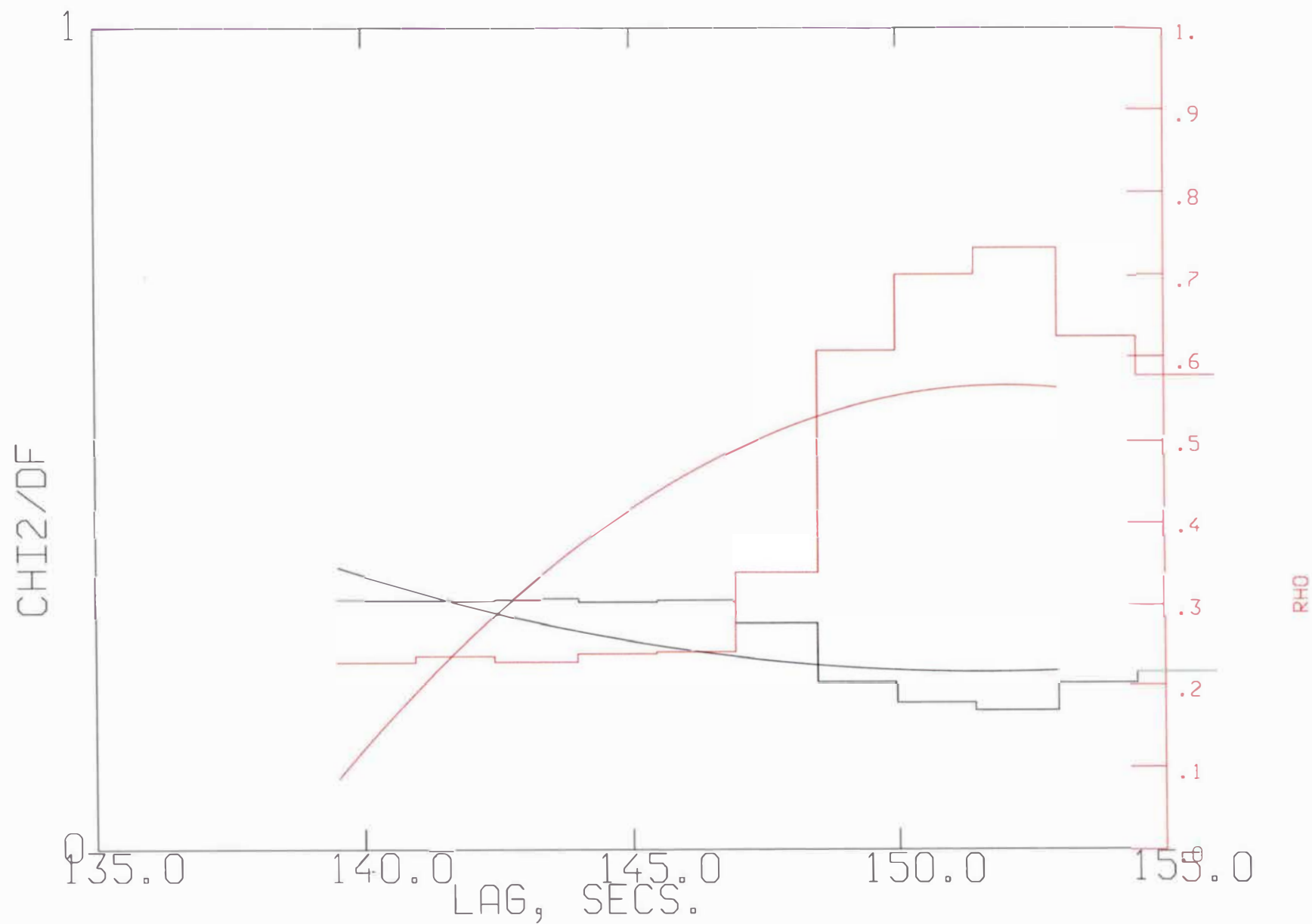
EVENT OF JAN 17, 1996 16:11

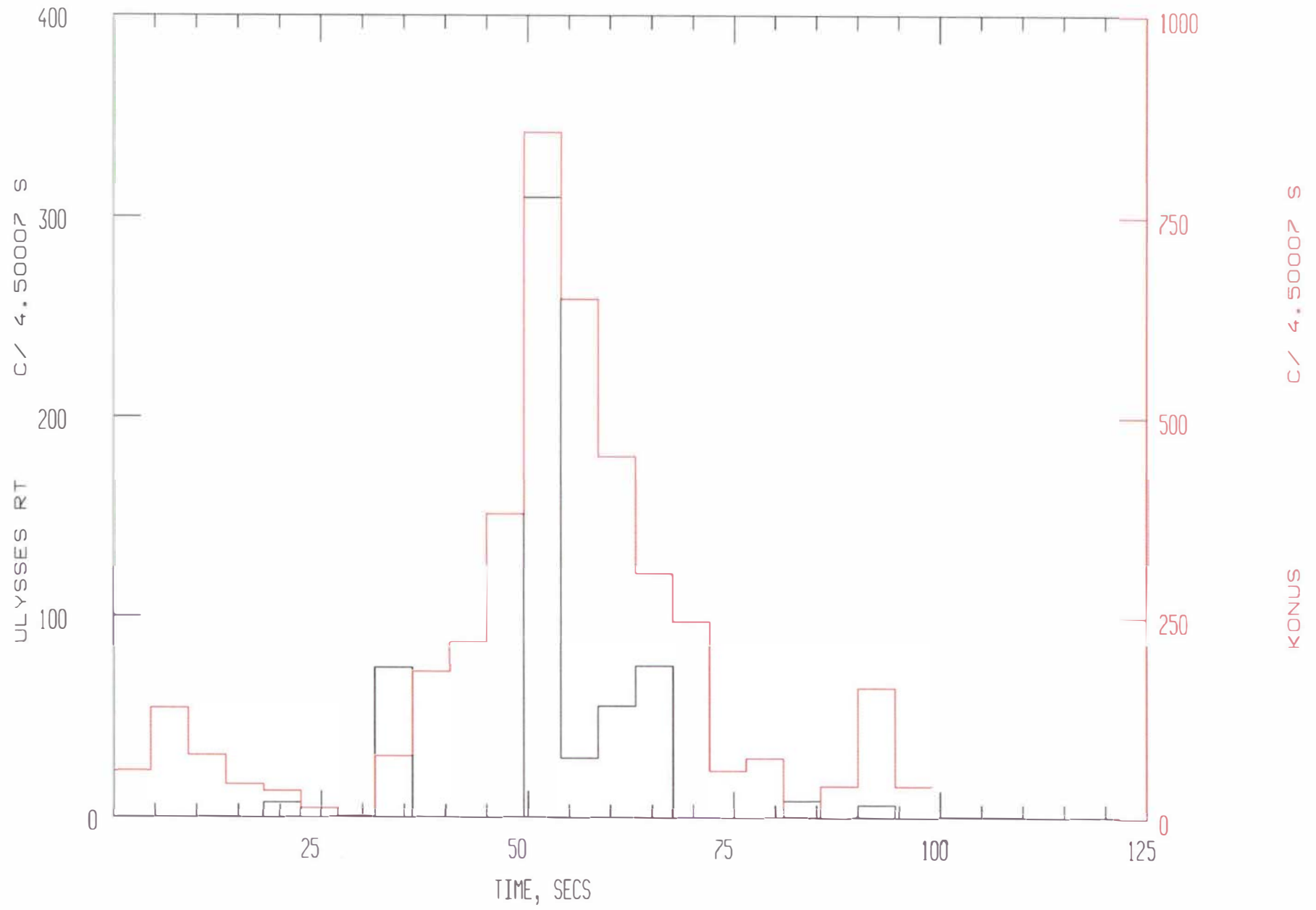
15/09/2011

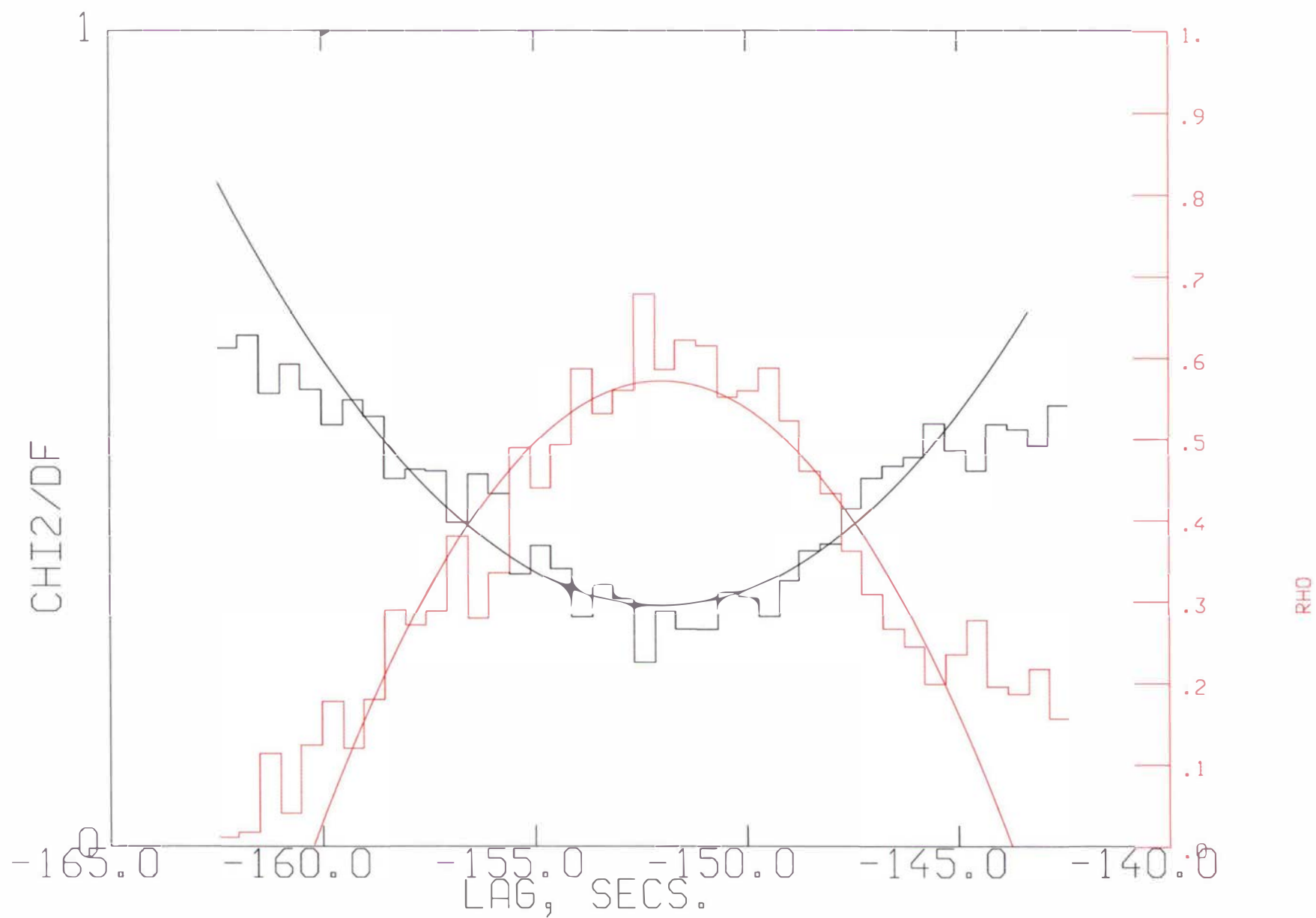
N-M = CORRELATION BETWEEN SATELLITES N AND M
 EARTH-N = EARTH AS SEEN FROM SATELLITE N
 S=SUN
 E=ECLIPTIC
 G=GALACTIC EQUATOR
 1 ULYSSES 2 KONUS

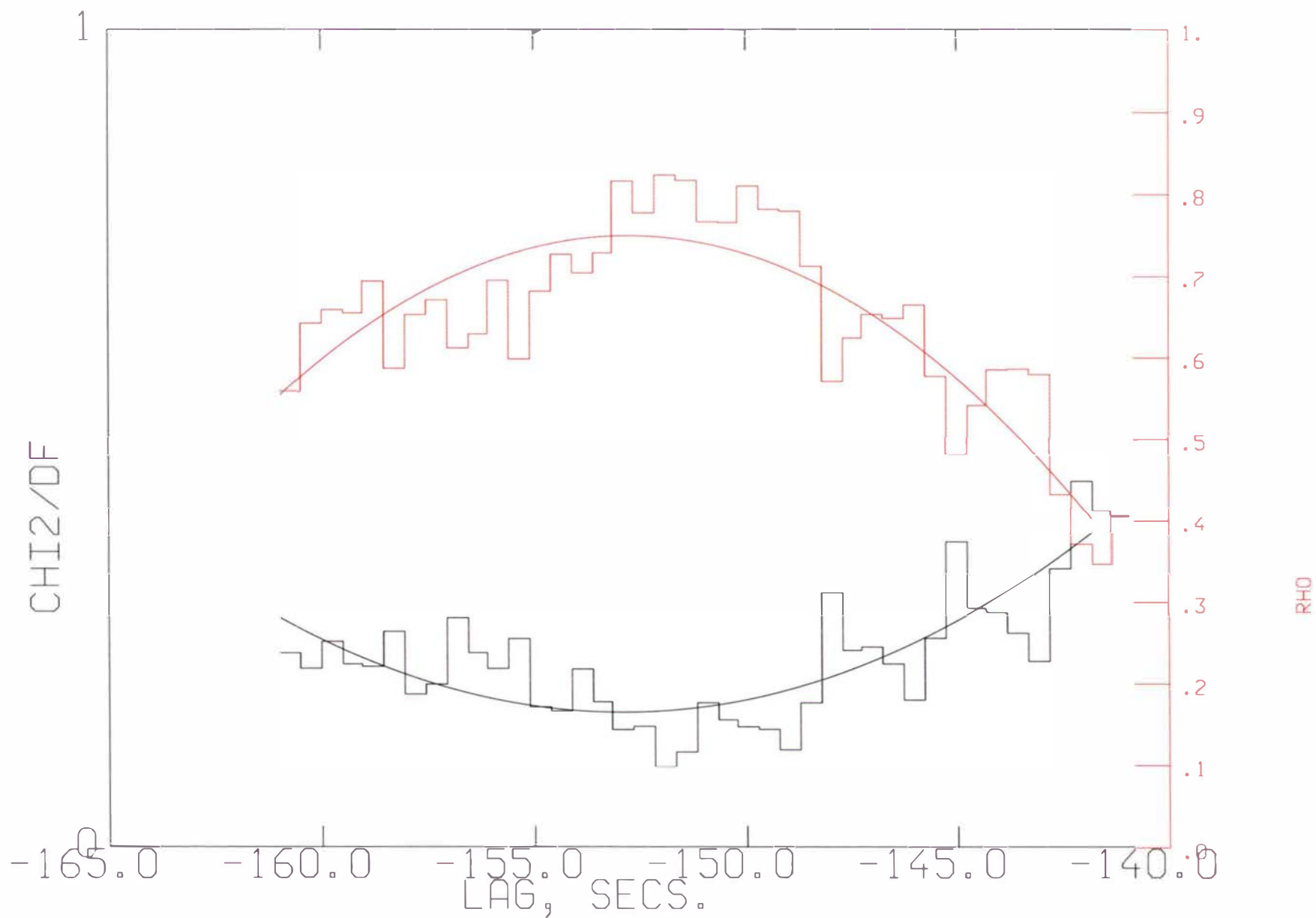


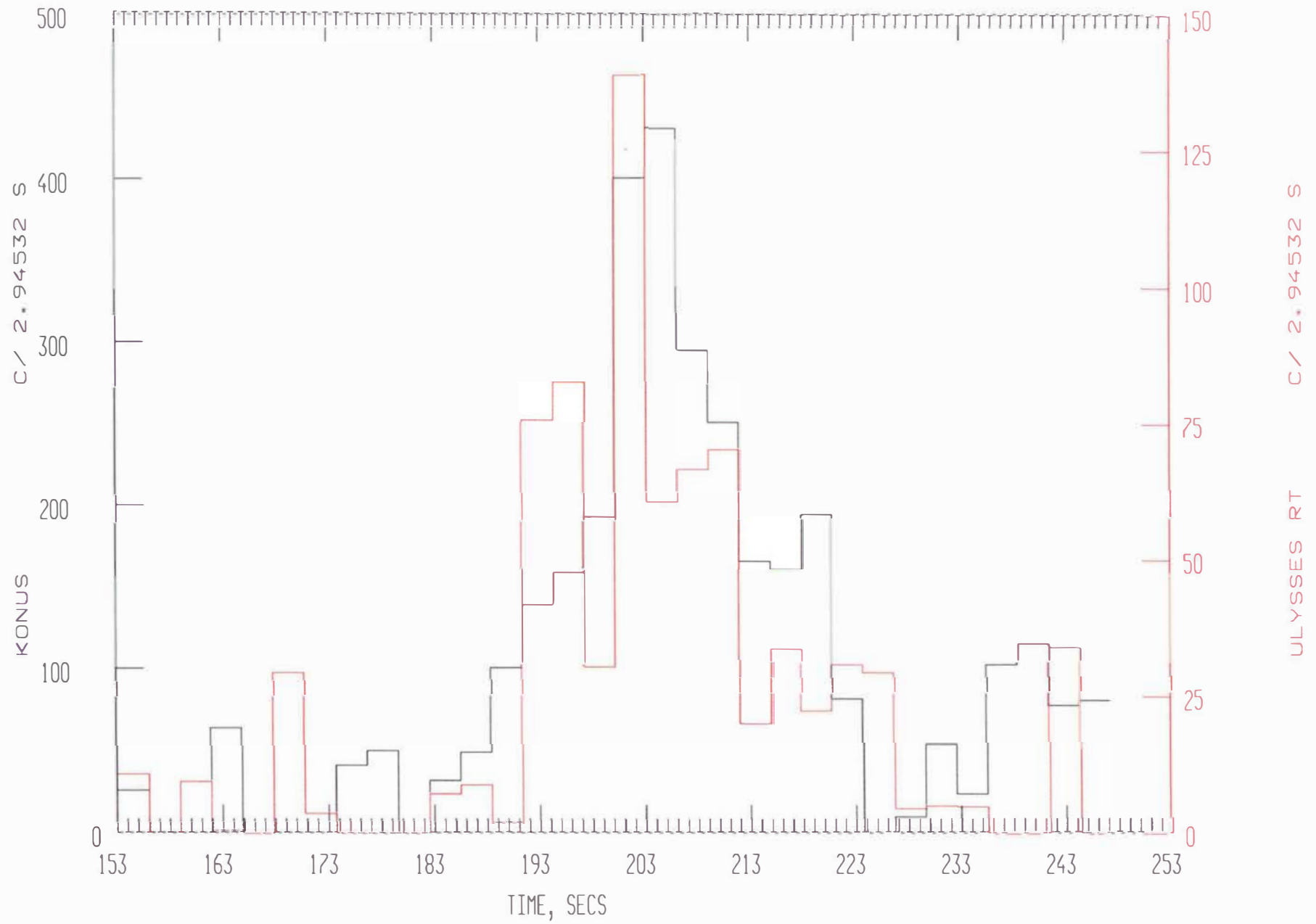




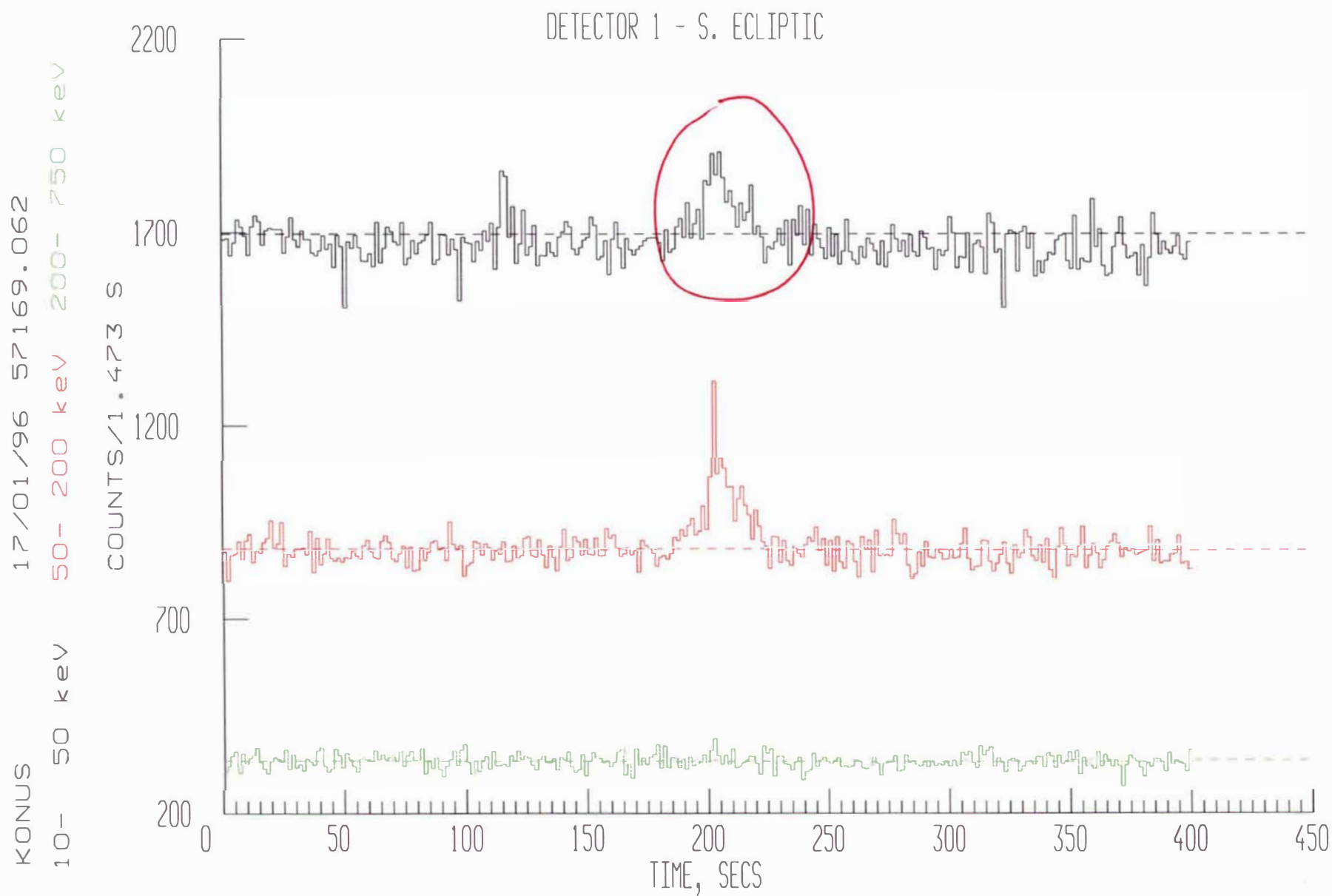






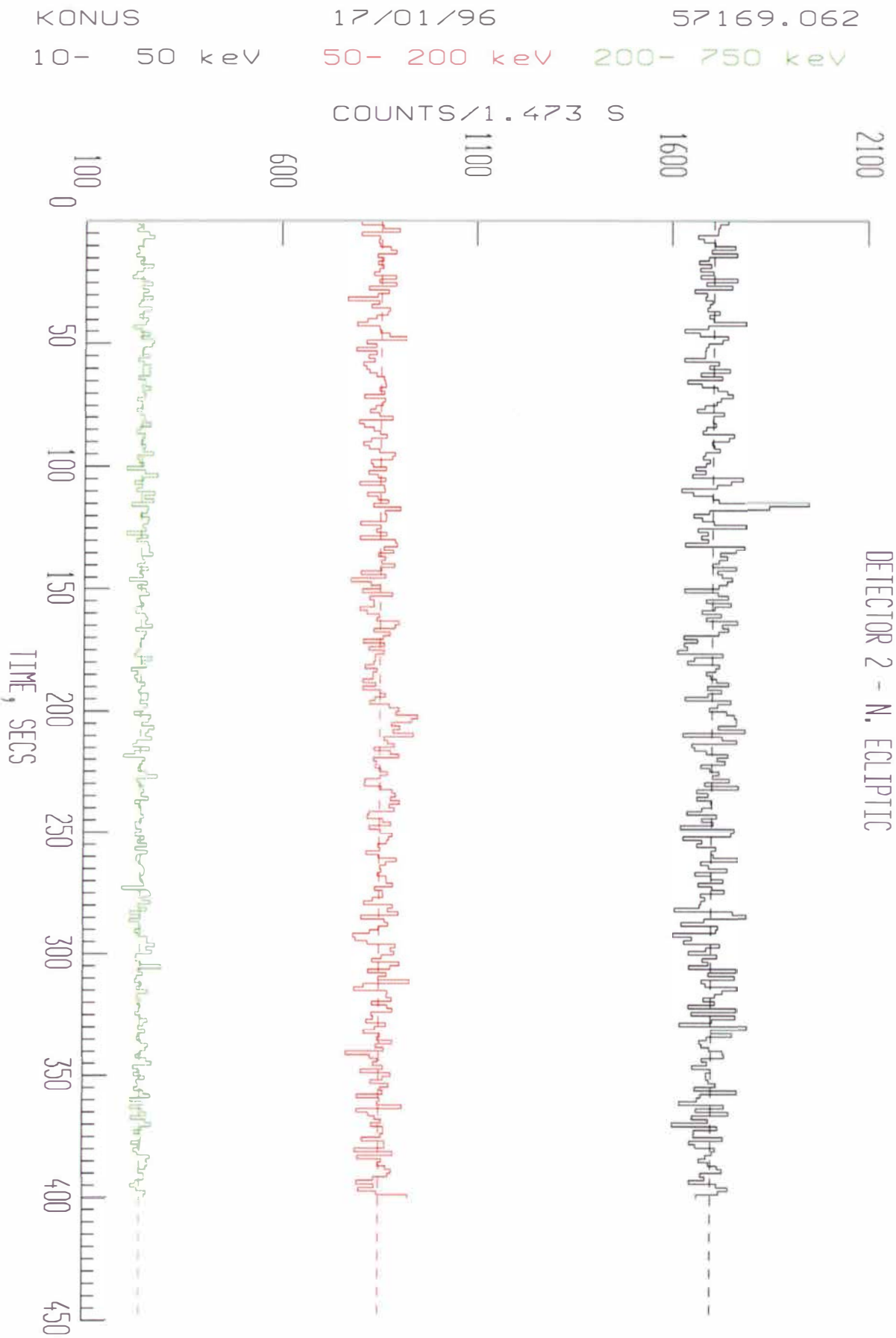


15/09/2011



15/09/2011

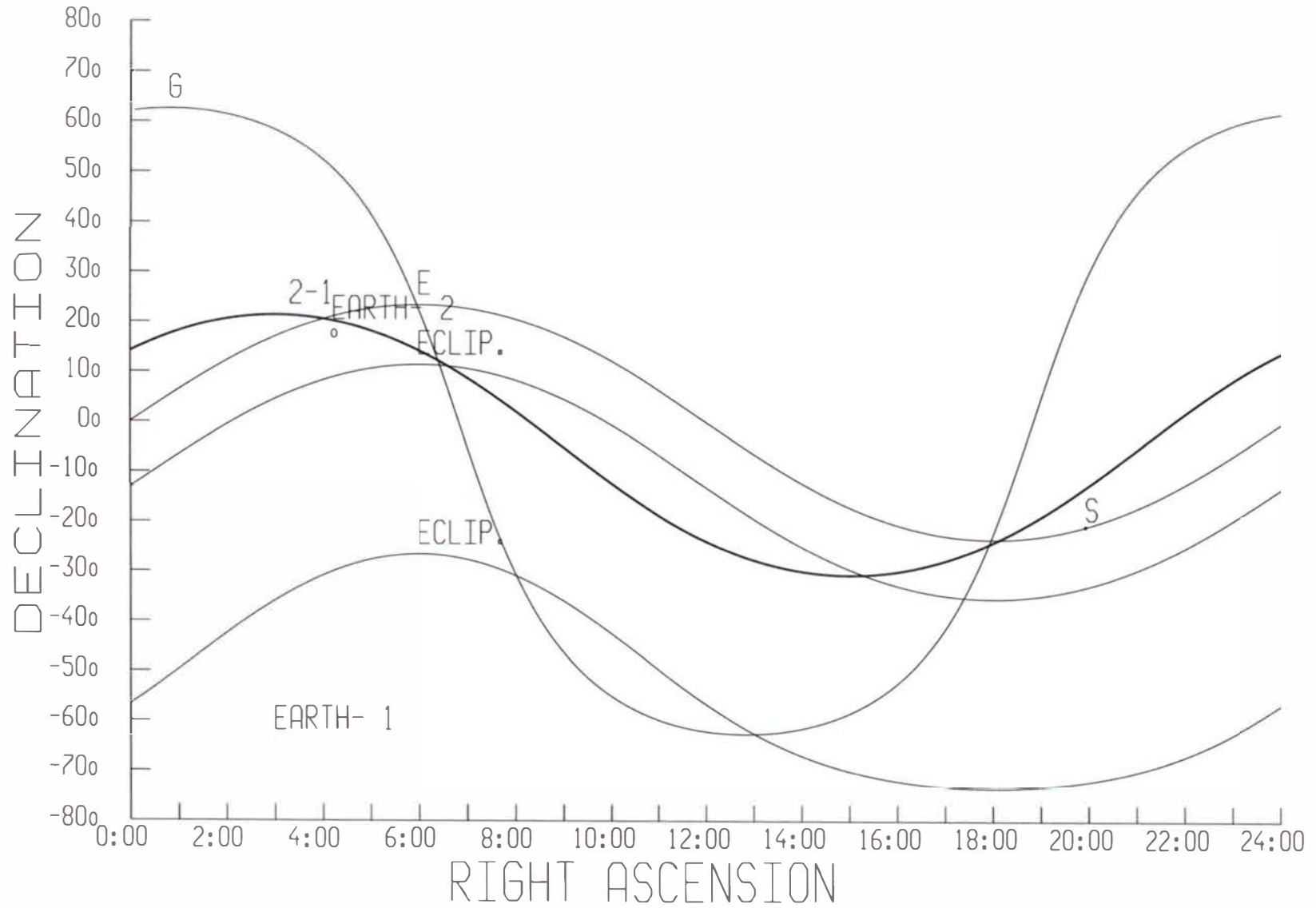
DETECTOR 2 - N. ECLIPTEIC



EVENT OF JAN 17, 1996 15:57

15/09/2011

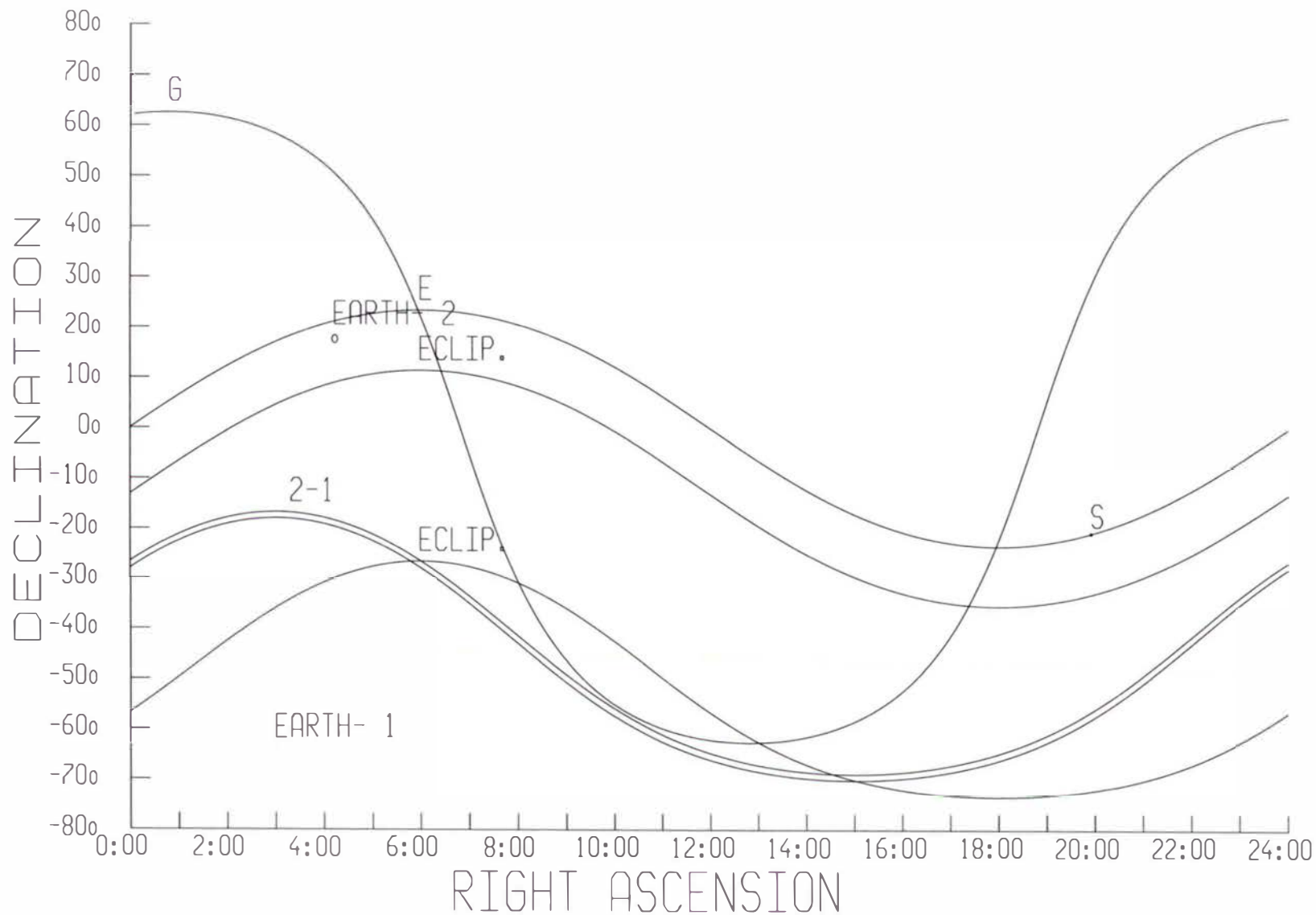
N-M = CORRELATION BETWEEN SATELLITES N AND M
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
1 ULYSSES 2 KONUS1

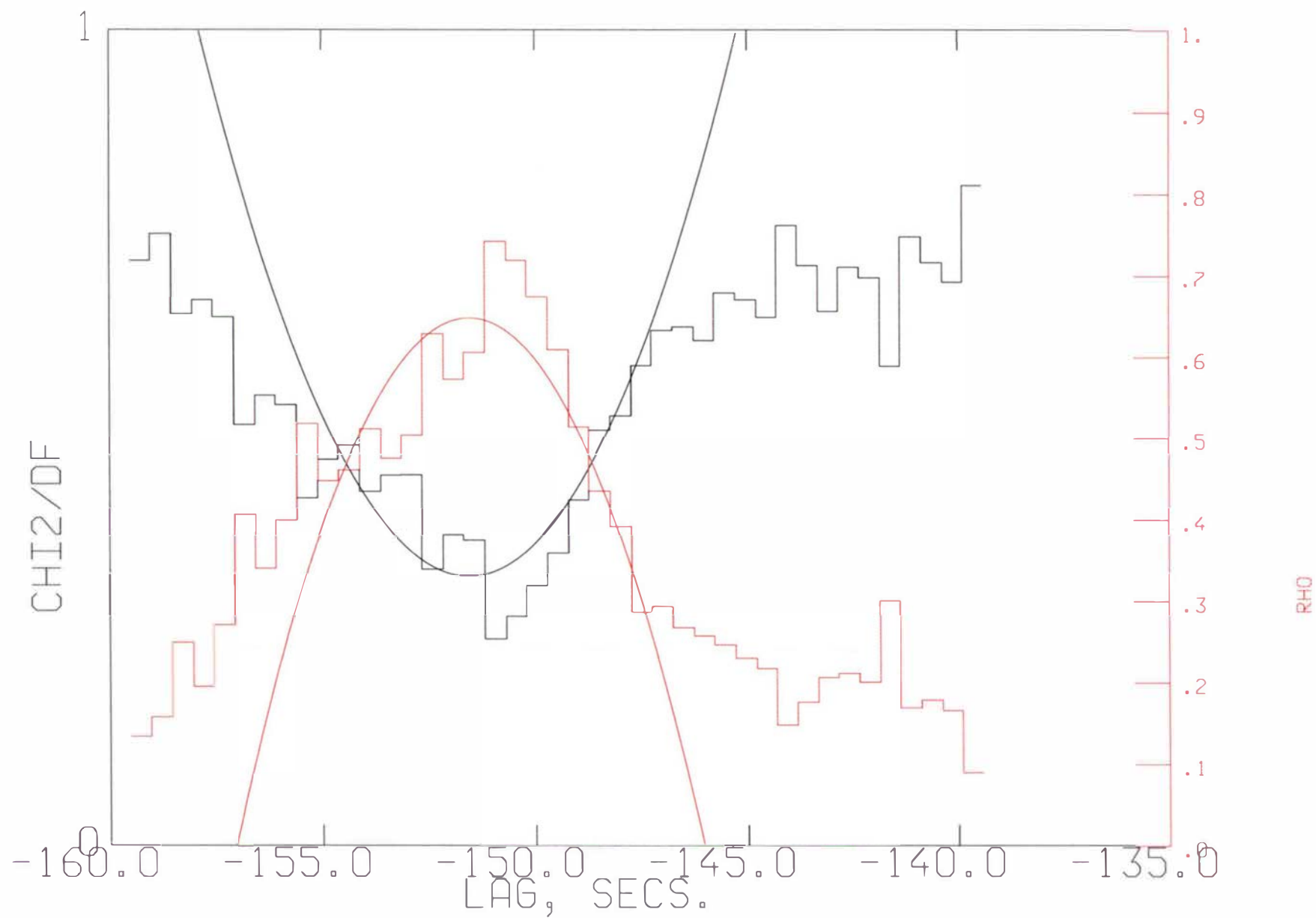


EVENT OF JAN 17, 1996 16:11

15/09/2011

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





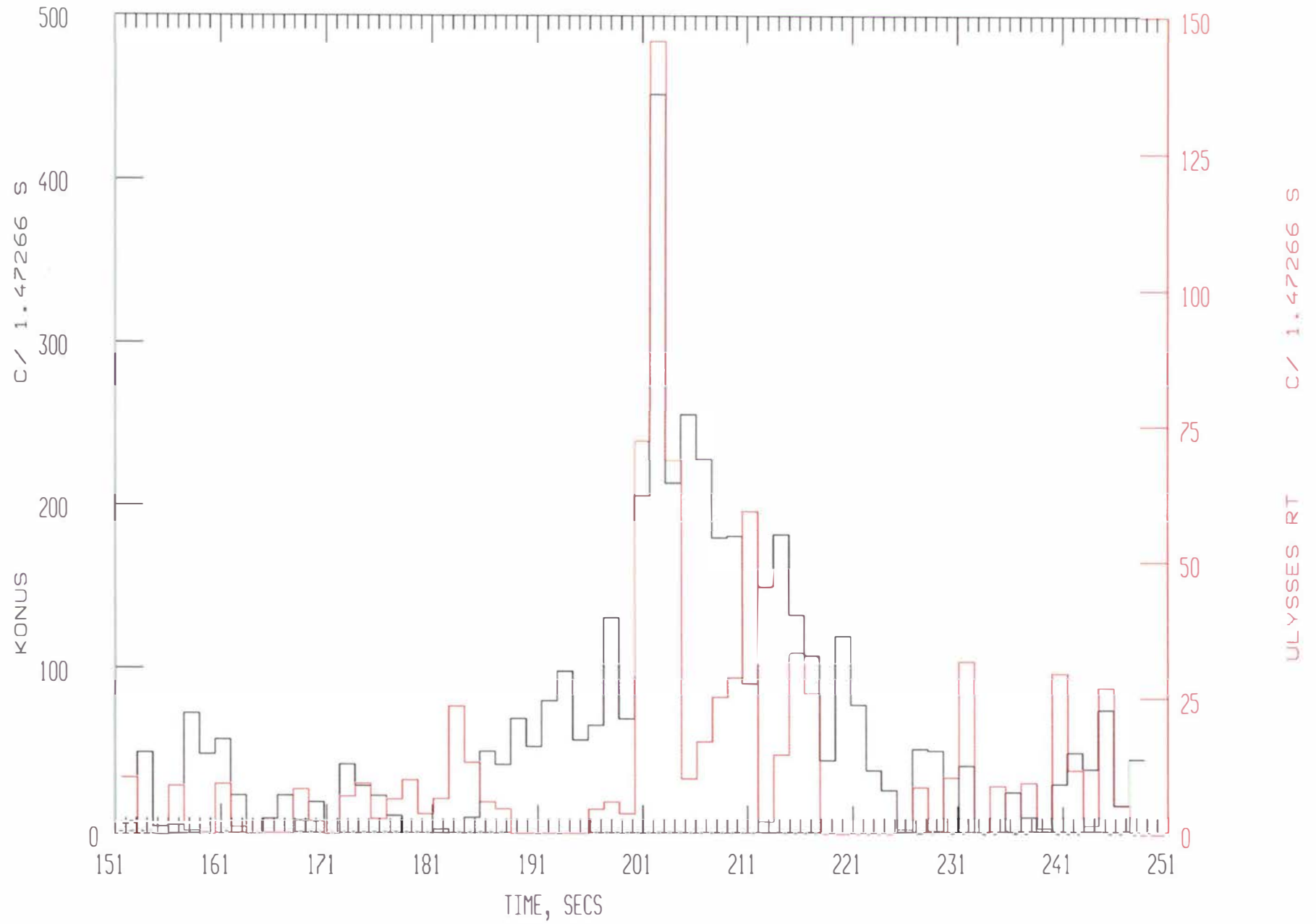
KONUS

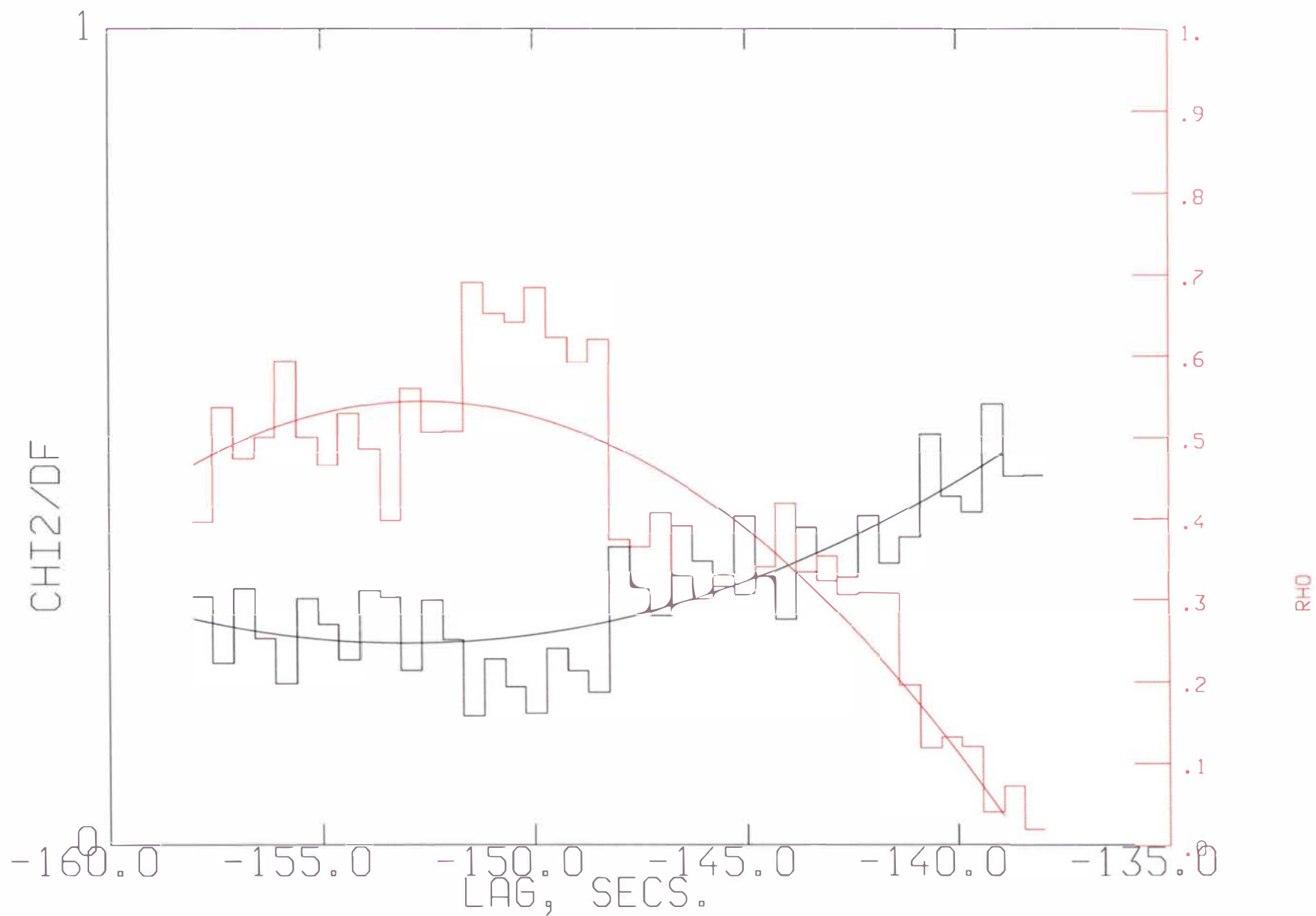
-ULYSSES RT CORRELATION

17/01/96

57169.062

15/ 9/11



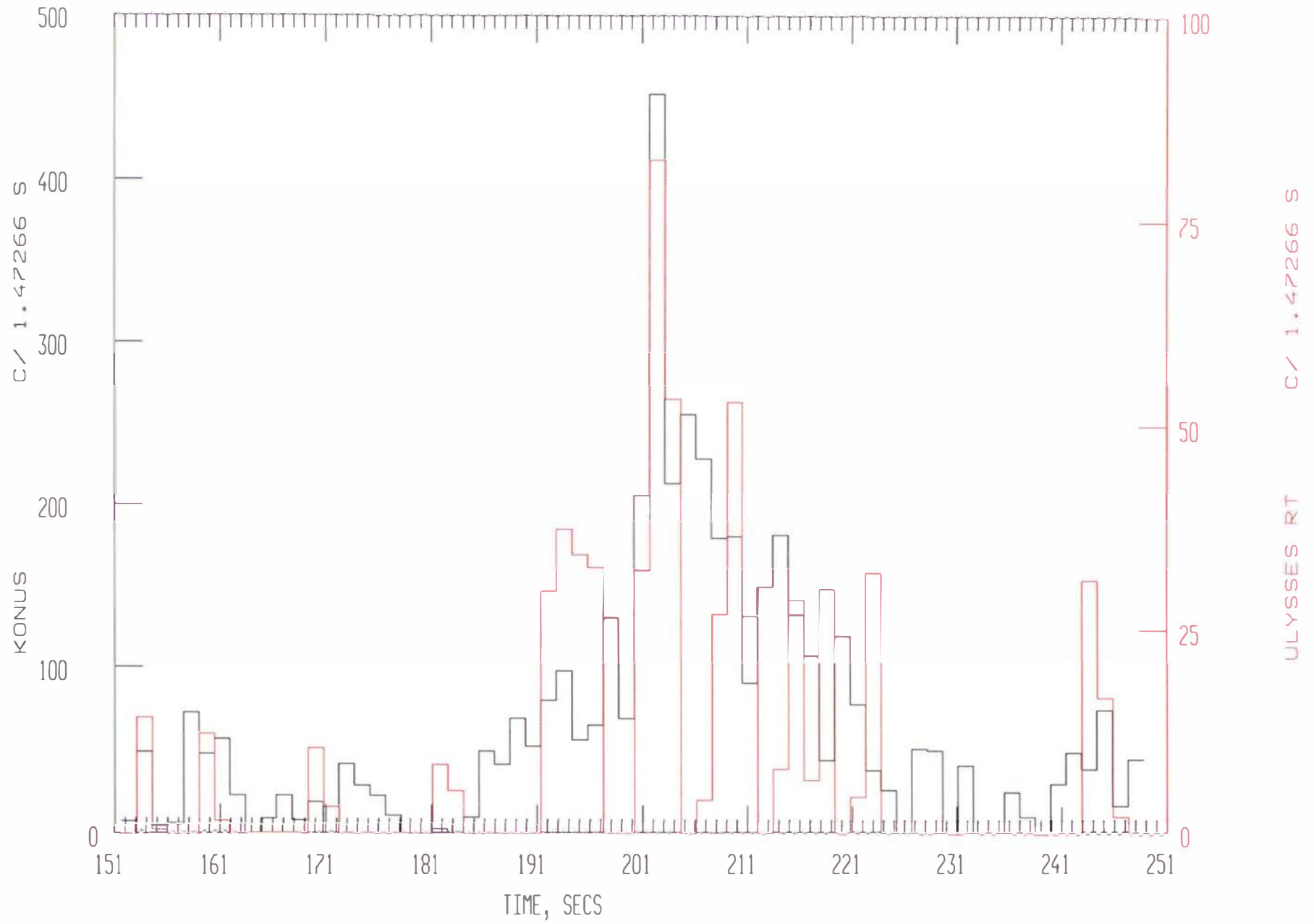


KONUS

-ULYSSES RT CORRELATION

17/01/96 57169.062

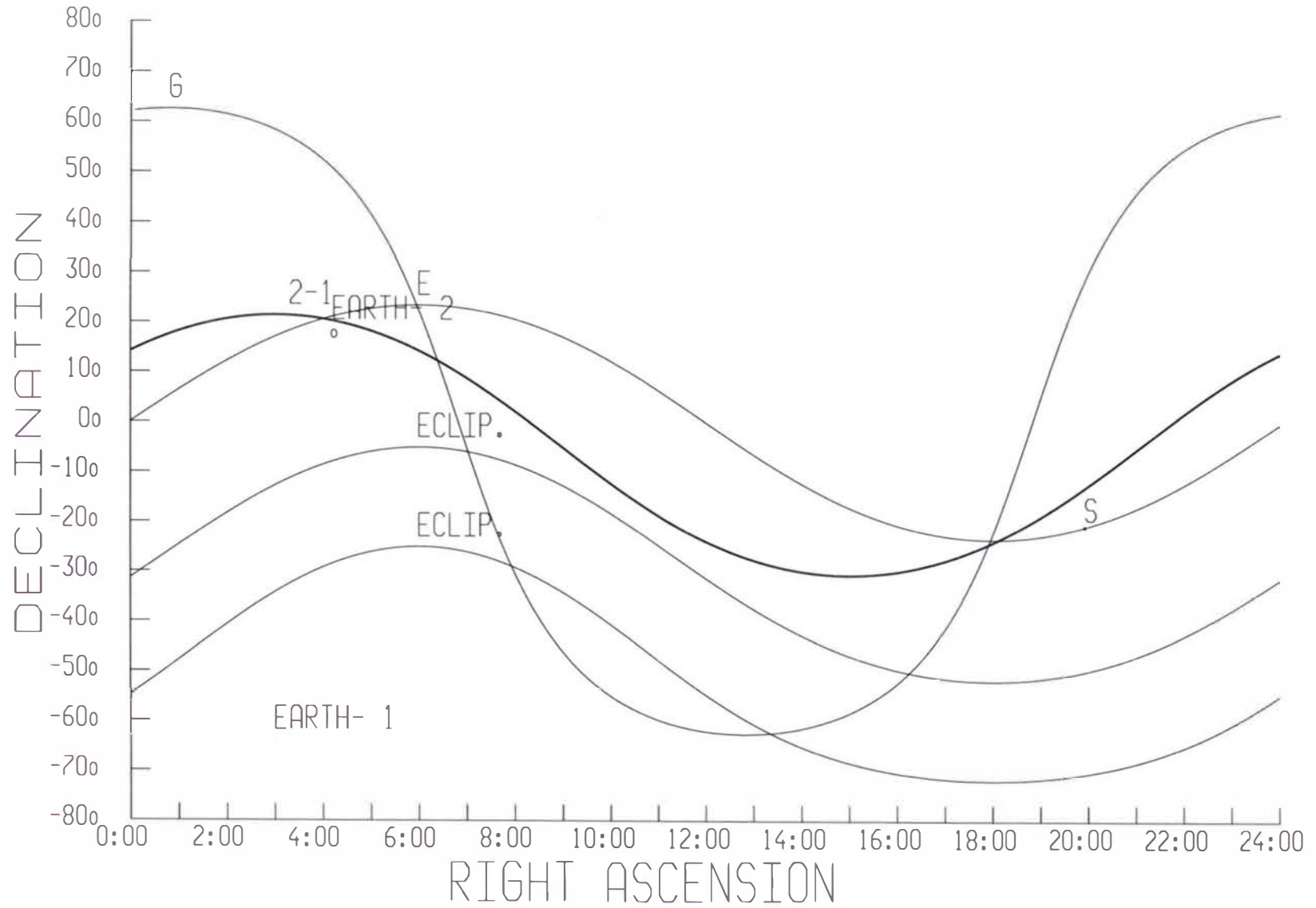
15/ 9/11

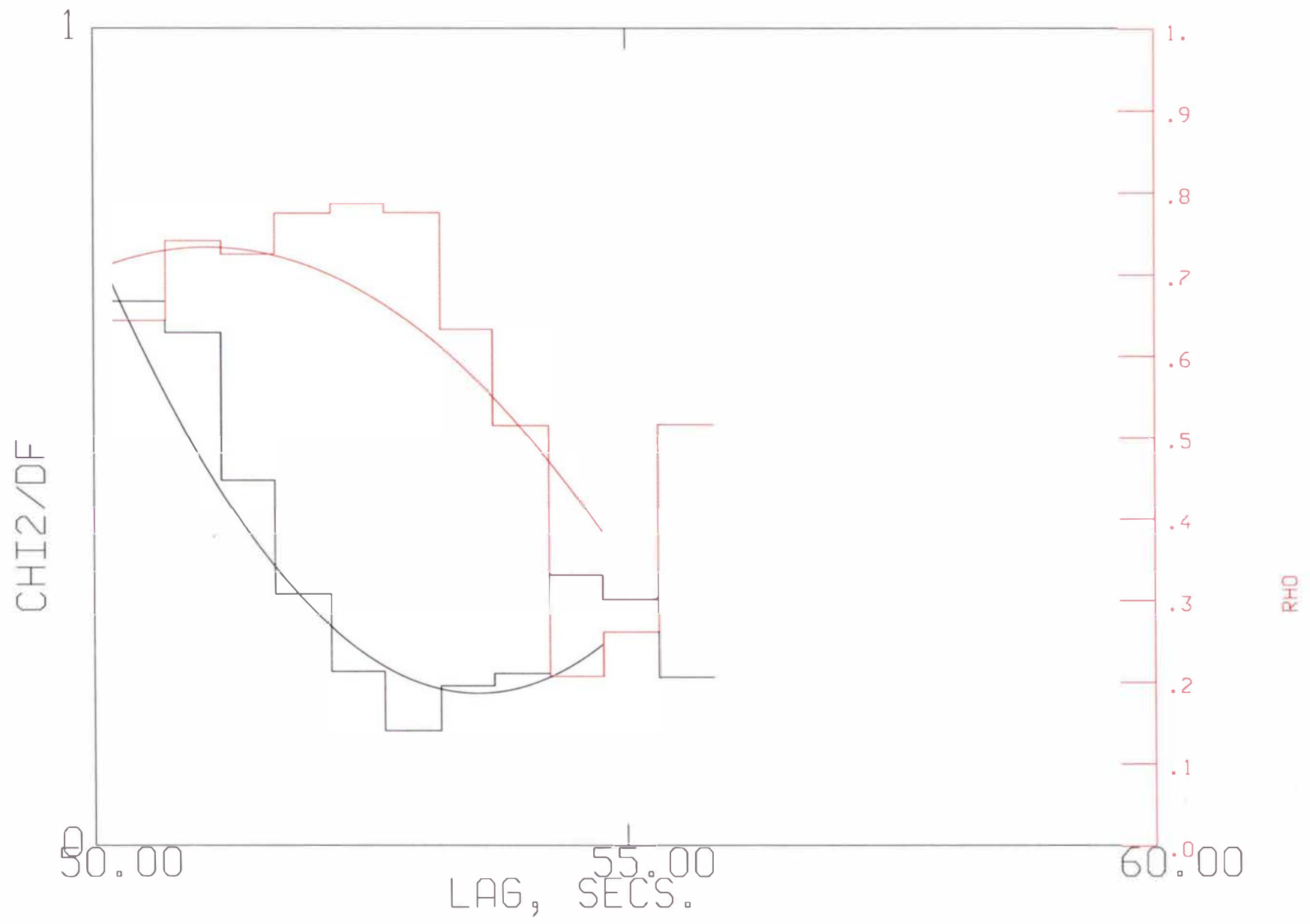


EVENT OF JAN 17, 1996 15:57

13/09/2011

N-M = CORRELATION BETWEEN SATELLITES N AND M
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
1 ULYSSES 2 KONUS1





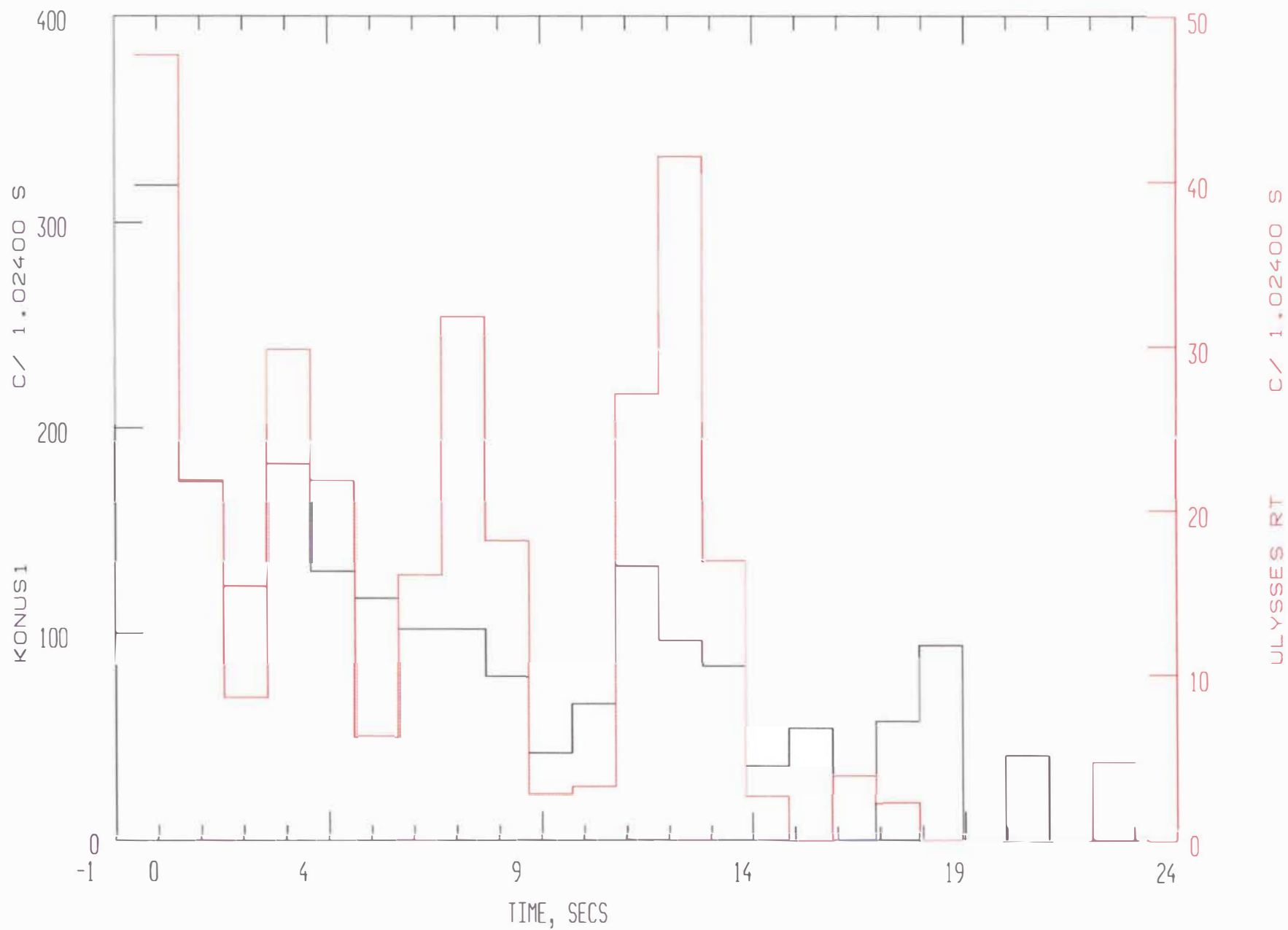
KONUS1

-ULYSSES RT CORRELATION

17/01/96

57371.341

13/ 9/11

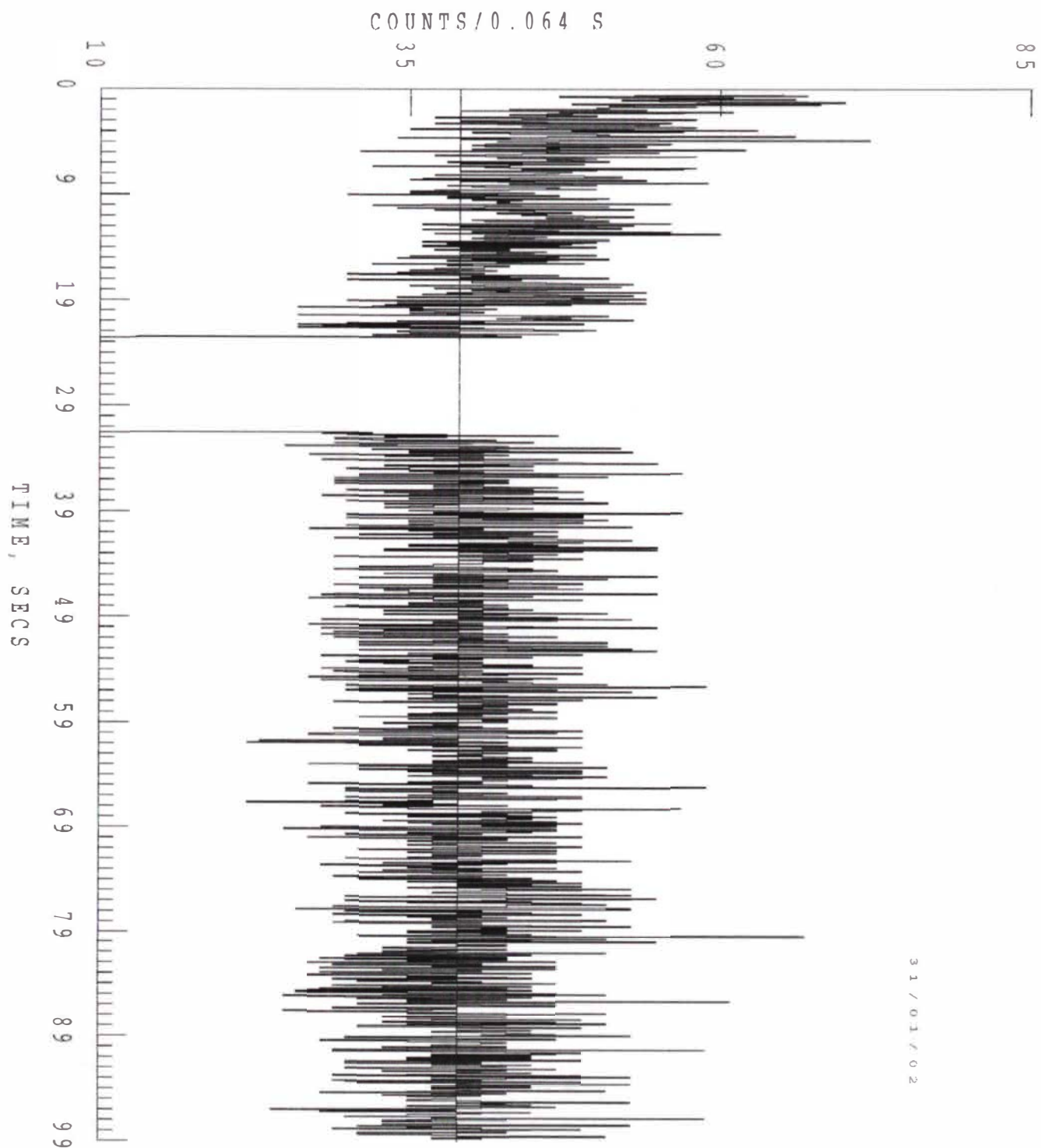


KONUS1

17/01/96

57371.341

50 - 200 keV



KONUS 19960117 57508

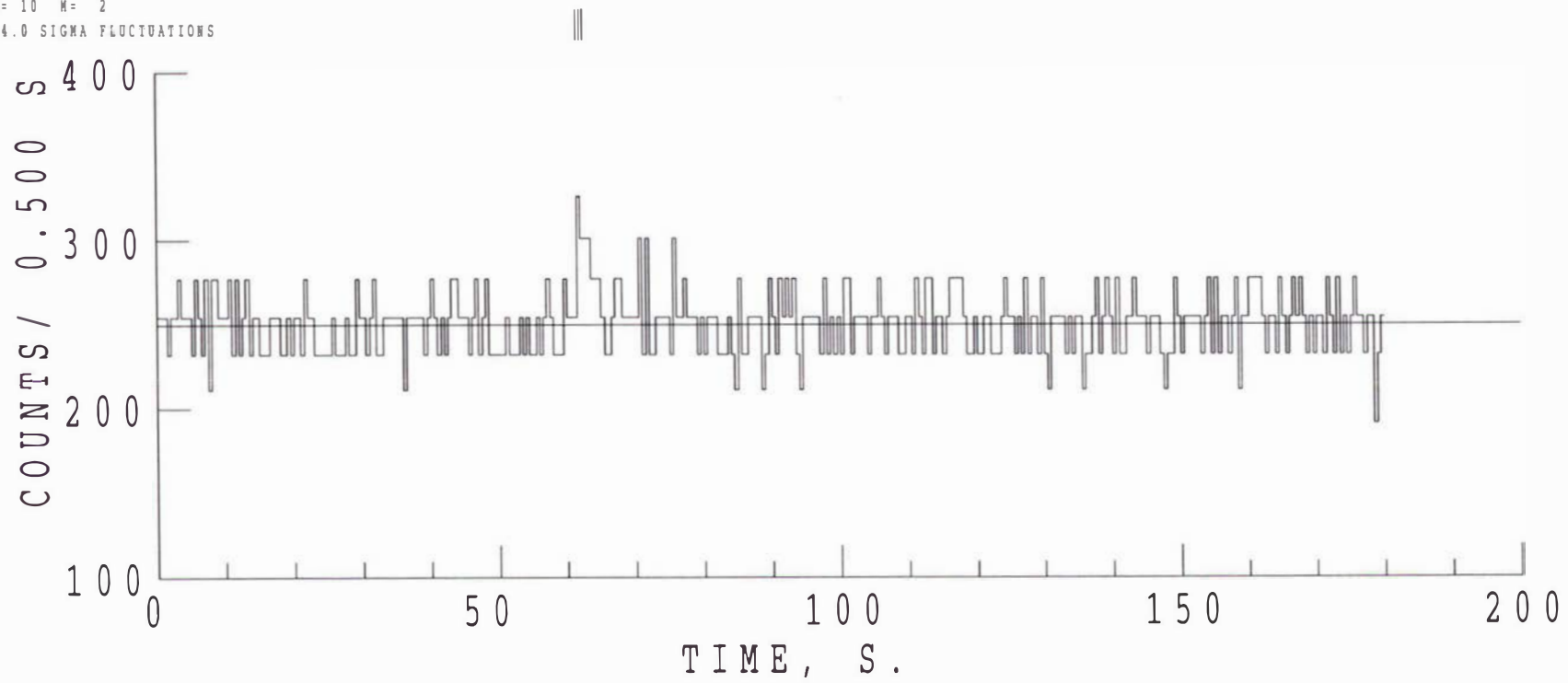
ULYSSES RT

12 / 09 / 11

17/01/96 57420.258 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



KONUS1 19960117 57371

ULYSSES RT

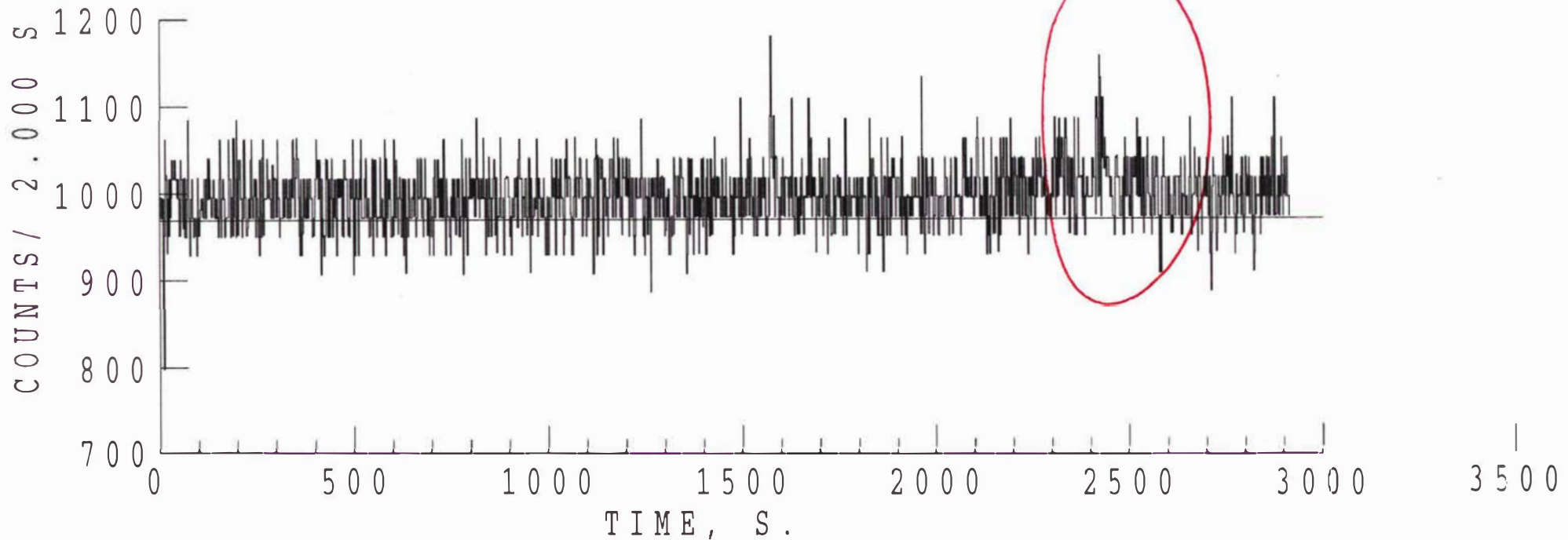
31/01/02

17/01/96 55908.234 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



KONUS 19960117 58307

ULYSSES RT

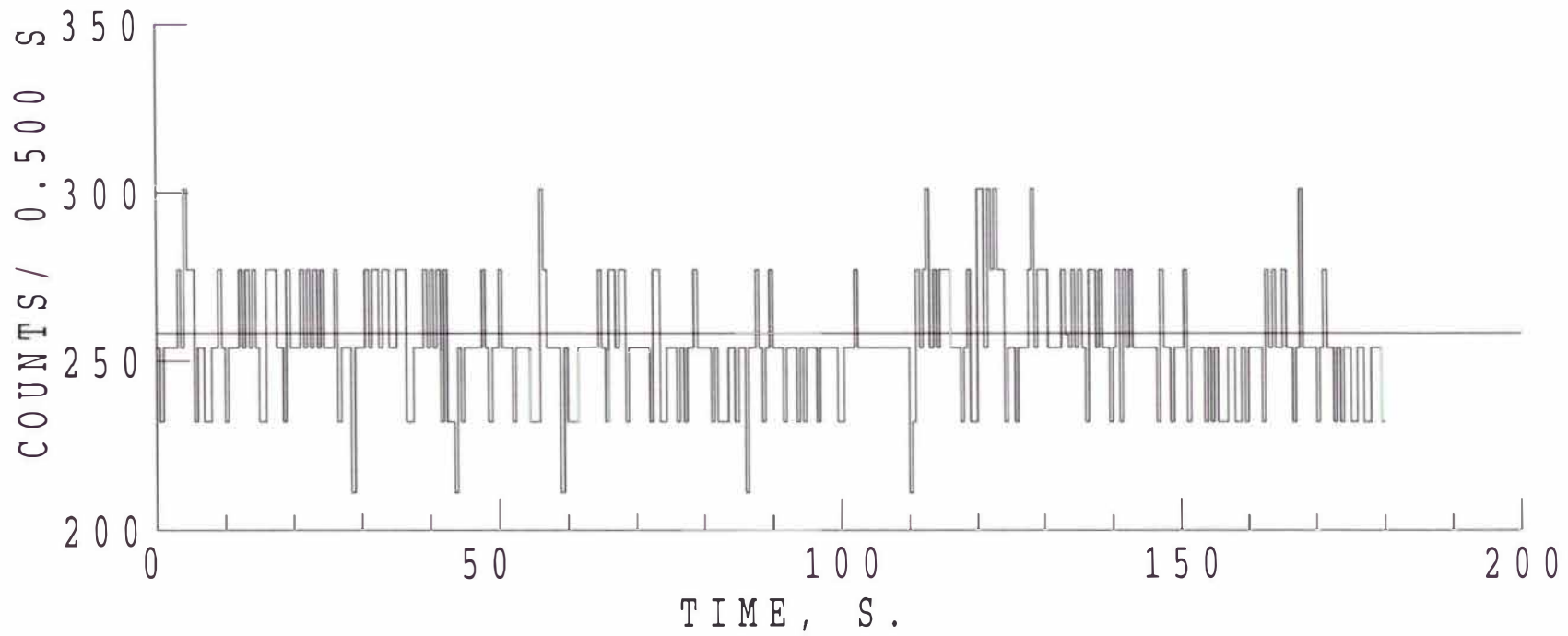
12 / 09 / 11

17/01/96 58212.273 s

0 - 0 keV

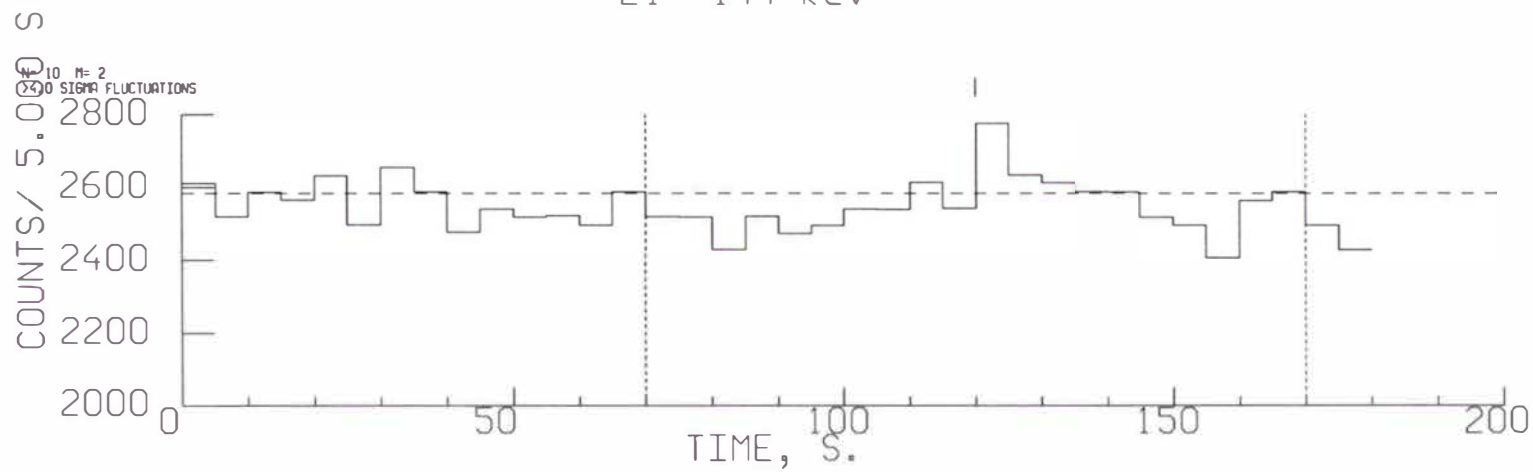
N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

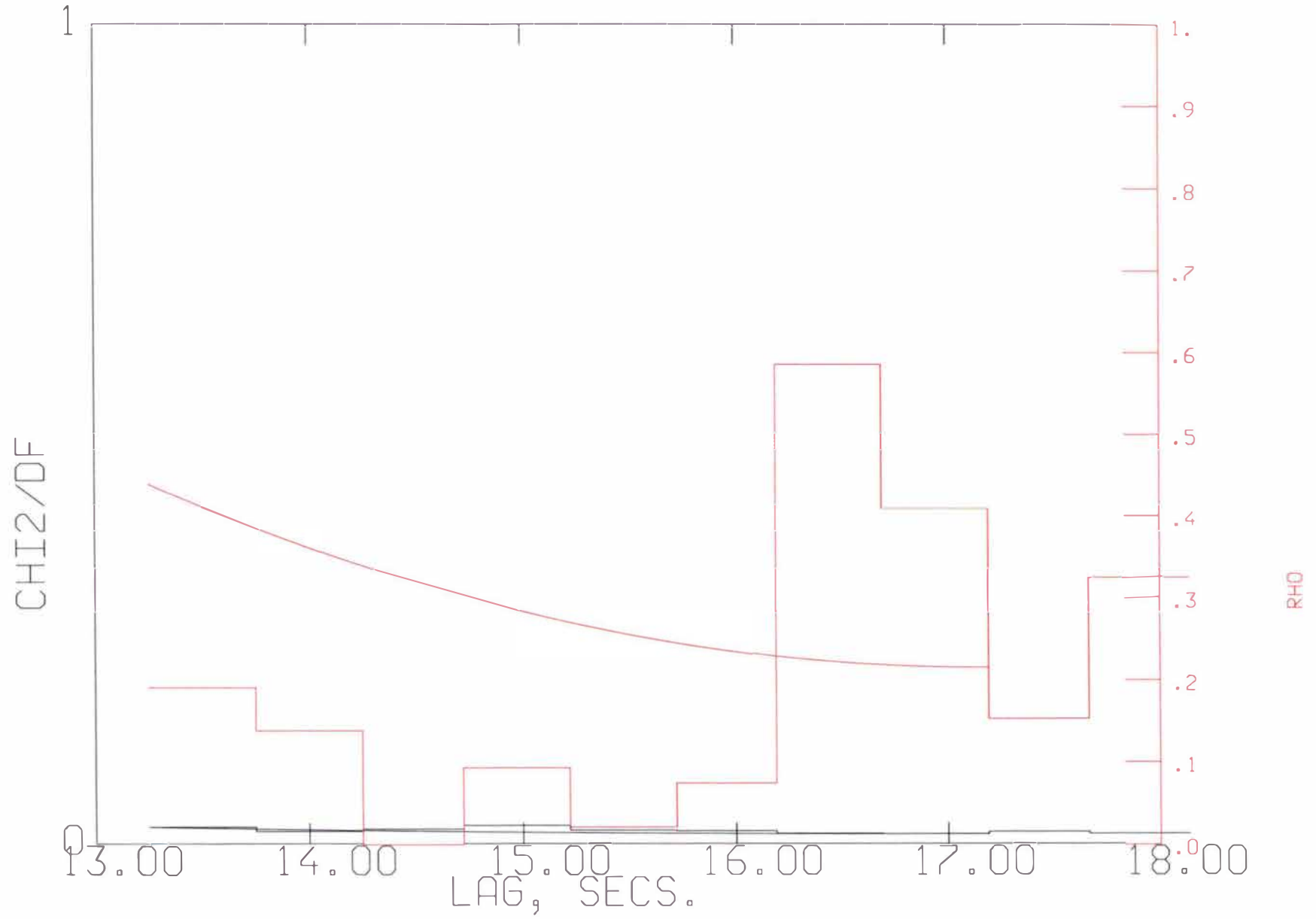
N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



ULYSSES RT
17/ 1/96 58212.273 s
0.500 S INTERVALS REGROUPED BY 10 (later)
21- 144 keV

13/ 9/11





KONUS1

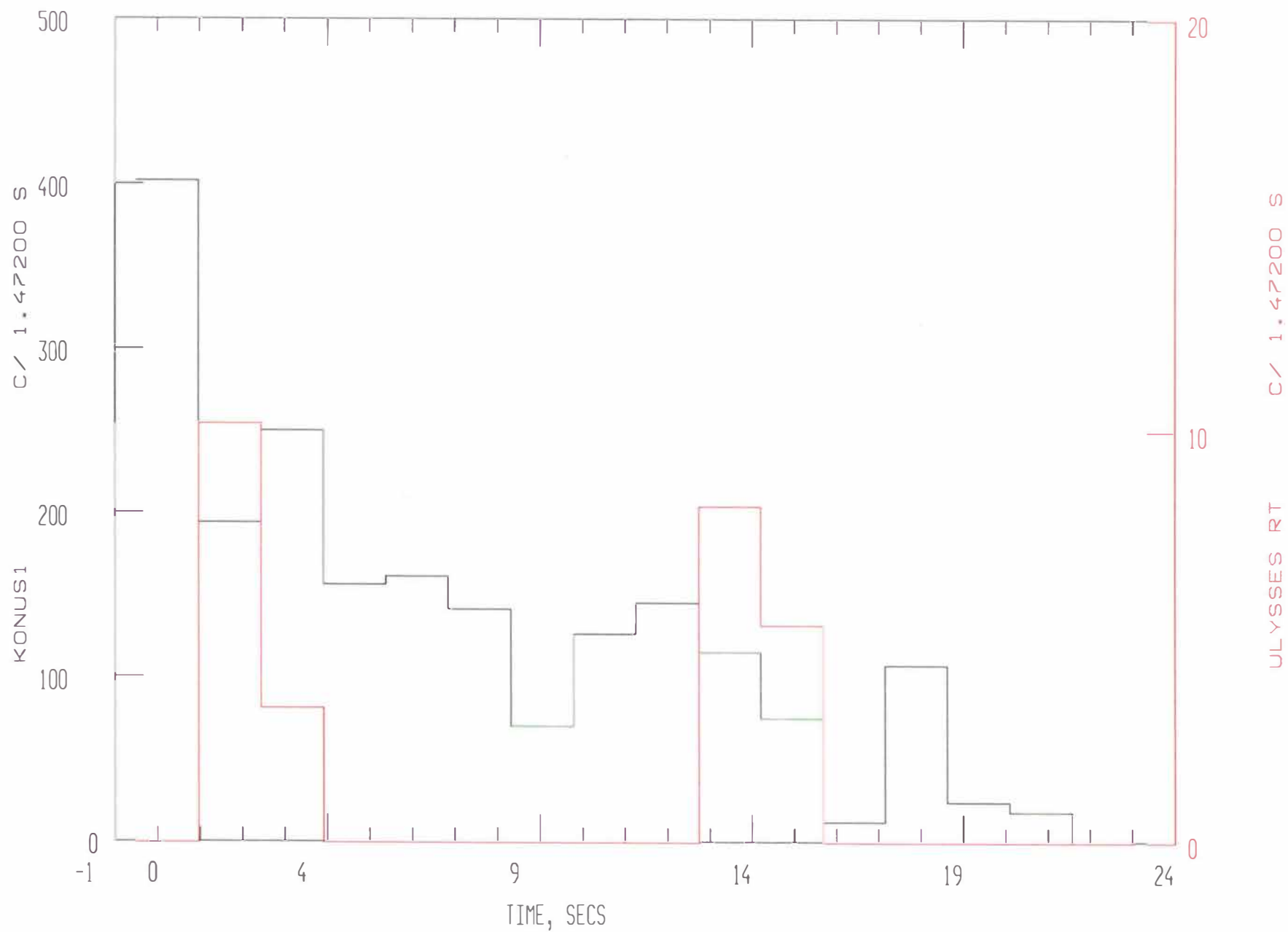
-ULYSSES RT CORRELATION

17/01/96

57371.341

(later)

13/ 9/11



K O N U S

2 2 / 2 / 9 6

U L Y S S E S R T

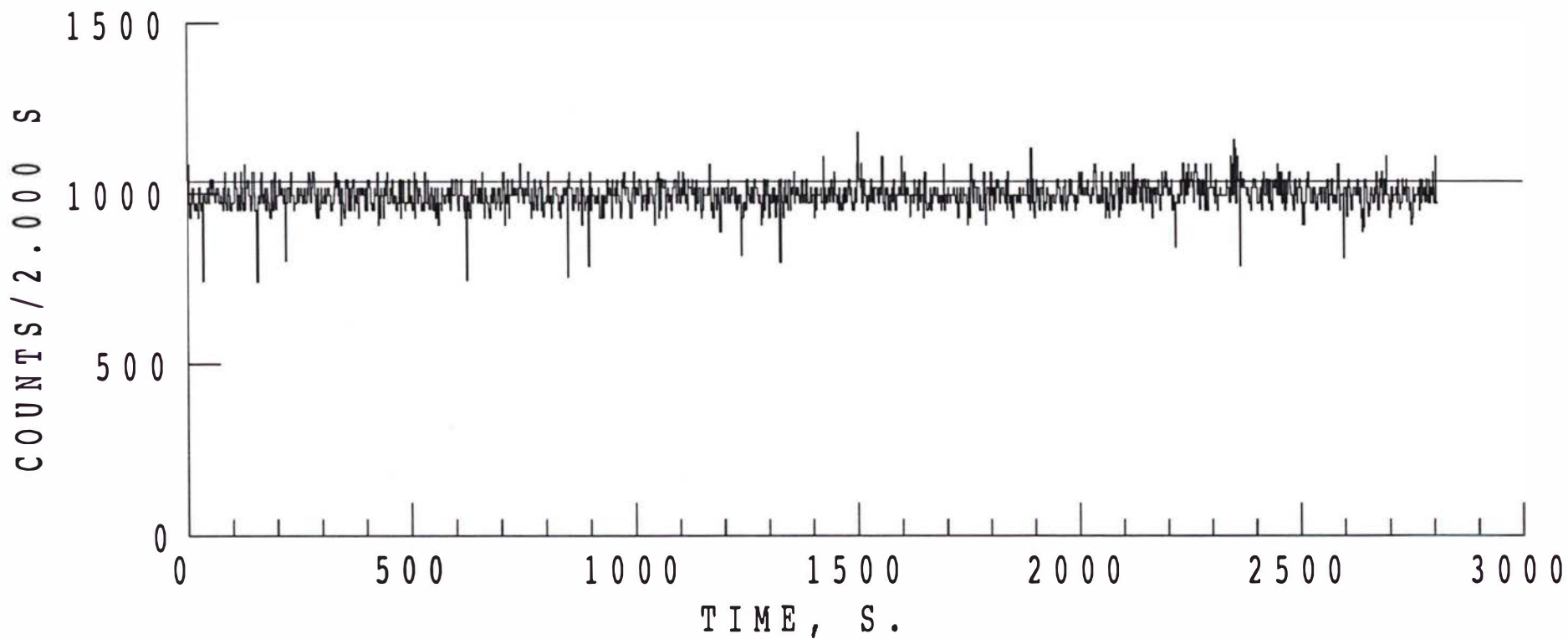
1 7 / 1 / 9 6 5 5 9 8 0 . 2 3 4 s

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

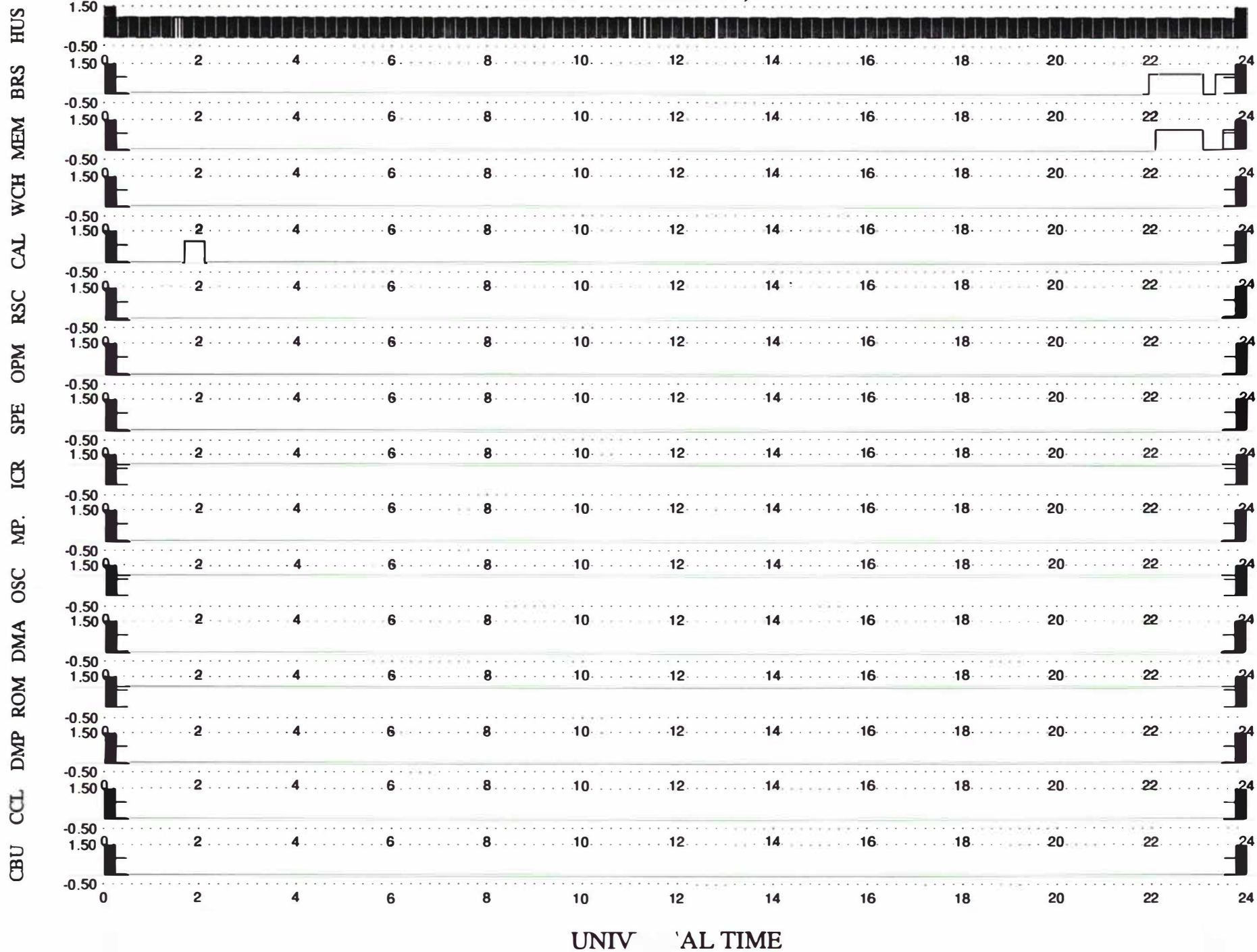
N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



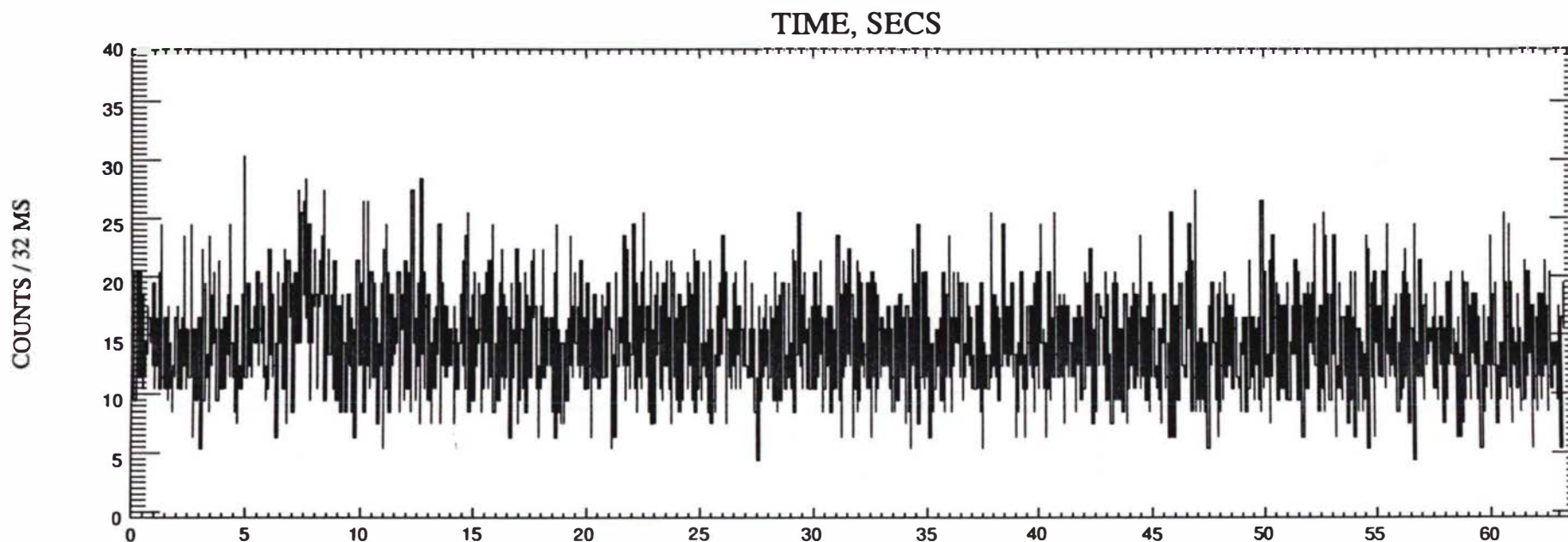
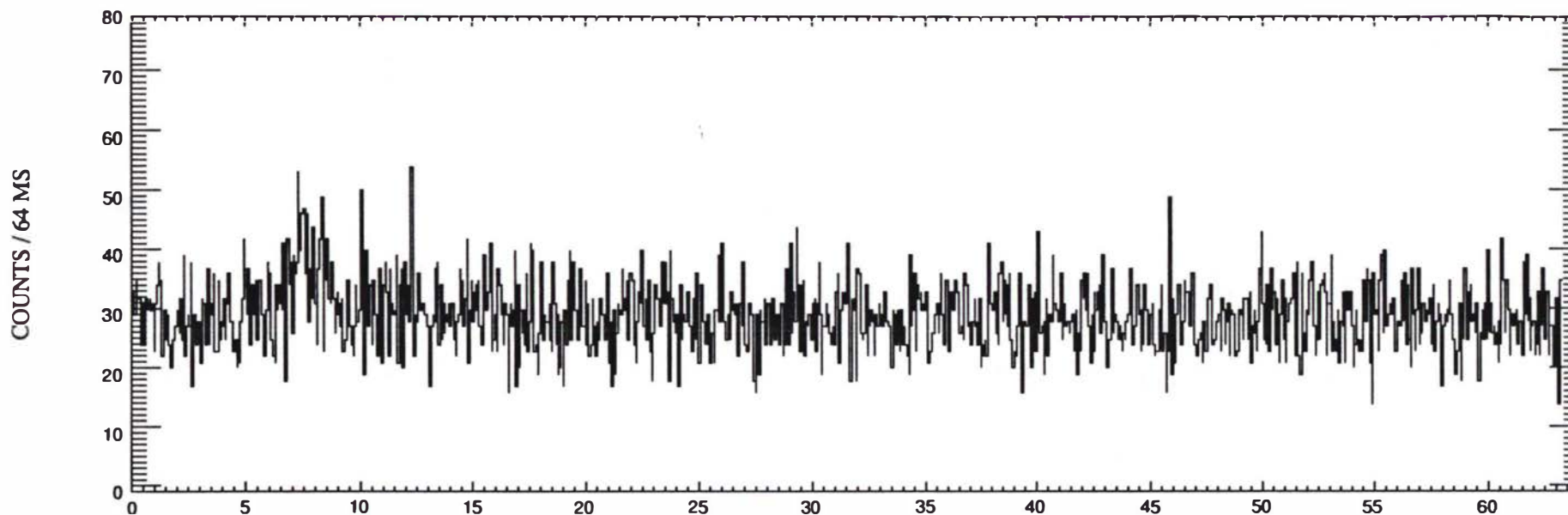
HUS MODES EDR day 17, year 1996 to day 17, year 1996
BURST NUMBER 11, 12

4/1/96



HUS 2A TRIGGERED DATA EDR day 17, year 1996
Burst Counter 11 at UT=21.849219021267 h=78657.188 s 21:50:57.188

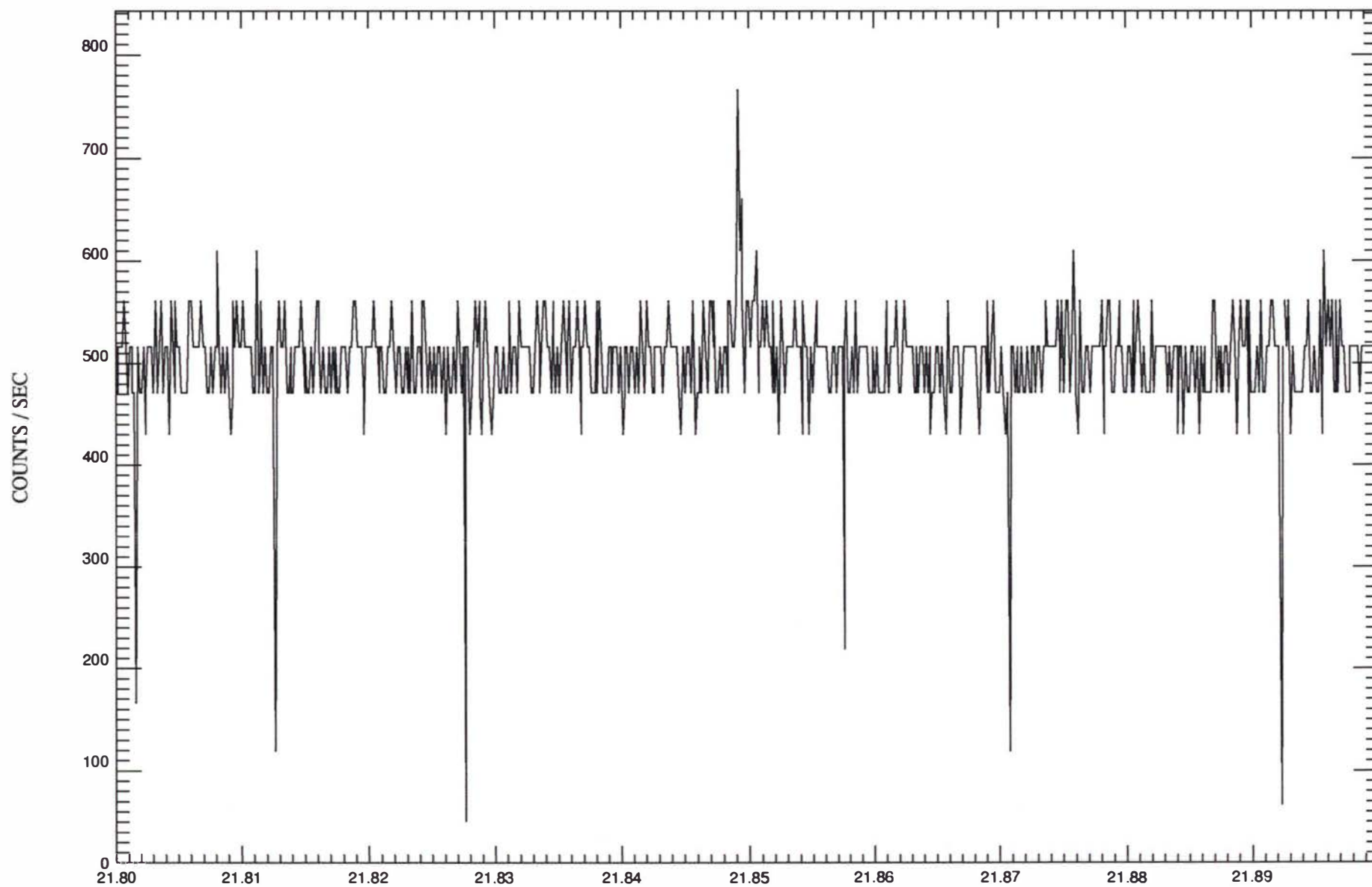
4/1/96



B# 1

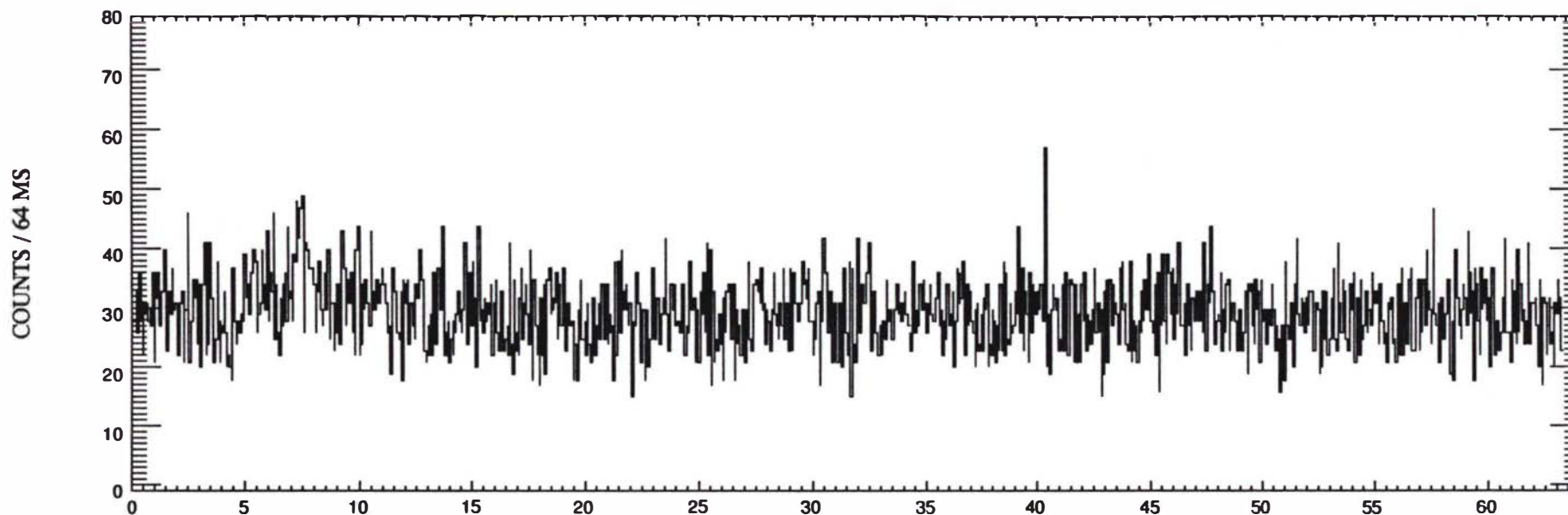
HUS 2A, MODE 1, NOT AVERAGED QEDR day 17, year 1996 to day 17, year 1996
CALIBRATION DATA INCLUDED

1/18/96

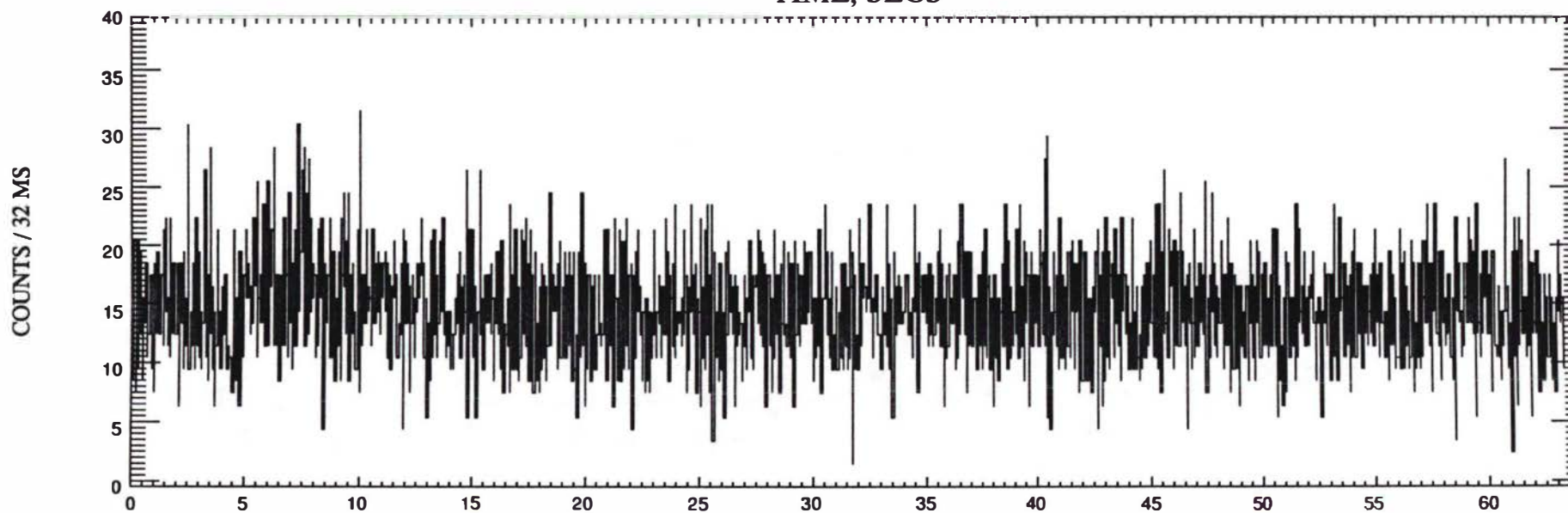


HUS 2A TRIGGERED DATA EDR day 17, year 1996
Burst Counter 12 at UT=23.352052709791 h=84067.390 s 23:21:07.390

4/1/96



TIME, SECS

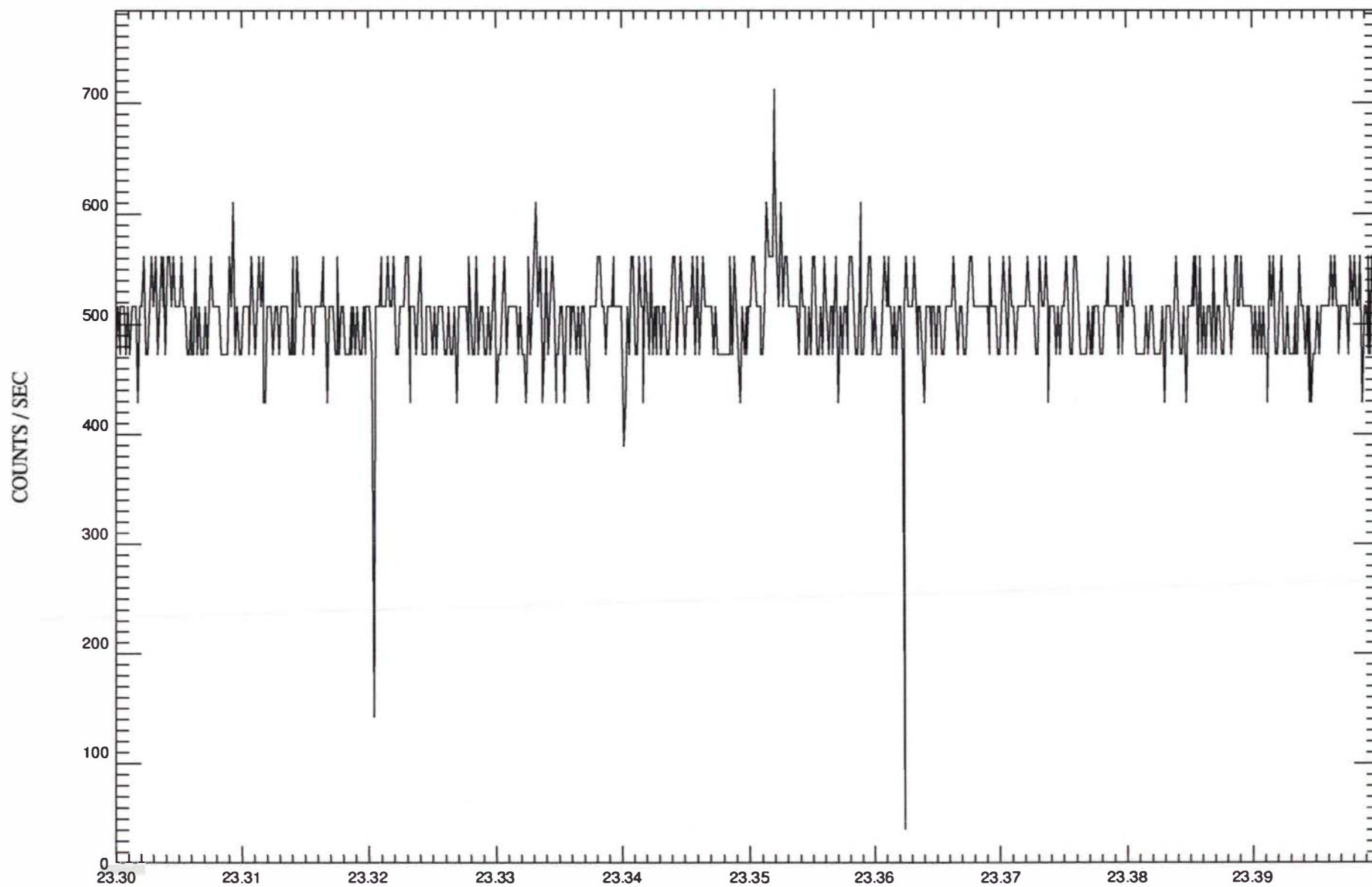


TIME, SECS

B# 2

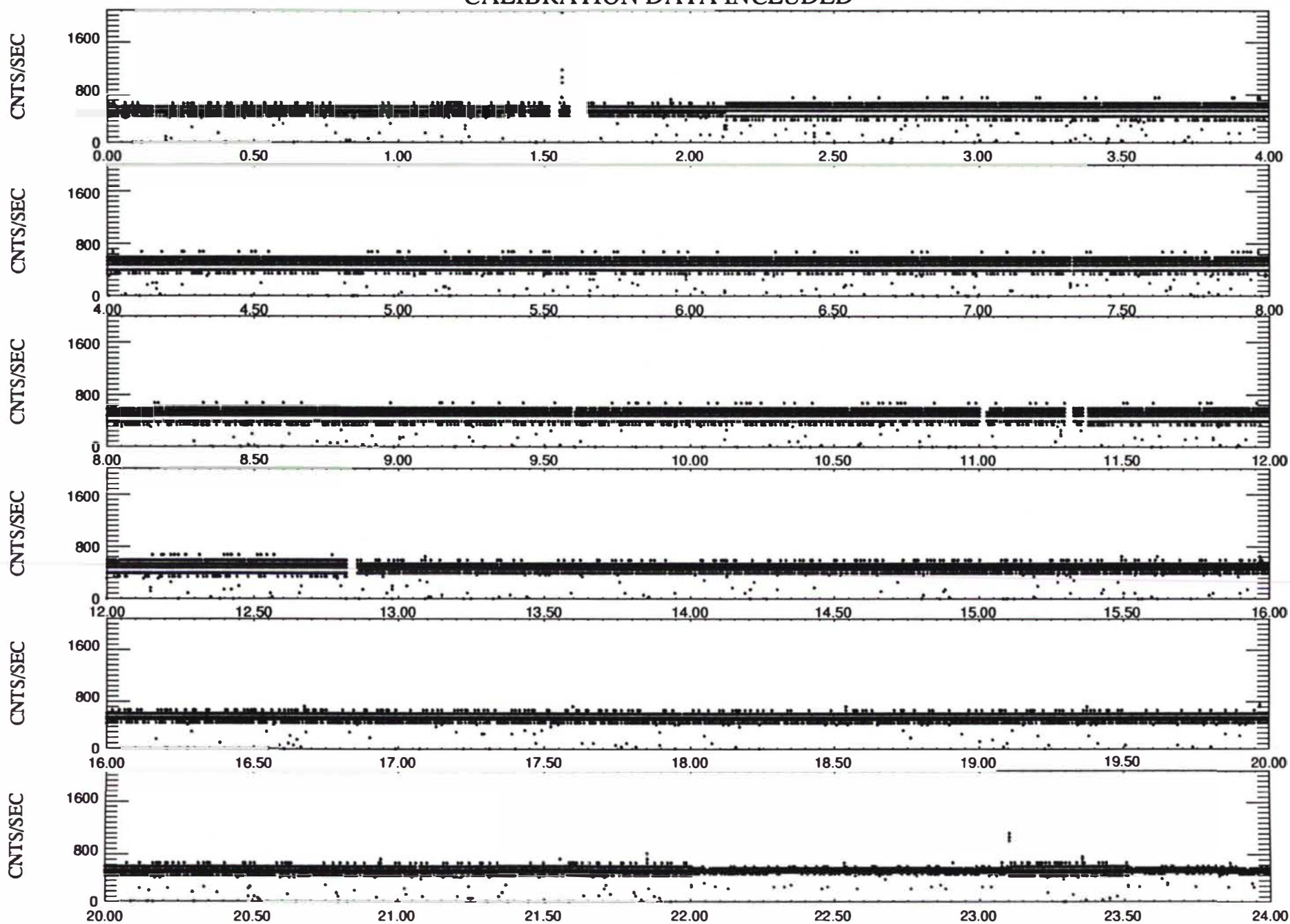
HUS 2A, MODE 1, NOT AVERAGED QEDR day 17, year 1996 to day 17, year 1996
CALIBRATION DATA INCLUDED

1/18/96

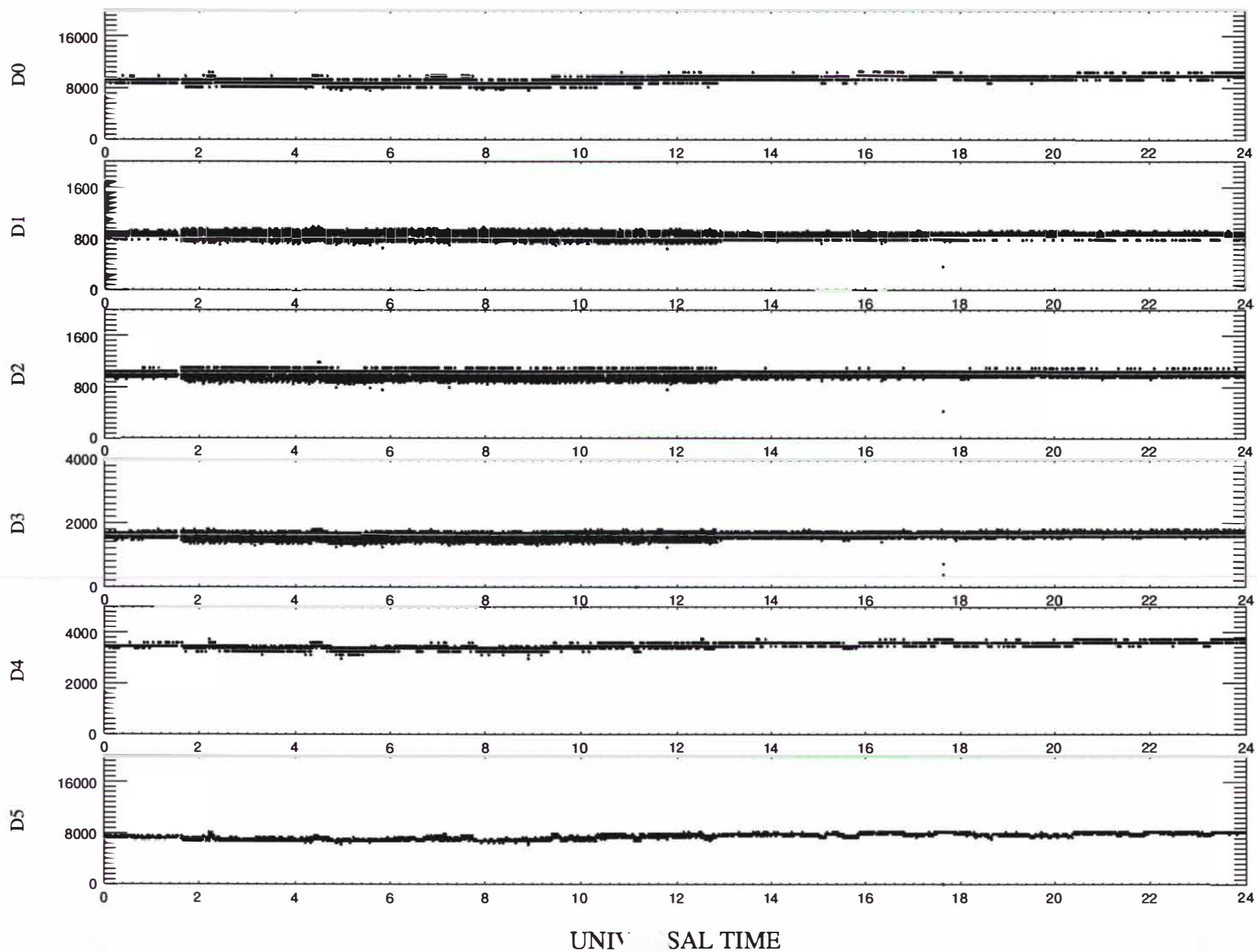


HUS 2A, MODE 1, NOT AVERAGED EDR day 17, year 1996 to day 17, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV SAL TIME



From HENZE@fender.msfc.nasa.gov Mon Jan 22 11:06 PST 1996
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 22 Jan 1996 13:05:14 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.gsfc.nasa.gov, butterworth@lheavx.gsfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, band@cass09.ucsd.edu,
gruber@cass09.ucsd.edu, matteson@cass09.ucsd.edu,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4435

TIME: TJD=0100 SECONDS=27081

TYPE: CYG RIS SOLAR FLARE TRIGGER SIGNAL:N

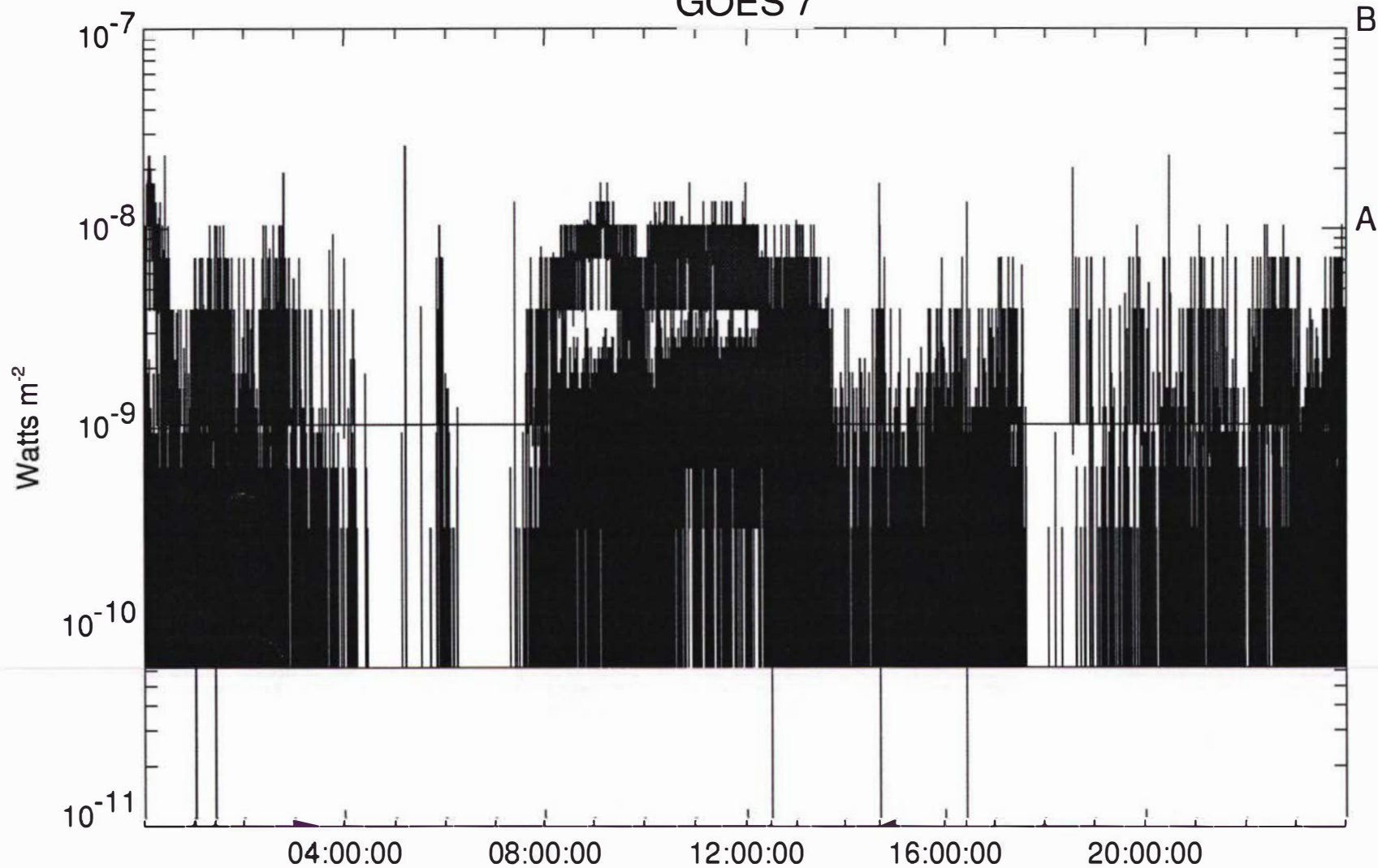
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
CYG X-1 RISE.

GOES 7



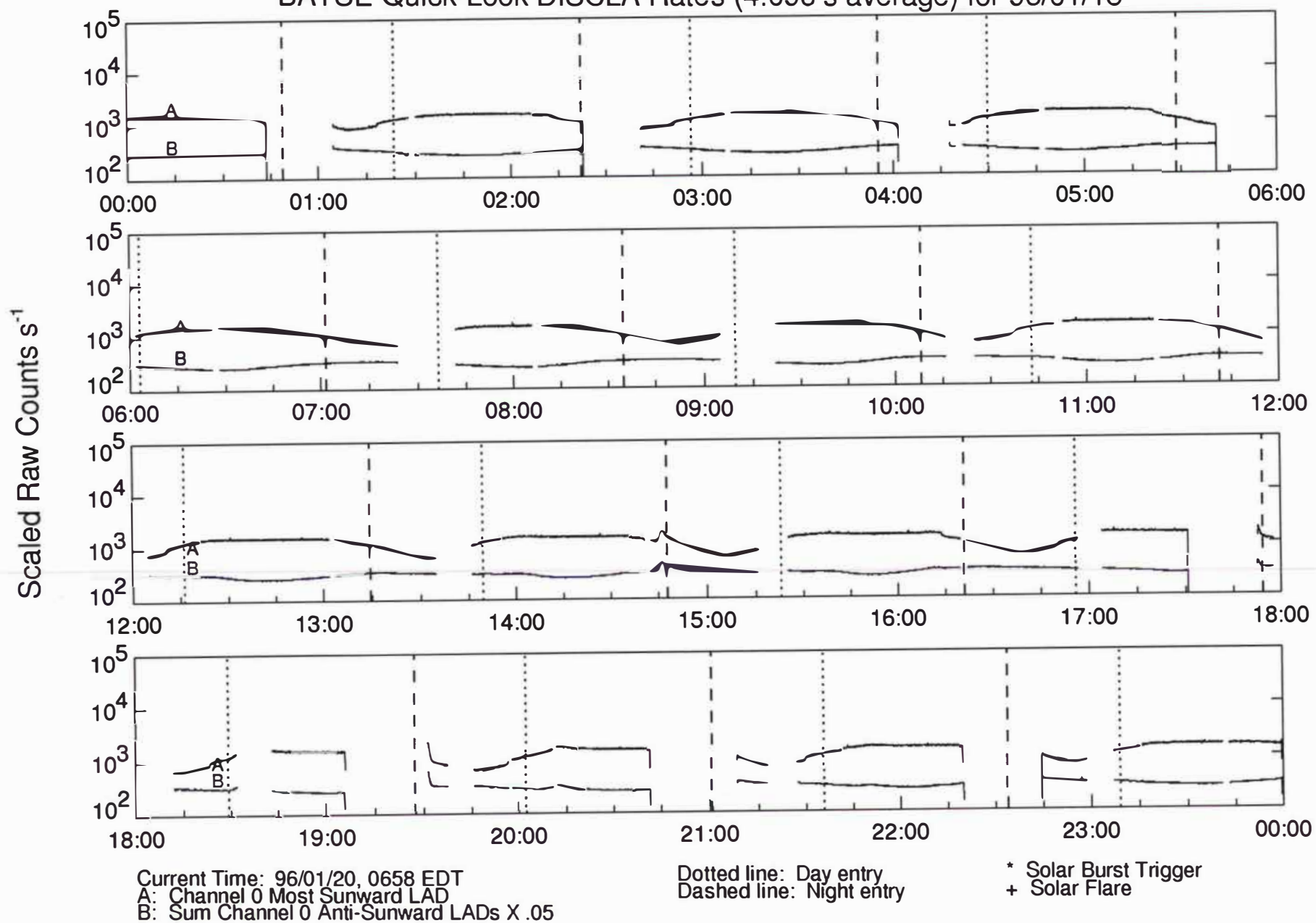
Data Start: 96/01/18, 0000:00

Plot created: 96/01/20, 0658

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

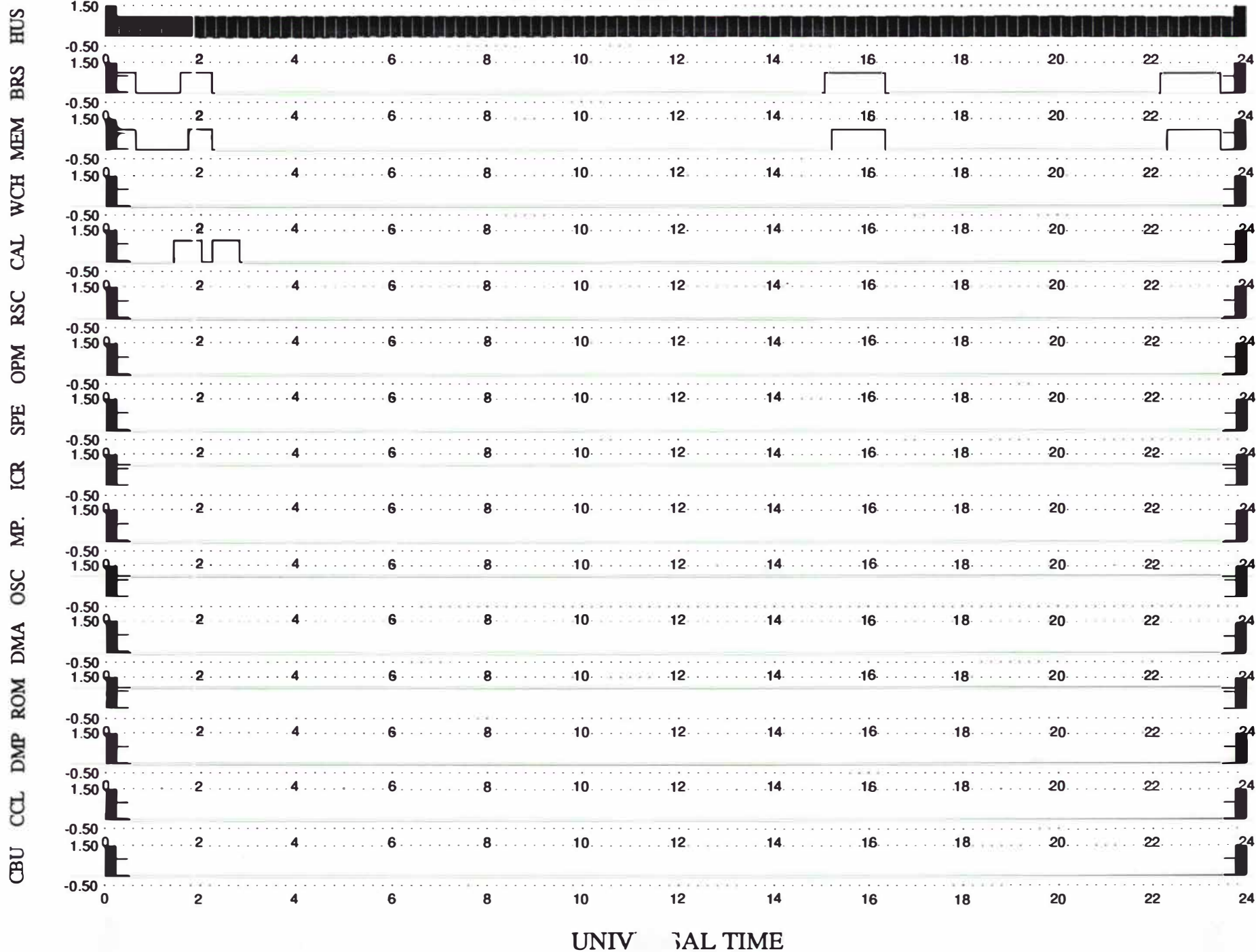
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/18



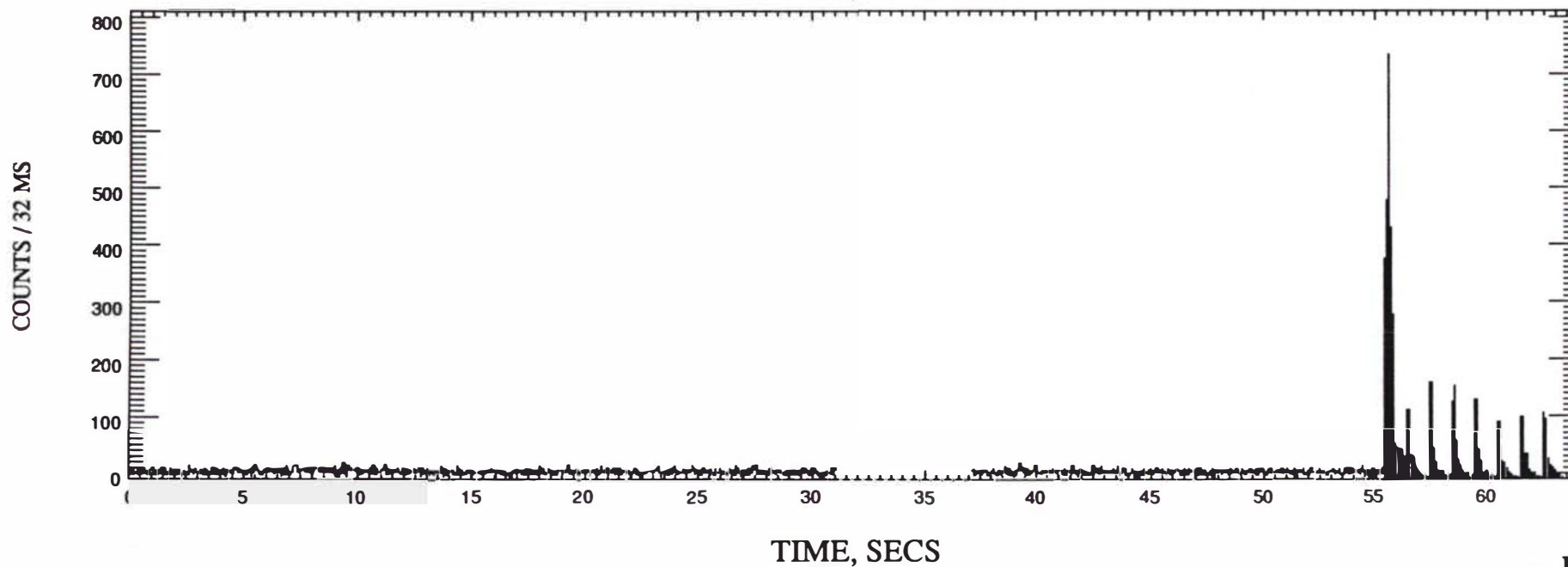
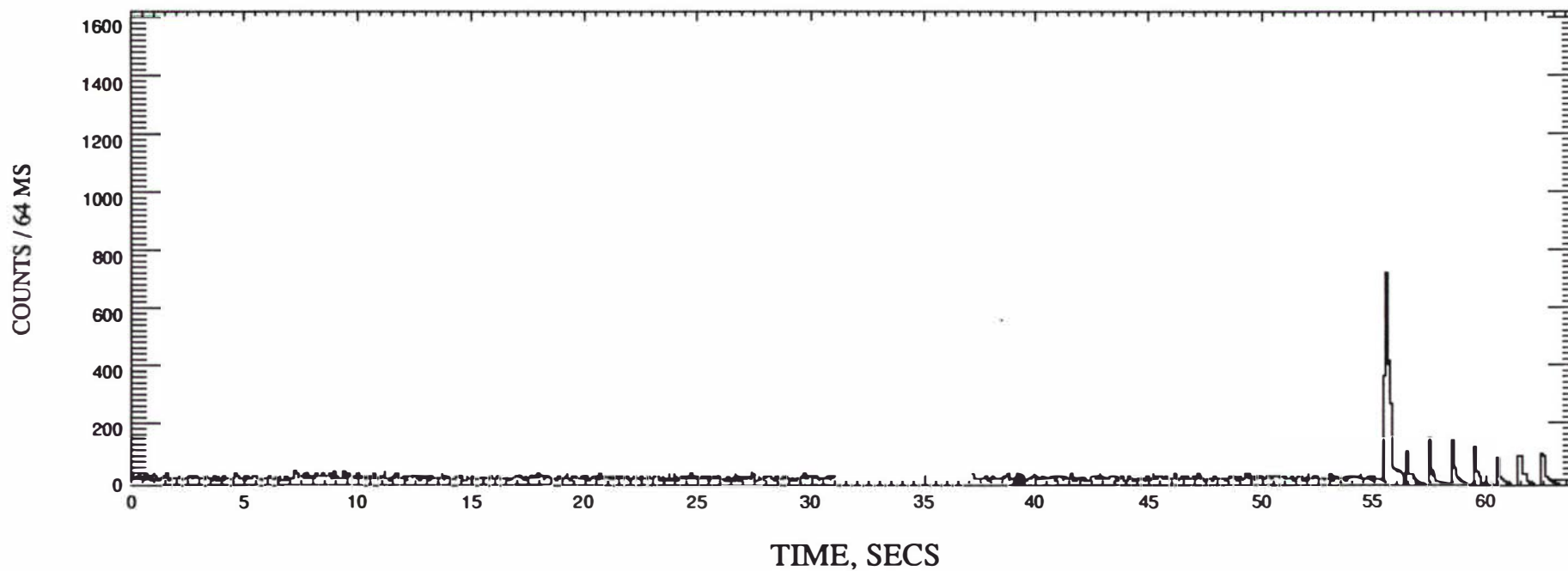
HUS MODES EDR day 18, year 1996 to day 18, year 1996 BURST NUMBER 13 - 15

4/1/96



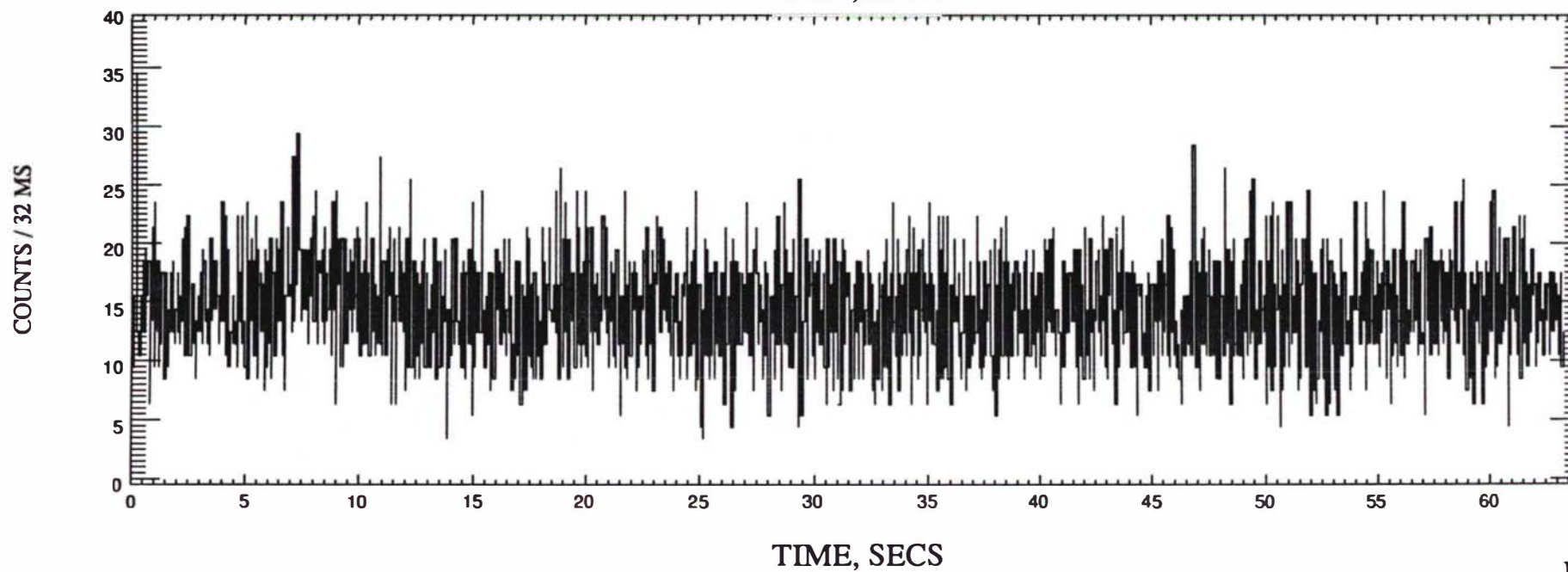
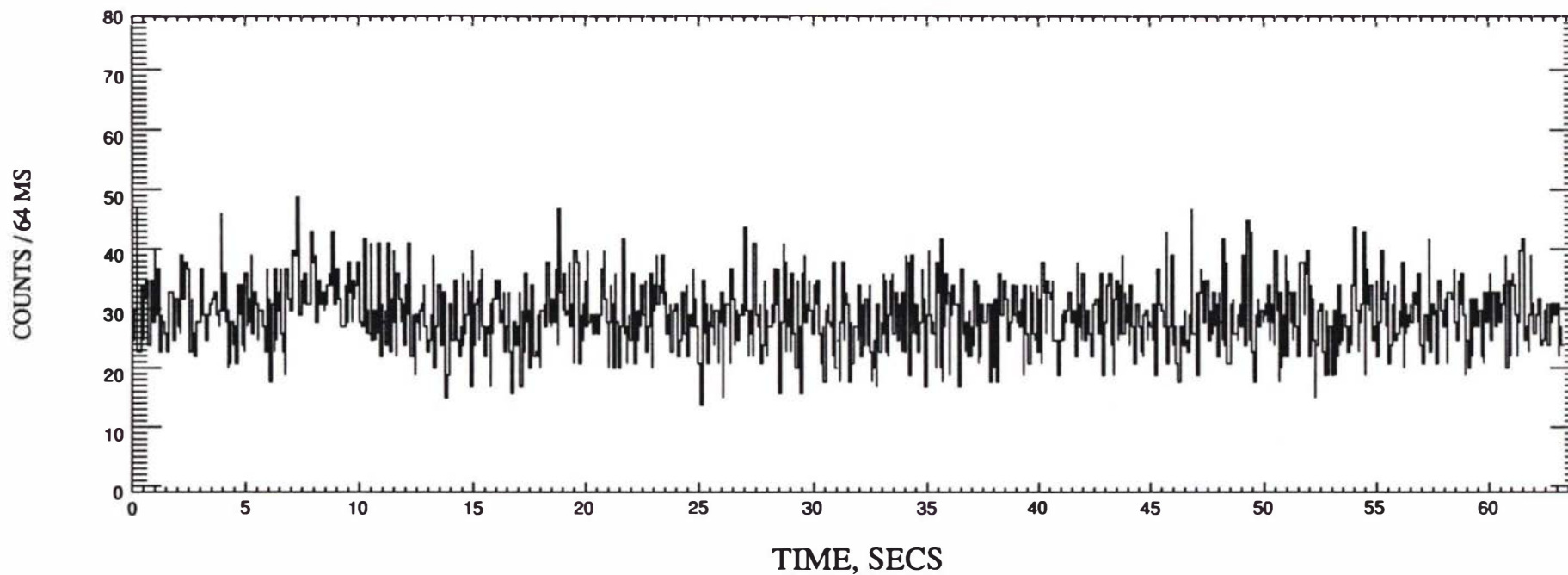
HUS 2A TRIGGERED DATA EDR day 18, year 1996
Burst Counter 13 at UT= 1.549830996195 h= 5579.392 s 01:32:59.392

4/1/96



HUS 2A TRIGGERED DATA EDR day 18, year 1996
Burst Counter 14 at UT=15.091905988057 h=54330.862 s 15:05:30.862

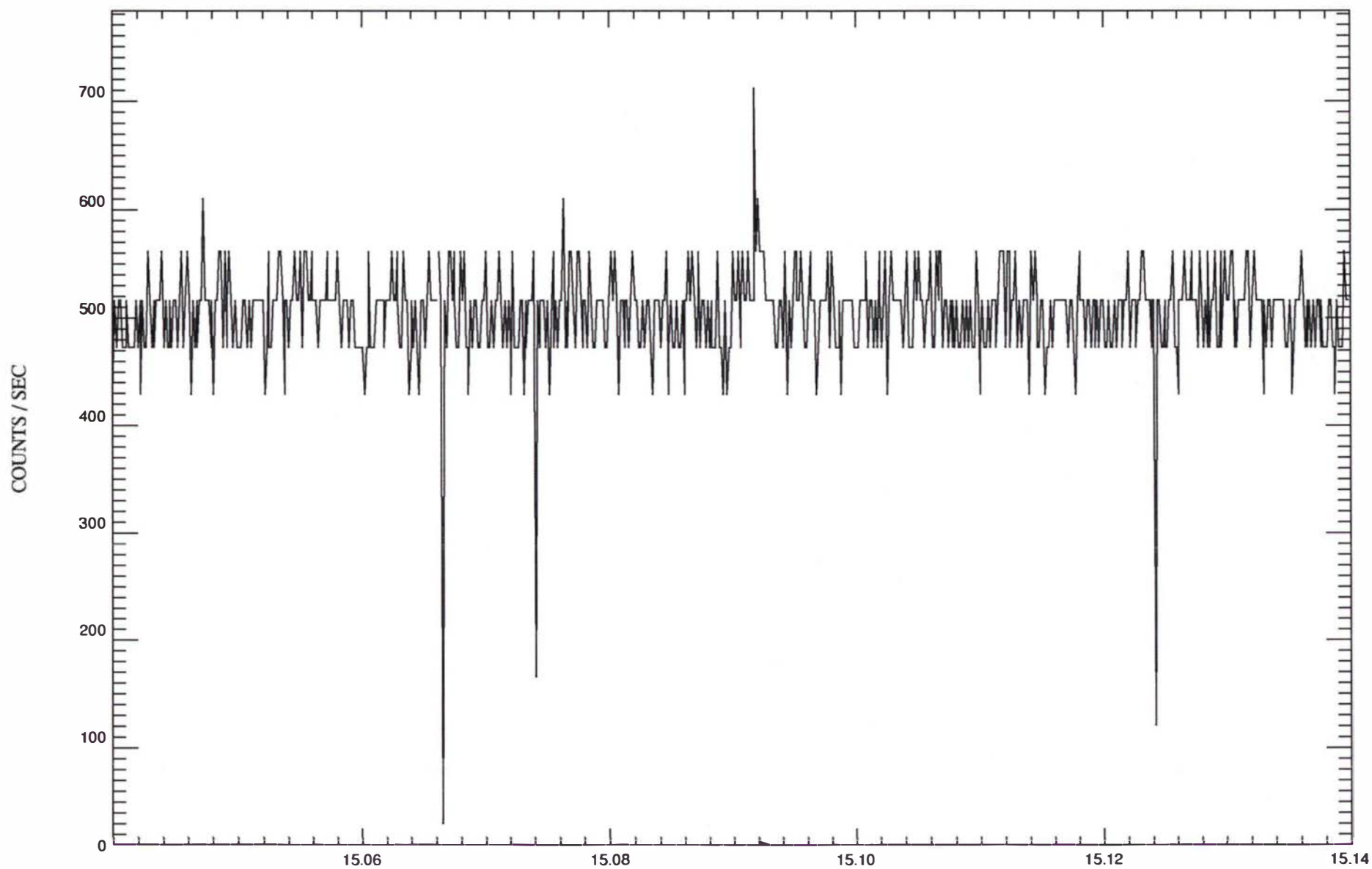
4/1/96



B# 2

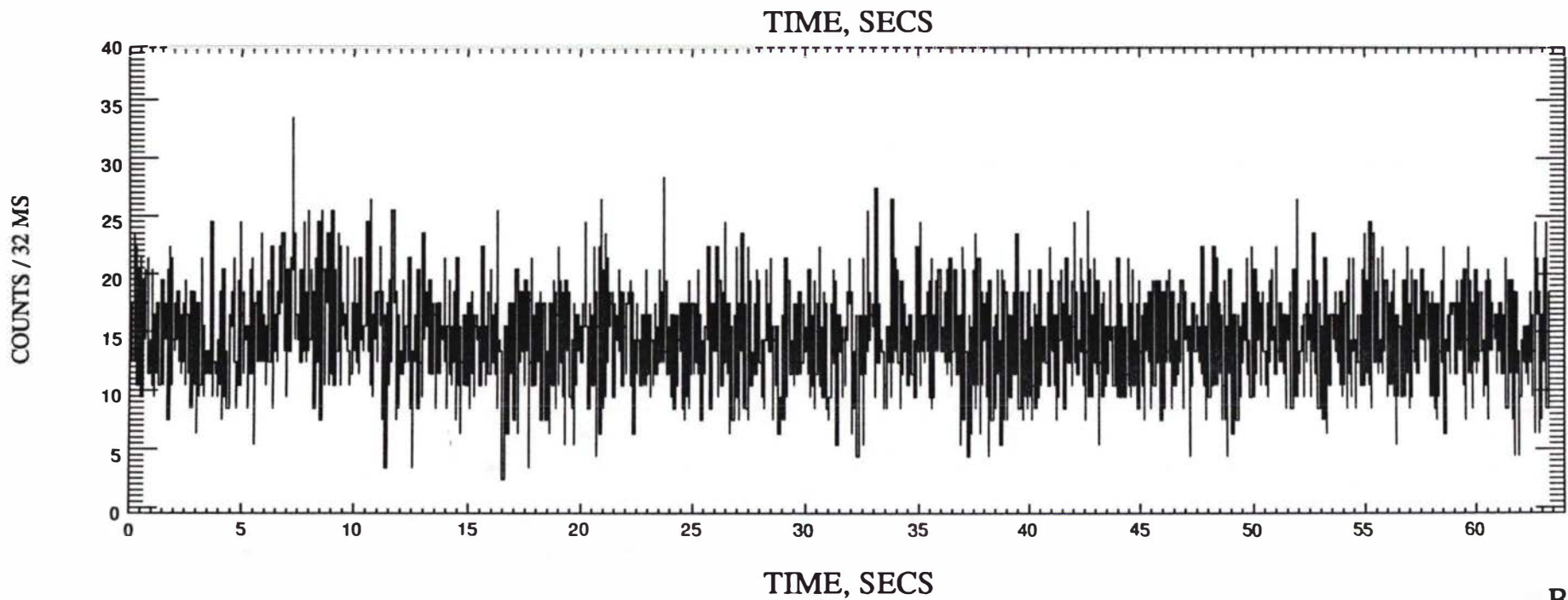
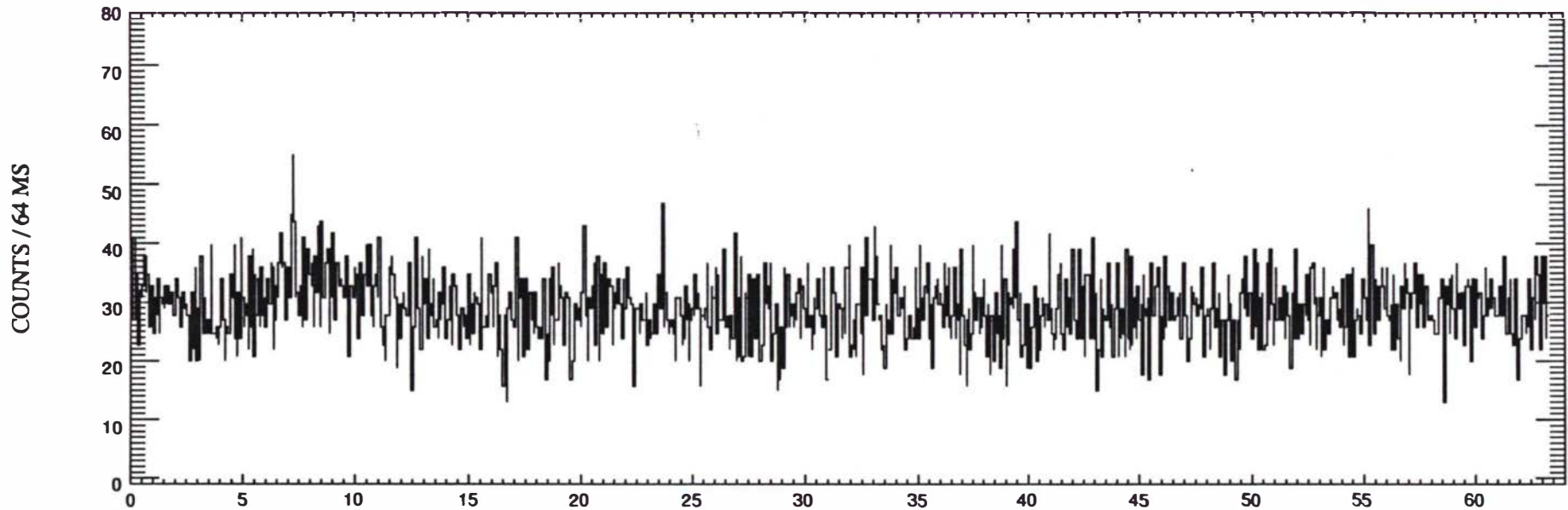
HUS 2A, MODE 1, NOT AVERAGED QEDR day 18, year 1996 to day 18, year 1996
CALIBRATION DATA INCLUDED

1/19/96



HUS 2A TRIGGERED DATA EDR day 18, year 1996
Burst Counter 15 at UT=22.201456387838 h=79925.243 s 22:12:05.243

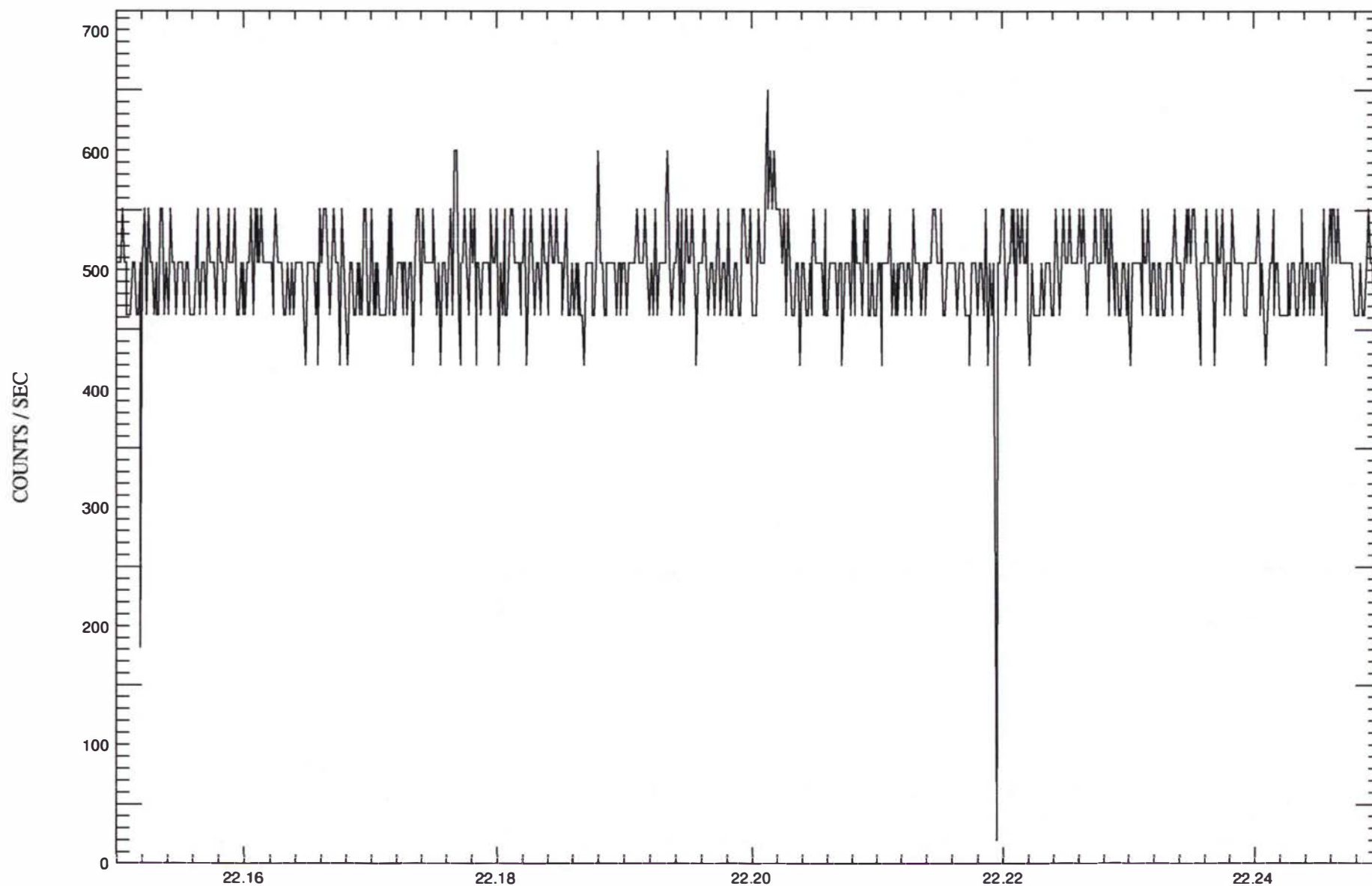
4/1/96



B# 3

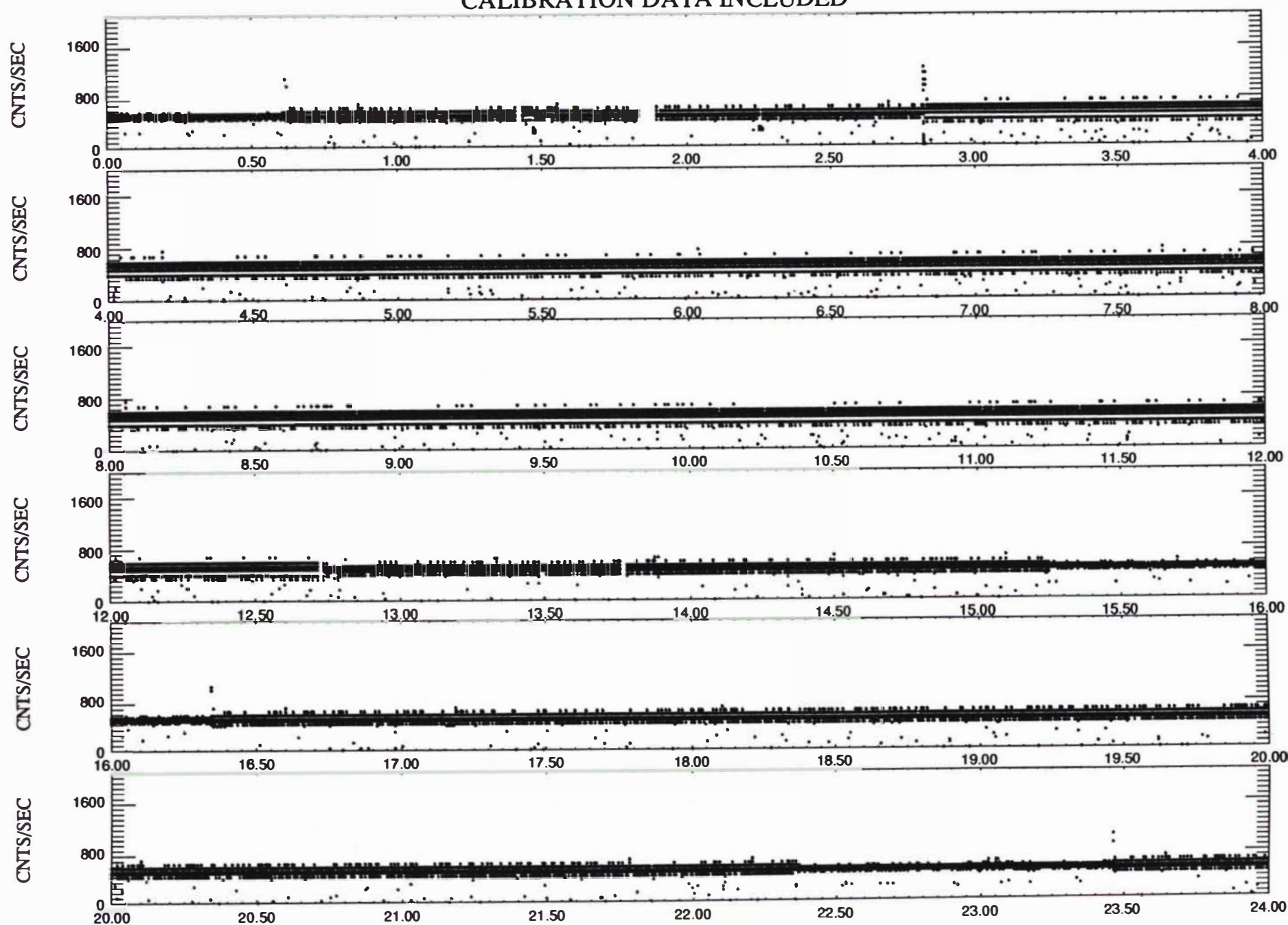
HUS 2A, MODE 1, NOT AVERAGED QEDR day 18, year 1996 to day 18, year 1996
CALIBRATION DATA INCLUDED

1/19/96

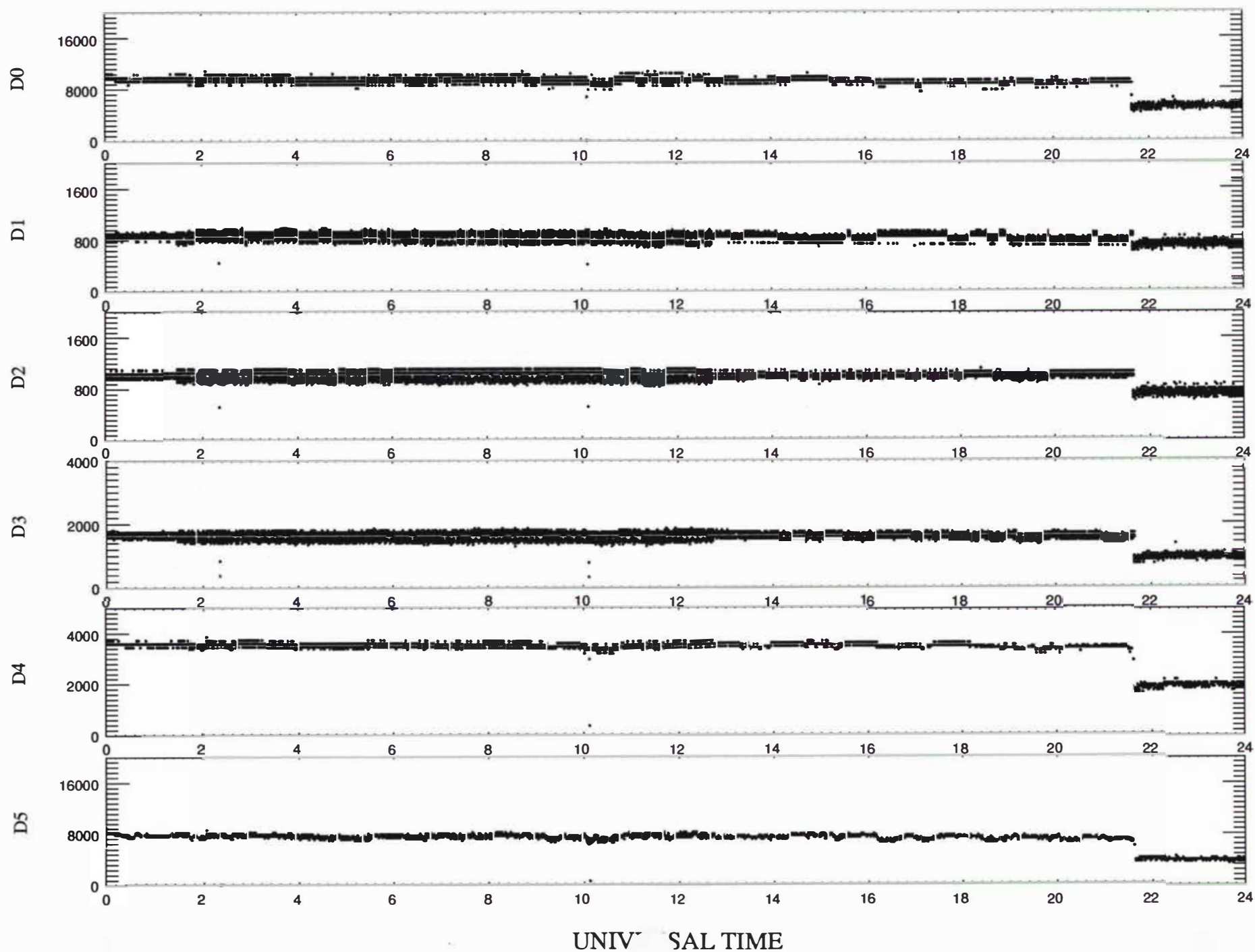


HUS 2A, MODE 1, NOT AVERAGED EDR day 18, year 1996 to day 18, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV. TIME



From HENZE@ssl.msfc.nasa.gov Tue Jan 23 10:07 PST 1996
Date: Tue, 23 Jan 1996 12:07:31 -0600 (CST)
From: HENZE@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4462

BATSEARCH PROGRAM

RI

BATSE BURST # 4462
EVENT OF 1996 JAN 19 DAY OF YEAR= 19
EVENT CROSSING TIME AT BATSE : 34675. S. OR 09:37:55.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 86.000 55.000
BATSE PEAK COUNTING RATE: 20500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 19/ 1/ 96 IS:
RA= 224.518 DEC= 64.831 DIST= 2.805 AU
BATSE-ULYSSES DISTANCE = 419554107. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=123.96 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -781.79 SECS.
CROSSING TIME AT ULYSSES IS 33893. S. OR 09:24:53 +/- 239.65 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 19/ 1/ 96 IS:
RA= 311.004 DEC= -19.249 DIST= 2.347 AU
MARS-BATSE DISTANCE = 351039264. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 49.24 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 764.55 SECS.
CROSSING TIME AT MARS IS 35440. S. OR 09:50:39 +/- 165.59 SECONDS

960119 09 37 59.317 S2 480 780 190 0.13 11 12 236
 960119 12 33 46.016 S2 210 460 190 0.2 6 85 237
 960120 10 12 48.974 S2 740 540 210 <0.05 7 19 238
 960120 13 30 22 S2 40 70 0.8 20 BGR
 960123 12 07 21 S1 90 70 1.7 15 BGR
 960124 00 56 28.008 S2 930 2130 710 0.13 11 8 239
 960128 14 36 46 S2 270 190 25 0.15 6 BGR
 960129 07 35 34 S1 90 70 >10 30 BGR
 960129 15 24 19 S1 40 90 30 2 9 BGR
 960130 02 25 56.848 S1 100 470 340 3 0.5 0.2 240

RT

Observations: 11/11/94 - 01/30/96 - 435 days

Gamma-ray bursts - 307
 burst mode - 153
 background mode (BGR) - 154

Solar flares - 78
 burst mode - 15
 background mode - 63

False events (multi-charged particles,
 trapped radiation, solar
 cosmic rays) - 85

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

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.
- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec		G3	in G2	T<T0	T>T0	
			G1	G2					
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR
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 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39

Date:

Helio corr removed
Feb 24 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

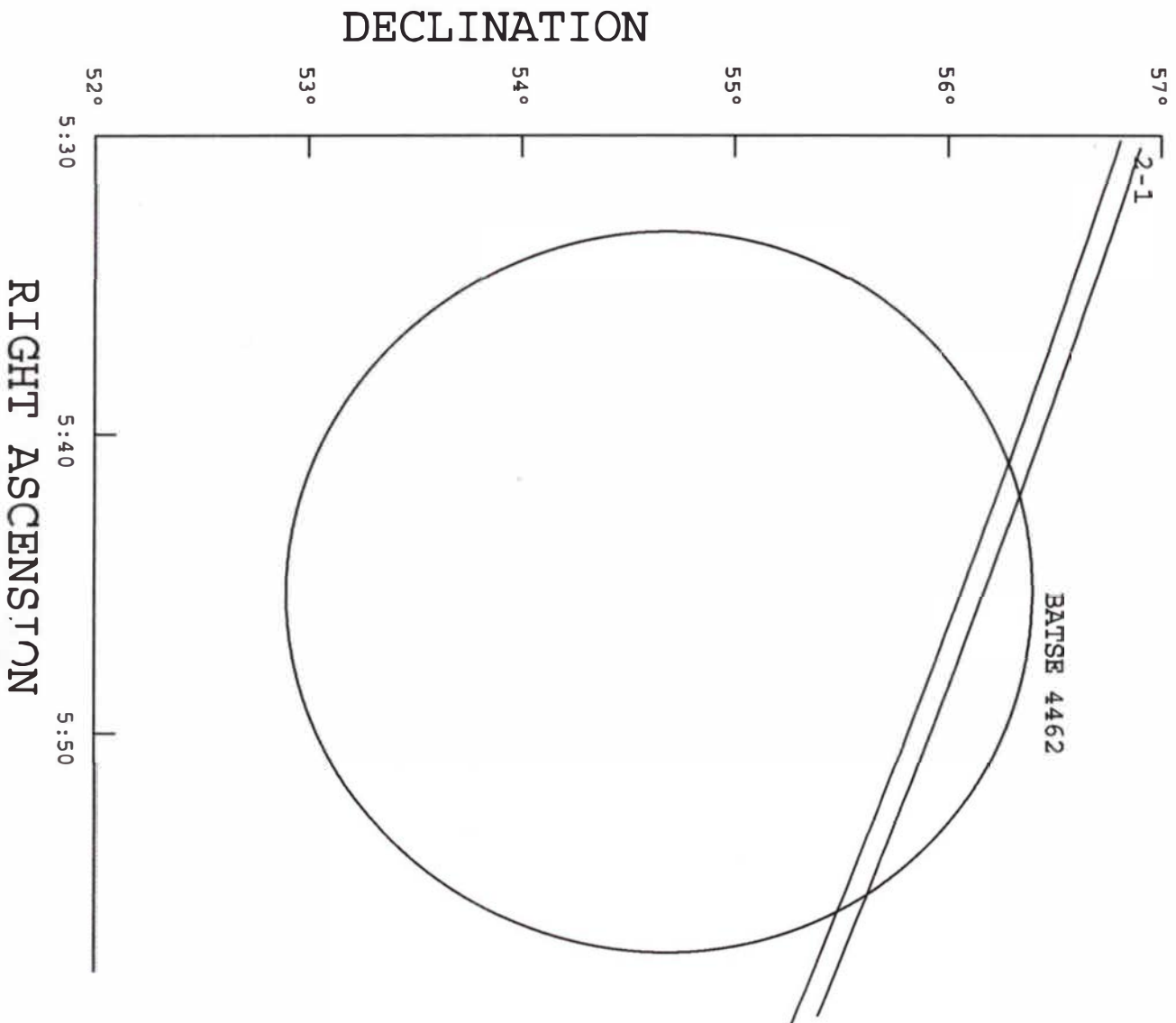
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF JAN 19, 1996 9:23

24/ 2/98



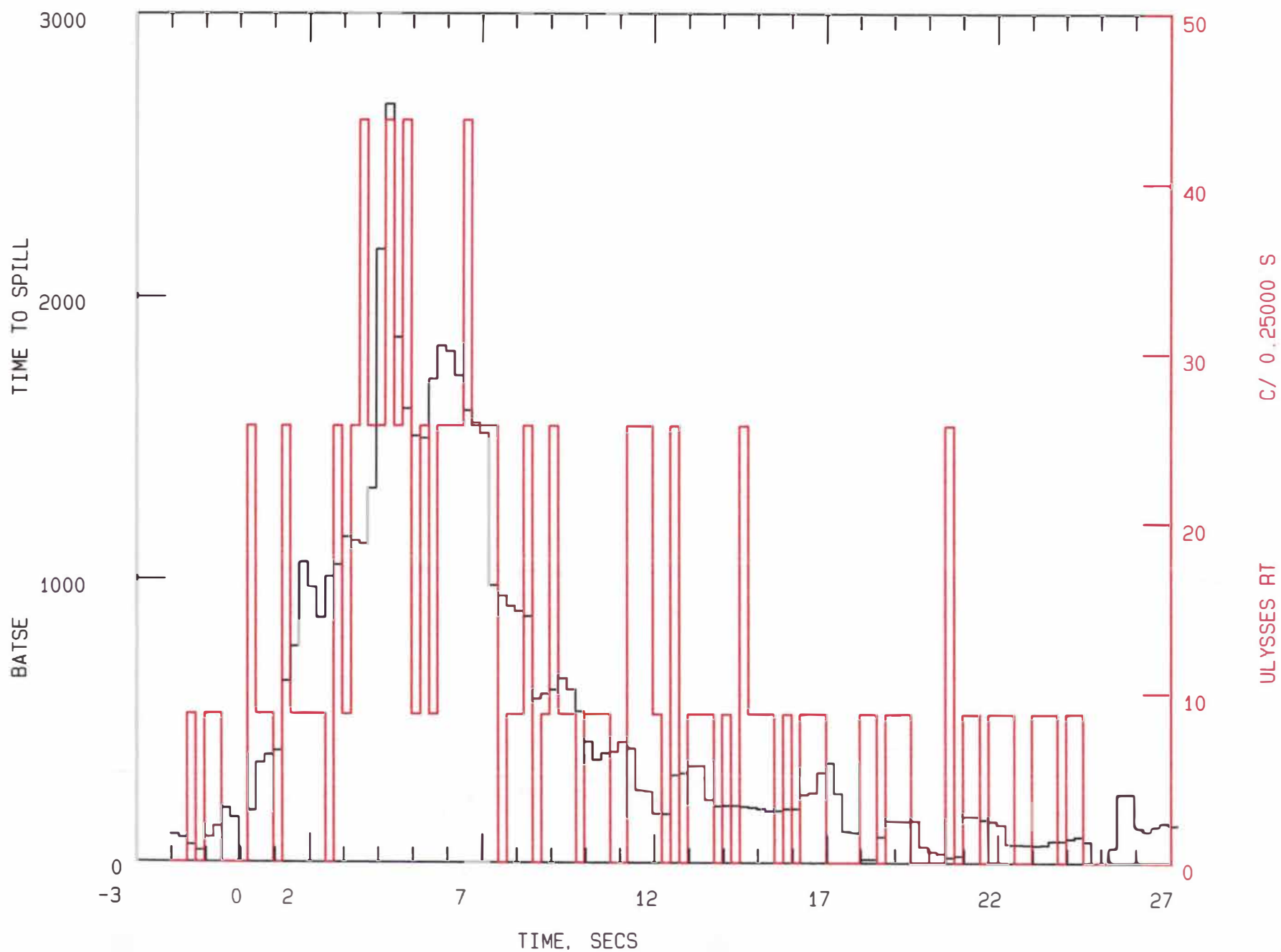
BATSE

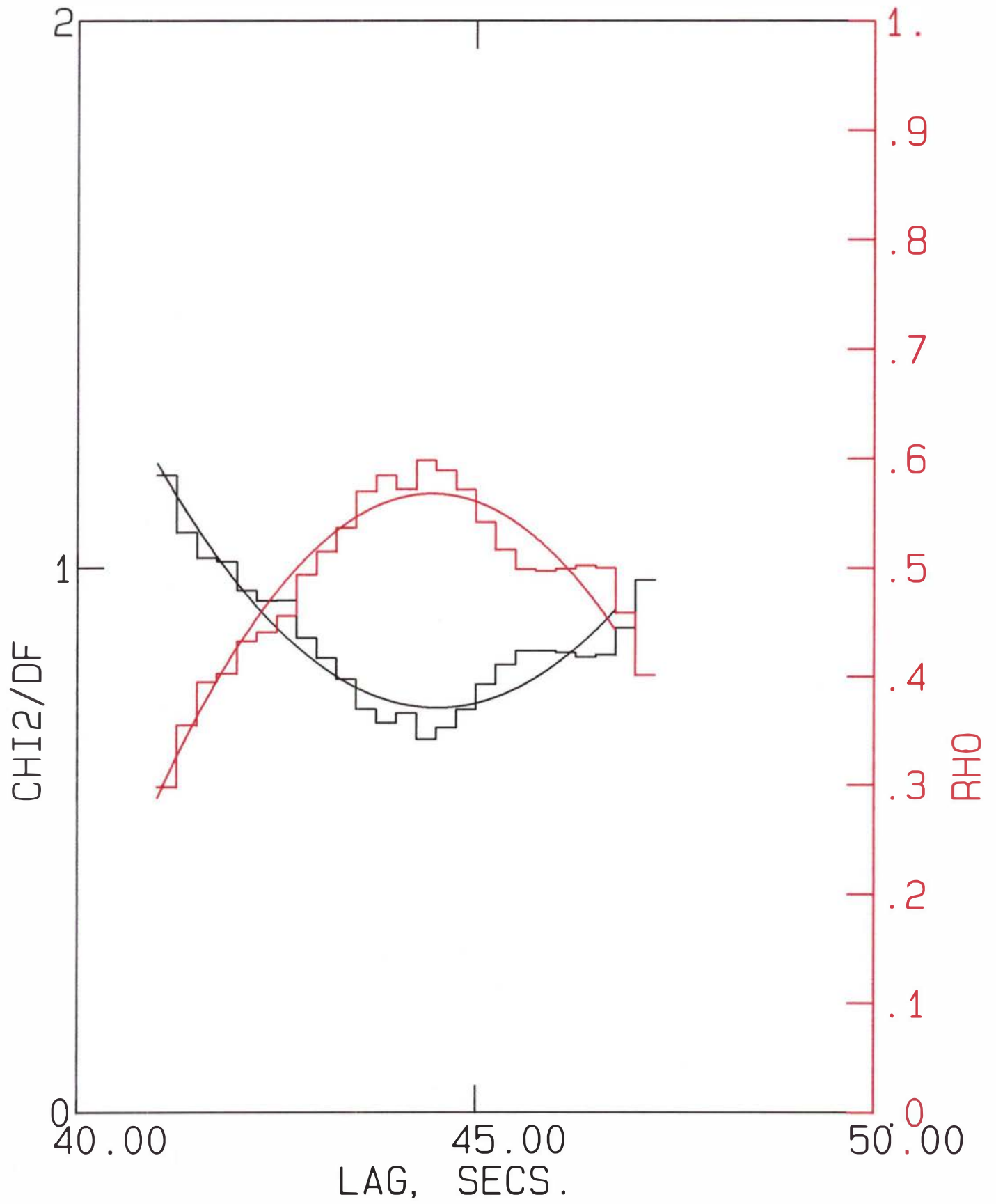
-ULYSSES RT CORRELATION

19/ 1/96

34675.785

24/ 2/98





ULYSSES RT

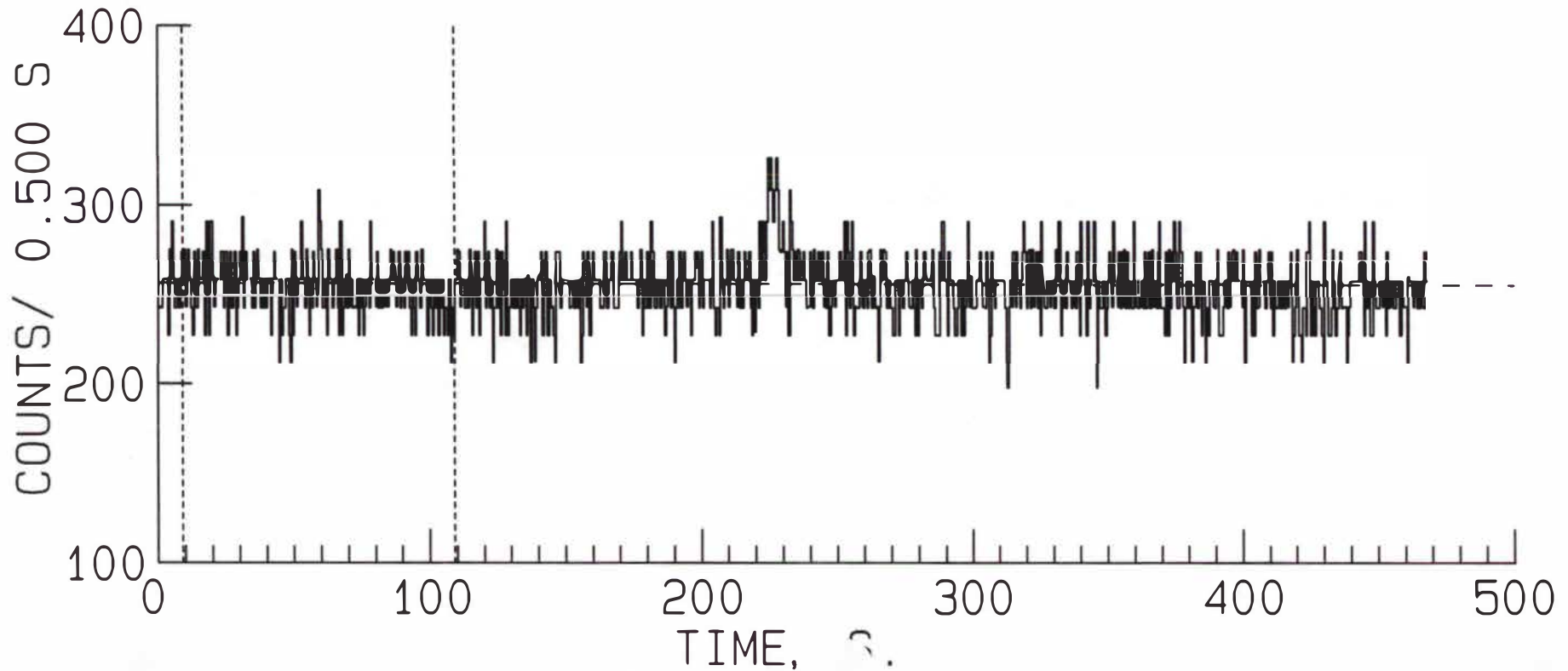
24 / 2 / 98

19 / 1 / 96 33660.230 s

0.250 S INTERVALS REGROUPED BY 2

21- 144 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



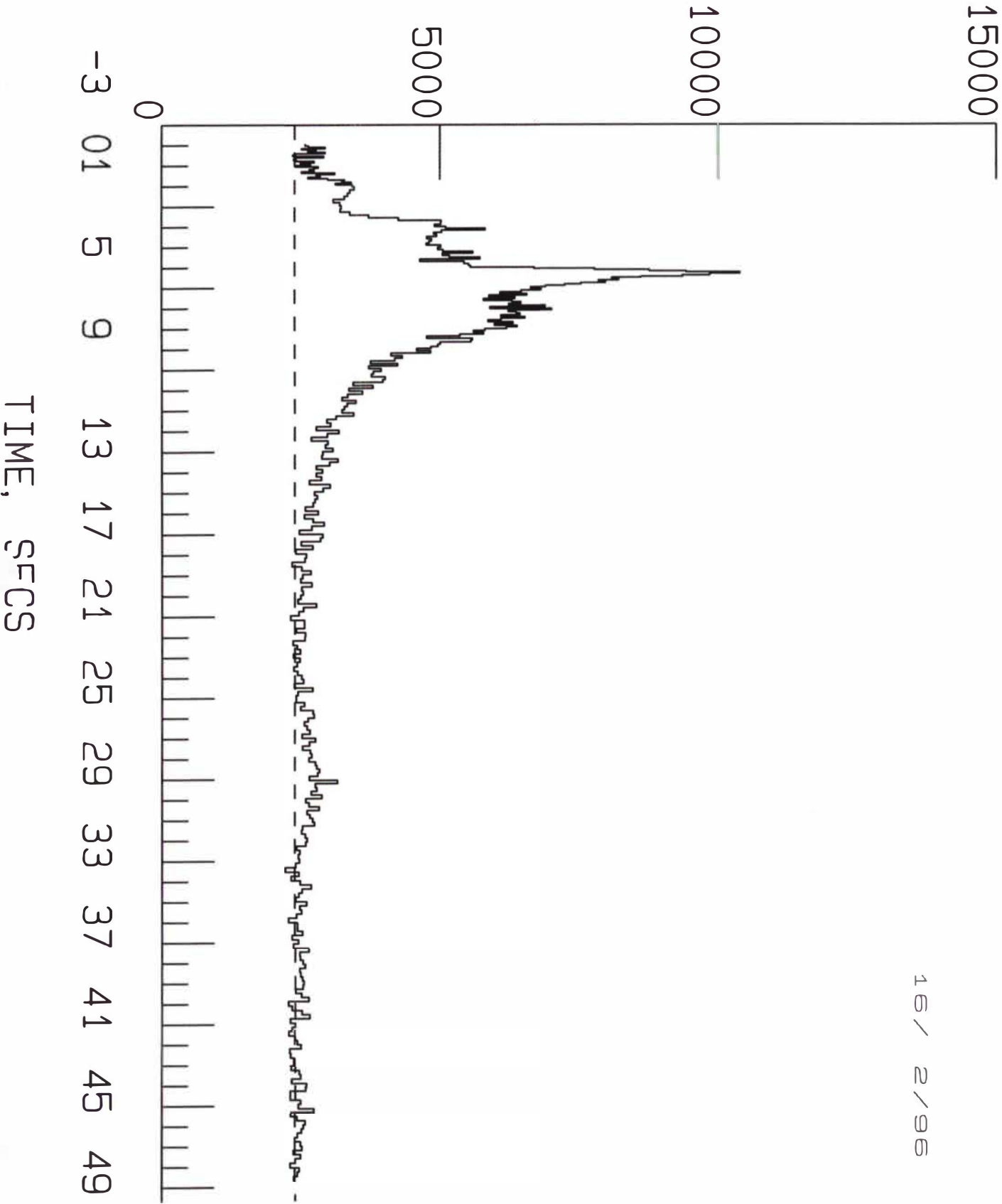
BATSE

19/01/96

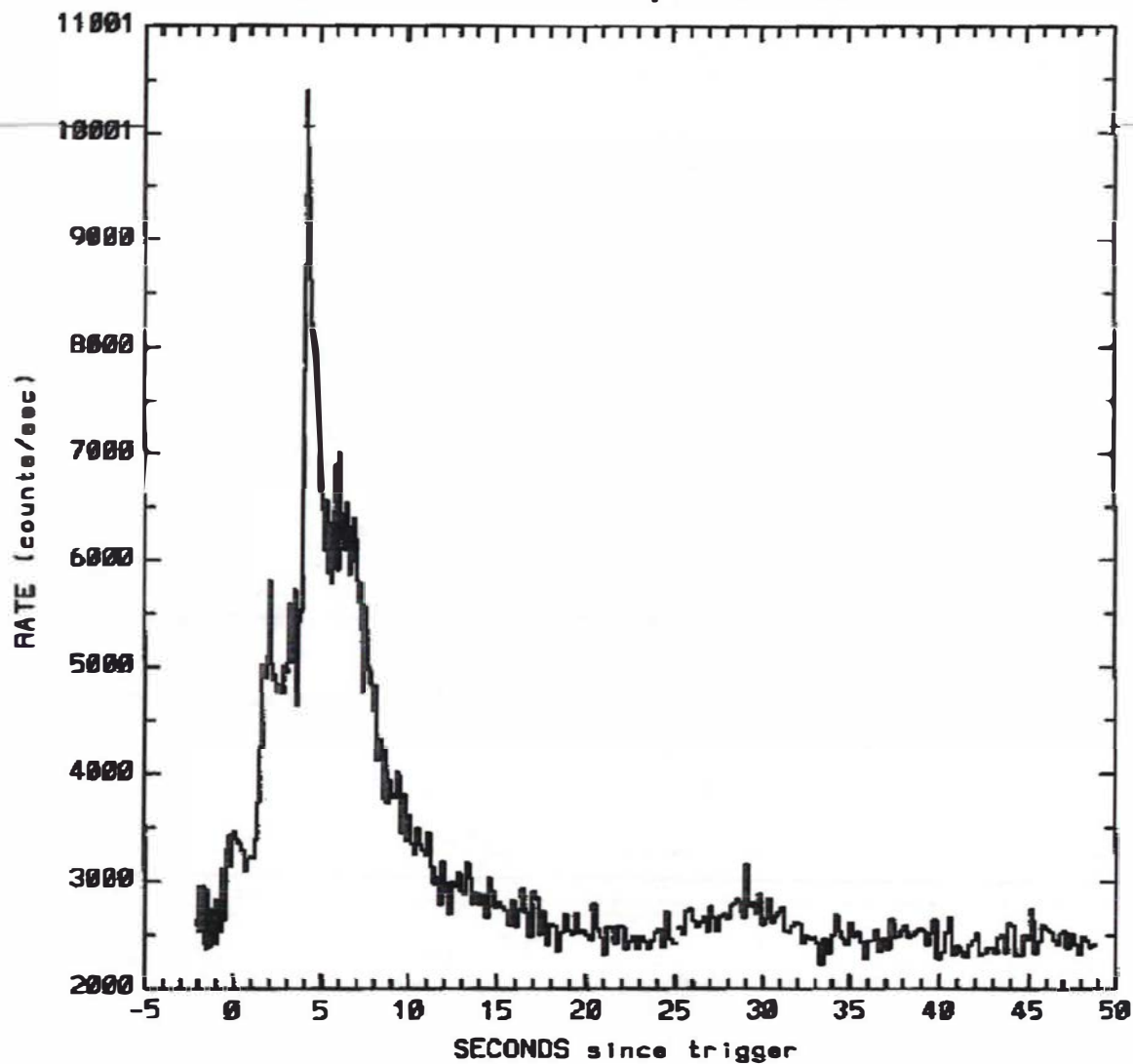
34675.785

25- 100 keV

COUNTS/S TTS



TTS Data for K. Hurley, No. 4462



8-FEB-1996 09:28:58

Created by HOPS 80
(Burst Display)
Version 12.25

Trigger # : 4462

Trigger Time:
19191 / 34675.786Burst Data Type:
TTS

Time Corrected: Y

Maximum Time Error:
0.07393 second(s)Deadtime
Corrected: NBackground Data
Type: PREB + DISCLA

Bin Count: 8

Detectors [7..8].
--54--Discriminators:
[2..2]Quality Mask:
BDISP1

KONUS2 19960120 36768

ULYSSES RT

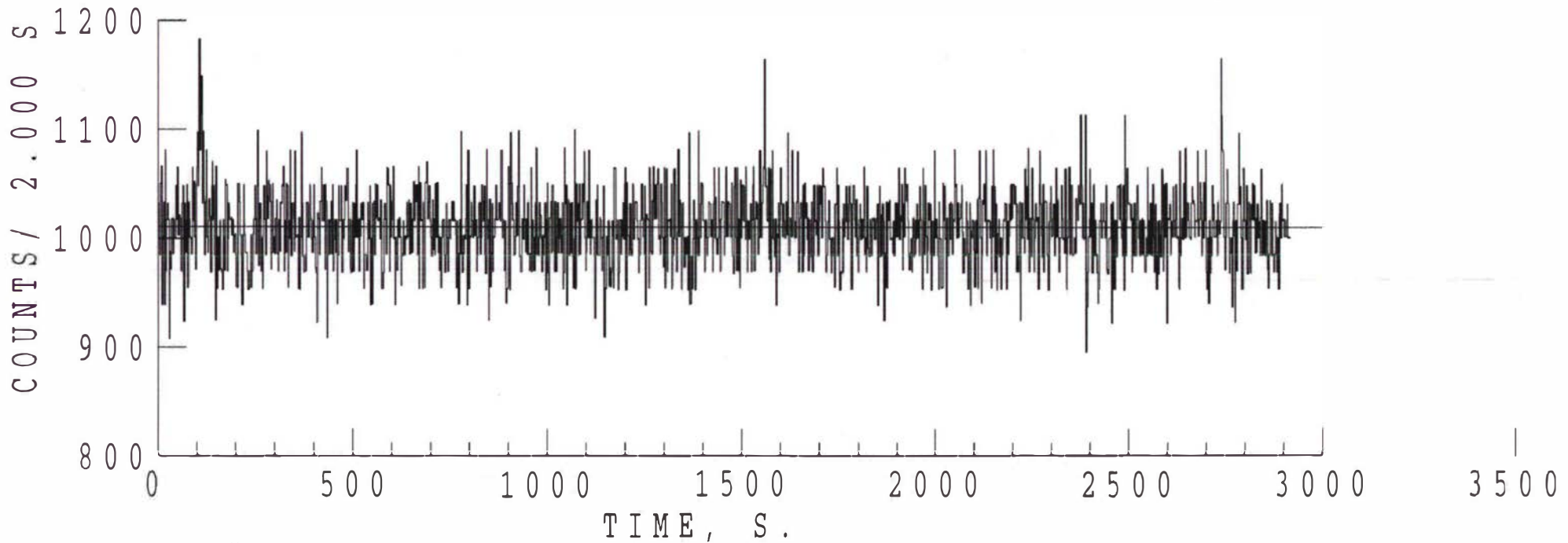
05 / 09 / 01

20/01/96 35316.043 s

0.250 S INTERVALS REGROUPED BY 8

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



Date: Sep 13 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

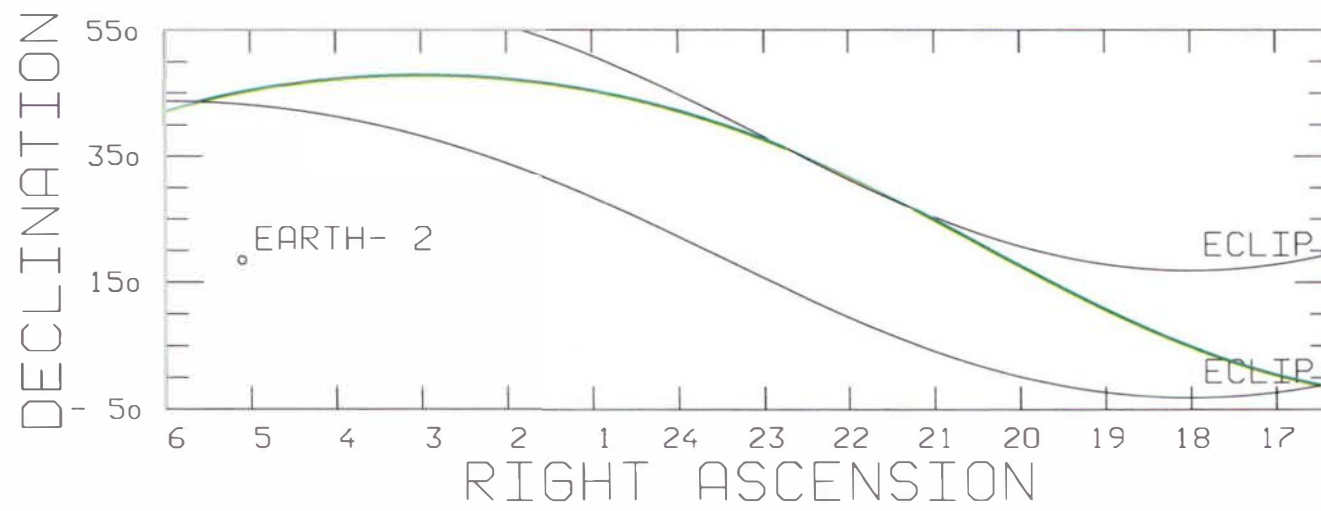
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

2. BATSE Data

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

3. PVO Data

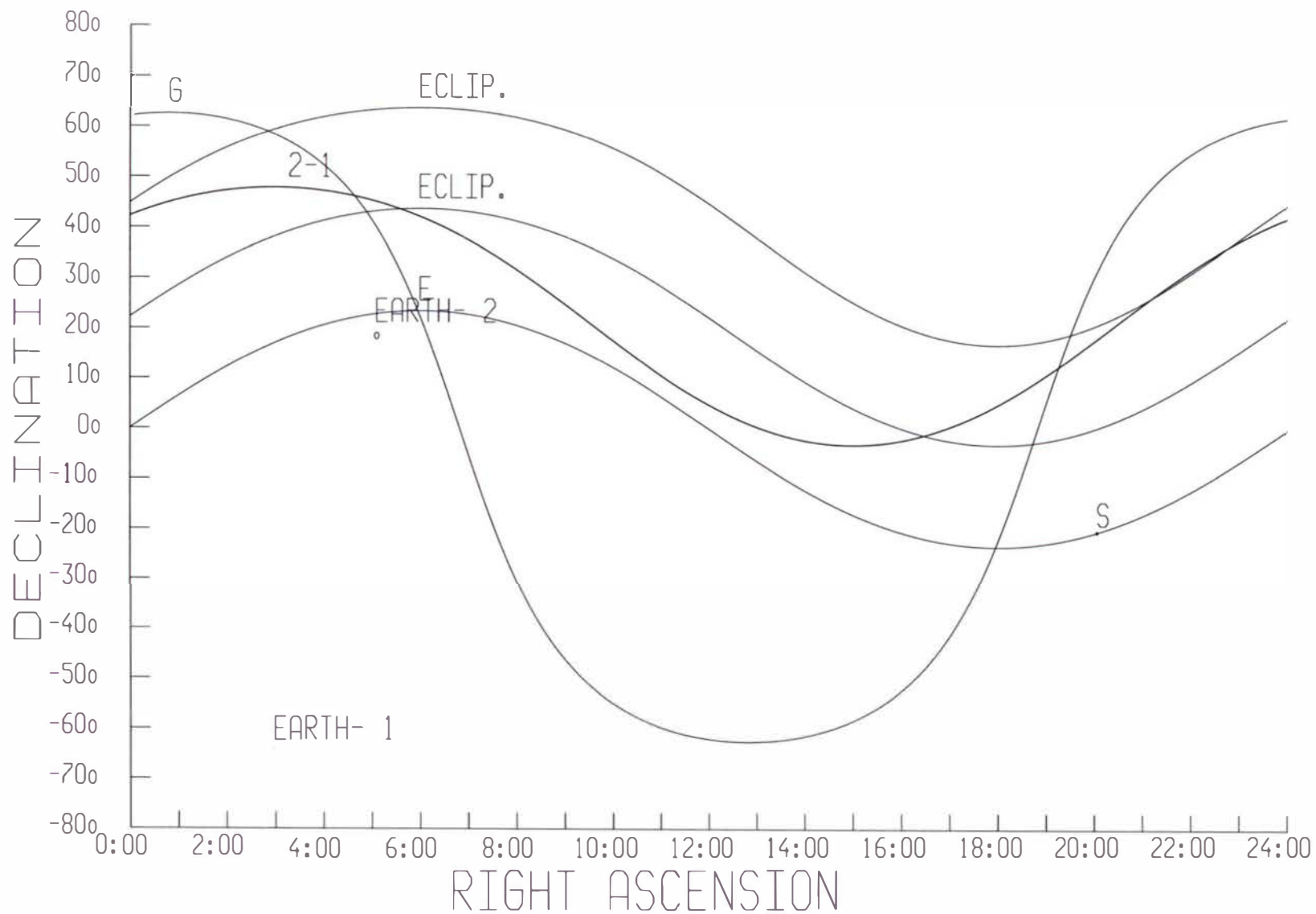
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

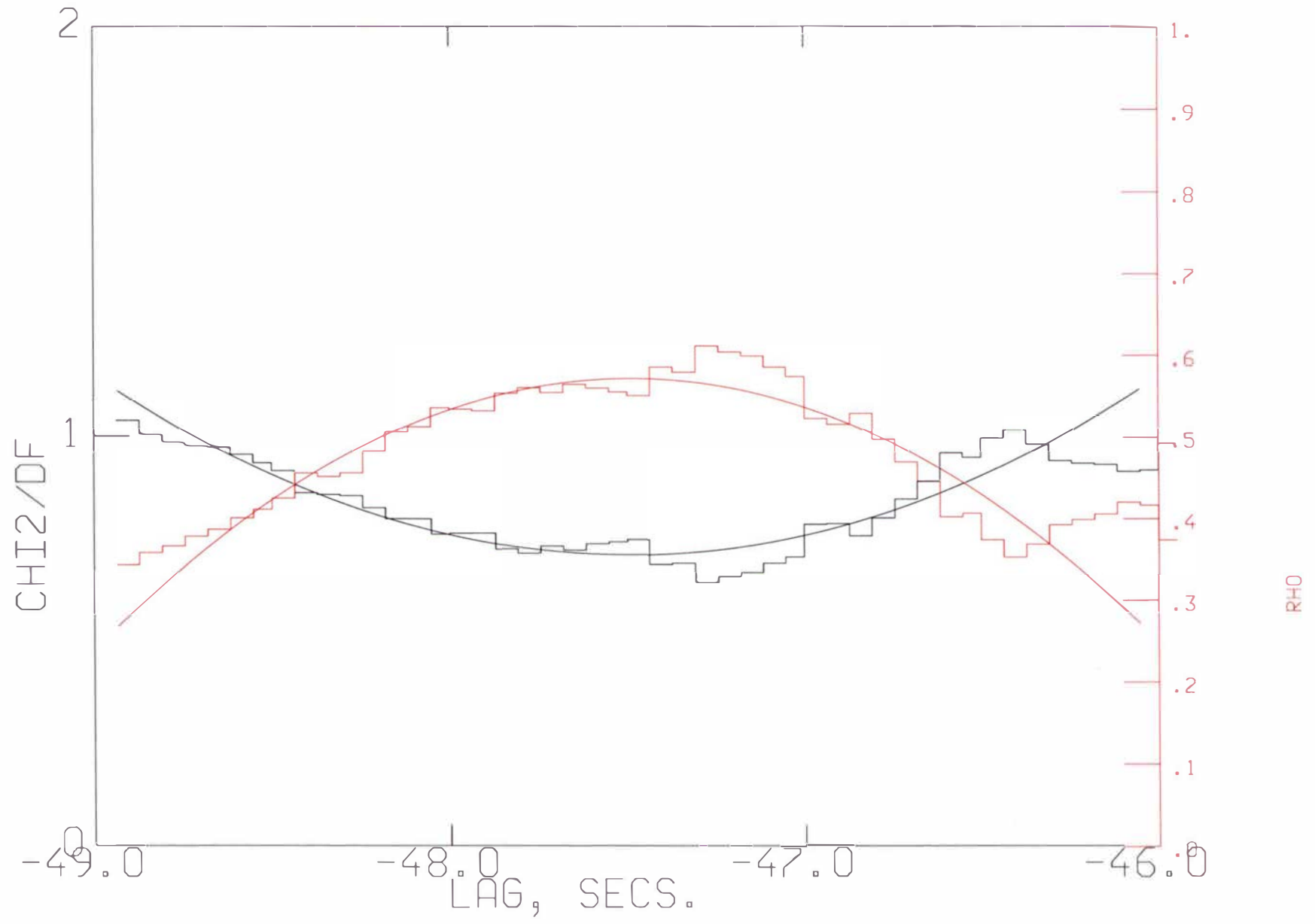


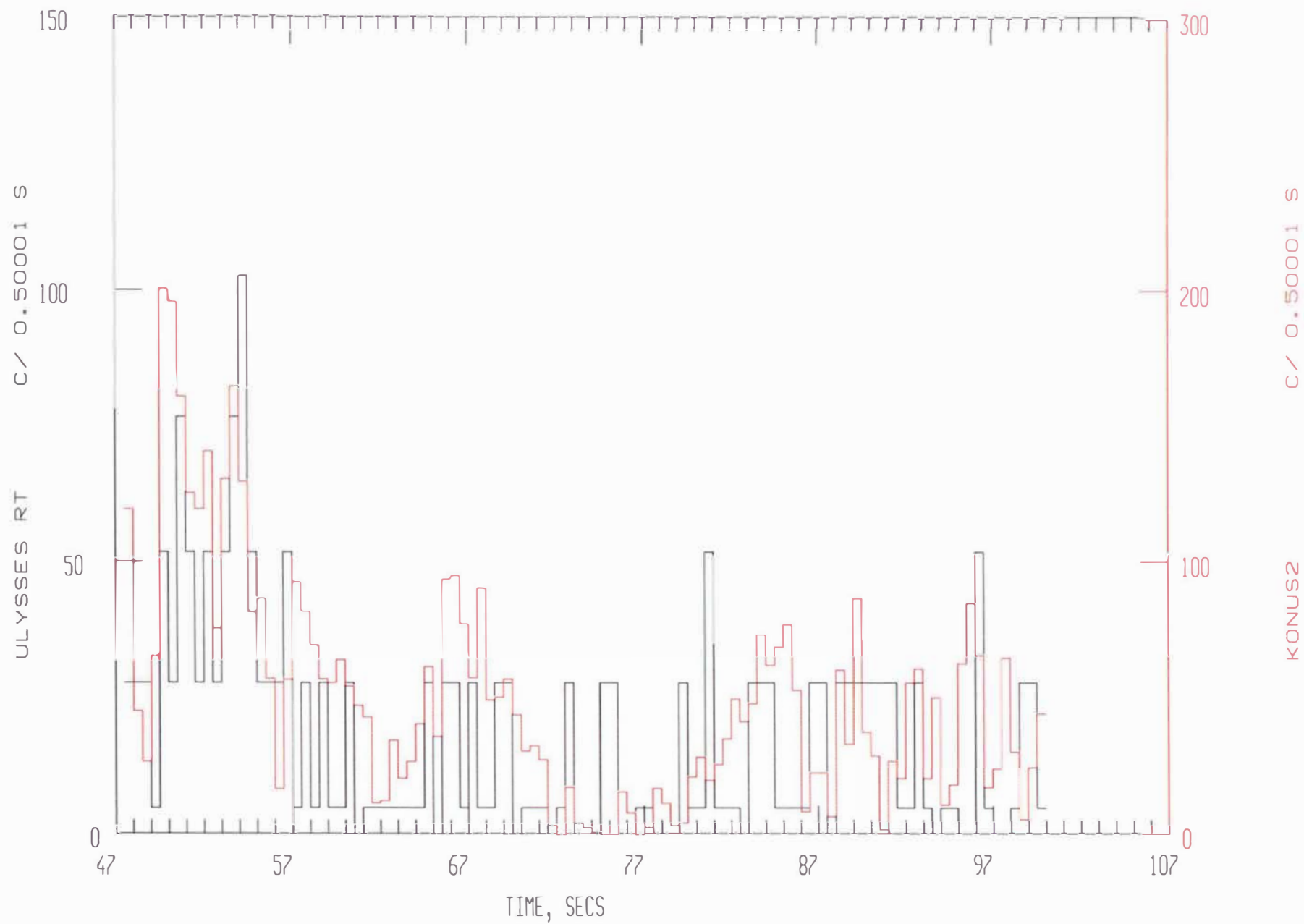
EVENT OF JAN 19, 1996 12:24

13/09/2011

N-M = CORRELATION BETWEEN SATELLITES N AND M
 EARTH-N = EARTH AS SEEN FROM SATELLITE N
 S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
 1 ULYSSES 2 KONUS2







KONUS 19960119 44676

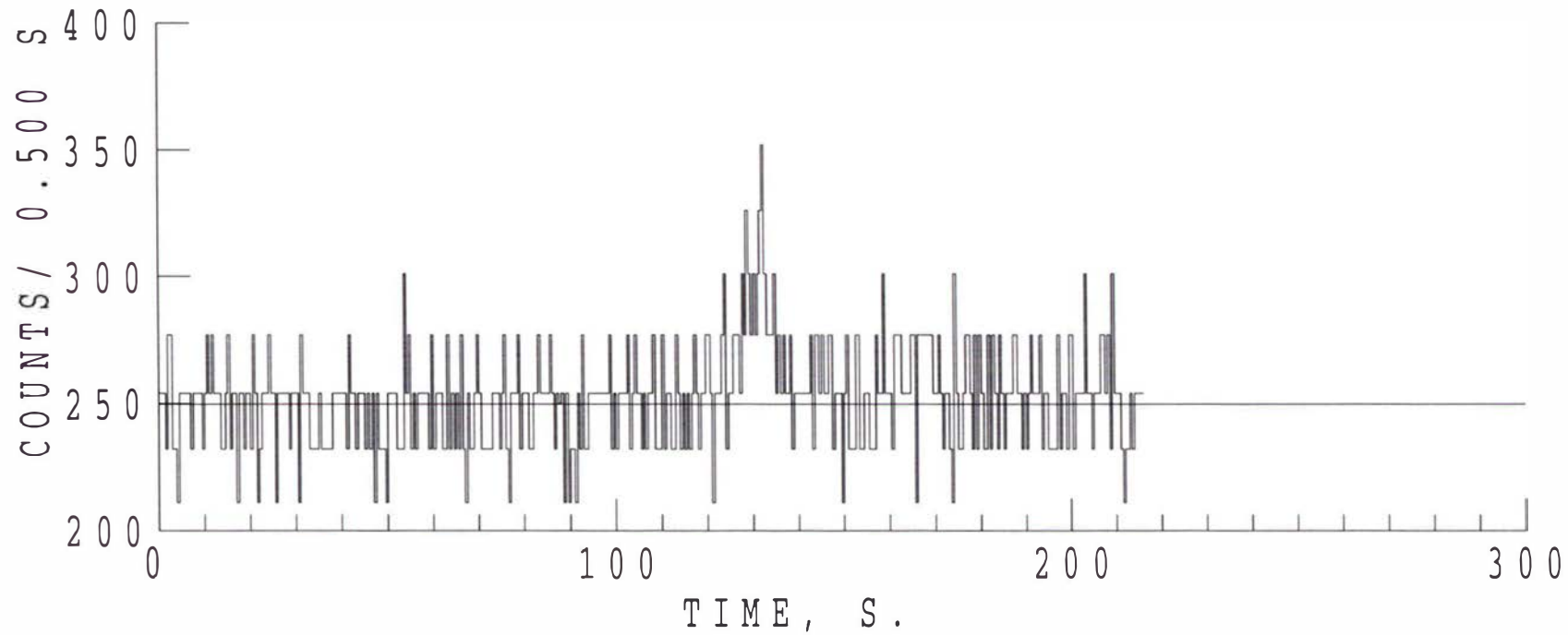
ULYSSES RT

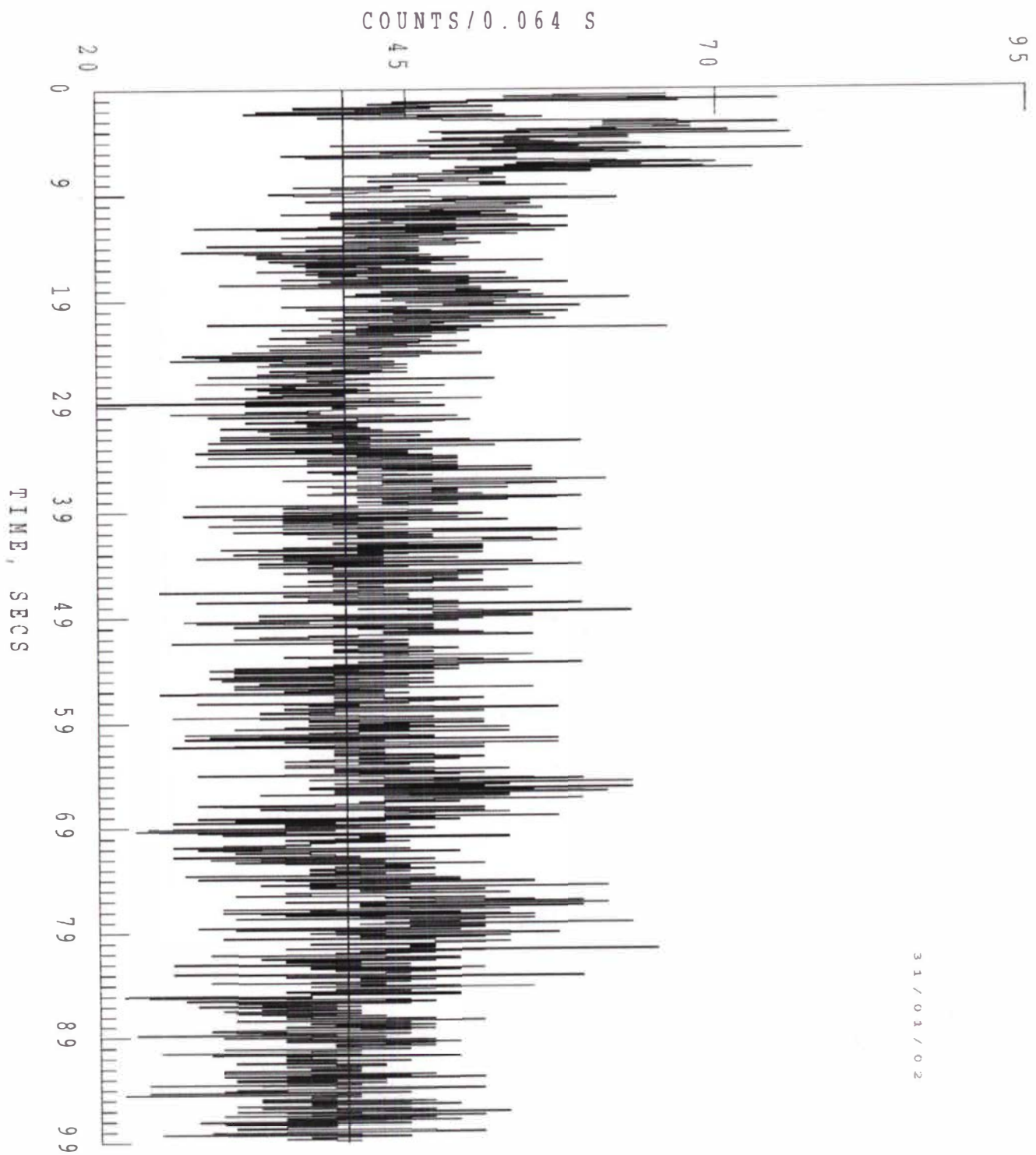
12 / 09 / 11

19/01/96 44568.145 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





KONUS2 19960119 45226

ULYSSES RT

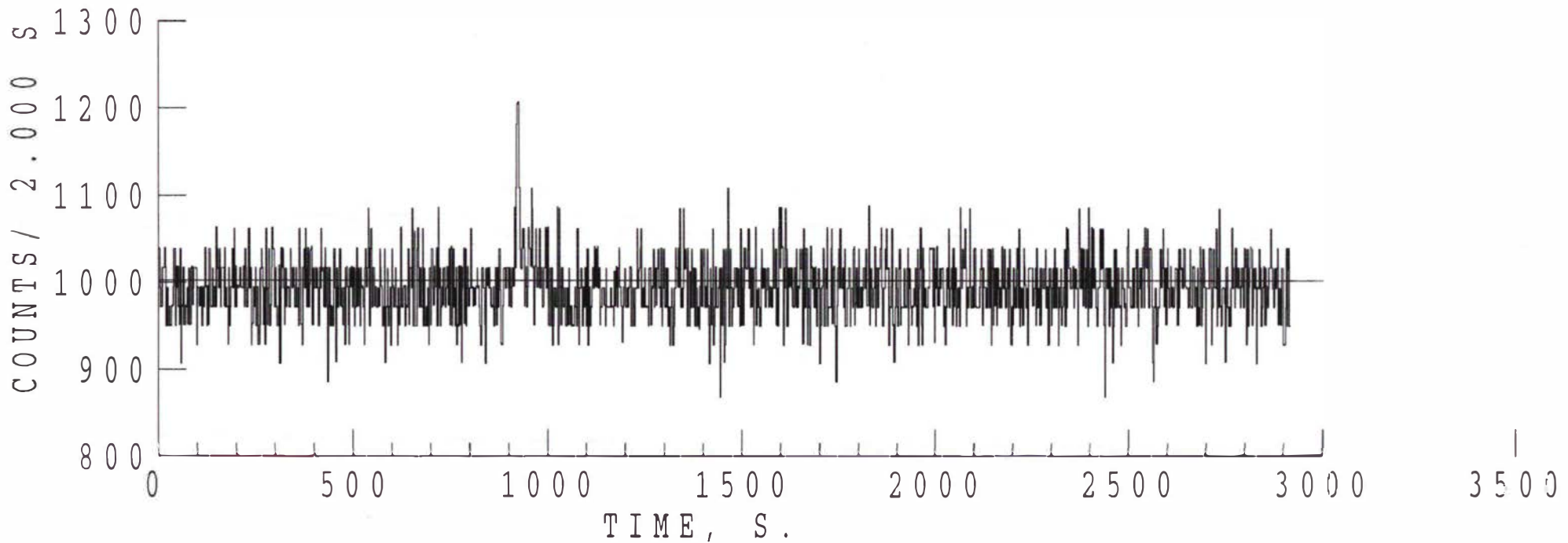
31 / 01 / 02

19 / 01 / 96 43776.129 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From HENZE@ssl.msfc.nasa.gov Tue Jan 23 10:09 PST 1996
Date: Tue, 23 Jan 1996 12:09:13 -0600 (CST)
From: HENZE@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4469

BATSEARCH PROGRAM

BATSE BURST # 4469
EVENT OF 1996 JAN 19 DAY OF YEAR= 19
EVENT CROSSING TIME AT BATSE : 62761. S. OR 17:26:01.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 210.000 -9.000
BATSE PEAK COUNTING RATE: 2000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 19/ 1/ 96 IS:
RA= 224.465 DEC= 64.920 DIST= 2.805 AU
BATSE-ULYSSES DISTANCE = 419558459. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=105.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -369.06 SECS.
CROSSING TIME AT ULYSSES IS 62392. S. OR 17:19:51 +/- 278.77 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 19/ 1/ 96 IS:
RA= 311.004 DEC= -19.249 DIST= 2.347 AU
MARS-BATSE DISTANCE = 351039264. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 82.74 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 148.02 SECS.
CROSSING TIME AT MARS IS 62909. S. OR 17:28:29 +/- 203.91 SECONDS

Date: Feb 24 '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 T_0 ?
- ☒ Error circle position and radius from public catalog used?
- ☐ If MER data were used, is a 30 ms systematic error included? N/A

3. PVO Data

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

- ☒ ACCESS database updated?

V/B ratio too high, and time histories don't match well - eliminate

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

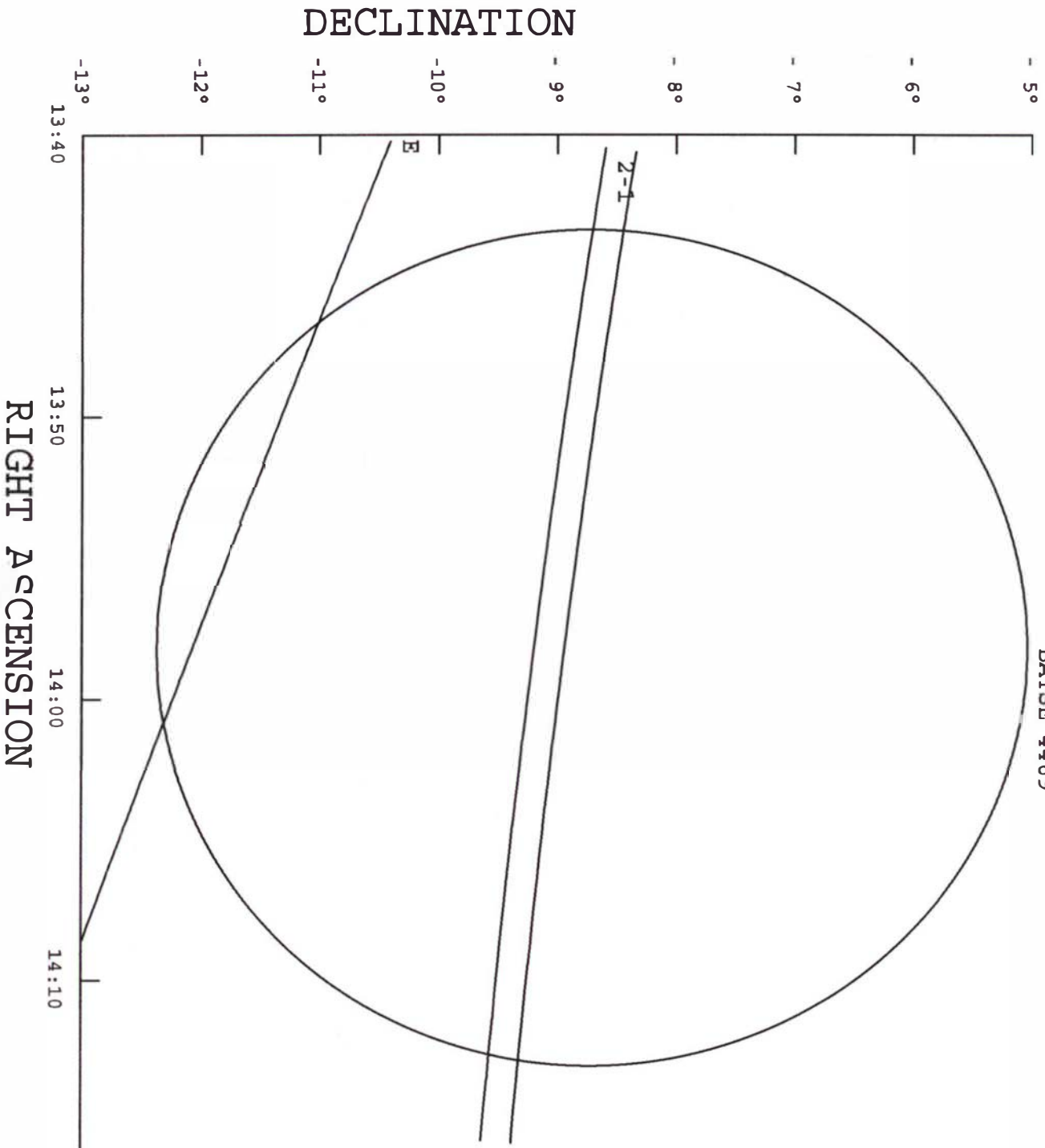
G=GALACTIC EQUATOR

1 ULYSSES

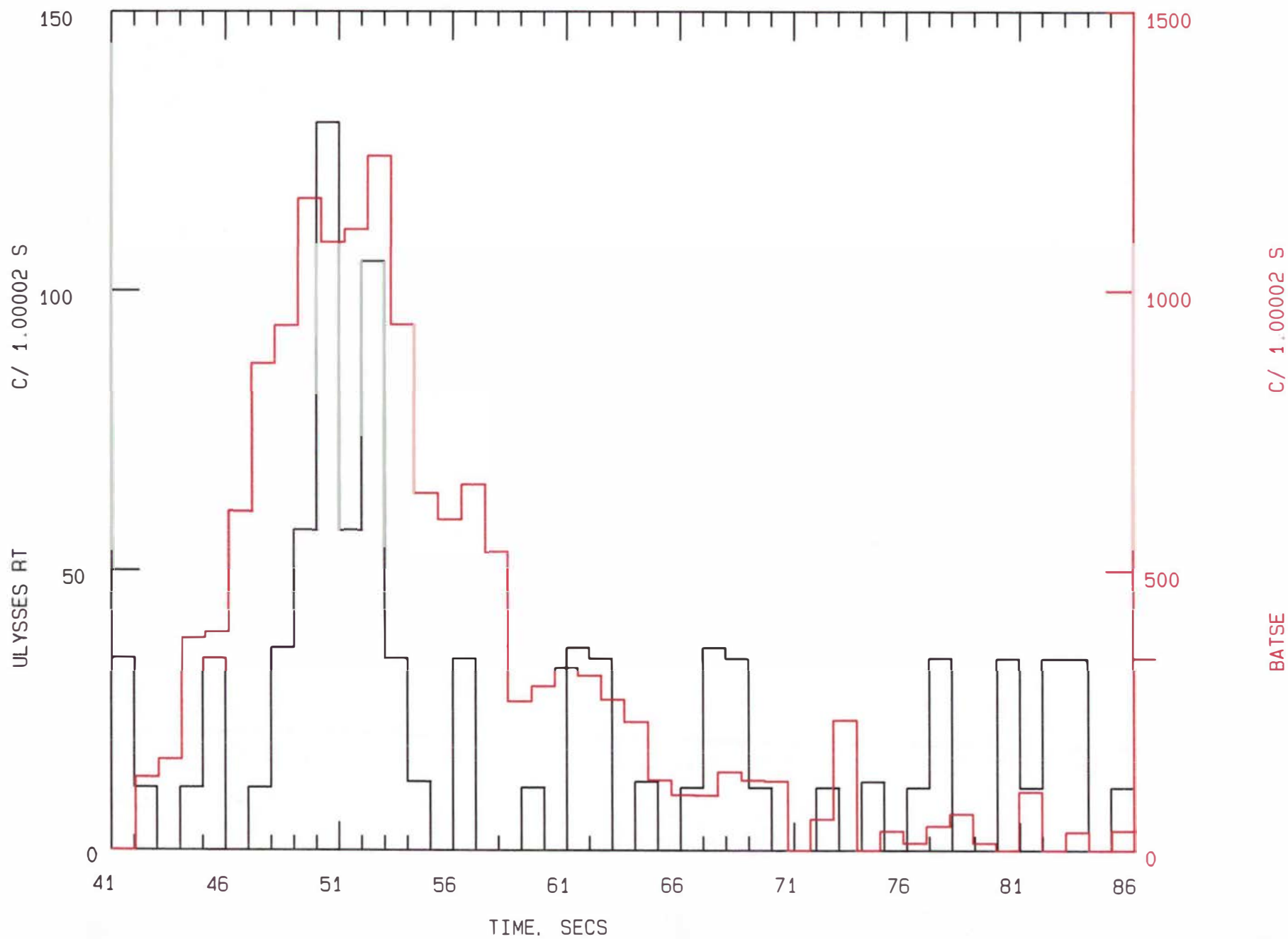
2 BATSE

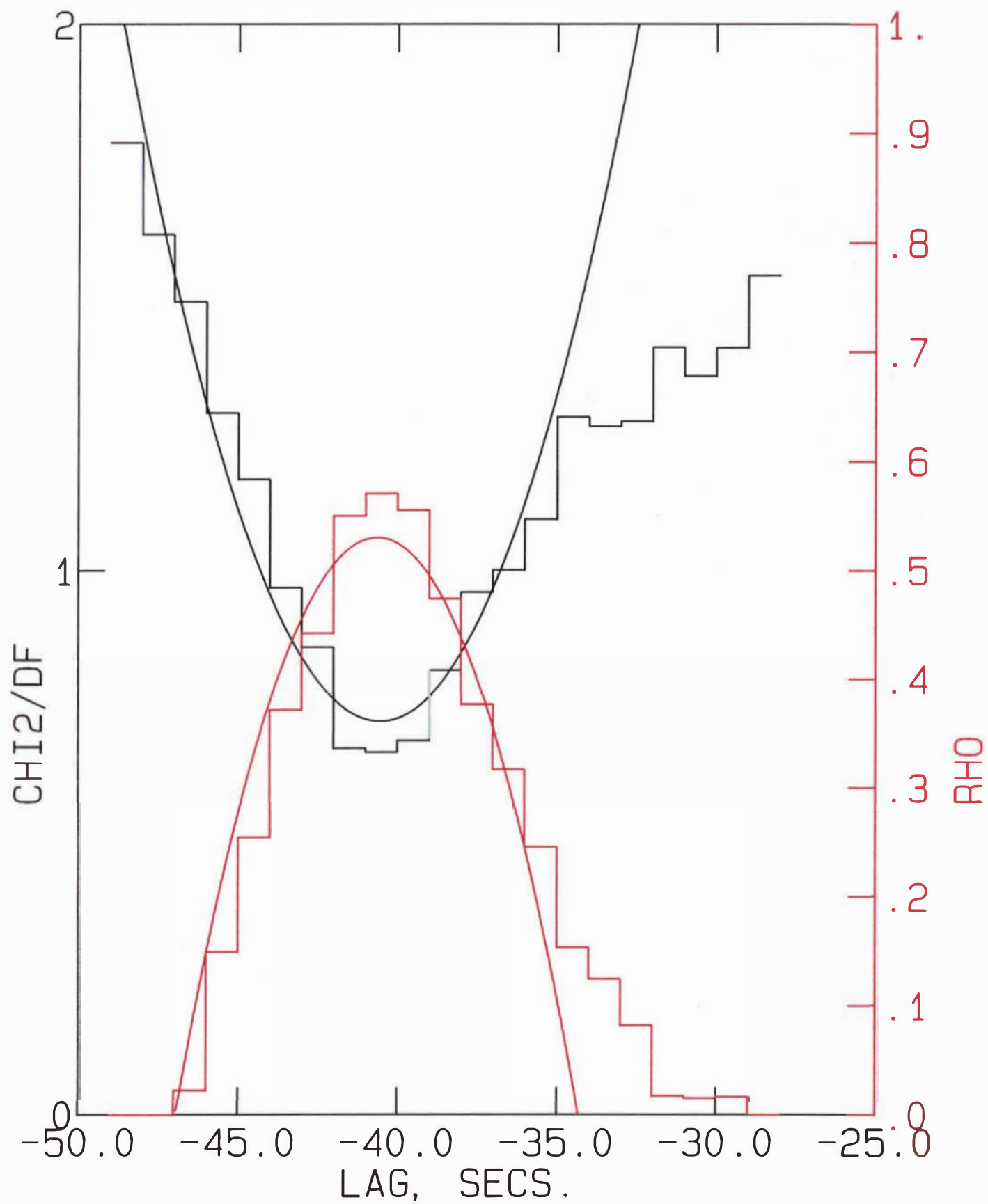
EVENT OF JAN 19, 1996 17:18

BATSE 4469



24 / 2 / 98





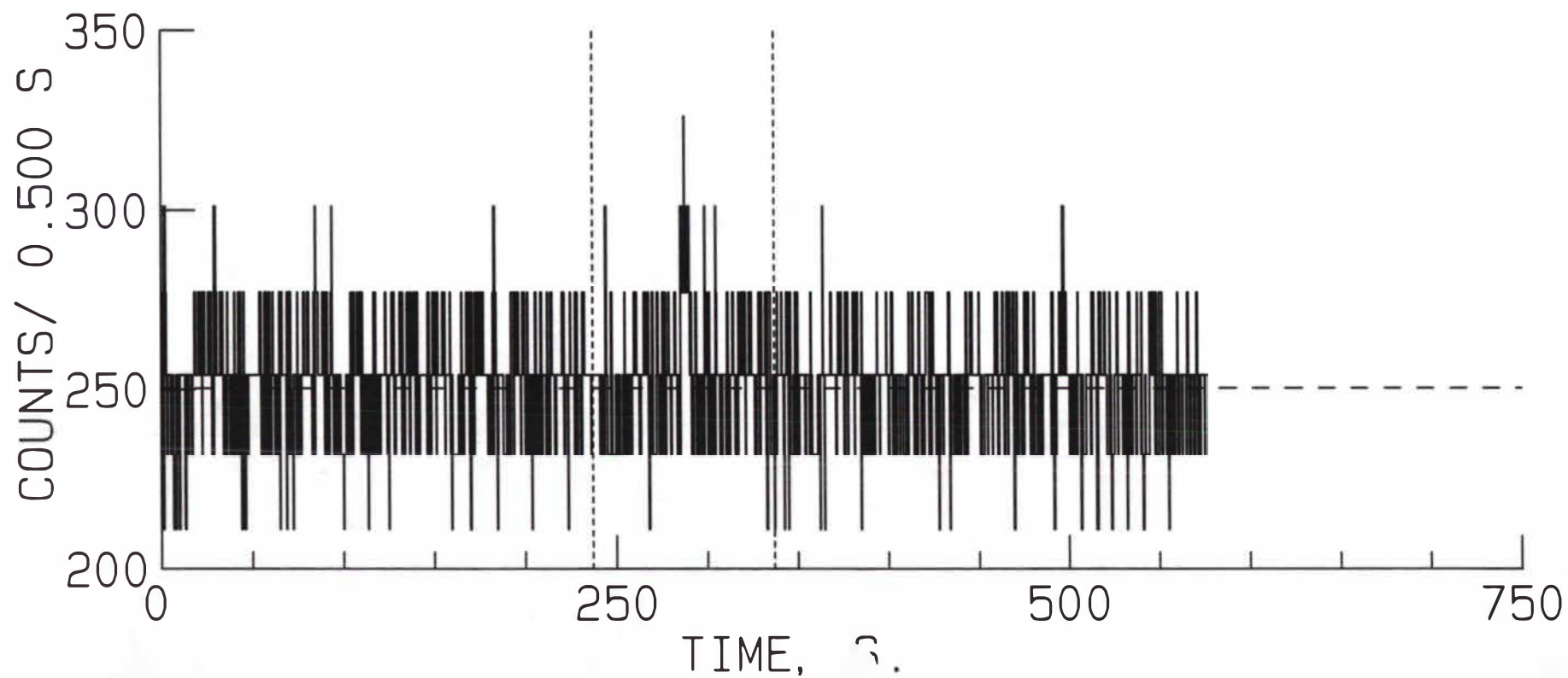
ULYSSES RT

24 / 2 / 98

19 / 1 / 96 62100.401 s

21- 144 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



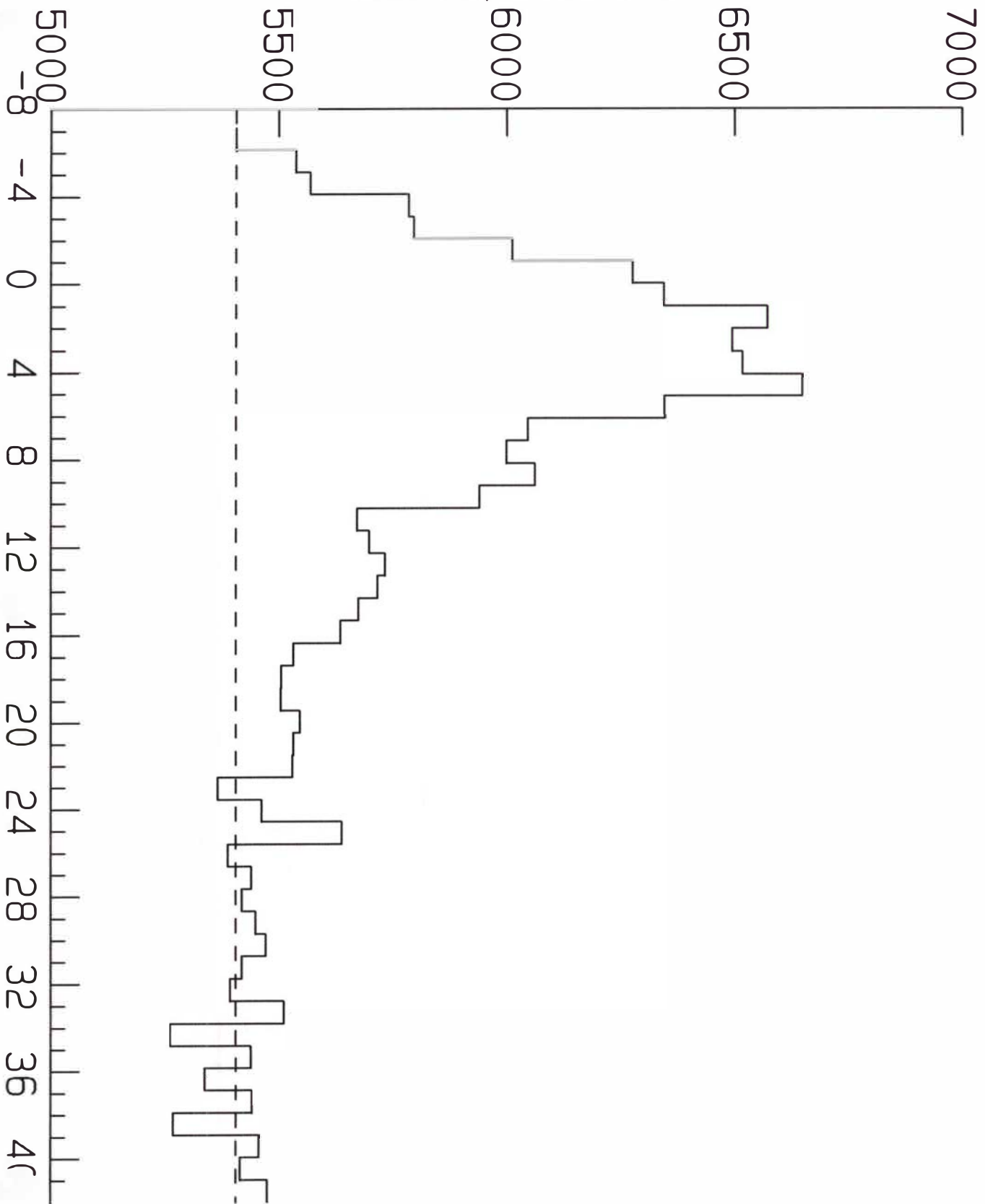
BATSE

19/01/96

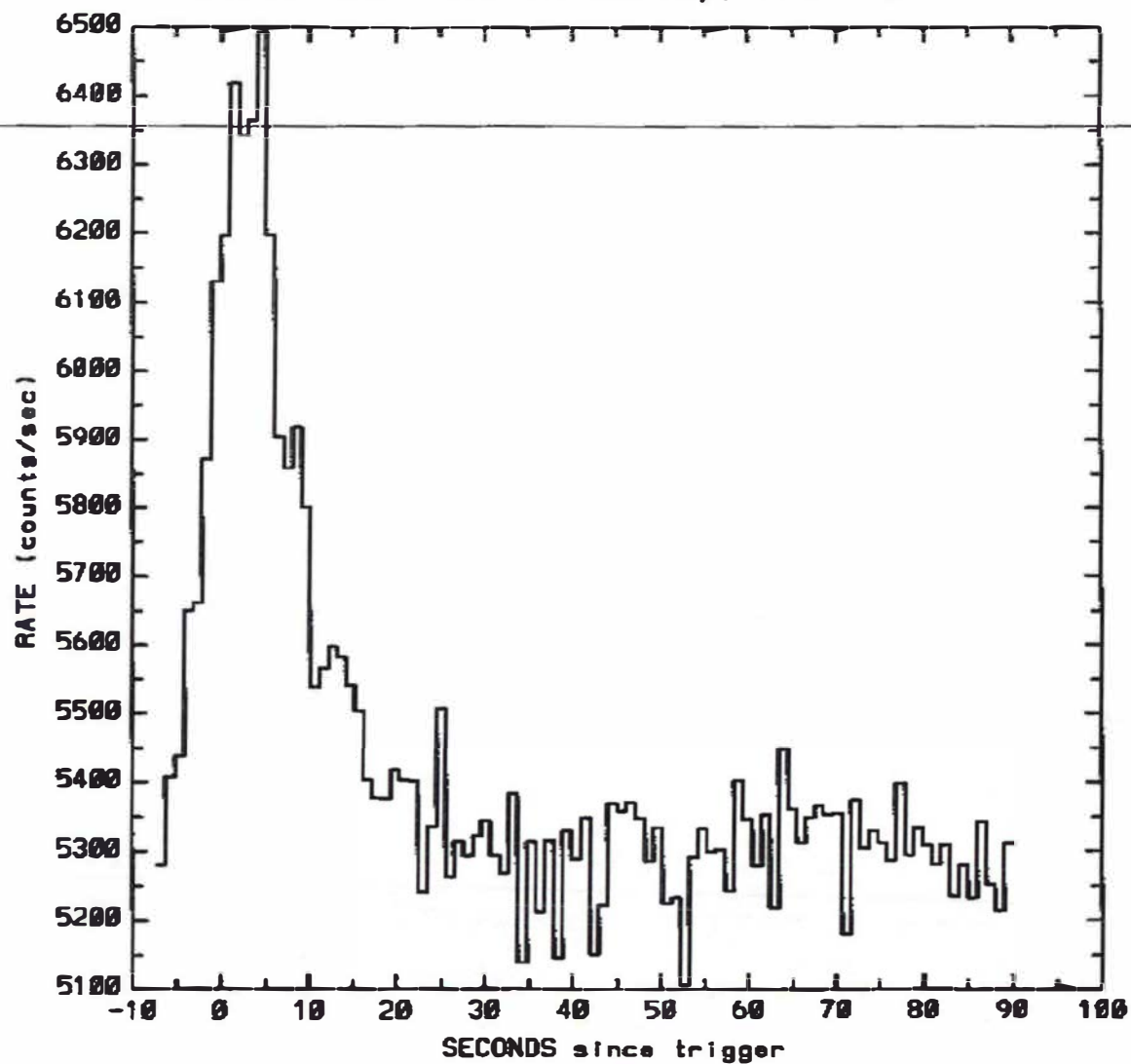
62761.672

25- 100 keV

COUNTS/1.024 S



DISCLA Data for K. Hurley, No. 4469



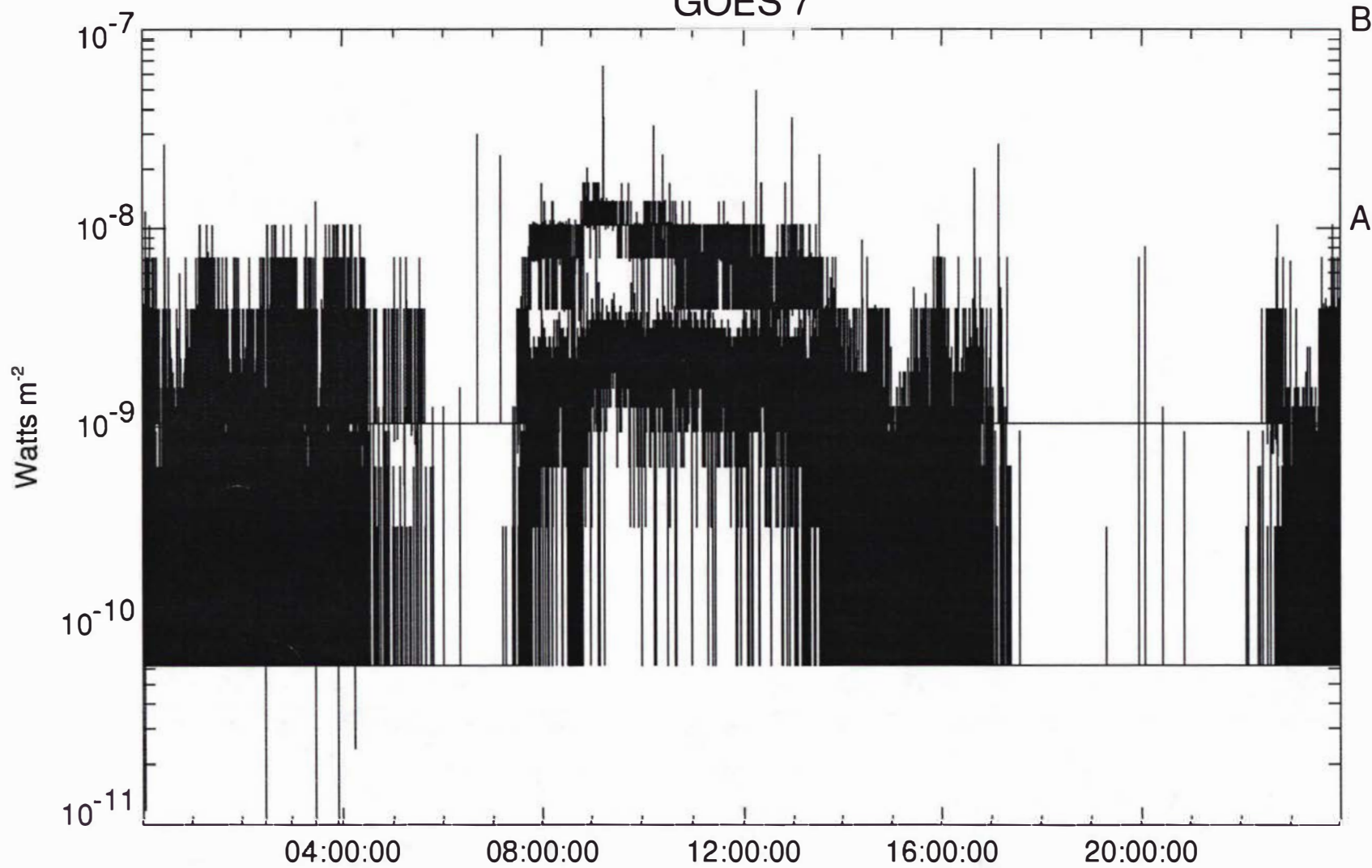
8-FEB-1996 09:48:08

Created by MOPS 80
(Burst Display)
Version 42.25User Input Time:
18181 / 62761.672

Data Type: DISCLA

Deadtime
Corrected: NIntegration Time:
1.024 second(s)Detectors (7..8):
-----2-8Discriminators:
(1..2)Quality Mask:
BDISP1

GOES 7



Data Start: 96/01/19, 0000:01

Plot created: 96/01/21, 0654

Channel

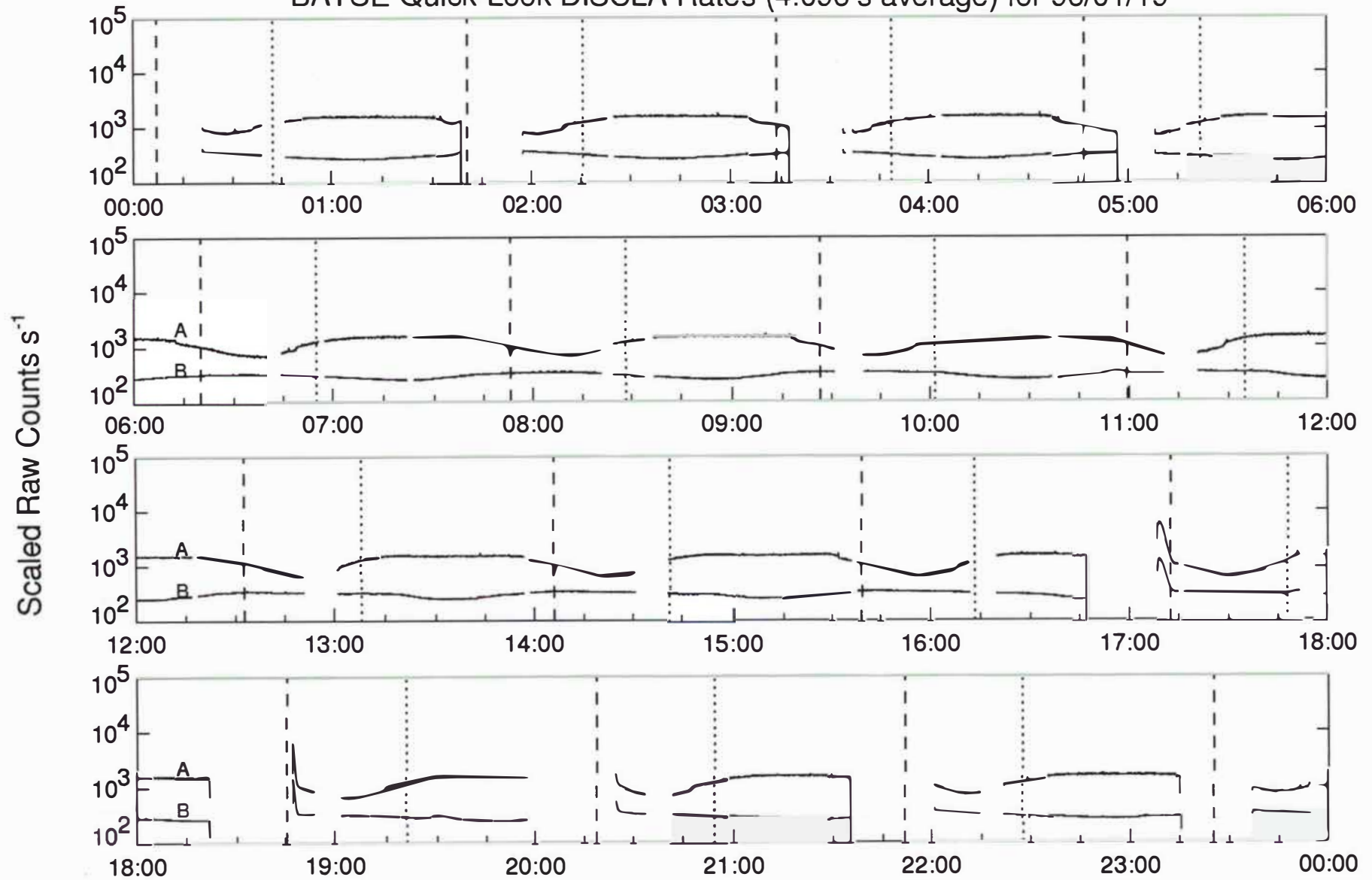
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/19



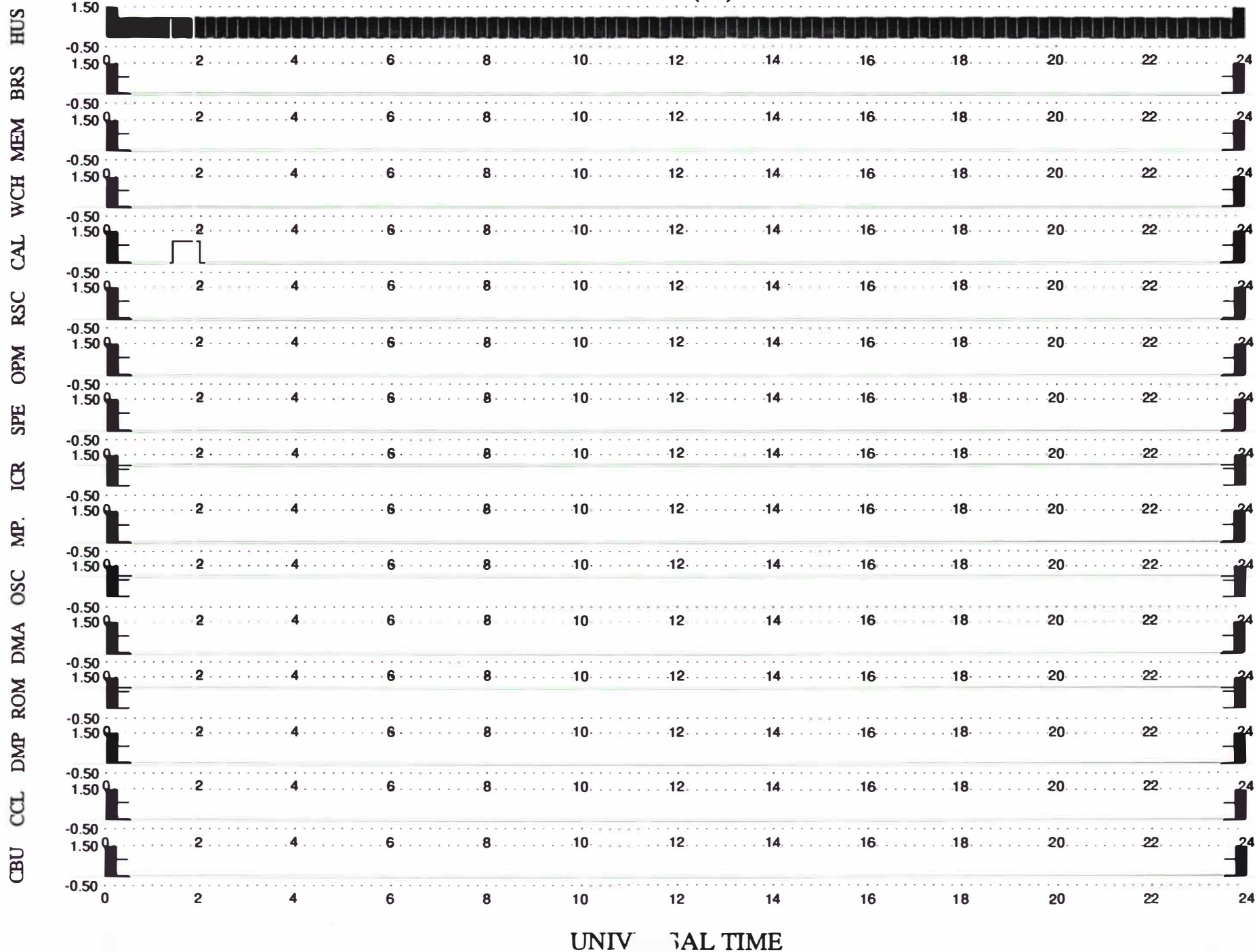
Current Time: 96/01/21, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

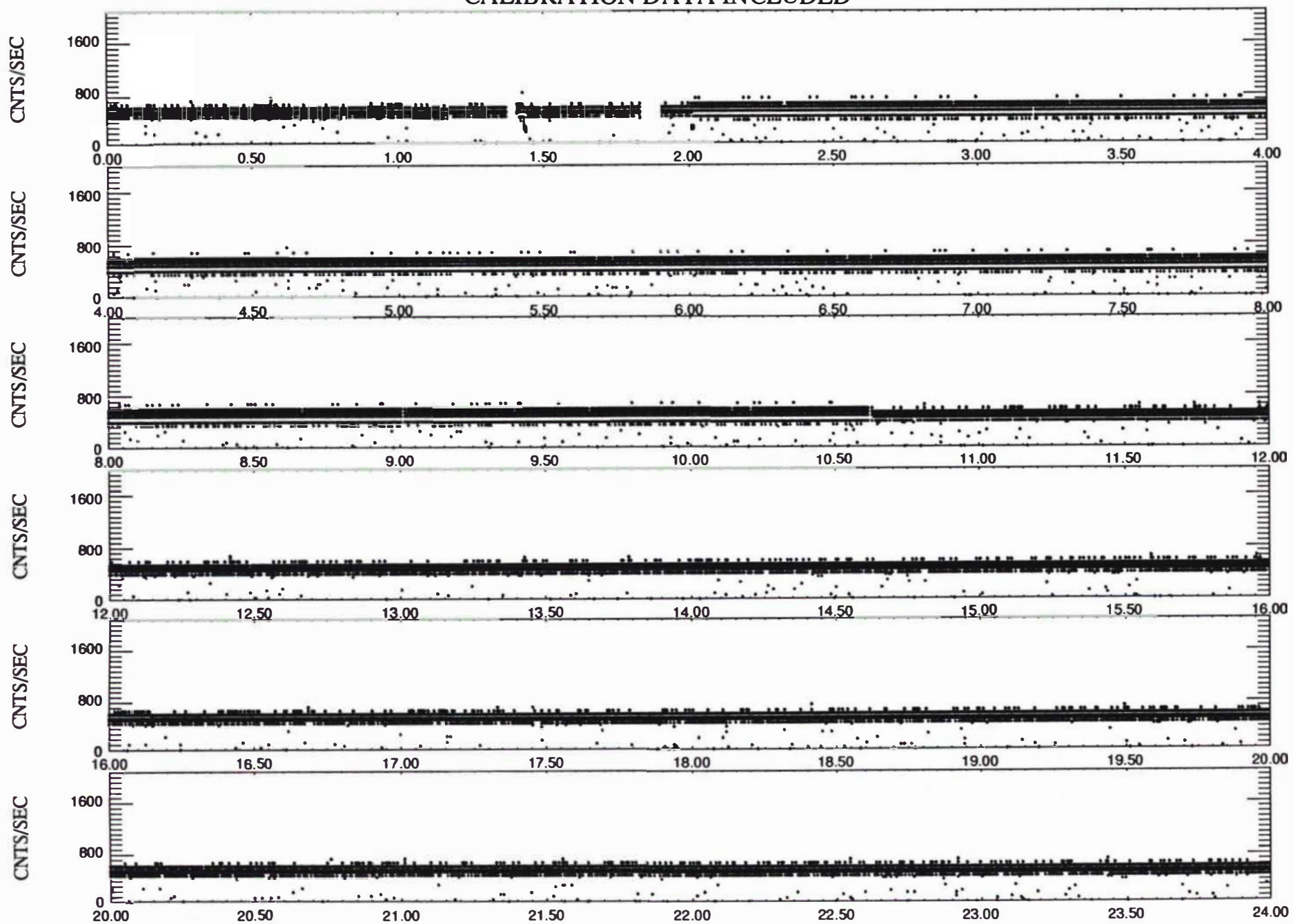
HUS MODES EDR day 19, year 1996 to day 19, year 1996 NO BURST (15)

4/1/96

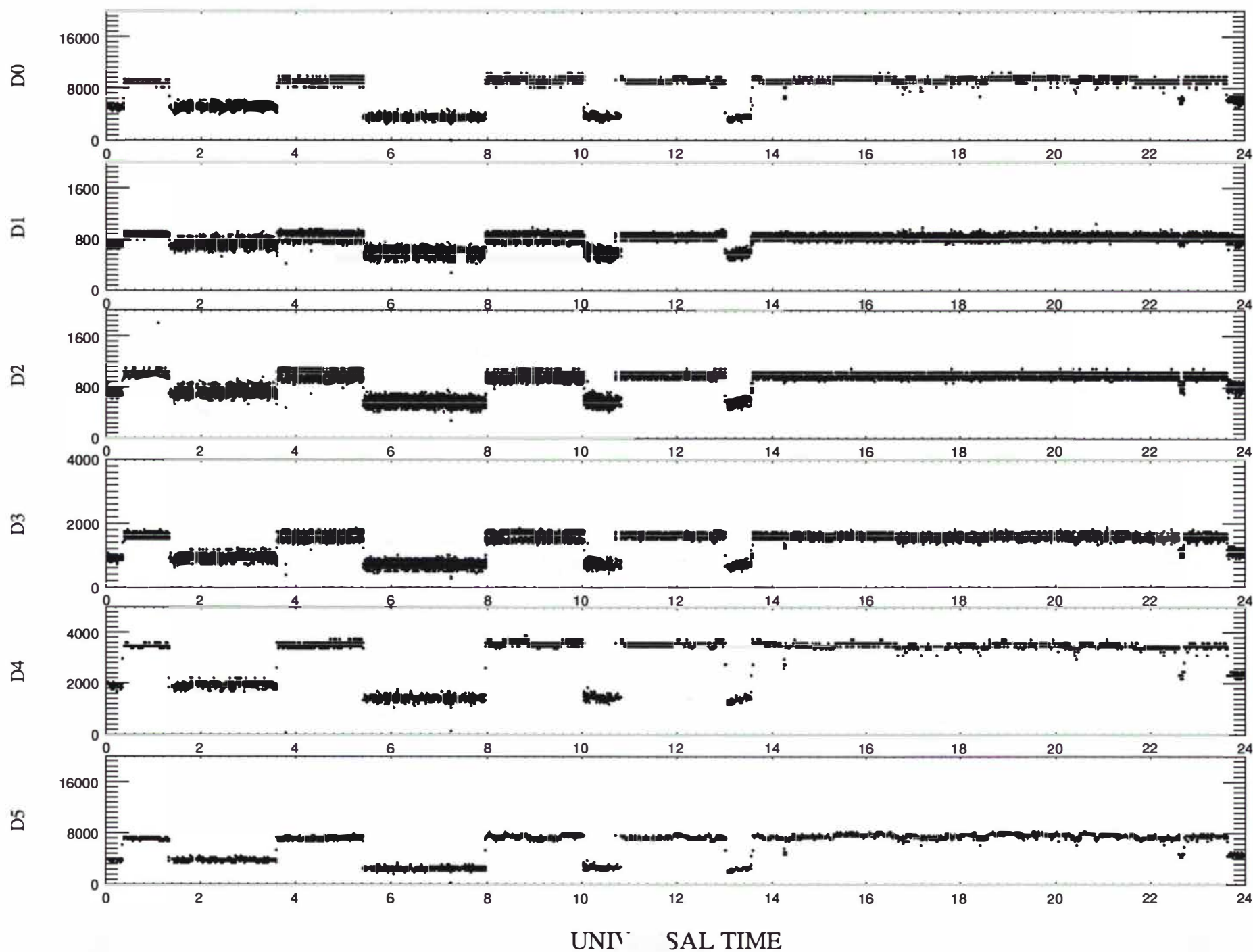


HUS 2A, MODE 1, NOT AVERAGED EDR day 19, year 1996 to day 19, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV CAL TIME



From HENZE@fender.msfc.nasa.gov Mon Jan 22 11:09 PST 1996
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 22 Jan 1996 13:08:35 -0600 (CST)
To: burst@compel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.gsfc.nasa.gov, butterworth@lheavx.gsfc.nasa.gov,
band@cass09.ucsd.edu, gruber@cass09.ucsd.edu, matteson@cass09.ucsd.edu,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4476

TIME: TJD=0102 SECONDS=08939

TYPE: SAA ENT SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY

960119	09 37	59.317	S2	480	780	190	0.13	11	12	236
960119	12 33	46.016	S2	210	460	190	0.2	6	85	237
960120	10 12	48.974	S2	740	540	210	<0.05	7	19	238
960120	13 30 22		S2	40	70		0.8	20		BGR
960123	12 07 21		S1	90	70		1.7	15		BGR
960124	00 56	28.008	S2	930	2130	710	0.13	11	8	239
960128	14 36 46		S2	270	190	25	0.15	6		BGR
960129	07 35 34		S1	90	70		>10	30		BGR
960129	15 24 19		S1	40	90	30	2	9		BGR
960130	02 25	56.848	S1	100	470	340	3	0.5	0.2	240

RI

Observations: 11/11/94 - 01/30/96 - 435 days

Gamma-ray bursts - 307

burst mode - 153

background mode (BGR) - 154

Solar flares - 78

burst mode - 15

background mode - 63

False events (multi-charged particles,
trapped radiation, solar
cosmic rays) - 85

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

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996
 Date: Fri, 2 Feb 1996 05:41:51 -0800
 Mime-Version: 1.0
 To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
 palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.
 - TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec		in G2		T<T0 T>T0		
			G1	G2	G3				
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9 ✓
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28 ✓
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR ✓
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 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39 ✓

Date: Sep 14 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

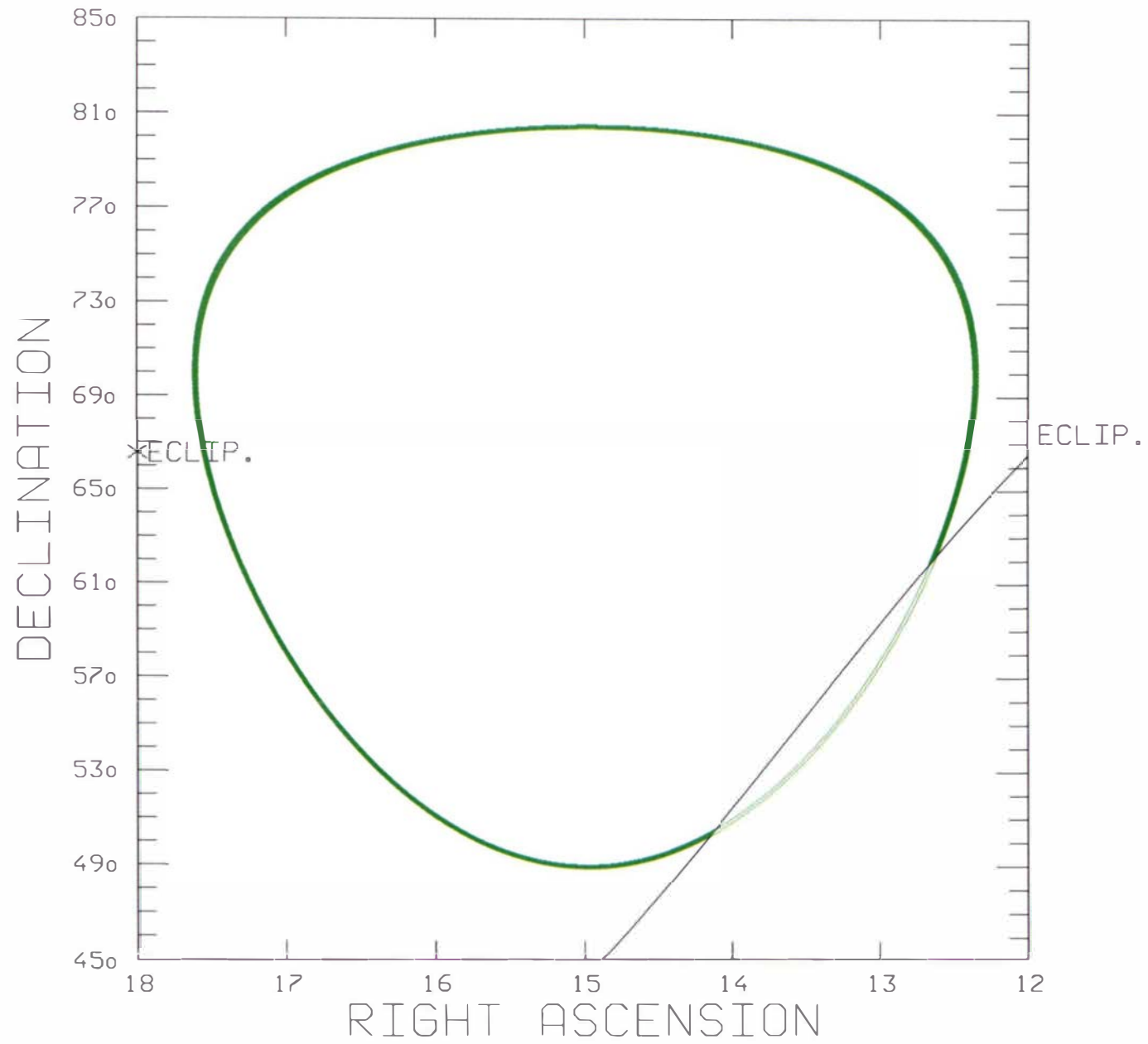
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

2. BATSE Data

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

3. PVO Data

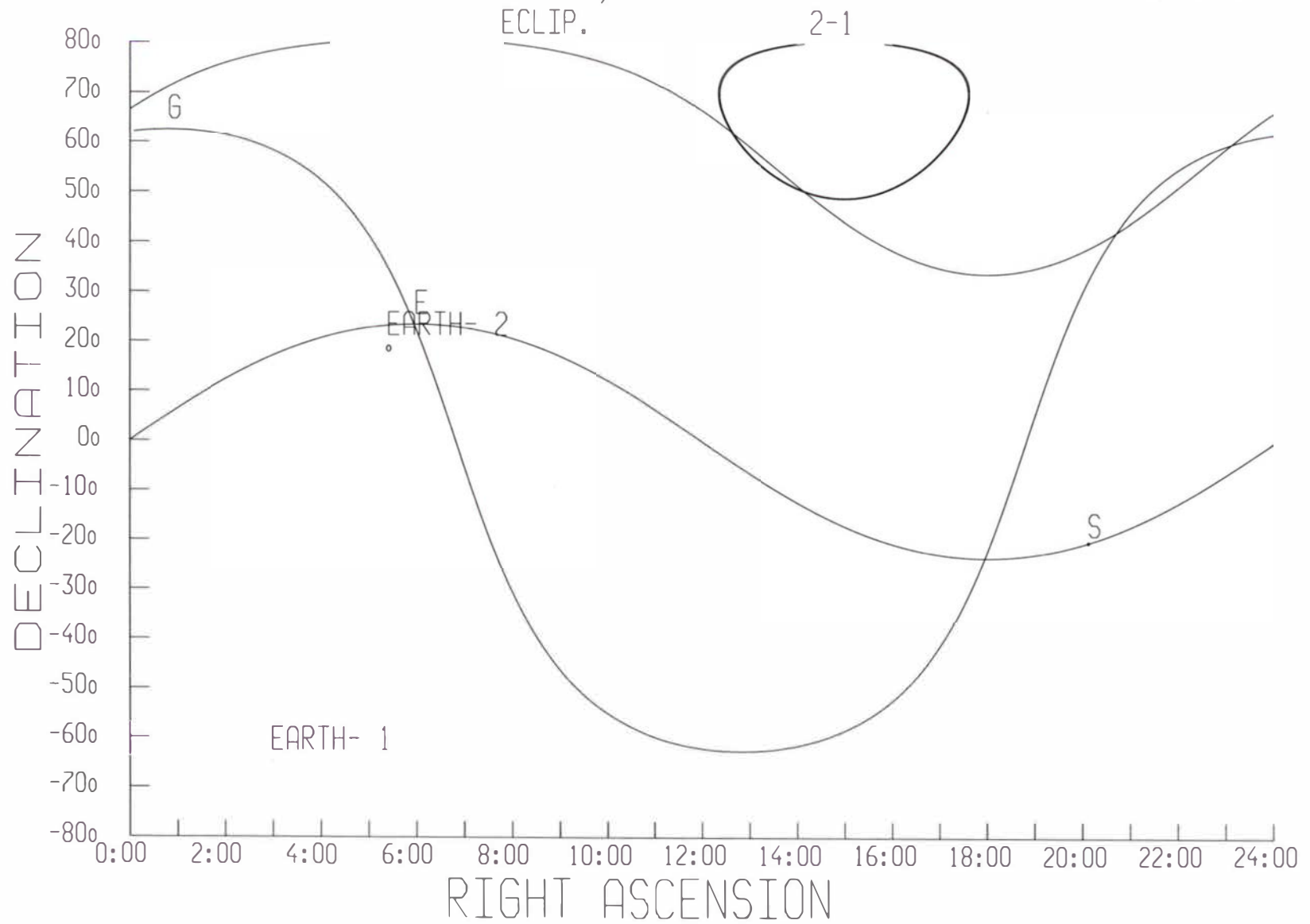
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

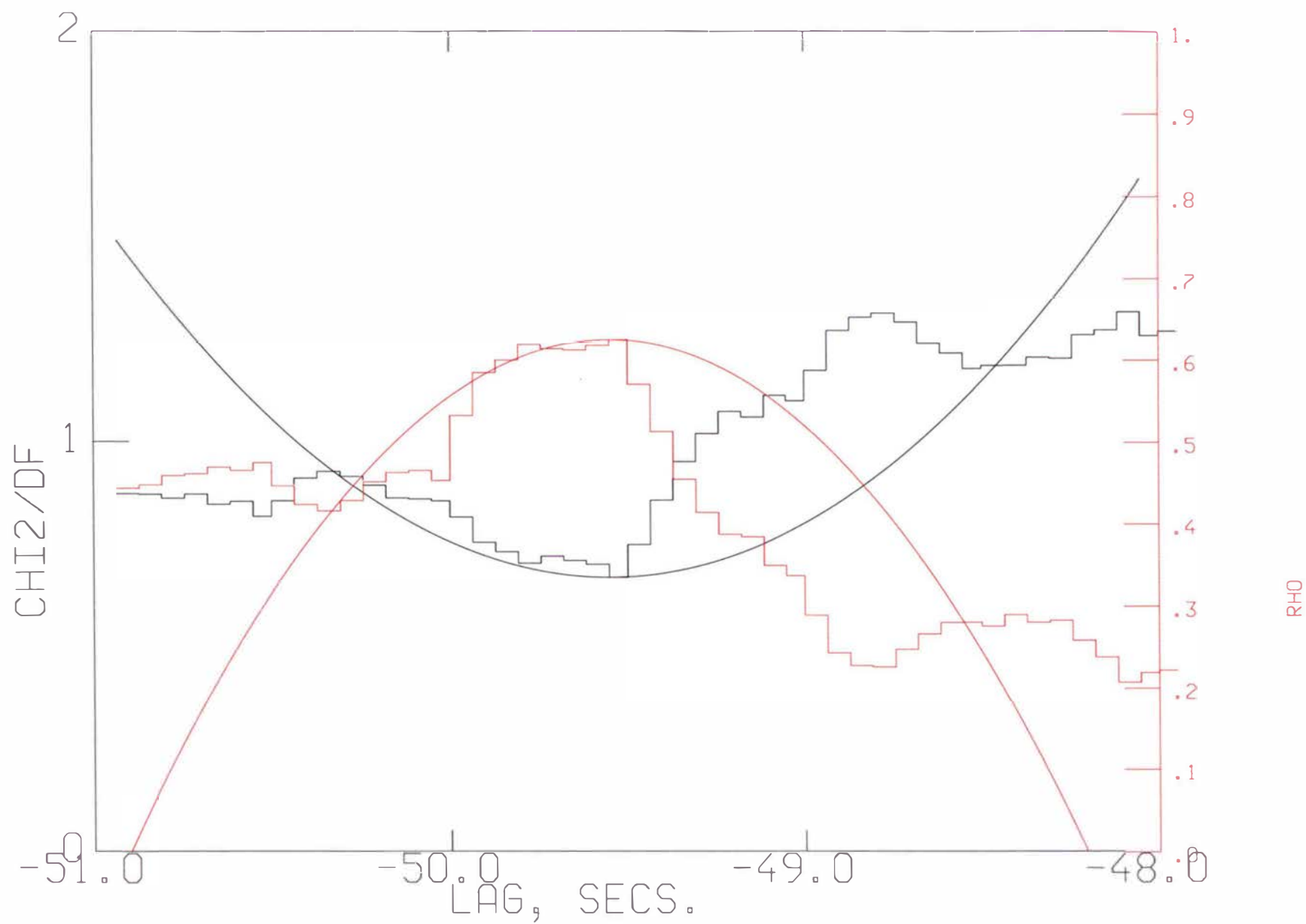


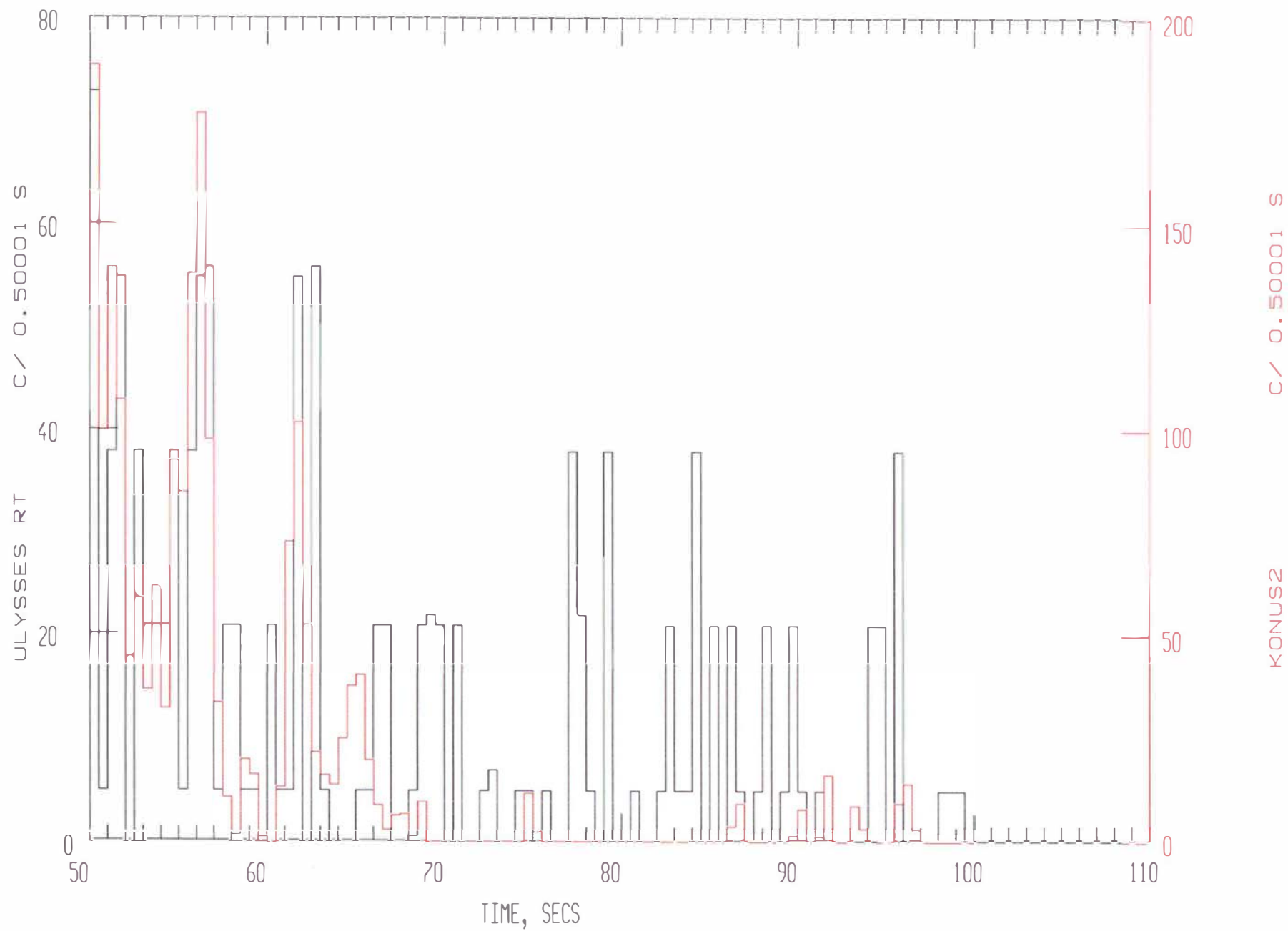
EVENT OF JAN 20, 1996 9:49

14/09/2011

N-M = CORRELATION BETWEEN SATELLITES N AND M
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN E=ECLIPTIC G=GALACTIC EQUATOR
1 ULYSSES 2 KONUS2







KONUS 19960120 35416

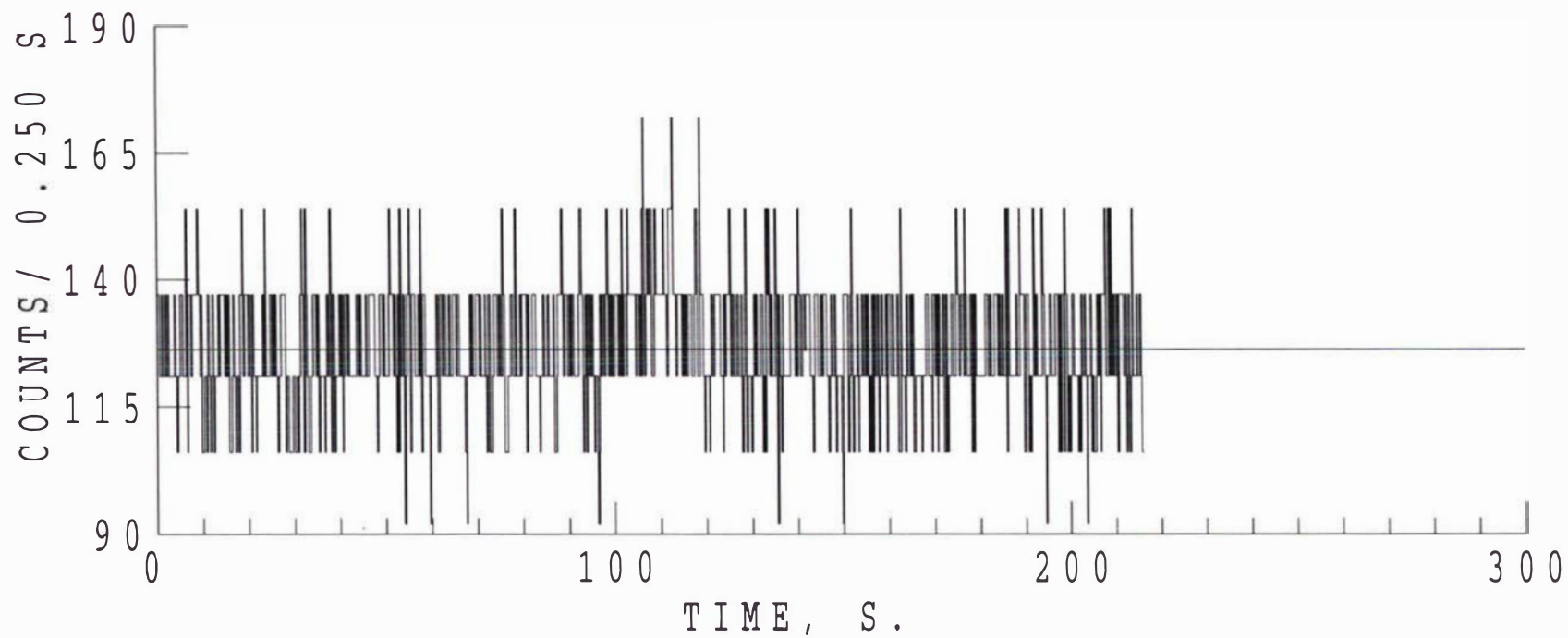
ULYSSES RT

12 / 09 / 11

20/01/96 35316.043 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



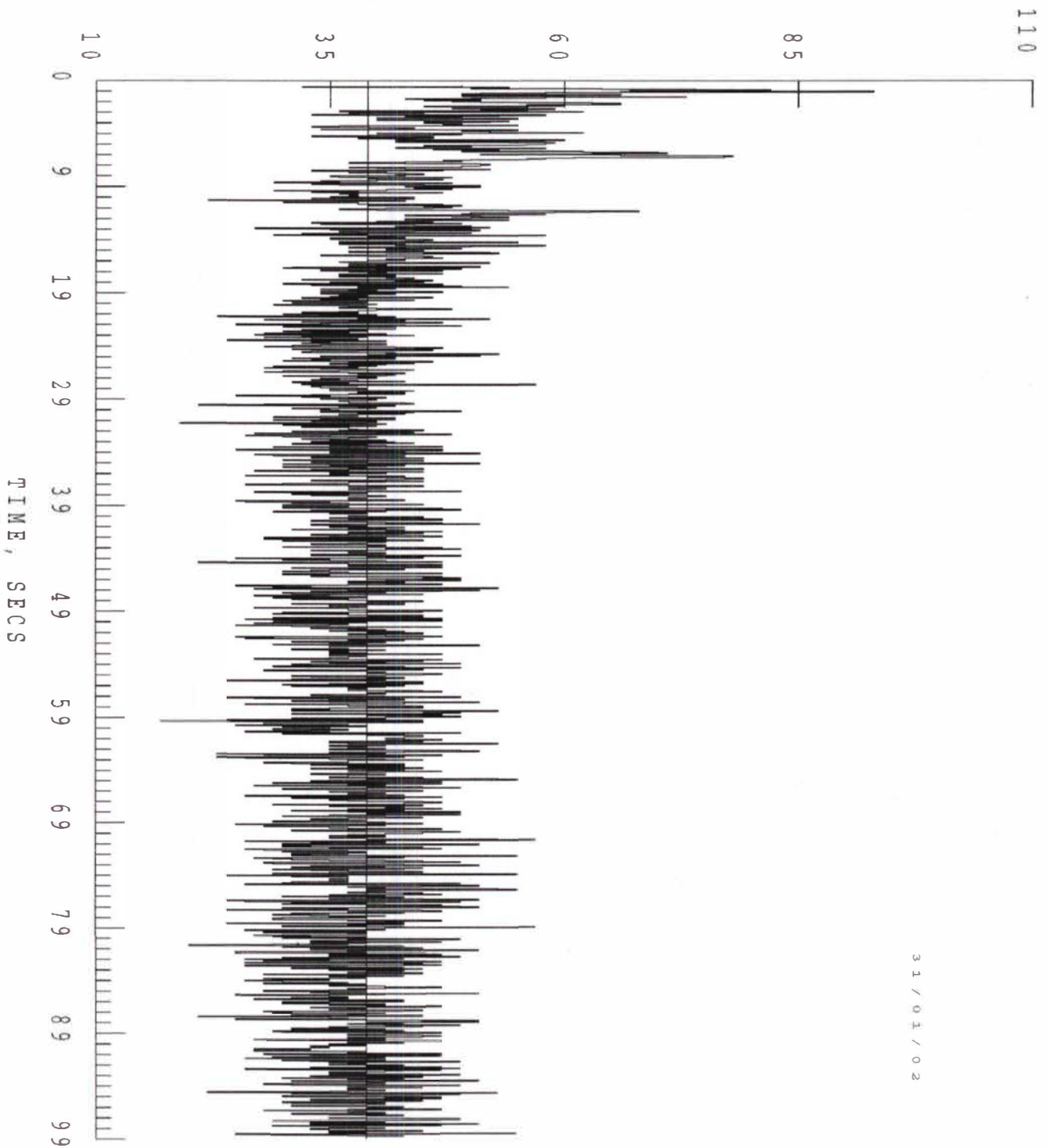
KONUS2

20/01/96

36768.974

50 - 200 keV

COUNTS/0.064 S



31/01/02

KONUS2 19960120 36768

ULYSSES RT

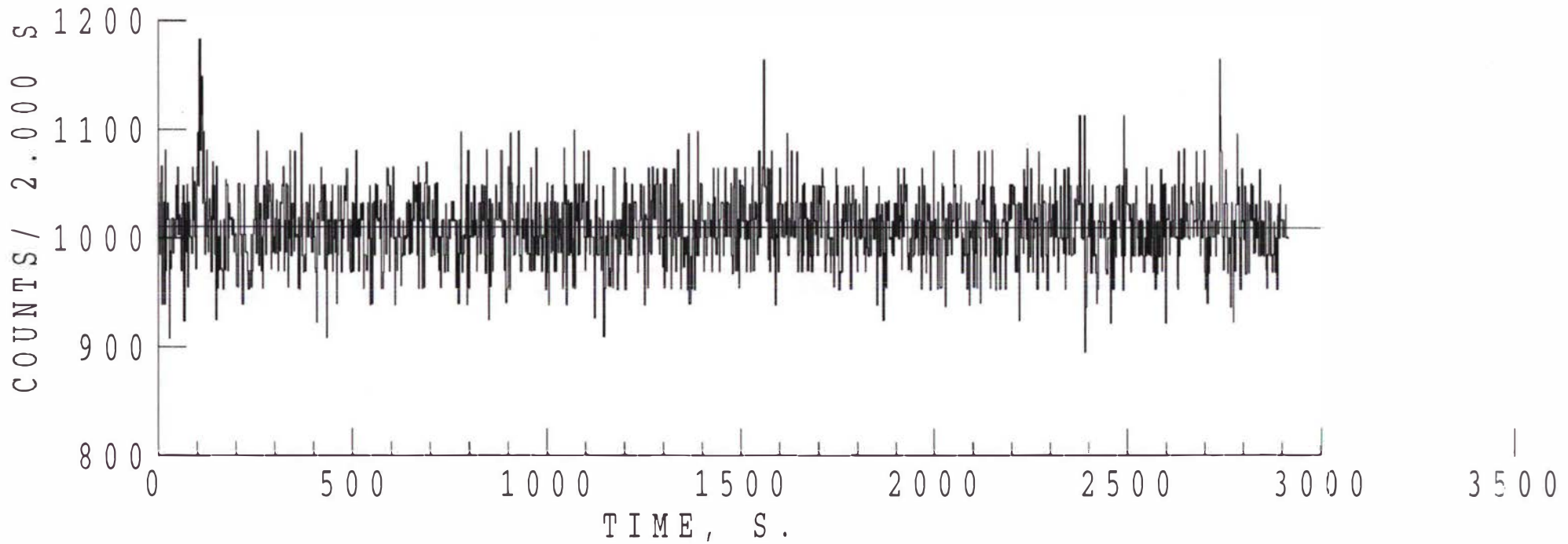
31 / 01 / 02

20/01/96 35316.043 s

0.250 S INTERVALS REGROUPED BY 8

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



KONUS 19960120 36916

ULYSSES RT

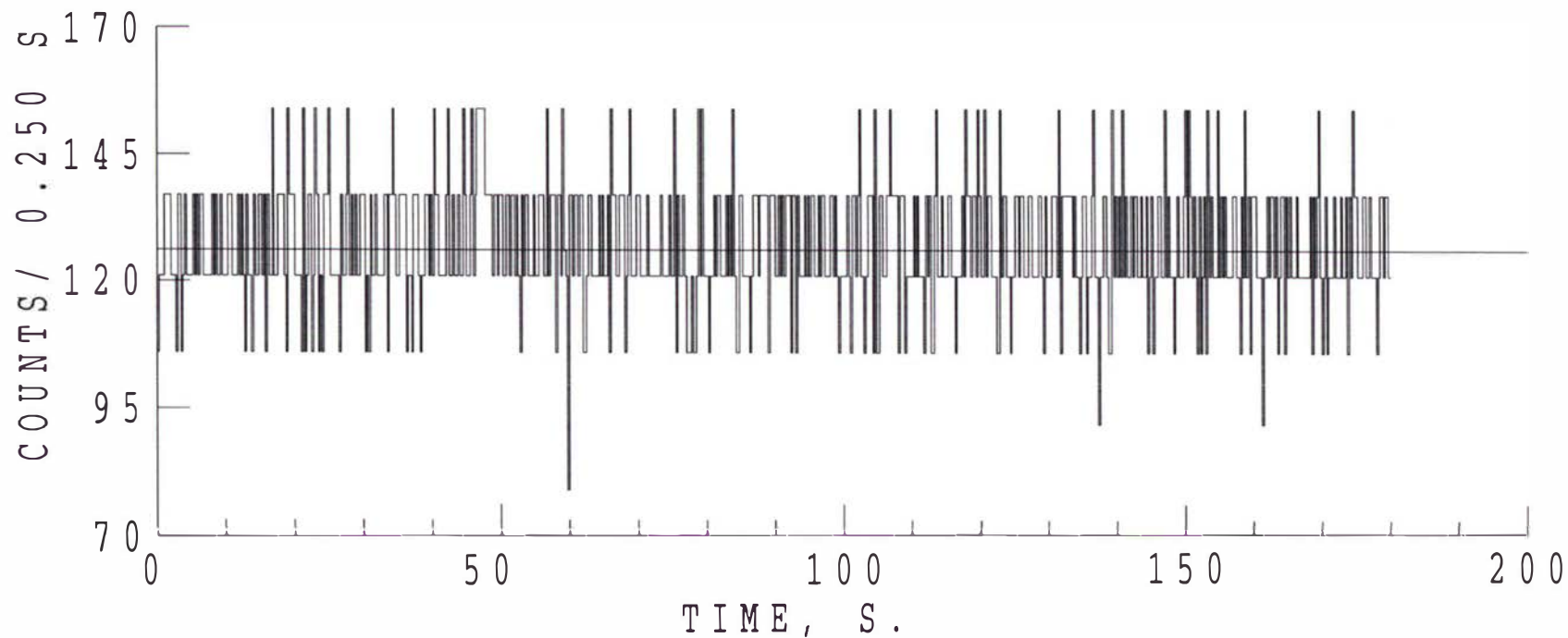
12 / 09 / 11

20/01/96 36828.062 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



Date: Sep 14 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

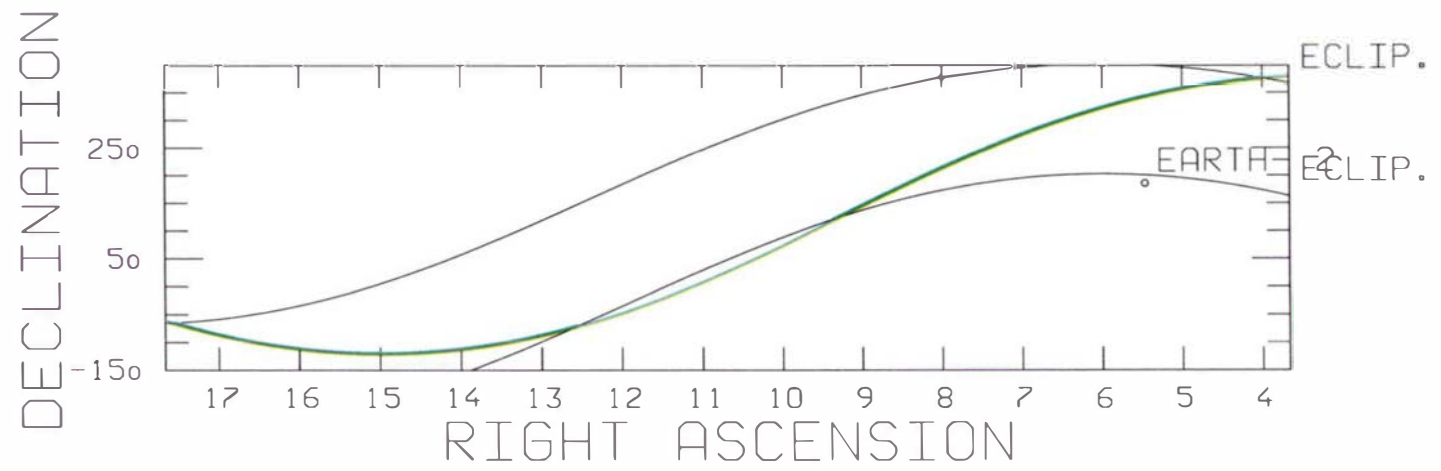
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

2. BATSE Data

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

3. PVO Data

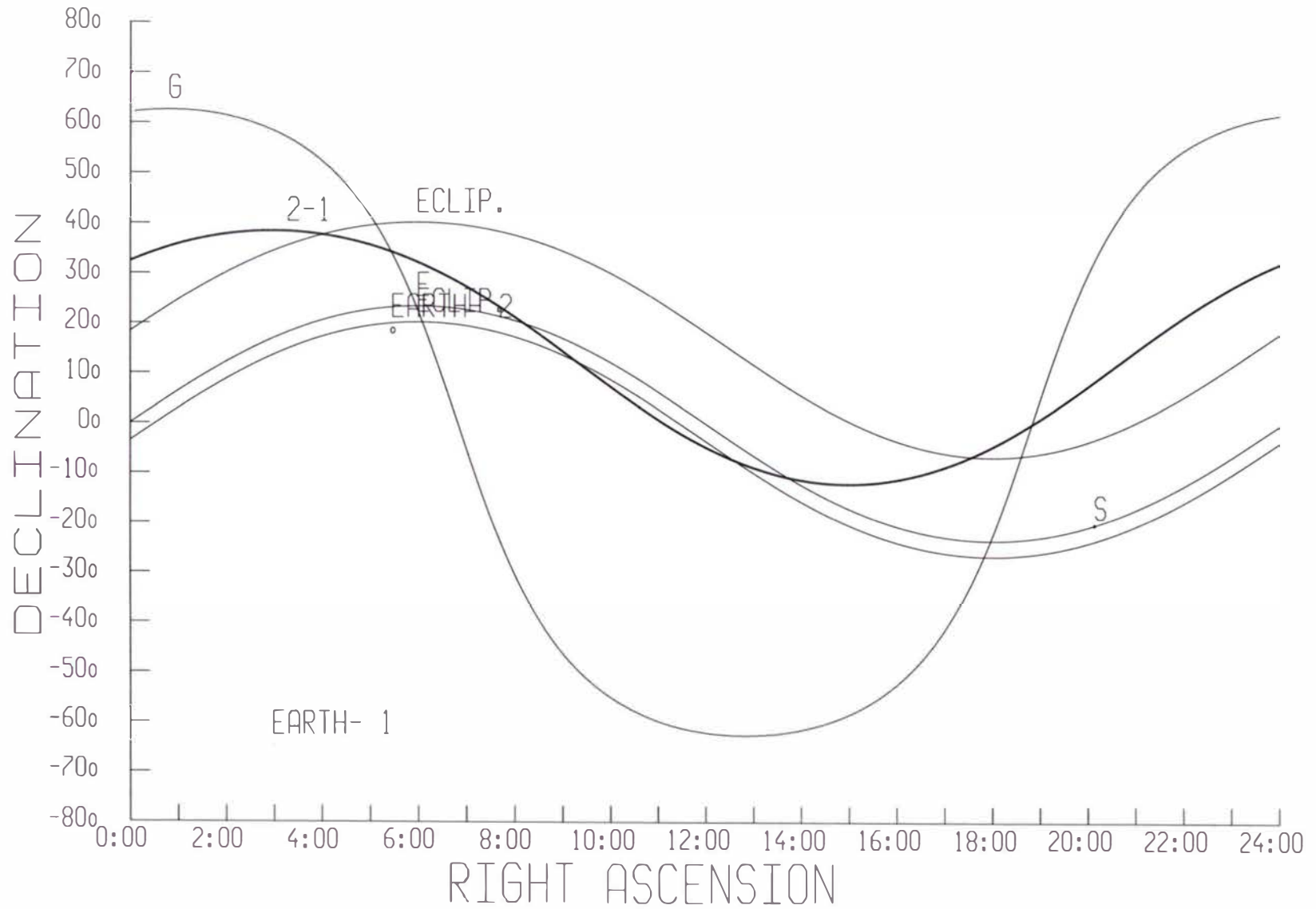
- ☐ Ephemeris of PVO used (not Venus)?
 - ☐ 2000 coordinates used?
 - ☐ Geocentric time used?
-
- ☒ ACCESS and MBL databases updated with identical times?



EVENT OF JAN 20, 1996 13:24

14/09/2011

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



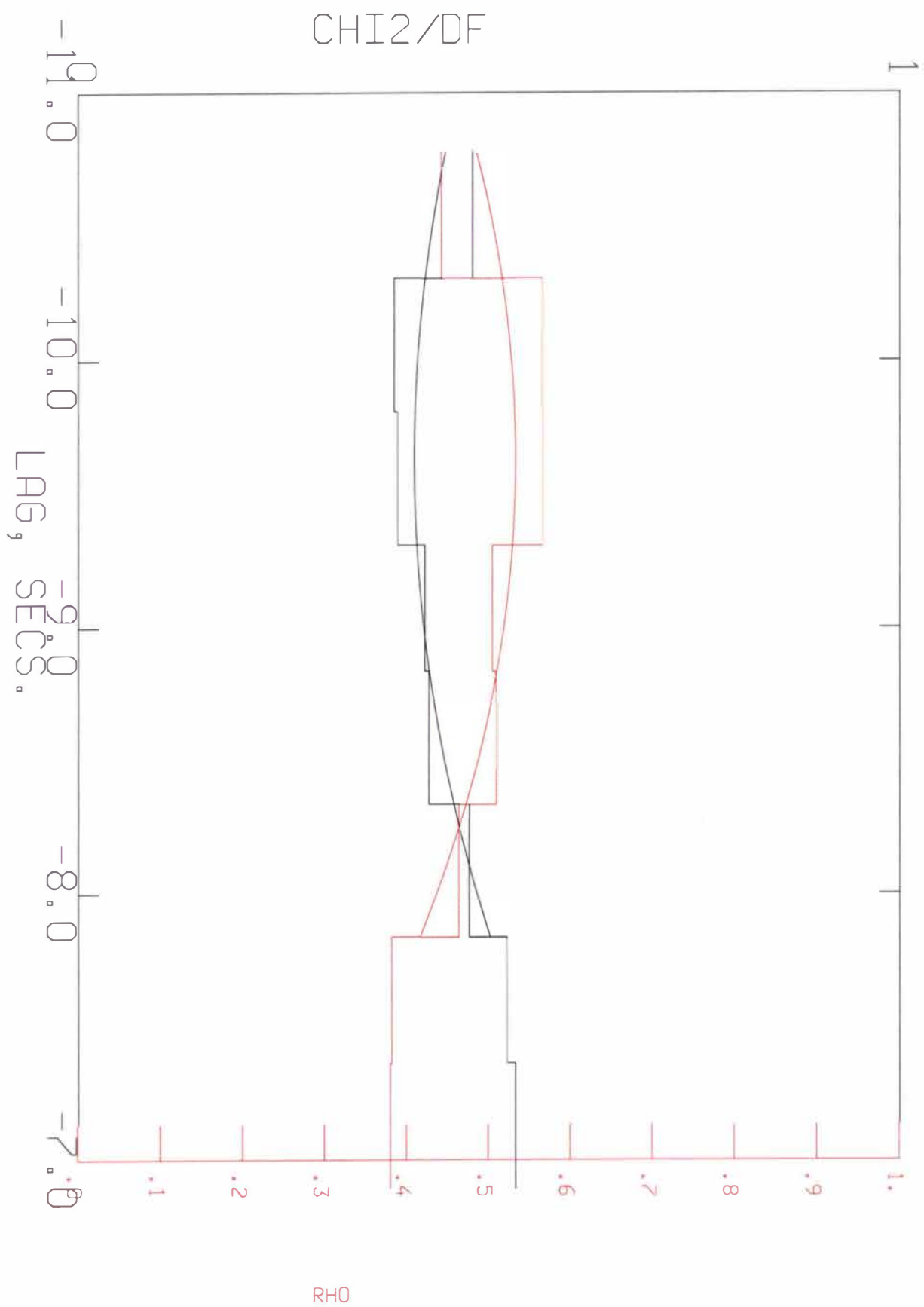
KONUS

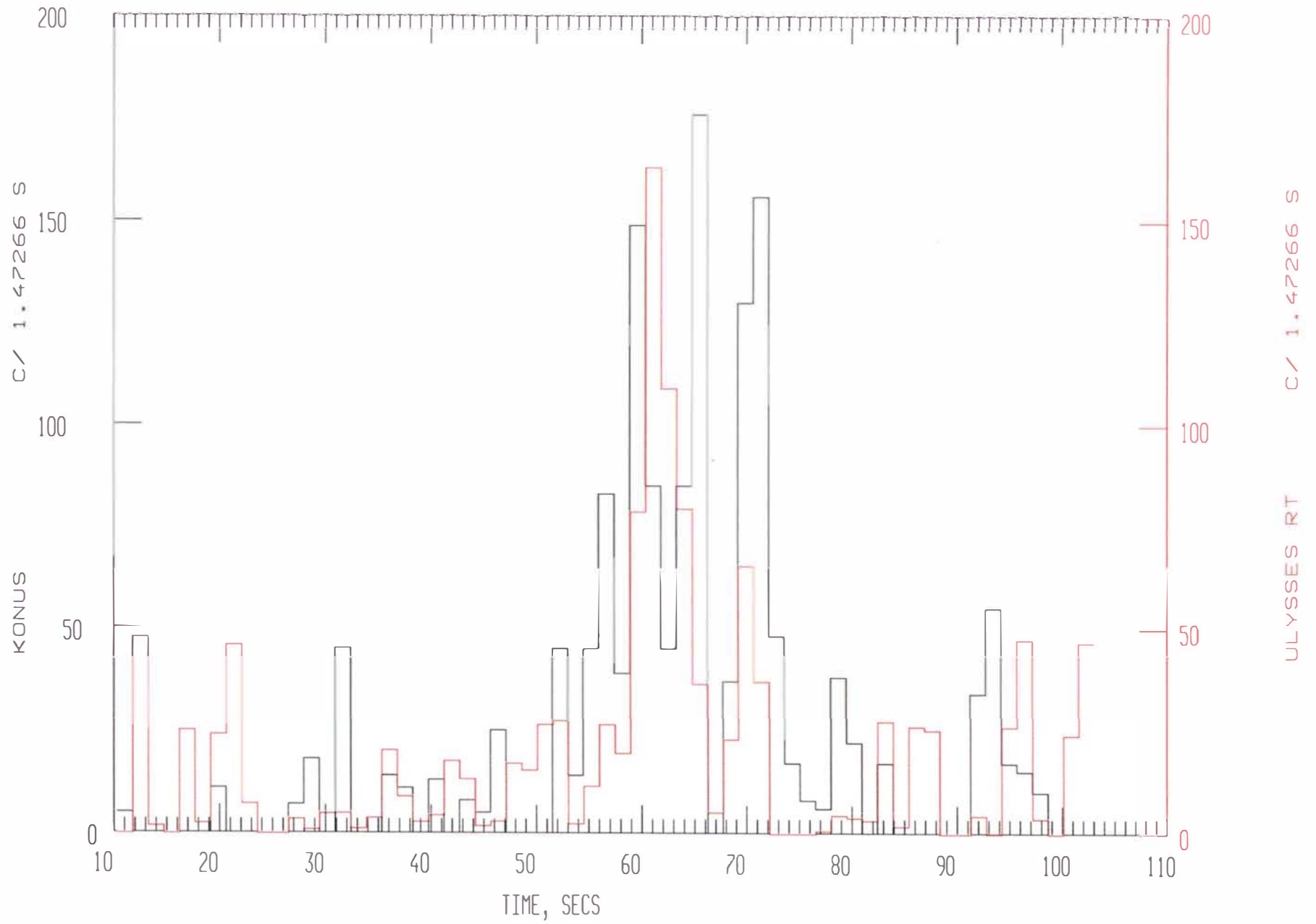
-ULYSSES RT CORRELATION

20/01/96

48568.219

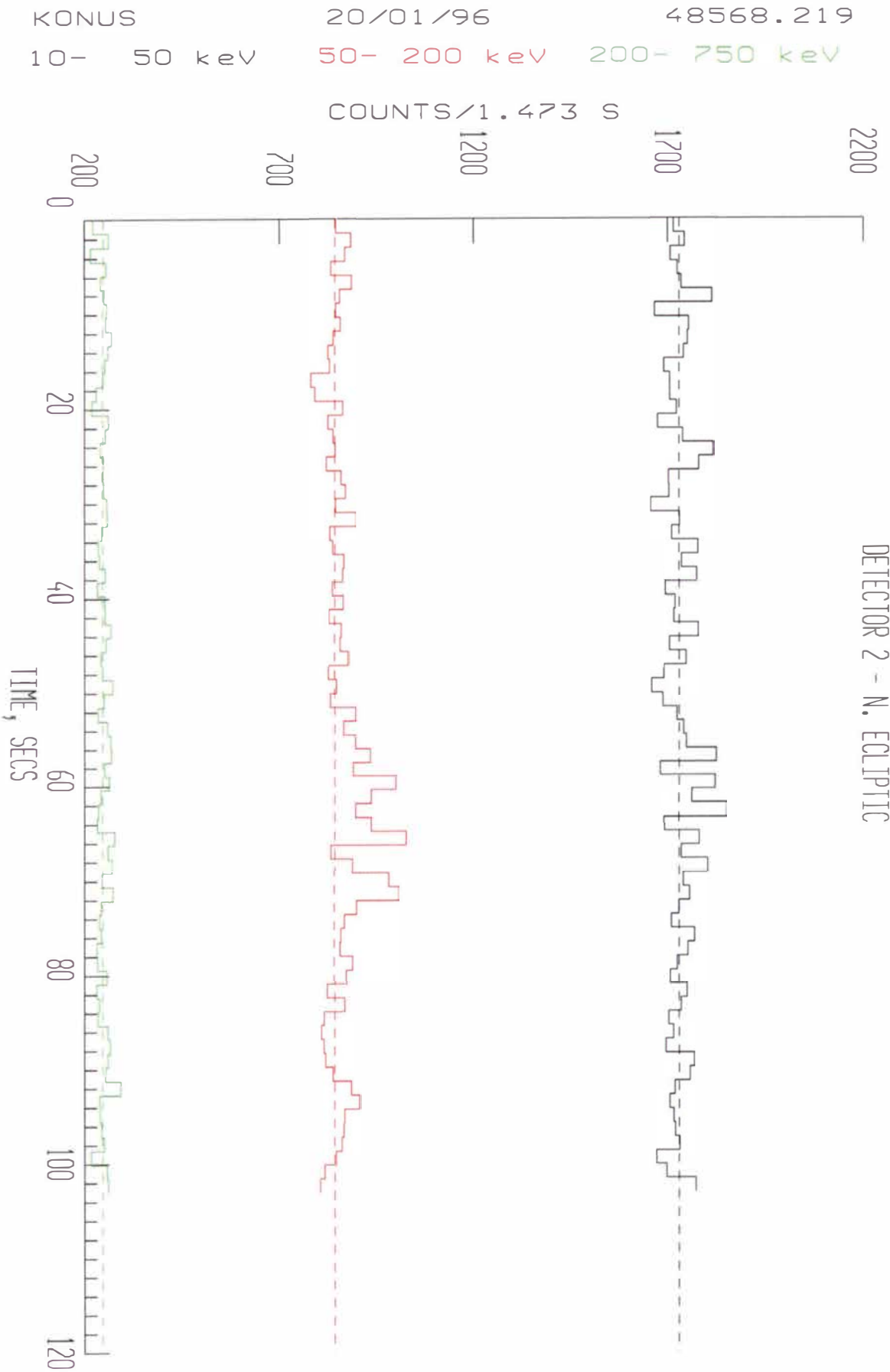
14/ 9/11





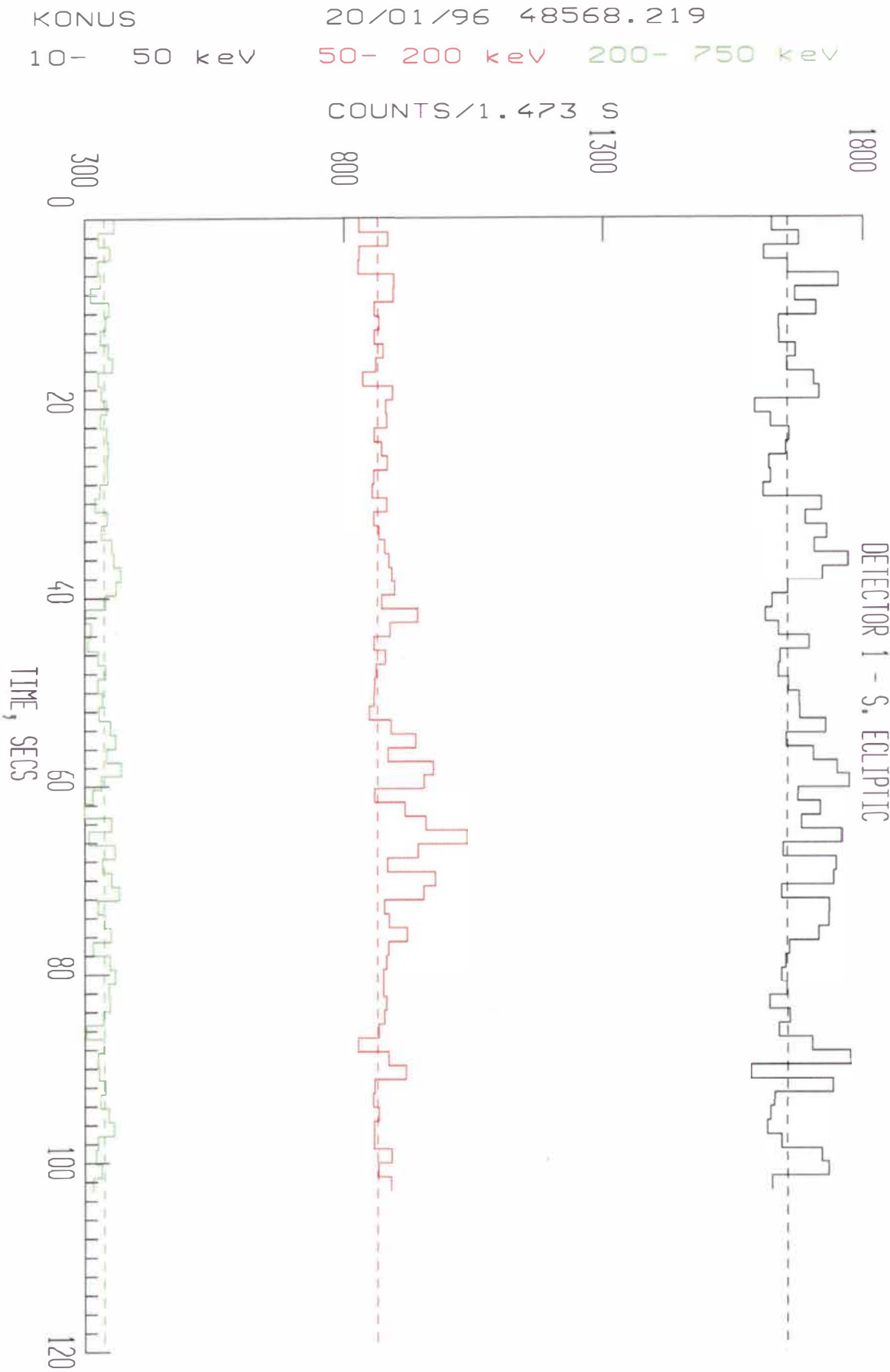
14/09/2011

DETECTOR 2 - N. ECLIPSE



14/09/2011

DETECTOR 1 - S, ECLIPSE



KONUS 19960120 48332

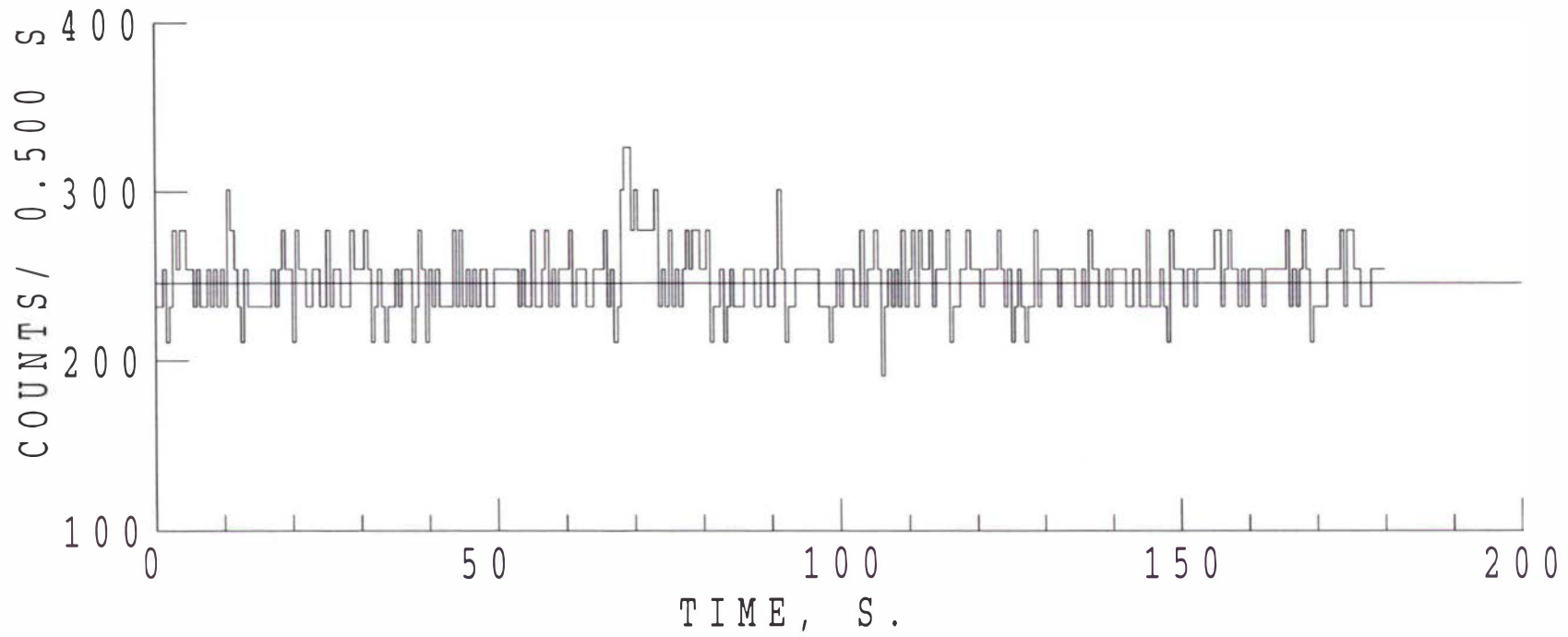
ULYSSES RT

12 / 09 / 11

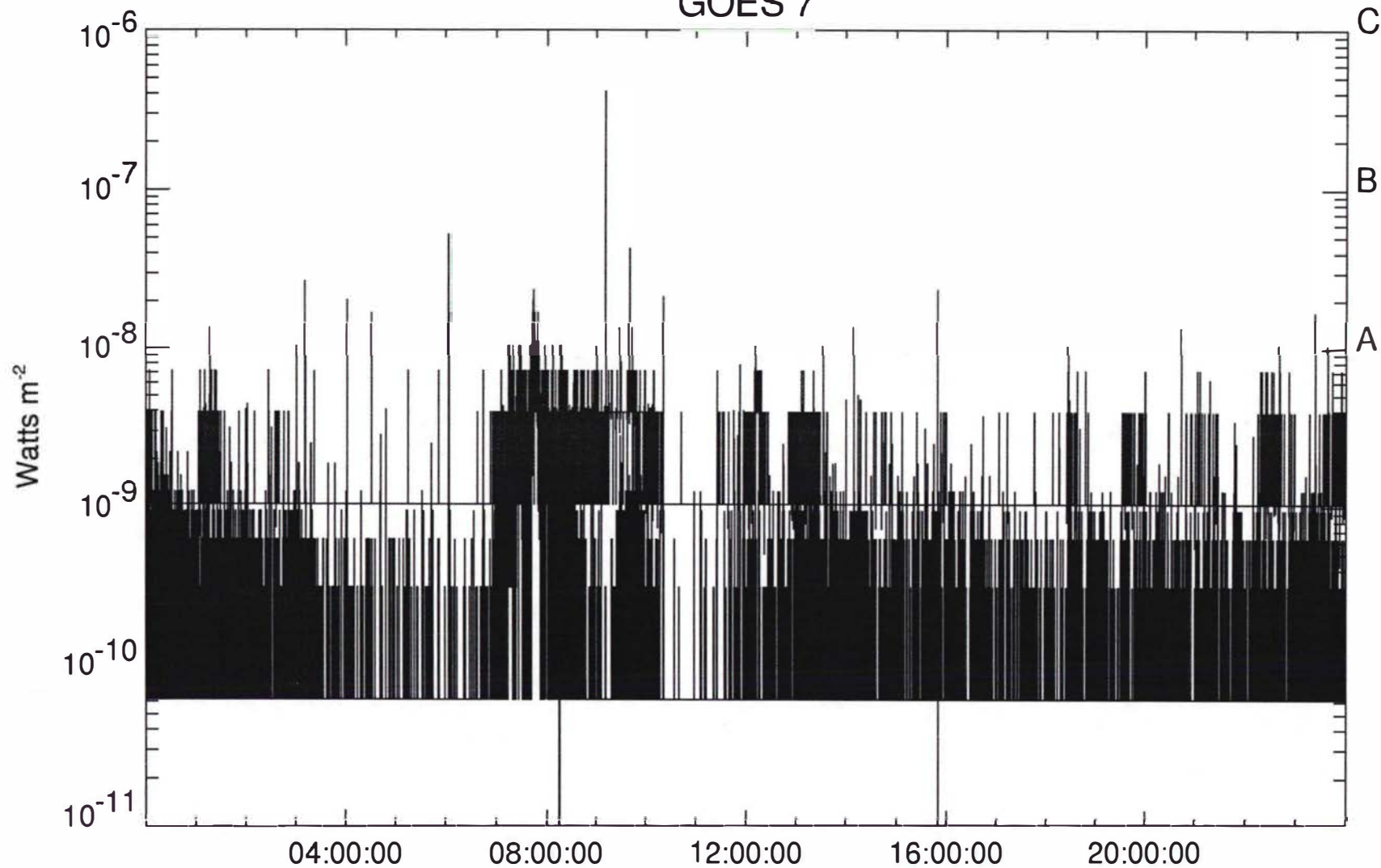
20 / 01 / 96 48240.480 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



GOES 7

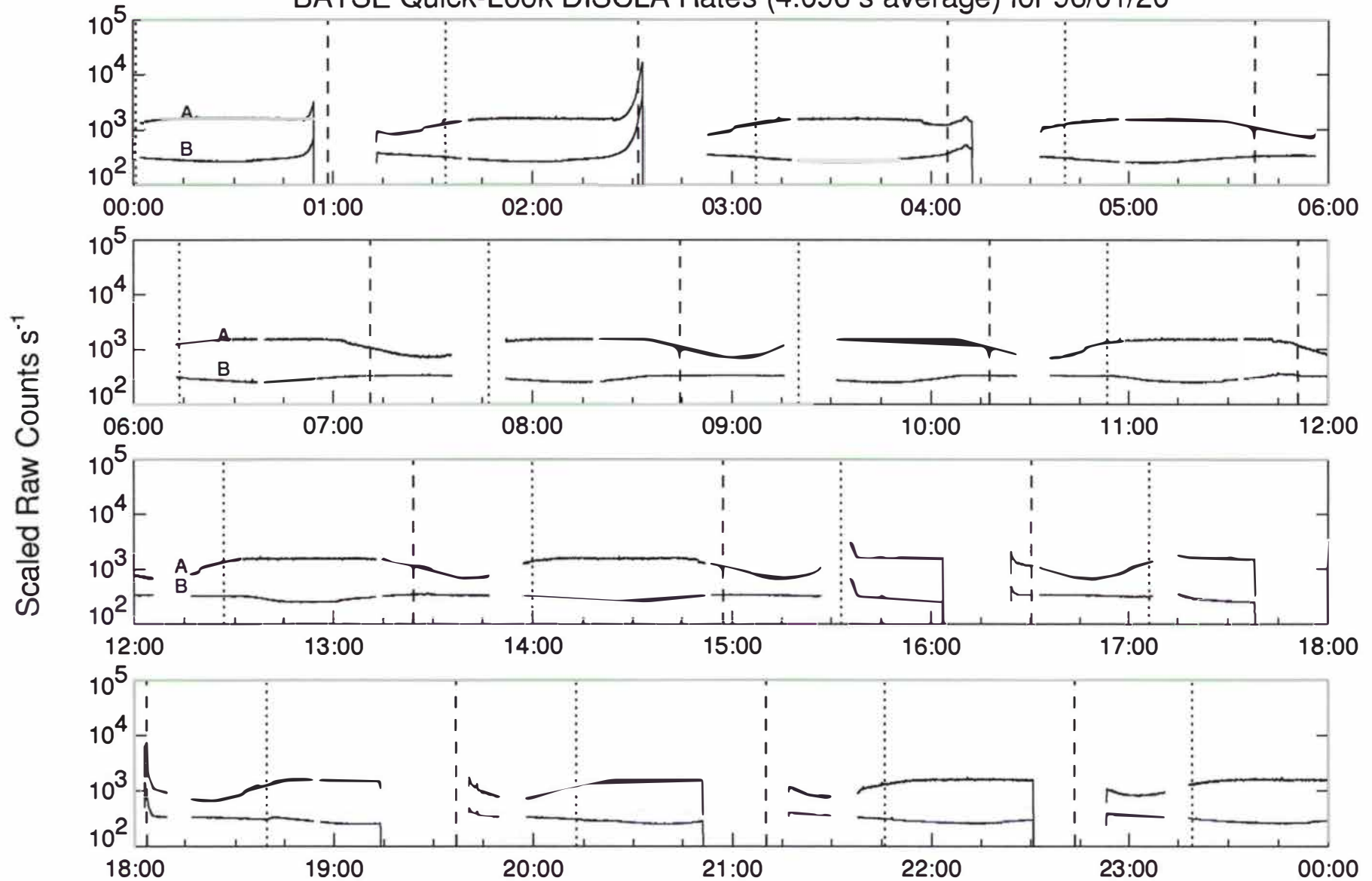


Data Start: 96/01/20, 0000:02

Plot created: 96/01/22, 0654

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 96/01/20



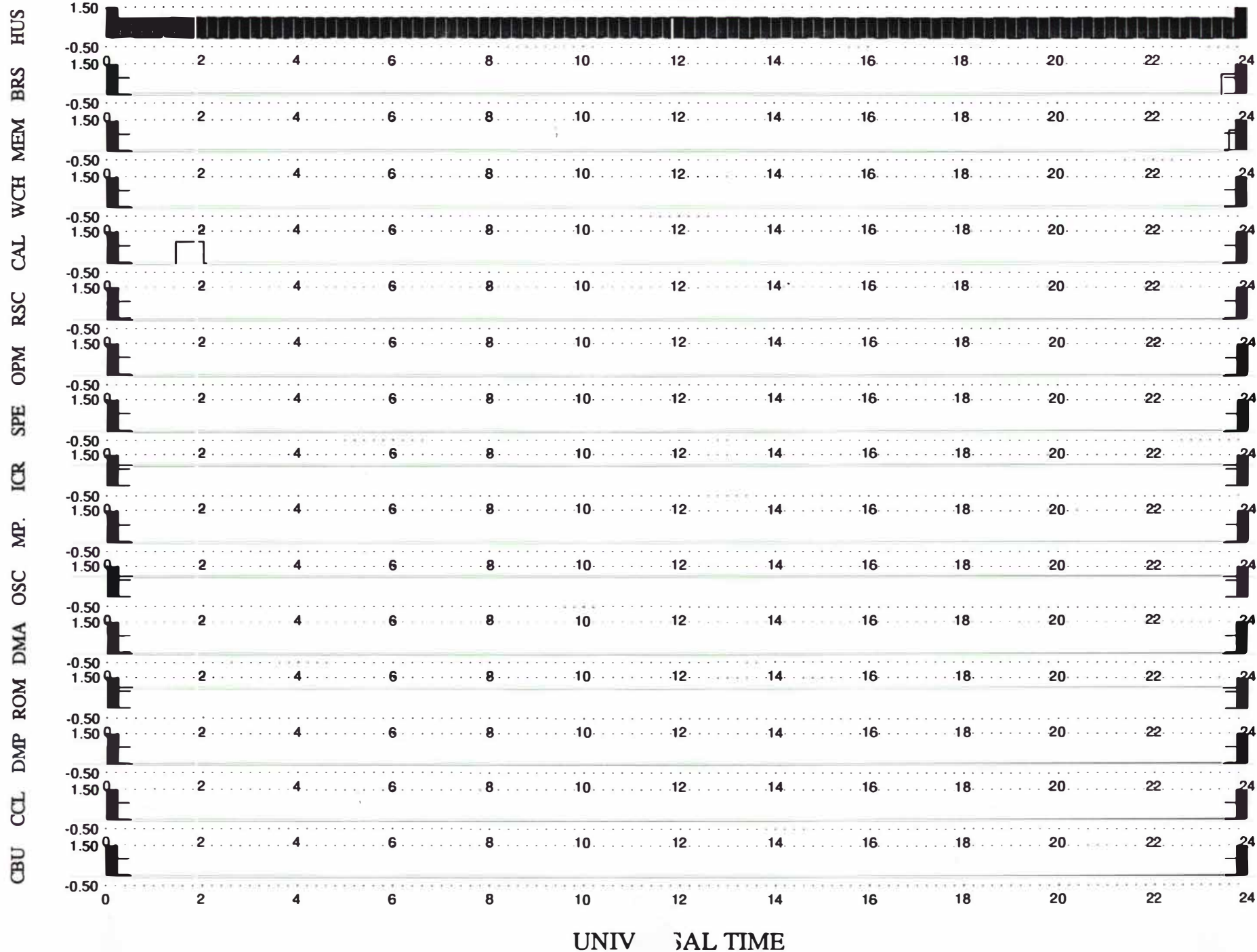
Current Time: 96/01/22, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

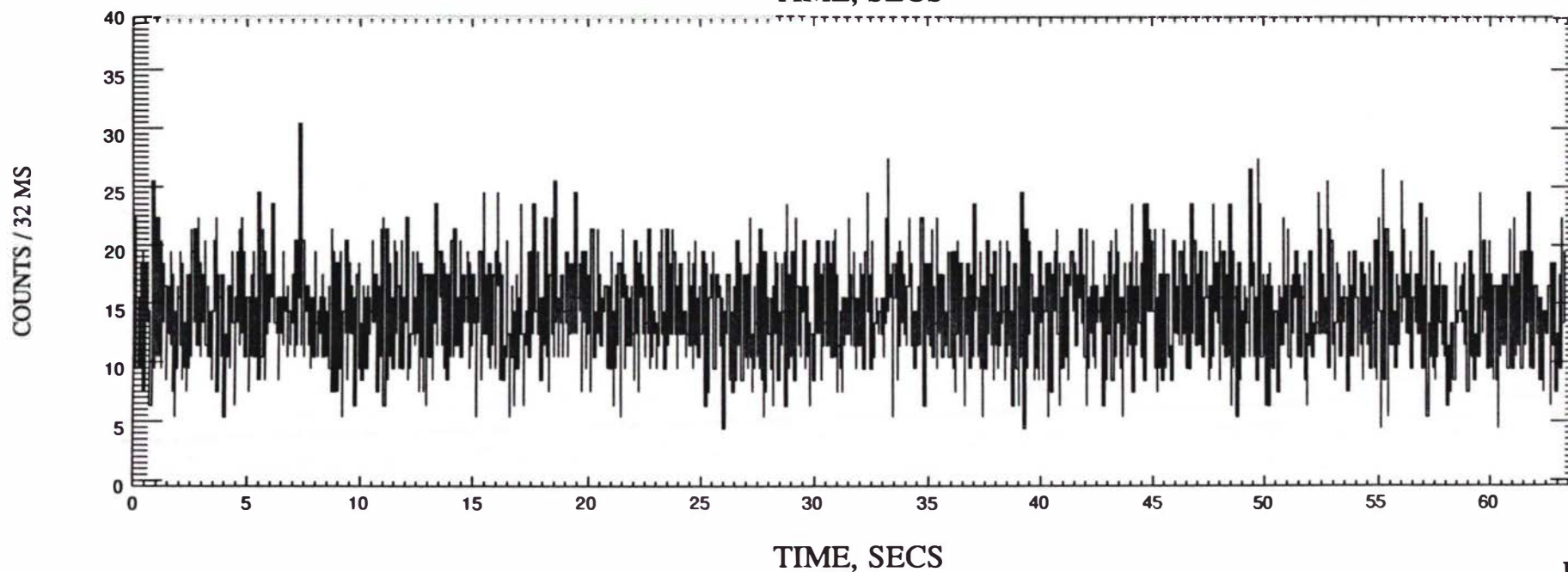
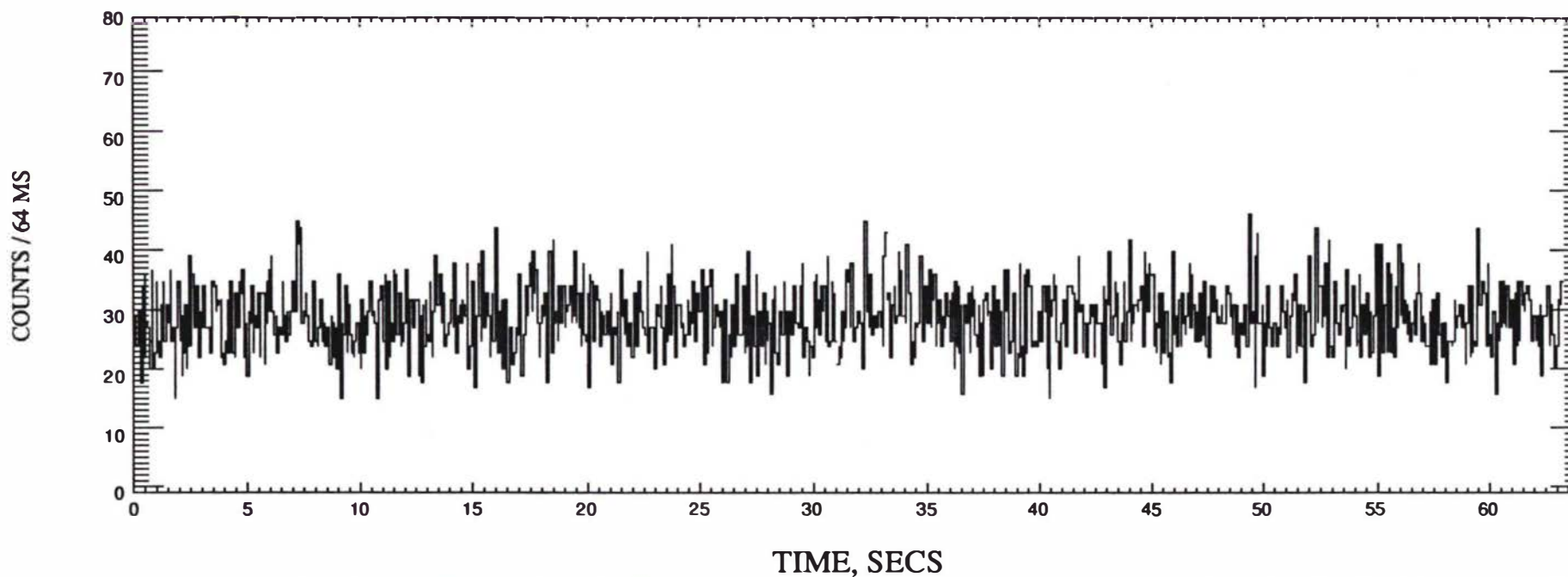
HUS MODES EDR day 20, year 1996 to day 20, year 1996
BURST NUMBER 0

4/1/96



HUS 2A TRIGGERED DATA EDR day 20, year 1996
Burst Counter 0 at UT=23.382432653639 h=84176.758 s 23:22:56.758

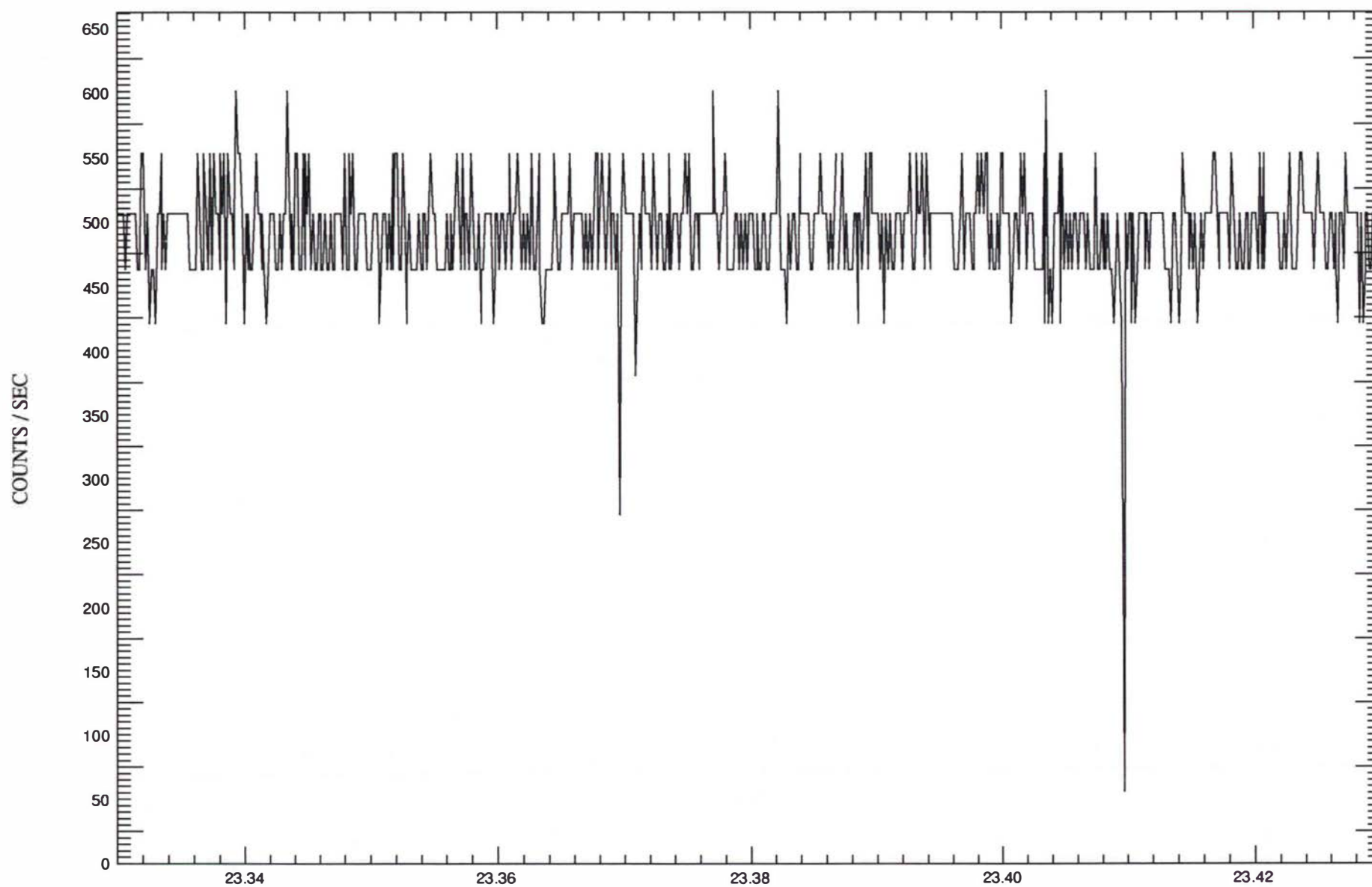
4/1/96



B# 1

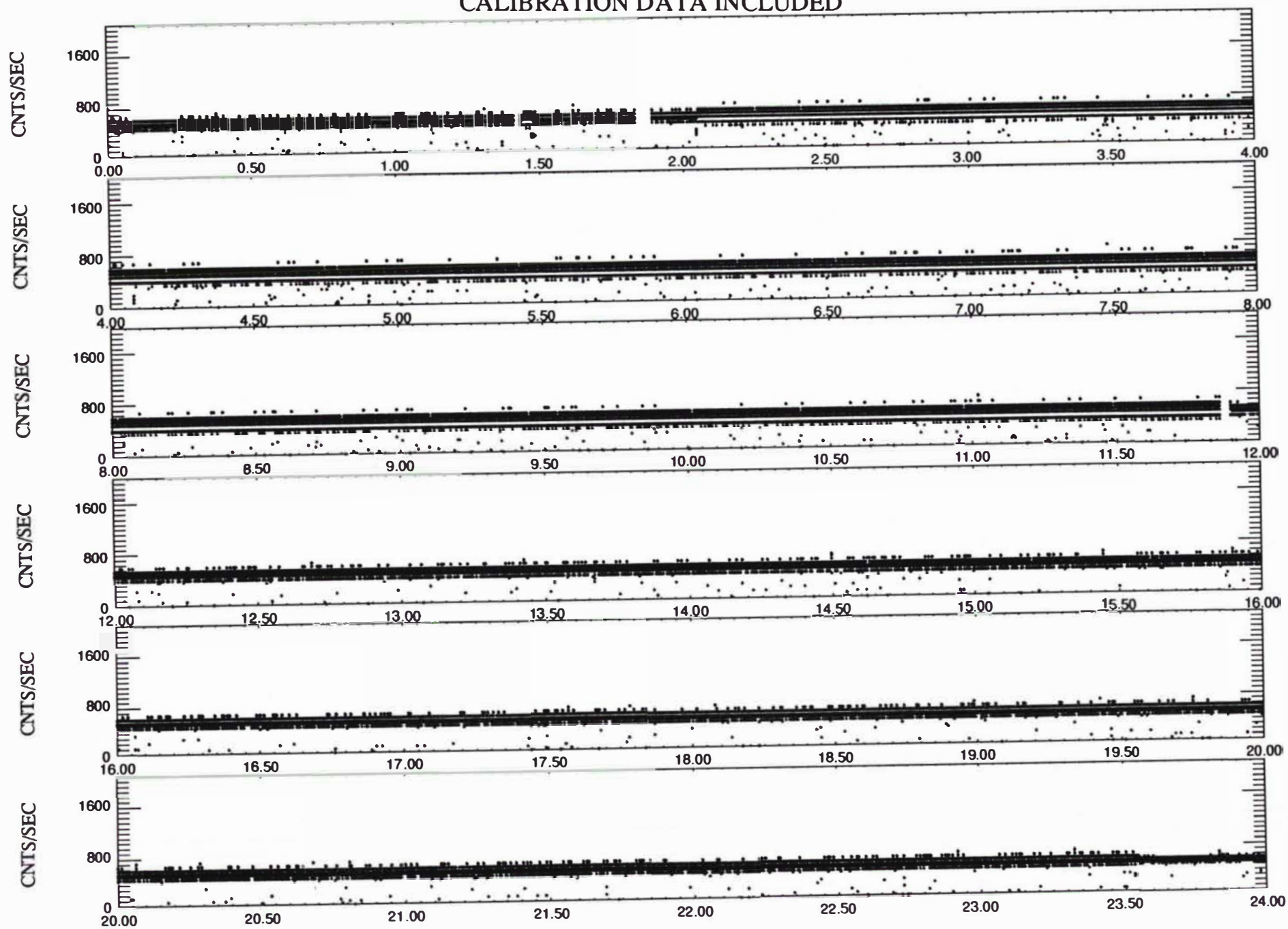
HUS 2A, MODE 1, NOT AVERAGED QEDR day 20, year 1996 to day 20, year 1996
CALIBRATION DATA INCLUDED

1/24/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 20, year 1996 to day 20, year 1996
CALIBRATION DATA INCLUDED

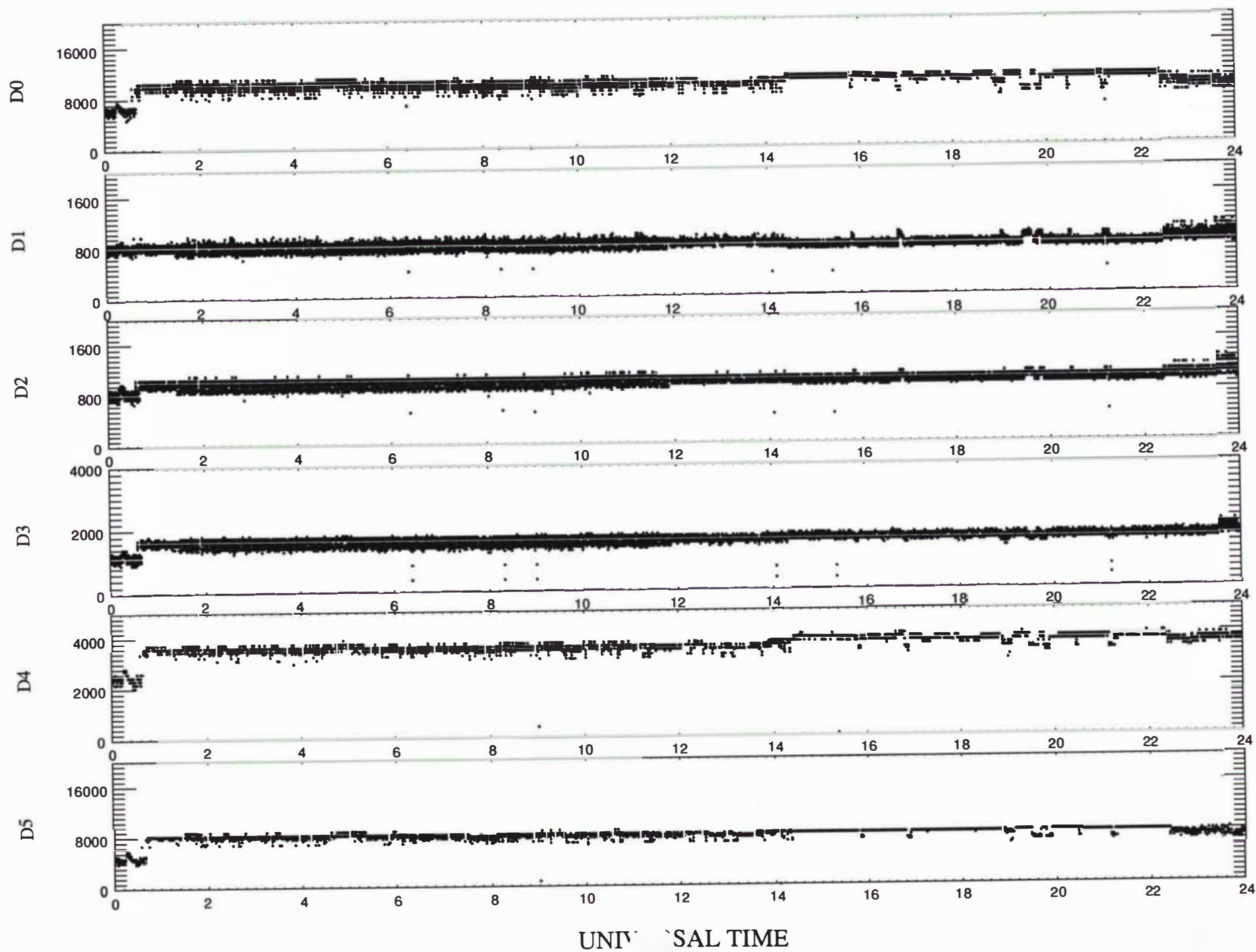
4/1/96



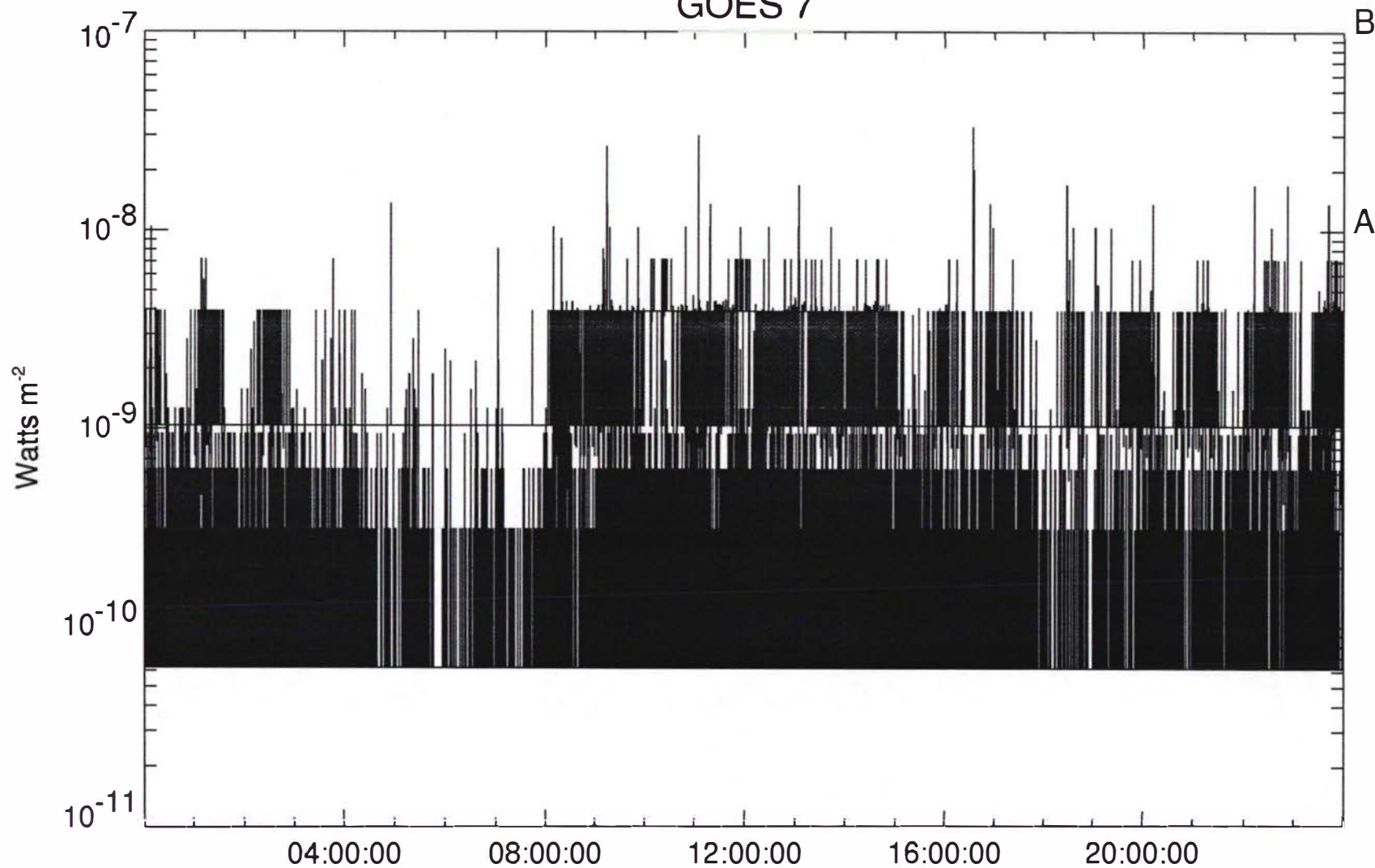
UNIV SAL TIME

HUS 2B COUNTS / SEC QEDR day 20, year 1996 to day 20, year 1996

1/24/96



GOES 7



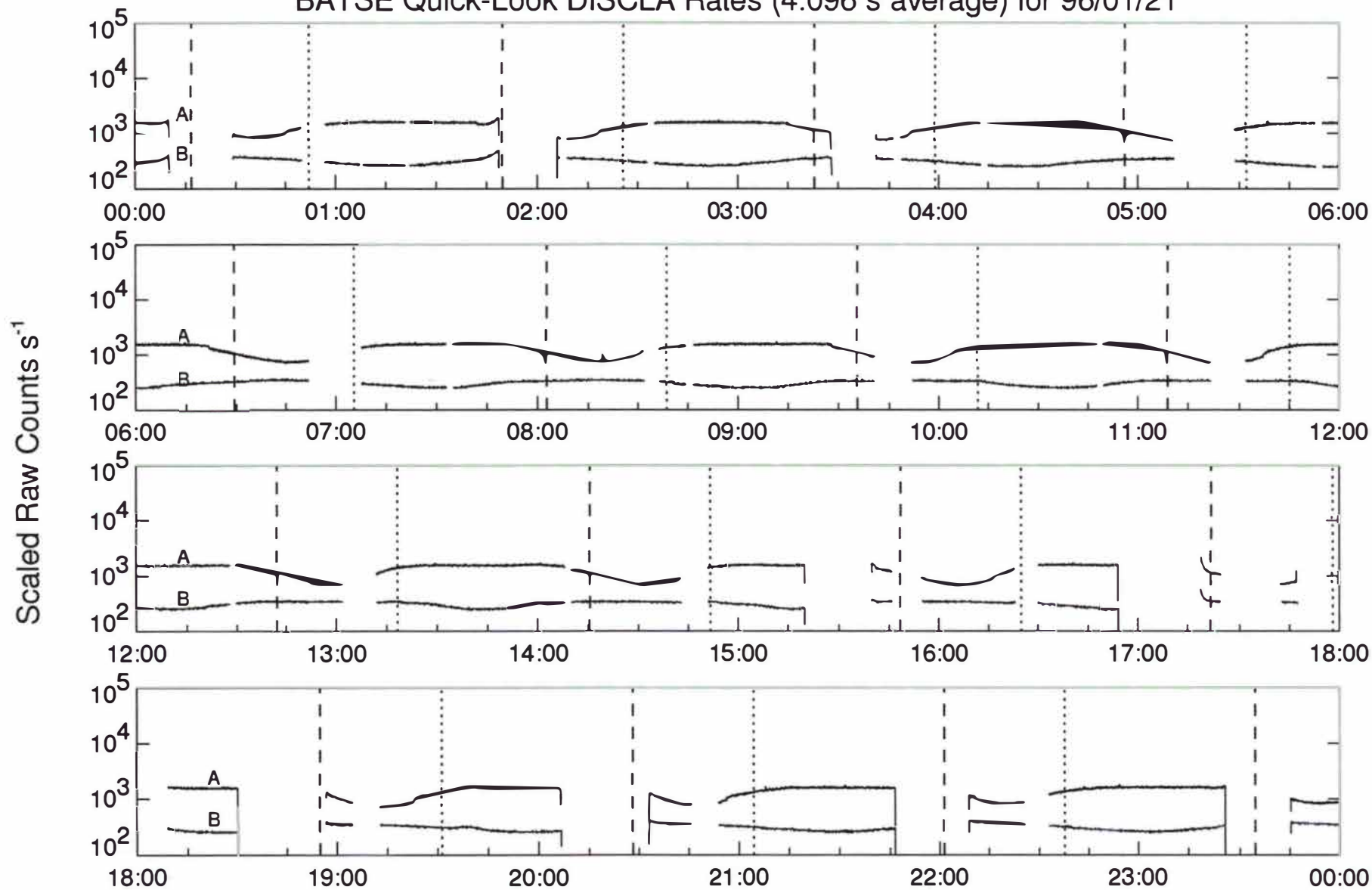
Data Start: 96/01/21, 0000:01

Plot created: 96/01/23, 0654

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 96/01/21



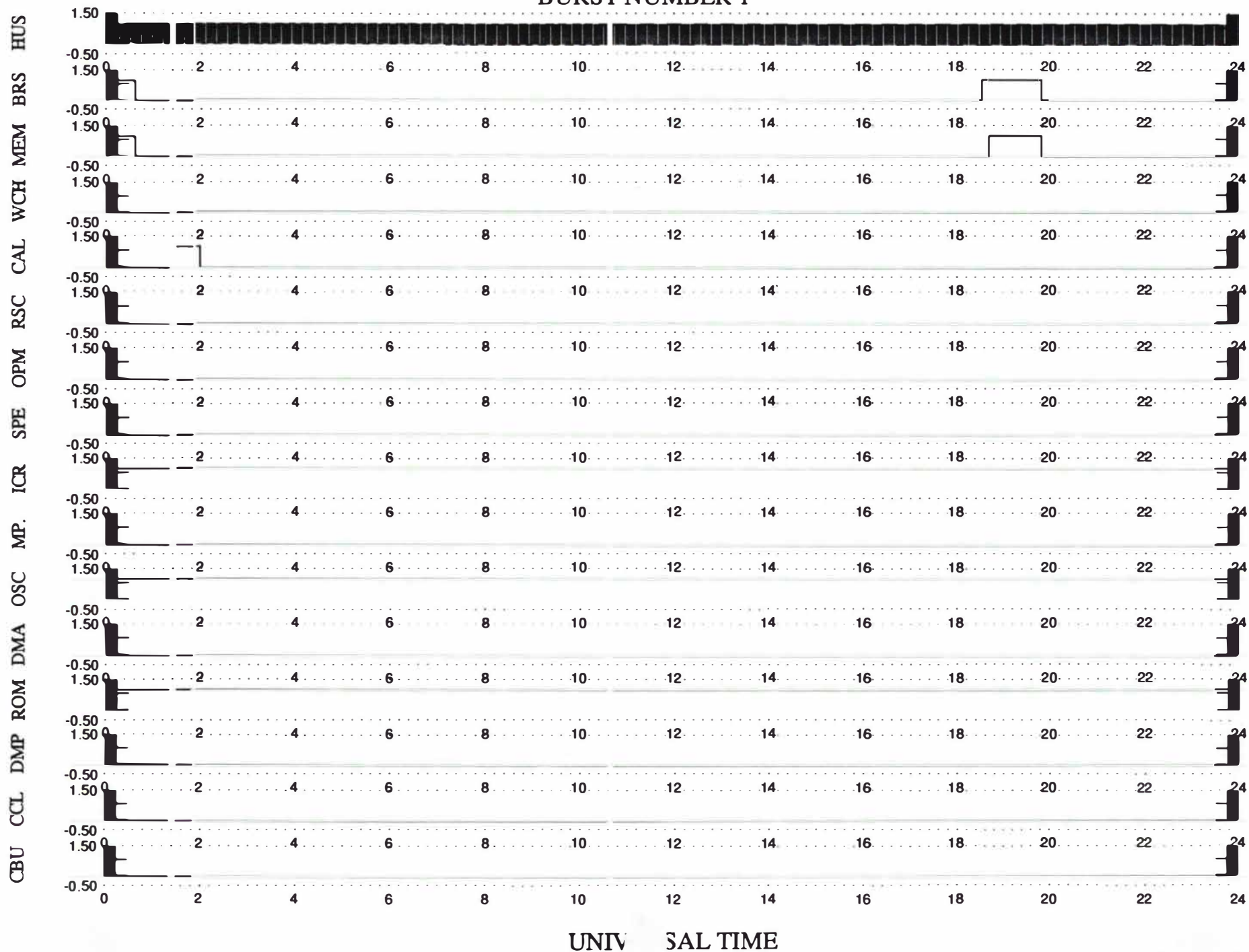
Current Time: 96/01/23, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

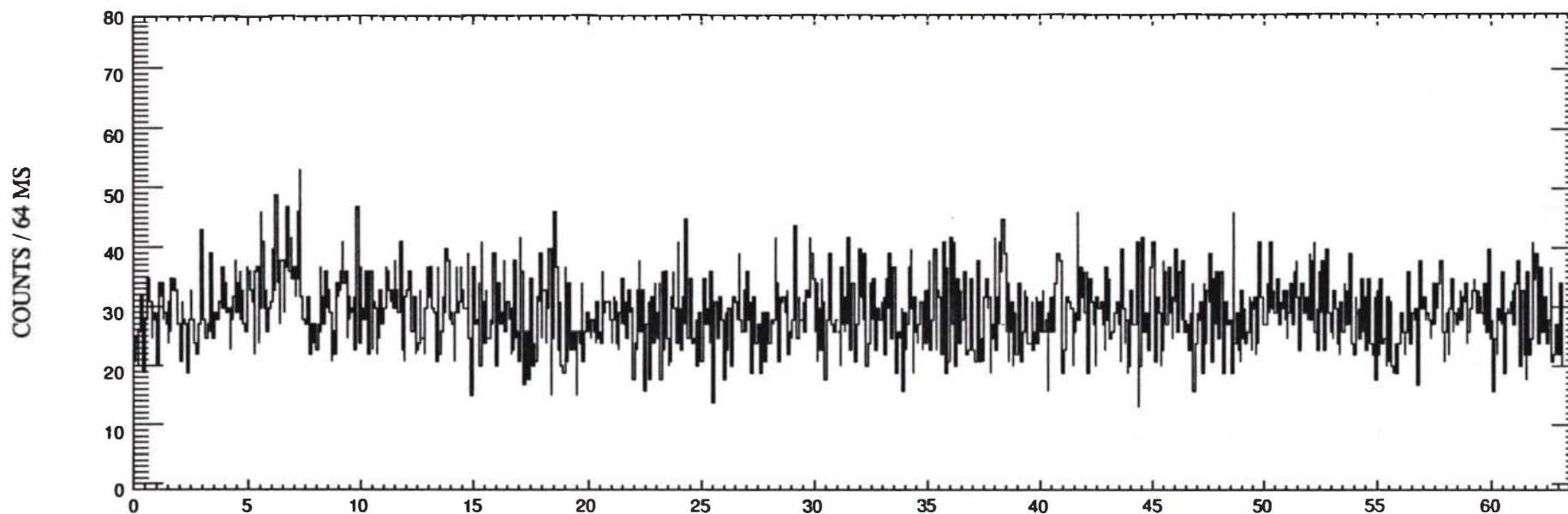
HUS MODES EDR day 21, year 1996 to day 21, year 1996
BURST NUMBER 1

4/1/96

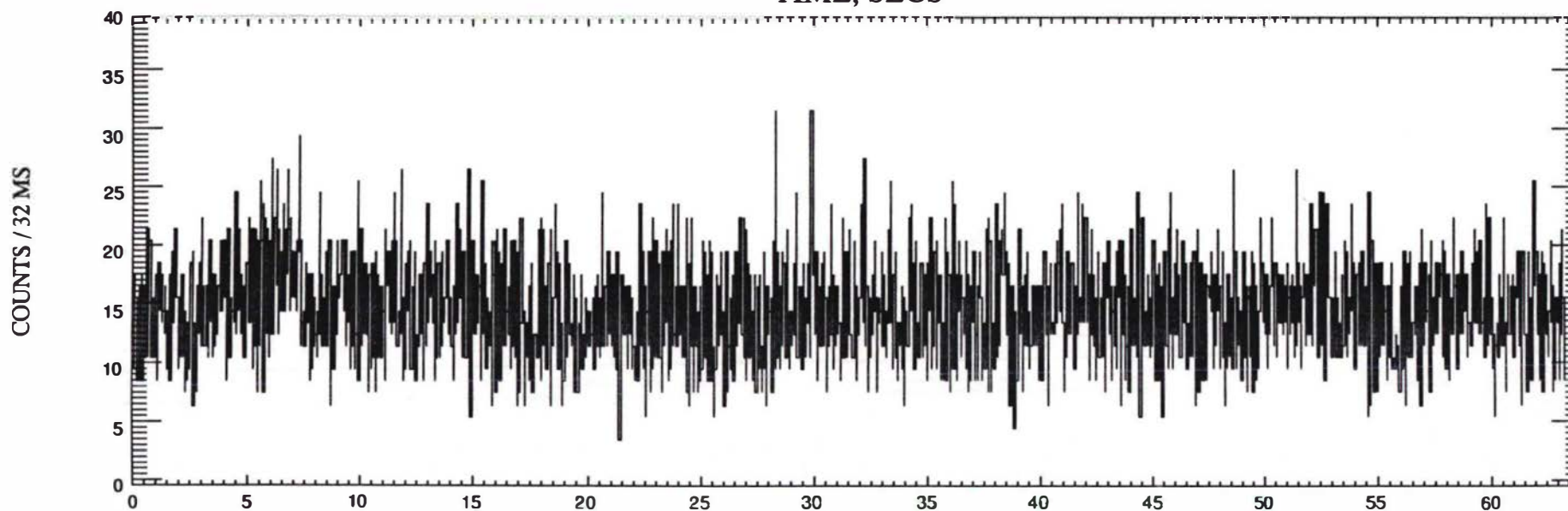


HUS 2A TRIGGERED DATA EDR day 21, year 1996
Burst Counter 1 at UT=18.495967597961 h=66585.483 s 18:29:45.483

4/1/96



TIME, SECS

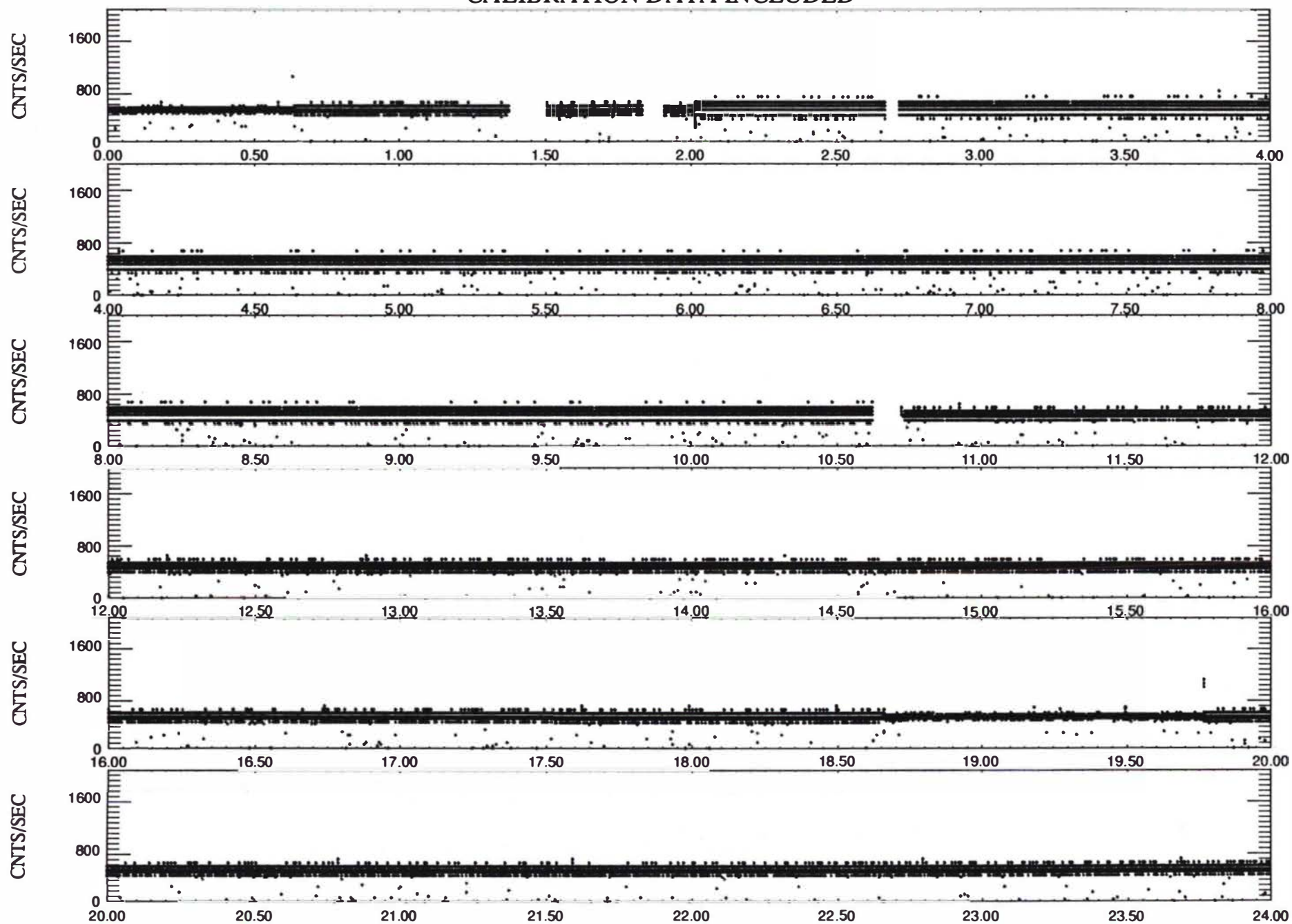


TIME, SECS

B# 1

HUS 2A, MODE 1, NOT AVERAGED EDR day 21, year 1996 to day 21, year 1996
CALIBRATION DATA INCLUDED

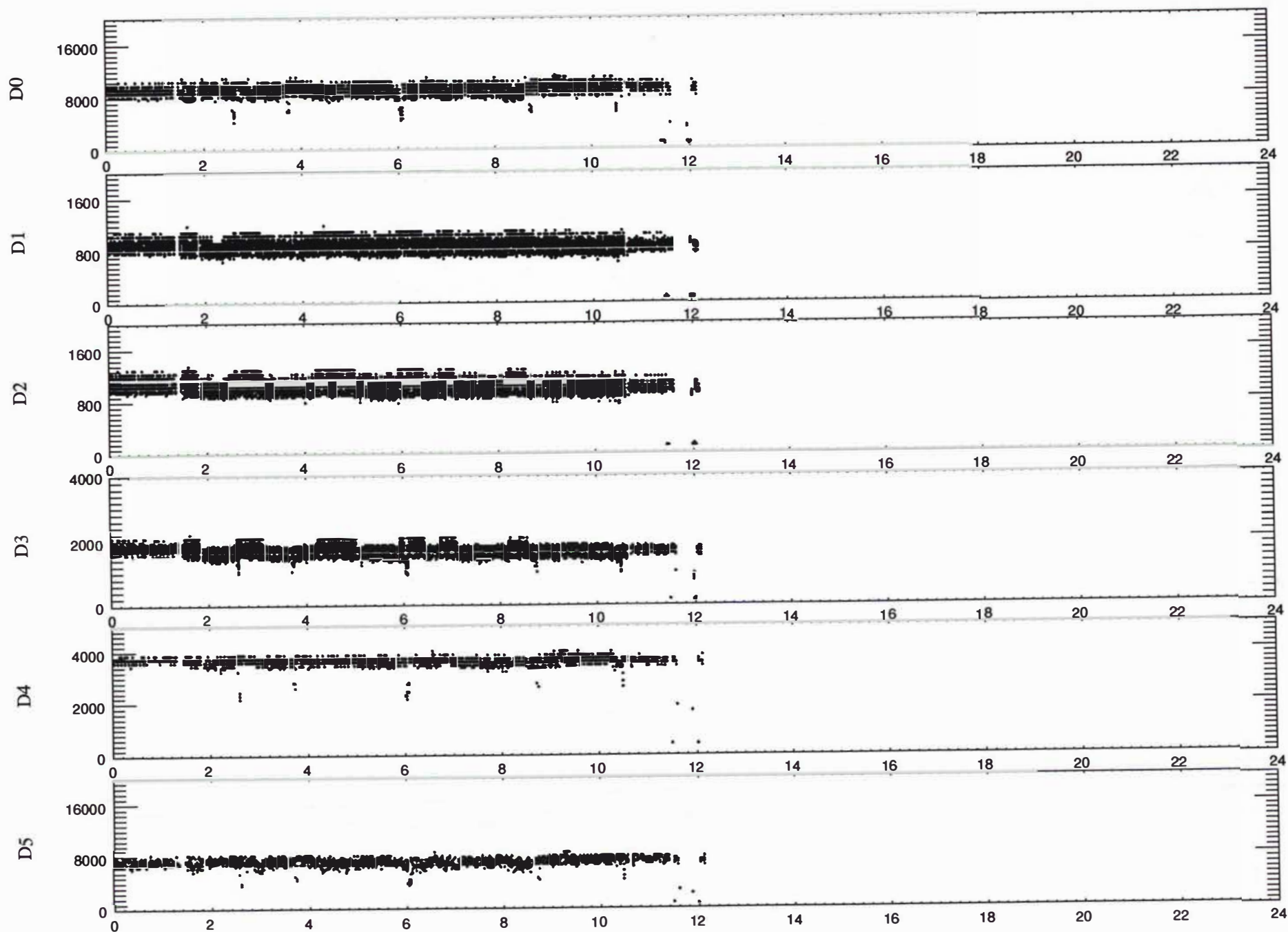
4/1/96



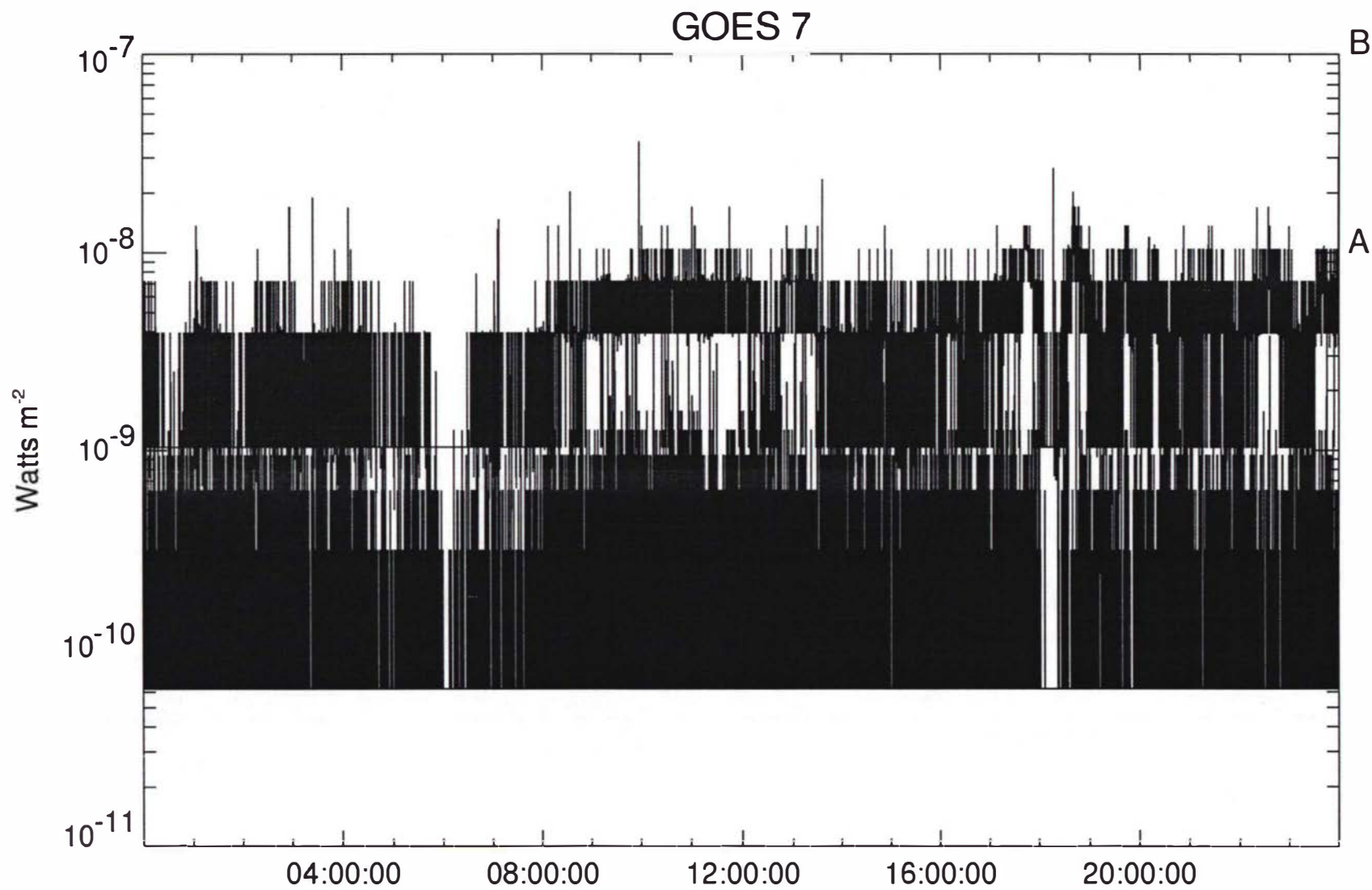
UNIV SAL TIME

HUS 2B COUNTS / SEC QEDR day 21, year 1996 to day 21, year 1996

1/26/96



UNIVERSAL TIME



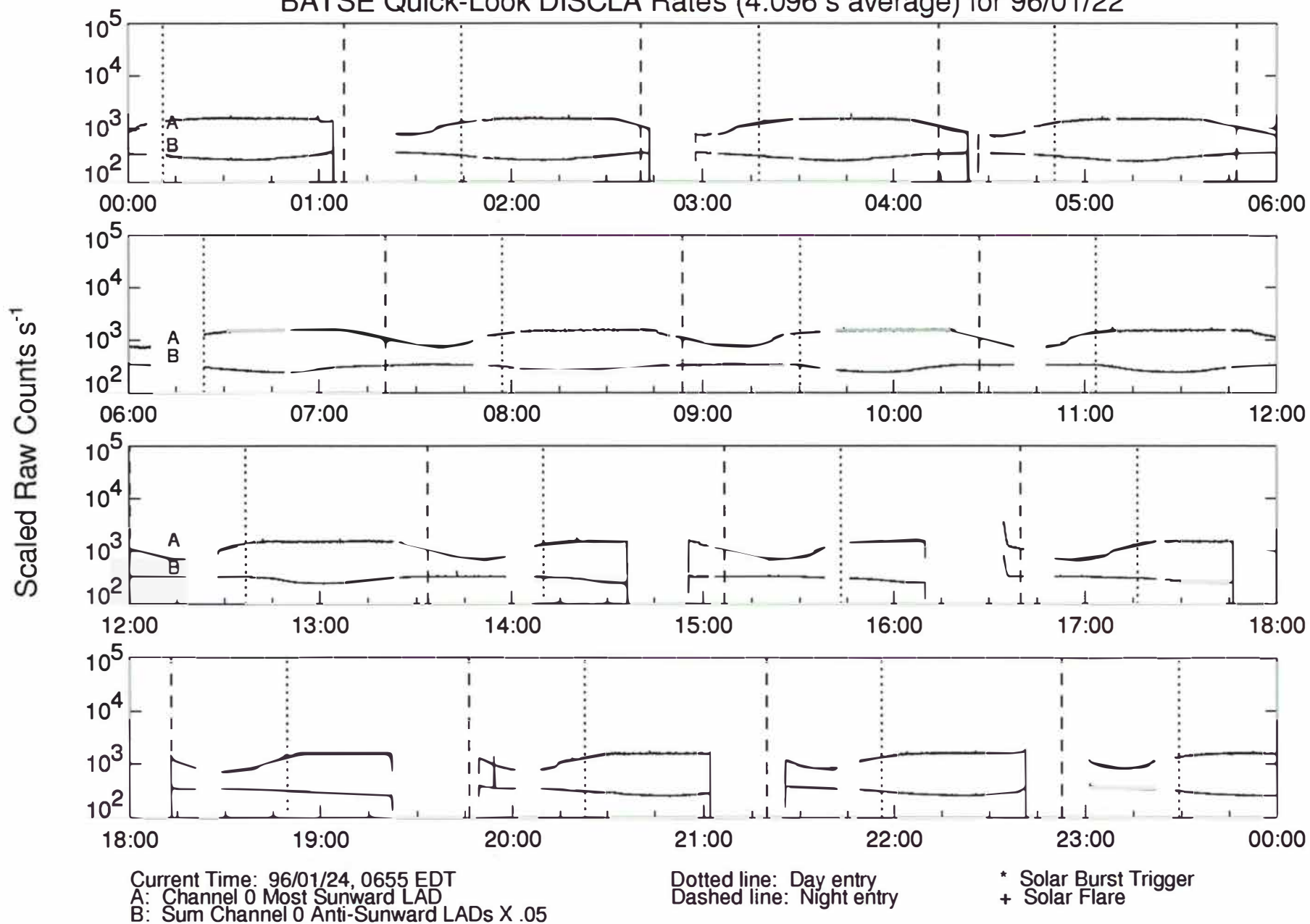
Data Start: 96/01/22, 0000:02

Plot created: 96/01/24, 0655

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

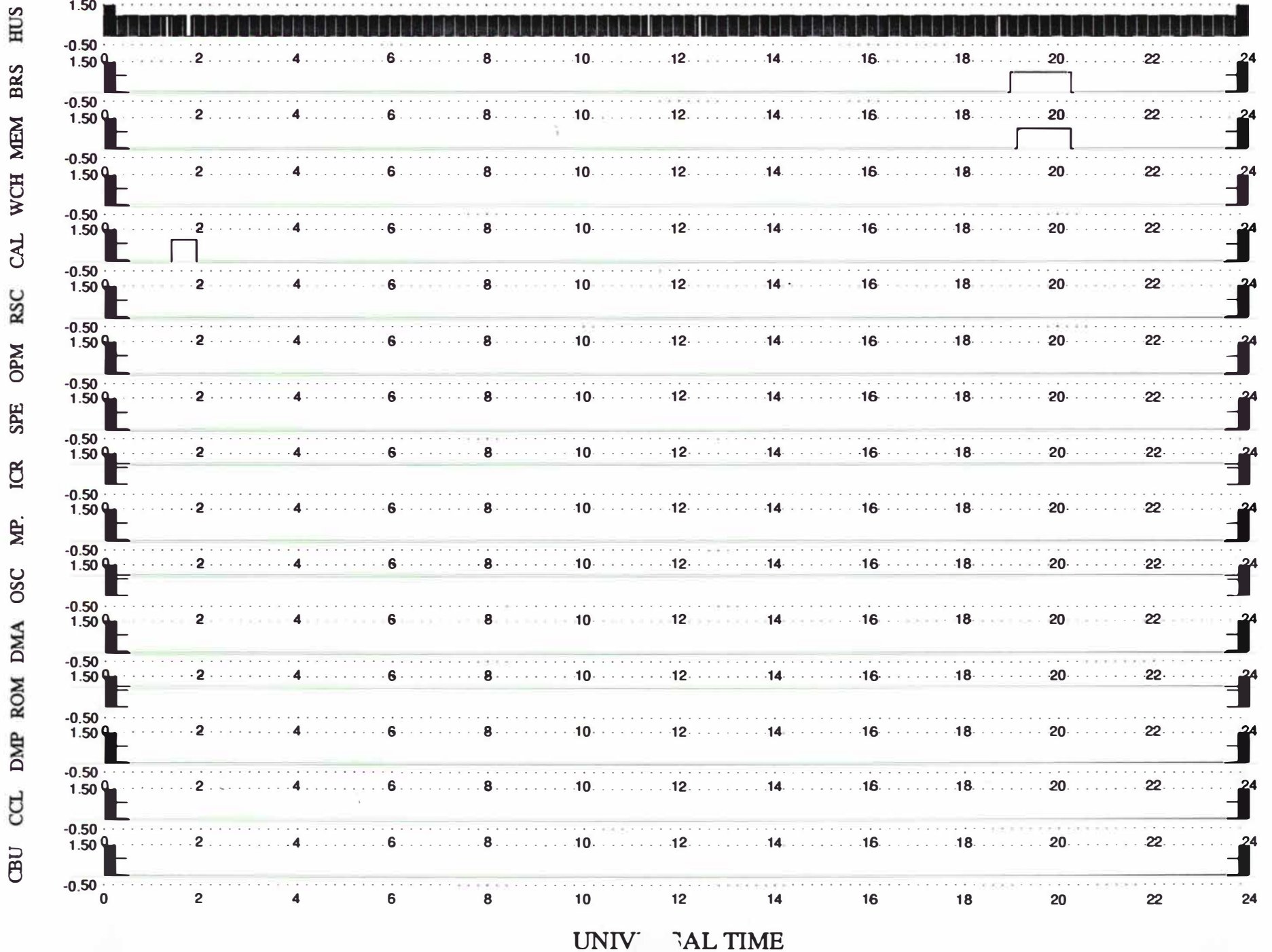
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 96/01/22



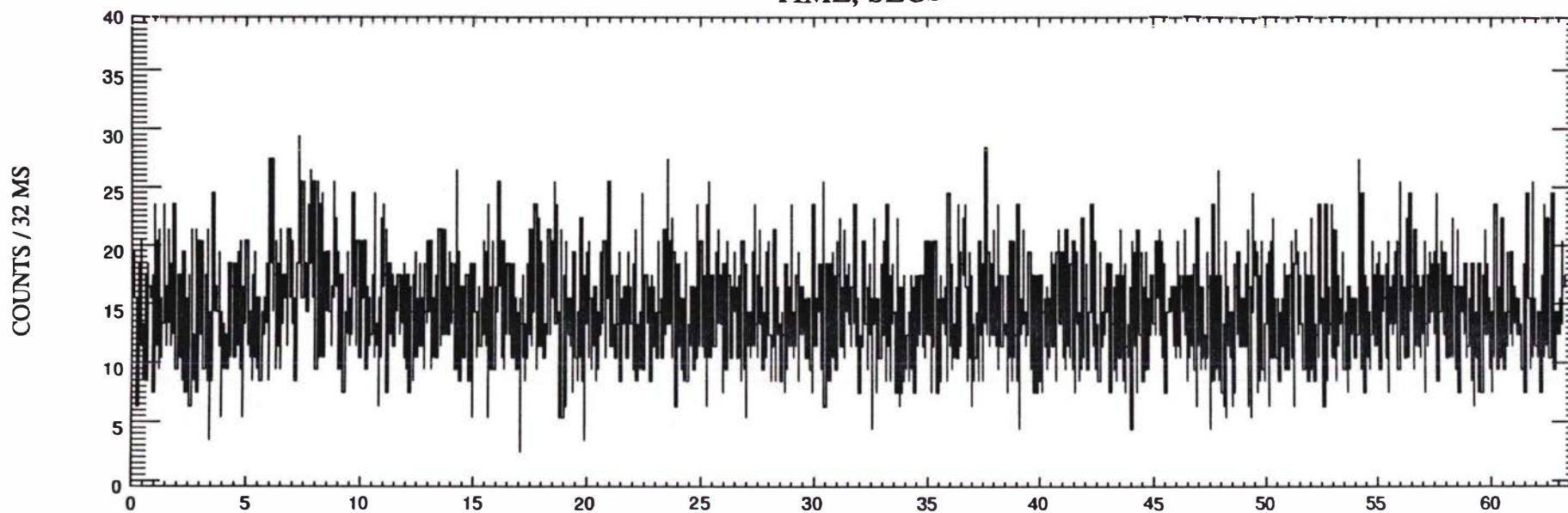
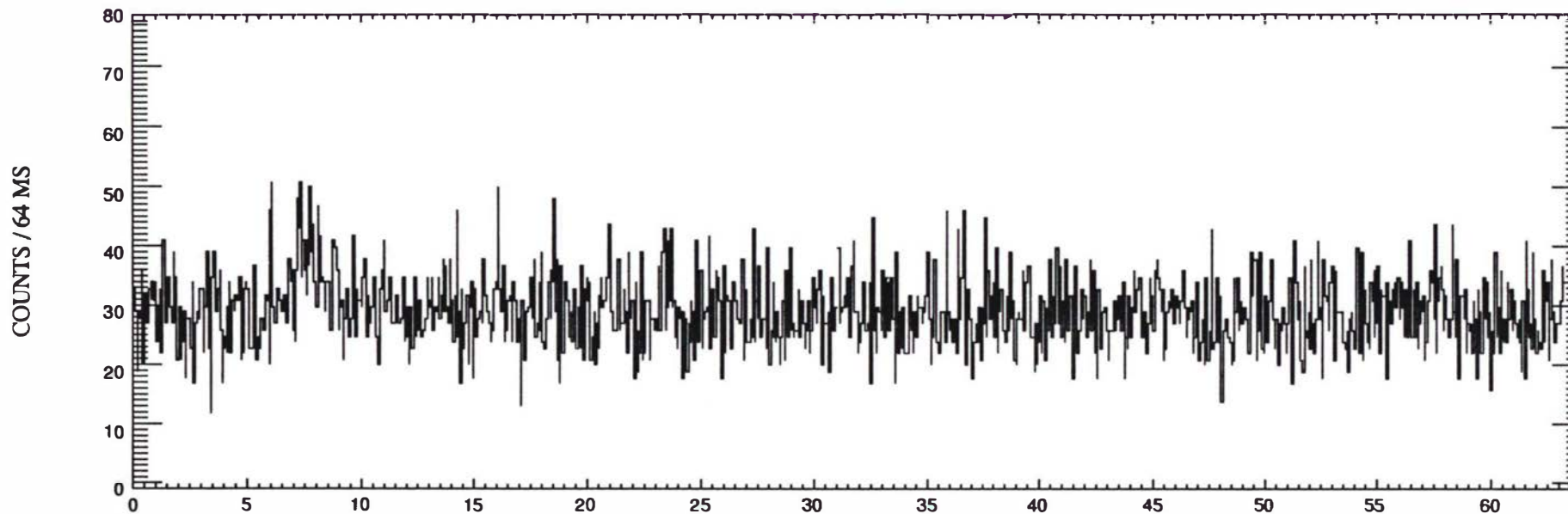
HUS MODES EDR day 22, year 1996 to day 22, year 1996
BURST NUMBER 2

4/1/96



HUS 2A TRIGGERED DATA EDR day 22, year 1996
Burst Counter 2 at UT=18.947851108975 h=68212.264 s 18:56:52.264

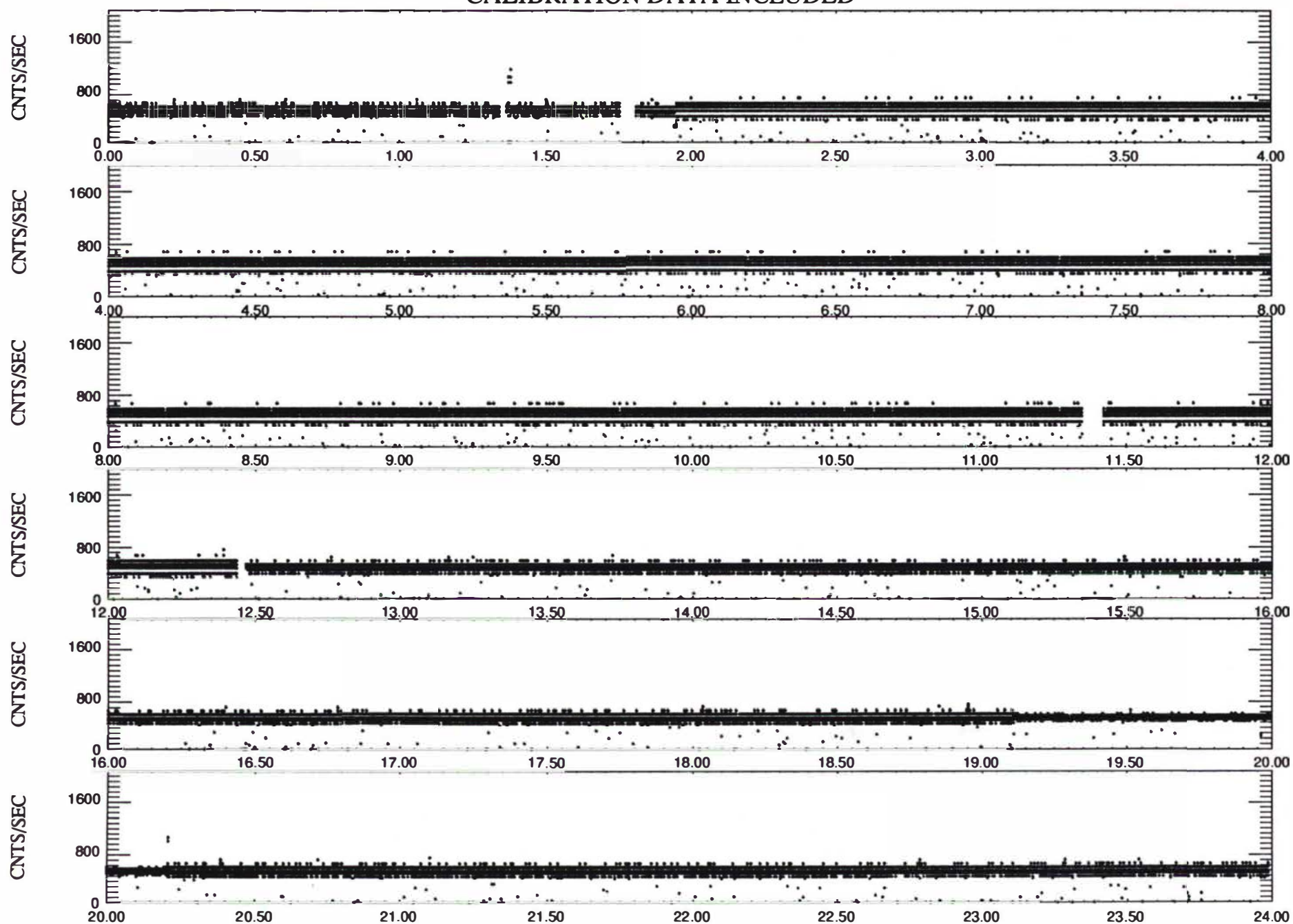
4/1/96



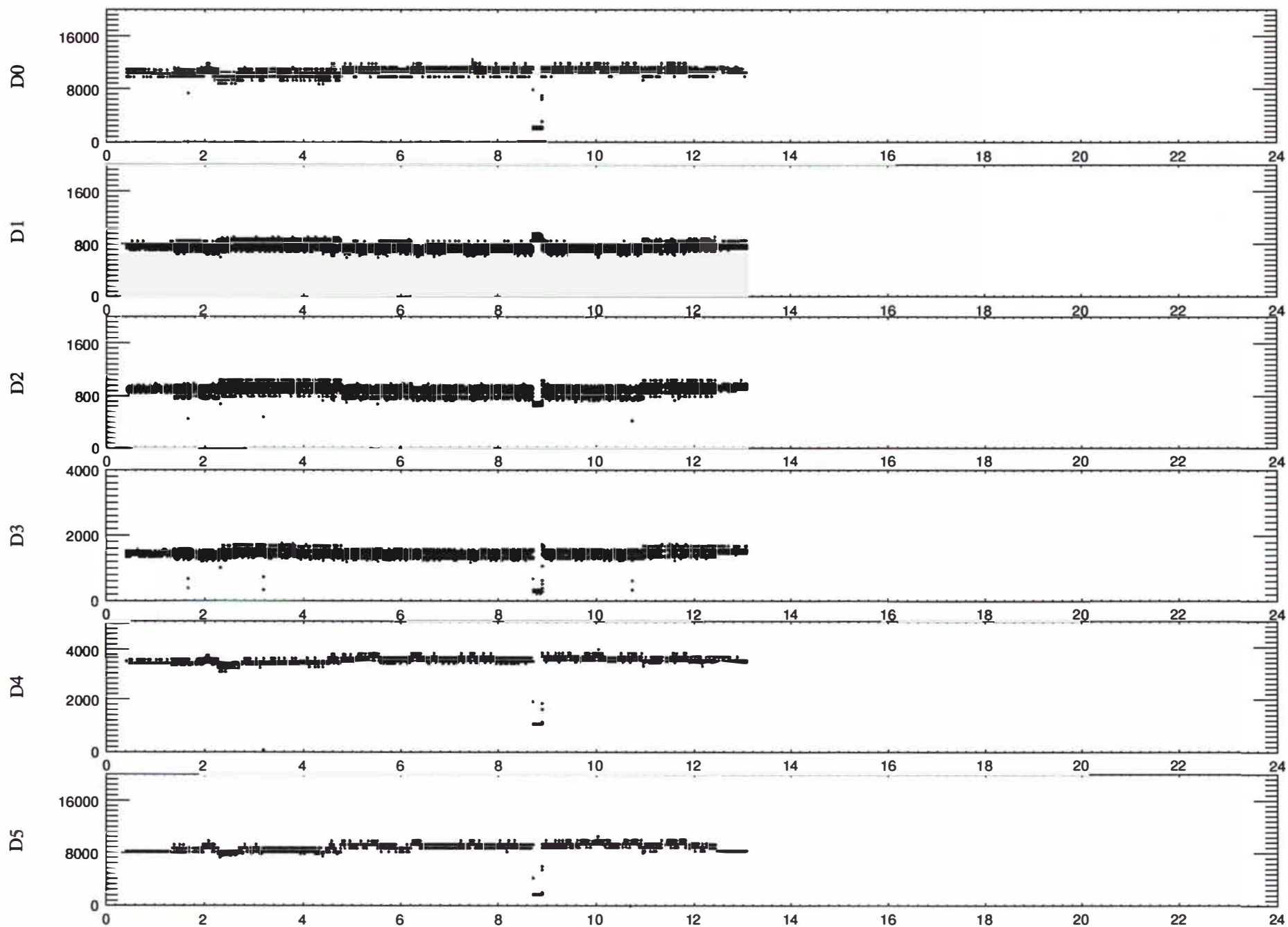
B# 1

HUS 2A, MODE 1, NOT AVERAGED EDR day 22, year 1996 to day 22, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV. TIME



UNIVERSAL TIME

From HENZE@fender.msfc.nasa.gov Tue Feb 6 13:04 PST 1996
From: HENZE@fender.msfc.nasa.gov
Date: Tue, 6 Feb 1996 15:04:01 -0600 (CST)
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.gsfc.nasa.gov, butterworth@lheavx.gsfc.nasa.gov,
band@cass09.ucsd.edu, gruber@cass09.ucsd.edu, matteson@cass09.ucsd.edu,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 4544

TIME: TJD=0105 SECONDS=42358

TYPE: CYG X-1 SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
CYG X-1 RISE.

960119	09	37	59.317	S2	480	780	190	0.13	11	12	236
960119	12	33	46.016	S2	210	460	190	0.2	6	85	237
960120	10	12	48.974	S2	740	540	210	<0.05	7	19	238
960120	13	30	22	S2	40	70		0.8	20		BGR
960123	12	07	21	S1	90	70		1.7	15		BGR
960124	00	56	28.008	S2	930	2130	710	0.13	11	8	239
960128	14	36	46	S2	270	190	25	0.15	6		BGR
960129	07	35	34	S1	90	70		>10	30		BGR
960129	15	24	19	S1	40	90	30	2	9		BGR
960130	02	25	56.848	S1	100	470	340	3	0.5	0.2	240

RI?

Observations: 11/11/94 - 01/30/96 - 435 days

Gamma-ray bursts - 307

burst mode - 153

background mode (BGR)- 154

Solar flares - 78

burst mode - 15

background mode - 63

False events (multi-charged particles,
trapped radiation, solar
cosmic rays) - 85

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

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec		G1	G2	G3	in G2	
941113	12 09 15	S1	145	85			2.5	115	BGR ✓
941114	02 02 40	S2	110	128	30		0.25	12	BGR ✓
941117	03 14 38.191	S2	406	550	74		0.17	40	5 2 ✓
941117	14 07 57	S2	150	140			<0.15	5	BGR
941119	19 31 09.175	S2	370	703	160		0.23	7	20 4 ✓
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 ✓
941125	22 04 30.156	S2	115	308	109		0.95	1.5	5 7 ✓
941126	00 20 46	S1	150	205	200	>14		18	BGR ✓
941126	12 22 37.952	S1	860	1430	330		4.2	40	45 8 ✓
941126	16 54 20	S1	55	75		>10		26	BGR
941126	19 56 49.732	S1	290	390	211		6.7	20	26 9
941127	14 30 25.680	S2	200	400	95		0.17	8	7 10
941127	15 39 10	S1	210	57			2.7	260	BGR ✓
941128	15 37 00	S1	75	90	32	>15		55	BGR ✓
941205	23 33 40.074	S2	370	460	188		0.06	6	30 11 ✓
941207	22 10 32	S2	265	175		<0.2		7	BGR ✓
941210	03 10 52.523	S2	900	2350	1385		0.12	1	15 14 ✓
941214	17 03 51	S1	40	45	29	>6		12	BGR
941214	05 38 45.226	S1	3479	1266	14		1.0	12	240 18 Sol
941221	07 44 08	S2	55	115	30		0.8	20	BGR
941221	22 14 35.215	S1	260	496	165		1.5	55	11 19 ✓
941222	05 36 00.243	S2	334	1360	1066		0.36	7	105 20 ✓
941228	07 39 45.915	S1	300	637	519		4.4	5	90 28
941228	16 55 23	S2	40	36	23		0.25	25	BGR
941229	12 58 05	S1	46	108	31		1.8	15	BGR
941229	22 51 08.781	S2	396	381	140		0.09	7	25 29 ✓
941230	20 52 53	S1	74	117	52		8.4	158	BGR ✓
941230	23 43 44	S2	55	70	16	<0.2		4.5	BGR ✓
950104	07 18 39.613	S2	258	550	219		0.75	2.8	20 31 ✓
950104	09 00 58	S2	140	143	40	<0.1		25	BGR ✓
950110	06 02 15	S2	332	180		<0.1		3600	BGR
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 ✓
950111	12 18 49.196	S1	225	435	164		1.85	26	50 34 ✓
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	BGR ✓
950113	17 38 32	S2	85	162	35	<0.06		75	BGR ✓
950114	01 00 38	S1	46	110			1.6	6	BGR ✓
950114	04 03 01	S2	23	76			0.5	70	BGR
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 ✓
950115	02 49 32	S2	40	47	34	<0.15		24	BGR ✓
950117	01 36 00	S2	56	82	42		0.2	108	BGR ✓
950118	12 22 54	S2	57	105	17	<0.1		35	BGR ✓
950125	14 51 52.253	S1	380	600	140		8.2	3.8	11 39

K O N U S

2 2 / 2 / 9 6

U L Y S S E S R T

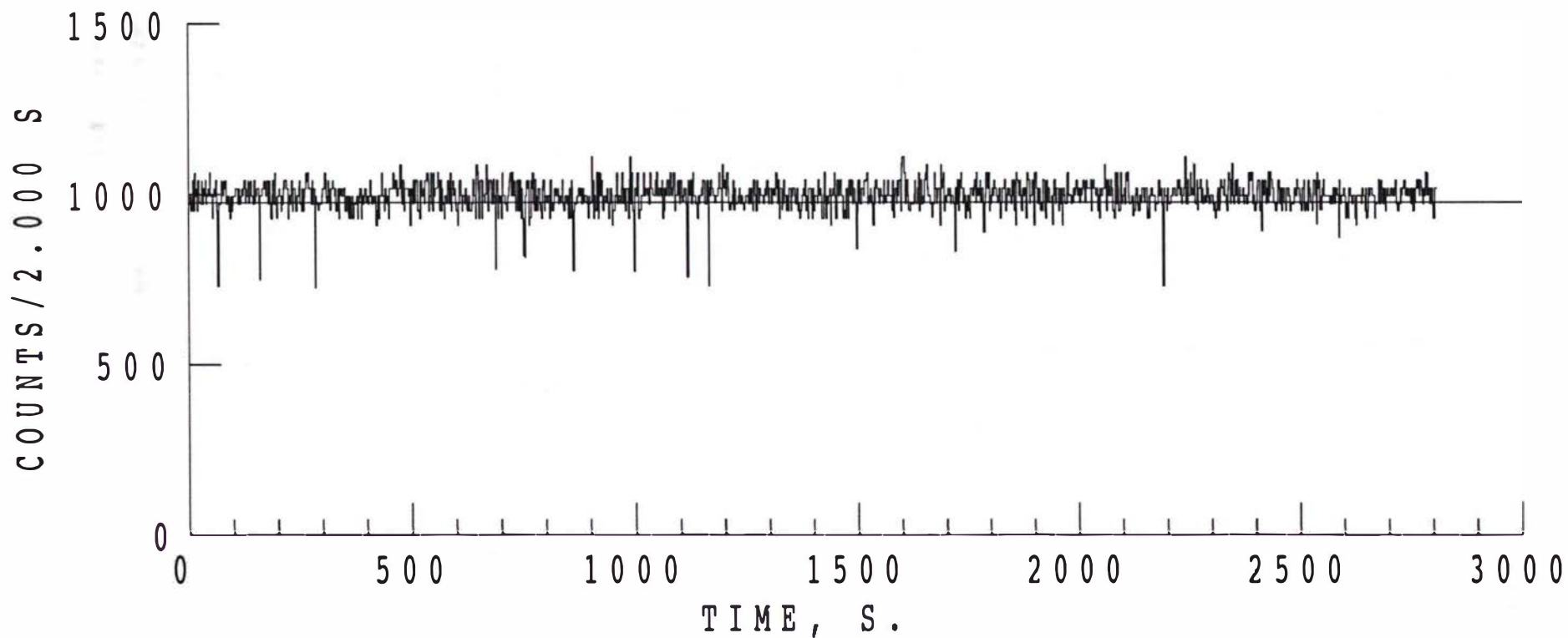
2 3 / 1 / 9 6 4 2 2 2 8 . 1 5 2 s

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

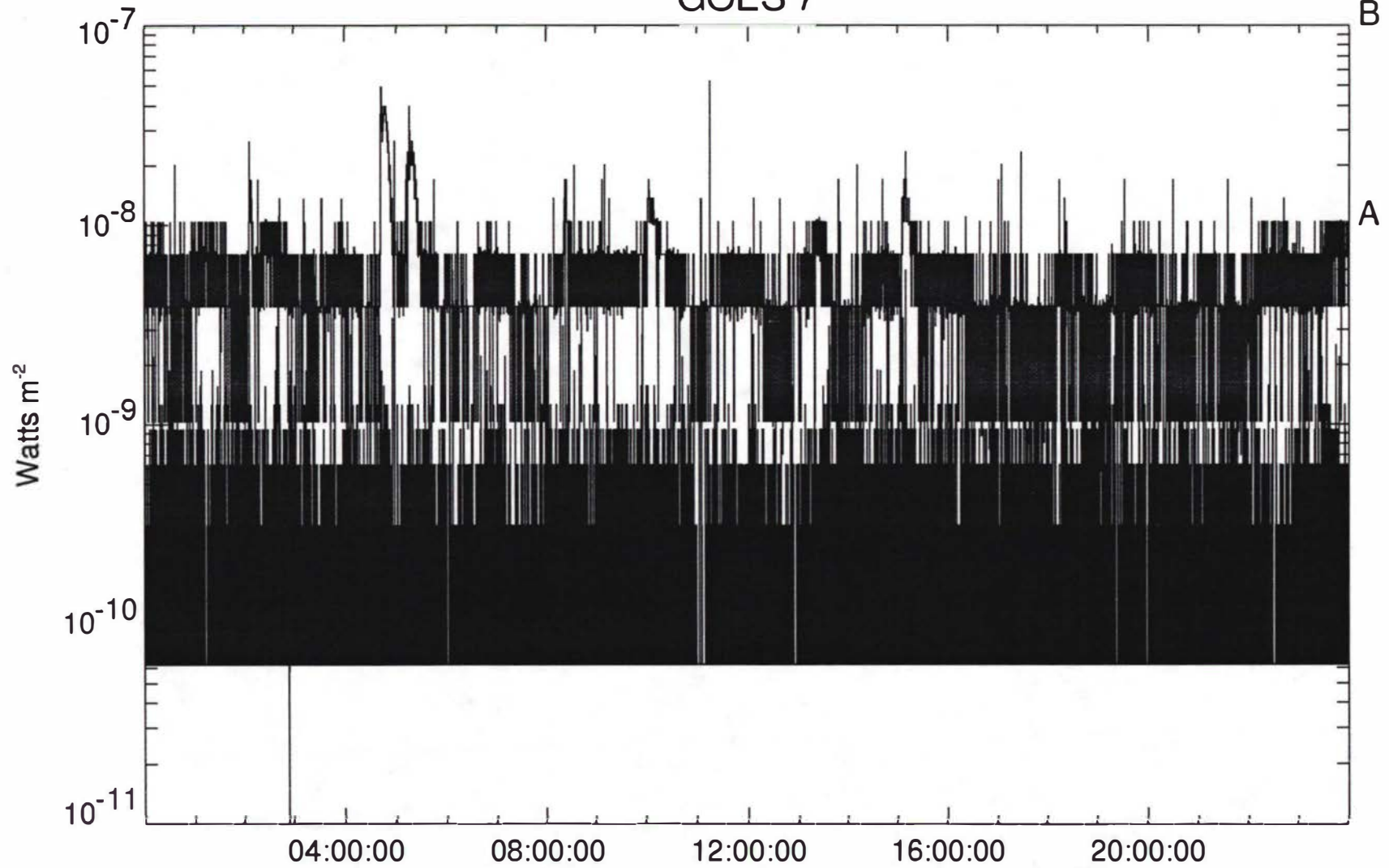
0 - 0 k e V

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



GOES 7

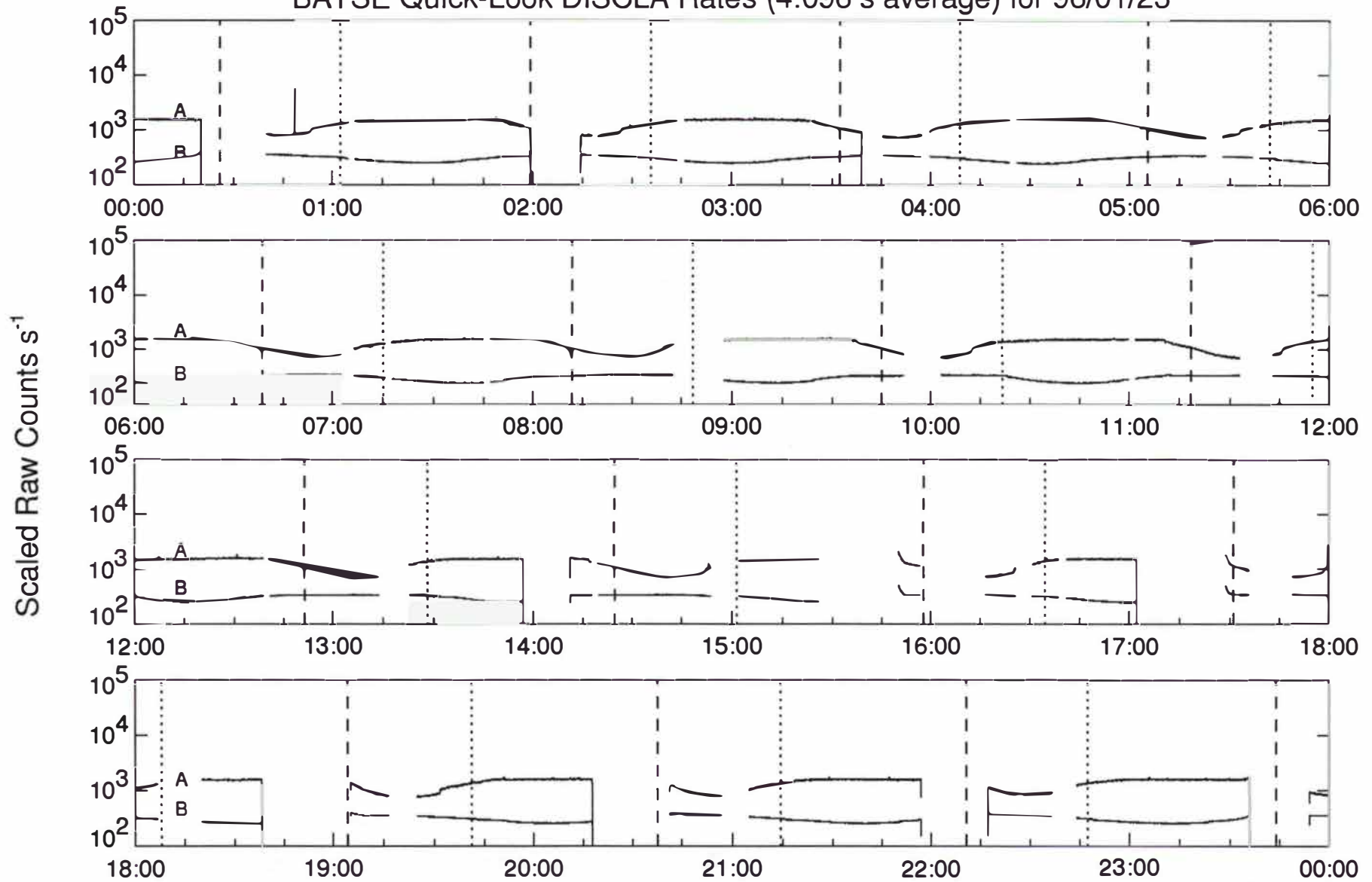


Data Start: 96/01/23, 0000:00

Plot created: 96/01/25, 0654

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 96/01/23



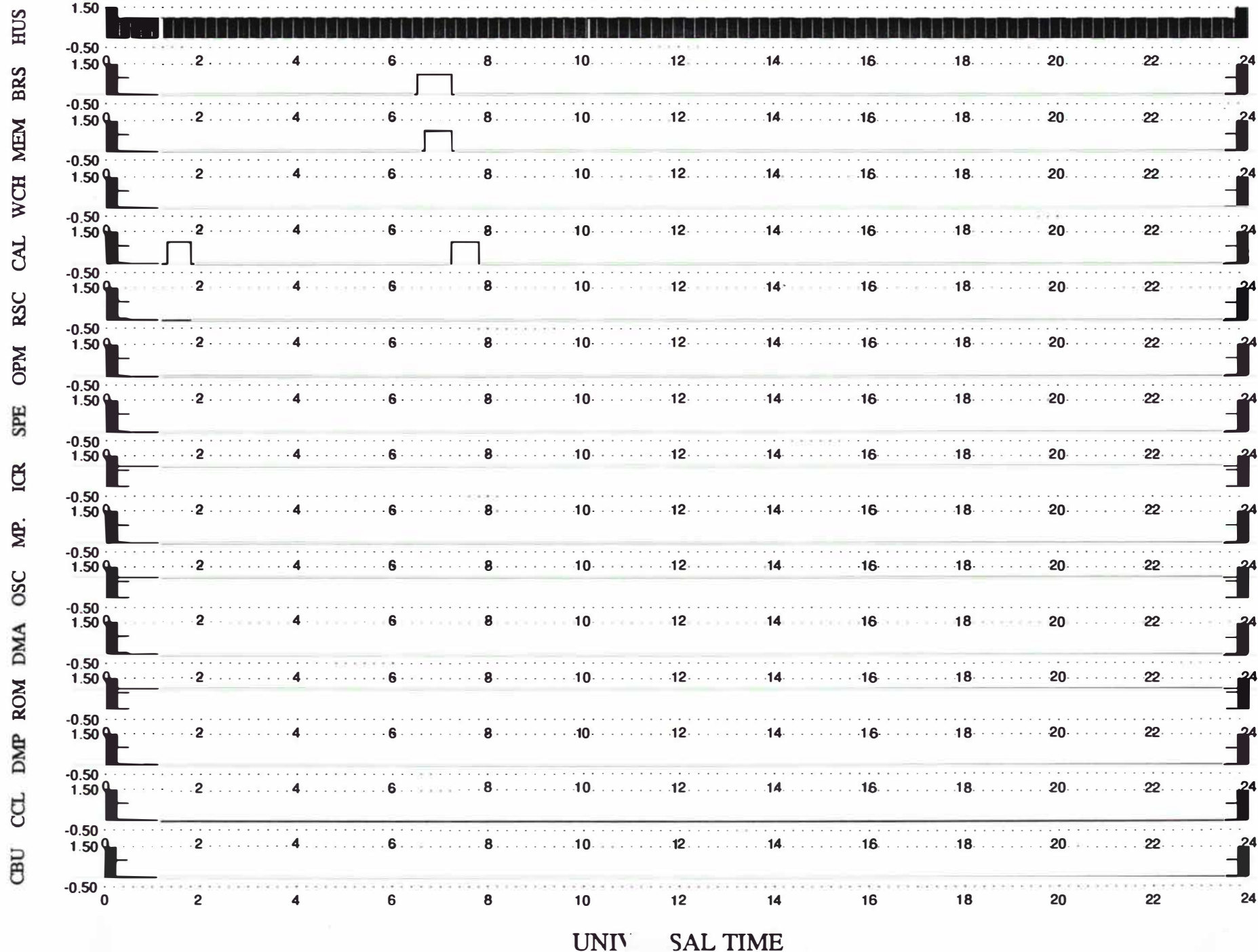
Current Time: 96/01/25, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

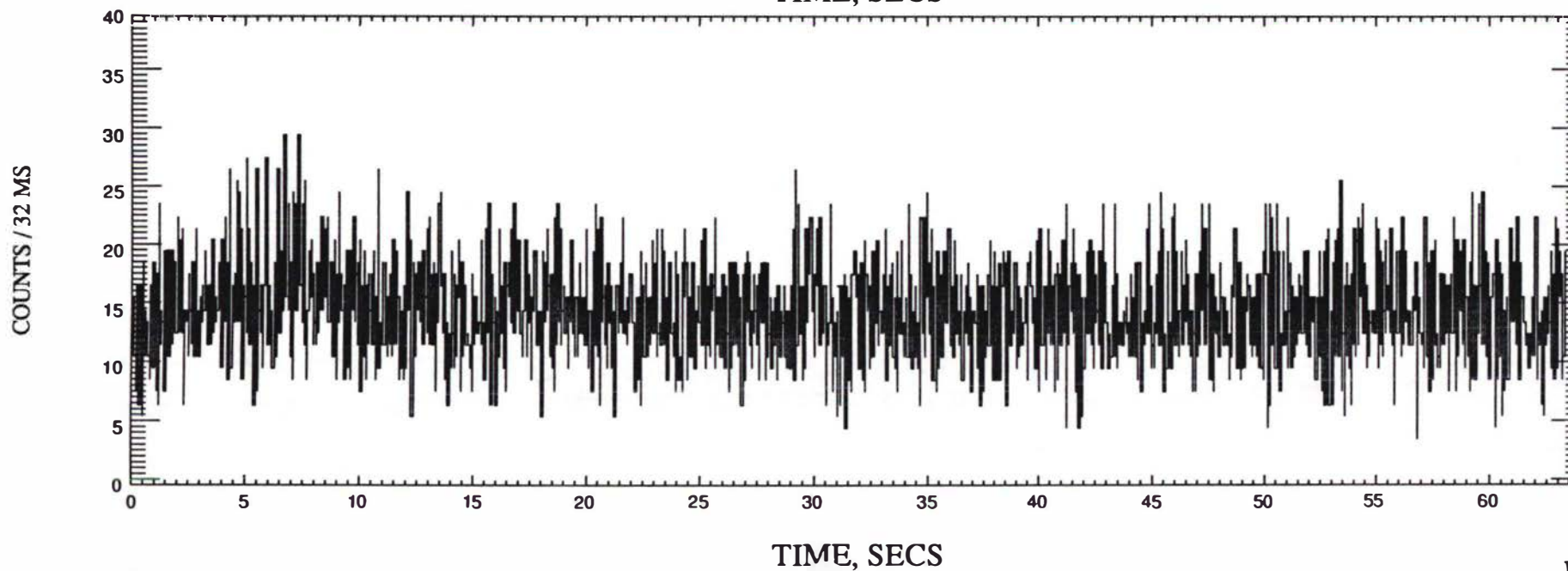
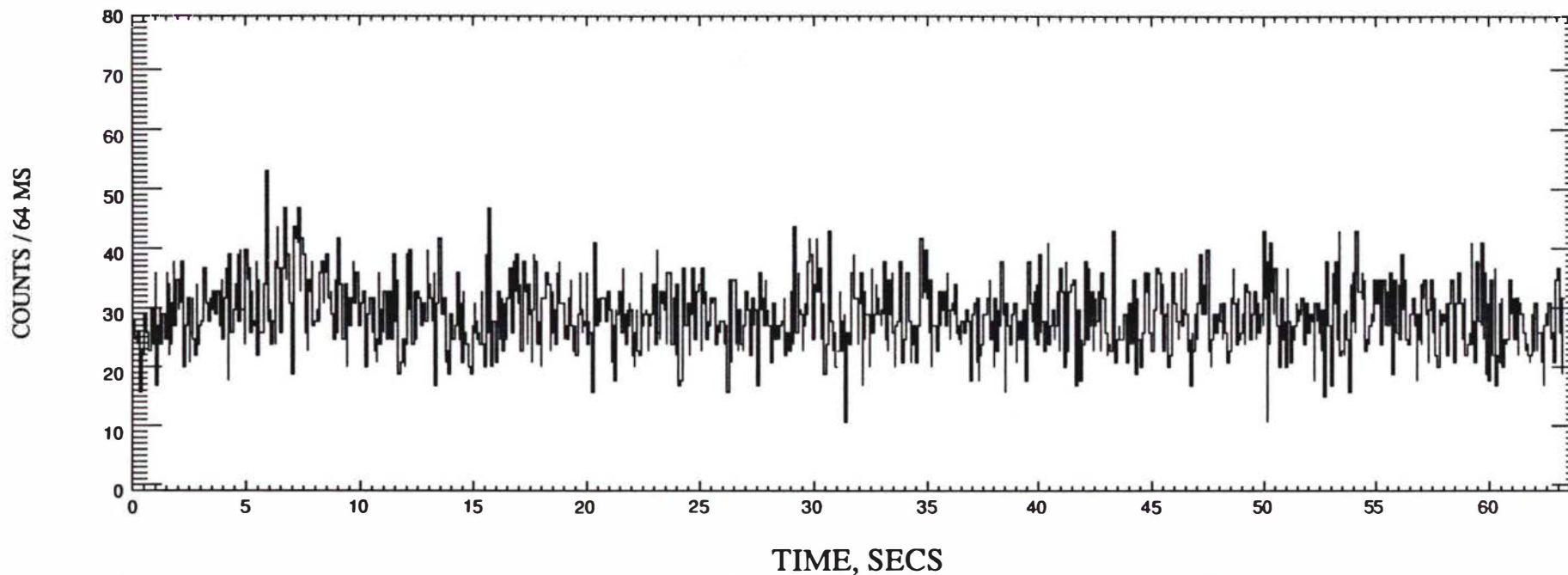
HUS MODES EDR day 23, year 1996 to day 23, year 1996
BURST NUMBER 3

4/1/96



HUS 2A TRIGGERED DATA EDR day 23, year 1996
Burst Counter 3 at UT= 6.543332193163 h=23555.996 s 06:32:35.996

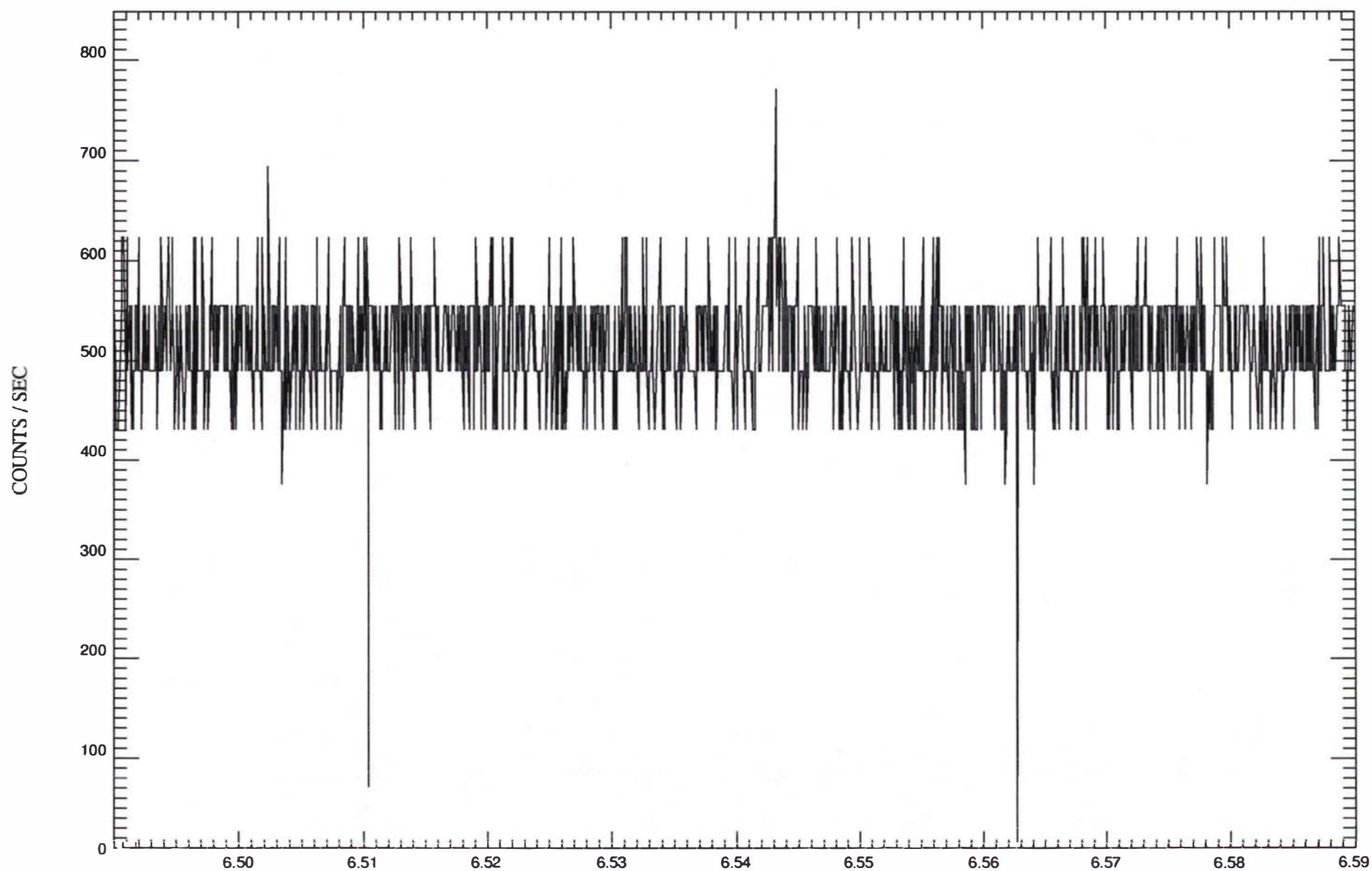
4/1/96



B# 1

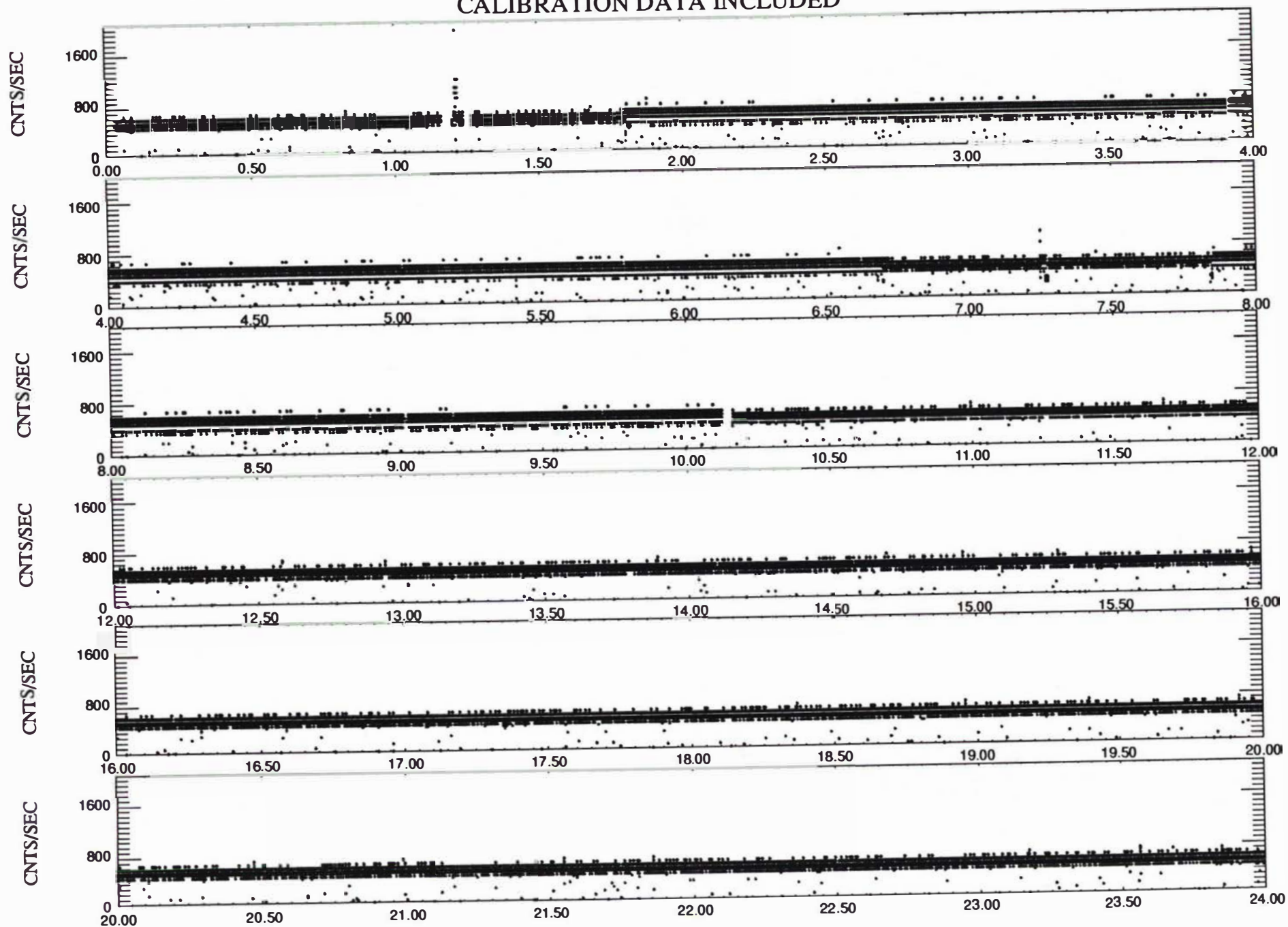
HUS 2A, MODE 1, NOT AVERAGED QEDR day 23, year 1996 to day 23, year 1996
CALIBRATION DATA INCLUDED

1/29/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 23, year 1996 to day 23, year 1996
CALIBRATION DATA INCLUDED

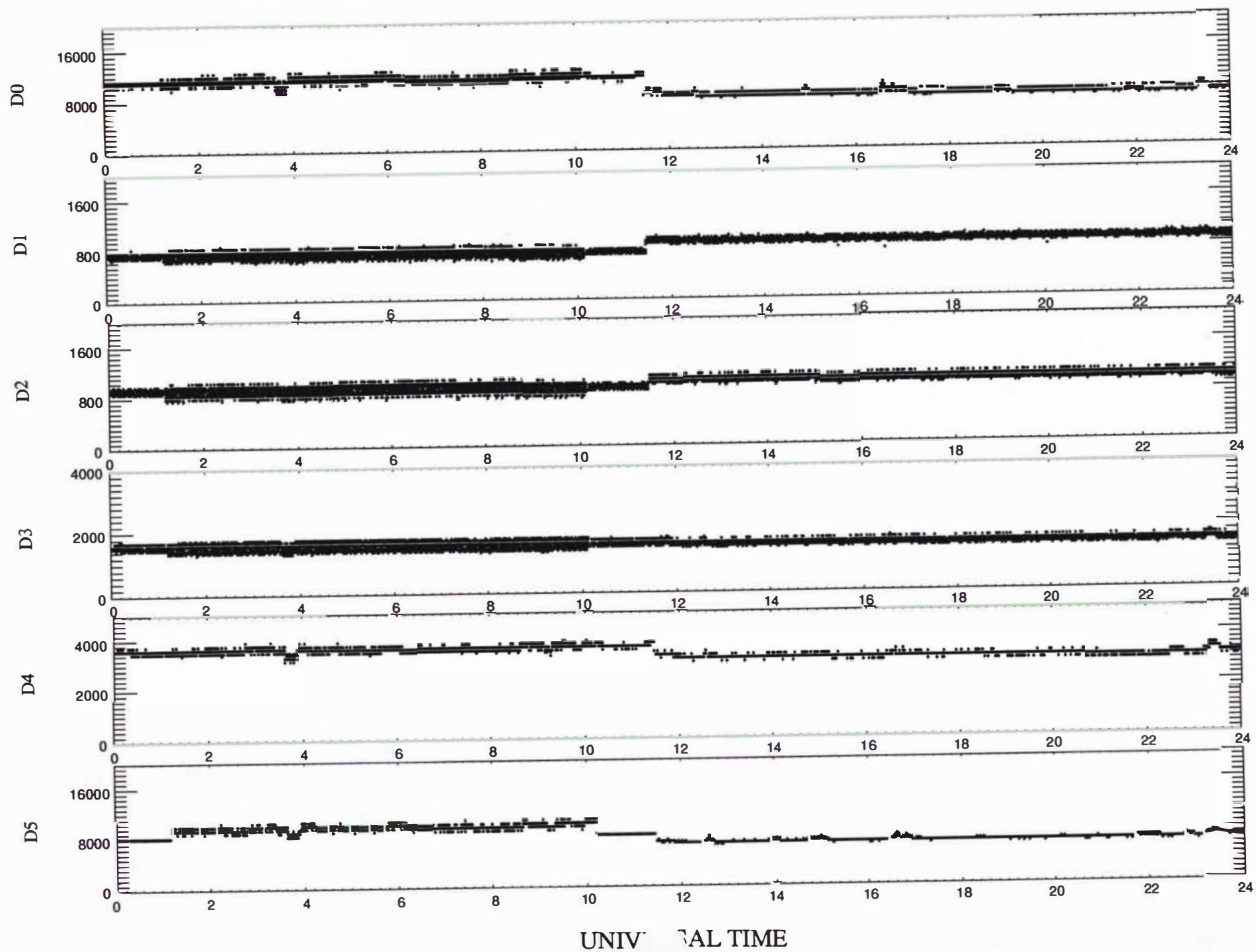
4/1/96



UNIVERSAL TIME

HUS 2B COUNTS / SEC QEDR day 23, year 1996 to day 23, year 1996

1/29/96



From WOODSP@ssl.msfc.nasa.gov Fri Jan 26 14:33 PST 1996
From: WOODSP@ssl.msfc.nasa.gov
Date: Fri, 26 Jan 1996 16:33:33 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4556

BATSEARCH PROGRAM

RT

BATSE BURST # 4556
EVENT OF 1996 JAN 24 DAY OF YEAR= 24
EVENT CROSSING TIME AT BATSE : 3386. S. OR 00:56:26.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 51.000 54.000
BATSE PEAK COUNTING RATE: 50000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 24/ 1/ 96 IS:
RA= 223.572 DEC= 66.123 DIST= 2.806 AU
BATSE-ULYSSES DISTANCE = 419790618. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=120.26 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -705.53 SECS.
CROSSING TIME AT ULYSSES IS 2680. S. OR 00:44:40 +/- 249.28 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 24/ 1/ 96 IS:
RA= 315.008 DEC= -18.179 DIST= 2.350 AU
MARS-BATSE DISTANCE = 351615264. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 71.90 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 364.41 SECS.
CROSSING TIME AT MARS IS 3750. S. OR 01:02:30 +/- 199.08 SECONDS

From cline@heavx.gsfc.nasa.gov Fri Mar 29 08:40 PST 1996
 Date: Fri, 29 Mar 1996 08:40:19 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@heavx.gsfc.nasa.gov (T L Cline)
 Subject: Konus Event List augmentation

Dear Kevin,

This list includes Sergei's latest Konus-W (GGS-Wind) and Konus-A (Kosmos-2326) events, for comparison with Ulysses, BATSE, TGRS, etc. The times listed are prioritized for Konus-W (i.e., Konus-A time given if Konus-W doesn't trigger).

Yr	Mn	Dy	UT (Konus)	BATSE	Ulysses	Konus	TGRS	Notes
95	11	2	07085.879	?	?	168	no	
95	11	2	21209.015	3891	R I	169	345	
95	11	4	05868.077	3893	R I	170	BGR	
95	11	5	46827.808	?	?	171	no	
95	11	12	66495.244	?	R I	172	no	
95	11	13	84358.872	3906	R I	173	BGR	
95	11	17	10123.762	3909	?	175	no	
95	11	19	29831.402	3912	R I	176	348	
95	11	19	46457.519	?	?	177	BGR	
95	11	22	09841.38	?	?	179	no	
95	11	22	17107.738	?	?	180	349	
95	12	2	39101.744	?	?	195	BGR	
95	12	3	03988.18	?	?	196	360	
	12	8	19617.151	?	?	197	no	
	12	8	39452.057	?	?	198	no	
95	12	8	42467.634	?	?	199	BGR	
95	12	9	31349.607	?	?	200	BGR	
95	12	13	17849.683	?	?	201	362	
95	12	14	08657.847	?	?	202	no	
95	12	19	60679.732	?	?	203	no	
95	12	20	31883.56	?	?	204	BGR	
95	12	22	25203.254	?	?	no	?	= K-A t.
95	12	27	23005.042	?	?	218	375	
96	12	31	20231.668	?	?	219	no	
96	1	2	11650.996	?	?	220	no	
96	1	4	12521.062	?	?	221	no	
96	1	11	46524.53	?	?	222	no	
96	1	13	56024.261	?	?	228	no	
96	1	14	44104.737	?	?	233	384	+ K-A t.
96	1	15	31956.506	?	?	234	BGR	
96	1	17	57371.341	?	?	235	no	
96	1	19	34679.317	?	?	236	no	
96	1	19	45226.016	?	?	237	no	
96	1	20	36768.974	?	?	238	no	
96	1	24	03388.008	?	?	239	385	+ K-A t.
96	1	24	76096.911	?	?	BGR	?	= K-A t.
96	1	30	08756.848	?	?	240	no	
96	2	1	78530.582	?	?	241	?	+ K-A t.
96	2	2	50750.813	?	?	242	?	
	2	10	35198.959	?	?	247	?	
96	2	16	57796.347	?	?	BGR	?	= K-A t.
96	2	19	20589.684	?	?	BGR	?	= K-A t.
96	2	28	85760.241	?	?	249	?	
96	2	29	22445.141	?	?	250	?	

96	3	5	33645.352	?	?	251	?
96	3	12	35074.697	?	?	252	?
96	3	19	51992.828	?	?	253	?
96	3	21	76321.803	?	?	254	?
96	3	22	19642.728	?	?	255	?
96	3	24	80064.124	?	?	257	?
96	3	25	69892.978	?	?	258	?

--

TLC

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

Helio corr removed

Date: Feb 24 '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? *Not exactly - triggered data couldn't be recovered, so RT used*

2. BATSE Data

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

3. PVO Data

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

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

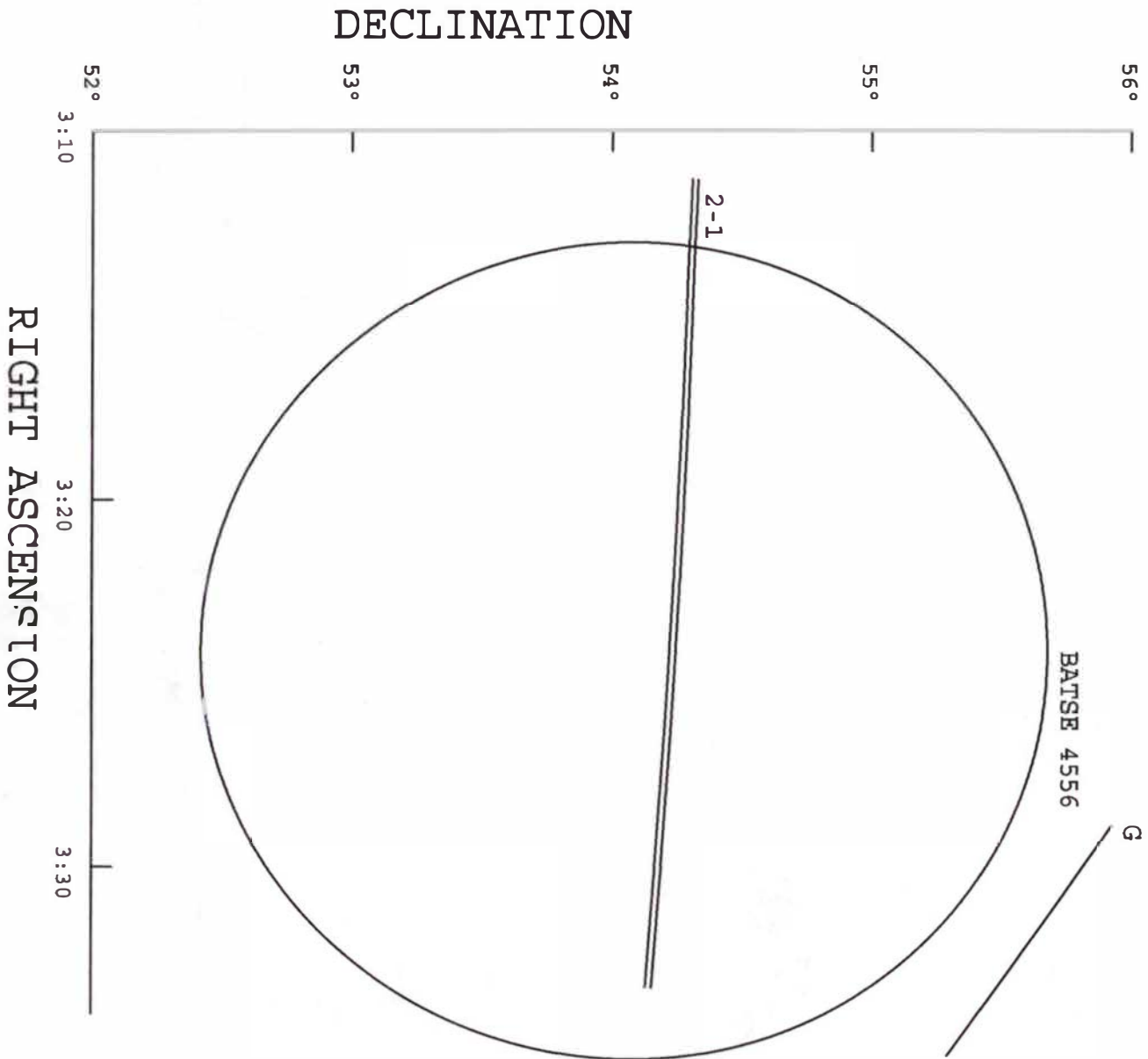
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF JAN 24, 1996 0:43

24 / 2 / 98



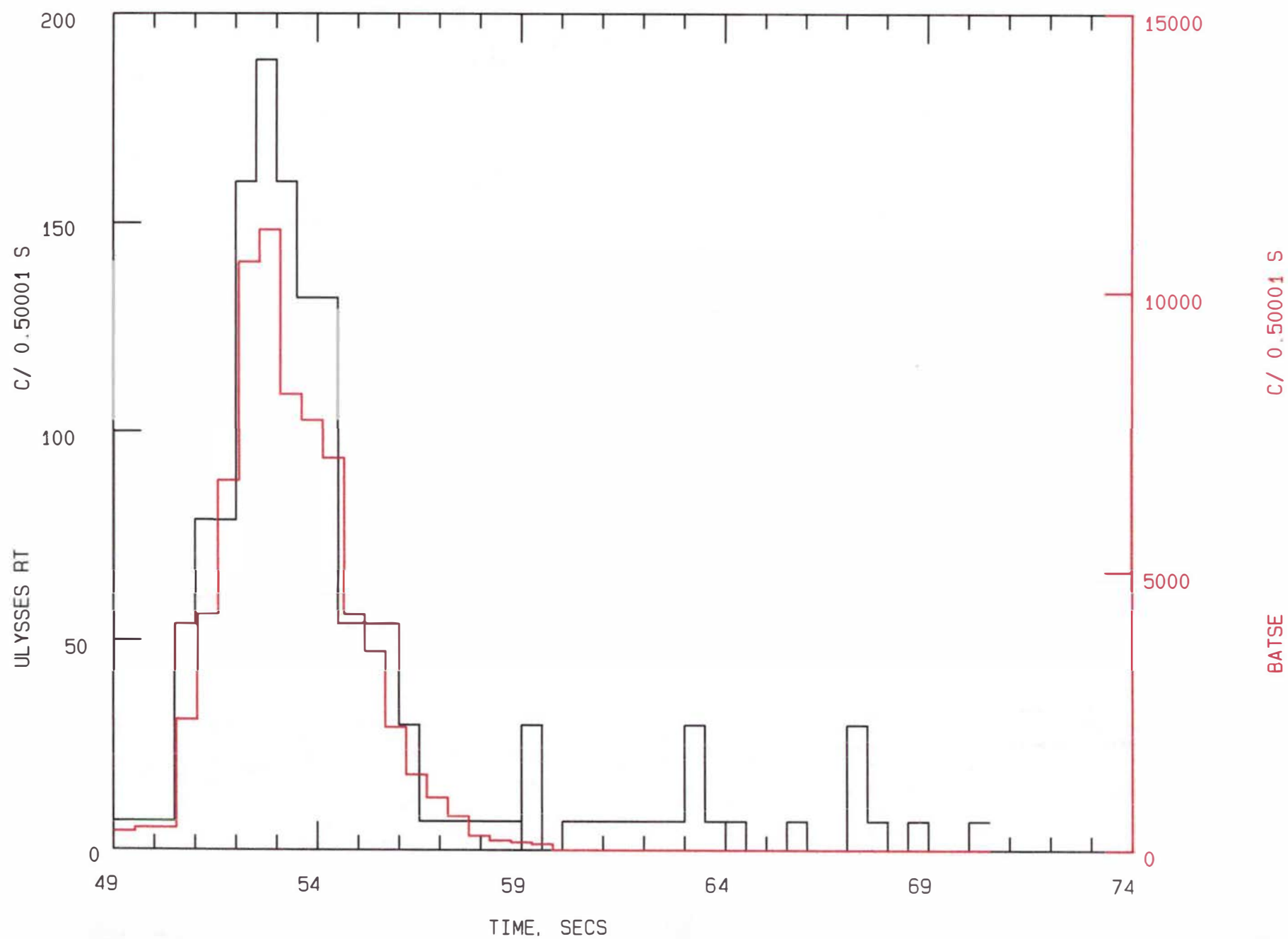
ULYSSES RT-BATSE

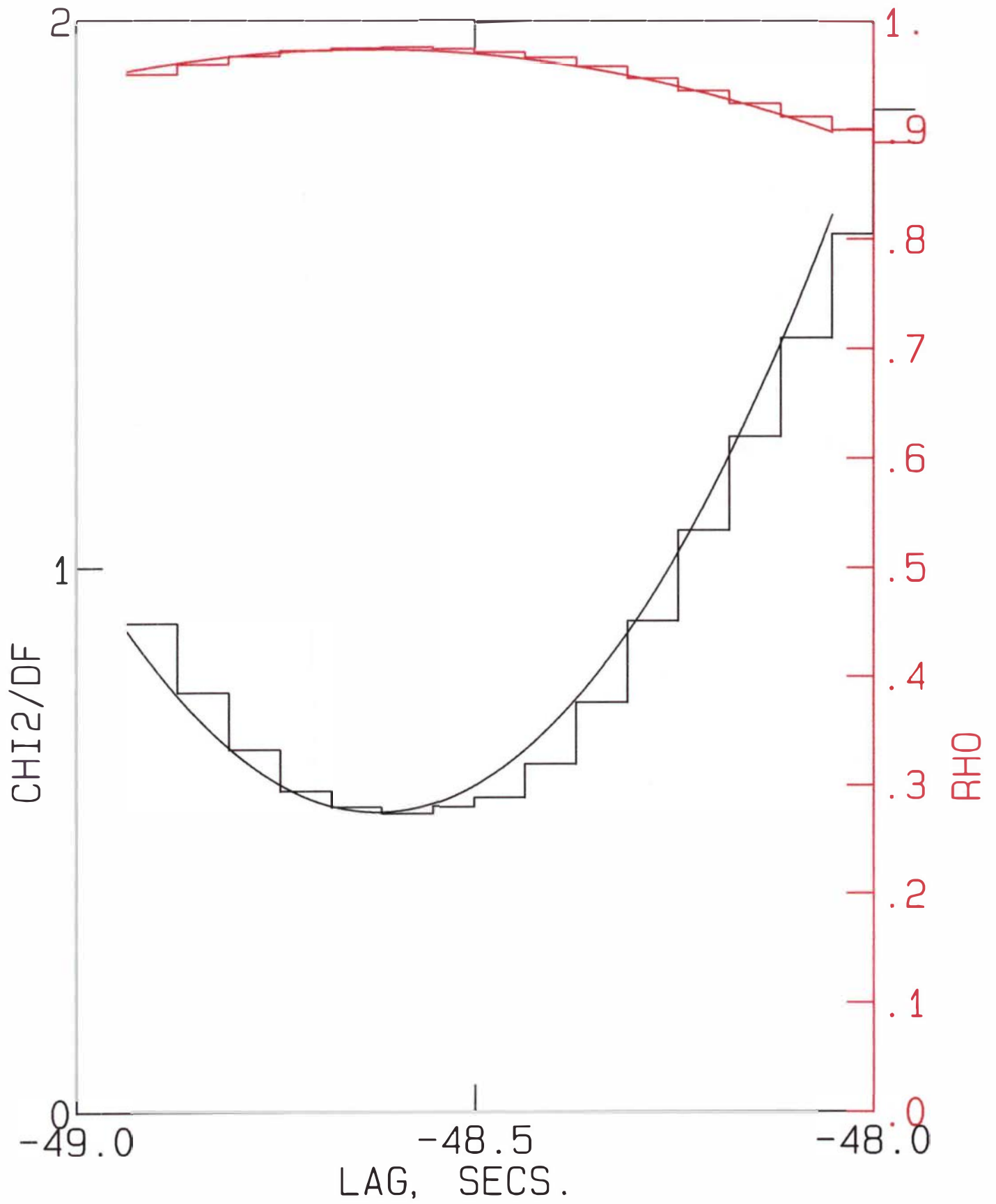
CORRELATION

24/ 1/96

2635.395

24/ 2/98





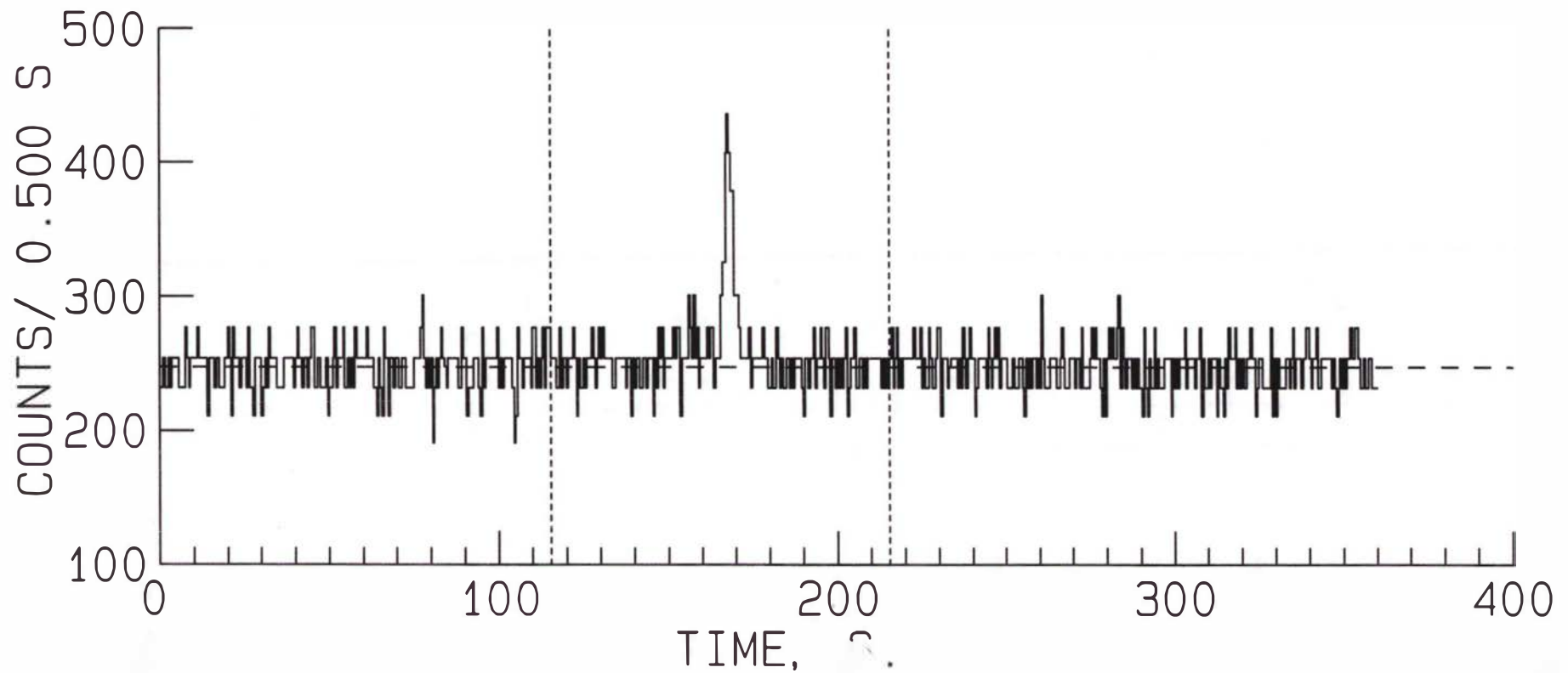
ULYSSES RT

24 / 2 / 98

24 / 1 / 96 2520.327 s

21- 145 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



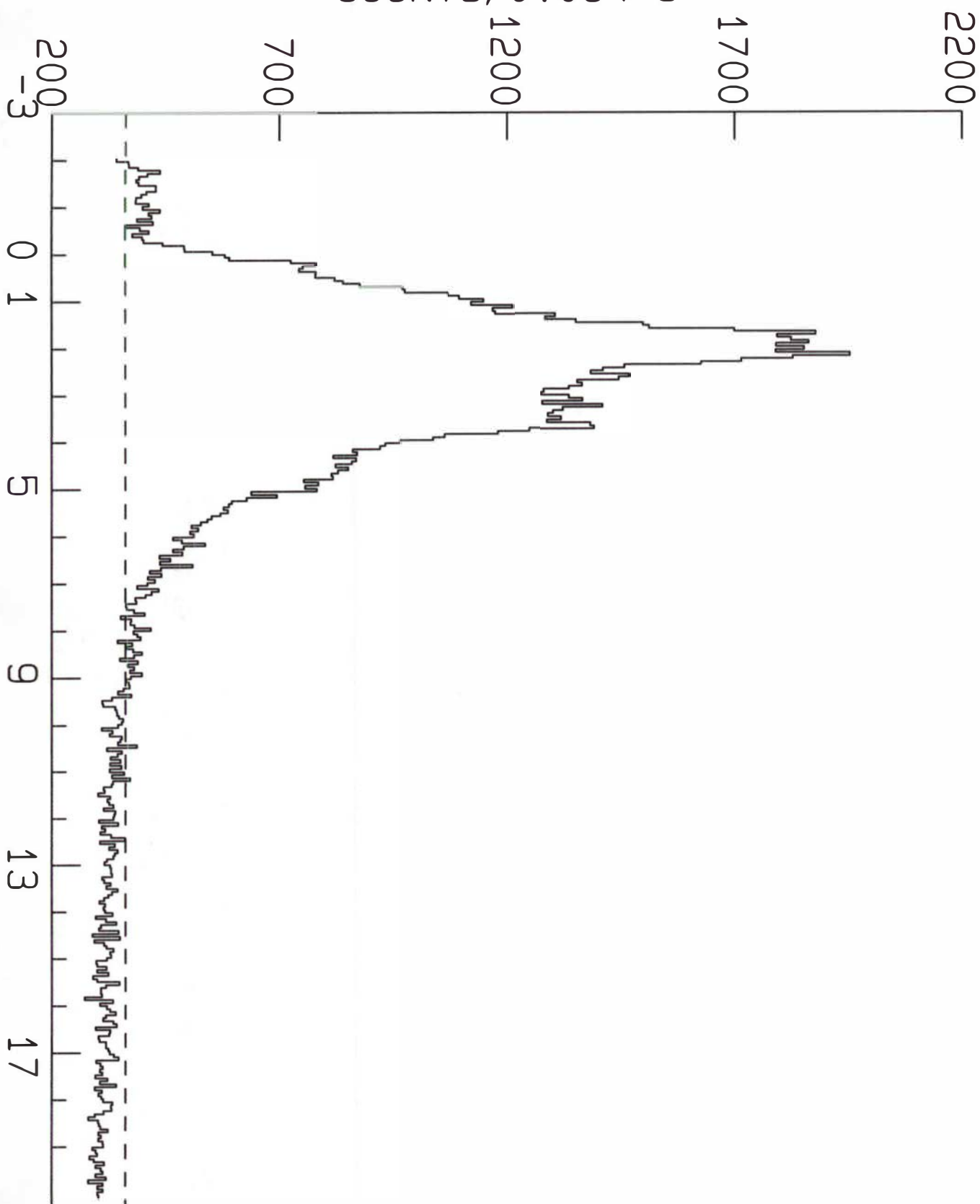
BATSE

24/01/96

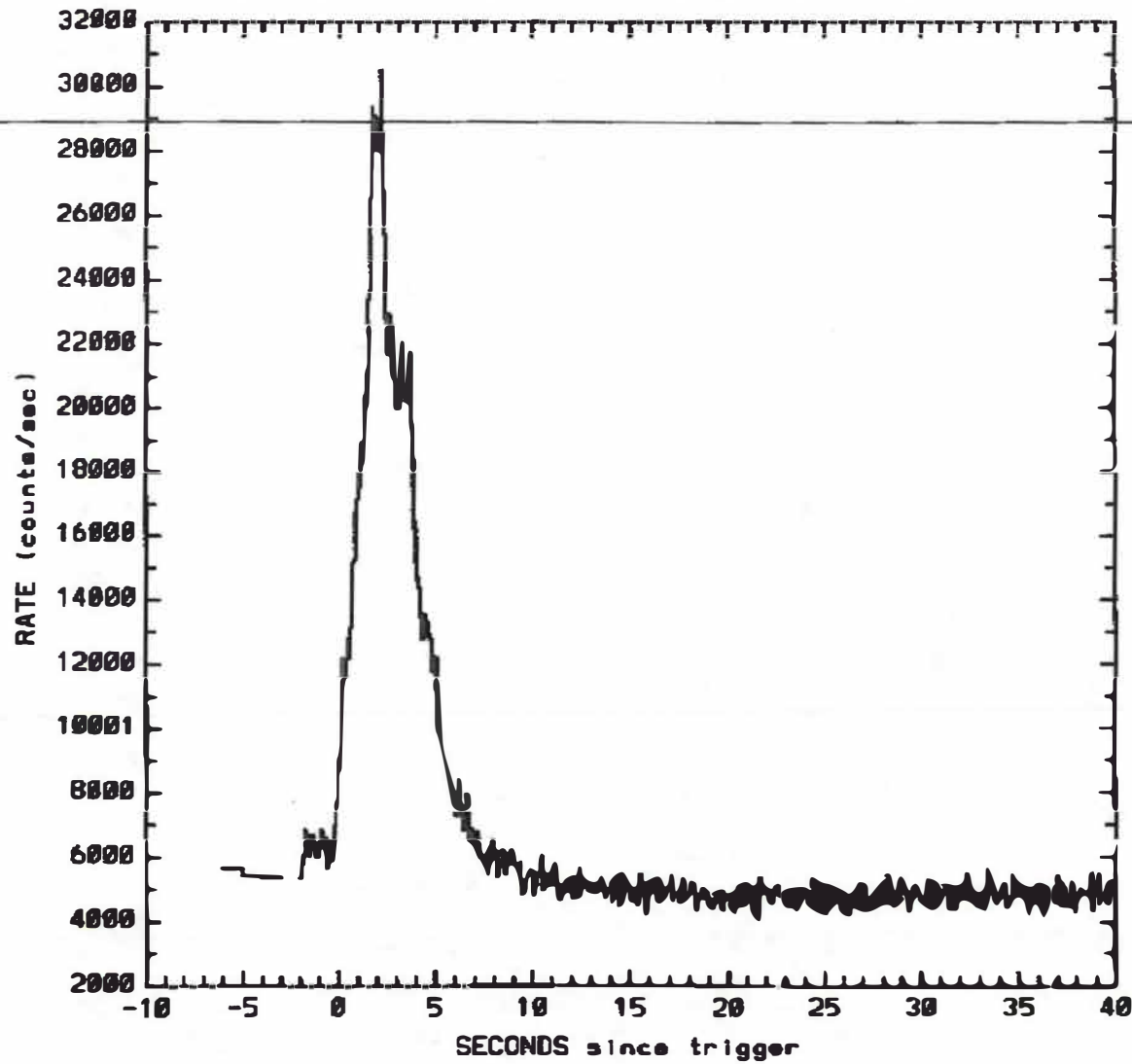
3385.994

25- 100 keV

COUNTS/0.064 S



DISCSC Data for K. Hurley, No. 4556



8-FEB-1996 09:55:16

Created by MDPS BD
(Burst Display)
Version 12.25

Trigger #: 4556

Trigger Time:
18186 / 3385.994Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors [7..0].
--54--Discriminators:
(1..2)Quality Mask:
BDISP1

From WOODSP@ssl.msfc.nasa.gov Fri Jan 26 14:35 PST 1996
From: WOODSP@ssl.msfc.nasa.gov
Date: Fri, 26 Jan 1996 16:35:24 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4569

BATSEARCH PROGRAM

140

BATSE BURST # 4569
EVENT OF 1996 JAN 24 DAY OF YEAR= 24
EVENT CROSSING TIME AT BATSE : 76093. S. OR 21:08:13.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 232.000 -4.000
BATSE PEAK COUNTING RATE: 8000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 24/ 1/ 96 IS:
RA= 223.357 DEC= 66.361 DIST= 2.807 AU
BATSE-ULYSSES DISTANCE = 419877432. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=109.36 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -464.35 SECS.
CROSSING TIME AT ULYSSES IS 75629. S. OR 21:00:28 +/- 272.35 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 24/ 1/ 96 IS:
RA= 315.008 DEC= -18.179 DIST= 2.350 AU
MARS-BATSE DISTANCE = 351615264. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 97.88 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -160.83 SECS.
CROSSING TIME AT MARS IS 75932. S. OR 21:05:32 +/- 199.26 SECONDS

From cline@heavx.gsfc.nasa.gov Fri Mar 29 08:40 PST 1996
 Date: Fri, 29 Mar 1996 08:40:19 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@heavx.gsfc.nasa.gov (T L Cline)
 Subject: Konus Event List augmentation

Dear Kevin,

This list includes Sergei's latest Konus-W (GGW-Wind) and Konus-A (Kosmos-2326) events, for comparison with Ulysses, BATSE, TGRS, etc. The times listed are prioritized for Konus-W (i.e., Konus-A time given if Konus-W doesn't trigger).

Yr	Mn	Dy	UT (Konus)	BATSE	Ulysses	Konus	TGRS	Notes
95	11	2	07085.879	?	?	168	no	
95	11	2	21209.015	3891	R I	169	345	
95	11	4	05868.077	3893	R I	170	BGR	
95	11	5	46827.808	?	?	171	no	
95	11	12	66495.244	?	R I	172	no	
95	11	13	84358.872	3906	R I	173	BGR	
95	11	17	10123.762	3909	?	175	no	
95	11	19	29831.402	3912	R I	176	348	
95	11	19	46457.519	?	?	177	BGR	
95	11	22	09841.38	?	?	179	no	
95	11	22	17107.738	?	?	180	349	
95	12	2	39101.744	?	?	195	BGR	
95	12	3	03988.18	?	?	196	360	
	12	8	19617.151	?	?	197	no	
	12	8	39452.057	?	?	198	no	
95	12	8	42467.634	?	?	199	BGR	
95	12	9	31349.607	?	?	200	BGR	
95	12	13	17849.683	?	?	201	362	
95	12	14	08657.847	?	?	202	no	
95	12	19	60679.732	?	?	203	no	
95	12	20	31883.56	?	?	204	BGR	
95	12	22	25203.254	?	?	no	?	= K-A t.
95	12	27	23005.042	?	?	218	375	
96	12	31	20231.668	?	?	219	no	
96	1	2	11650.996	?	?	220	no	
96	1	4	12521.062	?	?	221	no	
96	1	11	46524.53	?	?	222	no	
96	1	13	56024.261	?	?	228	no	
96	1	14	44104.737	?	?	233	384	+ K-A t.
96	1	15	31956.506	?	?	234	BGR	
96	1	17	57371.341	?	?	235	no	
96	1	19	34679.317	?	?	236	no	
96	1	19	45226.016	?	?	237	no	
96	1	20	36768.974	?	?	238	no	
96	1	24	03388.008	?	?	239	385	+ K-A t.
96	1	24	76096.911	?	?	BGR	?	= K-A t.
96	1	30	08756.848	?	?	240	no	
96	2	1	78530.582	?	?	241	?	+ K-A t.
96	2	2	50750.813	?	?	242	?	
	2	10	35198.959	?	?	247	?	
96	2	16	57796.347	?	?	BGR	?	= K-A t.
96	2	19	20589.684	?	?	BGR	?	= K-A t.
96	2	28	85760.241	?	?	249	?	
96	2	29	22445.141	?	?	250	?	

96	3	5	33645.352	?	?	251	?
96	3	12	35074.697	?	?	252	?
96	3	19	51992.828	?	?	253	?
96	3	21	76321.803	?	?	254	?
96	3	22	19642.728	?	?	255	?
96	3	24	80064.124	?	?	257	?
96	3	25	69892.978	?	?	258	?

--

TLC

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

30 / 1 / 96

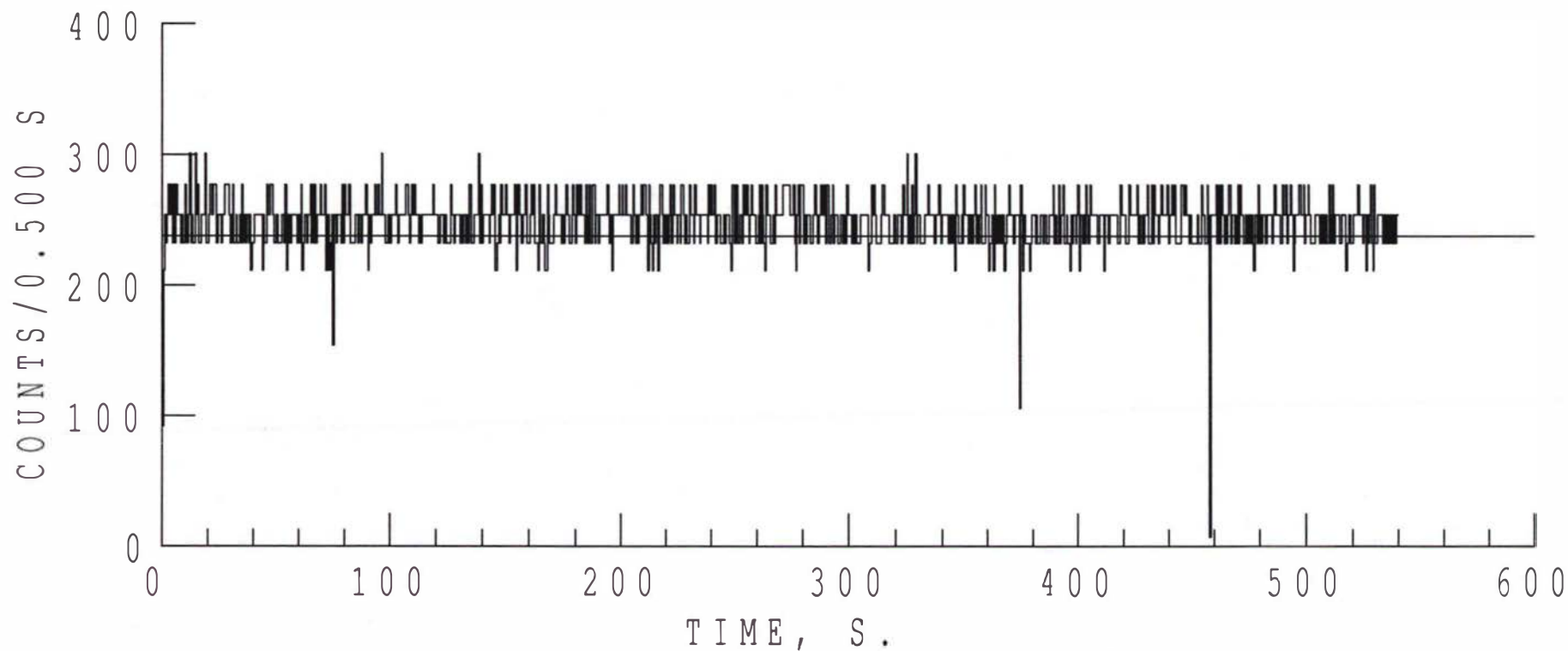
ULYSSES RT

24 / 1 / 96 75348.383 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



30 / 1 / 96

ULYSSES RT

Cole Miller's APO

24 / 1 / 96 45000.445 s

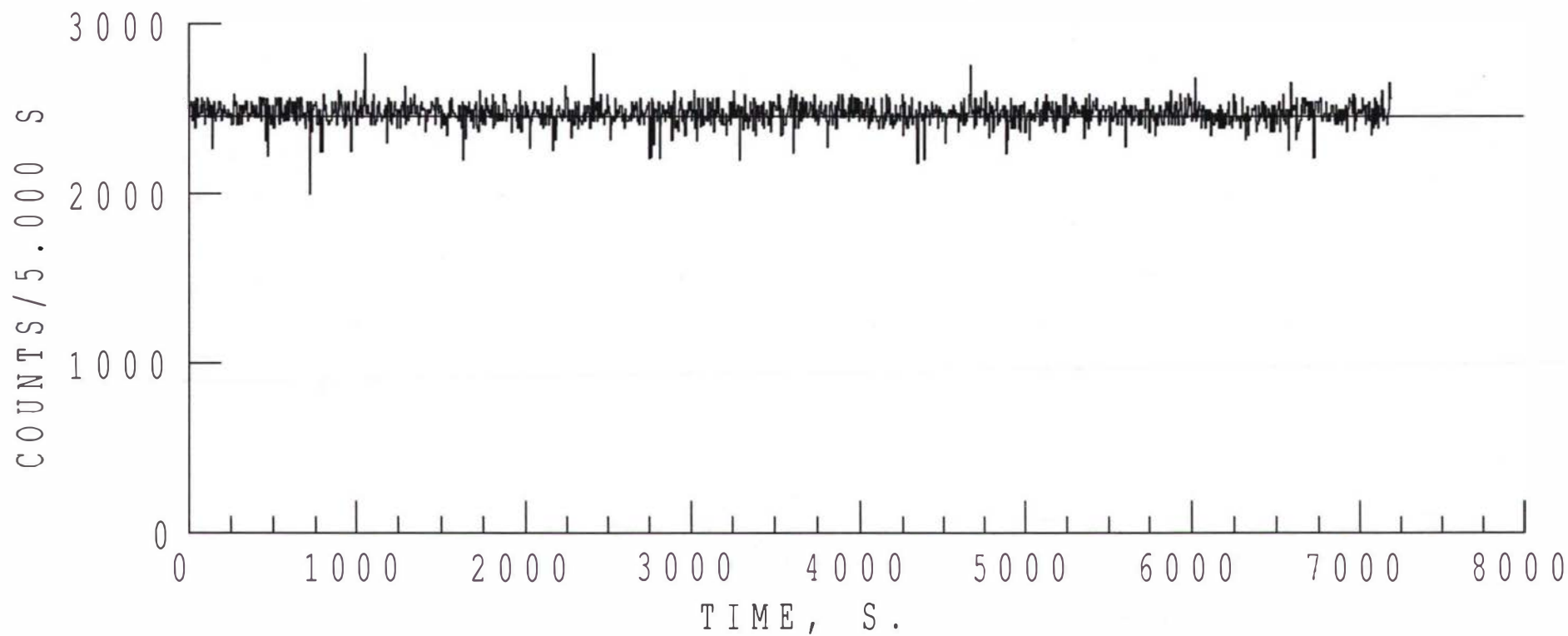
observation

0.500 S INTERVALS REGROUPED BY 10

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



ULYSSES RT

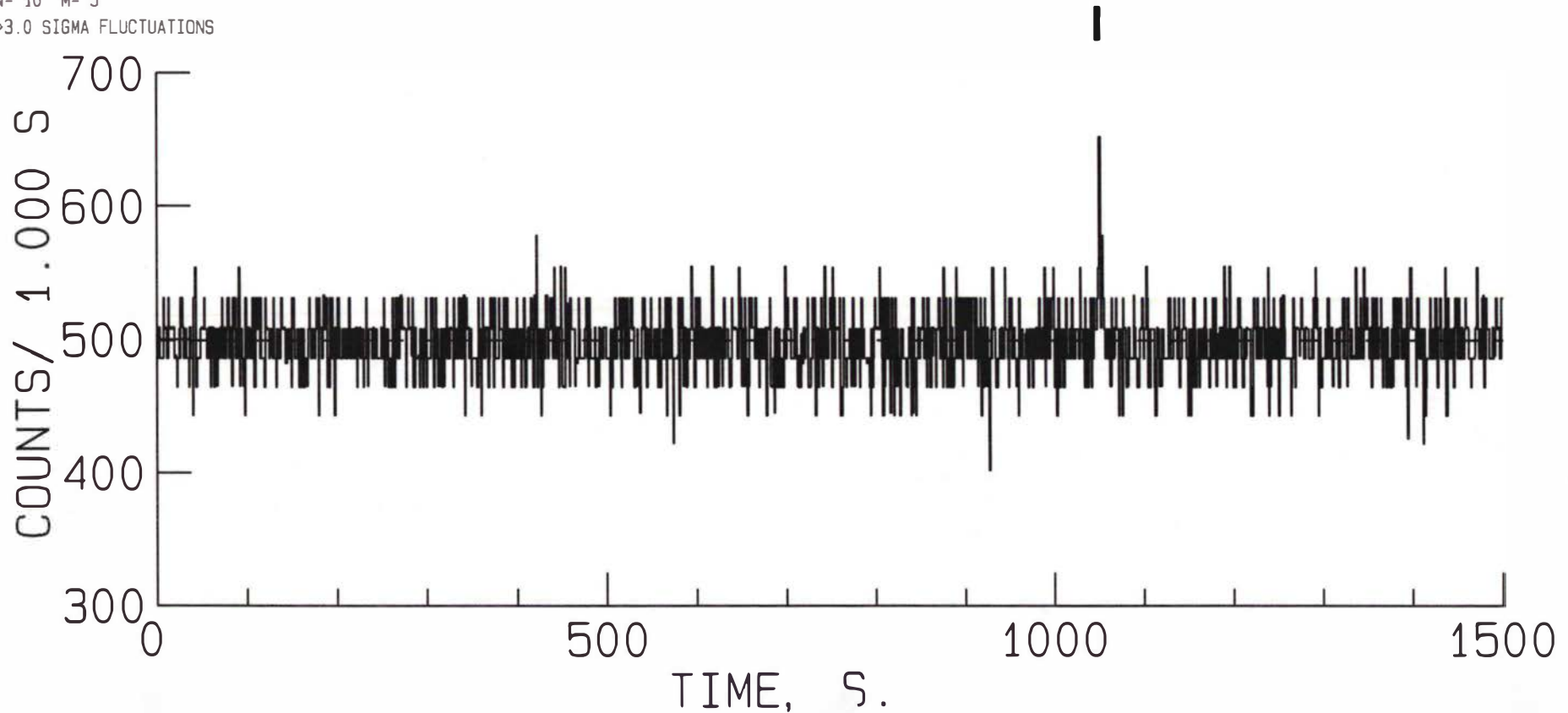
30 / 1 / 96

24 / 1 / 96 45000.445 s

0.500 S INTERVALS REGROUPED BY 2

21- 141 keV

N= 10 M= 5
>3.0 SIGMA FLUCTUATIONS



ULYSSES RT

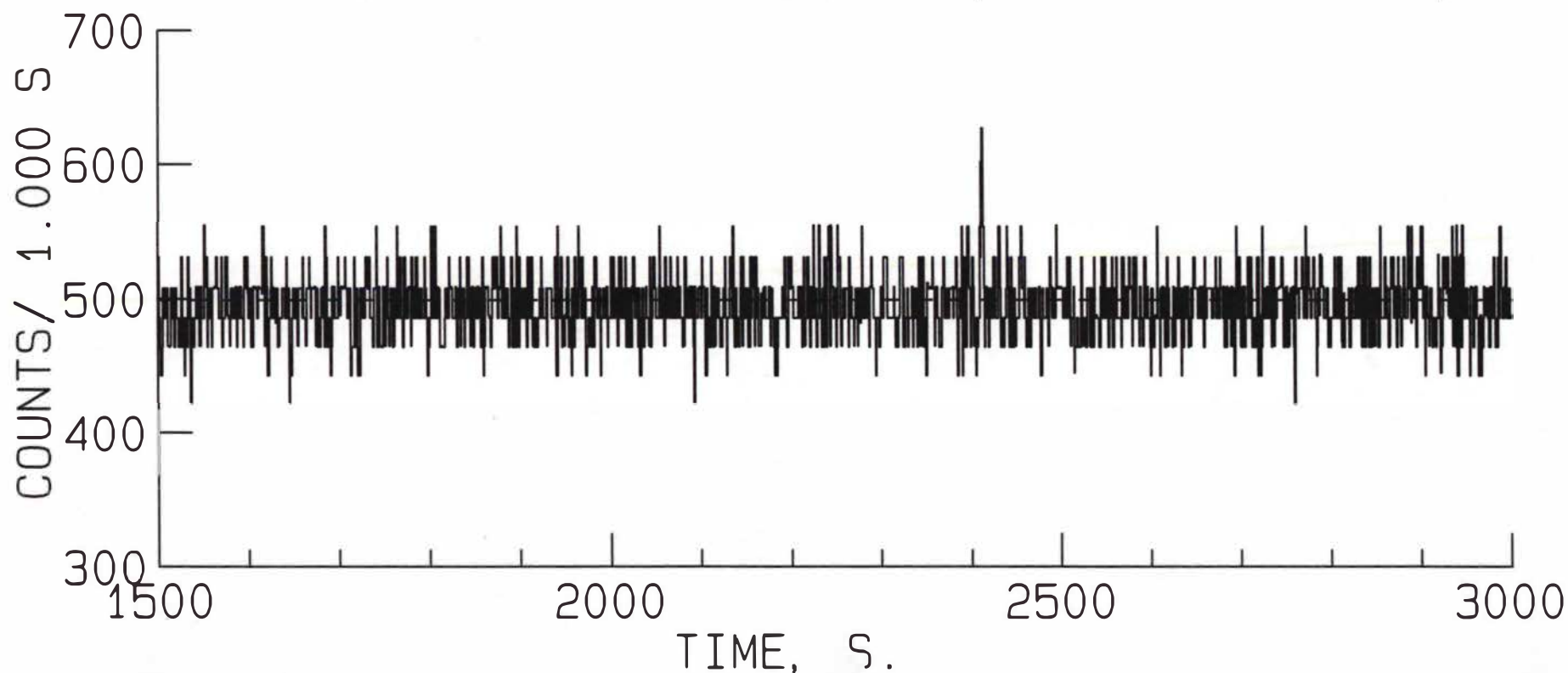
30 / 1 / 96

24 / 1 / 96 45000.445 s

0.500 S INTERVALS REGROUPED BY 2

21- 141 keV

N= 10 M= 5
>3.0 SIGMA FLUCTUATIONS



ULYSSES RT

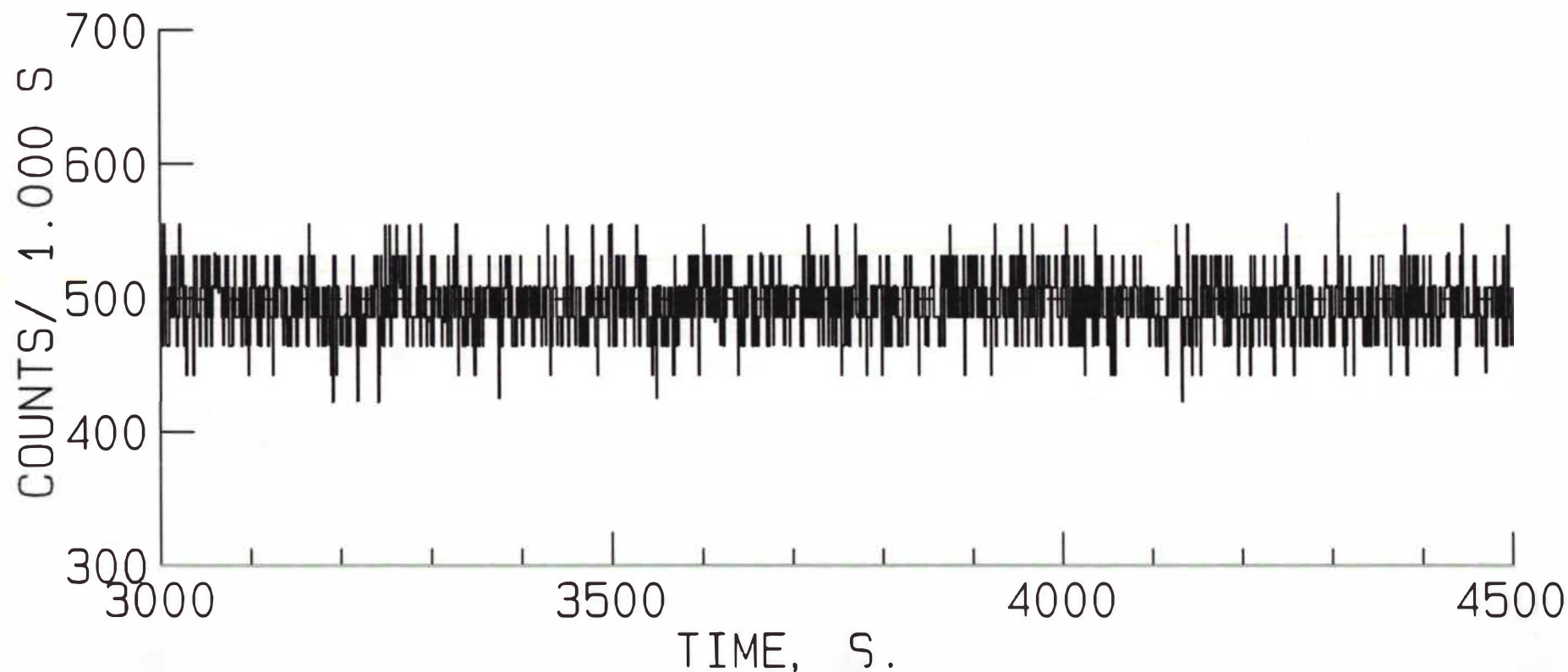
30 / 1 / 96

24 / 1 / 96 45000.445 s

0.500 S INTERVALS REGROUPED BY 2

21- 141 keV

N= 10 M= 5
>3.0 SIGMA FLUCTUATIONS



ULYSSES RT

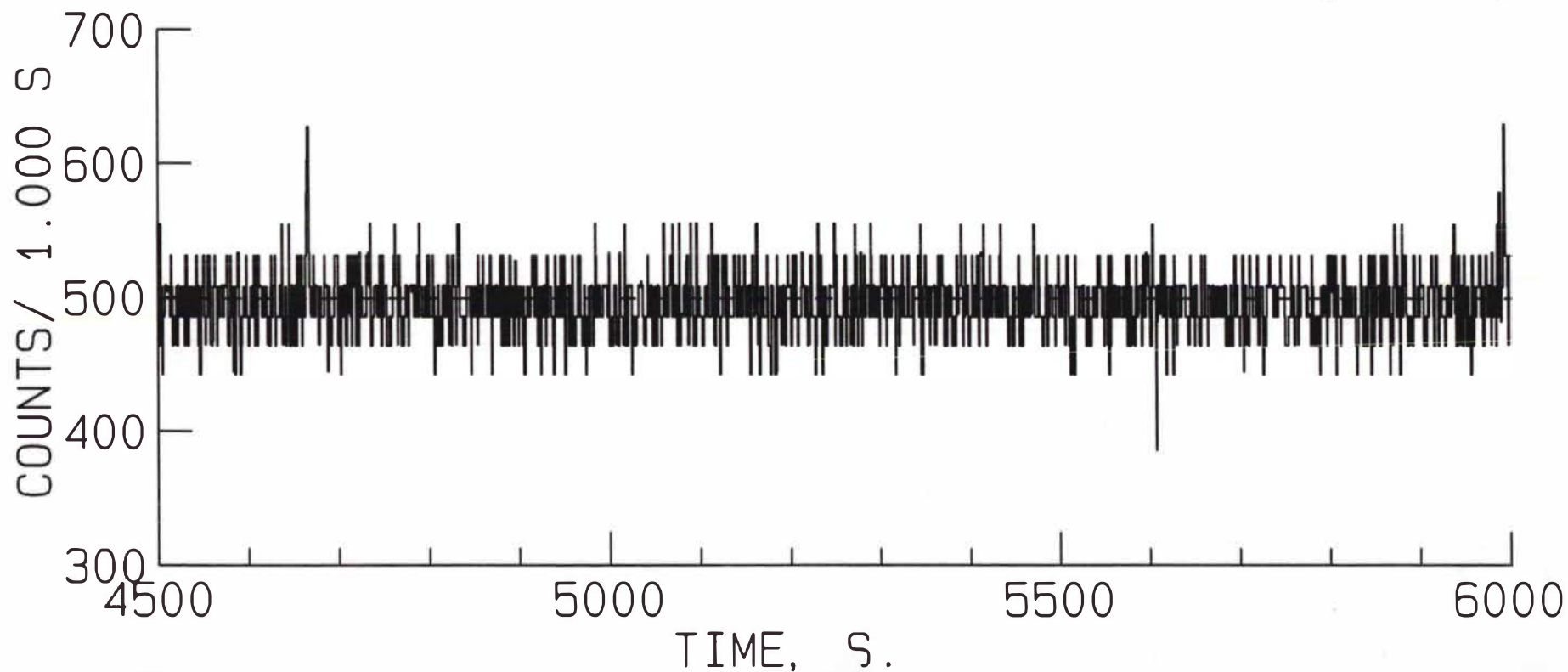
30 / 1 / 96

24 / 1 / 96 45000.445 s

0.500 S INTERVALS REGROUPED BY 2

21- 141 keV

N= 10 M= 5
>3.0 SIGMA FLUCTUATIONS



ULYSSES RT

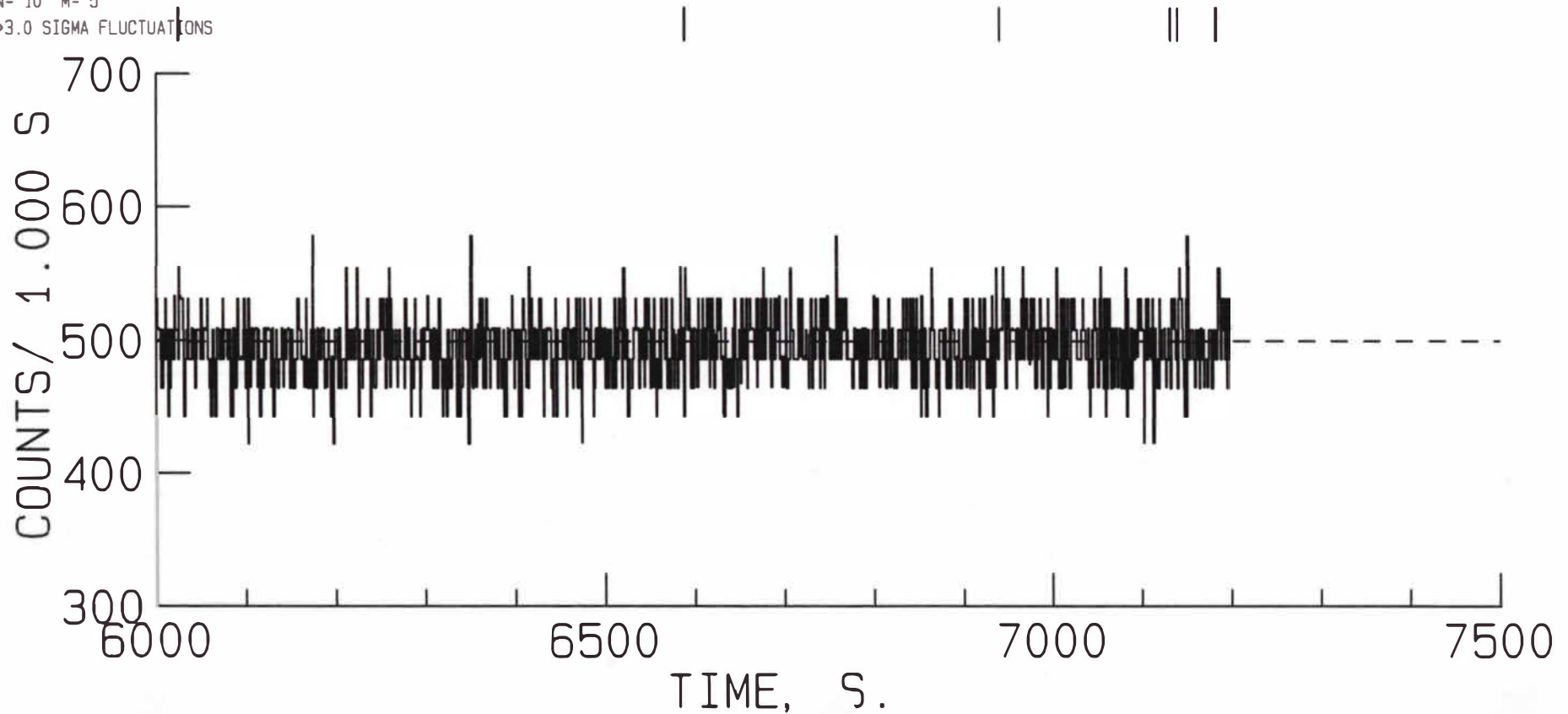
30 / 1 / 96

24 / 1 / 96 45000.445 s

0.500 S INTERVALS REGROUPED BY 2

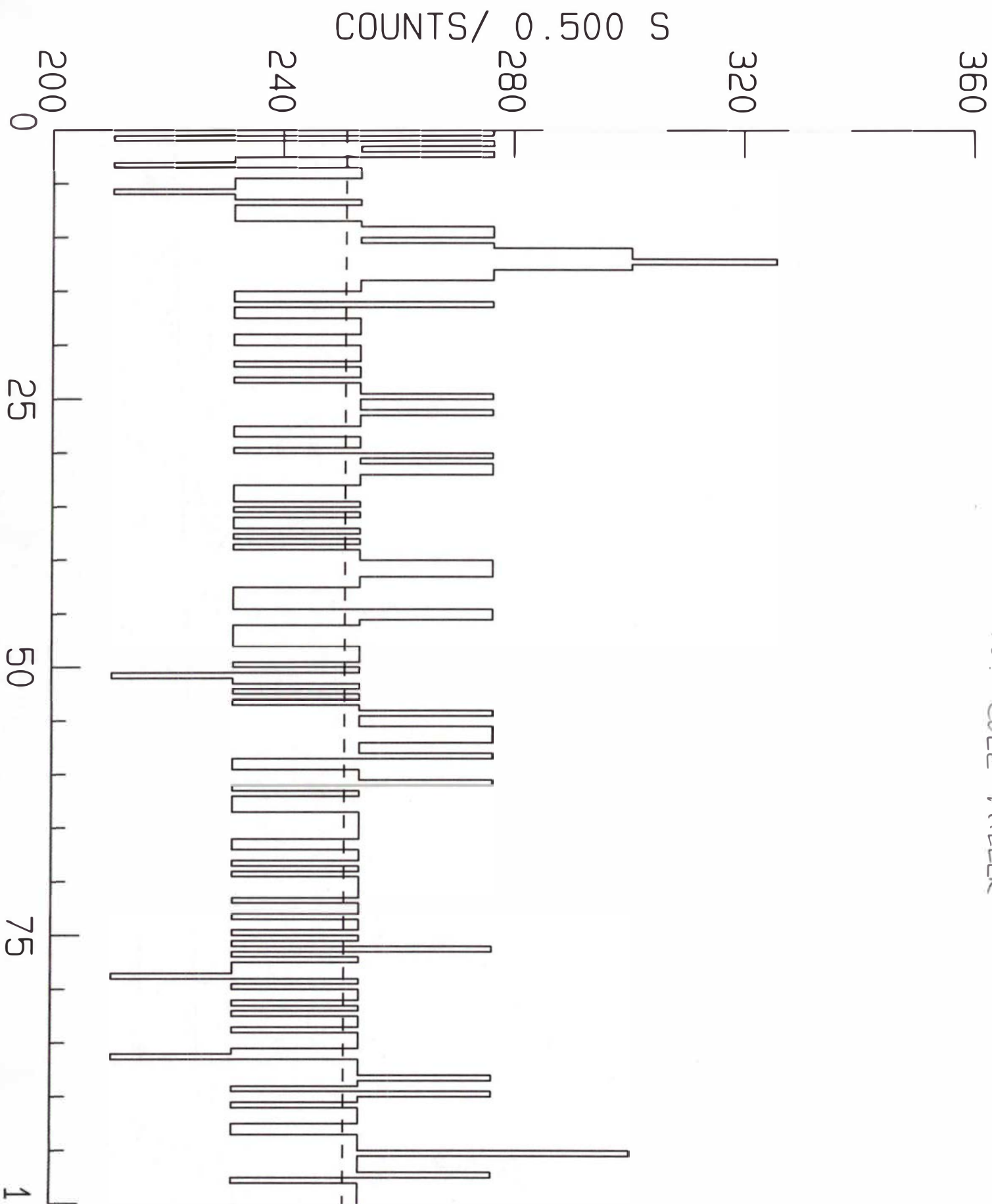
21- 141 keV

N= 10 M= 5
>3.0 SIGMA FLUCTUATIONS



ULYSSES RT 24/ 1/96

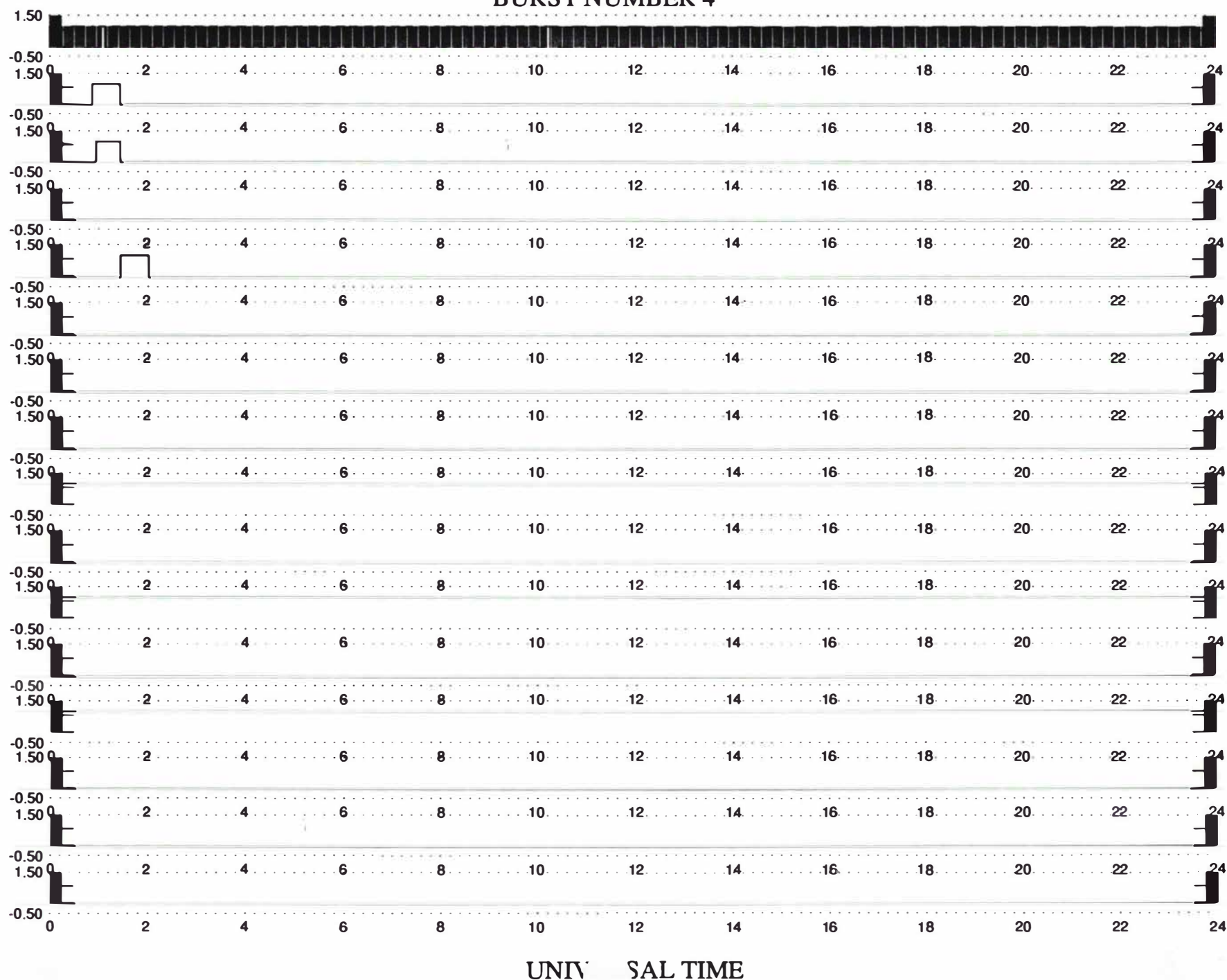
0- 0 keV 47400.475 S



To: Cole Miller

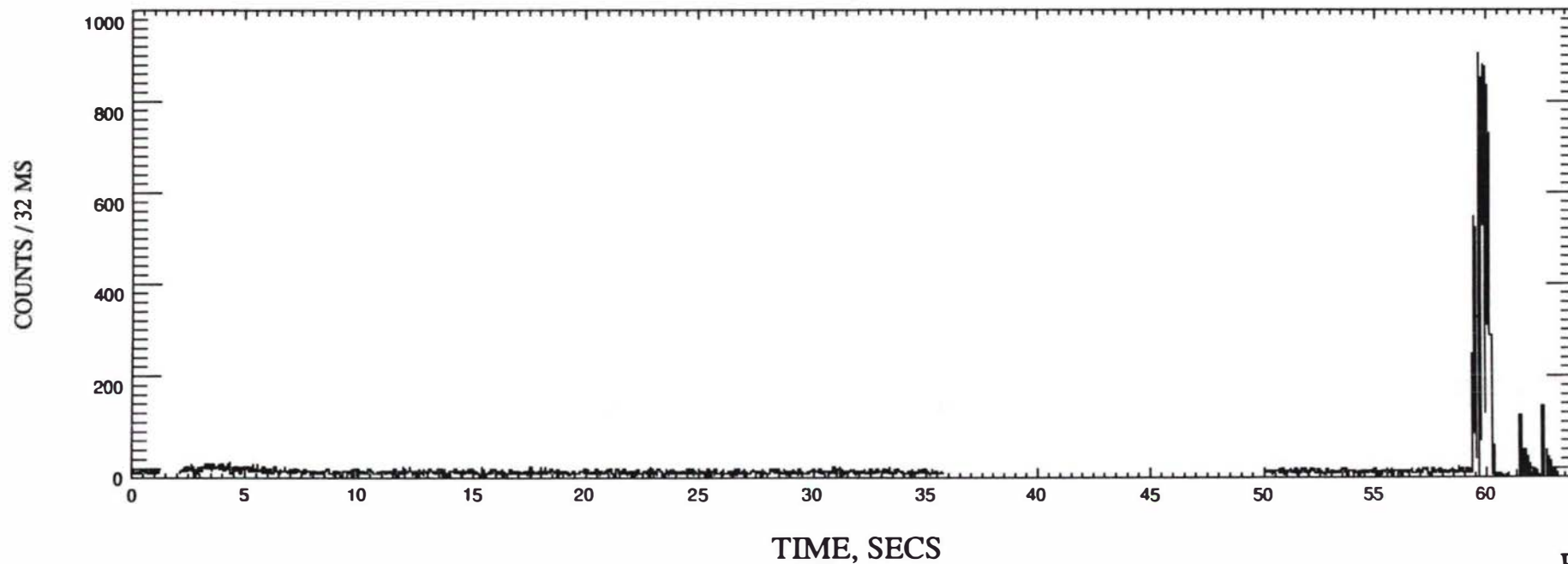
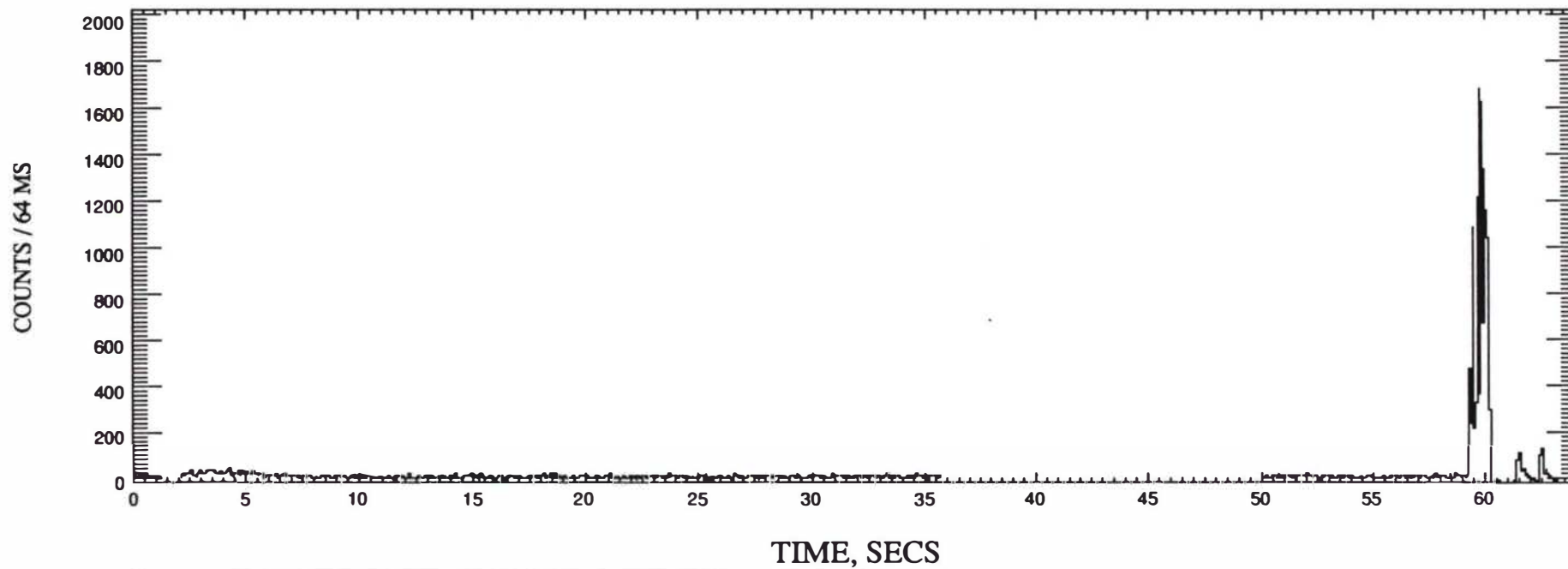
4/1/96

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



HUS 2A TRIGGERED DATA EDR day 24, year 1996
Burst Counter 4 at UT= 0.746579585605 h= 2687.687 s 00:44:47.687

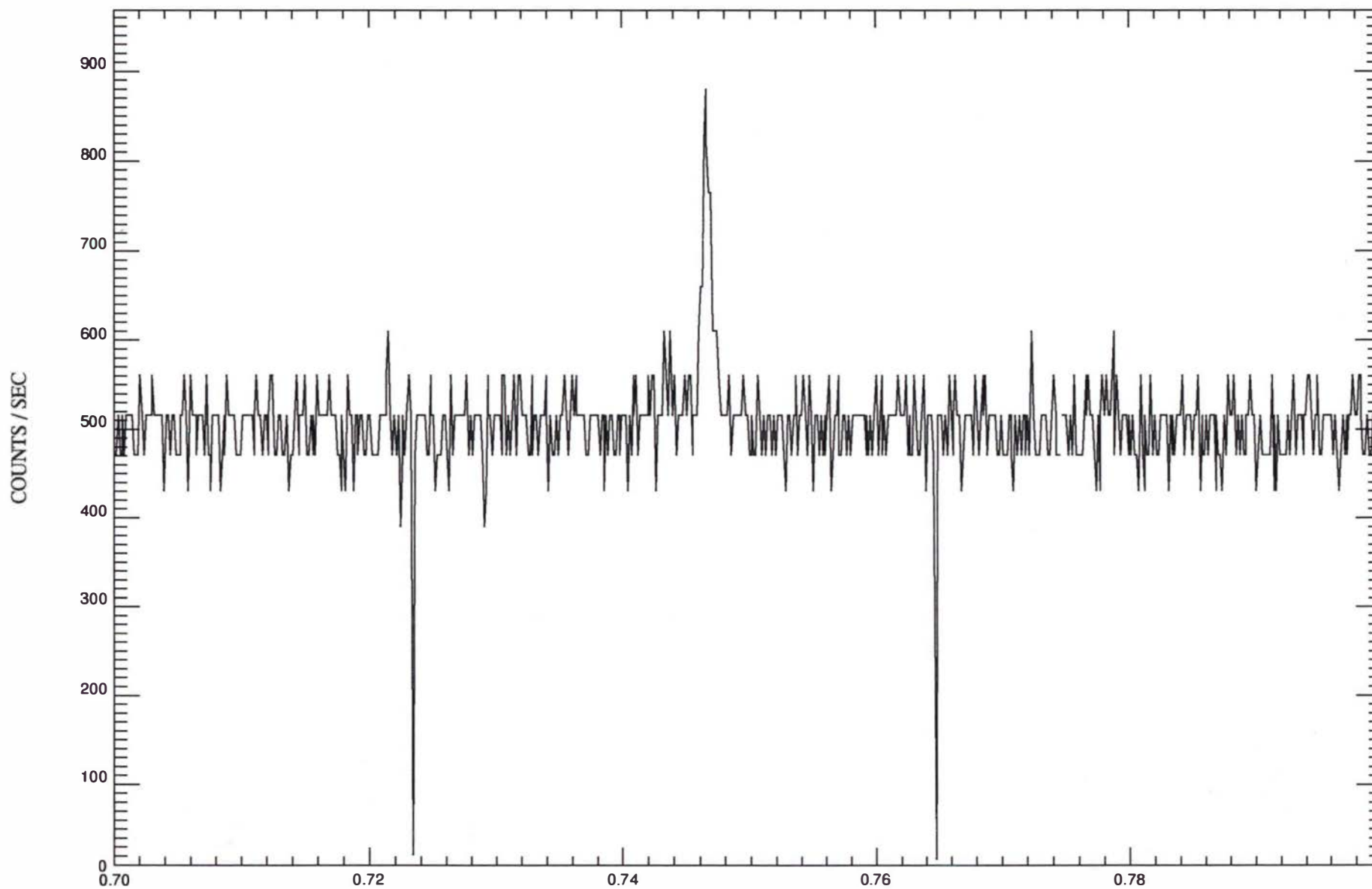
4/1/96



B# 1

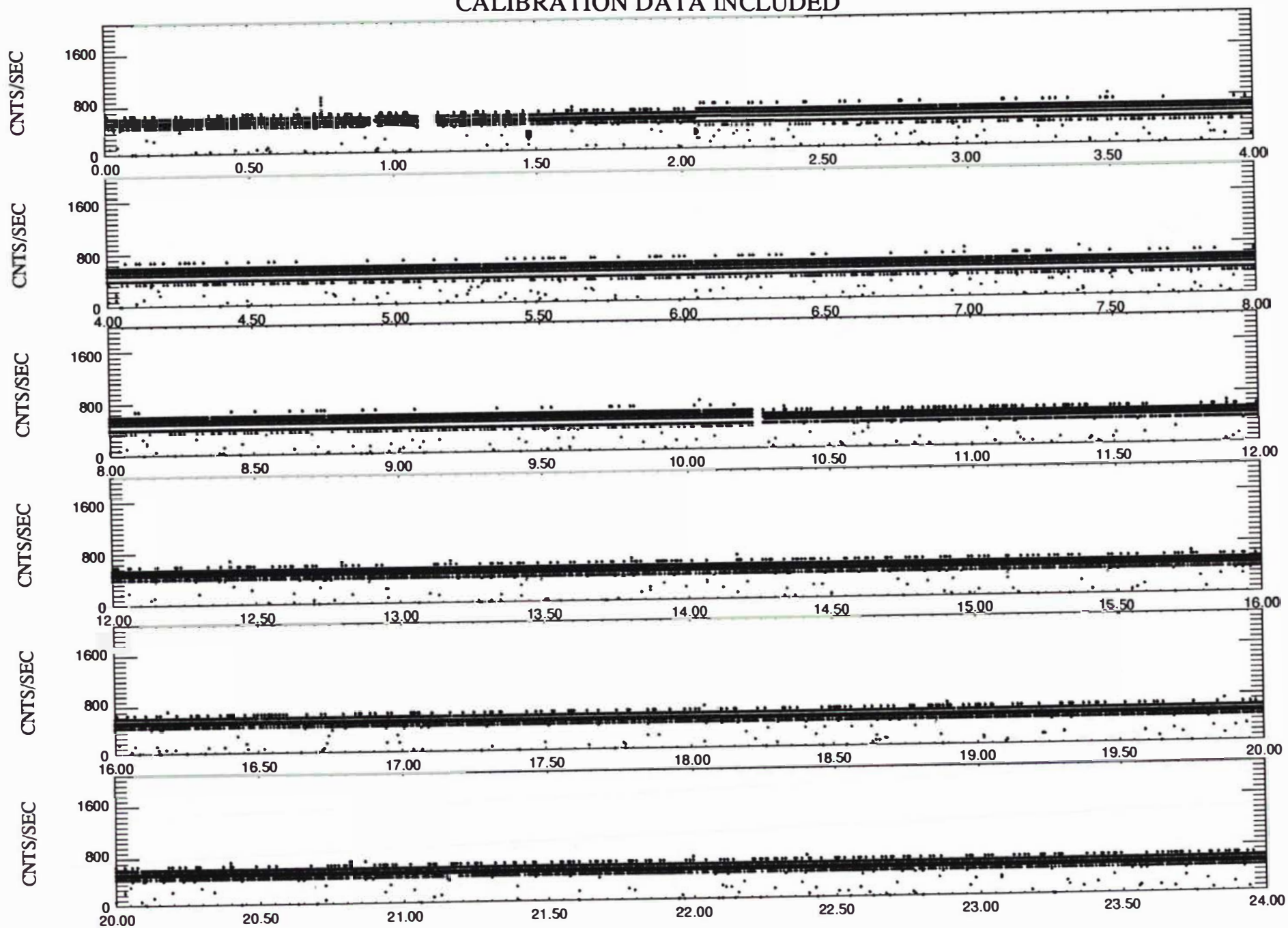
HUS 2A, MODE 1, NOT AVERAGED QEDR day 24, year 1996 to day 24, year 1996
CALIBRATION DATA INCLUDED

1/29/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 24, year 1996 to day 24, year 1996
CALIBRATION DATA INCLUDED

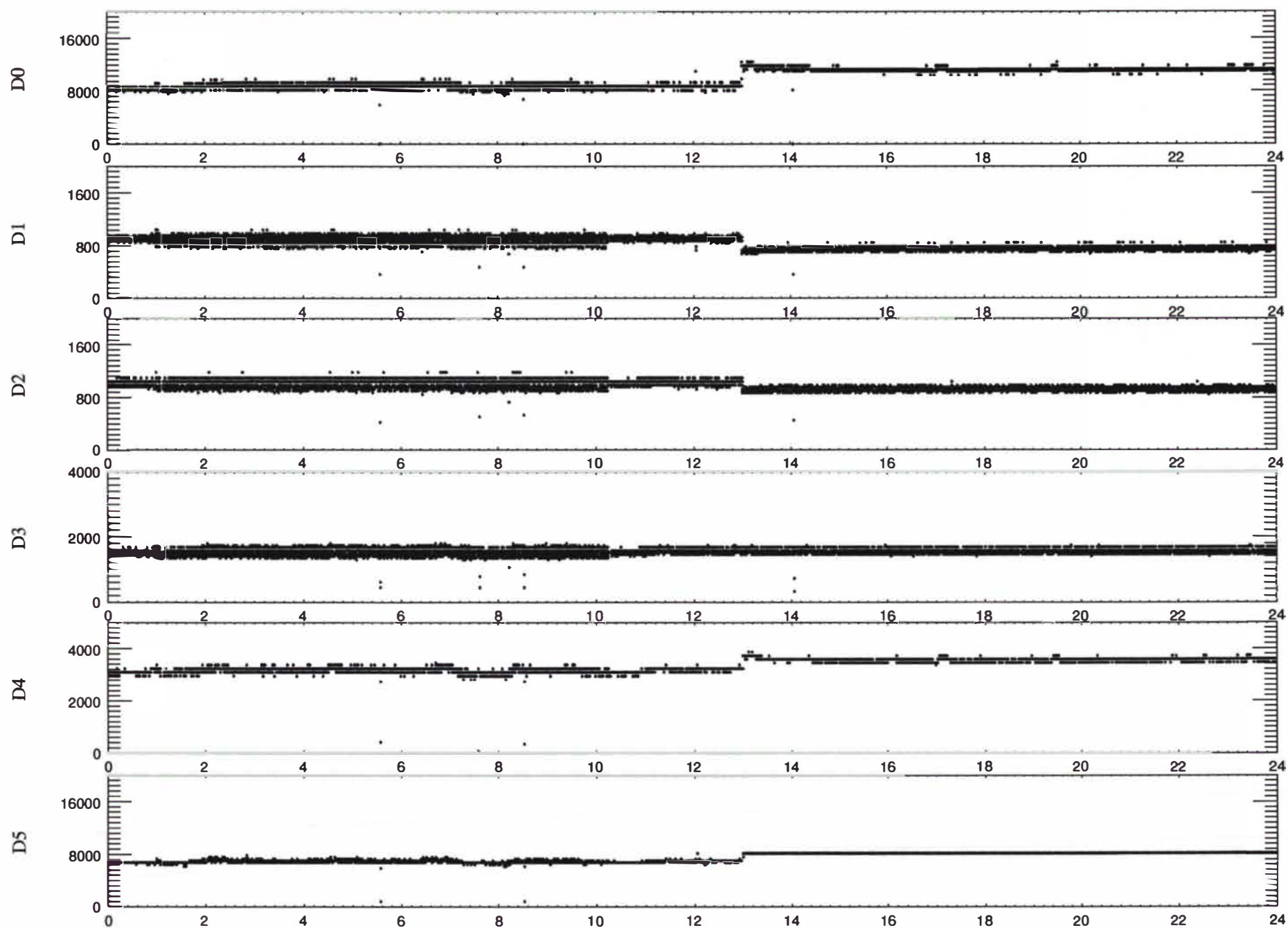
4/1/96



UNIV SAL TIME

HUS 2B COUNTS / SEC QEDR day 24, year 1996 to day 24, year 1996

1/29/96

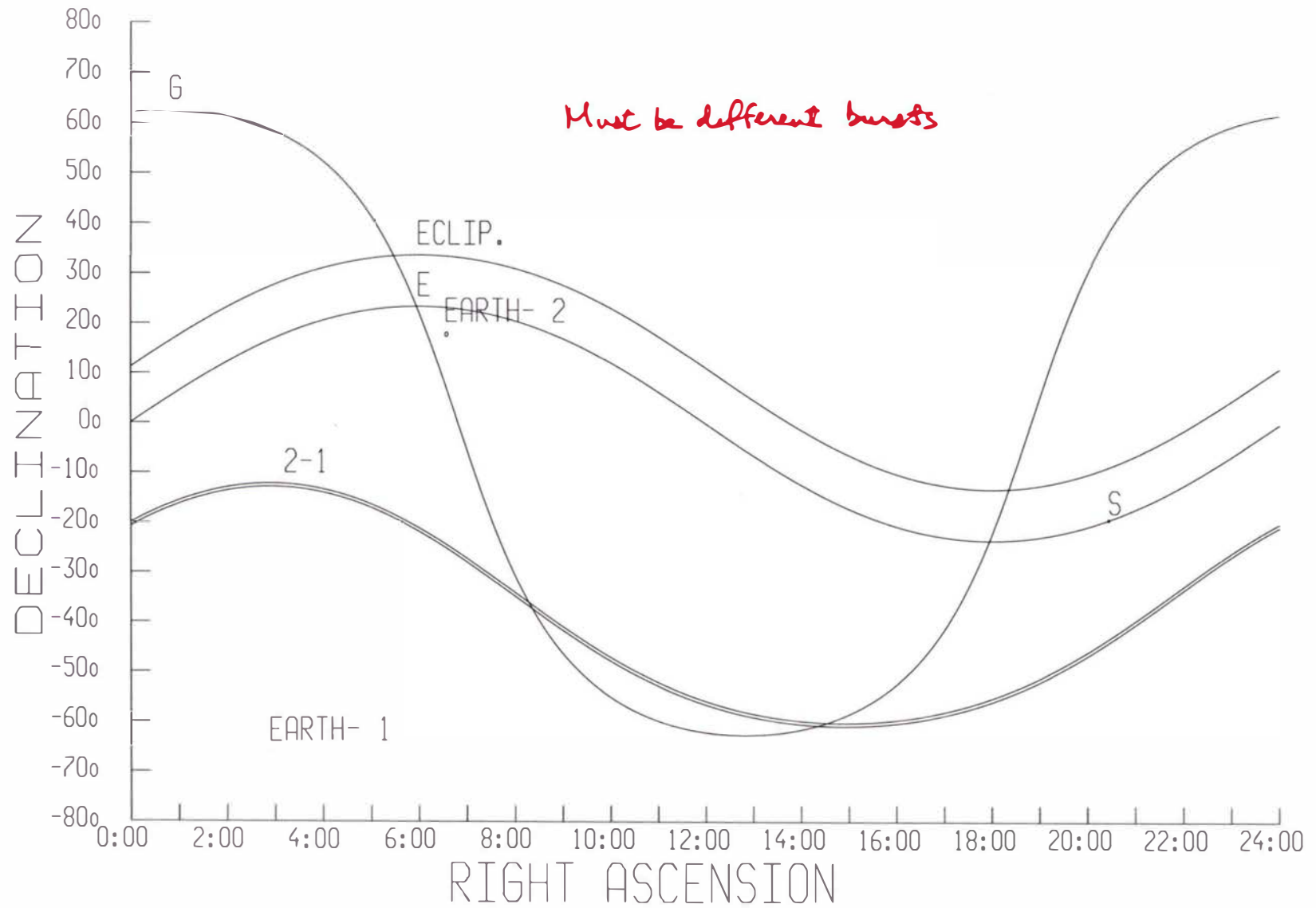


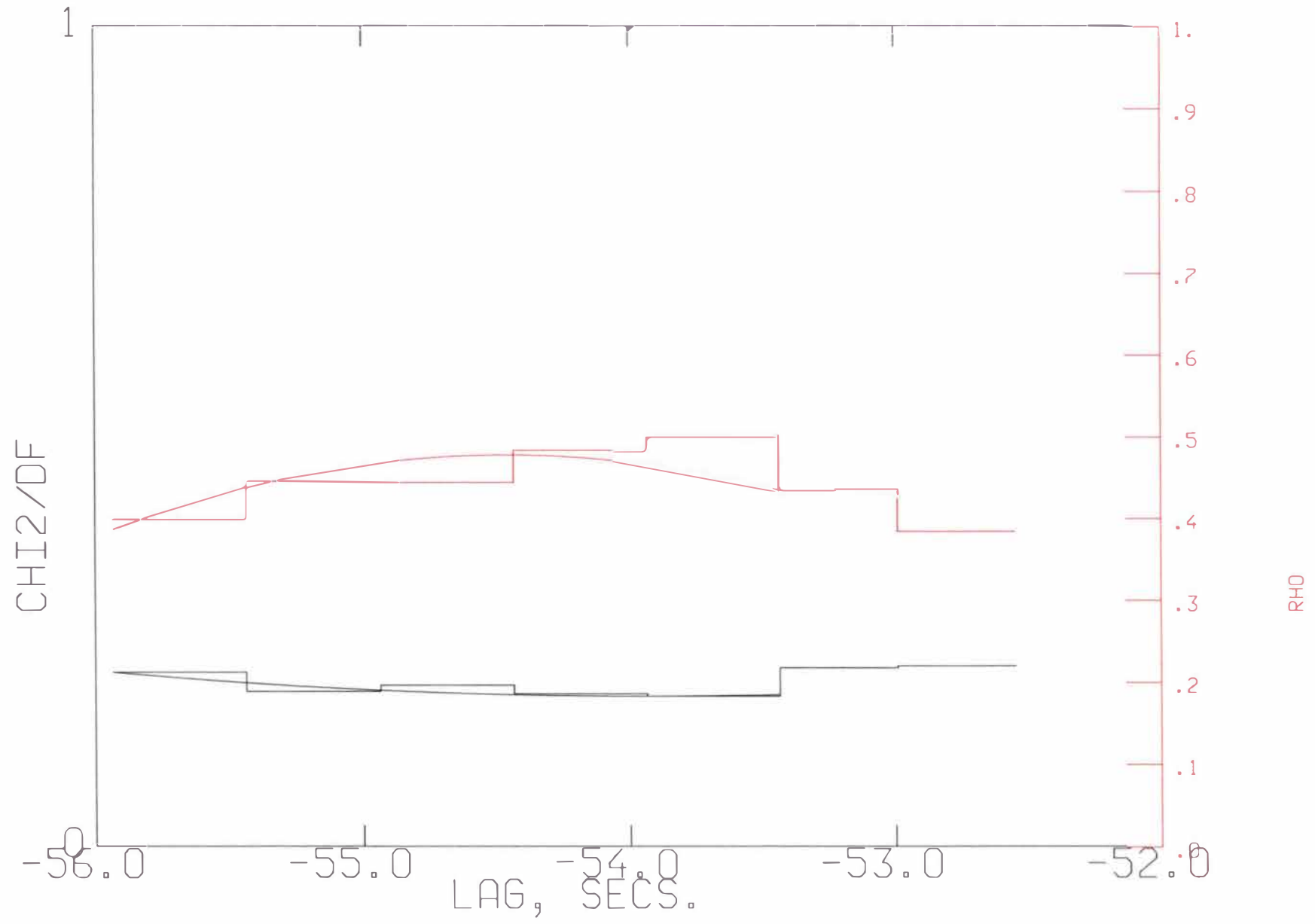
UNIV' CAL TIME

EVENT OF JAN 25, 1996 0:26

14/09/2011

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





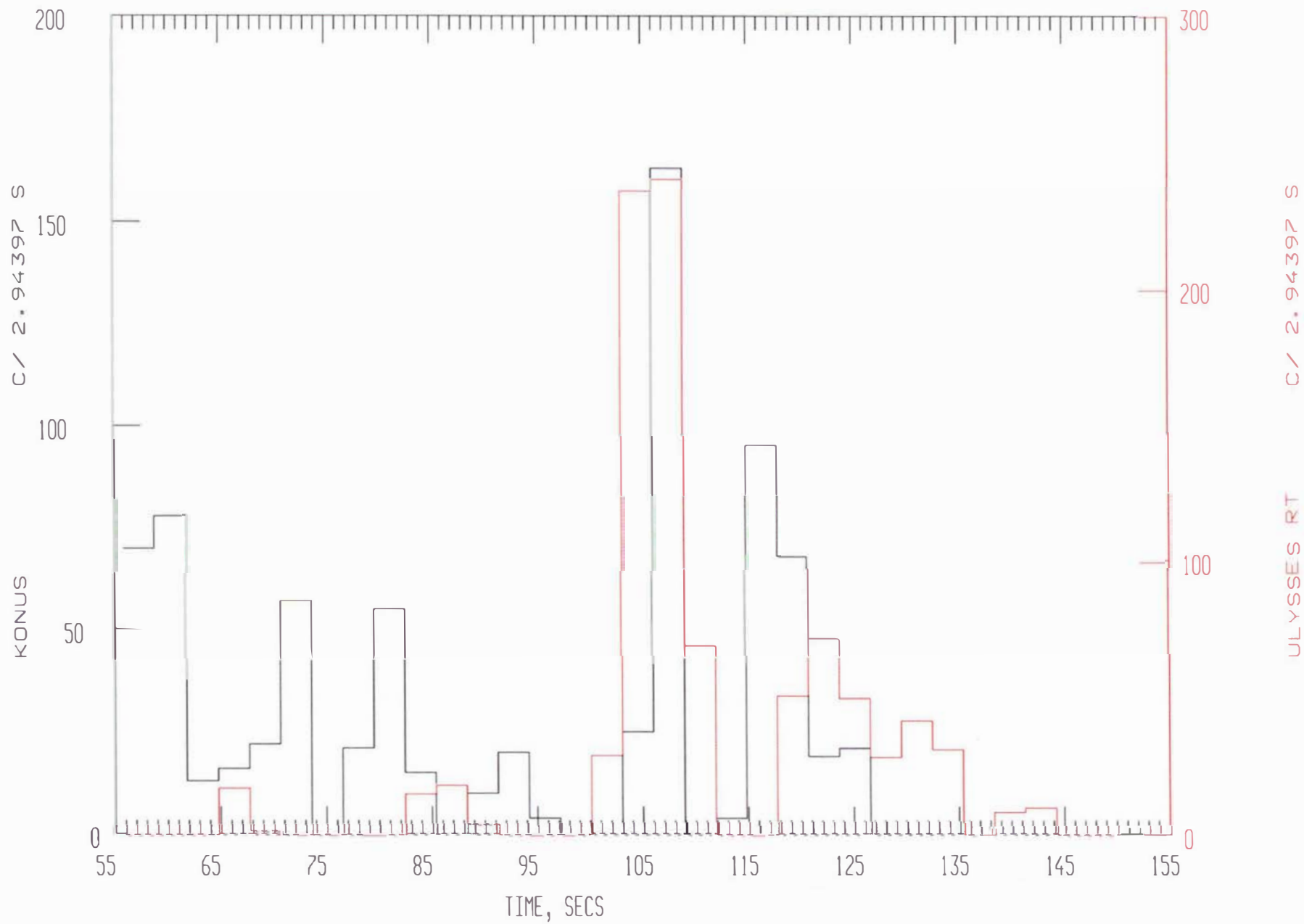
KONUS

-ULYSSES RT CORRELATION

25/01/96

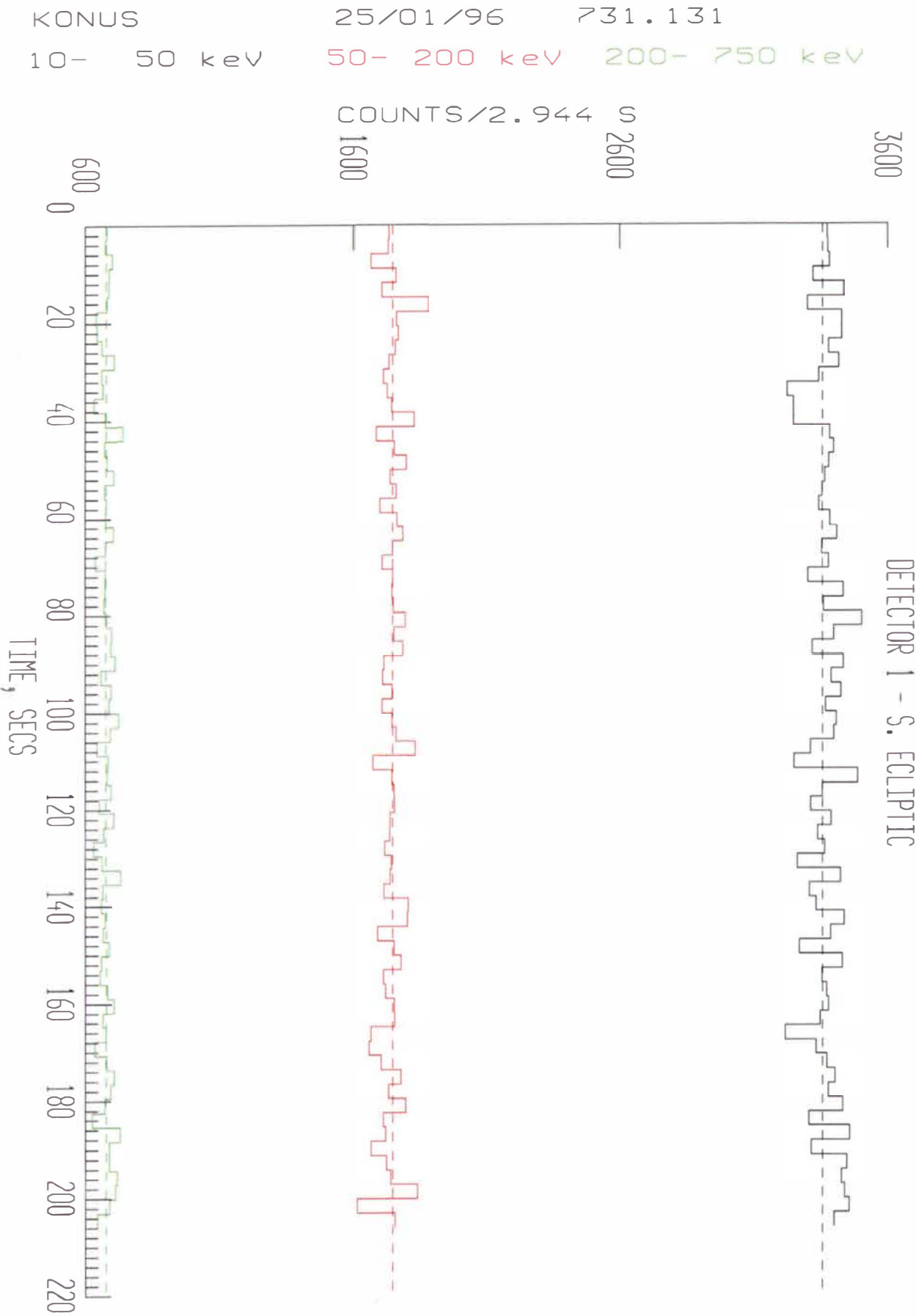
731.131

14/ 9/11



14/09/2011

DETECTOR 1 - S. ECLIPSE



KONUS

25/01/96

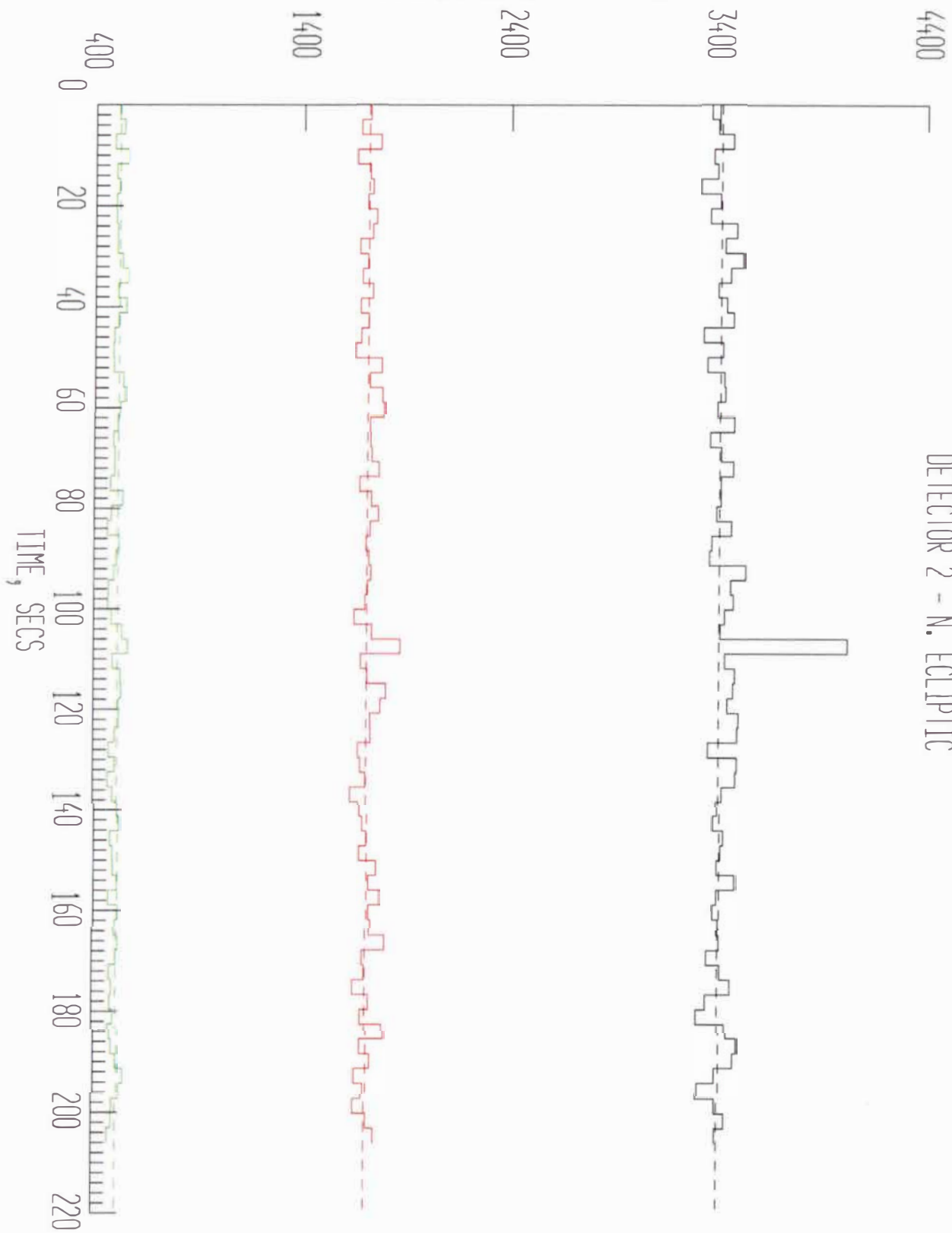
731.131

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.944 S



KONUS 19960125 01688

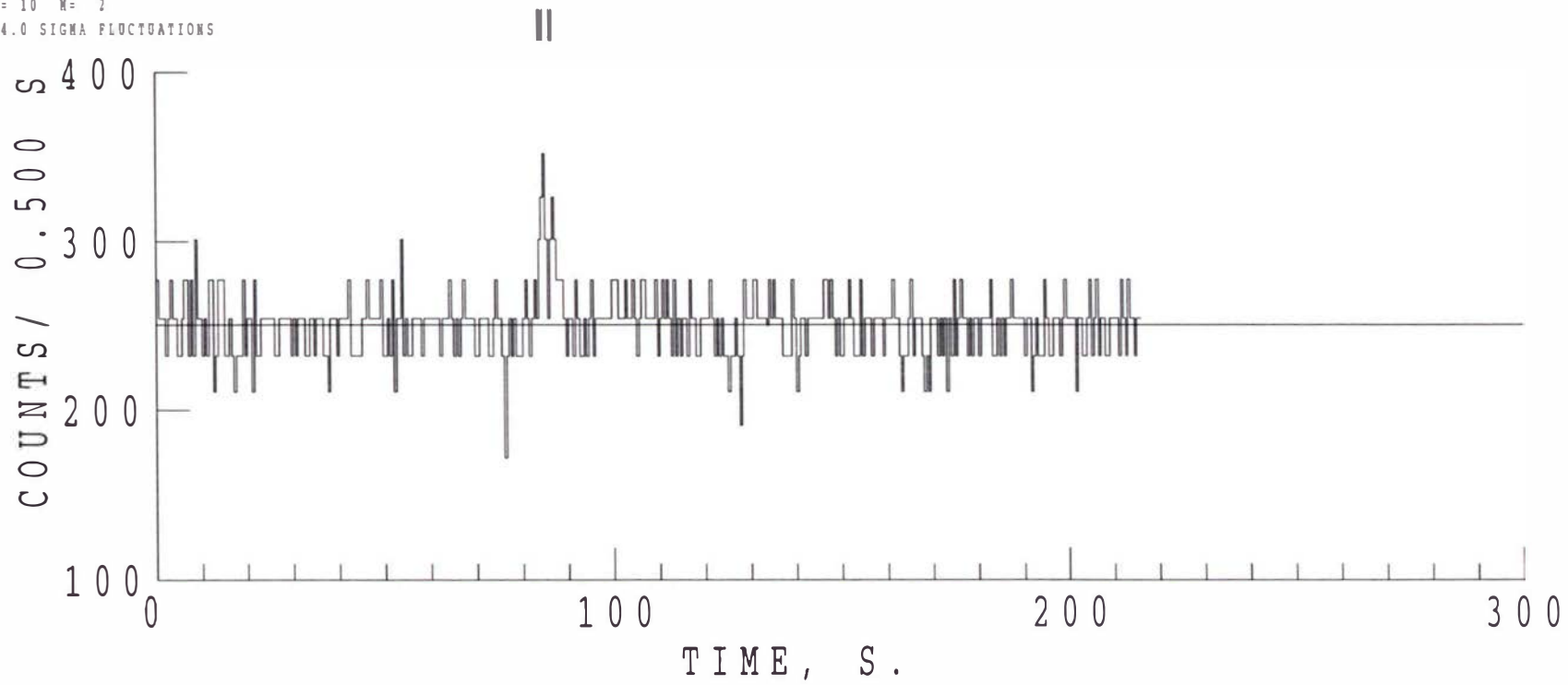
ULYSSES RT

12 / 09 / 11

25 / 01 / 96 1584.066 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



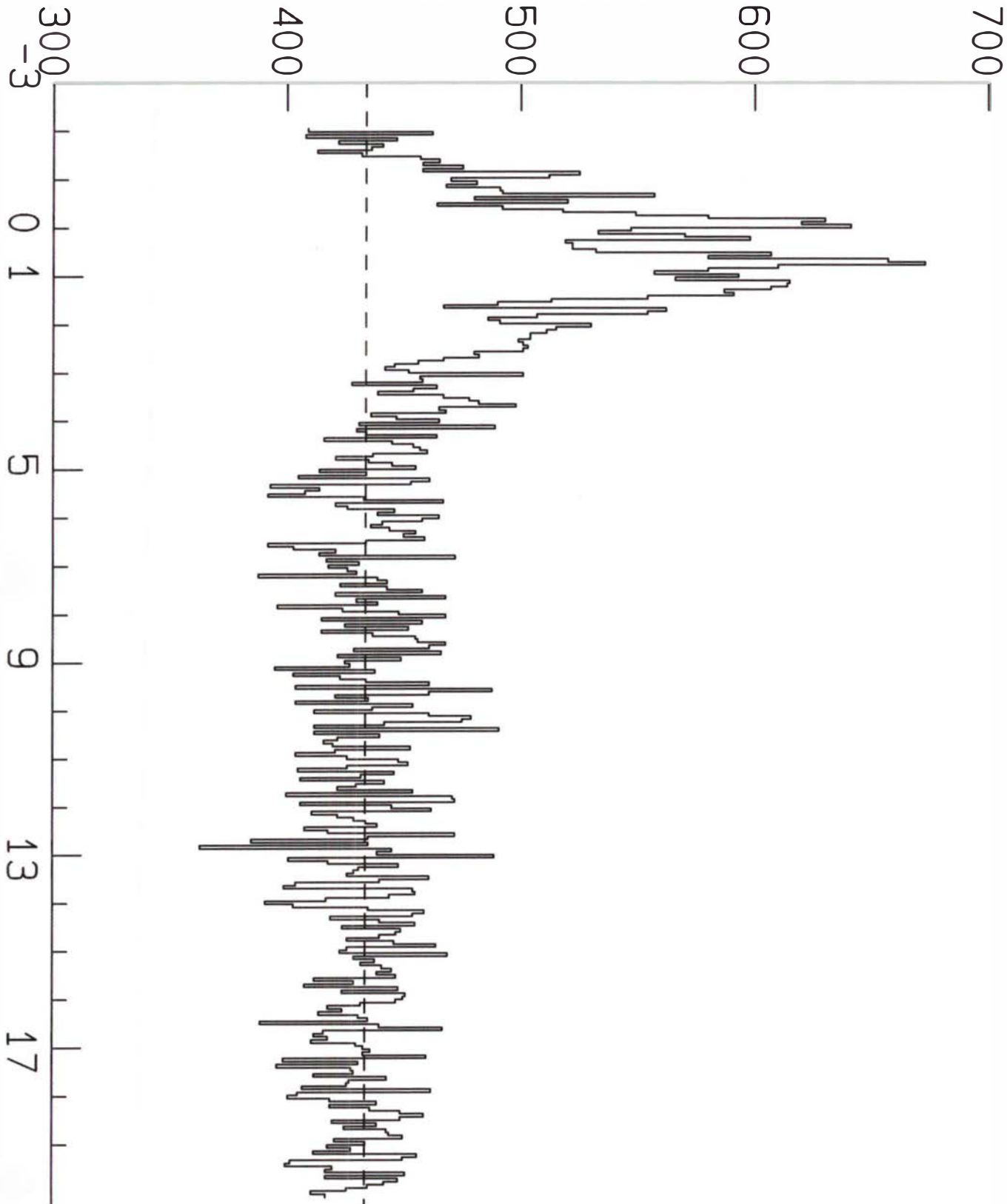
BATSE

25/01/96

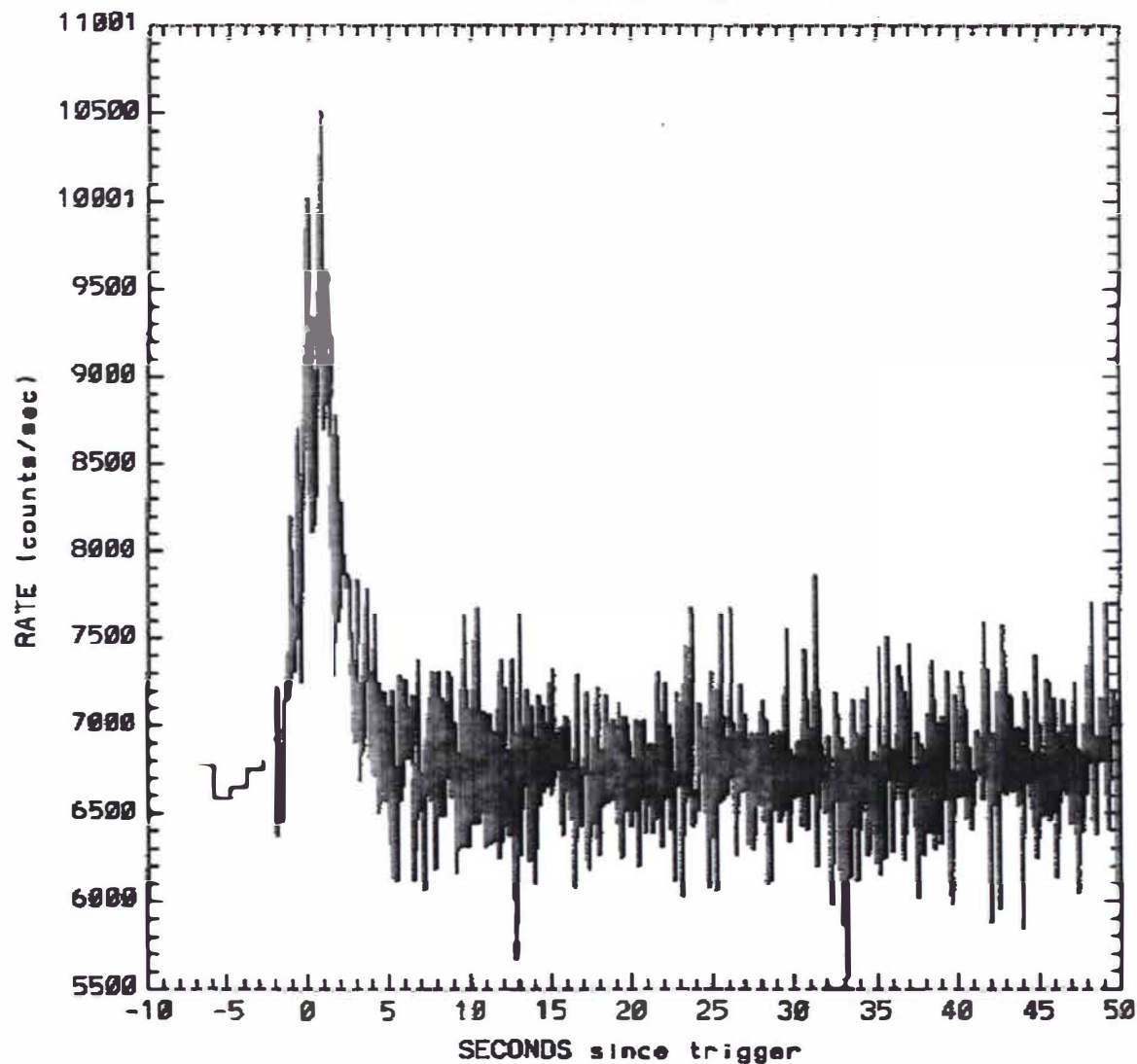
65579.466

25- 100 keV

COUNTS/0.064 S



DISCSC Data for K. Hurley, No. 4584



6-JUN-1996 11:22:42

Created by NOPS BD
(Burst Display)
Version t2.25

Trigger # : 4584

Trigger Time:
19167 / 65579.466Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors (7..9).
----2-9Discriminators:
1 1 . 2 1Quality Mask:
80ISP1

ULYSSES

25/01/96

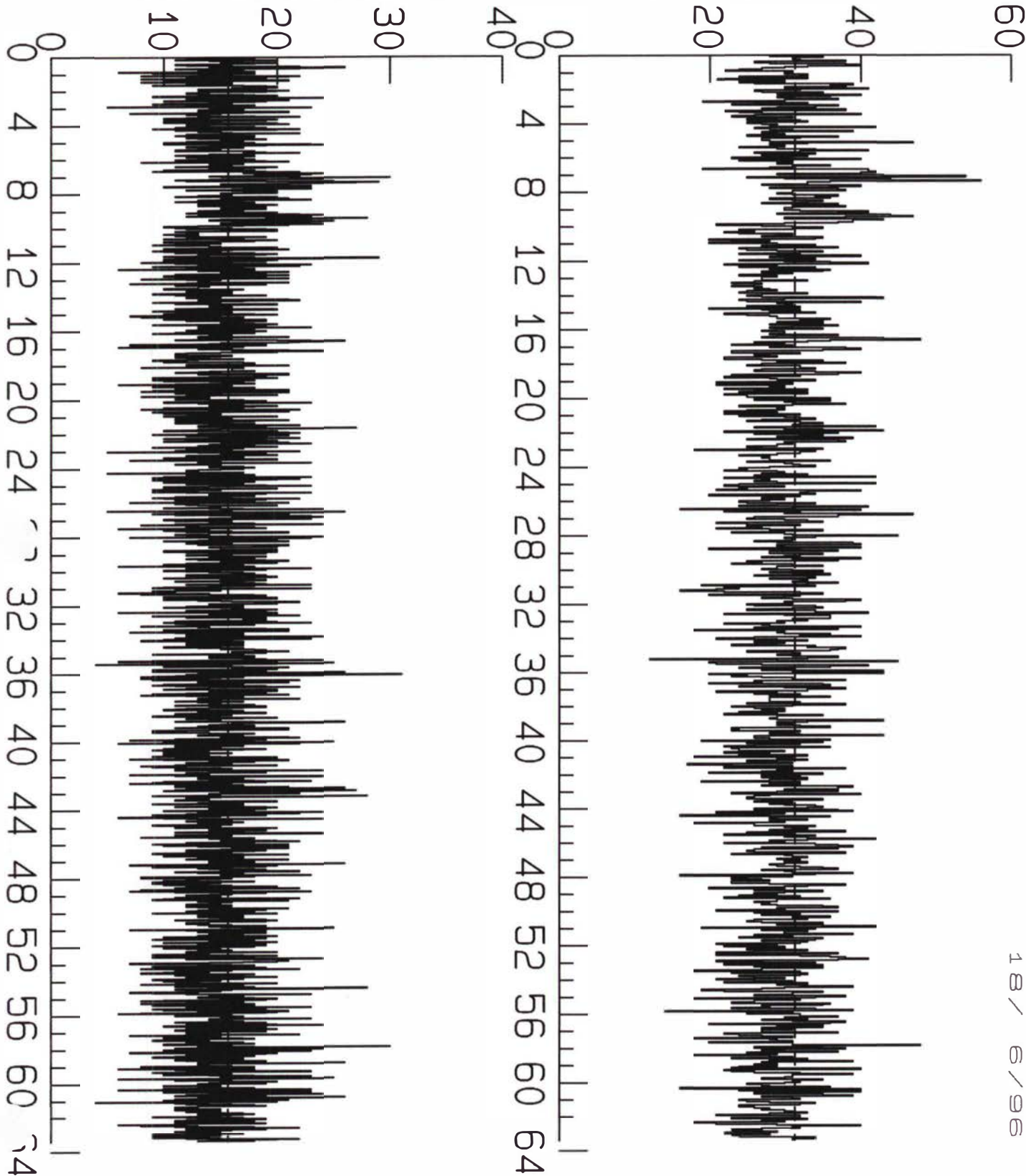
Ttrig=68598.662

0- 0 keV

*Wrong time for the
SGR*

COUNTS/0.031 S

COUNTS/0.062 S



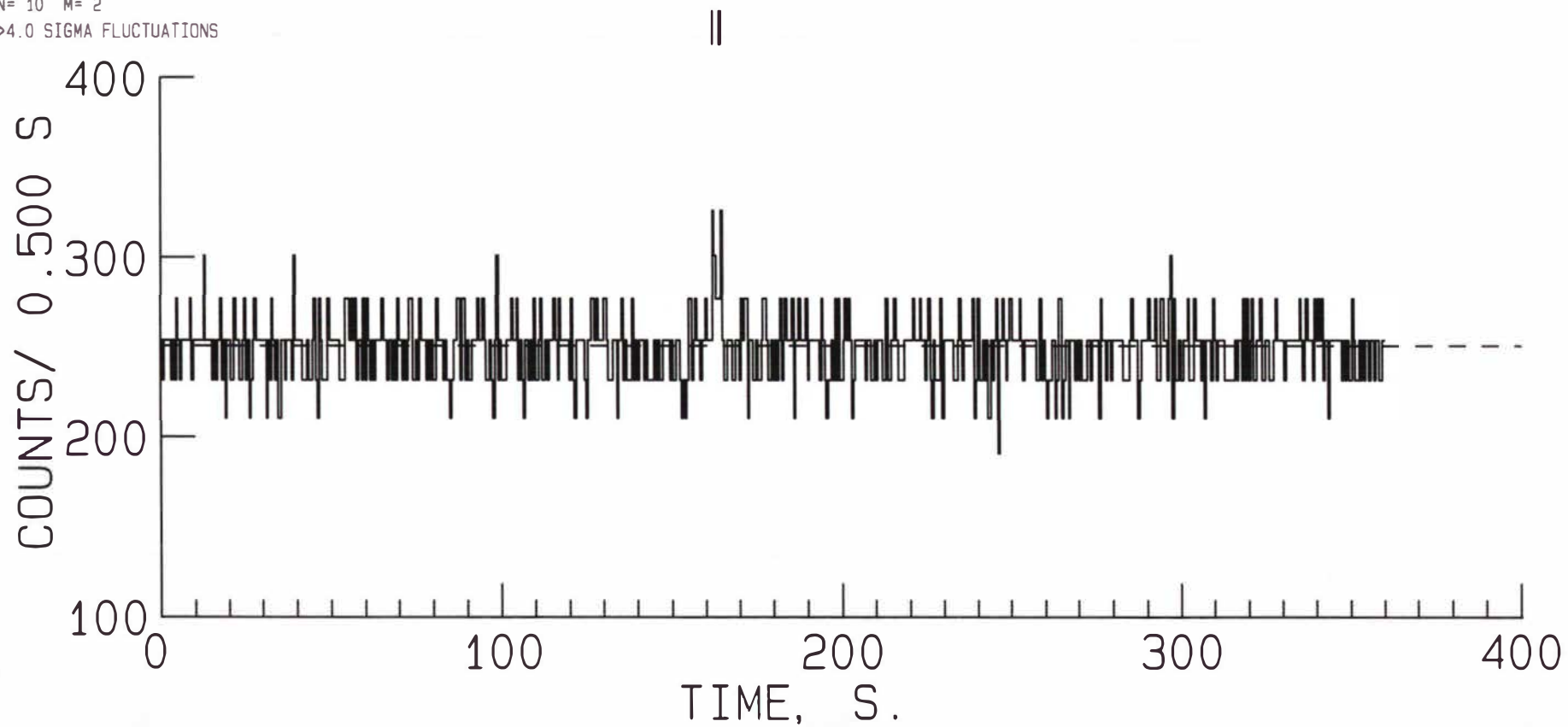
ULYSSES RT

18 / 6 / 96

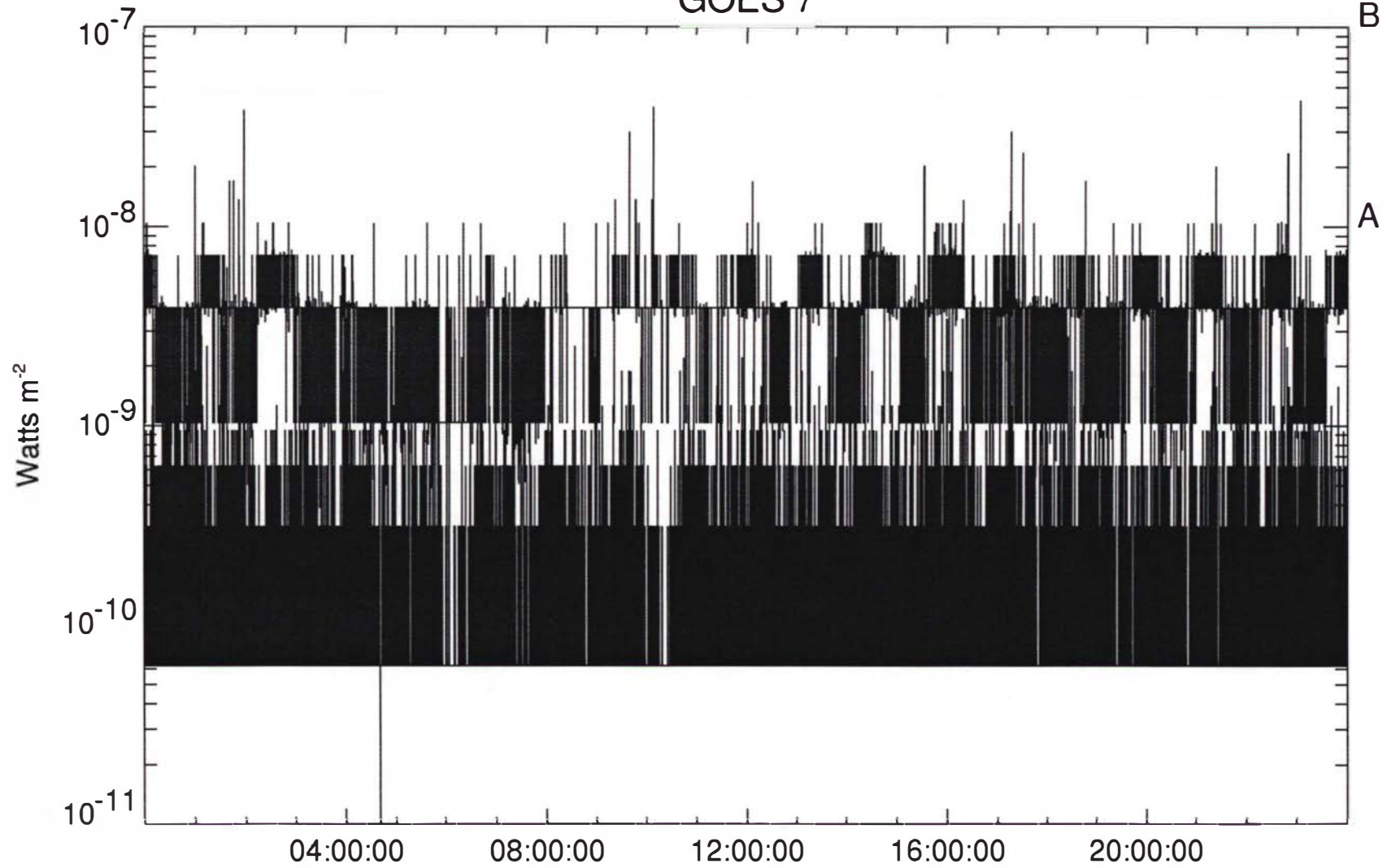
25 / 1 / 96 68436.032 s

21- 143 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



GOES 7



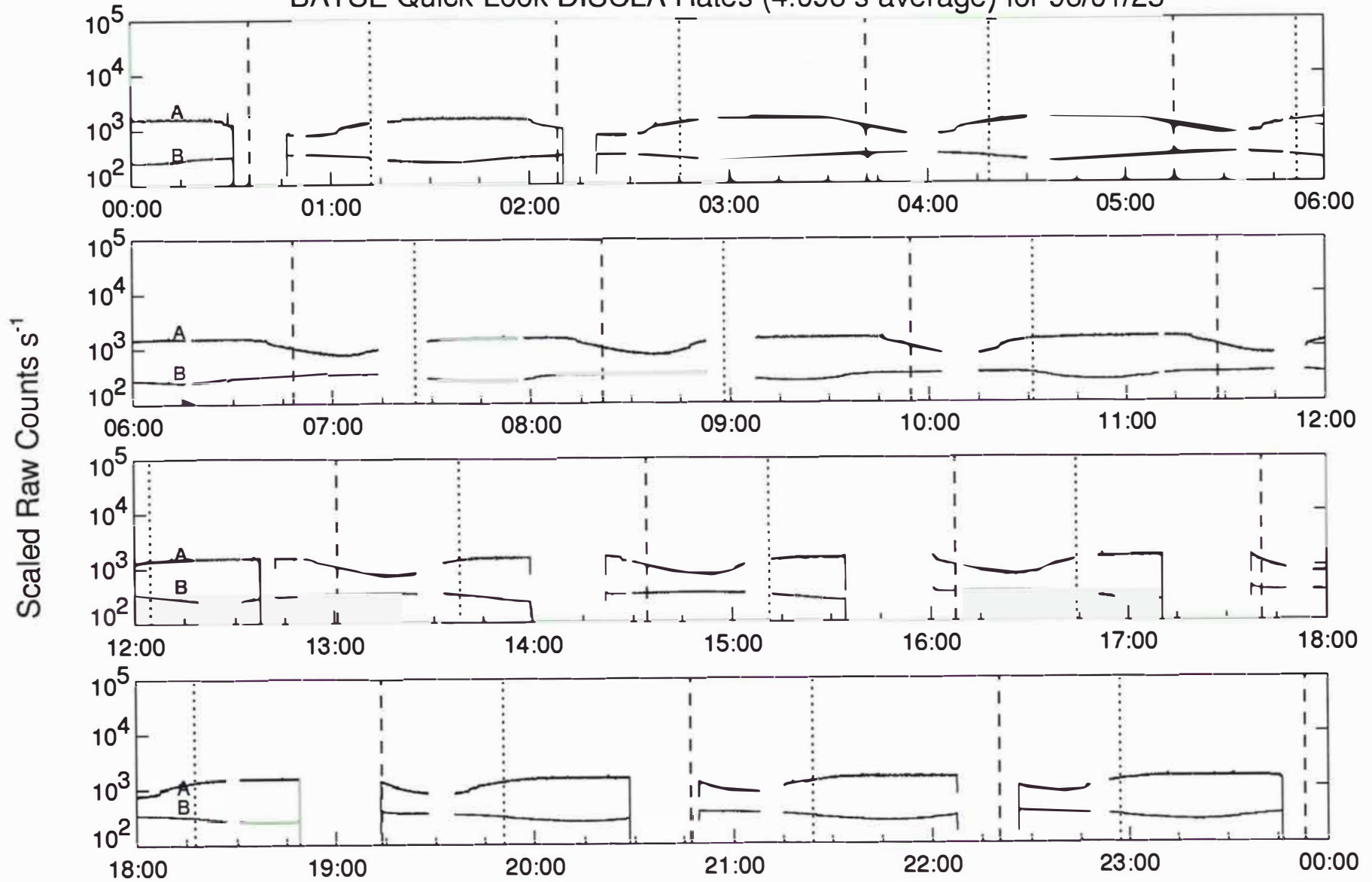
Data Start: 96/01/25, 0000:03

Plot created: 96/01/27, 0654

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 96/01/25



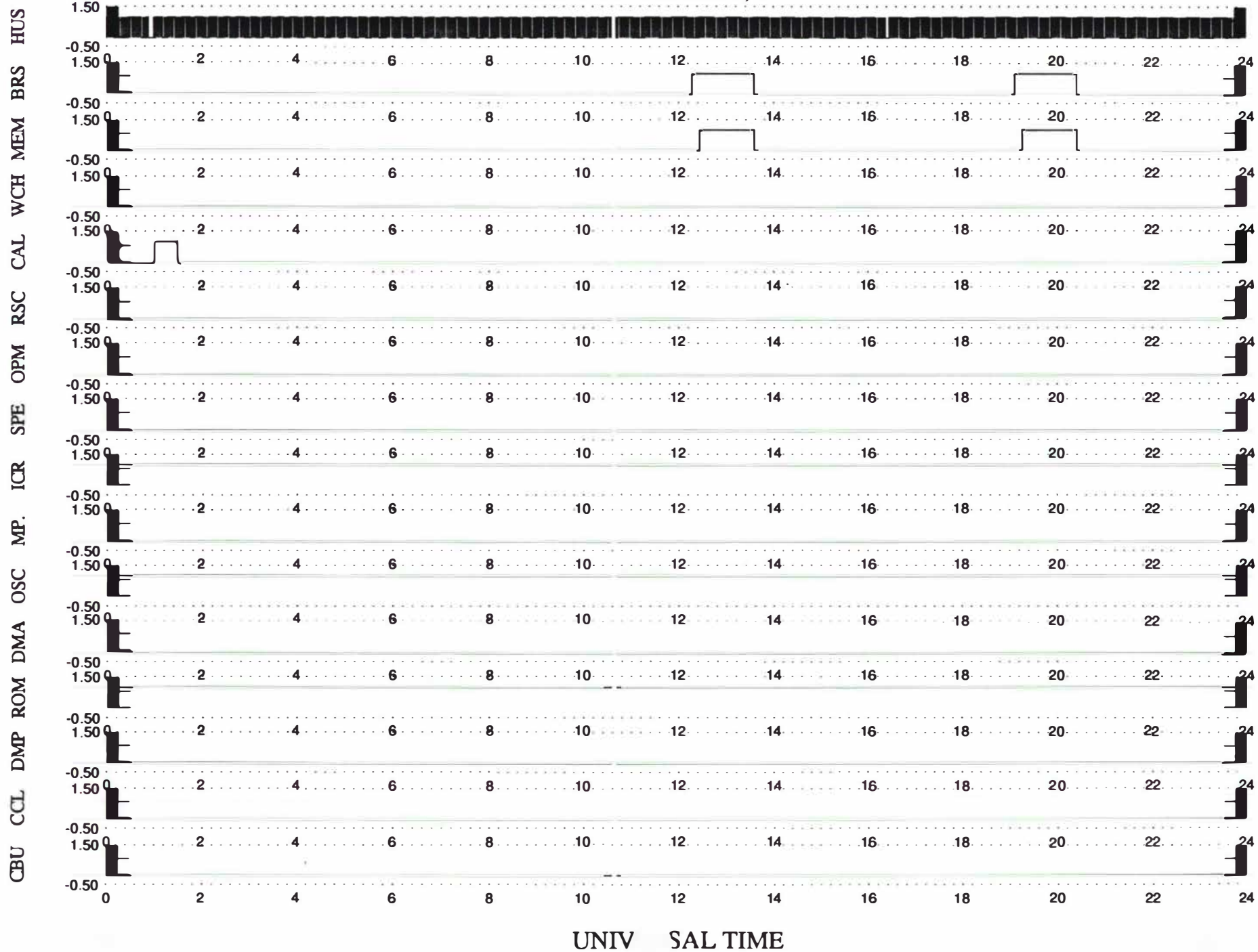
Current Time: 96/01/27, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

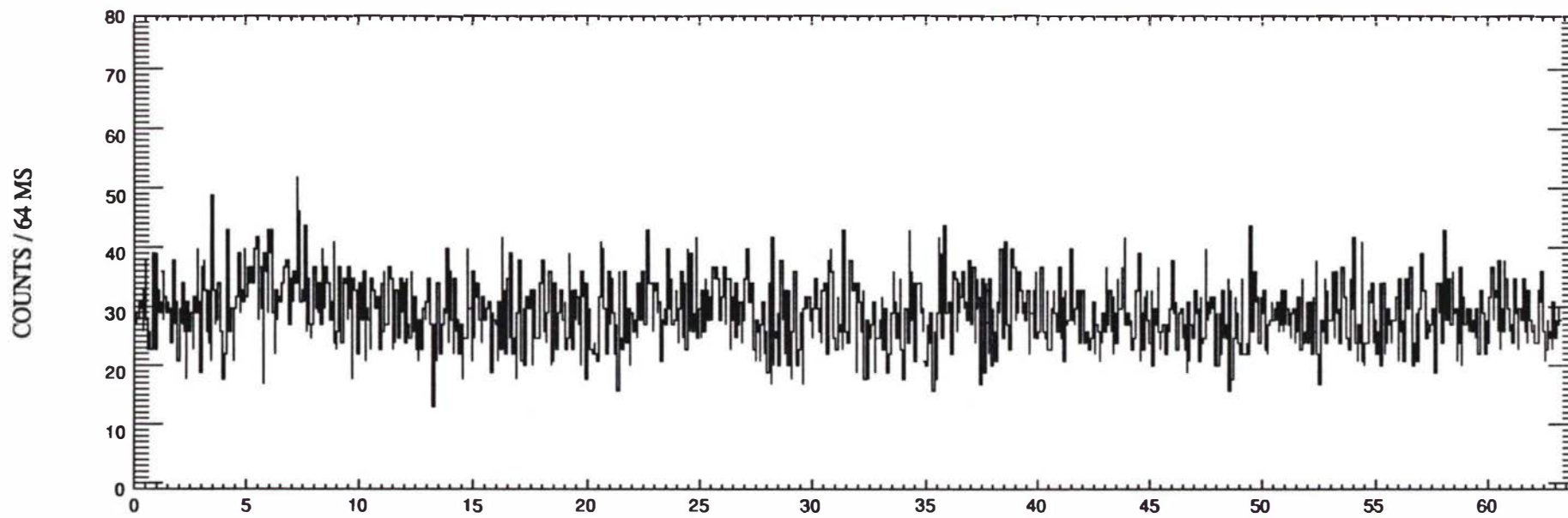
HUS MODES EDR day 25, year 1996 to day 25, year 1996
BURST NUMBER 5, 6

4/1/96

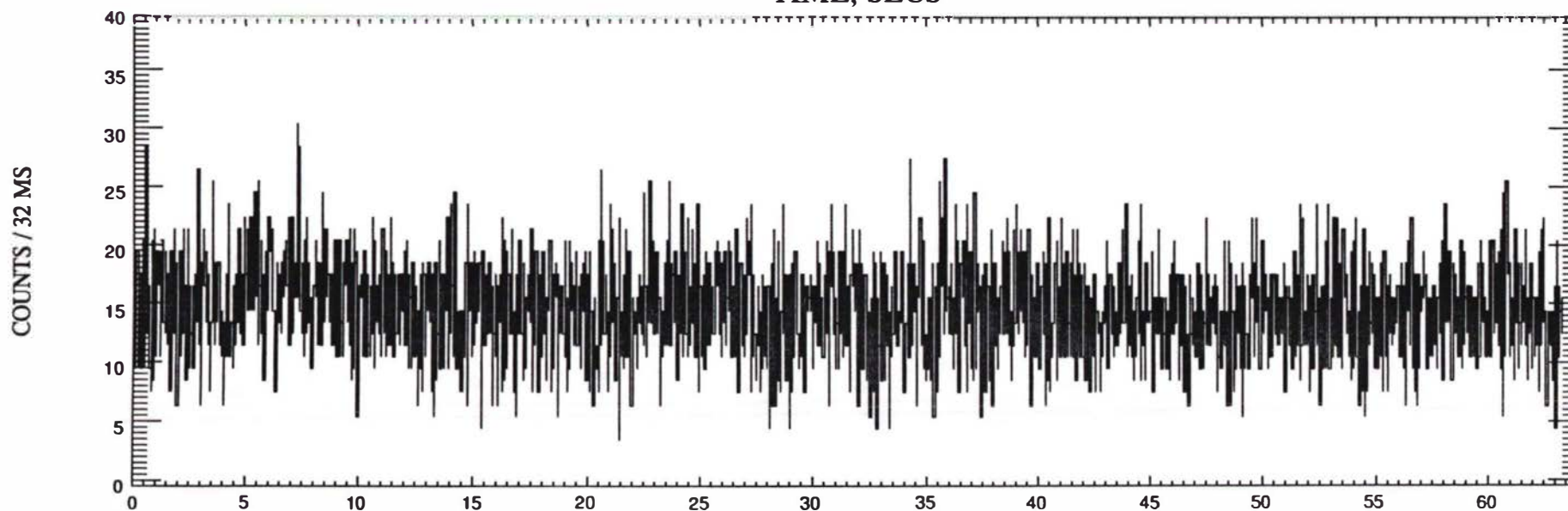


HUS 2A TRIGGERED DATA EDR day 25, year 1996
Burst Counter 5 at UT=12.254768859016 h=44117.168 s 12:15:17.168

4/1/96



TIME, SECS

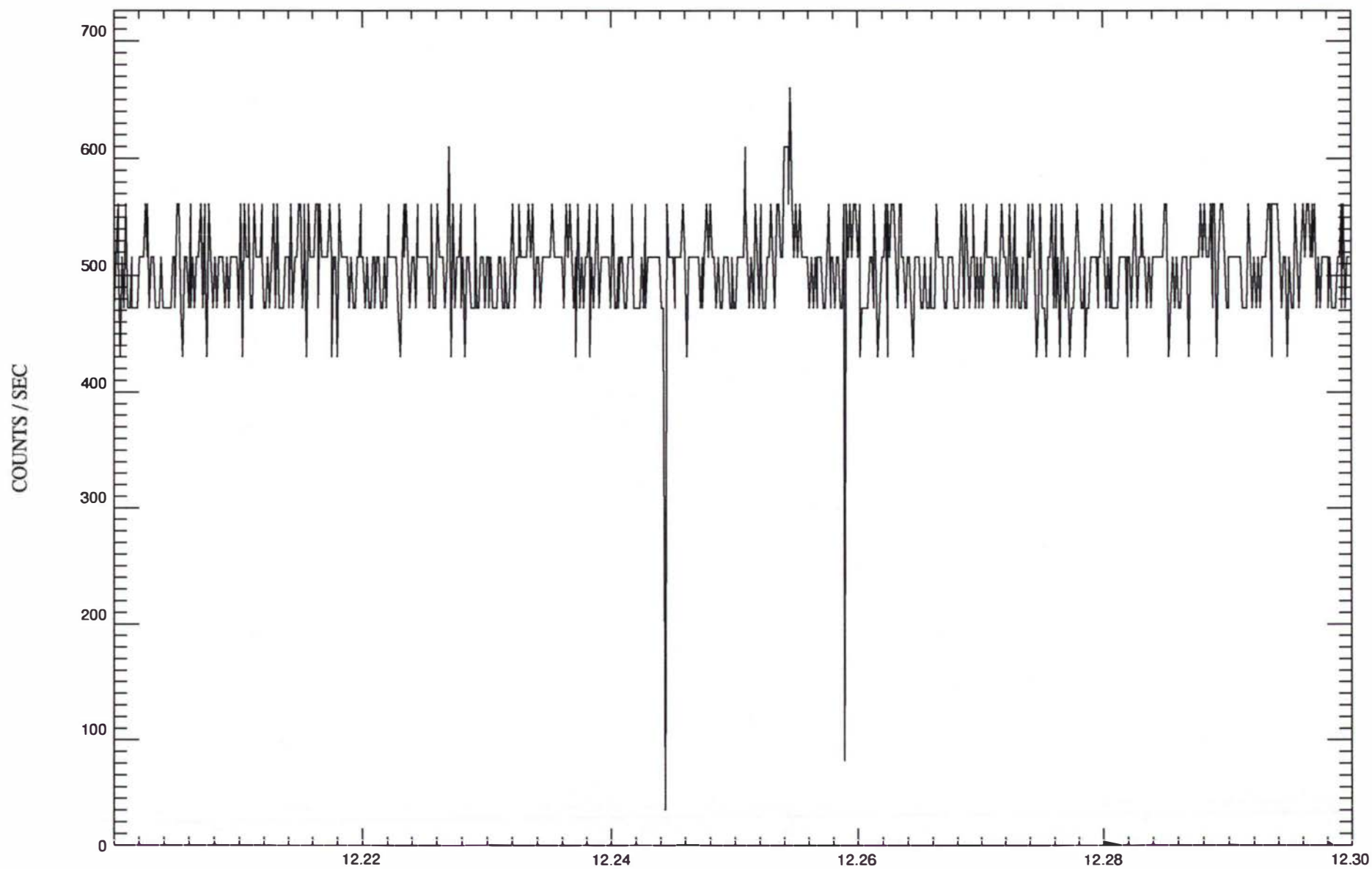


TIME, SECS

B# 1

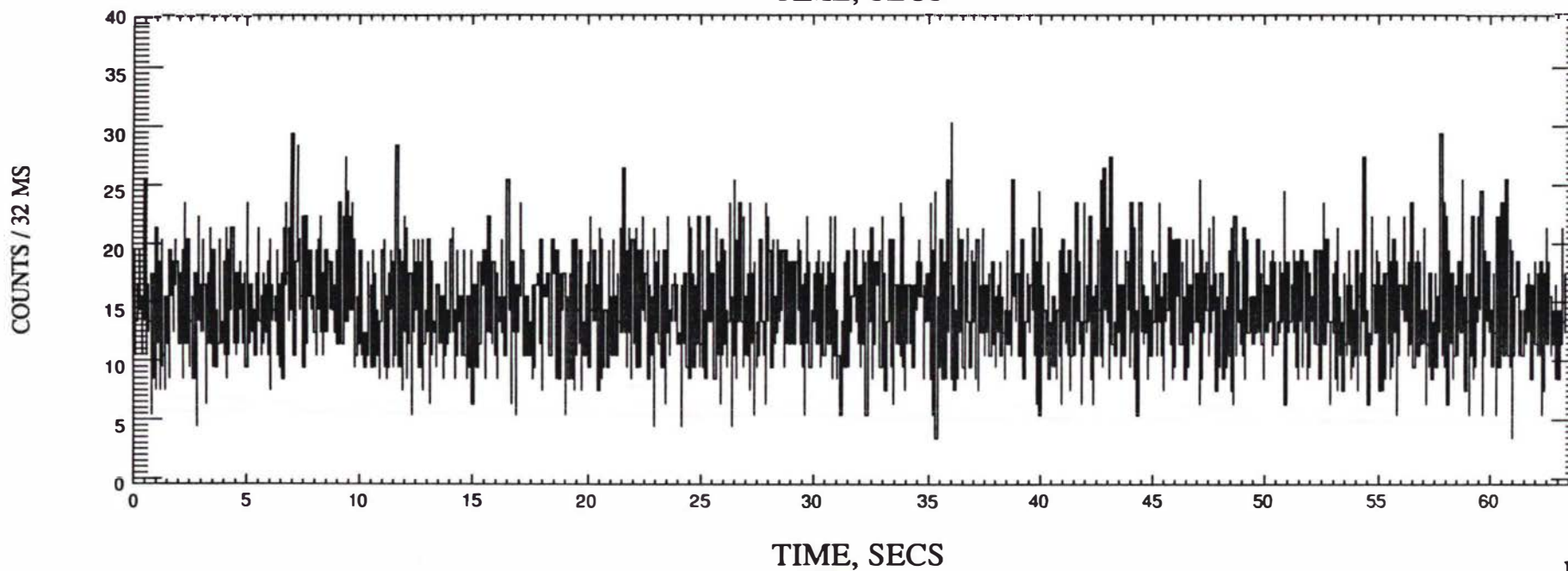
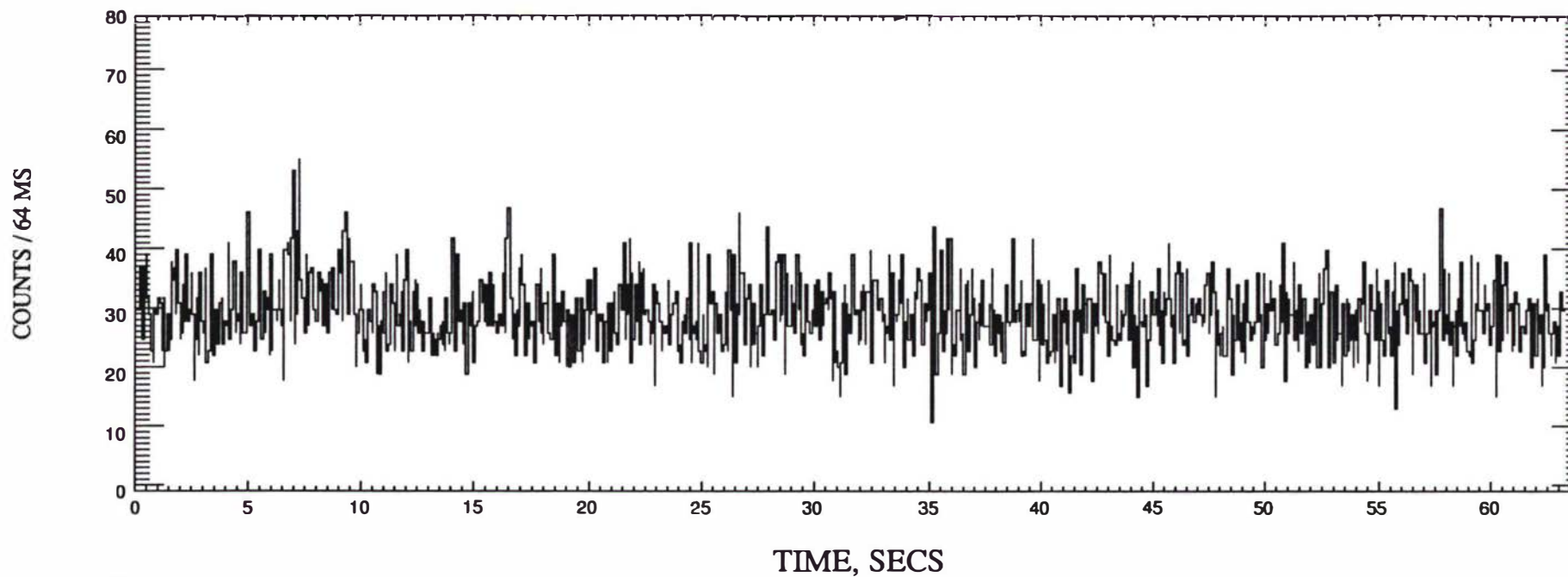
HUS 2A, MODE 1, NOT AVERAGED QEDR day 25, year 1996 to day 25, year 1996
CALIBRATION DATA INCLUDED

1/29/96



HUS 2A TRIGGERED DATA EDR day 25, year 1996
Burst Counter 6 at UT=19.055180346171 h=68598.649 s 19:03:18.649

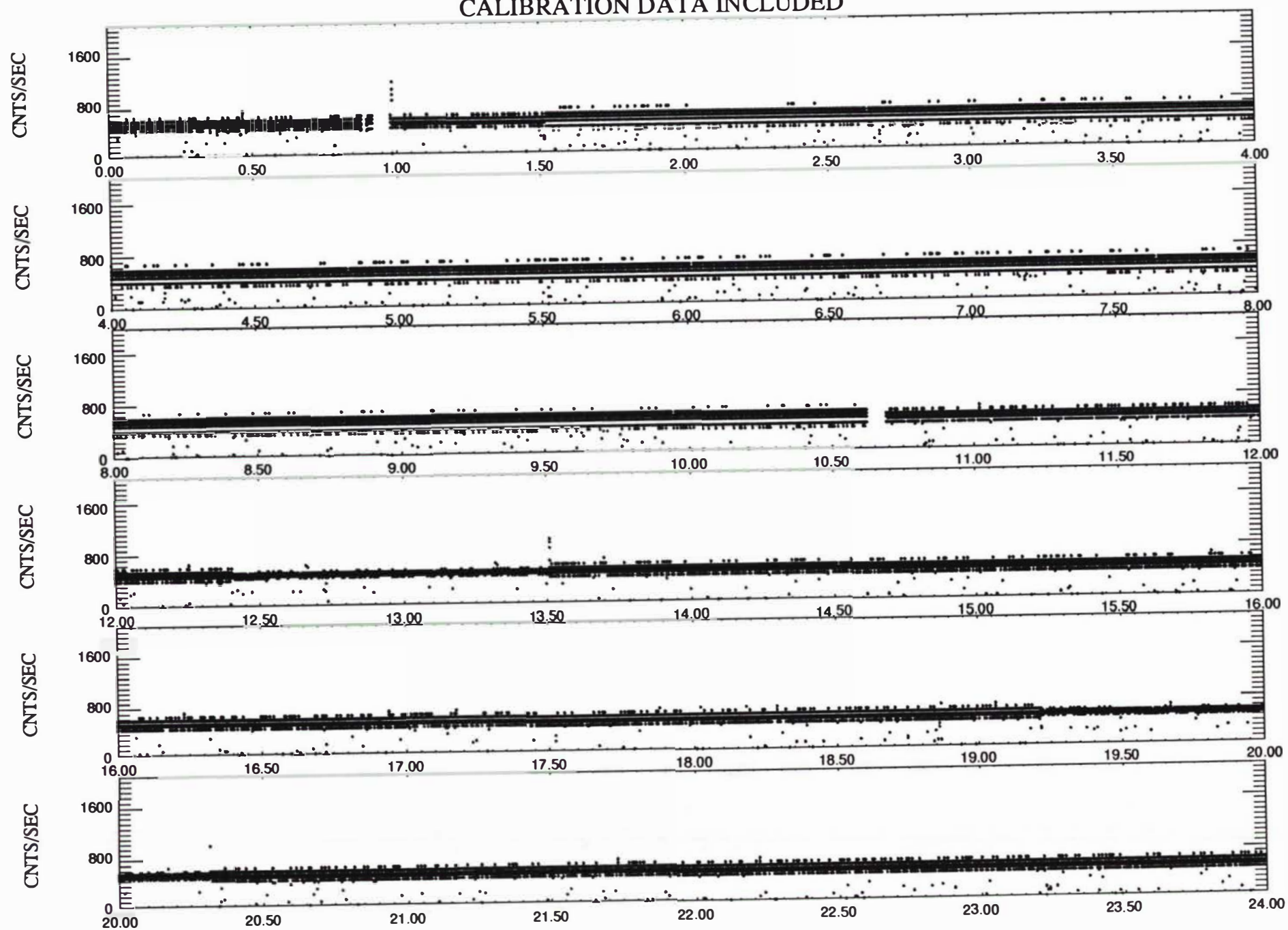
4/1/96



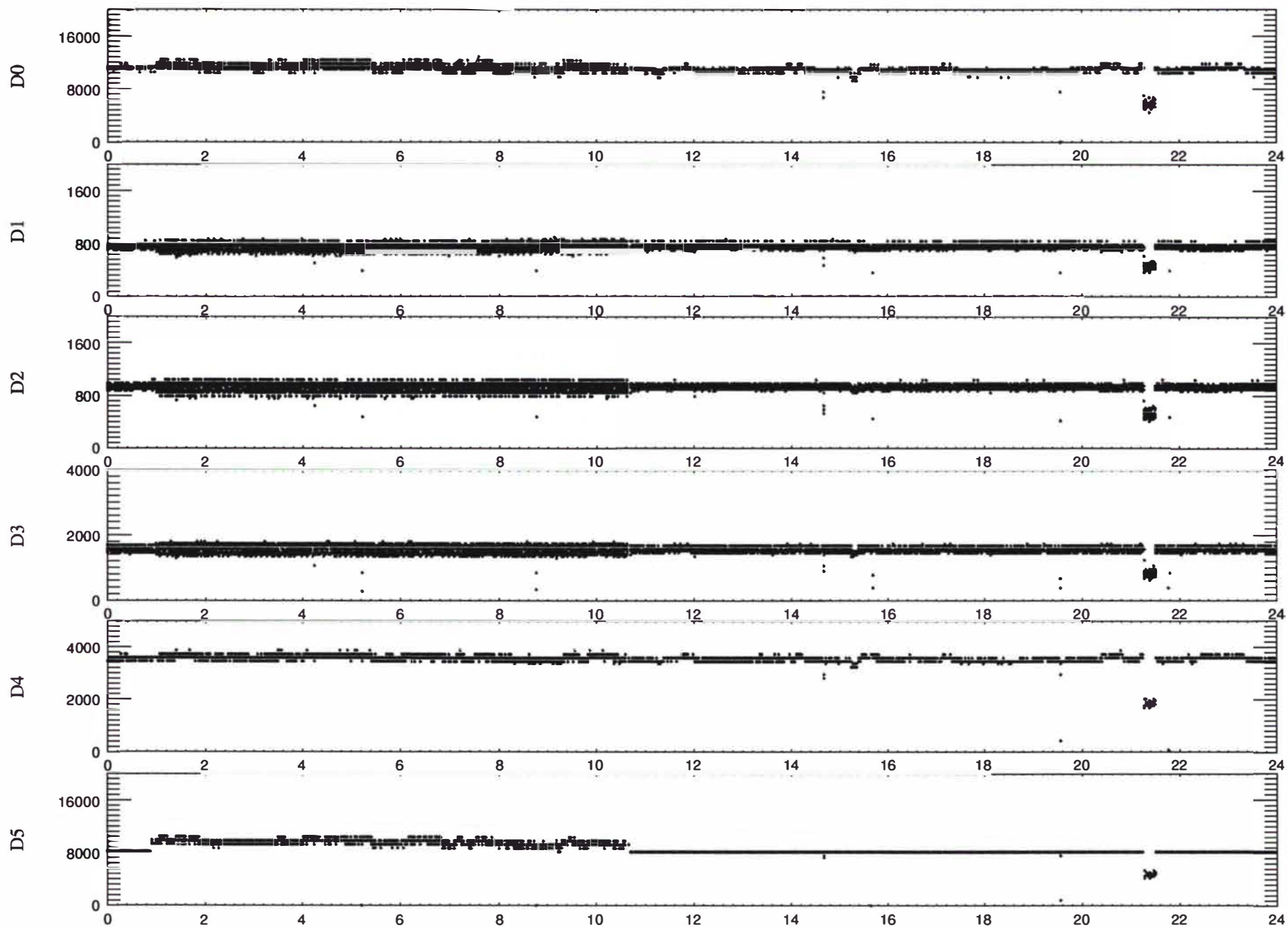
B# 2

HUS 2A, MODE 1, NOT AVERAGED EDR day 25, year 1996 to day 25, year 1996
CALIBRATION DATA INCLUDED

4/1/96

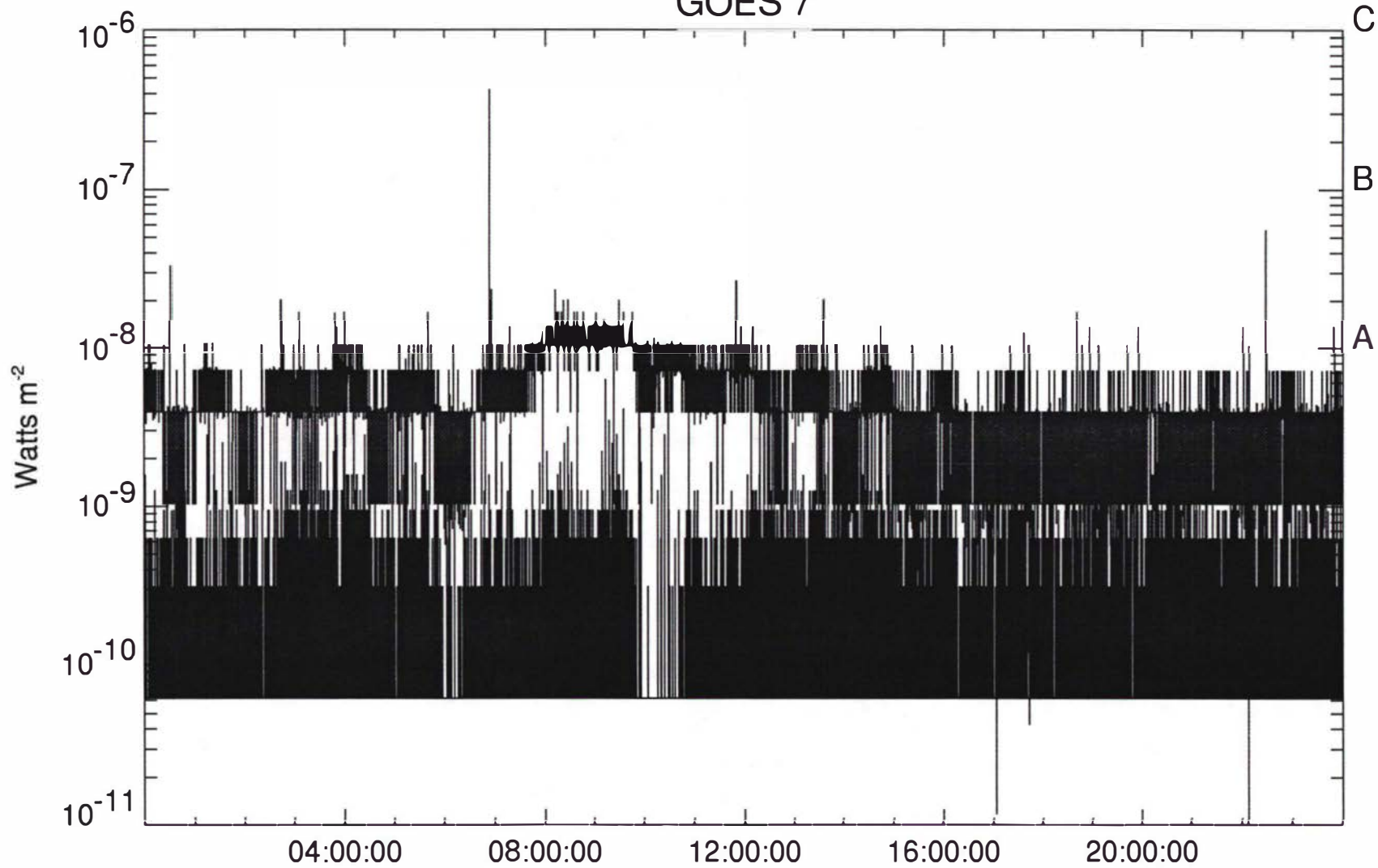


UNIV SAL TIME



UNIVERSAL TIME

GOES 7



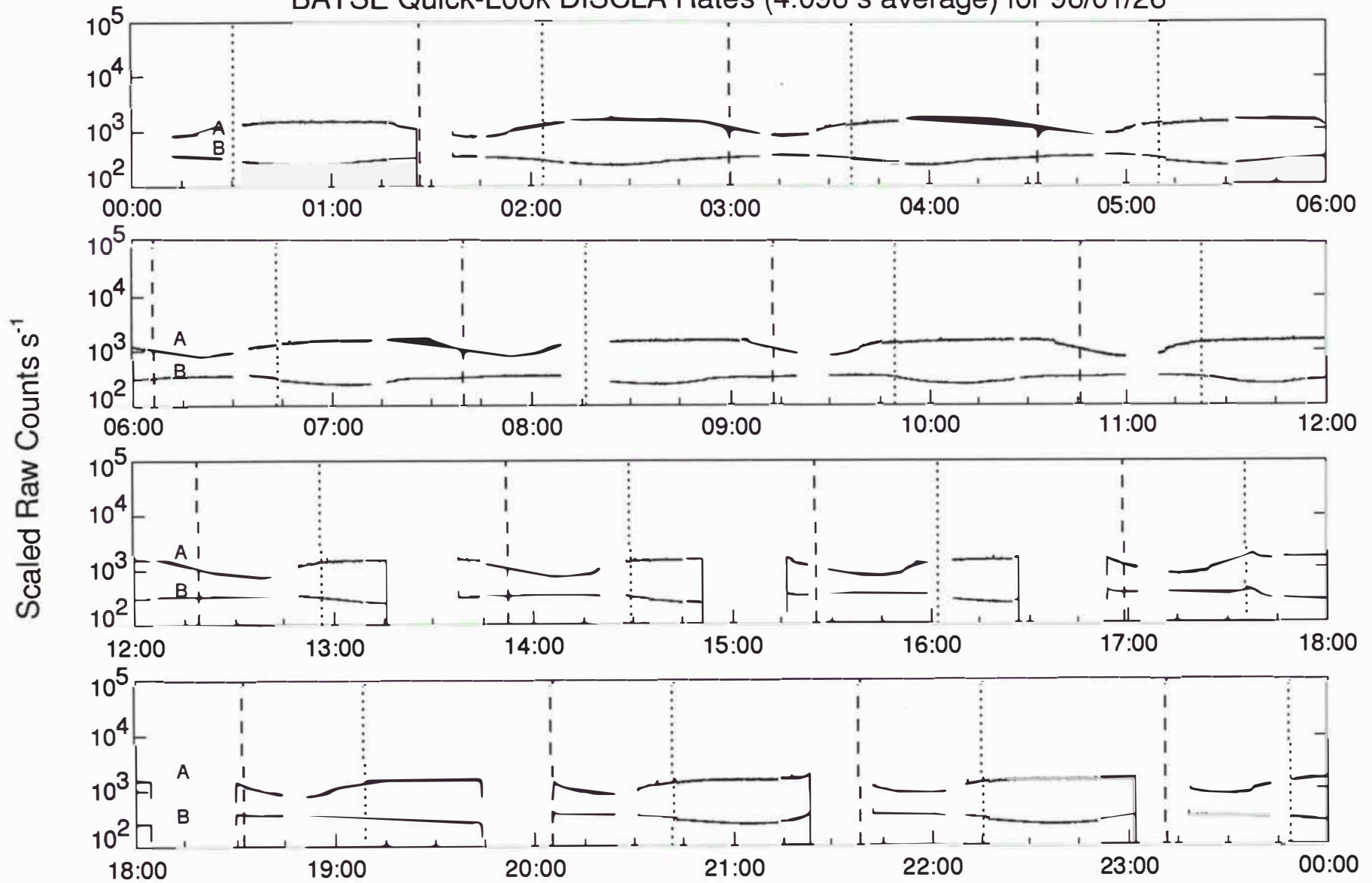
Data Start: 96/01/26, 0000:01

Plot created: 96/01/28, 0654

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 96/01/26

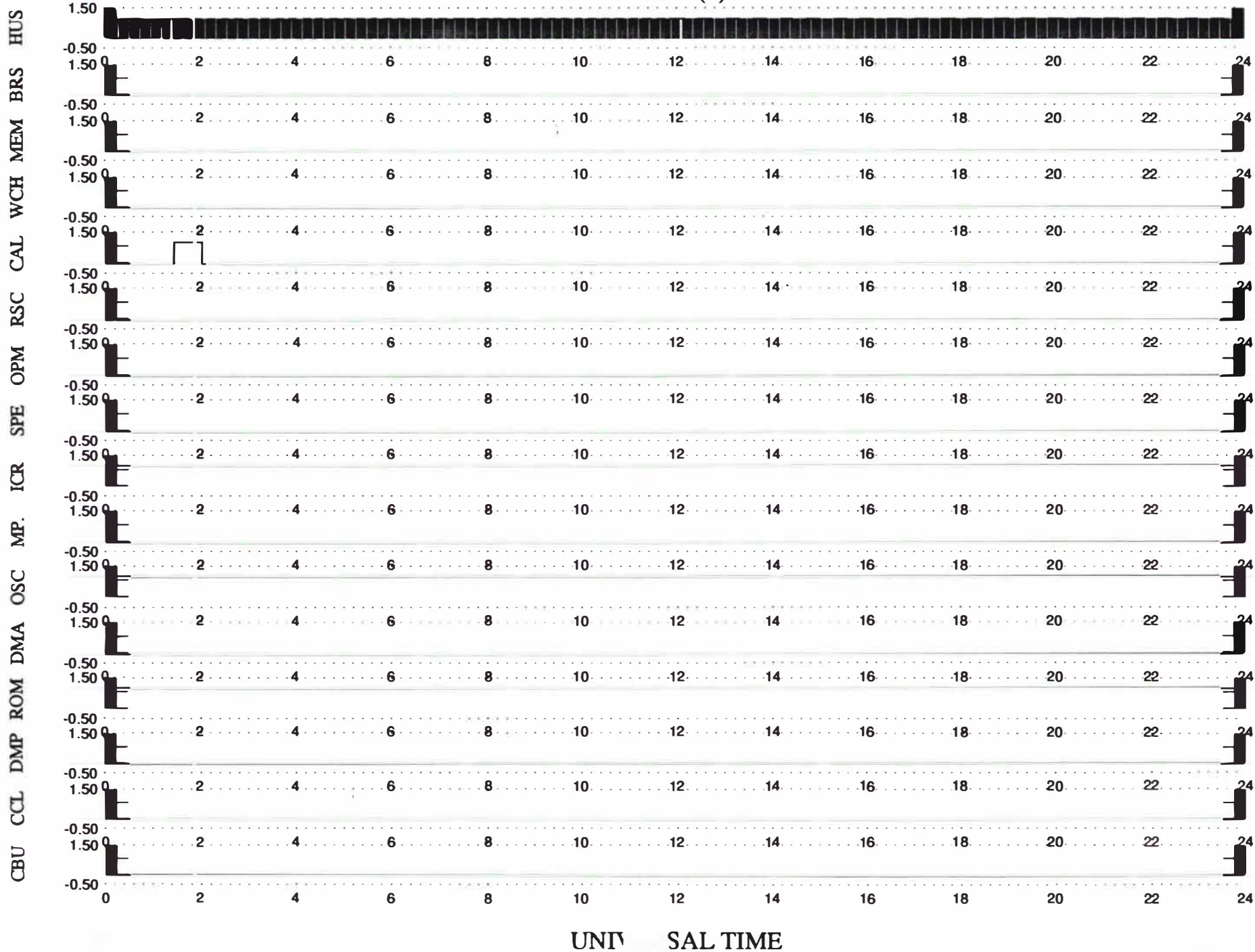


Current Time: 96/01/28, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

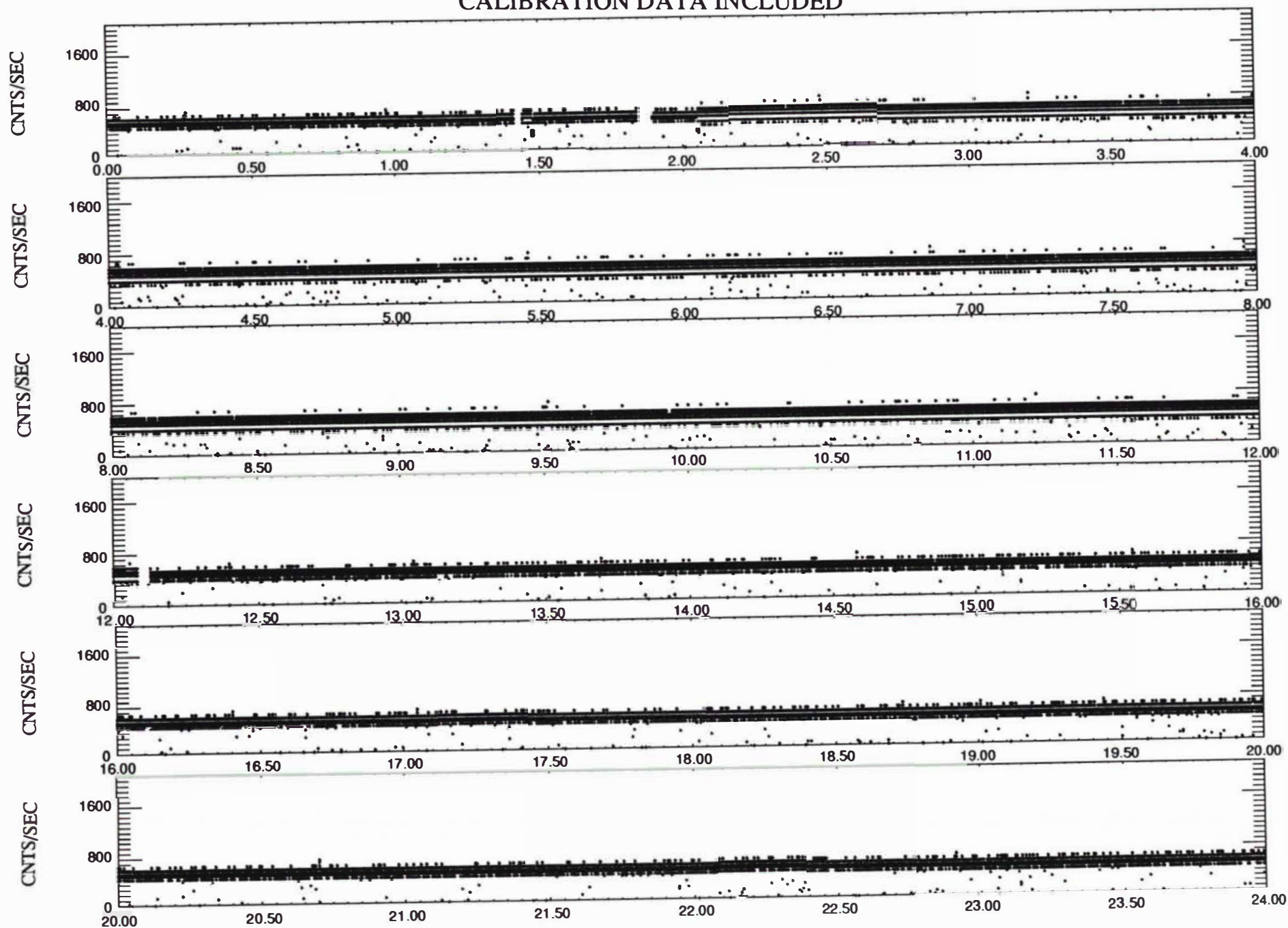
* Solar Burst Trigger
 + Solar Flare

4/1/96

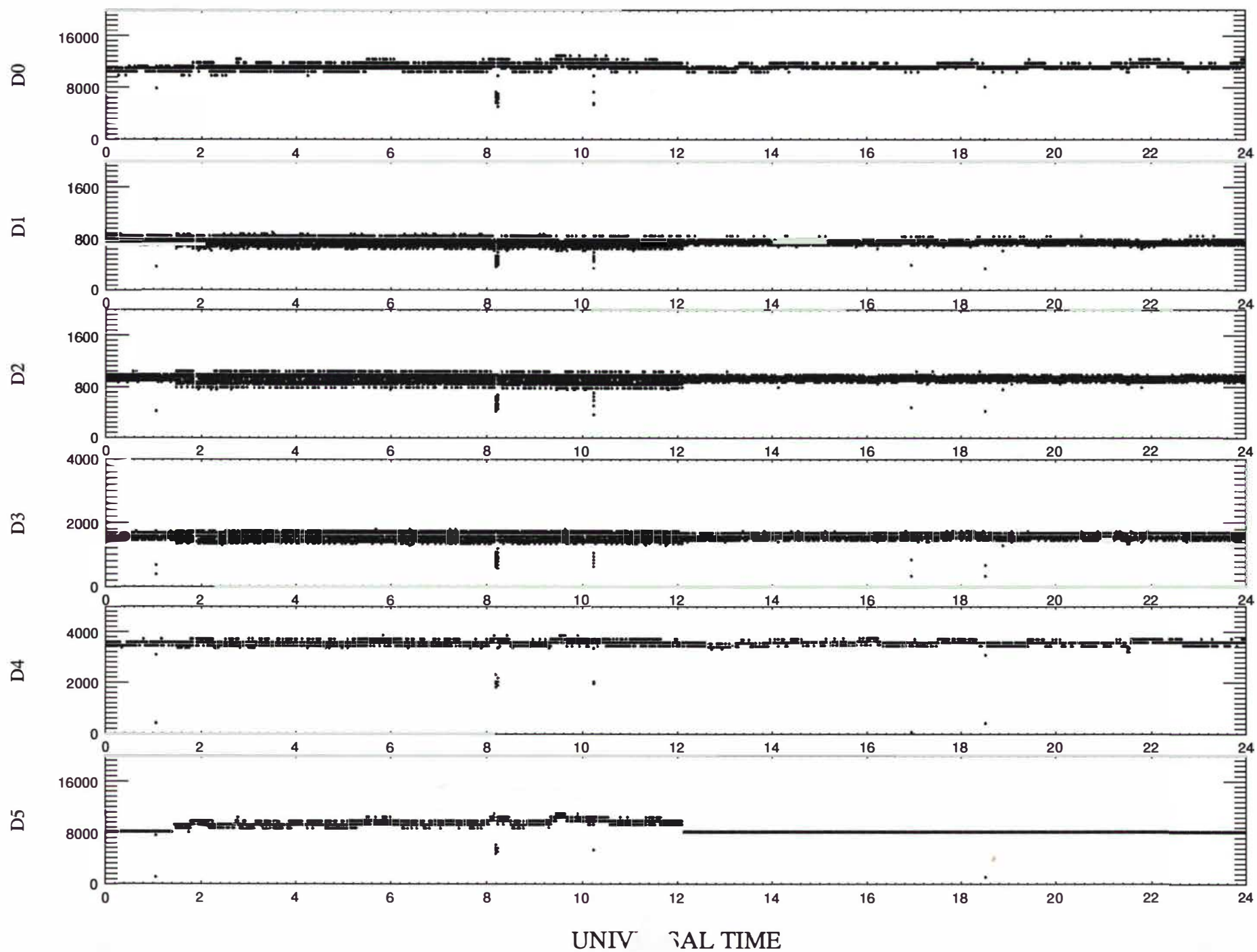


HUS 2A, MODE 1, NOT AVERAGED EDR day 26, year 1996 to day 26, year 1996
CALIBRATION DATA INCLUDED

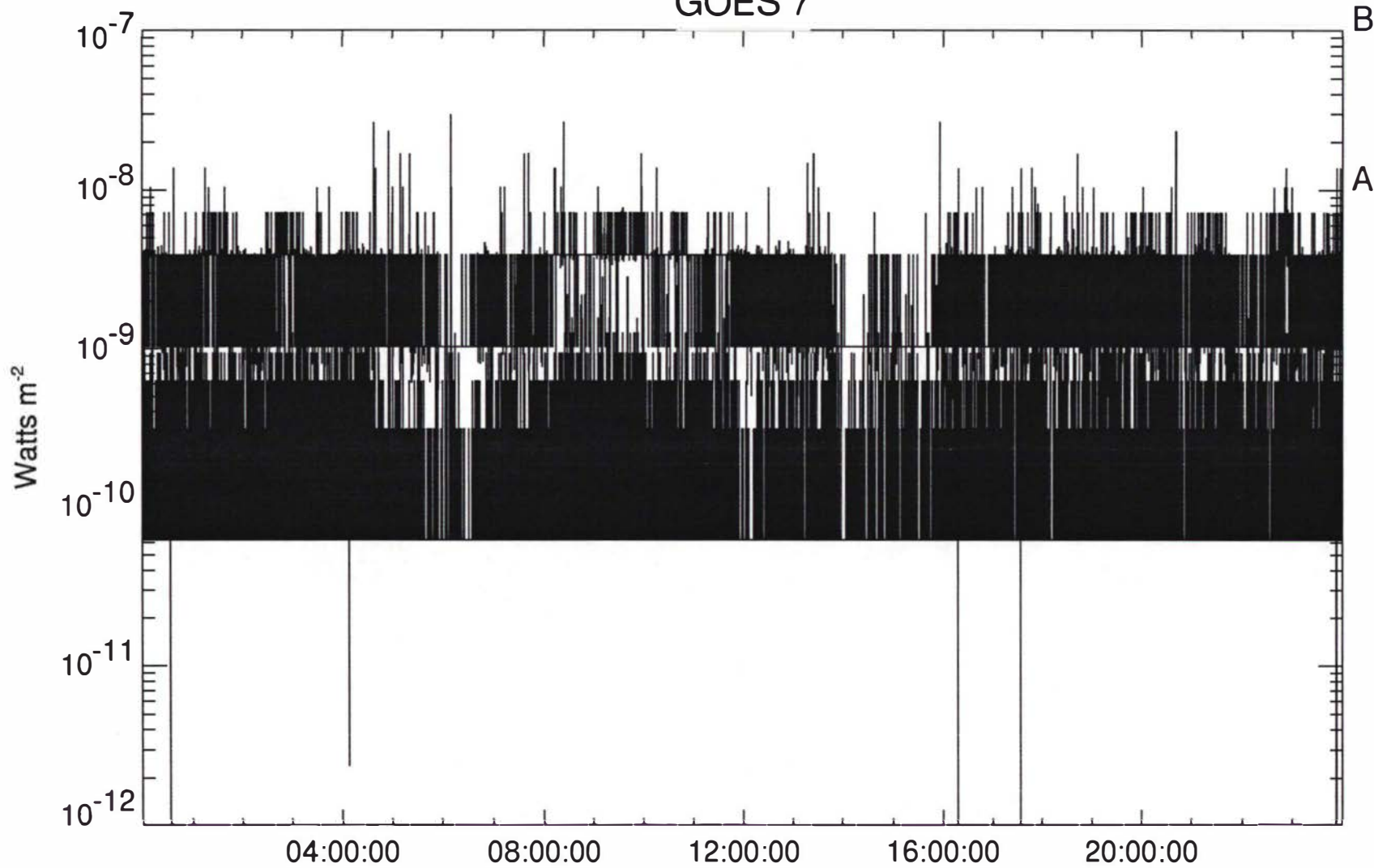
4/1/96



UNIVERSAL TIME



GOES 7



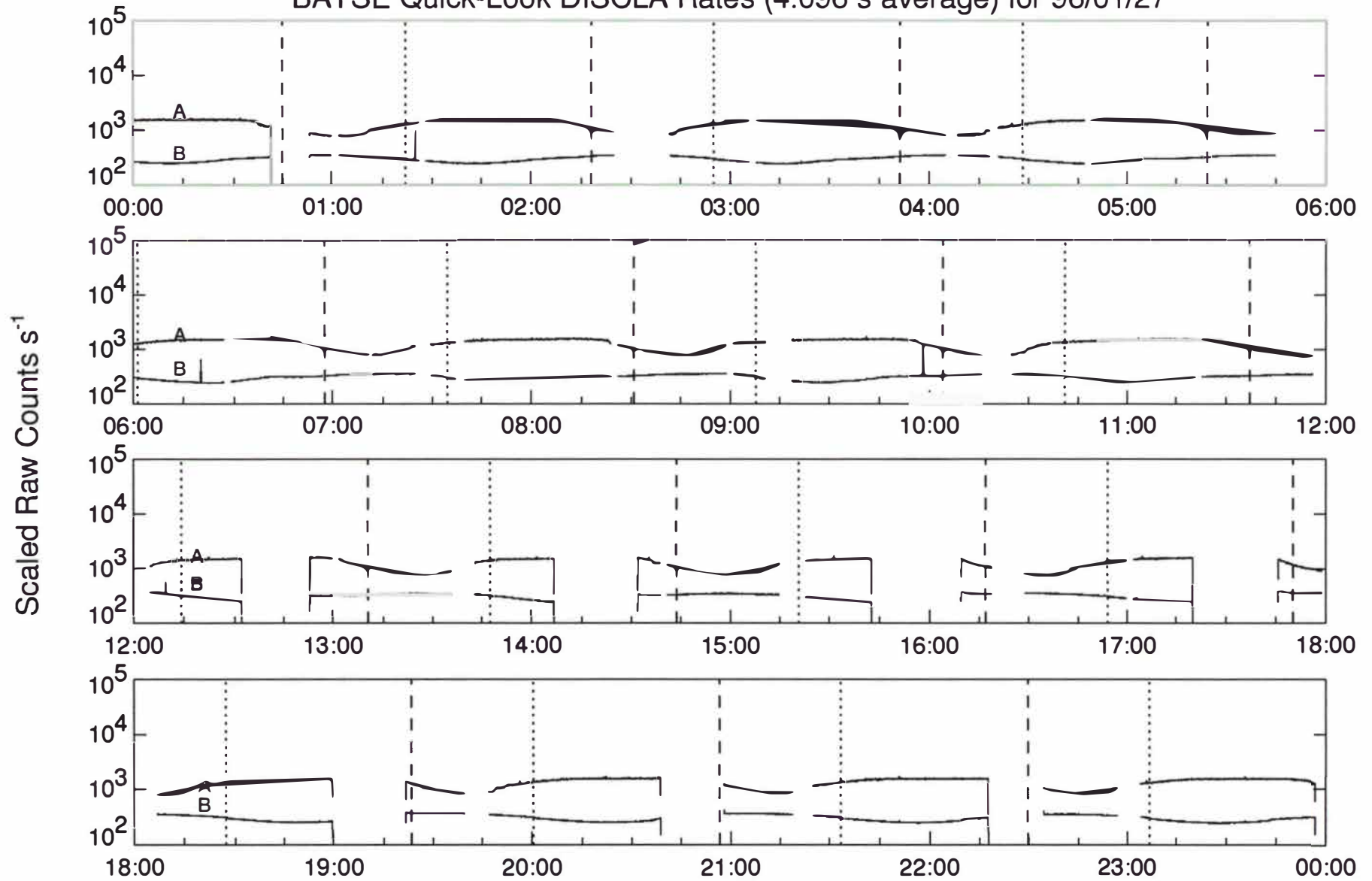
Data Start: 96/01/27, 0000:02

Plot created: 96/01/29, 0654

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 96/01/27



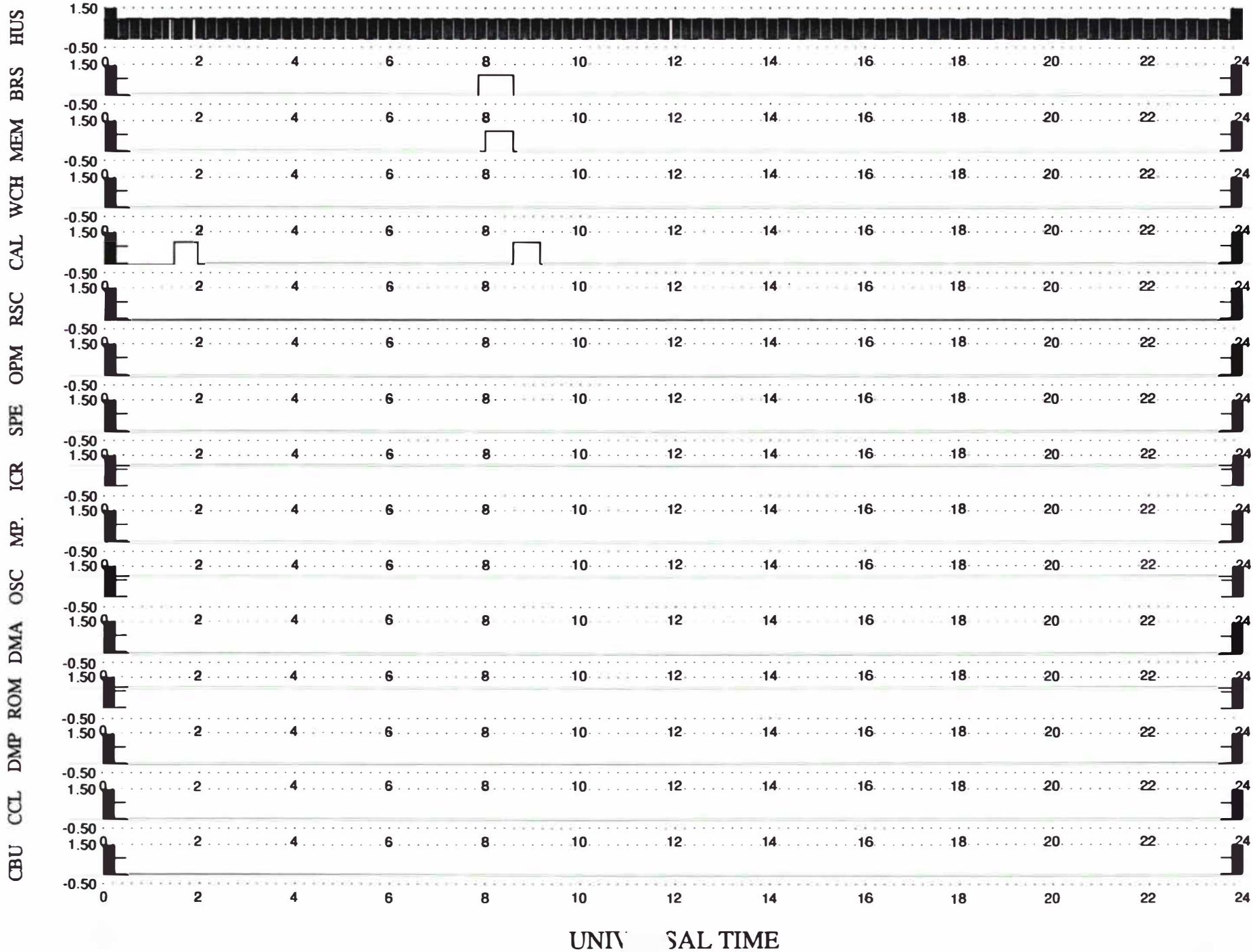
Current Time: 96/01/29, 0655 EDT
A: Channel 0 Most Sunward LAD
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

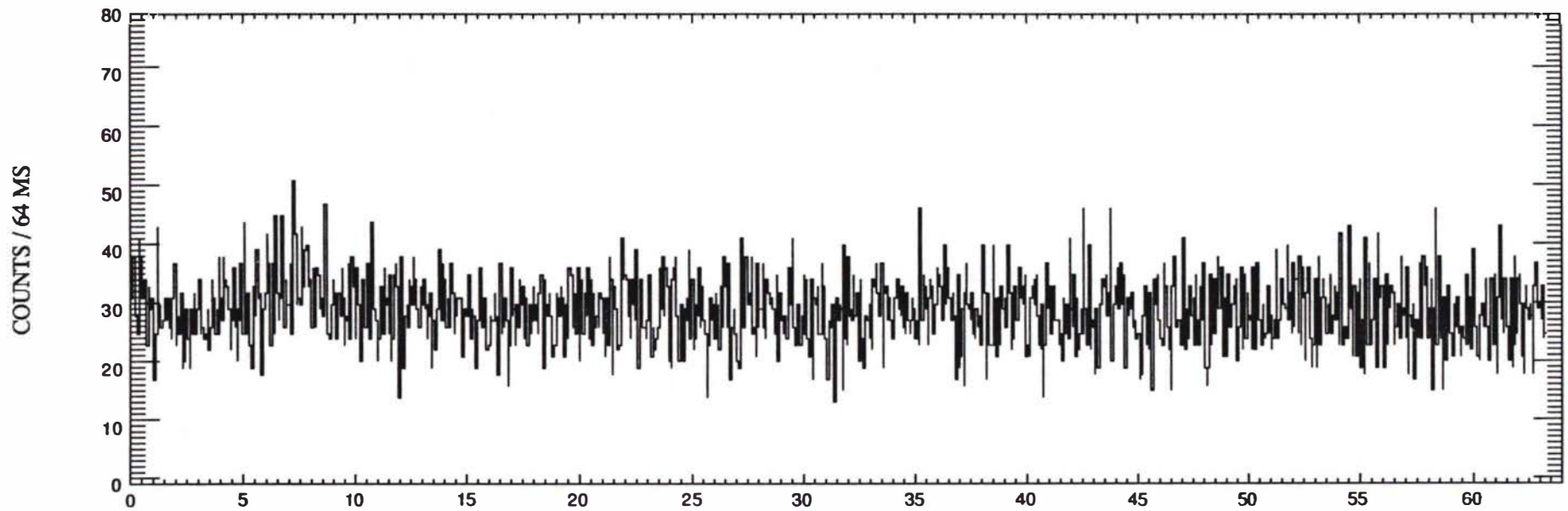
HUS MODES EDR day 27, year 1996 to day 27, year 1996
BURST NUMBER 7

4/1/96

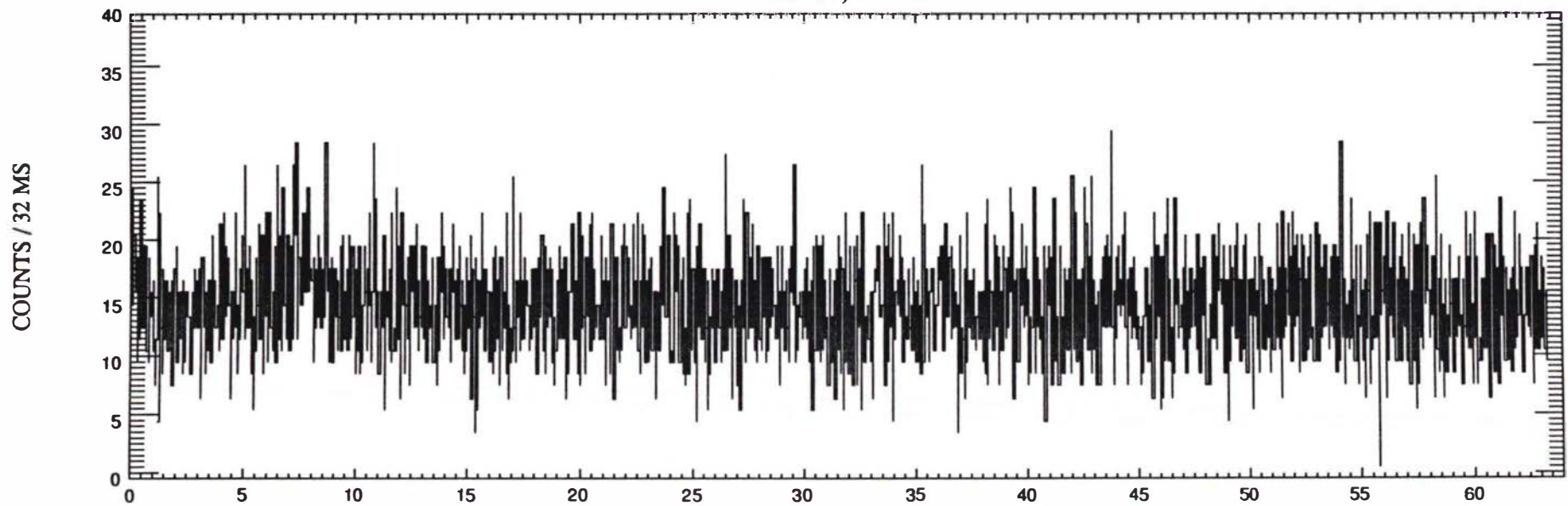


HUS 2A TRIGGERED DATA EDR day 27, year 1996
Burst Counter 7 at UT= 7.826641688877 h=28175.910 s 07:49:35.910

4/1/96



TIME, SECS

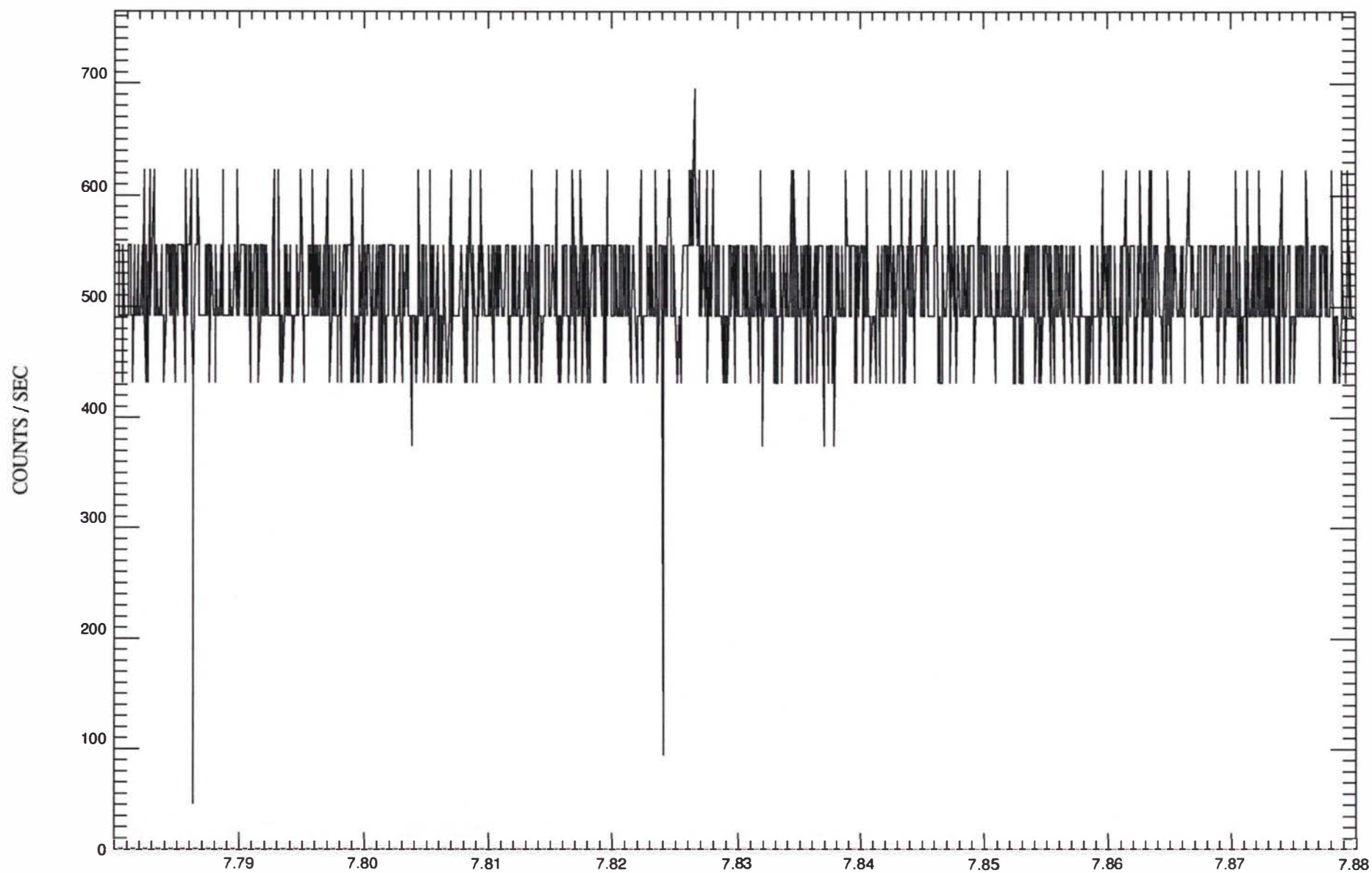


TIME, SECS

B# 1

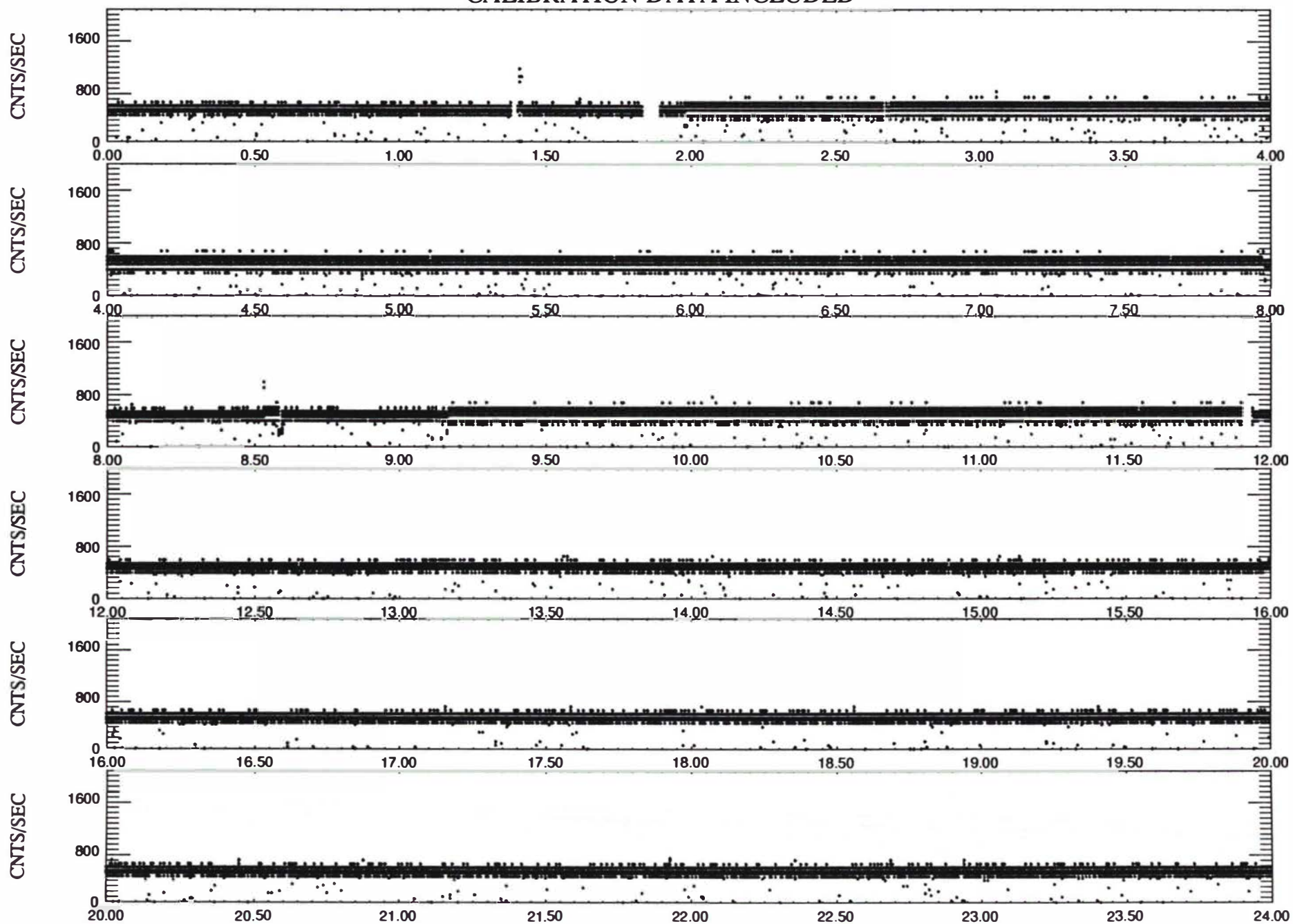
HUS 2A, MODE 1, NOT AVERAGED QEDR day 27, year 1996 to day 27, year 1996
CALIBRATION DATA INCLUDED

1/29/96

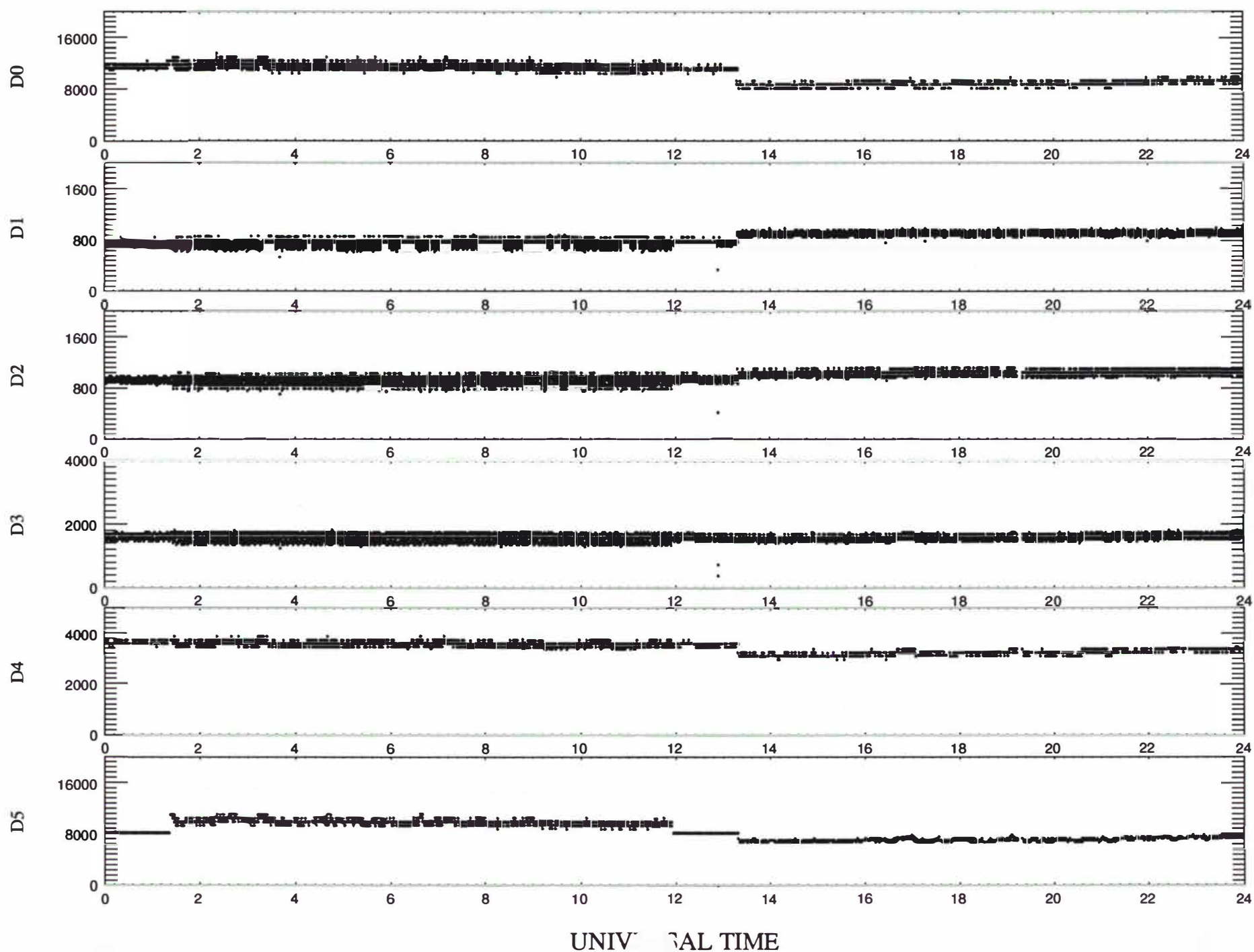


HUS 2A, MODE 1, NOT AVERAGED EDR day 27, year 1996 to day 27, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV SAL TIME



1996:

~001.02:45 SCET	should be	~364.23:12 SCET
~002.14:35 SCET	should be	~001.04:22 SCET
~029.19:35 SCET	should be	~028.13:43 SCET
~033.19:10 SCET	should be	~032.13:18 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~048.17:29 SCET	should be	~047.13:45 SCET
~054.08:59 SCET	should be	~053.11:46 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~039.18:34 SCET	should be	~038.12:14 SCET

We see data gaps for each of the correct times, so it looks like your theory of AMMOS mis-correcting times when there is carry-over data on the tape is correct.

I hope this is enough information. I would have to do a bit more calculation to get the approximate ERTs. Let me know if you want them.

Best regards,

Nigel

From ulsdmt@jplsp.DNET.NASA.GOV Mon Mar 18 17:13 PST 1996
From: ulsdmt@jplsp.DNET.NASA.GOV
Date: Mon, 18 Mar 96 20:13:12 -0500
To: "khurley@sunspot.ssl.berkeley.edu"@east.DNET.NASA.GOV (SENT TO @LIST1)
Subject: Misplaced Major Frames in EDRs

Greetings,

We have identified an operations technique that produces data that will be improperly time tagged by the MGDS (telemetry system). Instances of EDR errors (major frames out of order) have been found in the CDROM archival products for December 1995 and January 1996. Errors will also be found in the still to be shipped February 1996 data.

When major frames are recorded but not transmitted during the next track, but are eventually downlinked with data from a succeeding day, the embedded SCLKs are 'assumed' to be incorrect by the frame syncer and are re-tagged with SCETs and SCLKs matching the adjacent (but newer) data.

For each major frame processed in this manner, a gap will exist, representing the time the data was actually acquired, and a major frame or realtime data, representing the time period the data now errently represents, will be replaced by the misplaced playback data.

Yes. Confusing. See the attached memo detailing the times involved.

Approximately 17 such instances are known to have occured. The total time involved is about twenty minutes. Because the data loss is small and the cost of reprocessing would be so large, the Project has determined that it would be imprudent to reprocess.

For your information, however, we included a memo from Nigel Angold which itemizes each instance.

We thank Toni Galvin and Nigel for identifying the problem and assisting in the diagnosis.

Regards,

Joe

To: <ulsdmt@jplsp.jpl.nasa.gov>
From: Nigel Angold <nangold@jplsp2.jpl.nasa.gov>
Subject: Mis-corrected S/C clocks / SCETs
Cc: chris.leech@jpl.nasa.gov

I have looked at our recent tape recorder usage and predict that you will see major frames with mis-corrected spacecraft clocks / SCETs at the following times (give or take a few minutes):

1995:

~342.22:59 SCET	should be	~341.17:47 SCET
~347.22:39 SCET	should be	~346.16:46 SCET
~350.21:54 SCET	should be	~349.16:22 SCET
~355.22:14 SCET	should be	~354.15:42 SCET
~359.14:04 SCET	should be	~359.05:36 SCET
~360.14:59 SCET	should be	~359.00:20 SCET
~362.20:55 SCET	should be	~361.16:06 SCET

960119	09	37	59.317	S2	480	780	190	0.13	11	12	236
960119	12	33	46.016	S2	210	460	190	0.2	6	85	237
960120	10	12	48.974	S2	740	540	210	<0.05	7	19	238
960120	13	30	22	S2	40	70		0.8	20		BGR
960123	12	07	21	S1	90	70		1.7	15		BGR
960124	00	56	28.008	S2	930	2130	710	0.13	11	8	239
960128	14	36	46	S2	270	190	25	0.15	6		BGR
960129	07	35	34	S1	90	70	>10		30		BGR
960129	15	24	19	S1	40	90	30	2	9		BGR
960130	02	25	56.848	S1	100	470	340	3	0.5	0.2	240

RI

Observations: 11/11/94 - 01/30/96 - 435 days

Gamma-ray bursts - 307

burst mode - 153

background mode (BGR)- 154

Solar flares - 78

burst mode - 15

background mode - 63

False events (multi-charged particles,
trapped radiation, solar
cosmic rays) - 85

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

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996

Date: Fri, 2 Feb 1996 05:41:51 -0800

Mime-Version: 1.0

To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

*
Here is Sergei Golenetskii's latest Konus burst list, for your
information. Note that, including the non-triggered-mode 'BGR'
events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number	
			Max counts per sec		in G2		T<T0 T>T0			
			G1	G2	G3					
941113	12 09 15	S1	145	85		2.5	115		BGR ✓	
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓	
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓	
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓	
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓	
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 ✓	
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓	
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓	
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓	
941126	16 54 20	S1	55	75		>10	26		BGR ✓	
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9 ✓	
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓	
941127	15 39 10	S1	210	57		2.7	260		BGR ✓	
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓	
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓	
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓	
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓	
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓	
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol	
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓	
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓	
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓	
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28 ✓	
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓	
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓	
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓	
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓	
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓	
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓	
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓	
950110	06 02 15	S2	332	180		<0.1	3600		BGR ✓	
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 ✓	
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓	
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		BGR ✓	
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓	
950114	01 00 38	S1	46	110		1.6	6		BGR ✓	
950114	04 03 01	S2	23	76		0.5	70		BGR ✓	
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 ✓	
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓	
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓	
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓	
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39 ✓	

Date: Sep 14 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

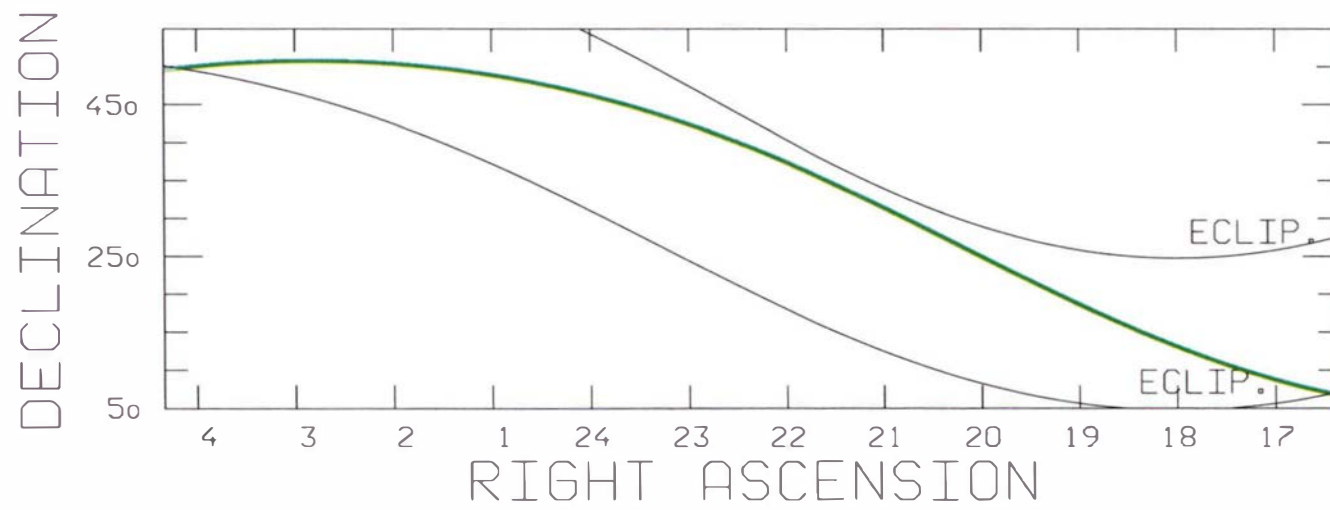
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

2. BATSE Data

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

3. PVO Data

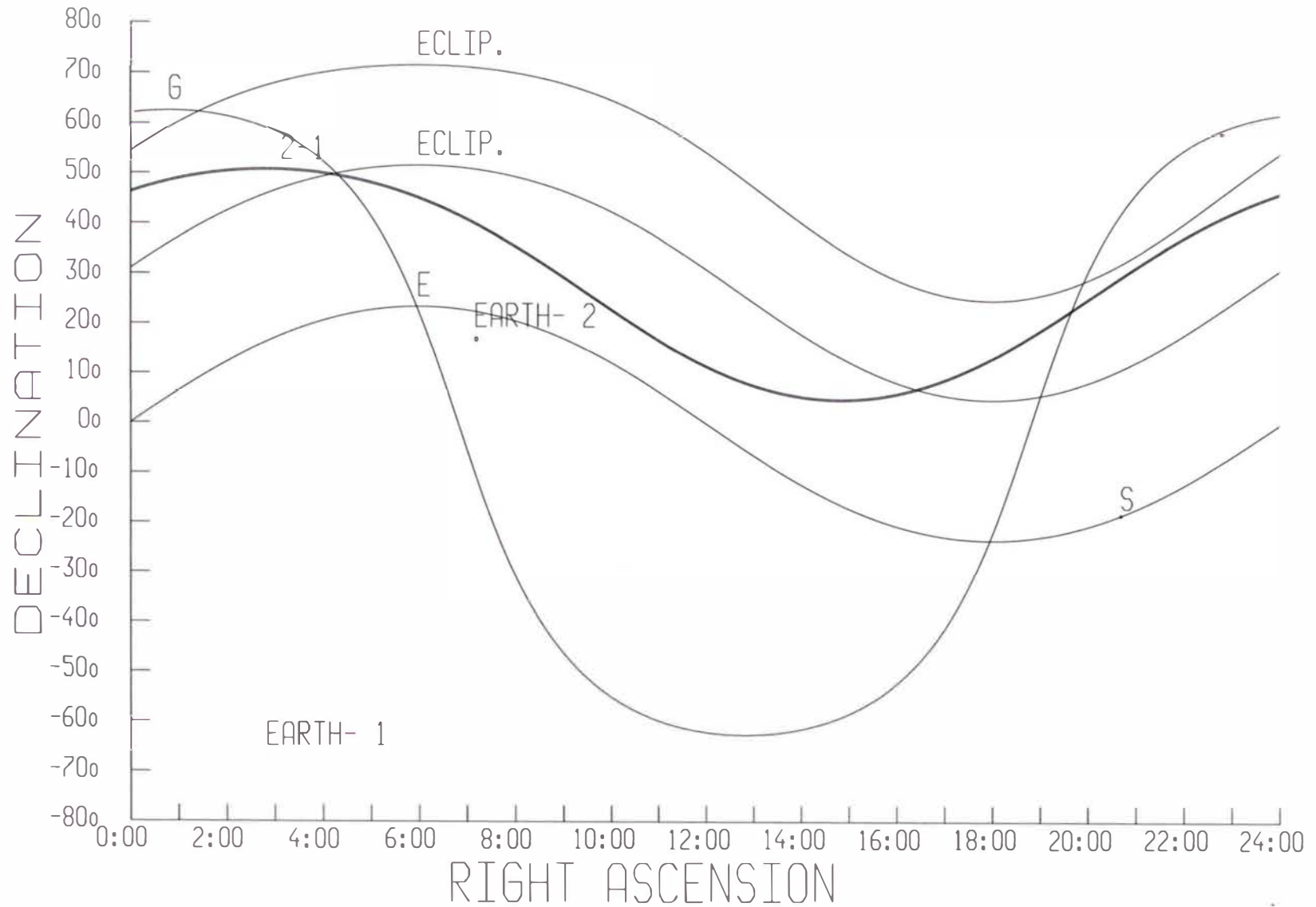
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

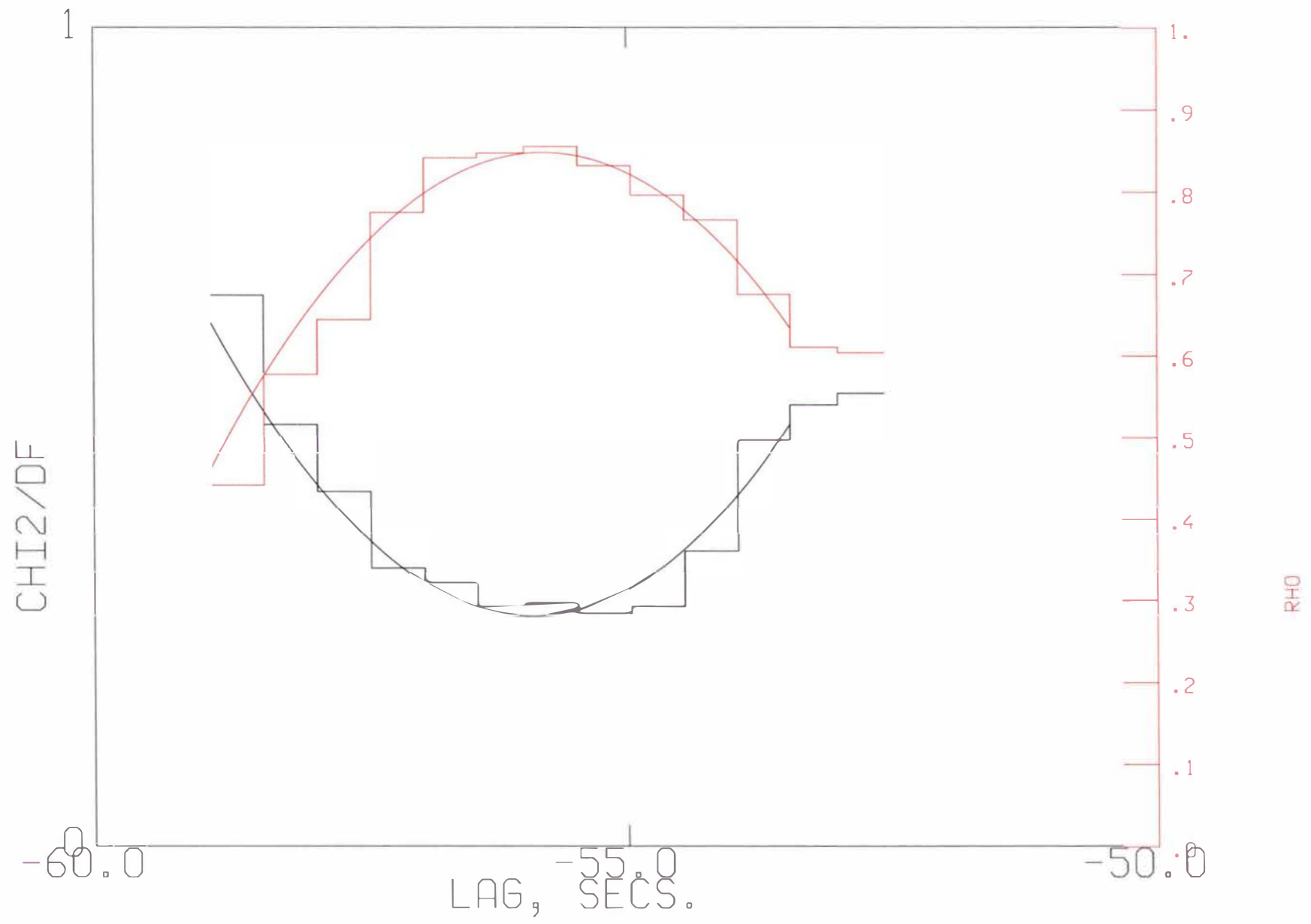


EVENT OF JAN 28, 1996 14:25

14/09/2011

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





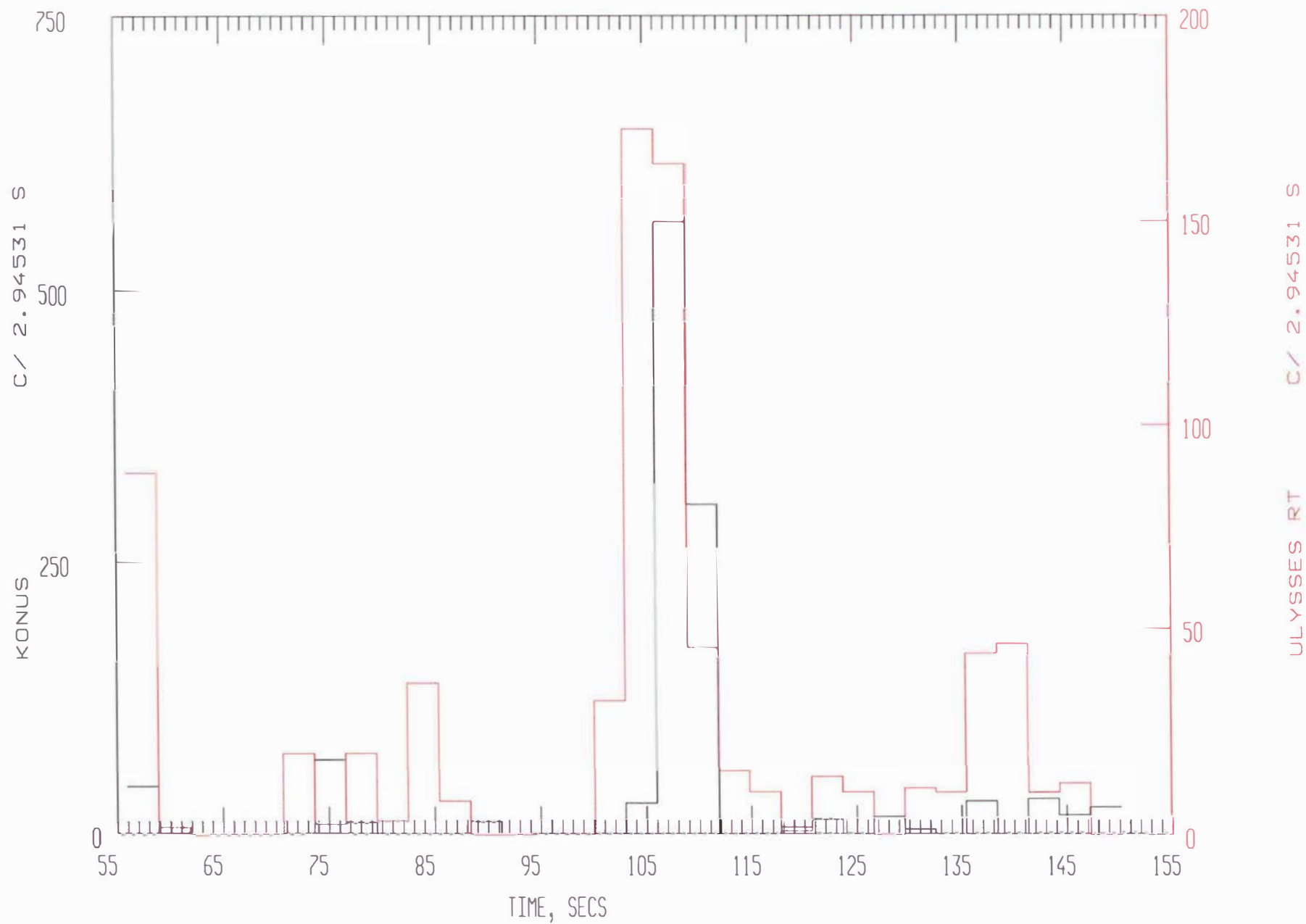
KONUS

-ULYSSES RT CORRELATION

28/01/96

52499.211

14/ 9/11



KONUS

28/01/96

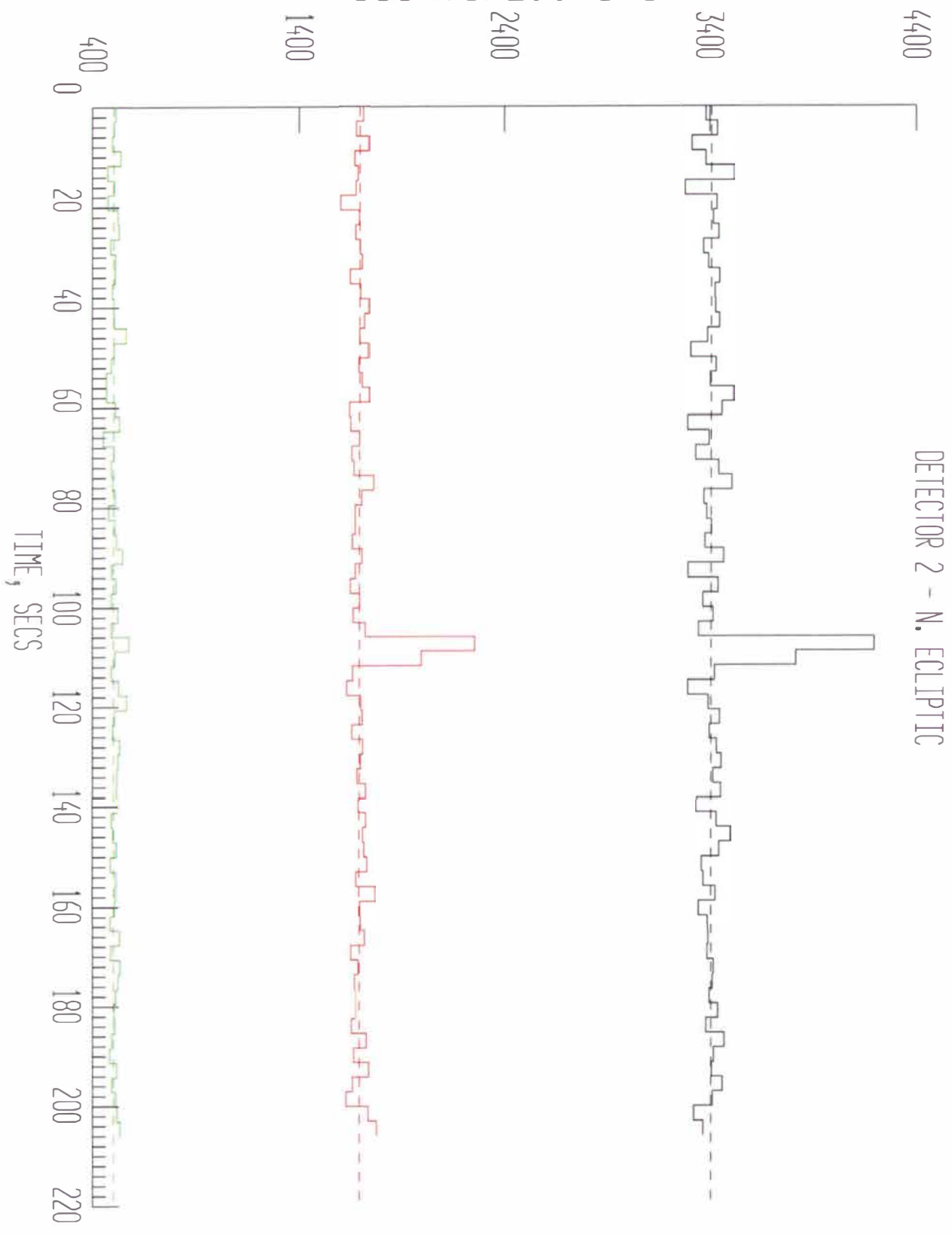
52499.211

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.945 S



14/09/2011

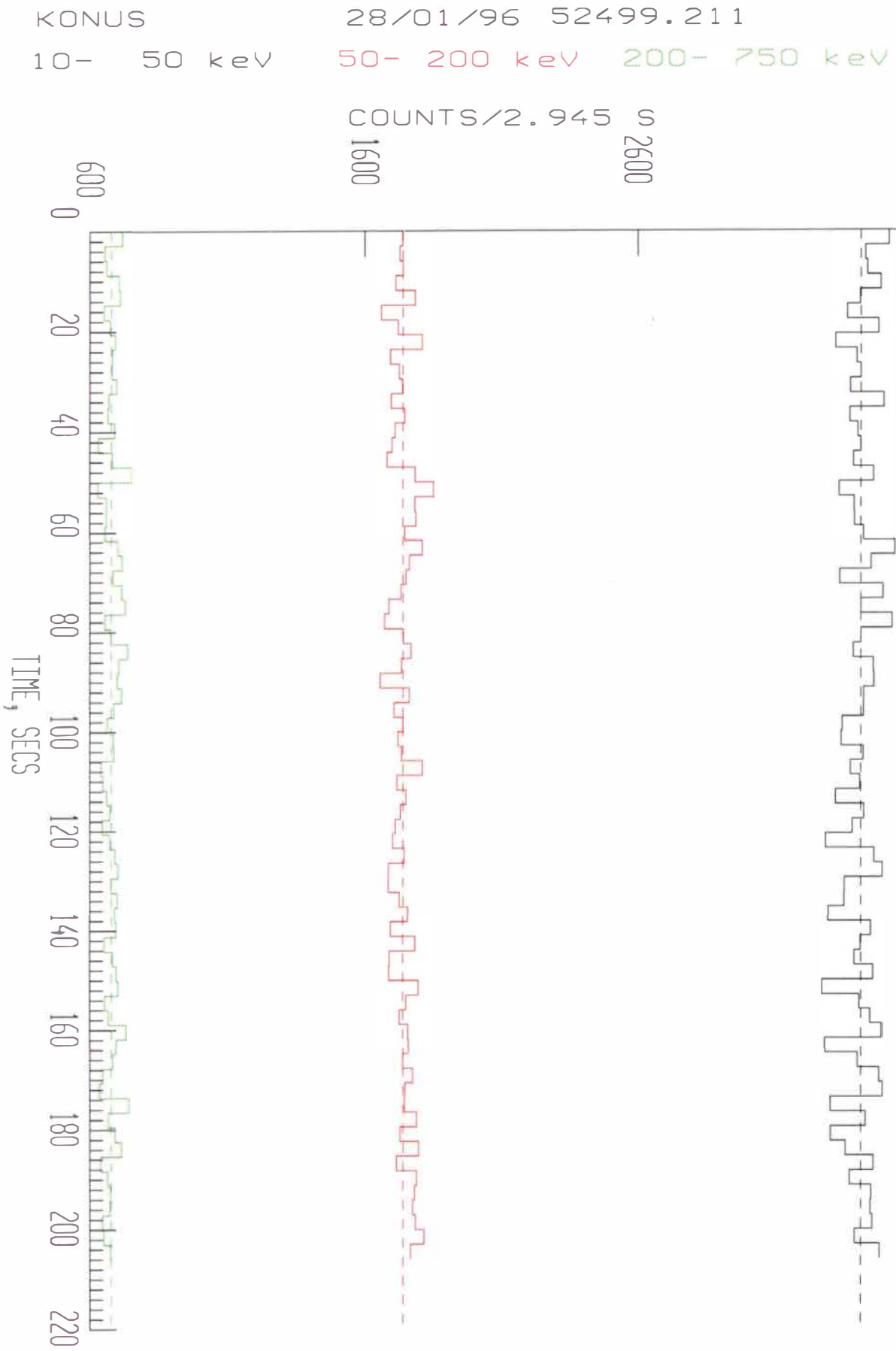
3600

DETECTOR 1 - S. ECLIPSE

2600

COUNTS/2.945 S

1600



KONUS 19960128 51992

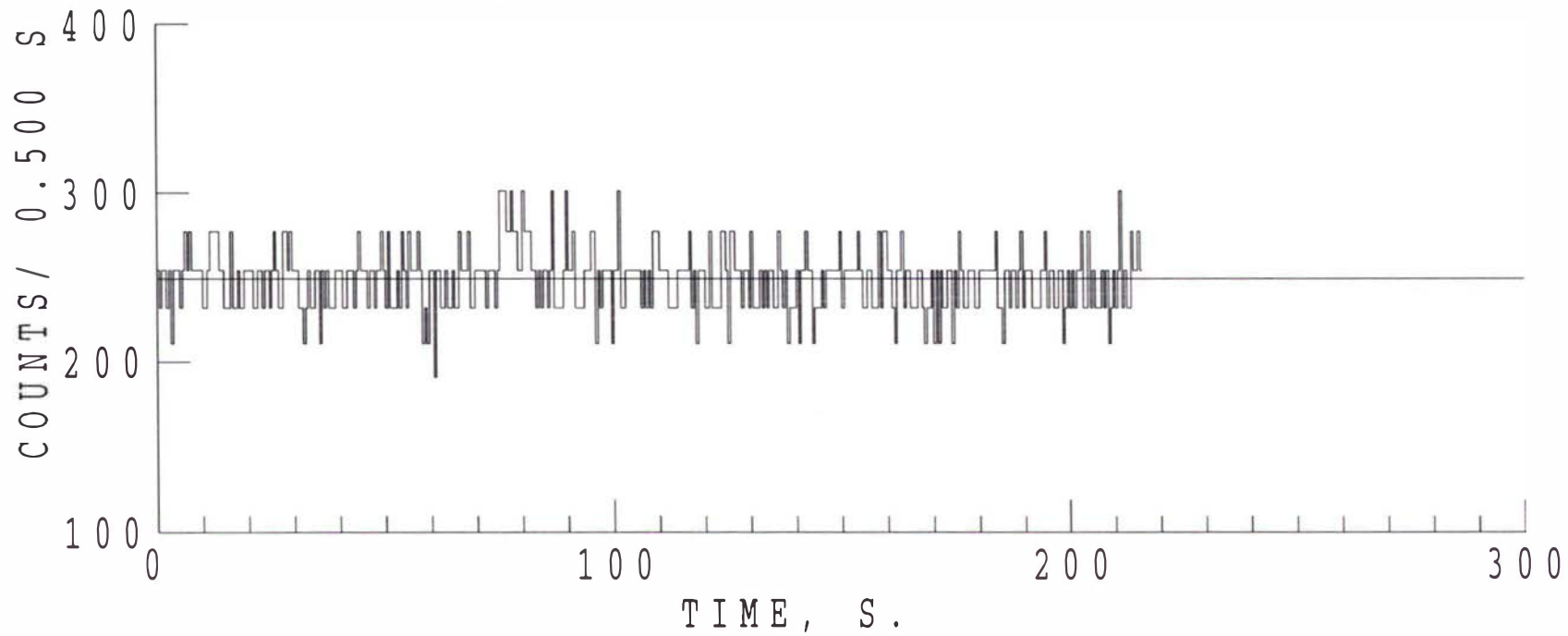
ULYSSES RT

12 / 09 / 11

28/01/96 51876.145 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From DEAL@fender.msfc.nasa.gov Mon Jan 29 10:20 PST 1996
From: DEAL@fender.msfc.nasa.gov
Date: Mon, 29 Jan 1996 12:20:24 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 4636

BATSEARCH PROGRAM

No

BATSE BURST # 4636
EVENT OF 1996 JAN 28 DAY OF YEAR= 28
EVENT CROSSING TIME AT BATSE : 62603. S. OR 17:23:23.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 172.000 59.000
BATSE PEAK COUNTING RATE: 4700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 28/ 1/ 96 IS:
RA= 222.188 DEC= 67.450 DIST= 2.810 AU
BATSE-ULYSSES DISTANCE = 420445365. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=156.65 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1287.58 SECS.
CROSSING TIME AT ULYSSES IS 61315. S. OR 17:01:55 +/- 126.96 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 28/ 1/ 96 IS:
RA= 318.181 DEC= -17.264 DIST= 2.353 AU
MARS-BATSE DISTANCE = 352047936. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 48.47 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 778.57 SECS.
CROSSING TIME AT MARS IS 63382. S. OR 17:36:21 +/- 164.45 SECONDS

30 / 1 / 96

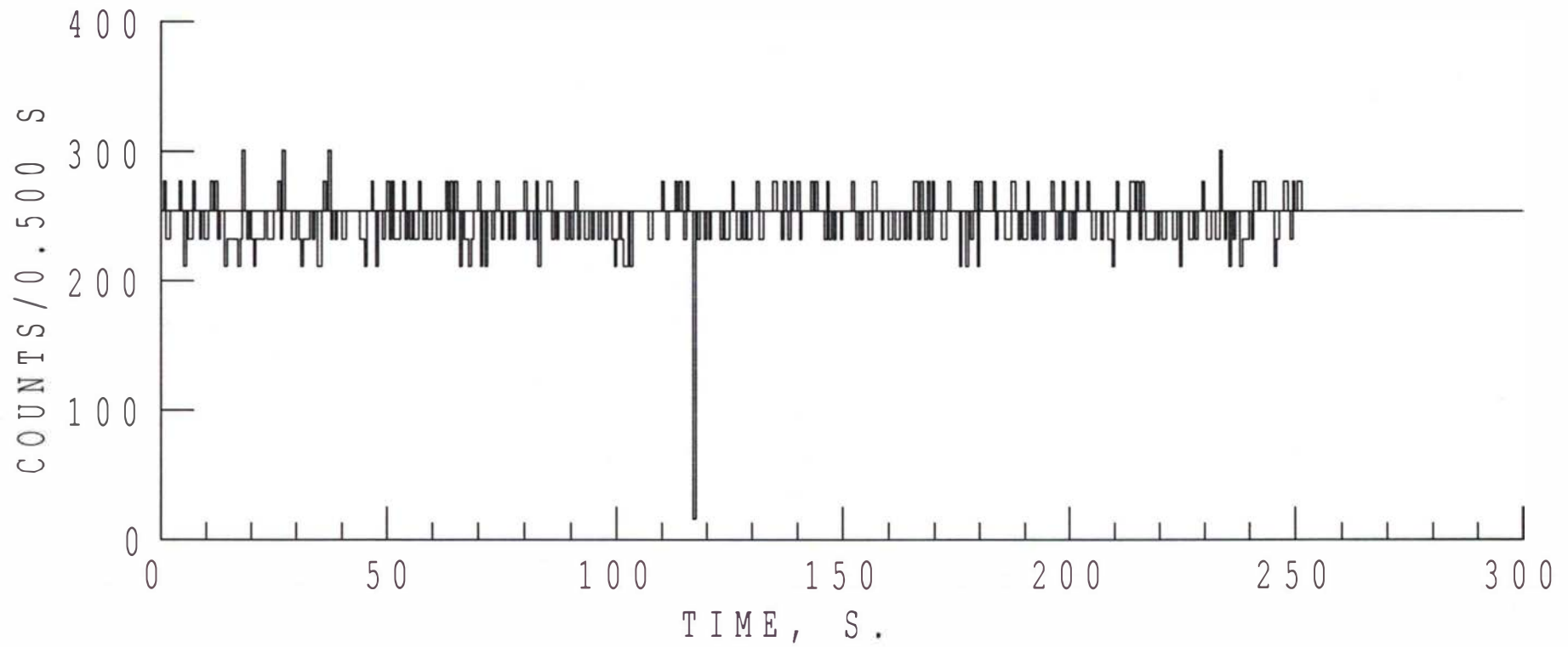
ULYSSES RT

28 / 1 / 96 61200.281 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



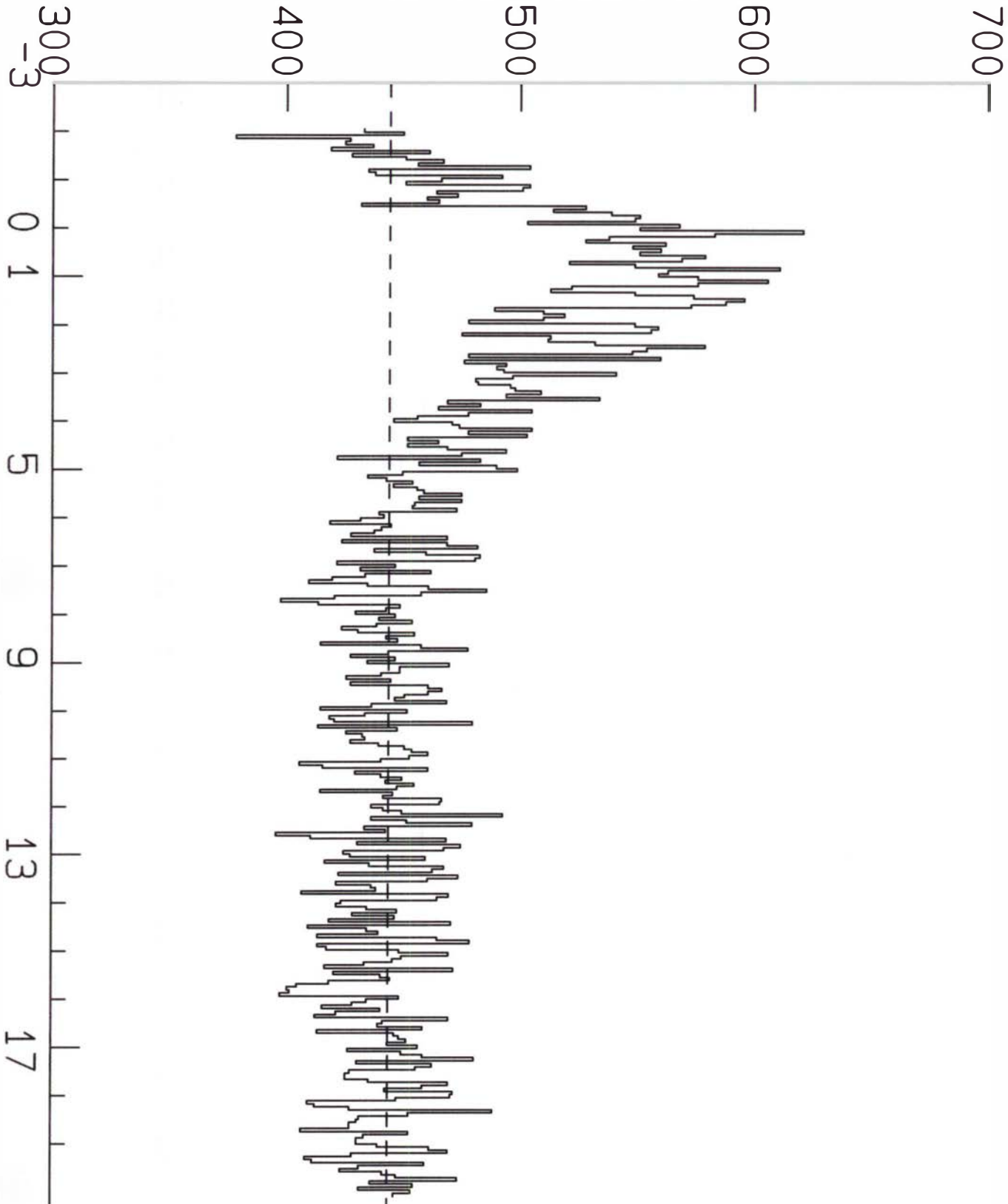
BATSE

28/01/96

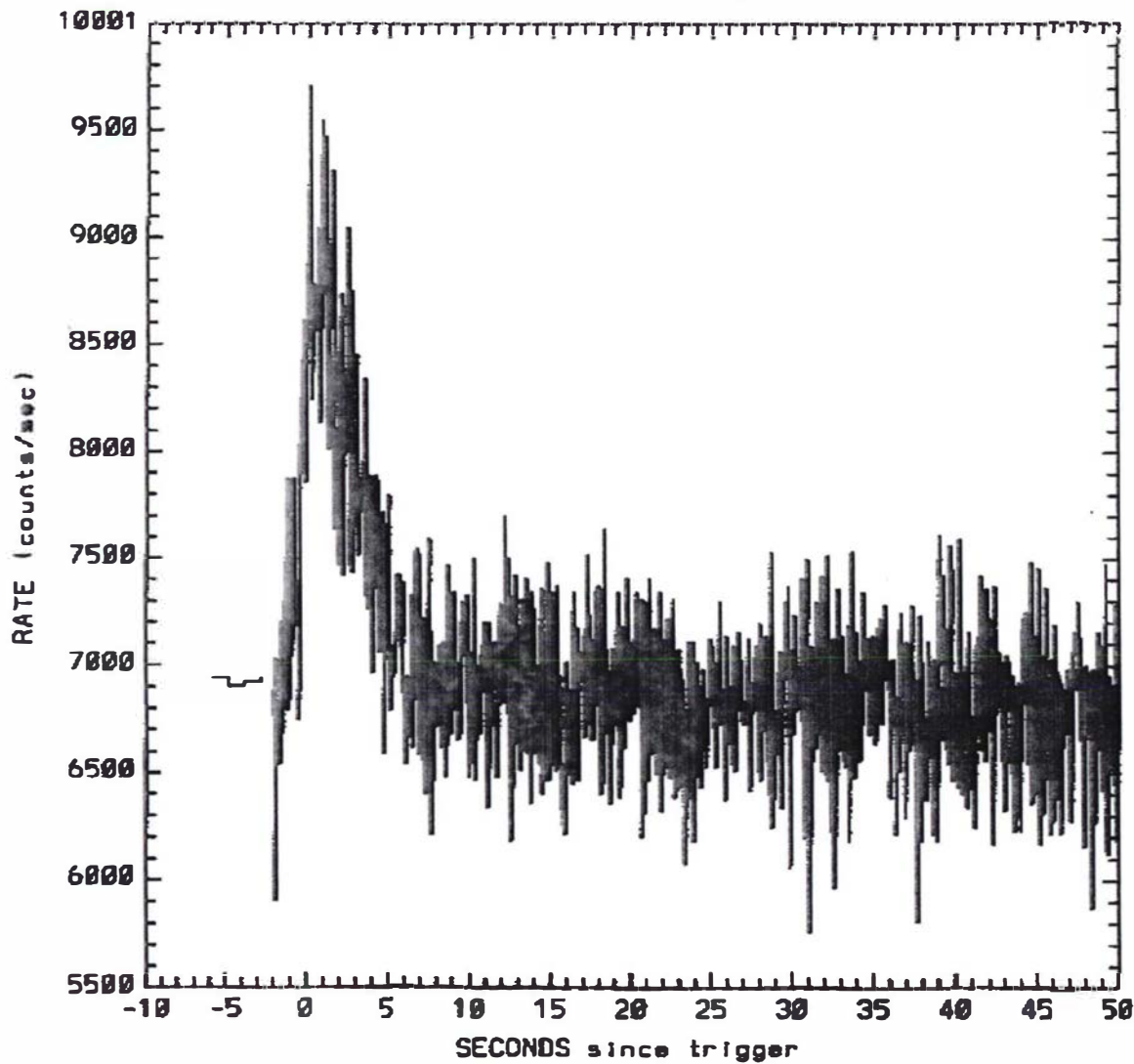
71037.386

25- 100 keV

COUNTS/0.064 S



DISCSC Data for K. Hurley, No. 4639



6-JUN-1996 11:26:45

Created by MDPS 80
(Burst Display)
Version 12.25

Trigger # : 4639

Trigger Time:
18118 / 71837.386Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors [7..8].
-----2-8Discriminators:
(1 , 2)Quality Mask:
BDISP1

RT data files which may contain ~ 0.5 s timing error because they follow a trigger

2 hour time range from beginning of burst that extract falls in: DATA USED ?

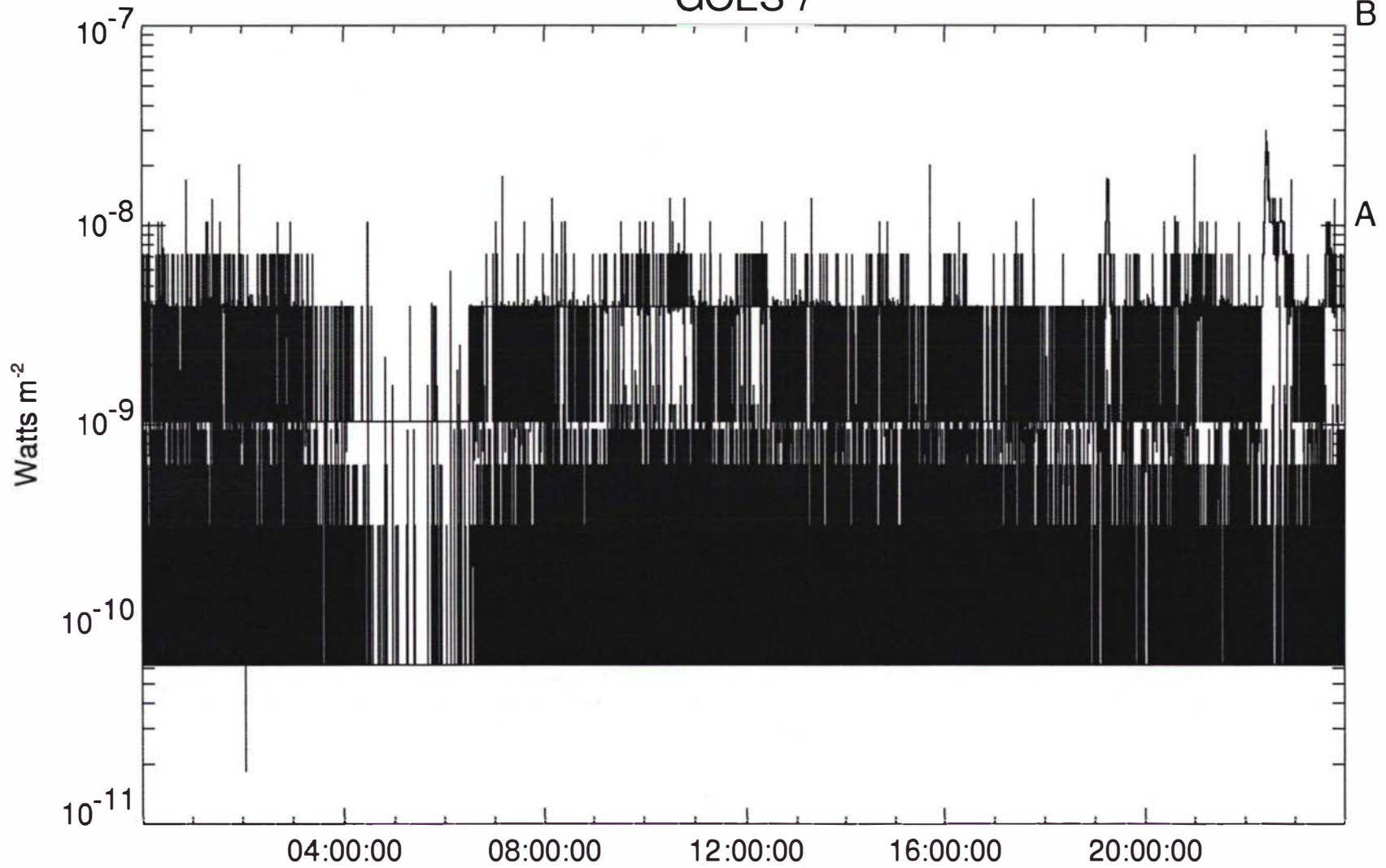
b02:0126	extract	beg time:0244	e91270_2A1_02.73_02.84.ascii.Z	N
b03:0219	extract	beg time:0244	e91270_2A1_02.73_02.84.ascii.Z	N
b01:0121	extract	beg time:0310	e91360_2A1_03.16_03.37.ascii.Z	N
0:0932	extract	beg time:1025	e92010_2A1_10.42_10.48.ascii.Z	Y (TRIGGER)
1:0845	extract	beg time:1015	e92058_2A1_10.25_10.75.ascii.Z	N
b01:0609	extract	beg time:0723	e92111_2A1_07.38_07.54.ascii.Z	N
b01:0629	extract	beg time:0634	e92174_2A1_06.57_06.87.ascii.Z	N
b01:0541	extract	beg time:0549	e92190_2A1_5.76_5.90.ascii.Z	Y (SAR 1300)
b02:2032	extract	beg time:2058	e92205_2A1_20.97_22.66.ascii.Z	Y (TRIGGER)
b01:1202	extract	beg time:1240	e92209_2A1_12.67_12.85.ascii.Z	N
b01:1717	extract	beg time:1831	e92213_2A1_18.51_18.82.ascii.Z	N
b01:1142	extract	beg time:1301	e92303_2A1_13.02_13.28.ascii	Y
b03:0736	extract	beg time:0844	q92313_2A1_8.70_8.96.ascii.Z	N
b03:0736	extract	beg time:0844	e92313_2A1_08.74_09.02.ascii.Z	N
b14:1730	extract	beg time:1905	q92314_2A1_19.08_19.30.ascii.Z	N
b15:1825	extract	beg time:1905	q92314_2A1_19.08_19.30.ascii.Z	N
b02:0156	extract	beg time:0344	e92315_2A1_3.10_3.36.ascii.Z	N
b03:0322	extract	beg time:0344	e92315_2A1_3.10_3.36.ascii.Z	N
b06:0819	extract	beg time:0844	e92315_2A1_8.71_8.85.ascii.Z	N
b08:1211	extract	beg time:1340	e92315_2A1_13.66_13.96.ascii.Z	N
b08:1211	extract	beg time:1344	e92315_2A1_13.74_14.03.ascii.Z	N
b02:0600	extract	beg time:0644	e92316_2A1_6.76_7.04.ascii.Z	N
b02:0135	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	Y
b03:0227	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	Y
b04:0315	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	Y
b01:1105	extract	beg time:1150	q93077_2A1_11.83_12.05.ascii.Z	Y
b01:0745	extract	beg time:0756	q93096_2A1_7.71_7.85.ascii.Z	Y (TRIGGER)
b01:0745	extract	beg time:0856	q93096_2A1_8.40_8.50.ascii.Z	N
1:1445	extract	beg time:1530	e93126_2A1_15.50_15.65.ascii.Z	N
1:1445	extract	beg time:1548	e93126_2A1_15.80_15.95.ascii.Z	N
b01:0334	extract	beg time:0434	e93265_2A1_04.56_04.64.ascii.Z	N
b01:0900	extract	beg time:0943	e93272_2A1_09.71_09.98.ascii.Z	Y (SAR 1806)
b01:1654	extract	beg time:1707	e93287_2A1_17.11_17.37.ascii.Z	Y
b01:2215	extract	beg time:2240	e93294_2A1_22.67_22.85.ascii.Z	N
b01:0824	extract	beg time:0840	e93303_2A1_08.66_08.81.ascii.Z	N
b01:0352	extract	beg time:0510	e93318_2A1_05.17_05.42.ascii.Z	N
b01:0641	extract	beg time:0824	e93340_2A1_08.40_08.61.ascii.Z	N
b02:0602	extract	beg time:0733	e94026_2A1_07.55_07.71.ascii.Z	N
b05:1140	extract	beg time:1240	e94044_2A1_12.66_12.76.ascii.Z	Y
b01:0204	extract	beg time:0326	e94047_2A1_03.44_03.62.ascii.Z	N
b01:0113	extract	beg time:0124	e94049_2A1_01.40_02.50.ascii.Z	N
b03:1943	extract	beg time:2123	e94058_2A1_21.38_21.49.ascii.Z	N
b01:0346	extract	beg time:0505	e94061_2A1_05.08_05.25.ascii.Z	Y (Trigger; but RT data probably used)
b01:0047	extract	beg time:0128	e94062_2A1_01.47_01.63.ascii.Z	N
b01:2113	extract	beg time:2142	e94202_2A1_21.70_21.98.ascii.Z	N
b01:2113	extract	beg time:2144	e94202_2A1_21.74_22.14.ascii.Z	N
b01:1047	extract	beg time:1143	e94242_2A1_11.71_11.86.ascii.Z	N
b01:0647	extract	beg time:0728	e94298_2A1_07.47_07.51.ascii.Z	N
b01:0128	extract	beg time:0241	e94299_2A1_02.68_02.80.ascii.Z	Y
b09:1148	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	N
b10:1238	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	N
b11:1328	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	N
b01:1952	extract	beg time:2040	e94326_2A1_20.66_20.78.ascii.Z	N
b01:0223	extract	beg time:0406	e95042_2A1_04.10_04.76.ascii.Z	N
1:0640	extract	beg time:0740	e95072_2A1_07.67_07.81.ascii.Z	N
1:0144	extract	beg time:0158	e95216_2A1_01.96_02.09.ascii.Z	Y (Trigger)
b02:1628	extract	beg time:1718	e95339_2A1_17.30_17.45.ascii.Z	N
b03:1718	extract	beg time:1718	e95339_2A1_17.30_17.45.ascii.Z	N
b01:1124	extract	beg time:1205	e95362_2A1_12.09_12.87.ascii.Z	N

b04:1343	extract	beg	time:1540	e95362_2A1_15.67_15.84.ascii.Z	Y
b04:1343	extract	beg	time:1541	e95362_2A1_15.69_15.85.ascii.Z	Y
b05:1516	extract	beg	time:1540	e95362_2A1_15.67_15.84.ascii.Z	Y
b05:1516	extract	beg	time:1541	e95362_2A1_15.69_15.85.ascii.Z	Y
b01:0053	extract	beg	time:0251	e96002_2A1_02.85_03.62.ascii	N
b02:0216	extract	beg	time:0251	e96002_2A1_02.85_03.62.ascii	N
b20:1956	extract	beg	time:2041	e96002_2A1_20.68_20.76.ascii	N
b20:1956	extract	beg	time:2041	e96002_2A1_20.69_20.76.ascii	N
b02:0128	extract	beg	time:0305	e96004_2A1_03.09_03.87.ascii.Z	N
b03:0235	extract	beg	time:0305	e96004_2A1_03.09_03.87.ascii.Z	N
b05:1621	extract	beg	time:1656	e96006_2A1_16.93_17.08.ascii.Z	N
b01:0116	extract	beg	time:0150	e96007_2A1_01.84_01.95.ascii	N
b01:0116	extract	beg	time:0152	e96007_2A1_01.87_01.99.ascii	N
b01:1819	extract	beg	time:1935	e96028_2A1_19.59_19.87.ascii.Z	Y
b01:0208	extract	beg	time:0233	e96030_2A1_02.55_02.66.ascii.Z	Y
b01:0208	extract	beg	time:0235	e96030_2A1_02.58_02.73.ascii.Z	Y
b01:0208	extract	beg	time:0235	e96030_2A1_02.59_02.73.ascii.Z	Y
b01:0849	extract	beg	time:0949	qp96032_2A1_09.81_09.94.ascii.Z	Y
b02:2011	extract	beg	time:2144	qp96032_2A1_21.74_21.90.ascii.Z	Y
b01:1929	extract	beg	time:2049	qp96051_2A1_20.82_20.85.ascii.Z	N
b01:1929	extract	beg	time:2049	qp96051_2A1_20.82_20.86.ascii.Z	N
b01:1529	extract	beg	time:1719	qp96094_2A1_17.32_17.48.ascii.Z	N
b01:1529	extract	beg	time:1722	qp96094_2A1_17.36_17.52.ascii.Z	N
b01:1652	extract	beg	time:1752	qp96168_2A1_17.87_17.97.ascii.Z	N
b01:1652	extract	beg	time:1755	qp96168_2A1_17.91_18.05.ascii.Z	N

NO ERROR
(GR: 1747 - MAYBE USED FOR NETSYN?)

"	"	"
"	"	"
"	"	"

GOES 7



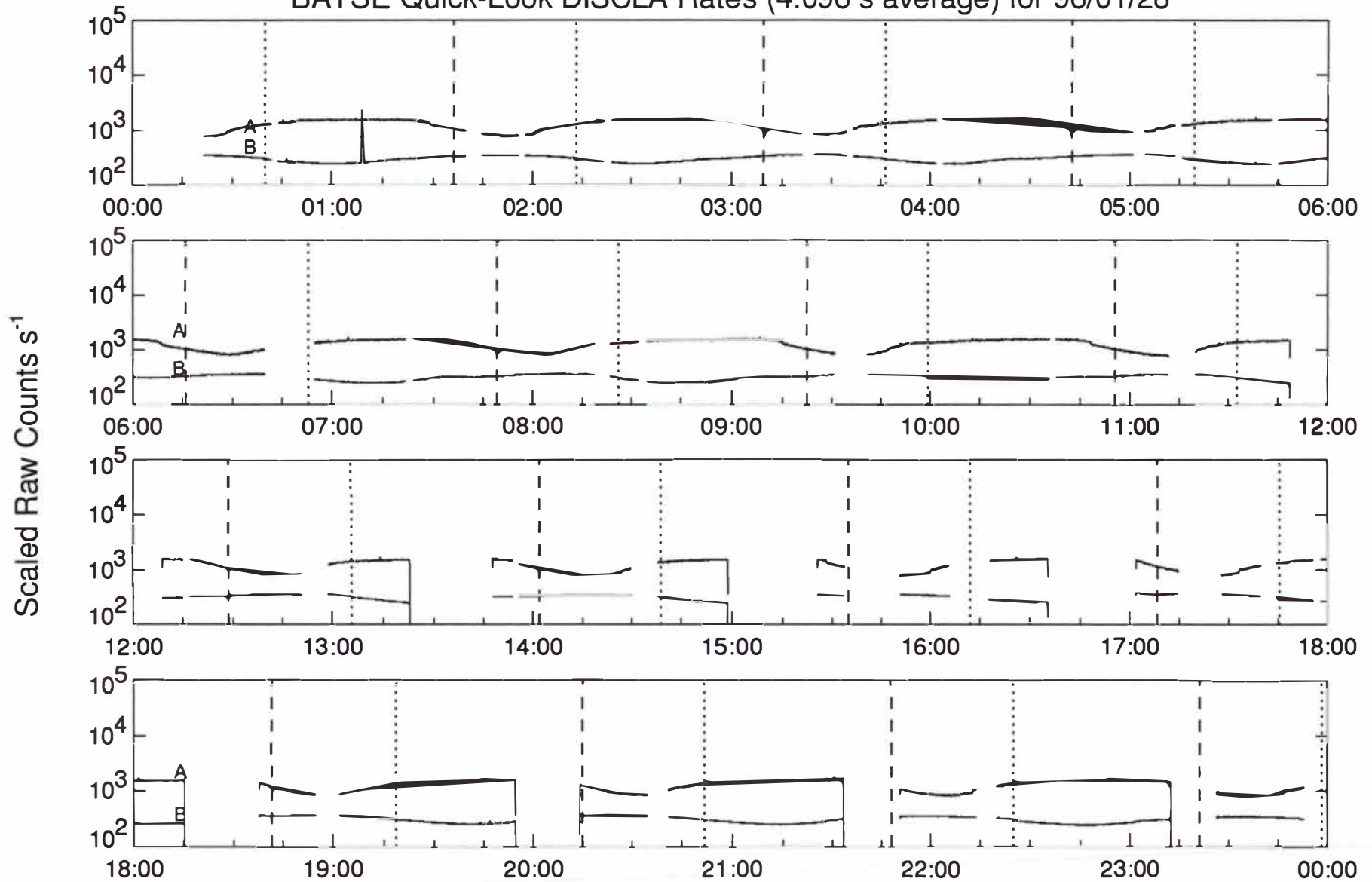
Data Start: 96/01/28, 0000:00

Plot created: 96/01/30, 0654

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 96/01/28



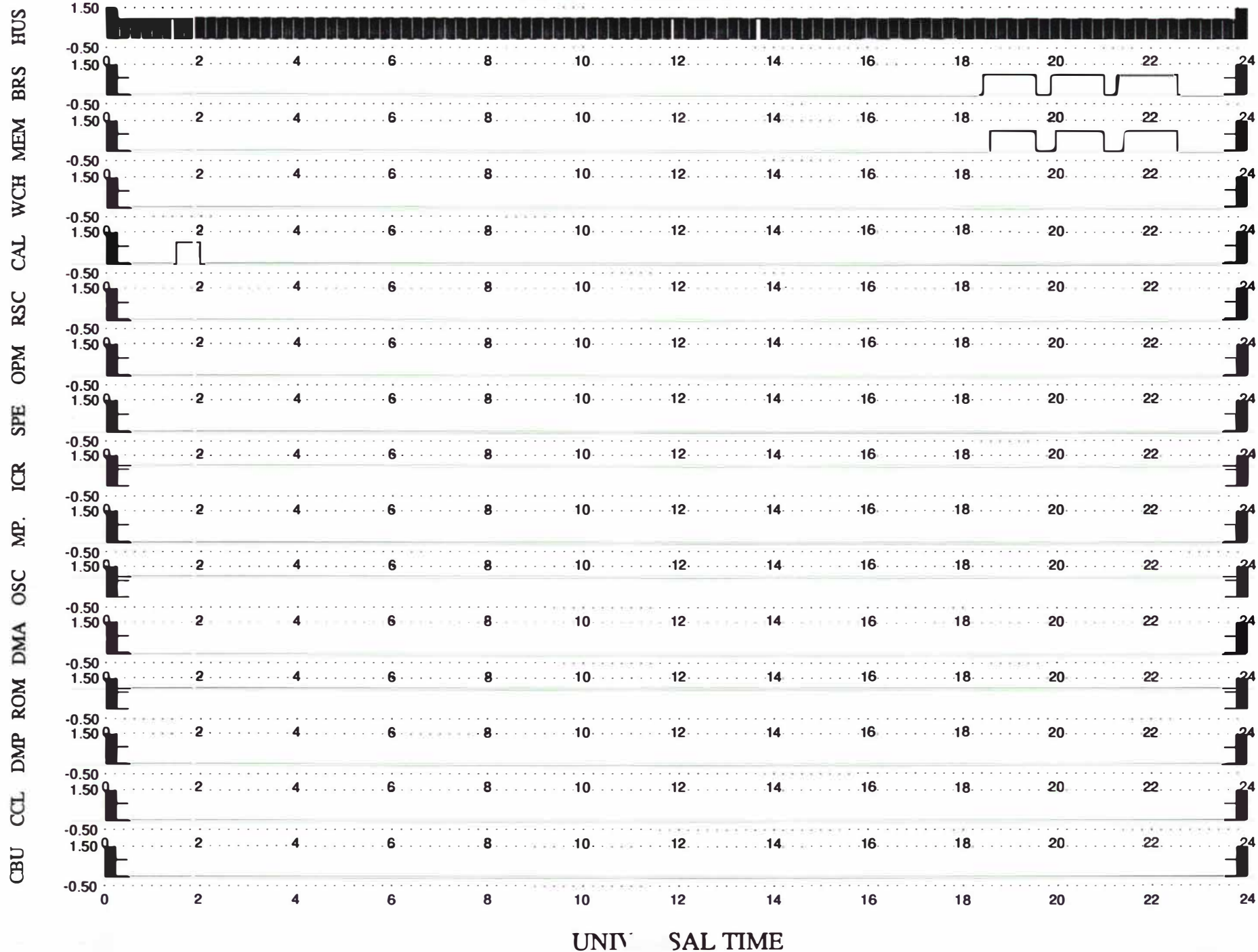
Current Time: 96/01/30, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

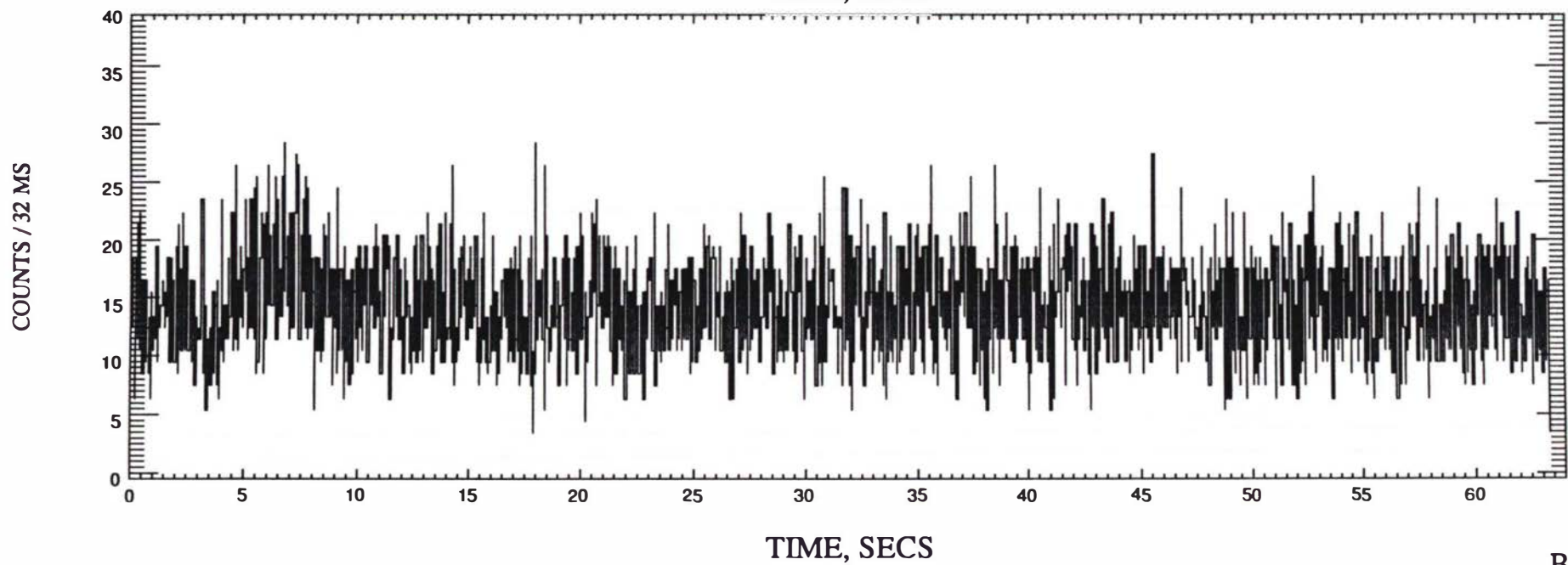
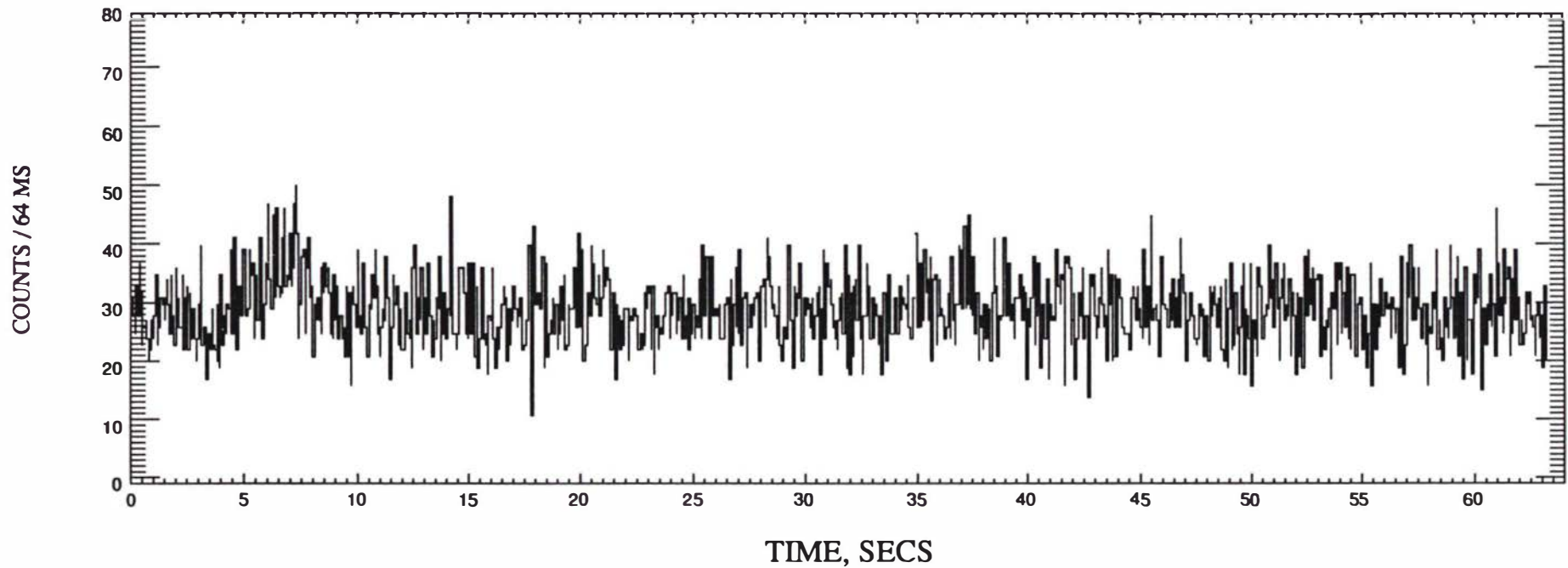
HUS MODES EDR day 28, year 1996 to day 28, year 1996
BURST NUMBER 8 - 10

4/1/96



HUS 2A TRIGGERED DATA EDR day 28, year 1996
Burst Counter 8 at UT=18.318290799459 h=65945.847 s 18:19:05.847

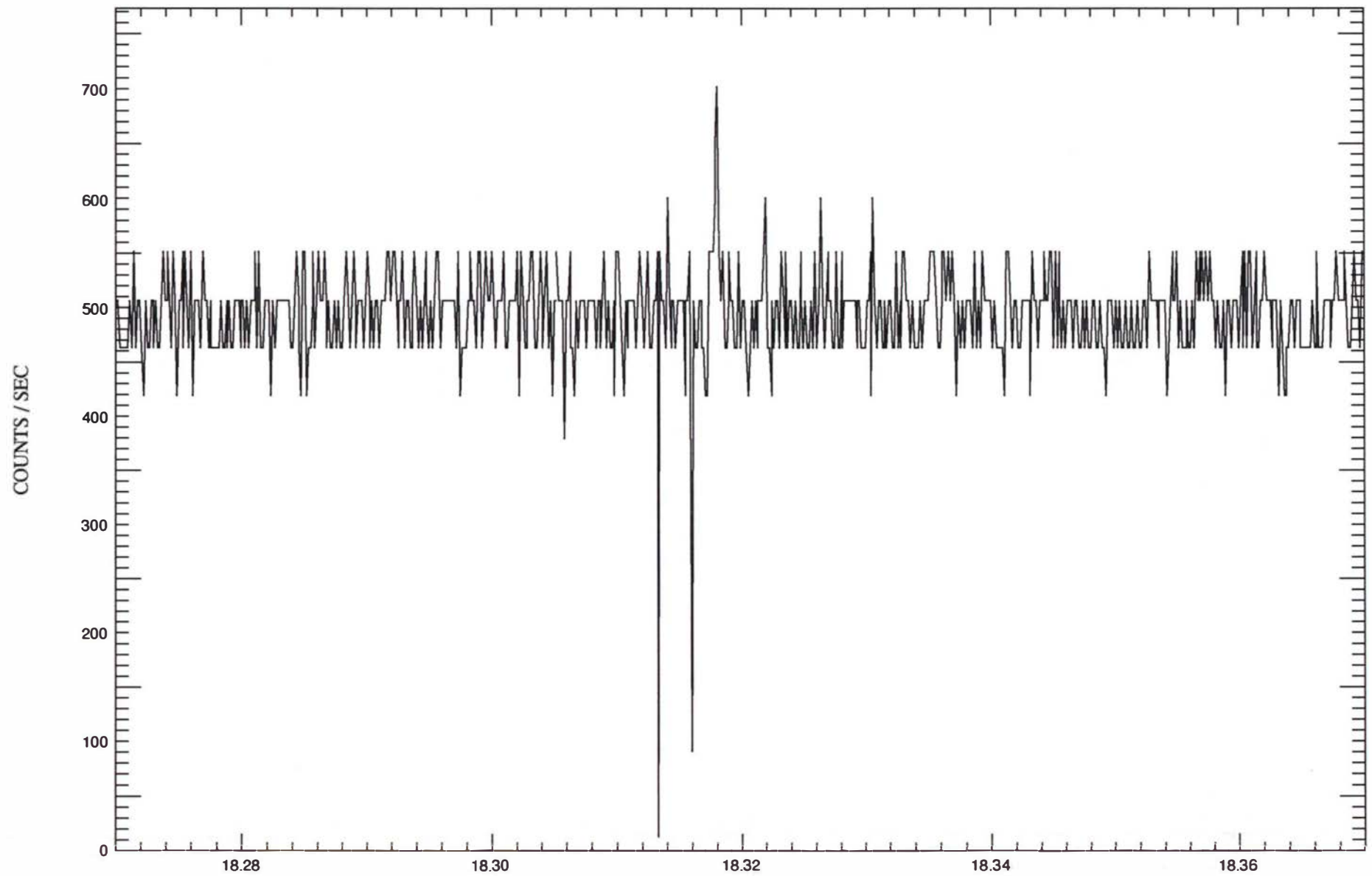
4/1/96



B# 1

HUS 2A, MODE 1, NOT AVERAGED QEDR day 28, year 1996 to day 28, year 1996
CALIBRATION DATA INCLUDED

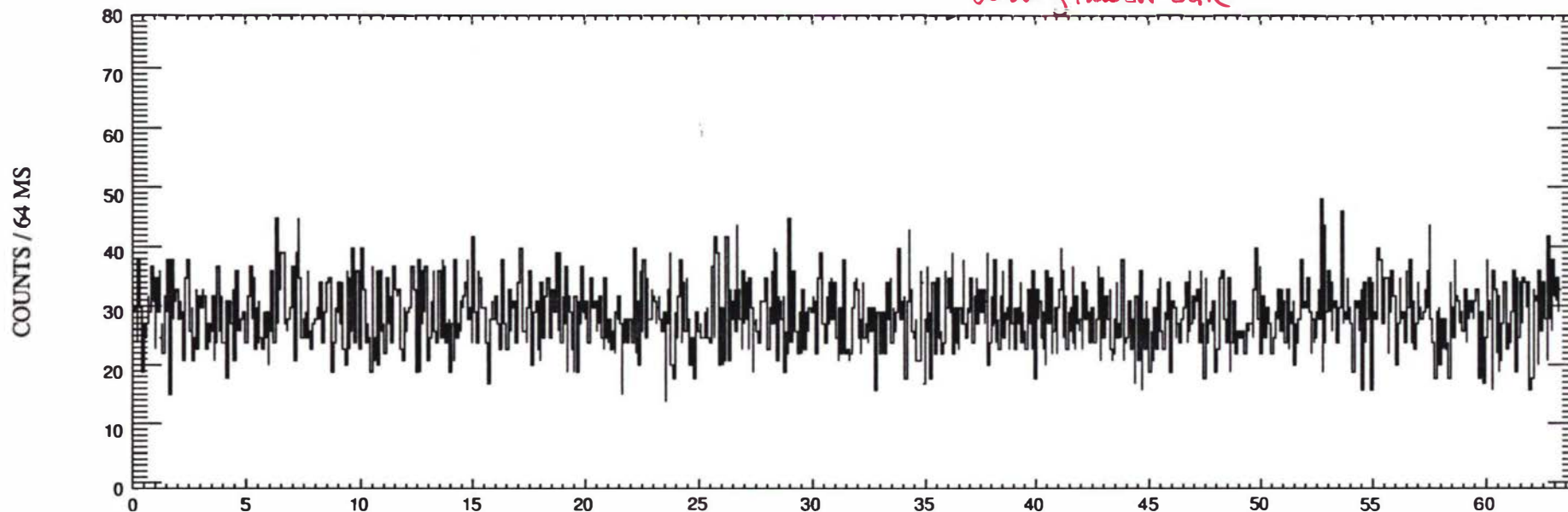
1/30/96



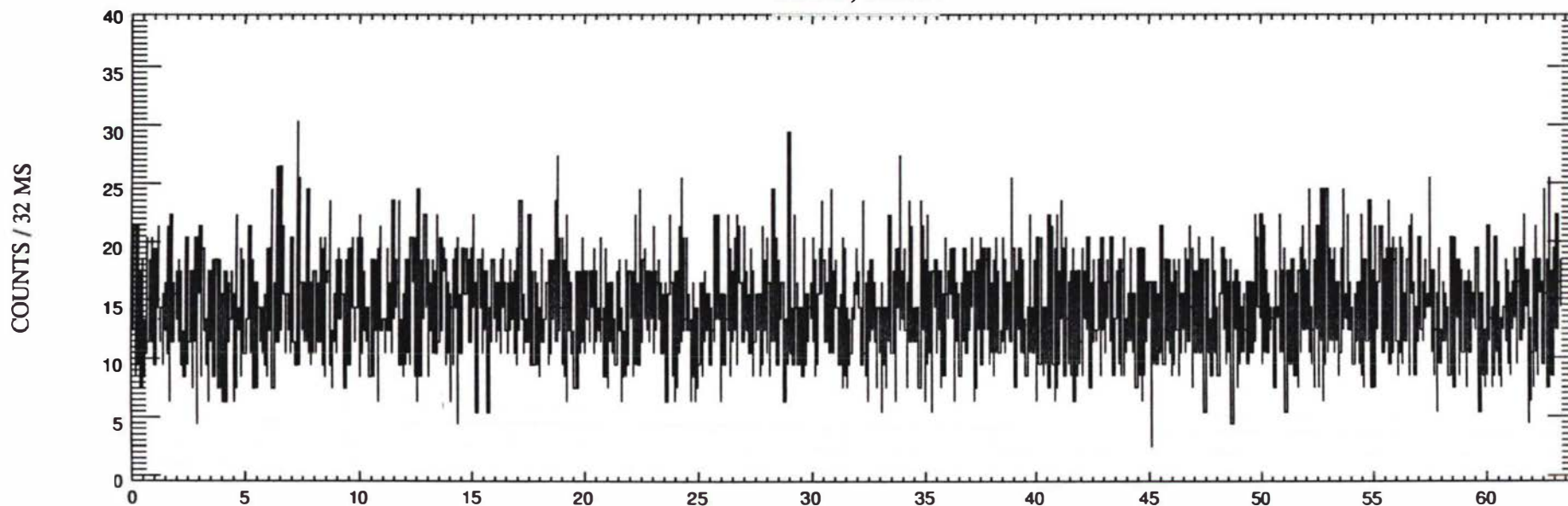
HUS 2A TRIGGERED DATA EDR day 28, year 1996
Burst Counter 9 at UT=19.749214341905 h=71097.172 s 19:44:57.172

4/1/96

Wrong time for SGR



TIME, SECS

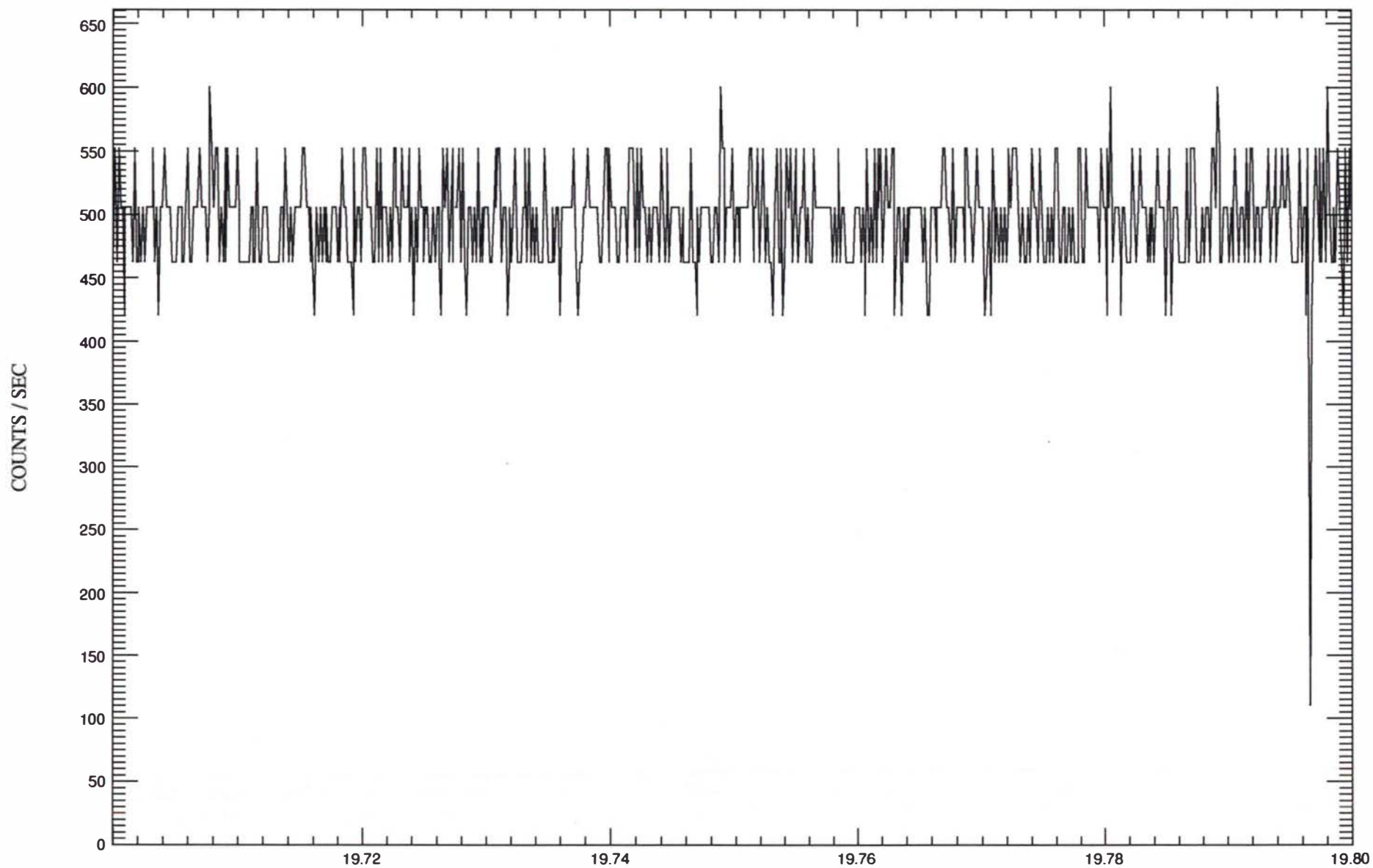


TIME, SECS

B# 2

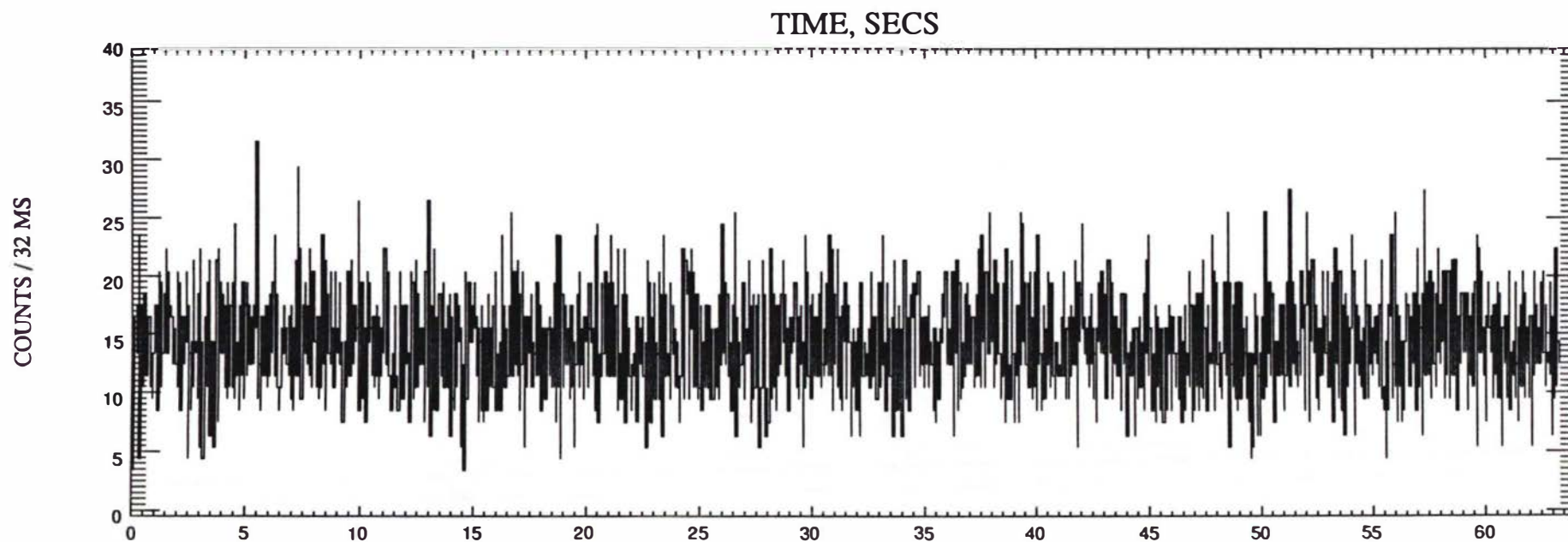
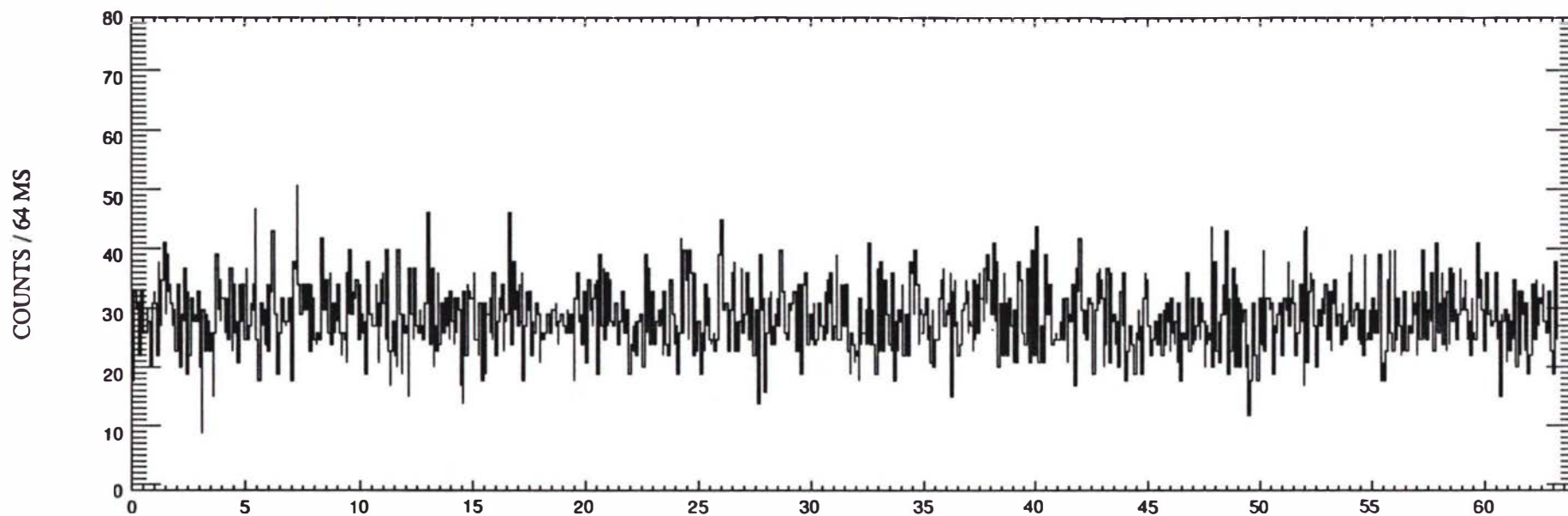
HUS 2A, MODE 1, NOT AVERAGED QEDR day 28, year 1996 to day 28, year 1996
CALIBRATION DATA INCLUDED

1/30/96



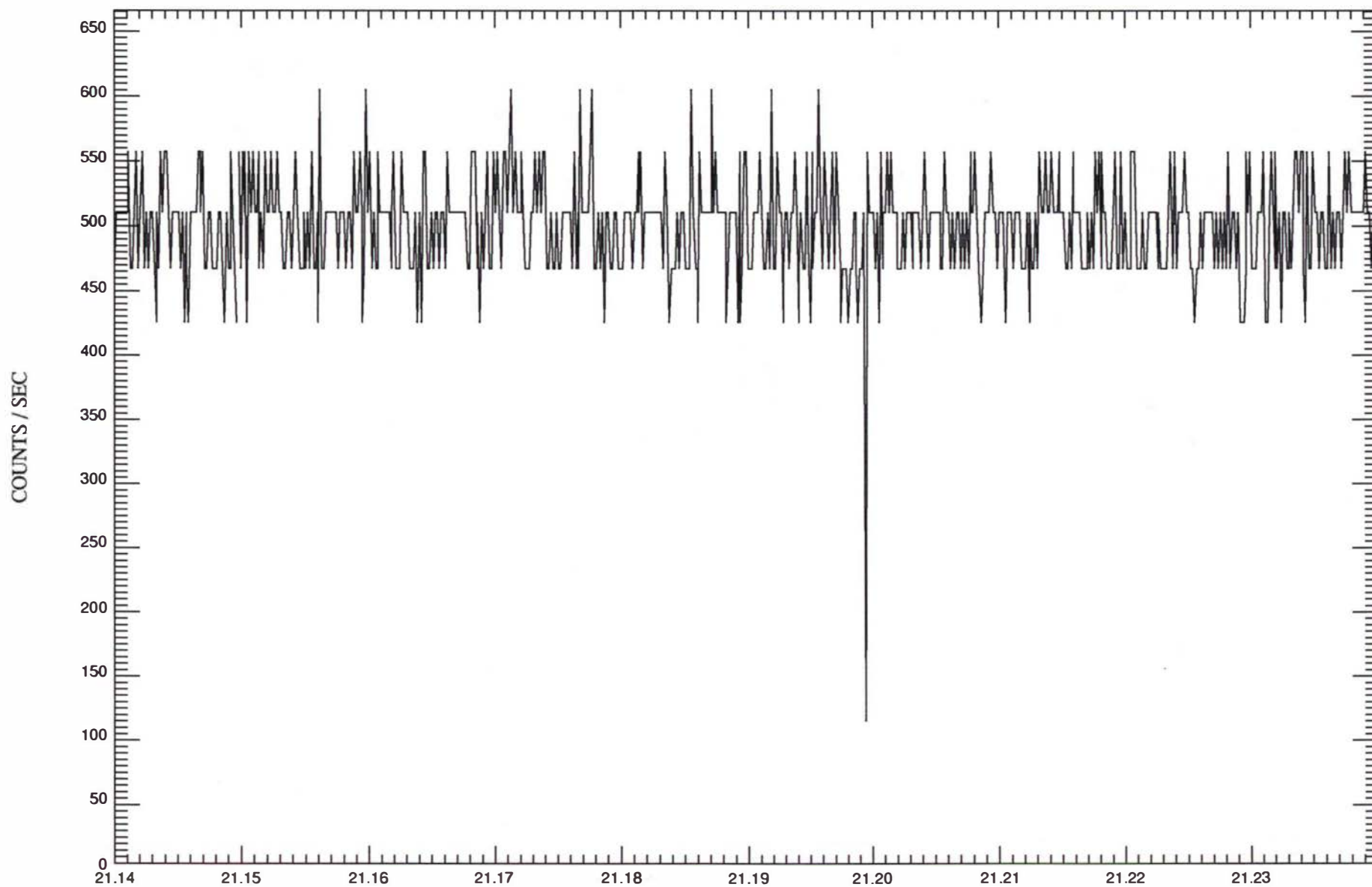
HUS 2A TRIGGERED DATA EDR day 28, year 1996
Burst Counter 10 at UT=21.187255939907 h=76274.121 s 21:11:14.121

4/1/96



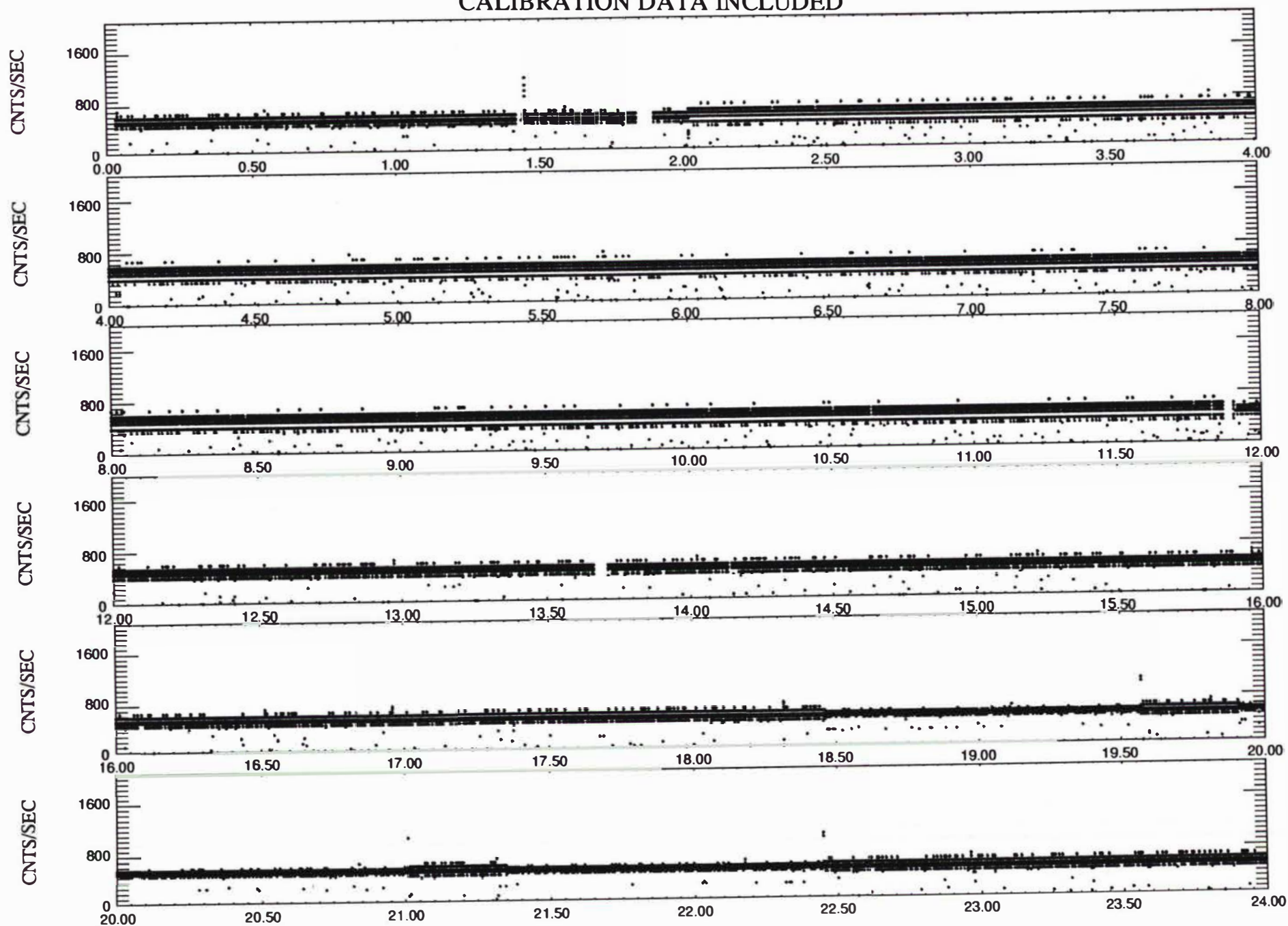
HUS 2A, MODE 1, NOT AVERAGED QEDR day 28, year 1996 to day 28, year 1996
CALIBRATION DATA INCLUDED

1/30/96

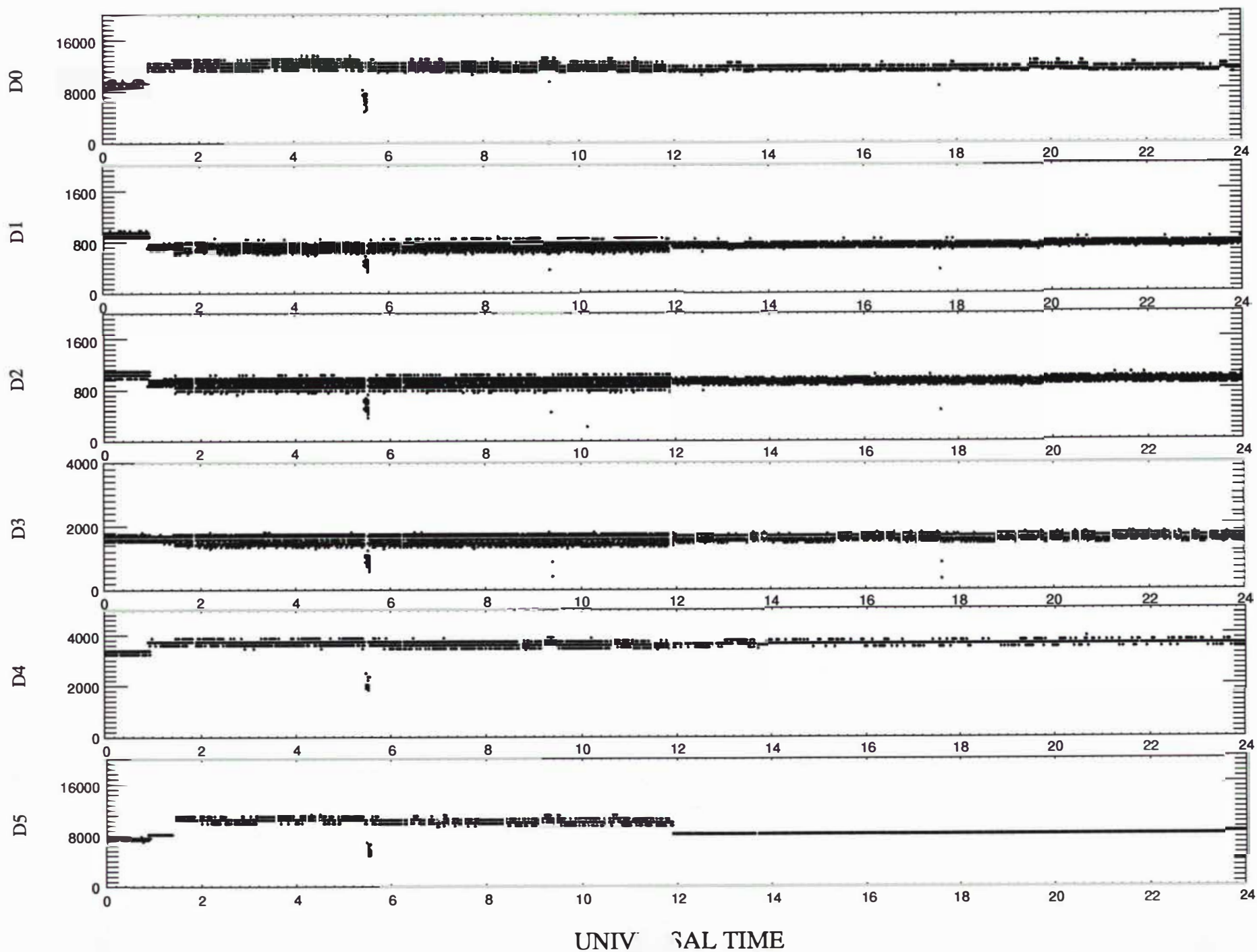


HUS 2A, MODE 1, NOT AVERAGED EDR day 28, year 1996 to day 28, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNITS SAL TIME





1996:

~001.02:45 SCET	should be	~364.23:12 SCET
~002.14:35 SCET	should be	~001.04:22 SCET
~029.19:35 SCET	should be	~028.13:43 SCET
~033.19:10 SCET	should be	~032.13:18 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~048.17:29 SCET	should be	~047.13:45 SCET
~054.08:59 SCET	should be	~053.11:46 SCET
~039.18:34 SCET	should be	~038.12:14 SCET
~039.18:34 SCET	should be	~038.12:14 SCET

We see data gaps for each of the correct times, so it looks like your theory of AMMOS mis-correcting times when there is carry-over data on the tape is correct.

I hope this is enough information. I would have to do a bit more calculation to get the approximate ERTs. Let me know if you want them.

Best regards,

Nigel

From ulsdmt@jplsp.DNET.NASA.GOV Mon Mar 18 17:13 PST 1996
From: ulsdmt@jplsp.DNET.NASA.GOV
Date: Mon, 18 Mar 96 20:13:12 -0500
To: "khurley@sunspot.ssl.berkeley.edu"@east.DNET.NASA.GOV (SENT TO @LIST1)
Subject: Misplaced Major Frames in EDRs

Greetings,

We have identified an operations technique that produces data that will be improperly time tagged by the MGDS (telemetry system). Instances of EDR errors (major frames out of order) have been found in the CDRM archival products for December 1995 and January 1996. Errors will also be found in the still to be shipped February 1996 data.

When major frames are recorded but not transmitted during the next track, but are eventually downlinked with data from a succeeding day, the embedded SCLKs are 'assumed' to be incorrect by the frame syncer and are re-tagged with SCETs and SCLKs matching the adjacent (but newer) data.

For each major frame processed in this manner, a gap will exist, representing the time the data was actually acquired, and a major frame or realtime data, representing the time period the data now errently represents, will be replaced by the misplaced playback data.

Yes. Confusing. See the attached memo detailing the times involved.

Approximately 17 such instances are known to have occured. The total time involved is about twenty minutes. Because the data loss is small and the cost of reprocessing would be so large, the Project has determined that it would be imprudent to reprocess.

For your information, however, we included a memo from Nigel Angold which itemizes each instance.

We thank Toni Galvin and Nigel for identifying the problem and assisting in the diagnosis.

Regards,

Joe

To: <ulsdmt@jplsp.jpl.nasa.gov>
From: Nigel Angold <nangold@jplsp2.jpl.nasa.gov>
Subject: Mis-corrected S/C clocks / SCETs
Cc: chris.leech@jpl.nasa.gov

I have looked at our recent tape recorder usage and predict that you will see major frames with mis-corrected spacecraft clocks / SCETs at the following times (give or take a few minutes):

1995:

~342.22:59 SCET	should be	~341.17:47 SCET
~347.22:39 SCET	should be	~346.16:46 SCET
~350.21:54 SCET	should be	~349.16:22 SCET
~355.22:14 SCET	should be	~354.15:42 SCET
~359.14:04 SCET	should be	~359.05:36 SCET
~360.14:59 SCET	should be	~359.00:20 SCET
~362.20:55 SCET	should be	~361.16:06 SCET

From HAGEDON@fender.msfc.nasa.gov Wed Jan 31 10:51 PST 1996
Return-Path: <HAGEDON@fender.msfc.nasa.gov>
Received: from FENDER.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (SMI-8.6/SMI-SVR4)
id KAA29070; Wed, 31 Jan 1996 10:51:05 -0800
From: HAGEDON@fender.msfc.nasa.gov
Date: Wed, 31 Jan 1996 12:50:54 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <960131125054.22800af0@fender.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 4649
Content-Type: text
Content-Length: 1135
X-Lines: 26
Status: RO

RI?
NO - TOO WEAK

BATSEARCH PROGRAM

BATSE BURST # 4649
EVENT OF 1996 JAN 29 DAY OF YEAR= 29
EVENT CROSSING TIME AT BATSE : 27345. S. OR 07:35:45.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 91.000 -39.000
BATSE PEAK COUNTING RATE: 2000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 29/ 1/ 96 IS:
RA= 221.979 DEC= 67.617 DIST= 2.811 AU
BATSE-ULYSSES DISTANCE = 420560214. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 39.11 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1088.57 SECS.
CROSSING TIME AT ULYSSES IS 28434. S. OR 07:53:53 +/- 220.16 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 29/ 1/ 96 IS:
RA= 318.969 DEC= -17.027 DIST= 2.354 AU
MARS-BATSE DISTANCE = 352152640. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 71.75 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 367.94 SECS.
CROSSING TIME AT MARS IS 27713. S. OR 07:41:52 +/- 199.26 SECONDS
BATSE BURST TRIGGER

NO.: 4649

TIME: TJD=1011 SECONDS=27345

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=97.9 AZIMUTH=248.7 ERROR=7.1 DEGREES

COMMENTS:

BURST, IN DATA GAP. AT LEAST ONE PULSE WHICH HAS SOME SUBSTRUCTURE.
?. >= 20 SEC. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4649	960129	10111	27345	2000	091	-39	20

ULYSSES RT

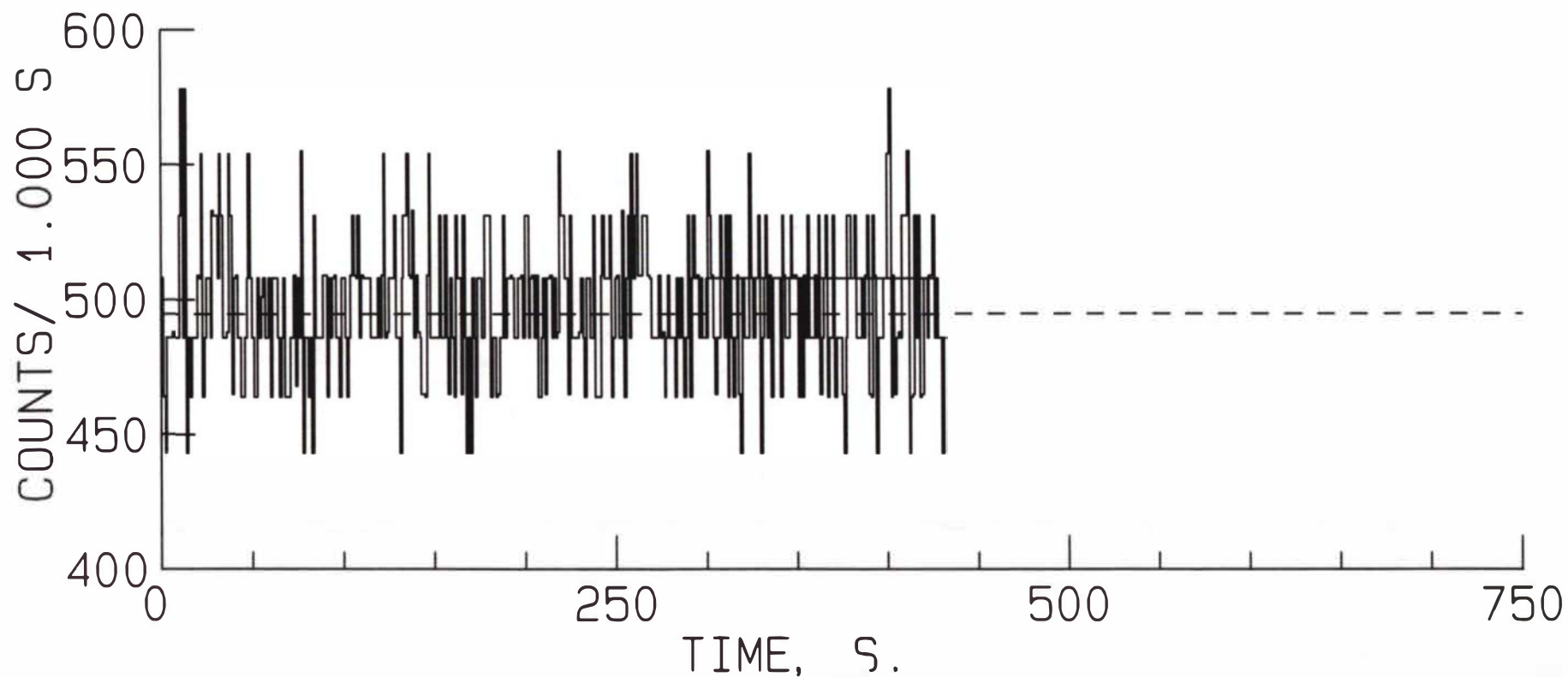
16 / 2 / 96

29 / 1 / 96 28224.066 s

0.500 S INTERVALS REGROUPED BY 2

21- 141 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



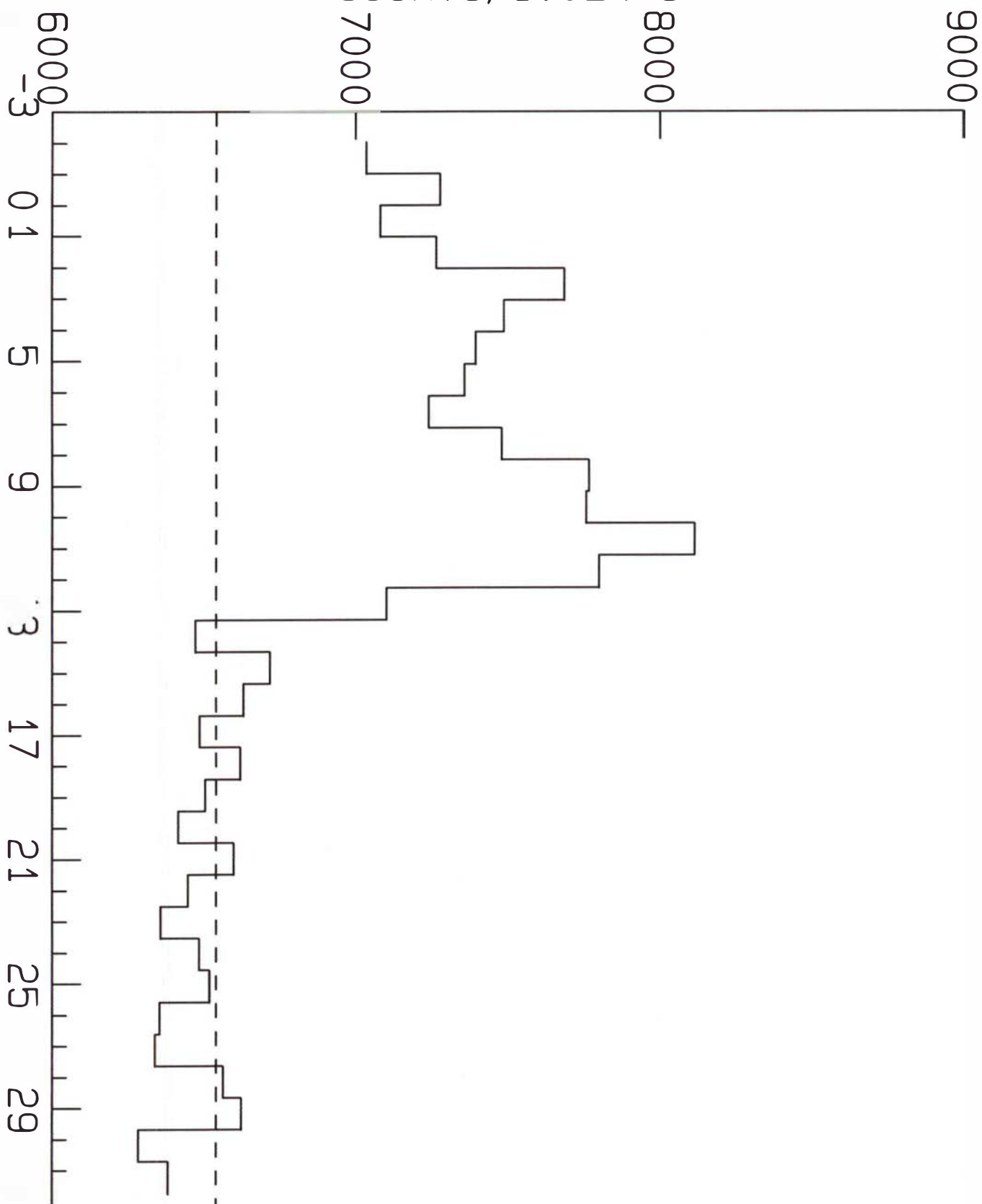
BATSE

29/01/96

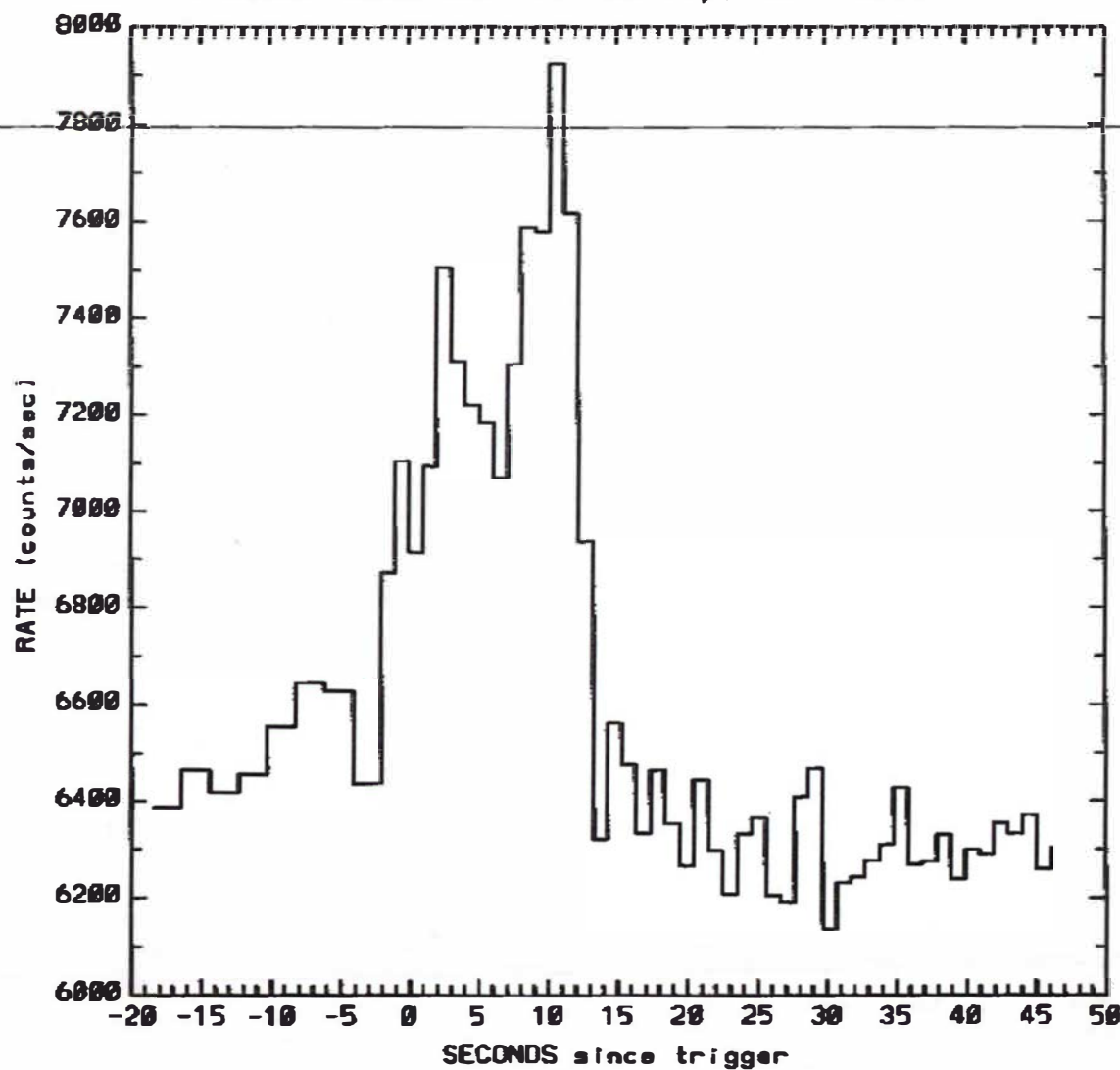
27345.610

25- 100 keV

COUNTS/1.024 S



DISCLB Data for K. Hurley, No. 4649



8-FEB-1996 10:00.31

Created by MOPS 80
(Burst Display)
Version 12.25

Trigger # : 4649

Trigger Time:
10111 / 27345.618Burst Data Type:
DISCLBDeadtime
Corrected: NBackground Data
Type: NoneMinimum Integ. Time:
1.024 second(s)Detectors [7..8]:
76-----Discriminators:
1 1 . 2 1Quality Mask:
BD16P1

From HAGEDON@fender.msfc.nasa.gov Wed Jan 31 10:52 PST 1996
Return-Path: <HAGEDON@fender.msfc.nasa.gov>
Received: from FENDER.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (SMI-8.6/SMI-SVR4)
id KAA29100; Wed, 31 Jan 1996 10:52:24 -0800
From: HAGEDON@fender.msfc.nasa.gov
Date: Wed, 31 Jan 1996 12:52:11 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <960131125211.22800af0@fender.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 4653
Content-Type: text
Content-Length: 1135
X-Lines: 26
Status: RO

RI

BATSEARCH PROGRAM

BATSE BURST # 4653
EVENT OF 1996 JAN 29 DAY OF YEAR= 29
EVENT CROSSING TIME AT BATSE : 55460. S. OR 15:24:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 193.000 -21.000
BATSE PEAK COUNTING RATE: 5200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 29/ 1/ 96 IS:
RA= 221.861 DEC= 67.710 DIST= 2.812 AU
BATSE-ULYSSES DISTANCE = 420626983. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 88.77 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 30.12 SECS.
CROSSING TIME AT ULYSSES IS 55490. S. OR 15:24:50 +/- 293.99 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 29/ 1/ 96 IS:
RA= 318.969 DEC= -17.027 DIST= 2.354 AU
MARS-BATSE DISTANCE = 352152640. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 65.21 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 492.60 SECS.
CROSSING TIME AT MARS IS 55953. S. OR 15:32:32 +/- 192.62 SECONDS

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4653	960129	10111	55460	5200	193	-21	15

BATSE BURST TRIGGER

NO.: 4653

TIME: TJD=0111 SECONDS=55460

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

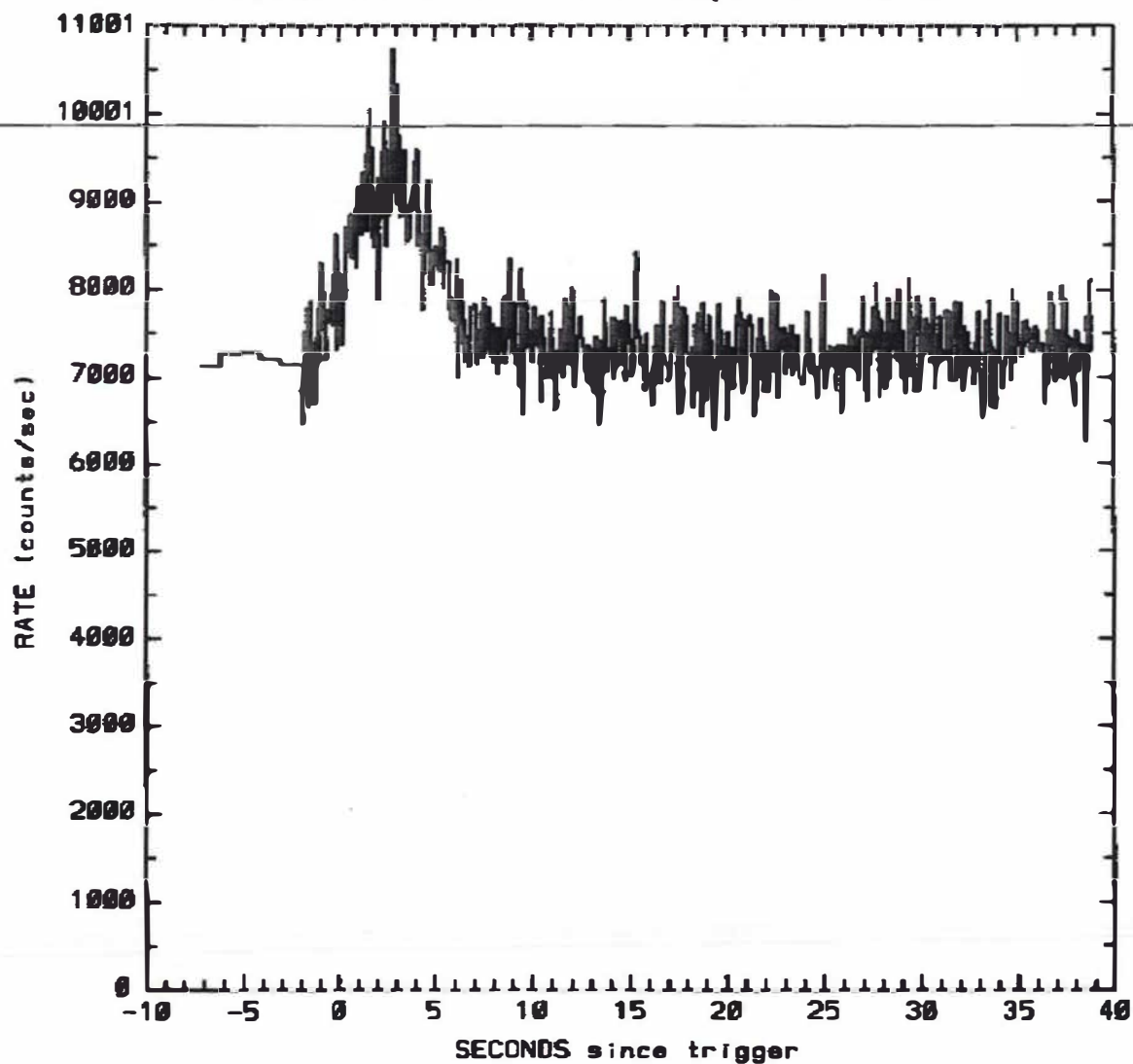
INTENSITY: COUNTS/CM2

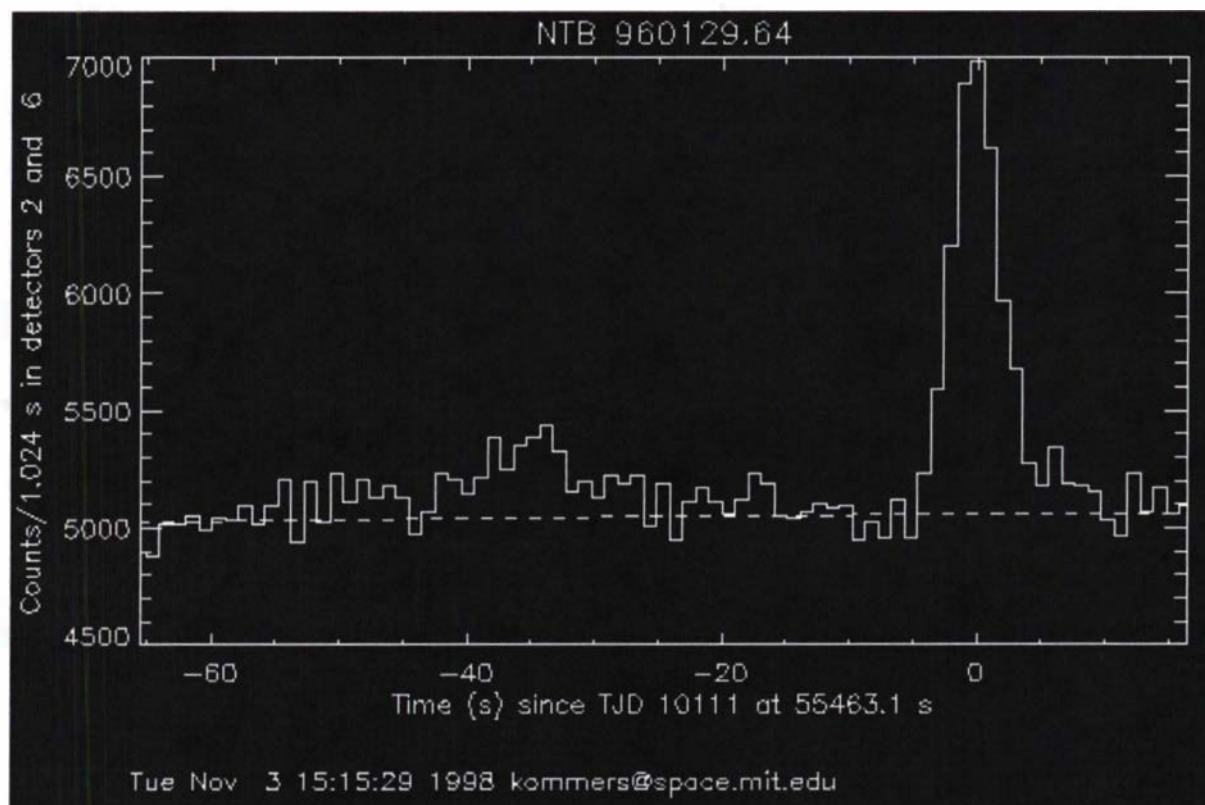
LOCATION: ZENITH=21.3 AZIMUTH=305.0 ERROR=2.1 DEGREES

COMMENTS:

BURST. SINGLE PULSE WITH POSSIBLE PRECURSOR @~T-30 SEC. DUR.~15 SEC.
NOT VISIBLE ABOVE 300 KEV. POSSIBLE THAT EVENT EXTENDS INTO DATA GAP
WHICH BEGINS AT ~T+40 SEC.

DISCSC Data for K. Hurley, No. 4653





$\alpha, \delta = 159.4, -57.4, E_u = 49.9^\circ$
 Same as BATSE 4653

ULYSSES RT

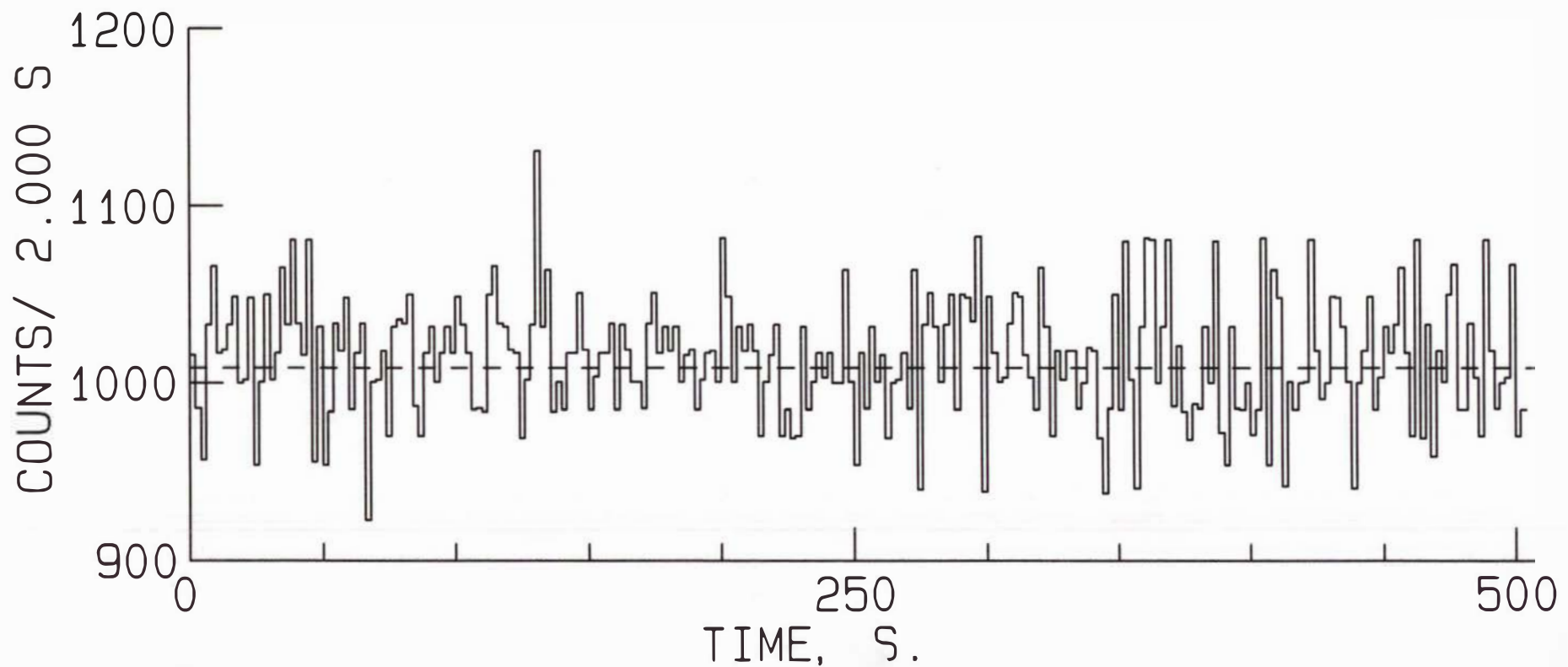
30 / 1 / 96

29 / 1 / 96 54648.201 s

0.250 S INTERVALS REGROUPED BY 8

21- 141 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS

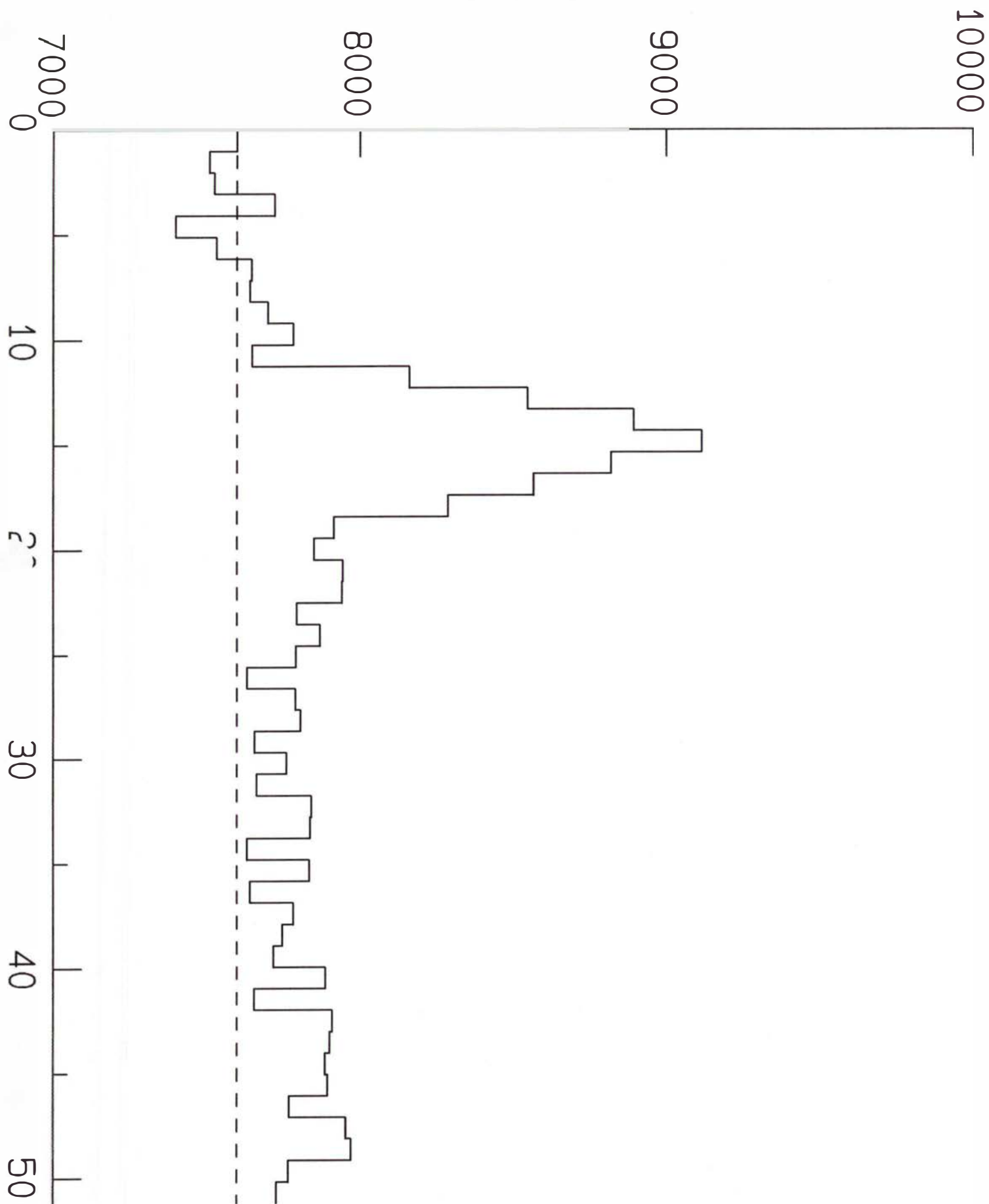


BACODINE

29/01/96

55448.265

25- 100 keV
COUNTS/1.024 S



960119	09	37	59.317	S2	480	780	190	0.13	11	12	236
960119	12	33	46.016	S2	210	460	190	0.2	6	85	237
960120	10	12	48.974	S2	740	540	210	<0.05	7	19	238
960120	13	30	22	S2	40	70		0.8	20		BGR
960123	12	07	21	S1	90	70		1.7	15		BGR
960124	00	56	28.008	S2	930	2130	710	0.13	11	8	239
960128	14	36	46	S2	270	190	25	0.15	6		BGR
960129	07	35	34	S1	90	70		>10	30		BGR
960129	15	24	19	S1	40	90	30	2	9		BGR
960130	02	25	56.848	S1	100	470	340	3	0.5	0.2	240

RI

Observations: 11/11/94 - 01/30/96 - 435 days

Gamma-ray bursts - 307
 burst mode - 153
 background mode (BGR)- 154

Solar flares - 78
 burst mode - 15
 background mode - 63

False events (multi-charged particles,
 trapped radiation, solar
 cosmic rays) - 85

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

From cline@lheavx.gsfc.nasa.gov Fri Feb 2 05:41 PST 1996
 Date: Fri, 2 Feb 1996 05:41:51 -0800
 Mime-Version: 1.0
 To: Bonnard.Teegarden@cesr.cnes.fr, KHURLEY@sunspot.ssl.berkeley.edu,
 palmer@lheamail.gsfc.nasa.gov, seifert@lheamail.gsfc.nasa.gov
 From: cline@lheavx.gsfc.nasa.gov (T L Cline)
 Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec						
			G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
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 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR
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 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
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		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
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 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39

K O N U S

2 2 / 2 / 9 6

U L Y S S E S R T

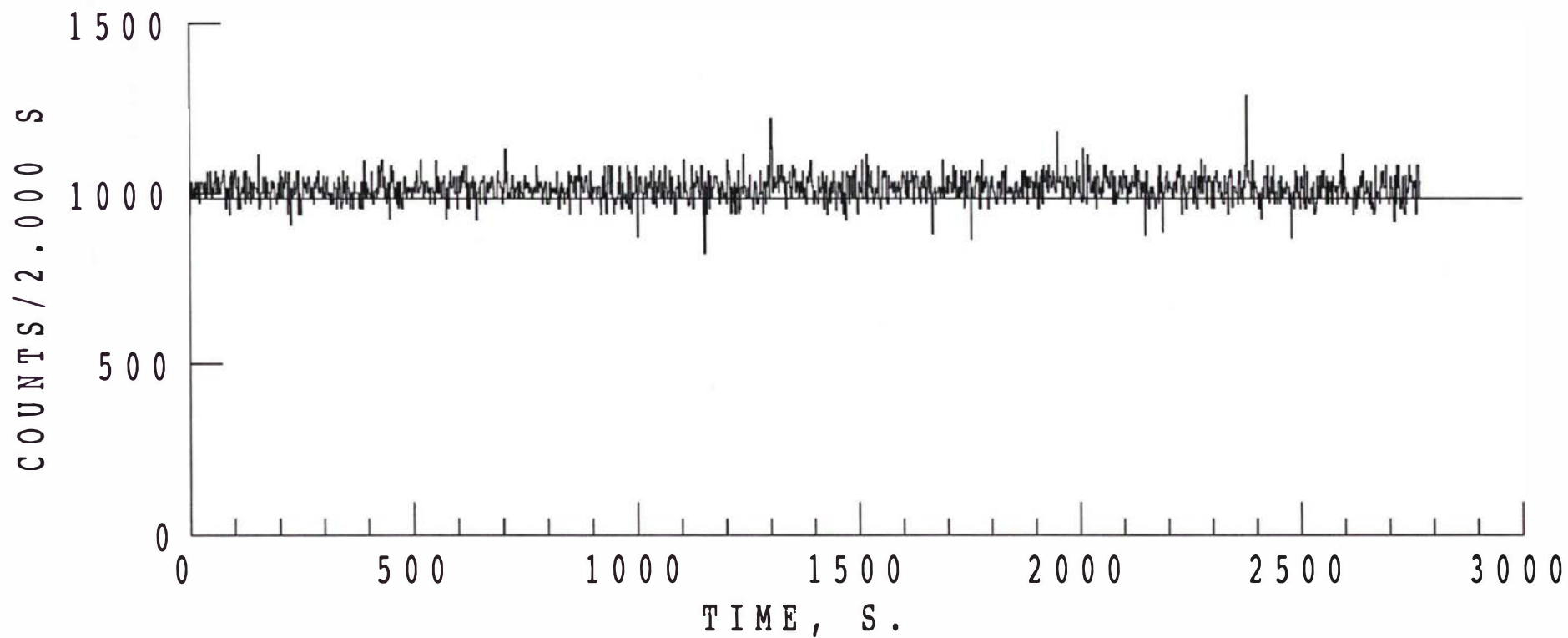
2 9 / 1 / 9 6 5 4 0 7 2 . 1 9 1 s

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 8

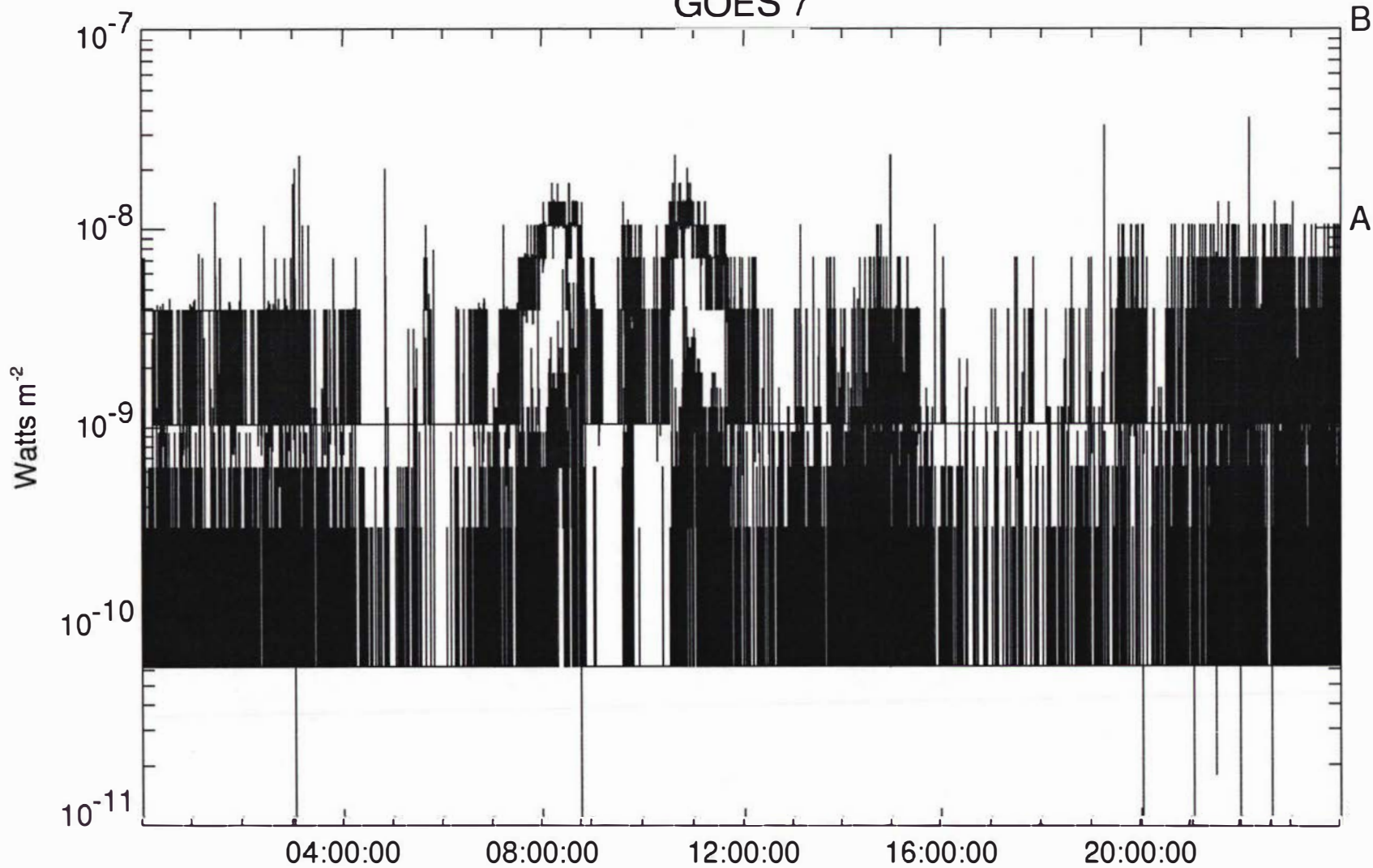
0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



GOES 7

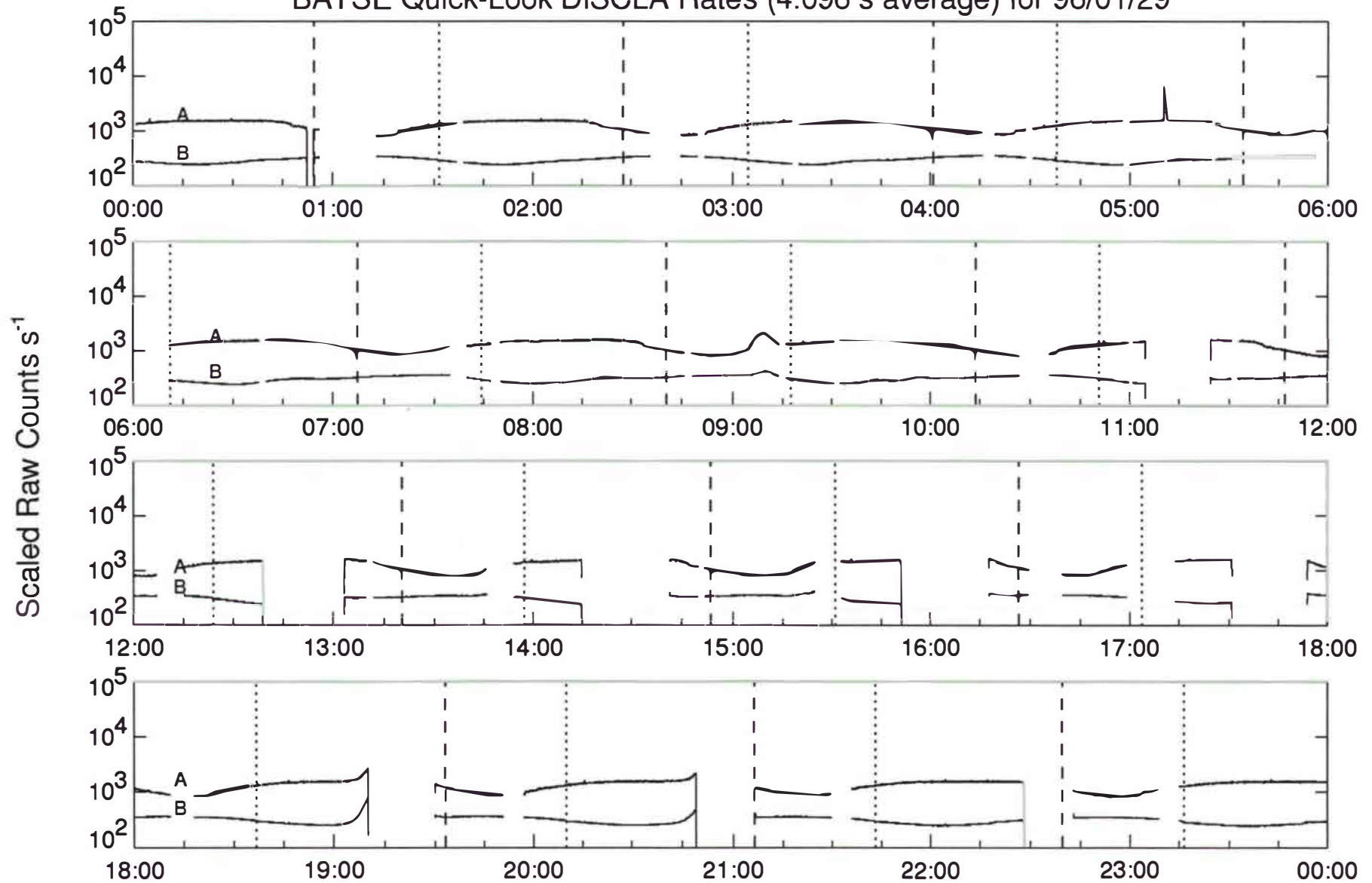


Data Start: 96/01/29, 0000:01

Plot created: 96/01/31, 0654

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 96/01/29



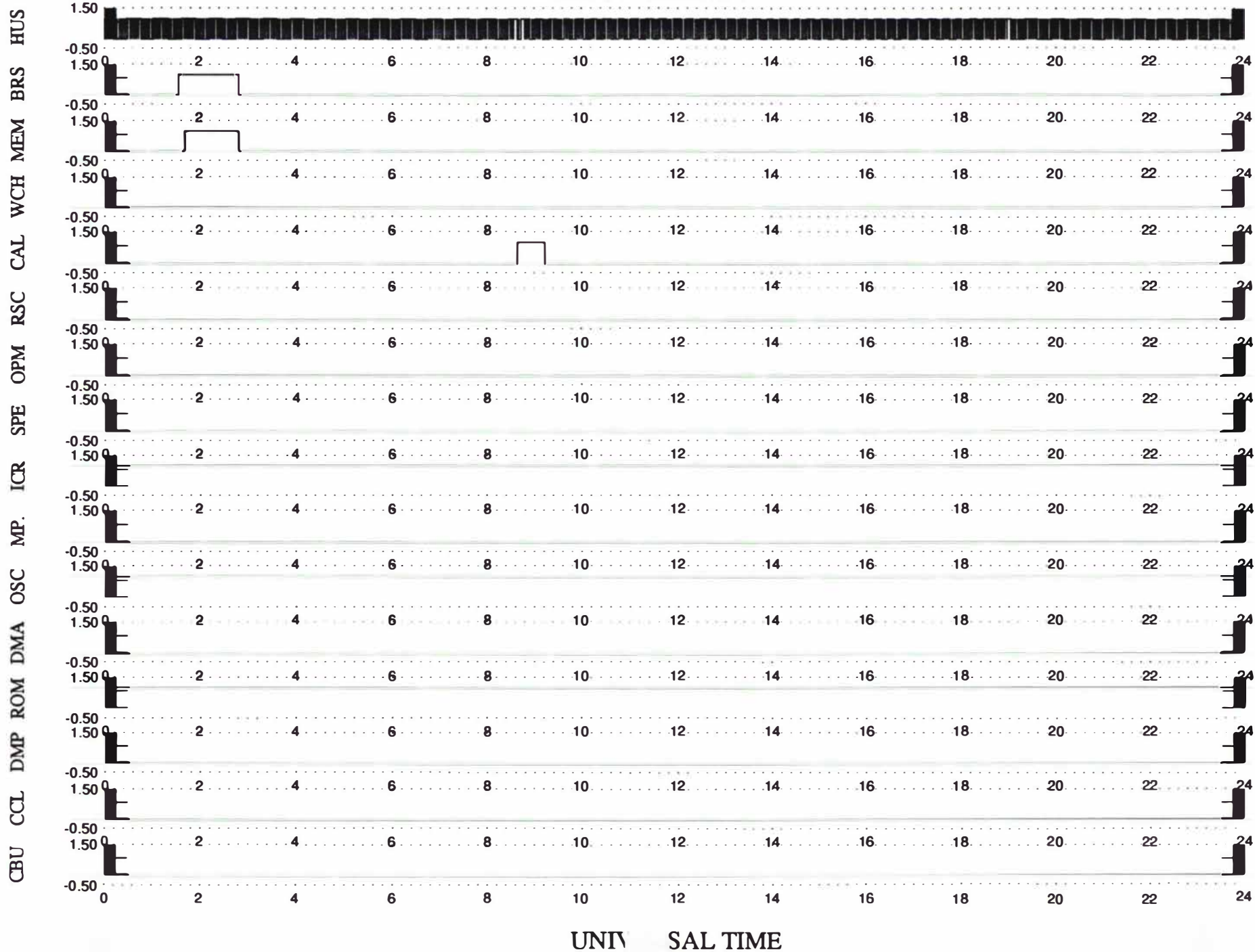
Current Time: 96/01/31, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

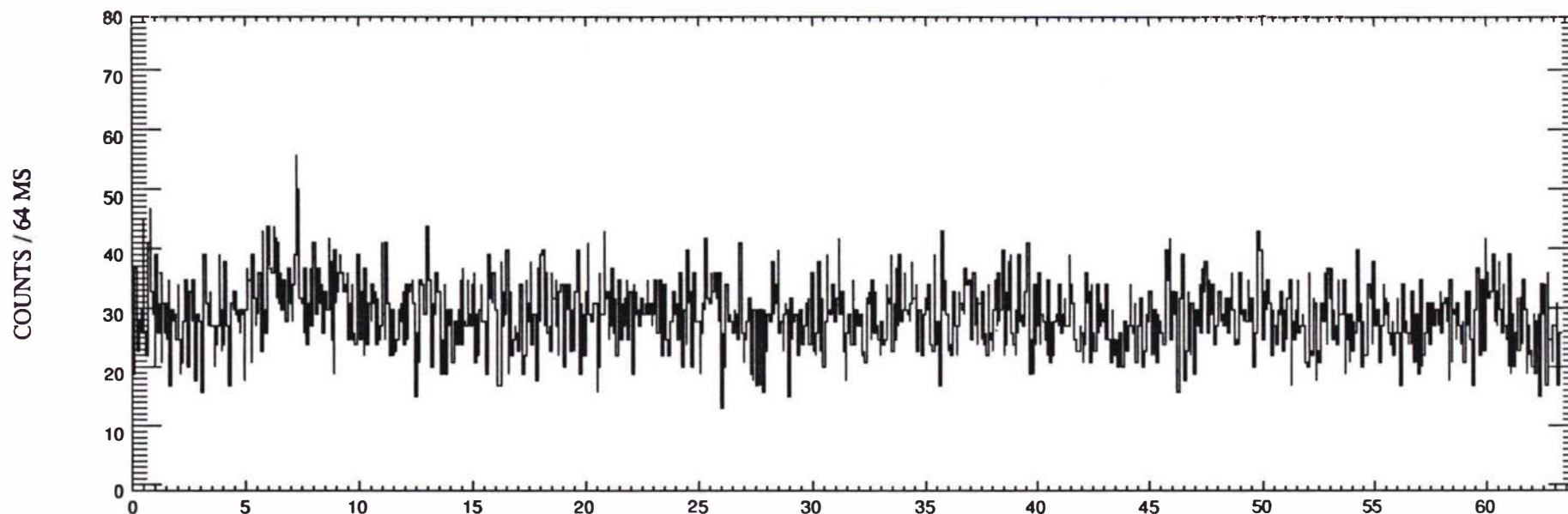
HUS MODES EDR day 29, year 1996 to day 29, year 1996
BURST NUMBER 11

4/1/96

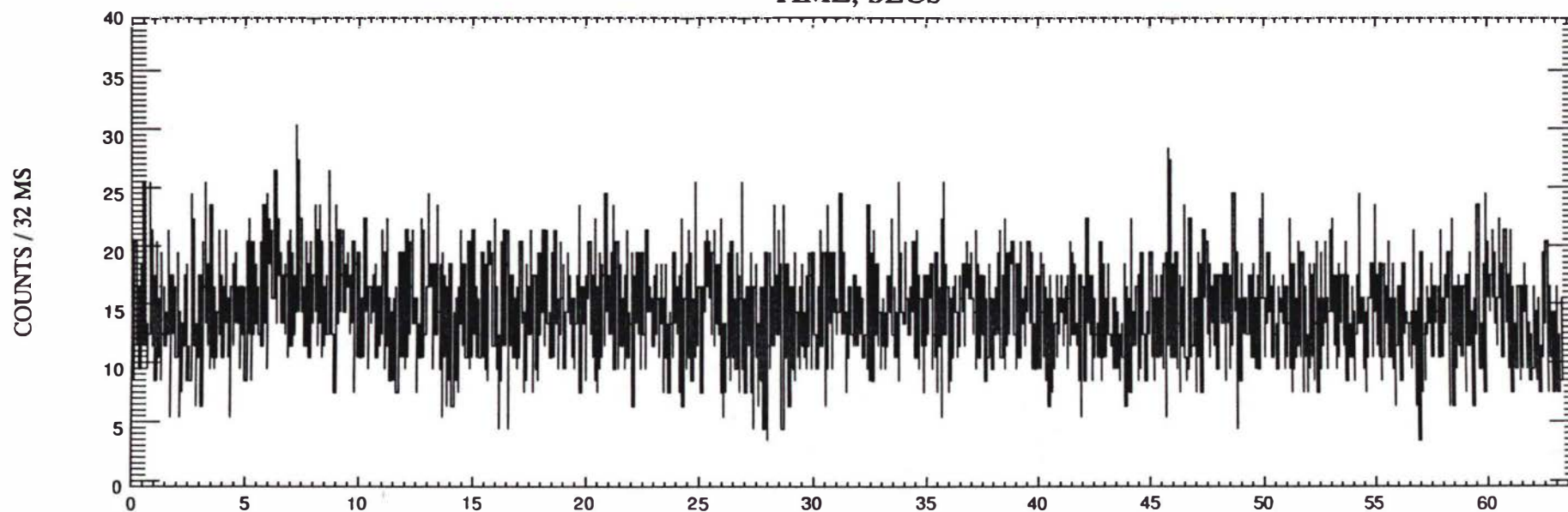


HUS 2A TRIGGERED DATA EDR day 29, year 1996
Burst Counter 11 at UT= 1.546971011692 h= 5569.096 s 01:32:49.096

4/1/96



TIME, SECS

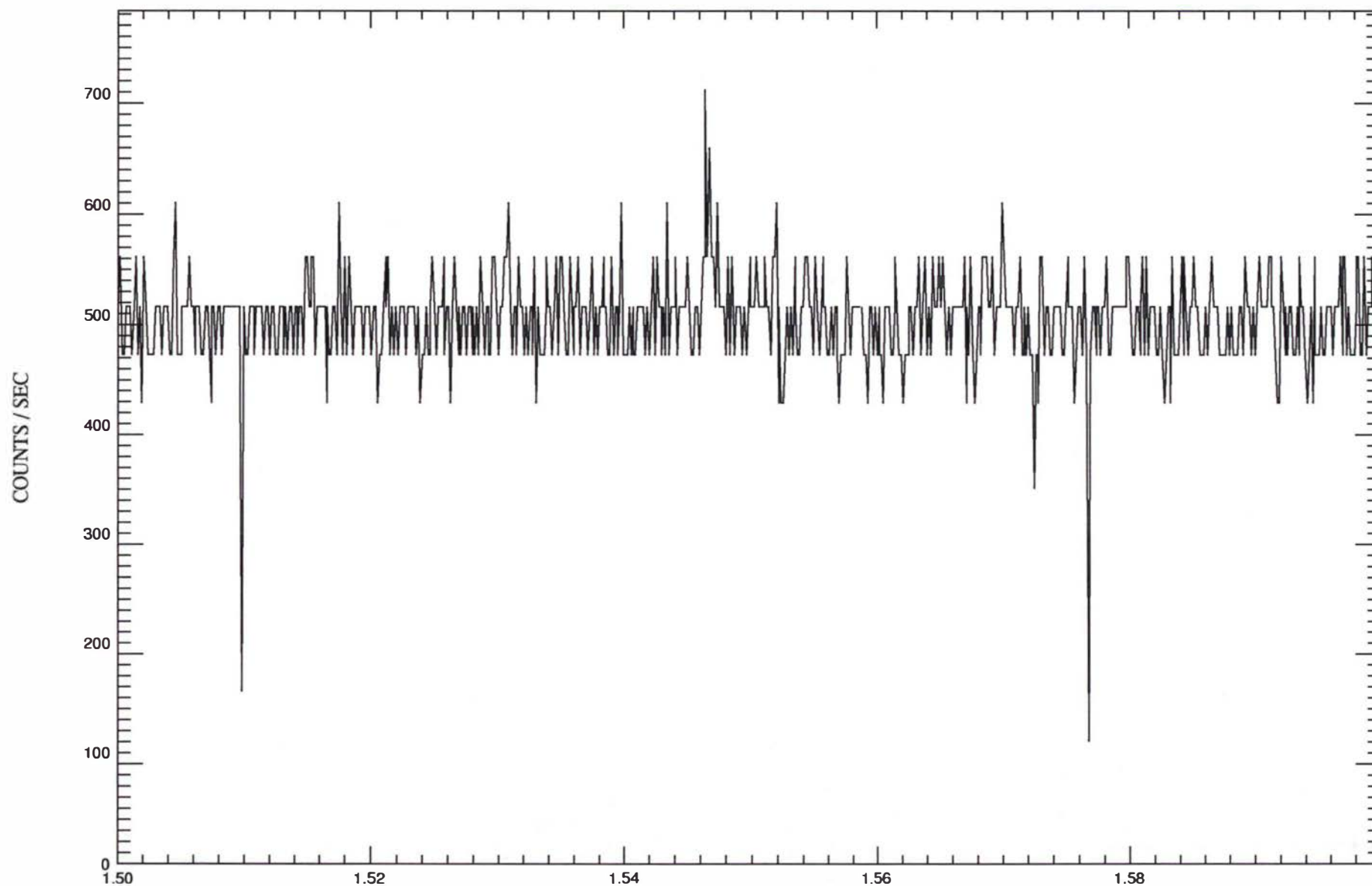


TIME, SECS

B# 1

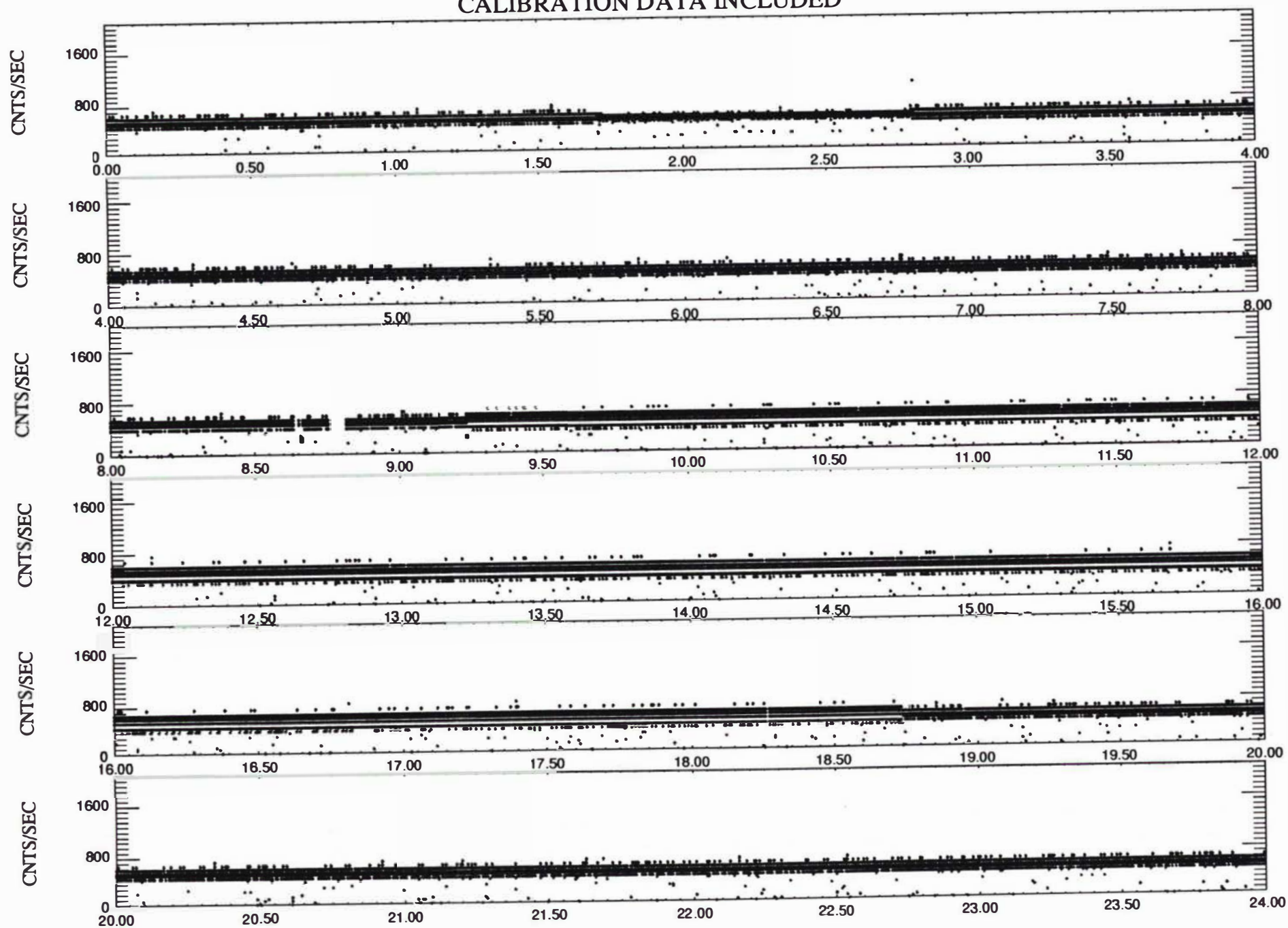
HUS 2A, MODE 1, NOT AVERAGED QEDR day 29, year 1996 to day 29, year 1996
CALIBRATION DATA INCLUDED

1/30/96

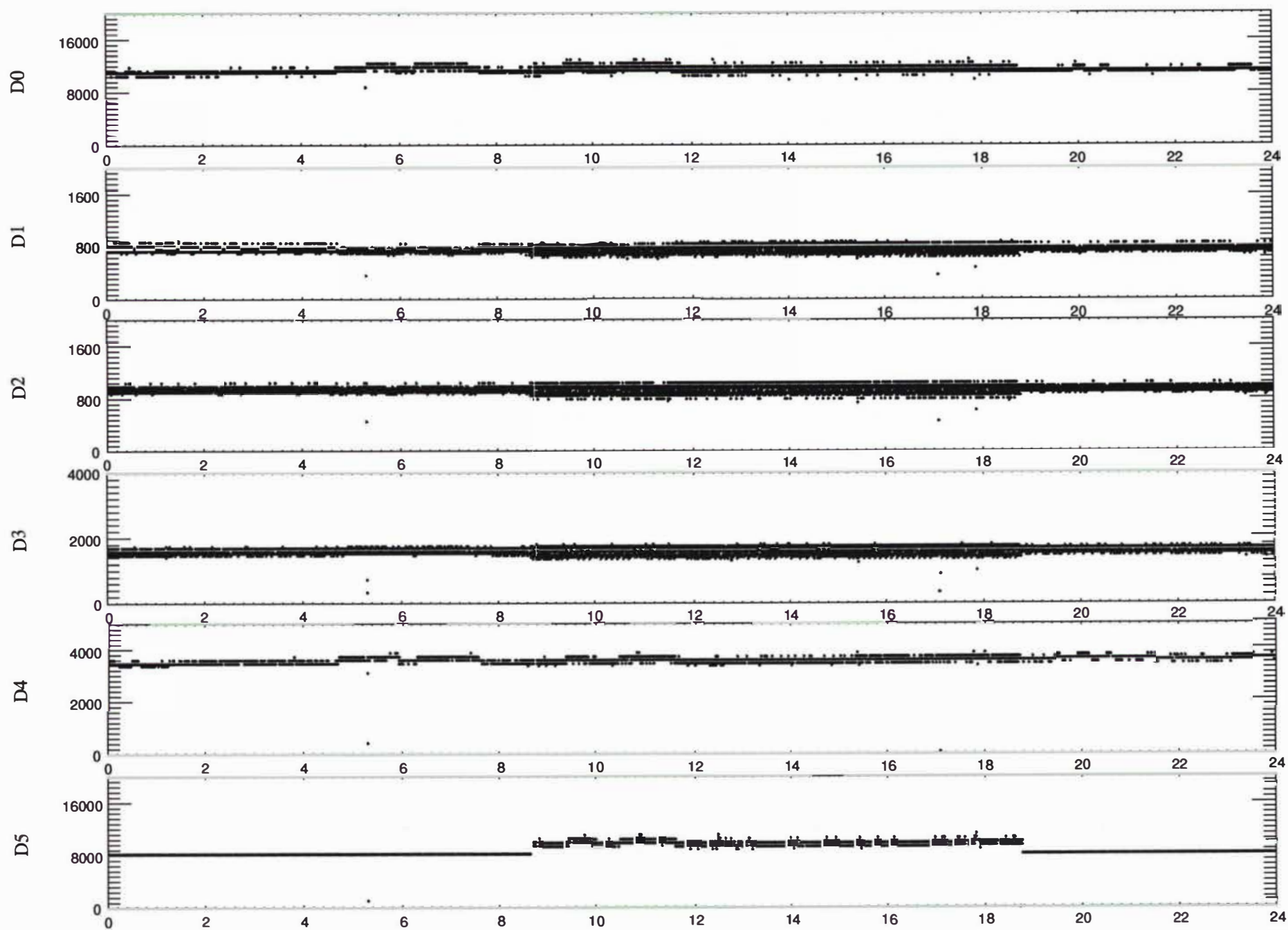


HUS 2A, MODE 1, NOT AVERAGED EDR day 29, year 1996 to day 29, year 1996
CALIBRATION DATA INCLUDED

4/1/96



UNIV CAL TIME



UNIVERSAL TIME

RT data files which may contain ~ 0.5 s timing error because they follow a trigger

2 hour time range from beginning of burst that extract falls in: DATA USED ?

b02:0126	extract	beg time:0244	e91270_2A1_02.73_02.84.ascii.Z	N
b03:0219	extract	beg time:0244	e91270_2A1_02.73_02.84.ascii.Z	N
b01:0121	extract	beg time:0310	e91360_2A1_03.16_03.37.ascii.Z	N
01:0932	extract	beg time:1025	e92010_2A1_10.42_10.48.ascii.Z	Y (TRIGGER)
01:0845	extract	beg time:1015	e92058_2A1_10.25_10.75.ascii.Z	N
b01:0609	extract	beg time:0723	e92111_2A1_07.38_07.54.ascii.Z	N
b01:0629	extract	beg time:0634	e92174_2A1_06.57_06.87.ascii.Z	N
b01:0541	extract	beg time:0549	e92190_2A1_5.76_5.90.ascii.Z	Y (SGR 1300)
b02:2032	extract	beg time:2058	e92205_2A1_20.97_22.66.ascii.Z	Y (TRIGGER)
b01:1202	extract	beg time:1240	e92209_2A1_12.67_12.85.ascii.Z	N
b01:1717	extract	beg time:1831	e92213_2A1_18.51_18.82.ascii.Z	N
b01:1142	extract	beg time:1301	e92303_2A1_13.02_13.28.ascii	Y
b03:0736	extract	beg time:0844	q92313_2A1_8.70_8.96.ascii.Z	N
b03:0736	extract	beg time:0844	e92313_2A1_08.74_09.02.ascii.Z	N
b14:1730	extract	beg time:1905	q92314_2A1_19.08_19.30.ascii.Z	N
b15:1825	extract	beg time:1905	q92314_2A1_19.08_19.30.ascii.Z	N
b02:0156	extract	beg time:0344	e92315_2A1_3.10_3.36.ascii.Z	N
b03:0322	extract	beg time:0344	e92315_2A1_3.10_3.36.ascii.Z	N
b06:0819	extract	beg time:0844	e92315_2A1_8.71_8.85.ascii.Z	N
b08:1211	extract	beg time:1340	e92315_2A1_13.66_13.96.ascii.Z	N
b08:1211	extract	beg time:1344	e92315_2A1_13.74_14.03.ascii.Z	N
b02:0600	extract	beg time:0644	e92316_2A1_6.76_7.04.ascii.Z	N
b02:0135	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	Y
b03:0227	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	Y
b04:0315	extract	beg time:0329	e93012_2A1_3.50_3.72.ascii.Z	Y
b01:1105	extract	beg time:1150	q93077_2A1_11.83_12.05.ascii.Z	Y
b01:0745	extract	beg time:0756	q93096_2A1_7.71_7.85.ascii.Z	Y (TRIGGER)
b01:0745	extract	beg time:0856	q93096_2A1_8.40_8.50.ascii.Z	N
01:1445	extract	beg time:1530	e93126_2A1_15.50_15.65.ascii.Z	N
01:1445	extract	beg time:1548	e93126_2A1_15.80_15.95.ascii.Z	N
b01:0334	extract	beg time:0434	e93265_2A1_04.56_04.64.ascii.Z	N
b01:0900	extract	beg time:0943	e93272_2A1_09.71_09.98.ascii.Z	Y (SGR 1806)
b01:1654	extract	beg time:1707	e93287_2A1_17.11_17.37.ascii.Z	Y
b01:2215	extract	beg time:2240	e93294_2A1_22.67_22.85.ascii.Z	N
b01:0824	extract	beg time:0840	e93303_2A1_08.66_08.81.ascii.Z	N
b01:0352	extract	beg time:0510	e93318_2A1_05.17_05.42.ascii.Z	N
b01:0641	extract	beg time:0824	e93340_2A1_08.40_08.61.ascii.Z	N
b02:0602	extract	beg time:0733	e94026_2A1_07.55_07.71.ascii.Z	N
b05:1140	extract	beg time:1240	e94044_2A1_12.66_12.76.ascii.Z	Y
b01:0204	extract	beg time:0326	e94047_2A1_03.44_03.62.ascii.Z	N
b01:0113	extract	beg time:0124	e94049_2A1_01.40_02.50.ascii.Z	N
b03:1943	extract	beg time:2123	e94058_2A1_21.38_21.49.ascii.Z	N
b01:0346	extract	beg time:0505	e94061_2A1_05.08_05.25.ascii.Z	Y (Trigger; but RT data probably used)
b01:0047	extract	beg time:0128	e94062_2A1_01.47_01.63.ascii.Z	N
b01:2113	extract	beg time:2142	e94202_2A1_21.70_21.98.ascii.Z	N
b01:2113	extract	beg time:2144	e94202_2A1_21.74_22.14.ascii.Z	N
b01:1047	extract	beg time:1143	e94242_2A1_11.71_11.86.ascii.Z	N
b01:0647	extract	beg time:0728	e94298_2A1_07.47_07.51.ascii.Z	N
b01:0128	extract	beg time:0241	e94299_2A1_02.68_02.80.ascii.Z	Y
b09:1148	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	N
b10:1238	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	N
b11:1328	extract	beg time:1348	e94321_2A1_13.80_14.47.ascii.Z	N
b01:1952	extract	beg time:2040	e94326_2A1_20.66_20.78.ascii.Z	N
b01:0223	extract	beg time:0406	e95042_2A1_04.10_04.76.ascii.Z	N
01:0640	extract	beg time:0740	e95072_2A1_07.67_07.81.ascii.Z	N
01:0144	extract	beg time:0158	e95216_2A1_01.96_02.09.ascii.Z	Y (Trigger)
b02:1628	extract	beg time:1718	e95339_2A1_17.30_17.45.ascii.Z	N
b03:1718	extract	beg time:1718	e95339_2A1_17.30_17.45.ascii.Z	N
b01:1124	extract	beg time:1205	e95362_2A1_12.09_12.87.ascii.Z	N

b04:1343	extract beg time:1540	e95362_2A1_15.67_15.84.ascii.Z	Y
b04:1343	extract beg time:1541	e95362_2A1_15.69_15.85.ascii.Z	Y
b05:1516	extract beg time:1540	e95362_2A1_15.67_15.84.ascii.Z	Y
b05:1516	extract beg time:1541	e95362_2A1_15.69_15.85.ascii.Z	Y
b01:0053	extract beg time:0251	e96002_2A1_02.85_03.62.ascii	N
b02:0216	extract beg time:0251	e96002_2A1_02.85_03.62.ascii	N
b20:1956	extract beg time:2041	e96002_2A1_20.68_20.76.ascii	N
b20:1956	extract beg time:2041	e96002_2A1_20.69_20.76.ascii	N
b02:0128	extract beg time:0305	e96004_2A1_03.09_03.87.ascii.Z	N
b03:0235	extract beg time:0305	e96004_2A1_03.09_03.87.ascii.Z	N
b05:1621	extract beg time:1656	e96006_2A1_16.93_17.08.ascii.Z	N
b01:0116	extract beg time:0150	e96007_2A1_01.84_01.95.ascii	N
b01:0116	extract beg time:0152	e96007_2A1_01.87_01.99.ascii	N
b01:1819	extract beg time:1935	e96028_2A1_19.59_19.87.ascii.Z	Y
b01:0208	extract beg time:0233	e96030_2A1_02.55_02.66.ascii.Z	Y
b01:0208	extract beg time:0235	e96030_2A1_02.58_02.73.ascii.Z	Y
b01:0208	extract beg time:0235	e96030_2A1_02.59_02.73.ascii.Z	Y
b01:0849	extract beg time:0949	qp96032_2A1_09.81_09.94.ascii.Z	Y
b02:2011	extract beg time:2144	qp96032_2A1_21.74_21.90.ascii.Z	Y
b01:1929	extract beg time:2049	qp96051_2A1_20.82_20.85.ascii.Z	N
b01:1929	extract beg time:2049	qp96051_2A1_20.82_20.86.ascii.Z	N
b01:1529	extract beg time:1719	qp96094_2A1_17.32_17.48.ascii.Z	N
b01:1529	extract beg time:1722	qp96094_2A1_17.36_17.52.ascii.Z	N
b01:1652	extract beg time:1752	qp96168_2A1_17.87_17.97.ascii.Z	N
b01:1652	extract beg time:1755	qp96168_2A1_17.91_18.05.ascii.Z	N

(GR 1744 - MAYBE USED FOR NLSYN?)

* This event is apparently from 1744-28
 It occurred around the time of a GRB (4660)
 and the time histories are similar, but the location
 was $\sim 80^\circ$ off. If it is from 1744, BATSE did not
 detect it. Check for updated BATSE position of 4660 -
 it could still be this event

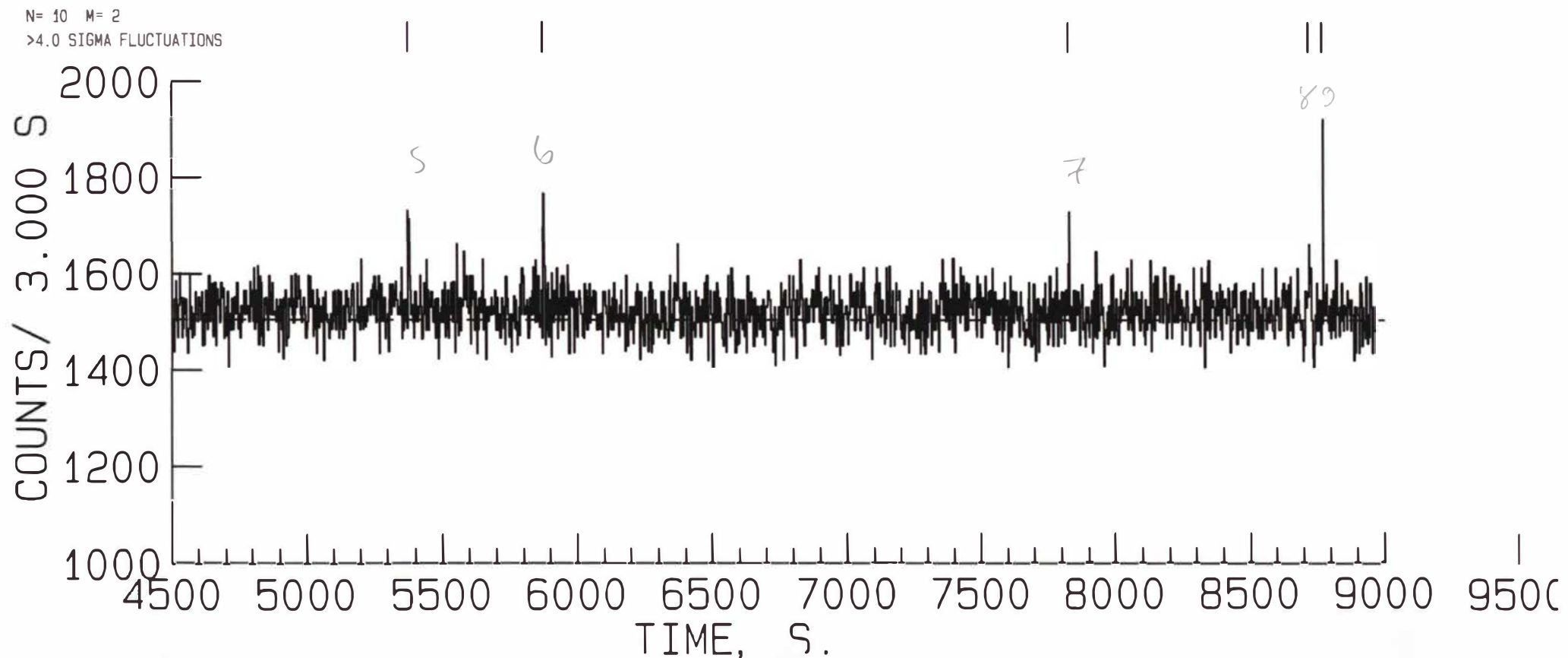
ULYSSES RT

7 / 2 / 96

30 / 1 / 96 41400.020 s

0.250 S INTERVALS REGROUPED BY 12

21- 141 keV



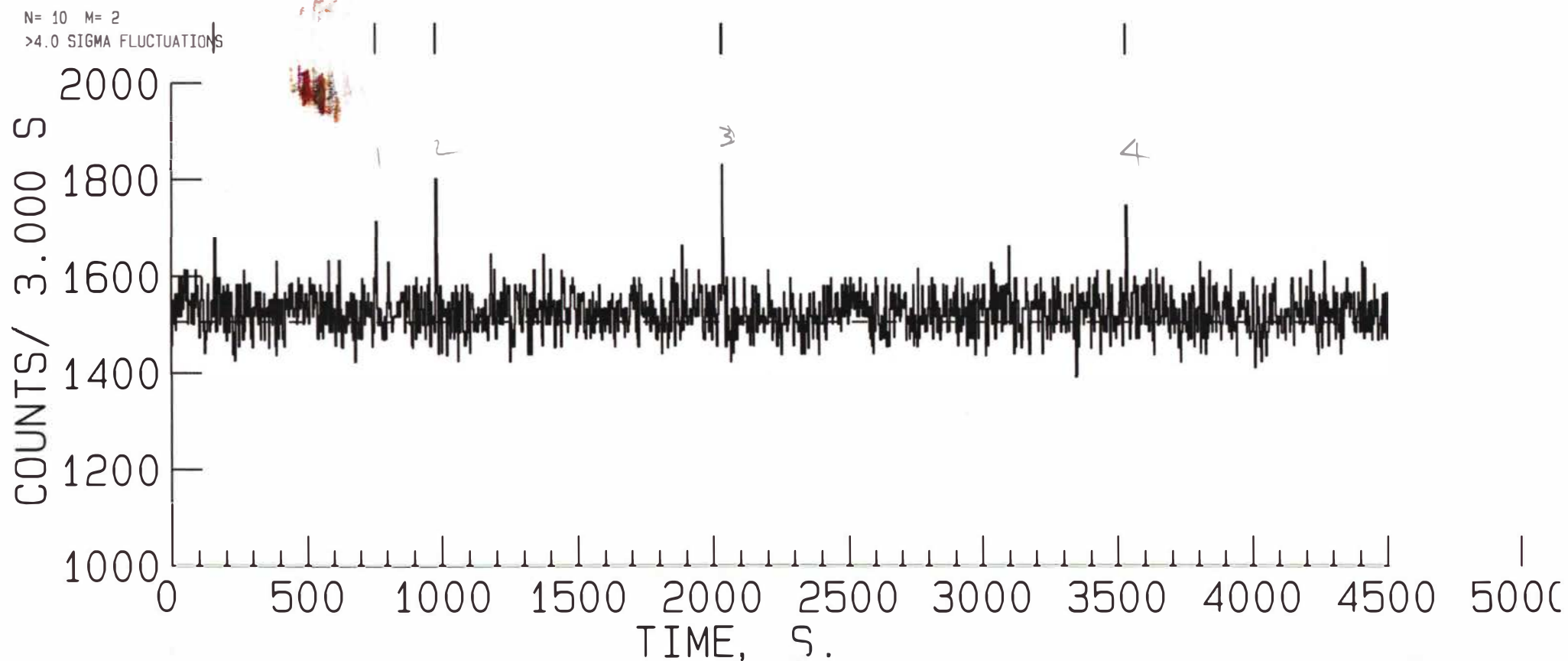
ULYSSES RT

7 / 2 / 96

30 / 1 / 96 41400.020 s

0.250 S INTERVALS REGROUPED BY 12

21- 141 keV



From HAGEDON@fender.msfc.nasa.gov Wed Jan 31 10:54 PST 1996
Return-Path: <HAGEDON@fender.msfc.nasa.gov>
Received: from FENDER.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (SMI-8.6/SMI-SVR4)
id KAA29137; Wed, 31 Jan 1996 10:54:15 -0800
om: HAGEDON@fender.msfc.nasa.gov
ate: Wed, 31 Jan 1996 12:54:02 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <960131125402.22800af0@fender.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 4660
Content-Type: text
Content-Length: 1135
X-Lines: 26
Status: RO

NO
~~RI - maybe~~
~~could be the GC repeater~~
IS

BATSEARCH PROGRAM

BATSE BURST # 4660
EVENT OF 1996 JAN 30 DAY OF YEAR= 30
EVENT CROSSING TIME AT BATSE : 8758. S. OR 02:25:58.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 306.000 -40.000
BATSE PEAK COUNTING RATE: 15000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 30/ 1/ 96 IS:
RA= 221.691 DEC= 67.840 DIST= 2.812 AU
BATSE-ULYSSES DISTANCE = 420723285. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 55.48 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 795.24 SECS.
CROSSING TIME AT ULYSSES IS 9553. S. OR 02:39:13 +/- 262.83 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 30/ 1/ 96 IS:
RA= 319.756 DEC= -16.788 DIST= 2.355 AU
MARS-BATSE DISTANCE = 352256096. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=153.90 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1055.17 SECS.
CROSSING TIME AT MARS IS 7703. S. OR 02:08:22 +/- 73.73 SECONDS

BATSE BURST TRIGGER

NO.: 4660

TIME: TJD=0112 SECONDS=8758

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=109.0 AZIMUTH=346.6 ERROR=1.2 DEGREES

COMMENTS:

1ST. SHORT SINGLE PULSE WITH SUBSTRUCTURE. DUR.~2 SEC.
2ND. SILENCE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
4660	960130	10112	08758	15000	306	-40	2



From cline@apache.gsfc.nasa.gov Wed Nov 20 14:32 PST 1996
 Date: Wed, 20 Nov 1996 14:32:12 -0800
 Mime-Version: 1.0
 To: KHURLEY@sunspot.ssl.berkeley.edu
 From: cline@apache.gsfc.nasa.gov (T L Cline)
 Subject: Search for (Konus mini-network) 3-sc triggers

Dear Kevin,

I'm sorry to report that the May 1996 mail from you was a list only to January 1996. If you have another later list, don't go to the trouble of plowing thru all this; I'll do it if you can e-mail/fax something. Thanks.

 SEARCH FOR 3-SC TRIGGERS ONLY -- Konus-W / Ulysses / BATSE or Konus-A

DATE	Konus-W Sensor (UT)	Max counts G1 G2 G3	N(S1)/N(S2) in G2	Duration T<T0 T>T0	Trigger # KW# BATSE/KA
94 11 21	62700.945 S1	1652 1656 300	21	3 50	6 3290
94 11 26	44557.952 S1	860 1430 330	4.2	40 45	8 3298
95 2 8	07824.432 S2	1144 1824 670	0.02	1 60	45 3408
95 2 10	08424.148 S1	1350 3900 700	3.2	0.04 0.16	47 3410
95 2 11	08697.749 S2	2750 11630 6560	<0.06	0.03 0.14	48 3412
95 2 11	72469.074 S1	1170 1570 460	60	12 60	50 3415
95 3 25	25841.574 S2	345 1460 1570	0.2	1 230	63 3480
95 3 25	63392.815 S1	1320 2710 900	3.2	1 43	64 3481
95 4 3	47985.179 S1	1030 2840 800	1.0	1 15	71 3491
95 4 3	84828.194 S2	4650 10000 4700	0.06	0.5 60	72 3492
95 4 25	00923.718 S1	1200 2780 1820	4.2	0.5 65	86 3523
95 5 3	66971.838 S1	1140 4200 3140	1.9	0.2 115	88 3537
95 5 13	81706.917 S1	720 1360 520	10	1 30	93 3571
95 7 1	12762.114 S1	340 1400 580	1.3	1 30	116 3657
95 7 1	23737.604 S2	570 1600 700	0.05	1 11	117 3658
95 8 4	07135.704 S2	3000 6650 3340	<0.03	0.2 3.5	131 3734
95 8 18	05065.640 S2	1960 4100 1350	0.05	60 50	137 3765
95 8 22	13751.048 S1	6070 12000 3770	9	0.4 60	140 3767
95 10 16	02484.285 S1	1960 1950 560	5	0.2 7	162 3870
95 12 3	03988.180 S2	260 720 420	0.85	1 16	196 3930
95 12 27	23005.042 S1	420 1200 320	1	1 1.5	218 ??? NO
96 1 11	46524.530 S2	1130 1280 190	0.2	0.5 6	222 4312
96 1 13	56024.261 S2	500 450 50	0.3	2 36	228 ??? NO
96 1 14	44104.737 S1	4900 7200 1400	1.8	1 60	233 4368, KA

(ABOVE, ALL ARE ULYSSES TRIGGERS - ALL BUT 2 ARE CONFIRMED BATSE TRIGGERS)

 (BELOW, ULYSSES TRIGGERS INCOMPLETE, BUT KNOWN ULYSSES RI'S ARE DELETED:)

BATSE

95 12 31	20231.668 S2	180 320 150	0.07	9 65	219	Search	
96 1 2	11650.996 S1	140 300 80	1	1 0.2	220	NO	
96 1 19	45226.016 S2	210 460 190	0.2	6 85	237	Search	
96 1 30	08756.848 S1	100 470 340	3	0.5 0.2	240	NO	4660
96 2 1	78530.582 S2	400 770 230	0.34	12 70	241	RI KA	4701
96 2 2	50750.813 S1	390 430 180	5	0.5 8	242	RI	4710
96 2 5	34499.021 S1	100 240 80	>15	7 250	243	RI	4745
96 2 6	17898.732 S1	120 520 260	1.05	1 36	244	Trig	4757
96 2 7	65075.063 S2	210 780 200	0.13	32 12	245	Search	
96 2 10	35198.959 S2	220 550 360	<0.1	0.5 2	247	RI	NO
96 2 28	85760.241 S1	2360 7360 3350	4.3	0.1 2.5	249	Trig	4814
							NO

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

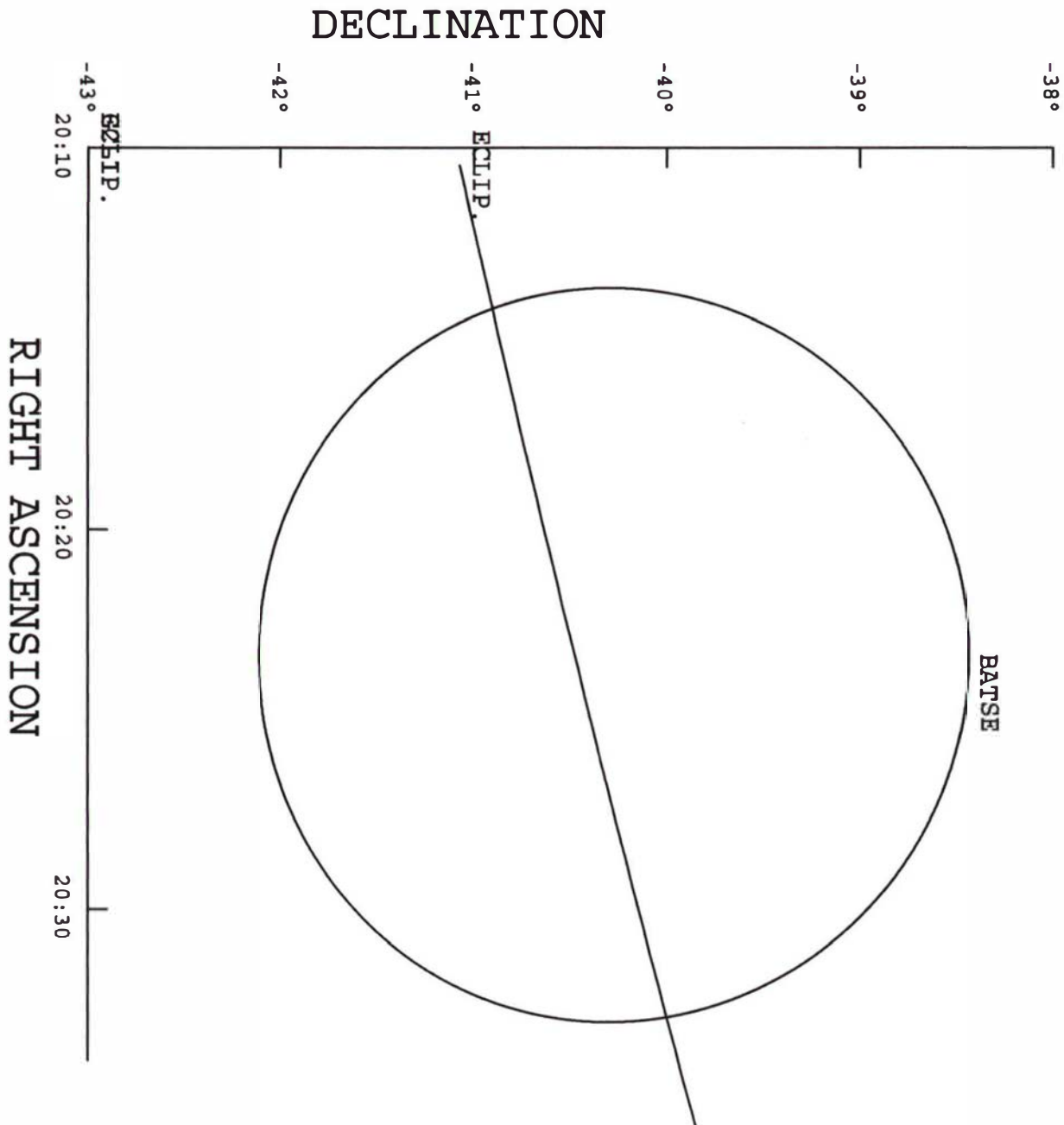
G=GALACTIC EQUATOR

1 BATSE

2 KONUS1

EVENT OF JAN 30, 1996 2:25

19/ 8/ 8



BATSE

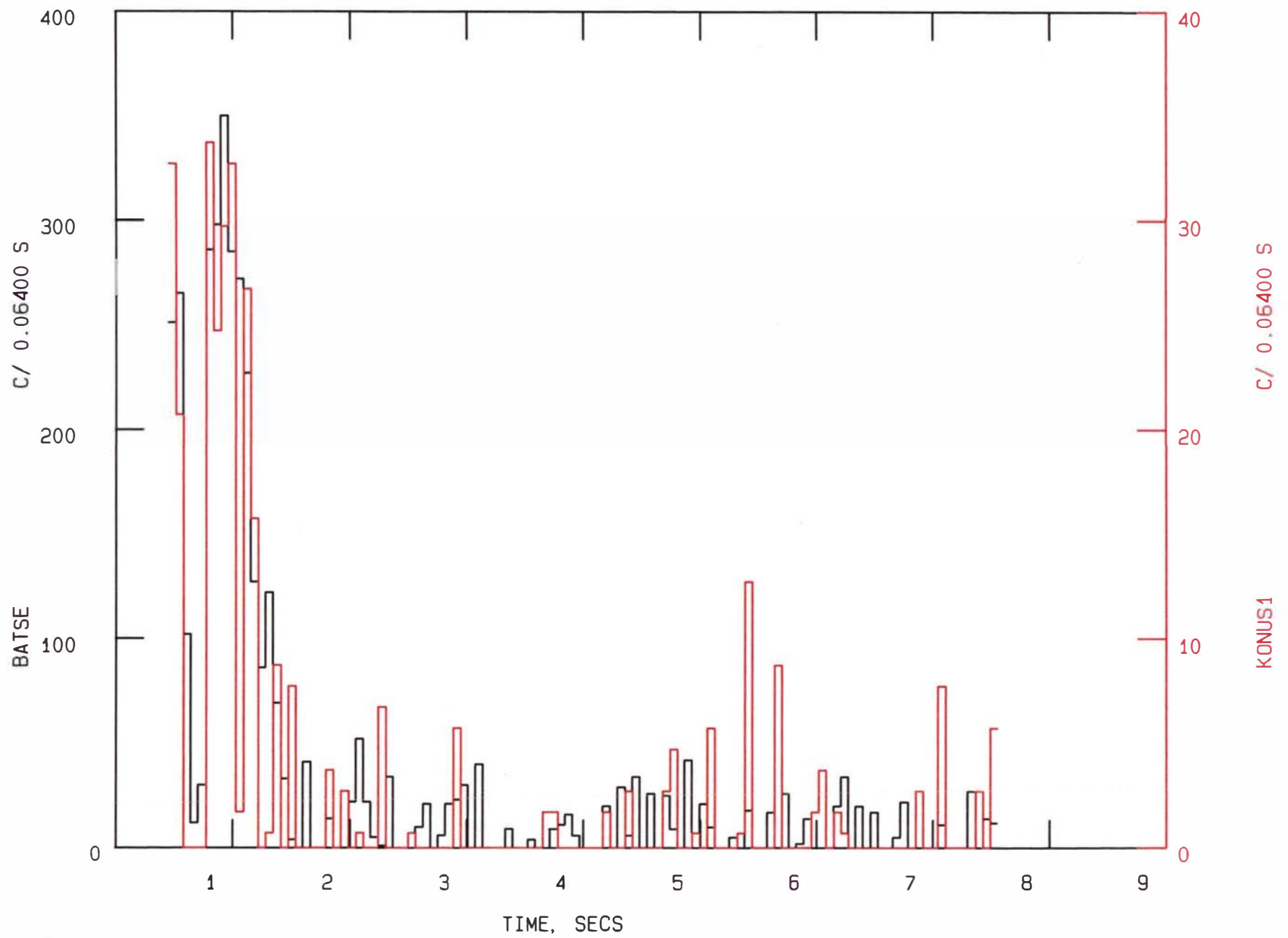
-KONUS1

CORRELATION

30/ 1/96

8758.666

19/ 8/ 8



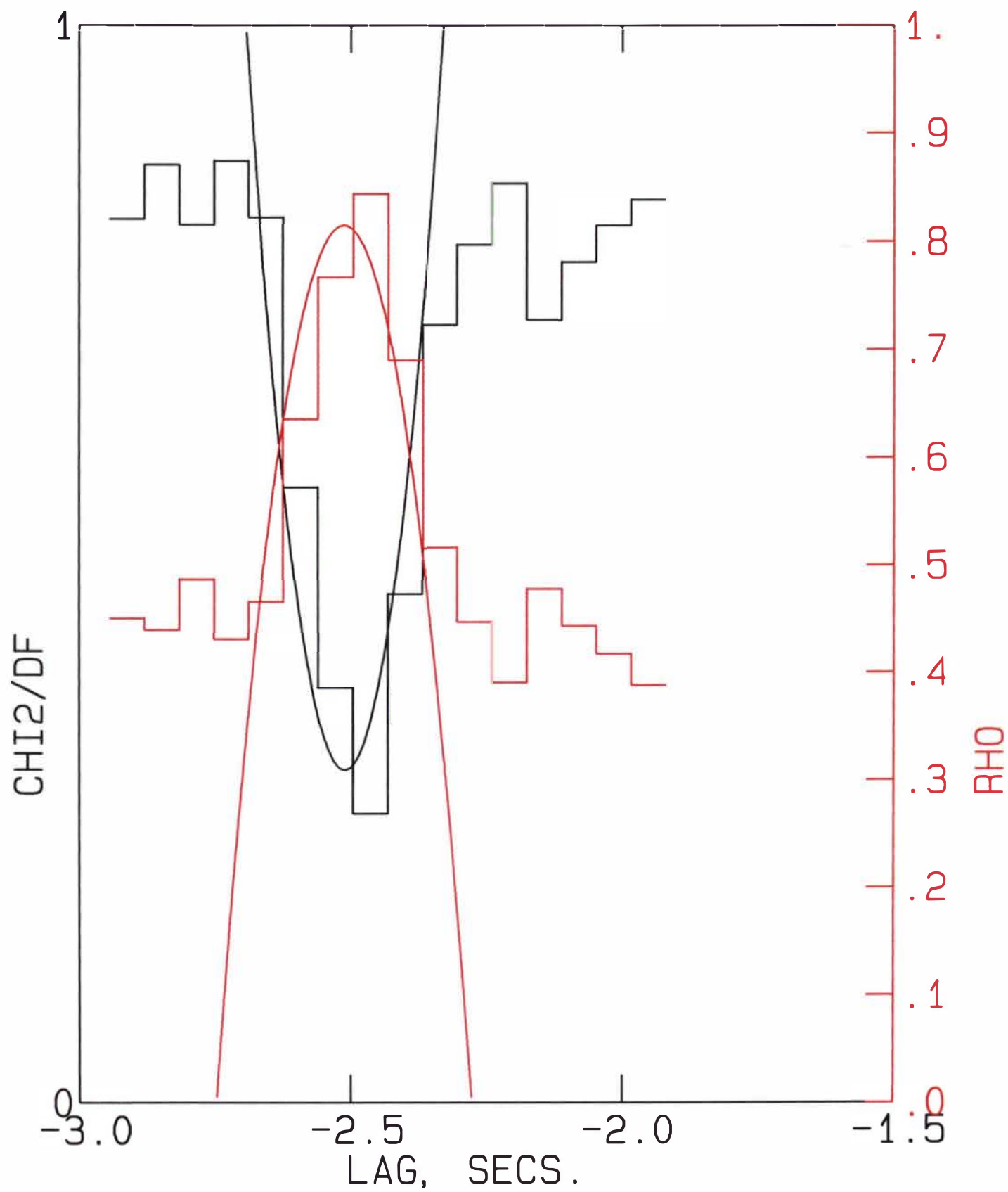
BATSE

-KONUS1

CORRELATION

30/ 1/96

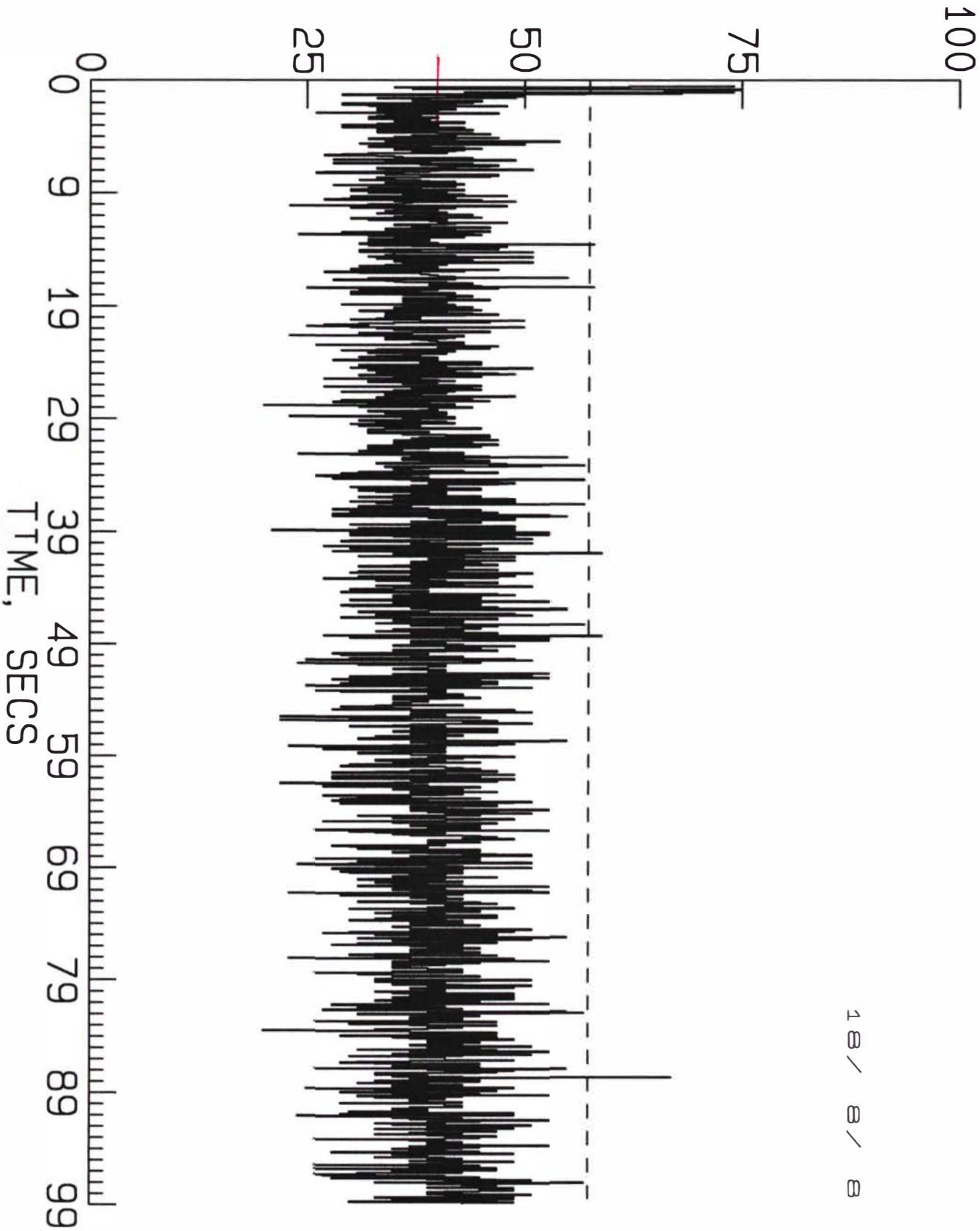
8758.666



KONUS

30/01/96 8756.840
50- 200 keV

COUNTS/0.064 S



N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

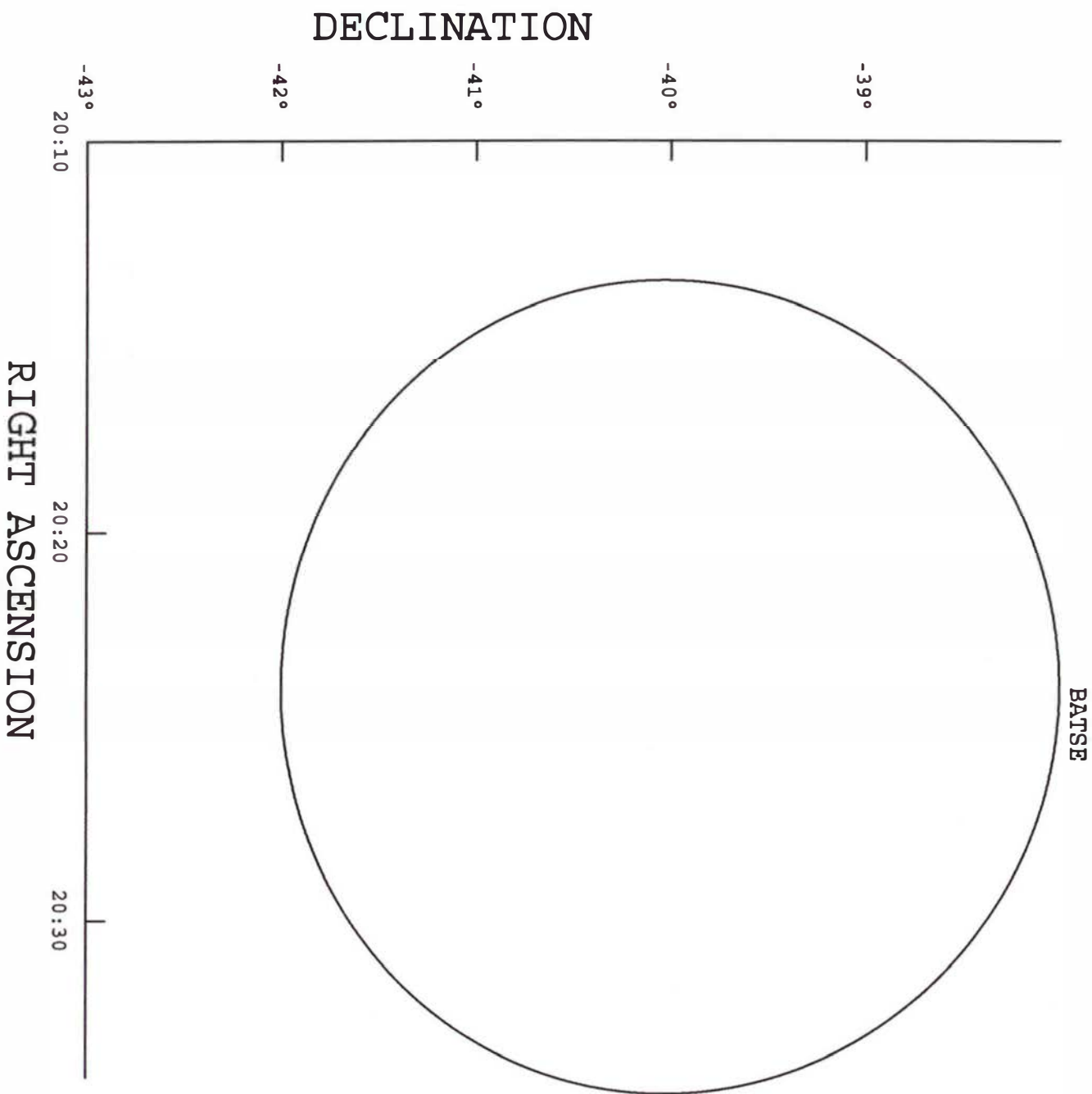
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF JAN 30, 1996 2:35

16 / 2/96



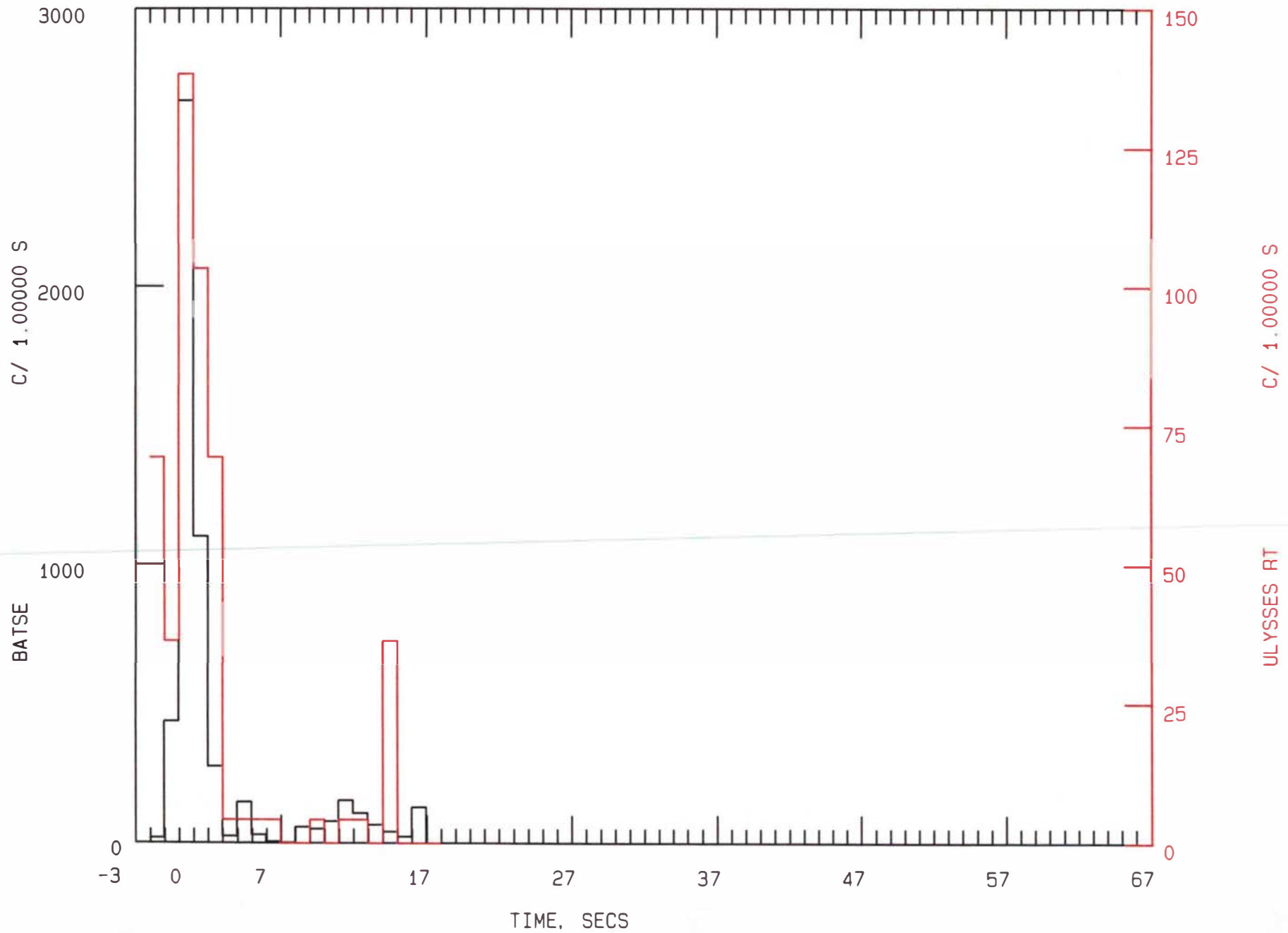
BATSE

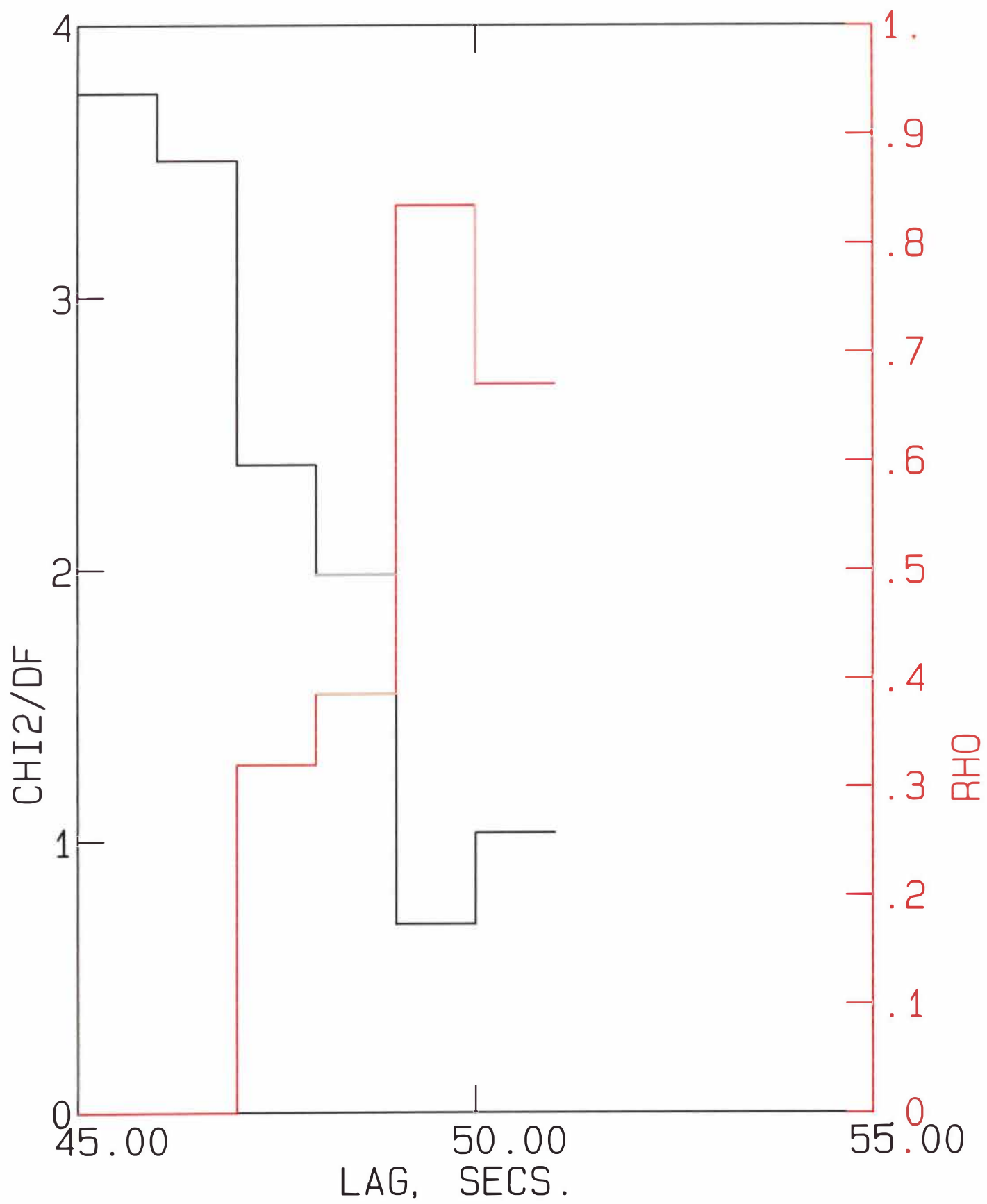
-ULYSSES RT CORRELATION

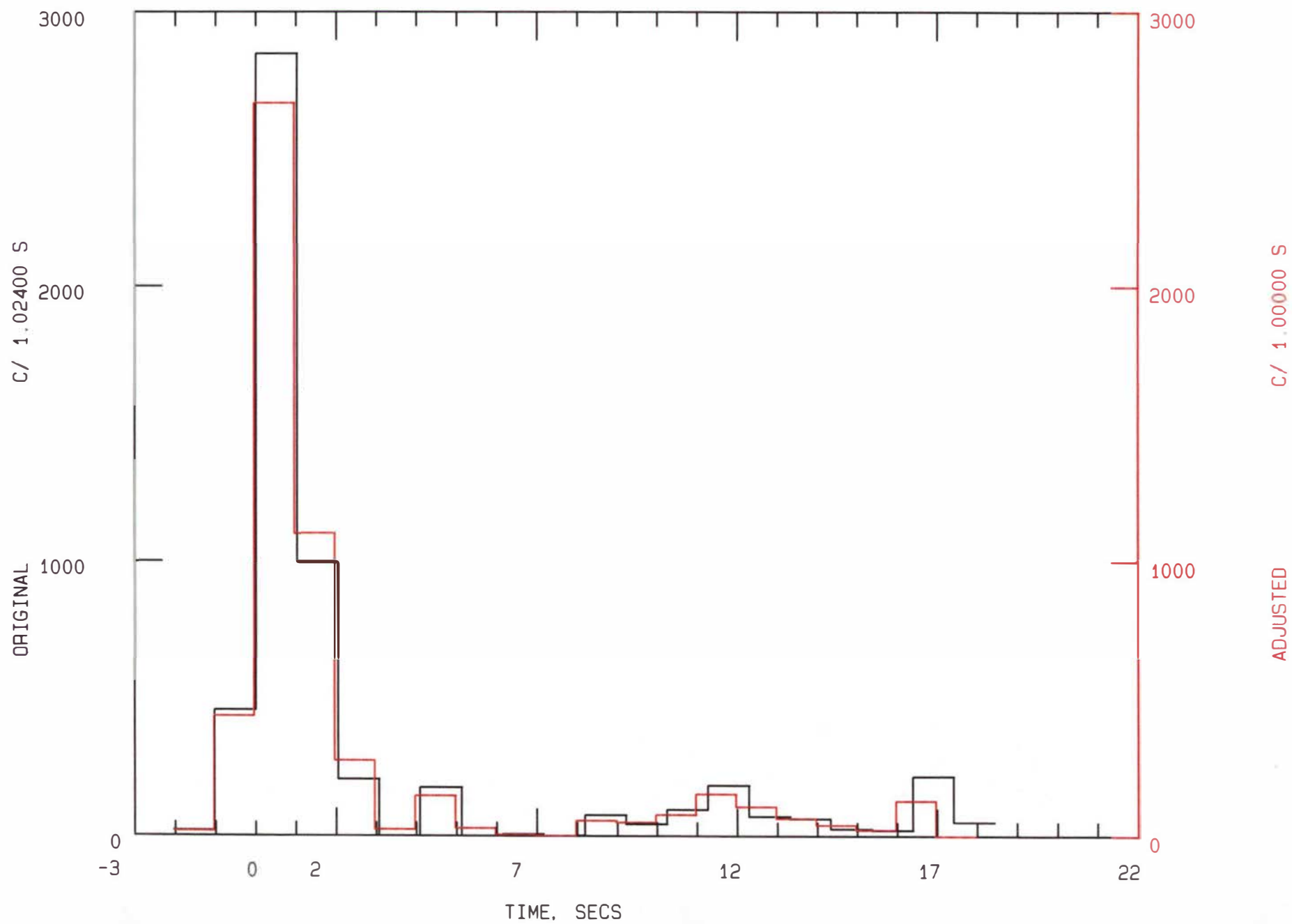
30/ 1/96

8758.666

16/ 2/96







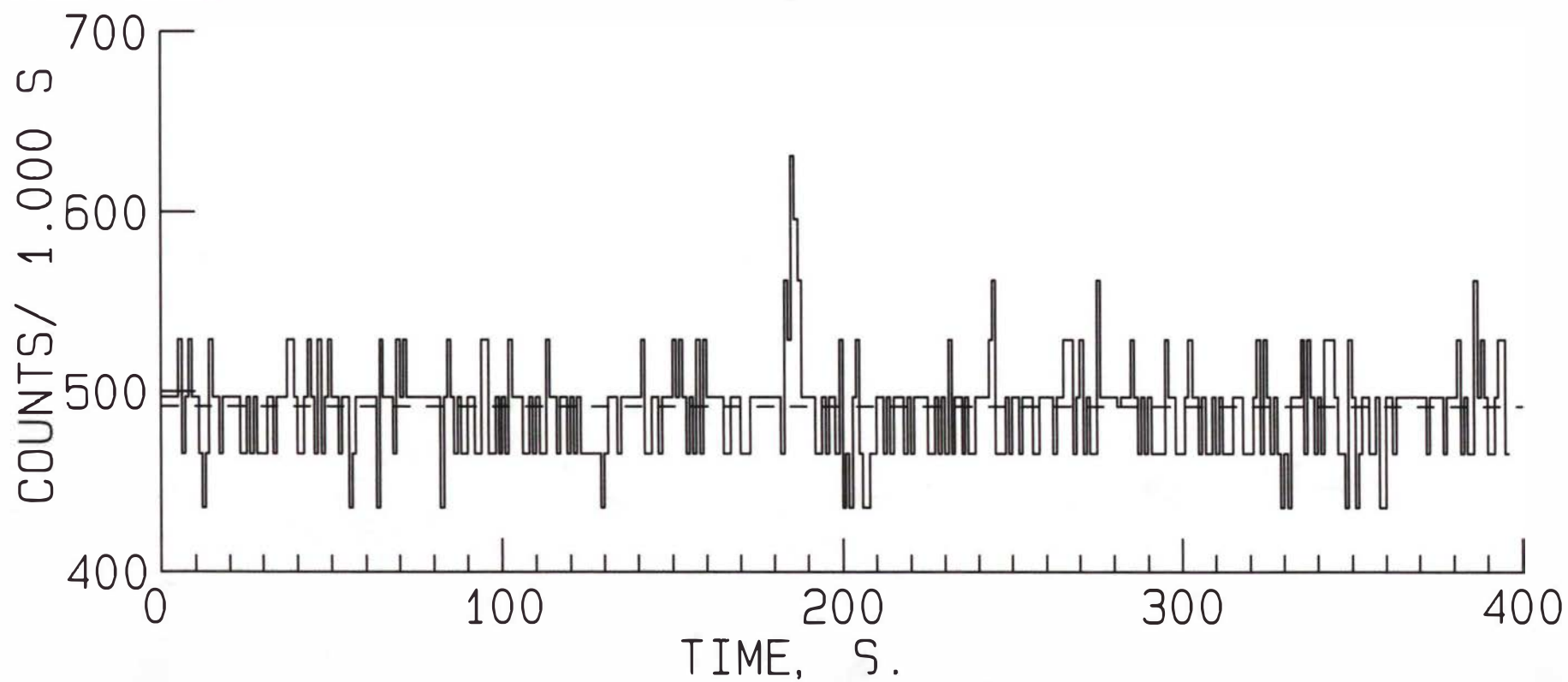
ULYSSES RT

16 / 2 / 96

30 / 1 / 96 9180.049 s

21- 141 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



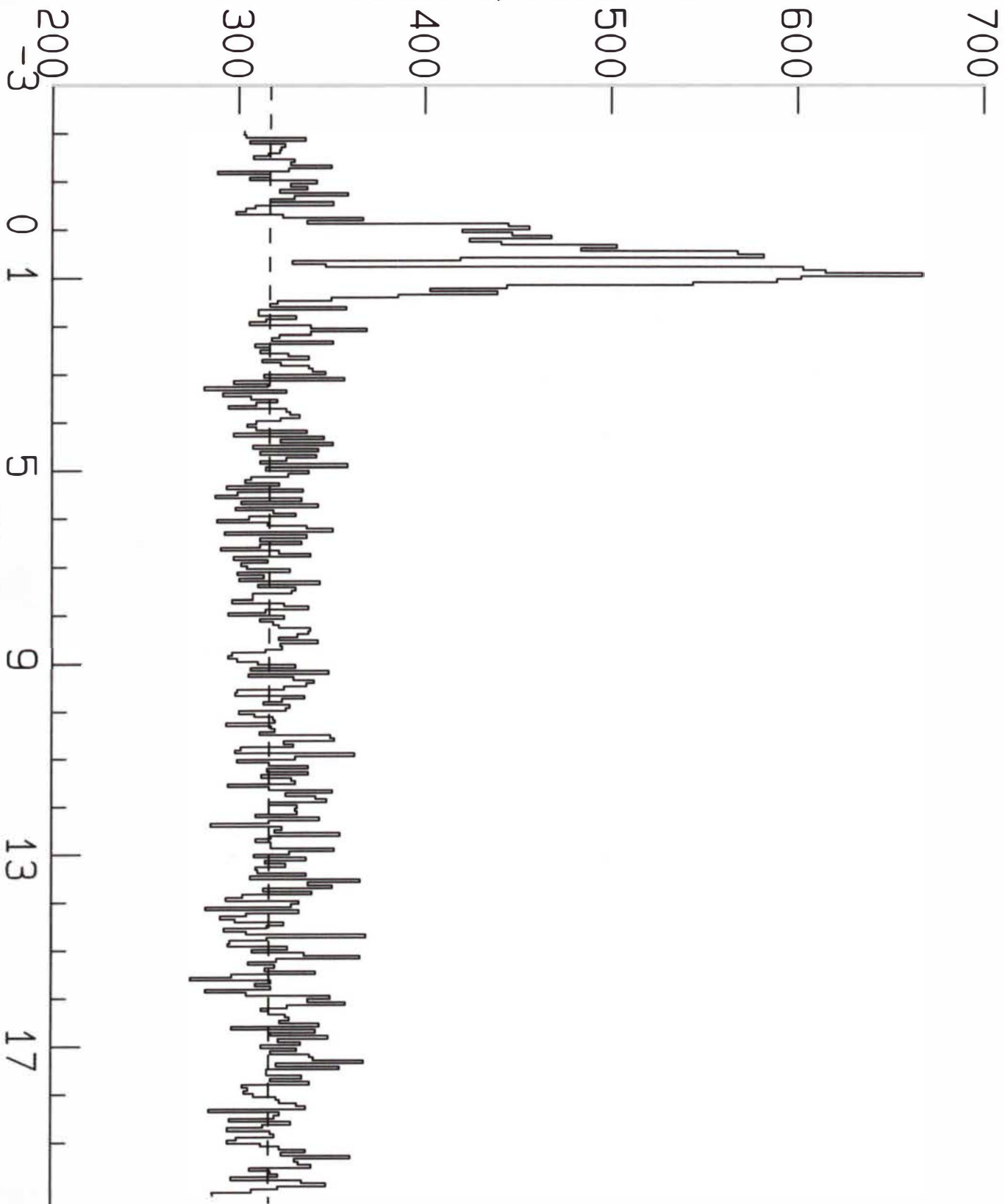
BATSE

30/01/96

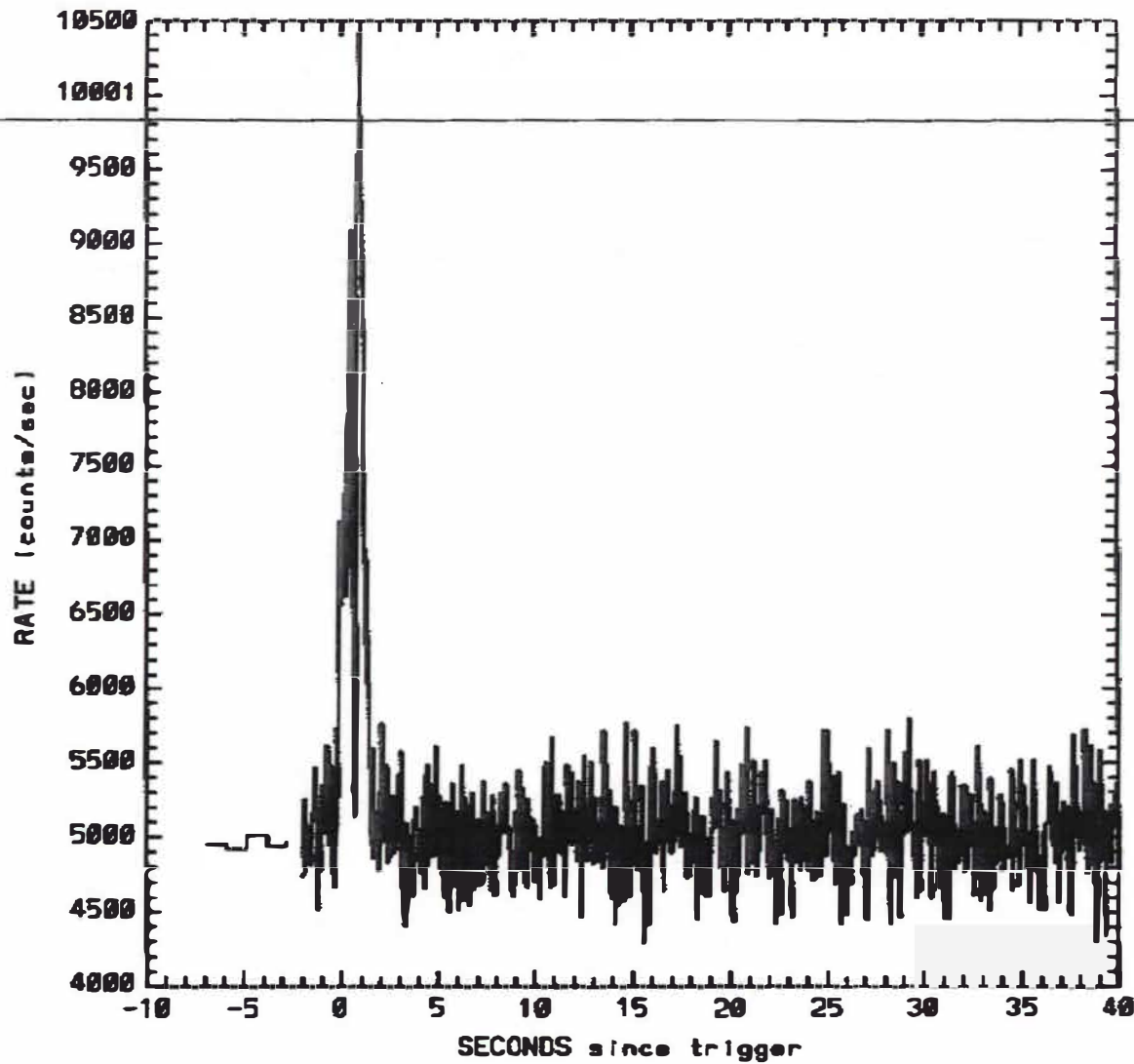
8758.666

25- 100 keV

COUNTS/0.064 S



DISCSC Data for K. Hurley. No. 4660



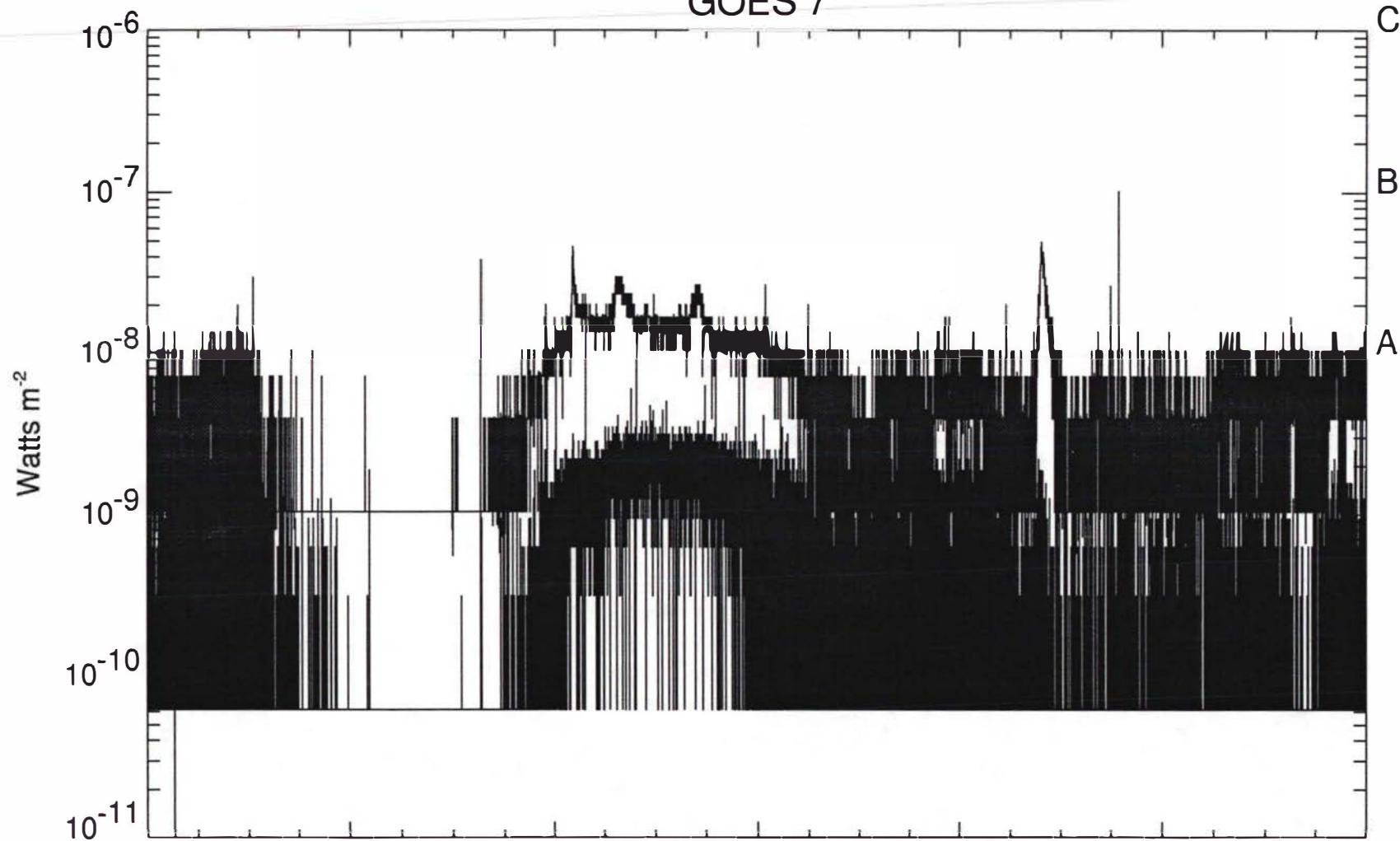
8-FEB-1996 10:00.45

Created by NDPS 80
(Burst Display)
Version 12.25

Trigger # = 4660

Trigger Time:
10112 / 0750.666Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.004 second(s)Detectors [7..8],
---3-1-Discriminators:
(1 - 2)Quality Mask:
BDISP1

GOES 7



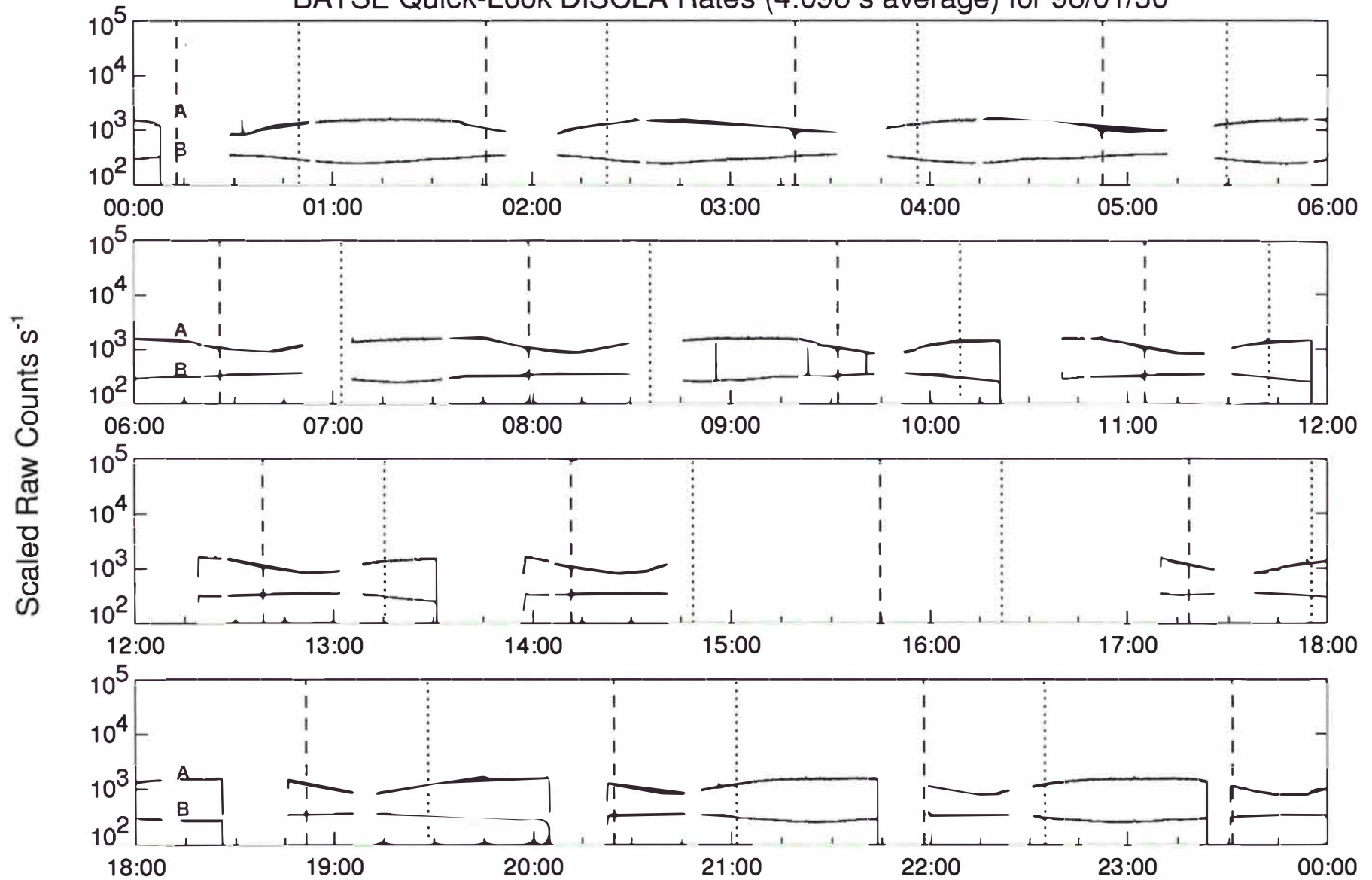
Data Start: 96/01/30, 0000:00

Plot created: 96/02/01, 0654

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 96/01/30



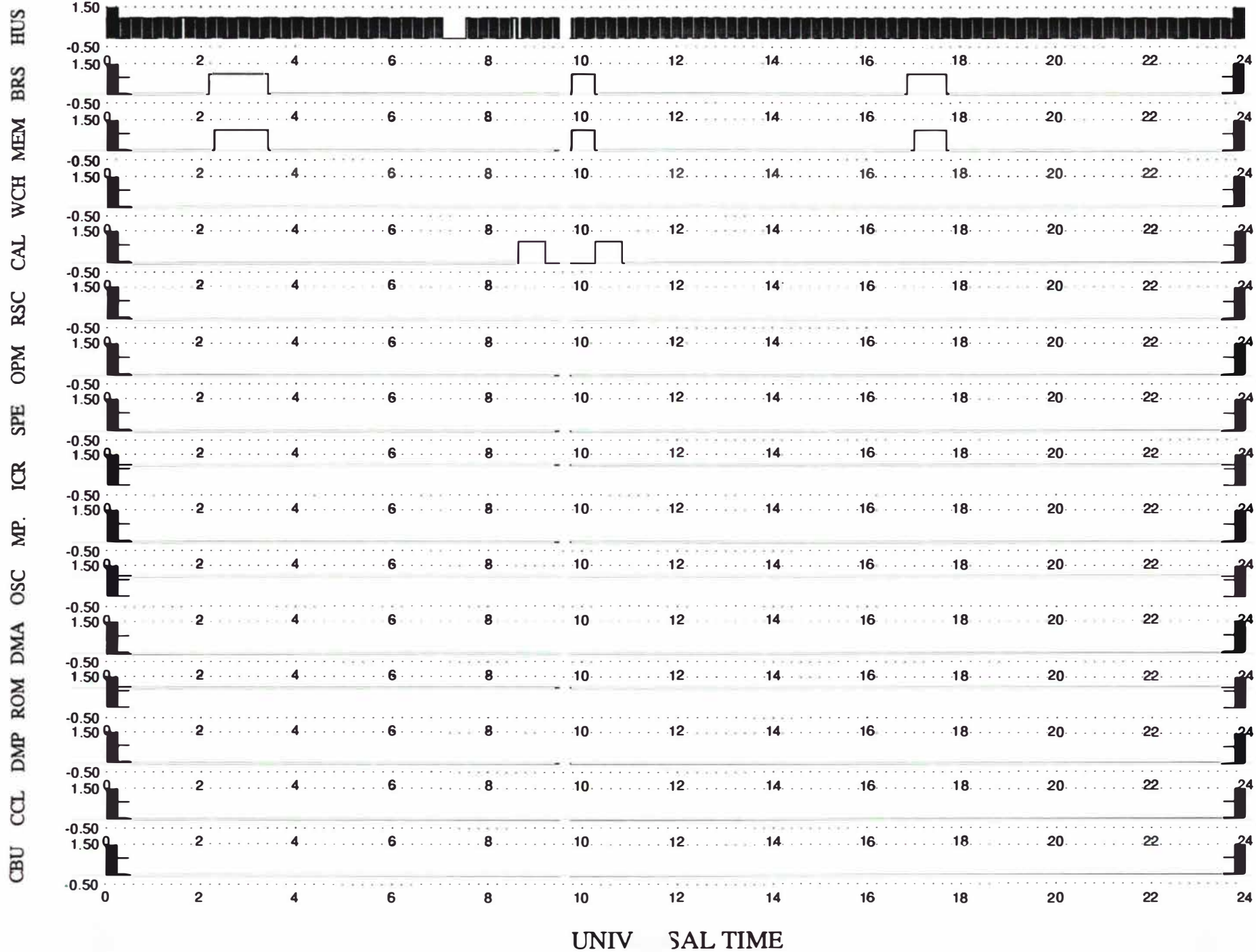
Current Time: 96/02/01, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

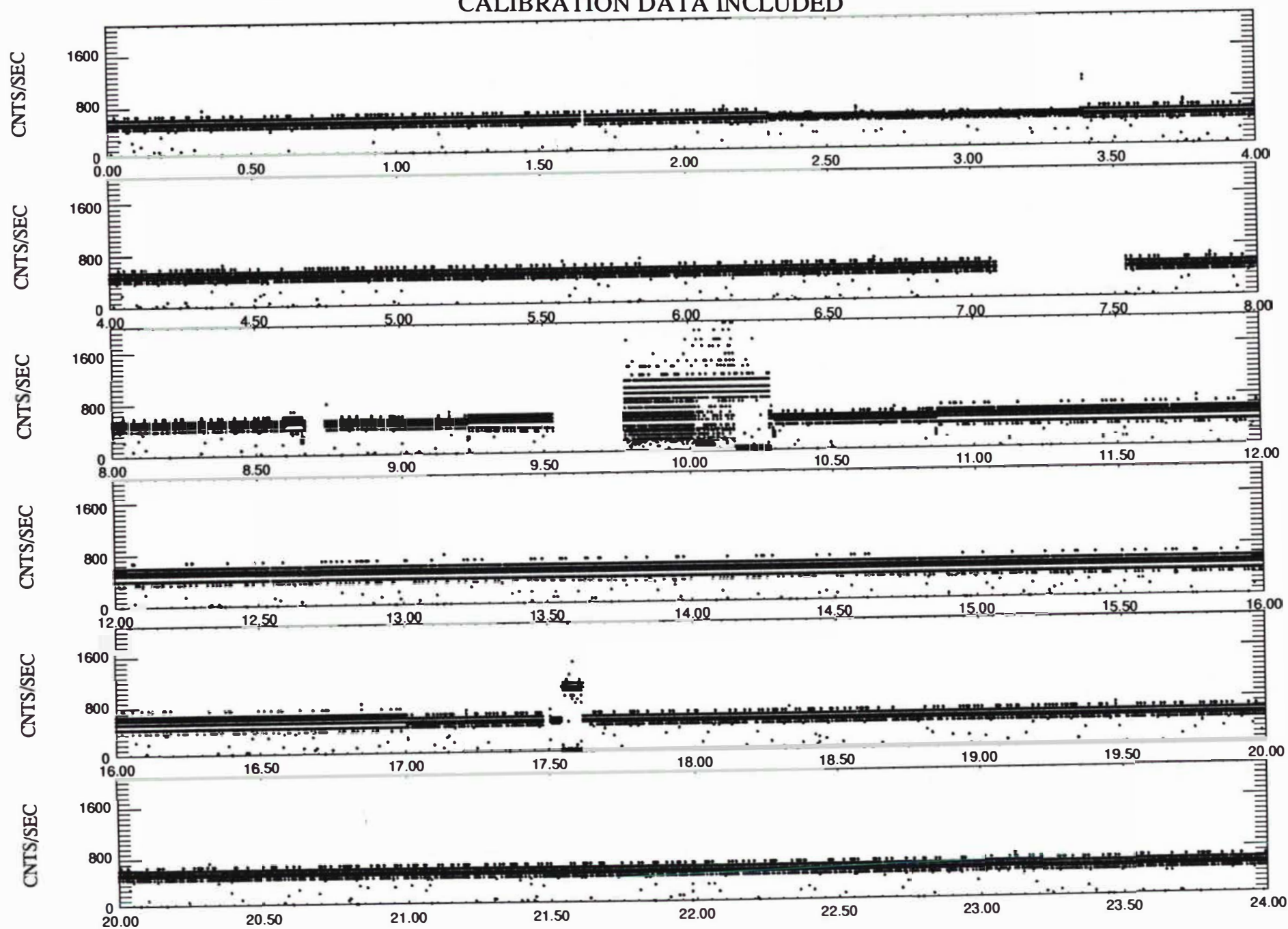
HUS MODES EDR day 30, year 1996 to day 30, year 1996
BURST NUMBER 12 - 14

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 30, year 1996 to day 30, year 1996
CALIBRATION DATA INCLUDED

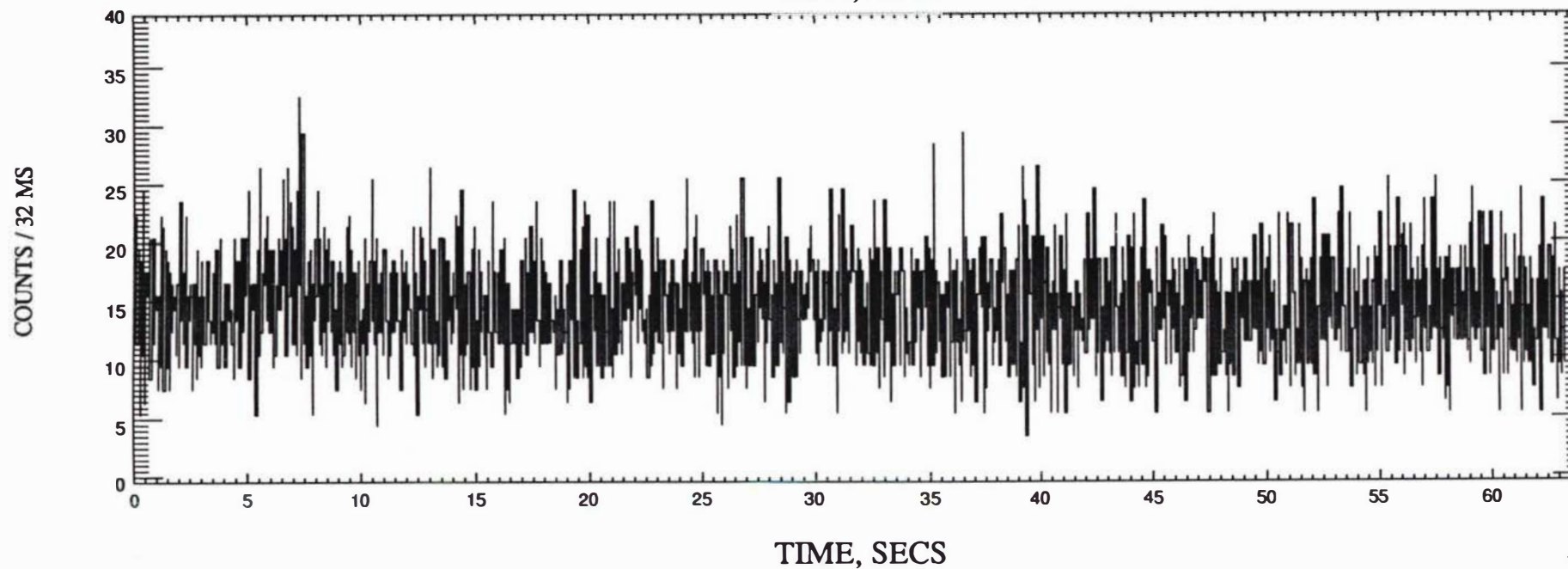
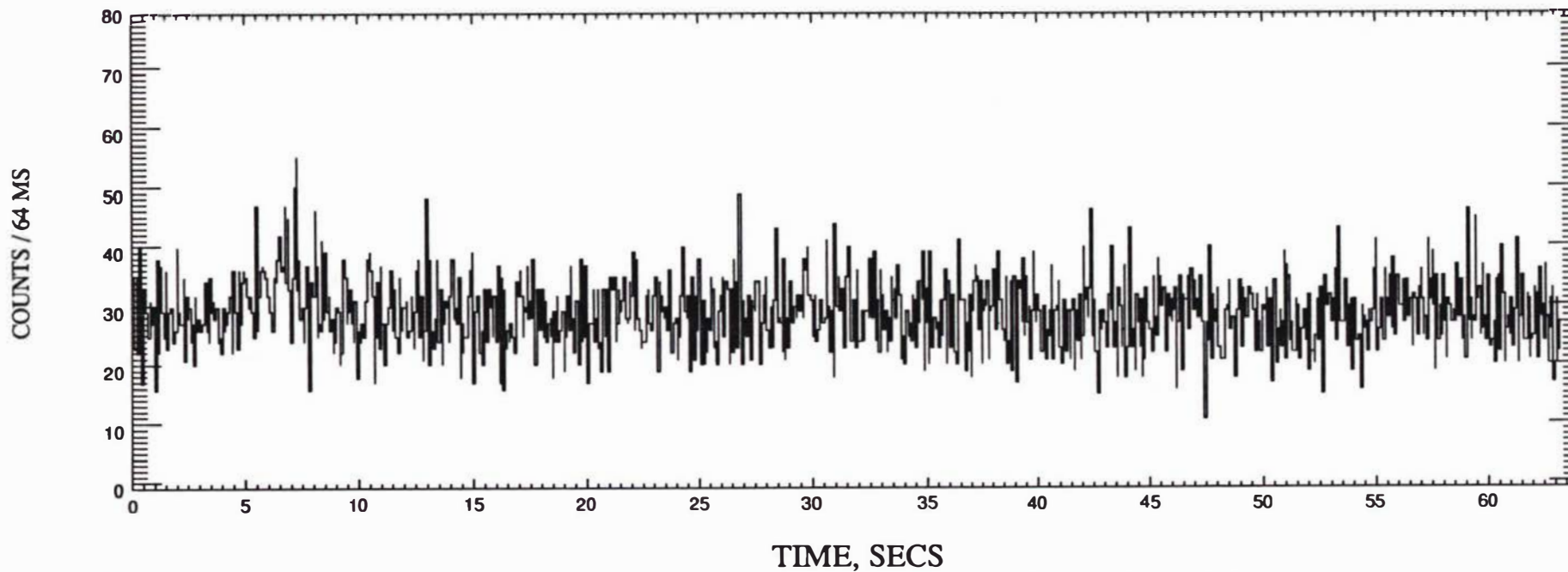
4/1/96



UNT SAL TIME

HUS 2A TRIGGERED DATA EDR day 30, year 1996
Burst Counter 12 at UT= 2.135660879347 h= 7688.379 s 02:08:08.379

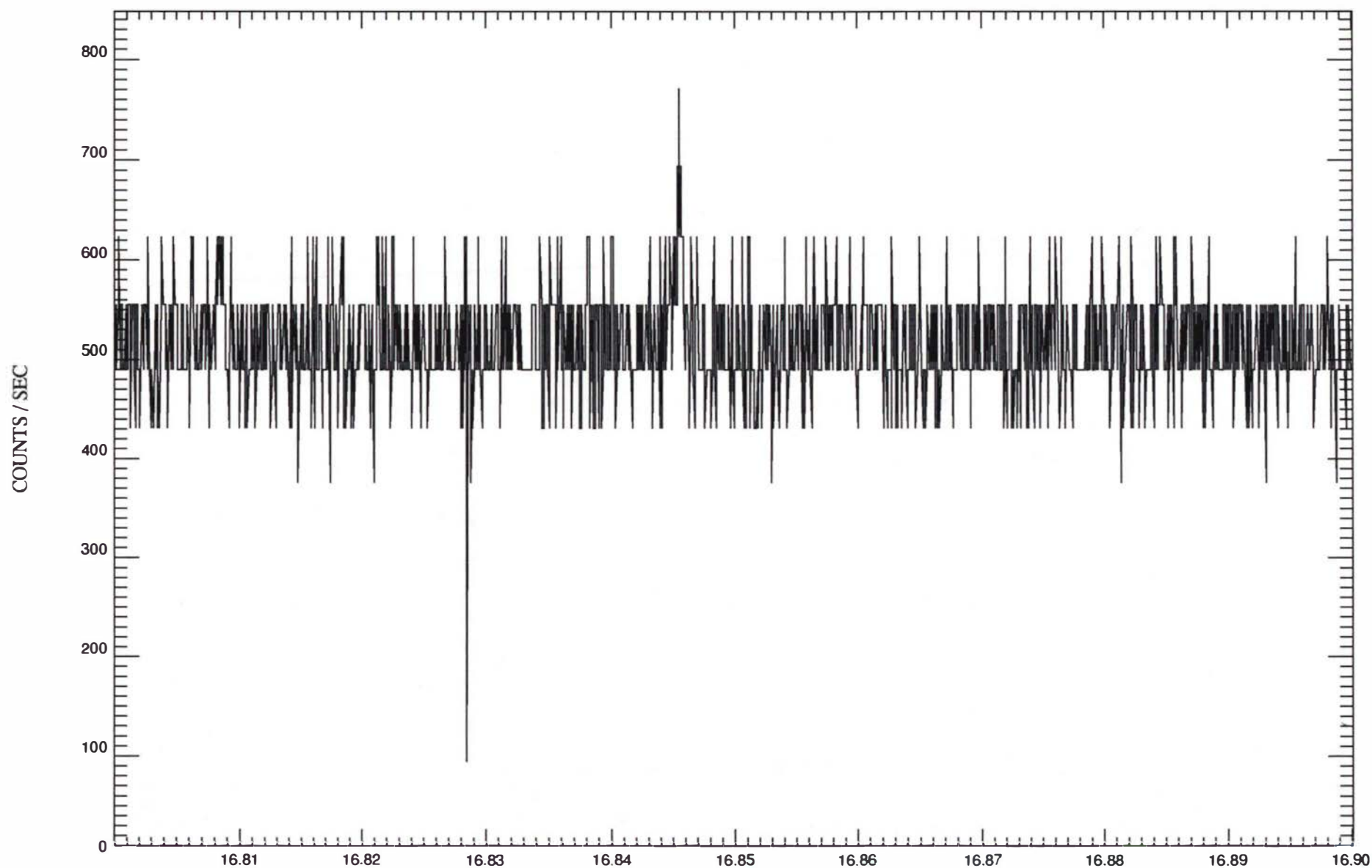
4/1/96



B# 1

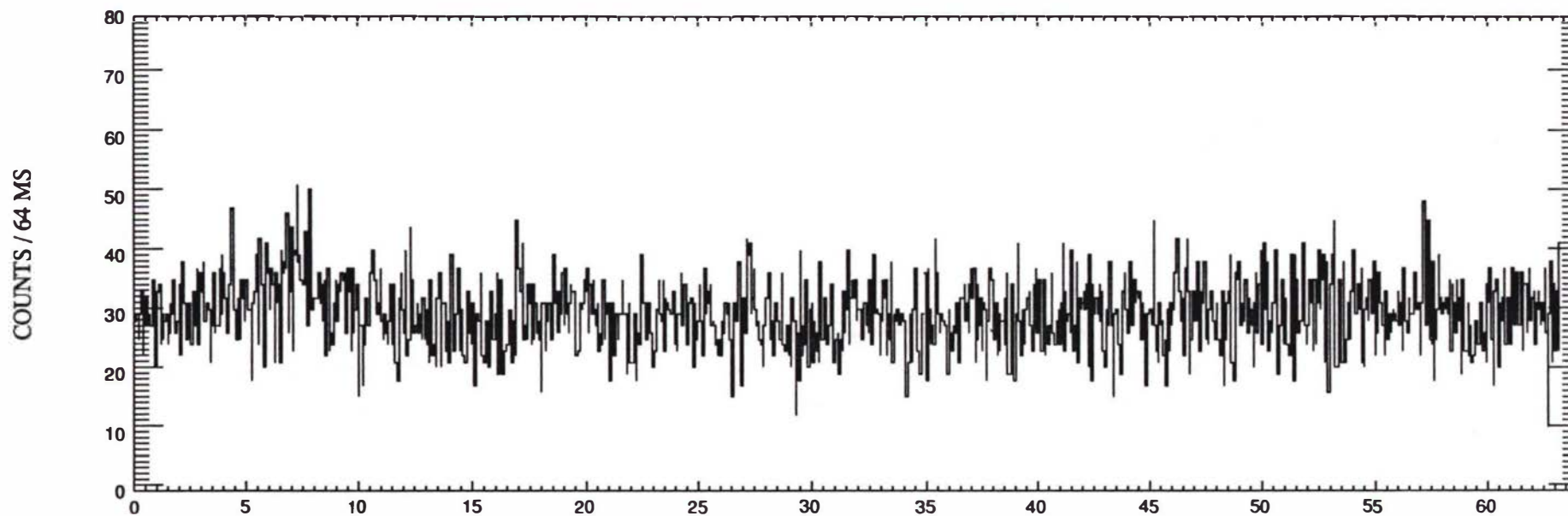
HUS 2A, MODE 1, NOT AVERAGED QEDR day 30, year 1996 to day 30, year 1996
CALIBRATION DATA INCLUDED

1/31/96

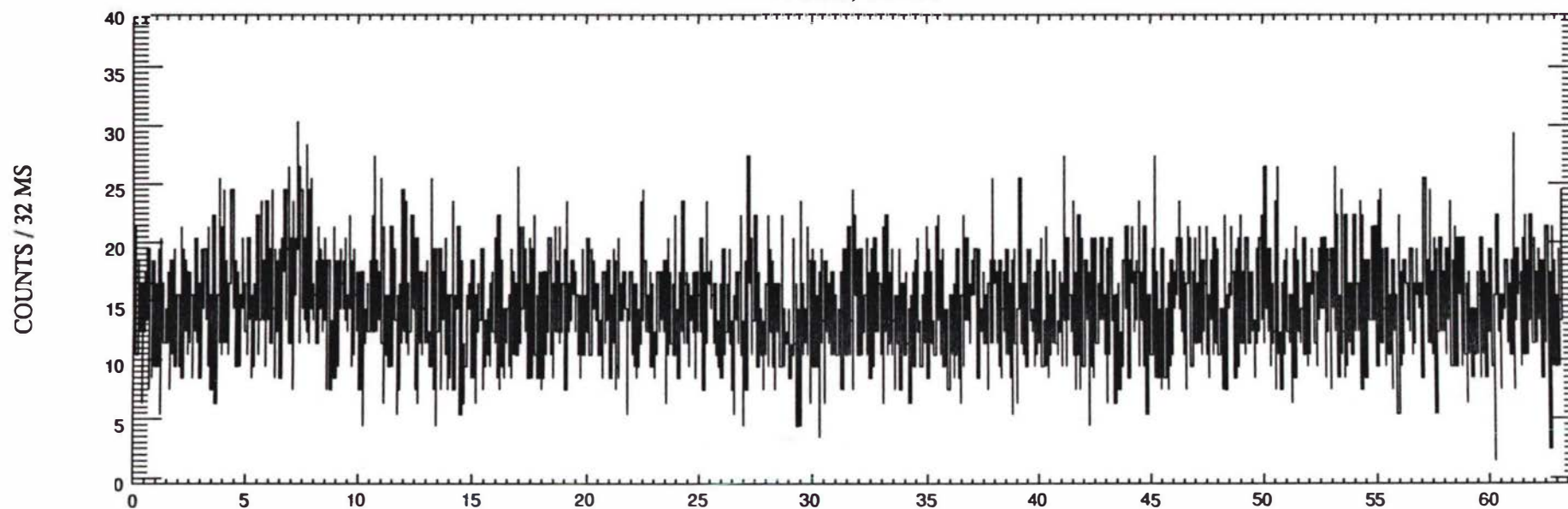


HUS 2A TRIGGERED DATA EDR day 30, year 1996
Burst Counter 14 at UT=16.845639152527 h=60644.301 s 16:50:44.301

4/1/96



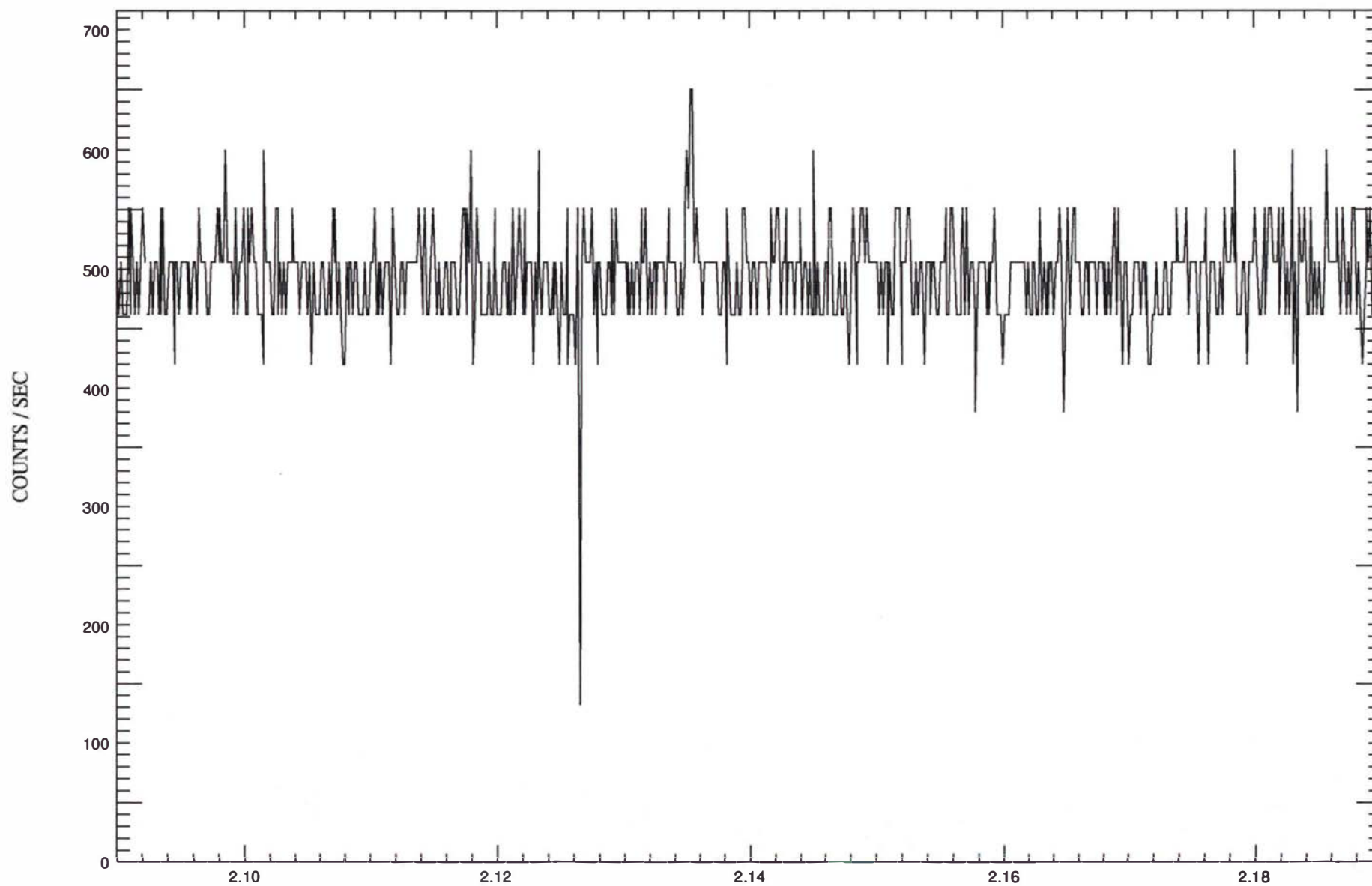
TIME, SECS

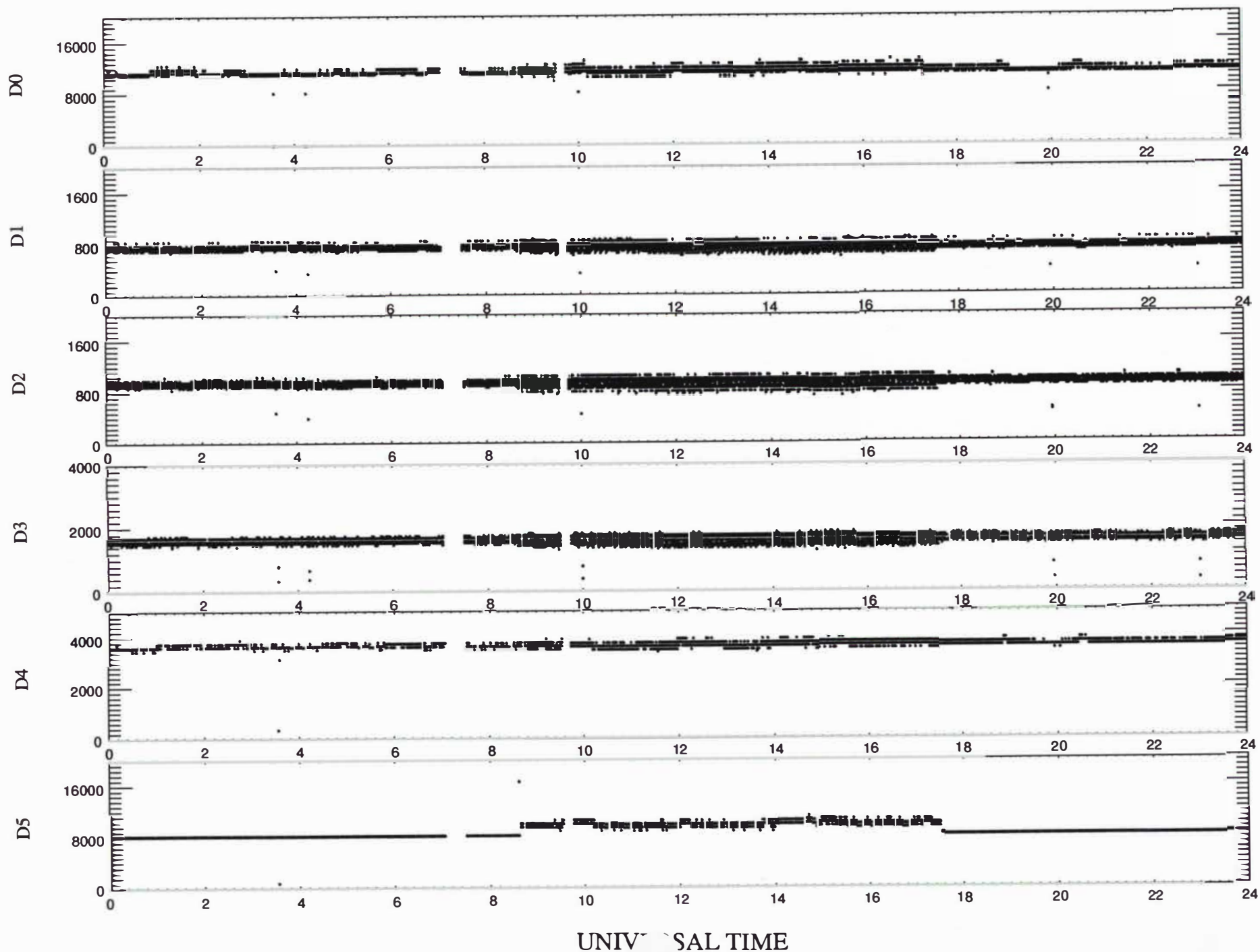


TIME, SECS

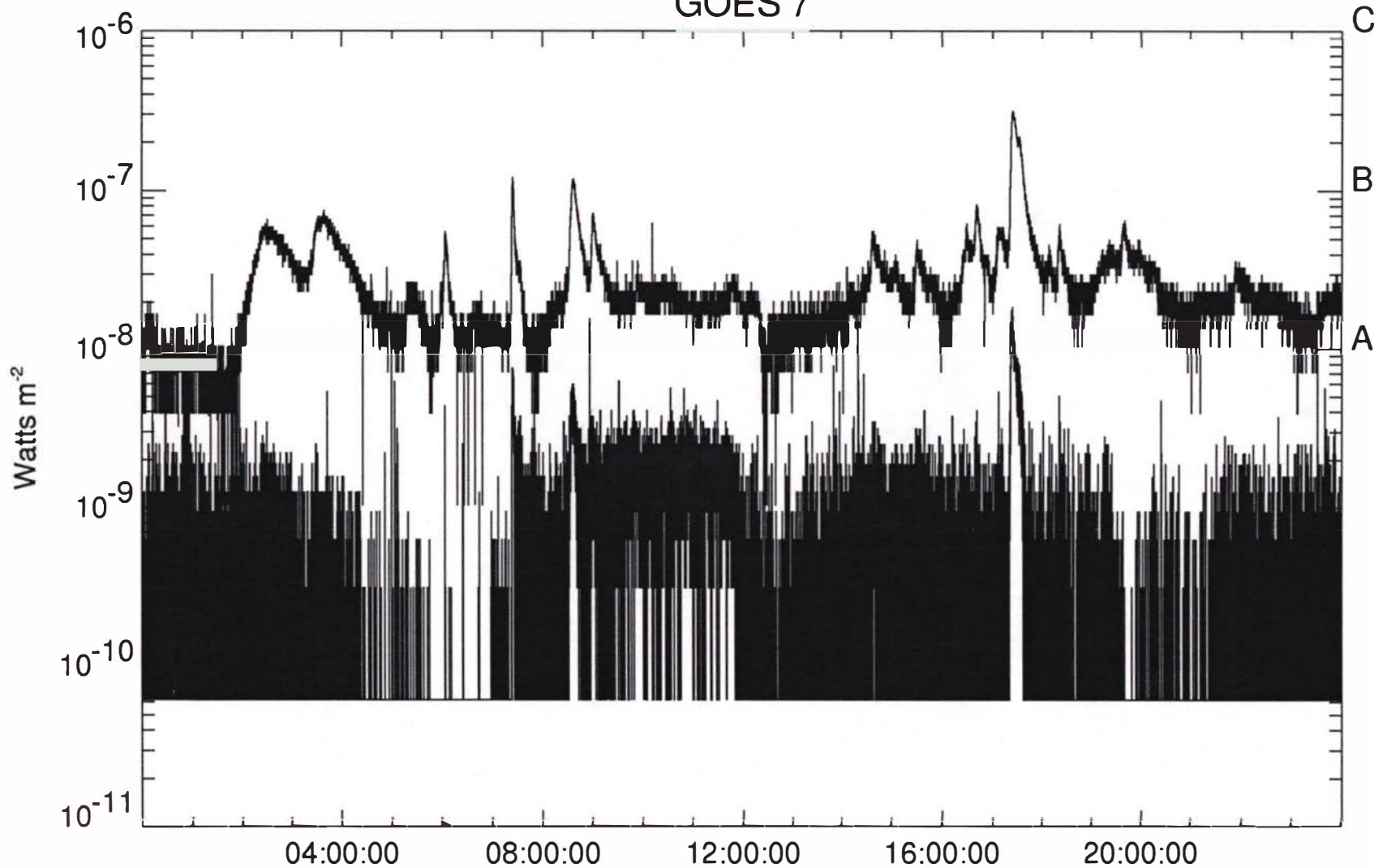
HUS 2A, MODE 1, NOT AVERAGED QEDR day 30, year 1996 to day 30, year 1996
CALIBRATION DATA INCLUDED

1/31/96





GOES 7



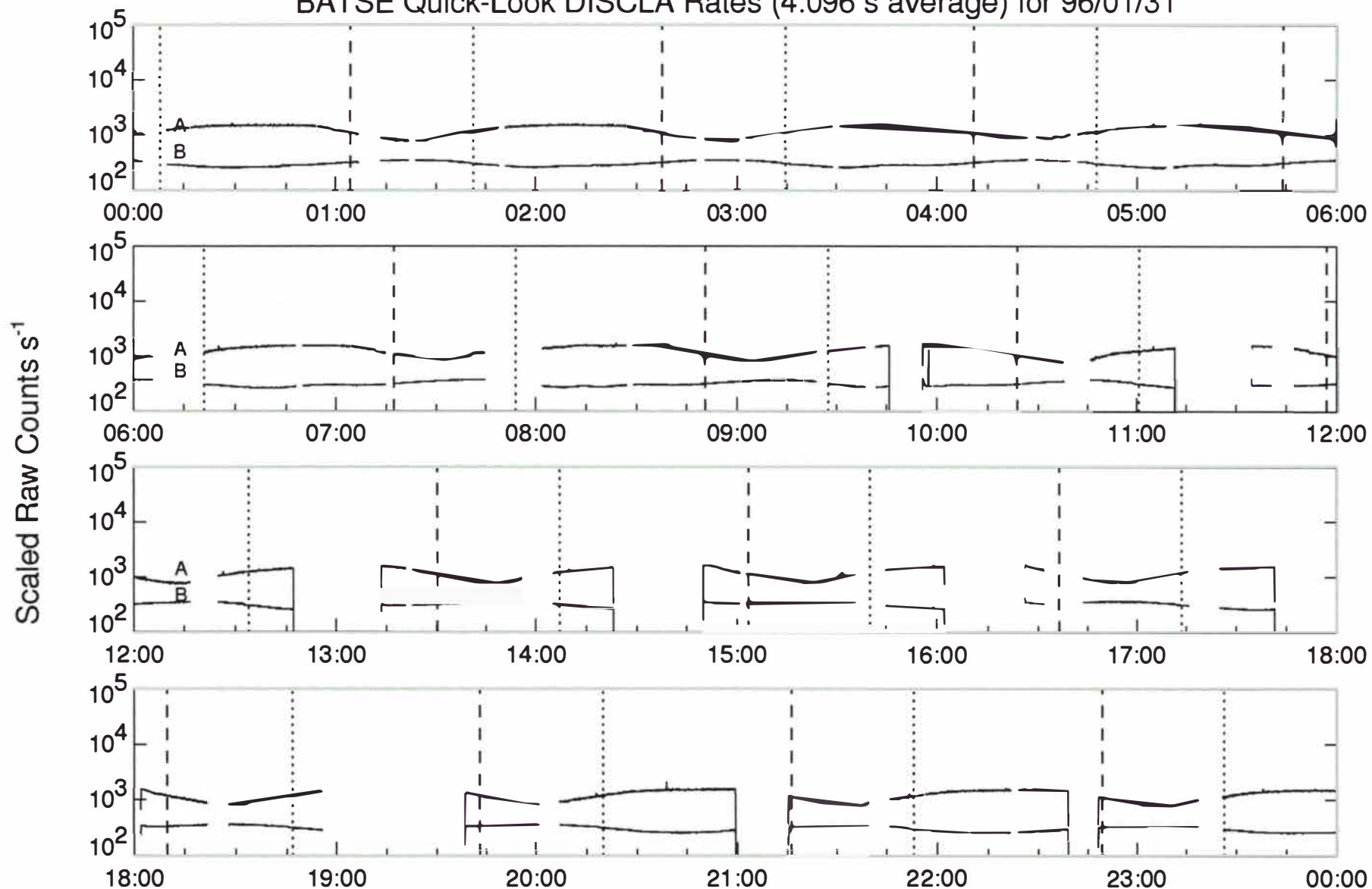
Data Start: 96/01/31, 0000:01

Plot created: 96/02/02, 0654

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 96/01/31



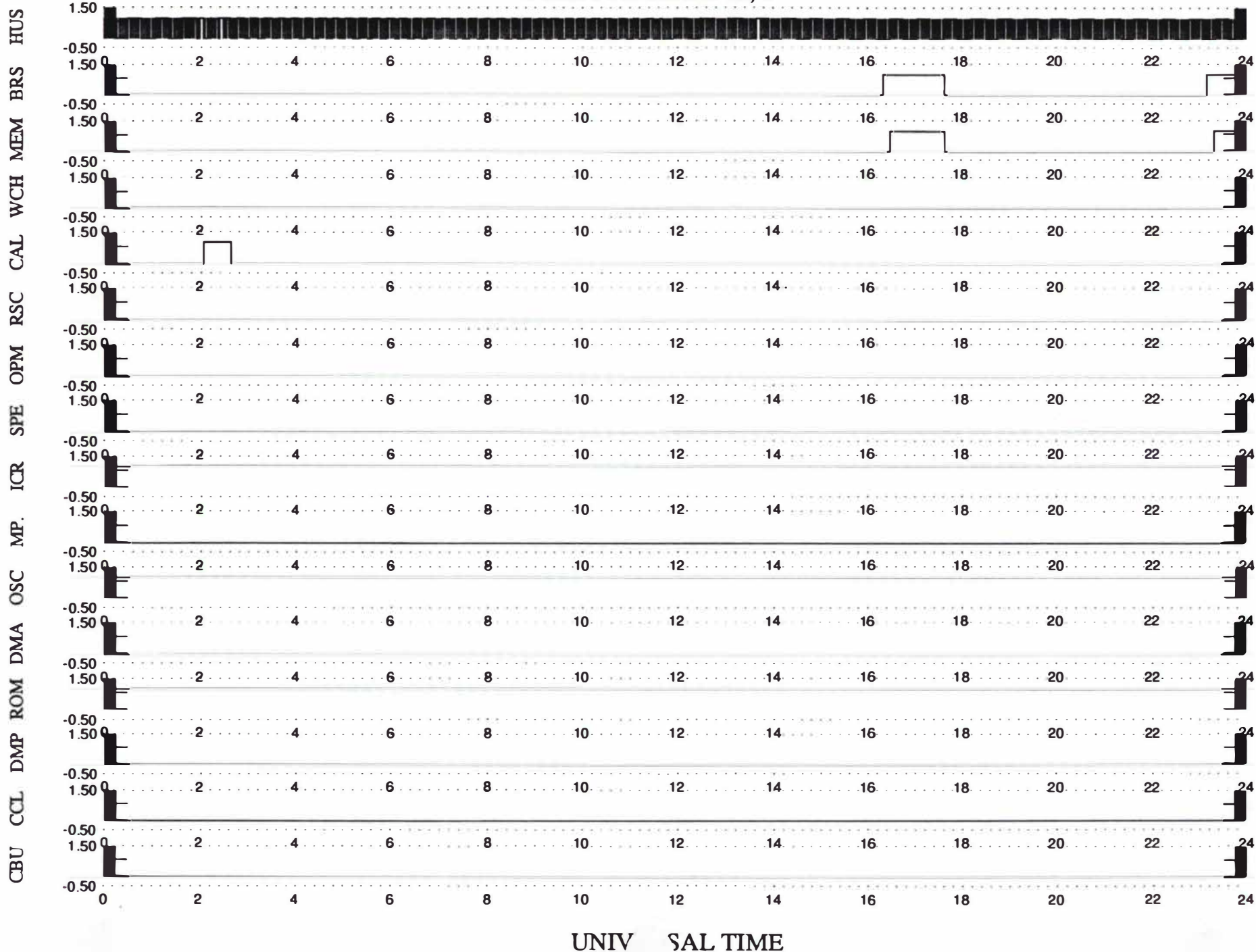
Current Time: 96/02/02, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

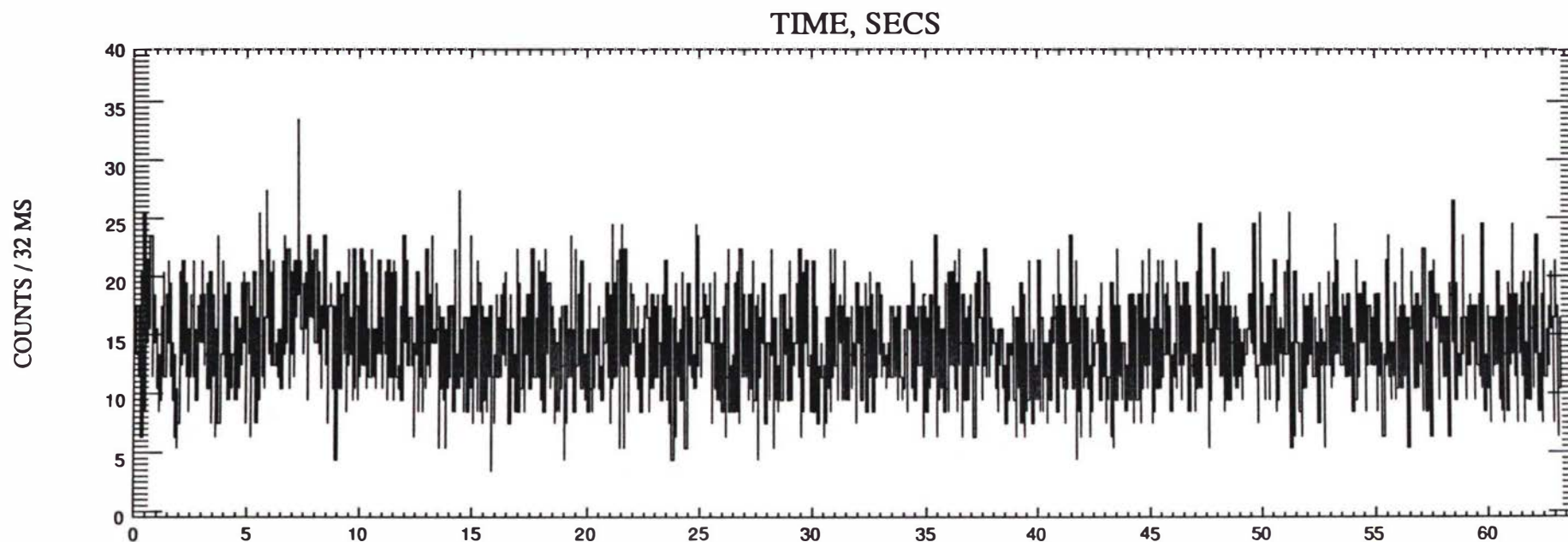
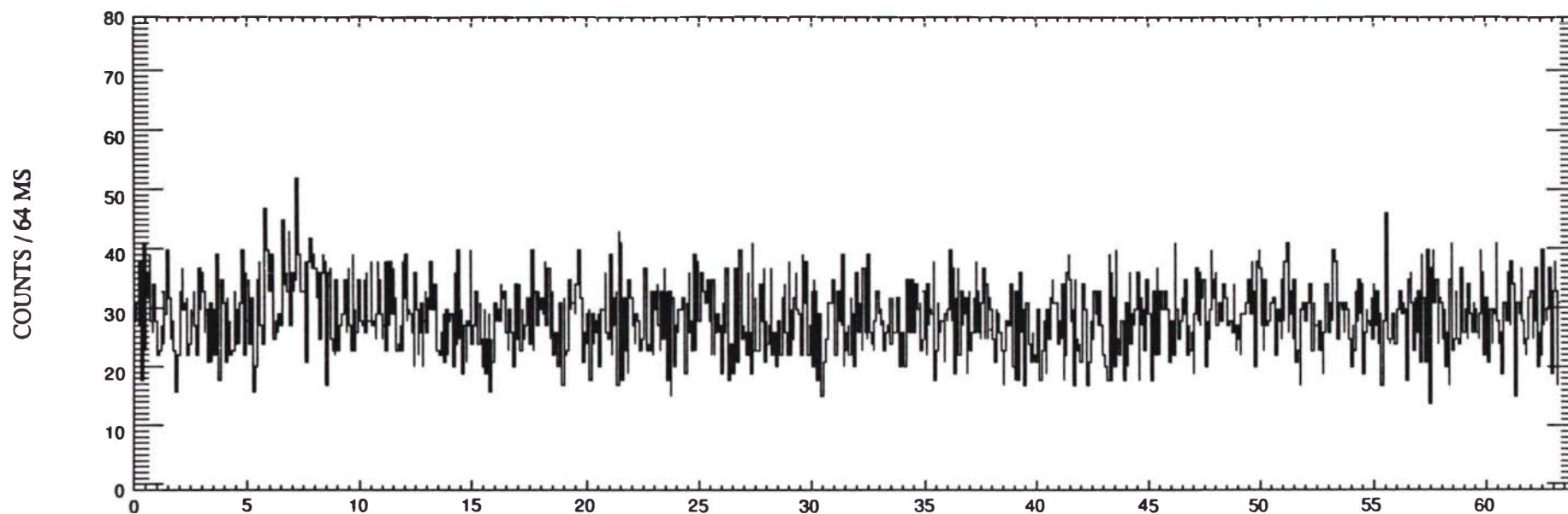
HUS MODES EDR day 31, year 1996 to day 31, year 1996
BURST NUMBER 15,0

4/1/96



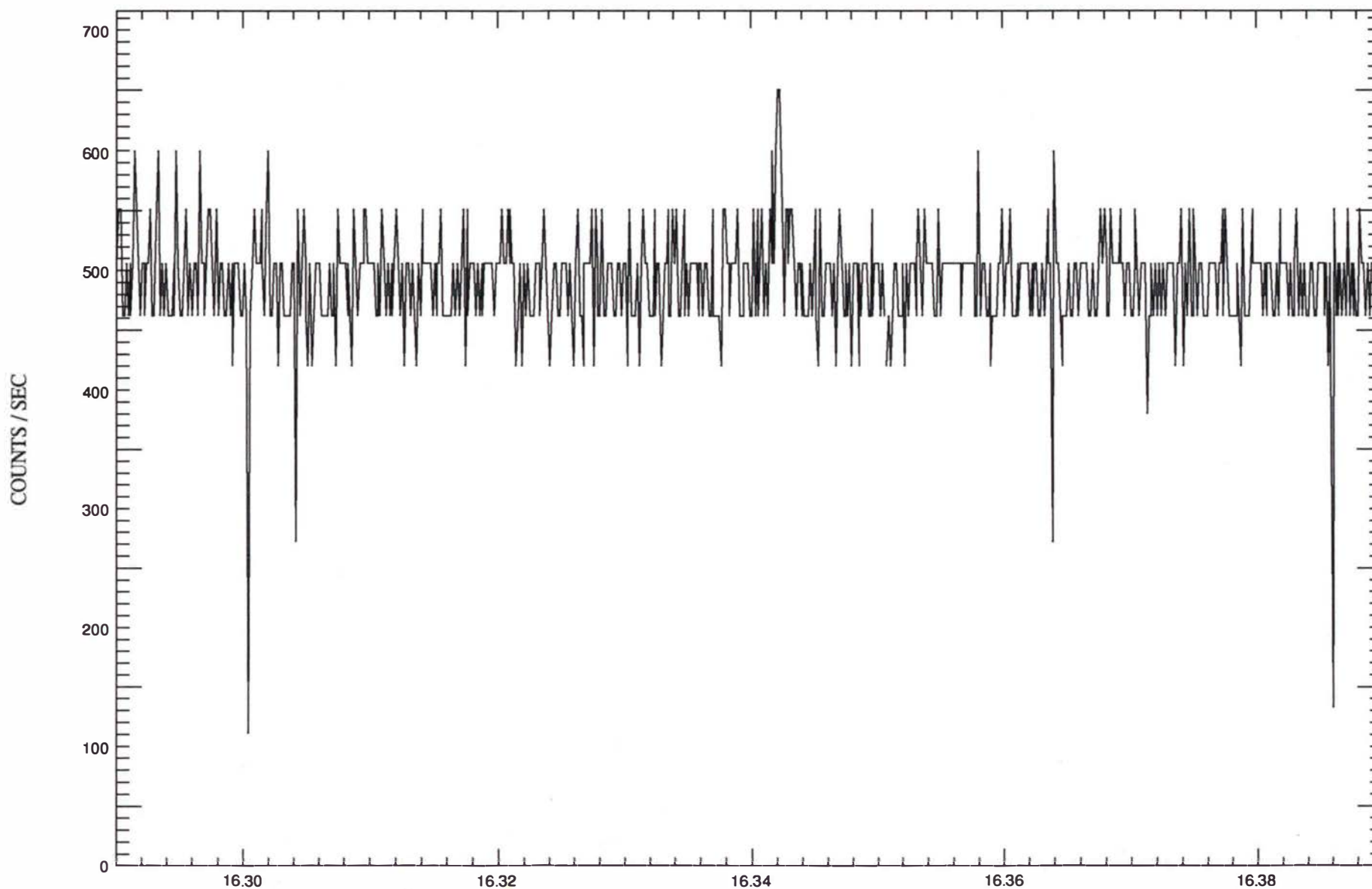
HUS 2A TRIGGERED DATA EDR day 31, year 1996
Burst Counter 15 at UT=16.342263281080 h=58832.148 s 16:20:32.148

4/1/96



HUS 2A, MODE 1, NOT AVERAGED QEDR day 31, year 1996 to day 31, year 1996
CALIBRATION DATA INCLUDED

2/2/96



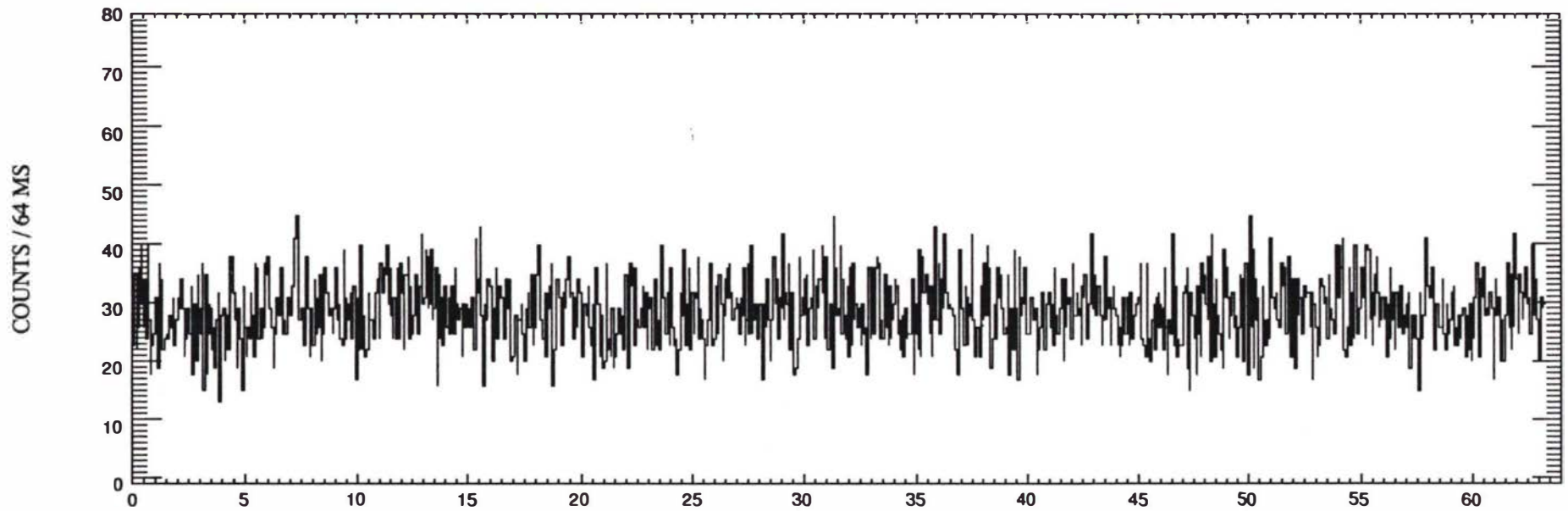
LINE 2000

1000 1000 1000

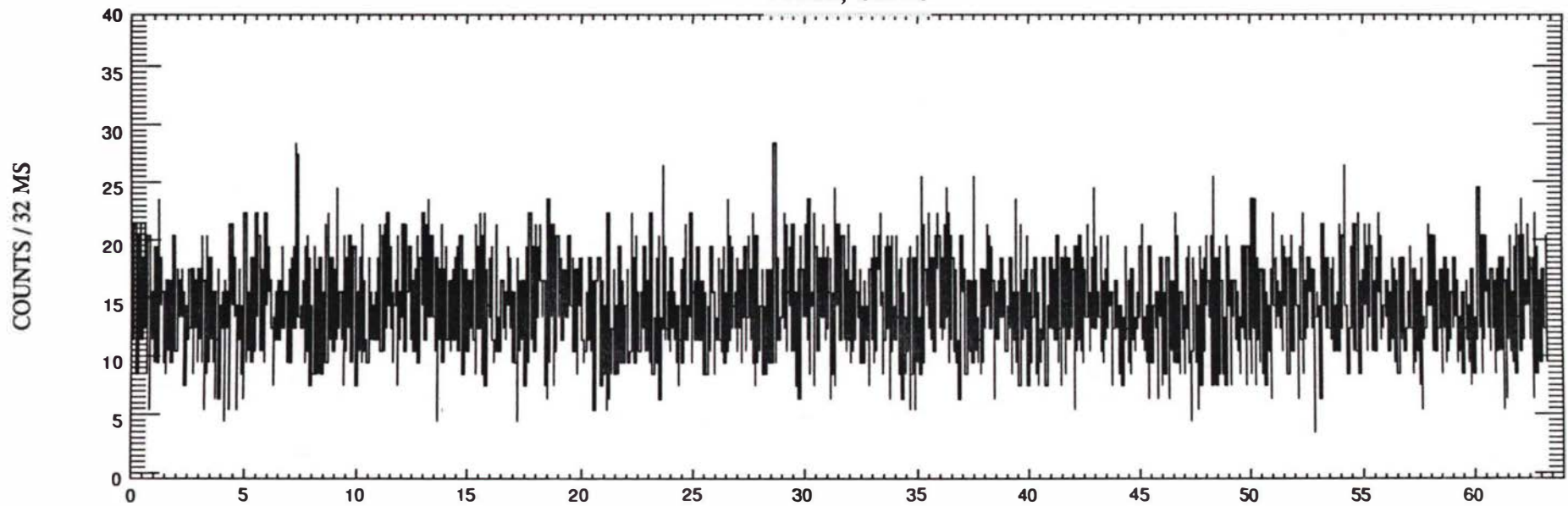
1000

HUS 2A TRIGGERED DATA EDR day 31, year 1996
Burst Counter 0 at UT=23.046842117310 h=82968.632 s 23:02:48.632

4/1/96



TIME, SECS

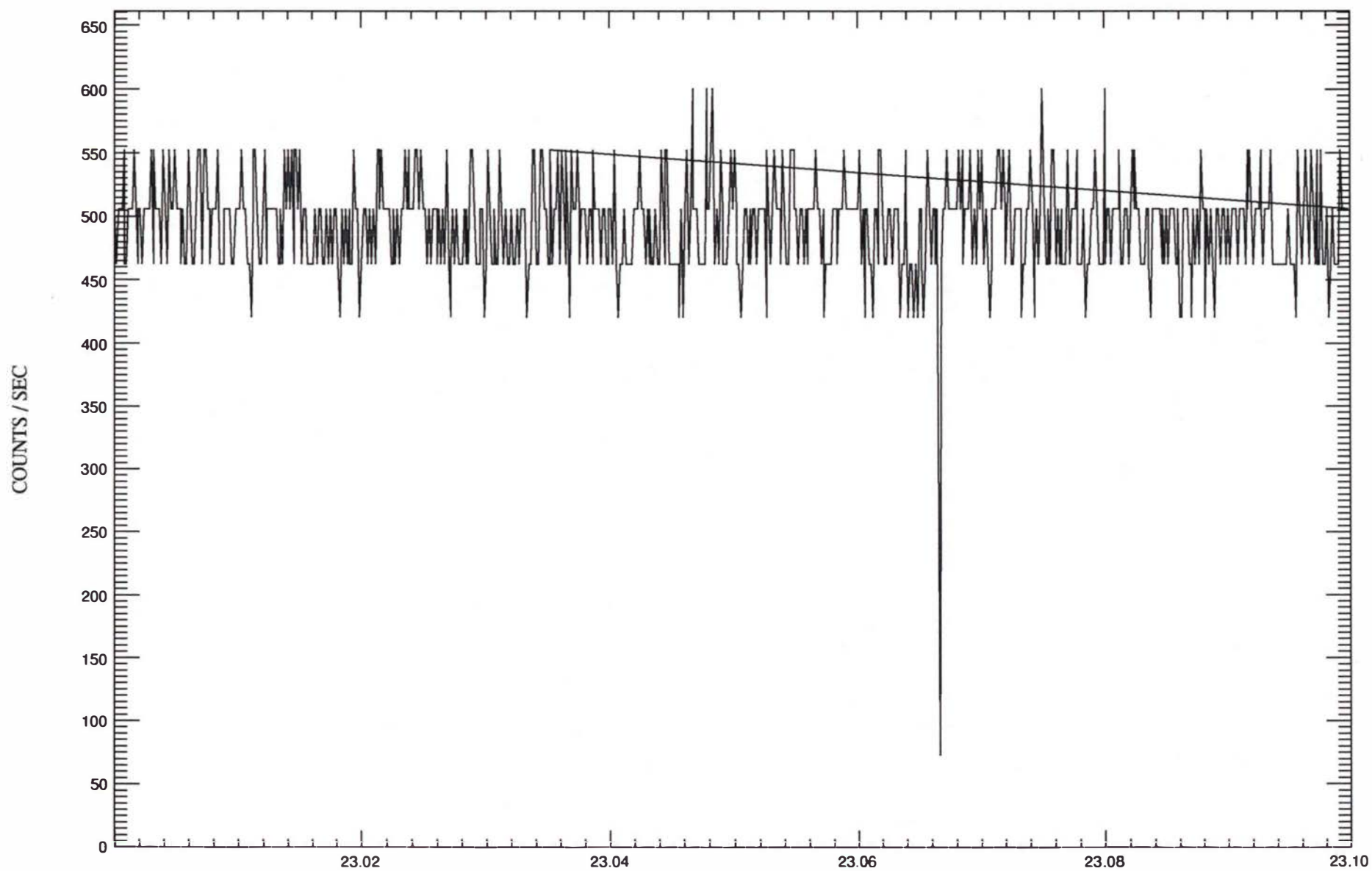


TIME, SECS

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

HUS 2A, MODE 1, NOT AVERAGED QEDR day 31, year 1996 to day 31, year 1996
CALIBRATION DATA INCLUDED

2/2/96



50.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

10.00

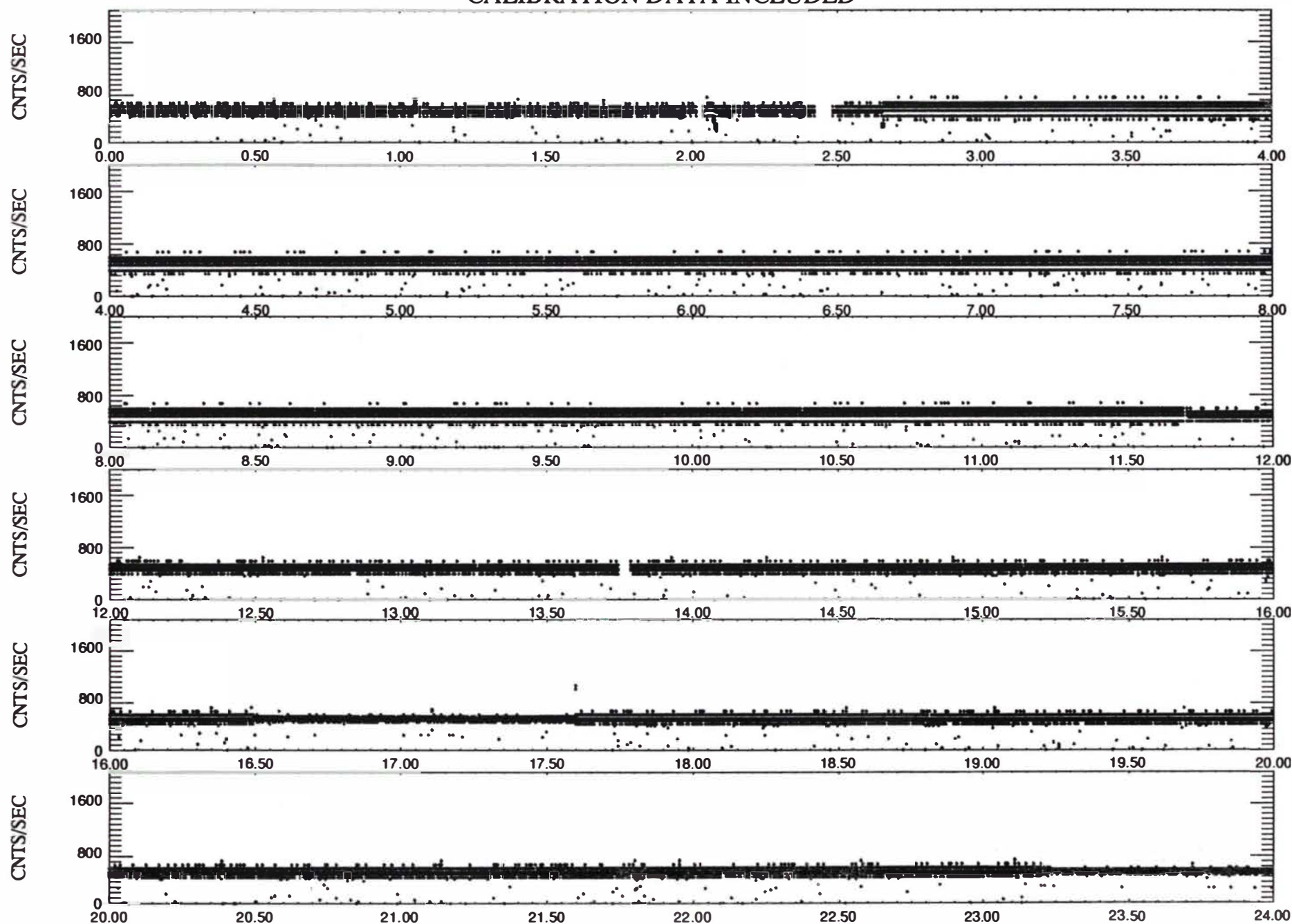
55.00

53.00

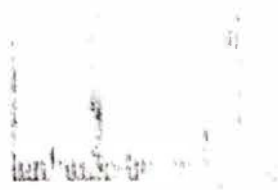
54.00

HUS 2A, MODE 1, NOT AVERAGED EDR day 31, year 1996 to day 31, year 1996
CALIBRATION DATA INCLUDED

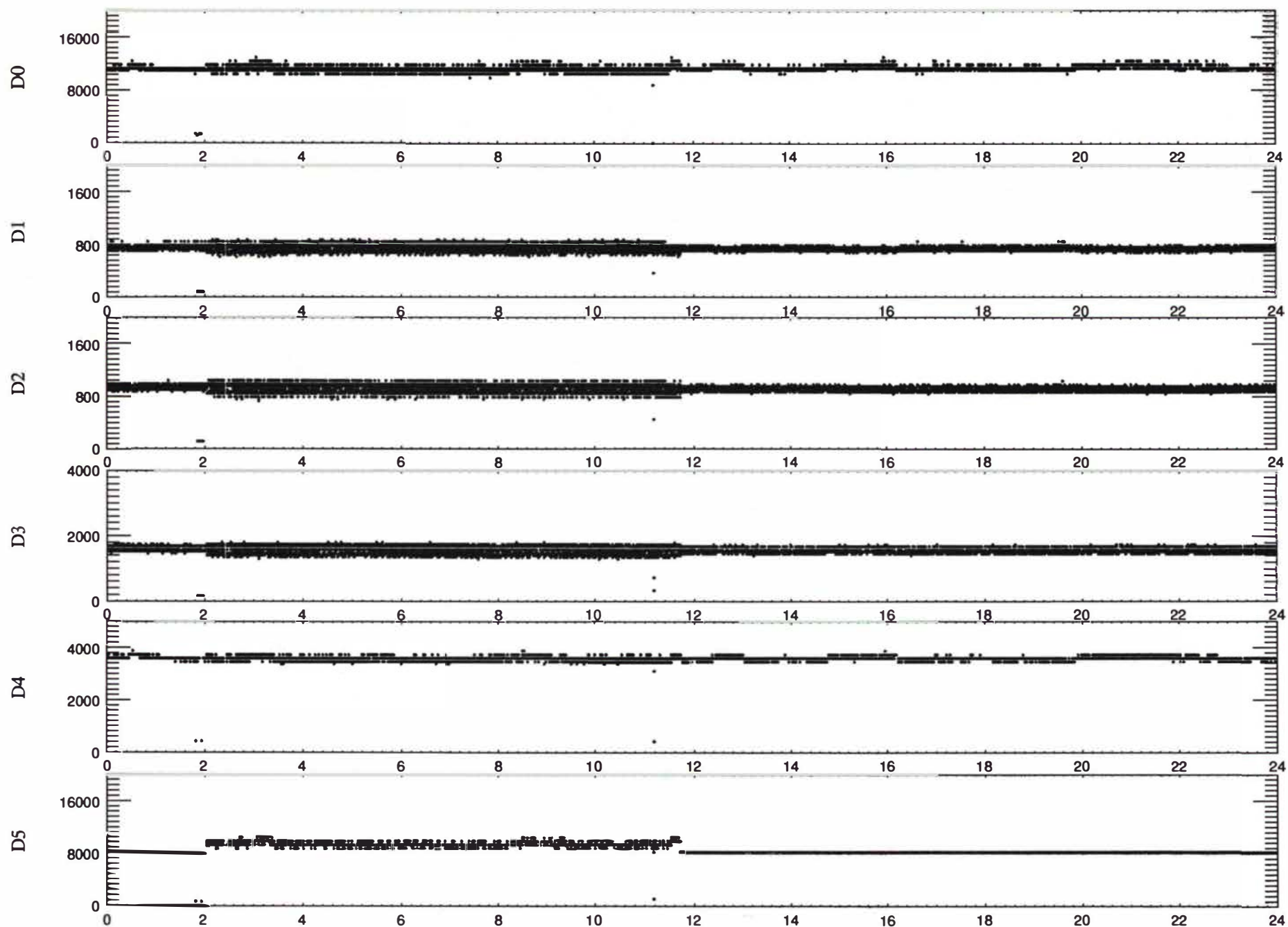
4/1/96



UNIV SAL TIME



5000



UNIV. CAL TIME