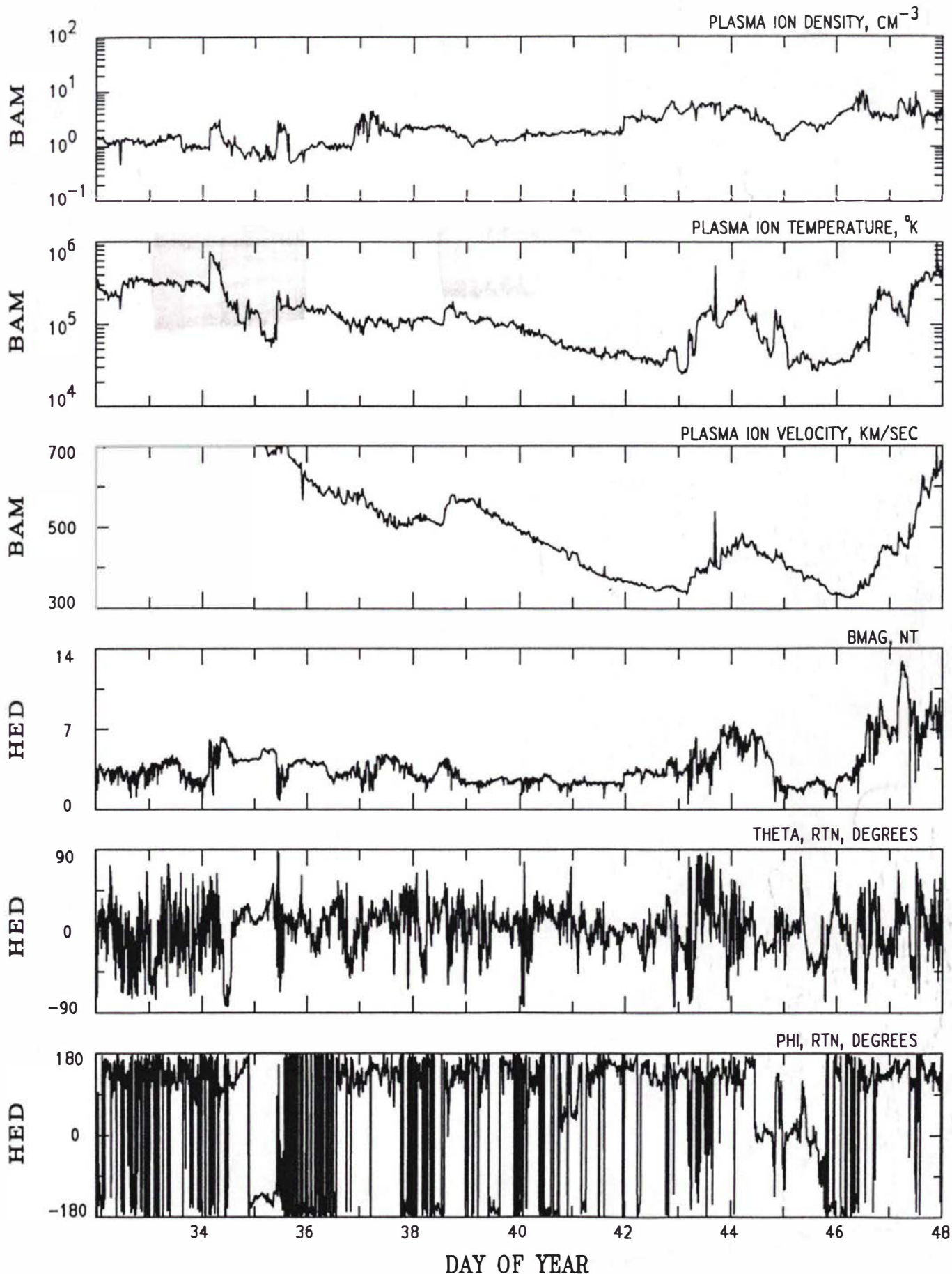


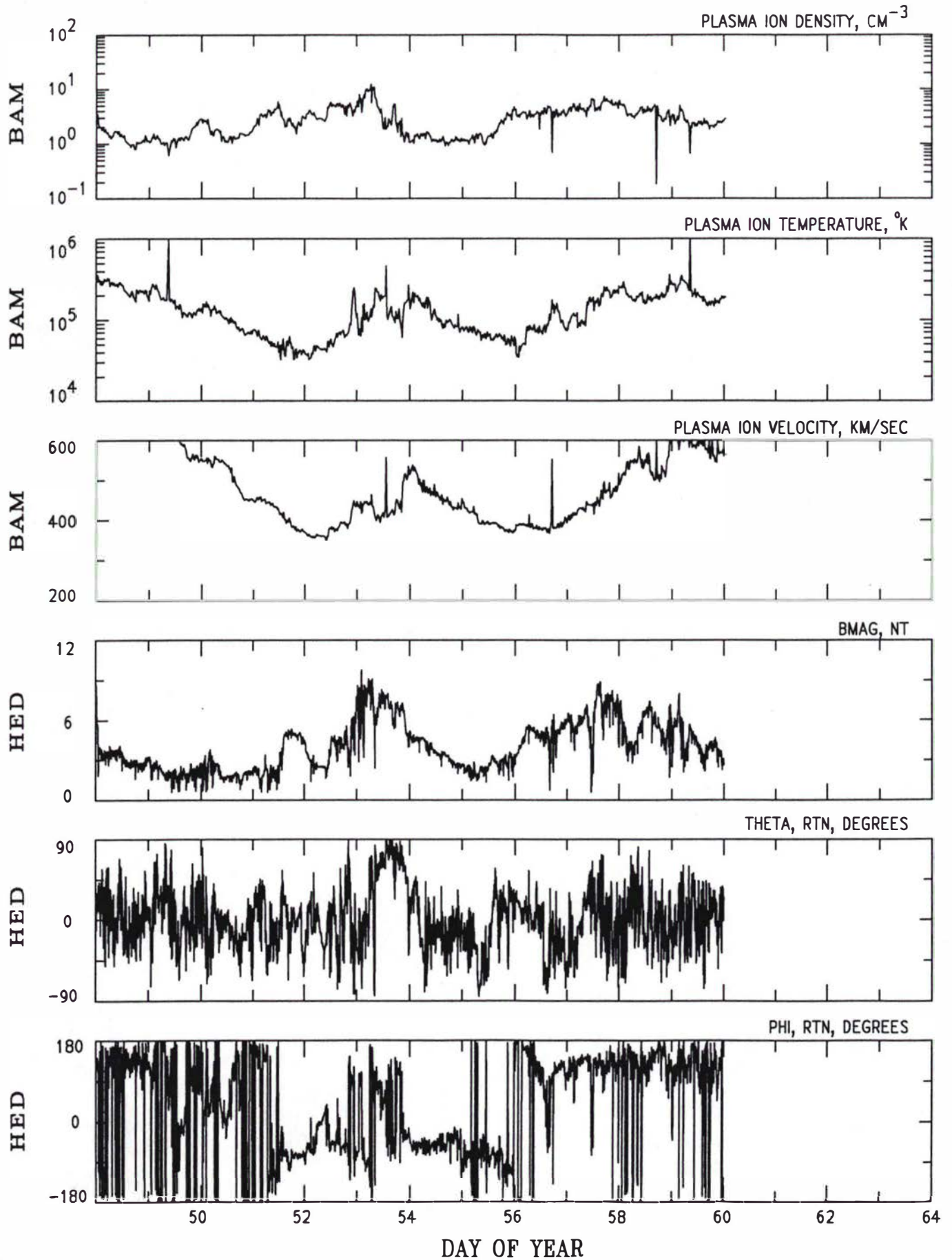
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

95 032 FEB 1 00:00:00.000 - 95 048 FEB 17 00:00:00.000



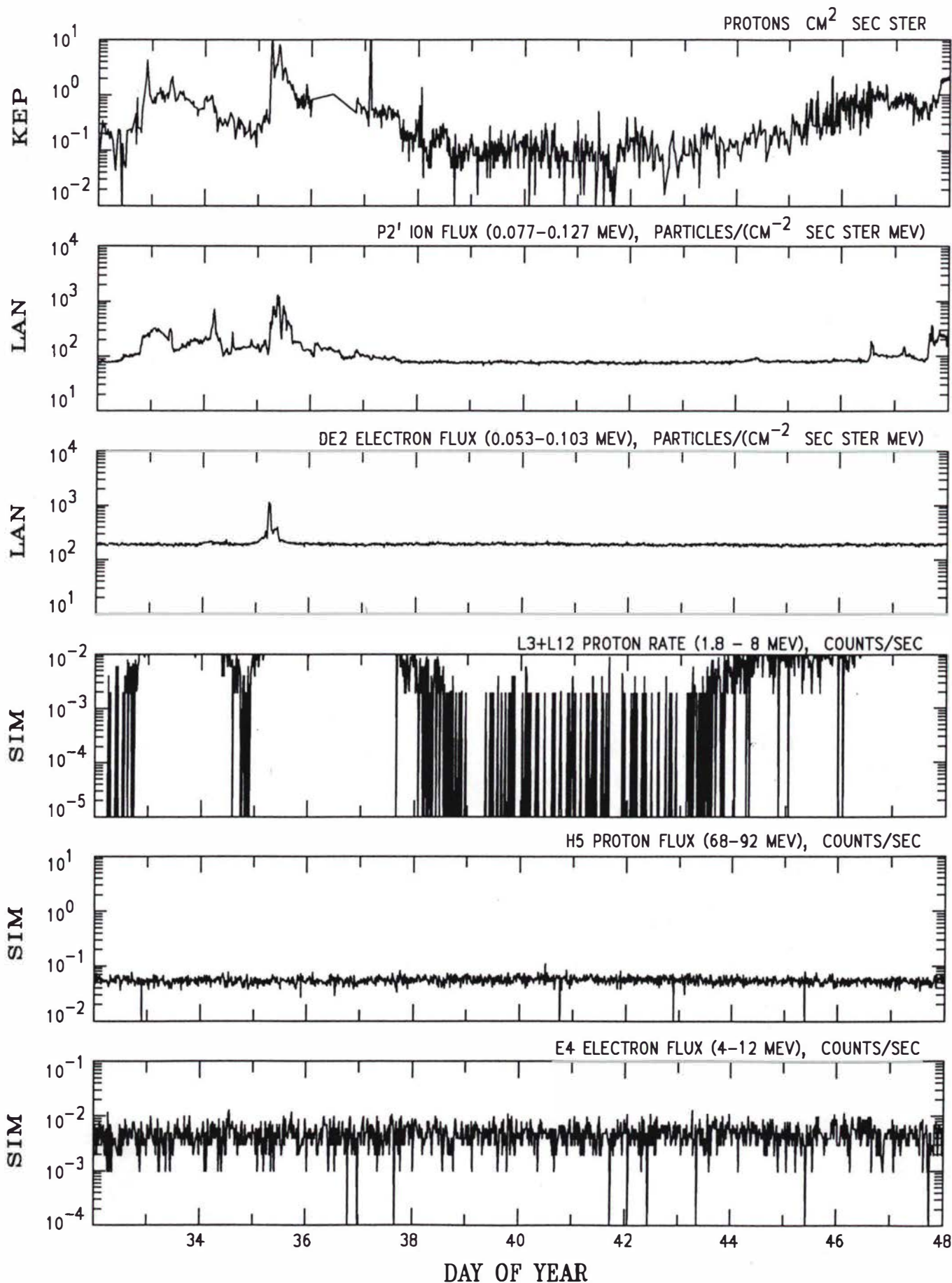
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

95 048 FEB 17 00:00:00.000 - 95 064 MAR 5 00:00:00.000



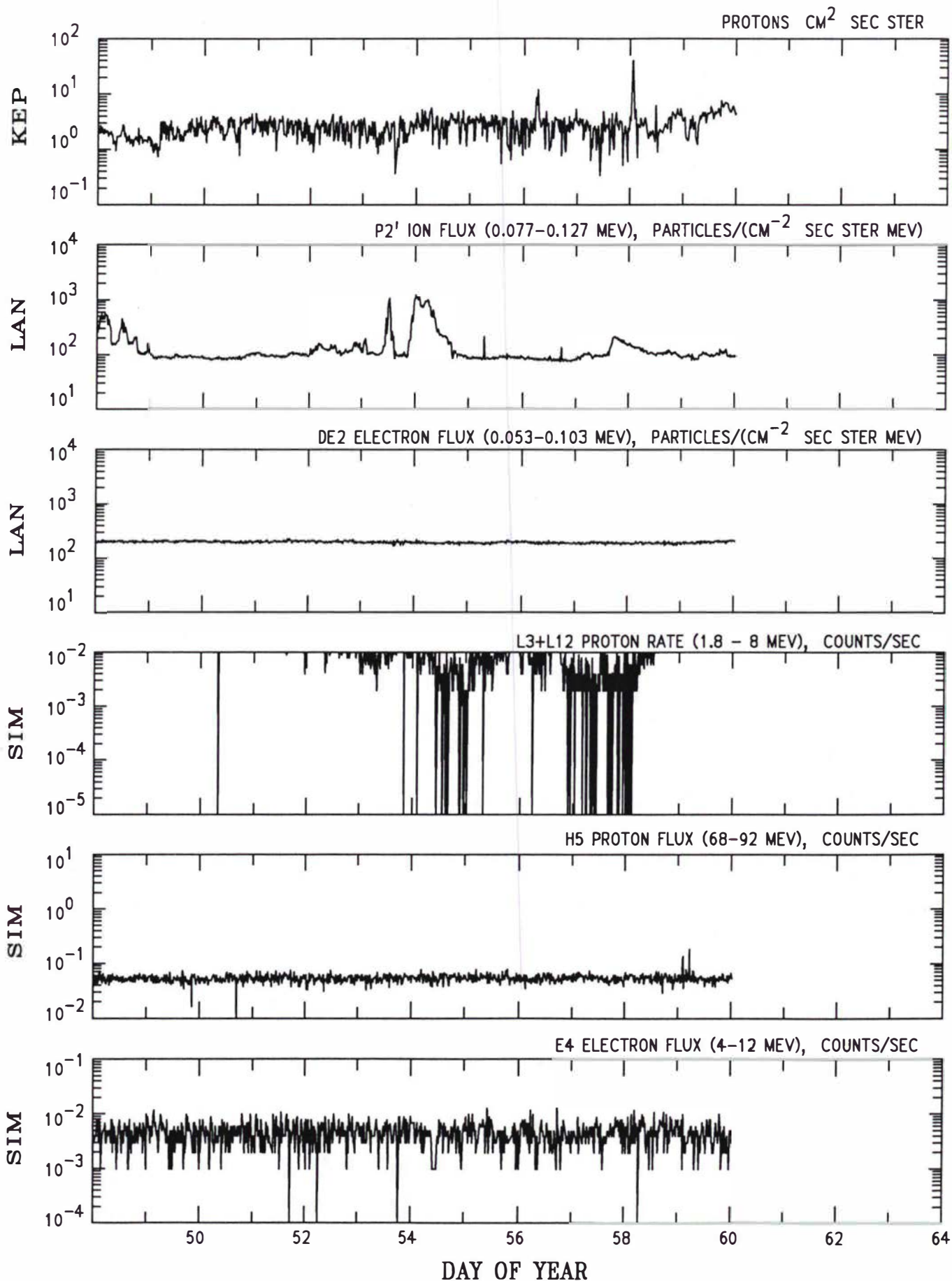
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

95 032 FEB 1 00:00:00.000 - 95 048 FEB 17 00:00:00.000



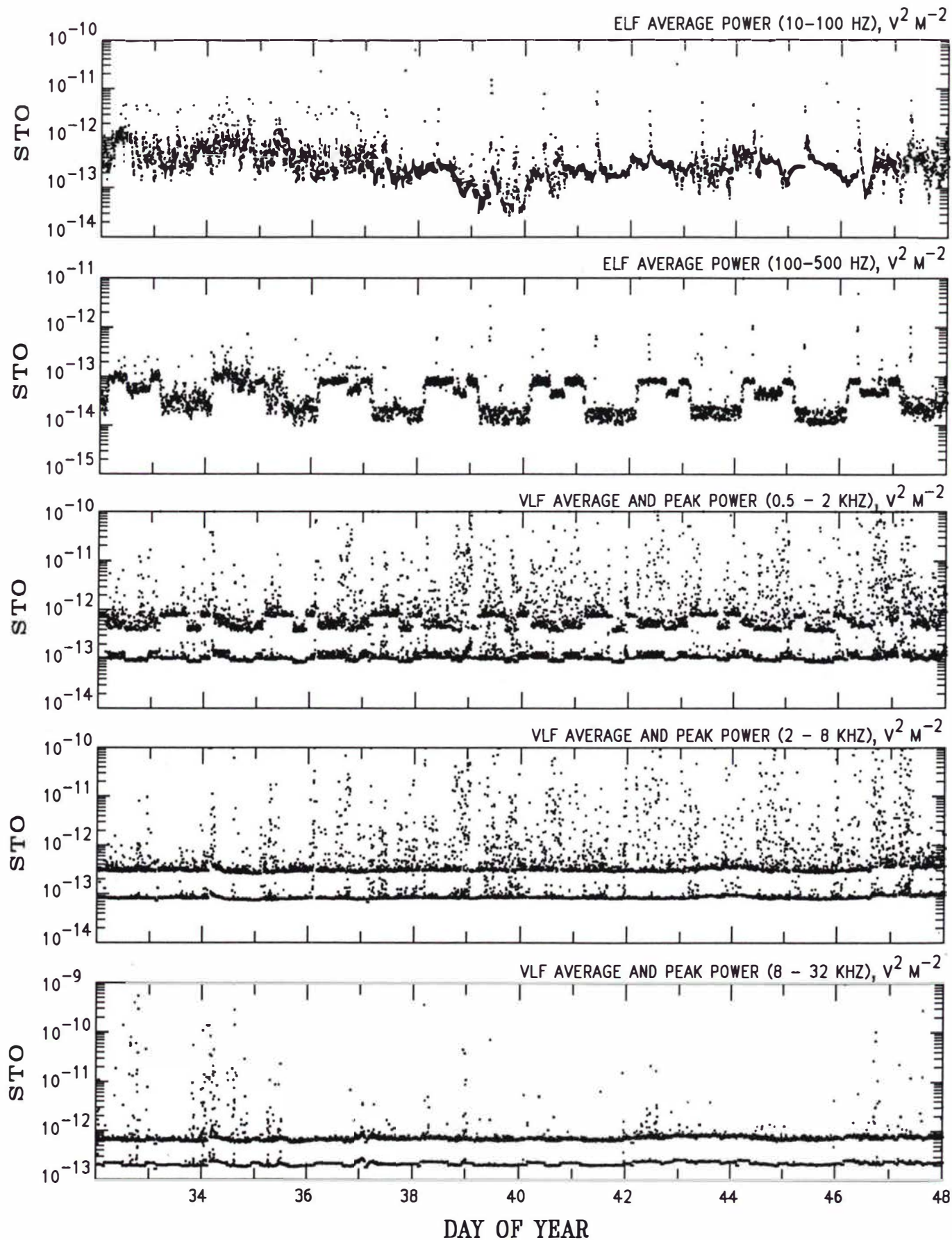
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

95 048 FEB 17 00:00:00.000 - 95 064 MAR 5 00:00:00.000



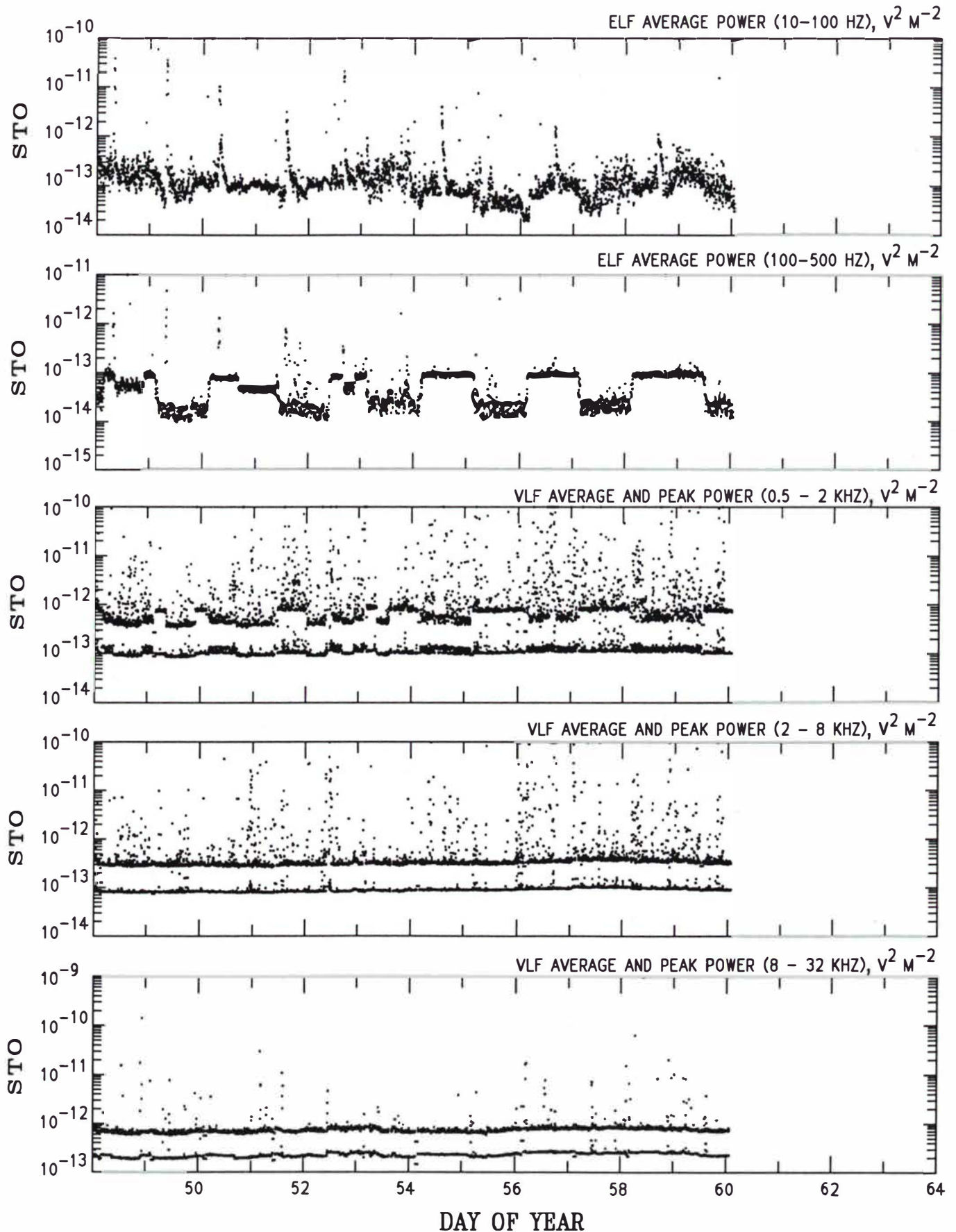
ULYSSES CDR - PLASMA WAVE

95 032 FEB 1 00:00:00.000 - 95 048 FEB 17 00:00:00.000



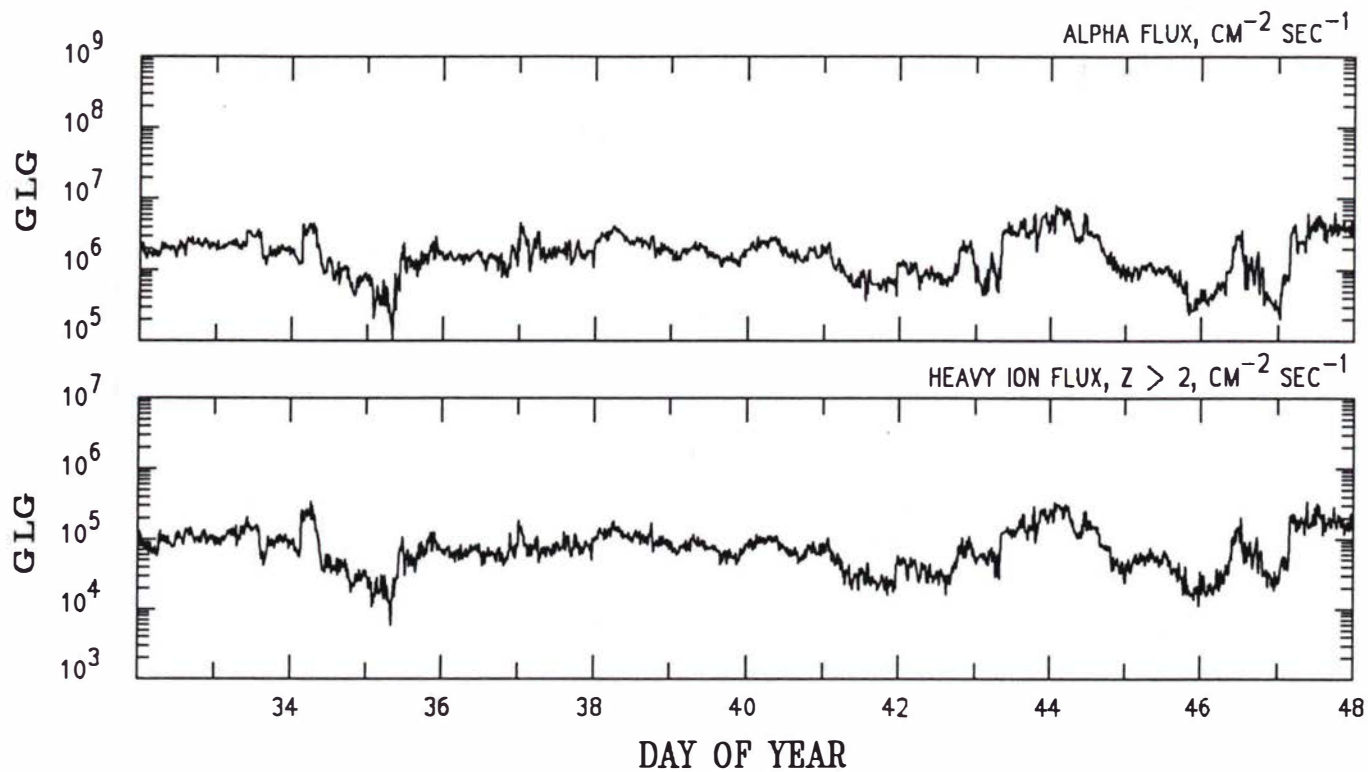
ULYSSES CDR - PLASMA WAVE

95 048 FEB 17 00:00:00.000 - 95 064 MAR 5 00:00:00.000



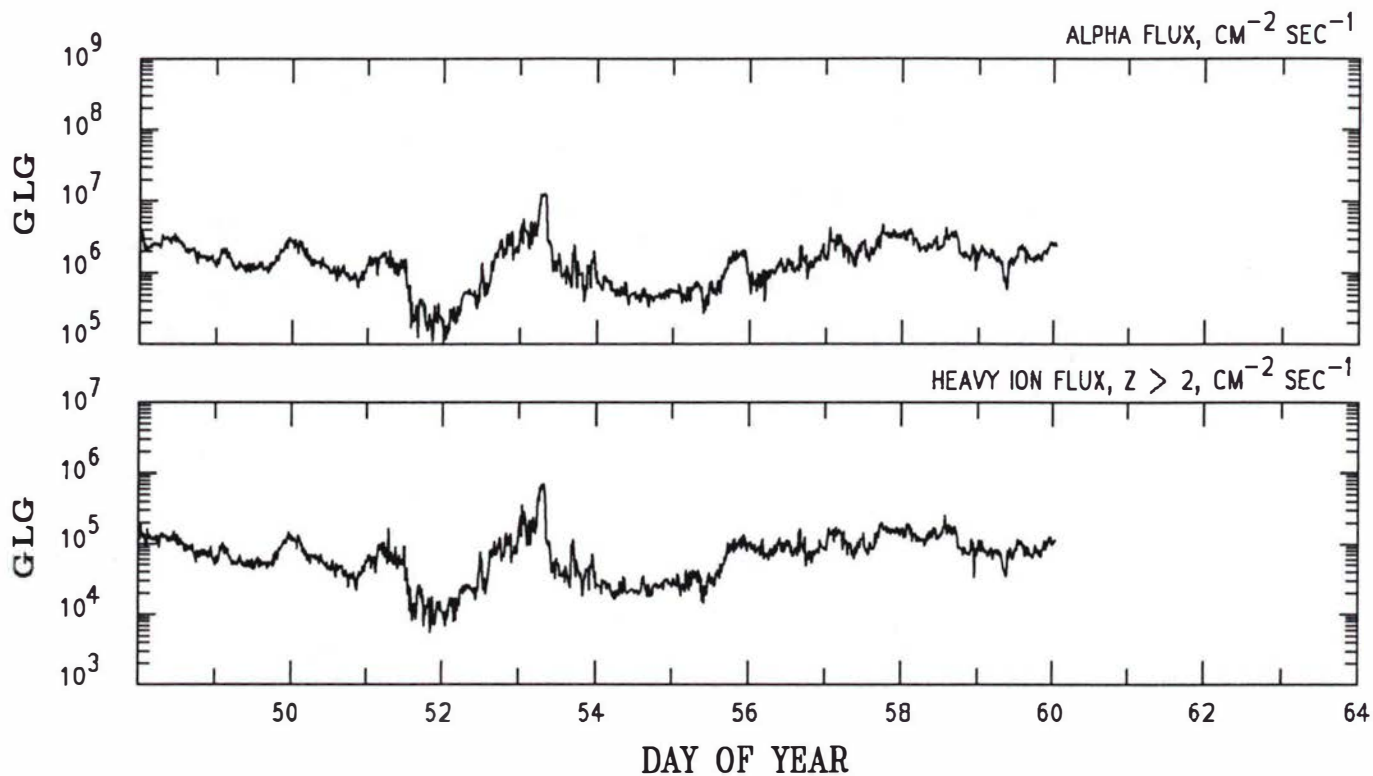
ULYSSES CDR - SOLAR WIND ION COMPOSITION

95 032 FEB 1 00:00:00.000 - 95 048 FEB 17 00:00:00.000



ULYSSES CDR - SOLAR WIND ION COMPOSITION

95 048 FEB 17 00:00:00.000 - 95 064 MAR 5 00:00:00.000



From DEAL@ssl.msfc.nasa.gov Fri Feb 3 09:24 PST 1995
Date: Fri, 3 Feb 1995 11:24:23 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3389

TIME: TJD=9749 SECONDS=03502

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=49.5 AZIMUTH=18.6 ERROR= DEGREES

COMMENTS:

SOLAR FLARE LASTING ~ 60 S. NOT VISIBLE ABOVE 300 KEV. GOES CLASSIFICATION C4.4.

From DEAL@ssl.msfc.nasa.gov Fri Feb 3 09:28 PST 1995
Date: Fri, 3 Feb 1995 11:28:09 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03390

TIME: TJD=9749 SECONDS=32603

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=42.2 AZIMUTH=25.8 ERROR= DEGREES

COMMENTS:

SOLAR FLARE LASTING ~ 160 S. NOT VISIBLE ABOVE 300 KEV. GOES CLASSIFICATION M1.0

From cline@tgrs.gsfc.nasa.gov Fri Feb 3 12:07 PST 1995
Date: Fri, 3 Feb 1995 12:07:00 +0800
Mime-Version: 1.0
To: KHURLEY@space6.ssl.berkeley.edu
From: cline@tgrs.gsfc.nasa.gov (T L Cline)
Subject: reply
Cc: TGRS::Butterworth@tgrs.gsfc.nasa.gov

KEVIN:

Paul Butterworth says:

Konus saw it - and triggered.

Single peak. Over in 5-6 seconds.

Trigger time 22:01:00.232.

TLC

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

Date: Aug 16 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?

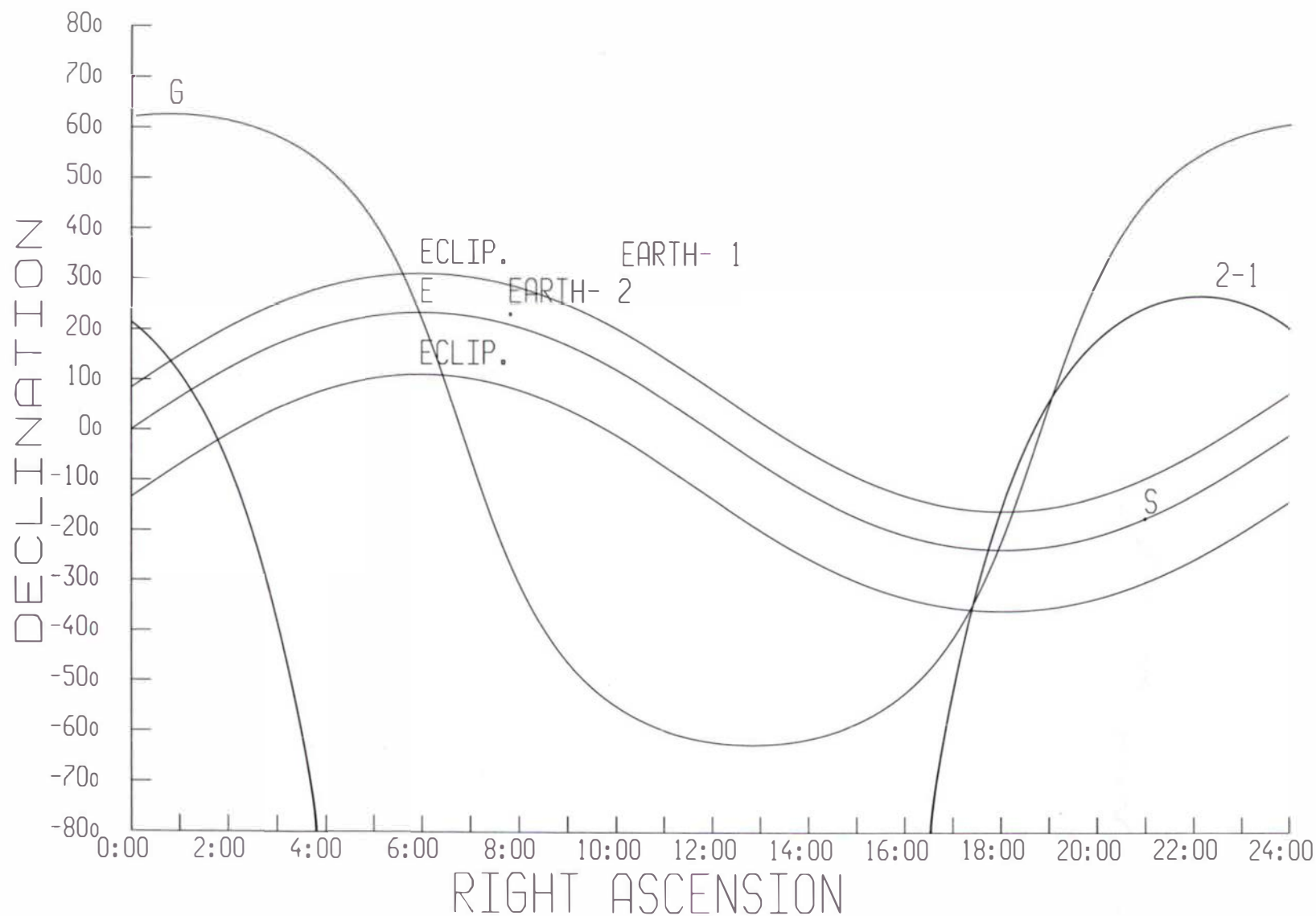
3. PVO Data

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

EVENT OF FEB 1, 1995 21:50

16/08/2011

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



KONUS 19950201 78668

ULYSSES RT

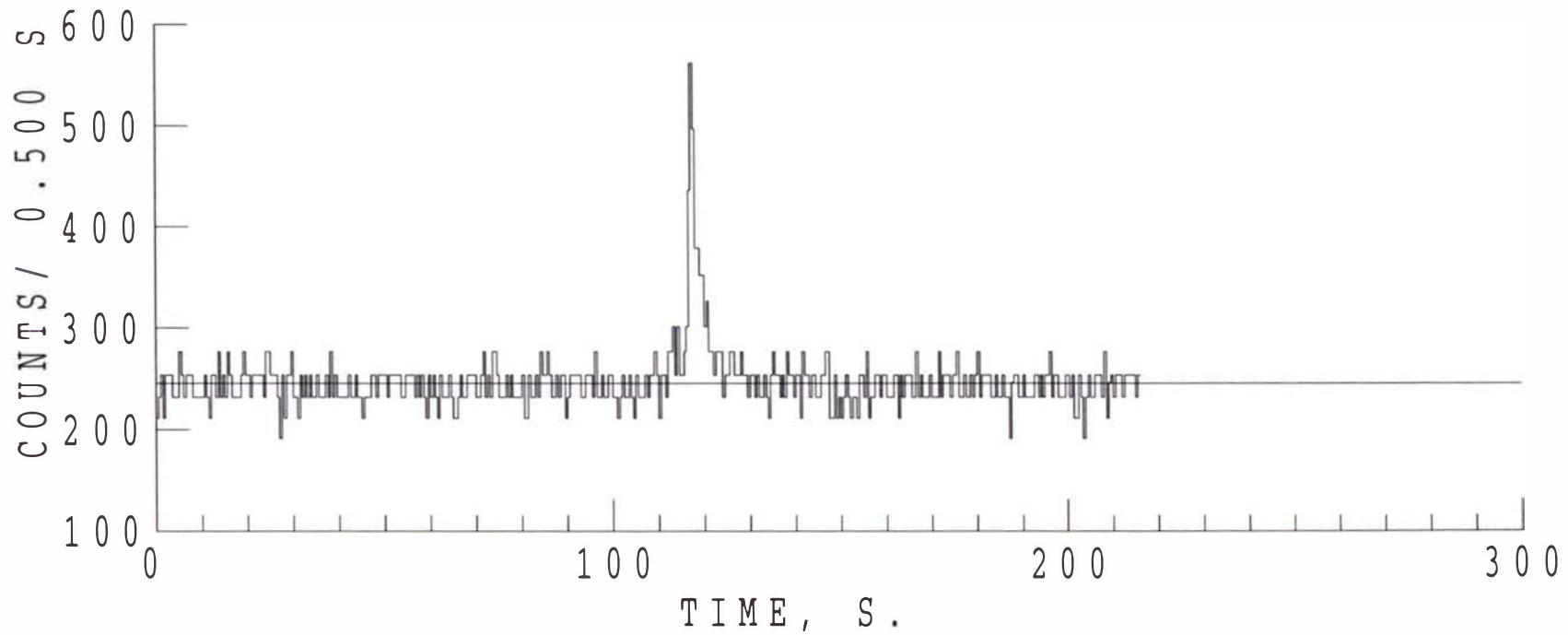
12 / 08 / 11

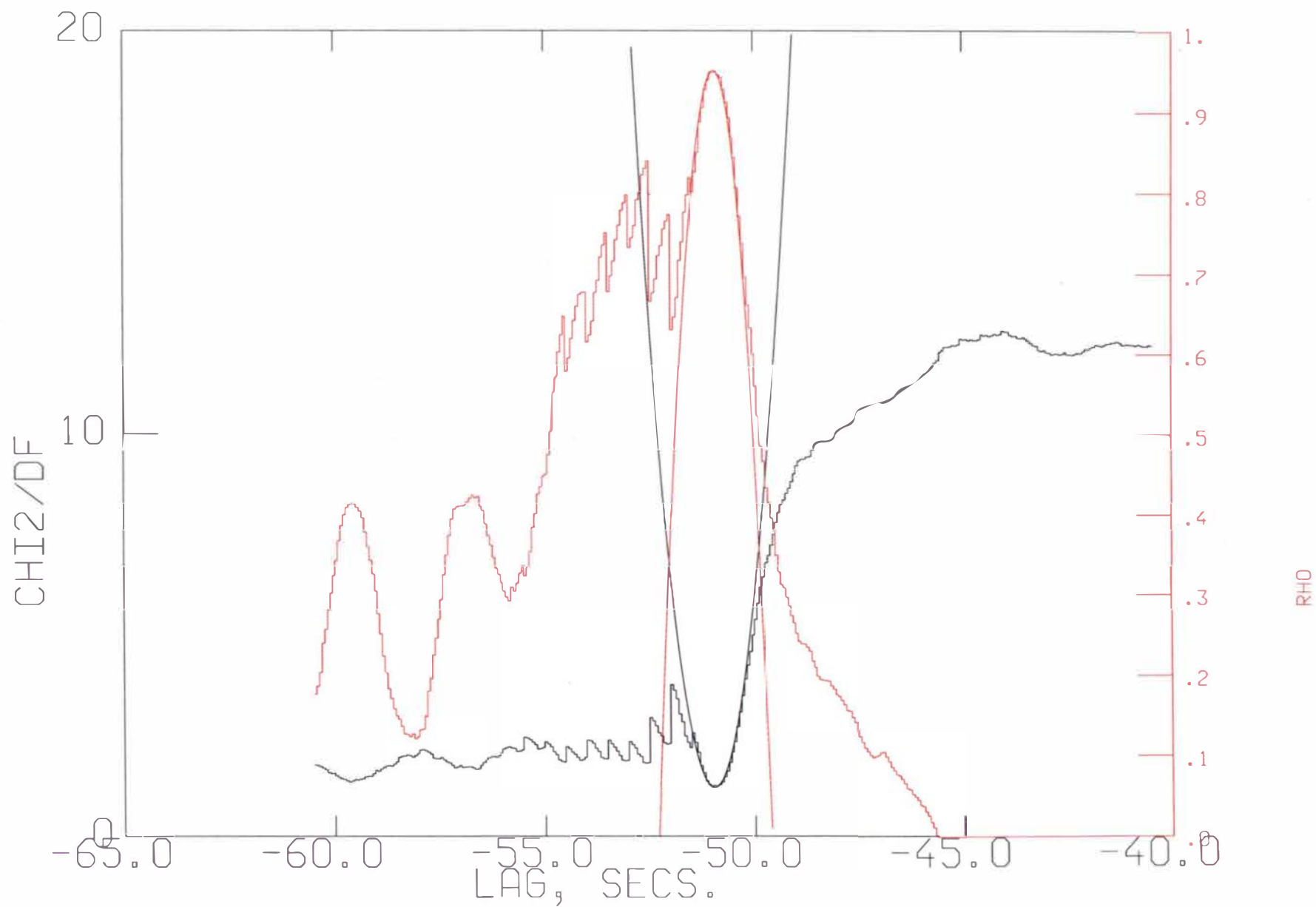
01/02/95 78552.047 s

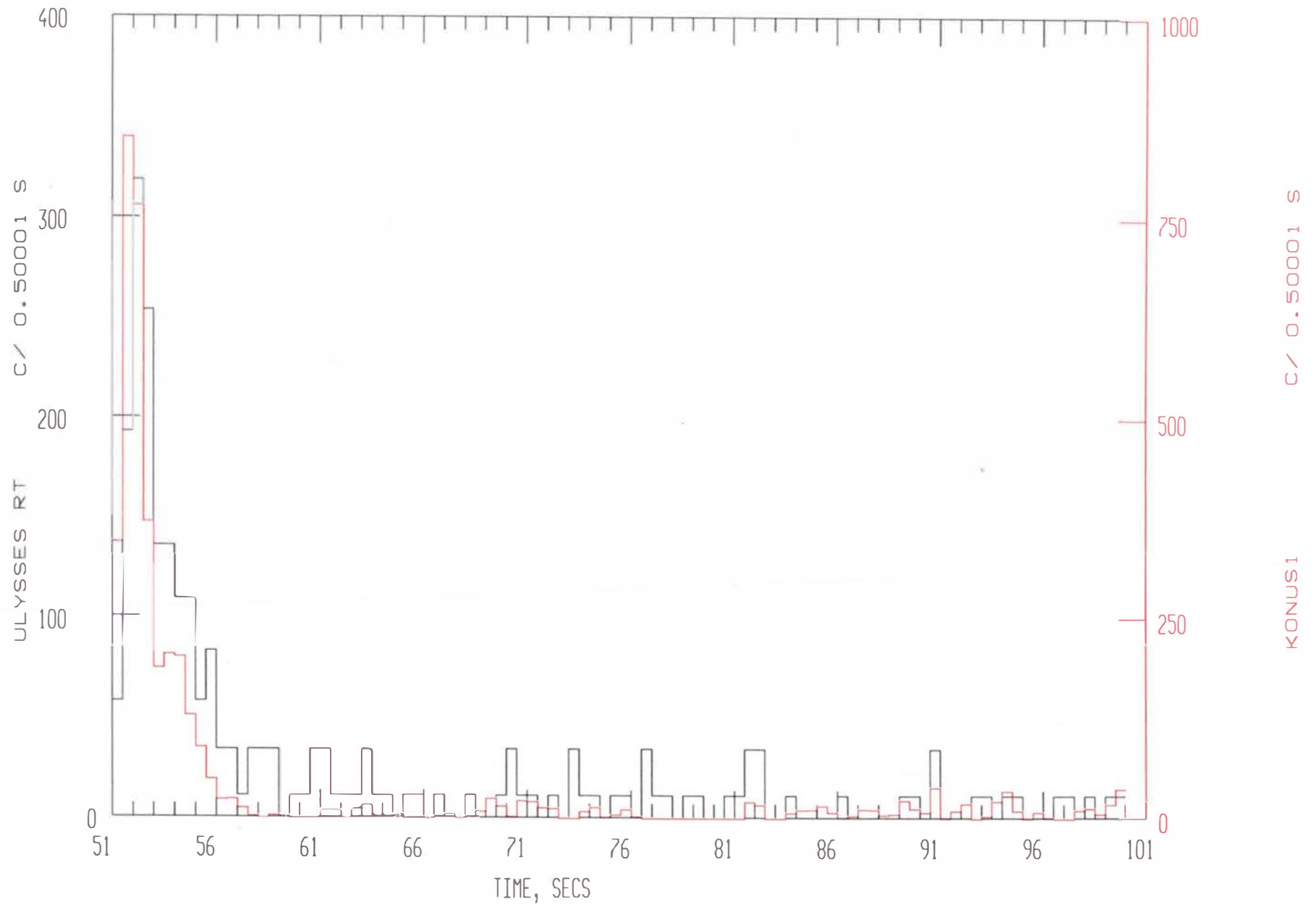
0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



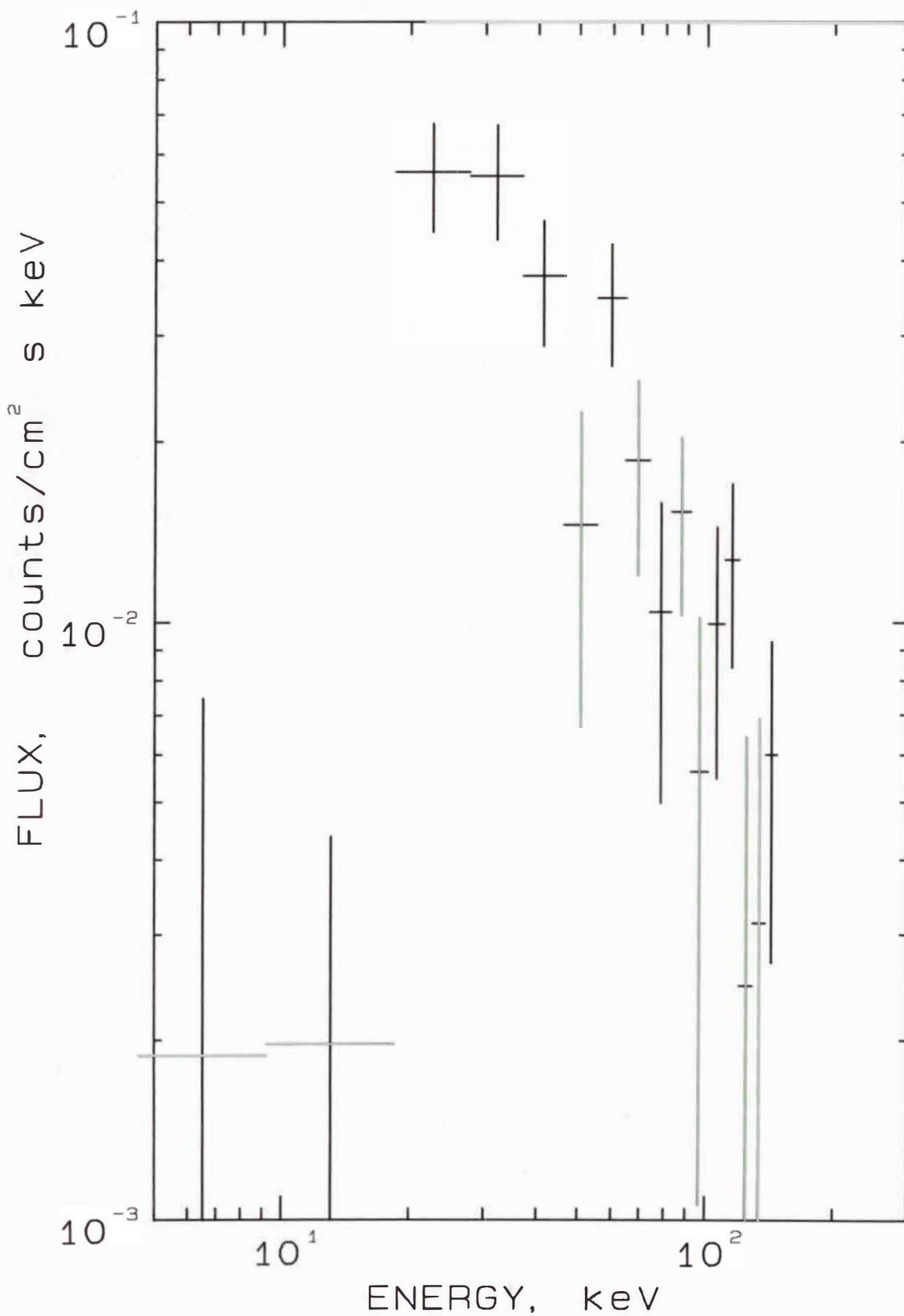




ULYSSES 01/02/95 78668.913

29/10/97

SPECTRUM INTEGRATED OVER 30.7 SECONDS, INTERVALS 2 TO 25



ULYSSES 01/02/95 78668.913 BURST SPECTRAL COUNT RATES

4- 18 keV

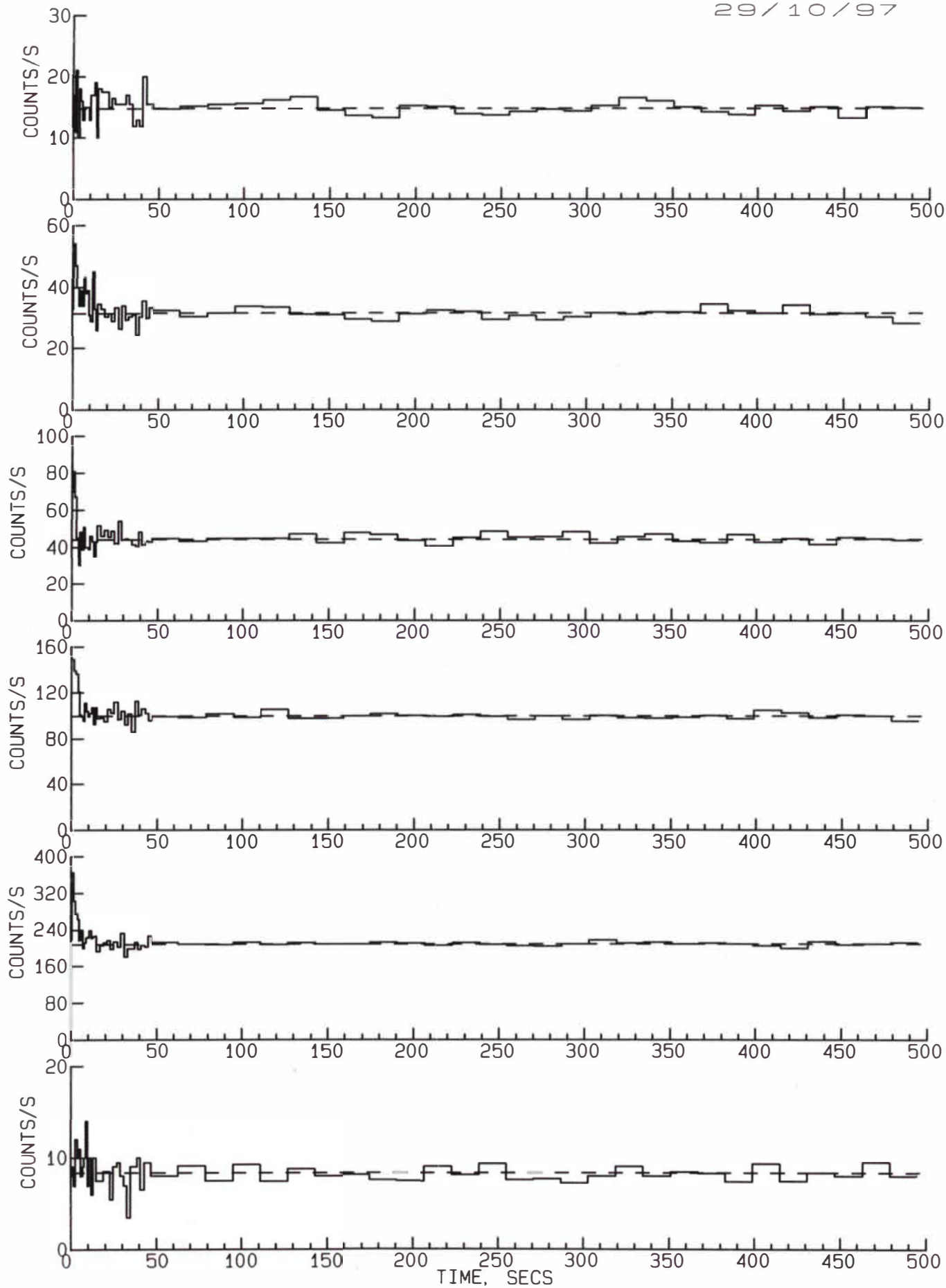
18- 46 keV

46- 73 keV

73-101 keV

101-129 keV

129-147 keV



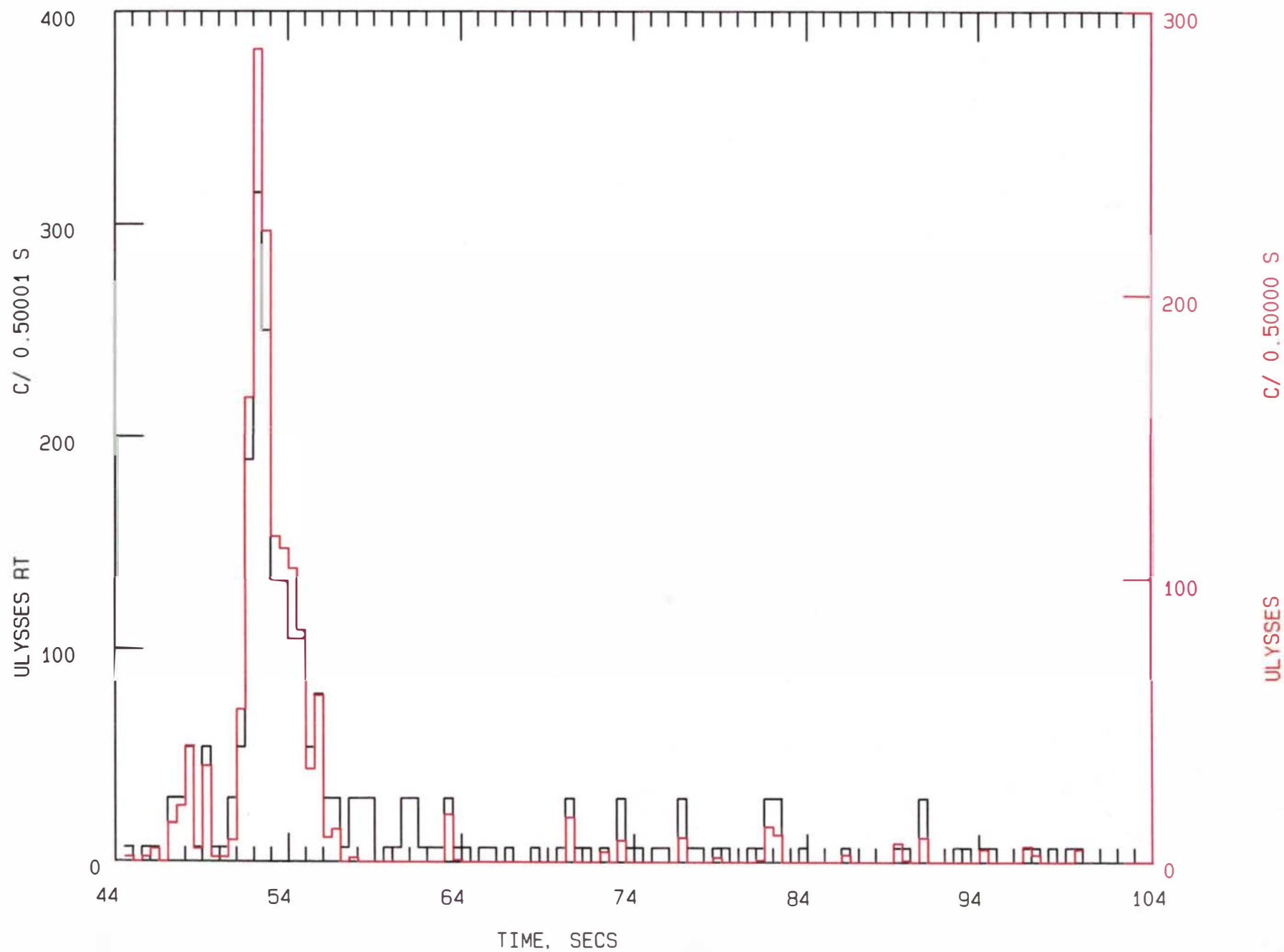
ULYSSES RT-ULYSSES

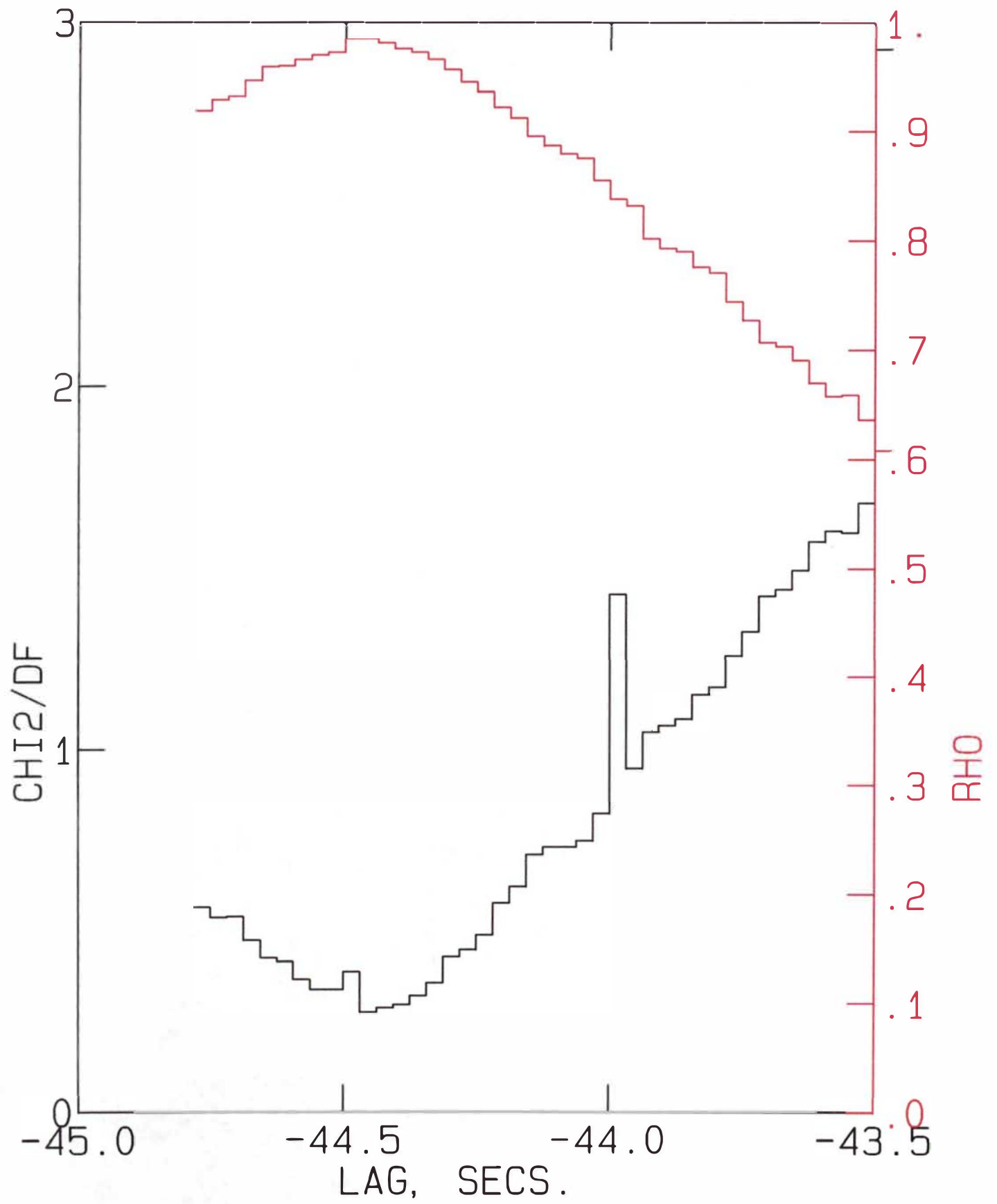
CORRELATION

1/ 2/95

78616.941

29/10/97





ULYSSES

01/02/95

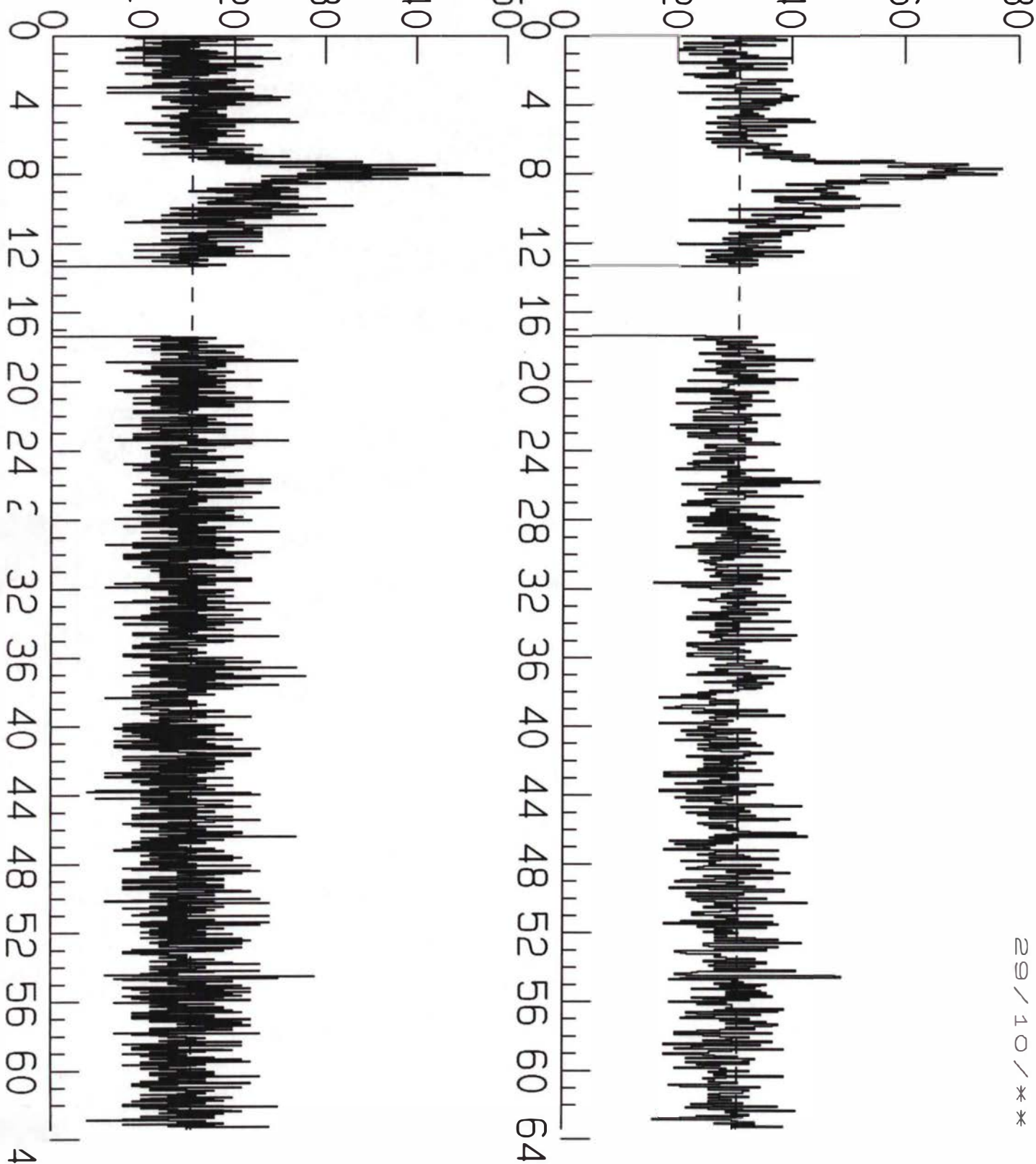
Ttrig=77836.801

22- 147 keV

29 / 10 / **

COUNTS/0.031 S

COUNTS/0.062 S



ULYSSES RT

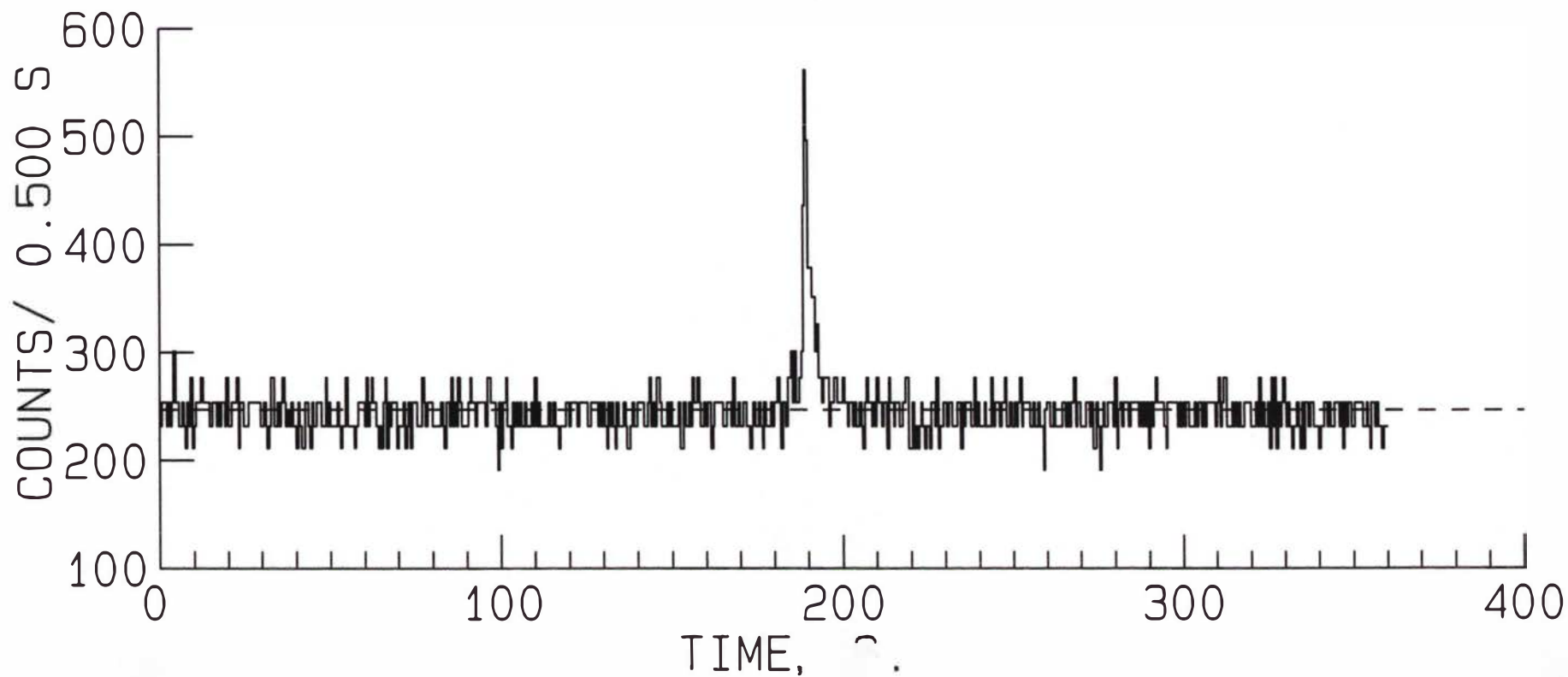
29/10/97

1/ 2/95 78480.045 s

22- 147 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



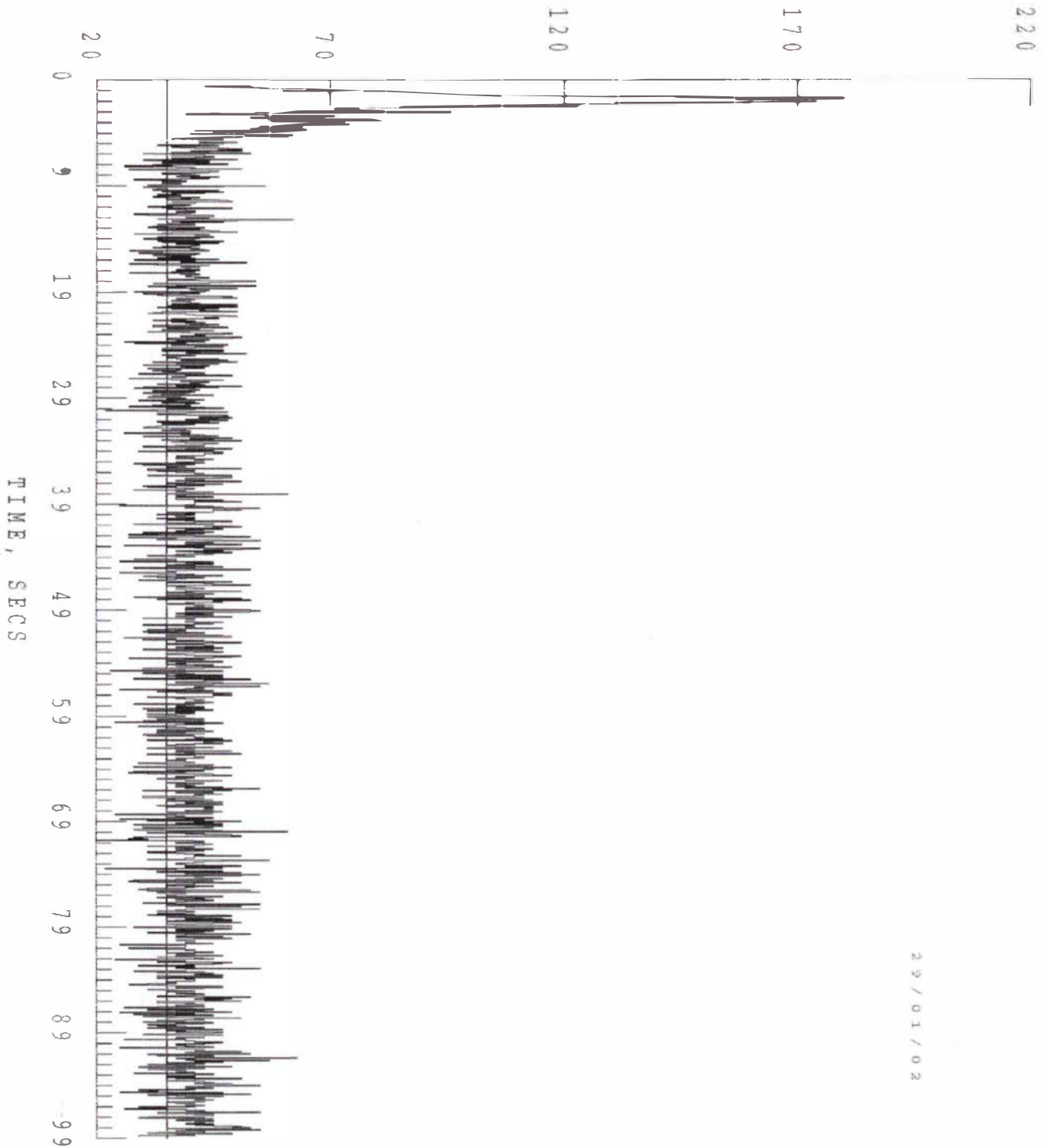
KONUS1

01/02/95

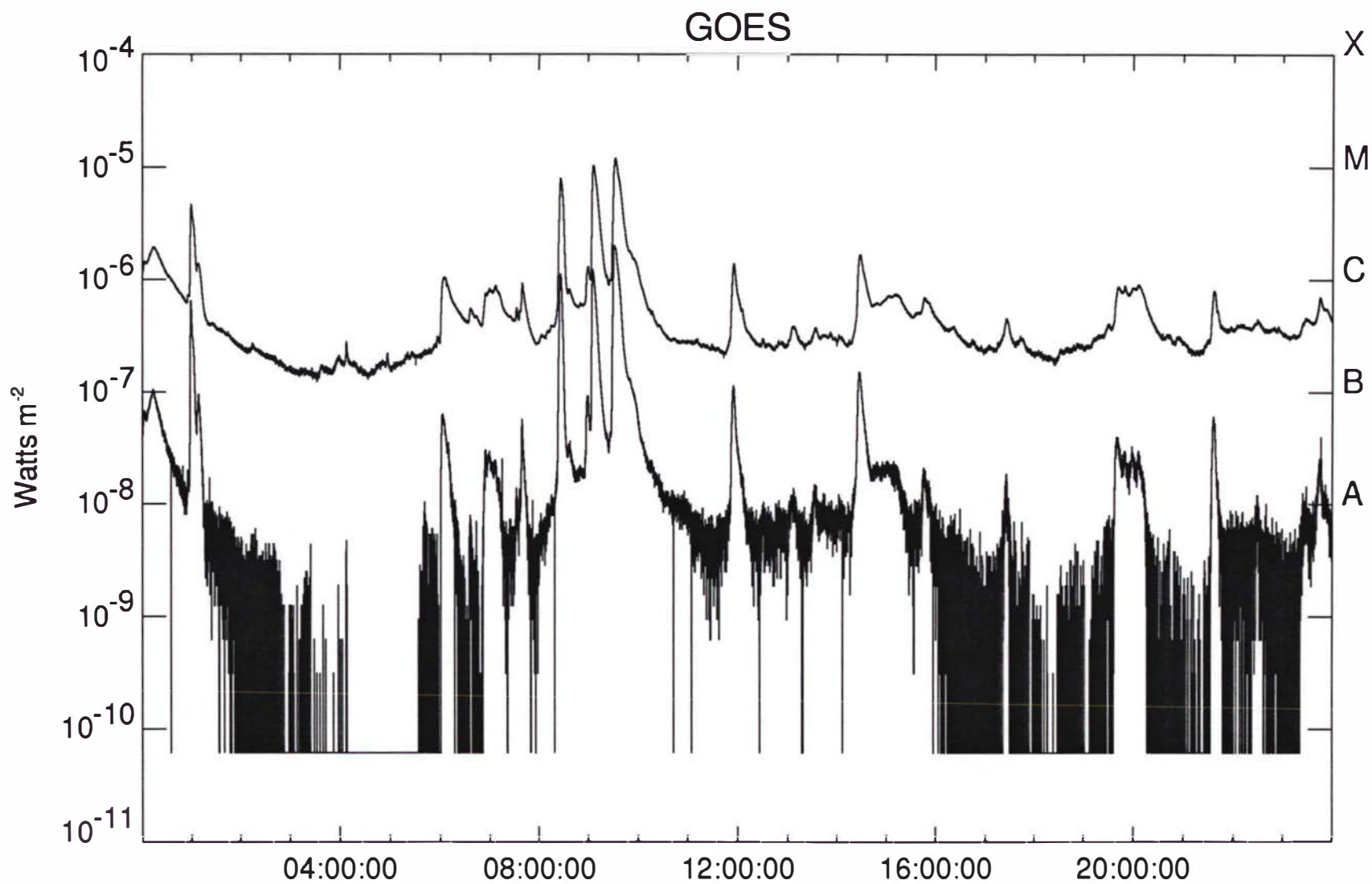
79260.232

50 200 REV

COUNTS/0.064 S



29/01/02



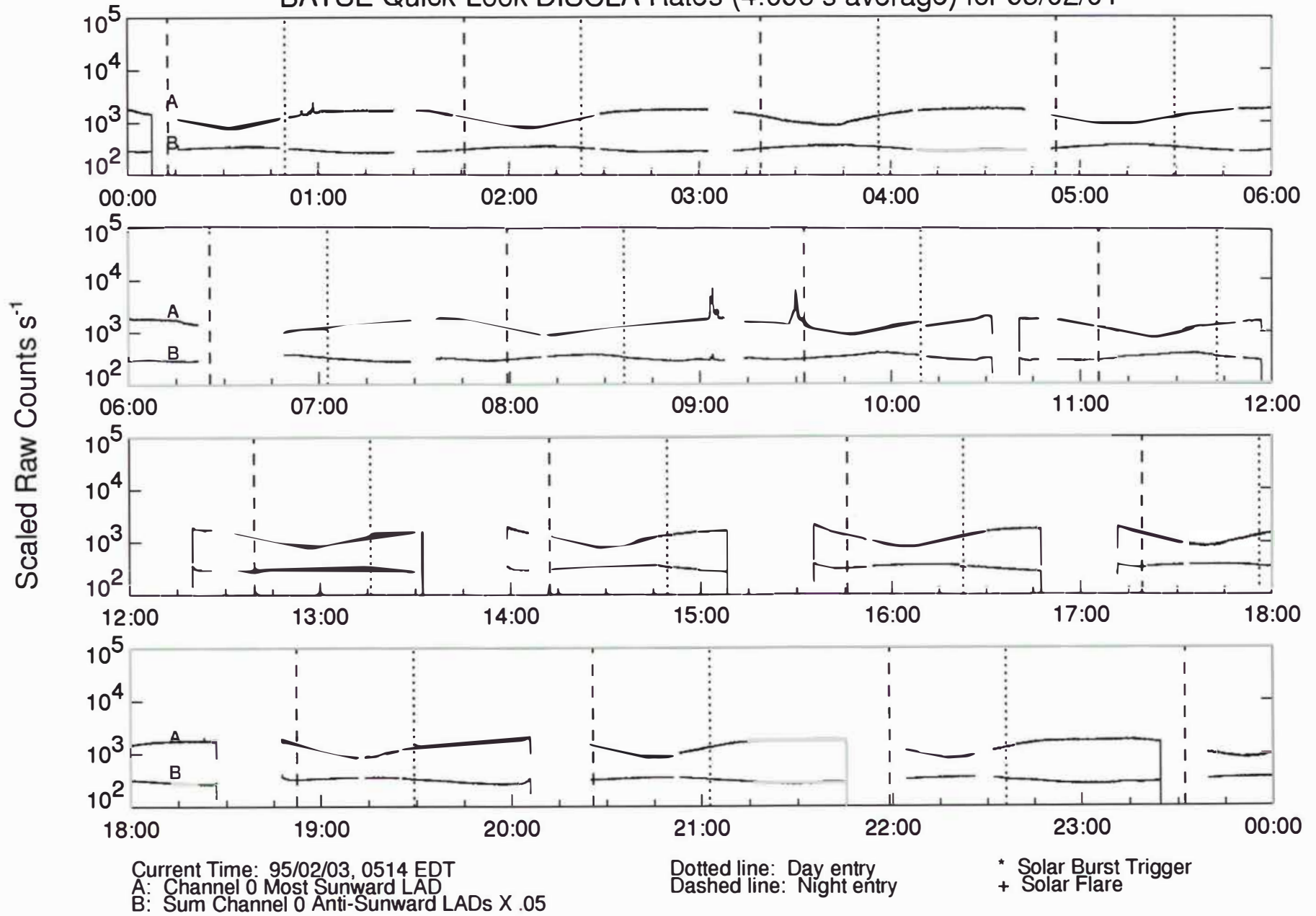
Data Start: 95/02/01, 0000:01

Plot created: 95/02/03, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

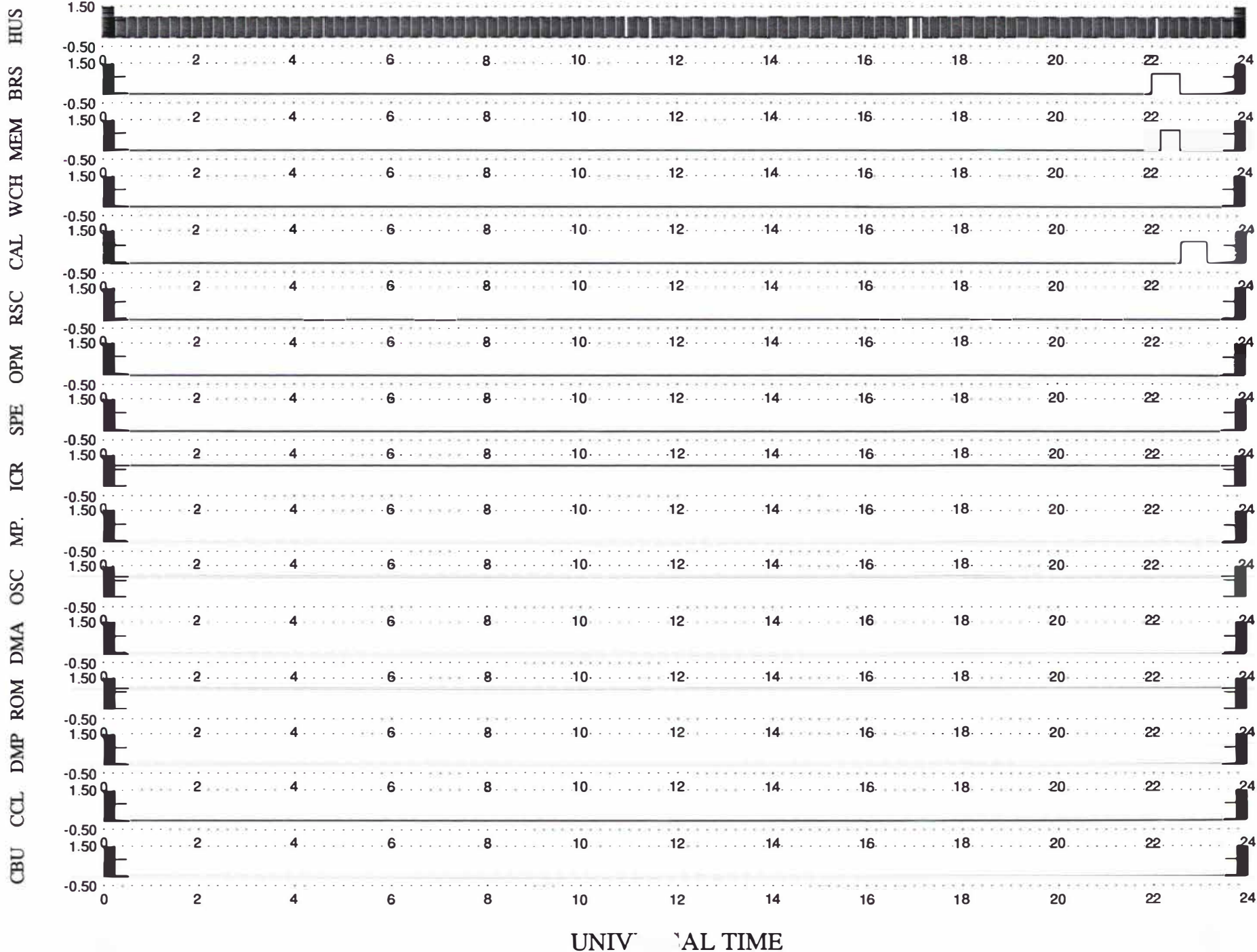
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/01



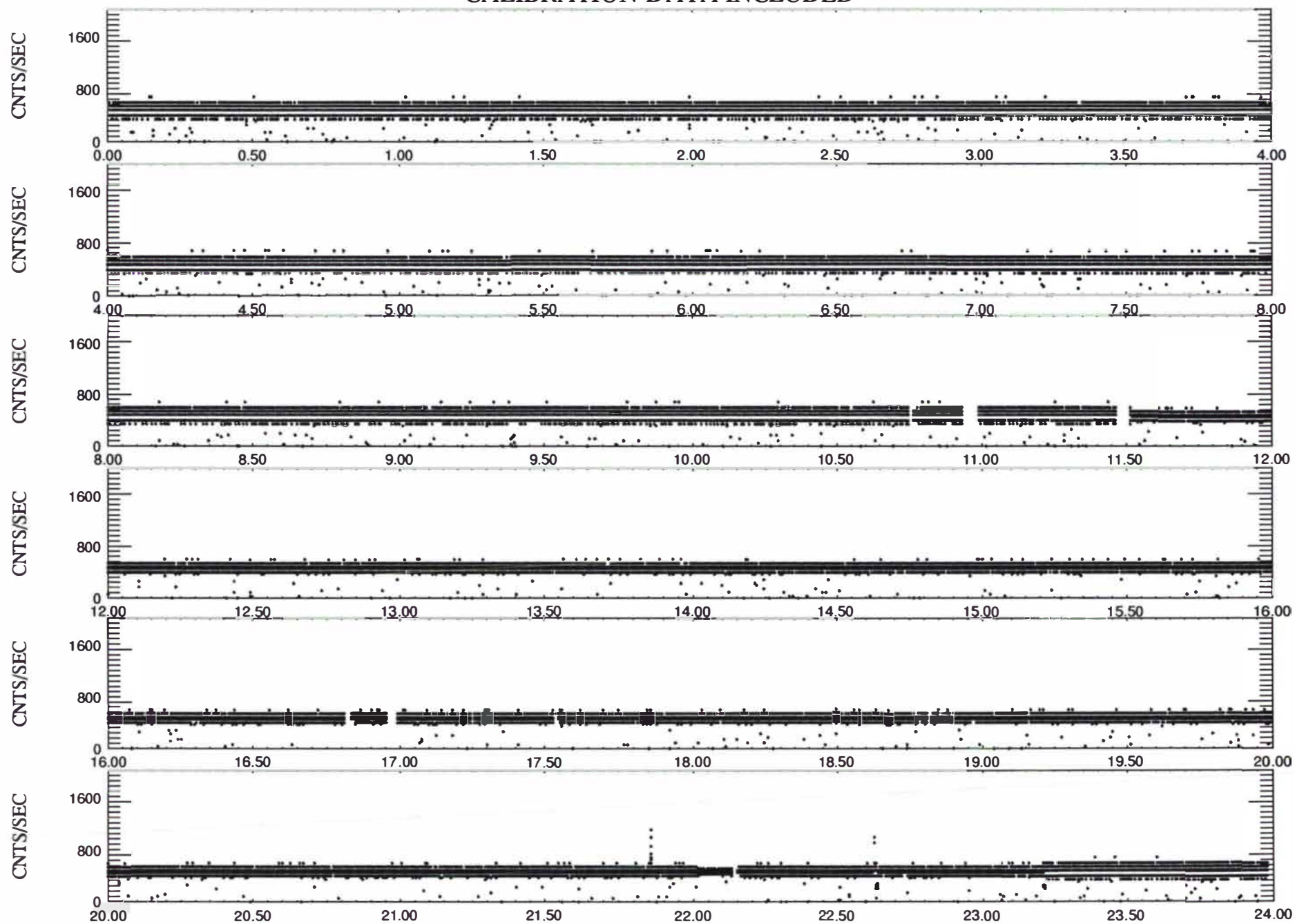
HUS MODES EDR day 32, year 1995 to day 32, year 1995
BURST NUMBER 12

7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 32, year 1995 to day 32, year 1995
CALIBRATION DATA INCLUDED

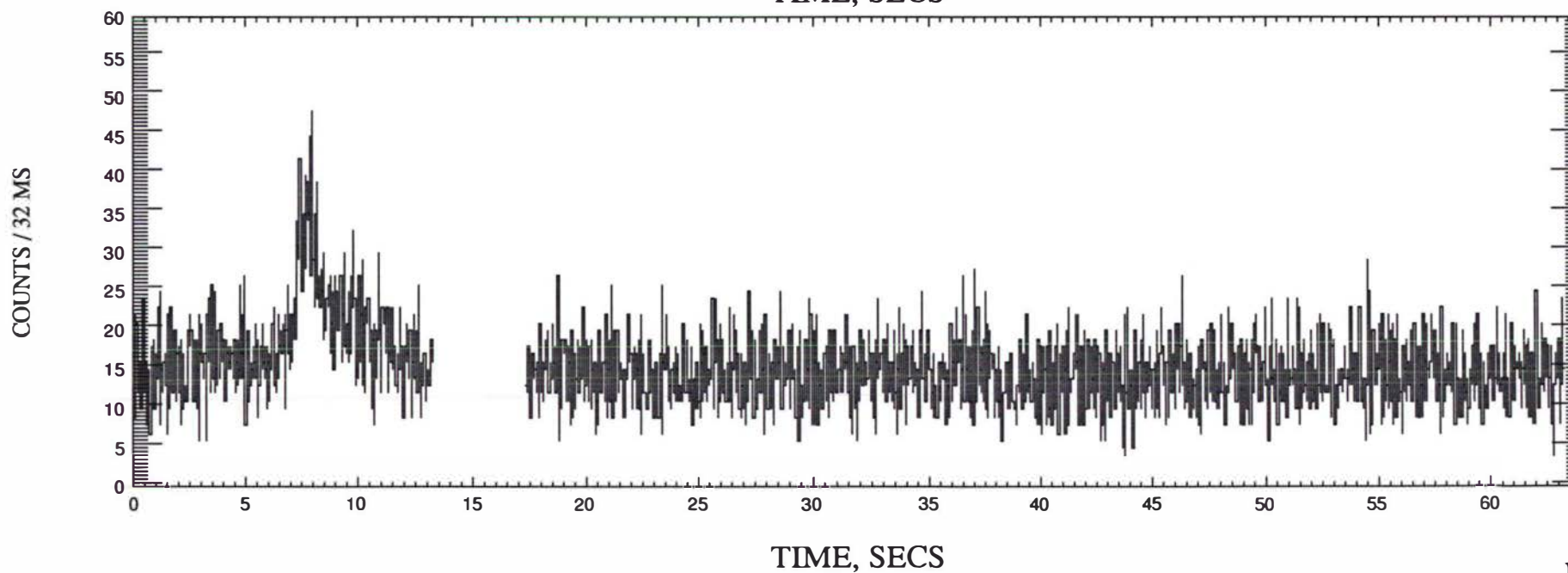
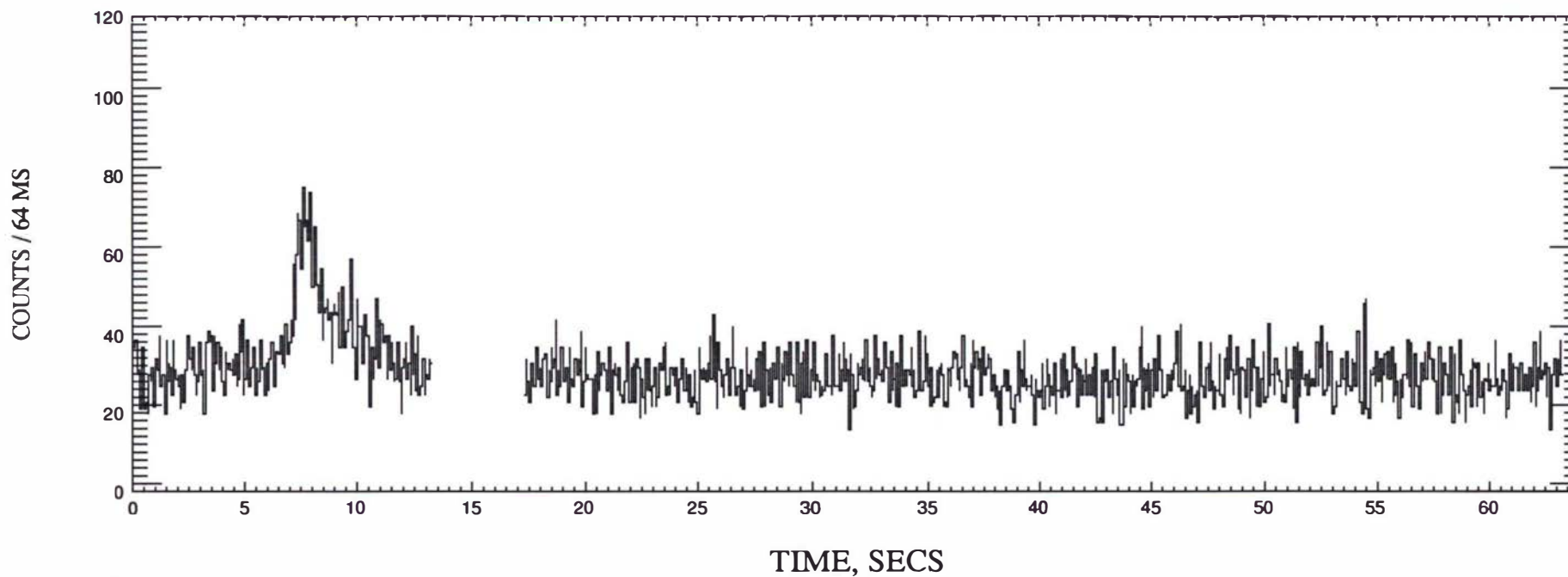
7/18/95



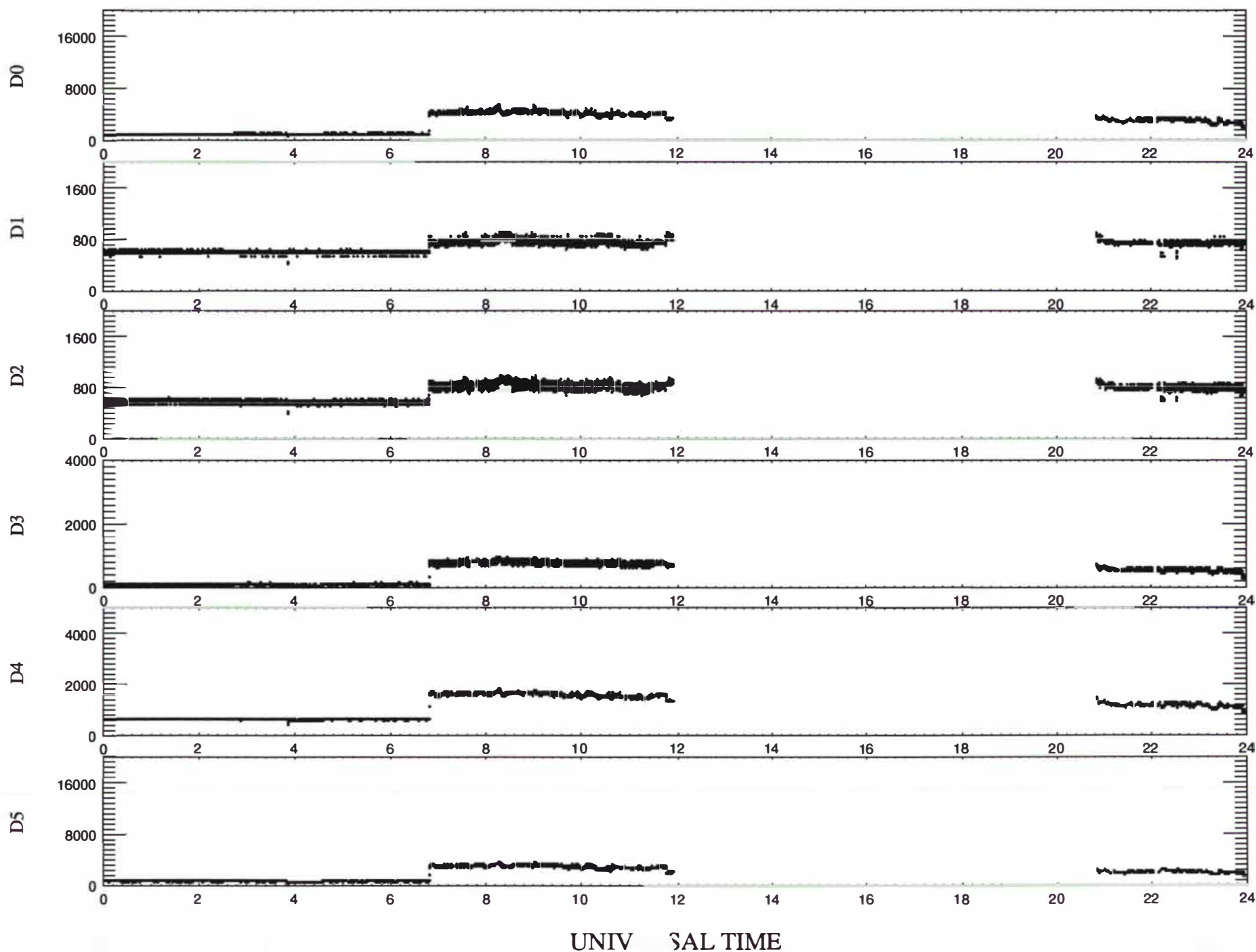
UNIV SAL TIME

HUS 2A TRIGGERED DATA EDR day 32, year 1995
Burst Counter 12 at UT=21.852475721571 h=78668.913 s 21:51:08.913

7/18/95



B# 1



From HAGEDON@ssl.msfc.nasa.gov Fri Feb 3 11:20 PST 1995
Date: Fri, 3 Feb 1995 13:20:26 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3391

TIME: TJD=9750 SECONDS=25023

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT.

950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47 ✓
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR ✓
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54 ✓
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59 ✓
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR ✓
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
940412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

Dear Bonnard, Kevin, David, Helmut:

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

- TLC

DATE	Trigger T0 time (UT)		Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
				Max counts						
				G1	G2	G3	in G2	T<T0	T>T0	
941113	12	09 15	S1	145	85		2.5	115		BGR ✓
941114	02	02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03	14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14	07 57	S2	150	140		<0.15	5		BGR ✓
941119	19	31 09.175	S2	370	703	160	0.23	7	20	4 ✓
941120	20	23 17.924	S1	215	328	30	>15	2	25	5 ✓
941121	17	25 00.945	S1	1652	1656	300	21	3	50	6 ✓
941125	22	04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00	20 46	S1	150	205	200	>14	18		BGR ✓
941126	12	22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16	54 20	S1	55	75		>10	26		BGR ✓
941126	19	56 49.732	S1	290	390	211	6.7	20	26	9 ✓
941127	14	30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15	39 10	S1	210	57		2.7	260		BGR ✓
941128	15	37 00	S1	75	90	32	>15	55		BGR ✓
941205	23	33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22	10 32	S2	265	175		<0.2	7		BGR ✓
941210	03	10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17	03 51	S1	40	45	29	>6	12		BGR ✓
941214	05	38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07	44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22	14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05	36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07	39 45.915	S1	300	637	519	4.4	5	90	28 ✓
941228	16	55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12	58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22	51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20	52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23	43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07	18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09	00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06	02 15	S2	332	180		<0.1	3600		BGR ✓
950110	13	37 57.084	S2	234	422	213	0.05	38	100	32 ✓
950111	04	49 12.241	S1	586	620	100	>19	92	24	33 ✓
950111	12	18 49.196	S1	225	435	164	1.85	26	50	34 ✓
950112	07	45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓
950113	05	59 13	S1	283	180	26	>10	52		BGR ✓
950113	17	38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01	00 38	S1	46	110		1.6	6		BGR ✓
950114	04	03 01	S2	23	76		0.5	70		BGR ✓
950114	07	30 30.766	S2	205	406	60	<0.05	1	100	36 ✓
950114	13	10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓
950115	02	49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01	36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12	22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14	51 52.253	S1	380	600	140	8.2	3.8	11	39

K O N U S

1 2 / 2 / 9 6

U L Y S S E S R T

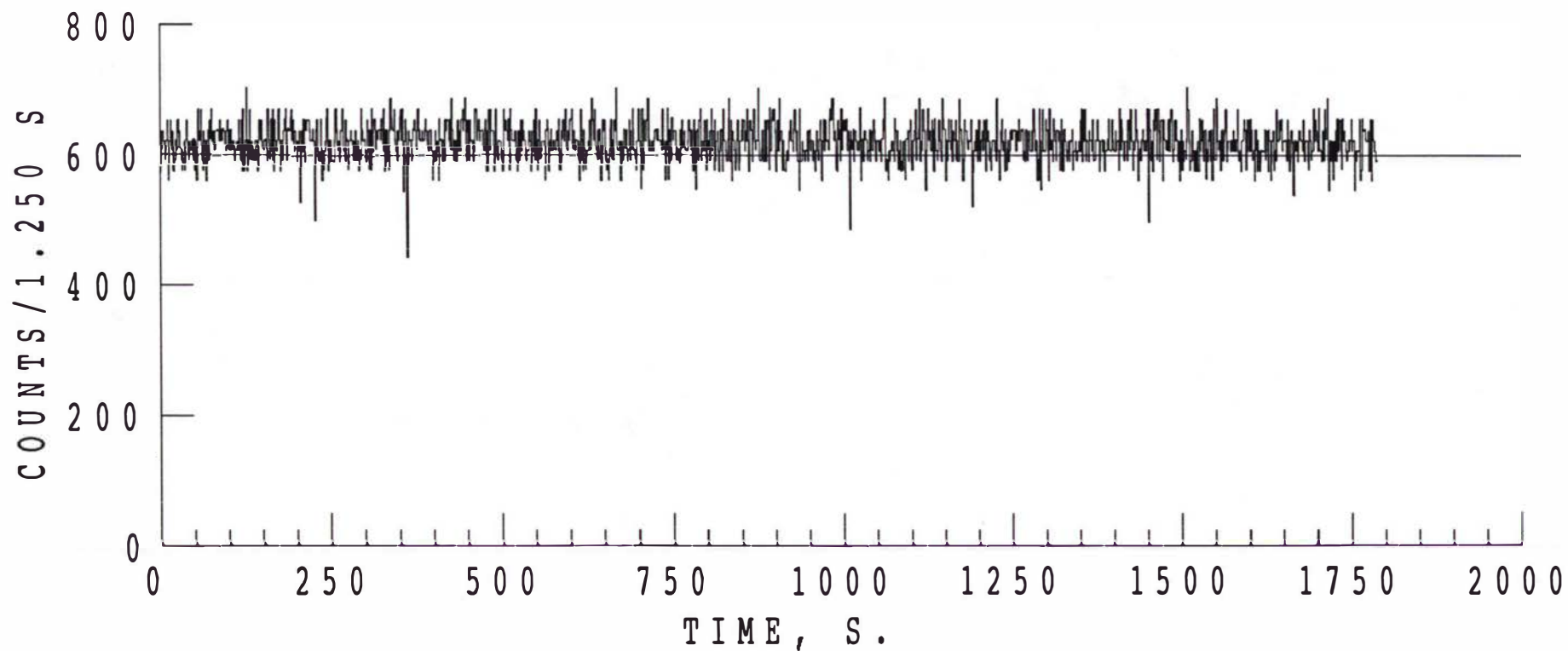
2 / 2 / 9 5 4 0 3 5 6 . 0 1 2 s

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

0 - 0 k e V

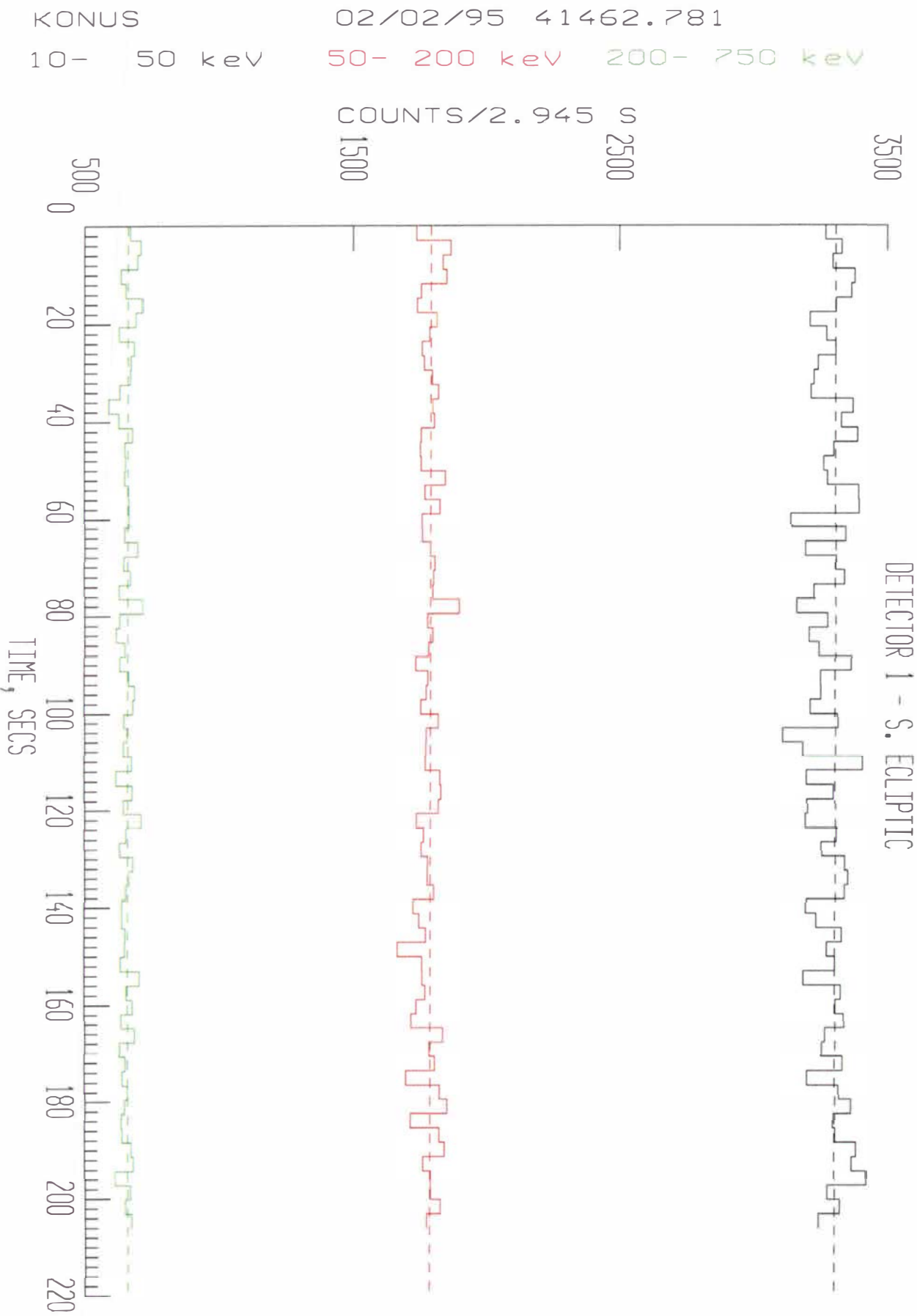
M= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



12/08/2011

DETECTOR 1 - S. ECLIPSE



KONUS

02/02/95

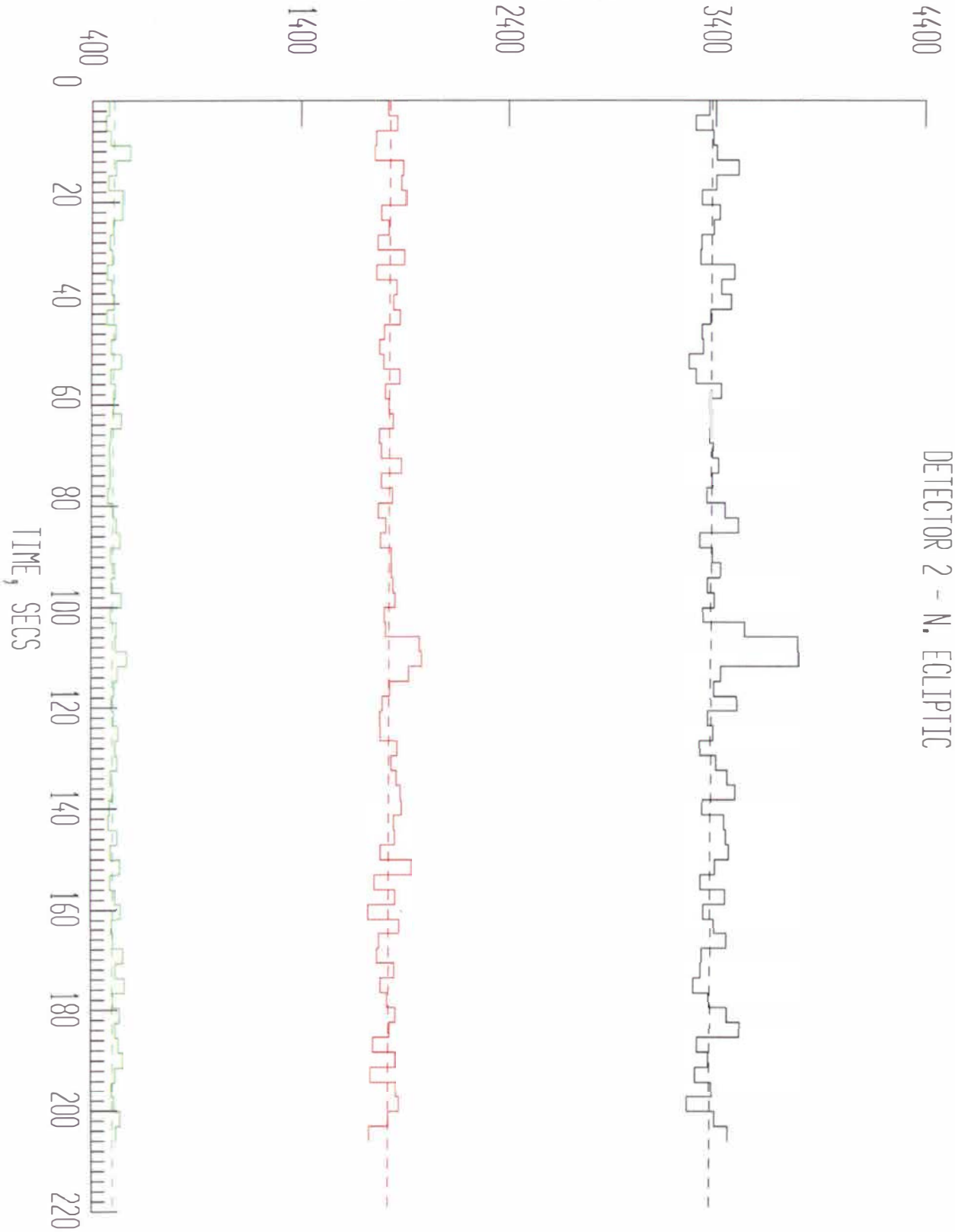
41462.781

10- 50 keV

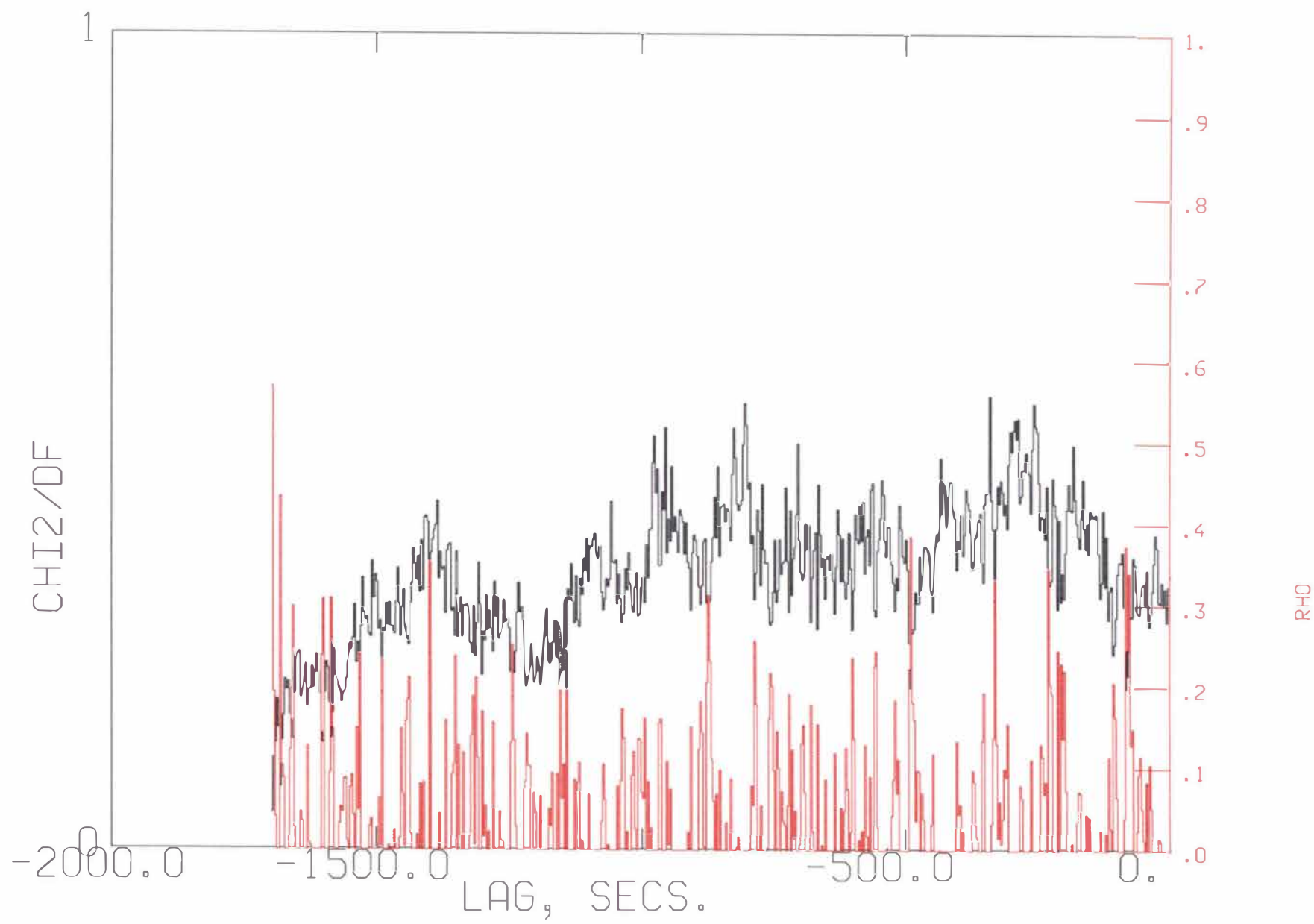
50- 200 keV

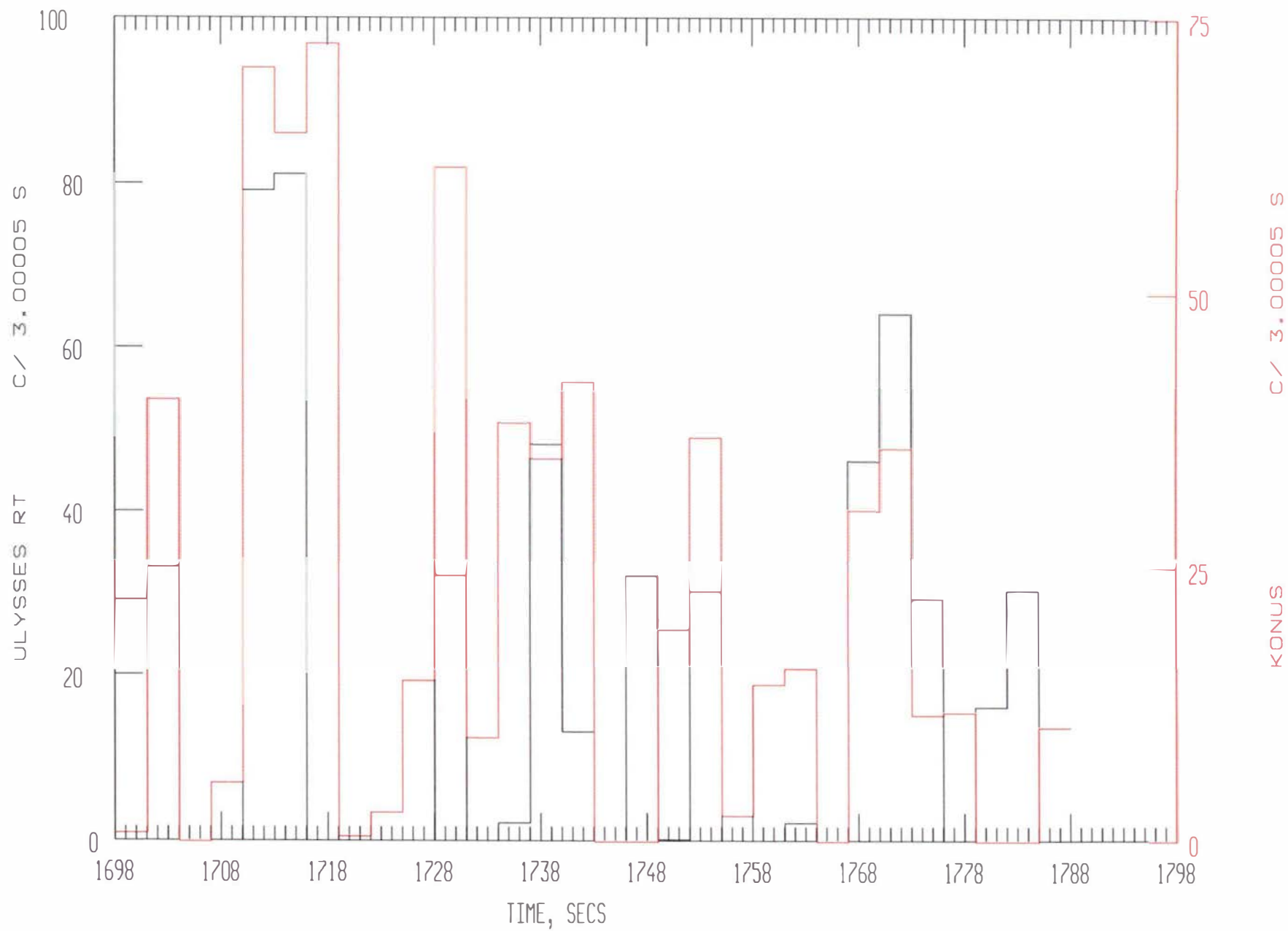
200- 750 keV

COUNTS/2.945 S



12/08/2011





From HAGEDON@ssl.msfc.nasa.gov Fri Feb 3 11:23 PST 1995
Date: Fri, 3 Feb 1995 13:23:31 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3392

TIME: TJD=9750 SECONDS=63833

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From HAGEDON@ssl.msfc.nasa.gov Fri Feb 3 11:26 PST 1995
Date: Fri, 3 Feb 1995 13:26:07 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3393

TIME: TJD=9750 SECONDS=69704

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From HAGEDON@ssl.msfc.nasa.gov Fri Feb 3 11:32 PST 1995
Date: Fri, 3 Feb 1995 13:29:53 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3394

TIME: TJD=9750 SECONDS=80314

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

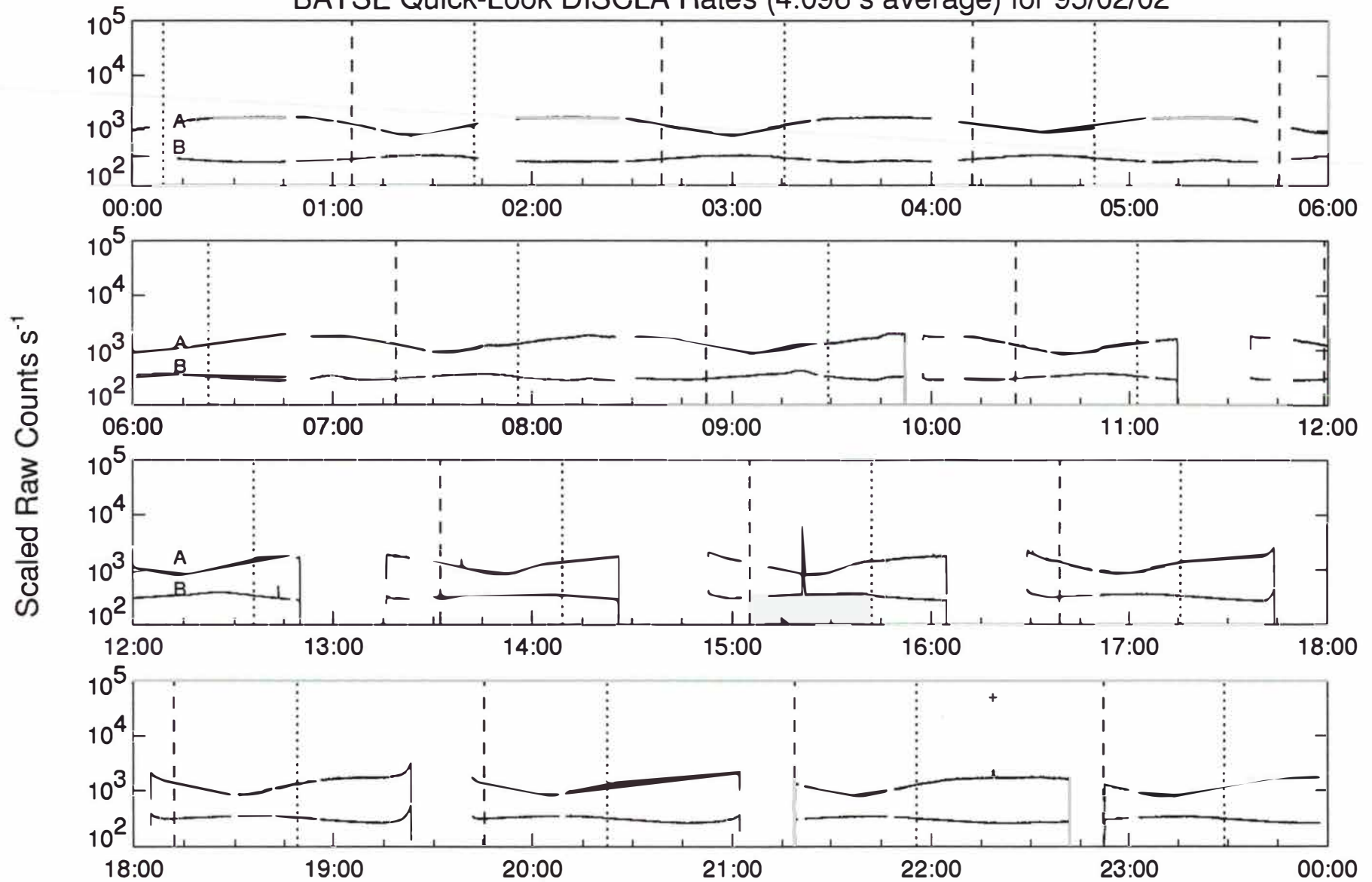
INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

GOES B1.7 SOLAR FLARE. DUR.~120 SEC. NOT VISIBLE ABOVE 100 KEV.

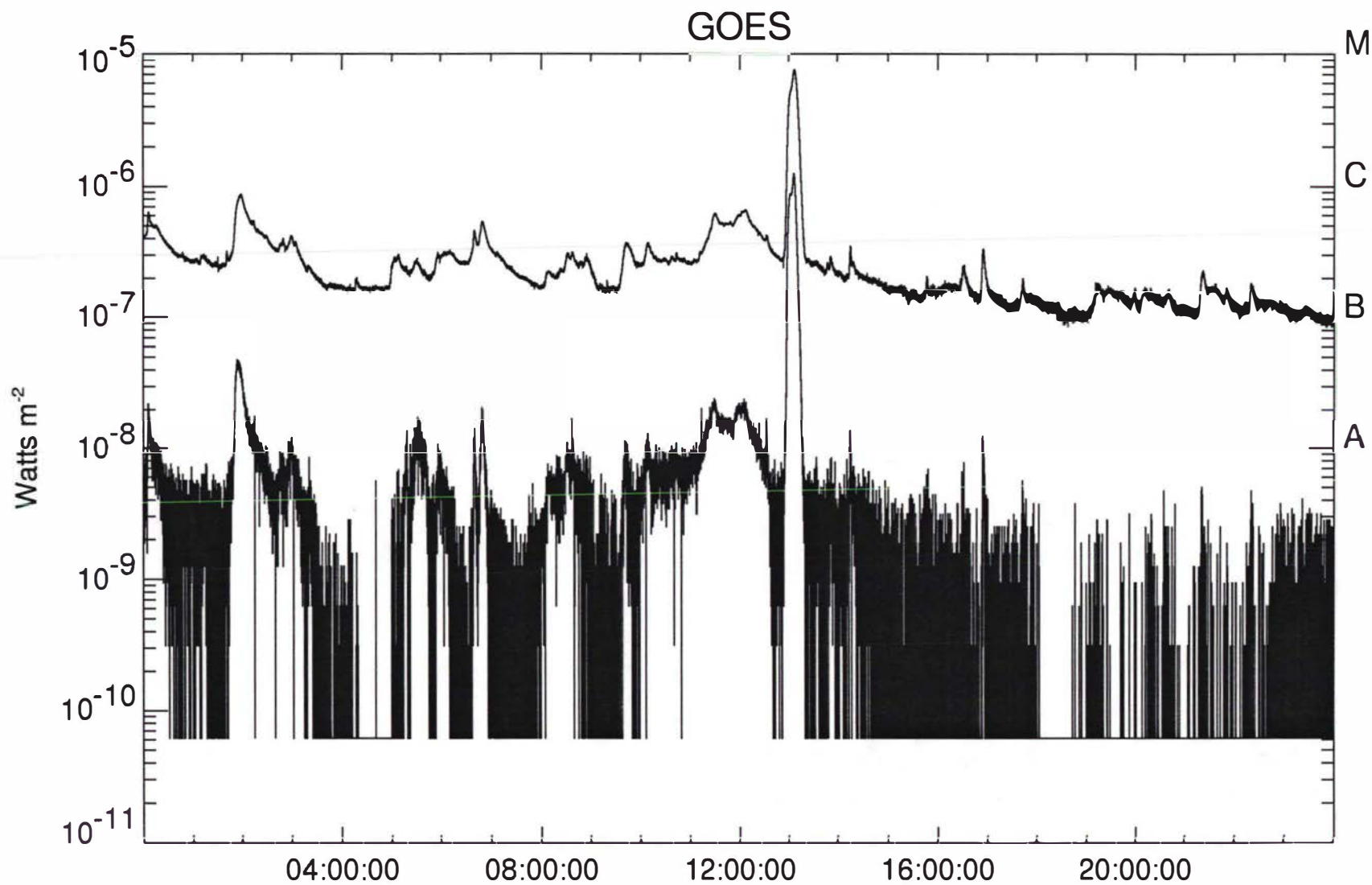
BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/02



Current Time: 95/02/04, 0514 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

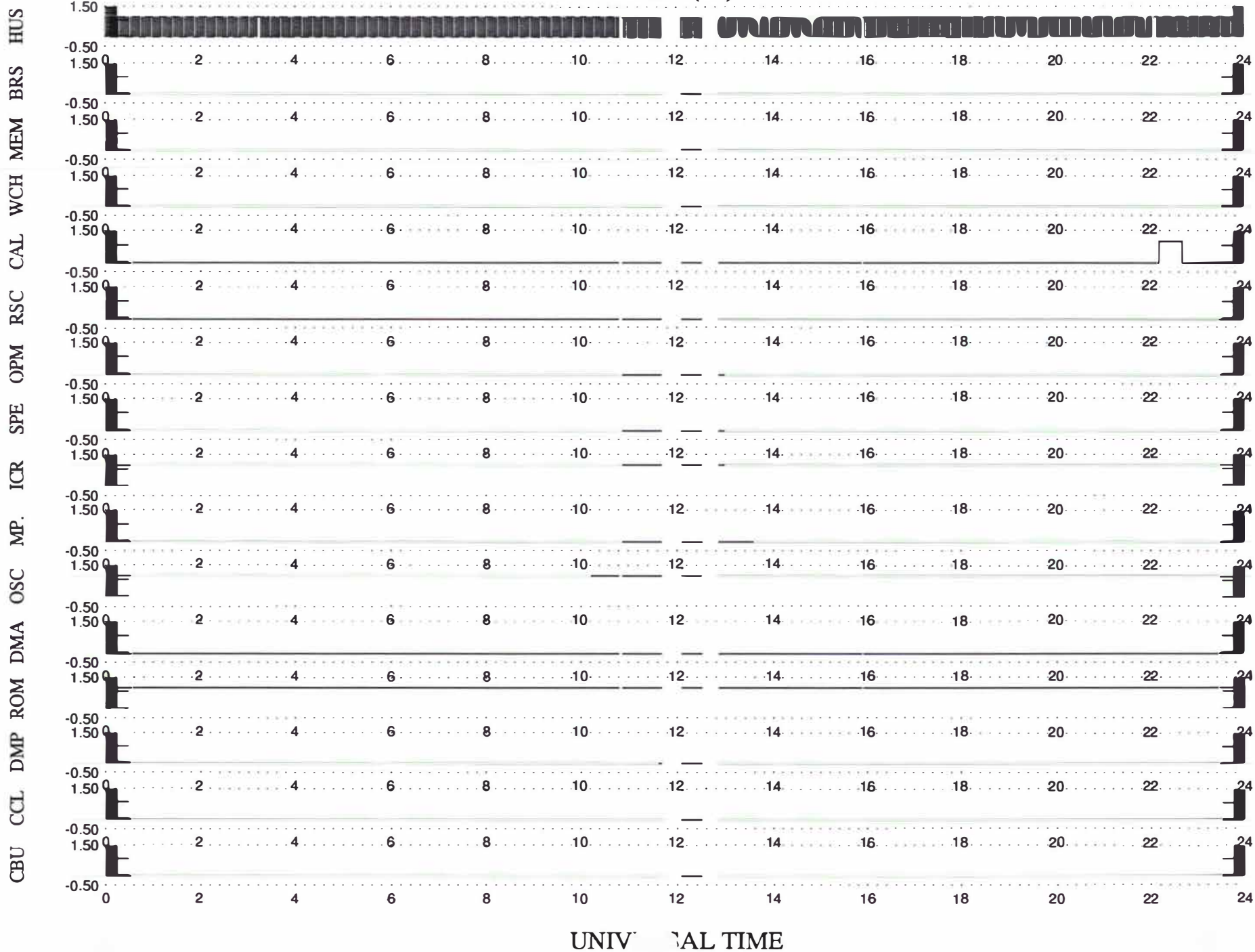
* Solar Burst Trigger
 + Solar Flare



Data Start: 95/02/02, 0000:02 Plot created: 95/02/04, 0514
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

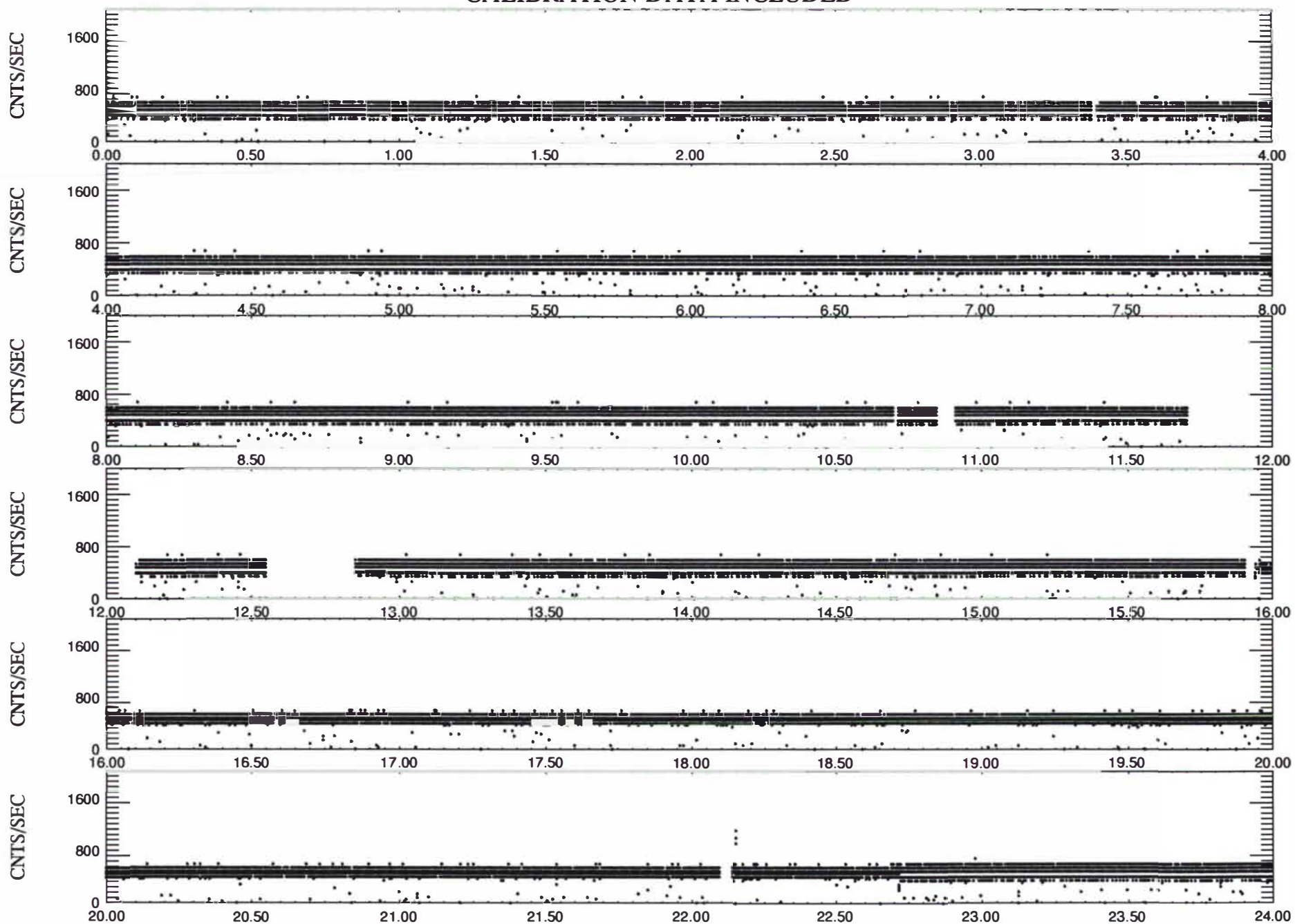
HUS MODES EDR day 33, year 1995 to day 33, year 1995
NO BURST (12)

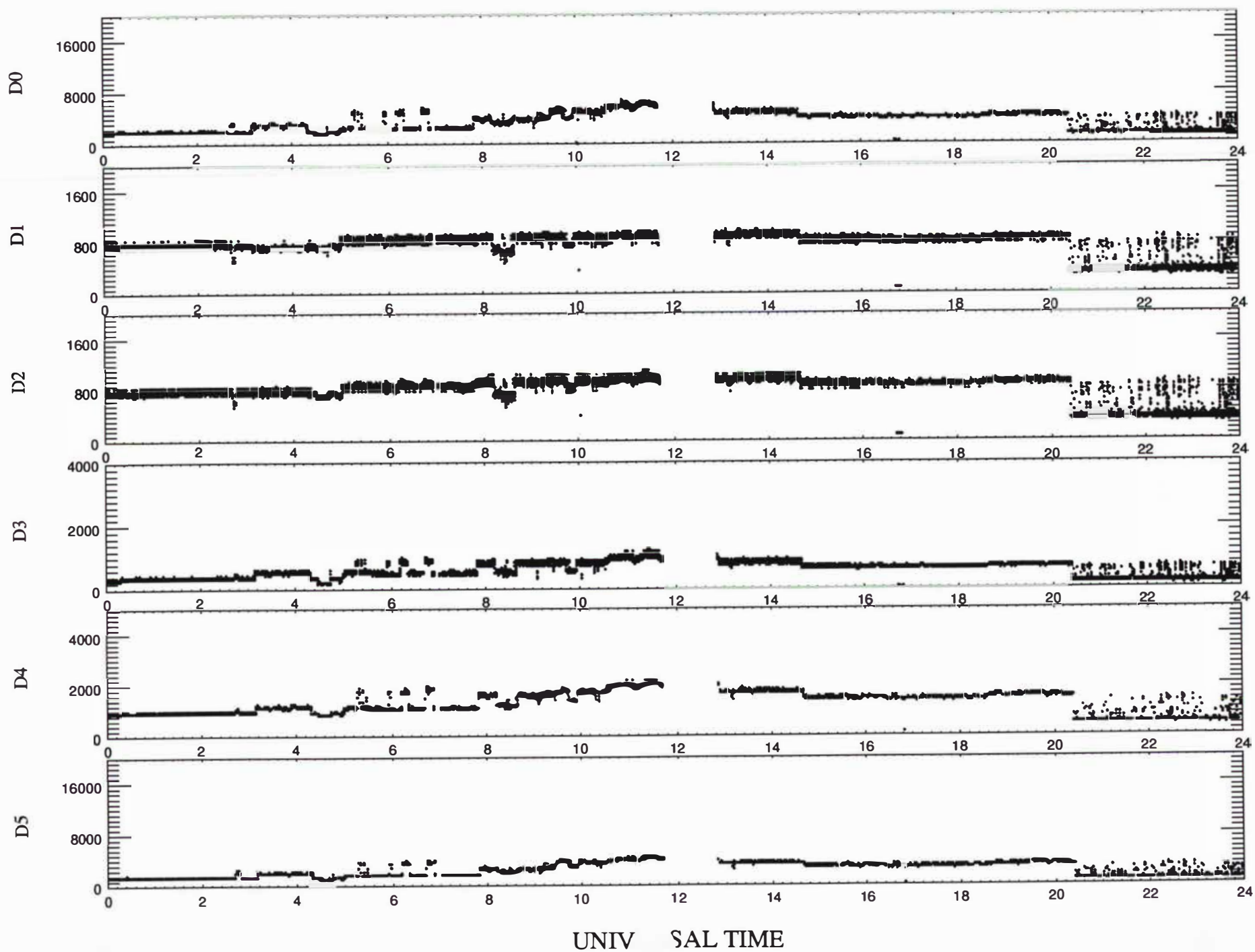
7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 33, year 1995 to day 33, year 1995
CALIBRATION DATA INCLUDED

7/18/95





To : Prof. K. MURKEL, UC, Berkeley

इसरो उपग्रह केन्द्र

अन्तरिक्ष विभाग

भारत सरकार

इवाईपत्तन मार्ग, विमानपुर डाक घर,

बैंगलूर-560 017, भारत

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

दूरभाष : 566251



ISRO SATELLITE CENTRE

DEPARTMENT OF SPACE

GOVERNMENT OF INDIA

AIRPORT ROAD, VIMANAPURA P.O.,

BANGALORE-560 017. INDIA

Telegram : UPAGRAH Telex : 0845-2325 & 2769

Telephone : 566251

Feb 16, 1995

Dr TMK Marar

Dear Kevin,

Extremely happy to get your fax dated Feb 13. It looks like that most of our shortlisted SROSS-C2 GRBs are getting confirmation from Ulysses.

Our Feb 3 event time 02:21:29.308 UT matches well with your time, indicating that the direction is roughly perpendicular to the baseline. Given below is the profile of the event. Another new event was detected on Feb 11, 1995. Its profile is also enclosed. Please confirm both.

I was very pleased to talk to you on telephone. On International calls each second is taken as one unit and will cost us one rupee (which may be approximately \$ 1 when budgets are compared!); that is why I was trying to speed up my conversation. Hope you understand me.

My telephone Nos are 91-80 526 9277 (home) &
91-80-526 5955 (office)

If there is anything urgent kindly call me on these numbers any time of the day/night.

We still have to exchange the modality of exchange of data and collaboration in which we are very much interested.

With best regards,

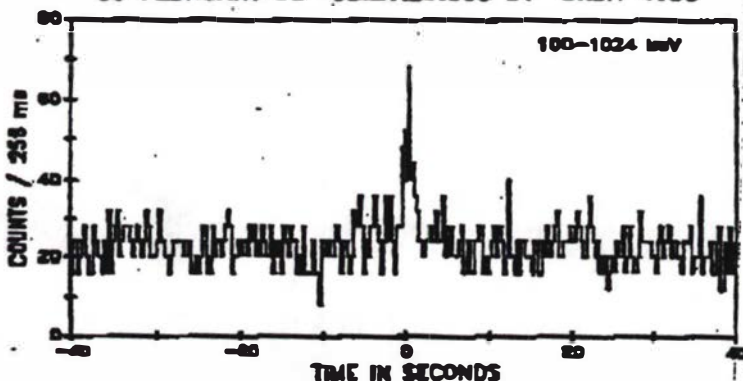
sincerely yours,

Krishnan

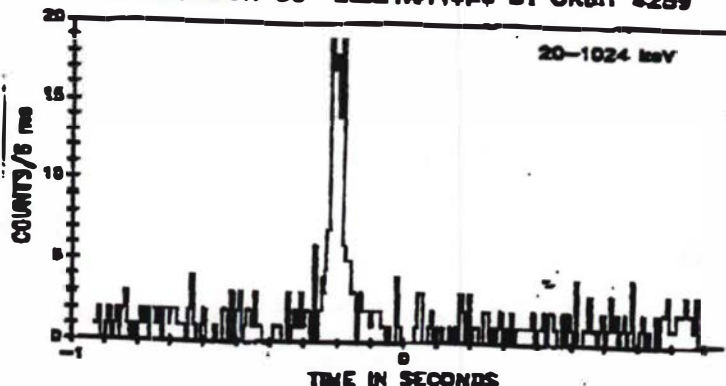
(TMK Marar)

PS: Received your email sent to me through Christina of IIA. The Jan 6 event was faint; Is that why Ulysses did not detect it, I wonder.

03 FEBRUARY 95 02:21:29.308 UT ORBIT 4138



11 FEBRUARY 95 02:24:57.626 UT ORBIT 4259



From SHEETS@tgrs2.gsfc.nasa.gov Thu Jan 10 11:43 PST 2002
From: SHEETS@tgrs2.gsfc.nasa.gov
Date: Thu, 10 Jan 2002 14:48:35 -0500
 \: khurley@sunspot.ssl.berkeley.edu
 : SHEETS@tgrs2.gsfc.nasa.gov
Subject: Konus requests for Konus/Ulysses catalog

Kevin,

I just sent the last set of files - finishing up the (first part of the) 'big request' for konus files. So, I am ready for another list. Please let me know if I have missed anything on the first list. The only problems I have to report are:

#17. 3 FEB 95 8489 there is a data gap: 6682-9950 (I already told you about it earlier)

#75. 8 DEC 95 39452 you have it listed as a burst - my program doesn't identify it as a burst, I can send it to you as waiting mode, is that okay?

Some of the seconds of day were off (most by 1 second, and some by more, but the files I sent matched the time of the web files - I already told you this earlier, too).

Teresa

BATSE time corrected 9/26

Date: June 17 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. For 3 Spacecraft events

- ☐ Konus N/S anisotropy used to distinguish between positions?
- ☐ SAX anisotropy used to distinguish between positions?
- ☐ SAX Earth-blocking used to distinguish between positions?
- ☐ $\Sigma 3\Delta t$'s calculated?

3. For 4 Spacecraft Events

- ☐ BMAPSUM executed to get chisquare for alternate positions?
- ☐ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

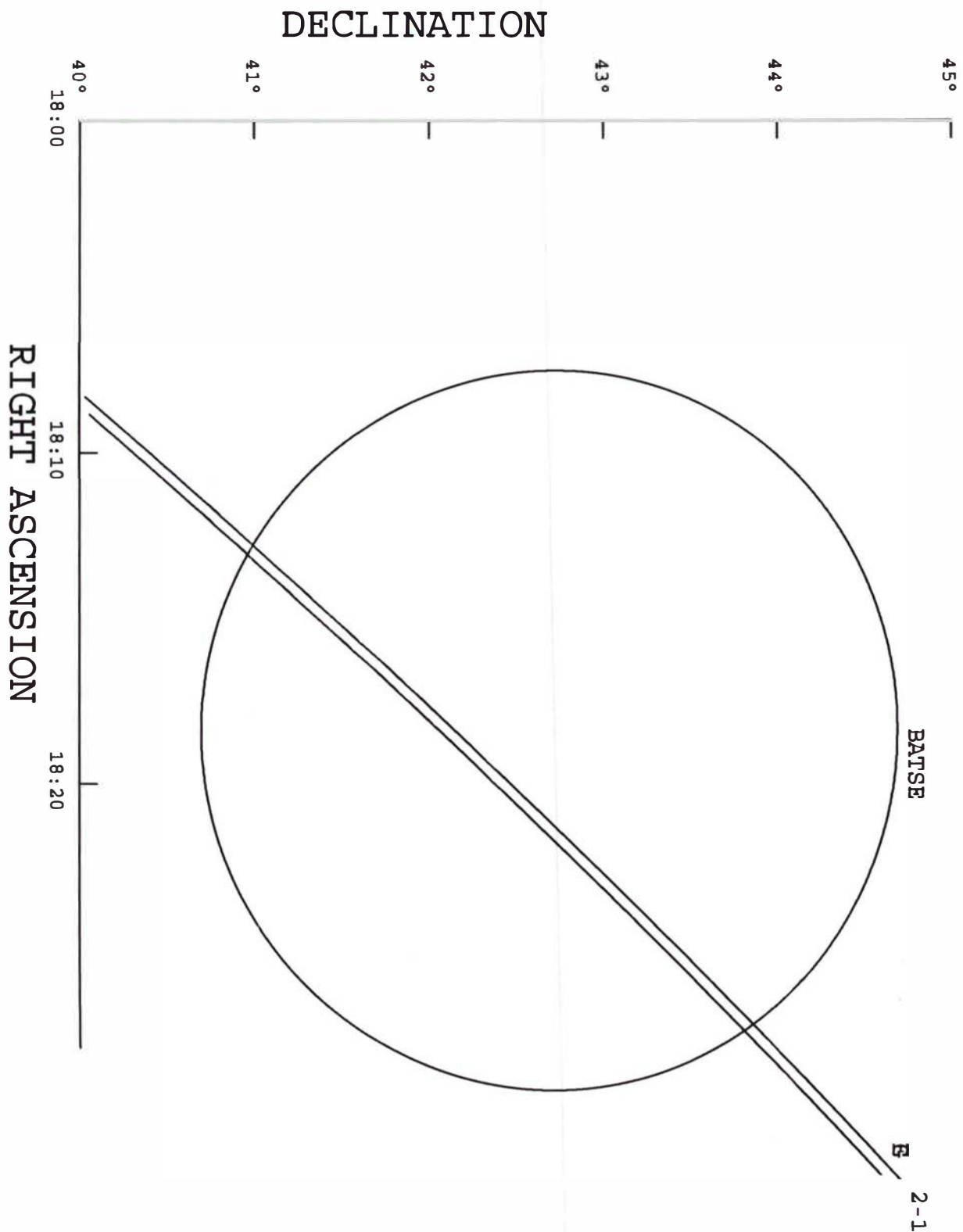
G=GALACTIC EQUATOR

1 BATSE

2 ULYSSES

EVENT OF FEB 3, 1995 2:20

14 / 6 / 2



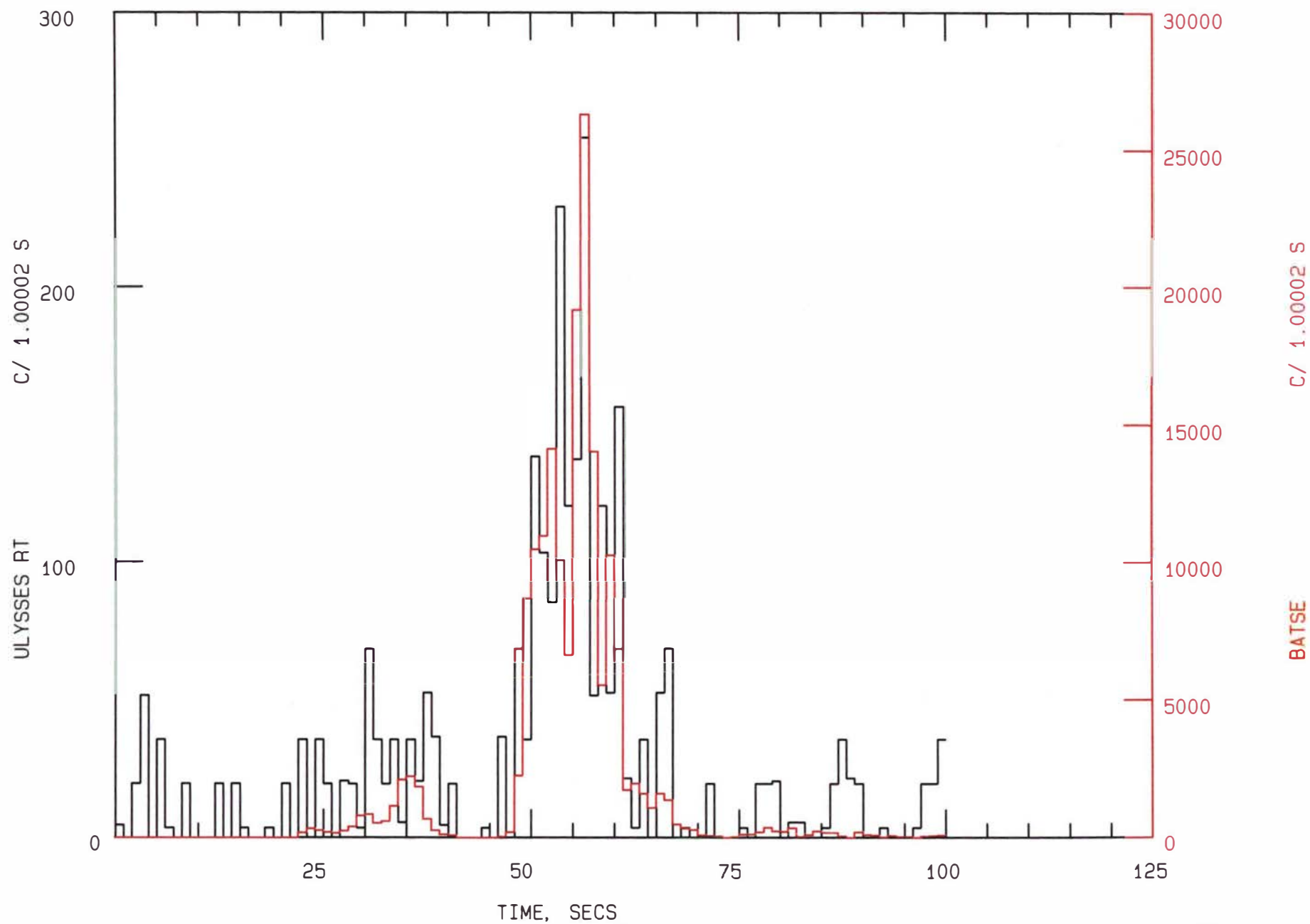
ULYSSES RT-BATSE

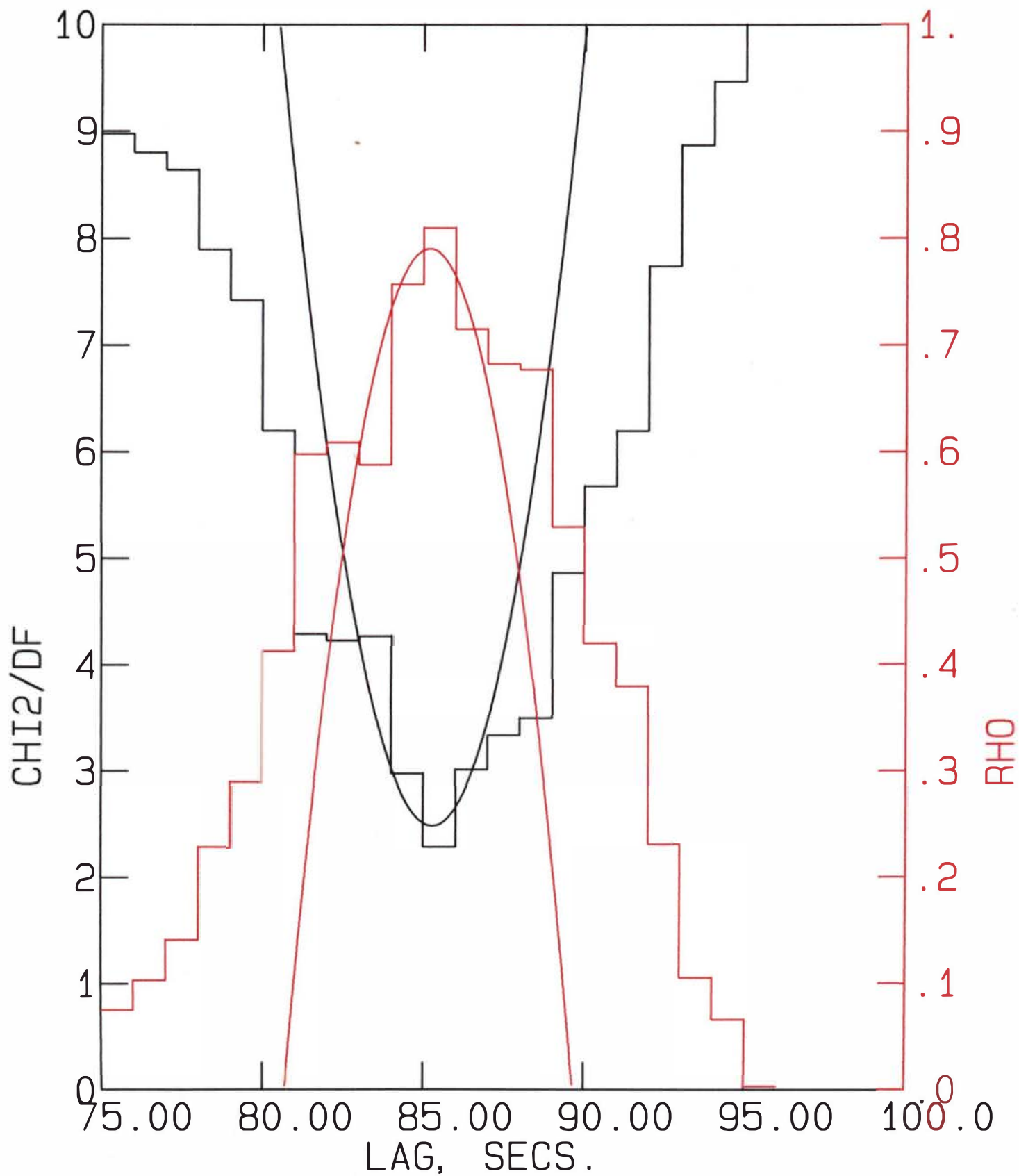
CORRELATION

3/ 2/95

8433.184

14/ 6/ 2





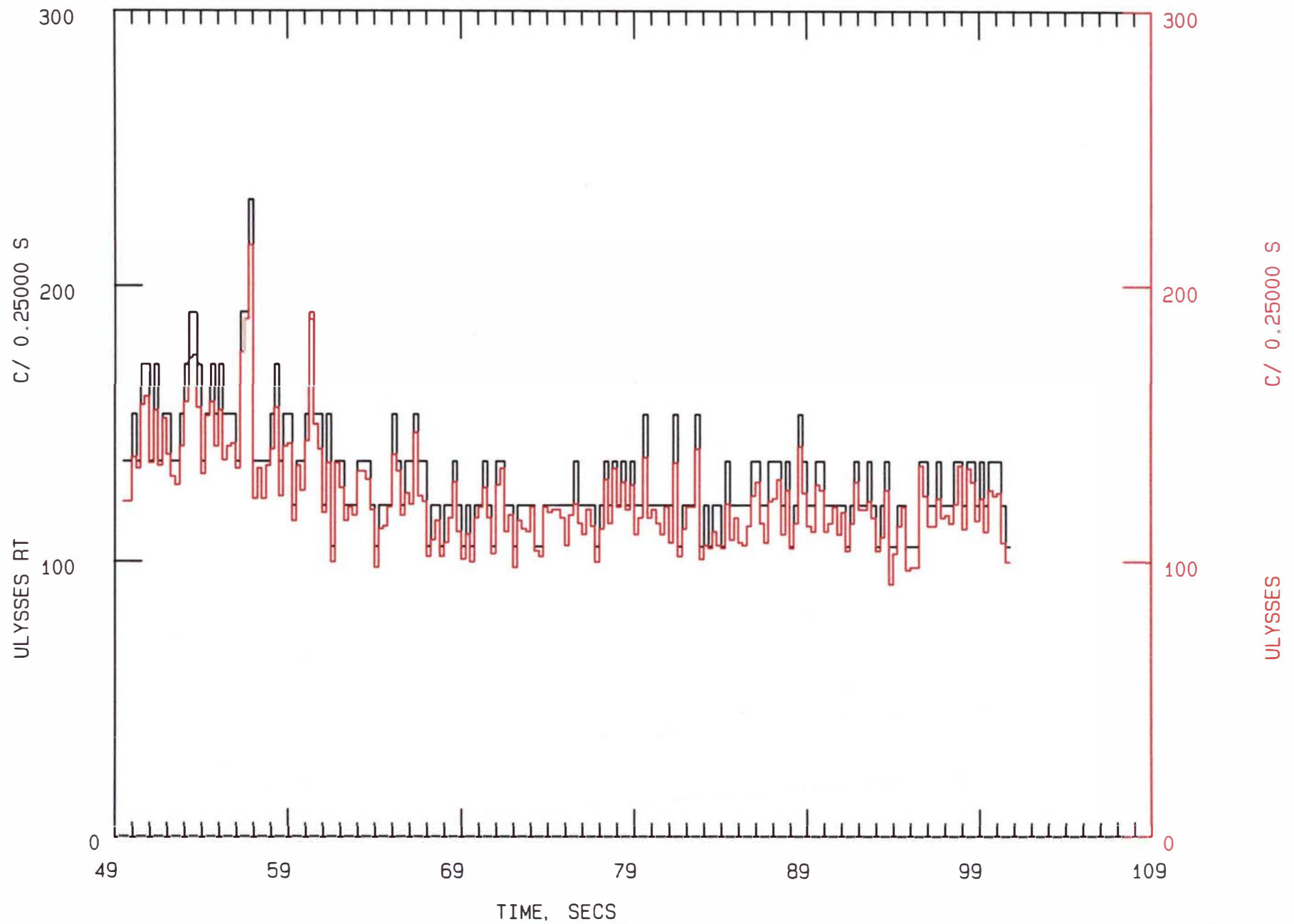
ULYSSES RT-ULYSSES

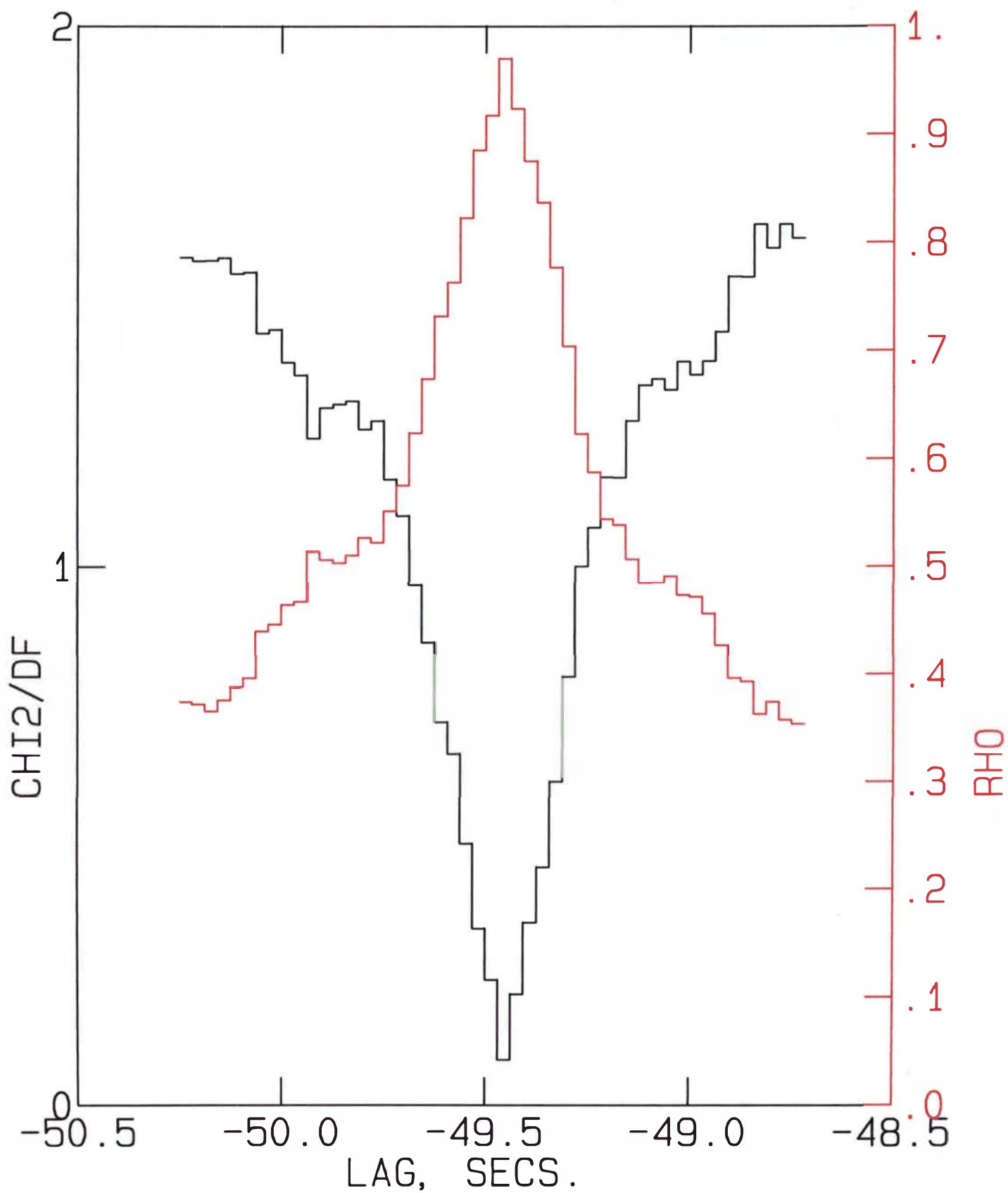
CORRELATION

3/ 2/95

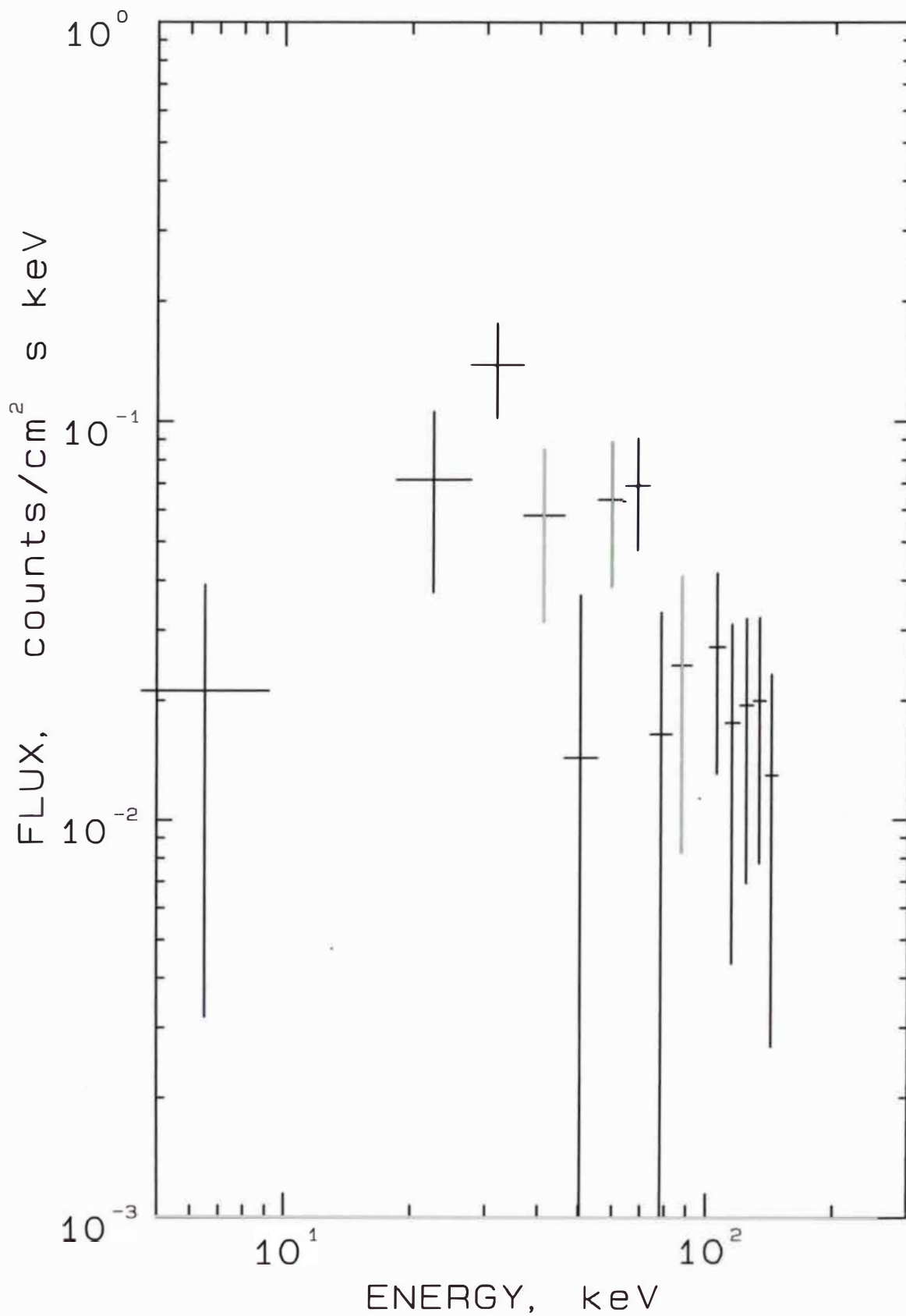
8433.184

14/ 6/ 2





SPECTRUM INTEGRATED OVER 4.0 SECONDS, INTERVALS 2 TO 5



ULYSSES 03/02/95 B490.437 BURST SPECTRAL COUNT RATES

4- 18 keV

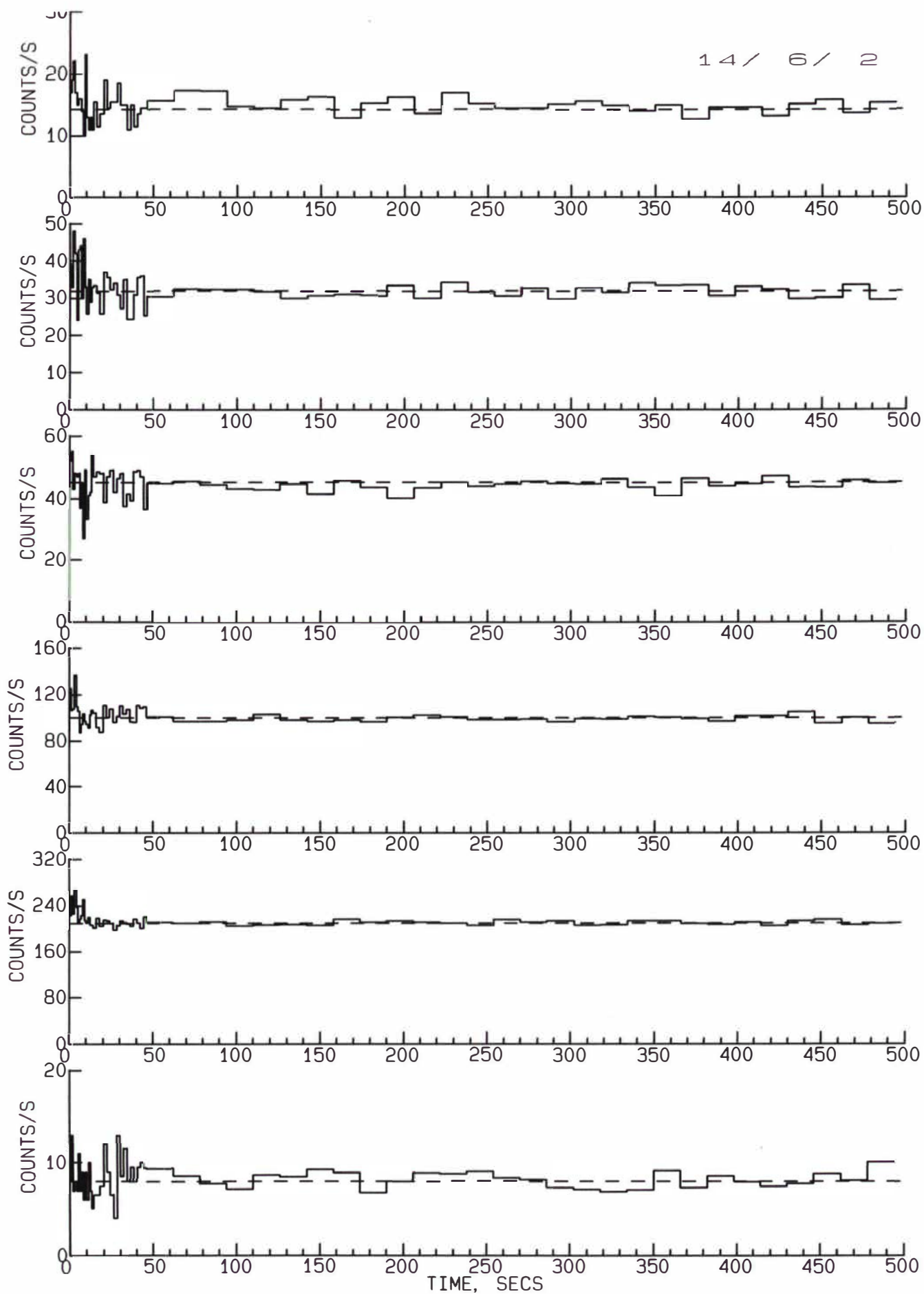
18- 45 keV

45- 73 keV

73-101 keV

101-128 keV

128-147 keV

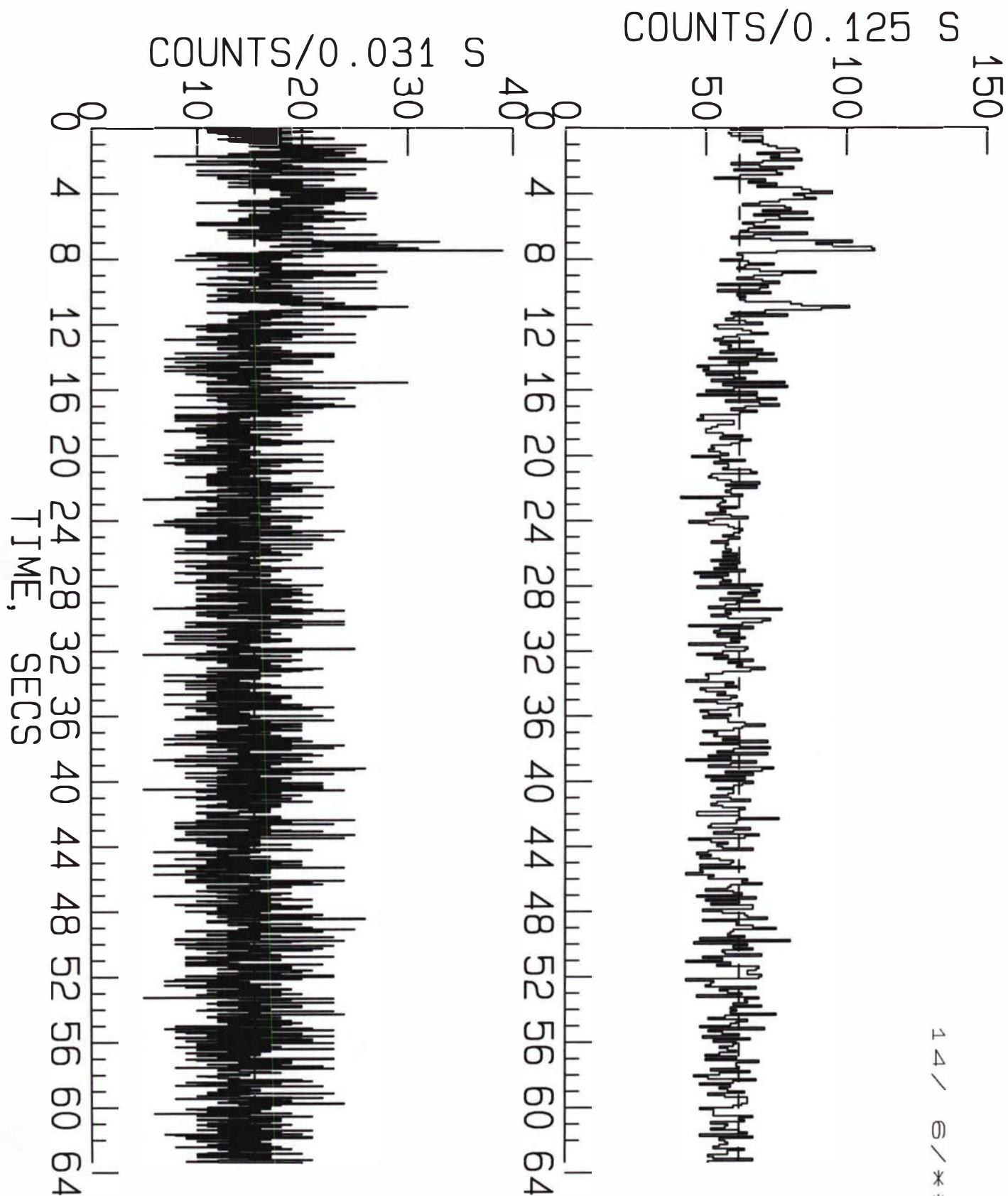


ULYSSES

03/02/95

Ttrig= 8490.052

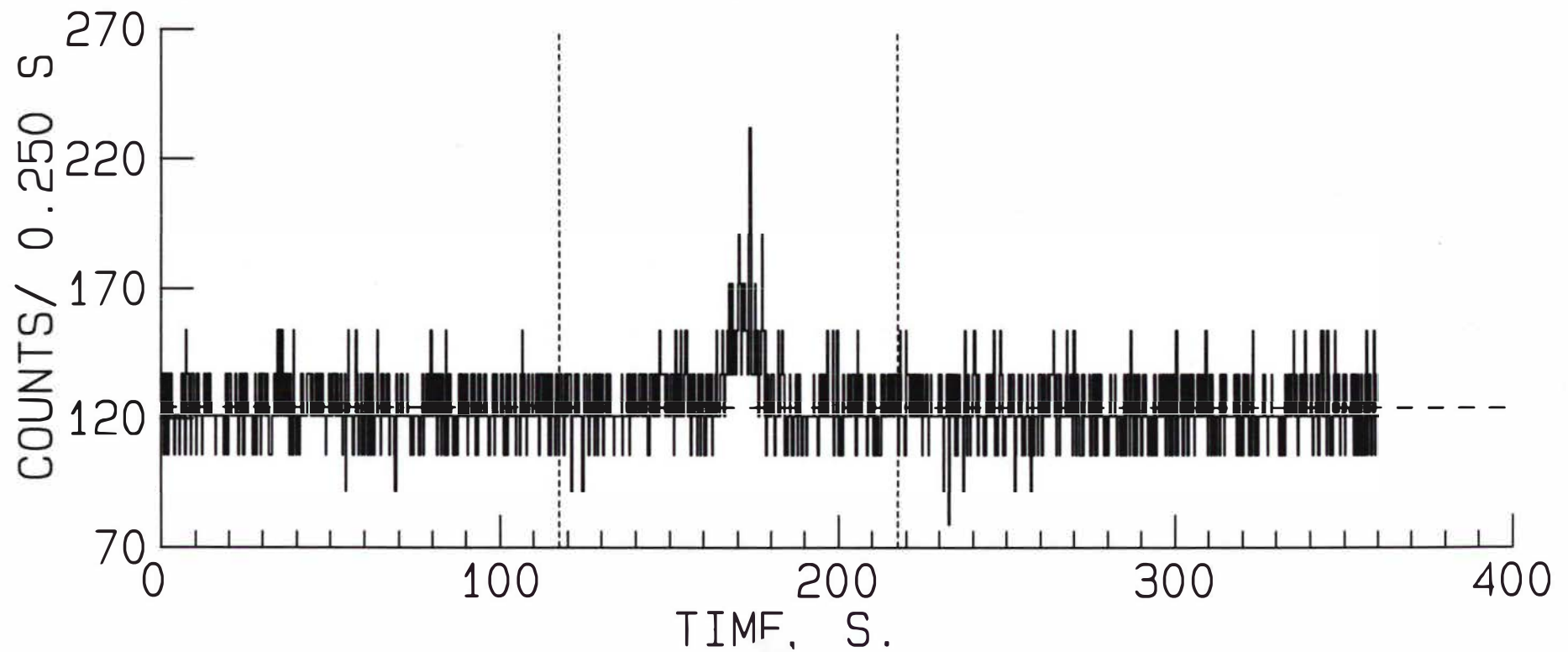
22- 147 keV



ULYSSES RT
3/ 2/95 8316.182 s
22- 147 keV

14 / 6 / 2

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From teegarden@tgrs.gsfc.nasa.gov Fri Feb 10 04:35 PST 1995
Mime-Version: 1.0
Date: Fri, 10 Feb 1995 07:37:19 -0500
To: khurley@sunspot.ssl.berkeley.edu (Kevin Hurley)
From: teegarden@tgrs.gsfc.nasa.gov (Bonnard J. Teegarden)
Subject: Re: Ulysses GRB

Hi Kevin,

1:49:56

The Feb. 3 event (TGRS trigger time = 6596s) looks like a solar flare to us. Our spin sector data shows it to be near the ecliptic (within ~ 10 deg) with an ecliptic longitude consistent with that of the sun.

Cheers,

Bonnard

From teegarden@tgrs.gsfc.nasa.gov Fri Feb 10 04:39 PST 1995
Mime-Version: 1.0
Date: Fri, 10 Feb 1995 07:40:38 -0500
To: KHURLEY@space6.ssl.berkeley.edu
From: teegarden@tgrs.gsfc.nasa.gov (Bonnard J. Teegarden)

Hi Again,

I just saw a message from David Palmer saying that there was a burst shortly after the flare (2:21:29) that was not triggered due to the flare. Maybe Tom has already sent you this info.

Cheers,

Bonnard

From cline@tgrs.gsfc.nasa.gov Fri Feb 10 14:05 PST 1995
Date: Fri, 10 Feb 1995 14:05:20 +0800
Mime-Version: 1.0
To: KHURLEY@space6.ssl.berkeley.edu
From: cline@tgrs.gsfc.nasa.gov (T L Cline)
Subject: Relay of Butterworth check

Subject: Feb 3 - the second Ulysses event

To: TOM

Cc: DAVIDP,BUTTERWORTH

Tom,

I checked the Konus background data from 4 to 6UT. We didn't see anything corresponding to the second Ulysses event.

Paul.

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

From HAGEDON@ssl.msfc.nasa.gov Sat Feb 4 10:04 PST 1995
Date: Sat, 4 Feb 1995 12:03:57 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3395

TIME: TJD=9751 SECONDS=06424

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

GOES M4.3 SOLAR FLARE. DUR.~230 SEC. VISIBLE ABOVE 300 KEV.

From HAGEDON@ssl.msfc.nasa.gov Sat Feb 4 10:06 PST 1995
Date: Sat, 4 Feb 1995 12:06:21 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3396

TIME: TJD=9751 SECONDS=67211

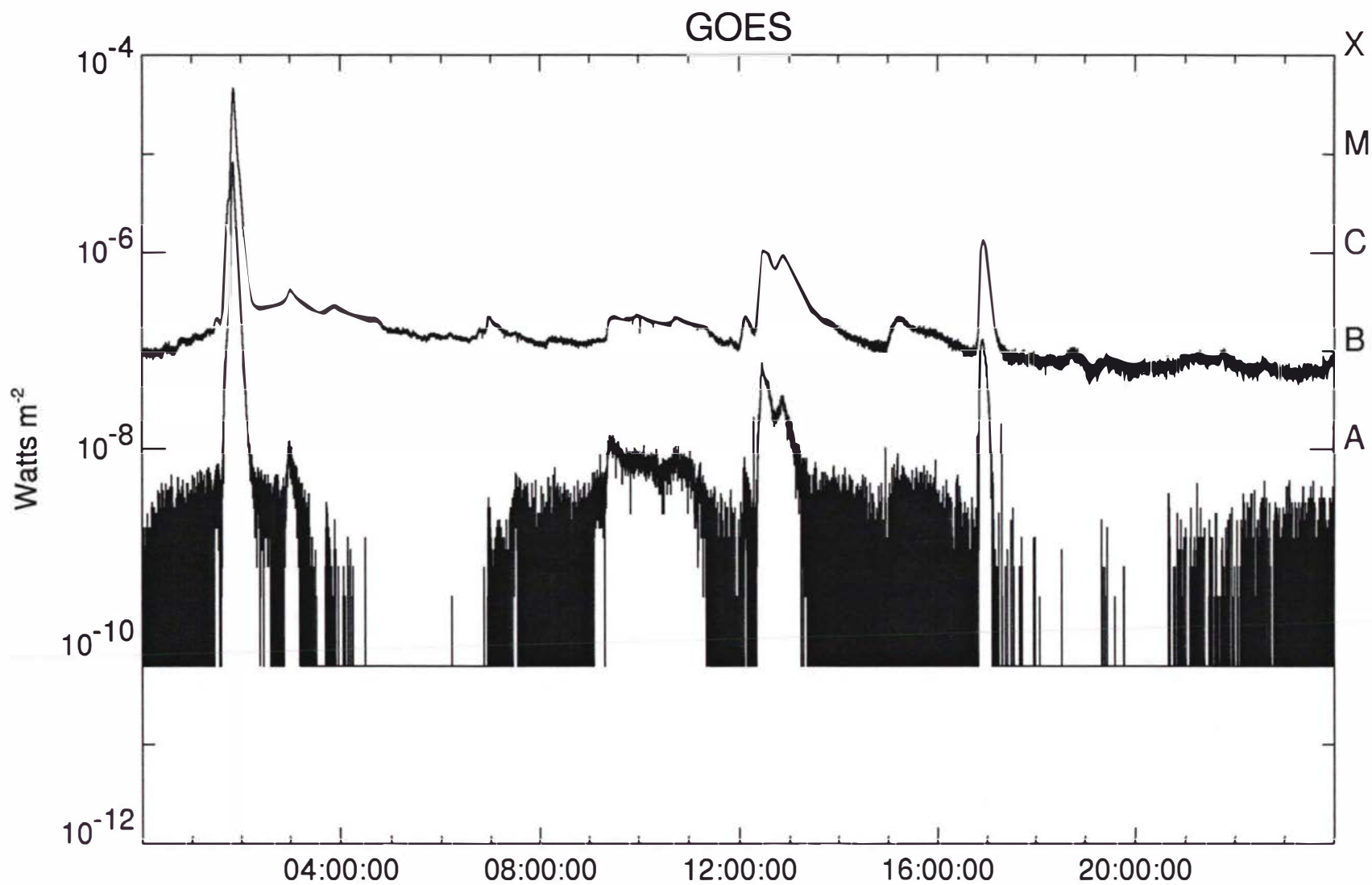
TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.



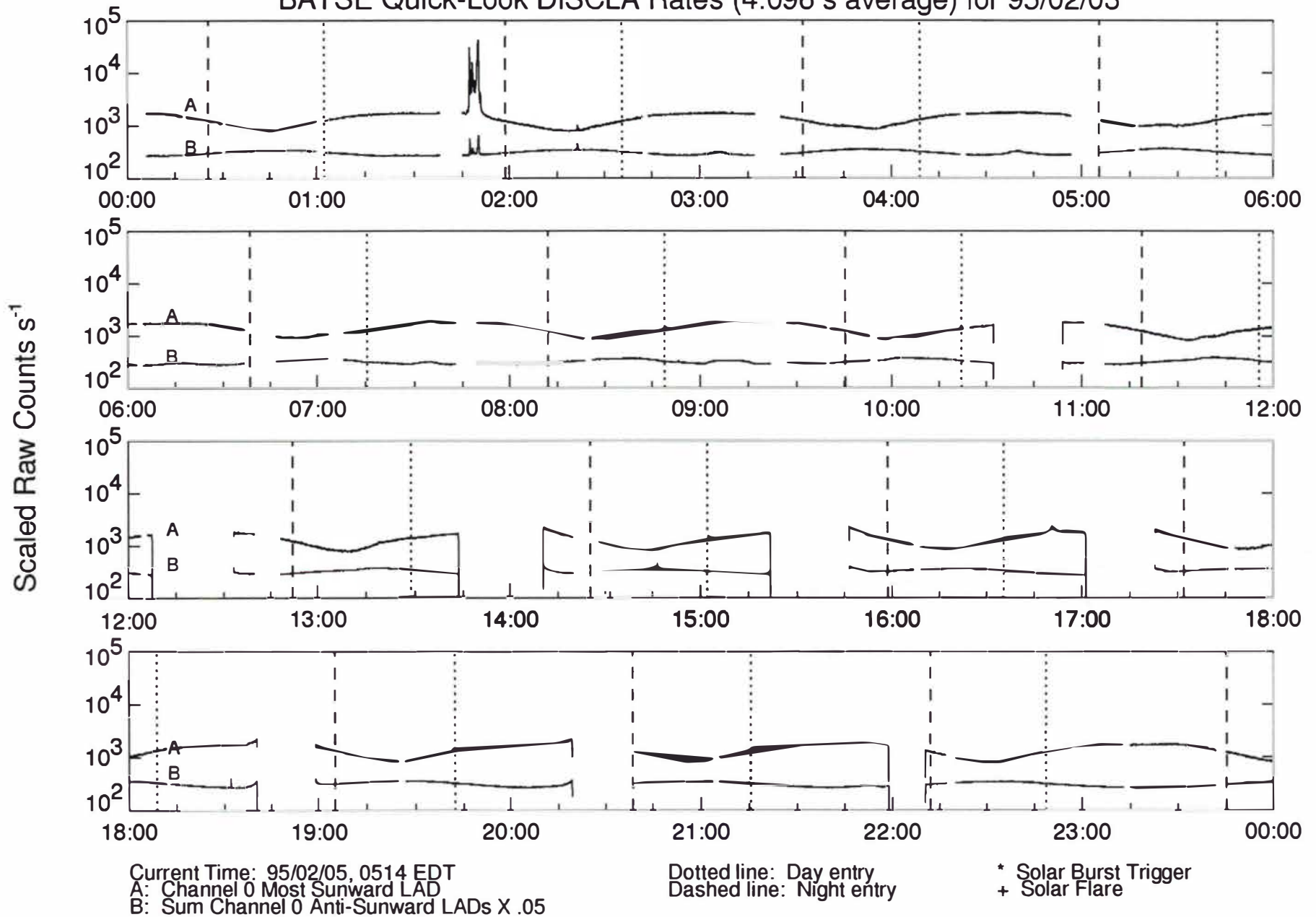
Data Start: 95/02/03, 0000:00

Plot created: 95/02/05, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

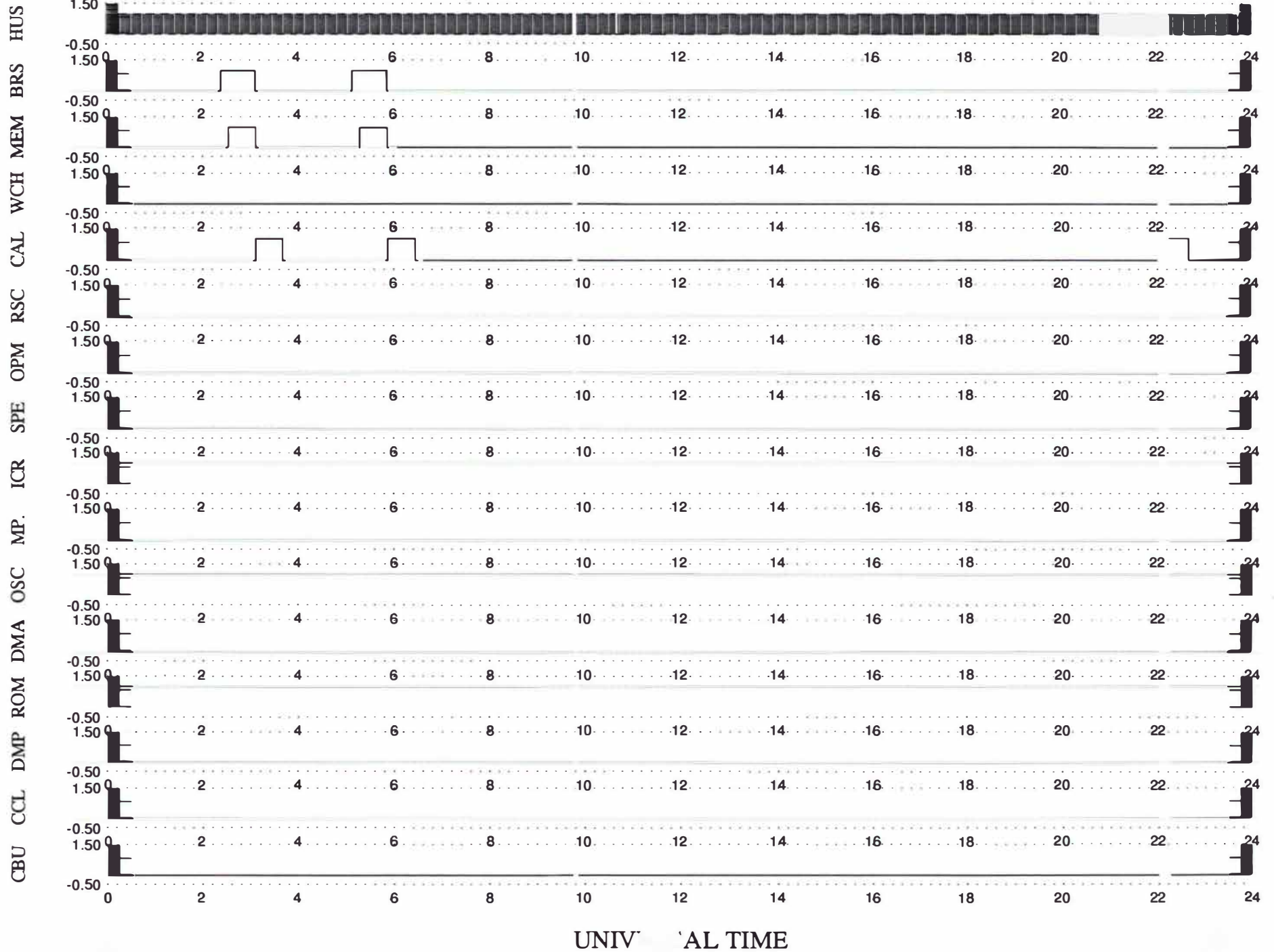
2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/03



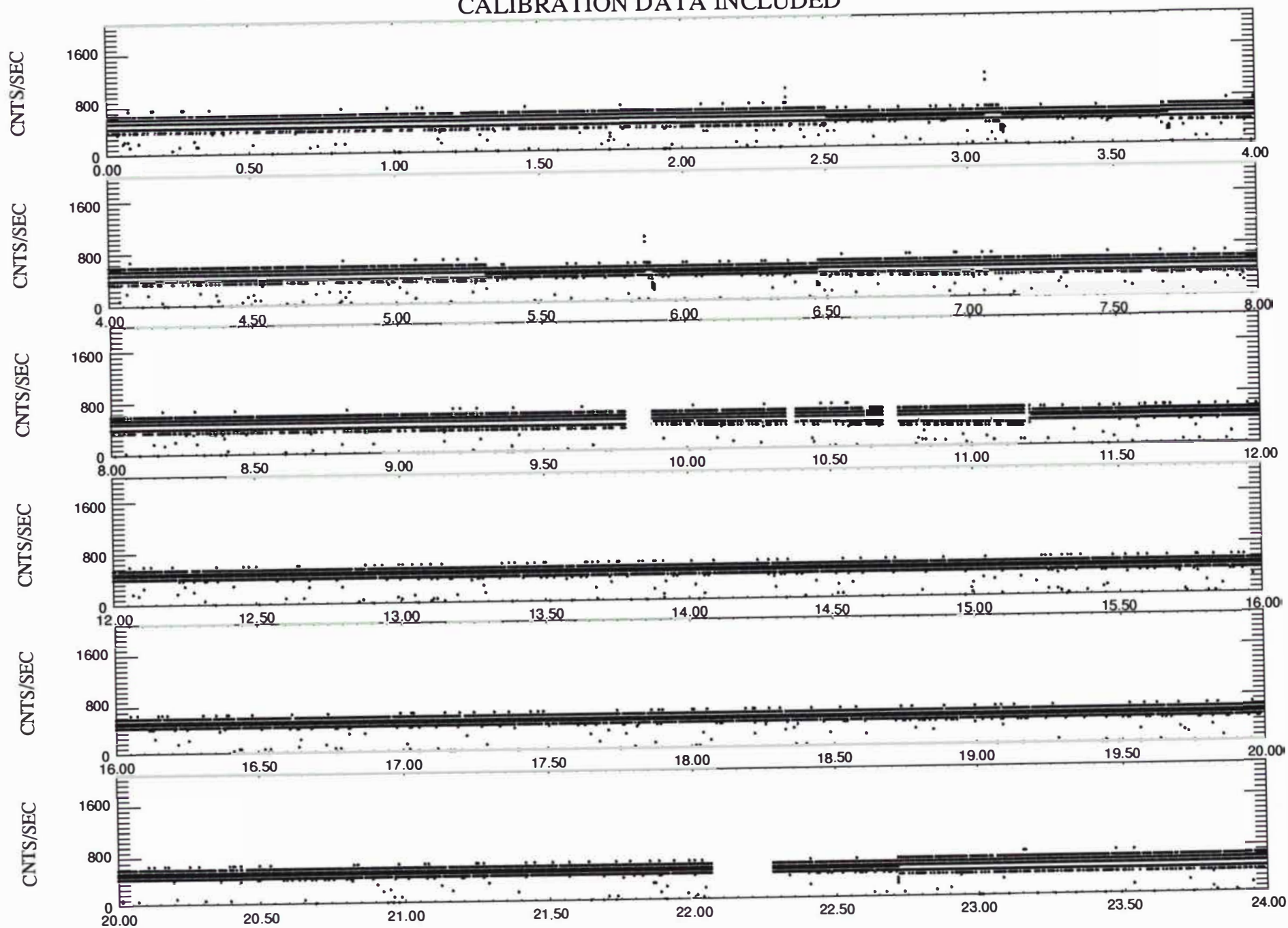
HUS MODES EDR day 34, year 1995 to day 34, year 1995
BURST NUMBER 13, 14

7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 34, year 1995 to day 34, year 1995
CALIBRATION DATA INCLUDED

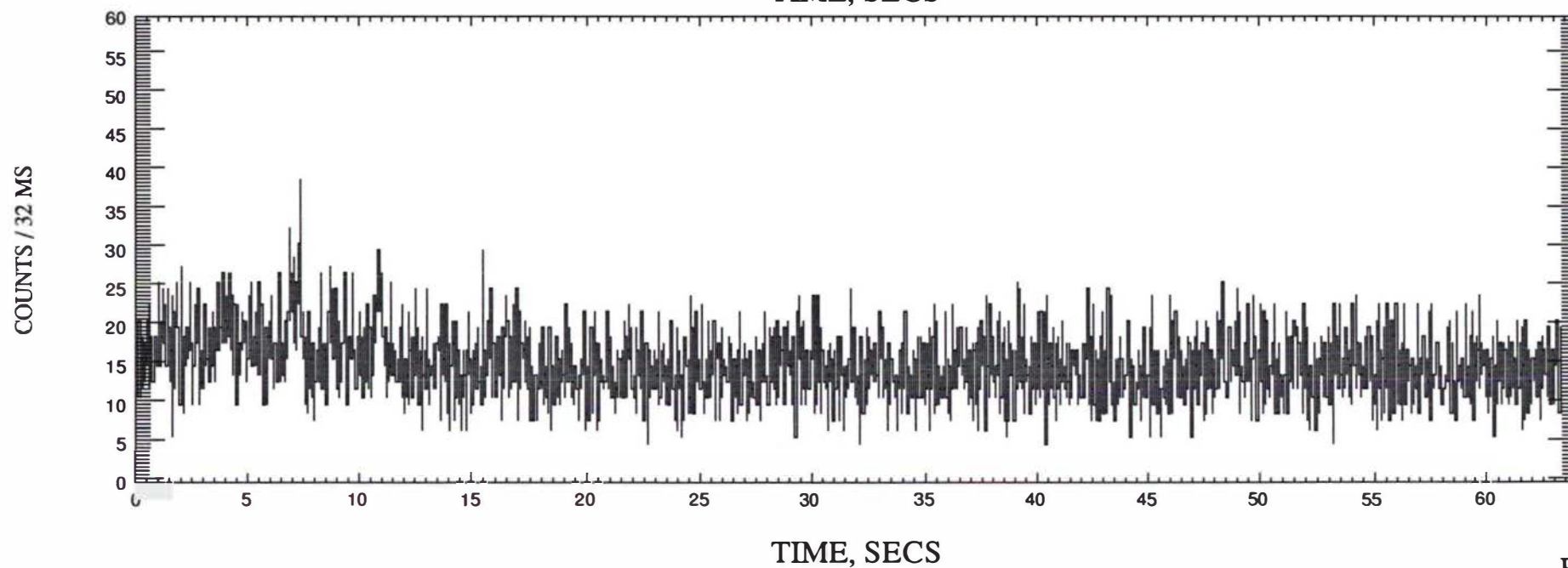
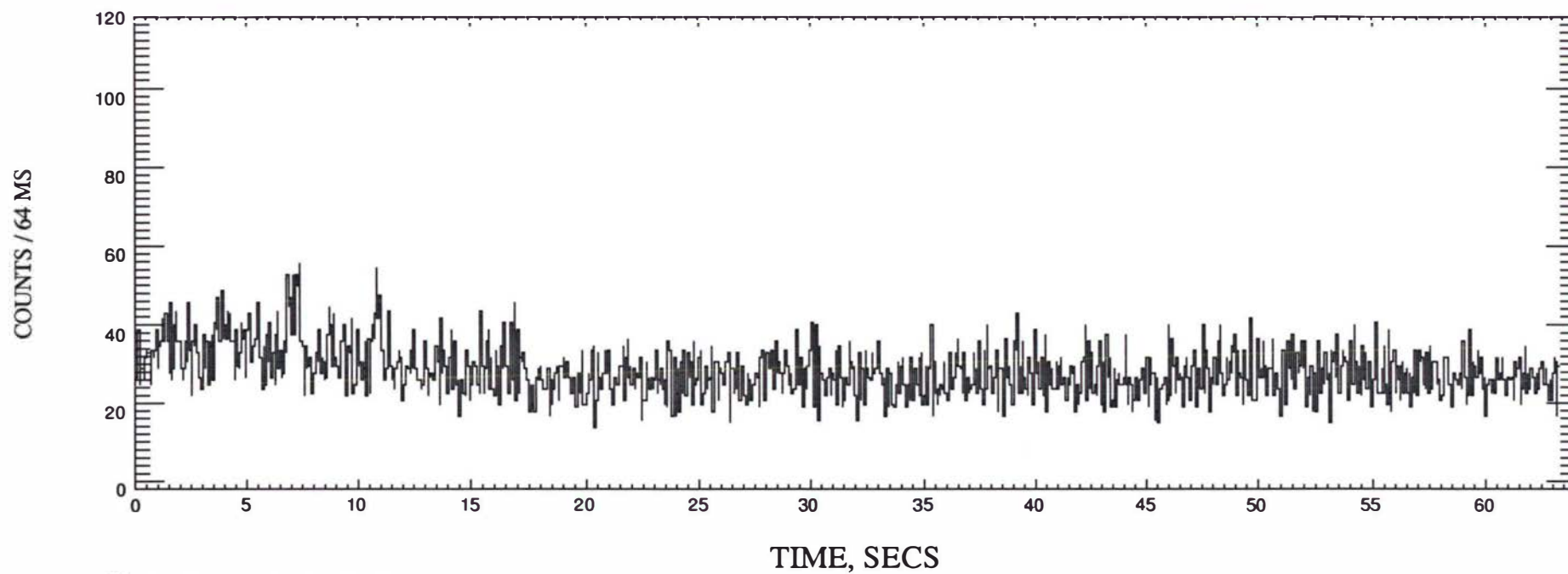
7/18/95



UNIV GAL TIME

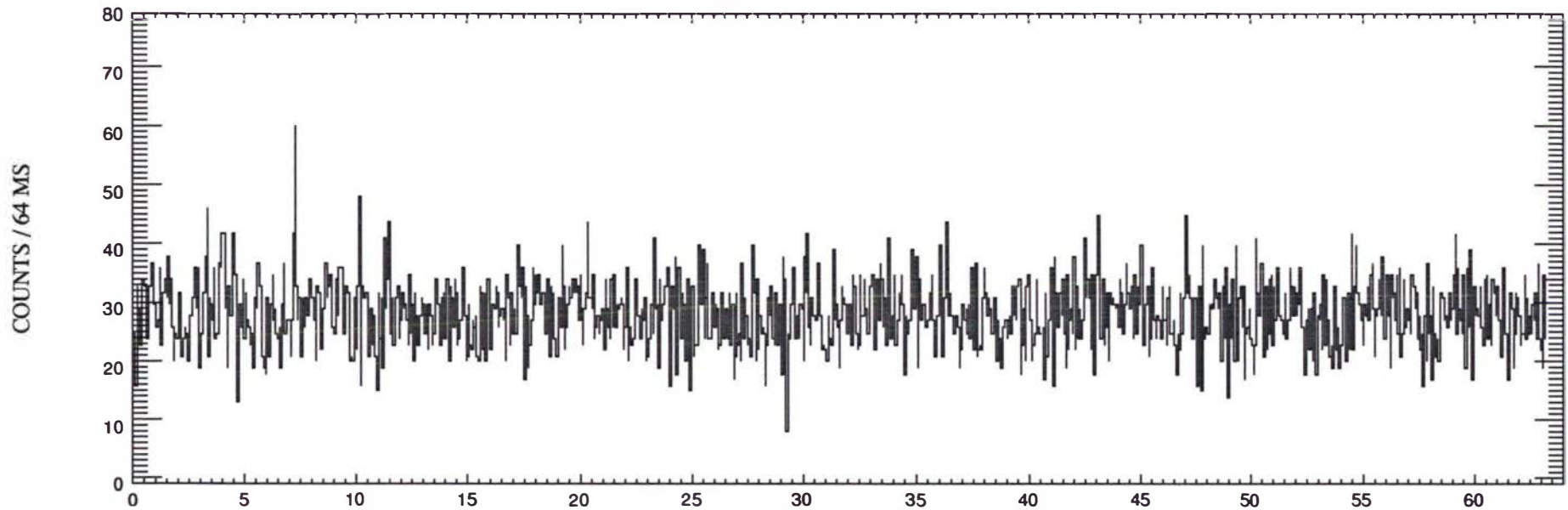
HUS 2A TRIGGERED DATA EDR day 34, year 1995
Burst Counter 13 at UT= 2.358346341451 h= 8490.047 s 02:21:30.047

7/18/95

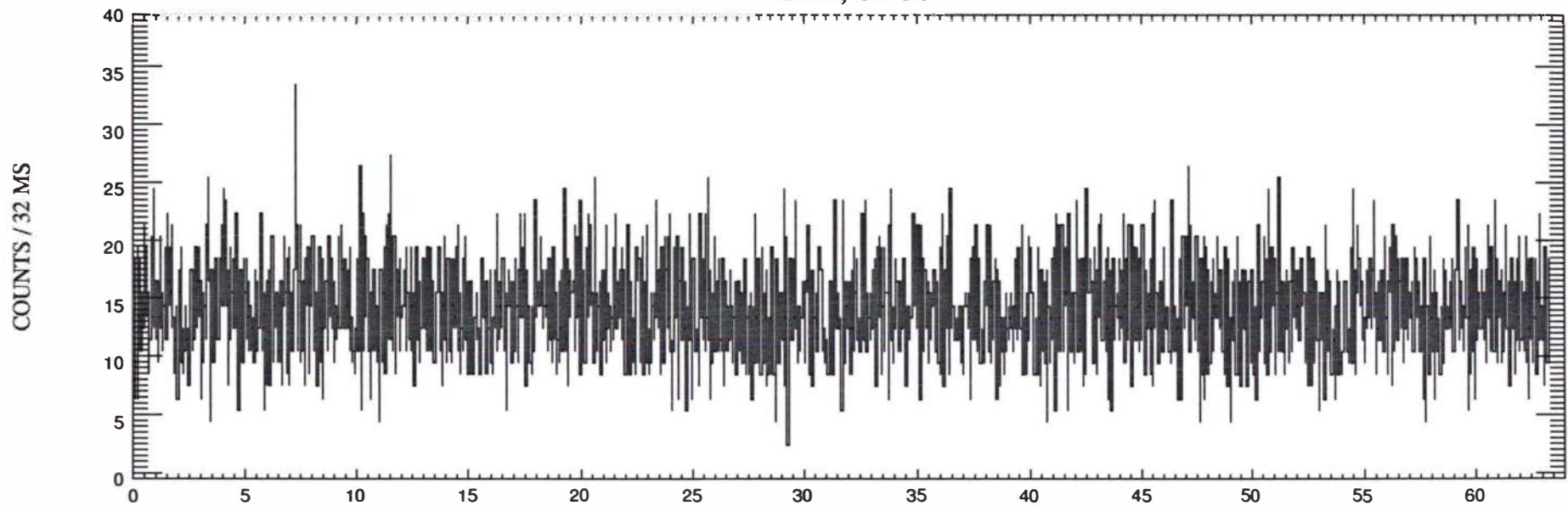


HUS 2A TRIGGERED DATA EDR day 34, year 1995
Burst Counter 14 at UT= 5.158399603102 h=18570.239 s 05:09:30.239

7/18/95

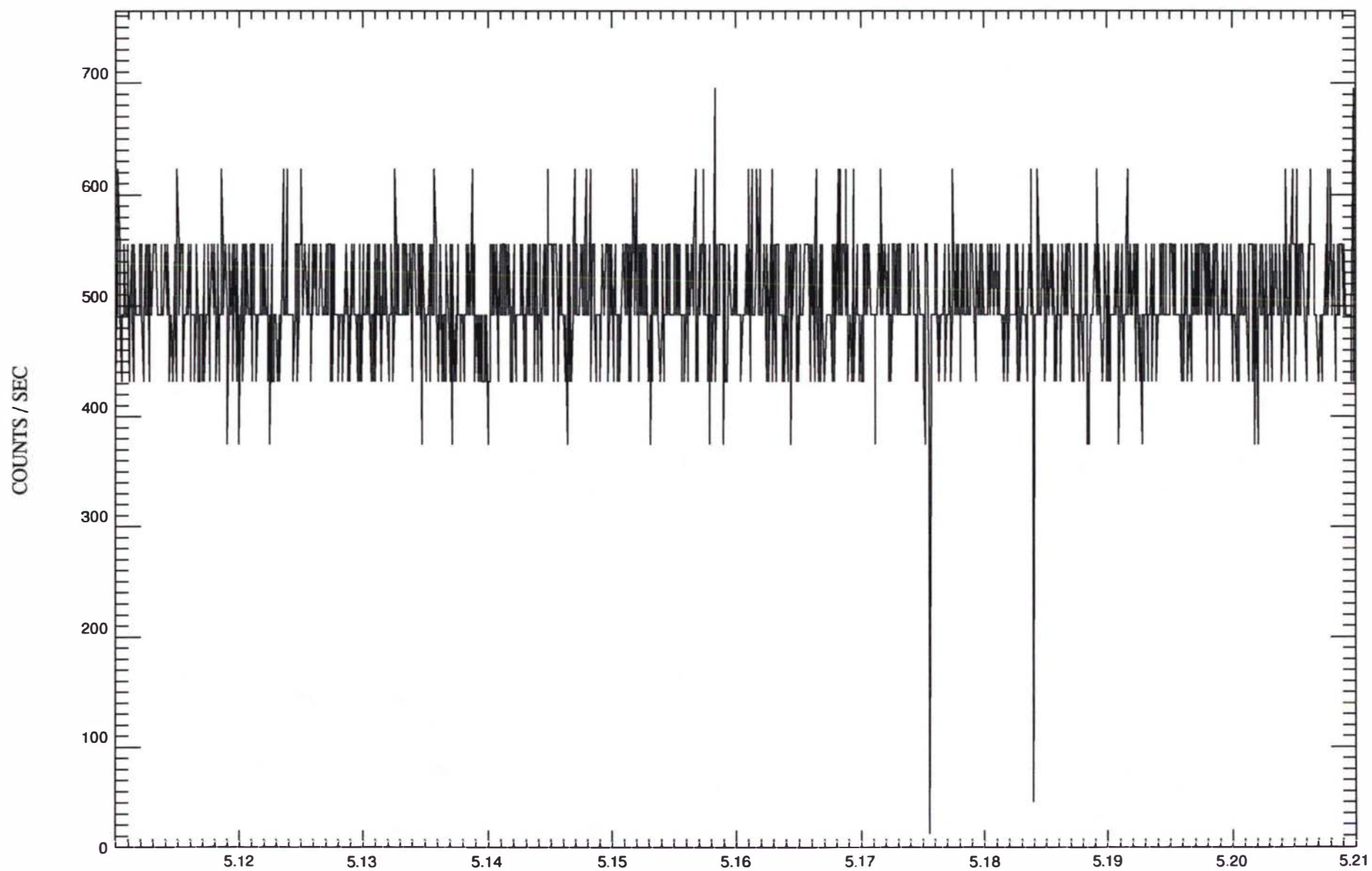


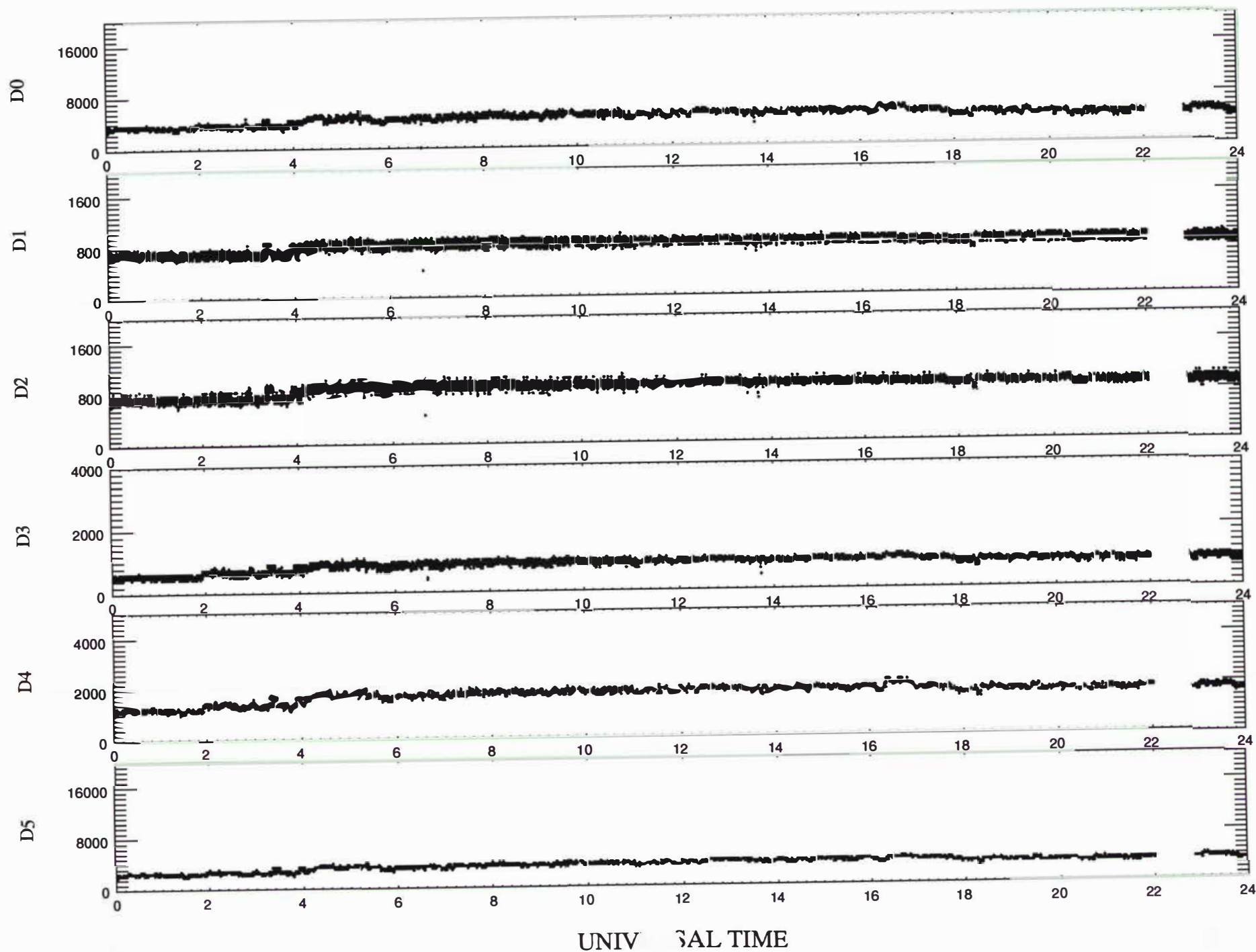
TIME, SECS



TIME, SECS

CALIBRATION DATA INCLUDED





Date: Aug 16 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?

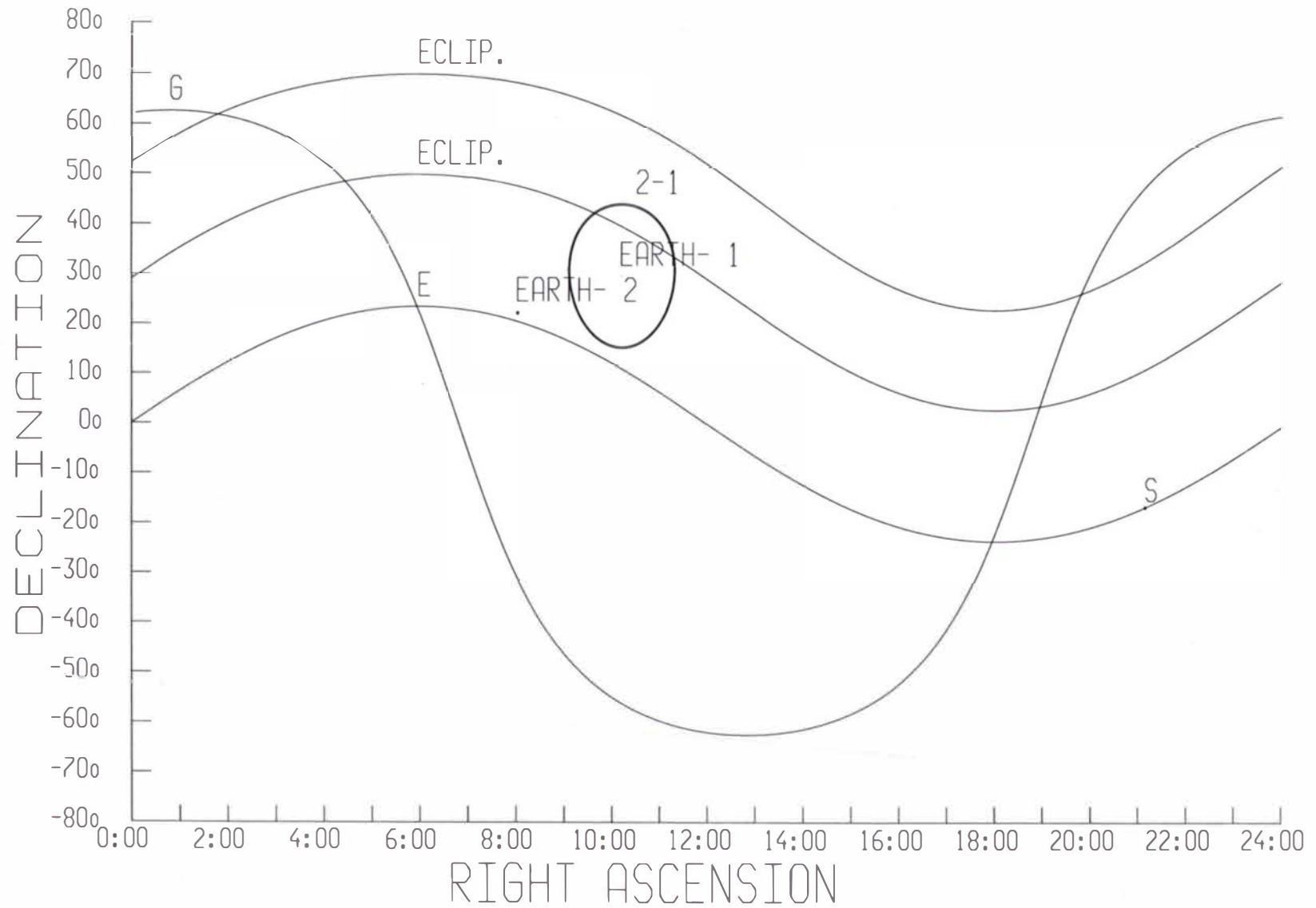
3. PVO Data

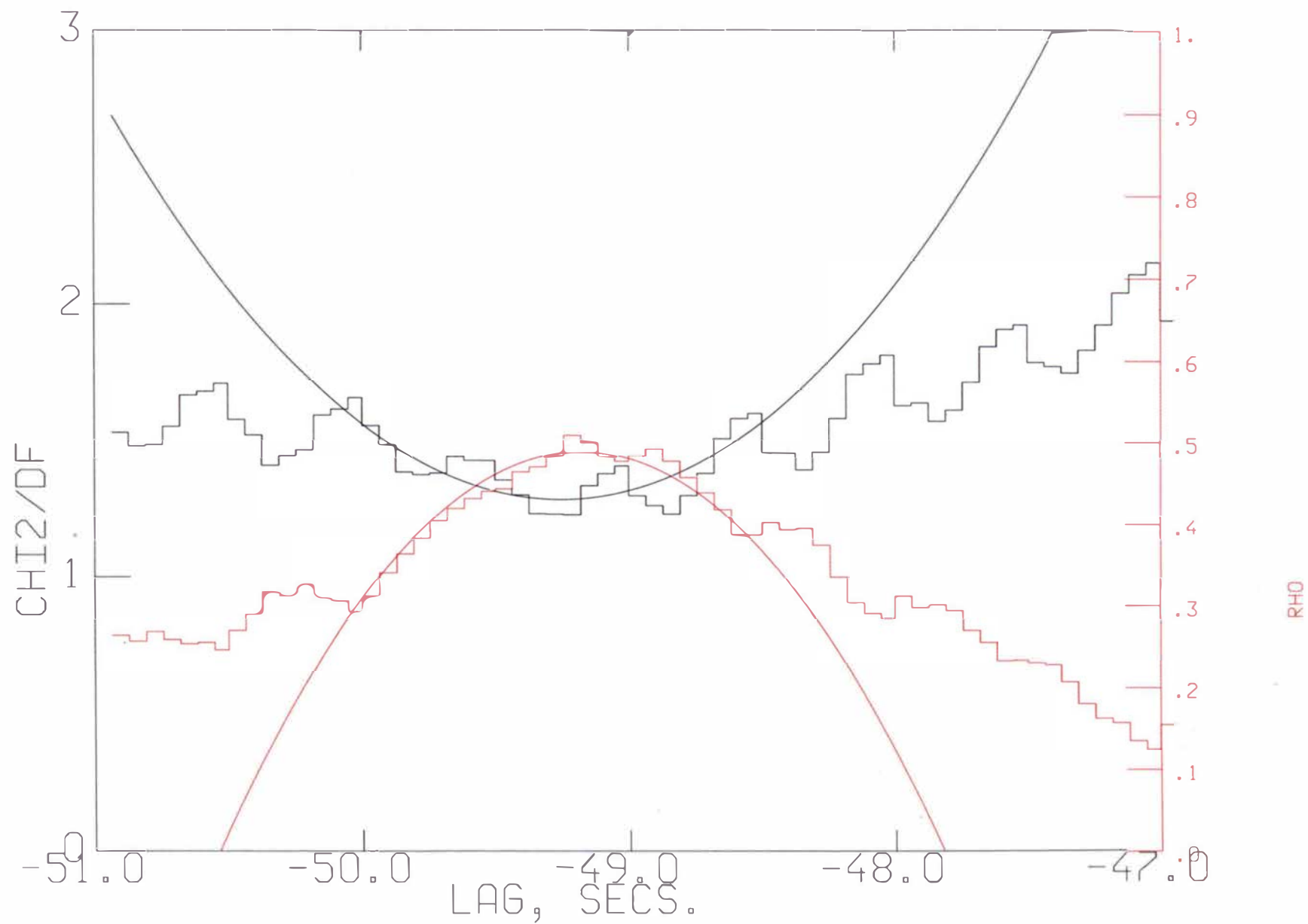
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

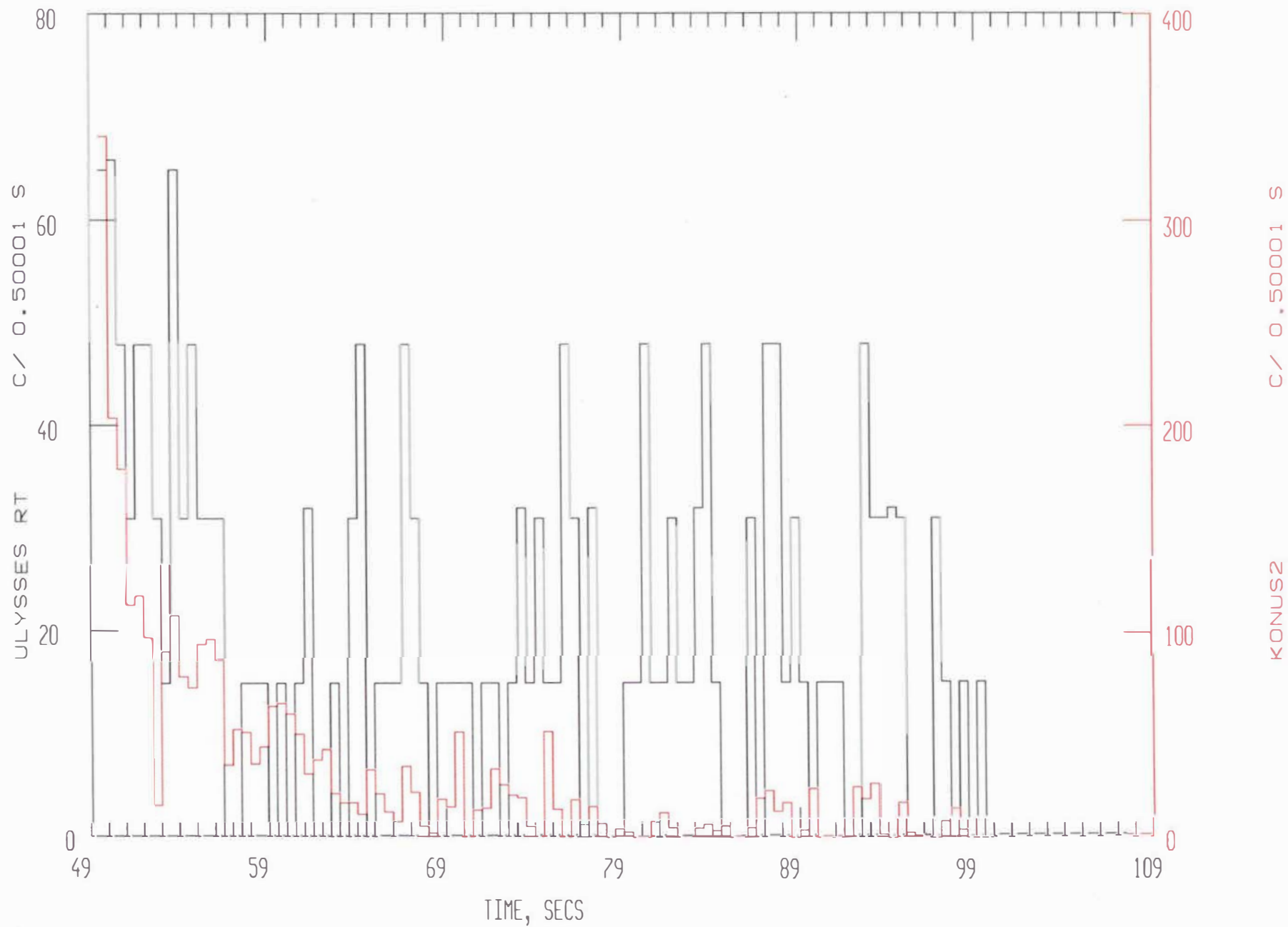
EVENT OF FEB 4, 1995 0:56

16/08/2011

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







KONUS 19950204 03416

ULYSSES RT

12 / 08 / 11

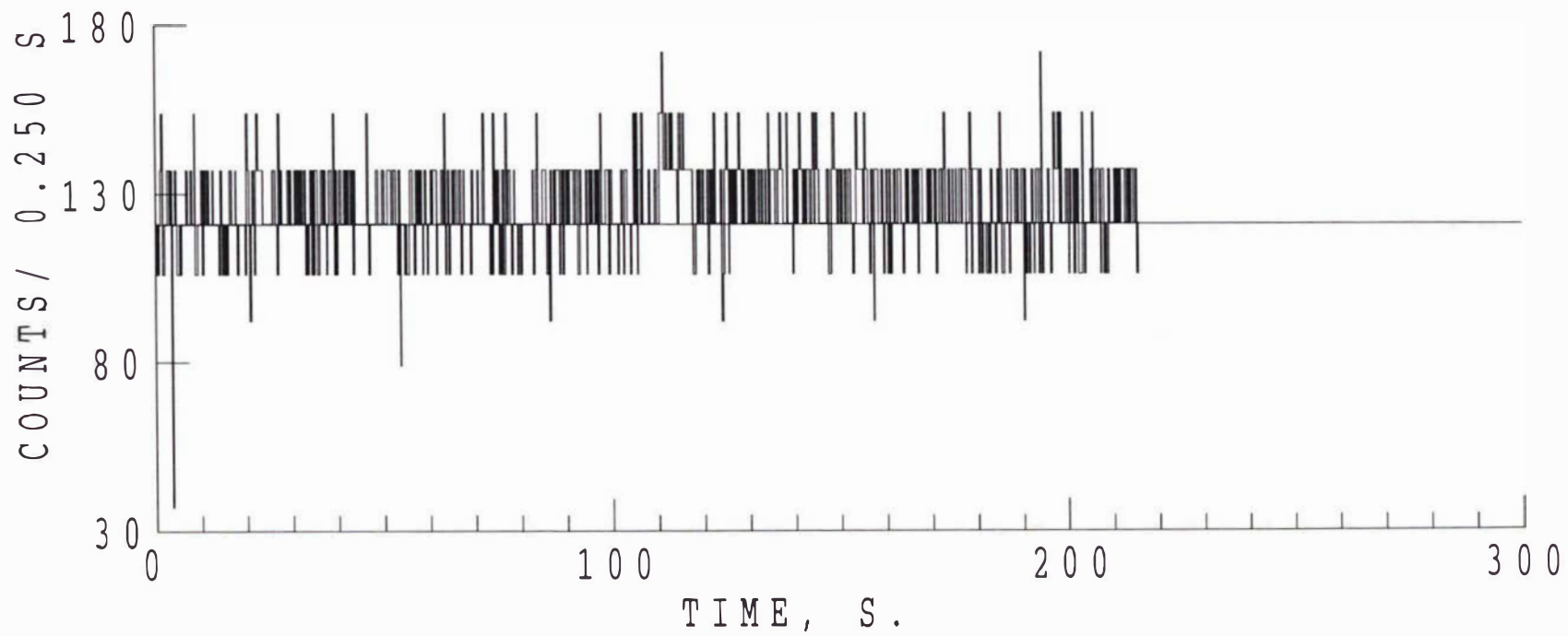
04/02/95 3312.248 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

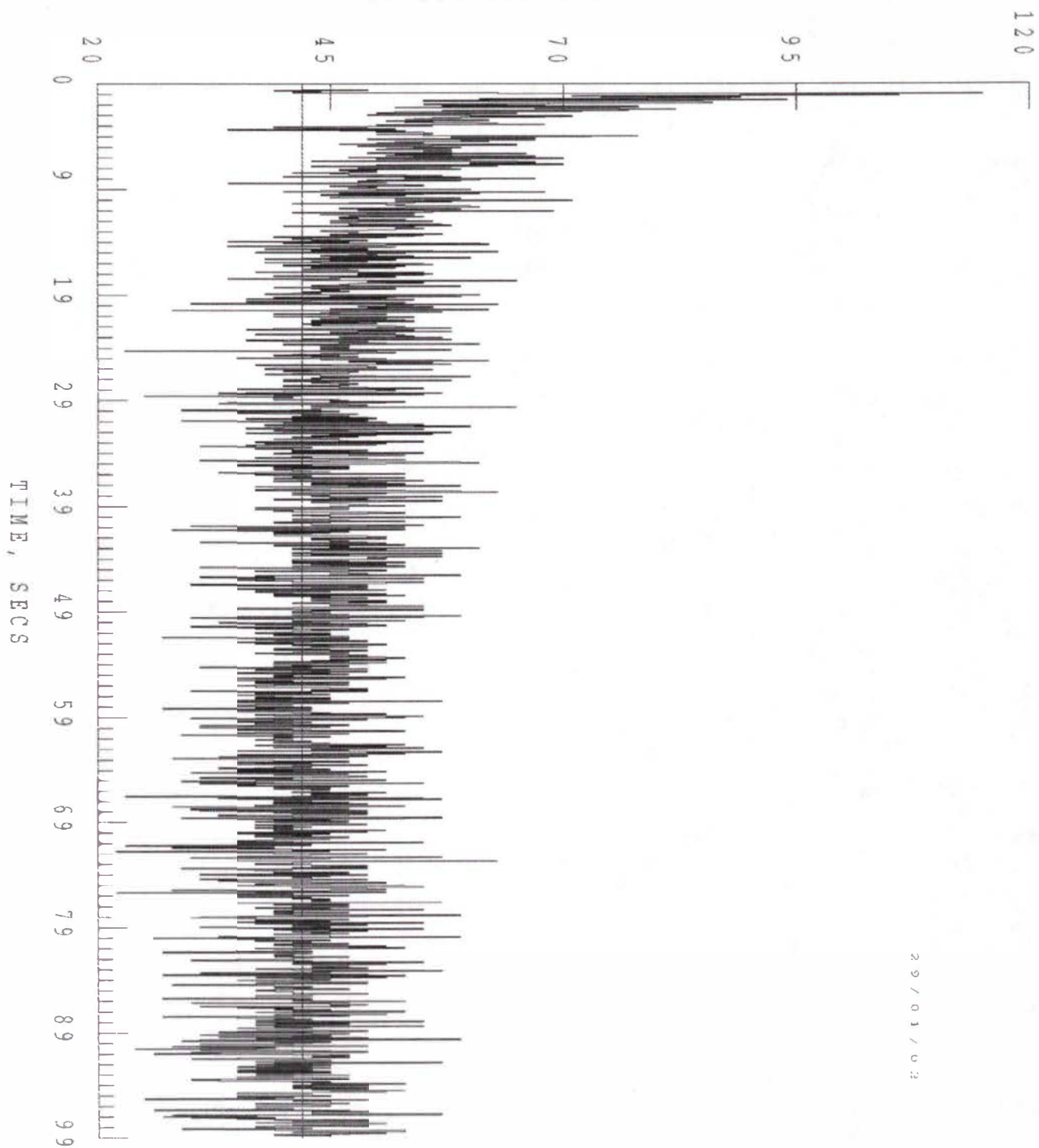
|||

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



11
10
9
8
7
6
5
4
3
2
1
0

COUNTS/0.064 S



From RICHARDSON@ssl.msfc.nasa.gov Tue Feb 7 06:29 PST 1995
Date: Tue, 7 Feb 1995 8:28:49 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3397

TIME: TJD=9752 SECONDS=20607

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=36.5 AZIMUTH=39.0 ERROR= DEGREES

COMMENTS:

SOLAR FLARE, SPIKEY, LASTING APROX. 160SEC. NOT VISIBLE ABOVE 50KEV.

From RICHARDSON@ssl.msfc.nasa.gov Tue Feb 7 06:31 PST 1995
Date: Tue, 7 Feb 1995 8:31:28 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3398

TIME: TJD=9752 SECONDS=24978

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From RICHARDSON@ssl.msfc.nasa.gov Tue Feb 7 06:34 PST 1995
Date: Tue, 7 Feb 1995 8:33:57 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3399

TIME: TJD=9752 SECONDS=30424

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From RICHARDSON@ssl.msfc.nasa.gov Tue Feb 7 06:39 PST 1995
Date: Tue, 7 Feb 1995 8:36:08 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3400

TIME: TJD=9752 SECONDS=64612

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

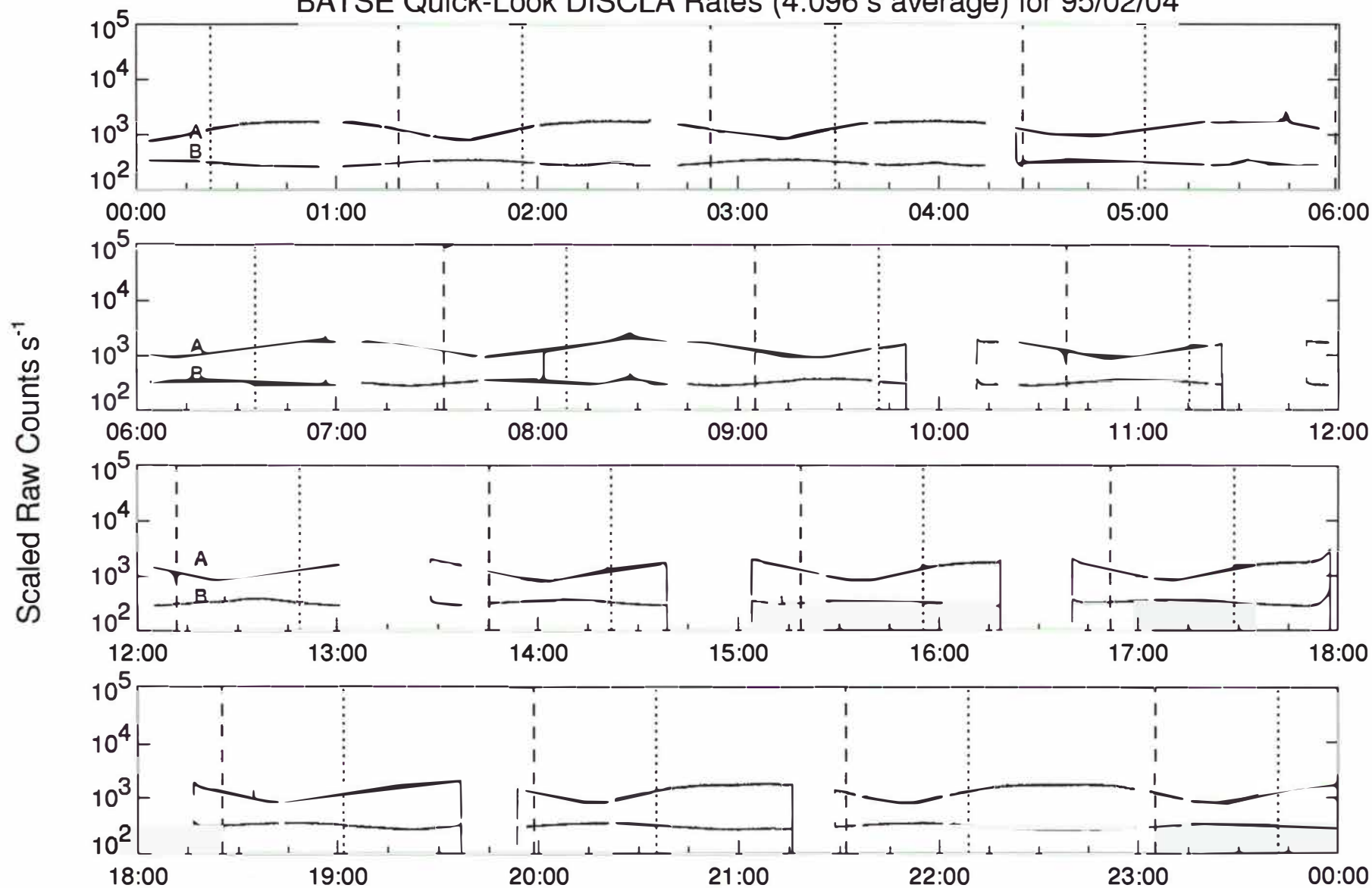
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/04



Current Time: 95/02/06, 0514 EDT

A: Channel 0 Most Sunward LAD

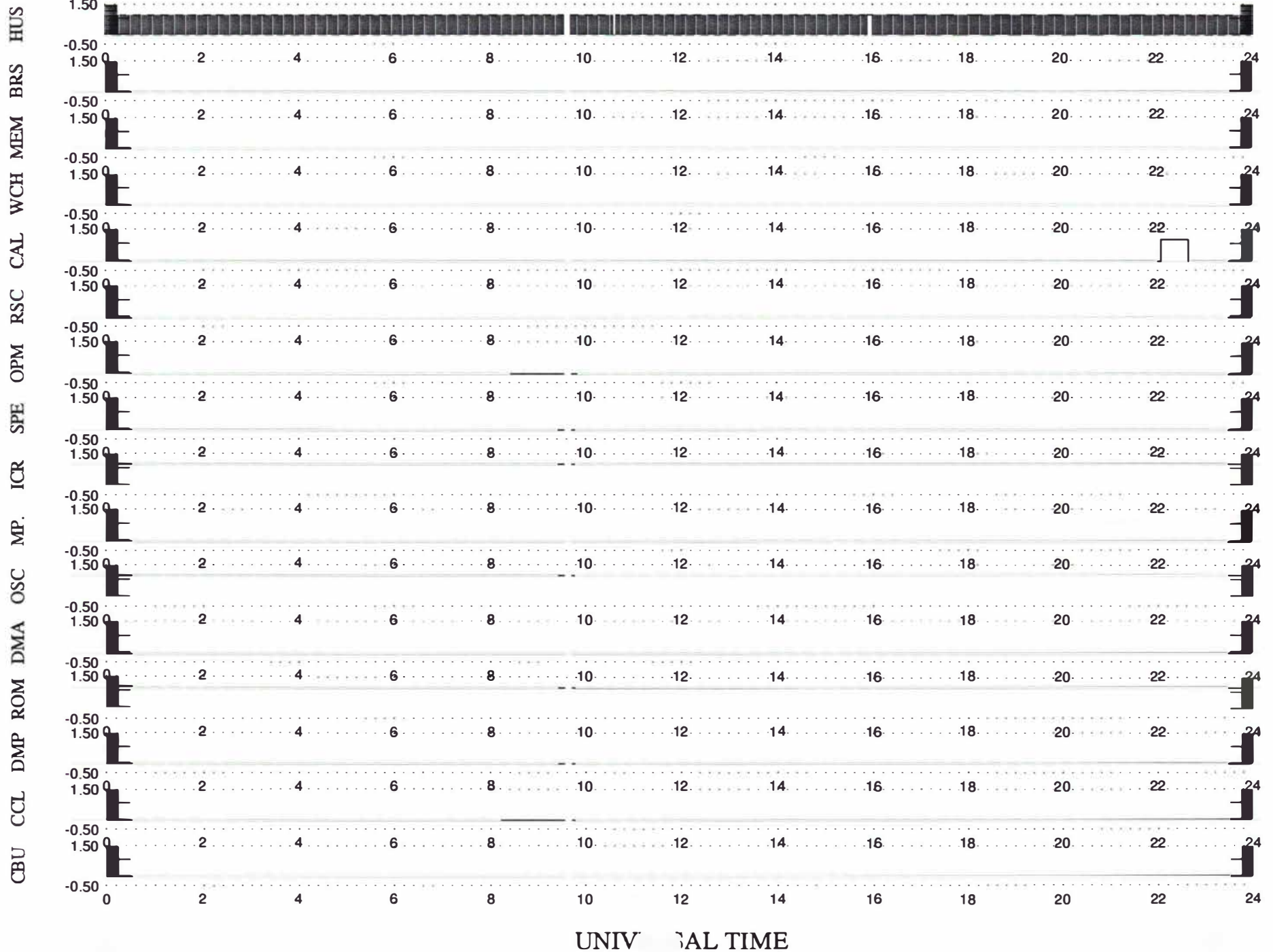
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

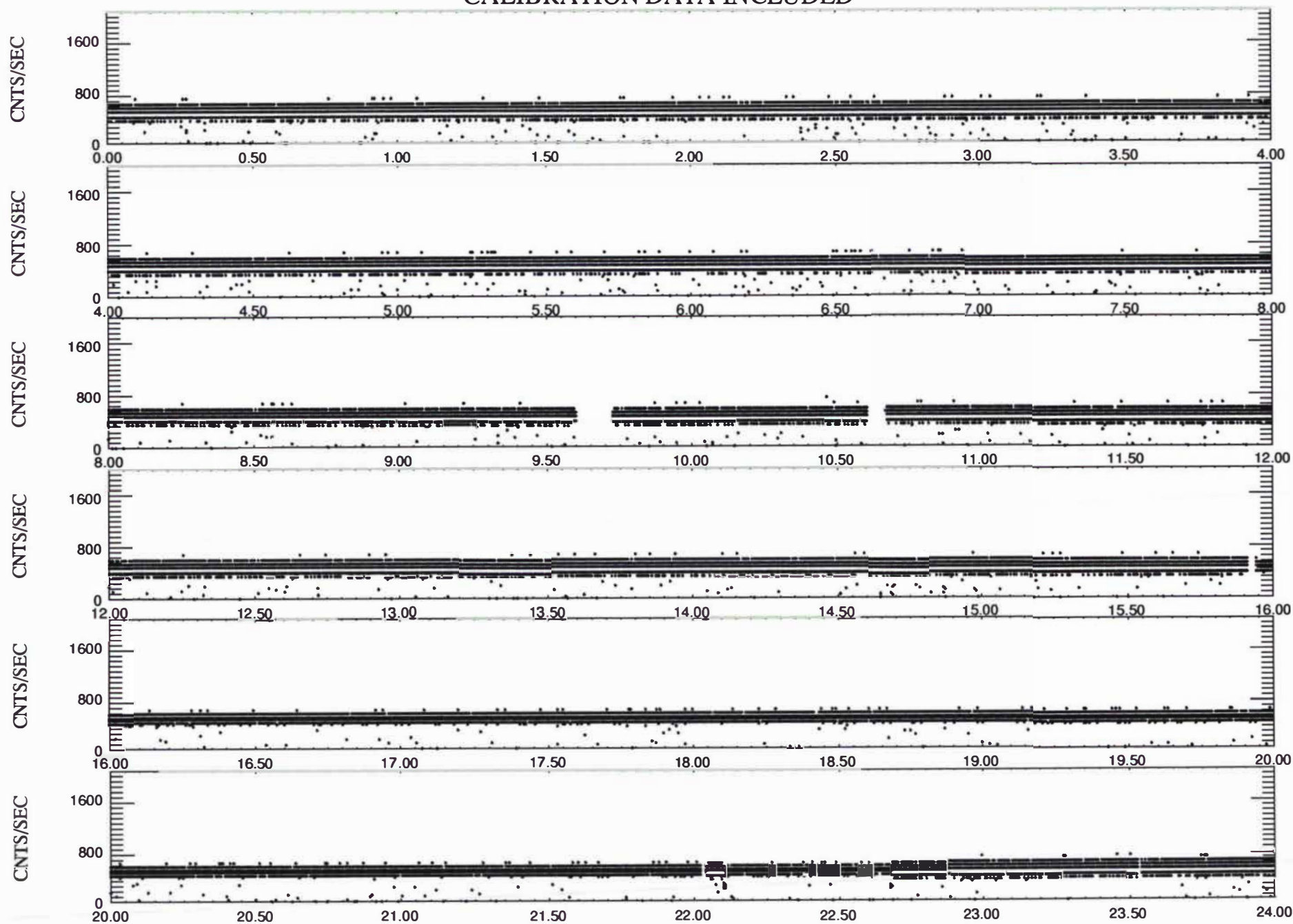
HUS MODES EDR day 35, year 1995 to day 35, year 1995
NO BURST (14)

7/18/95

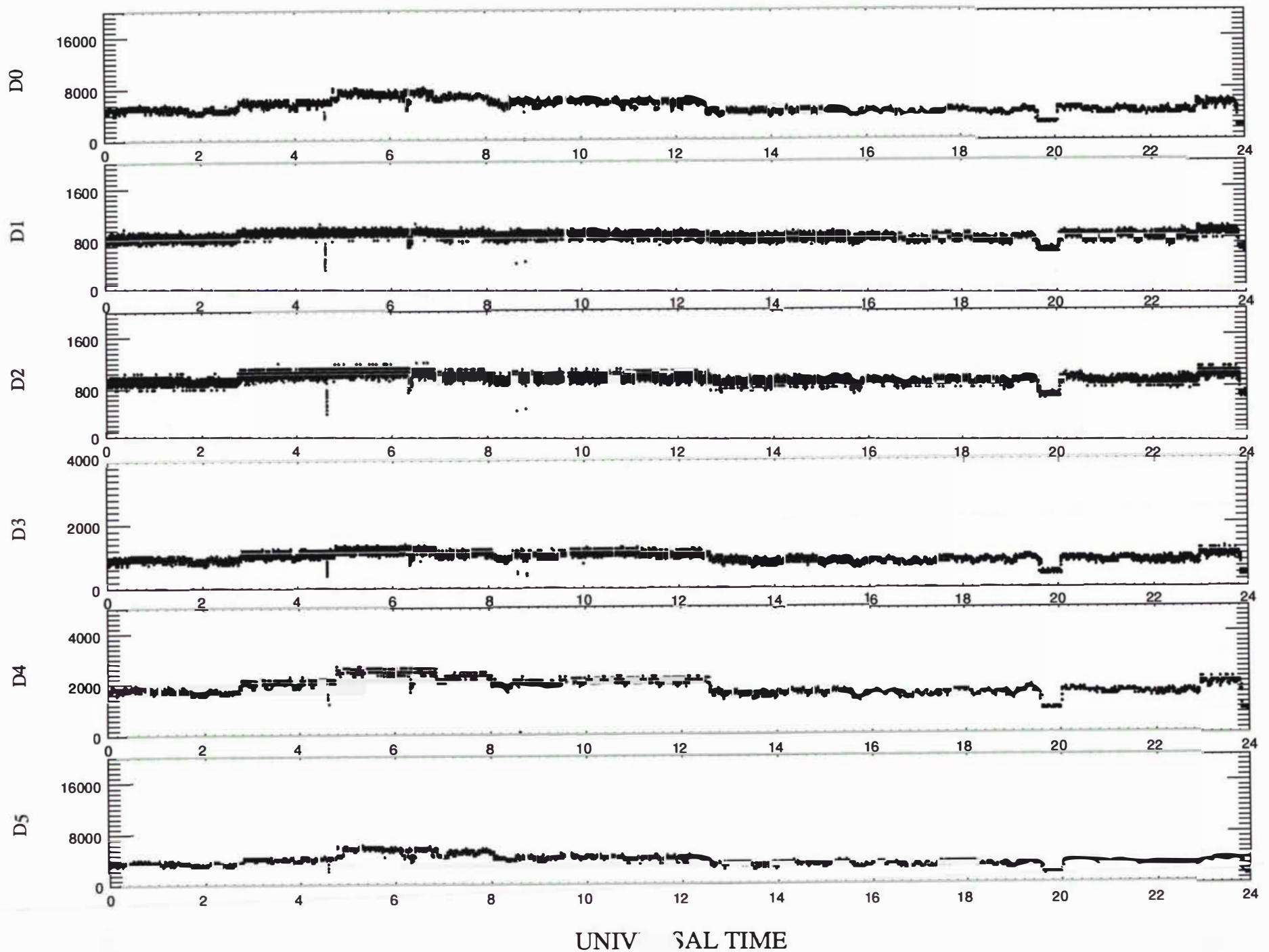


HUS 2A, MODE 1, NOT AVERAGED EDR day 35, year 1995 to day 35, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. TIME



From SAHI@ssl.msfc.nasa.gov Mon Feb 6 12:33 PST 1995
Date: Mon, 6 Feb 1995 14:33:20 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03401

TIME: TJD=9753 SECONDS=49787

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=037.6 AZIMUTH=028.9 ERROR= DEGREES

COMMENTS:

SOLAR FLARE, GOES C5.1, OPTICAL 1N. MULTYPEAKED, DUR.~ 200 SEC.
STARTS AT T-15 SEC , MARGINALLY VISIBLE ABOVE 50 KEV.

From SAHI@ssl.msfc.nasa.gov Wed Feb 8 12:53 PST 1995
Date: Wed, 8 Feb 1995 14:53:32 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3402

TIME: TJD=9754 SECONDS=24685

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

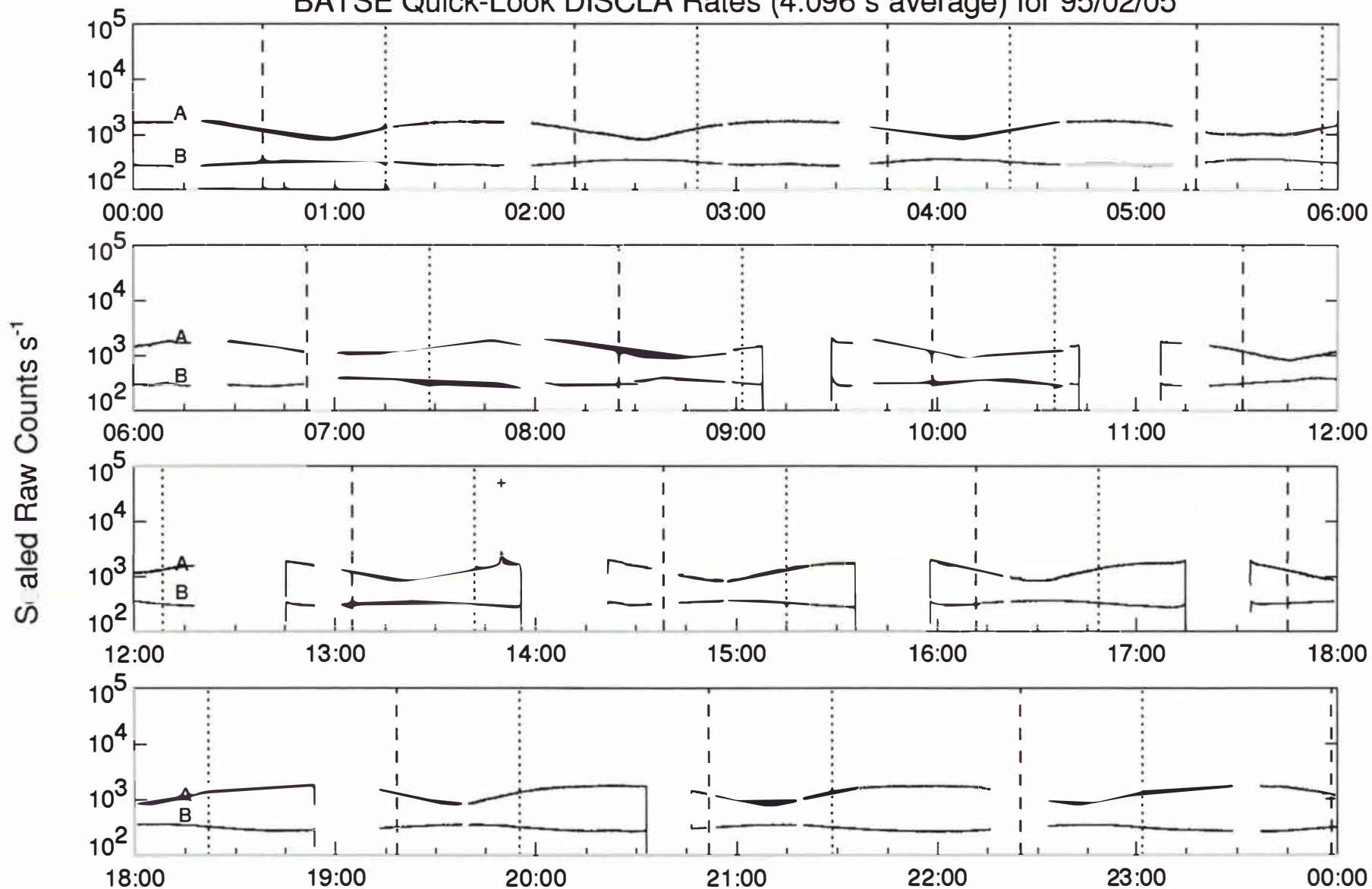
INTENSITY: COUNTS/CM2

LOCATION: ZENITH=038.4 AZIMUTH=024.2 ERROR= DEGREES

COMMENTS:

SOLAR FLARE, GOES C3.6, OPTICAL 1F. MULTI-PEAKED DUR.~120 SECS.
NOT VISIBLE ABOVE 100 KEV.

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/05



Current Time: 95/02/07, 0519 EDT

A: Channel 0 Most Sunward LAD

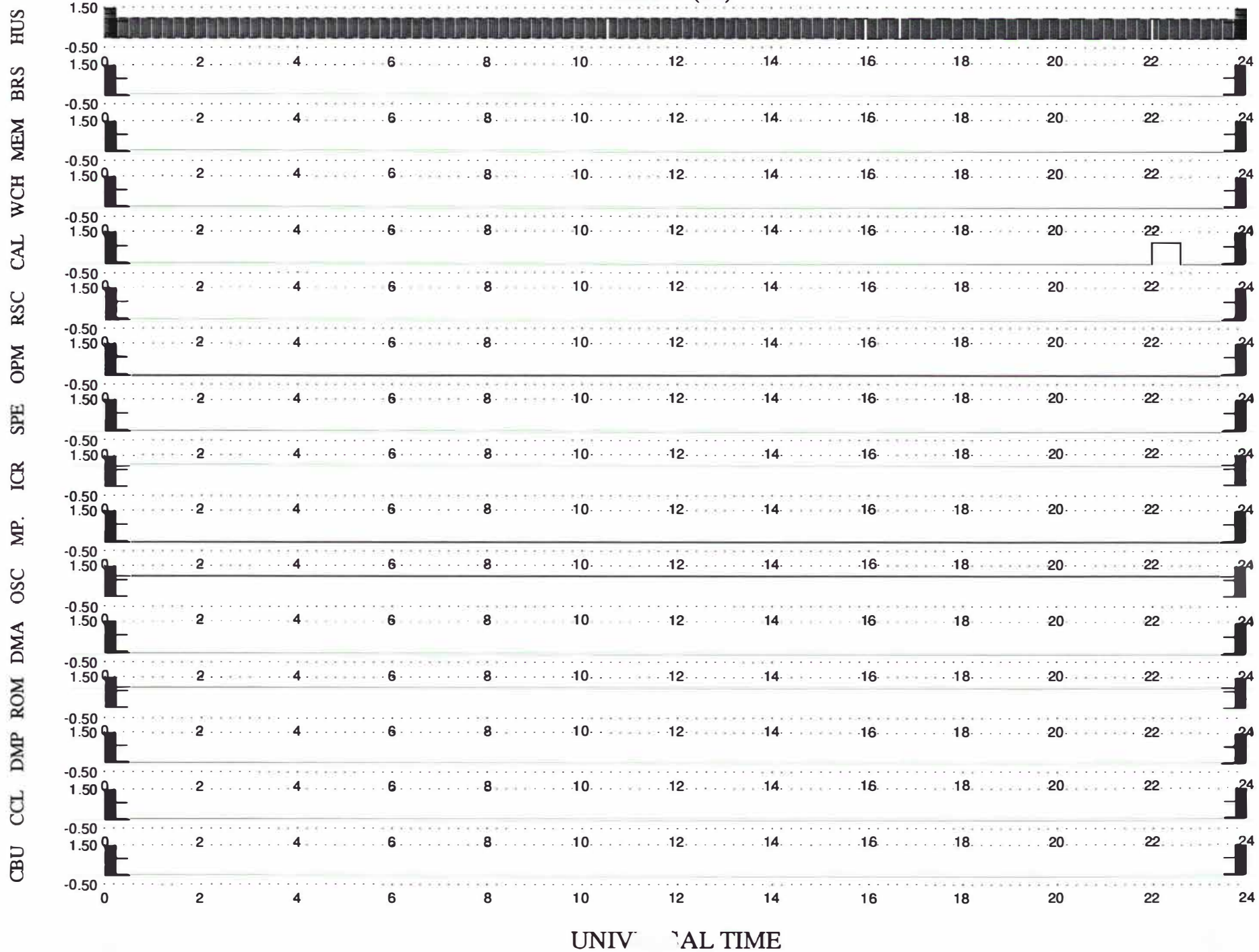
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

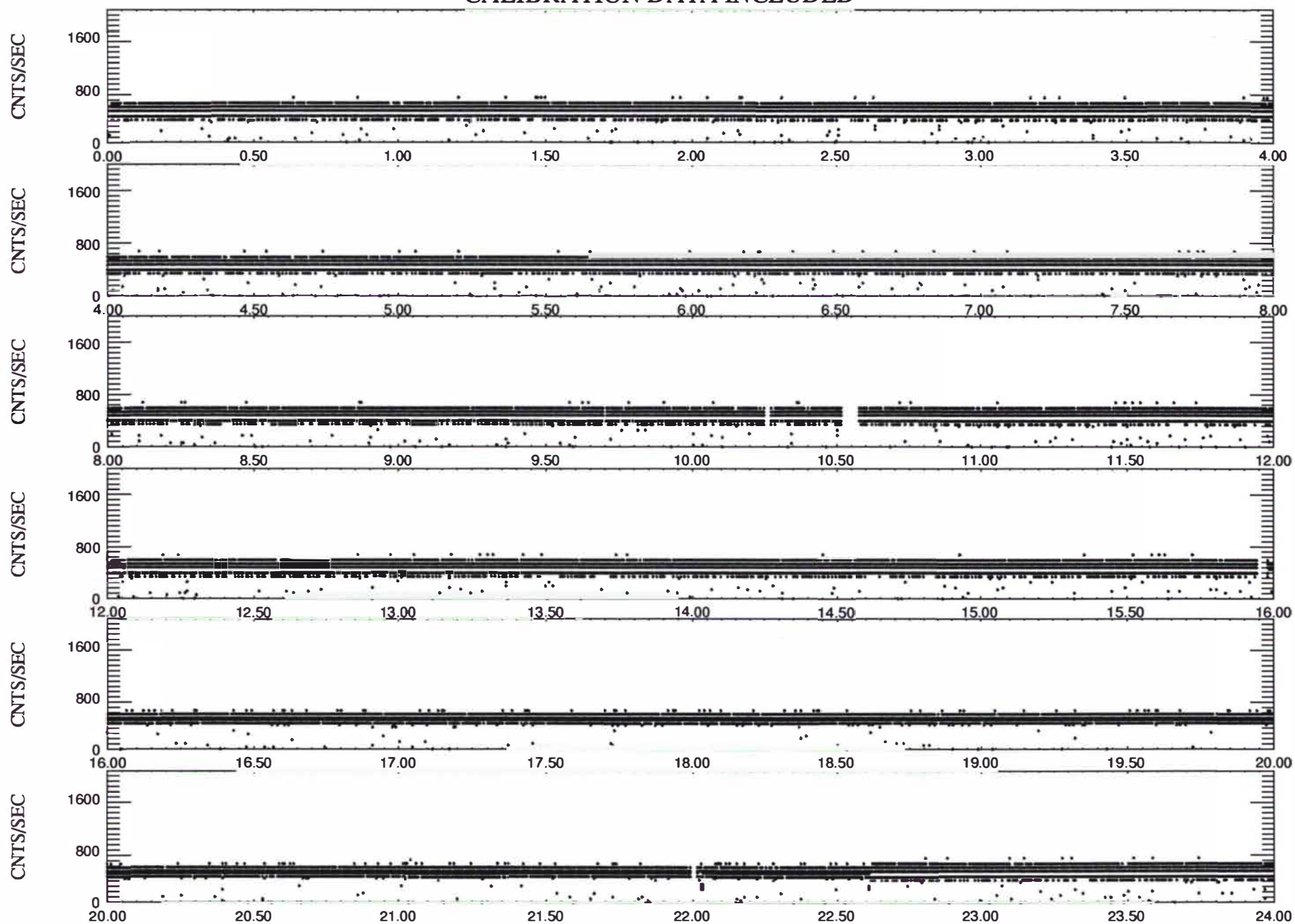
HUS MODES EDR day 36, year 1995 to day 36, year 1995 NO BURST (14)

7/18/95

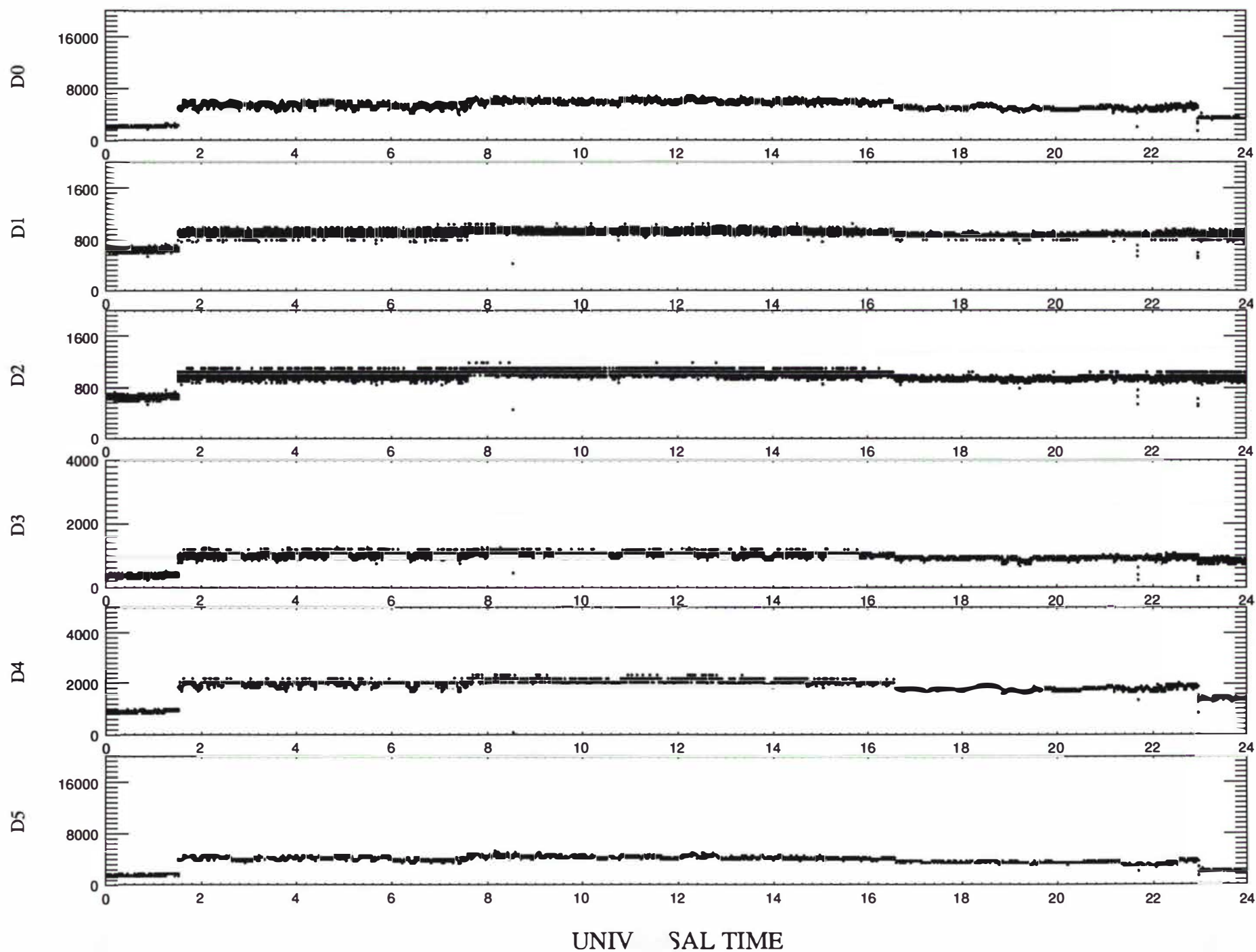


HUS 2A, MODE 1, NOT AVERAGED EDR day 36, year 1995 to day 36, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIVERSAL TIME



From SAHI@ssl.msfc.nasa.gov Wed Feb 8 13:05 PST 1995
Date: Wed, 8 Feb 1995 15:05:25 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3403

BATSEARCH PROGRAM

BATSE BURST # 3403
EVENT OF 1995 FEB 6 DAY OF YEAR= 37
EVENT CROSSING TIME AT BATSE : 38628. S. OR 10:43:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 70.000 -16.000
BATSE PEAK COUNTING RATE: 1900 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 2/ 95 IS:
RA= 333.400 DEC= -28.297 DIST= 2.297 AU
BATSE-ULYSSES DISTANCE = 343626660. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 91.91 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -38.26 SECS.
CROSSING TIME AT ULYSSES IS 38590. S. OR 10:43:09 +/- 248.31 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 2/ 95 IS:
RA= 149.176 DEC= 17.338 DIST= 0.679 AU
MARS-BATSE DISTANCE = 101619744. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 95.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -30.56 SECS.
CROSSING TIME AT MARS IS 38597. S. OR 10:43:17 +/- 58.15 SECONDS

BATSE BURST TRIGGER

NO.: 3403

TIME: TJD=9754 SECONDS=38628

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=097.5 AZIMUTH=139.0 ERROR= DEGREES

COMMENTS:

BURST, RISE FASTER THAN FALL, DUR.~40 SECS.
NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3403	950206	9754	38628	1900	070	-16

8 / 2 / 95

ULYSSES RT

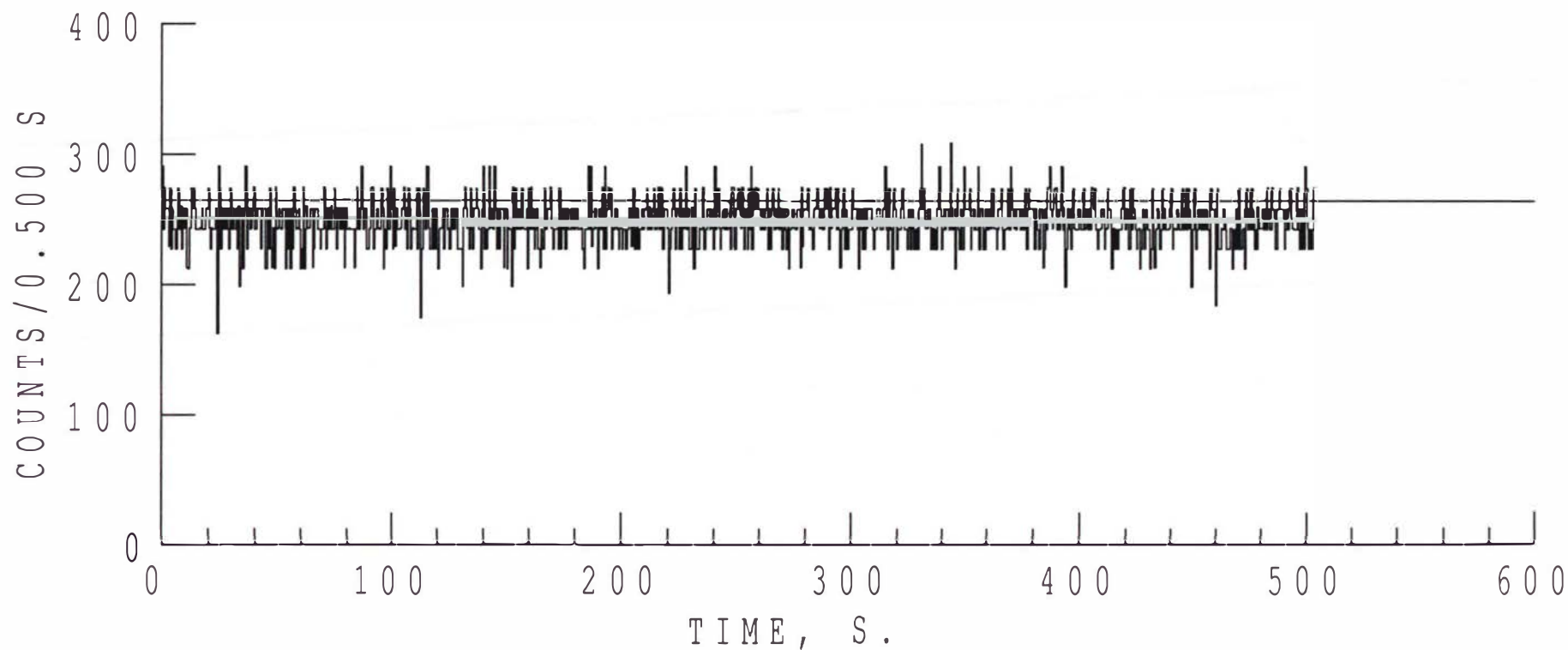
6 / 2 / 95 38340.234 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@ssl.msfc.nasa.gov Wed Feb 8 09:51 PST 1995
Date: Wed, 8 Feb 1995 11:39:22 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3404

TIME: TJD=9754 SECONDS=65448

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.

From HAGEDON@fender.msfc.nasa.gov Wed Feb 8 09:29 PST 1995
Date: Wed, 8 Feb 1995 11:29:44 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3405

BATSEARCH PROGRAM

BATSE BURST # 3405
EVENT OF 1995 FEB 6 DAY OF YEAR= 37
EVENT CROSSING TIME AT BATSE : 71141. S. OR 19:45:41.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 242.000 -50.000
BATSE PEAK COUNTING RATE: 6200 C/S

NO

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 6/ 2/ 95 IS:
RA= 333.542 DEC= -28.059 DIST= 2.298 AU
BATSE-ULYSSES DISTANCE = 343762696. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=110.19 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -395.67 SECS.
CROSSING TIME AT ULYSSES IS 70745. S. OR 19:39:05 +/- 230.84 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 6/ 2/ 95 IS:
RA= 149.176 DEC= 17.338 DIST= 0.679 AU
MARS-BATSE DISTANCE = 101619744. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 75.02 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 87.63 SECS.
CROSSING TIME AT MARS IS 71229. S. OR 19:47:08 +/- 58.18 SECONDS

BATSE BURST TRIGGER

NO.: 3405

TIME: TJD=9754 SECONDS=71141

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=107 AZIMUTH=21 ERROR= DEGREES

COMMENTS:

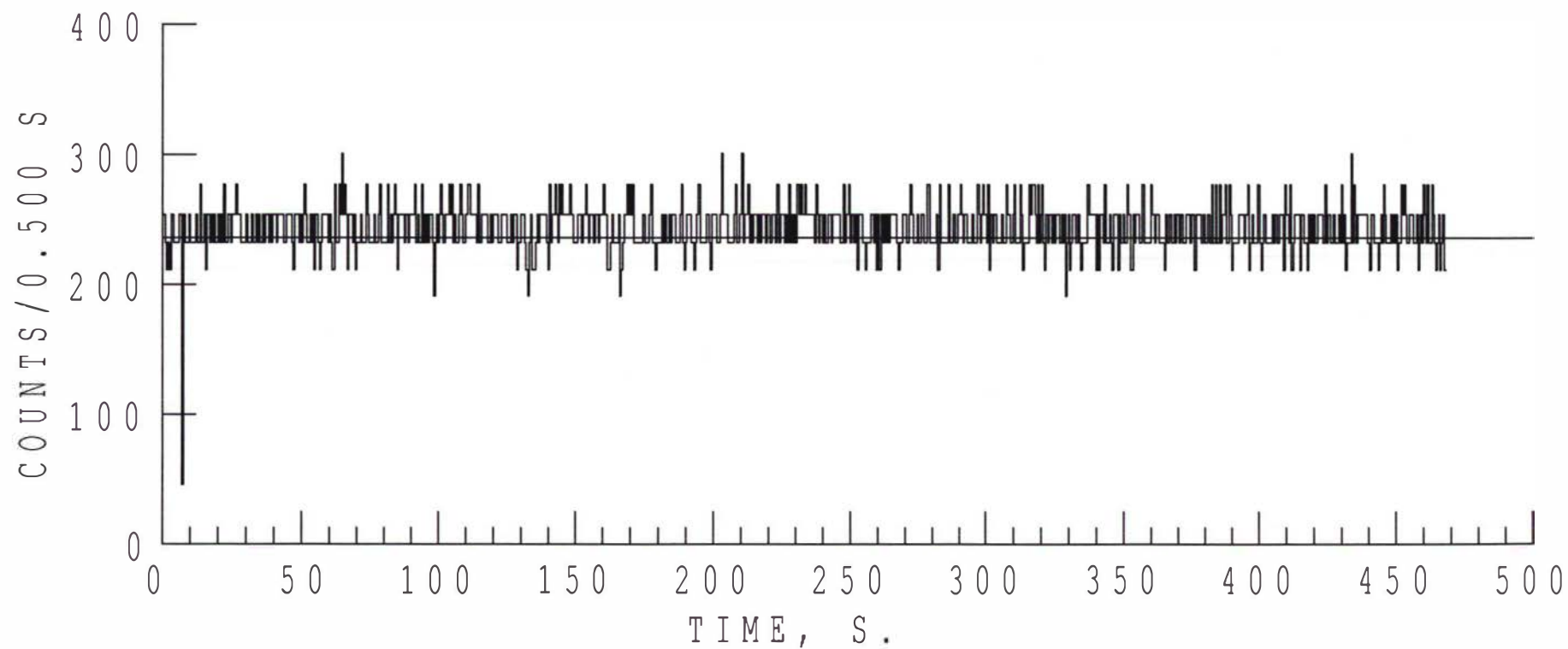
BURST. COMPLEX, MULTI-PEAKED EVENT. DUR.~40 SEC. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3405	950206	9754	71141	6200	242	-50

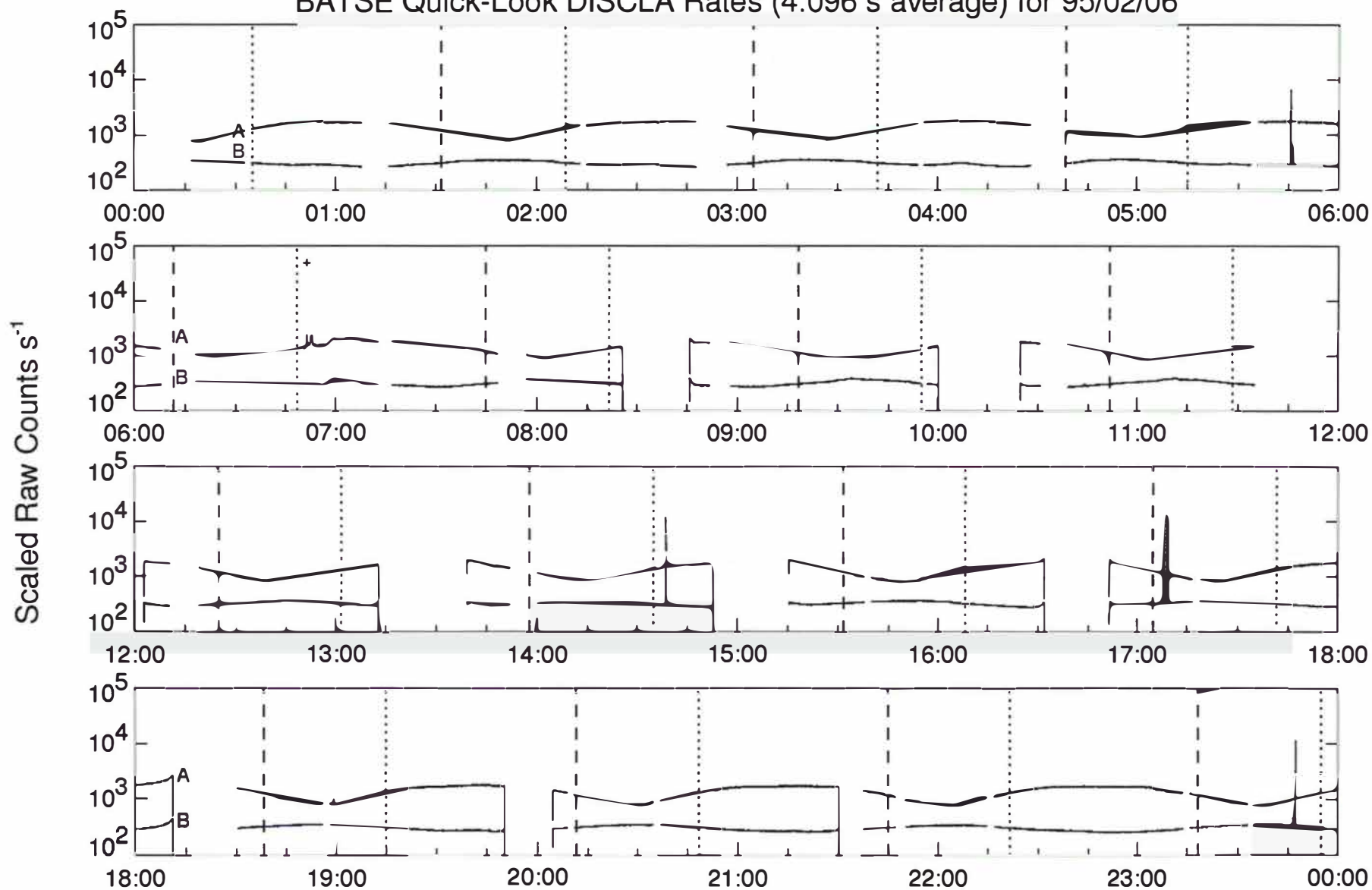
8 / 2 / 95

ULYSSES RT
6 / 2 / 95 70524.102 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



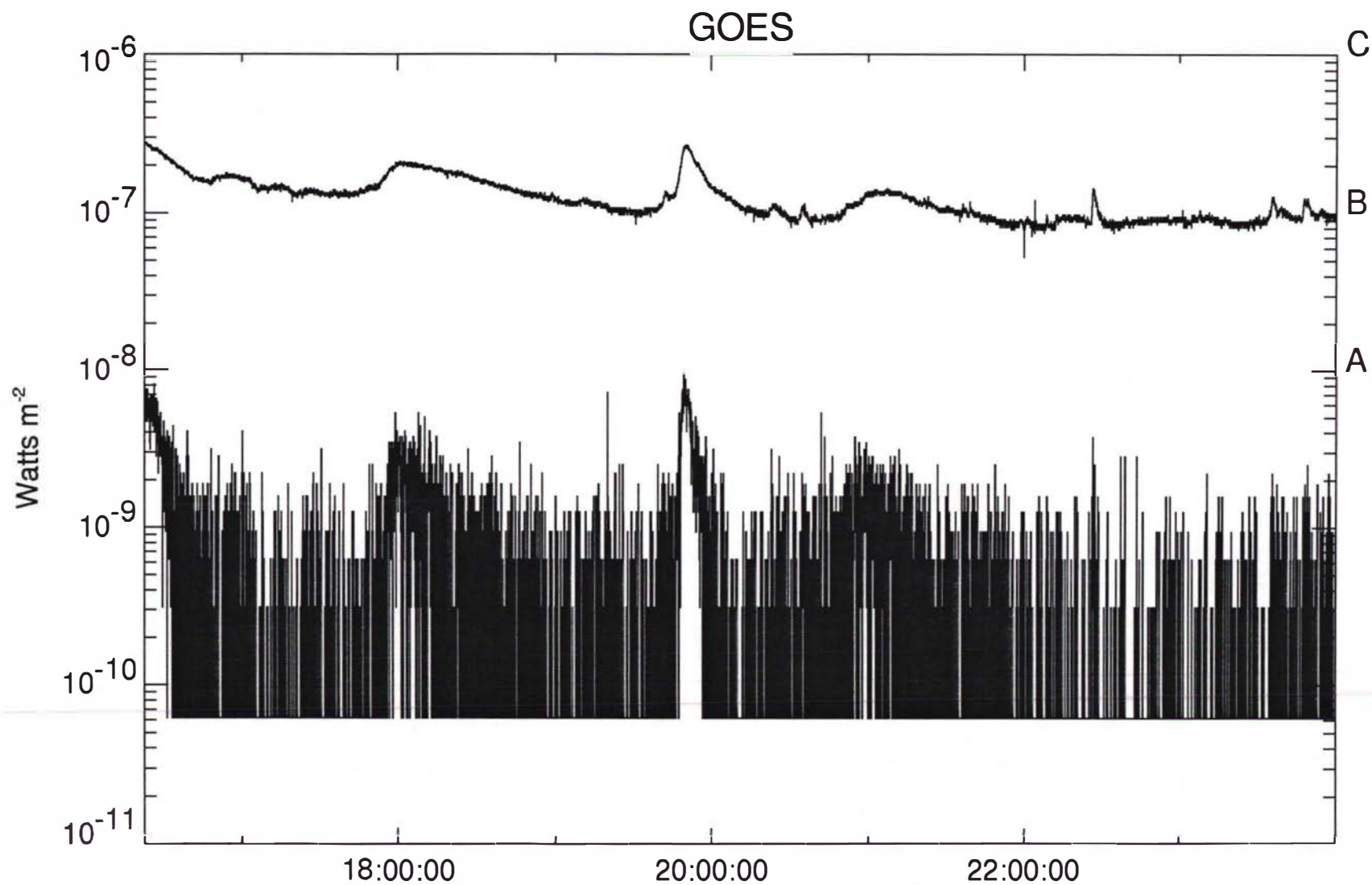
BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/06



Current Time: 95/02/08, 0514 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

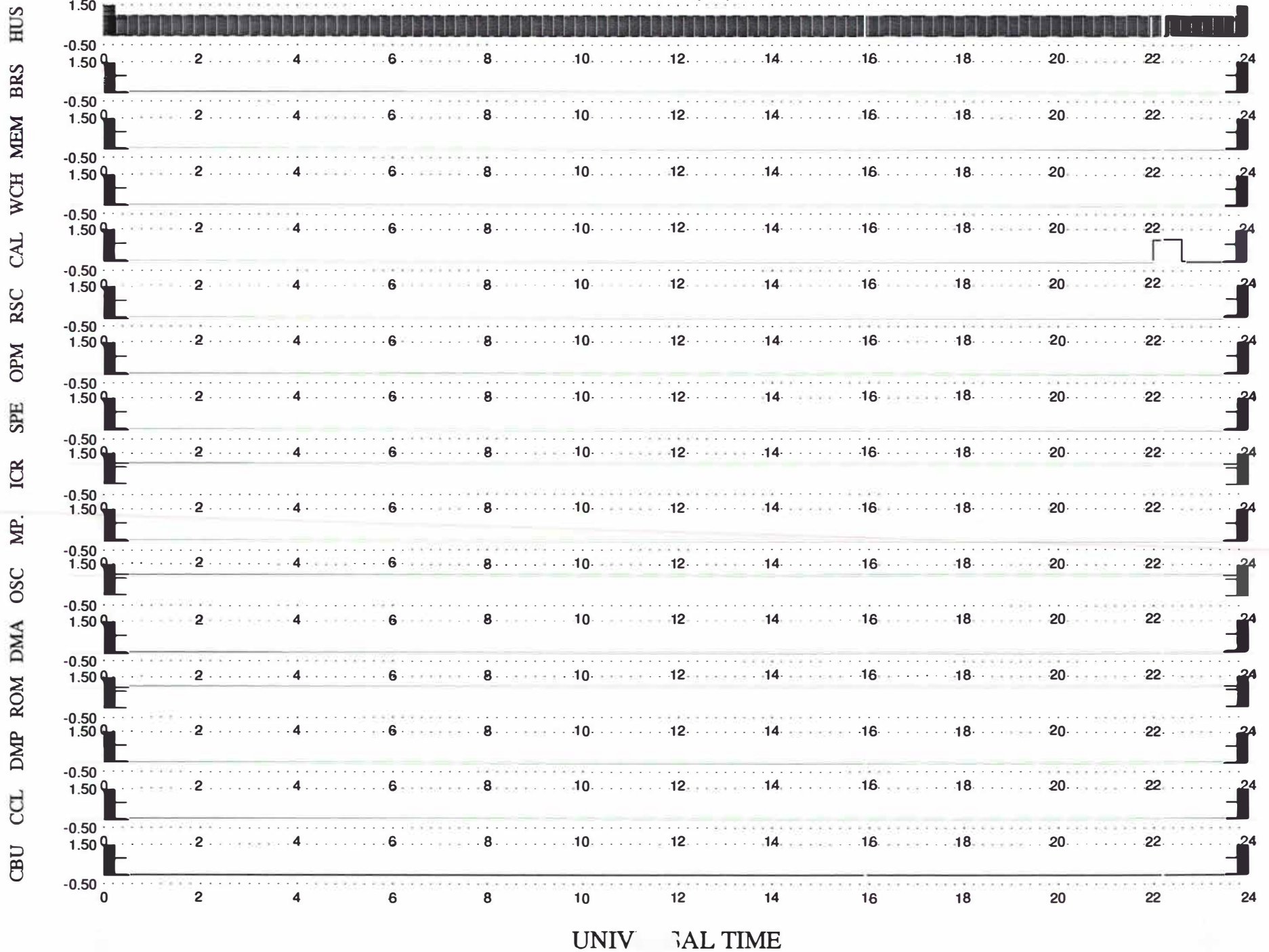
* Solar Burst Trigger
 + Solar Flare



Data Start: 95/02/06, 1622:33 Plot created: 95/02/08, 0514
Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

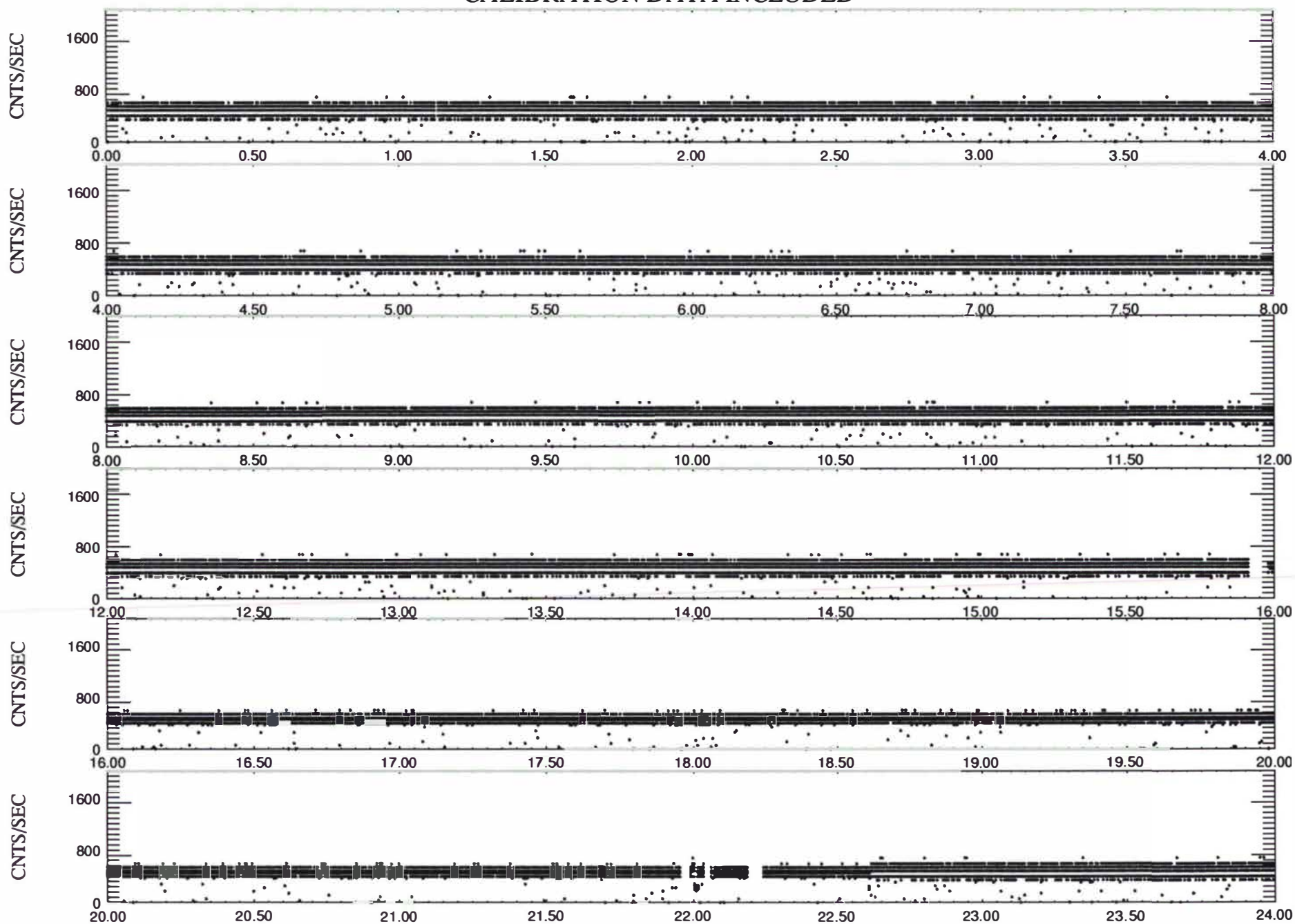
HUS MODES EDR day 37, year 1995 to day 37, year 1995
NO BURST (14)

7/18/95

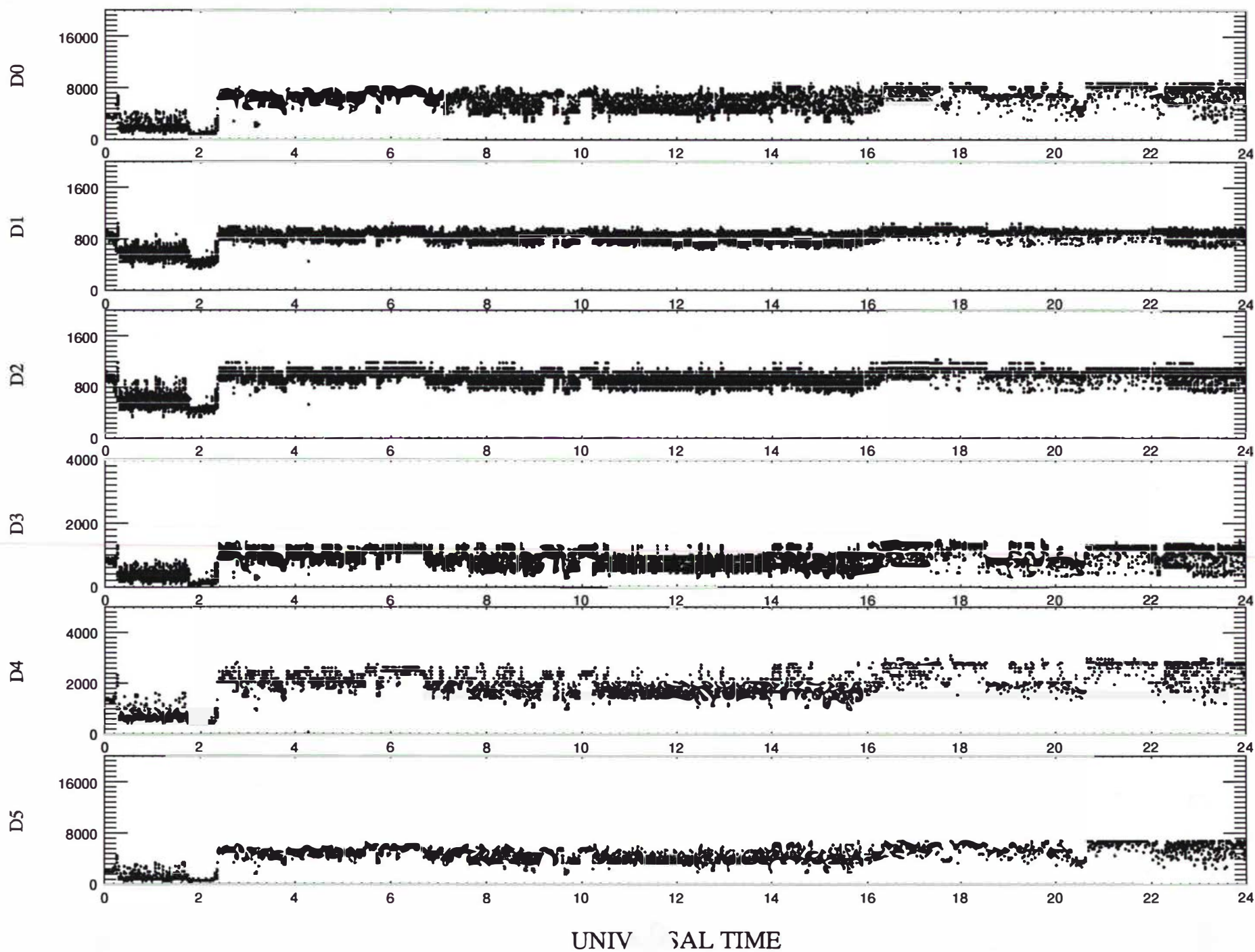


HUS 2A, MODE 1, NOT AVERAGED EDR day 37, year 1995 to day 37, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV SAL TIME



From RICHARDSON@ssl.msfc.nasa.gov Thu Feb 9 13:44 PST 1995
Date: Thu, 9 Feb 1995 15:44:09 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3406

BATSEARCH PROGRAM

No

BATSE BURST # 3406
EVENT OF 1995 FEB 7 DAY OF YEAR= 38
EVENT CROSSING TIME AT BATSE : 2781. S. OR 00:46:21.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 204.000 87.000
BATSE PEAK COUNTING RATE: 2100 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/ 2/ 95 IS:
RA= 333.620 DEC= -27.927 DIST= 2.298 AU
BATSE-ULYSSES DISTANCE = 343837668. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 60.19 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 570.24 SECS.
CROSSING TIME AT ULYSSES IS 3351. S. OR 00:55:51 +/- 231.43 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/ 2/ 95 IS:
RA= 148.797 DEC= 17.478 DIST= 0.678 AU
MARS-BATSE DISTANCE = 101446624. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=109.17 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -111.13 SECS.
CROSSING TIME AT MARS IS 2670. S. OR 00:44:29 +/- 53.80 SECONDS

BATSE BURST TRIGGER

NO.: 3406

TIME: TJD=9755 SECONDS=2781

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=73.6 AZIMUTH=245.8 ERROR= DEGREES

COMMENTS:

GRB MULTI-PEAKED. TOTAL DUR.~350SEC. 1ST EVENT AT ~T-160SEC. 2ND EVENT AT
~T. 3RD EVENT AT ~T+100SEC. NOT VISIBLE ABOVE 300KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3406	950207	9755	02781	2100	204	+87

From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996

Date: Fri, 26 Jan 1996 13:00:45 -0800

Mime-Version: 1.0

To: KHURLEY@sunspot.ssl.berkeley.edu

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

Subject: Improved list; same question.

Dear Kevin,

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

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

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

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

9 / 2 / 95

ULYSSES RT

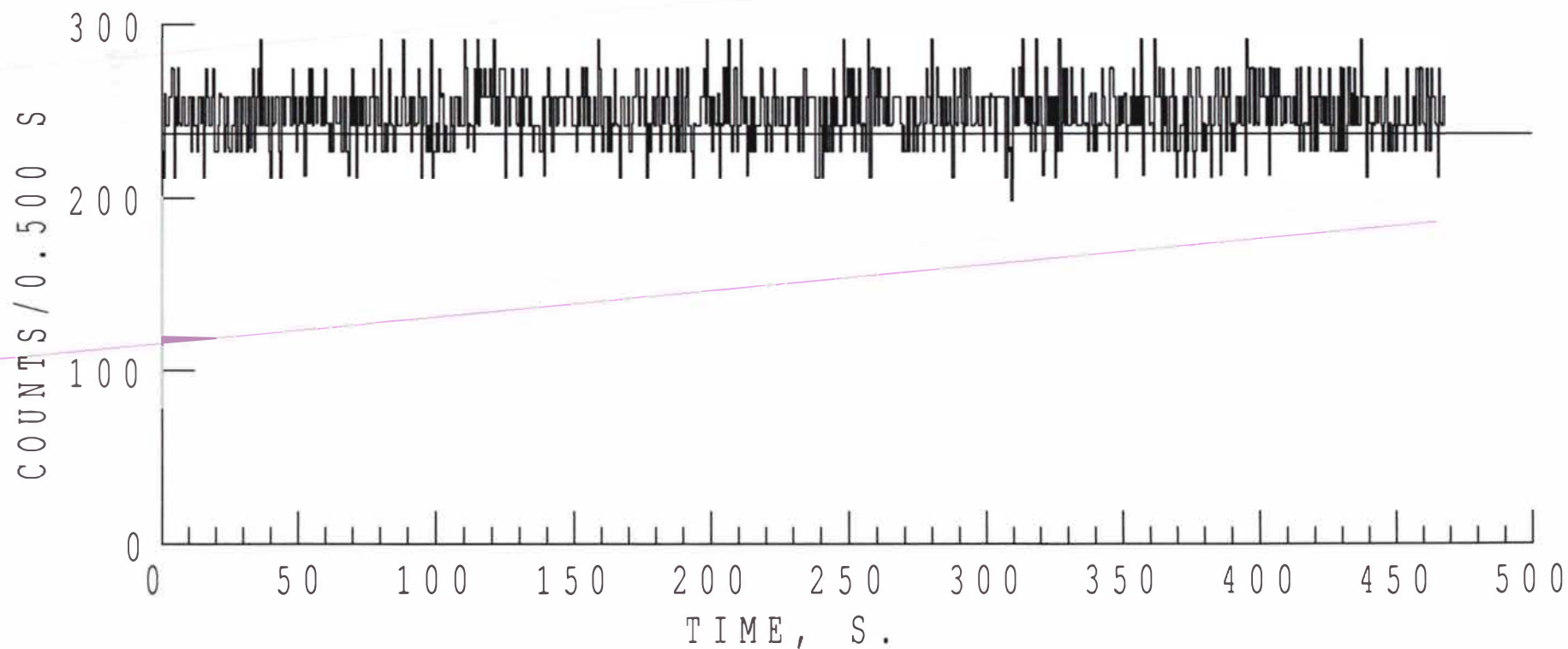
7 / 2 / 95 3132.218 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From RICHARDSON@ssl.msfc.nasa.gov Thu Feb 9 13:42 PST 1995
Date: Thu, 9 Feb 1995 15:42:40 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3407

N0

BATSEARCH PROGRAM

BATSE BURST # 3407
EVENT OF 1995 FEB 7 DAY OF YEAR= 38
EVENT CROSSING TIME AT BATSE : 26626. S. OR 07:23:46.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 39.000 25.000
BATSE PEAK COUNTING RATE: 5500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 7/ 2/ 95 IS:
RA= 333.723 DEC= -27.754 DIST= 2.299 AU
BATSE-ULYSSES DISTANCE = 343936681. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 97.97 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -159.05 SECS.
CROSSING TIME AT ULYSSES IS 26467. S. OR 07:21:06 +/- 244.84 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 7/ 2/ 95 IS:
RA= 148.797 DEC= 17.478 DIST= 0.678 AU
MARS-BATSE DISTANCE = 101446624. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.45 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 56.13 SECS.
CROSSING TIME AT MARS IS 26682. S. OR 07:24:42 +/- 58.79 SECONDS

BATSE BURST TRIGGER

NO.: 3407

TIME: TJD=9755 SECONDS=26626

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=57.5 AZIMUTH=171.1 ERROR= DEGREES

COMMENTS:

GRB. MULTI-PEAKED. TOTAL DUR.~90SEC. 1ST PEAK AT ~T-15SEC. 2ND PEAK AT ~T.
3RD PEAK AT ~T+45SEC. SLIGHTLY VISIBLE ABOVE 300KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3407	950207	9755	26626	5500	039	+25

9 / 2 / 95

ULYSSES RT

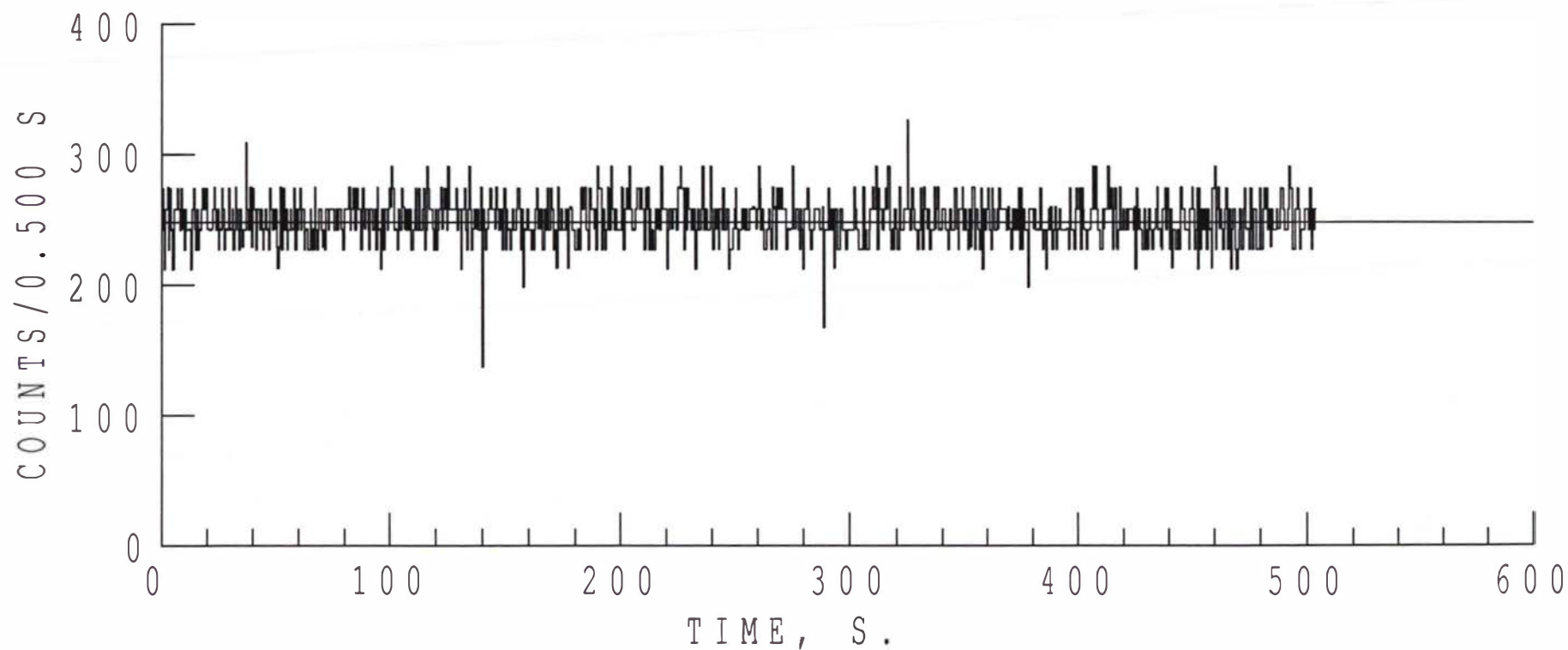
7 / 2 / 95 26208.164 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



Date: Aug 16 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?

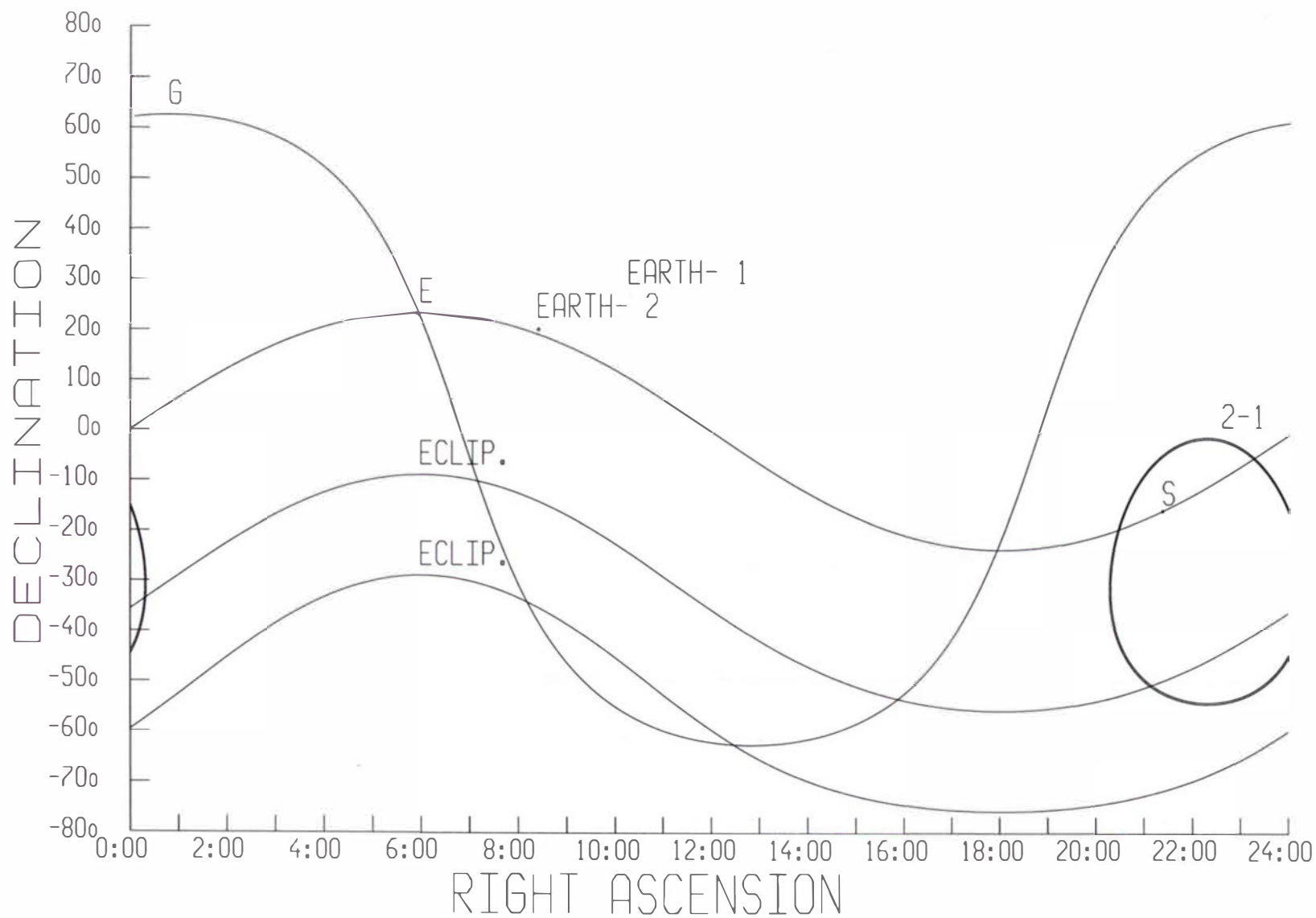
3. PVO Data

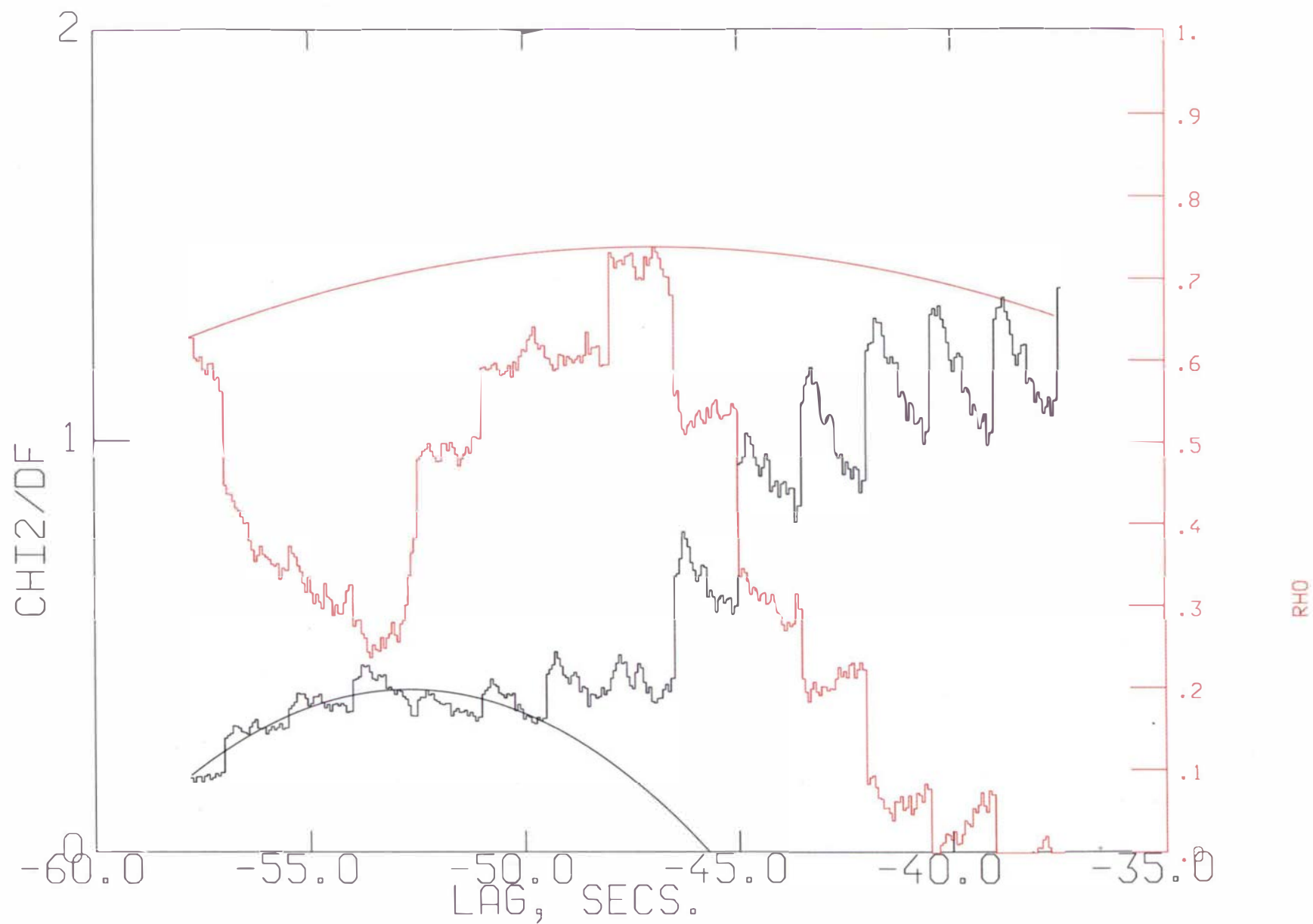
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

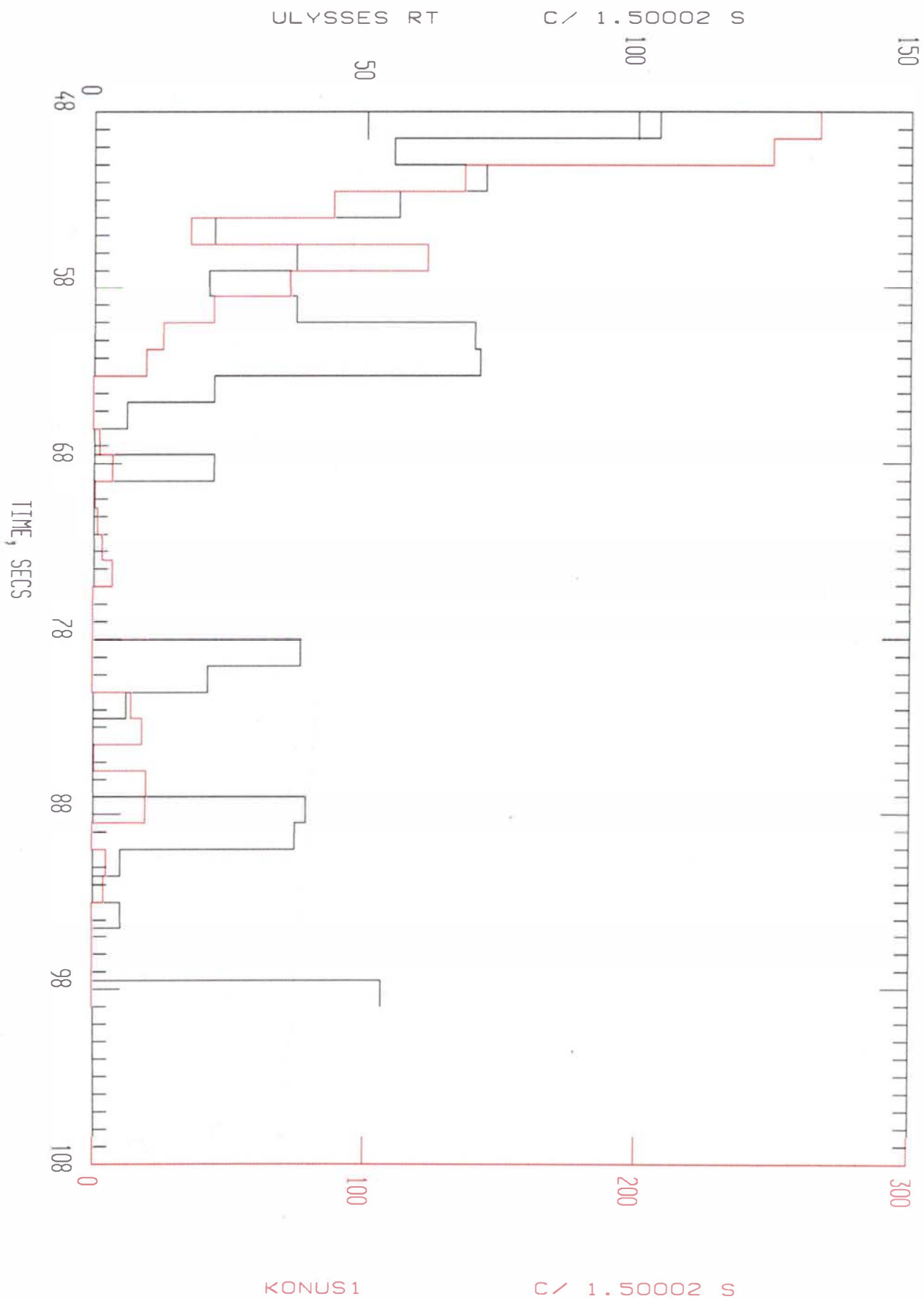
EVENT OF FEB 7, 1995 13:34

16/08/2011

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







KONUS 19950207 48950

ULYSSES RT

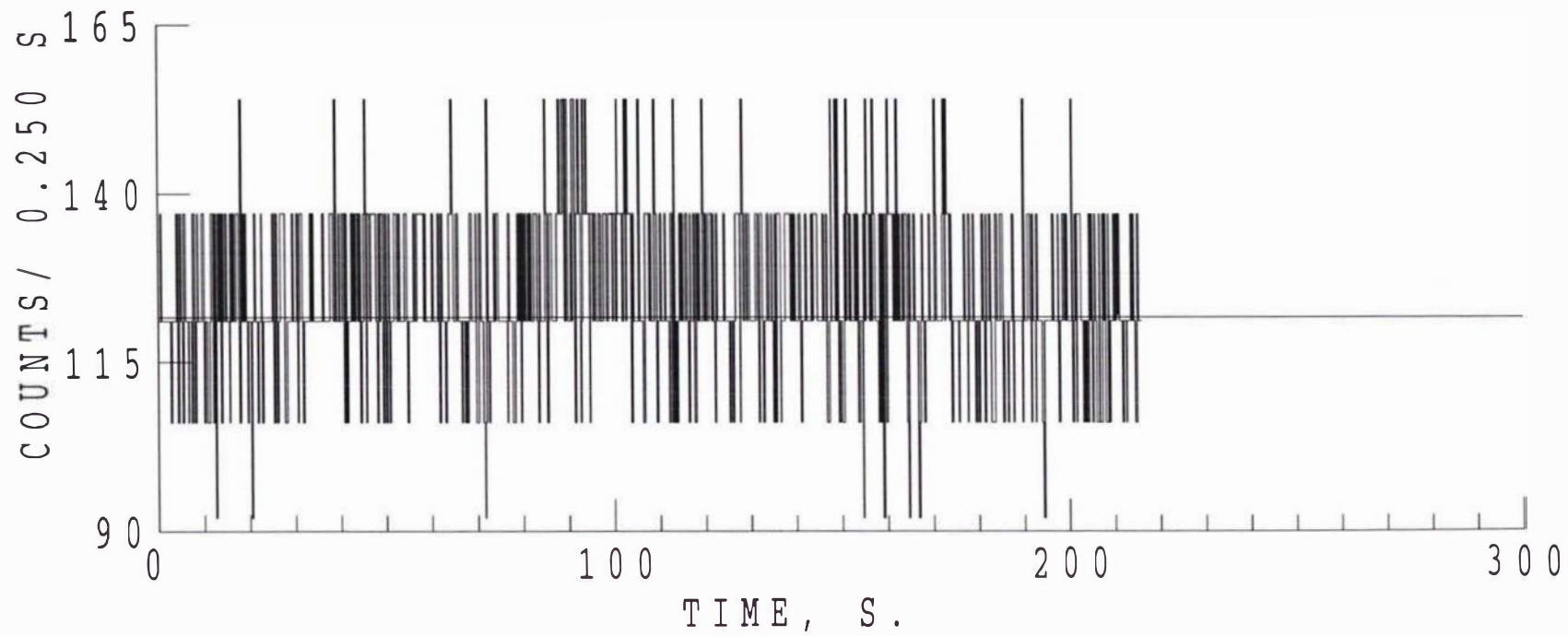
12 / 08 / 11

07/02/95 48852.098 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS

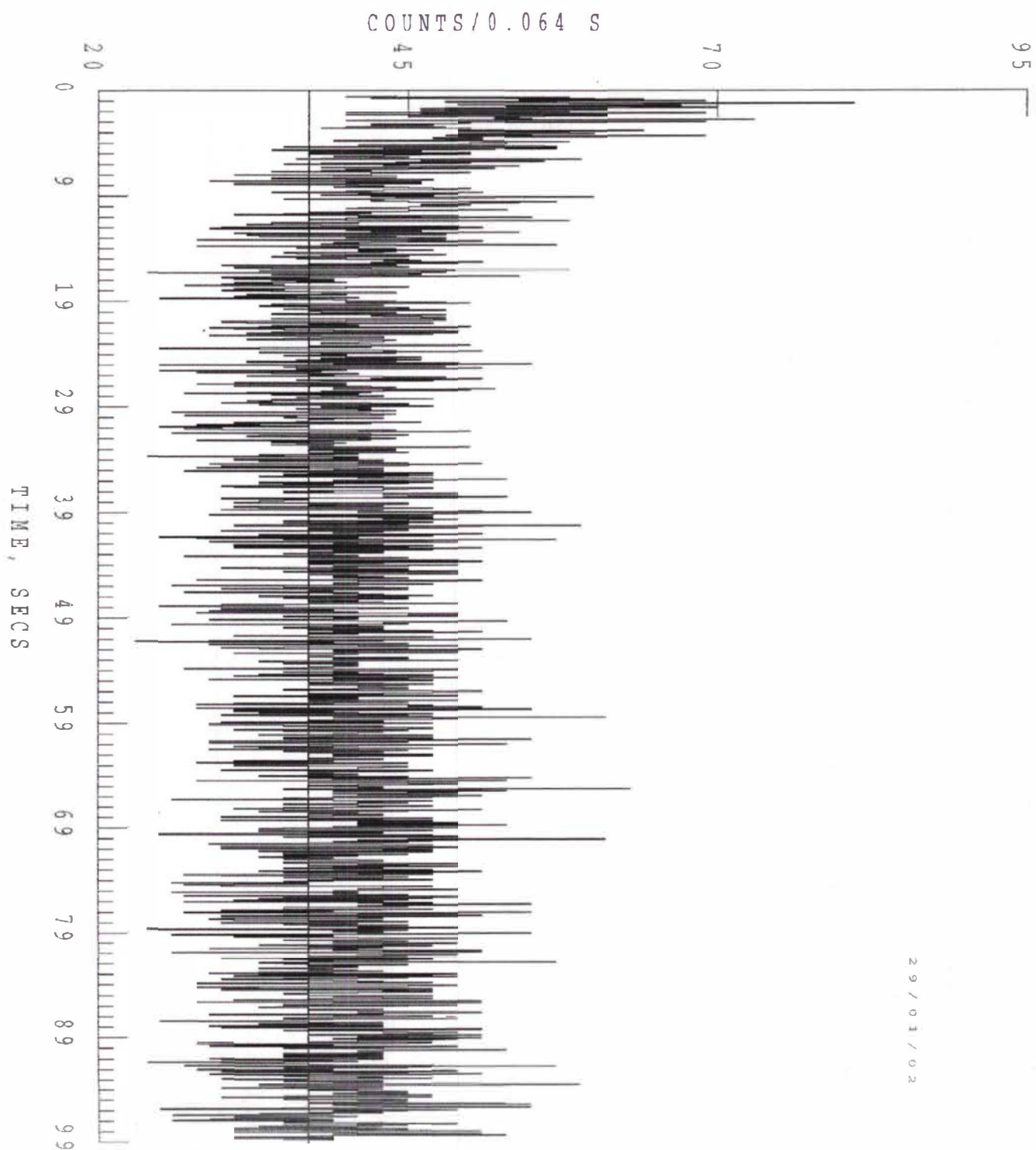


KONUS1

07/02/95

49973.785

50 - 200 keV



KONUS1 19950207 49973

ULYSSES RT

29 / 01 / 02

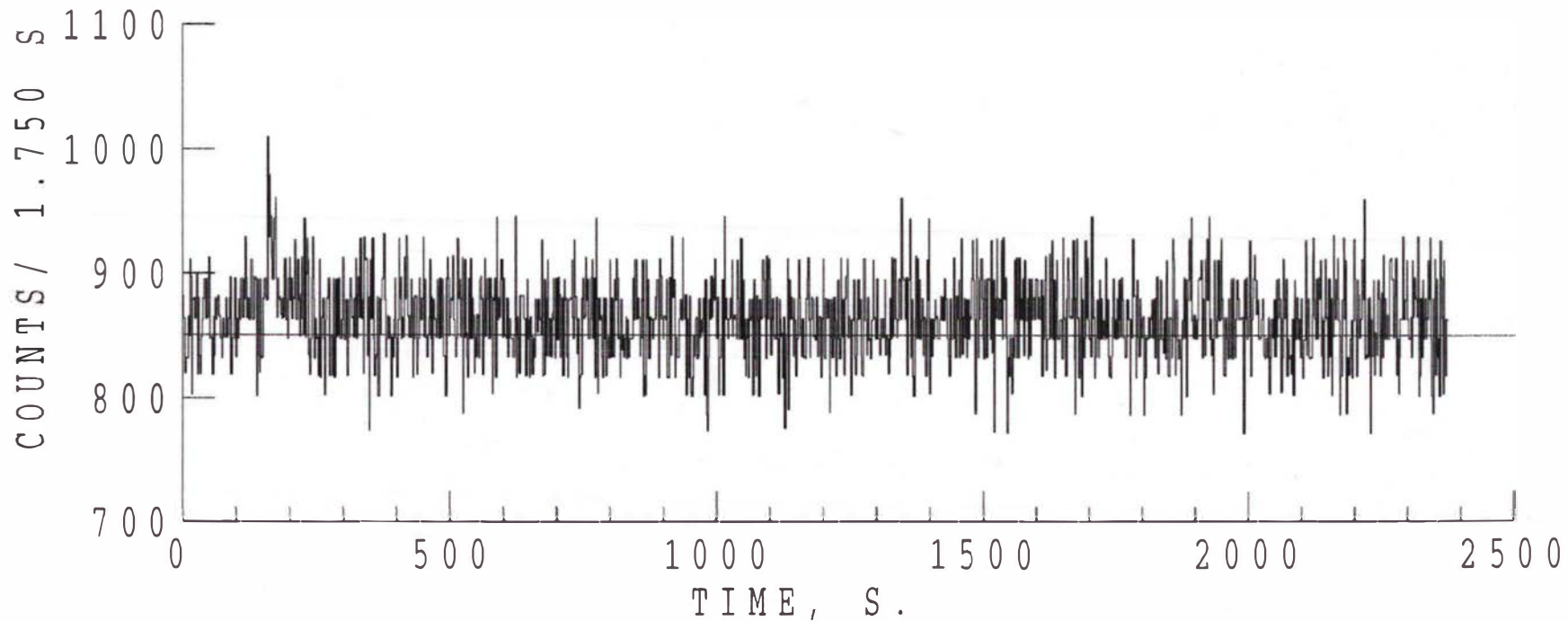
07/02/95 48780.098 s

0.250 S INTERVALS REGROUPED BY 7

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



300

950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47 ✓
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR ✓
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54 ✓
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR ✓
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
940412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

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

Mime-Version: 1.0

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

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

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

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND Max counts per sec			N(S1)/N(S2)		Duration		Trigger number
			G1	G2	G3	in G2	T<T0	T>T0		
941113	12 09 15	S1	145	85		2.5	115		BGR ✓	
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓	
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓	
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓	
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓	
941120	20 23 17.924	S1	215	328	30	>15	2	25	5 ✓	
941121	17 25 00.945	S1	1652	1656	300	21	3	50	6 ✓	
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓	
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓	
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓	
941126	16 54 20	S1	55	75		>10	26		BGR ✓	
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9 ✓	
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓	
941127	15 39 10	S1	210	57		2.7	260		BGR ✓	
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓	
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓	
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓	
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓	
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓	
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol	
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓	
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓	
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓	
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28 ✓	
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓	
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓	
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓	
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓	
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓	
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓	
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓	
950110	06 02 15	S2	332	180		<0.1	3600		BGR	
950110	13 37 57.084	S2	234	422	213	0.05	38	100	32 ✓	
950111	04 49 12.241	S1	586	620	100	>19	92	24	33 ✓	
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓	
950112	07 45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓	
950113	05 59 13	S1	283	180	26	>10	52		BGR ✓	
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓	
950114	01 00 38	S1	46	110		1.6	6		BGR ✓	
950114	04 03 01	S2	23	76		0.5	70		BGR ✓	
950114	07 30 30.766	S2	205	406	60	<0.05	1	100	36 ✓	
950114	13 10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓	
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓	
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓	
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓	
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39	

K O N U S

1 2 / 2 / 9 6

U L Y S S E S R T

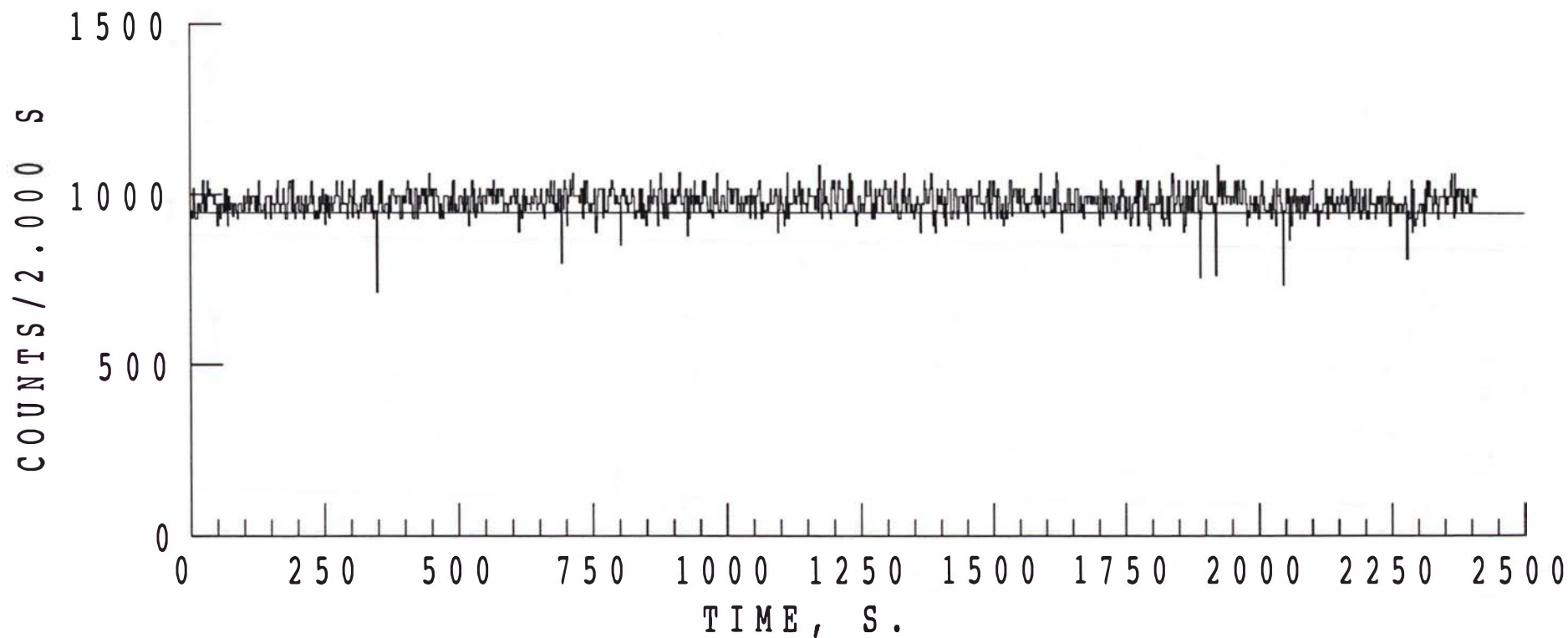
7 / 2 / 9 5 7 1 4 2 4 . 2 8 1 s

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

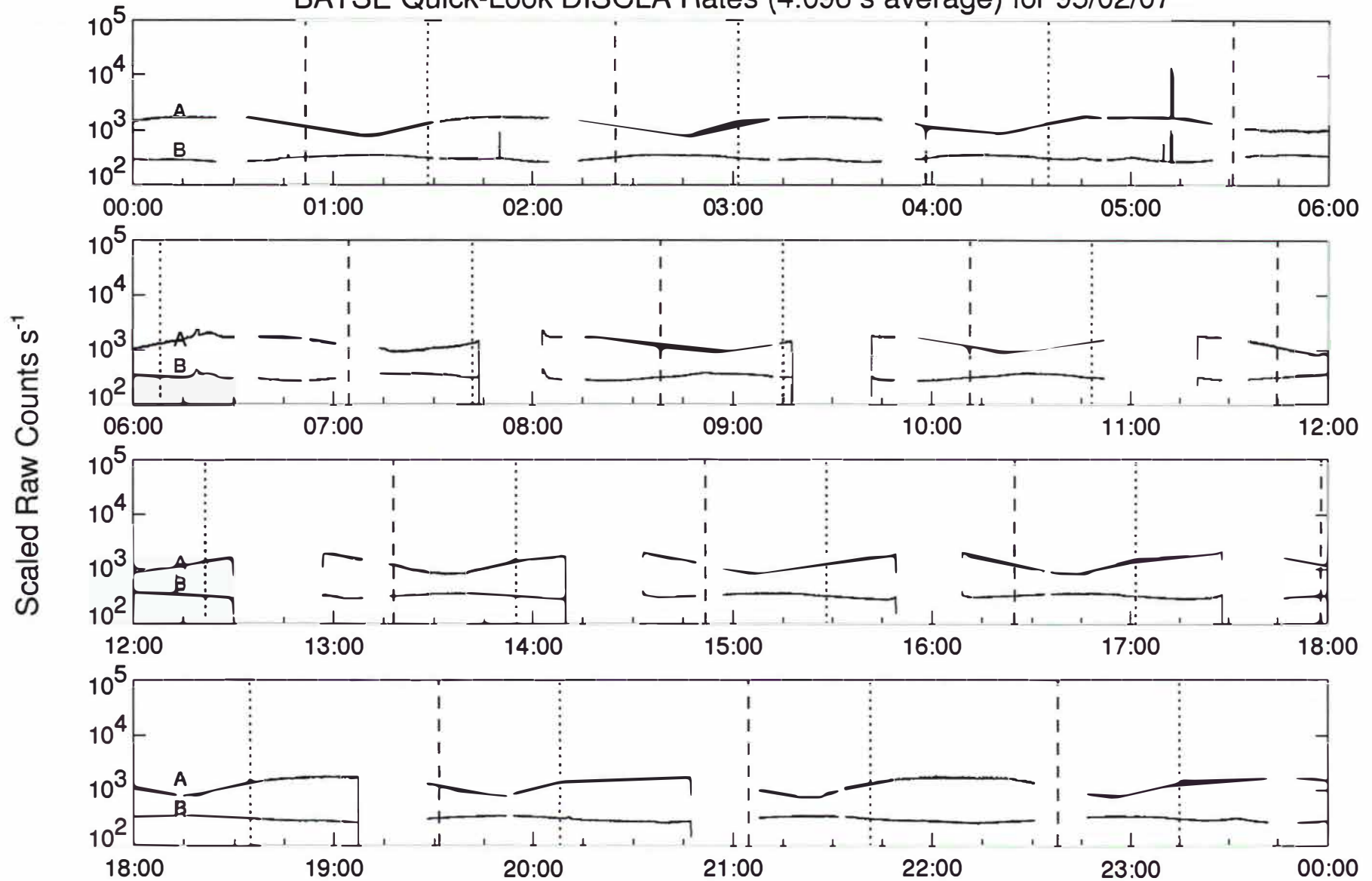
0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



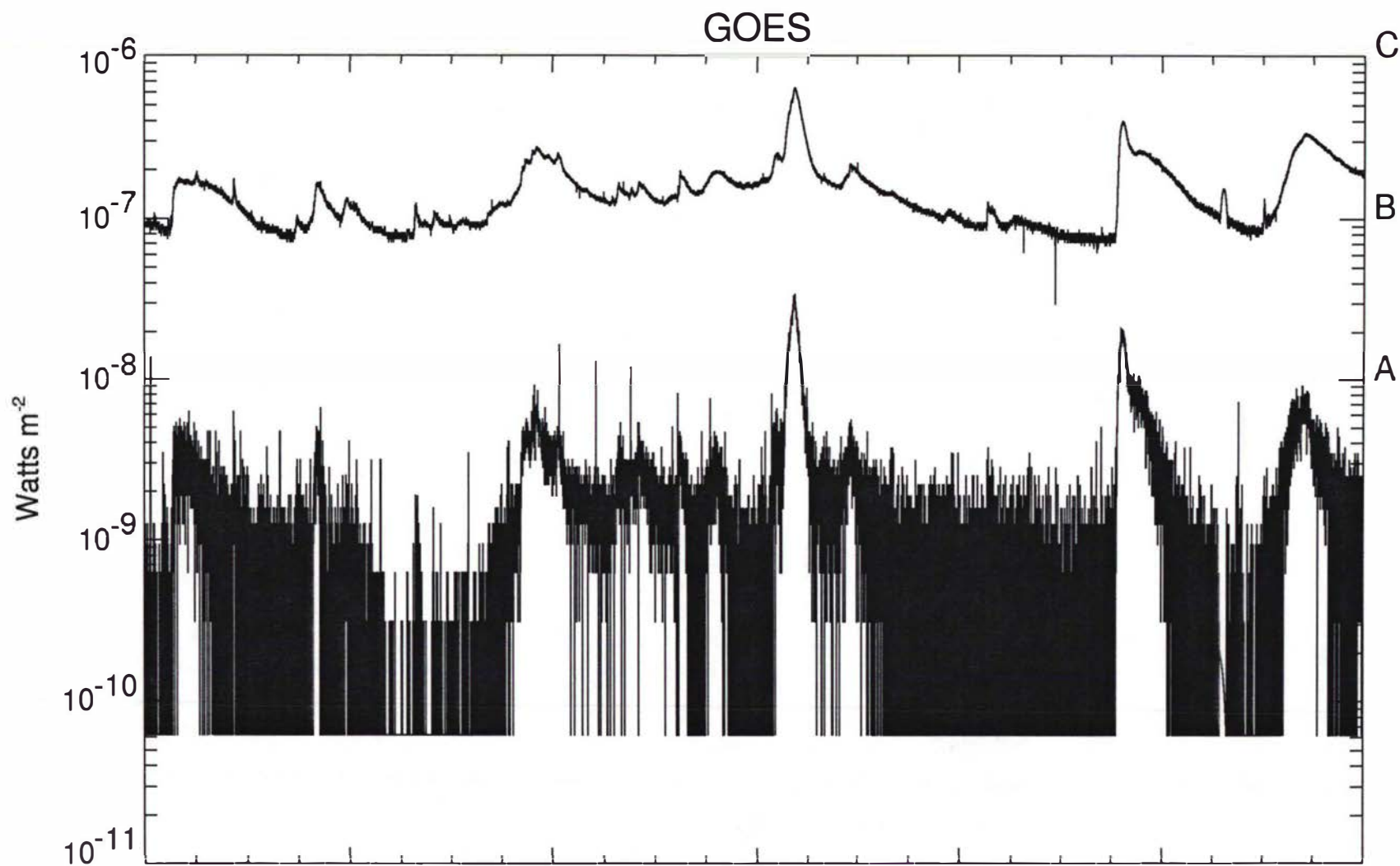
BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/07



Current Time: 95/02/09, 0515 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare



Data Start: 95/02/07, 0000:01

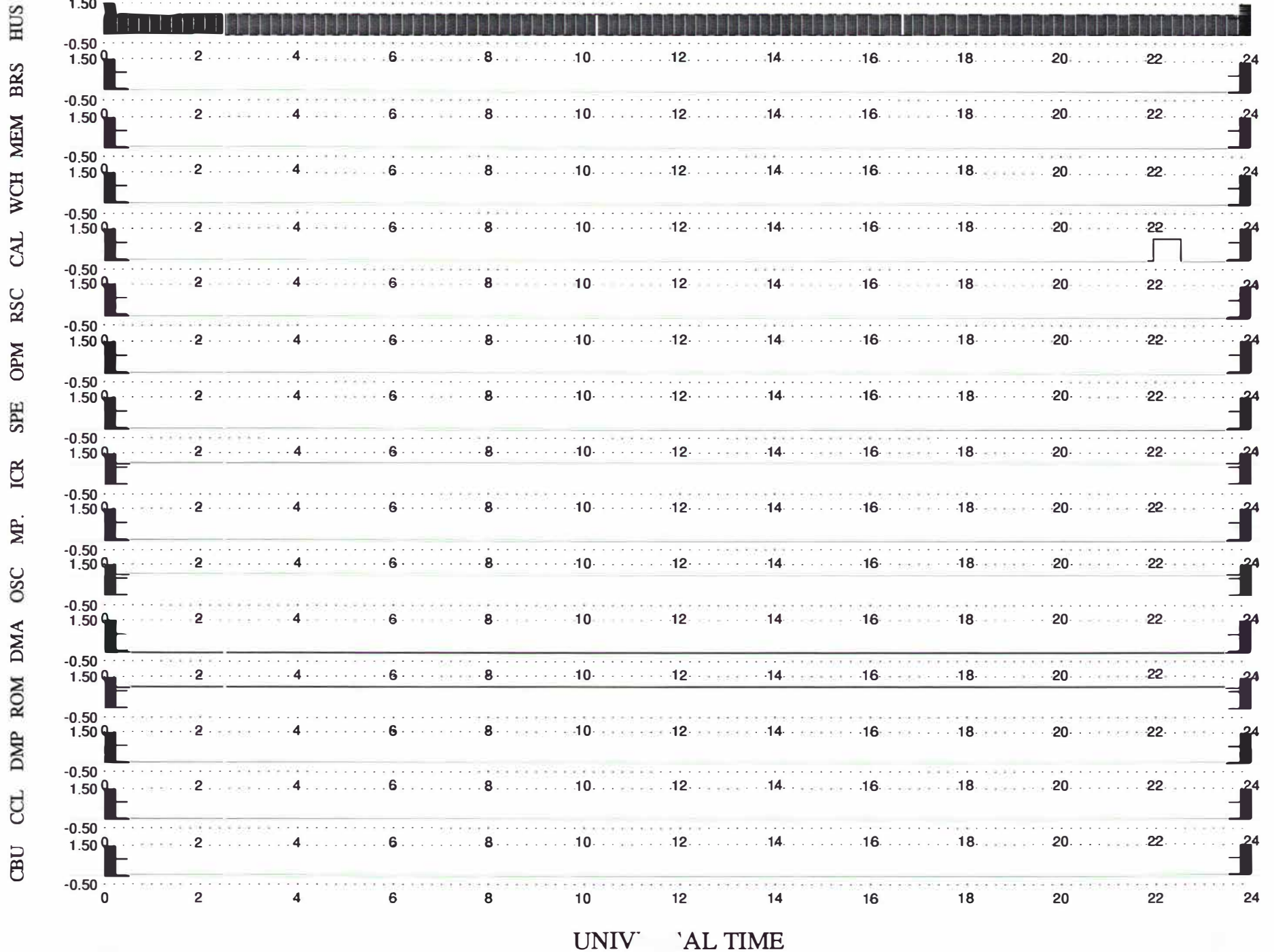
Plot created: 95/02/09, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

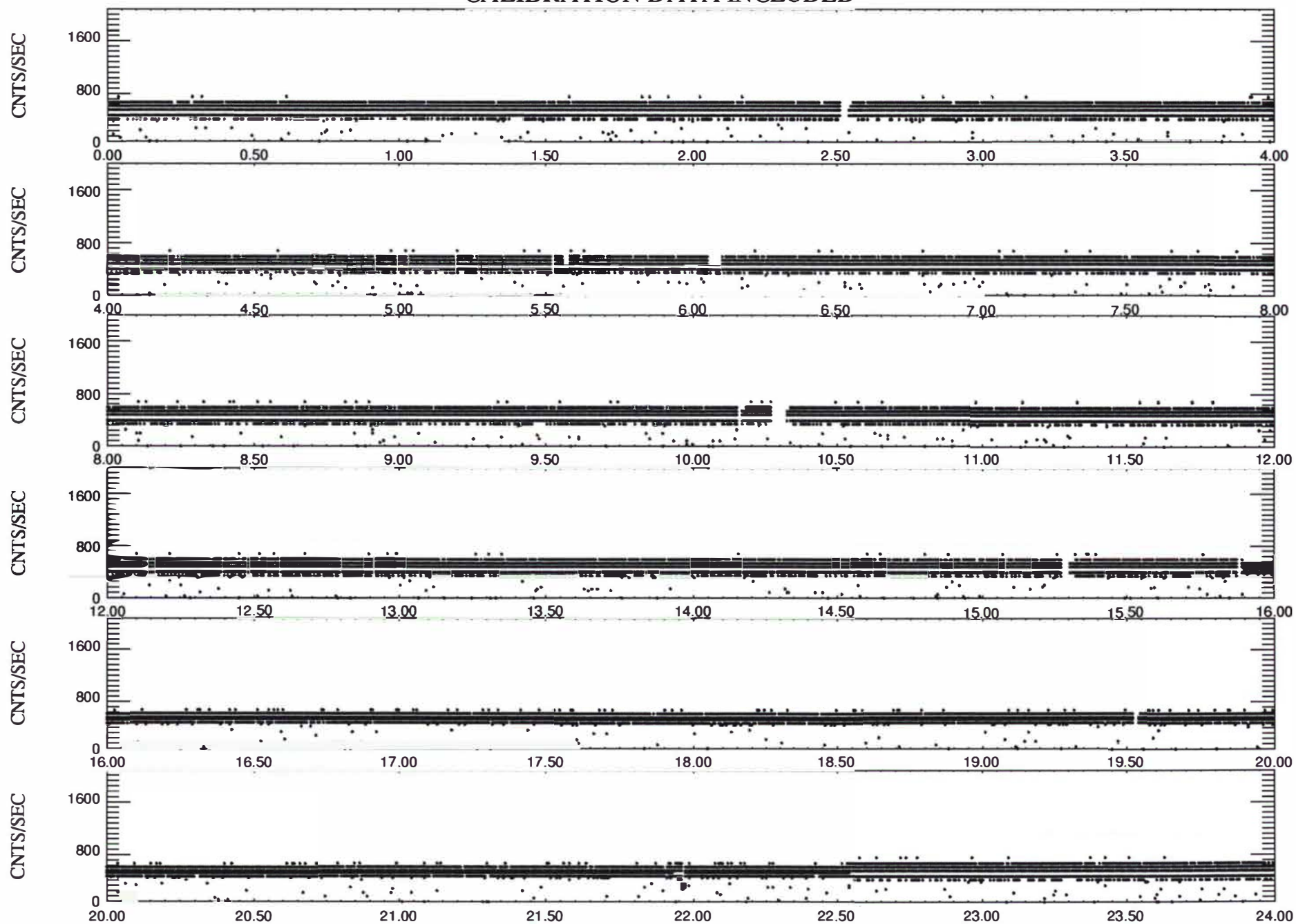
HUS MODES EDR day 38, year 1995 to day 38, year 1995
NO BURST (14)

7/18/95

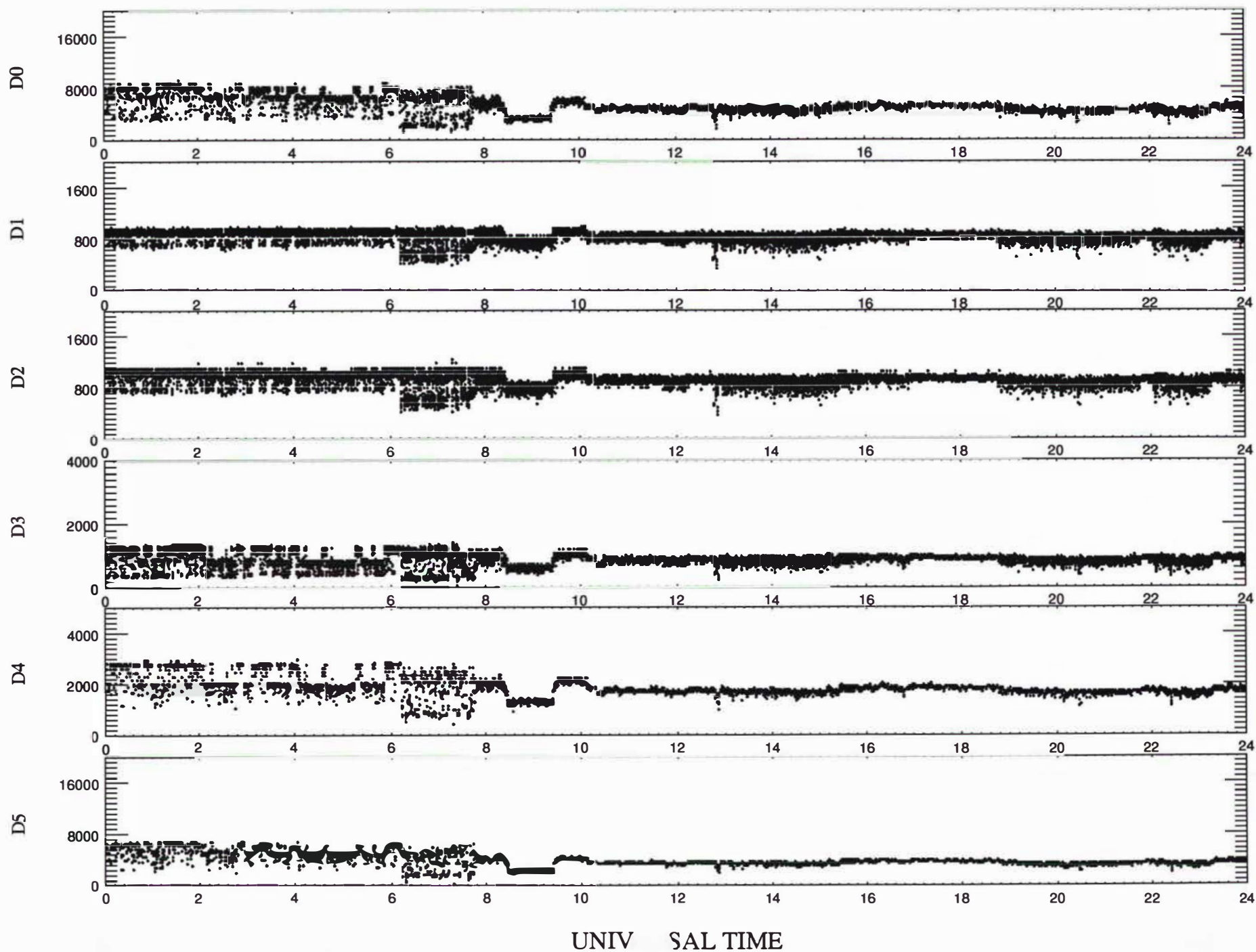


HUS 2A, MODE 1, NOT AVERAGED EDR day 38, year 1995 to day 38, year 1995
 CALIBRATION DATA INCLUDED

7/18/95



UNIVERSAL TIME



From DEAL@fender.msfc.nasa.gov Fri Feb 10 06:42 PST 1995
Date: Fri, 10 Feb 1995 8:41:58 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3408

BATSEARCH PROGRAM

BATSE BURST # 3408
EVENT OF 1995 FEB 8 DAY OF YEAR= 39
EVENT CROSSING TIME AT BATSE : 7824. S. OR 02:10:24.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 337.000 54.000
BATSE PEAK COUNTING RATE: 50000 C/S

TRIGGER

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 8/ 2/ 95 IS:
RA= 334.013 DEC= -27.261 DIST= 2.301 AU
BATSE-ULYSSES DISTANCE = 344216349. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 98.70 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -173.62 SECS.
CROSSING TIME AT ULYSSES IS 7650. S. OR 02:07:30 +/- 244.41 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 8/ 2/ 95 IS:
RA= 148.414 DEC= 17.618 DIST= 0.677 AU
MARS-BATSE DISTANCE = 101307272. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 72.00 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 104.45 SECS.
CROSSING TIME AT MARS IS 7928. S. OR 02:12:08 +/- 57.38 SECONDS

BATSE BURST TRIGGER

NO.: 3408

TIME: TJD=9756 SECONDS=07824

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=35.4 AZIMUTH=243.5 ERROR= DEGREES

COMMENTS:

BURST LASTING ~ 63 S. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3408	950208	9756	07824	50000	337	+54

COMPTTEL/BATSE/IPN Burst Localizations

All Coordinates Epoch J2000.0

UB= Ulysses/BATSE UP = Ulysses/PVO BP= BATSE/PVO							BATSE Position					COMPTTEL Position			
Center							Radius								
Burst	Rf	Ra	Dec	Radius	(-/+)	D (AU)	Ra	Dec	lσ	Smin	Rf	Ra	Dec	lσ	Smin
GRB910425 UB	1	115.140	23.172	51.733	0.053	2.848	91.29	-22.77	1.02	0.27	3	90.20	-22.20	0.92	0.28
GRB910503 UB	1	117.730	22.657	30.352	0.010	3.042	87.45	38.74	0.87	0.03	3	87.00	38.60	0.44	0.30
GRB910601 UB	1	307.038	-20.538	52.936	0.011	3.708	310.12	32.34	0.17	0.02	3	309.90	32.70	0.46	0.37
GRB910627 UB	1	134.824	18.425	66.820	0.031	4.215	197.99	-2.48	0.28	1.28	3	199.40	-5.00	1.63	0.96
UP	1	133.523	18.792	68.352	0.036	3.621	-	-	-	1.53	-	-	-	-	0.71
GRB910709	NA	NA	NA	NA	NA	NA	172.77	81.67	2.31	NA	3	144.10	75.60	1.80	NA
GRB910814 UB	1	328.558	-13.966	45.699	0.018	4.918	346.35	30.43	0.48	1.89	3	343.80	29.50	0.39	0.19
UP	1	328.287	-14.629	46.428	0.019	4.626	-	-	-	1.87	-	-	-	-	0.17
GRB911118 UB	1	166.979	6.889	30.110	0.017	4.972	167.03	-20.85	0.36	2.37	3	166.30	-22.50	1.11	0.71
UP	1	162.619	8.562	32.018	0.019	4.248	-	-	-	2.29	-	-	-	-	0.75
BP	1	190.131	-2.551	30.766	0.086	0.813	-	-	-	1.76	-	-	-	-	0.23
GRB920622 UB	1	150.167	6.667	41.335	0.009	5.800	162.1	47.17	0.31	0.43	3	162.50	49.20	0.81	2.44
GRB920627 UB	1	150.590	6.327	23.540	0.049	5.869	166.02	-2.58	0.65	5.74		166.80	-8.50	1.18	1.61
GRB920830 UB	1	338.192	0.949	86.268	0.018	?	258.53	-73.99	0.54	1.81	3	259.00	-74.50	1.35	1.78
GRB930118	NA	NA	NA	NA	NA	NA	228.40	-34.30	?	NA	4	221.80	-34.80	1.47	NA
GRB930131 UB	1	161.411	-14.563	22.256	0.011	4.218	182.04	-8.24	2.16	1.09	3	186.20	-7.90	1.77	2.93
GRB930309 UB	1	332.600	14.645	36.601	0.035	3.998	325.41	51.73	0.72	0.93	3	322.70	55.20	0.74	4.67
GRB930612 UB	1	143.974	-11.184	63.928	0.053	4.870	103.07	-69.76	0.4	0.07	3	106.50	-71.00	1.60	0.17
GRB930704 UB	1	146.146	-11.823	82.959	0.113	5.089	100.9	60.8	0.59	2.01	3	99.30	62.80	1.08	0.07
BM	1	159.825	8.635	68.701	2.319	1.981	-	-	-	1.04	-	-	-	-	0.45
GRB931229	NA	NA	NA	NA	NA	NA	240.06	19.7	1.4	NA	3	241.90	21.00	2.35	NA
GRB940217 UB	1	328.736	51.947	69.334	0.050	3.038	29.07	4.55	0.69	0.84	3	30.10	3.10	0.32	0.94
GRB940301 UB	1	321.914	52.508	59.395	0.136	2.953	103.51	64.35	0.35	0.02	3	102.70	64.00	0.40	0.17
GRB940314 UB	1	314.850	51.972	64.530	0.220	?	354.86	-2.14	0.94	0.77	3	356.00	-1.40	1.43	0.92
GRB940520 UB	1	300.149	41.387	40.380	0.133	2.986	323.5	6.93	0.88	0.16	3	324.70	7.70	0.70	0.27
GRB940619 UB	1	303.998	39.140	69.375	0.211	3.039	299.05	-29.89	0.34	0.20	3	298.50	-31.50	1.15	1.44
GRB940708 UB	1	308.119	39.489	17.431	0.038	?	301.58	24.66	1.02	1.61	3	300.50	22.70	1.03	0.56
GRB940728 UB	1	133.614	-41.397	36.245	0.131	?	85.49	-39.87	1.44	0.17	3	85.10	-38.00	1.10	0.75
GRB940921 UB	2	155.516	-55.210	54.361	0.121	2.583	196.59	-18.71	?	6.49	4	207.10	-16.40	0.68	0.75
GRB941017	NA	NA	NA	NA	NA	NA	302.63	11.10	?	NA	4	301.70	13.30	2.10	NA
GRB950208 UB	2	334.715	-27.012	83.397	0.022	2.301	337.06	54.19	?	2.17	4	344.80	56.00	1.95	0.05
GRB950421 UB	2	177.048	-19.097	81.048	0.226	2.171	71.92	-63.03	?	1.41	4	70.10	-61.70	1.43	0.11
GRB950425 UB	2	178.121	-21.566	17.005	0.207	2.154	163.16	-35.21	?	1.90	4	164.90	-33.80	0.34	0.11
GRB950522 UB	2	7.656	42.578	86.989	0.063	2.039	109.57	19.31	?	1.60	4	110.81	20.34	1.14	1.47
1 Hurley, K. et al Huntsville workshop (1995)							Smin = minimum distance between point and IPN annulus								
2 BACODINE/IPN burst alert messages (Hurley)															
3 BATSE 3B Catalog															
4 Meegan, C. Priv. Comm. (Trigger Messages)															

From cline@lheavx.gsfc.nasa.gov Fri Jan 26 13:00 PST 1996

Date: Fri, 26 Jan 1996 13:00:45 -0800

Mime-Version: 1.0

To: KHURLEY@sunspot.ssl.berkeley.edu

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

Subject: Improved list; same question.

Dear Kevin,

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

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

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

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

Helio corr removed

Date: *Nov 18 '97*

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

☒ ACCESS database updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

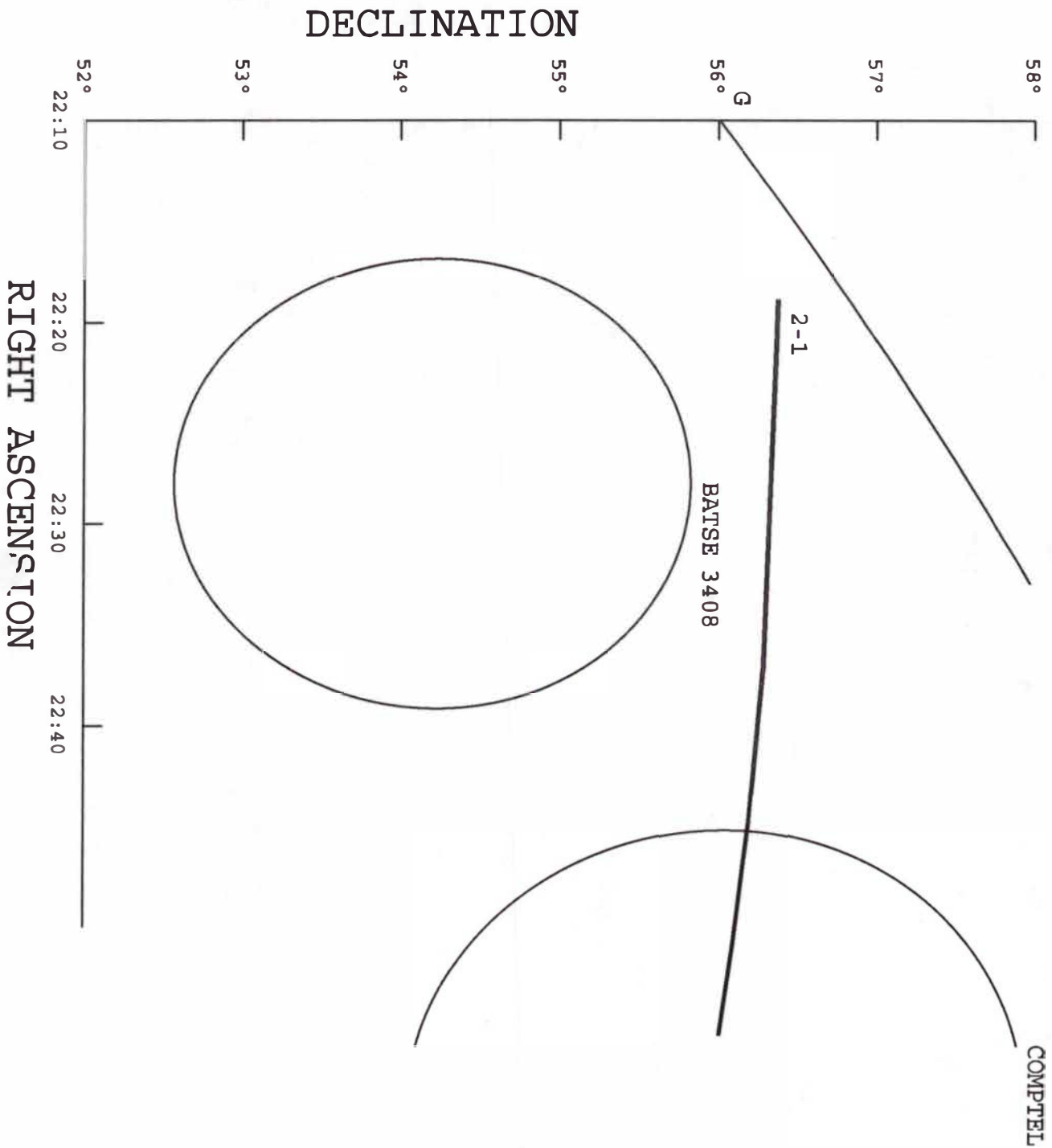
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF FEB 8, 1995 2:07

18/11/97



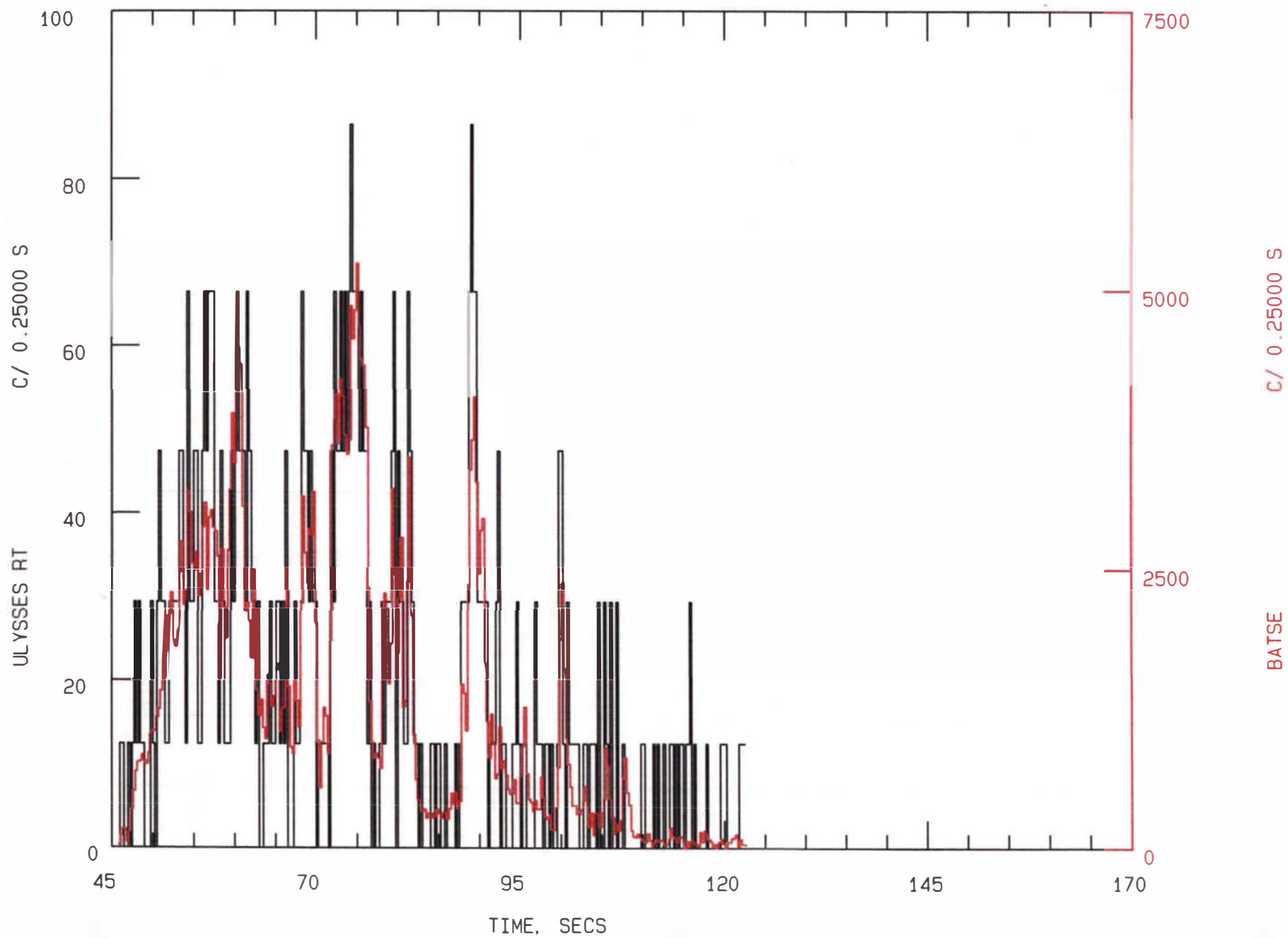
ULYSSES RT-BATSE

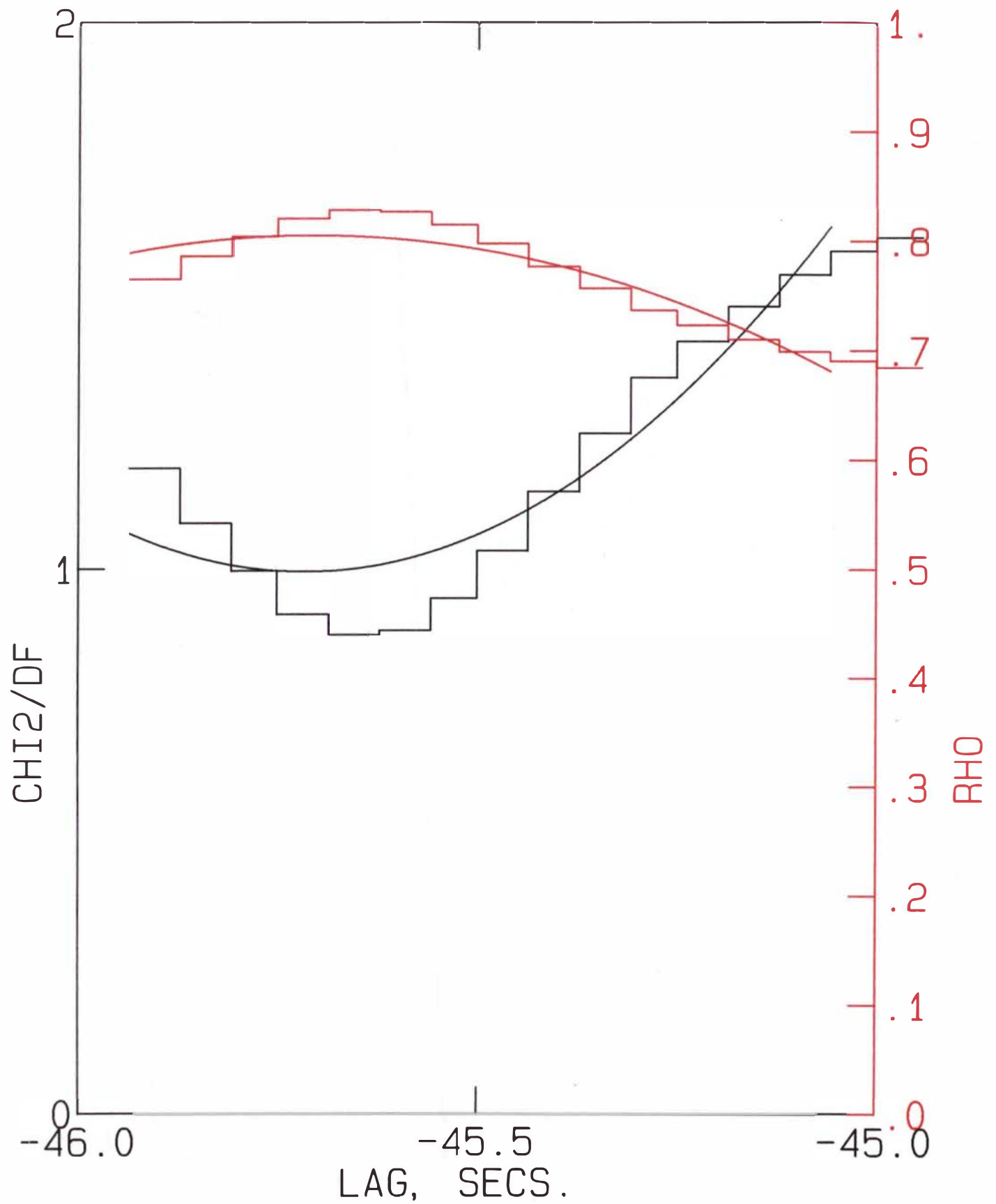
CORRELATION

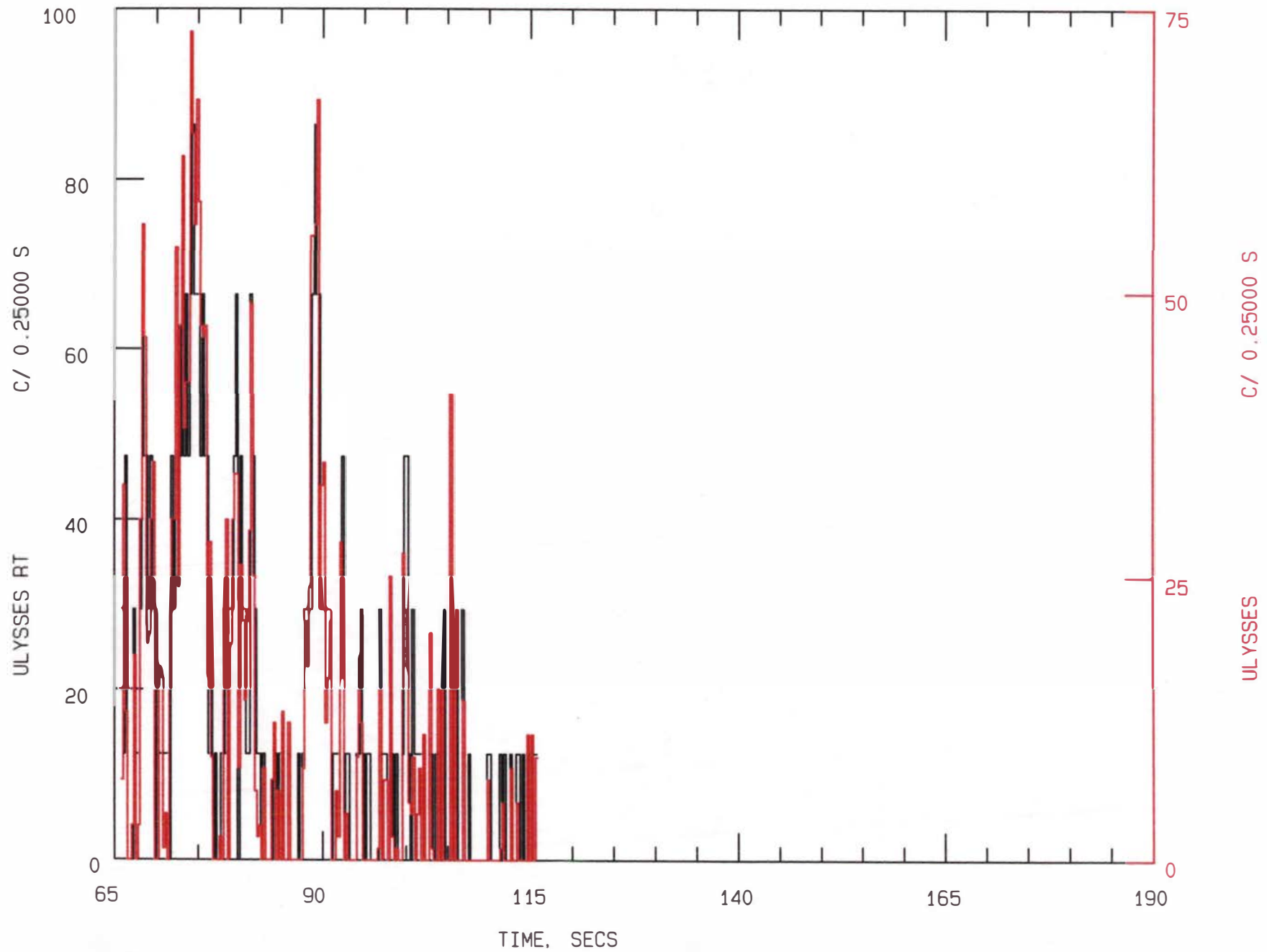
8/ 2/95

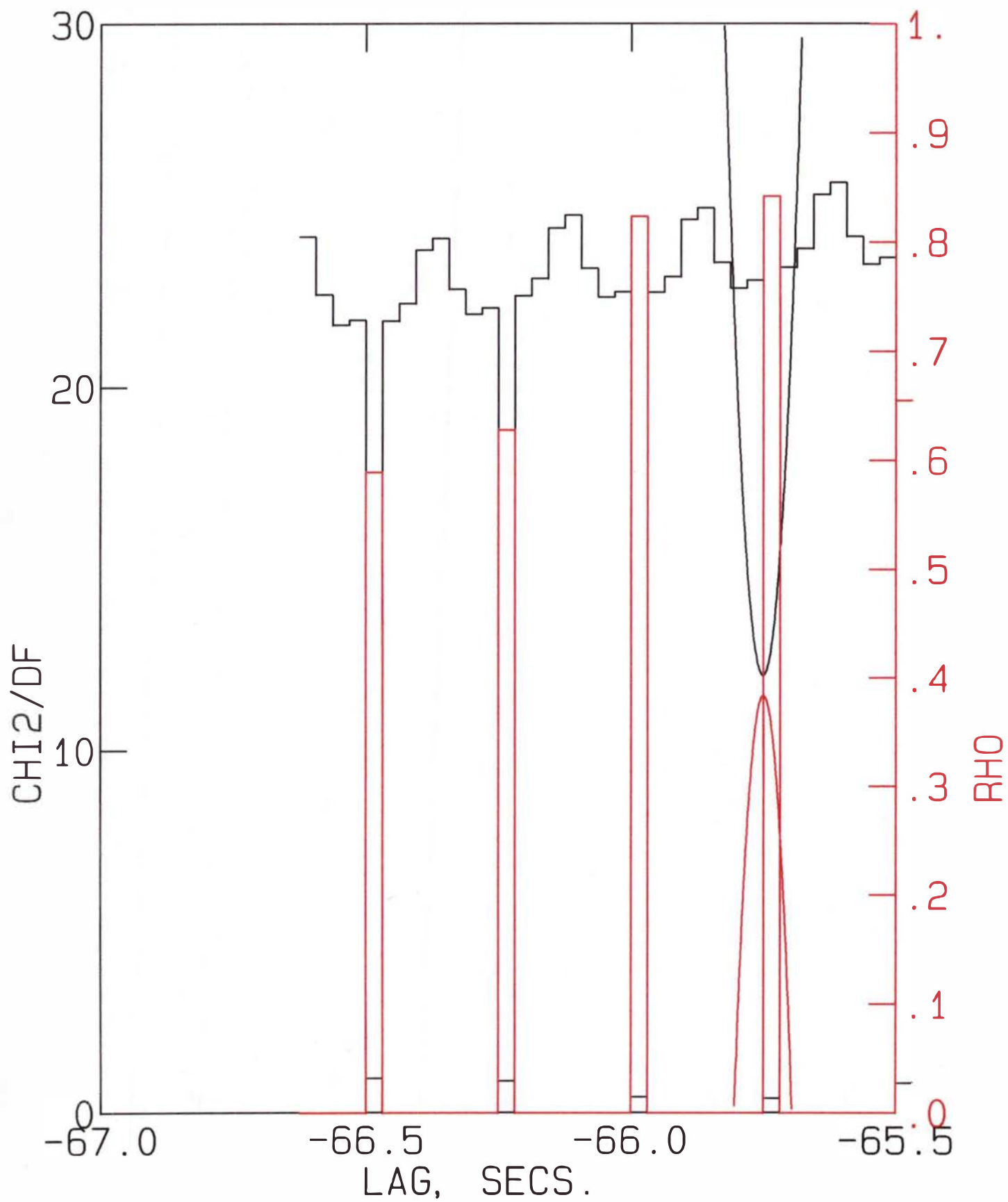
7644.205

18/11/97





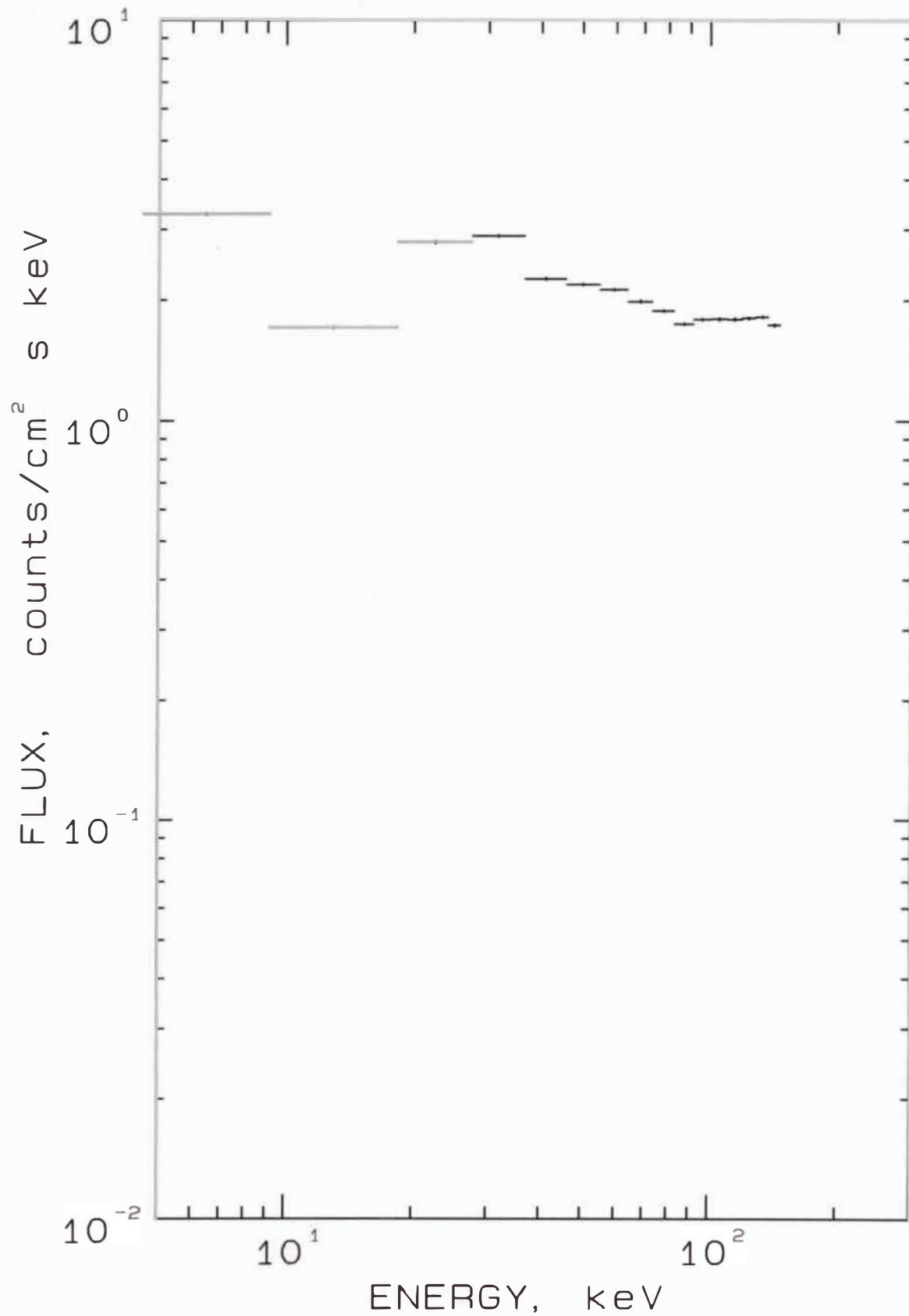




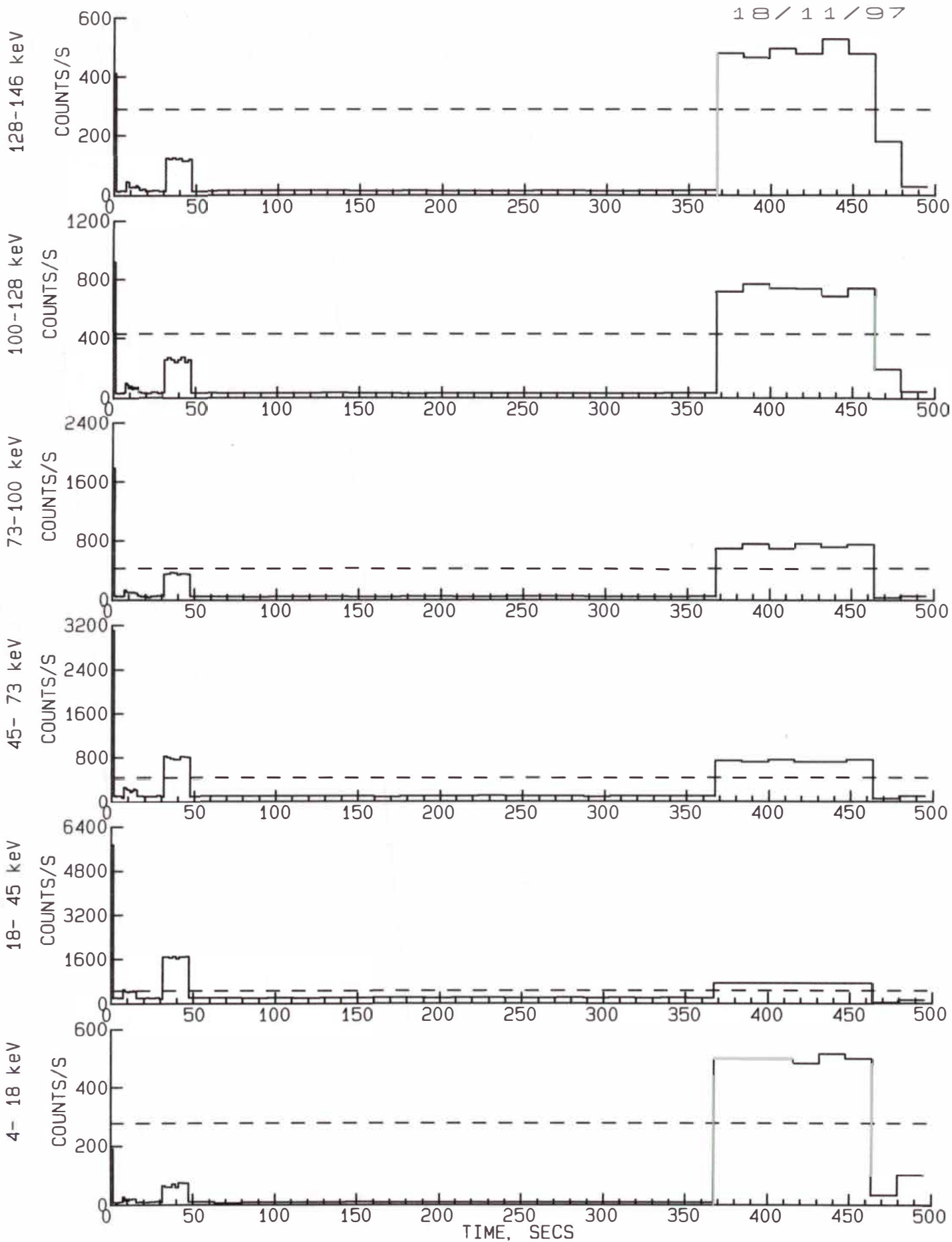
ULYSSES 08/02/95 7717.456

18/11/97

SPECTRUM INTEGRATED OVER 21.3 SECONDS, INTERVALS 2 TO 20



ULYSSES 08/02/95 7717.456 BURST SPECTRAL COUNT RATES



ULYSSES

08/02/95

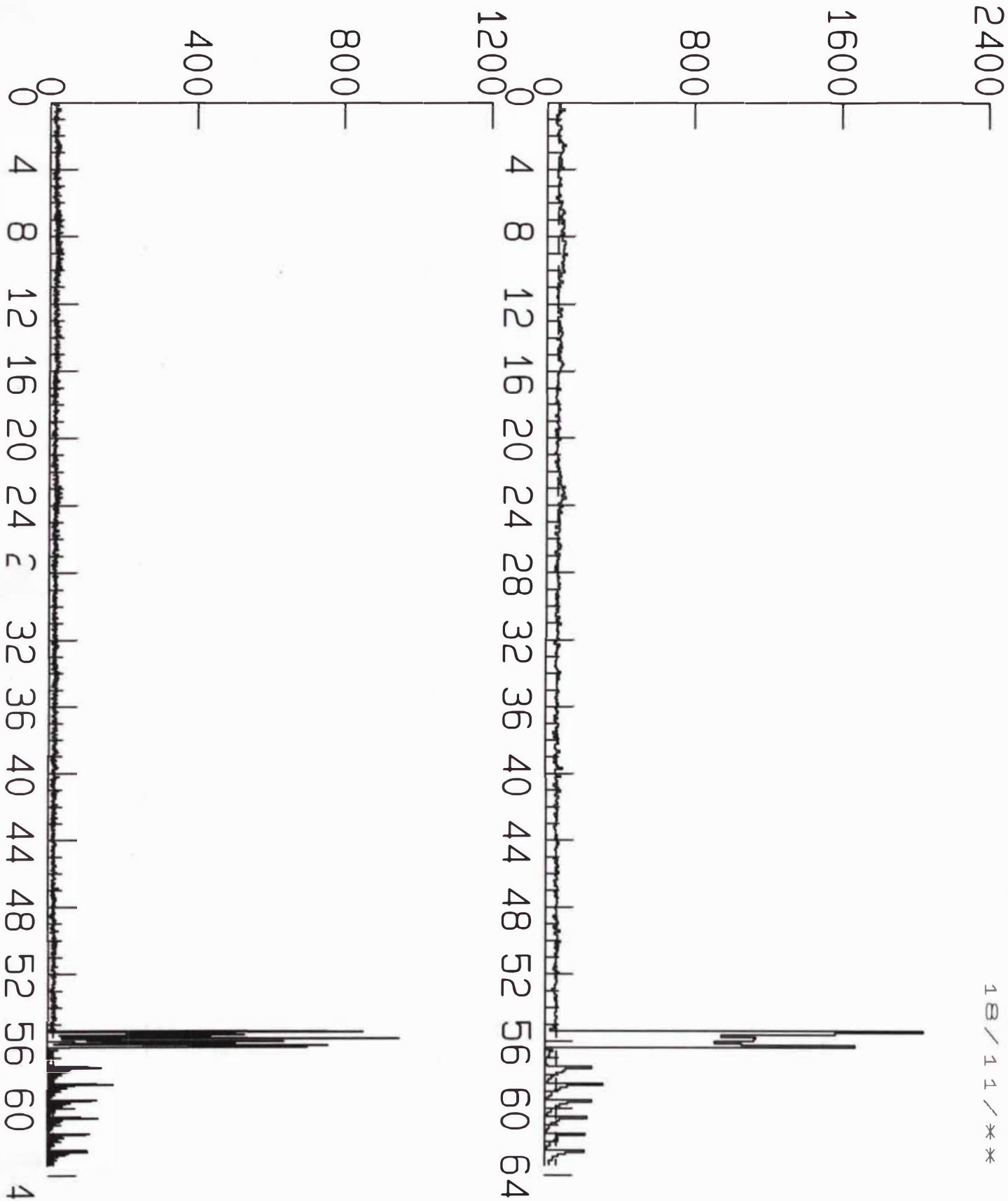
Ttrig= 7717.456

21- 147 keV

COUNTS/0.031 S

COUNTS/0.125 S

18 / 11 / ***

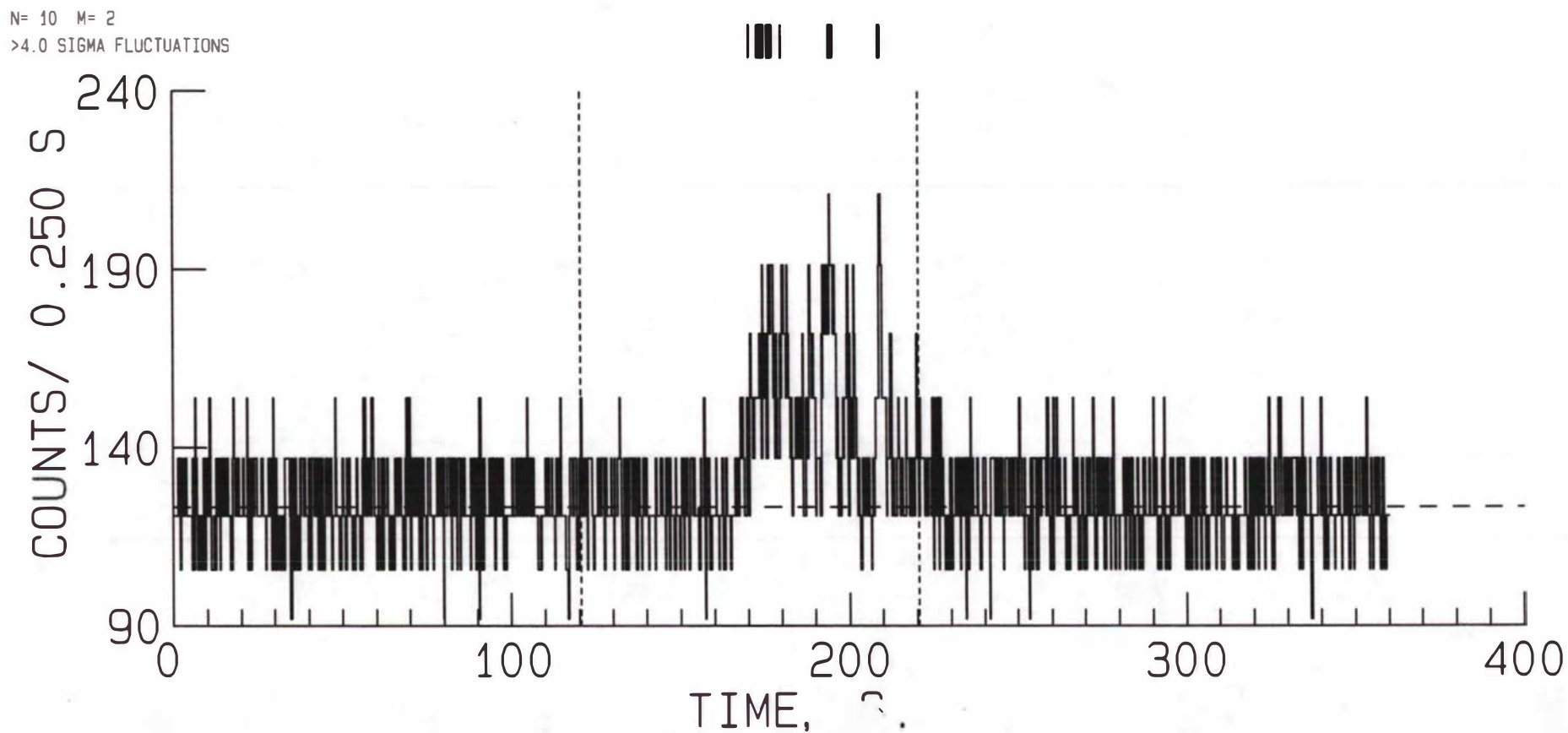


ULYSSES RT

18/11/97

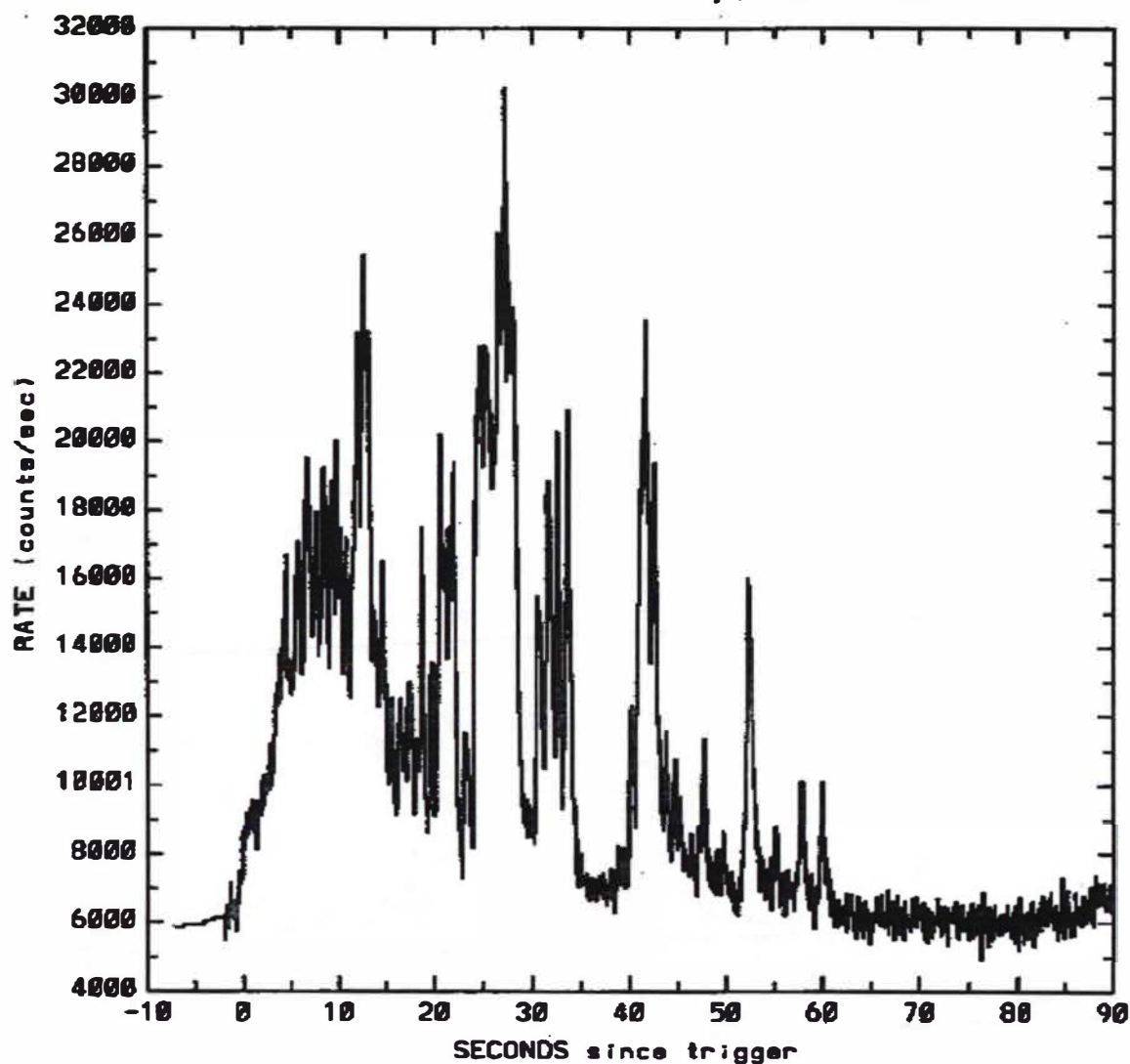
8/ 2/95 7524.213 s

21- 147 keV



Feb 08

DISCSC Data for K. Hurley. No. 3408



15-FEB-1995 16:06.22

Created by NOPS 80
(Burst Display)
Version 12.23

Trigger = . 3408

Trigger Time:
9756 / 7824.050Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum (Integ. Time:
0.064 second(s)Detectors [7..8]:
-6--2--Discriminators:
1 1. 2)Quality Mask:
8018P1

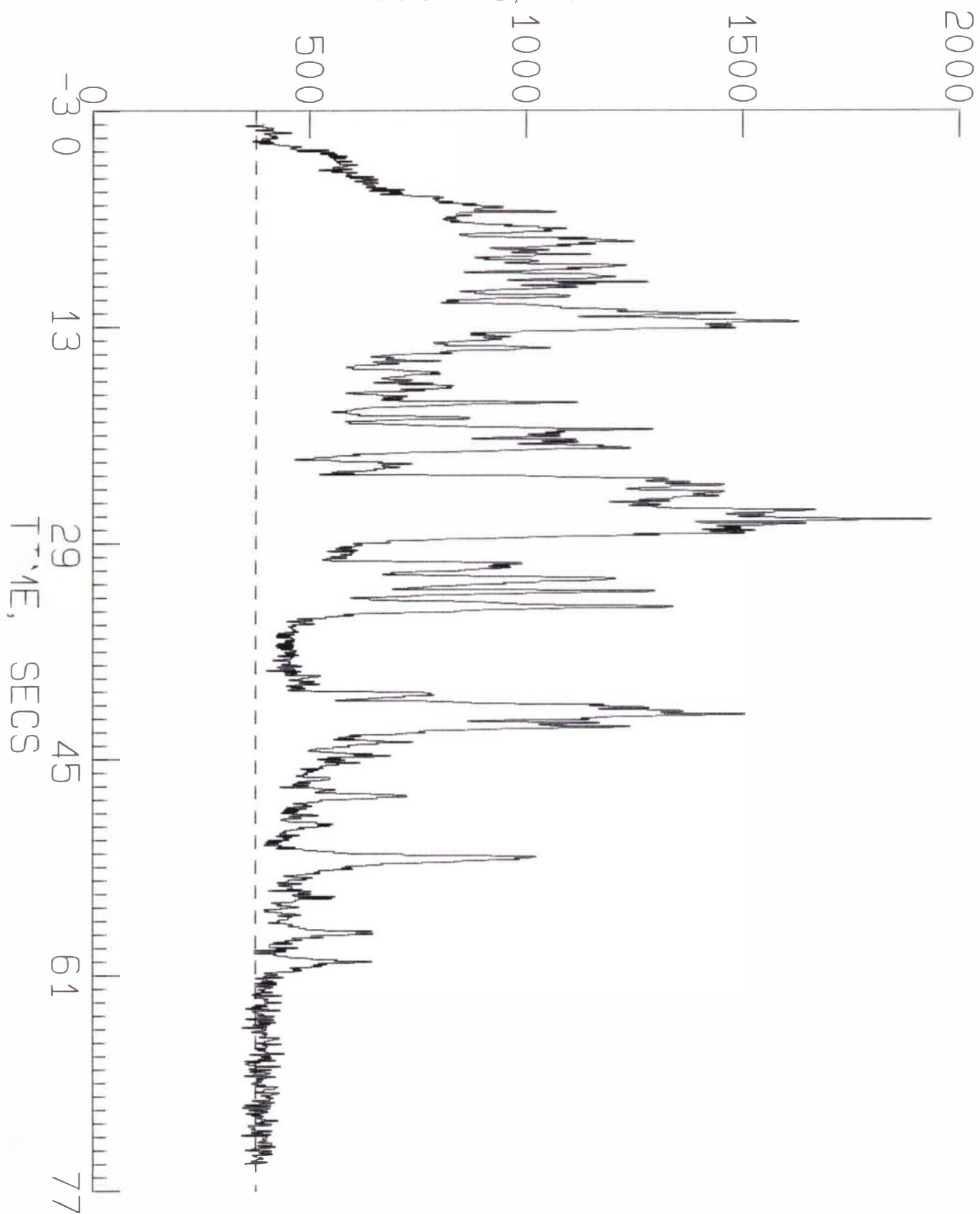
BATSE

08/02/95

7824.050

25- 100 keV

COUNTS/ .064 S



From DEAL@fender.msfc.nasa.gov Fri Feb 10 06:36 PST 1995
Date: Fri, 10 Feb 1995 8:36:35 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, CASS09BAND@fender.msfc.nasa.gov,
CASS09GRUBER@fender.msfc.nasa.gov, CASS09MATTESON@fender.msfc.nasa.gov,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3409

TIME: TJD=9756 SECONDS=19989

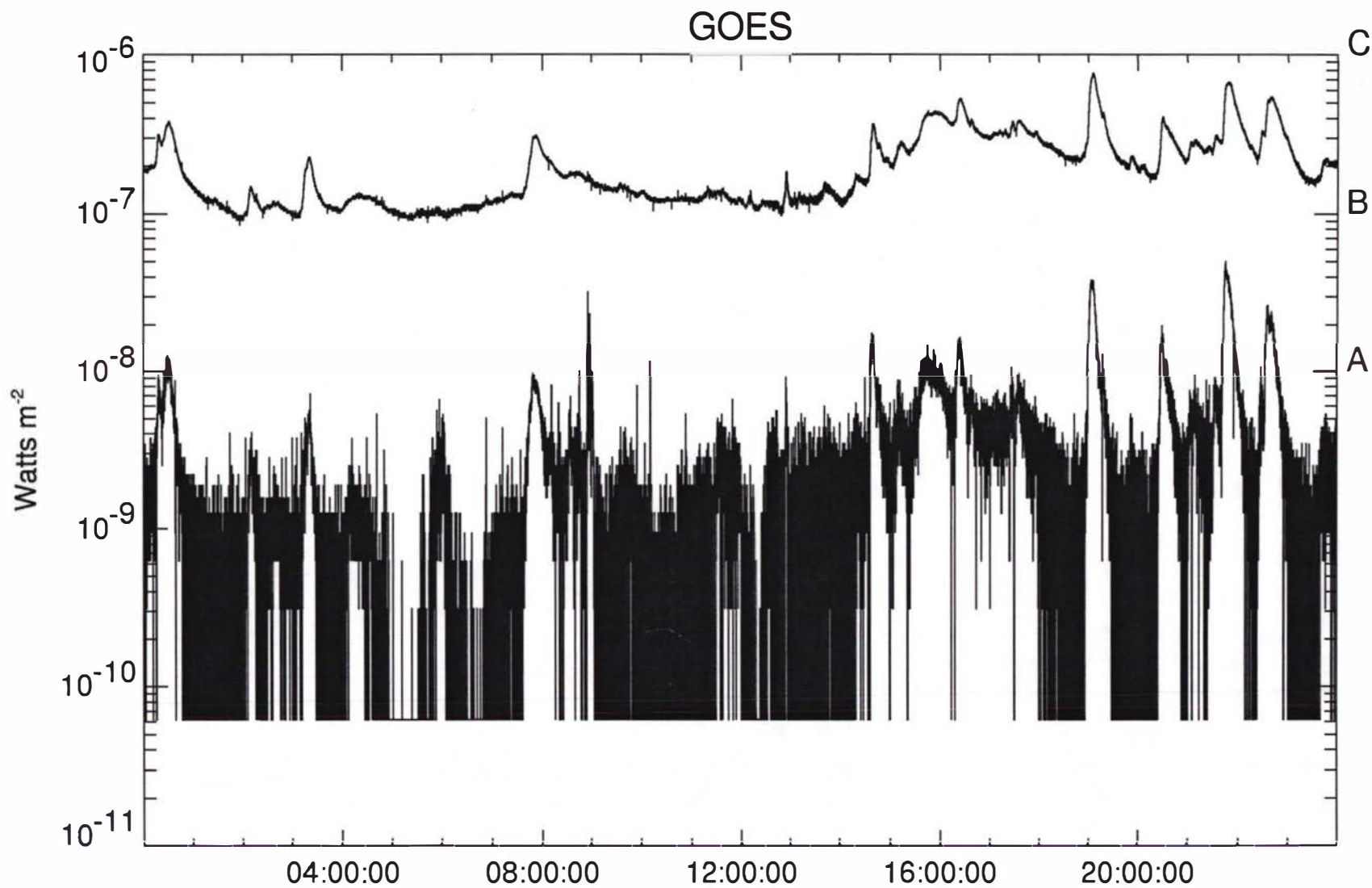
TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT



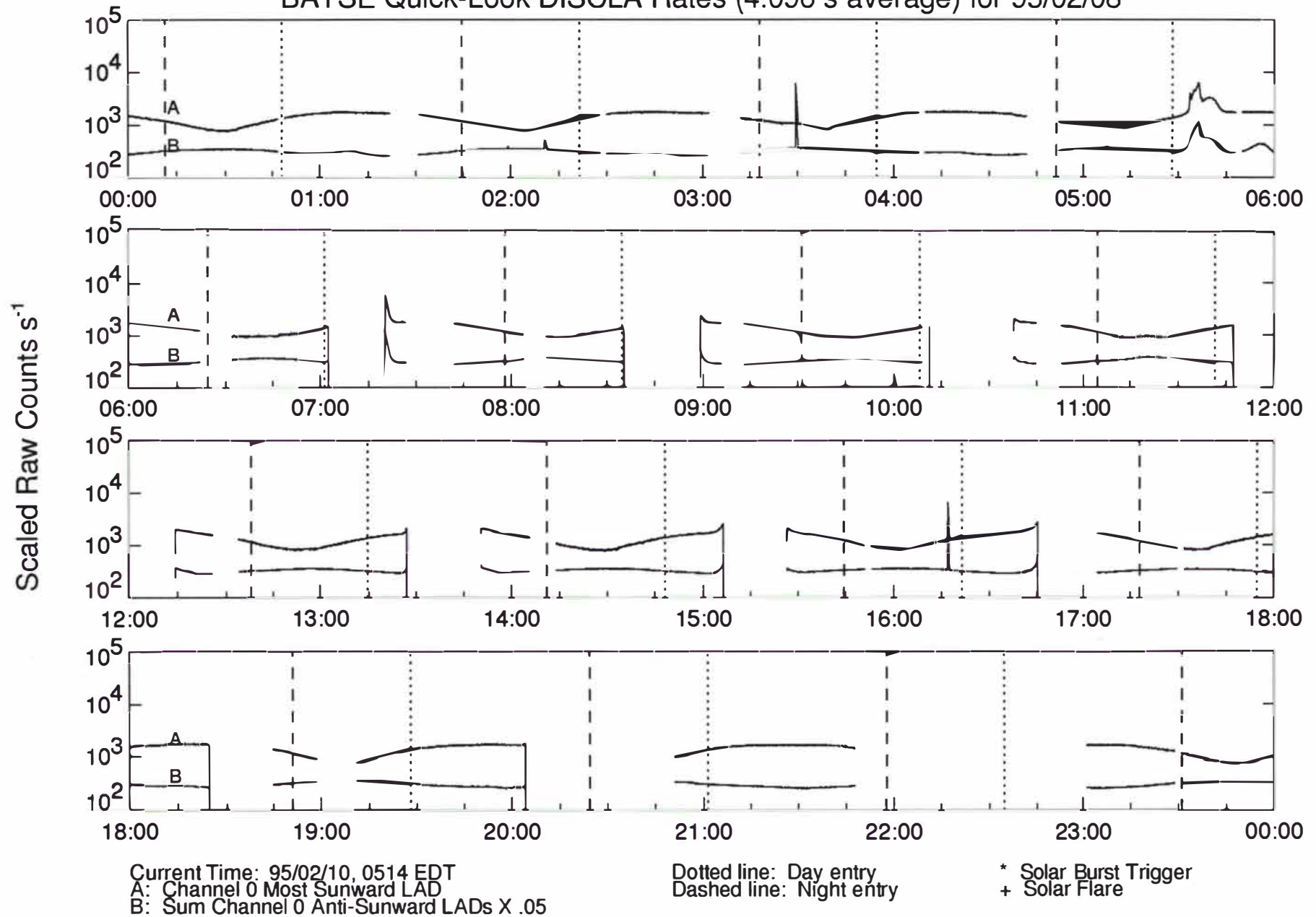
Data Start: 95/02/08, 0000:02

Plot created: 95/02/10, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

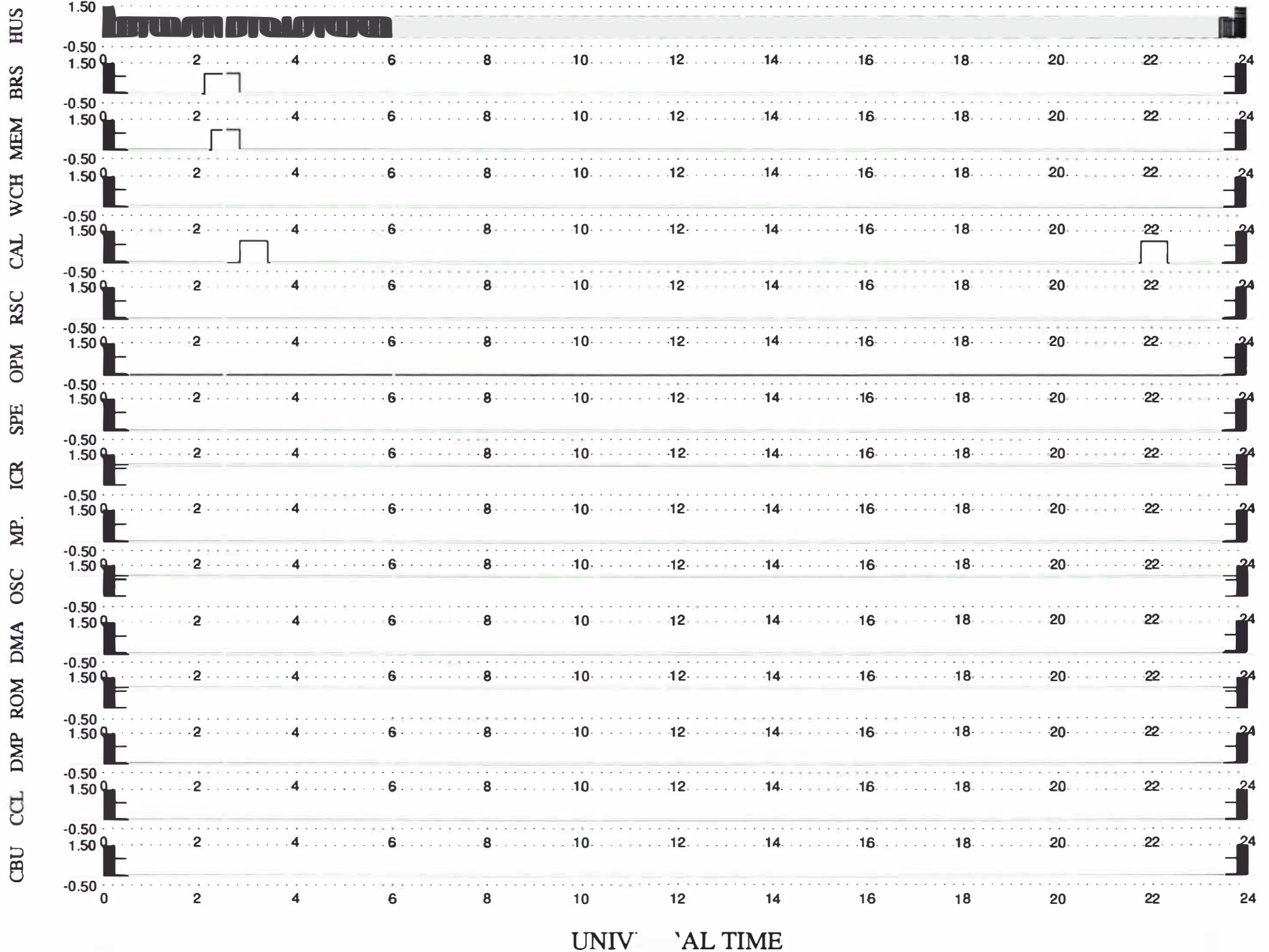
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/08



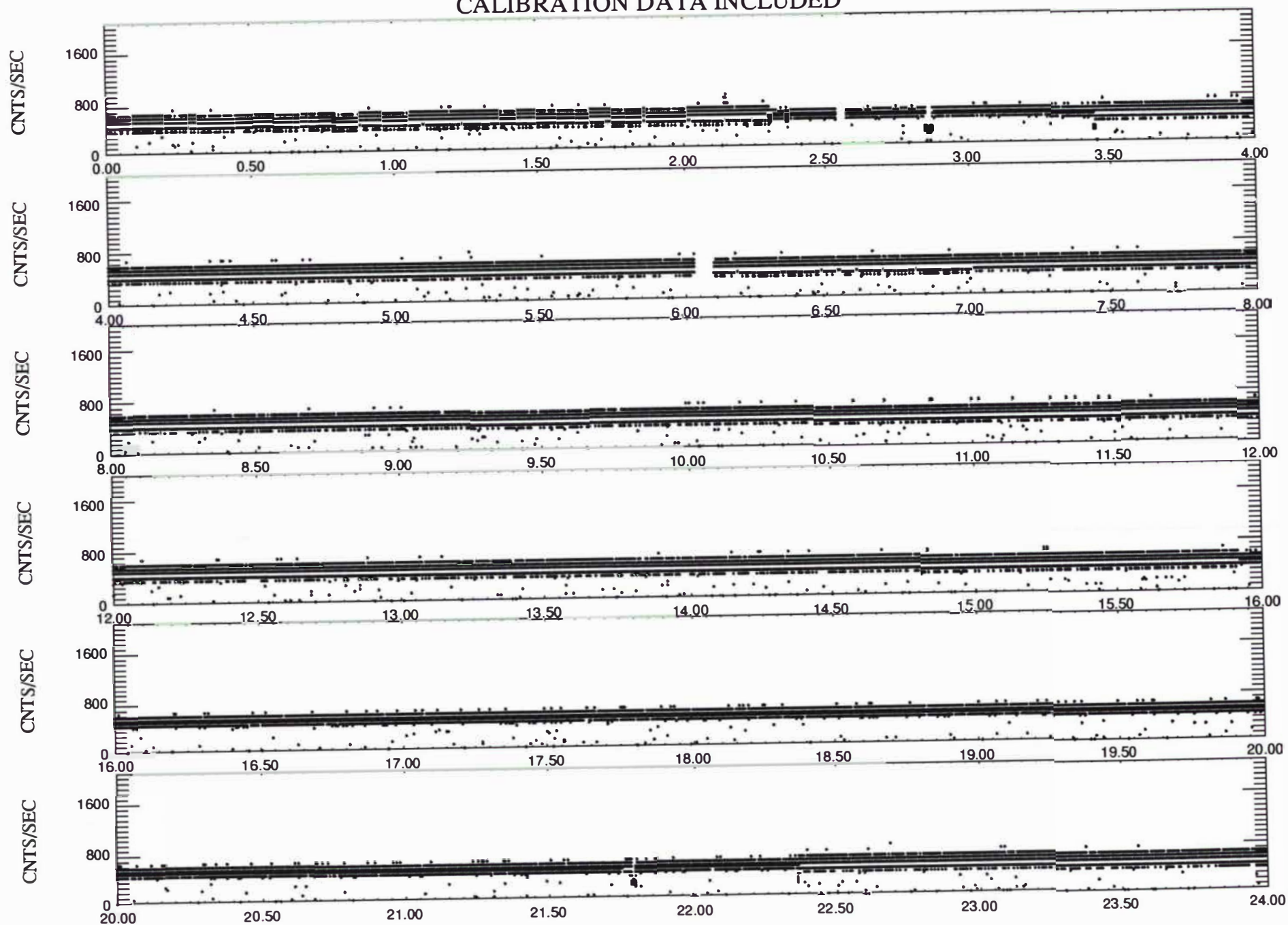
HUS MODES EDR day 39, year 1995 to day 39, year 1995
BURST NUMBER 15

7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 39, year 1995 to day 39, year 1995
CALIBRATION DATA INCLUDED

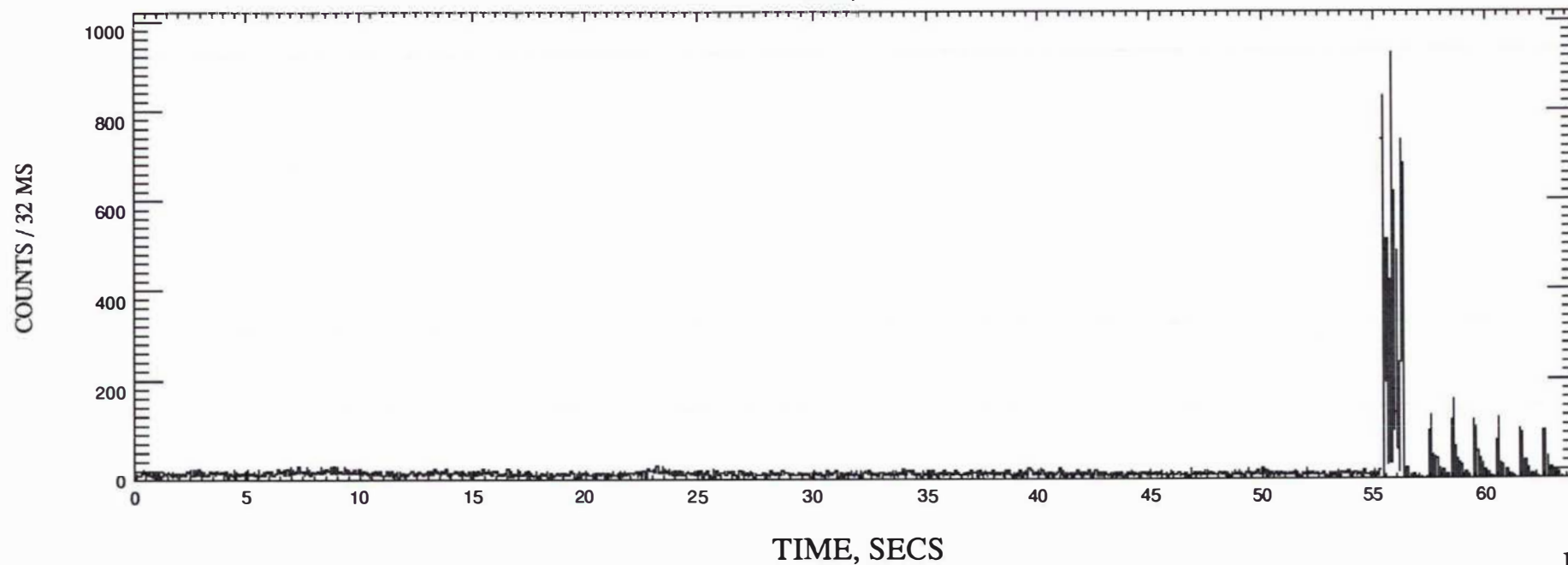
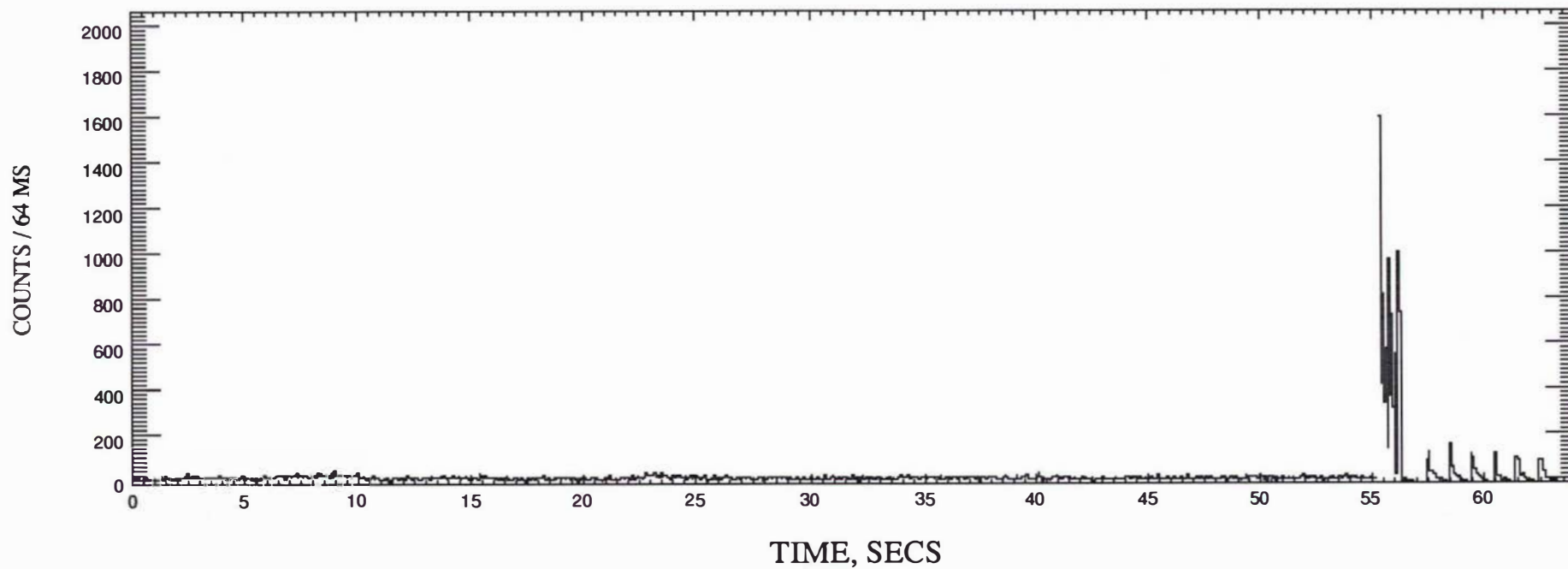
7/18/95

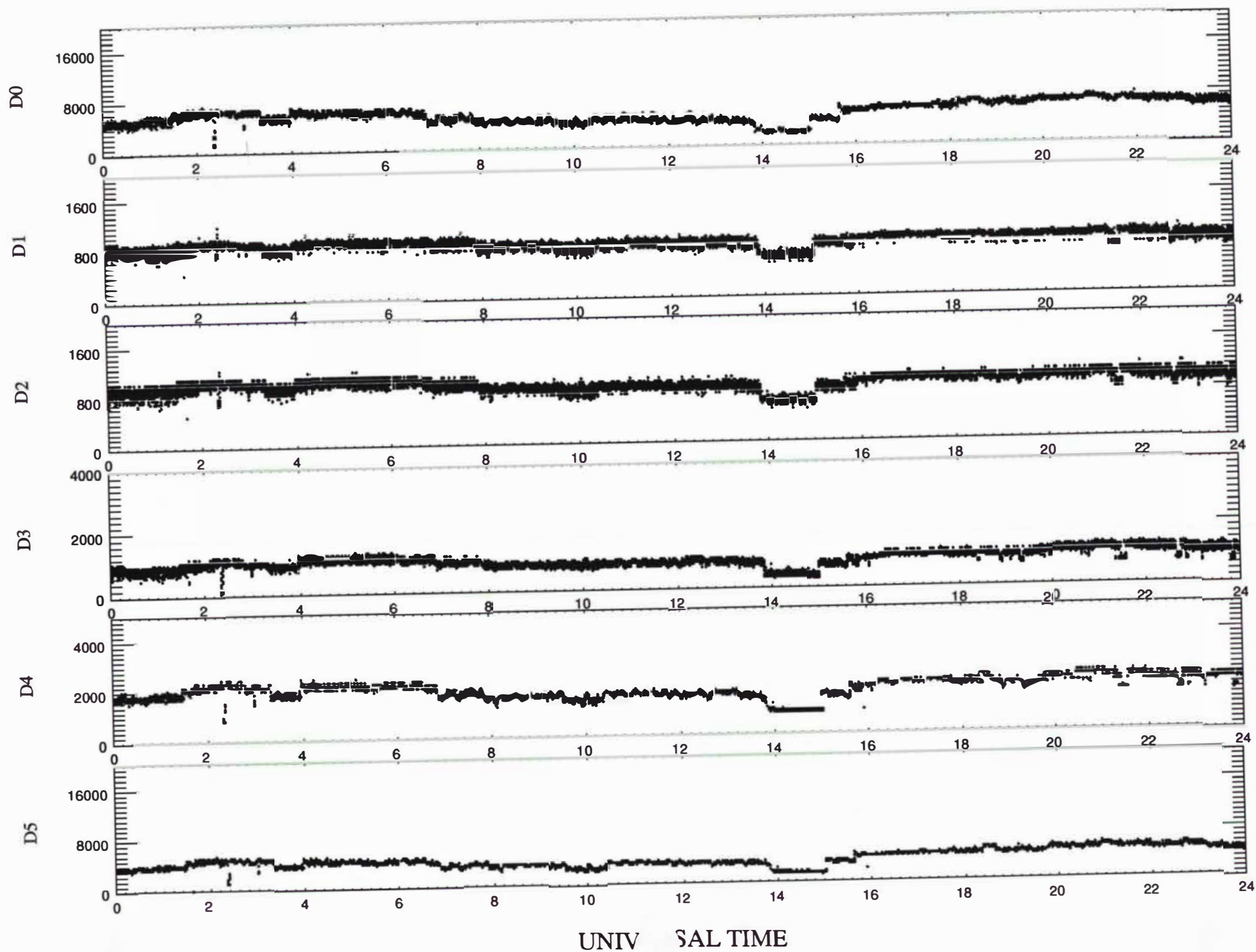


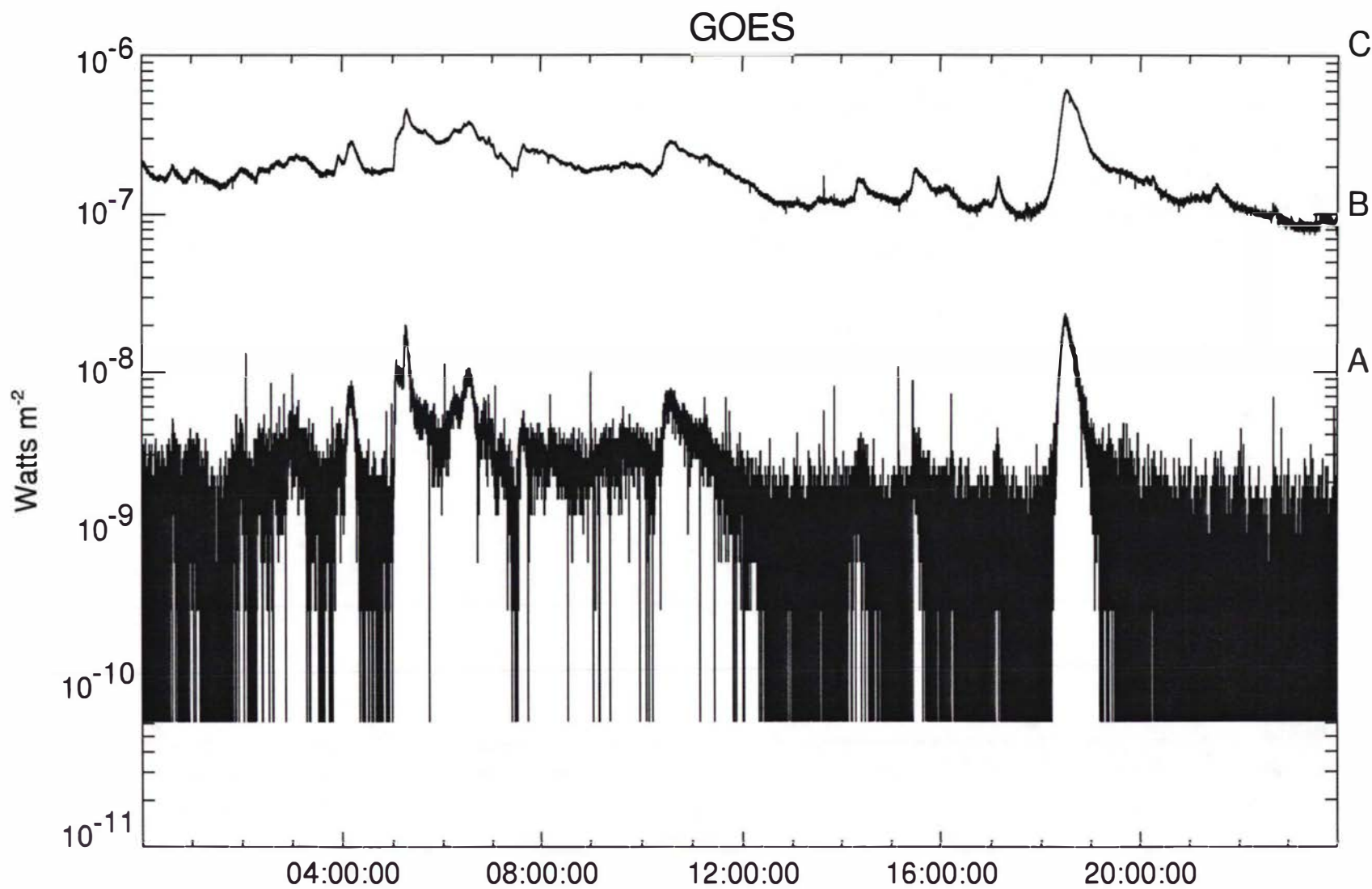
UNIV. TIME

HUS 2A TRIGGERED DATA EDR day 39, year 1995
Burst Counter 15 at UT= 2.143737809923 h= 7717.456 s 02:08:37.456

7/18/95







Data Start: 95/02/09, 0000:00

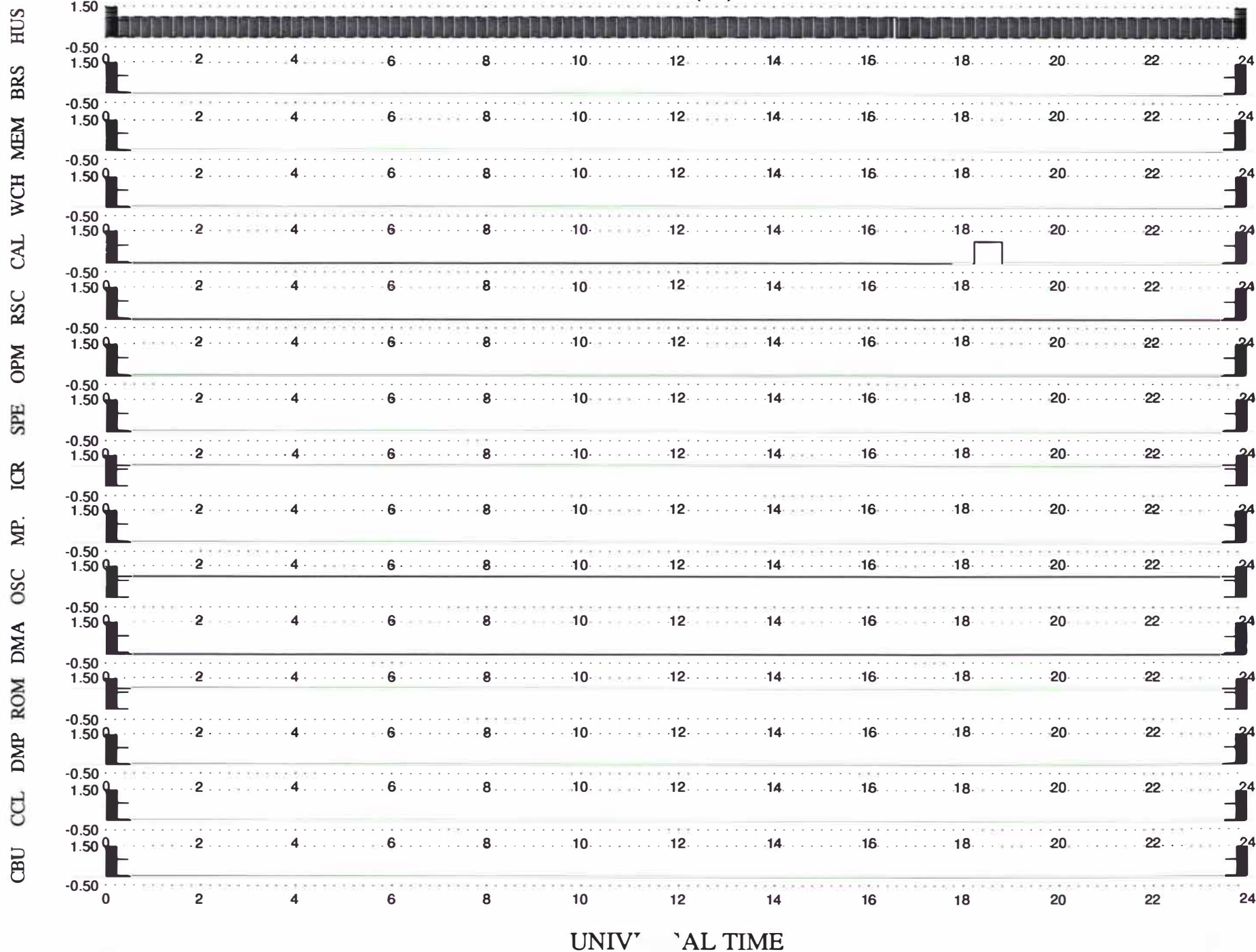
Plot created: 95/02/11, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

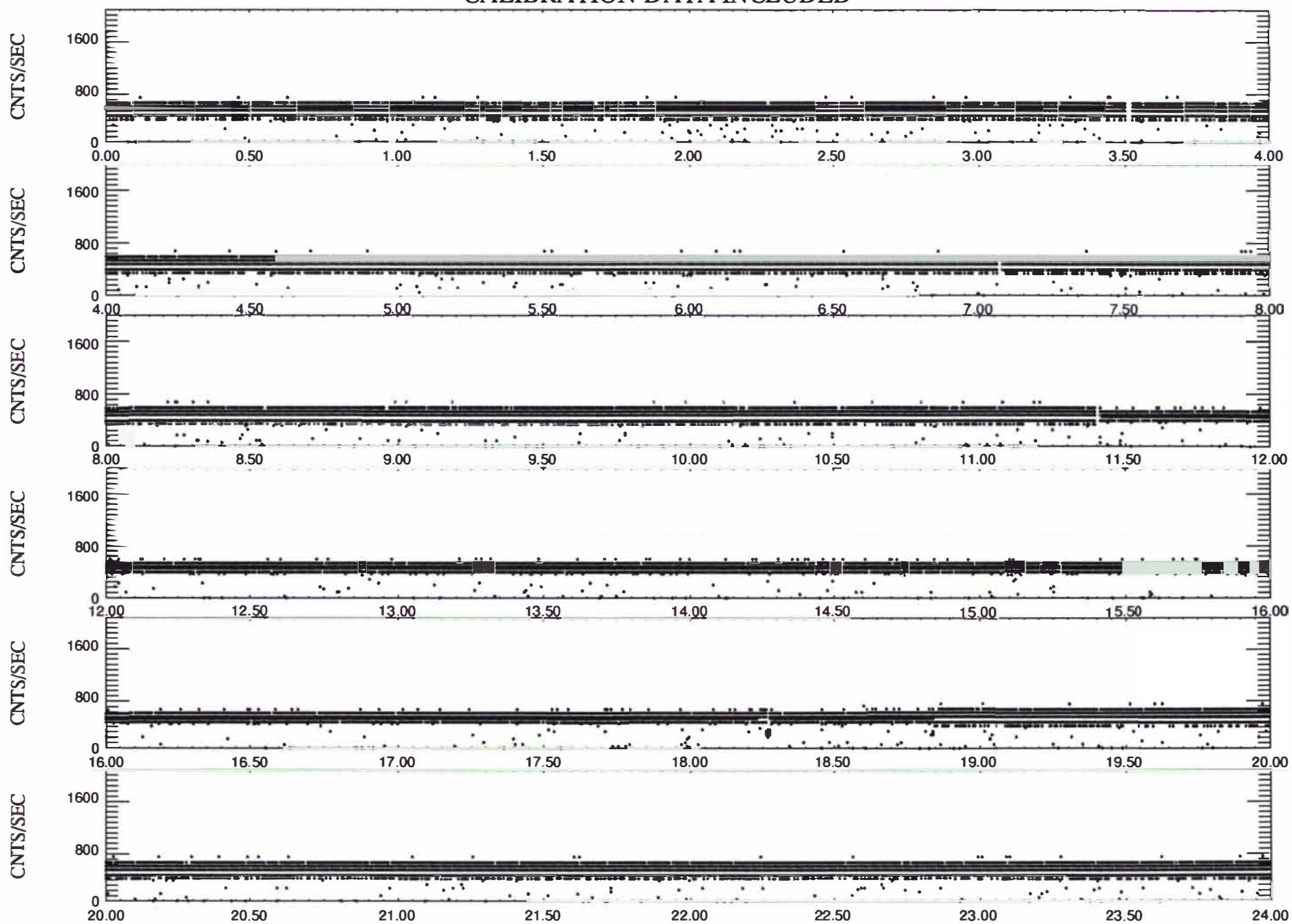
HUS MODES EDR day 40, year 1995 to day 40, year 1995
NO BURST (15)

7/18/95

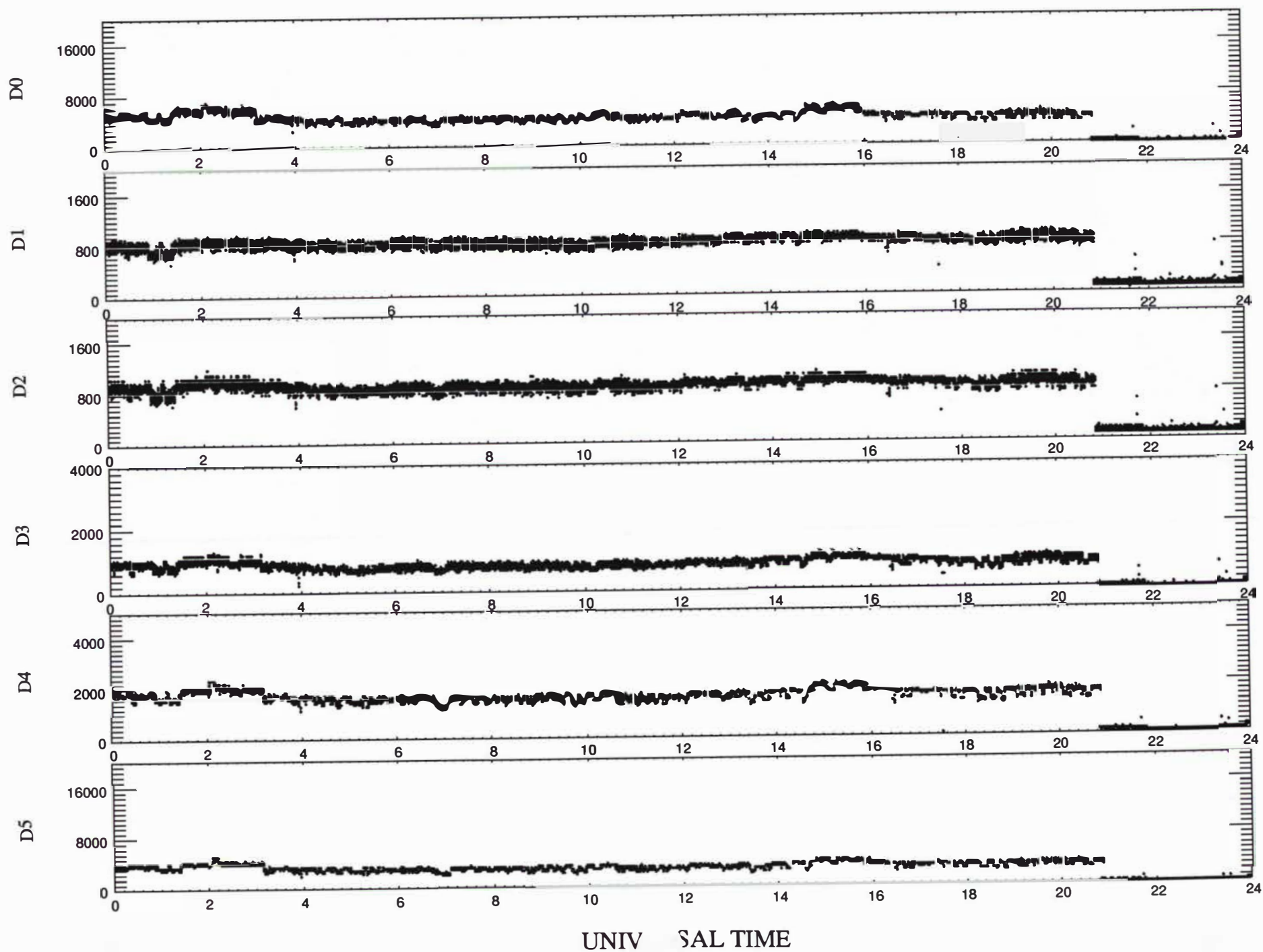


HUS 2A, MODE 1, NOT AVERAGED EDR day 40, year 1995 to day 40, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIVERSAL TIME



Feb 14 08:58

burst3410.feb13

1

From HAGEDON@fender.msfc.nasa.gov Mon Feb 13 10:02 PST 1995
Return-Path: <HAGEDON@fender.msfc.nasa.gov>
Received: from FENDER.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA16704; Mon, 13 Feb 1995 10:01:59 +0800
Date: Mon, 13 Feb 1995 12:01:59 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <950213120159.21602261@fender.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 3410
Content-Type: text
Content-Length: 1135
X-Lines: 26
Status: O

BATSEARCH PROGRAM

TRIGGER

BATSE BURST # 3410
EVENT OF 1995 FEB 10 DAY OF YEAR= 41
EVENT CROSSING TIME AT BATSE : 8421. S. OR 02:20:21.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 155.000 -27.000
BATSE PEAK COUNTING RATE: 97000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 10/ 2/ 95 IS:
RA= 334.745 DEC= -26.004 DIST= 2.305 AU
BATSE-ULYSSES DISTANCE = 344873593. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 53.00 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 692.24 SECS.
CROSSING TIME AT ULYSSES IS 9113. S. OR 02:31:53 +/- 220.03 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 10/ 2/ 95 IS:
RA= 147.636 DEC= 17.892 DIST= 0.676 AU
MARS-BATSE DISTANCE = 101130264. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=134.54 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -236.62 SECS.
CROSSING TIME AT MARS IS 8184. S. OR 02:16:24 +/- 38.15 SECONDS

BATSE BURST TRIGGER

NO.: 3410

TIME: TJD=9758 SECONDS=08421

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=171 AZIMUTH=80 ERROR= DEGREES

COMMENTS:

BURST. STRONG, SINGLE SPIKE WITH SOME SUBSTRUCTURE. DUR.~0.2 SEC.
VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3410	950210	9758	08421	97000	155	-27

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

Dear Kevin,

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

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

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

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

Helio corr removed
Date: Feb 11 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

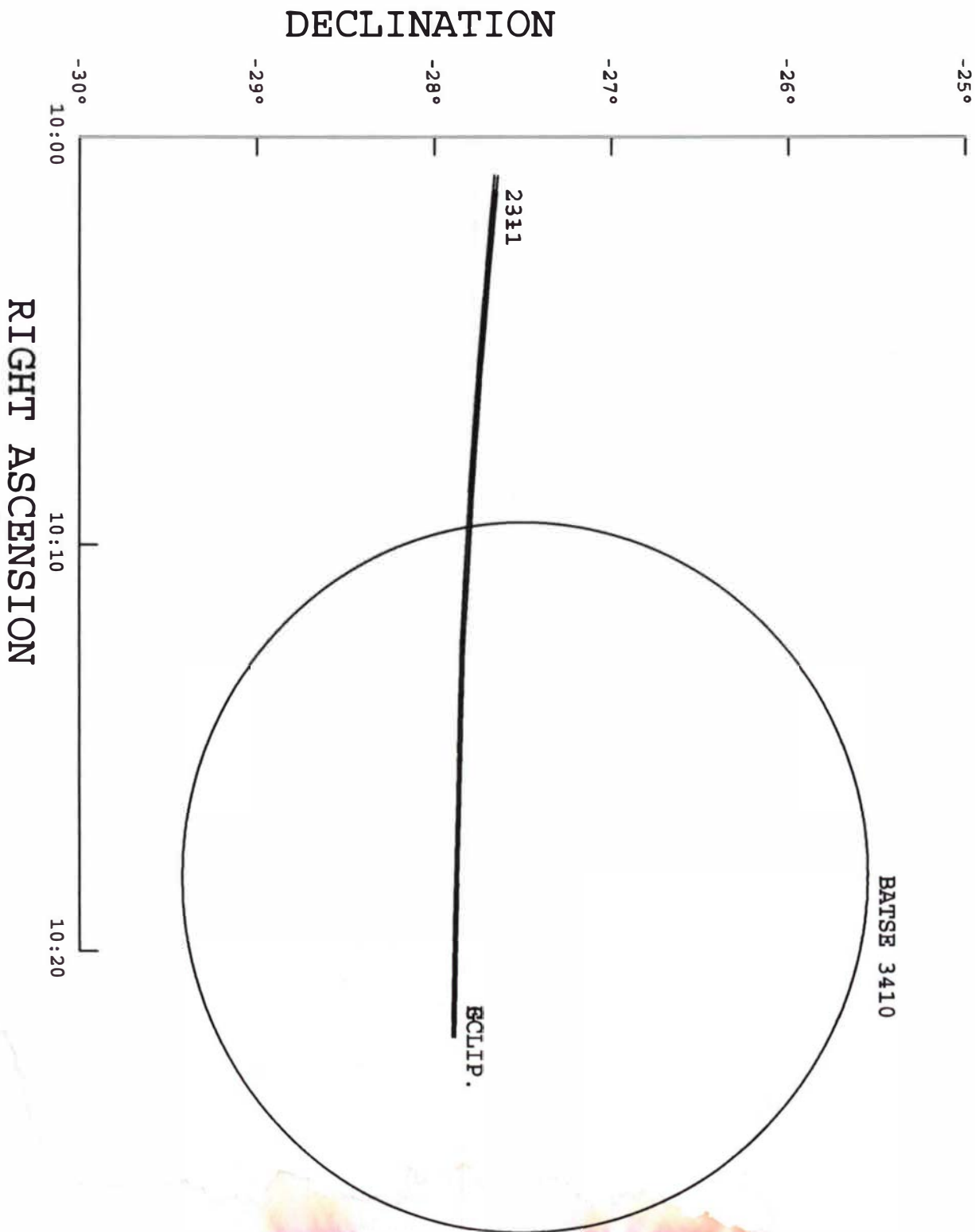
- ☒ ACCESS database updated?

Konus added Aug 8 '08

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 3 KONUS1

EVENT OF FEB 10, 1995 2:31

8 / 8 / 8



ULYSSES

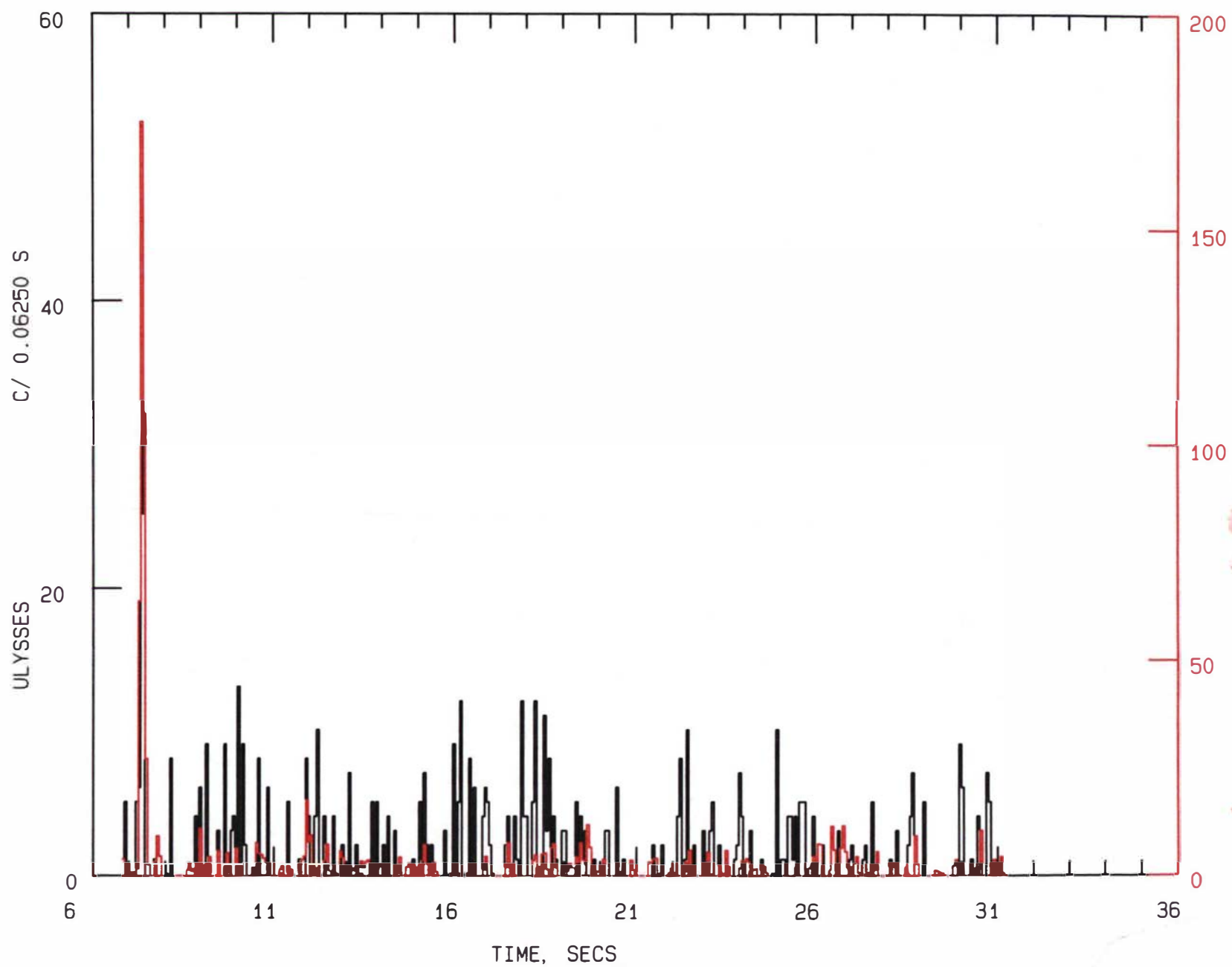
-KONUS1

CORRELATION

10/02/95

9103.759

8/ 8/ 8



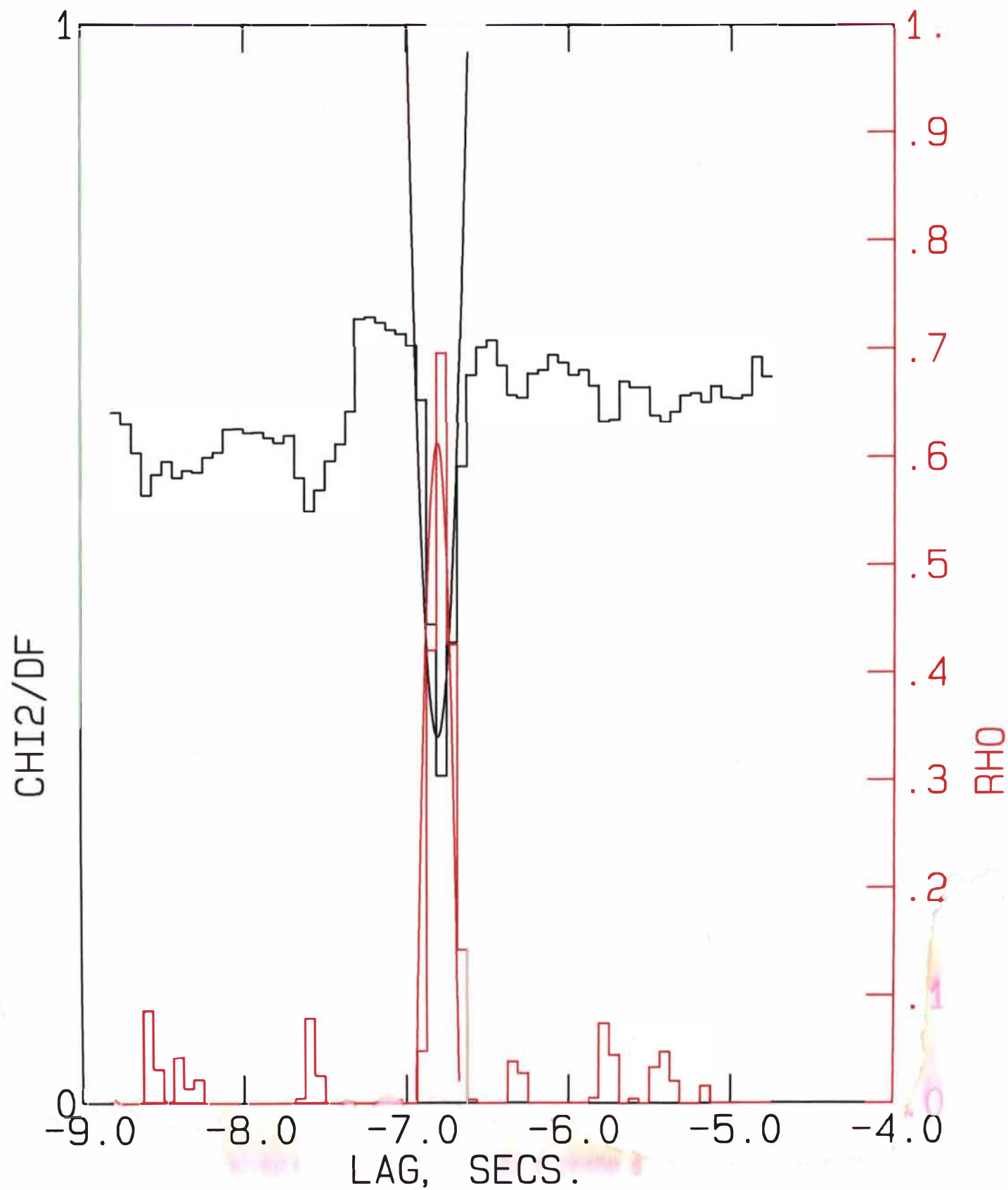
ULYSSES

-KONUS1

CORRELATION

10/02/95

9103.759



BATSE

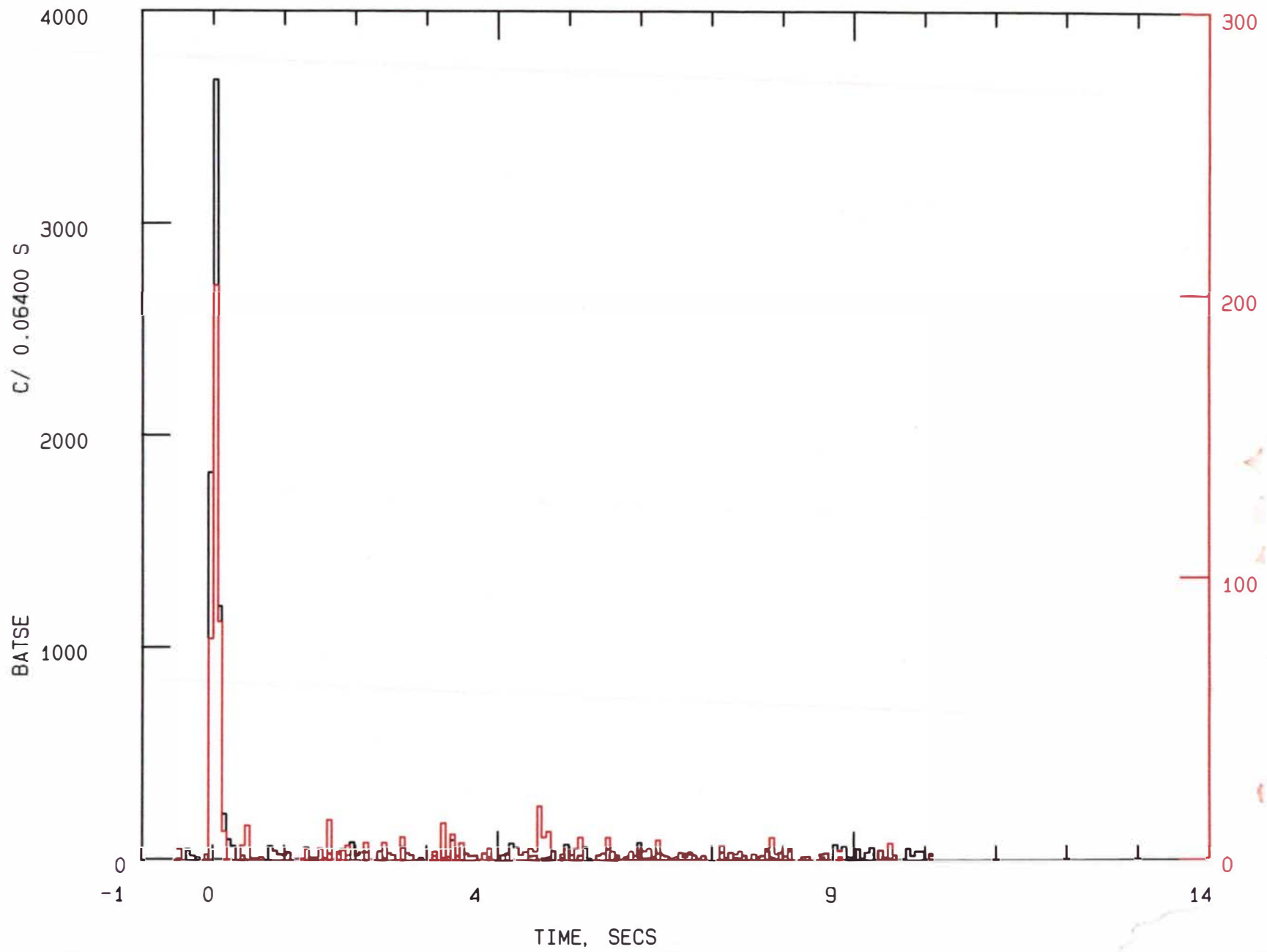
-KONUS1

CORRELATION

10/ 2/95

8421.554

8/ 8/ 8



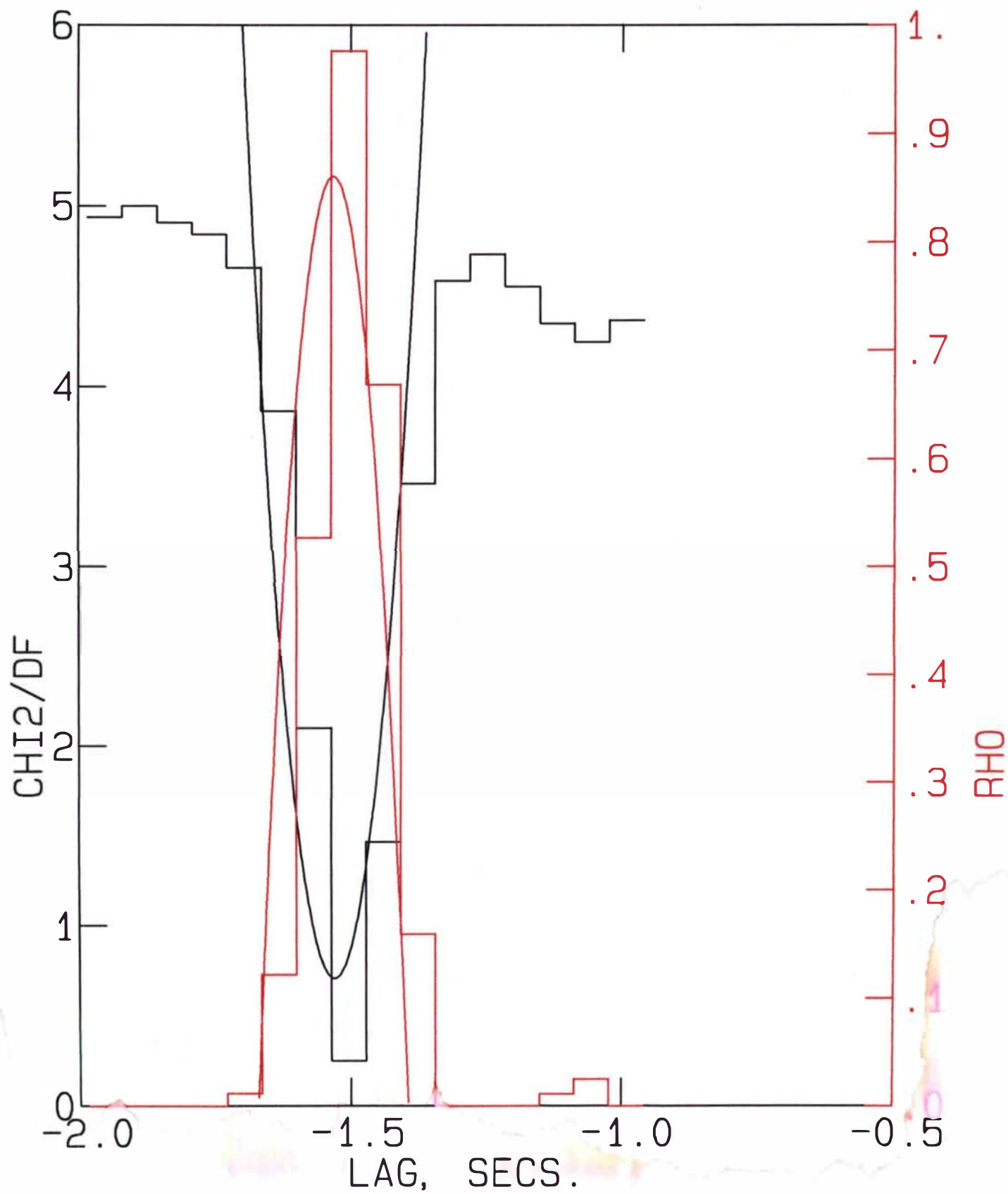
BATSE

-KONUS1

CORRELATION

10/ 2/95

8421.554



KONUS

10/02/95 8424.140

50- 200 keV

COUNTS/0.064 S

100

200

300

0
9
19
29
39
49
59
69
79
89
99
TIME, SECS



8 / 8 / 8

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

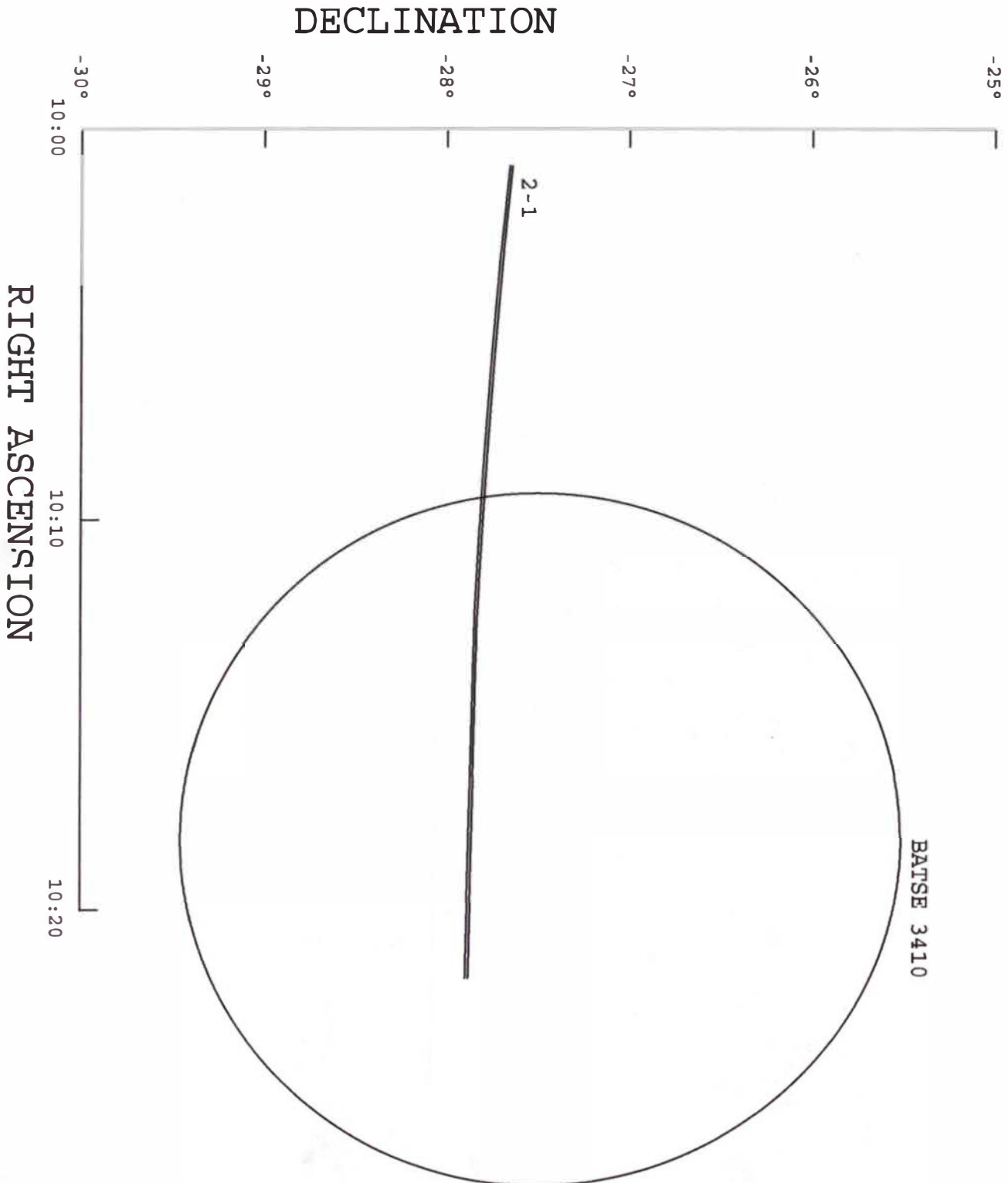
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF FEB 10, 1995 2:31

11/ 2/98



BATSE

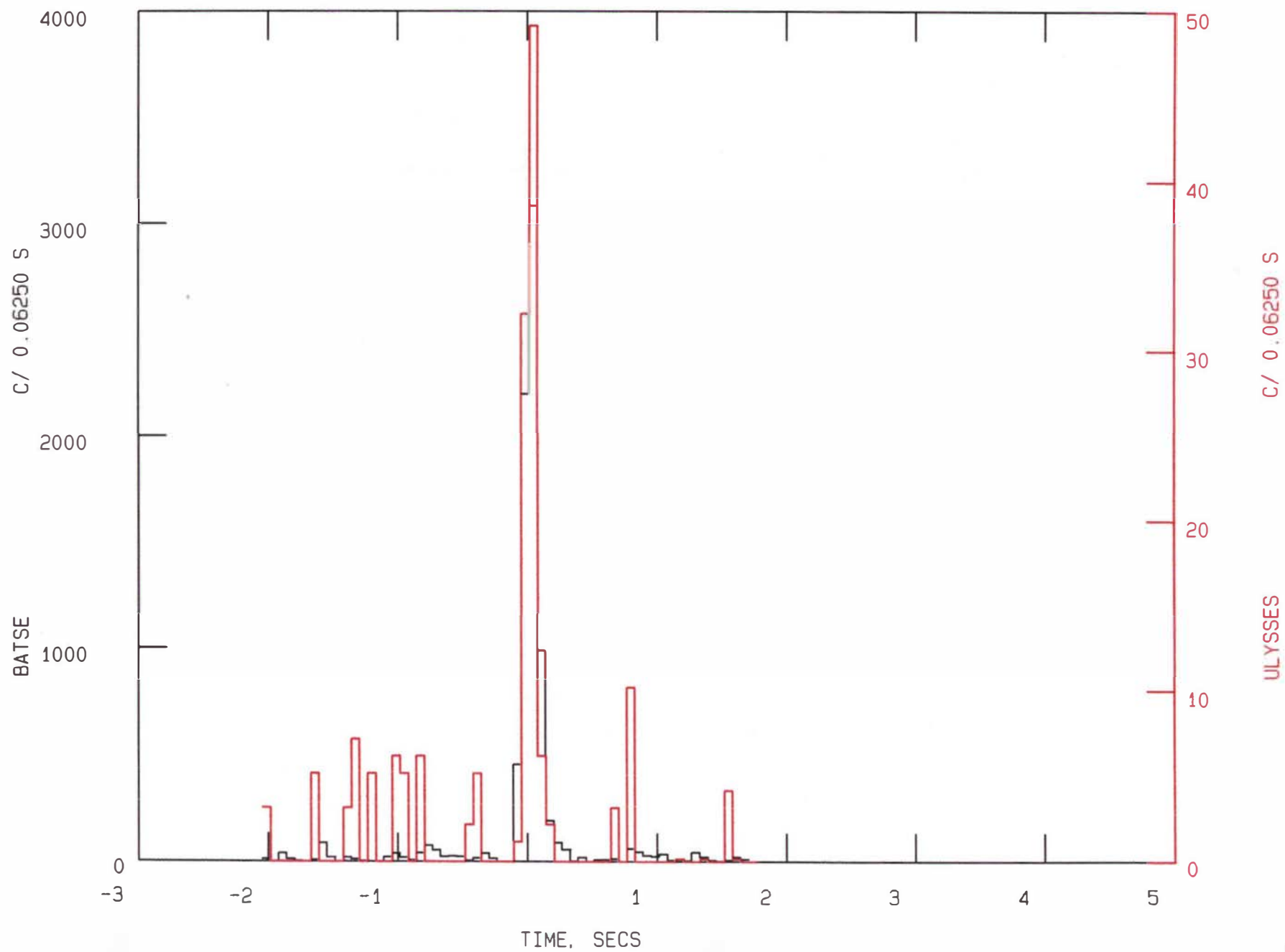
-ULYSSES

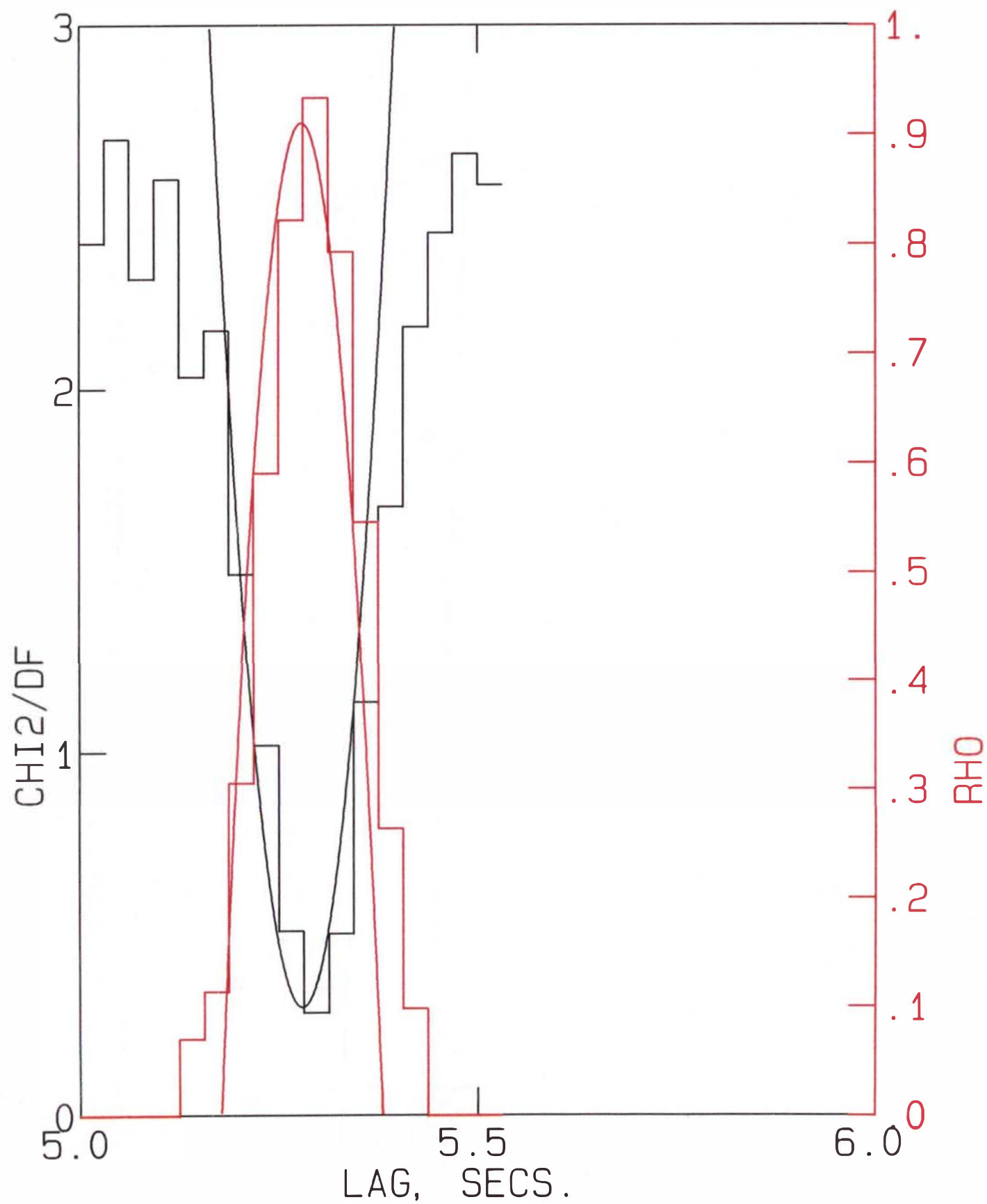
CORRELATION

10/ 2/95

8421.554

11/ 2/98





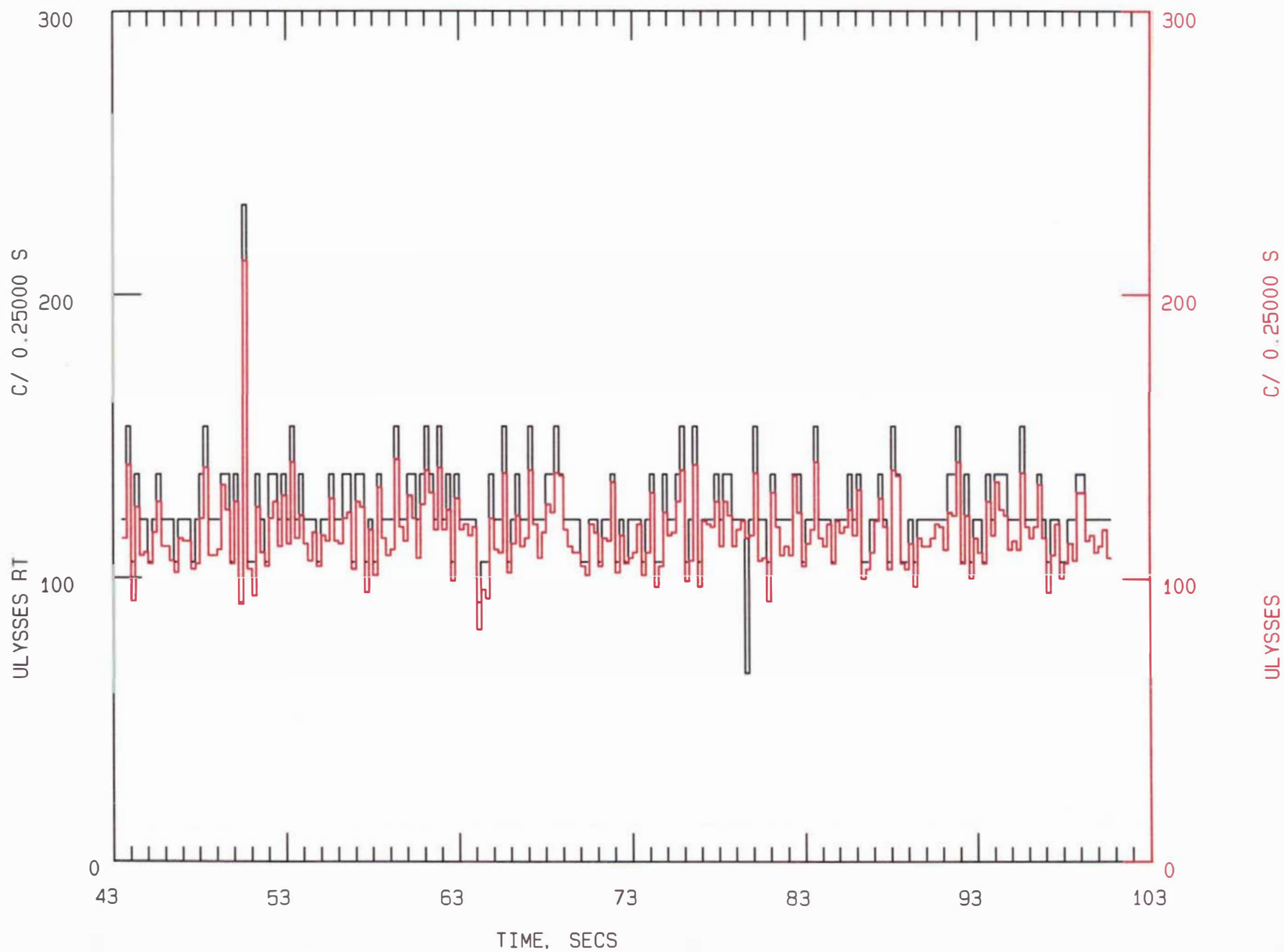
ULYSSES RT-ULYSSES

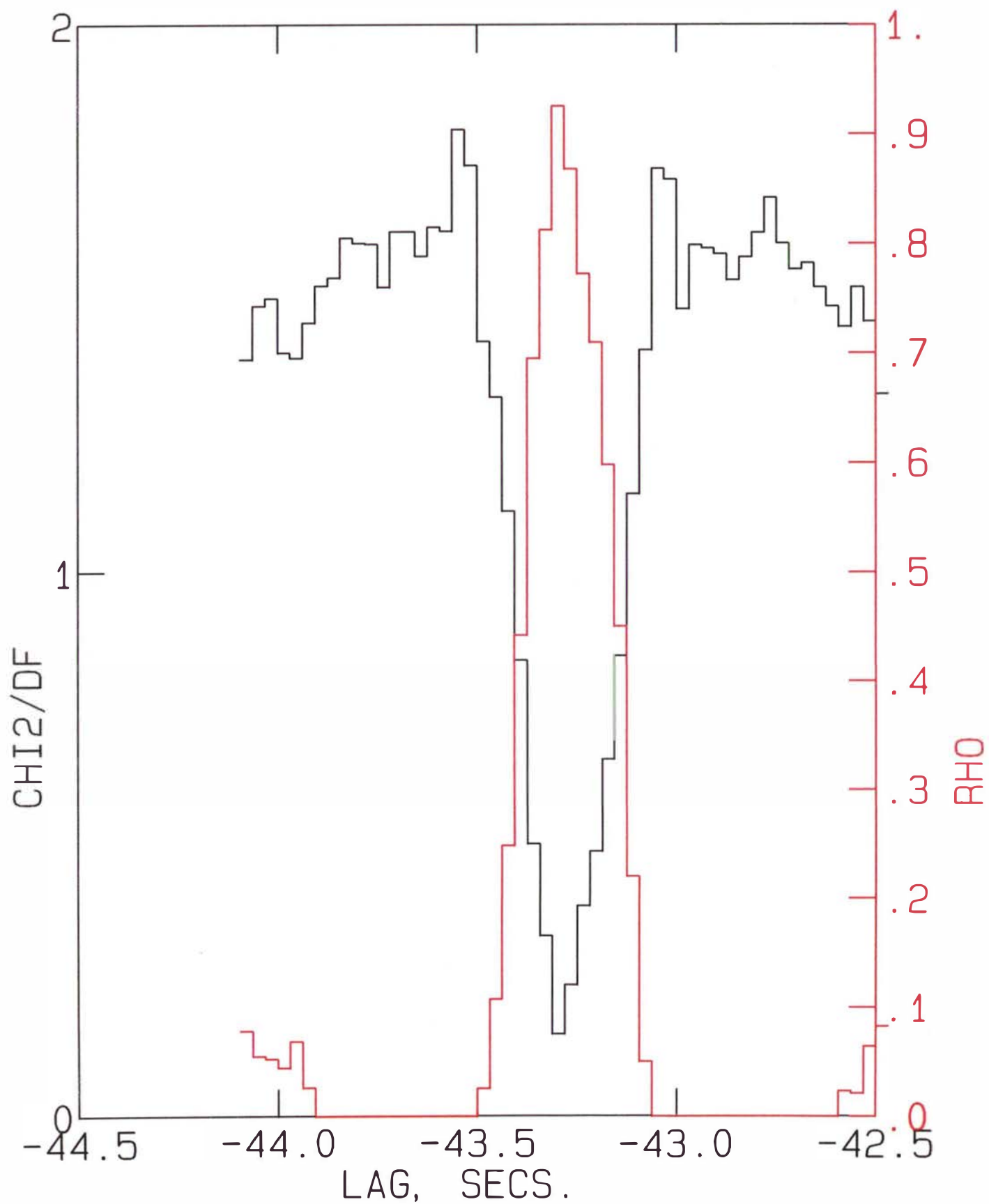
CORRELATION

10/ 2/95

9053.052

11/ 2/98

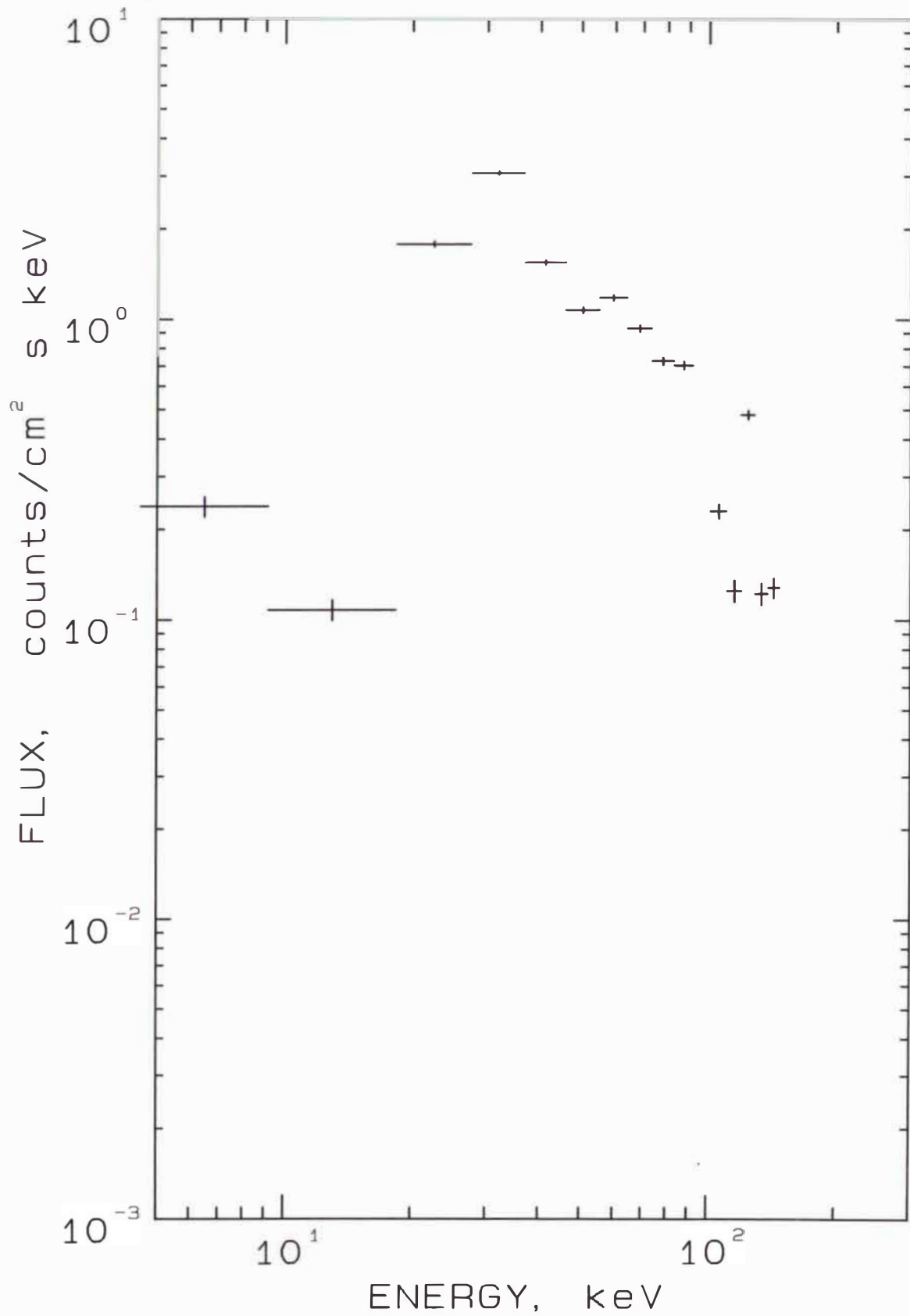




ULYSSES 10/02/95 9103.765

11/ 2/98

SPECTRUM INTEGRATED OVER 10.3 SECONDS, INTERVALS 2 TO 13



ULYSSES 10/02/95 9103.765 BURST SPECTRAL COUNT RATES

4- 18 keV

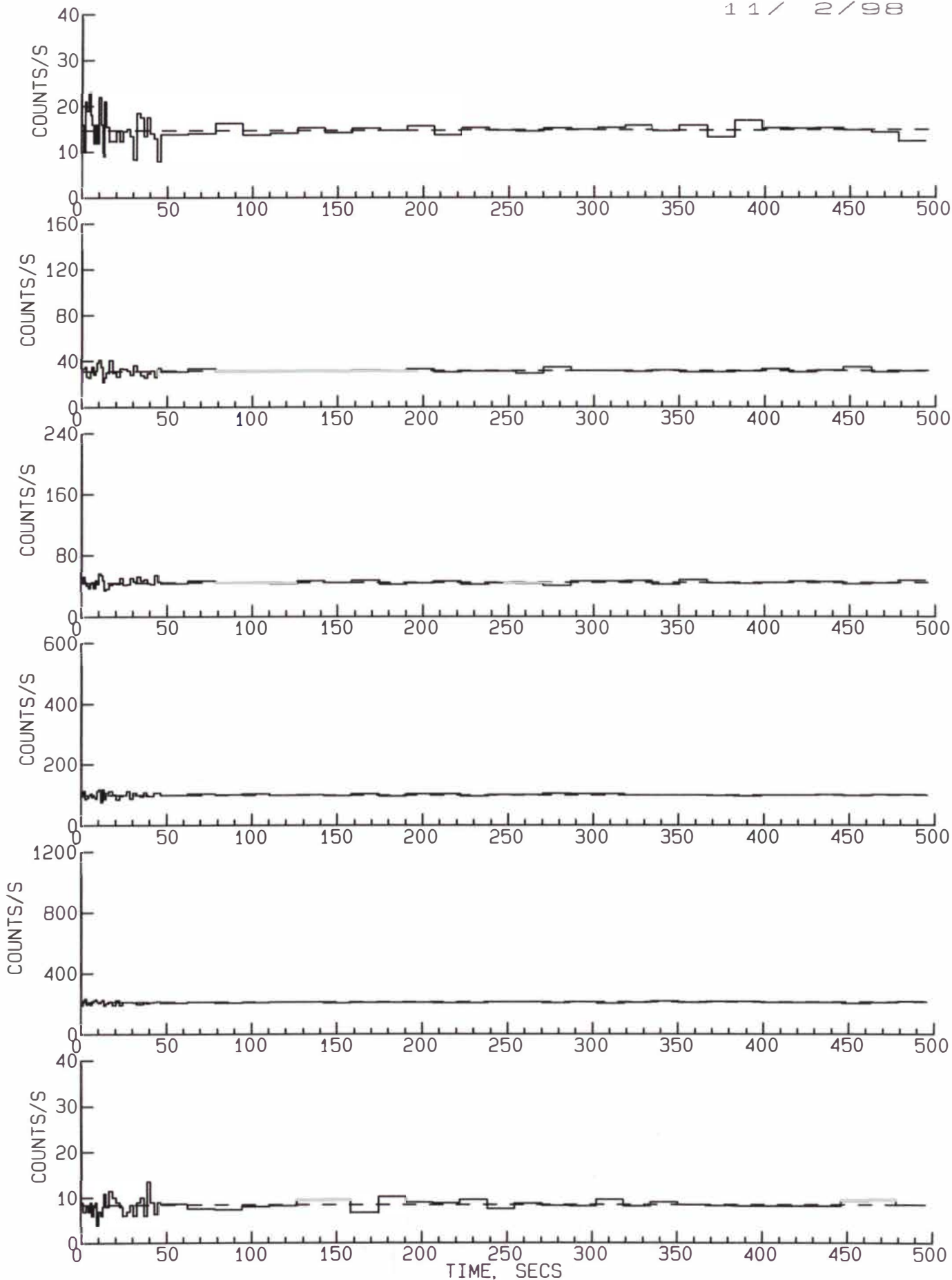
18- 45 keV

45- 73 keV

73-100 keV

100-128 keV

128-146 keV



11 / 2/98

ULYSSES

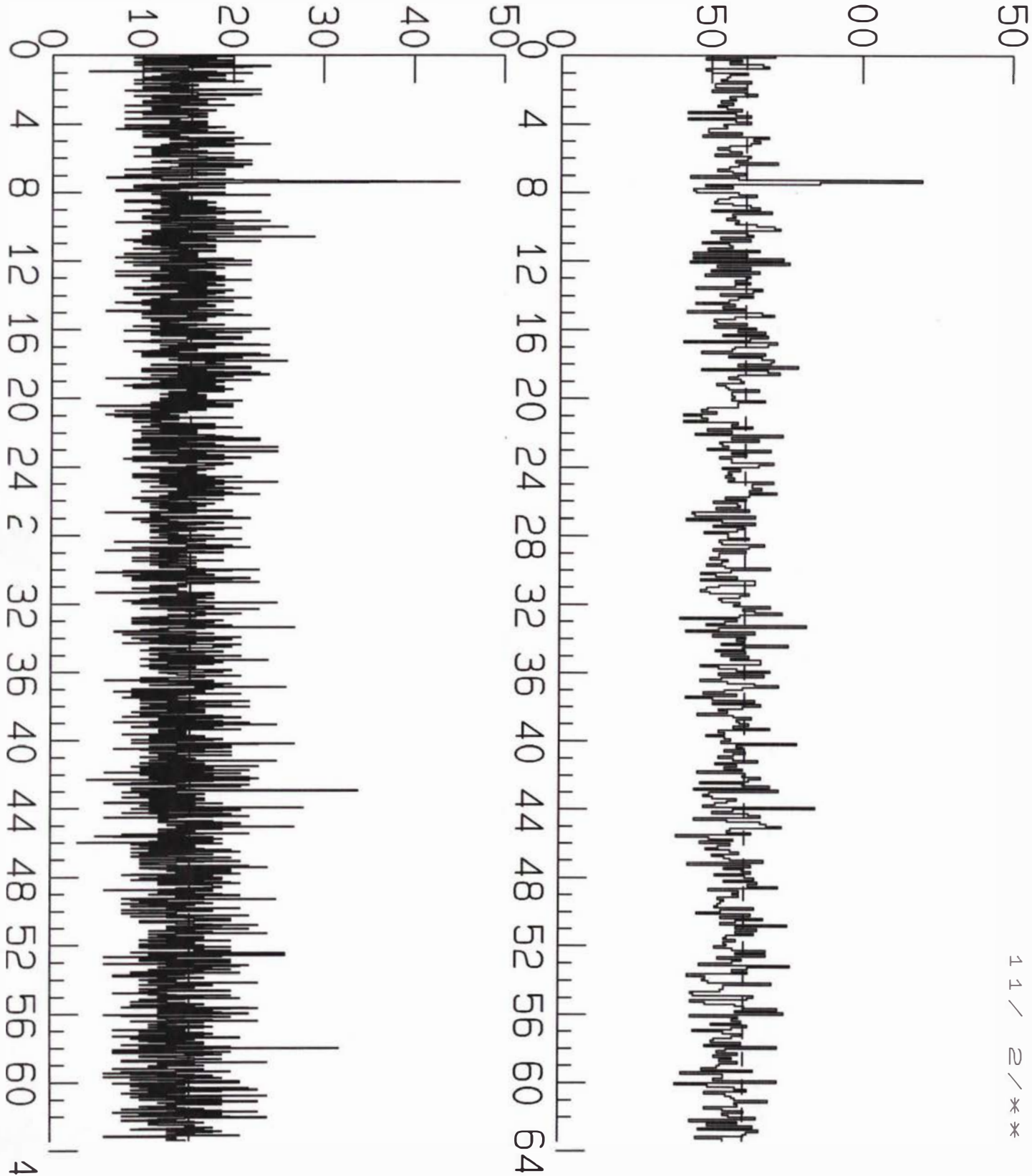
10/02/95

Ttrig= 9103.759

22- 147 keV

COUNTS/0.031 S

COUNTS/0.125 S



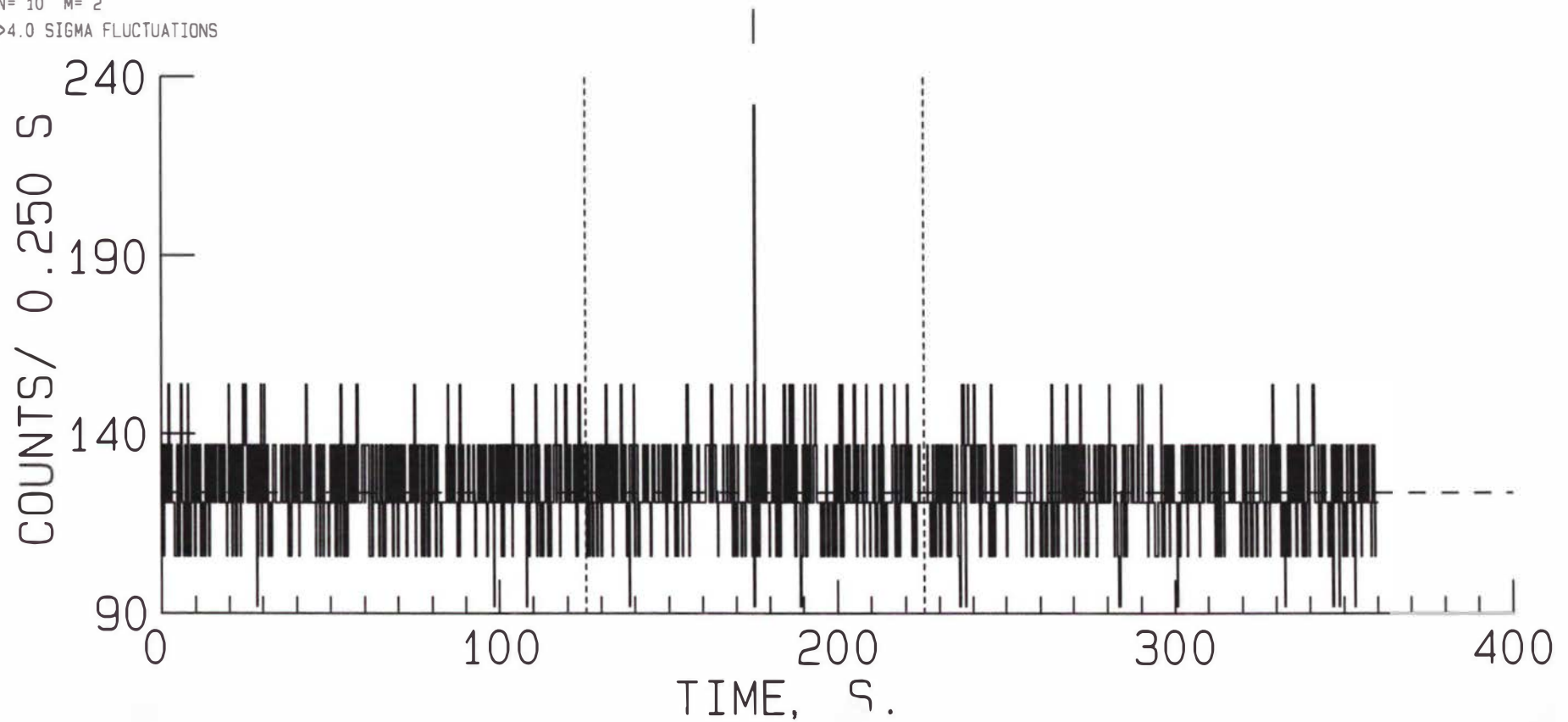
ULYSSES RT

11 / 2 / 98

10 / 2 / 95 8928.061 s

22- 147 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



BATSE

10/02/95

8421.554

25- 100 keV

COUNTS/ .064 S

5000
4000
3000
2000
1000
0

-3

0

1

5

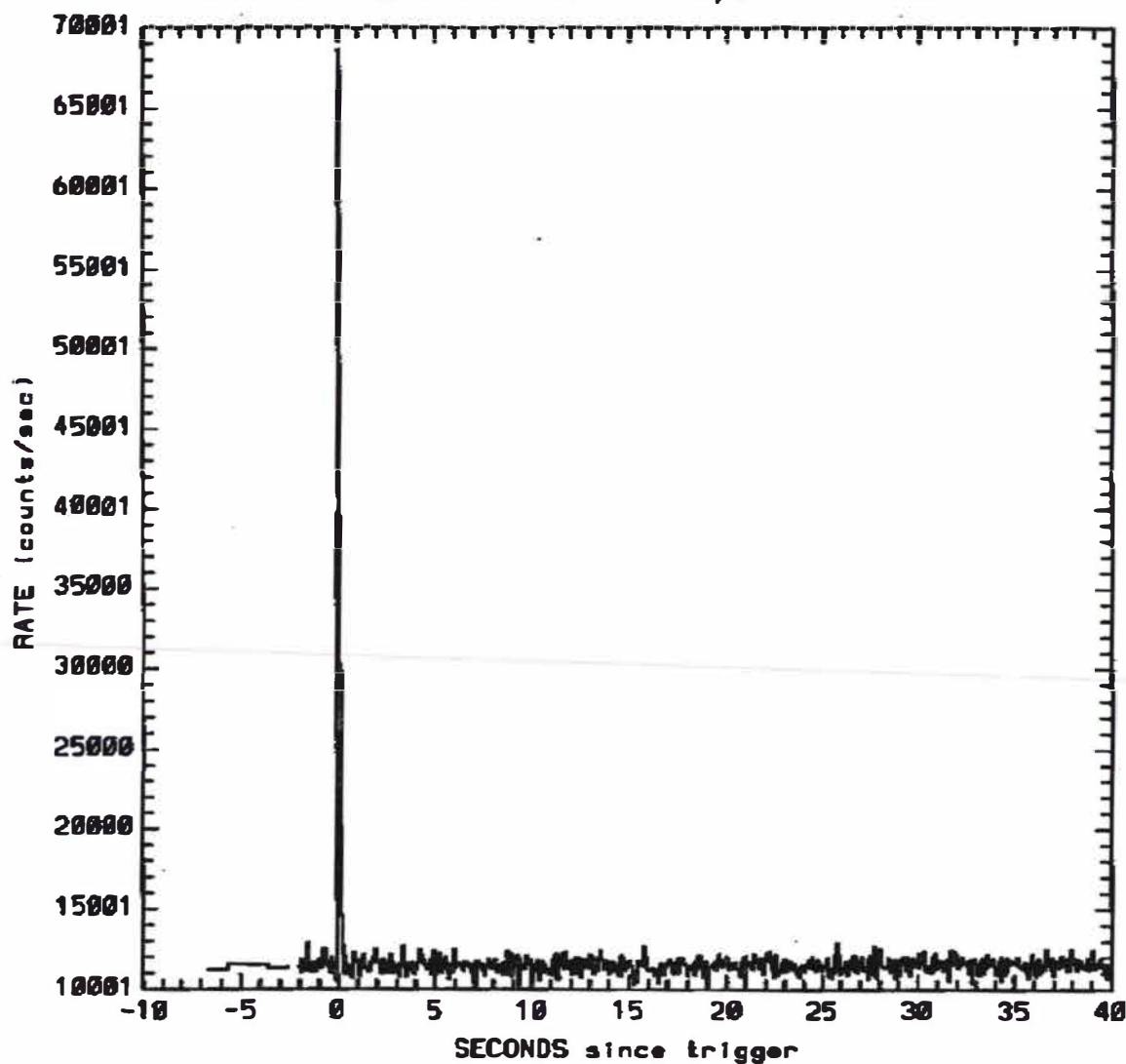
9

13

17

TIME, SECS

DISCSC Data for K. Hurley, No. 3410



15-FEB-1995 10.11.11

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

Trigger = 3410

Trigger Time:
9758 / 8421.554Burst Data Type:
DISCSCDeadtime
Corrected: N
Background Data
Type: PREB + DISCLA
Minimum Integ. Time:
0.064 second(s)Detectors [7..8].
7-5-3-1-Discriminators:
[1, 2]Quality Mask:
BDISP1

From HAGEDON@ssl.msfc.nasa.gov Mon Feb 13 09:55 PST 1995
Date: Mon, 13 Feb 1995 11:54:58 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3411

TIME: TJD=9758 SECONDS=21288

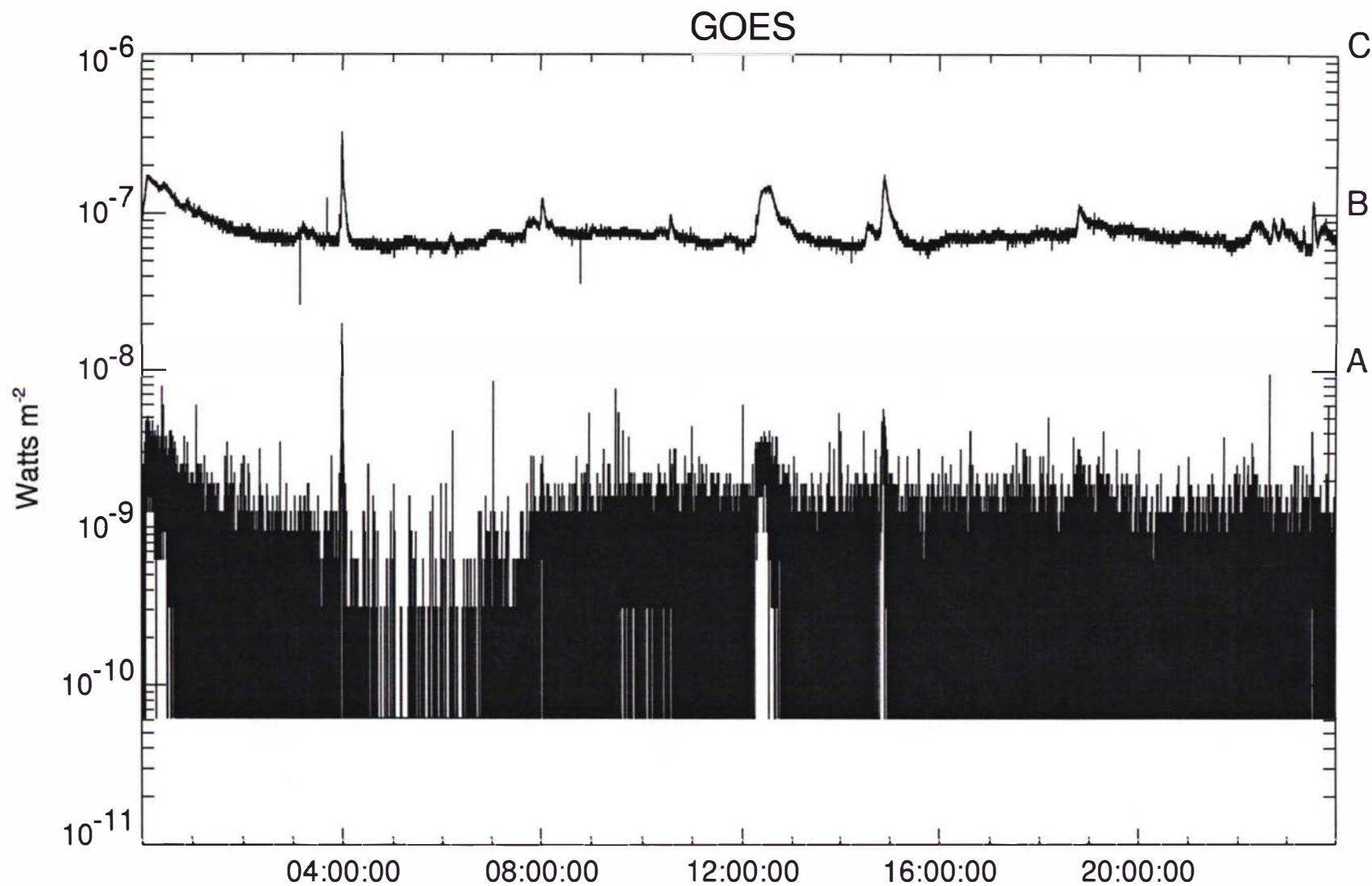
TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA EXIT.



Data Start: 95/02/10, 0000:02

Plot created: 95/02/12, 0514

Channel

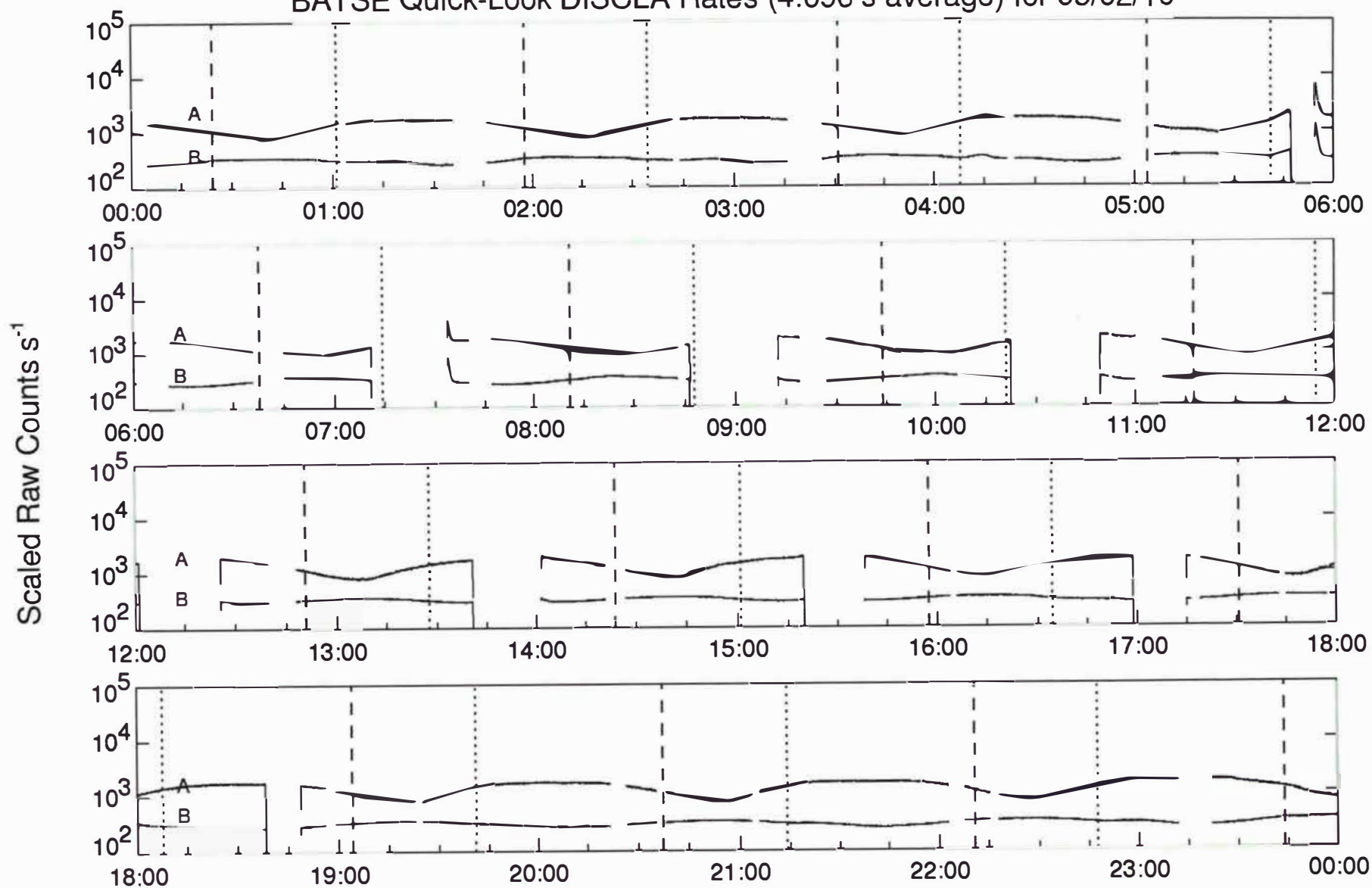
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/10



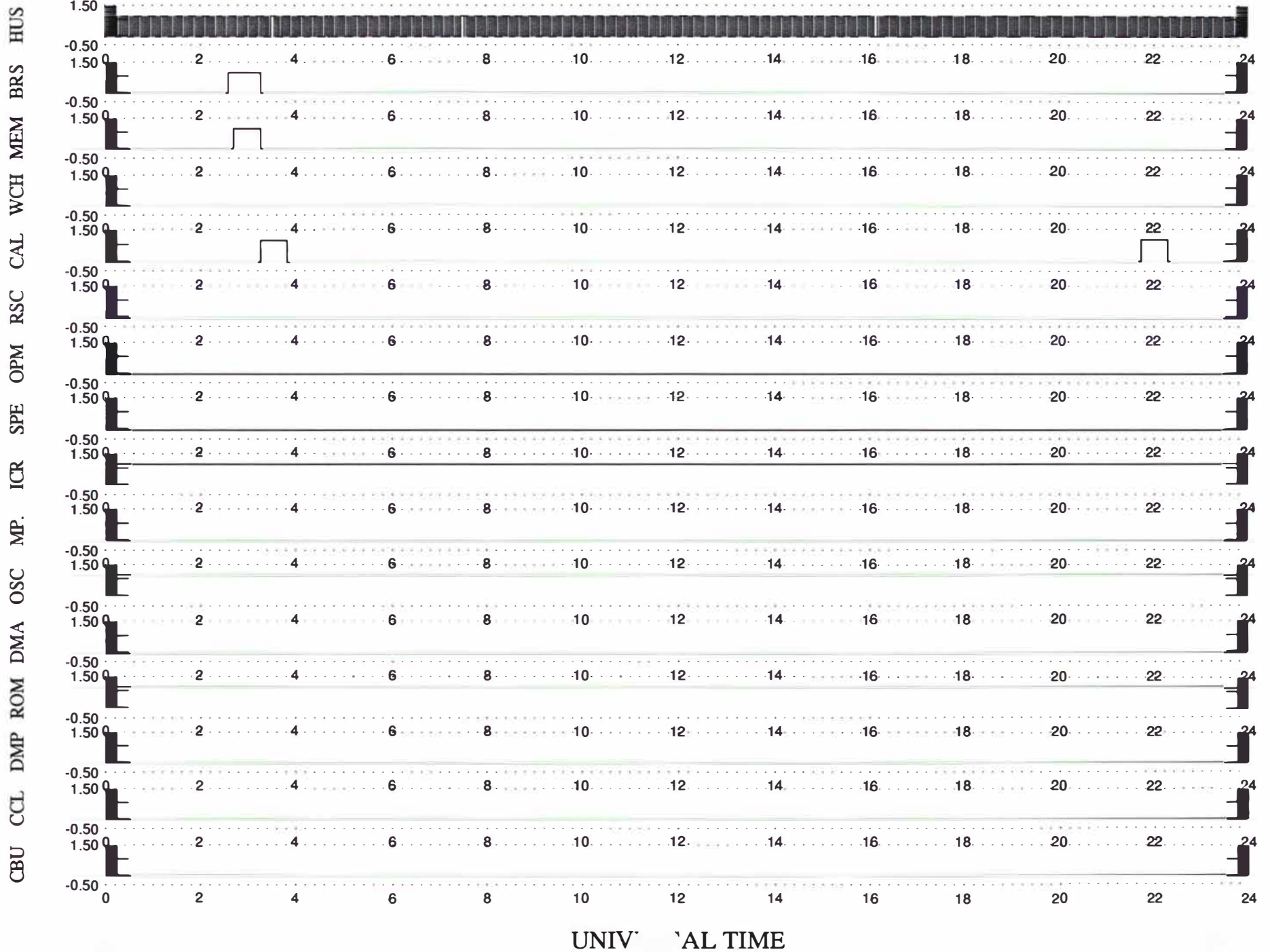
Current Time: 95/02/12, 0515 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

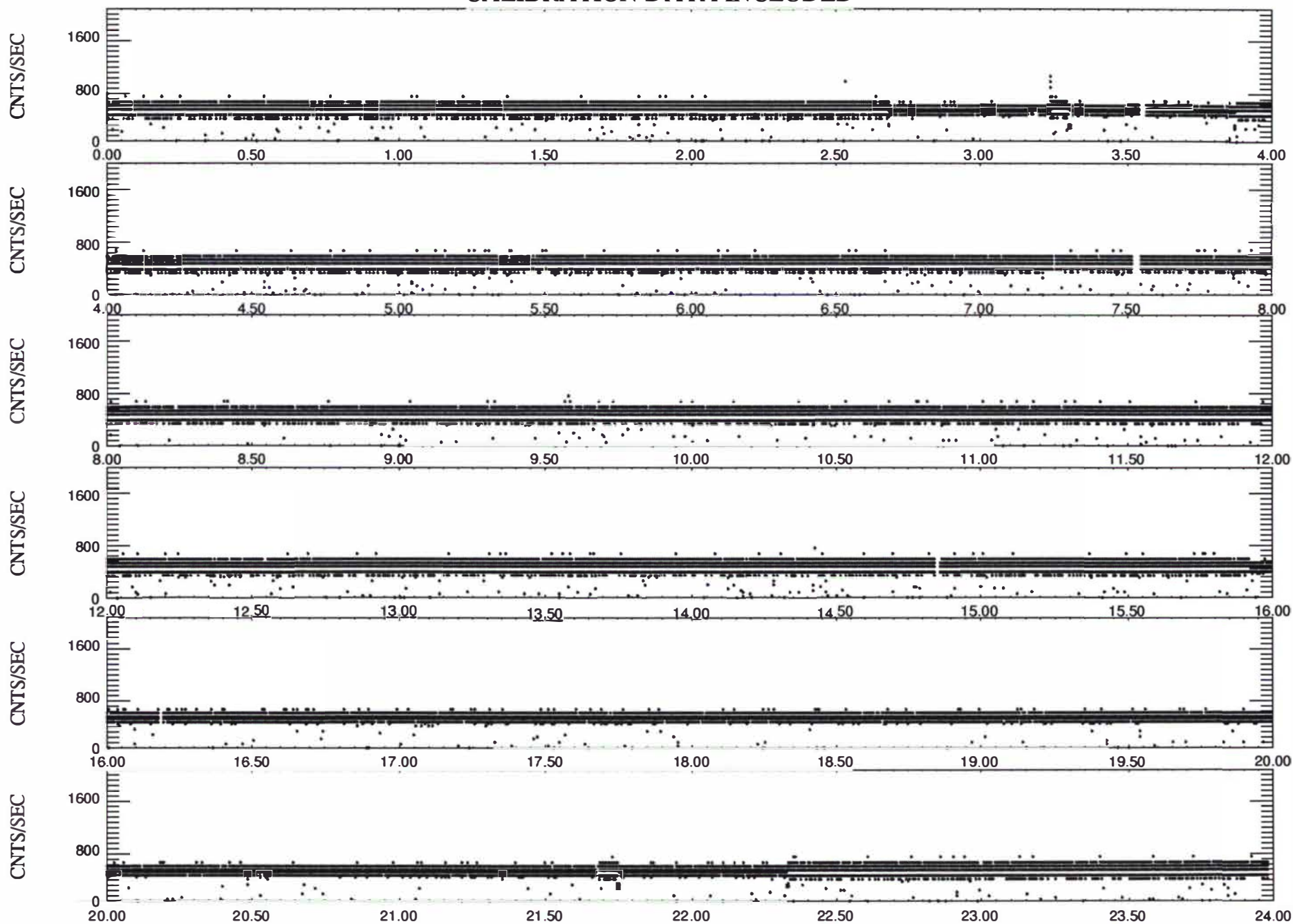
HUS MODES EDR day 41, year 1995 to day 41, year 1995
BURST NUMBER 0

7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 41, year 1995 to day 41, year 1995
CALIBRATION DATA INCLUDED

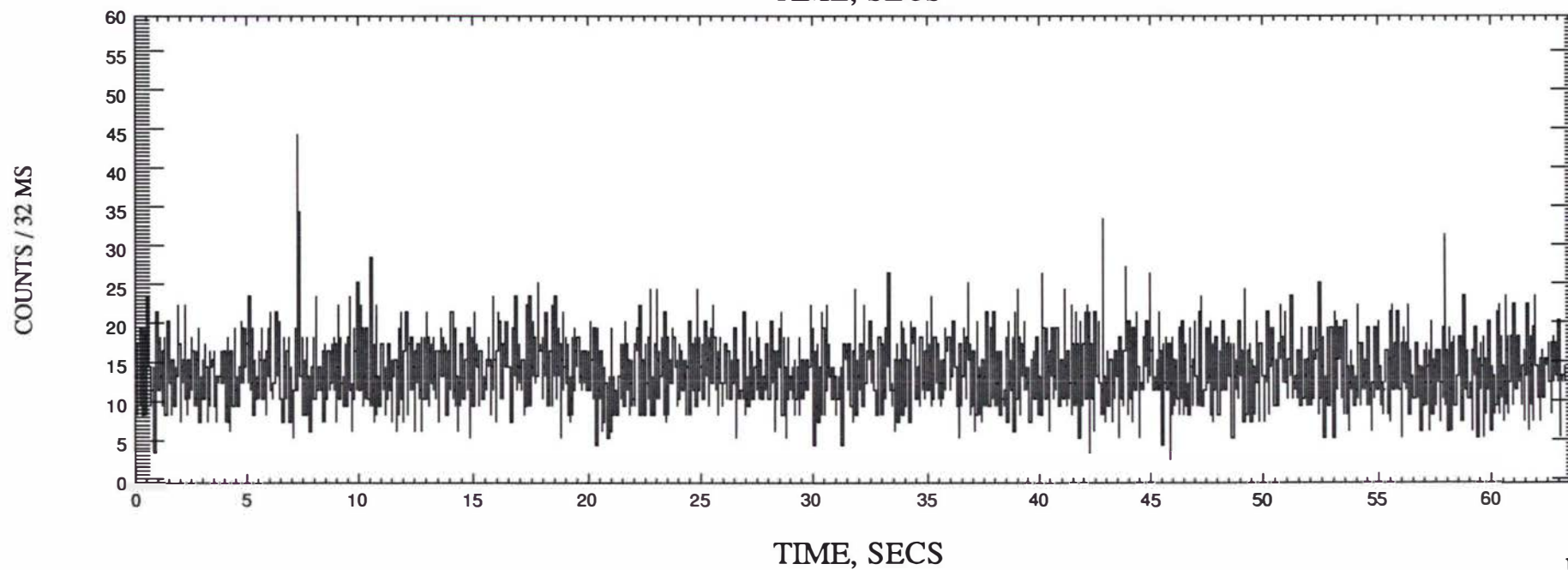
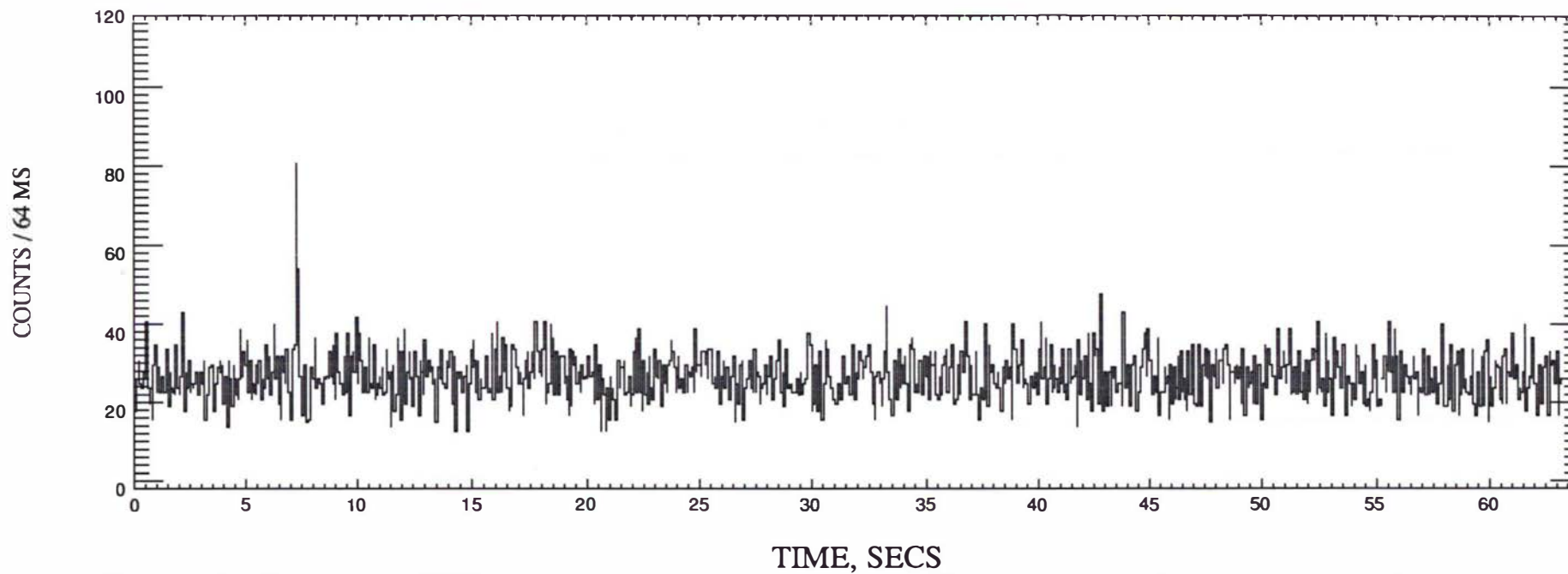
7/18/95

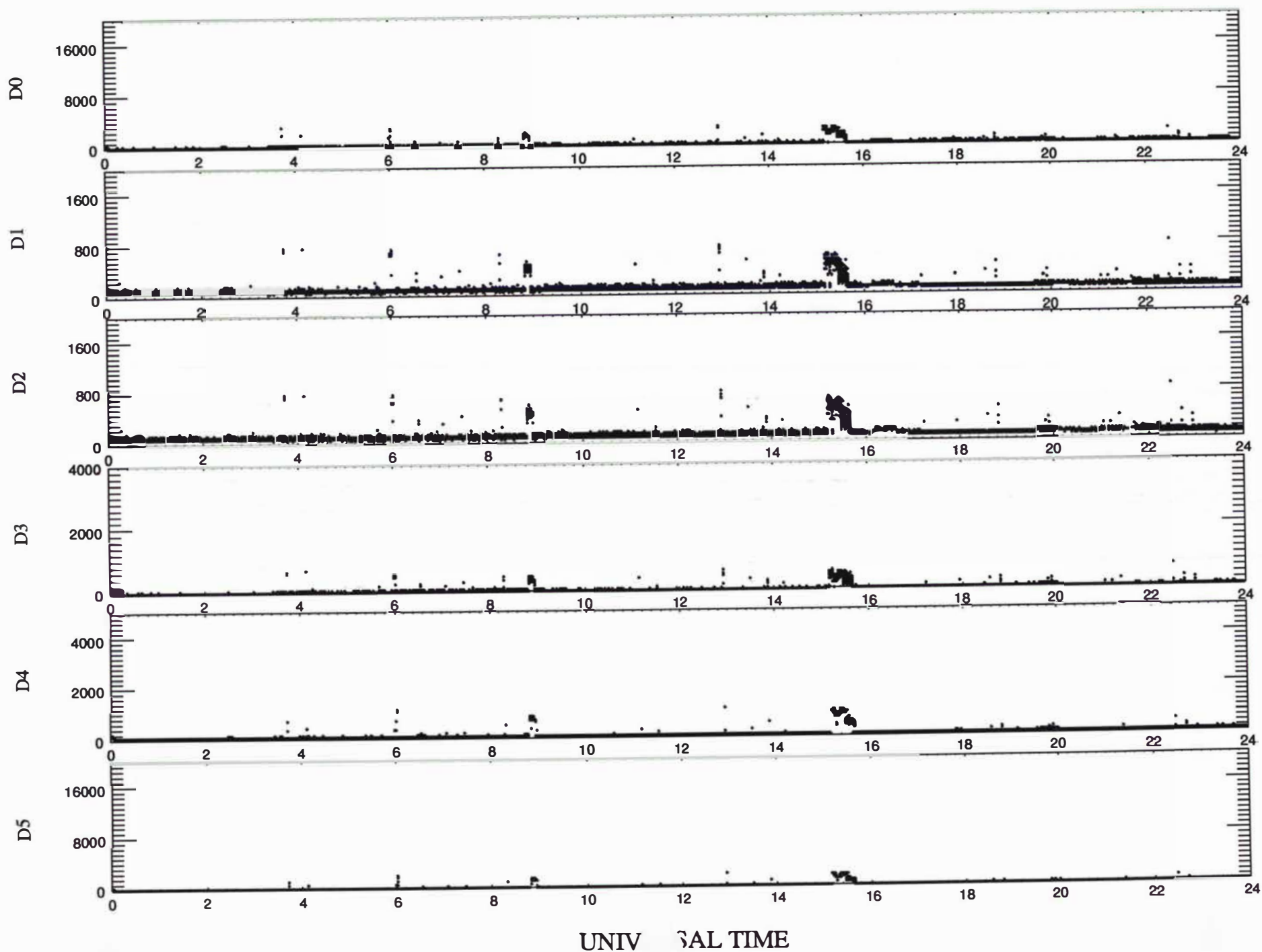


UNIV TIME

HUS 2A TRIGGERED DATA EDR day 41, year 1995
Burst Counter 0 at UT= 2.528823610942 h= 9103.765 s 02:31:43.765

7/18/95





From DEAL@fender.msfc.nasa.gov Mon Feb 13 10:08 PST 1995
Date: Mon, 13 Feb 1995 12:08:01 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3412

BATSEARCH PROGRAM

TRIGGER

BATSE BURST # 3412
EVENT OF 1995 FEB 11 DAY OF YEAR= 42
EVENT CROSSING TIME AT BATSE : 8697. S. OR 02:24:57.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 10.000 53.000
BATSE PEAK COUNTING RATE: 210000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/ 2/ 95 IS:
RA= 335.107 DEC= -25.376 DIST= 2.307 AU
BATSE-ULYSSES DISTANCE = 345187859. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 95.95 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -119.44 SECS.
CROSSING TIME AT ULYSSES IS 8578. S. OR 02:22:57 +/- 247.01 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/ 2/ 95 IS:
RA= 147.243 DEC= 18.026 DIST= 0.676 AU
MARS-BATSE DISTANCE = 101092728. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.04 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 58.35 SECS.
CROSSING TIME AT MARS IS 8755. S. OR 02:25:55 +/- 58.55 SECONDS

BATSE BURST TRIGGER

NO.: 3412

TIME: TJD=9759 SECONDS=8697

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=42.1 AZIMUTH=214.4 ERROR= DEGREES

COMMENTS:

GRB. SINGLE SPIKE LASTING ~ 0.14S. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3412	950211	9759	08697	210000	010	+53

Helio corr removed

Date: Nov 17 '97

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

Konus added 8 Aug '08

- ☒ 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

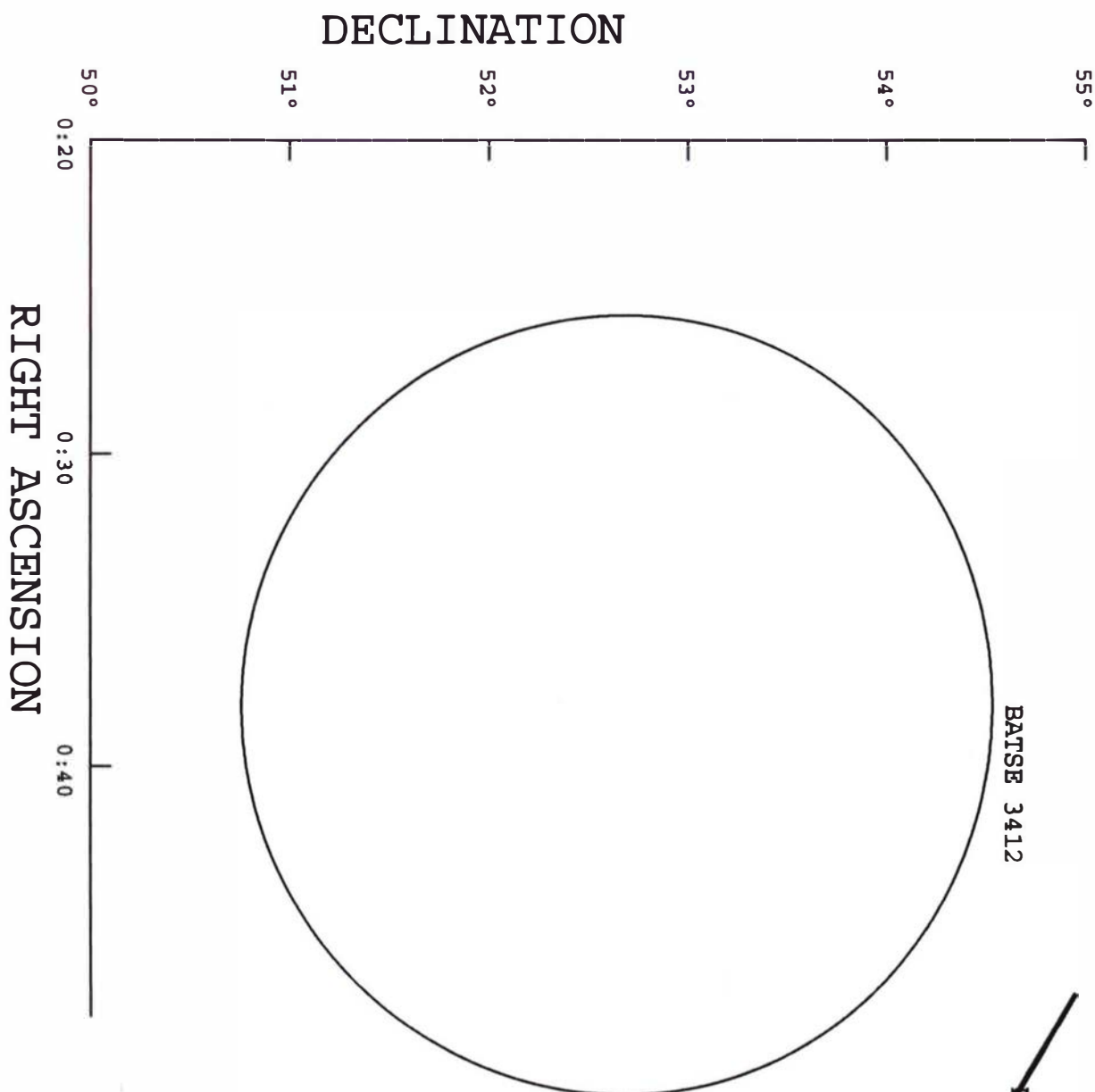
1 ULYSSES

2 BATSE

3 KONUS2

EVENT OF FEB 11, 1995 2:23

8 / 8 / 8



ULYSSES

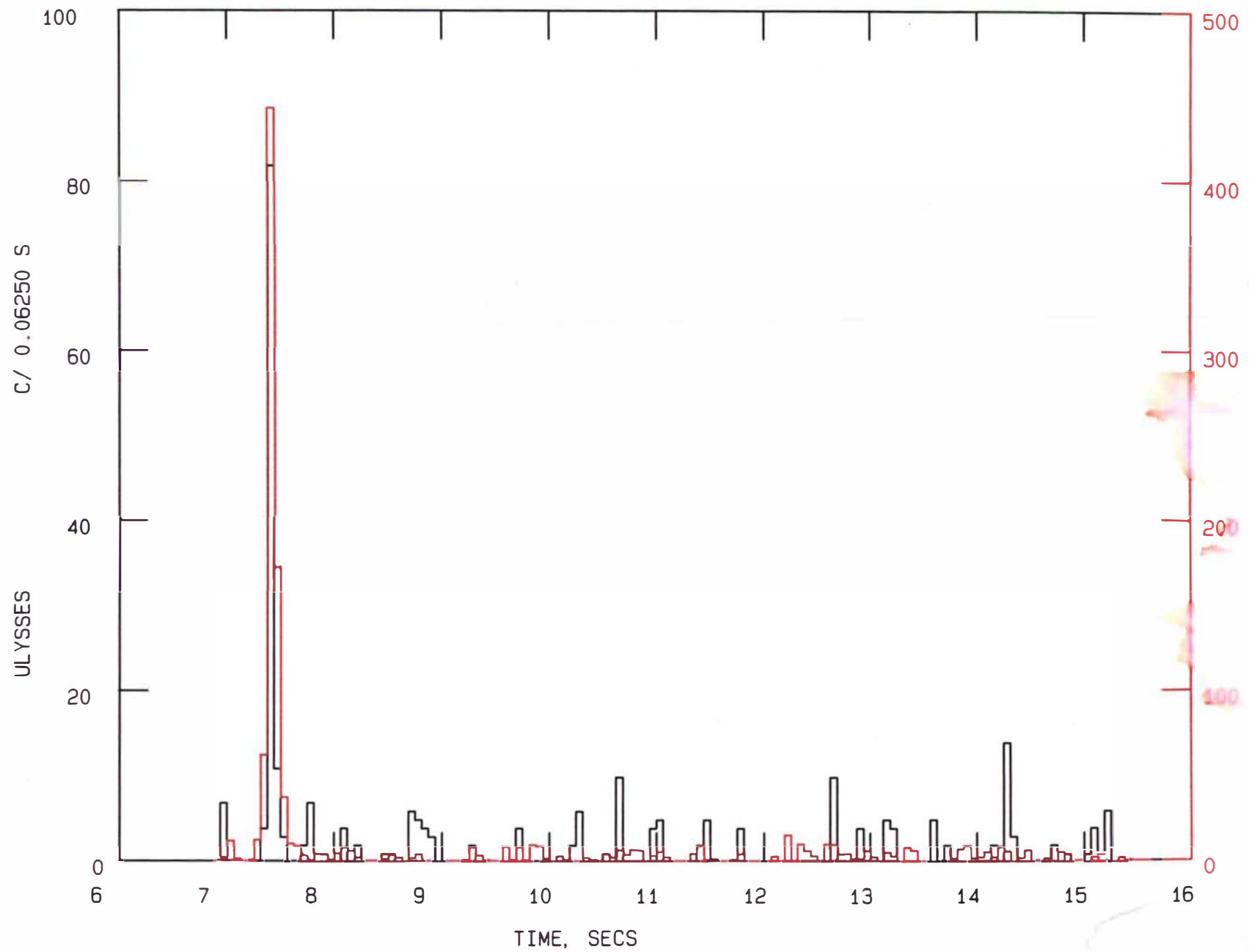
-KONUS2

CORRELATION

11/02/95

8614.019

8/ 8/ 8



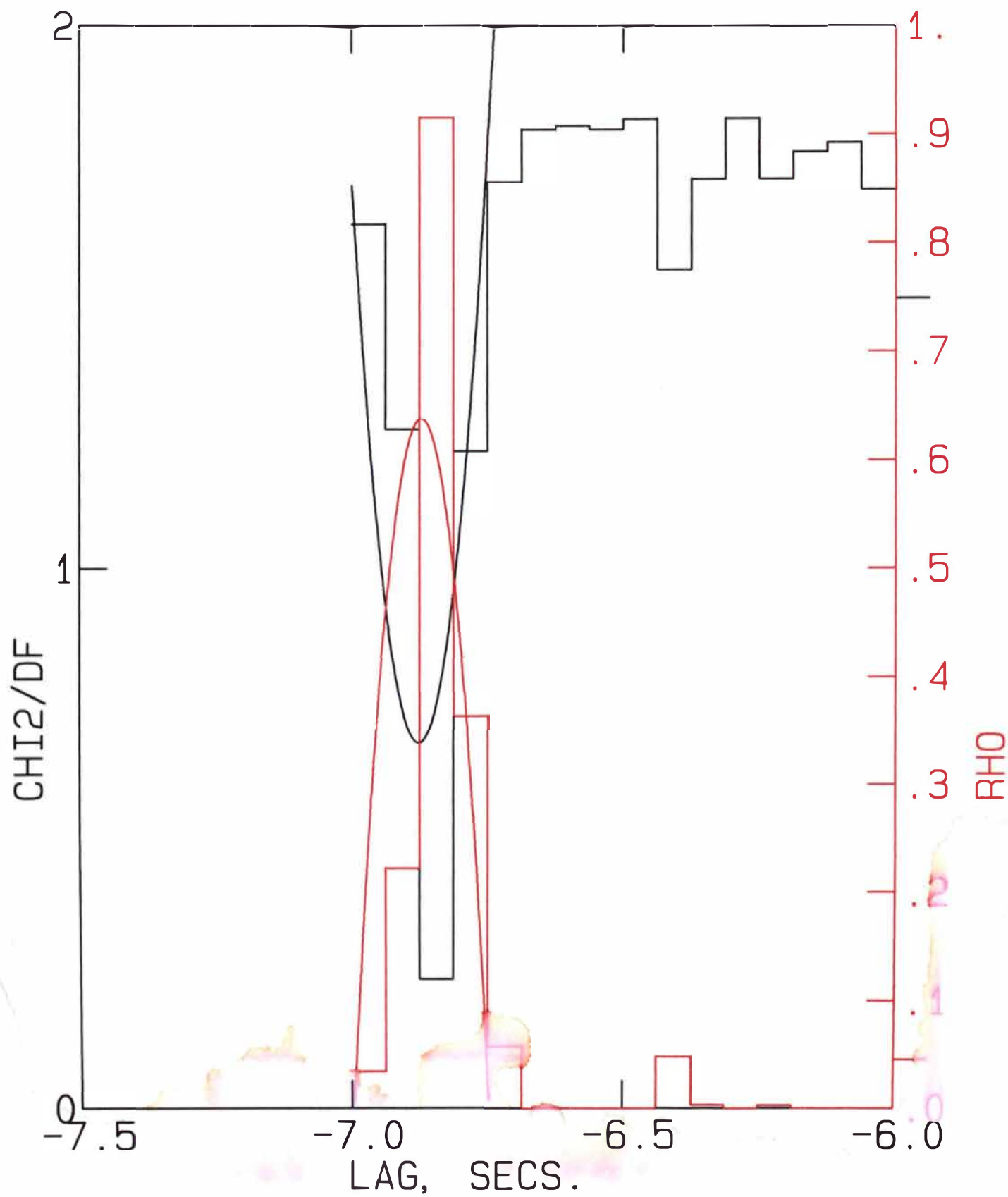
ULYSSES

-KONUS2

CORRELATION

11/02/95

8614.019



BATSE

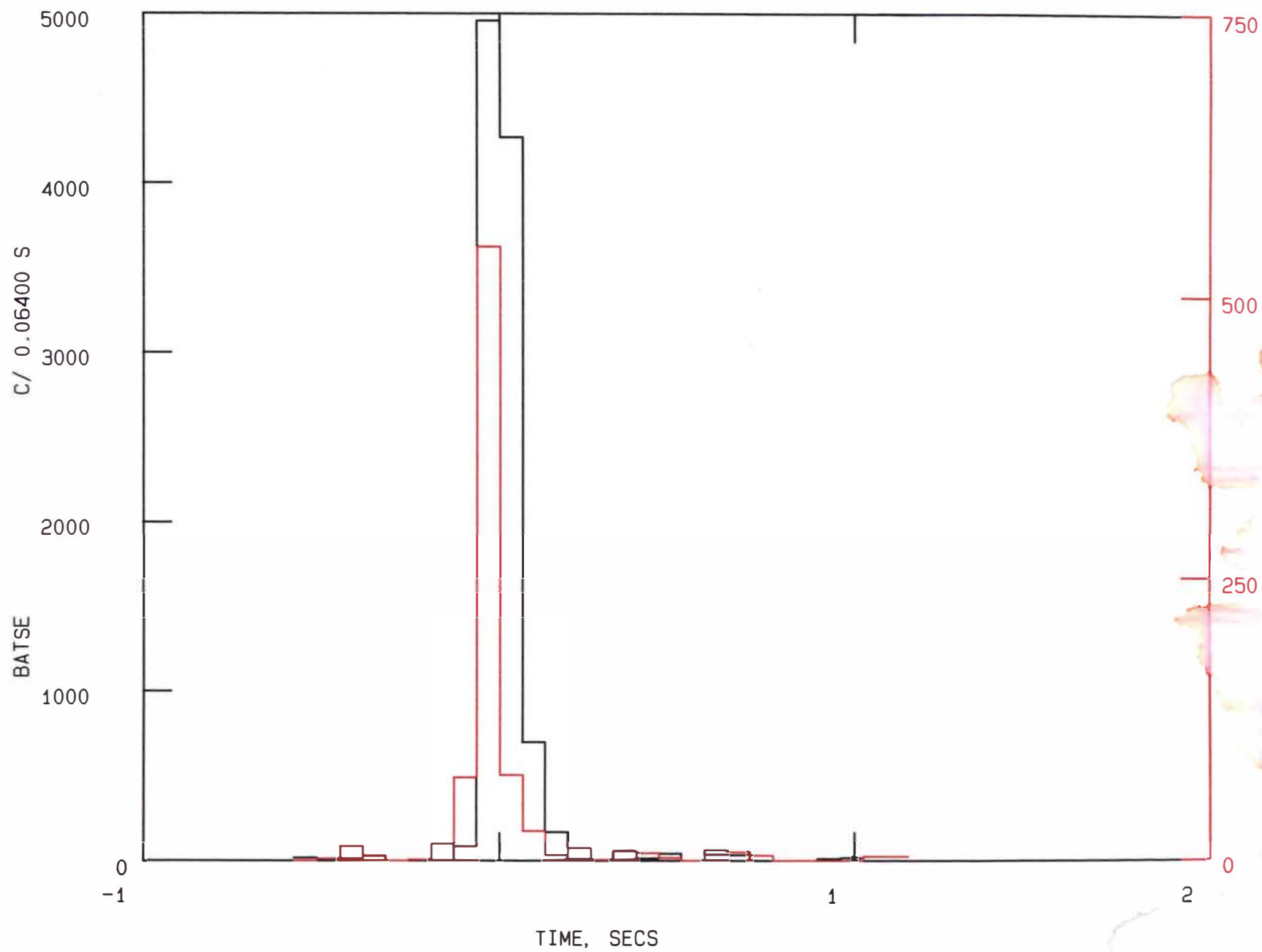
-KONUS2

CORRELATION

11/ 2/95

8697.778

8/ 8/ 8



BATSE

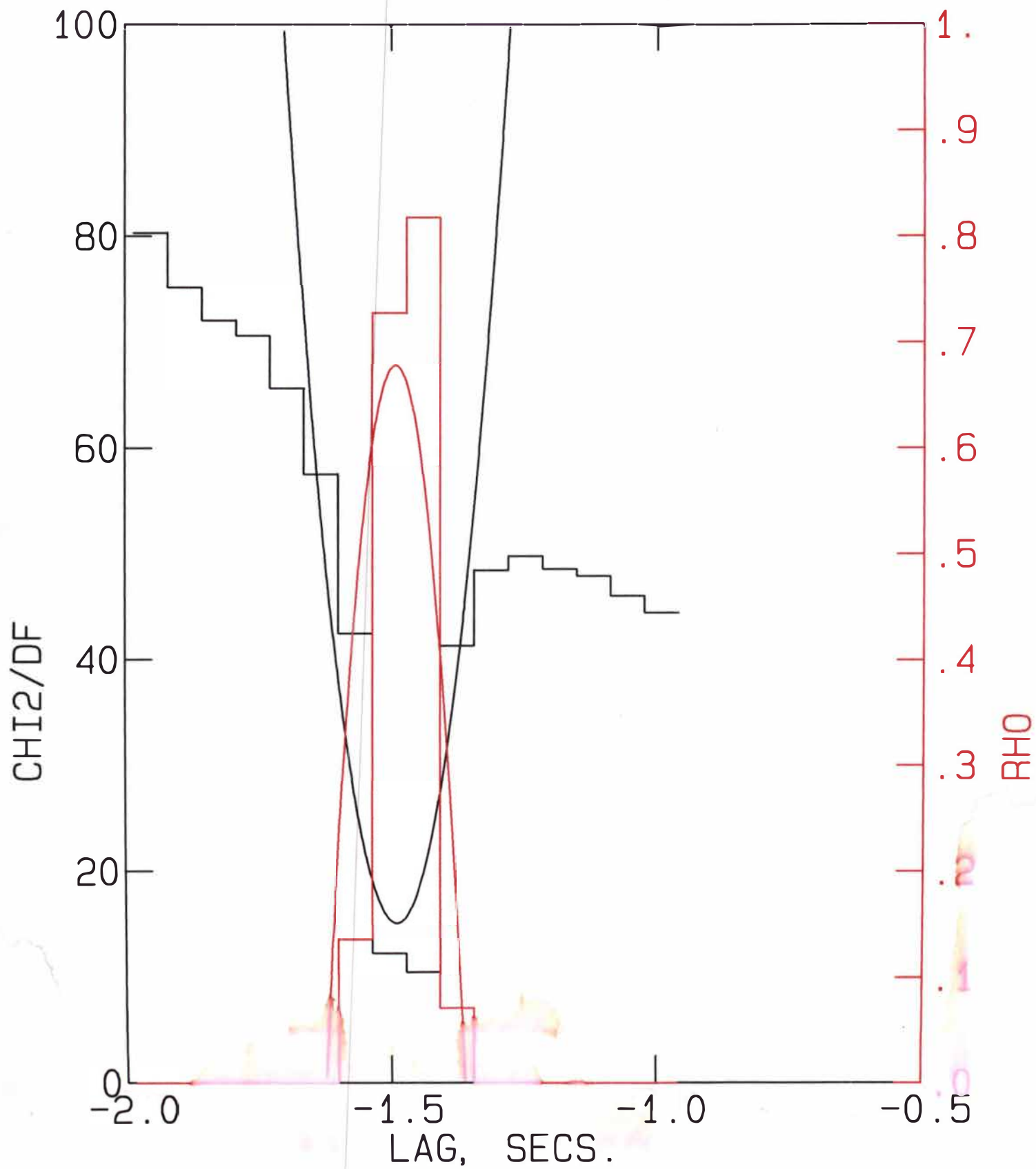
-KONUS2

CORRELATION

11/ 2/95

8697.778

8/ 8/ 8



KONUS

11/02/95 8697.740

50- 200 keV

COUNTS/0.064 S

600
400
200
0

0 9 19 29 39 49 59 69 79 89 99
TIME, SECS

0 / 0 / 0

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

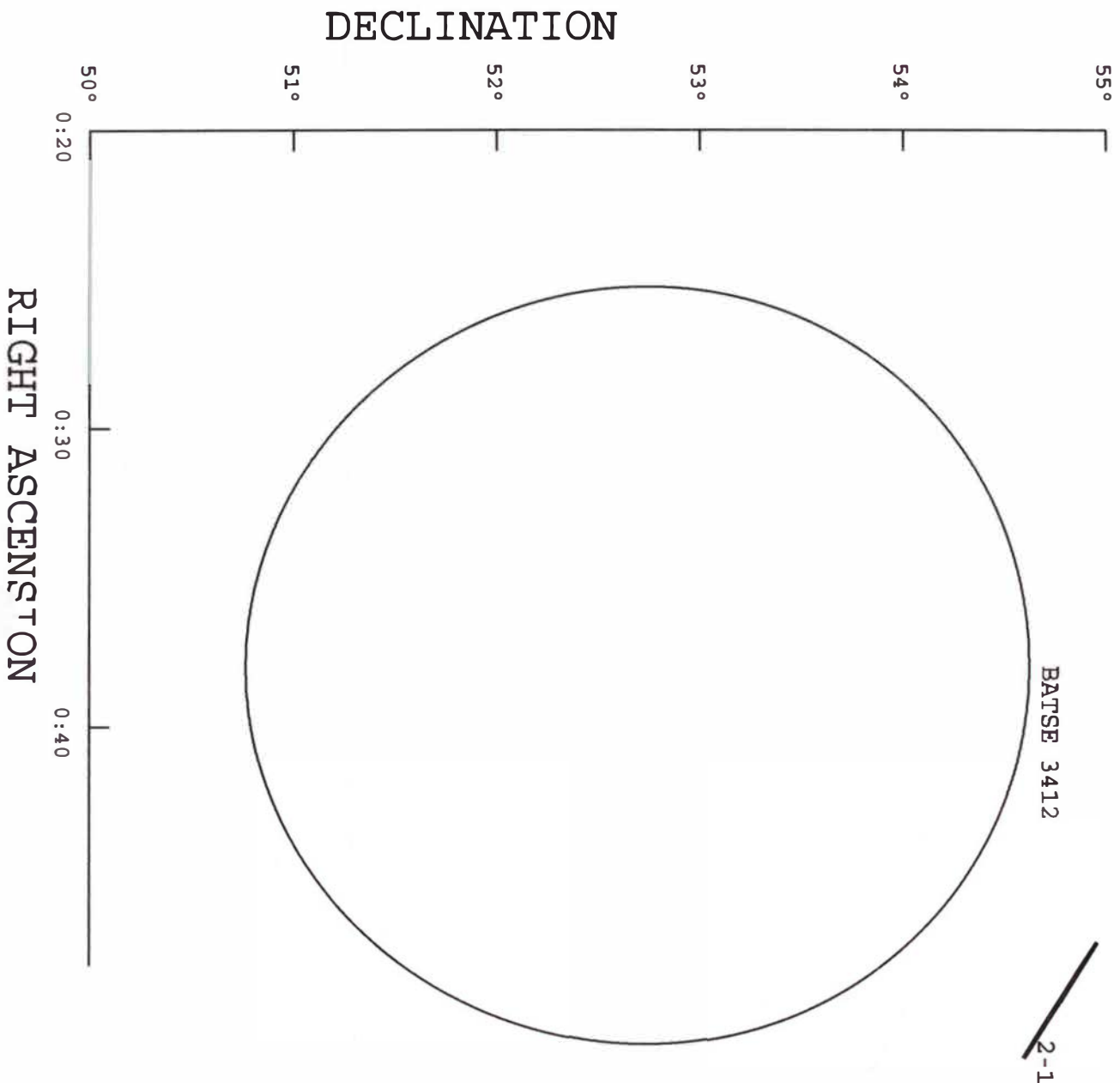
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF FEB 11, 1995 2:23

17/11/97



BATSE

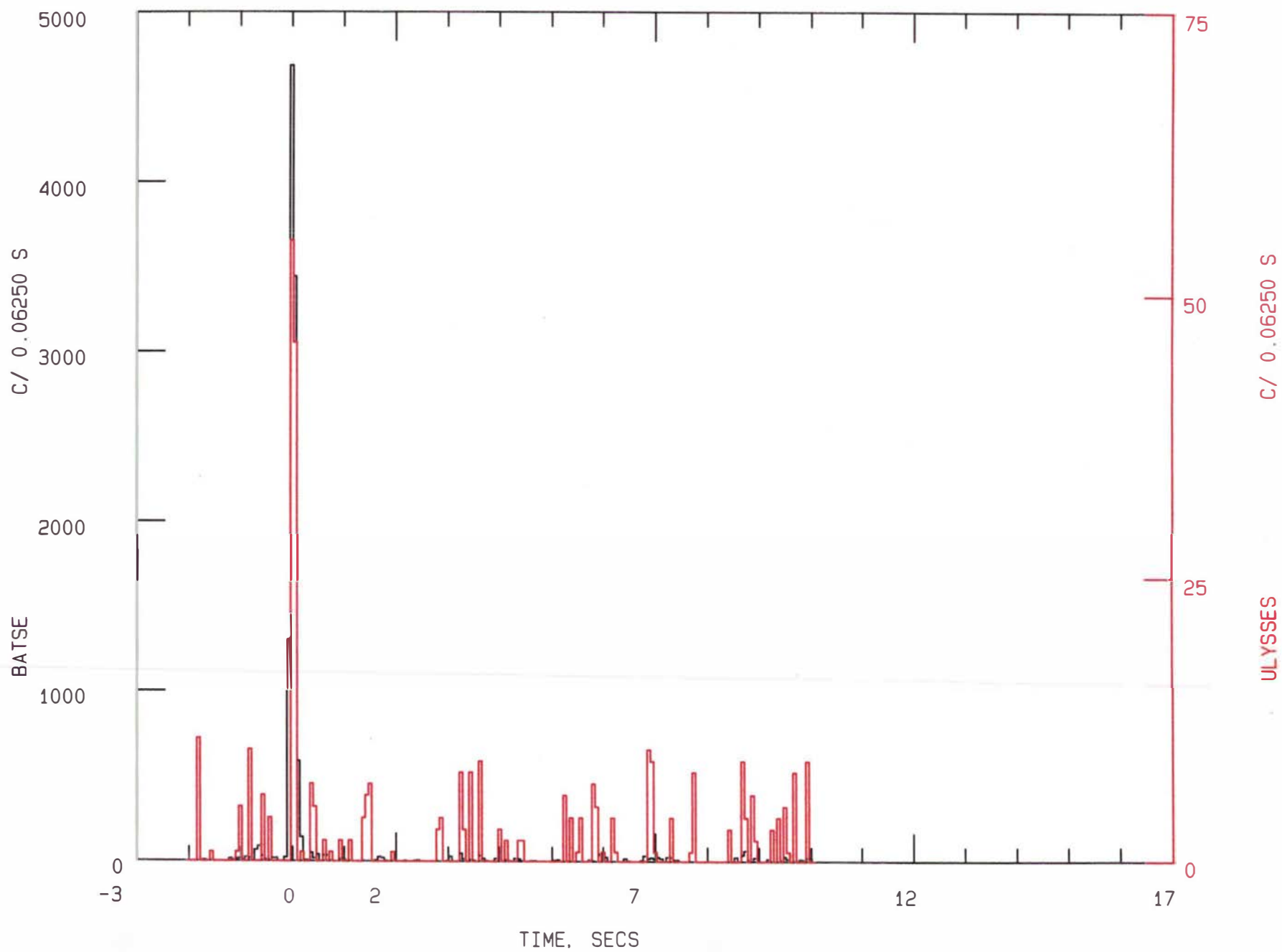
-ULYSSES

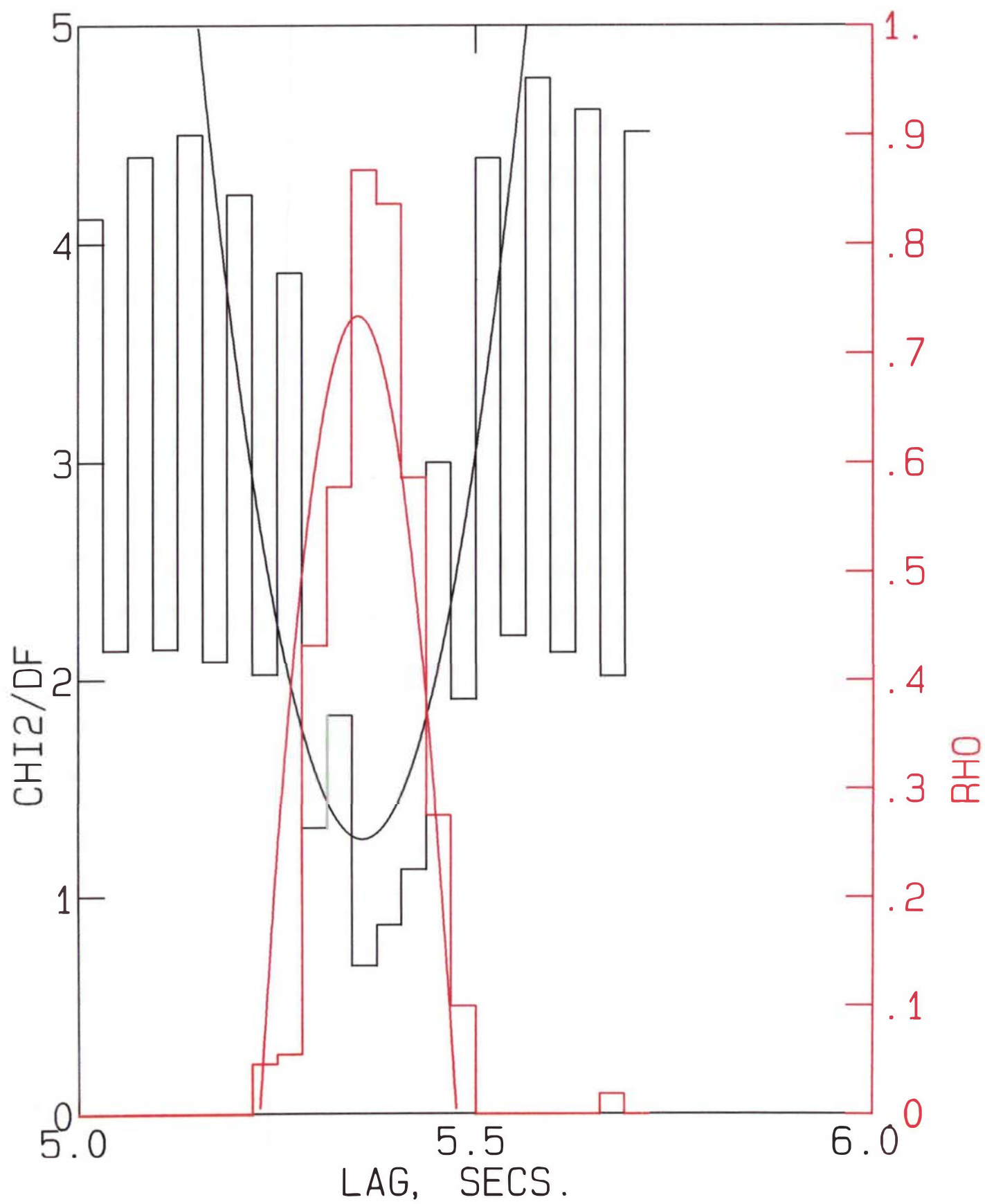
CORRELATION

11/ 2/95

8697.778

17/11/97





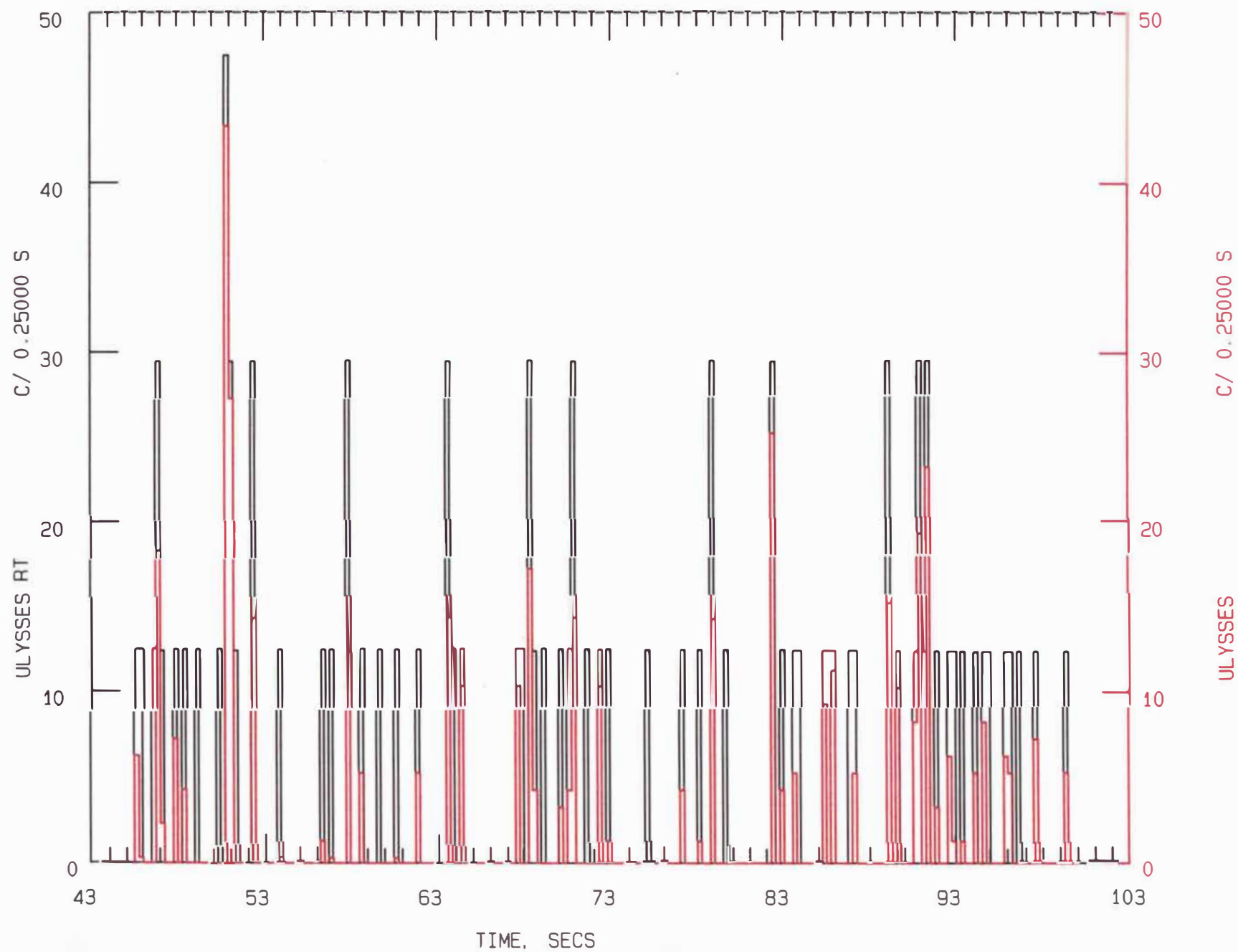
ULYSSES RT-ULYSSES

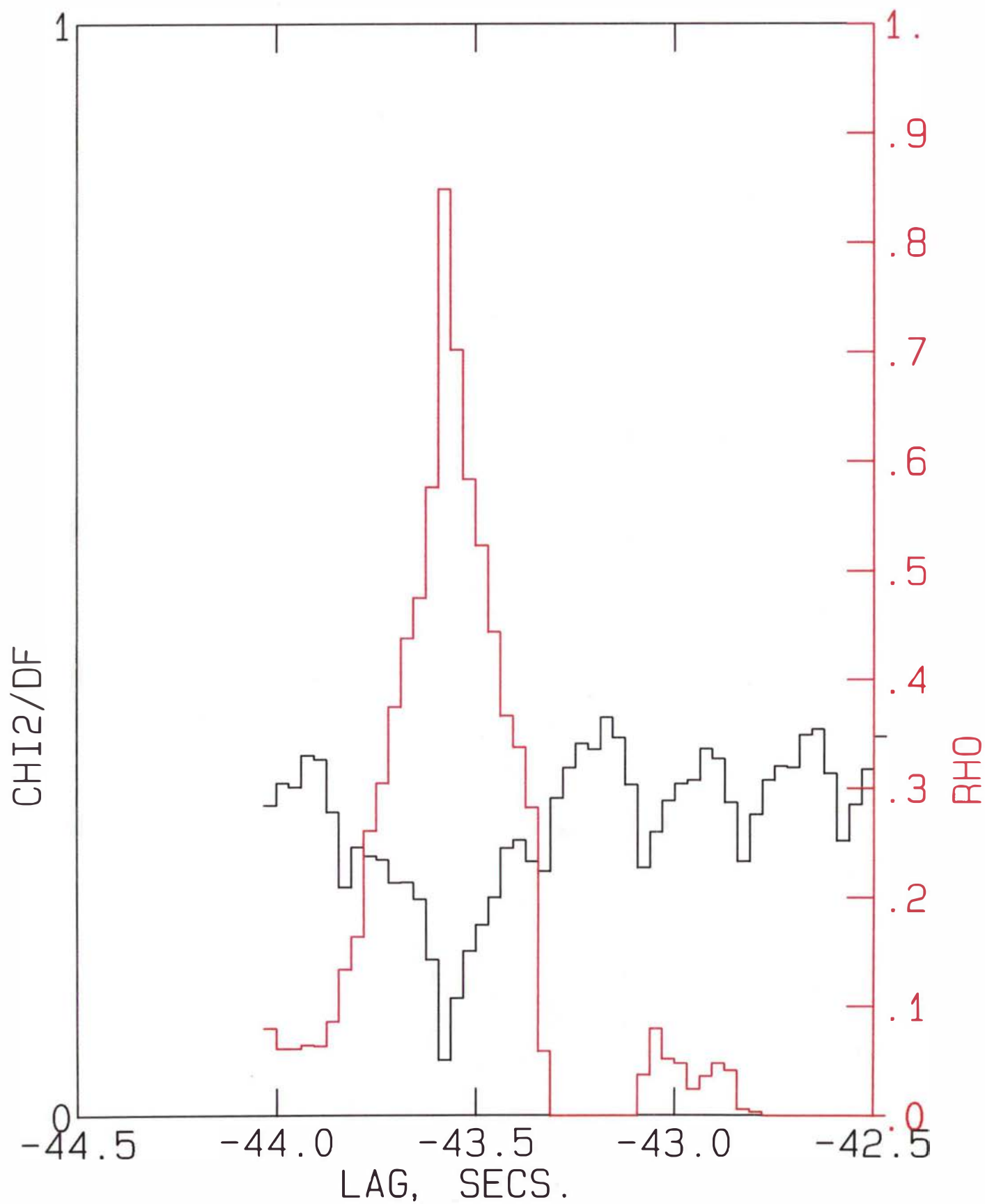
CORRELATION

11/ 2/95

8563.016

17/11/97

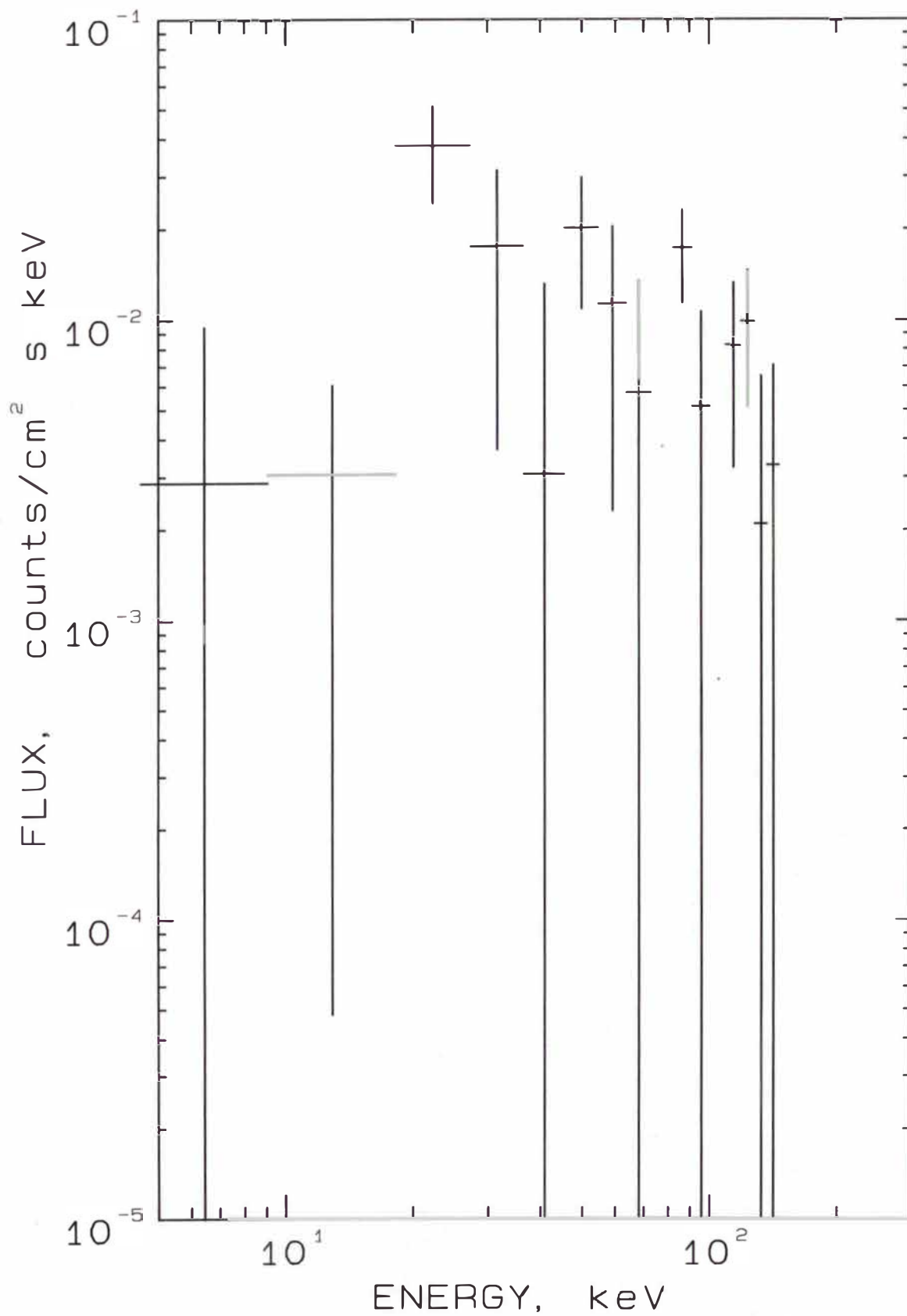




ULYSSES 11/02/95 8614.016

17/11/97

SPECTRUM INTEGRATED OVER 21.8 SECONDS, INTERVALS 2 TO 20



ULYSSES 11/02/95 8614.016 BURST SPECTRAL COUNT RATES

4- 18 keV

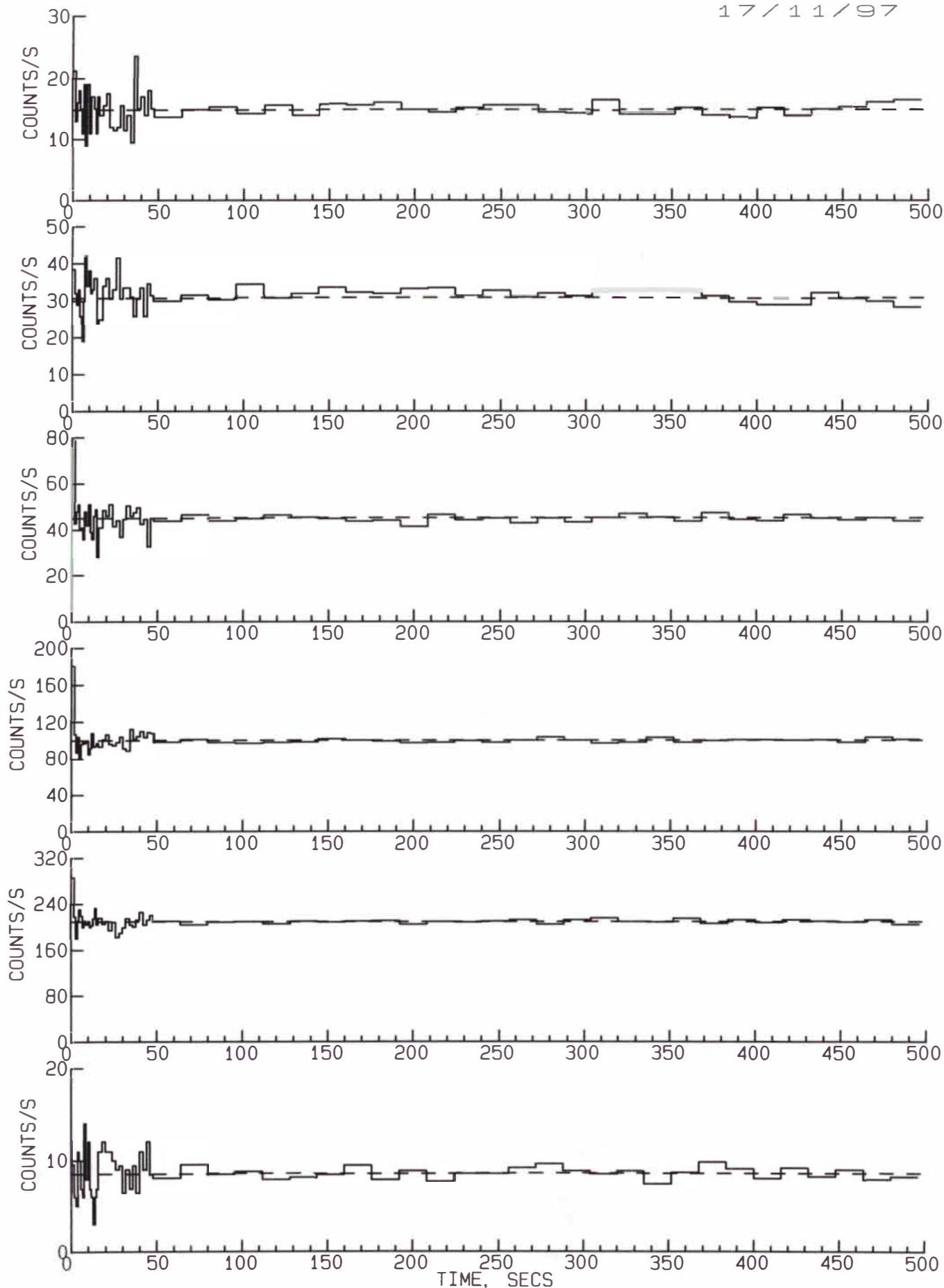
18- 45 keV

45- 72 keV

72-100 keV

100-127 keV

127-145 keV



ULYSSES

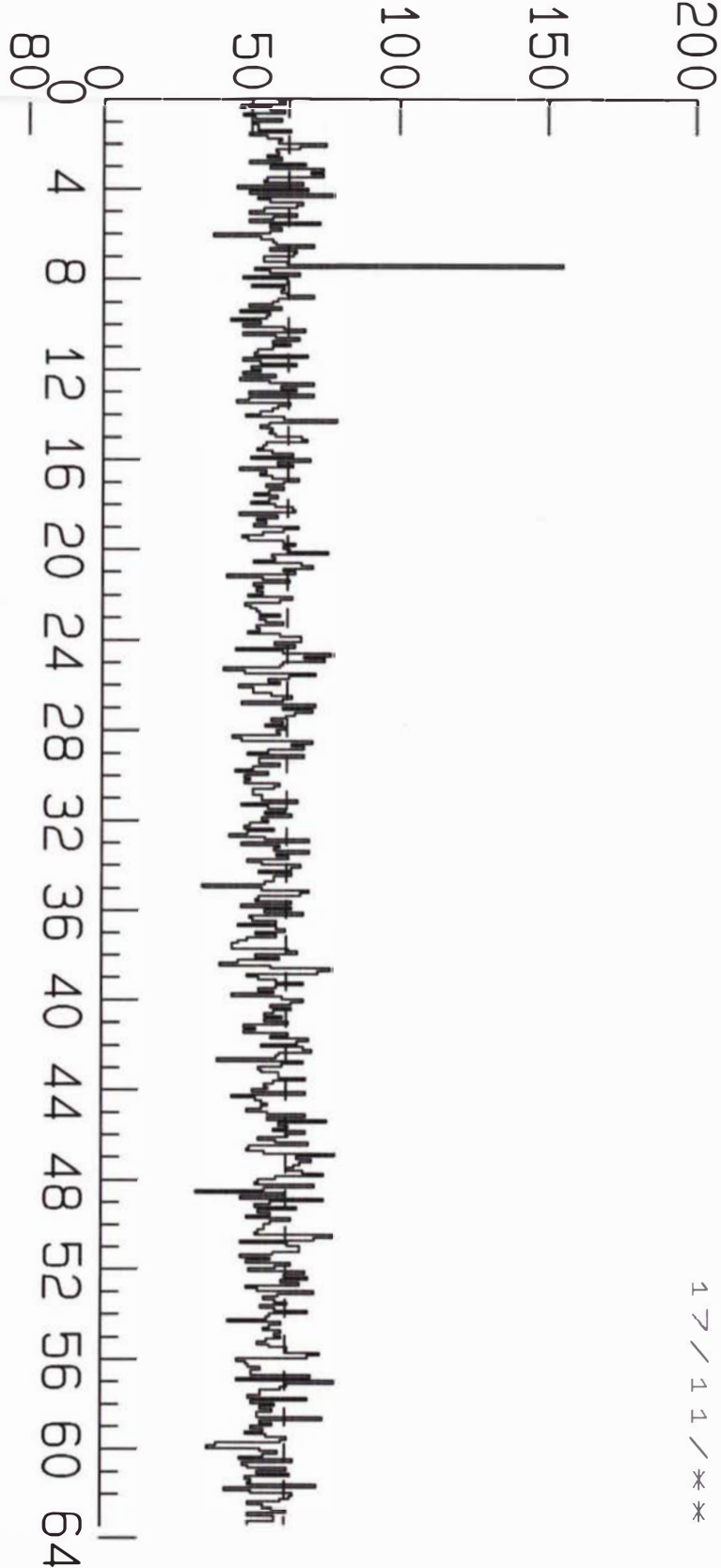
11/02/95

Ttrig= 8614.019

21- 146 keV

17/11**

COUNTS/0.125 S



COUNTS/0.031 S



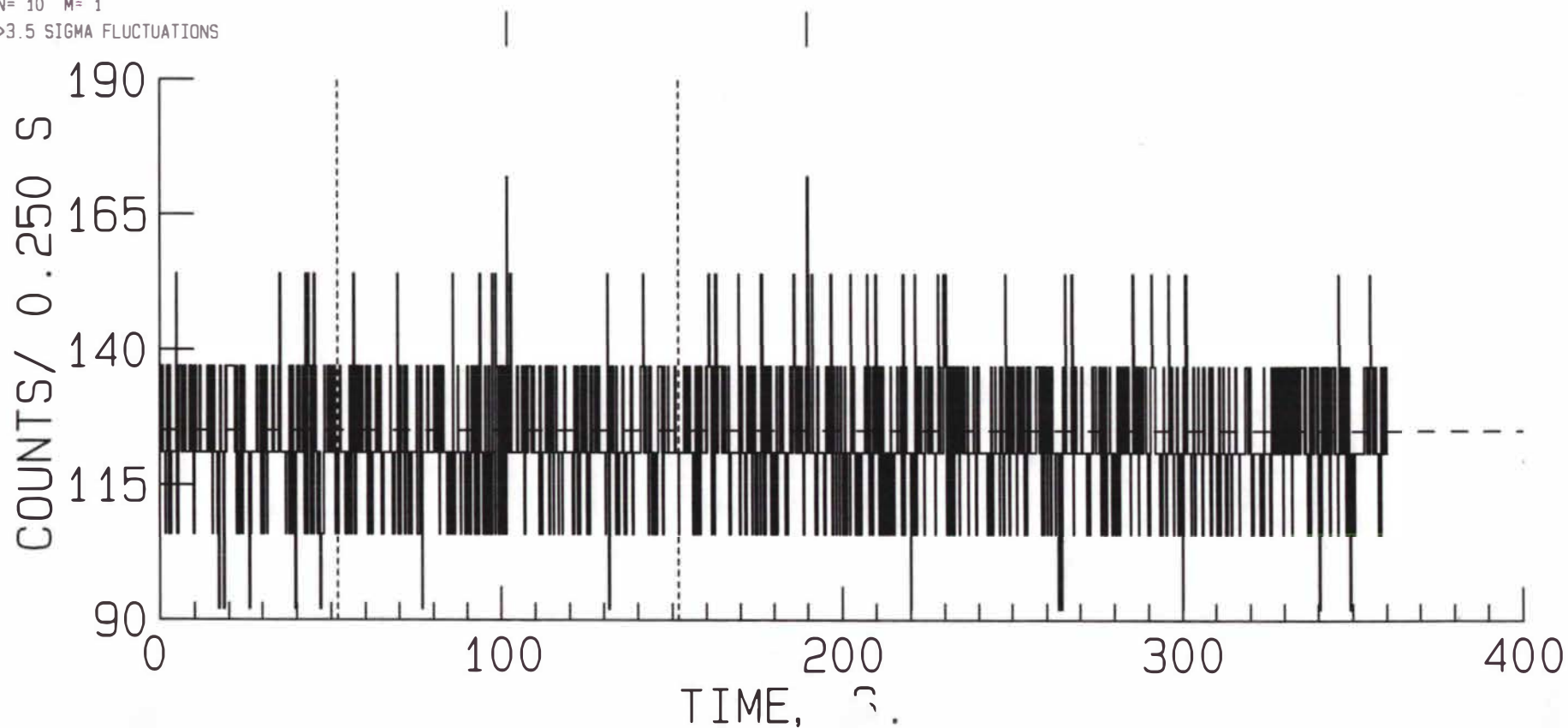
ULYSSES RT

17/11/97

11/ 2/95 8424.023 s

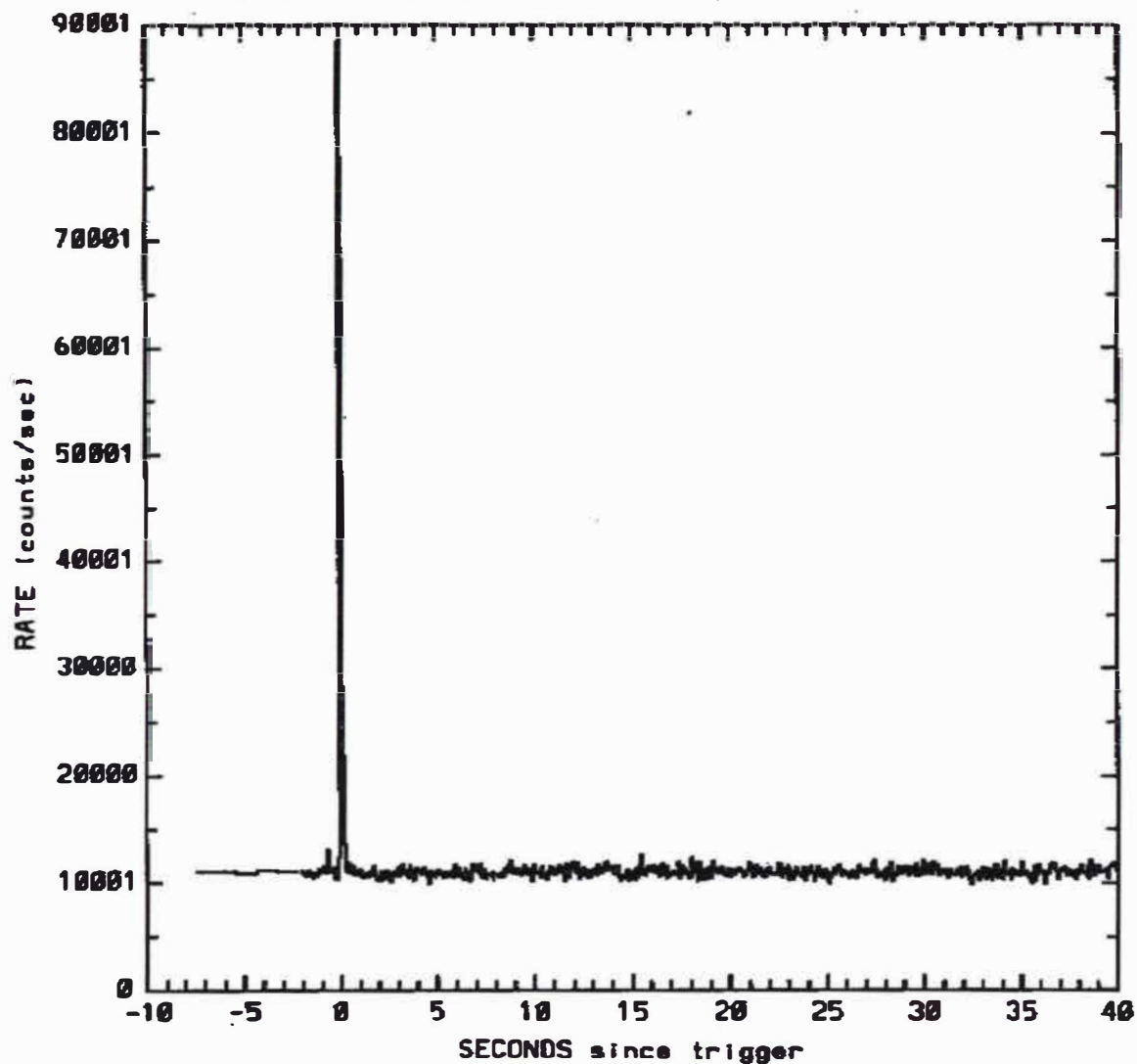
21- 146 keV

N= 10 M= 1
>3.5 SIGMA FLUCTUATIONS



FEB11A

DISCSC Data for K. Hurley. No. 3412



15-FEB-1995 10:16:00

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

Trigger # . 3412

Trigger Time:
9759 / 0697.770

Burst Data Type:
DISCSC

Deadtime
Corrected: N

Background Data
Type: PREB + DISCLA

Minimum Integ. Time:
0.064 second(s)

Detectors [7..0]:
76-4-2--

Discriminators:
[1, 2]

Quality Mask:
BDISP1

BATSE

11/02/95

8697.778

25- 100 keV

COUNTS/ .064 S

6000
4000
2000
0

-3

0

1

5

9

13

17

TIME, SECS

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

Kevin:

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

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

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

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

U....(08697 sec)

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

To : Prof. K. HURLEY, UC, Berkeley

इसरो उपग्रह केन्द्र

अन्तरिक्ष विभाग

भारत सरकार

हवाईपत्तन मार्ग, विमानपुर डाक घर,

बैंगलूर - 560 017, भारत

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

दूरभाष : 566251



ISRO SATELLITE CENTRE

DEPARTMENT OF SPACE

GOVERNMENT OF INDIA

AIRPORT ROAD, VIMANAPURA P. O.,

BANGALORE-560 017. INDIA

Telegram : UPAGRAH Telex : 0845-2325 & 2769

Telephone : 566251

Feb 16, 1995

Dr TMK Marar

Dear Kevin,

Extremely happy to get your fax dated Feb 13. It looks like that most of our shortlisted SROSS-C2 GRBs are getting confirmation from Ulysses.

Our Feb 3 event time 02:21:29.308 UT matches well with your time, indicating that the direction is roughly perpendicular to the baseline. Given below is the profile of the event. Another new event was detected on Feb 11, 1995. Its profile is also enclosed. Please confirm both.

I was very pleased to talk to you on telephone. On International calls each second is taken as one unit and will cost us one rupee (which may be approximately \$ 1 when budgets are compared!); that is why I was trying to speed up my conversation. Hope you understand me.

My telephone Nos are 91-80 526 9277 (home) &
91-80-526 5955 (office)

If there is anything urgent kindly call me on these numbers any time of the day/night.

We still have to exchange the modality of exchange of data and collaboration in which we are very much interested.

With best regards,

sincerely yours,

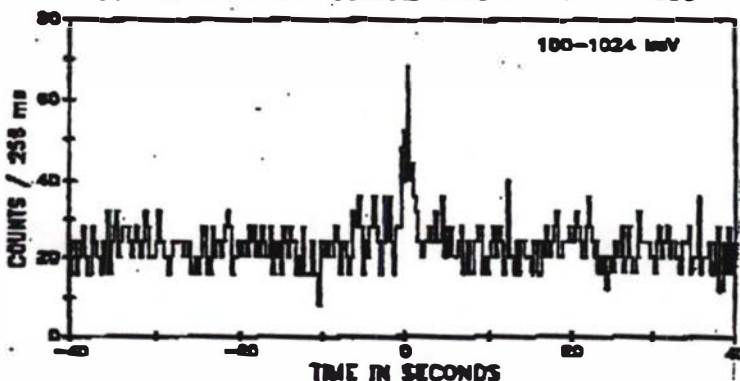
Krishnan

(TMK Marar)

PS: Received your email sent to me through Christina of IIA. The Jan 6 event was faint; Is that why Ulysses did not detect it, I wonder.

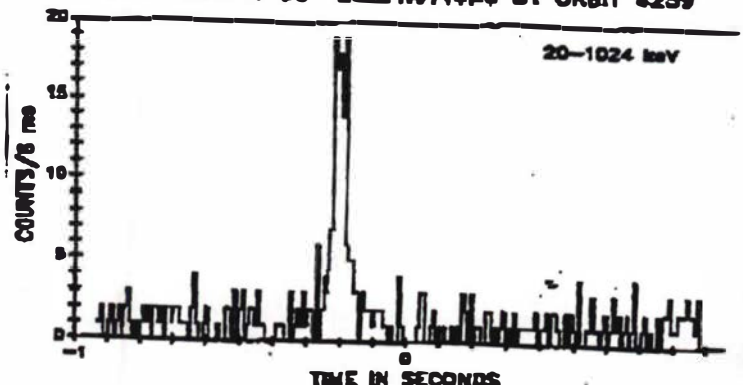
03 FEBRUARY 95 02:21:29.308 UT ORBIT 4138

100-1024 keV



11 FEBRUARY 95 02:24:57.526 UT ORBIT 4259

20-1024 keV



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

Kevin,

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

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

The list of files is attached.

Roger and J

<This message contains 1 attachments (not printed)>

Tuning problem ~ time of burst

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

950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR ✓
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
940412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

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

Mime-Version: 1.0

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

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

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

TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND Max counts per sec			N(S1)/N(S2)		Duration		Trigger number
			G1	G2	G3	in G2	T<T0	T>T0		
941113	12 09 15	S1	145	85		2.5	115		BGR ✓	
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓	
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓	
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓	
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓	
941120	20 23 17.924	S1	215	328	30	>15	2	25	5 ✓	
941121	17 25 00.945	S1	1652	1656	300	21	3	50	6 ✓	
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓	
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓	
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓	
941126	16 54 20	S1	55	75		>10	26		BGR ✓	
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9	
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓	
941127	15 39 10	S1	210	57		2.7	260		BGR ✓	
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓	
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓	
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓	
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓	
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓	
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol	
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓	
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓	
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓	
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28	
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓	
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓	
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓	
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓	
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓	
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓	
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓	
950110	06 02 15	S2	332	180		<0.1	3600		BGR	
950110	13 37 57.084	S2	234	422	213	0.05	38	100	32 ✓	
950111	04 49 12.241	S1	586	620	100	>19	92	24	33 ✓	
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓	
950112	07 45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓	
950113	05 59 13	S1	283	180	26	>10	52		BGR ✓	
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓	
950114	01 00 38	S1	46	110		1.6	6		BGR ✓	
950114	04 03 01	S2	23	76		0.5	70		BGR ✓	
950114	07 30 30.766	S2	205	406	60	<0.05	1	100	36 ✓	
950114	13 10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓	
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓	
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓	
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓	
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39	

BATSE time corrected 9/27

Date: June 24 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. For 3 Spacecraft events

- ☐ Konus N/S anisotropy used to distinguish between positions?
- ☐ SAX anisotropy used to distinguish between positions?
- ☐ SAX Earth-blocking used to distinguish between positions?
- ☐ $\Sigma 3\Delta t$'s calculated?

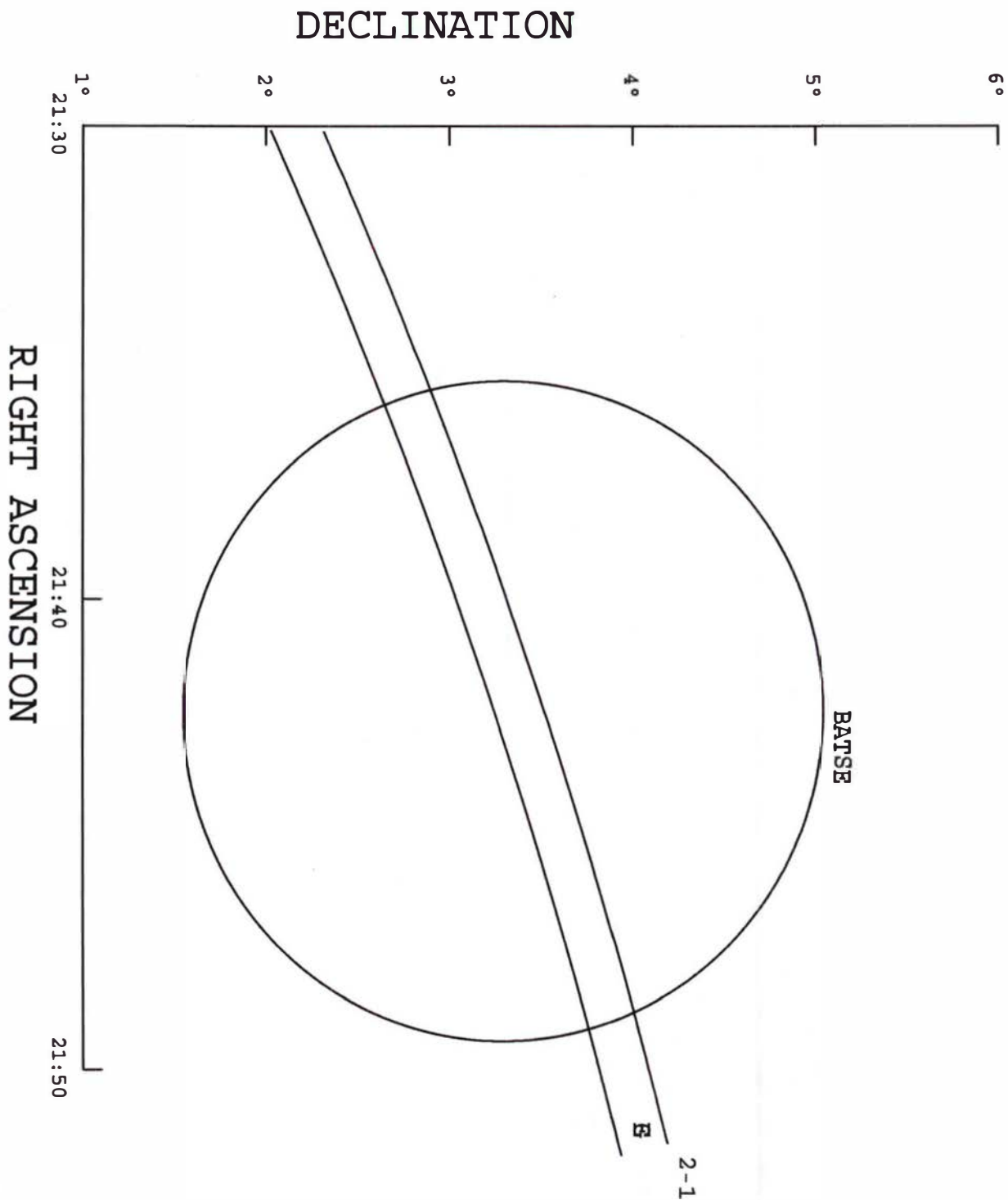
3. For 4 Spacecraft Events

- ☐ BMAPSUM executed to get chisquare for alternate positions?
- ☒ 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 FEB 11, 1995 4:25

24 / 6 / 2



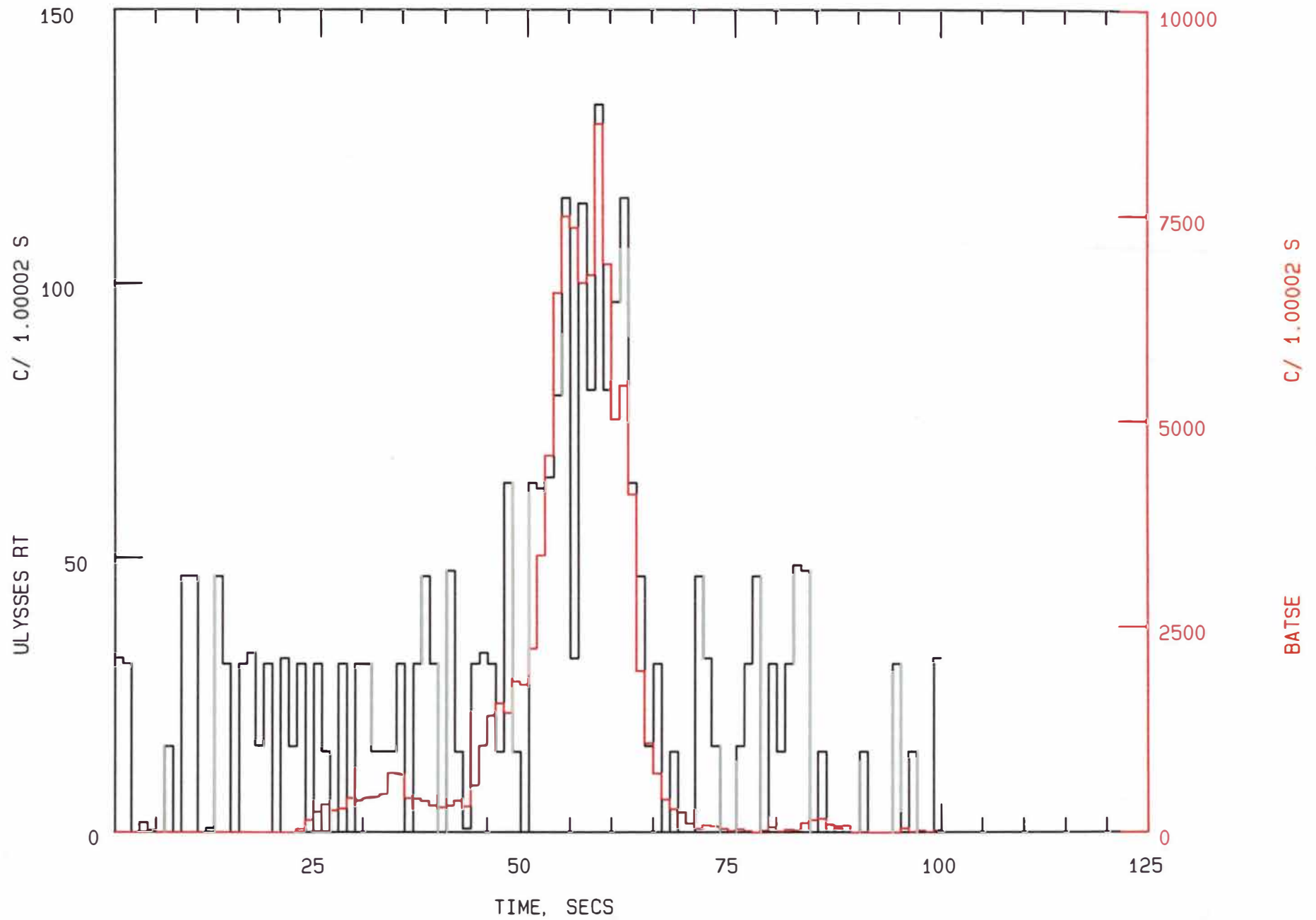
ULYSSES RT-BATSE

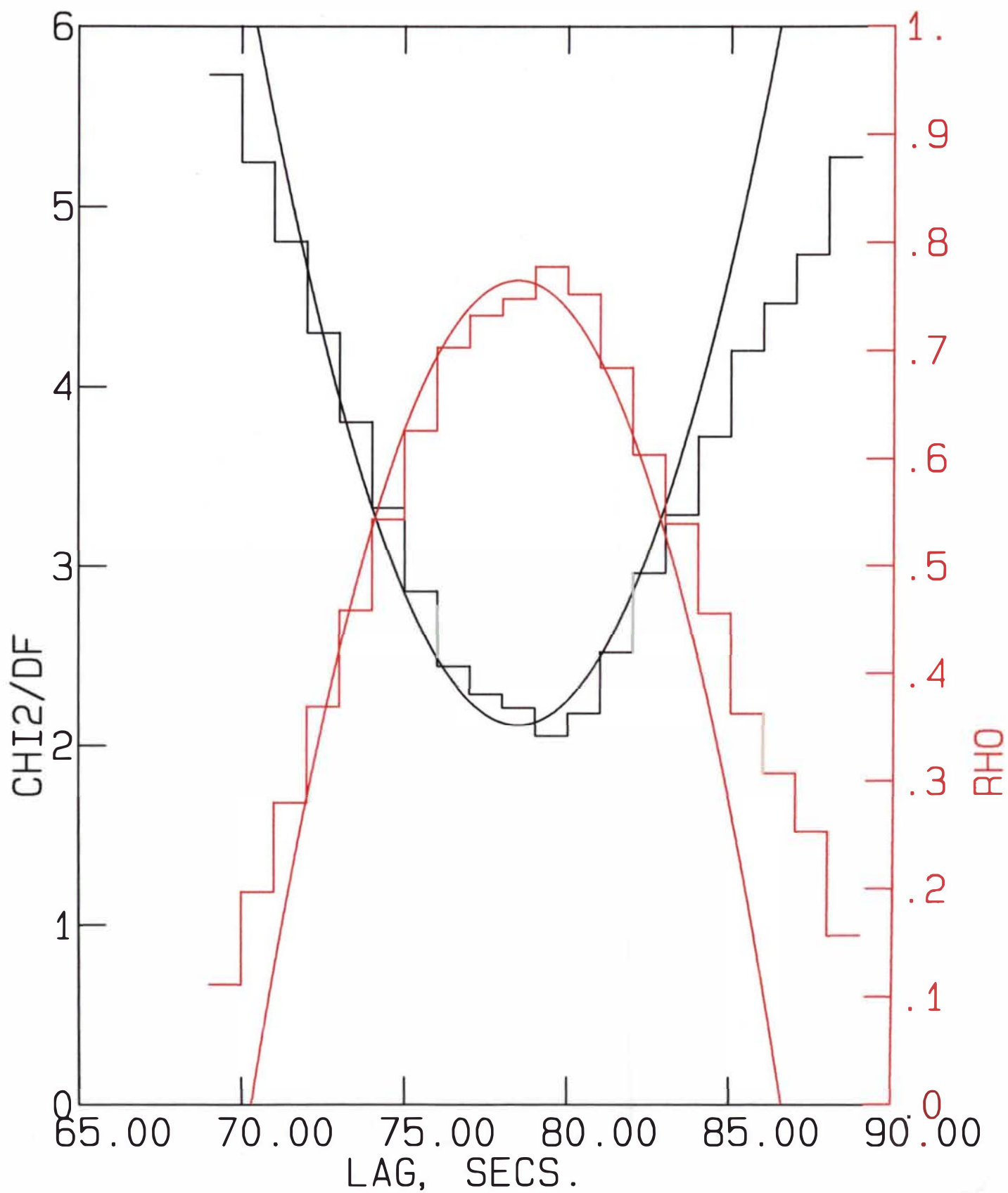
CORRELATION

11/ 2/95

14900.154

24/ 6/ 2





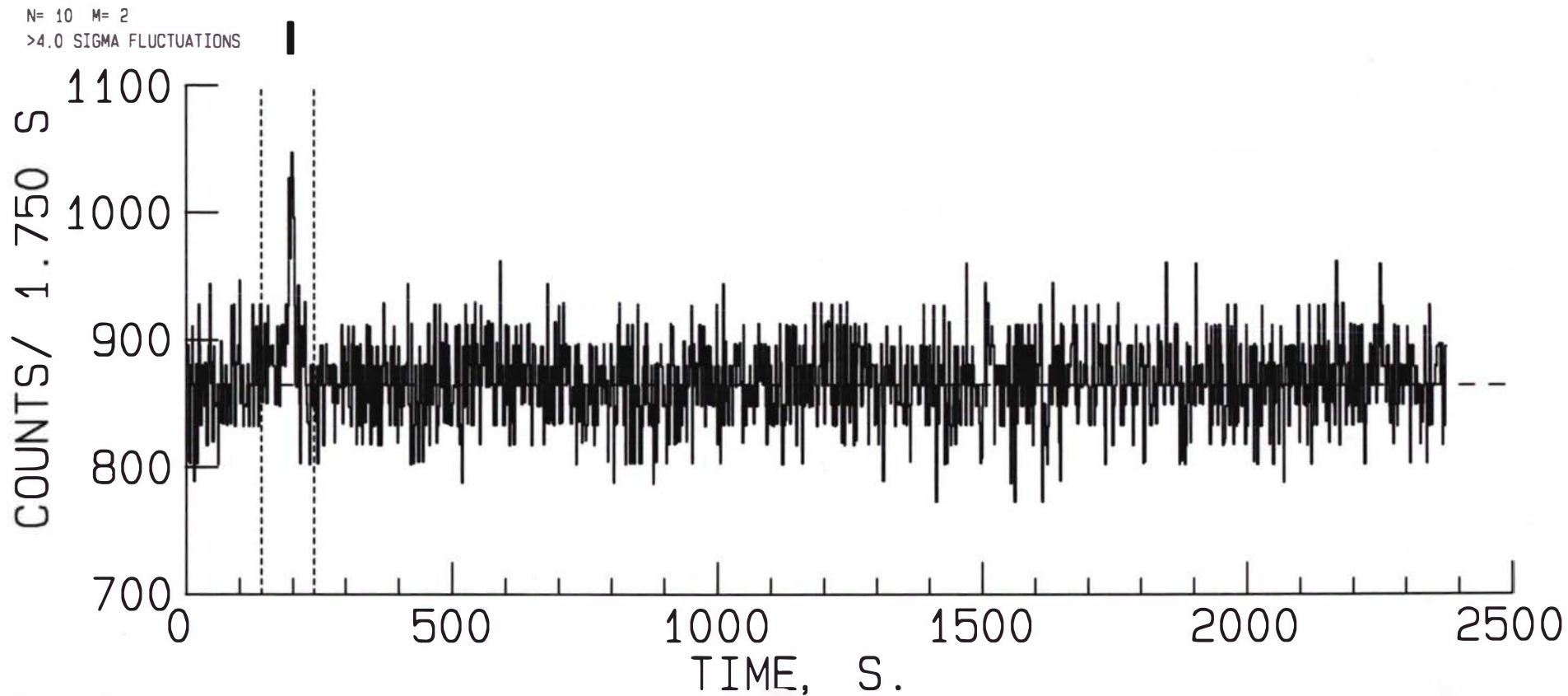
ULYSSES RT

24 / 6 / 2

11 / 2 / 95 14760.149 s

0.250 S INTERVALS REGROUPED BY 7

21- 146 keV



KONUS2

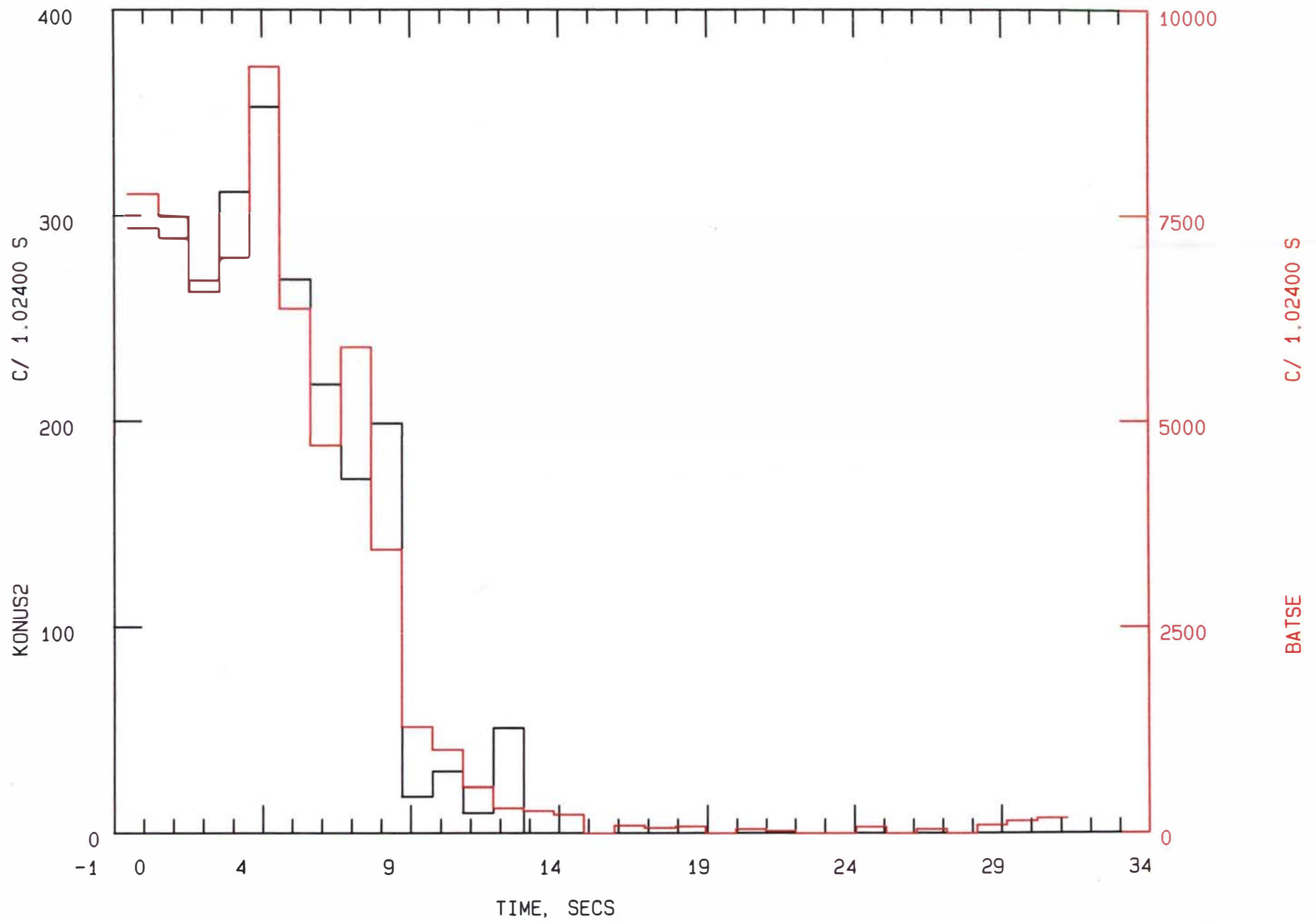
-BATSE

CORRELATION

11/02/95

15945.869

24/ 6/ 2



KONUS2

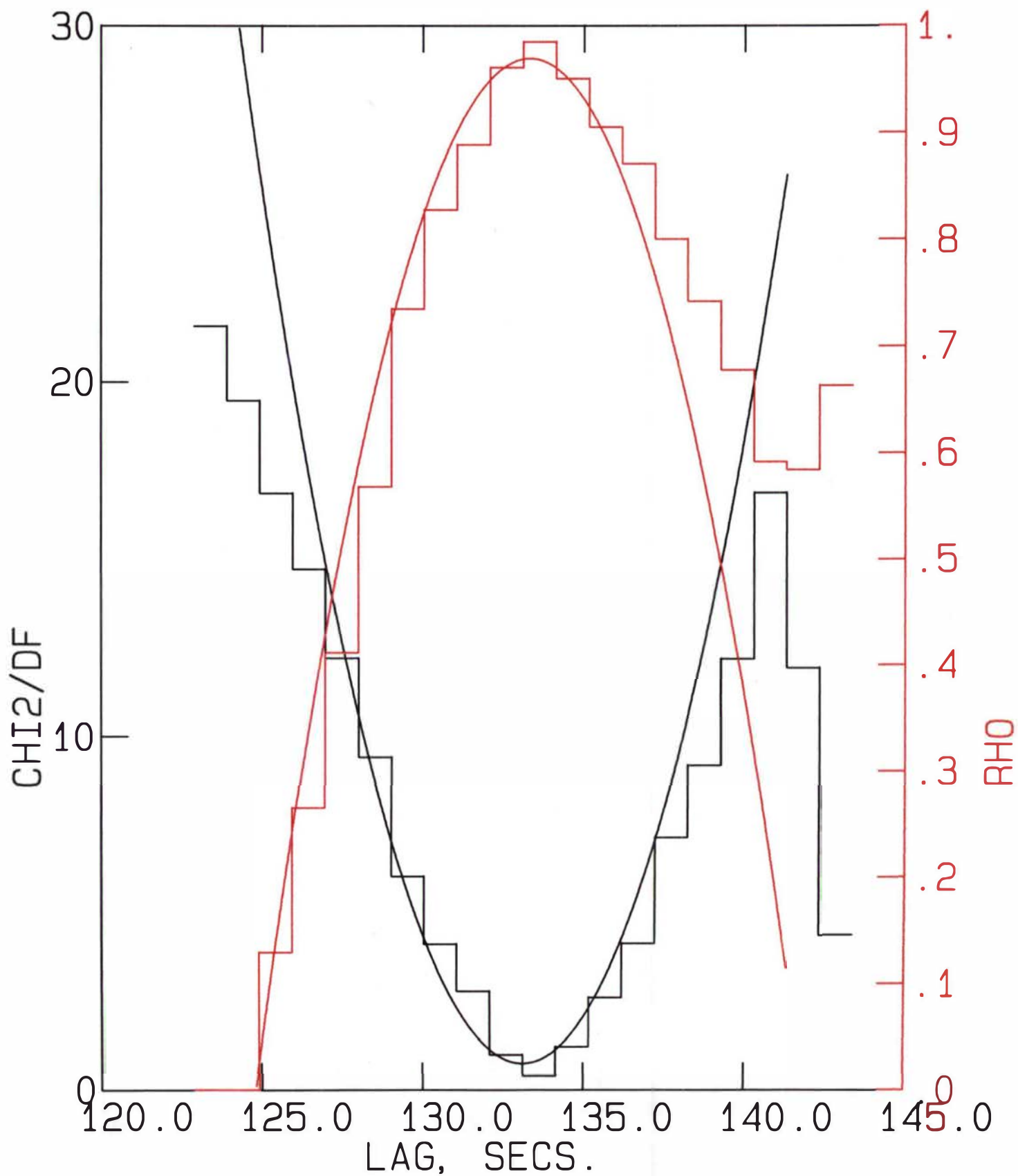
-BATSE

CORRELATION

11/02/95

15945.869

24/ 6/ 2

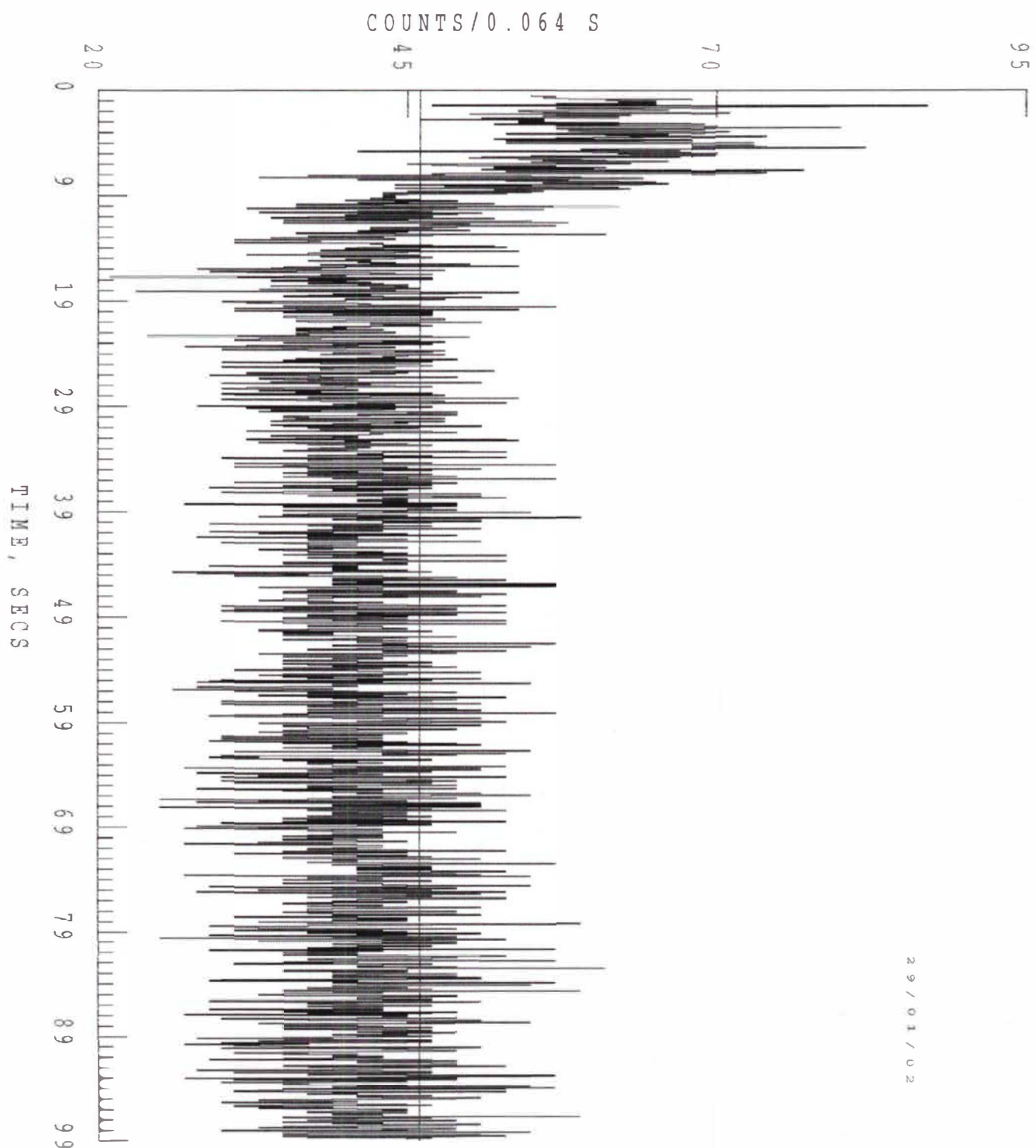


KONUS2

11/02/95

15945.869

50 - 200 keV



From DEAL@fender.msfc.nasa.gov Mon Feb 13 10:03 PST 1995
Date: Mon, 13 Feb 1995 12:03:39 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, CASS09BAND@fender.msfc.nasa.gov,
CASS09GRUBER@fender.msfc.nasa.gov, CASS09MATTESON@fender.msfc.nasa.gov,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3413

TIME: TJD=9759 SECONDS=46517

TYPE: SAA ENT SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY

From DEAL@fender.msfc.nasa.gov Mon Feb 13 10:06 PST 1995
Date: Mon, 13 Feb 1995 12:06:26 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, CASS09BAND@fender.msfc.nasa.gov,
CASS09GRUBER@fender.msfc.nasa.gov, CASS09MATTESON@fender.msfc.nasa.gov,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3414

TIME: TJD=9759 SECONDS=58474

TYPE: SAA ENT SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY

From DEAL@ssl.msfc.nasa.gov Mon Feb 13 07:24 PST 1995
Date: Mon, 13 Feb 1995 9:23:59 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3415

BATSEARCH PROGRAM

Trigger

BATSE BURST # 3415
EVENT OF 1995 FEB 11 DAY OF YEAR= 42
EVENT CROSSING TIME AT BATSE : 72468. S. OR 20:07:48.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 63.000 -56.000
BATSE PEAK COUNTING RATE: 26000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/ 2/ 95 IS:
RA= 335.369 DEC= -24.917 DIST= 2.309 AU
BATSE-ULYSSES DISTANCE = 345408105. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=111.73 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -426.57 SECS.
CROSSING TIME AT ULYSSES IS 72041. S. OR 20:00:41 +/- 229.34 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/ 2/ 95 IS:
RA= 147.243 DEC= 18.026 DIST= 0.676 AU
MARS-BATSE DISTANCE = 101092728. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 78.28 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 68.52 SECS.
CROSSING TIME AT MARS IS 72537. S. OR 20:08:56 +/- 58.36 SECONDS

BATSE BURST TRIGGER

NO.: 3415

TIME: TJD=9759 SECONDS=72468

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=103.1 AZIMUTH=098.4 ERROR= DEGREES

COMMENTS:

MULTI PEAKED BURST LASTING ~ 67S. VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3415	950211	9759	72468	26000	063	-56

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

Dear Kevin,

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

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

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

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

Helio corr removed

Date: *Nov 17 '97*

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

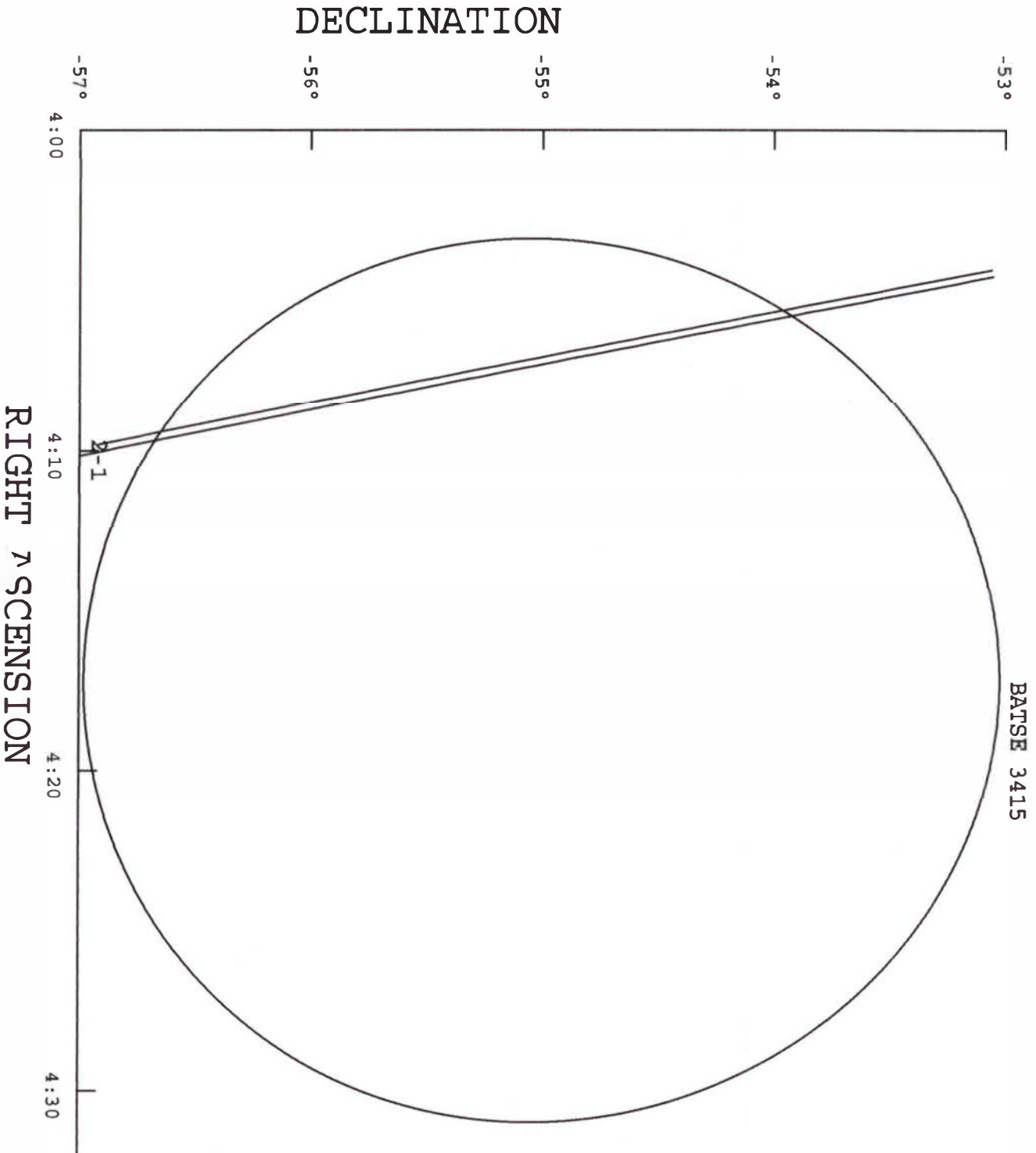
3. PVO Data

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

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

EVENT OF FEB 11, 1995 20:01

17/11/97



ULYSSES

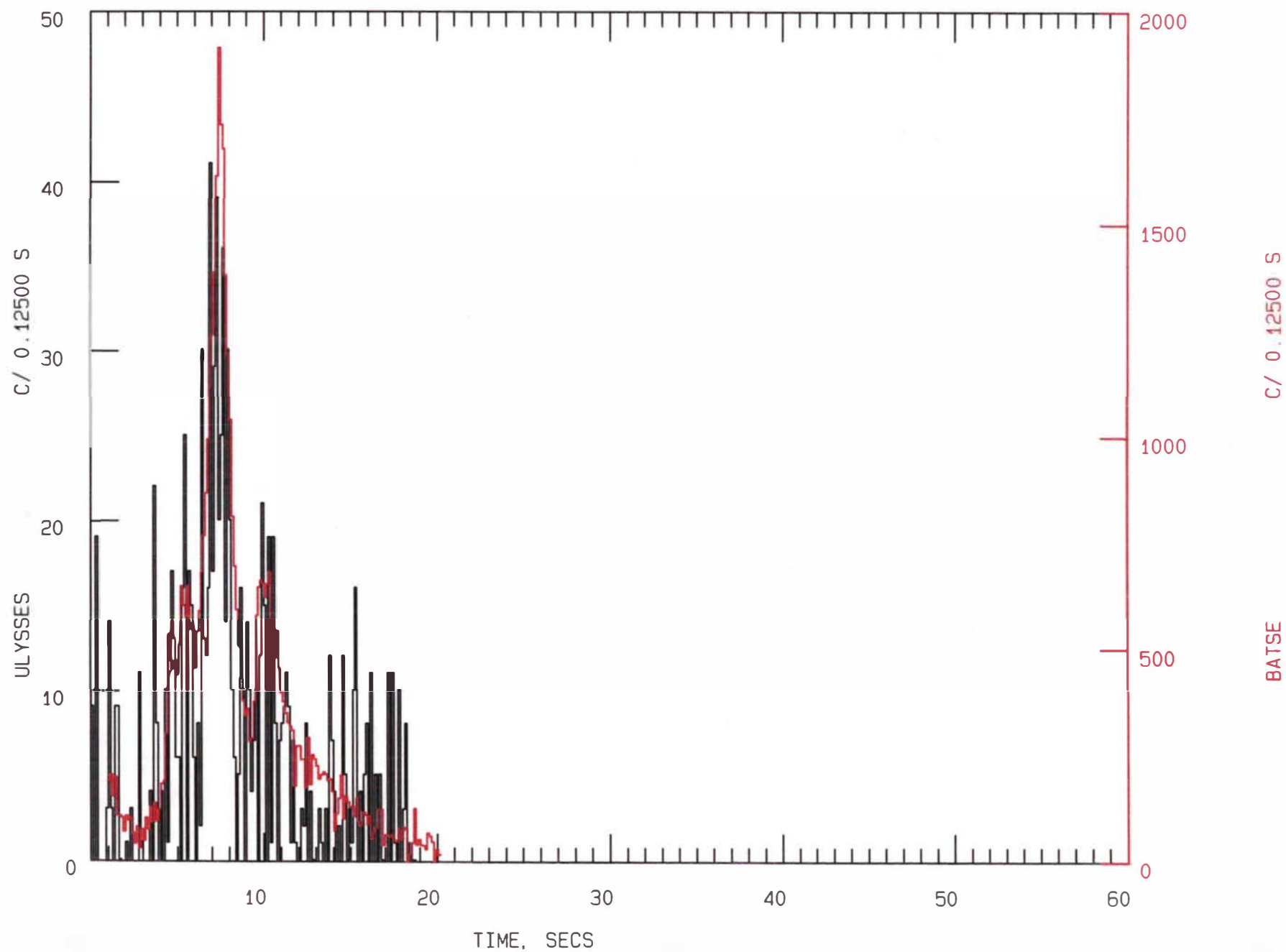
-BATSE

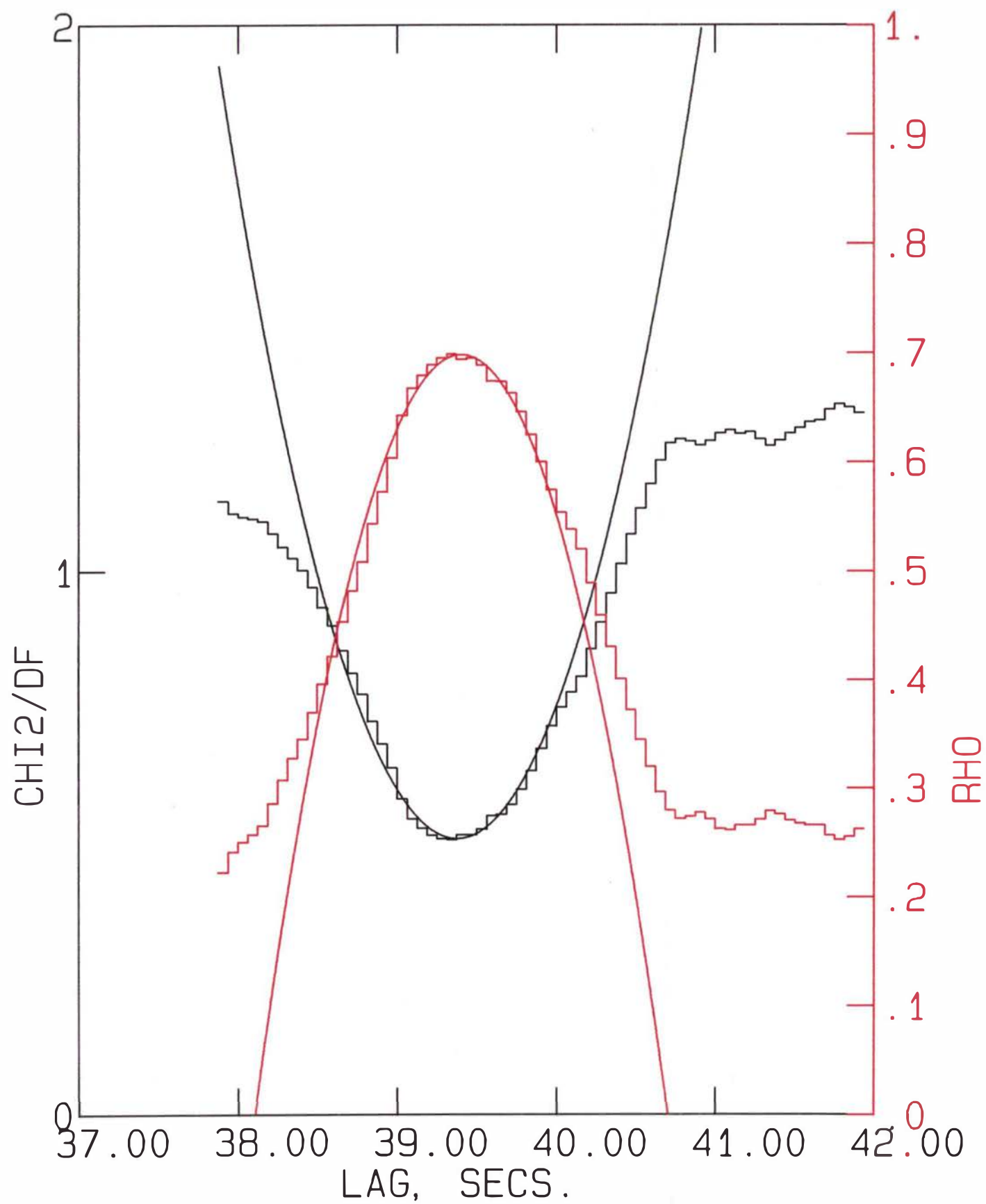
CORRELATION

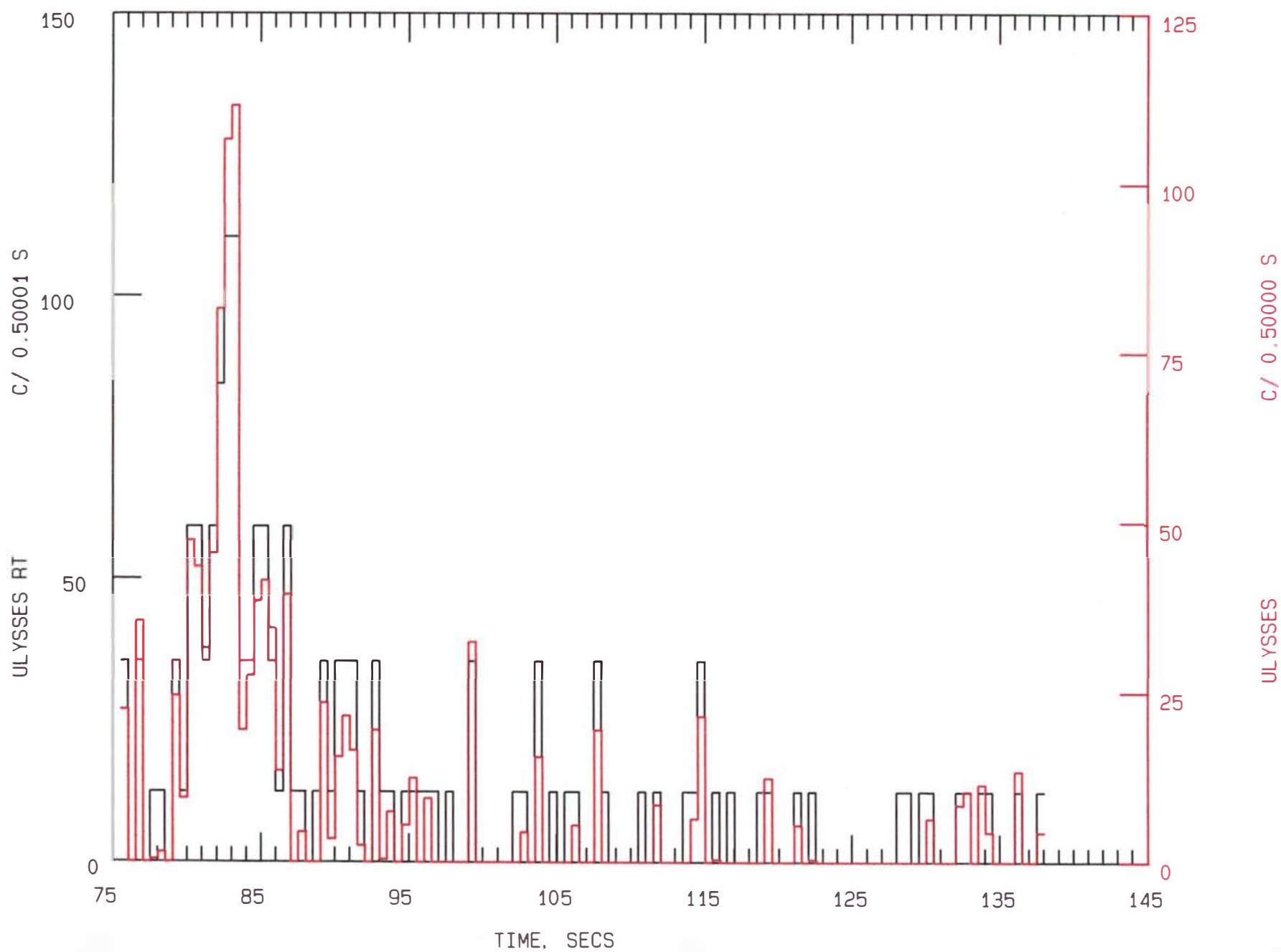
11/02/95

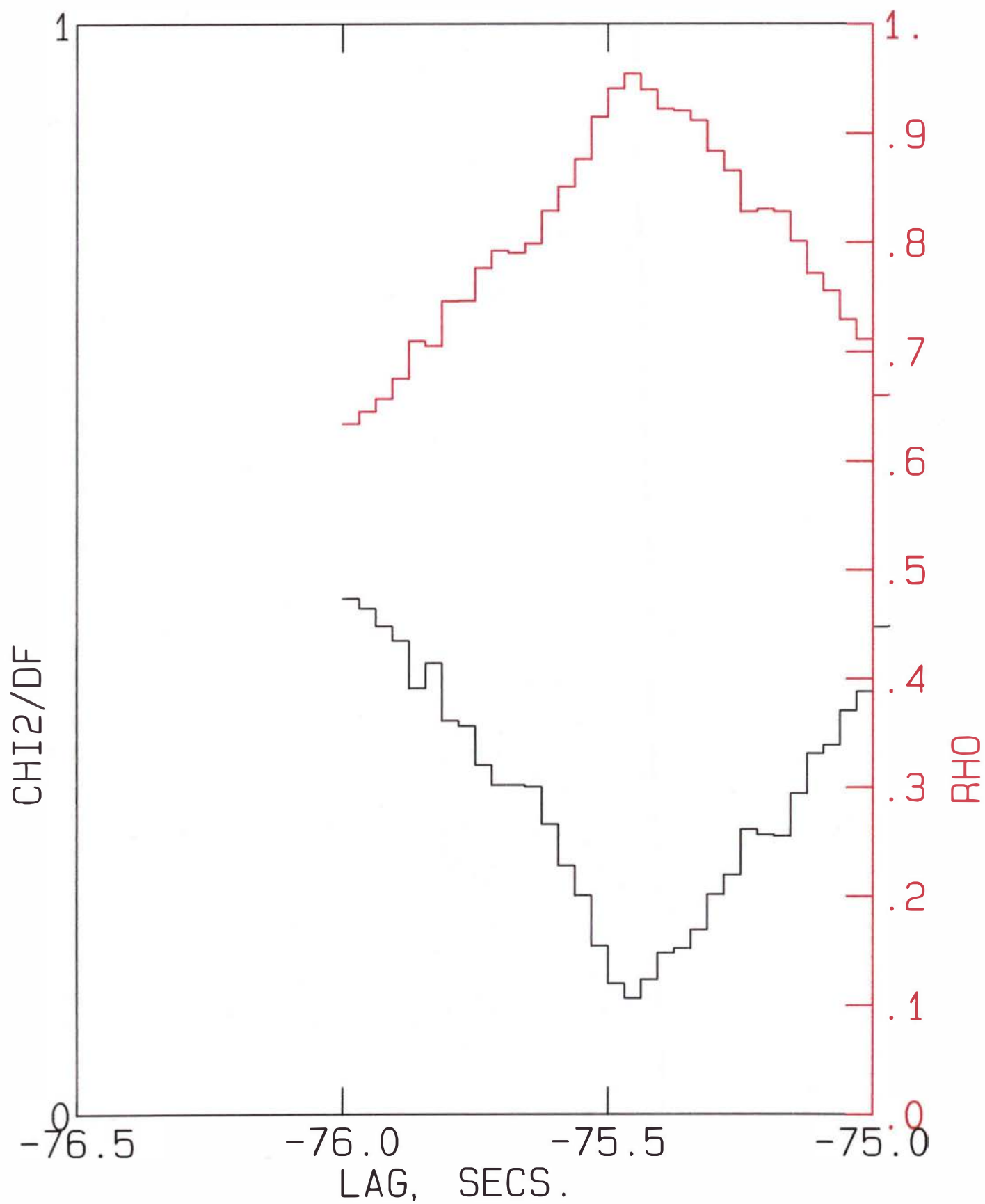
72074.885

17/11/97





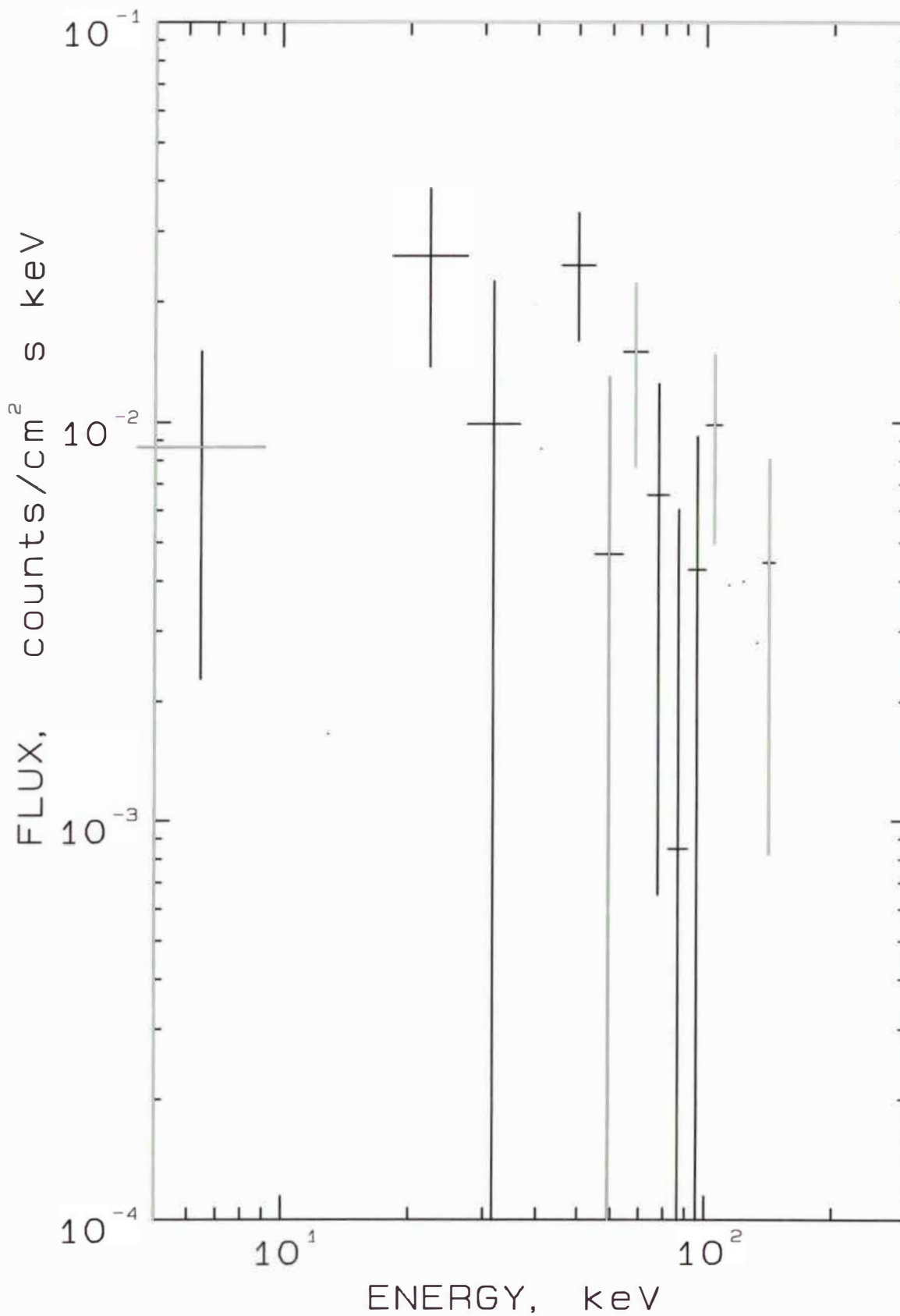




ULYSSES 11/02/95 72074.889

17/11/97

SPECTRUM INTEGRATED OVER 26.2 SECONDS, INTERVALS 2 TO 23



ULYSSES 11/02/95 72074.889 BURST SPECTRAL COUNT RATES

4- 18 keV

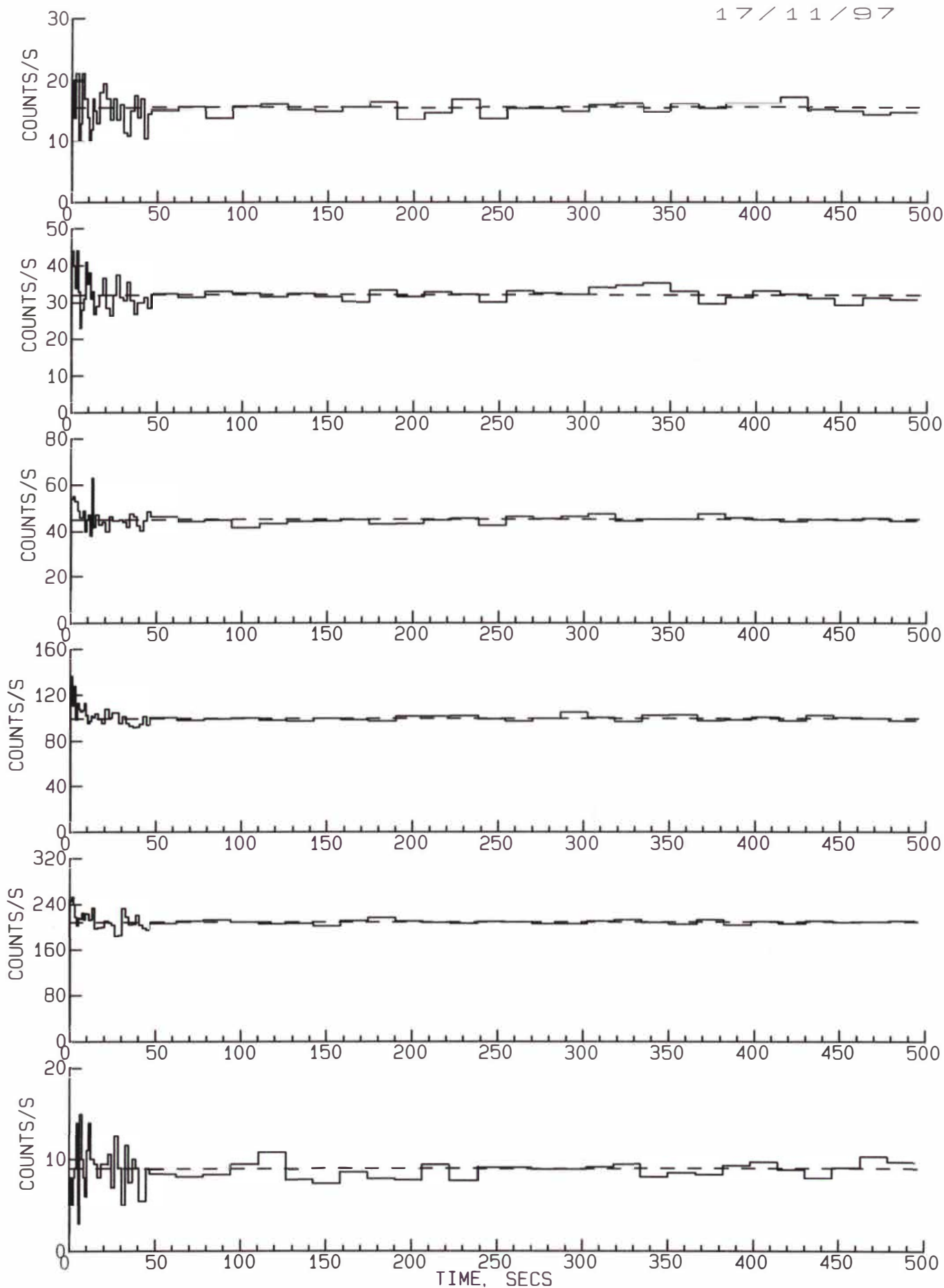
18- 45 keV

45- 72 keV

72-100 keV

100-127 keV

127-145 keV



ULYSSES

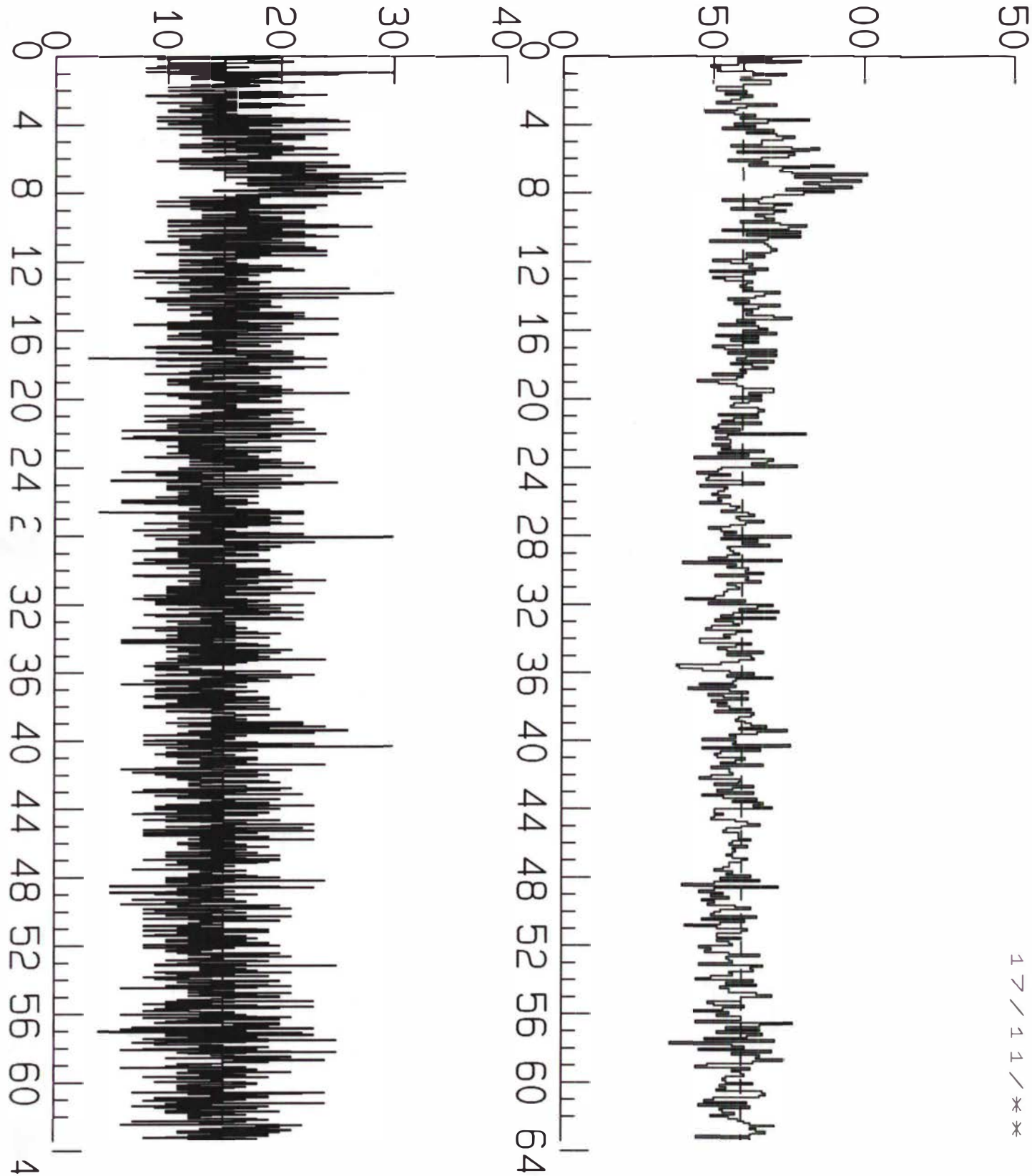
11/02/95

Ttrig=72074.885

21- 146 keV

COUNTS/0.031 S

COUNTS/0.125 S



17/11/88

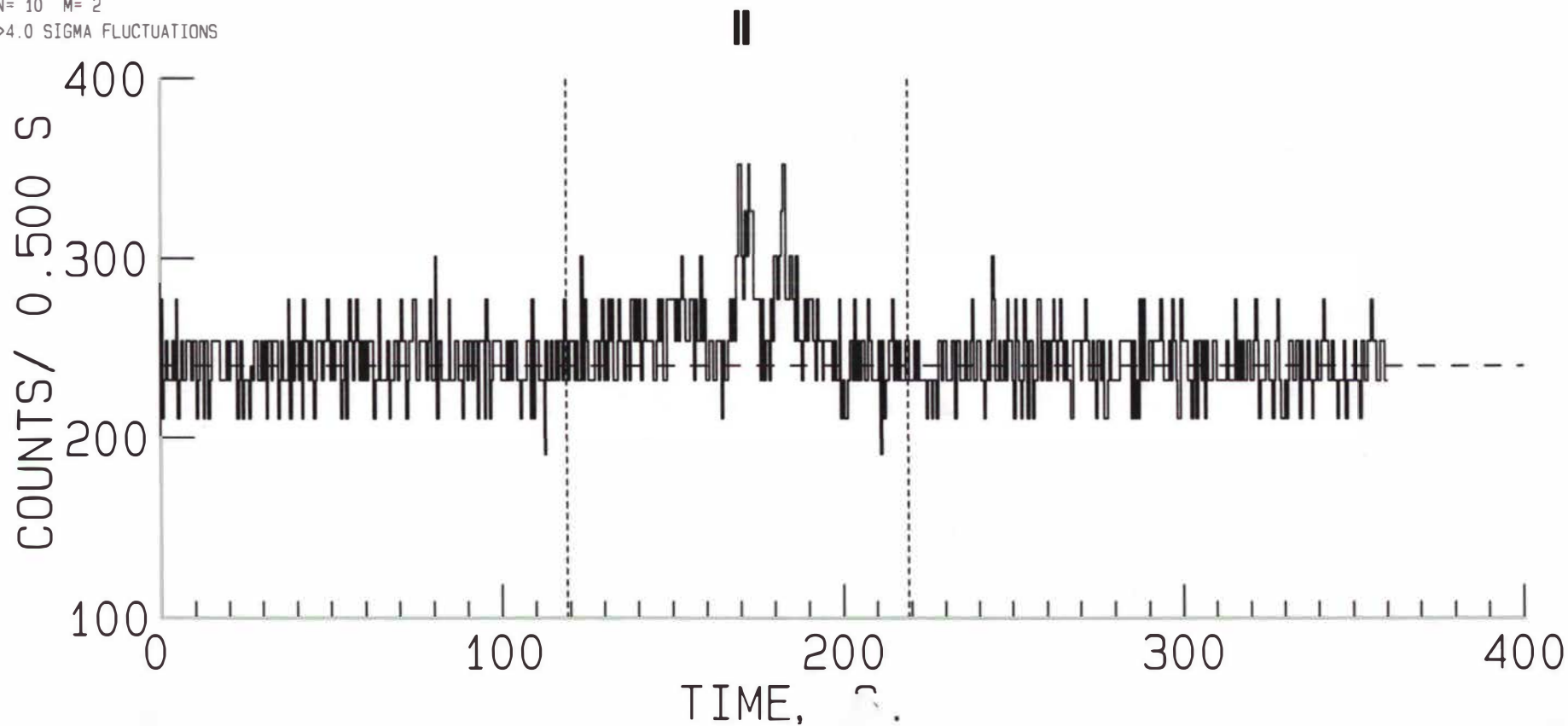
ULYSSES RT

17 / 11 / 97

11/ 2/95 71892.012 s

21- 146 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



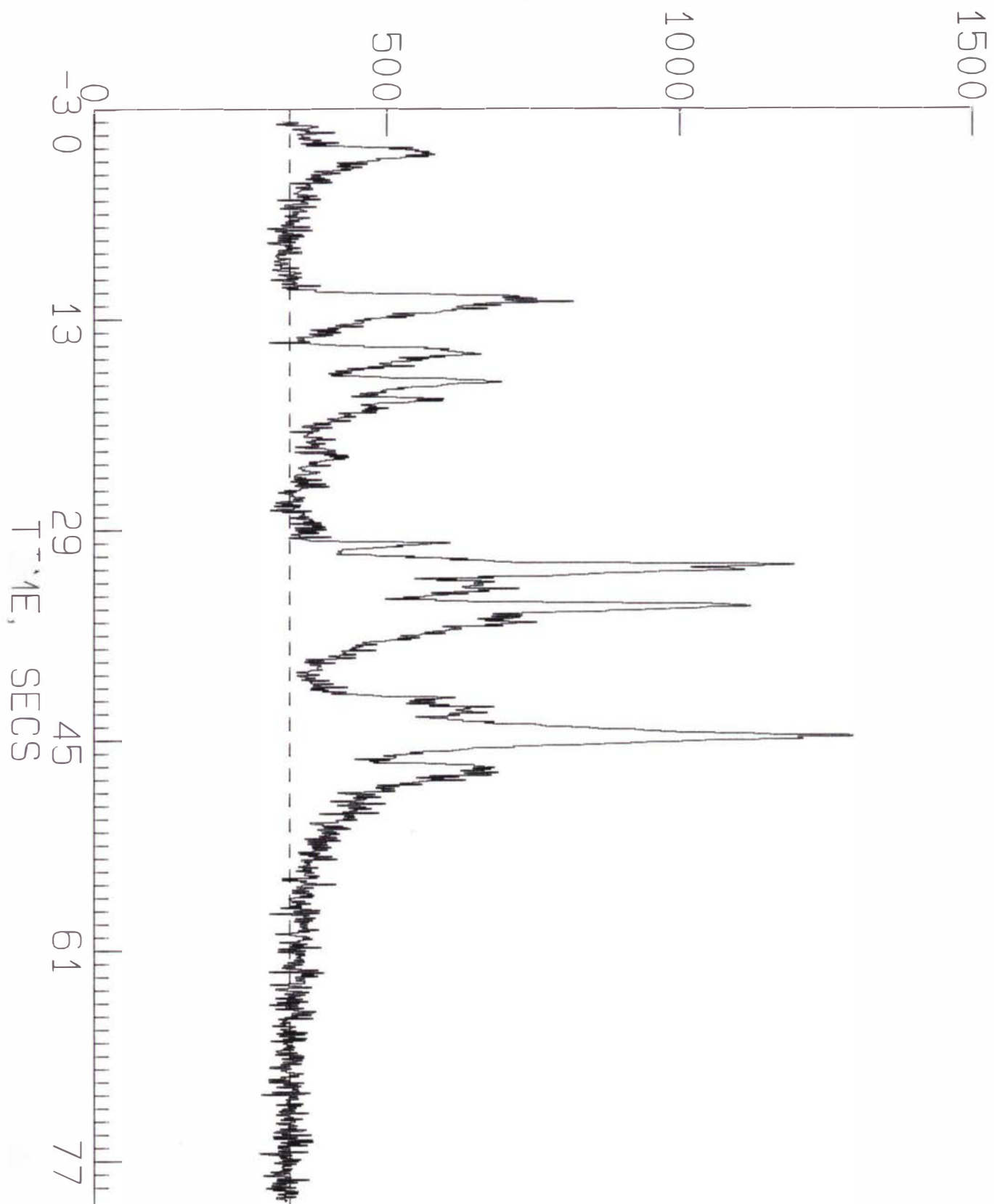
BATSE

11/02/95

72468.850

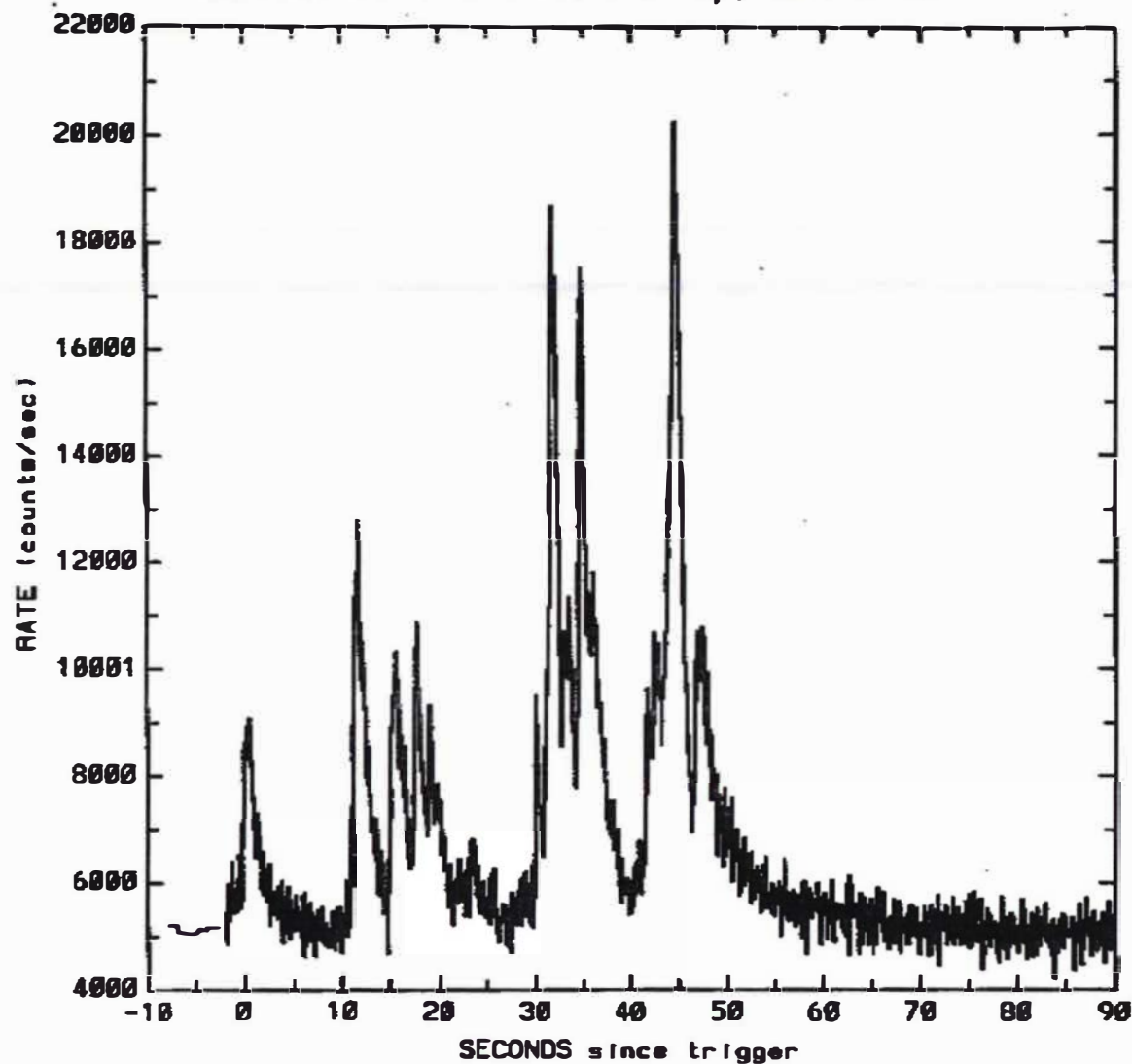
25- 100 keV

COUNTS/ .064 S



FEB11B.

DISCSC Data for K. Hurley, No. 3415



15-FEB-1995 10:10:27

Created by NOPS 80
(Burst Display)
Version 12.23

Trigger = 3415

Trigger Time:
9750 / 72468.050Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors (7..0):
--5---1-Discriminators:
(1, 2)Quality Mask:
BDISP1

Feb 14 08:58

burst3416.feb13

1

From HAGEDON@fender.msfc.nasa.gov Mon Feb 13 10:04 PST 1995
Return-Path: <HAGEDON@fender.msfc.nasa.gov>
Received: from FENDER.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (5.0/SMI-SVR4)
id AA16737; Mon, 13 Feb 1995 10:04:43 +0800
Date: Mon, 13 Feb 1995 12:04:43 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <950213120443.21602261@fender.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 3416
Content-Type: text
Content-Length: 1135
X-Lines: 26
Status: 0

BATSEARCH PROGRAM

NO

BATSE BURST # 3416
EVENT OF 1995 FEB 11 DAY OF YEAR= 42
EVENT CROSSING TIME AT BATSE : 84385. S. OR 23:26:25.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 253.000 46.000
BATSE PEAK COUNTING RATE: 6500 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 11/ 2/ 95 IS:
RA= 335.418 DEC= -24.832 DIST= 2.309 AU
BATSE-ULYSSES DISTANCE = 345448837. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 77.36 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 252.25 SECS.
CROSSING TIME AT ULYSSES IS 84637. S. OR 23:30:37 +/- 249.03 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 11/ 2/ 95 IS:
RA= 147.243 DEC= 18.026 DIST= 0.676 AU
MARS-BATSE DISTANCE = 101092728. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 92.48 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -14.57 SECS.
CROSSING TIME AT MARS IS 84370. S. OR 23:26:10 +/- 58.27 SECONDS

BATSE BURST TRIGGER

NO.: 3416

TIME: TJD=9759 SECONDS=84385

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=73 AZIMUTH=290 ERROR= DEGREES

COMMENTS:

BURST. SINGLE PULSE WITH SUBSTRUCTURE. DUR.~25 SEC. BEGINS AT ~T-12 SEC.
MARGINALLY VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3416	950211	9759	84385	6500	253	+46

13 / 2 / 95

ULYSSES RT

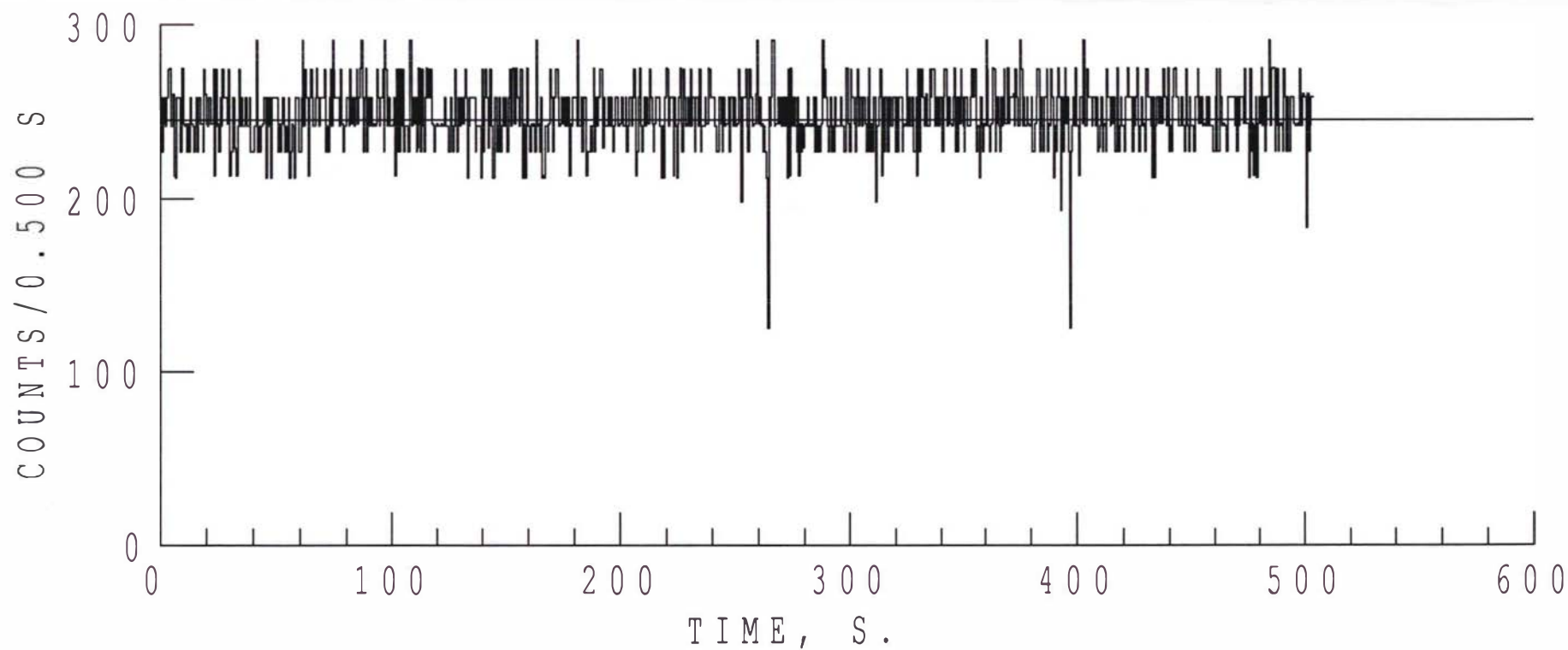
11 / 2 / 95 84384.016 s

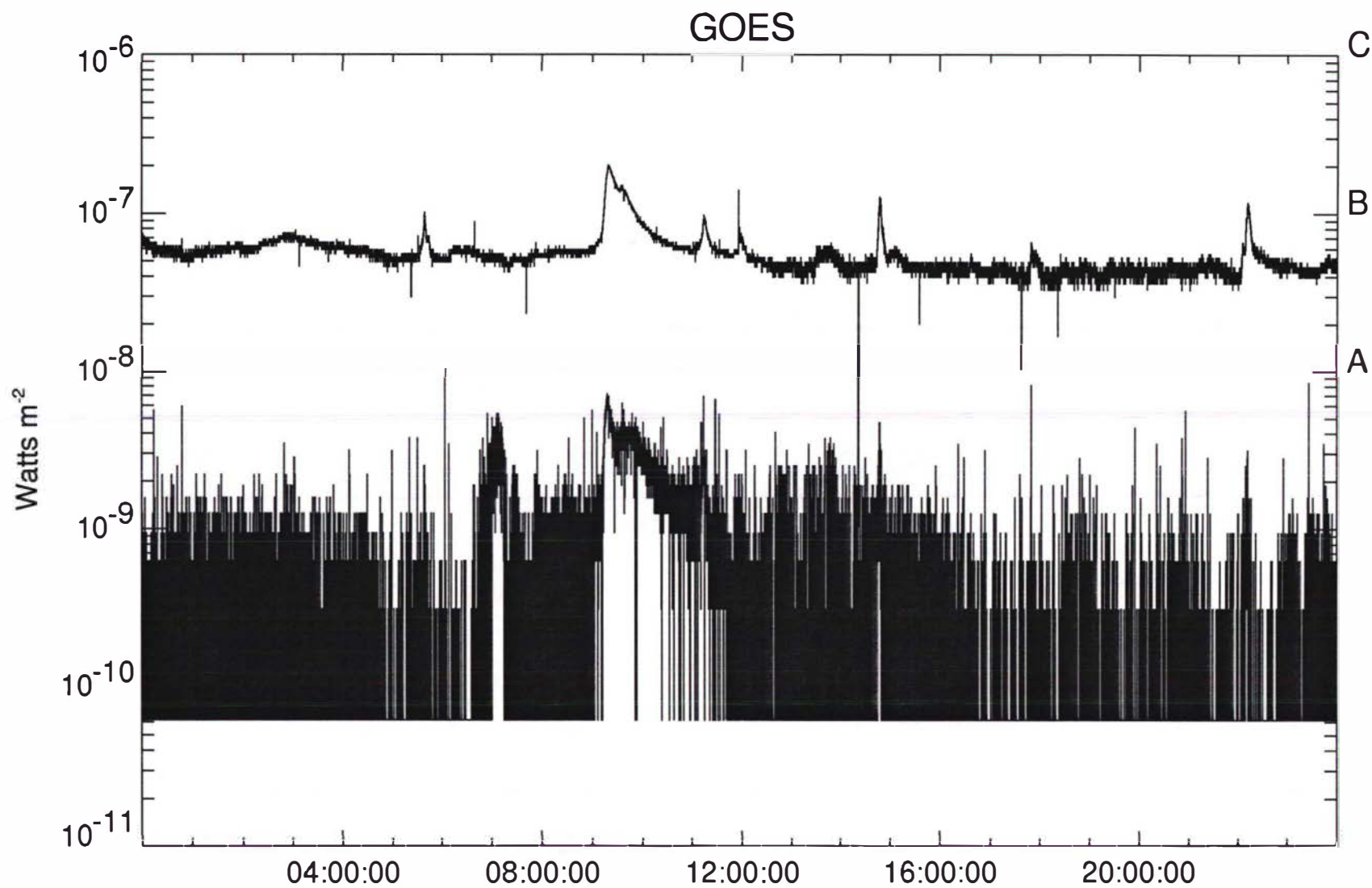
0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





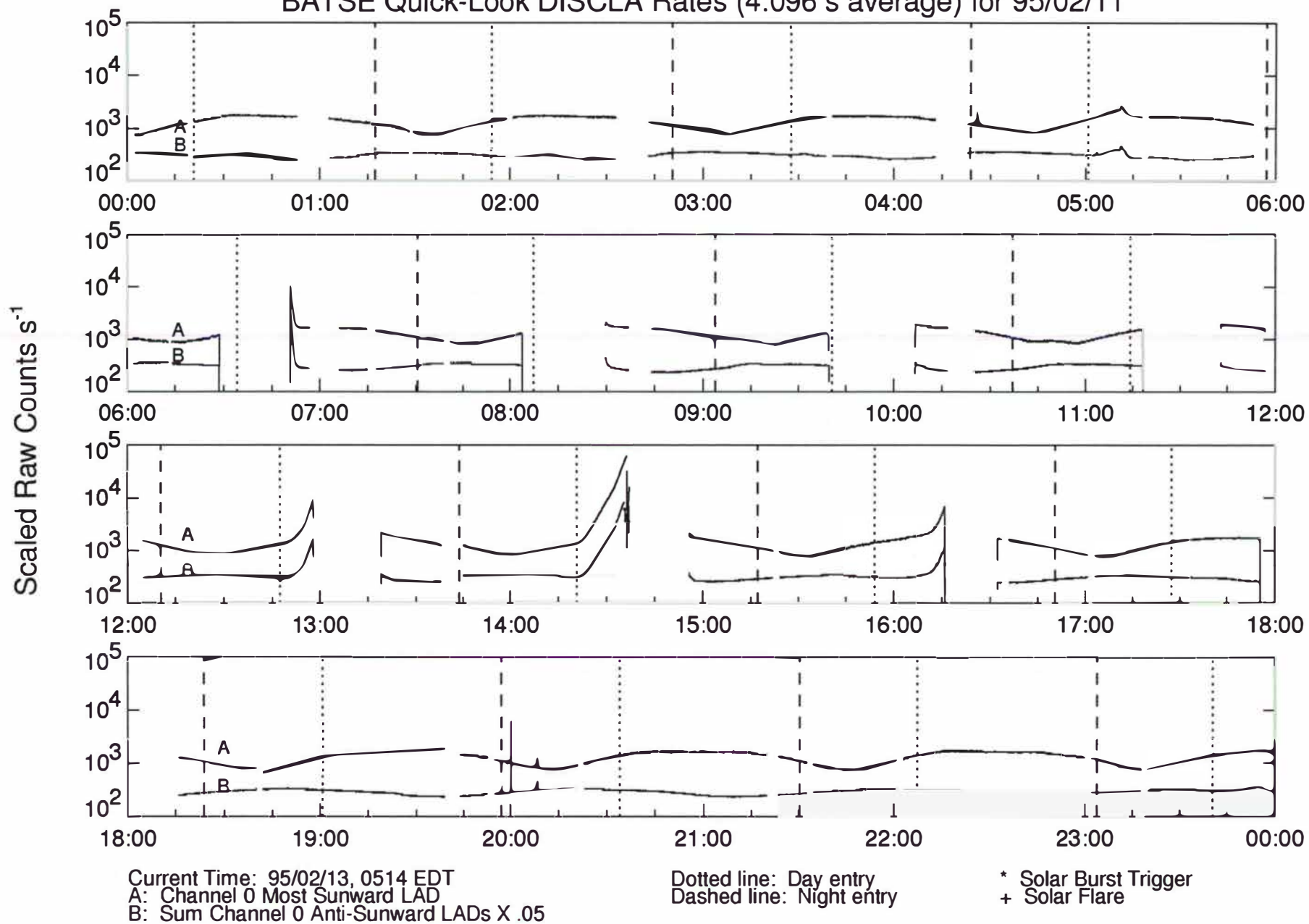
Data Start: 95/02/11, 0000:00

Plot created: 95/02/13, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

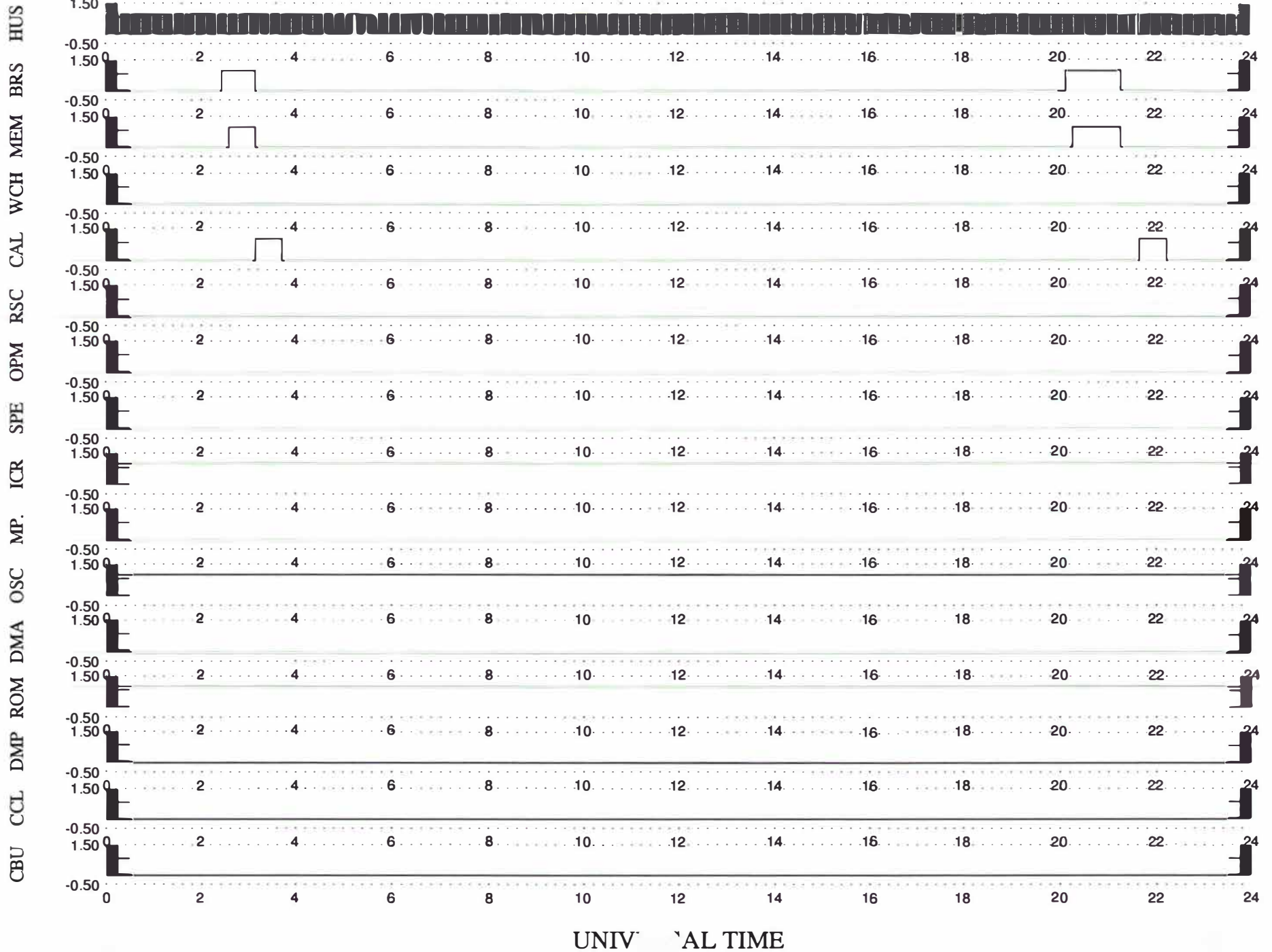
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

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



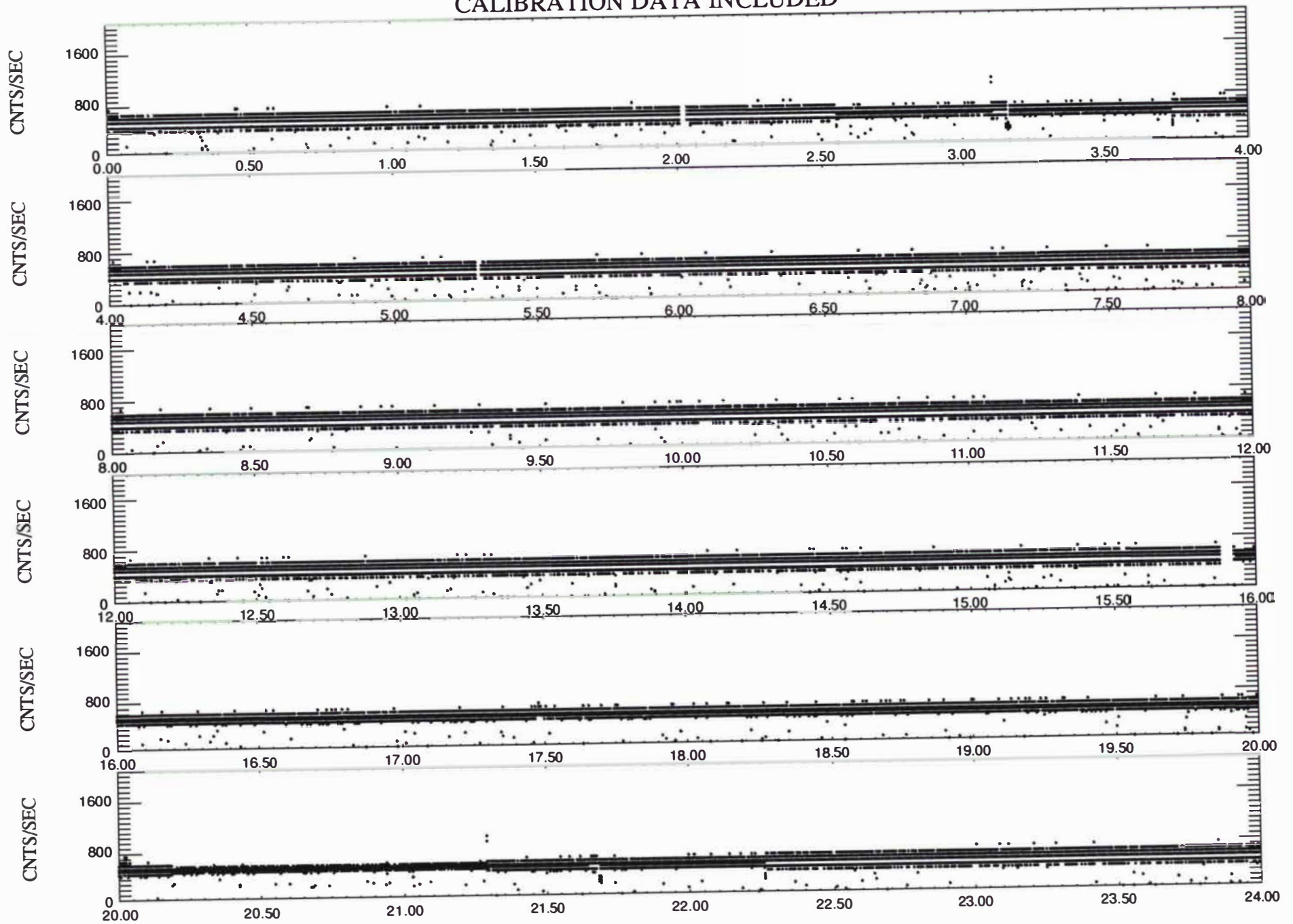
HUS MODES EDR day 42, year 1995 to day 42, year 1995
BURST NUMBER 1, 2

7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 42, year 1995 to day 42, year 1995 CALIBRATION DATA INCLUDED

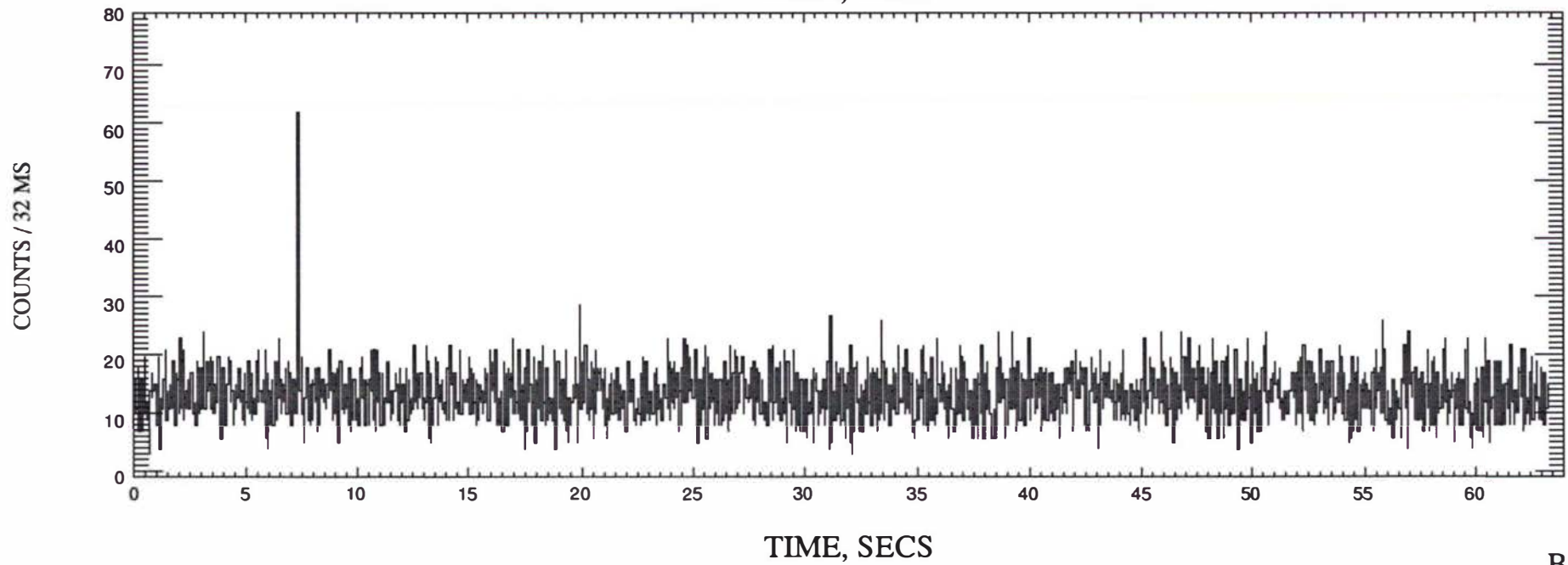
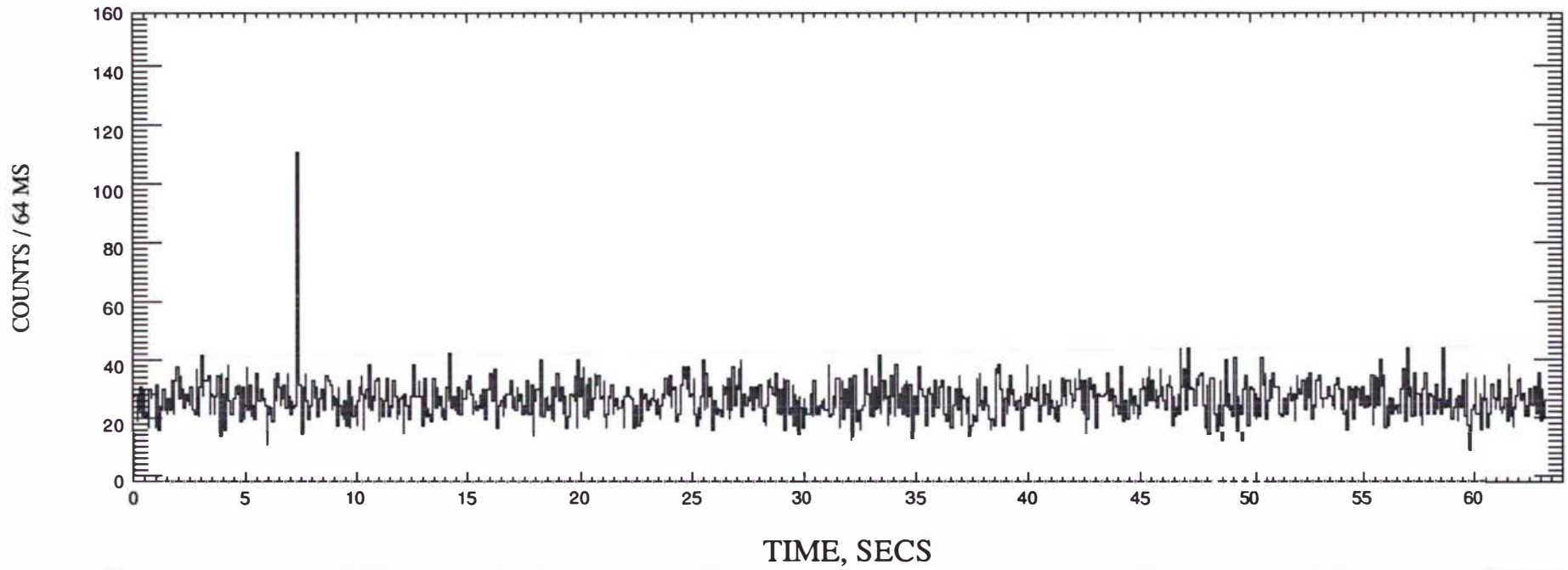
7/18/95



UNIVERSAL TIME

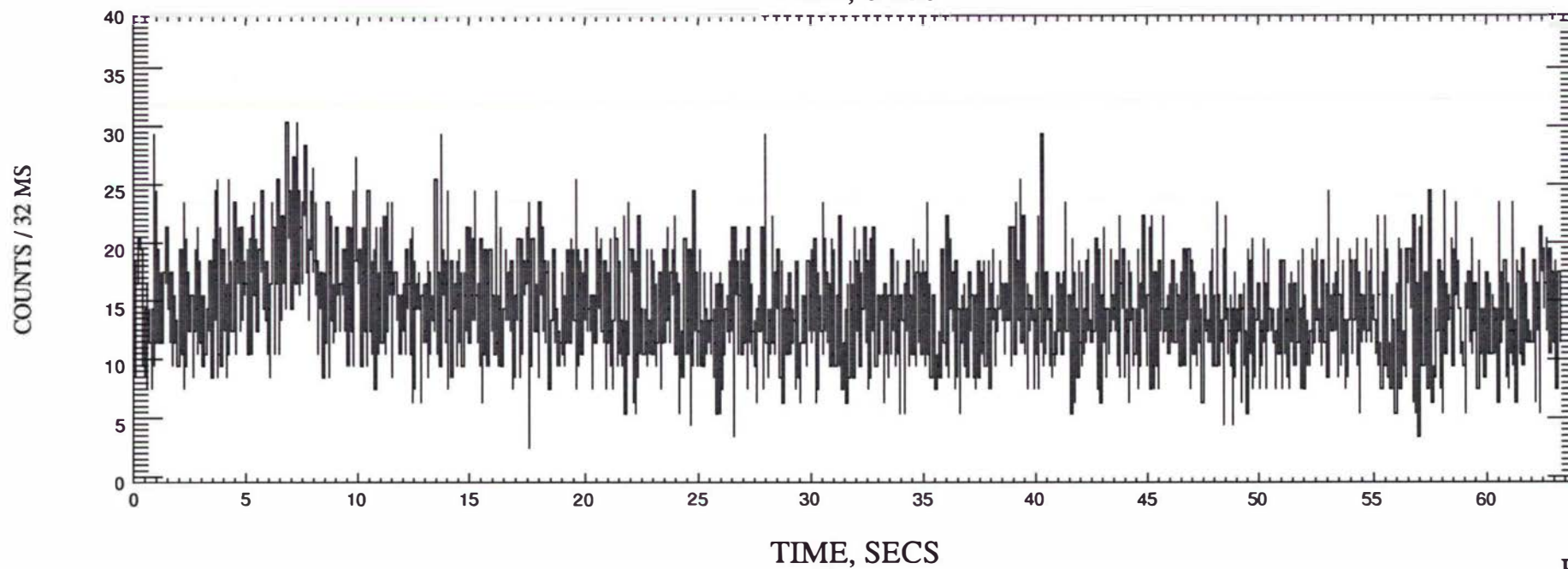
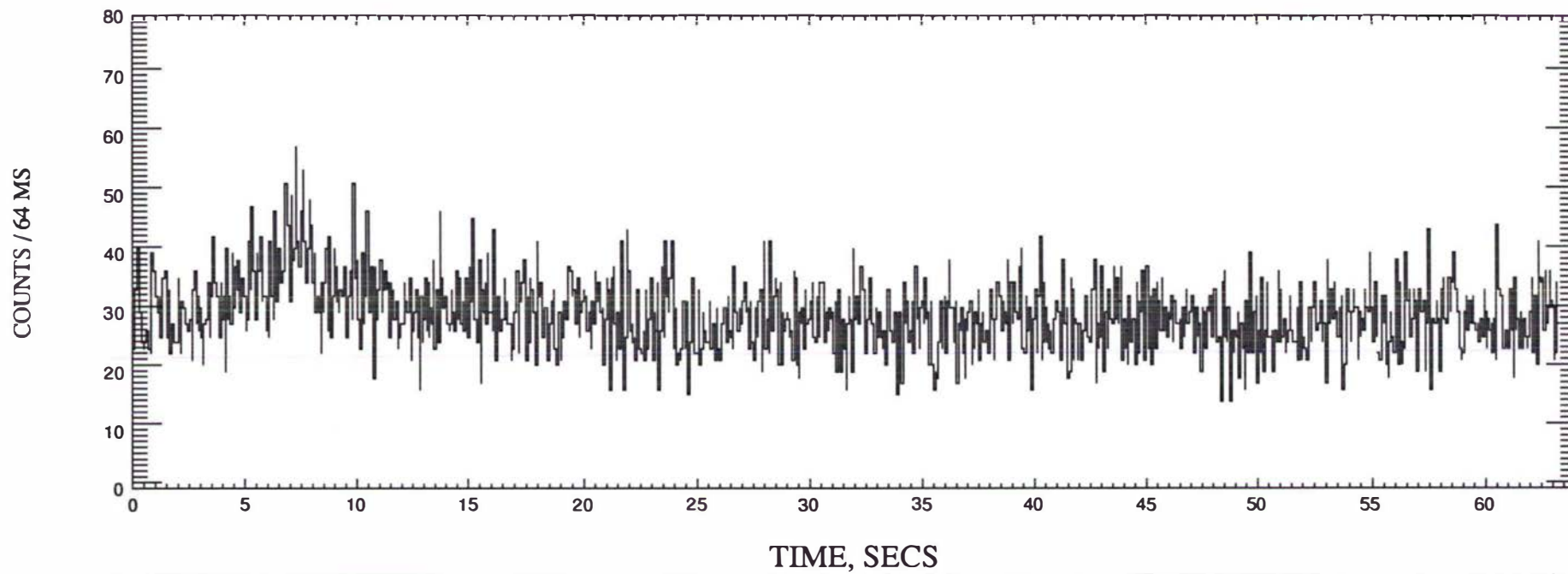
HUS 2A TRIGGERED DATA EDR day 42, year 1995
Burst Counter 1 at UT= 2.392782262166 h= 8614.016 s 02:23:34.016

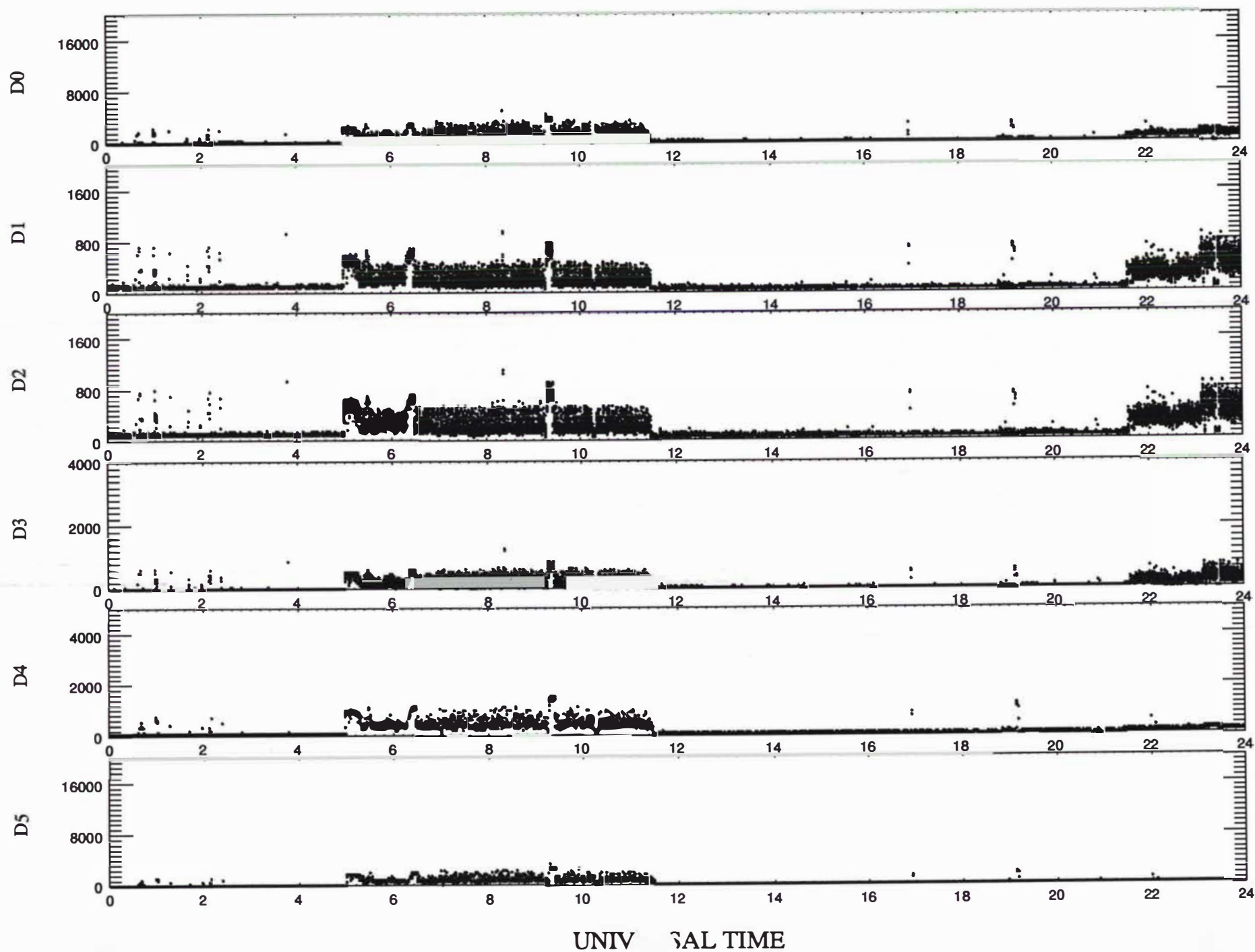
7/18/95



HUS 2A TRIGGERED DATA EDR day 42, year 1995
Burst Counter 2 at UT=20.020802574158 h=72074.889 s 20:01:14.889

7/18/95





From DEAL@fender.msfc.nasa.gov Mon Feb 13 10:10 PST 1995

Date: Mon, 13 Feb 1995 12:09:51 -0600 (CST)

From: DEAL@fender.msfc.nasa.gov

To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, CASS09BAND@fender.msfc.nasa.gov,
CASS09GRUBER@fender.msfc.nasa.gov, CASS09MATTESON@fender.msfc.nasa.gov,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3417

TIME: TJD=9760 SECONDS=15981

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

ELECTRON EVENT

From DEAL@fender.msfc.nasa.gov Mon Feb 13 10:13 PST 1995
Date: Mon, 13 Feb 1995 12:12:55 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@fender.msfc.nasa.gov, LHEAVXBARTHELMY@fender.msfc.nasa.gov,
15733SCHAEFER@fender.msfc.nasa.gov, CASS09BAND@fender.msfc.nasa.gov,
CASS09GRUBER@fender.msfc.nasa.gov, CASS09MATTESON@fender.msfc.nasa.gov,
PACIESAS@fender.msfc.nasa.gov, HORACK@fender.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3418

TIME: TJD=9760 SECONDS=44088

TYPE: SAA ENT SOLAR FLARE TRIGGER SIGNAL:N

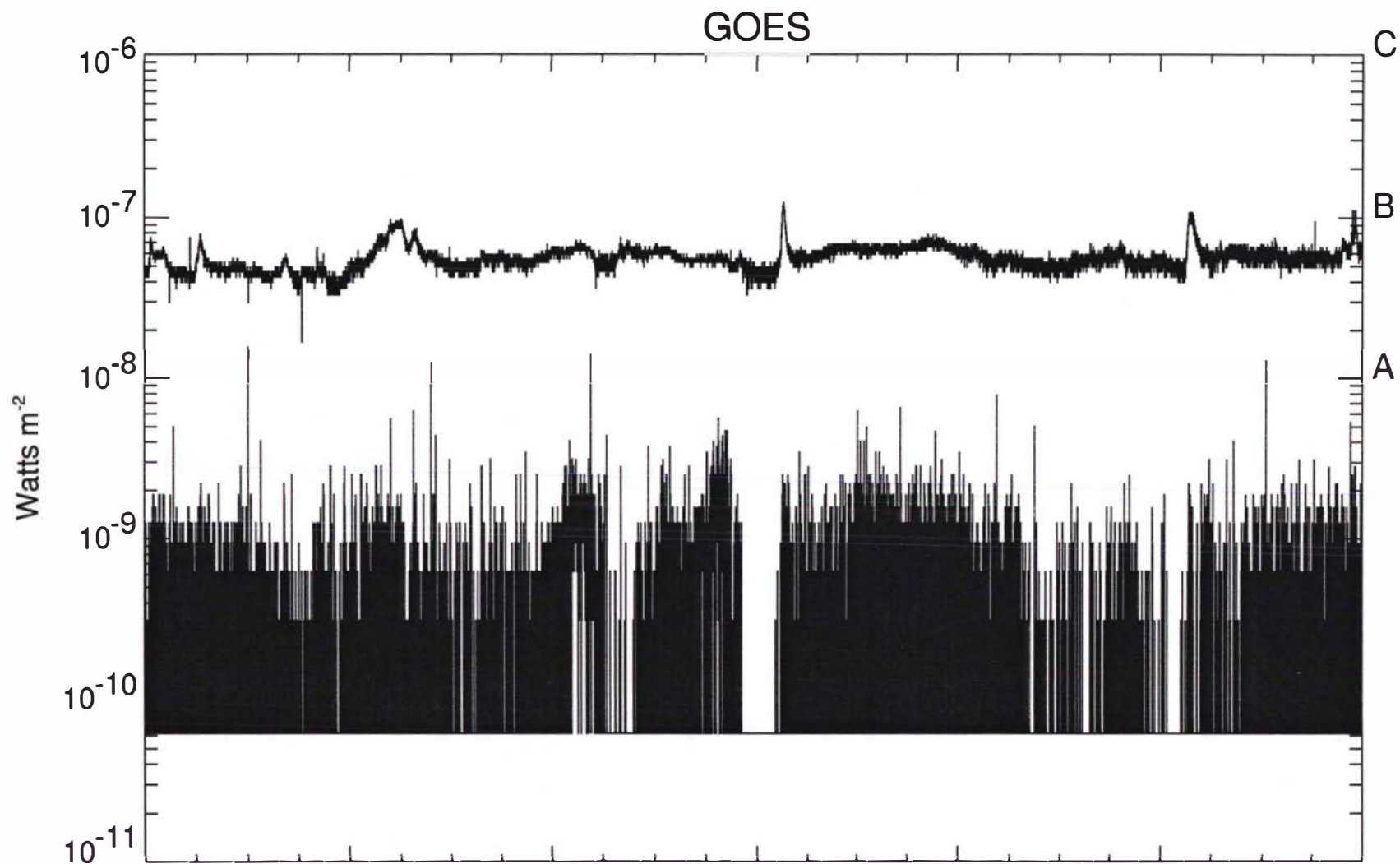
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

SAA ENTRY



Data Start: 95/02/12, 0000:01

Plot created: 95/02/14, 0514

Channel

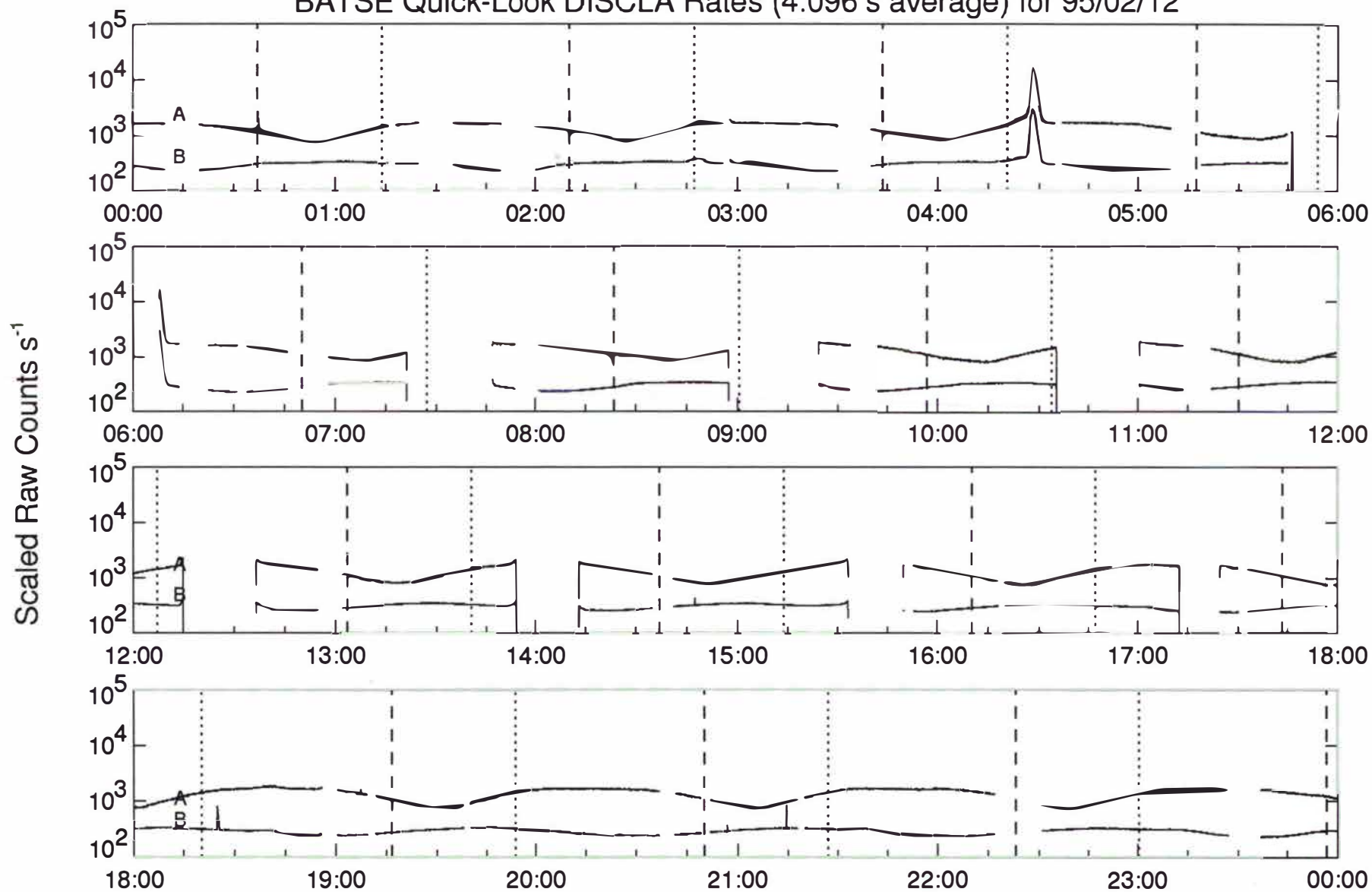
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/12



Current Time: 95/02/14, 0515 EDT

A: Channel 0 Most Sunward LAD

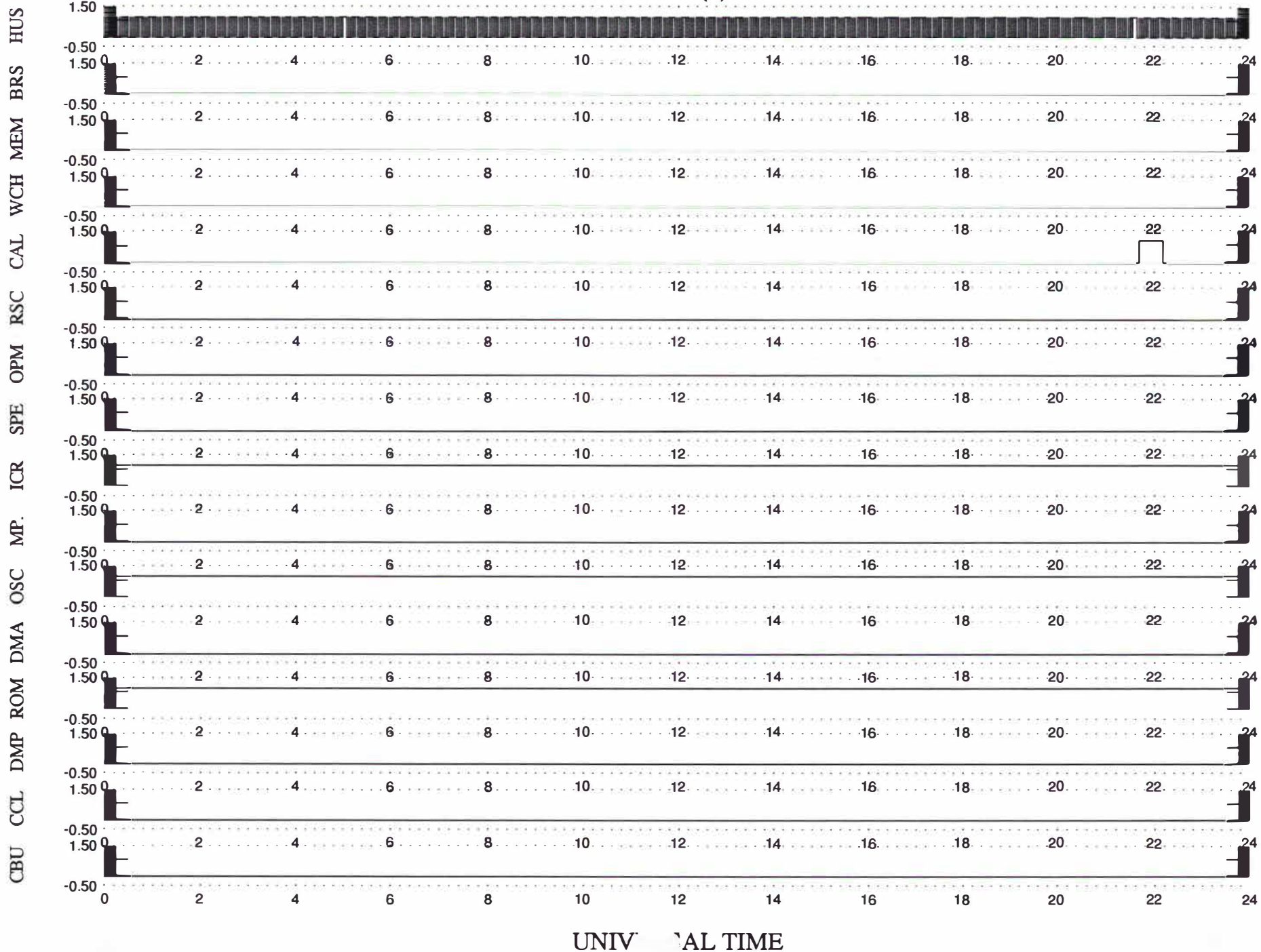
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

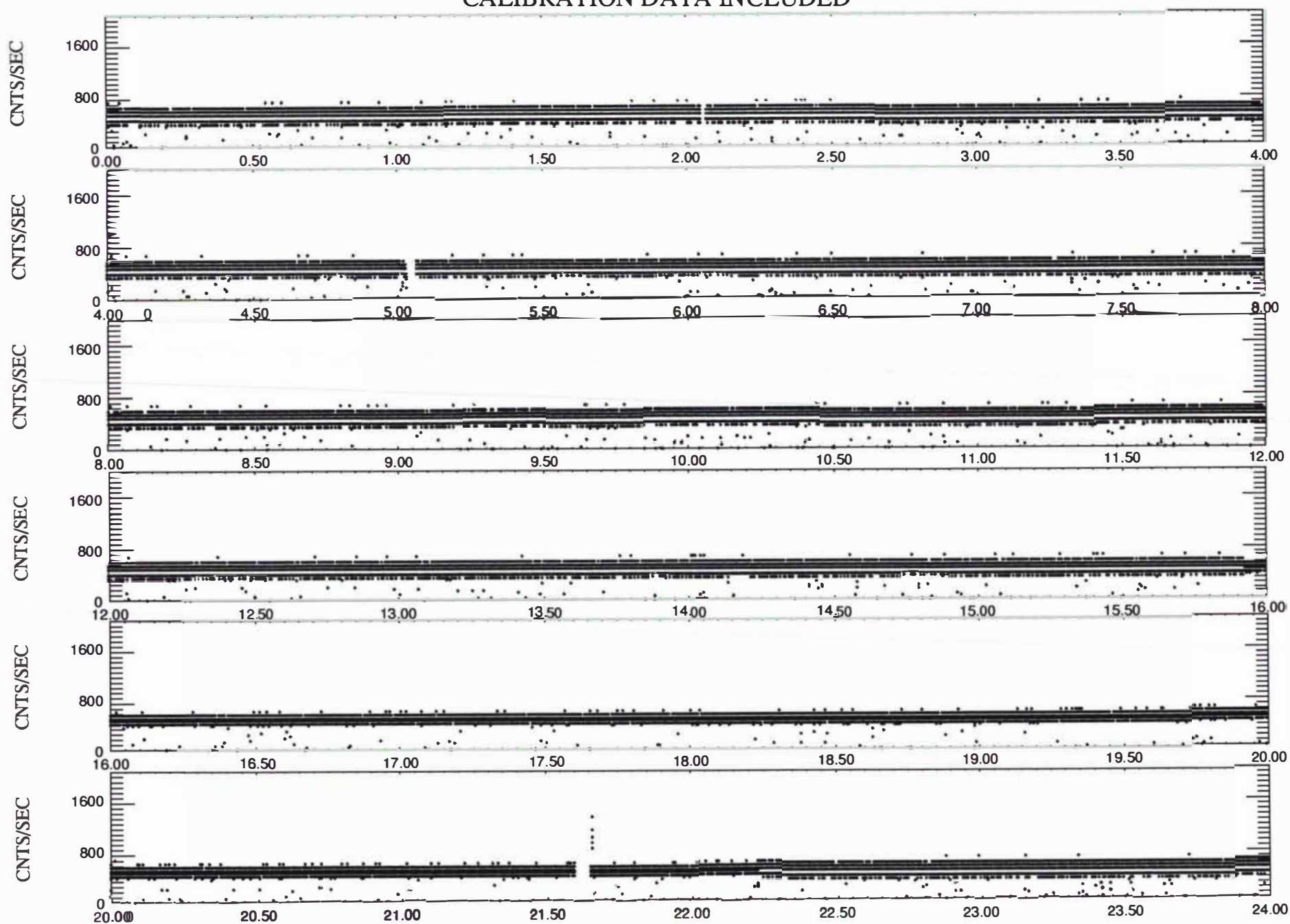
HUS MODES EDR day 43, year 1995 to day 43, year 1995
NO BURST (2)

7/18/95

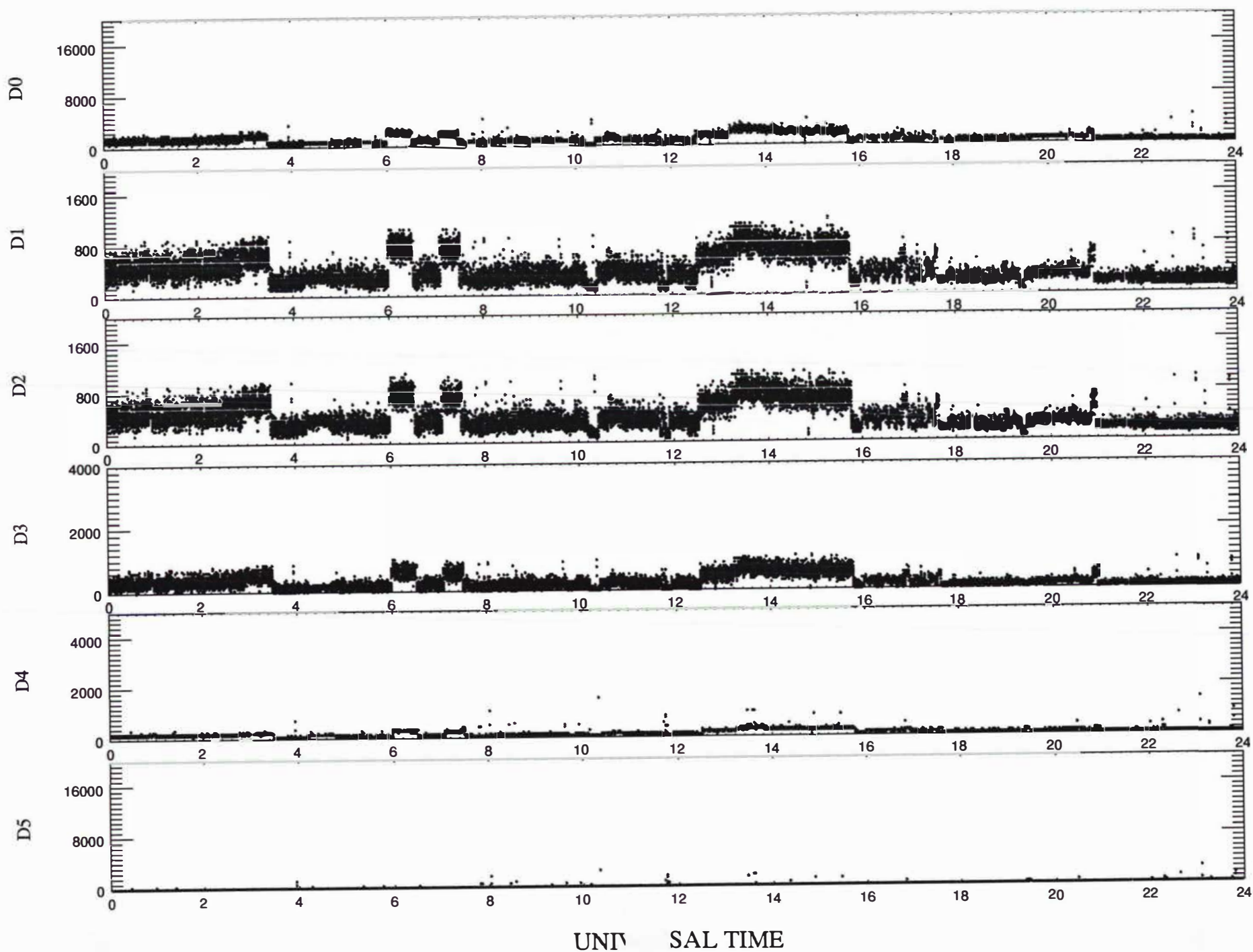


HUS 2A, MODE 1, NOT AVERAGED EDR day 43, year 1995 to day 43, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIVERSAL TIME



From HAGEDON@ssl.msfc.nasa.gov Wed Feb 15 09:16 PST 1995

Date: Wed, 15 Feb 1995 11:16:16 -0600 (CST)

From: HAGEDON@ssl.msfc.nasa.gov

To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3419

TIME: TJD=9761 SECONDS=02478

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT.

From HAGEDON@ssl.msfc.nasa.gov Wed Feb 15 09:19 PST 1995
Date: Wed, 15 Feb 1995 11:18:59 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3420

TIME: TJD=9761 SECONDS=11059

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From SAHI@ssl.msfc.nasa.gov Thu Feb 16 08:33 PST 1995
Date: Thu, 16 Feb 1995 10:33:34 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3421

TIME: TJD=9761 SECONDS=25597

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
PARTICLE EVENT.

From SAHI@ssl.msfc.nasa.gov Thu Feb 16 08:46 PST 1995
Date: Thu, 16 Feb 1995 10:46:10 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3422

TIME: TJD=9761 SECONDS=41452

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
TRIGGERED UPON ENTRY INTO SAA.

From SAHI@ssl.msfc.nasa.gov Thu Feb 16 08:49 PST 1995
Date: Thu, 16 Feb 1995 10:49:36 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3423

TIME: TJD=9761 SECONDS=53397

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

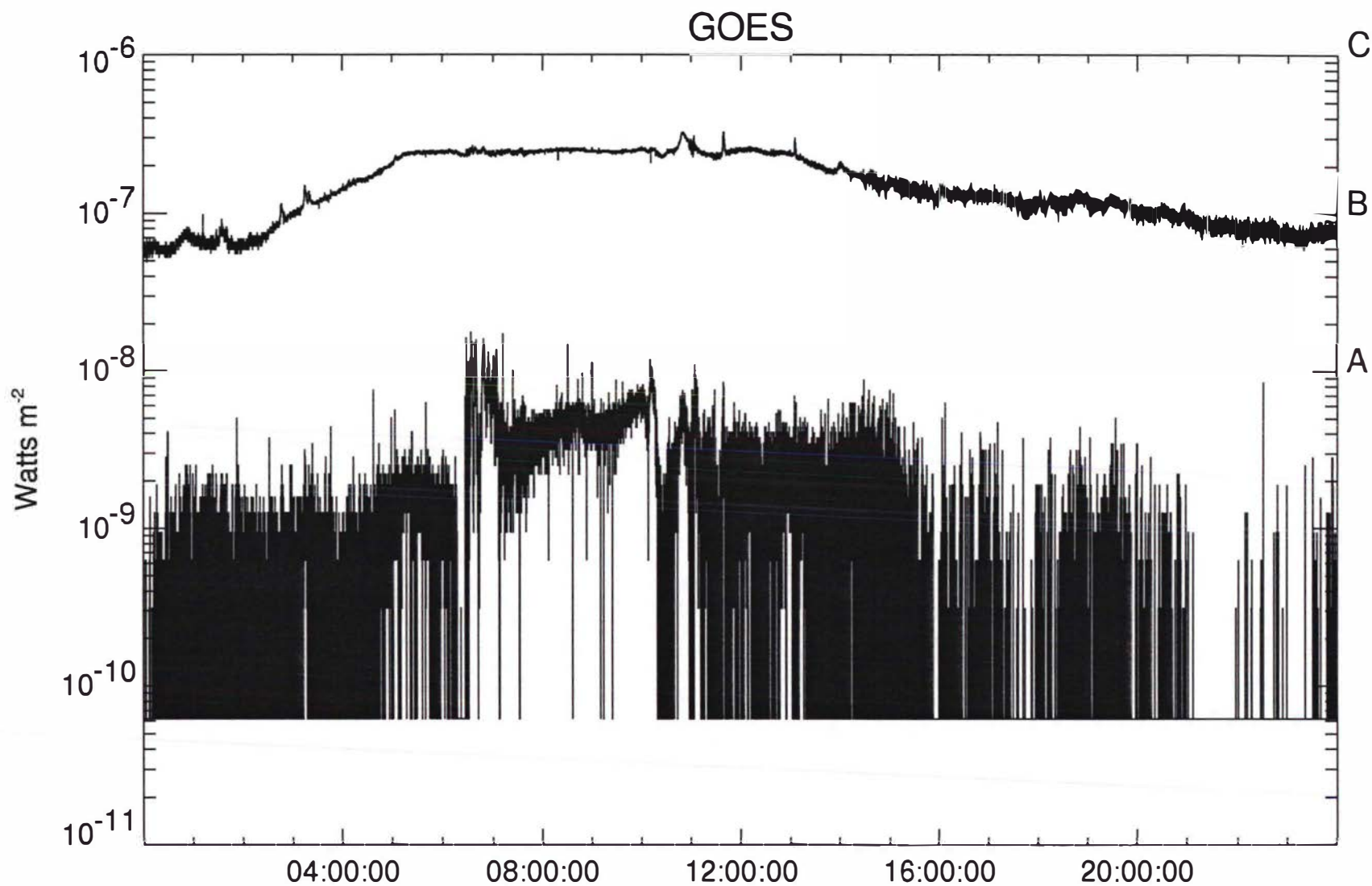
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

TRIGGERED UPON ENTRY INTO SAA.



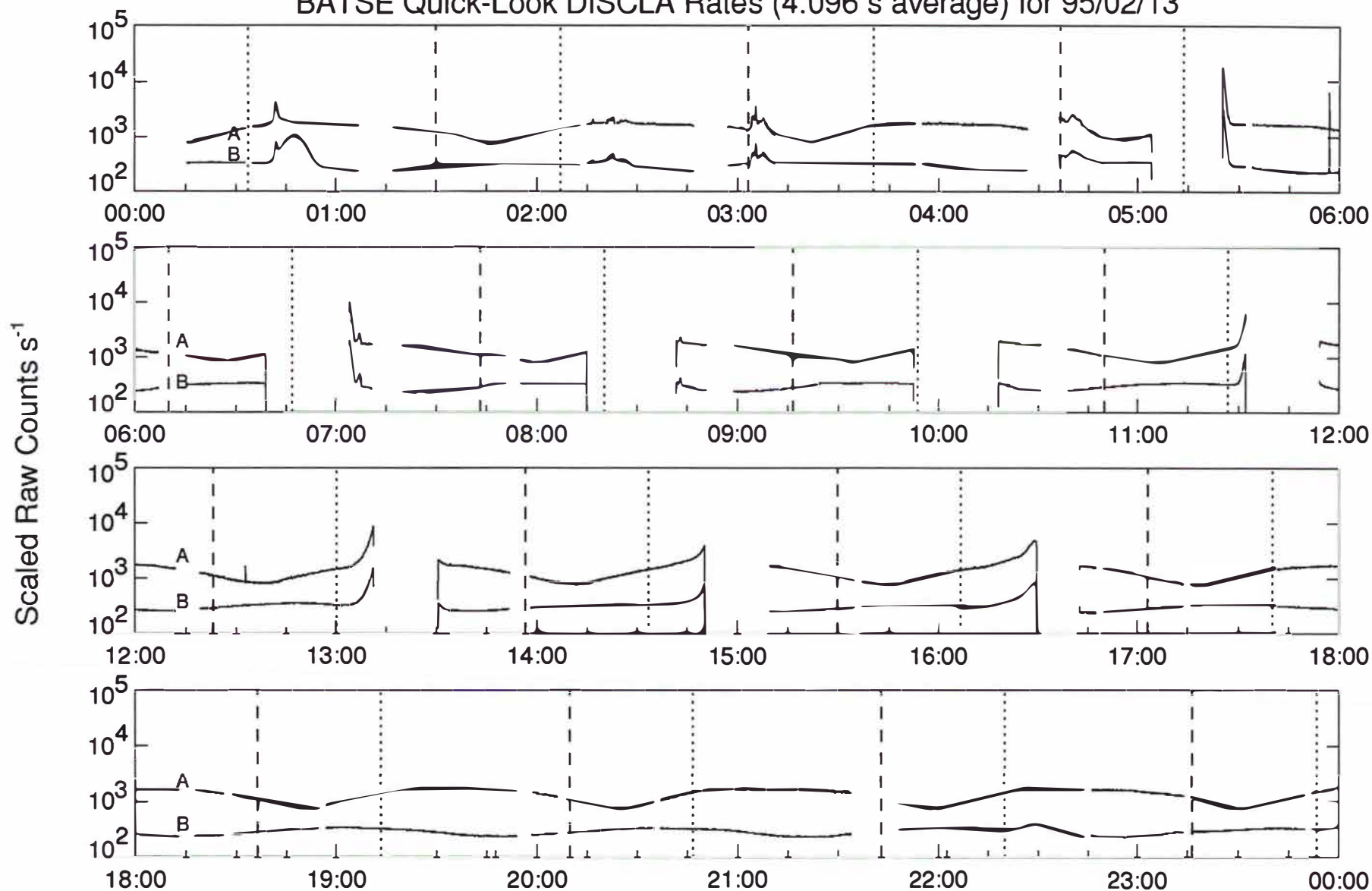
Data Start: 95/02/13, 0000:02

Plot created: 95/02/15, 0514

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 95/02/13



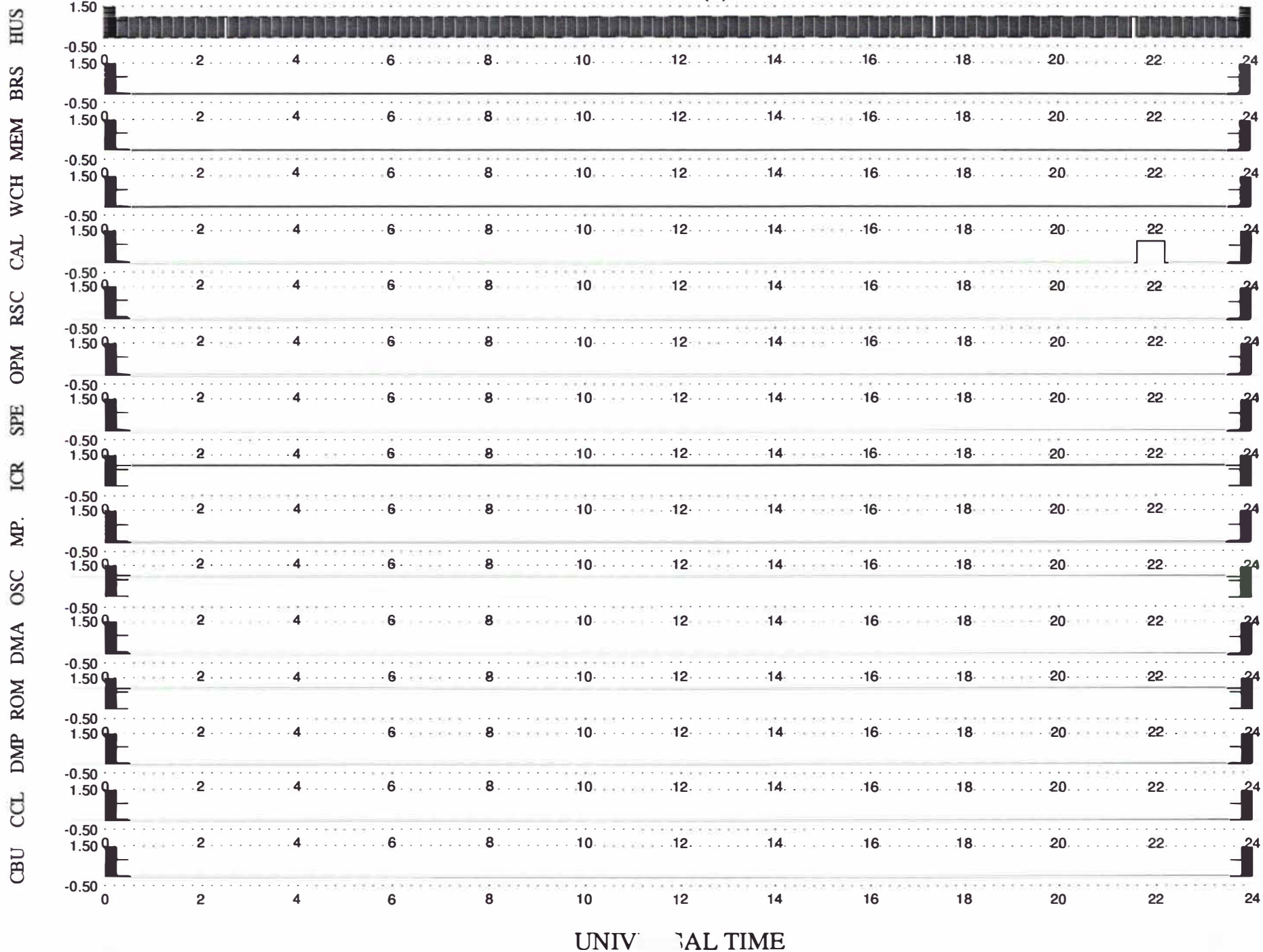
Current Time: 95/02/15, 0514 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

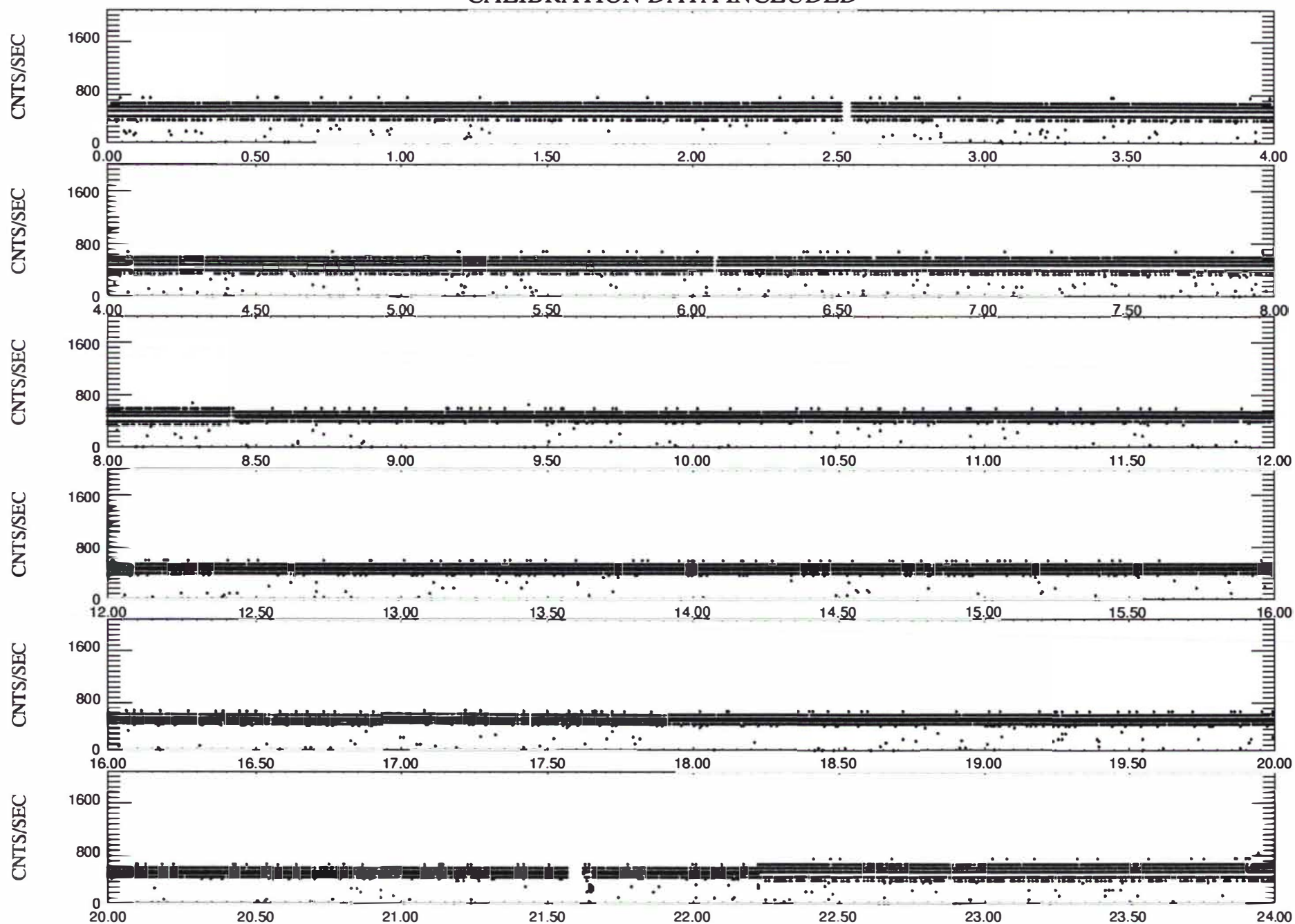
HUS MODES EDR day 44, year 1995 to day 44, year 1995
NO BURST (2)

7/18/95

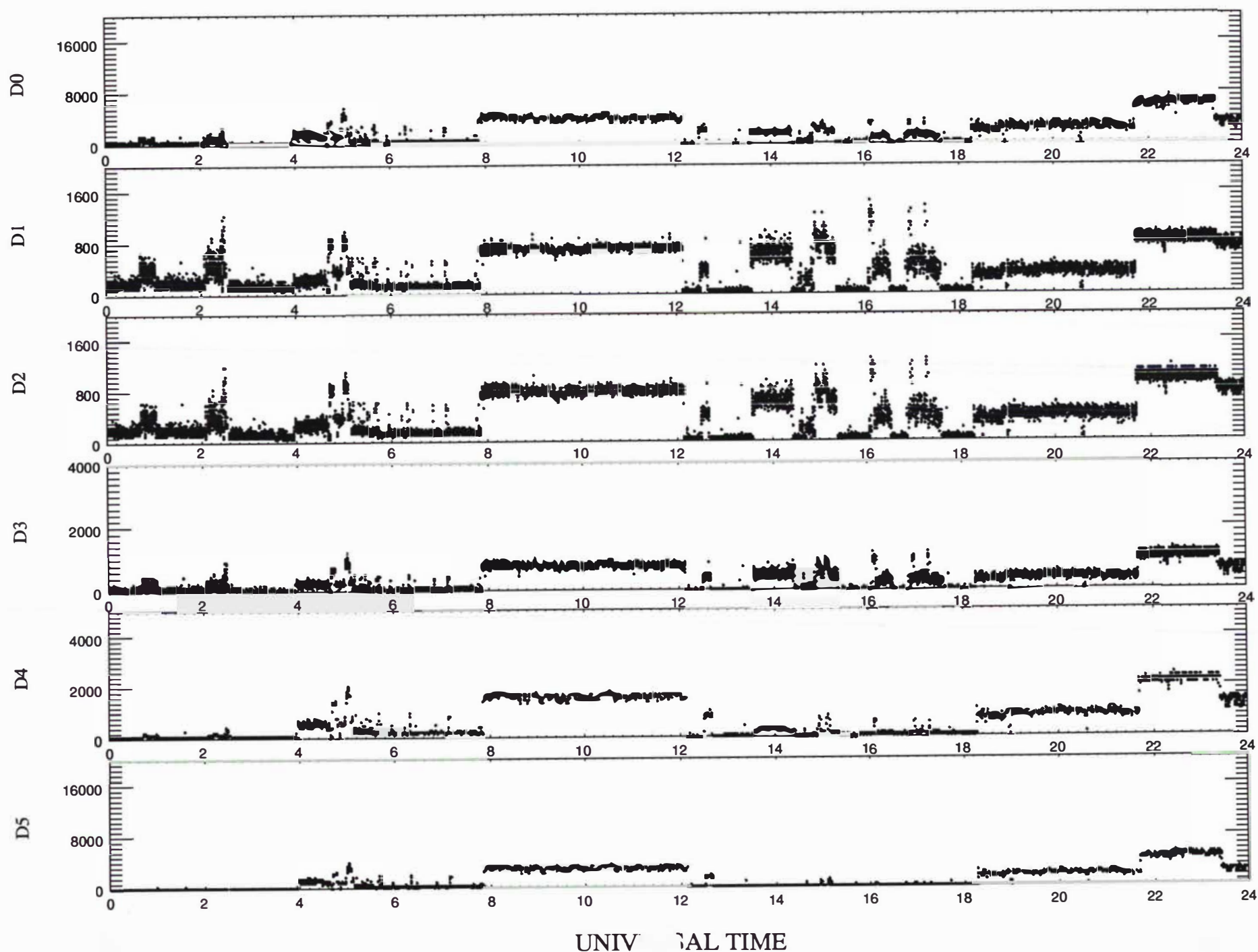


HUS 2A, MODE 1, NOT AVERAGED EDR day 44, year 1995 to day 44, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. TIME



From RICHARDSON@ssl.msfc.nasa.gov Thu Feb 16 09:17 PST 1995
Date: Thu, 16 Feb 1995 11:17:23 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3424

TIME: TJD=9762 SECONDS=3050

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRONS

From RICHARDSON@ssl.msfc.nasa.gov Thu Feb 16 09:21 PST 1995
Date: Thu, 16 Feb 1995 11:21:14 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3425

TIME: TJD=9762 SECONDS=10830

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRONS

From RICHARDSON@ssl.msfc.nasa.gov Thu Feb 16 09:24 PST 1995
Date: Thu, 16 Feb 1995 11:24:10 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3426

TIME: TJD=9762 SECONDS=17057

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRONS

From scott@xtelab.gsfc.nasa.gov Tue Feb 14 11:07 PST 1995
Date: Tue, 14 Feb 1995 14:02:49 -0500
From: Scott Barthelmy <scott@xtelab.gsfc.nasa.gov>
To: ables@sl.gov, akerlof@mich.physics.lsa.umich.edu, astmph@earn.cvut.cz,
astr008%nmsuvm1.BITNET@cunyvm.cuny.edu,
astroin%bgearn.BITNET@cunyvm.cuny.edu, bmcnamar@nmsu.edu,
boer@cesr.cnes.fr, butterworth@heavax.gsfc.nasa.gov,
cline@tgrs.gsfc.nasa.gov, ddupre@sstcxl.lanl.gov,
f.fleischmann@abbs.heide.de, fishman@ssl.msfc.nasa.gov,
gehrels@lheavx.gsfc.nasa.gov, glangsto@sadira.gb.nrao.edu,
grb%bgcict.BITNET@cunyvm.cuny.edu, holger@astro.ku.dk, jbloch@lanl.gov,
khurley@space6.ssl.berkeley.edu, klet@virgo.jcu.cz,
kouvelioutou@ssl.msfc.nasa.gov, kroll@nova.tat.physik.uni-tuebingen.de,
lee@mich.physics.lsa.umich.edu, llo@sl.gov,
lpicciri@bartol.bartol.udel.edu, meegan@ssl.msfc.nasa.gov,
mlimon@florero.ll.iac.es, palmer@tgrs.gsfc.nasa.gov, park@sl.gov,
ppravec@asu.cas.cz, rhudec@asu.cas.cz, rmb@sl.gov,
schaefer@tgrs.gsfc.nasa.gov, scott@xtelab.gsfc.nasa.gov,
tbeasley@aoc.nrao.edu, tharriso@nmsu.edu, tony@ucscloc.ucsc.edu,
varadi@asu.cas.cz, wilkerson@csa2.lbl.gov
Subject: BACODINE: Trigger 3426 is NOT a GRB

BACODINE sites:

14 Feb 95

A BACODINE notice was sent out at 04:44 UT 14 Feb 95.

This was for BATSE trigger# 3426.

The intensity was 8858, and the RA=13.99 Dec=-68.14 (current epoch).

THIS IS NOT A REAL GRB! THIS IS NOT A REAL GRB!

This is some sort of Particle Event upon exiting the SAA.

Scott Barthelmy	NASA-GSFC, Code 661, Greenbelt, MD	20706
PHONE: 301-286-3106	(work)	
EMAIL: scott@xtelab.gsfc.nasa.gov		
PAGER: 1-800-SKY-PAGE, PIN 2618712	(by phone)	
PAGER: 2618712@skymail.com	(by email, 240 characters max per message)	

PS The trigger ID filtering starts tomorrow (15 Feb 95) for those sites that have selected it.

From RICHARDSON@ssl.msfc.nasa.gov Wed Feb 15 07:14 PST 1995
Date: Wed, 15 Feb 1995 9:14:28 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3427

TIME: TJD=9762 SECONDS=44841

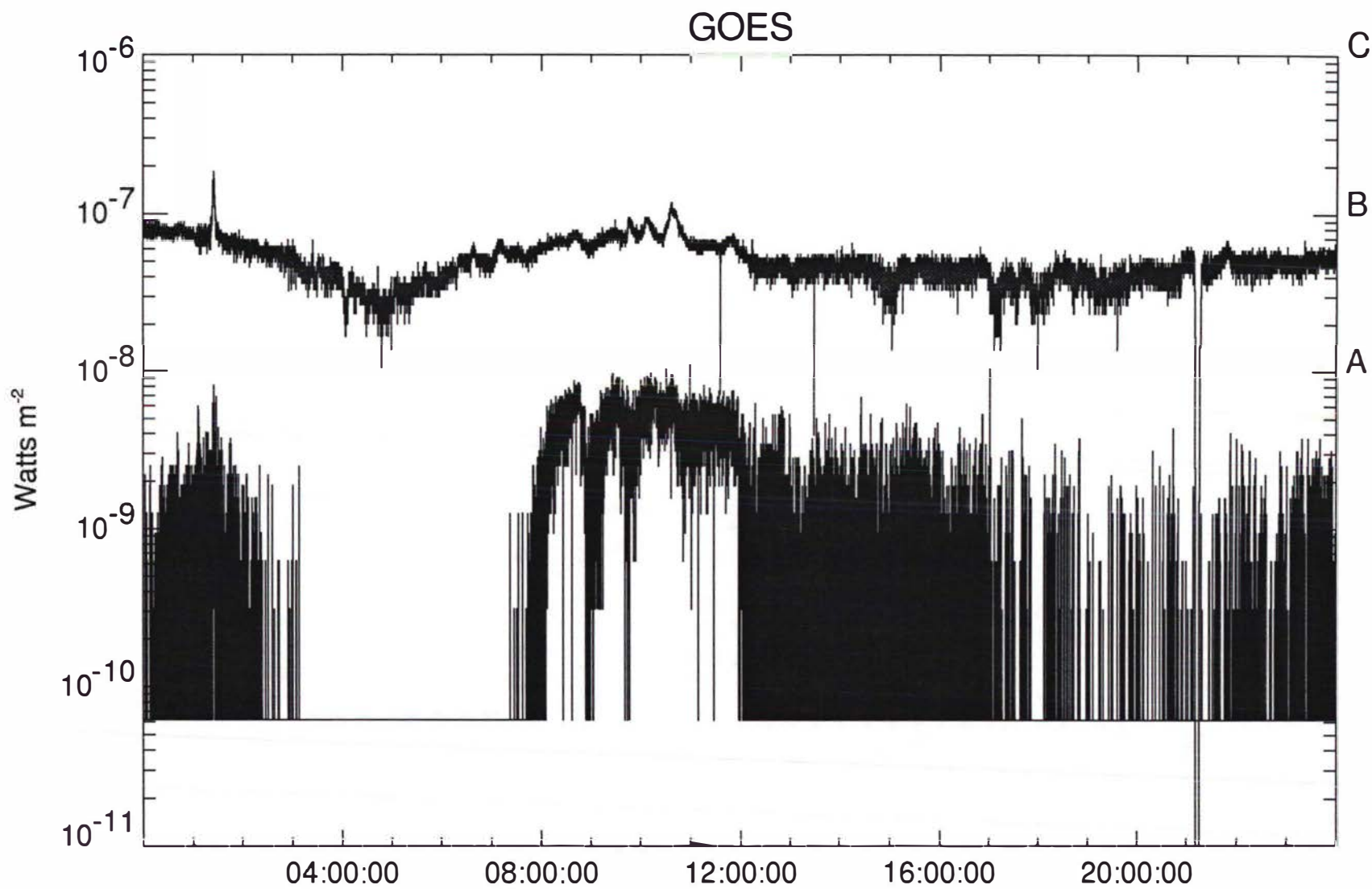
TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.



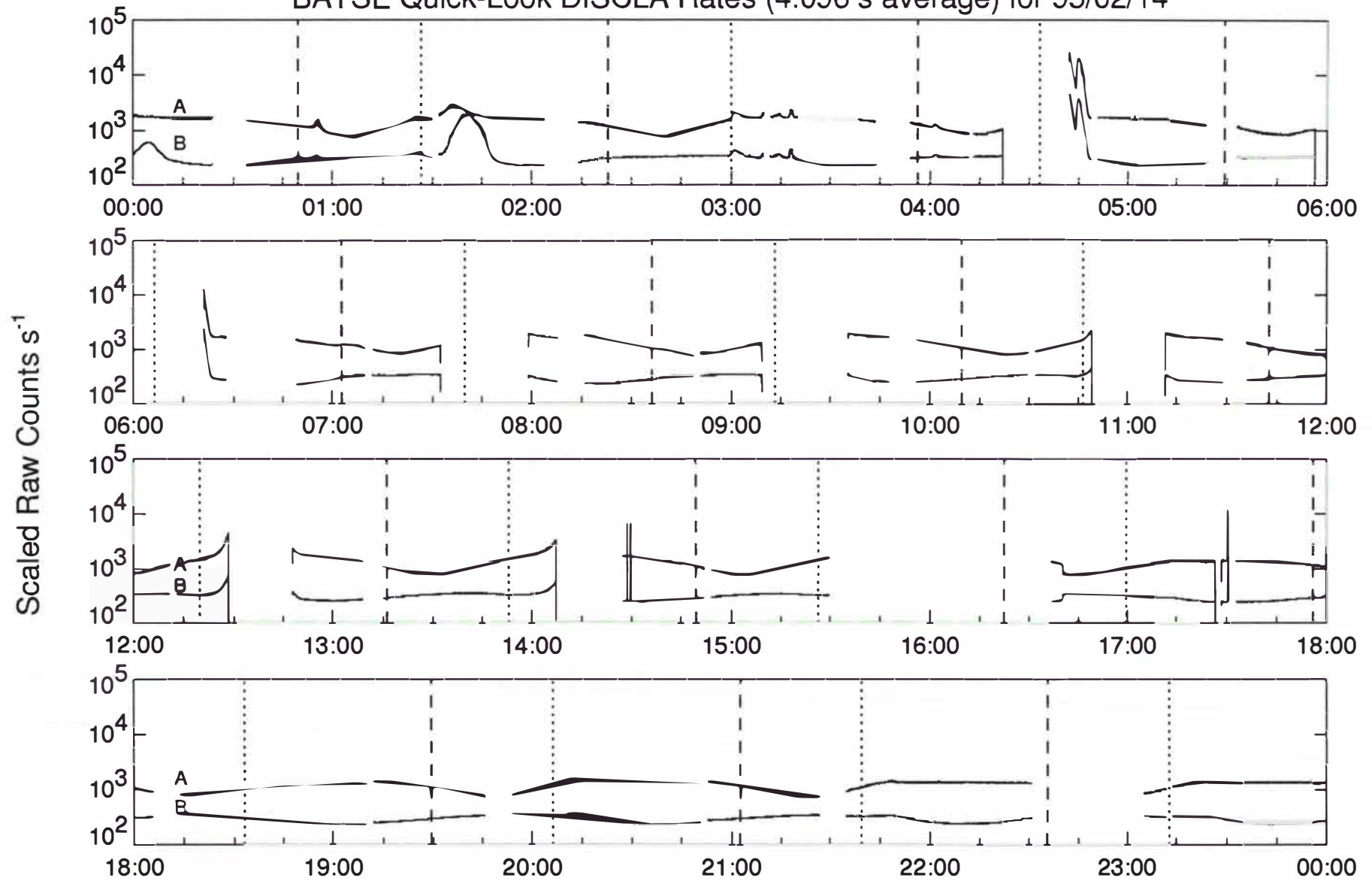
Data Start: 95/02/14, 0000:00

Plot created: 95/02/16, 0514

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 95/02/14

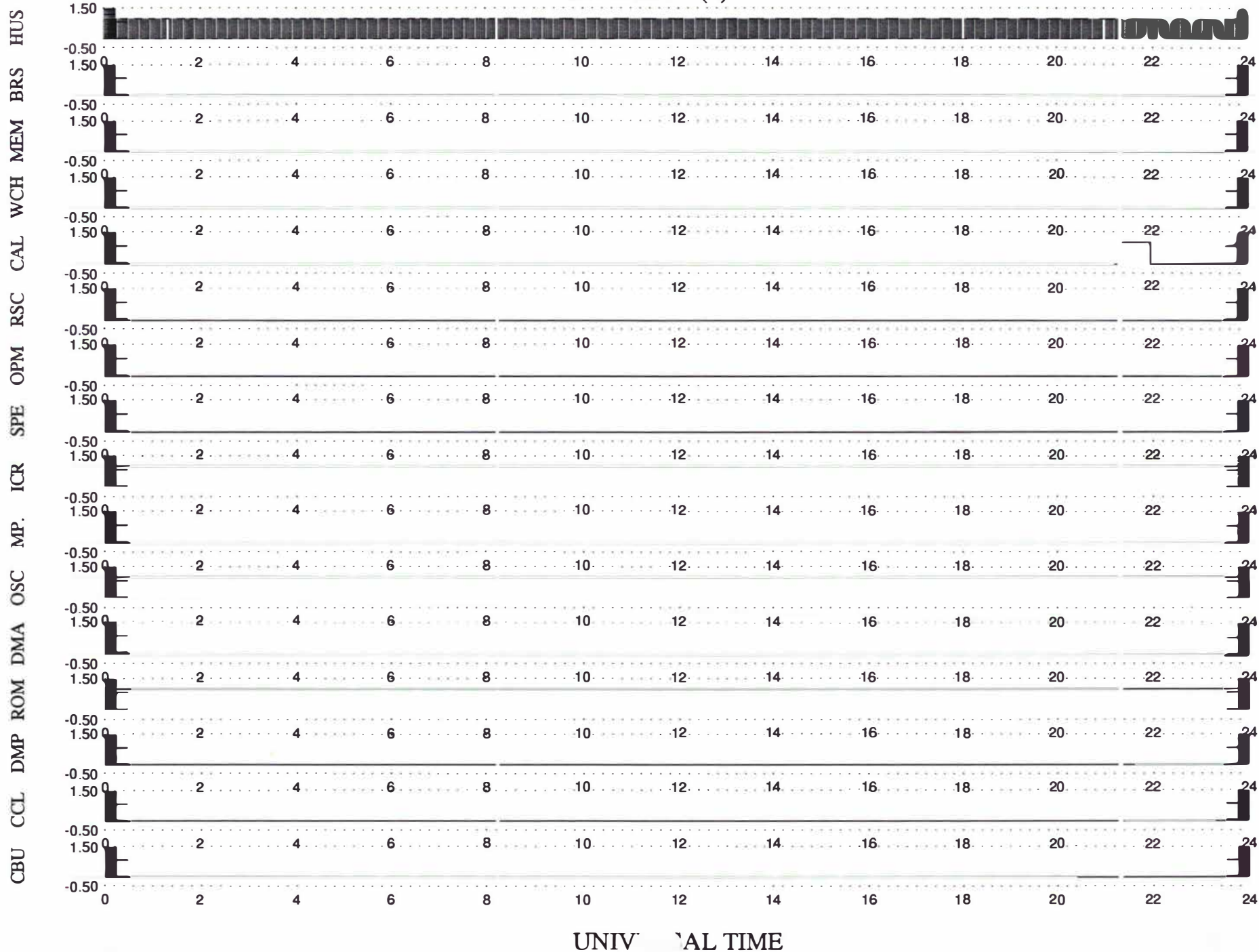


Current Time: 95/02/16, 0515 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

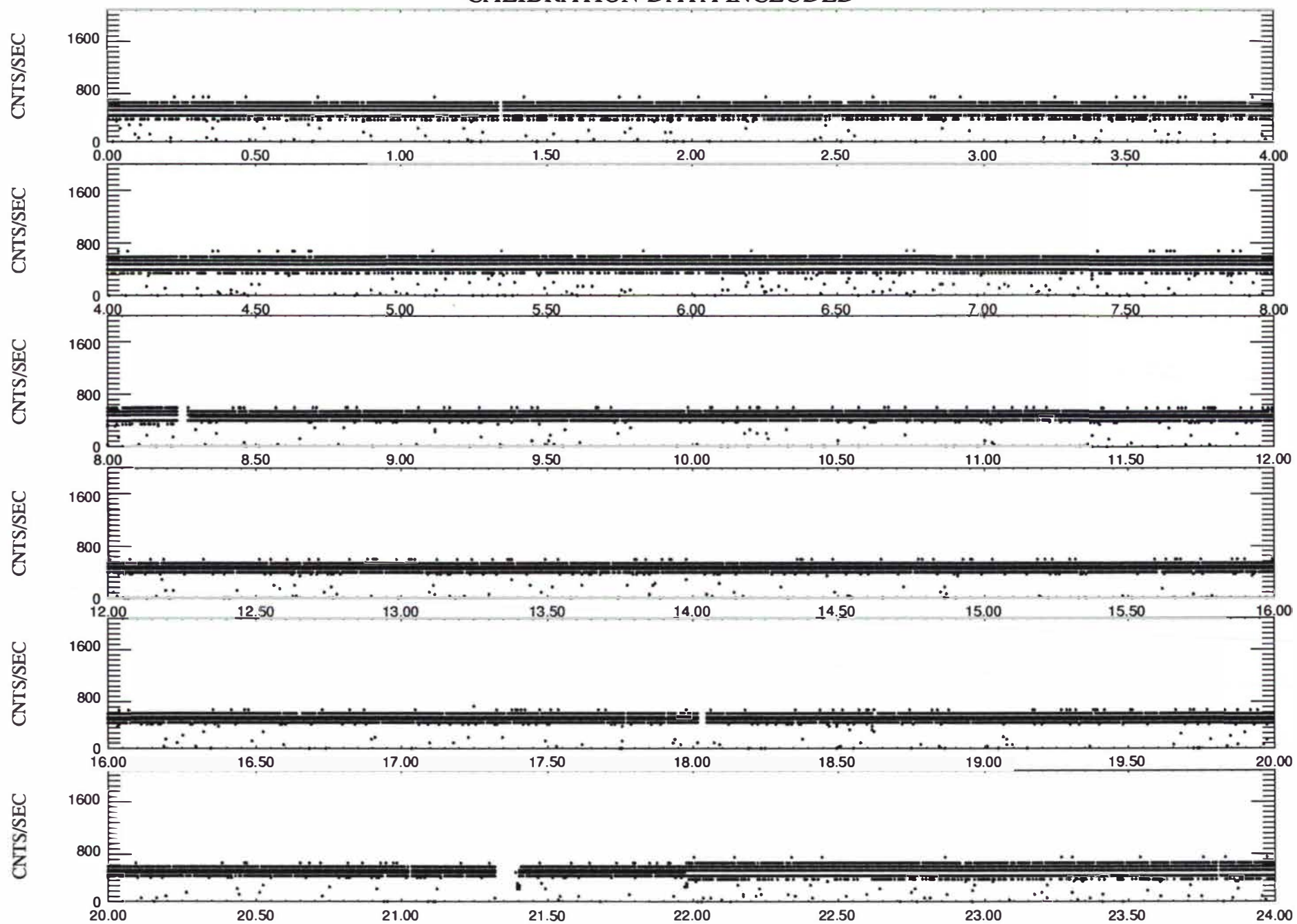
* Solar Burst Trigger
 + Solar Flare

7/18/95

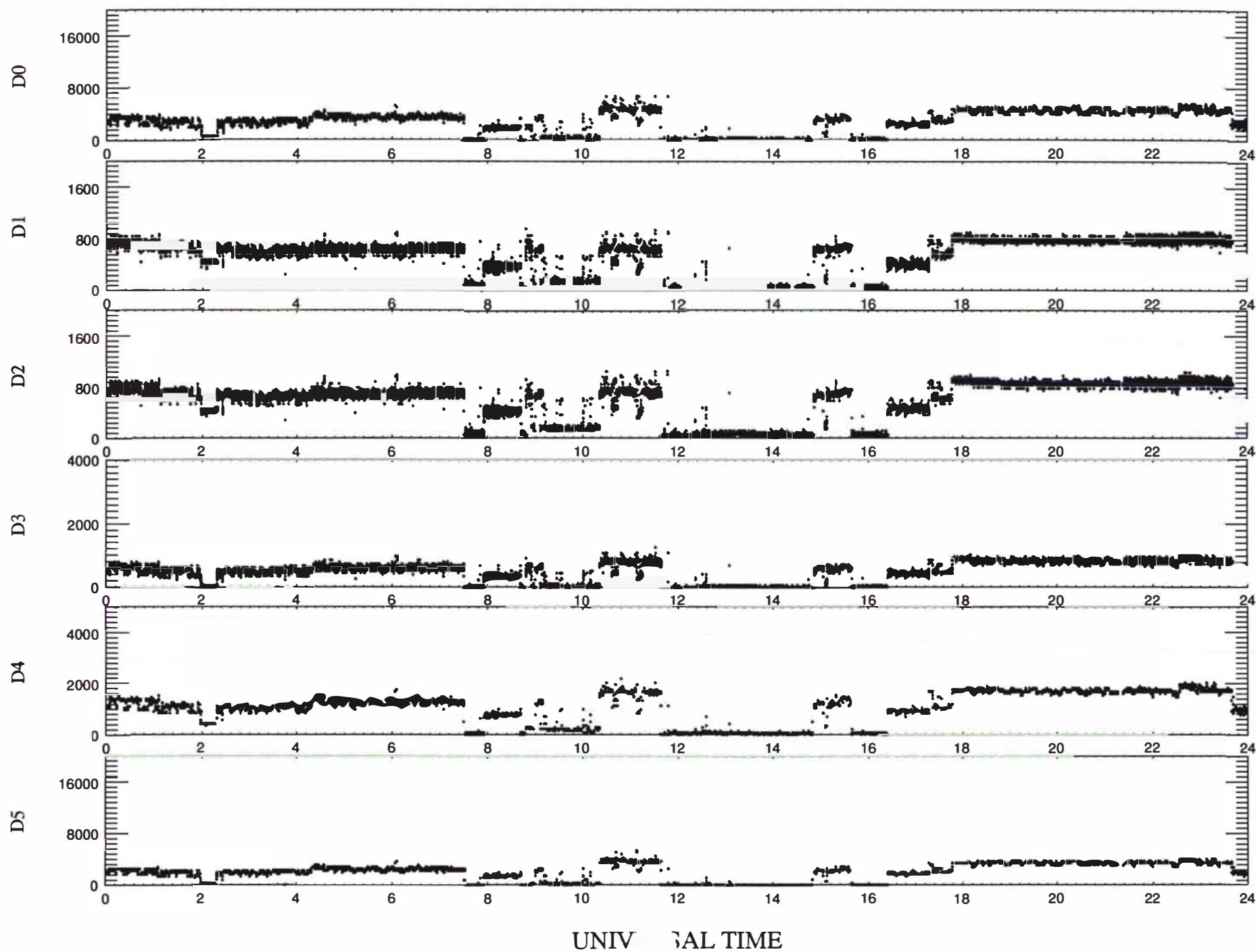


HUS 2A, MODE 1, NOT AVERAGED EDR day 45, year 1995 to day 45, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIVERSAL TIME



From vnp@isac.ernet.in Mon Sep 15 23:38 PDT 1997
From: vnp@isac.ernet.in
>Received: from sx07 by isac.ernet.in (AIX 3.2/UCB 5.64/4.03)
id AA19488; Tue, 16 Sep 1997 12:04:45 GMT
Date: Tue, 16 Sep 1997 12:04:44 +0000 (CUT)
X-Sender: vnp@sx07
To: khurley@sunspot.ssl.berkeley.edu
Subject: SROSS-C2 events of 94-95
Mime-Version: 1.0

Dear Prof.Hurley,

Thank you very much for the reply. I shall be grateful if you could kindly confirm whether any other spacecraft recorded events of particle/solar/cosmic origin listed below

1. 5 Oct 94 11:31:56 UT --peak lasted 40s came back to bg. followed by another peak at 11:34 UT in both 20-100keV (LE)channel and 100-1024keV (HE)channel.
Solar geophysical data(SGD) reports class C3.0 flare at 11:36UT lasting until 11:58UT.
BATSE solar flare data base reports event at 11:57UT
2. 5 Oct 94 19:49:07 UT - light curve shows rapid variability in LEC
SGD reports B1.9 flare between 19:33 and 19:51 with peak at 19:49.
3. 13 Oct 94 16:08:57 UT -- peak lasts 50s in LEC and 30s in HEC.
SGD reports B3.7 flare between 16:06 and 16:48 with peak at 16:18.
4. 15 Feb 95 12:00:28 UT --light curve shows rapid variability in LEC.
16 Feb 95 11:45:42 UT -- peak lasts 80s in LEC and 60s in HEC.
SGD reports B1.2 flare between 11:52 and 12:02 with peak at 11:56UT
6. 30 Jan 95 12:11:10UT -- peak lasted 30s in LEC and HEC
SGD reports B9.2 flare at 11:57 upto 12:22 peak at 12:11UT
7. 30 Jan 95 19:02:41 UT --peak saturated (>2048c/s) in LEC lasted 80s in LEC & HEC
SGD reports C4.8 flare between 19:04 and 19:17 peak at 19:08 UT
8. 29 Mar 95 19:16:19 --light curve shows rapid variability in LEC
SGD reports C1.9 flare between 18:51 and 19:05 peak at 18:52 UT

Regards,
padmini

From khurley@sunspot Fri Feb 17 08:52 PST 1995
Date: Fri, 17 Feb 1995 08:52:50 -0800
From: khurley@sunspot (Kevin Hurley)
To: cline@lheavx.gsfc.nasa.gov, khurley@sunspot
Subject: Ulysses burst
Cc: teegarden@lheavx.gsfc.nasa.gov

Dear Tom,

Ulysses triggered on a very short event around 08:09 Feb 15.
It may be particle-induced, but I'm not sure. Anything from
KONUS or TGRS?

Kevin

KONUS - no

From SAHI@ssl.msfc.nasa.gov Thu Feb 16 12:49 PST 1995
Date: Thu, 16 Feb 1995 14:49:01 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3428

TIME: TJD=9763 SECONDS=14384

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

TRIGGERED UPON EXIT FROM SAA.

From SAHI@ssl.msfc.nasa.gov Thu Feb 16 12:54 PST 1995
Date: Thu, 16 Feb 1995 14:54:12 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3429

TIME: TJD=9763 SECONDS=42326

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

TRIGGERED UPON ENTRY INTO SAA.

From SAHI@ssl.msfc.nasa.gov Thu Feb 16 13:00 PST 1995

Date: Thu, 16 Feb 1995 14:59:52 -0600 (CST)

From: SAHI@ssl.msfc.nasa.gov

To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu

Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3430

TIME: TJD=9763 SECONDS=81320

TYPE: PARTICL

SOLAR FLARE TRIGGER SIGNAL:N

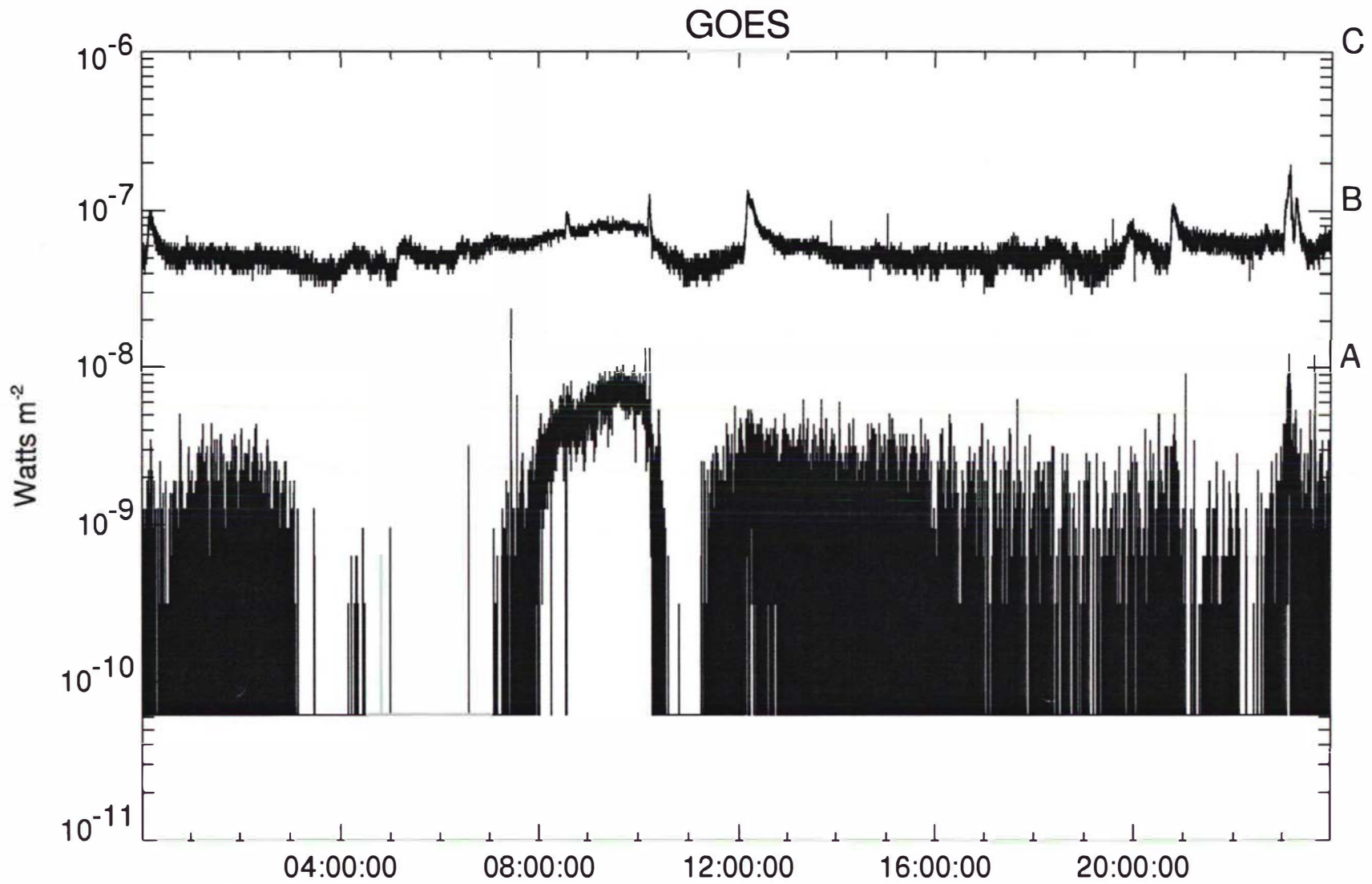
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

PARTICLE EVENT.



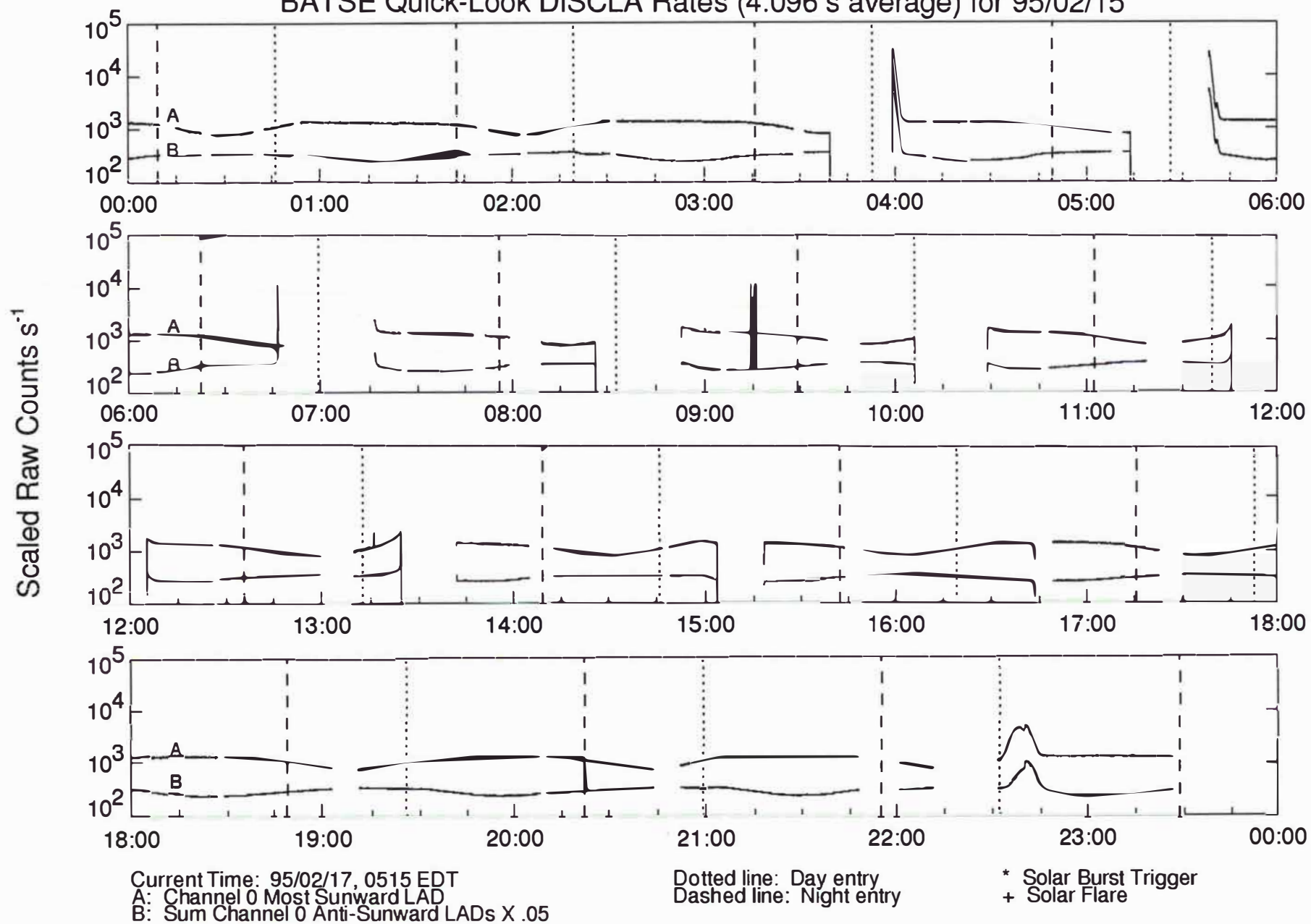
Data Start: 95/02/15, 0000:01

Plot created: 95/02/17, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

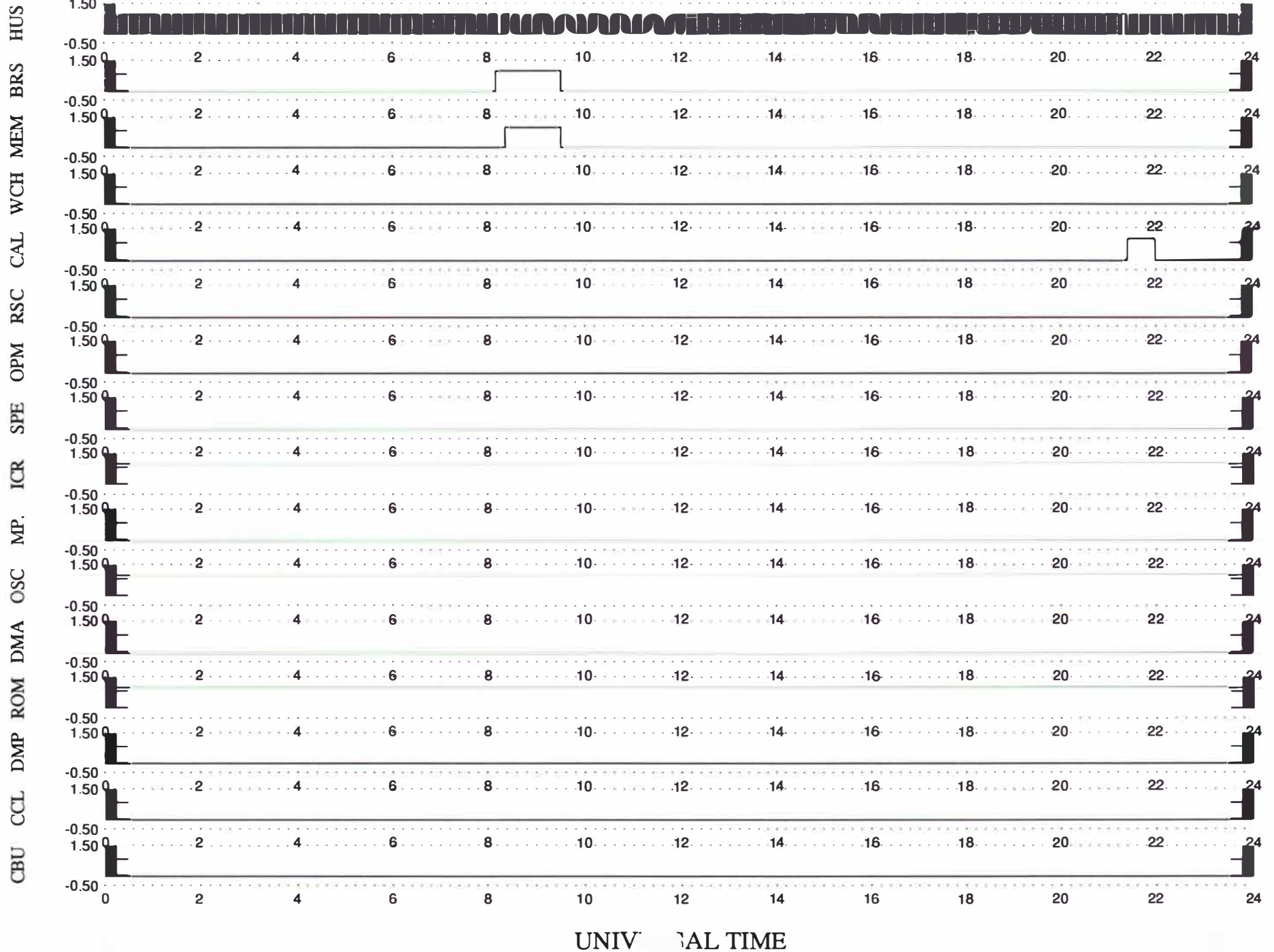
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/15



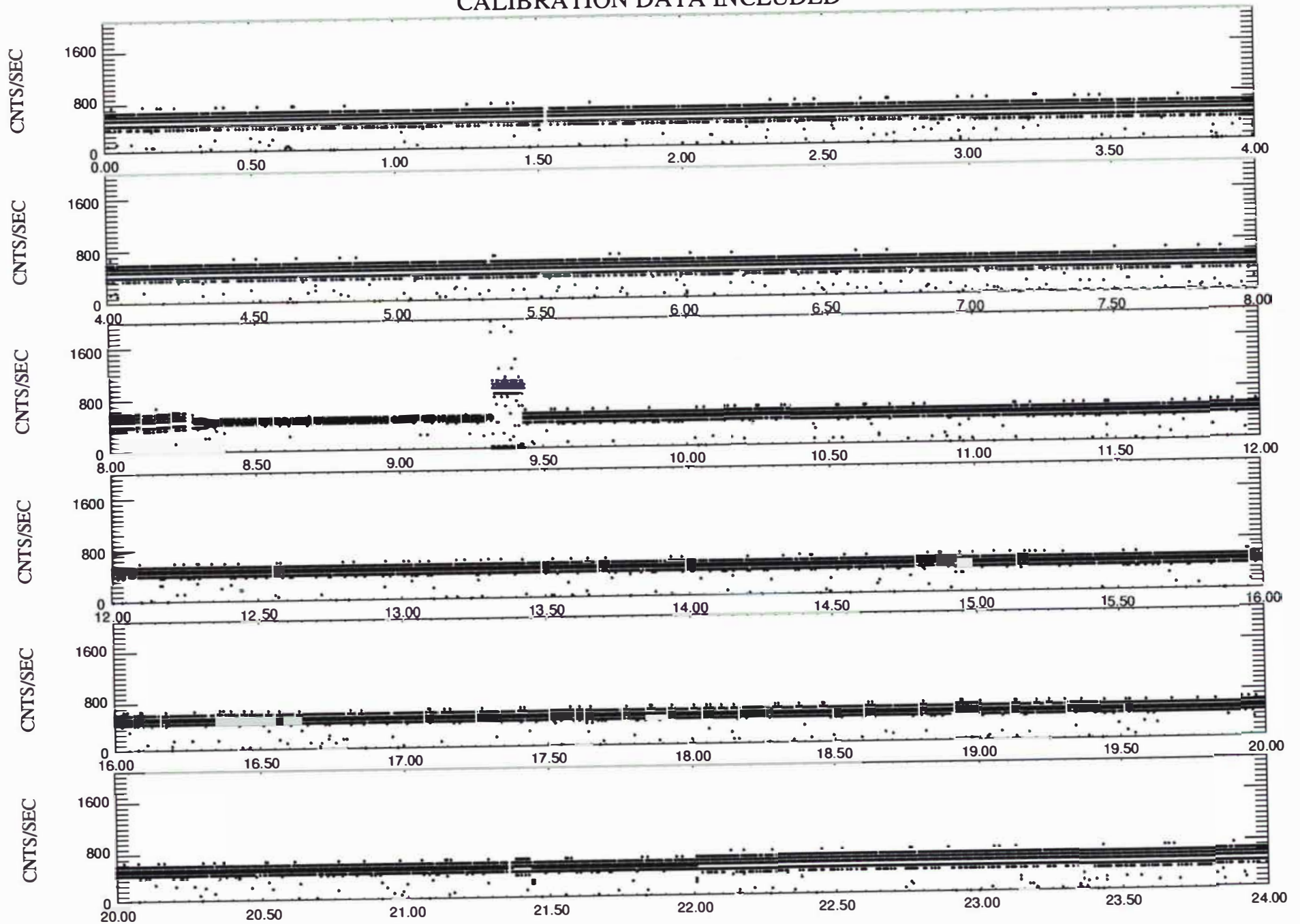
HUS MODES EDR day 46, year 1995 to day 46, year 1995
BURST NUMBER 3

7/18/95



HUS 2A, MODE 1, NOT AVERAGED EDR day 46, year 1995 to day 46, year 1995
CALIBRATION DATA INCLUDED

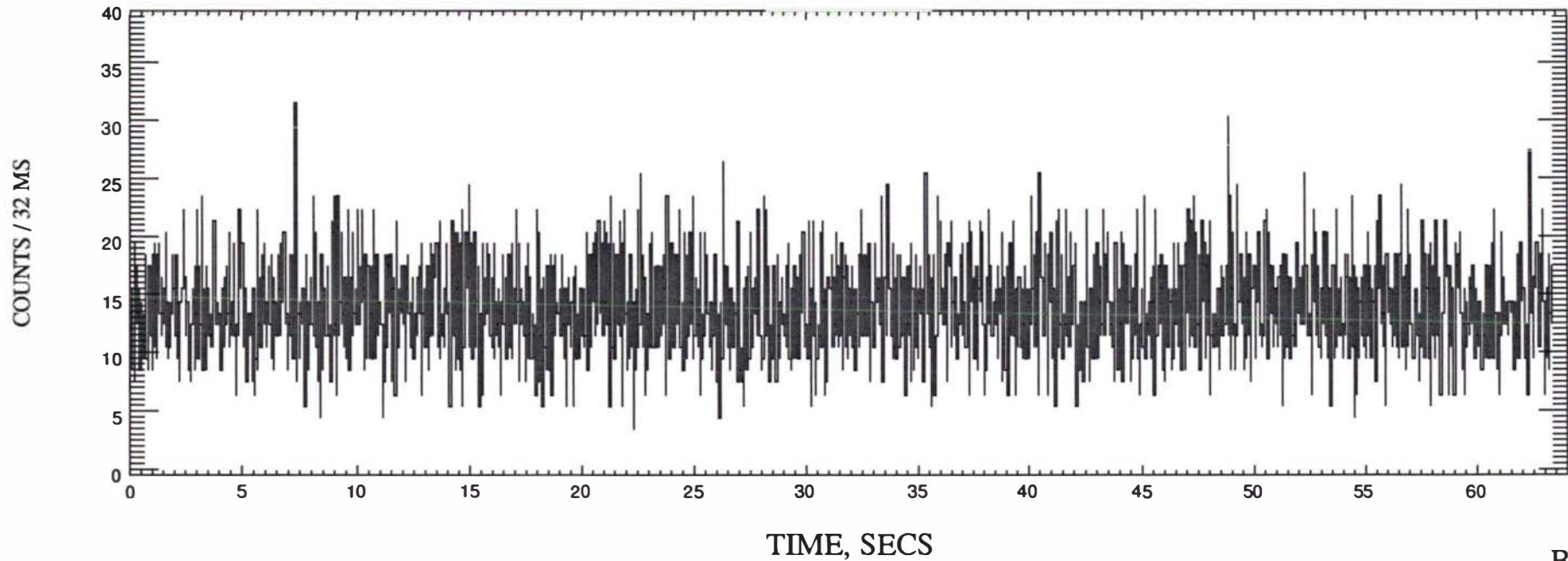
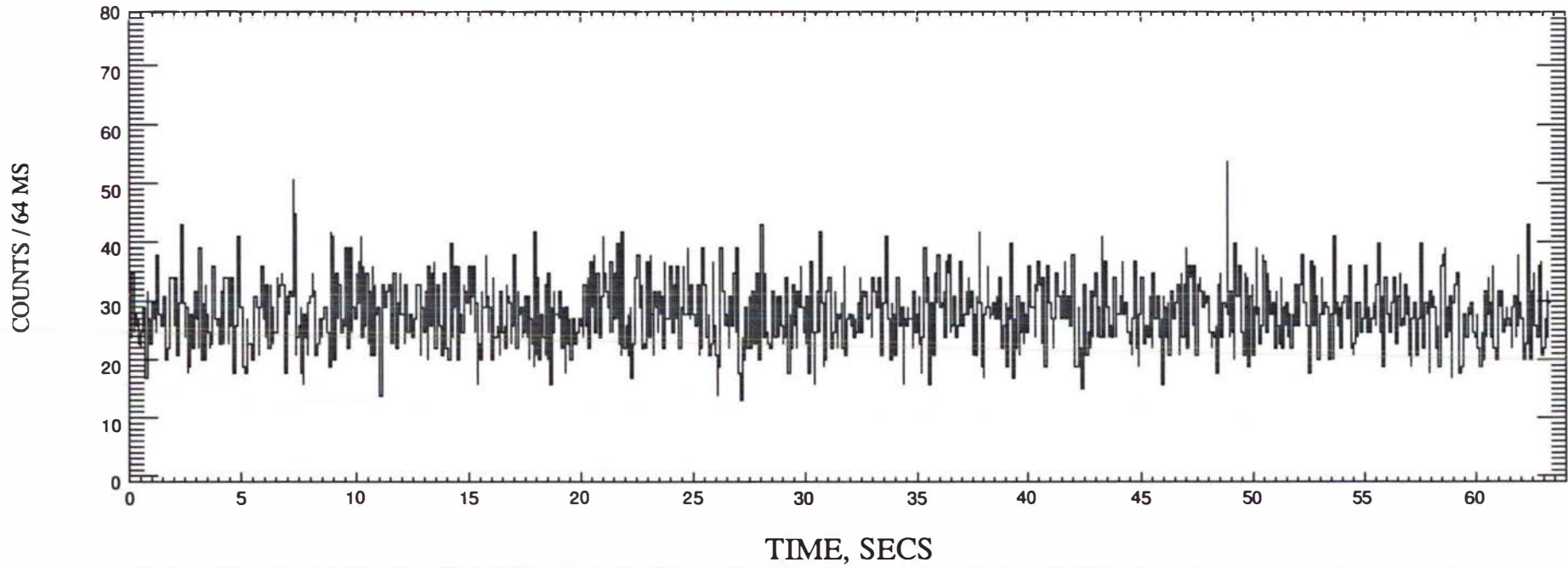
7/18/95



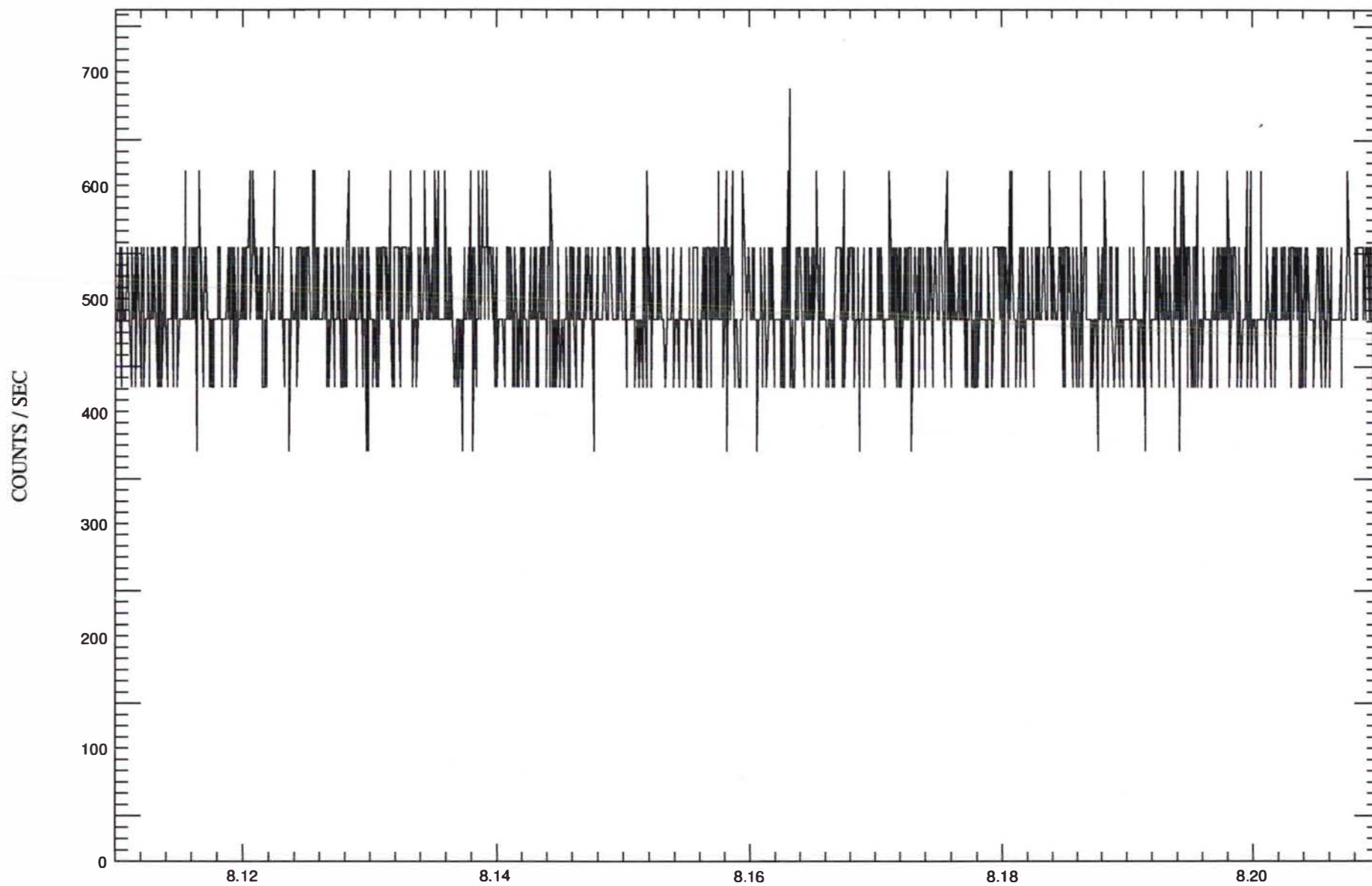
UNIV. TIME

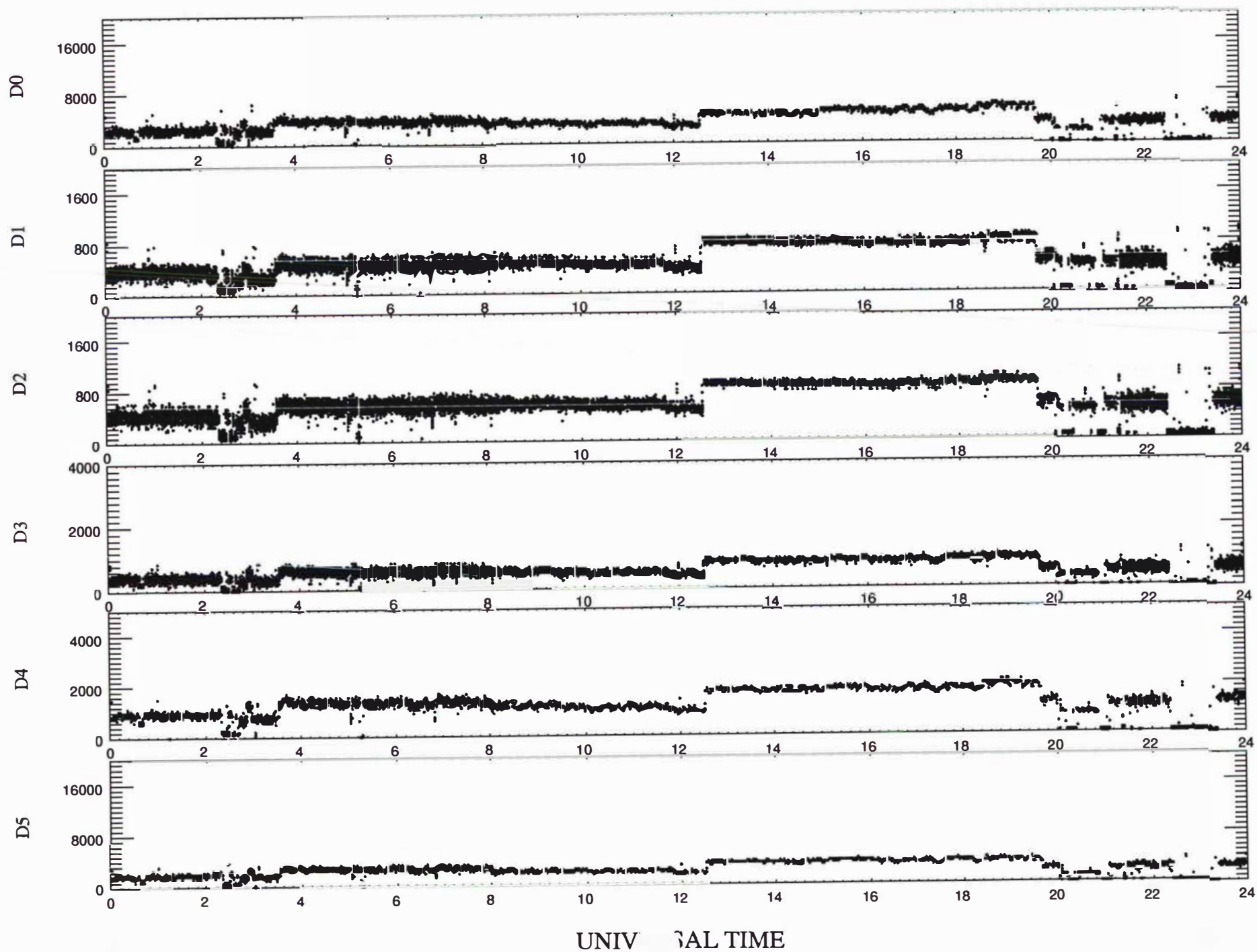
HUS 2A TRIGGERED DATA EDR day 46, year 1995
Burst Counter 3 at UT= 8.163318426344 h=29387.946 s 08:09:47.946

7/18/95



CALIBRATION DATA INCLUDED





From vnp@isac.ernet.in Mon Sep 15 23:38 PDT 1997
From: vnp@isac.ernet.in
>Received: from sx07 by isac.ernet.in (AIX 3.2/UCB 5.64/4.03)
id AA19488; Tue, 16 Sep 1997 12:04:45 GMT
e: Tue, 16 Sep 1997 12:04:44 +0000 (CUT)
Sender: vnp@sx07
To: khurley@sunspot.ssl.berkeley.edu
Subject: SROSS-C2 events of 94-95
Mime-Version: 1.0

Dear Prof.Hurley,
Thank you very much for the reply. I shall be grateful if you could kindly confirm whether any other spacecraft recorded events of particle/solar/cosmic origin listed below

1. 5 Oct 94 11:31:56 UT --peak lasted 40s came back to bg. followed by another peak at 11:34 UT in both 20-100keV (LE)channel and 100-1024keV (HE)channel.
Solar geophysical data(SGD) reports class C3.0 flare at 11:36UT lasting until 11:58UT.
BATSE solar flare data base reports event at 11:57UT
2. 5 Oct 94 19:49:07 UT - light curve shows rapid variability in LEC
SGD reports B1.9 flare between 19:33 and 19:51 with peak at 19:49.
3. 13 Oct 94 16:08:57 UT -- peak lasts 50s in LEC and 30s in HEC.
SGD reports B3.7 flare between 16:06 and 16:48 with peak at 16:18.
4. 15 Feb 95 12:00:28 UT --light curve shows rapid variability in LEC.
16 Feb 95 11:45:42 UT -- peak lasts 80s in LEC and 60s in HEC.
SGD reports B1.2 flare between 11:52 and 12:02 with peak at 11:56UT
6. 30 Jan 95 12:11:10UT -- peak lasted 30s in LEC and HEC
SGD reports B9.2 flare at 11:57 upto 12:22 peak at 12:11UT
7. 30 Jan 95 19:02:41 UT --peak saturated (>2048c/s) in LEC lasted 80s in LEC & HEC
SGD reports C4.8 flare between 19:04 and 19:17 peak at 19:08 UT
8. 29 Mar 95 19:16:19 --light curve shows rapid variability in LEC
SGD reports C1.9 flare between 18:51 and 19:05 peak at 18:52 UT

Regards,
padmini

From HENZE@fender.msfc.nasa.gov Mon May 12 11:54 PDT 1997
Return-Path: <HENZE@fender.msfc.nasa.gov>
Received: from FENDER.MSFC.NASA.GOV by sunspot.ssl.berkeley.edu (SMI-8.6/SMI-SVR4)
id LAA07200; Mon, 12 May 1997 11:54:39 -0700
From: HENZE@fender.msfc.nasa.gov
Date: Mon, 12 May 1997 13:54:11 -0500 (CDT)
To: khurley@sunspot.ssl.berkeley.edu
Message-Id: <970512135411.21e183e4@fender.msfc.nasa.gov>
Subject: Crossing Windows for BATSE Burst 3431
Content-Type: text
Content-Length: 1135
X-Lines: 26

BATSEARCH PROGRAM

BATSE BURST # 3431
EVENT OF 1995 FEB 16 DAY OF YEAR= 47
EVENT CROSSING TIME AT BATSE : 76747. S. OR 21:19:07.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 124.000 50.000
BATSE PEAK COUNTING RATE: 4700 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 16/ 2/ 95 IS:
RA= 337.468 DEC= -21.160 DIST= 2.319 AU
BATSE-ULYSSES DISTANCE = 346895401. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 39.05 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 898.59 SECS.
CROSSING TIME AT ULYSSES IS 77646. S. OR 21:34:05 +/- 190.21 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 16/ 2/ 95 IS:
RA= 145.265 DEC= 18.663 DIST= 0.678 AU
MARS-BATSE DISTANCE = 101413888. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=144.36 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -274.90 SECS.
CROSSING TIME AT MARS IS 76472. S. OR 21:14:32 +/- 30.05 SECONDS

BATSE BURST TRIGGER

NO.: 3431

TIME: TJD=9764 SECONDS=76747

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=023.5 AZIMUTH=176.0 ERROR=008.2 DEGREES

COMMENTS:

REEVALUATION OF EARLIER TRIGGER (2 YEARS AGO). ORIGINAL MESSAGE SAID UNKNOWN
BUT ALSO HAD INCORRECT LOCATION (RA,DEC INSTEAD OF GRO COORDS.).
SINGLE PULSE, DUR. ~0.6 S. WEAKLY VISIBLE ABOVE 100 KEV.

BATSE #	Date	TJD	SoD	Max ct/s	RA	Dec	Dur (s)
3431	950216	9764	76747	4700	124	+50	.6

From KOUVELIOTOU@ssl.msfc.nasa.gov Tue Feb 28 09:03 PST 1995
Date: Tue, 28 Feb 1995 11:02:55 -0600 (CST)
From: KOUVELIOTOU@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03431

TIME: TJD=9764 SECONDS=76747

TYPE: UNKNOWN SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=123.8 AZIMUTH=049.6 ERROR= DEGREES

COMMENTS:

VERY SOFT, SHORT EVENT, LASTING ~0.8 S. NOT SEEN ABOVE 100 KEV.
COULD BE ASSOCIATED WITH AN SGR.

From KOUVELIOTOU@ssl.msfc.nasa.gov Tue Feb 28 09:22 PST 1995
Date: Tue, 28 Feb 1995 11:21:26 -0600 (CST)
From: KOUVELIOTOU@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03431

TIME: TJD=9764 SECONDS=76747

TYPE: UNKNOWN SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=123.8 AZIMUTH=049.6 ERROR= DEGREES

COMMENTS:

CORRECTION OF PREVIOUS MESSAGE: SOLAR FLARE TRIGGER SIGNAL
WAS NOT SET.

From KOUVELIOTOU@BATSE.MSFC.NASA.GOV Wed Feb 22 13:26 PST 1995

Date: Wed, 22 Feb 1995 15:26:23 -0600 (CST)

From: Chryssa Kouveliotou NASA/MSFC (205) 544-7711 <KOUVELIOTOU@BATSE.MSFC.NASA.GOV>

To: khurley@sunspot.ssl.berkeley.edu

Subject: SGR

Kevin,

the best location I obtained today with the appropriate spectral index
for the SGR we discussed yesterday is:

RA = 124 ^{vs 194} 76747 708 16
dec = 50 ³⁰
error = 8 deg

fluence (between 17 - 109 keV) = $6 \times 10^{\exp(-8)}$ ergs/cm²

does that help any ???

cheers

ck

77867 ± 1705

77654 ± 188

(Possible BATSE SGR)

2 1 / 2 / 9 5

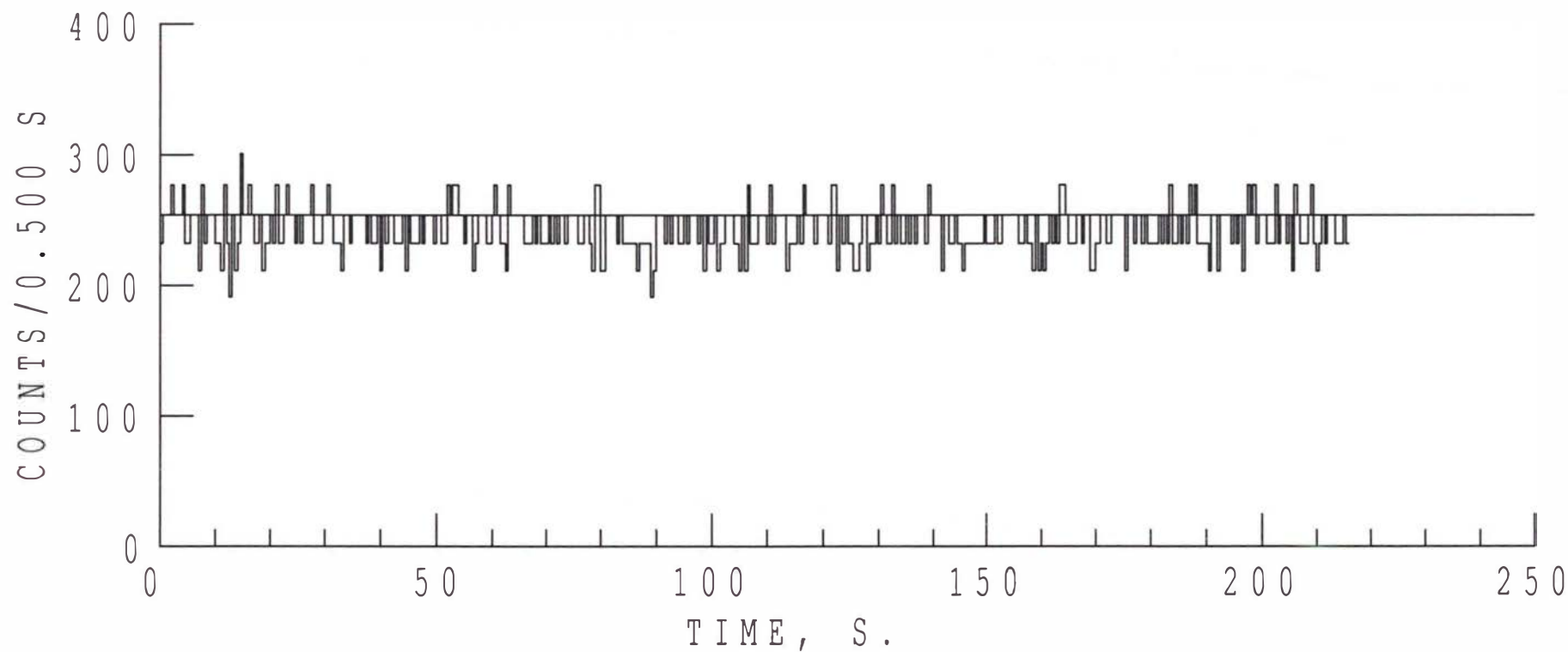
U L Y S S E S R T

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

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS



From khurley@space6.ssl.berkeley.edu Thu Feb 23 09:26 PST 1995
Date: Thu, 23 Feb 95 09:26:20
From: khurley@space6.ssl.berkeley.edu

Roger, \

Please run EXTRACT for this time window

BATSEARCH PROGRAM

Possible SGR

BATSE BURST #
EVENT OF 1995 FEB 16 DAY OF YEAR= 47
EVENT CROSSING TIME AT BATSE : 76747. S. OR 21:19:07.0
COORDINATES ARE .000 .000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 124.000 50.000
BATSE PEAK COUNTING RATE: 600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 16/ 2/ 95 IS:
RA= 337.127 DEC= -21.779 DIST= 2.317 AU
BATSE-ULYSSES DISTANCE = 346687959. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 38.36 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 906.77 SECS.
CROSSING TIME AT ULYSSES IS 77654. S. OR 21:34:13 +/- 250.00 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 16/ 2/ 95 IS:
RA= 145.263 DEC= 18.663 DIST= .678 AU
MARS-BATSE DISTANCE = 101414100. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=144.36 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -274.91 SECS.
CROSSING TIME AT MARS IS 76472. S. OR 21:14:32 +/- 30.05 SECONDS
OR 21:13:35 +/- 6.57 SECONDS

BATSE BURST# 3431

ULYSSES RT

12 / 5 / 97

16 / 2 / 95 77472.039 s

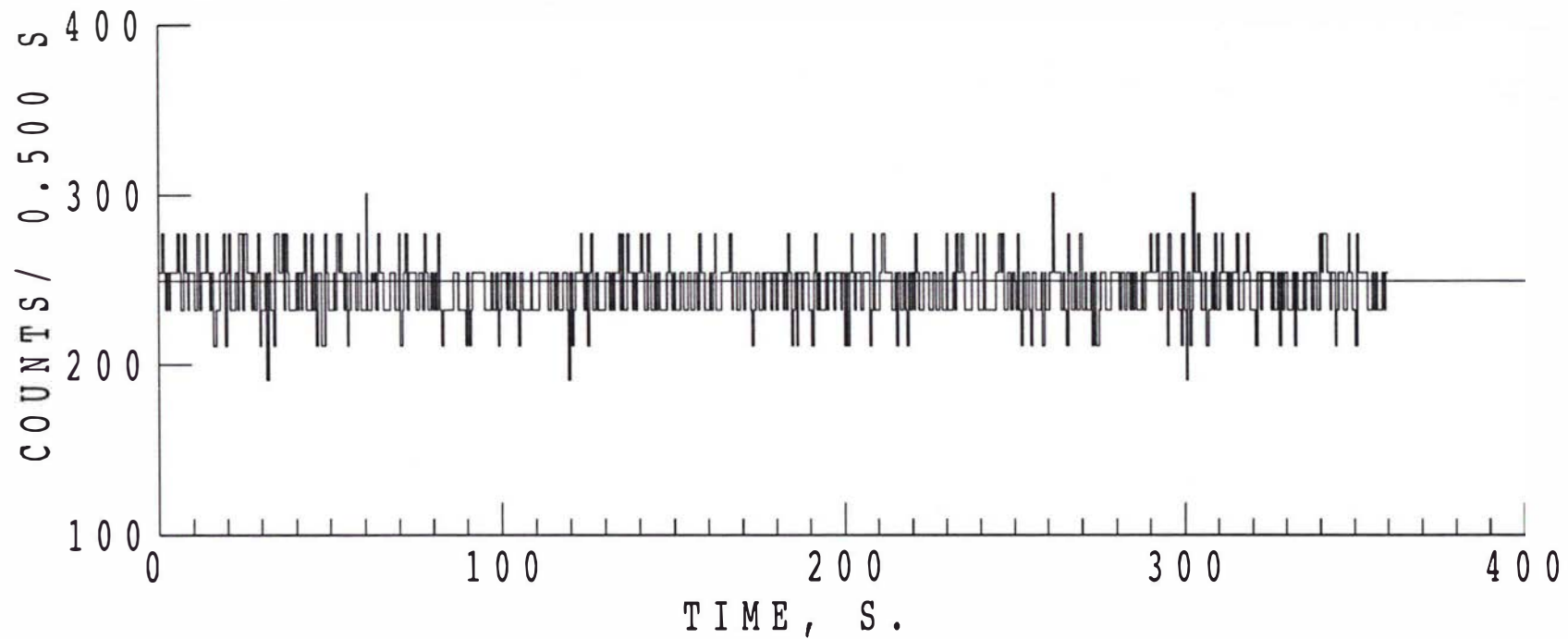
0 - 0 keV

W= 10 M=10

>4.0 SIGMA FLOCTUATIONS

W= 10 M= 2

>4.0 SIGMA FLOCTUATIONS

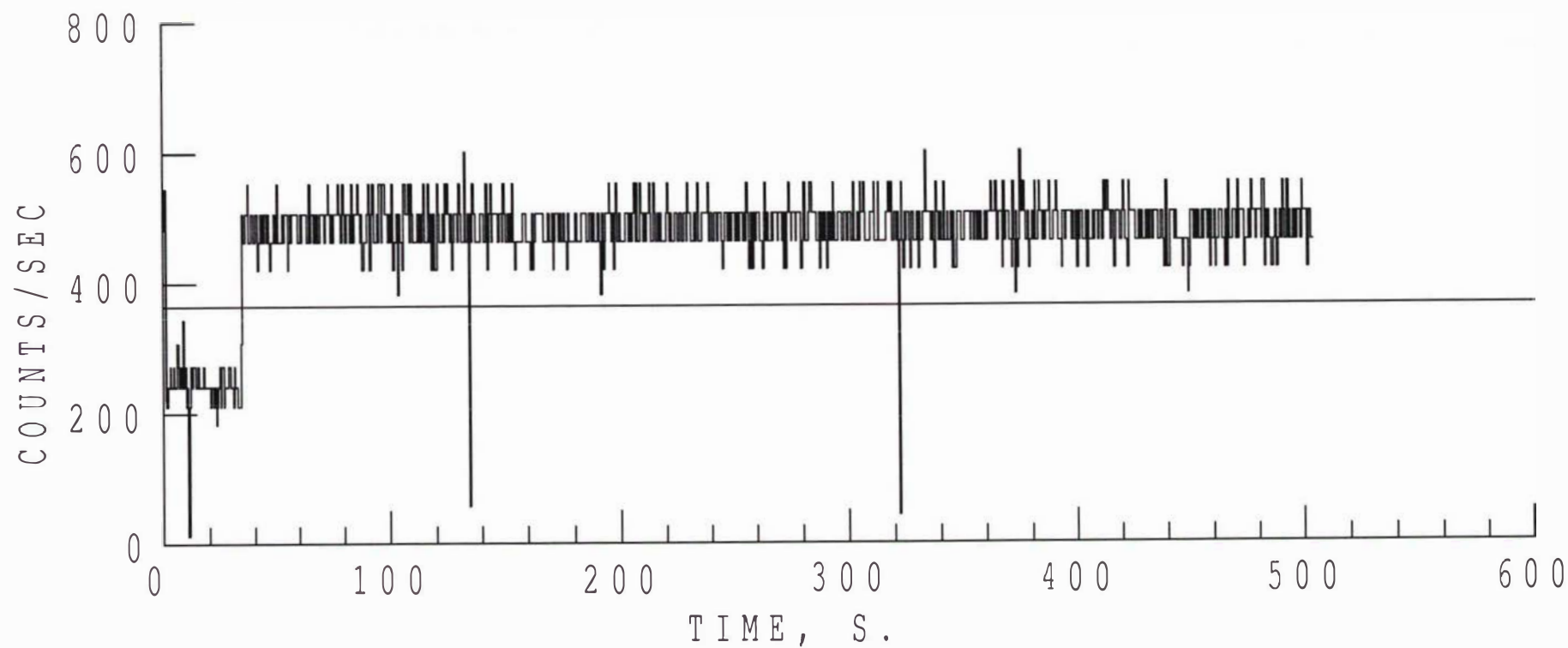


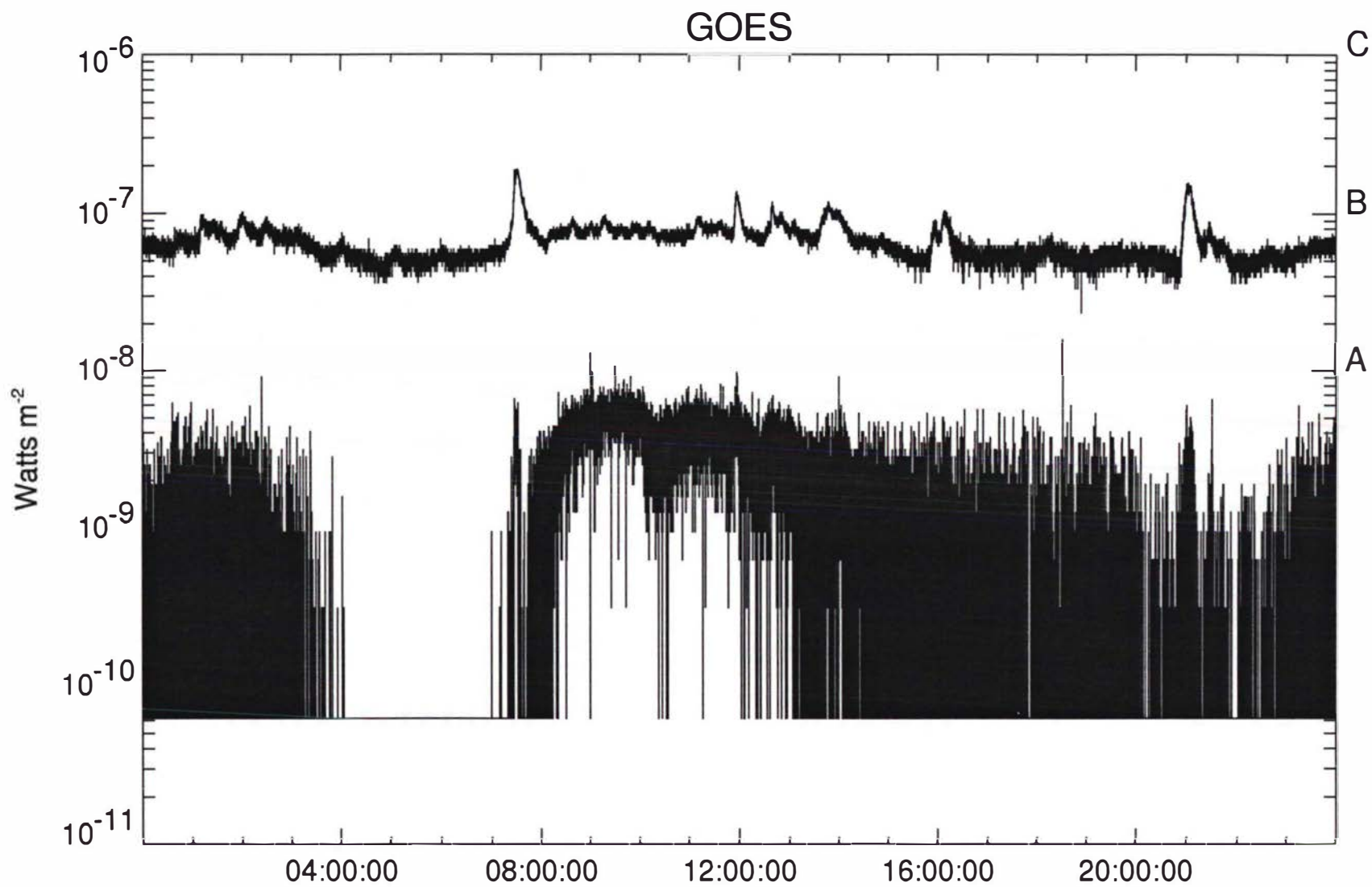
2 3 / 2 / 9 5

U L Y S S E S R T
1 6 / 2 / 9 5 7 7 4 0 0 . 0 3 9 s
0 - 0 k e V

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS





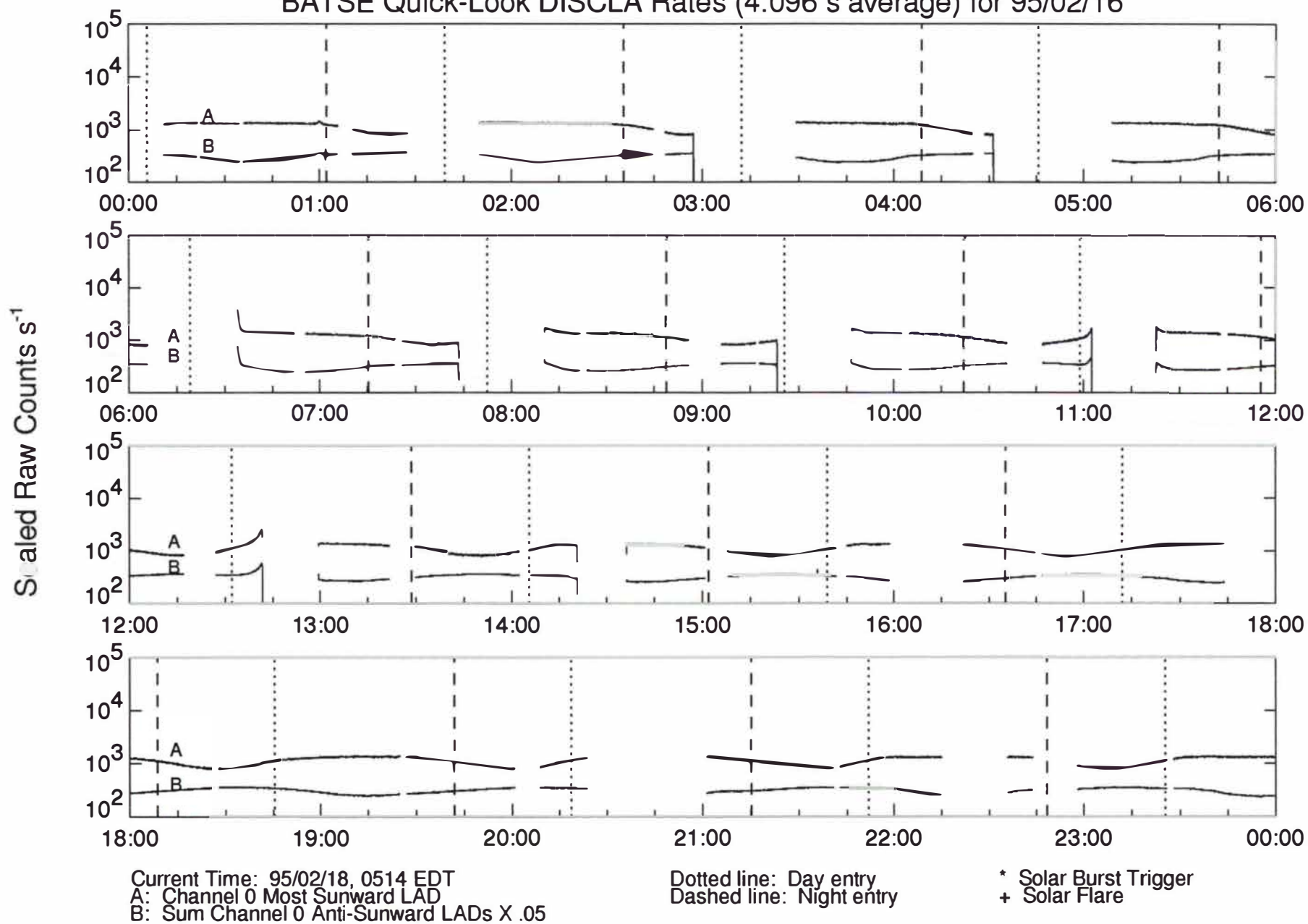
Data Start: 95/02/16, 0000:02

Plot created: 95/02/18, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

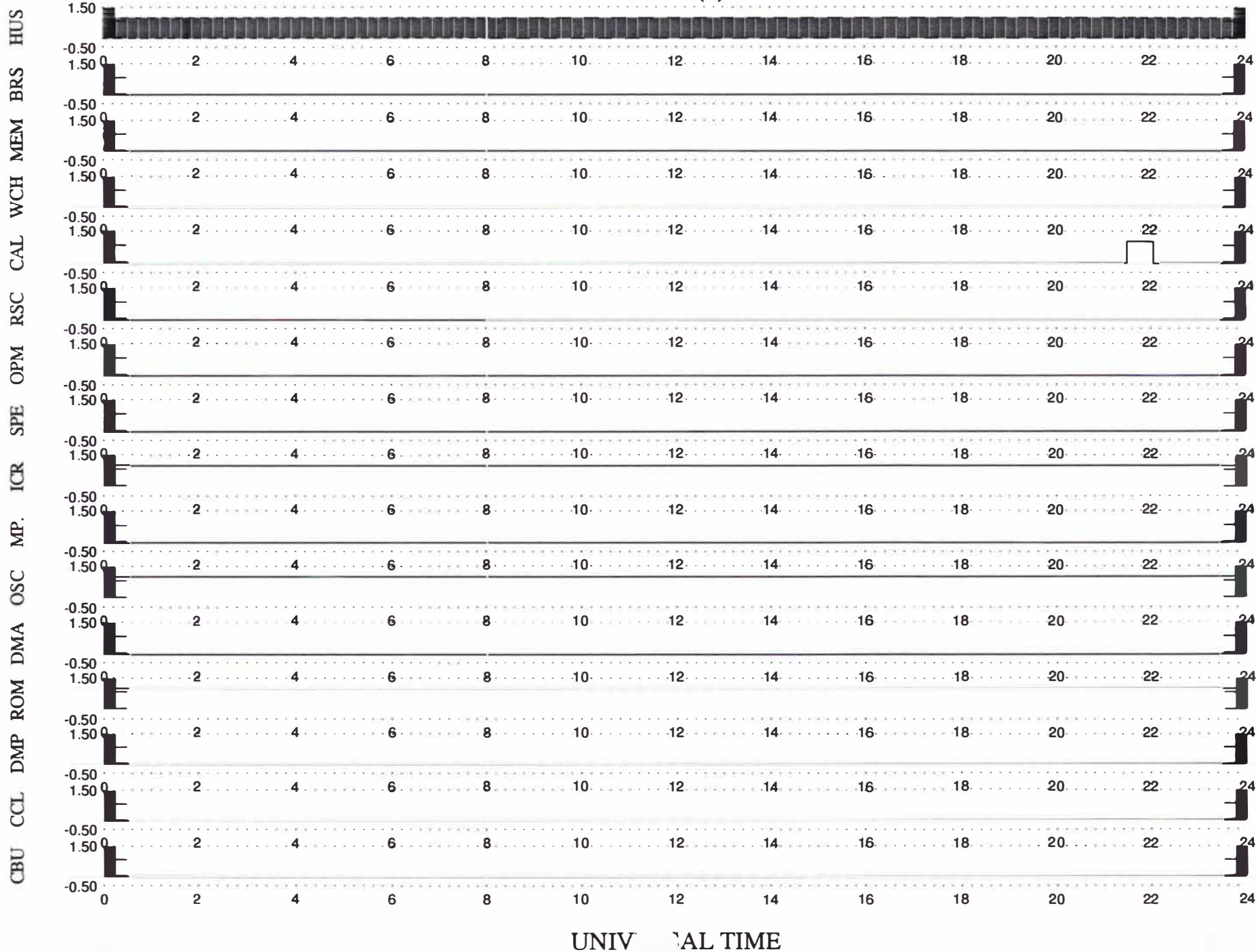
2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/16



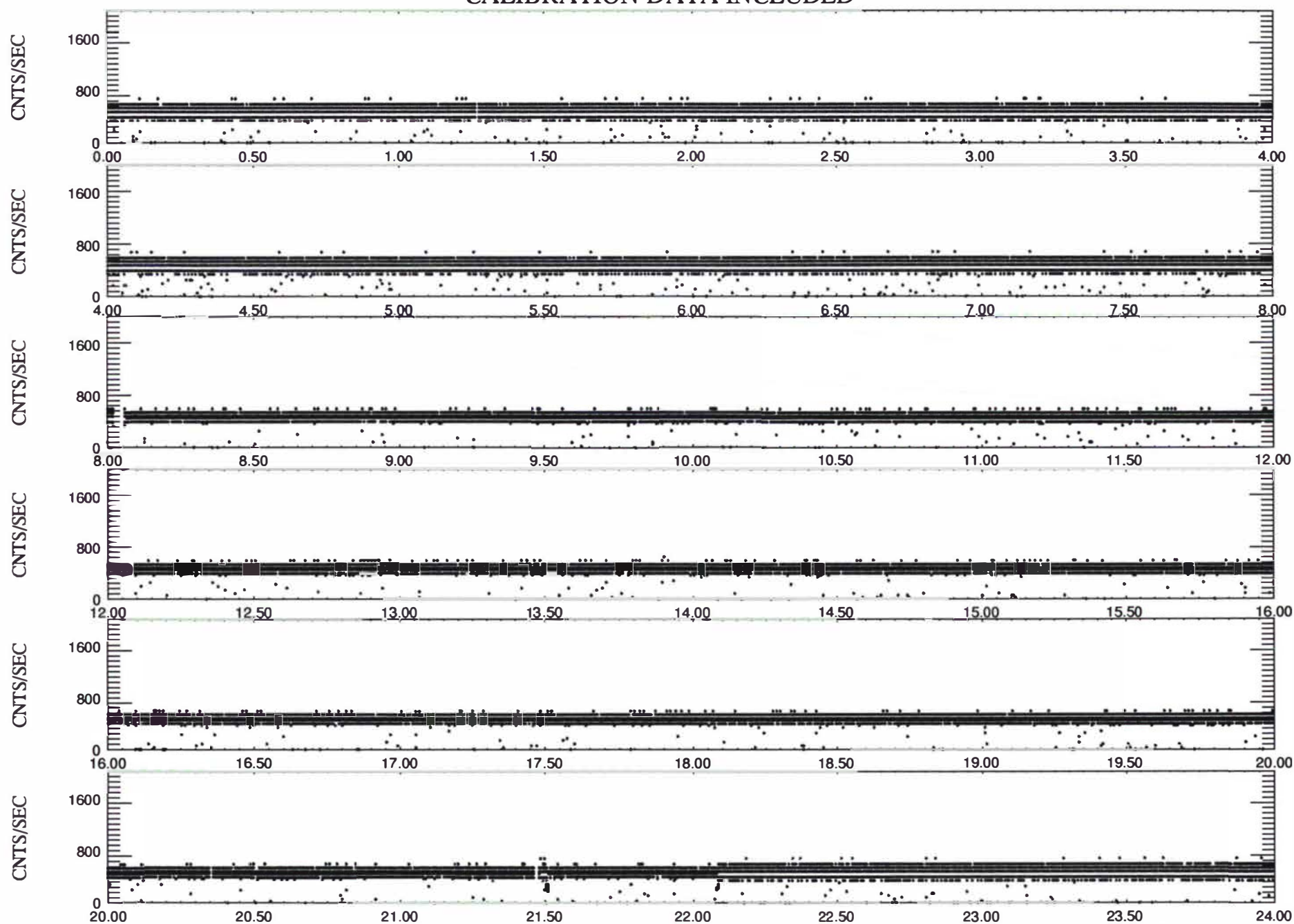
HUS MODES EDR day 47, year 1995 to day 47, year 1995
NO BURST (3)

7/18/95

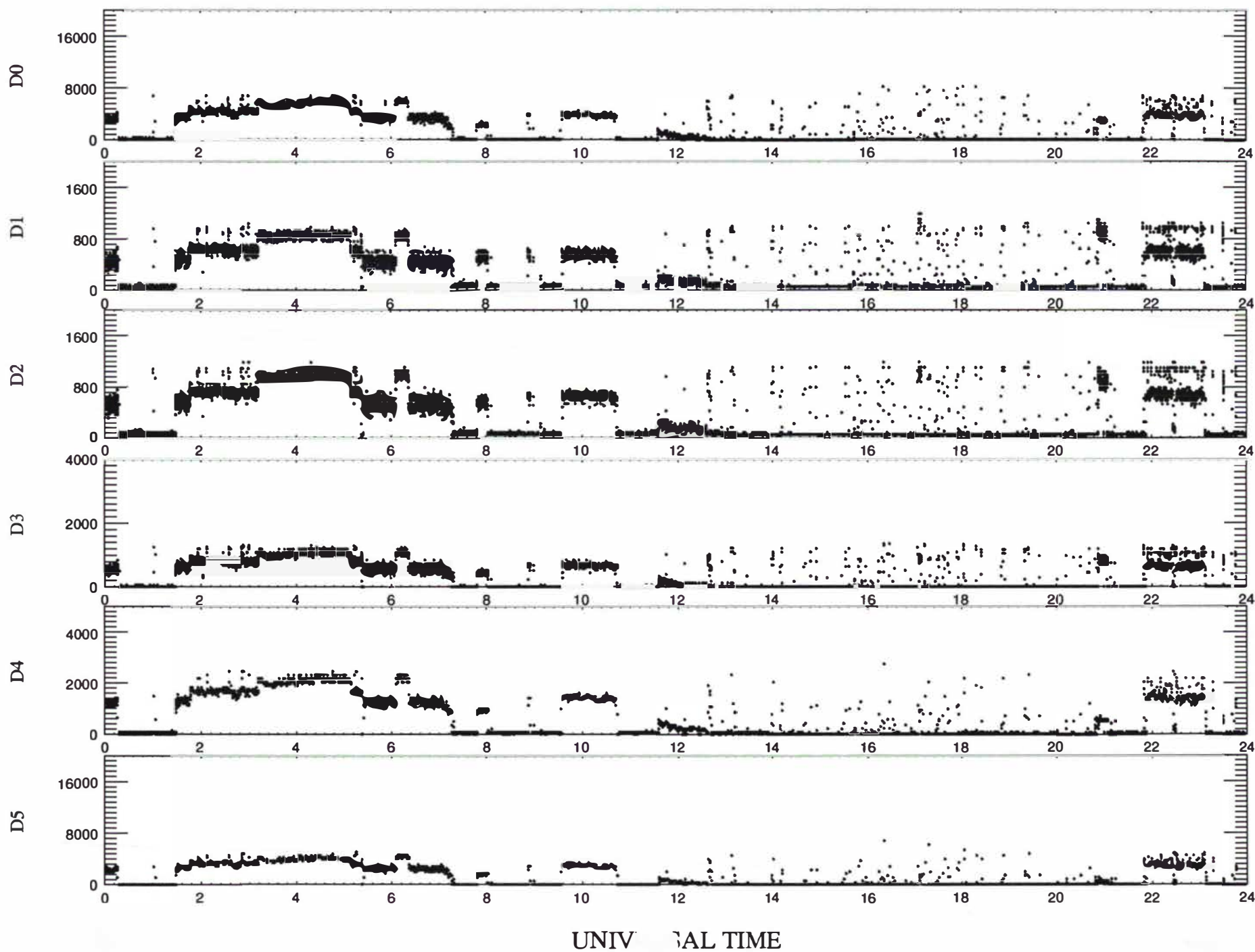


HUS 2A, MODE 1, NOT AVERAGED EDR day 47, year 1995 to day 47, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV TIME



From MALLOZZI@ssl.msfc.nasa.gov Sat Feb 18 13:51 PST 1995
Date: Sat, 18 Feb 1995 15:50:55 -0600 (CST)
From: "ROBERT S. MALLOZZI 205-544-6257" <MALLOZZI@ssl.msfc.nasa.gov>
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03433

TIME: TJD=9765 SECONDS=43106

TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
TRIGGERED ON ENTRY INTO SAA.

From MALLOZZI@ssl.msfc.nasa.gov Sat Feb 18 13:49 PST 1995
Date: Sat, 18 Feb 1995 15:49:14 -0600 (CST)
From: "ROBERT S. MALLOZZI 205-544-6257" <MALLOZZI@ssl.msfc.nasa.gov>
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 03432

TIME: TJD=9765 SECONDS=09256

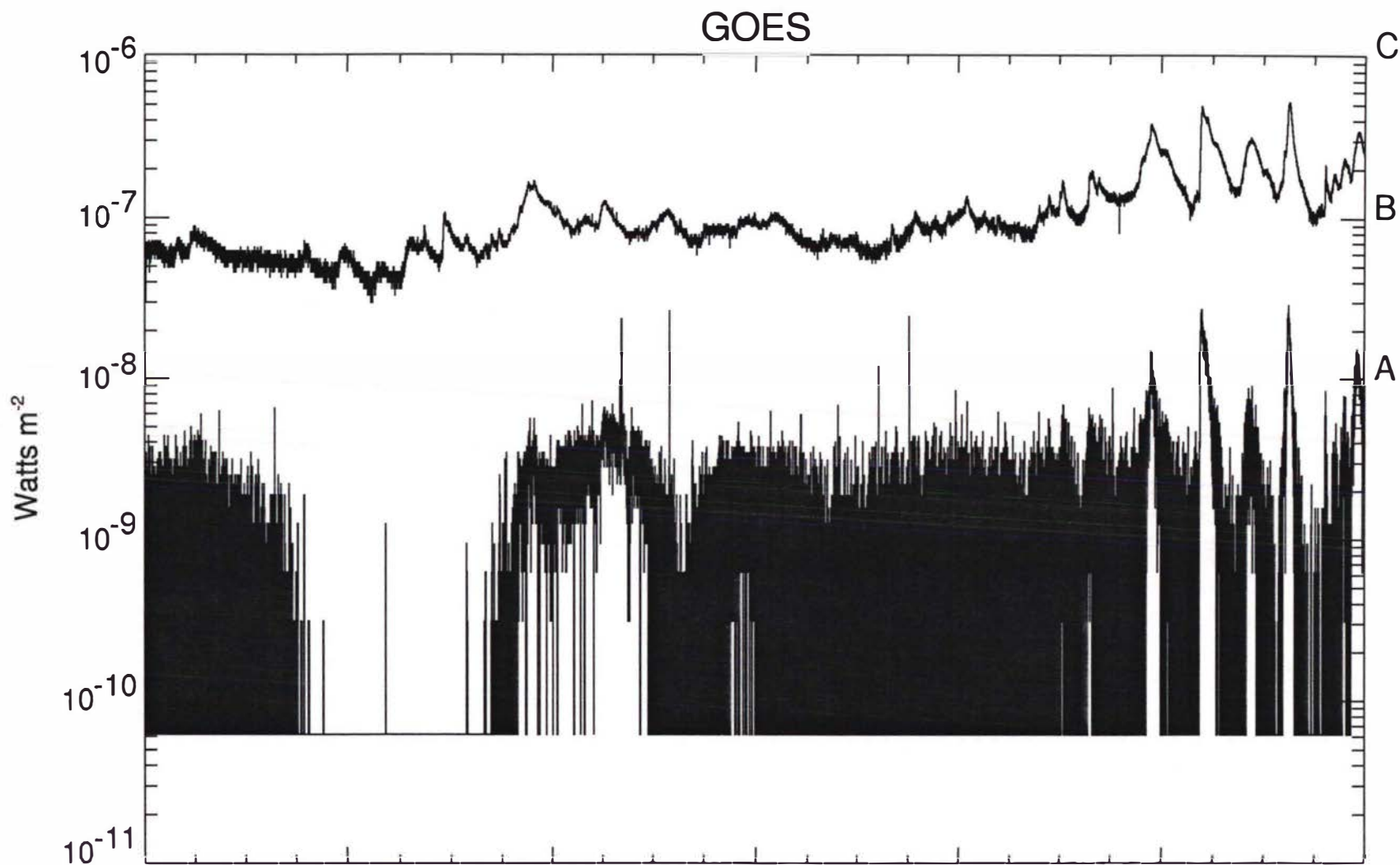
TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
PARTICLE EVENT.



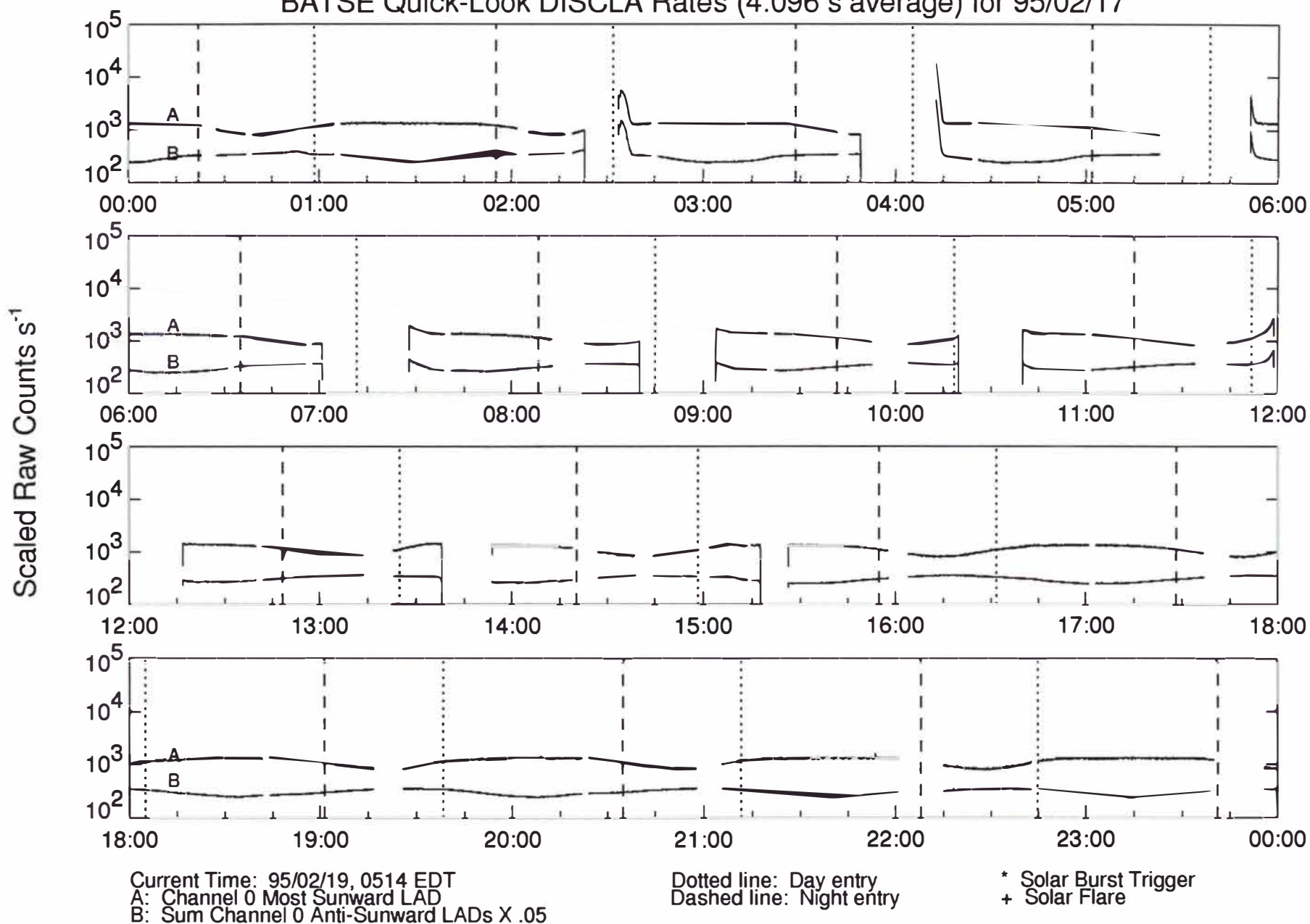
Data Start: 95/02/17, 0000:00

Plot created: 95/02/19, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

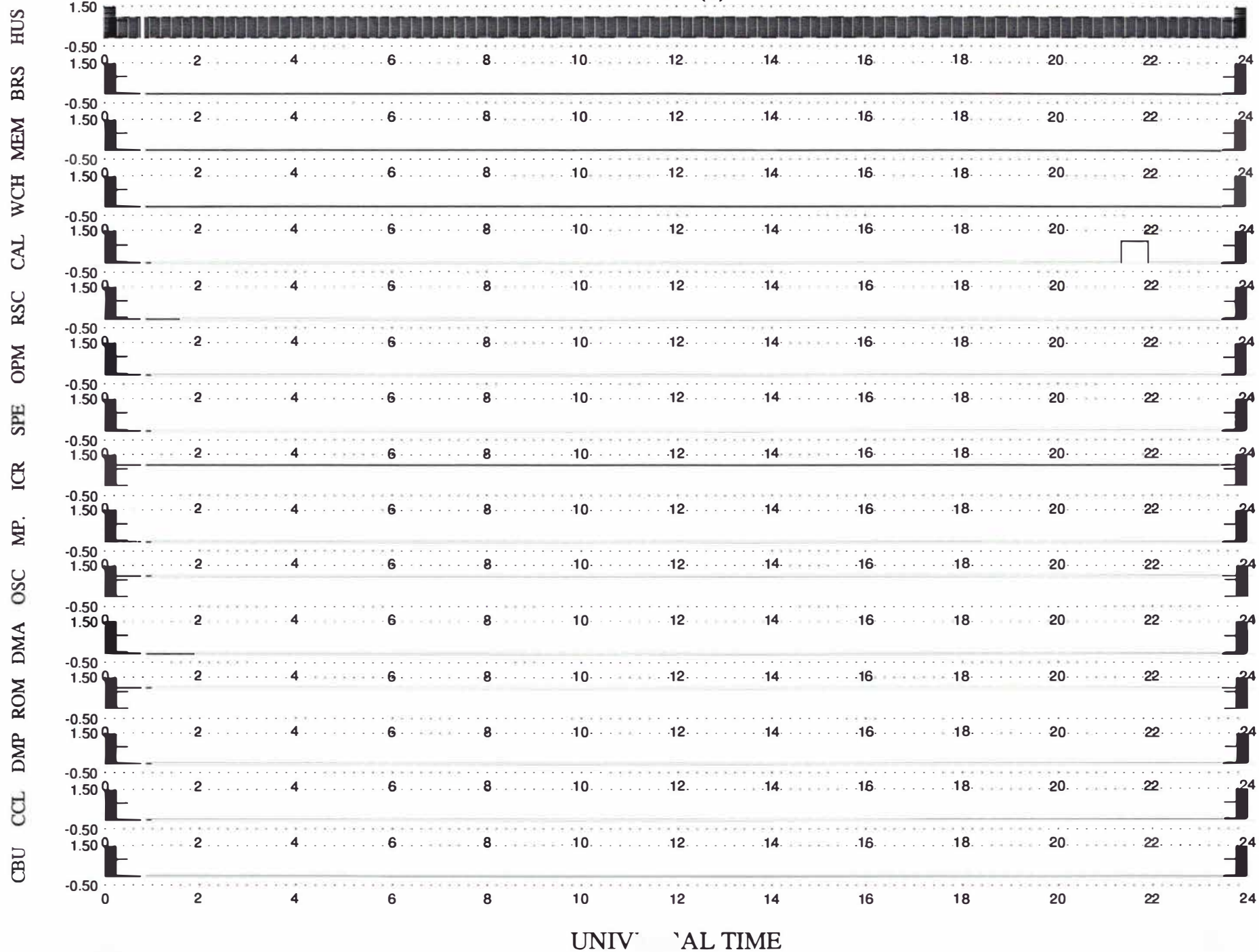
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/17



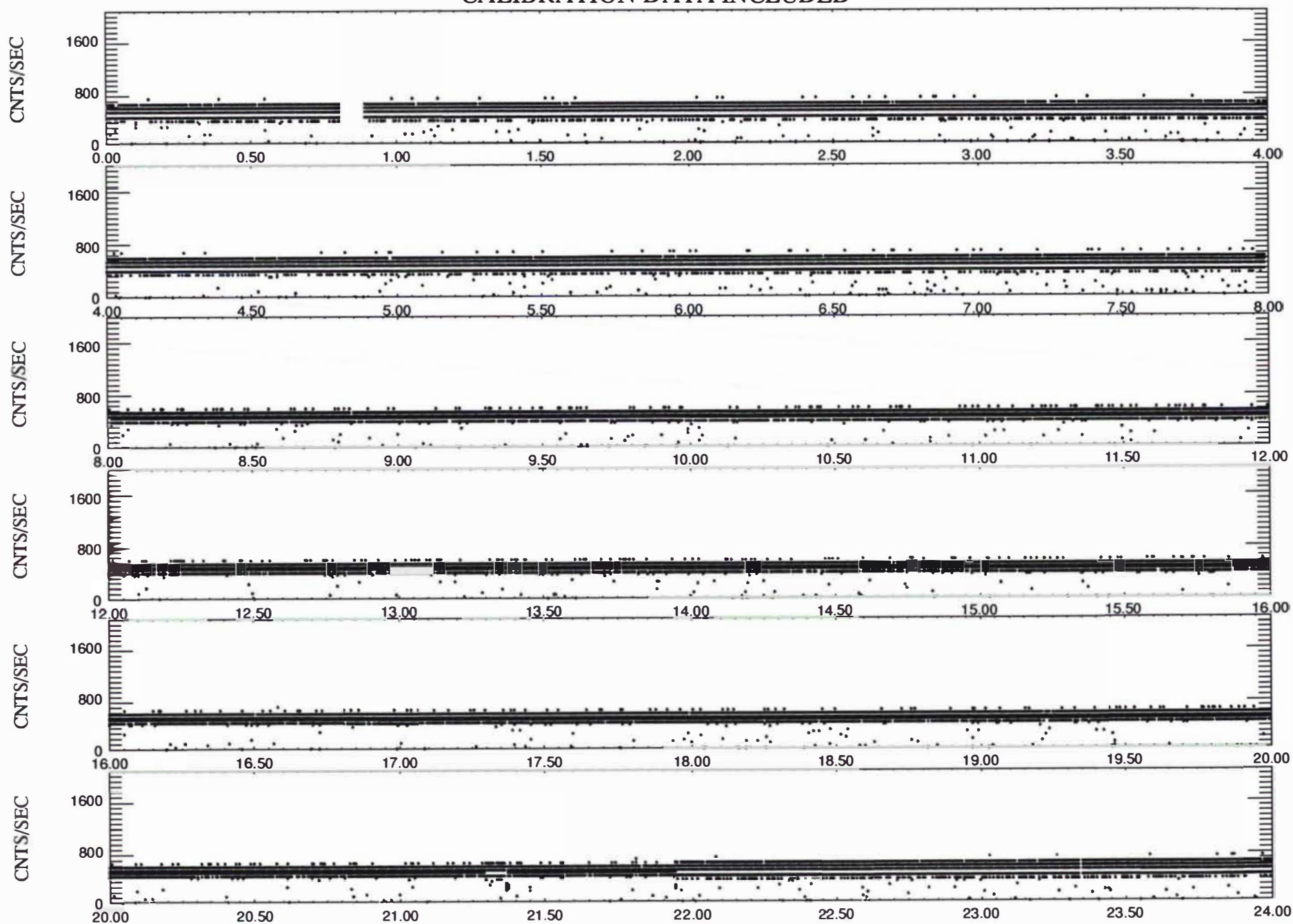
HUS MODES EDR day 48, year 1995 to day 48, year 1995
NO BURST (3)

7/18/95

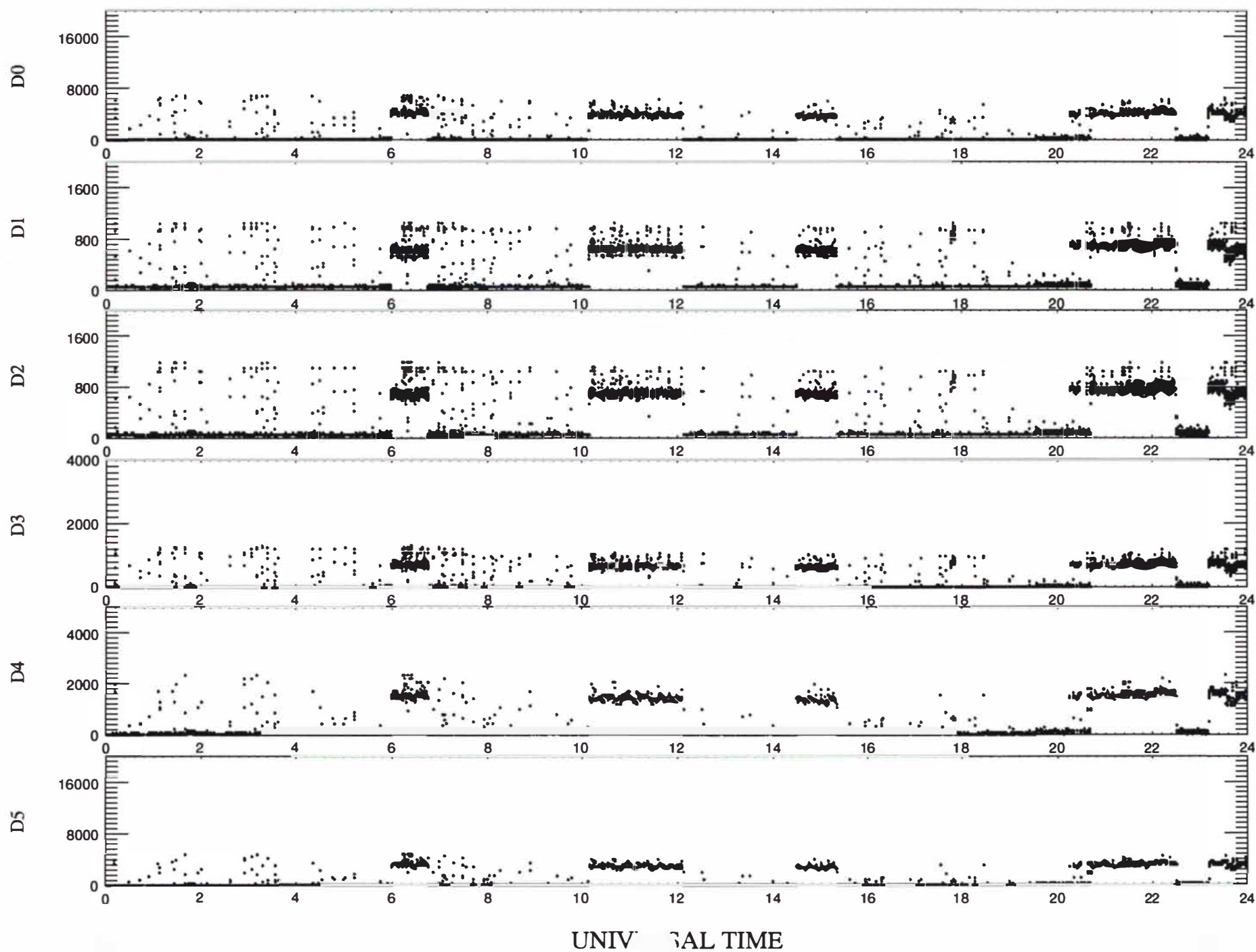


HUS 2A, MODE 1, NOT AVERAGED EDR day 48, year 1995 to day 48, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. TIME



From DEAL@ssl.msfc.nasa.gov Mon Feb 20 06:16 PST 1995
Date: Mon, 20 Feb 1995 8:16:37 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3434

TIME: TJD=9766 SECONDS=43076

TYPE: FLARE SOLAR FLARE TRIGGER SIGNAL:N

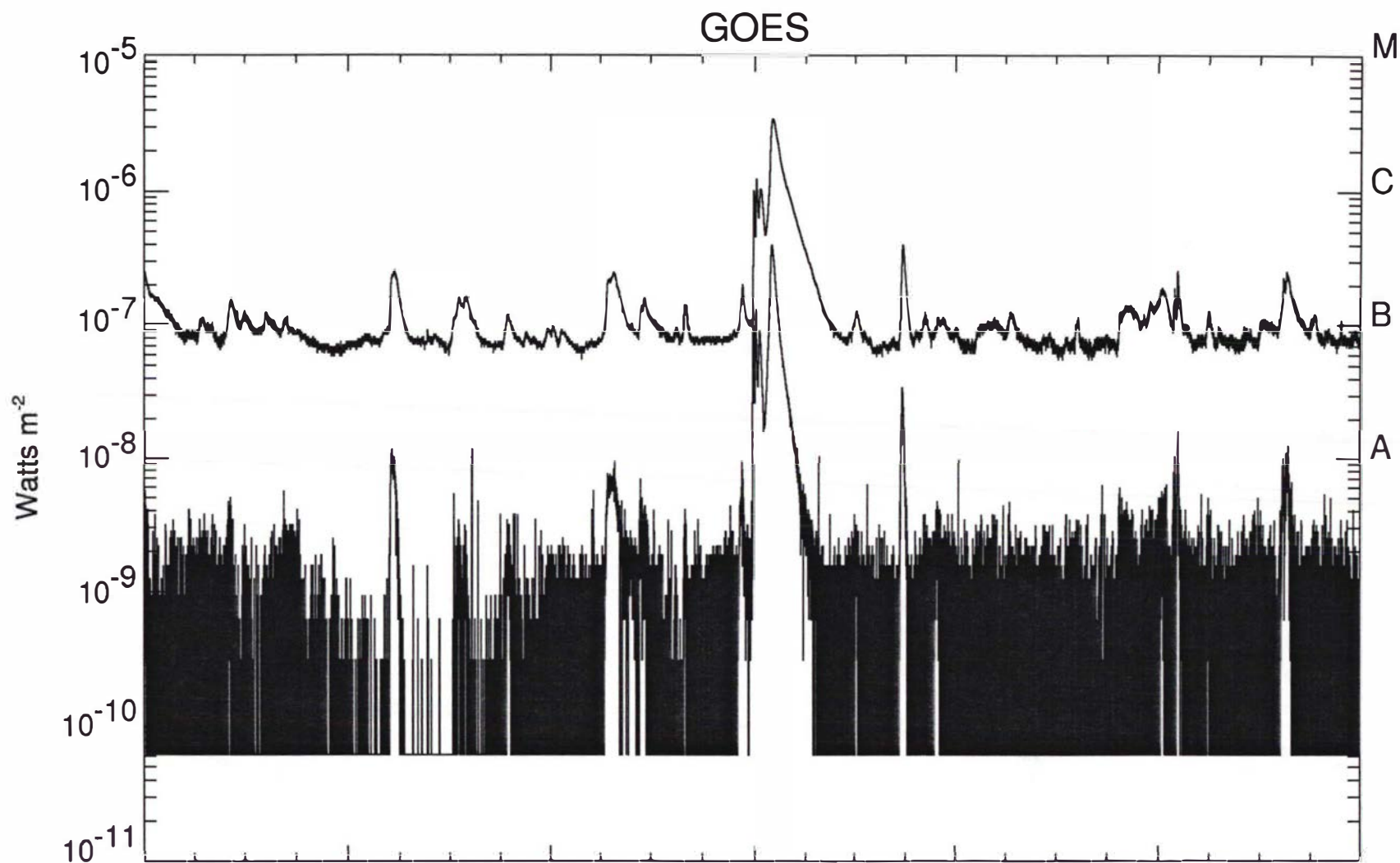
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=115.2 AZIMUTH=008.3 ERROR= DEGREES

COMMENTS:

SOLAR FLARE. GOES C1.0. FLARE LASTS APPROXIMATELY 18S. NOT VISIBLE ABOVE 300KEV.



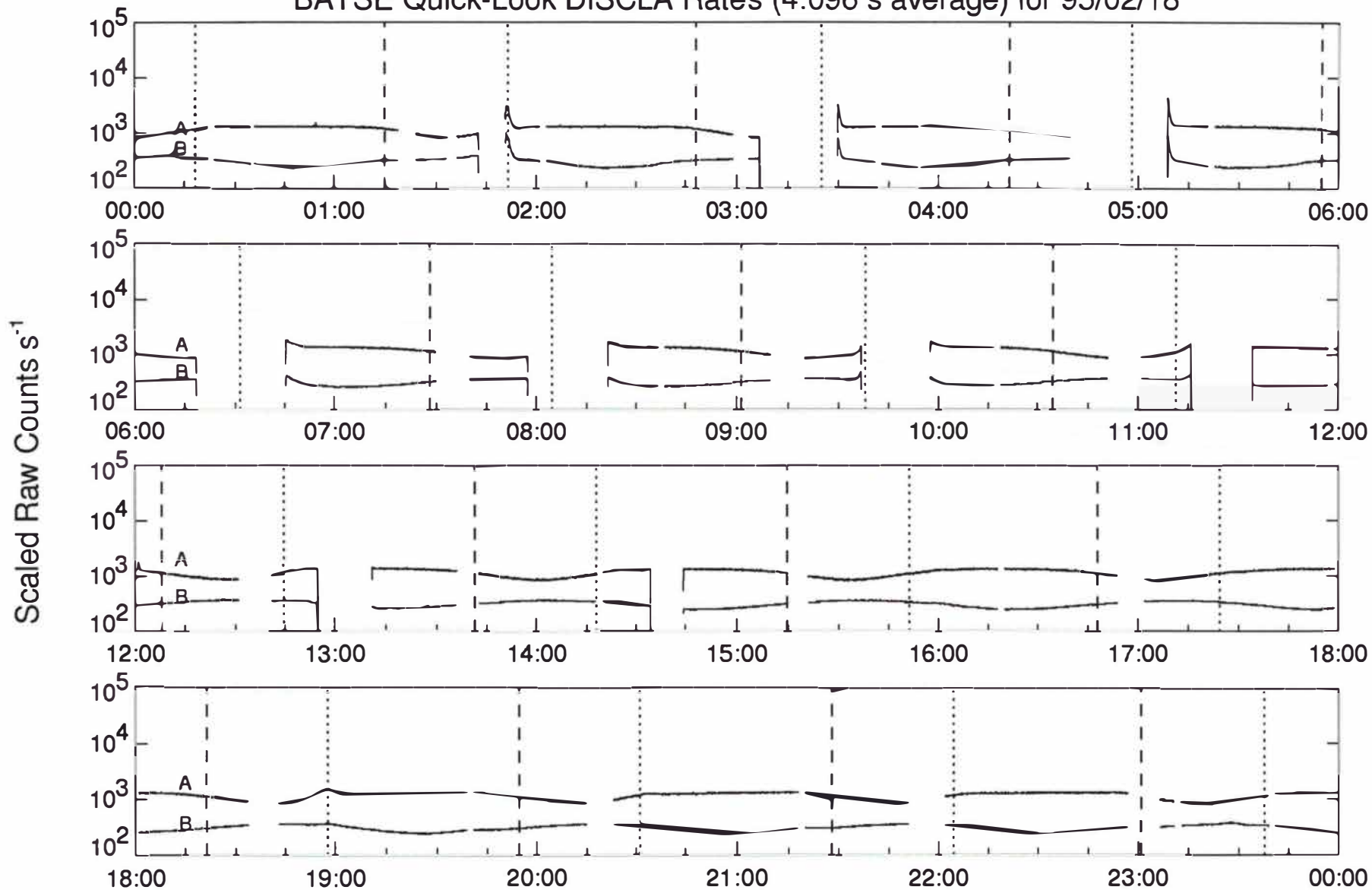
Data Start: 95/02/18, 0000:01

Plot created: 95/02/20, 0514

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 95/02/18



Current Time: 95/02/20, 0514 EDT

A: Channel 0 Most Sunward LAD

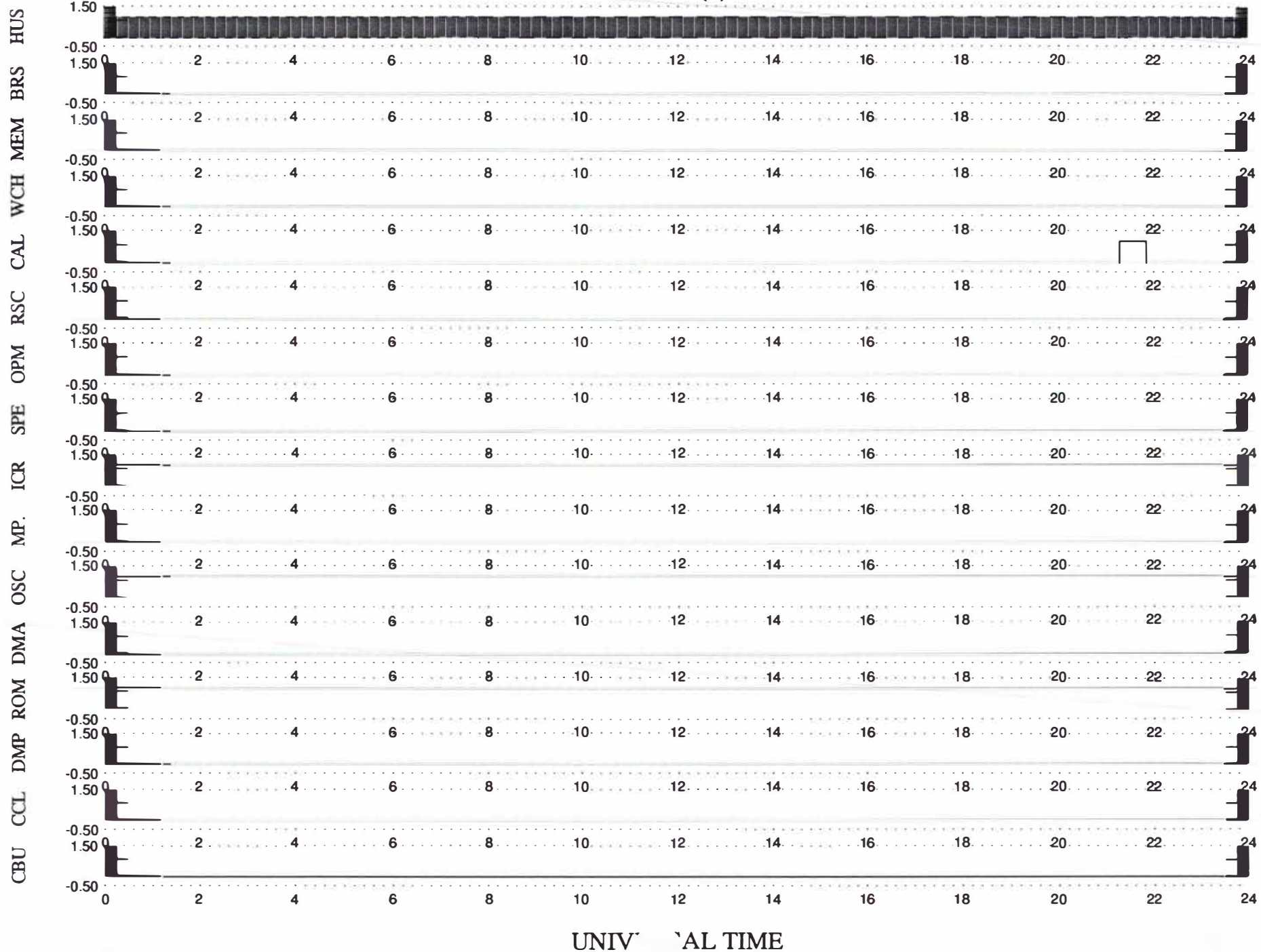
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

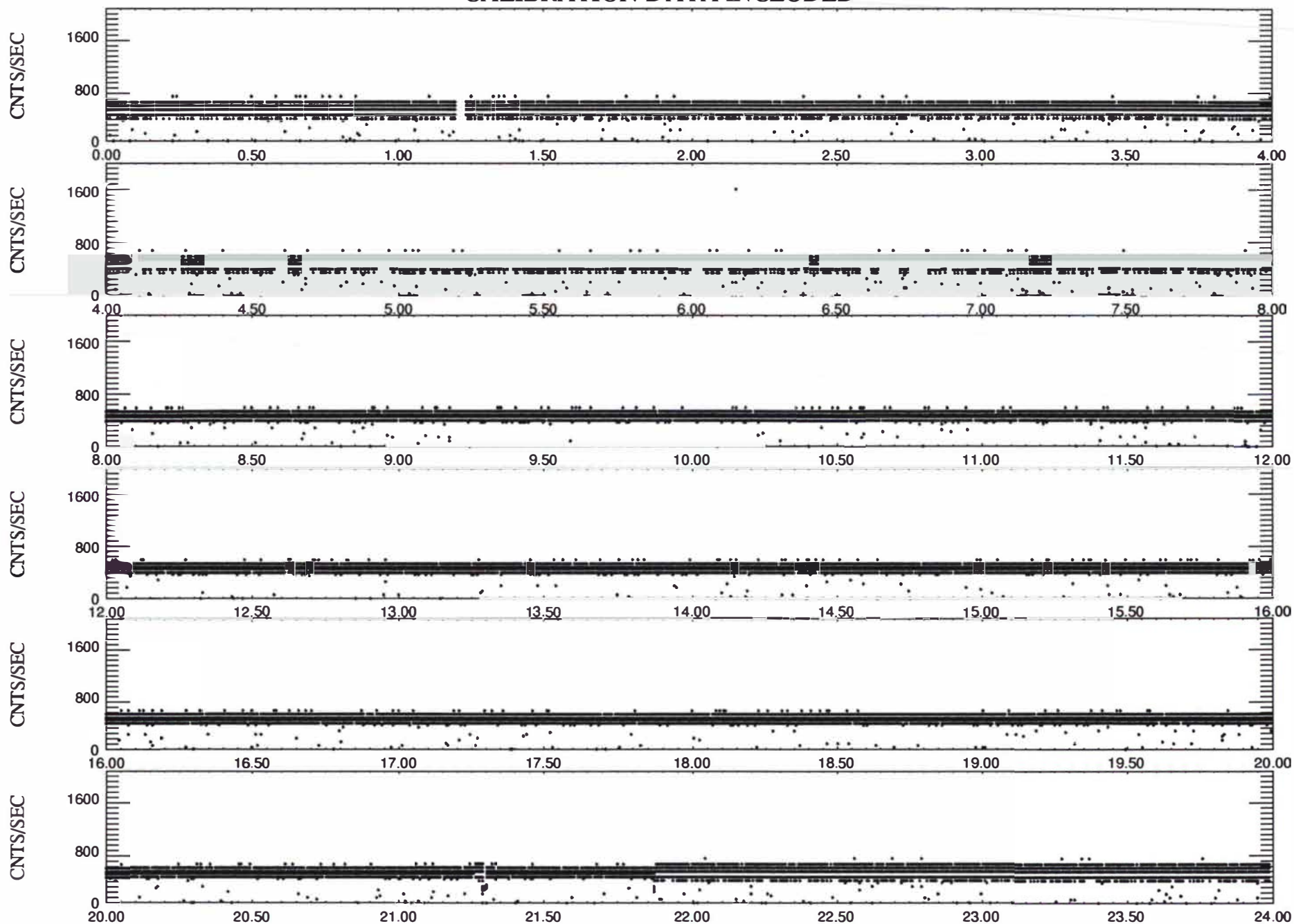
HUS MODES EDR day 49, year 1995 to day 49, year 1995
NO BURST (3)

7/18/95

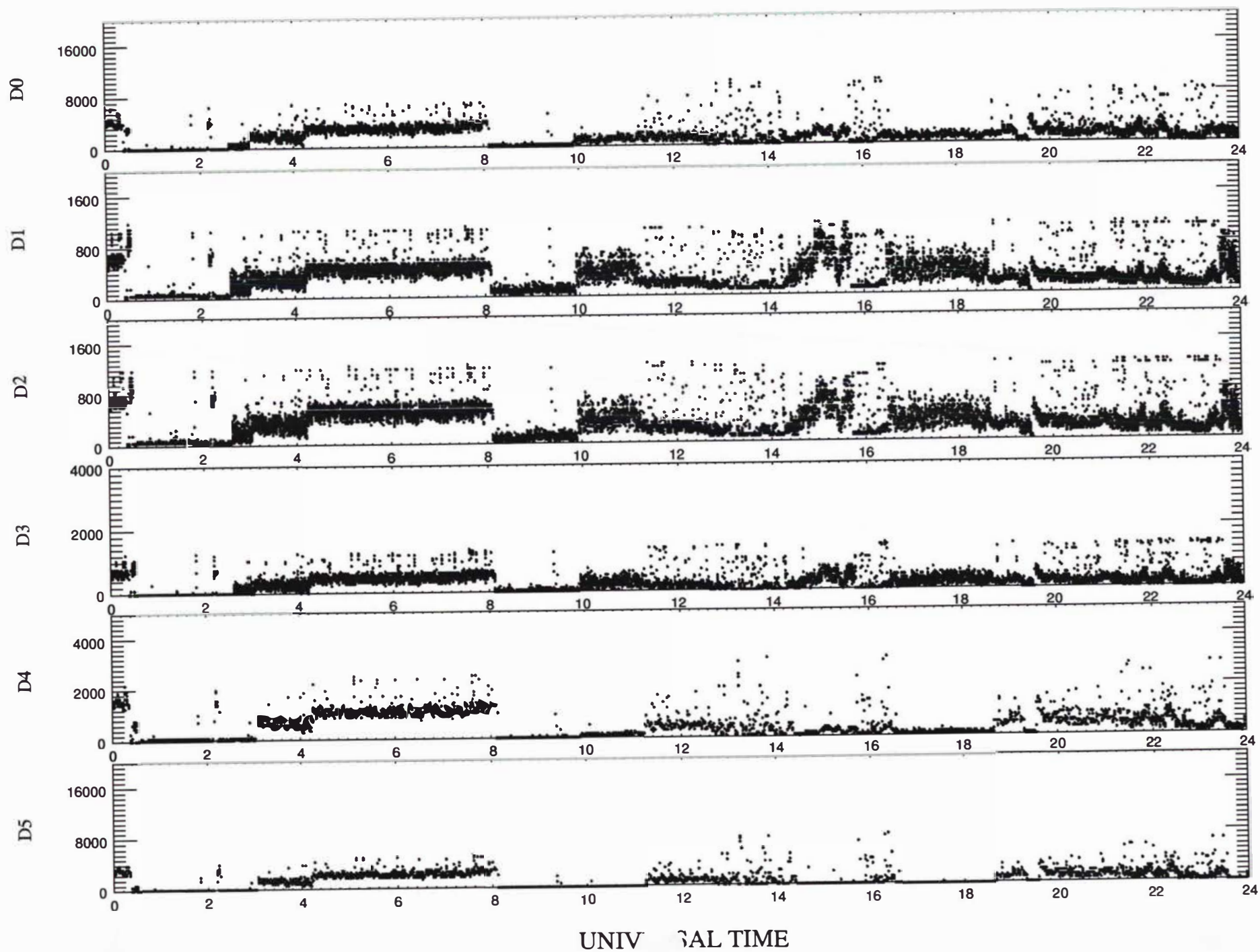


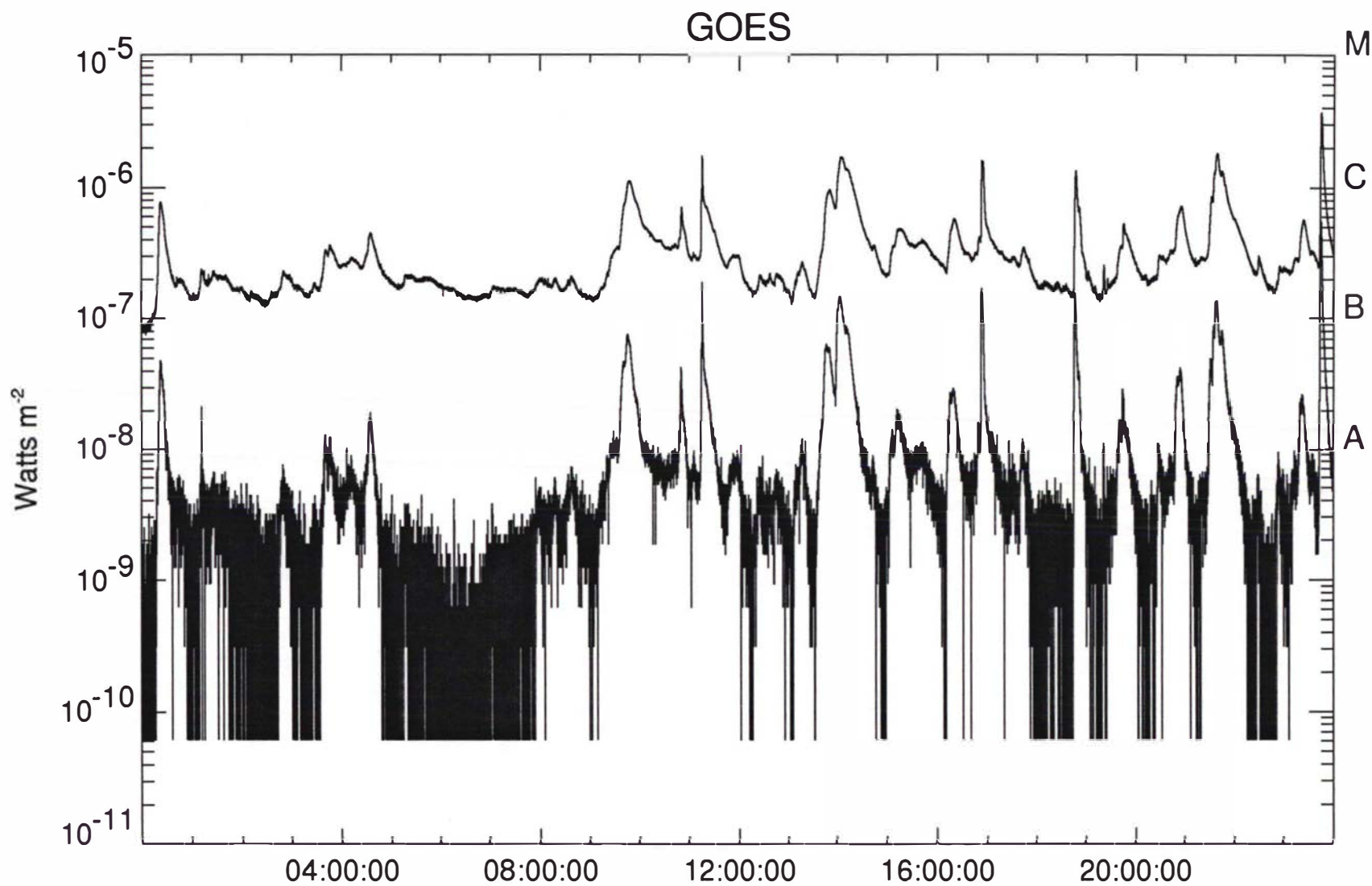
HUS 2A, MODE 1, NOT AVERAGED EDR day 49, year 1995 to day 49, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. TIME





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

Plot created: 95/02/21, 0514

Channel

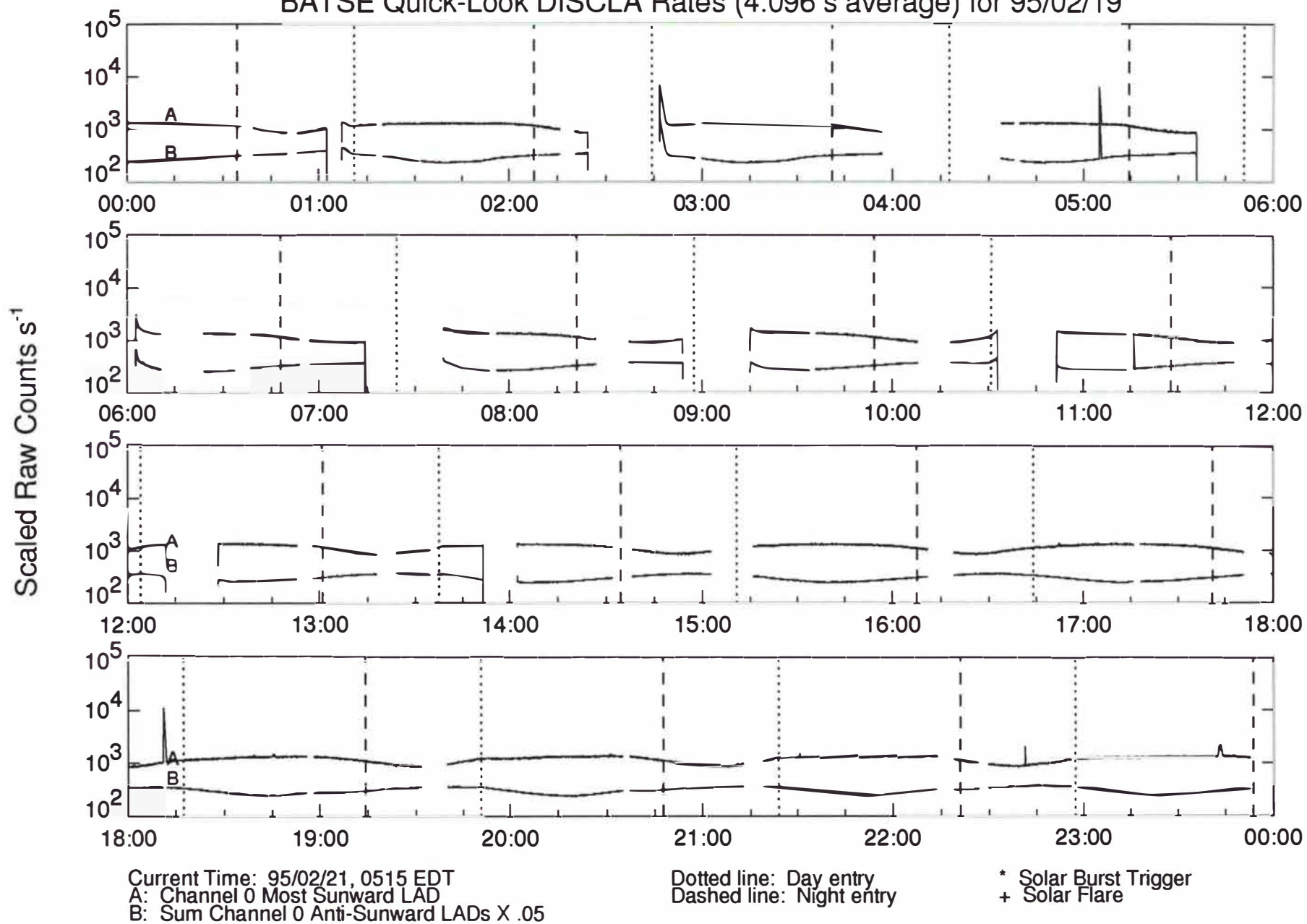
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

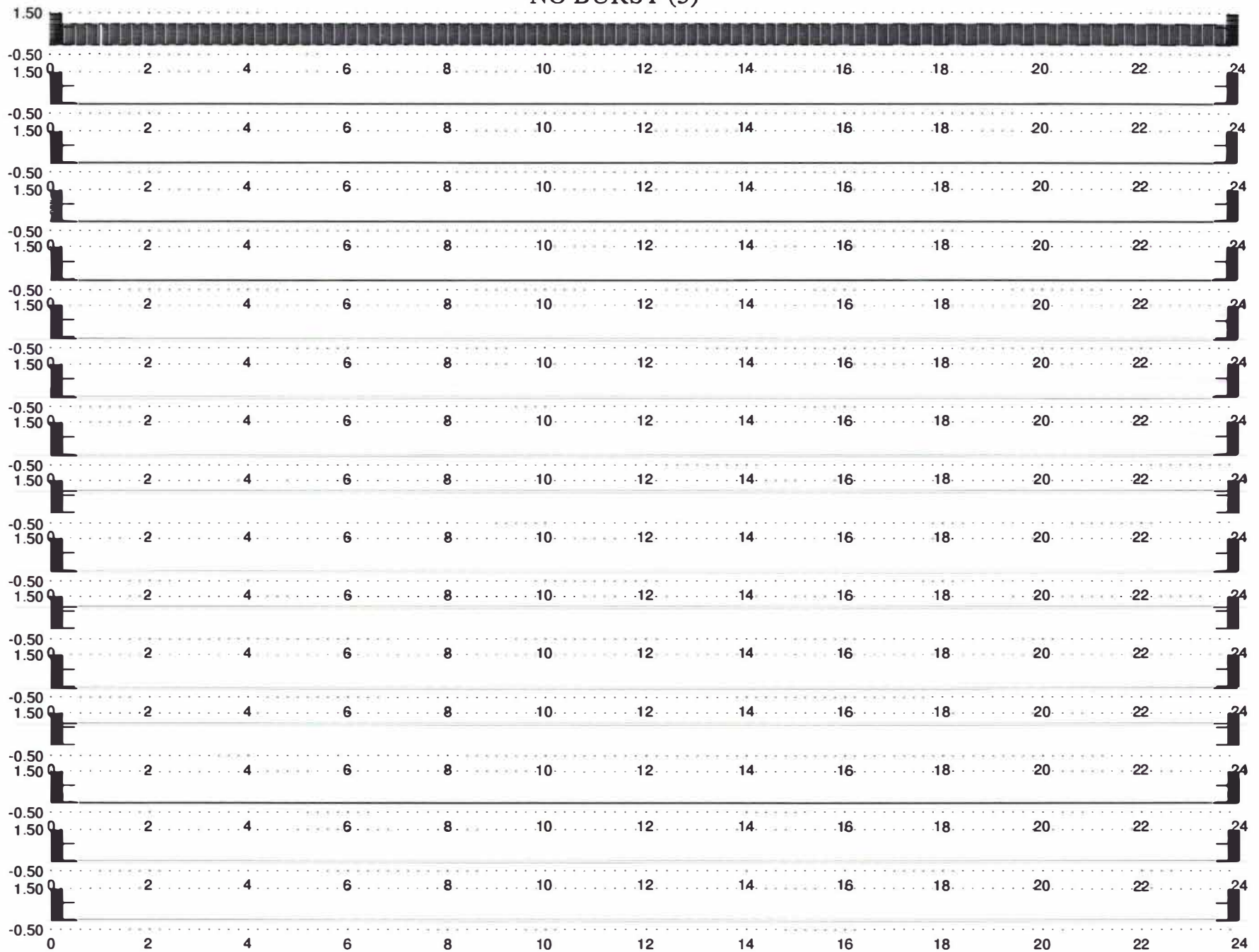
BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/19



HUS MODES EDR day 50, year 1995 to day 50, year 1995
NO BURST (3)

7/18/95

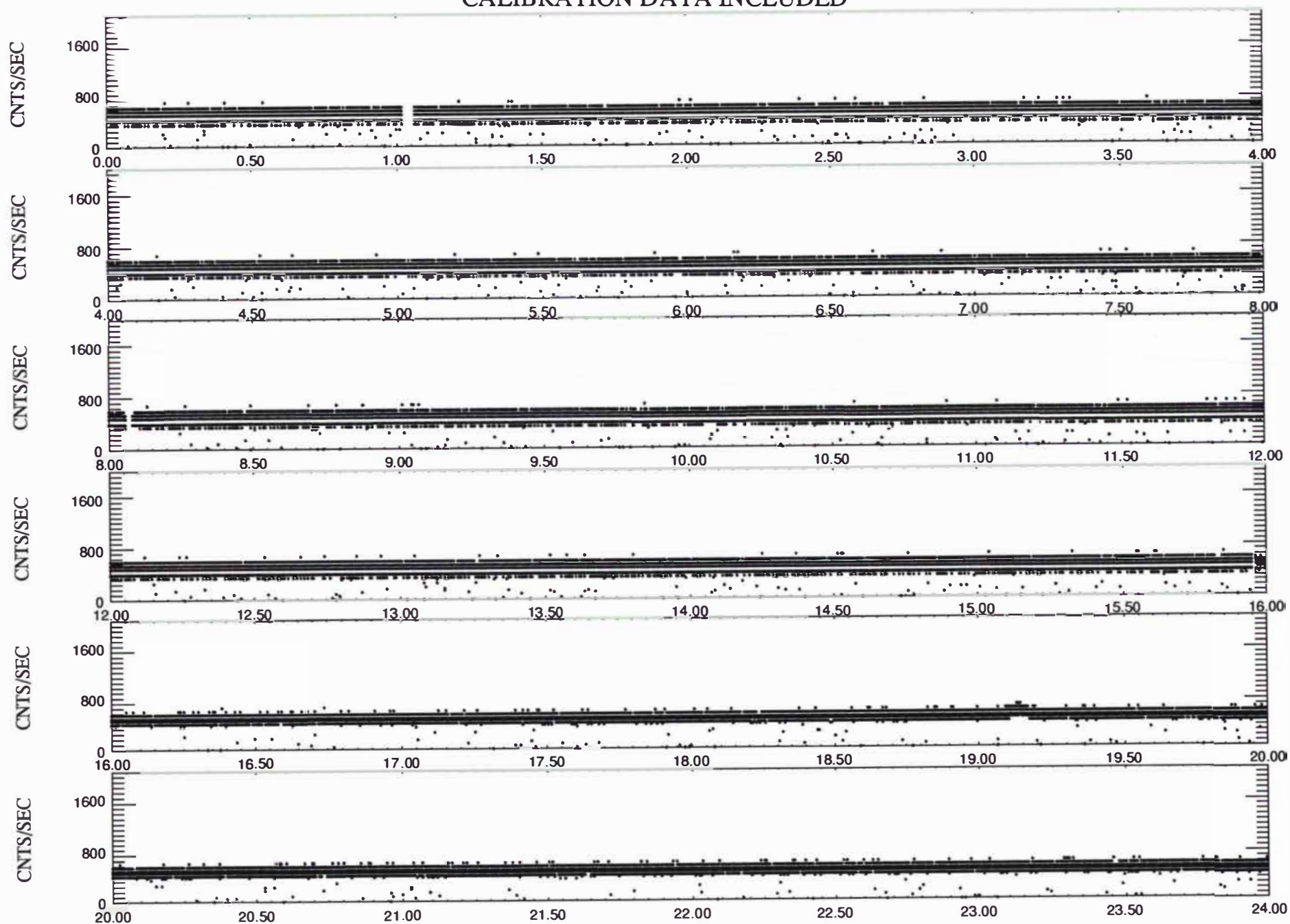
HUS
BRS
MEM
WCH
CAL
RSC
OPM
SPE
ICR
MP.
OSC
DMA
ROM
DMP
CCL
CBU



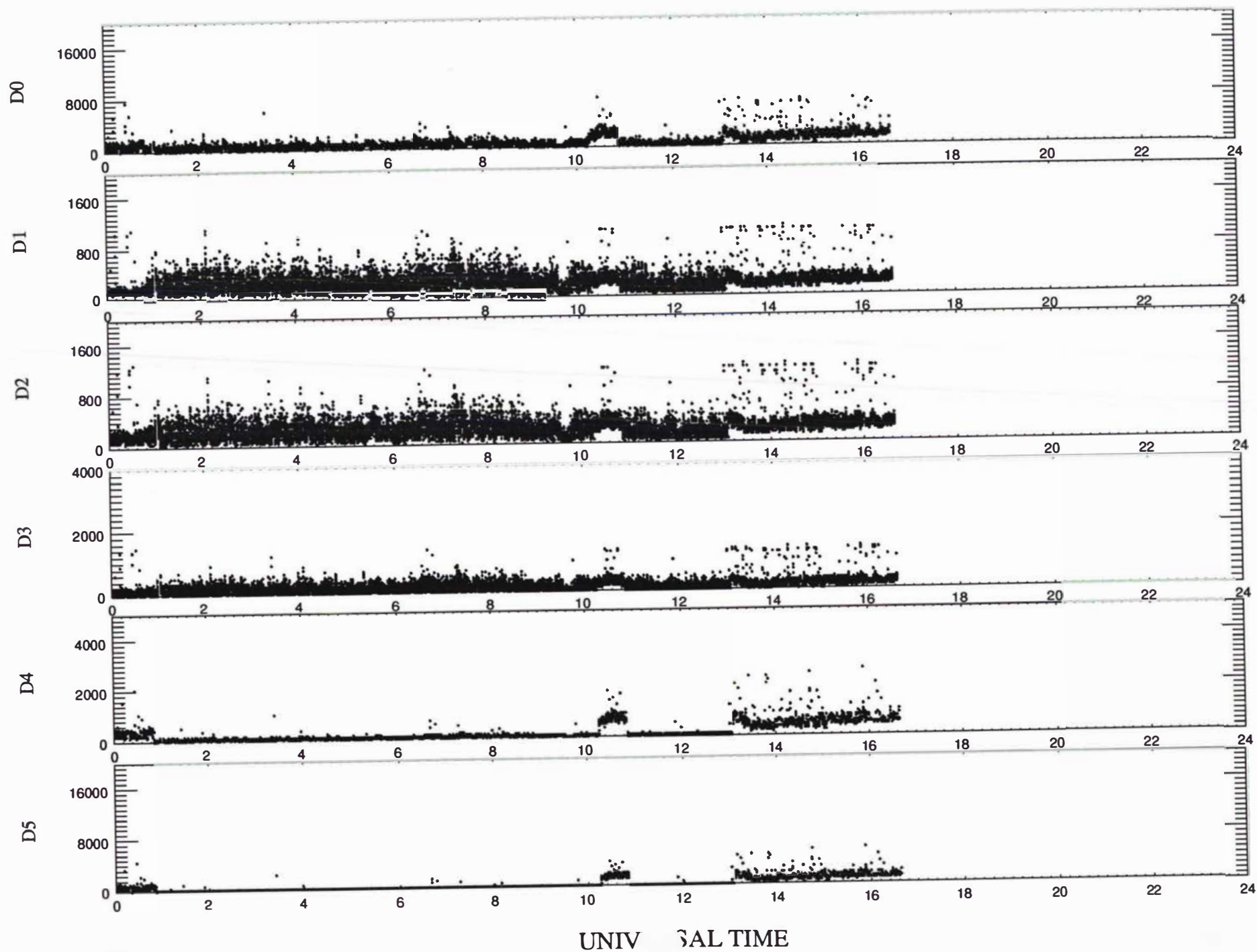
UNIV! 'AL TIME

HUS 2A, MODE 1, NOT AVERAGED EDR day 50, year 1995 to day 50, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. CAL TIME



From SAHI@ssl.msfc.nasa.gov Wed Feb 22 12:57 PST 1995
Date: Wed, 22 Feb 1995 14:56:50 -0600 (CST)
From: SAHI@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3435

TIME: TJD=9768 SECONDS=01371

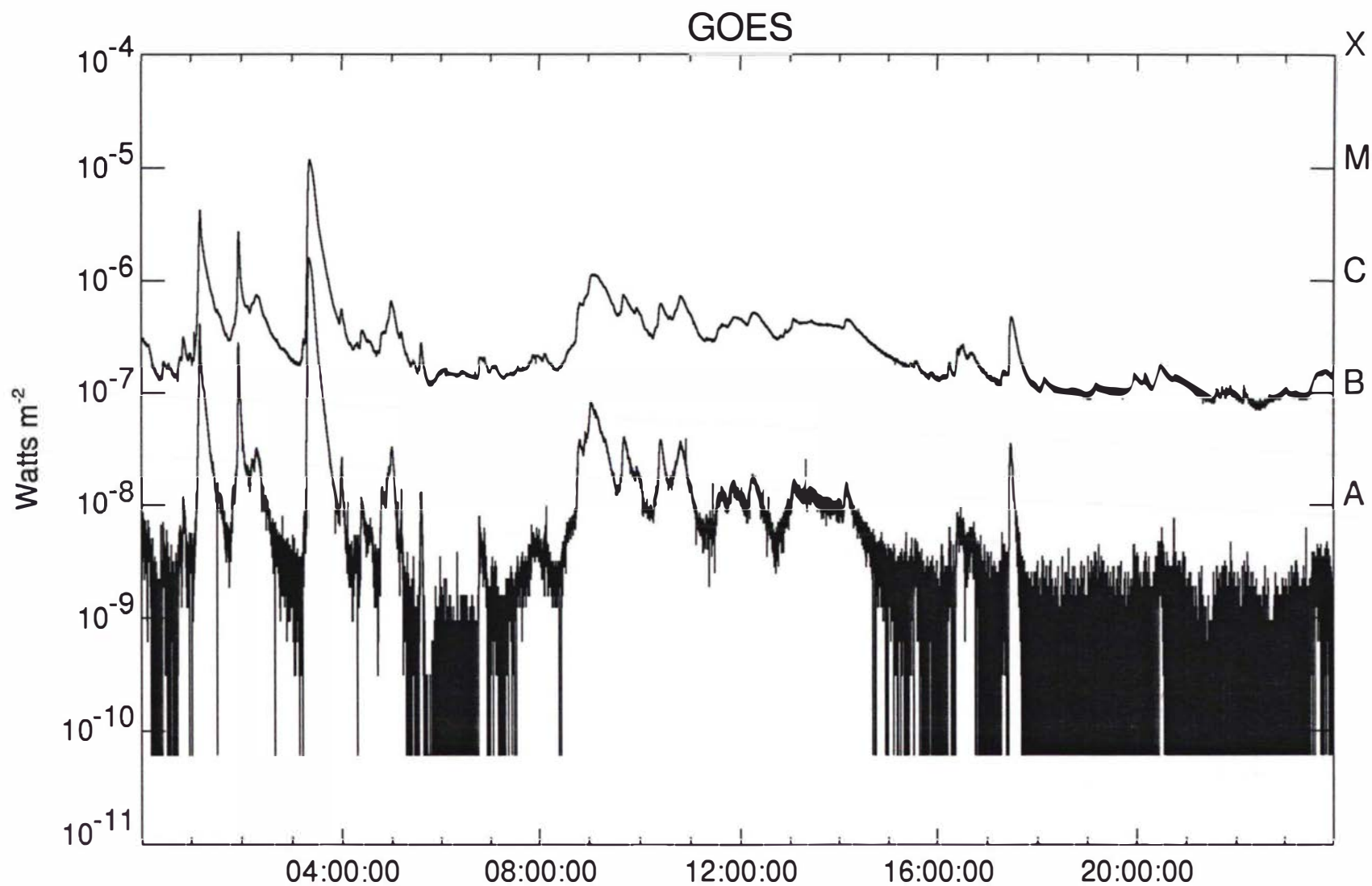
TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT.



Data Start: 95/02/20, 0000:00

Plot created: 95/02/22, 0514

Channel

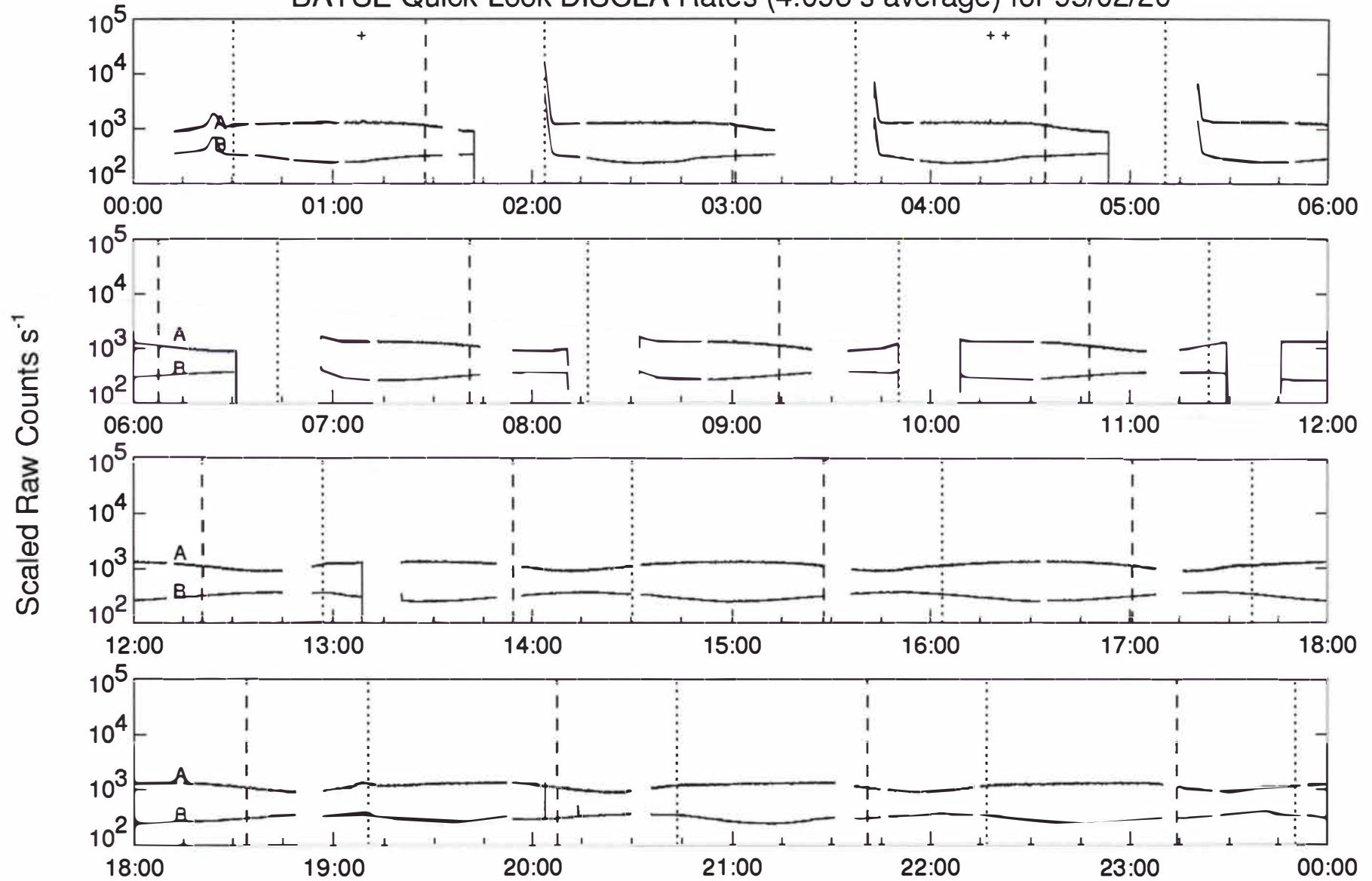
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/20



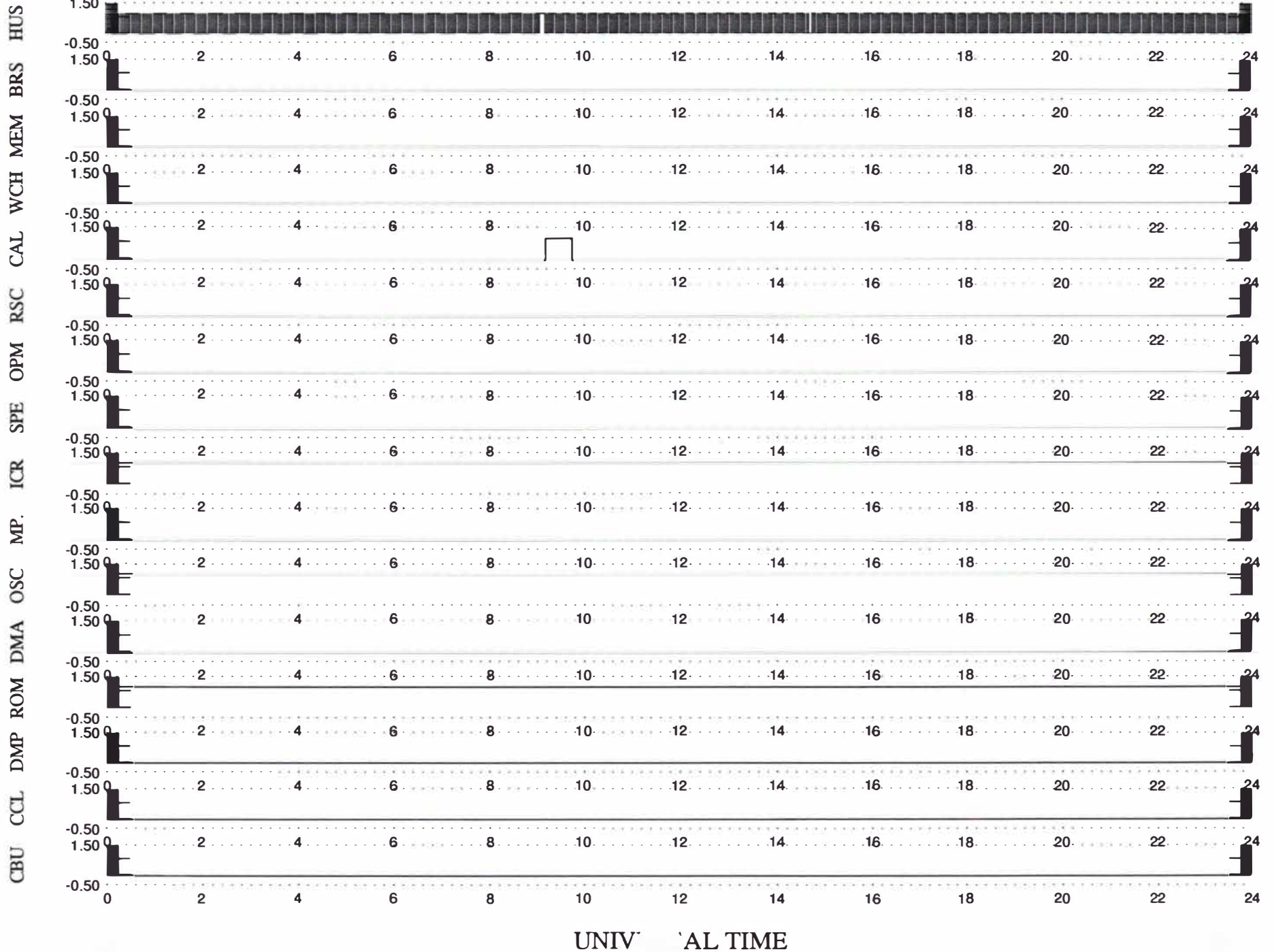
Current Time: 95/02/22, 0514 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

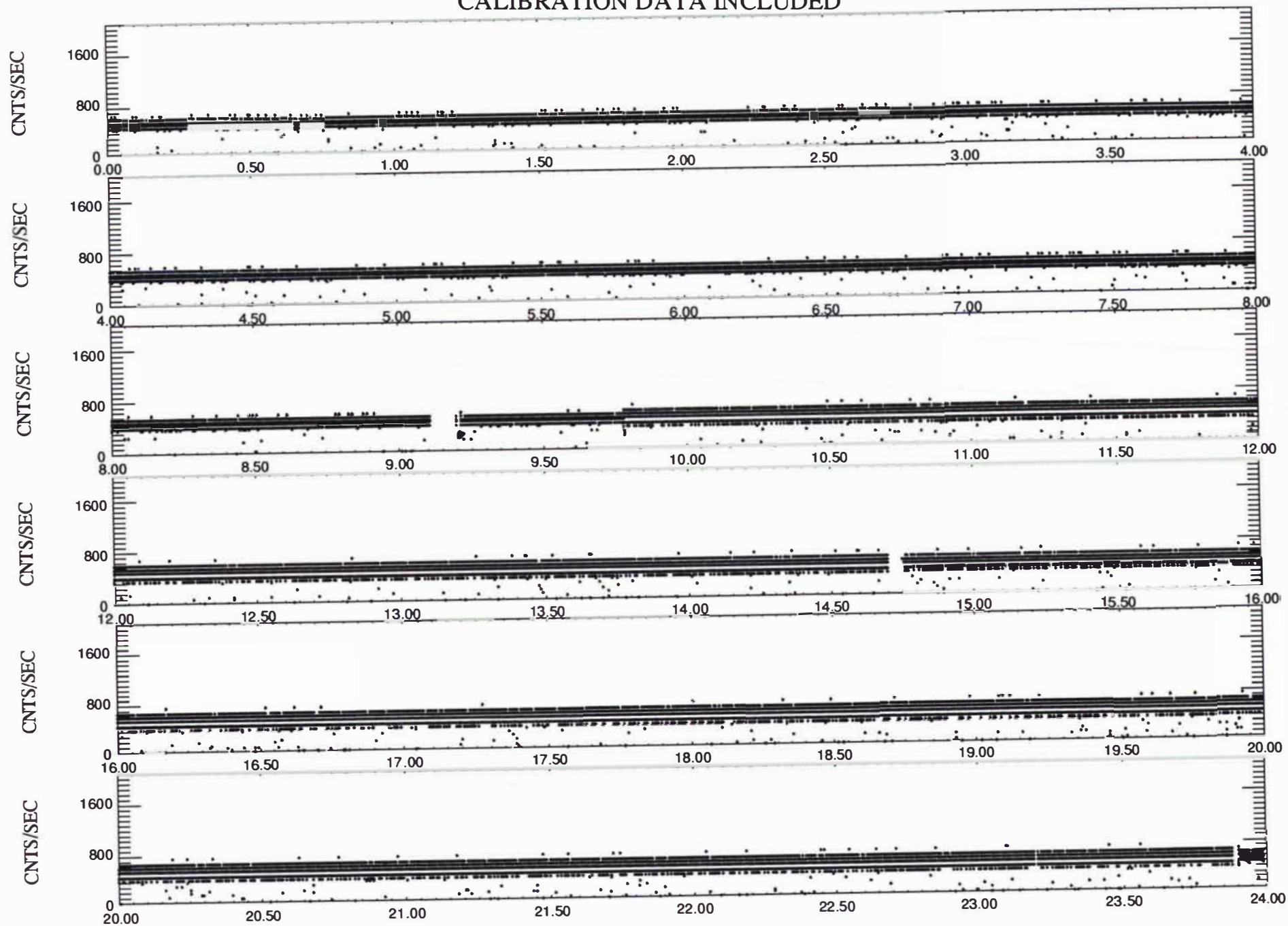
HUS MODES EDR day 51, year 1995 to day 51, year 1995
NO BURST (3)

7/18/95

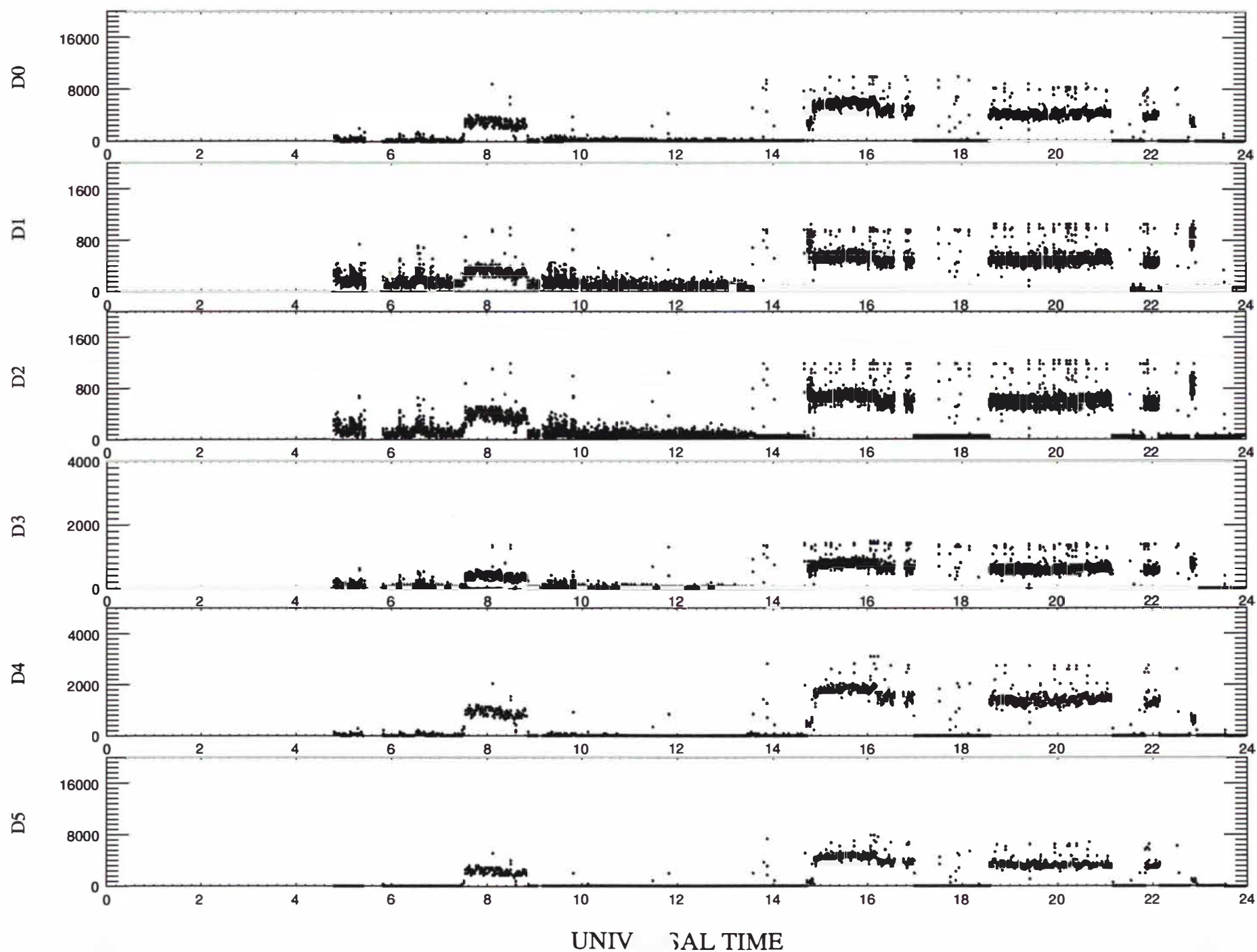


HUS 2A, MODE 1, NOT AVERAGED EDR day 51, year 1995 to day 51, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. CAL TIME



From DEAL@fender.msfc.nasa.gov Thu Feb 23 06:20 PST 1995
Date: Thu, 23 Feb 1995 8:20:56 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3436

BATSEARCH PROGRAM

RI

BATSE BURST # 3436
EVENT OF 1995 FEB 21 DAY OF YEAR= 52
EVENT CROSSING TIME AT BATSE : 74705. S. OR 20:45:05.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 294.000 -32.000
BATSE PEAK COUNTING RATE: 12000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/ 2/ 95 IS:
RA= 338.790 DEC= -18.708 DIST= 2.323 AU
BATSE-ULYSSES DISTANCE = 347532385. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=137.73 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -857.86 SECS.
CROSSING TIME AT ULYSSES IS 73847. S. OR 20:30:47 +/- 172.34 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/ 2/ 95 IS:
RA= 143.336 DEC= 19.217 DIST= 0.686 AU
MARS-BATSE DISTANCE = 102572712. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 29.25 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 298.53 SECS.
CROSSING TIME AT MARS IS 75004. S. OR 20:50:03 +/- 33.56 SECONDS

BATSE BURST TRIGGER

NO.: 3436

TIME: TJD=9769 SECONDS=74705

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=139.6 AZIMUTH=318.0 ERROR= DEGREES

COMMENTS:

BURST WITH MANY PEAKS. DURATION ~ 25S. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3436	950221	9769	74705	12000	294	-32

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

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

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

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

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

Helio corr removed

Date: *Feb 11 '98*

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

3. PVO Data

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

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

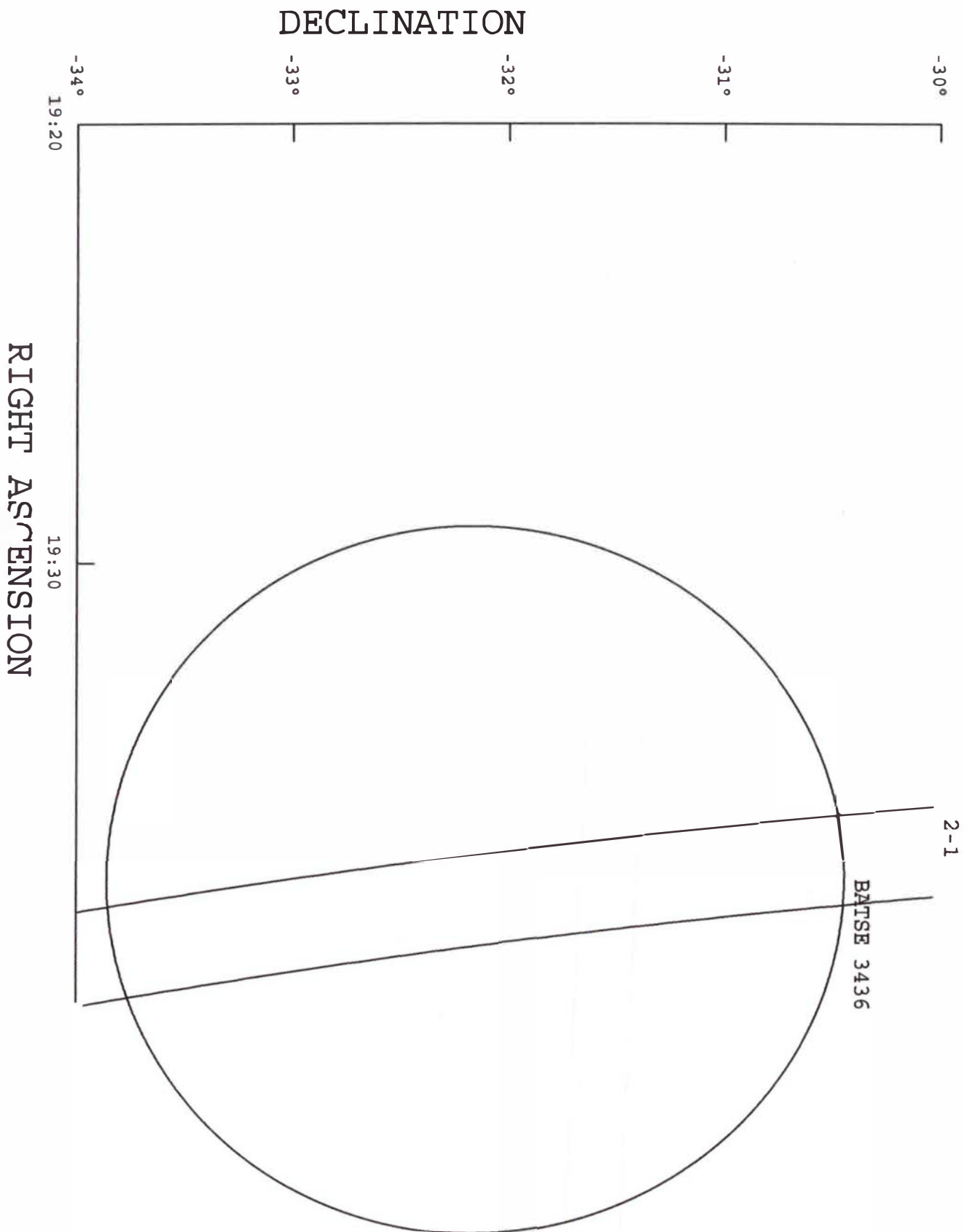
G=GALACTIC EQUATOR

1 ULYSSES

2 BATSE

EVENT OF FEB 21, 1995 20:30

11/ 2/98



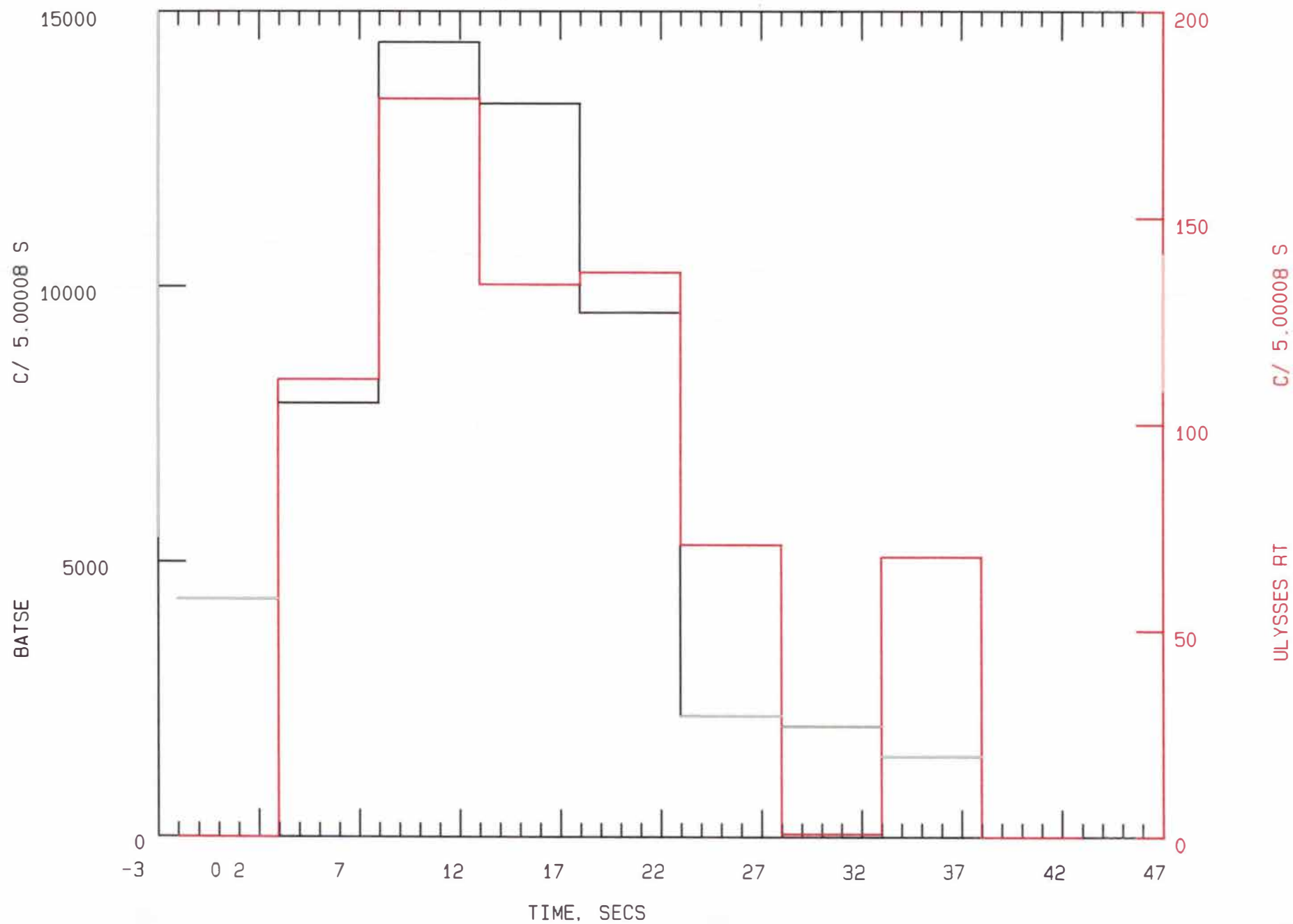
BATSE

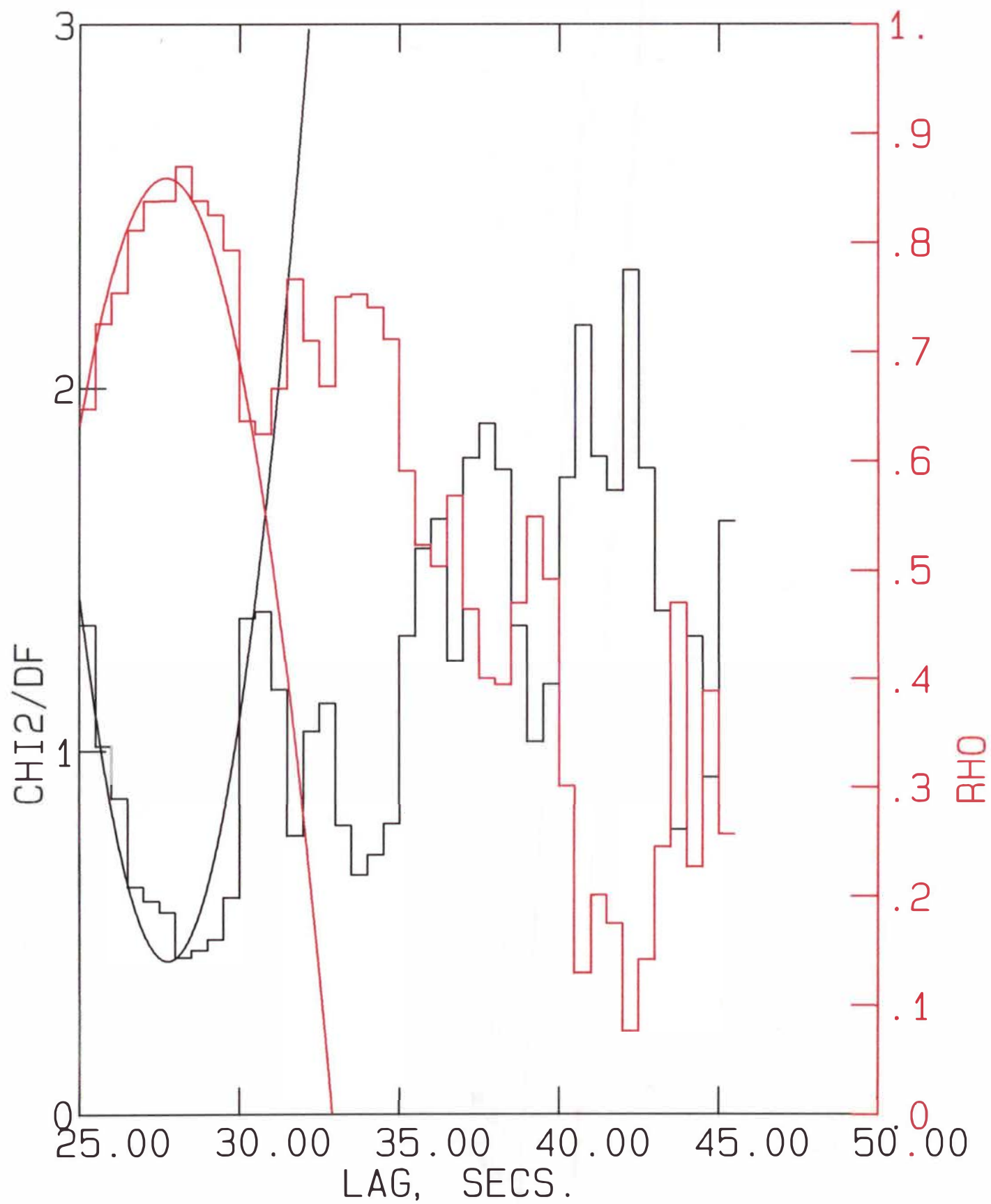
-ULYSSES RT CORRELATION

21/ 2/95

74705.586

11/ 2/98





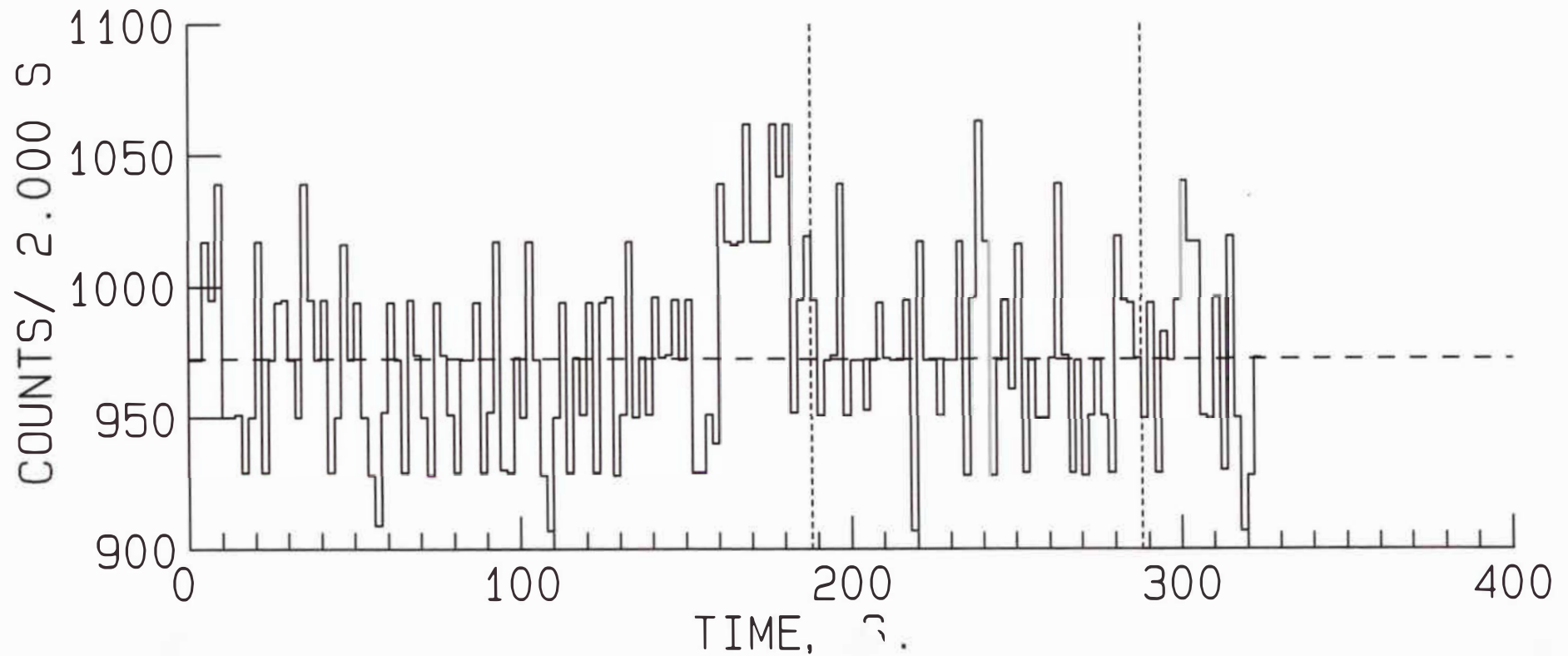
ULYSSES RT

11 / 2 / 98

21/ 2/95 73692.412 s

0.500 S INTERVALS REGROUPED BY 4

21- 145 keV



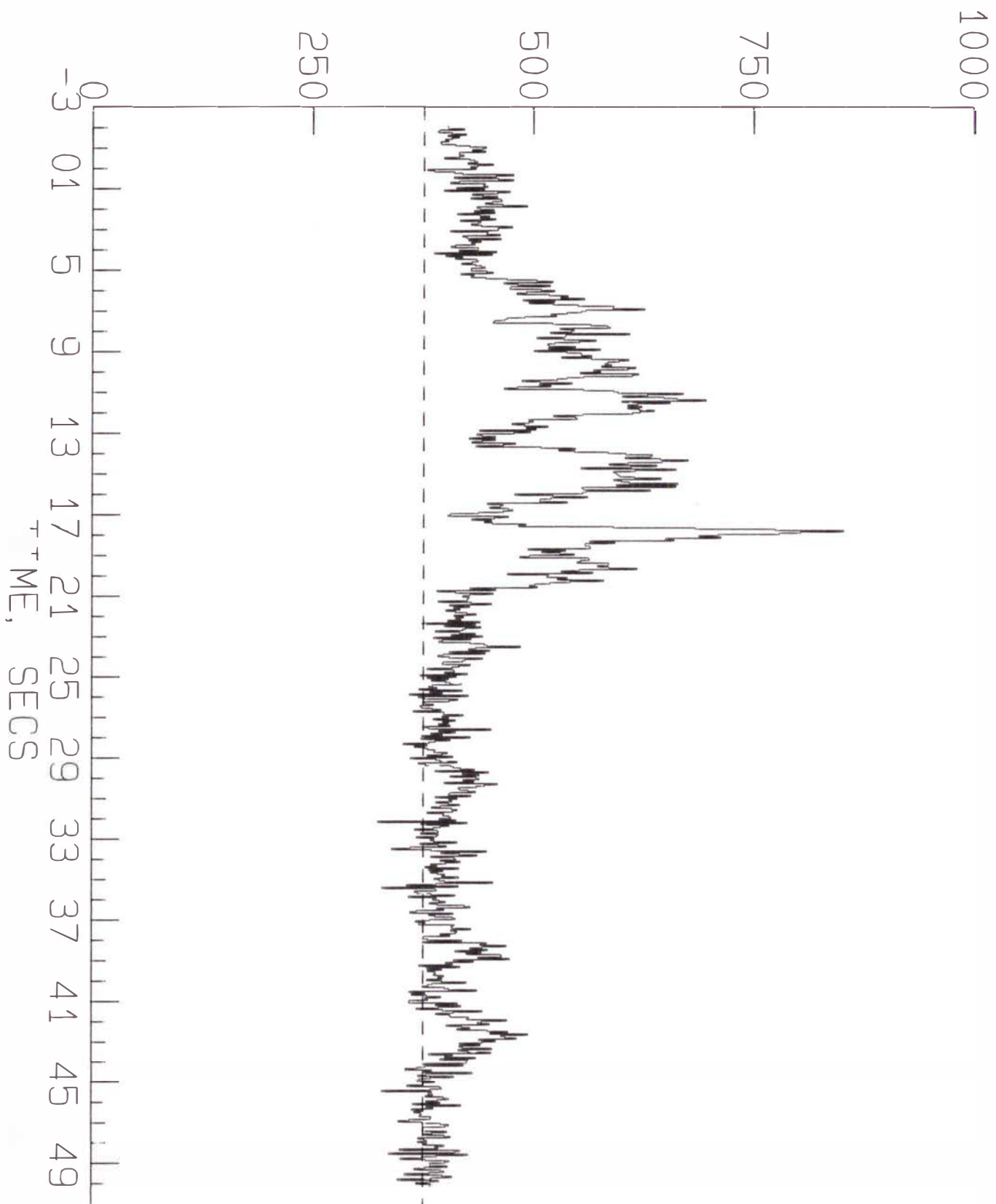
BATSE

21/02/95

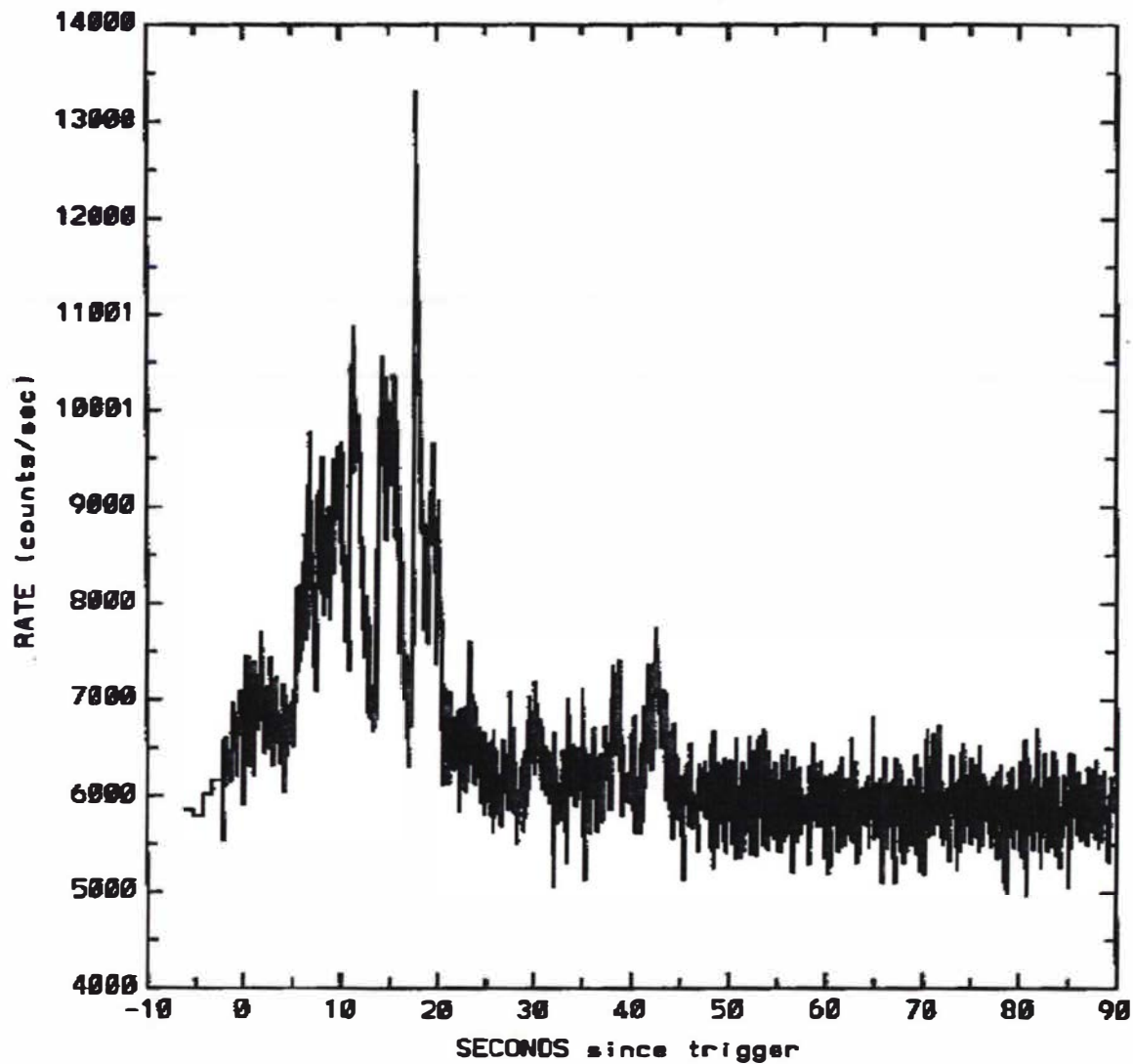
74705.586

25- 100 keV

COUNTS/ .064 S



DISCSC Data for K. Hurley. No. 3436



28-FEB-1995 14:18:41

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

Trigger = . 3436

Trigger Time:
9769 / 74785.586Burst Data Type:
DISCSCDeadtime
Corrected: NBackground Data
Type: PREB + DISCLAMinimum Integ. Time:
0.064 secondsDetectors [7..8],
----2-1-Discriminators:
(1. 2)Quality Mask:
001SP1

From DEAL@fender.msfc.nasa.gov Thu Feb 23 06:23 PST 1995
Date: Thu, 23 Feb 1995 8:23:02 -0600 (CST)
From: DEAL@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3437

BATSEARCH PROGRAM

NO

BATSE BURST # 3437
EVENT OF 1995 FEB 21 DAY OF YEAR= 52
EVENT CROSSING TIME AT BATSE : 85400. S. OR 23:43:20.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 172.000 -4.000
BATSE PEAK COUNTING RATE: 3600 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 21/ 2/ 95 IS:
RA= 338.830 DEC= -18.633 DIST= 2.323 AU
BATSE-ULYSSES DISTANCE = 347548863. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 26.09 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1041.20 SECS.
CROSSING TIME AT ULYSSES IS 86441. S. OR 24:00:41 +/- 154.32 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 21/ 2/ 95 IS:
RA= 143.336 DEC= 19.217 DIST= 0.686 AU
MARS-BATSE DISTANCE = 102572712. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=143.47 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -274.94 SECS.
CROSSING TIME AT MARS IS 85125. S. OR 23:38:45 +/- 31.18 SECONDS

BATSE BURST TRIGGER

NO.: 3437

TIME: TJD=9769 SECONDS=85400

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=90.5 AZIMUTH=188.4 ERROR= DEGREES

COMMENTS:

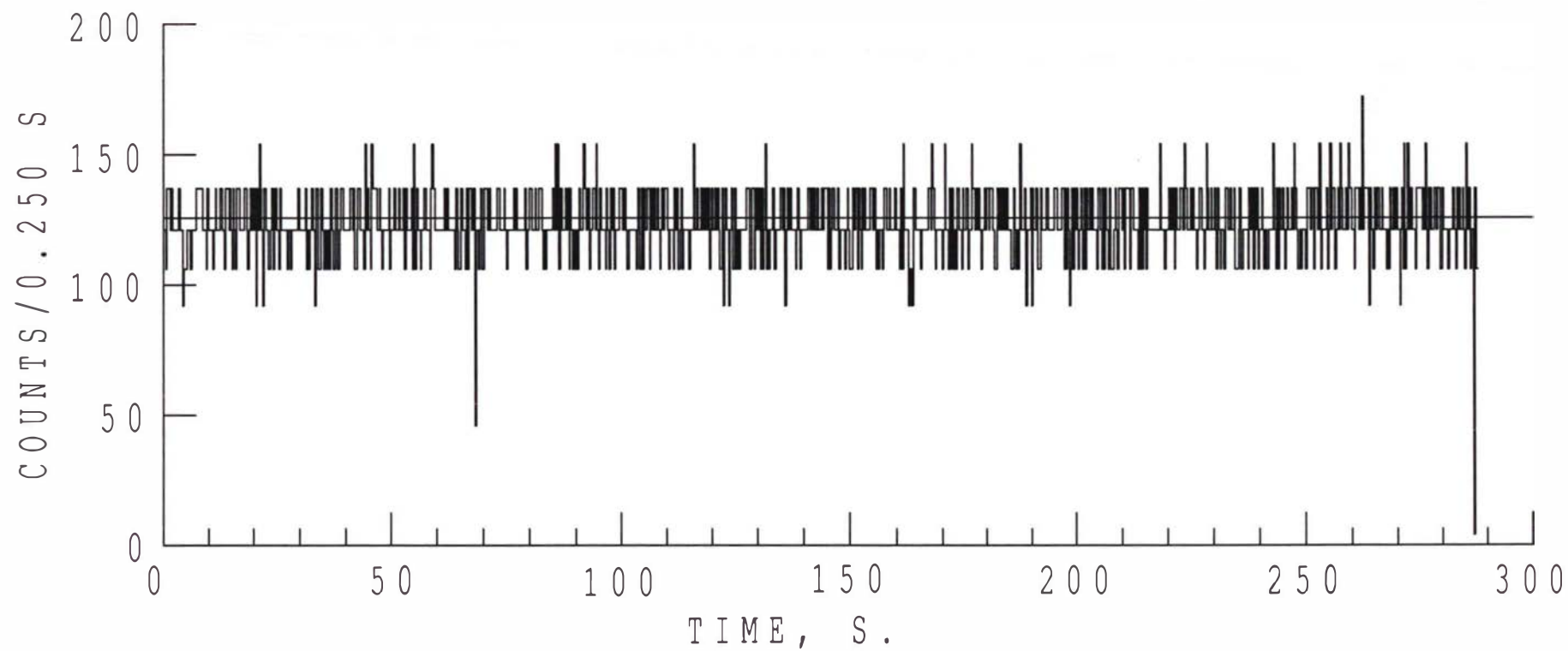
BURST LASTING ~0.5 S. NOT VISIBLE ABOVE 300 KEV.

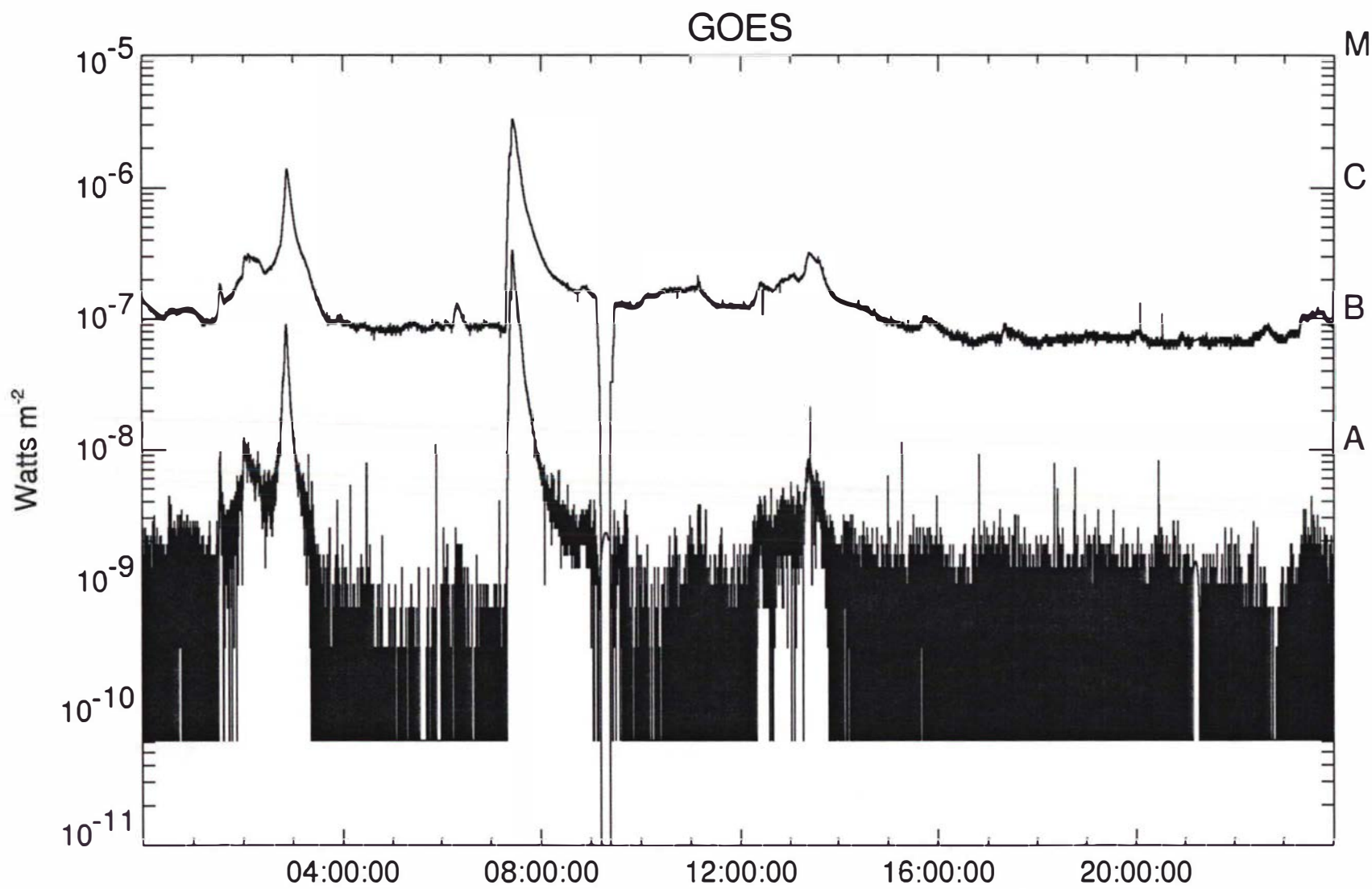
BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3437	950221	9769	85400	3600	172	-04

24 / 2 / 95

ULYSSES RT
21 / 2 / 95 86292.156 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





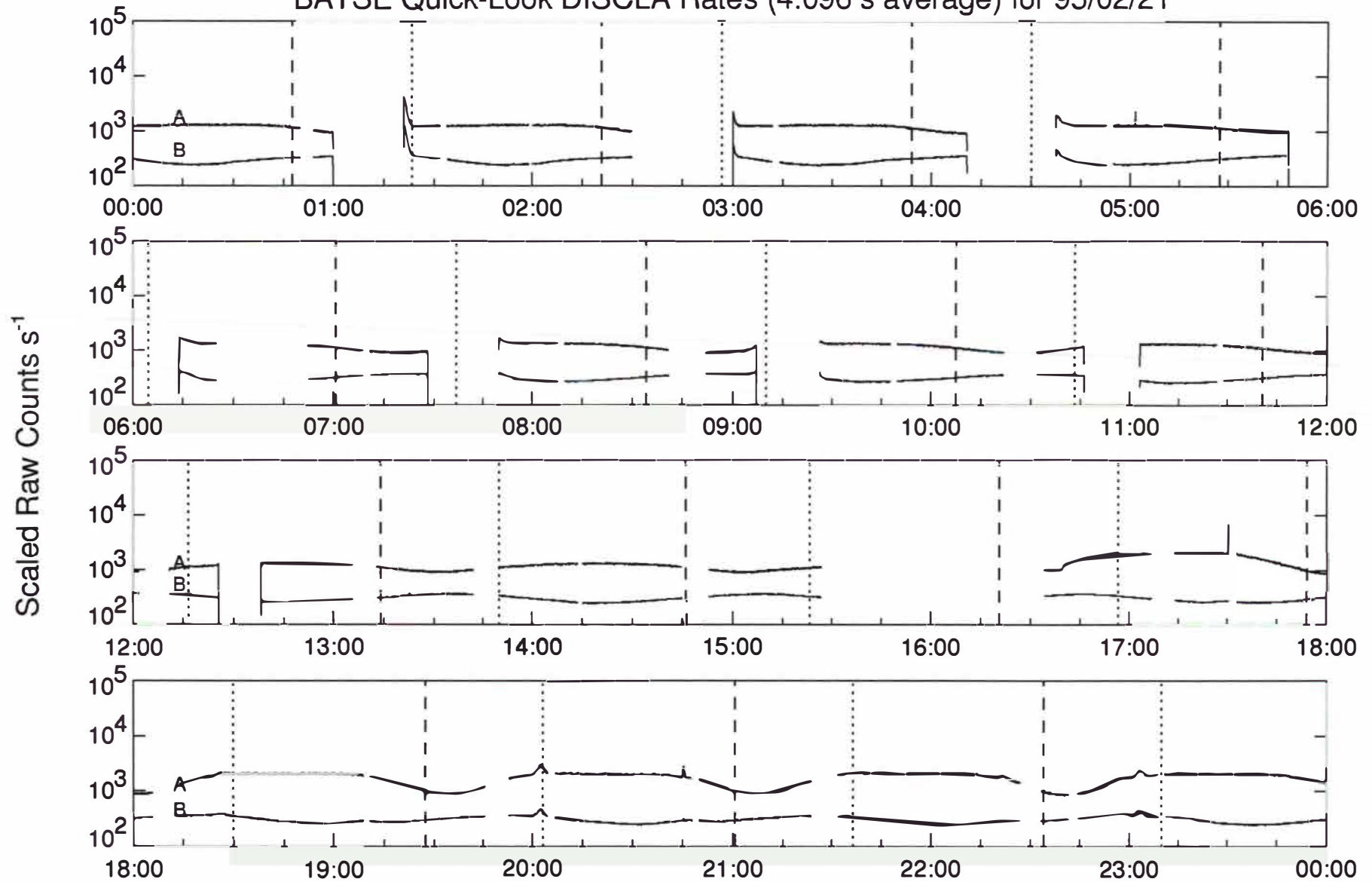
Data Start: 95/02/21, 0000:01

Plot created: 95/02/23, 0514

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 95/02/21



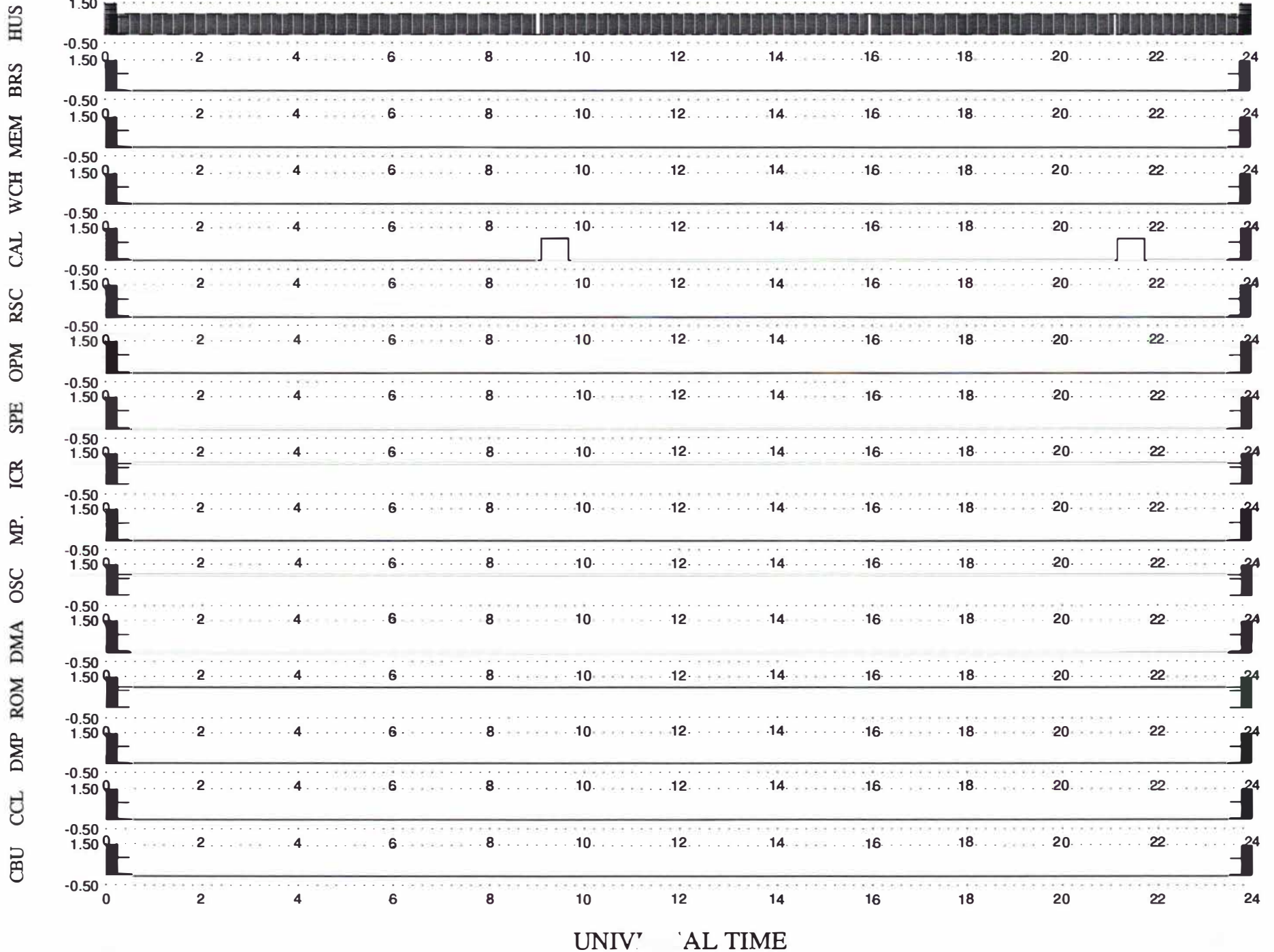
Current Time: 95/02/23, 0515 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

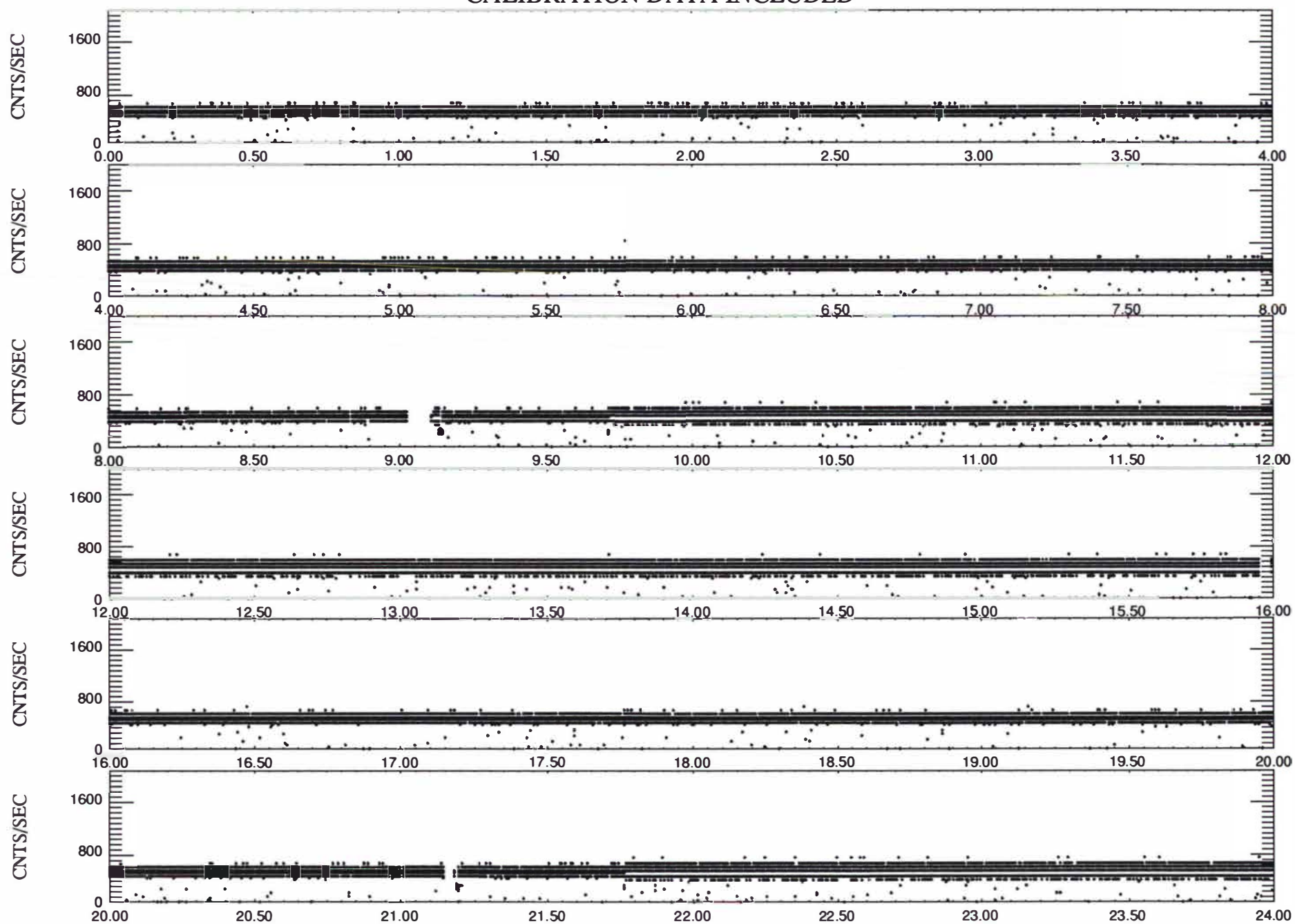
HUS MODES EDR day 52, year 1995 to day 52, year 1995
NO BURST (3)

7/18/95

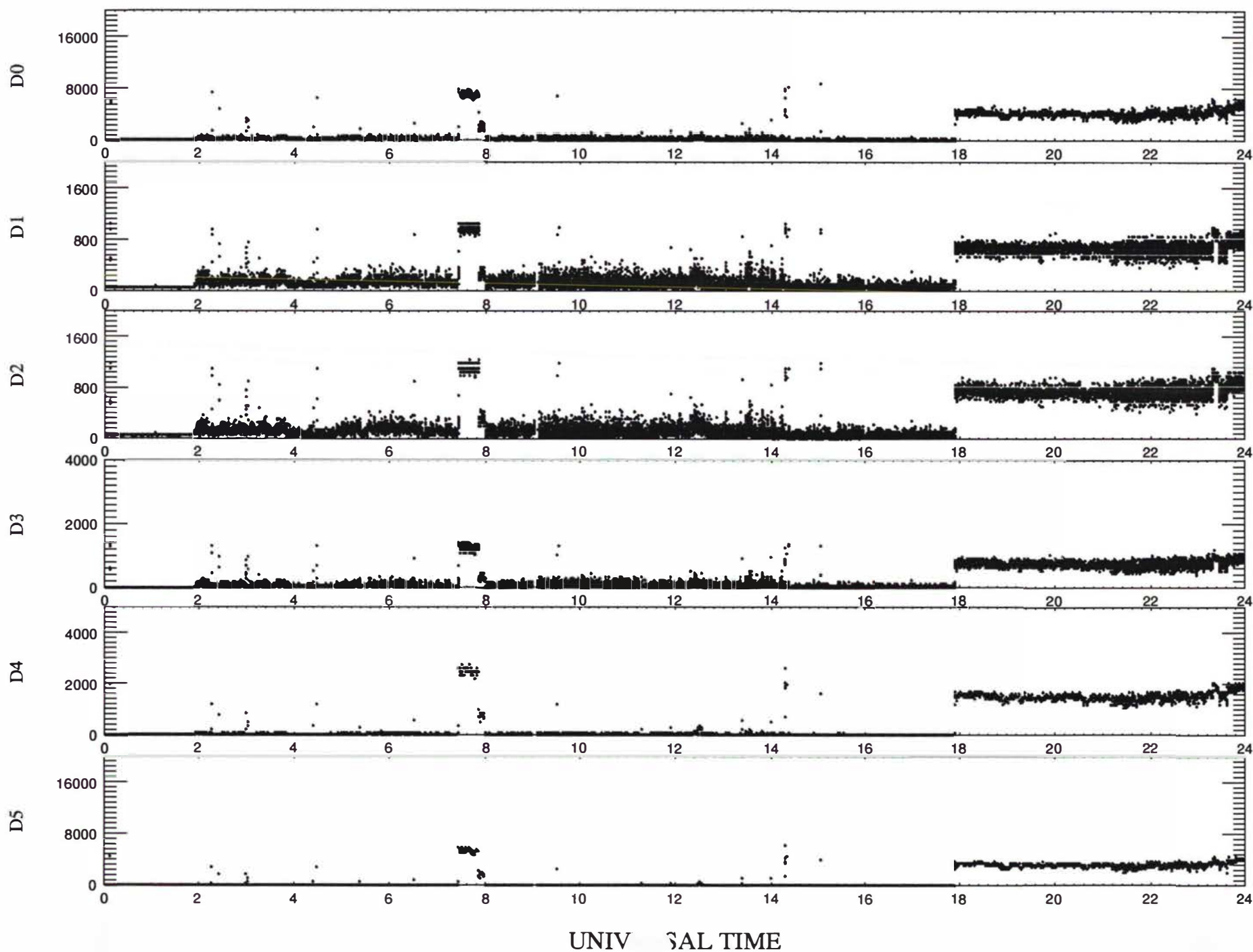


HUS 2A, MODE 1, NOT AVERAGED EDR day 52, year 1995 to day 52, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIVERSAL TIME



From HAGEDON@ssl.msfc.nasa.gov Thu Feb 23 07:52 PST 1995
Date: Thu, 23 Feb 1995 9:52:13 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3438

TIME: TJD=9770 SECONDS=02471

TYPE: PARTICL SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:

ELECTRON EVENT AFTER SAA EXIT.

950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47 ✓
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54 ✓
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
940412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

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

Mime-Version: 1.0

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

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

Subject: For Your INFO

Dear Bonnard, Kevin, David, Helmut:

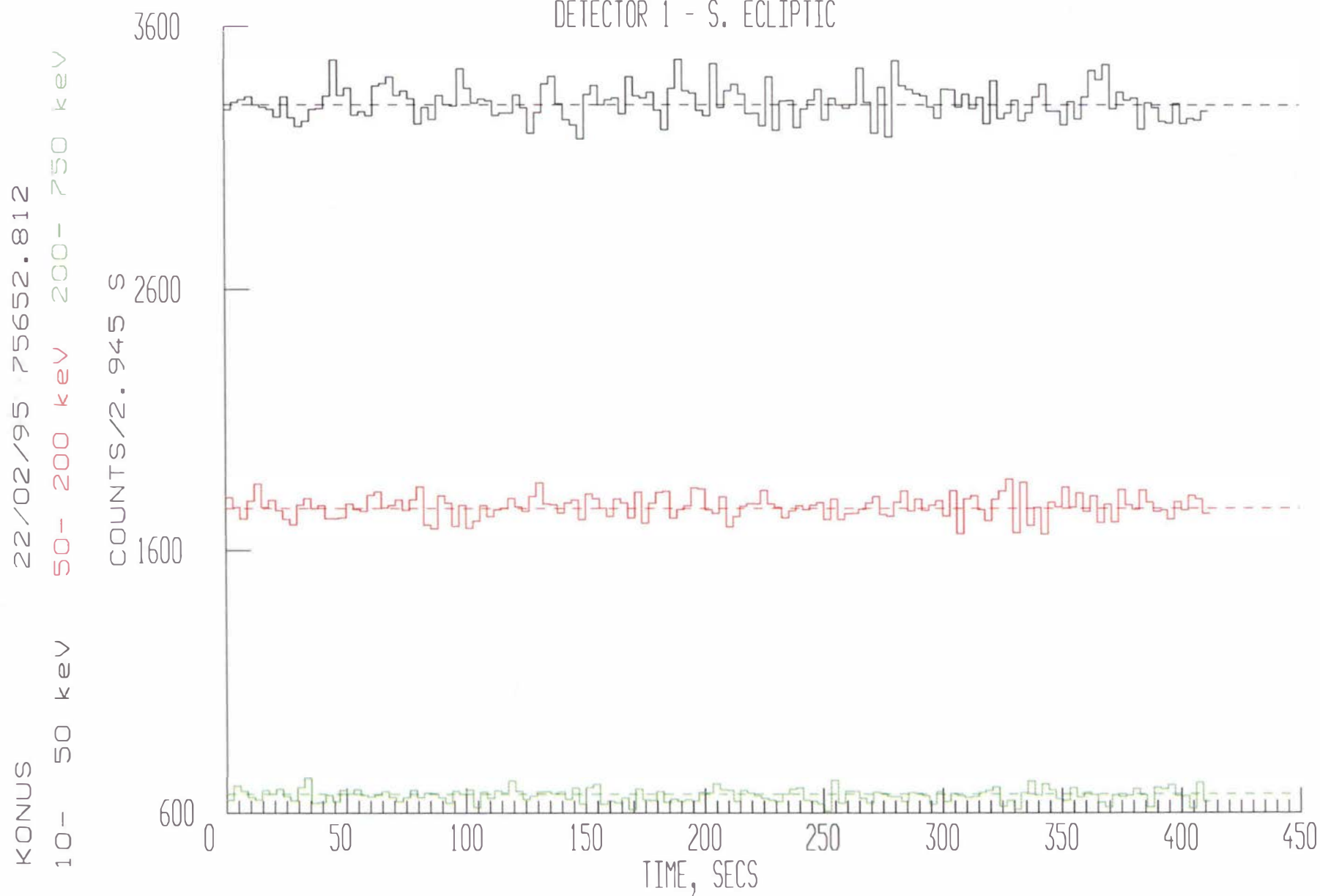
Here is Sergei Golenetskii's latest Konus burst list, for your information. Note that, including the non-triggered-mode 'BGR' events they confidently identify, there are over 300 events so far.

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number	
			Max counts							
			G1	G2	G3	in G2	T<T0	T>T0		
941113	12 09 15	S1	145	85		2.5	115		BGR ✓	
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓	
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓	
941117	14 07 57	S2	150	140		<0.15	5		BGR	
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓	
941120	20 23 17.924	S1	215	328	30	>15	2	25	5 ✓	
941121	17 25 00.945	S1	1652	1656	300	21	3	50	6 ✓	
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓	
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓	
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓	
941126	16 54 20	S1	55	75		>10	26		BGR	
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9	
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10	
941127	15 39 10	S1	210	57		2.7	260		BGR ✓	
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓	
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓	
941207	22 10 32	S2	265	175		<0.2	7		BGR	
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓	
941214	17 03 51	S1	40	45	29	>6	12		BGR	
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol	
941221	07 44 08	S2	55	115	30	0.8	20		BGR	
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓	
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓	
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28	
941228	16 55 23	S2	40	36	23	0.25	25		BGR	
941229	12 58 05	S1	46	108	31	1.8	15		BGR	
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓	
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓	
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓	
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓	
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓	
950110	06 02 15	S2	332	180		<0.1	3600		BGR	
950110	13 37 57.084	S2	234	422	213	0.05	38	100	32 ✓	
950111	04 49 12.241	S1	586	620	100	>19	92	24	33 ✓	
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓	
950112	07 45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓	
950113	05 59 13	S1	283	180	26	>10	52		BGR ✓	
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓	
950114	01 00 38	S1	46	110		1.6	6		BGR ✓	
950114	04 03 01	S2	23	76		0.5	70		BGR ✓	
950114	07 30 30.766	S2	205	406	60	<0.05	1	100	36 ✓	
950114	13 10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓	
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓	
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓	
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓	
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39	

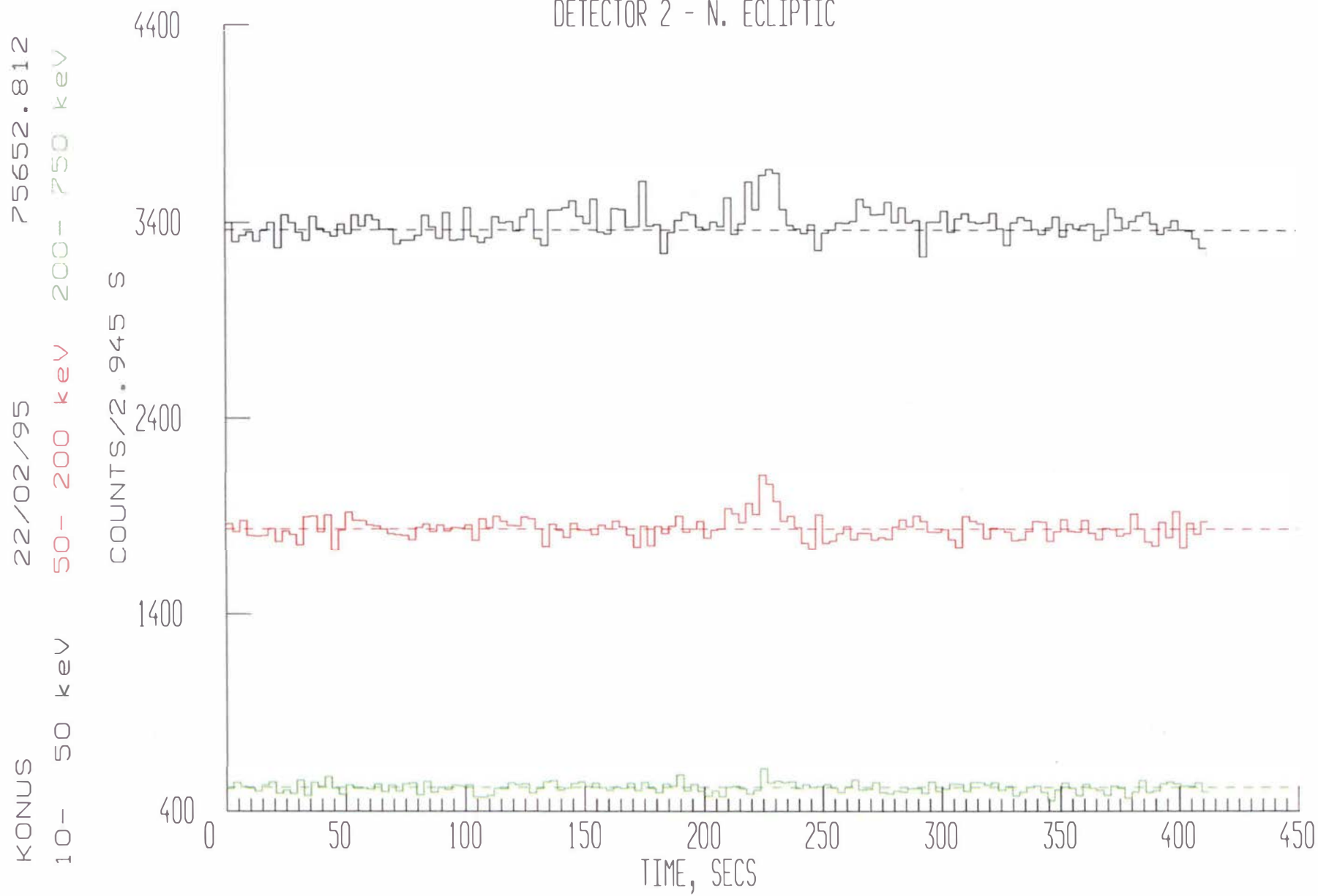
22/08/2011

DETECTOR 1 - S. ECLIPTIC



22/08/2011

DETECTOR 2 - N. ECLIPTIC



KONUS RI 19950222 76214

ULYSSES RT

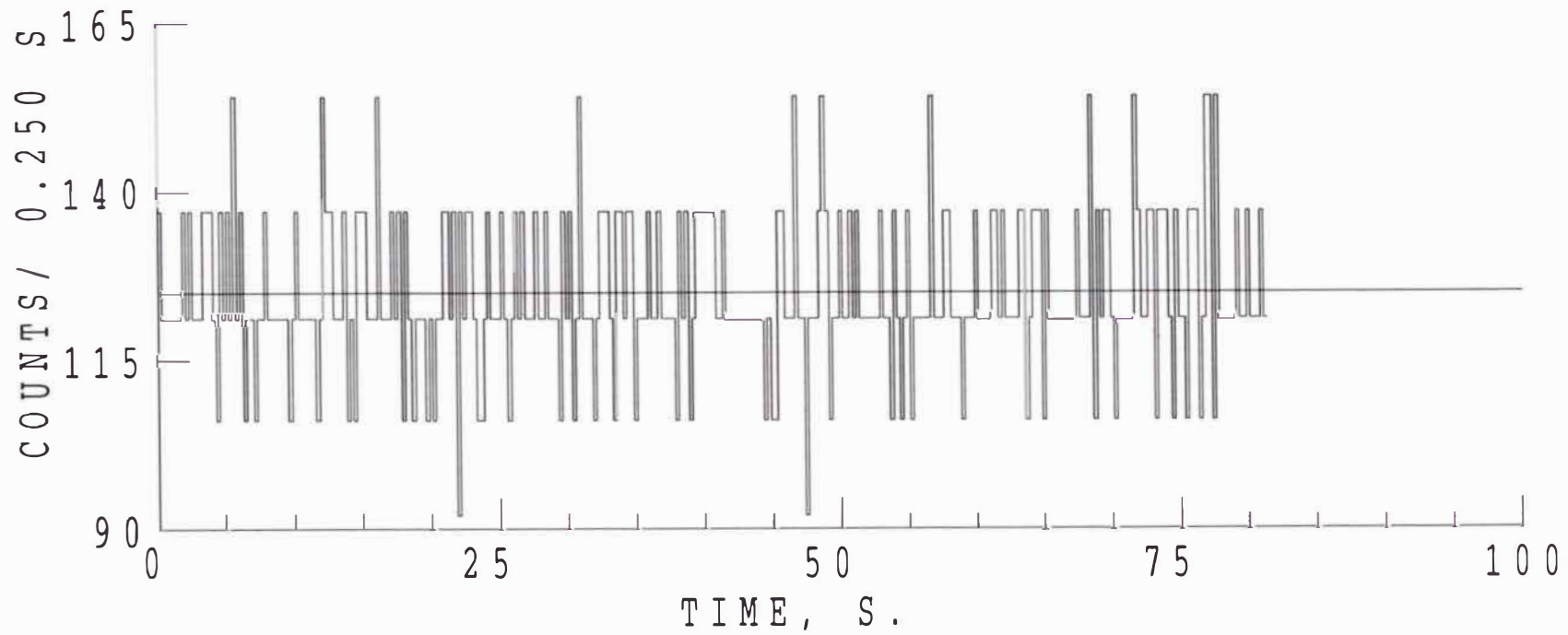
27 / 08 / 11

22/02/95 76274.906 s

0 - 0 keV

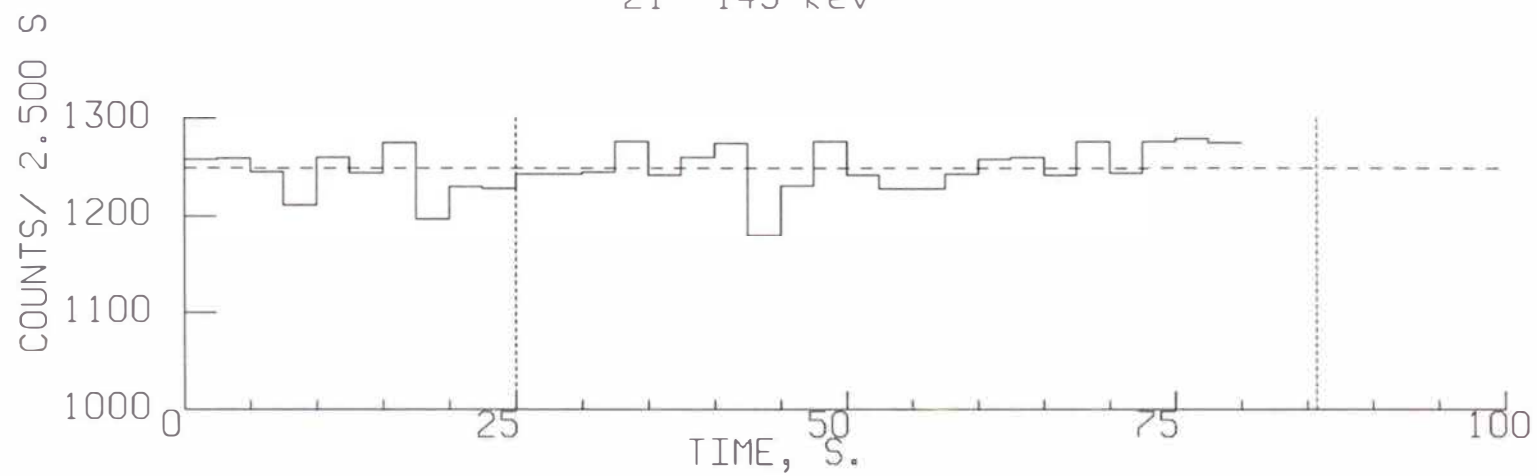
N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



ULYSSES RT
22/ 2/95 76274.906 s
0.250 S INTERVALS REGROUPED BY 10
21- 145 keV

29/ 8/11



K O N U S

1 2 / 2 / 9 6

U L Y S S E S R T

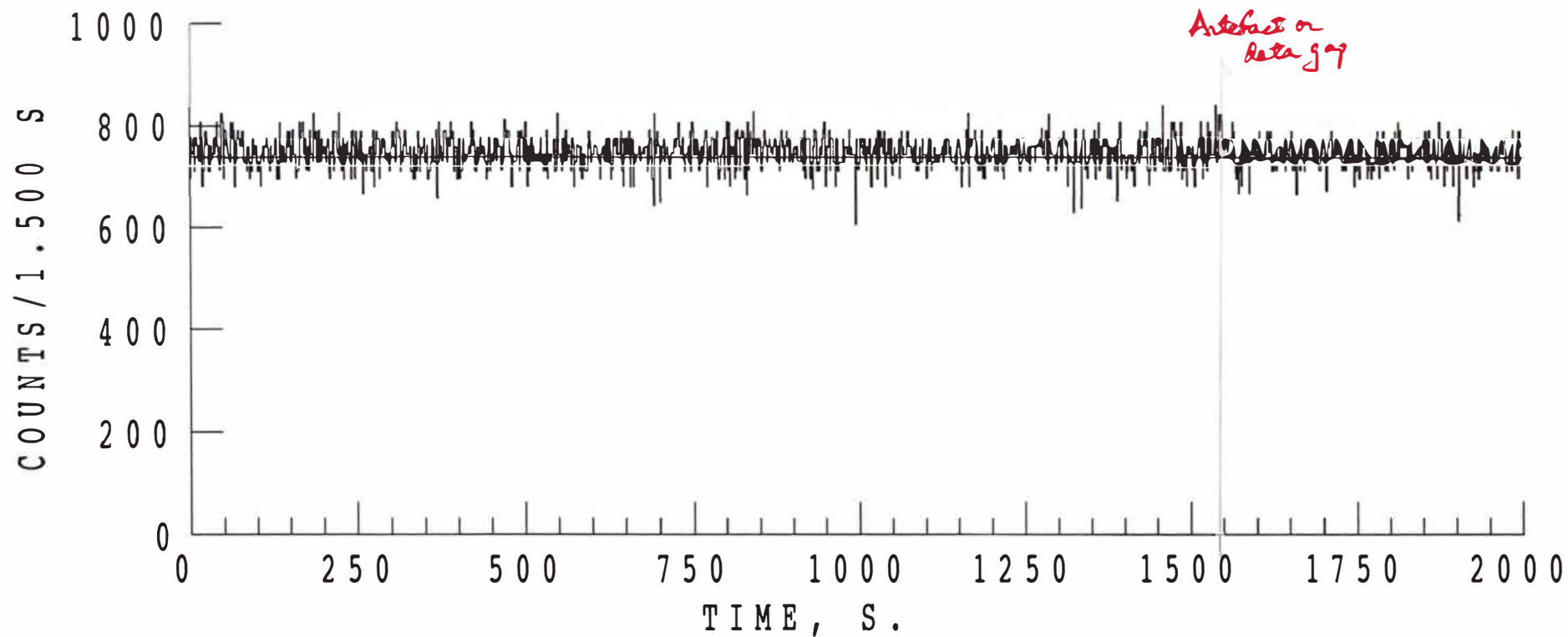
2 2 / 2 / 9 5 7 4 6 6 4 . 1 1 7 s

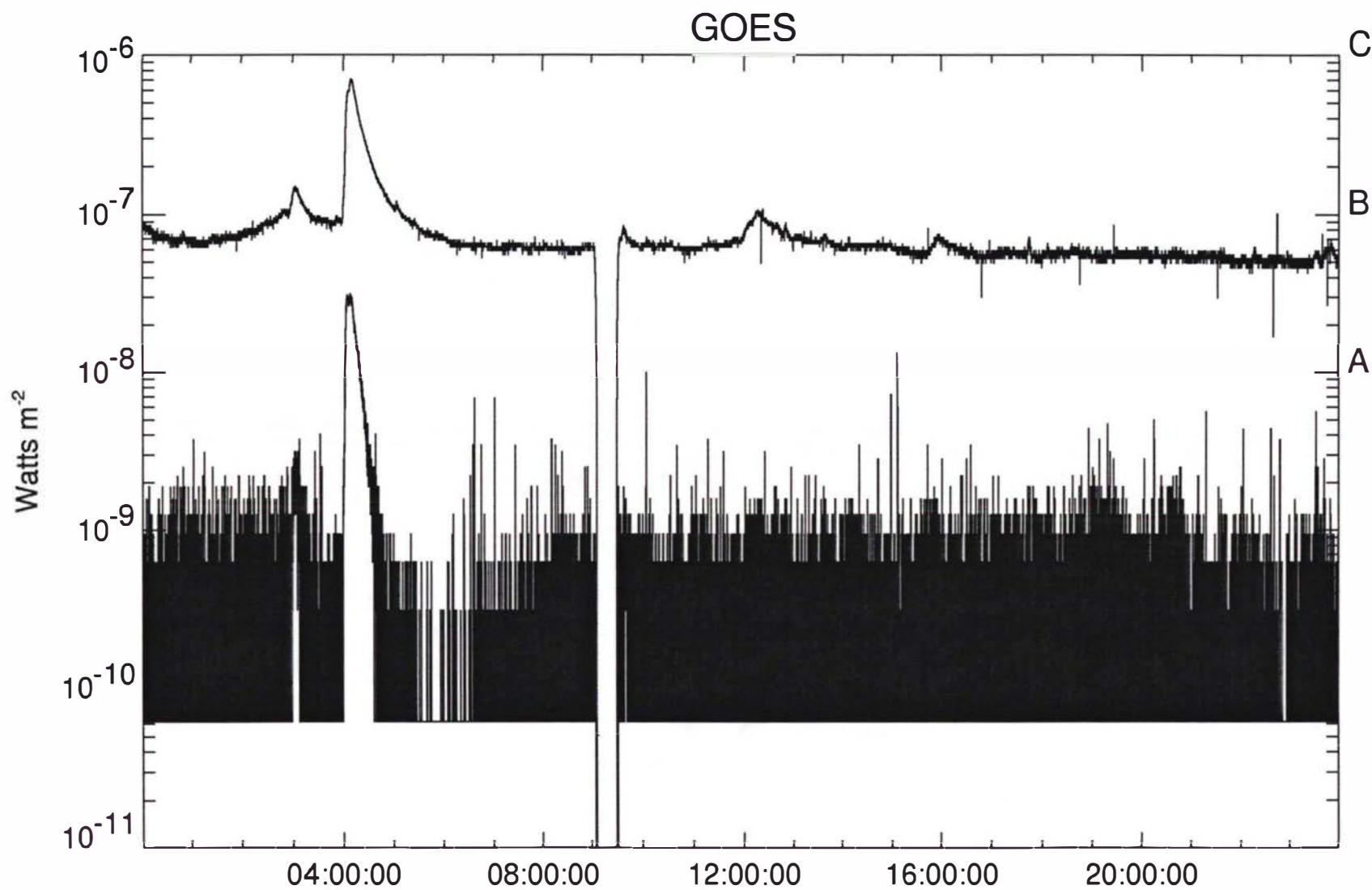
0 . 2 5 0 S I N T E R V A L S R E G R O U P E D B Y 6

0 - 0 k e V

N = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS





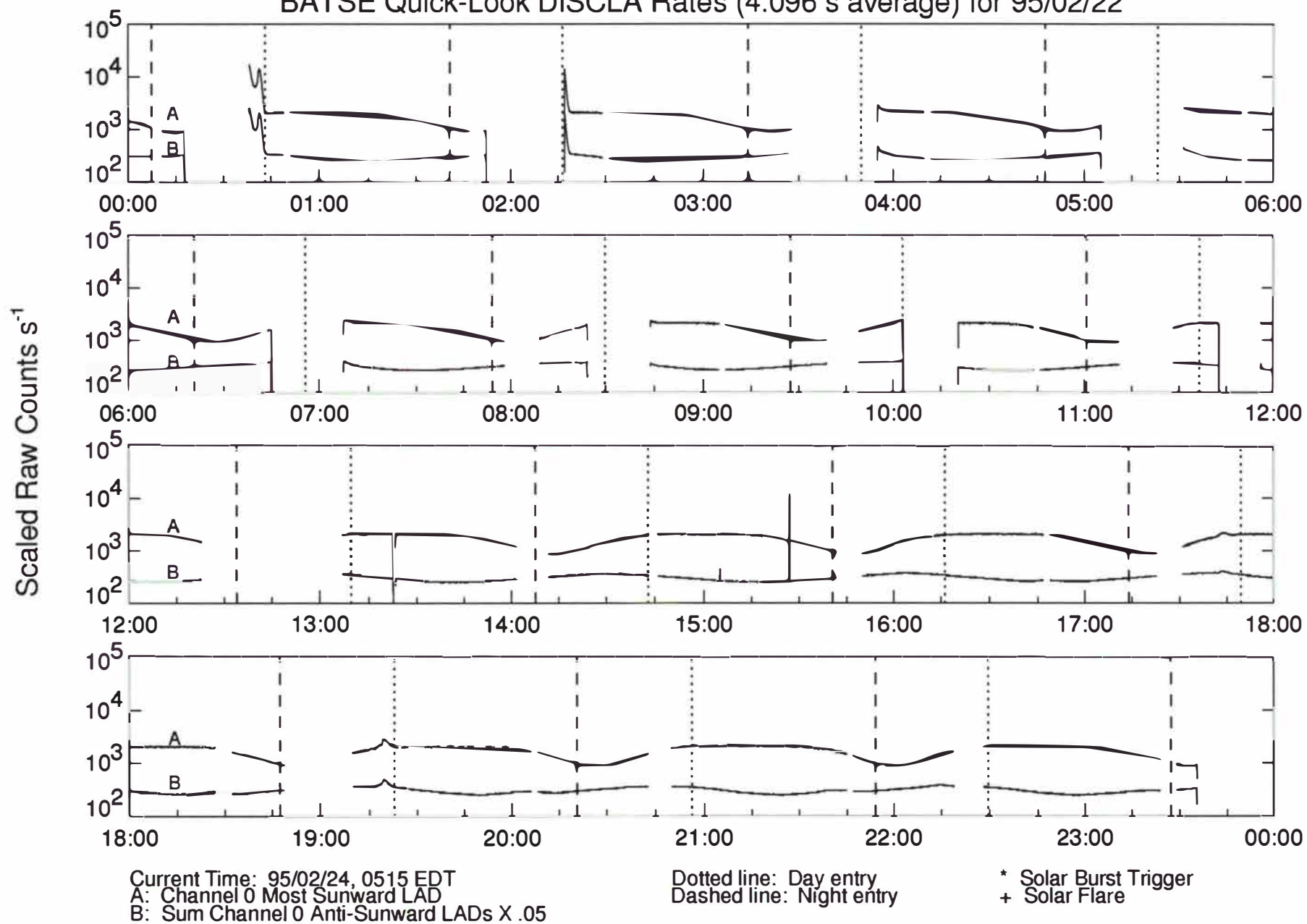
Data Start: 95/02/22, 0000:02

Plot created: 95/02/24, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

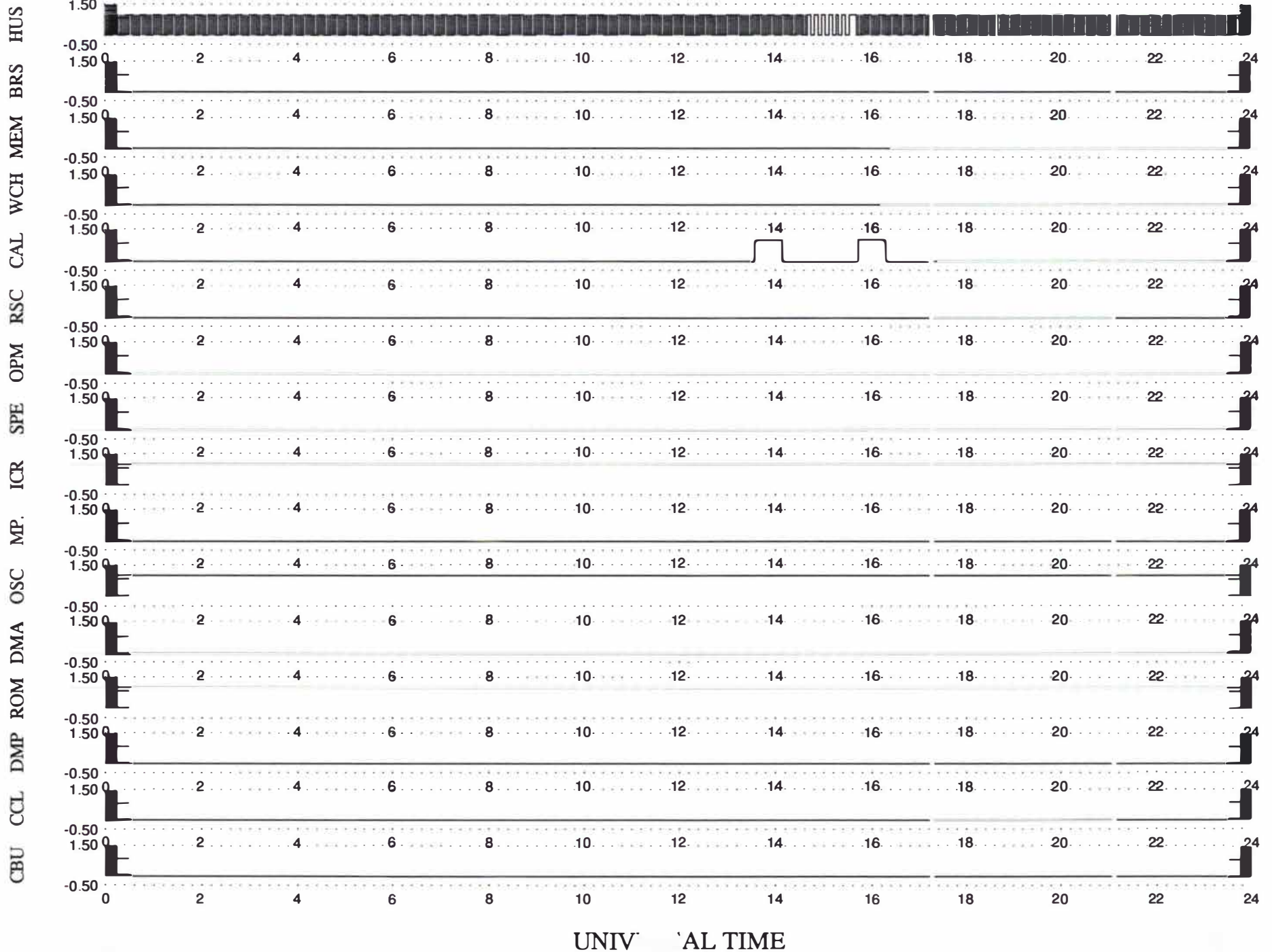
Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/22



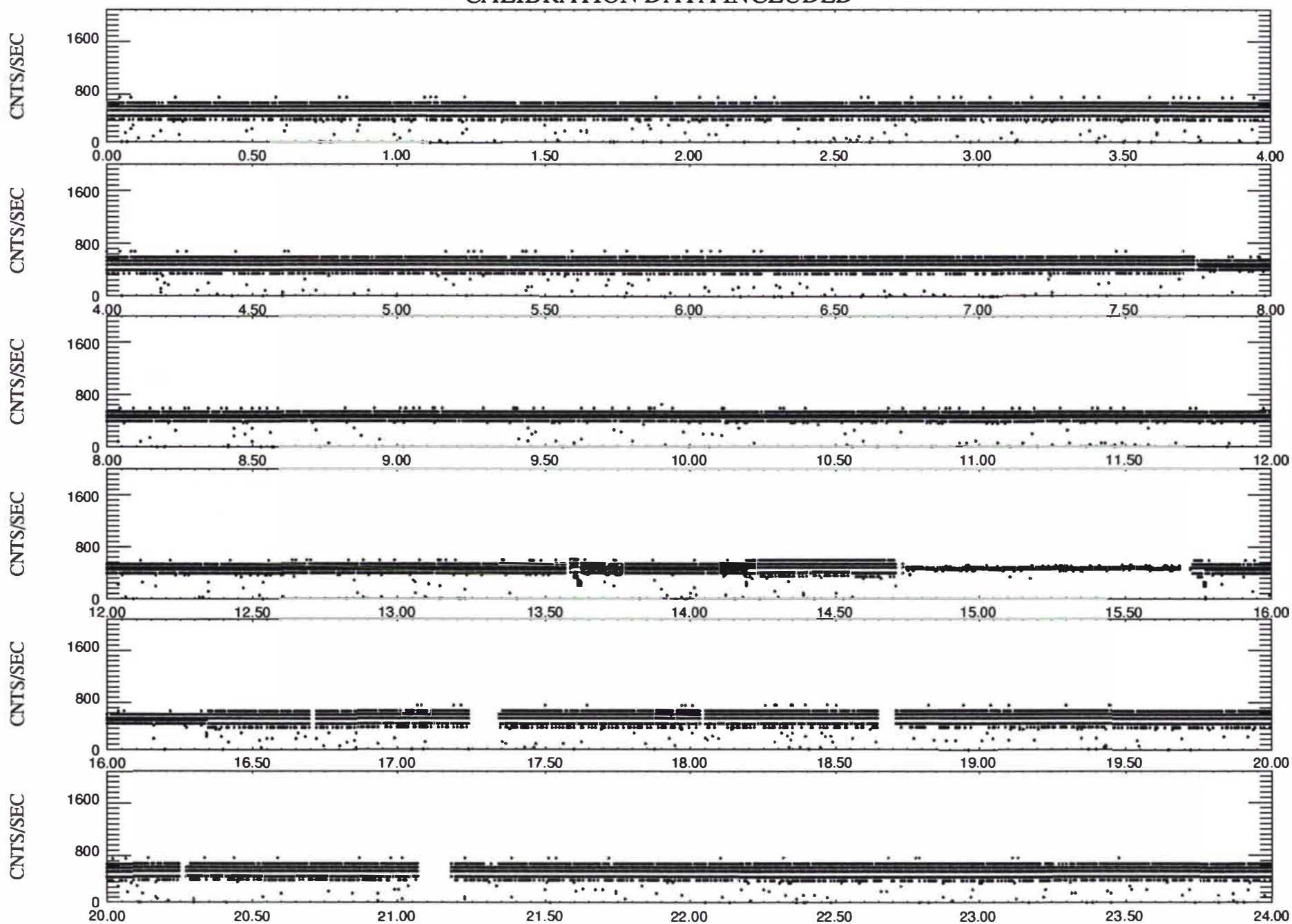
HUS MODES EDR day 53, year 1995 to day 53, year 1995
NO BURST (3)

7/18/95

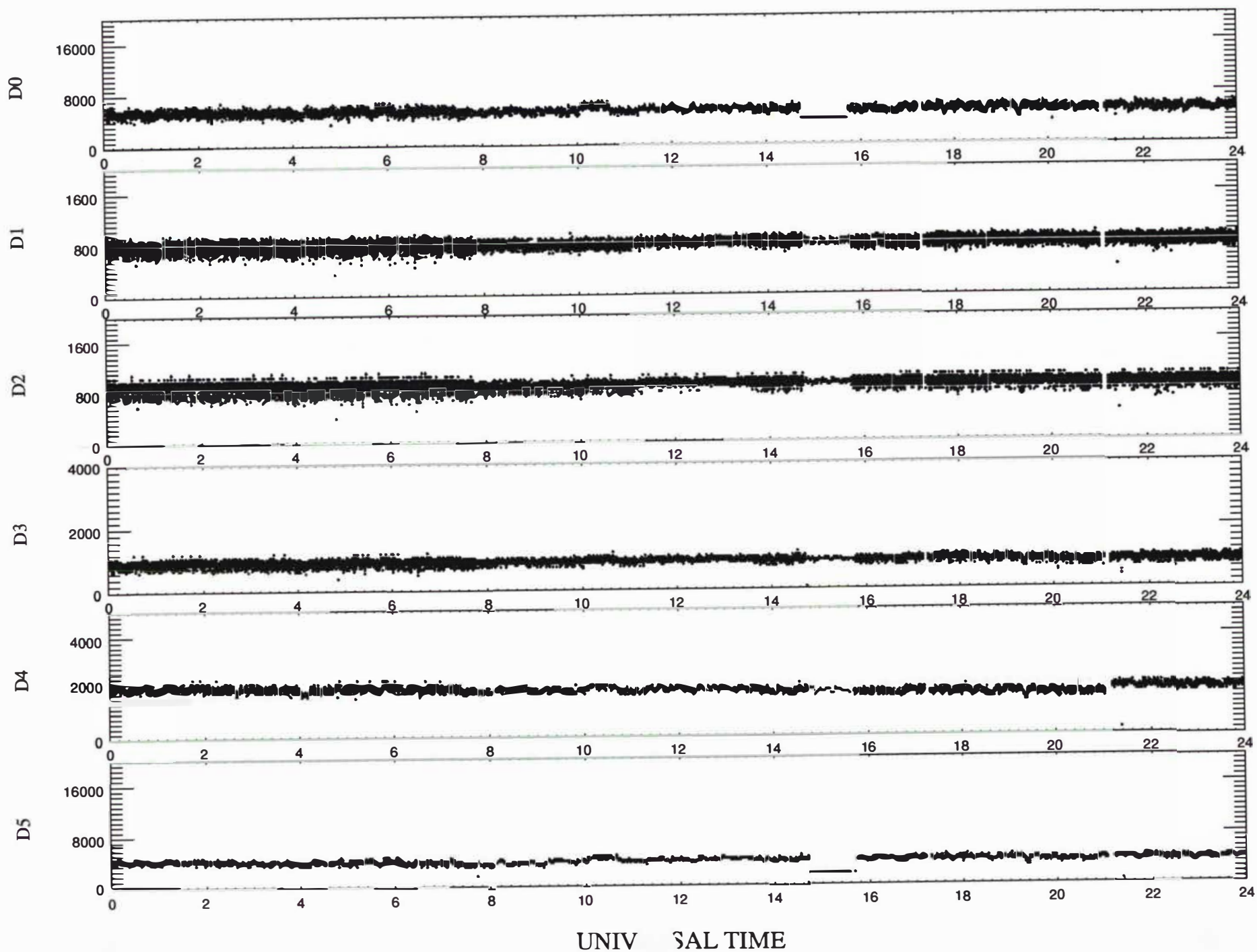


HUS 2A, MODE 1, NOT AVERAGED EDR day 53, year 1995 to day 53, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV TIME



From RICHARDSON@ssl.msfc.nasa.gov Tue Feb 28 07:09 PST 1995
Date: Tue, 28 Feb 1995 9:09:08 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3439

BATSEARCH PROGRAM

KUO

BATSE BURST # 3439
EVENT OF 1995 FEB 23 DAY OF YEAR= 54
EVENT CROSSING TIME AT BATSE : 8588. S. OR 02:23:08.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 326.000 -22.000
BATSE PEAK COUNTING RATE: 8000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 23/ 2/ 95 IS:
RA= 339.195 DEC= -17.949 DIST= 2.324 AU
BATSE-ULYSSES DISTANCE = 347665639. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=166.96 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH=-1129.78 SECS.
CROSSING TIME AT ULYSSES IS 7458. S. OR 02:04:18 +/- 78.27 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 23/ 2/ 95 IS:
RA= 142.598 DEC= 19.411 DIST= 0.690 AU
MARS-BATSE DISTANCE = 103265112. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 4.10 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 343.57 SECS.
CROSSING TIME AT MARS IS 8932. S. OR 02:28:51 +/- 9.50 SECONDS

BATSE BURST TRIGGER

NO.: 3439

TIME: TJD=9771 SECONDS=8588

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:Y

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=122.8 AZIMUTH=350.8 ERROR= DEGREES

COMMENTS:

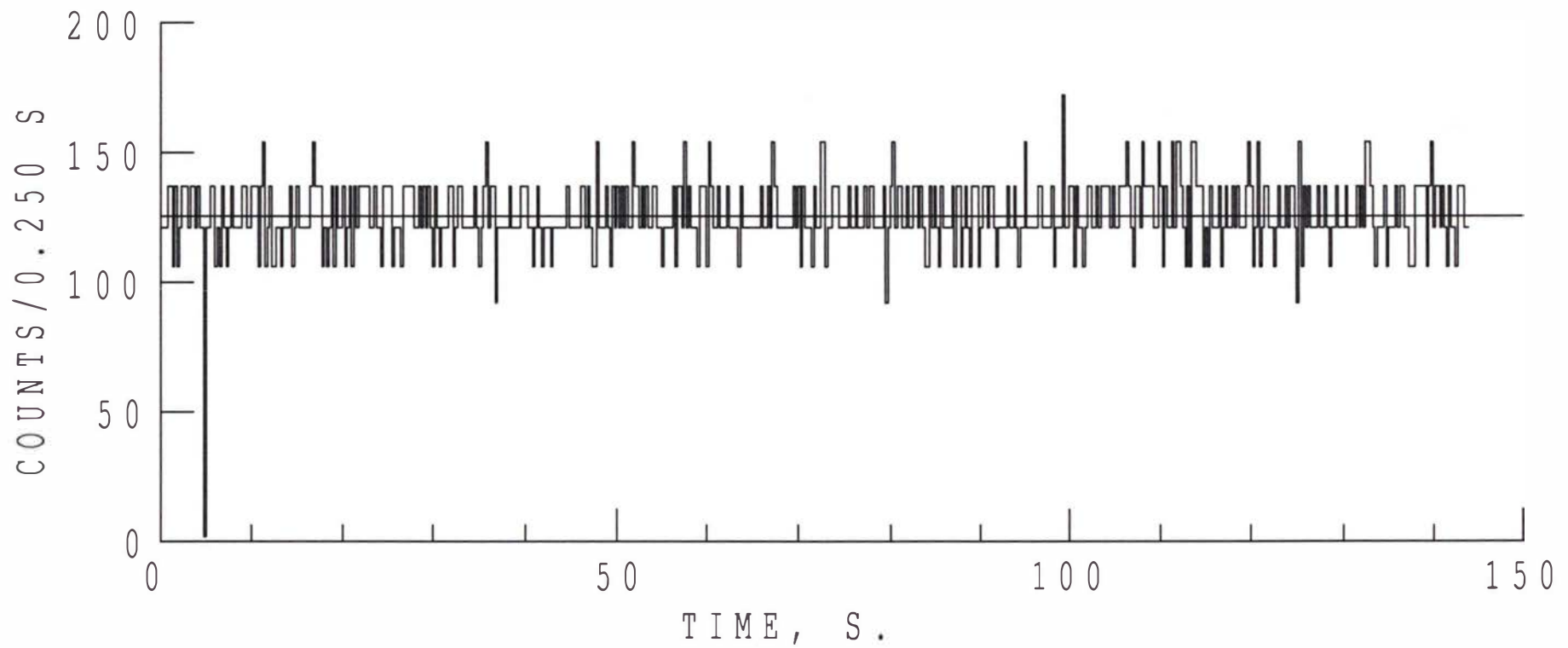
GRB. FAST RISE WITH EXPONENTIAL DECAY, WITH EMISSION CONTINUING AFTER THE MAIN
EVENT. LASTING APROX. 120SEC. VISIBLE ABOVE 300KEV.

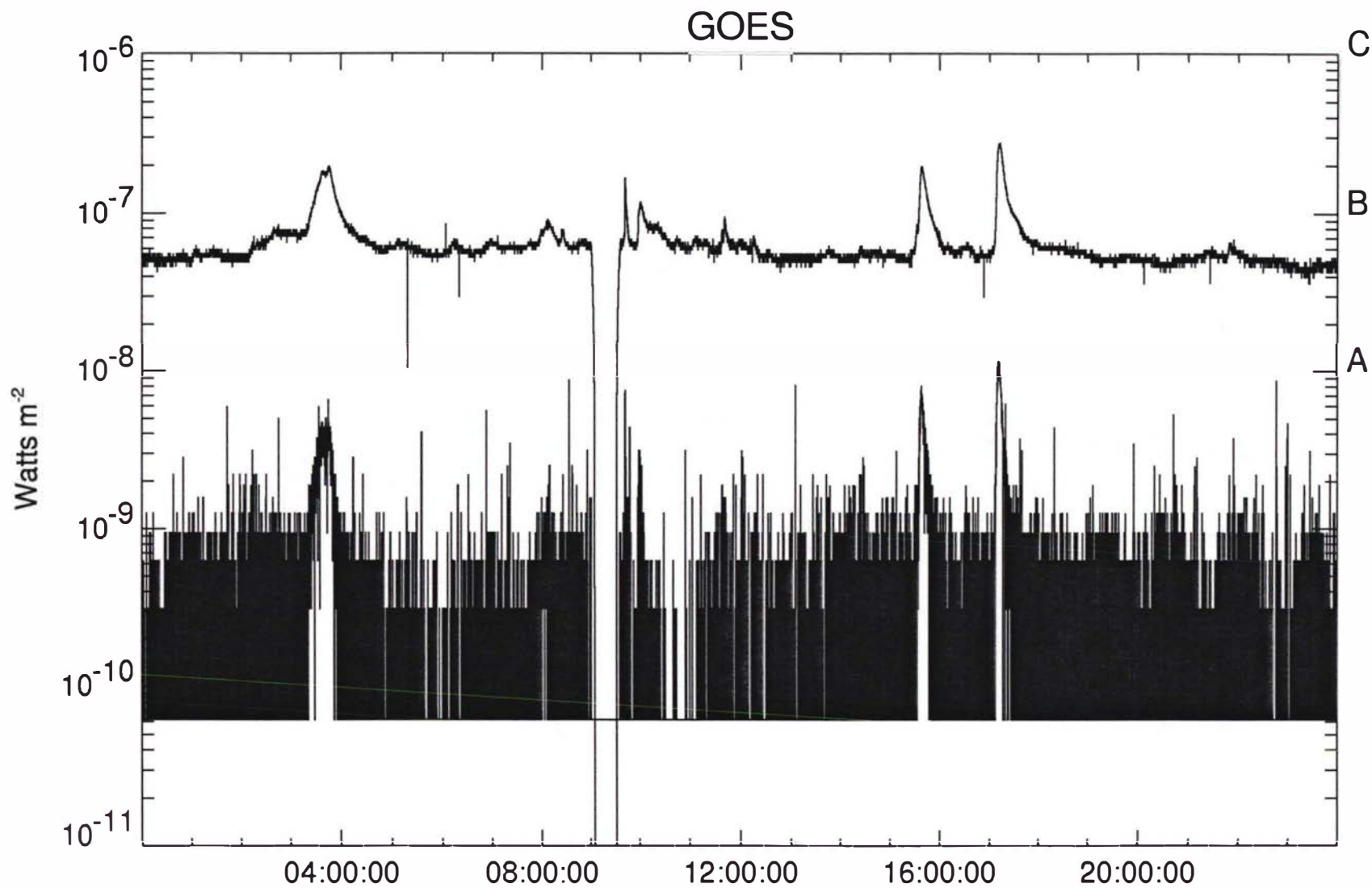
BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3439	950223	9771	08588	8000	326	-22

1 / 3 / 95

ULYSSES RT
23 / 2 / 95 7380.245 s
0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS





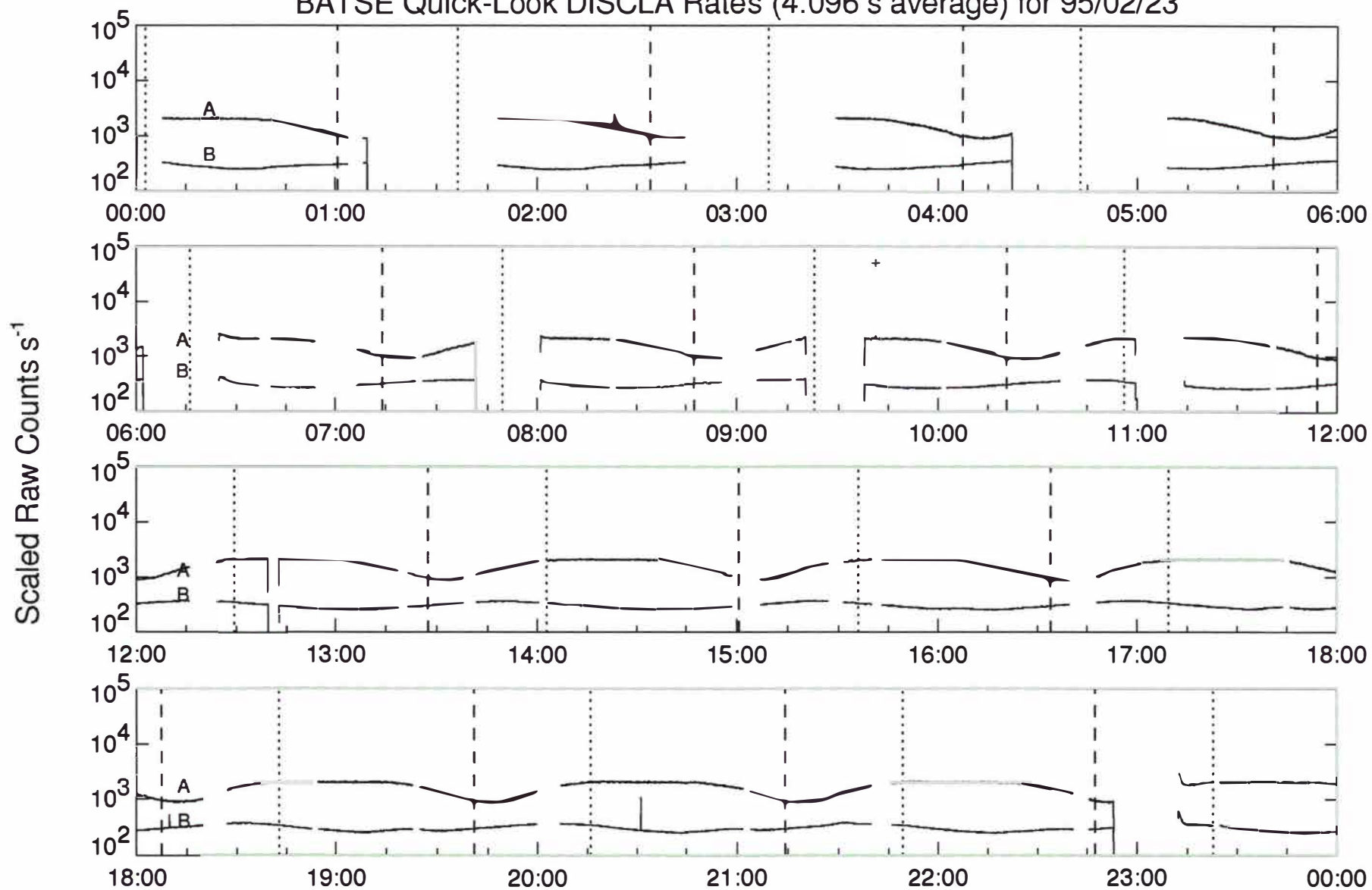
Data Start: 95/02/23, 0000:00

Plot created: 95/02/25, 0514

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 95/02/23



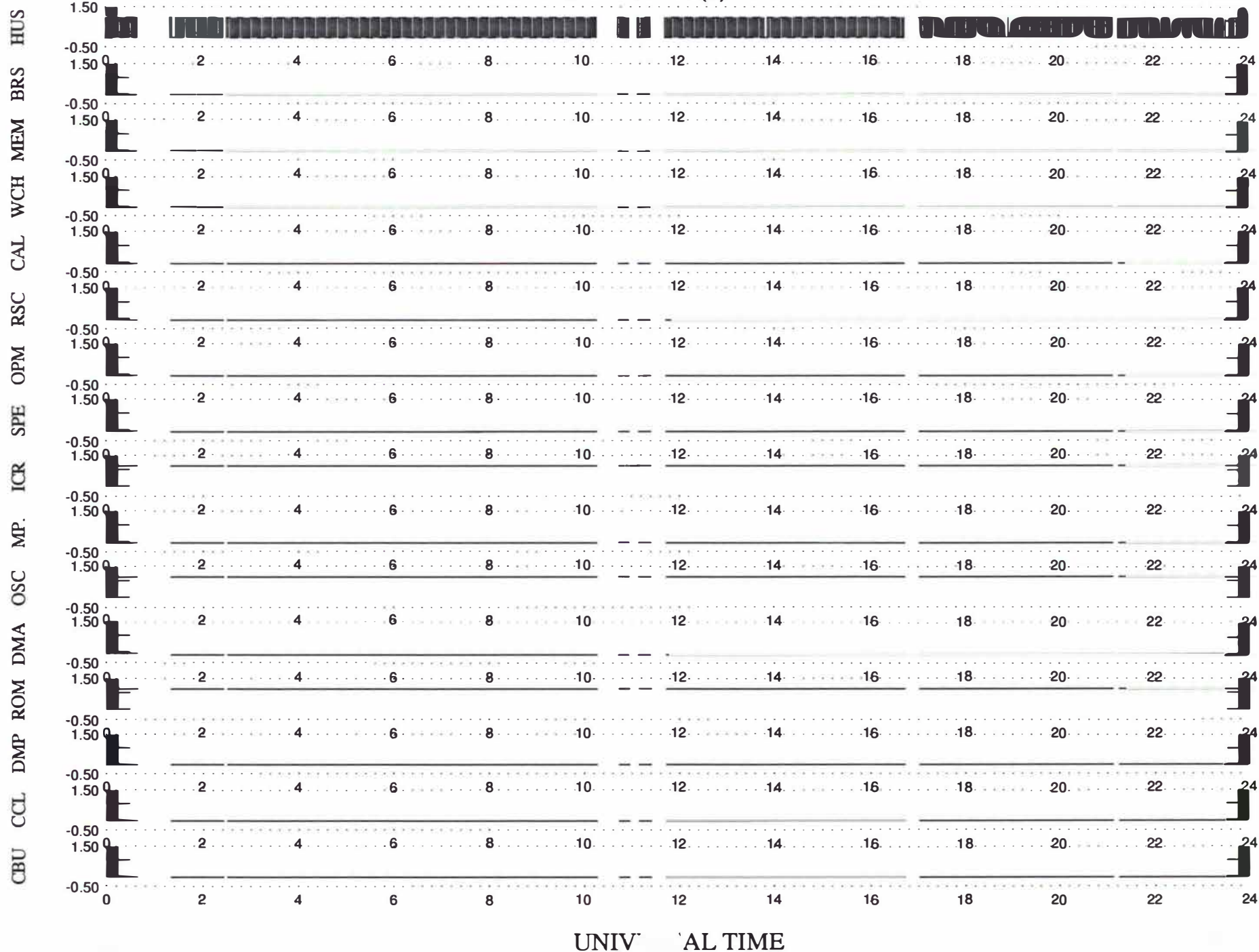
Current Time: 95/02/25, 0515 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

HUS MODES EDR day 54, year 1995 to day 54, year 1995 NO BURST (3)

7/18/95

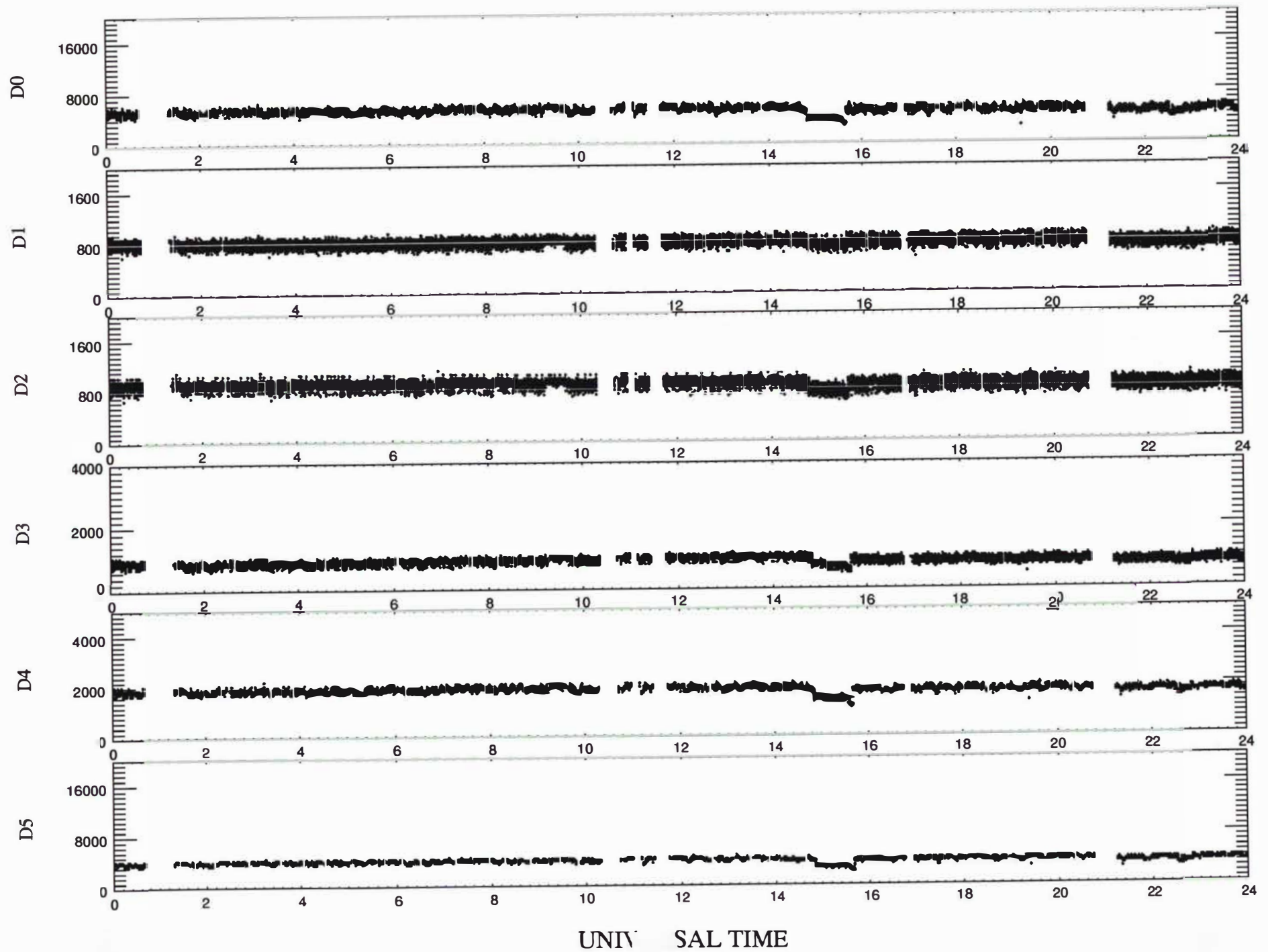


HUS 2A, MODE 1, NOT AVERAGED EDR day 54, year 1995 to day 54, year 1995
 CALIBRATION DATA INCLUDED

7/18/95



UNIV. TIME



950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47 ✓
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR ✓
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54 ✓
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR ✓
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
940412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

Dear Bonnard, Kevin, David, Helmut:

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

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec		G3 in G2		T<T0 T>T0		
			G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
941120	20 23 17.924	S1	215	328	30	>15	2	25	5 ✓
941121	17 25 00.945	S1	1652	1656	300	21	3	50	6 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28 ✓
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR ✓
950110	13 37 57.084	S2	234	422	213	0.05	38	100	32 ✓
950111	04 49 12.241	S1	586	620	100	>19	92	24	33 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
950112	07 45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓
950113	05 59 13	S1	283	180	26	>10	52		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
950114	07 30 30.766	S2	205	406	60	<0.05	1	100	36 ✓
950114	13 10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39

K O N U S

1 2 / 2 / 9 6

U L Y S S E S R T

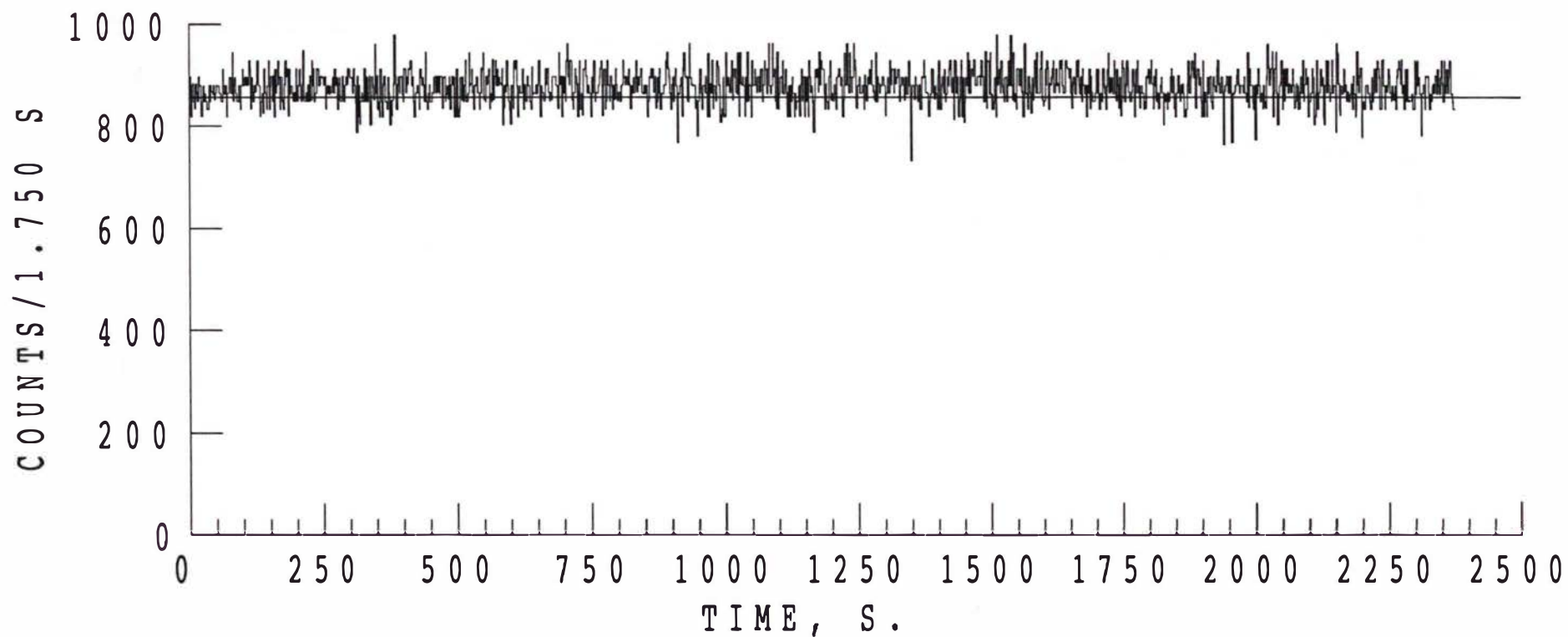
2 4 / 2 / 9 5 3 2 6 1 6 . 0 3 1 s

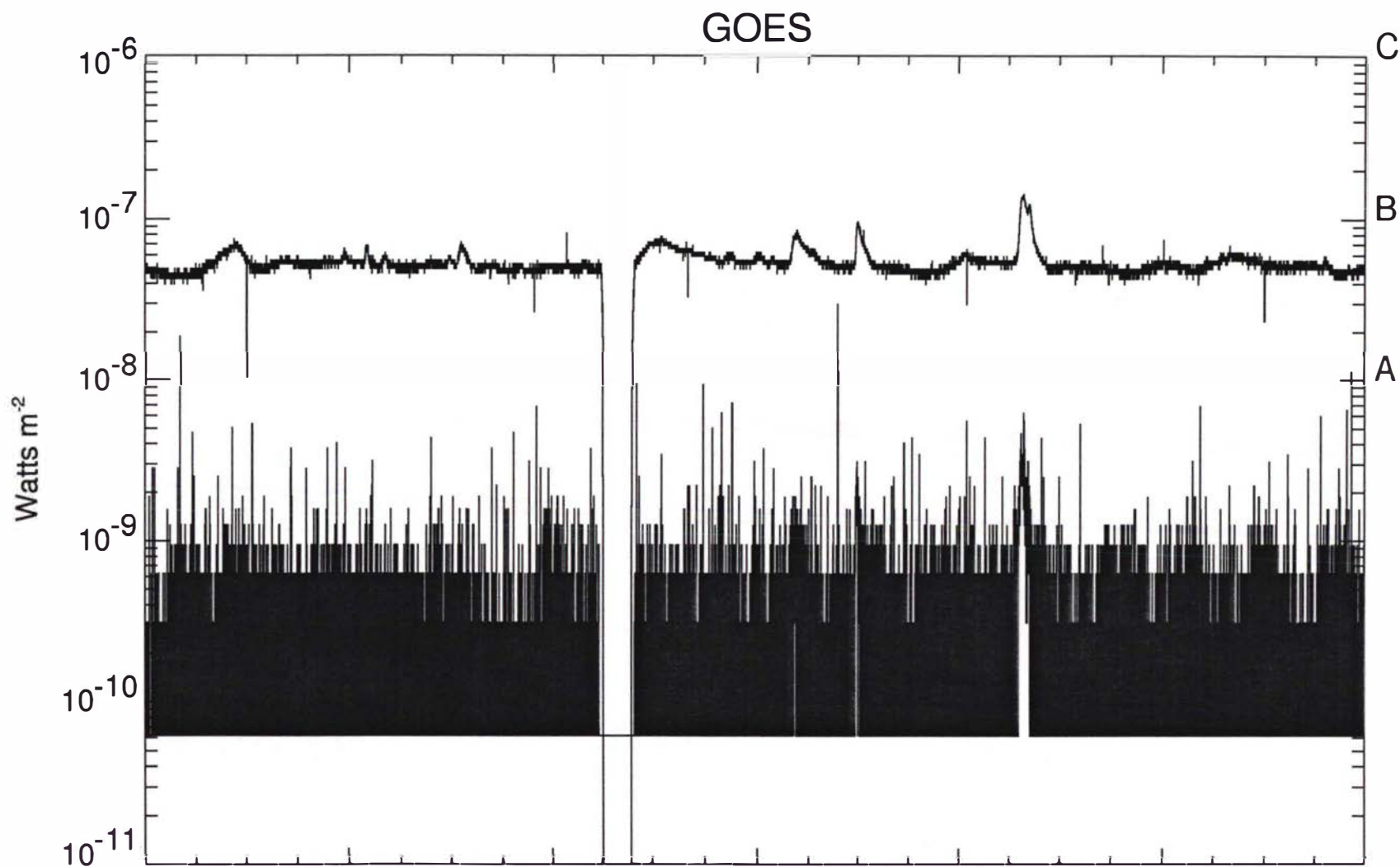
0 . 2 5 0 s I N T E R V A L S R E G R O U P E D B Y 7

0 - 0 k e V

M = 10 M = 2

> 4.0 SIGMA FLUCTUATIONS





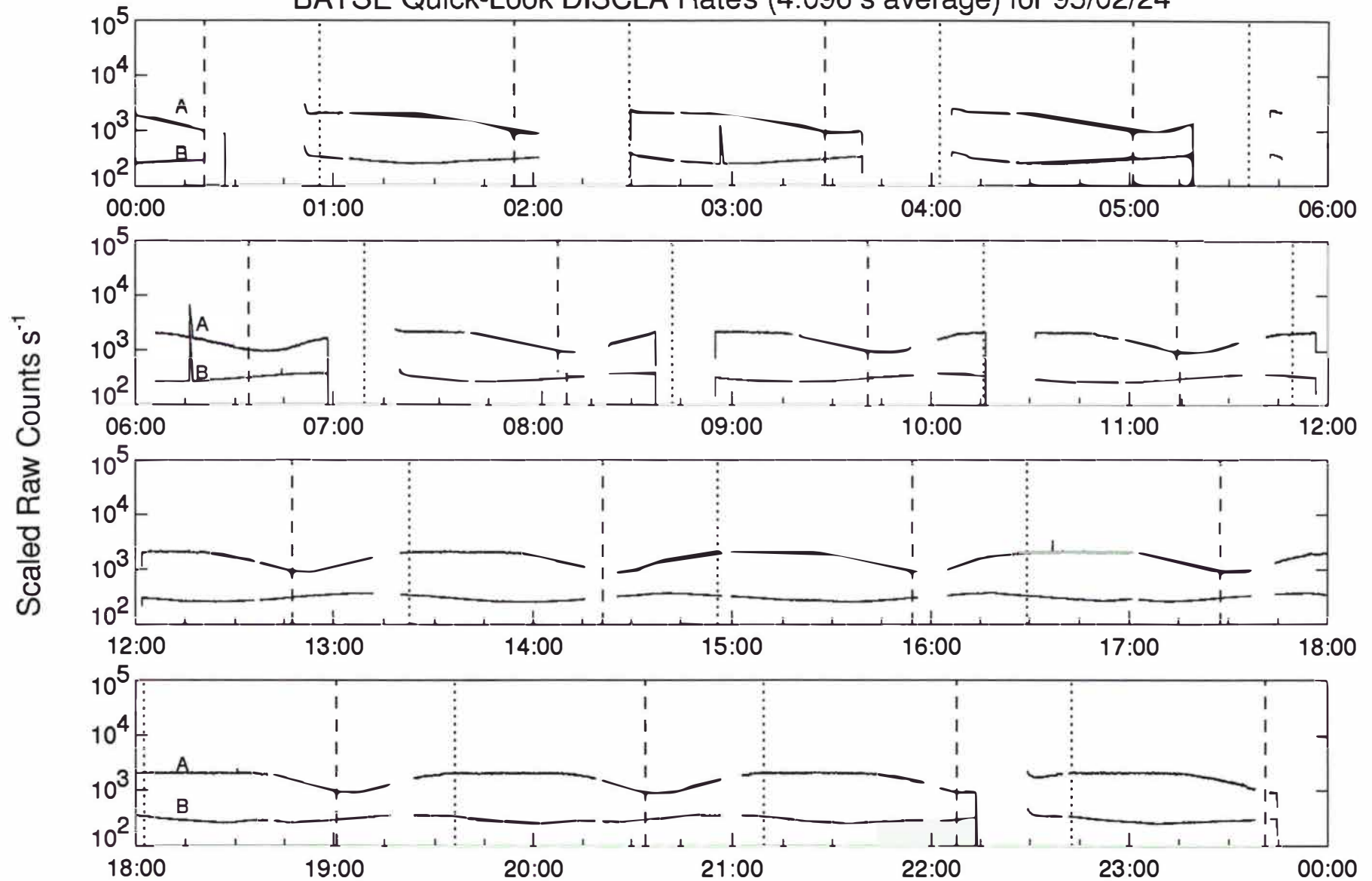
Data Start: 95/02/24, 0000:01

Plot created: 95/02/26, 0514

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 95/02/24



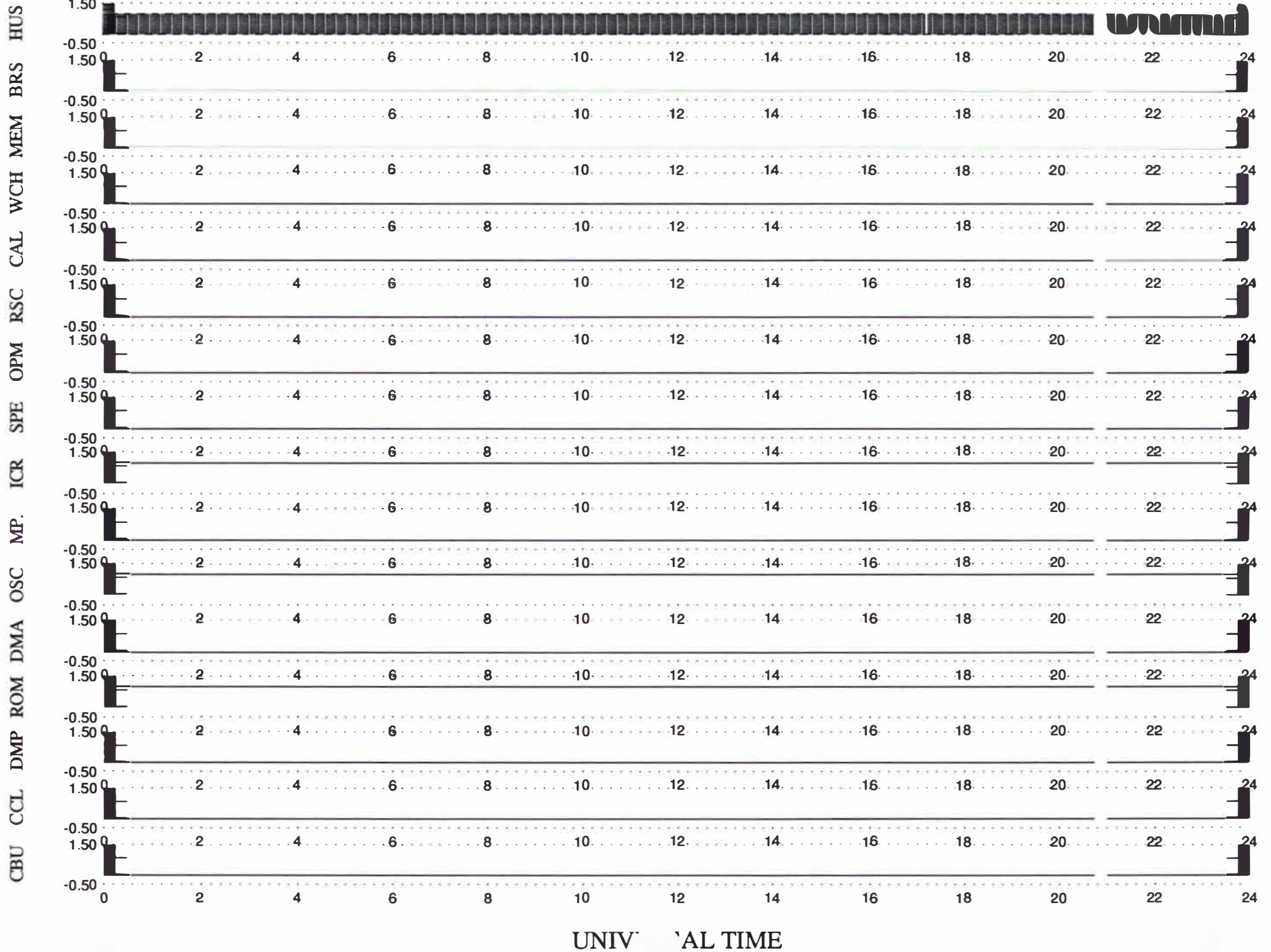
Current Time: 95/02/26, 0515 EDT
 A: Channel 0 Most Sunward LAD
 B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
 Dashed line: Night entry

* Solar Burst Trigger
 + Solar Flare

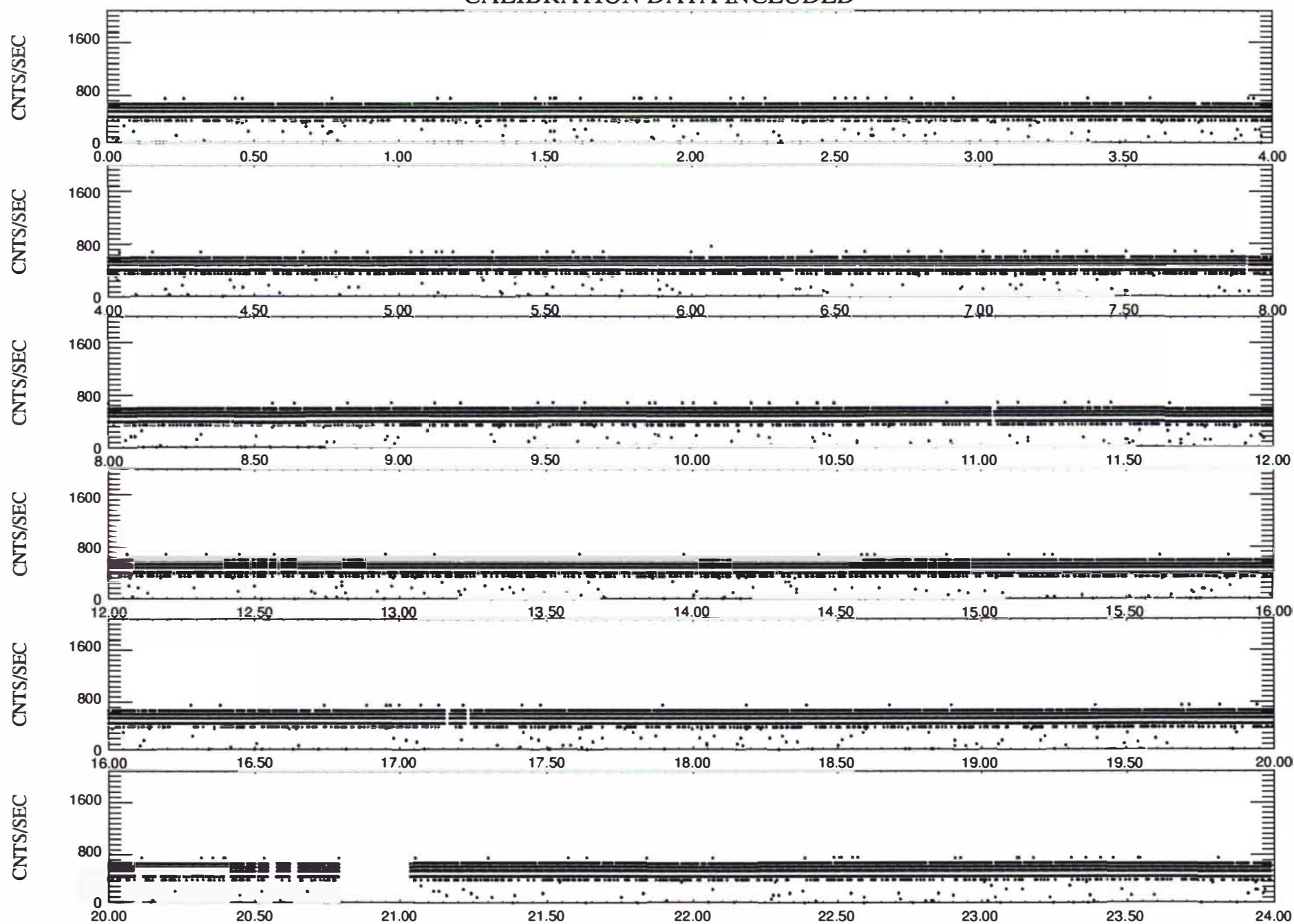
HUS MODES EDR day 55, year 1995 to day 55, year 1995
NO BURST (3)

7/18/95

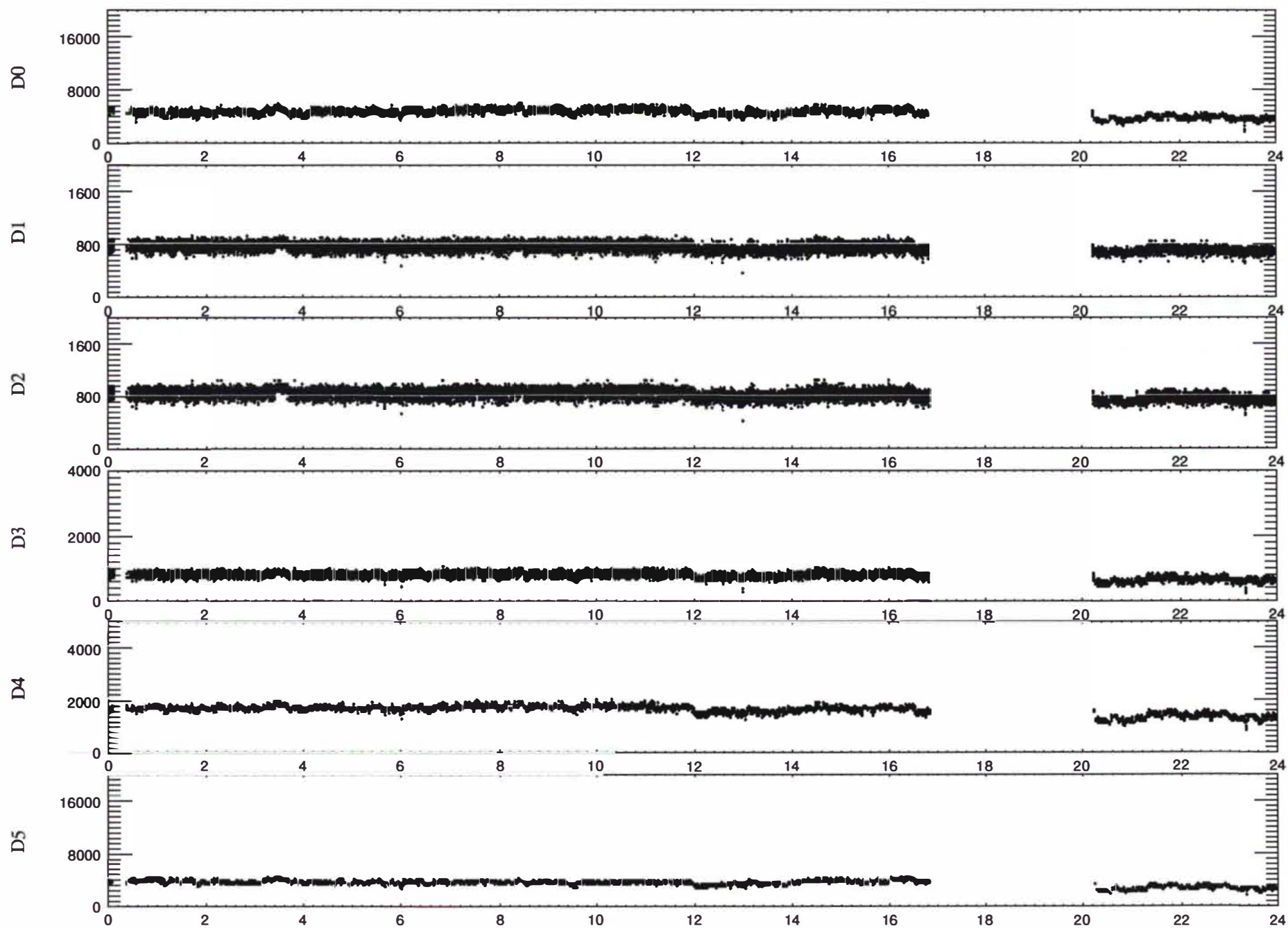


HUS 2A, MODE 1, NOT AVERAGED EDR day 55, year 1995 to day 55, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. CAL TIME



UNIV SAL TIME

From HAGEDON@fender.msfc.nasa.gov Mon Feb 27 10:10 PST 1995
Date: Mon, 27 Feb 1995 12:10:26 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3440

BATSEARCH PROGRAM

BATSE BURST # 3440
EVENT OF 1995 FEB 25 DAY OF YEAR= 56
EVENT CROSSING TIME AT BATSE : 54580. S. OR 15:09:40.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 67.000 44.000
BATSE PEAK COUNTING RATE: 2800 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 25/ 2/ 95 IS:
RA= 340.014 DEC= -16.390 DIST= 2.325 AU
BATSE-ULYSSES DISTANCE = 347872795. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 80.81 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 185.35 SECS.
CROSSING TIME AT ULYSSES IS 54765. S. OR 15:12:45 +/- 251.69 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 25/ 2/ 95 IS:
RA= 141.887 DEC= 19.587 DIST= 0.696 AU
MARS-BATSE DISTANCE = 104084680. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=114.18 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -142.20 SECS.
CROSSING TIME AT MARS IS 54438. S. OR 15:07:17 +/- 52.83 SECONDS

BATSE BURST TRIGGER

NO.: 3440

TIME: TJD=9773 SECONDS=54580

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=35 AZIMUTH=73 ERROR= DEGREES

COMMENTS:

BURST. COMPLEX EVENT. DUR. >350 SEC. NOT VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3440	950225	9773	54580	2800	067	+44

1 / 3 / 95

ULYSSES RT

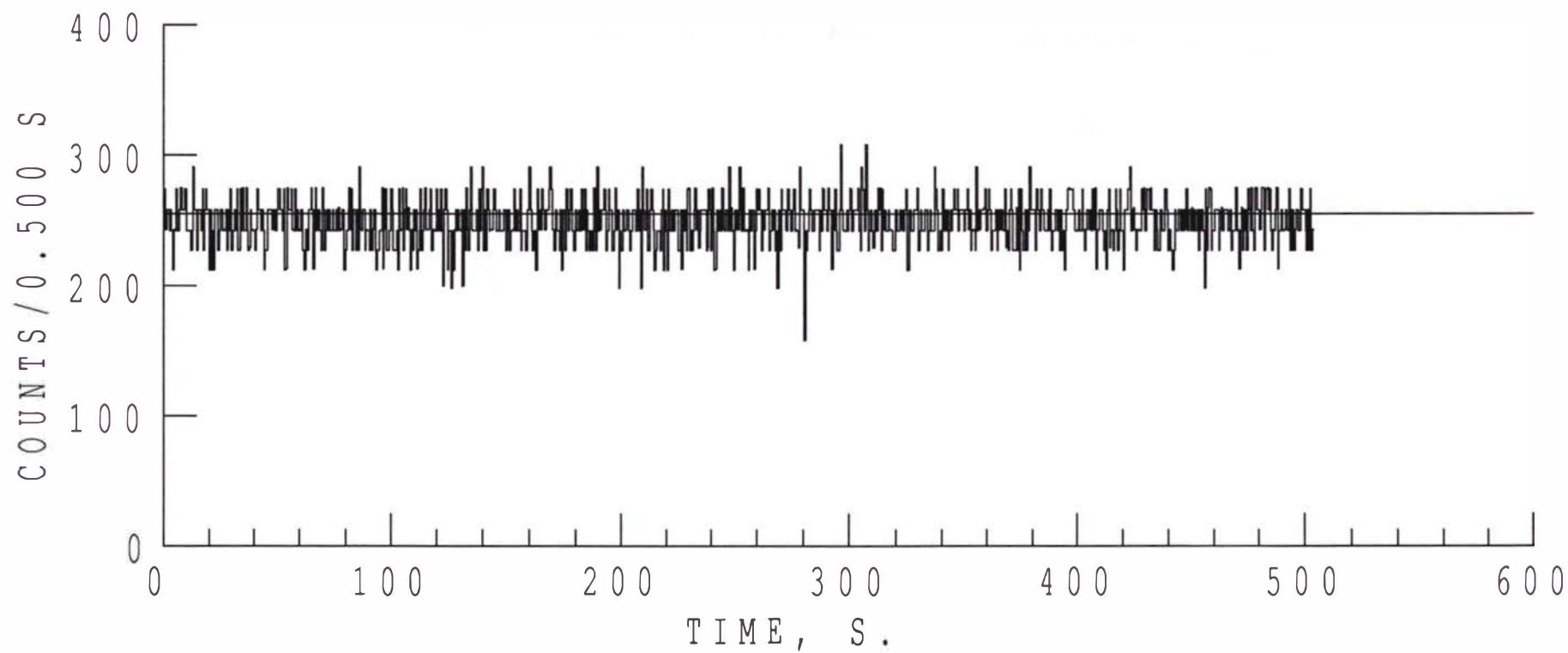
25 / 2 / 95 54504.043 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@fender.msfc.nasa.gov Mon Feb 27 10:13 PST 1995
Date: Mon, 27 Feb 1995 12:12:58 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3441

BATSEARCH PROGRAM

RI

BATSE BURST # 3441
EVENT OF 1995 FEB 25 DAY OF YEAR= 56
EVENT CROSSING TIME AT BATSE : 61777. S. OR 17:09:37.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 192.000 -85.000
BATSE PEAK COUNTING RATE: 5400 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 25/ 2/ 95 IS:
RA= 340.041 DEC= -16.339 DIST= 2.325 AU
BATSE-ULYSSES DISTANCE = 347877788. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION=102.08 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -242.85 SECS.
CROSSING TIME AT ULYSSES IS 61534. S. OR 17:05:34 +/- 243.31 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 25/ 2/ 95 IS:
RA= 141.887 DEC= 19.587 DIST= 0.696 AU
MARS-BATSE DISTANCE = 104084680. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 73.66 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 97.67 SECS.
CROSSING TIME AT MARS IS 61875. S. OR 17:11:14 +/- 59.33 SECONDS

BATSE BURST TRIGGER

NO.: 3441

TIME: TJD=9773 SECONDS=61777

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=161 AZIMUTH=126 ERROR= DEGREES

COMMENTS:

BURST. WEAK SINGLE SPIKE. DUR.~0.15 SEC. NOT VISIBLE ABOVE 300 KEV.

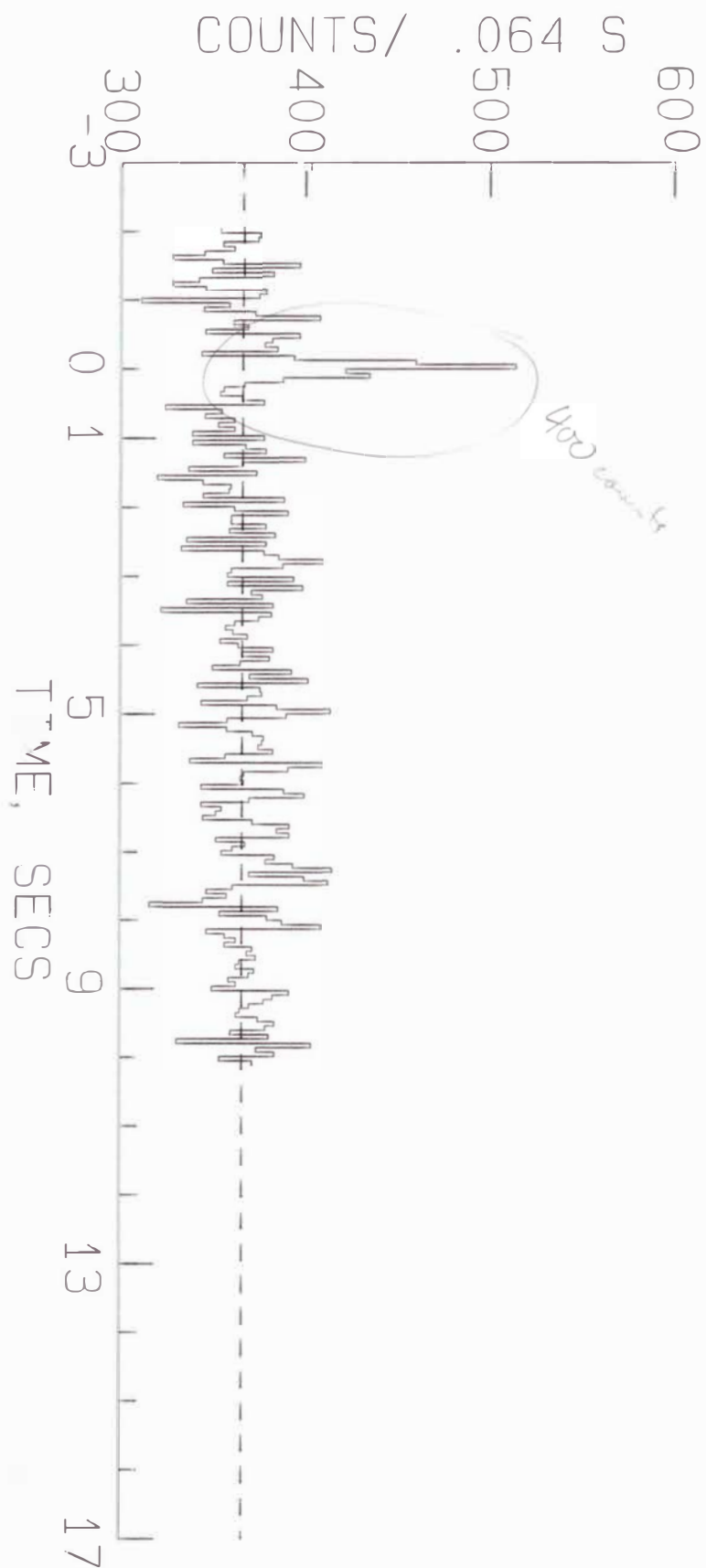
BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3441	950225	9773	61777	5400	192	-85

BATSE

21/02/95

61777.969

25- 100 keV



BATSE BURST# 3441

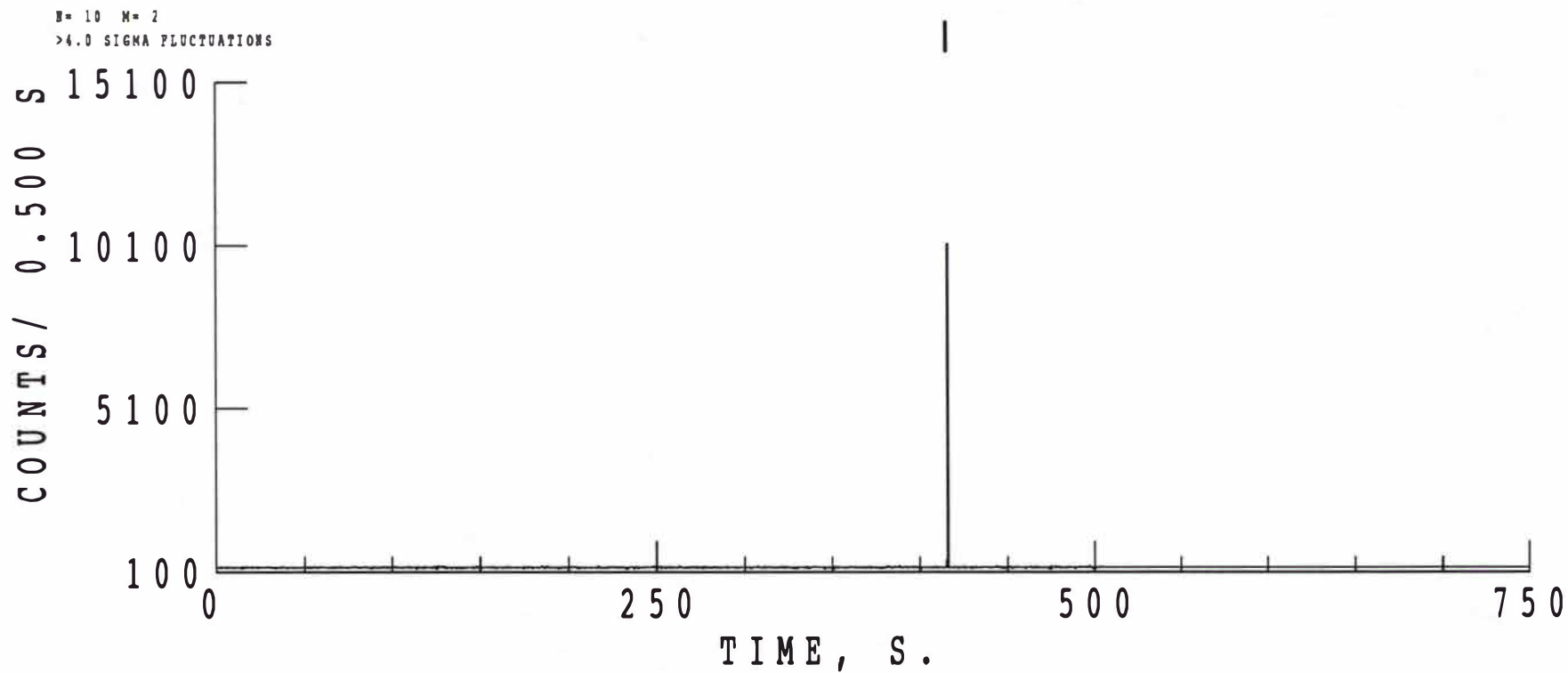
ULYSSES RT

4 / 5 / 98

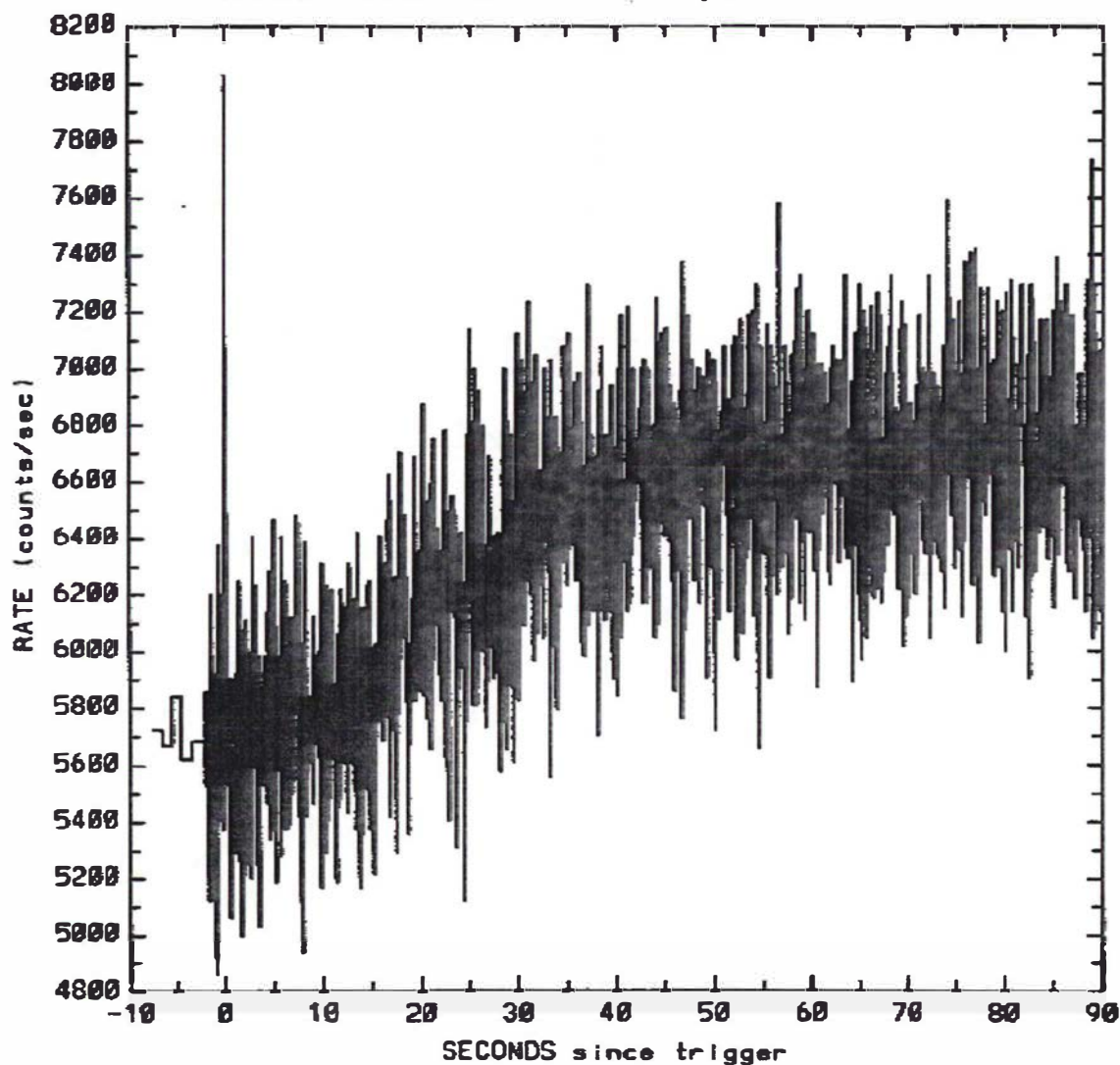
25 / 2 / 95 61272.207 s

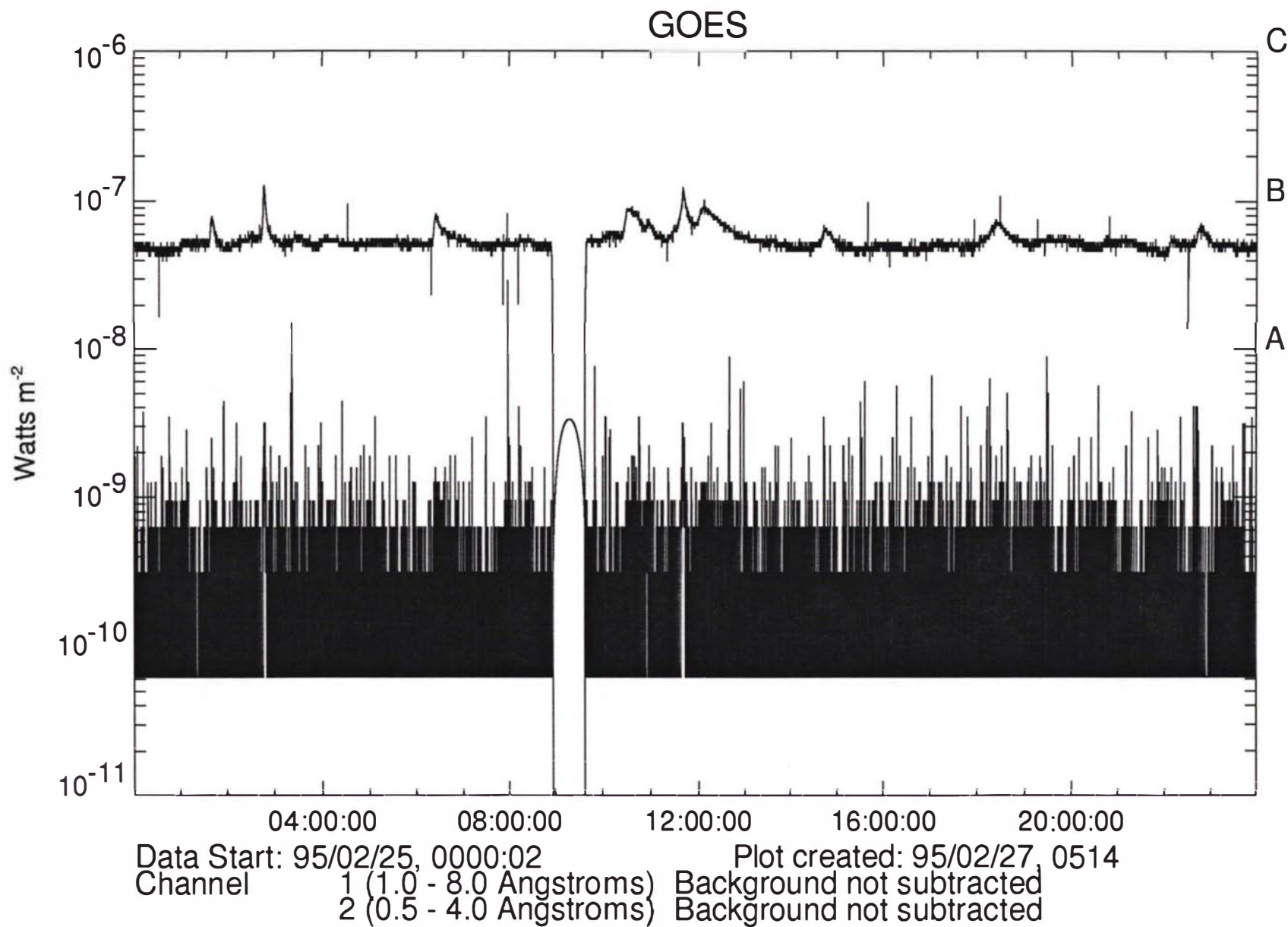
0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

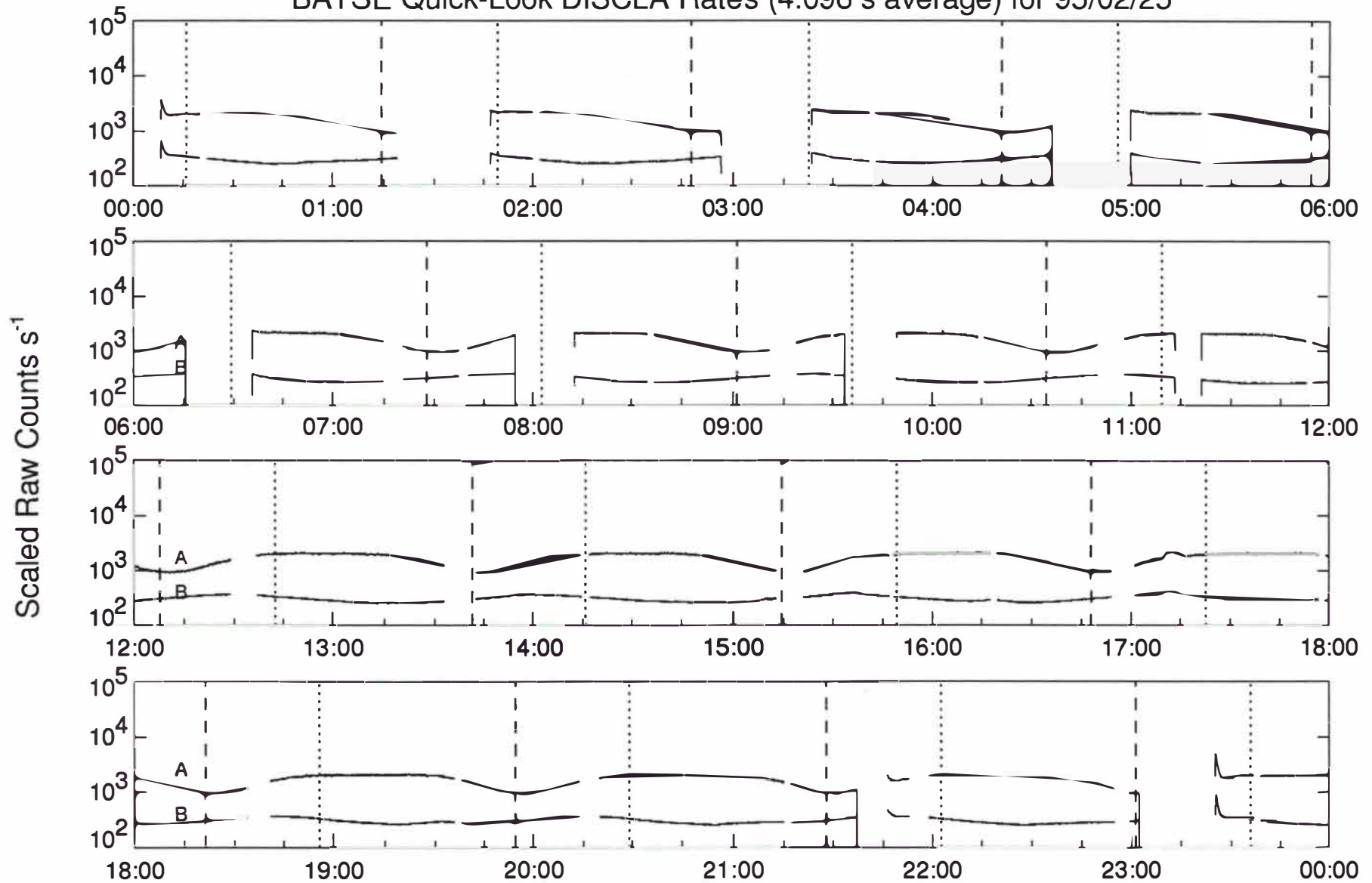


DISCSC Data for K. Hurley, No. 3441





BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/25



Current Time: 95/02/27, 0515 EDT

A: Channel 0 Most Sunward LAD

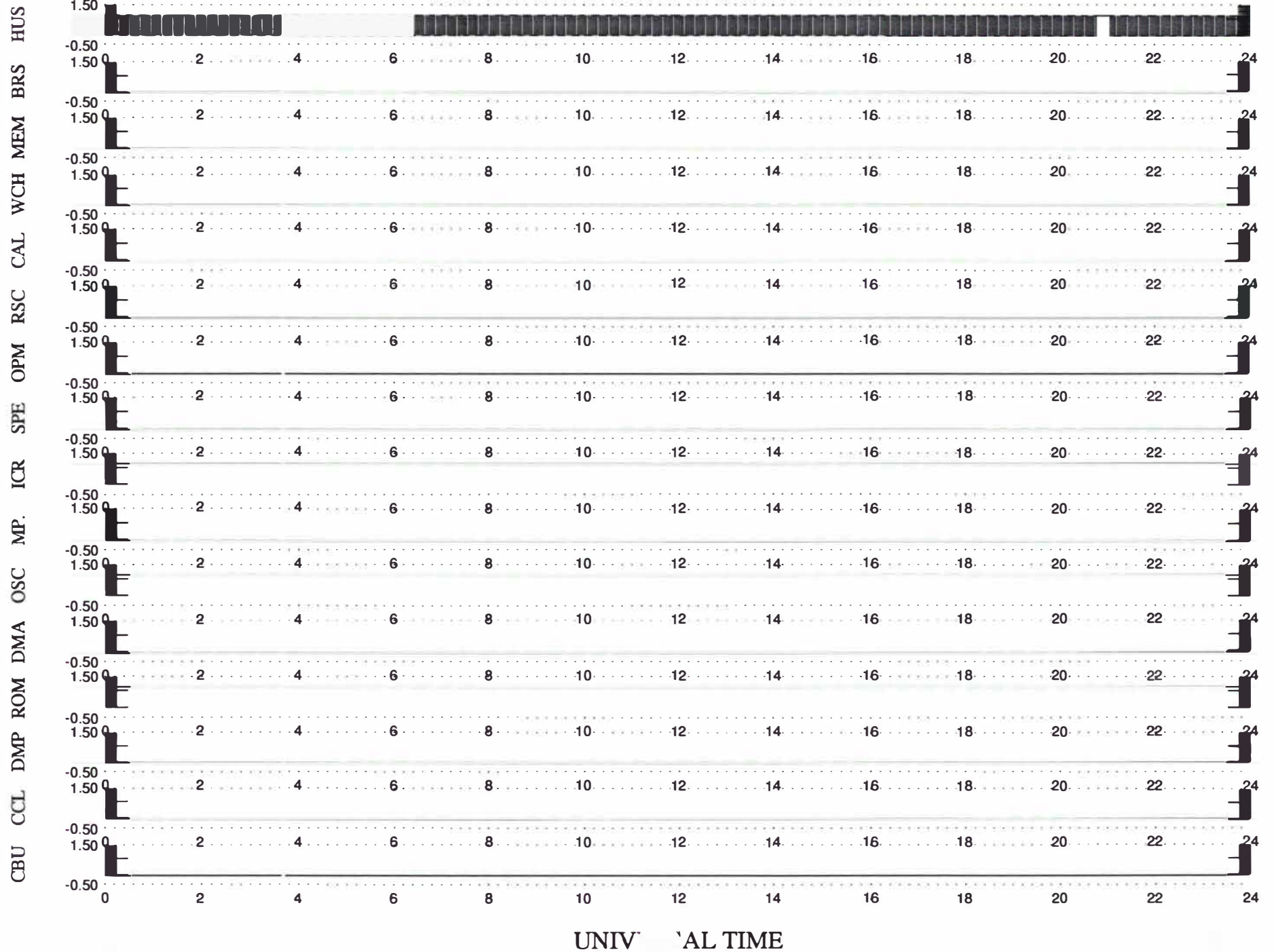
B: Sum Channel 0 Anti-Sunward LADs X .05

Dotted line: Day entry
Dashed line: Night entry

* Solar Burst Trigger
+ Solar Flare

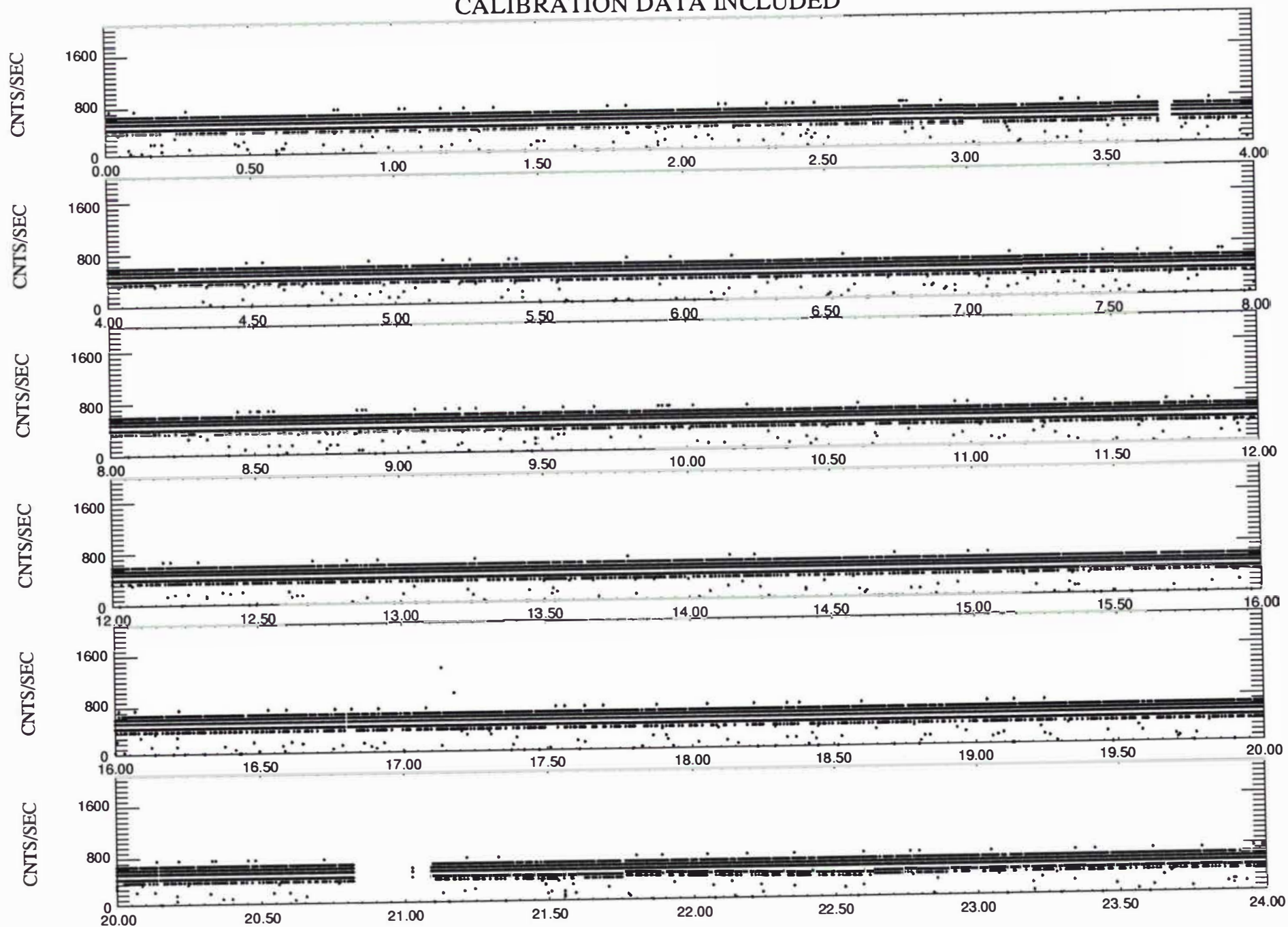
HUS MODES EDR day 56, year 1995 to day 56, year 1995
NO BURST (3)

7/18/95

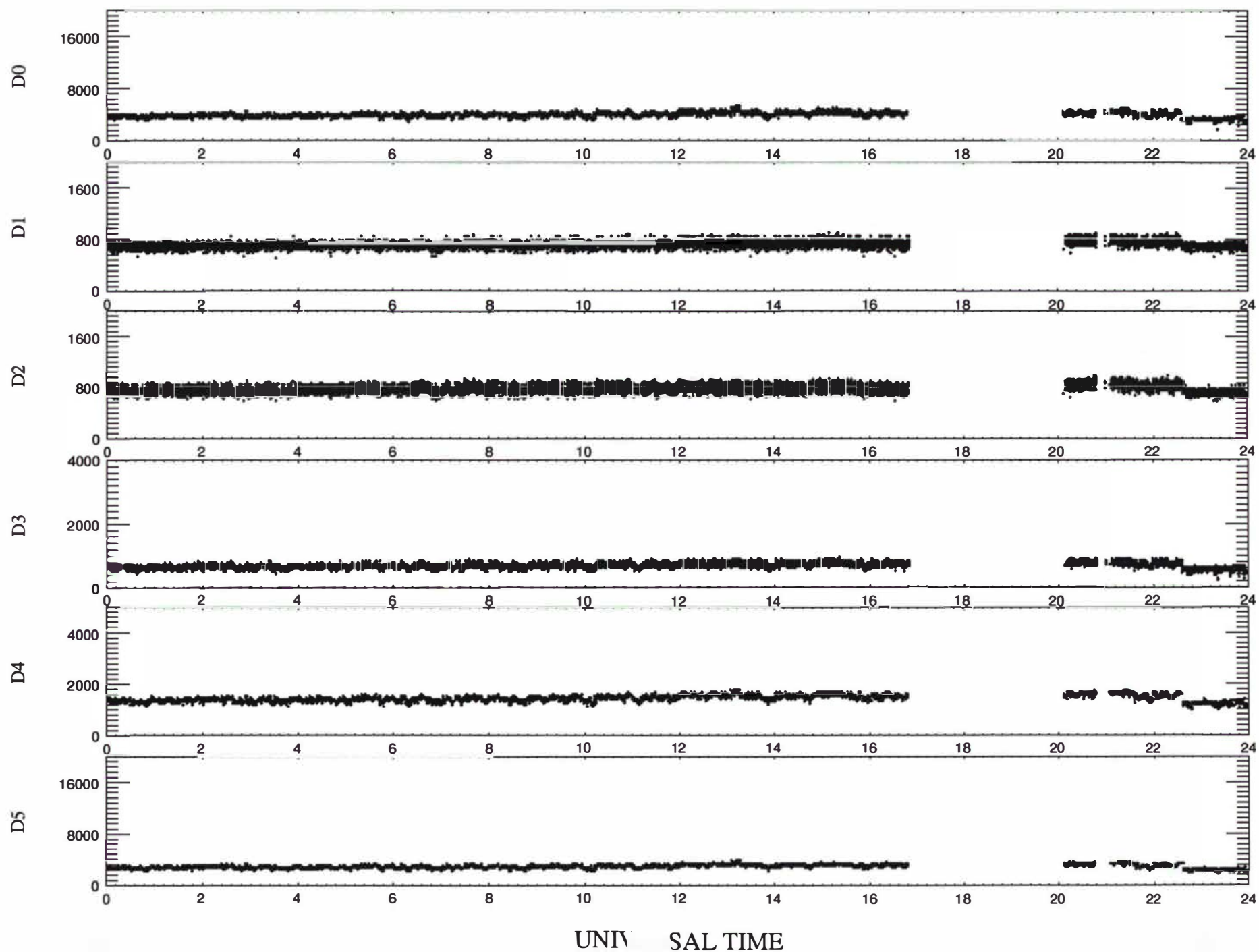


HUS 2A, MODE 1, NOT AVERAGED EDR day 56, year 1995 to day 56, year 1995 CALIBRATION DATA INCLUDED

7/18/95



UNIV. CAL TIME



From HAGEDON@fender.msfc.nasa.gov Tue Feb 28 09:33 PST 1995
Date: Tue, 28 Feb 1995 11:33:11 -0600 (CST)
From: HAGEDON@fender.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3442

BATSEARCH PROGRAM

RI

BATSE BURST # 3442
EVENT OF 1995 FEB 26 DAY OF YEAR= 57
EVENT CROSSING TIME AT BATSE : 53336. S. OR 14:48:56.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 159.000 -14.000
BATSE PEAK COUNTING RATE: 20000 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 26/ 2/ 95 IS:
RA= 340.329 DEC= -15.784 DIST= 2.326 AU
BATSE-ULYSSES DISTANCE = 347913313. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 29.81 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 1006.92 SECS.
CROSSING TIME AT ULYSSES IS 54343. S. OR 15:05:42 +/- 165.46 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 26/ 2/ 95 IS:
RA= 141.544 DEC= 19.669 DIST= 0.699 AU
MARS-BATSE DISTANCE = 104541176. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=142.20 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -275.54 SECS.
CROSSING TIME AT MARS IS 53060. S. OR 14:44:20 +/- 32.92 SECONDS

BATSE BURST TRIGGER

NO.: 3442

TIME: TJD=9774 SECONDS=53336

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=95 AZIMUTH=173 ERROR= DEGREES

COMMENTS:

BURST. COMPLEX EVENT WITH LOTS OF SUBSTRUCTURE. DUR.~95 SEC.
VISIBLE ABOVE 300 KEV.

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3442	950226	9774	53336	20000	159	-14

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

Dear Kevin,

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

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

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

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

Helio corr removed

Date: Feb 11 '98

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

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

2. BATSE Data

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

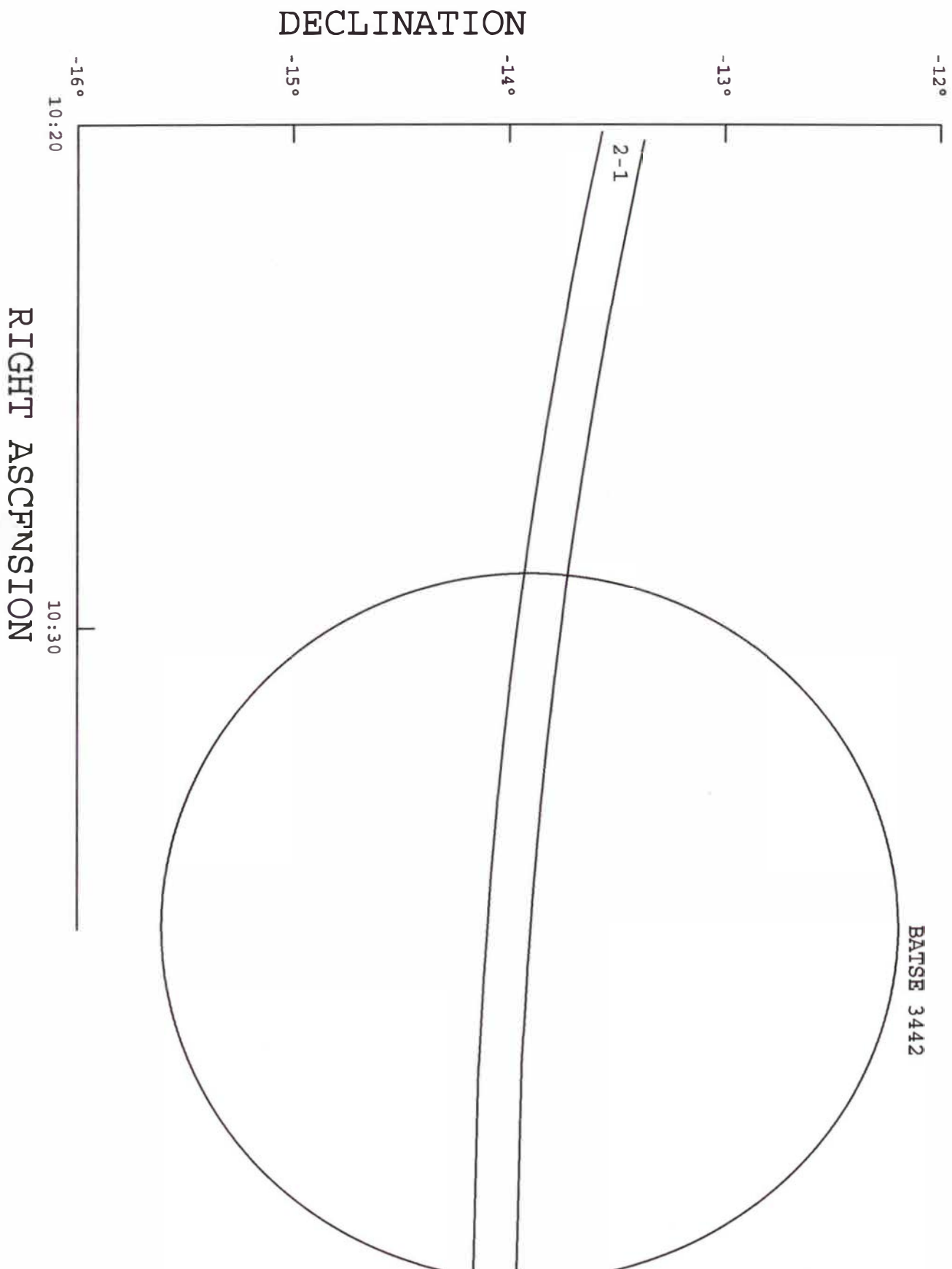
3. PVO Data

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

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

EVENT OF FEB 26, 1995 15:05

11 / 2 / 98



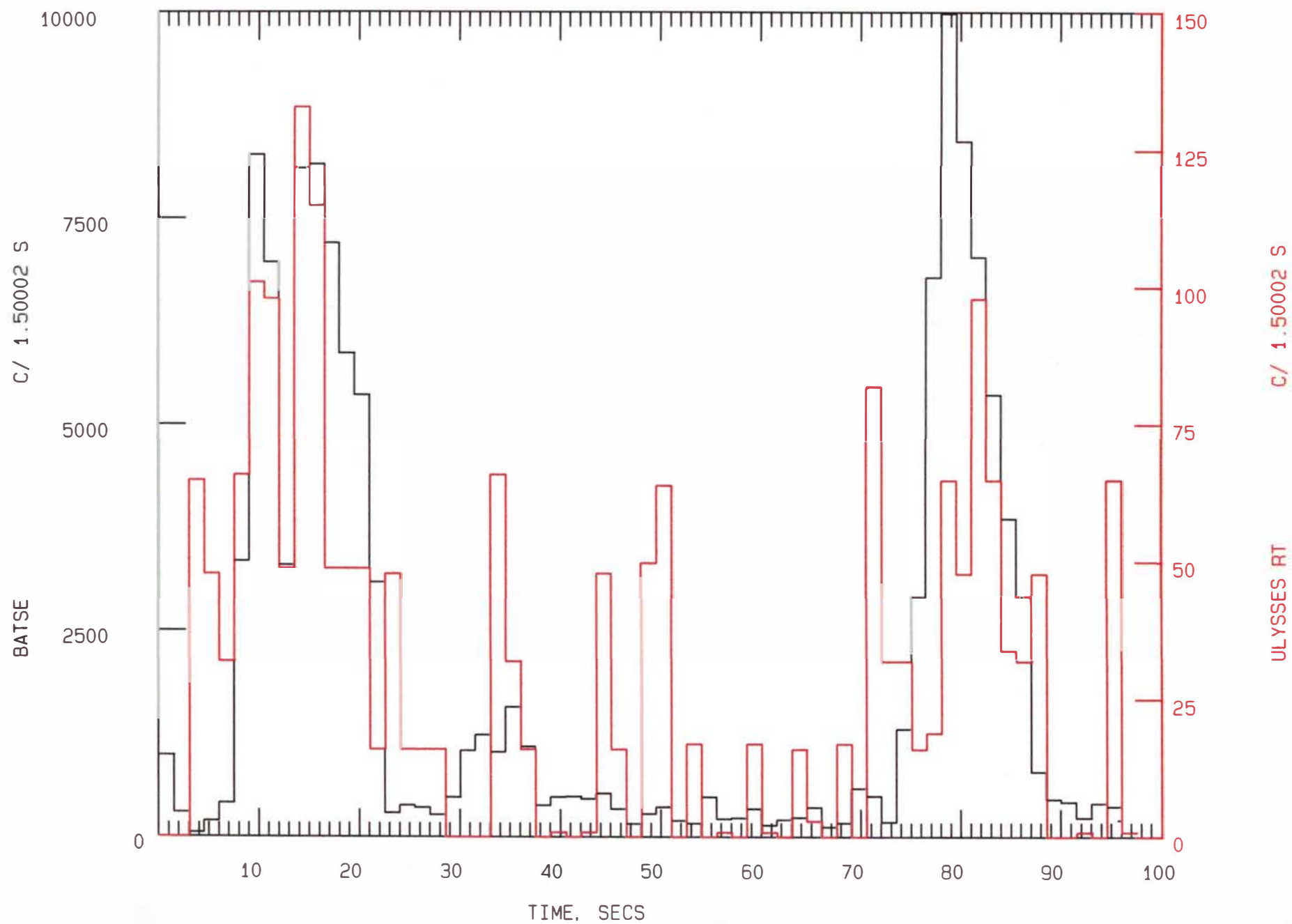
BATSE

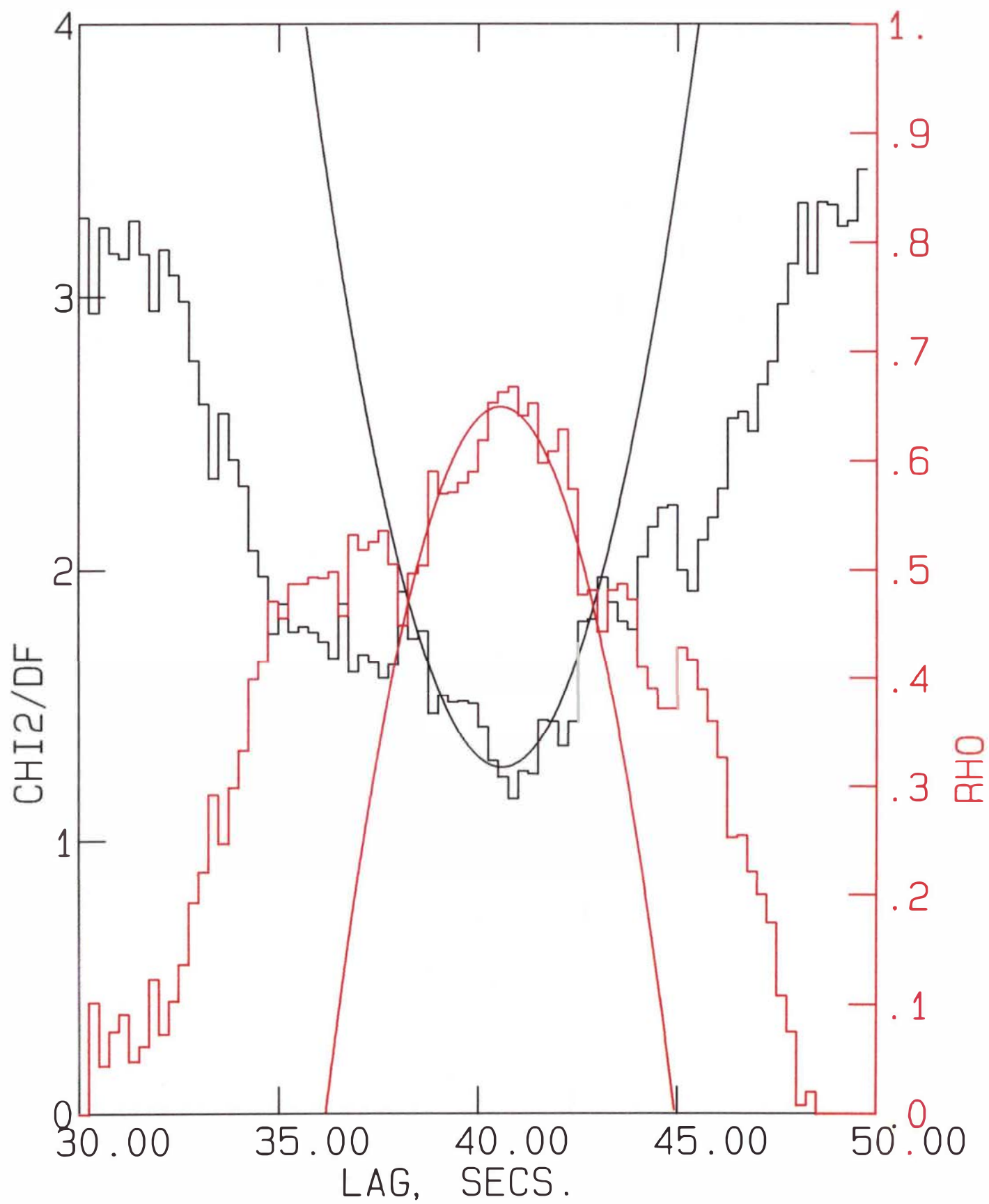
-ULYSSES RT CORRELATION

26/ 2/95

53336.498

11/ 2/98





ULYSSES RT

11 / 2 / 98

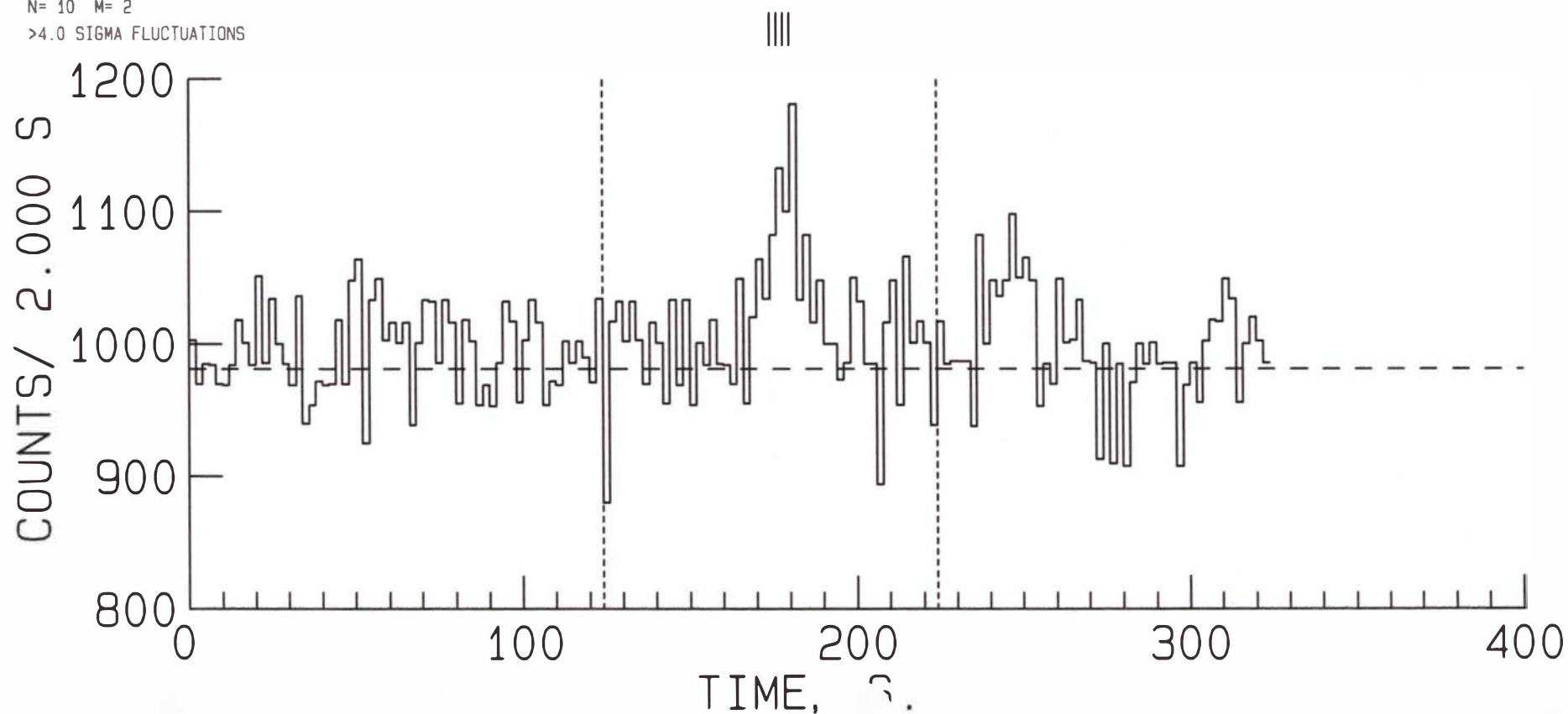
26 / 2 / 95 54180.060 s

0.250 S INTERVALS REGROUPED BY 8

21- 145 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



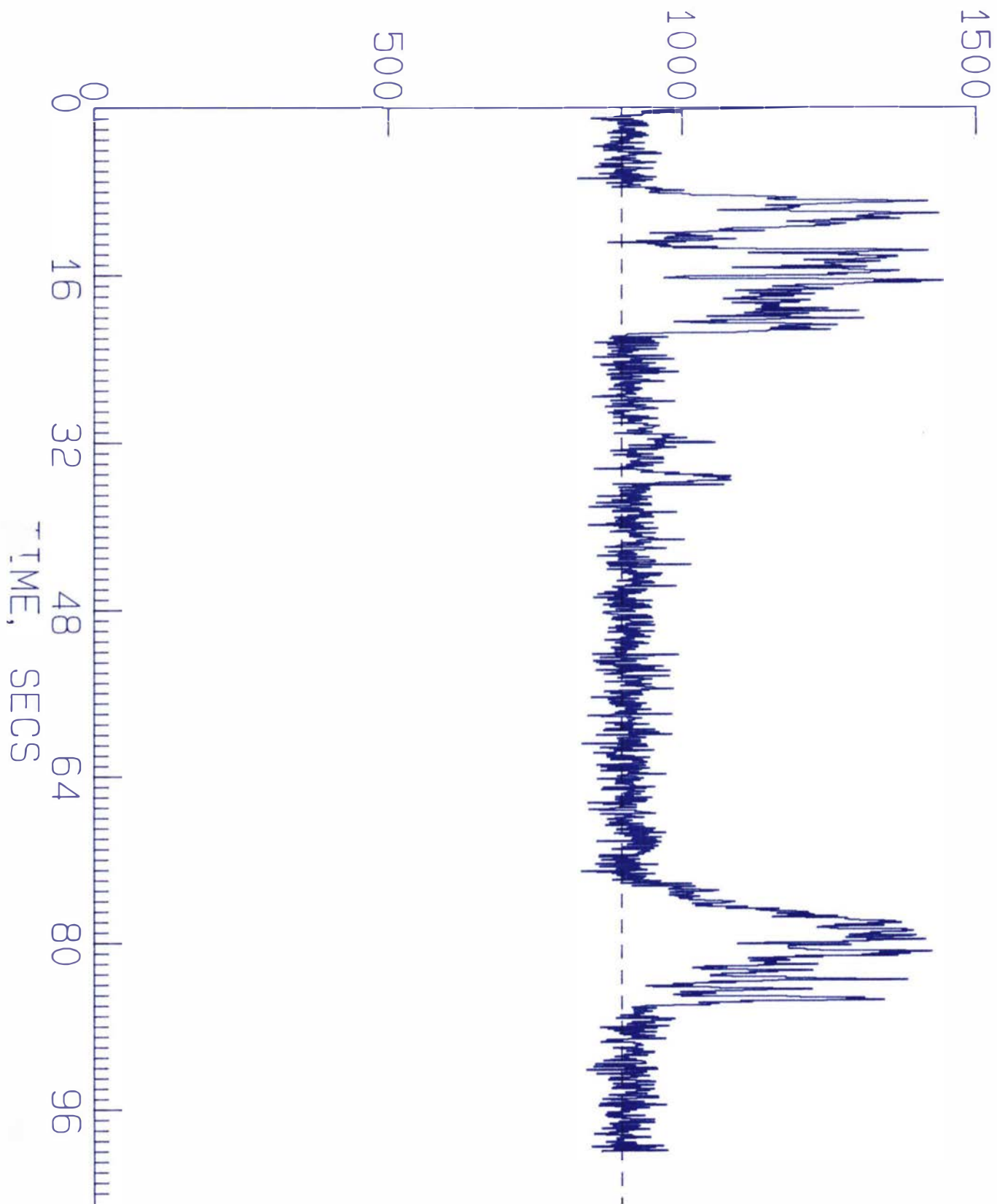
BATSE

26/02/95

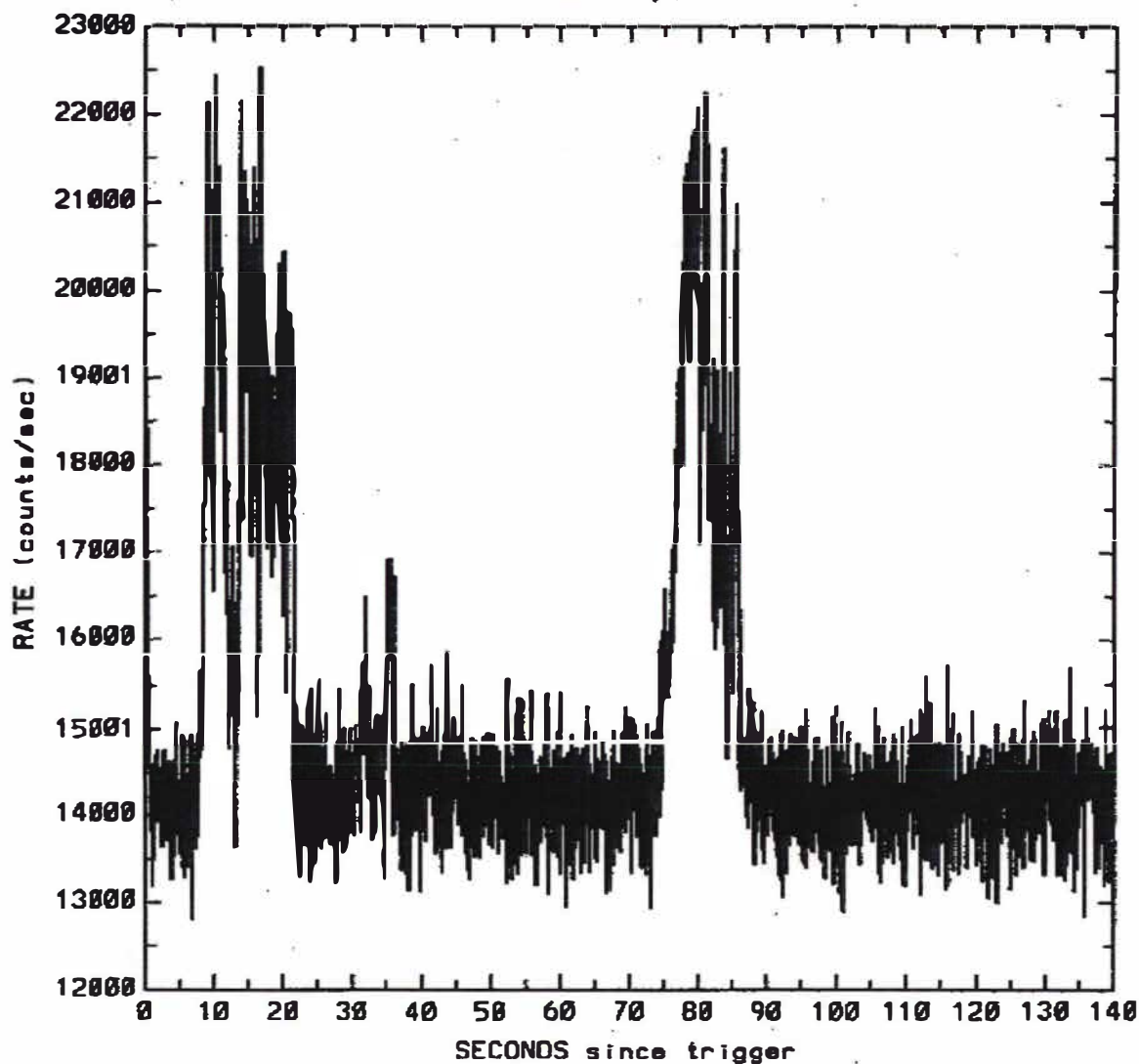
53336.498

25- 100 keV

COUNTS/ .064 S



MER Data for K. Hurley, No. 3442



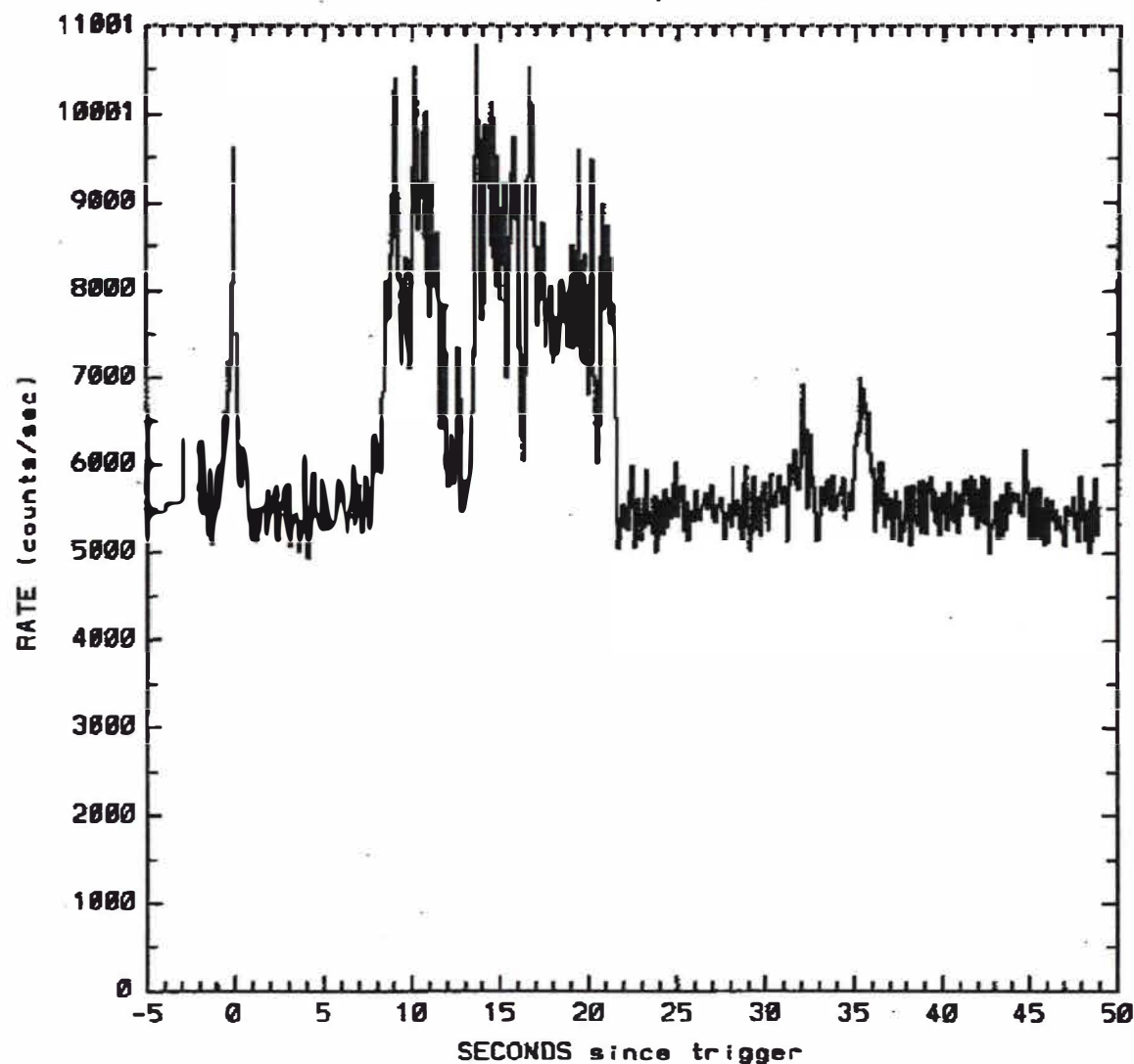
22-MAR-1995 18:59:34

Created by MOPS 80
(Burst Display)
Version 12.23

Trigger = 3442

Trigger Time:
9774 / 53336.498Burst Data Type:
MERDeadtime
Corrected: NBackground Data
Type: CONTMinimum Integ. Time:
8.864 secondsDetectors [7..8]:
7654----Channels:
(8..6)Quality Mask:
BDISP1

TTS Data for K. Hurley, No. 3442



22-MAR-1995 11:00:52

Created by MDPS 80
(Burst Display)
Version 42.23

Trigger # : 3442

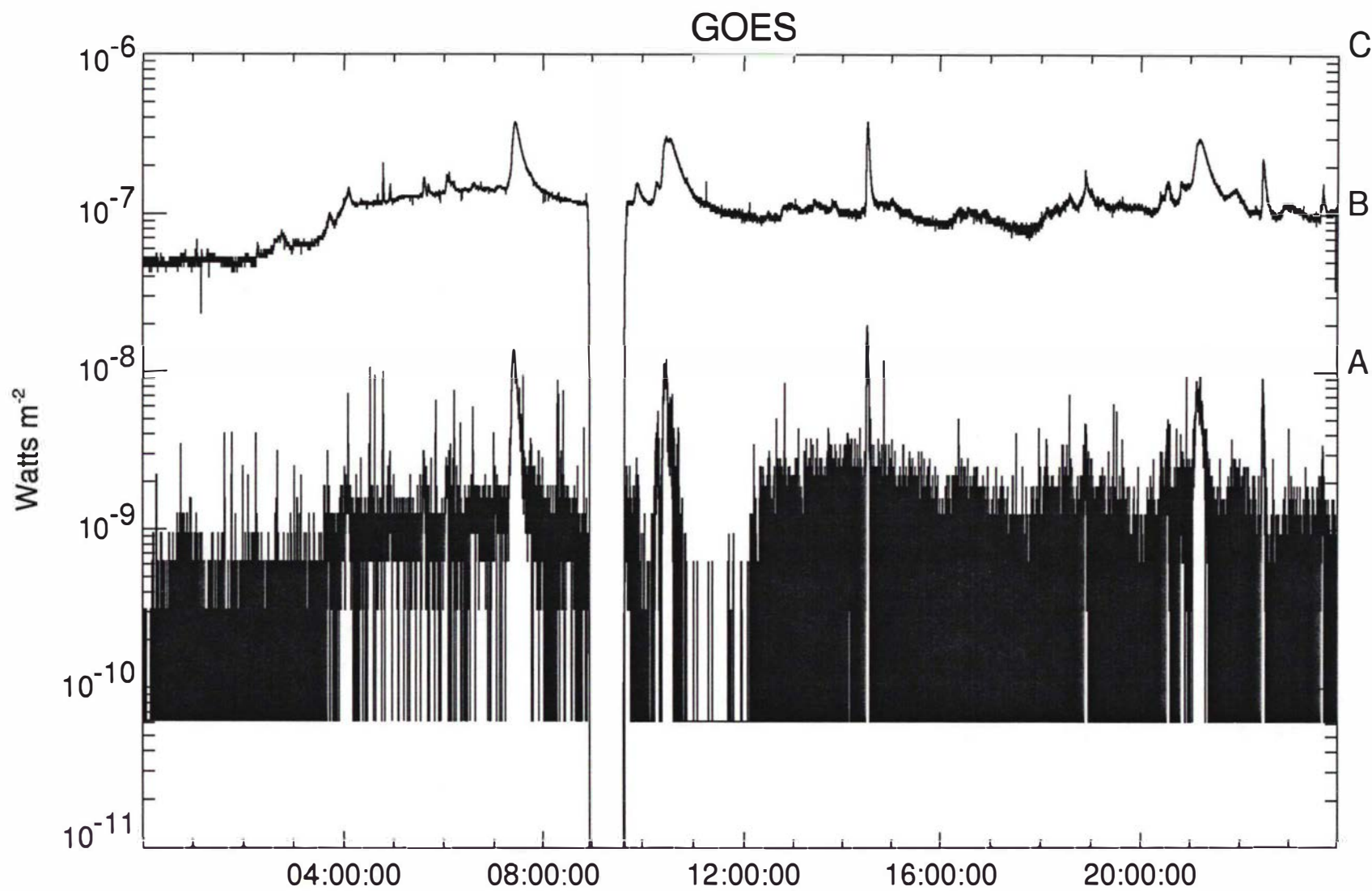
Trigger Time:
9774 / 53336.498Burst Data Type:
TTS

Time Corrected: Y

Maximum Time Error:
0.05780 second(s)Deadtime
Corrected: NBackground Data
Type: PREB + DISCLA

Bin Count: 8

Detectors [7..8]:
7654----Discriminators:
(2, 2)Quality Mask:
BDISP1



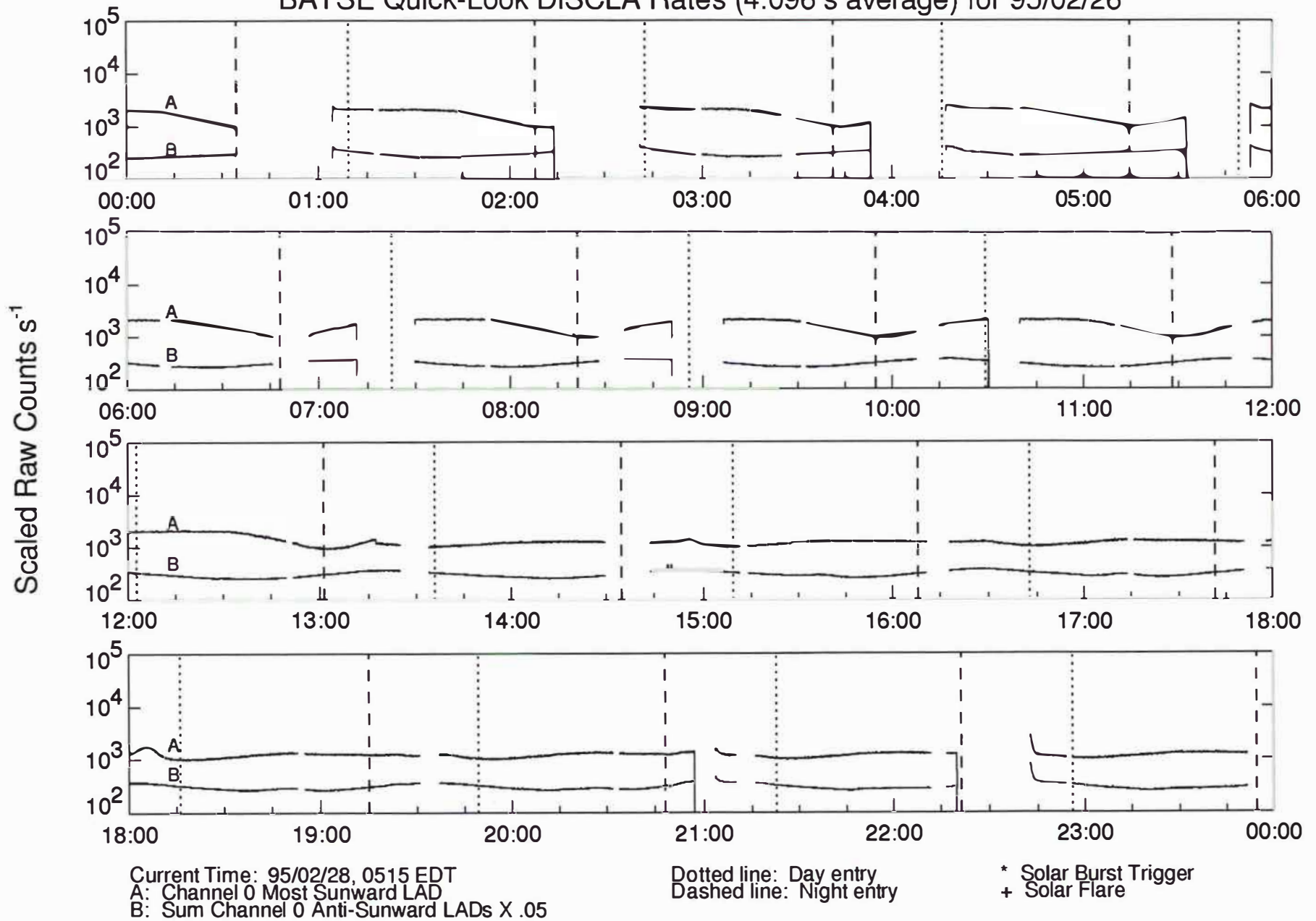
Data Start: 95/02/26, 0000:00

Plot created: 95/02/28, 0514

Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted

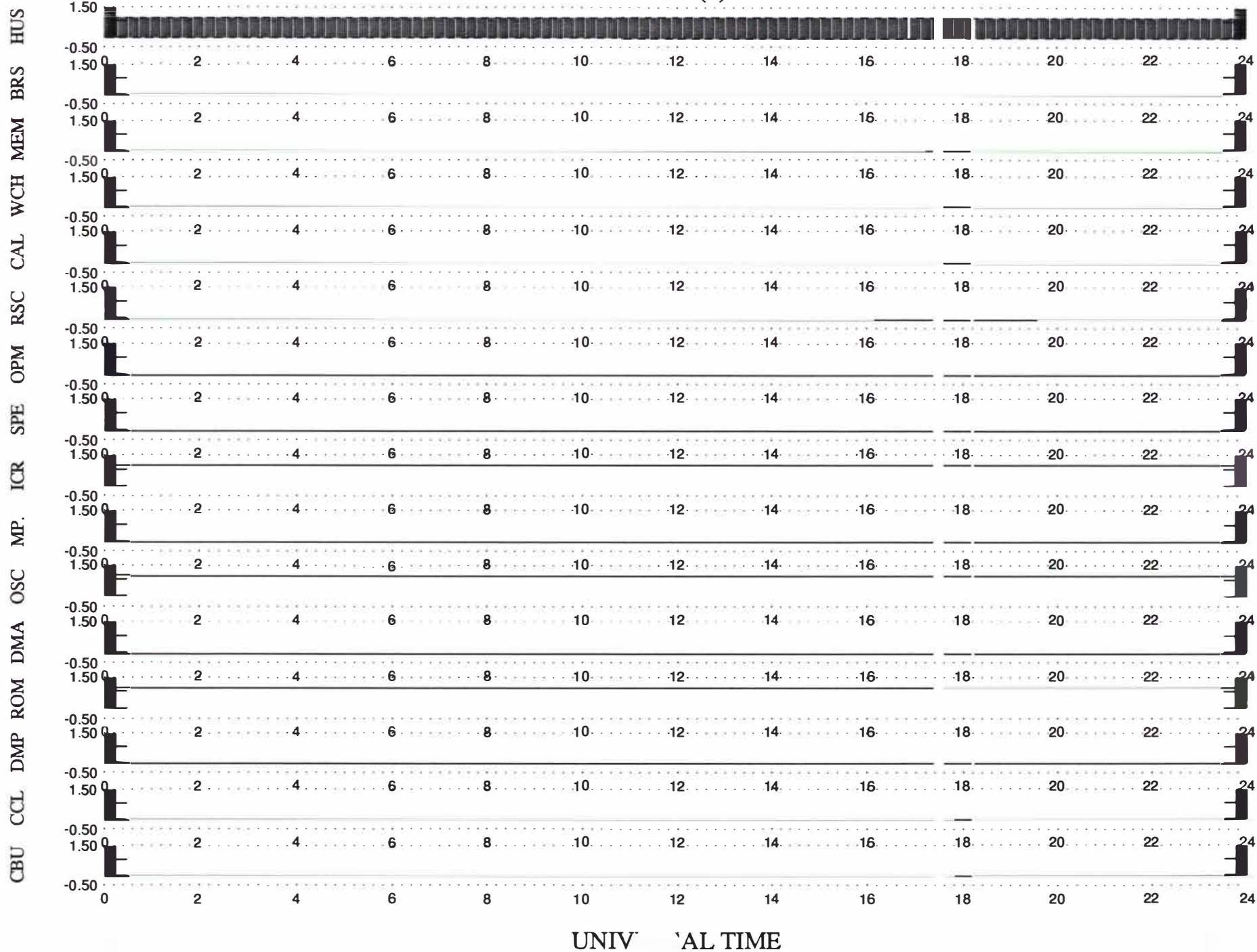
2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/26



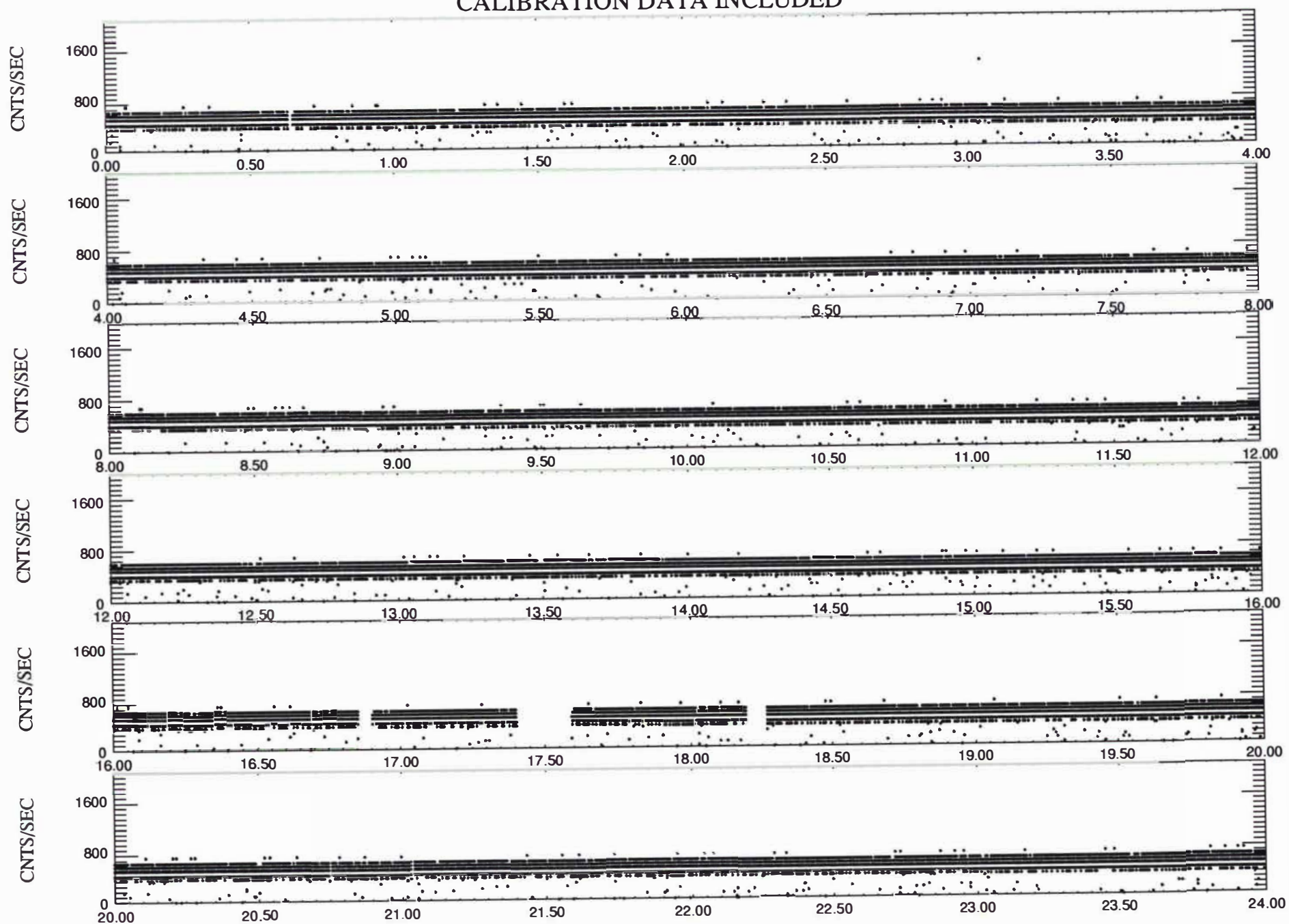
HUS MODES EDR day 57, year 1995 to day 57, year 1995
NO BURST (3)

7/18/95

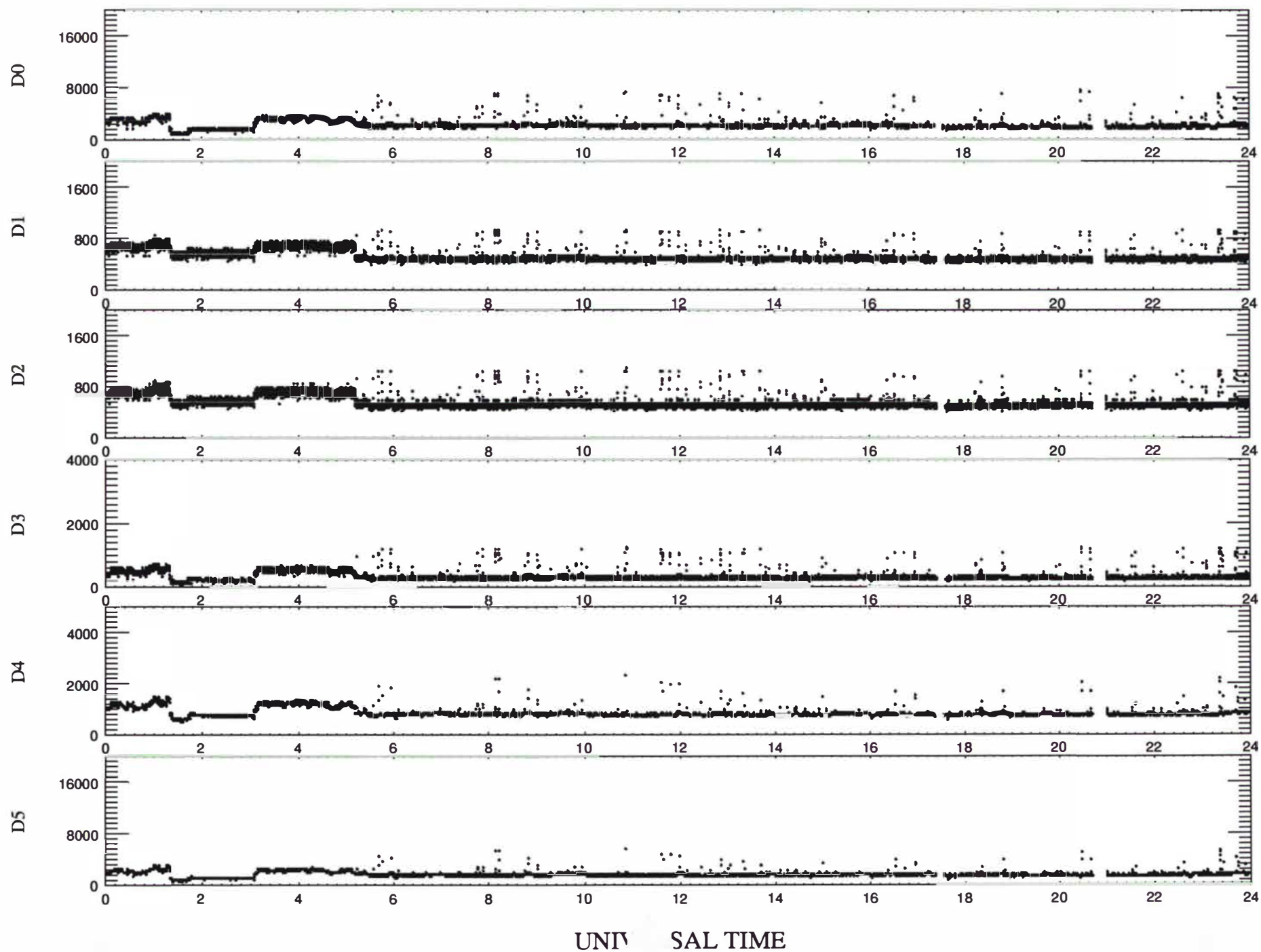


HUS 2A, MODE 1, NOT AVERAGED EDR day 57, year 1995 to day 57, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. TIME



950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47 ✓
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR ✓
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54 ✓
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR ✓
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
950412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

Dear Bonnard, Kevin, David, Helmut:

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

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec						
			G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
941120	20 23 17.924	S1	215	328	30	>15	2	25	5 ✓
941121	17 25 00.945	S1	1652	1656	300	21	3	50	6 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR ✓
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR ✓
950110	13 37 57.084	S2	234	422	213	0.05	38	100	32 ✓
950111	04 49 12.241	S1	586	620	100	>19	92	24	33 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
950112	07 45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓
950113	05 59 13	S1	283	180	26	>10	52		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
950114	07 30 30.766	S2	205	406	60	<0.05	1	100	36 ✓
950114	13 10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39

Date: Aug 16 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?

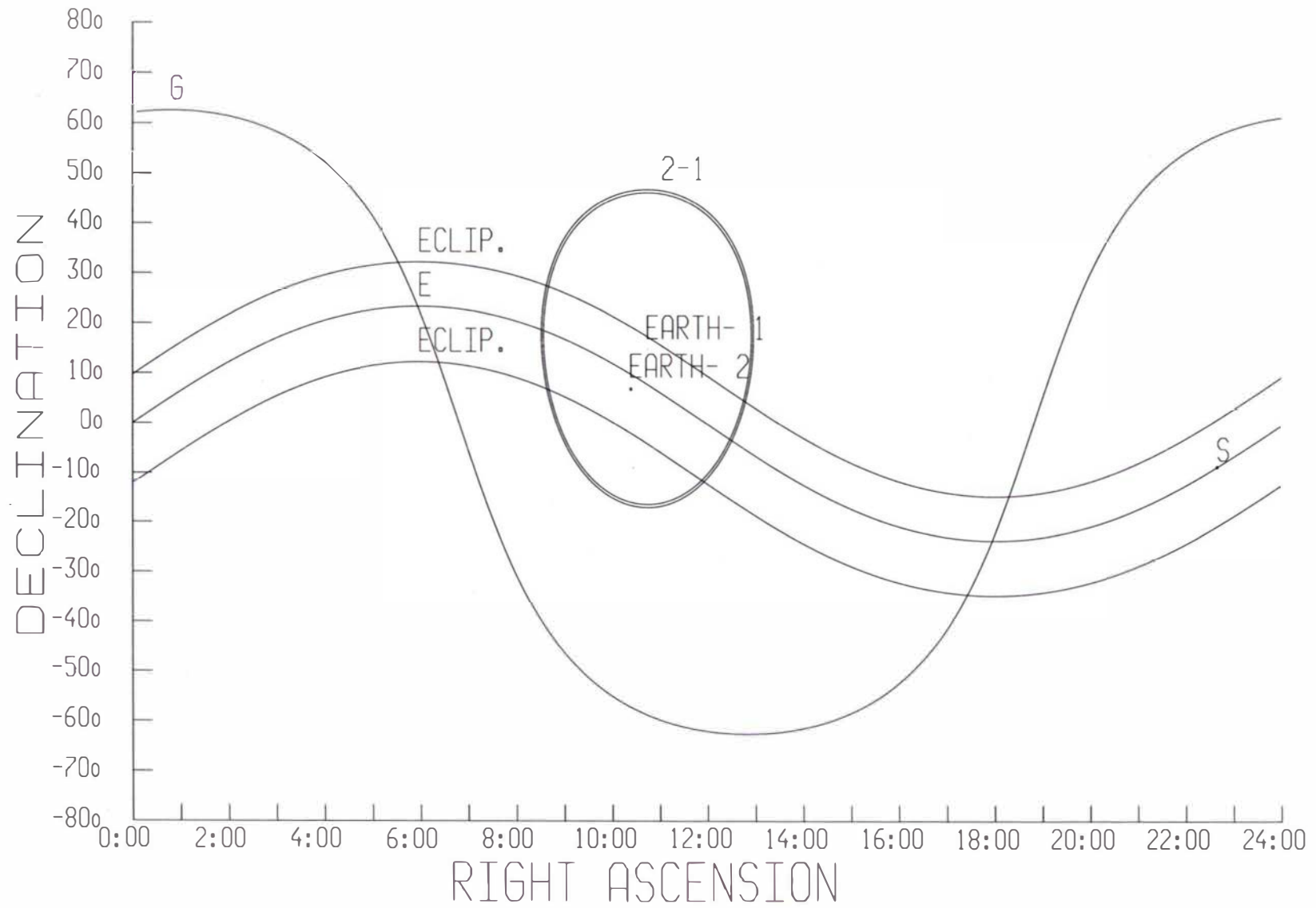
3. PVO Data

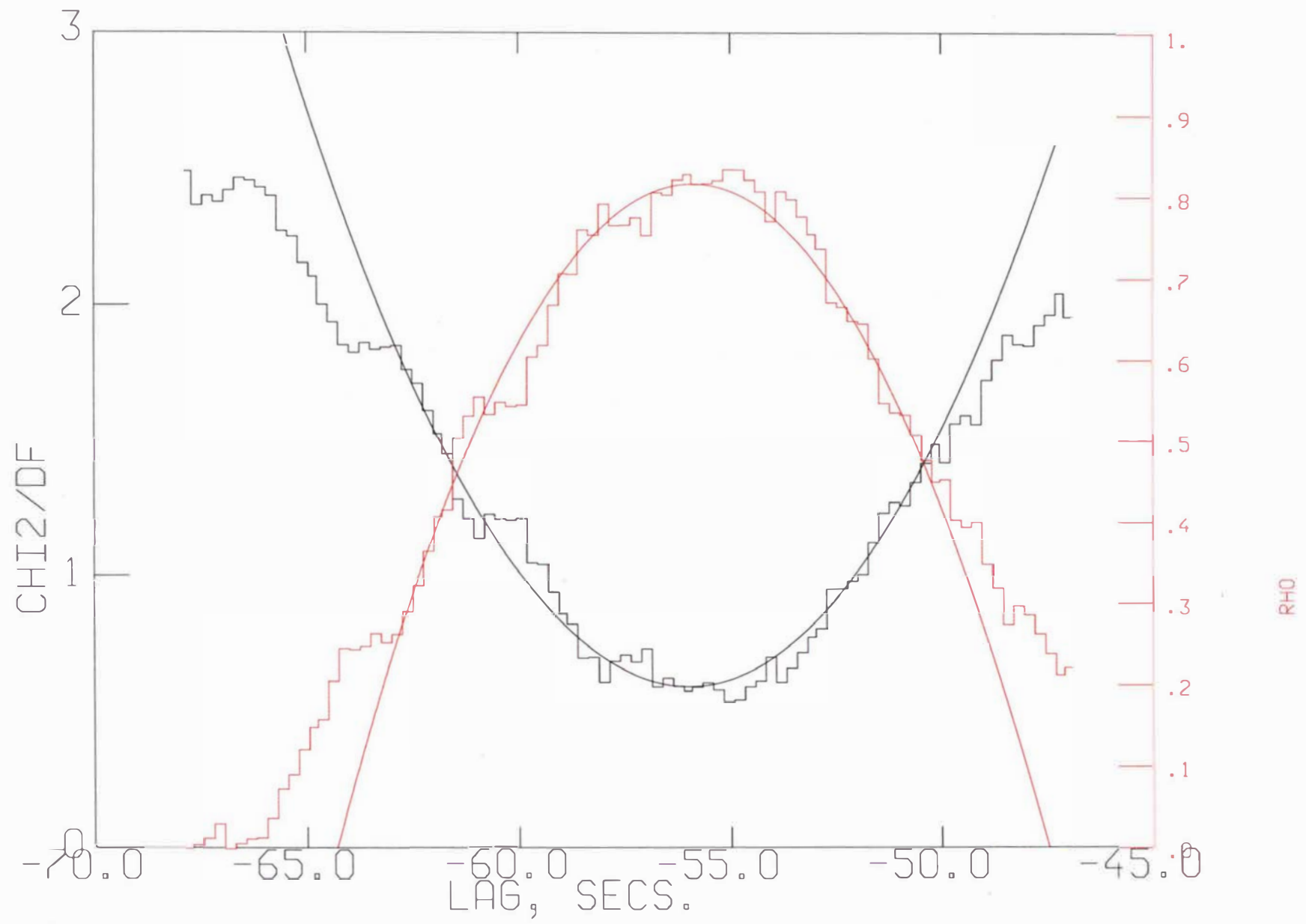
- ☐ Ephemeris of PVO used (not Venus)?
- ☐ 2000 coordinates used?
- ☐ Geocentric time used?
- ☒ ACCESS and MBL databases updated with identical times?

EVENT OF FEB 27, 1995 8:57

16/08/2011

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





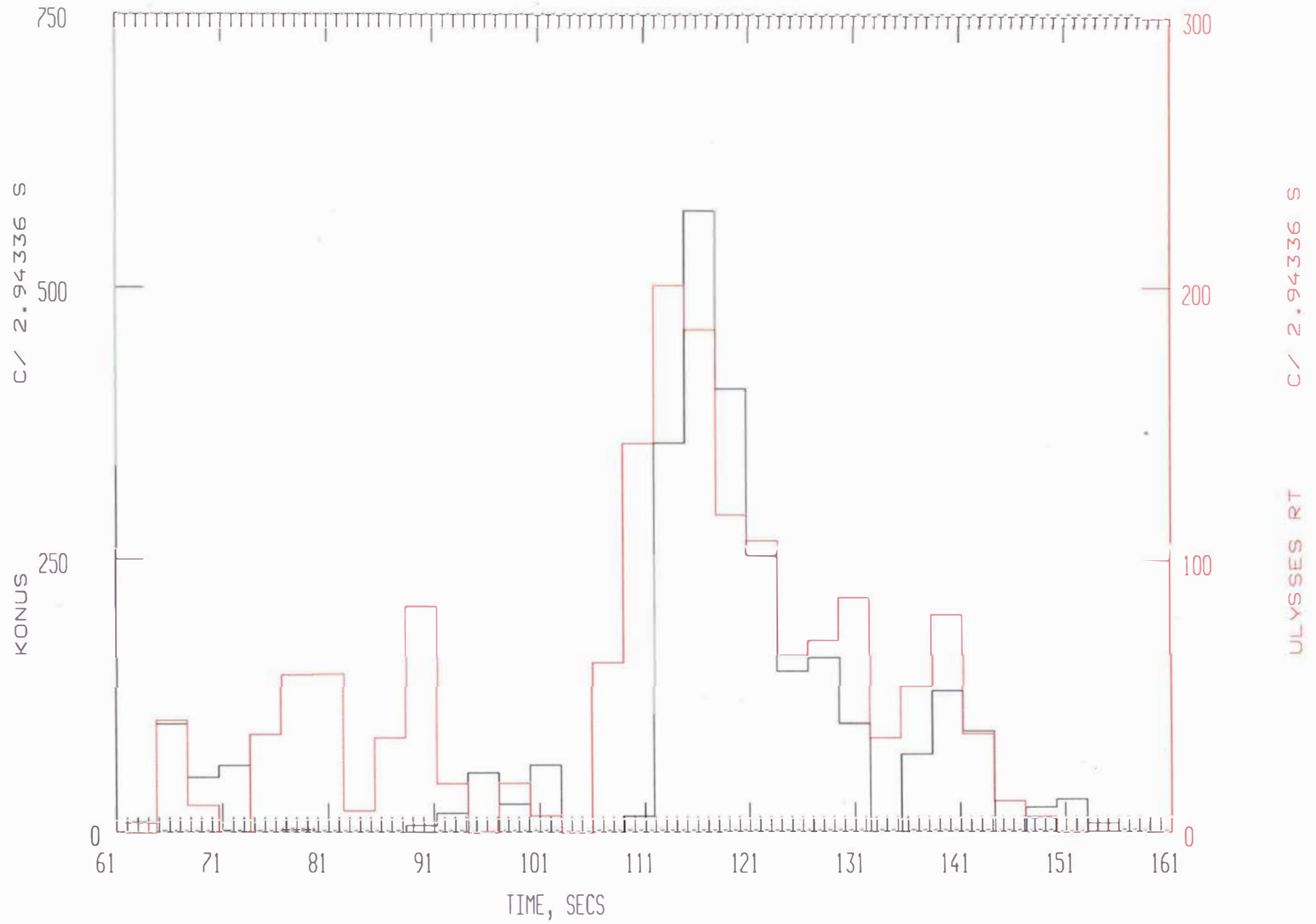
KONUS

-ULYSSES RT CORRELATION

27/02/95

31200.967

16/ 8/11



KONUS 19950227 32307

ULYSSES RT

12 / 08 / 11

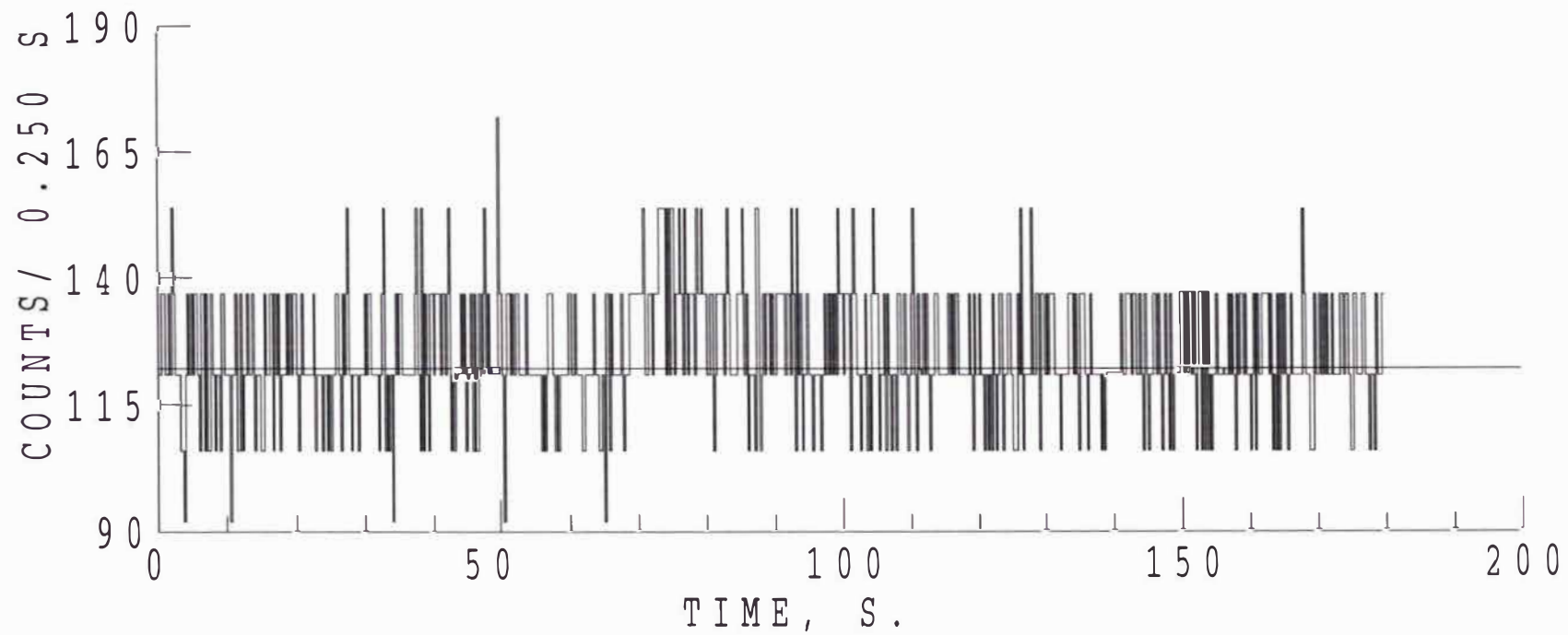
27 / 02 / 95 32220.064 s

0 - 0 keV

N= 10 M= 10
>4.0 SIGMA FLUCTUATIONS

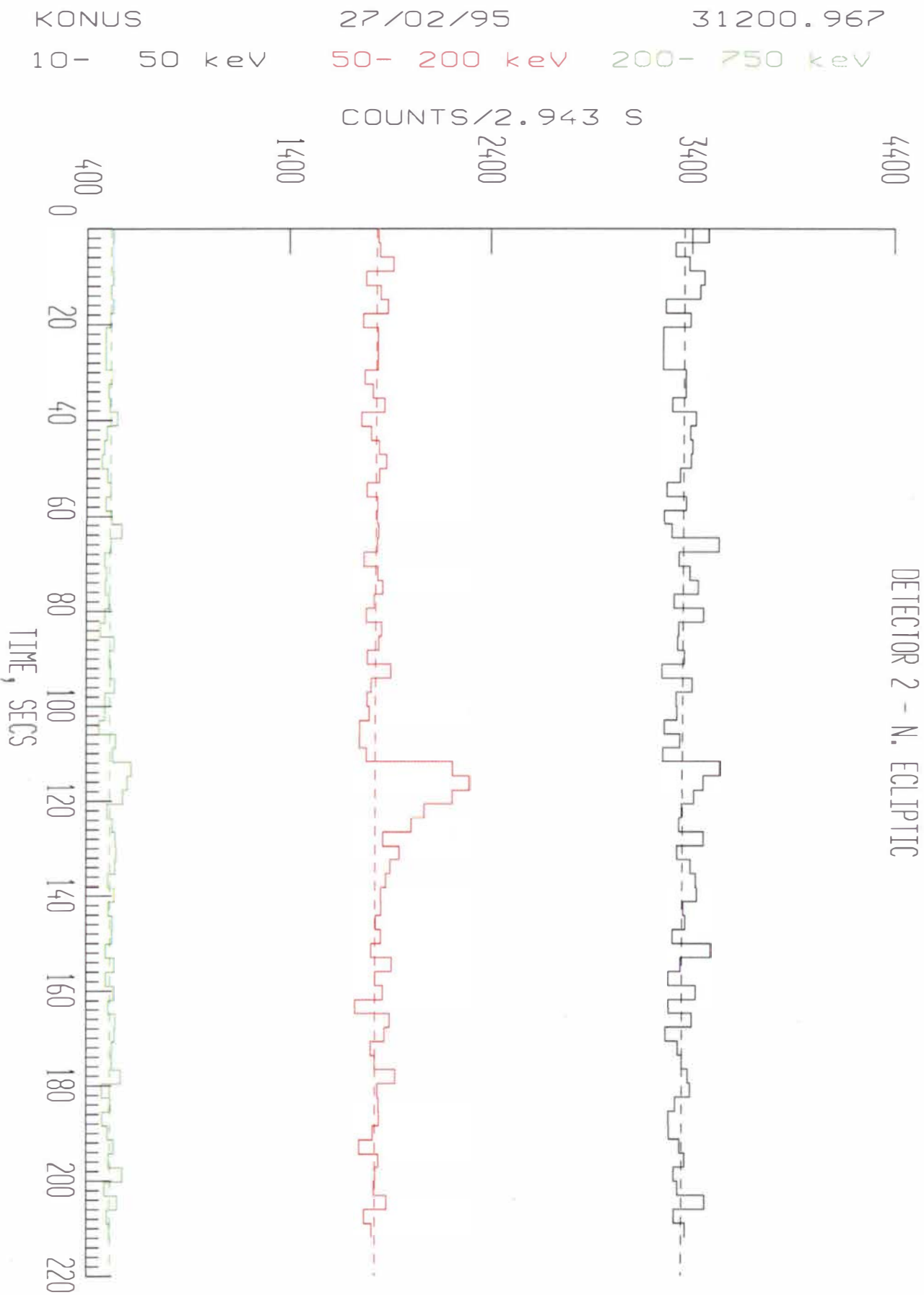


N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



16/08/2011

DETECTOR 2 - N. ECLIPSE



16/08/2011

DETECTOR 1 - S. ECLIPSE

8100

5600

COUNTS/2.943 S

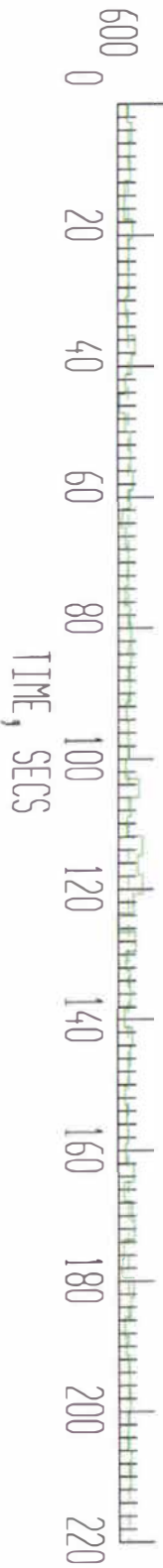
3100

27/02/95 31200.967

50- 200 keV 200- 750 keV

KONUS

10- 50 keV



KONUS

12 / 2 / 96

ULYSSES RT

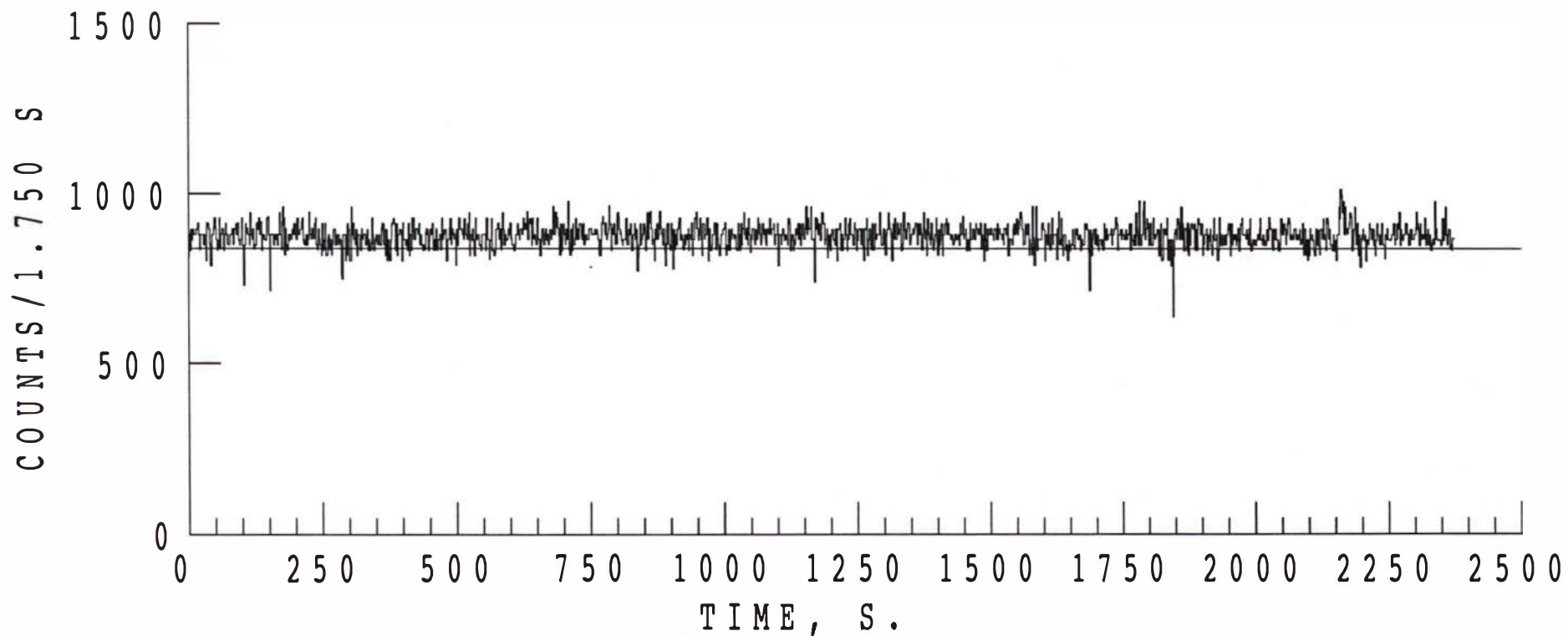
27 / 2 / 95 30132.016 s

0.250 S INTERVALS REGROUPED BY 7

0 - 0 keV

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From DEAL@ssl.msfc.nasa.gov Wed Mar 1 06:20 PST 1995
Date: Wed, 1 Mar 1995 8:20:35 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: khurley@sunspot.ssl.berkeley.edu
Subject: Crossing Windows for BATSE Burst 3443

BATSEARCH PROGRAM

NO

BATSE BURST # 3443
EVENT OF 1995 FEB 27 DAY OF YEAR= 58
EVENT CROSSING TIME AT BATSE : 50652. S. OR 14:04:12.0
COORDINATES ARE 0.000 0.000 6800. (RA, DEC, DIST.)
BURST ARRIVAL DIRECTION: 93.000 52.000
BATSE PEAK COUNTING RATE: 1050 C/S

EVENT CROSSING TIME AT ULYSSES WILL BE FOUND
INTERPOLATED POSITION OF ULYSSES ON 27/ 2/ 95 IS:
RA= 340.638 DEC= -15.189 DIST= 2.326 AU
BATSE-ULYSSES DISTANCE = 347942311. KM.
ANGLE WHICH BATSE-ULYSSES VECTOR MAKES WITH GRB ARRIVAL DIRECTION= 64.37 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= 501.99 SECS.
CROSSING TIME AT ULYSSES IS 51154. S. OR 14:12:33 +/- 239.30 SECONDS

EVENT CROSSING TIME AT MARS WILL BE FOUND
POSITION OF MARS ON 27/ 2/ 95 IS:
RA= 141.209 DEC= 19.745 DIST= 0.702 AU
MARS-BATSE DISTANCE = 105028176. KM.
ANGLE WHICH BATSE-MARS VECTOR MAKES WITH GRB ARRIVAL DIRECTION=130.72 DEG.
LIGHT TRAVEL TIME ALONG PROJECTED PATH= -228.55 SECS.
CROSSING TIME AT MARS IS 50423. S. OR 14:00:23 +/- 42.63 SECONDS

BATSE BURST TRIGGER

NO.: 3443

TIME: TJD=9775 SECONDS=50652

TYPE: BURST SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=19.1 AZIMUTH=109.5 ERROR= DEGREES

COMMENTS:

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

BATSE #	Date	TJD	sec	Max ct/s	RA	Dec
3443	950227	9775	50652	1050	093	+52

1 / 3 / 95

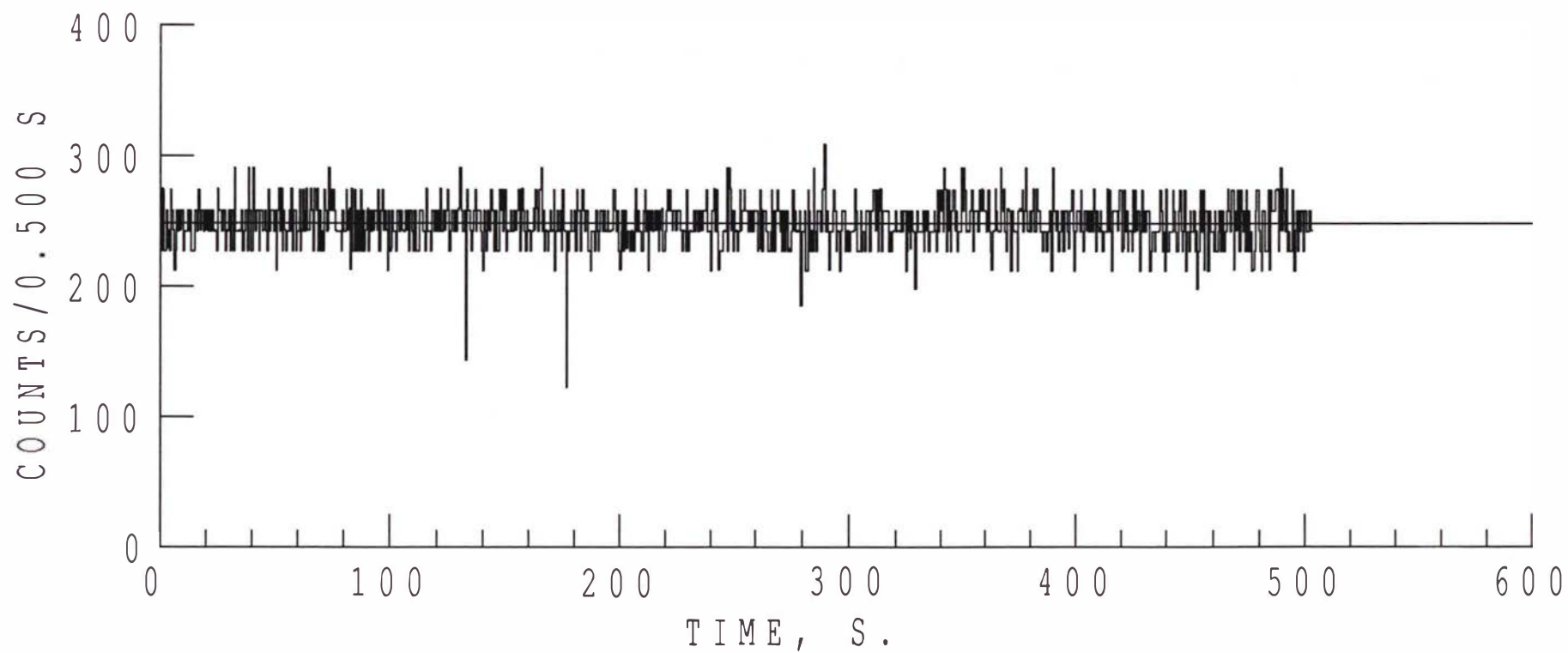
ULYSSES RT

27 / 2 / 95 50904.246 s

0.250 S INTERVALS REGROUPED BY 2

0 - 0 keV

N= 10 M= 2
>4.0 SIGMA FLUCTUATIONS



From DEAL@ssl.msfc.nasa.gov Wed Mar 1 06:18 PST 1995
Date: Wed, 1 Mar 1995 8:18:22 -0600 (CST)
From: DEAL@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3444

TIME: TJD=9775 SECONDS=56669

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From RICHARDSON@ssl.msfc.nasa.gov Thu Mar 2 12:14 PST 1995
Date: Thu, 2 Mar 1995 14:13:30 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3445

TIME: TJD=9776 SECONDS=59986

TYPE: ELECTRO SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
ELECTRON EVENT

From RICHARDSON@ssl.msfc.nasa.gov Thu Mar 2 12:21 PST 1995
Date: Thu, 2 Mar 1995 14:19:43 -0600 (CST)
From: RICHARDSON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3446

TIME: TJD=9776 SECONDS=66679

TYPE: TGF SOLAR FLARE TRIGGER SIGNAL:N

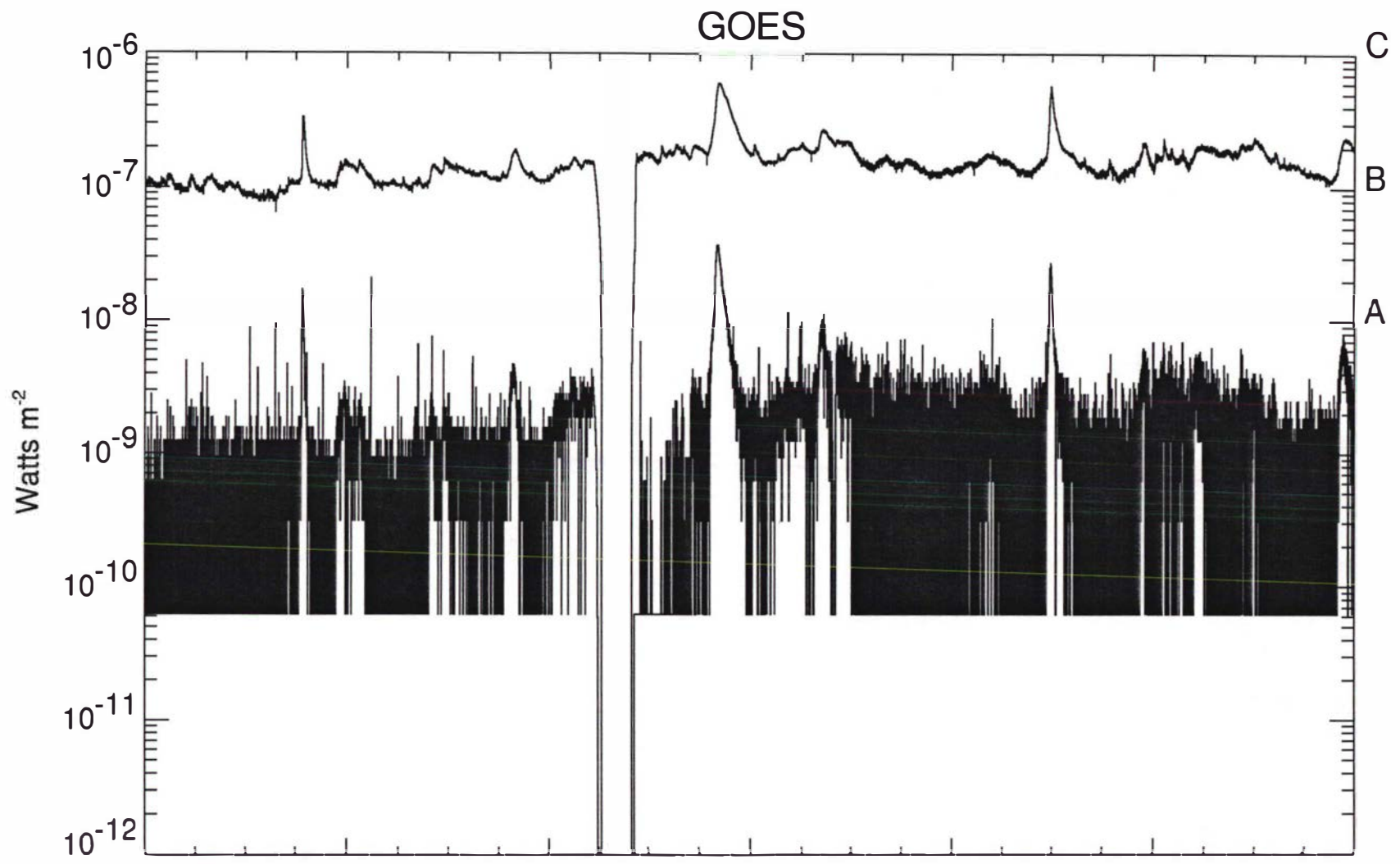
SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH=63.7 AZIMUTH=70.8 ERROR= DEGREES

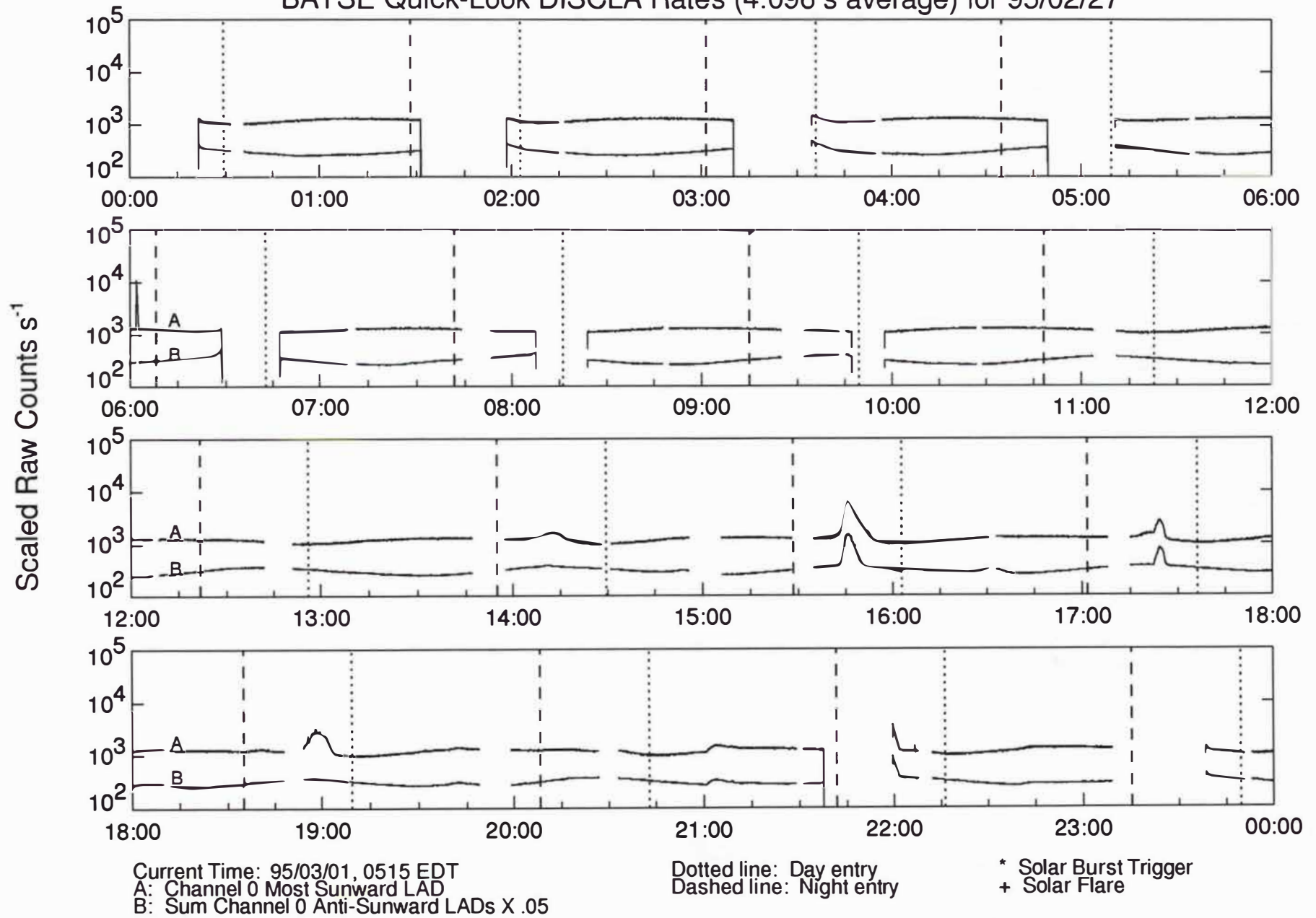
COMMENTS:

TGF. SINGLE SPIKE. DURATION ~0.0007 SEC. VISIBLE ABOVE 300KEV.



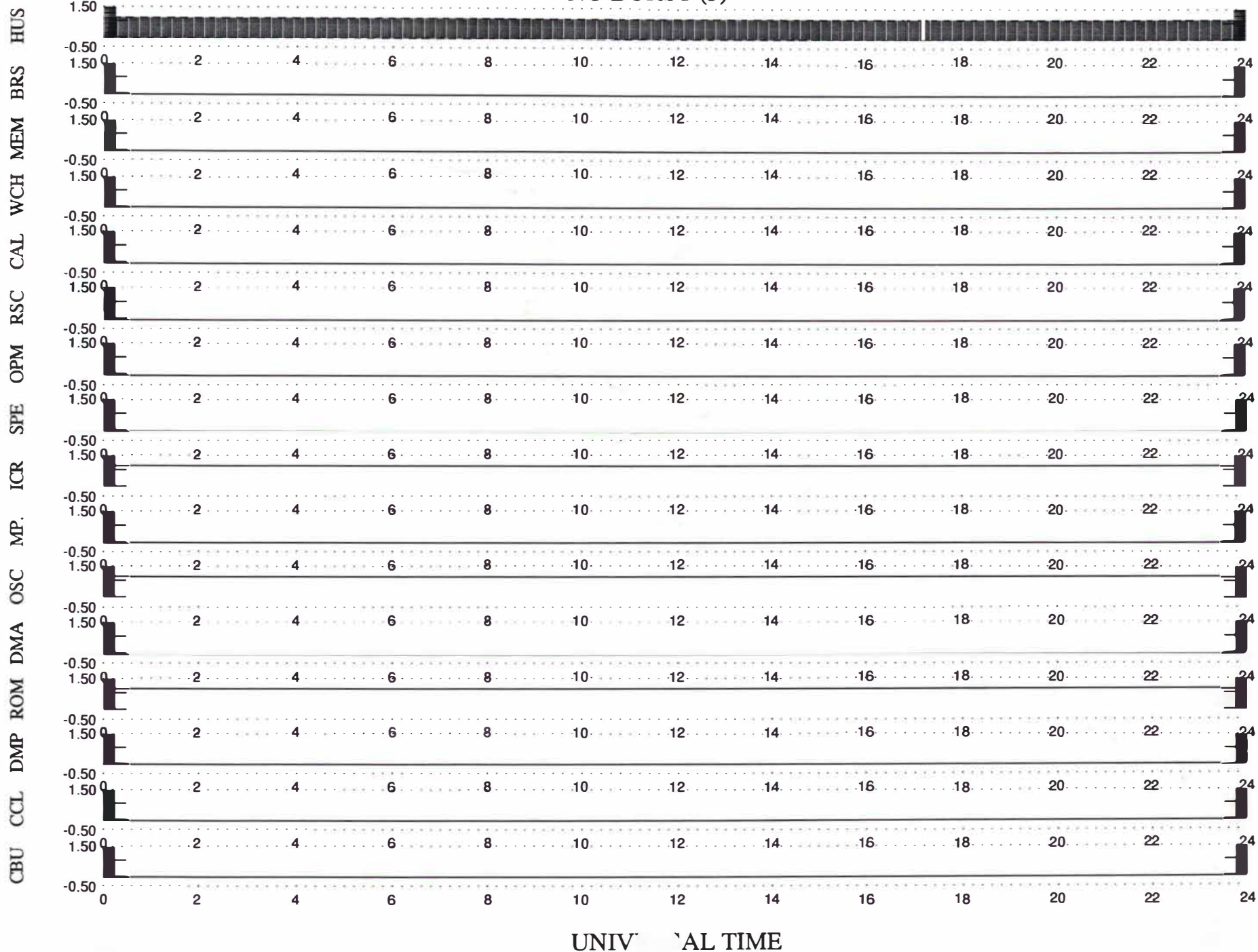
Data Start: 95/02/27, 0000:01 Plot created: 95/03/01, 0514
 Channel 1 (1.0 - 8.0 Angstroms) Background not subtracted
 Channel 2 (0.5 - 4.0 Angstroms) Background not subtracted

BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/27



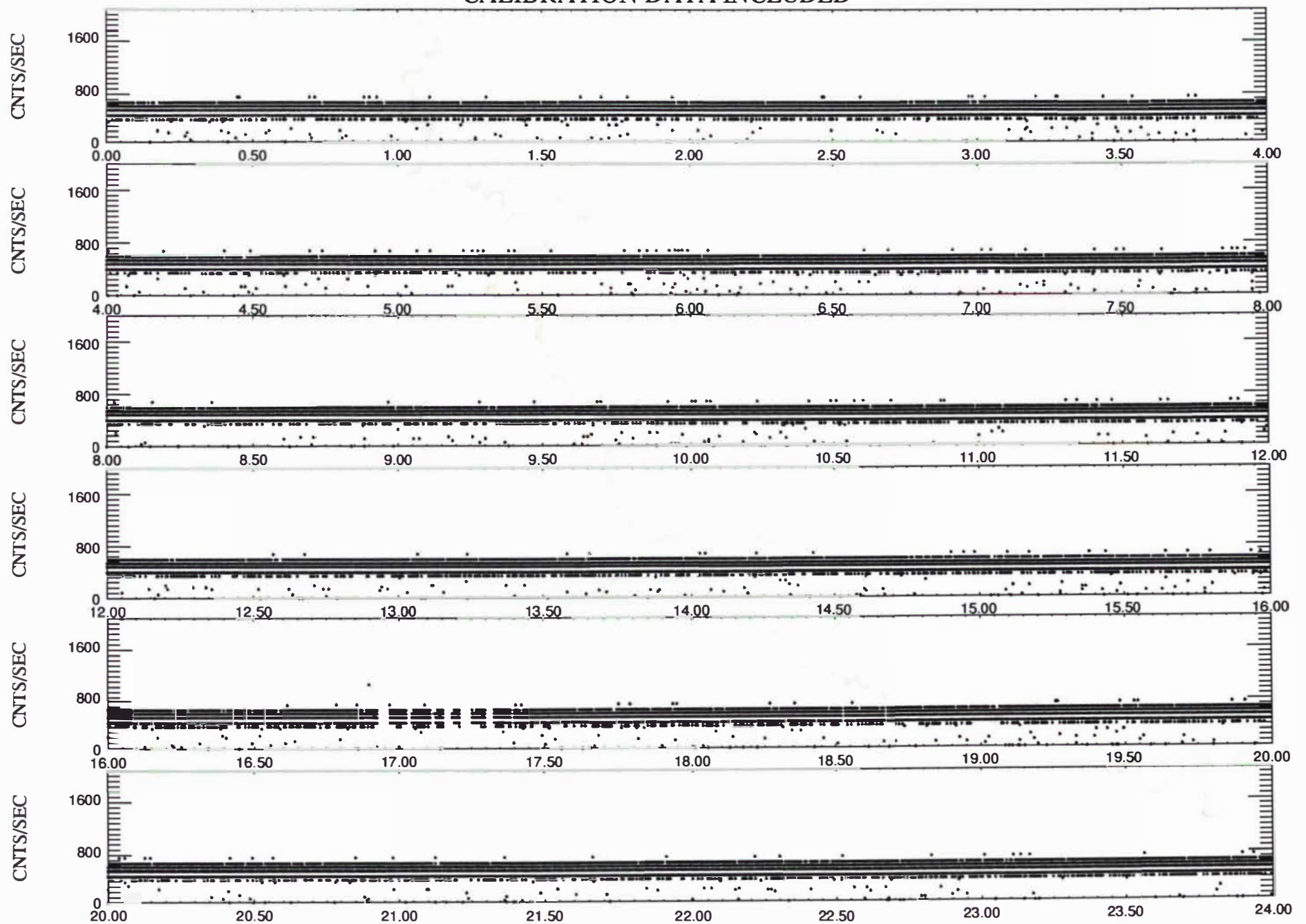
HUS MODES EDR day 58, year 1995 to day 58, year 1995 NO BURST (3)

7/18/95

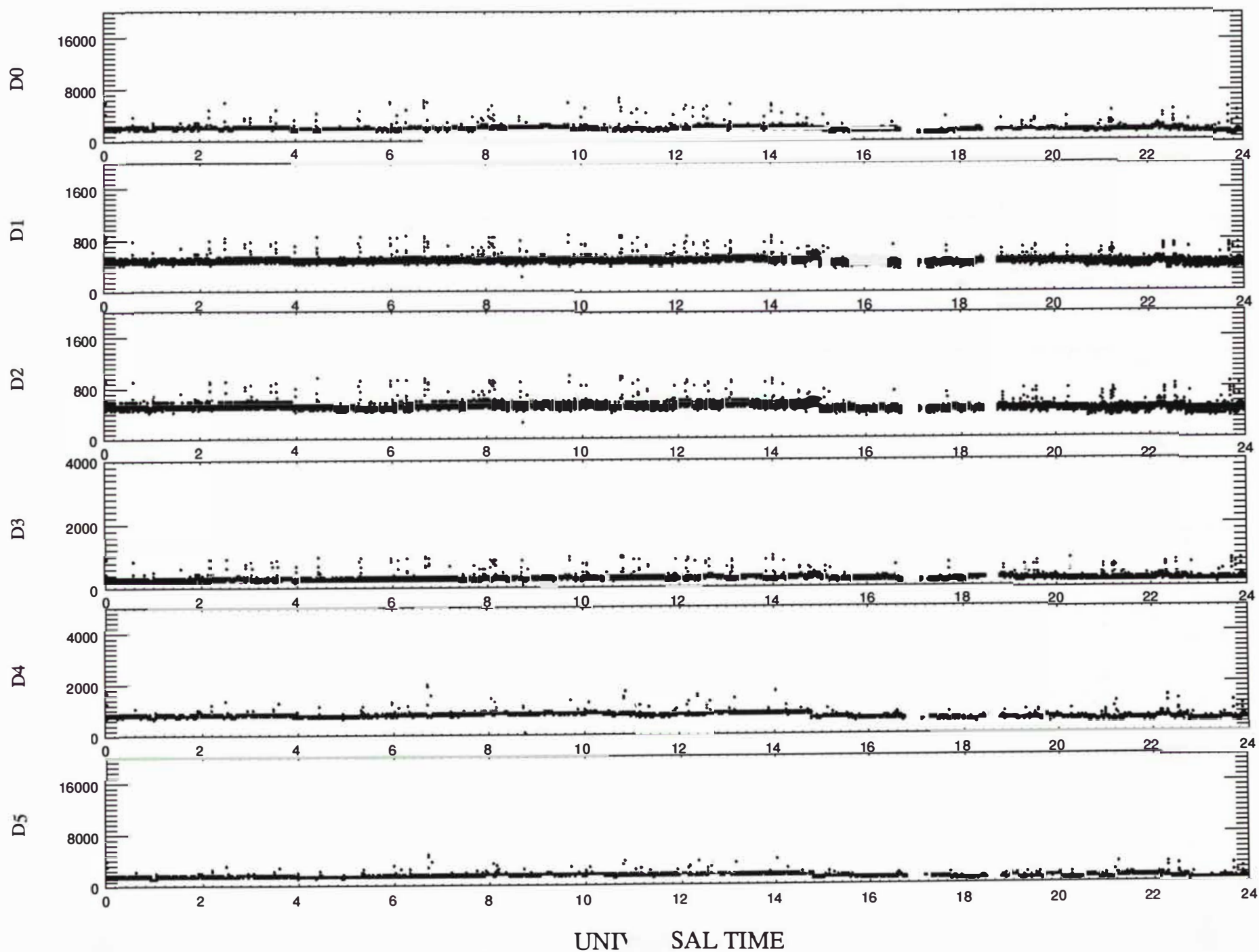


HUS 2A, MODE 1, NOT AVERAGED EDR day 58, year 1995 to day 58, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. CAL TIME



950131	11	35	35	S2	70	130	20	0.4	12		BGR ✓
950131	21	49	48	S1	265	80		>5	15		BGR
950201	22	01	00.232	S1	793	2027	152	1.1	1	5	40 ✓
950202	11	32	49	S2	140	60		<0.2	6		BGR
950203	01	47	11.728	S1	4380	2800	80	0.95	4	250	41 Sol
950204	00	38	38.654	S2	145	710	620	0.16	0.1	45	42
950204	15	42	24.557	S1	15400	8240	180	0.95	1.5	260	43 Sol
950207	00	46	14	S2	150	95		<0.1	40		BGR ✓
950207	13	52	53.785	S1	115	360	50	4.6	6	25	44
950207	20	10	30	S1	65	20		2.4	50		BGR
950208	02	10	24.432	S2	1144	1824	670	0.02	1	60	45
950210	02	20	24.148	S1	1350	3900	700	3.2	0.04	0.16	47 ✓
950211	02	24	57.749	S2	2750	11630	6560	<0.06	0.03	0.14	48 ✓
950211	04	25	45.869	S2	230	480	240	0.4	8	12	49
950211	20	07	49.074	S1	1170	1570	460	60	12	60	50 ✓
950211	23	26	12	S2	30	40	15	<0.2	30		BGR ✓
950218	11	57	51.463	S2	1275	620		0.95	5	40	51 Sol
950220	03	18	27.878	S2	550	185		0.95	40	240	52 Sol
950221	20	45	01	S2	36	150	40	1.7	24		BGR ✓
950222	21	04	23	S2	100	90	35	<0.1	30		BGR
950223	02	23	03	S1	120	160	30	2.0	18		BGR ✓
950224	09	23	19	S2	115	80		<0.1	30		BGR
950225	15	09	09	S2	35	35		<0.1	200		BGR ✓
950226	14	49	11.255	S1	300	375	120	2.5	3	78	54 ✓
950227	08	41	54	S1	70	160	30	1.05	25		BGR
950228	05	38	53	S2	150	105		<0.1	90		BGR
950301	04	55	54	S1	270	90		1.4	320		BGR
950301	21	02	11	S2	140	220	60	<0.1	340		BGR ✓
950302	23	52	57.178	S2	240	260	70	<0.1	0.5	1.5	55 ✓
950304	05	38	10	S2	75	70	15	<0.1	100		BGR
950304	10	27	41.062	S1	360	490	250	4.5	0.5	55	56 ✓
950305	15	05	09.427	S1	200	640	400	1.2	1	25	58 ✓
950307	04	05	33.254	S2	280	480	70	0.15	7	1	59
950310	21	46	28	S2	110	140	50	<0.1	210		BGR ✓
950313	01	56	27	S1	45	50		>7	30		BGR
950313	06	16	19	S2	140	50	10	<0.15	15		BGR ✓
950313	07	37	34	S1	45	85	25	4	6		BGR ✓
950316	11	45	42	S2	40	115	75	<0.07	40		BGR
950317	19	53	43	S2		85		0.7	6		BGR ✓
950317	20	28	32	S1	40	60		1.5	32		BGR
950319	18	32	54.499	S2	720	1560	400	0.65	1	10	62 ✓
950325	07	10	41.574	S2	345	1460	1570	0.2	1	230	63 ✓
950325	17	36	32.815	S1	1320	2710	900	3.2	1	43	64 ✓
950327	06	13	10	S1	30	65	20	1.3	18		BGR
950327	07	18	43	S2	20	45	10	0.3	60		BGR ✓
950327	19	15	55.518	S1	500	200		0.9	12	4	65 Sol
950327	23	47	52	S2	60	85	35	0.2	90		BGR ✓
950329	06	47	45.958	S2	720	170		0.9	115	140	66 Sol
950329	18	51	52.697	S2	2540	2090	10	0.86	94	40	67 Sol
950329	21	56	10.723	S2	3270	3440	50	0.9	1	25	68 Sol
950401	11	50	47.034	S2	470	840	530	<0.05	3	58	69 ✓
950401	20	43	55.068	S2	200	700	340	0.3	3	18	70 ✓
950403	02	26	54	S1	30	90	20	4.0	18		BGR
950403	13	19	45.179	S1	1030	2840	800	1.0	1	15	71 ✓
950403	23	33	48.194	S2	4650	10000	4700	0.06	0.5	60	72 ✓
950405	04	14	12	S2	95	30		<0.2	6		BGR ✓
950407	15	15	22.052	S1	1230	4780	1920	2.1	14	60	74 ✓
950408	09	32	55.553	S1	180	320	210	4.5	5	8	75
950409	02	17	33	S2	70	50		<0.15	20		BGR
950409	15	43	10.676	S1	520	290		>8	2	10	76
950411	07	51	01.753	S1	440	1180	610	1.4	2	7	78 ✓
940412	00	48	03	S2	30	120	20	0.4	6		BGR ✓
950412	14	50	33	S1	60	110	40	3.0	10		BGR
950414	11	21	22.798	S1	590	1400	1160	>2	0.13	0.03	79
950416	03	41	46.766	S1	2670	3420	620	20	0.5	4	80 ✓
950416	10	42	21	S2	30	40		<0.2	15		BGR

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

Dear Bonnard, Kevin, David, Helmut:

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

- TLC

DATE	Trigger T0 time (UT)	Sensor	KONUS-WIND		N(S1)/N(S2)		Duration		Trigger number
			Max counts per sec						
			G1	G2	G3	in G2	T<T0	T>T0	
941113	12 09 15	S1	145	85		2.5	115		BGR ✓
941114	02 02 40	S2	110	128	30	0.25	12		BGR ✓
941117	03 14 38.191	S2	406	550	74	0.17	40	5	2 ✓
941117	14 07 57	S2	150	140		<0.15	5		BGR ✓
941119	19 31 09.175	S2	370	703	160	0.23	7	20	4 ✓
941120	20 23 17.924	S1	215	328	30	>15	2	25	5 ✓
941121	17 25 00.945	S1	1652	1656	300	21	3	50	6 ✓
941125	22 04 30.156	S2	115	308	109	0.95	1.5	5	7 ✓
941126	00 20 46	S1	150	205	200	>14	18		BGR ✓
941126	12 22 37.952	S1	860	1430	330	4.2	40	45	8 ✓
941126	16 54 20	S1	55	75		>10	26		BGR ✓
941126	19 56 49.732	S1	290	390	211	6.7	20	26	9 ✓
941127	14 30 25.680	S2	200	400	95	0.17	8	7	10 ✓
941127	15 39 10	S1	210	57		2.7	260		BGR ✓
941128	15 37 00	S1	75	90	32	>15	55		BGR ✓
941205	23 33 40.074	S2	370	460	188	0.06	6	30	11 ✓
941207	22 10 32	S2	265	175		<0.2	7		BGR ✓
941210	03 10 52.523	S2	900	2350	1385	0.12	1	15	14 ✓
941214	17 03 51	S1	40	45	29	>6	12		BGR ✓
941214	05 38 45.226	S1	3479	1266	14	1.0	12	240	18 Sol
941221	07 44 08	S2	55	115	30	0.8	20		BGR
941221	22 14 35.215	S1	260	496	165	1.5	55	11	19 ✓
941222	05 36 00.243	S2	334	1360	1066	0.36	7	105	20 ✓
941228	07 39 45.915	S1	300	637	519	4.4	5	90	28
941228	16 55 23	S2	40	36	23	0.25	25		BGR ✓
941229	12 58 05	S1	46	108	31	1.8	15		BGR ✓
941229	22 51 08.781	S2	396	381	140	0.09	7	25	29 ✓
941230	20 52 53	S1	74	117	52	8.4	158		BGR ✓
941230	23 43 44	S2	55	70	16	<0.2	4.5		BGR ✓
950104	07 18 39.613	S2	258	550	219	0.75	2.8	20	31 ✓
950104	09 00 58	S2	140	143	40	<0.1	25		BGR ✓
950110	06 02 15	S2	332	180		<0.1	3600		BGR
950110	13 37 57.084	S2	234	422	213	0.05	38	100	32 ✓
950111	04 49 12.241	S1	586	620	100	>19	92	24	33 ✓
950111	12 18 49.196	S1	225	435	164	1.85	26	50	34 ✓
950112	07 45 37.120	S2	1305	1800	336	0.04	2.5	44	35 ✓
950113	05 59 13	S1	283	180	26	>10	52		BGR ✓
950113	17 38 32	S2	85	162	35	<0.06	75		BGR ✓
950114	01 00 38	S1	46	110		1.6	6		BGR ✓
950114	04 03 01	S2	23	76		0.5	70		BGR ✓
950114	07 30 30.766	S2	205	406	60	<0.05	1	100	36 ✓
950114	13 10 34.865	S1	1320	2828	516	3.1	1	10	37 ✓
950115	02 49 32	S2	40	47	34	<0.15	24		BGR ✓
950117	01 36 00	S2	56	82	42	0.2	108		BGR ✓
950118	12 22 54	S2	57	105	17	<0.1	35		BGR ✓
950125	14 51 52.253	S1	380	600	140	8.2	3.8	11	39

K O N U S

1 2 / 2 / 9 6

U L Y S S E S R T

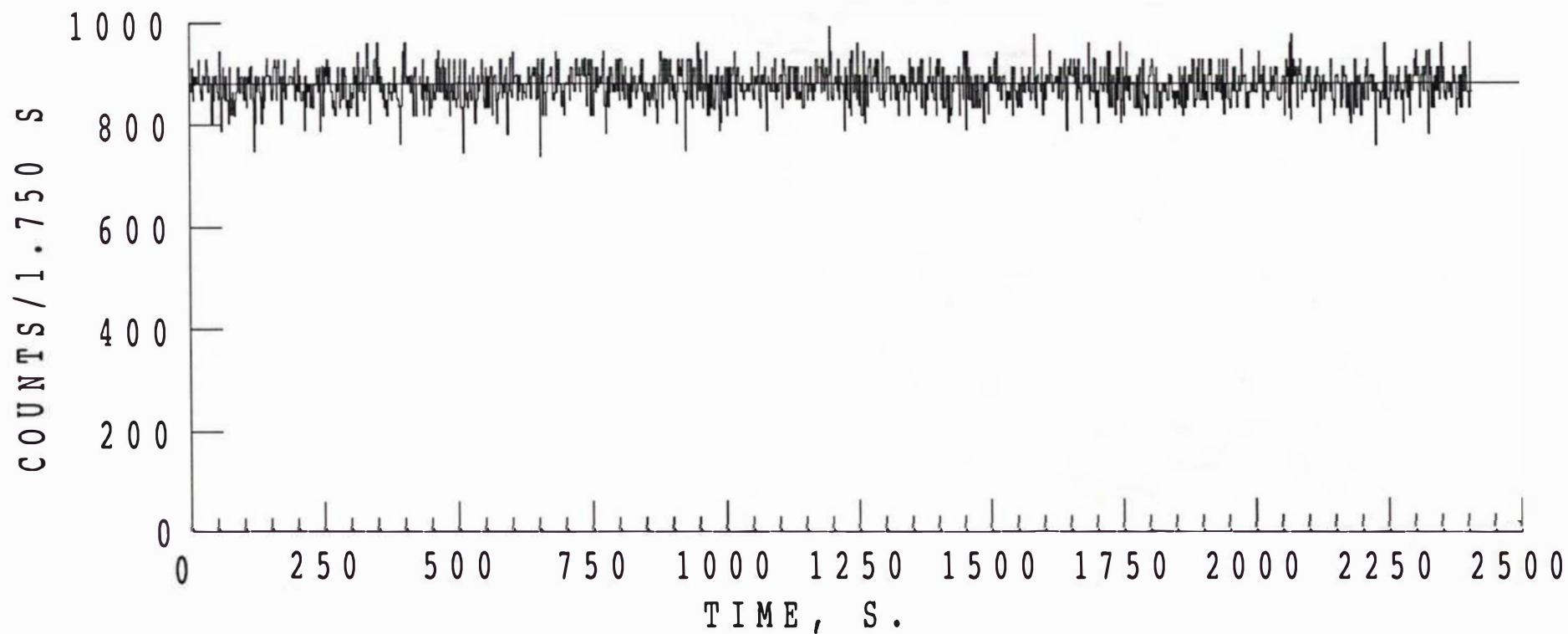
2 8 / 2 / 9 5 1 9 1 1 6 . 0 2 0 s

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

0 - 0 k e V

N= 10 M= 2

>4.0 SIGMA FLUCTUATIONS



From HAGEDON@ssl.msfc.nasa.gov Fri Mar 3 09:26 PST 1995
Date: Fri, 3 Mar 1995 11:25:35 -0600 (CST)
From: HAGEDON@ssl.msfc.nasa.gov
To: burst@comptel.unh.edu, grobad@vmprofs.estec.esa.nl,
LHEAVXCLINE@ssl.msfc.nasa.gov, LHEAVXBARTHELMY@ssl.msfc.nasa.gov,
15733SCHAEFER@ssl.msfc.nasa.gov, CASS09BAND@ssl.msfc.nasa.gov,
CASS09GRUBER@ssl.msfc.nasa.gov, CASS09MATTESON@ssl.msfc.nasa.gov,
PACIESAS@ssl.msfc.nasa.gov, HORACK@ssl.msfc.nasa.gov,
khurley@sunspot.ssl.berkeley.edu
Subject: Burst Trigger Message

BATSE BURST TRIGGER

NO.: 3447

TIME: TJD=9777 SECONDS=24063

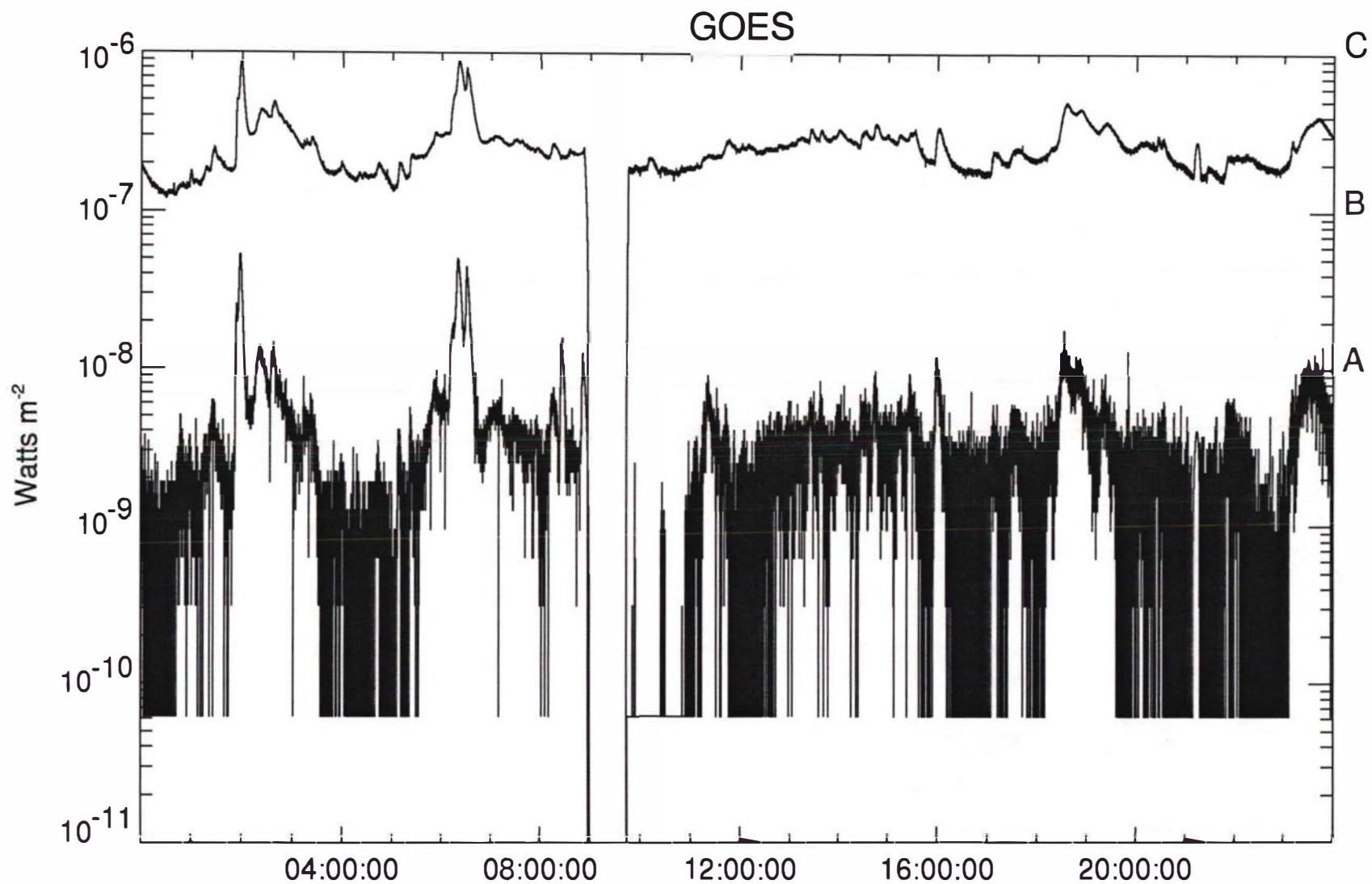
TYPE: SAA SOLAR FLARE TRIGGER SIGNAL:N

SIGNIFICANCE: SIGMA

INTENSITY: COUNTS/CM2

LOCATION: ZENITH= AZIMUTH= ERROR= DEGREES

COMMENTS:
SAA ENTRY.



Data Start: 95/02/28, 0000:02

Plot created: 95/03/02, 0514

Channel

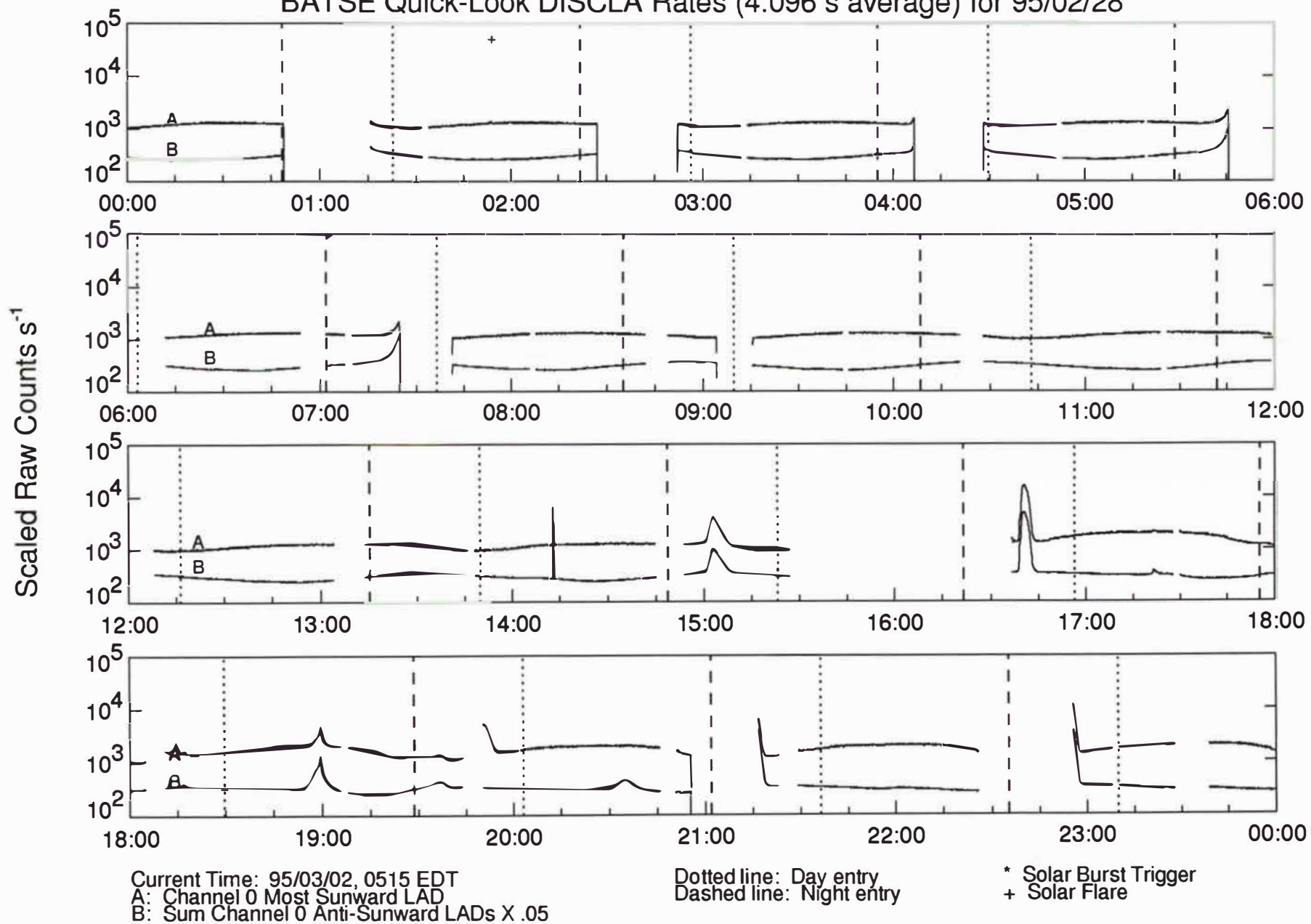
1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

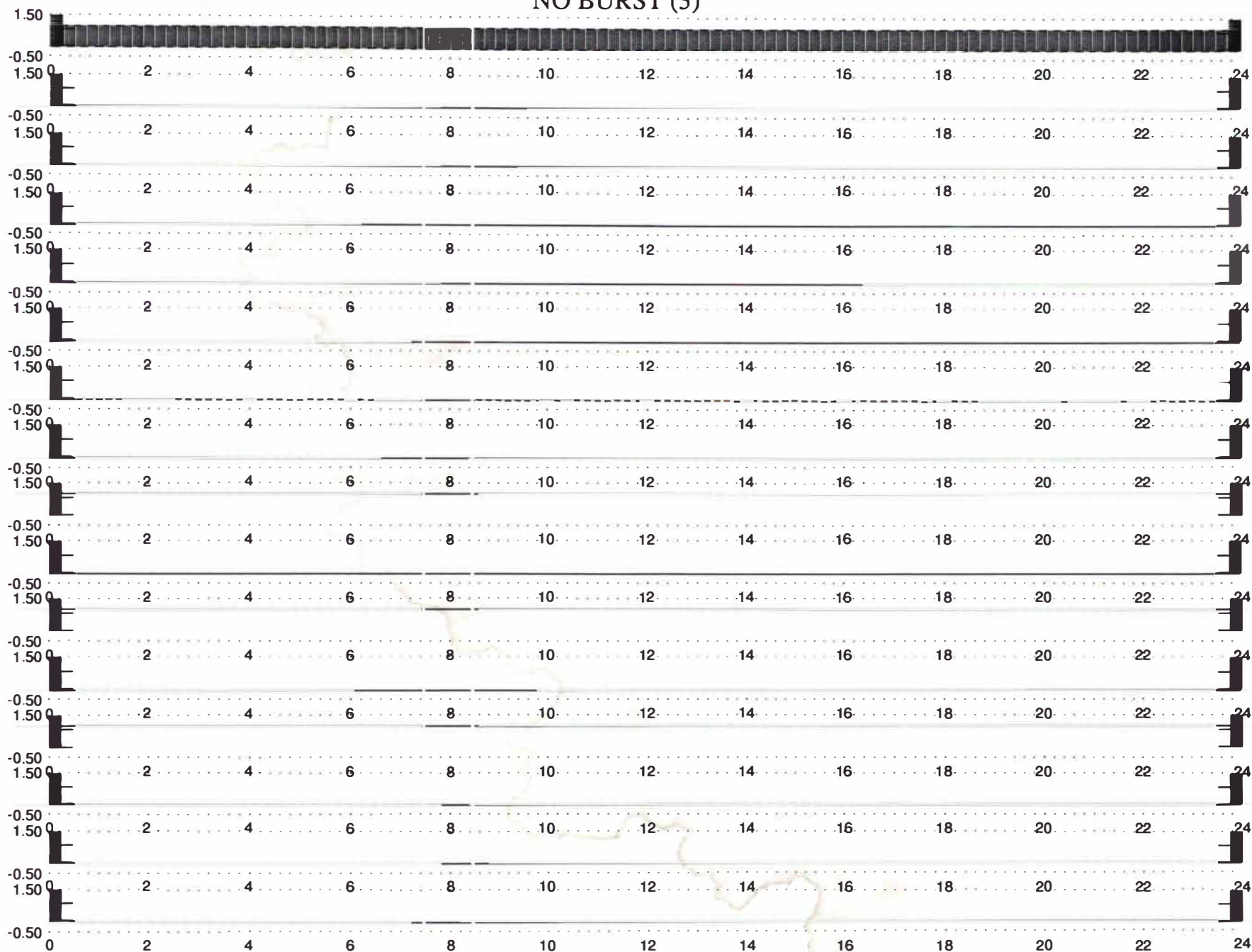
BATSE Quick-Look DISCLA Rates (4.096 s average) for 95/02/28



HUS MODES EDR day 59, year 1995 to day 59, year 1995 NO BURST (3)

7/18/95

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



UNIV 'AL TIME

HUS 2A, MODE 1, NOT AVERAGED EDR day 59, year 1995 to day 59, year 1995
CALIBRATION DATA INCLUDED

7/18/95



UNIV. CAL TIME

