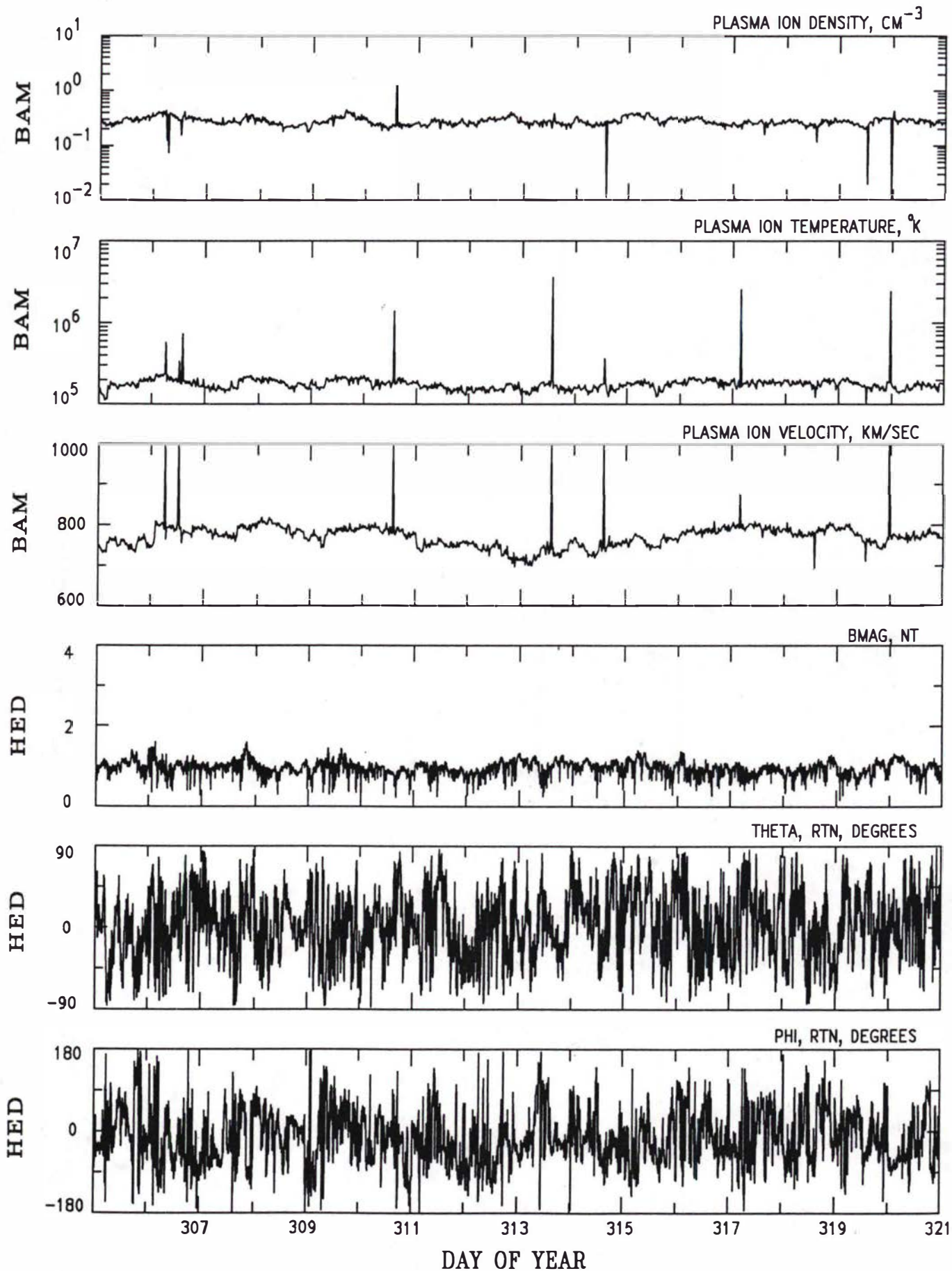


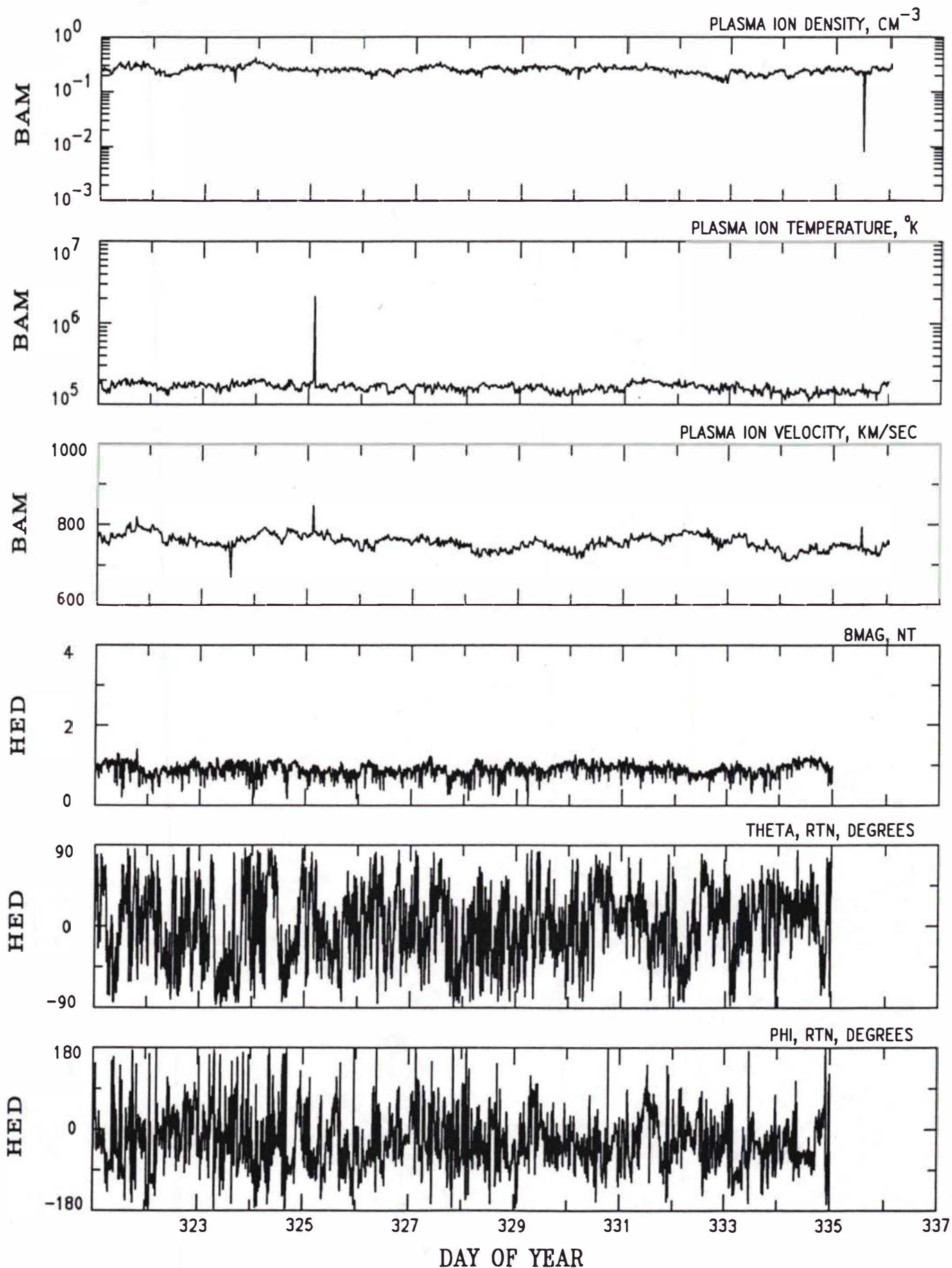
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

95 305 NOV 1 00:00:00.000 - 95 321 NOV 17 00:00:00.000



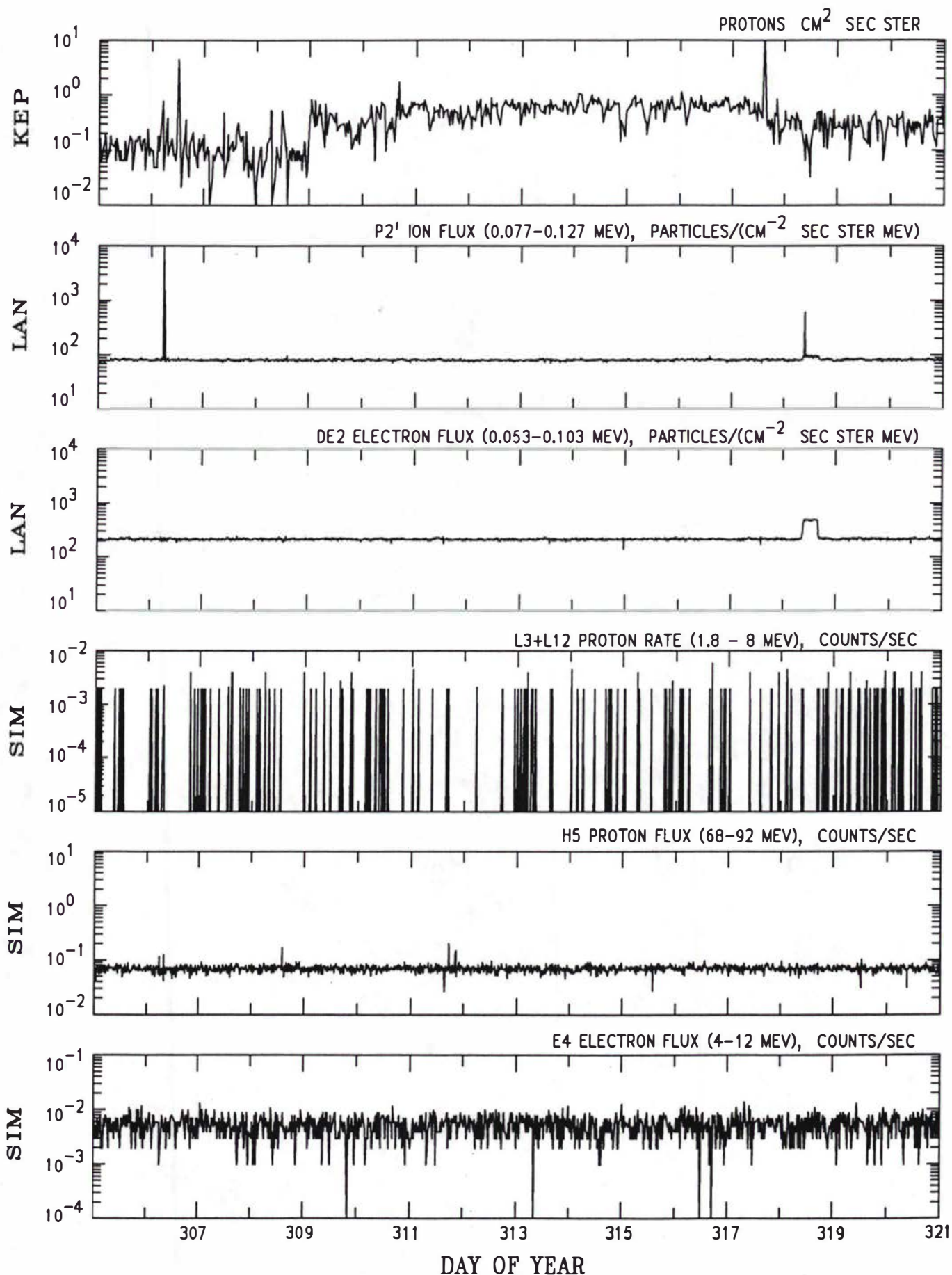
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

95 321 NOV 17 00:00:00.000 - 95 337 DEC 3 00:00:00.000



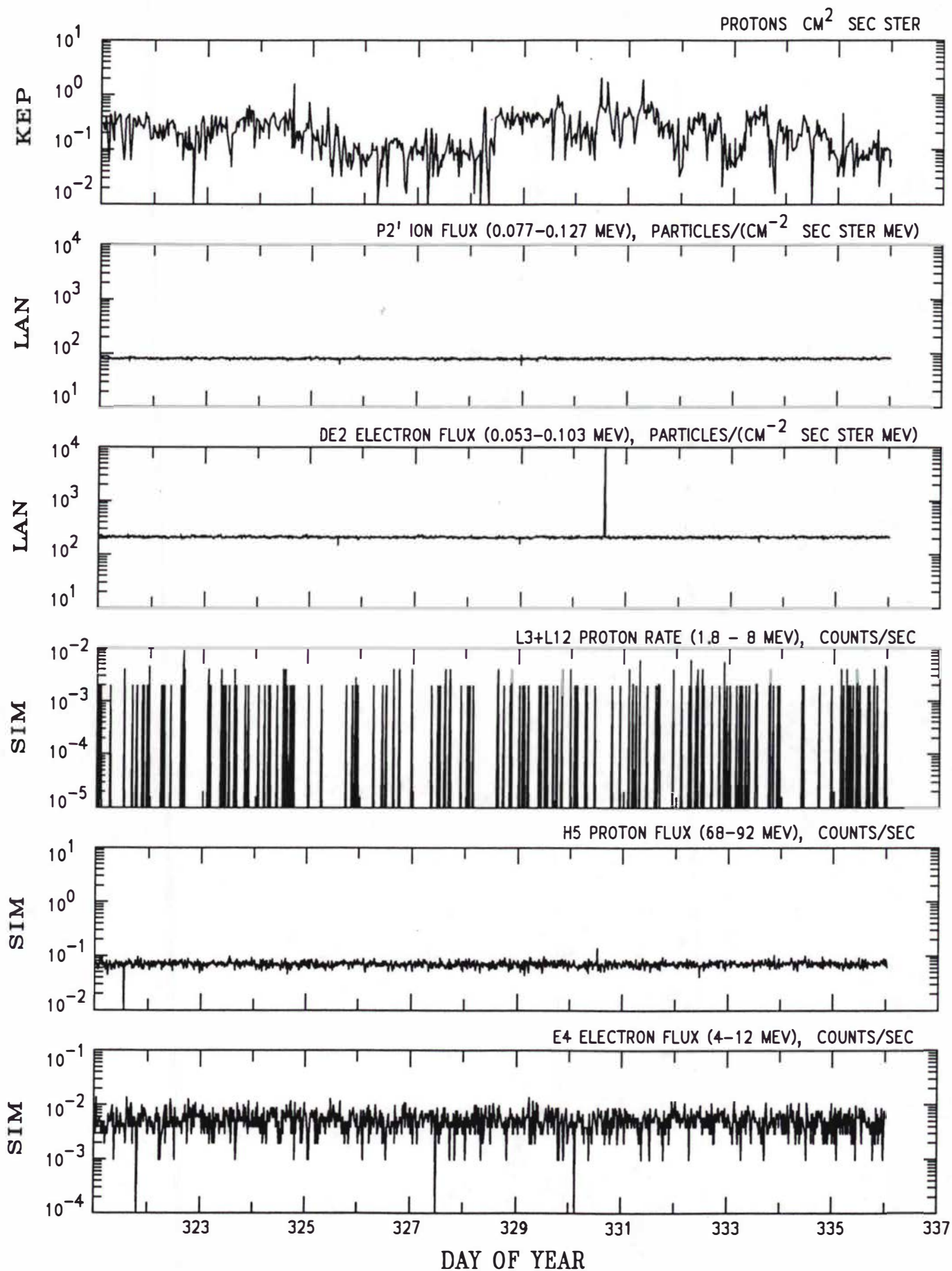
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

95 305 NOV 1 00:00:00.000 - 95 321 NOV 17 00:00:00.000



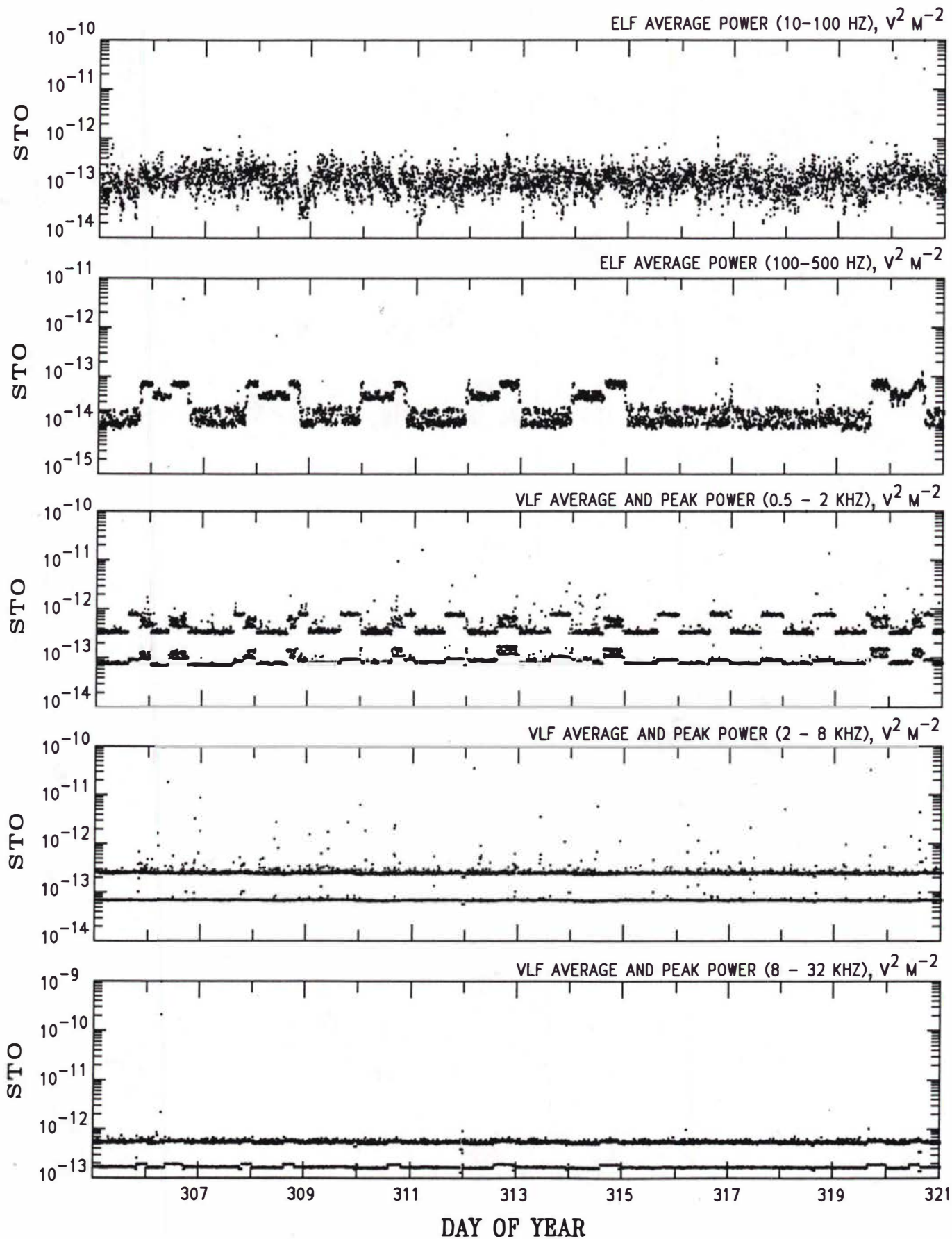
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

95 321 NOV 17 00:00:00.000 - 95 337 DEC 3 00:00:00.000



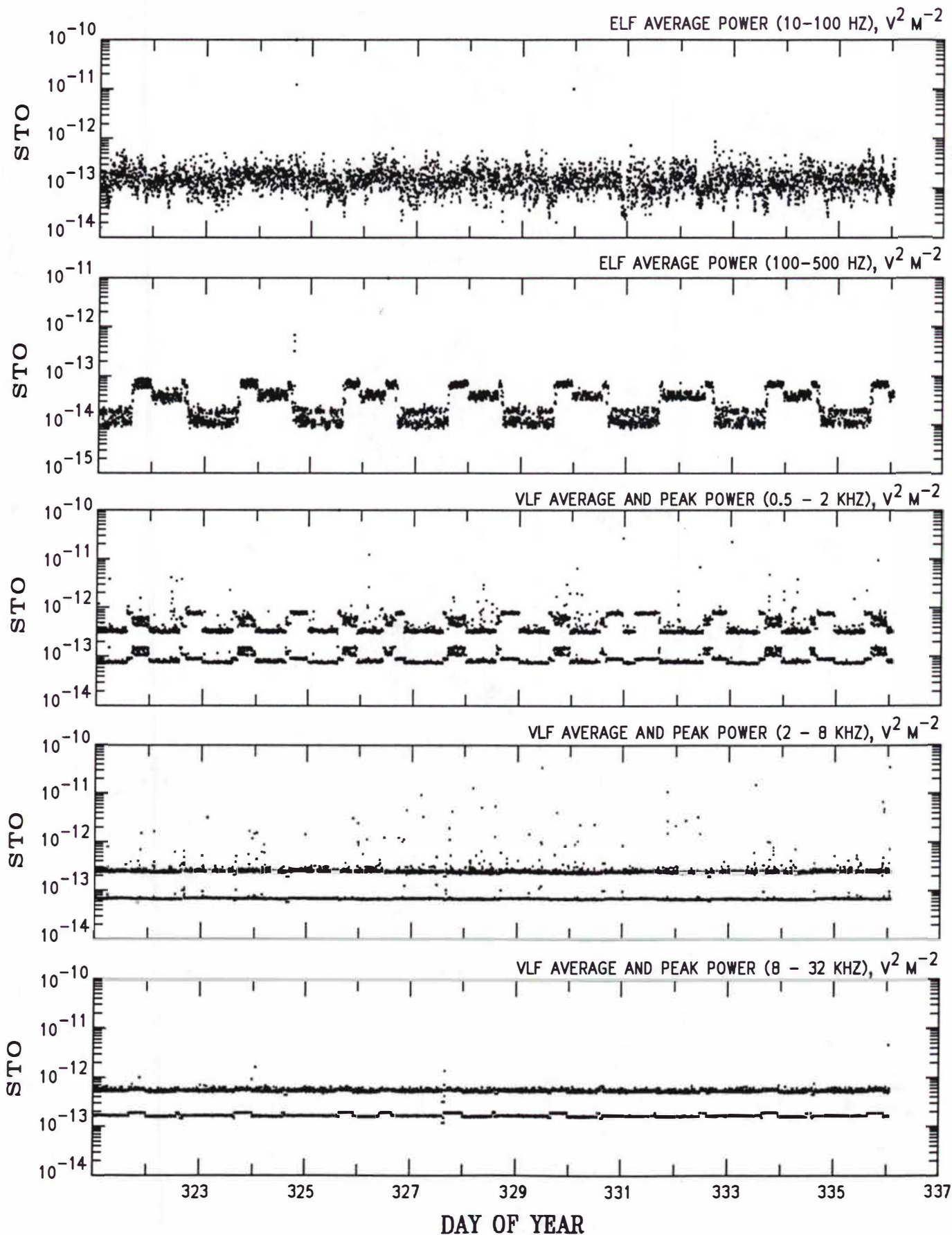
ULYSSES CDR - PLASMA WAVE

95 305 NOV 1 00:00:00.000 - 95 321 NOV 17 00:00:00.000



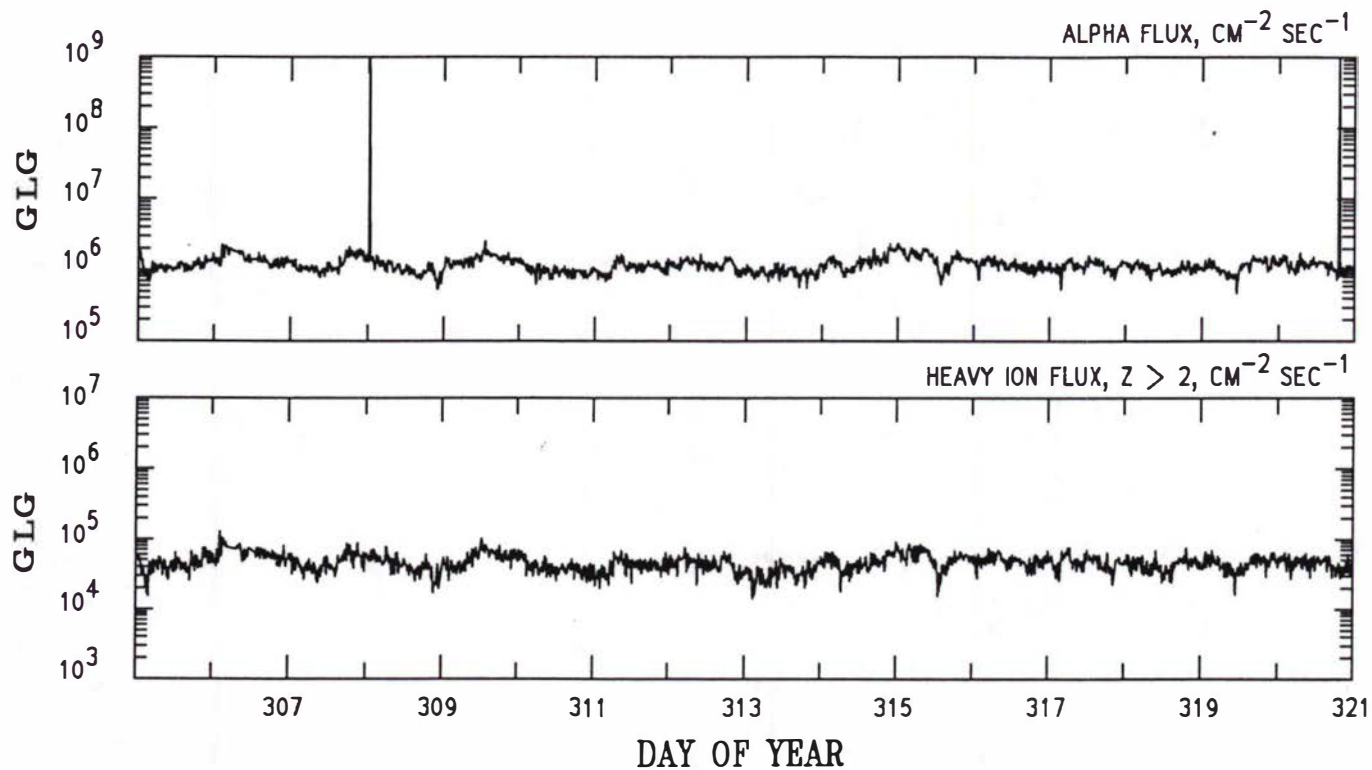
ULYSSES CDR - PLASMA WAVE

95 321 NOV 17 00:00:00.000 - 95 337 DEC 3 00:00:00.000



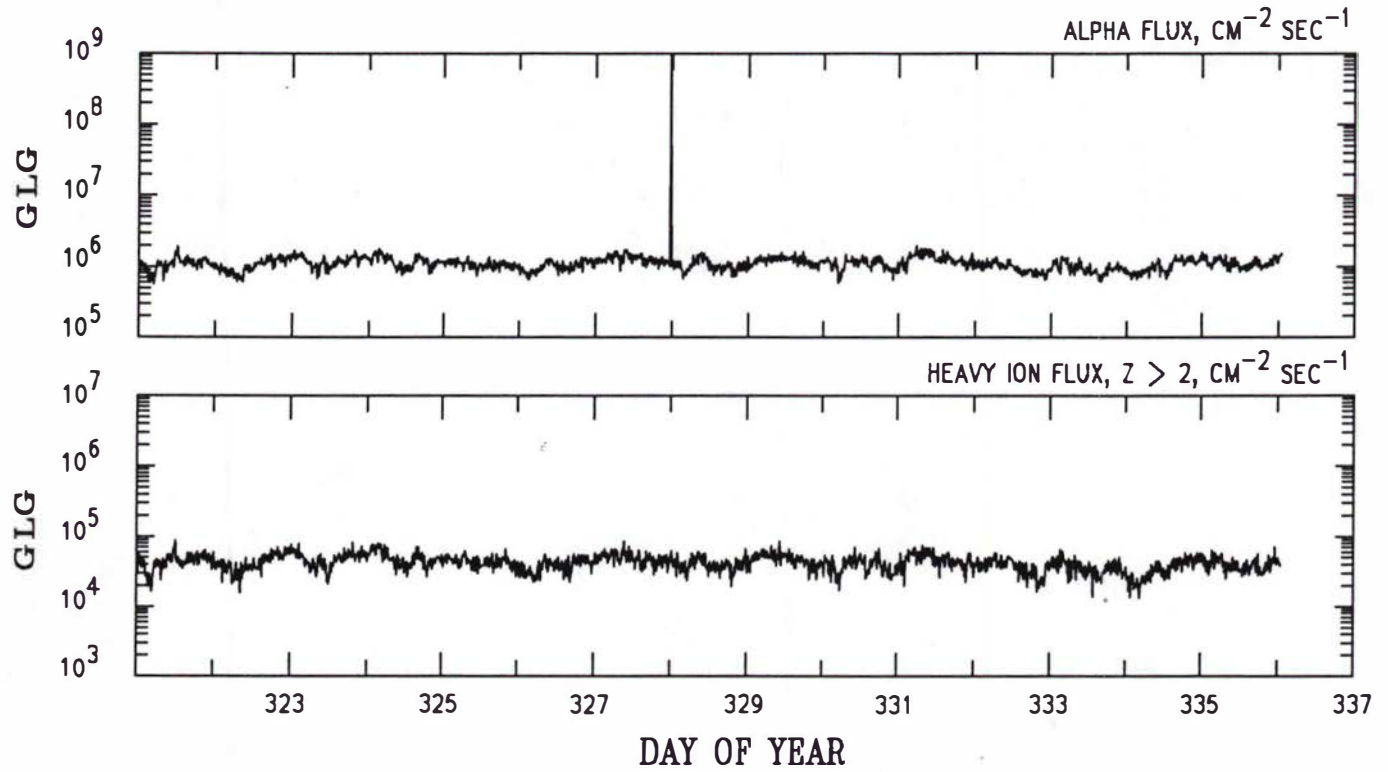
ULYSSES CDR - SOLAR WIND ION COMPOSITION

95 305 NOV 1 00:00:00.000 - 95 321 NOV 17 00:00:00.000



ULYSSES CDR - SOLAR WIND ION COMPOSITION

95 321 NOV 17 00:00:00.000 - 95 337 DEC 3 00:00:00.000



From WOODSP@SSLLES.MSFC.NASA.GOV Thu Nov 9 13:26 PST 1995
Date: Thu, 9 Nov 1995 15:26:22 -0600 (CST)
From: WOODSP@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3889

NO

BATSEARCH PROGRAM

BATSE BURST # 3889
EVENT OF 1995 NOV 1 DAY OF YEAR=305
EVENT CROSSING TIME AT BATSE : 36242. S. OR 10:04:02.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 217.000 46.000
BATSE PEAK COUNTING RATE: 14000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 1/11/ 95 IS:
RA= 212.552 DEC= 55.693 DIST= 2.837 AU
BATSE-ULYSSES DISTANCE = 424484914. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=169.91 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1394.05 SECS.
CROSSING TIME AT ULYSSES IS 34848. S. OR 09:40:47 +/- 71.88 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 1/11/ 95 IS:
RA= 246.132 DEC= -22.388 DIST= 2.233 AU
MARS-BATSE DISTANCE = 334048480. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=106.68 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -319.88 SECS.
CROSSING TIME AT MARS IS 35922. S. OR 09:58:42 +/- 180.45 SECONDS

BATSE BURST TRIGGER

NO.: 3889

TIME: TJD=0022 SECONDS=36242

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=69.9 AZIMUTH=3.3 ERROR=5.0 DEGREES

COMMENTS:

SHORT GRB WITH DURATION ~ 0.1SEC. VISIBLE ABOVE 300 KEV.

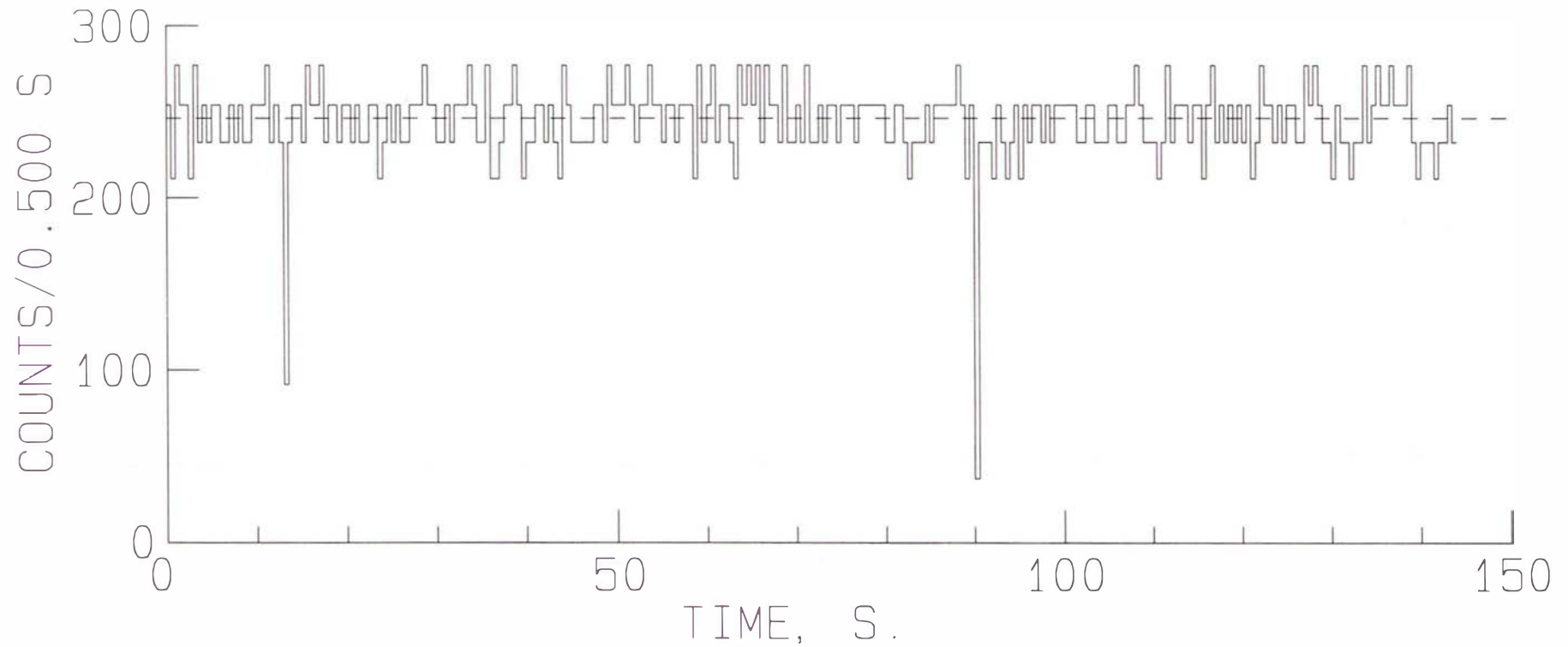
BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3889	951101	10022	36242	14000	217	+46	.1

BATSE BURST# 3889

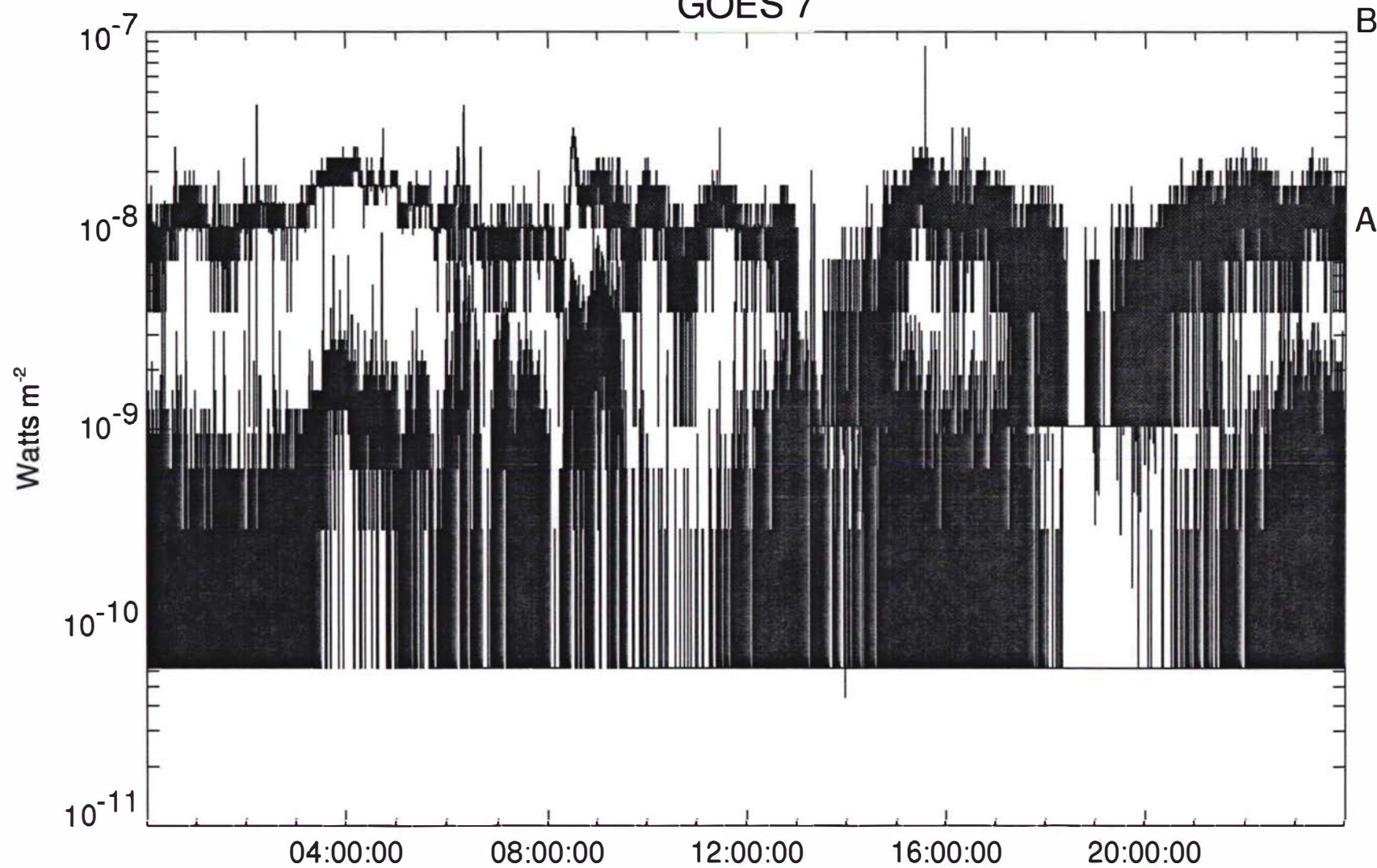
7 / 2 / 96

ULYSSES RT
1/11/95 34776.230 s
0- 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



GOES 7



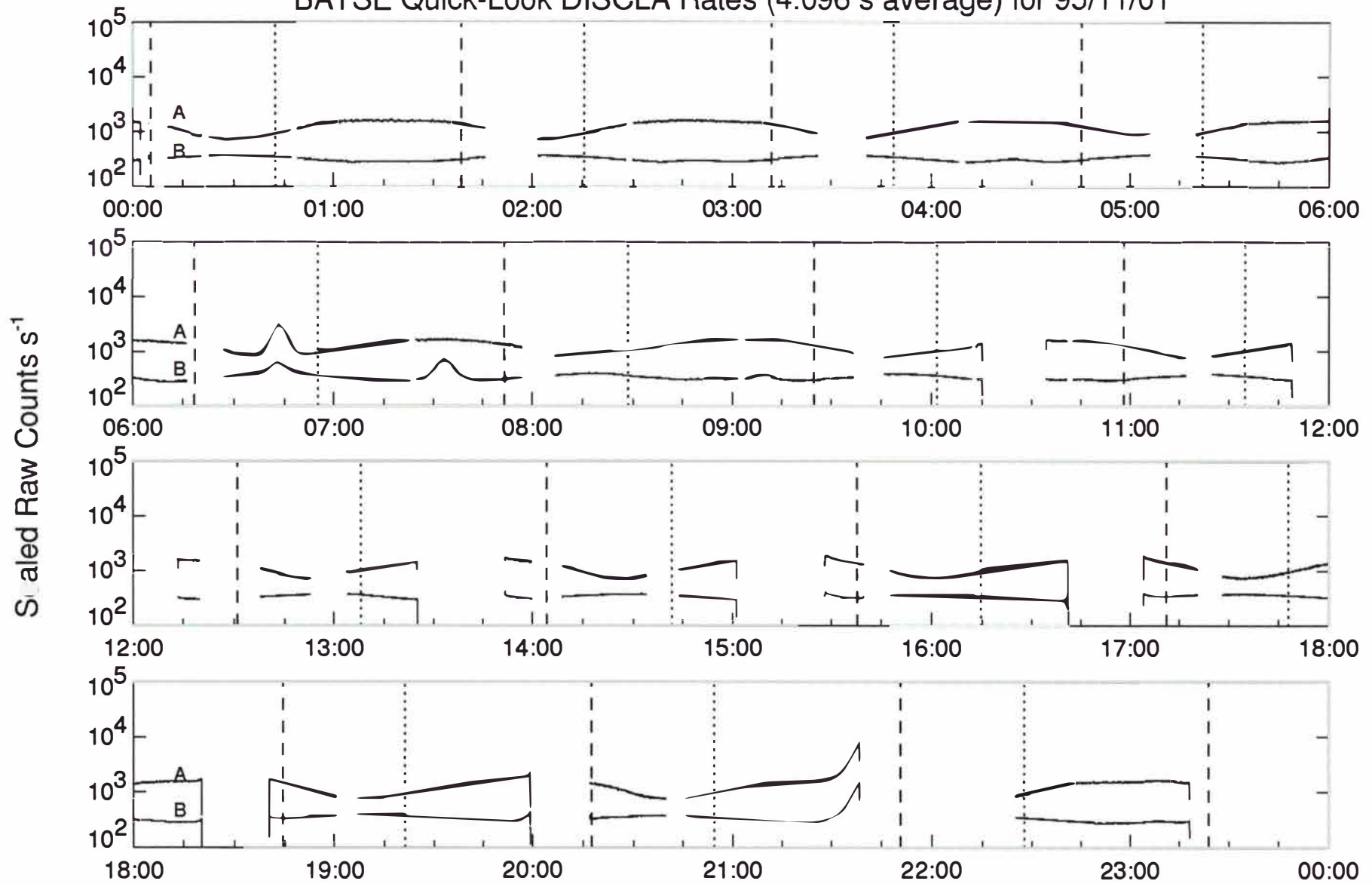
Data Start: 95/11/01, 0000:01

Plot created: 95/11/17, 1835

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 95/11/01



Current Time: 95/11/17, 1835 EDT

A: Channel 0 Most Sunward LAD

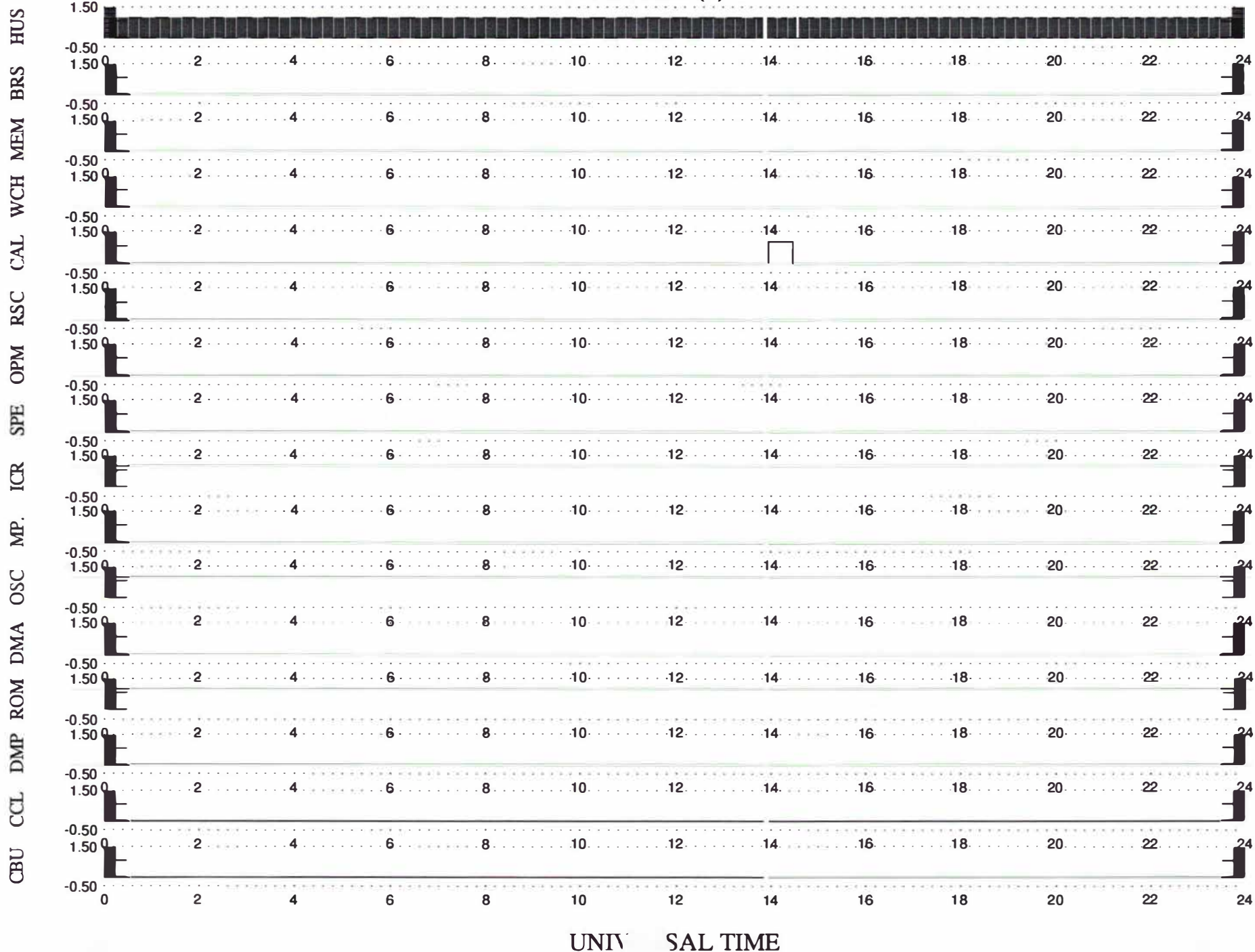
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

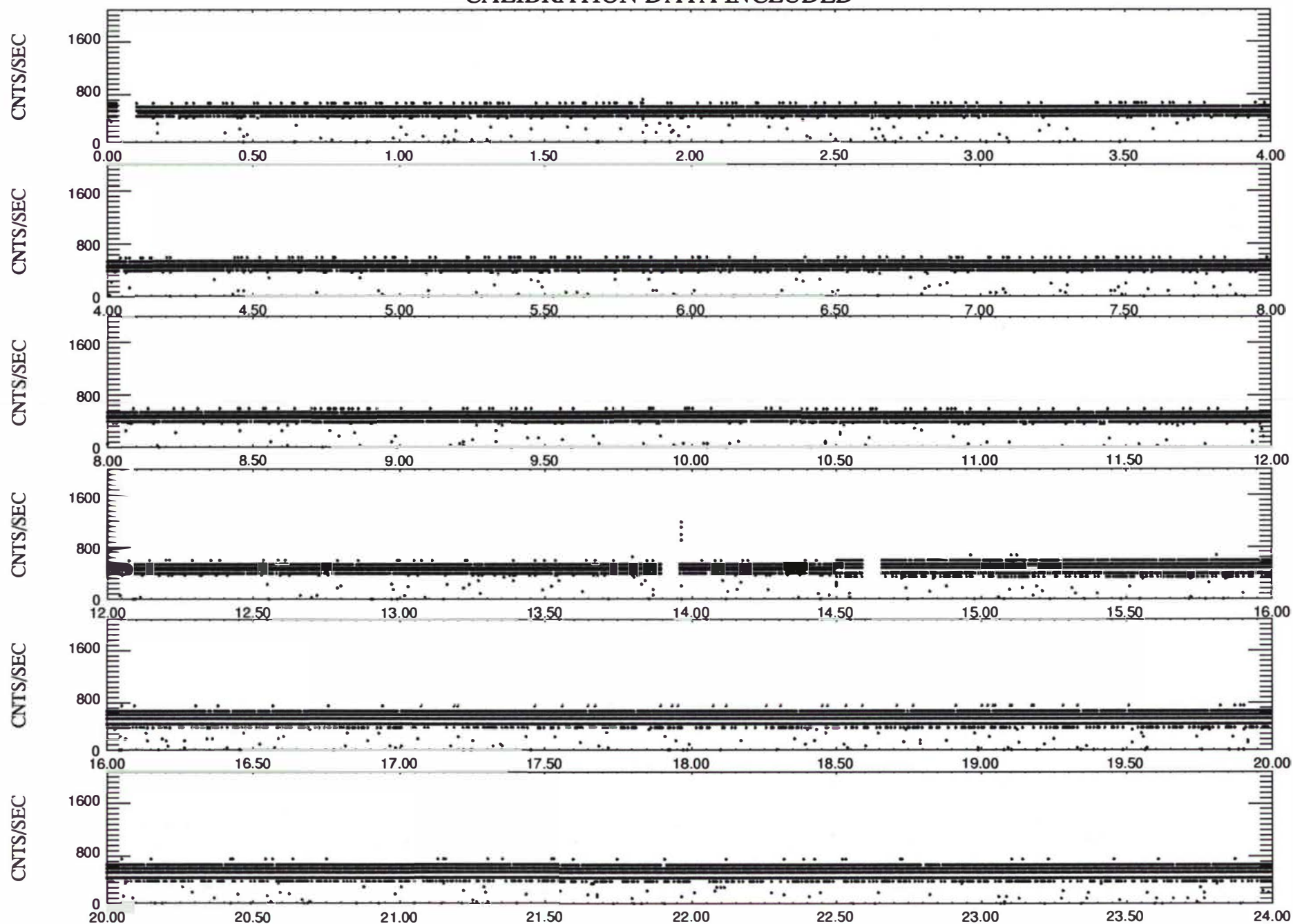
HUS MODES EDR day 305, year 1995 to day 305, year 1995 NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 305, year 1995 to day 305, year 1995
CALIBRATION DATA INCLUDED

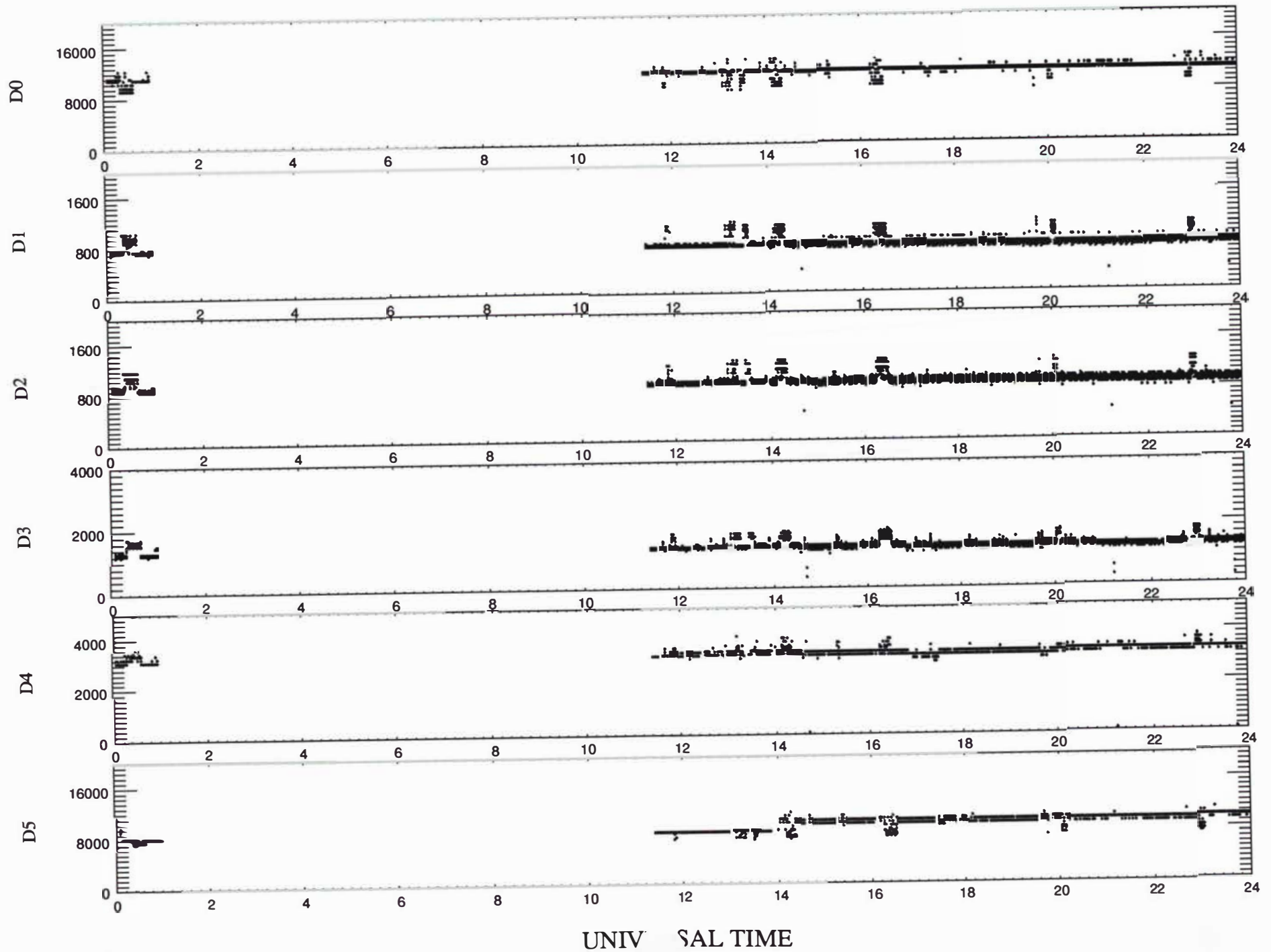
4/1/96



UNIV `SAL TIME

HUS 2B COUNTS / SEC QEDR day 305, year 1995 to day 305, year 1995

11/2/95



KONUS 19951102 07085

ULYSSES RT

01 / 09 / 11

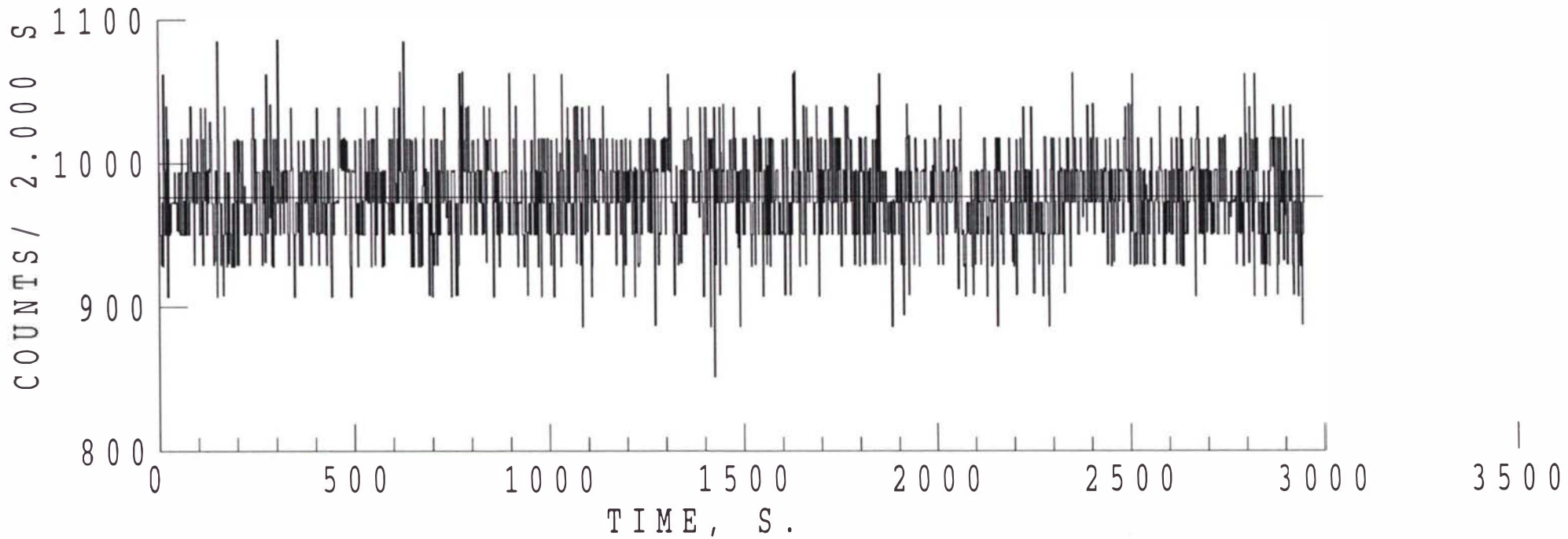
02 / 11 / 95 5616.159 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

M= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

M= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From SAHI@ssl.msfc.nasa.gov Fri Nov 3 13:43 PST 1995
From: SAHI@ssl.msfc.nasa.gov
Date: Fri, 3 Nov 1995 15:43:06 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3890

BATSEARCH PROGRAM

BATSE BURST # 3890
EVENT OF 1995 NOV 2 DAY OF YEAR=306
EVENT CROSSING TIME AT BATSE : 1910. S. OR 00:31:50.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 338.000 -57.000
BATSE PEAK COUNTING RATE: 3500 C/S

No

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 2/11/ 95 IS:
RA= 212.732 DEC= 55.649 DIST= 2.839 AU
BATSE-ULYSSES DISTANCE = 424678481. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 29.56 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1232.21 SECS.
CROSSING TIME AT ULYSSES IS 3142. S. OR 00:52:22 +/- 190.04 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 2/11/ 95 IS:
RA= 246.908 DEC= -22.511 DIST= 2.235 AU
MARS-BATSE DISTANCE = 334398720. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=108.15 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -347.46 SECS.
CROSSING TIME AT MARS IS 1563. S. OR 00:26:02 +/- 178.75 SECONDS

BATSE BURST TRIGGER

NO.: 3890

TIME: TJD=0023 SECONDS=1910

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=119.4 AZIMUTH=143.0 ERROR=3.1 DEGREES

COMMENTS:

BURST, SINGLE PULSE WITH SUBSTRUCTURE, DUR.~15 SECS. NOT VISIBLE ABOVE 300 KEV.

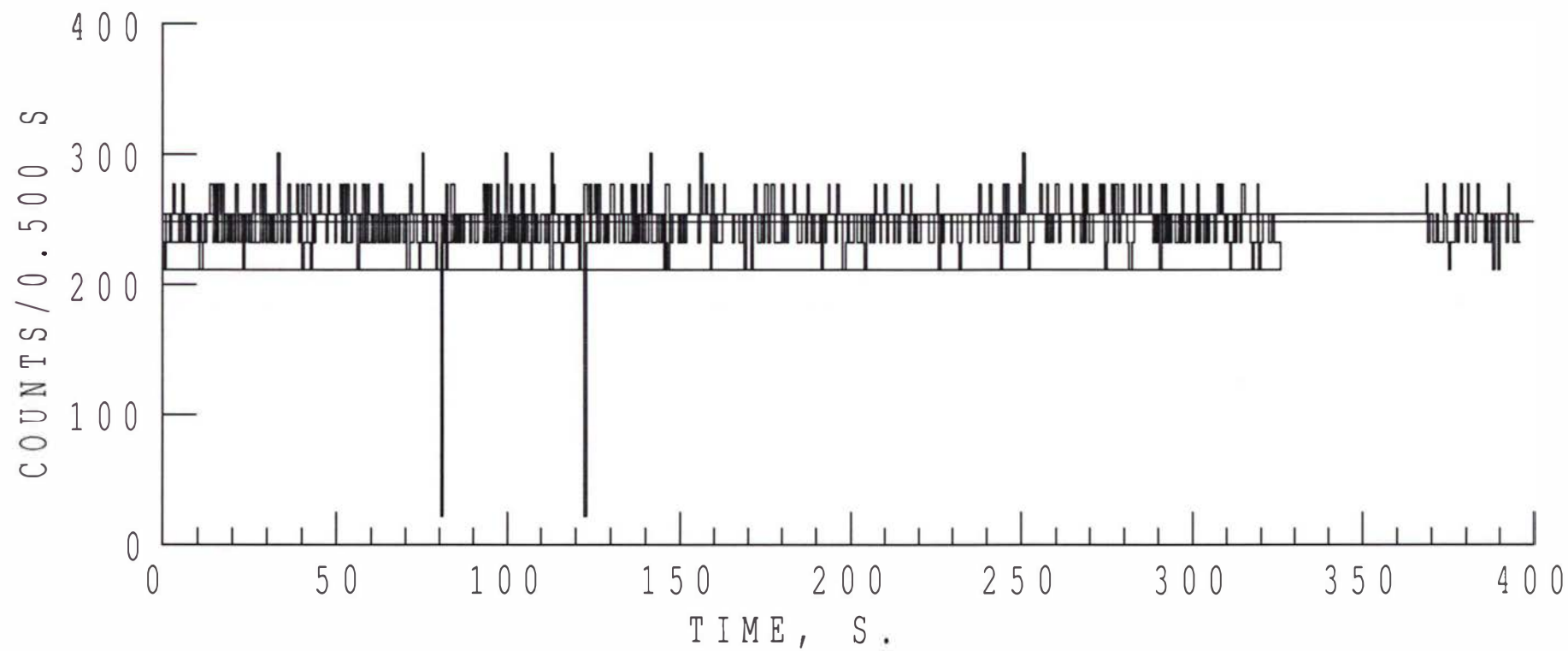
BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3890	951102	10023	01910	3500	338	-57	15

7 / 11 / 95

ULYSSES RT
2 / 11 / 95 2952.117 s
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



95	7	1	117	23737	23737	3658
95	7	6	121	42735	42735	3662
95	7	11	123	13789	13789	3663
95	7	13	BGR	32133	32176	3664
95	7	30	128	76149	76124	3720
95	8	4	131	7135	07134	3734
95	8	4	133	45377	45376	3735
95	8	8	BGR	13023	12974	3745
95	8	9	136	85945	85945	3750
95	8	18	137	5065	05002	3765
95	8	22	140	13751	13749	3767
95	9	4	142	52692	52688	3776
95	9	9	145	85473	85452	3788
95	9	19	151	51465	51447	3806
95	9	21	152	20947	20947	3811
95	9	22	BGR	15495		
95	9	22	BGR	25929		
95	9	26	BGR	63919		
95	10	1	153	41907		
95	10	2	BGR	77583		3843
95	10	4	BGR	83974		
95	10	5	154	14842.112		
95	10	8	156	46287.863		
95	10	10	BGR	11774		
95	10	11	157	77693.094		3860
95	10	13	159	57097.299		
95	10	14	160	13108.167		
95	10	14	161	43561.3		
95	10	16	162	02484.285		3870
95	10	16	BGR	71607		3871
95	10	18	163	19832.069		
95	10	19	64	11712.625		
95	10	19	165	48244.594		3875
95	10	25	167	85239.738		
95	11	2	168	07085.879		
95	11	2	169	21209.015		3891
95	11	2	BGR	28693		
95	11	5	BGR	01745		
95	11	5	170	05868.077		3893
95	11	5	171	46827.808		
95	11	7	BGR	27298		
95	11	11	BGR	34960		
95	11	12	172	66495.244		
95	11	13	173	84358.872		3906
95	11	15	BGR	38929		
95	11	17	175	10123.762		
95	11	18	BGR	82560		
95	11	19	176	29831.402		3912
95	11	19	177	46457.519		
95	11	19		59448		
95	11	21		22280		
95	11	22	179	09841.38		
95	11	22	180	17107.738		
95	11	23	BGR	65408		
95	11	24	BGR	21266		3918
95	11	24	BGR	25132		

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

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

Dear Kevin,

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

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

1 / 2 / 9 6

ULYSSES RT

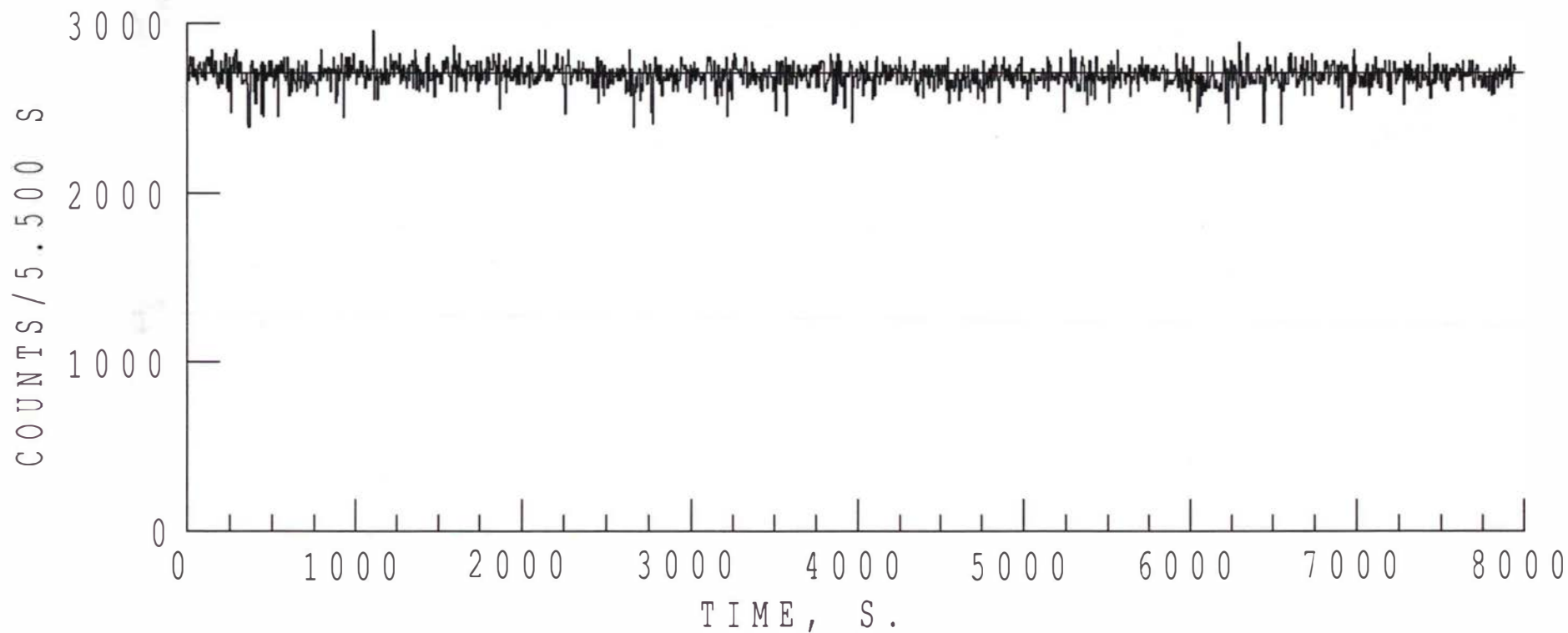
2 / 11 / 95 3096.117 s

0.500 S INTERVALS REGROUPED BY 11

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From SAHI@ssl.msfc.nasa.gov Fri Nov 3 13:44 PST 1995
From: SAHI@ssl.msfc.nasa.gov
Date: Fri, 3 Nov 1995 15:44:34 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3891

BATSEARCH PROGRAM

BATSE BURST # 3891
EVENT OF 1995 NOV 2 DAY OF YEAR=306
EVENT CROSSING TIME AT BATSE : 21175. S. OR 05:52:55.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 139.000 47.000
BATSE PEAK COUNTING RATE: 48000 C/S

RI

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 2/11/ 95 IS:
RA= 212.799 DEC= 55.633 DIST= 2.839 AU
BATSE-ULYSSES DISTANCE = 424747319. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=135.32 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1007.49 SECS.
CROSSING TIME AT ULYSSES IS 20168. S. OR 05:36:07 +/- 207.65 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 2/11/ 95 IS:
RA= 246.908 DEC= -22.511 DIST= 2.235 AU
MARS-BATSE DISTANCE = 334398720. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 61.72 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 528.42 SECS.
CROSSING TIME AT MARS IS 21703. S. OR 06:01:43 +/- 178.57 SECONDS

BATSE BURST TRIGGER

NO.: 3891

TIME: TJD=0023 SECONDS=21175

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=66.7 AZIMUTH=307.2 ERROR=0.05 DEGREES

COMMENTS:

BURST. DOUBLE PULSE WITH SUBSTRUCTURE, DUR.~60 SECS. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3891	951102	10023	21175	48000	139	+47	60

Helio corr removed

Date: July 2 '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? *NO - this burst was after the errors stopped*

☒ 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*

☒ 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?

3. PVO Data

☐ Ephemeris of PVO used (not Venus)?

☐ 2000 coordinates used?

☐ Geocentric time used?

☐ ACCESS database updated? *NO*

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

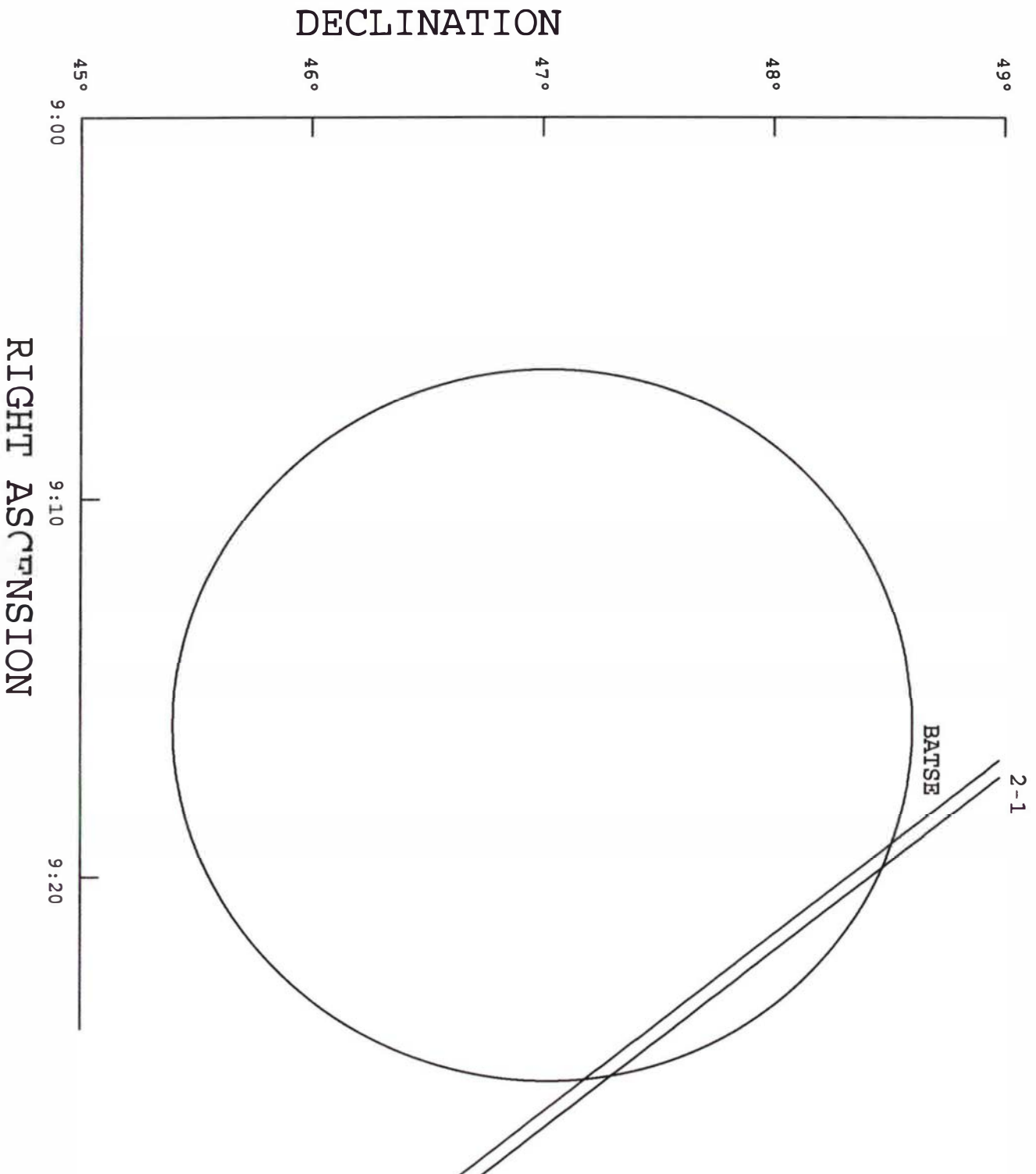
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 2, 1995 5:35

2/ 7/97



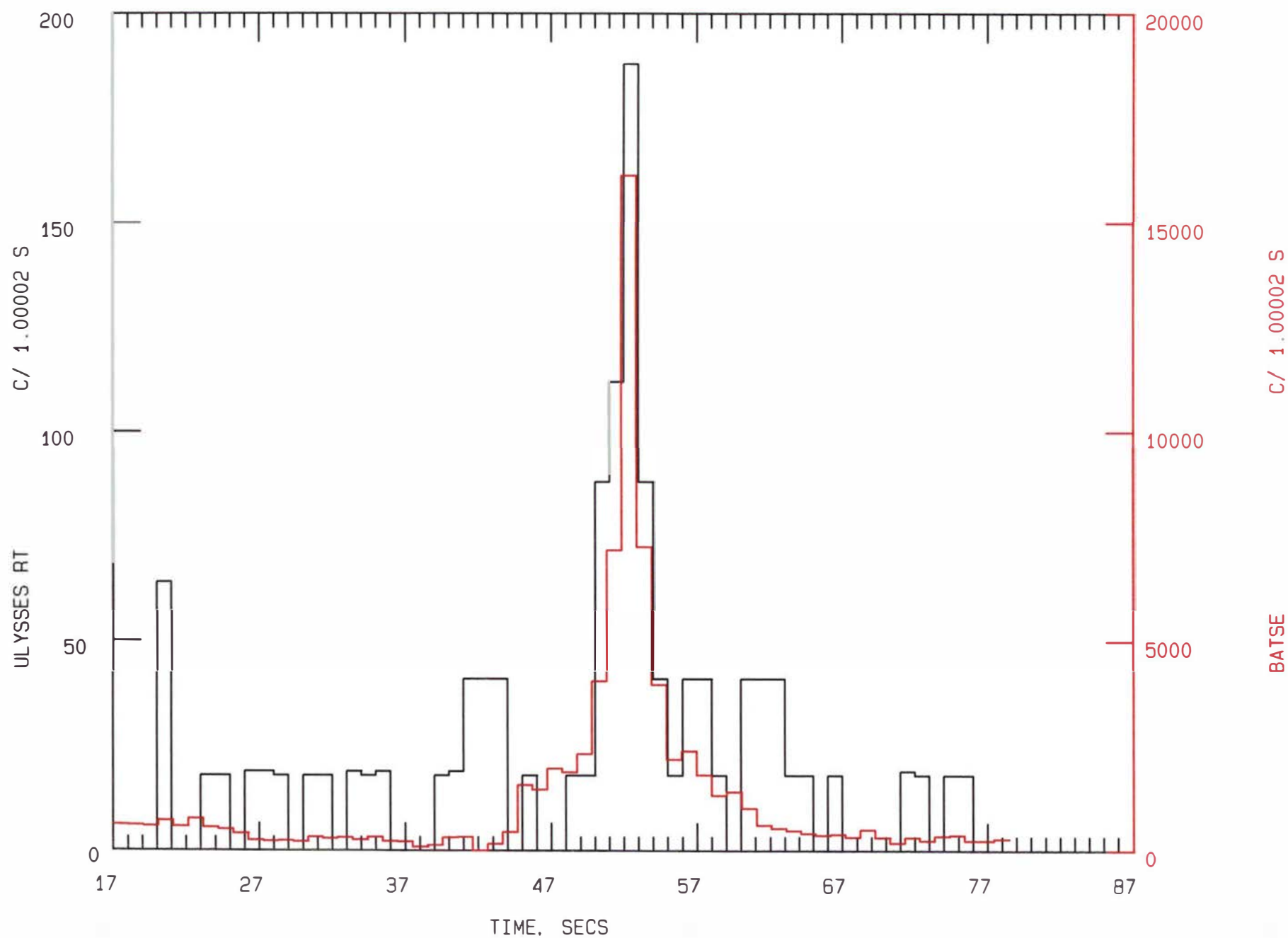
ULYSSES RT-BATSE

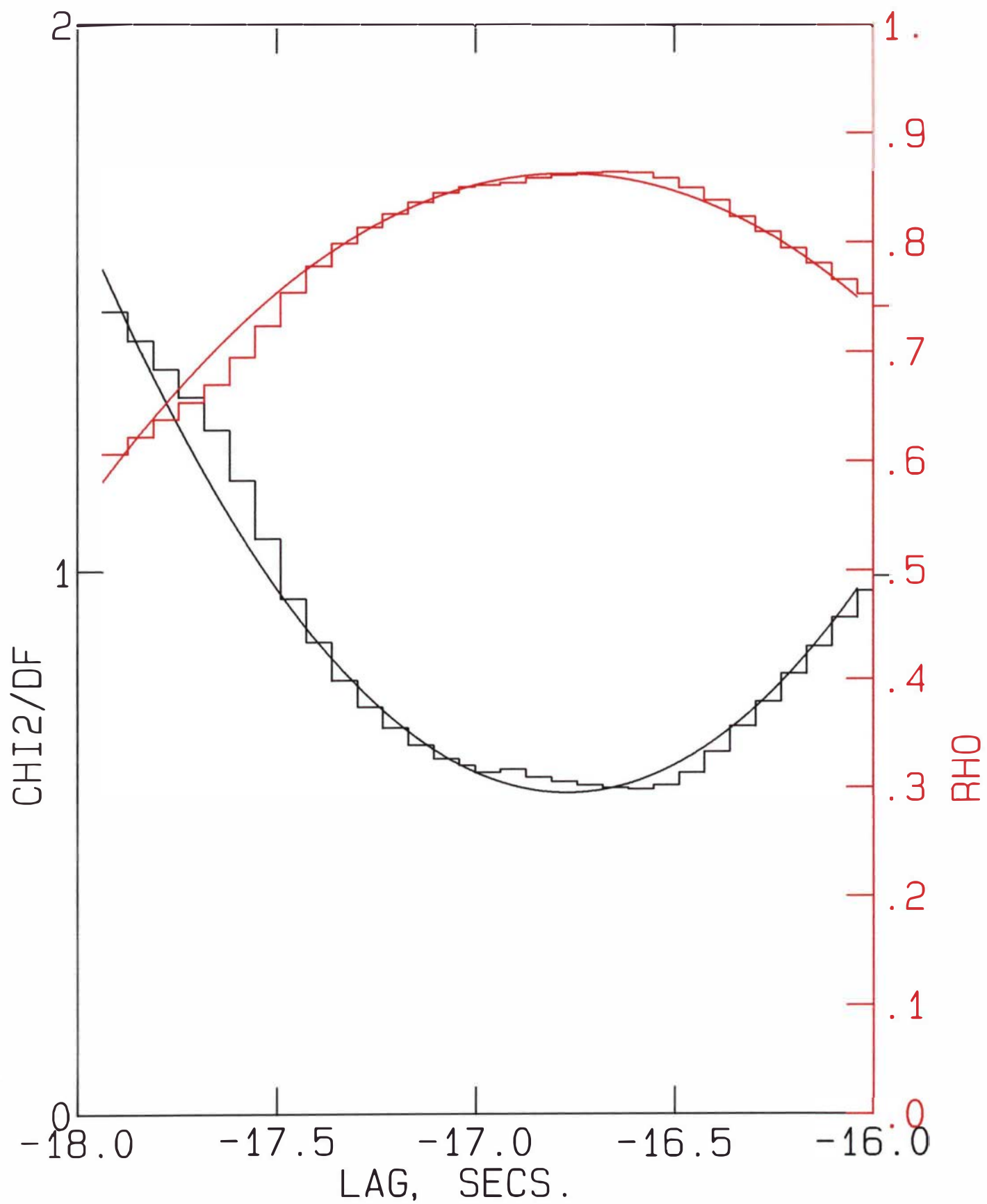
CORRELATION

2/11/95

20131.401

2/ 7/97

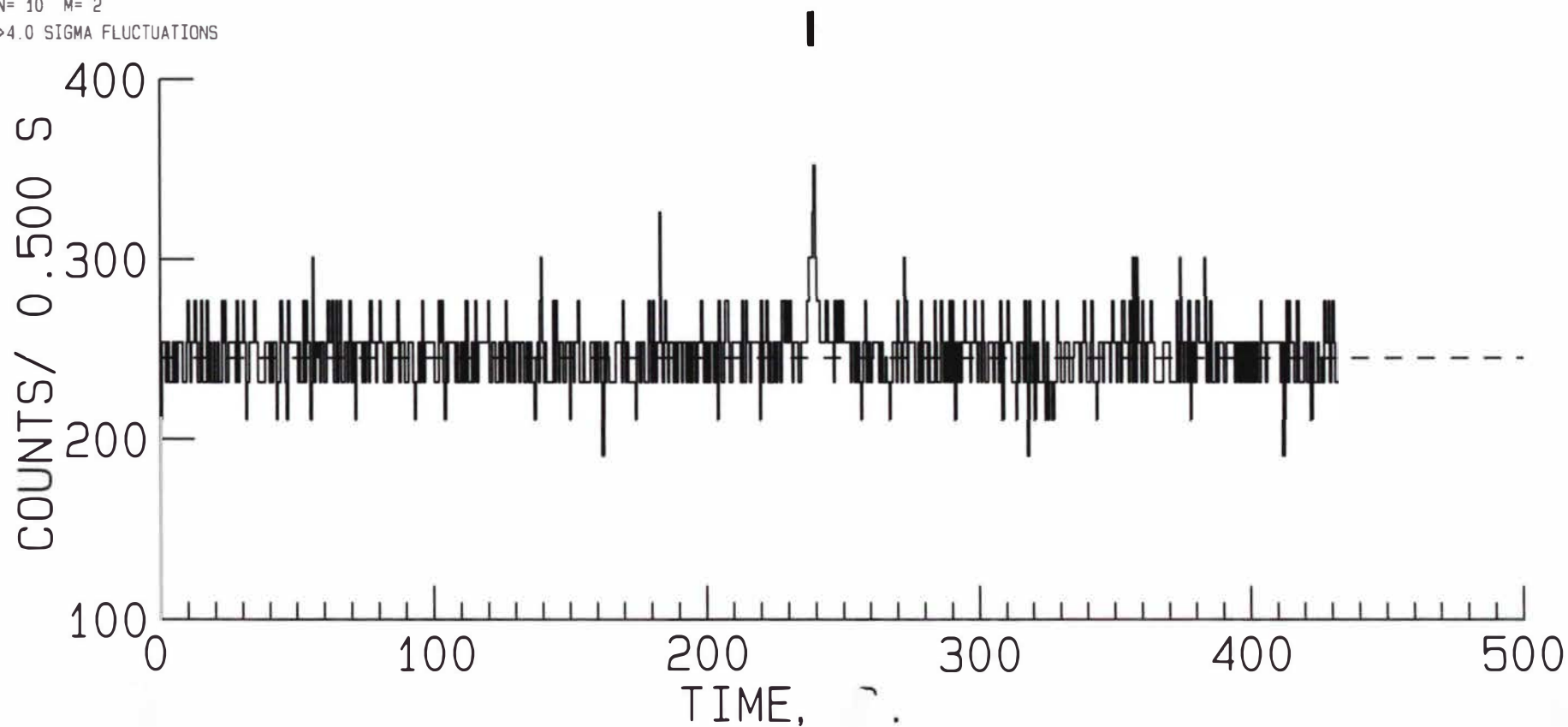




ULYSSES RT
2/11/95 19944.390 s
21- 143 keV

2 / 7 / 97

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



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

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

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

Dear Kevin,

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

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

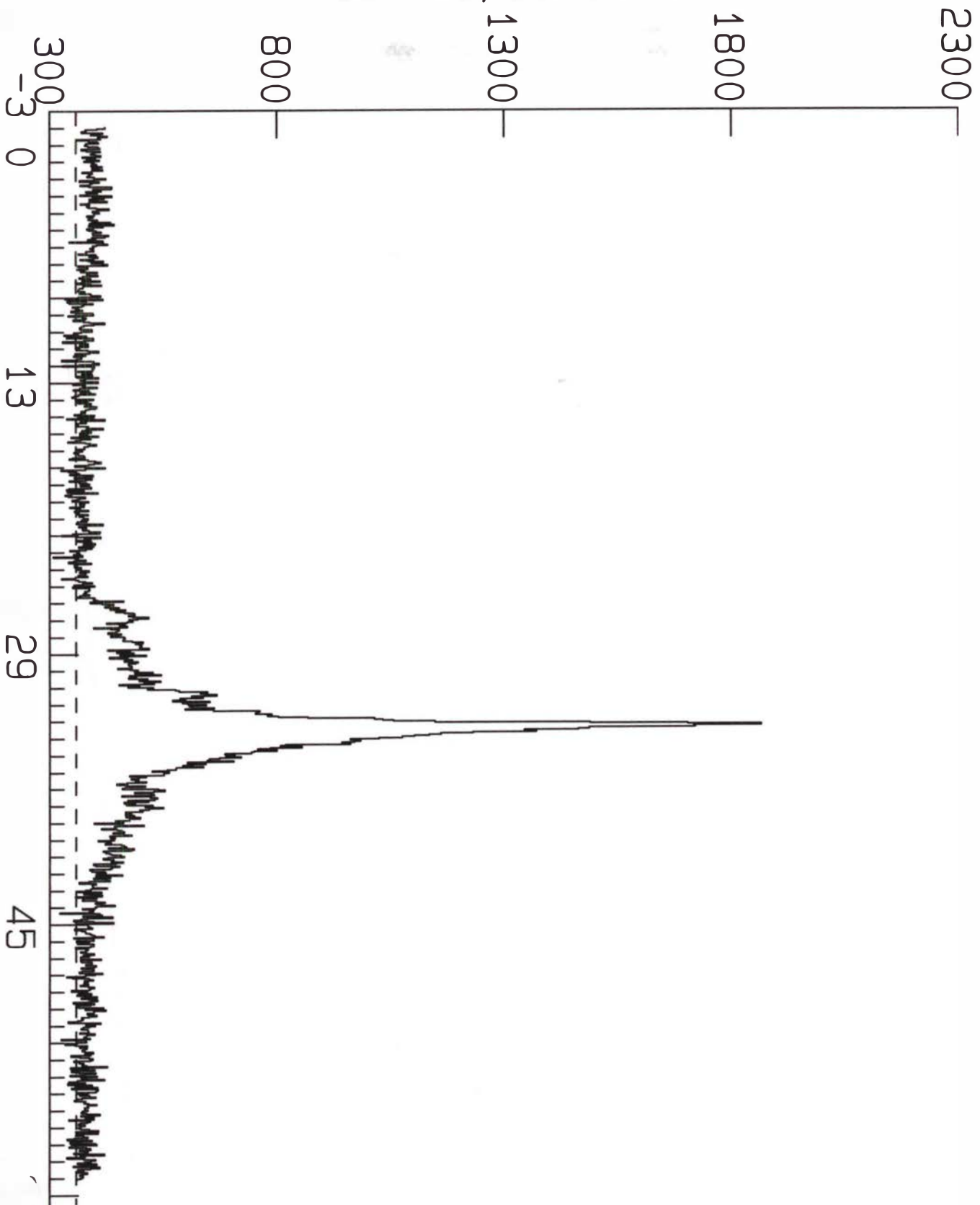
BATSE

02/11/95

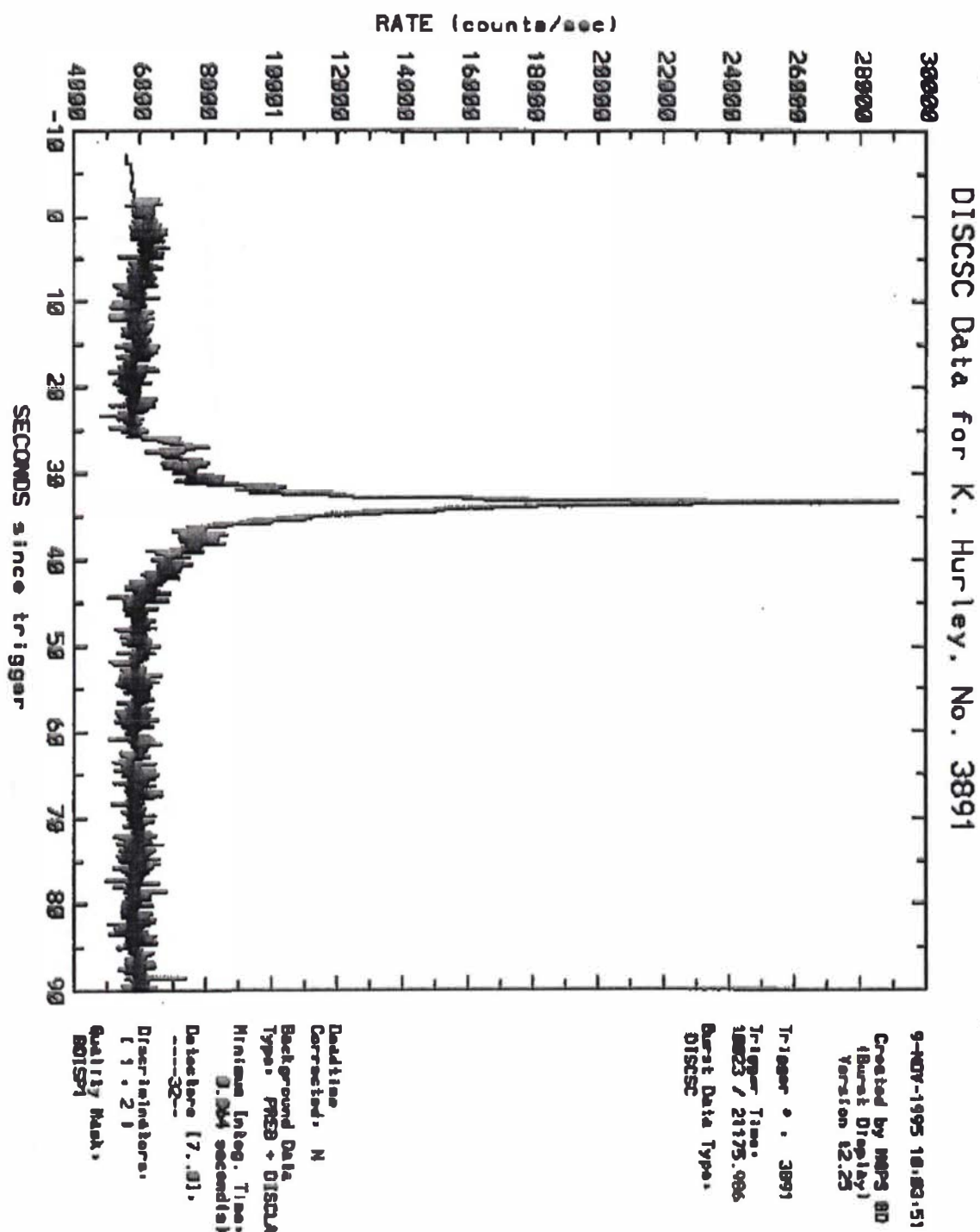
21175.986

25- 100 keV

COUNTS/0.064 S



11/11/95



From isac.ernet.in!kmarar@vigyan.iisc.ernet.in Fri Nov 10 08:42 PST 1995
Date: Fri, 10 Nov 1995 09:32:04 +0000 (CUT)
From: kmarar@isac.ernet.in
X-Sender: kmarar@se08
To: Hurley K <khurley@sunspot.ssl.berkeley.edu>
Subject: sross-c2 event
Mime-Version: 1.0

Dear Kevin
We have an event on 2nd November at UT 05:53:29.
Its duration is about 2 sec.
Pl confirm if anyone else has seen it.
Krishnan

From SAHI@ssl.msfc.nasa.gov Fri Nov 3 13:46 PST 1995
From: SAHI@ssl.msfc.nasa.gov
Date: Fri, 3 Nov 1995 15:46:25 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3892

BATSEARCH PROGRAM

BATSE BURST # 3892
EVENT OF 1995 NOV 2 DAY OF YEAR=306
EVENT CROSSING TIME AT BATSE : 28696. S. OR 07:58:16.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 190.000 -35.000
BATSE PEAK COUNTING RATE: 7000 C/S

NO

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 2/11/ 95 IS:
RA= 212.824 DEC= 55.627 DIST= 2.839 AU
BATSE-ULYSSES DISTANCE = 424773677. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 87.30 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 66.82 SECS.
CROSSING TIME AT ULYSSES IS 28763. S. OR 07:59:22 +/- 296.74 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 2/11/ 95 IS:
RA= 246.908 DEC= -22.511 DIST= 2.235 AU
MARS-BATSE DISTANCE = 334398720. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=129.25 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -705.80 SECS.
CROSSING TIME AT MARS IS 27990. S. OR 07:46:30 +/- 139.24 SECONDS

BATSE BURST TRIGGER

NO.: 3892

TIME: TJD=0023 SECONDS=28696

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=154.3 AZIMUTH=351.4 ERROR=2.3 DEGREES

COMMENTS:

BURST. SINGLE PULSE, DUR.~5 SECS. RISE FASTER THAN FALL. MARGINALLY VISIBLE
ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3892	951102	10023	28696	7000	190	-35	5

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

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

From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996
 Date: Fri, 26 Jan 1996 13:00:45 -0800
 Mime-Version: 1.0
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94	11	25	7	79470.156	79470 3295	R I
94	11	26	BGR	01246	01245 3296	
94	11	26	8	44557.952	44521 3298	trig.
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94	11	26	9	71809.732	71798 3301	R I
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94	11	28	BGR	56220	56217 3305	
94	12	28	28	27585.915	27581 3330	R I
94	12	29	29	82268.781	82258 3334	R I
95	1	4	31	26319.613	26319 3345	R I
95	1	11	33	17352.241	17263 3351	R I
95	1	11	34	44329	44310 3352	
95	1	17	BGR	05760	05761 3360	
95	1	18	BGR	44574	44589 3364	
95	2	7	BGR	02774	02781 3406	
95	2	8	45	07824	07824 3408	
95	2	10	47	08424	08421 3410	
95	2	11	48	08697	08697 3412	trig.
95	2	11	50	72469	72468 3415	
95	2	21	BGR	74701	74705 3436	
95	2	26	54	53351	53336 3442	
95	3	1	BGR	75731	75761 3448	
95	3	4	56	37661	37657 3453	
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95	3	10	BGR	78388	78395 3464	
95	3	25	63	25841	25844 3480	
95	3	25	64	63392	63391 3481	
95	3	27	BGR	26323	26347 3485	
95	3	27	BGR	85672	85671 3486	
95	4	1	69	42647	42642 3488	
95	4	1	70	74635	74634 3489	
95	4	3	71	47985	47987 3491	
95	4	3	72	84828	84826 3492	
95	4	16	BGR	48420	48419 3509	
95	4	18	81	83793	83795 3512	
95	4	25	86	00923	00919 3523	
95	4	30	BGR	54224	54229 3527	
95	5	3	88	66971	66970 3537	
95	5	10	90	28083	28079 3569	
95	5	13	93	81706	81703 3571	
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95	5	22	98	23898	23896 3590	
95	5	22	100	85280	85283 3593	
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95	6	10	107	6849	06849 3637	
95	6	24	111	84124	84084 3648	
95	6	25	113	14626	14601 3649	
95	6	29	115	37033	37036 3654	
95	7	1	116	12762	12758 3657	

7 / 11 / 95

ULYSSES RT

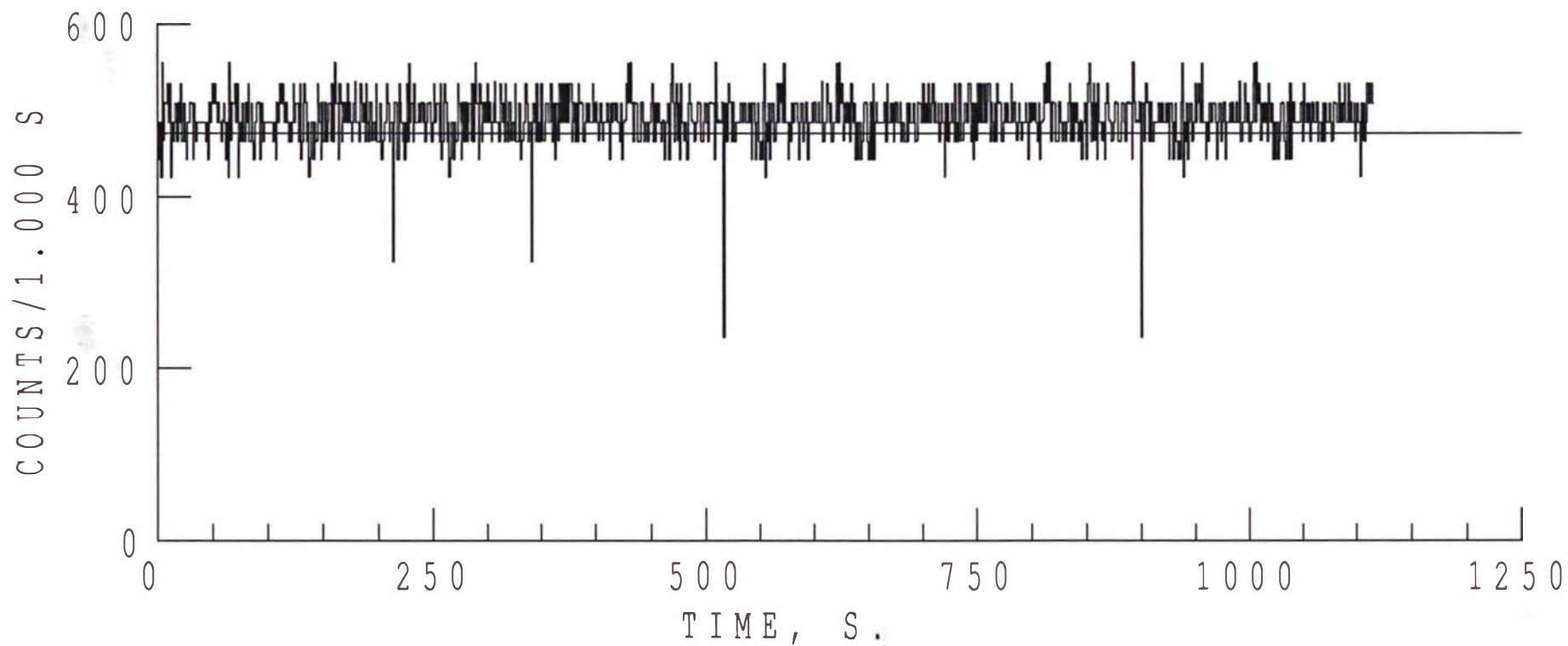
2 / 11 / 95 28476.023 s

0.500 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



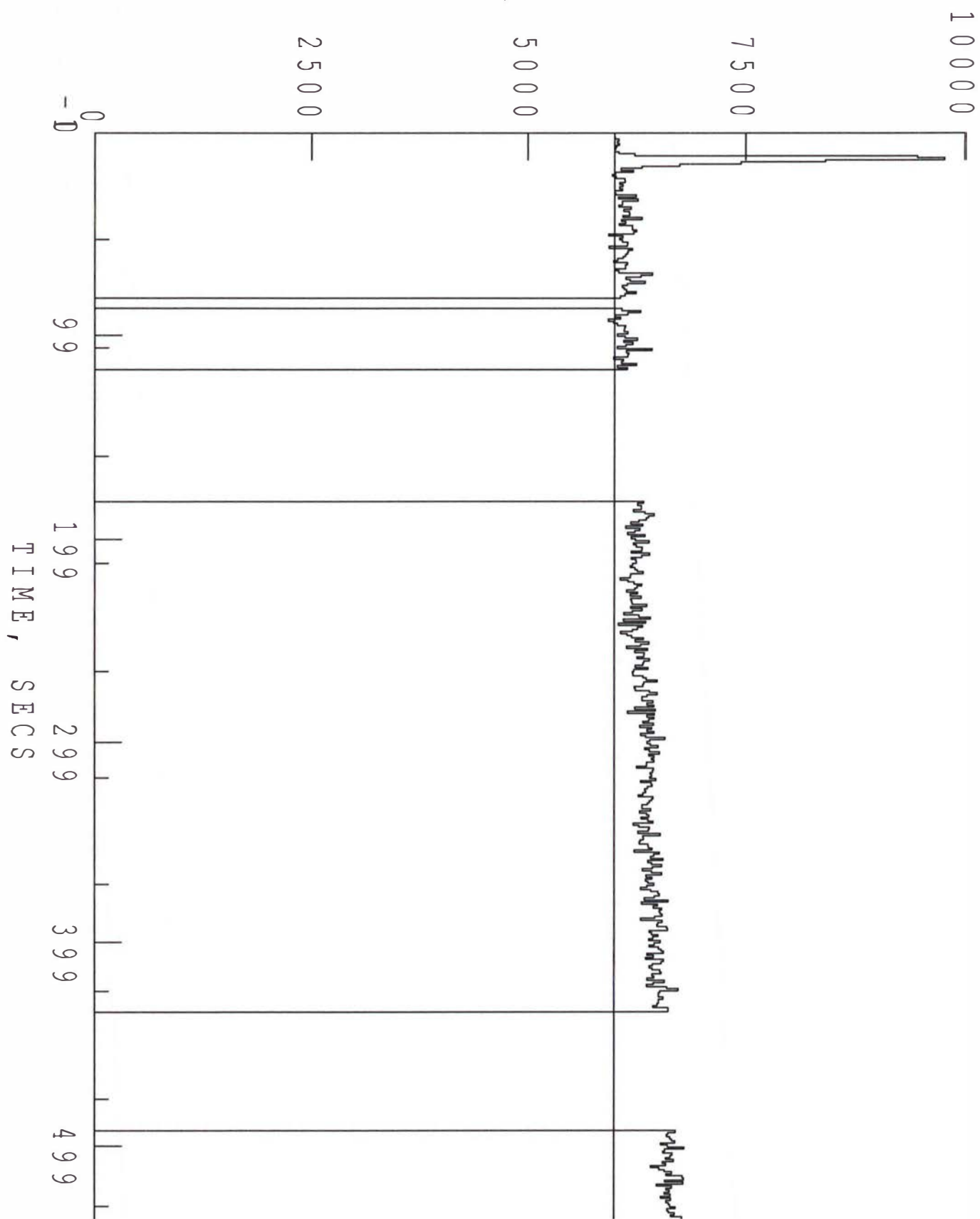
BACODINE

02/11/95

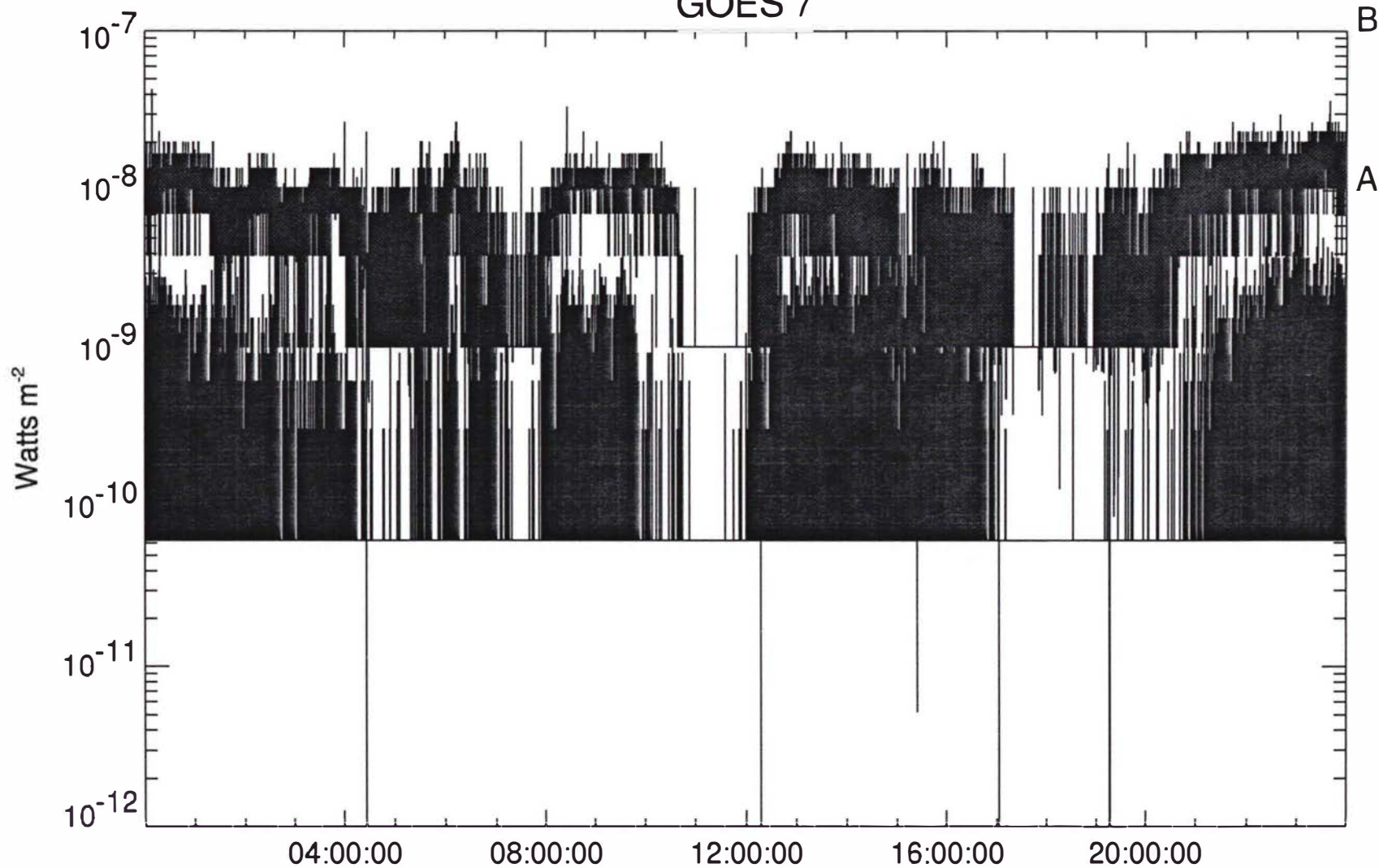
28686.001

25- 100 keV

COUNTS/1.024 S



GOES 7

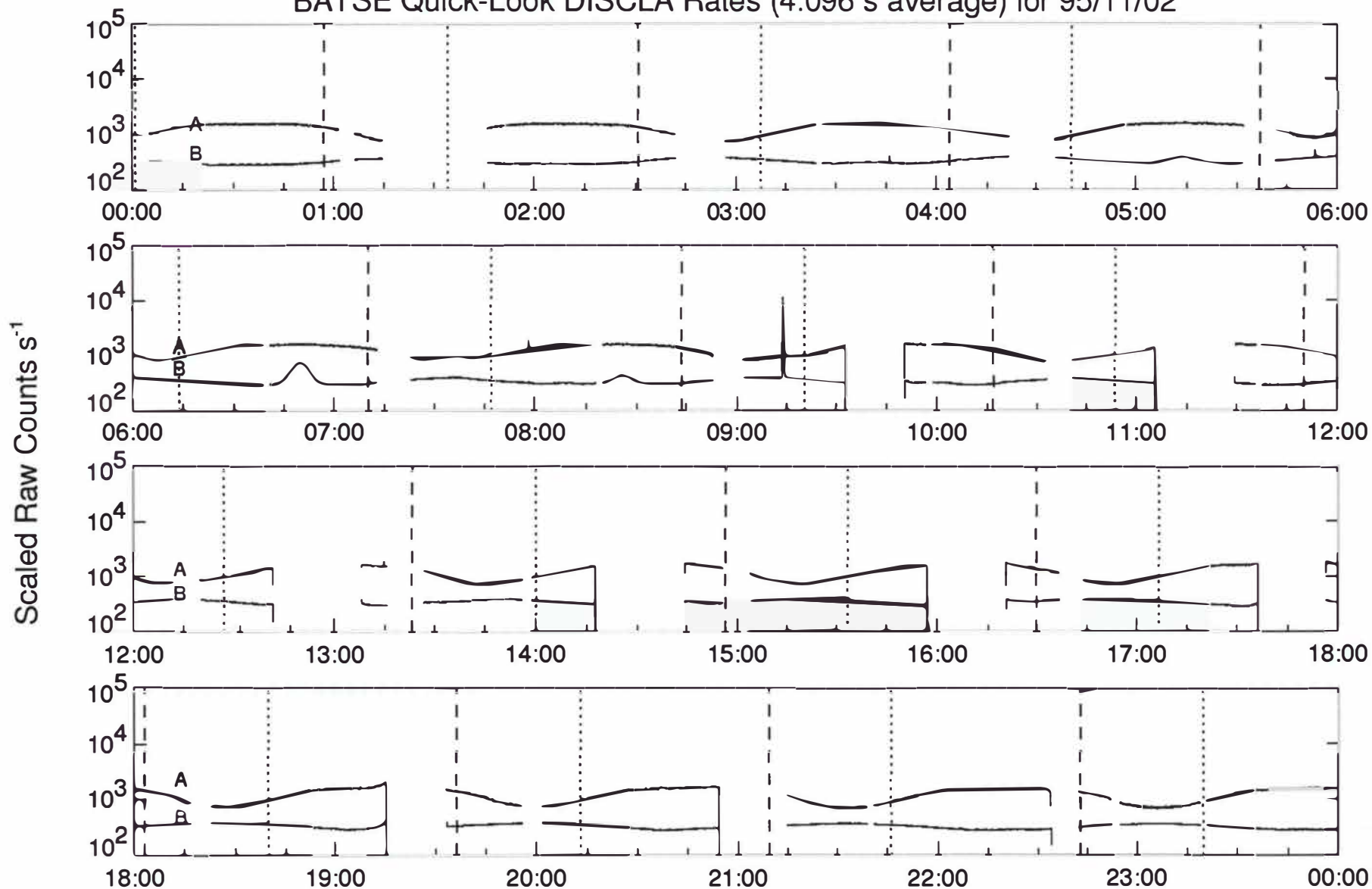


Data Start: 95/11/02, 0000:02

Plot created: 95/11/17, 1838

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

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/02



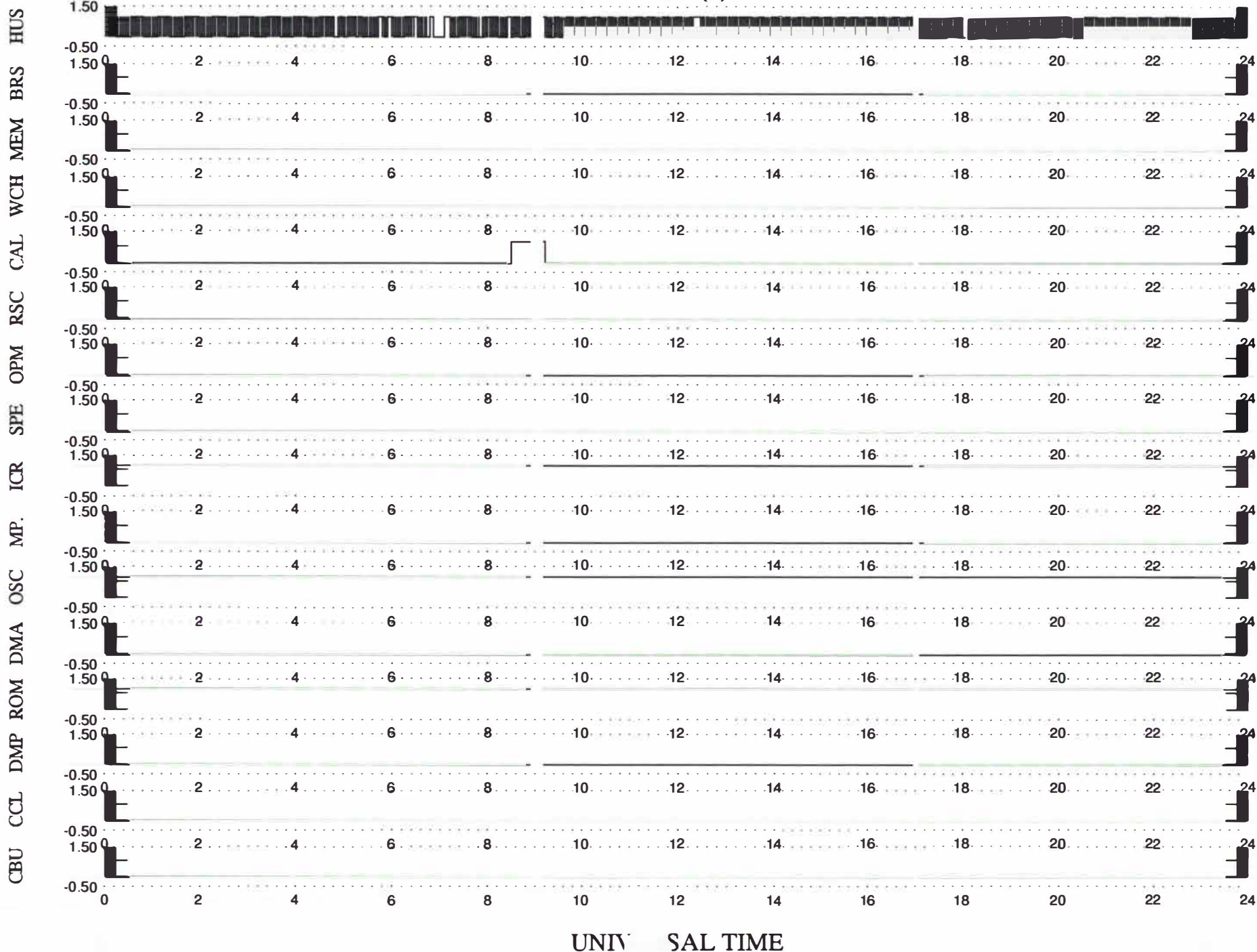
Current Time: 95/11/17, 1838 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

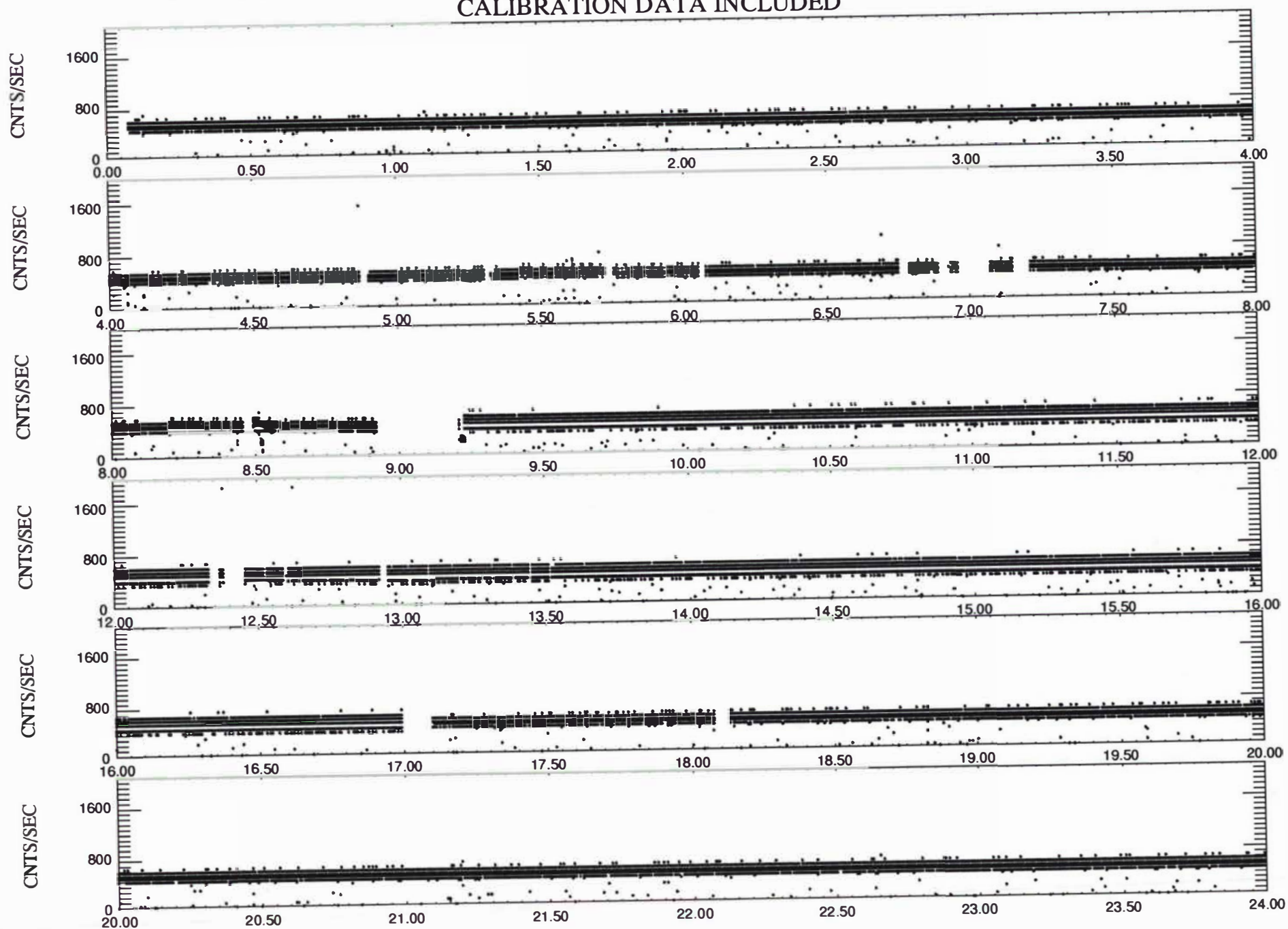
HUS MODES EDR day 306, year 1995 to day 306, year 1995 NO BURST (8)

4/1/96

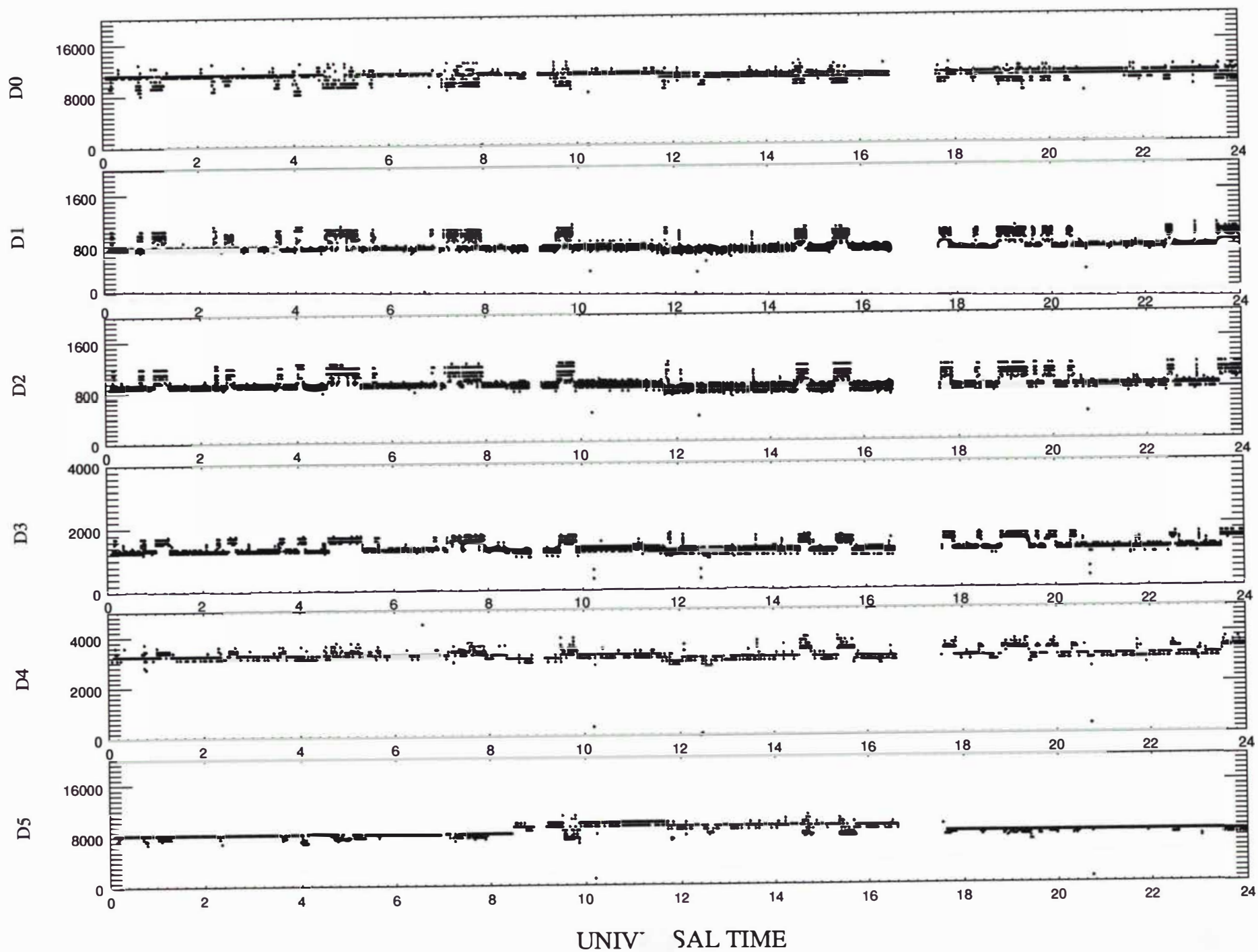


HUS 2A, MODE 1, NOT AVERAGED EDR day 306, year 1995 to day 306, year 1995
CALIBRATION DATA INCLUDED

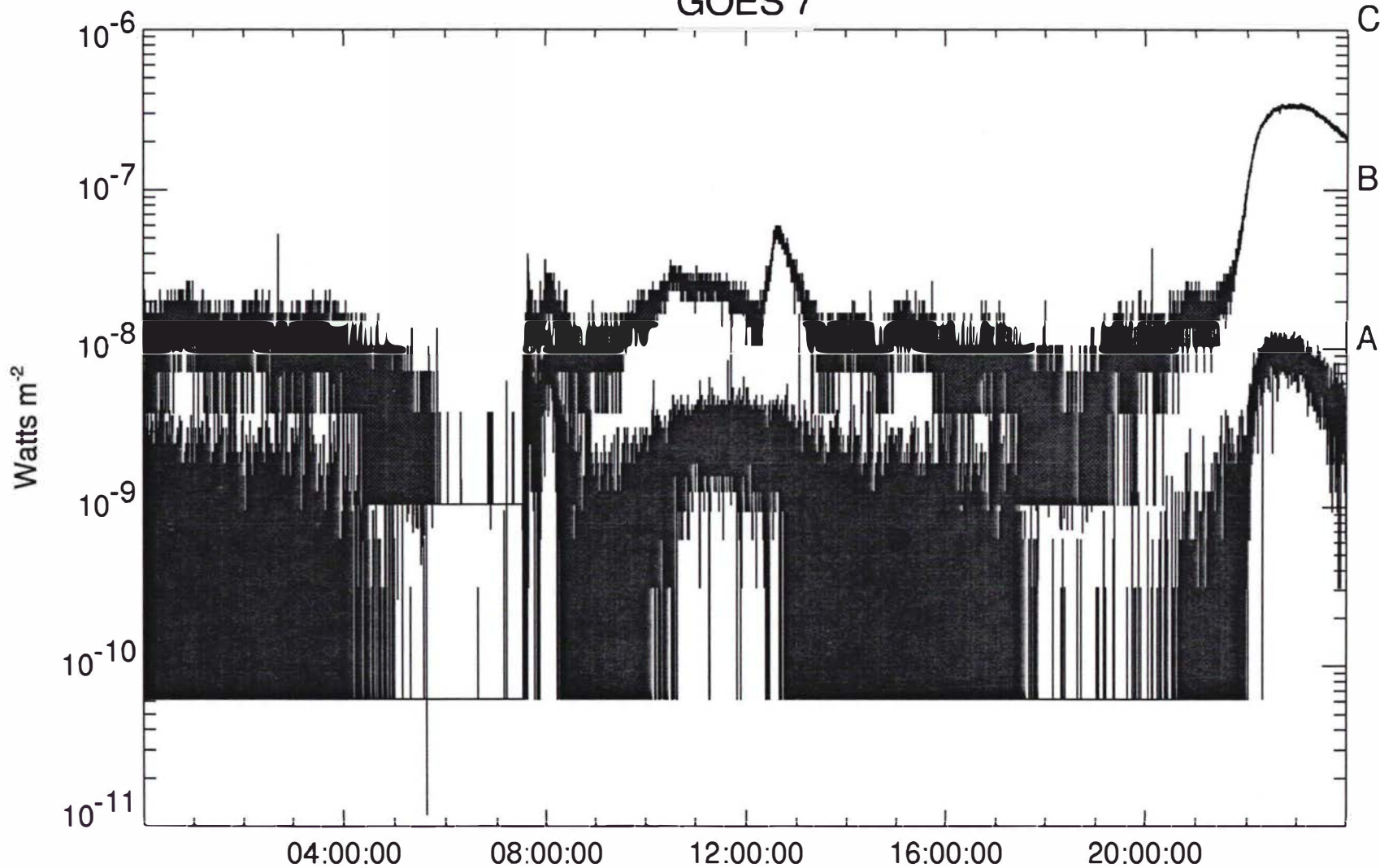
4/1/96



UNIV SAL TIME



GOES 7



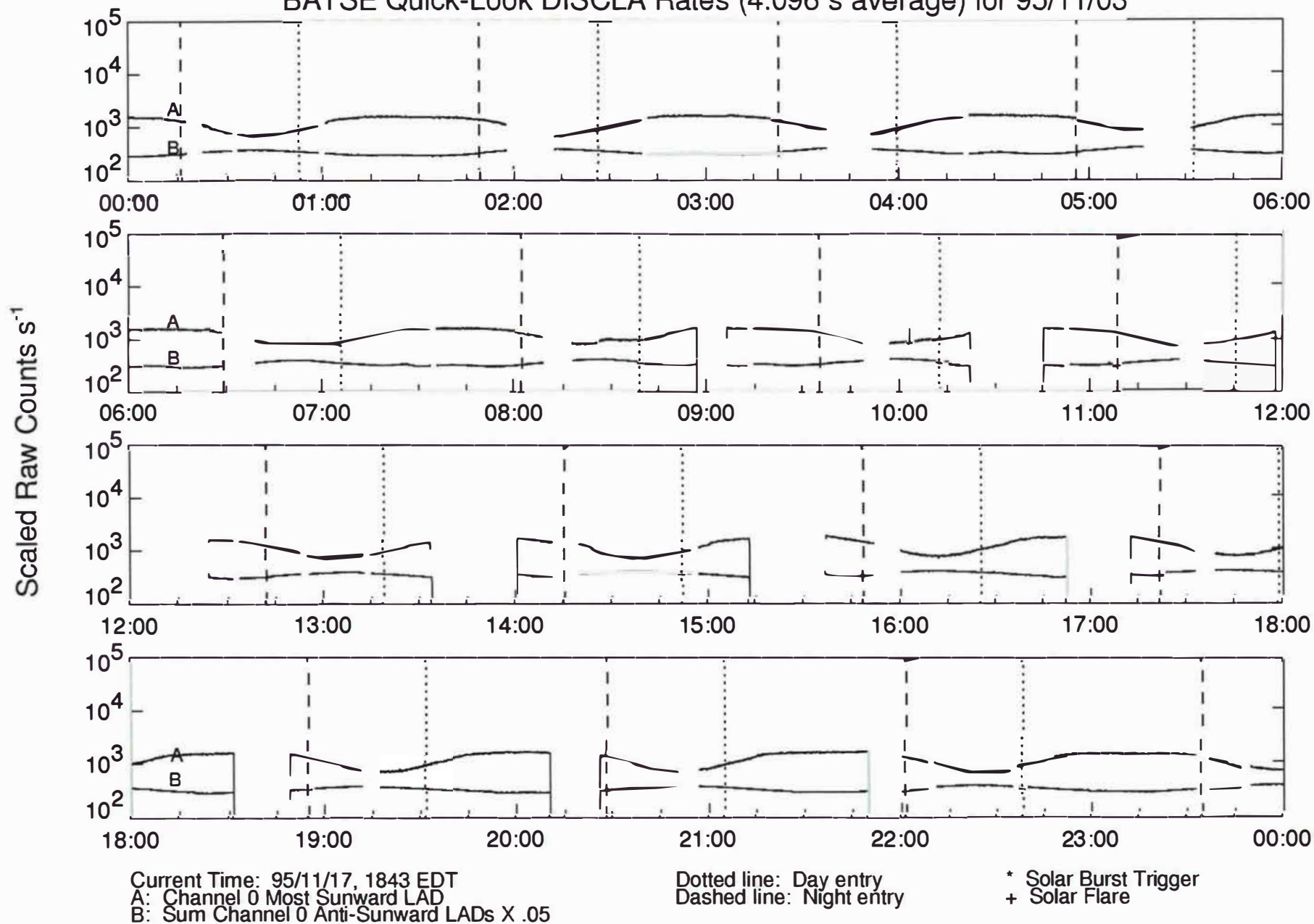
Data Start: 95/11/03, 0000:00

Plot created: 95/11/17, 1842

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

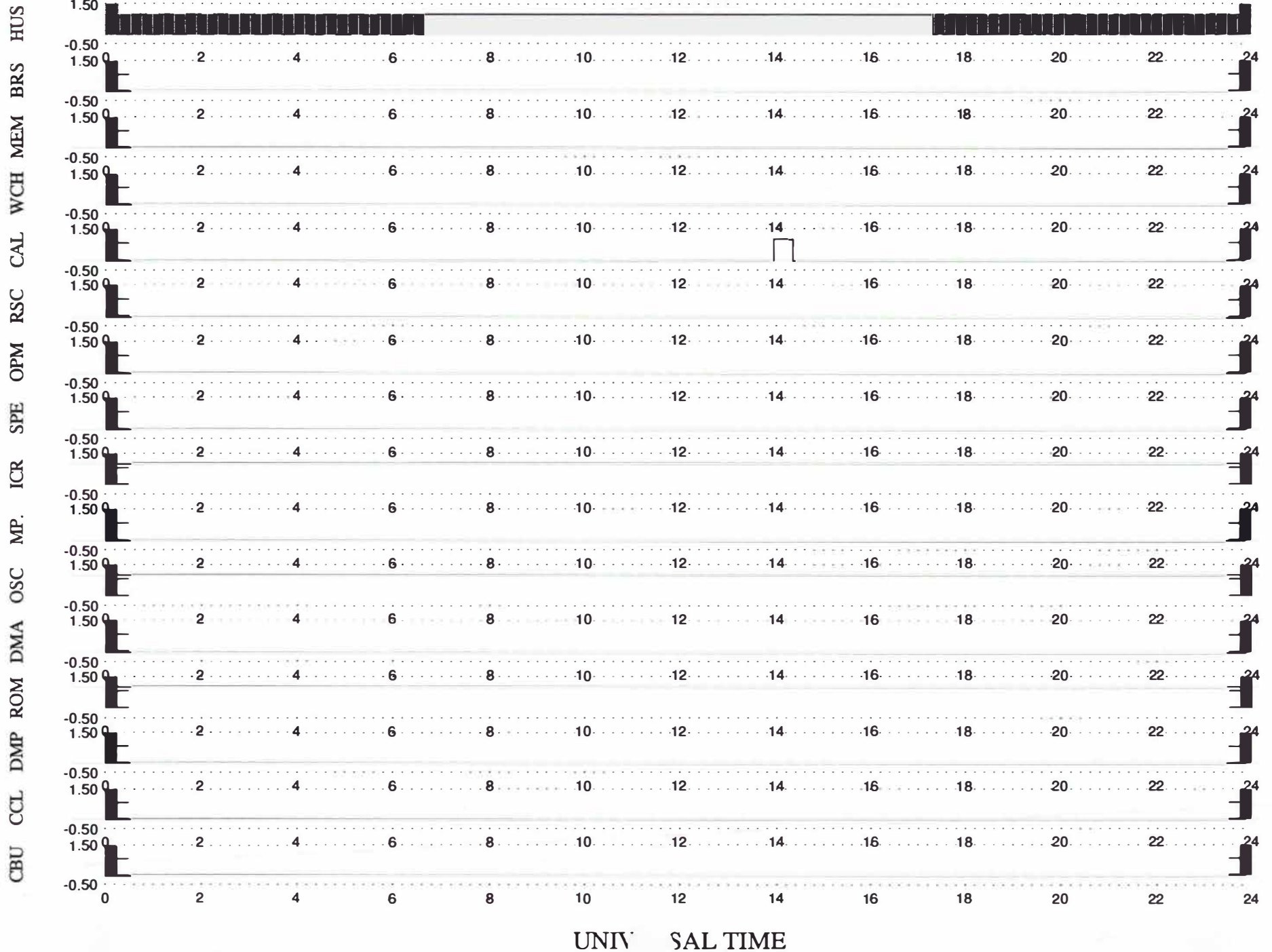
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/03



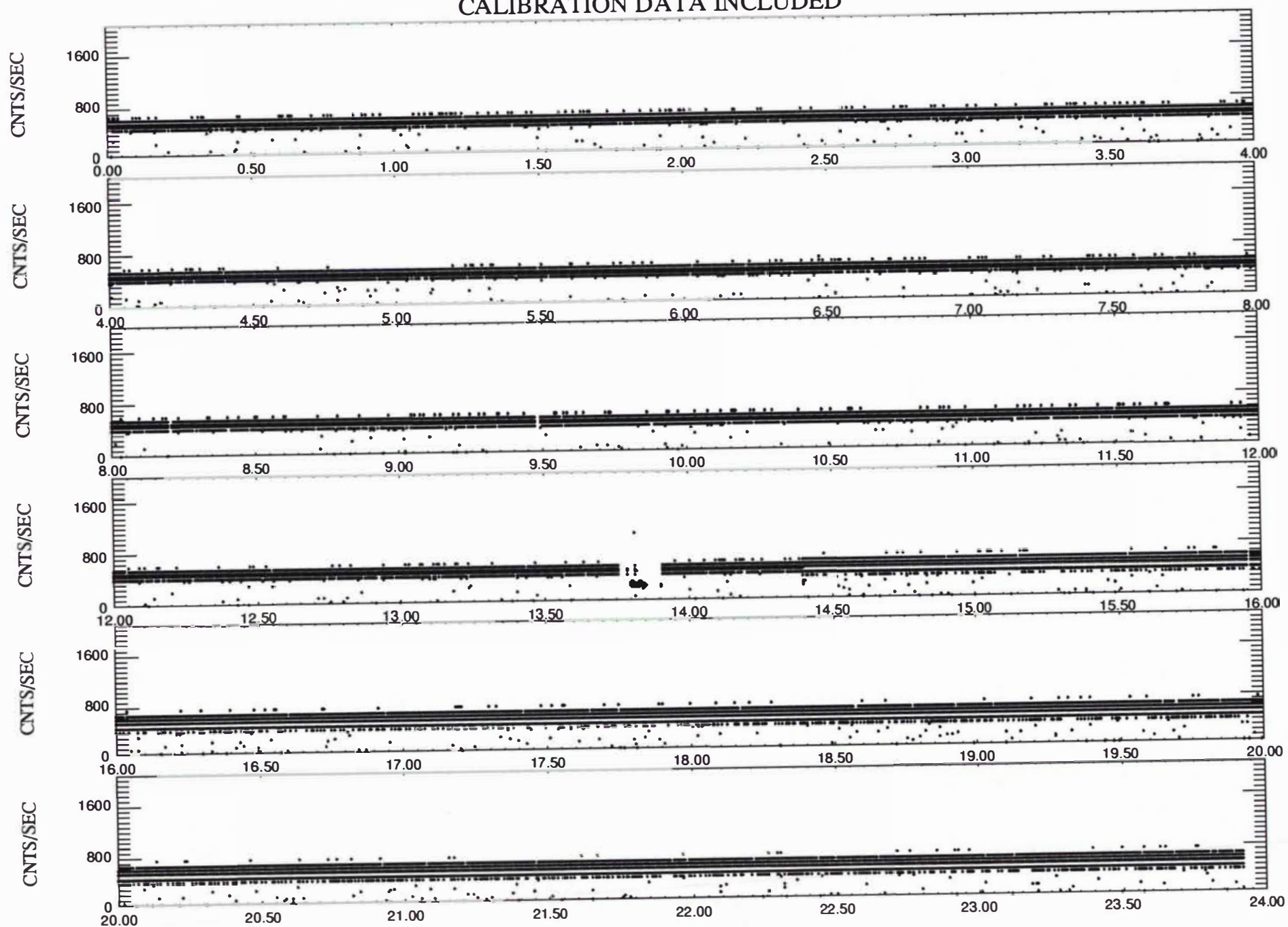
HUS MODES EDR day 307, year 1995 to day 307, year 1995
NO BURST (8)

4/1/96

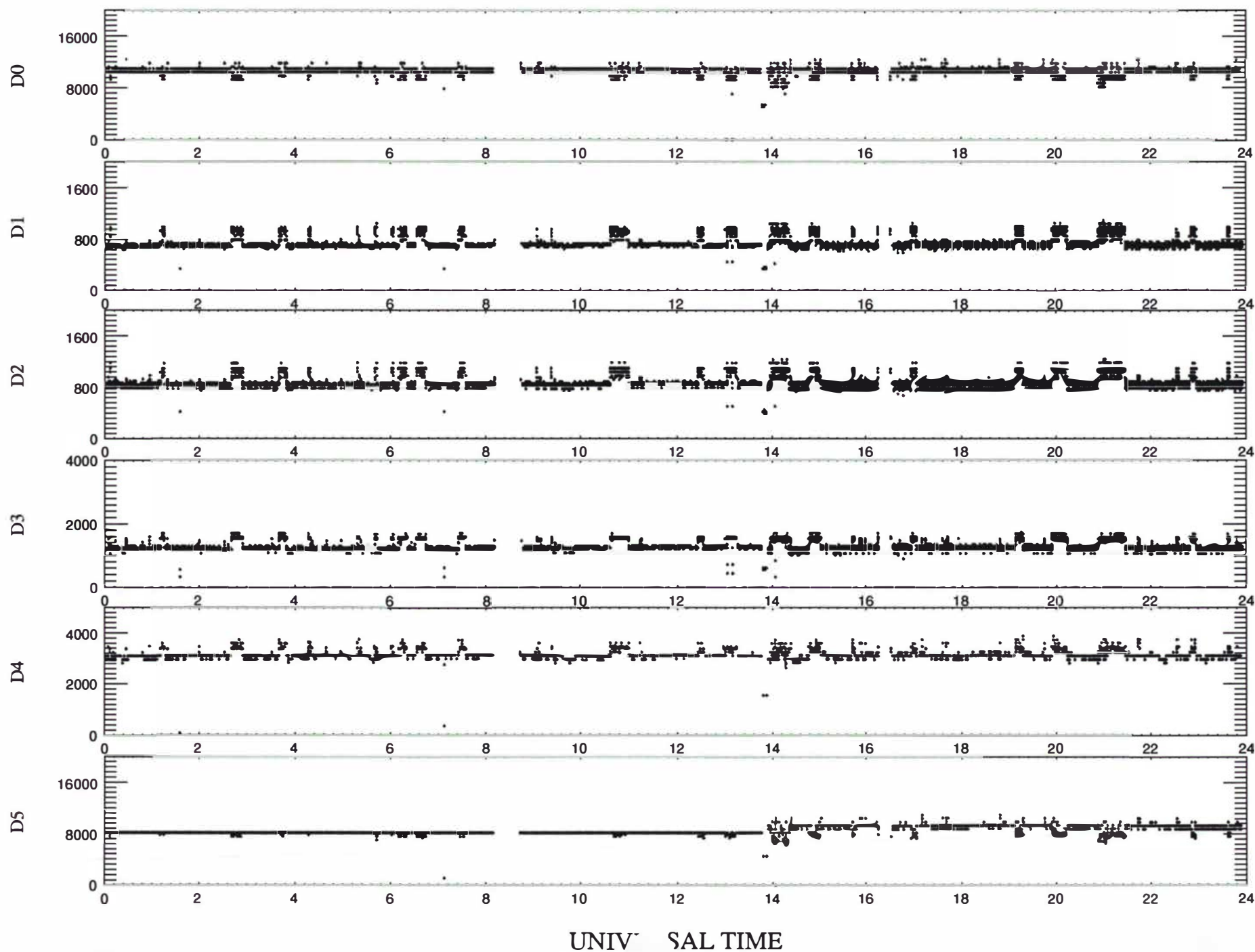


HUS 2A, MODE 1, NOT AVERAGED EDR day 307, year 1995 to day 307, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIV `SAL TIME



From RICHARDSON@ssl.msfc.nasa.gov Tue Nov 7 06:31 PST 1995
From: RICHARDSON@ssl.msfc.nasa.gov
Date: Tue, 7 Nov 1995 8:31:05 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3893

BATSEARCH PROGRAM

RI

BATSE BURST # 3893
EVENT OF 1995 NOV 4 DAY OF YEAR=308
EVENT CROSSING TIME AT BATSE : 5863. S. OR 01:37:43.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 40.000 27.000
BATSE PEAK COUNTING RATE: 12000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 4/11/ 95 IS:
RA= 213.337 DEC= 55.512 DIST= 2.843 AU
BATSE-ULYSSES DISTANCE = 425286218. KM
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 82.71 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 180.04 SECS.
CROSSING TIME AT ULYSSES IS 6043. S. OR 01:40:43 +/- 297.03 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 4/11/ 95 IS:
RA= 248.469 DEC= -22.747 DIST= 2.240 AU
MARS-BATSE DISTANCE = 335085440. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 26.12 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1003.59 SECS.
CROSSING TIME AT MARS IS 6867. S. OR 01:54:26 +/- 100.67 SECONDS

BATSE BURST TRIGGER

NO.: 3893

TIME: TJD= 25 SECONDS=5863

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=41.8 AZIMUTH=212.9 ERROR=0.4 DEGREES

COMMENTS:

GRB. FAST RISE, EXTENDED EMISSION, EXPONENTIAL DECAY. DUR.~100SEC. VISIBLE ABOVE 300KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3893	951104	10025	05863	12000	040	+27	100

Helio corr removed

Date: Feb 21 '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?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

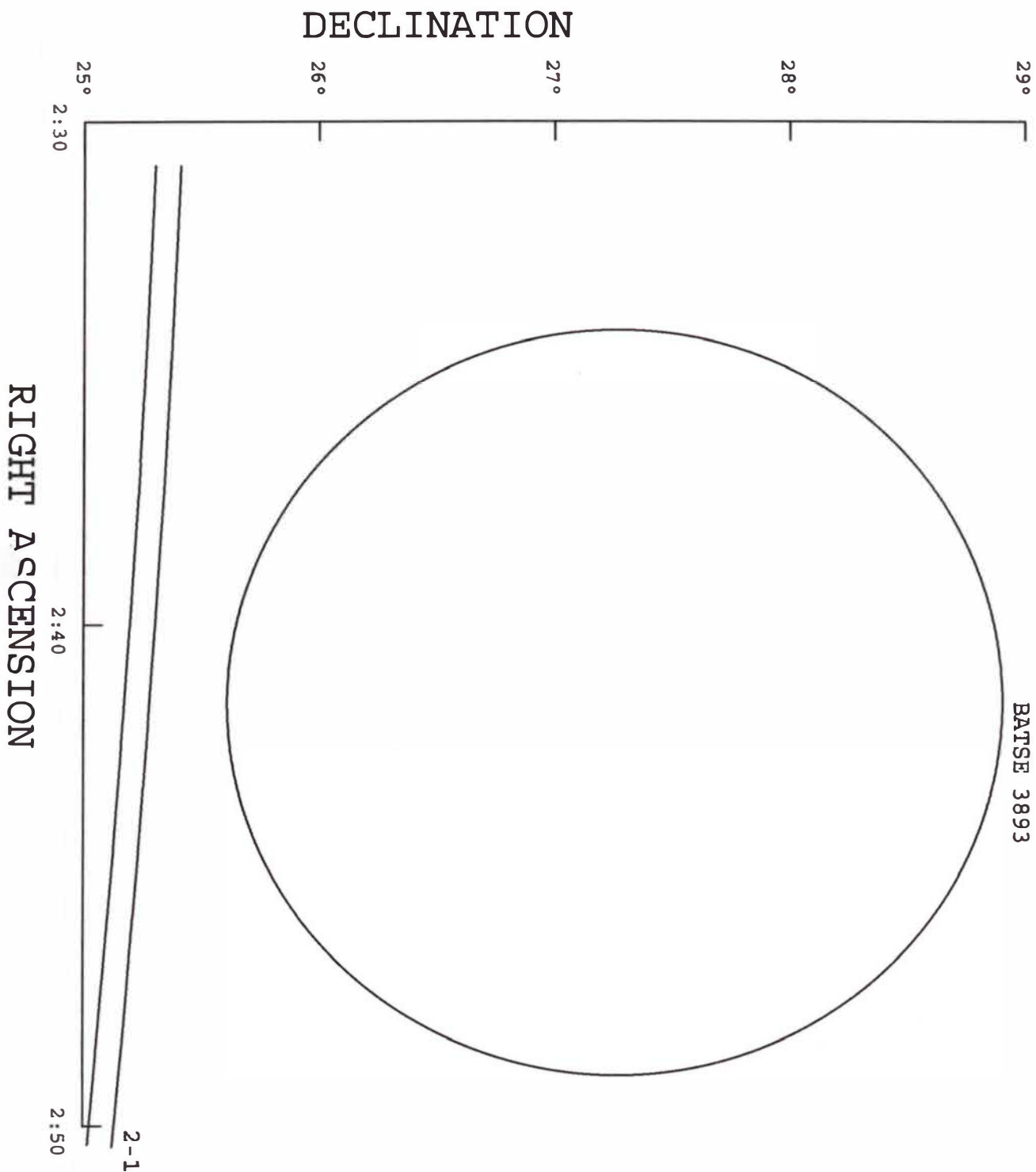
G=GALACTIC EQUATOR

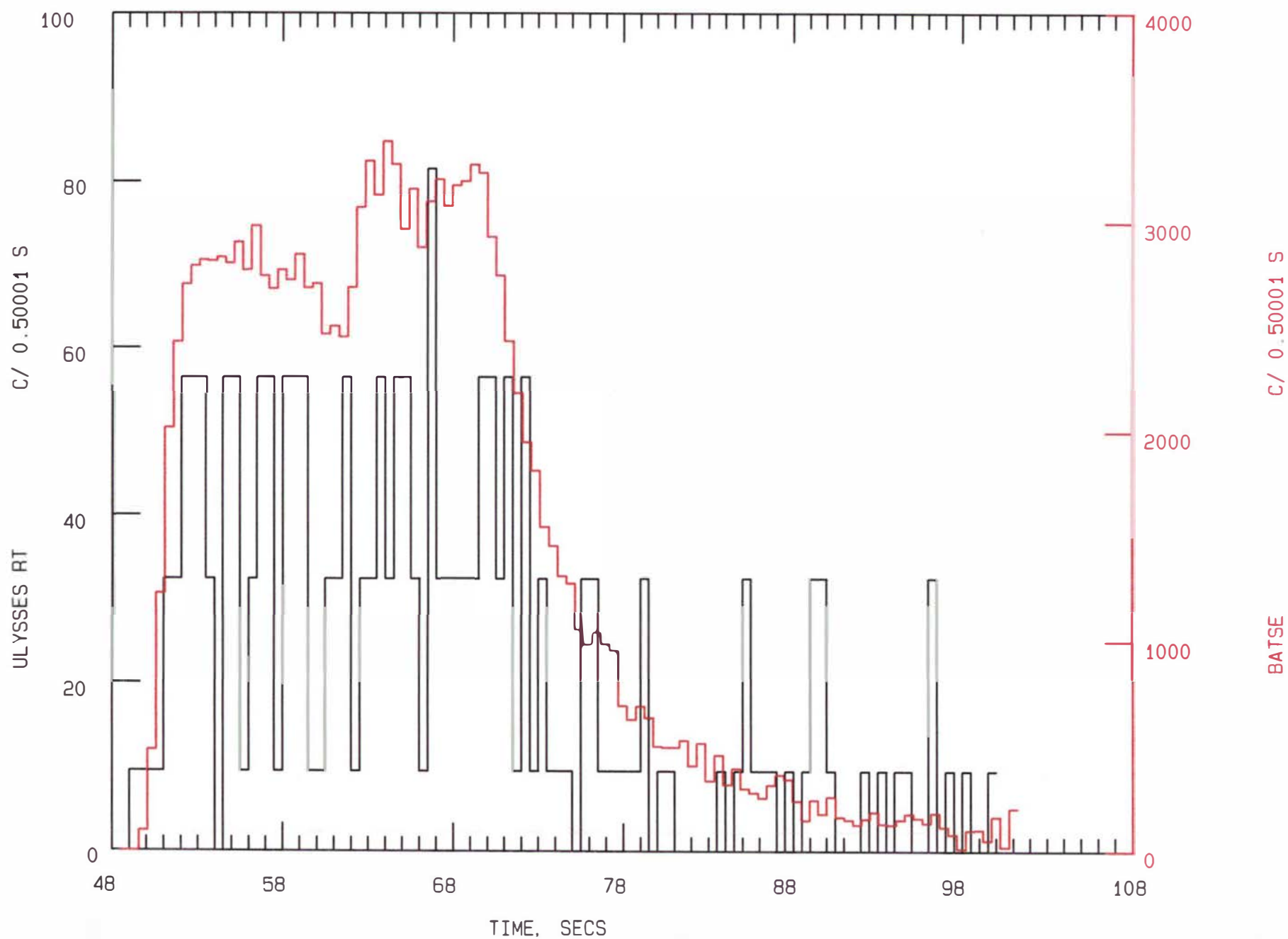
1 ULYSSES

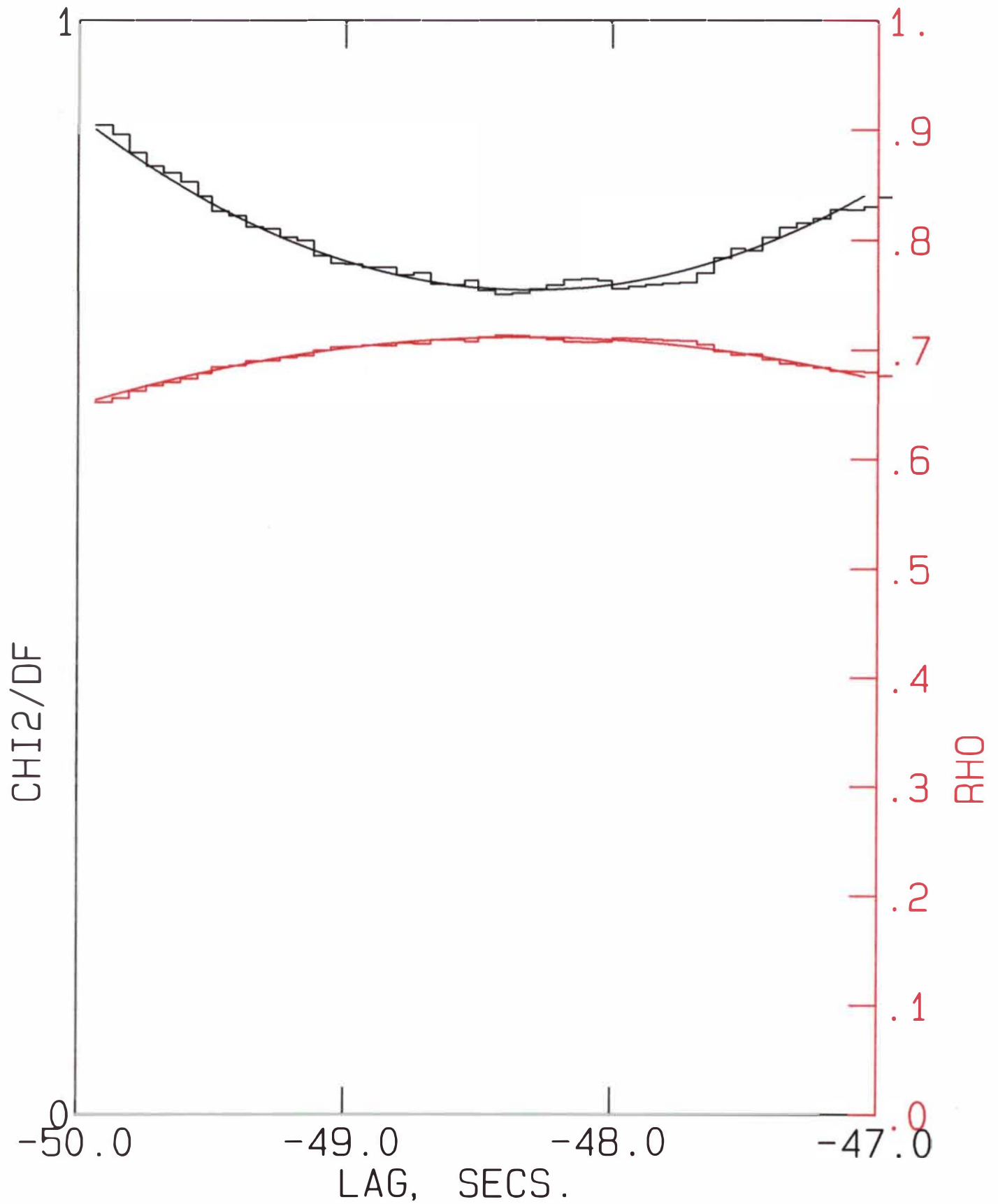
2 BATSE

EVENT OF NOV 4, 1995 1:40

21/ 2/98







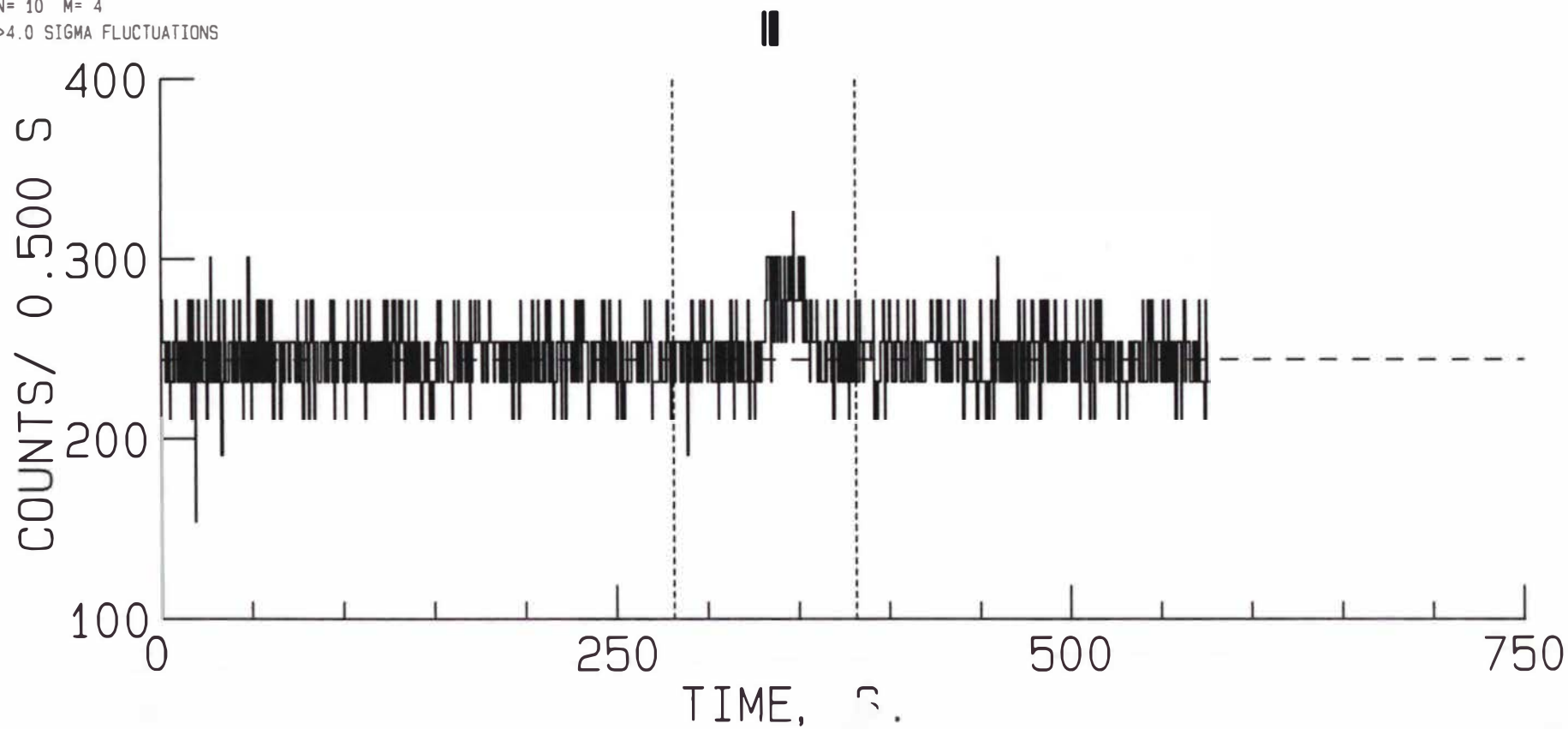
ULYSSES RT

21 / 2 / 98

4/11/95 5760.365 s

21- 143 keV

N= 10 M= 4
>4.0 SIGMA FLUCTUATIONS



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

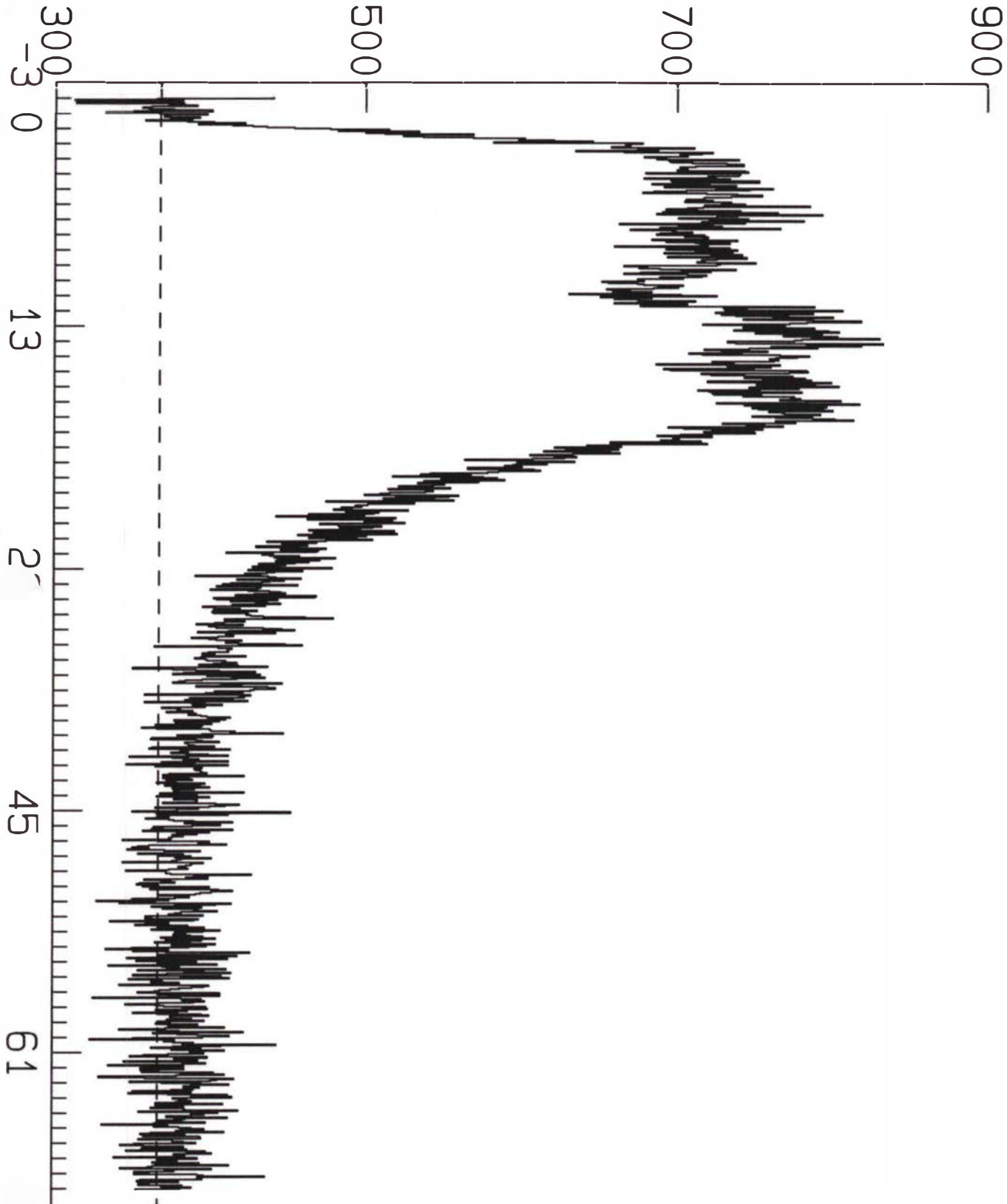
BATSE

04/11/95

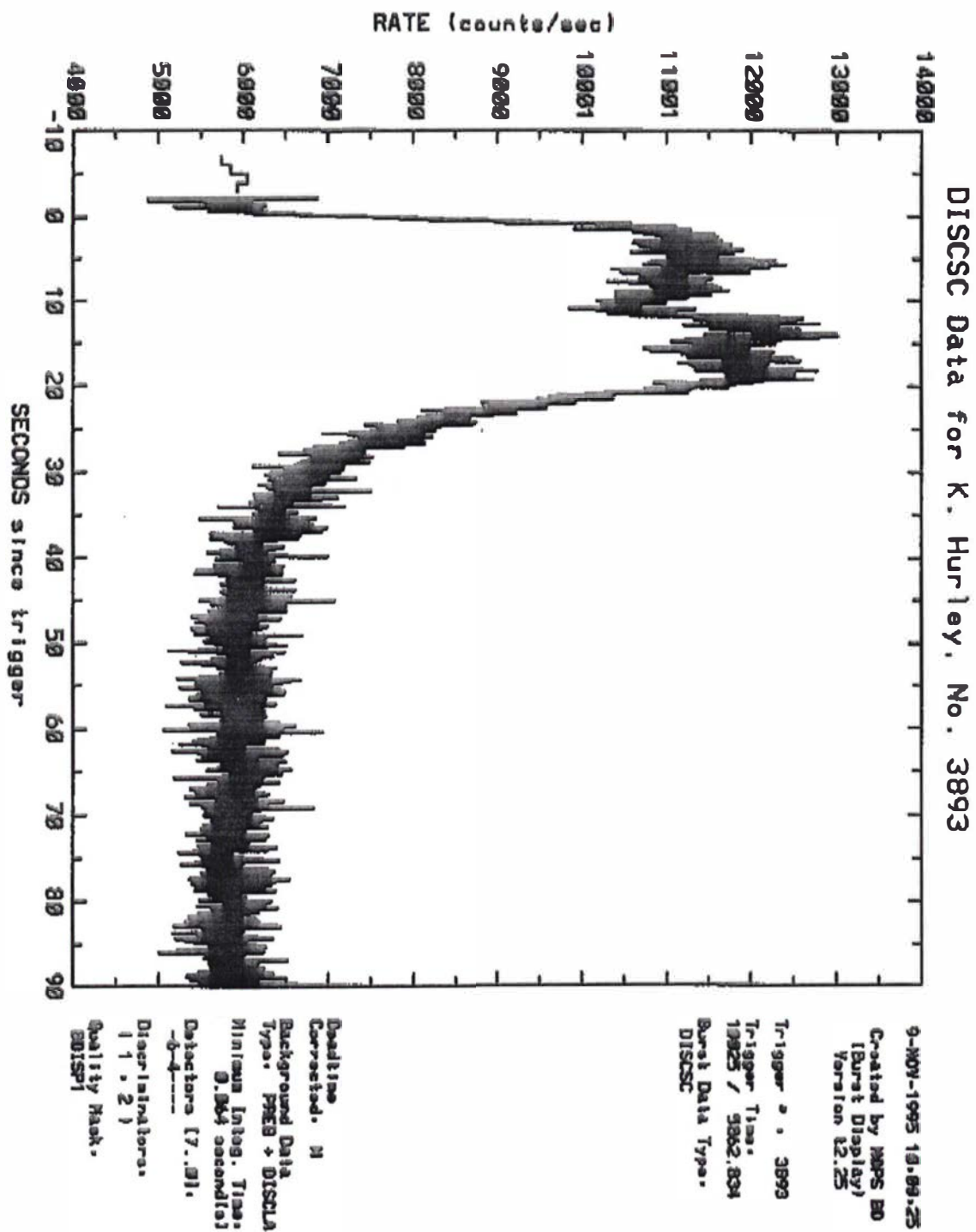
5862.834

25- 100 keV

COUNTS/0.064 S



11/11/95



From RICHARDSON@ssl.msfc.nasa.gov Tue Nov 7 06:32 PST 1995
From: RICHARDSON@ssl.msfc.nasa.gov
Date: Tue, 7 Nov 1995 8:32:29 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3894

BATSEARCH PROGRAM

NO

BATSE BURST # 3894
EVENT OF 1995 NOV 4 DAY OF YEAR=308
EVENT CROSSING TIME AT BATSE : 19986. S. OR 05:33:06.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 279.000 -16.000
BATSE PEAK COUNTING RATE: 7250 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 4/11/ 95 IS:
RA= 213.385 DEC= 55.502 DIST= 2.843 AU
BATSE-ULYSSES DISTANCE = 425331230. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 89.86 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 3.40 SECS.
CROSSING TIME AT ULYSSES IS 19989. S. OR 05:33:09 +/- 296.37 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 4/11/ 95 IS:
RA= 248.469 DEC= -22.747 DIST= 2.240 AU
MARS-BATSE DISTANCE = 335085440. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=150.48 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -972.60 SECS.
CROSSING TIME AT MARS IS 19013. S. OR 05:16:53 +/- 80.85 SECONDS

BATSE BURST TRIGGER

NO.: 3894

TIME: TJD=25 SECONDS=19986

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=101.0 AZIMUTH=81.4 ERROR=12.6 DEGREES

COMMENTS:

GRB. TWO SHORT PULSES. DUR.~3SEC. VISIBLE ABOVE 300KEV.

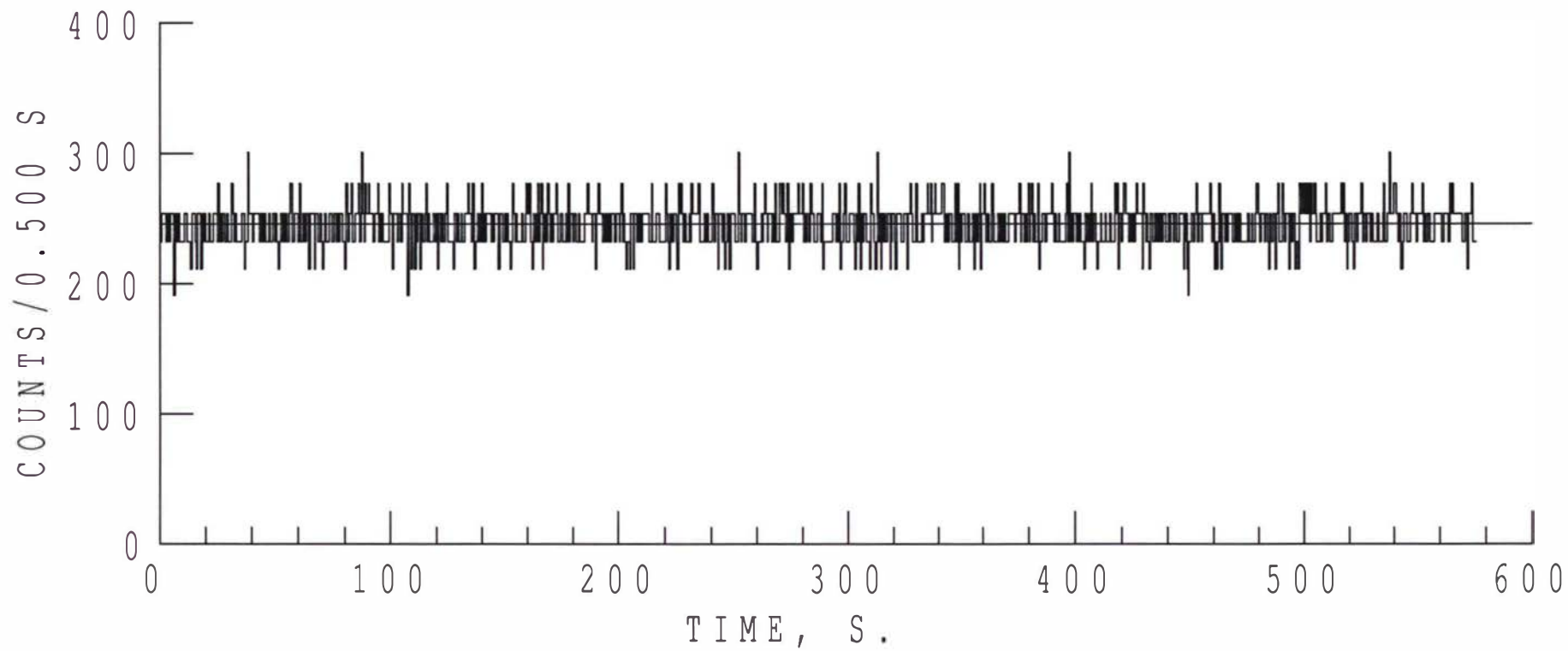
BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3894	951104	10025	19986	7250	279	-16	3

7 / 11 / 95

ULYSSES RT
4 / 11 / 95 19692.088 s
0 - 0 keV

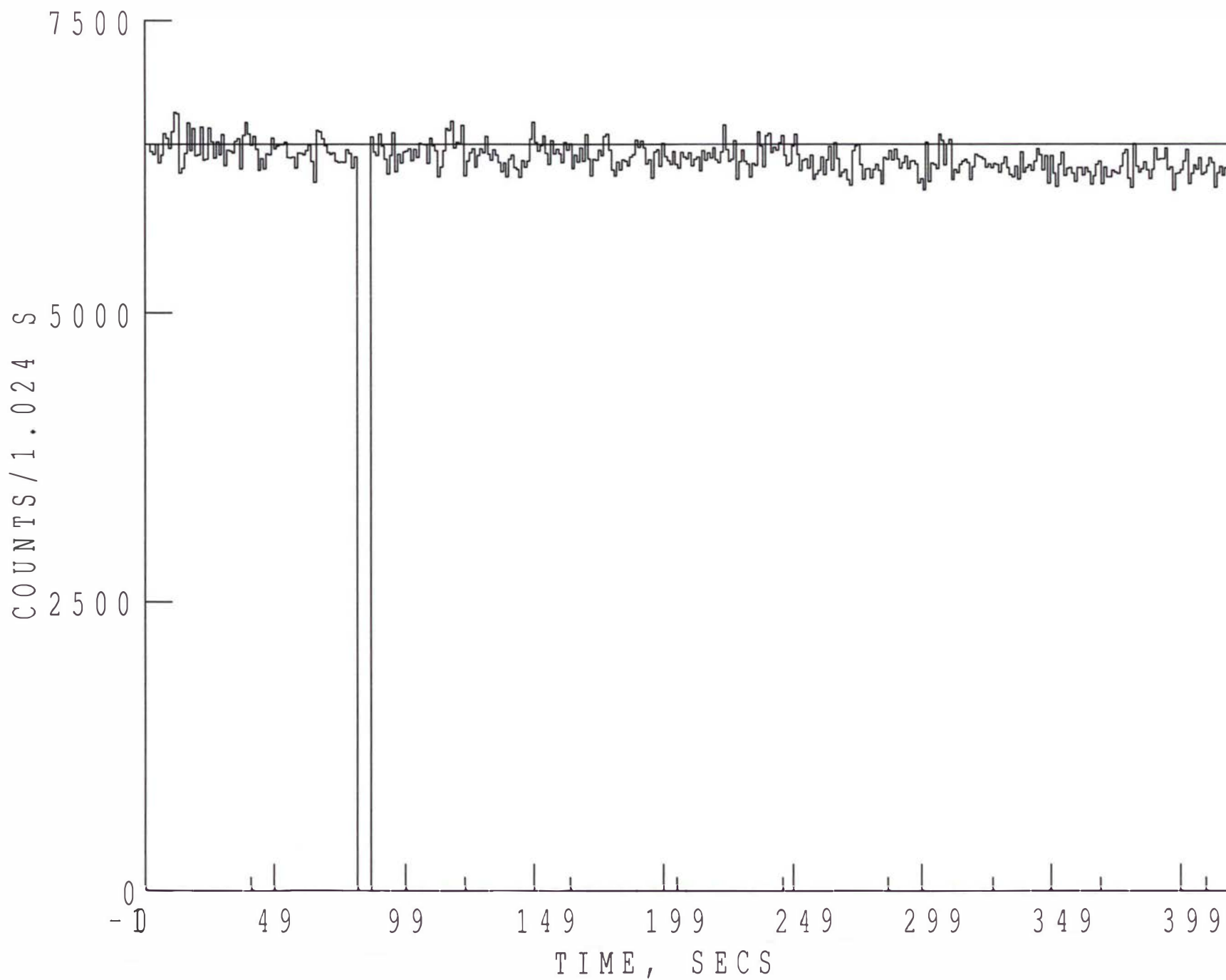
N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



BACODINE 04/11/95 19975.857
25- 100 keV

7 / 1 1 / 9 5



From RICHARDSON@SSLLES.MSFC.NASA.GOV Tue Nov 7 06:34 PST 1995
Date: Tue, 7 Nov 1995 8:33:55 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3895

BATSEARCH PROGRAM

ND

BATSE BURST # 3895
EVENT OF 1995 NOV 4 DAY OF YEAR=308
EVENT CROSSING TIME AT BATSE : 63303. S. OR 17:35:03.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 189.000 -48.000
BATSE PEAK COUNTING RATE: 2000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 4/11/ 95 IS:
RA= 213.531 DEC= 55.473 DIST= 2.844 AU
BATSE-ULYSSES DISTANCE = 425468479. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 74.50 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 379.24 SECS.
CROSSING TIME AT ULYSSES IS 63682. S. OR 17:41:22 +/- 293.20 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 4/11/ 95 IS:
RA= 248.469 DEC= -22.747 DIST= 2.240 AU
MARS-BATSE DISTANCE = 335085440. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=126.93 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -671.56 SECS.
CROSSING TIME AT MARS IS 62631. S. OR 17:23:51 +/- 144.92 SECONDS

BATSE BURST TRIGGER

NO.: 3895

TIME: TJD=25 SECONDS=63303

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=166.7 AZIMUTH=357.9 ERROR=7.0 DEGREES

COMMENTS:

GRB. WEAK SINGLE PULSE, DUR.~1.5 SEC. NOT VISIBLE ABOVE 300KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3895	951104	10025	63303	2000	189	-48	1.5

7 / 11 / 95

ULYSSES RT

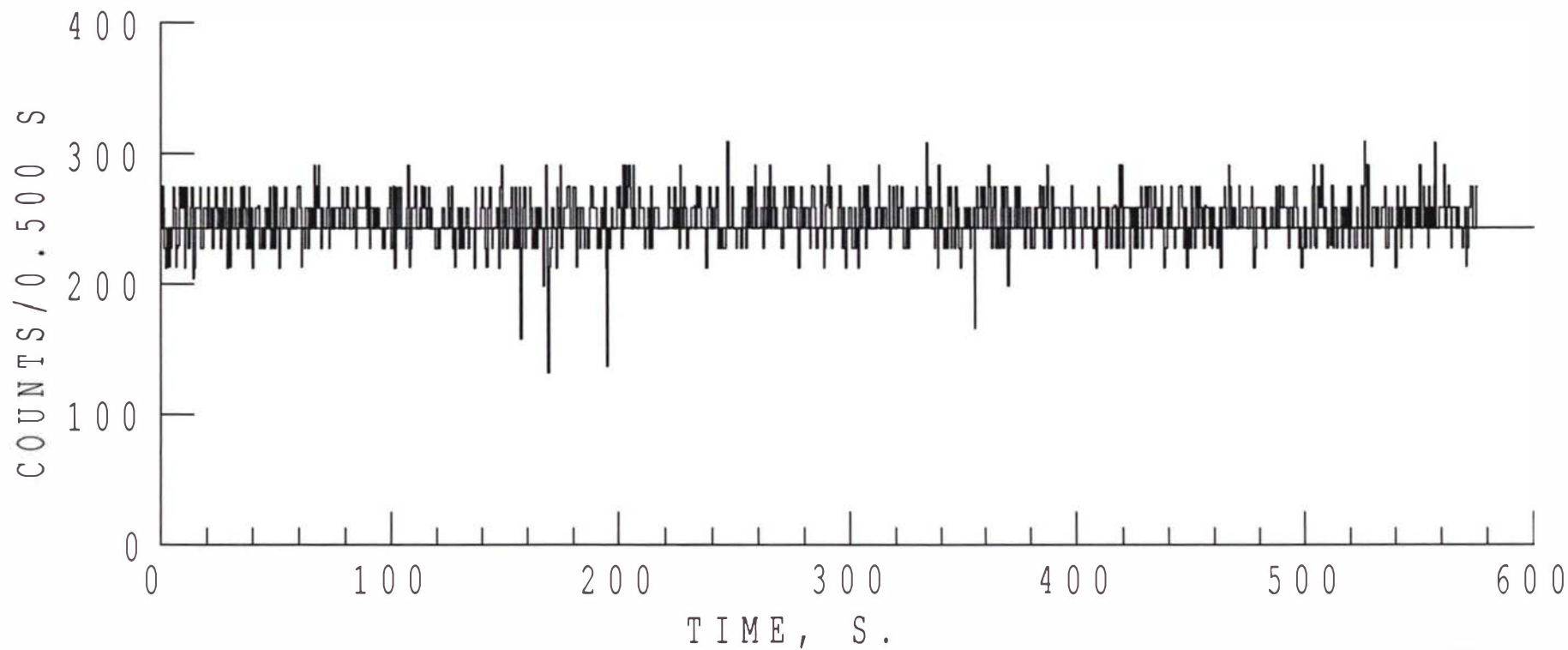
4 / 11 / 95 63396.031 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



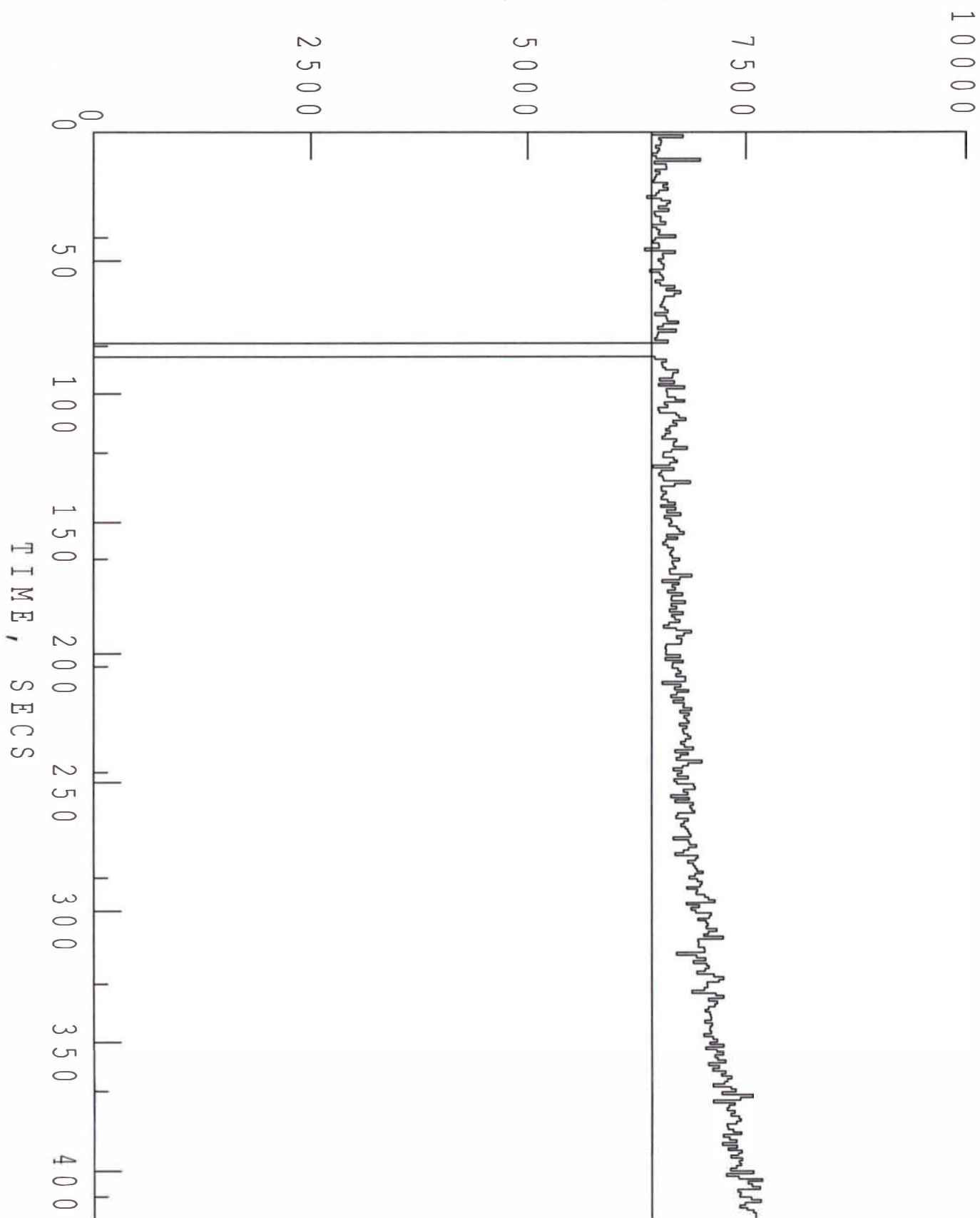
BACODINE

04/11/95

63293.105

25 - 100 keV

COUNTS/1.024 S



From RICHARDSON@SSLLES.MSFC.NASA.GOV Tue Nov 7 06:18 PST 1995
Date: Tue, 7 Nov 1995 8:18:34 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@ssl.msfc.nasa.gov,
"LHEAVX::BARTHELMY"@ssl.msfc.nasa.gov, scott@circe.gsfc.nasa.gov,
"15733::SCHAEFER"@ssl.msfc.nasa.gov, band@cass09.ucsd.edu
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3896

TIME: TJD=25 SECONDS=86128

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

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

CYG X-1, OCCULTATION STEP.

KONUS 19951104 46827

ULYSSES RT

01/09/11

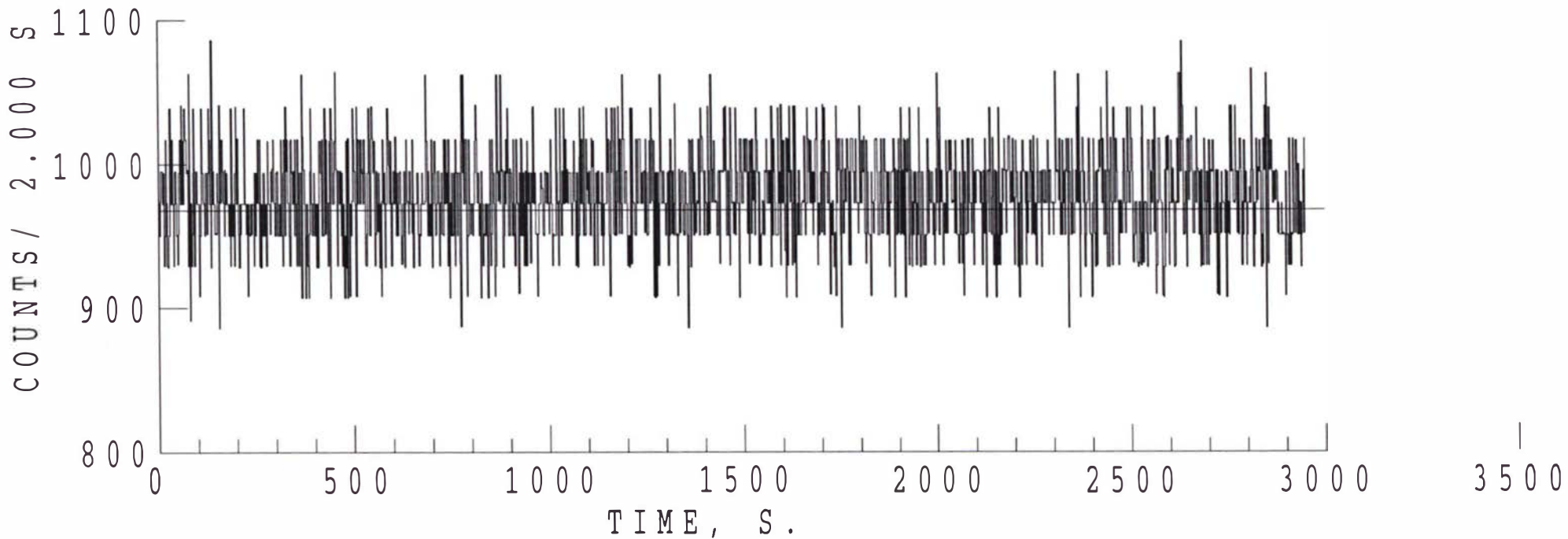
04/11/95 45360.496 s

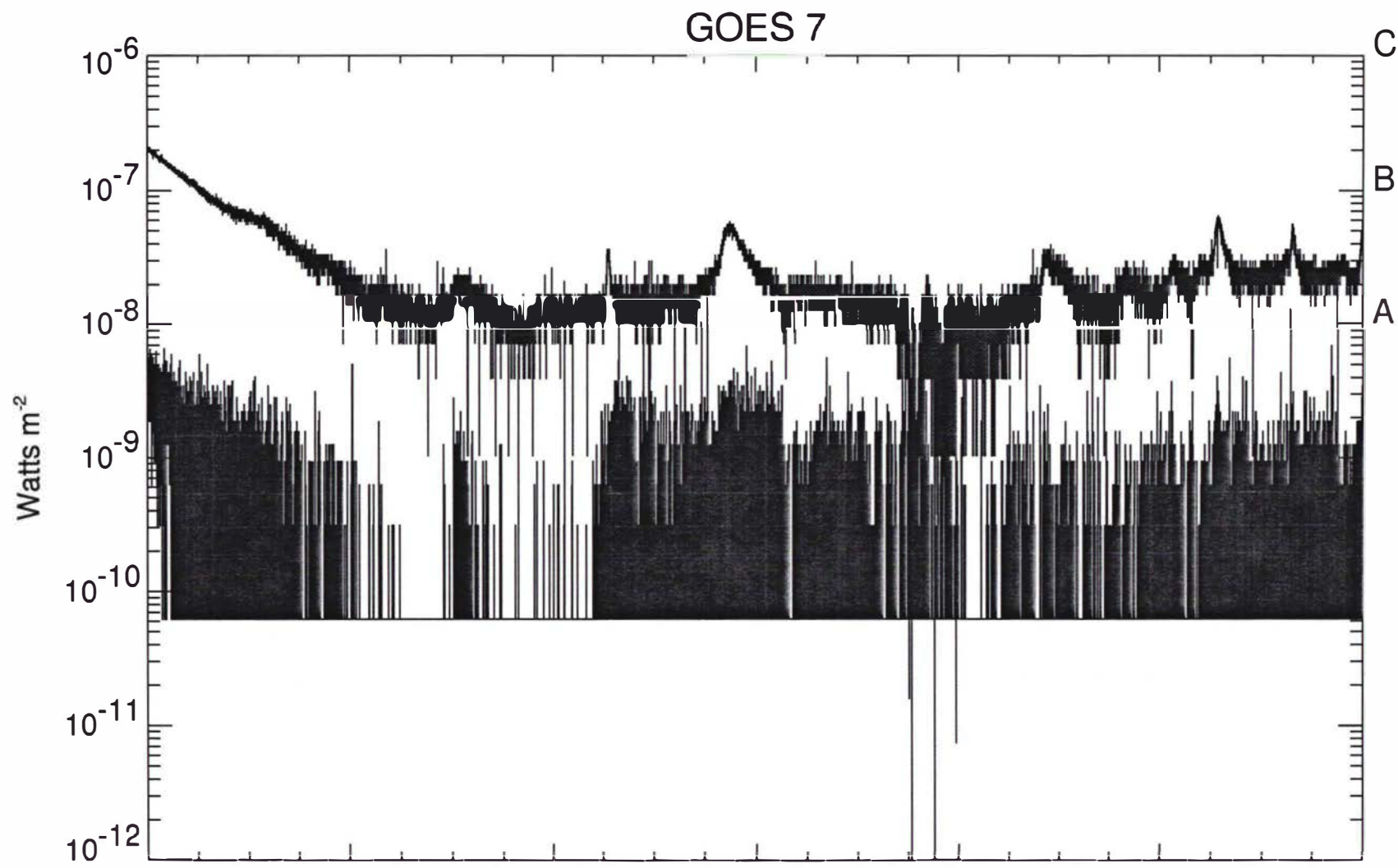
0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

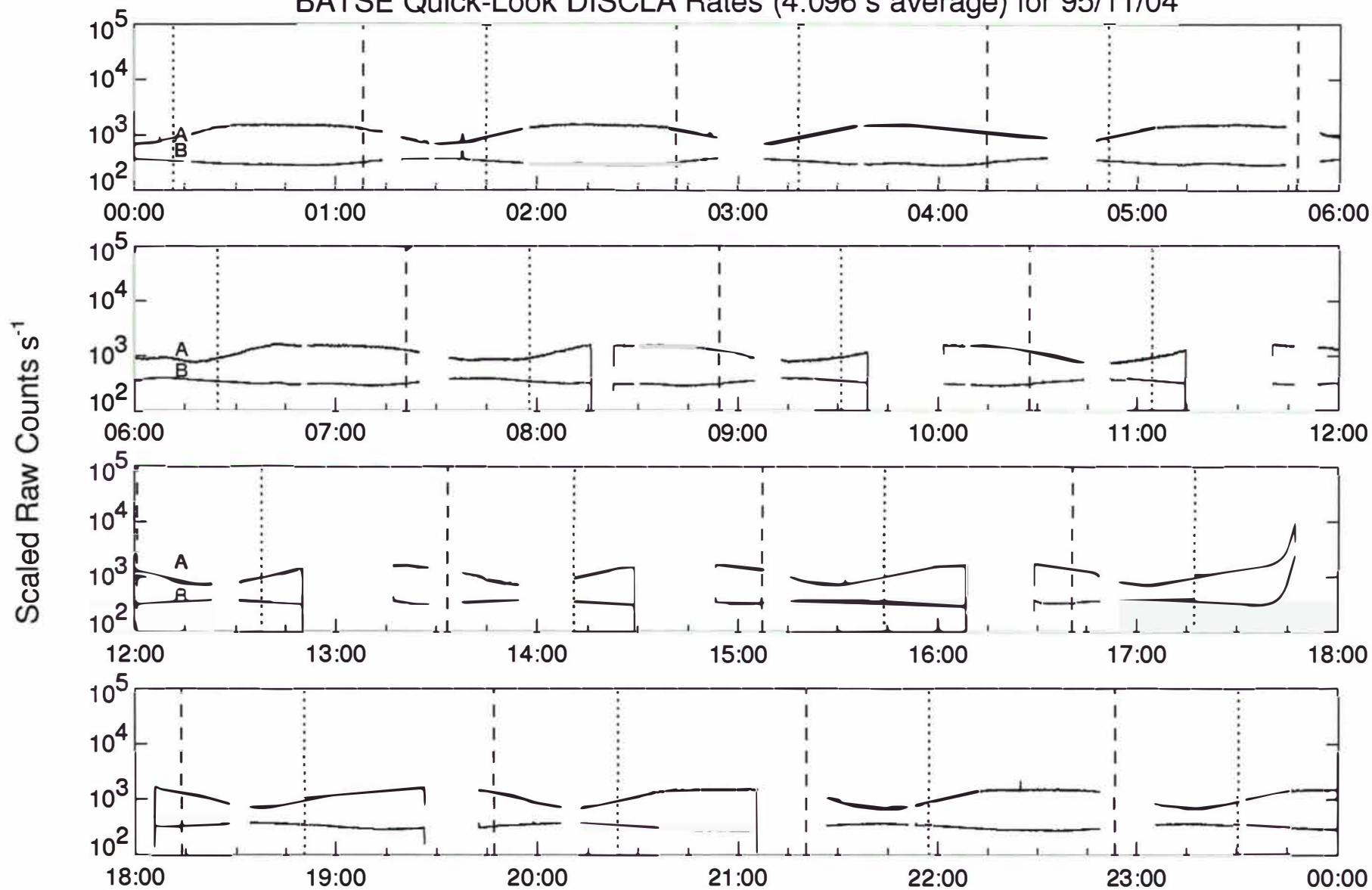
N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





Data Start: 95/11/04, 0000:01 Plot created: 95/11/17, 1847
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 95/11/04



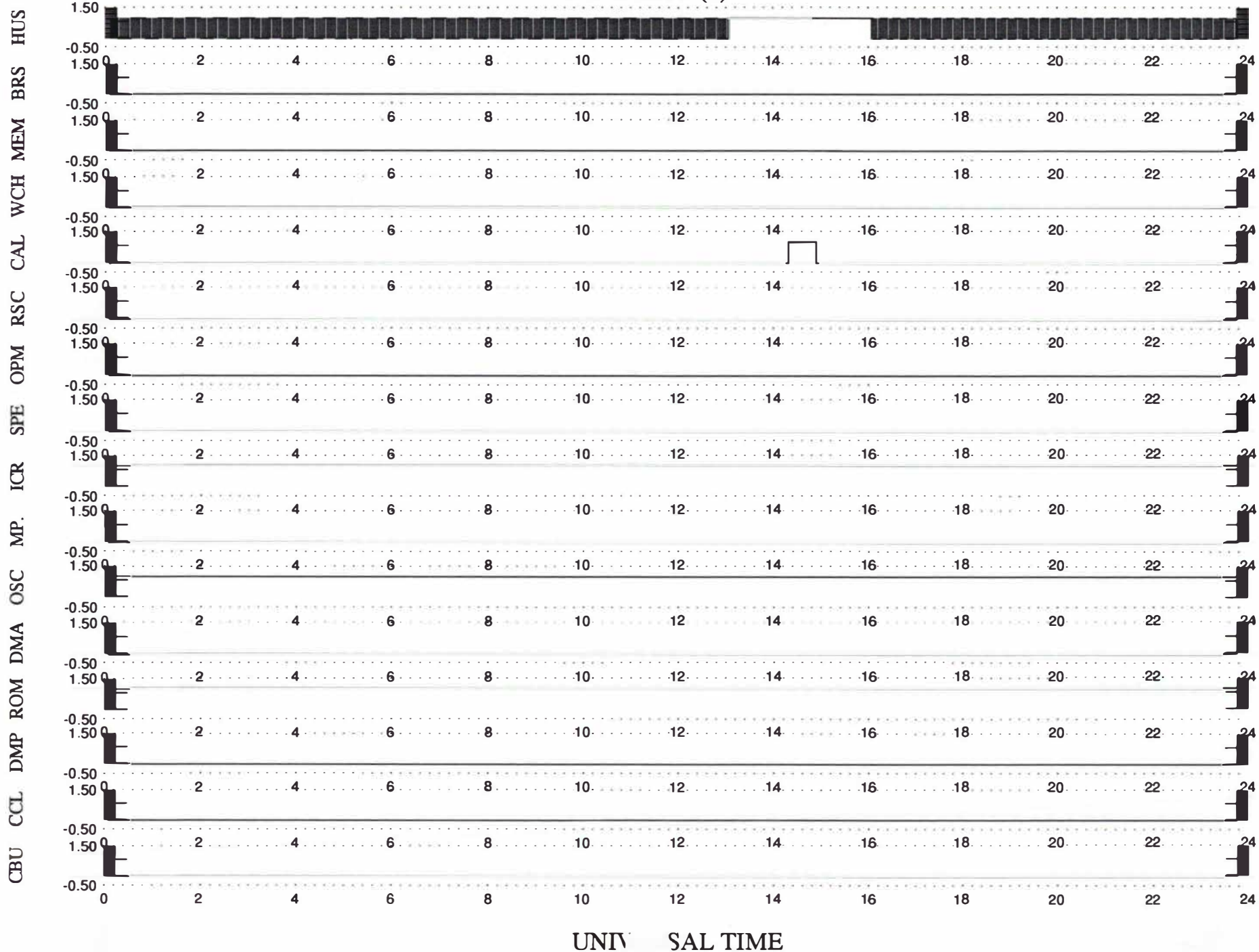
Current Time: 95/11/17, 1848 EDT
A: Channel 0 Most Sunward LAD
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

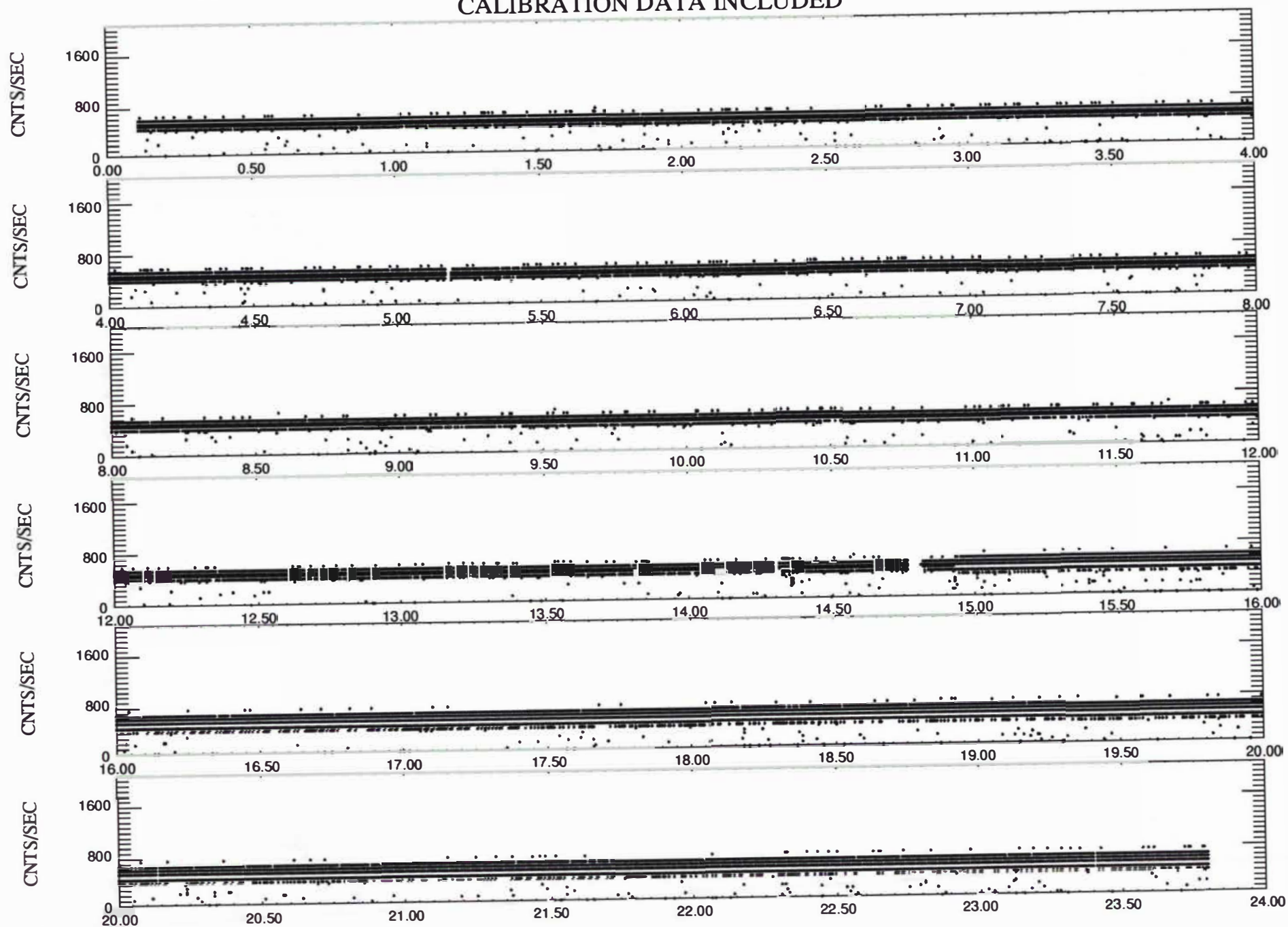
HUS MODES EDR day 308, year 1995 to day 308, year 1995 NO BURST (8)

4/1/96

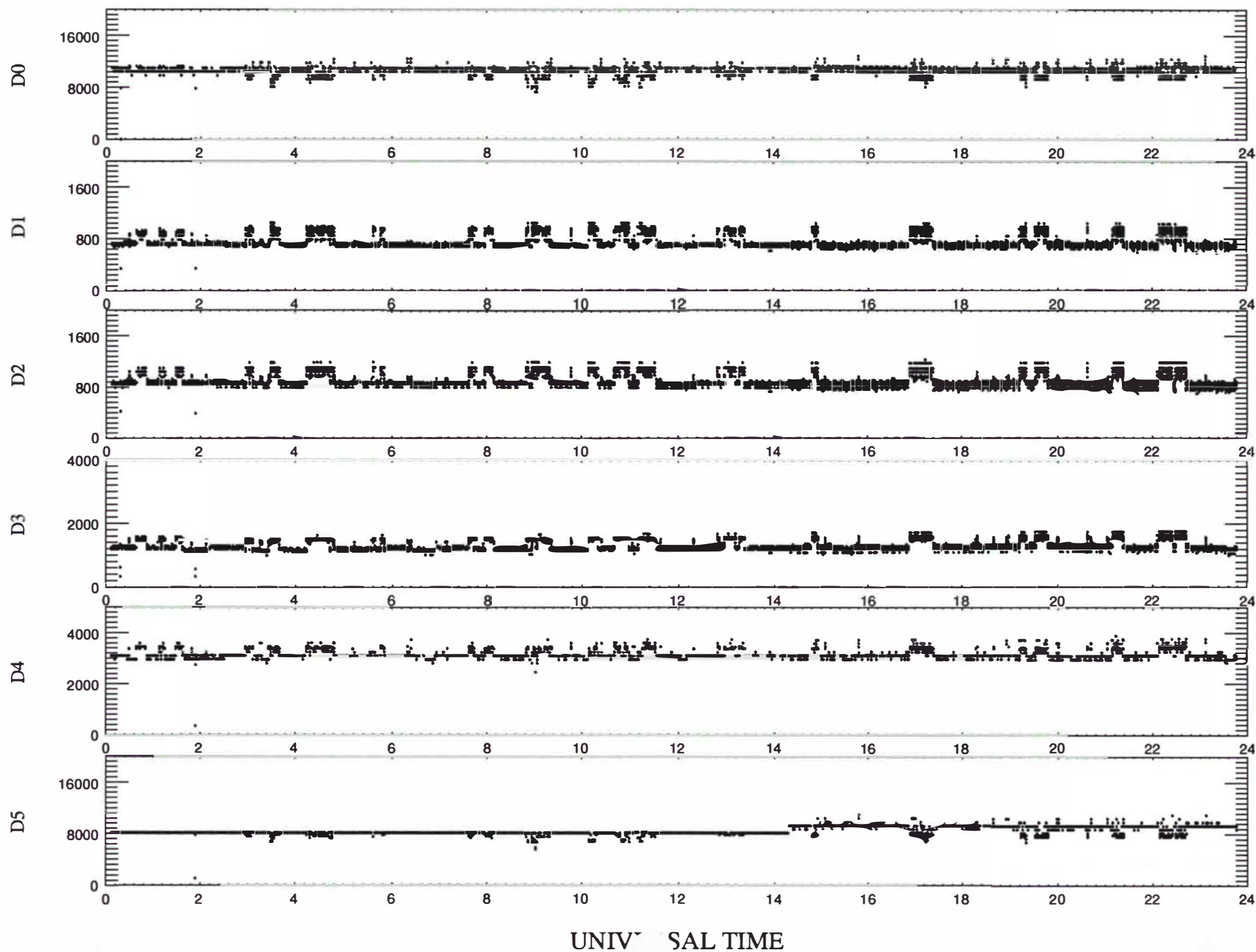


HUS 2A, MODE 1, NOT AVERAGED EDR day 308, year 1995 to day 308, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIV SAL TIME



From HAGEDON@fender.msfc.nasa.gov Tue Nov 7 09:26 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Tue, 7 Nov 1995 11:26:12 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3897

BATSEARCH PROGRAM

BATSE BURST # 3897
EVENT OF 1995 NOV 5 DAY OF YEAR=309
EVENT CROSSING TIME AT BATSE : 14157. S. OR 03:55:57.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 18.000 43.000
BATSE PEAK COUNTING RATE: 1300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 5/11/ 95 IS:
RA= 213.657 DEC= 55.448 DIST= 2.845 AU
BATSE-ULYSSES DISTANCE = 425583756. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 99.34 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -230.40 SECS.
CROSSING TIME AT ULYSSES IS 13927. S. OR 03:52:06 +/- 289.70 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 5/11/ 95 IS:
RA= 249.252 DEC= -22.859 DIST= 2.242 AU
MARS-BATSE DISTANCE = 335422080. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 46.63 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 768.35 SECS.
CROSSING TIME AT MARS IS 14925. S. OR 04:08:45 +/- 152.87 SECONDS

BATSE BURST TRIGGER

NO.: 3897

TIME: TJD=0026 SECONDS=14157

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=19.6 AZIMUTH=192.9 ERROR=4.0 DEGREES

COMMENTS:

BURST. WEAK SINGLE PULSE. FASTER RISE THAN DECAY. DUR.~12 SEC.
NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3897	951105	10026	14157	1300	018	+43	12

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

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

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

Dear Kevin,

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

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

1 / 2 / 9 6

U L Y S S E S R T

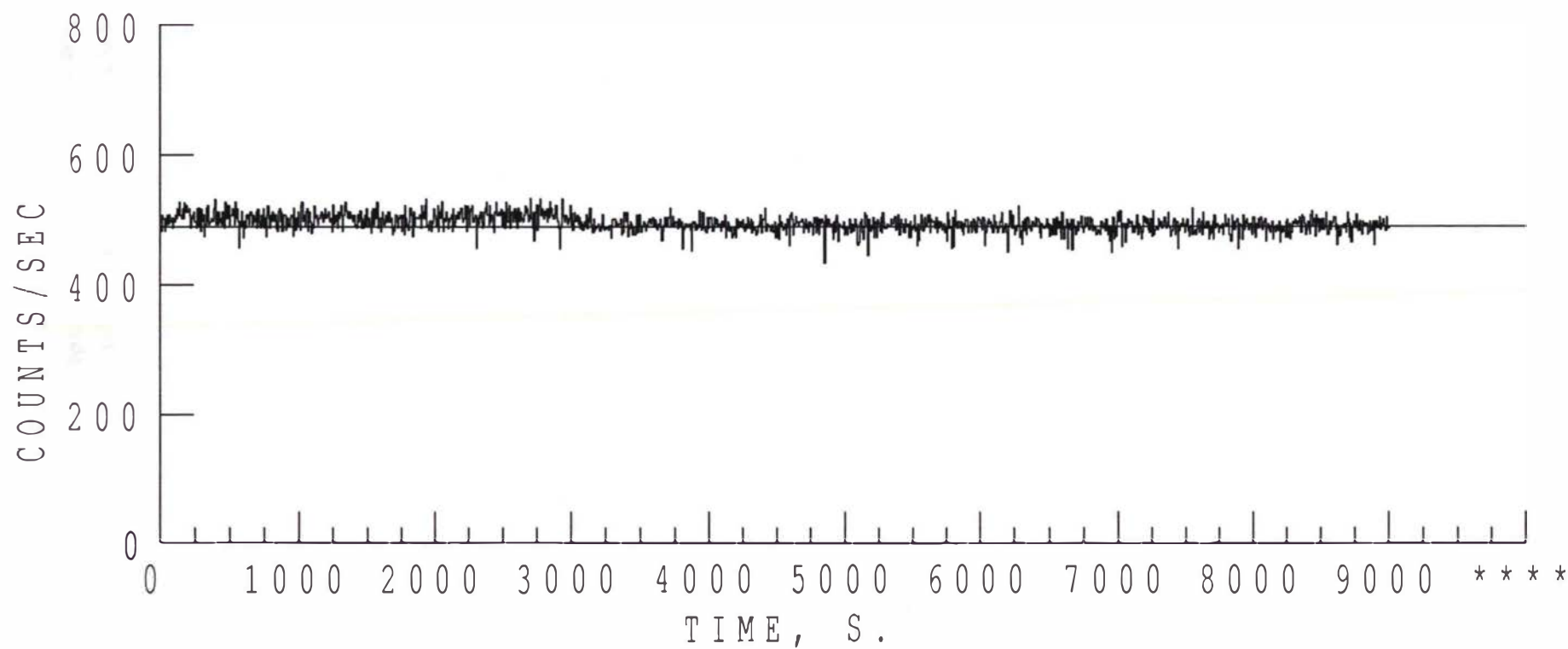
4 / 1 1 / 9 5 8 4 1 3 2 . 1 0 2 s

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 1 3

0 - 0 k e V

N = 10 M = 2

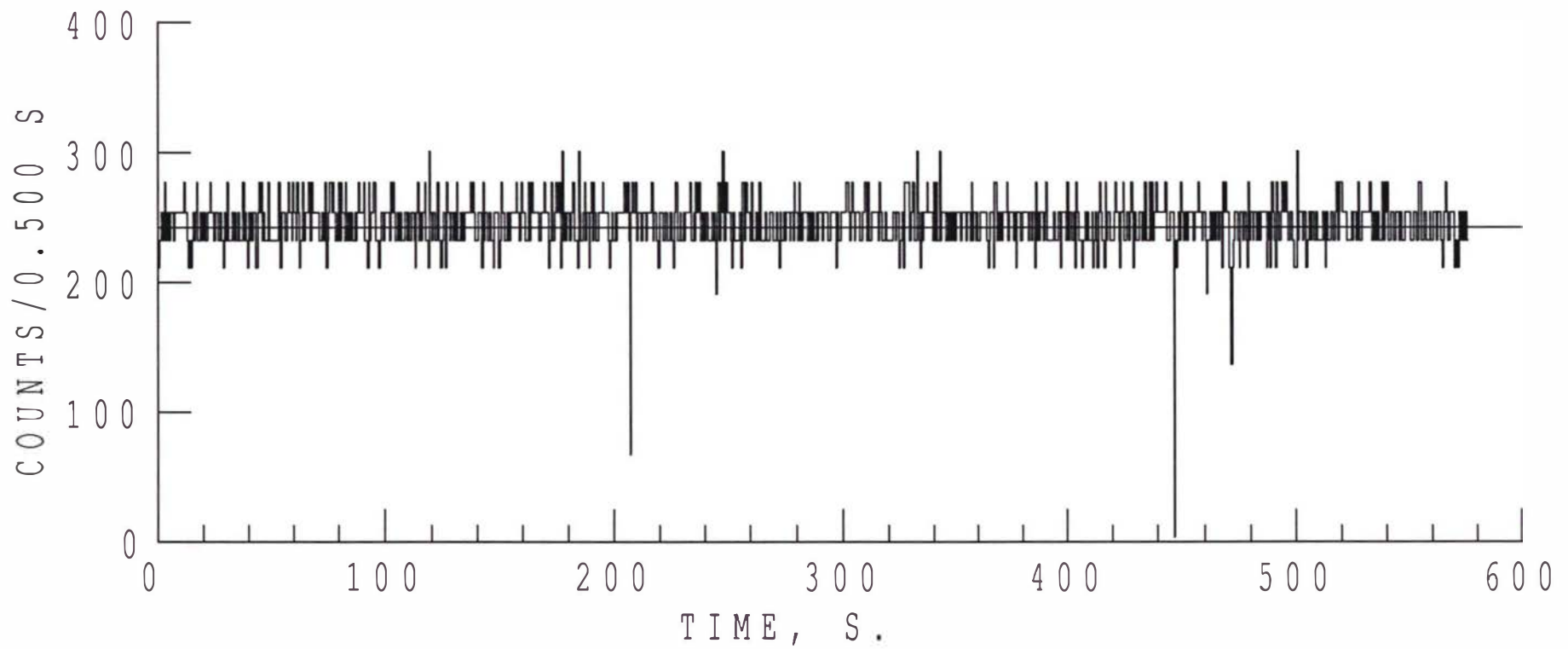
> 4.0 SIGMA FLUCTUATIONS



7 / 11 / 95

ULYSSES RT
5 / 11 / 95 13644.353 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



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

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

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Yr	Mn	Dy	Konus#	Konus Tzero	BATSE Tz, #	Ulysses
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94	11	19	4	70269.175	70250 3287	R I
94	11	21	6	62700.945	62697 3290	trig.
94	11	25	7	79470.156	79470 3295	R I
94	11	26	BGR	01246	01245 3296	
94	11	26	8	44557.952	44521 3298	trig.
94	11	26	BGR	60860	60861 3299	
94	11	26	9	71809.732	71798 3301	R I
94	11	27	10	52225.68	52217 3303	R I
94	11	28	BGR	56220	56217 3305	
94	12	28	28	27585.915	27581 3330	R I
94	12	29	29	82268.781	82258 3334	R I
95	1	4	31	26319.613	26319 3345	R I
95	1	11	33	17352.241	17263 3351	R I
95	1	11	34	44329	44310 3352	
95	1	17	BGR	05760	05761 3360	
95	1	18	BGR	44574	44589 3364	
95	2	7	BGR	02774	02781 3406	
95	2	8	45	07824	07824 3408	
95	2	10	47	08424	08421 3410	
95	2	11	48	08697	08697 3412	trig.
95	2	11	50	72469	72468 3415	
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95	3	4	56	37661	37657 3453	
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95	4	16	BGR	48420	48419 3509	
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95	5	3	88	66971	66970 3537	
95	5	10	90	28083	28079 3569	
95	5	13	93	81706	81703 3571	
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95	5	22	100	85280	85283 3593	
95	5	24	102	14902	14899 3598	
95	6	2	104	25592	25592 3618	
95	6	10	107	6849	06849 3637	
95	6	24	111	84124	84084 3648	
95	6	25	113	14626	14601 3649	
95	6	29	115	37033	37036 3654	
95	7	1	116	12762	12758 3657	

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

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94	11	21	6	62700.945	62697	3290 trig.
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94	11	26	BGR	01246	01245	3296
94	11	26	8	44557.952	44521	3298 trig.
94	11	26	BGR	60860	60861	3299
94	11	26	9	71809.732	71798	3301 R I
94	11	27	10	52225.68	52217	3303 R I
94	11	28	BGR	56220	56217	3305
94	12	28	28	27585.915	27581	3330 R I
94	12	29	29	82268.781	82258	3334 R I
95	1	4	31	26319.613	26319	3345 R I
95	1	11	33	17352.241	17263	3351 R I
95	1	11	34	44329	44310	3352
95	1	17	BGR	05760	05761	3360
95	1	18	BGR	44574	44589	3364
95	2	7	BGR	02774	02781	3406
95	2	8	45	07824	07824	3408
95	2	10	47	08424	08421	3410
95	2	11	48	08697	08697	3412 trig.
95	2	11	50	72469	72468	3415
95	2	21	BGR	74701	74705	3436
95	2	26	54	53351	53336	3442
95	3	1	BGR	75731	75761	3448
95	3	4	56	37661	37657	3453
95	3	5	58	54309	54304	3458
95	3	10	BGR	78388	78395	3464
95	3	25	63	25841	25844	3480
95	3	25	64	63392	63391	3481
95	3	27	BGR	26323	26347	3485
95	3	27	BGR	85672	85671	3486
95	4	1	69	42647	42642	3488
95	4	1	70	74635	74634	3489
95	4	3	71	47985	47987	3491
95	4	3	72	84828	84826	3492
95	4	16	BGR	48420	48419	3509
95	4	18	81	83793	83795	3512
95	4	25	86	00923	00919	3523
95	4	30	BGR	54224	54229	3527
95	5	3	88	66971	66970	3537
95	5	10	90	28083	28079	3569
95	5	13	93	81706	81703	3571
95	5	21	97	25161	25157	3588
95	5	22	98	23898	23896	3590
95	5	22	100	85280	85283	3593
95	5	24	102	14902	14899	3598
95	6	2	104	25592	25592	3618
95	6	10	107	6849	06849	3637
95	6	24	111	84124	84084	3648
95	6	25	113	14626	14601	3649
95	6	29	115	37033	37036	3654
95	7	1	116	12762	12758	3657

1 / 2 / 9 6

U L Y S S E S R T

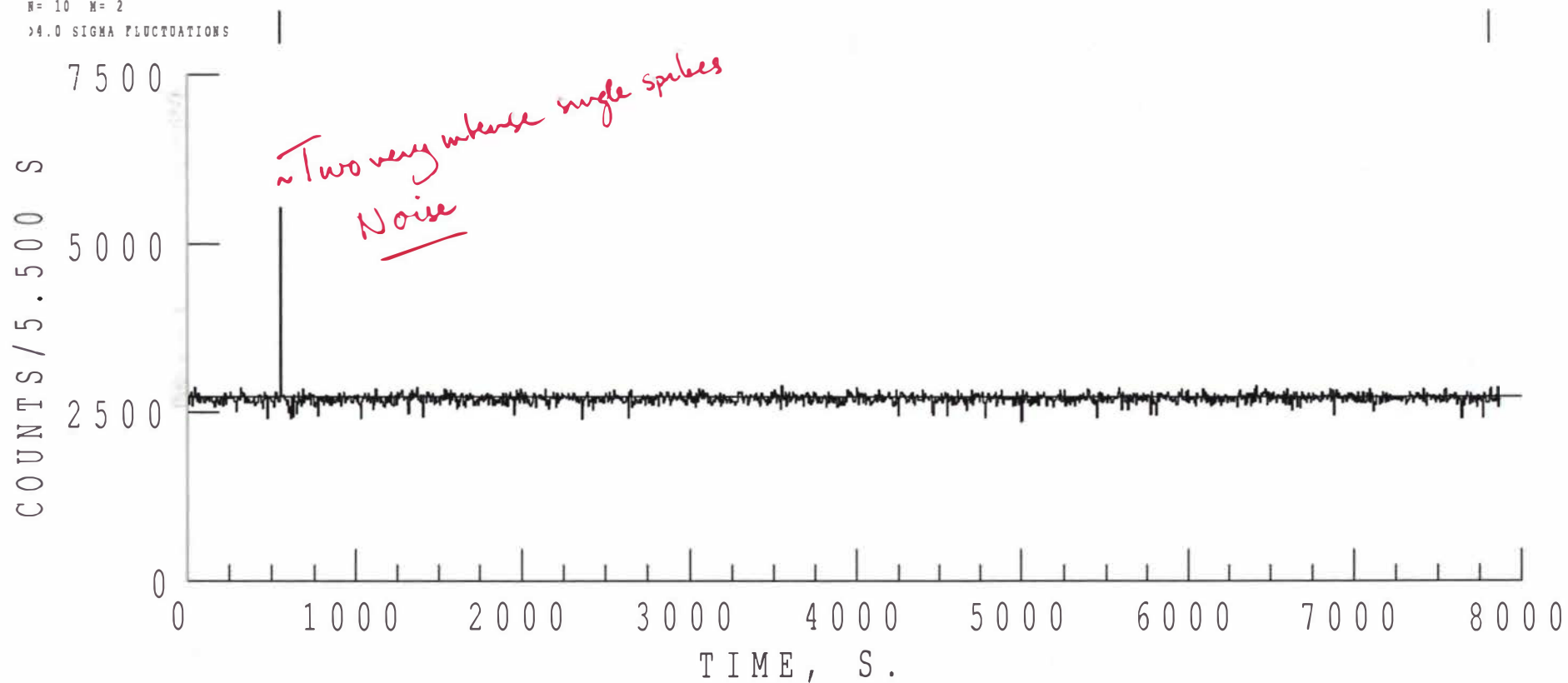
5 / 1 1 / 9 5 4 2 5 8 8 . 3 1 2 s

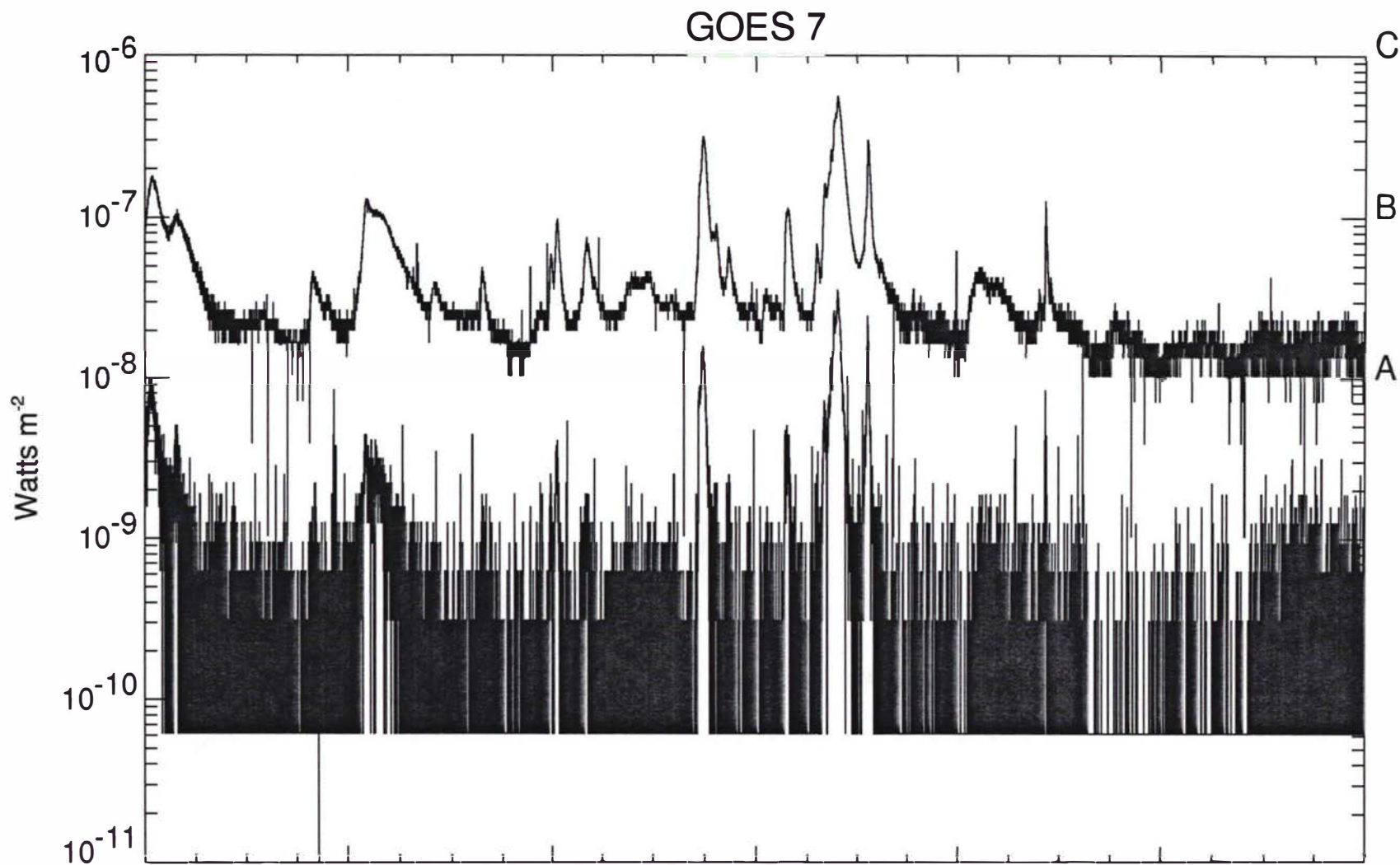
0 . 5 0 0 S I N T E R V A L S R E G R O U P E D B Y 1 1

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS





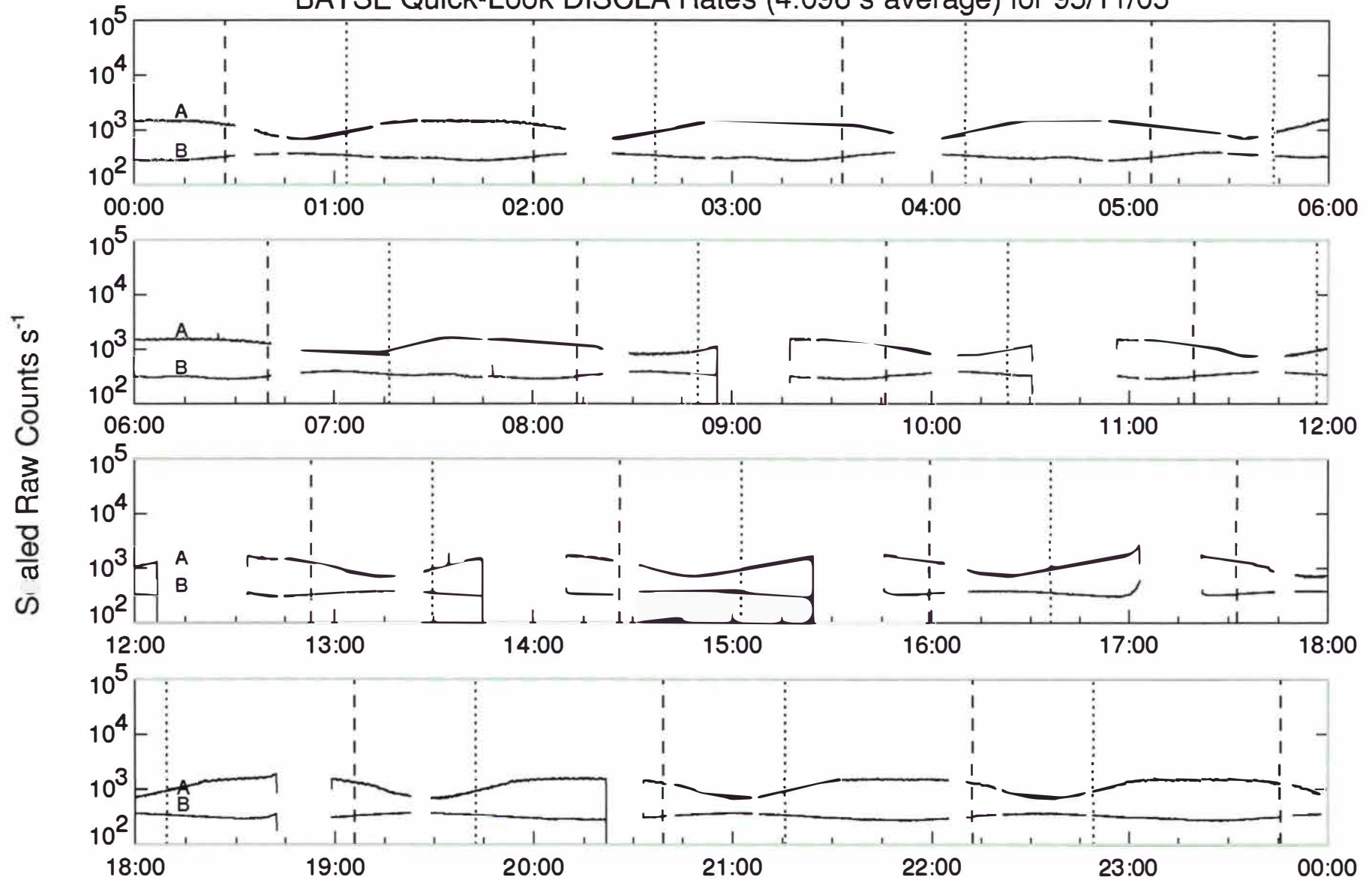
Data Start: 95/11/05, 0000:02

Plot created: 95/11/17, 1858

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 95/11/05



Current Time: 95/11/17, 1858 EDT

A: Channel 0 Most Sunward LAD

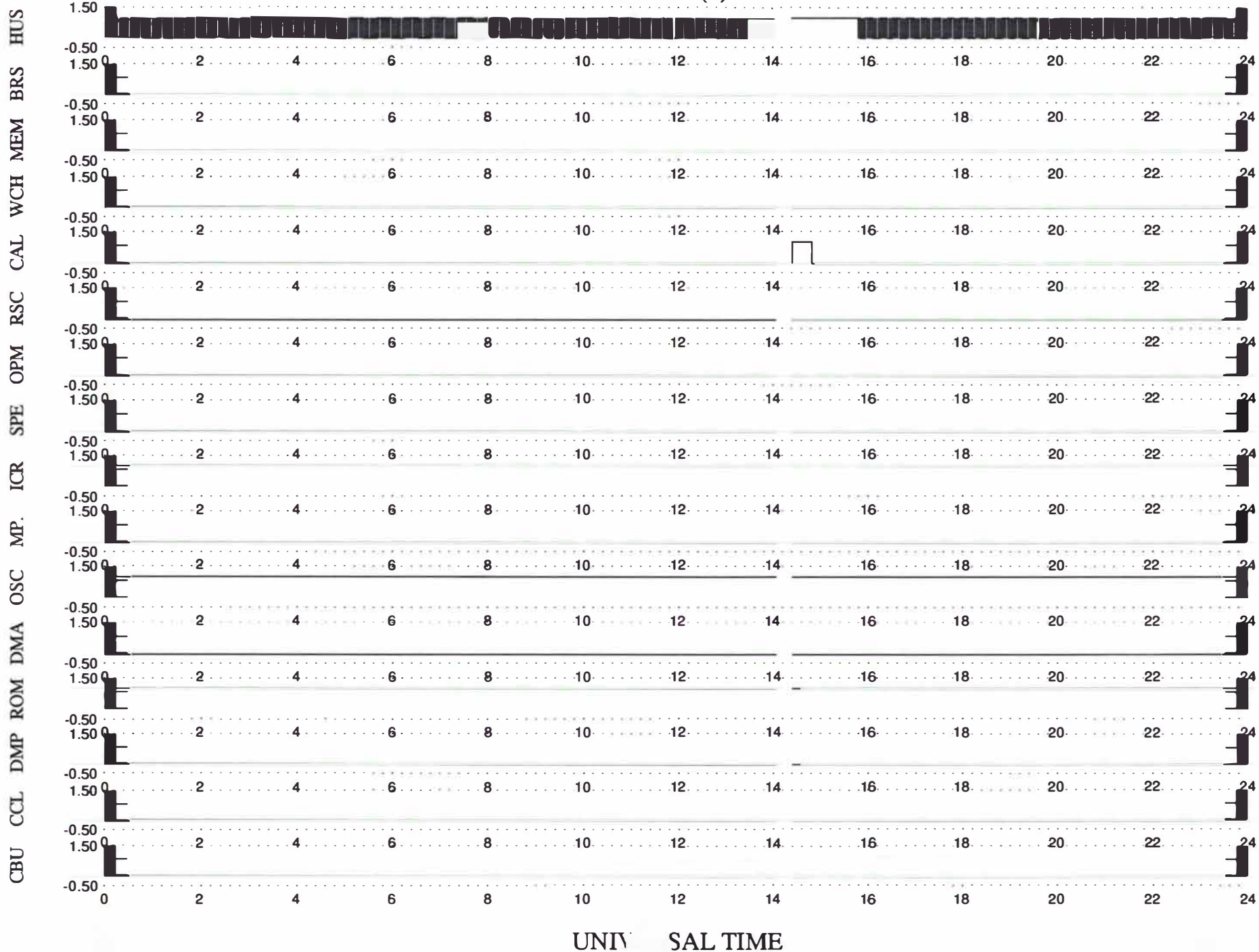
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

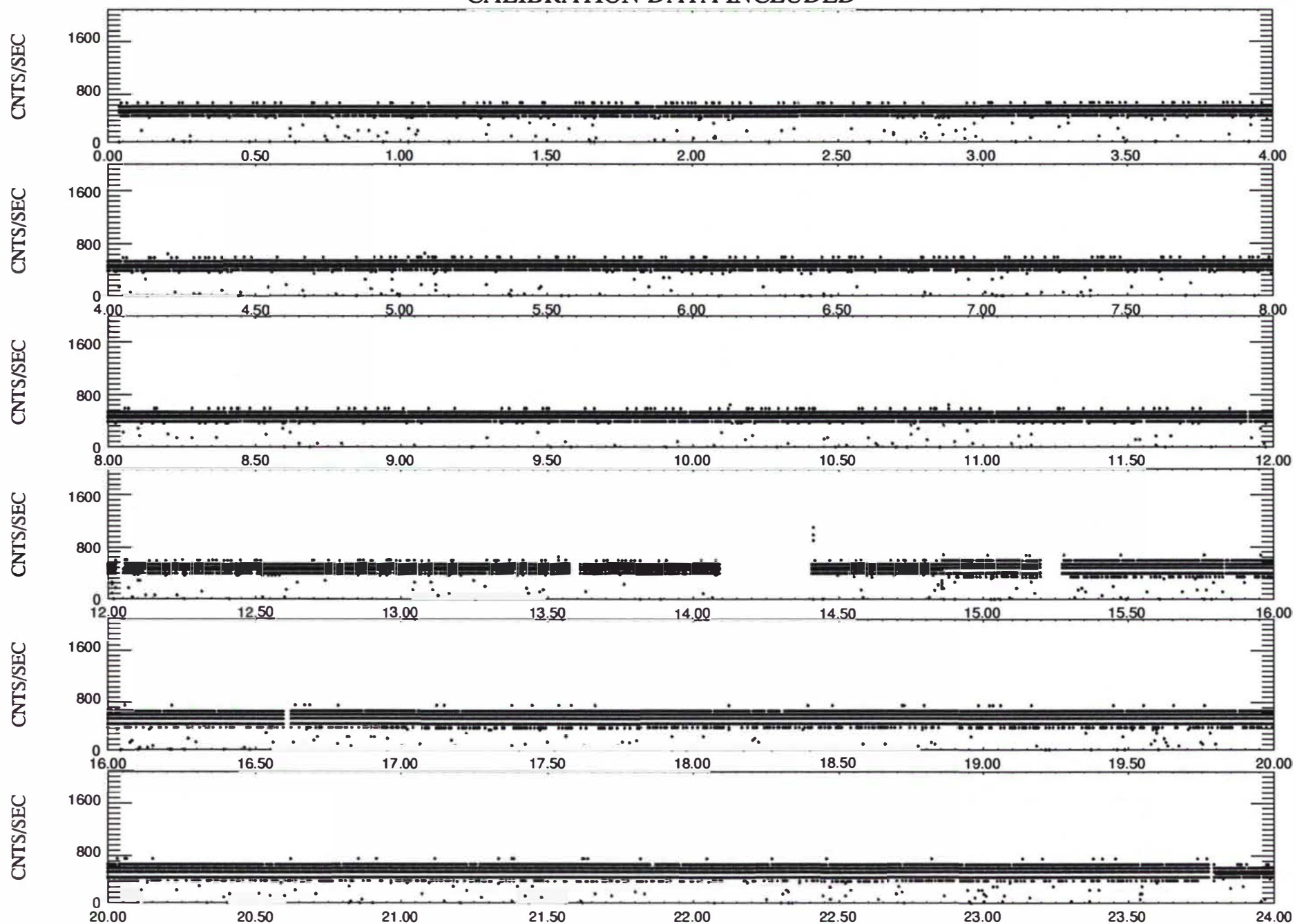
HUS MODES EDR day 309, year 1995 to day 309, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 309, year 1995 to day 309, year 1995
CALIBRATION DATA INCLUDED

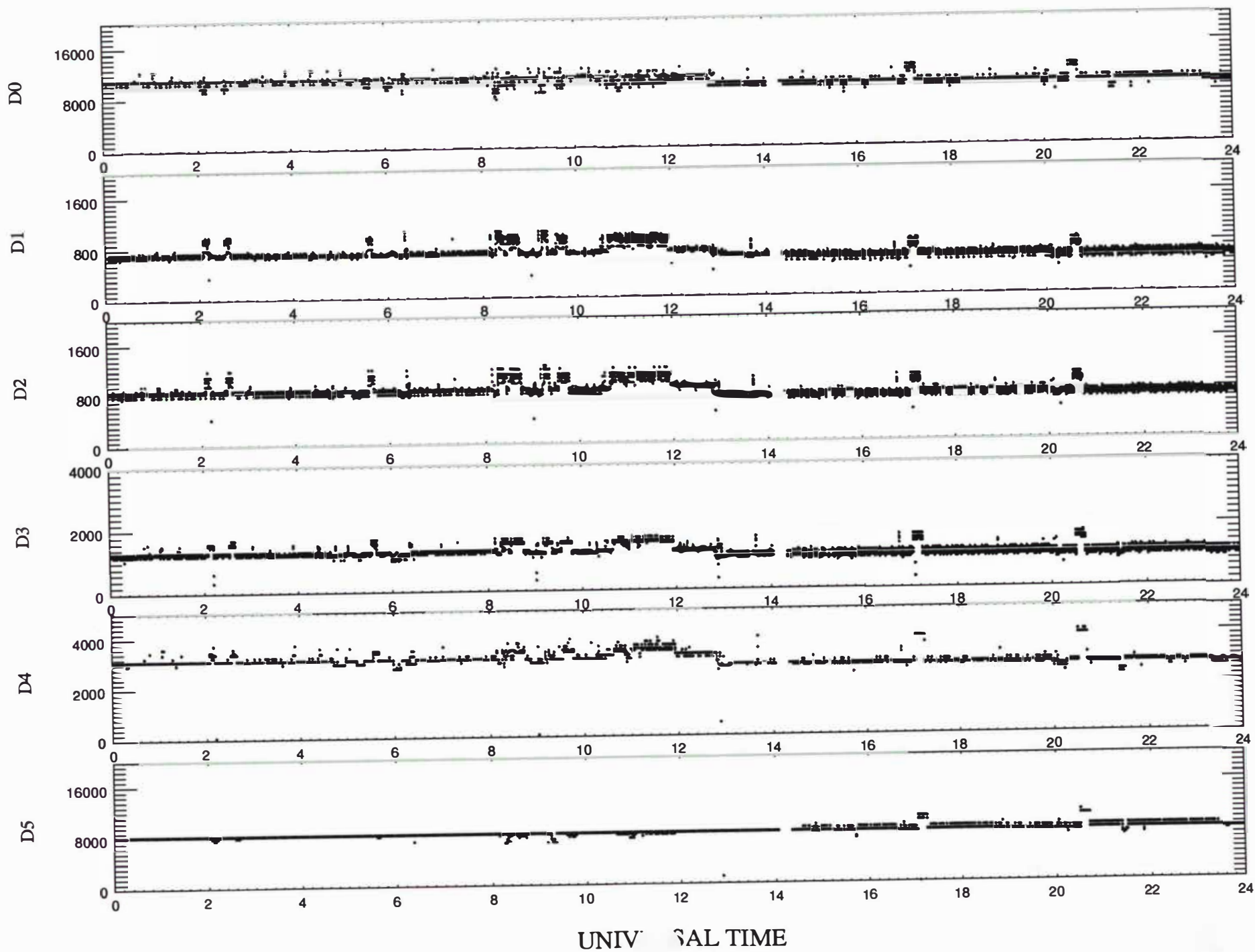
4/1/96



UNIT SAL TIME

HUS 2B COUNTS / SEC QEDR day 309, year 1995 to day 309, year 1995

11/7/95



From MIZZELL@fender.msfc.nasa.gov Tue Nov 7 09:30 PST 1995
From: MIZZELL@fender.msfc.nasa.gov
Date: Tue, 7 Nov 1995 11:29:56 -0600 (CST)
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
scott@circe.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.: 3898

TIME: TJD=0027 SECONDS=24940

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

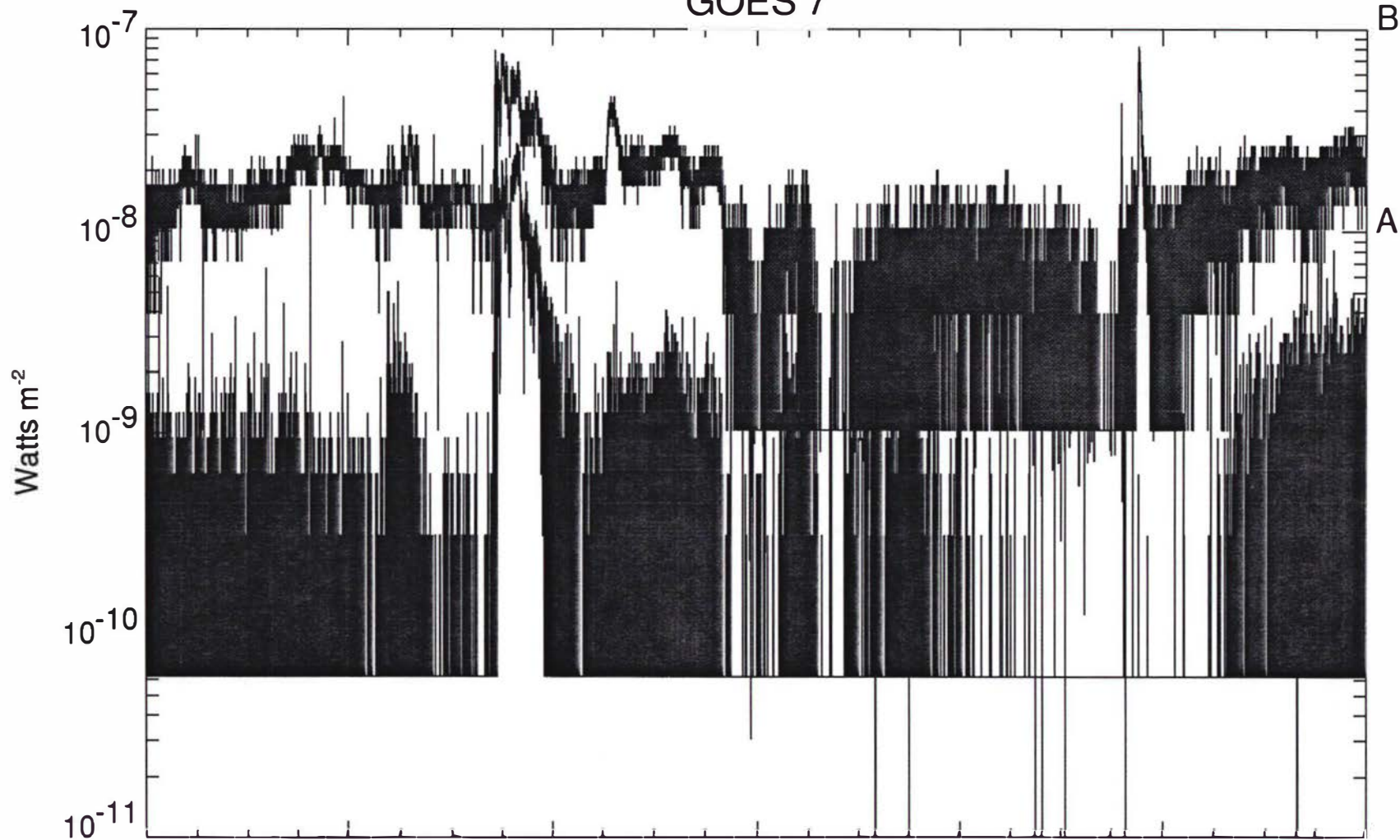
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
PARTICLE EVENT.

GOES 7



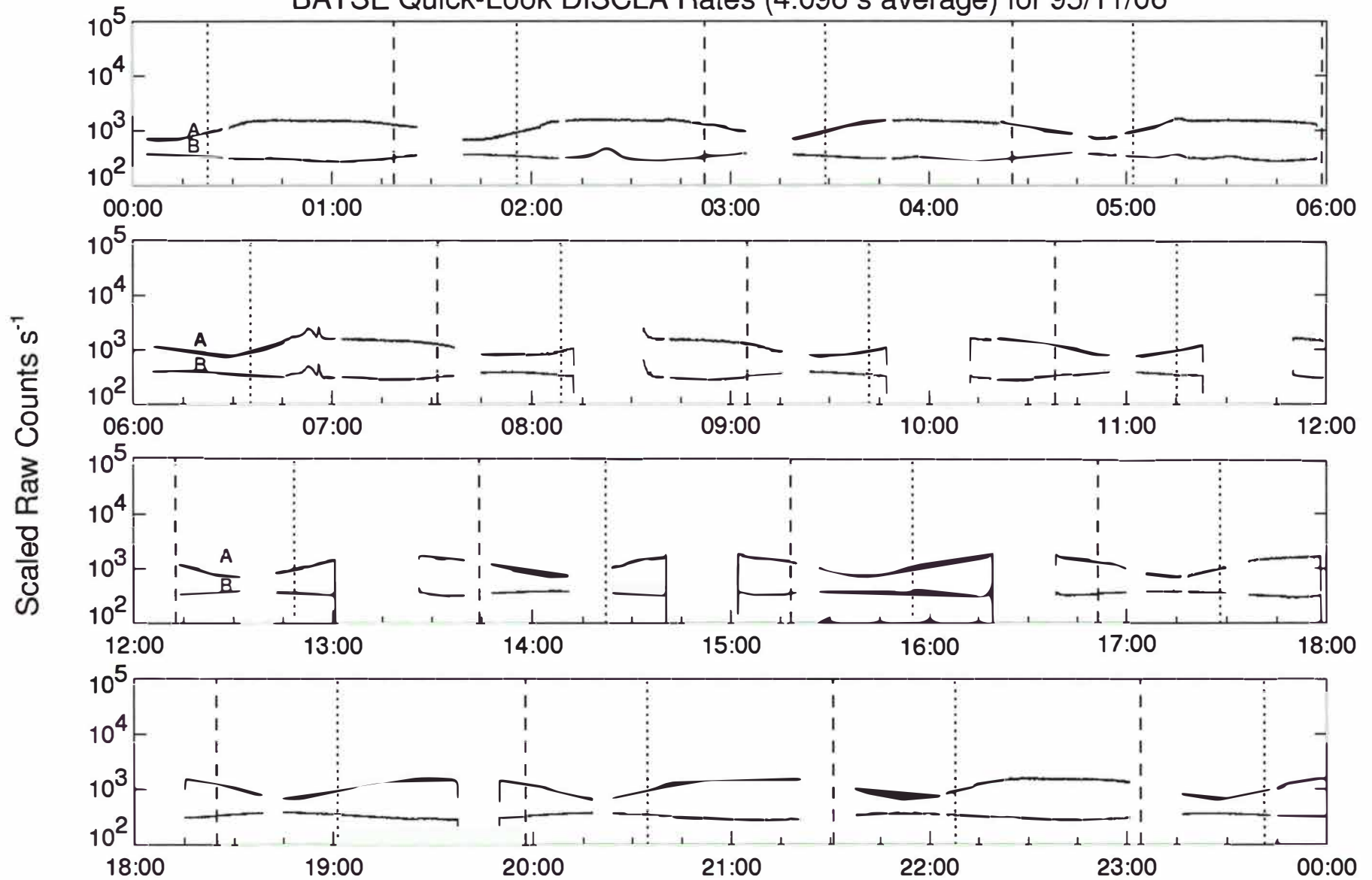
Data Start: 95/11/06, 0000:00

Plot created: 95/11/17, 1907

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 95/11/06



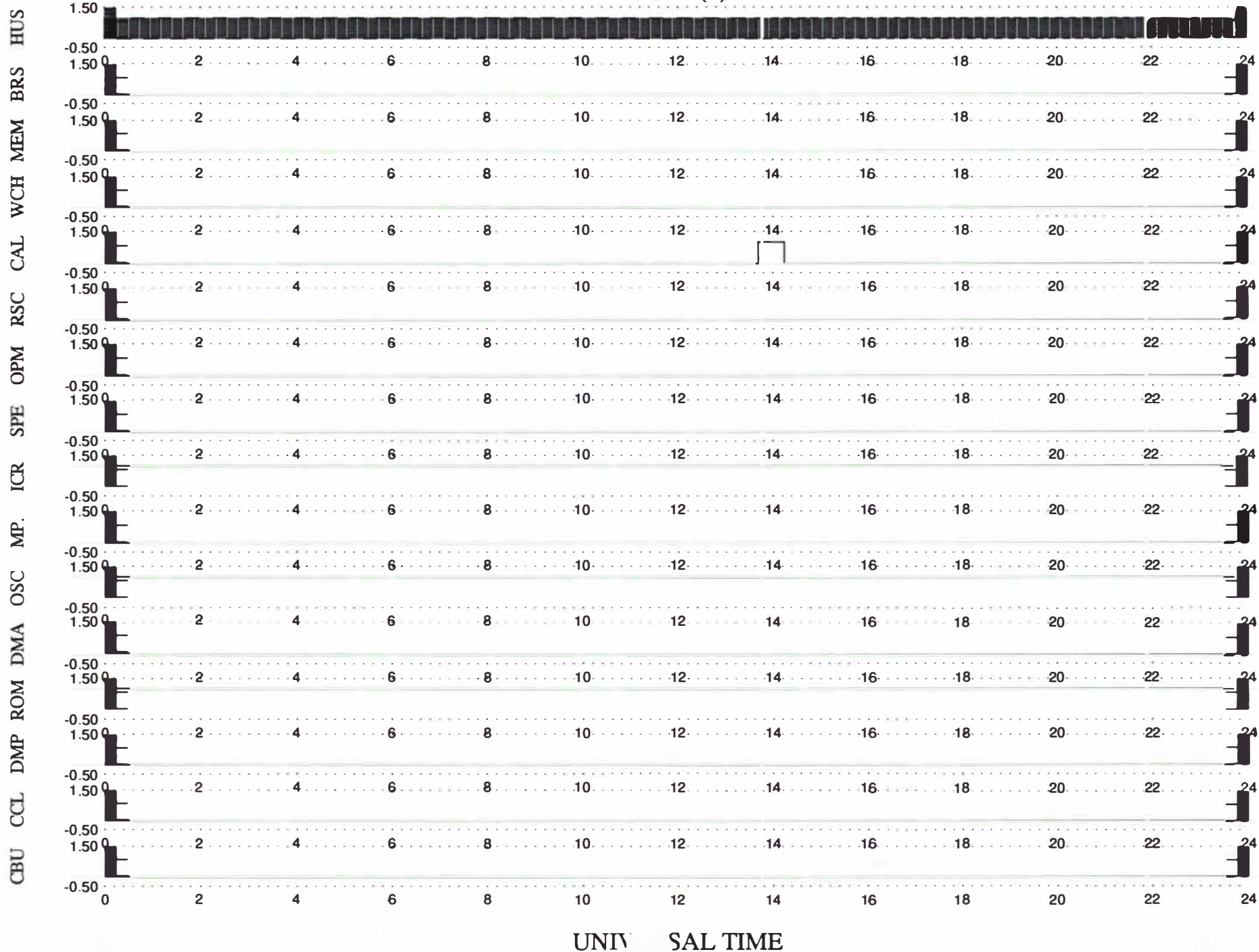
Current Time: 95/11/17, 1908 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

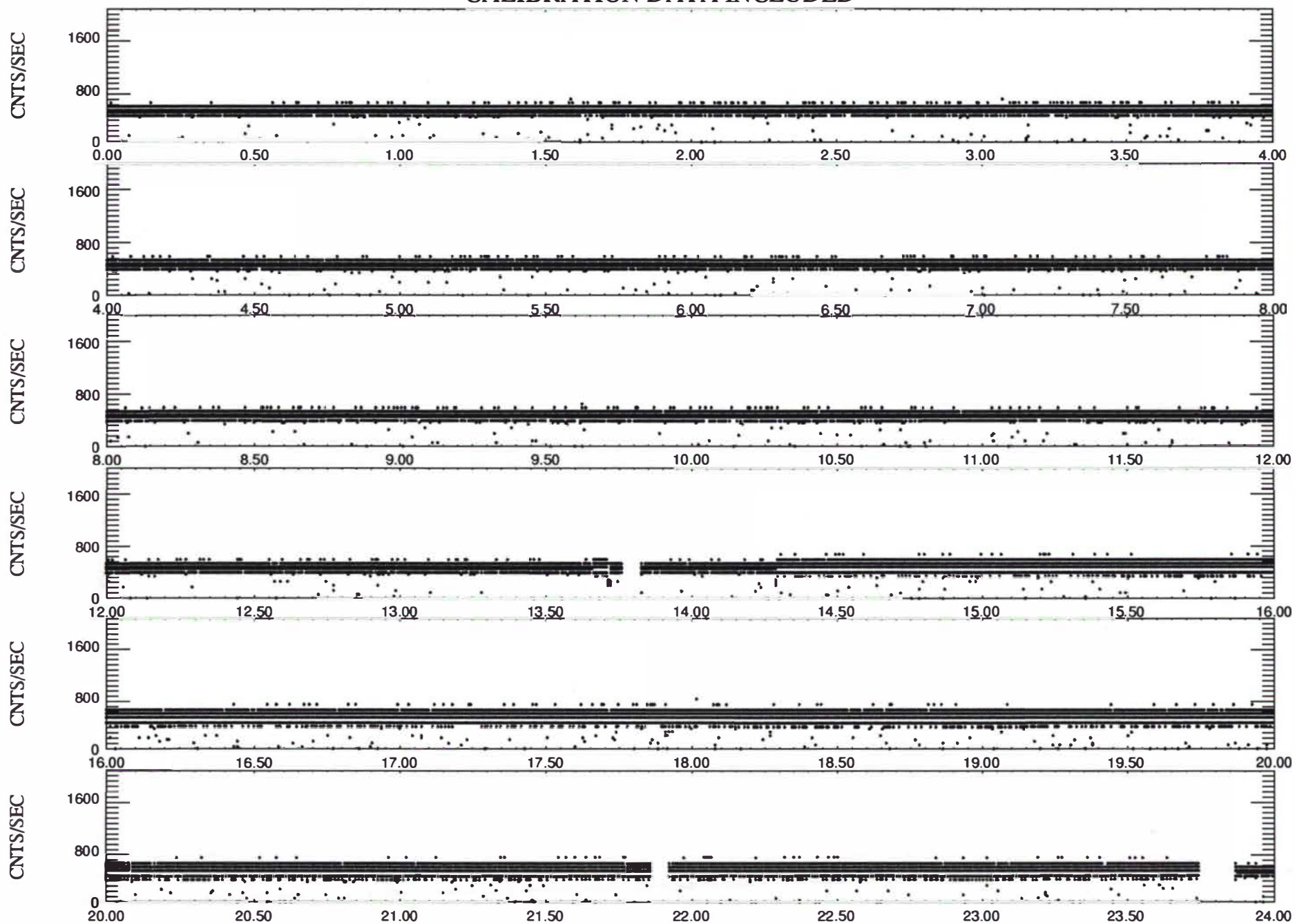
HUS MODES EDR day 310, year 1995 to day 310, year 1995
NO BURST (8)

4/1/96

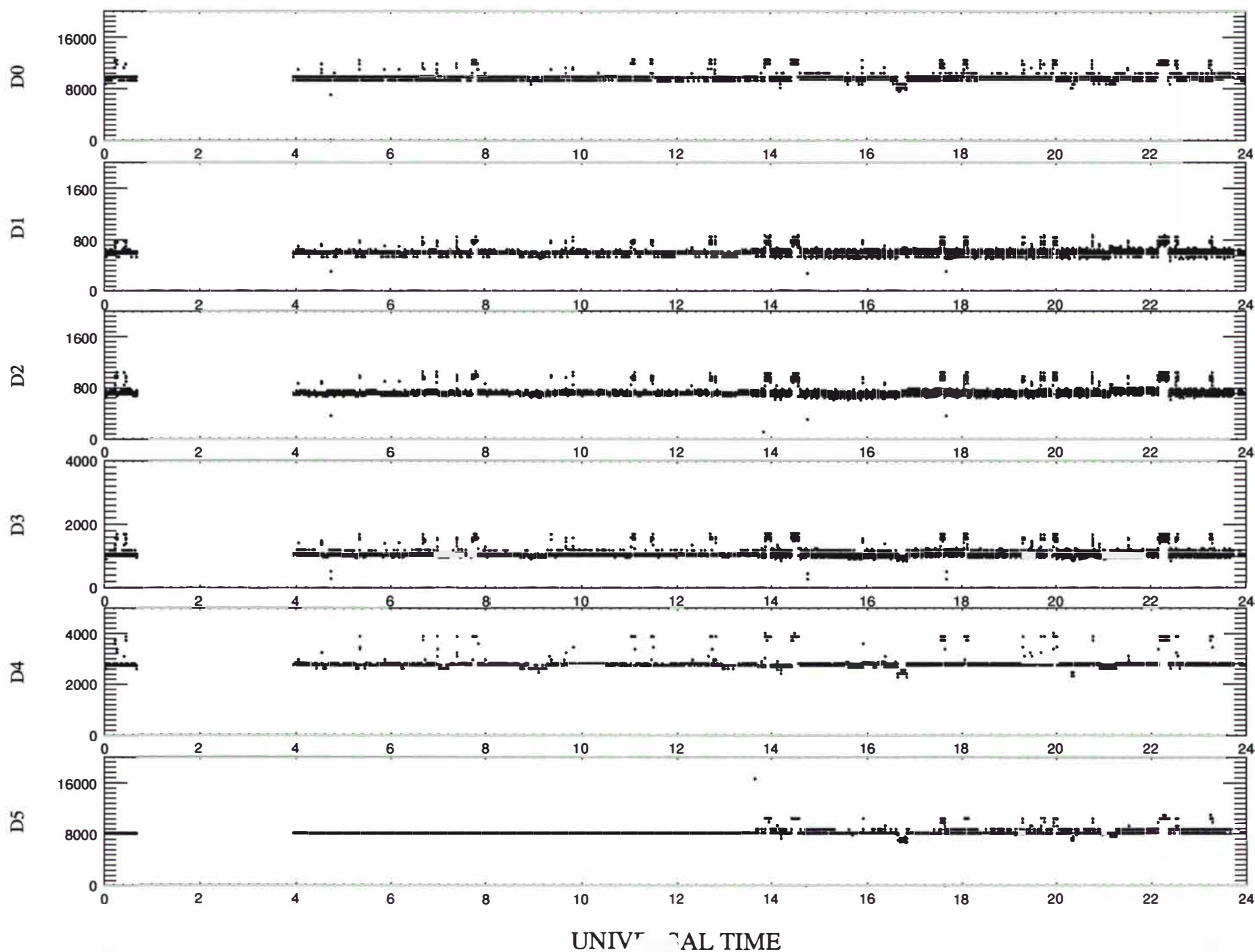


HUS 2A, MODE 1, NOT AVERAGED EDR day 310, year 1995 to day 310, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIV SAL TIME



From DEAL@SSLLES.MSFC.NASA.GOV Thu Nov 9 10:53 PST 1995
From: DEAL@SSLLES.MSFC.NASA.GOV
Date: Thu, 9 Nov 1995 12:53:31 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3899

BATSEARCH PROGRAM

BATSE BURST # 3899
EVENT OF 1995 NOV 7 DAY OF YEAR=311
EVENT CROSSING TIME AT BATSE : 26270. S. OR 07:17:50.0 100
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 180.000 -13.000
BATSE PEAK COUNTING RATE: 1600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/11/ 95 IS:
RA= 214.274 DEC= 55.337 DIST= 2.848 AU
BATSE-ULYSSES DISTANCE = 426106497. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=105.84 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -387.90 SECS.
CROSSING TIME AT ULYSSES IS 25882. S. OR 07:11:22 +/- 281.51 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/11/ 95 IS:
RA= 250.827 DEC= -23.073 DIST= 2.247 AU
MARS-BATSE DISTANCE = 336082400. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=112.49 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -428.87 SECS.
CROSSING TIME AT MARS IS 25841. S. OR 07:10:41 +/- 173.31 SECONDS

BATSE BURST TRIGGER

NO.: 3899

TIME: TJD=1002 SECONDS=26270

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=132.3 AZIMUTH=335.1 ERROR=5.8 DEGREES

COMMENTS:

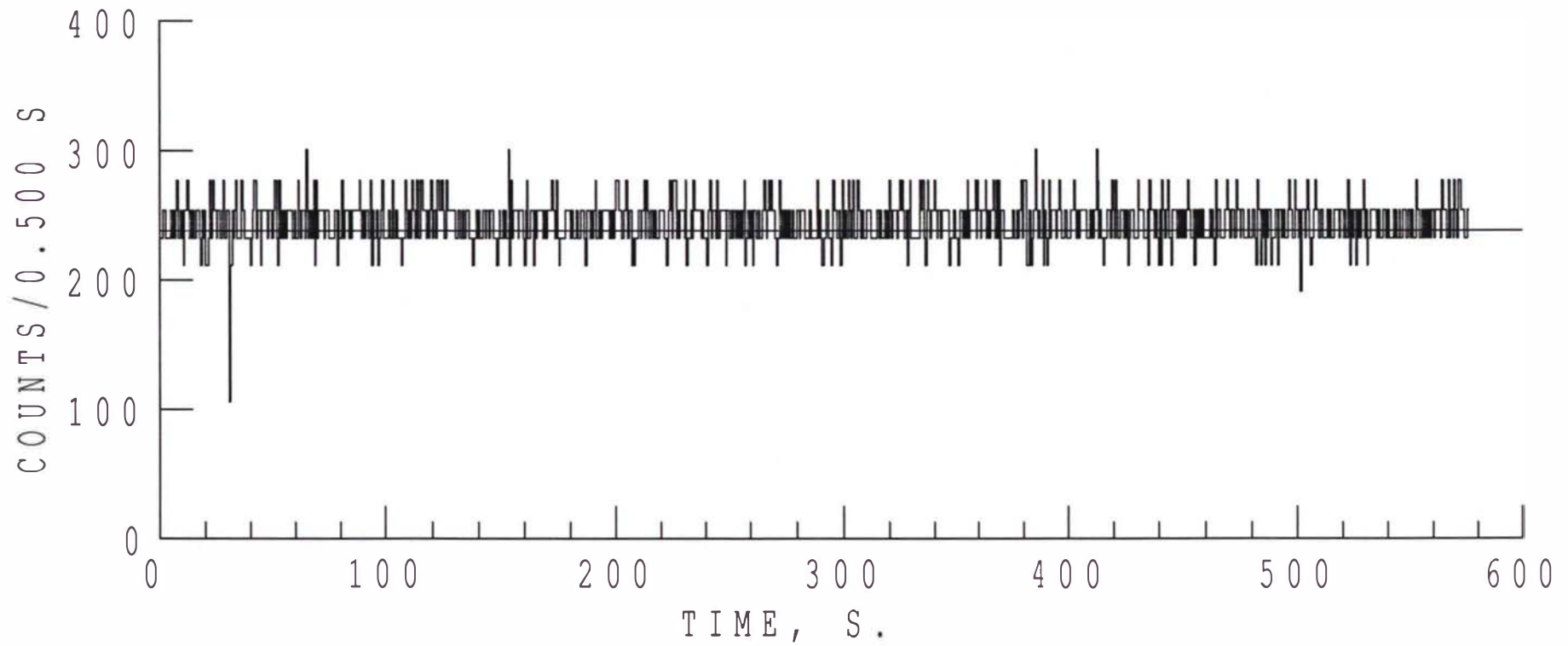
BURST LASTING ~ 30 S. NOT VISIBLE ABOVE 300 KEV.

9 / 11 / 95

ULYSSES RT
7 / 11 / 95 25596.271 s
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



95	7	1	117	23737	23737	3658
95	7	6	121	42735	42735	3662
95	7	11	123	13789	13789	3663
95	7	13	BGR	32133	32176	3664
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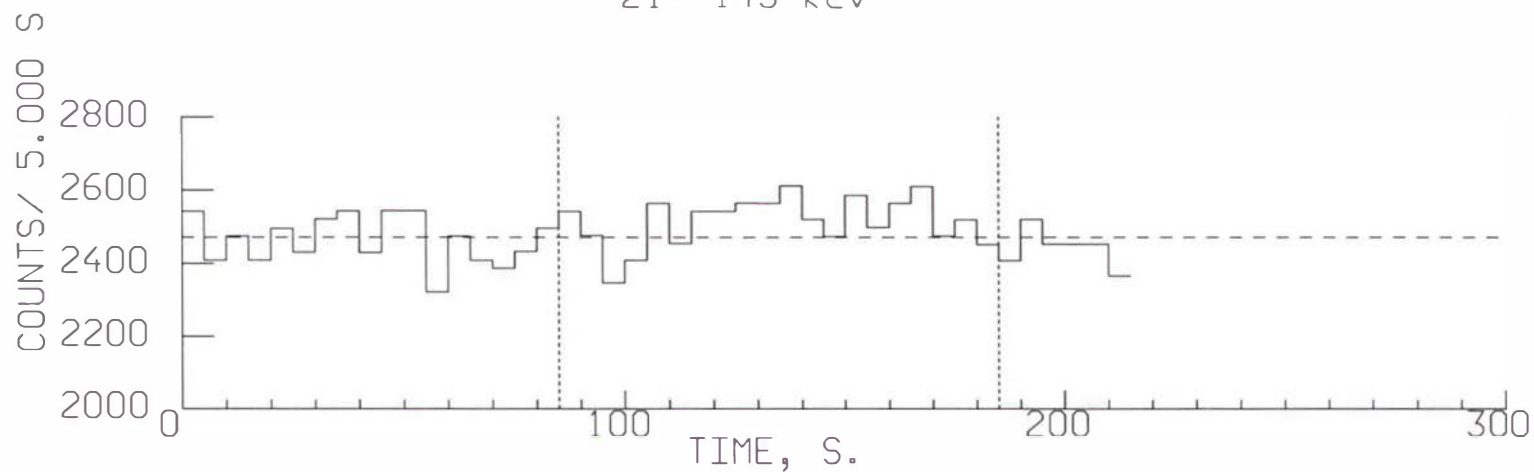
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94	11	27	10	52225.68	52217 3303	R I
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94	12	28	28	27585.915	27581 3330	R I
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95	1	11	34	44329	44310 3352	
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95	2	8	45	07824	07824 3408	
95	2	10	47	08424	08421 3410	
95	2	11	48	08697	08697 3412	trig.
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95	2	21	BGR	74701	74705 3436	
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95	3	1	BGR	75731	75761 3448	
95	3	4	56	37661	37657 3453	
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95	3	25	64	63392	63391 3481	
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95	4	1	70	74635	74634 3489	
95	4	3	71	47985	47987 3491	
95	4	3	72	84828	84826 3492	
95	4	16	BGR	48420	48419 3509	
95	4	18	81	83793	83795 3512	
95	4	25	86	00923	00919 3523	
95	4	30	BGR	54224	54229 3527	
95	5	3	88	66971	66970 3537	
95	5	10	90	28083	28079 3569	
95	5	13	93	81706	81703 3571	
95	5	21	97	25161	25157 3588	
95	5	22	98	23898	23896 3590	
95	5	22	100	85280	85283 3593	
95	5	24	102	14902	14899 3598	
95	6	2	104	25592	25592 3618	
95	6	10	107	6849	06849 3637	
95	6	24	111	84124	84084 3648	
95	6	25	113	14626	14601 3649	
95	6	29	115	37033	37036 3654	
95	7	1	116	12762	12758 3657	

ULYSSES RT
7/11/95 26928.301 s
0.500 S INTERVALS REGROUPED BY 10
21- 143 keV

6/ 9/11



KONUS 19951107 27040

ULYSSES RT

01 / 09 / 11

07/11/95 26928.301 s

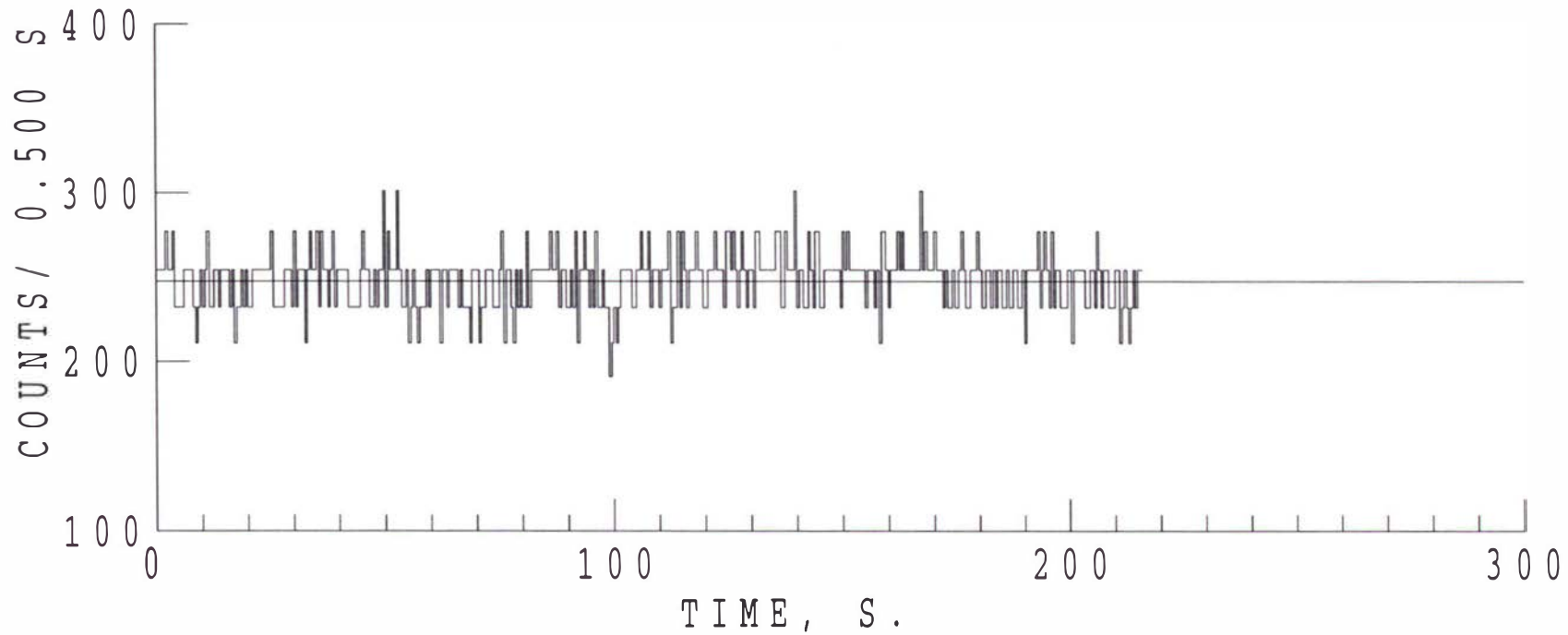
0 - 0 keV

N= 10 M= 10

>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



1 / 2 / 9 6

ULYSSES RT

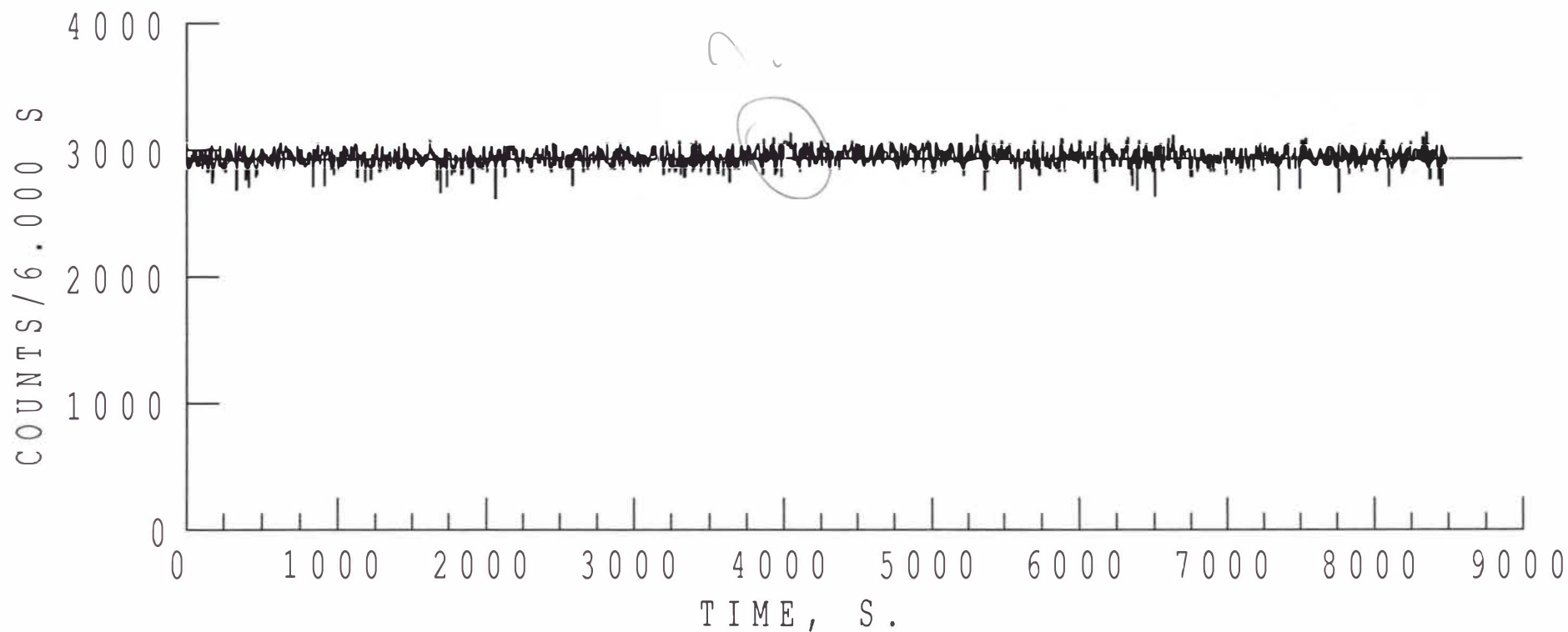
7 / 11 / 95 23040.232 s

0.500 S INTERVALS REGROUPED BY 12

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From DEAL@ssl.msfc.nasa.gov Thu Nov 9 11:31 PST 1995
Date: Thu, 9 Nov 1995 13:31:14 -0600 (CST)
From: DEAL@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3900

BATSEARCH PROGRAM

BATSE BURST # 3900
EVENT OF 1995 NOV 7 DAY OF YEAR=311
EVENT CROSSING TIME AT BATSE : 63156. S. OR 17:32:36.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 12.000 29.000
BATSE PEAK COUNTING RATE: 5500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/11/ 95 IS:
RA= 214.397 DEC= 55.318 DIST= 2.849 AU
BATSE-ULYSSES DISTANCE = 426202764. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 86.48 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 87.39 SECS.
CROSSING TIME AT ULYSSES IS 63243. S. OR 17:34:03 +/- 297.68 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/11/ 95 IS:
RA= 250.827 DEC= -23.073 DIST= 2.247 AU
MARS-BATSE DISTANCE = 336082400. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 52.66 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 679.93 SECS.
CROSSING TIME AT MARS IS 63836. S. OR 17:43:55 +/- 165.07 SECONDS

BATSE BURST TRIGGER

NO.: 3900

TIME: TJD=0028 SECONDS=63156

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=39.9 AZIMUTH=171.2 ERROR=5.3 DEGREES

COMMENTS:

BURST LASTING ~ 83 S. MULTIPLE PEAKED EVENT. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3900	951107	10028	63156	5500	012	+29	83

Helio corr removed

Date: Feb 21 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for 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

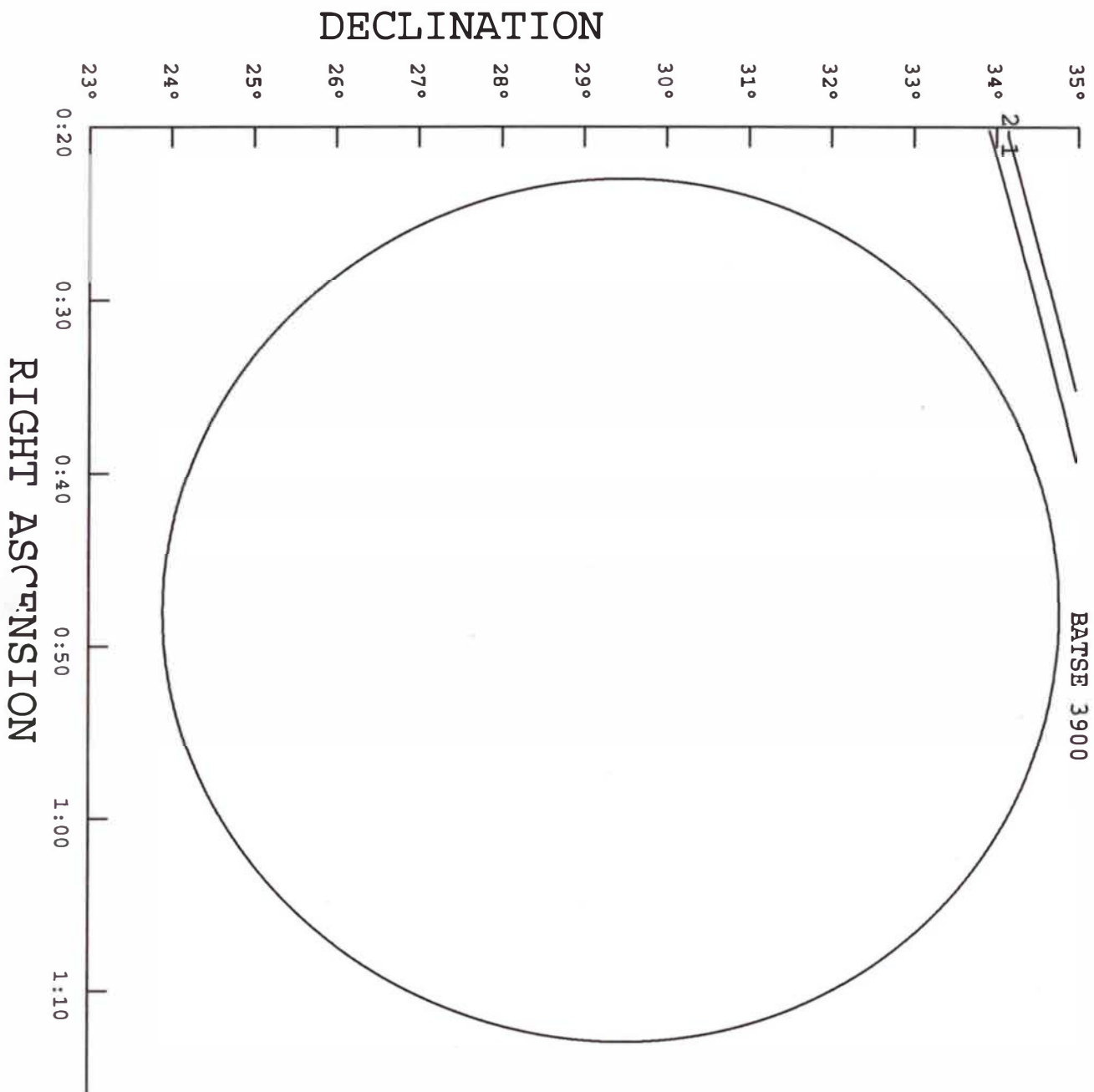
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 7, 1995 17:31

21/ 2/98



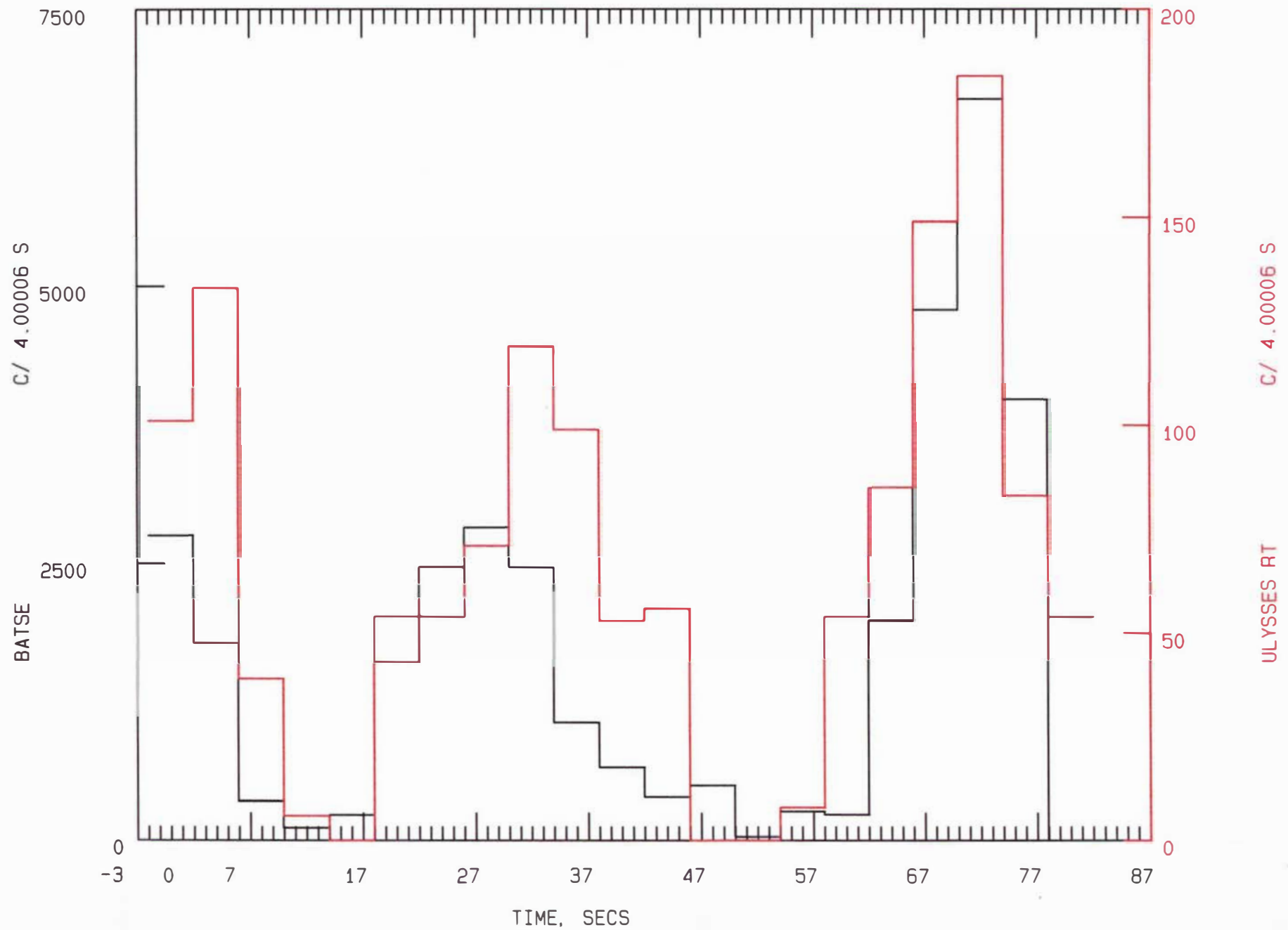
BATSE

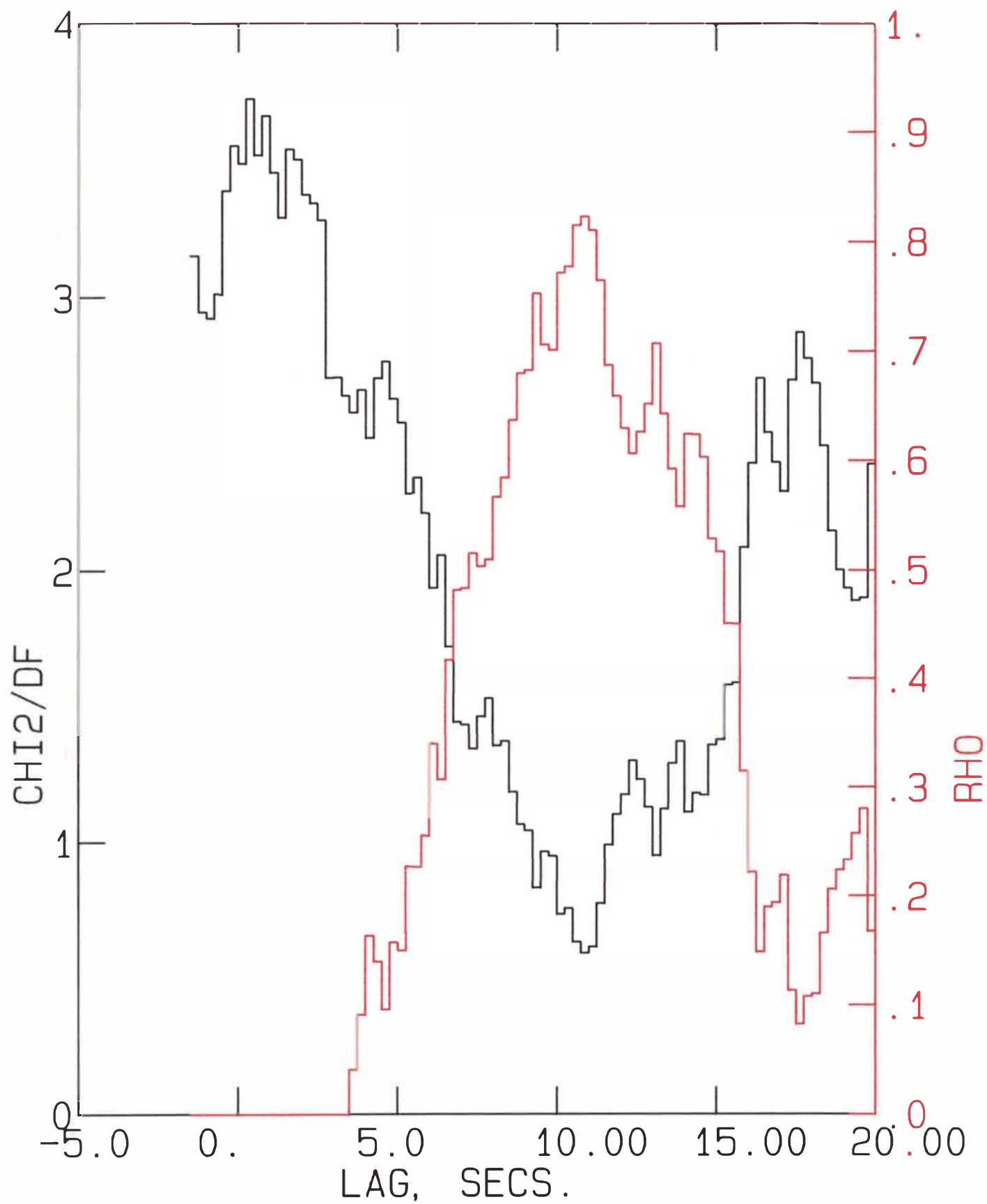
-ULYSSES RT CORRELATION

7/11/95

63157.682

21/ 2/98





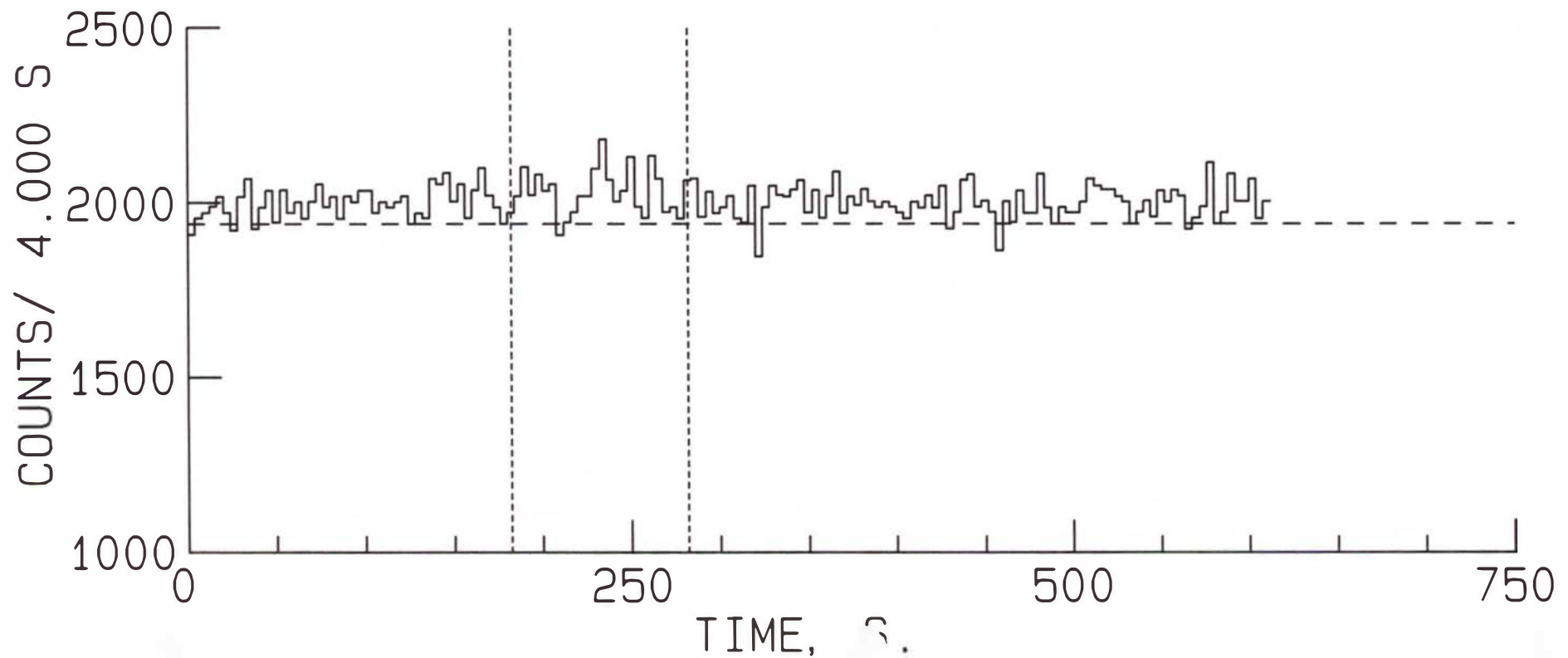
ULYSSES RT

21 / 2 / 98

7/11/95 62928.118 s

0.250 S INTERVALS REGROUPED BY 16

21- 143 keV

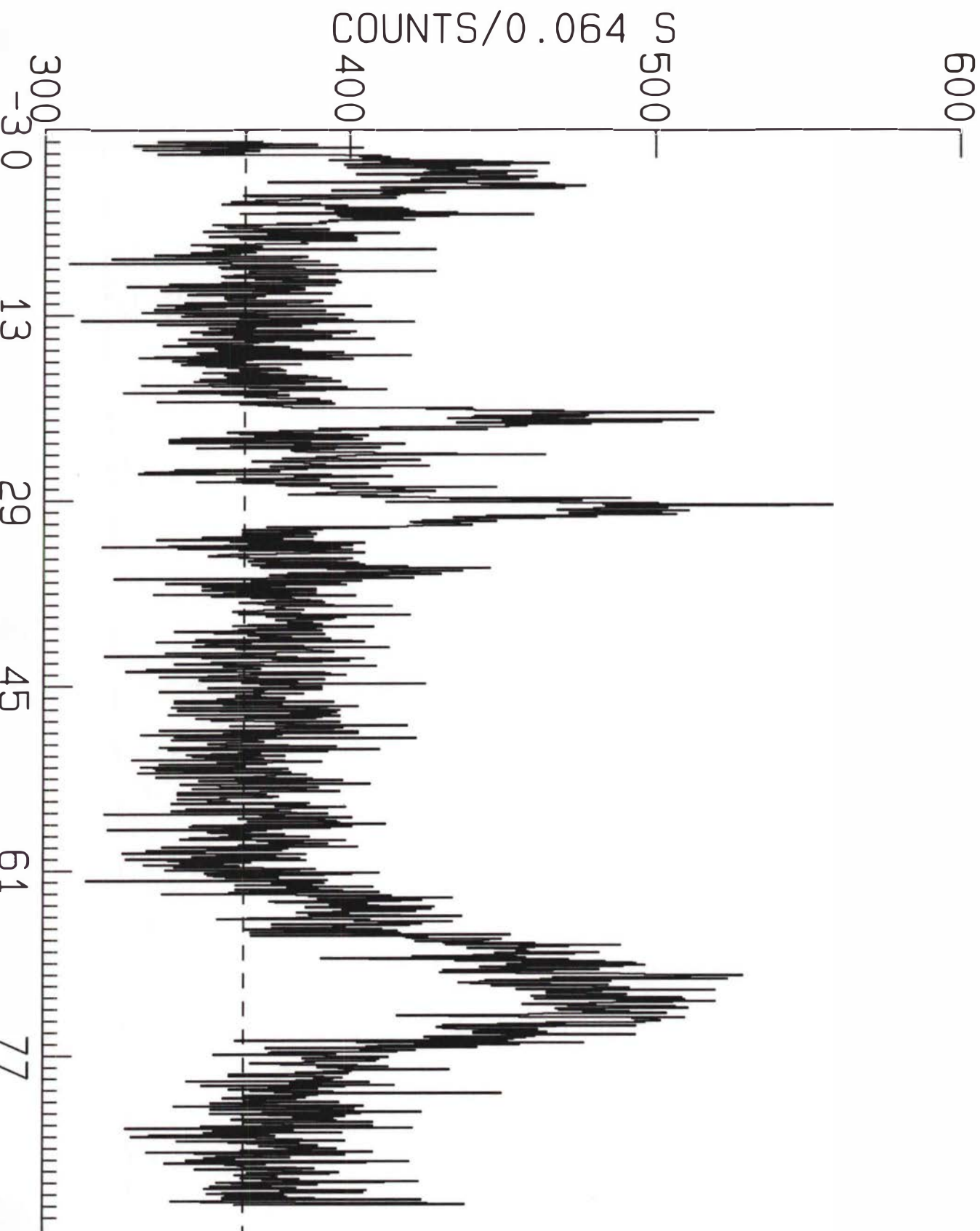


BATSE

07/11/95

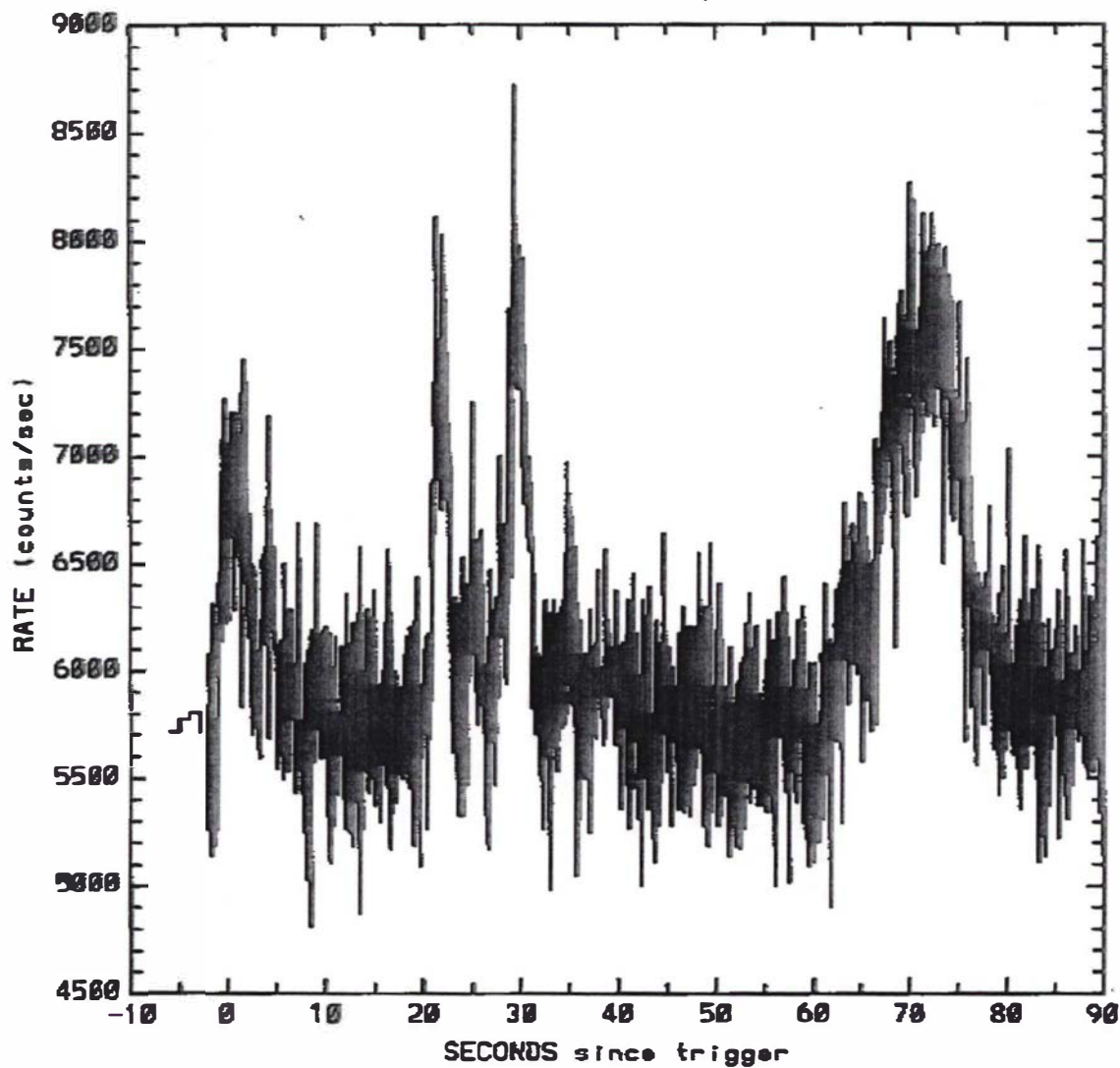
63157.682

25- 100 keV



16/11/93

DISCSC Data for K. Hurley, No. 3900



14-NOV-1995 10:24:38

Created by MDPS 80
(Burst Display)
Version 42.25

Trigger = 3900

Trigger Time:
10028 / 63157.682Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors [7..8]:
-6-4----Discriminators:
[1 . 2]Quality Mask:
80ISP1

From DEAL@ssl.msfc.nasa.gov Thu Nov 9 11:32 PST 1995
Date: Thu, 9 Nov 1995 13:32:39 -0600 (CST)
From: DEAL@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3901

BATSEARCH PROGRAM

BATSE BURST # 3901
EVENT OF 1995 NOV 7 DAY OF YEAR=311
EVENT CROSSING TIME AT BATSE : 81500. S. OR 22:38:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 149.000 40.000
BATSE PEAK COUNTING RATE: 1900 C/S

ND

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/11/ 95 IS:
RA= 214.457 DEC= 55.309 DIST= 2.849 AU
BATSE-ULYSSES DISTANCE = 426250273. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=135.20 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1008.95 SECS.
CROSSING TIME AT ULYSSES IS 80491. S. OR 22:21:31 +/- 208.60 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/11/ 95 IS:
RA= 250.827 DEC= -23.073 DIST= 2.247 AU
MARS-BATSE DISTANCE = 336082400. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 66.65 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 444.34 SECS.
CROSSING TIME AT MARS IS 81944. S. OR 22:45:44 +/- 185.44 SECONDS

BATSE BURST TRIGGER

NO.: 3901

TIME: TJD=0028 SECONDS=81500

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=74.4 AZIMUTH=299.2 ERROR=4.0 DEGREES

COMMENTS:

BURST LASTING ~ 40 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3901	951107	10028	81500	1900	149	+40	40

9 / 11 / 95

ULYSSES RT

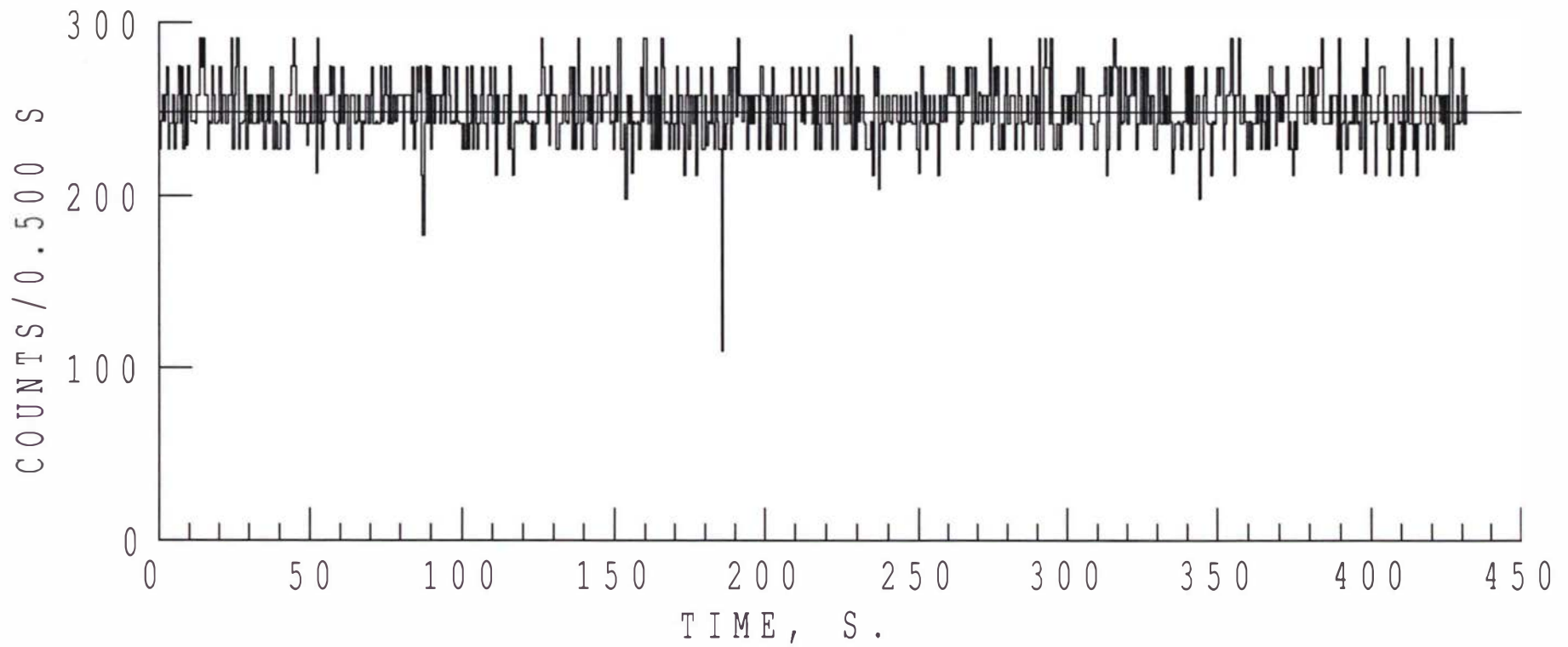
7/11/95 80280.141 s

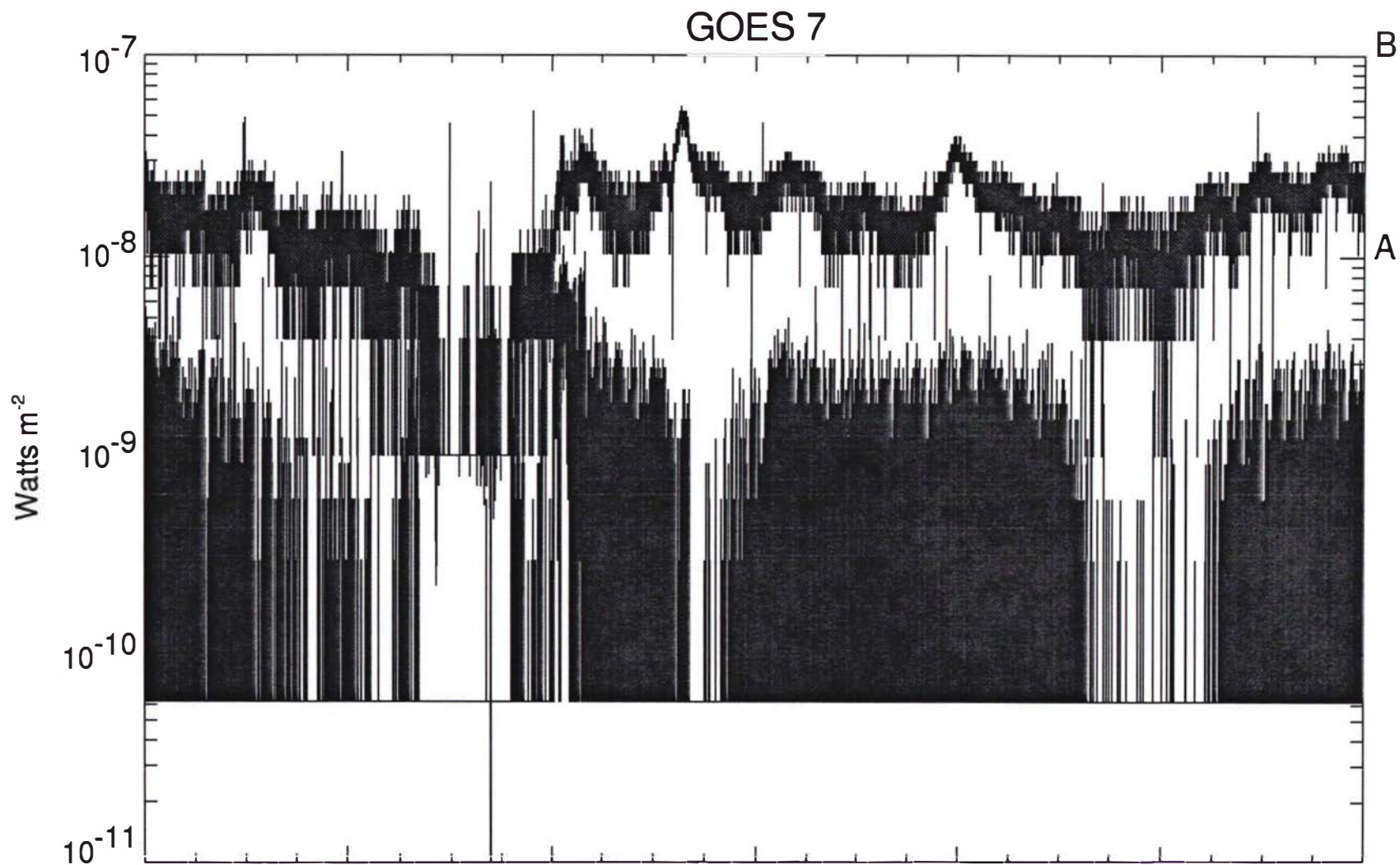
0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





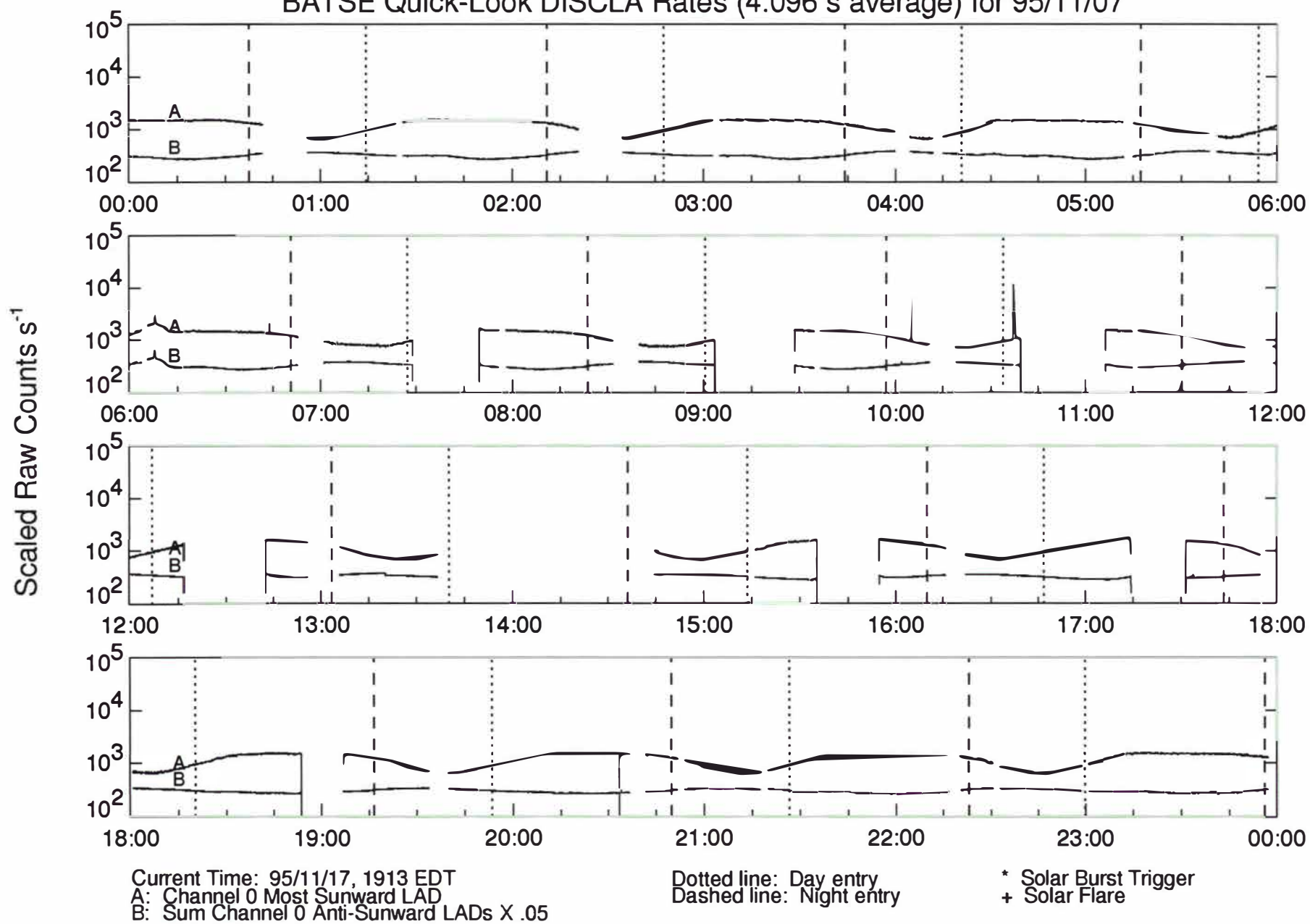
Data Start: 95/11/07, 0000:01

Plot created: 95/11/17, 1913

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

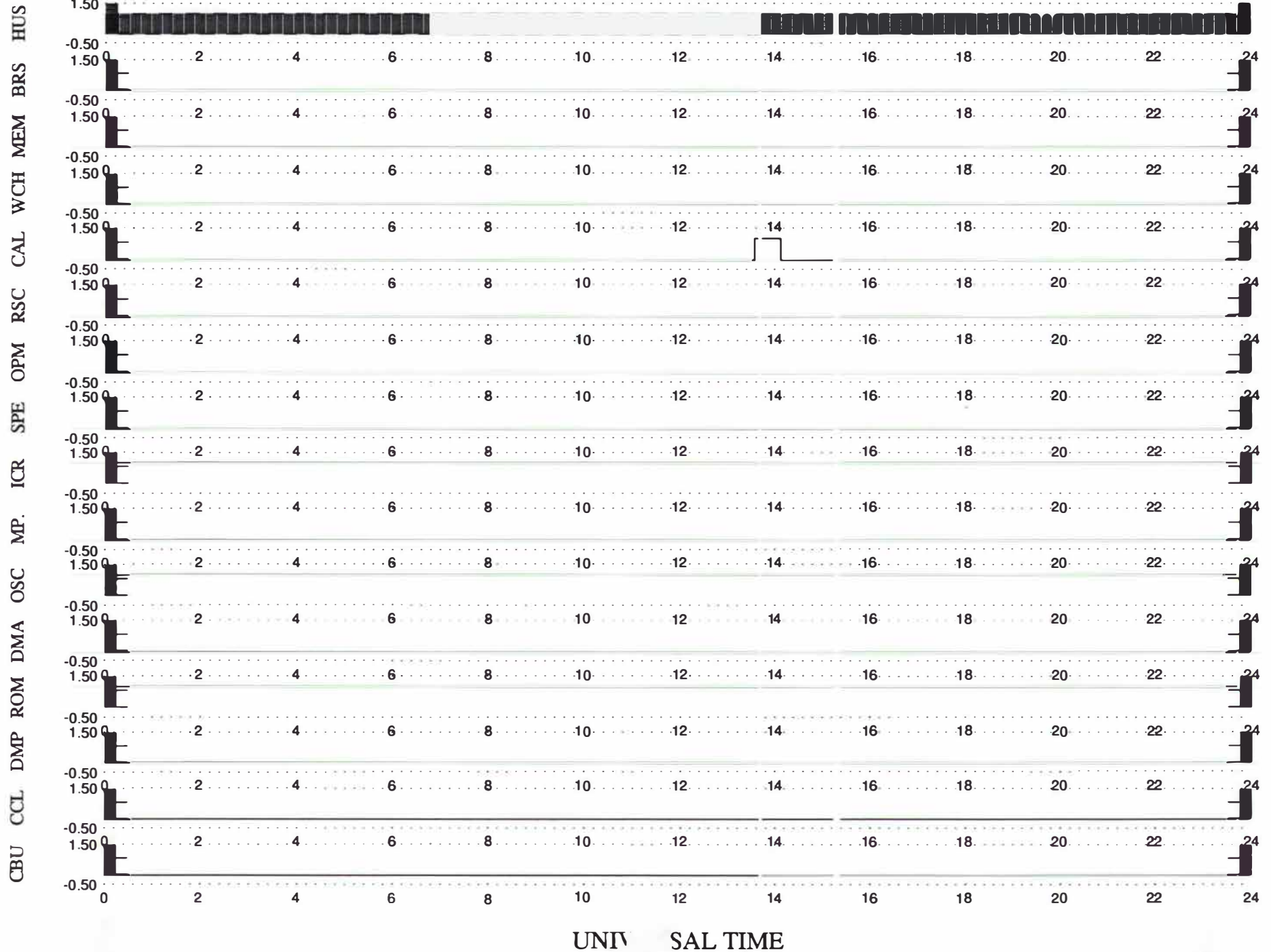
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/07



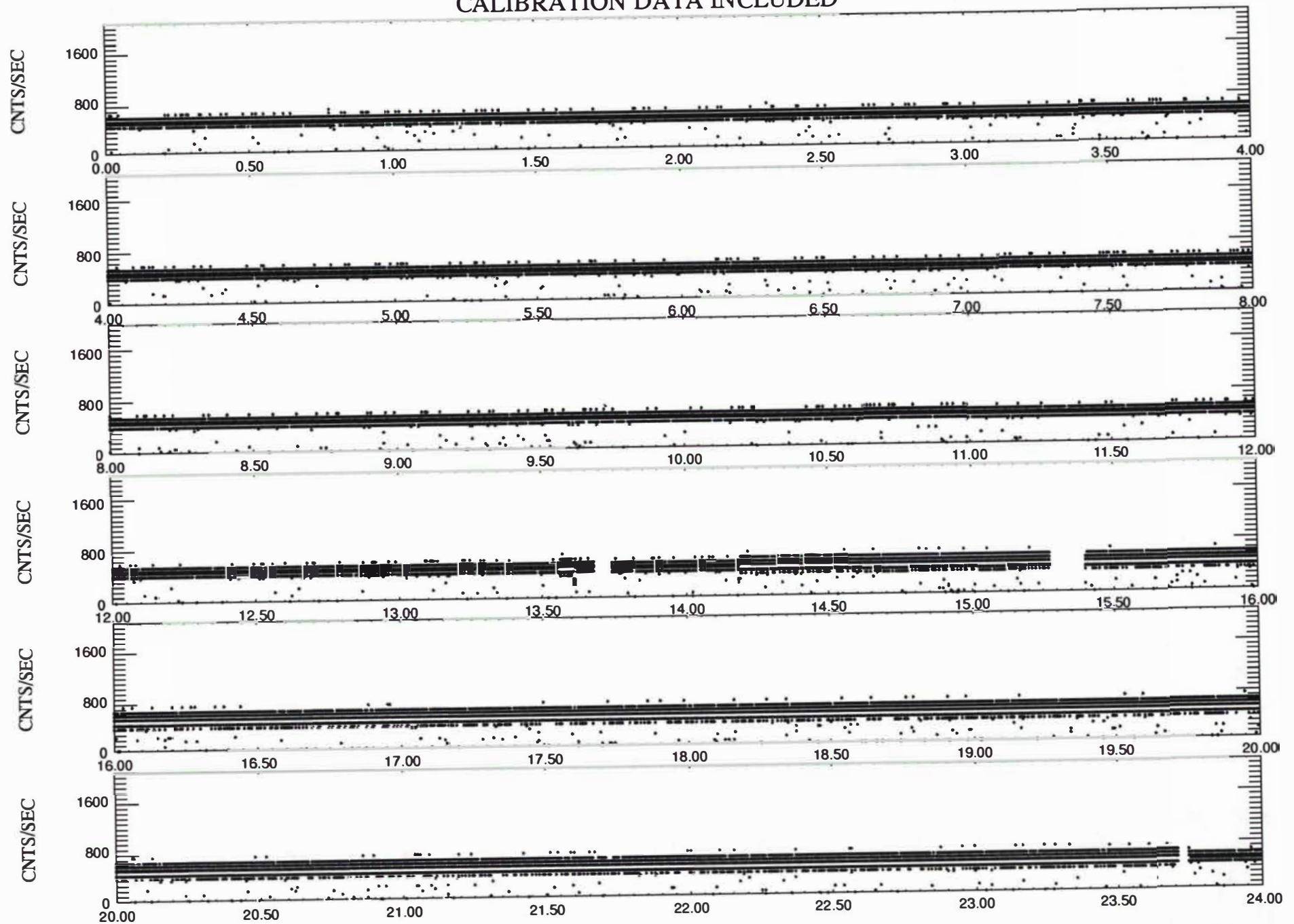
HUS MODES EDR day 311, year 1995 to day 311, year 1995
NO BURST (8)

4/1/96

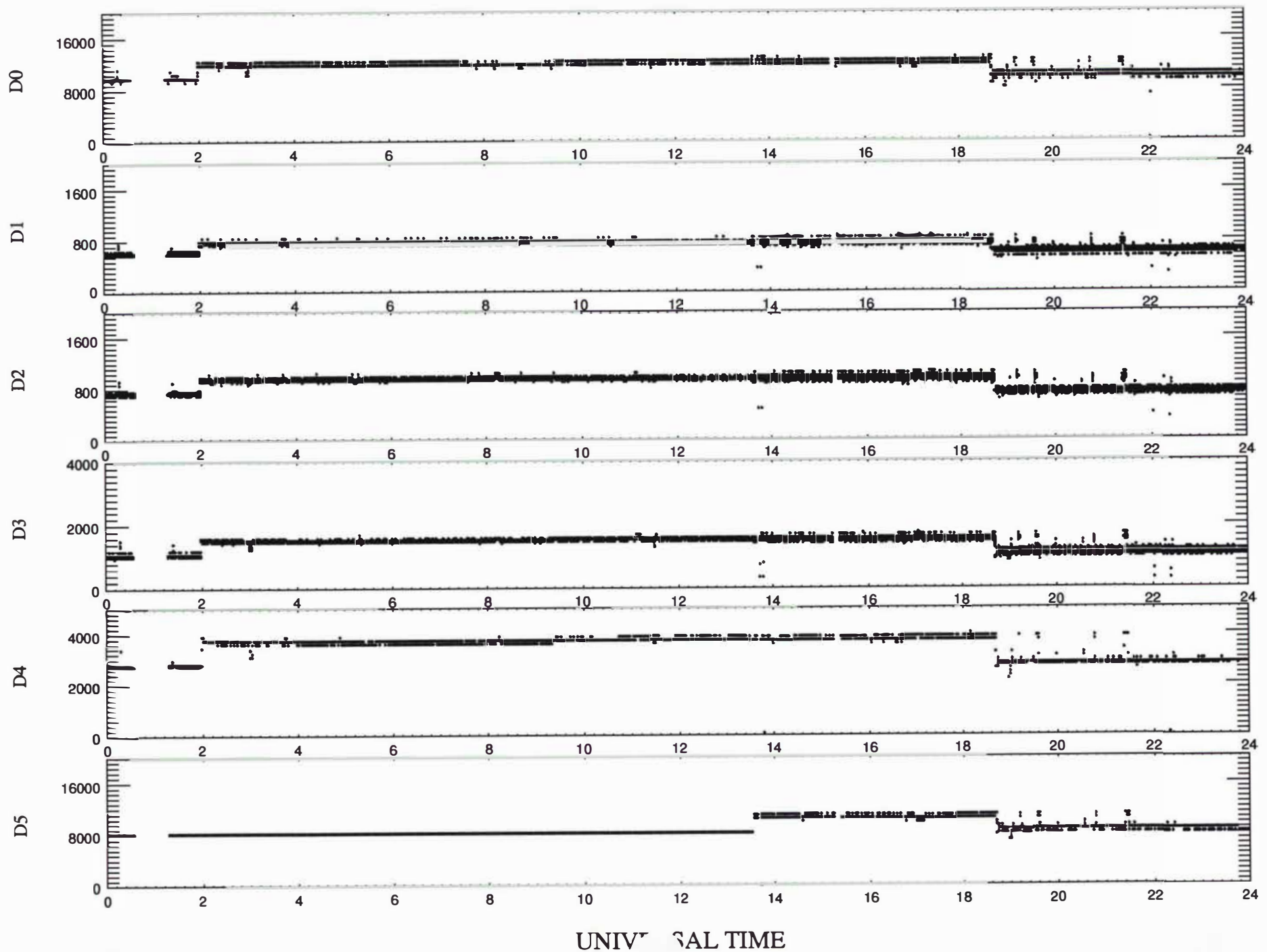


HUS 2A, MODE 1, NOT AVERAGED EDR day 311, year 1995 to day 311, year 1995
CALIBRATION DATA INCLUDED

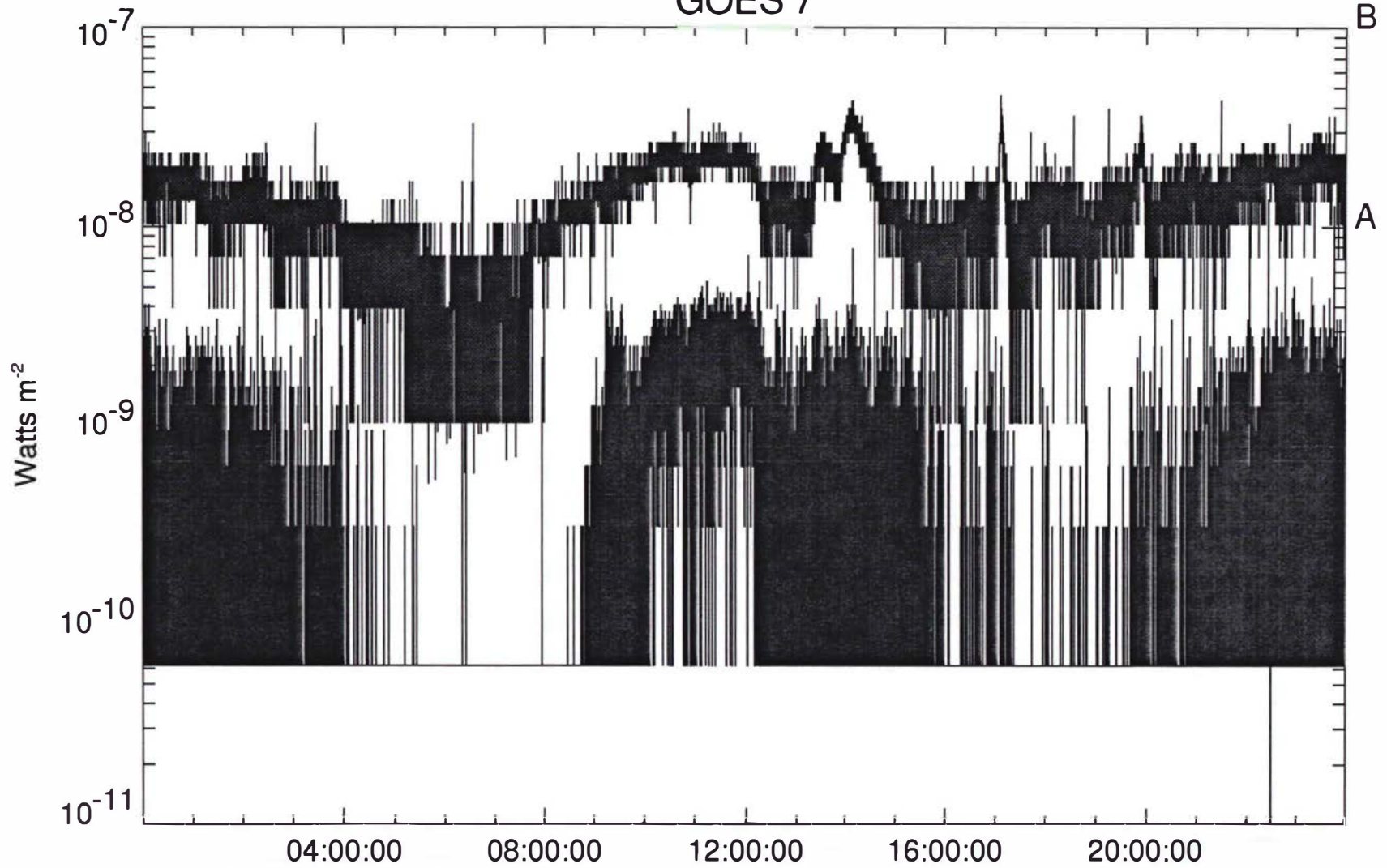
4/1/96



UNIV. SAL TIME



GOES 7

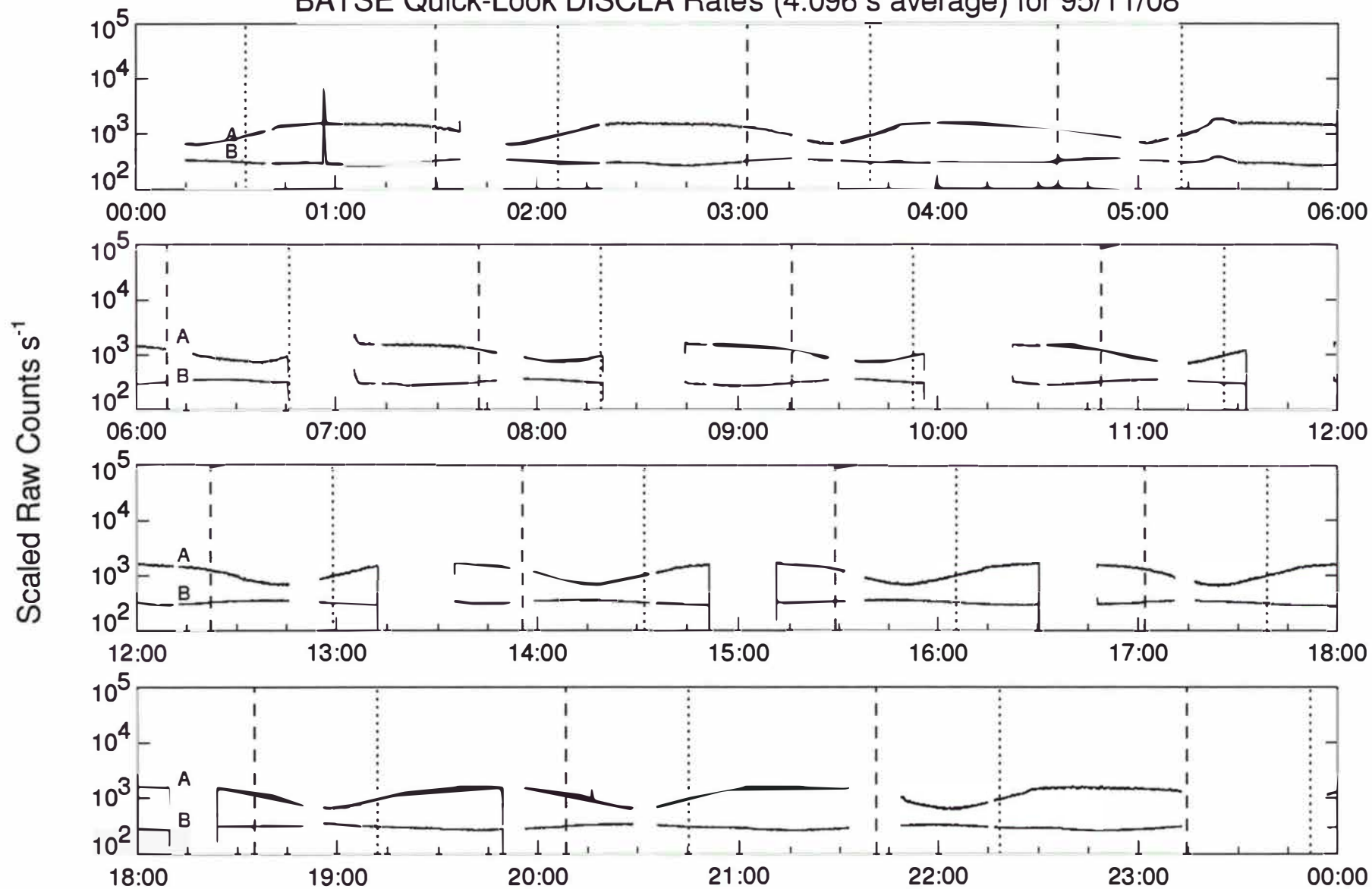


Data Start: 95/11/08, 0000:02

Plot created: 95/11/17, 1939

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 95/11/08



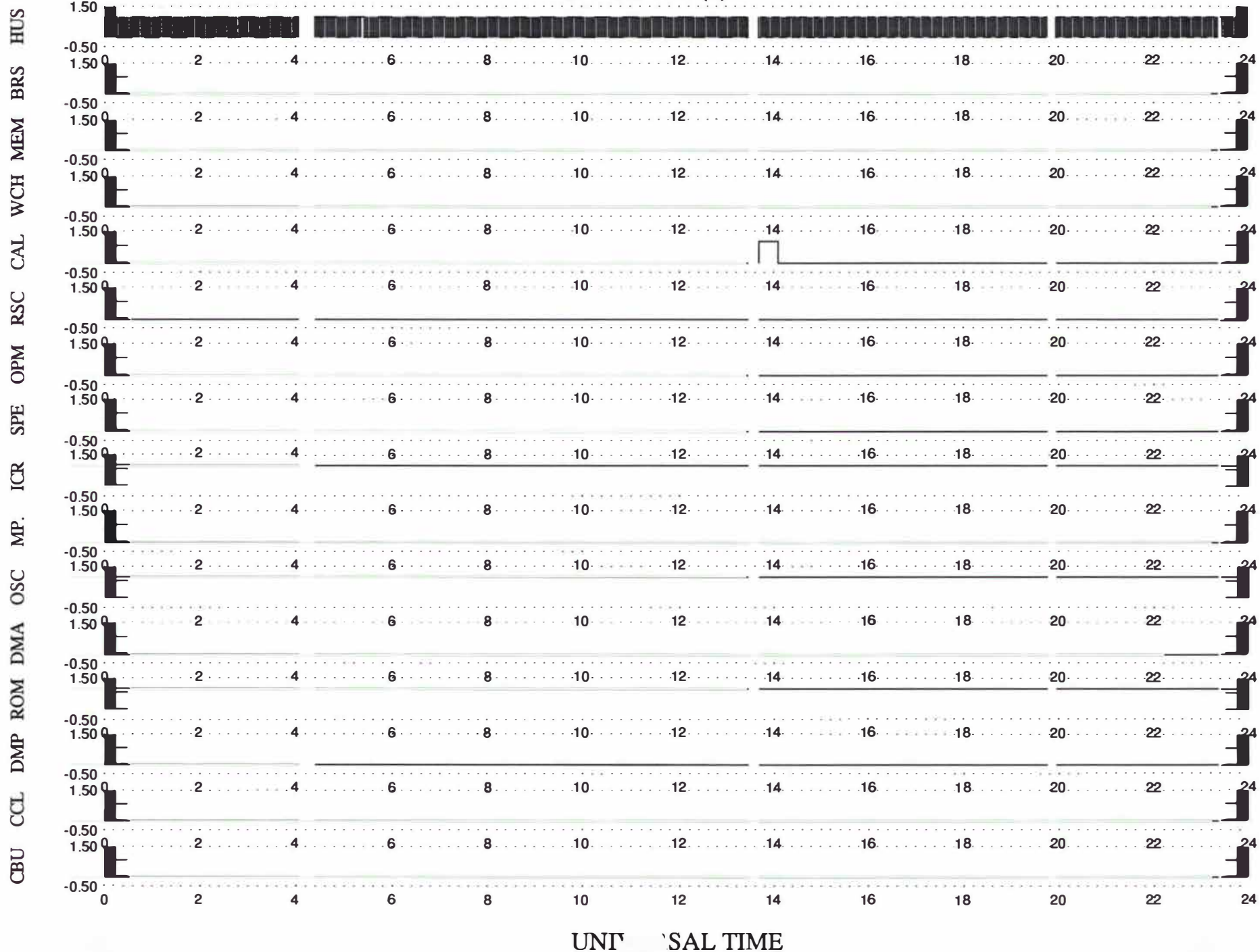
Current Time: 95/11/17, 1940 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

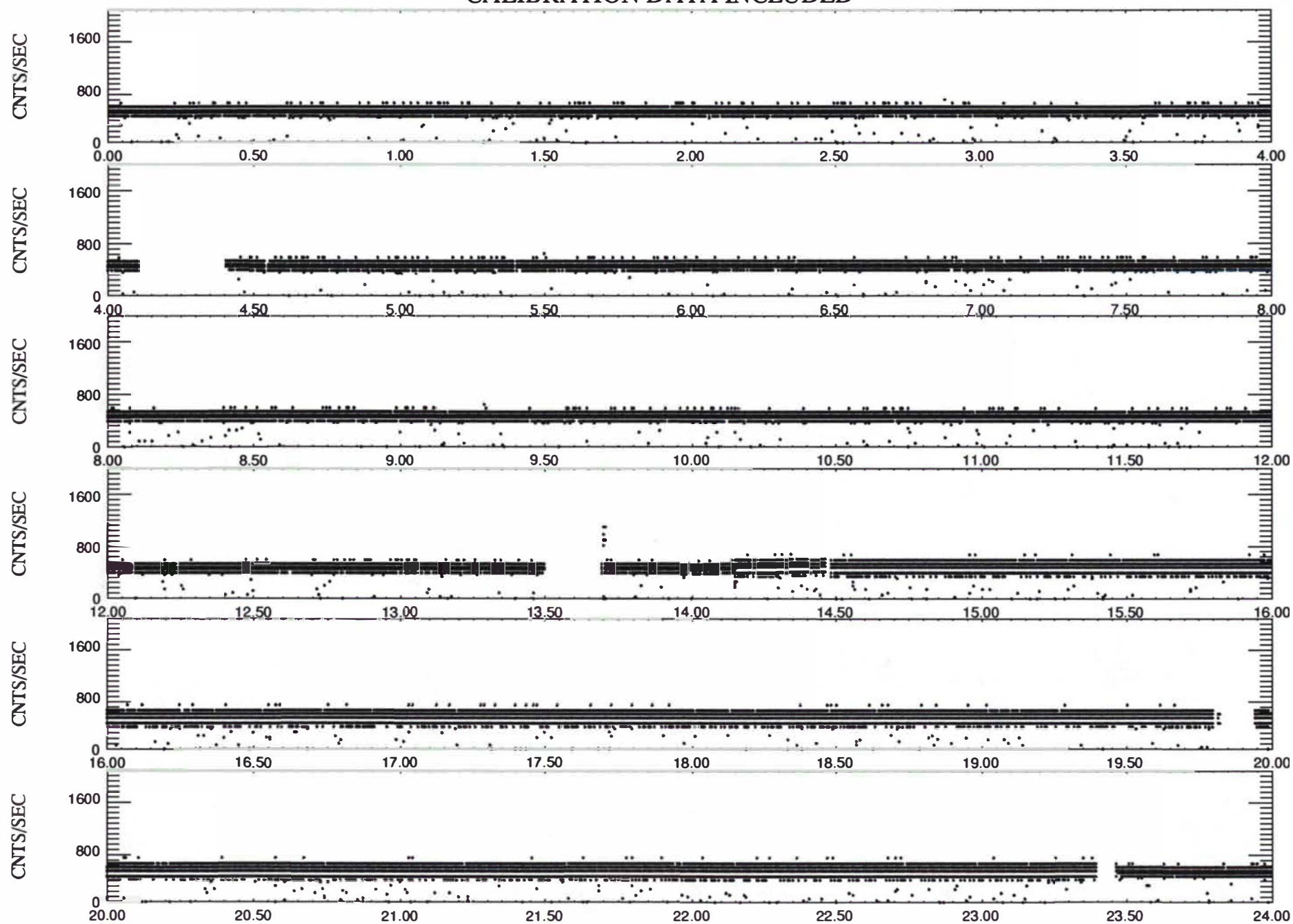
HUS MODES EDR day 312, year 1995 to day 312, year 1995 NO BURST (8)

4/1/96

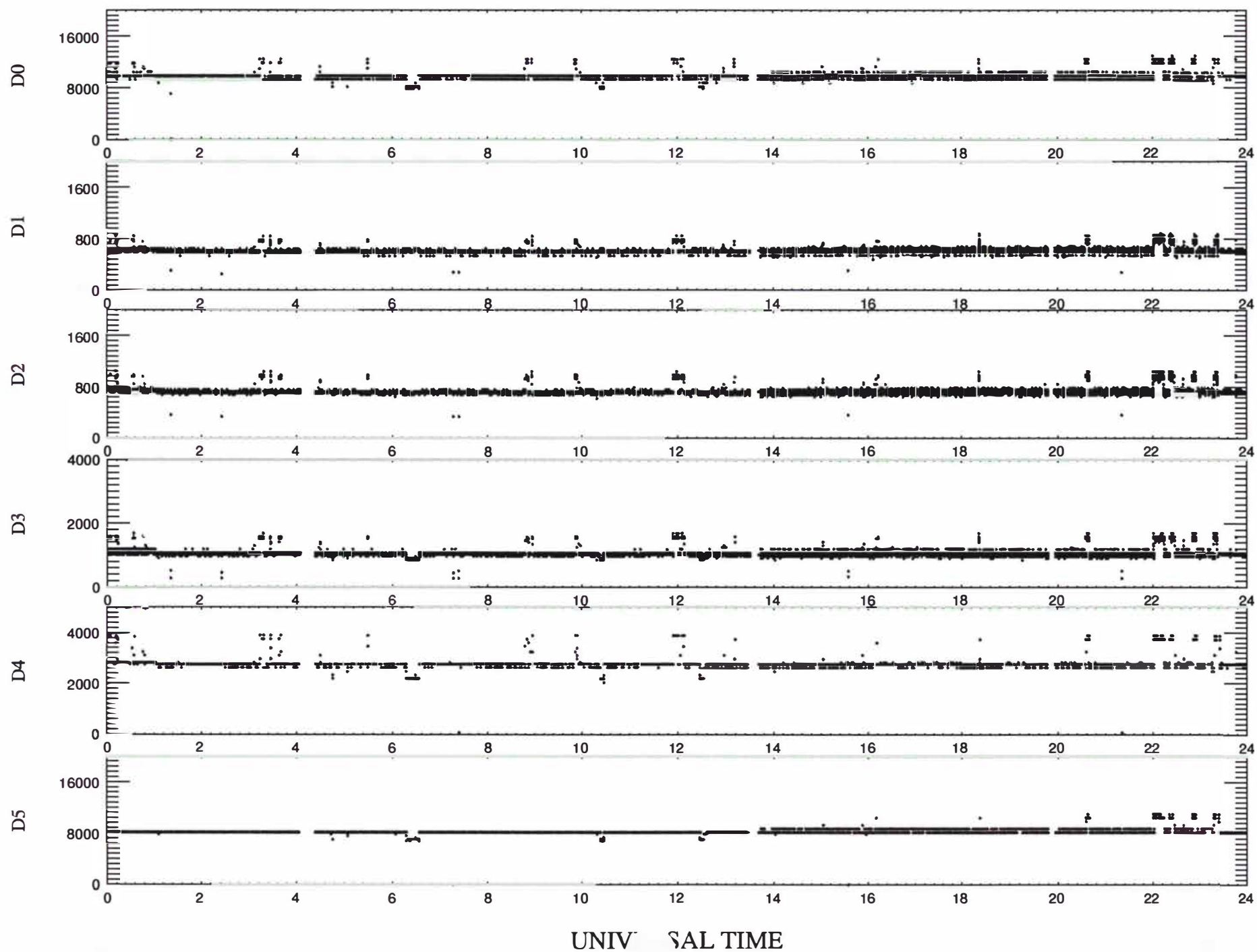


HUS 2A, MODE 1, NOT AVERAGED EDR day 312, year 1995 to day 312, year 1995
CALIBRATION DATA INCLUDED

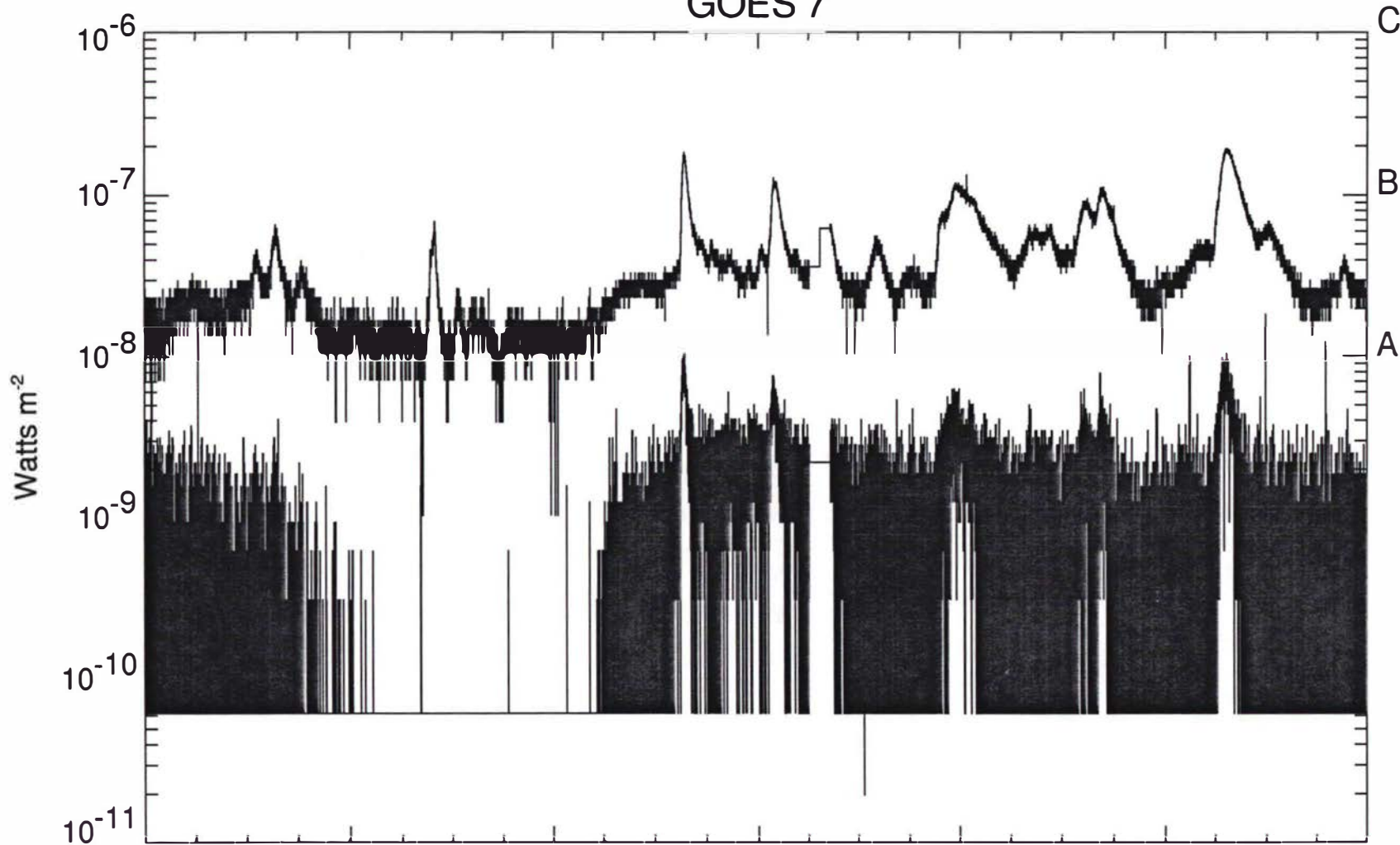
4/1/96



UNIV SAL TIME



GOES 7

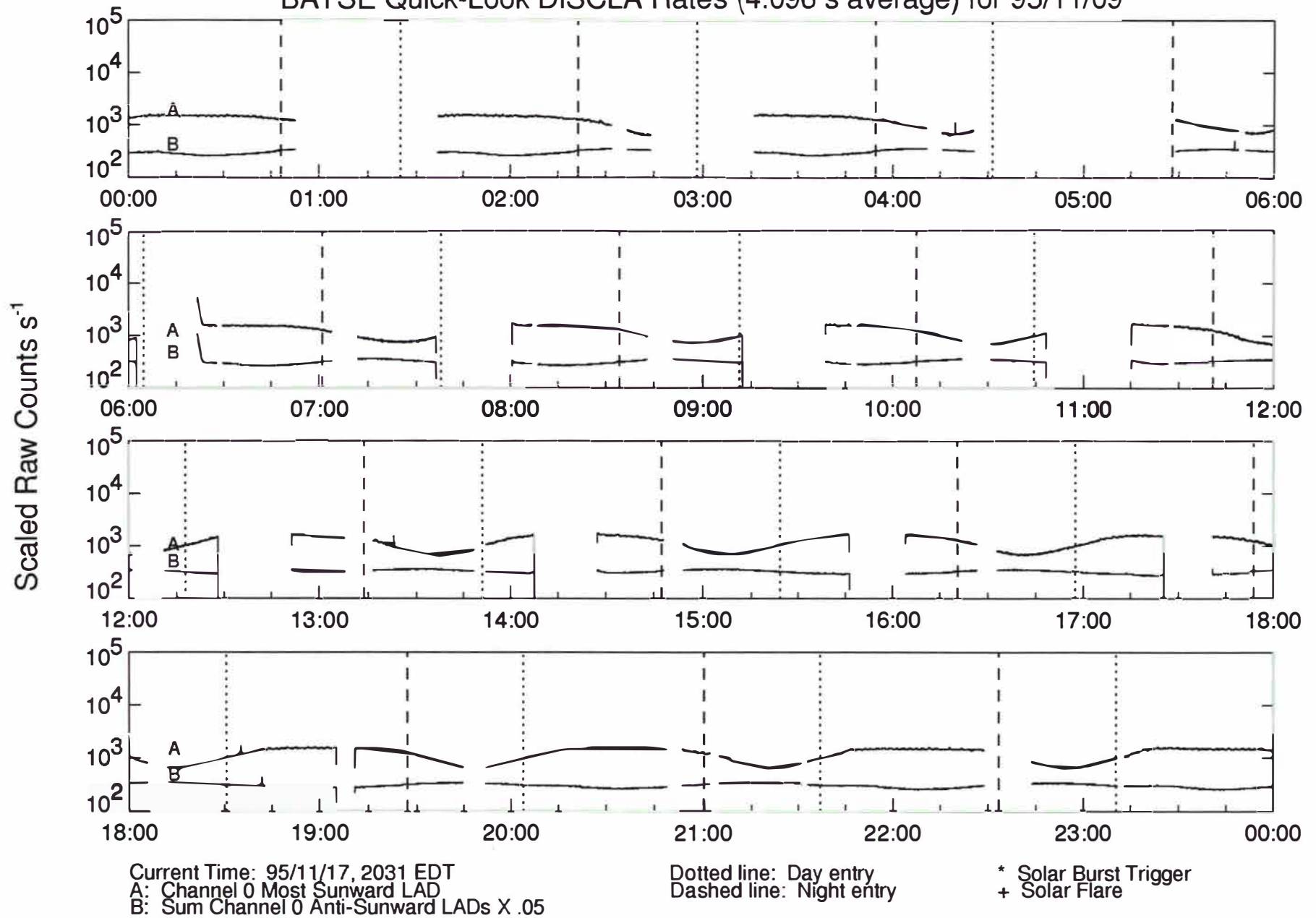


Data Start: 95/11/09, 0000:00

Plot created: 95/11/17, 2030

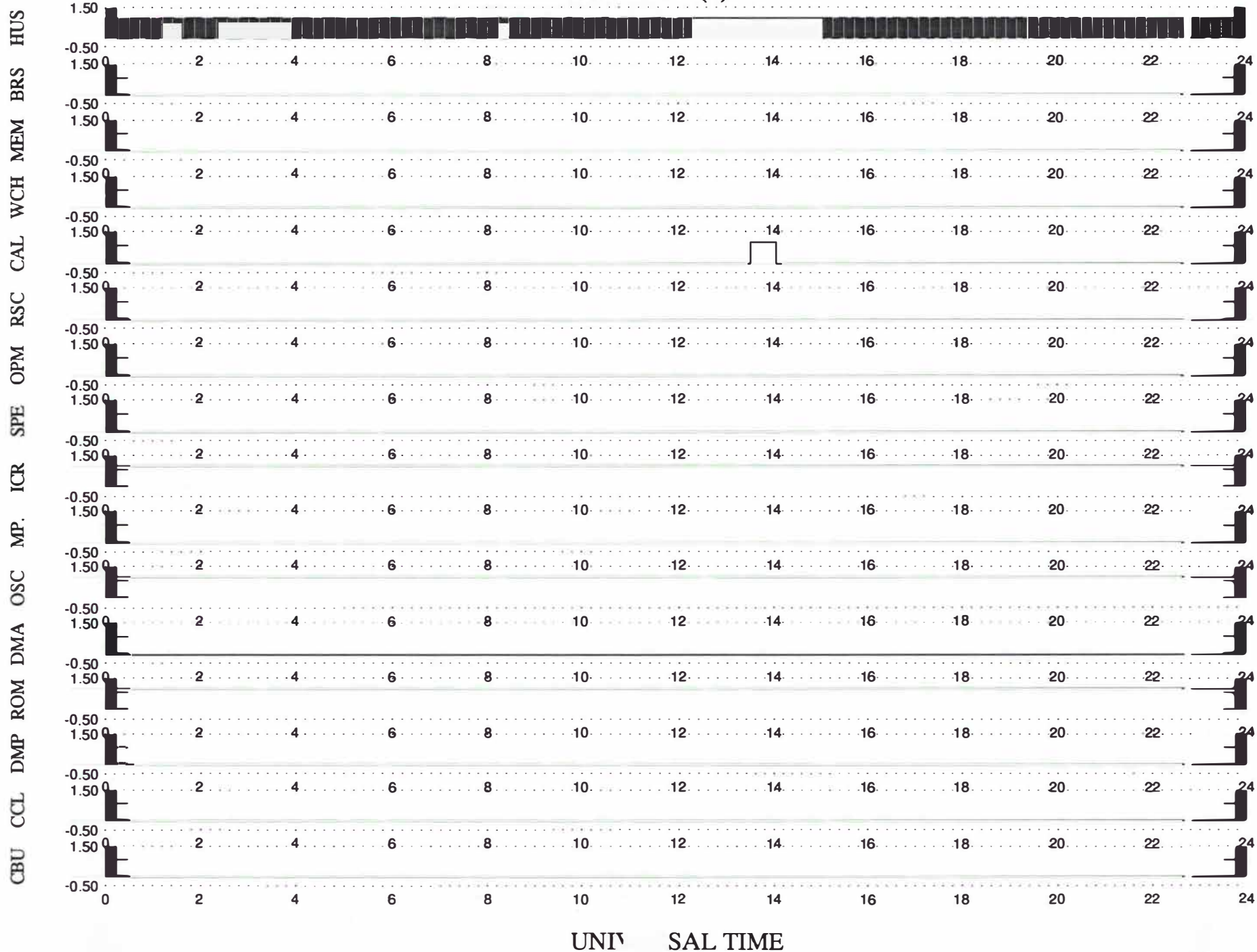
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
 Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/09



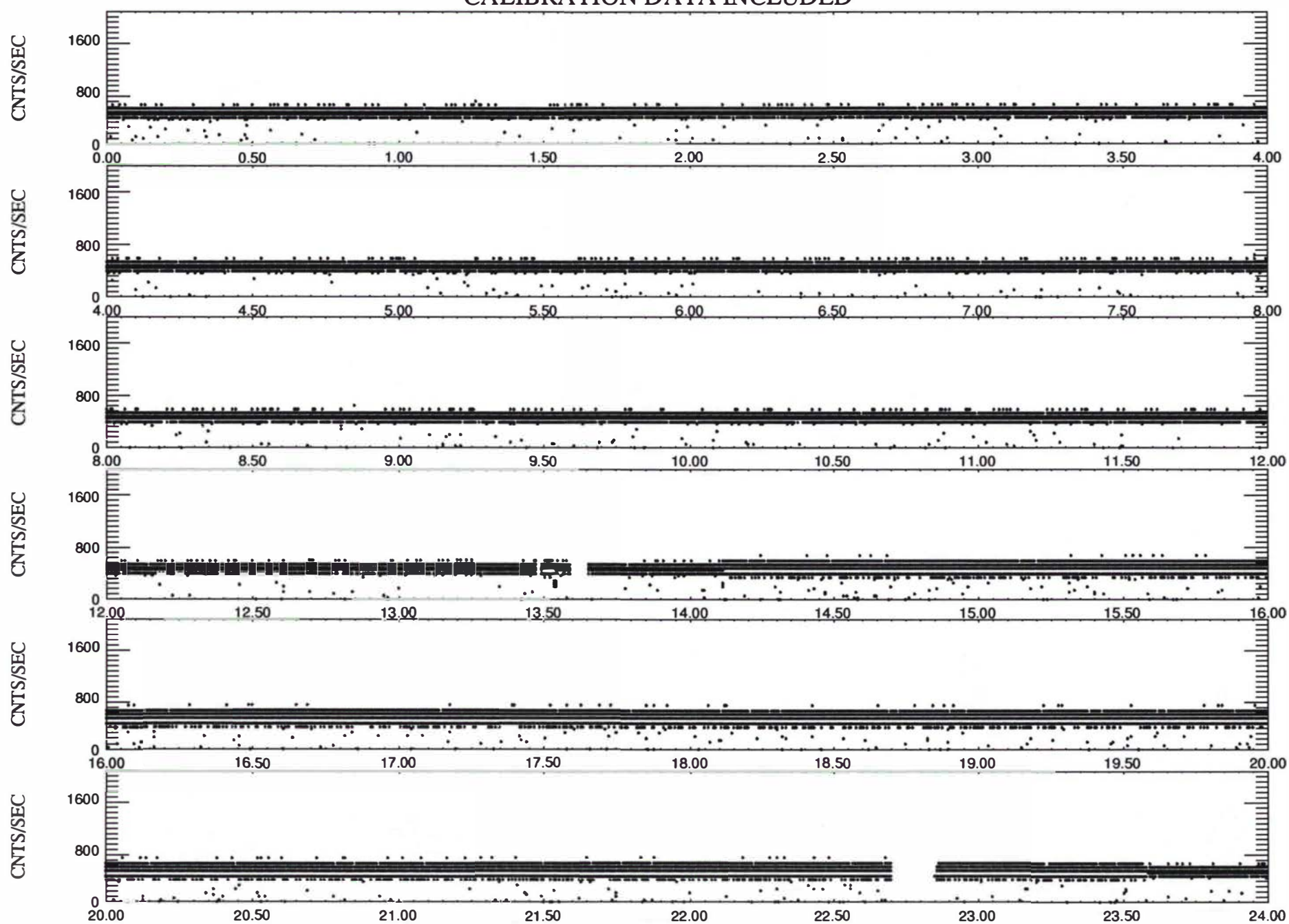
HUS MODES EDR day 313, year 1995 to day 313, year 1995
NO BURST (8)

4/1/96

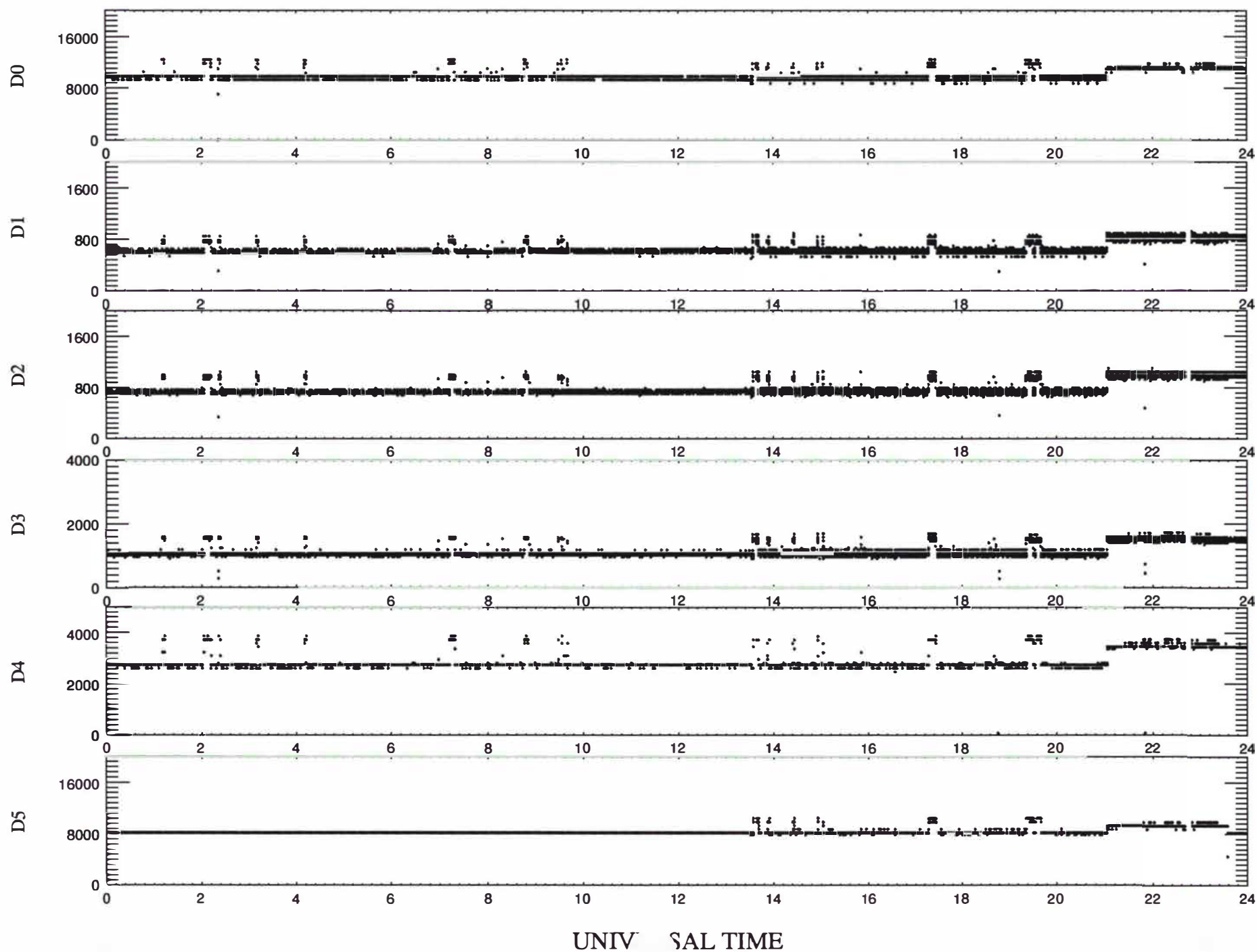


HUS 2A, MODE 1, NOT AVERAGED EDR day 313, year 1995 to day 313, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIVERSAL TIME



From HENZE@ssl.msfc.nasa.gov Mon Nov 13 12:58 PST 1995
Date: Mon, 13 Nov 1995 14:58:44 -0600 (CST)
From: HENZE@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3902

BATSEARCH PROGRAM

*Prob. not -
should be redone*

BATSE BURST # 3902
EVENT OF 1995 NOV 10 DAY OF YEAR=314
EVENT CROSSING TIME AT BATSE : 83386. S. OR 23:09:46.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 18.000 -16.000
BATSE PEAK COUNTING RATE: 40000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 10/11/ 95 IS:
RA= 215.309 DEC= 55.199 DIST= 2.853 AU
BATSE-ULYSSES DISTANCE = 426832829. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 41.40 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1067.98 SECS.
CROSSING TIME AT ULYSSES IS 84454. S. OR 23:27:33 +/- 229.69 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 10/11/ 95 IS:
RA= 253.207 DEC= -23.366 DIST= 2.253 AU
MARS-BATSE DISTANCE = 337041568. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 66.78 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 443.19 SECS.
CROSSING TIME AT MARS IS 83829. S. OR 23:17:09 +/- 186.11 SECONDS

BATSE BURST TRIGGER

NO.: 03902

TIME: TJD=0031 SECONDS=83386

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=085.5 AZIMUTH=163.6 ERROR=002.3 DEGREES

COMMENTS:

SINGLE SPIKE, DUR. ~150 MILLISECONDS. STRONGLY VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	ScD	Max ct/s	RA	Dec	Dur (s)
3902	951110	10031	83386	40000	018	-16	.15

13 / 11 / 95

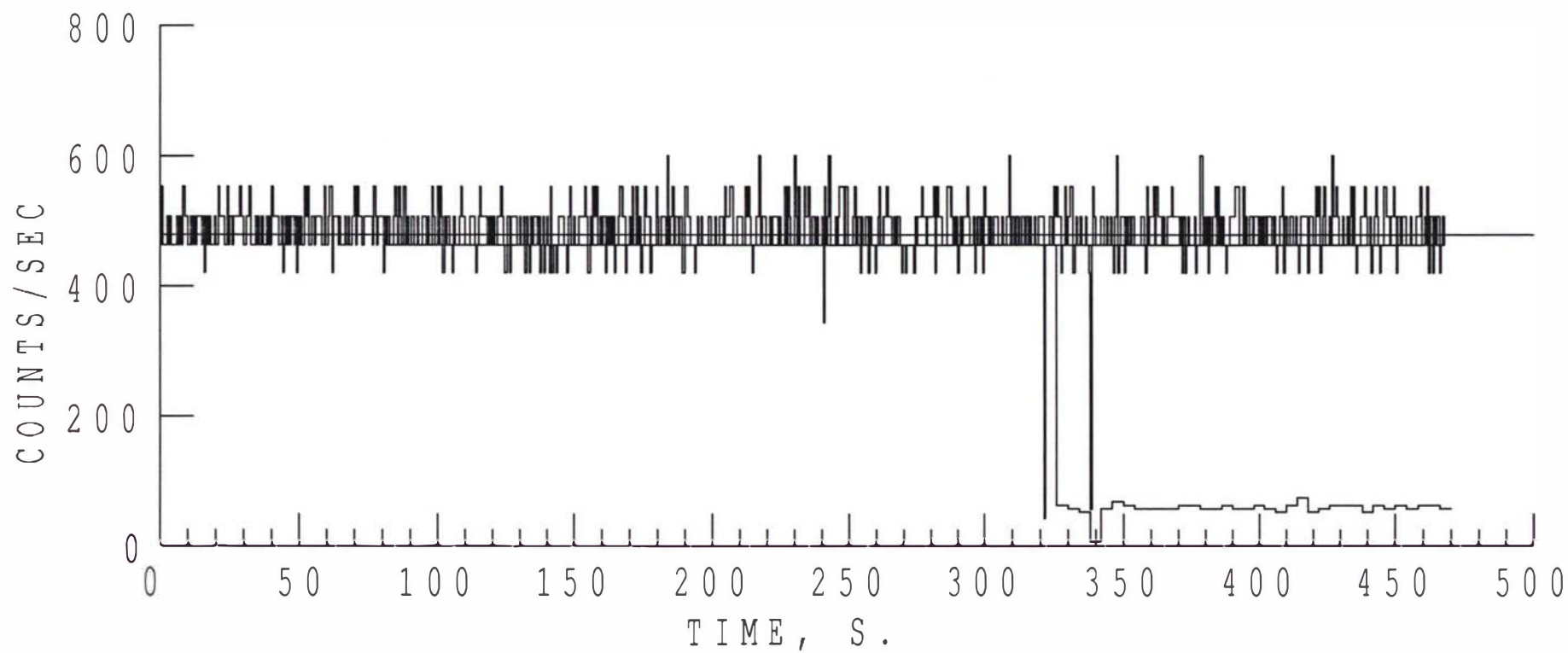
ULYSSES RT

10 / 11 / 95 84276.297 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



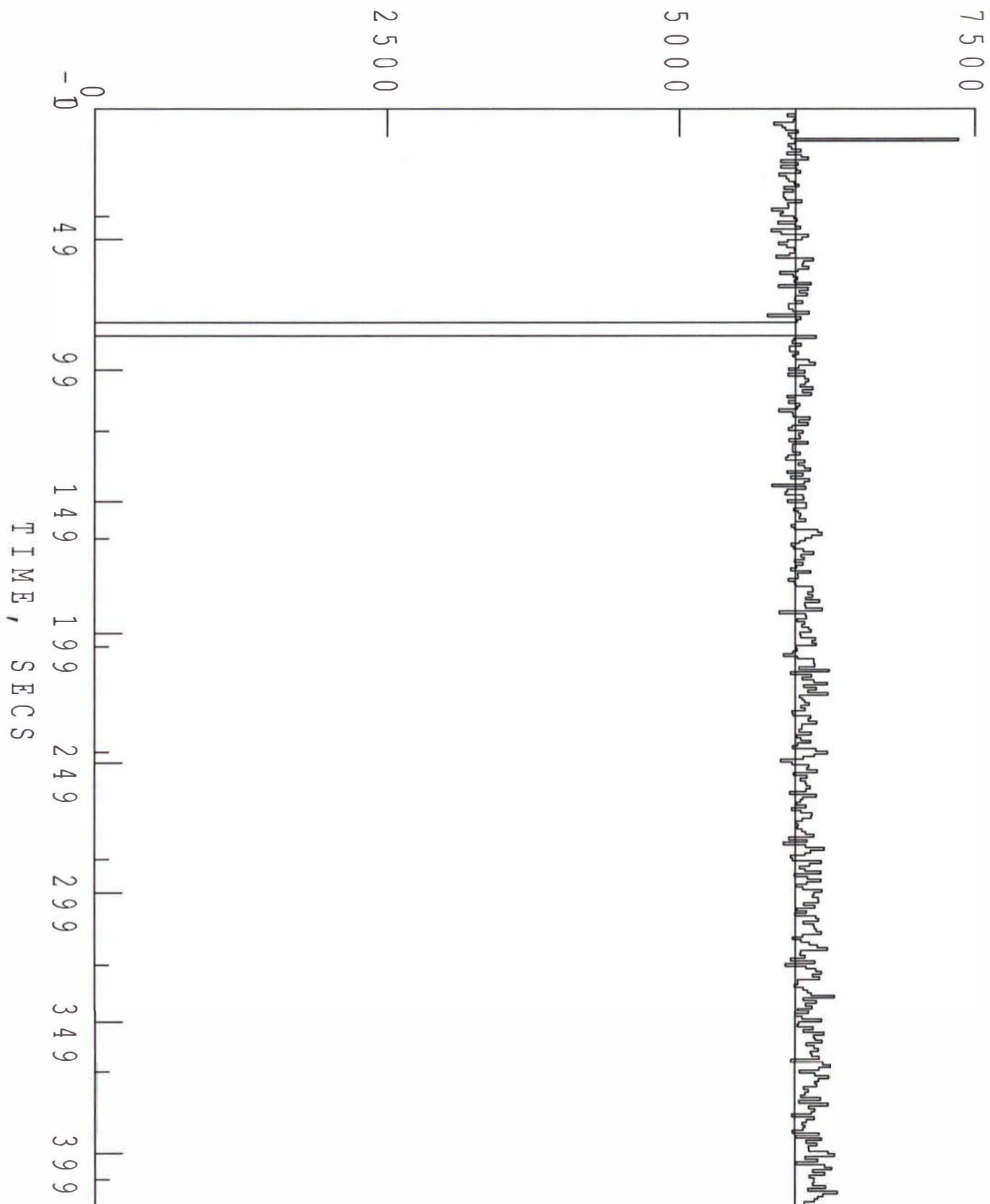
BACODINE

10/11/95

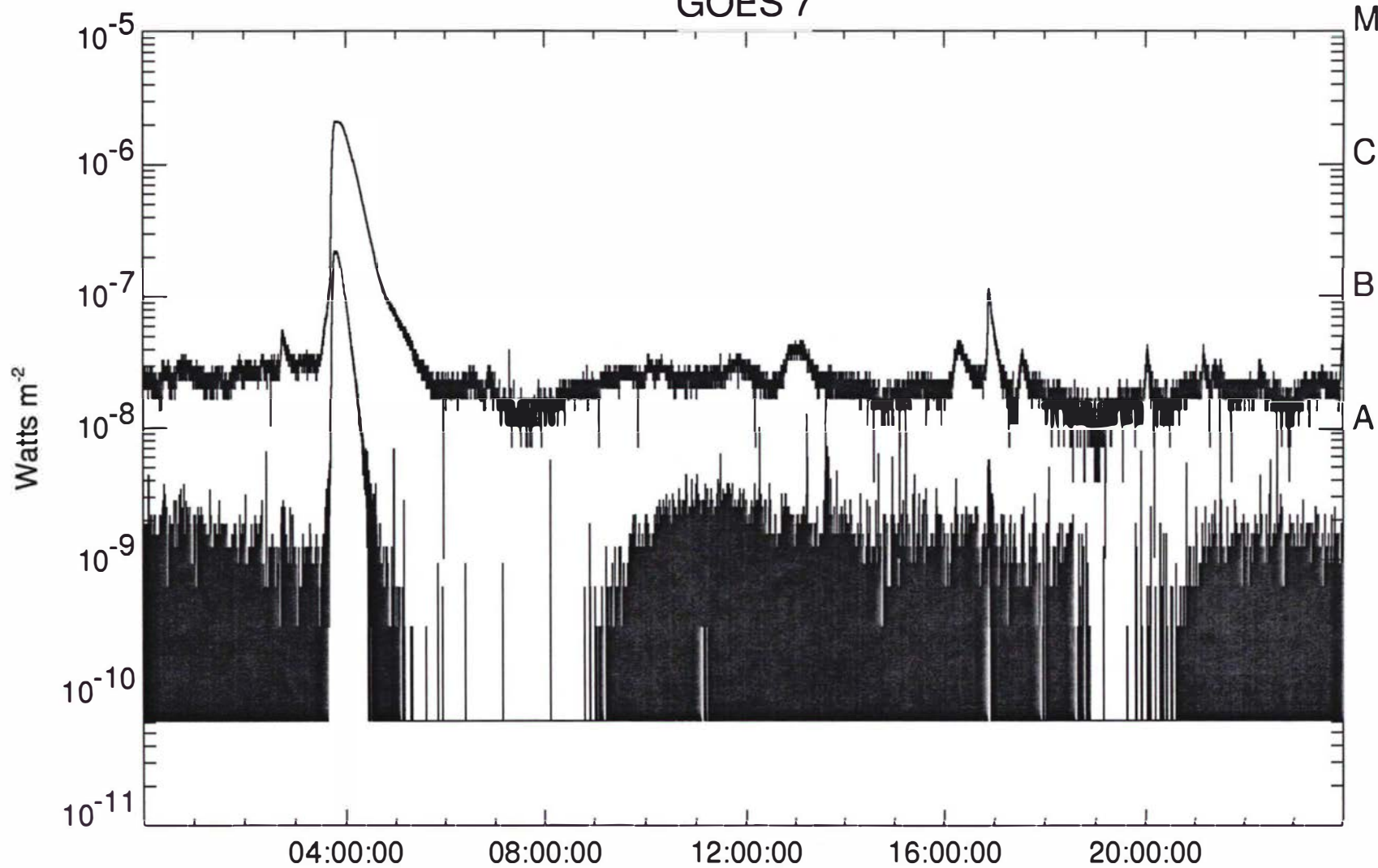
83375.793

25 - 100 keV

COUNTS/1.024 S

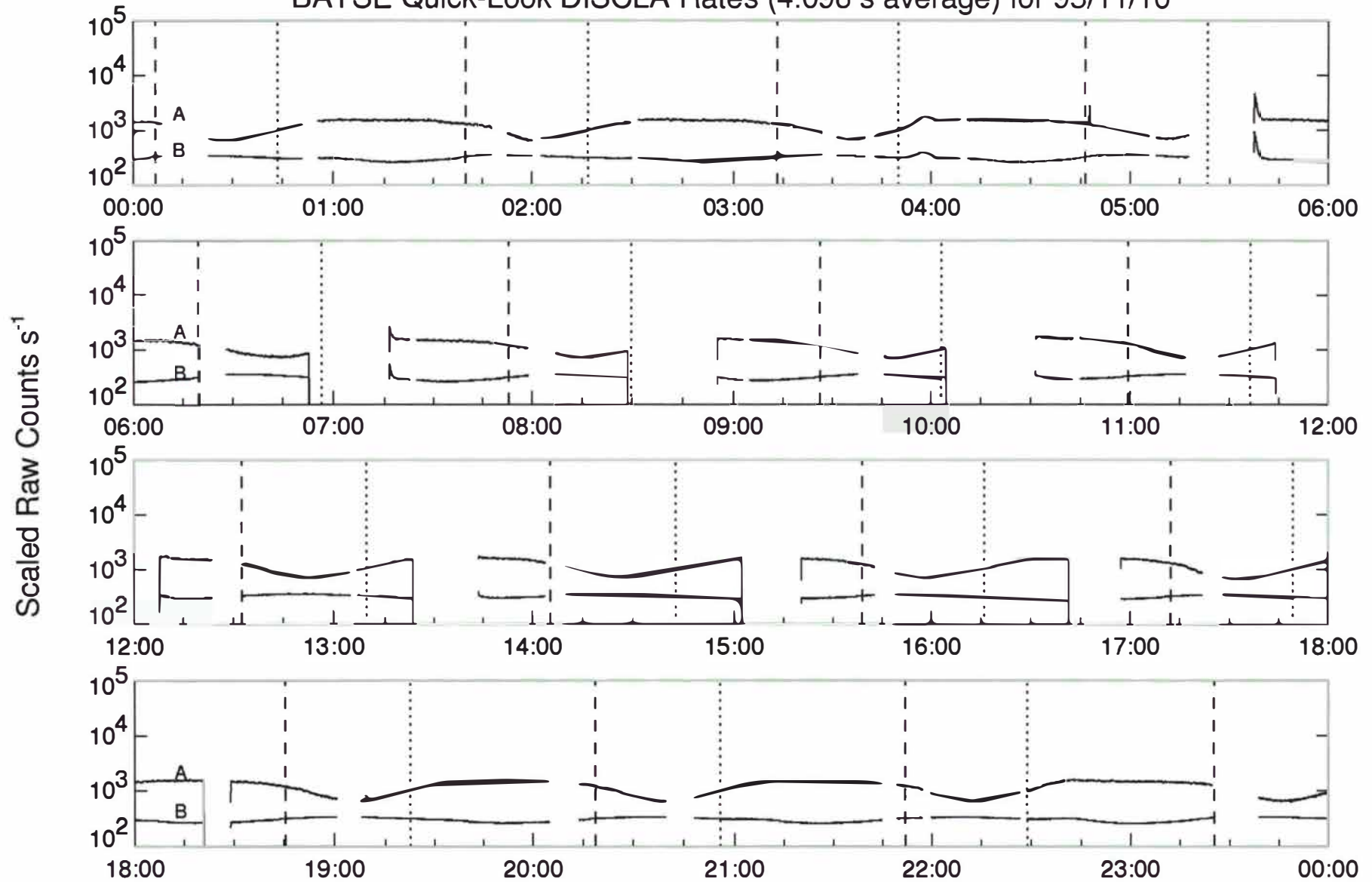


GOES 7



Data Start: 95/11/10, 0000:01 Plot created: 95/11/17, 2038
 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 95/11/10



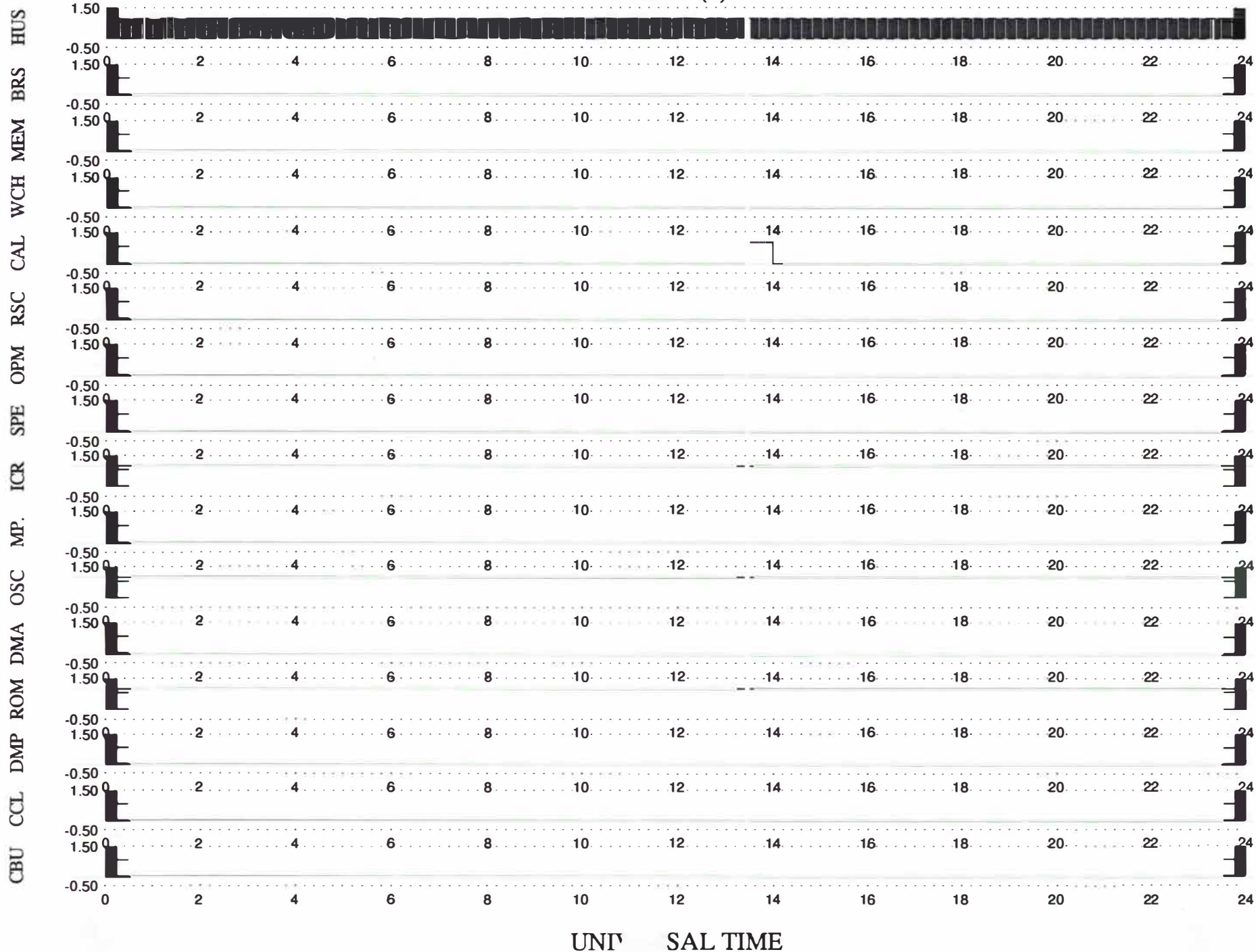
Current Time: 95/11/17, 2039 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

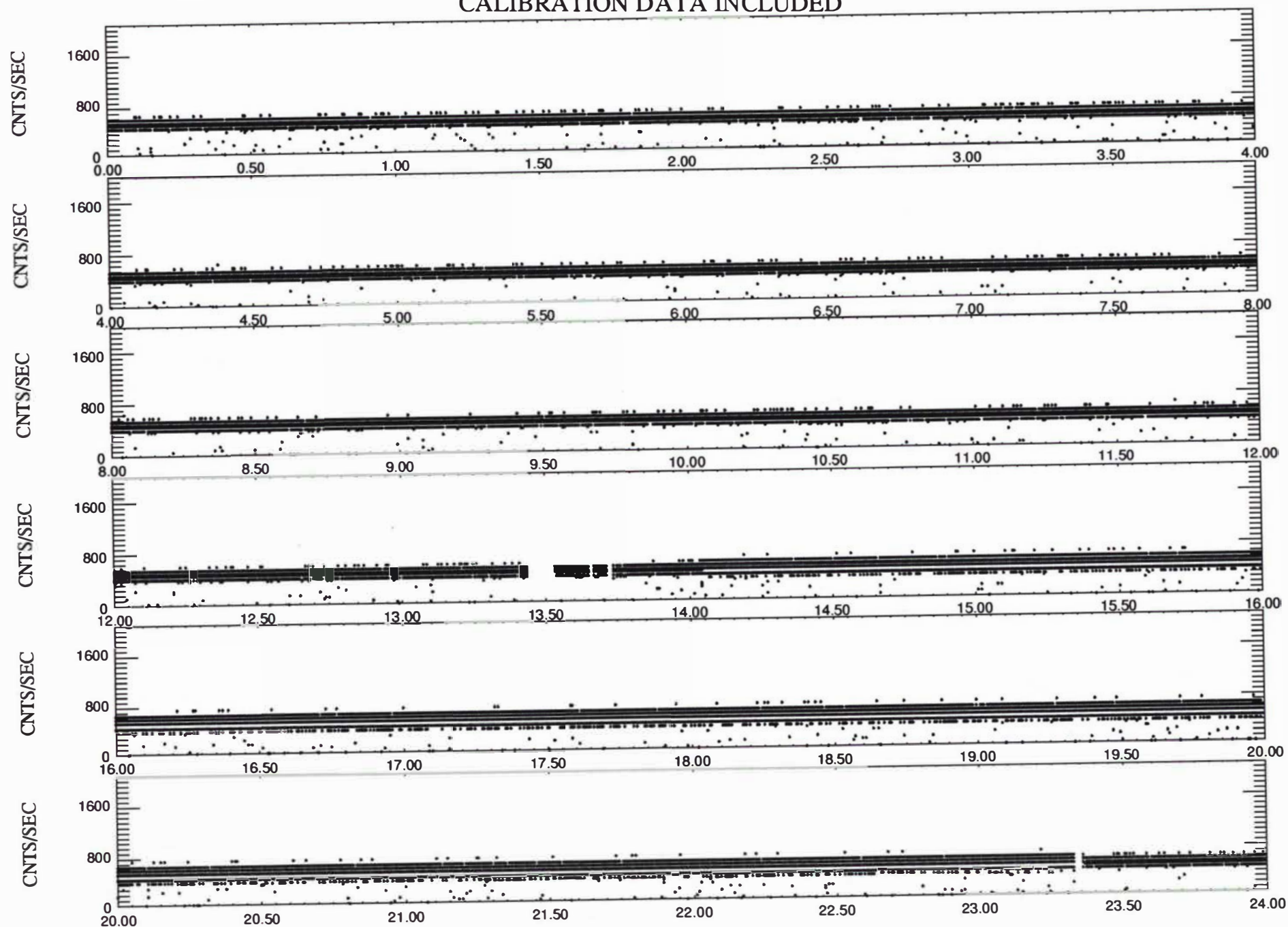
HUS MODES EDR day 314, year 1995 to day 314, year 1995
NO BURST (8)

4/1/96

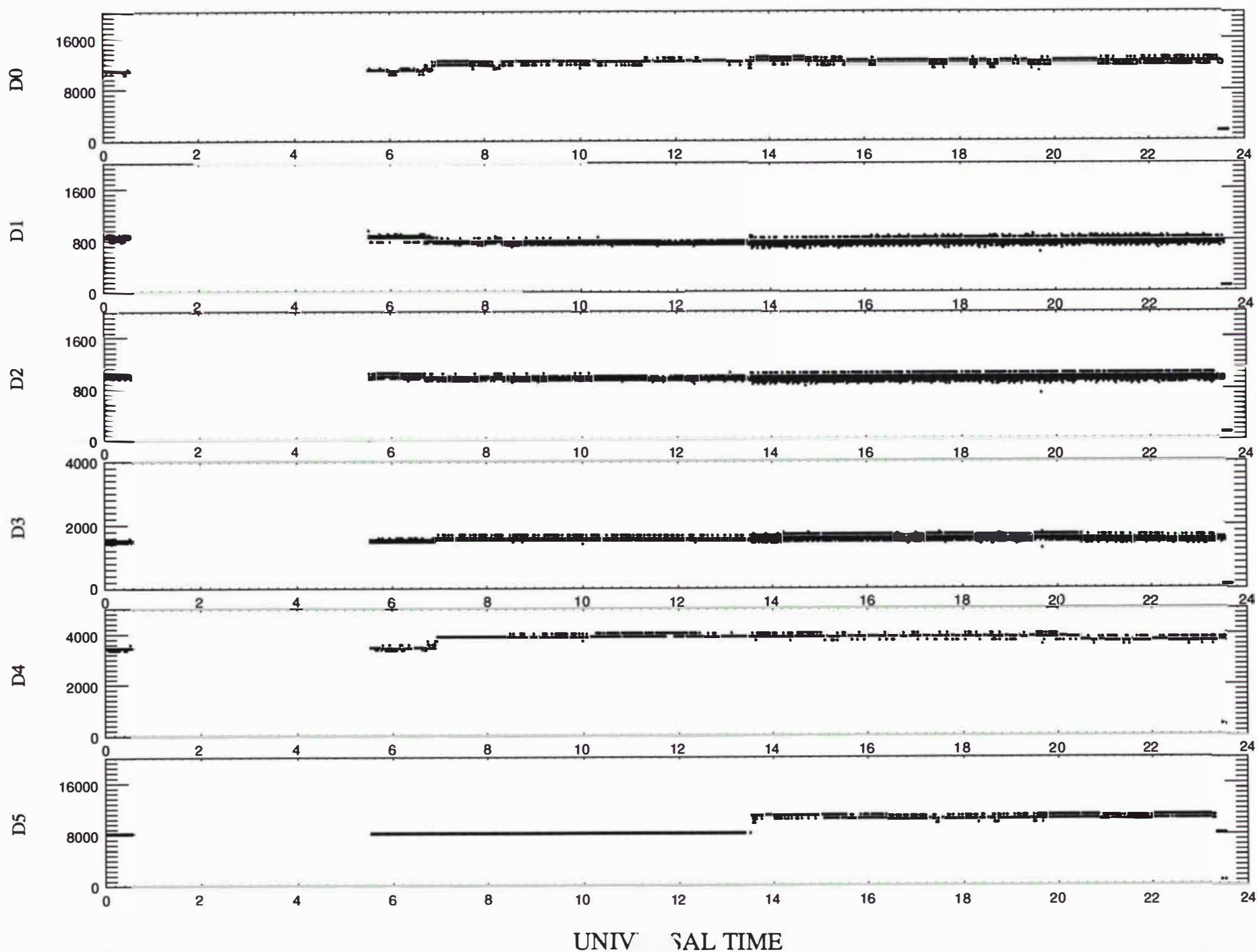


HUS 2A, MODE 1, NOT AVERAGED EDR day 314, year 1995 to day 314, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNITS SAL TIME



KONUS

ULYSSES RT

27/01/00

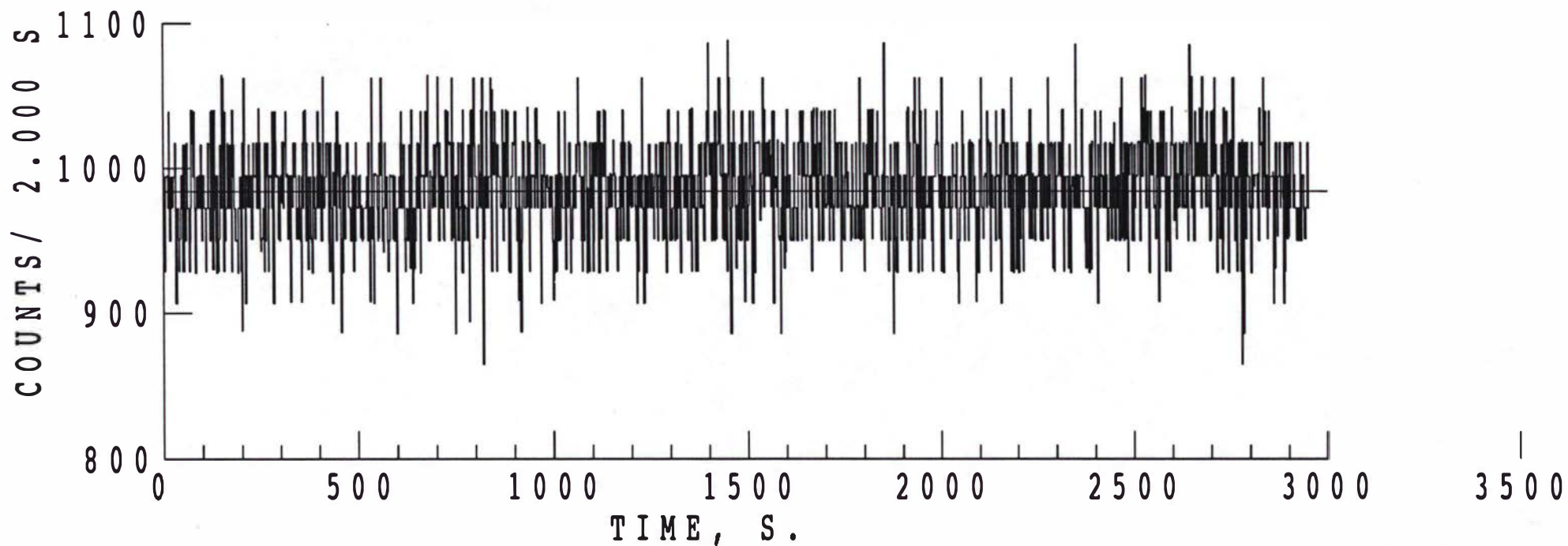
05/11/95 4392.208 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From HENZE@ssl.msfc.nasa.gov Wed Nov 15 08:35 PST 1995
Date: Wed, 15 Nov 1995 10:27:43 -0600 (CST)
From: HENZE@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3903

ND

BATSEARCH PROGRAM

BATSE BURST # 3903
EVENT OF 1995 NOV 11 DAY OF YEAR=315
EVENT CROSSING TIME AT BATSE : 77568. S. OR 21:32:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 31.000 69.000
BATSE PEAK COUNTING RATE: 4100 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/11/ 95 IS:
RA= 215.567 DEC= 55.175 DIST= 2.854 AU
BATSE-ULYSSES DISTANCE = 426983666. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=124.22 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -800.95 SECS.
CROSSING TIME AT ULYSSES IS 76767. S. OR 21:19:27 +/- 242.31 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/11/ 95 IS:
RA= 254.004 DEC= -23.456 DIST= 2.255 AU
MARS-BATSE DISTANCE = 337353152. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 52.26 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 688.71 SECS.
CROSSING TIME AT MARS IS 78257. S. OR 21:44:16 +/- 164.96 SECONDS

BATSE BURST TRIGGER

NO.: 03903

TIME: TJD=0032 SECONDS=77568

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=018.4 AZIMUTH=255.9 ERROR=005.7 DEGREES

COMMENTS:

MULTI-PEAKED, TOTAL DUR. ~40 S. NOT VISIBLE ABOVE 300 KEV.
DIFFICULTIES WITH LOCATION.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3903	951111	10032	77568	4100	031	+69	40

BATSE BURST# 3903

16 / 5 / 96

ULYSSES RT

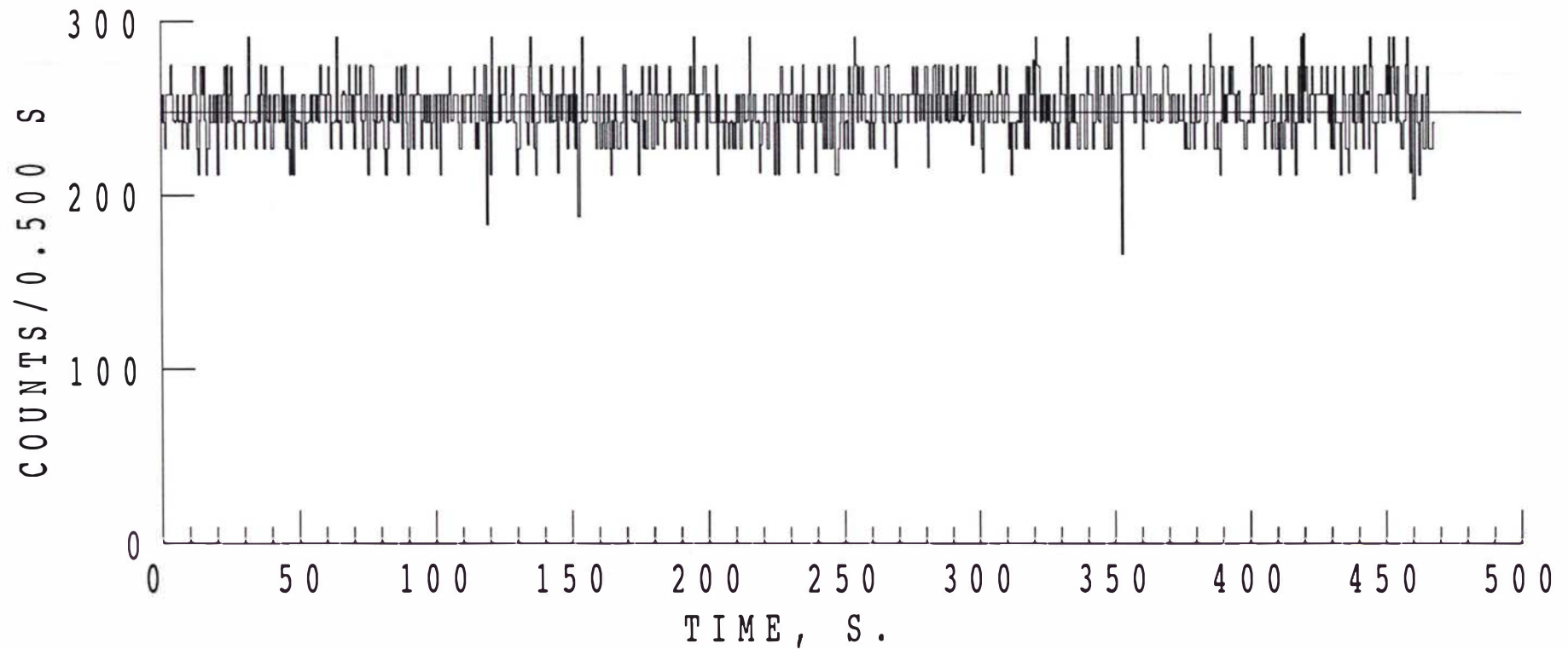
11/11/95 76536.039 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



Date: Mar 21 01

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

- ☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

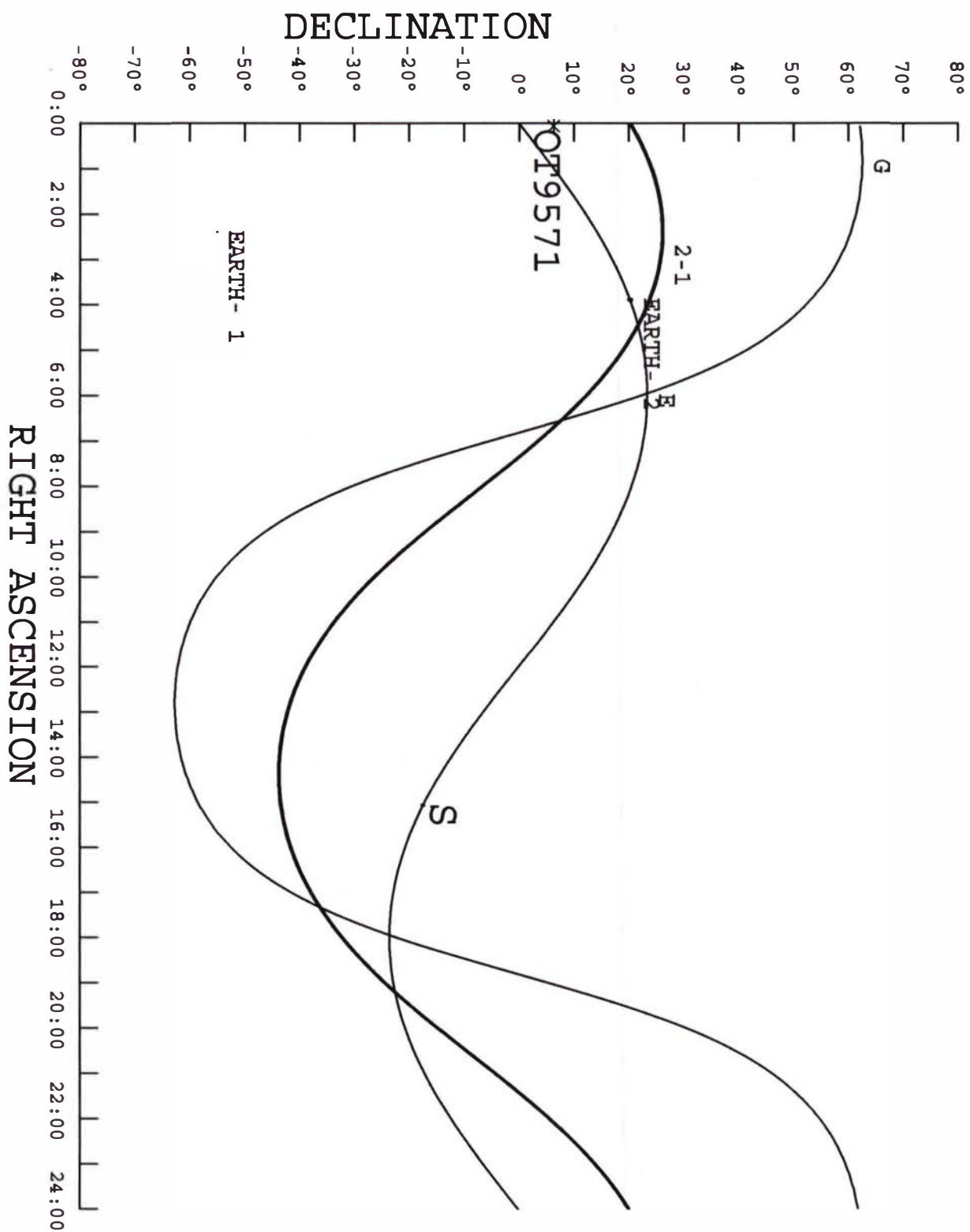
G=GALACTIC EQUATOR

1 ULYSSES

2 KONUS

EVENT OF NOV 11, 1995 9:45

21/ 3/ 1



KONUS

11/11/95 34782.203

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

4400

DETECTOR 2 - N. ECLIPIC

19/03/01

3400

2400

1400

400

100

200

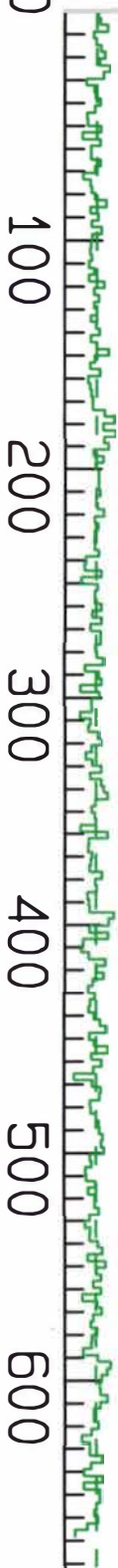
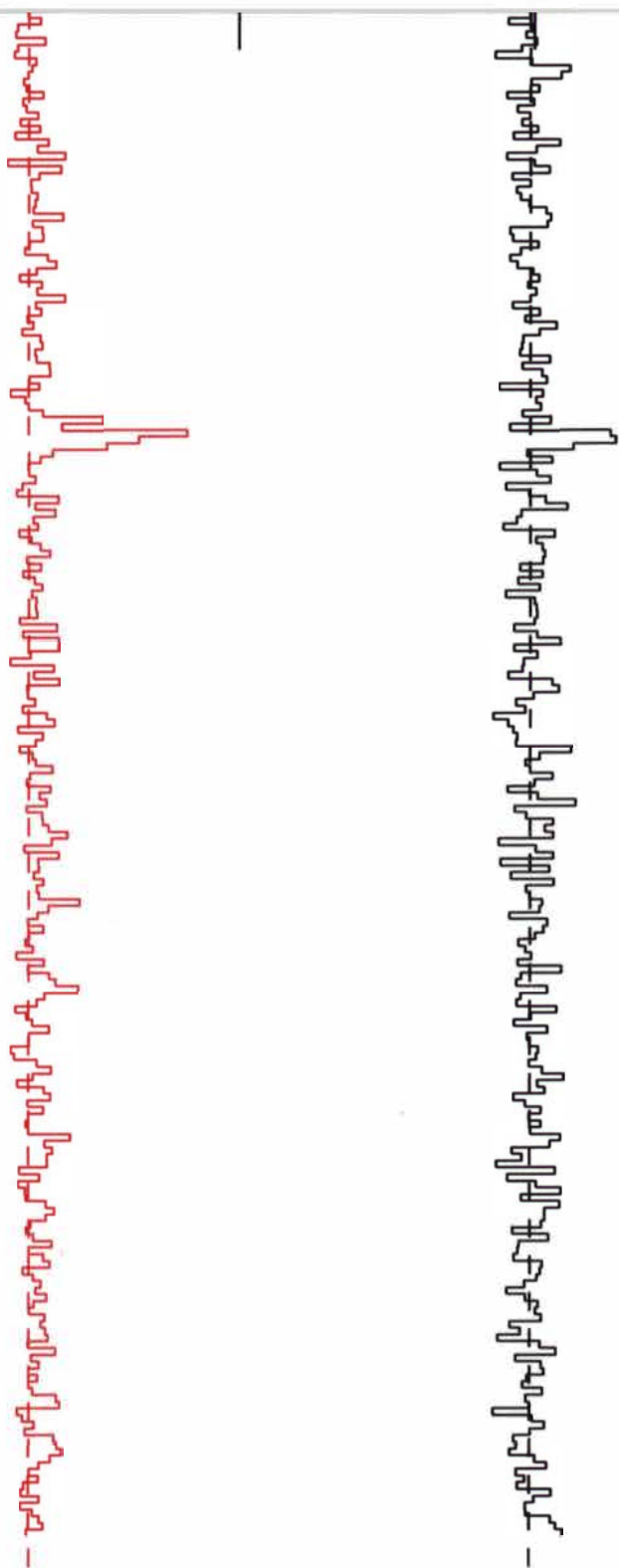
300

400

500

600

TIME, SECS



KONUS

11/11/95 34782.203

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

3600

2600

1600

600

DETECTOR 1 - S. ECLIPSE

TIME, SECS

100

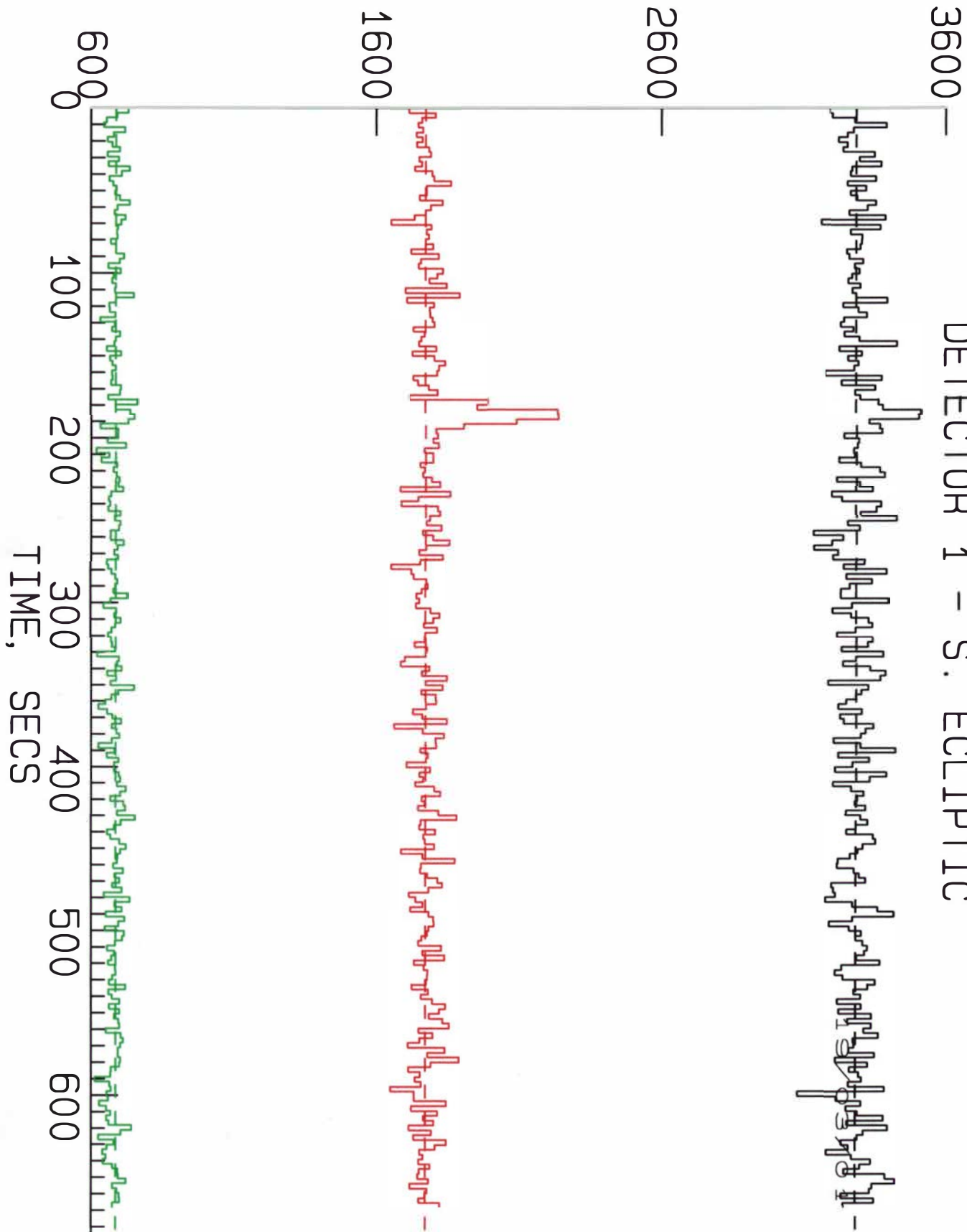
200

300

400

500

600



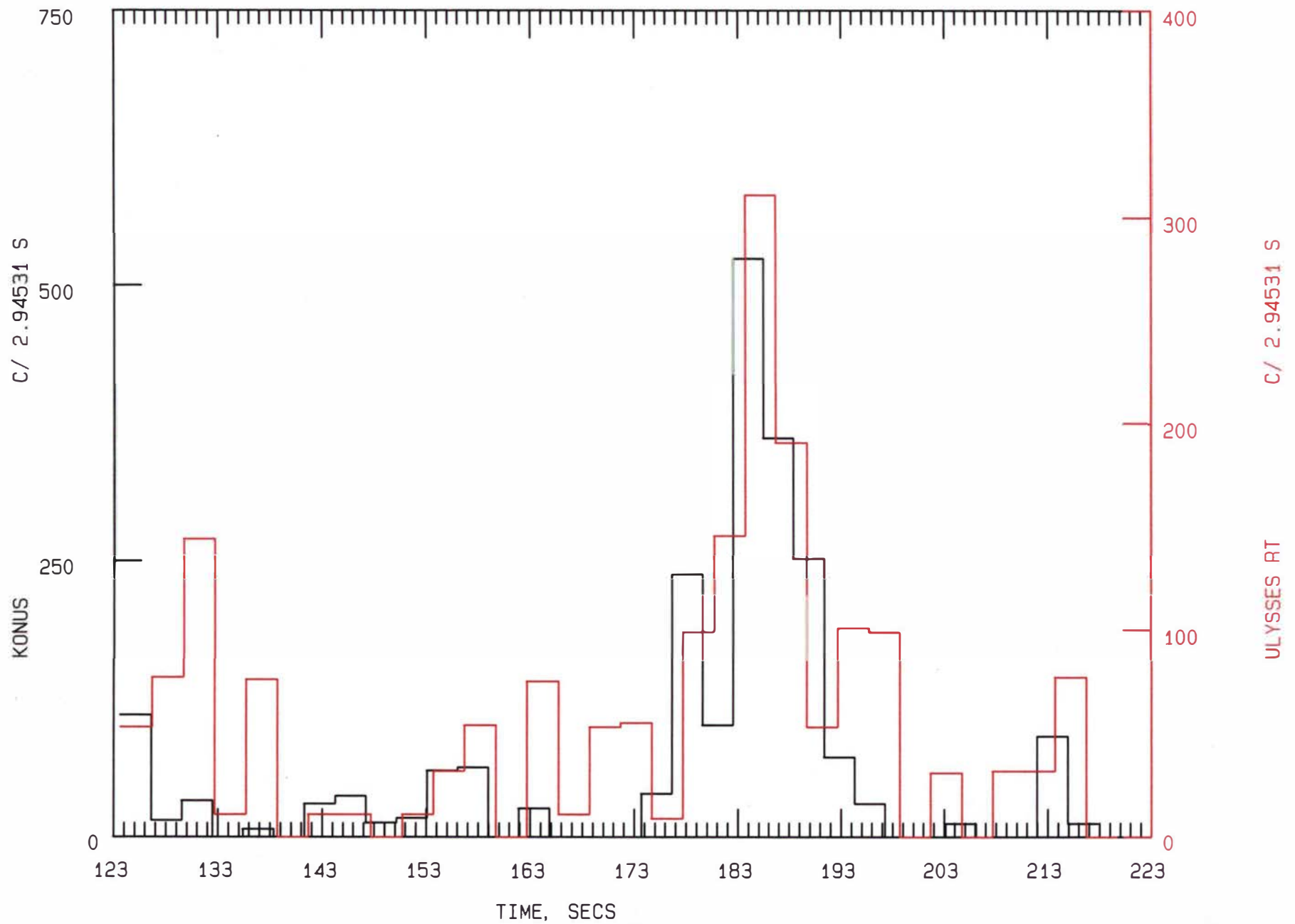
KONUS

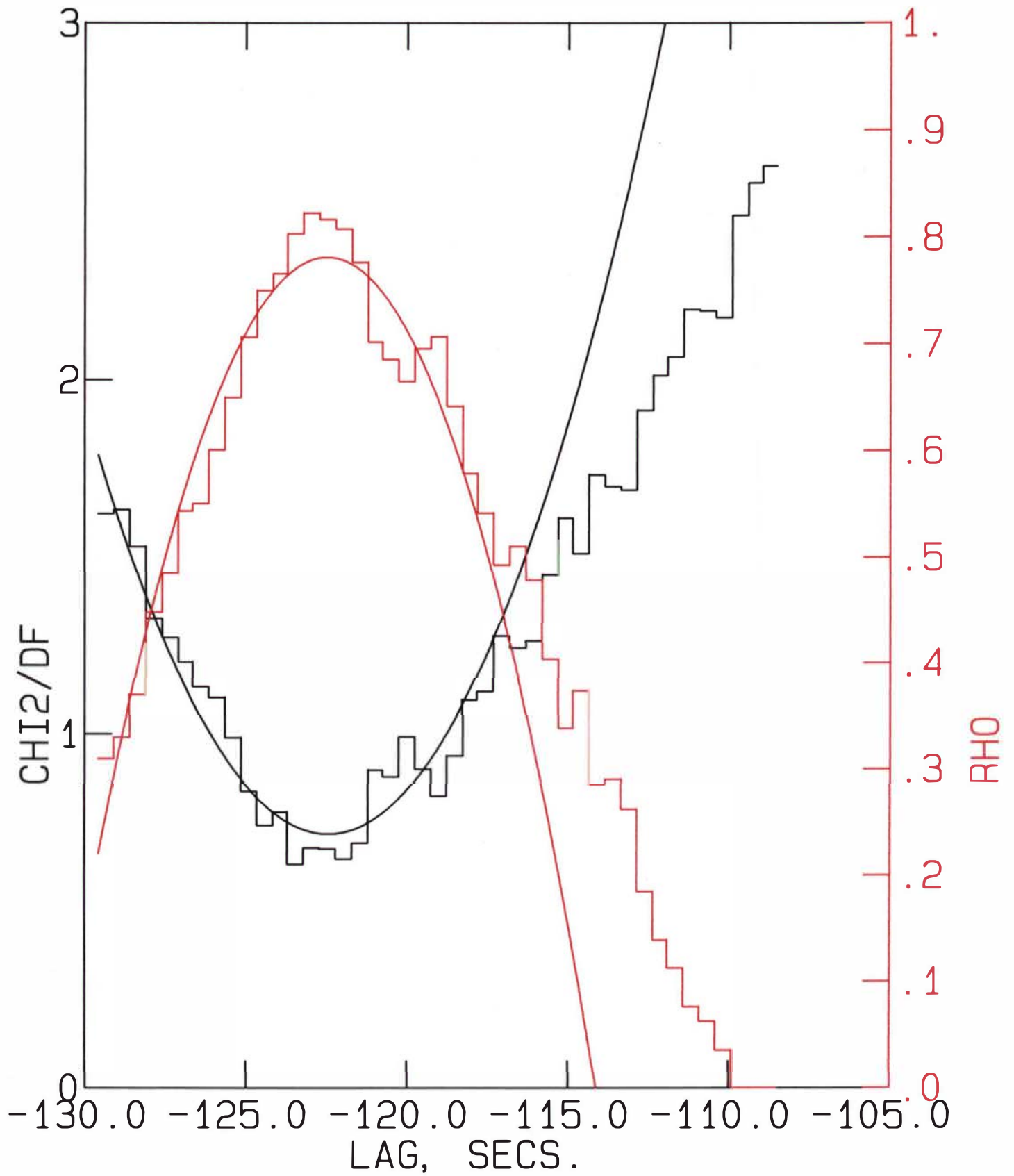
-ULYSSES RT CORRELATION

11/11/95

34782.203

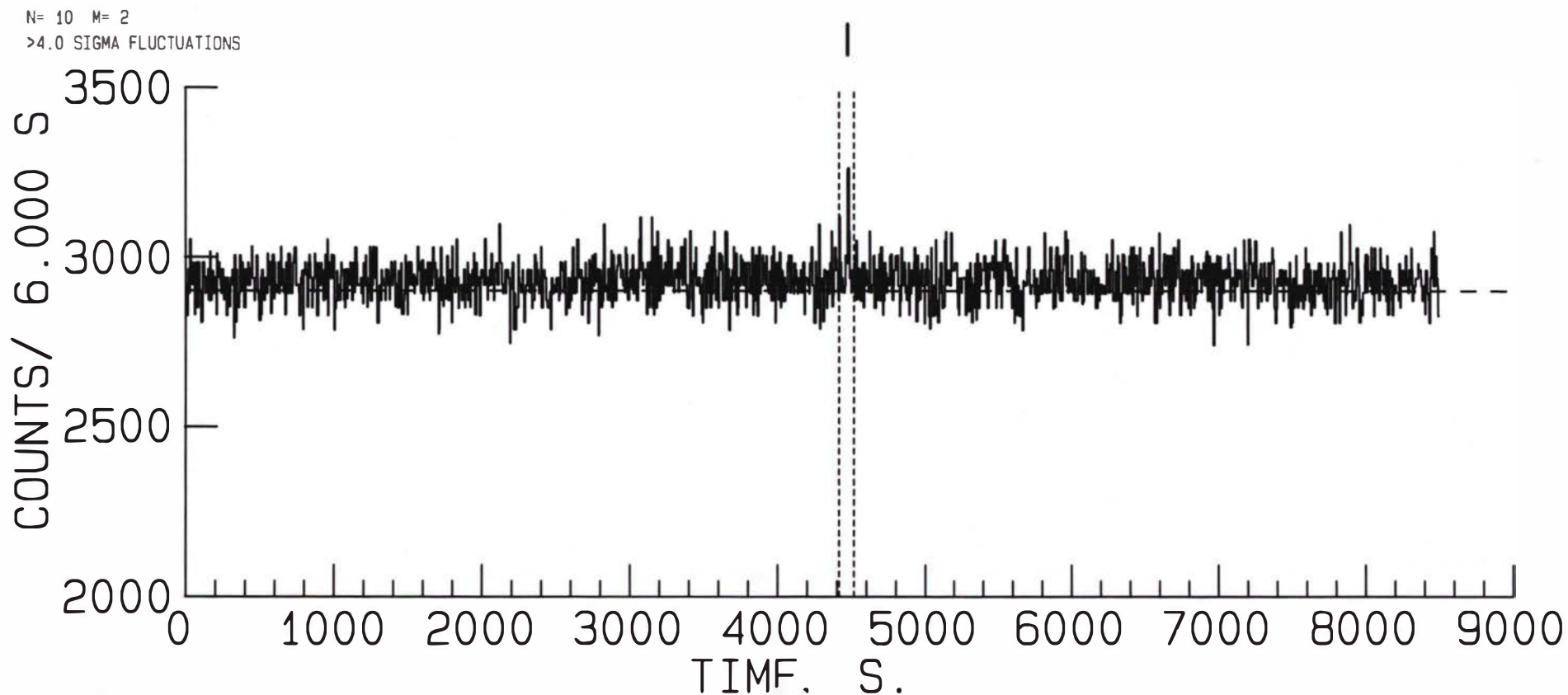
19/ 3/ 1

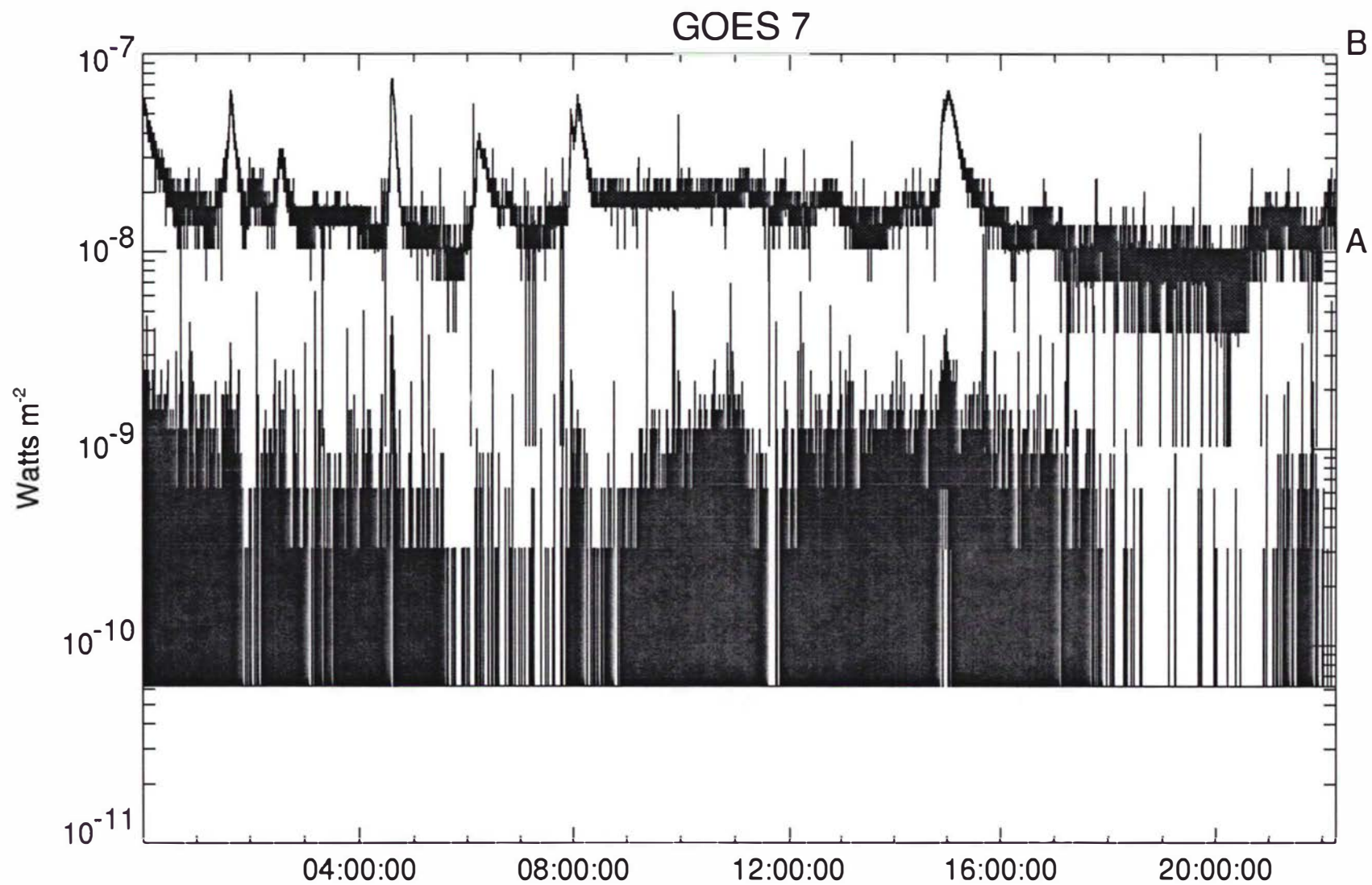




ULYSSES RT
11/11/95 30708.319 s
0.500 S INTERVALS REGROUPED BY 12
21- 144 keV

19 / 3 / 1





Data Start: 95/11/11, 0000:02

Plot created: 95/11/20, 1818

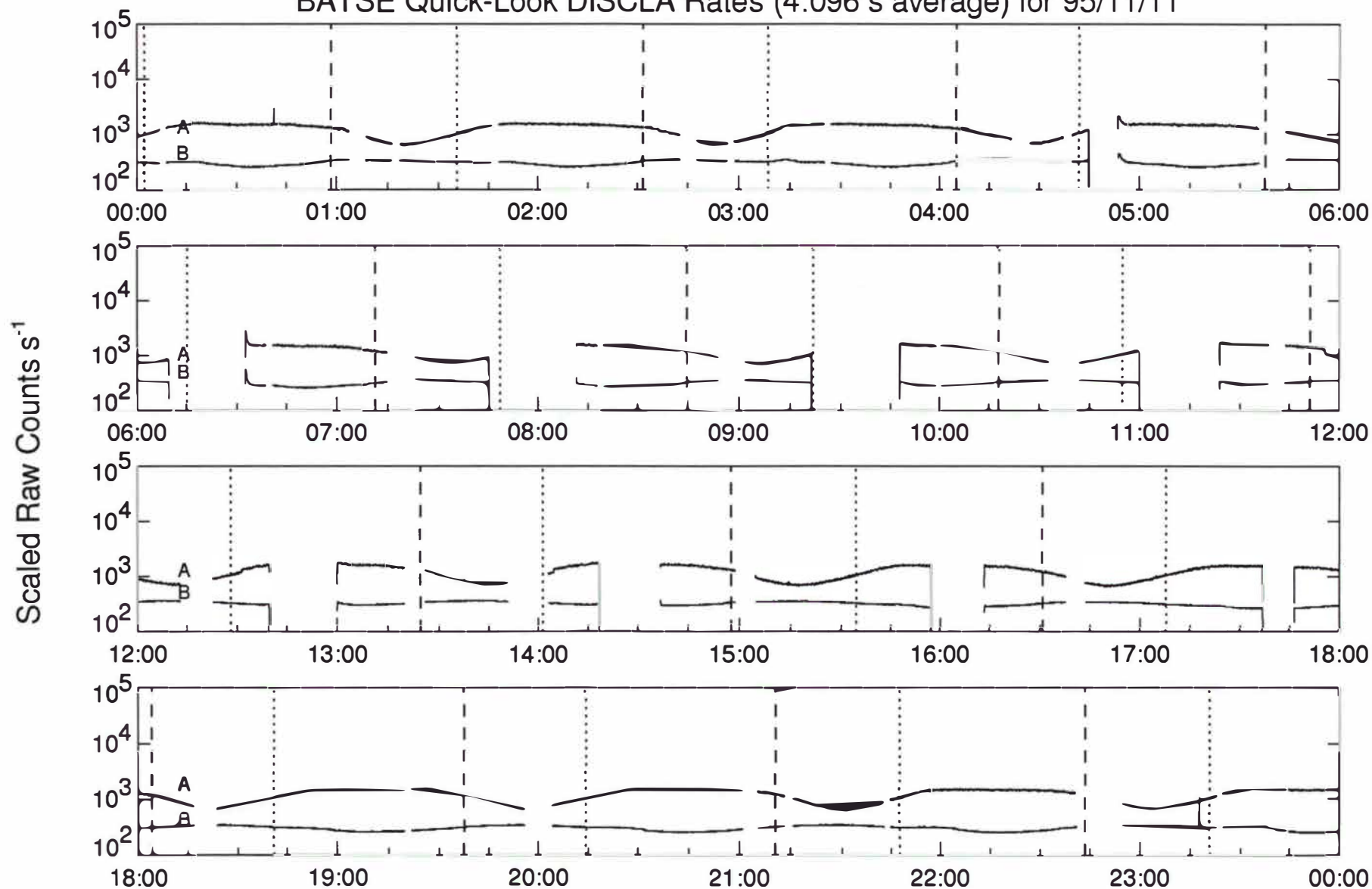
Channel 1 (1.0 - 8.0 Angstroms)

Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/11



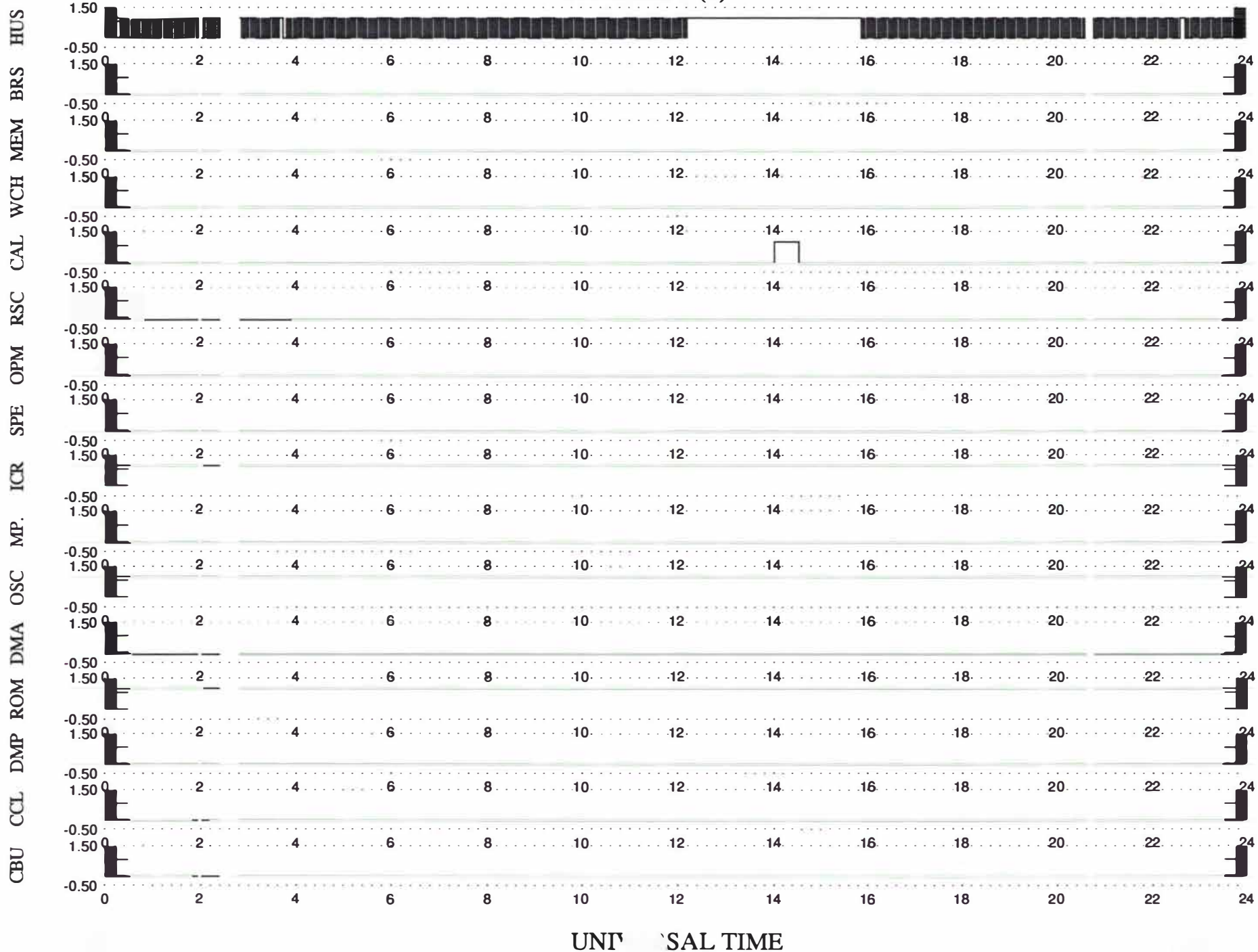
Current Time: 95/11/20, 1819 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

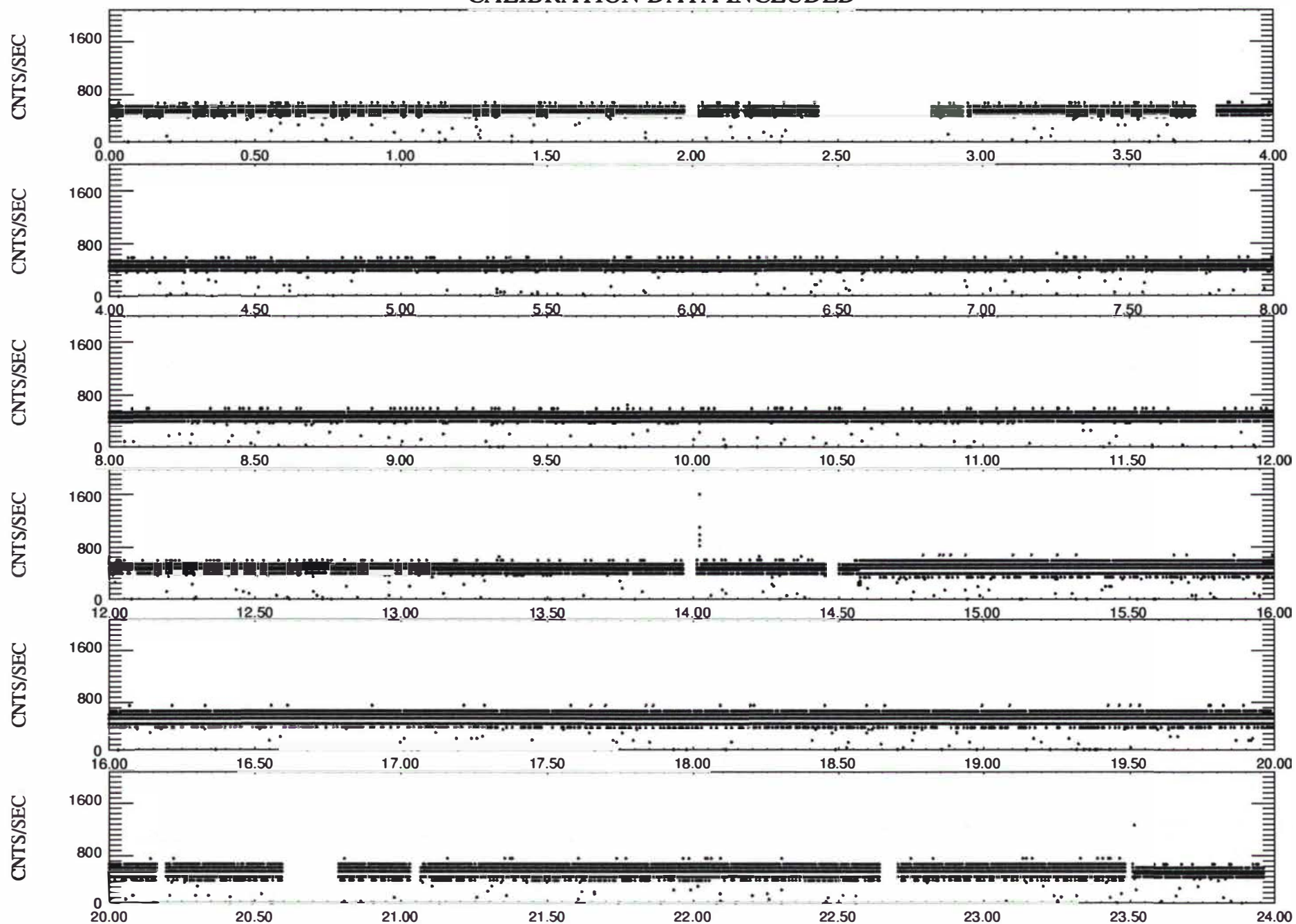
HUS MODES EDR day 315, year 1995 to day 315, year 1995 NO BURST (8)

4/1/96

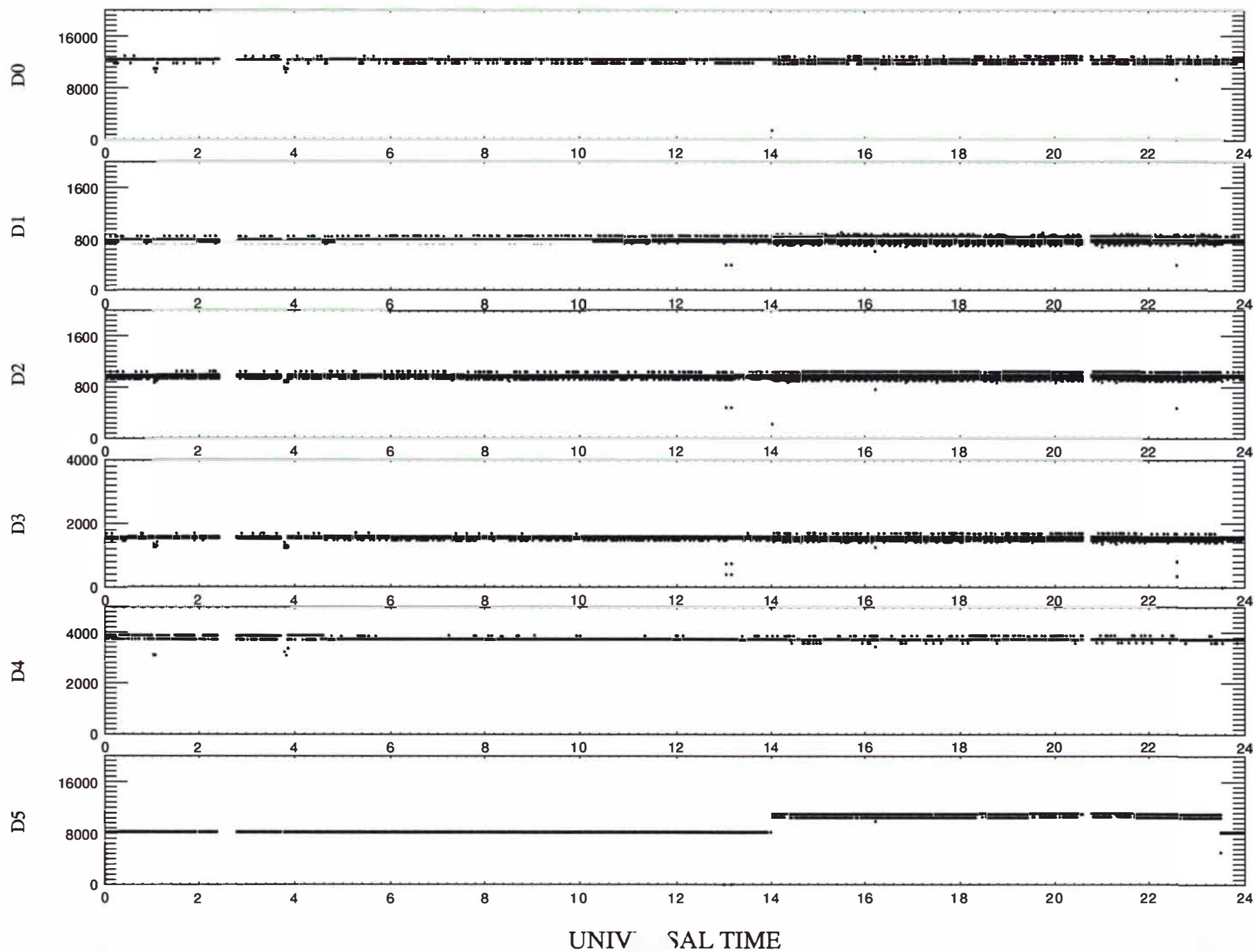


HUS 2A, MODE 1, NOT AVERAGED EDR day 315, year 1995 to day 315, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIFORM SAL TIME



From HAGEDON@fender.msfc.nasa.gov Tue Nov 14 11:49 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Tue, 14 Nov 1995 13:49:34 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3904

BATSEARCH PROGRAM

NO

BATSE BURST # 3904
EVENT OF 1995 NOV 12 DAY OF YEAR=316
EVENT CROSSING TIME AT BATSE : 50534. S. OR 14:02:14.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 72.000 62.000
BATSE PEAK COUNTING RATE: 6000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/11/ 95 IS:
RA= 215.755 DEC= 55.160 DIST= 2.855 AU
BATSE-ULYSSES DISTANCE = 427085176. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=120.56 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -724.22 SECS.
CROSSING TIME AT ULYSSES IS 49810. S. OR 13:50:09 +/- 251.99 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/11/ 95 IS:
RA= 254.804 DEC= -23.542 DIST= 2.257 AU
MARS-BATSE DISTANCE = 337660768. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 38.50 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 881.40 SECS.
CROSSING TIME AT MARS IS 51415. S. OR 14:16:55 +/- 135.13 SECONDS

BATSE BURST TRIGGER

NO.: 3904

TIME: TJD=0033 SECONDS=50534

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=36.6 AZIMUTH=257.9 ERROR=11.0 DEGREES

COMMENTS:

BURST. SINGLE SPIKE. FASTER RISE THAN DECAY. DUR.~0.050 SEC.
VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3904	951112	10033	50534	6000	072	+62	.05

BATSE BURST# 3904

ULYSSES RT

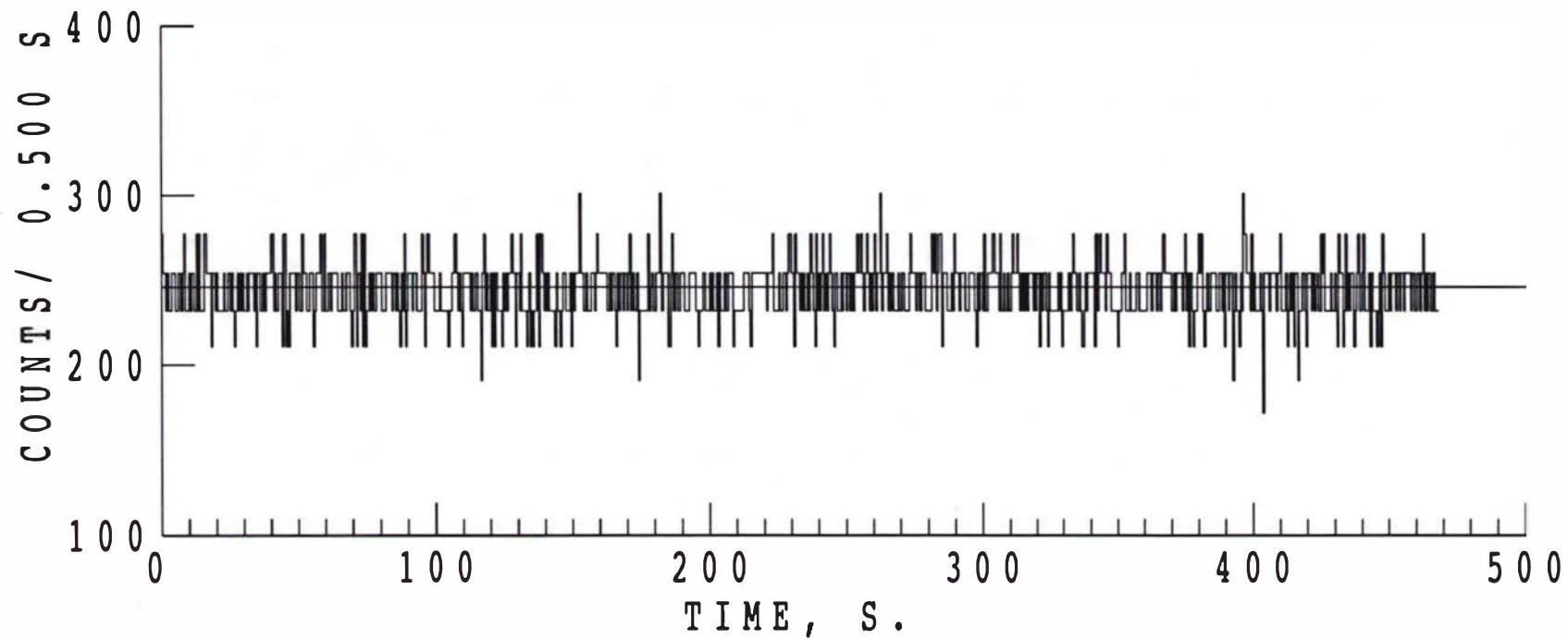
4 / 5 / 98

12 / 11 / 95 49392.480 s

0 - 0 keV

N= 10 M=10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From HAGEDON@fender.msfc.nasa.gov Tue Nov 14 11:51 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Tue, 14 Nov 1995 13:51:12 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3905

BATSEARCH PROGRAM

RI

BATSE BURST # 3905
EVENT OF 1995 NOV 12 DAY OF YEAR=316
EVENT CROSSING TIME AT BATSE : 66479. S. OR 18:27:59.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 132.000 48.000
BATSE PEAK COUNTING RATE: 14200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 12/11/ 95 IS:
RA= 215.806 DEC= 55.156 DIST= 2.855 AU
BATSE-ULYSSES DISTANCE = 427111819. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=130.63 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -927.69 SECS.
CROSSING TIME AT ULYSSES IS 65551. S. OR 18:12:31 +/- 223.64 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 12/11/ 95 IS:
RA= 254.804 DEC= -23.542 DIST= 2.257 AU
MARS-BATSE DISTANCE = 337660768. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 51.01 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 708.65 SECS.
CROSSING TIME AT MARS IS 67188. S. OR 18:39:47 +/- 162.75 SECONDS

BATSE BURST TRIGGER

NO.: 3905

TIME: TJD=0033 SECONDS=66479

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=64.6 AZIMUTH=288.0 ERROR=0.72 DEGREES

COMMENTS:

BURST. COMPLEX EVENT WITH THREE EPISODES. TOTAL DUR.~30 SEC.
SECOND PEAK IS STRONGEST. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3905	951112	10033	66479	14200	132	+48	30

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	?	
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

Helo corr removed

Date: Mar 5 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for 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*

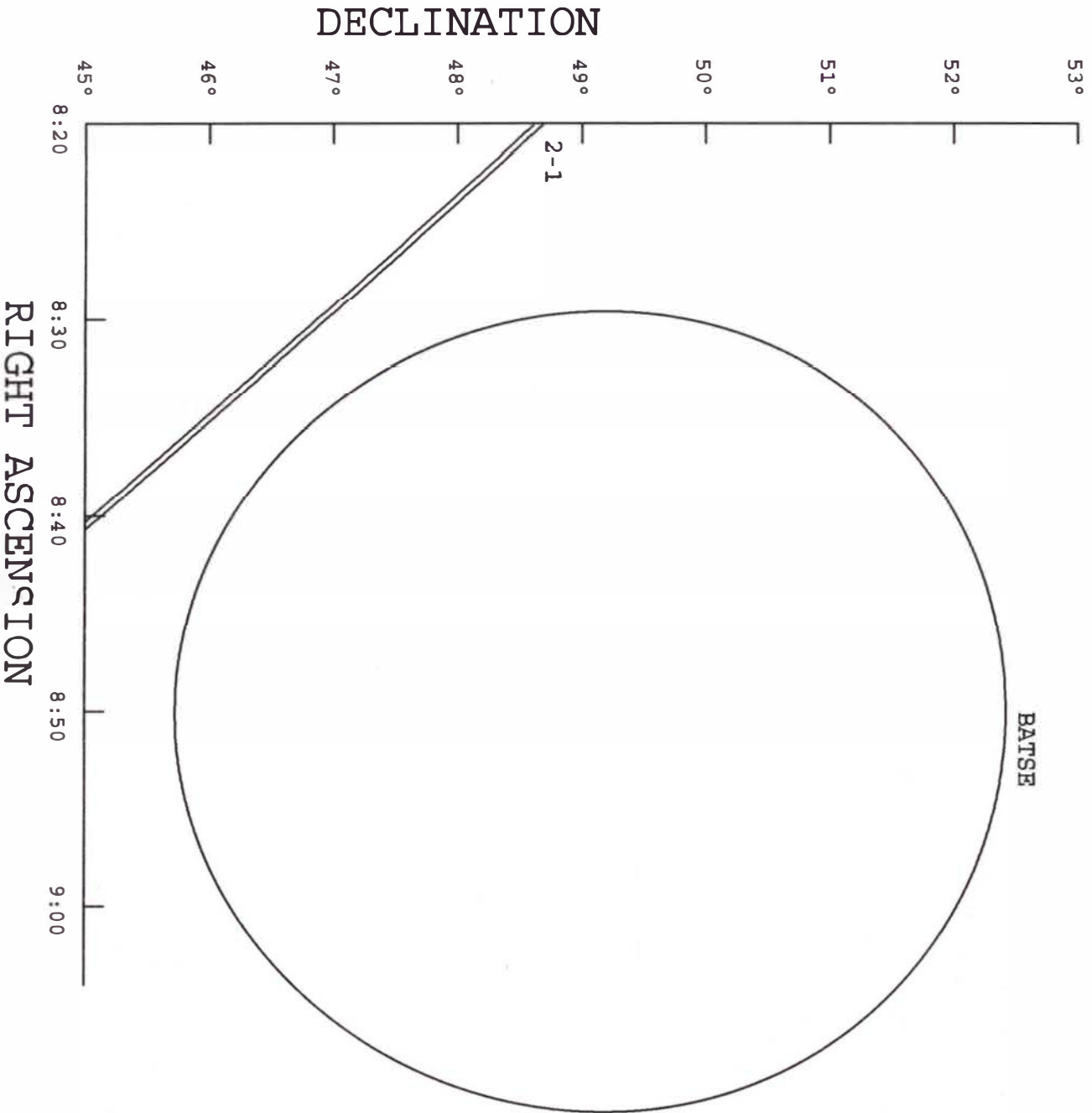
3. PVO Data

- ☐ 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 NOV 12, 1995 18:12

5 / 3/98



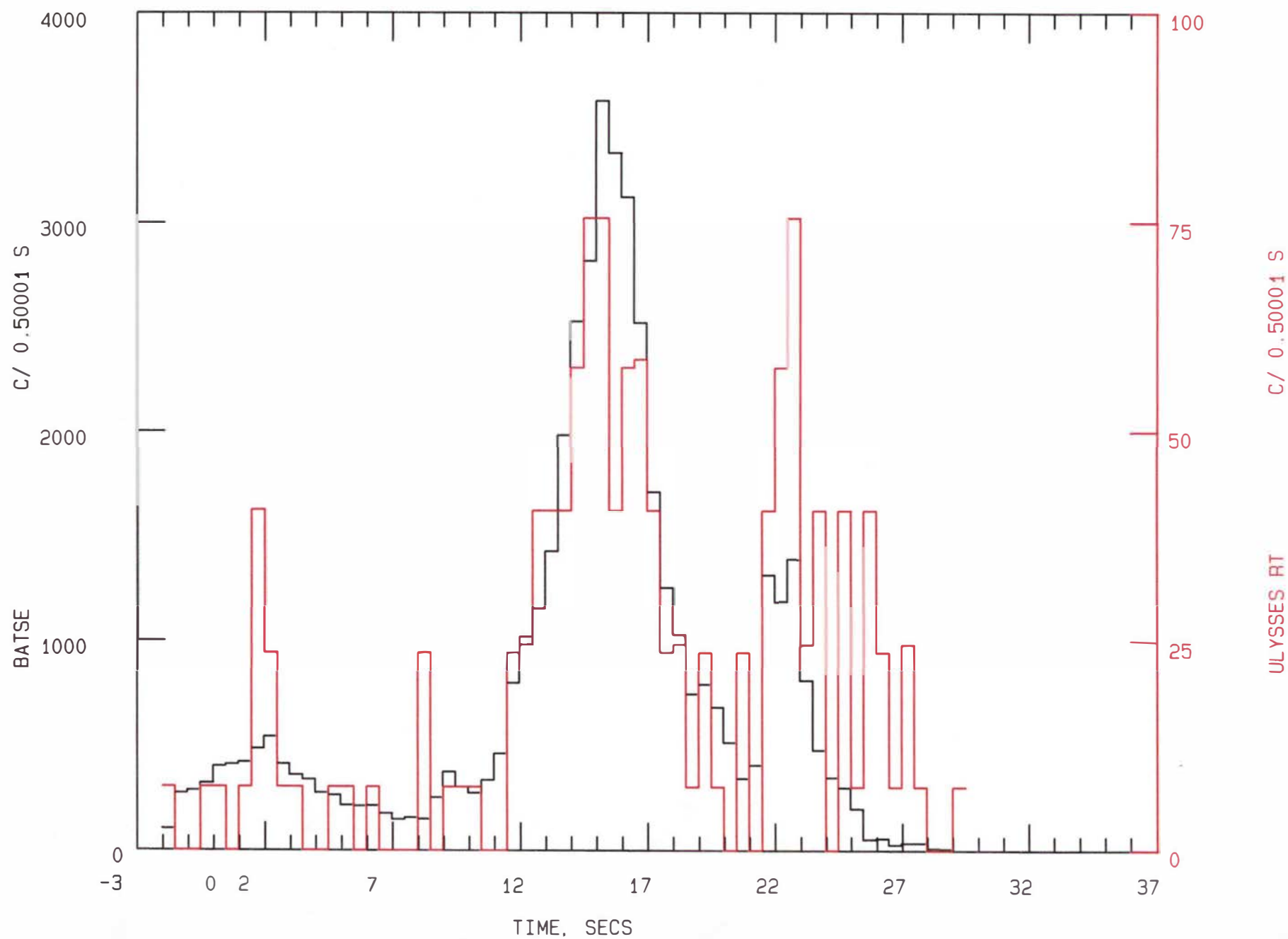
BATSE

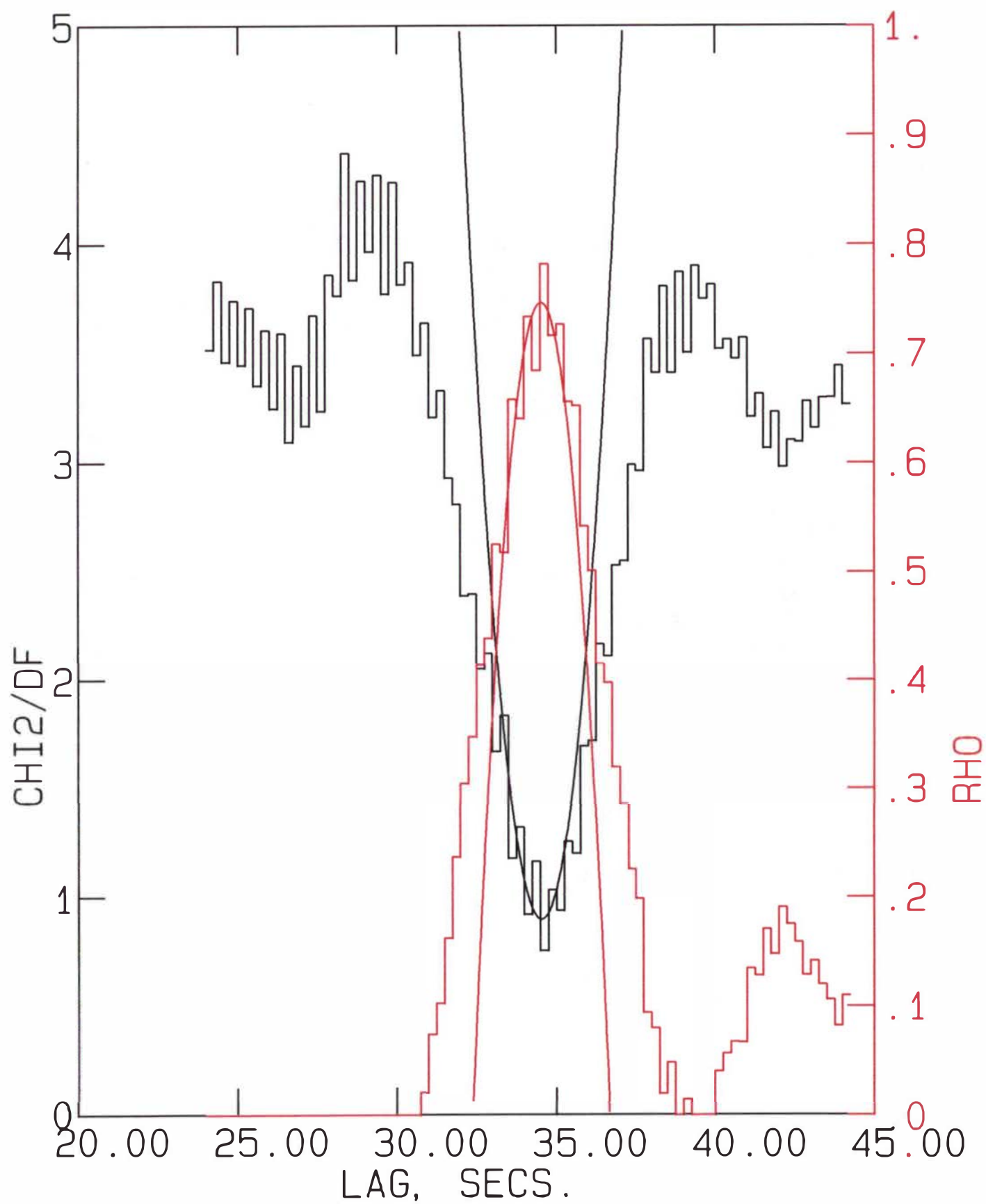
-ULYSSES RT CORRELATION

12/11/95

66479.794

5/ 3/98





ULYSSES RT

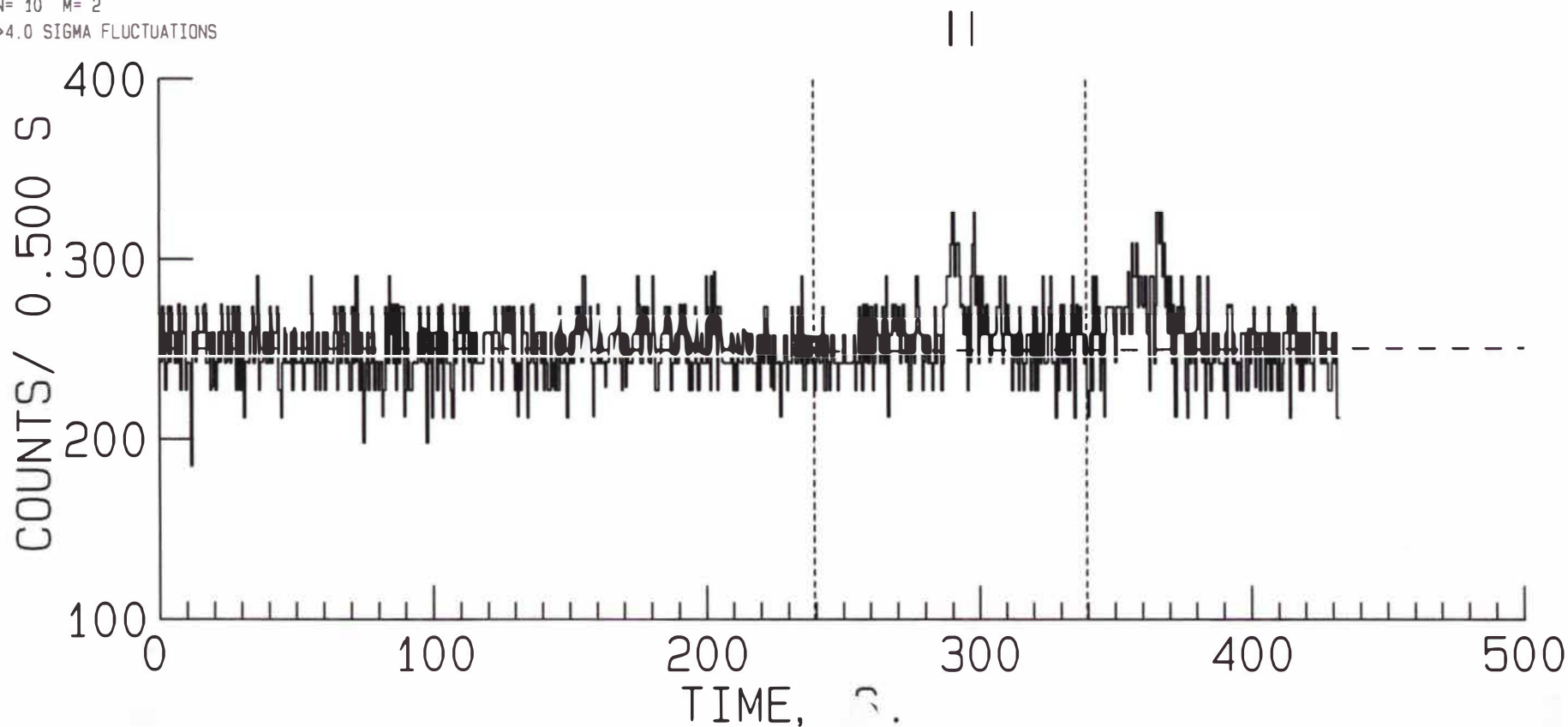
5 / 3 / 98

12/11/95 65340.230 s

0.250 S INTERVALS REGROUPED BY 2

21- 144 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



BATSE

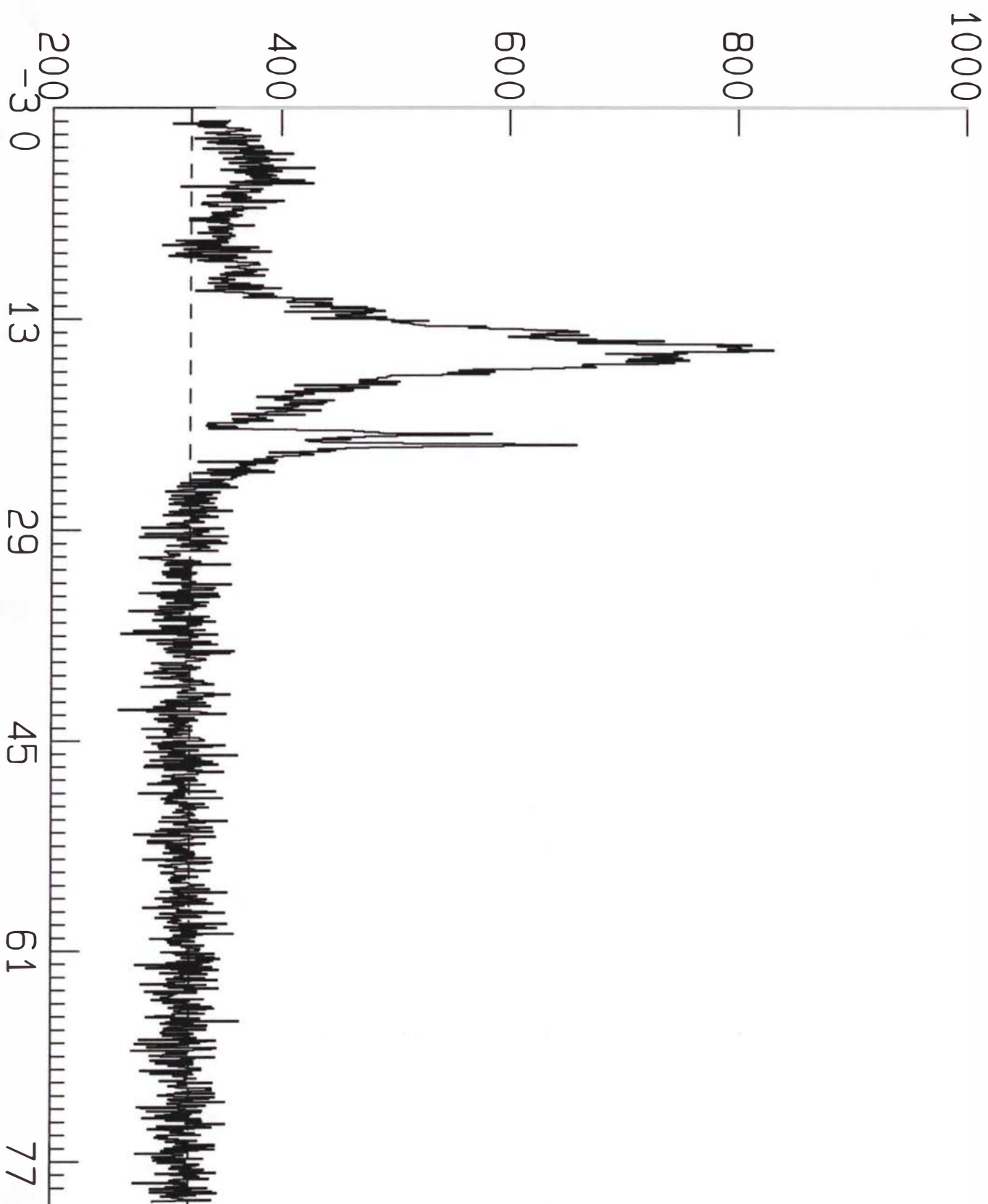
12/11/95

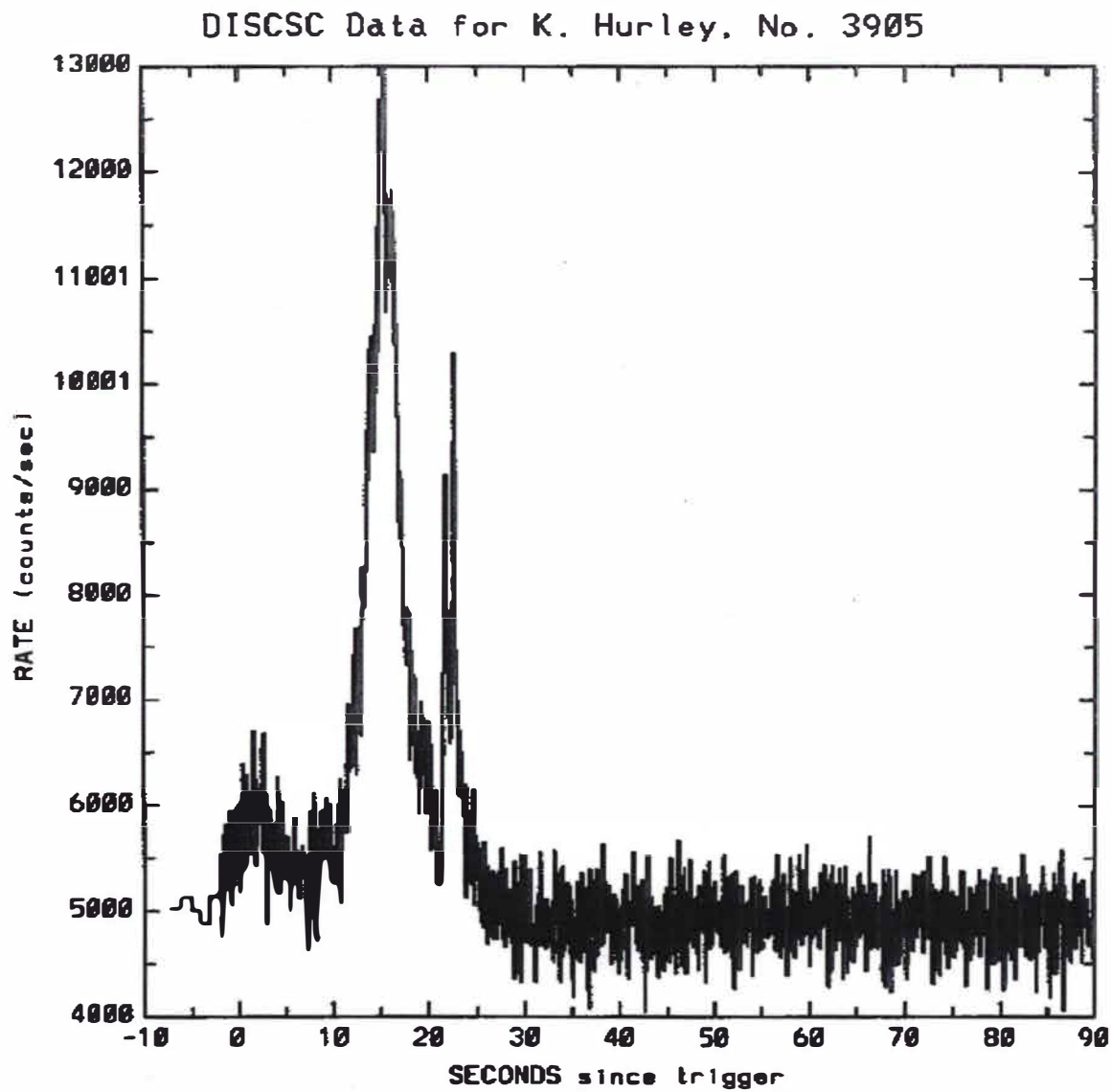
66479.794

25- 100 keV

COUNTS/0.064 S

5 / 3 / 98





25-FEB-1998 10:31:30

Created by MOPS 8D
(Burst Display)
Version 12.25

Trigger # . 3905

Trigger Time:
10033 / 66470.704

Burst Data Type:
DISCSC

Deadtime
Corrected: N
Background Data
Type: PREB + DISCLA

Minimum (integ. Time:
0.064 seconds)

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

Discriminators:
1 1 . 2 1

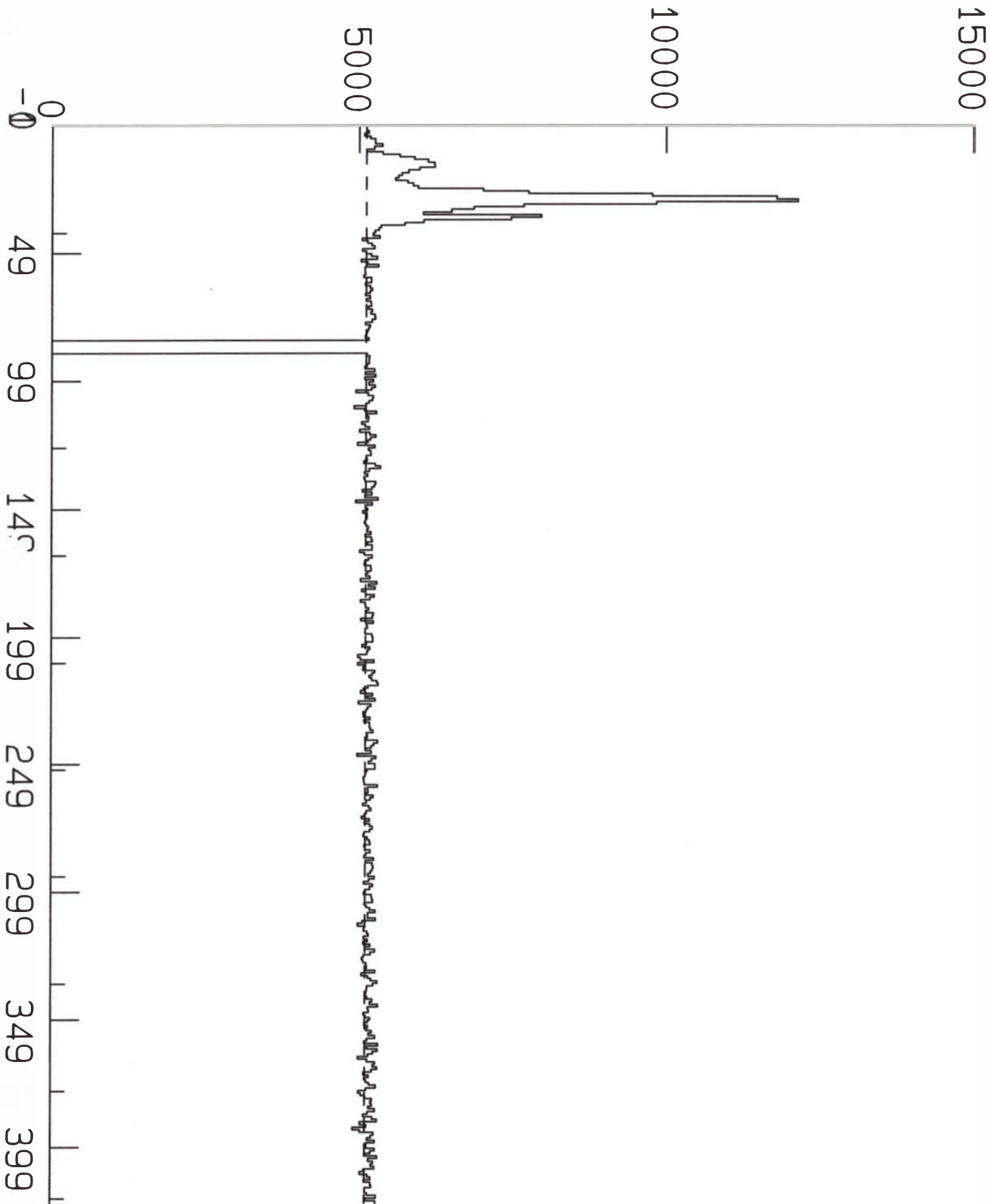
Quality Mask:
BDISP1

BACODINE

12/11/95

66467.505

25- 100 keV
COUNTS/1.024 S



Date: Oct 2 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 N/A

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

3. NEAR Data

- ☐ Final, correct time used? (Files postmarked vw@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

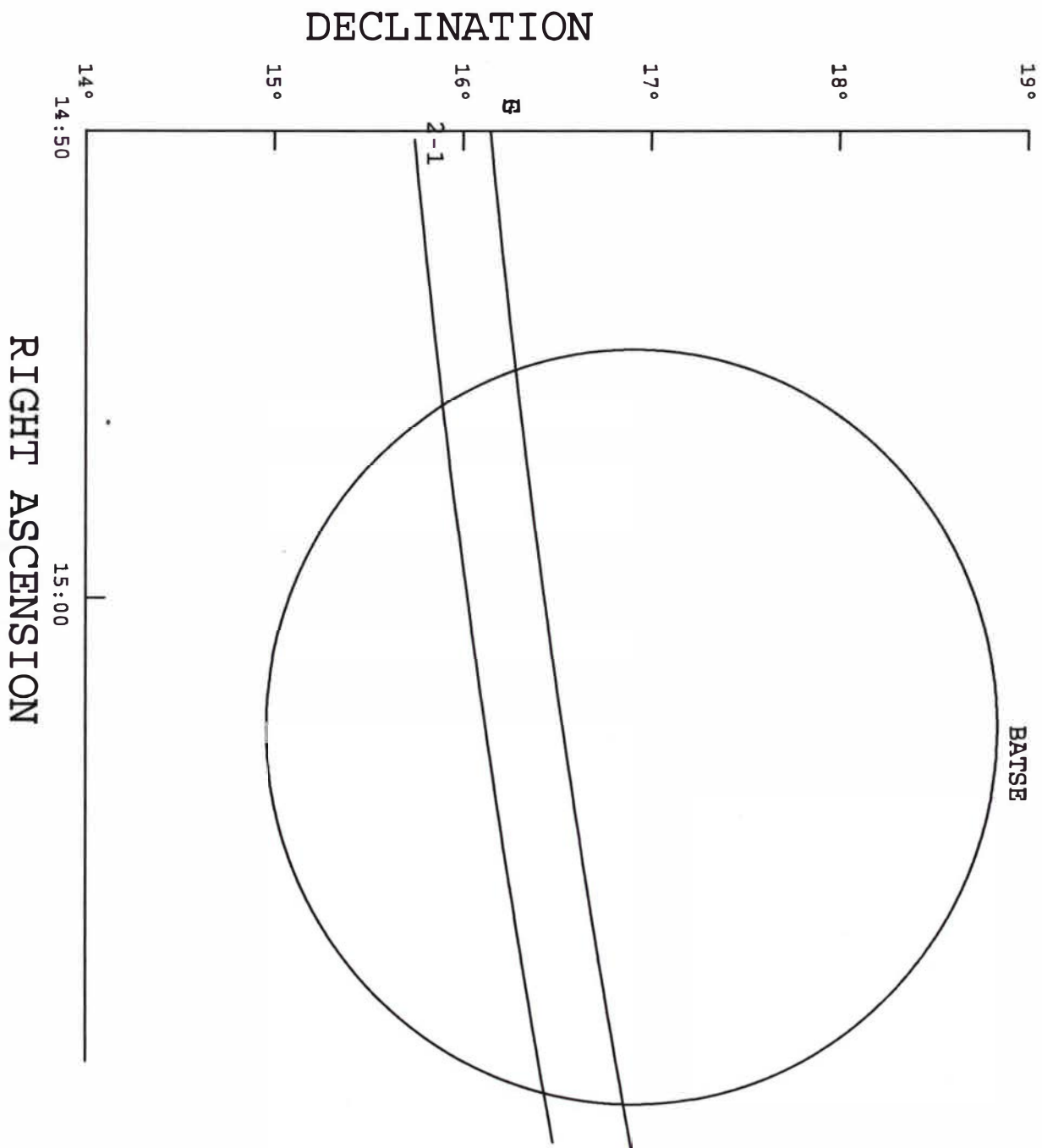
G=GALACTIC EQUATOR

1 BATSE

2 ULYSSES

EVENT OF NOV 12, 1995 18:50

2/10/ 2



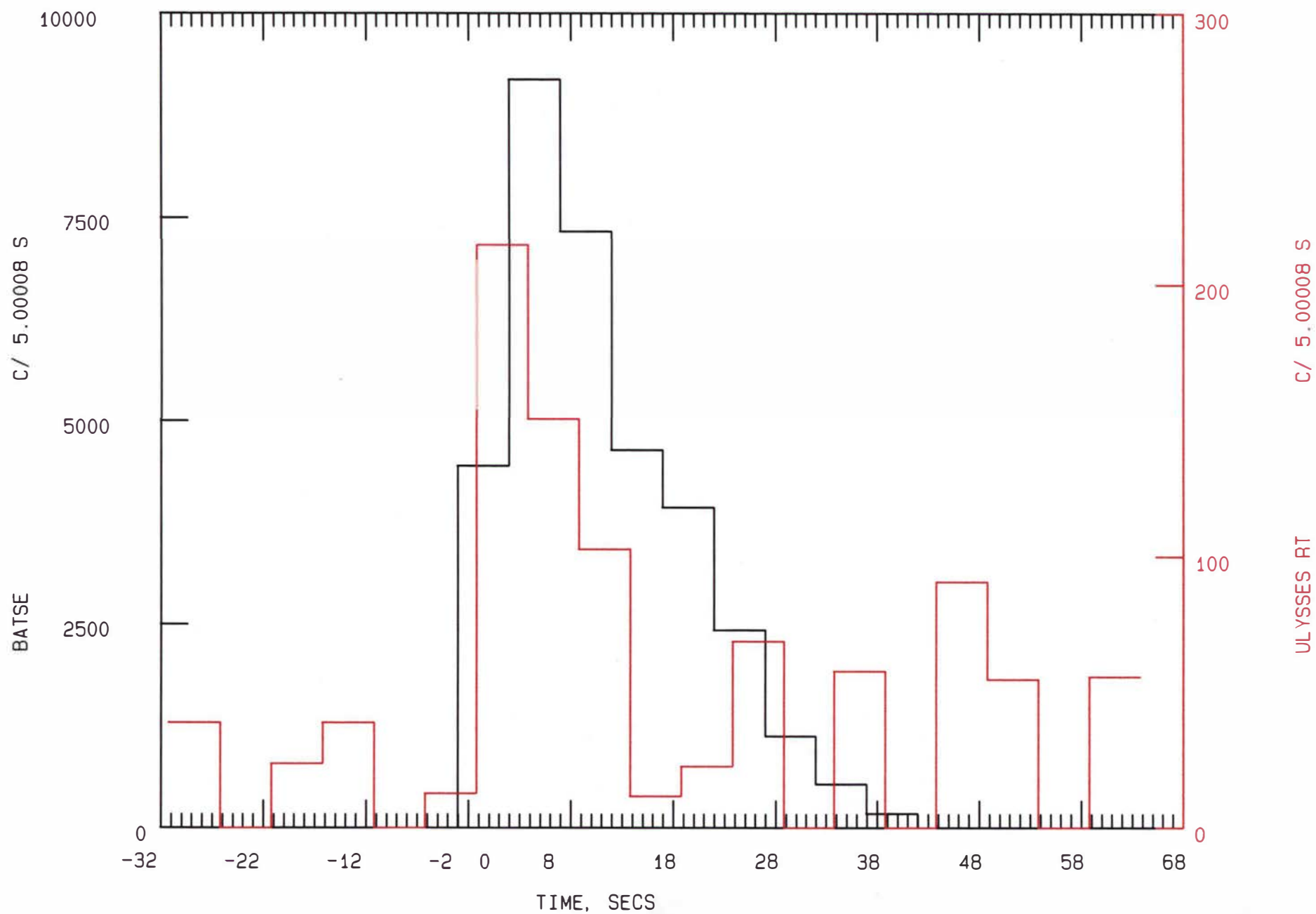
BATSE

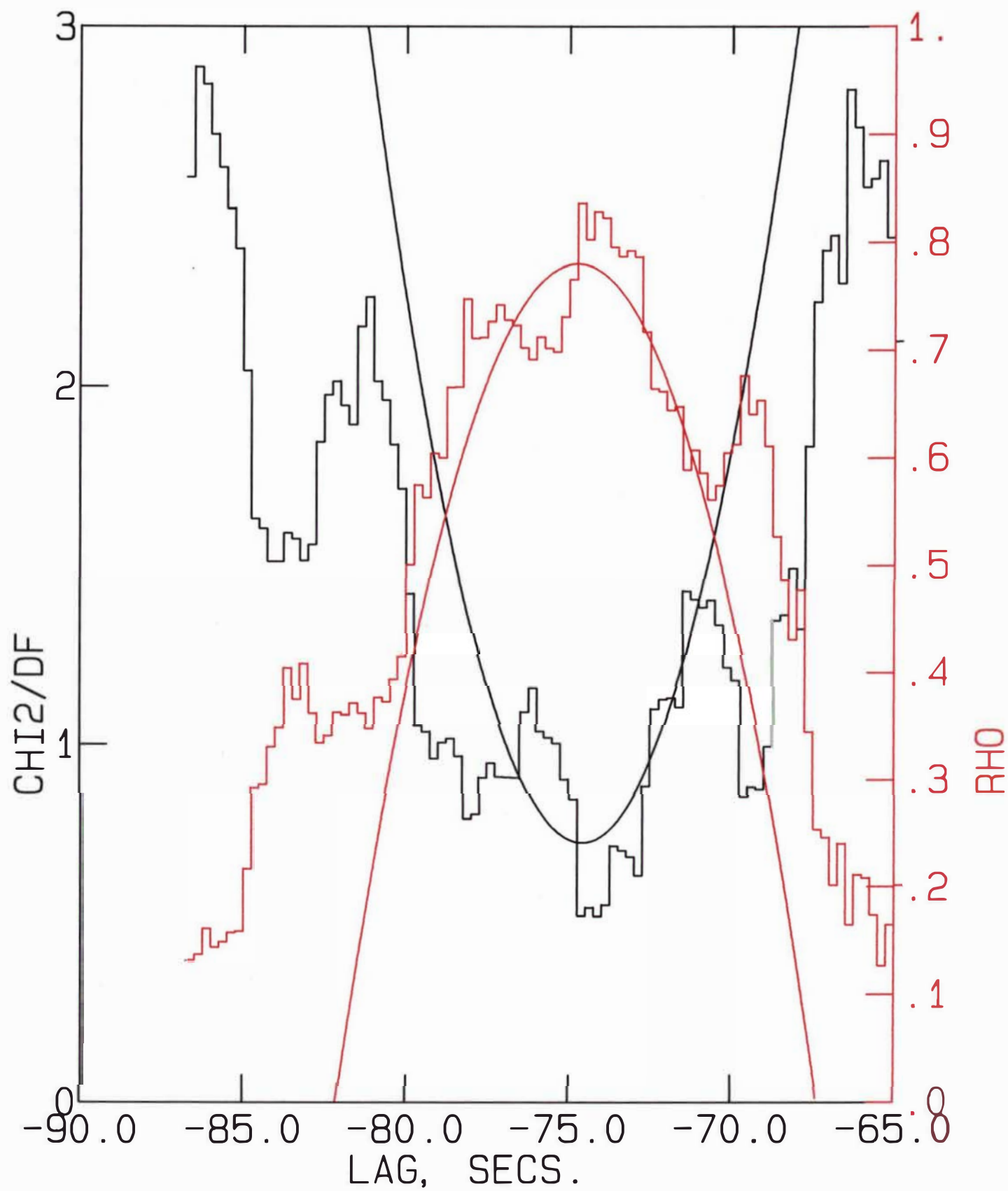
-ULYSSES RT CORRELATION

12/11/95

67850.418

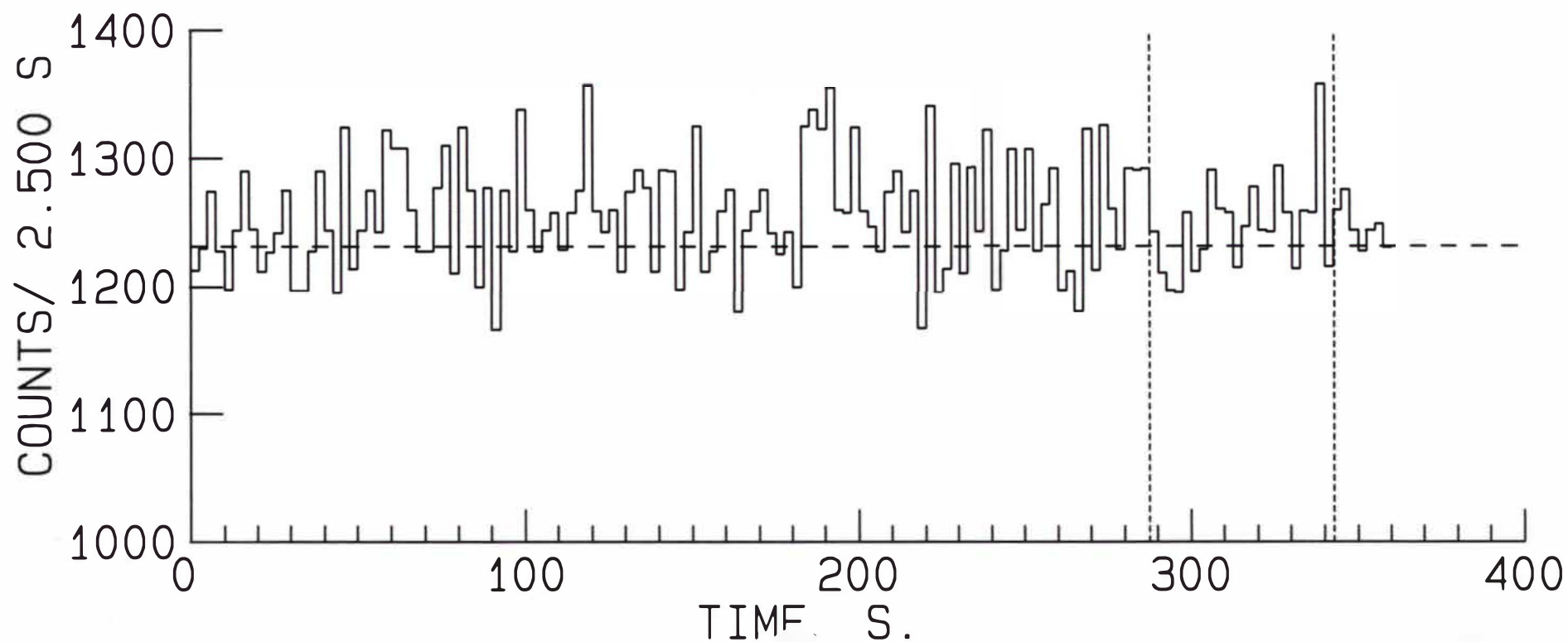
2/10/ 2



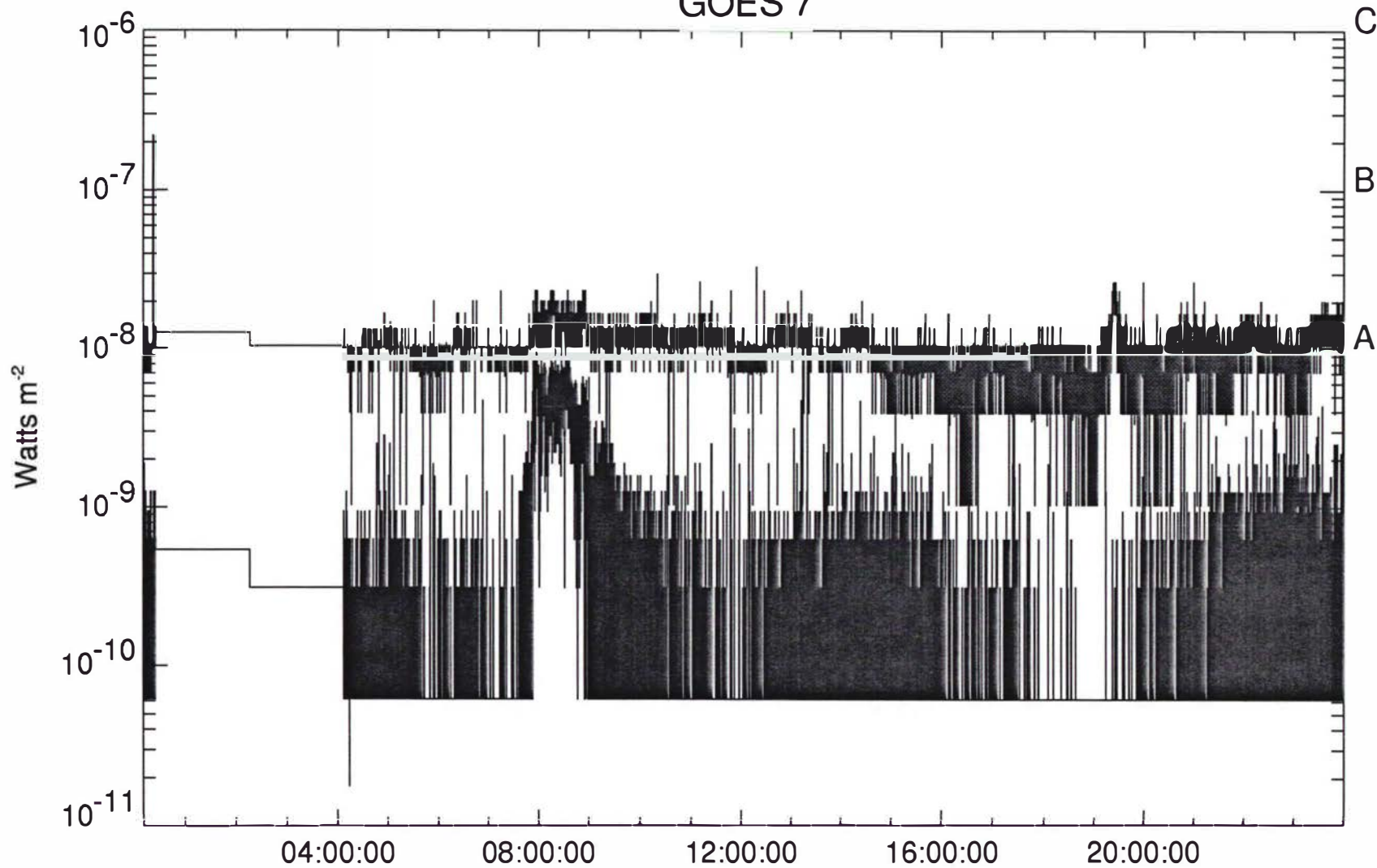


ULYSSES RT
12/11/95 66564.000 s
0.250 S INTERVALS REGROUPED BY 10
21- 144 keV

2/10/ 2



GOES 7



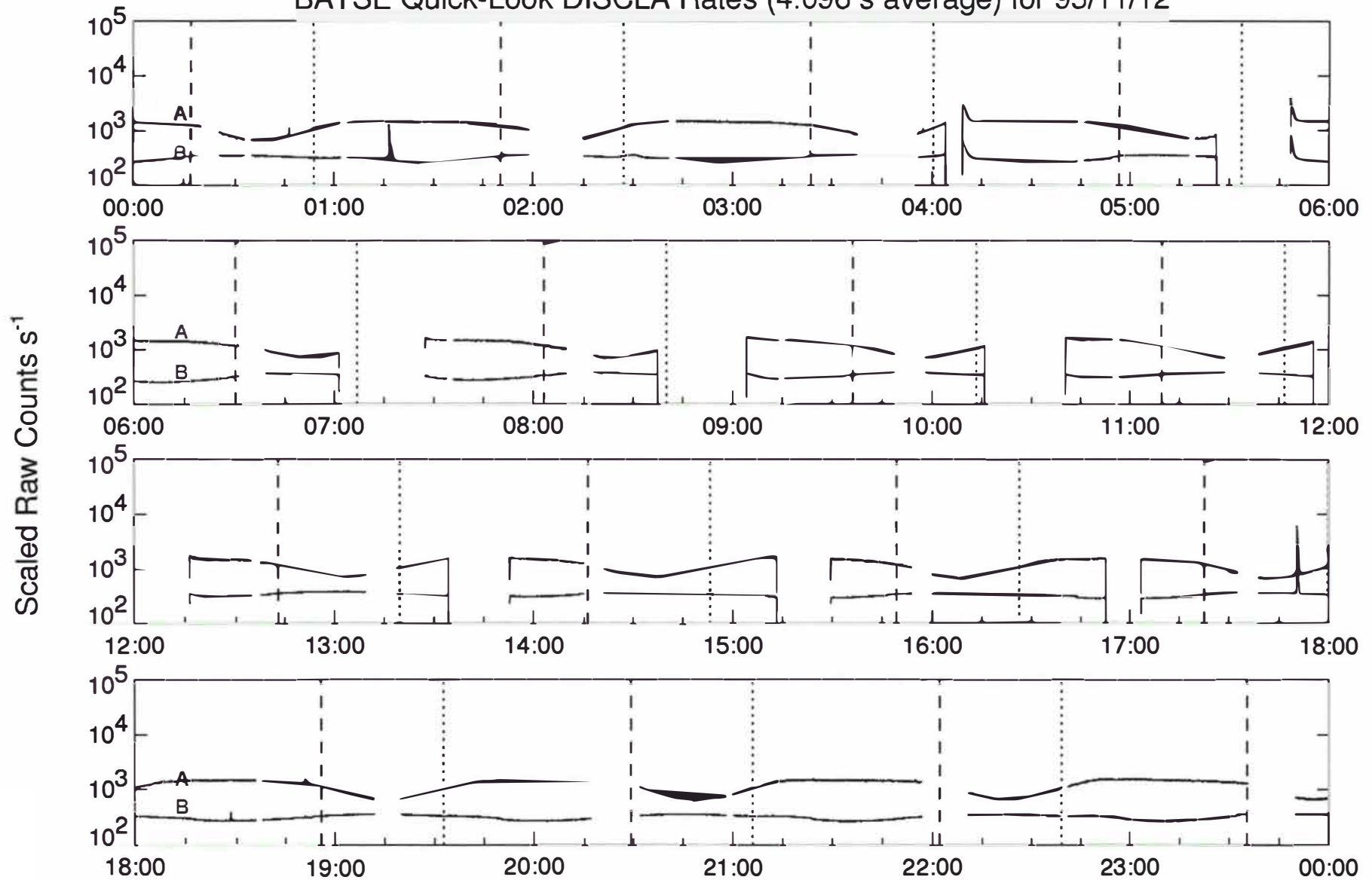
Data Start: 95/11/12, 0011:16

Plot created: 95/11/14, 1442

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 95/11/12



Current Time: 95/11/14, 1443 EDT

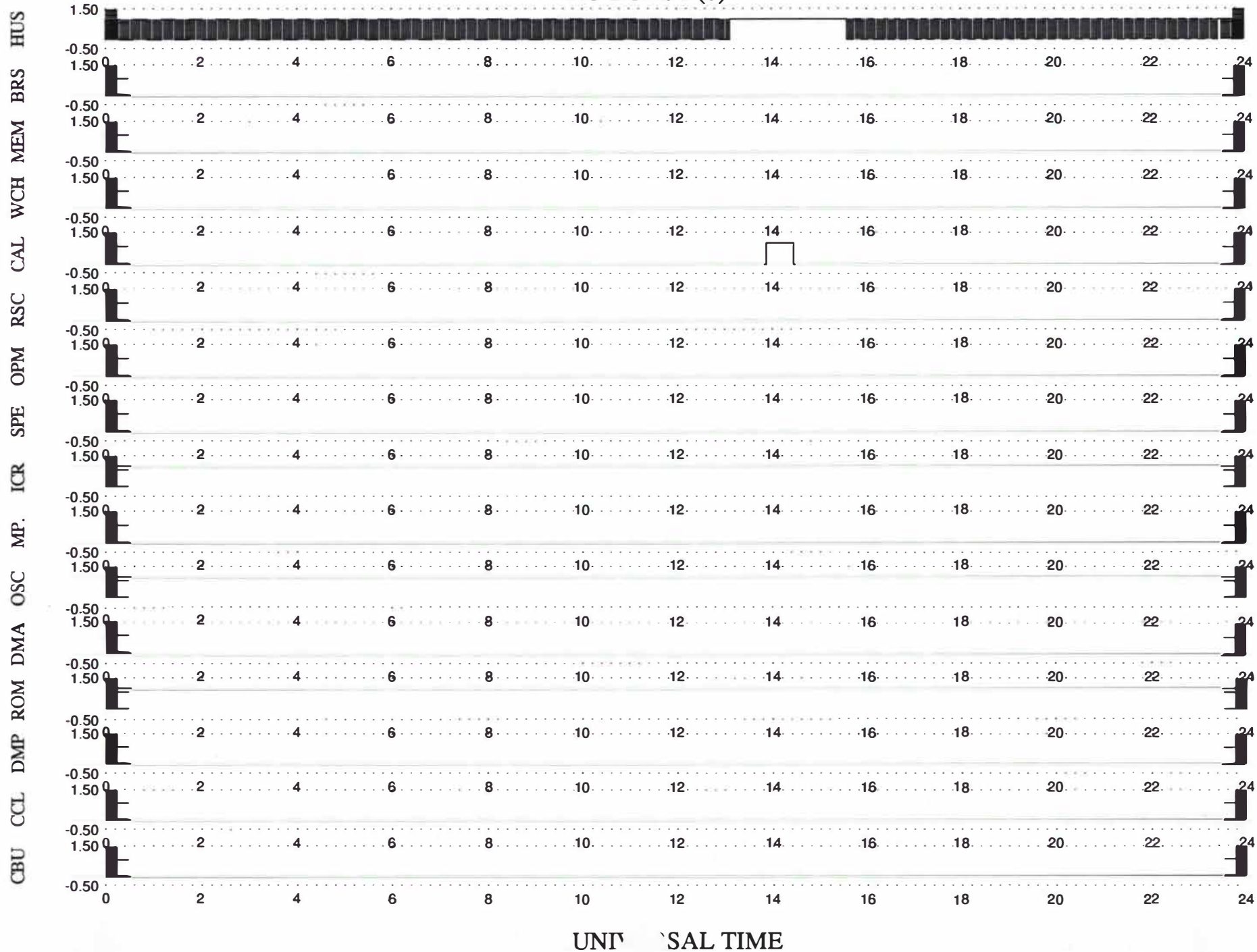
A: Channel 0 Most Sunward LAD

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

Dotted line: Day entry
Dashed line: Night entry

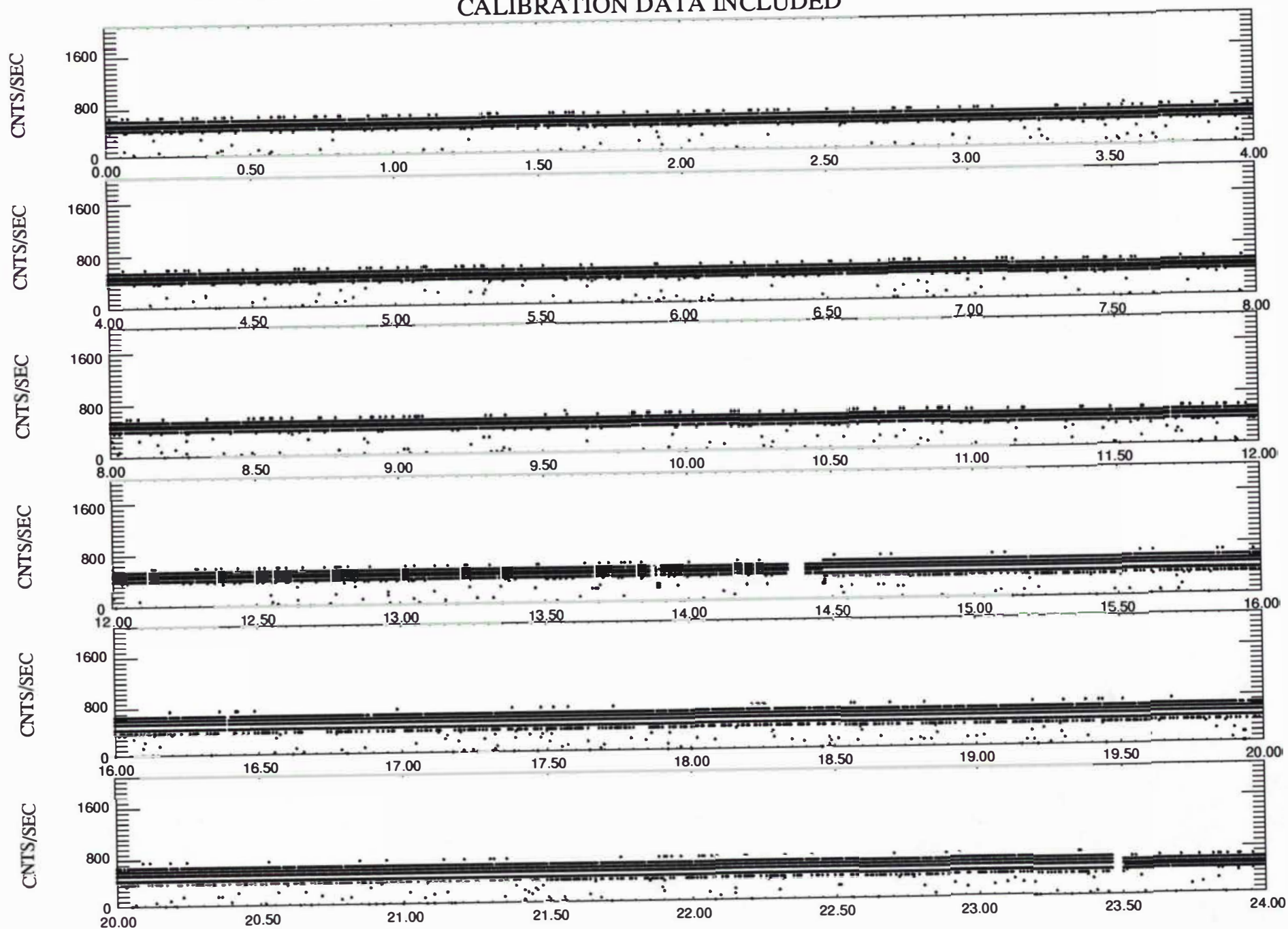
* Solar Burst Trigger
+ Solar Flare

4/1/96

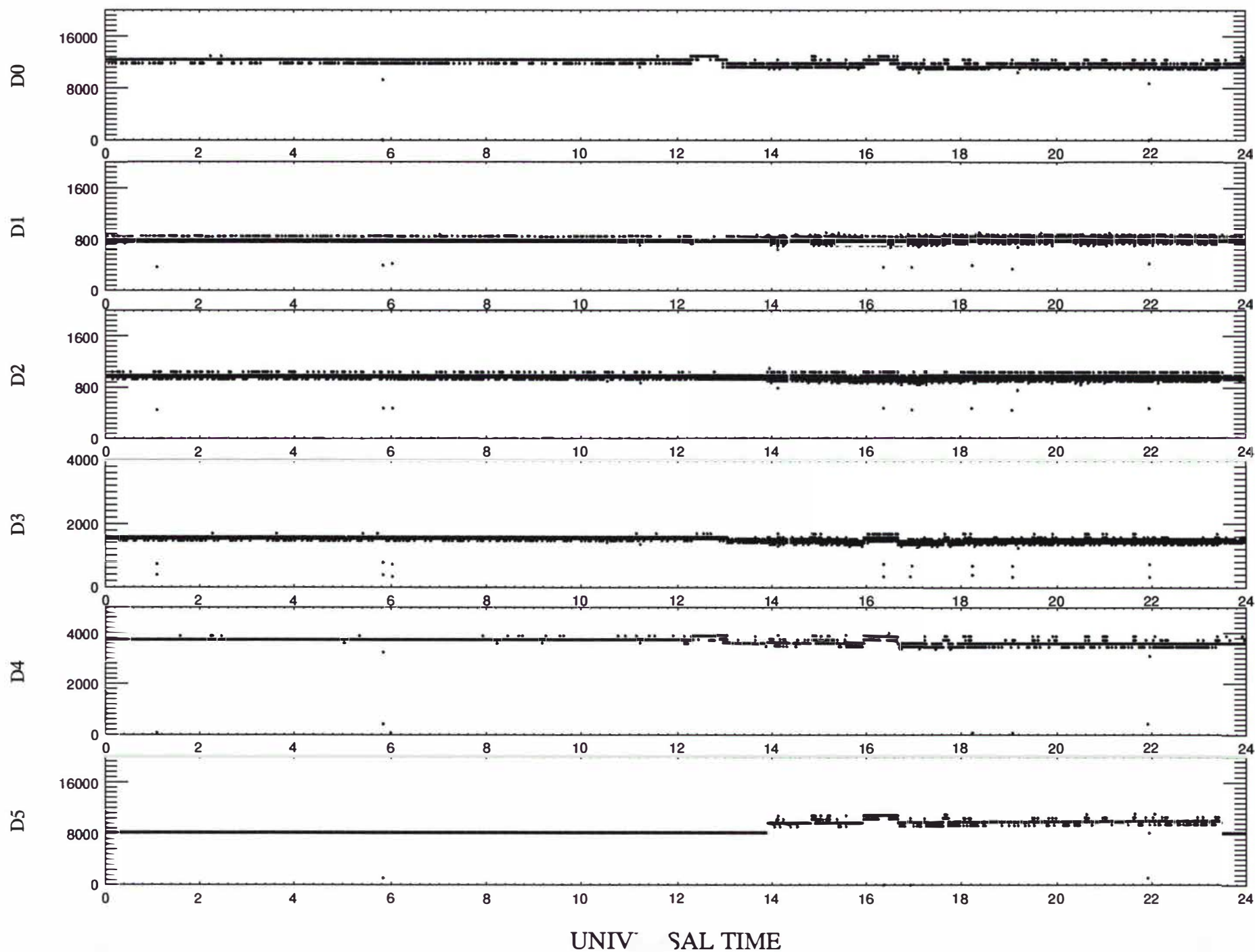


HUS 2A, MODE 1, NOT AVERAGED EDR day 316, year 1995 to day 316, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIVERSAL TIME



From WOODSP@ssl.msfc.nasa.gov Tue Nov 14 09:11 PST 1995
From: WOODSP@ssl.msfc.nasa.gov
Date: Tue, 14 Nov 1995 11:11:24 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3906

BATSEARCH PROGRAM

BATSE BURST # 3906
EVENT OF 1995 NOV 13 DAY OF YEAR=317
EVENT CROSSING TIME AT BATSE : 84356. S. OR 23:25:56.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 355.000 -45.000
BATSE PEAK COUNTING RATE: 8200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 13/11/ 95 IS:
RA= 216.135 DEC= 55.134 DIST= 2.856 AU
BATSE-ULYSSES DISTANCE = 427272287. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 27.80 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1260.79 SECS.
CROSSING TIME AT ULYSSES IS 85617. S. OR 23:46:56 +/- 184.53 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 13/11/ 95 IS:
RA= 255.606 DEC= -23.625 DIST= 2.259 AU
MARS-BATSE DISTANCE = 337964416. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=100.23 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -200.24 SECS.
CROSSING TIME AT MARS IS 84156. S. OR 23:22:35 +/- 189.57 SECONDS

BATSE BURST TRIGGER

NO.: 3906

TIME: TJD=1003 SECONDS=84356

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=110.3 AZIMUTH=139.6 ERROR=1.1 DEGREES

COMMENTS:

GRB WITH 25 SEC DURATION. MORE THAN ONE PEAK DURING EPISODE.
VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3906	951113	10034	84356	8200	355	-45	25

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 21 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for 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*

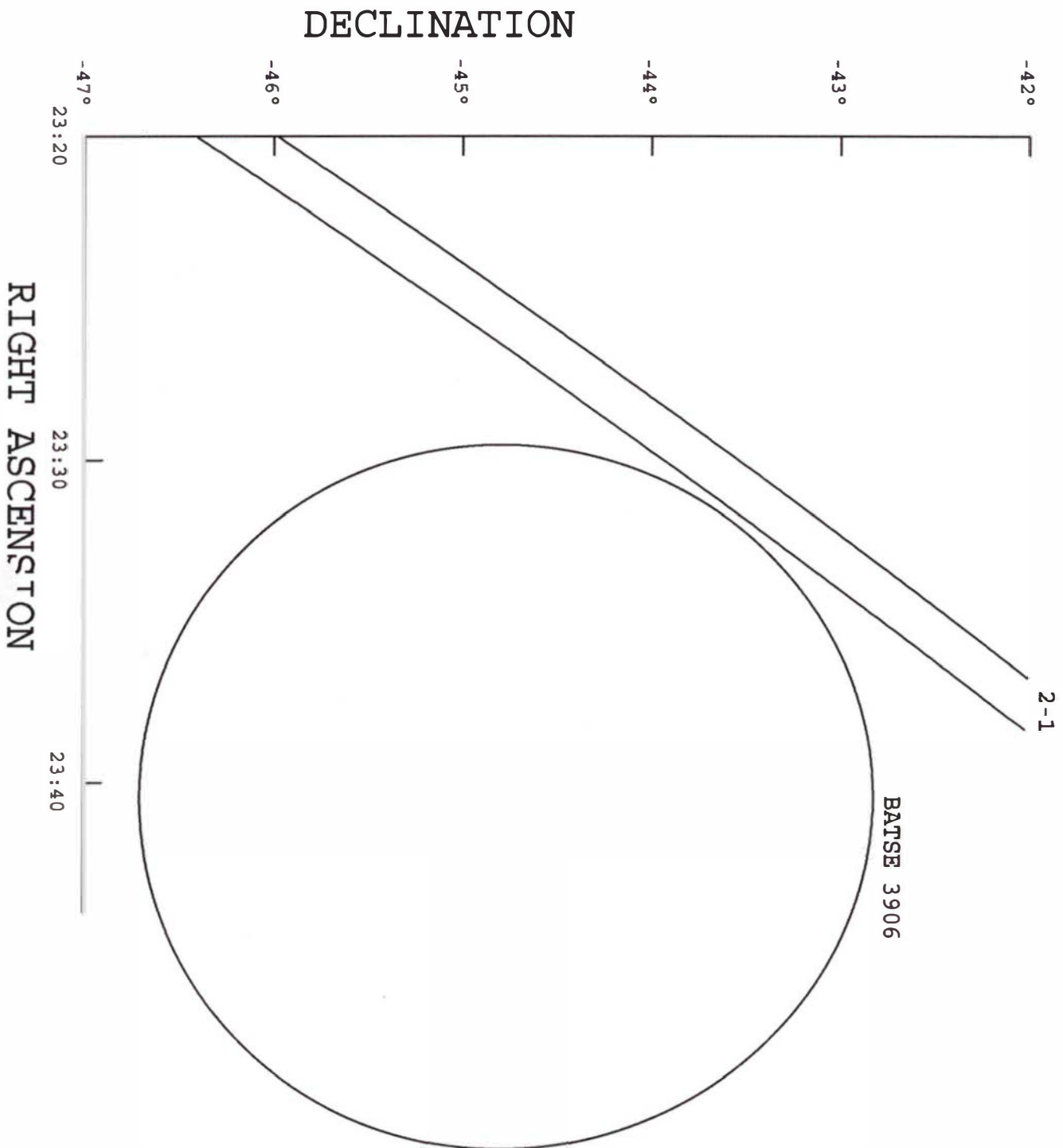
3. PVO Data

- ☐ 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 NOV 13, 1995 23:45

21/ 2/98



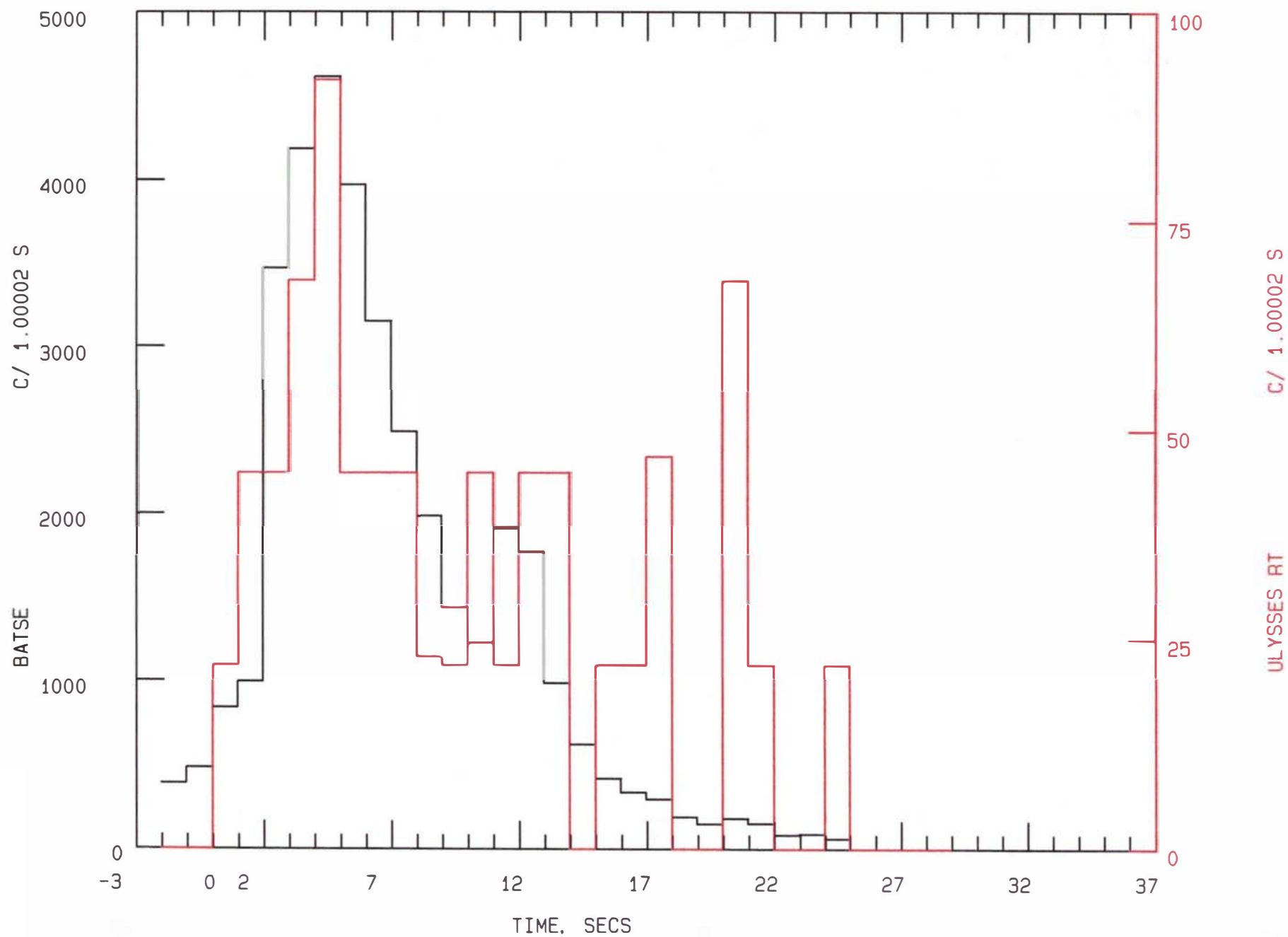
BATSE

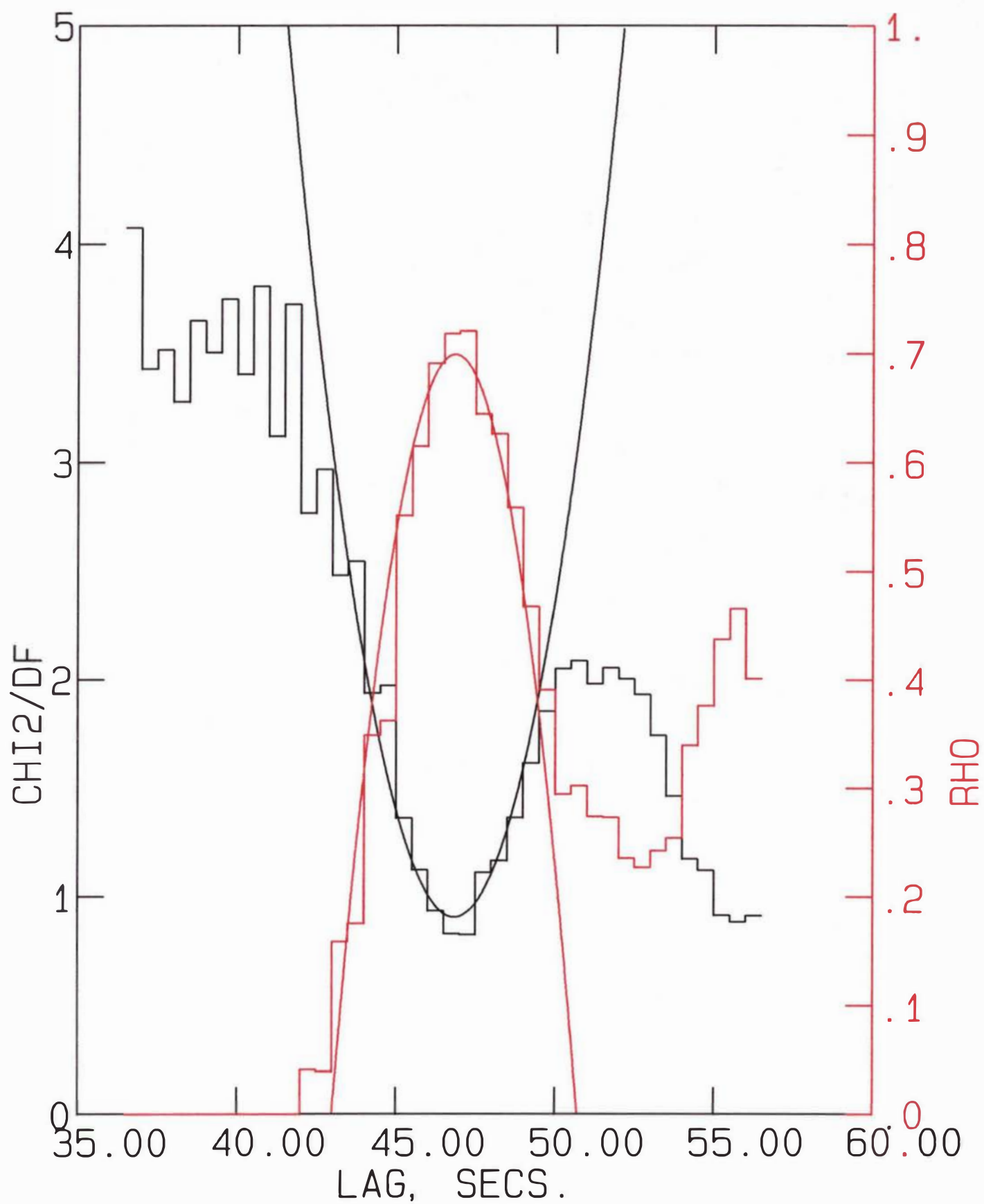
-ULYSSES RT CORRELATION

13/11/95

84355.762

21/ 2/98





ULYSSES RT

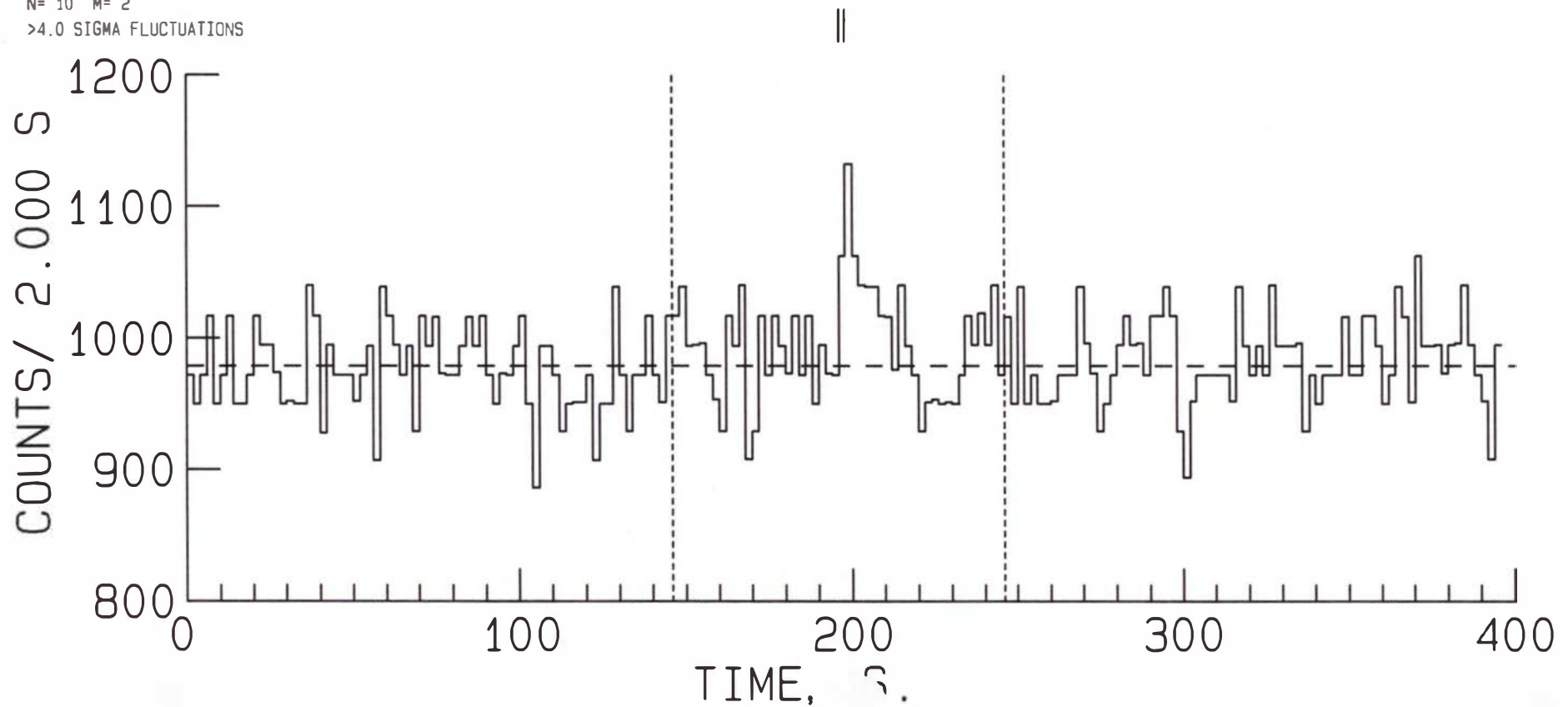
21 / 2 / 98

13/11/95 85392.411 s

0.500 S INTERVALS REGROUPED BY 4

21- 143 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



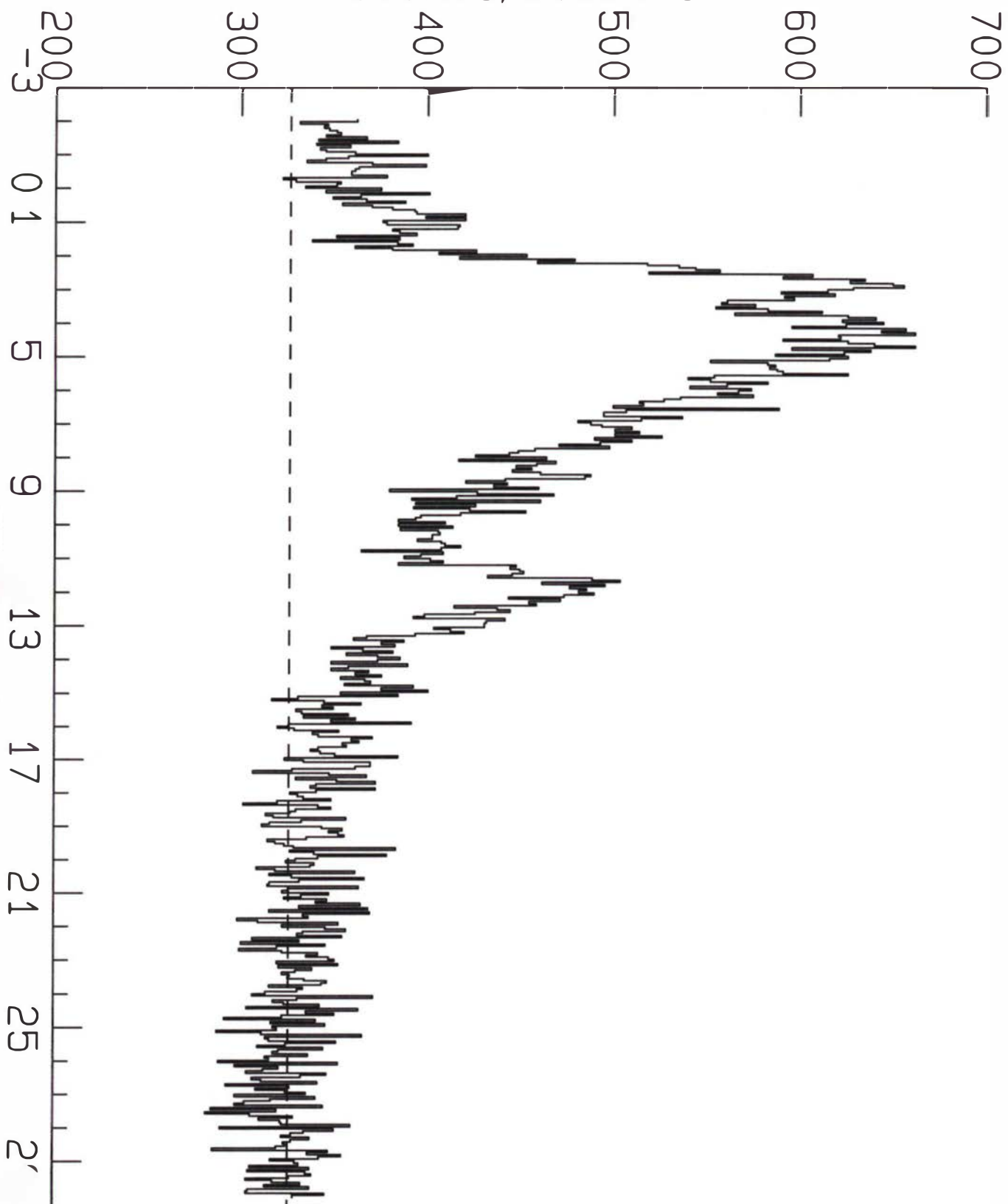
BATSE

13/11/95

84355.762

25- 100 keV

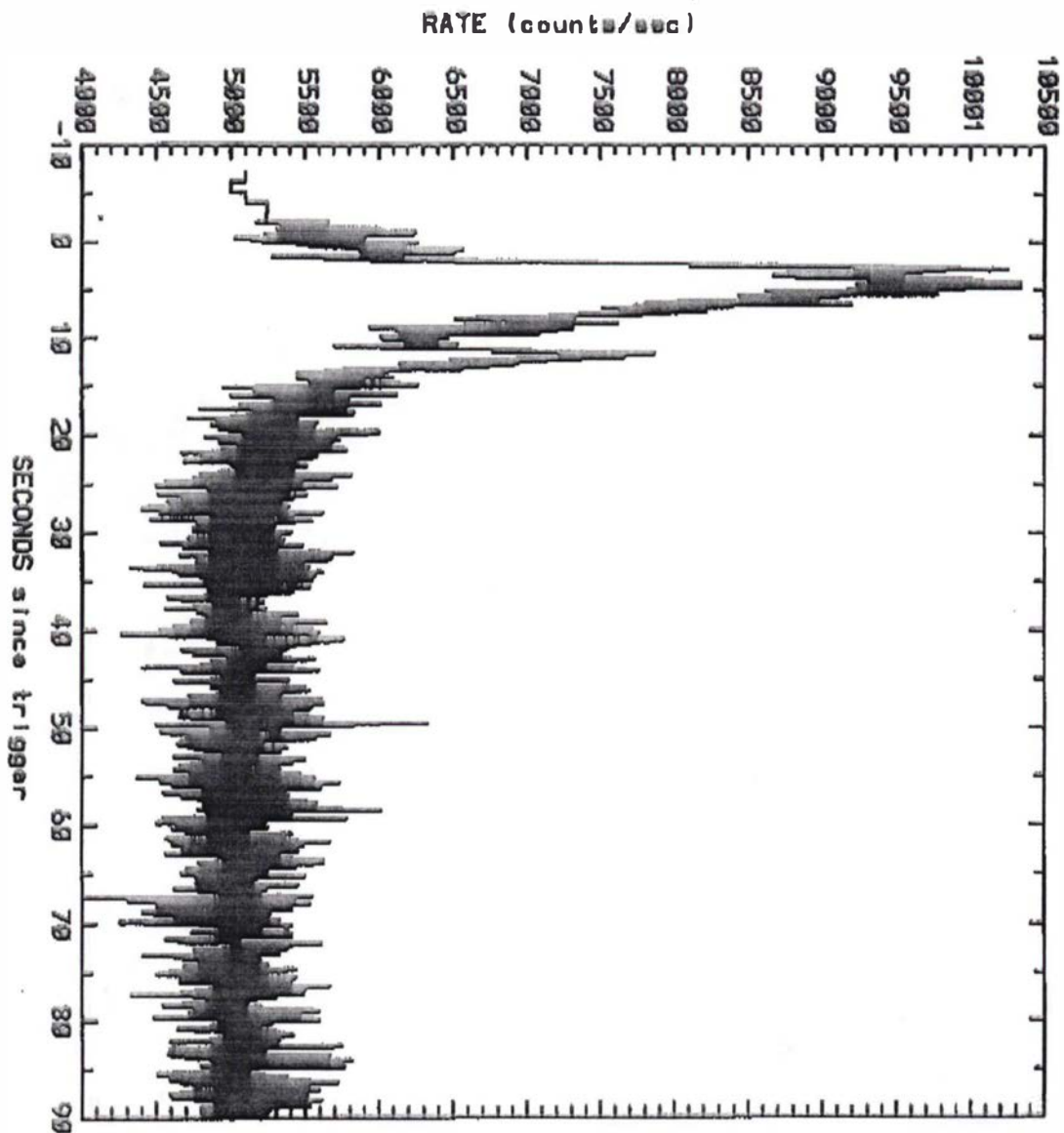
COUNTS/0.064 S



8 / 12 / 95

951113

DISCSC Data for K. Hurley, No. 3906



28-MAY-1995 16:22:04

Created by MCPS BD

Burst Display

Version 12.25

Trigger # : 3906

Trigger Time:

1995 / 04/25.762

Burst Data Type:

DISCSC

Deadtime

Corrected: N

Background Data

Type: PHEB + DISCSC

Minimum Integ. Time:

0.064 seconds

Delays (7.0):

---24---

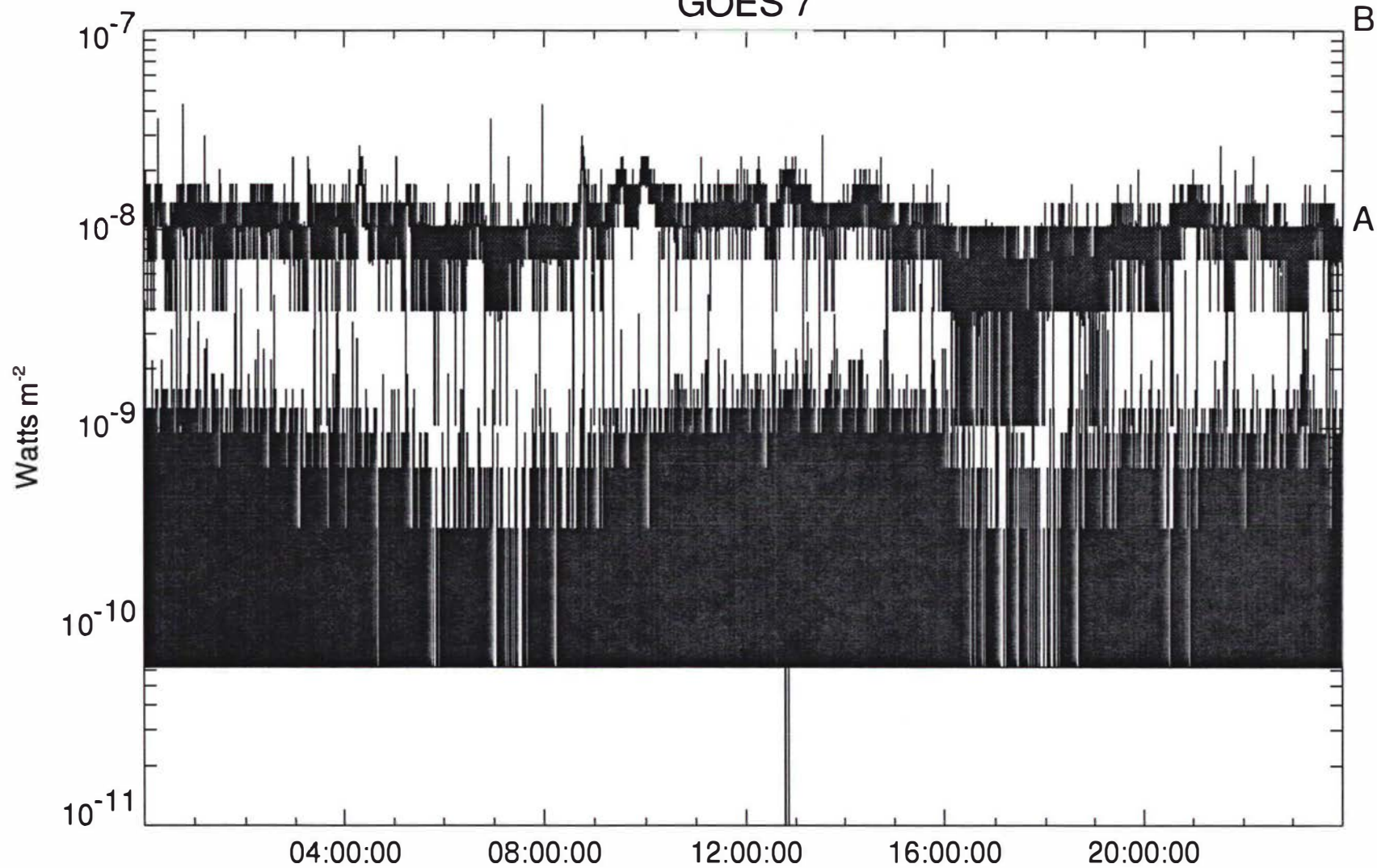
Discriminator:

(1 + 2)

Quality Mask:

B01SP1

GOES 7



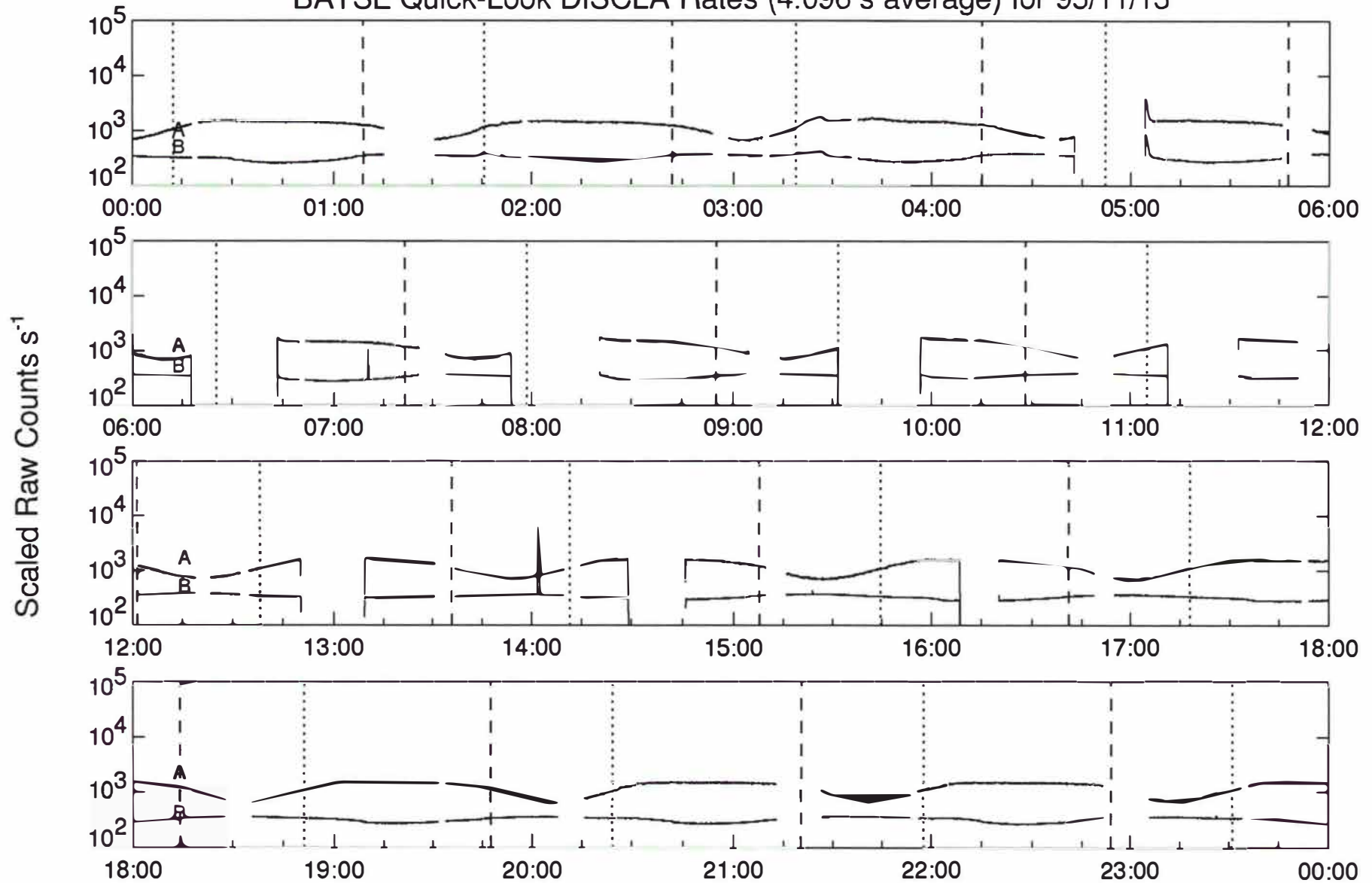
Data Start: 95/11/13, 0000:01

Plot created: 95/11/15, 0657

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 95/11/13



Current Time: 95/11/15, 0658 EDT

A: Channel 0 Most Sunward LAD

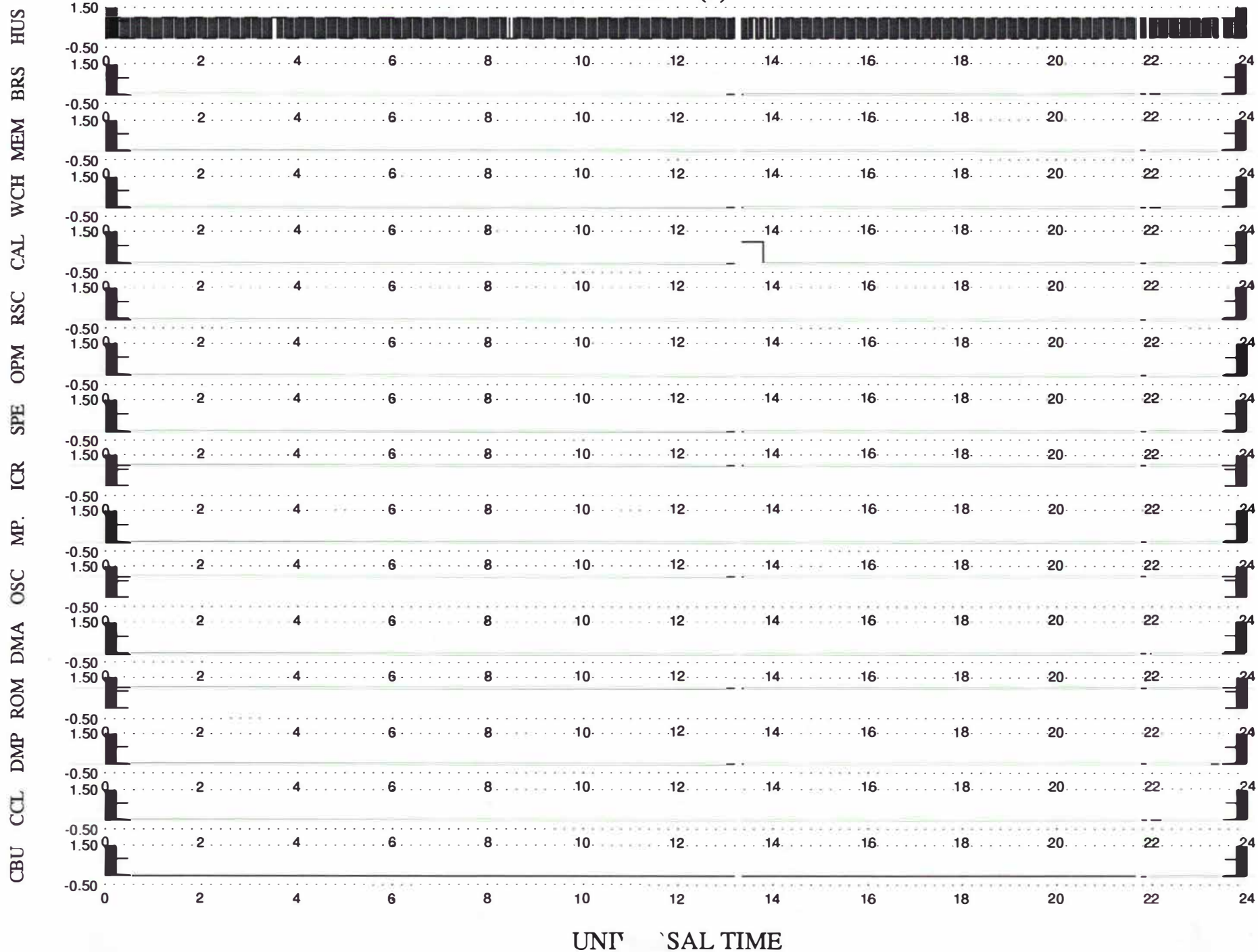
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

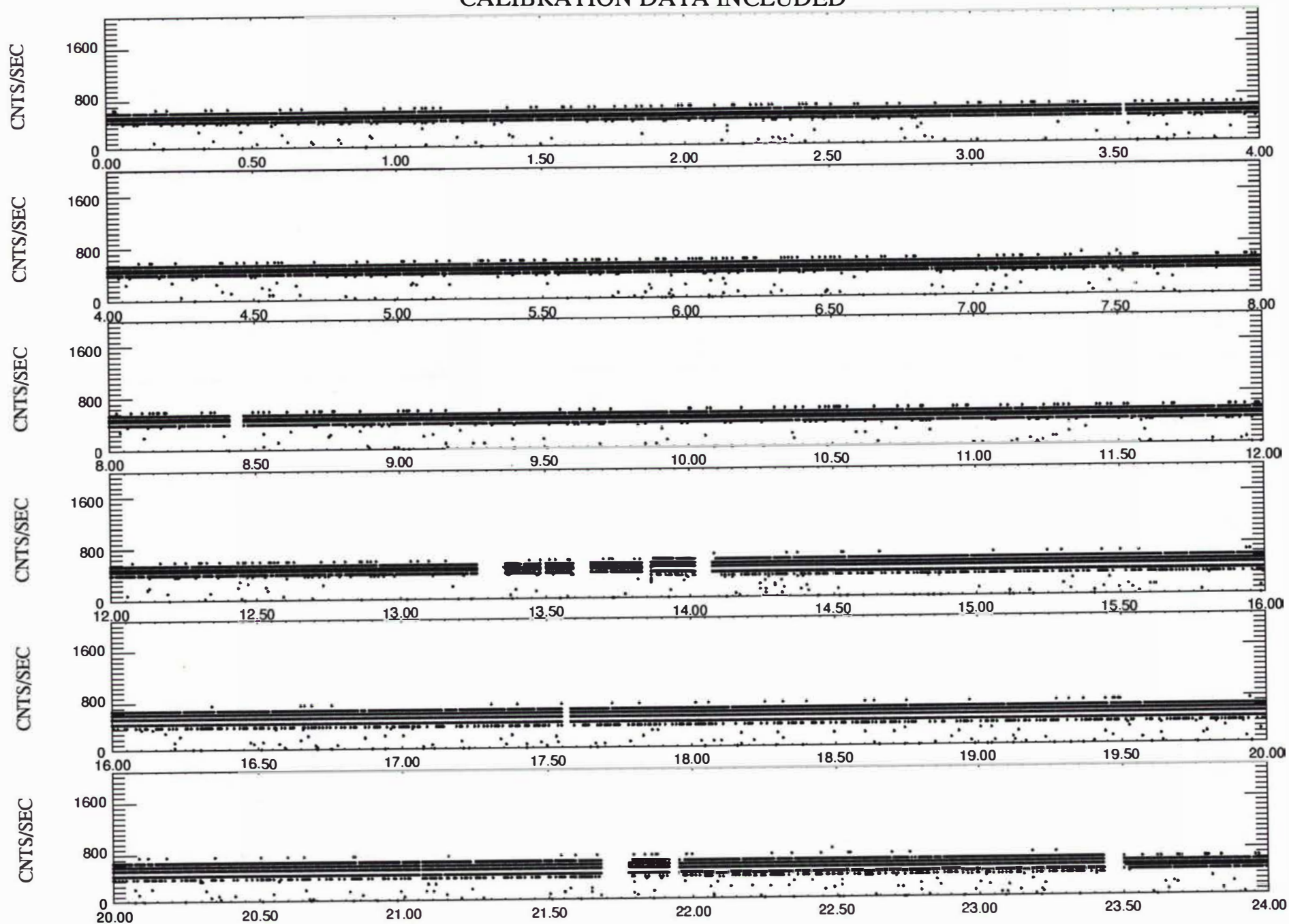
HUS MODES EDR day 317, year 1995 to day 317, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 317, year 1995 to day 317, year 1995
CALIBRATION DATA INCLUDED

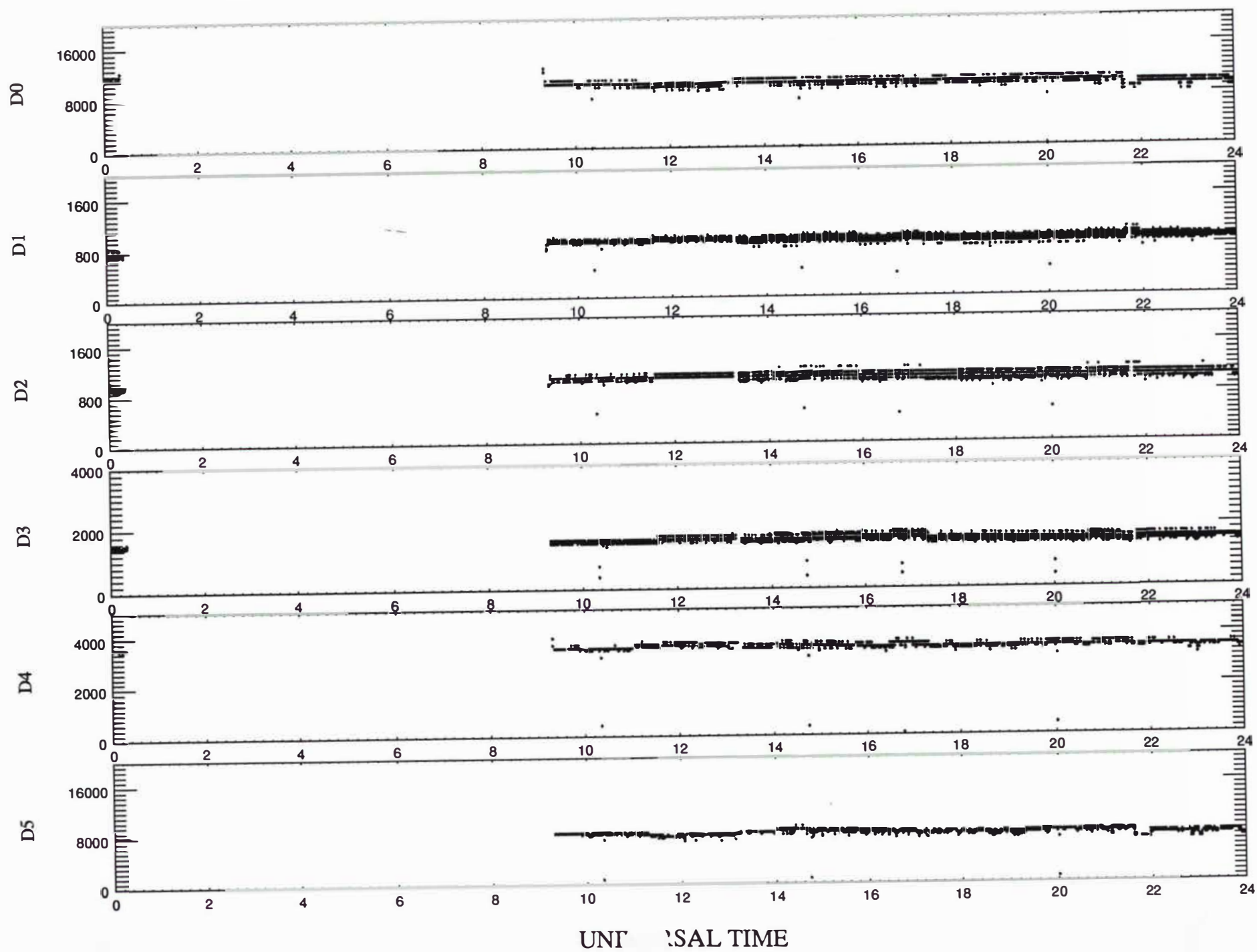
4/1/96

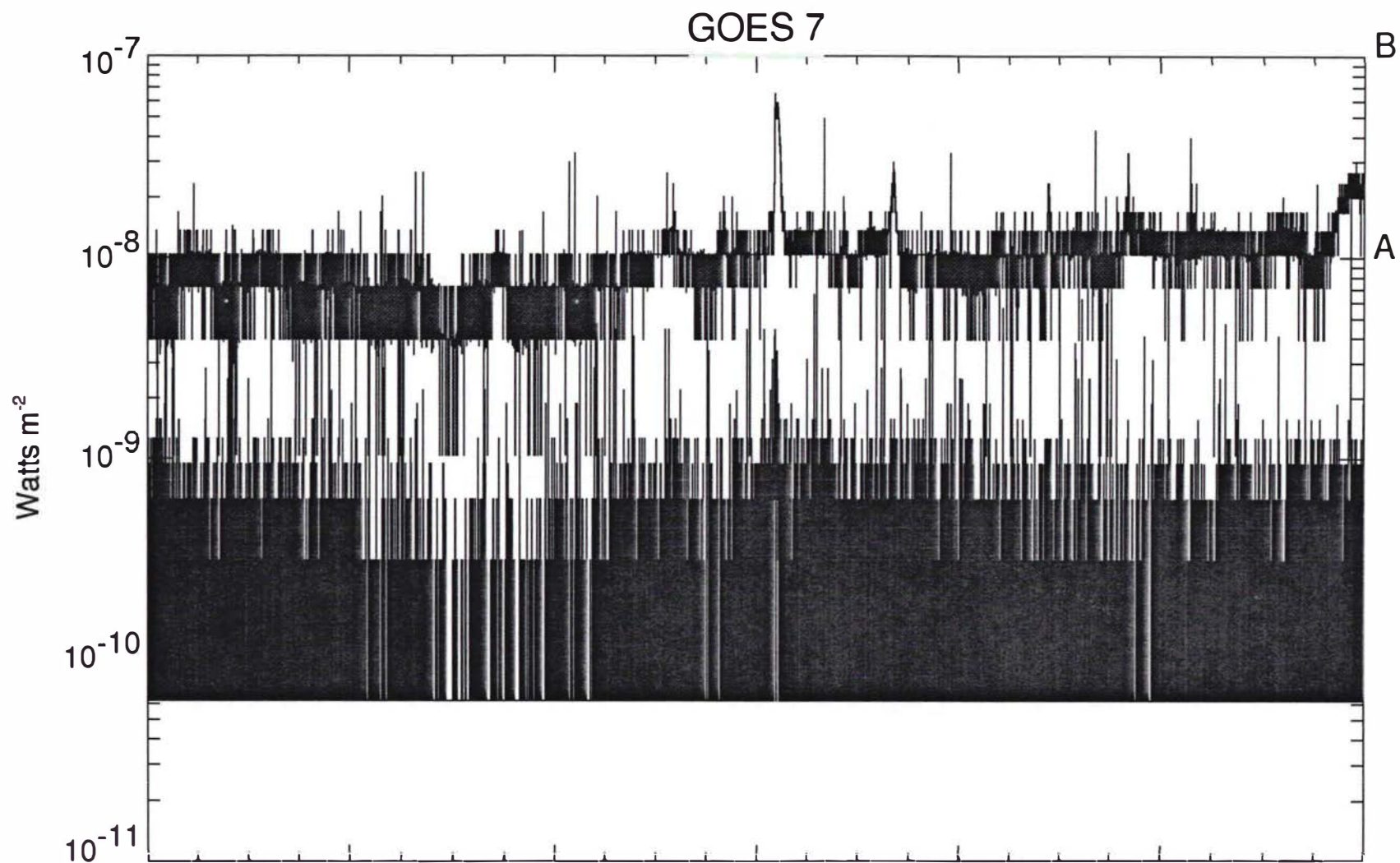


UNIVERSAL TIME

HUS 2B COUNTS / SEC QEDR day 317, year 1995 to day 317, year 1995

11/17/95





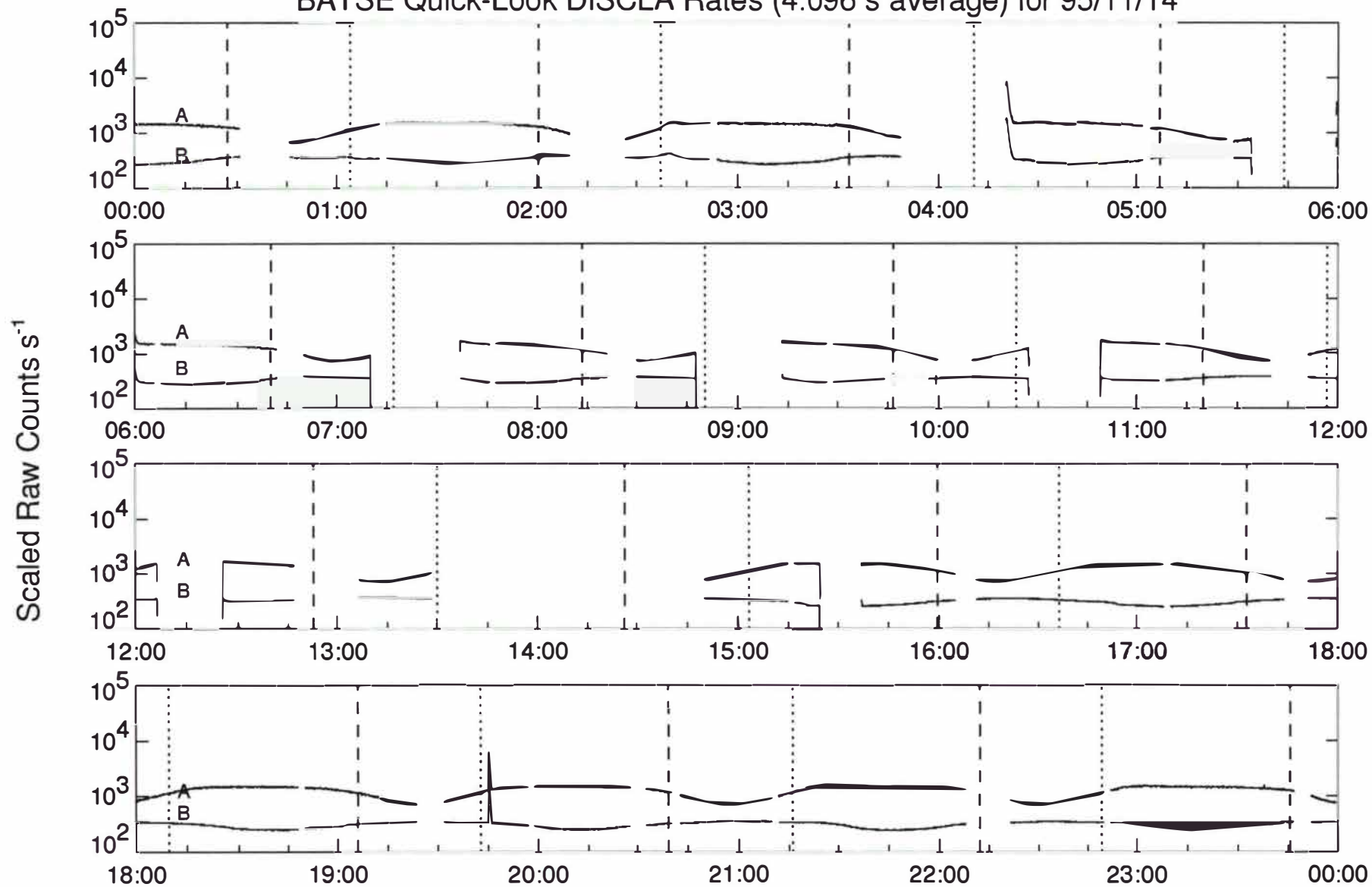
Data Start: 95/11/14, 0000:02

Plot created: 95/11/16, 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 95/11/14



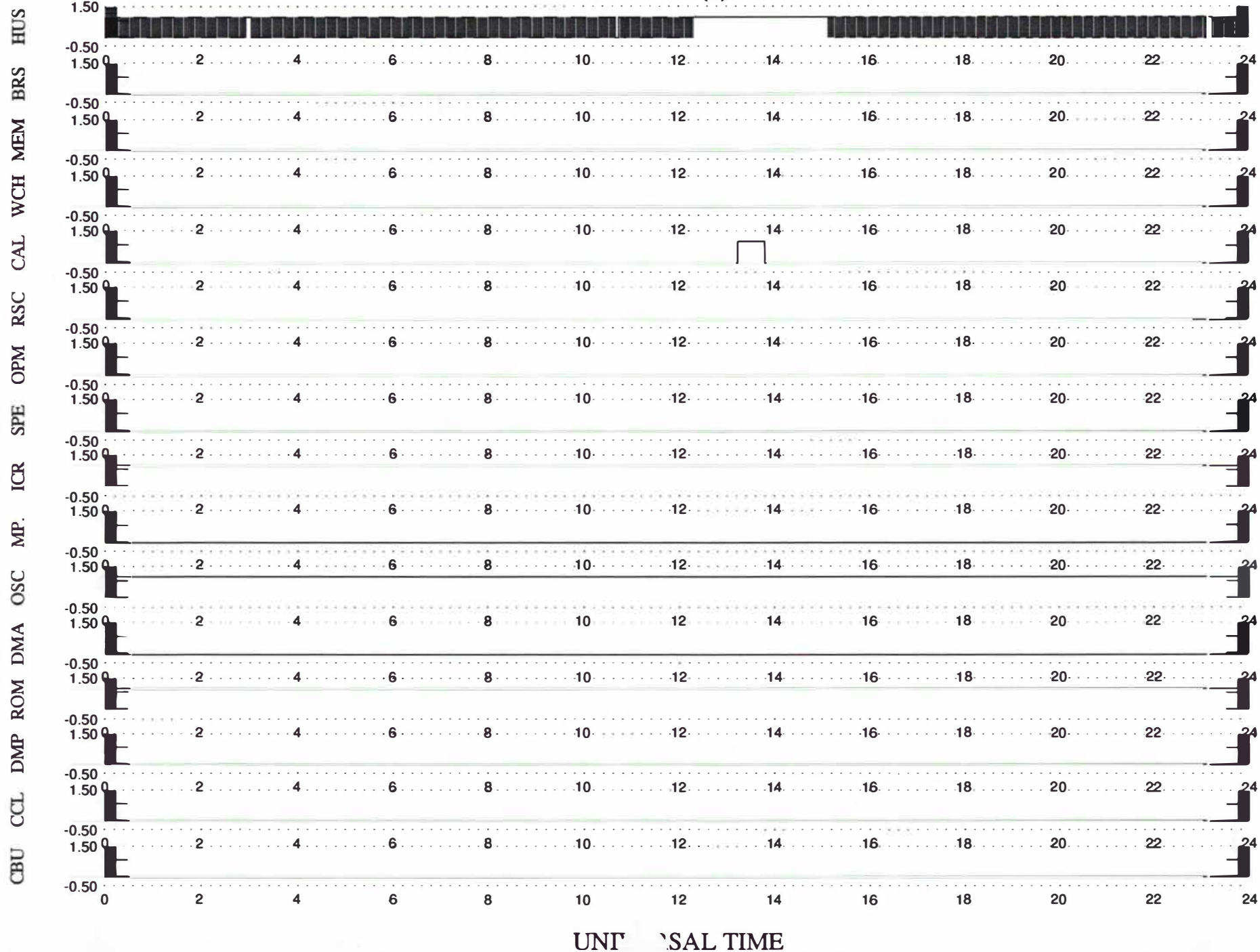
Current Time: 95/11/16, 0655 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

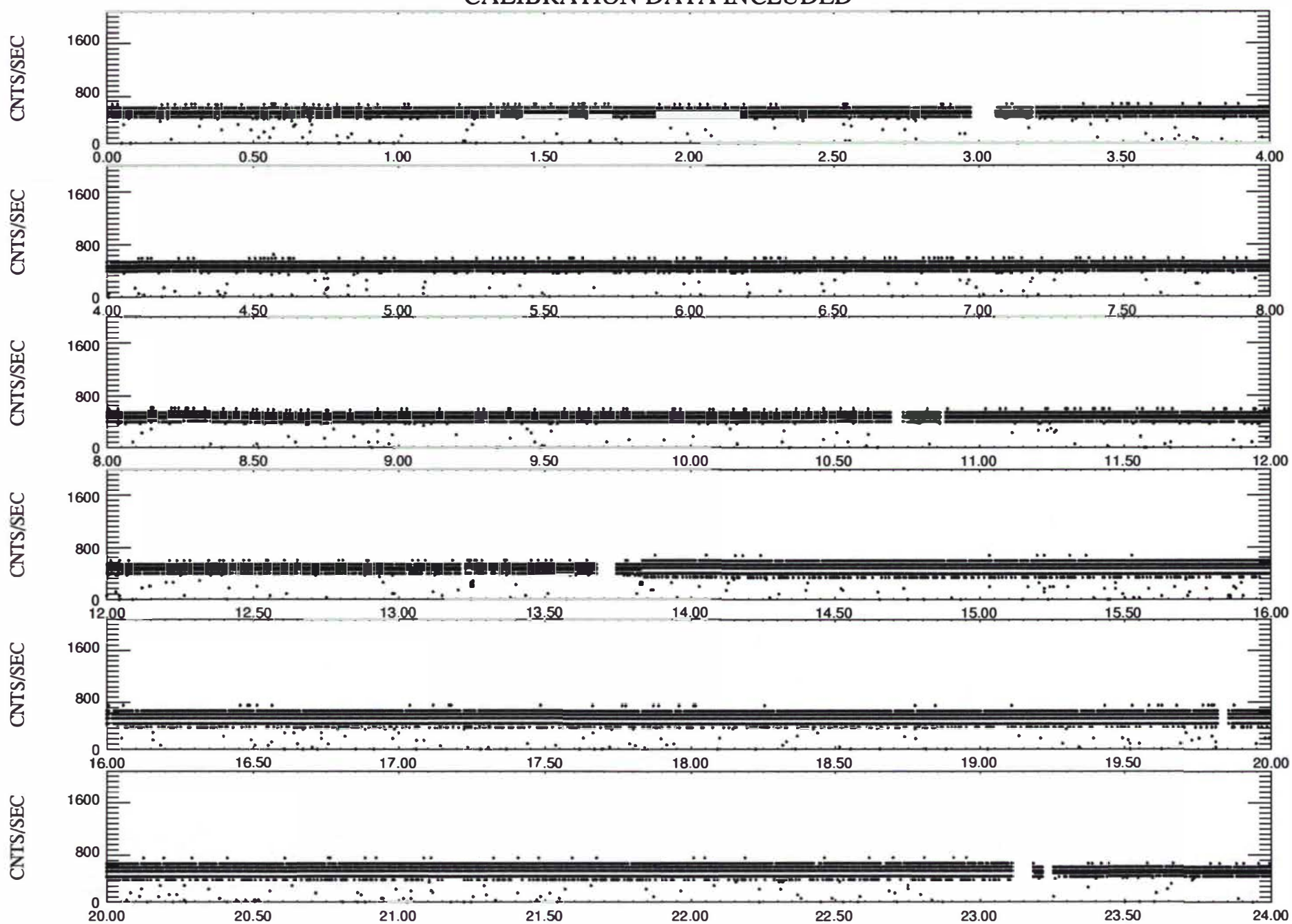
HUS MODES EDR day 318, year 1995 to day 318, year 1995 NO BURST (8)

4/1/96

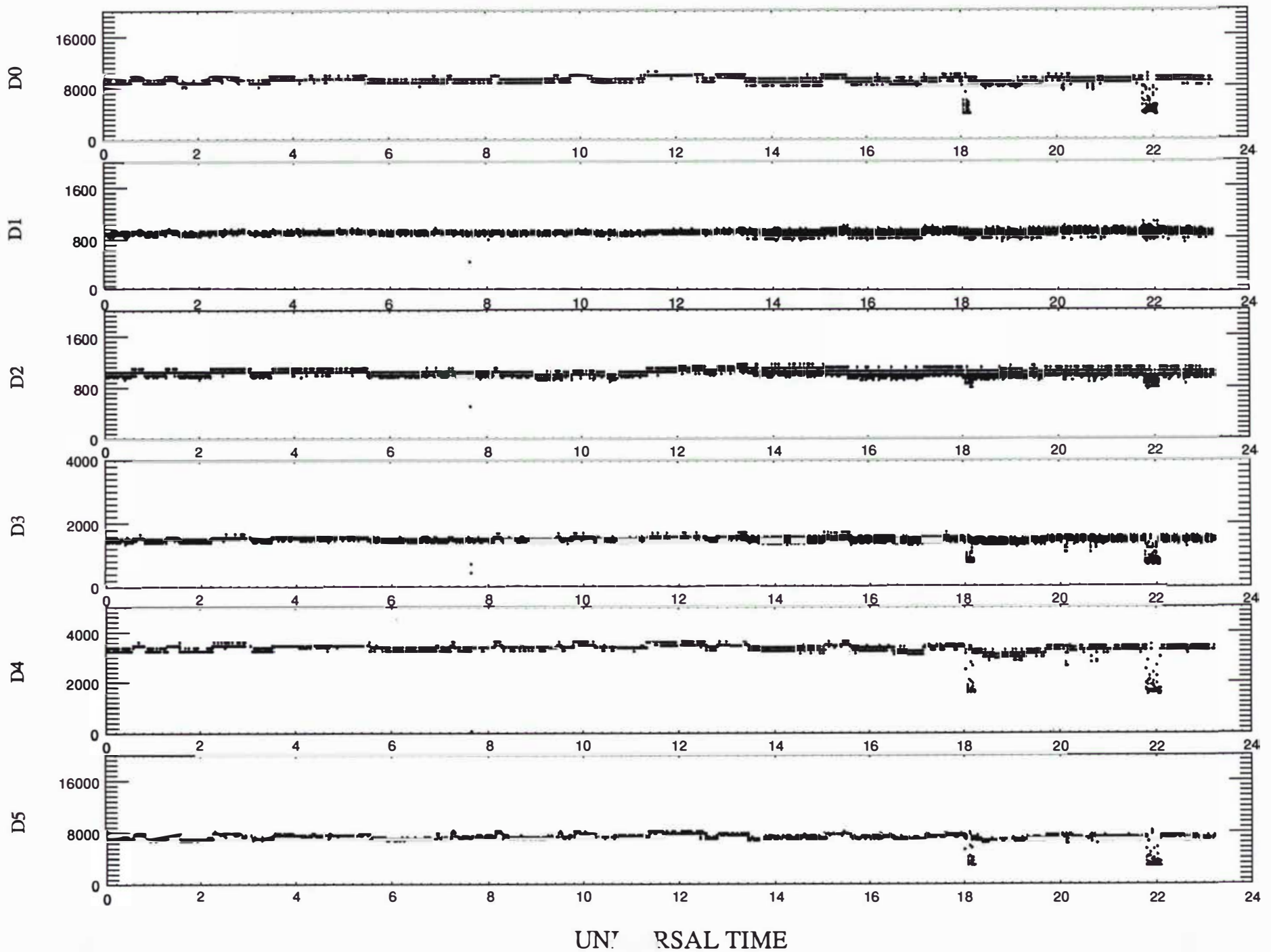


HUS 2A, MODE 1, NOT AVERAGED EDR day 318, year 1995 to day 318, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIFORM SAL TIME



Date: Sep 6 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

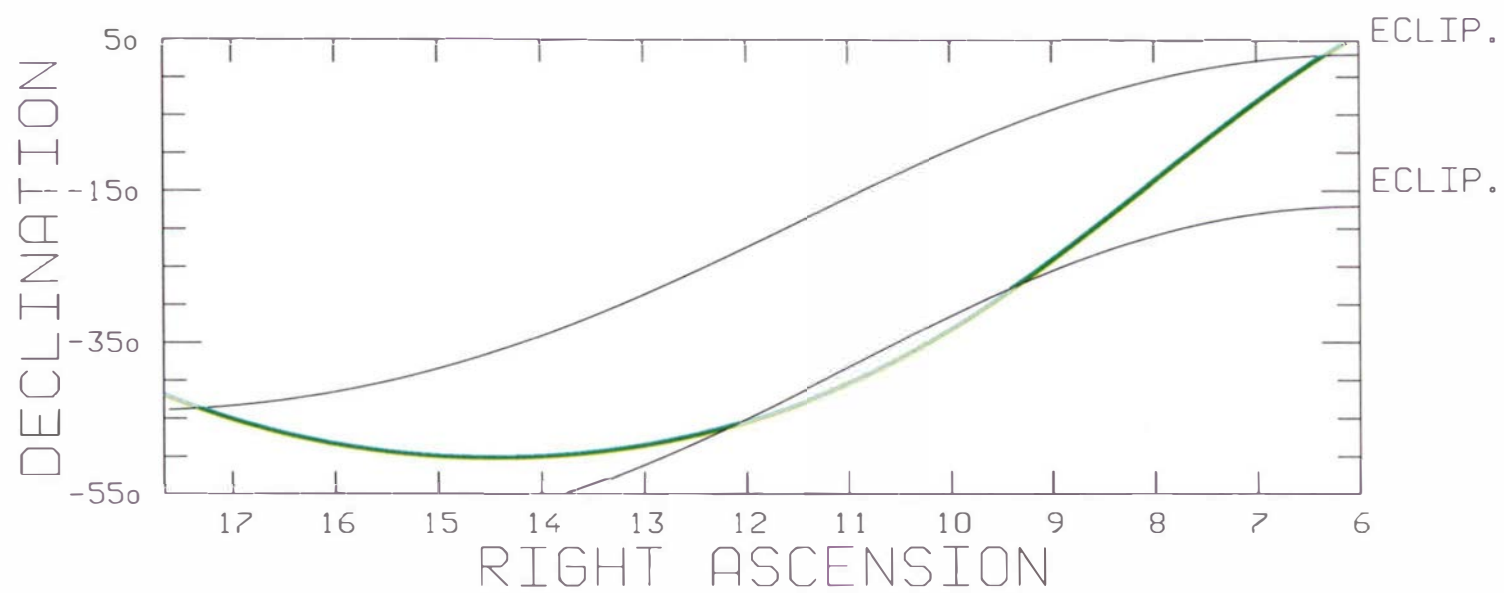
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

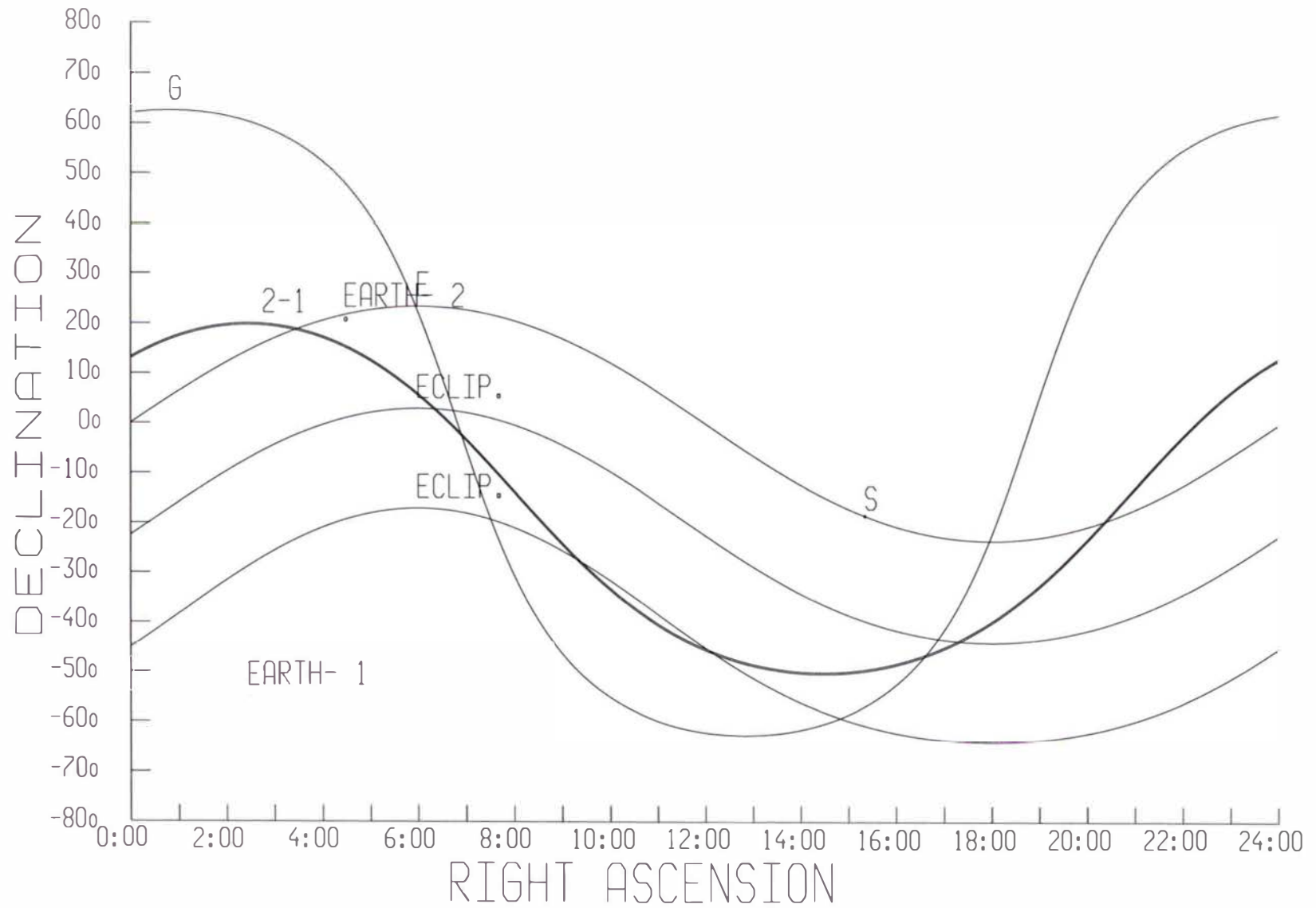
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

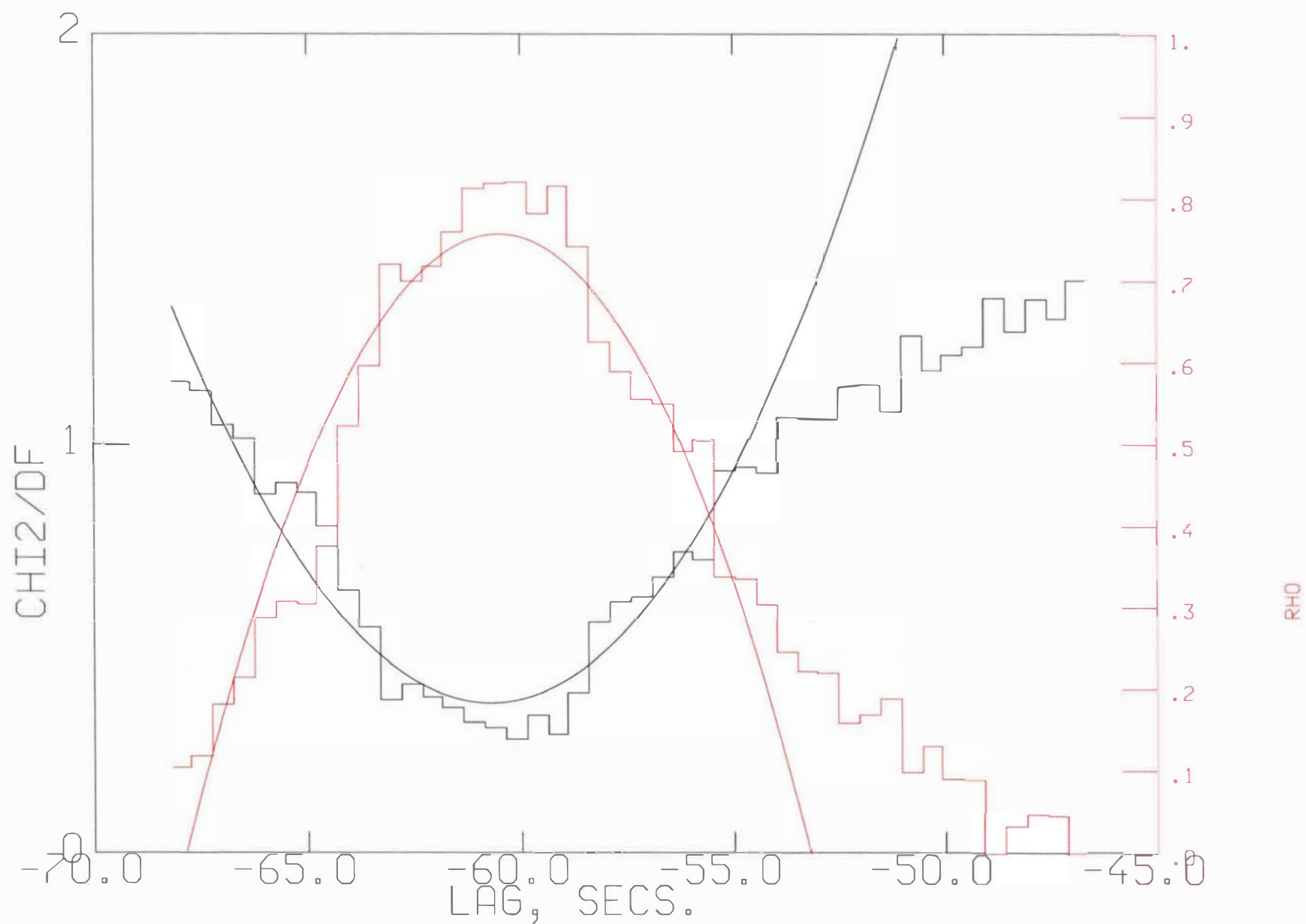


EVENT OF NOV 15, 1995 10:54

06/09/2011

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





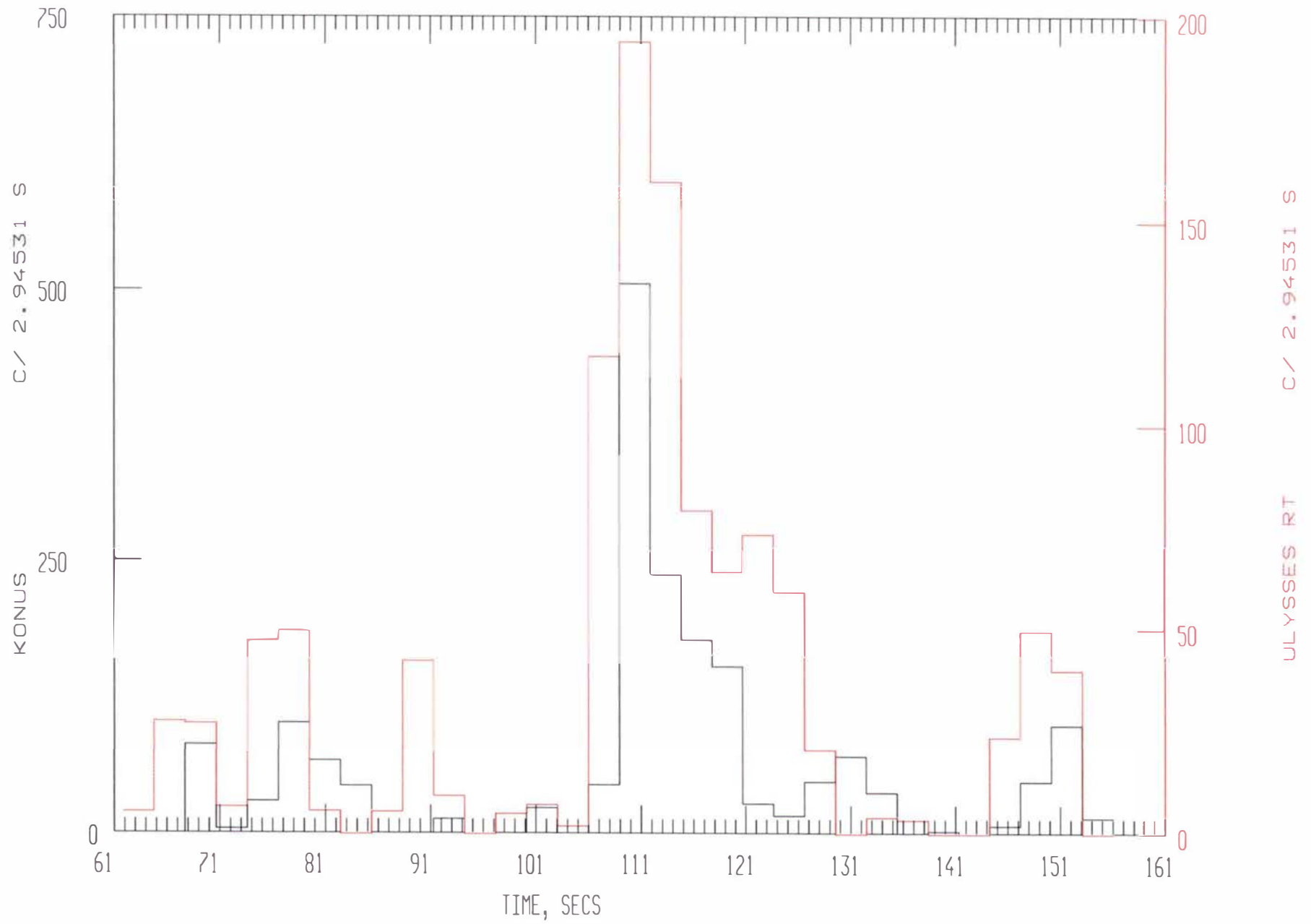
KONUS

-ULYSSES RT CORRELATION

15/11/95

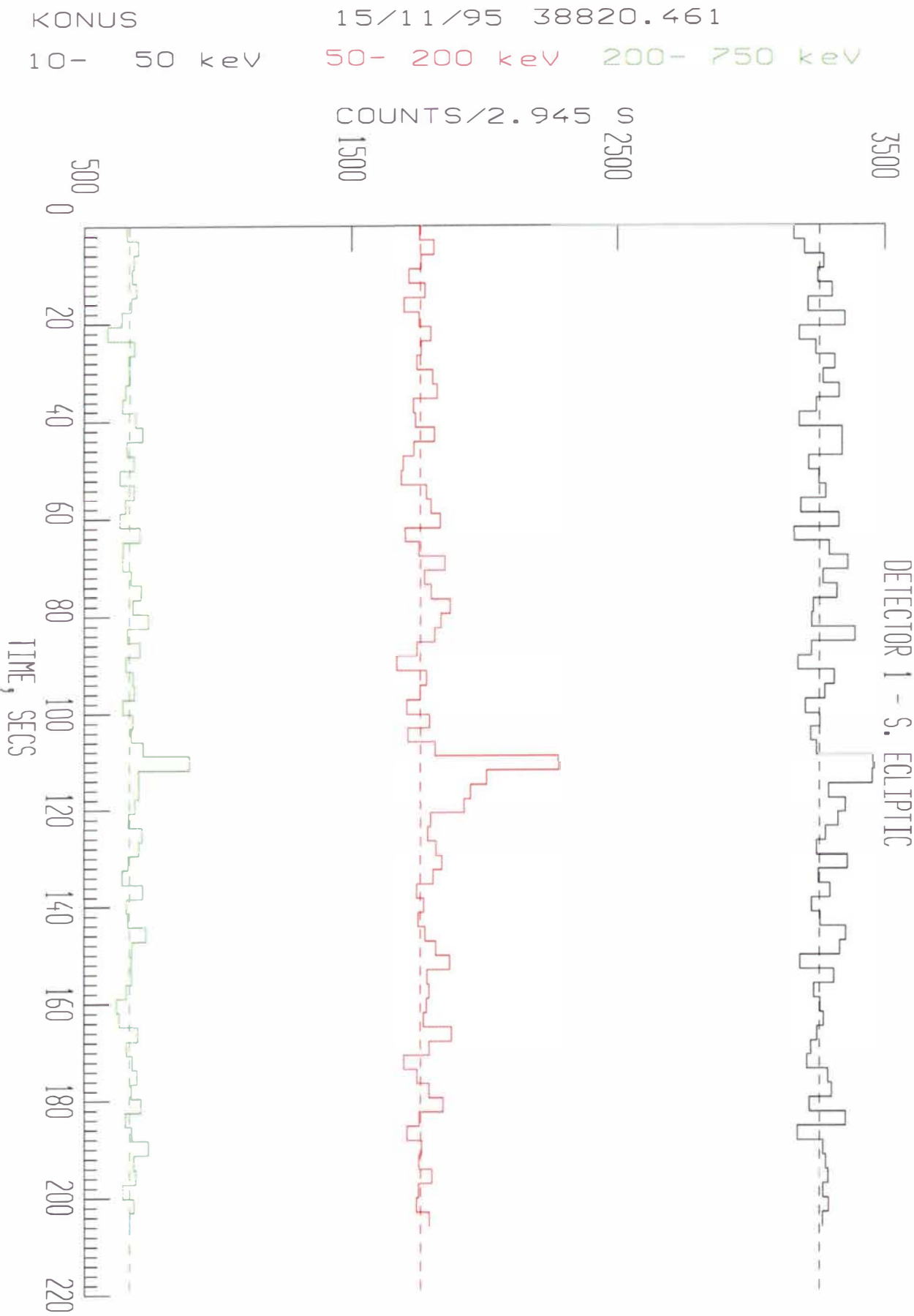
38820.461

6/ 9/11



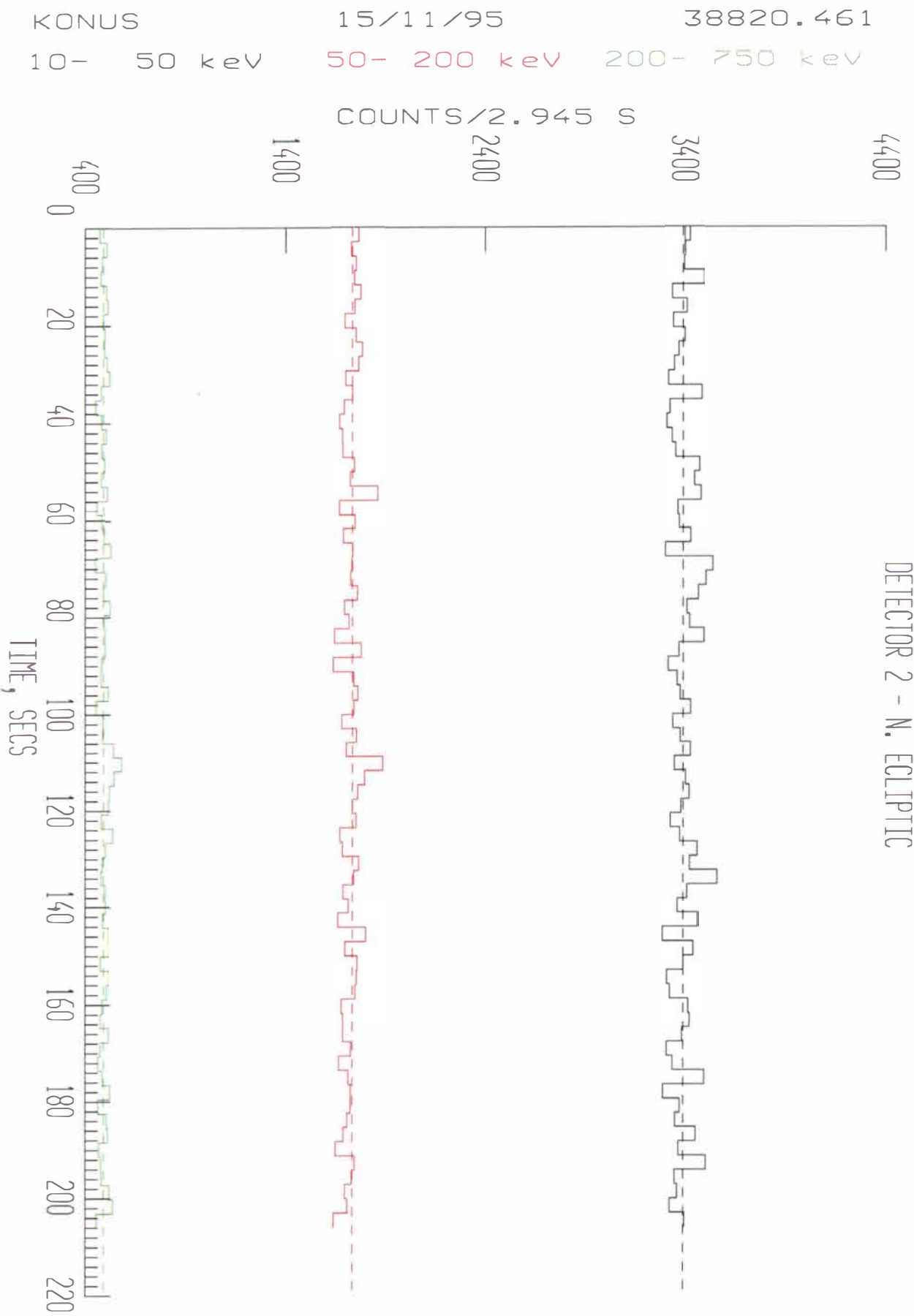
06/09/2011

DETECTOR 1 - S. ECLIPSE



06/09/2011

DETECTOR 2 - N. ECLIPIC



KONUS 19951115 39293

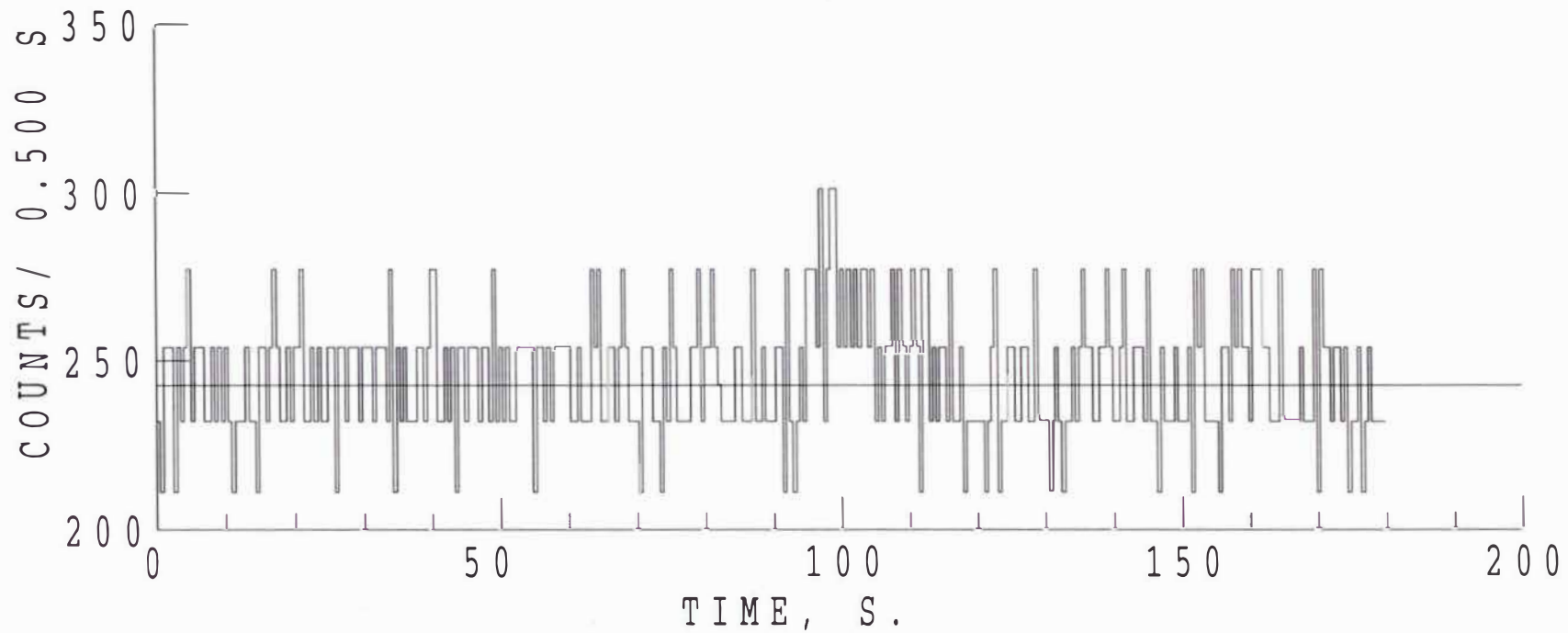
ULYSSES RT

01 / 09 / 11

15 / 11 / 95 39204.406 s

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



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

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

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

Dear Kevin,

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

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

1 / 2 / 9 6

U L Y S S E S R T

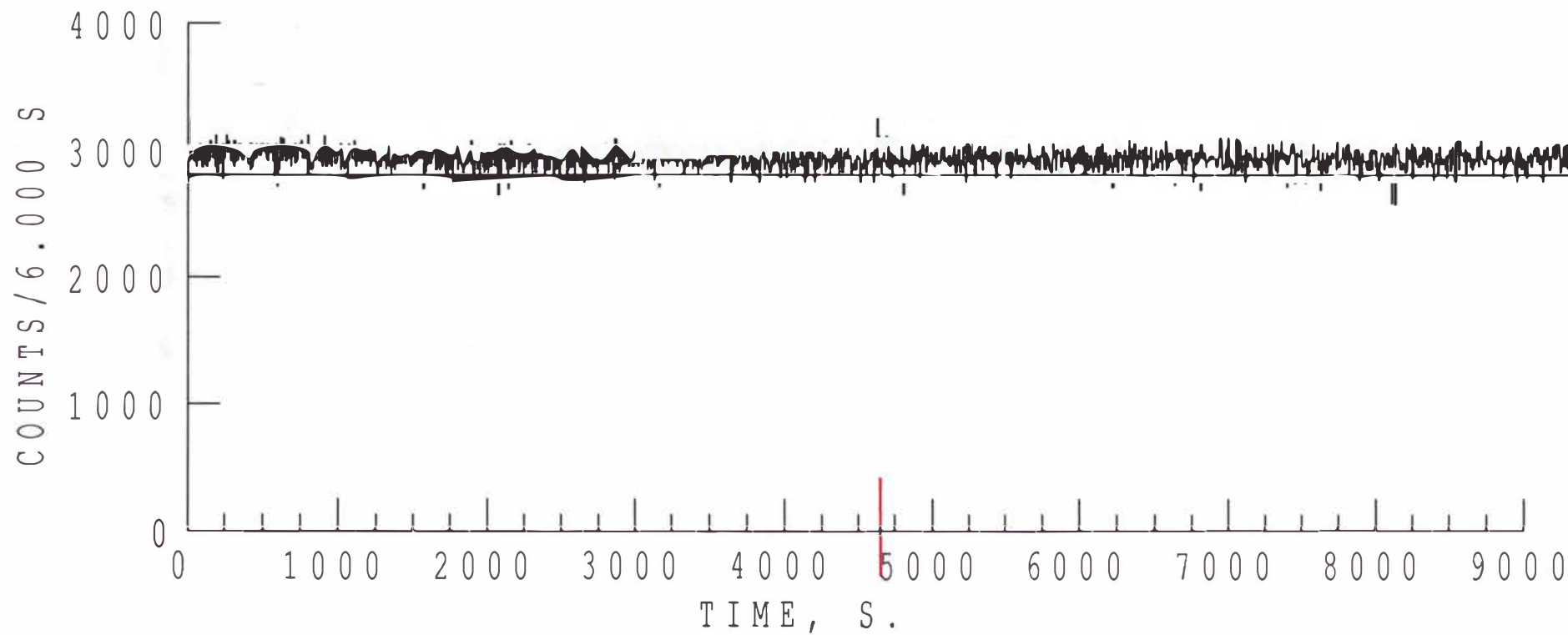
1 5 / 1 1 / 9 5 3 4 6 6 8 . 3 4 0 s

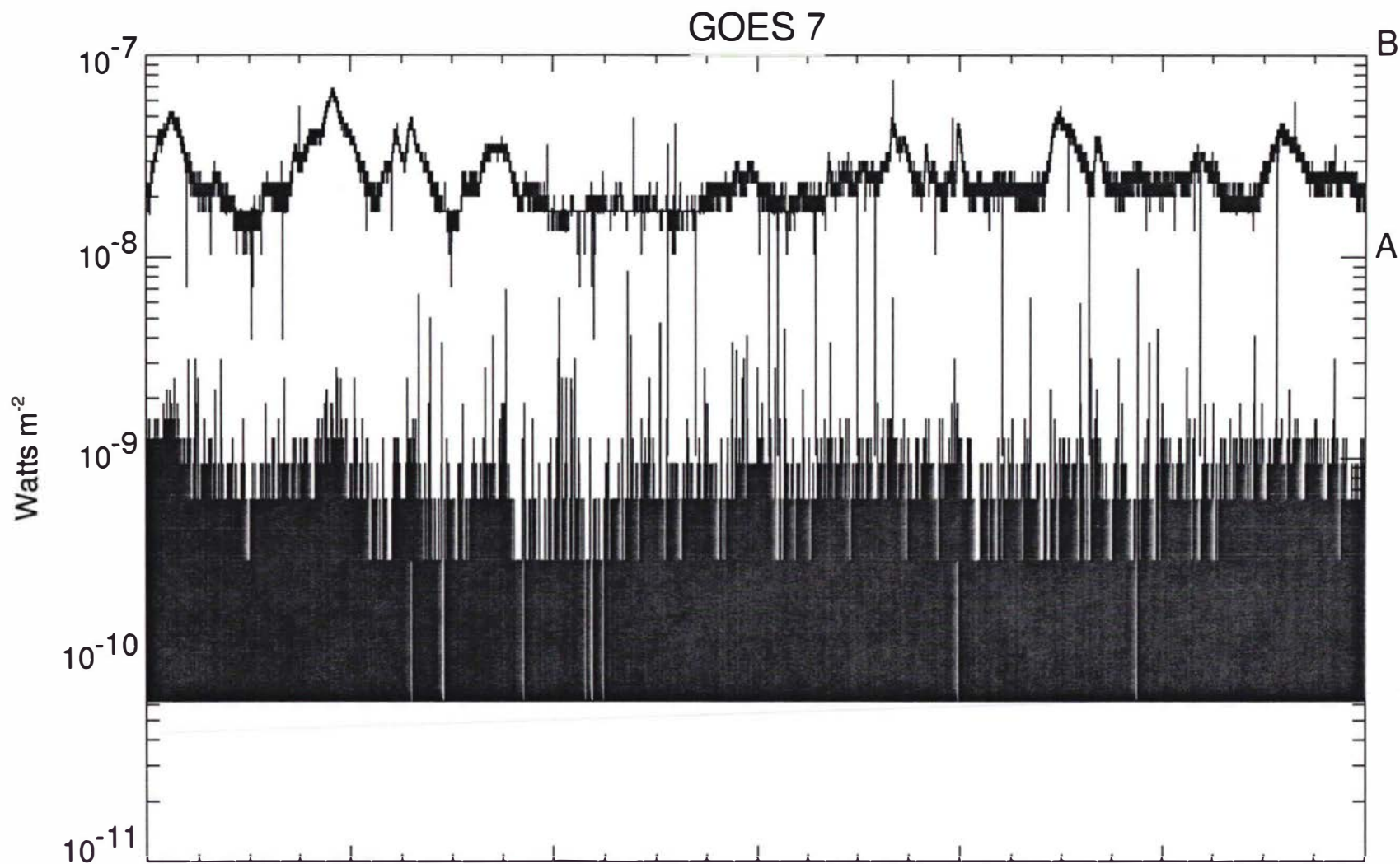
0 . 5 0 0 S I N T E R V A L S R E G R O U P E D B Y 1 2

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS





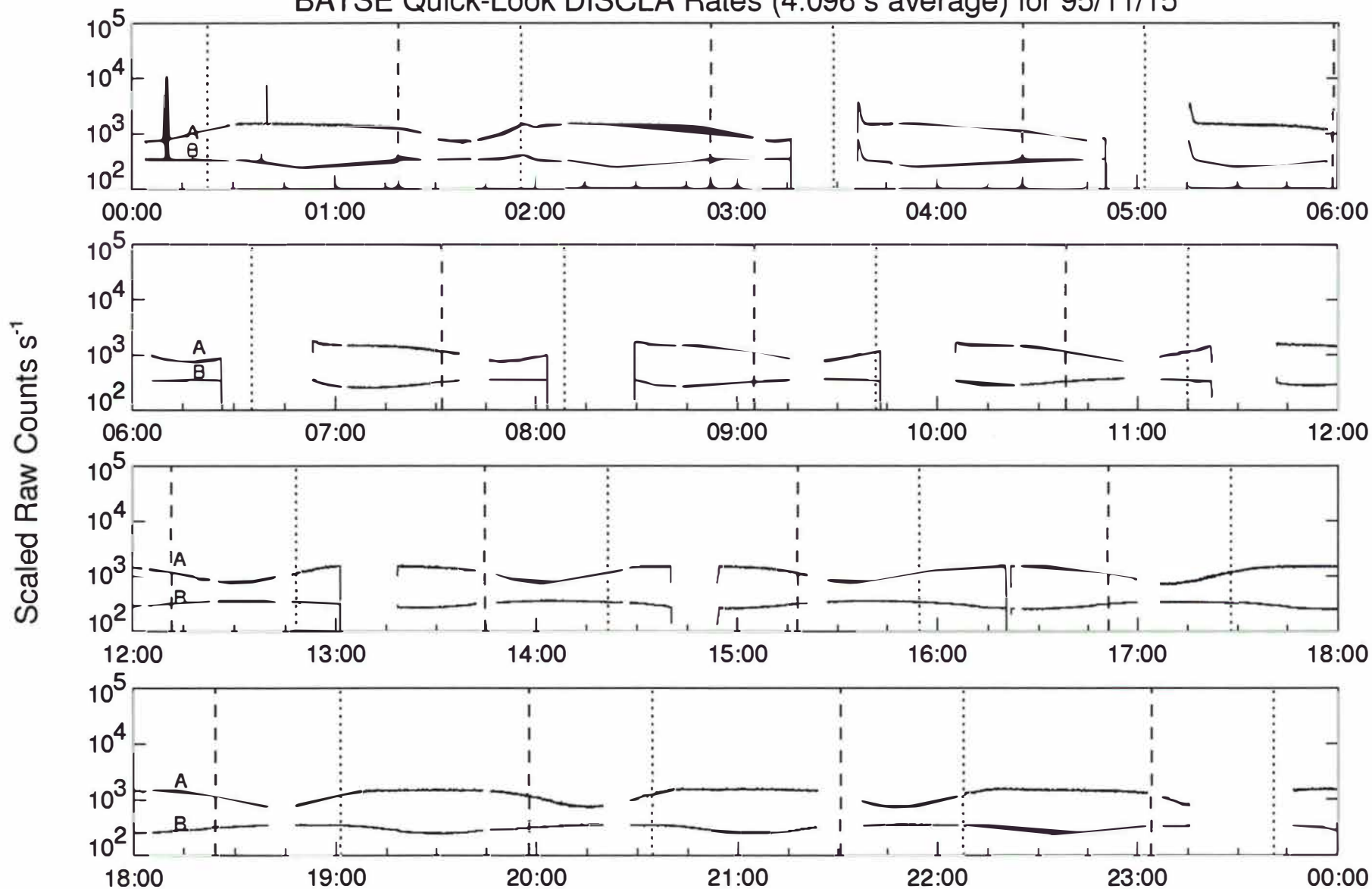
Data Start: 95/11/15, 0000:00

Plot created: 95/11/17, 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 95/11/15



Current Time: 95/11/17, 0655 EDT

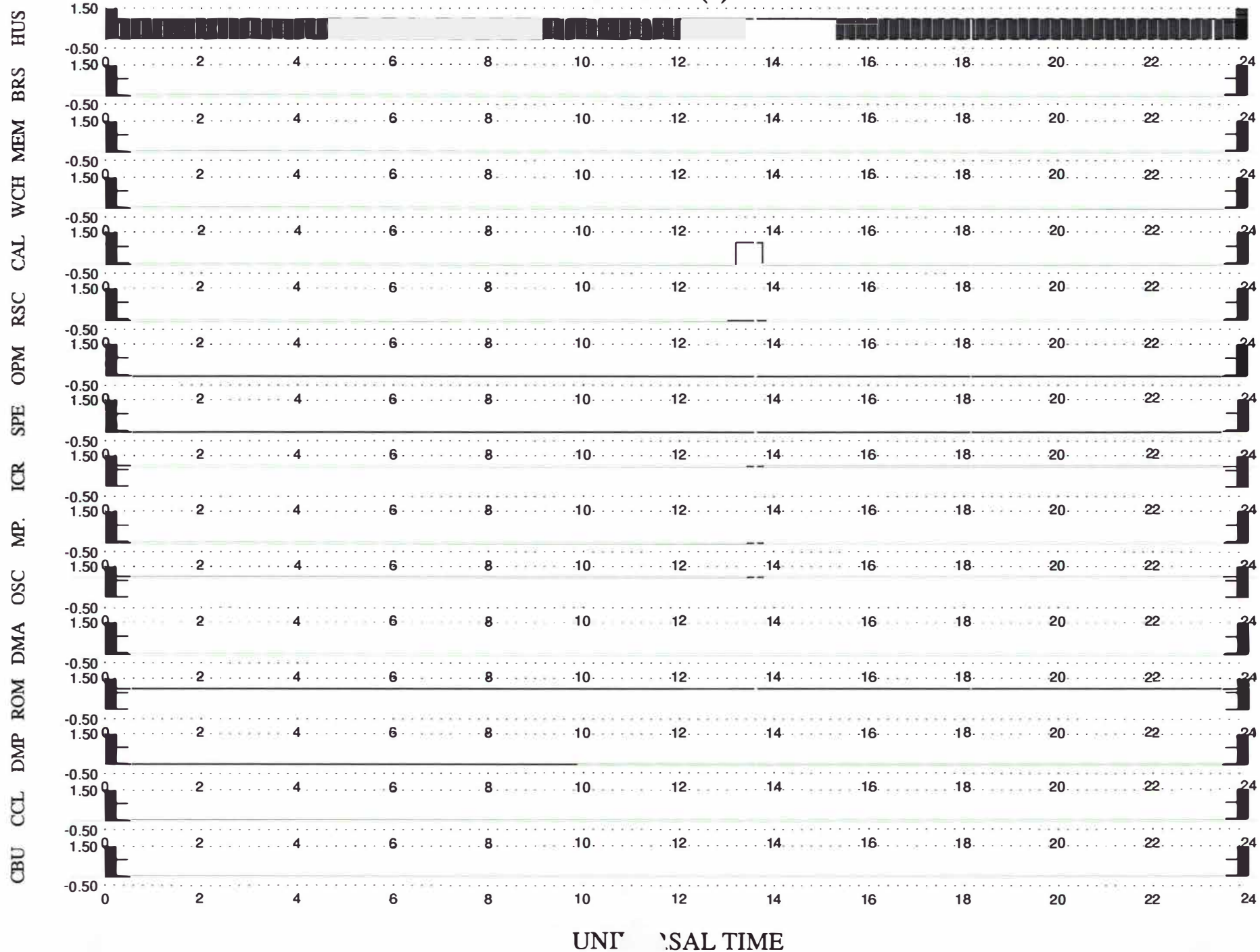
A: Channel 0 Most Sunward LAD

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

Dotted line: Day entry
Dashed line: Night entry

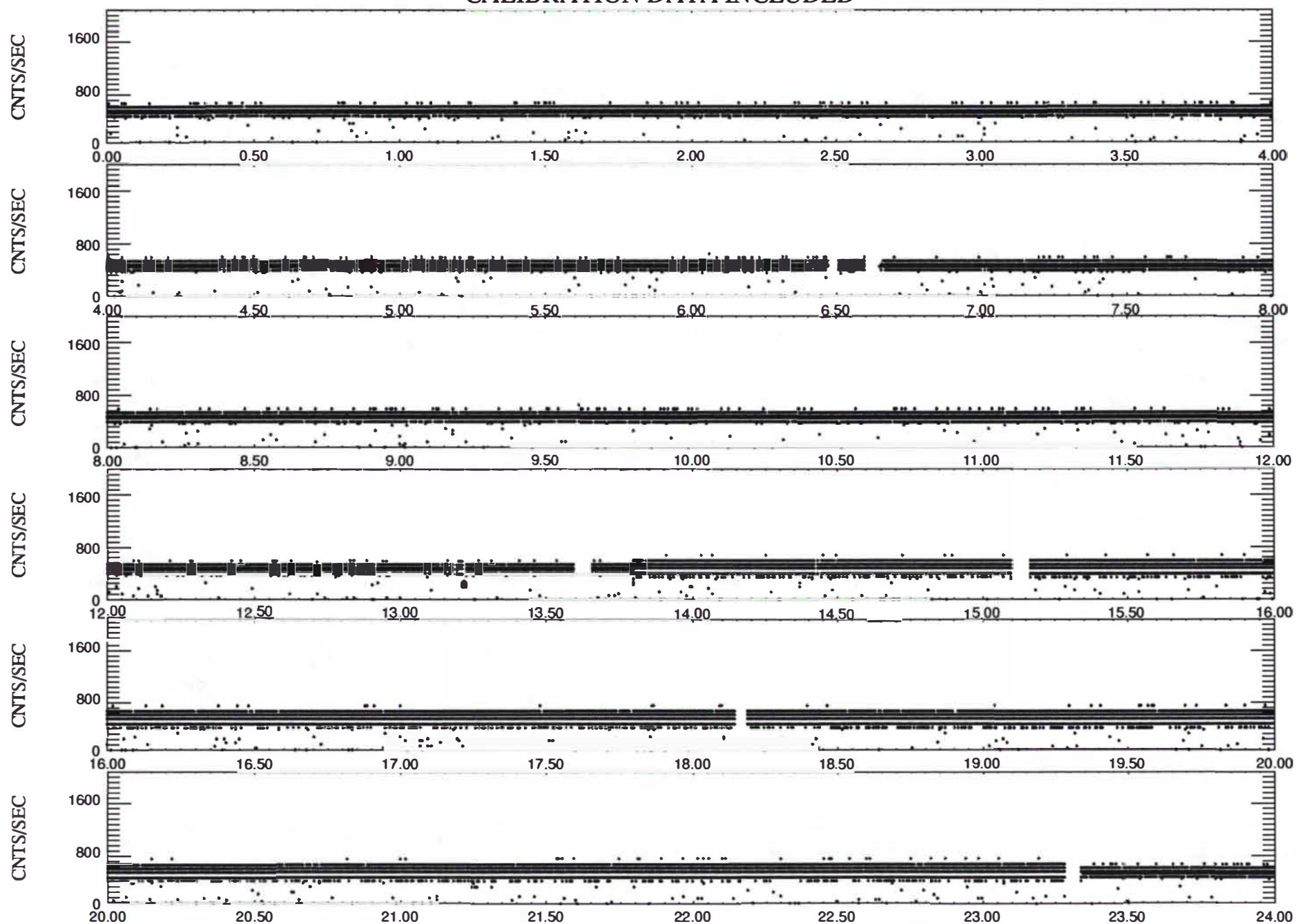
* Solar Burst Trigger
+ Solar Flare

4/1/96

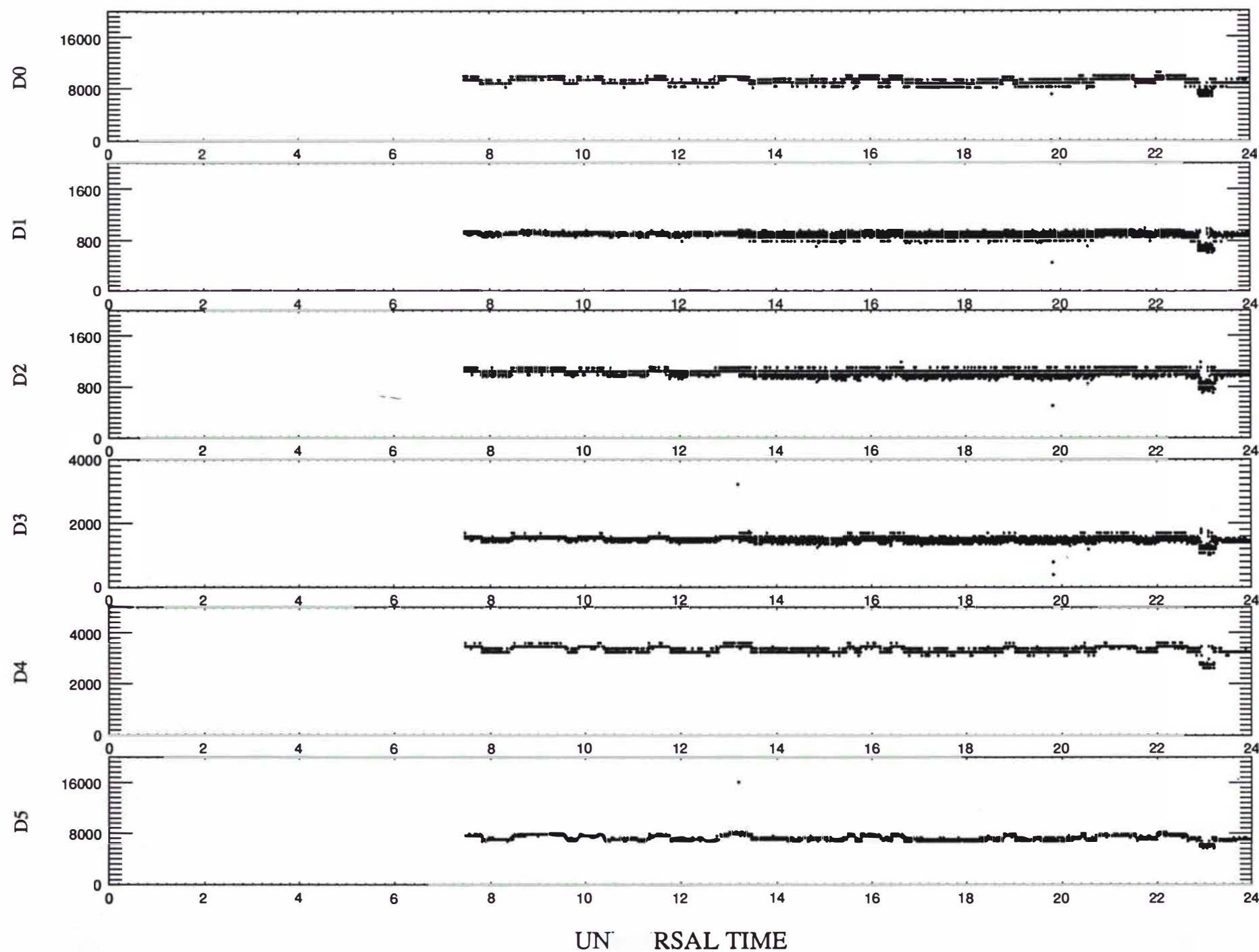


HUS 2A, MODE 1, NOT AVERAGED EDR day 319, year 1995 to day 319, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIVERSAL TIME



From DEAL@SSLLES.MSFC.NASA.GOV Mon Nov 20 12:38 PST 1995
Date: Mon, 20 Nov 1995 14:37:49 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@ssl.msfc.nasa.gov,
"LHEAVX::BARTHELMY"@ssl.msfc.nasa.gov, scott@circe.gsfc.nasa.gov,
"15733::SCHAEFER"@ssl.msfc.nasa.gov, band@cass09.ucsd.edu
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3907

TIME: TJD=0037 SECONDS=10397

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From DEAL@SSLLES.MSFC.NASA.GOV Mon Nov 20 12:49 PST 1995
Date: Mon, 20 Nov 1995 14:48:55 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3908

ND

BATSEARCH PROGRAM

BATSE BURST # 3908
EVENT OF 1995 NOV 16 DAY OF YEAR=320
EVENT CROSSING TIME AT BATSE : 30588. S. OR 08:29:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 12.000 -27.000
BATSE PEAK COUNTING RATE: 3700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 16/11/ 95 IS:
RA= 216.774 DEC= 55.114 DIST= 2.858 AU
BATSE-ULYSSES DISTANCE = 427521139. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 33.37 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1190.92 SECS.
CROSSING TIME AT ULYSSES IS 31779. S. OR 08:49:38 +/- 204.28 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 16/11/ 95 IS:
RA= 258.025 DEC= -23.847 DIST= 2.265 AU
MARS-BATSE DISTANCE = 338851648. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 81.51 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 166.83 SECS.
CROSSING TIME AT MARS IS 30755. S. OR 08:32:34 +/- 196.62 SECONDS

BATSE BURST TRIGGER

NO.: 3908

TIME: TJD=0037 SECONDS=30588

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=87.8 AZIMUTH=142.7 ERROR=8.0 DEGREES

COMMENTS:

BURST LASTING ~ 30 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3908	951116	10037	30588	3700	012	-27	30

22 / 11 / 95

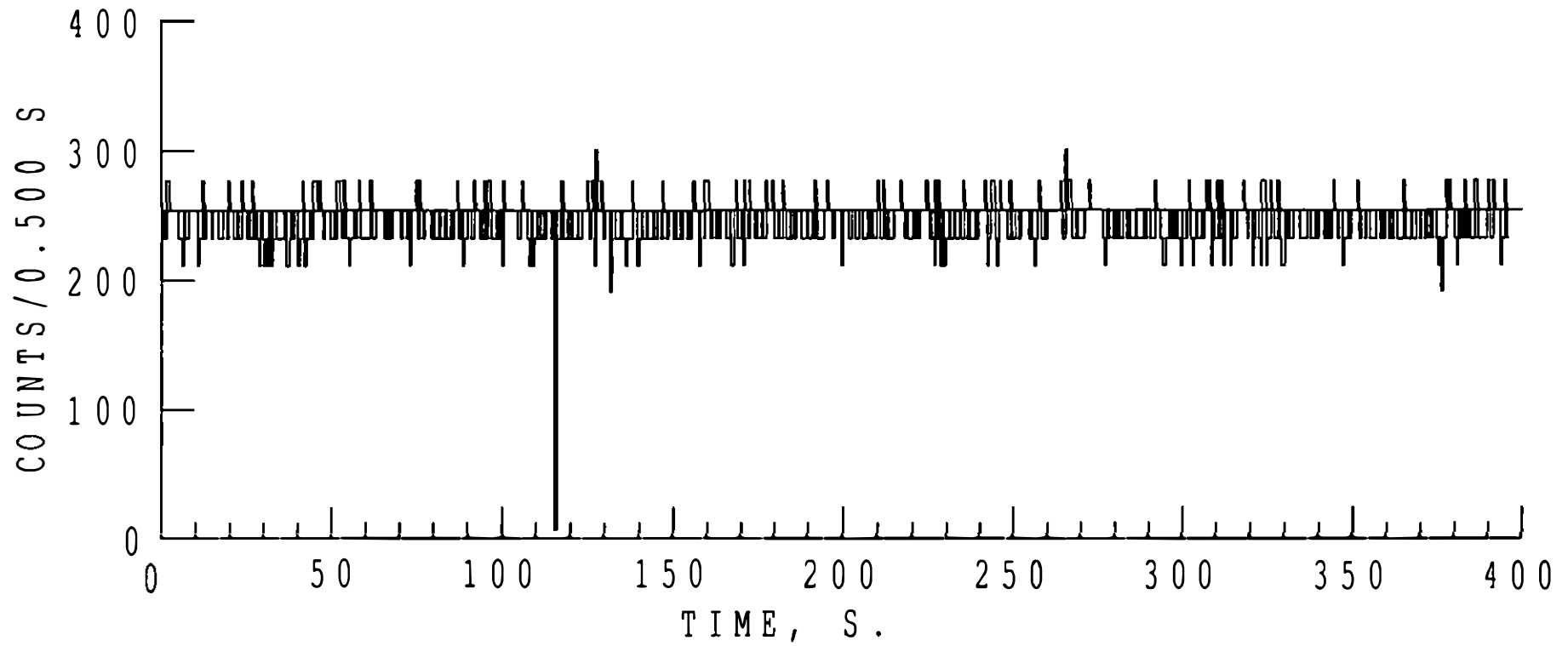
ULYSSES RT

16 / 11 / 95 31572.152 s

0 - 0 keV

B= 10 B= 2

>4.0 SIGMA FLUCTUATIONS



BACODINE

16/11/95

30576.305

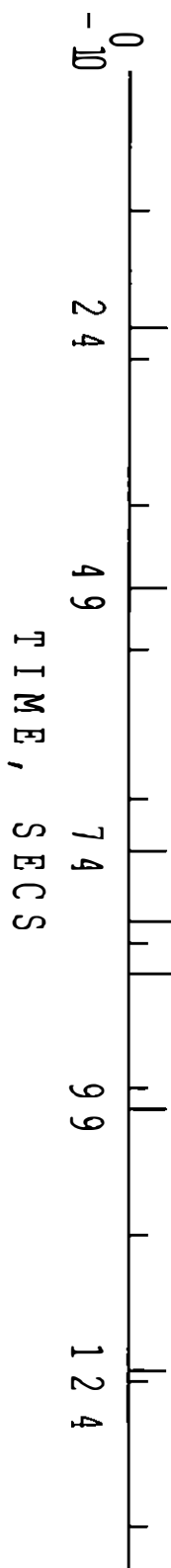
25- 100 keV

COUNTS/1.024 S

2500 —

5000 —

7500 —



From HENZE@fender.msfc.nasa.gov Mon Nov 20 14:06 PST 1995
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 20 Nov 1995 16:06:31 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3910

BATSEARCH PROGRAM

BATSE BURST # 3910
EVENT OF 1995 NOV 17 DAY OF YEAR=321
EVENT CROSSING TIME AT BATSE : 61080. S. OR 16:58:00.0 No
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 75.000 52.000
BATSE PEAK COUNTING RATE: 7300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 17/11/ 95 IS:
RA= 217.132 DEC= 55.115 DIST= 2.858 AU
BATSE-ULYSSES DISTANCE = 427627035. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=111.62 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -525.54 SECS.
CROSSING TIME AT ULYSSES IS 60554. S. OR 16:49:14 +/- 272.24 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 17/11/ 95 IS:
RA= 258.835 DEC= -23.913 DIST= 2.267 AU
MARS-BATSE DISTANCE = 339139584. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 28.24 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 996.60 SECS.
CROSSING TIME AT MARS IS 62077. S. OR 17:14:36 +/- 108.07 SECONDS

BATSE BURST TRIGGER

NO.: 03910

TIME: TJD=0038 SECONDS=61080

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=052.3 AZIMUTH=242.8 ERROR=006.9 DEGREES

COMMENTS:

SINGLE SPIKE, DUR. ~0.12 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3910	951117	10038	61080	7300	075	+52	.12

22 / 11 / 95

ULYSSES RT

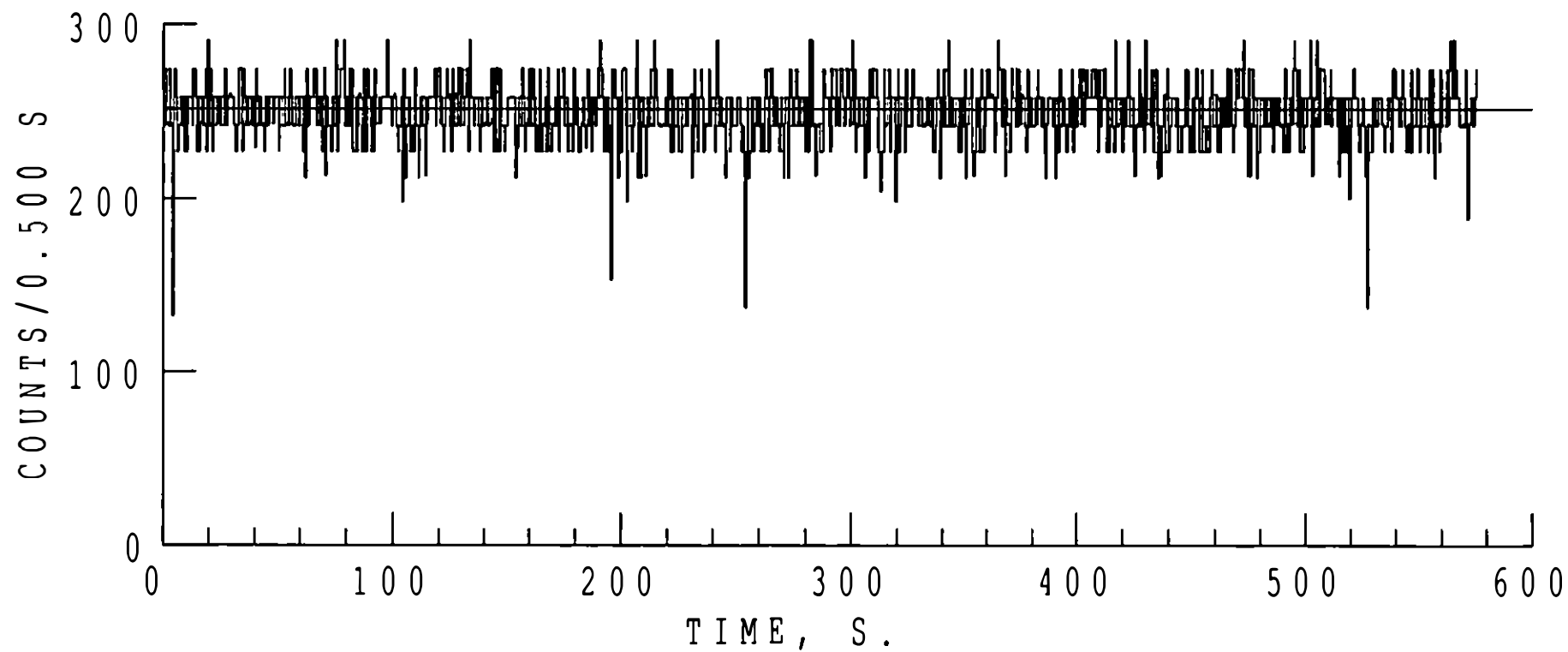
17/11/95 60264.176 s

0.250 S INTERVALS REGROUPED BY 2

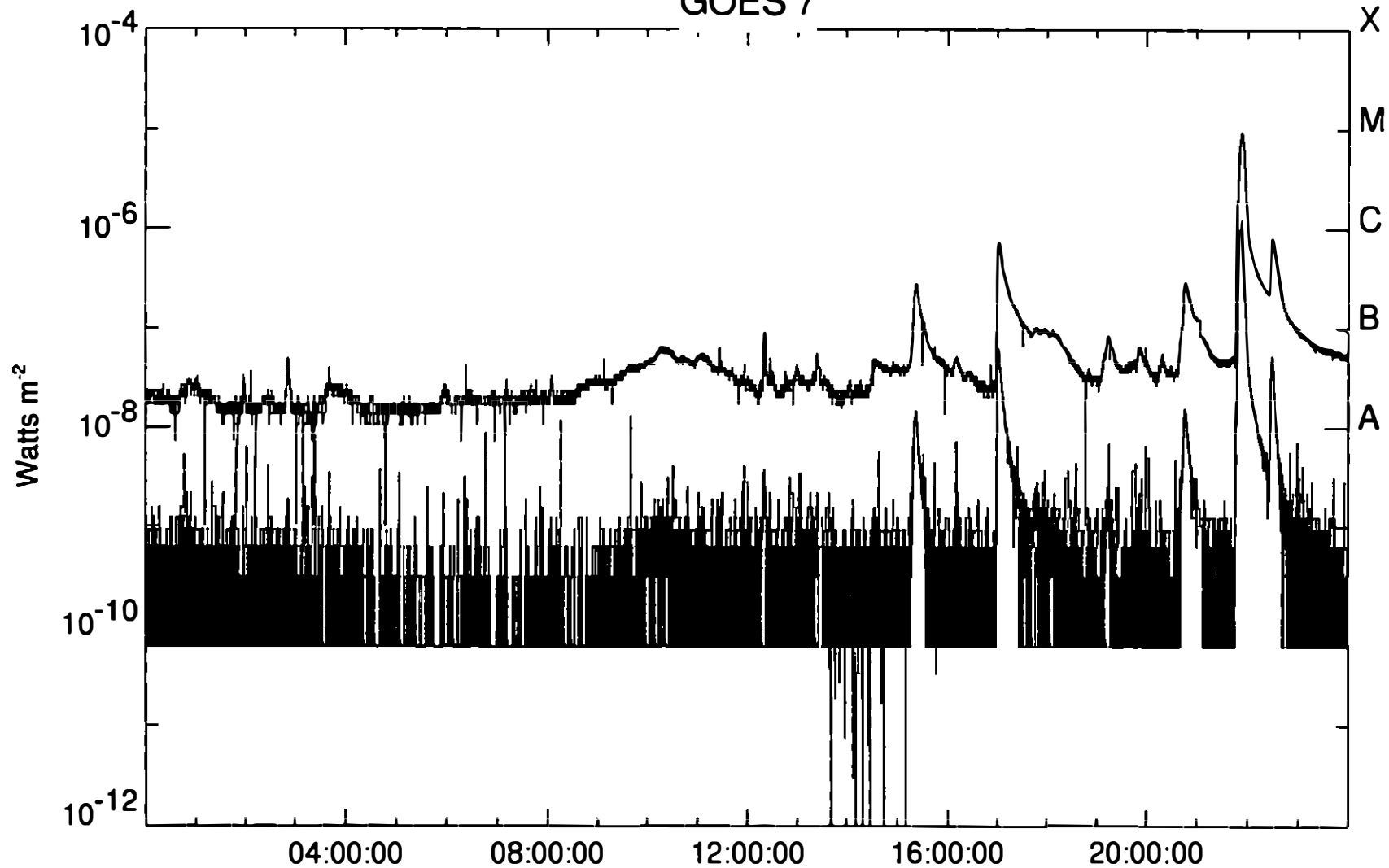
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



GOES 7



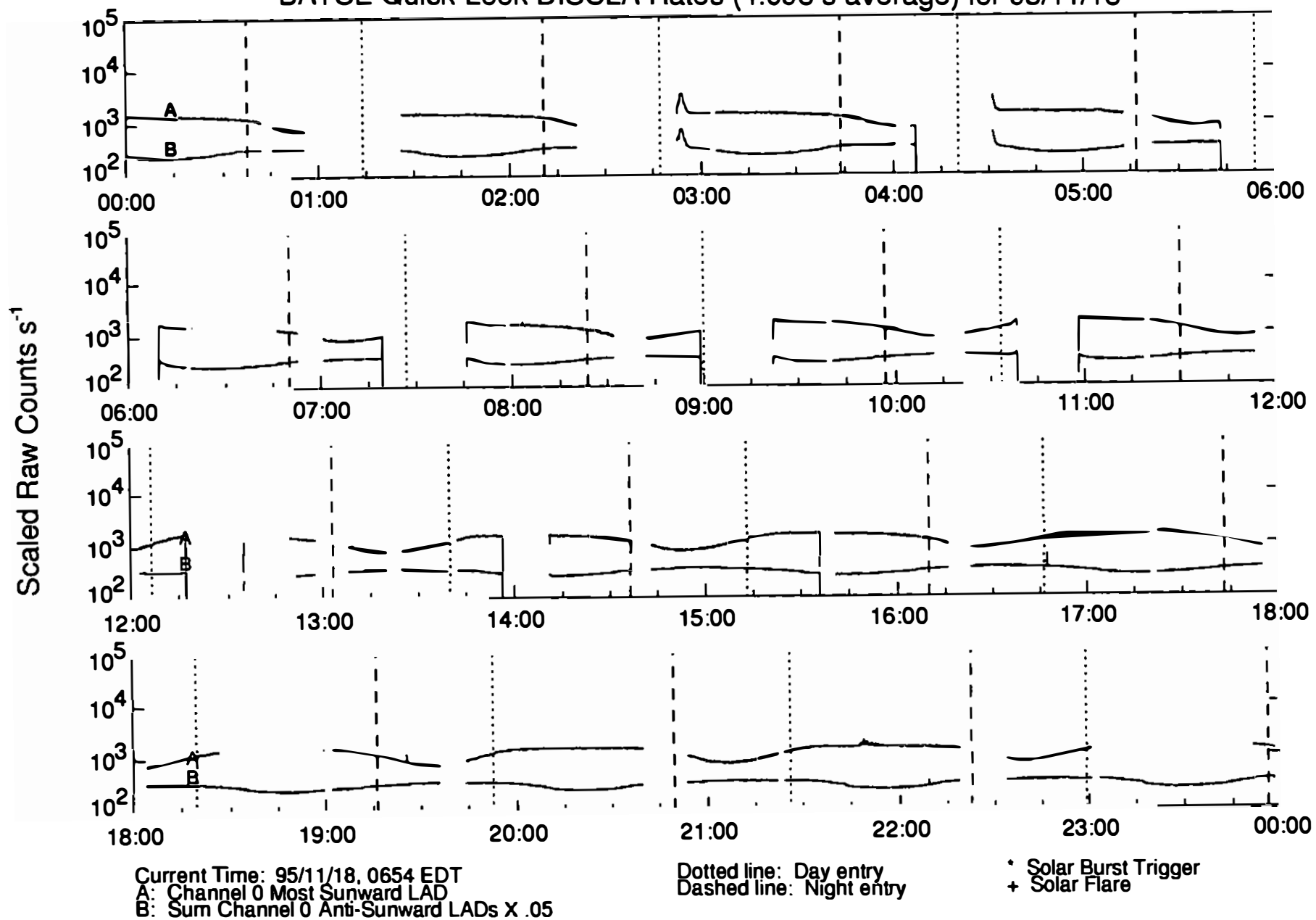
Data Start: 95/11/16, 0000:01

Plot created: 95/11/18, 0654

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

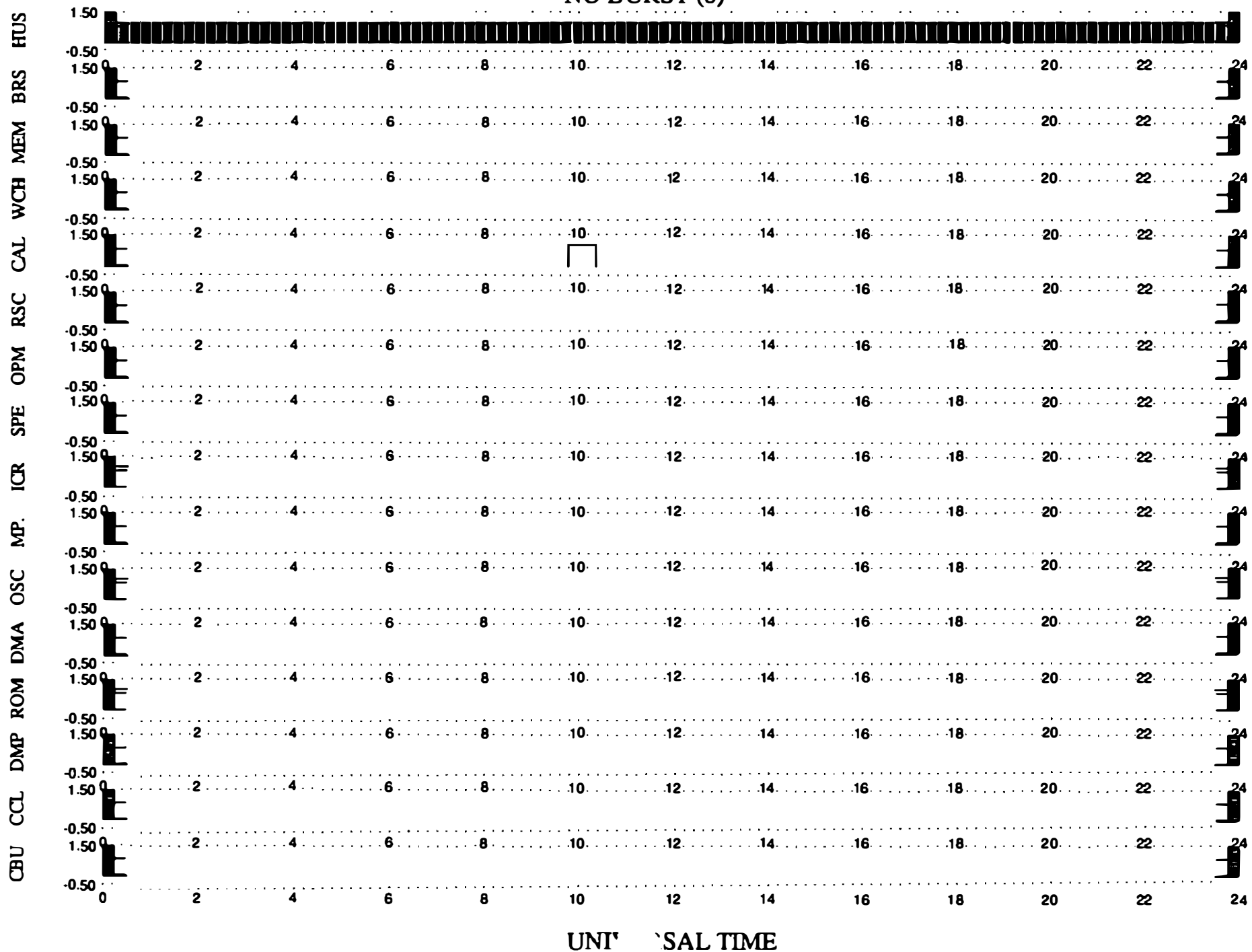
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/16



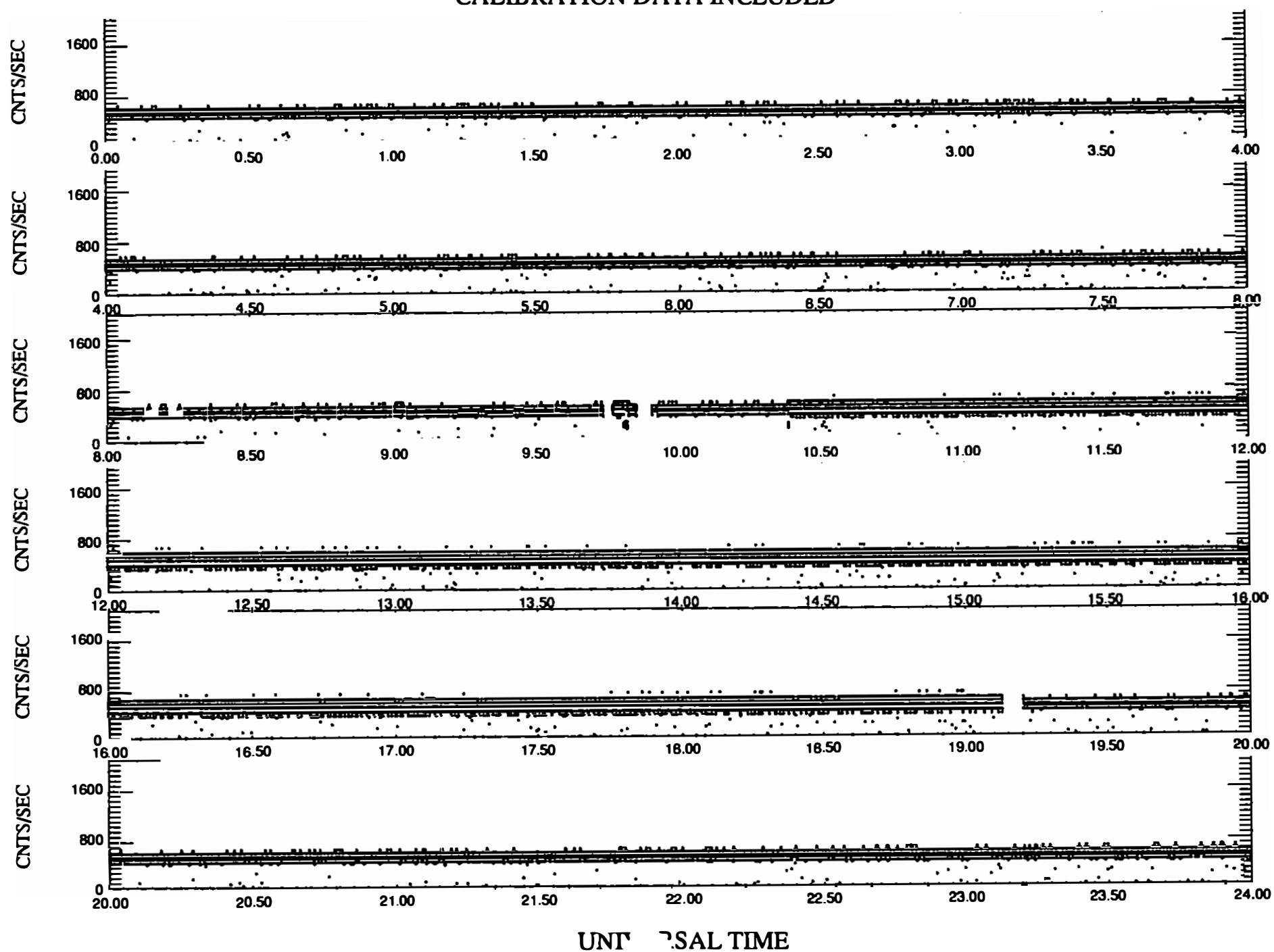
HUS MODES EDR day 320, year 1995 to day 320, year 1995
NO BURST (8)

4/1/96



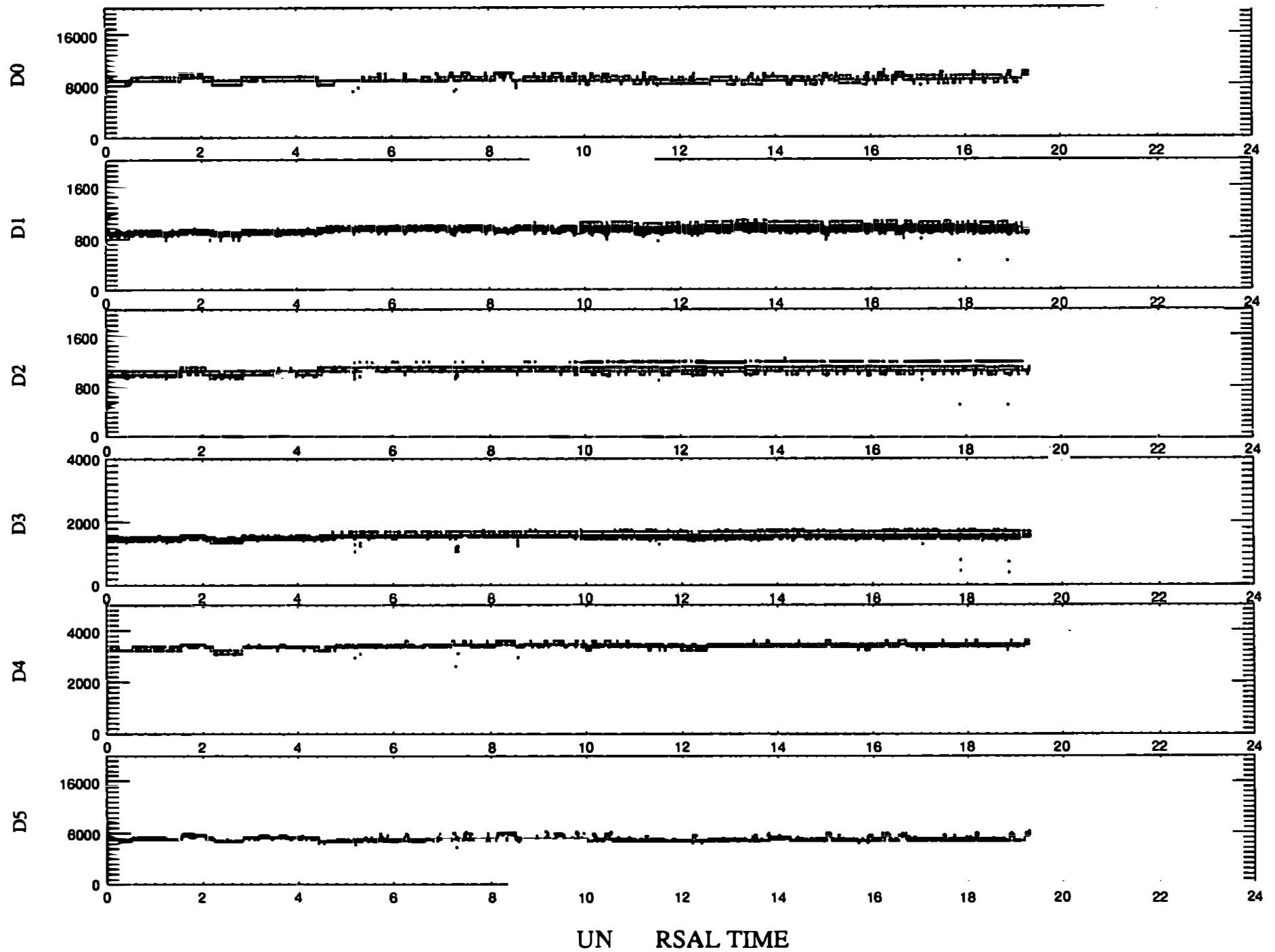
HUS 2A, MODE 1, NOT AVERAGED EDR day 320, year 1995 to day 320, year 1995
CALIBRATION DATA INCLUDED

4/1/96



HUS 2B COUNTS / SEC QEDR day 320, year 1995 to day 320, year 1995

11/17/95



From DEAL@ssl.msfc.nasa.gov Mon Nov 20 12:47 PST 1995
From: DEAL@ssl.msfc.nasa.gov
Date: Mon, 20 Nov 1995 14:46:58 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3909

BATSEARCH PROGRAM

RI

BATSE BURST # 3909
EVENT OF 1995 NOV 17 DAY OF YEAR=321
EVENT CROSSING TIME AT BATSE : 10117. S. OR 02:48:37.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 286.000 37.000
BATSE PEAK COUNTING RATE: 11000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 17/11/ 95 IS:
RA= 216.977 DEC= 55.113 DIST= 2.858 AU
BATSE-ULYSSES DISTANCE = 427584662. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=131.09 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -937.32 SECS.
CROSSING TIME AT ULYSSES IS 9180. S. OR 02:32:59 +/- 222.41 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 17/11/ 95 IS:
RA= 258.835 DEC= -23.913 DIST= 2.267 AU
MARS-BATSE DISTANCE = 339139584. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=113.93 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -458.84 SECS.
CROSSING TIME AT MARS IS 9658. S. OR 02:40:58 +/- 172.55 SECONDS

BATSE BURST TRIGGER

NO.: 3909

TIME: TJD=0038 SECONDS=10117

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=39.2 AZIMUTH=29.0 ERROR=2.0 DEGREES

COMMENTS:

BURST LASTING ~ 25 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3909	951117	10038	10117	11000	286	+37	25

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 (GGG-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	
95	12	8	19617.151	?	?	197	no	
95	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	?	

Helio corr removed

Date: Feb 21 '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?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

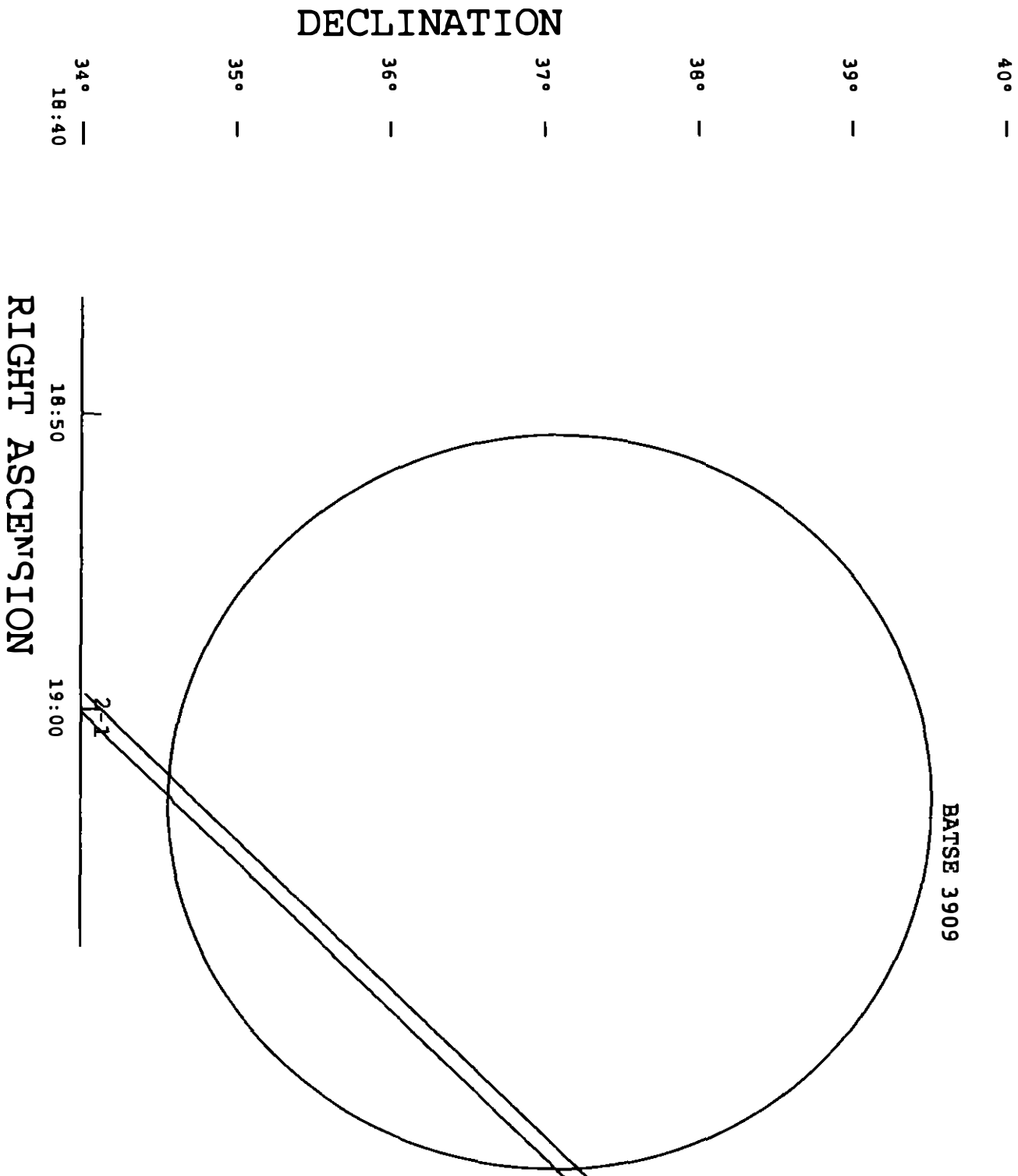
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF NOV 17, 1995 2:32

21/ 2/98



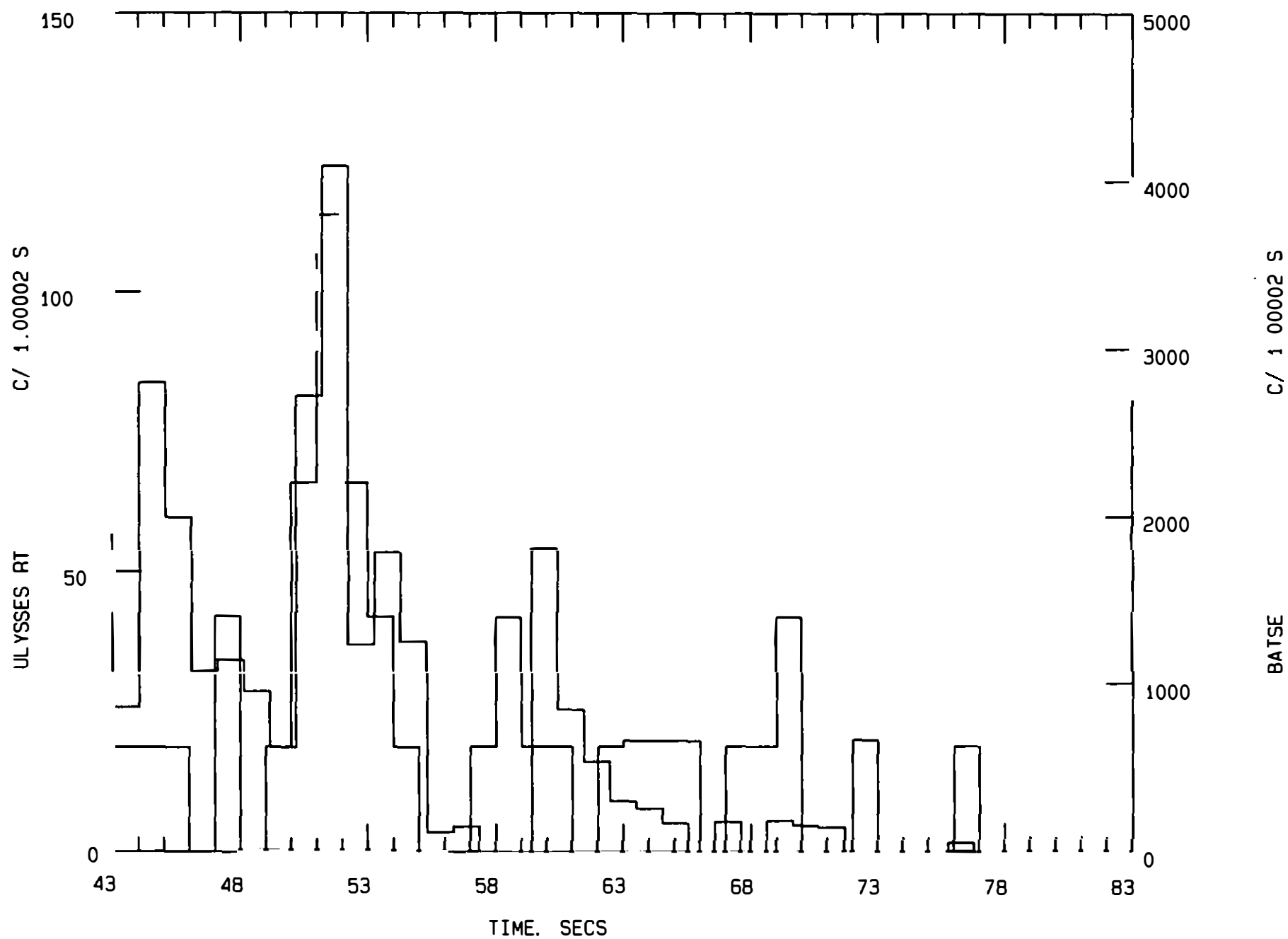
ULYSSES RT-BATSE

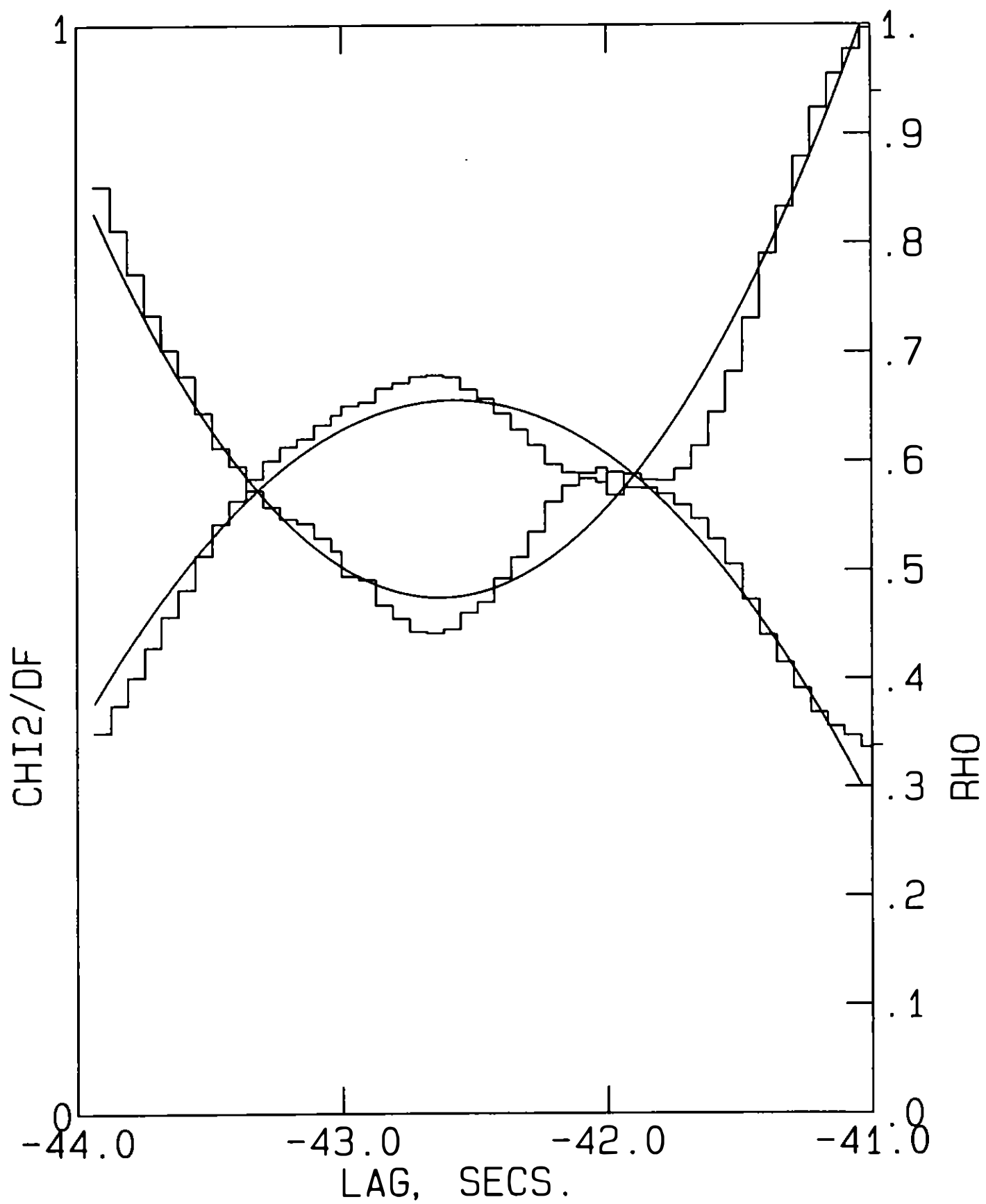
CORRELATION

17/11/95

9161.172

21/ 2/98





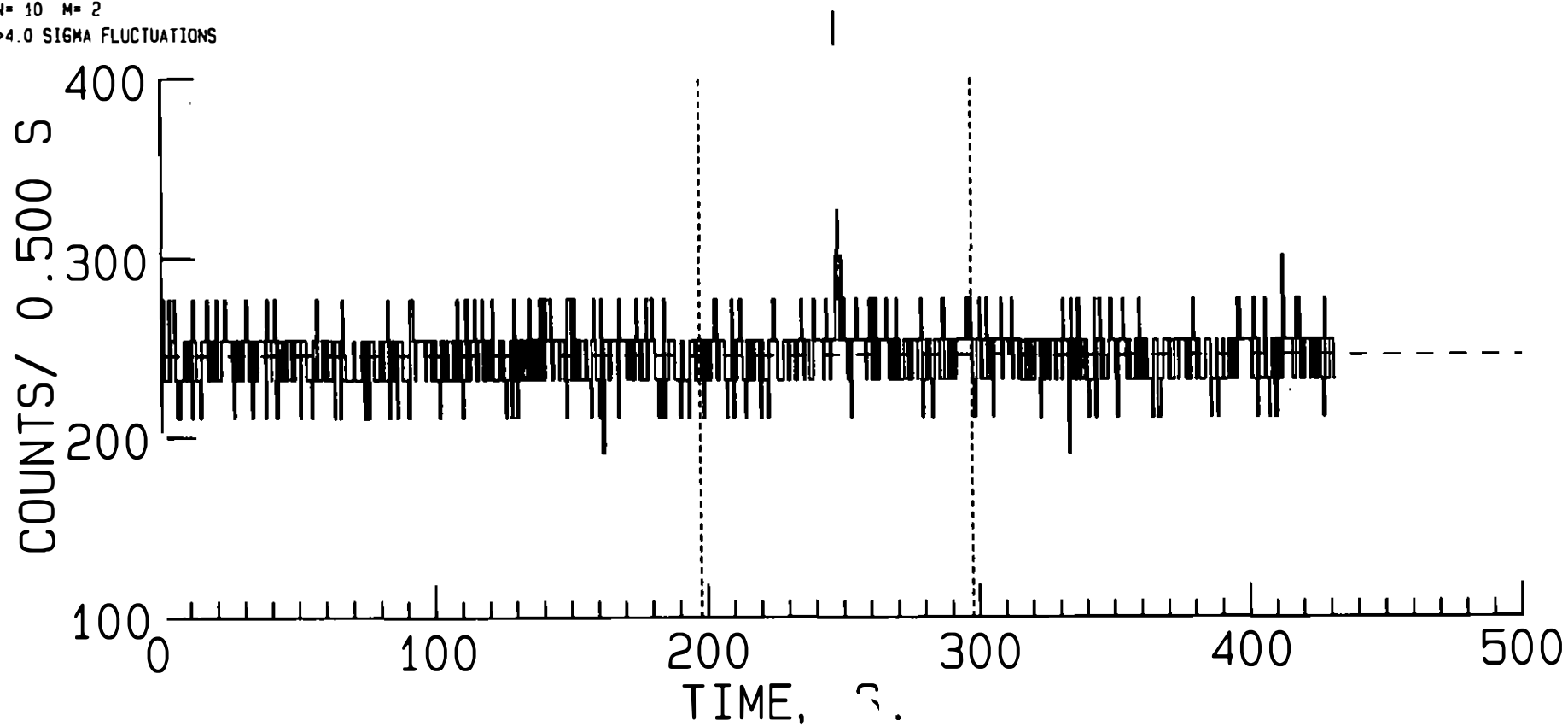
ULYSSES RT

21 / 2 / 98

17/11/95 8964.124 s

21- 143 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



1100 -

900 -

700 -

500 -

BATSE 17/11/95 10118.066
25- 100 keV
COUNTS/0.064 S

300 -

-3

0 1

5

9

13

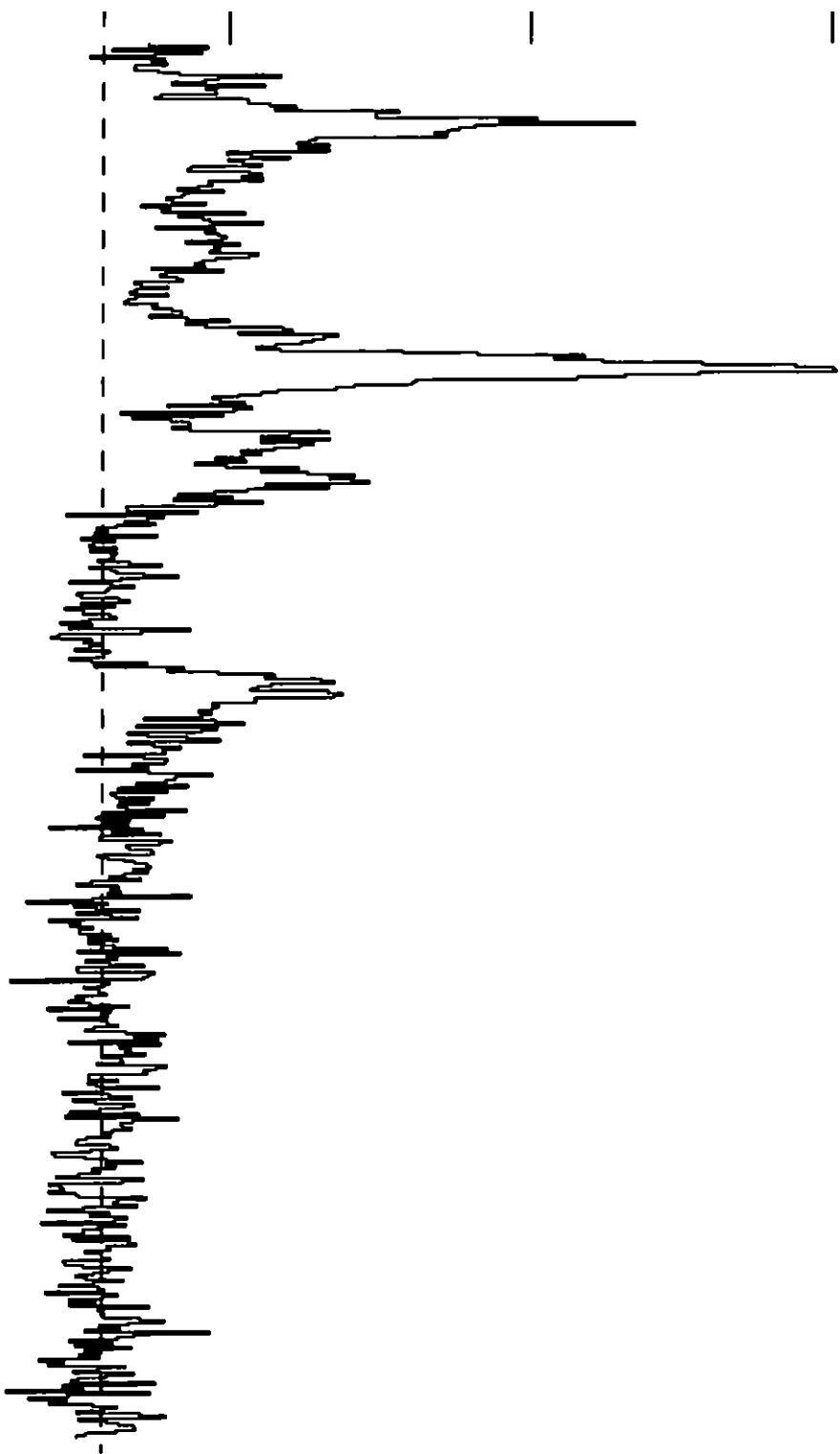
17

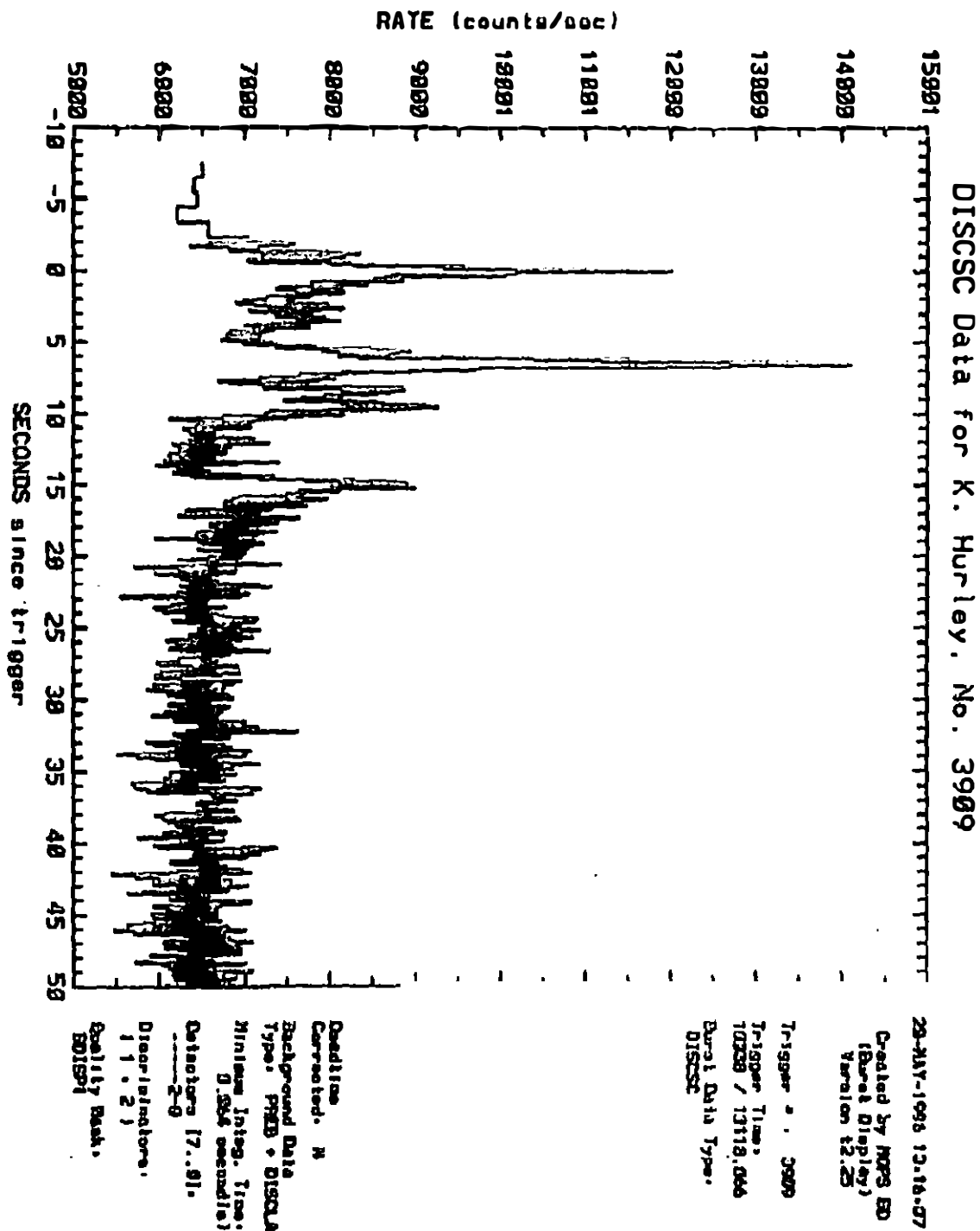
21

25

29

33





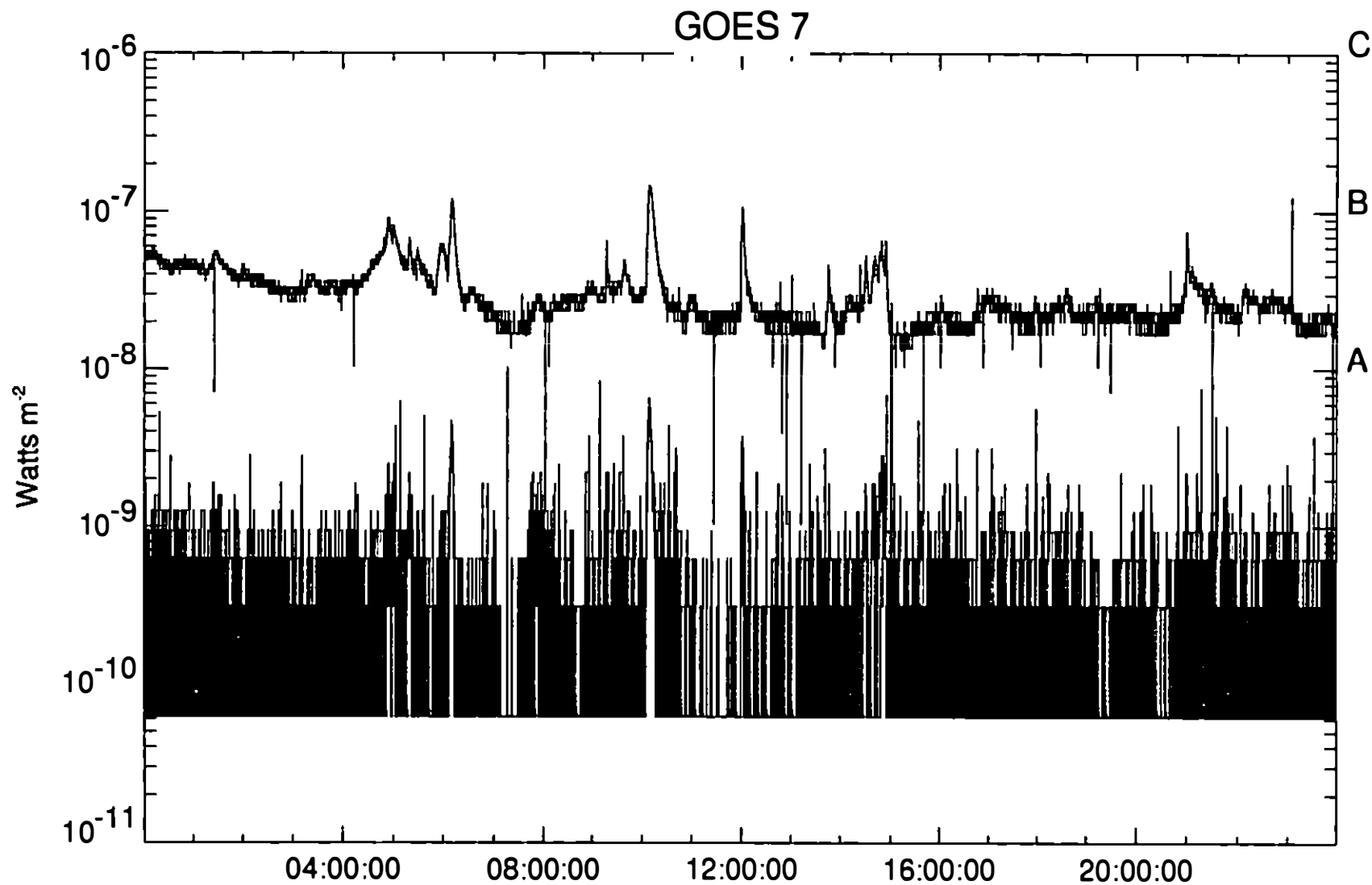
From tharriso@NMSU.Edu Wed Mar 20 07:46 PST 1996
From: tharriso@NMSU.Edu ()
Date: Wed, 20 Mar 1996 08:45:47 -0700
To: khurley@sunspot.ssl.berkeley.edu
Subject: Re: IPNs?

Kevin,

Thanks. If you get 17 Nov 95 we would be very interested.

-Tom

Sent May 21



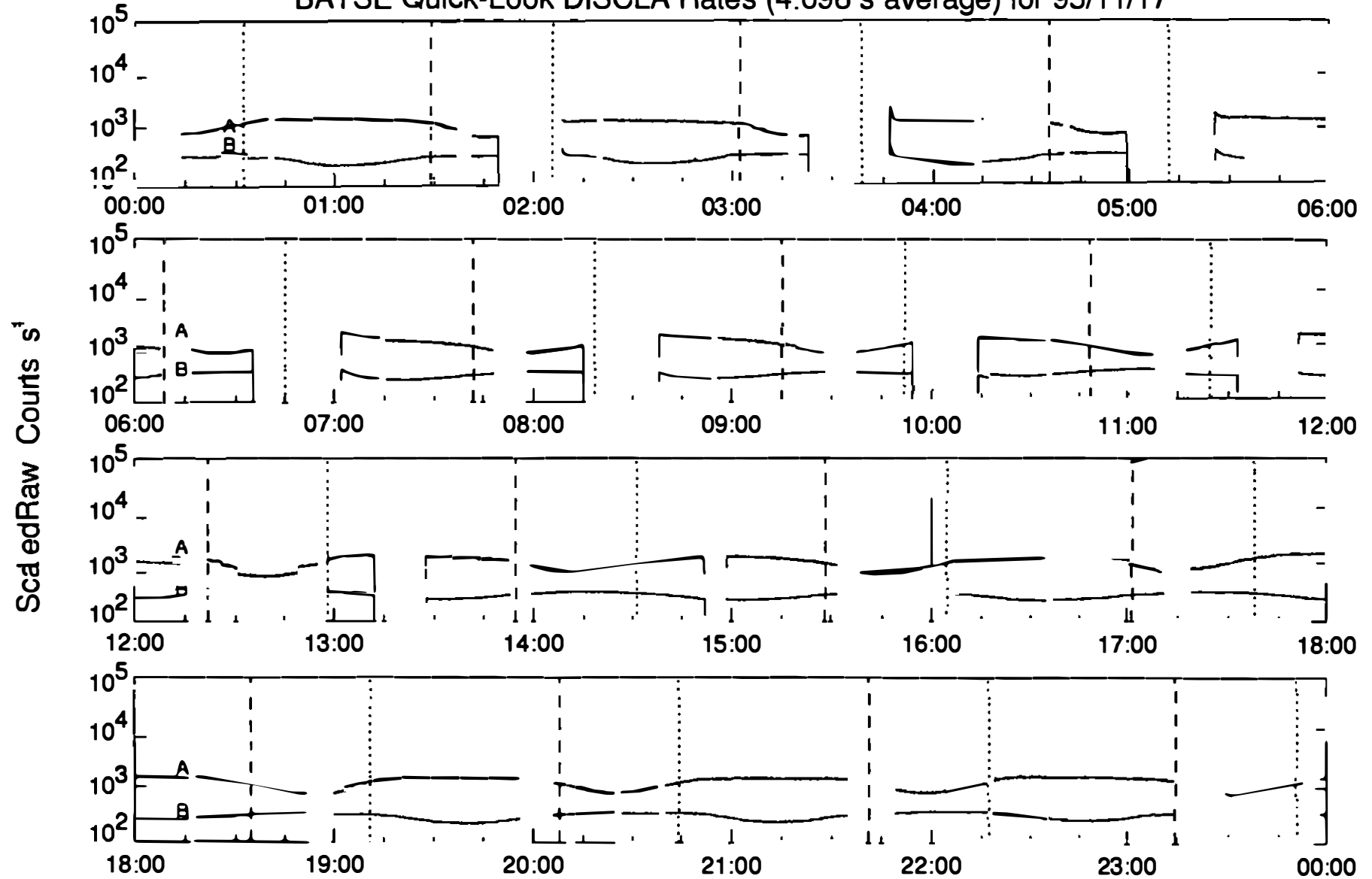
Data Start: 95/11/17, 0000:02

Plot created: 95/11/19, 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 95/11/17



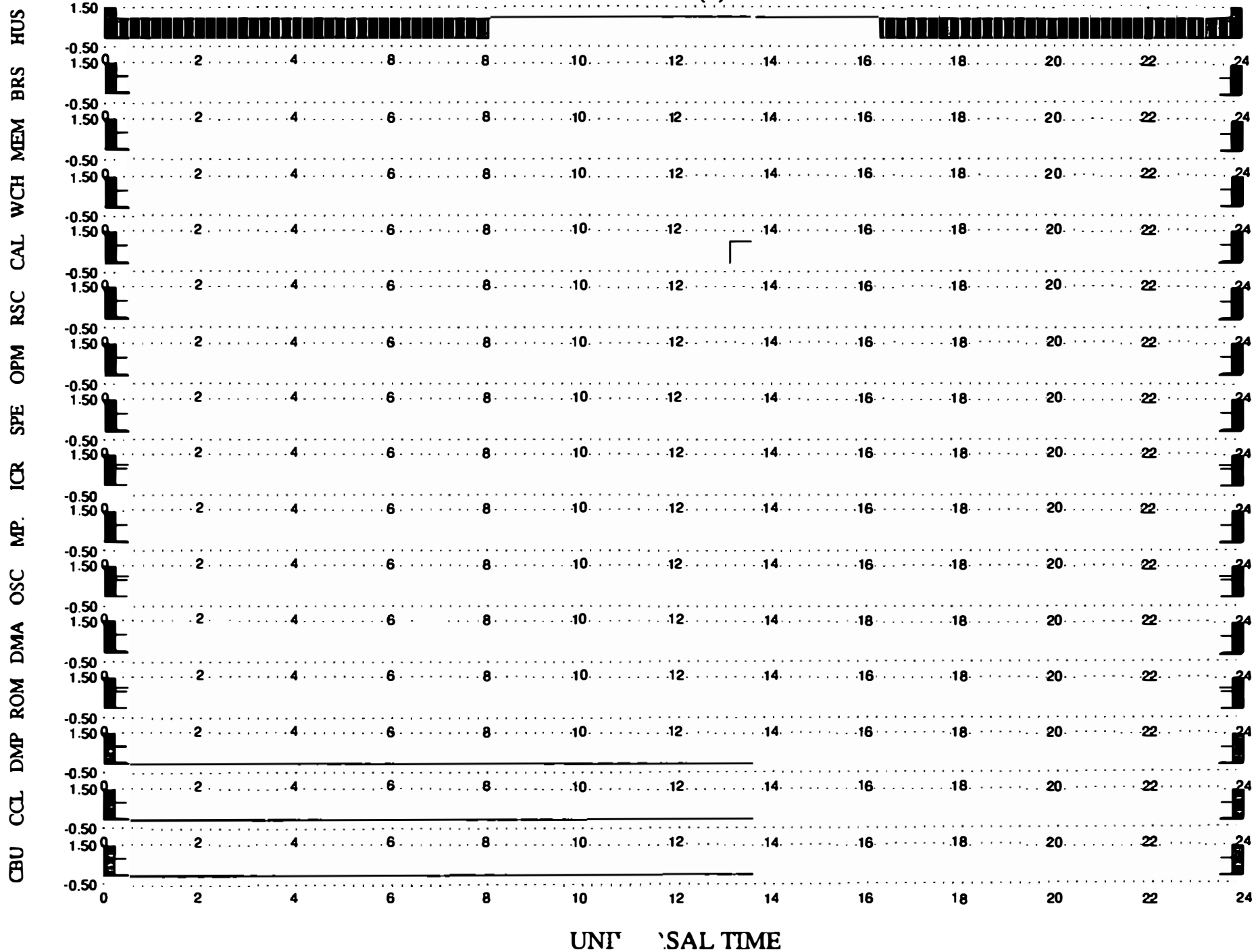
Current Time: 95/11/19, 0654 EDT
A: Channel 0 Most Sunward LAD
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

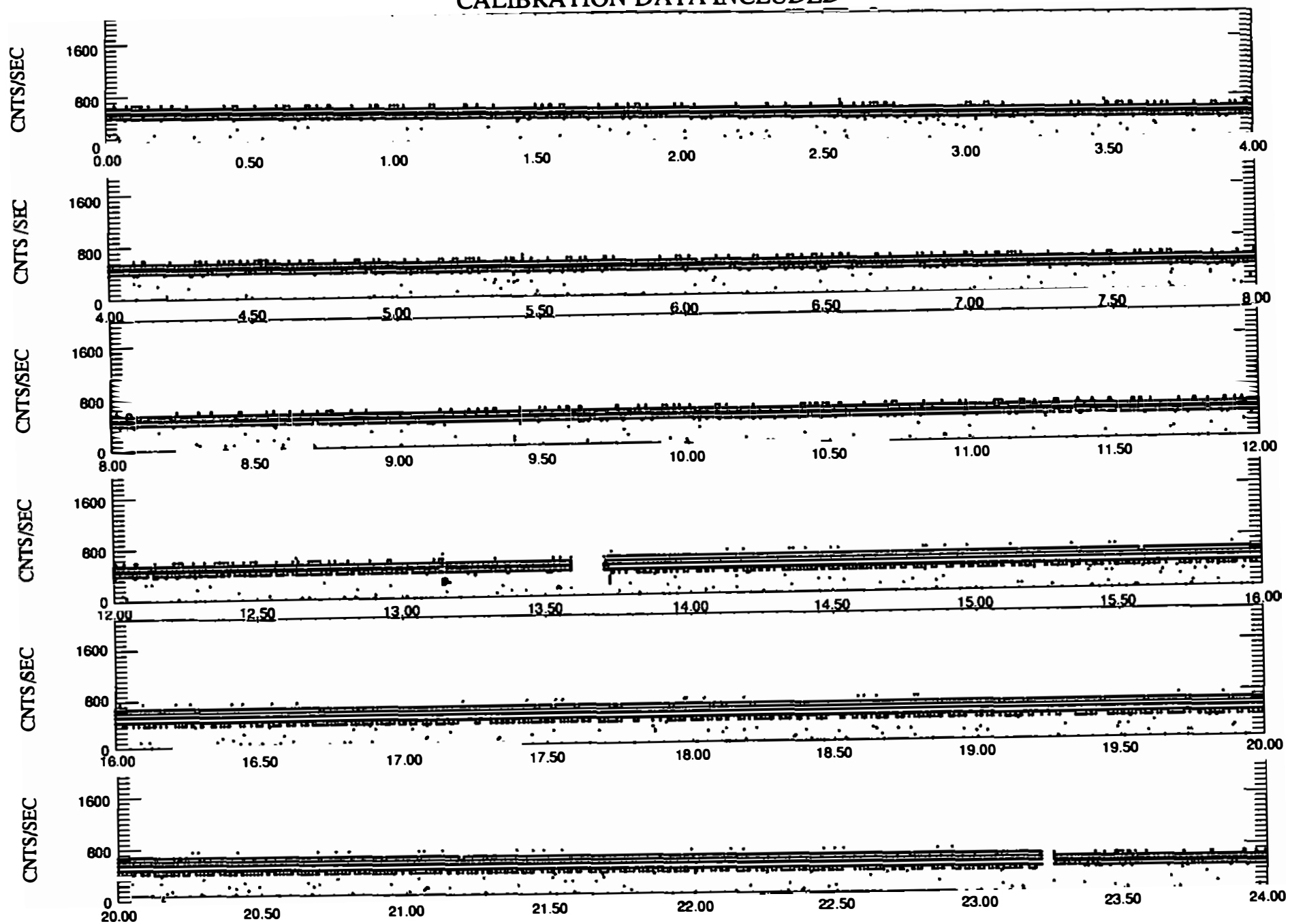
HUS MODES EDR day 321, year 1995 to day 321, year 1995
NO BURST (8)

4/1/96

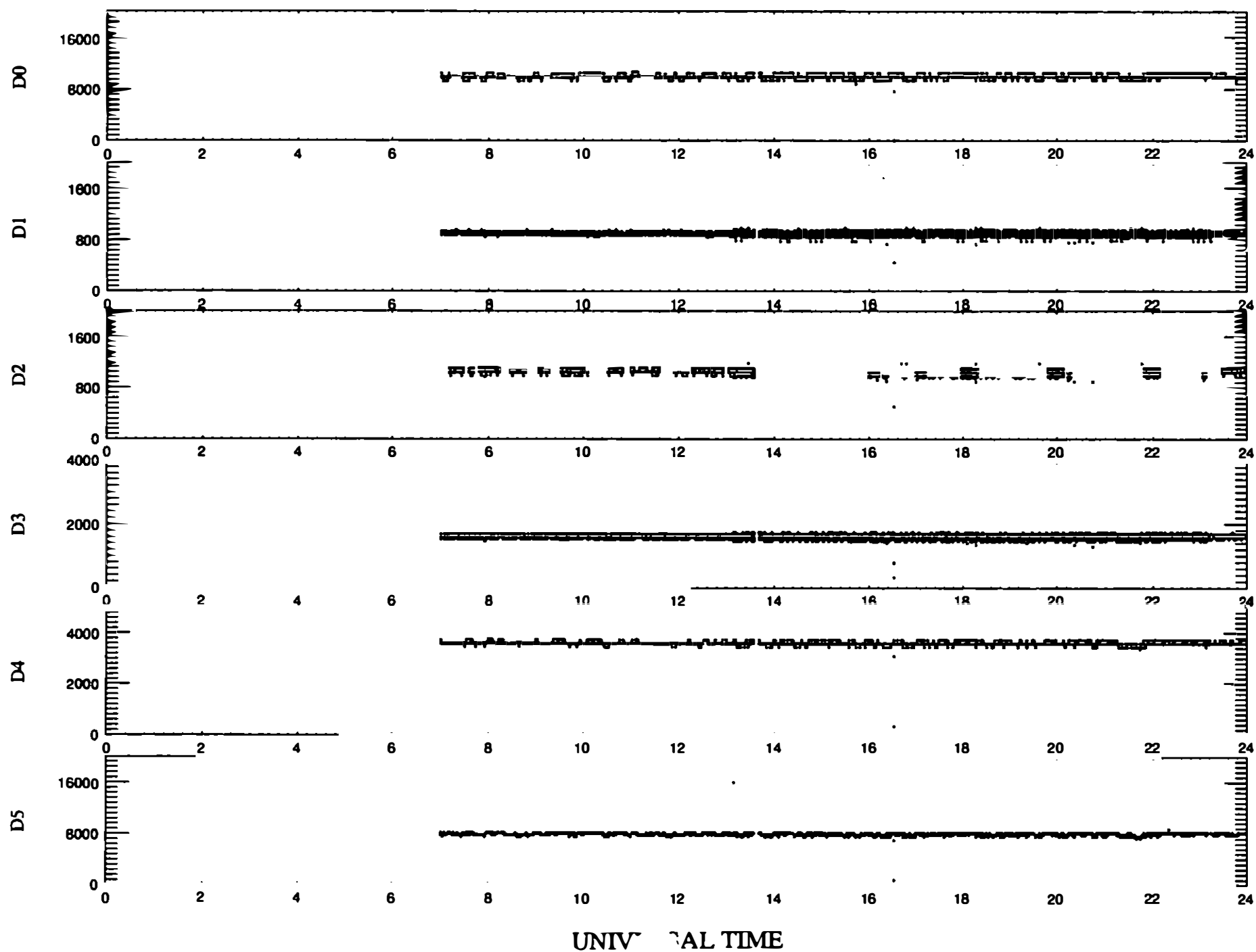


HUS 2A, MODE 1, NOT AVERAGED EDR day 321, year 1995 to day 321, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIV. TIME



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

 -- T. L. Cline ----- LBEAVX::CLINE

1 / 2 / 9 6

ULYSSES RT

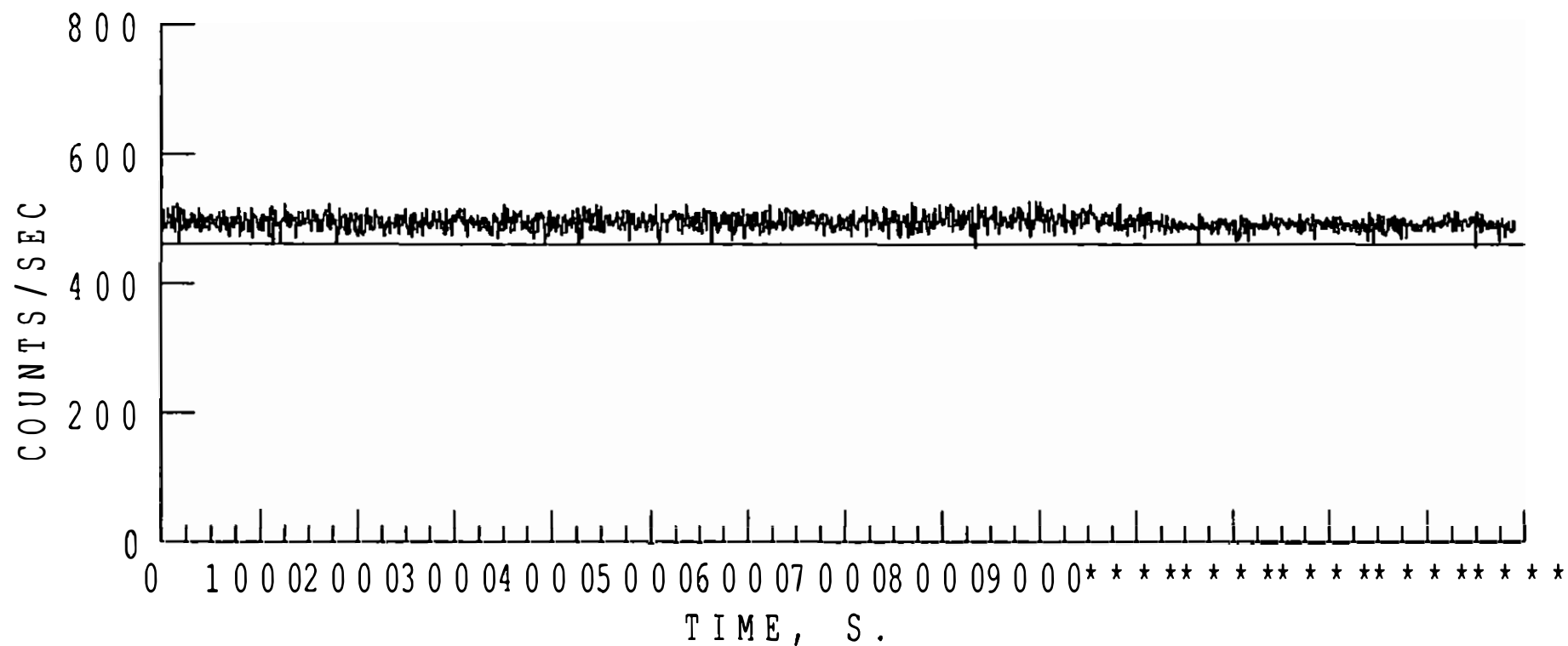
18/11/95 78300.039 s

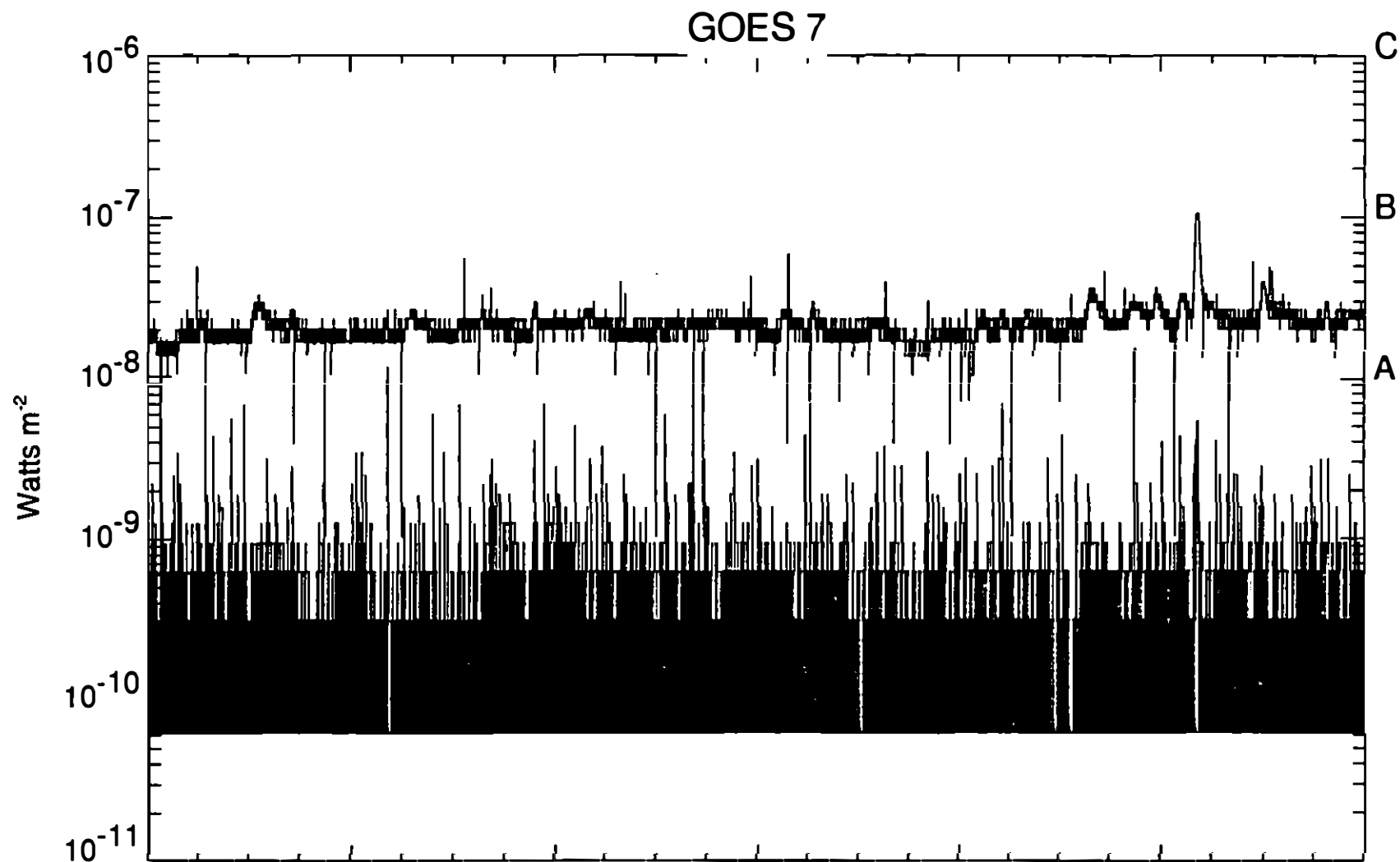
0.500 S INTERVALS REGROUPED BY 19

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





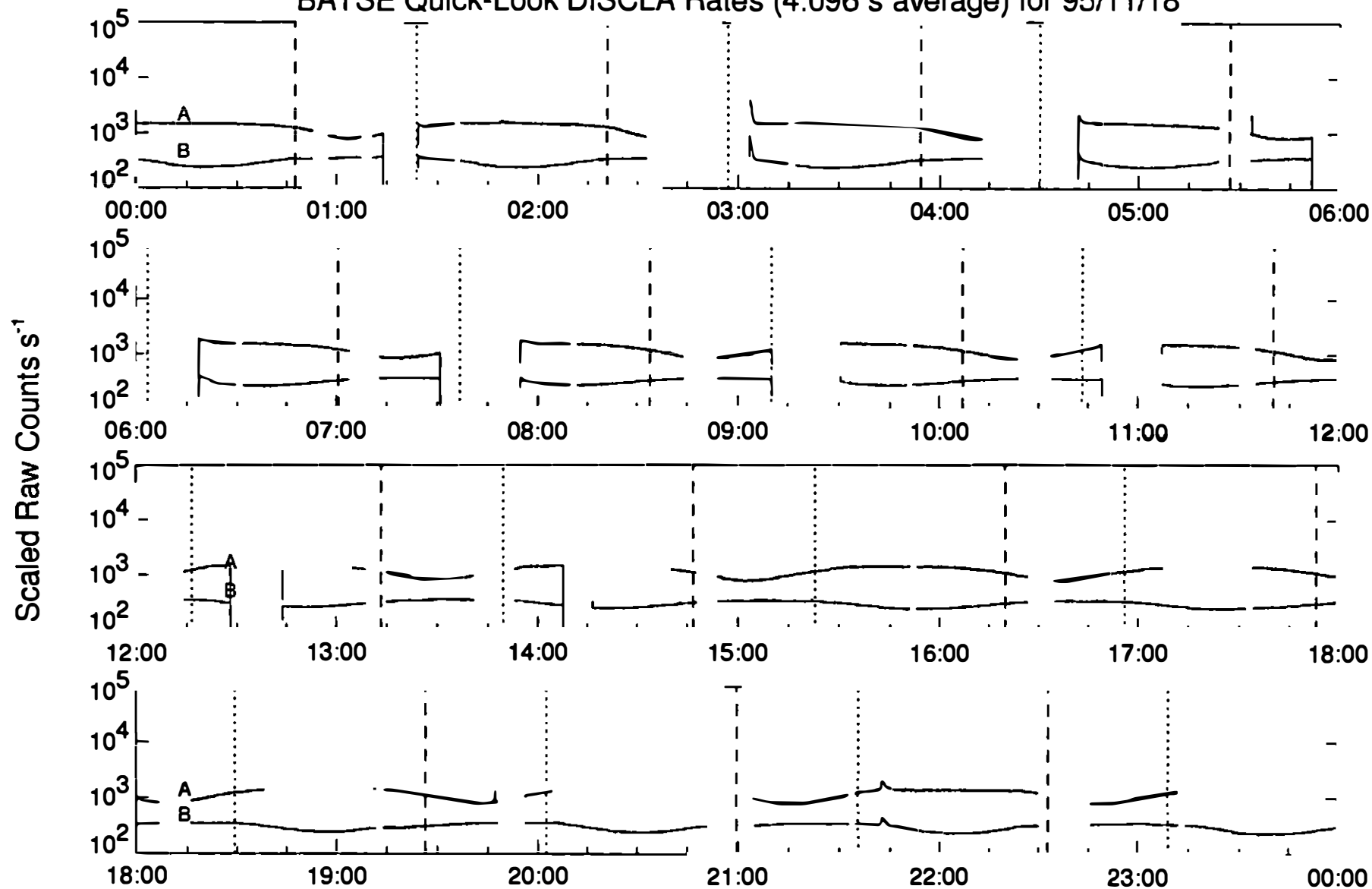
Data Start: 95/11/18, 0000:01

Plot created: 95/11/20, 0653

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 95/11/18



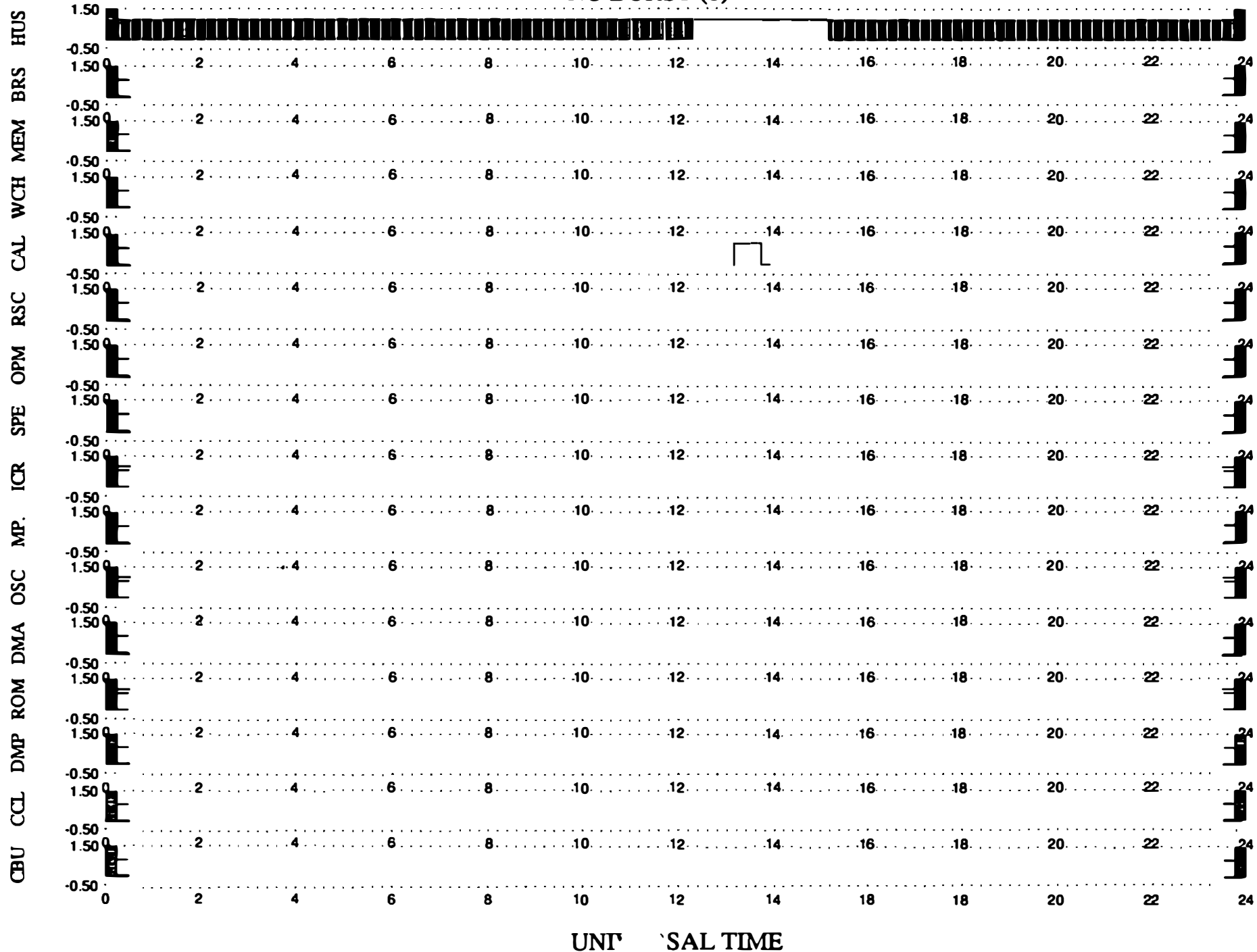
Current Time: 95/11/20, 0654 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

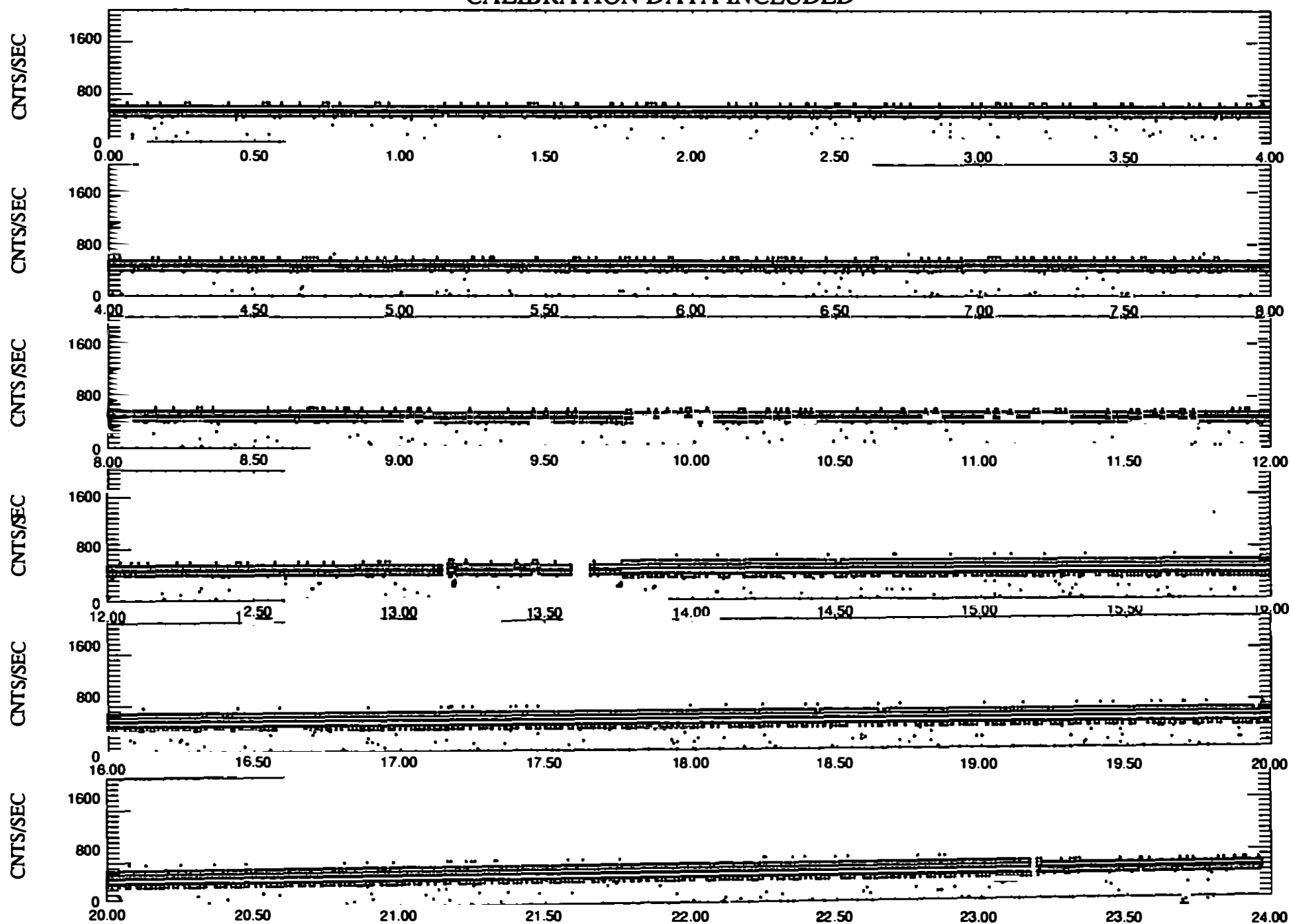
HUS MODES EDR day 322, year 1995 to day 322, year 1995
NO BURST (8)

4/1/96

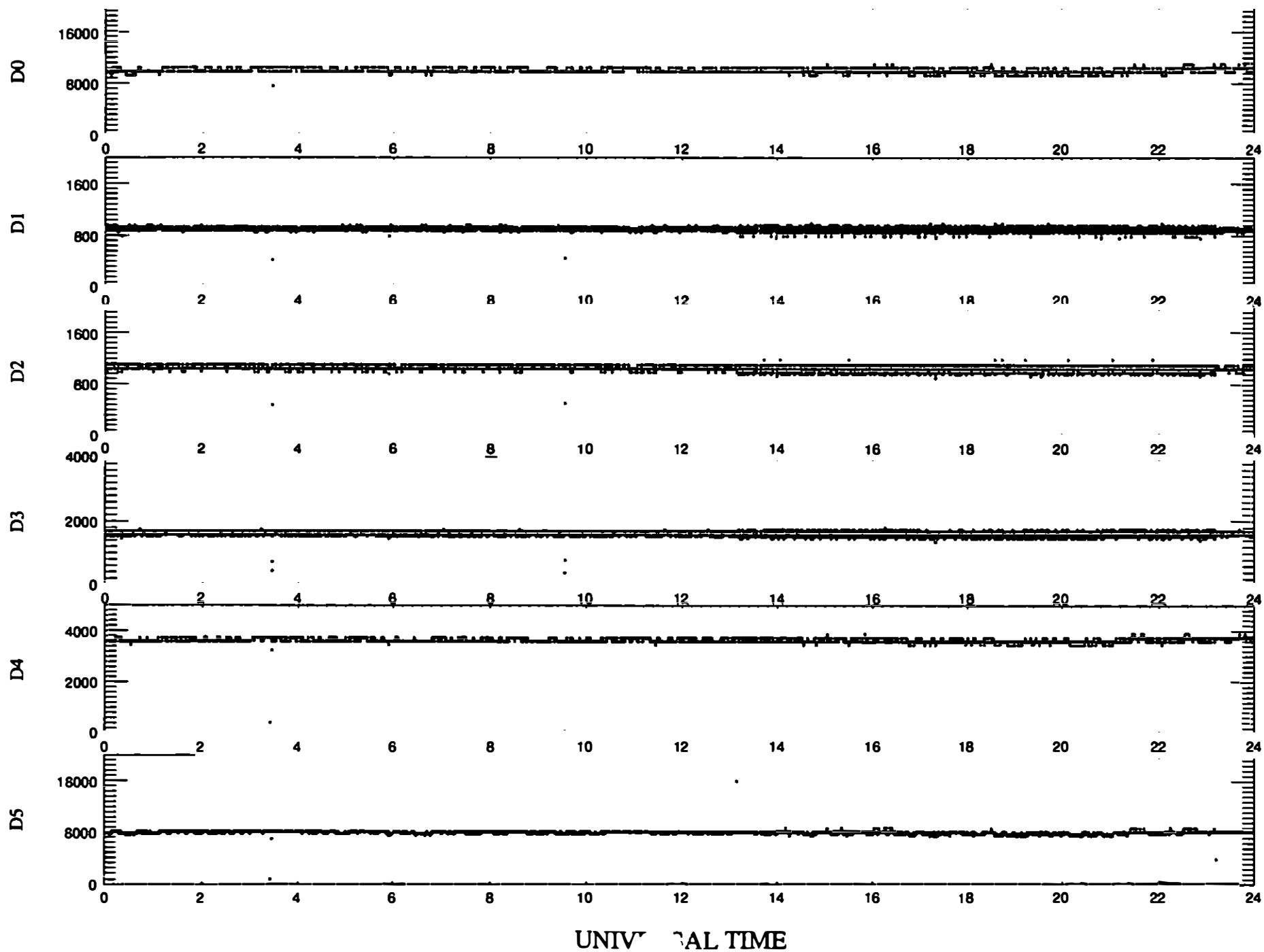


HUS 2A, MODE 1, NOT AVERAGED EDR day 322, year 1995 to day 322, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNITS SAL TIME



From HAGEDON@fender.msfc.nasa.gov Mon Nov 20 13:38 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Mon, 20 Nov 1995 15:38:16 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3911

BATSEARCH PROGRAM

NO.

BATSE BURST # 3911
EVENT OF 1995 NOV 19 DAY OF YEAR=323
EVENT CROSSING TIME AT BATSE : 5580. S. OR 01:33:00.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 11.000 75.000
BATSE PEAK COUNTING RATE: 4700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 19/11/ 95 IS:
RA= 217.487 DEC= 55.125 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427707572. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=131.30 DEGS.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -941.59 SECS.
CROSSING TIME AT ULYSSES IS 4638. S. OR 01:17:18 +/- 221.79 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 19/11/ 95 IS:
RA= 260.461 DEC= -24.033 DIST= 2.271 AU
MARS-BATSE DISTANCE = 339703584. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 61.55 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 539.73 SECS.
CROSSING TIME AT MARS IS 6120. S. OR 01:41:59 +/- 181.18 SECONDS

BATSE BURST TRIGGER

NO.: 3911

TIME: TJD=0040 SECONDS=05580

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=23.1 AZIMUTH=271.8 ERROR=6.9 DEGREES

COMMENTS:

BURST. WEAK COMPLEX EVENT. DUR.~60 SEC. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3911	951119	10040	05580	4700	011	+75	60

22 / 11 / 95

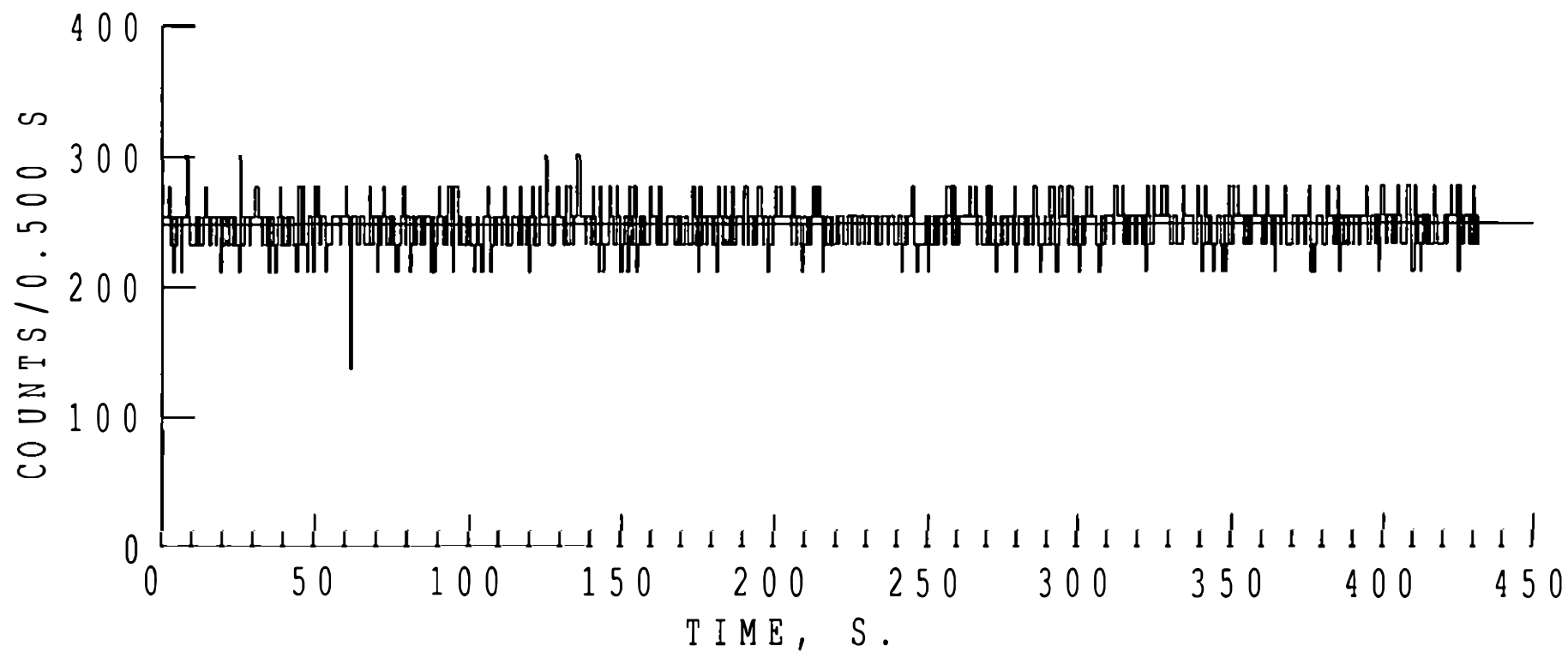
ULYSSES RT

19 / 11 / 95 4428.239 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



BACODINE

19/11/95

5569.201

25 - 100 keV
COUNTS/1.024 S

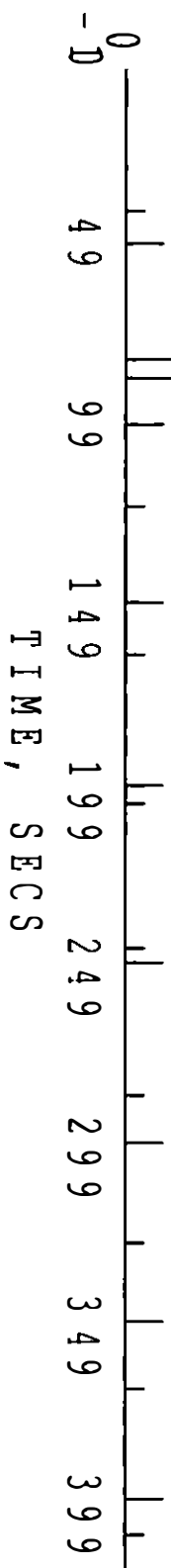
10000 —

7500 —

5000 —

2500 —

0 —



From HAGEDON@fender.msfc.nasa.gov Mon Nov 20 13:40 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Mon, 20 Nov 1995 15:39:56 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3912

BATSEARCH PROGRAM

RI

BATSE BURST # 3912
EVENT OF 1995 NOV 19 DAY OF YEAR=323
EVENT CROSSING TIME AT BATSE : 29832. S. OR 08:17:12.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 307.000 -41.000
BATSE PEAK COUNTING RATE: 14300 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 19/11/ 95 IS:
RA= 217.559 DEC= 55.128 DIST= 2.859 AU ;
BATSE-ULYSSES DISTANCE = 427719378. KM. !
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 57.72 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 761.93 SECS.
CROSSING TIME AT ULYSSES IS 30594. S. OR 08:29:53 +/- 270.99 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 19/11/ 95 IS:
RA= 260.461 DEC= -24.033 DIST= 2.271 AU
MARS-BATSE DISTANCE = 339703584. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=137.84 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -840.01 SECS.
CROSSING TIME AT MARS IS 28992. S. OR 08:03:11 +/- 119.28 SECONDS

BATSE BURST TRIGGER

NO.: 3912

TIME: TJD=0040 SECONDS=29832

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=100.0 AZIMUTH=89.5 ERROR=0.42 DEGREES

COMMENTS:

BURST. STRONG SINGLE PULSE. FASTER RISE THAN DECAY WITH TRAILING "BUMP".
DUR.~50 SEC. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3912	951119	10040	29832	14300	307	-41	50

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	?	

Helio corr removed
Date: Feb 21 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for 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*

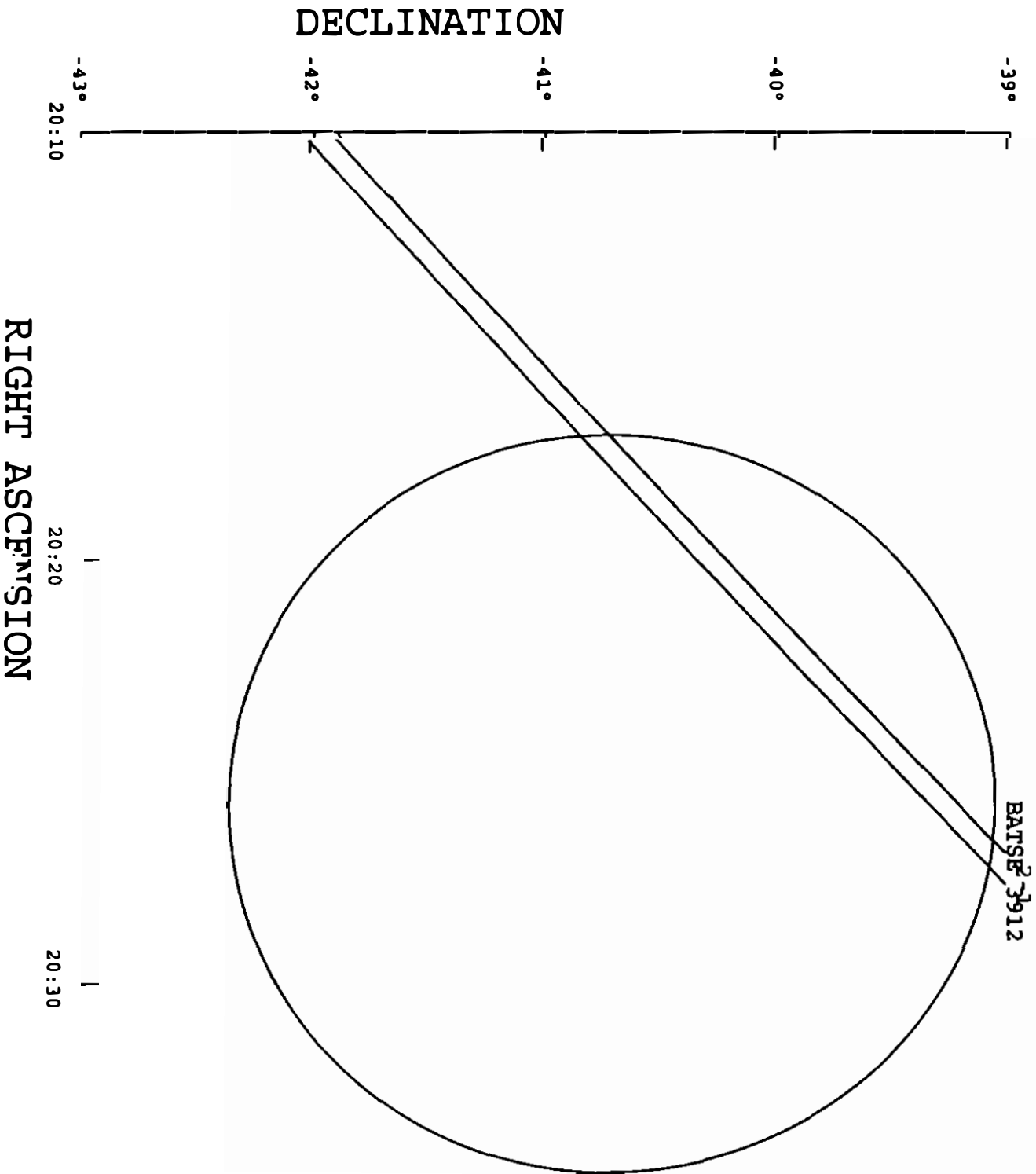
3. PVO Data

- ☐ 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 NOV 19, 1995 8:28

21/ 2/98



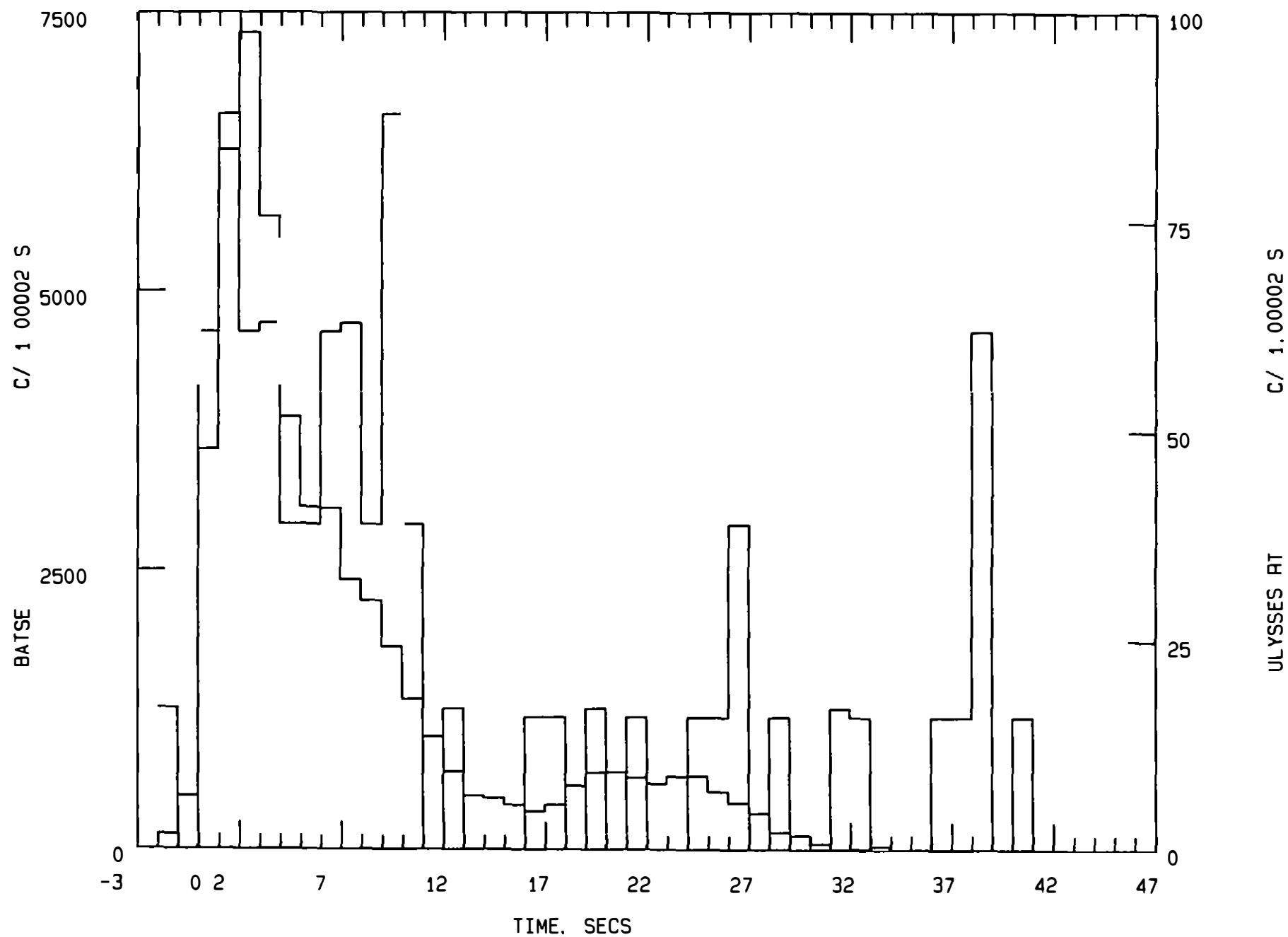
BATSE

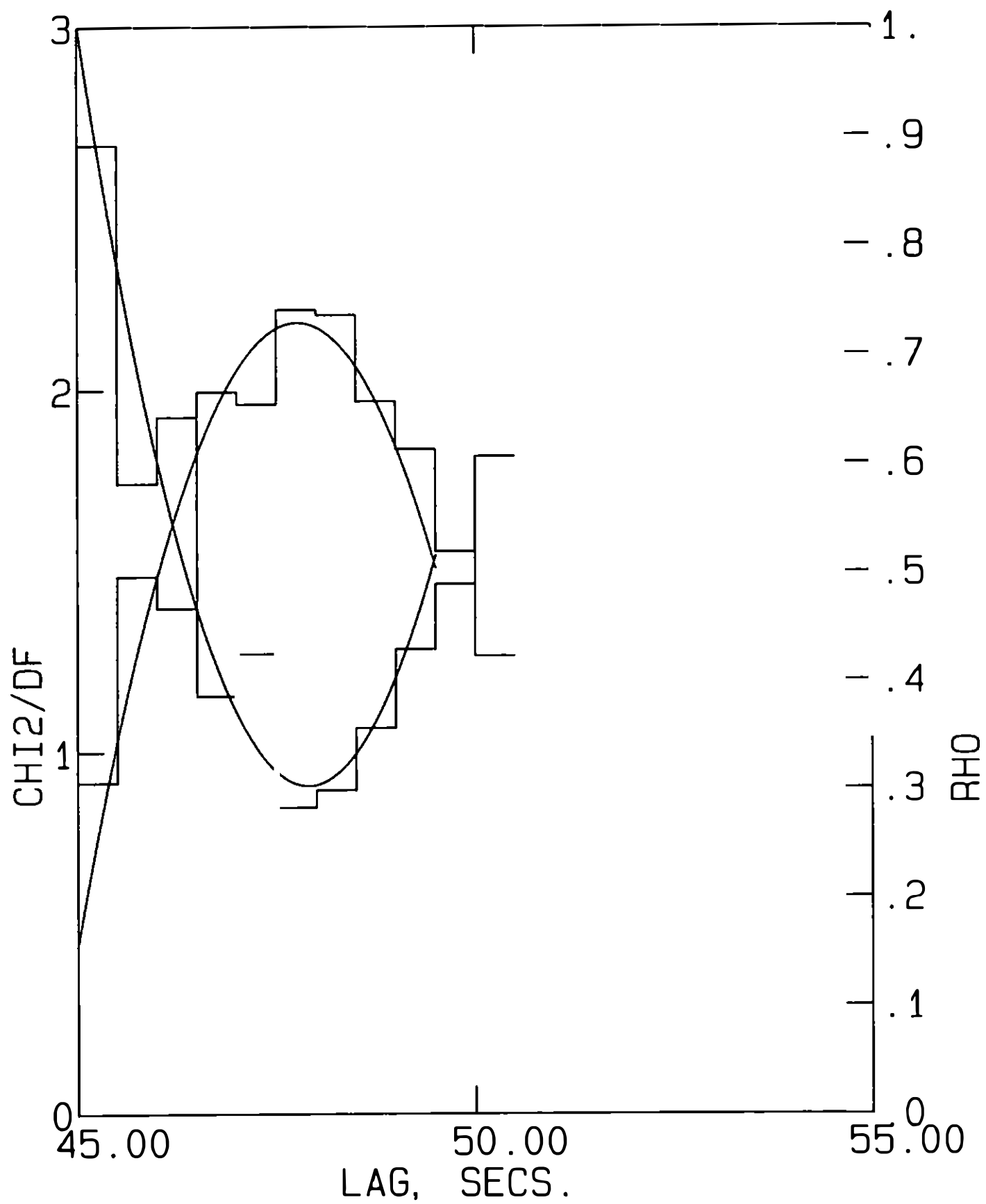
-ULYSSES RT CORRELATION

19/11/95

29832.114

21/ 2/98





ULYSSES RT

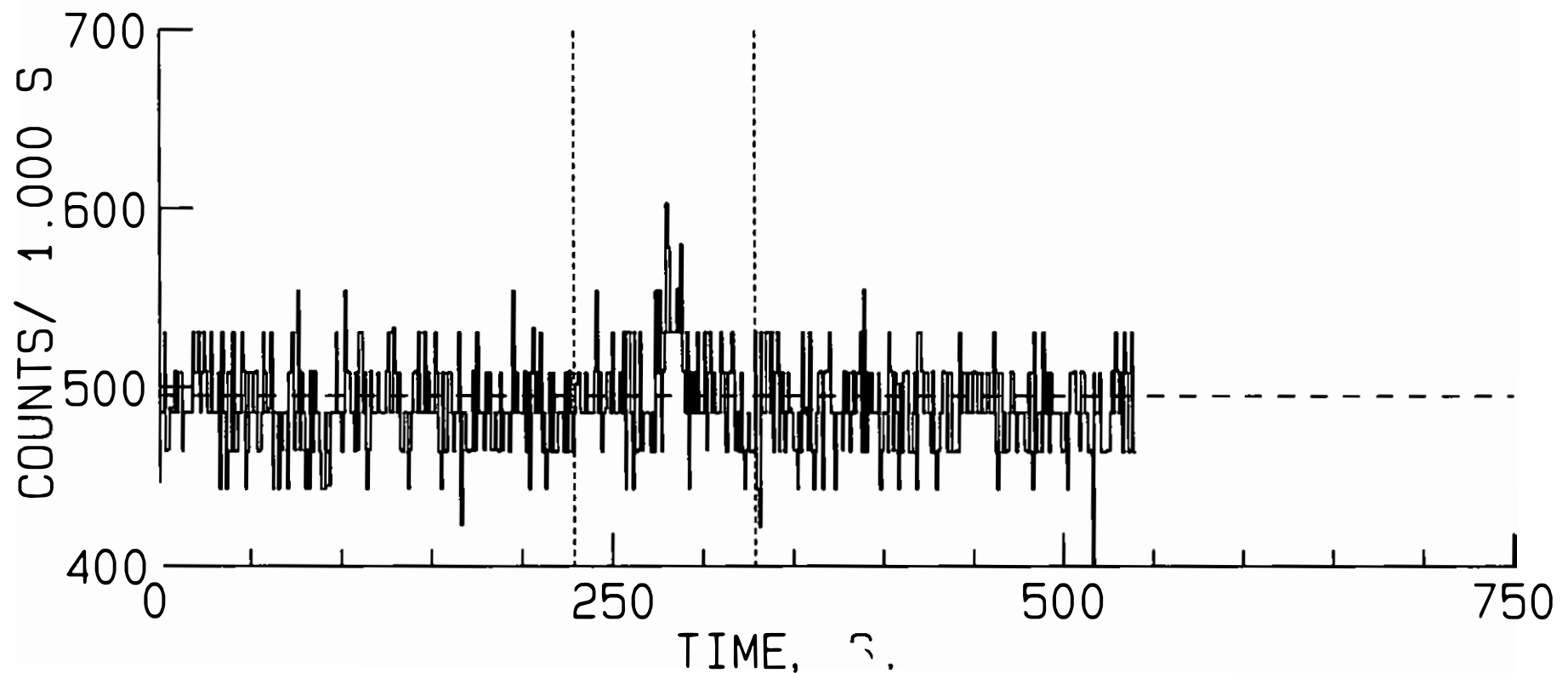
21 / 2 / 98

19/11/95 30276.140 s

0.500 S INTERVALS REGROUPED BY 2

21- 143 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



BATSE

19/11/95

29832.114

25- 100 keV

COUNTS/0.064 S

1100—

900—

700—

500—

300—
-3

01

5

9

13

17

21

25

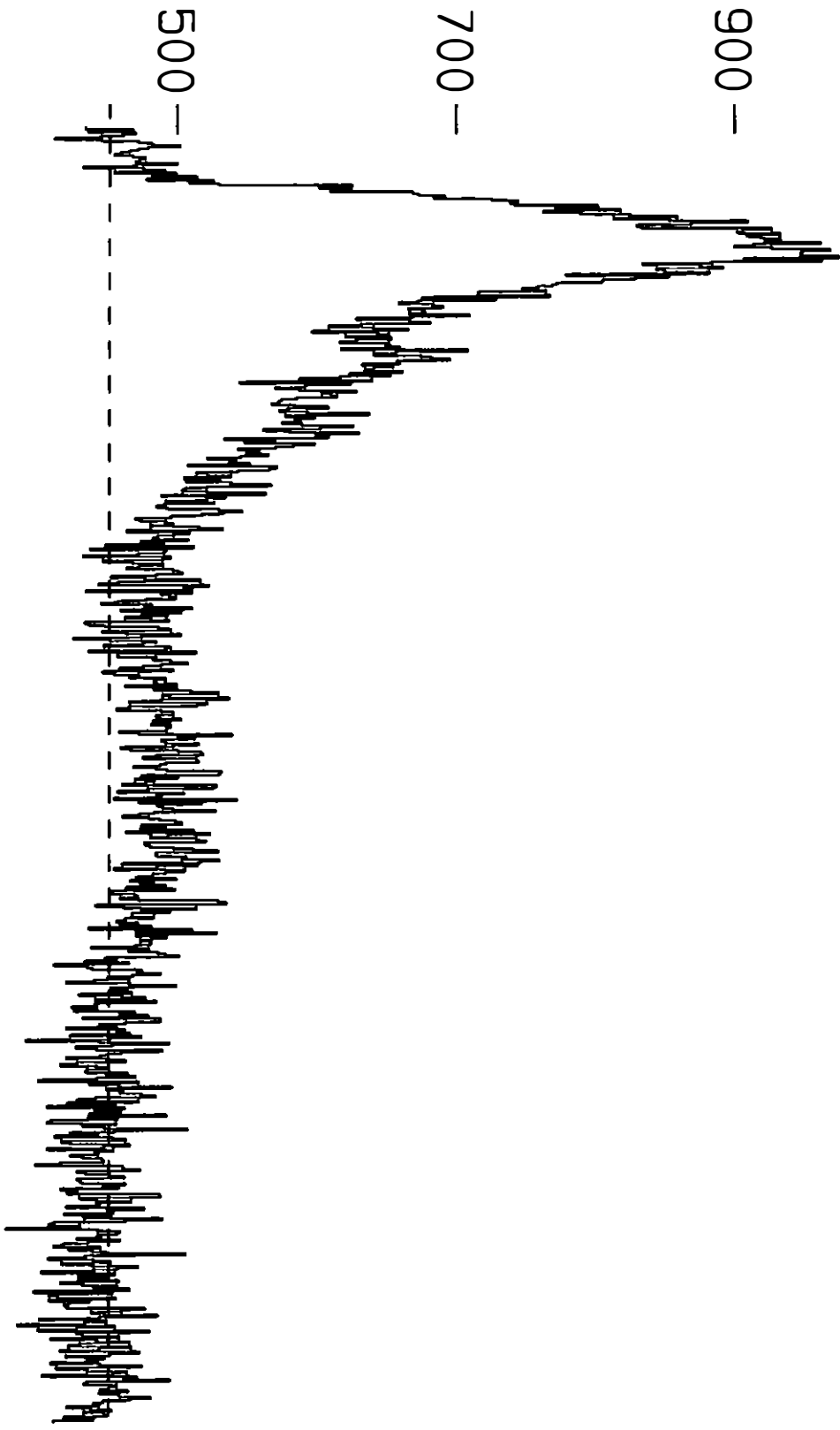
29

33

37

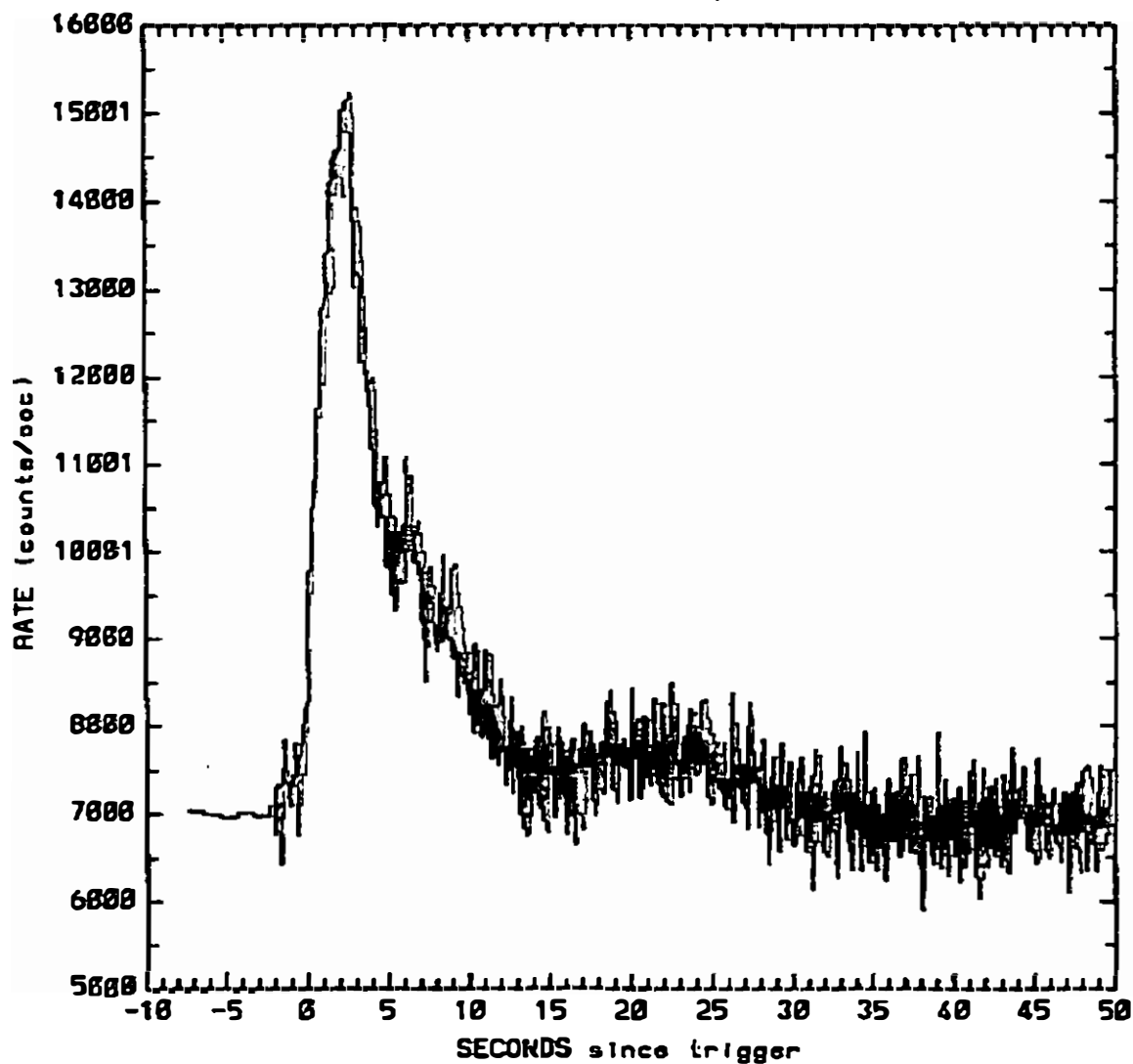
41

4



Nov 19 1995

DISCSC Data for K. Hurley, No. 3912



10-DEC-1995 11:43:59

Created by KDPS 80
(Burst Display)
Version 62.25

Trigger = 3912

Trigger Time:
18040 / 20832.114Burst Data Type:
DISCSCDeadtime
Corrected: KBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors (7.6):
--5--10Discriminators:
(1.2)Quality Mech.
BDSP1

Date: Sep 7 2011

BURST TRIANGULATION CHECKLIST

I. Ulysses Data

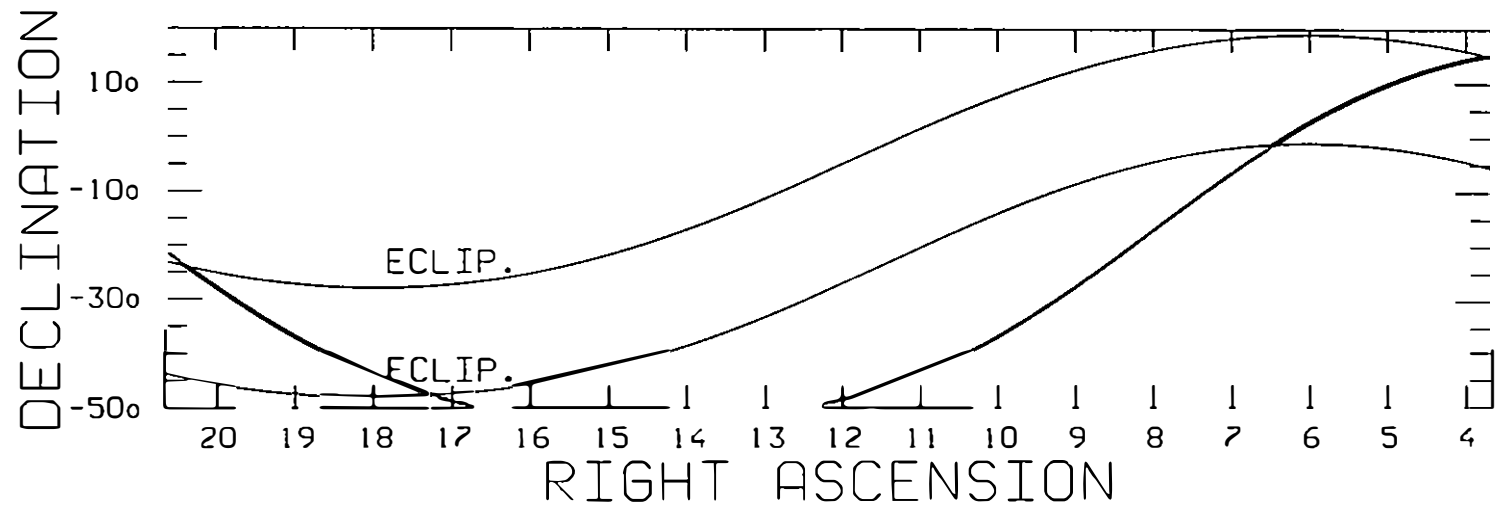
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☐ Is the order of the data in CORREL such that a vernier is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

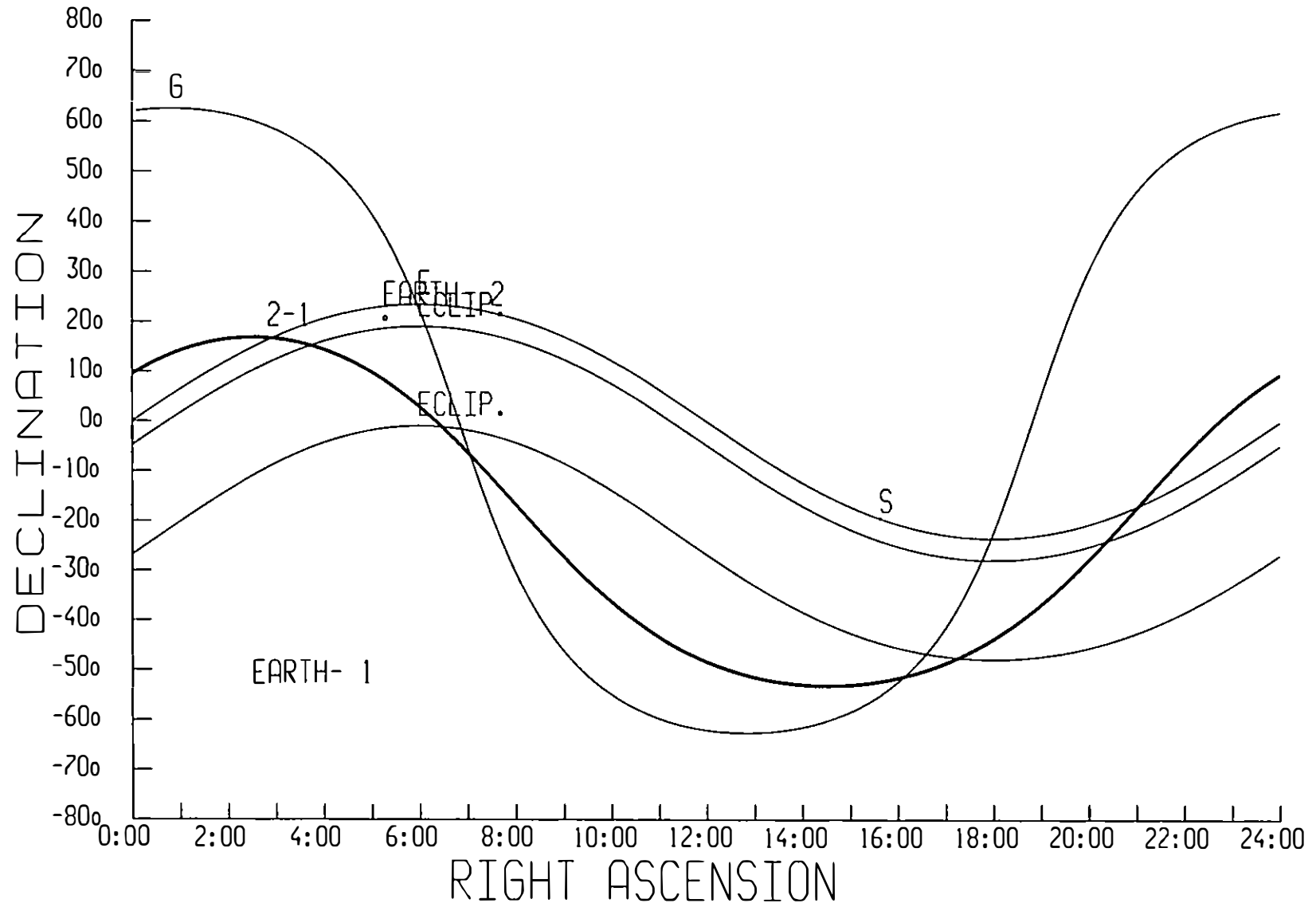
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?



EVENT OF NOV 19, 1995 13:00

07/09/2011

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



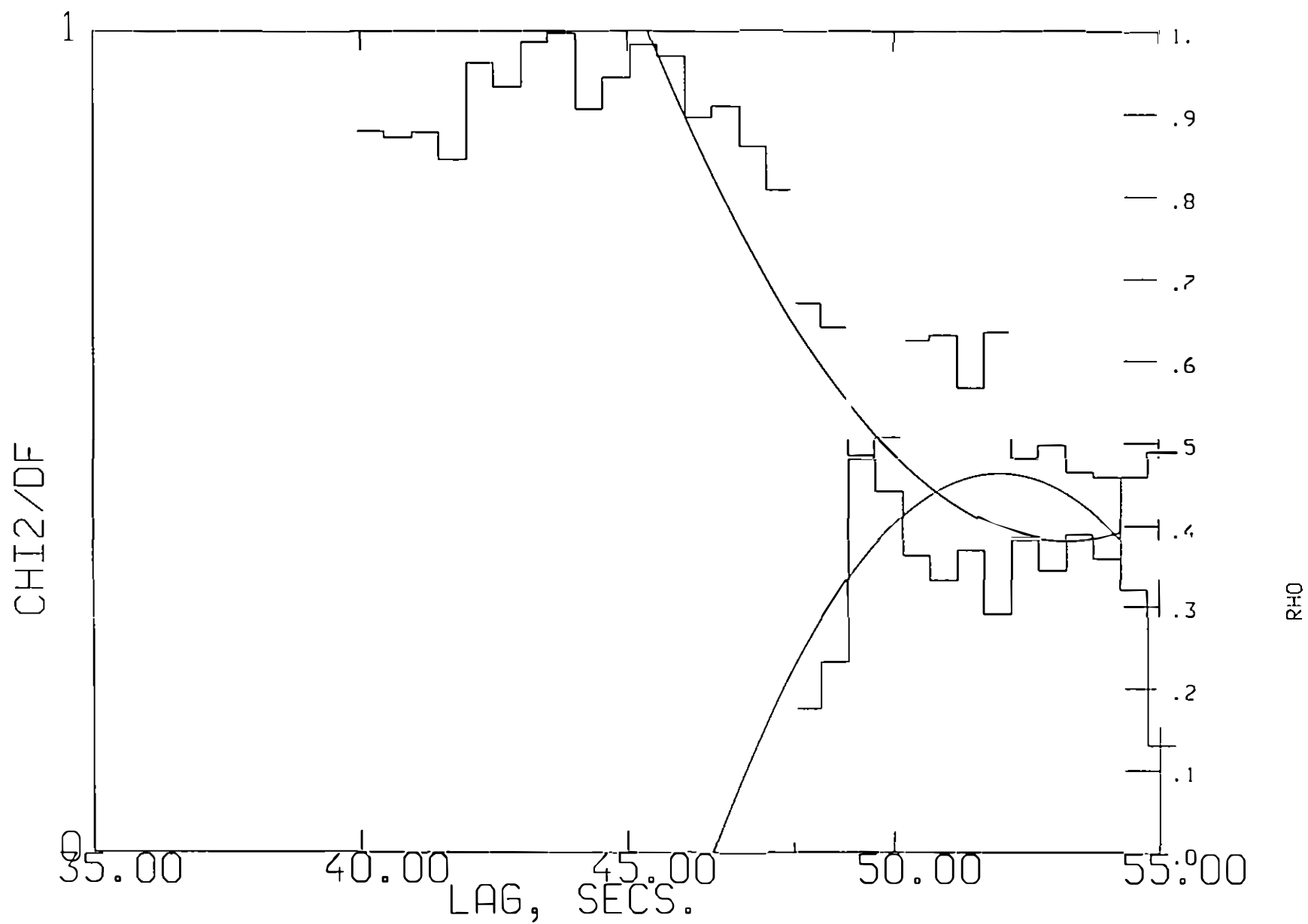
KONUS1

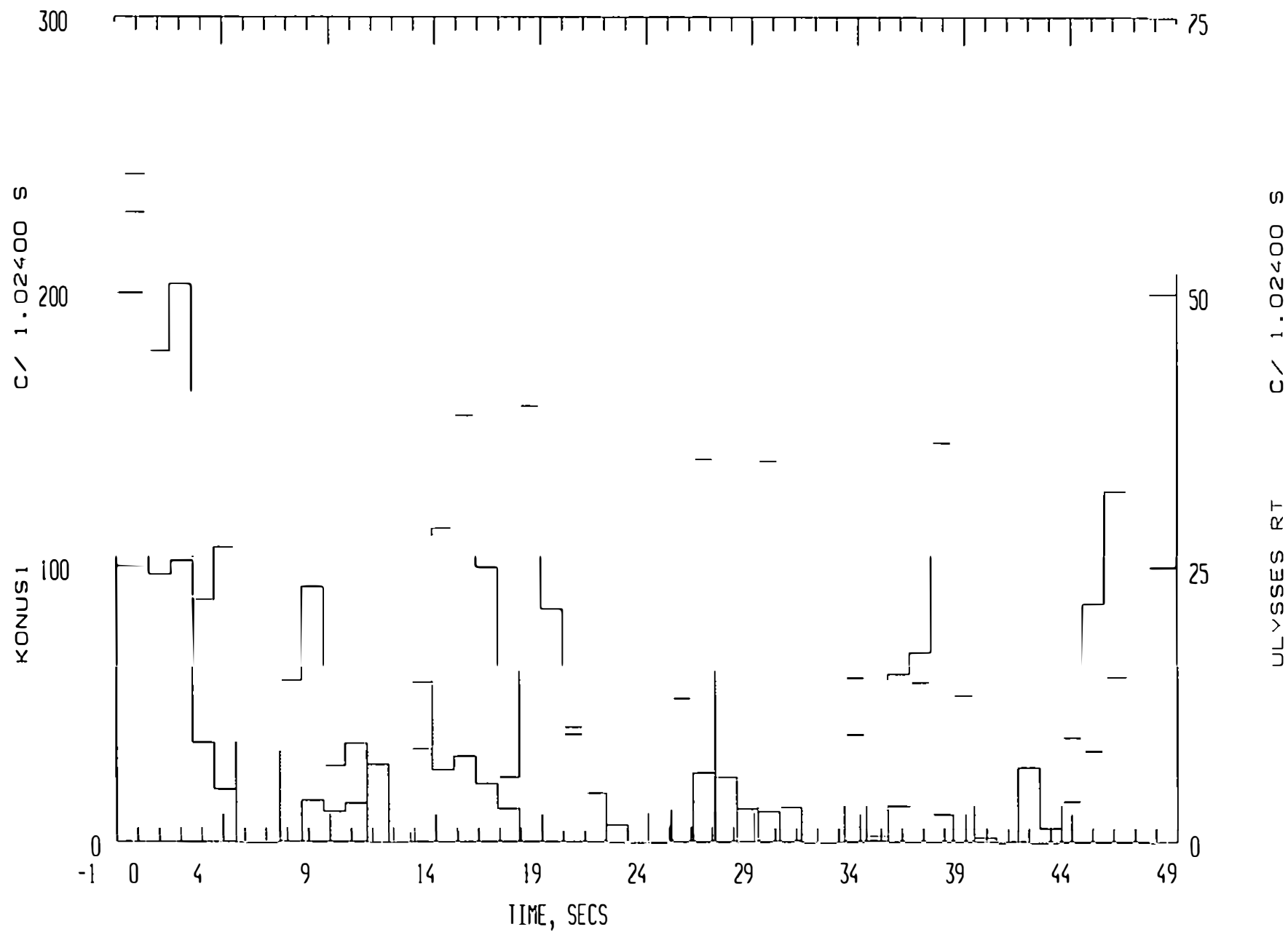
-ULYSSES RT CORRELATION

19/11/95

46457.519

7/ 9/11





KONUS 19951119 46894

ULYSSES RT

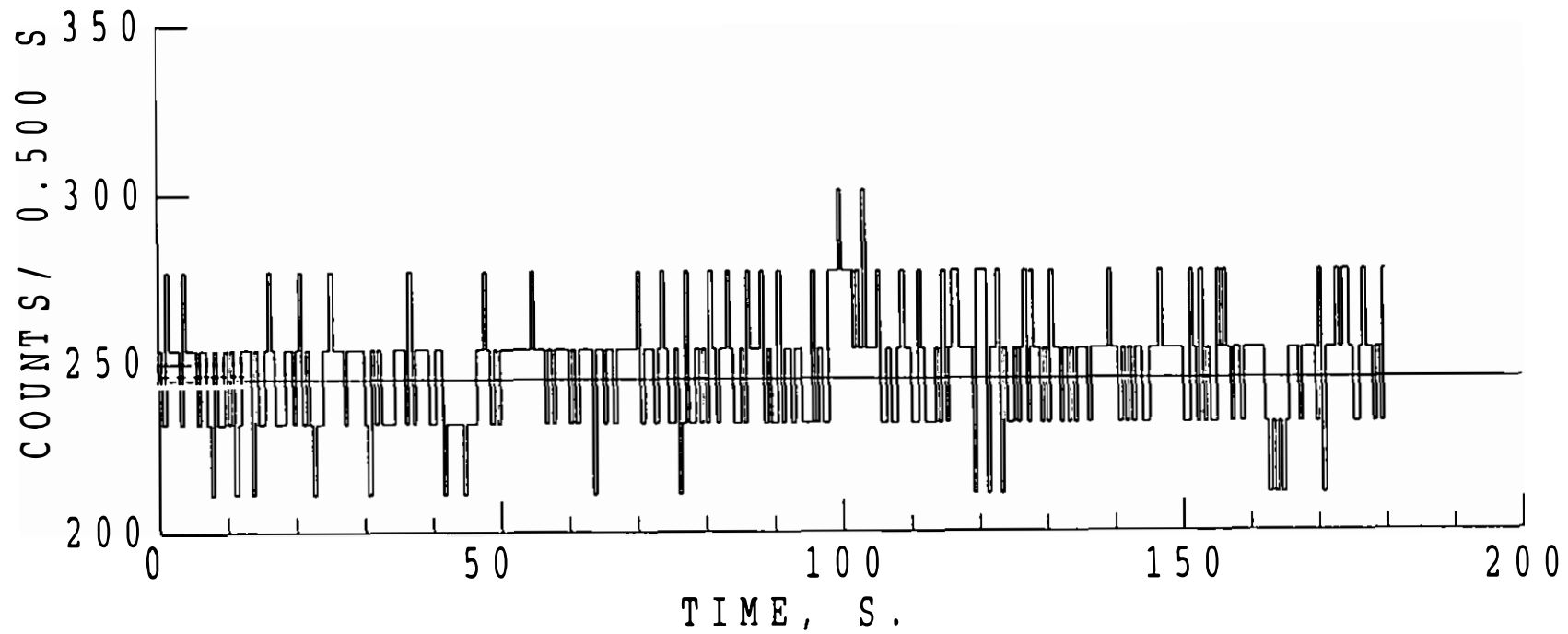
01/09/11

19/11/95 46800.391 s

0 - 0 keV

N= 10 N= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 N= 2
>4.0 SIGMA FLUCTUATIONS

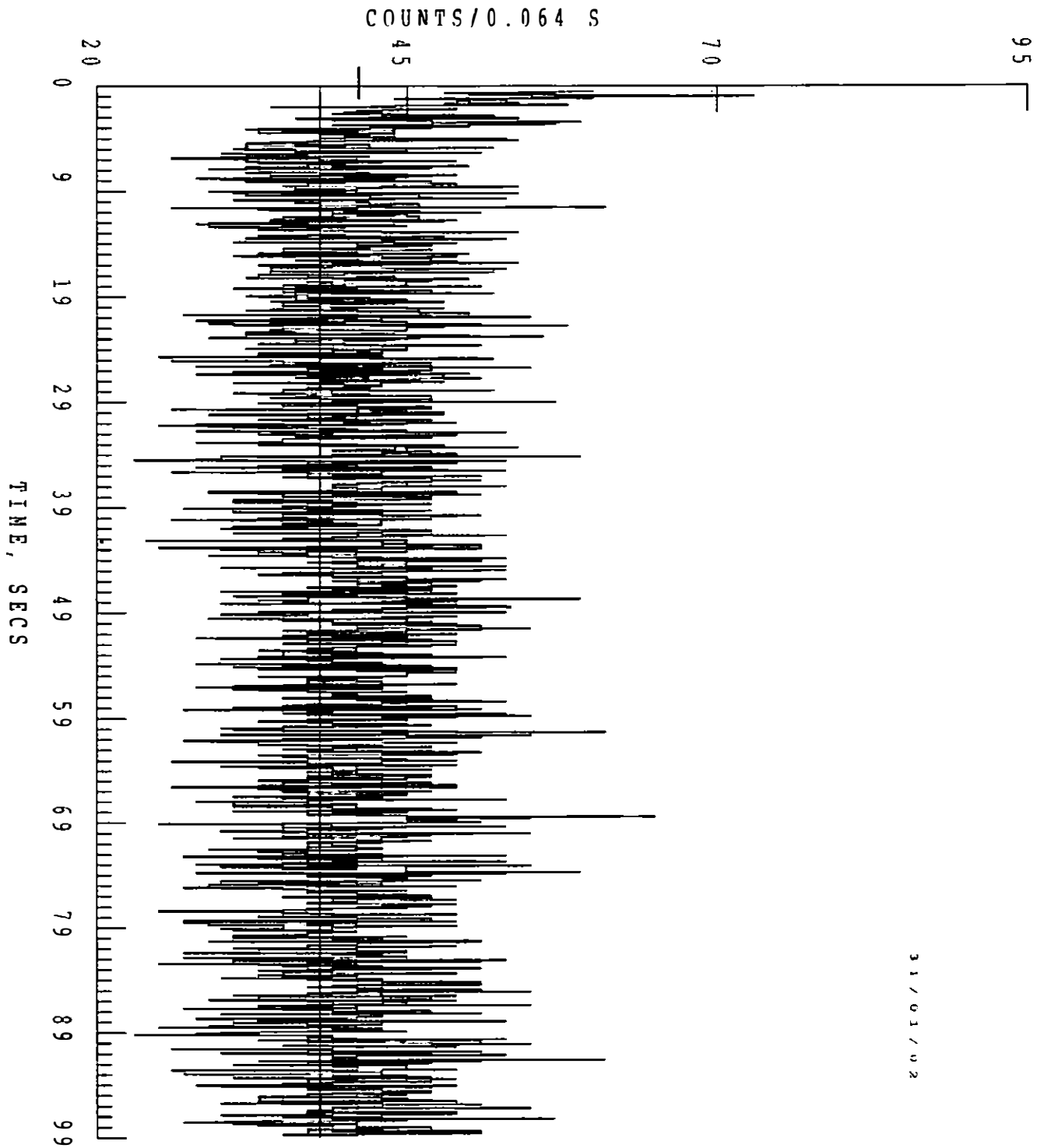


KONUS1

19/11/95

46457.519

50 - 200 keV



KONUS1 19951119 46457

ULYSSES RT

31 / 01 / 02

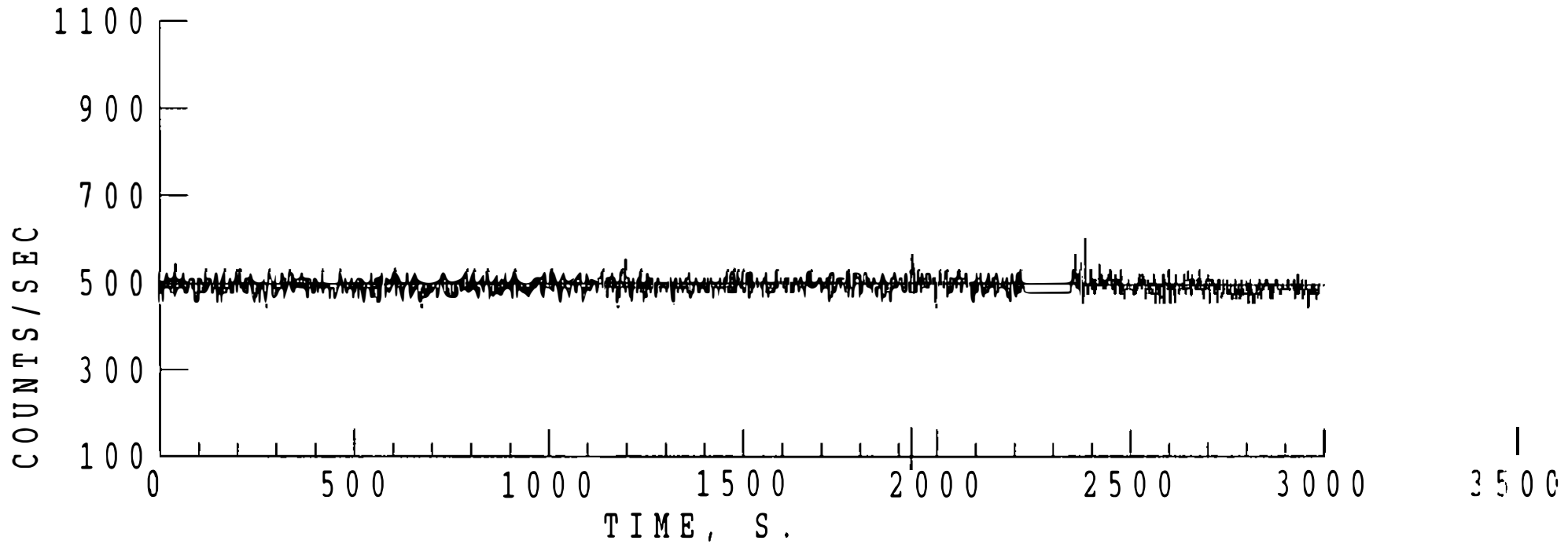
19/11/95 44964.359 s

INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



1 / 2 / 9 6

ULYSSES RT

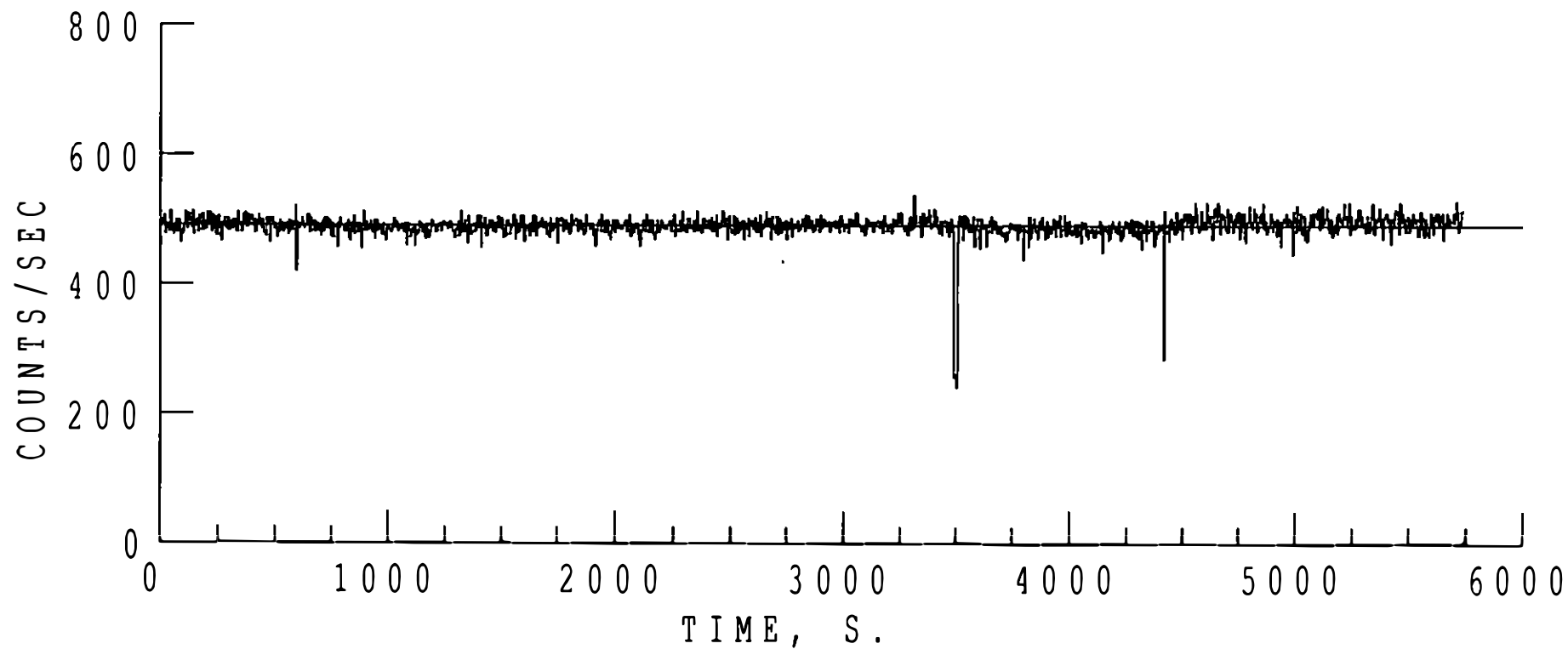
19/11/95 42192.320 s

0.250 S INTERVALS REGROUPED BY 16

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



KONUS

ULYSSES RT

27 / 01 / 00

19 / 11 / 95 57960.066 s

0.250 S INTERVALS REGROUPED BY 8

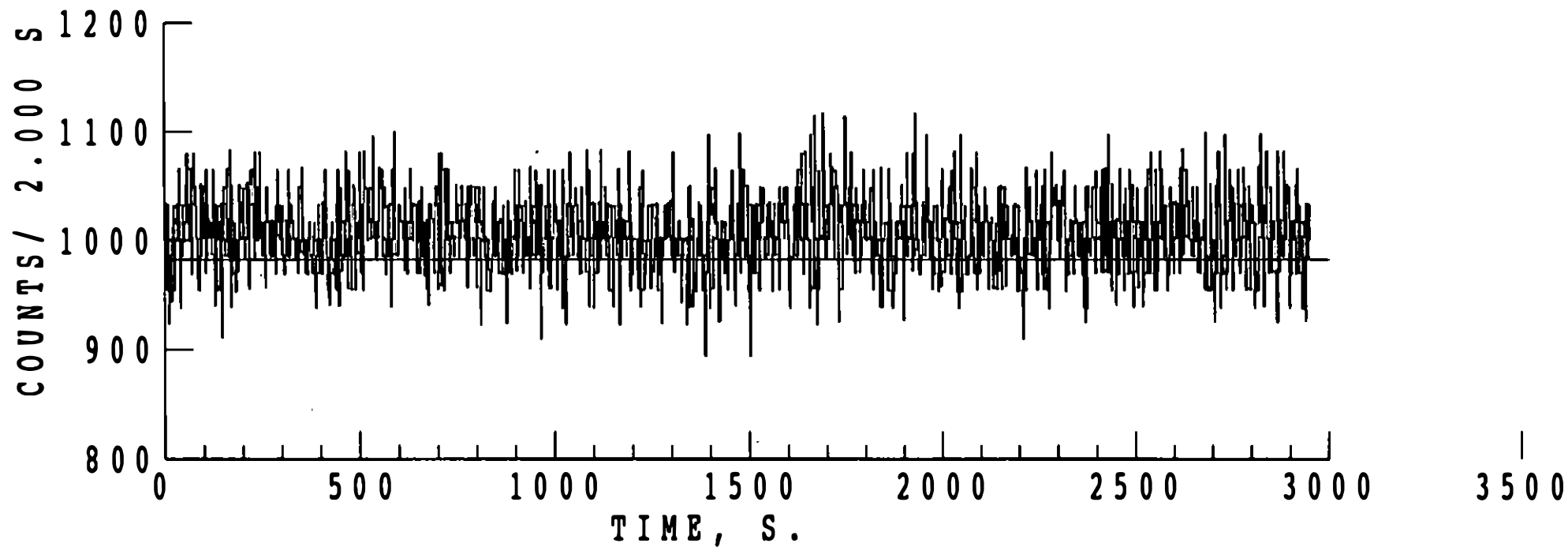
0 - 0 keV

N= 10 M= 10

>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@fender.msfc.nasa.gov Mon Nov 20 13:42 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Mon, 20 Nov 1995 15:41:47 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3913

BATSEARCH PROGRAM

NO

BATSE BURST # 3913
EVENT OF 1995 NOV 19 DAY OF YEAR=323
EVENT CROSSING TIME AT BATSE : 73815. S. OR 20:30:15.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 79.000 25.000
BATSE PEAK COUNTING RATE: 4700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 19/11/ 95 IS:
RA= 217.691 DEC= 55.134 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427740743. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 87.57 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 60.52 SECS.
CROSSING TIME AT ULYSSES IS 73876. S. OR 20:31:15 +/- 298.41 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 19/11/ 95 IS:
RA= 260.461 DEC= -24.033 DIST= 2.271 AU
MARS-BATSE DISTANCE = 339703584. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 1.64 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1132.66 SECS.
CROSSING TIME AT MARS IS 74948. S. OR 20:49:07 +/- 22.84 SECONDS

BATSE BURST TRIGGER

NO.: 3913

TIME: TJD=0040 SECONDS=73815

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=75.6 AZIMUTH=226.4 ERROR=1.3 DEGREES

COMMENTS:

BURST. SINGLE PULSE WITH LOTS OF SUBSTRUCTURE. DUR.~140 SEC.
MARGINALLY VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3913	951119	10040	73815	4700	079	+25	140

22 / 11 / 95

ULYSSES RT

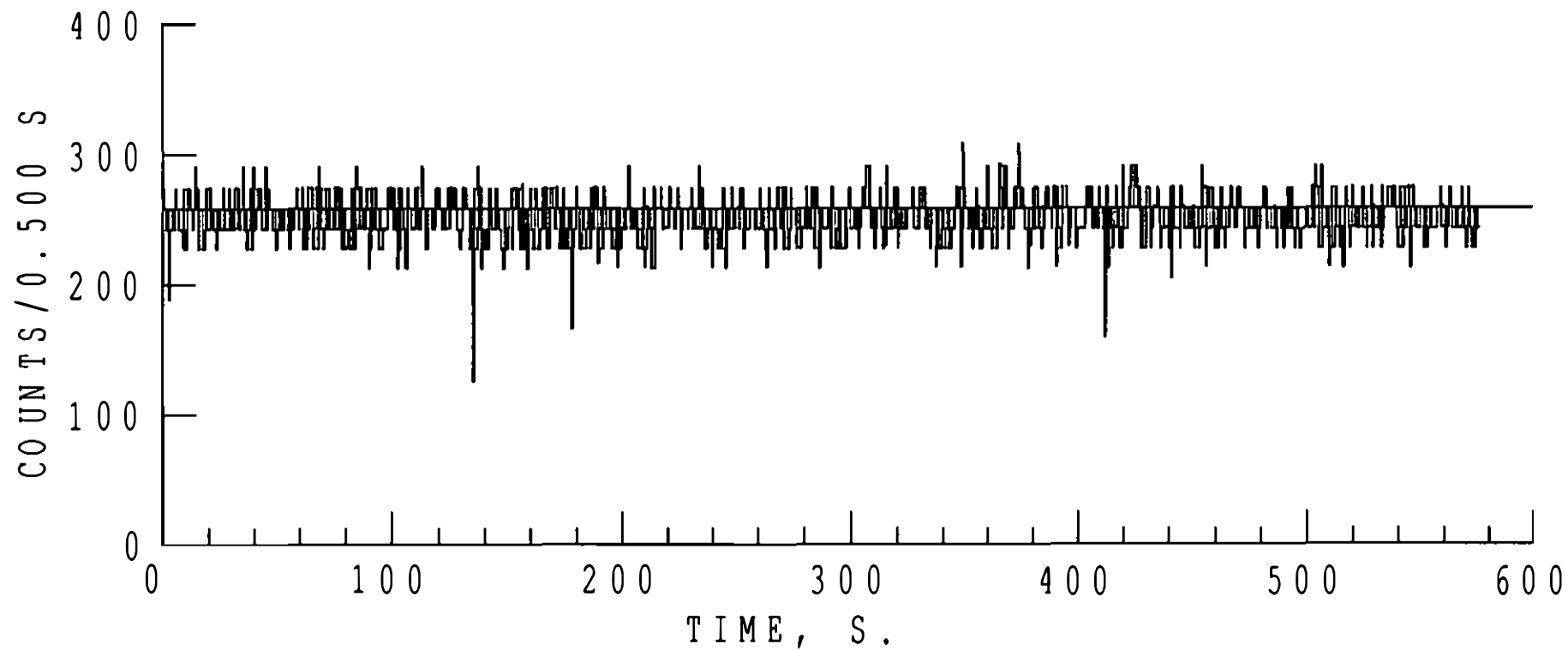
19/11/95 73584.062 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



BACODINE

19/11/95

73804.465

25 - 100 keV

COUNTS/1.024 S

10000 —

7500 —

5000 —

2500 —

0

49

99

149

199

249

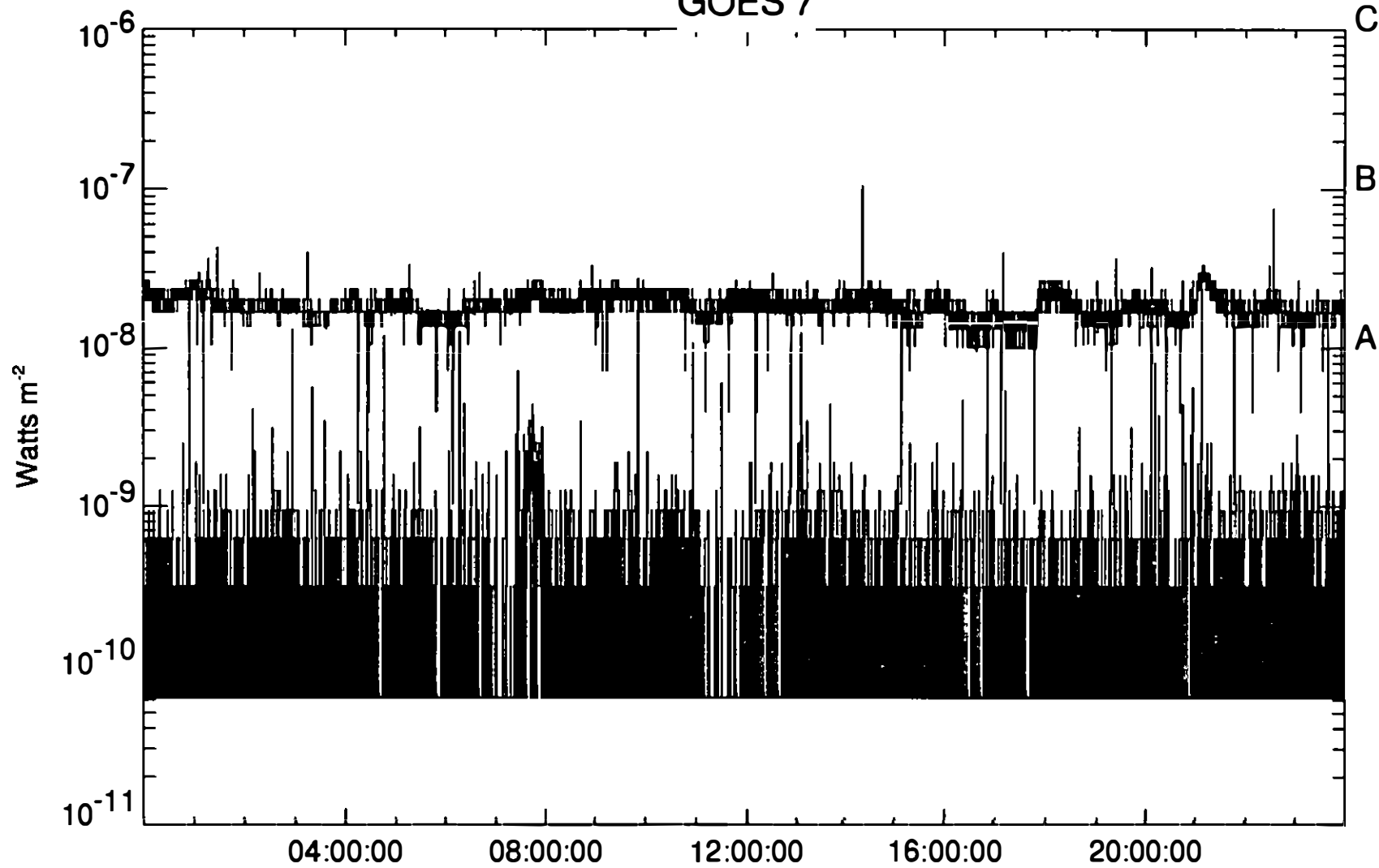
299

349

399

TIME, SECS

GOES 7

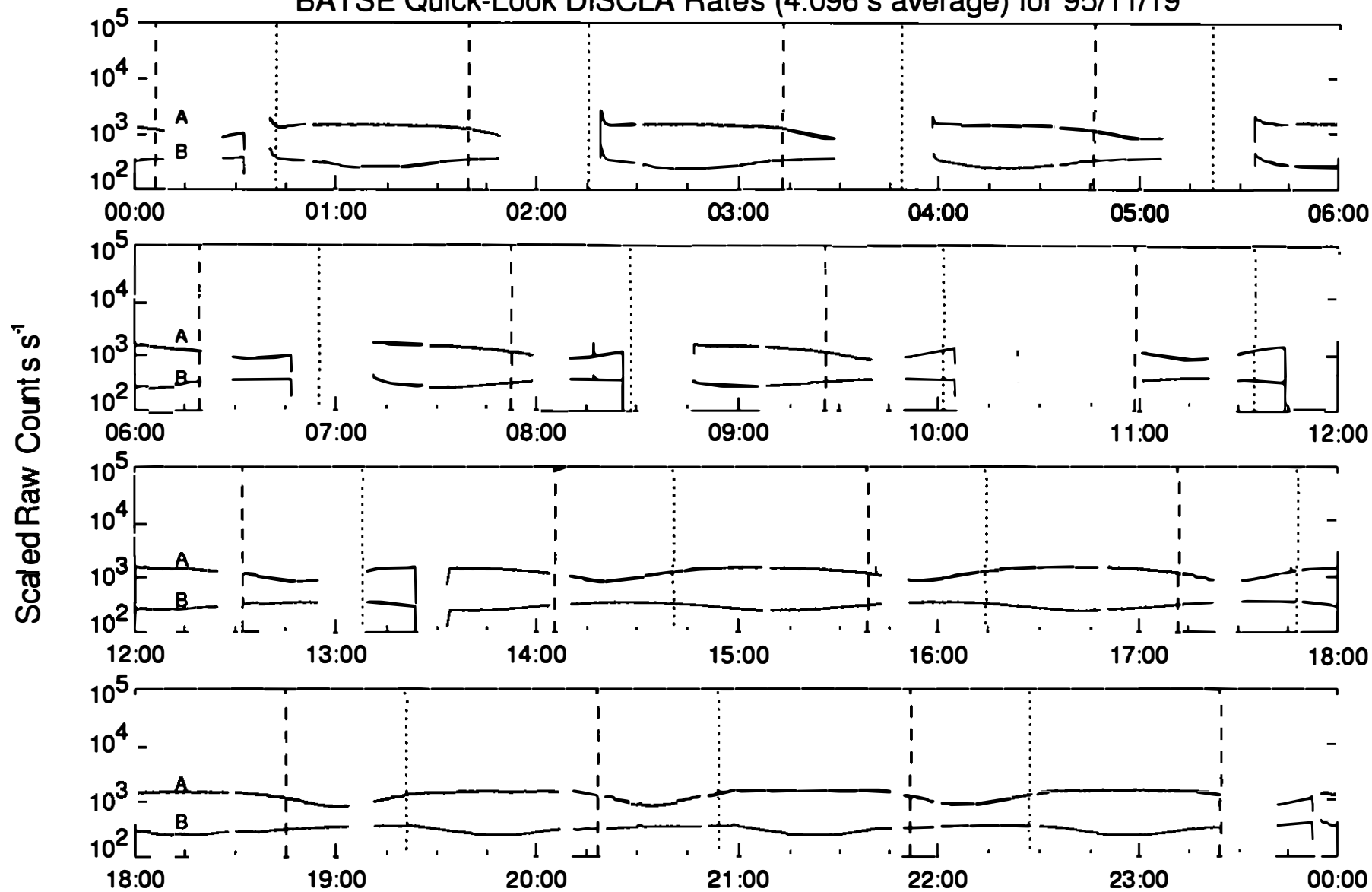


Data Start: 95/11/19, 0000:02

Plot created: 95/11/21, 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 95/11/19



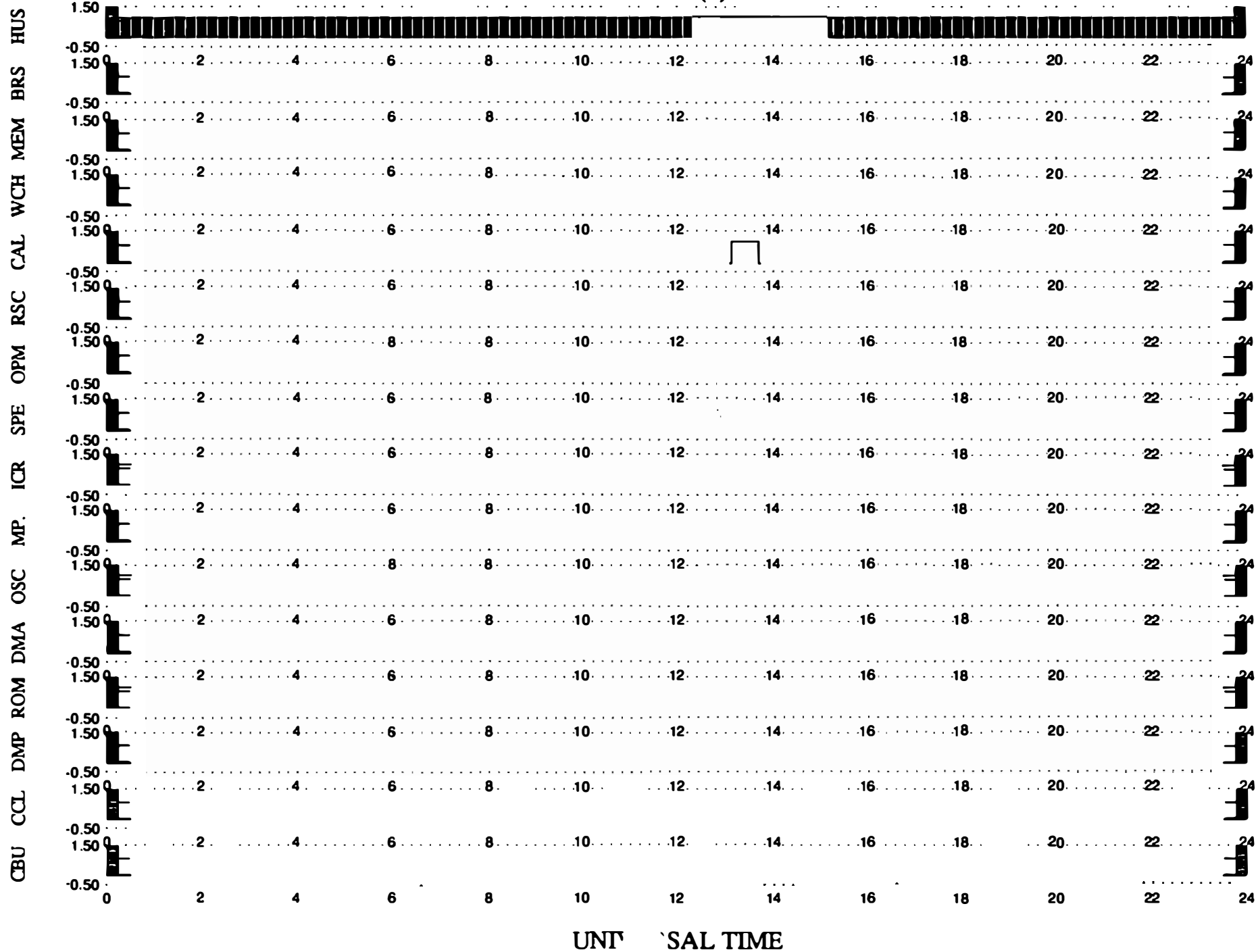
Current Time: 95/11/21, 0654 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

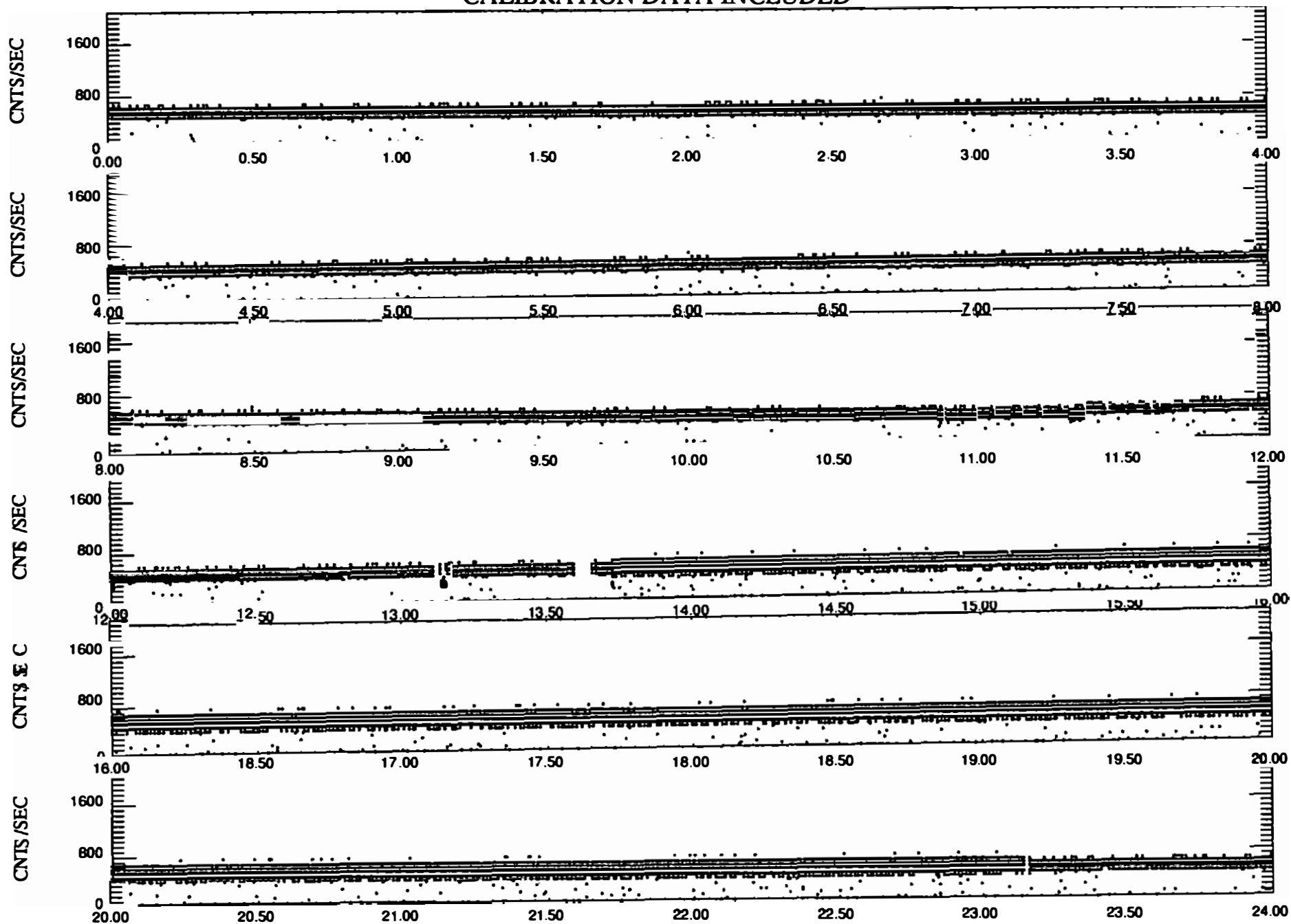
HUS MODES EDR day 323, year 1995 to day 323, year 1995
NO BURST (8)

4/1/96

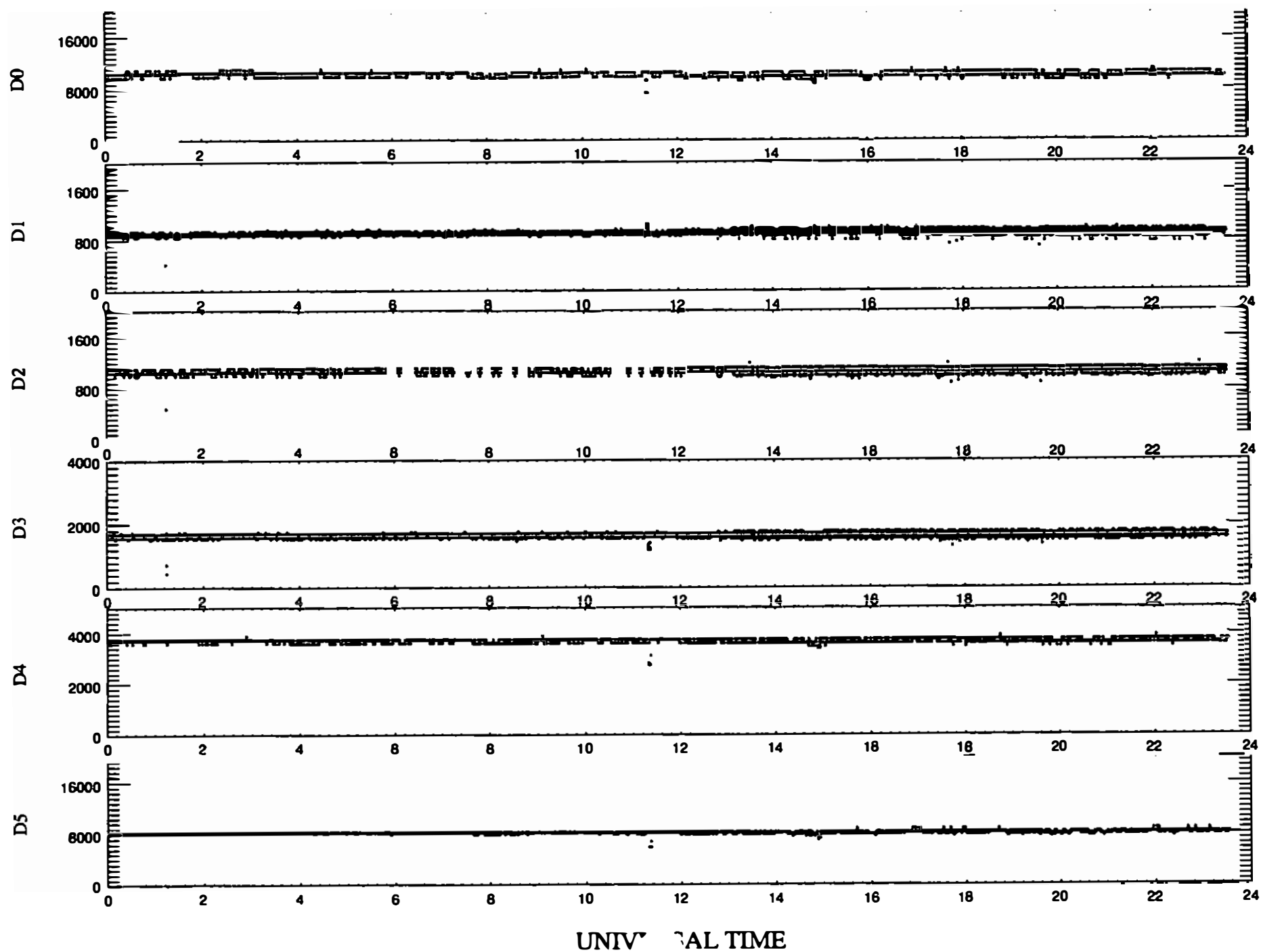


HUS 2A, MODE 1, NOT AVERAGED EDR day 323, year 1995 to day 323, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNITS OF TIME



From HAGEDON@fender.msfc.nasa.gov Wed Nov 22 11:23 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Wed, 22 Nov 1995 13:20:33 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3914

BATSEARCH PROGRAM

BATSE BURST # 3914
EVENT OF 1995 NOV 20 DAY OF YEAR=324
EVENT CROSSING TIME AT BATSE : 12250. S. OR 03:24:10.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 137.000 -33.000
BATSE PEAK COUNTING RATE: 1700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 20/11/ 95 IS:
RA= 217.764 DEC= 55.139 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427751051. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 68.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 527.87 SECS.
CROSSING TIME AT ULYSSES IS 12778. S. OR 03:32:57 +/- 288.16 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 20/11/ 95 IS:
RA= 261.277 DEC= -24.086 DIST= 2.273 AU
MARS-BATSE DISTANCE = 339979712. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 77.94 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 236.94 SECS.
CROSSING TIME AT MARS IS 12487. S. OR 03:28:06 +/- 196.14 SECONDS

BATSE BURST TRIGGER

NO.: 3914

TIME: TJD=0041 SECONDS=12250

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=153.3 AZIMUTH=251.5 ERROR=6.2 DEGREES

COMMENTS:

WEAK GRB WITH HARD SPECTRUM. DUR. ~ 20 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3914	951120	10041	12250	1700	137	-33	20

BATSE BURST# 3914

16 / 5 / 96

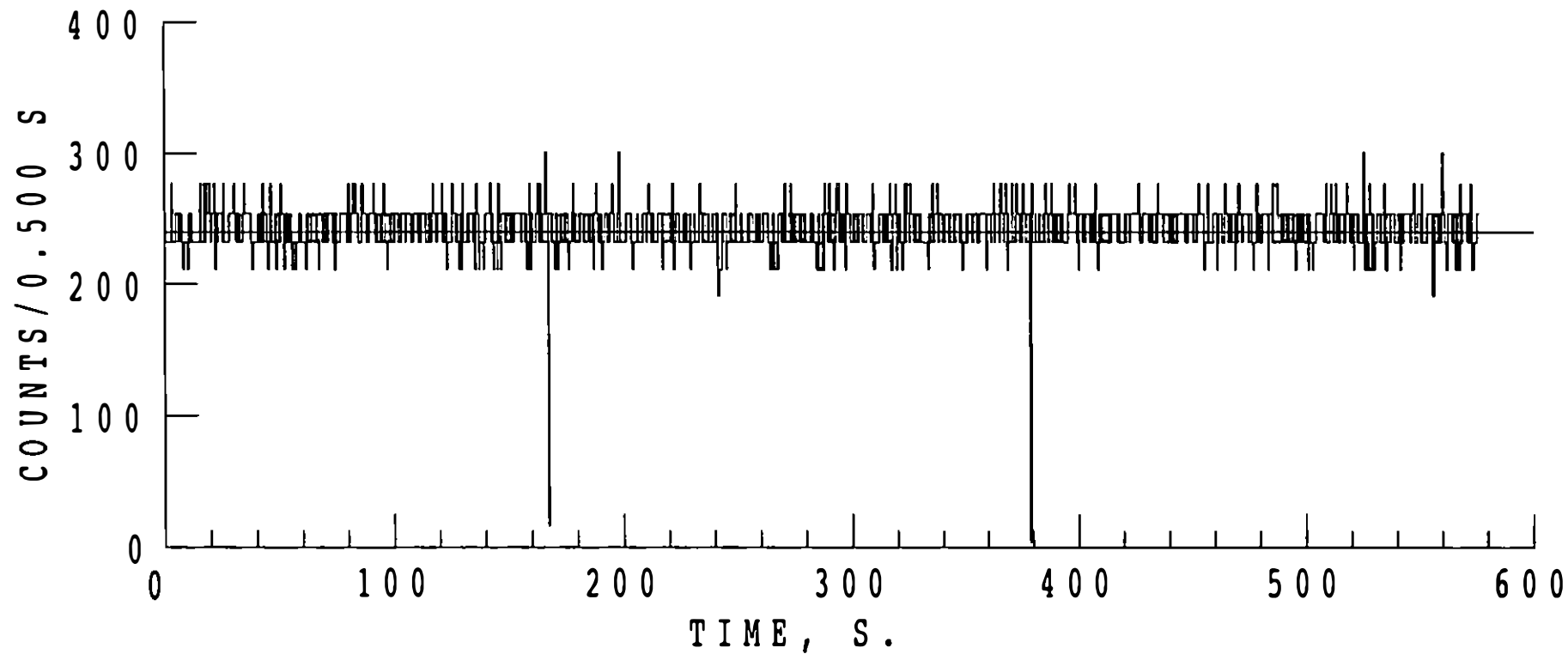
ULYSSES RT

20/11/95 12492.197 s

0 - 0 keV

N=10 M=2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@fender.msfc.nasa.gov Wed Nov 22 11:23 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Wed, 22 Nov 1995 13:21:57 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3915

BATSEARCH PROGRAM

BATSE BURST # 3915
EVENT OF 1995 NOV 20 DAY OF YEAR=324
EVENT CROSSING TIME AT BATSE : 30930. S. OR 08:35:30.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 131.000 70.000
BATSE PEAK COUNTING RATE: 5500 C/S

UD

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 20/11/ 95 IS:
RA= 217.820 DEC= 55.142 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427757542. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=141.44 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1115.69 SECS.
CROSSING TIME AT ULYSSES IS 29814. S. OR 08:16:54 +/- 187.48 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 20/11/ 95 IS:
RA= 261.277 DEC= -24.086 DIST= 2.273 AU
MARS-BATSE DISTANCE = 339979712. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 54.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 663.83 SECS.
CROSSING TIME AT MARS IS 31594. S. OR 08:46:33 +/- 169.71 SECONDS

BATSE BURST TRIGGER

NO.: 3915

TIME: TJD=0041 SECONDS=30930

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=52.6 AZIMUTH=282.3 ERROR=12.5 DEGREES

COMMENTS:

BURST. SINGLE SPIKE, DUR.~0.3 SEC. MARGINALLY VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3915	951120	10041	30930	5500	131	+70	.3

22 / 11 / 95

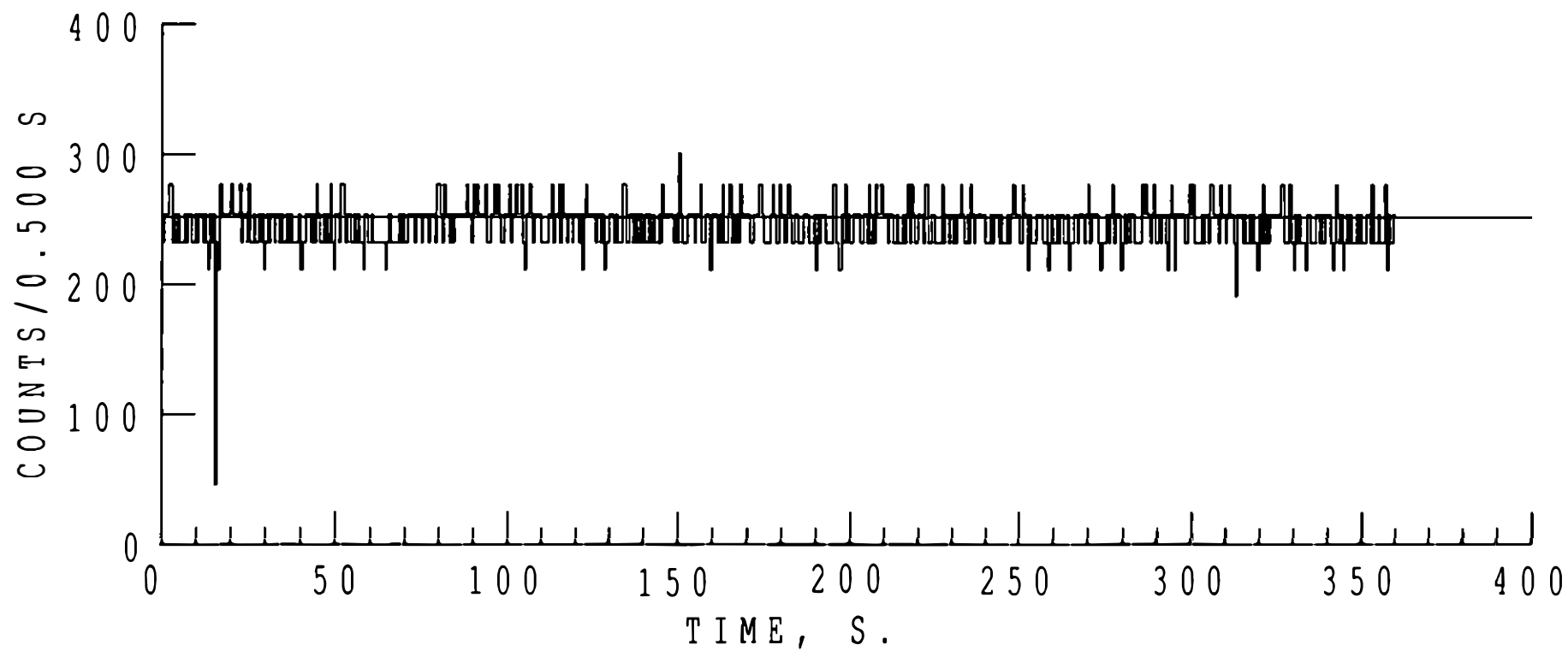
ULYSSES RT

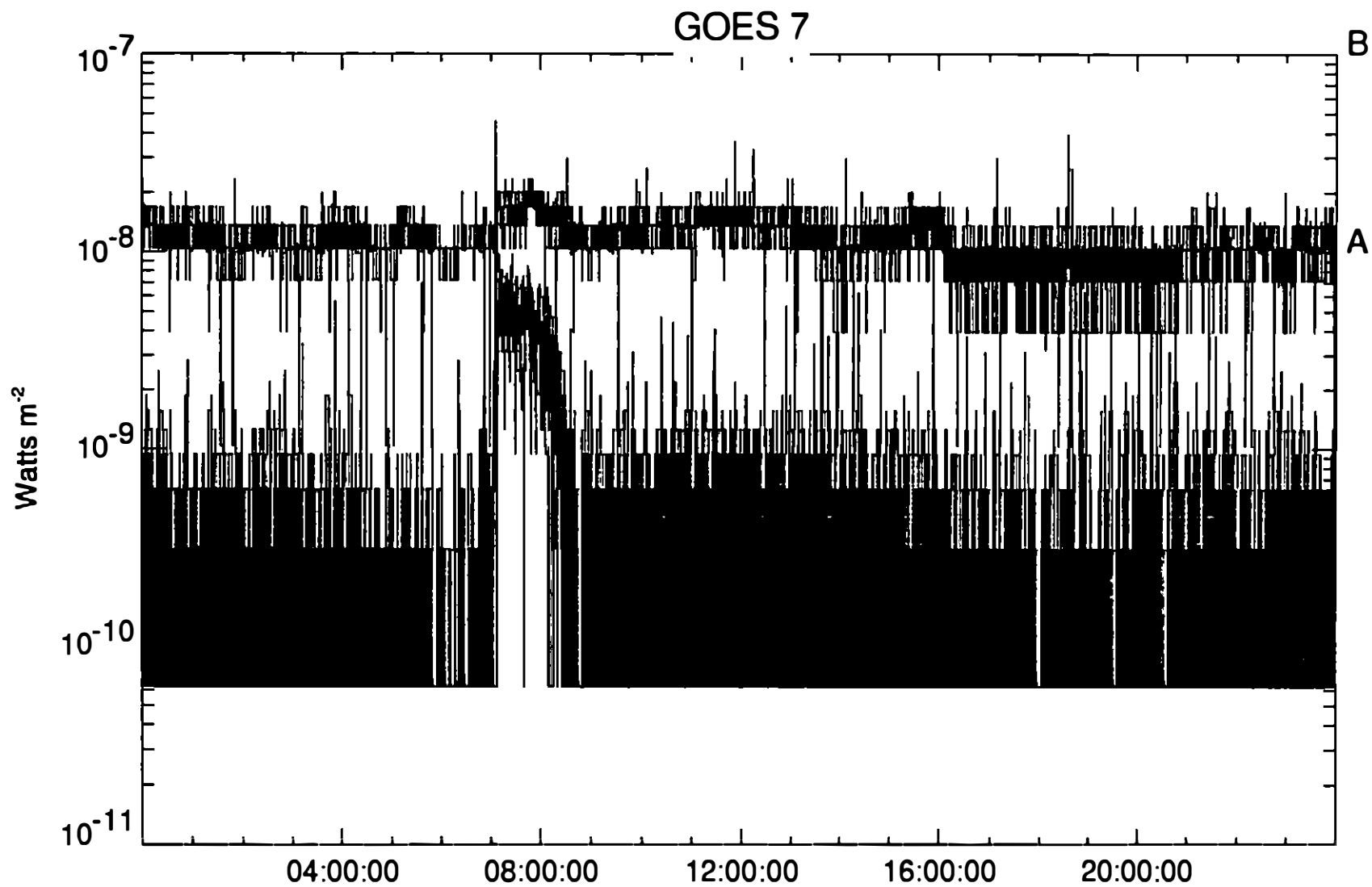
20 / 11 / 95 29628.465 s

0 - 0 keV

N= 10 N= 2

>4.0 SIGMA FLUCTUATIONS |





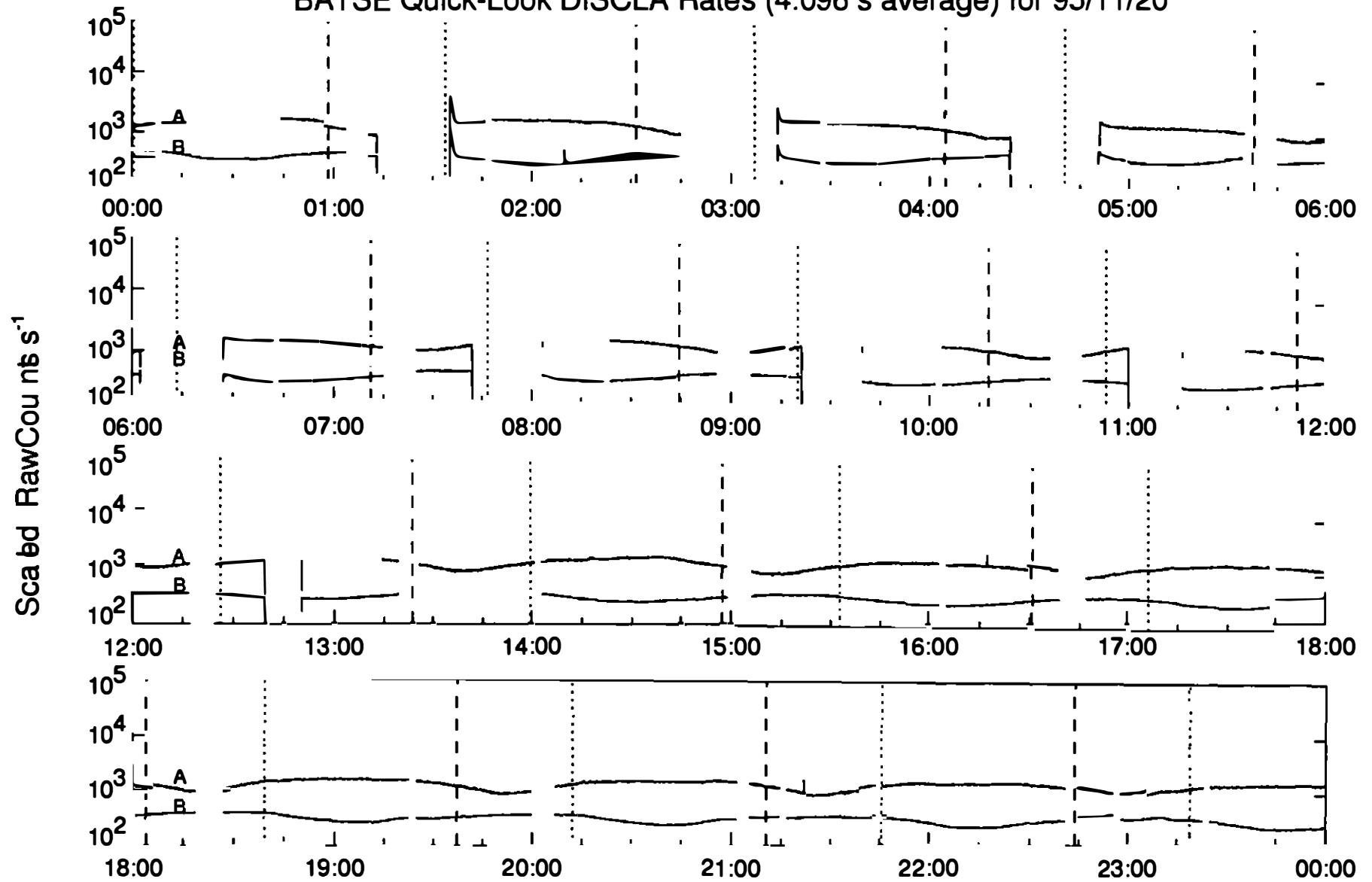
Data Start: 95/11/20, 0000:00

Plot created: 95/11/22, 1345

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 95/11/20



Current Time: 95/11/22, 0654 EDT

A: Channel 0 Most Sunward LAD

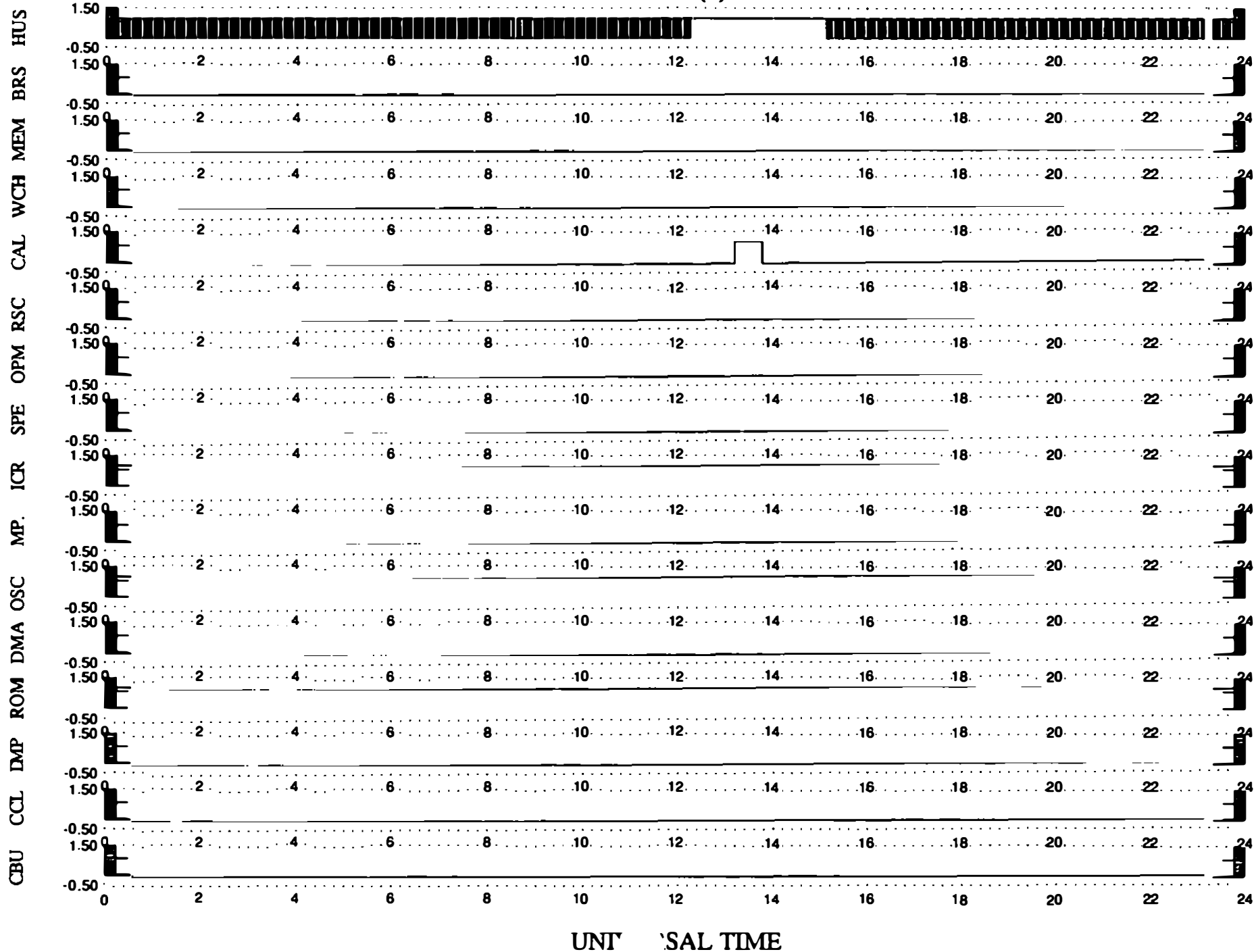
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

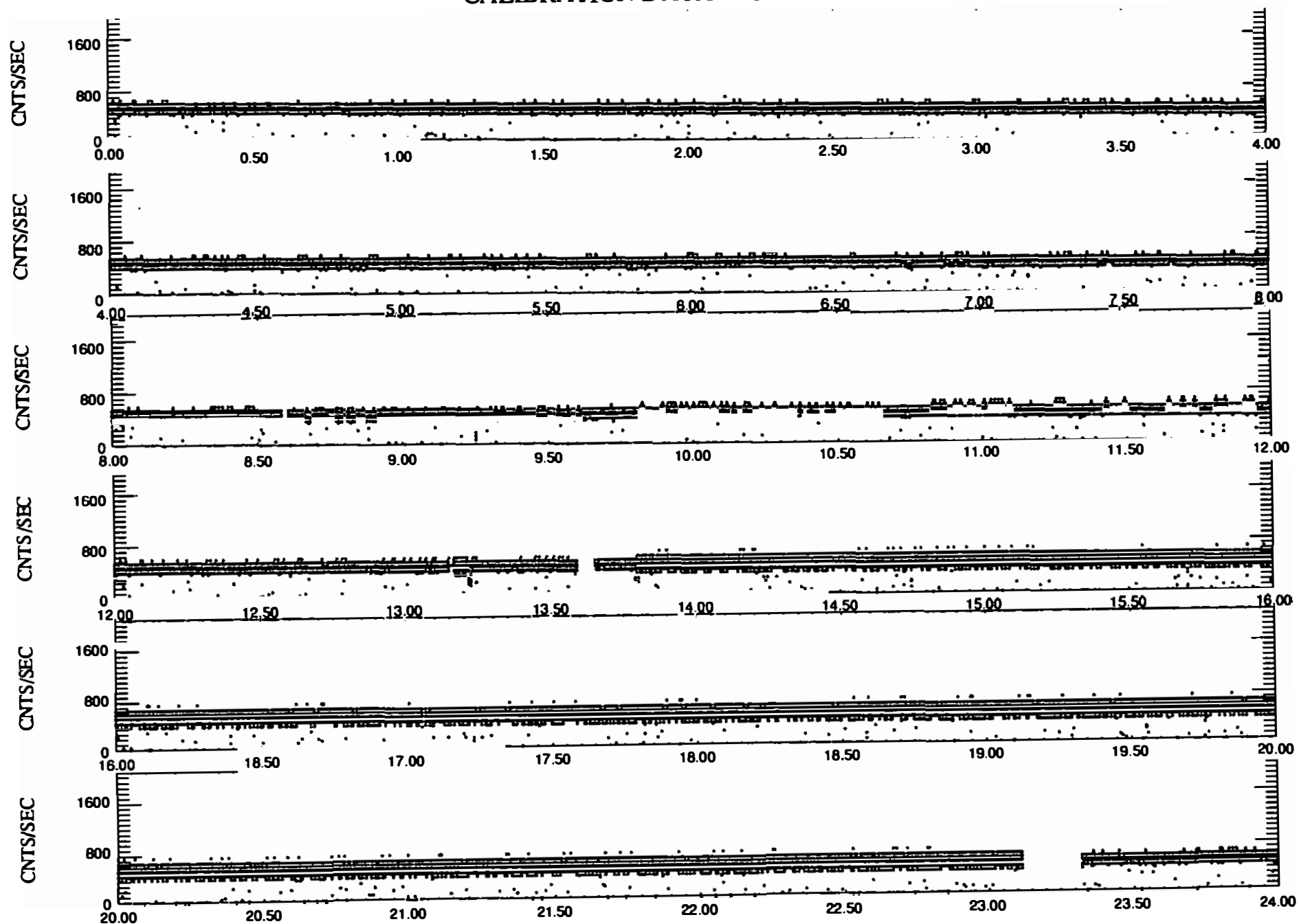
HUS MODES EDR day 324, year 1995 to day 324, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 324, year 1995 to day 324, year 1995
CALIBRATION DATA INCLUDED

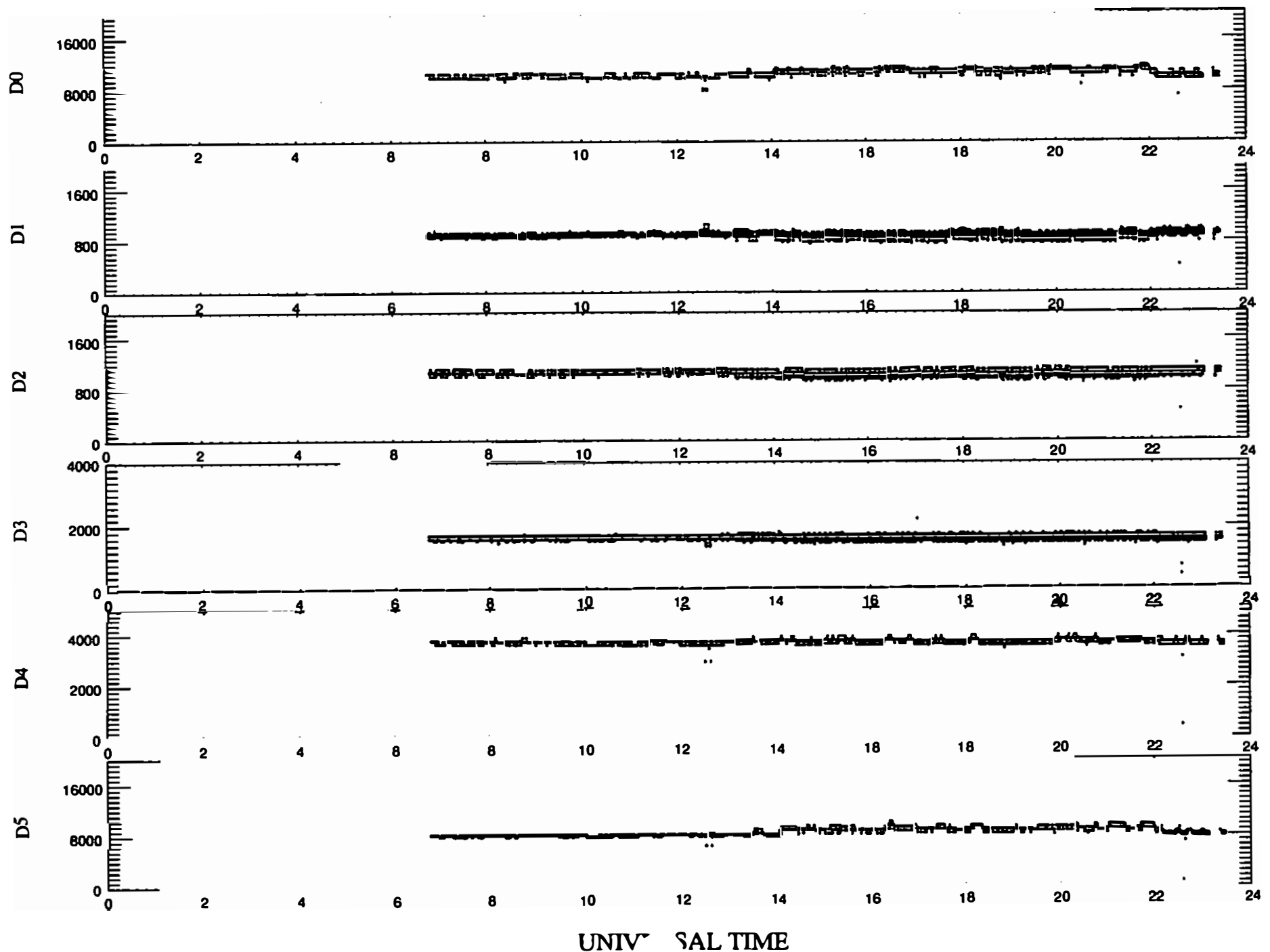
4/1/96



UNIVERSAL TIME

HUS 2B COUNTS / SEC QEDR day 324, year 1995 to day 324, year 1995

11/22/95



From HAGEDON@fender.msfc.nasa.gov Wed Nov 22 11:24 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Wed, 22 Nov 1995 13:23:38 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3916

BATSEARCH PROGRAM

20

BATSE BURST # 3916
EVENT OF 1995 NOV 21 DAY OF YEAR=325
EVENT CROSSING TIME AT BATSE : 22280. S. OR 06:11:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 206.000 -24.000
BATSE PEAK COUNTING RATE: 5000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/11/ 95 IS:
RA= 218.049 DEC= 55.160 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427780940. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=100.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -251.96 SECS.
CROSSING TIME AT ULYSSES IS 22028. S. OR 06:07:08 +/- 290.02 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/11/ 95 IS:
RA= 262.094 DEC= -24.136 DIST= 2.274 AU
MARS-BATSE DISTANCE = 340251872. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=129.15 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -716.57 SECS.
CROSSING TIME AT MARS IS 21563. S. OR 05:59:23 +/- 141.92 SECONDS

BATSE BURST TRIGGER

NO.: 3916

TIME: TJD=0042 SECONDS=22280

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=132.8 AZIMUTH=1.5 ERROR=2.0 DEGREES

COMMENTS:

BURST. COMPLEX EVENT WITH 2 MAIN PEAKS. TOTAL DUR.~100 SEC.
VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3916	951121	10042	22280	5000	206	-24	100

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

-- T. L. Cline ----- LREAVX::CLINE

22 / 11 / 95

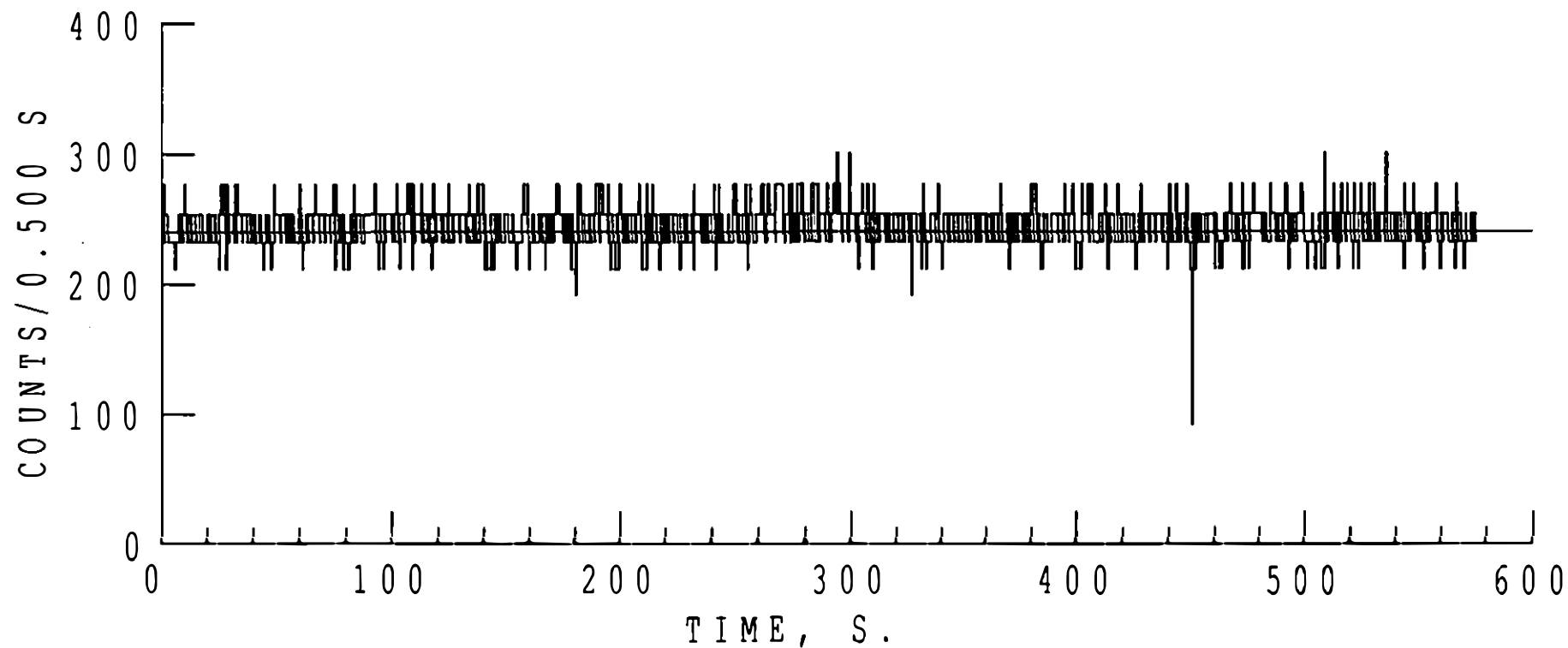
ULYSSES RT

21 / 11 / 95 21744.184 s

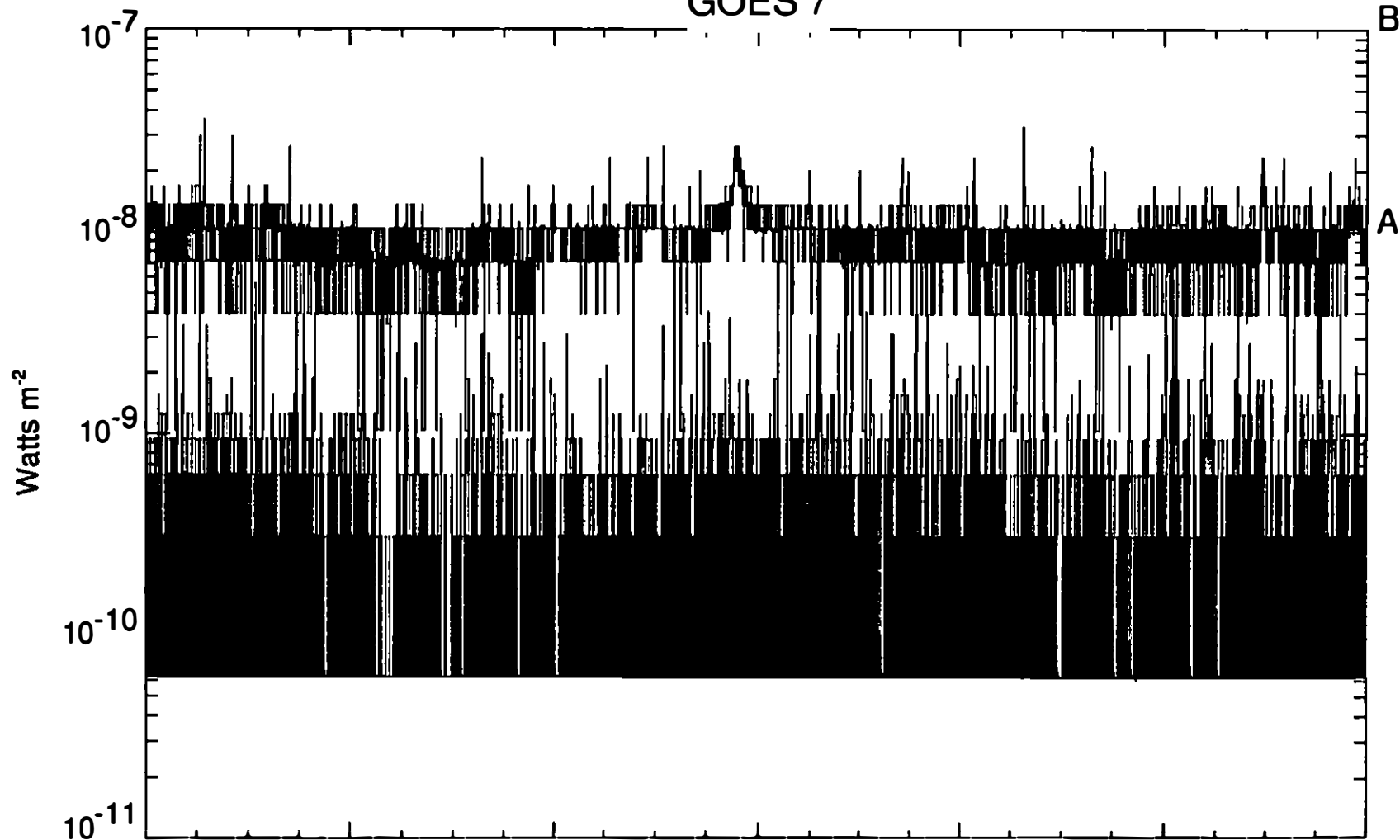
0 - 0 keV

N= 10 N= 2

>4.0 SIGMA FLUCTUATIONS



GOES 7



Data Start: 95/11/21, 0000:01

Plot created: 95/11/23, 0653

Channel

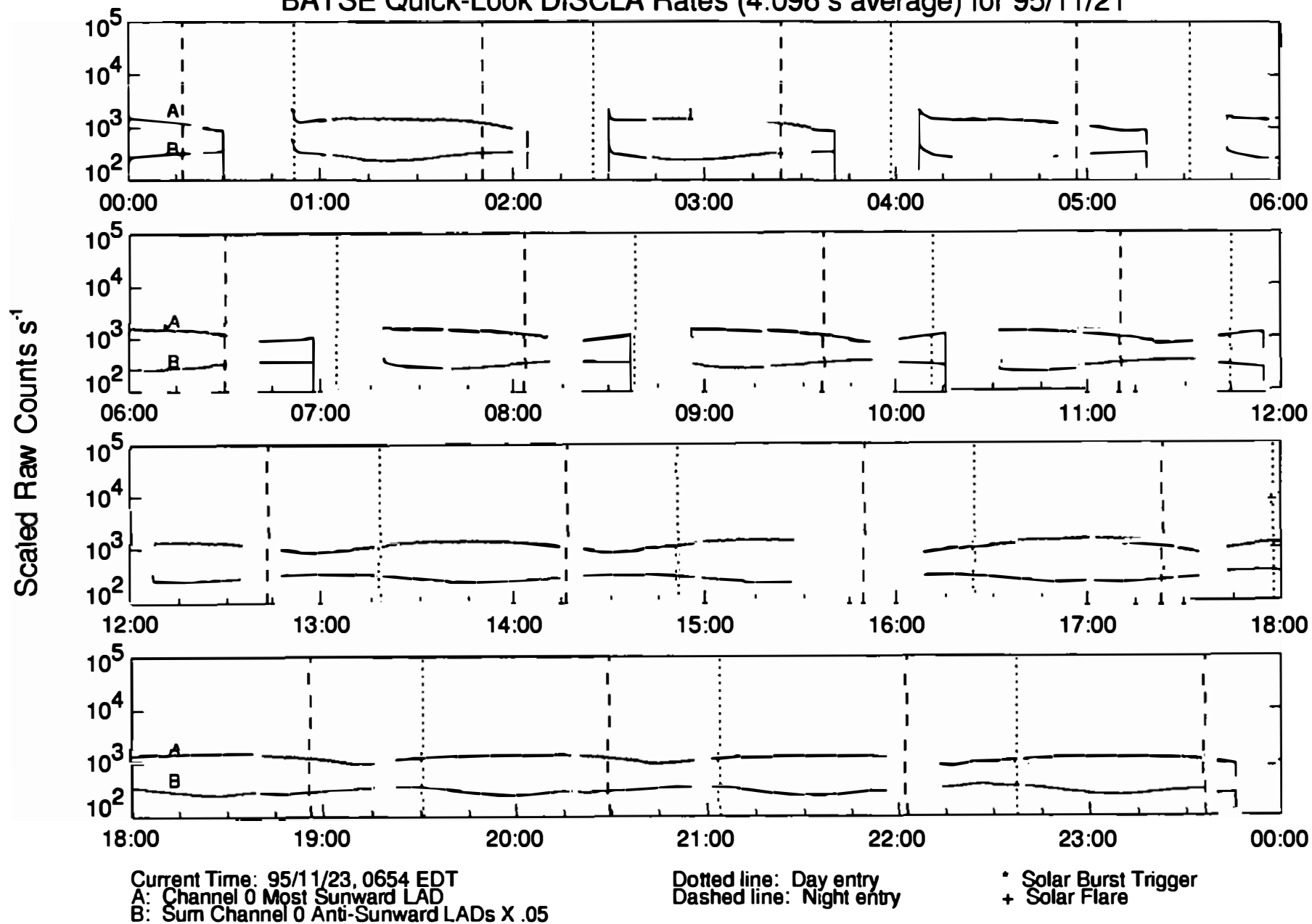
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

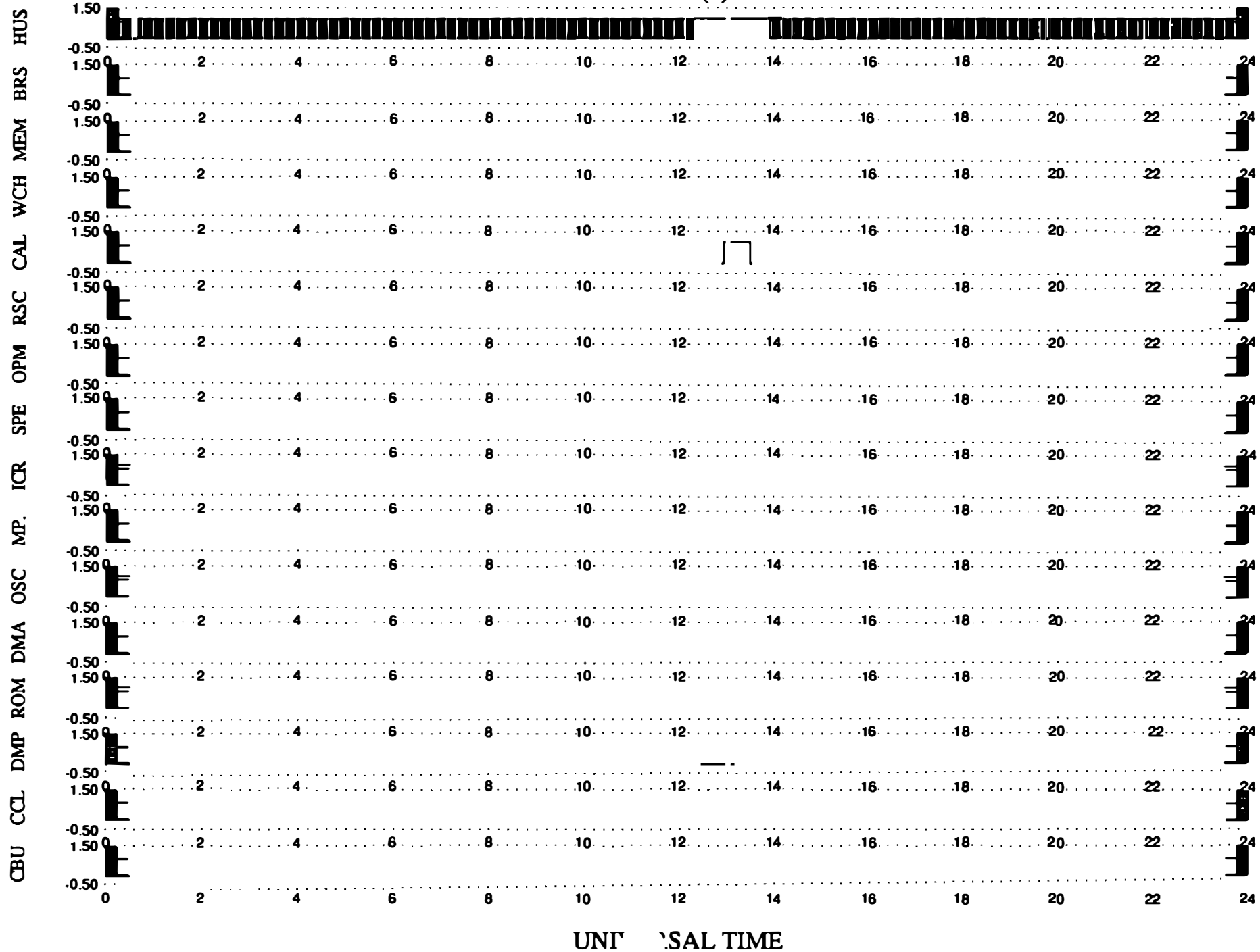
Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/21



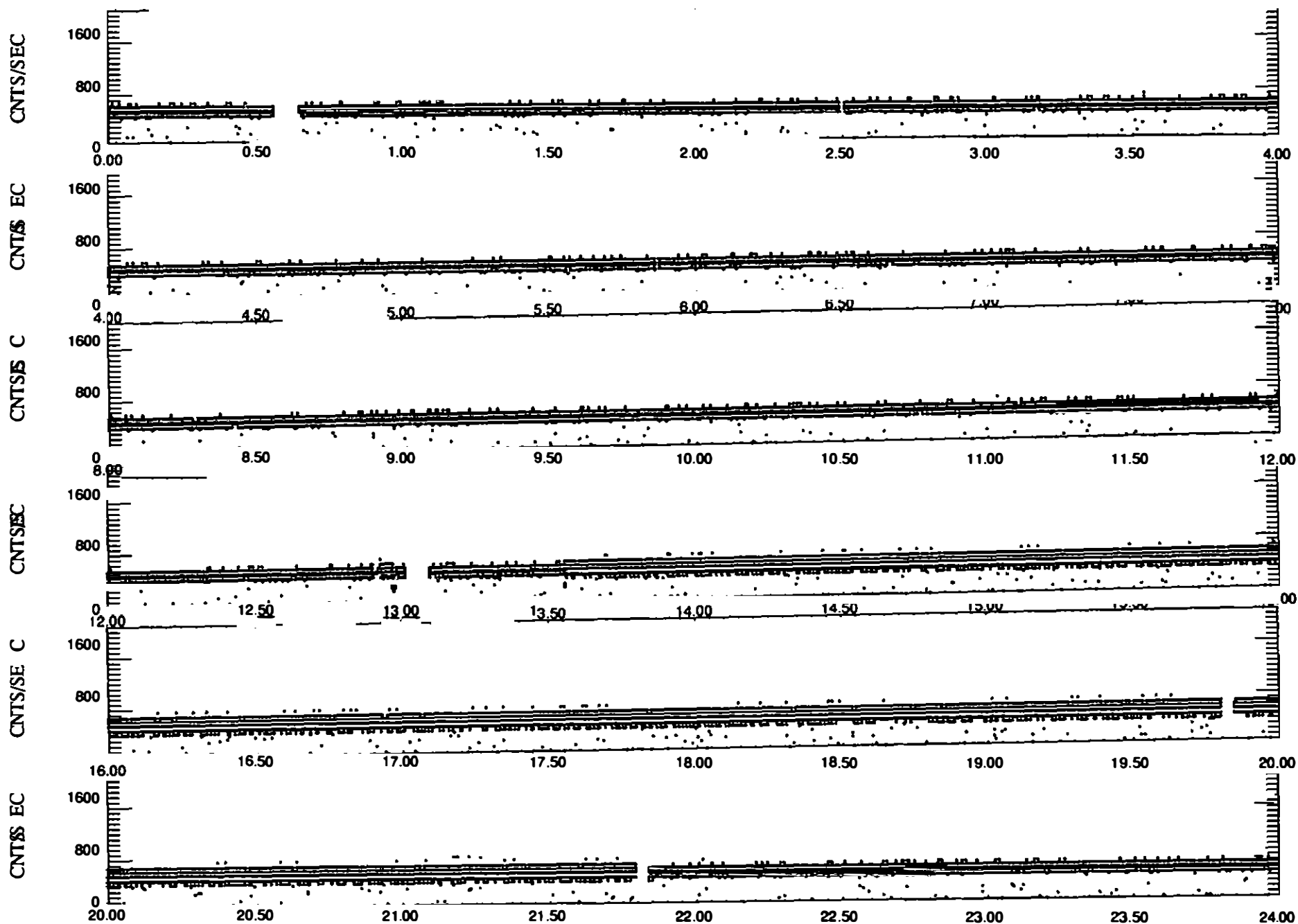
HUS MODES EDR day 325, year 1995 to day 325, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 325, year 1995 to day 325, year 1995
 CALIBRATION DATA INCLUDED

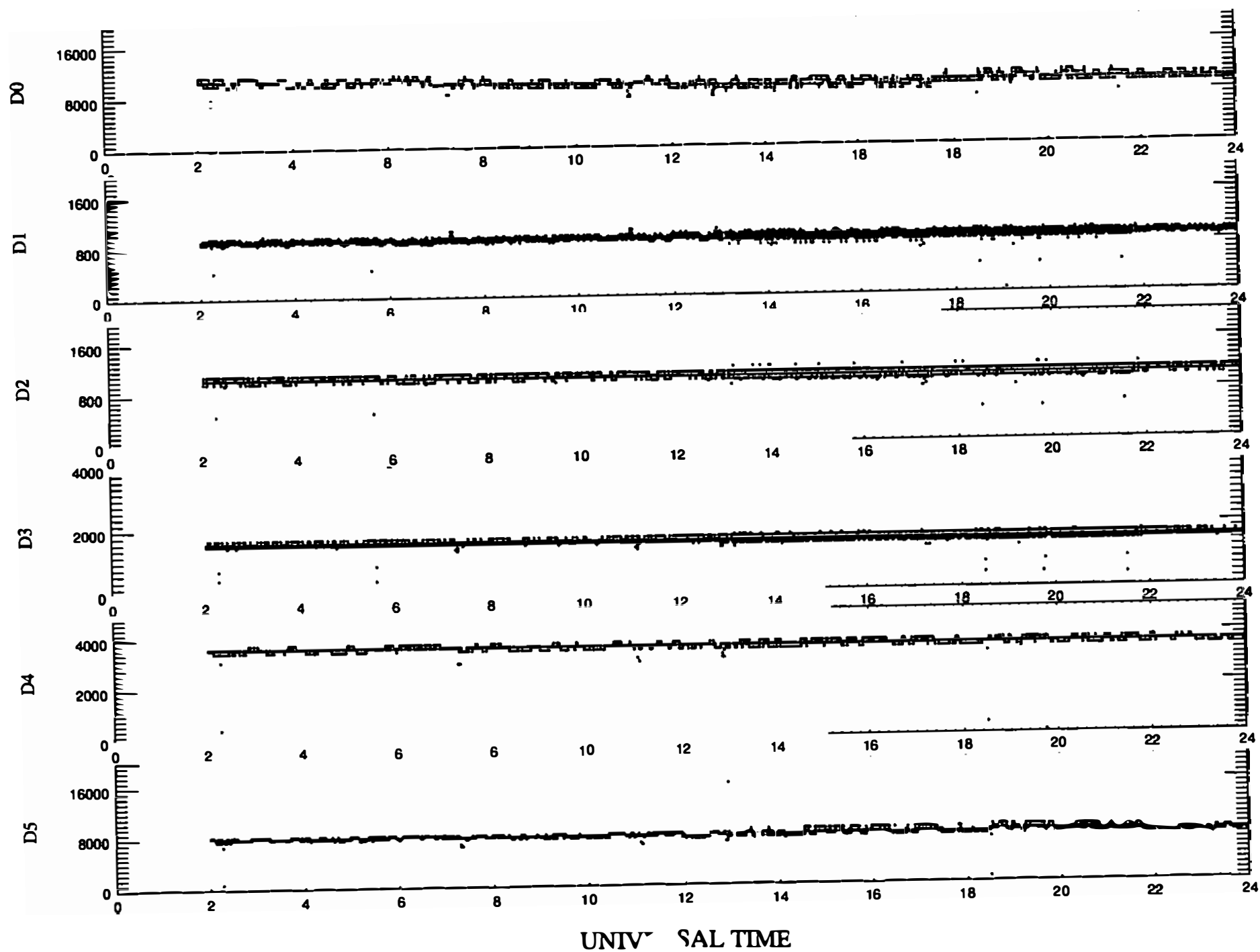
4/1/96



UNITS 'SAL TIME

HUS 2B COUNTS / SEC QEDR day 325, year 1995 to day 325, year 1995

11/22/95



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 (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	?	

1 / 2 / 9 6

ULYSSES RT

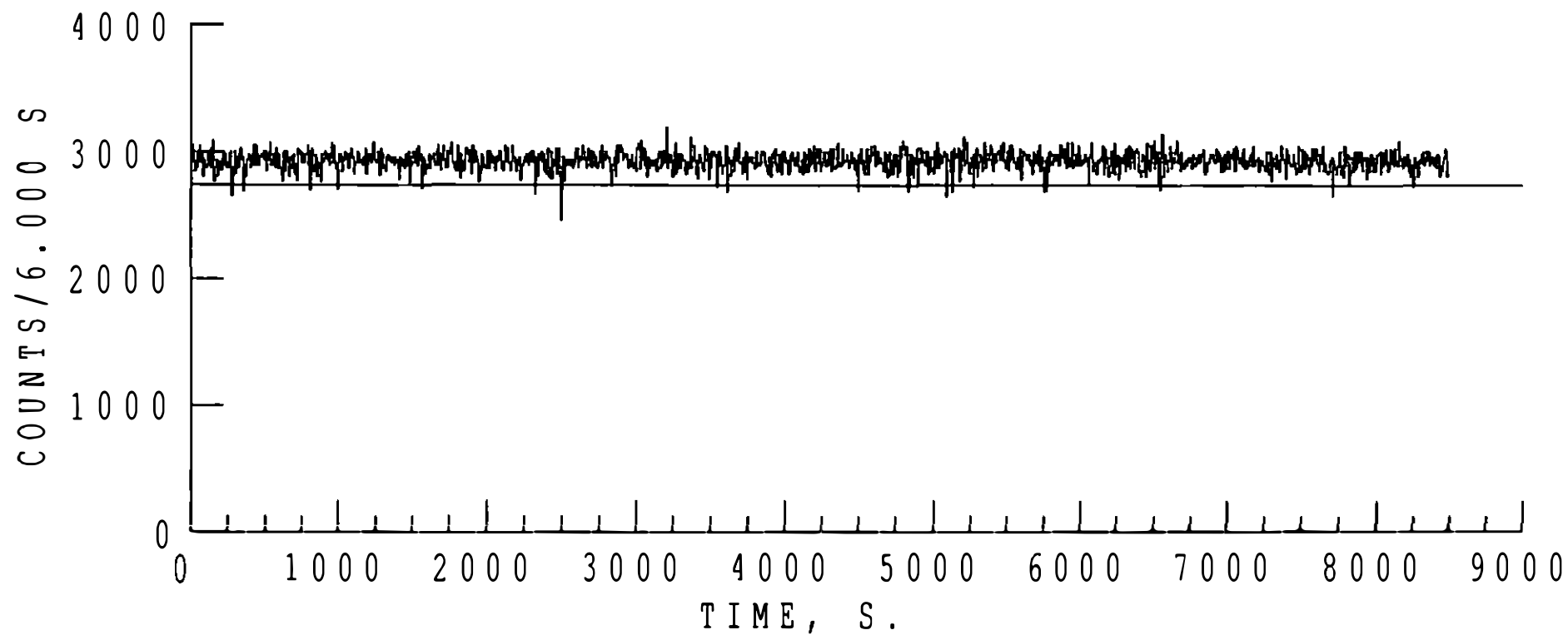
22/11/95 5580.272 s

0.500 S INTERVALS REGROUPED BY 12

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



Date: Sep 7 2011

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

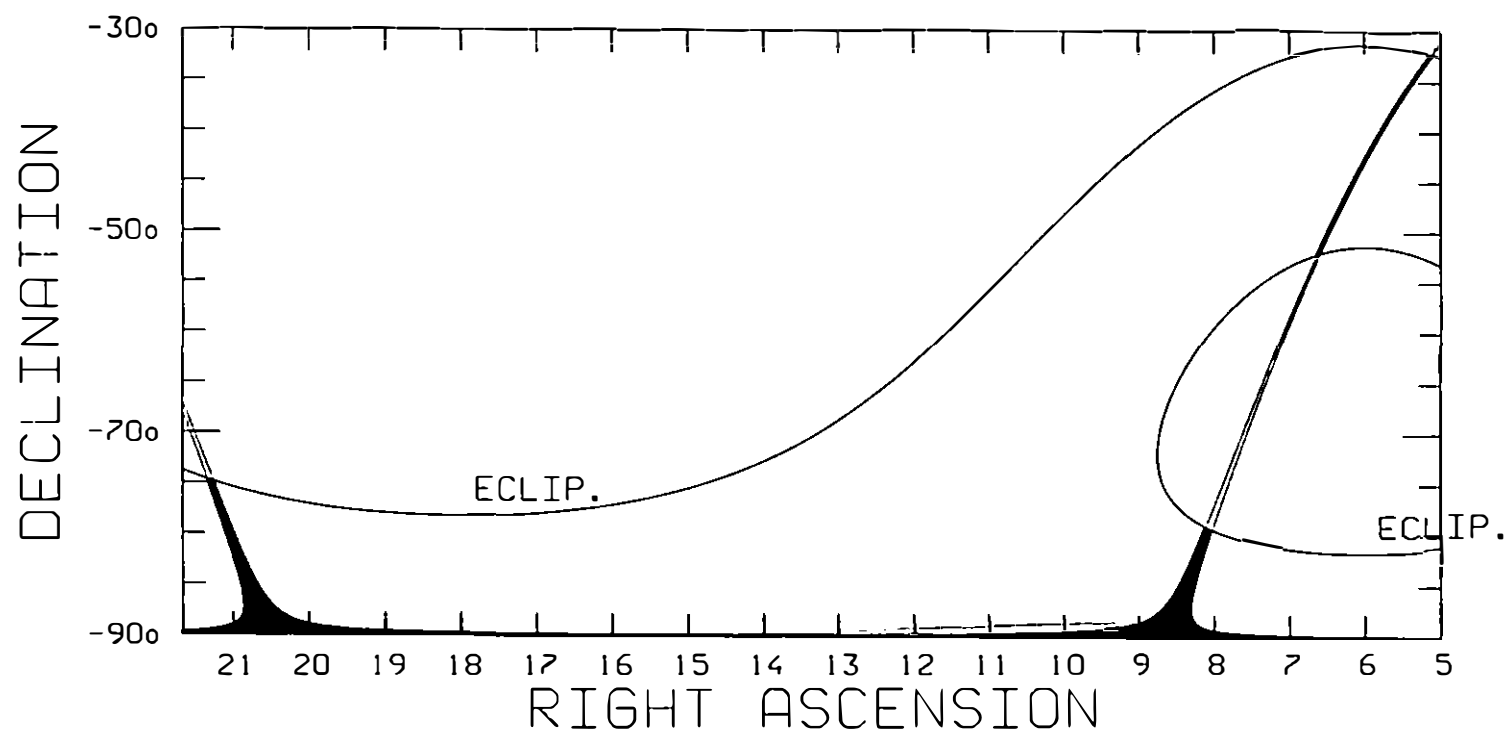
- ☒ Jim Schmidling's stat file correction applied?
- ☒ Final ephemeris used?
- ☒ Final, CDROM data used?
- ☒ Were data checked by Joe Springer for 0.5 s errors?
- ☒ If a 2 spacecraft triangulation, was Ulysses time corrected for aberration?
- ☒ Is the order of the data in CORREL such that a vernier is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

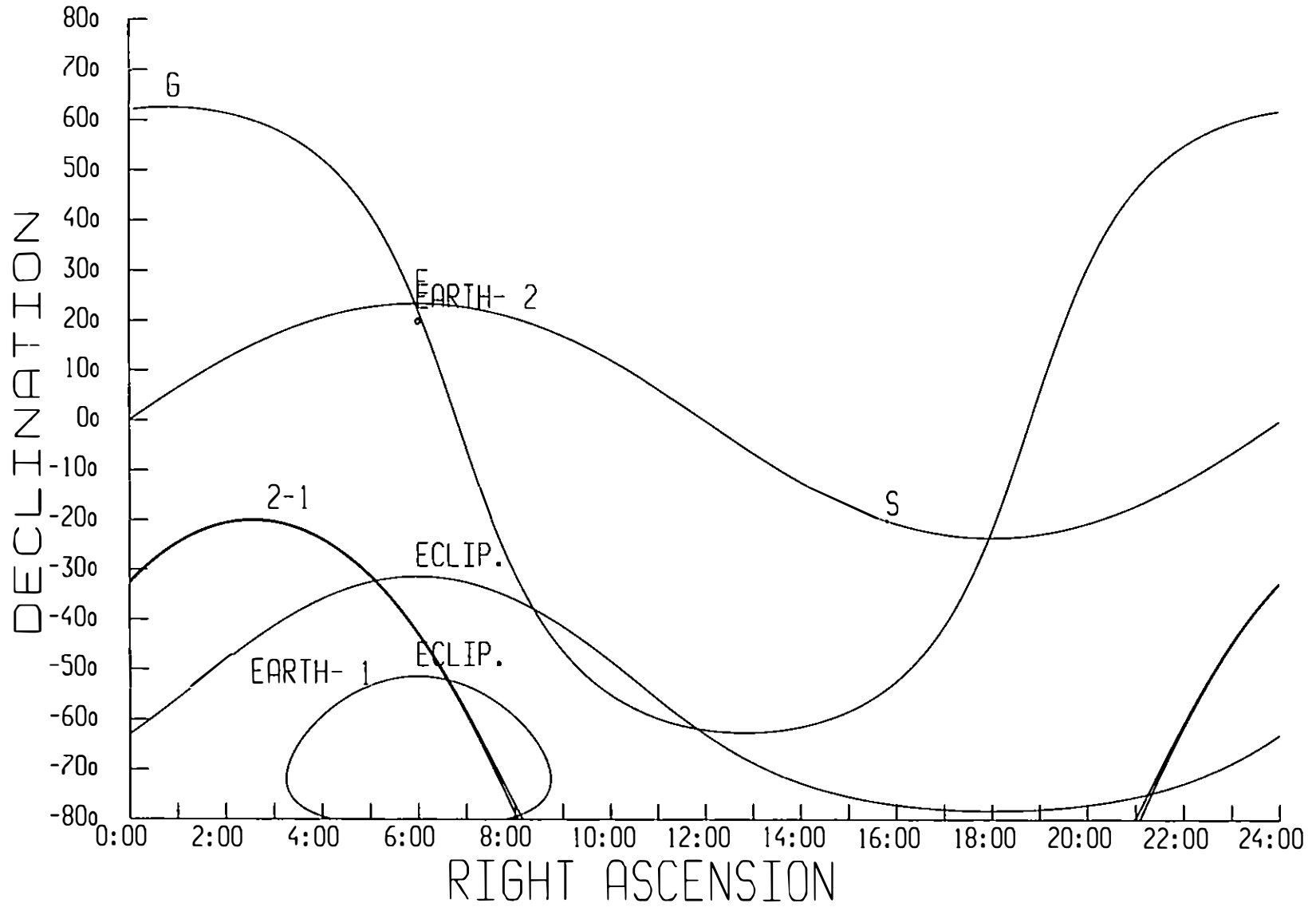
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

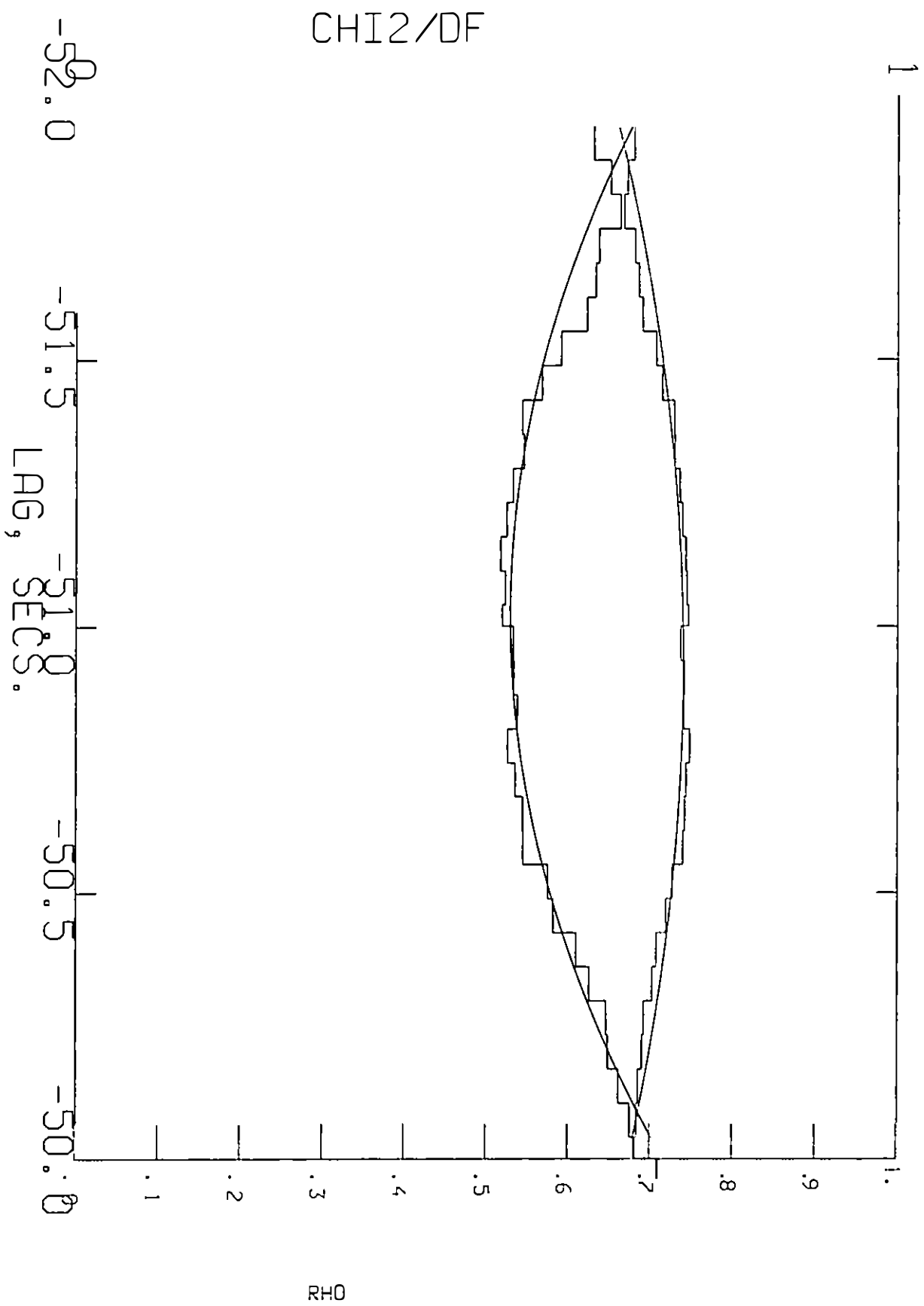


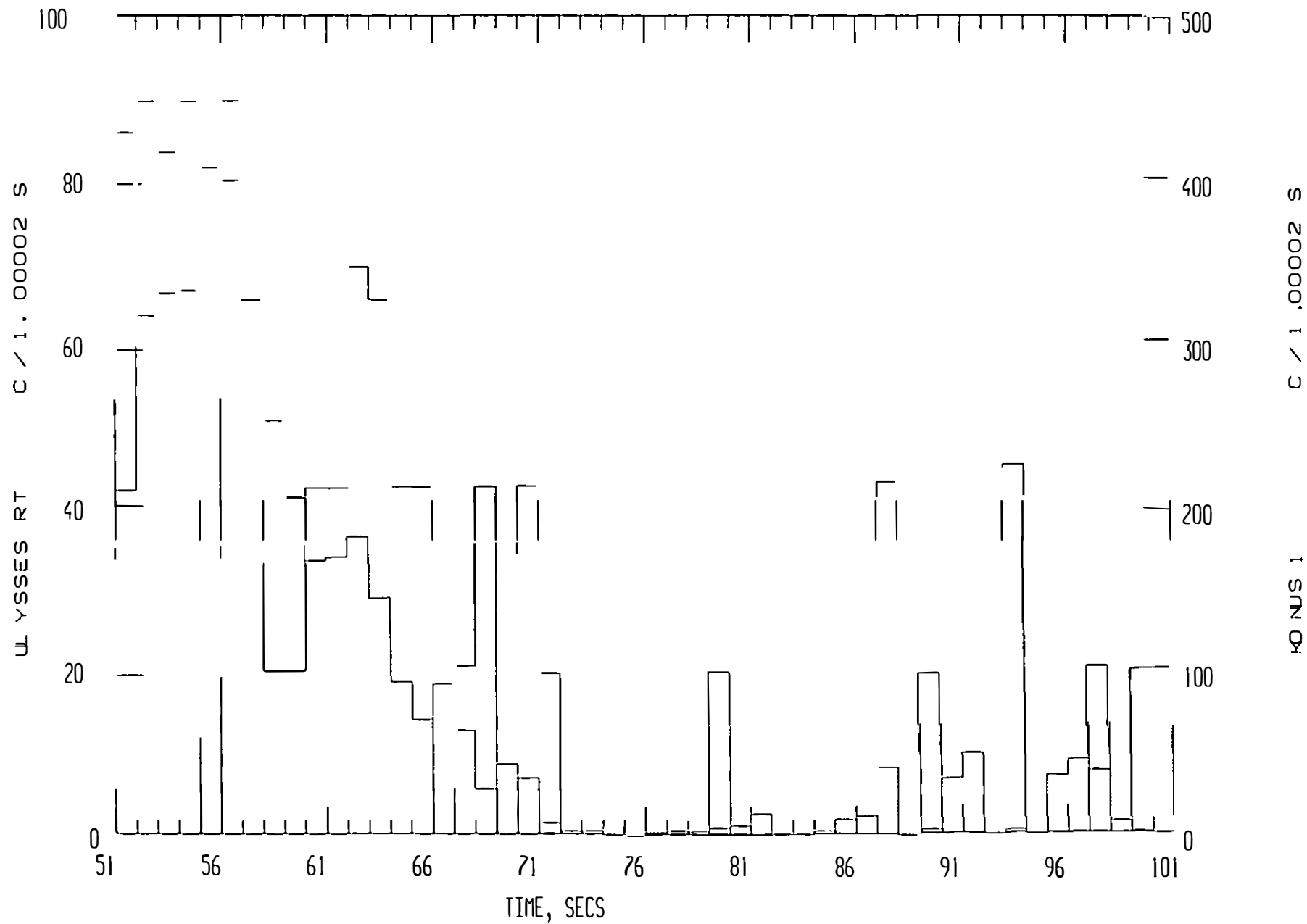
EVENT OF NOV 22, 1995 5:03

07/09/2011

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







KONUS 19951122 18274

ULYSSES RT

01/09/11

22/11/95 18180.465 s

0 - 0 keV

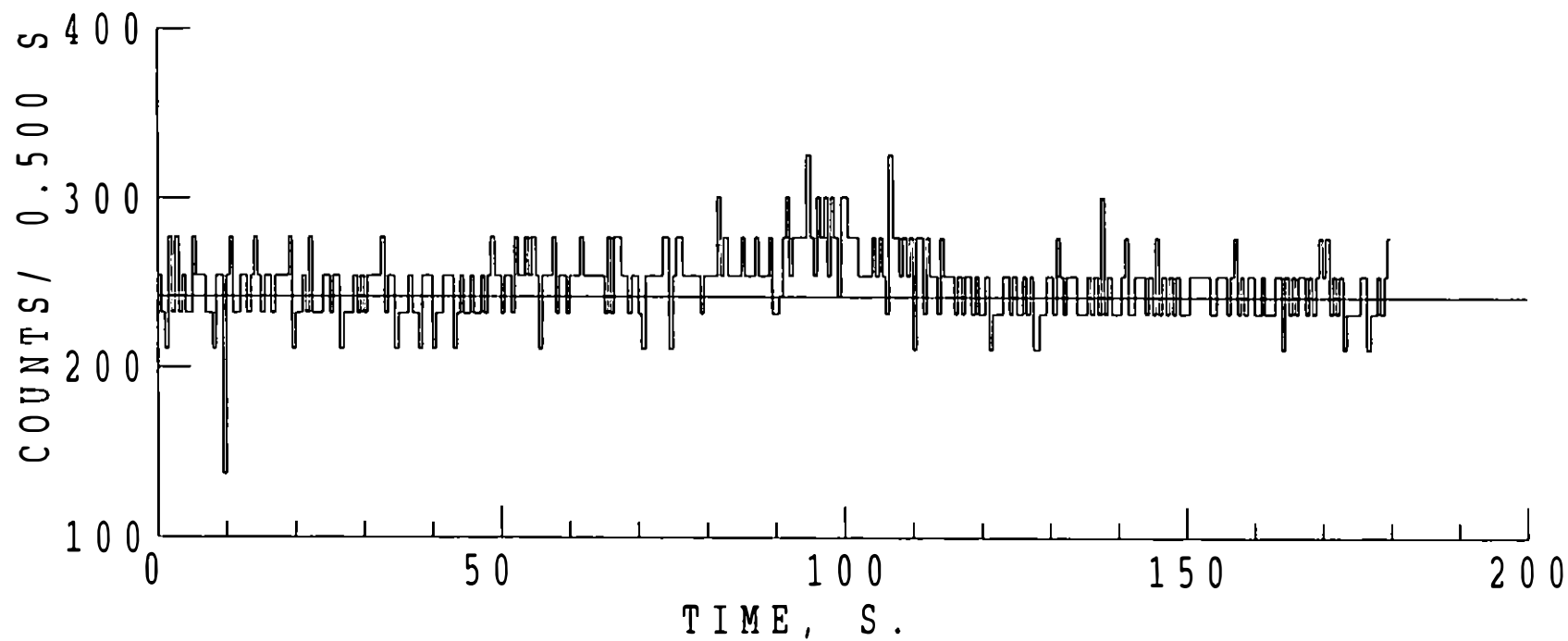
N= 10 N= 10

>4.0 SIGMA FLUCTUATIONS

|

N= 10 N= 2

>4.0 SIGMA FLUCTUATIONS

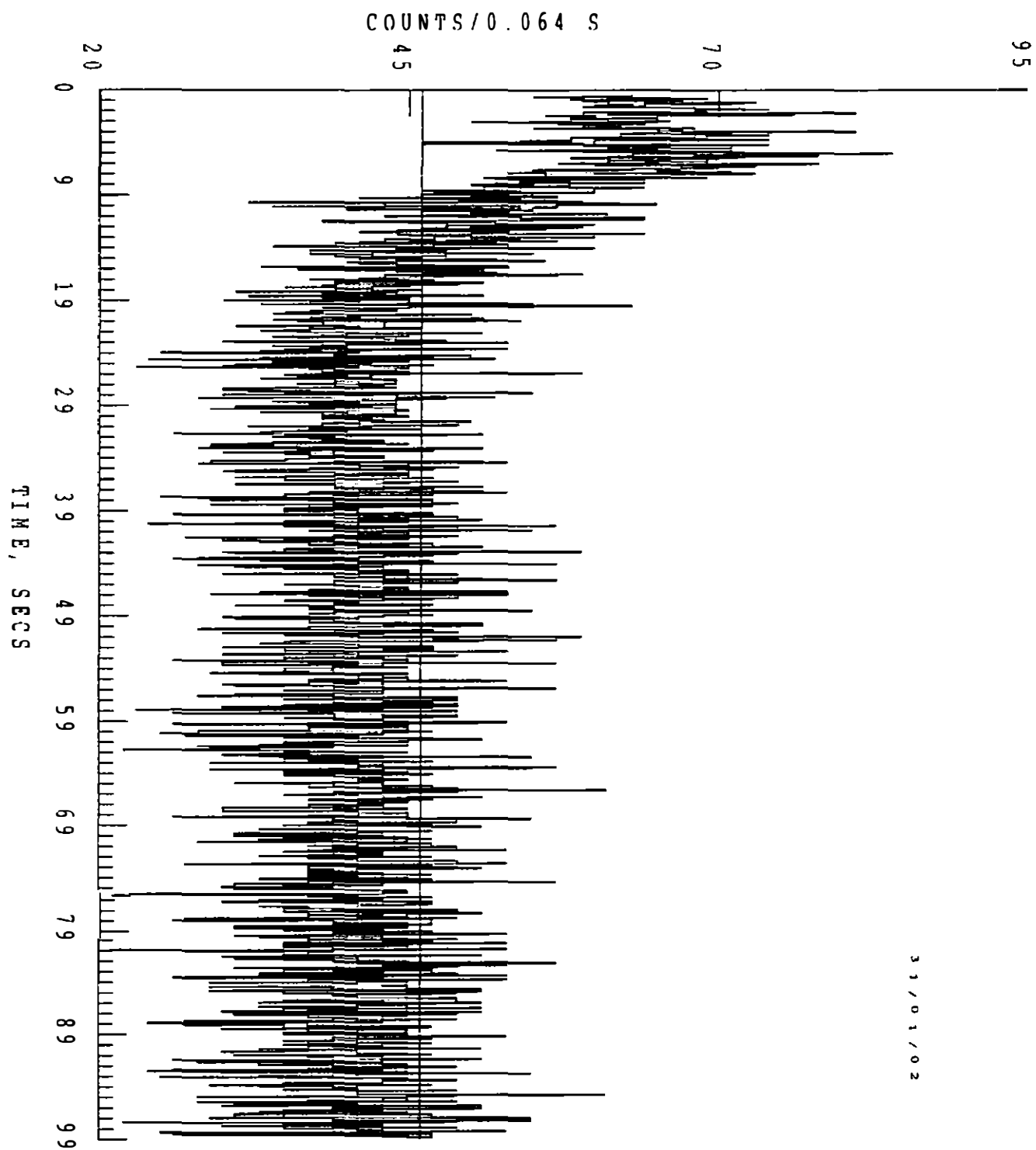


KONUS1

22/11/95

17107.738

50 - 200 keV



KONUS1 19951122 17107

ULYSSES RT

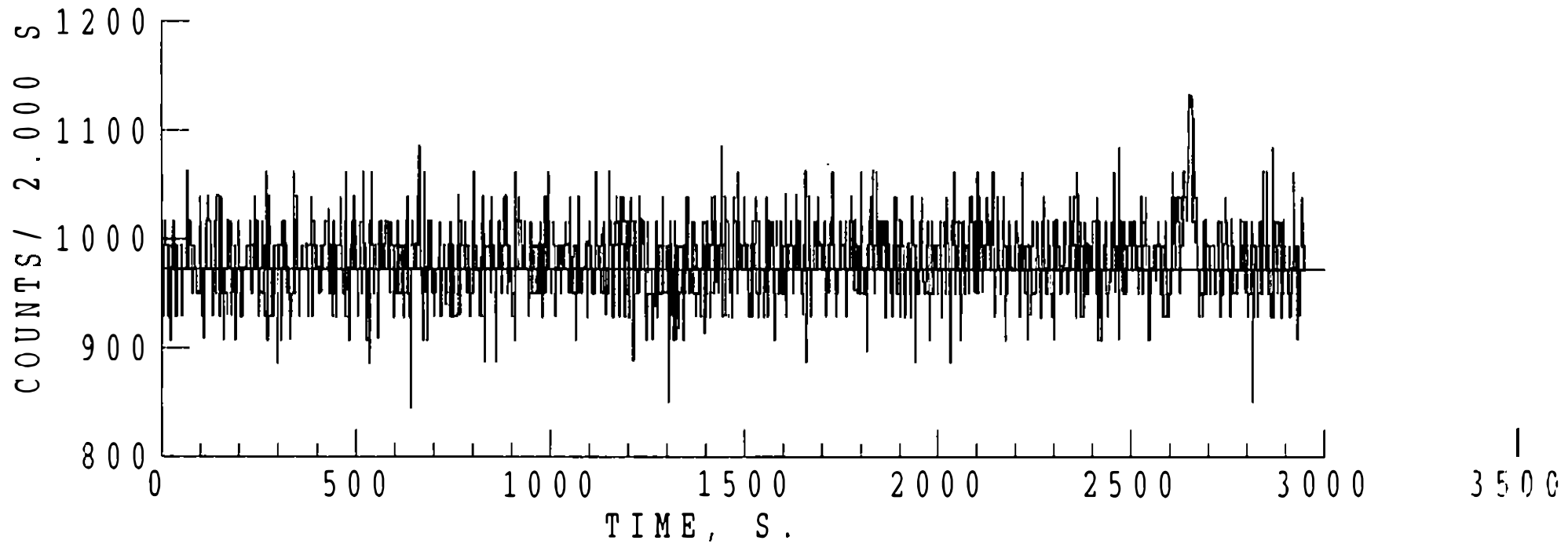
31 / 01 / 02

22/11/95 15624.423 s

0.500 S INTERVALS REGROUPED BY 4

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



1 / 2 / 96

ULYSSES RT

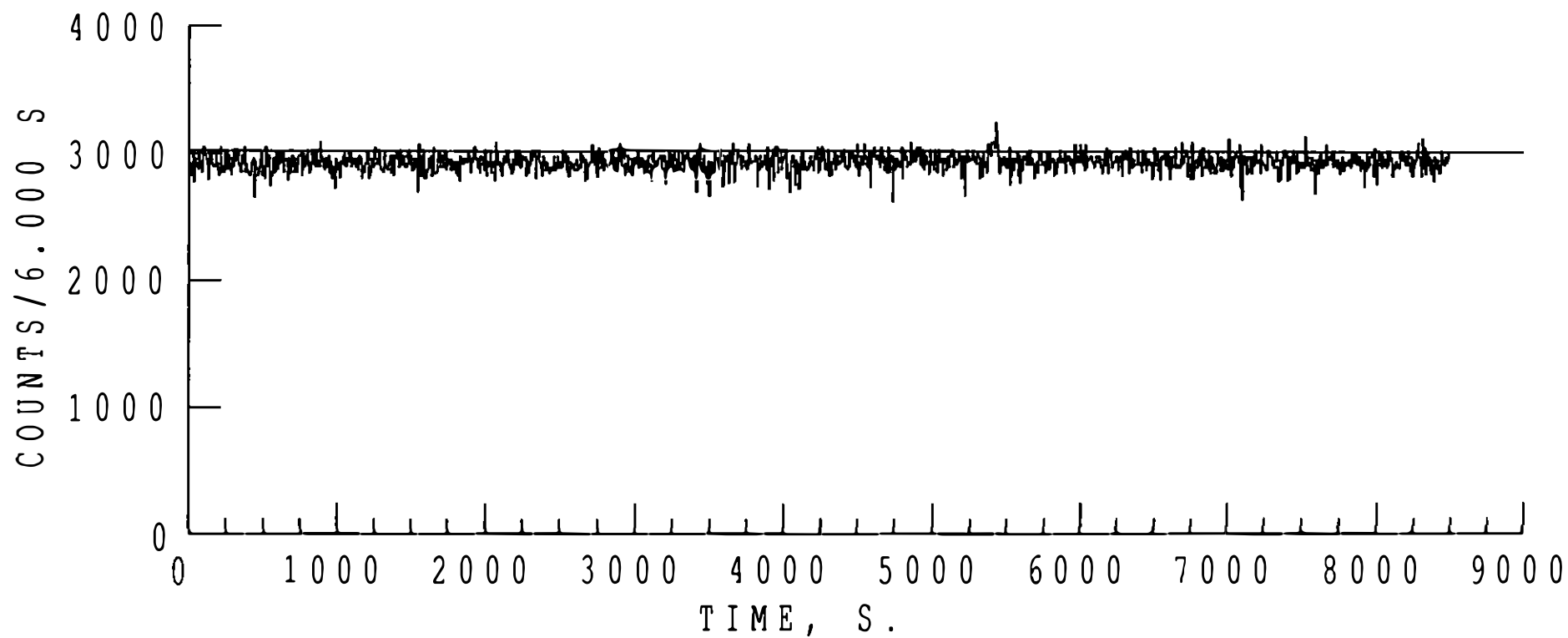
22/11/95 12852.384 s

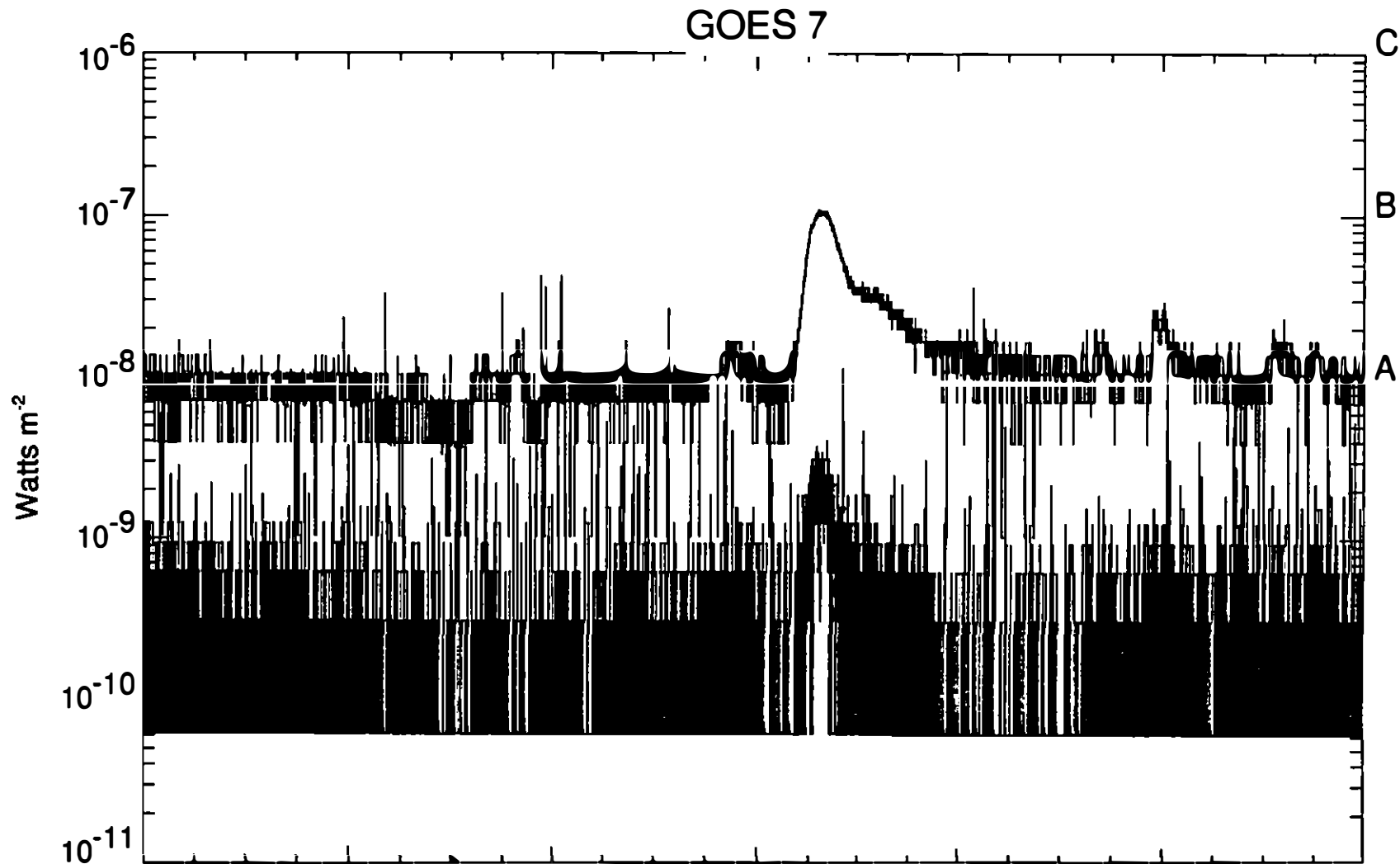
0.500 S INTERVALS REGROUPED BY 12

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



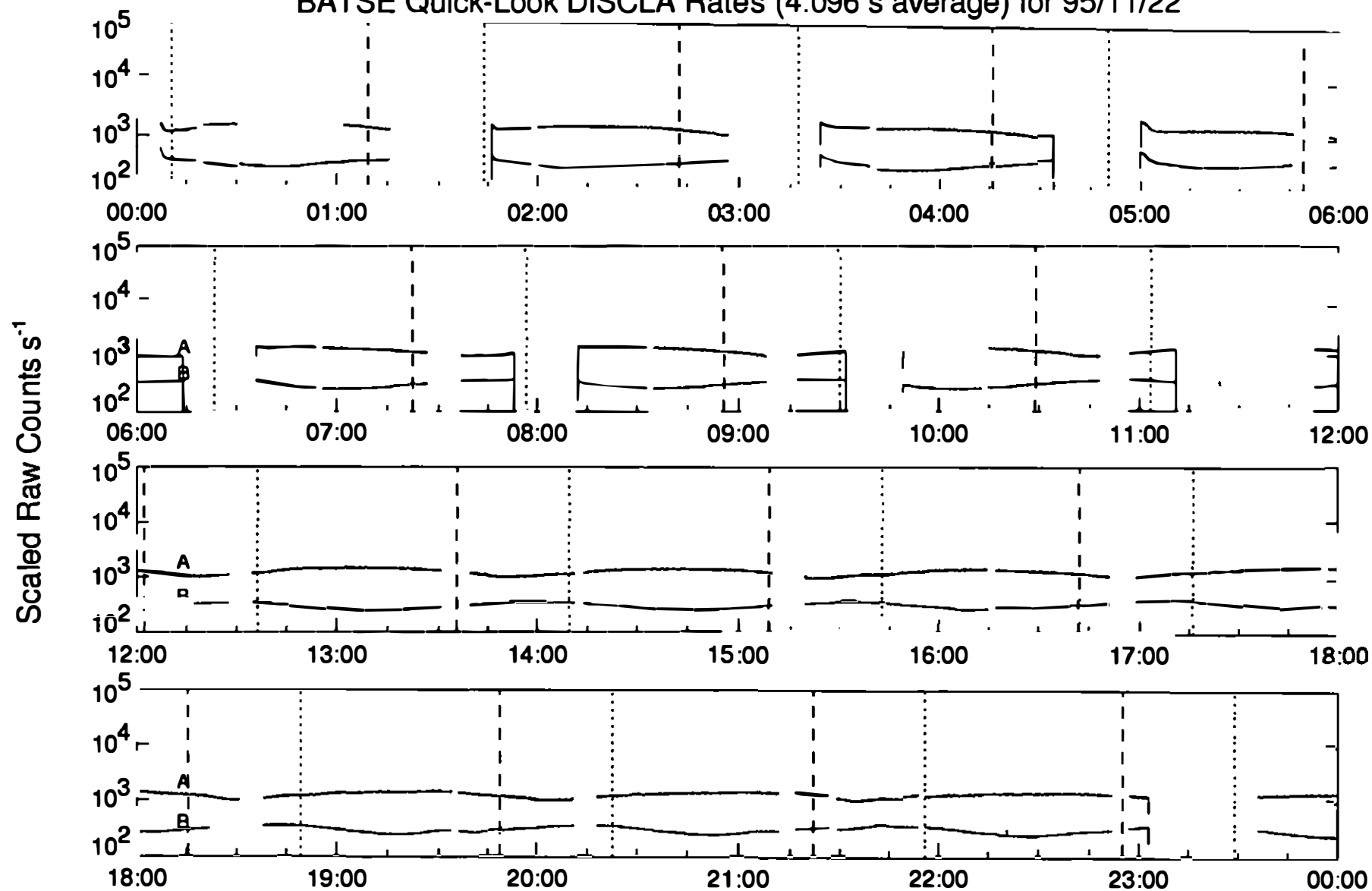


Data Start: 95/11/22, 0000:02

Plot created: 95/11/24, 0653

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 95/11/22



Current Time: 95/11/24, 0654 EDT

A: Channel 0 Most Sunward LAD

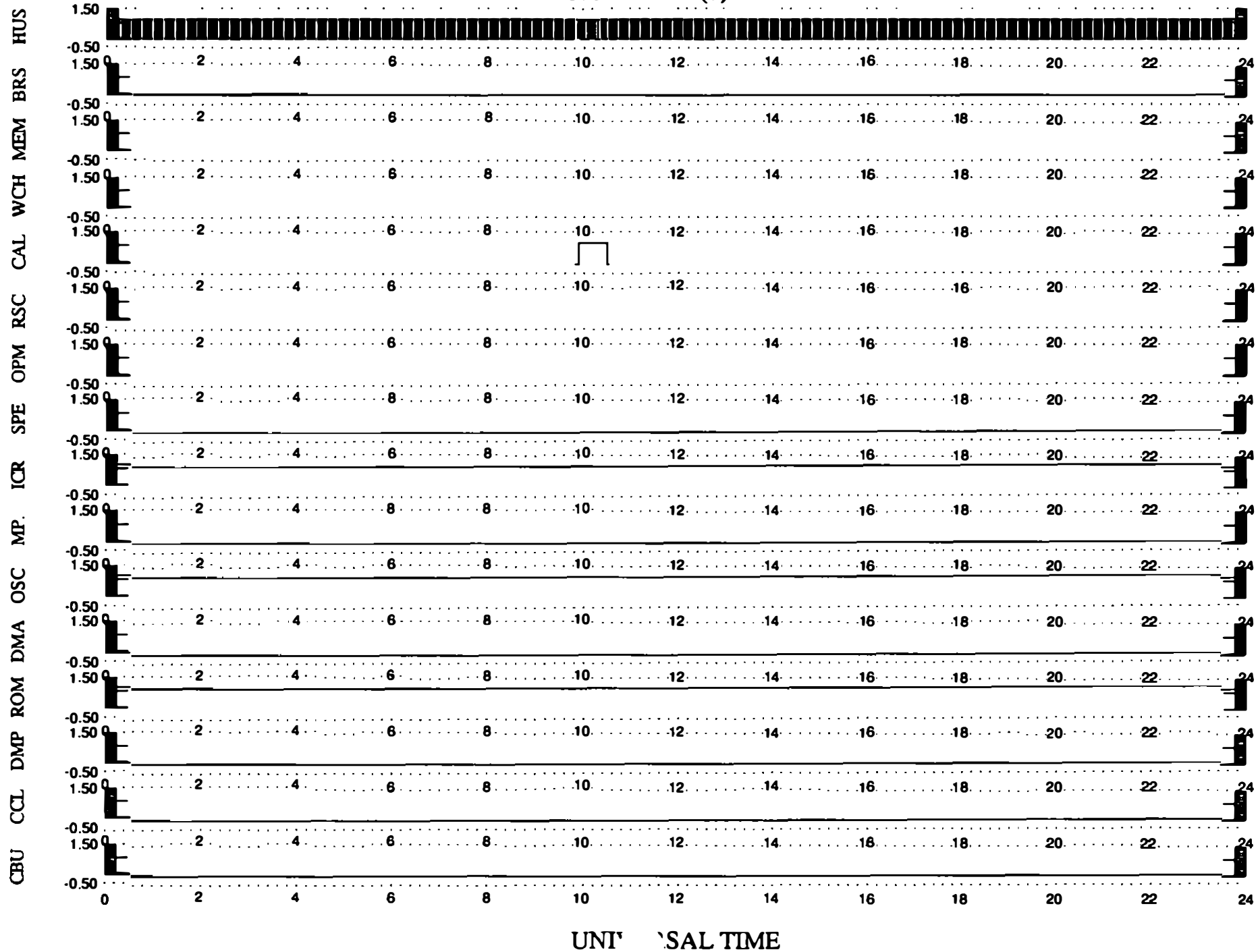
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

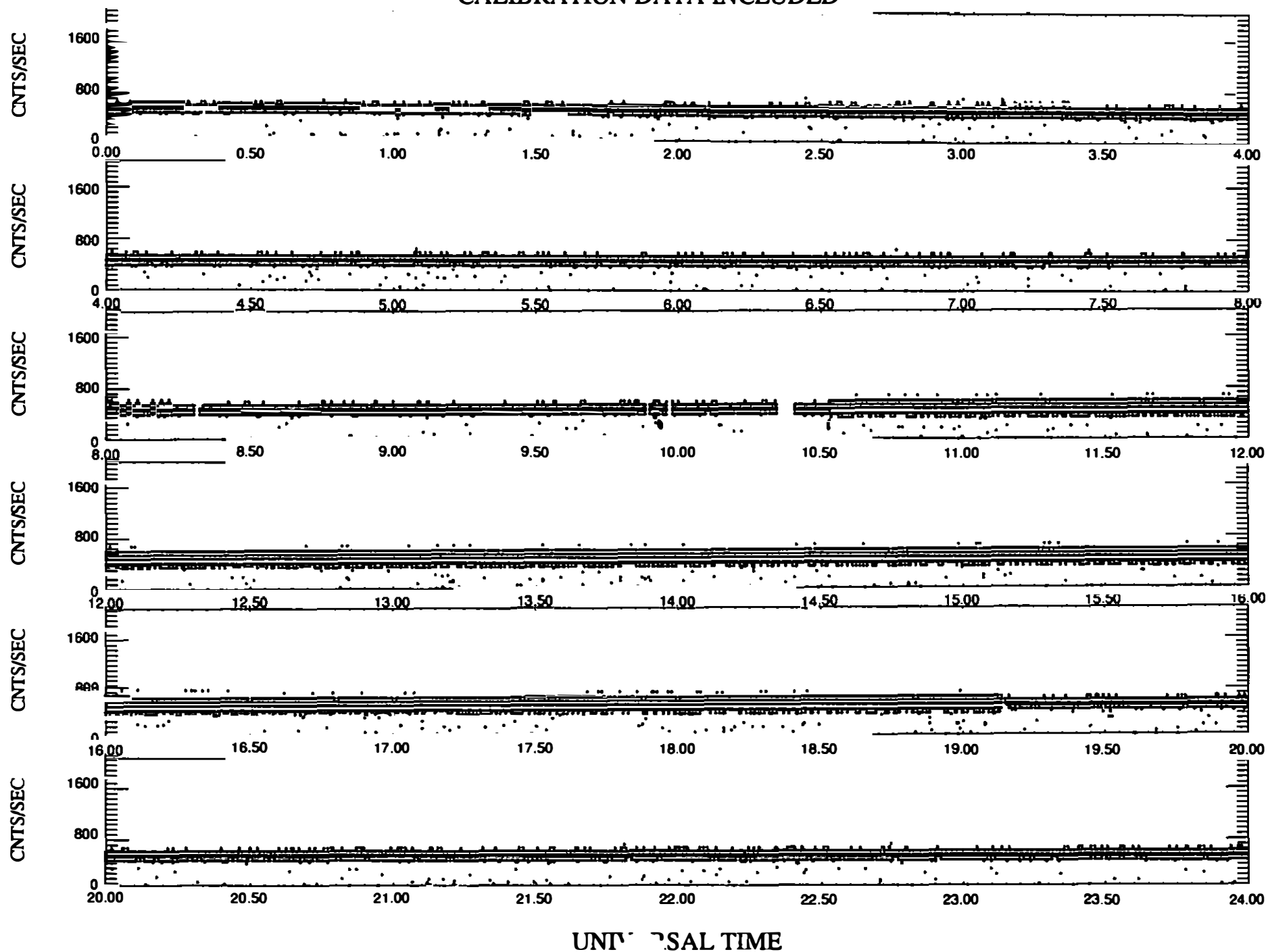
HUS MODES EDR day 326, year 1995 to day 326, year 1995
NO BURST (8)

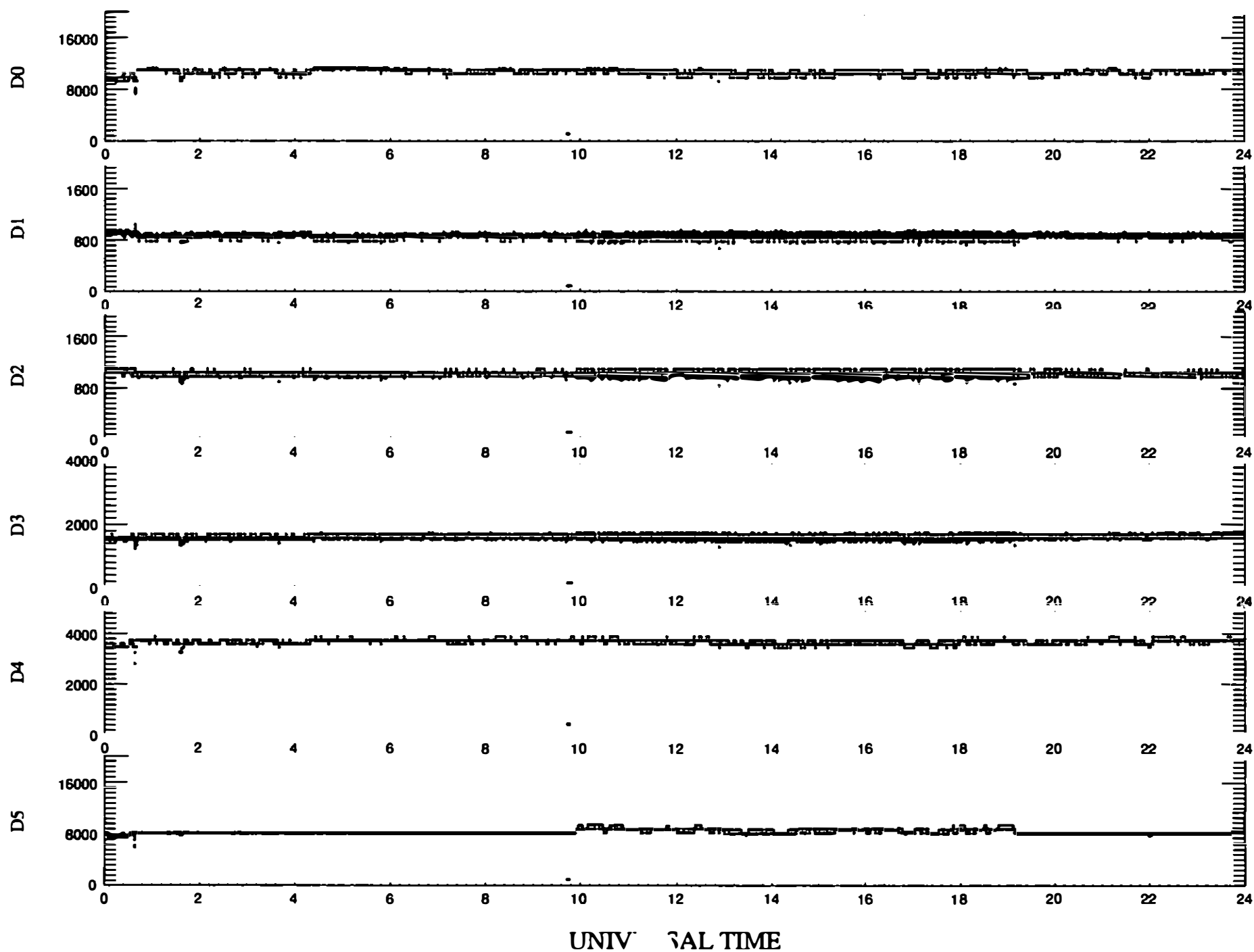
4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 326, year 1995 to day 326, year 1995
CALIBRATION DATA INCLUDED

4/1/96





From HAGEDON@fender.msfc.nasa.gov Mon Nov 27 10:16 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Mon, 27 Nov 1995 12:16:14 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3917

BATSEARCH PROGRAM

NO

BATSE BURST # 3917
EVENT OF 1995 NOV 23 DAY OF YEAR=327
EVENT CROSSING TIME AT BATSE : 65405. S. OR 18:10:05.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 54.000 25.000
BATSE PEAK COUNTING RATE: 4200 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 23/11/ 95 IS:
RA= 218.675 DEC= 55.227 DIST= 2.860 AU
BATSE-ULYSSES DISTANCE = 427786718. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 81.29 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 215.99 SECS.
CROSSING TIME AT ULYSSES IS 65621. S. OR 18:13:40 +/- 298.17 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 23/11/ 95 IS:
RA= 263.734 DEC= -24.222 DIST= 2.278 AU
MARS-BATSE DISTANCE = 340784448. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 26.99 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1012.93 SECS.
CROSSING TIME AT MARS IS 66418. S. OR 18:26:57 +/- 104.95 SECONDS

BATSE BURST TRIGGER

NO.: 3917

TIME: TJD=0044 SECONDS=65405

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=52.4 AZIMUTH=192.0 ERROR=2.2 DEGREES

COMMENTS:

BURST. TWO PEAKS SEPARATED BY ~60 SEC. FIRST PEAK IS MUCH STRONGER AND
HARDER. TOTAL DUR.~150 SEC. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3917	951123	10044	65405	4200	054	+25	150

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

-- T. L. Cline ----- LREAVX::CLINE

28 / 11 / 95

ULYSSES RT

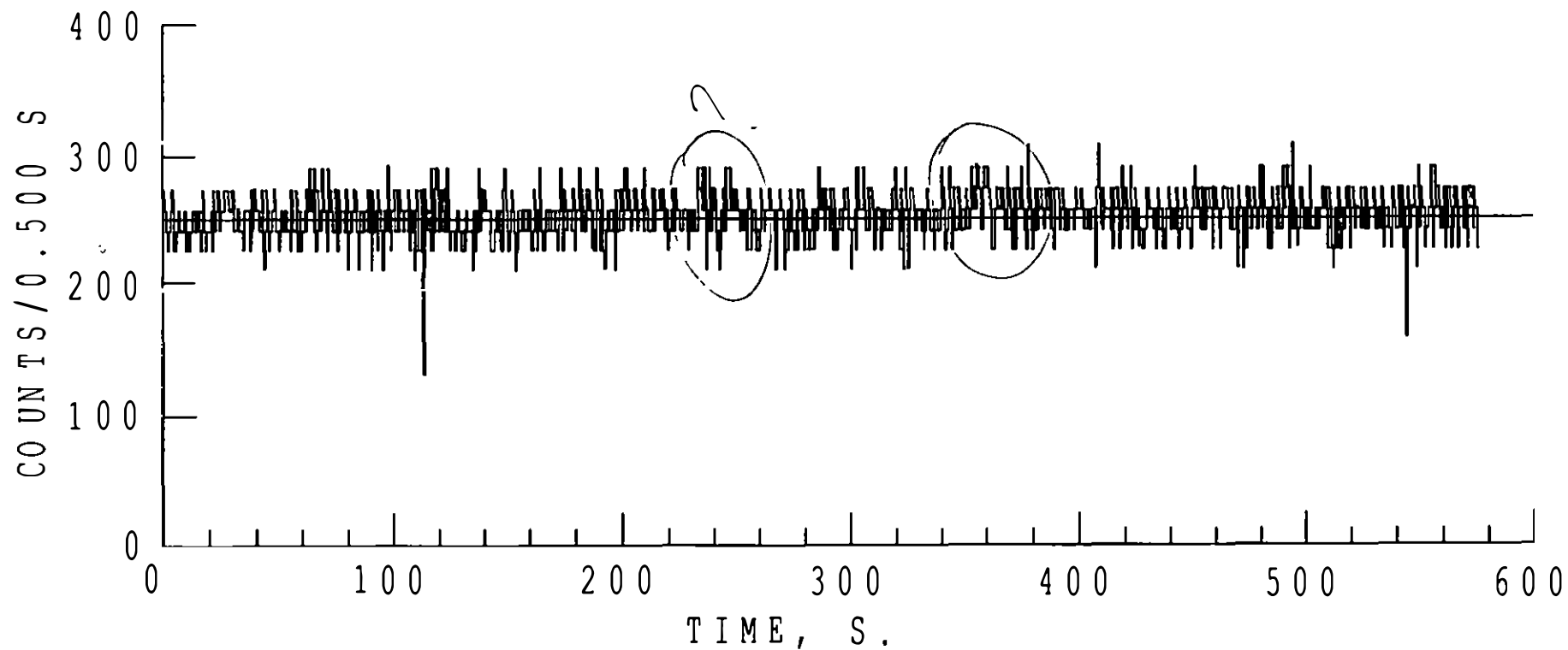
23/11/95 65340.039 s

0.250 S INTERVALS REGROUPED BY 2

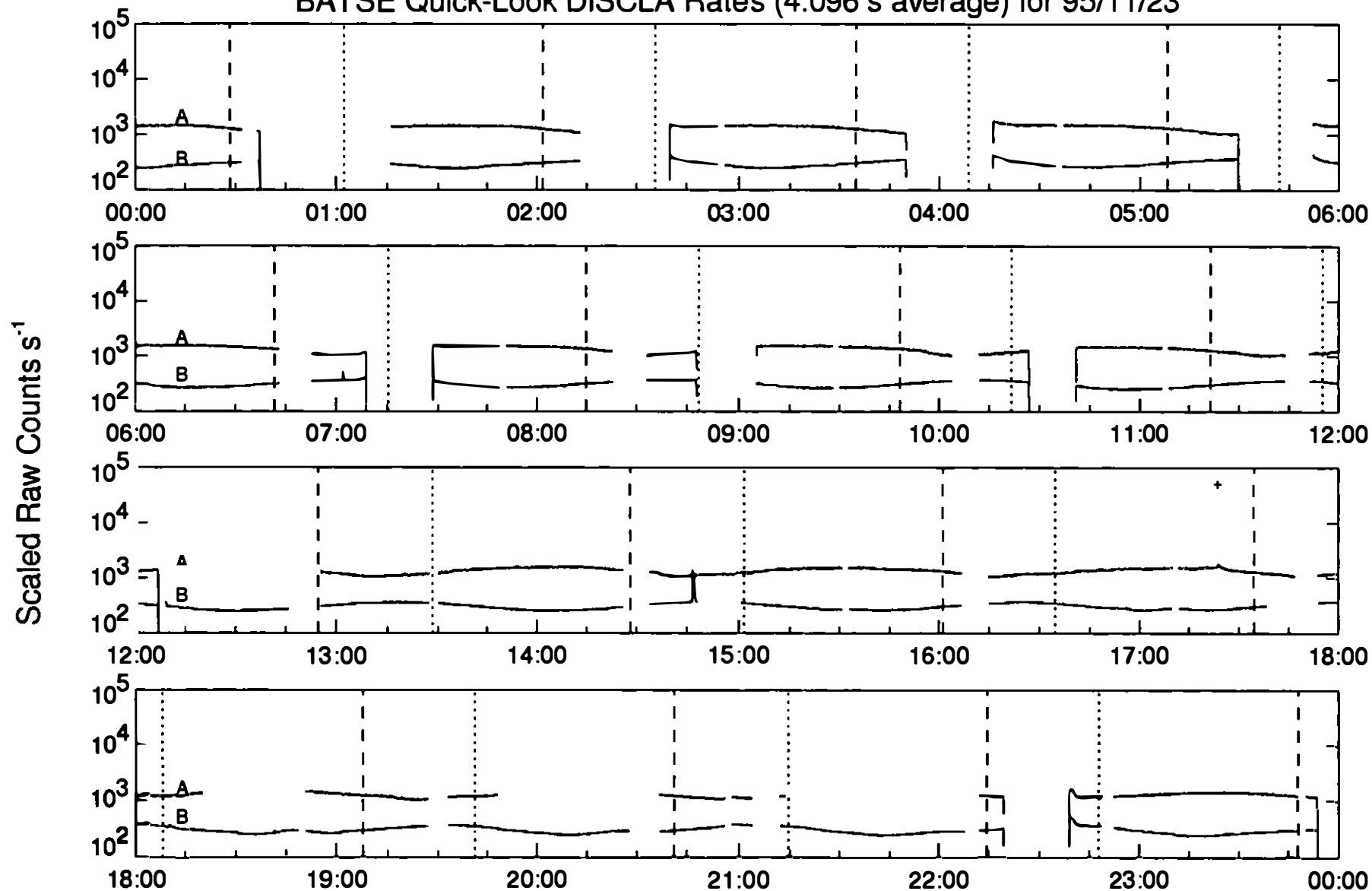
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/23

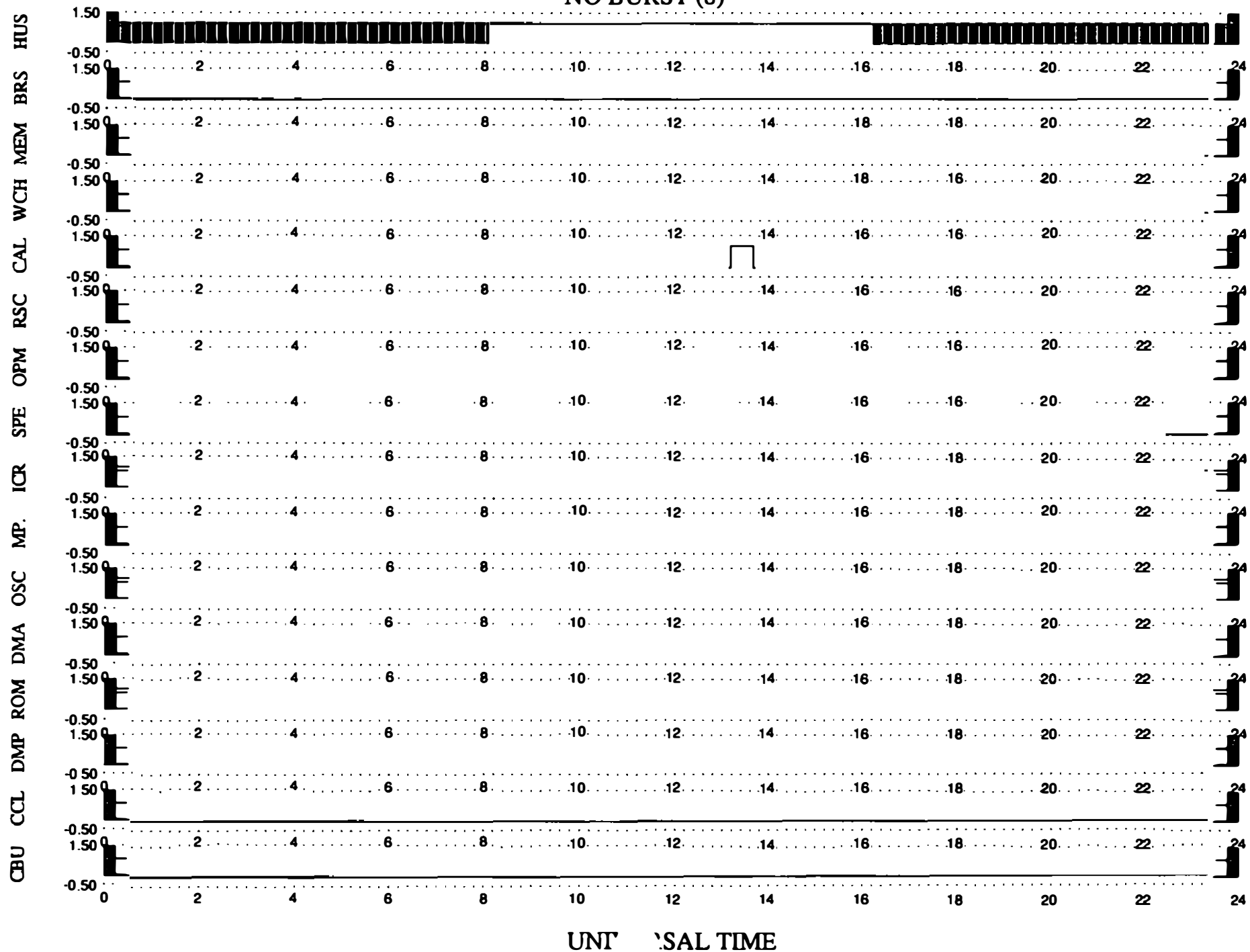


Current Time: 95/11/25, 0653 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

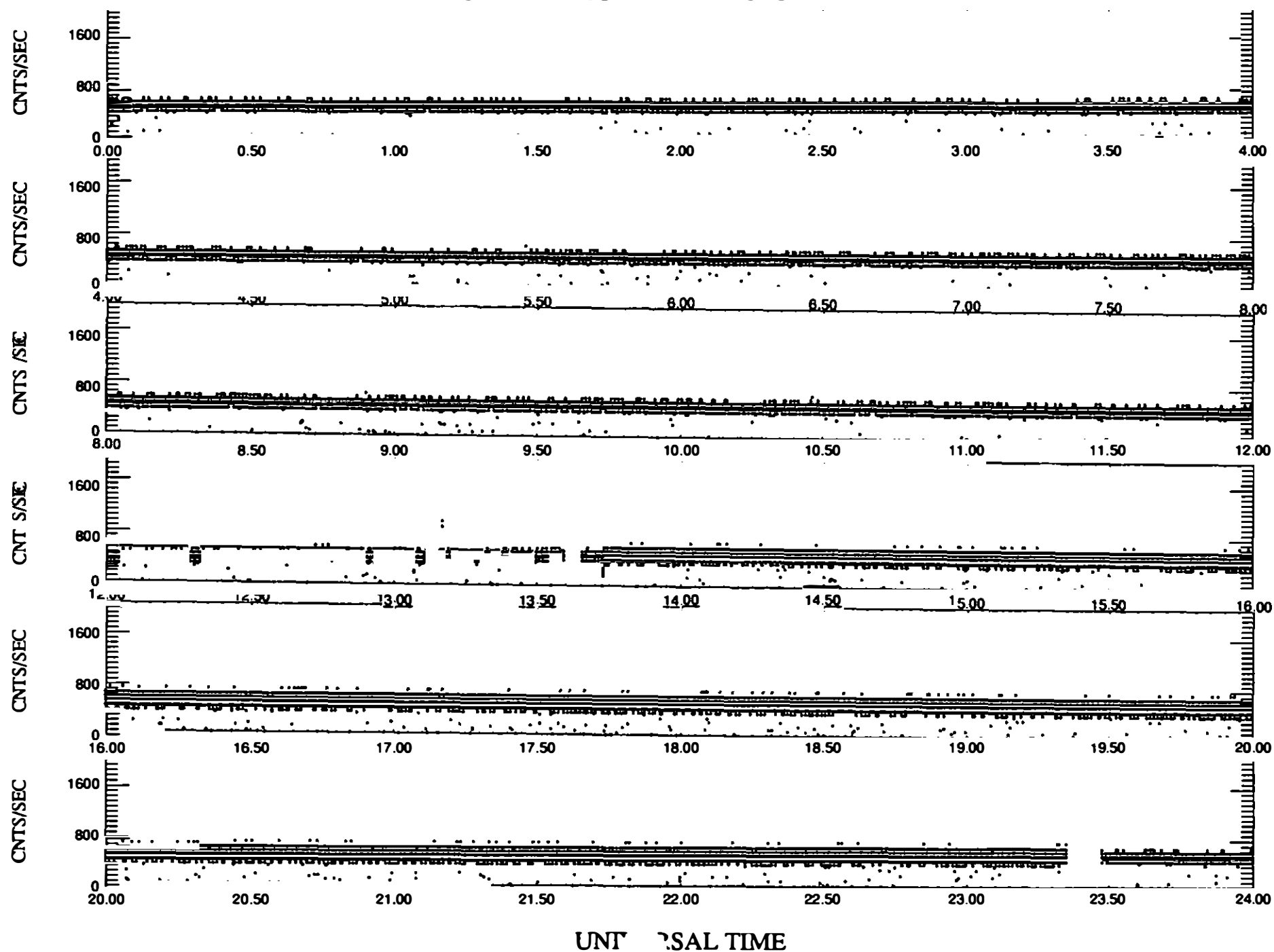
* Solar Burst Trigger
 + Solar Flare

4/1/96



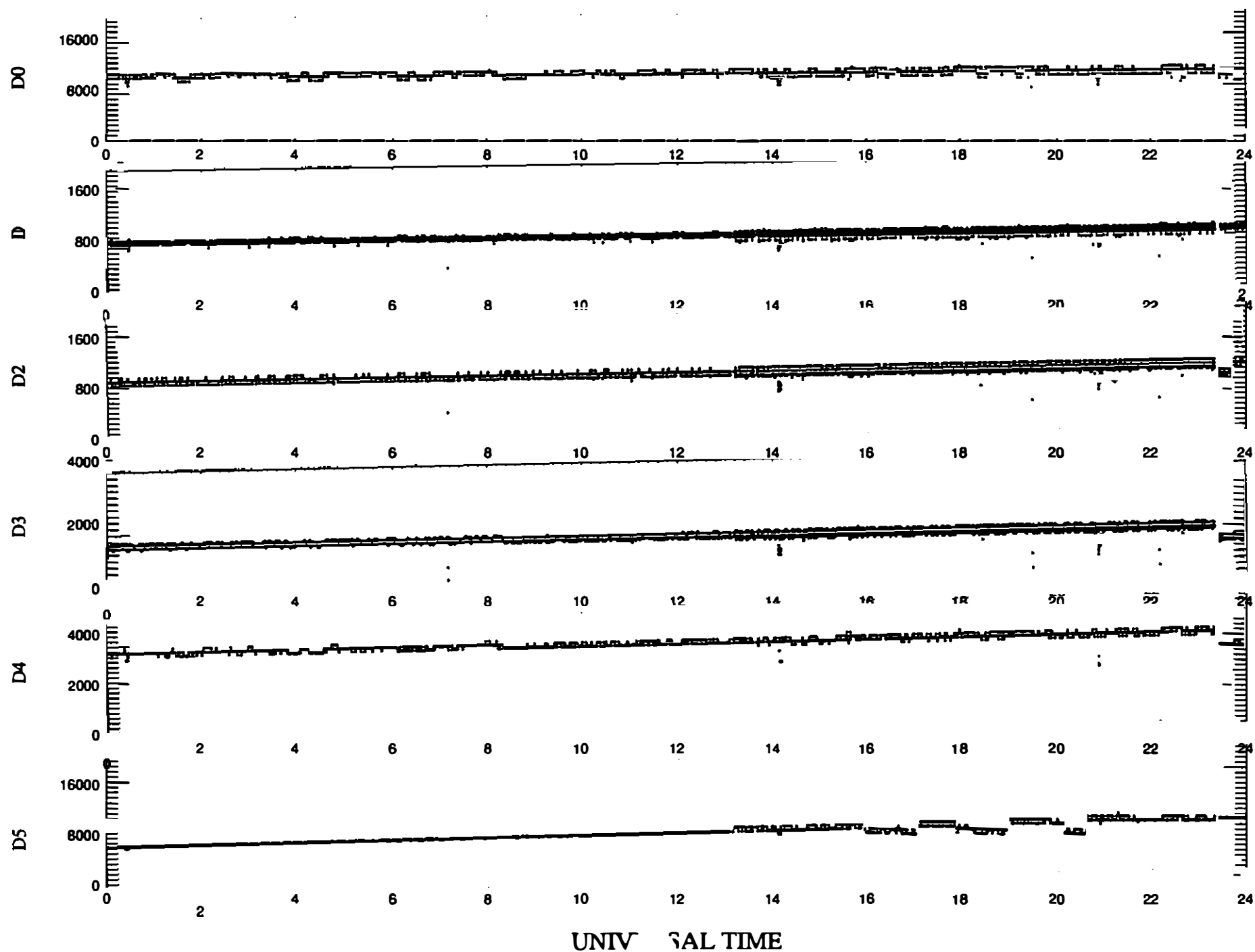
HUS 2A, MODE 1, NOT AVERAGED EDR day 327, year 1995 to day 327, year 1995
CALIBRATION DATA INCLUDED

4/1/96



HUS 2B COUNTS / SEC QEDR day 327, year 1995 to day 327, year 1995

11/28/95



From HENZE@fender.msfc.nasa.gov Mon Nov 27 11:53 PST 1995
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 27 Nov 1995 13:52:57 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3918

BATSEARCH PROGRAM

RT

GROSCE event

BATSE BURST # 3918
EVENT OF 1995 NOV 24 DAY OF YEAR=328
EVENT CROSSING TIME AT BATSE : 21258. S. OR 05:54:18.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 73.000 52.000
BATSE PEAK COUNTING RATE: 8000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 24/11/ 95 IS:
RA= 218.795 DEC= 55.244 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427778693. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=110.93 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -509.62 SECS.
CROSSING TIME AT ULYSSES IS 20748. S. OR 05:45:48 +/- 273.66 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 24/11/ 95 IS:
RA= 264.557 DEC= -24.258 DIST= 2.280 AU
MARS-BATSE DISTANCE = 341044864. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 29.11 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 993.90 SECS.
CROSSING TIME AT MARS IS 22252. S. OR 06:10:51 +/- 111.18 SECONDS

BATSE BURST TRIGGER

NO.: 03918

TIME: TJD=0045 SECONDS=21258

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=047.0 AZIMUTH=232.4 ERROR=1.1 DEGREES

COMMENTS:

DOUBLE PULSE, TOTAL DUR.~150 S. FIRST PULSE VISIBLE ABOVE 300 KEV.
FIRST PULSE STRONGER, MAX AT ~T+20 S, DUR.~60 S.
SECOND HAS MAX AT ~T+100 S, DUR.~30 S.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3918	951124	10045	21258	8000	073	+52	150

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

-- T. L. Cline ----- LREAVX::CLINE

1 / 2 / 9 6

ULYSSES RT

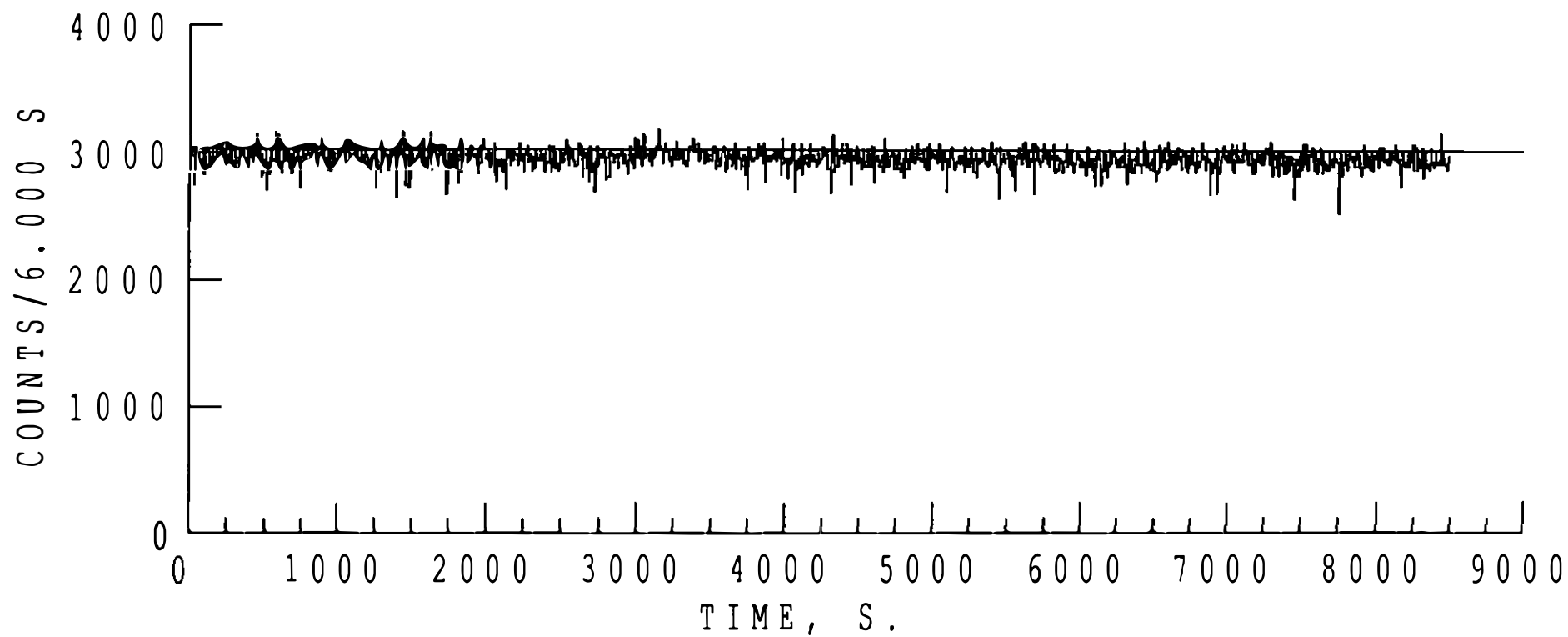
24/11/95 20880.188 s

0.500 S INTERVALS REGROUPED BY 12

0 - 0 keV

N= 10 N= 2

>4.0 SIGMA FLUCTUATIONS



Helio corr removed

Date: Feb 21 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

- ☐ 2.042 s subtracted for bursts prior to June 25 1992 and DISCSC programs prior to Version 2.16 (August 28 1992)? *N/A*
- ☒ BATSE ephemeris for 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*

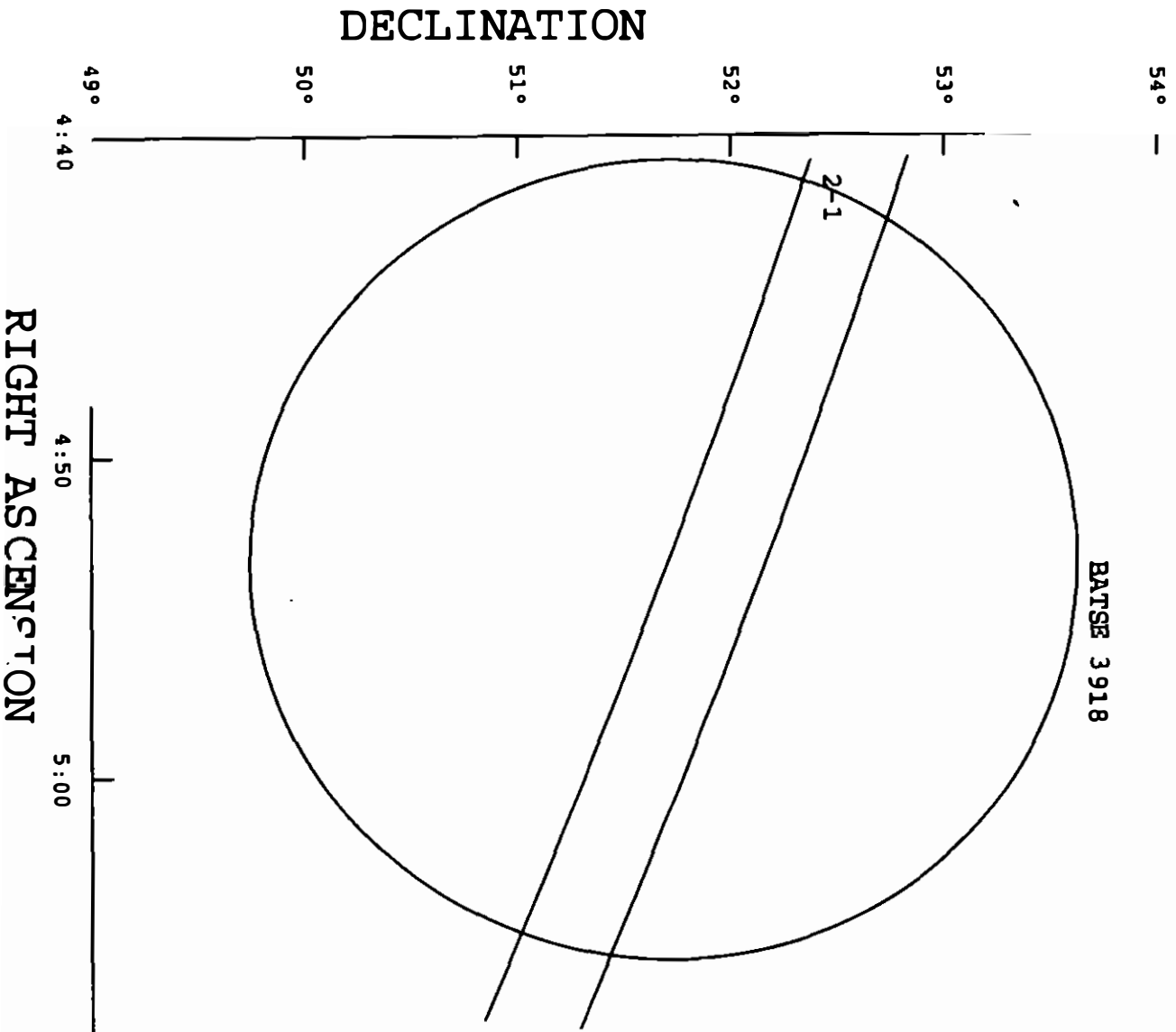
3. PVO Data

- ☐ 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 NOV 24, 1995 5:45

21/ 2/98



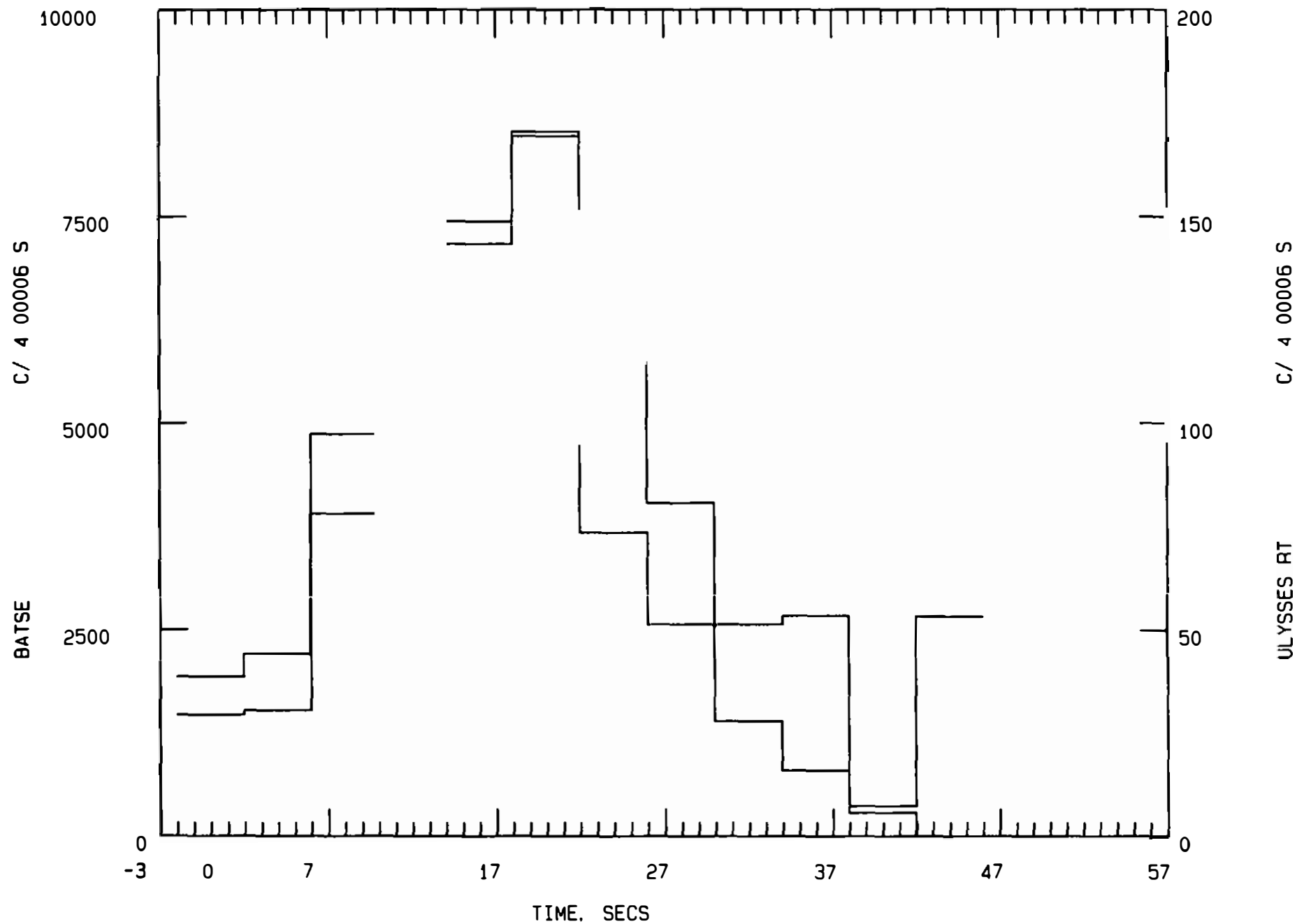
BATSE

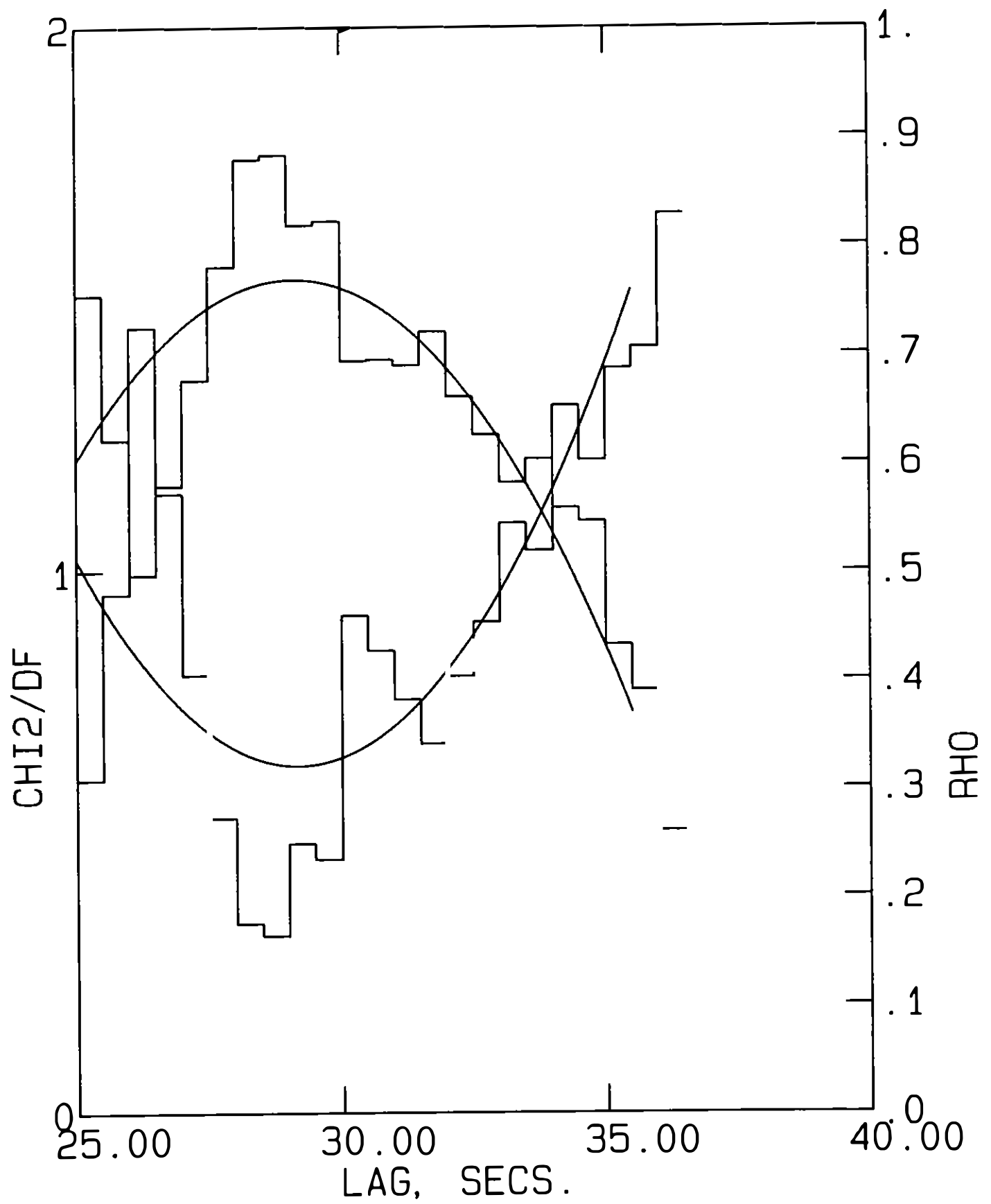
-ULYSSES RT CORRELATION

24/11/95

21258.930

21/ 2/98





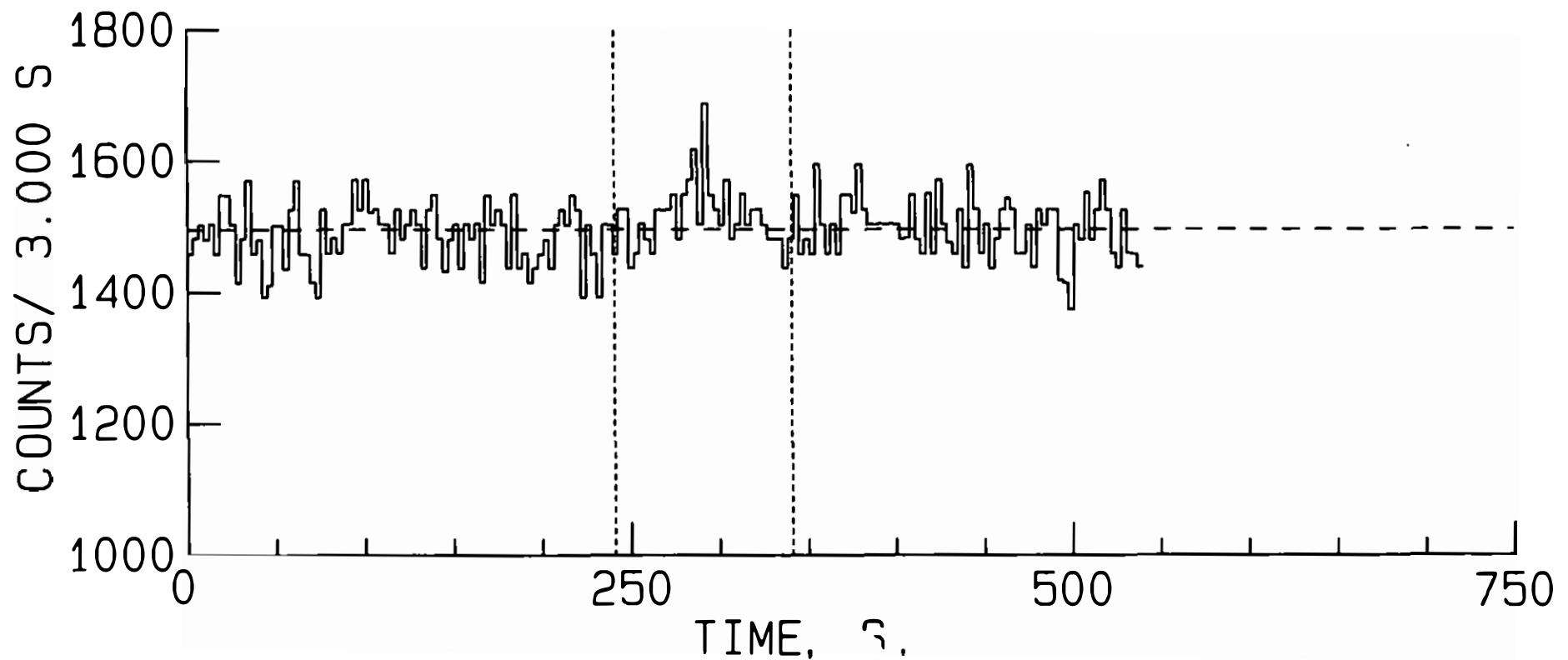
ULYSSES RT

21 / 2 / 98

24/11/95 20484.181 s

0.500 S INTERVALS REGROUPED BY 6

21- 144 keV



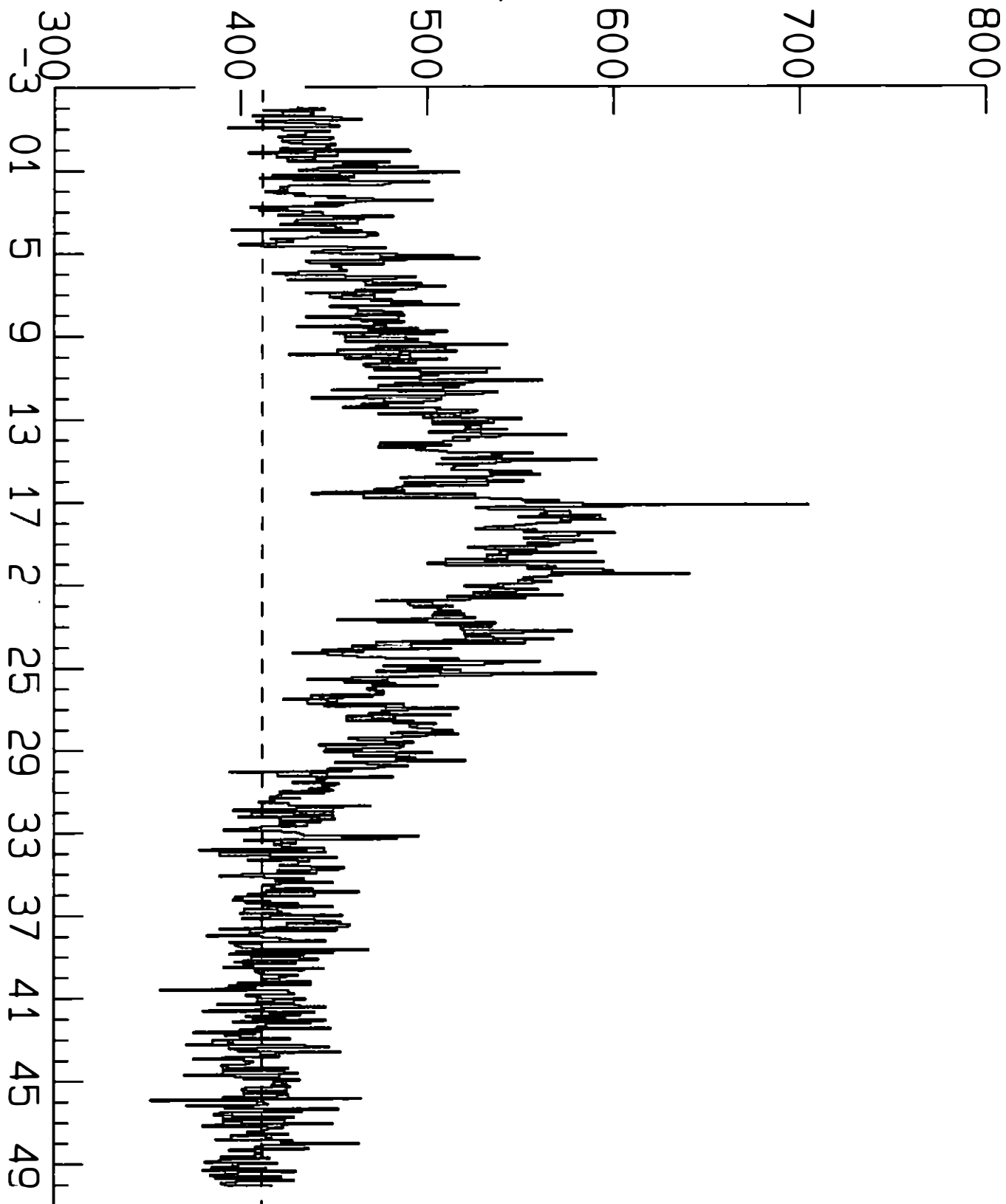
BATSE

24/11/95

21258.930

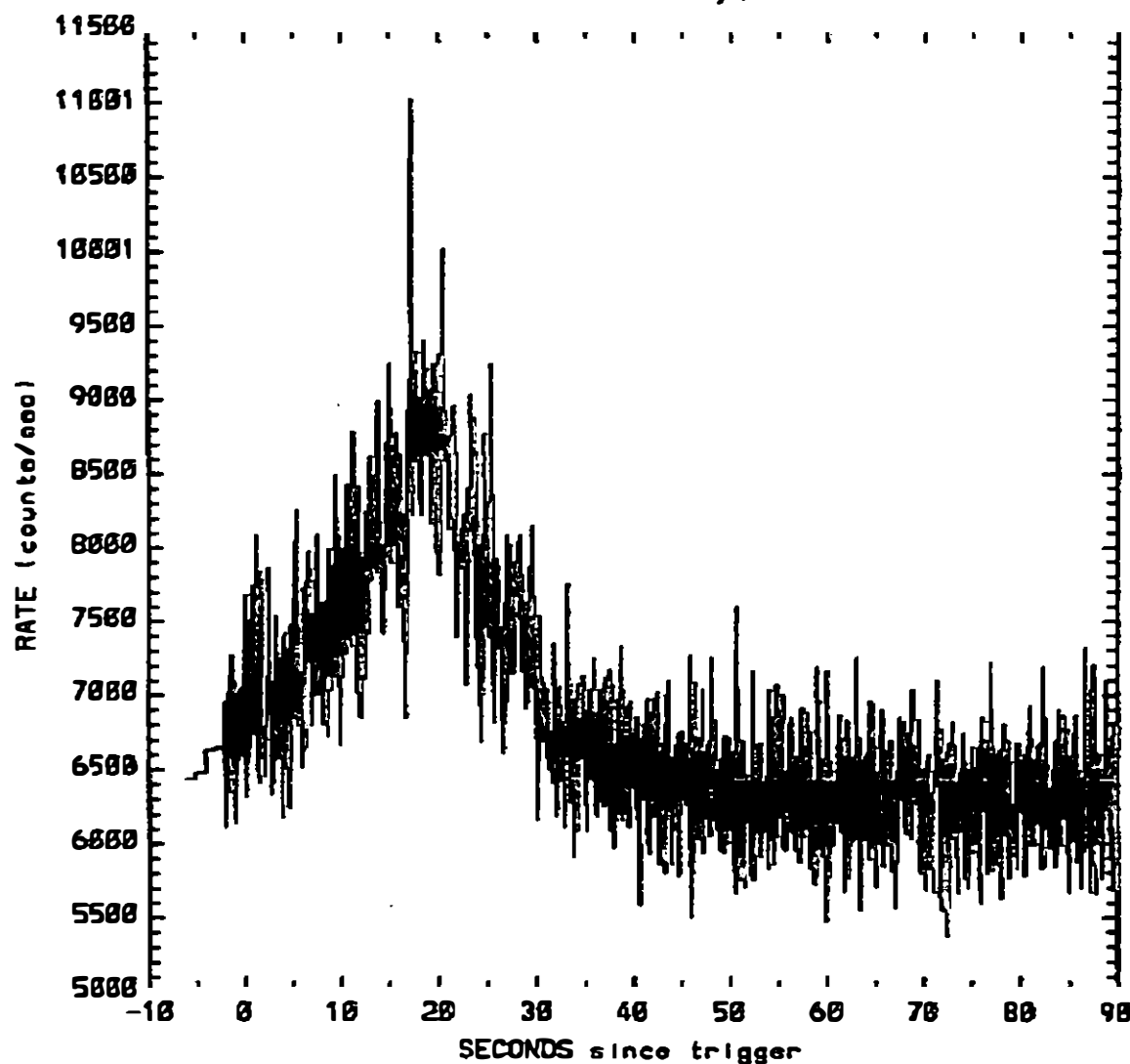
25- 100 keV

COUNTS/0.064 S



Nov 24 1995

DISCSC Data for K. Hurley, No. 3918



14-DEC-1995 11:46:24

Created by KOPS 80
(Burst Display)
Version 12.25

Trigger # = 3918

Trigger Time:
18945 / 21258.938Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
8.864 second(s)Detectors [7..8]:
-6-2Discriminators:
(1, 2)Quality Mask:
BDISP1

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

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

Date: June 26 2003

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?

2. BATSE Data

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

3. NEAR Data

- ☐ Final, correct time used? (Files postmarked vw@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

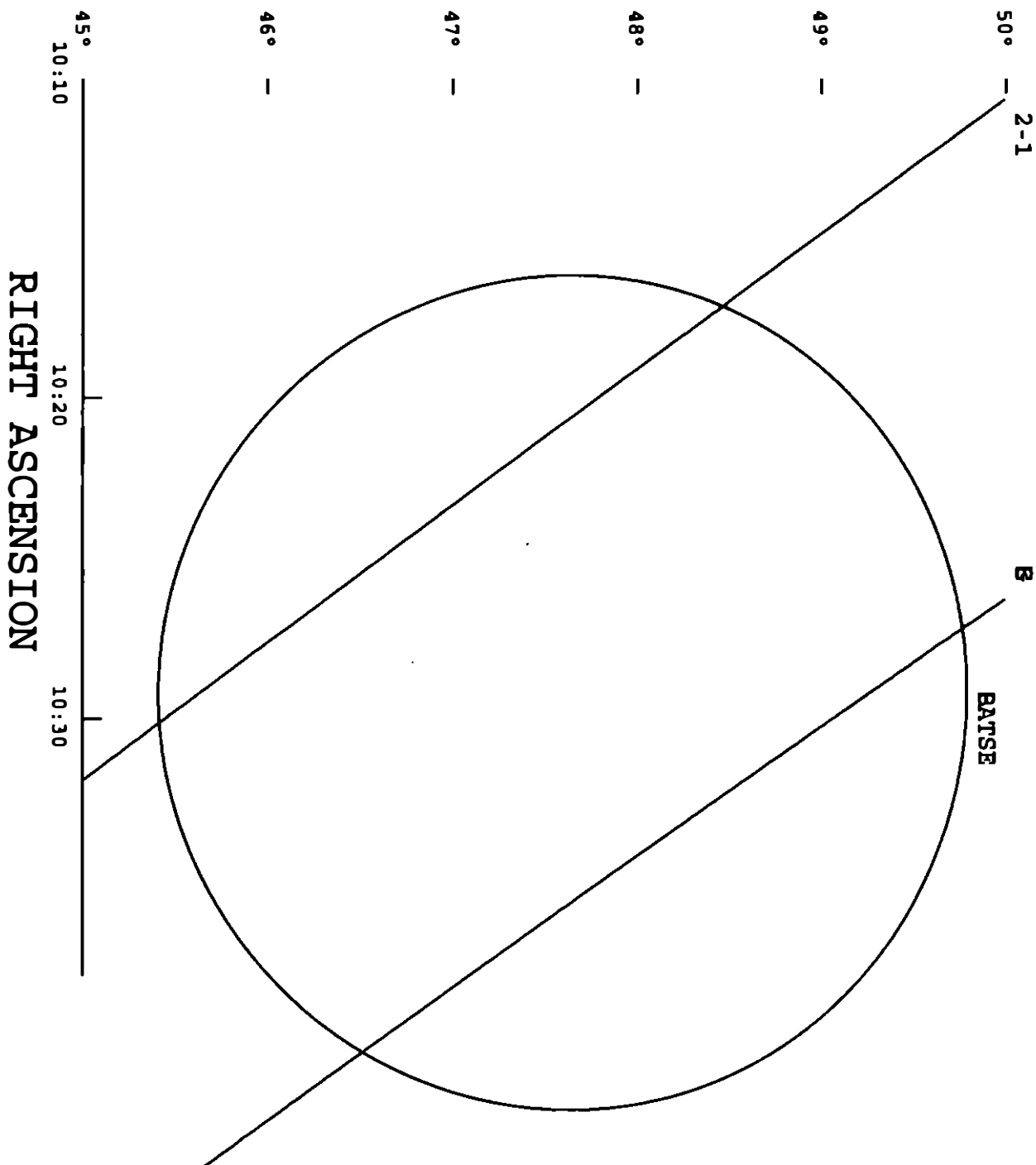
1 BATSE

2 ULYSSES

DECLINATION

EVENT OF NOV 24, 1995 6:58

26 / 6 / 3



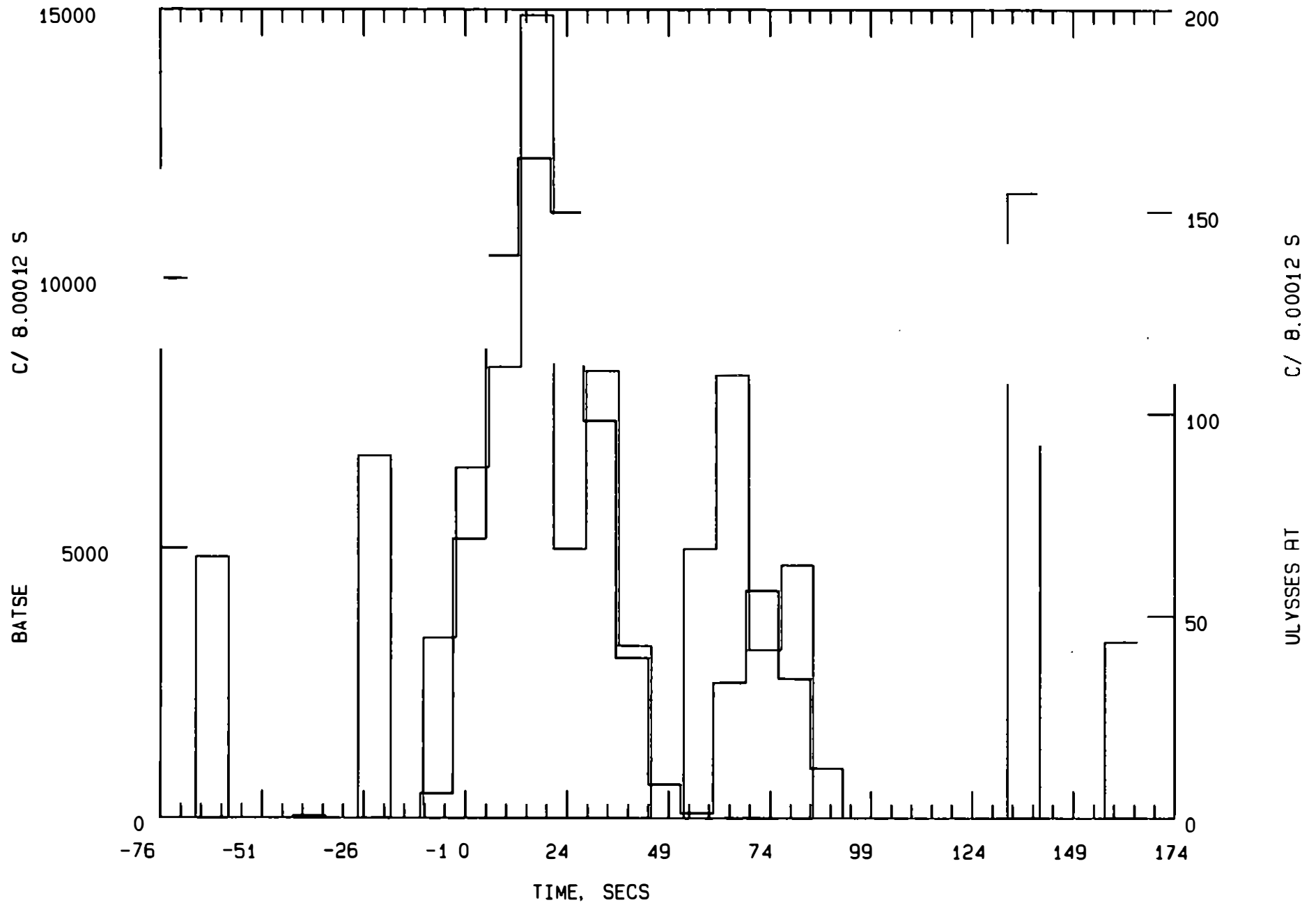
BATSE

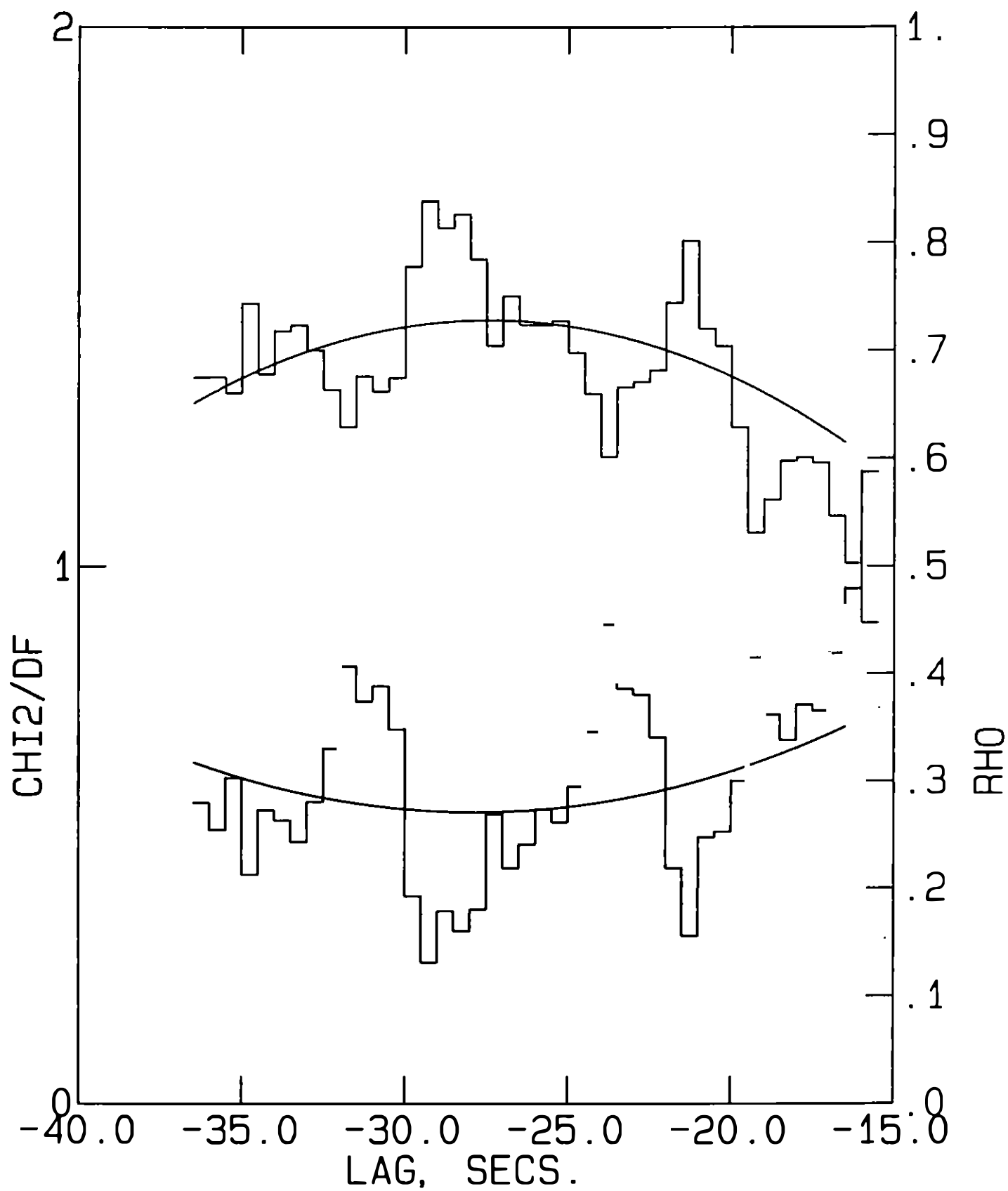
-ULYSSES RT CORRELATION

24/11/95

25132.210

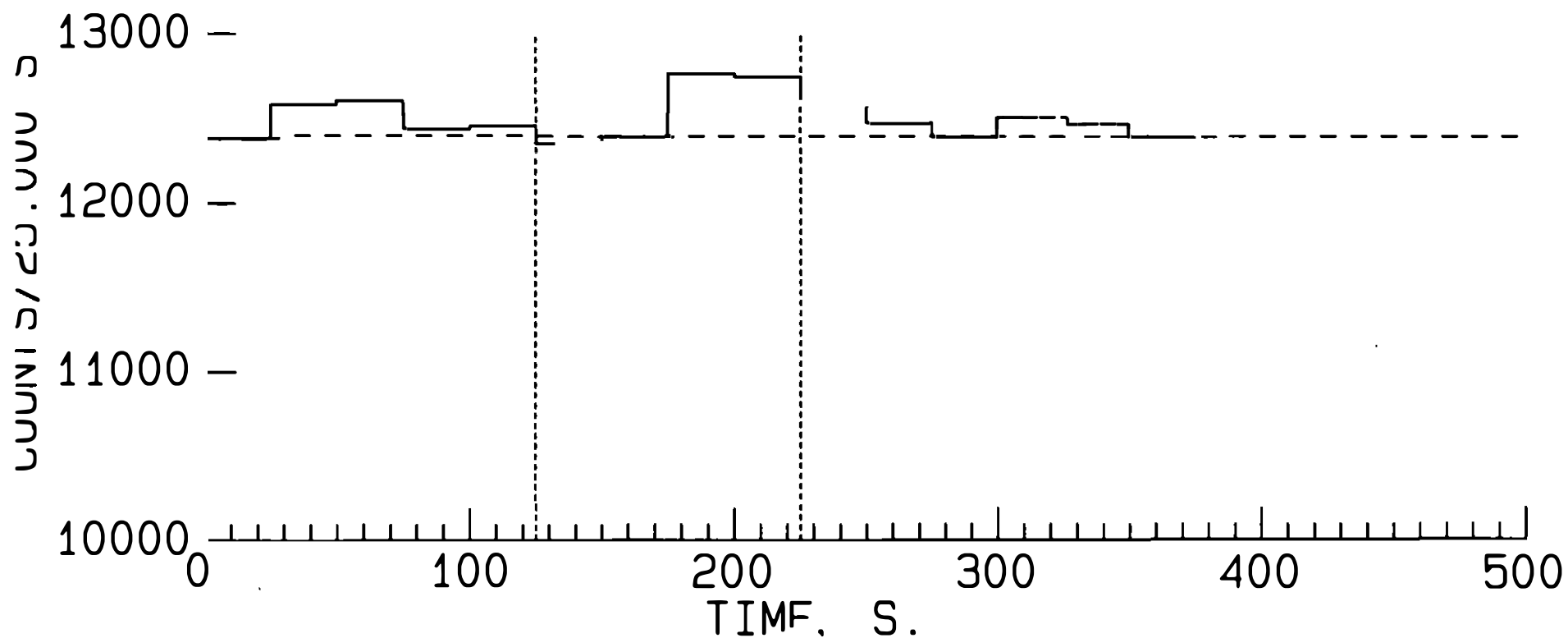
26/ 6/ 3





ULYSSES RT
24/11/95 23832.236 s
0.500 S INTERVALS REGROUPED BY 50
21- 144 keV

26 / 6 / 3



From HENZE@fender.msfc.nasa.gov Mon Nov 27 11:54 PST 1995
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 27 Nov 1995 13:54:34 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3919

BATSEARCH PROGRAM

NO

BATSE BURST # 3919
EVENT OF 1995 NOV 24 DAY OF YEAR=328
EVENT CROSSING TIME AT BATSE : 38933. S. OR 10:48:53.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 117.000 -43.000
BATSE PEAK COUNTING RATE: 3700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 24/11/ 95 IS:
RA= 218.846 DEC= 55.252 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427774056. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 49.76 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 921.70 SECS.
CROSSING TIME AT ULYSSES IS 39855. S. OR 11:04:14 +/- 253.11 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 24/11/ 95 IS:
RA= 264.557 DEC= -24.258 DIST= 2.280 AU
MARS-BATSE DISTANCE = 341044864. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 73.59 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 321.39 SECS.
CROSSING TIME AT MARS IS 39254. S. OR 10:54:14 +/- 194.34 SECONDS

BATSE BURST TRIGGER

NO.: 03919

TIME: TJD=0045 SECONDS=38933

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=141.7 AZIMUTH=187.7 ERROR=15.5 DEGREES

COMMENTS:

SINGLE SPIKE, DUR.~0.1 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3919	951124	10045	38933	3700	117	-43	.1

28 / 11 / 95

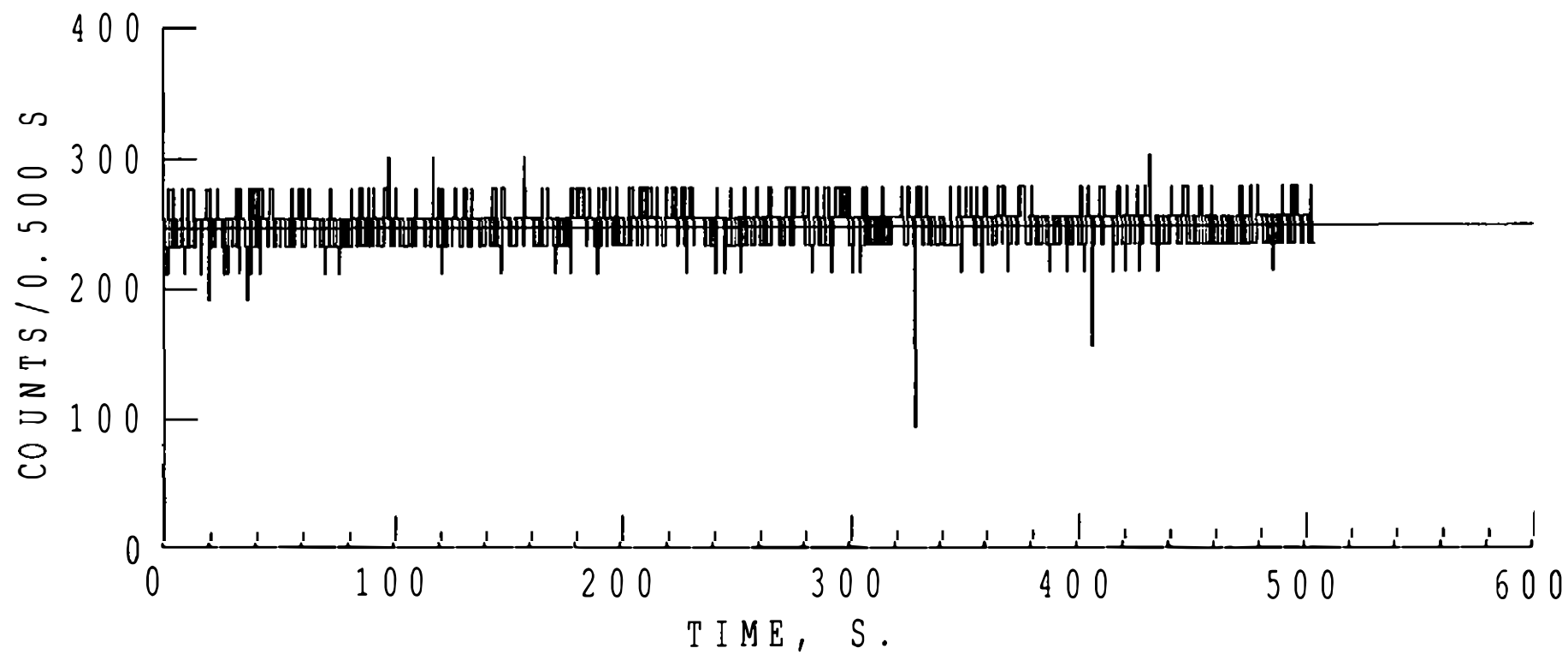
ULYSSES RT

24 / 11 / 95 39600.477 s

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HENZE@fender.msfc.nasa.gov Mon Nov 27 10:06 PST 1995
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 27 Nov 1995 12:05:32 -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.: 03920

TIME: TJD=0045 SECONDS=78914

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:Y

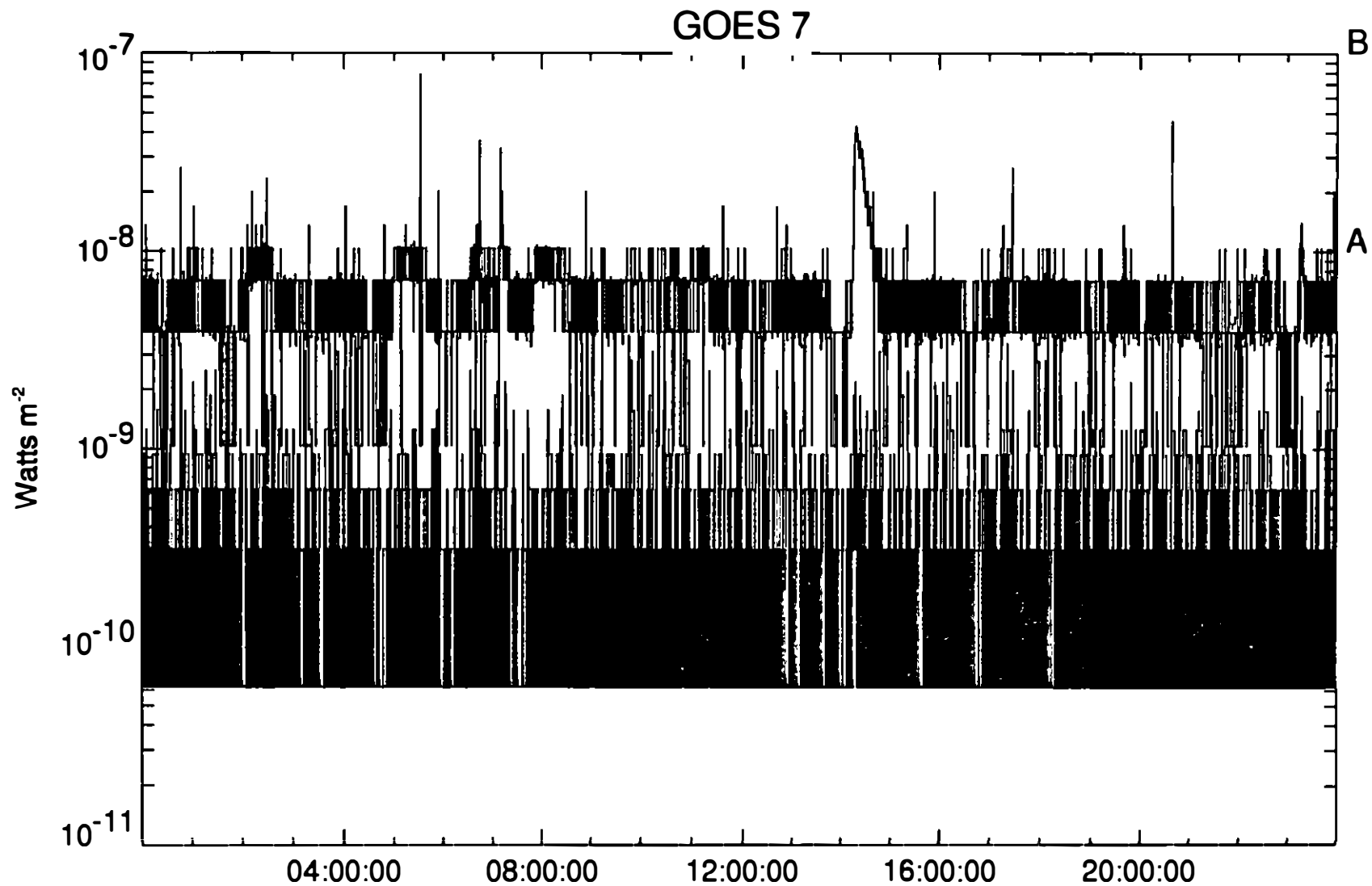
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

PARTICLE EVENT FOLLOWING SAA EXIT.



Data Start: 95/11/24, 0000:01

Plot created: 95/11/26, 0653

Channel

1 (1.0 - 8.0 Angstroms)

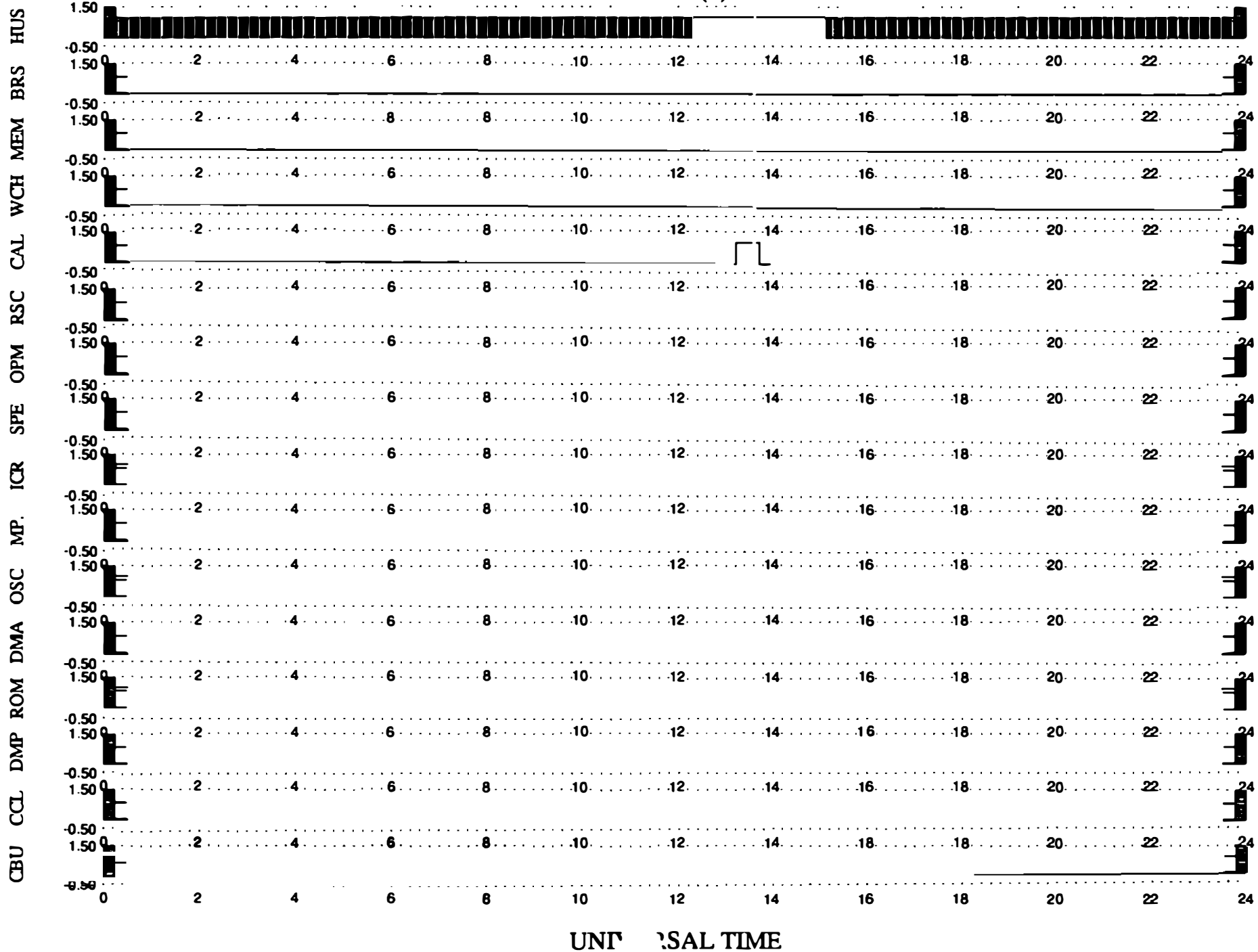
Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

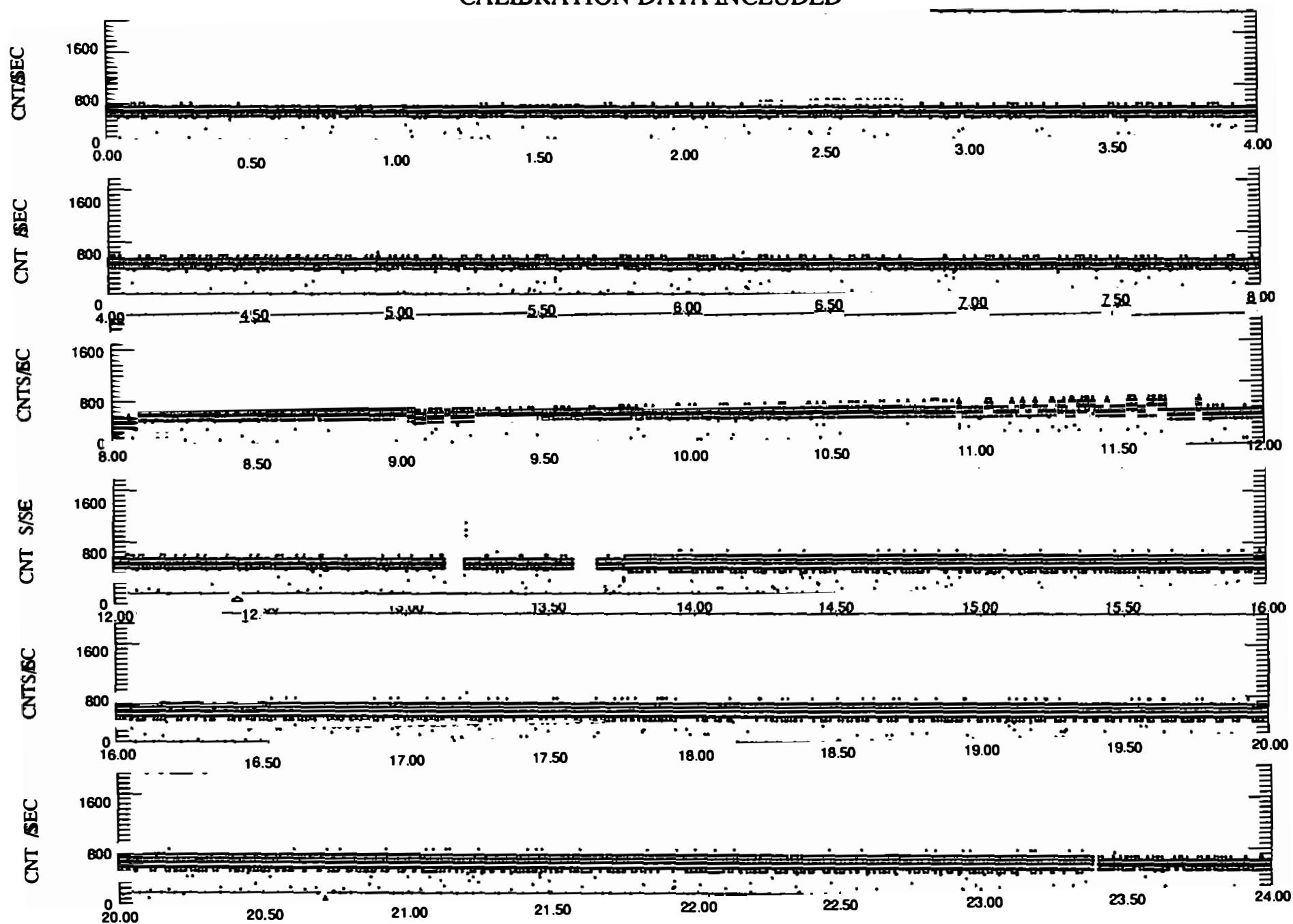
HUS MODES EDR day 328, year 1995 to day 328, year 1995
NO BURST (8)

4/1/96

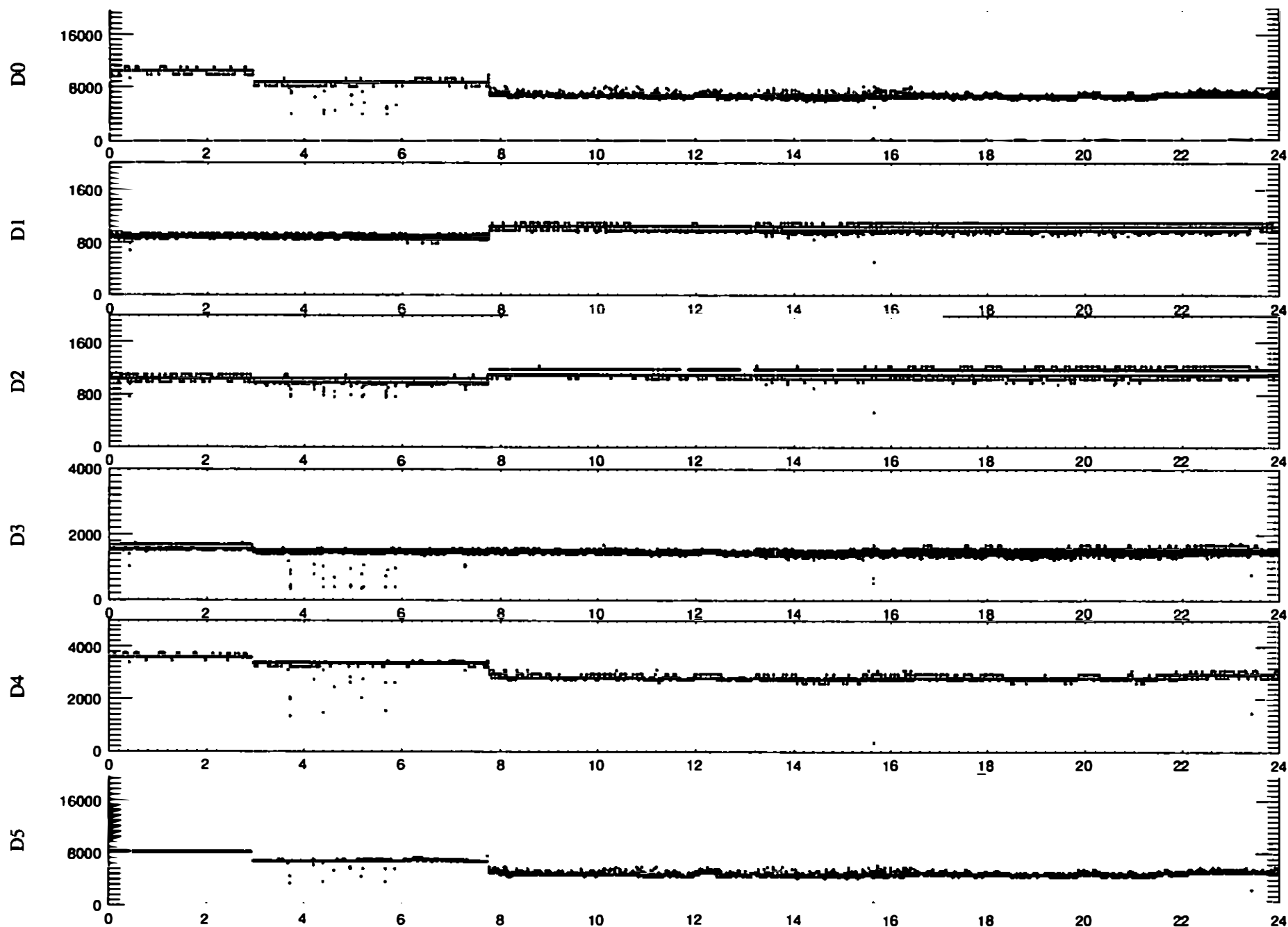


HUS 2A, MODE 1, NOT AVERAGED EDR day 328, year 1995 to day 328, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNIT 23.50



UNIV GAL TIME

From HAGEDON@fender.msfc.nasa.gov Mon Nov 27 10:18 PST 1995
From: HAGEDON@fender.msfc.nasa.gov
Date: Mon, 27 Nov 1995 12:18:21 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3921

BATSEARCH PROGRAM

BATSE BURST # 3921
EVENT OF 1995 NOV 25 DAY OF YEAR=329
EVENT CROSSING TIME AT BATSE : 1896. S. OR 00:31:36.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 277.000 -3.000
BATSE PEAK COUNTING RATE: 11100 C/S

No

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 25/11/ 95 IS:
RA= 218.985 DEC= 55.274 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427760966. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=104.97 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -368.58 SECS.
CROSSING TIME AT ULYSSES IS 1527. S. OR 00:25:27 +/- 283.72 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 25/11/ 95 IS:
RA= 265.380 DEC= -24.290 DIST= 2.281 AU
MARS-BATSE DISTANCE = 341301472. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=155.94 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1039.52 SECS.
CROSSING TIME AT MARS IS 856. S. OR 00:14:16 +/- 64.81 SECONDS

BATSE BURST TRIGGER

NO.: 3921

TIME: TJD=0046 SECONDS=01896

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=84.2 AZIMUTH=31.4 ERROR=3.2 DEGREES

COMMENTS:

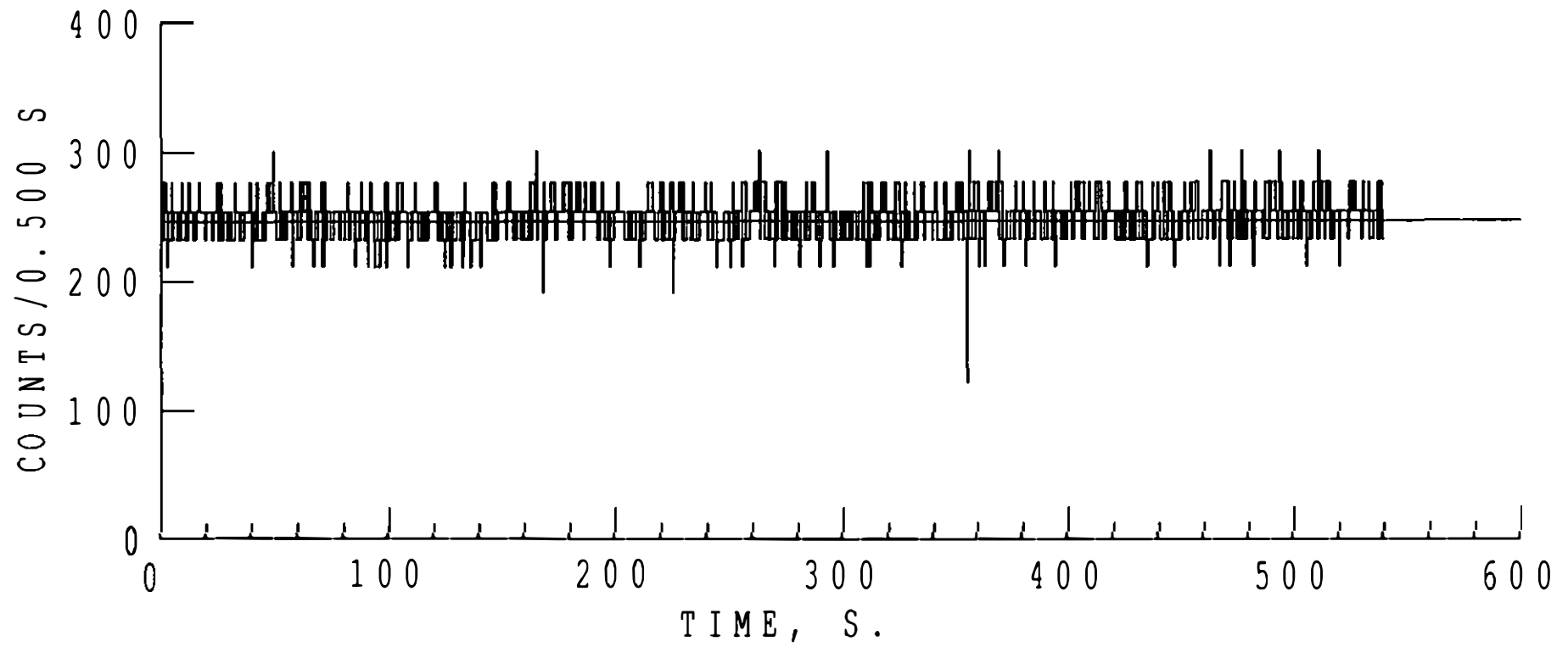
BURST. SINGLE SPIKE WITH SOME SUBSTRUCTURE. DUR.~0.7 SEC.
VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3921	951125	10046	01896	11100	277	-03	.7

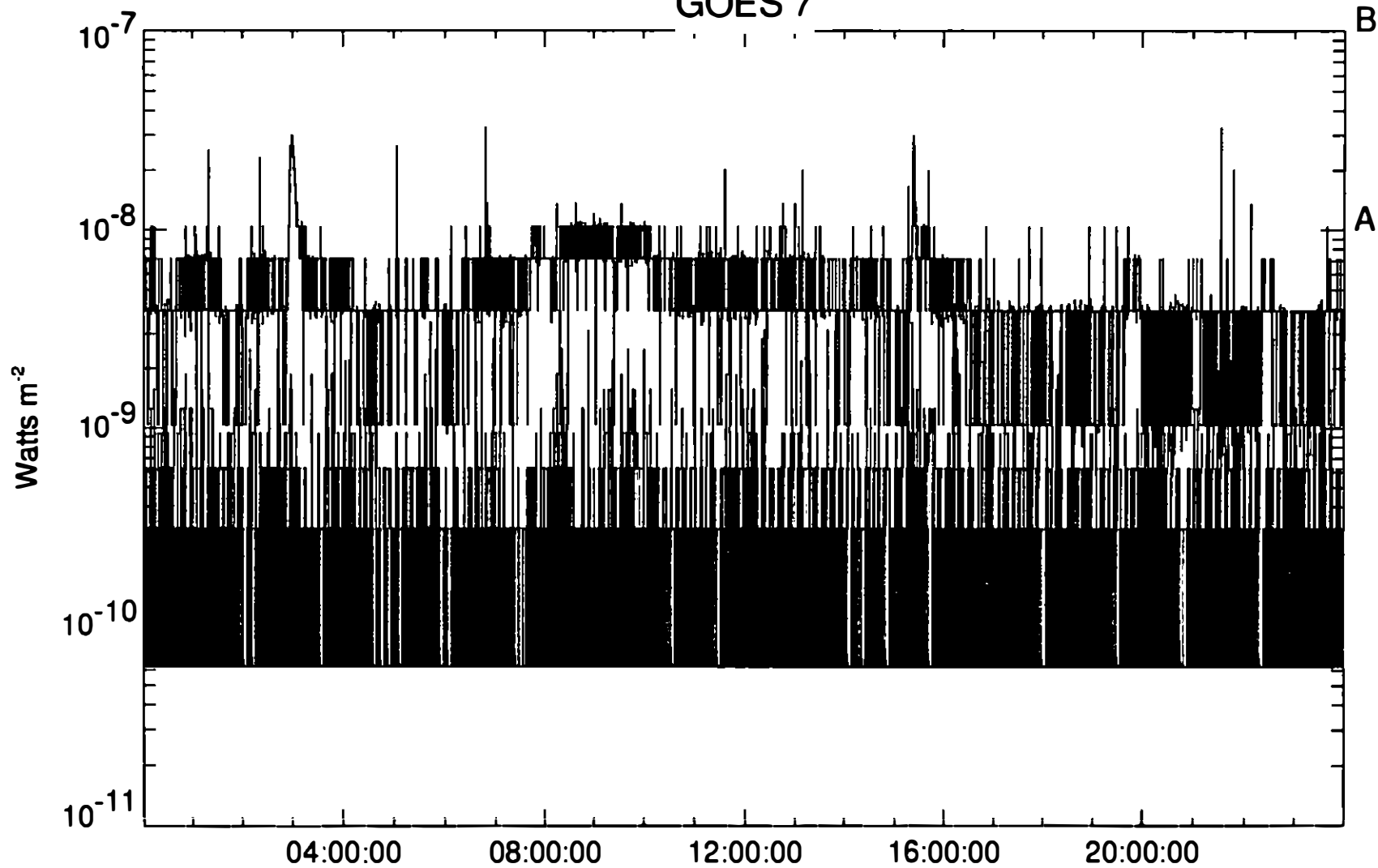
28 / 11 / 95

ULYSSES RT
25 / 11 / 95 1260.221 s
0 - 0 keV

N=10 M=2
>4.0 SIGMA FLUCTUATIONS



GOES 7

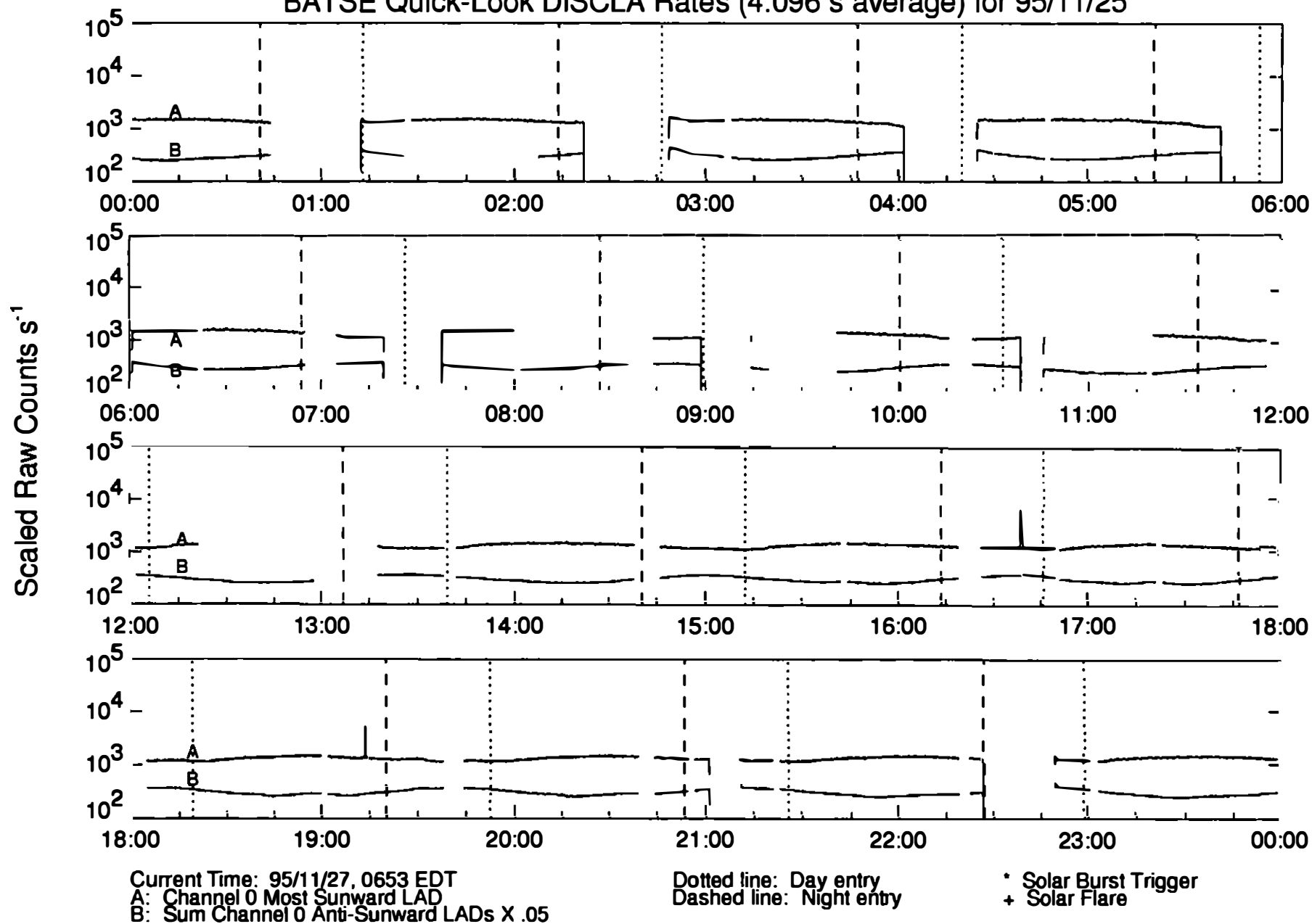


Data Start: 95/11/25, 0000:02

Plot created: 95/11/27, 0653

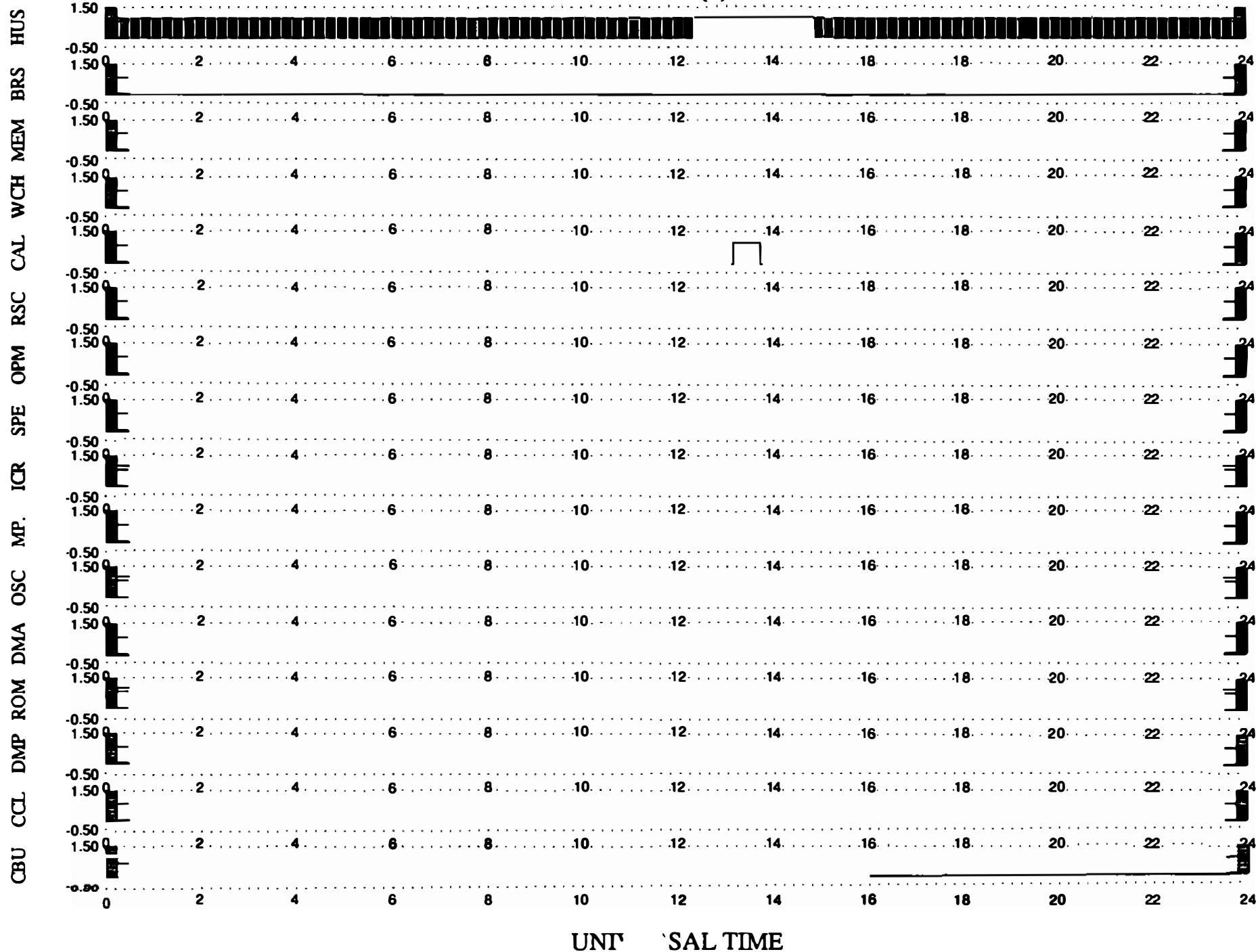
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/25



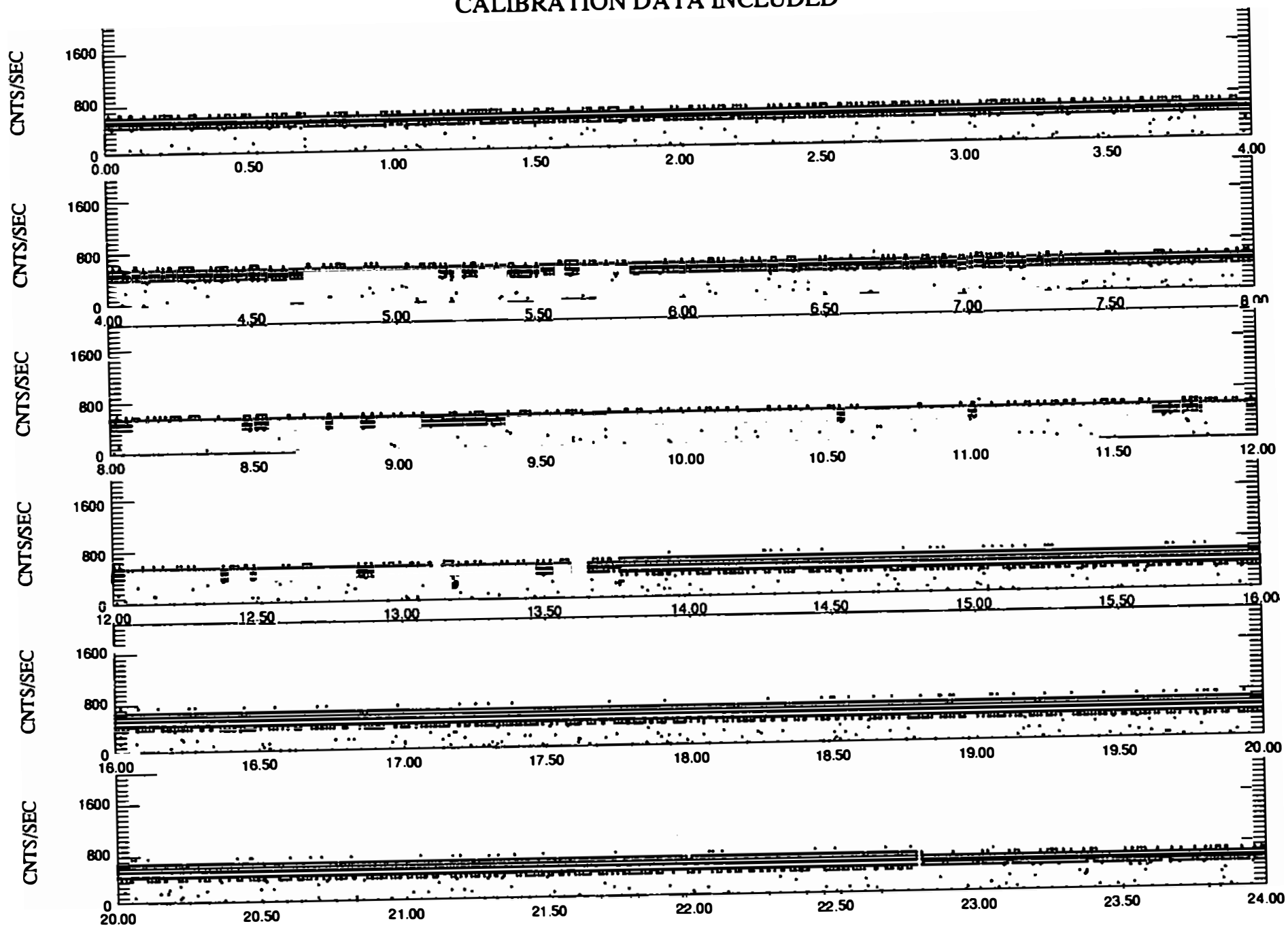
HUS MODES EDR day 329, year 1995 to day 329, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 329, year 1995 to day 329, year 1995
CALIBRATION DATA INCLUDED

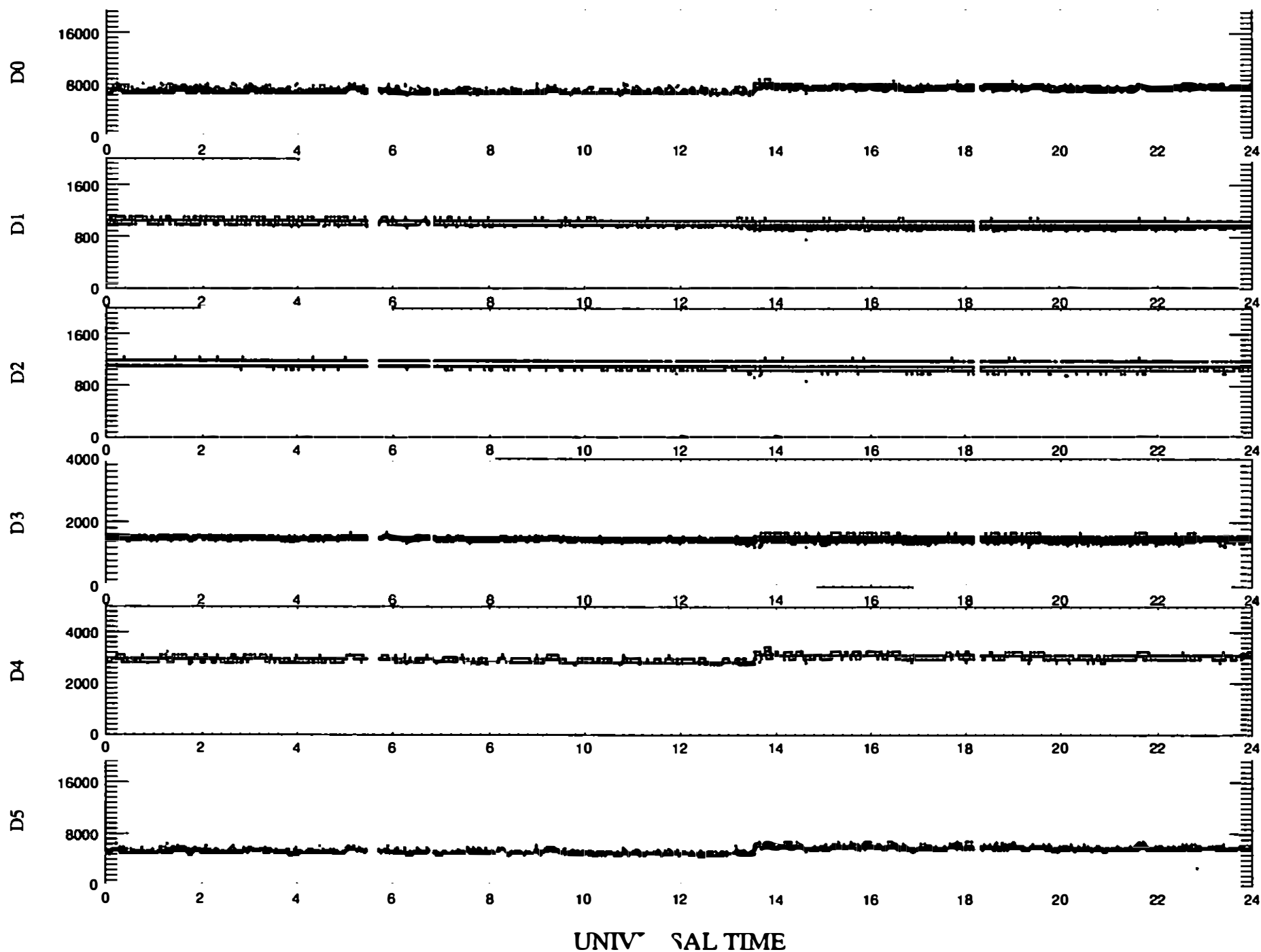
4/1/96



UNIVERSAL TIME

HUS 2B COUNTS / SEC QEDR day 329, year 1995 to day 329, year 1995

11/28/95



From DEAL@SSLLES.MSFC.NASA.GOV Mon Nov 27 09:32 PST 1995
From: DEAL@SSLLES.MSFC.NASA.GOV
Date: Mon, 27 Nov 1995 11:31:57 -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.: 3922

TIME: TJD=0047 SECONDS=51289

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From DEAL@ssl.msfc.nasa.gov Mon Nov 27 09:34 PST 1995
Date: Mon, 27 Nov 1995 11:33:34 -0600 (CST)
From: DEAL@SSLLES.MSFC.NASA.GOV
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.: 3923

TIME: TJD=0047 SECONDS=58896

TYPE: CYGX-1 SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

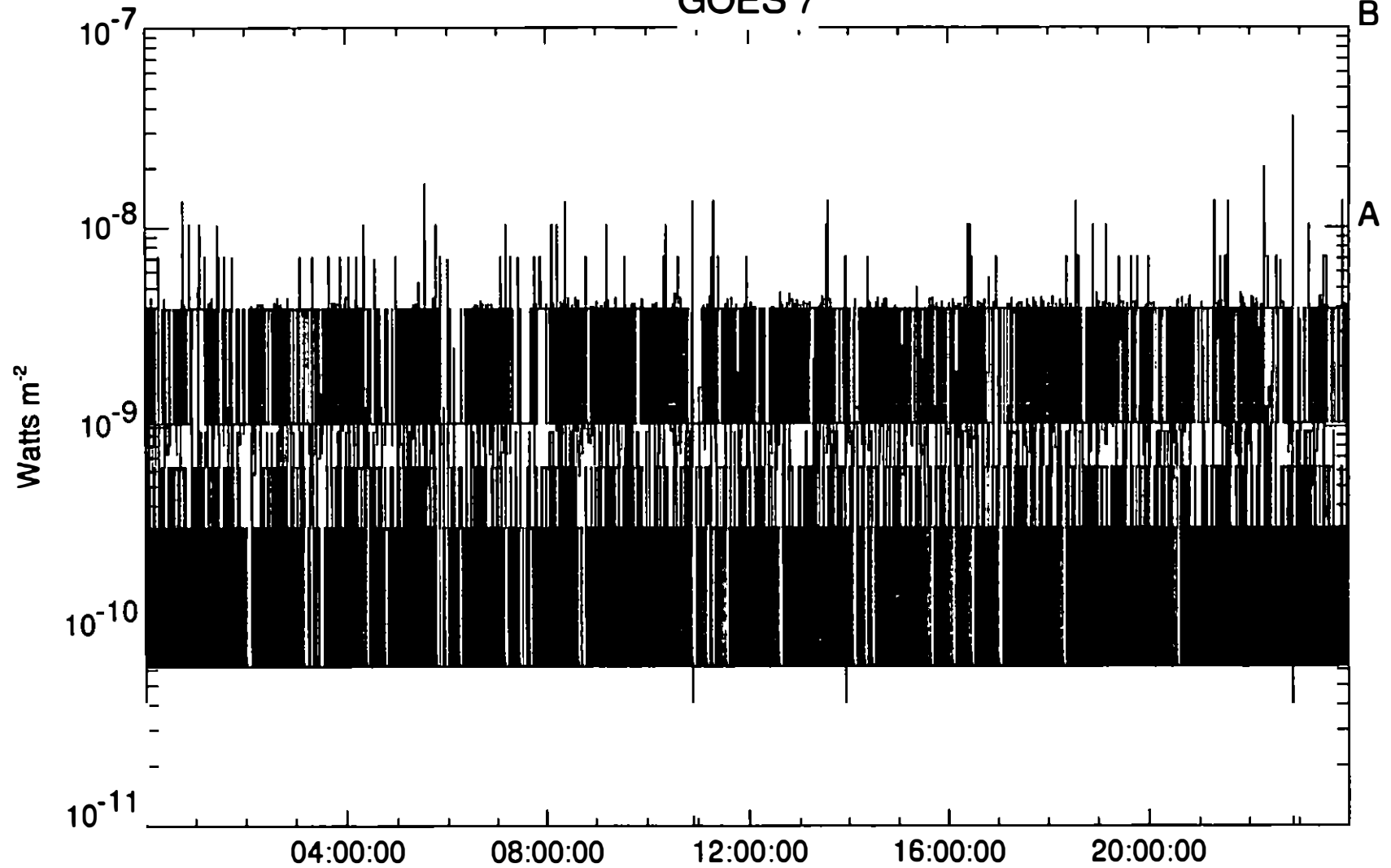
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

CYGX-1 RISING OCCULTATION STEP

GOES 7

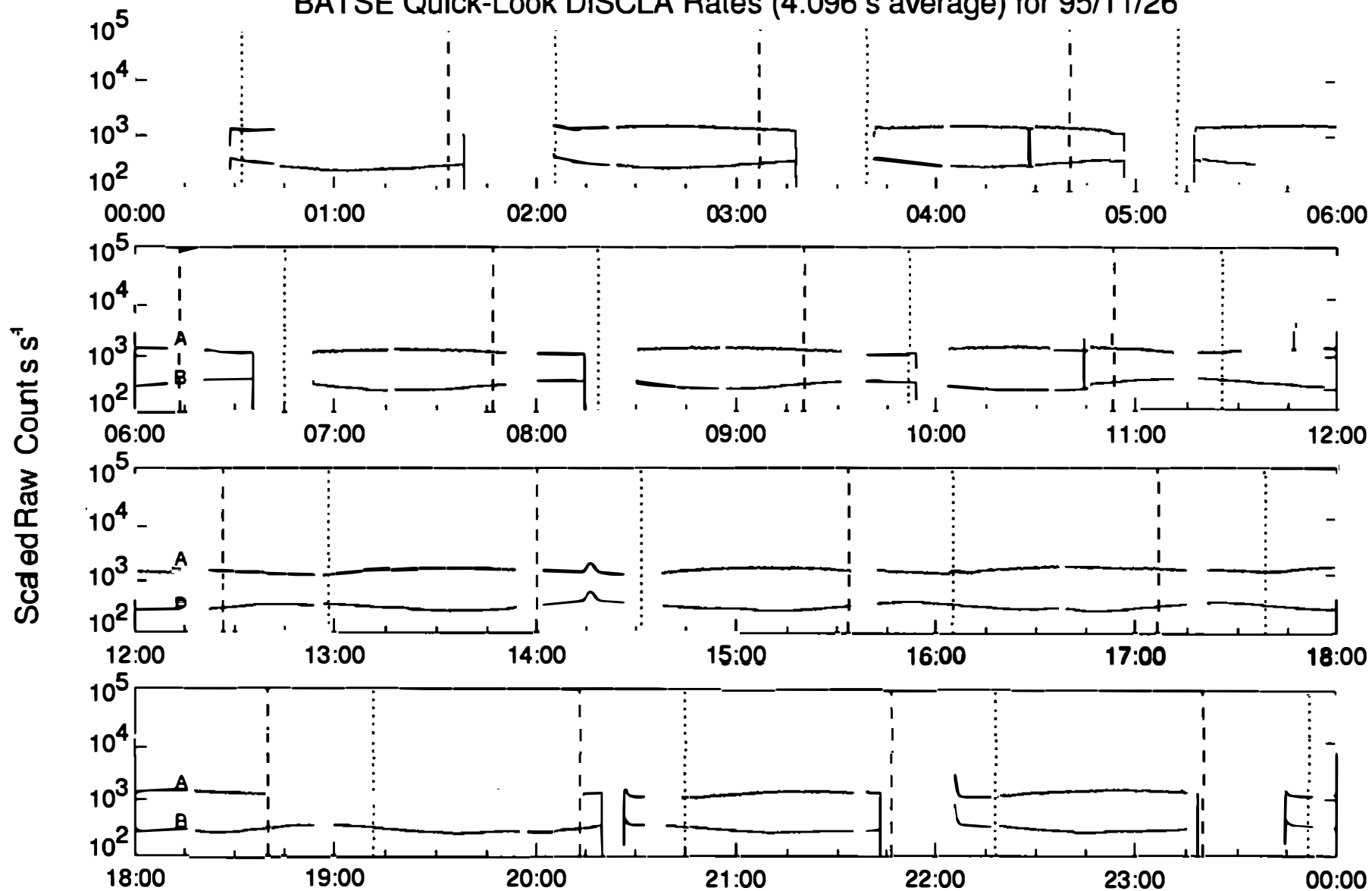


Data Start: 95/11/26, 0000:00

Plot created: 95/11/28, 0653

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 95/11/26



Current Time: 95/11/28, 0653 EDT

A: Channel 0 Most Sunward LAD

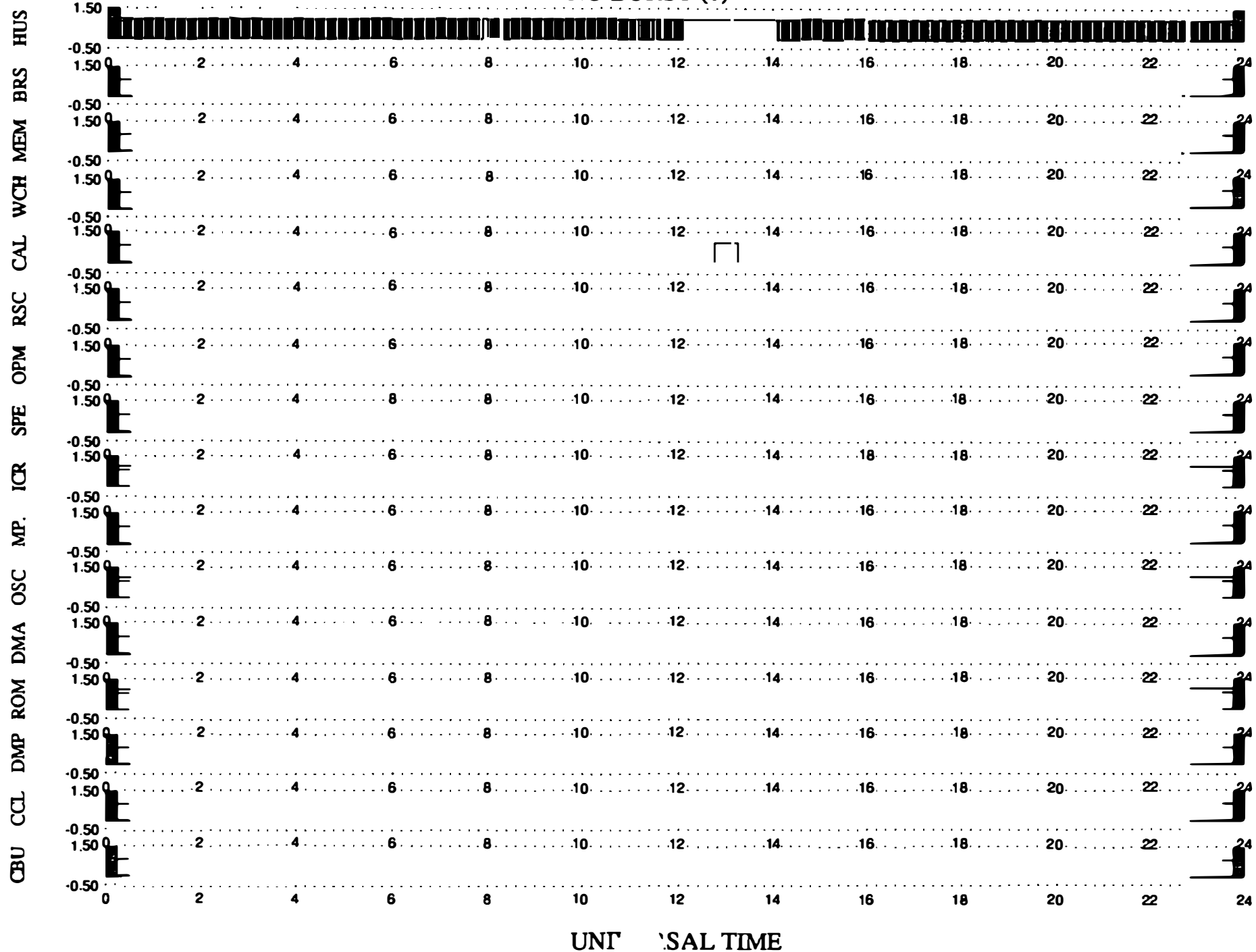
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

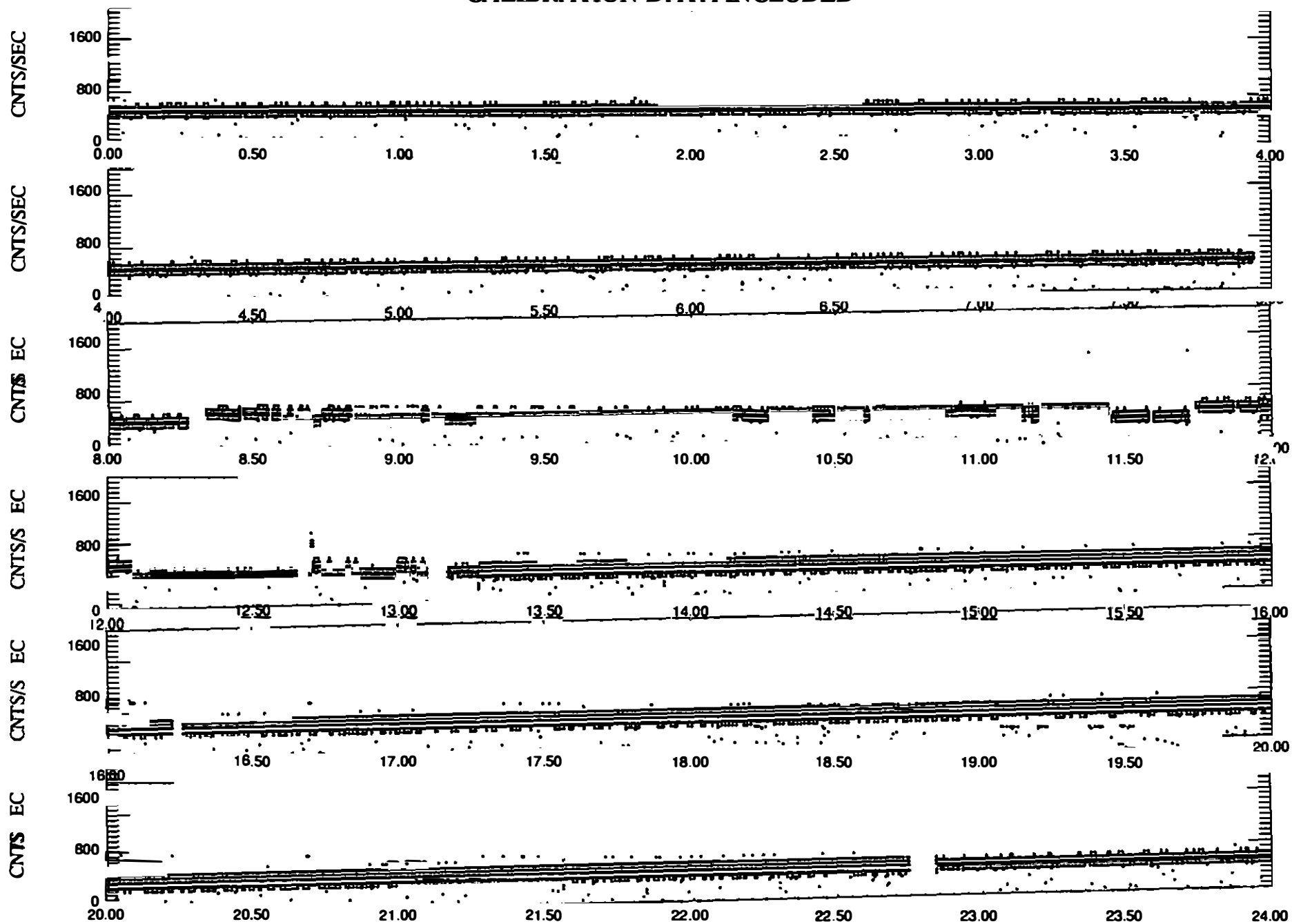
HUS MODES EDR day 330, year 1995 to day 330, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 330, year 1995 to day 330, year 1995
 CALIBRATION DATA INCLUDED

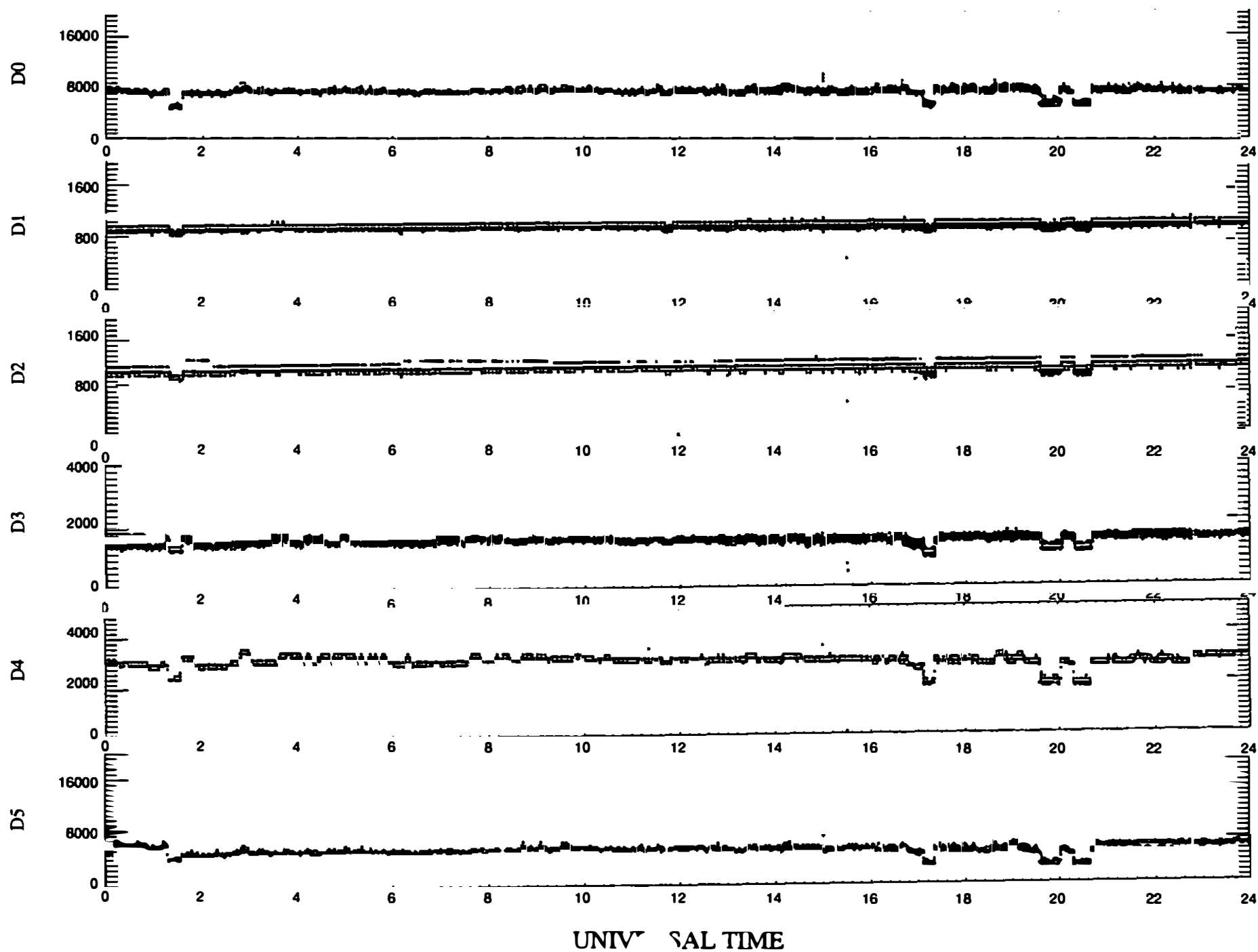
4/1/96



UNT SAL TIME

HUS 2B COUNTS / SEC QEDR day 330, year 1995 to day 330, year 1995

11/28/95



From WOODSP@ssl.msfc.nasa.gov Tue Nov 28 09:20 PST 1995
Date: Tue, 28 Nov 1995 11:20:27 -0600 (CST)
From: WOODSP@SSLLES.MSFC.NASA.GOV
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3924

BATSEARCH PROGRAM

BATSE BURST # 3924
EVENT OF 1995 NOV 27 DAY OF YEAR=331
EVENT CROSSING TIME AT BATSE : 44079. S. OR 12:14:39.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 191.000 48.000
BATSE PEAK COUNTING RATE: 4500 C/S

NO

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 27/11/ 95 IS:
RA= 219.581 DEC= 55.388 DIST= 2.859 AU
BATSE-ULYSSES DISTANCE = 427651218. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=160.98 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1348.58 SECS.
CROSSING TIME AT ULYSSES IS 42730. S. OR 11:52:10 +/- 110.25 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 27/11/ 95 IS:
RA= 267.032 DEC= -24.342 DIST= 2.285 AU
MARS-BATSE DISTANCE = 341803232. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.84 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 181.46 SECS.
CROSSING TIME AT MARS IS 44260. S. OR 12:17:40 +/- 198.18 SECONDS

BATSE BURST TRIGGER

NO.: 3924

TIME: TJD=0048 SECONDS=44079

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=79.9 AZIMUTH=300.5 ERROR=6.9 DEGREES

COMMENTS:

GRB FRED WITH 4 SEC DURATION. PRECURSOR VISIBLE AT 7 SEC BEFORE
TRIGGER. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3924	951127	10048	44079	4500	191	+48	4

28 / 11 / 95

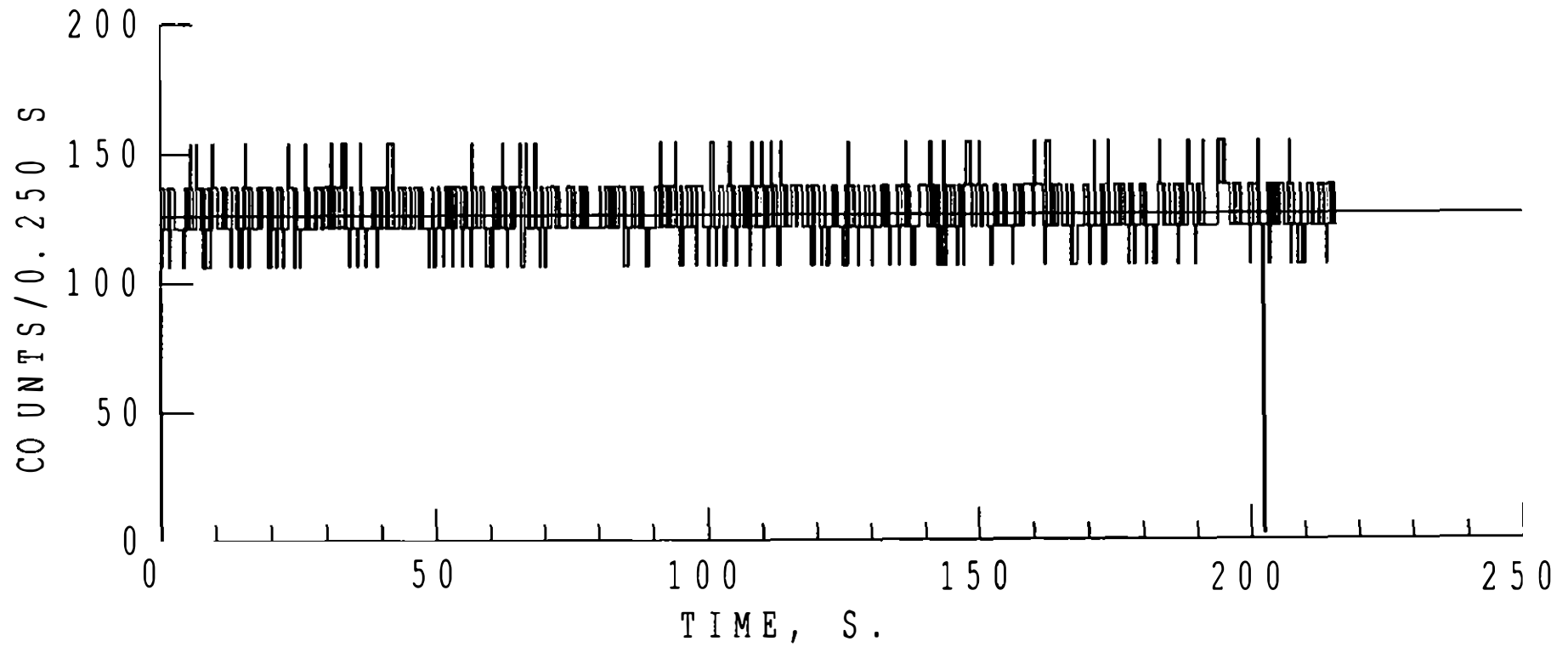
ULYSSES RT

27/11/95 42624.039 s

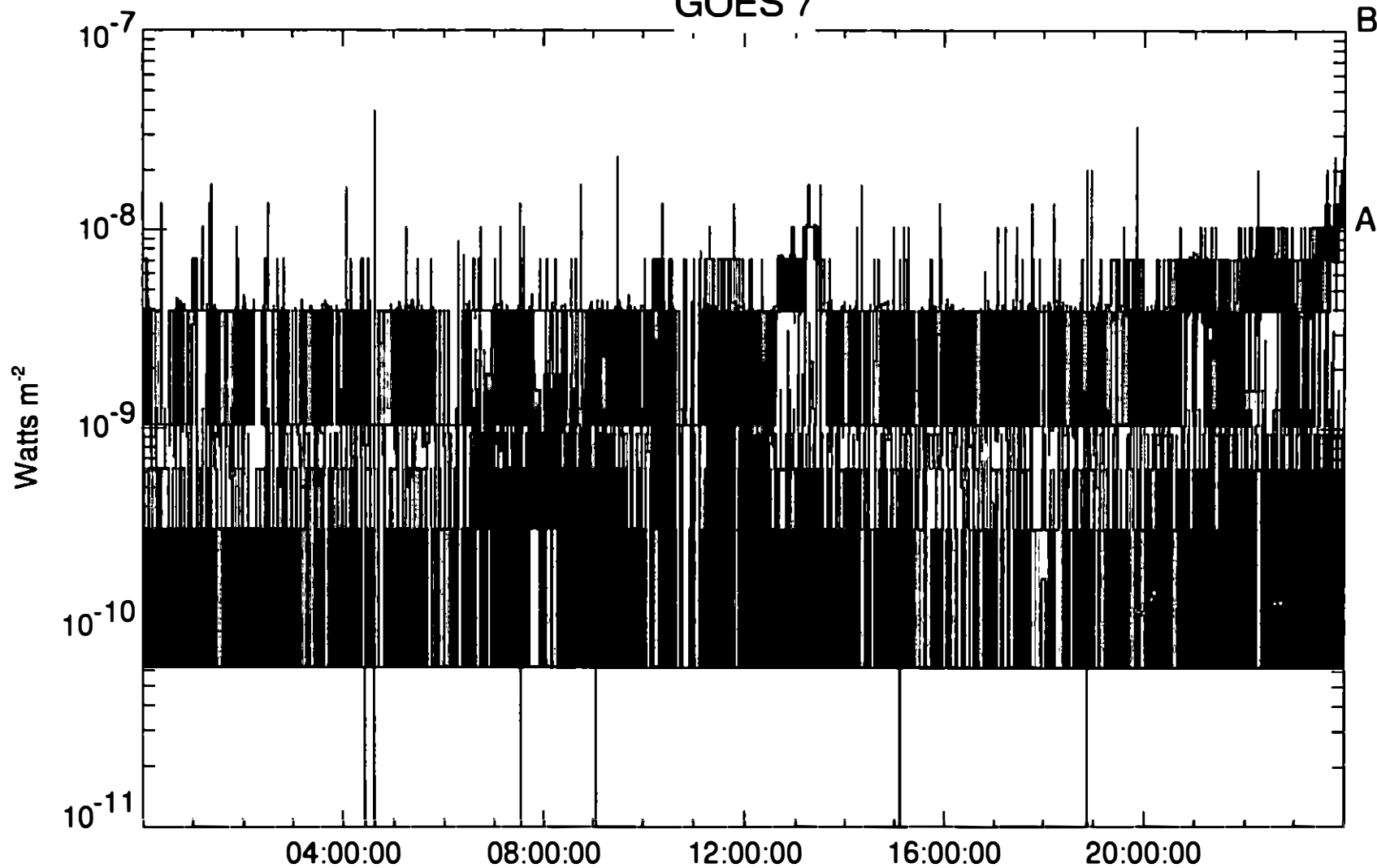
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



GOES 7



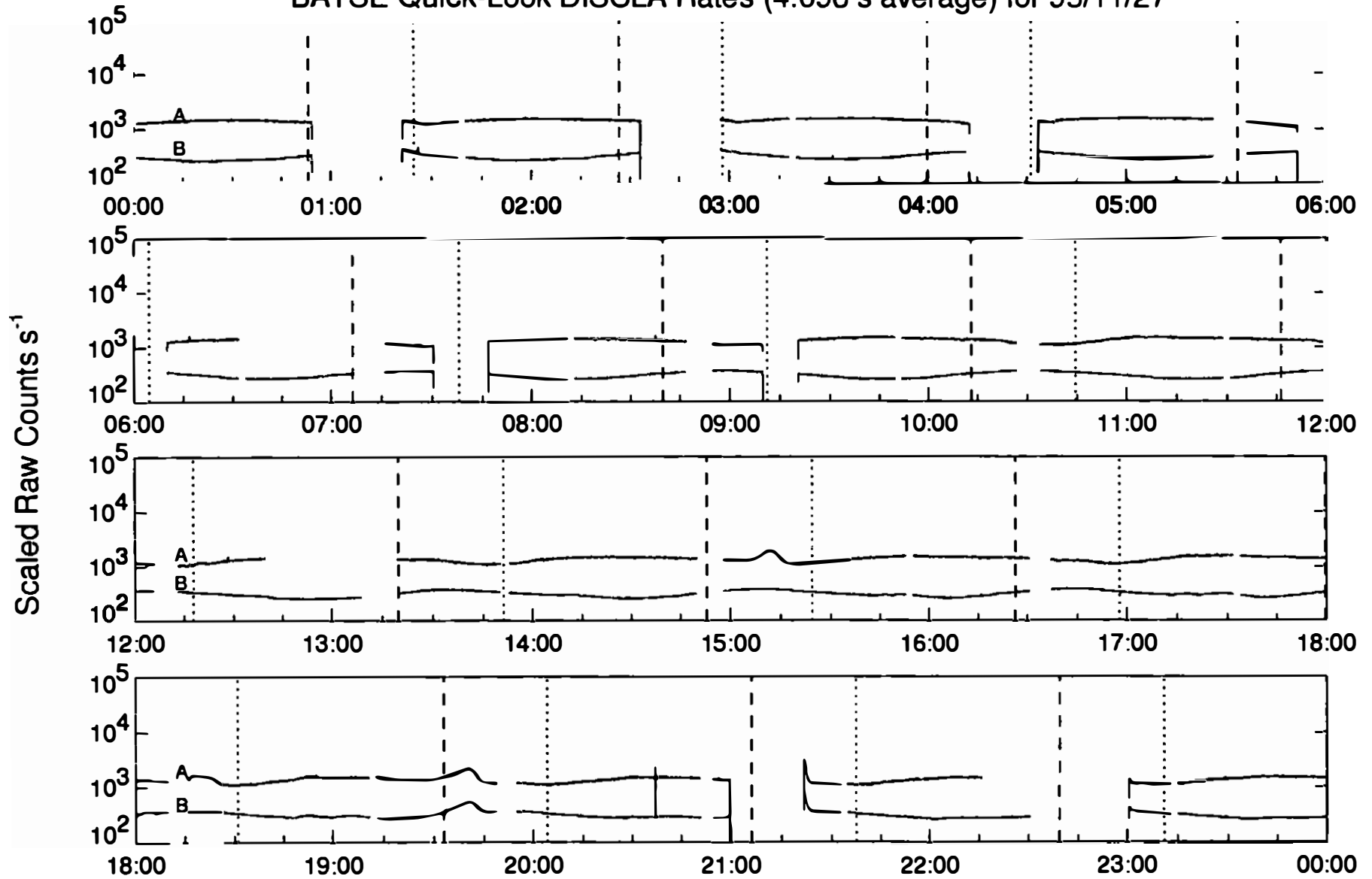
Data Start: 95/11/27, 0000:01

Plot created: 95/11/29, 0653

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 95/11/27



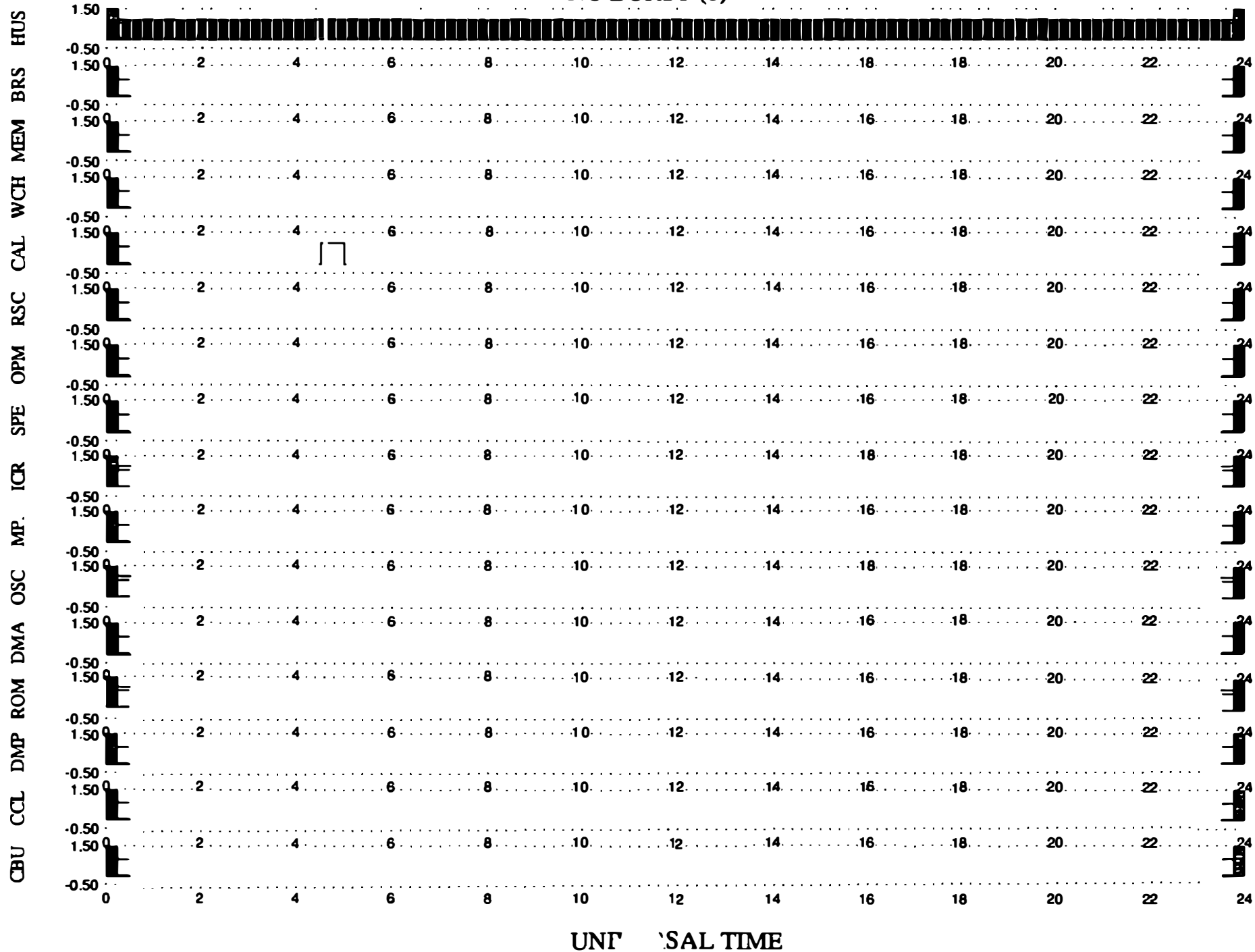
Current Time: 95/11/29, 0653 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

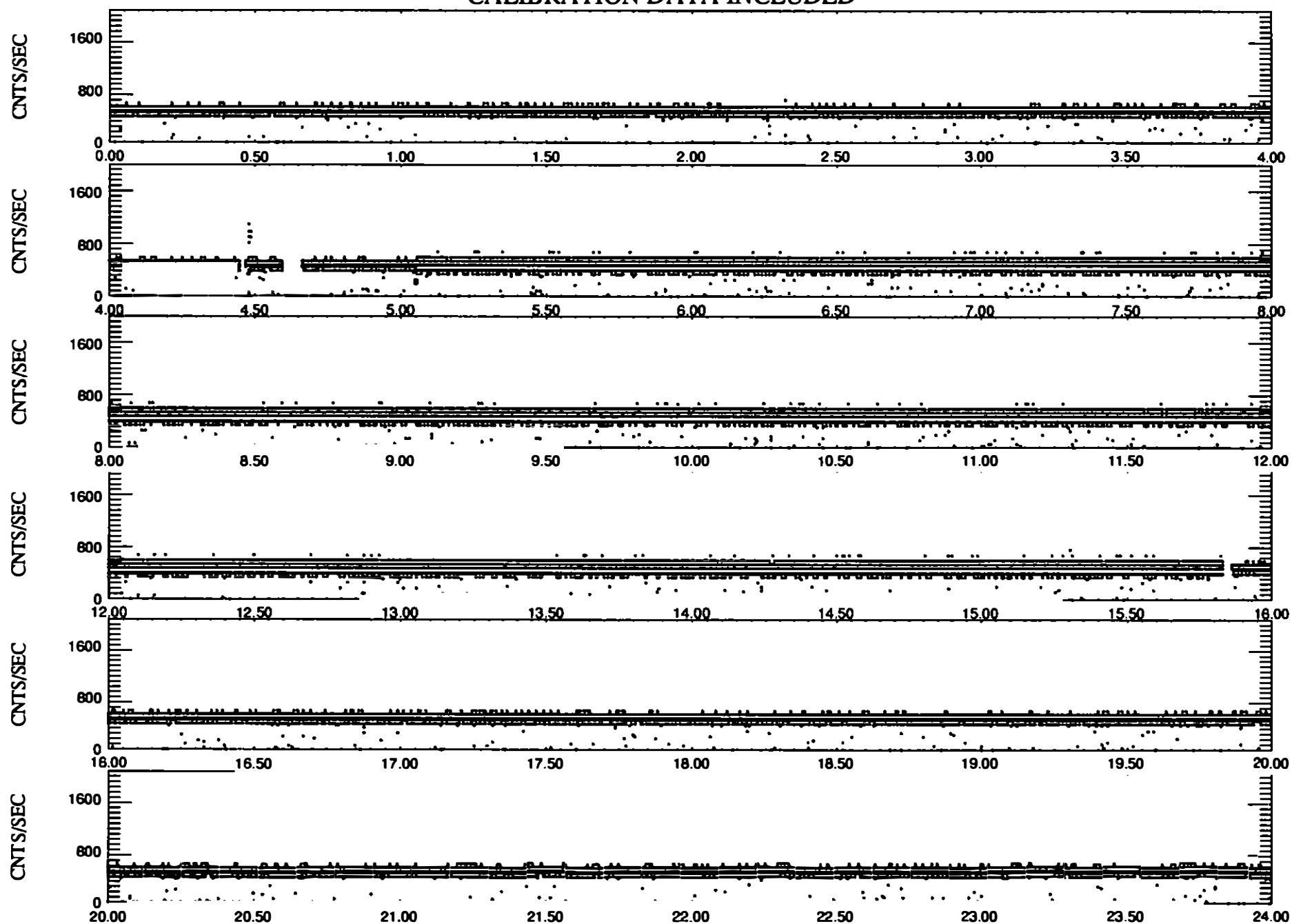
HUS MODES EDR day 331, year 1995 to day 331, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 331, year 1995 to day 331, year 1995
CALIBRATION DATA INCLUDED

4/1/96



UNITS SAL TIME

From DEAL@SSLLES.MSFC.NASA.GOV Thu Nov 30 09:25 PST 1995
Date: Thu, 30 Nov 1995 11:25:02 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: burst@comptel.sr.unh.edu, grobad@vmprofs.estec.esa.nl,
"LHEAVX::CLINE"@ssl.msfc.nasa.gov,
"LHEAVX::BARTHELMY"@ssl.msfc.nasa.gov, scott@circe.gsfc.nasa.gov,
butterworth@lheavx.gsfc.nasa.gov, "15733::SCHAEFER"@ssl.msfc.nasa.gov
X-Vmsmail-To: @mops\$send_msg:BURST_SPAN.DIS
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3925

TIME: TJD=0049 SECONDS=25538

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=32.6 AZIMUTH=13.3 ERROR=9.3 DEGREES

COMMENTS:

TGF LASTING ~ 4 MS.

From DEAL@fender.msfc.nasa.gov Fri Dec 1 09:38 PST 1995
From: DEAL@fender.msfc.nasa.gov
Date: Fri, 1 Dec 1995 11:38:16 -0600 (CST)
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3926

ND

BATSEARCH PROGRAM

BATSE BURST # 3926
EVENT OF 1995 NOV 28 DAY OF YEAR=332
EVENT CROSSING TIME AT BATSE : 37600. S. OR 10:26:40.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 251.000 50.000
BATSE PEAK COUNTING RATE: 3700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 28/11/ 95 IS:
RA= 219.798 DEC= 55.438 DIST= 2.858 AU
BATSE-ULYSSES DISTANCE = 427592081. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=160.52 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1344.64 SECS.
CROSSING TIME AT ULYSSES IS 36255. S. OR 10:04:15 +/- 112.16 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 28/11/ 95 IS:
RA= 267.860 DEC= -24.361 DIST= 2.286 AU
MARS-BATSE DISTANCE = 342048544. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=104.15 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -278.85 SECS.
CROSSING TIME AT MARS IS 37321. S. OR 10:22:01 +/- 187.84 SECONDS

BATSE BURST TRIGGER

NO.: 3926

TIME: TJD=0049 SECONDS=37600

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=59.6 AZIMUTH=335.1 ERROR=4.9 DEGREES

COMMENTS:

BURST LASTING ~ 15 S. DOUBLE PULSE. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3926	951128	10049	37600	3700	251	+50	15

BACODINE

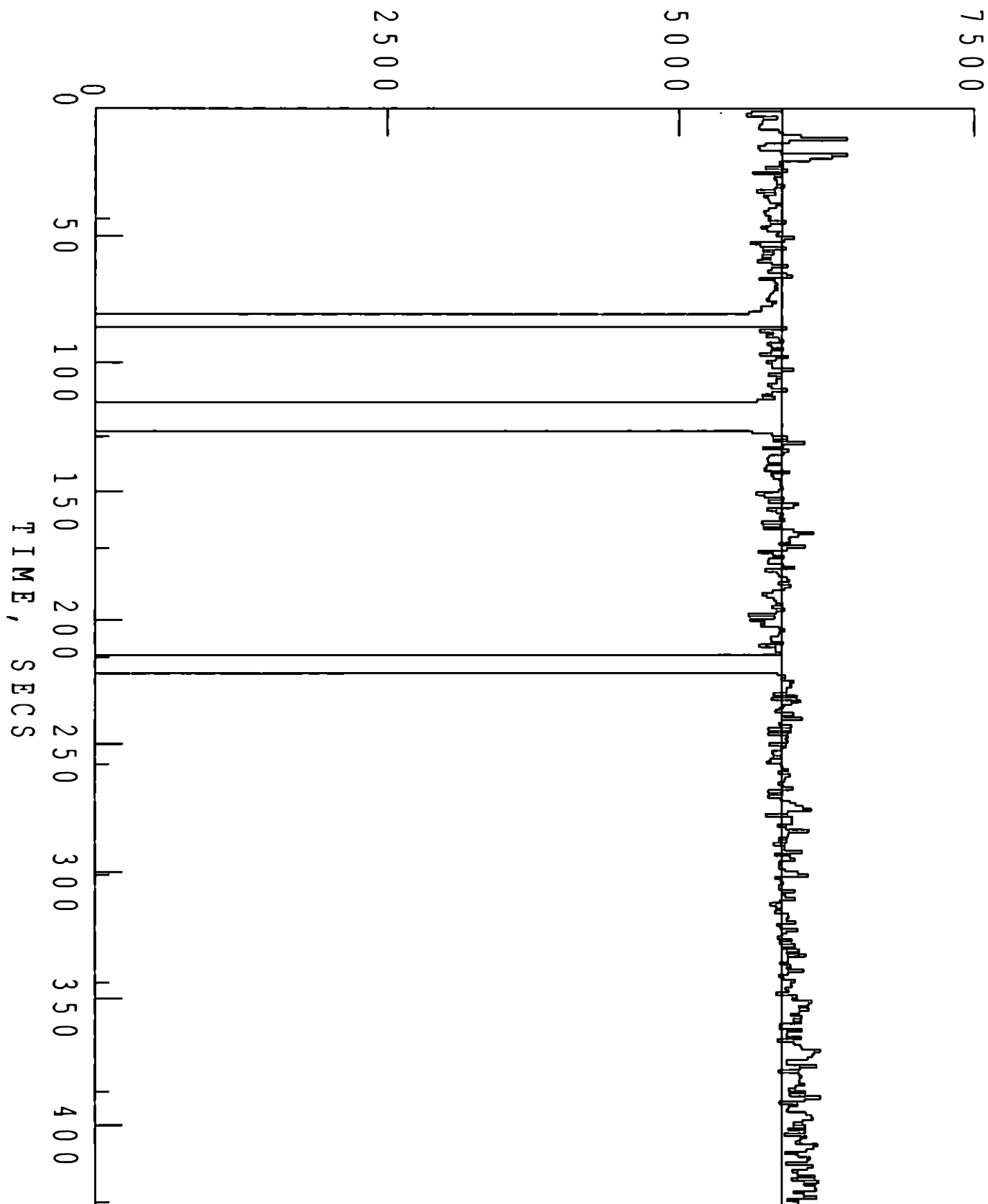
28/11/95

37588.657

3926

25- 100 keV

COUNTS/1.024 S



1 / 12 / 95

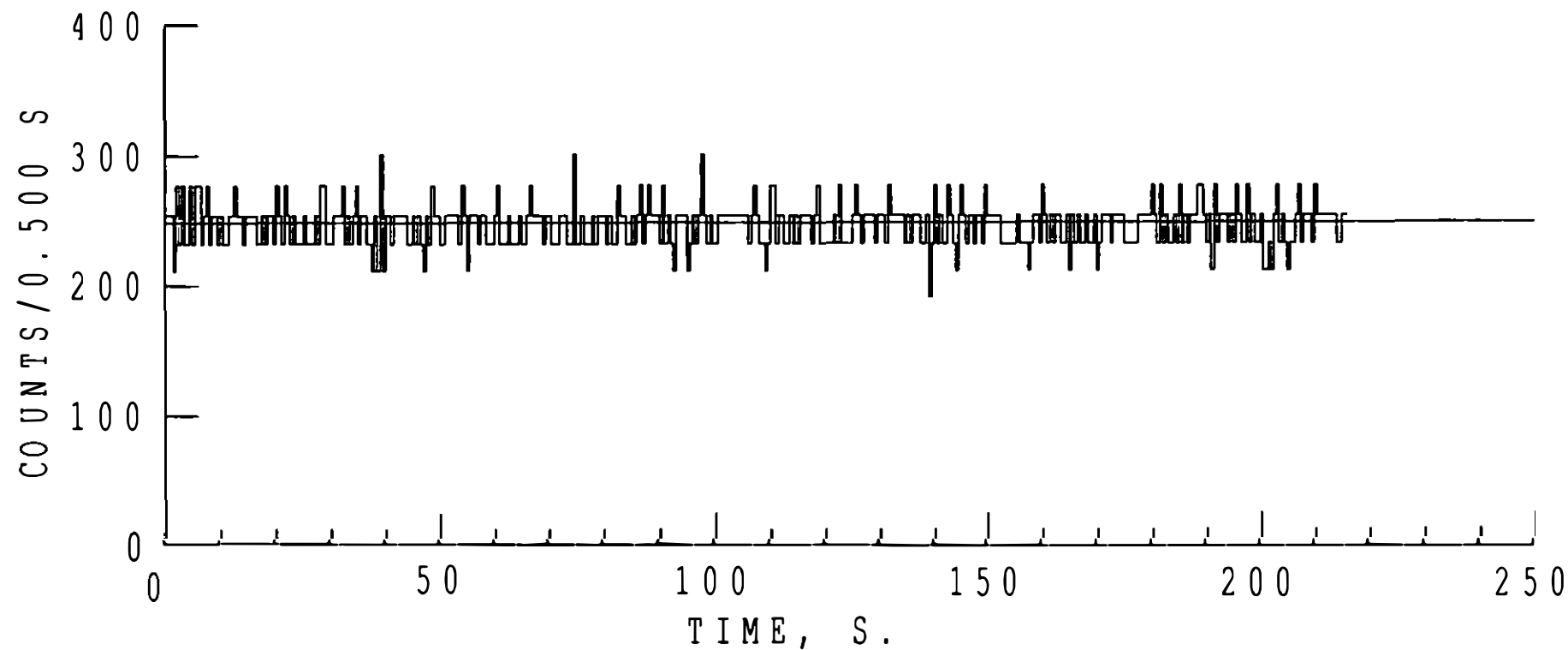
ULYSSES RT

28 / 11 / 95 36144.281 s

0 - 0 keV

N= 10 M= 2

>1.0 SIGMA FLUCTUATIONS



From DEAL@SSLLES.MSFC.NASA.GOV Thu Nov 30 11:01 PST 1995
Date: Thu, 30 Nov 1995 13:01:39 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3927

BATSEARCH PROGRAM

NO

BATSE BURST # 3927
EVENT OF 1995 NOV 28 DAY OF YEAR=332
EVENT CROSSING TIME AT BATSE ; 78593. S. OR 21:49:53.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 43.000 84.000
BATSE PEAK COUNTING RATE: 1400 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 28/11/ 95 IS:
RA= 219.909 DEC= 55.465 DIST= 2.858 AU
BATSE-ULYSSES DISTANCE = 427558589. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=139.47 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1084.03 SECS.
CROSSING TIME AT ULYSSES IS 77509. S. OR 21:31:48 +/- 194.44 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 28/11/ 95 IS:
RA= 267.860 DEC= -24.361 DIST= 2.286 AU
MARS-BATSE DISTANCE = 342048544. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 61.46 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 545.06 SECS.
CROSSING TIME AT MARS IS 79138. S. OR 21:58:58 +/- 182.30 SECONDS

BATSE BURST TRIGGER

NO.: 3927

TIME: TJD=0049 SECONDS=78593

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=75.9 AZIMUTH=264.8 ERROR=3.9 DEGREES

COMMENTS:

BURST LASTING ~ 21 S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3927	951128	10049	78593	1400	043	+84	21

30/11/95

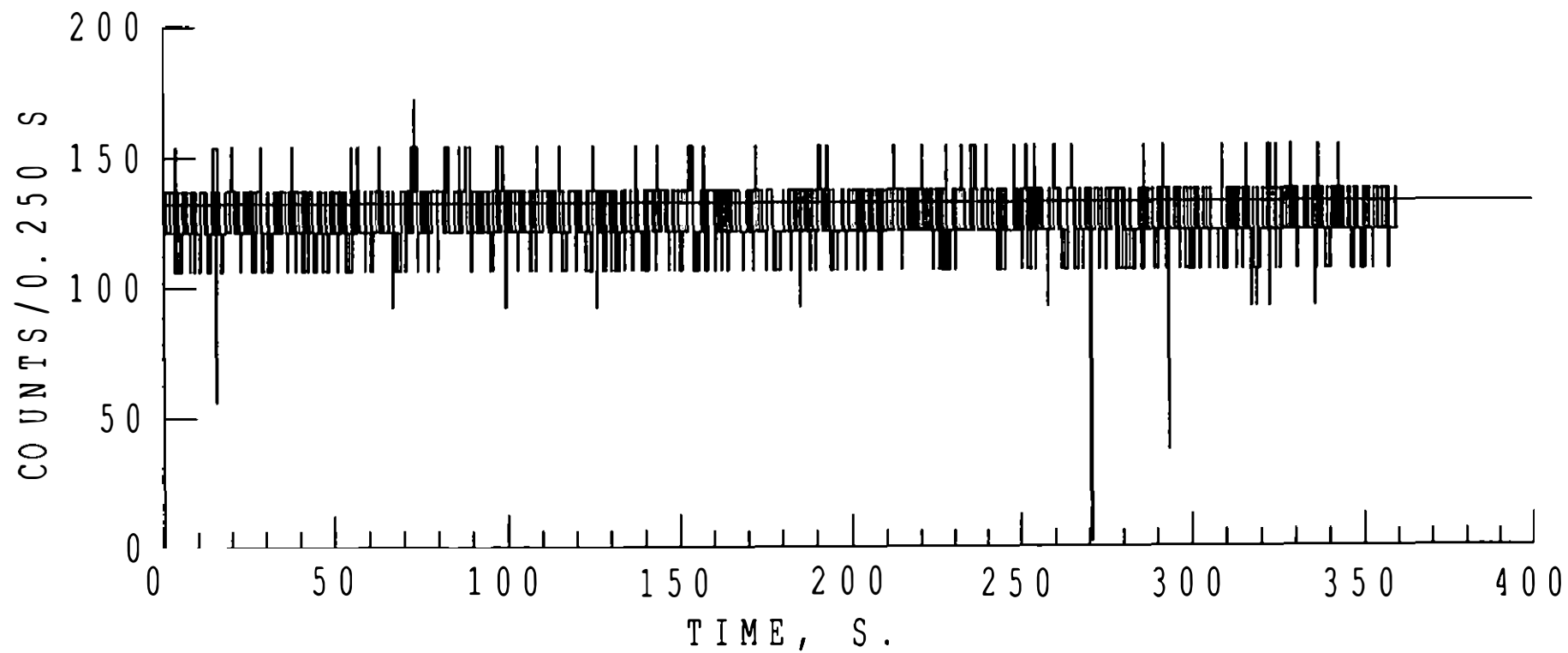
ULYSSES RT

28/11/95 77328.172 s

0- 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



BACODINE

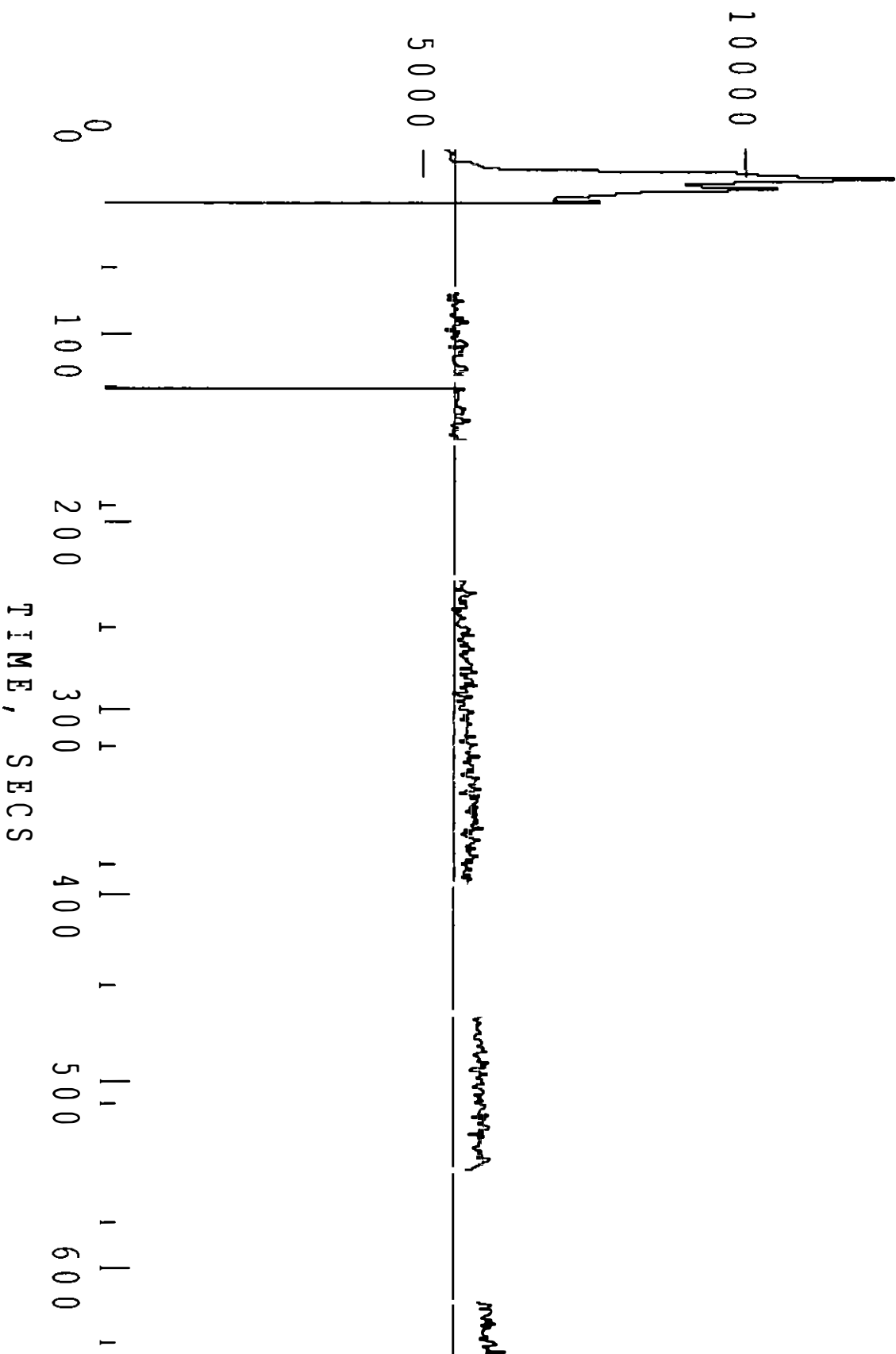
02/12/95

39087.793

25 - 100 keV

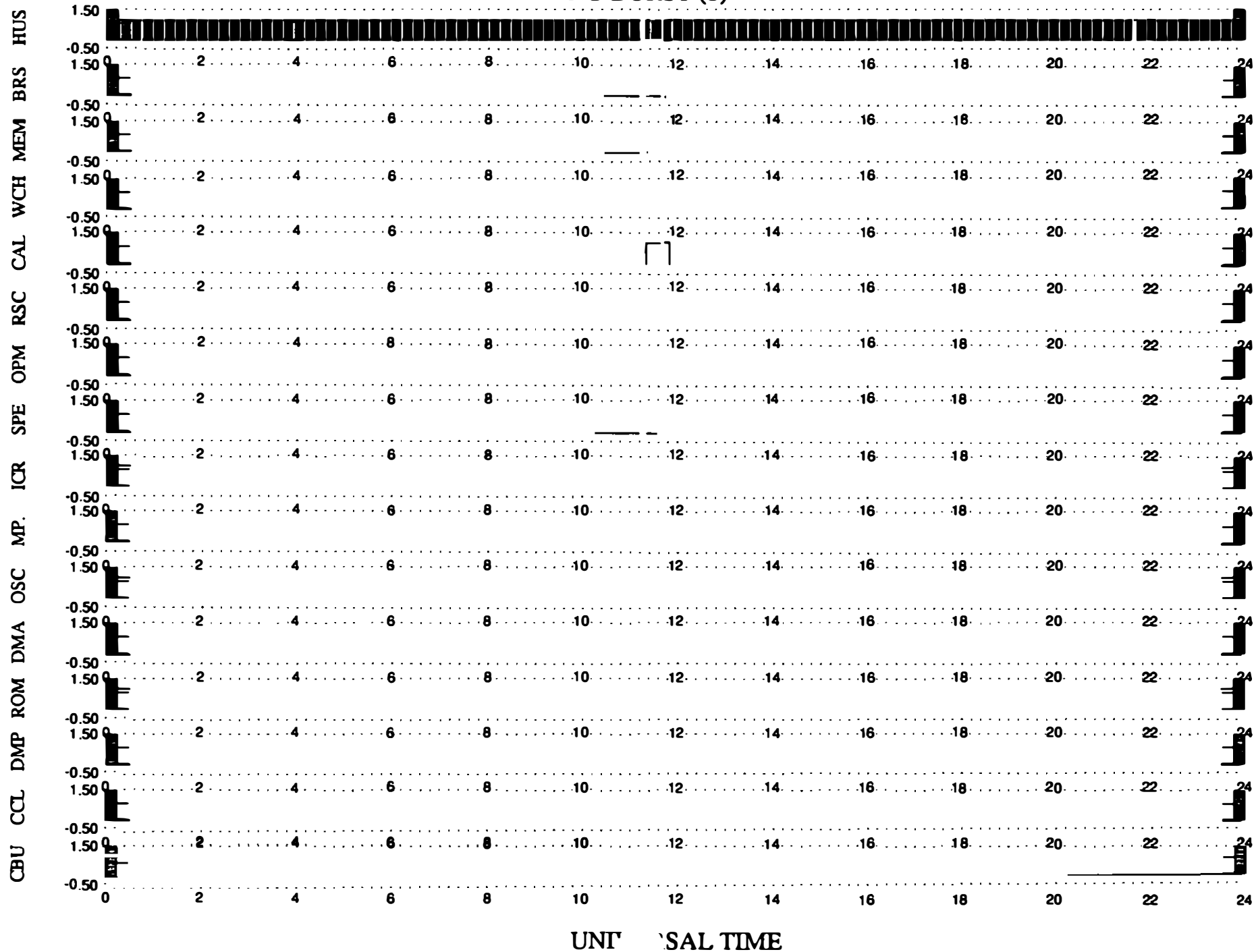
COUNTS/1.024 S

15000 —



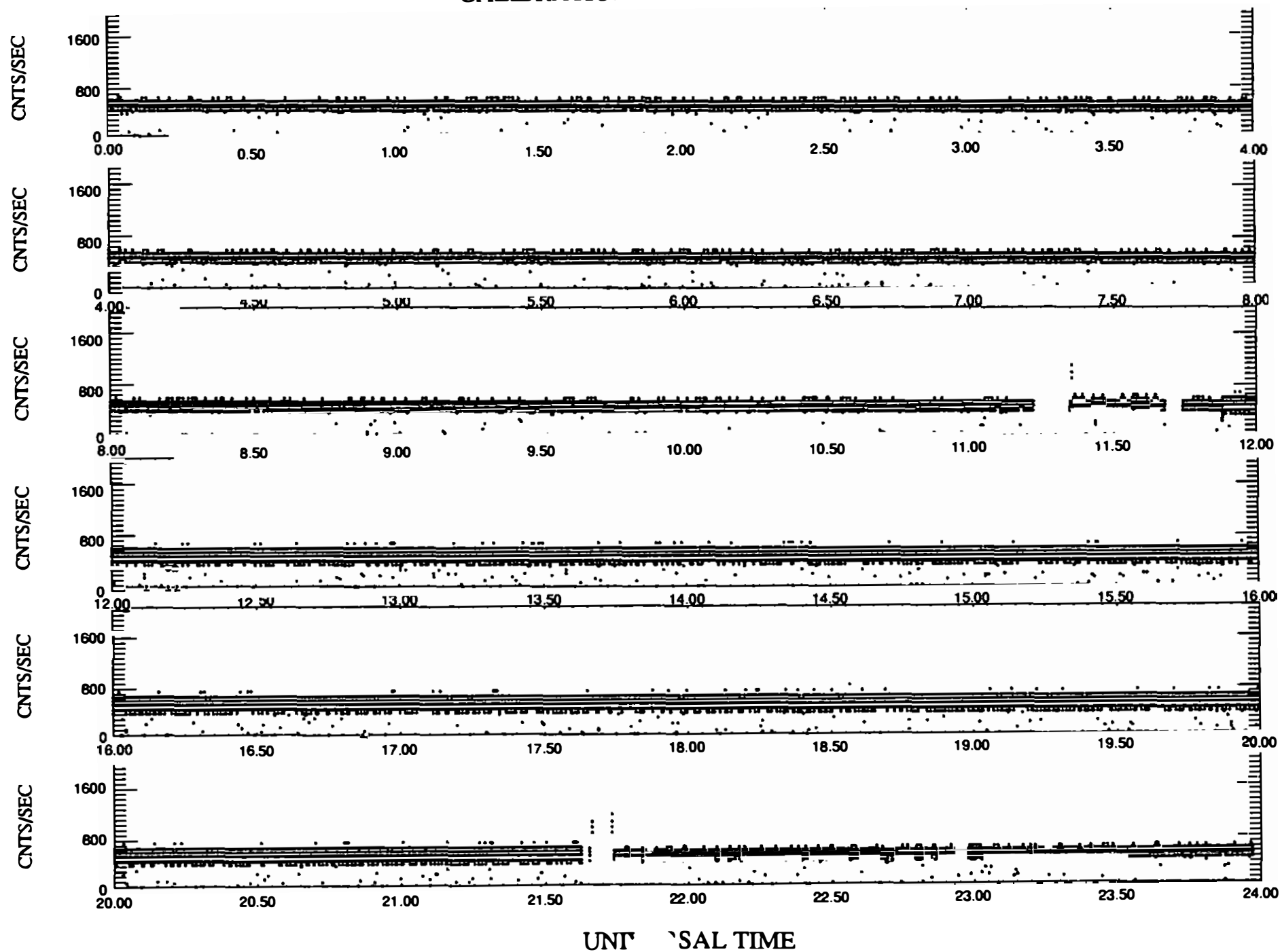
HUS MODES EDR day 332, year 1995 to day 332, year 1995
NO BURST (8)

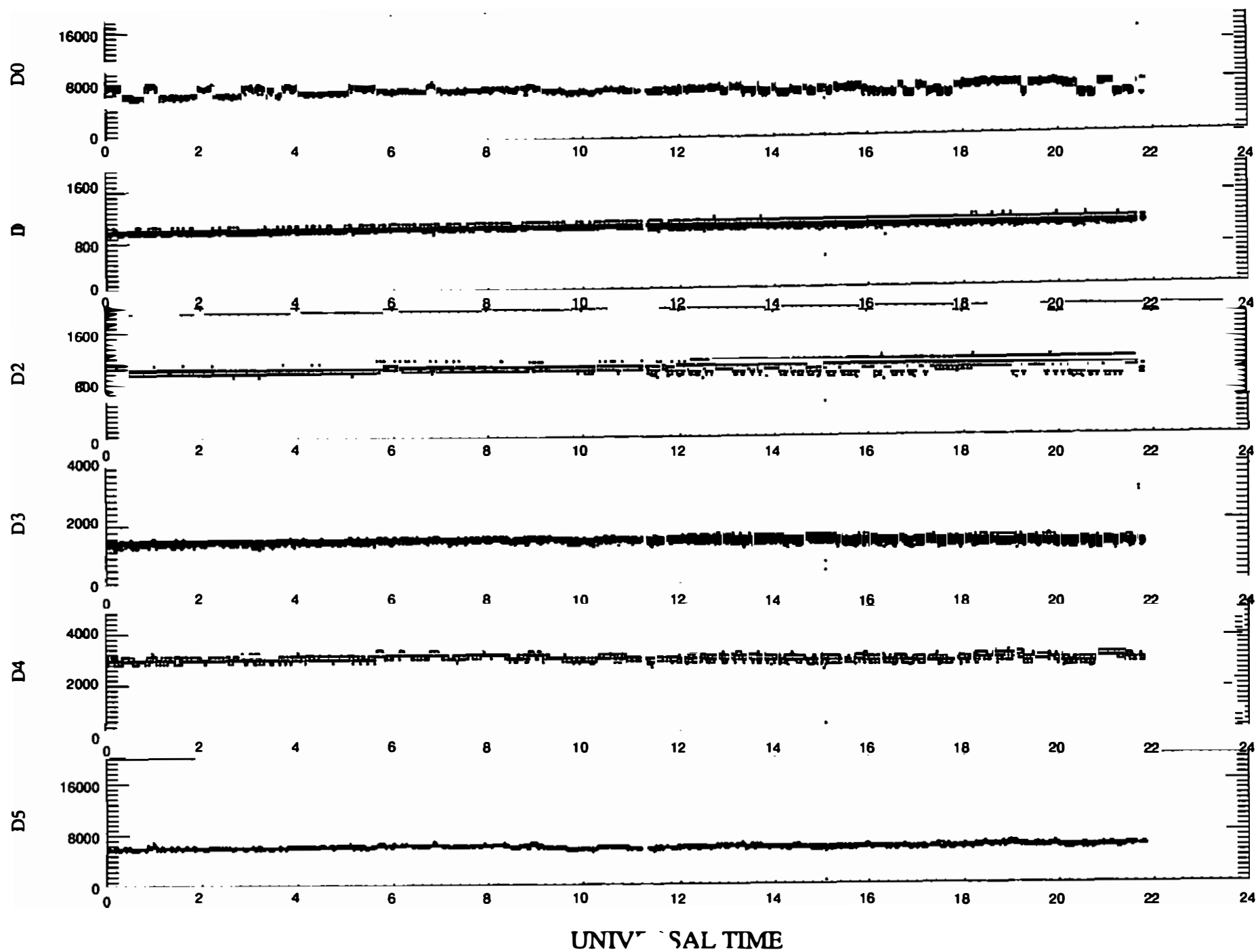
4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 332, year 1995 to day 332, year 1995
CALIBRATION DATA INCLUDED

4/1/96





From WOODSP@SSLLES.MSFC.NASA.GOV Thu Nov 30 06:47 PST 1995
From: WOODSP@SSLLES.MSFC.NASA.GOV
Date: Thu, 30 Nov 1995 8:45:52 -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.: 3928

TIME: TJD=0050 SECONDS=49195

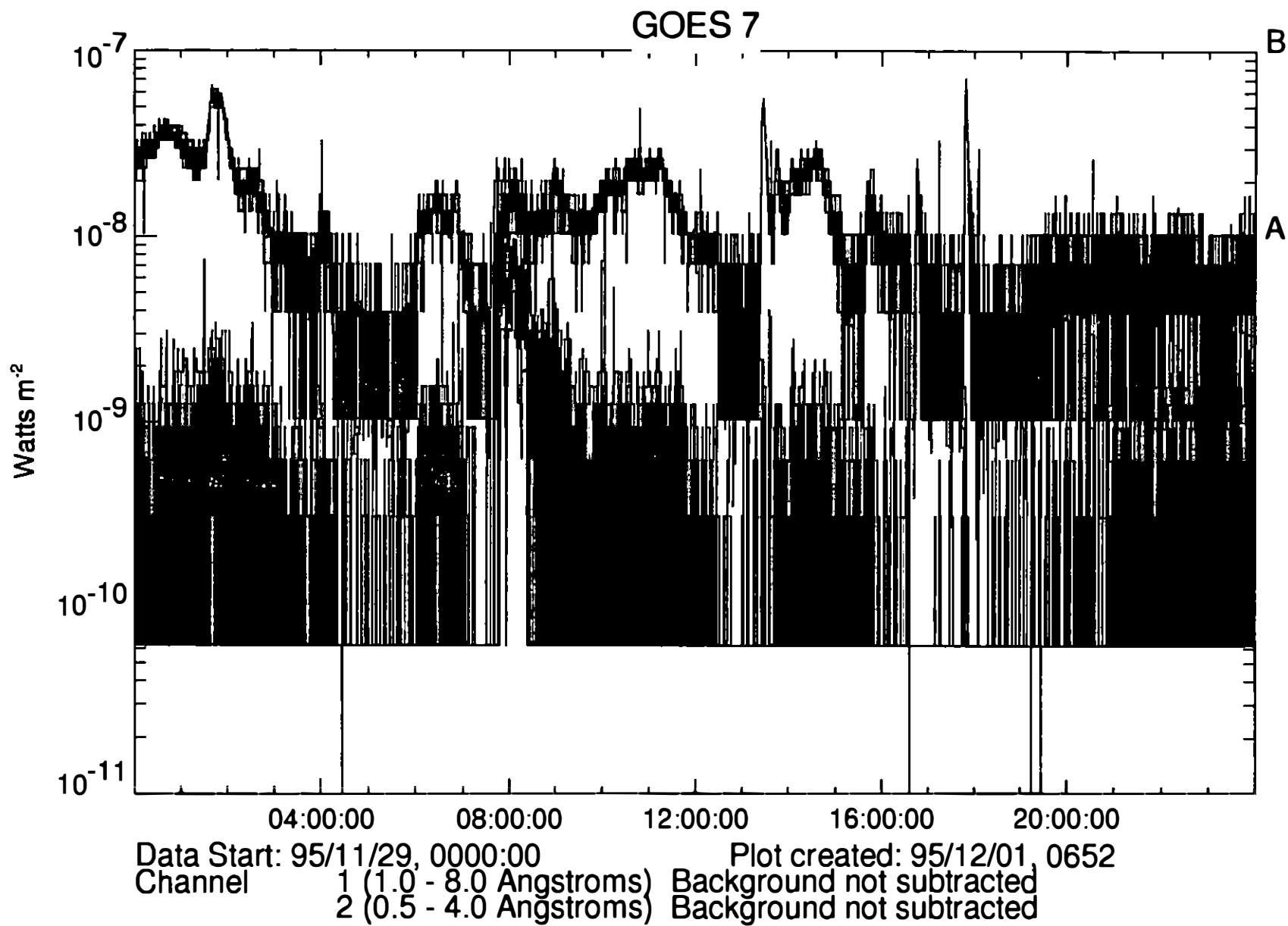
TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

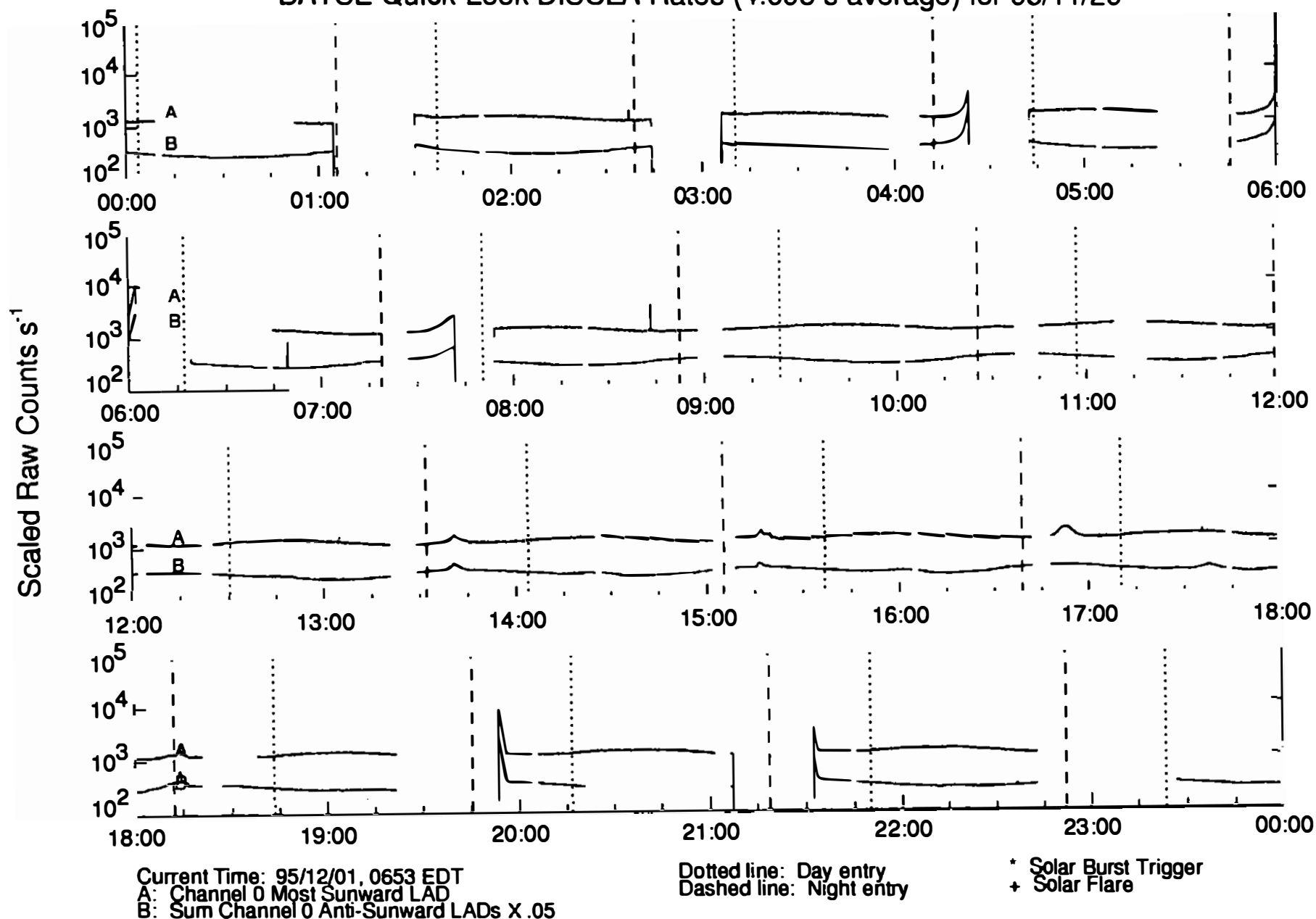
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
PARTICLE EVENT.

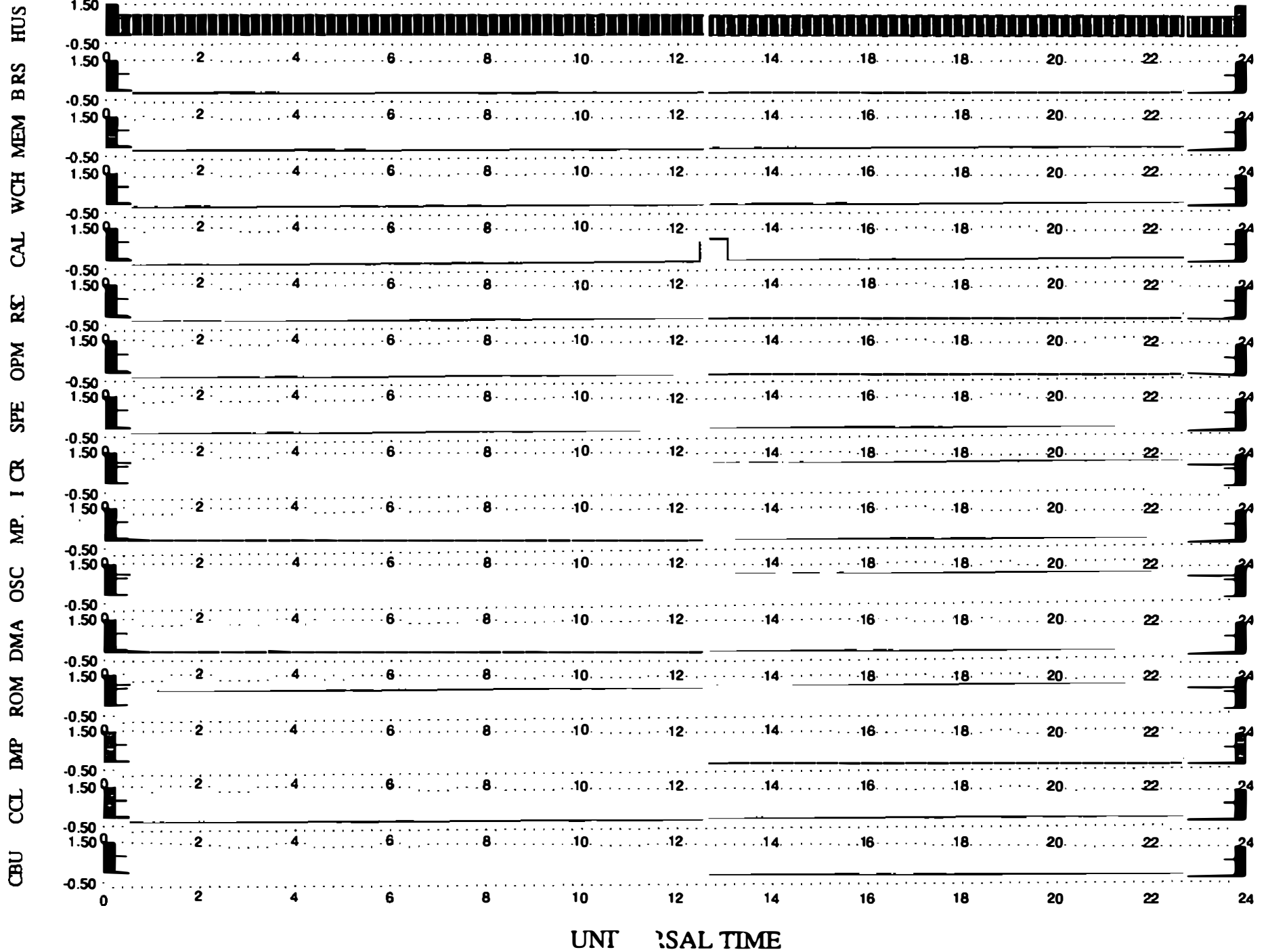


BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/11/29



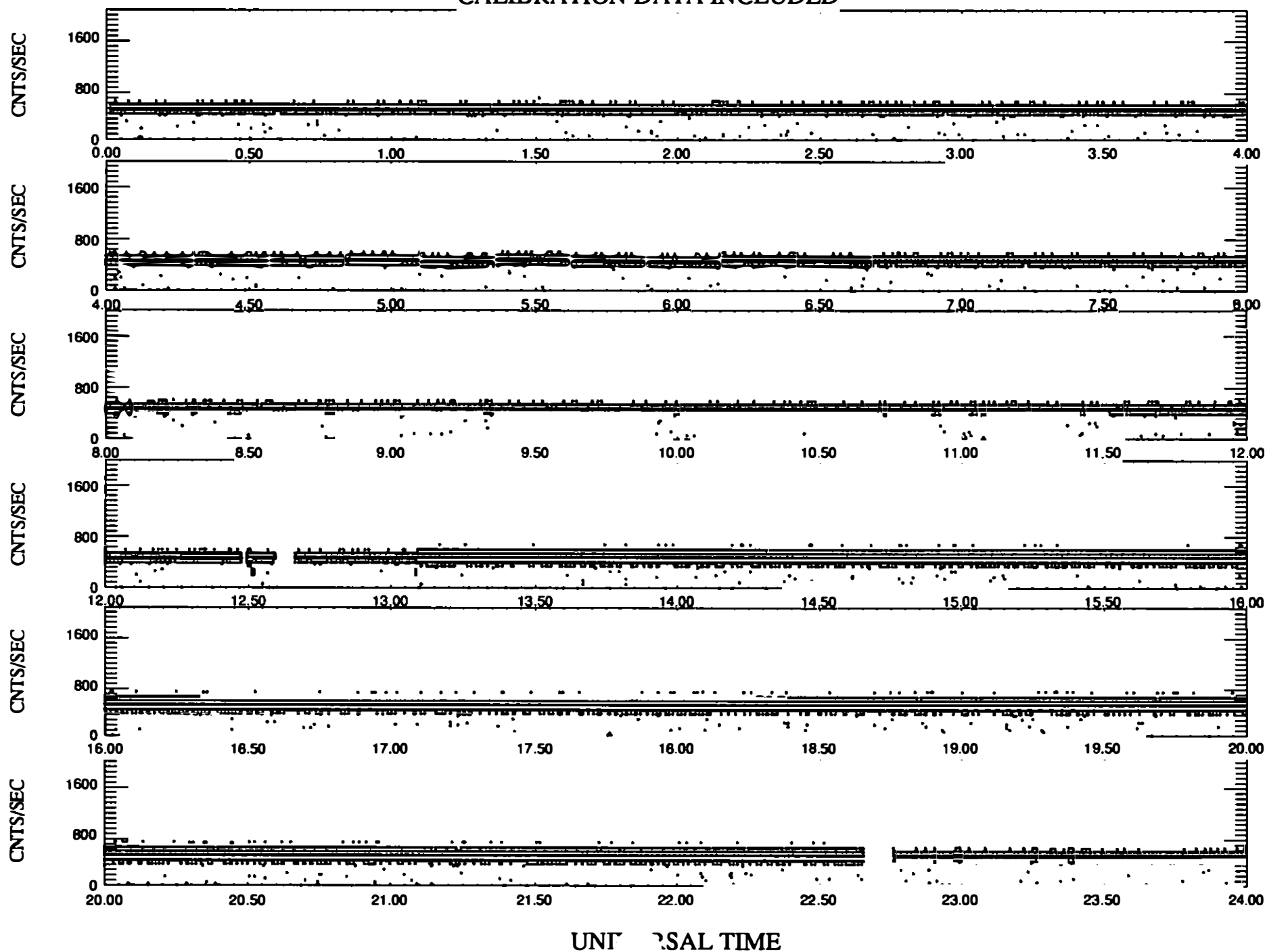
HUS MODES EDR day 333, year 1995 to day 333, year 1995 NO BURST (8)

4/1/96



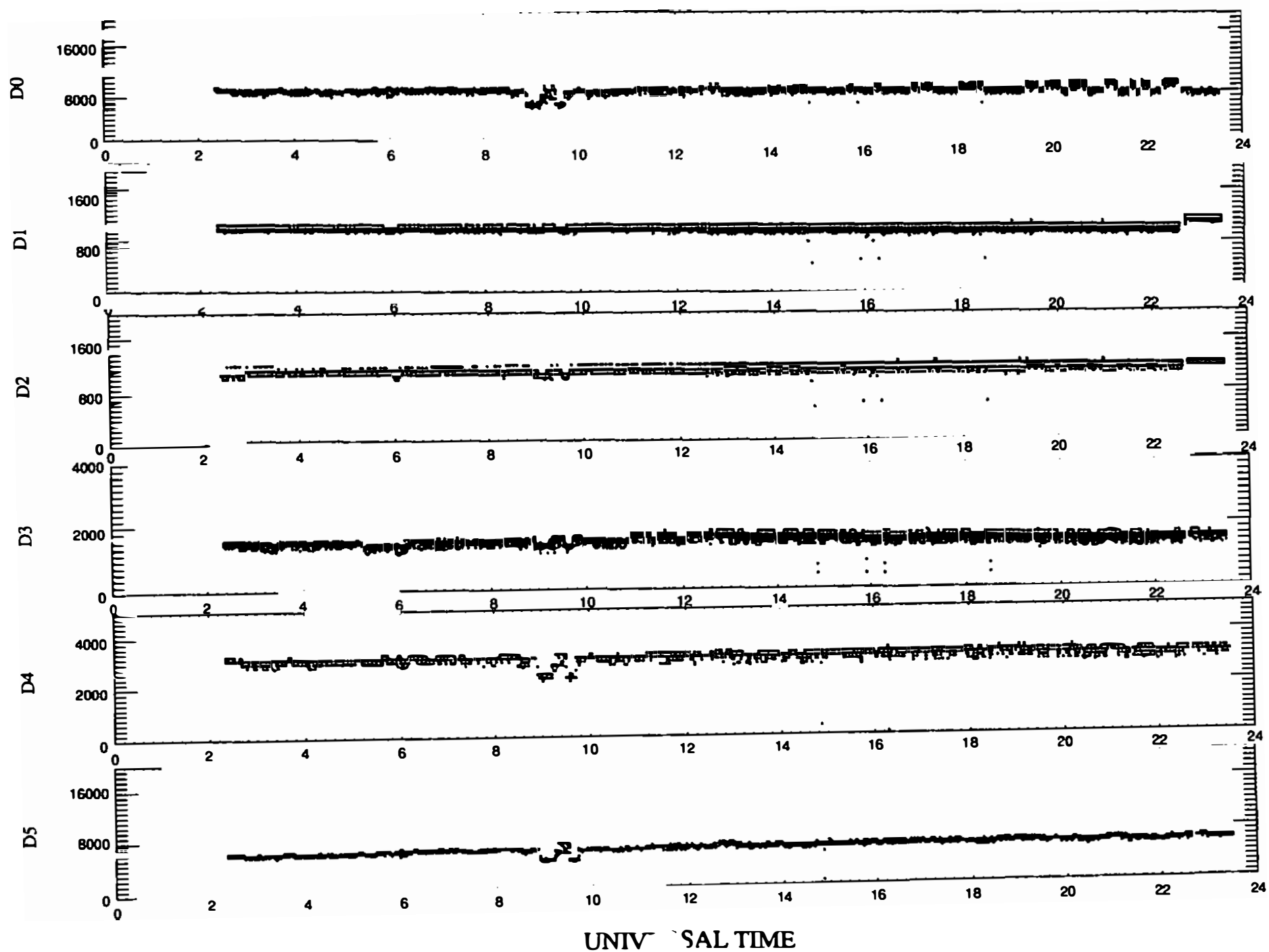
HUS 2A, MODE 1, NOT AVERAGED EDR day 333, year 1995 to day 333, year 1995
CALIBRATION DATA INCLUDED

4/1/96

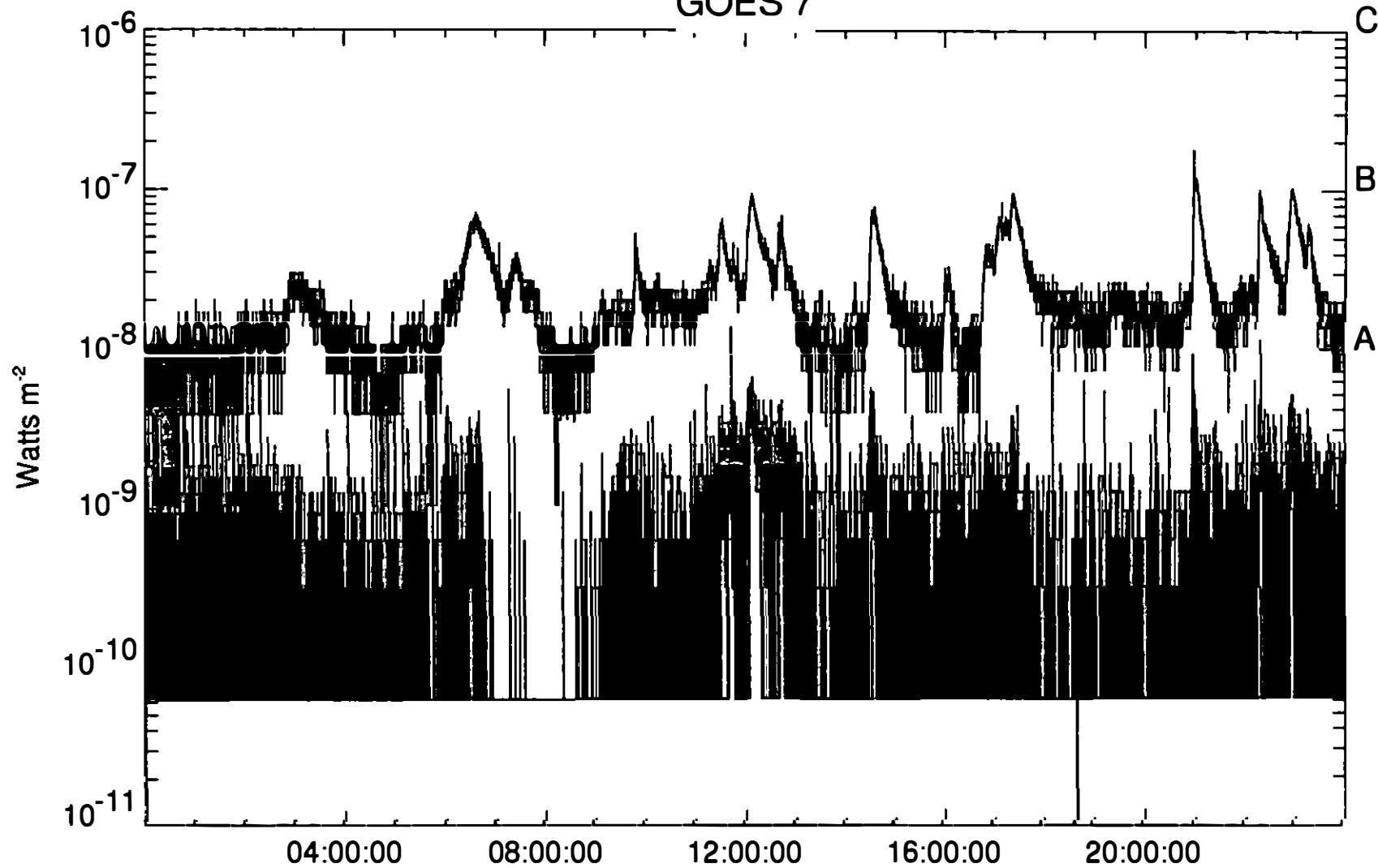


HUS 2B COUNTS / SEC QEDR day 333, year 1995 to day 333, year 1995

11/30/95



GOES 7

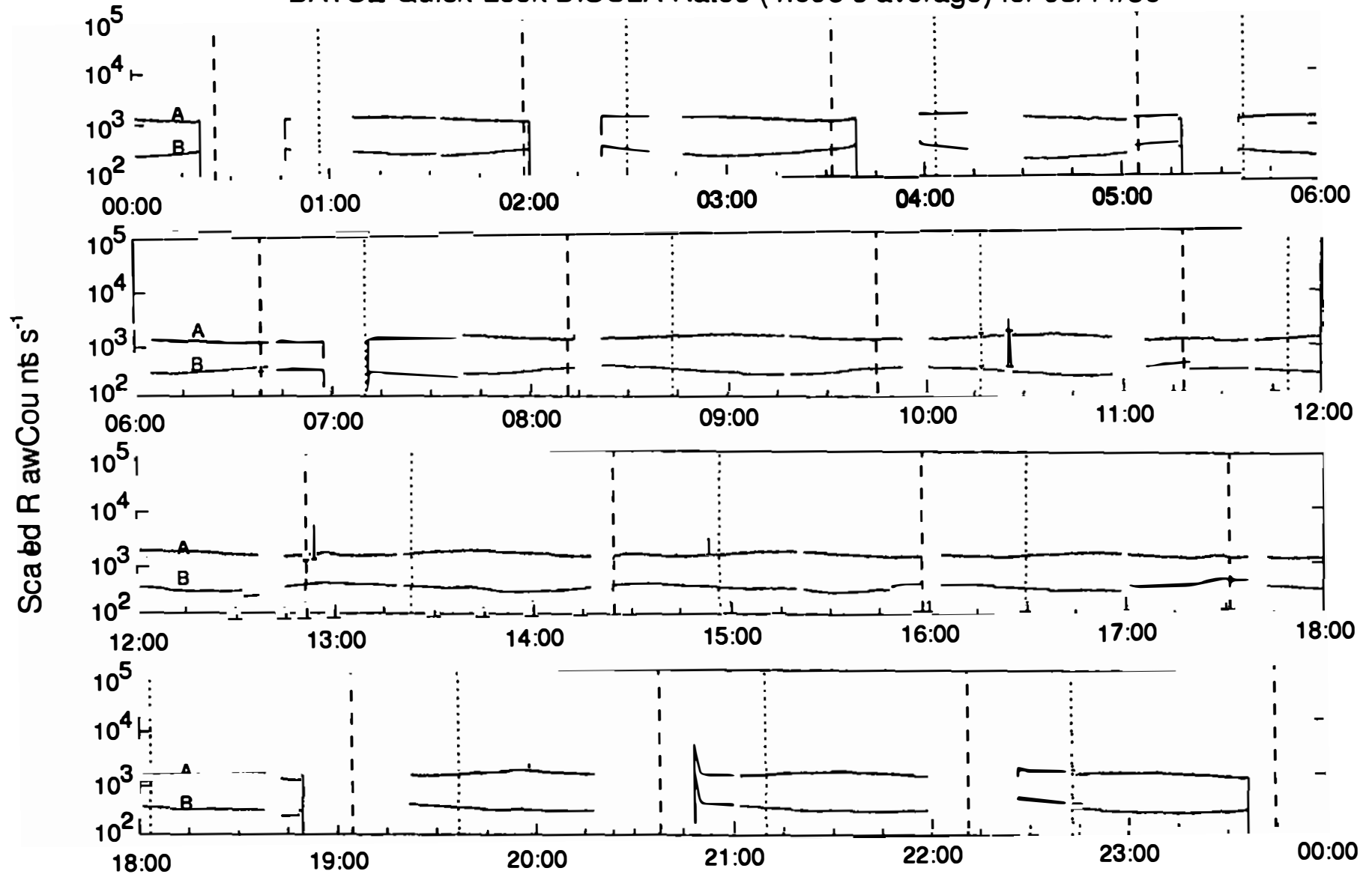


Data Start: 95/11/30, 0000:01

Plot created: 95/12/02, 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 95/11/30



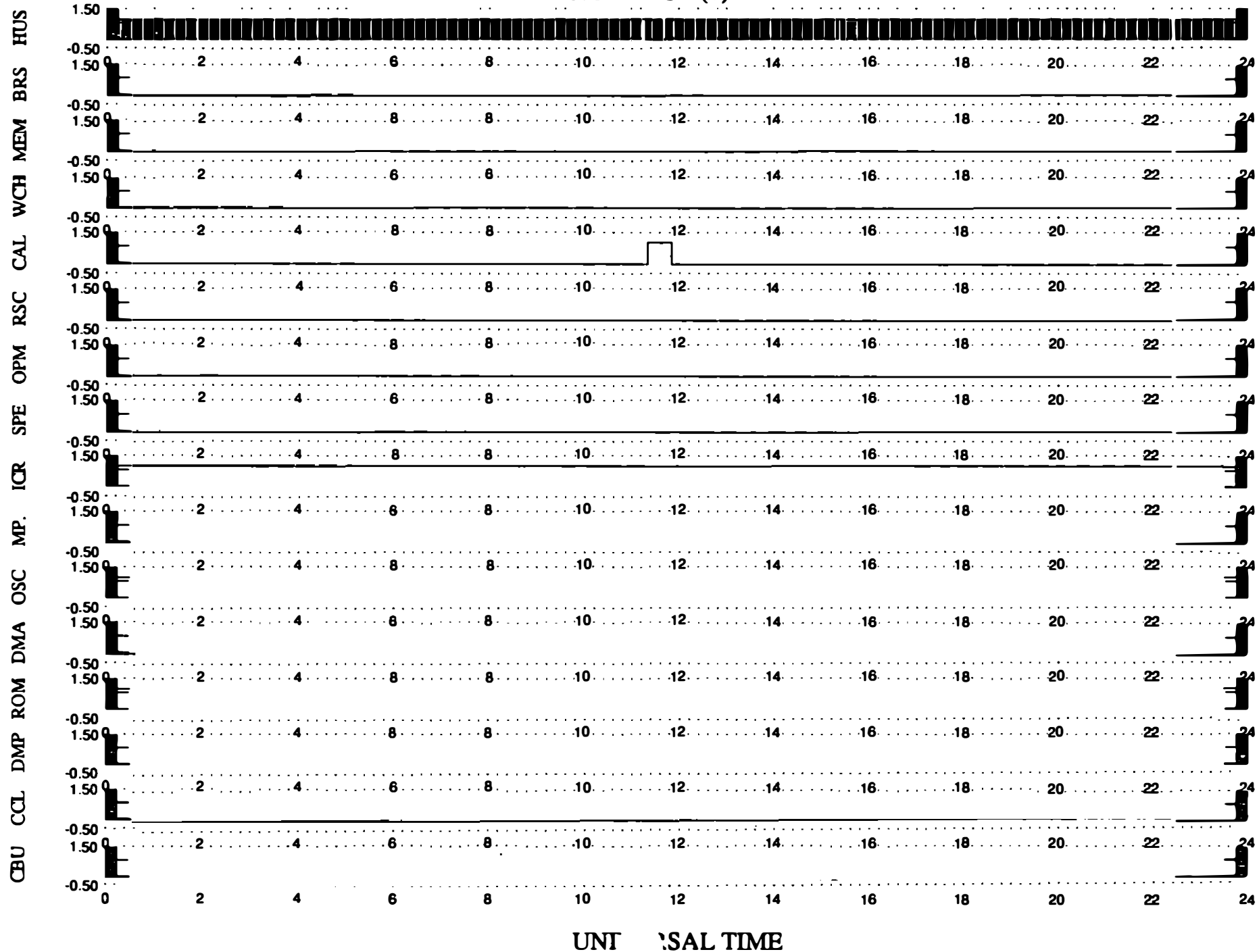
Current Time: 95/12/02, 0658 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

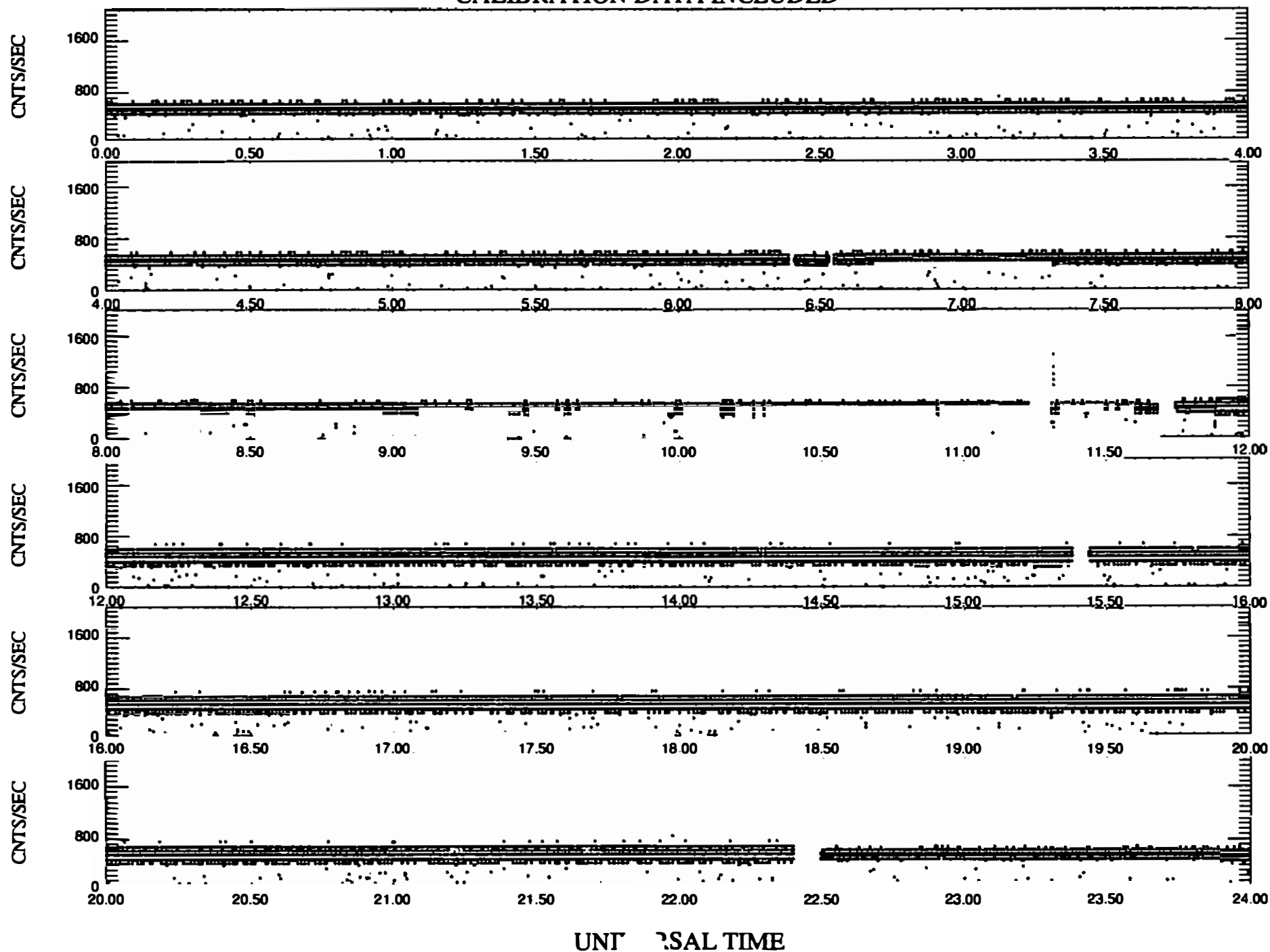
HUS MODES EDR day 334, year 1995 to day 334, year 1995
NO BURST (8)

4/1/96



HUS 2A, MODE 1, NOT AVERAGED EDR day 334, year 1995 to day 334, year 1995
CALIBRATION DATA INCLUDED

4/1/96



HUS 2B COUNTS / SEC QEDR day 334, year 1995 to day 334, year 1995

12/4/95

