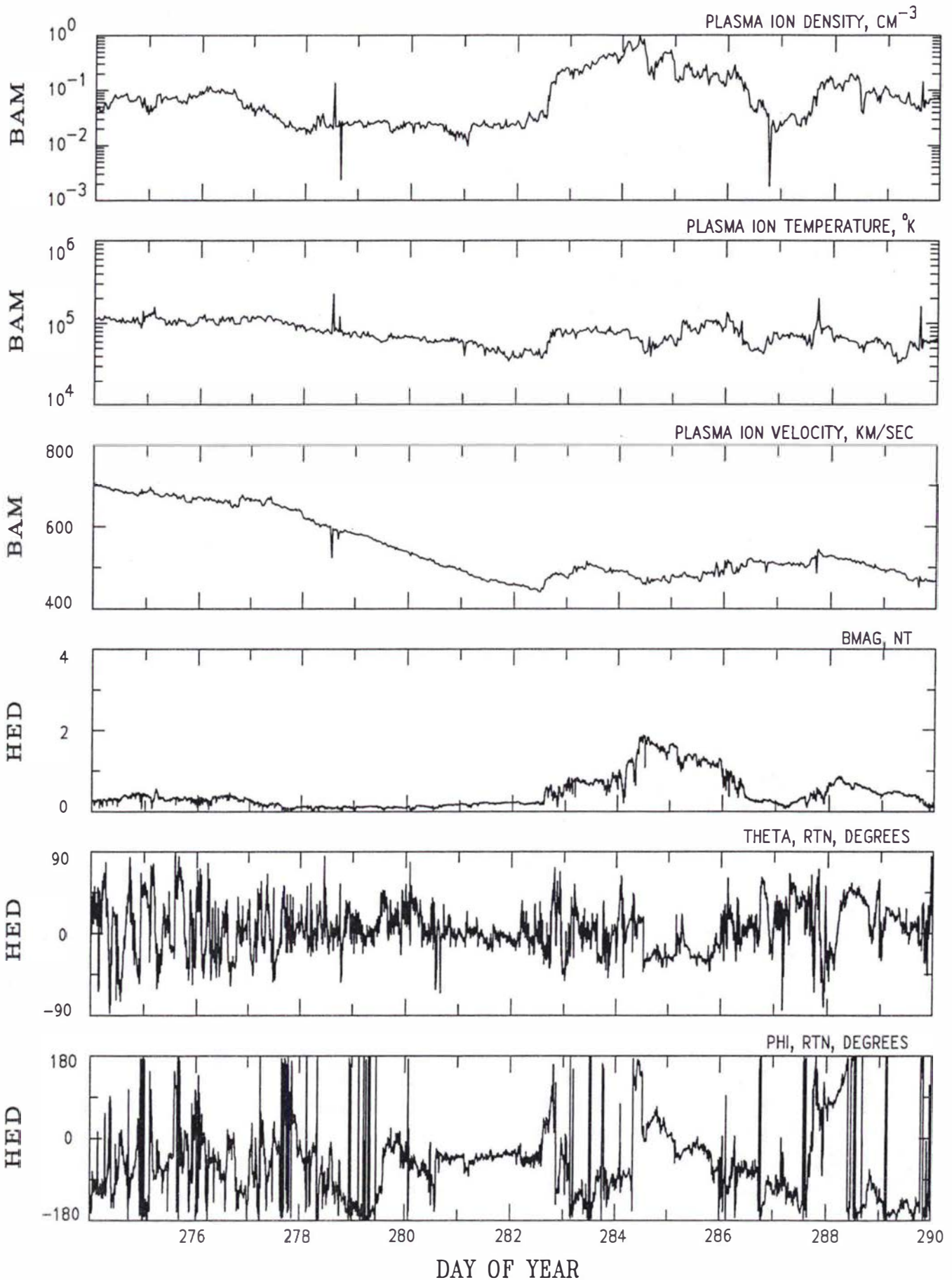


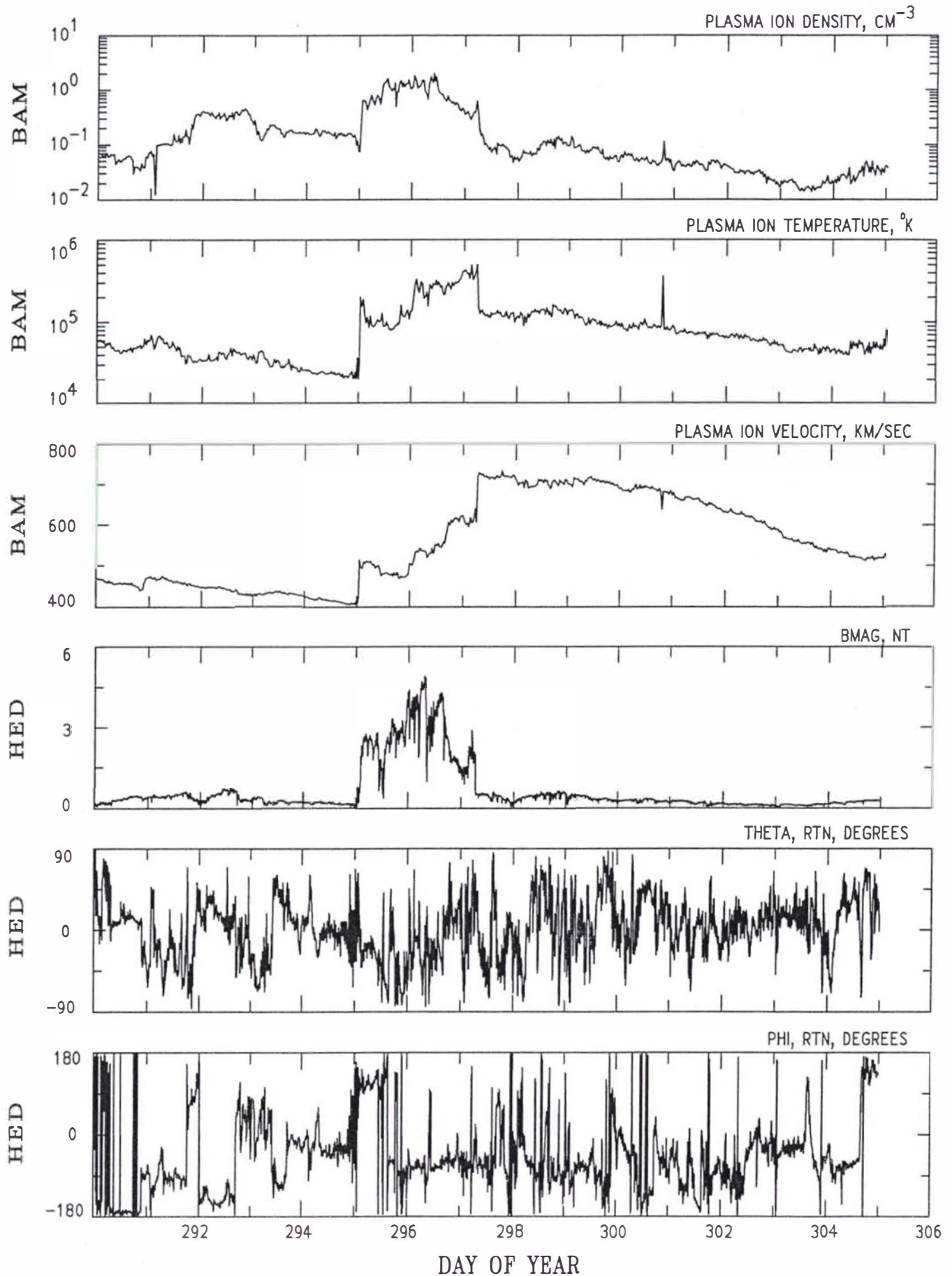
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

05 274 OCT 1 00:00:00.000 - 05 290 OCT 17 00:00:00.000



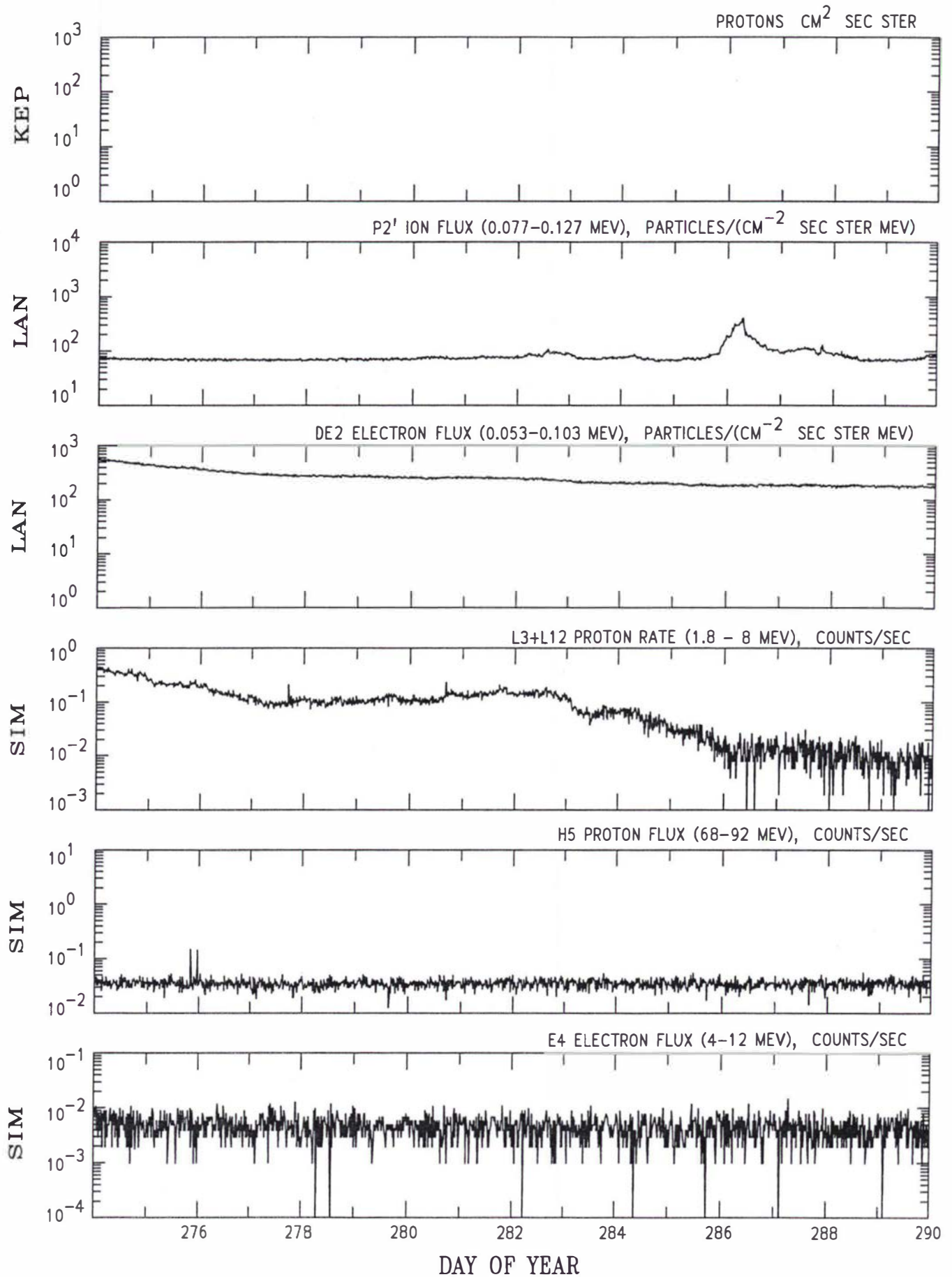
ULYSSES CDR - SOLAR WIND PLASMA AND MAGNETIC FIELD

05 290 OCT 17 00:00:00.000 - 05 306 NOV 2 00:00:00.000



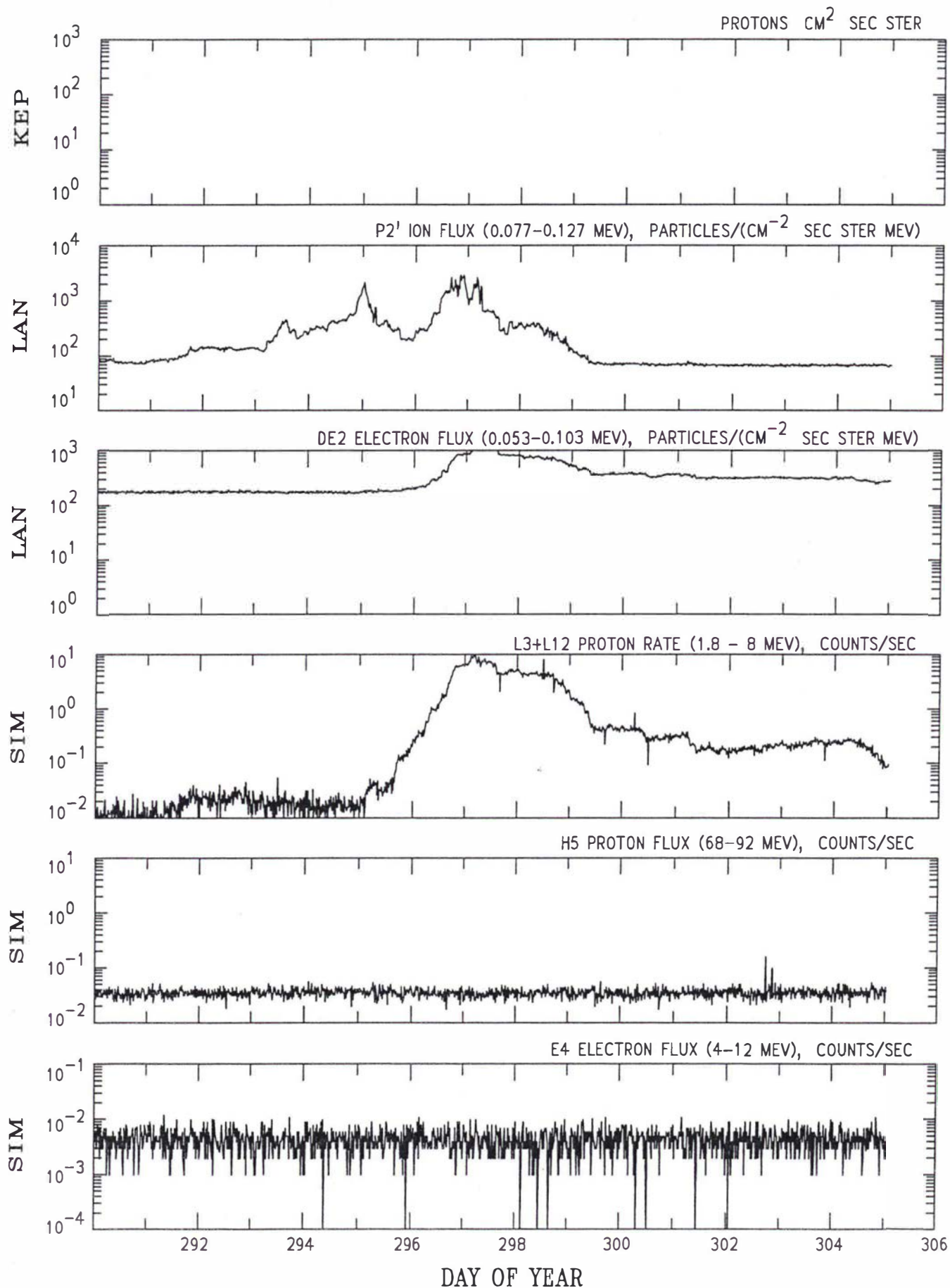
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

05 274 OCT 1 00:00:00.000 - 05 290 OCT 17 00:00:00.000



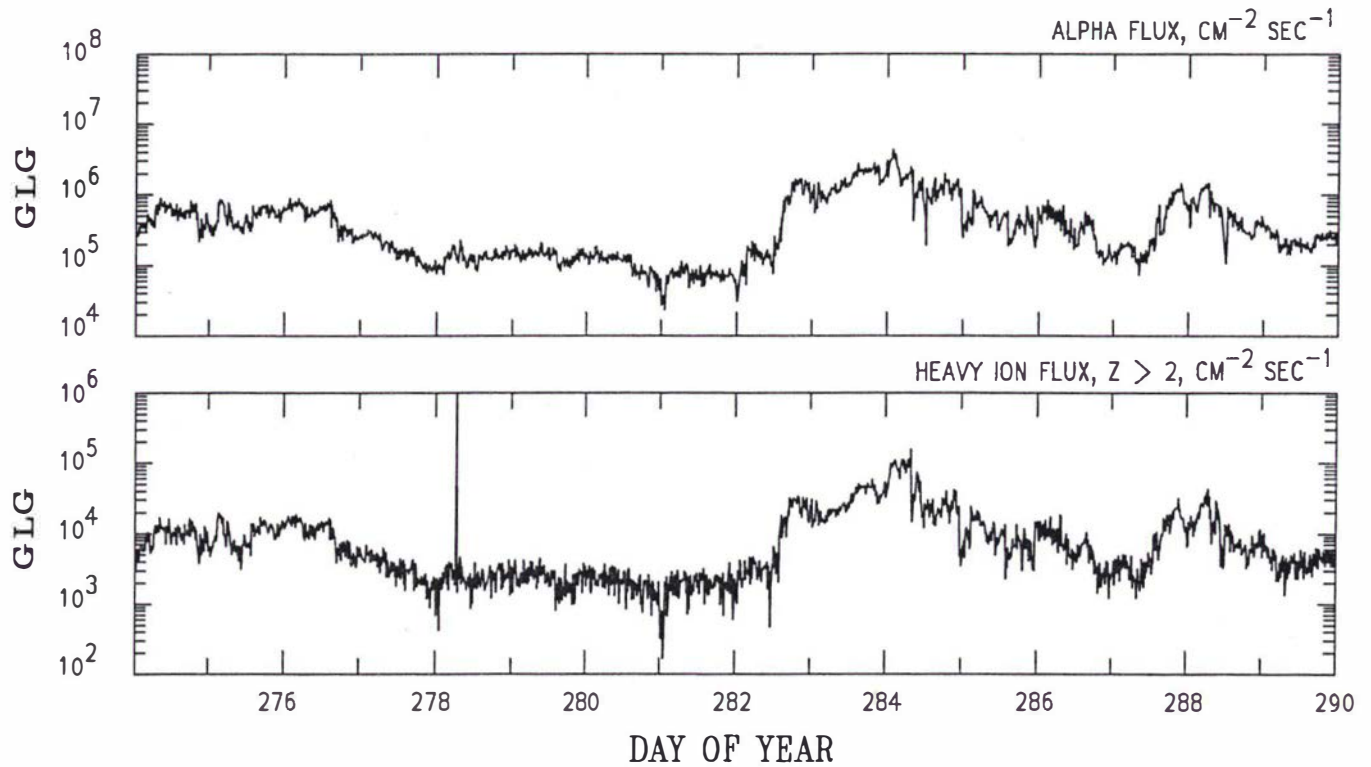
ULYSSES CDR - ENERGETIC PARTICLES, LOW ENERGY IONS AND COSMIC RAY

05 290 OCT 17 00:00:00.000 - 05 306 NOV 2 00:00:00.000



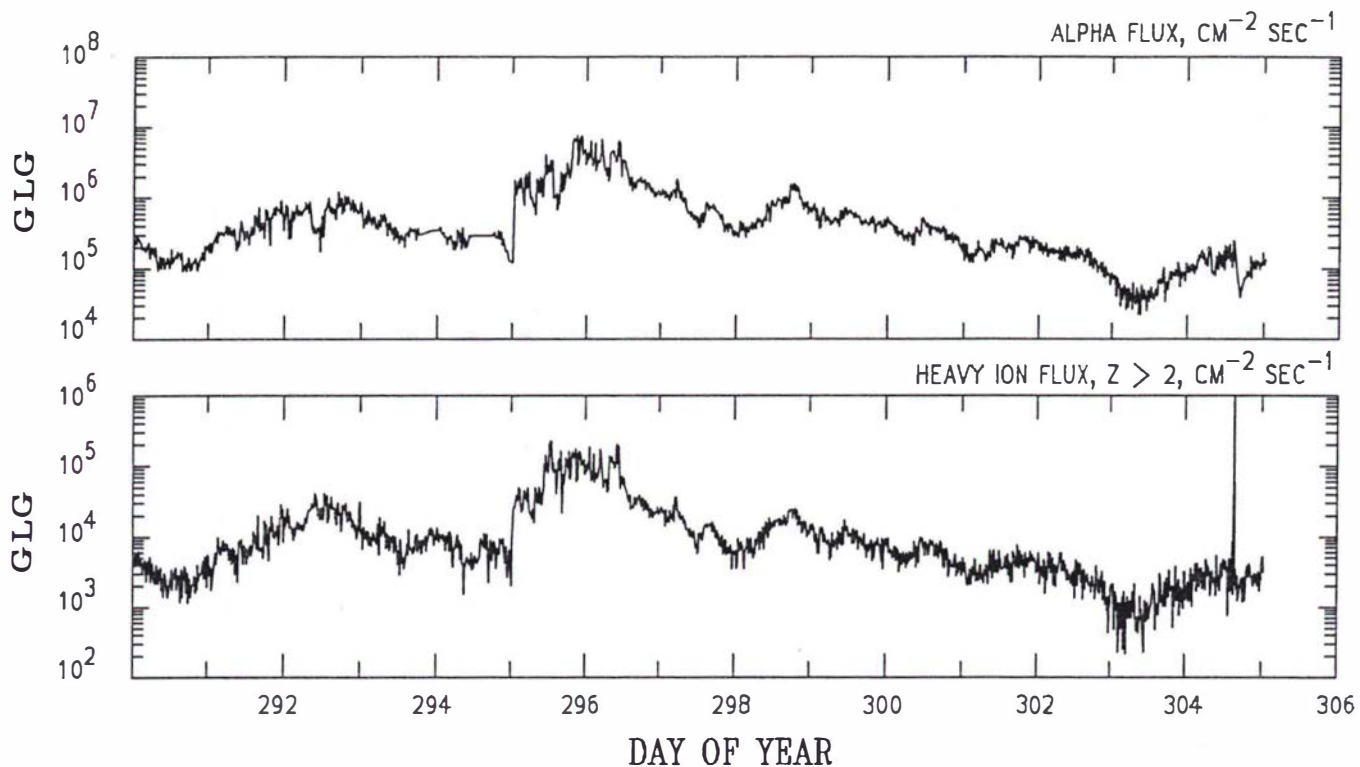
ULYSSES CDR - SOLAR WIND ION COMPOSITION

05 274 OCT 1 00:00:00.000 - 05 290 OCT 17 00:00:00.000



ULYSSES CDR - SOLAR WIND ION COMPOSITION

05 290 OCT 17 00:00:00.000 - 05 306 NOV 2 00:00:00.000



From gcncirc@capella.gsfc.nasa.gov Thu Oct 27 01:10:15 2005
X-ASG-Debug-ID: 1130400651-7109-1-0
X-Barracuda-URL: <http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi>
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: SGR 1806-20: continued moderate activity seen with INTEGRAL
Subject: SGR 1806-20: continued moderate activity seen with INTEGRAL
To: khurley@ssl.berkeley.edu
Date: Thu, 27 Oct 2005 04:10:50 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4168
SUBJECT: SGR 1806-20: continued moderate activity seen with INTEGRAL
DATE: 05/10/27 08:09:41 GMT
FROM: Sandro Mereghetti at IASF/CNR <sandro@mi.iasf.cnr.it>

S. Mereghetti (IASF-Milano), D. Gotz (SAP, Saclay), M. Beck (ISDC, Versoix), J. Borkowski (CAMK, Torun) on behalf of the IBAS Localization Team, and I.F. Mirabel (ESO) on behalf of the INTEGRAL Science Working Team report:

The soft gamma-ray repeater SGR 1806-20 continues to be in an active bursting state. A few normal short bursts have been detected by IBAS in October 2005 (note that SGR 1806-20 was not observed continuously during this period; the INTEGRAL observation log can be found at <http://intweb.esac.esa.int/>).

Burst times, approximate durations, and fluences (15-100 keV) measured with the IBIS/ISGRI instrument are reported below:

Date and UT	Duration (s)	Fluence (erg cm ⁻²)
2005-10-01T07:47:10	0.1	3E-8
2005-10-04T02:54:14	0.1	2E-8
2005-10-22T03:43:40	0.1	4E-8
2005-10-22T07:25:37	0.38	9E-7
2005-10-22T08:52:42	0.07	2E-8
2005-10-25T04:48:31	0.11	2E-8

The burst at 2005-10-22T08:52:42 was followed by a fainter peak 4.4 s later, lasting 0.04 s.

We remind that the occurrence of SGR 1806-20 bursts detected with high signal to noise ratio is reported in real time with IBAS Alert Packets. See <http://ibas.mi.iasf.cnr.it/> for an updated table of all the IBAS Alerts and for information on how to receive the Alert Packets for soft repeaters and type I bursters.

This message can be cited.

From vxw@capella.gsfc.nasa.gov Sat Oct 1 04:16:09 2005
X-ASG-Debug-ID: 1128165392-21333-1-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
Date: Sat, 1 Oct 2005 07:16:30 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/SWIFT_BAT_LIGHTCURVE
Subject: GCN/SWIFT_BAT_LIGHTCURVE
Mime-Version: 1.0
Content-Disposition: inline
User-Agent: Mutt/1.4.2.1i
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-ASG-Whitelist: Sender (Per-User)
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

189s

$1.7 \times 10^{-6} \text{ erg/cm}^2$

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Sat 01 Oct 05 11:15:55 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 157870, Seg Num: 0
GRB_RA: 350.973d {+23h 23m 53s} (J2000),
351.049d {+23h 24m 12s} (current),
350.304d {+23h 21m 13s} (1950)
GRB_DEC: -31.528d {-31d 31' 39"} (J2000),
-31.496d {-31d 29' 45"} (current),
-31.802d {-31d 48' 08"} (1950)
GRB_DATE: 13644 TJD; 274 DOY; 05/10/01
GRB_TIME: 40296.24 SOD {11:11:36.24} UT
TRIGGER_INDEX: 20000
RB_PHI: 13.30 [deg]
RB_THETA: 29.33 [deg]
DELTA_TIME: 0.00 [sec]
TRIGGER_DUR: 64.000 [sec]
LC_URL: sw00157870000msb.lc
SUN_POSTN: 187.69d {+12h 30m 47s} -3.32d {-03d 19' 16"}
SUN_DIST: 141.75 [deg]
MOON_POSTN: 168.38d {+11h 13m 32s} +7.73d {+07d 43' 44"}
MOON_DIST: 156.10 [deg]
MOON_ILLUM: 4 [%]
GAL_COORDS: 14.69, -70.45 [deg] galactic lon,lat of the pointing direction
ECL_COORDS: 338.55, -25.25 [deg] ecliptic lon,lat of the pointing direction
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is an image trigger.
COMMENTS: A point_source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.

<This message contains 1 attachments (not printed)>

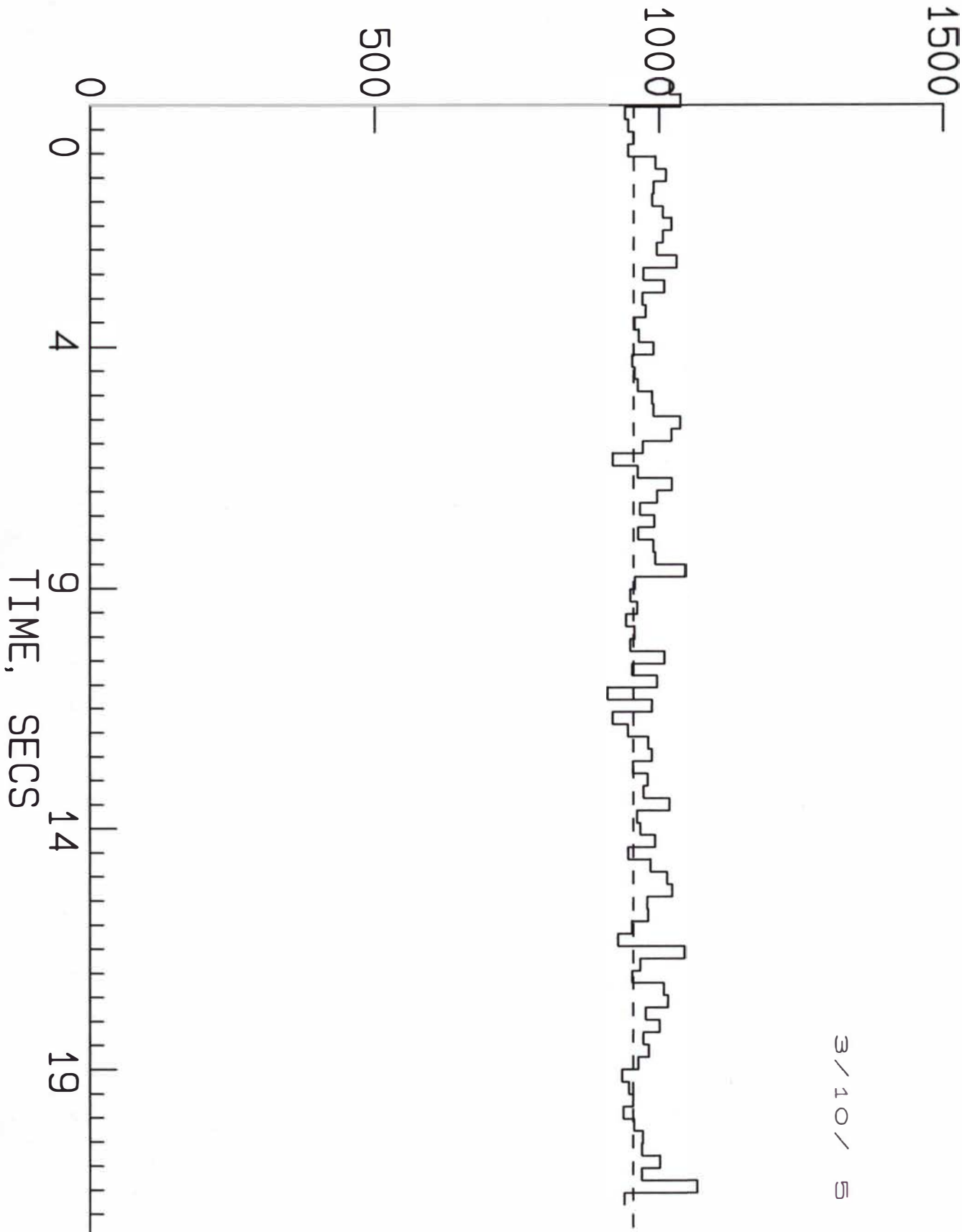
Added to ACCESS

SWIFT

01/10/05 40296.241

25- 100 keV

COUNTS/0.256 S



From williams@sunspot.ssl.berkeley.edu Sat Oct 1 06:00:08 2005
Date: Sat, 1 Oct 2005 06:06:51 -0700 (PDT)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_GSwift-BAT_157870_0_20051001_40296

HESSI 25 to 150 keV Counts
Created 1-Oct-2005 05:58:48.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
Full time range in eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

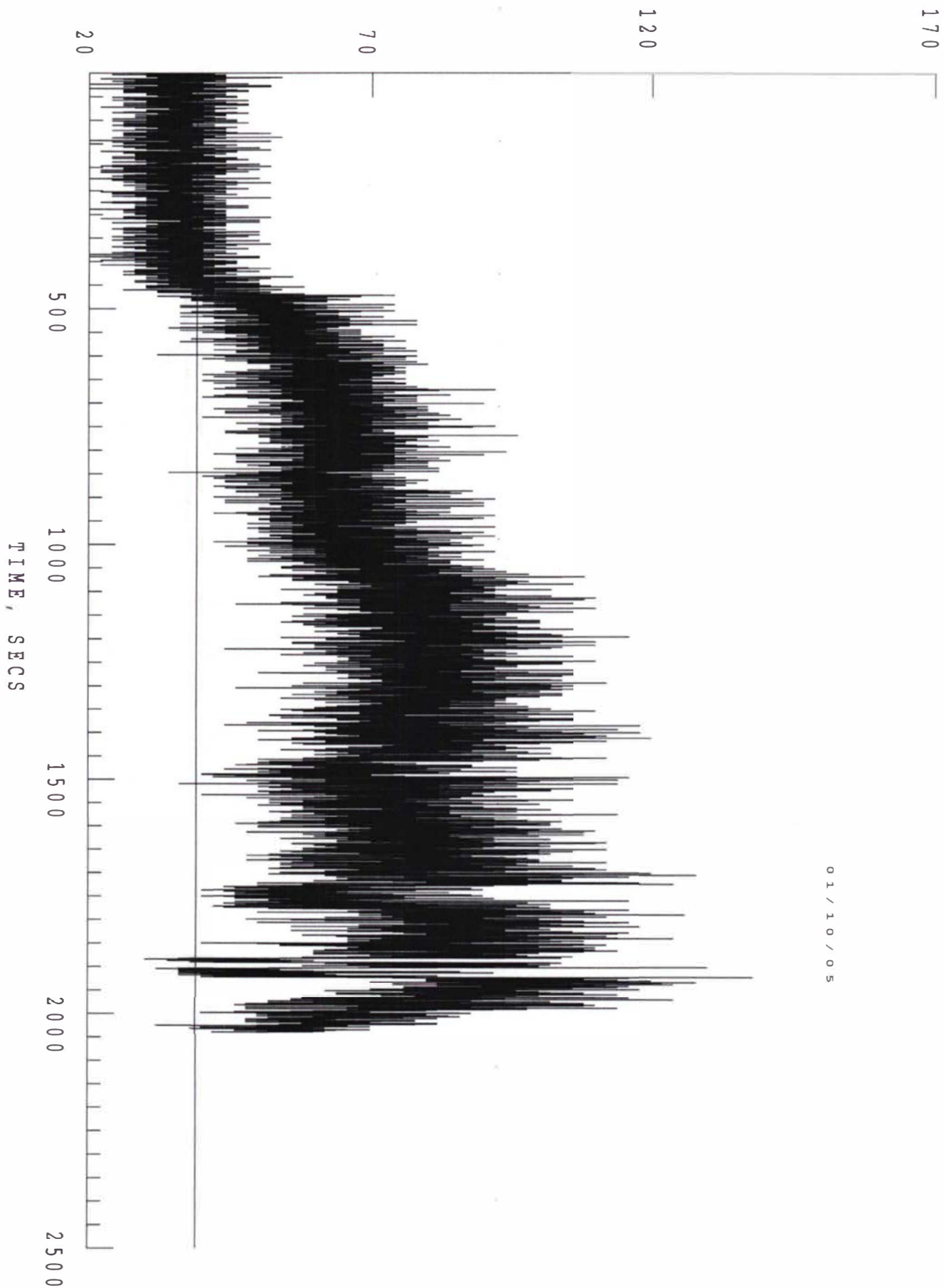
MS01

01/10/05

38982.729

50 - 3000 keV

COUNTS/0.250 S



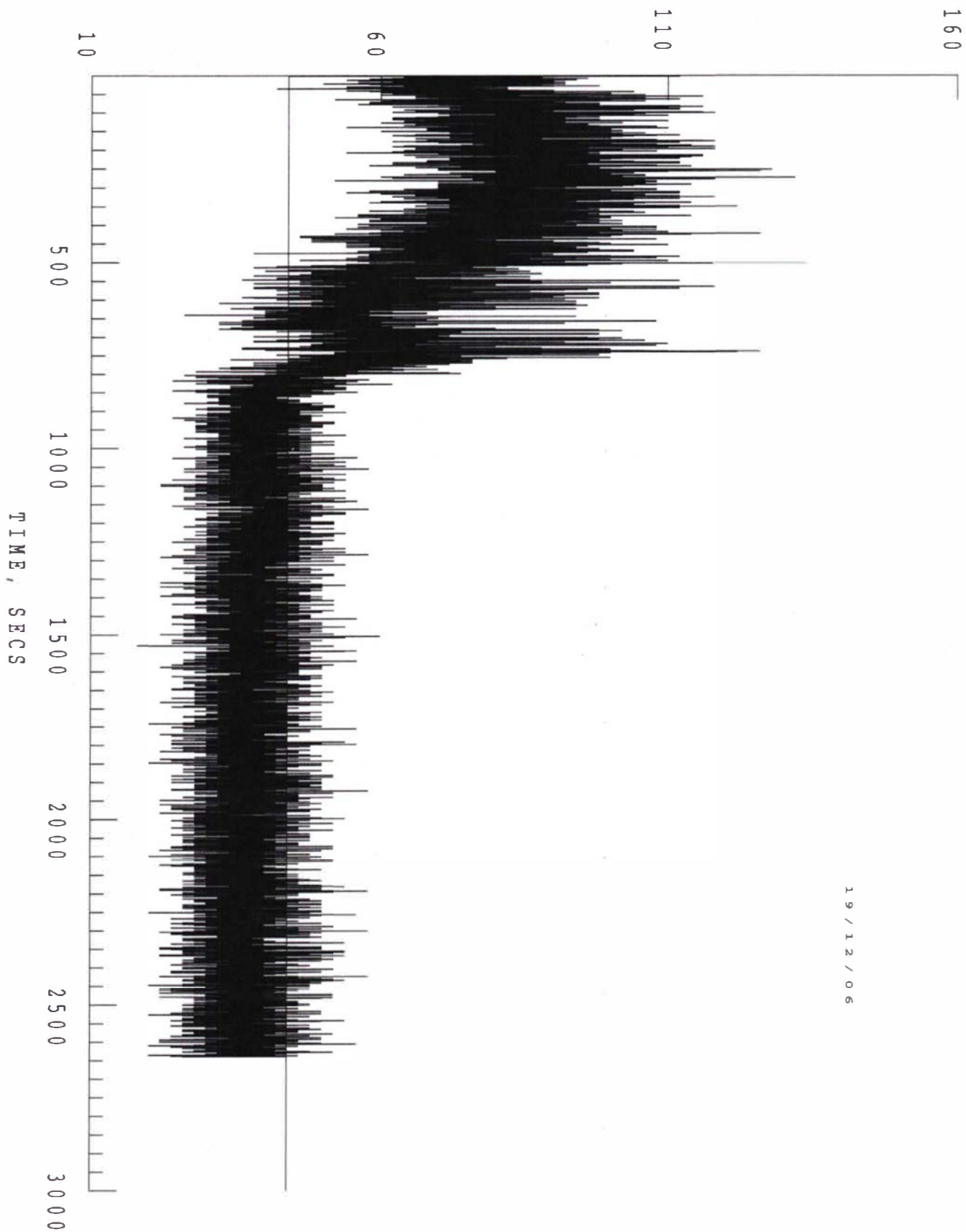
MS01

01/10/05

82902.224

50 - 3000 keV

COUNTS/0.250 S



19/12/06

No SPI, GRS tugs

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051001_84261)

BEG TIME: 01/10/05 DOY 274 Julian 2453646.47417 UT = 23.380 23:22:48 (84168.000 secs) [sct = 0019 bfc0 64fe 838f]
END TIME: 01/10/05 DOY 274 Julian 2453646.47625 UT = 23.430 23:25:48 (84348.000 secs) [sct = 0019 bfc0 6fb9 1927]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

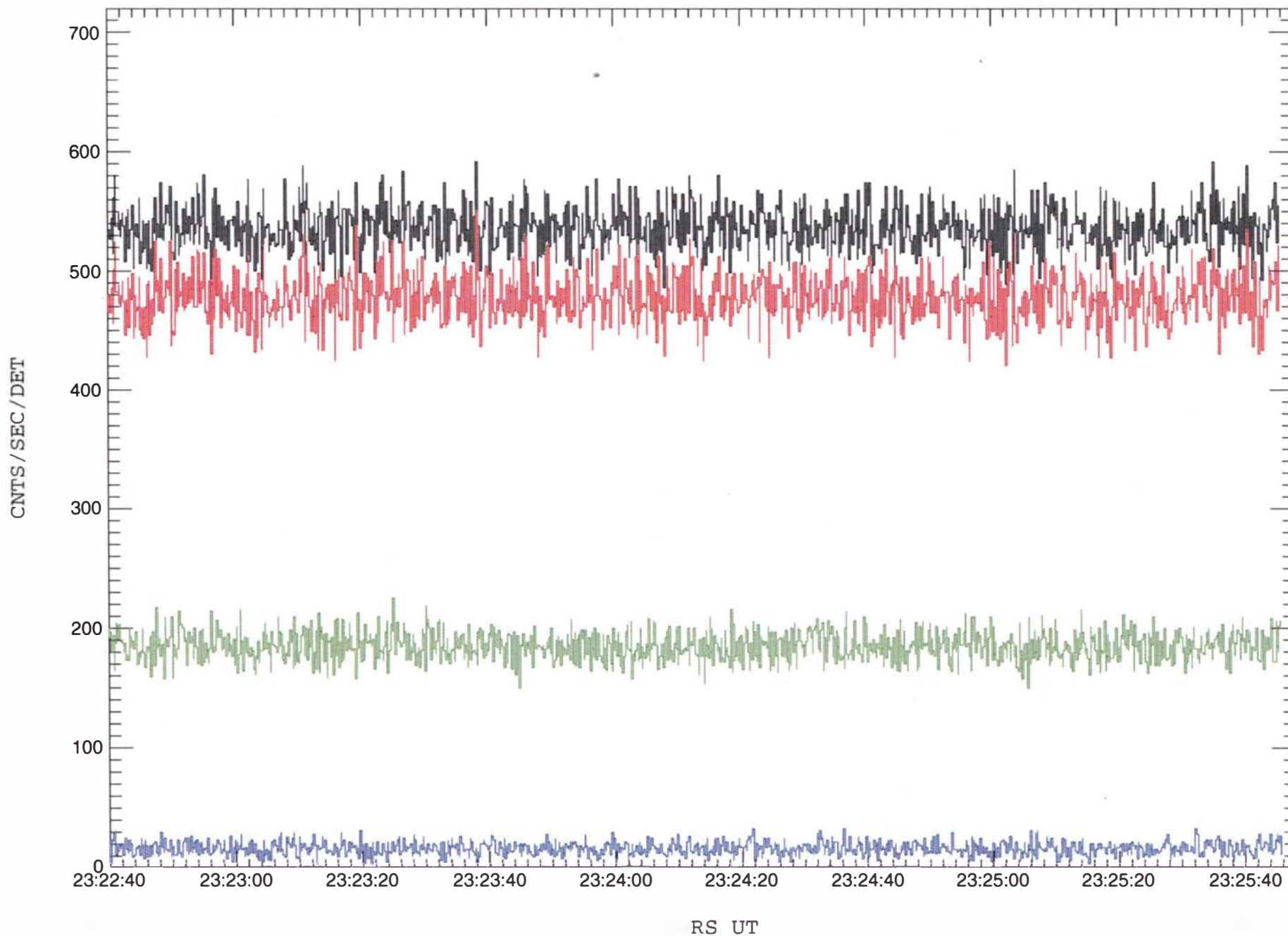
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

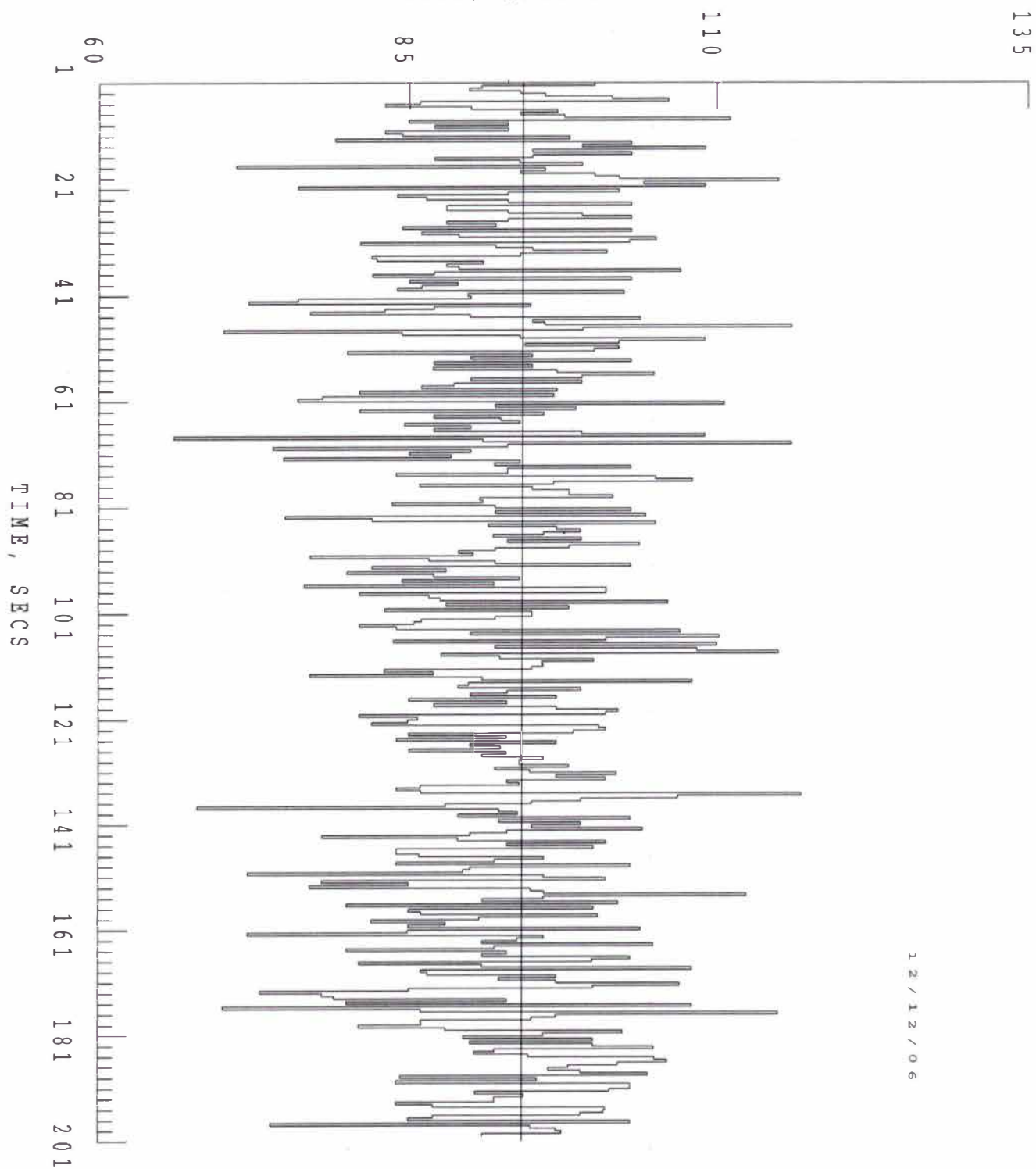


HESSI

01/10/05 84161.000 (SUZAKU_20051001_84261)

25- 150 keV

COUNTS/0.500 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

01/10/05 DOY 274 Julian 2453645.50000 [est. sct = 0019 bfac cc2f a967]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

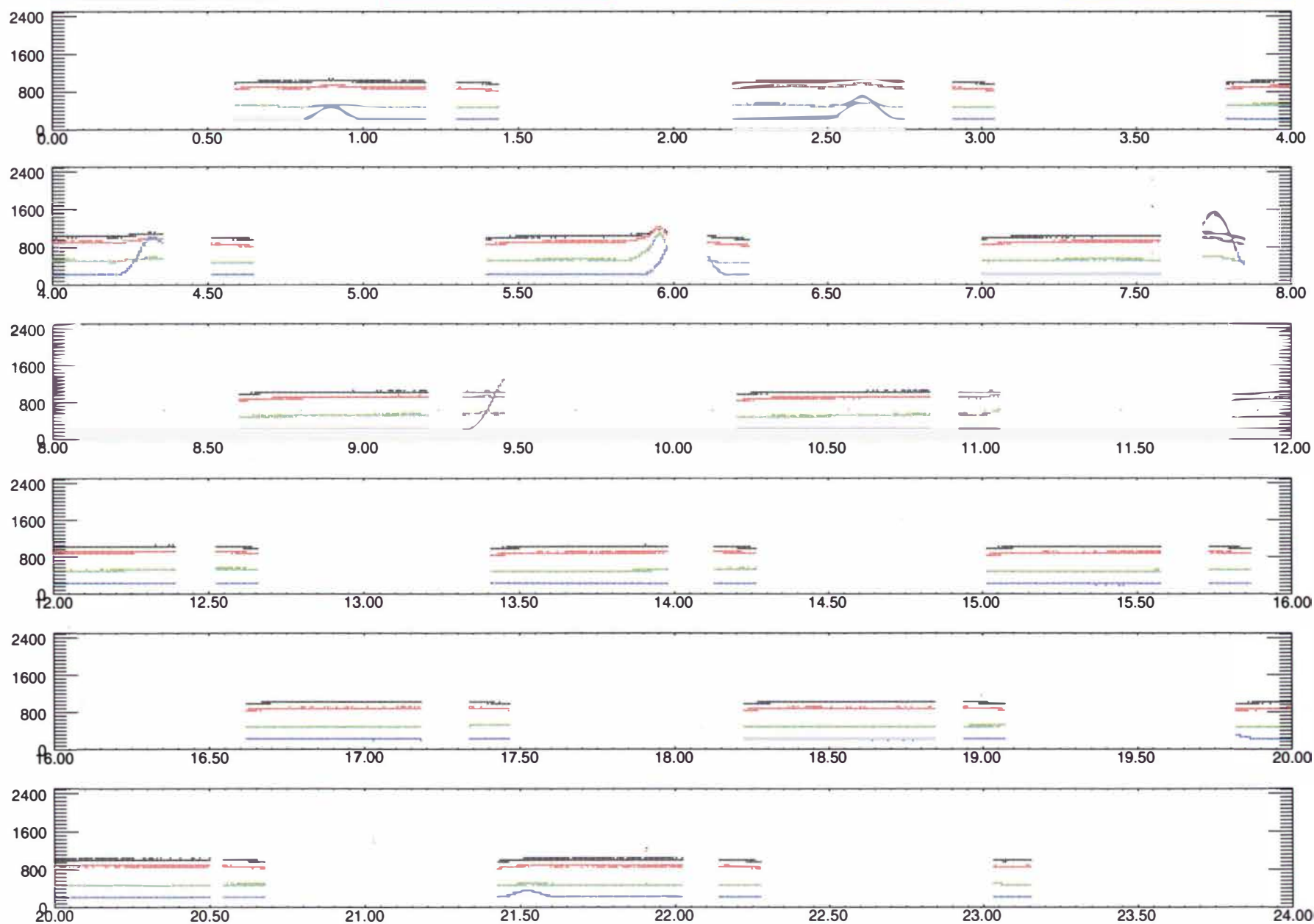
Channel 1 + 800

Channel 2 + 600

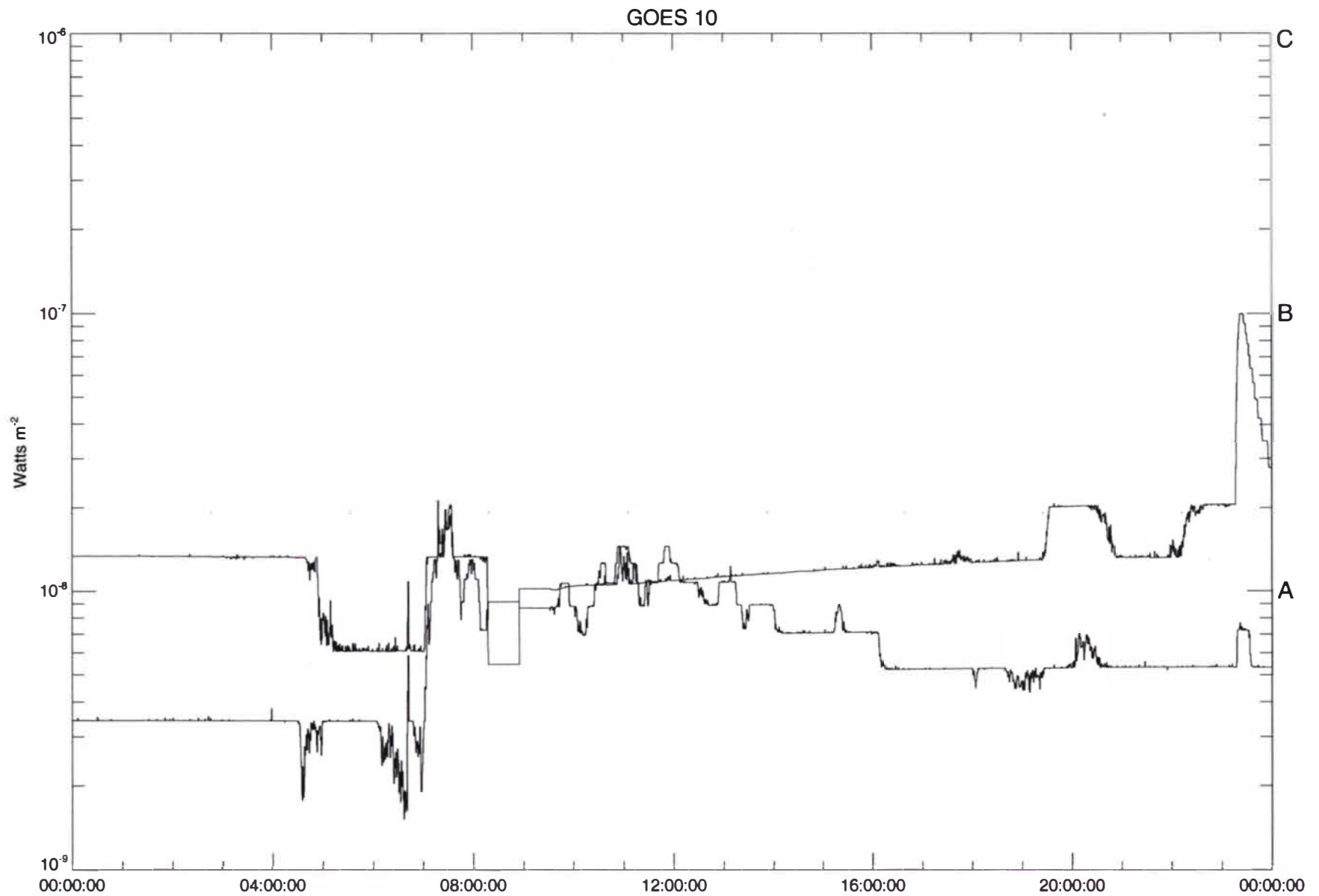
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/01, 0000:00

Channel

1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

Plot created: 05/10/03, 0824

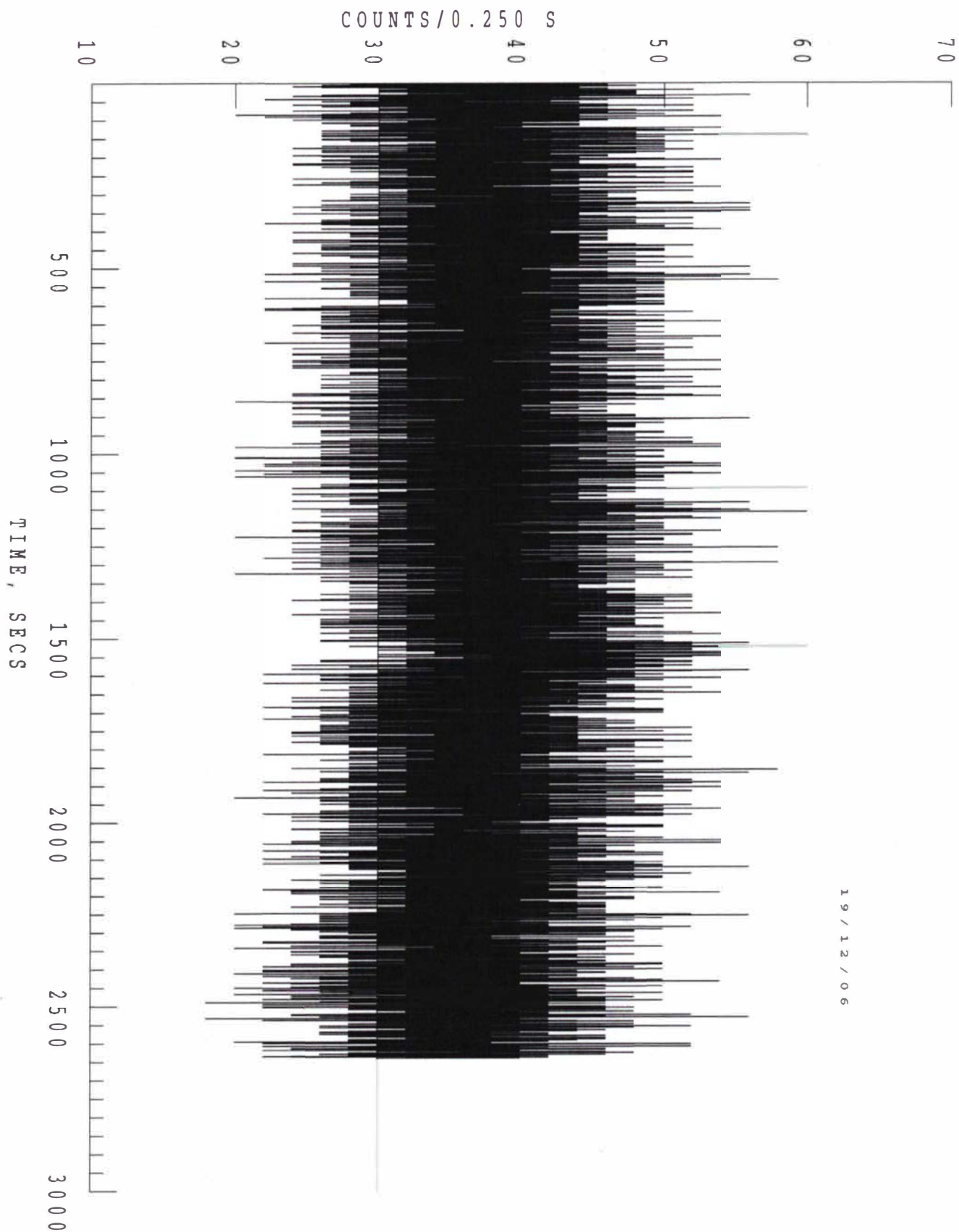
Sample average = 10

MS01

02/10/05

77741.598

50 - 3000 keV

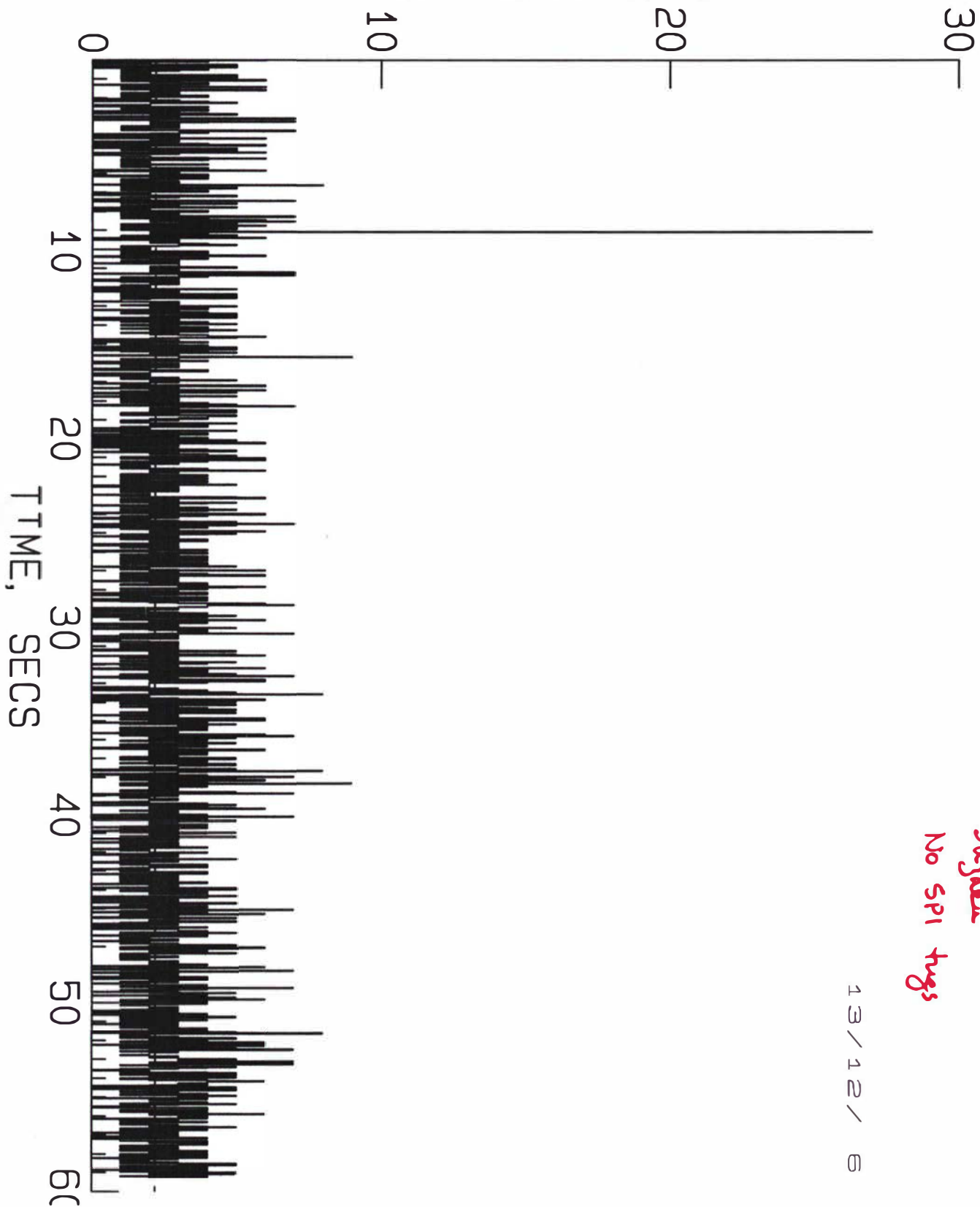


MO GE

02/10/05 79011.886

116- 337 keV

COUNTS/0.032 S



*Singh
No SPI bugs*

13/12/05

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051002_79067)

BEG TIME: 02/10/05 DOY 275 Julian 2453647.41500 UT = 21.960 21:57:36 (79056.000 secs) [sct = 0019 bfd3 5224 0421]
 END TIME: 02/10/05 DOY 275 Julian 2453647.41542 UT = 21.970 21:58:12 (79092.000 secs) [sct = 0019 bfd3 5449 553f]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

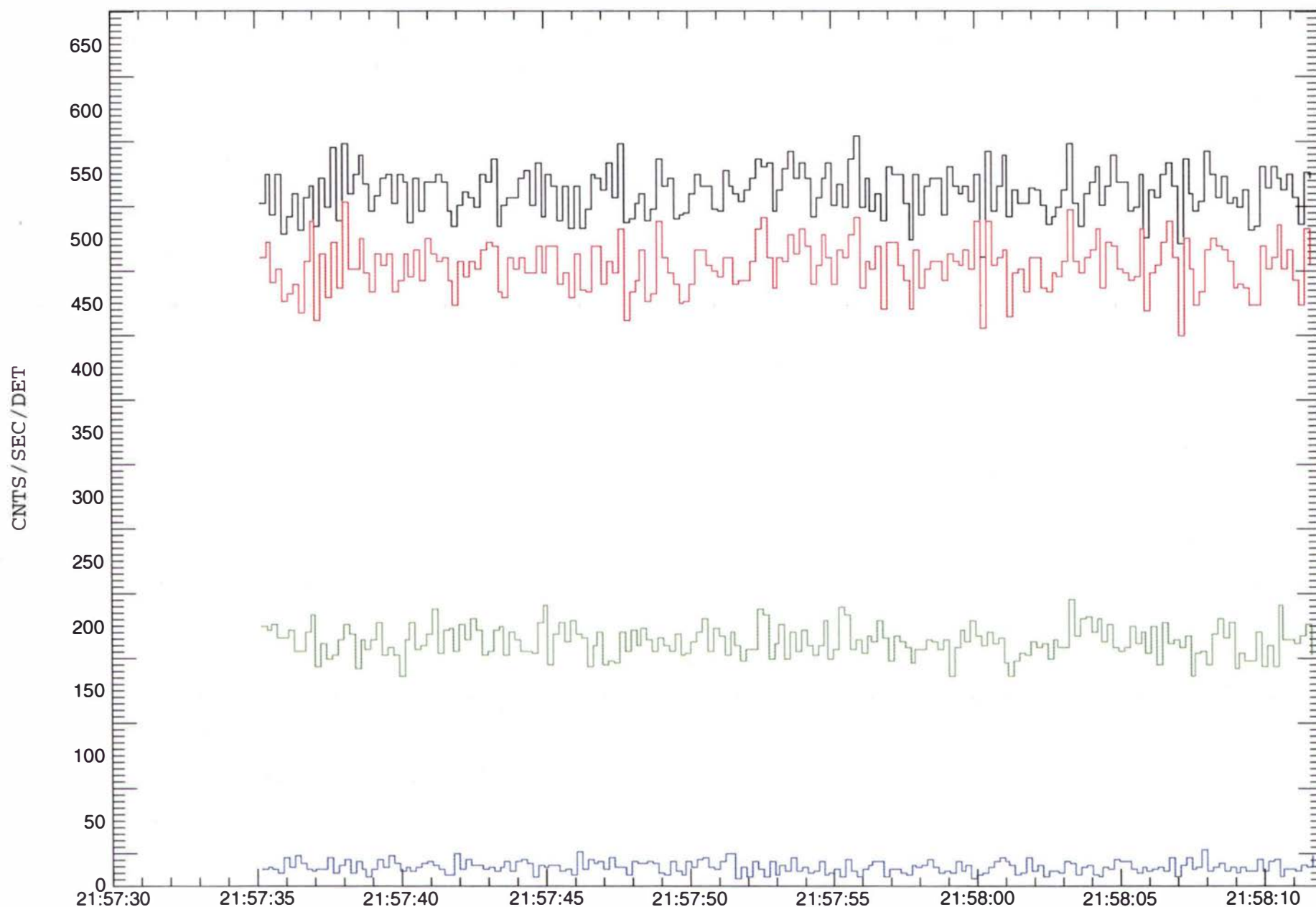
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

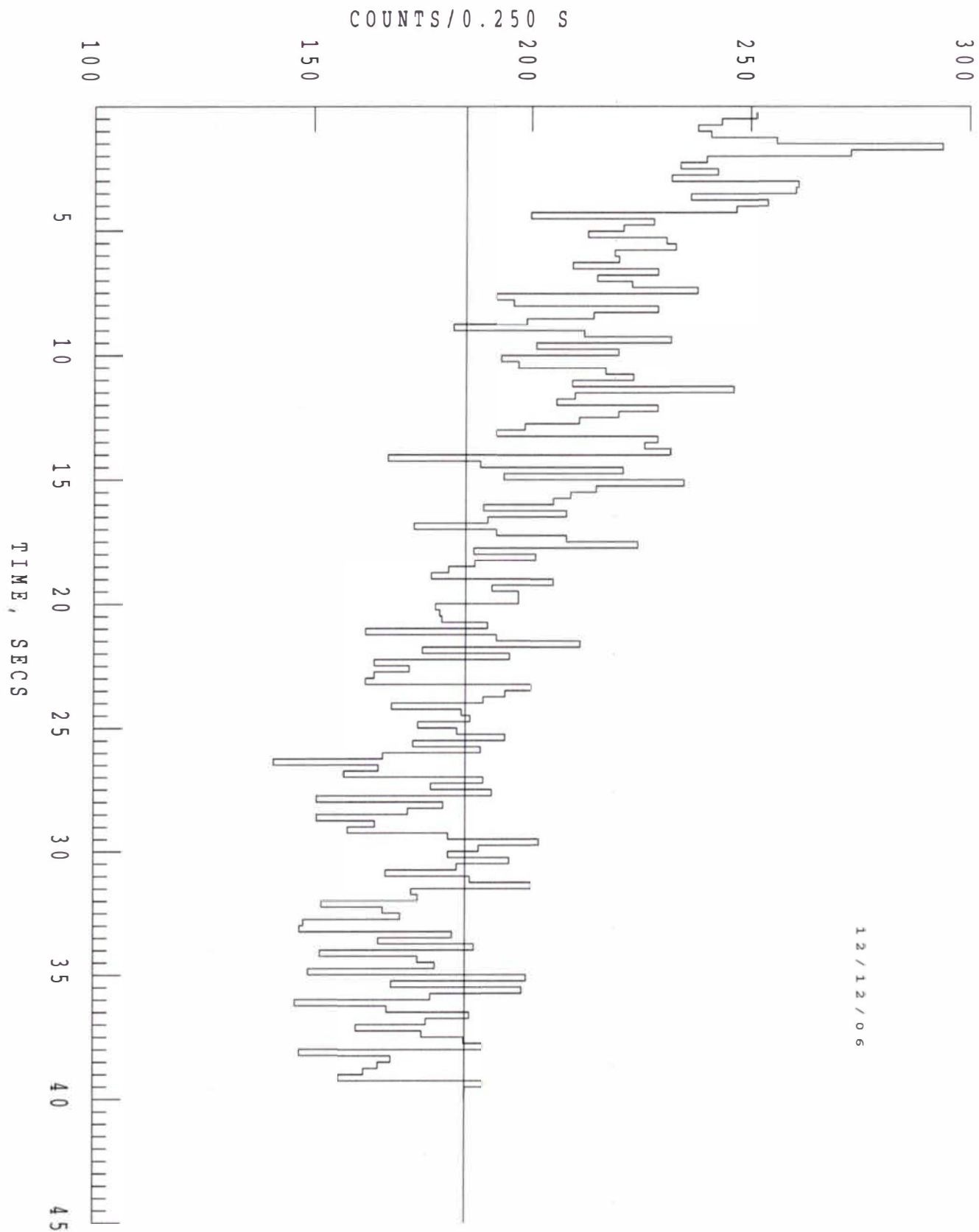


RS UT

HESSI

02/10/05 79047.000 (SUZAKU_20051002_79067)

25- 150 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

02/10/05 DOY 275 Julian 2453646.50000 [est. sct = 0019 bfc0 ea08 28fb]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

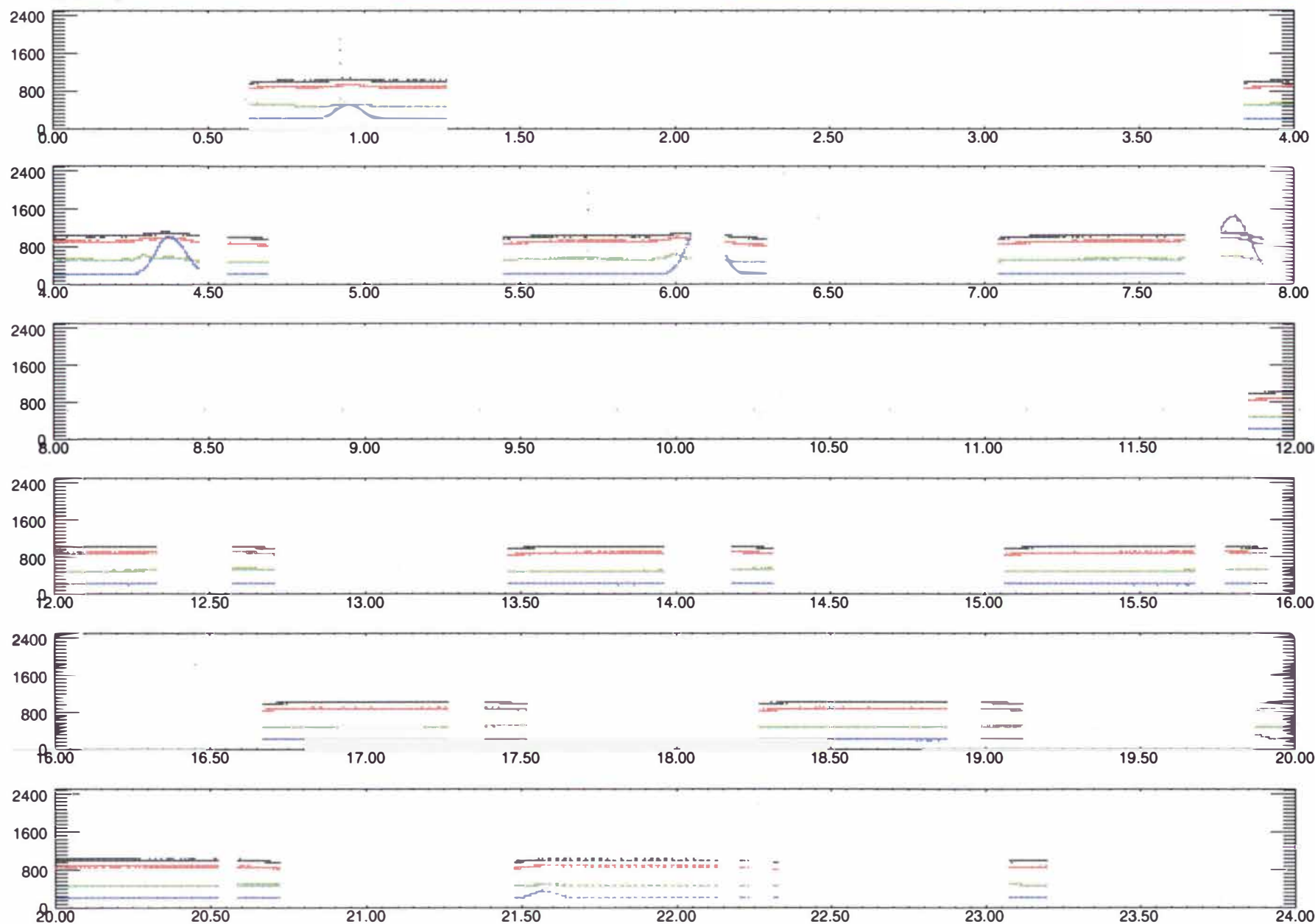
Channel 1 + 800

Channel 2 + 600

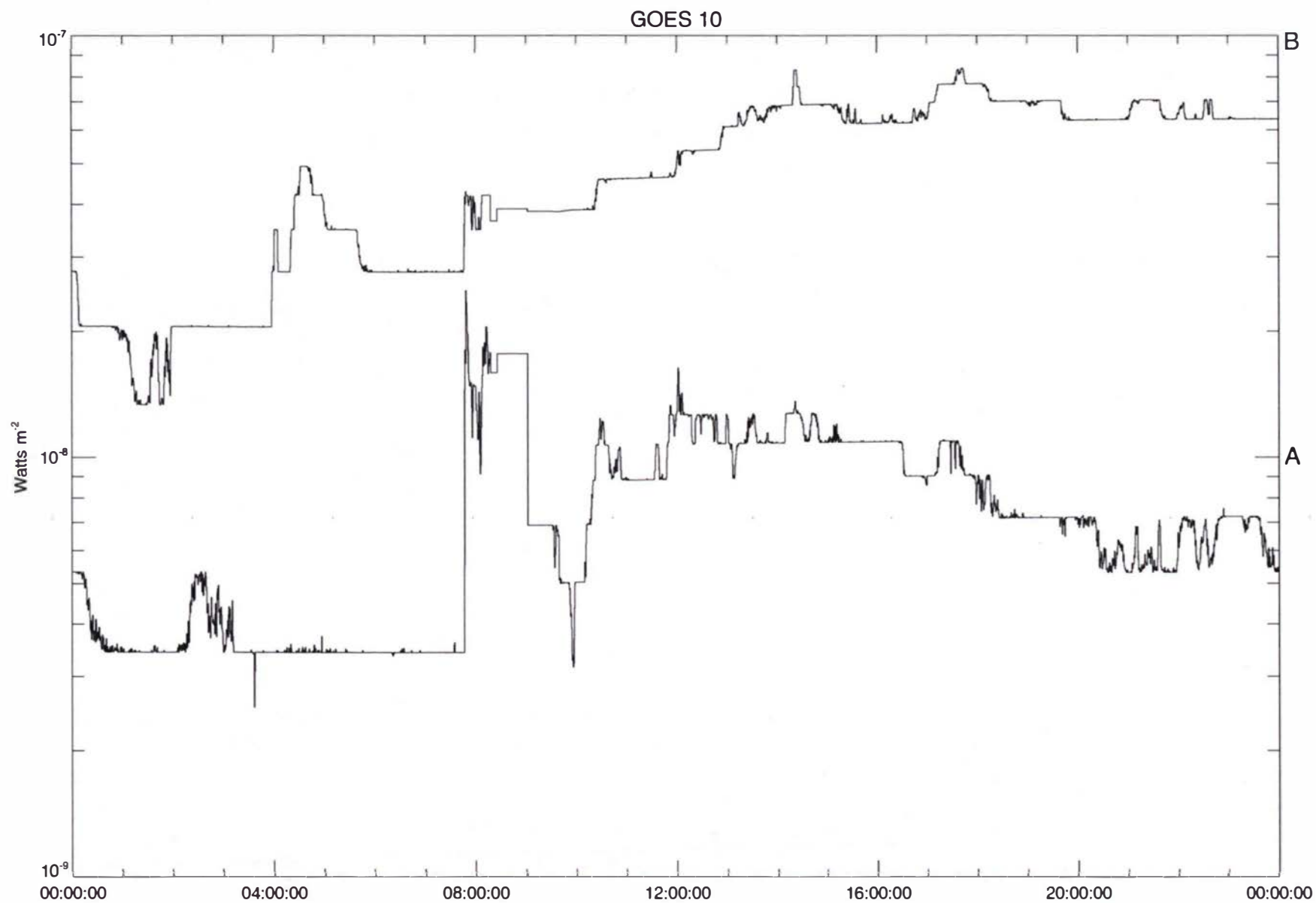
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/02, 0000:00

Channel

1 (1.0 - 8.0 Angstroms)

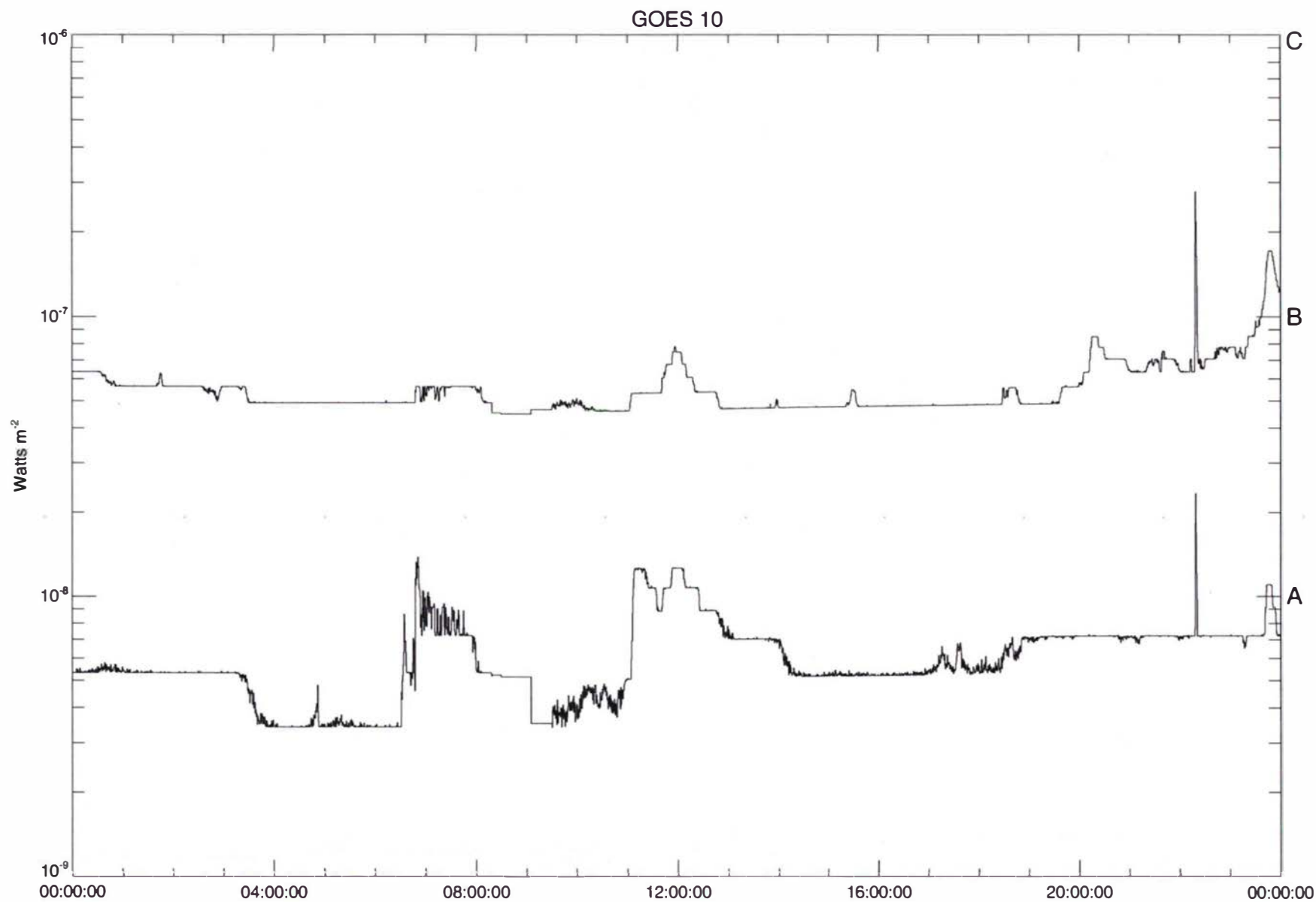
Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

Plot created: 05/10/04, 0824

Sample average = 10



Data Start: 05/10/03, 0000:00

Channel

1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

Plot created: 05/10/05, 0824

Sample average = 10

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

03/10/05 DOY 276 Julian 2453647.50000 [est. sct = 0019 bfd5 07e0 a891]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=19 E6=510]

Chan 4:[E6=510 ->]

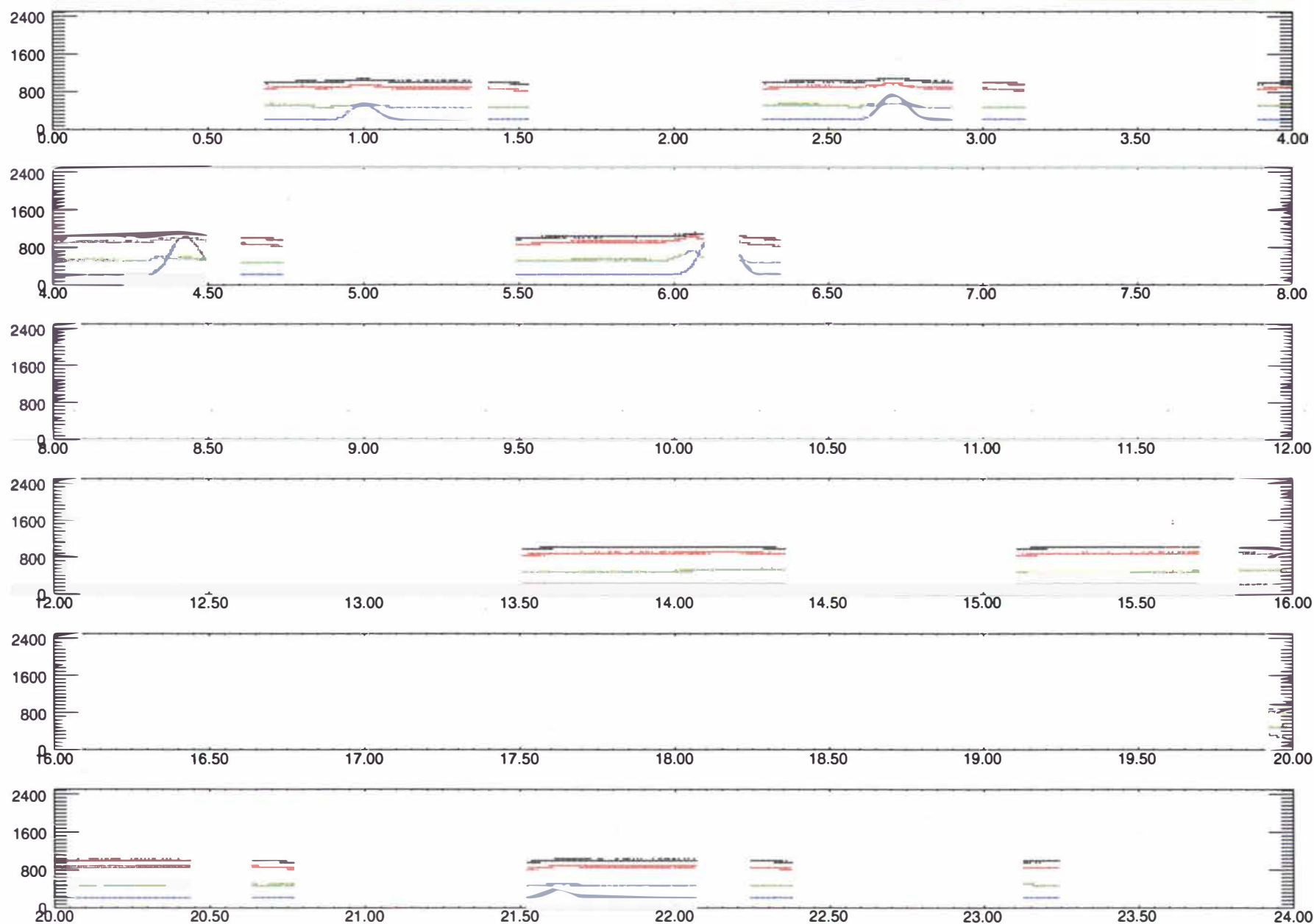
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT

From gcncirc@capella.gsfc.nasa.gov Thu Oct 27 01:10:15 2005
X-ASG-Debug-ID: 1130400651-7109-1-0
X-Barracuda-URL: <http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi>
v-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: SGR 1806-20: continued moderate activity seen with INTEGRAL
Subject: SGR 1806-20: continued moderate activity seen with INTEGRAL
To: khurley@ssl.berkeley.edu
Date: Thu, 27 Oct 2005 04:10:50 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4168
SUBJECT: SGR 1806-20: continued moderate activity seen with INTEGRAL
DATE: 05/10/27 08:09:41 GMT
FROM: Sandro Mereghetti at IASF/CNR <sandro@mi.iasf.cnr.it>

S. Mereghetti (IASF-Milano), D. Gotz (SAP, Saclay), M. Beck (ISDC, Versoix), J. Borkowski (CAMK, Torun) on behalf of the IBAS Localization Team, and I.F. Mirabel (ESO) on behalf of the INTEGRAL Science Working Team report:

The soft gamma-ray repeater SGR 1806-20 continues to be in an active bursting state. A few normal short bursts have been detected by IBAS in October 2005 (note that SGR 1806-20 was not observed continuously during this period; the INTEGRAL observation log can be found at <http://intweb.esac.esa.int/>).

Burst times, approximate durations, and fluences (15-100 keV) measured with the IBIS/ISGRI instrument are reported below:

Date and UT	Duration (s)	Fluence (erg cm ⁻²)
2005-10-01T07:47:10	0.1	3E-8
2005-10-04T02:54:14	0.1	2E-8
2005-10-22T03:43:40	0.1	4E-8
2005-10-22T07:25:37	0.38	9E-7
2005-10-22T08:52:42	0.07	2E-8
2005-10-25T04:48:31	0.11	2E-8

The burst at 2005-10-22T08:52:42 was followed by a fainter peak 4.4 s later, lasting 0.04 s.

We remind that the occurrence of SGR 1806-20 bursts detected with high signal to noise ratio is reported in real time with IBAS Alert Packets. See <http://ibas.mi.iasf.cnr.it/> for an updated table of all the IBAS Alerts and for information on how to receive the Alert Packets for soft repeaters and type I bursters.

This message can be cited.

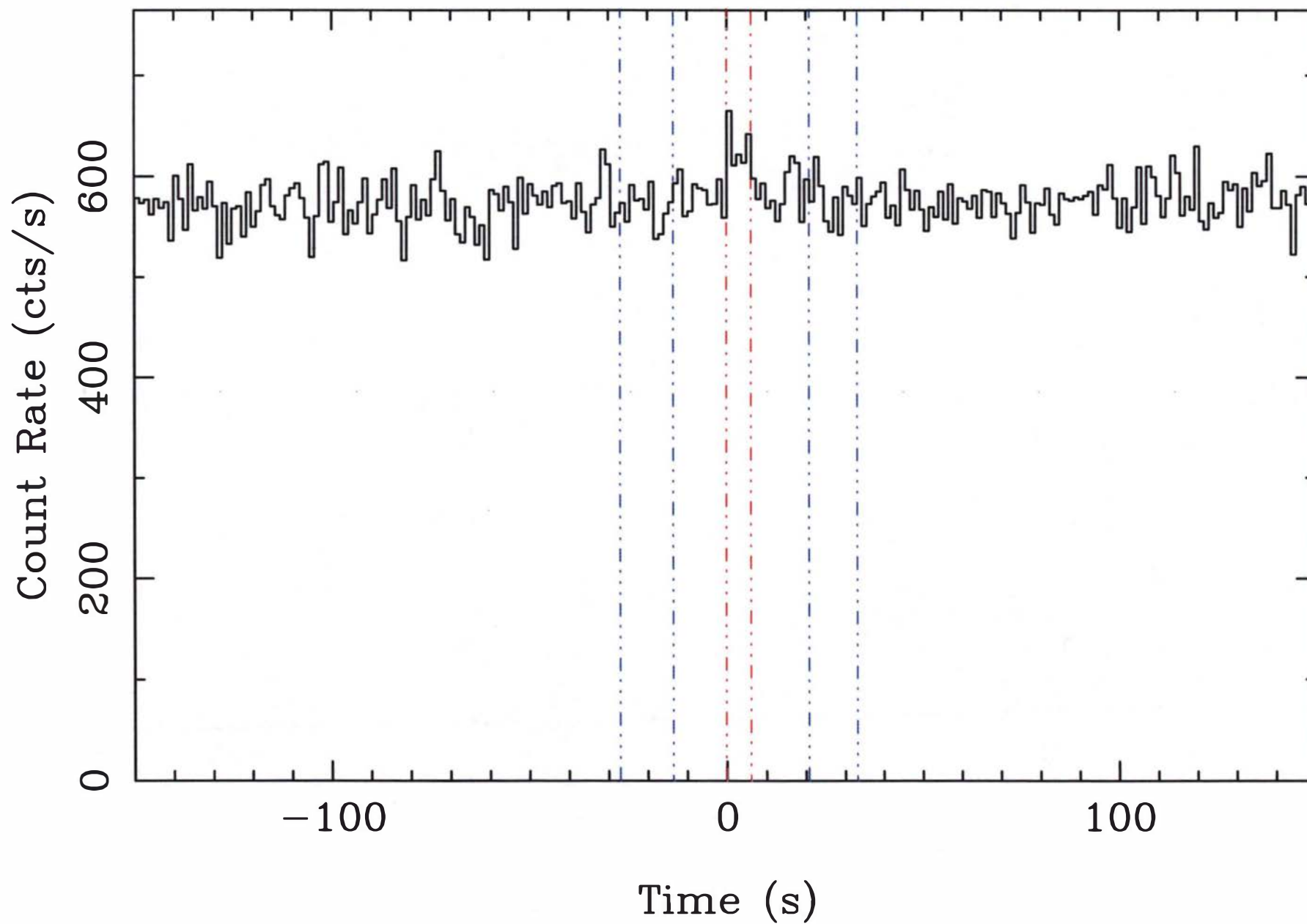
From hops@space.mit.edu Tue Oct 4 22:49:27 2005
Date: Wed, 5 Oct 2005 01:49:52 -0400 (EDT)
From: HETE Operator <hops@space.mit.edu>
To: khurley@sunspot.ssl.berkeley.edu
Subject: Trigger Notice to IPN

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Wed Oct 5 05:49:37 GMT 2005
NOTICE_TYPE: HETE S/C Alert
TRIGGER_NUM: 9999, Seq_Num: 1
GRB_DATE: 13647 TJD; 277 DOY; 05/10/04
GRB_TIME: 14834.03 SOD {04:07:14.03} UT
TRIGGER_SOURCE: Carlo's trigger robot
GAMMA_RATE: Not computed, sorry
SC_Z_RA: No idea, sorry
SC_Z_DEC: Beats me
SC_LONG: Couldn't rightly say
SUN_POSTN: Don't know that one either
MOON_POSTN: There's an almanac around here somewhere...
MOON_ILLUM: Yes
COMMENTS: Improbable GRB

*JLA says
particles or noise,
not a GRB*

FREGATE Band C, 1.2s Resolution Data

Time Since UTC = 20051004_040714.032285



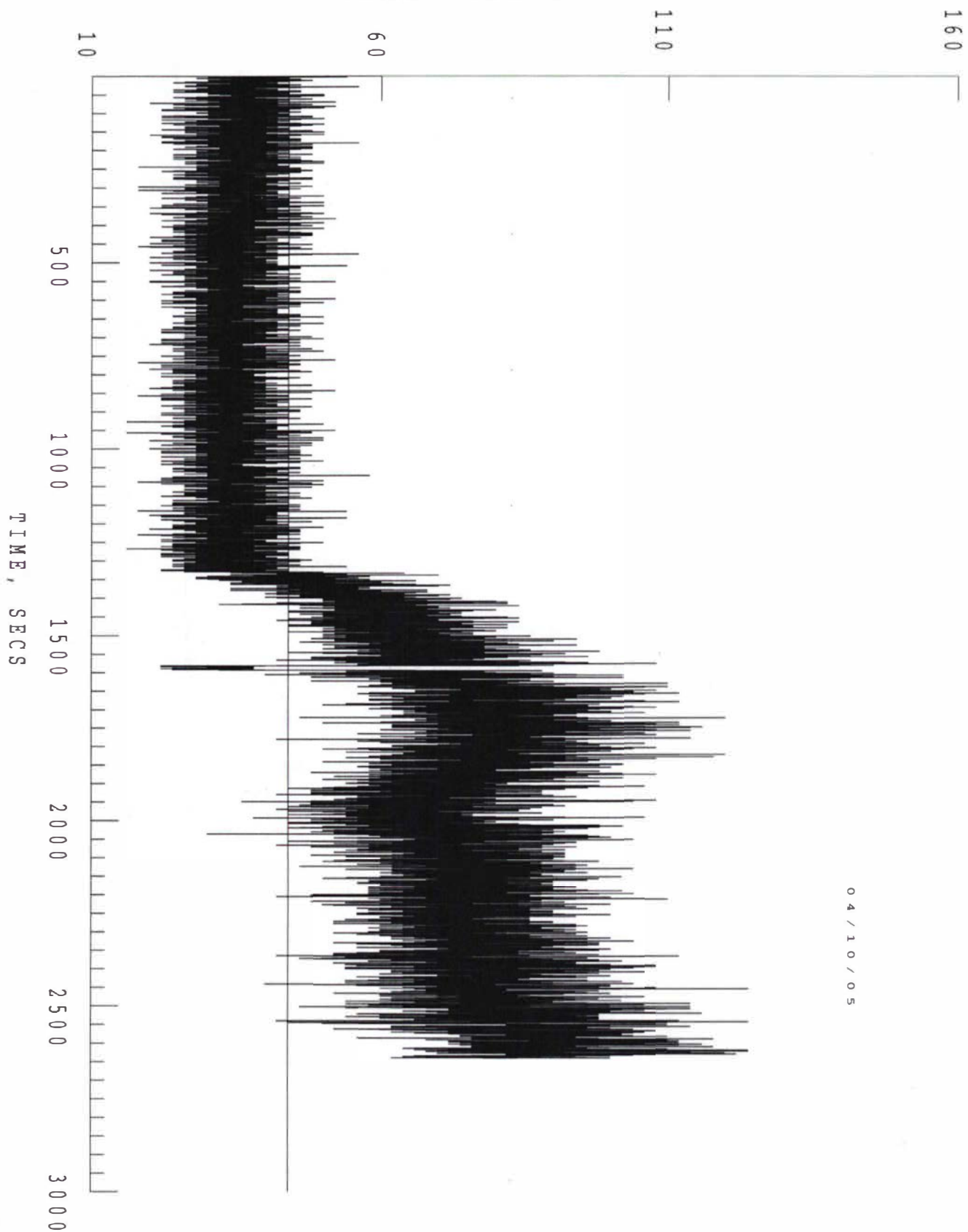
MS01

04/10/05

13481.900

50 - 3000 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_9999_1_20051004_14834)

BEG TIME: 04/10/05 DOY 277 Julian 2453648.66958 UT = 04.070 04:04:12 (14652.000 secs) [sct = 0019 bfec 8f0d 1fec]
 END TIME: 04/10/05 DOY 277 Julian 2453648.67417 UT = 04.180 04:10:47 (15048.000 secs) [sct = 0019 bfec a6a7 9c3d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

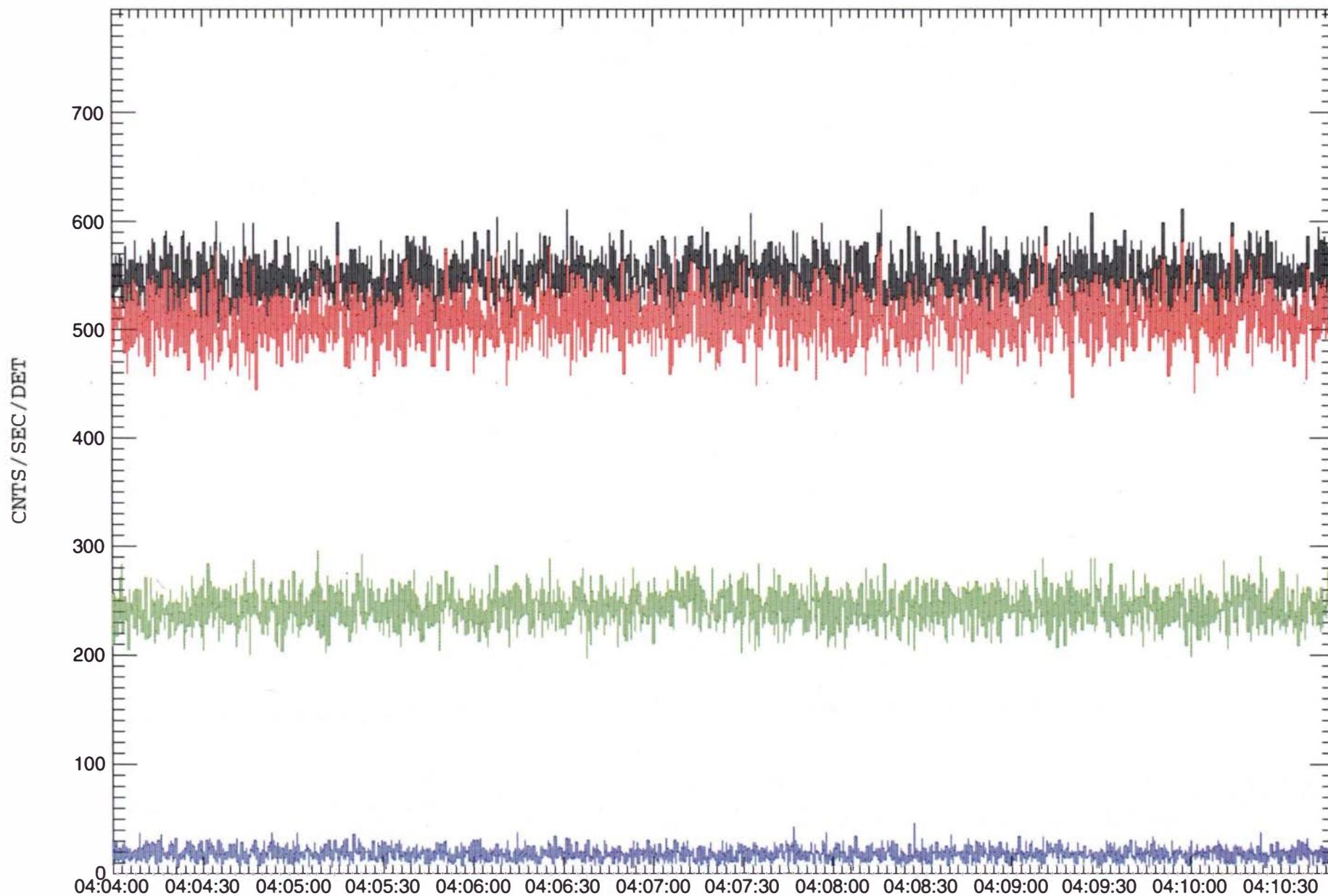
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

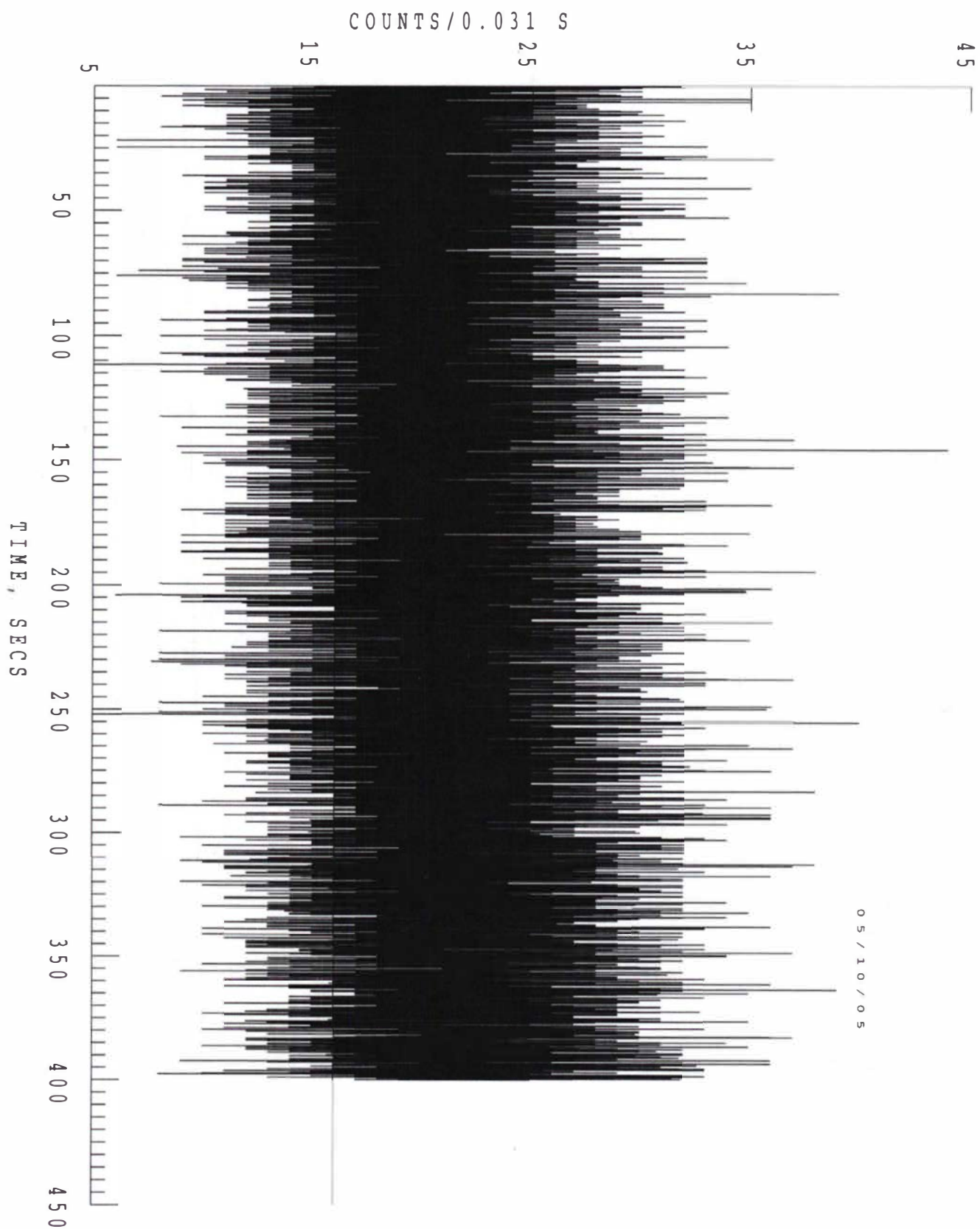


RS UT

HESSI

04/10/05 14634.000 (GHETE_9999_1_20051004_14834)

25- 150 keV



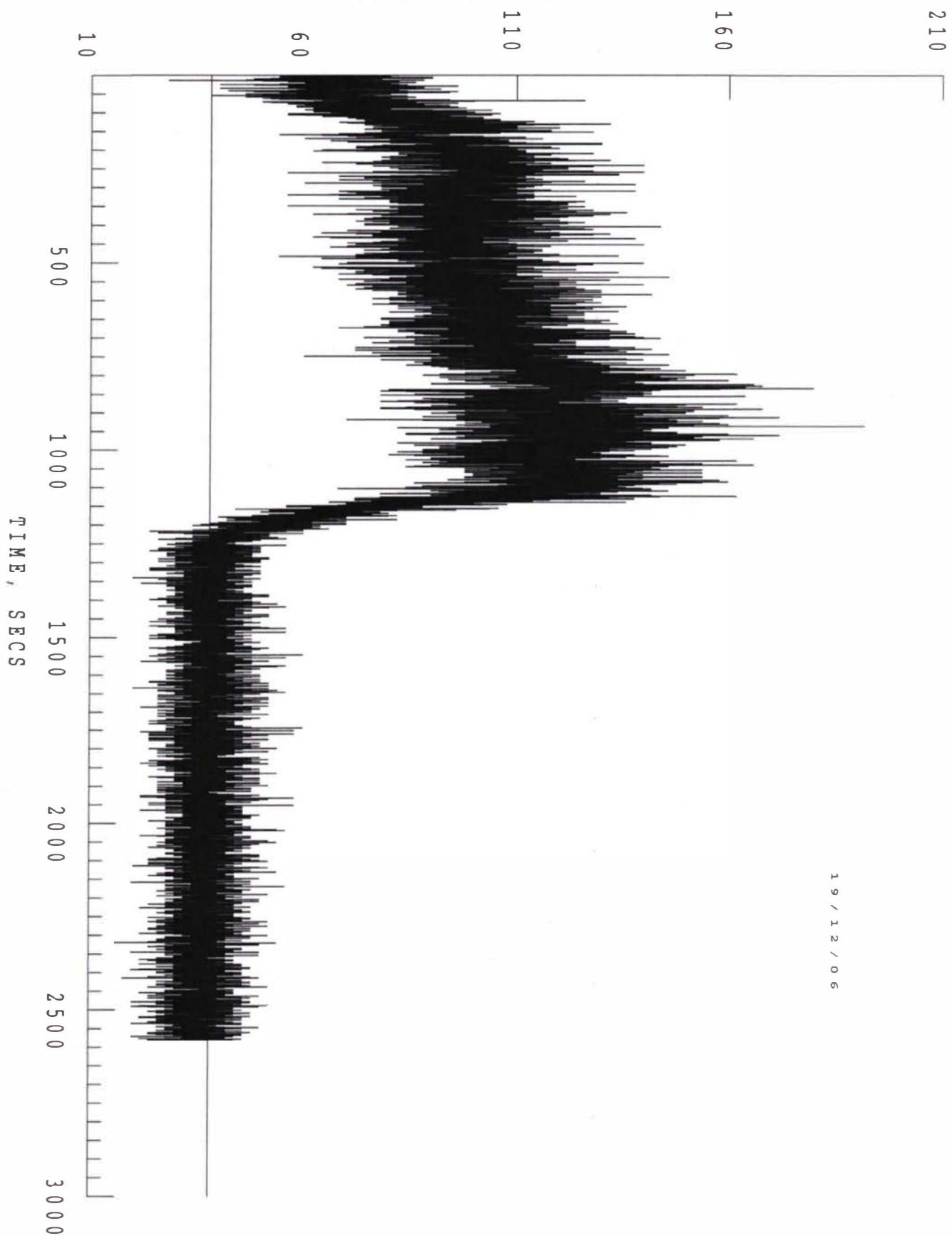
MS01

04/10/05

72280.247

50 - 3000 keV

COUNTS/0.250 S



No SPI, 6RS tugs

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051004_73592)

BEG TIME: 04/10/05 DOY 277 Julian 2453649.35125 UT = 20.430 20:25:48 (73548.000 secs) [sct = 0019 bffa 4587 87f5]
END TIME: 04/10/05 DOY 277 Julian 2453649.35250 UT = 20.460 20:27:36 (73656.000 secs) [sct = 0019 bffa 4bf7 7b51]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

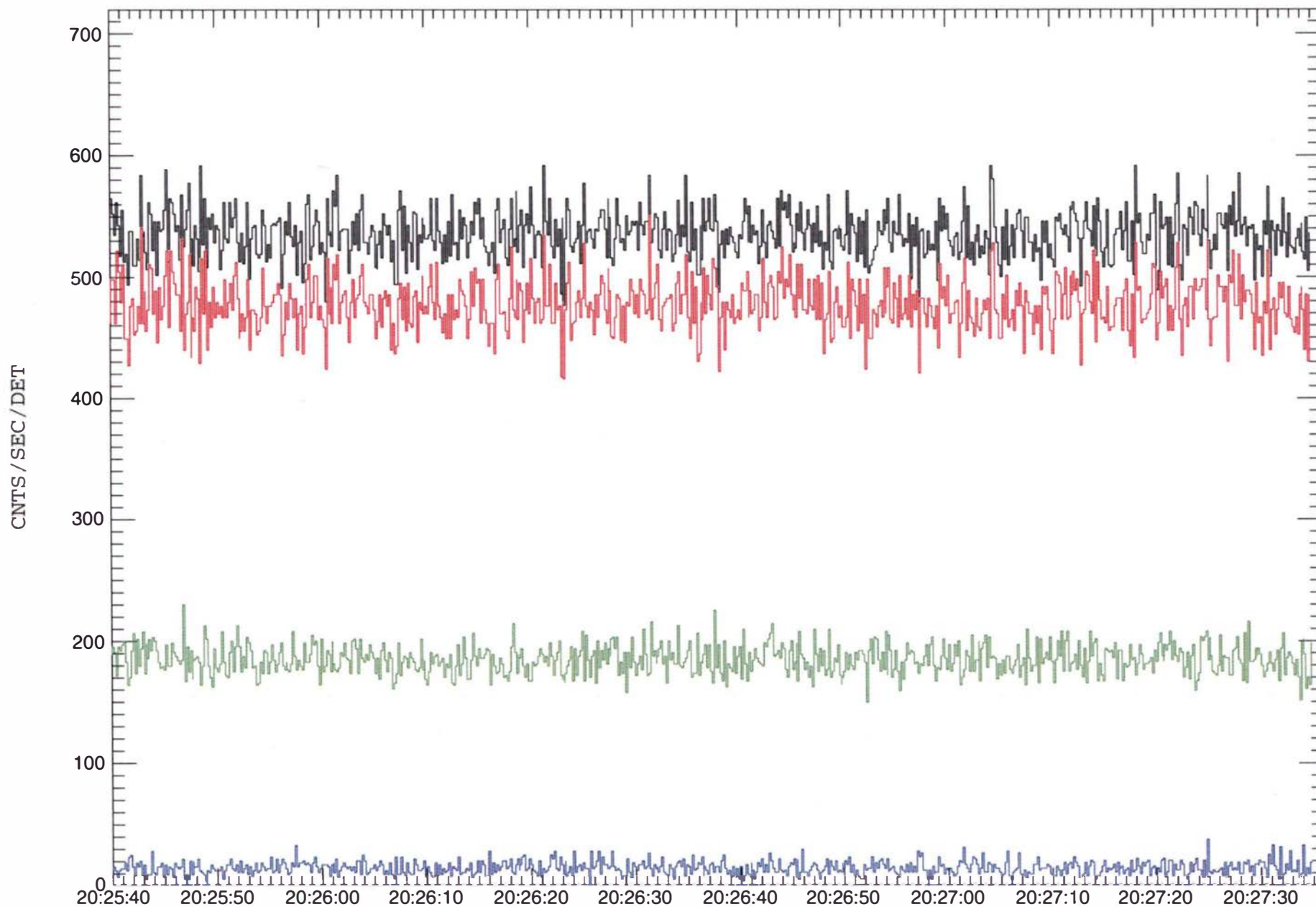
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



RS UT

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

04/10/05 DOY 277 Julian 2453648.50000 [est. sct = 0019 bfe9 25b9 2827]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

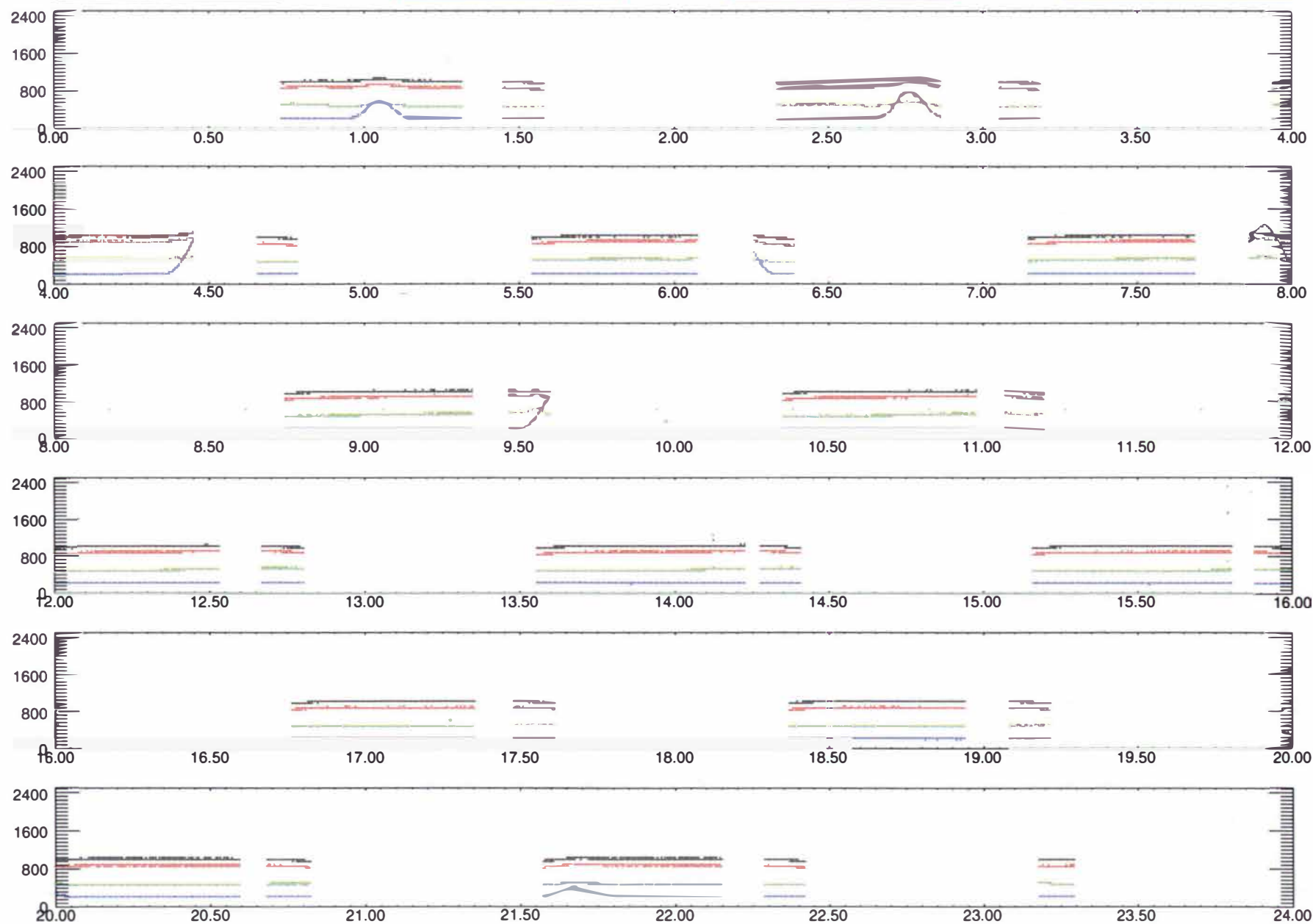
Channel 1 + 800

Channel 2 + 600

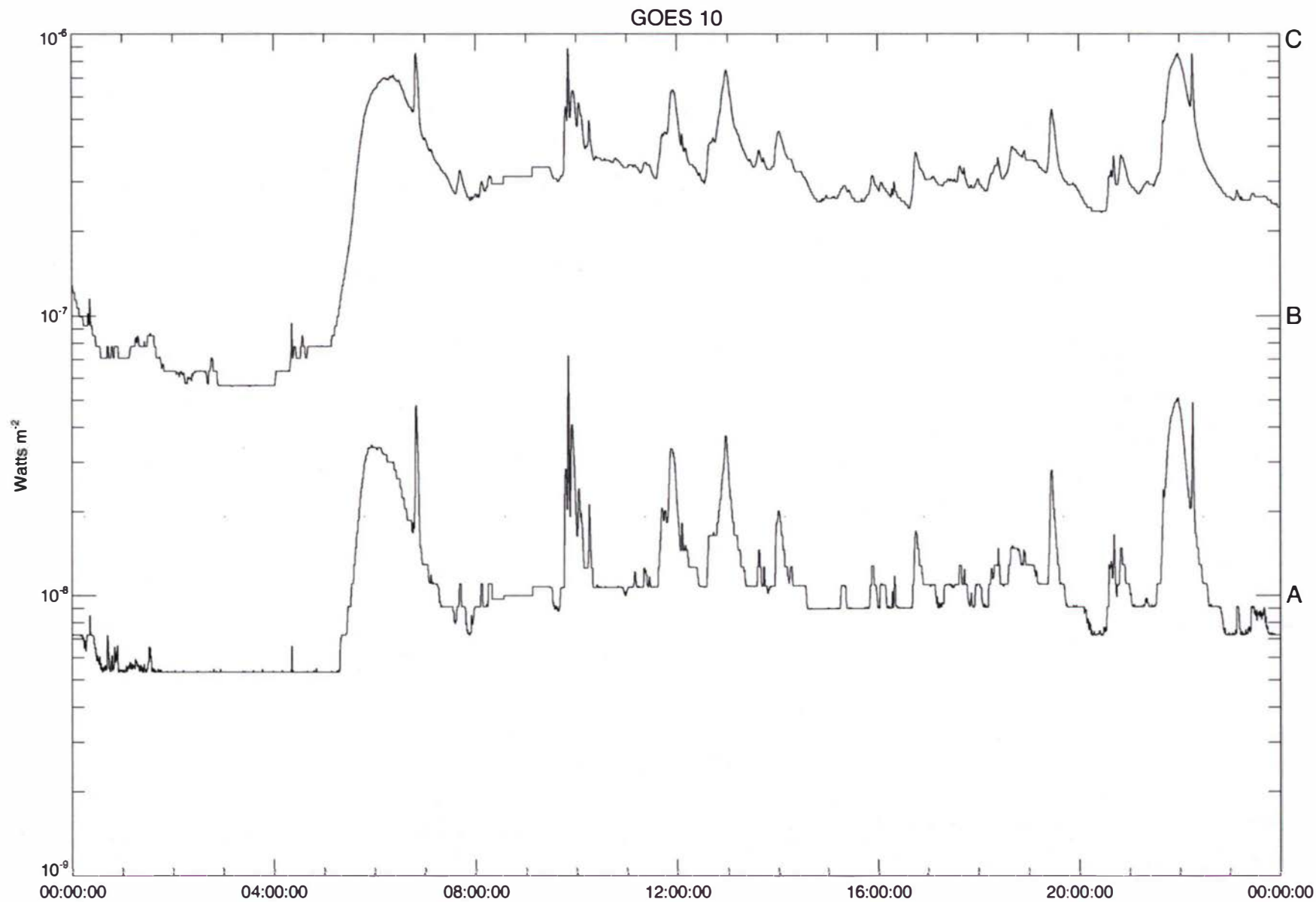
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/04, 0000:00

Channel

1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

Plot created: 05/10/06, 0824

Sample average = 10

From khurley@sunspot.ssl.berkeley.edu Mon Oct 10 13:24:50 2005
X-ASG-Debug-ID: 1128975918-11645-1-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
Date: Mon, 10 Oct 2005 13:22:07 -0700 (PDT)
From: Kevin Hurley <khurley@ssl.berkeley.edu>
To: khurley@ssl.berkeley.edu, derek@milkyway.gsfc.nasa.gov, val@mail.ioffe.ru
X-ASG-Orig-Subj: Re: SGR-like burst 051005
Subject: Re: SGR-like burst 051005
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-ASG-Whitelist: Sender (Per-User)
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

Dear Valentin,

We have a good detection of this event by RHESSI. But it looks like both SGR1900 and the possible new SGR are both below the RHESSI horizon.

Kevin

> From val@mail.ioffe.ru Sat Oct 8 08:58:30 2005
> X-ASG-Debug-ID: 1128787135-15544-15-0
> X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
> DomainKey-Signature: a=rsa-sha1; s=relay; d=ioffe.ru; c=nofws; q=dns;
> h=message-id:date:from:organization:x-mailer:
> x-accept-language:mime-version:to:subject:content-type:content-transfer-
> b=ATTudEonwy4DUFCJnFPNh3zRpUt8jro/xjVH+UyVKmAsscCiWq/Hxvh9oFIMQynGW
> Q+OzGzOB/lcueLRCmN27Ki0XL4sJXA61P7SY0i5NwEP6UiChpkY8I7zEG8+10ABrRt/
> ttv3YJSSaH9jfxWOv6HjjQ4HKbb+mIJ5ZnUzxULM
> Date: Sat, 08 Oct 2005 20:07:13 +0400
> From: Val <val@mail.ioffe.ru>
> X-Accept-Language: en
> MIME-Version: 1.0
> To: Kevin Hurley <khurley@ssl.berkeley.edu>,
> Derek Hullinger <derek@milkyway.gsfc.nasa.gov>
> X-ASG-Orig-Subj: SGR-like burst 051005
> Subject: SGR-like burst 051005
> Content-Transfer-Encoding: 7bit
> X-Virus-Scanned: ClamAV version 0.87, clamav-milter version 0.87 on localhost
> X-Virus-Status: Clean
> X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
> X-ASG-Whitelist: Sender (Per-User)
> X-Barracuda-Spam-Score: 0.00
> X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 Q
>
> Dear Kevin and Derek,
>
> An SGR-like burst was detected on October 5
> by Konus-Wind and Helicon-Coronas-F in the waiting mode.
> For Konus-Wind it was seen as a single 2.944-s long bin
> above background in G1-window of both detectors S1 and S2
> at T(W)=27811.279 s UT (07:43:31.279) (start time of the bin).
> (the S2/S1 ratio indicates that the source lies near ecliptic plane,
> but the ecliptic latitude limits are fairly large)
>
> For Helicon-Coronas-F it was seen as a single 1.05-s long bin
> well above background in G1-G4-windows of the detector S1,
> which observed solar hemisphere

> at T(Hel)=27812.42 s UT (07:43:32.42)
> (it was not seen in the G5-G8 windows, i.e. it was soft)
>
> SGR 1627-41 and SGR 0526-66 were occulted by the Earth from Coronas-F.

> SGR 1900+14 or possible(?) new SGR associated with
> Swift short soft burst 050925 (GCN 4034, 4037)
> are unlikely can be a source of this burst due to their
> present location in the antisolar hemisphere.
>
> The conservative estimation of the Wind-Coronas time delay
> $dT(W-H)$ is from -2.19 to +1.81 s.
> This time delay is consistent with the expected delay
> for SGR 1806-20 ($=0.11$ sec)
>
>
> Was this burst observed by some other instruments?
> May be it was observed by the Swift-BAT in the waiting mode?
> We would be grateful for any data on this point.
>
> Best wishes,
>
> Valentin
>
>
>
> --
>
> Valentin Pal'shin

> Ioffe Physico-Technical Institute
> Laboratory for Experimental Astrophysics
> 26 Polytekhnicheskaya, St Petersburg 194021,
> Russian Federation
>
> email: val@mail.ioffe.ru
> Tel: (7)-812-2479177
> Fax: (7)-812-2471963
>

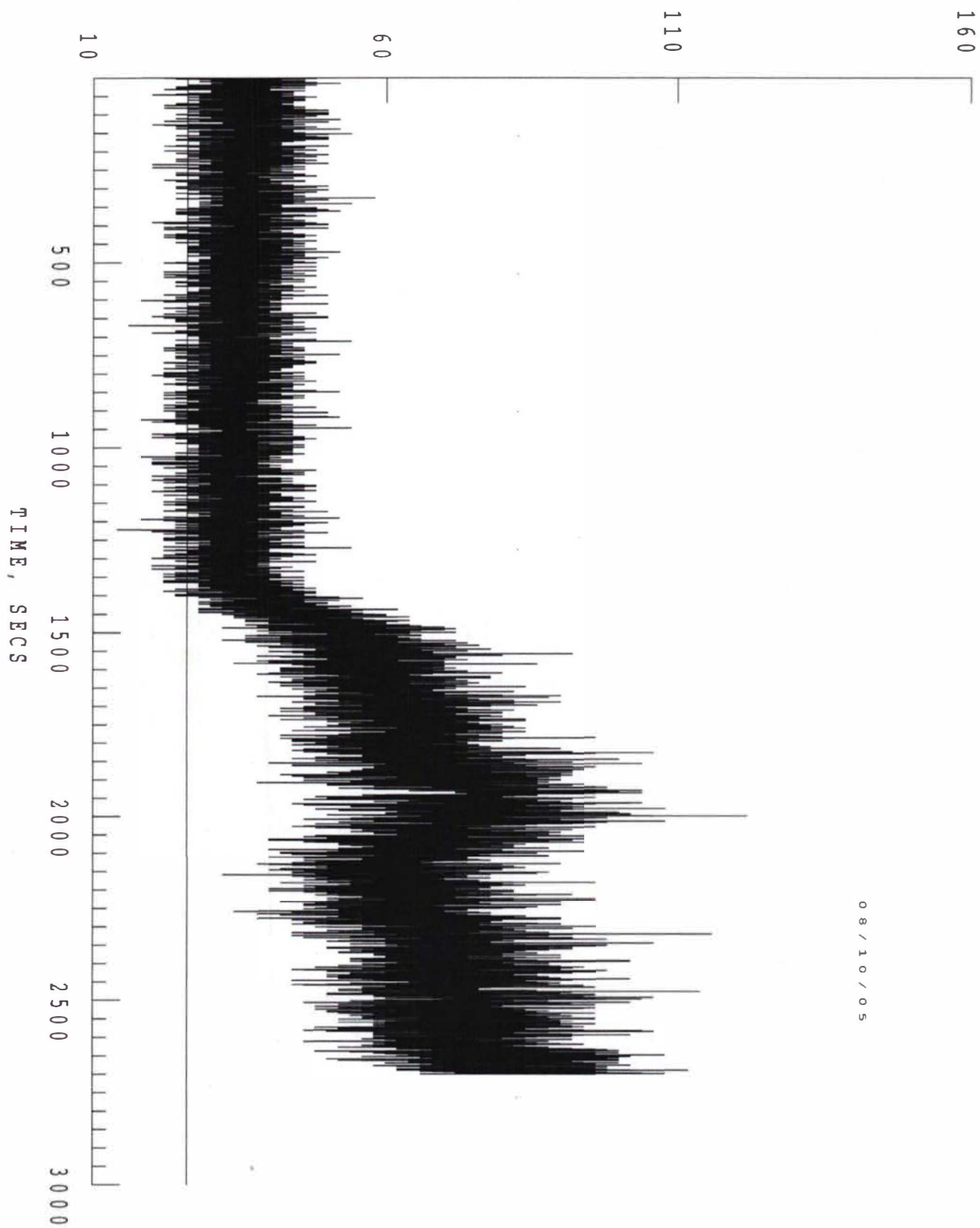
MS01

05/10/05

26440.318

50 - 3000 keV

COUNTS/0.250 S



08/10/05

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (KONUS_20051005_27811)

BEG TIME: 05/10/05 DOY 278 Julian 2453649.82125 UT = 07.710 07:42:36 (27756.000 secs) [sct = 0019 c003 b9f4 f71f]
 END TIME: 05/10/05 DOY 278 Julian 2453649.82250 UT = 07.740 07:44:24 (27864.000 secs) [sct = 0019 c003 c064 ea7b]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

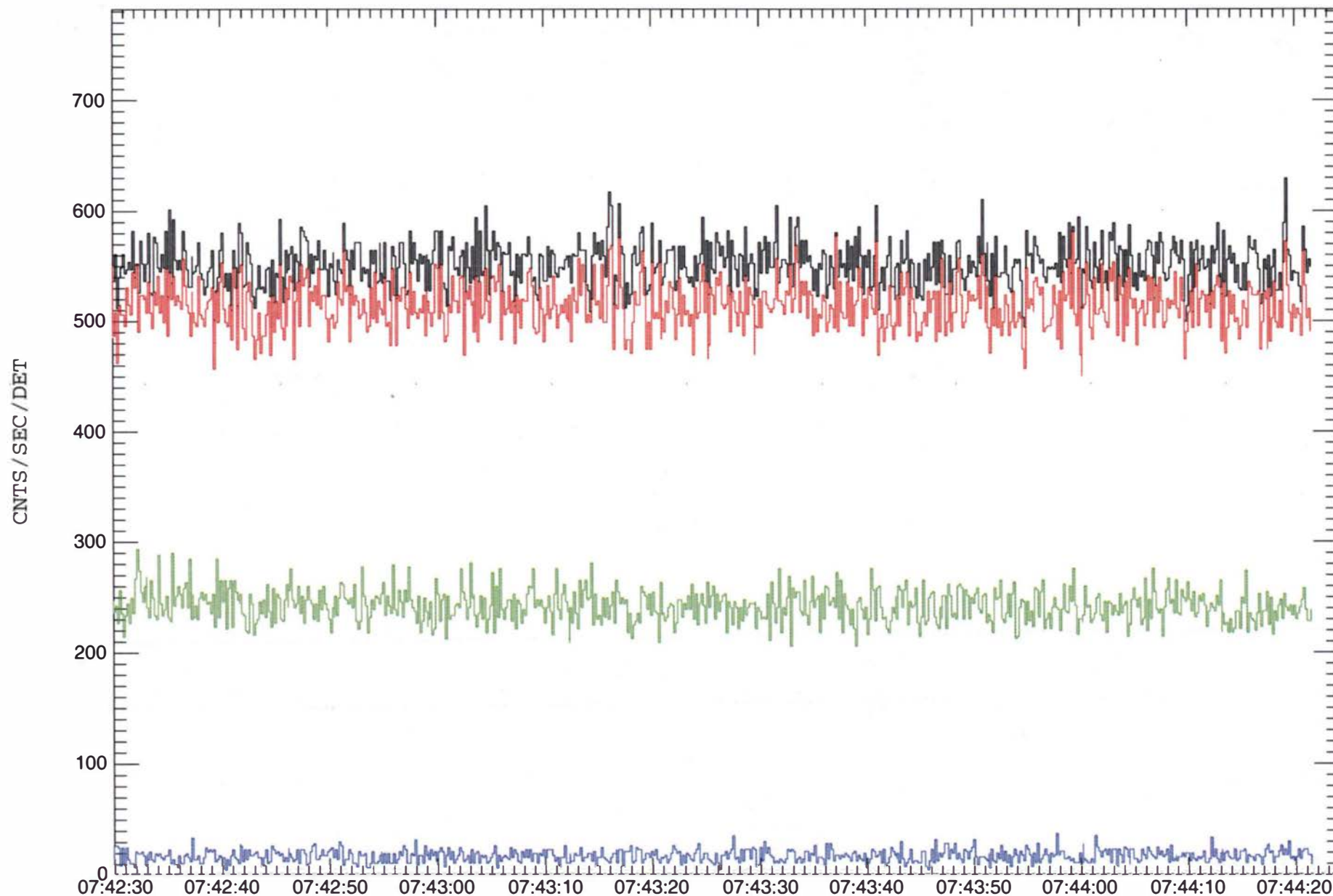
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



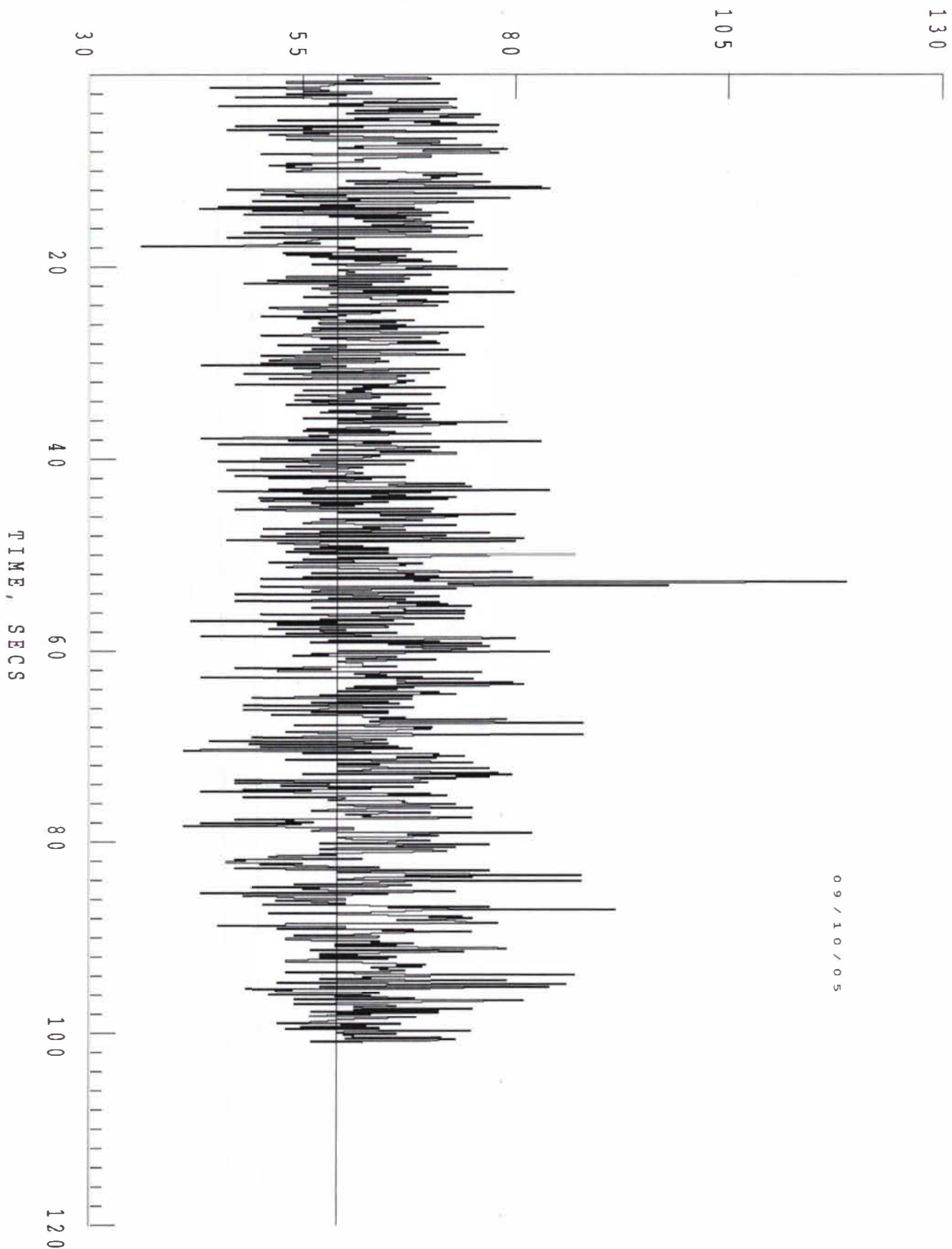
RS UT

HESSI

05/10/05 27760.000 (KONUS_20051005_27811)

25- 150 keV

COUNTS/0.100 S



From hops@space.mit.edu Wed Oct 5 04:48:34 2005
X-ASG-Debug-ID: 1128512939-12106-5-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
From: HETE Operator <hops@space.mit.edu>
-ASG-Orig-Subj: Trigger Notice
Subject: Trigger Notice
To: khurley@ssl.berkeley.edu, autobrst@sunspot.ssl.berkeley.edu
Date: Wed, 5 Oct 2005 11:48:58 +0000 (GMT)
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-ASG-Whitelist: Sender (Per-User)
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Wed Oct 5 11:48:58 GMT 2005
NOTICE_TYPE: HETE S/C Alert
TRIGGER_NUM: 9999, Seq_Num: 1
GRB_DATE: 13648 TJD; 278 DOY; 05/10/05
GRB_TIME: 38309.03 SOD {10:38:29.02} UT
TRIGGER_SOURCE: Nat's trigger robot
GAMMA_RATE: 130 [cnts/s] on a 1.300 [sec] timescale
SC_-Z_RA: 298 [deg]
SC_-Z_DEC: -20 [deg]
SC_LONG: 342 [deg East]
SUN_POSTN: 114.99d {+07h 39m 58s} +21.45d {+21d 27' 06"}
MOON_POSTN: 186.62d {+12h 26m 28s} +2.56d {+02d 33' 31"}
MOON_ILLUM: 35 [%]
COMMENTS: Probable GRB.

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_9999_1_20051005_38309)

BEG TIME: 05/10/05 DOY 278 Julian 2453649.94125 UT = 10.590 10:35:24 (38124.000 secs) [sct = 0019 c006 23f0 39a2]
 END TIME: 05/10/05 DOY 278 Julian 2453649.94583 UT = 10.700 10:42:00 (38520.000 secs) [sct = 0019 c006 3b8a b5f3]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

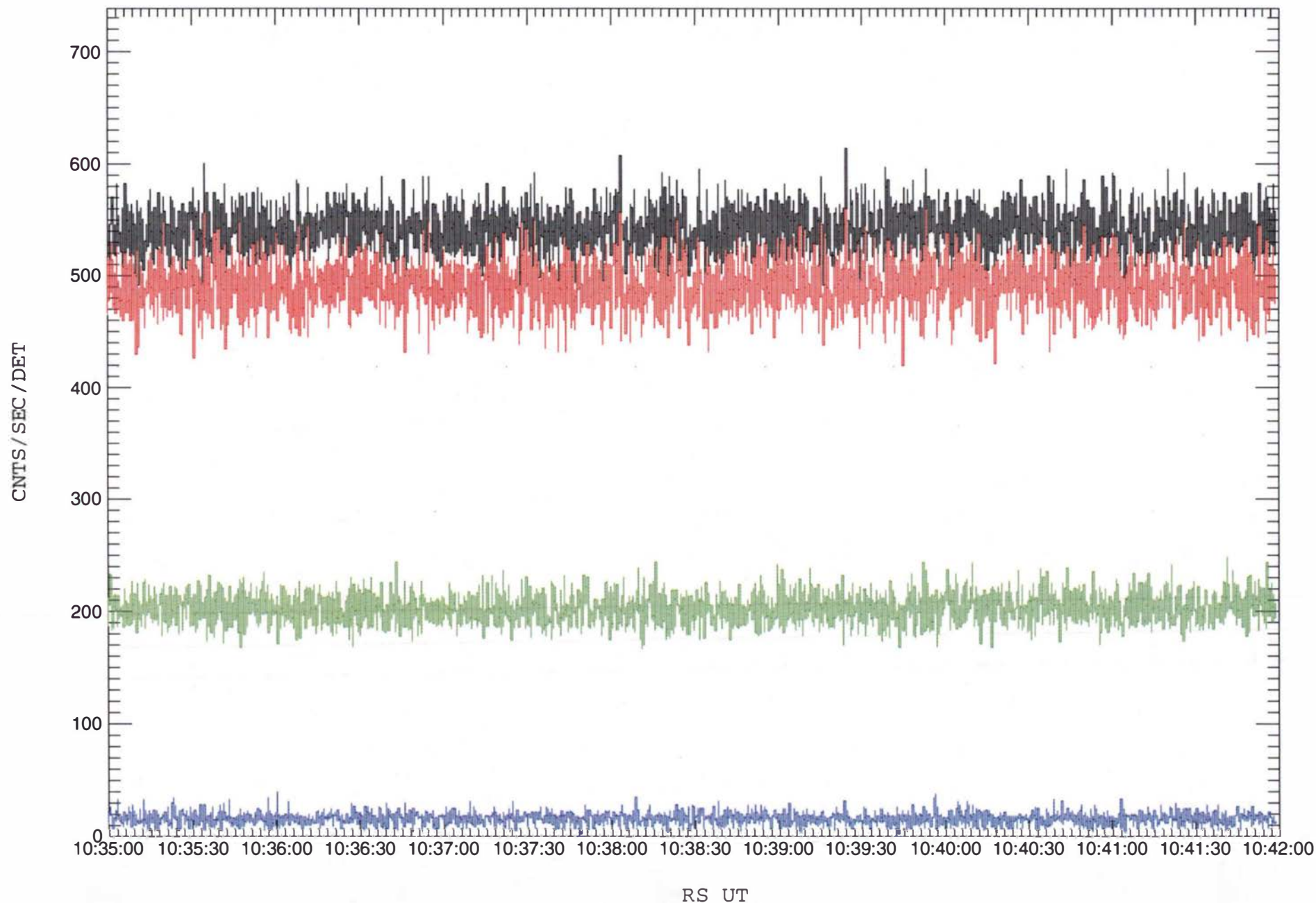
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



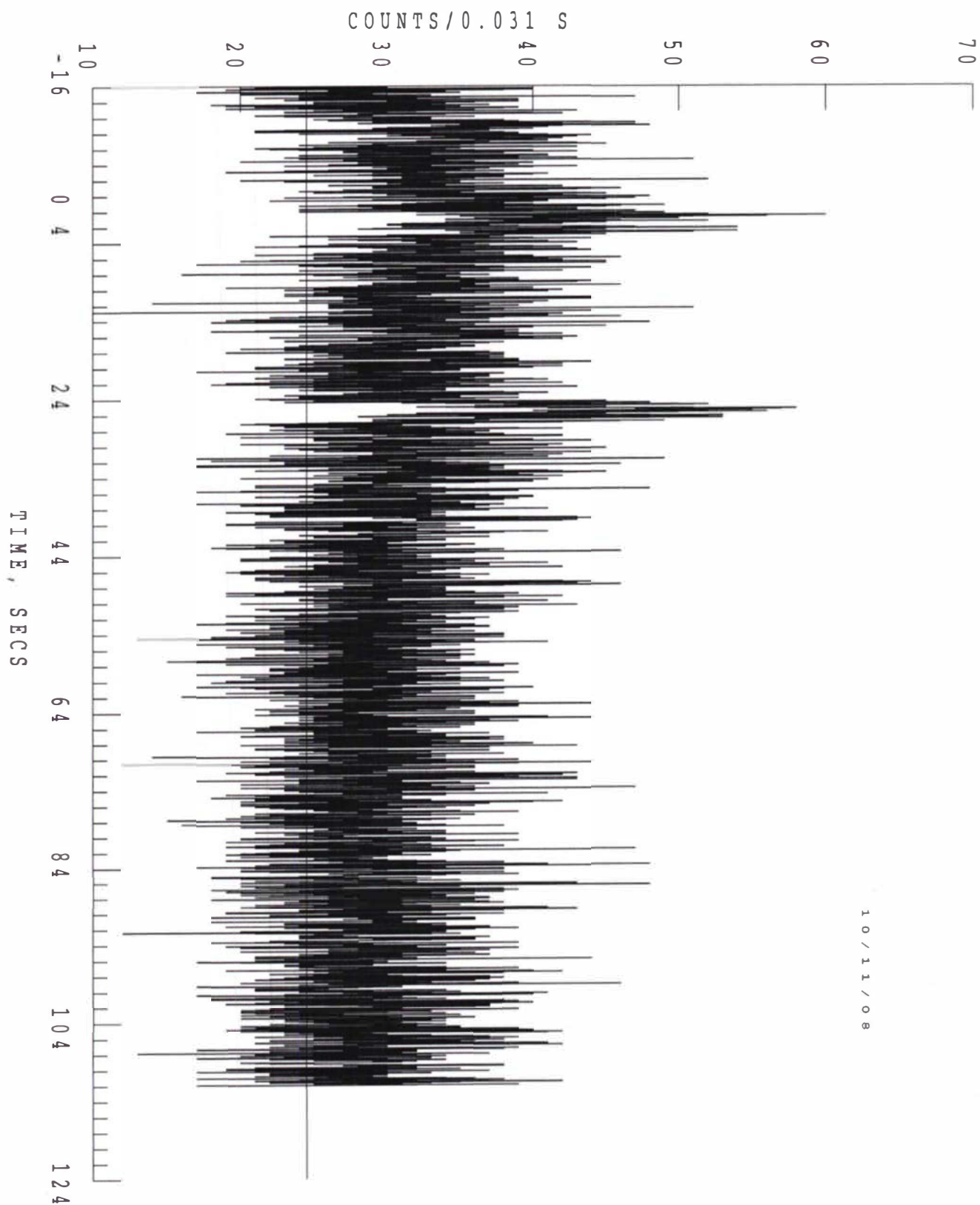
SUZAKU

09/10/05

38917.461

50 - 240 keV

10:48:37



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051009_38917)

BEG TIME: 09/10/05 DOY 282 Julian 2453653.94792 UT = 10.750 10:45:00 (38700.000 secs) [sct = 0019 c056 c238 278b]
 END TIME: 09/10/05 DOY 282 Julian 2453653.95292 UT = 10.870 10:52:12 (39132.000 secs) [sct = 0019 c056 dbf8 02dd]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

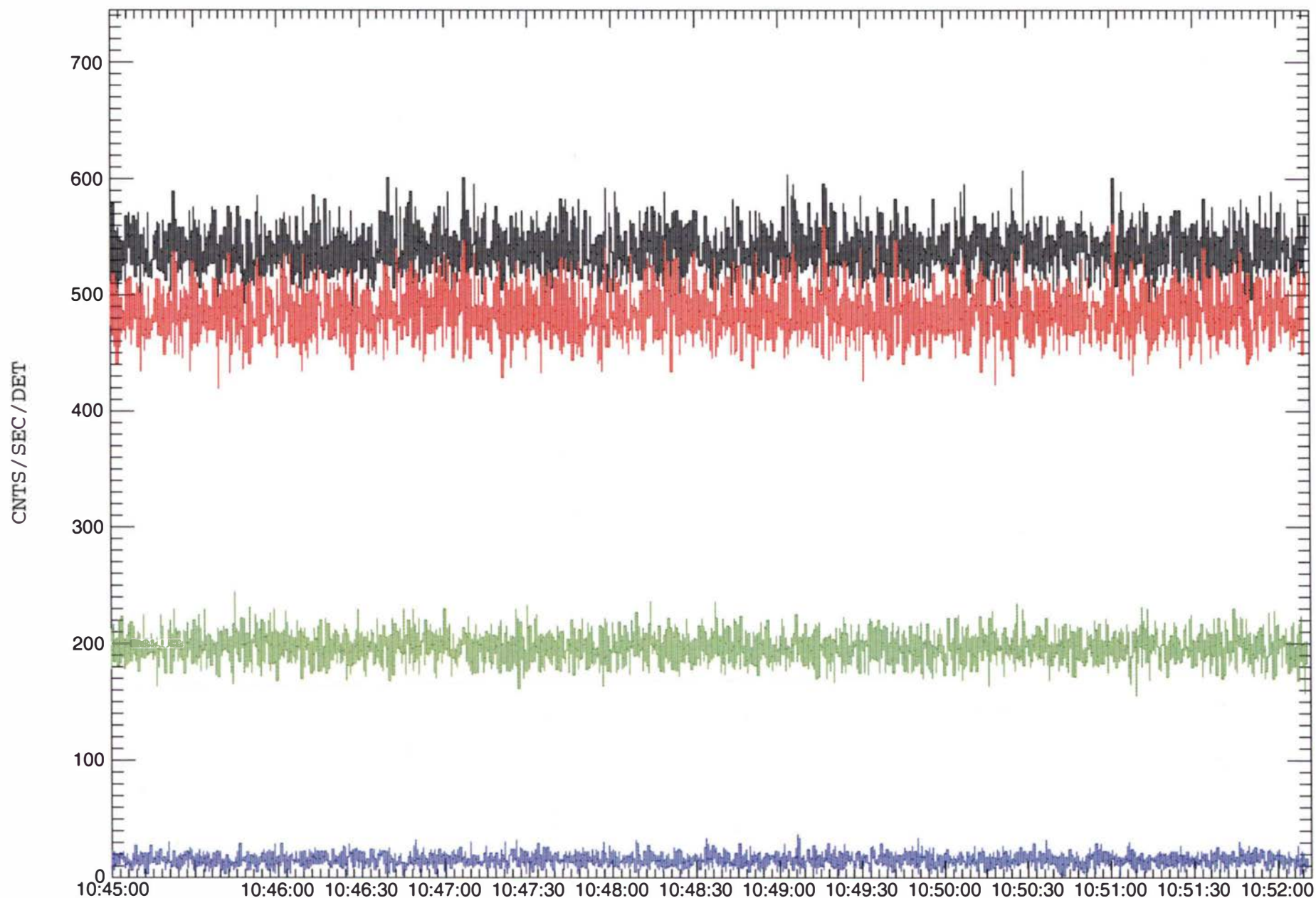
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTOR 1 (SUZAKU_20051009_38917)

BEG TIME: 09/10/05 DOY 282 Julian 2453653.94792 UT = 10.750 10:45:00 (38700.000 secs) [sct = 0019 c056 c238 278b]
 END TIME: 09/10/05 DOY 282 Julian 2453653.95292 UT = 10.870 10:52:12 (39132.000 secs) [sct = 0019 c056 dbf8 02dd]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

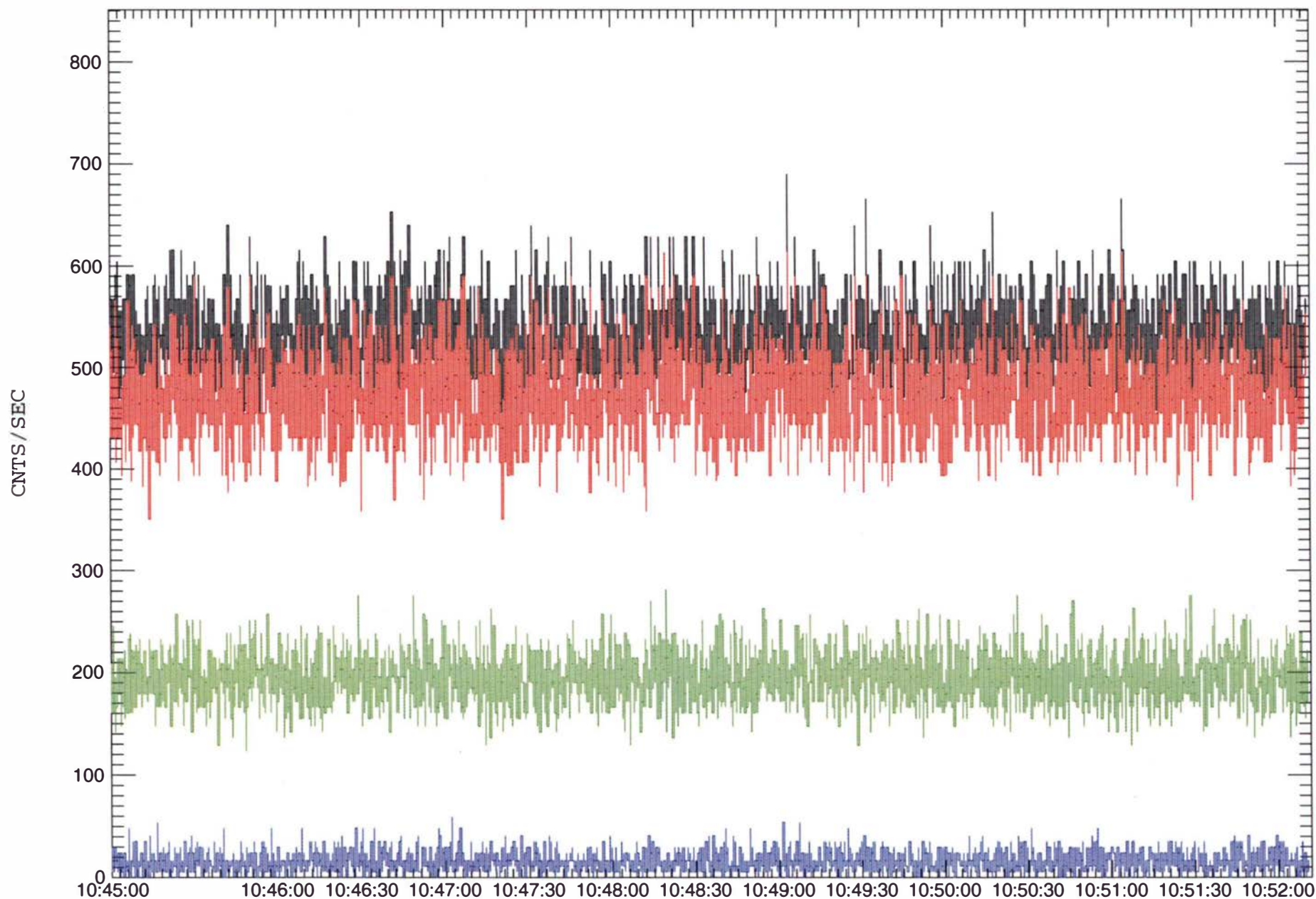
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTOR 2 (SUZAKU_20051009_38917)

BEG TIME: 09/10/05 DOY 282 Julian 2453653.94792 UT = 10.750 10:45:00 (38700.000 secs) [sct = 0019 c056 c238 278b]
 END TIME: 09/10/05 DOY 282 Julian 2453653.95292 UT = 10.870 10:52:12 (39132.000 secs) [sct = 0019 c056 dbf8 02dd]

Chan 1:[E1=14 E2=103]

Chan 2:[E3=14 E4=78]

Chan 3:[E5=20 E6=511]

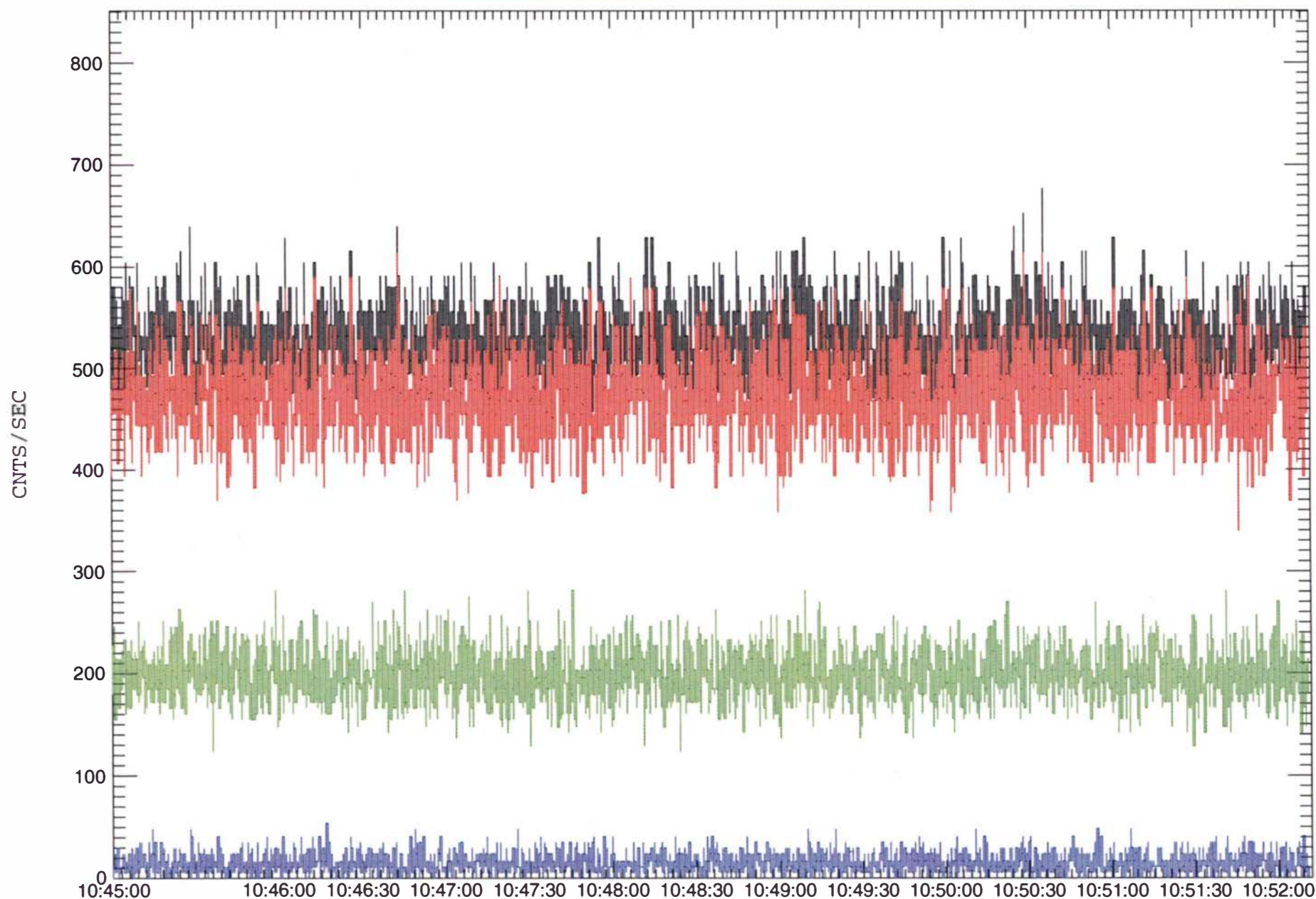
Chan 4:[E6=511 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTOR 3 (SUZAKU_20051009_38917)

BEG TIME: 09/10/05 DOY 282 Julian 2453653.94792 UT = 10.750 10:45:00 (38700.000 secs) [sct = 0019 c056 c238 278b]
 END TIME: 09/10/05 DOY 282 Julian 2453653.95292 UT = 10.870 10:52:12 (39132.000 secs) [sct = 0019 c056 dbf8 02dd]

Chan 1:[E1=18 E2=103]

Chan 2:[E3=17 E4=77]

Chan 3:[E5=20 E6=511]

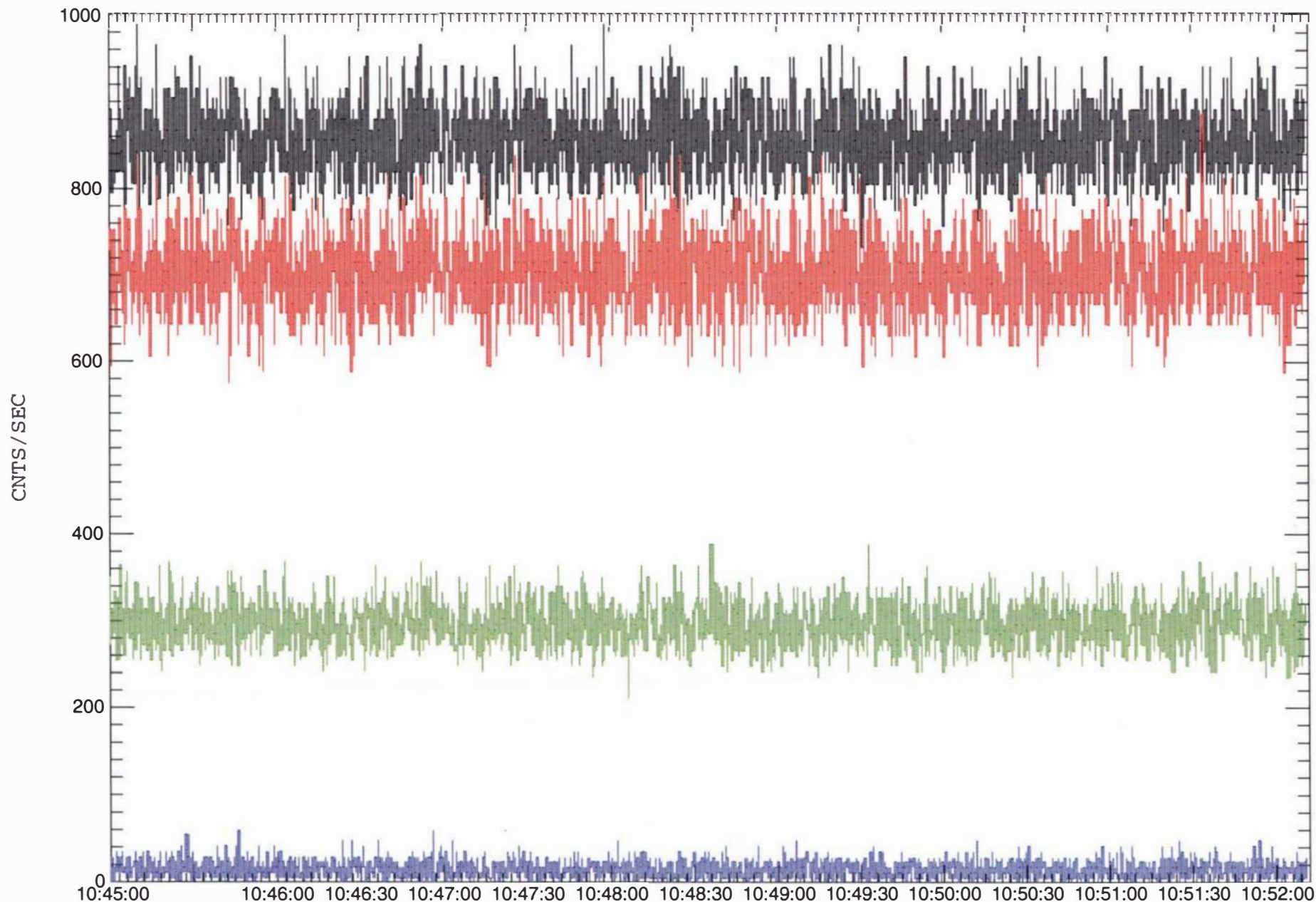
Chan 4:[E6=511 ->]

Channel 1 + 600

Channel 2 + 400

Channel 3 + 200

Channel 4 + 0



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTOR 4 (SUZAKU_20051009_38917)

BEG TIME: 09/10/05 DOY 282 Julian 2453653.94792 UT = 10.750 10:45:00 (38700.000 secs) [sct = 0019 c056 c238 278b]
 END TIME: 09/10/05 DOY 282 Julian 2453653.95292 UT = 10.870 10:52:12 (39132.000 secs) [sct = 0019 c056 dbf8 02dd]

Chan 1:[E1=17 E2=103]

Chan 2:[E3=17 E4=77]

Chan 3:[E5=19 E6=504]

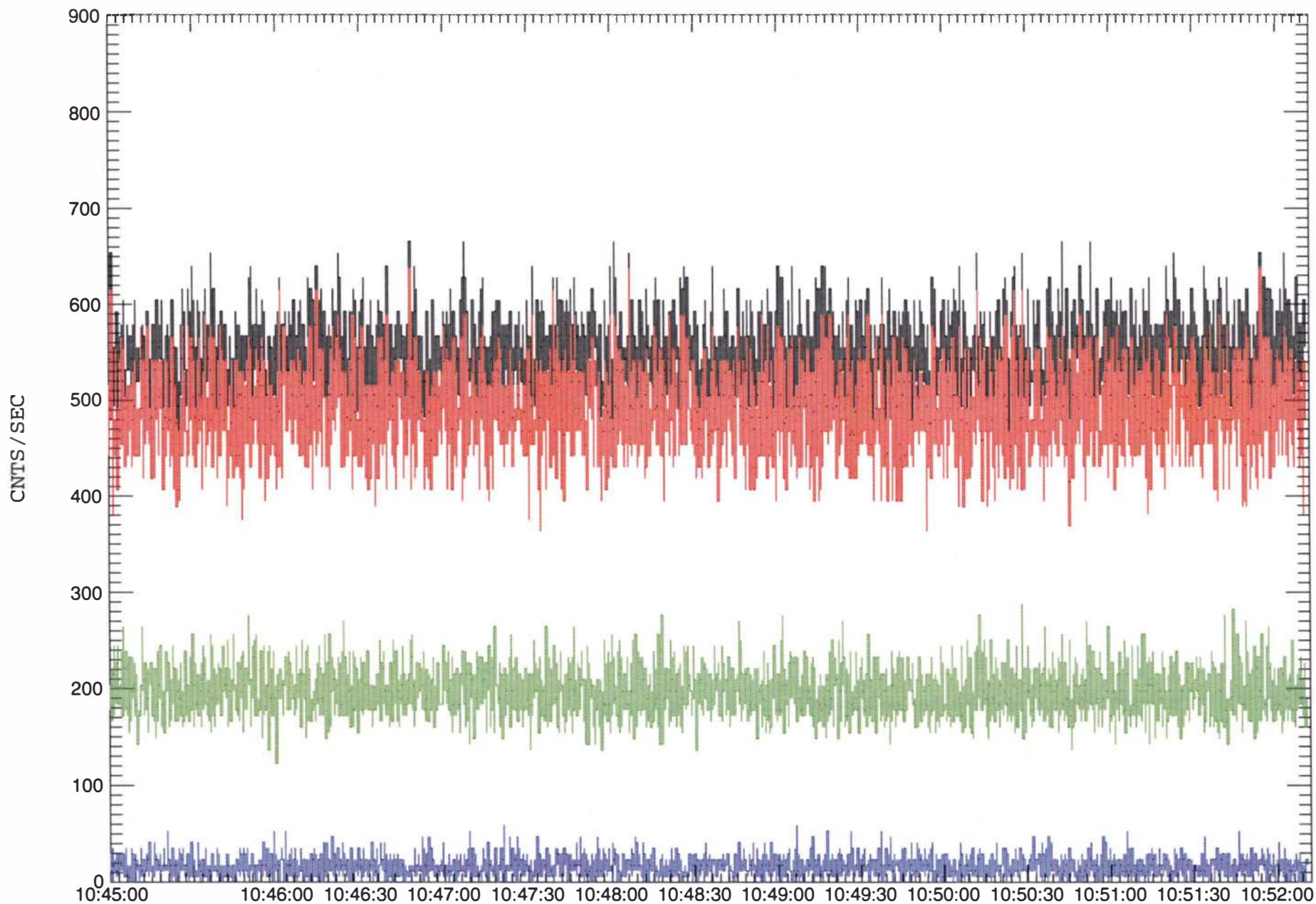
Chan 4:[E6=504 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

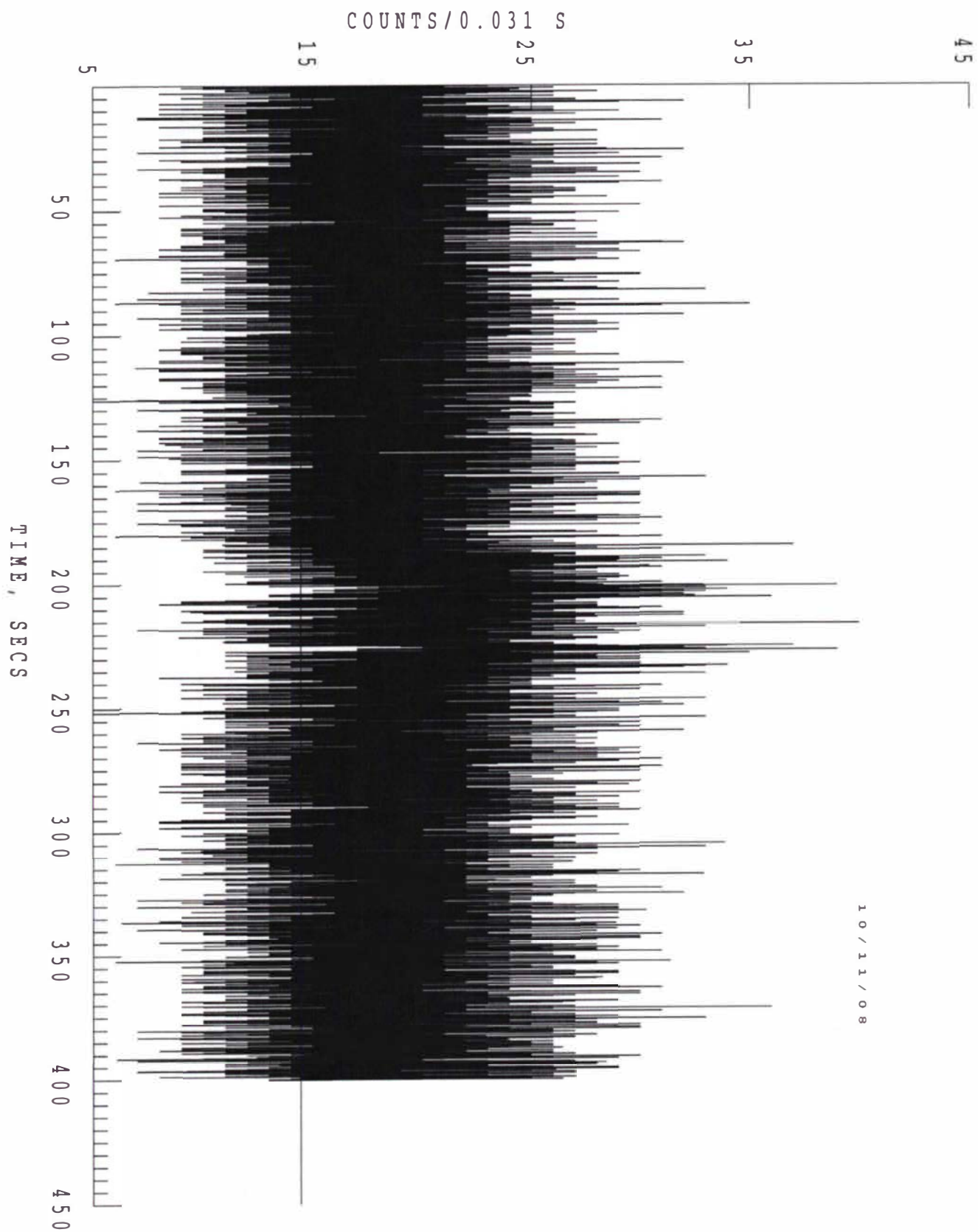
Channel 4 + 0



HESSI

09/10/05 38717.000 (SUZAKU_20051009_38917)

25- 150 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

05/10/05 DOY 278 Julian 2453649.50000 [est. sct = 0019 bffd 4391 a7bb]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

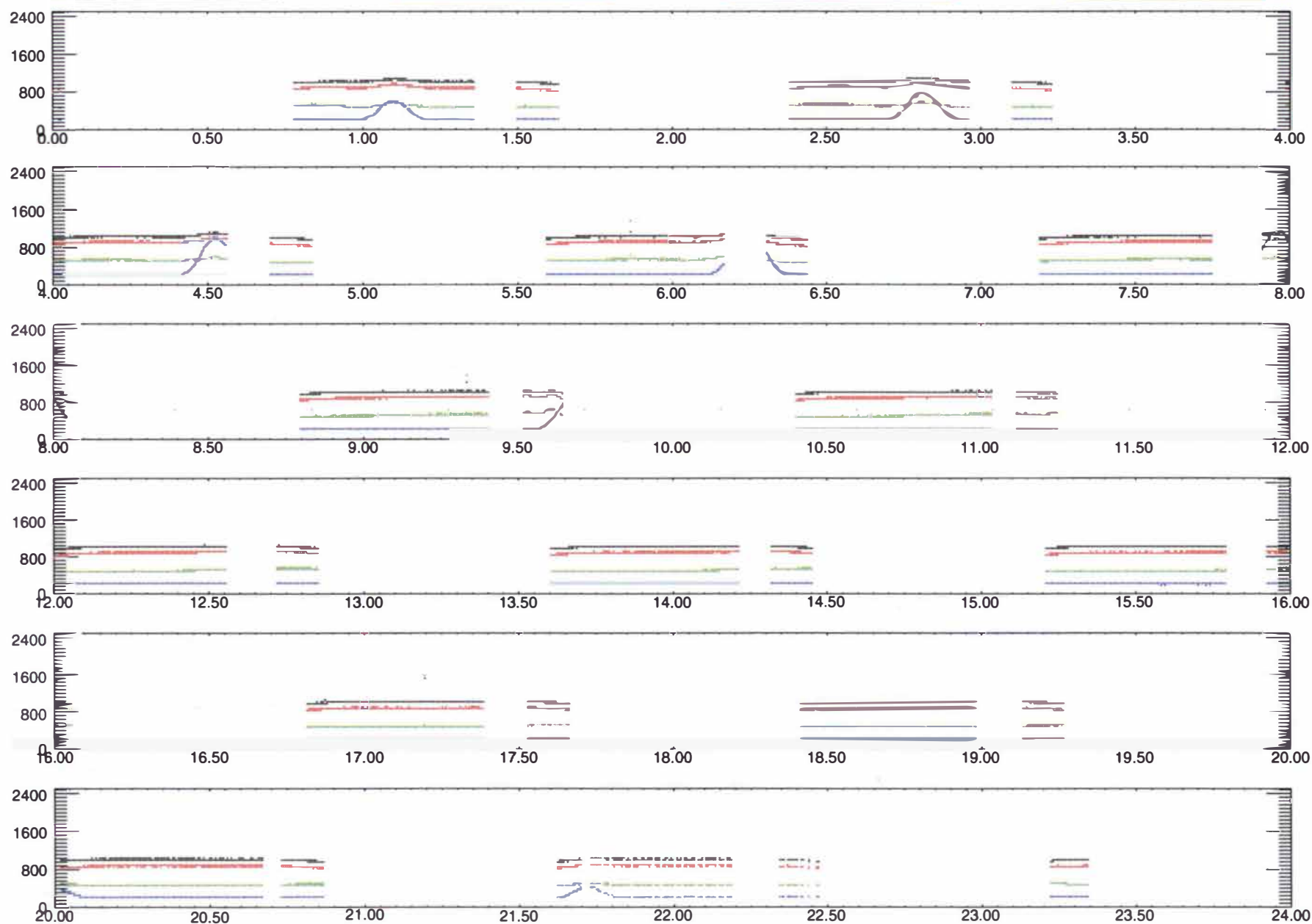
Channel 1 + 800

Channel 2 + 600

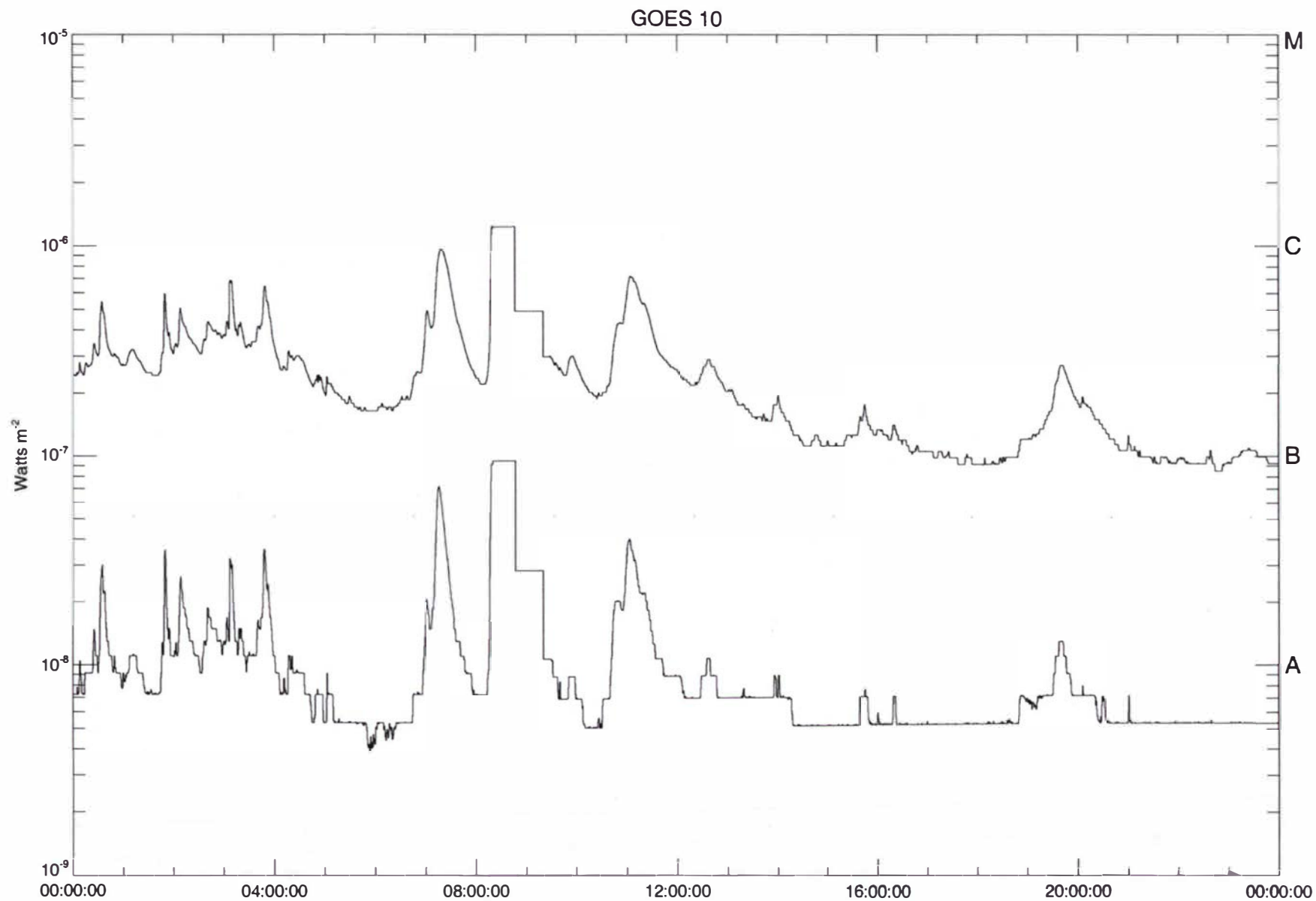
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/05, 0000:00

Channel

1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

Plot created: 05/10/07, 0824

Sample average = 10

Date: Oct 30 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

N/A

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☒ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☒ Was CHECKMO run to eliminate data gaps?
- ☒ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☒ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

A

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

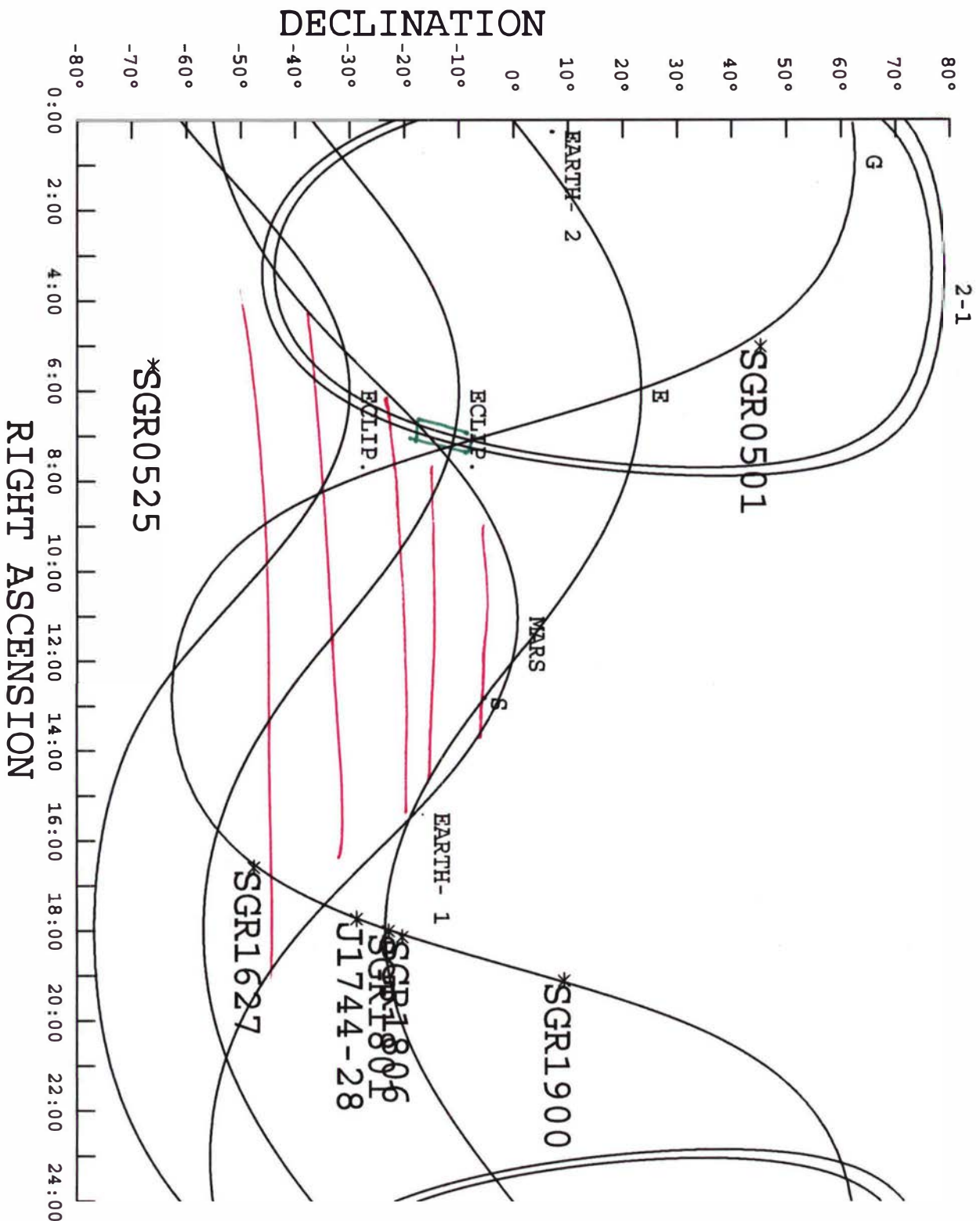
G=GALACTIC EQUATOR

1 MO

2 KONUS

EVENT OF OCT 6, 2005 15:12

30/10/ 8



A

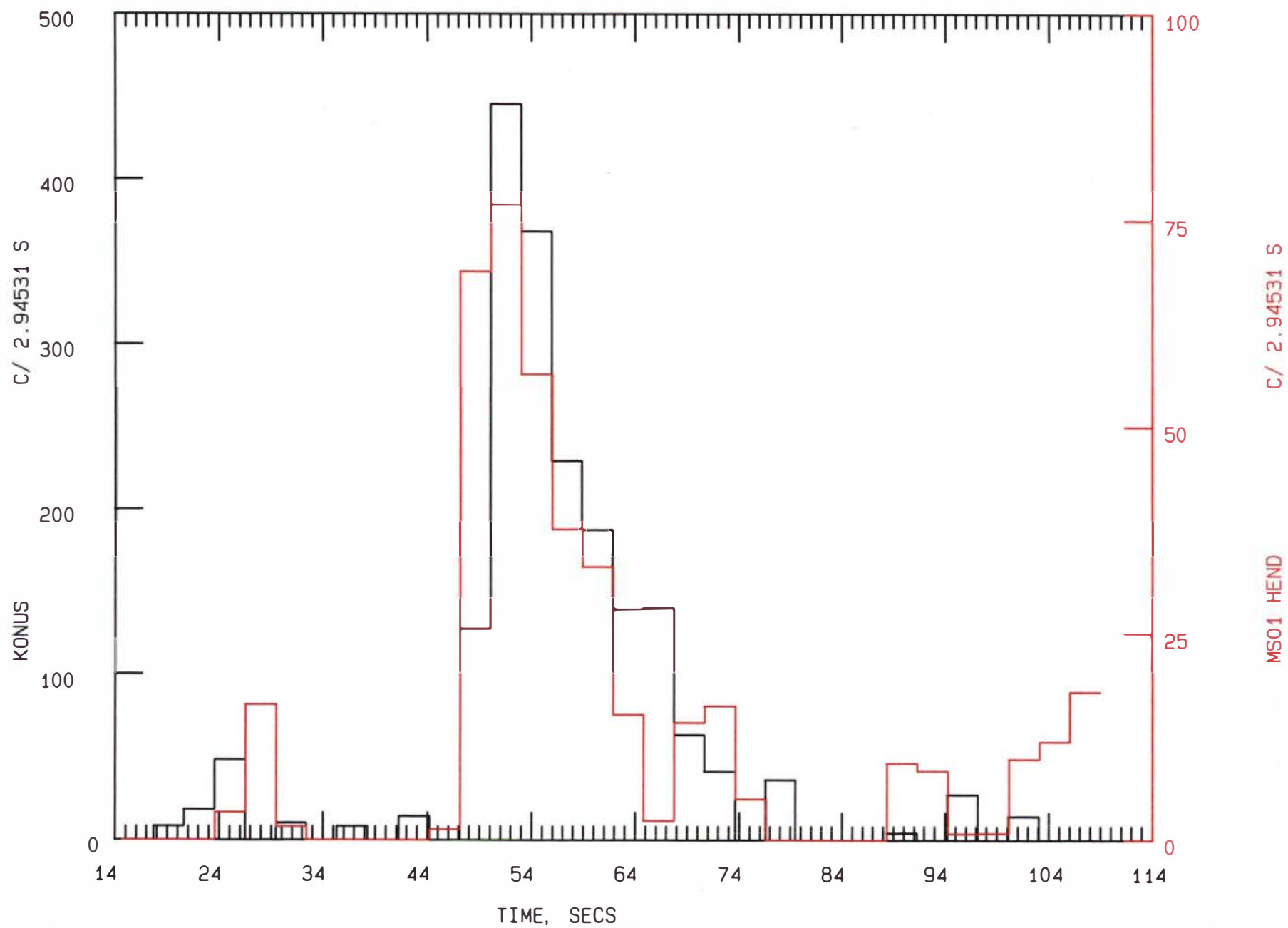
KONUS

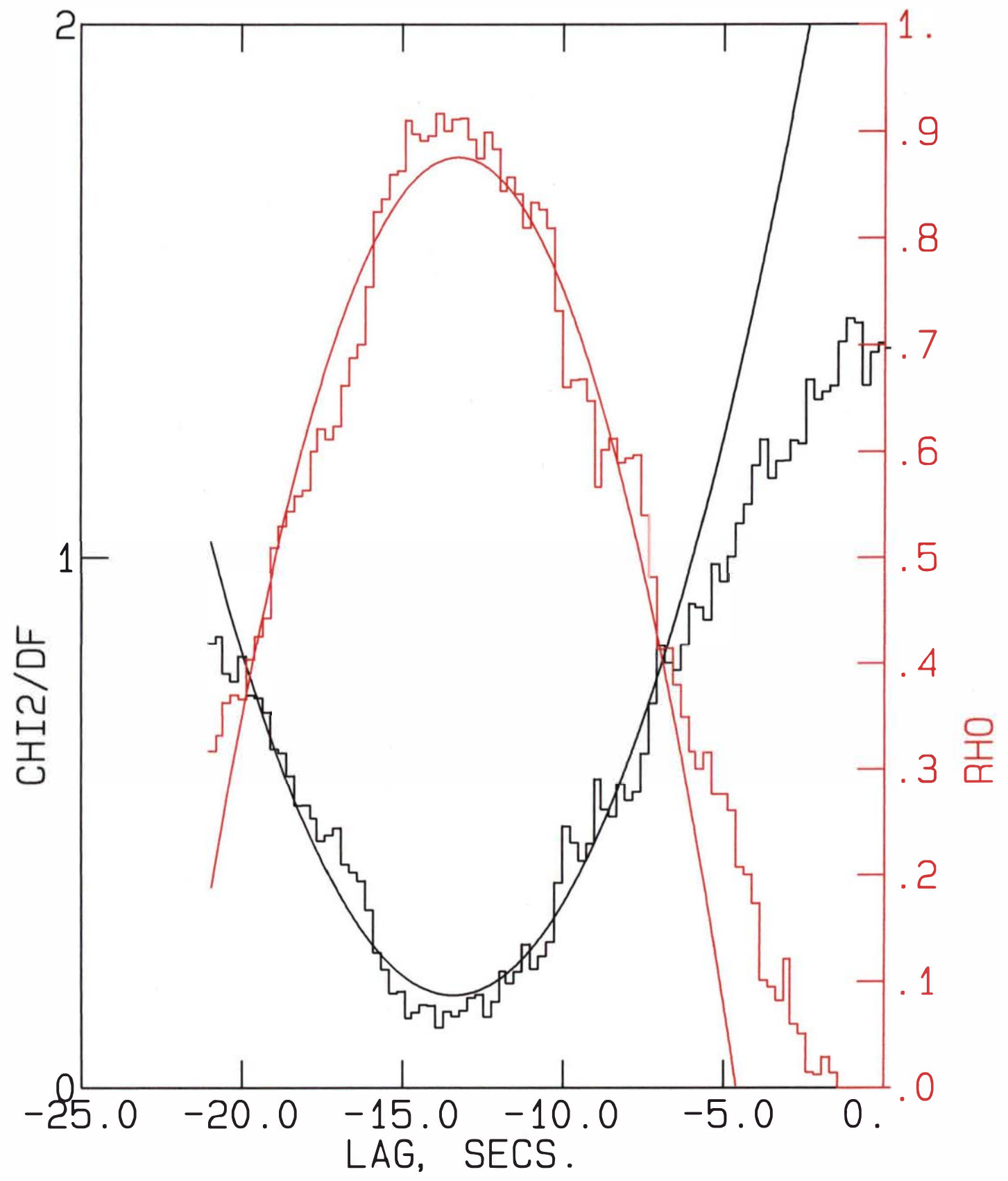
-MS01 HEND CORRELATION

06/10/05

54887.746

30/10/ 8



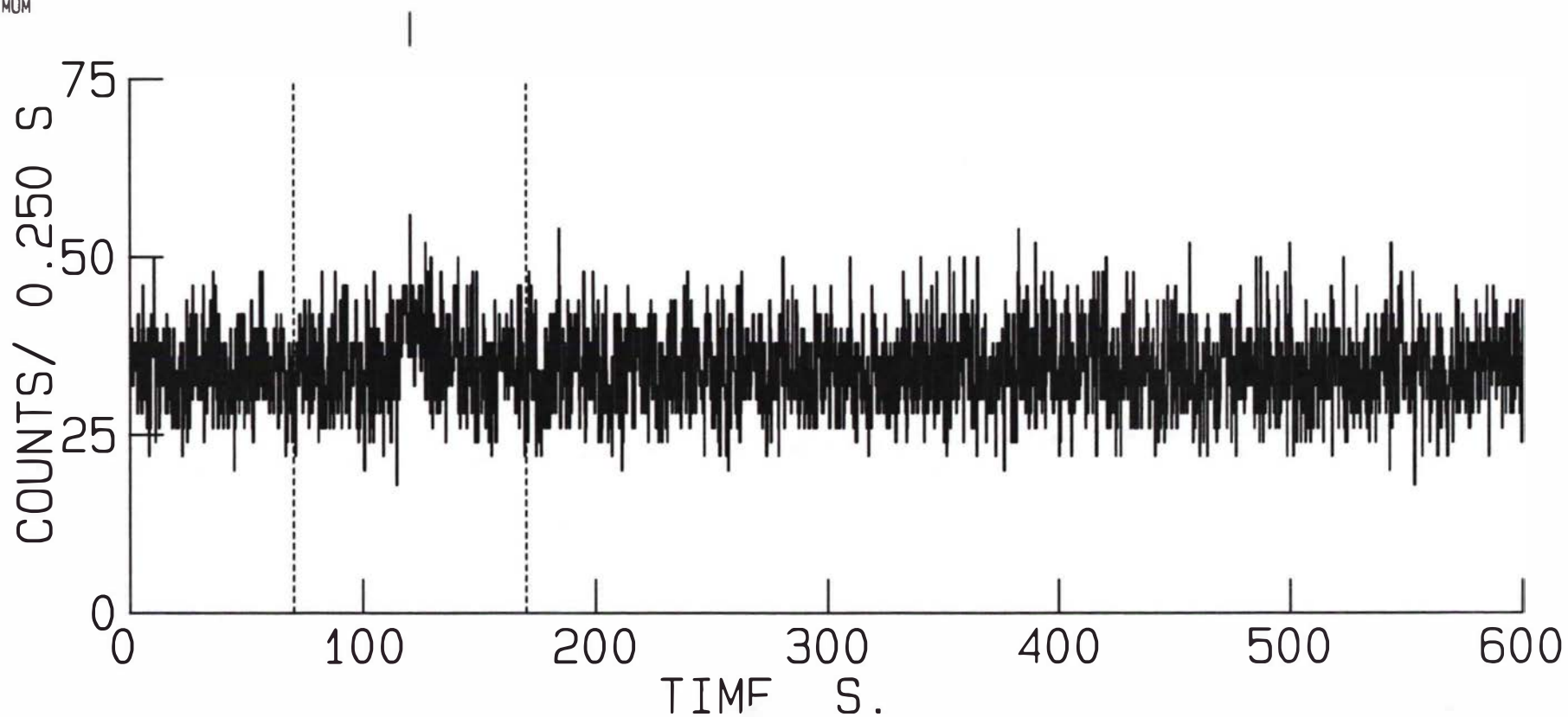


A

MS01 HEND
06/10/05 54699.609 s
50-3000 keV

30/10/08

MAXIMUM



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTOR 2 (konus_ri_20051006_54937)

BEG TIME: 06/10/05 DOY 279 Julian 2453651.13542 UT = 15.250 15:15:00 (54900.000 secs) [sct = 0019 c01e 29b6 630f]
 END TIME: 06/10/05 DOY 279 Julian 2453651.13625 UT = 15.270 15:16:12 (54972.000 secs) [sct = 0019 c01e 2e01 054c]

Chan 1:[E1=14 E2=103]

Chan 2:[E3=14 E4=77]

Chan 3:[E5=19 E6=511]

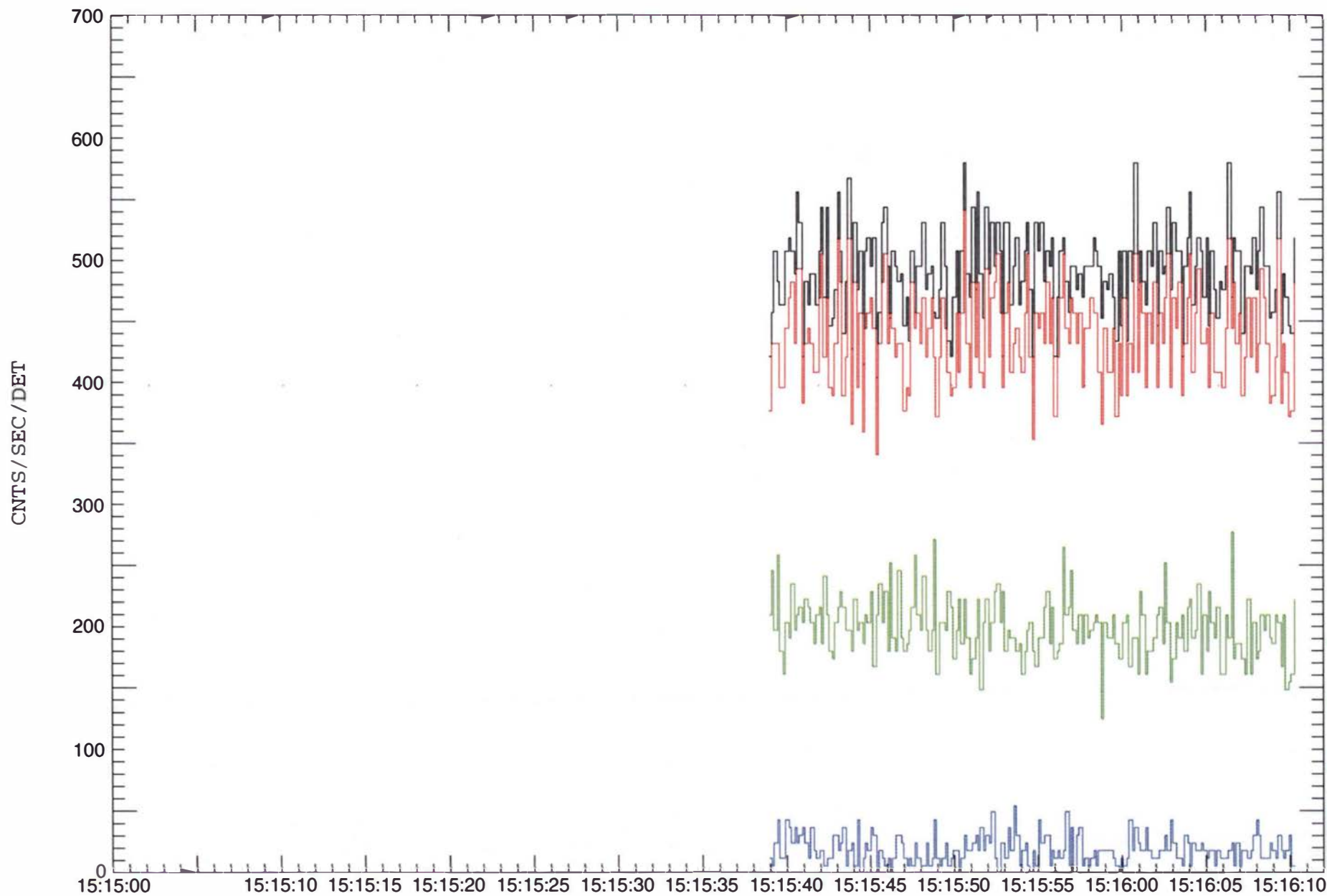
Chan 4:[E6=511 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



RS UT

A

KONUS

06/10/05 54784.707

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

3400

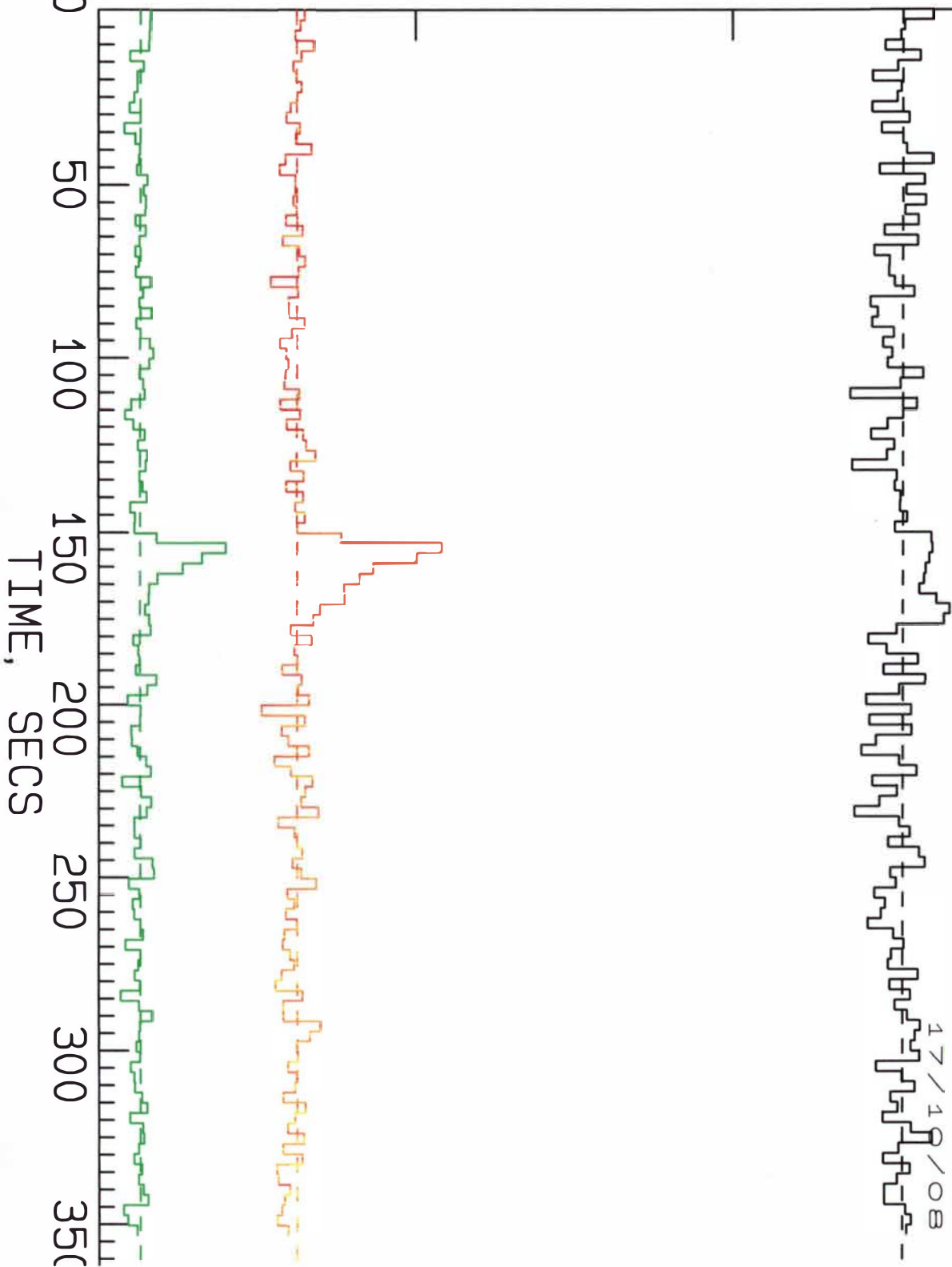
2400

1400

400

DETECTOR 1 - S. ECLIPTEIC

17/10/08



A

KONUS

06/10/05 54784.707

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

4300

3300

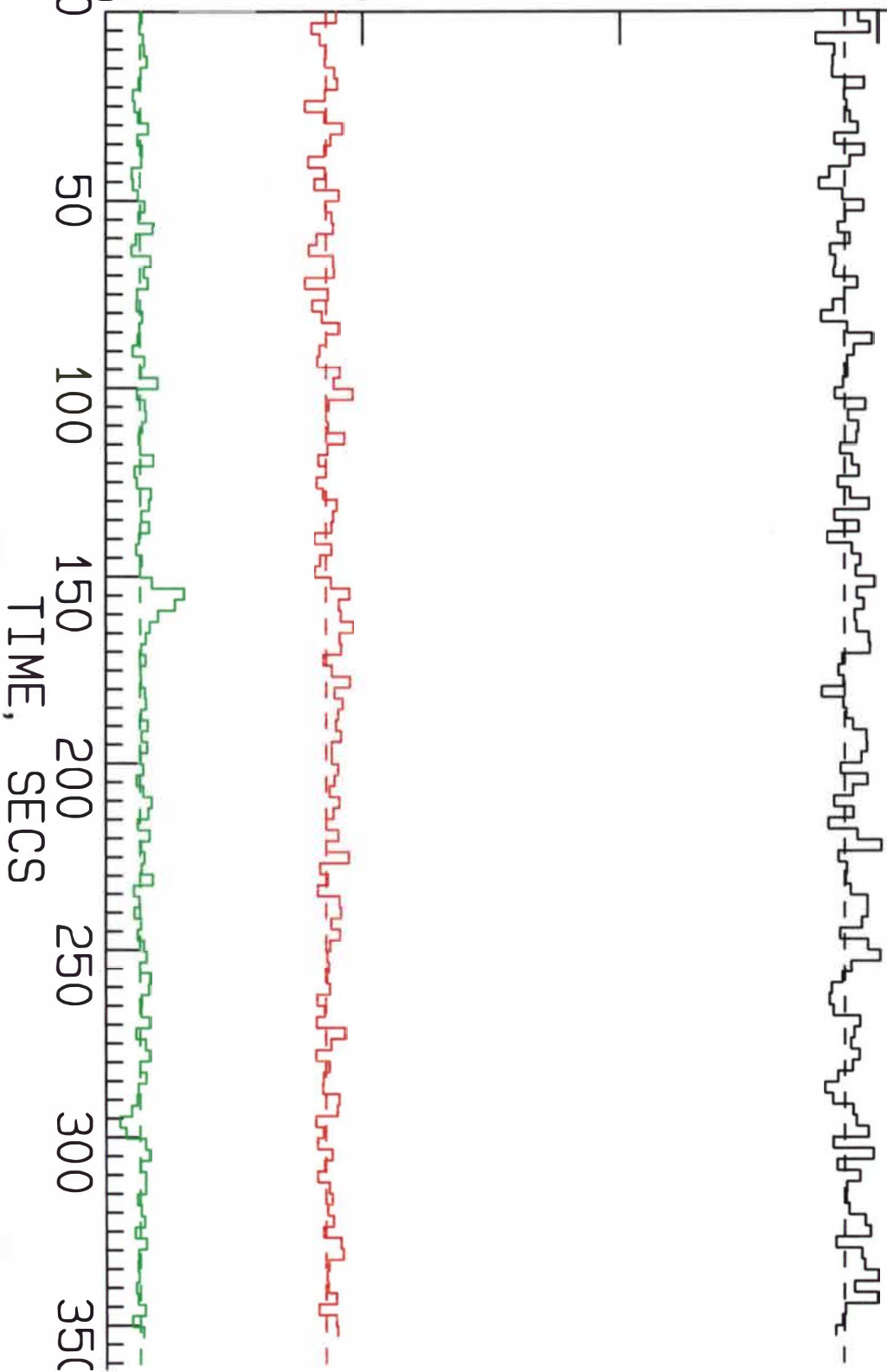
2300

1300

300

DETECTOR 2 - N. ECLIPIC

17/10/08



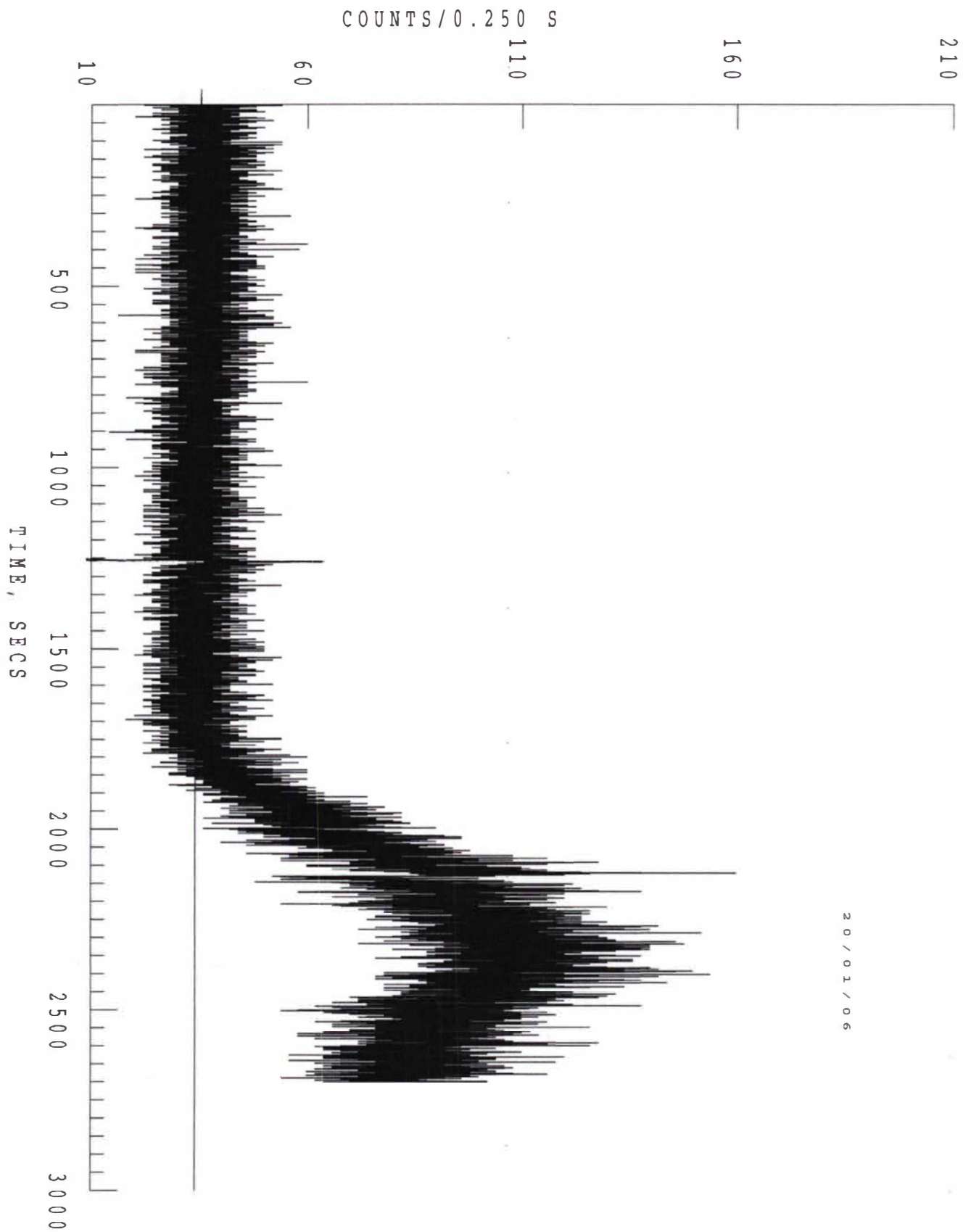
MS01

06/10/05

53559.629

A

50 - 3000 keV



A

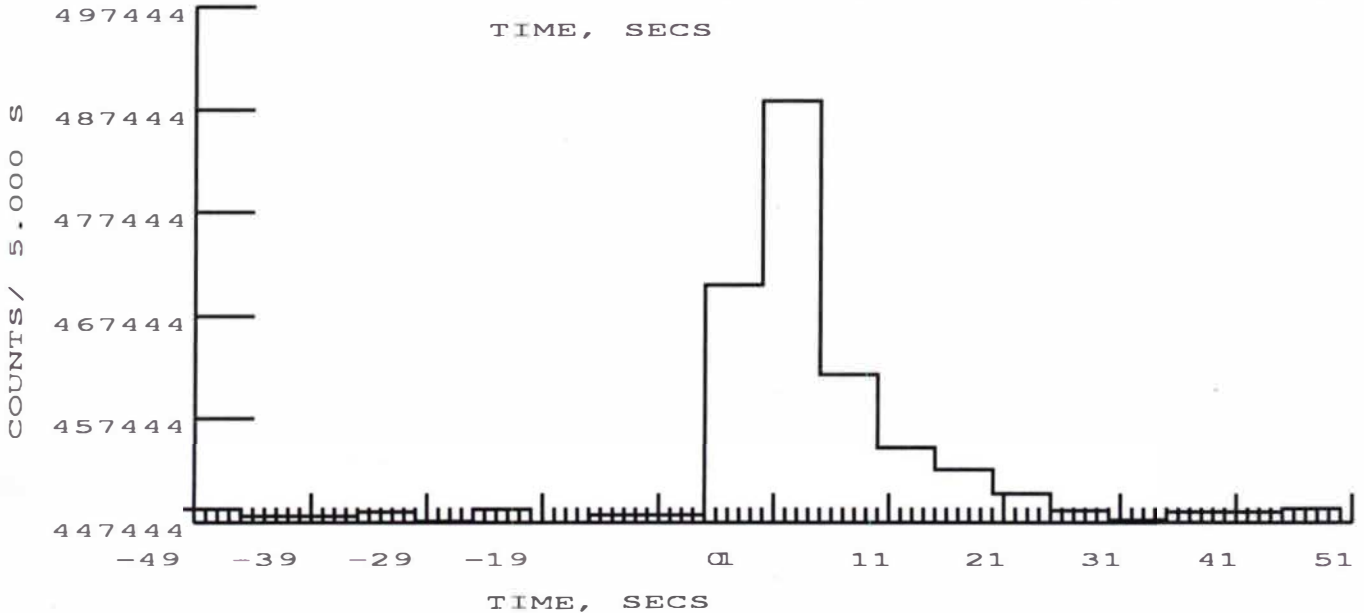
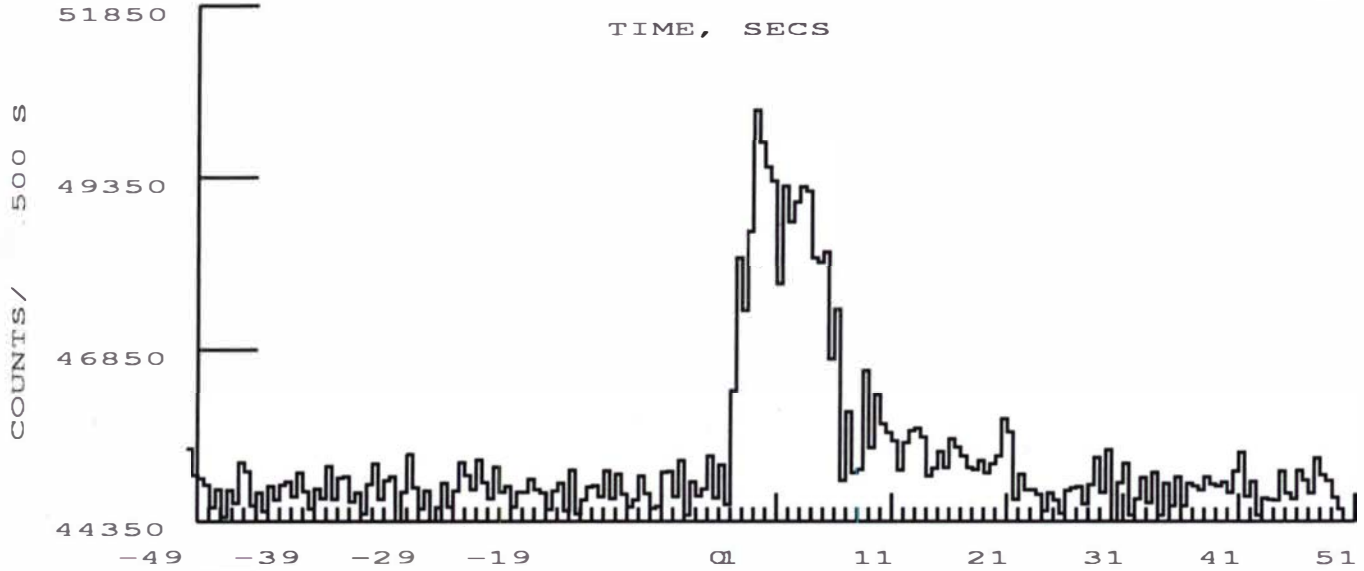
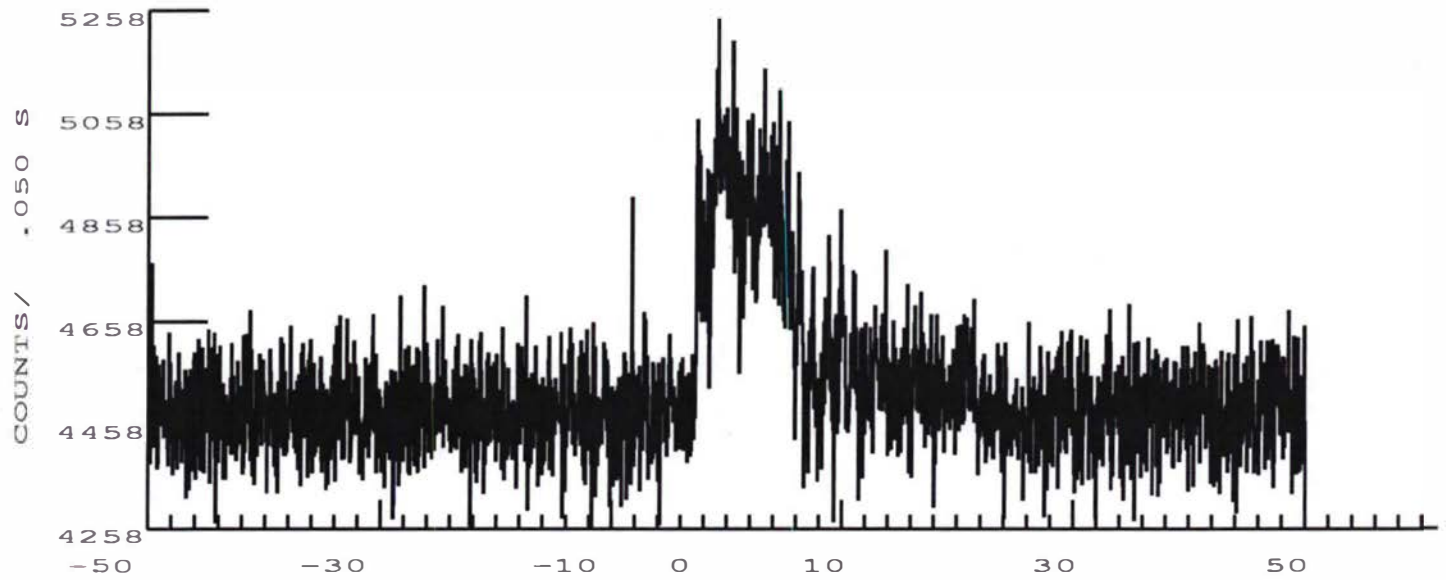
INTEGRAL

06/10/05

54937.000

15:15:37.0

27/01/14



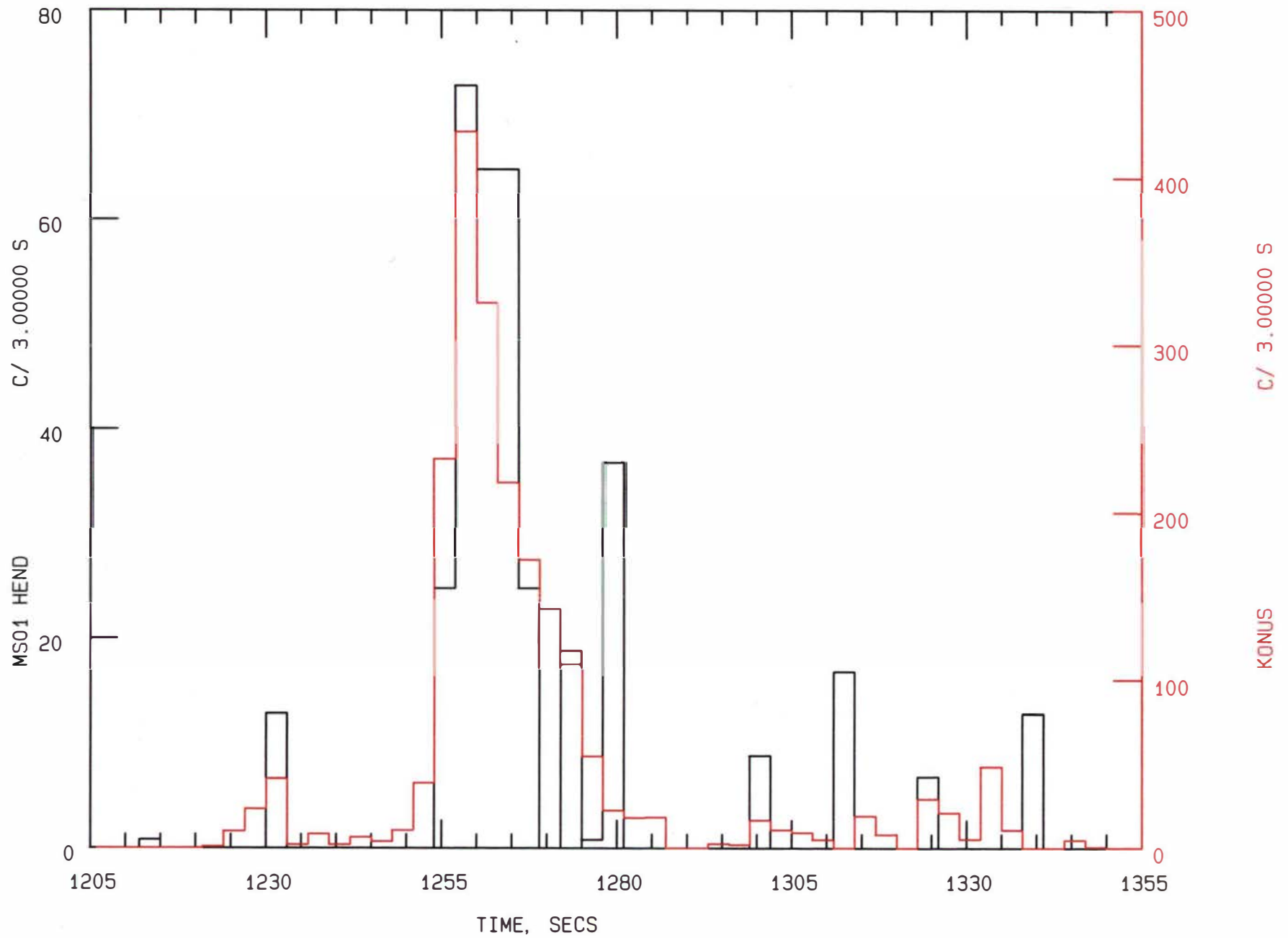
MS01 HEND -KONUS

CORRELATION

06/10/05

53559.629

28/10/ 8



4

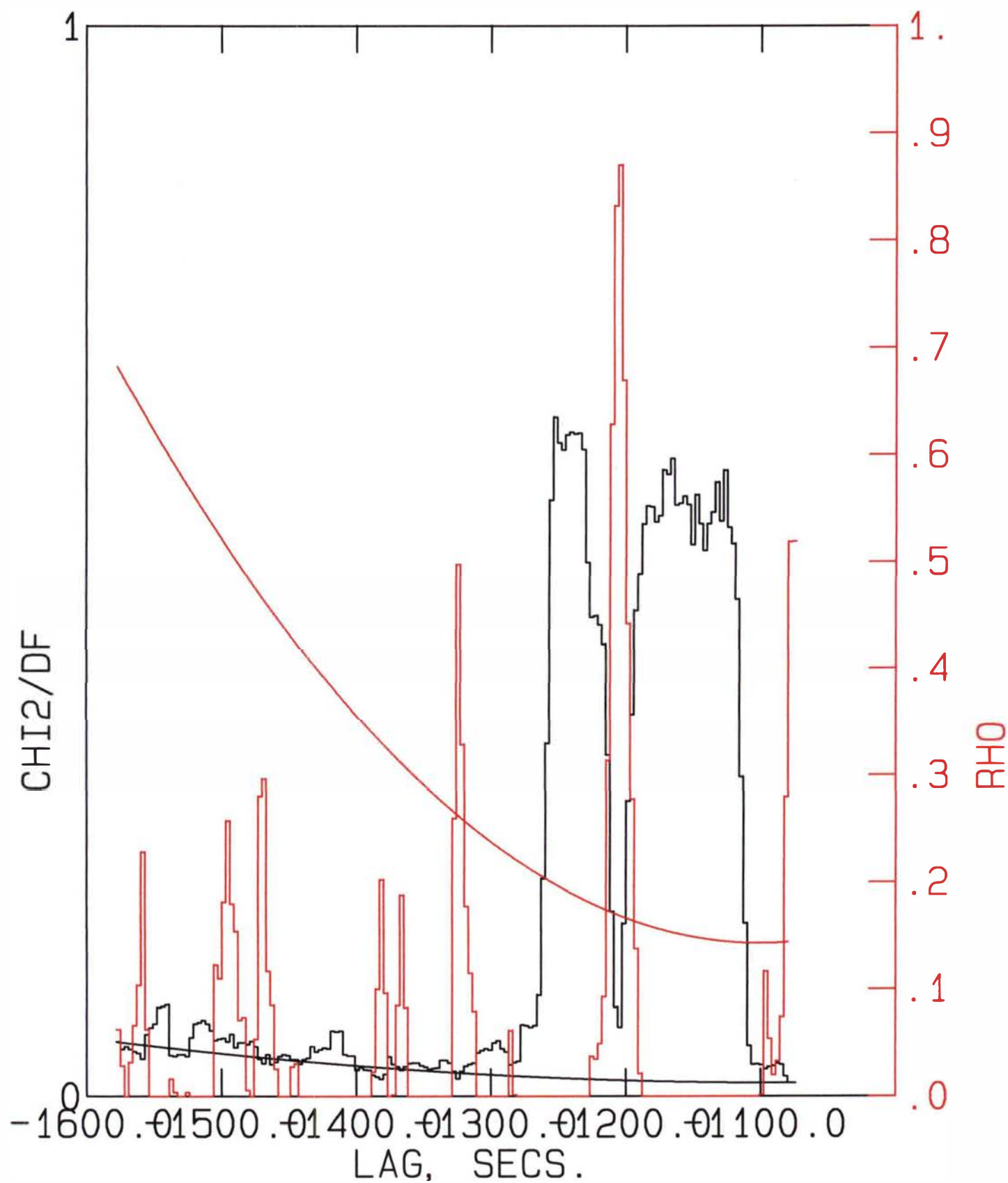
28/10/ 8

MS01 HEND -KONUS

CORRELATION

06/10/05

53559.629

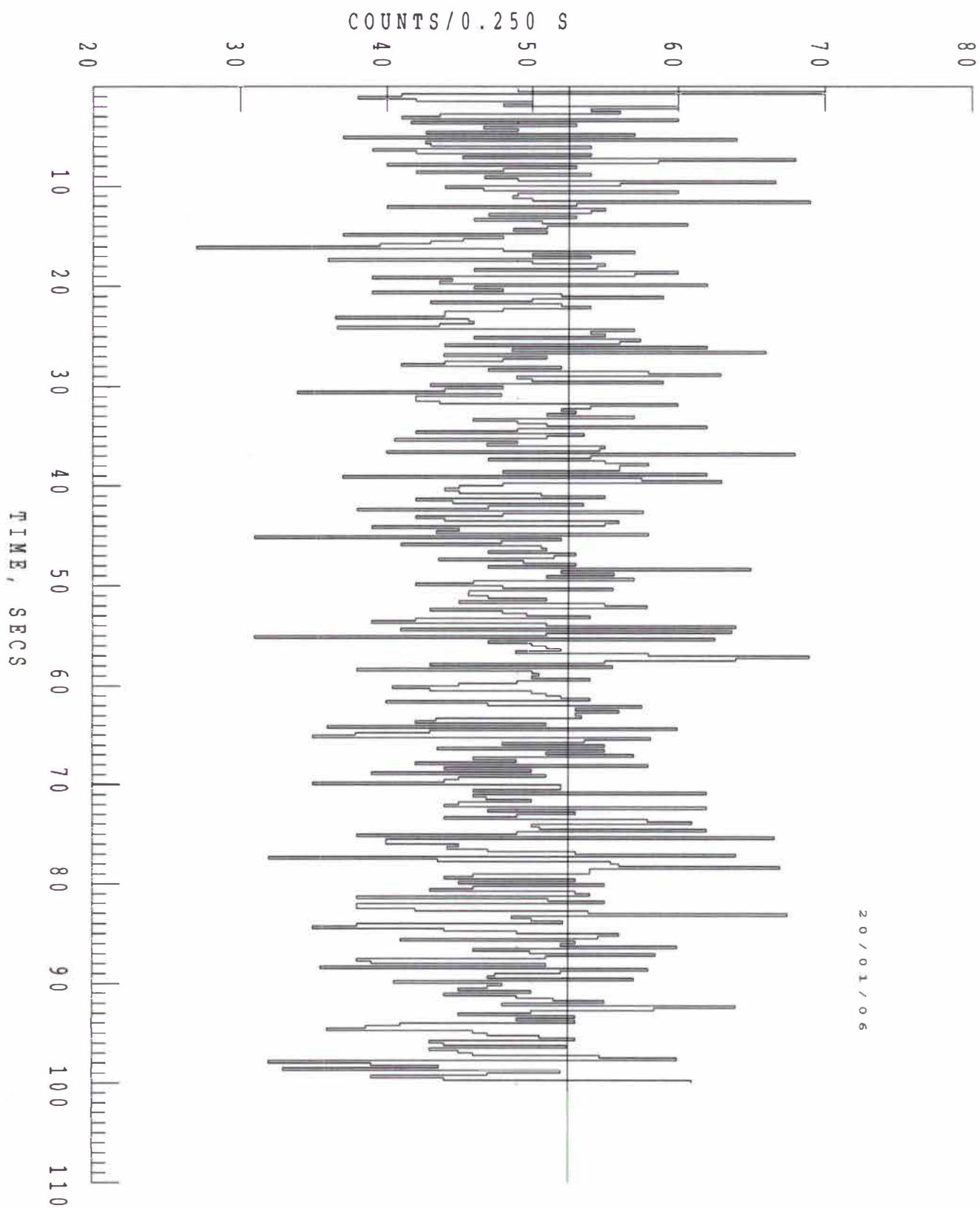


HESSI

06/10/05 54887.000 (konus_ri_20051006_54937)



50- 200 keV



Date: Nov 18 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☐ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

*Konus - Suzaku uncertainty ~ 7 s
No triang. possible
Konus EL added to ACCESS*

MS01

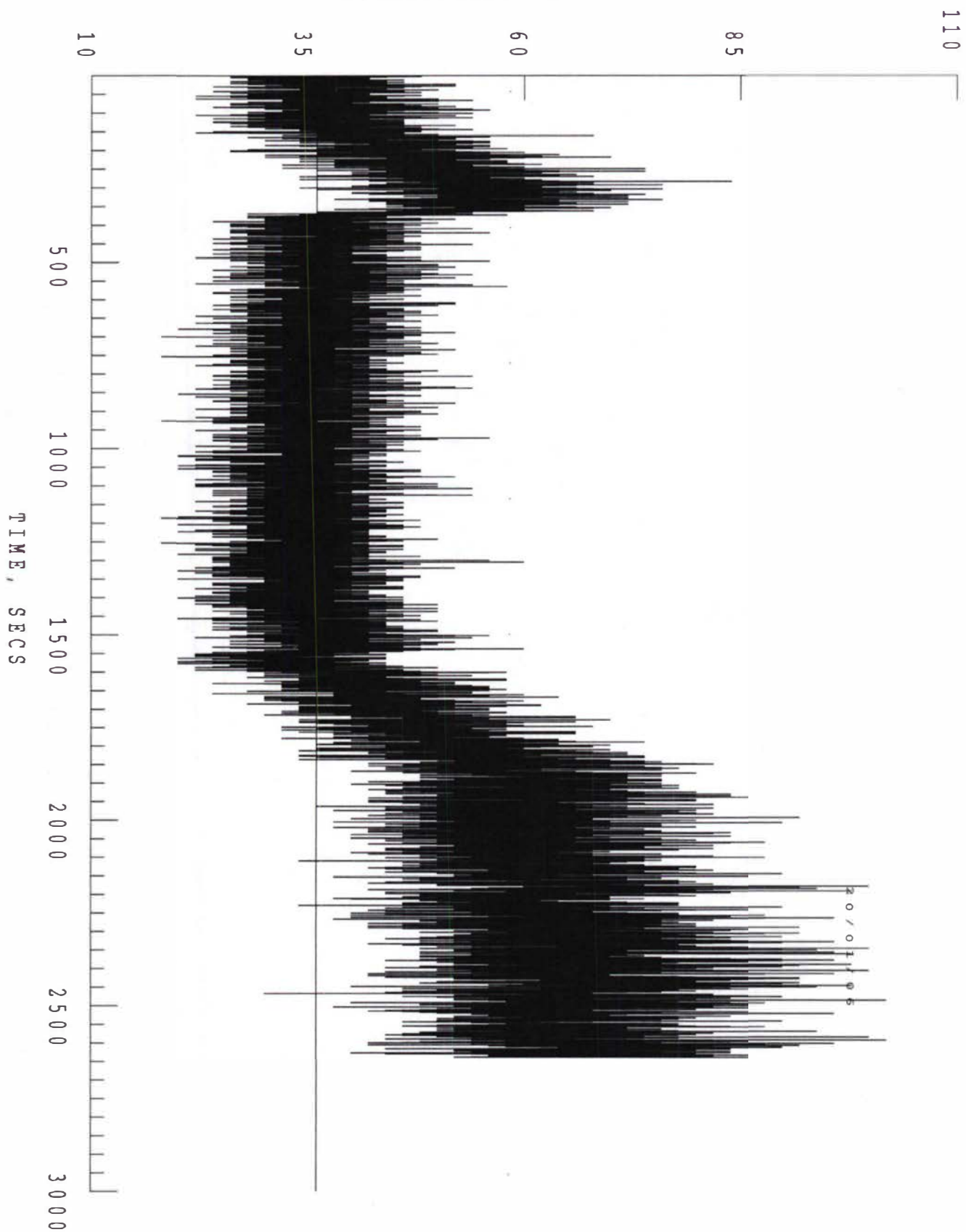
06/10/05

67659.386

B

50 - 3000 keV

COUNTS/0.250 S



KONUS

06/10/05 68862.914

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

3400

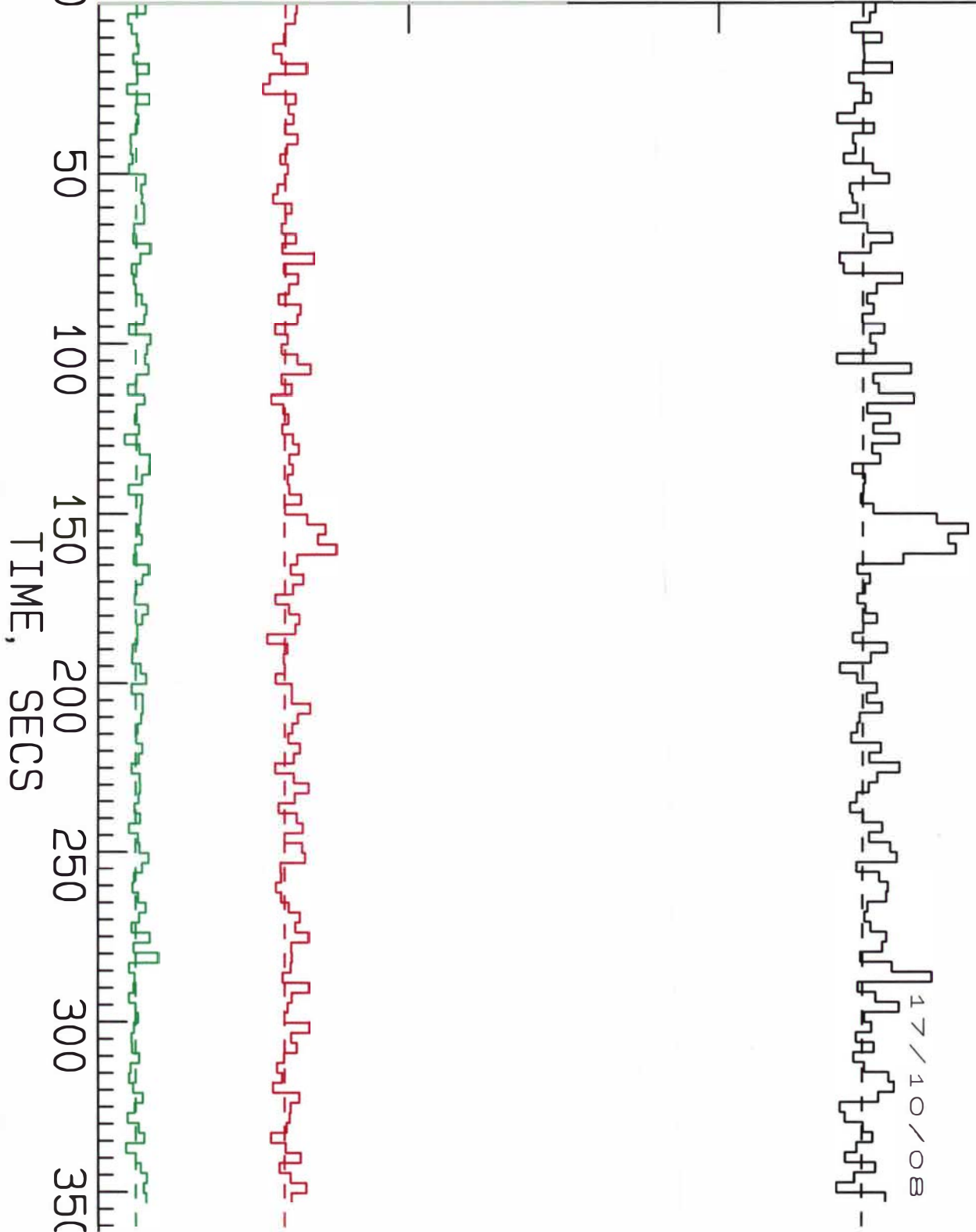
2400

1400

400

DETECTOR 1 - S. ECLIPTEIC

17/10/08



KONUS

06/10/05 68862.914

B

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

4300

3300

2300

1300

300

50

100

150

200

250

300

350

DETECTOR 2 - N. ECLIPHTIC

17/10/08

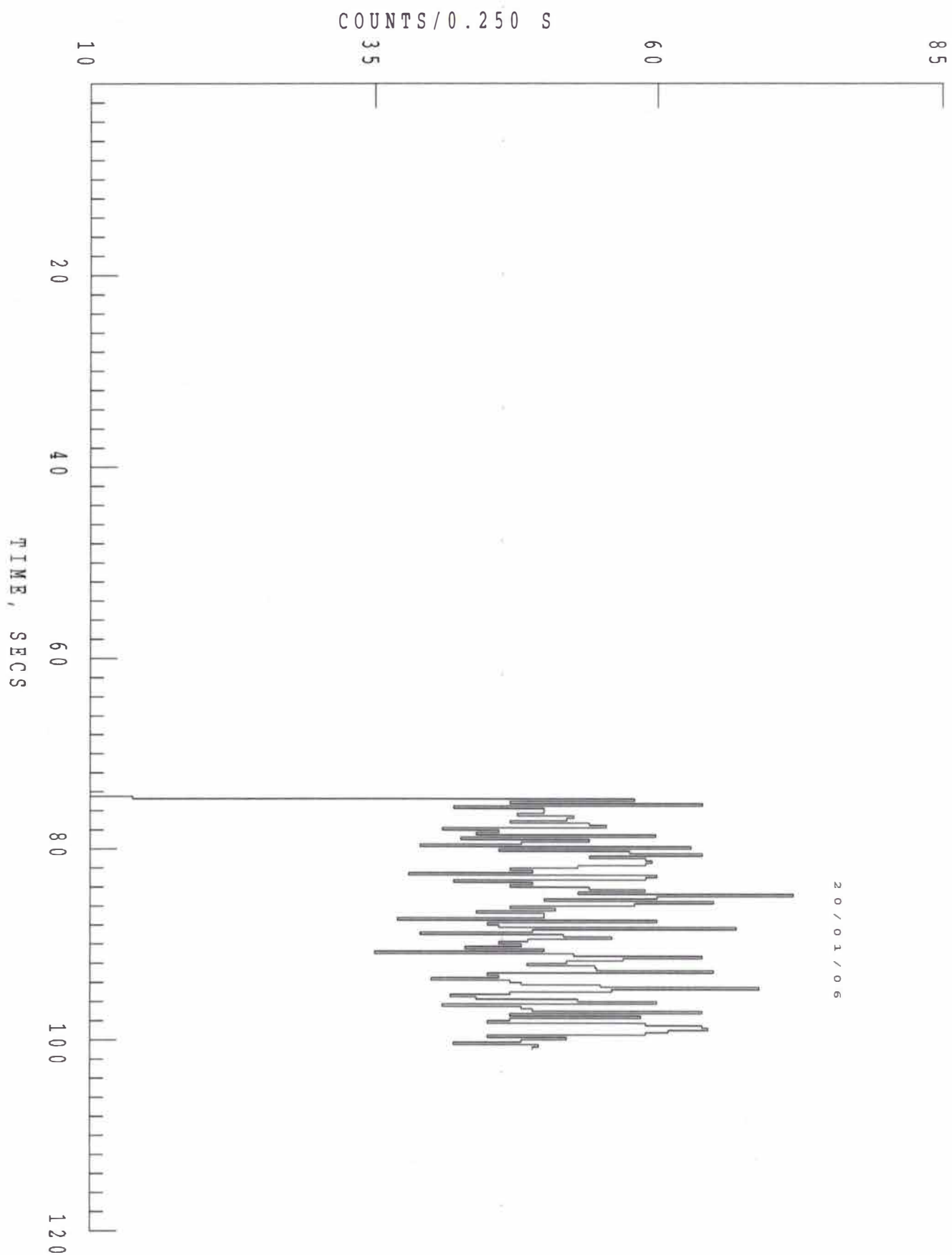
TIME, SECS

HESSI

06/10/05 68965.000 (KONUS_RI_20051006_69016)

B

50- 200 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (KONUS_RI_20051006_69524)

BEG TIME: 06/10/05 DOY 279 Julian 2453651.30250 UT = 19.260 19:15:36 (69336.000 secs) [sct = 0019 c021 862a 741b]
 END TIME: 06/10/05 DOY 279 Julian 2453651.30708 UT = 19.370 19:22:12 (69732.000 secs) [sct = 0019 c021 9dc4 f06c]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

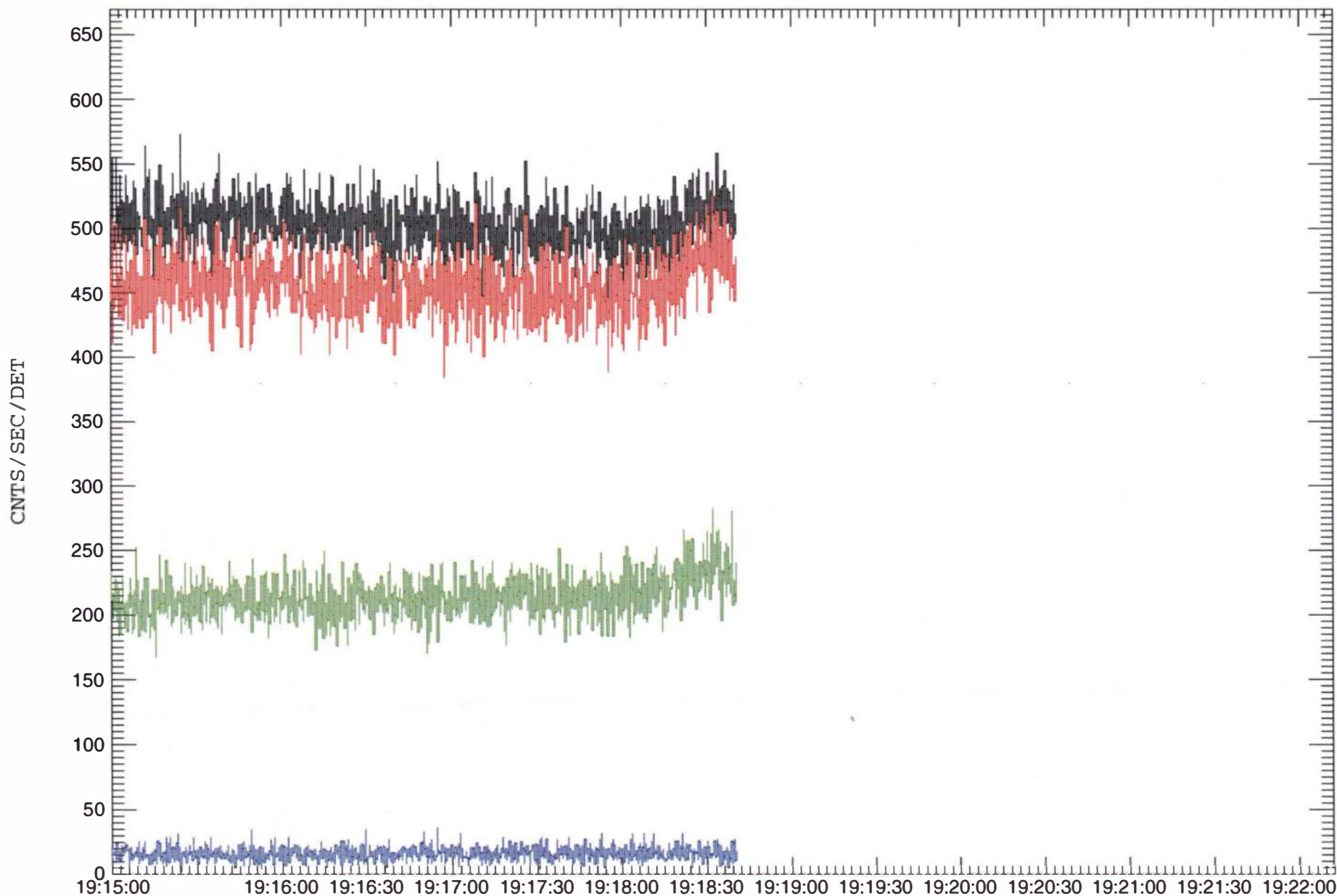
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



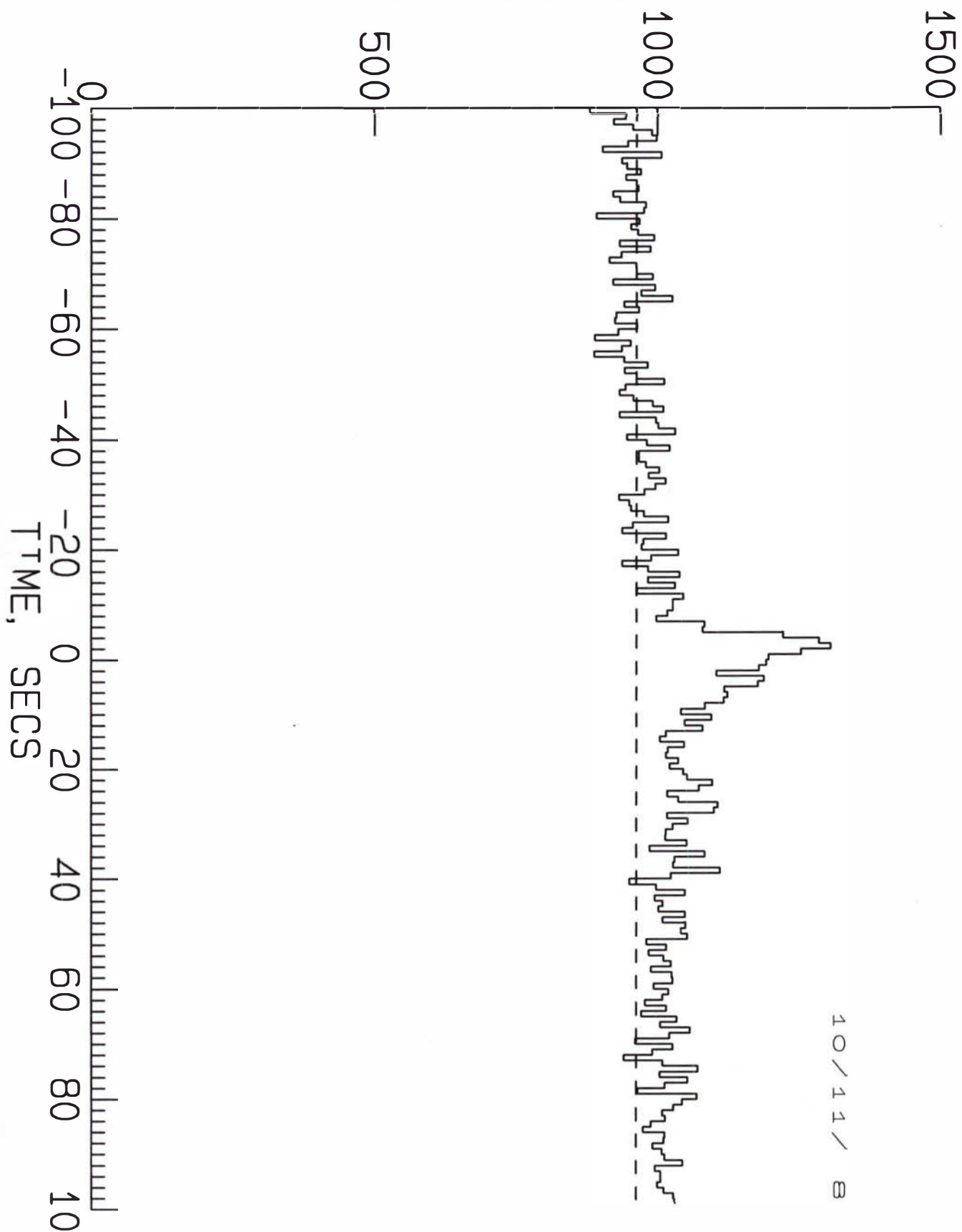
RS UT

SUZAKU

06/10/05 69016.496

50- 240 keV

COUNTS/1.000 S



KONUS

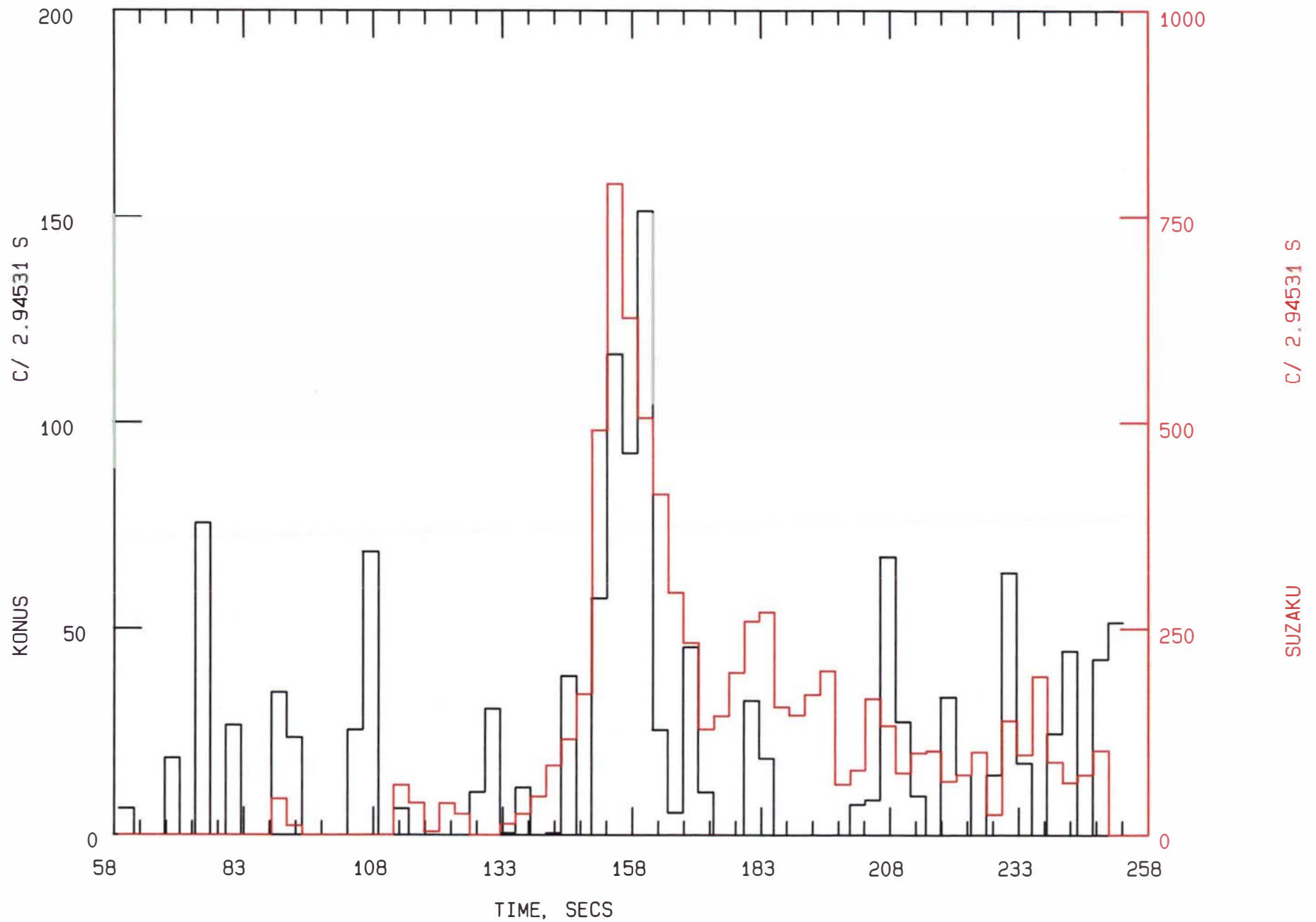
-SUZAKU

CORRELATION

06/10/05

68862.914

18/11/ 8



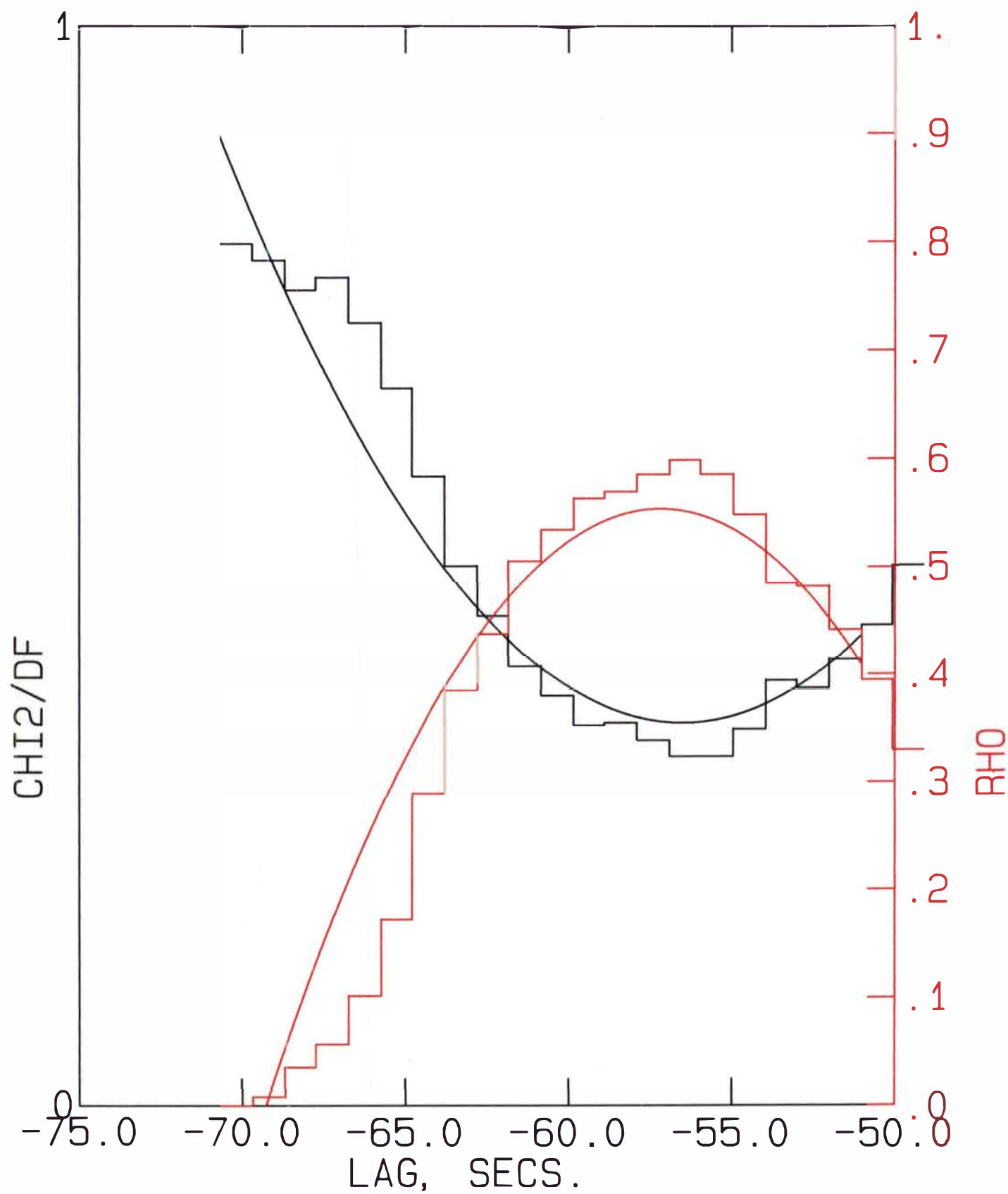
KONUS

-SUZAKU

CORRELATION

06/10/05

68862.914



Date: Nov 18 '08

BURST TRIANGULATION CHECKLIST

I. Ulysses Data

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☐ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

*Konus - Suzaku uncertainty ~ 4.3 s
Triangulation not possible
Konus EL added to ACCESS*

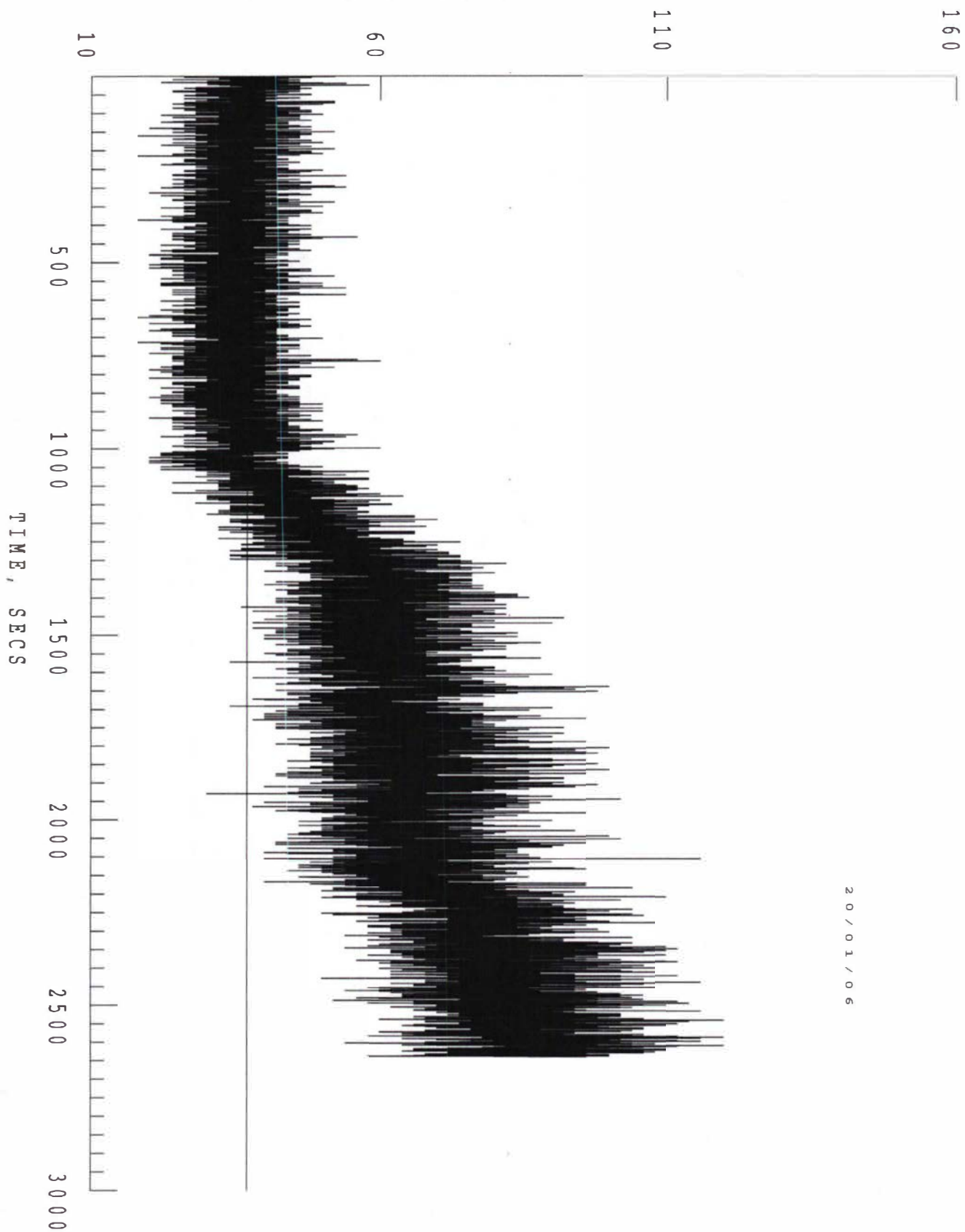
MS01

06/10/05

68199.379

50 - 3000 keV

COUNTS/0.250 S



20/01/06

c

KONUS

06/10/05 69372.227

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

4300

3300

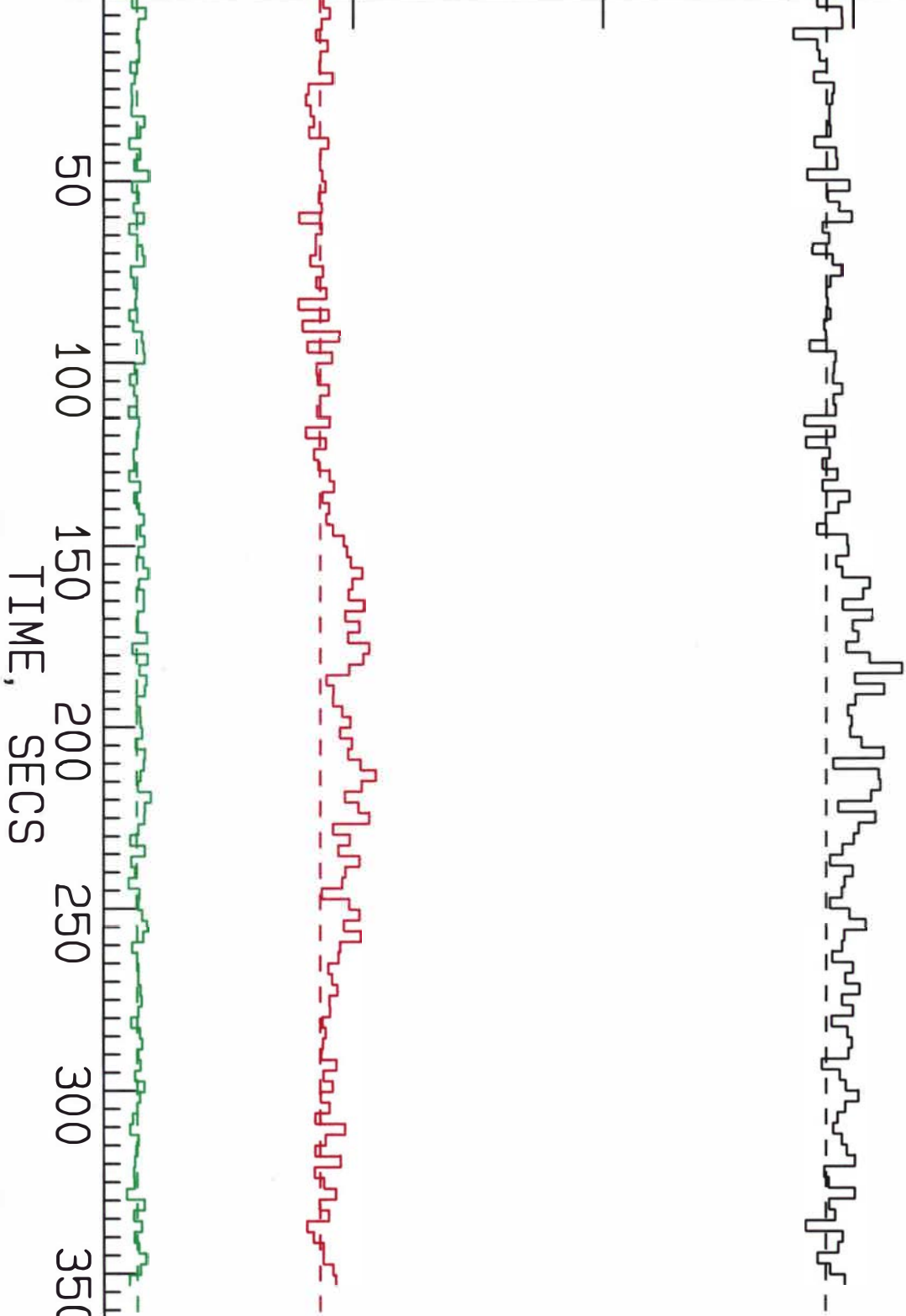
2300

1300

300

DETECTOR 2 - N. ECLIPTIC

17 / 10 / 08



c

KONUS

06/10/05 69372.227

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

3400

DETECTOR 1 - S. ECLIPTEIC

17/10/08

2400

1400

400

50

100

150

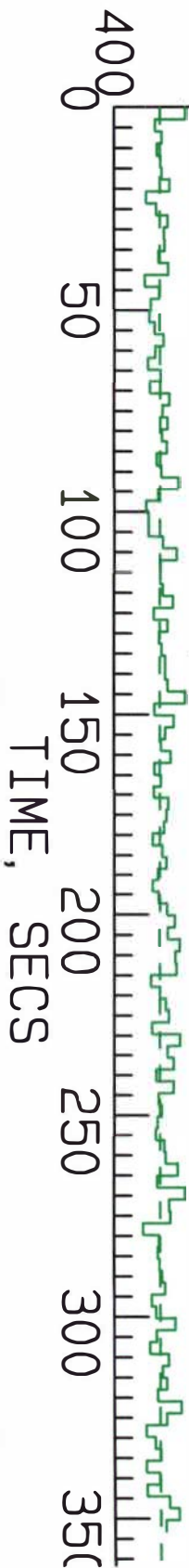
200

250

300

350

TIME, SECS

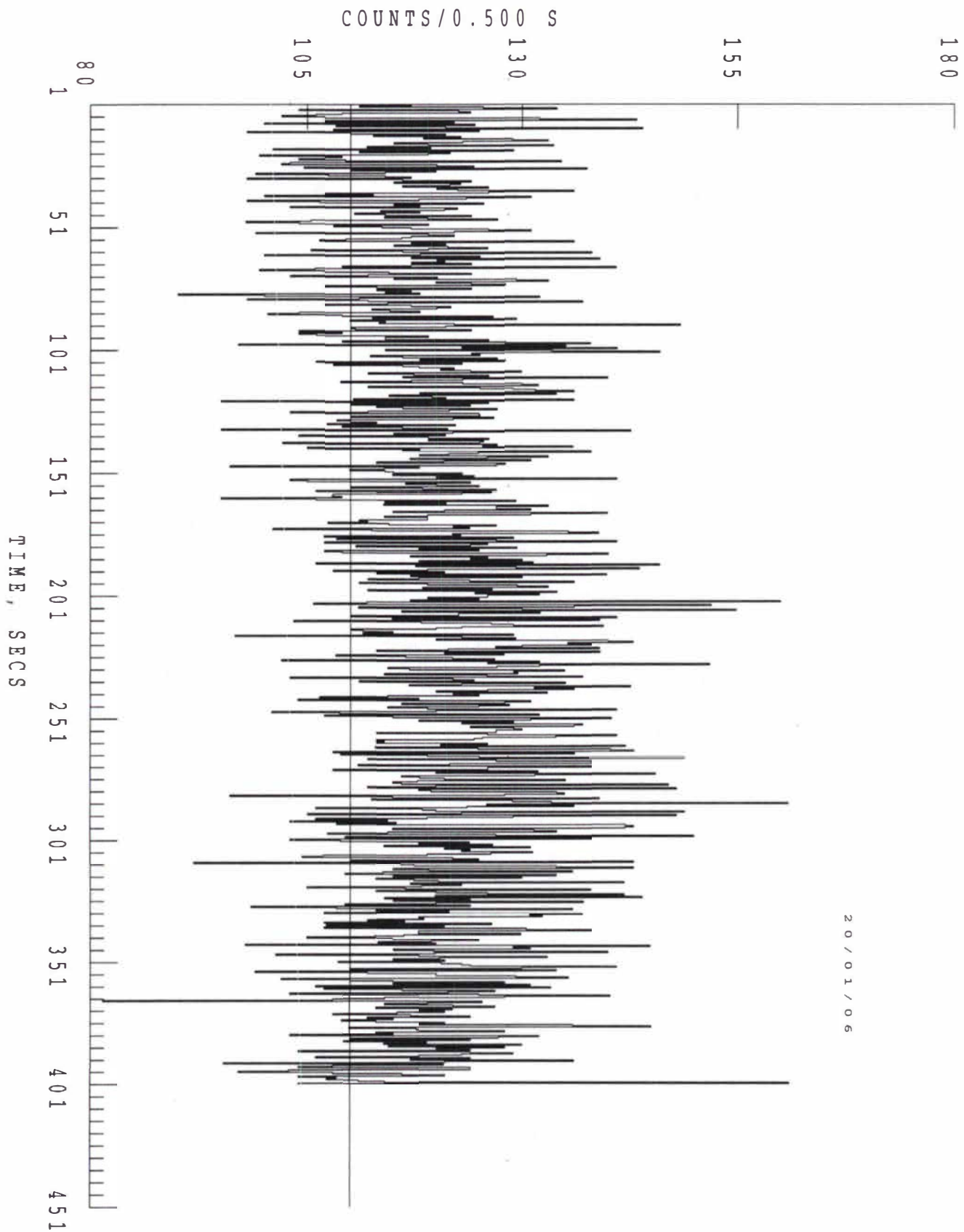


HESSI

06/10/05 69323.000 (KONUS_RI_20051006_69524)

C

25- 150 keV



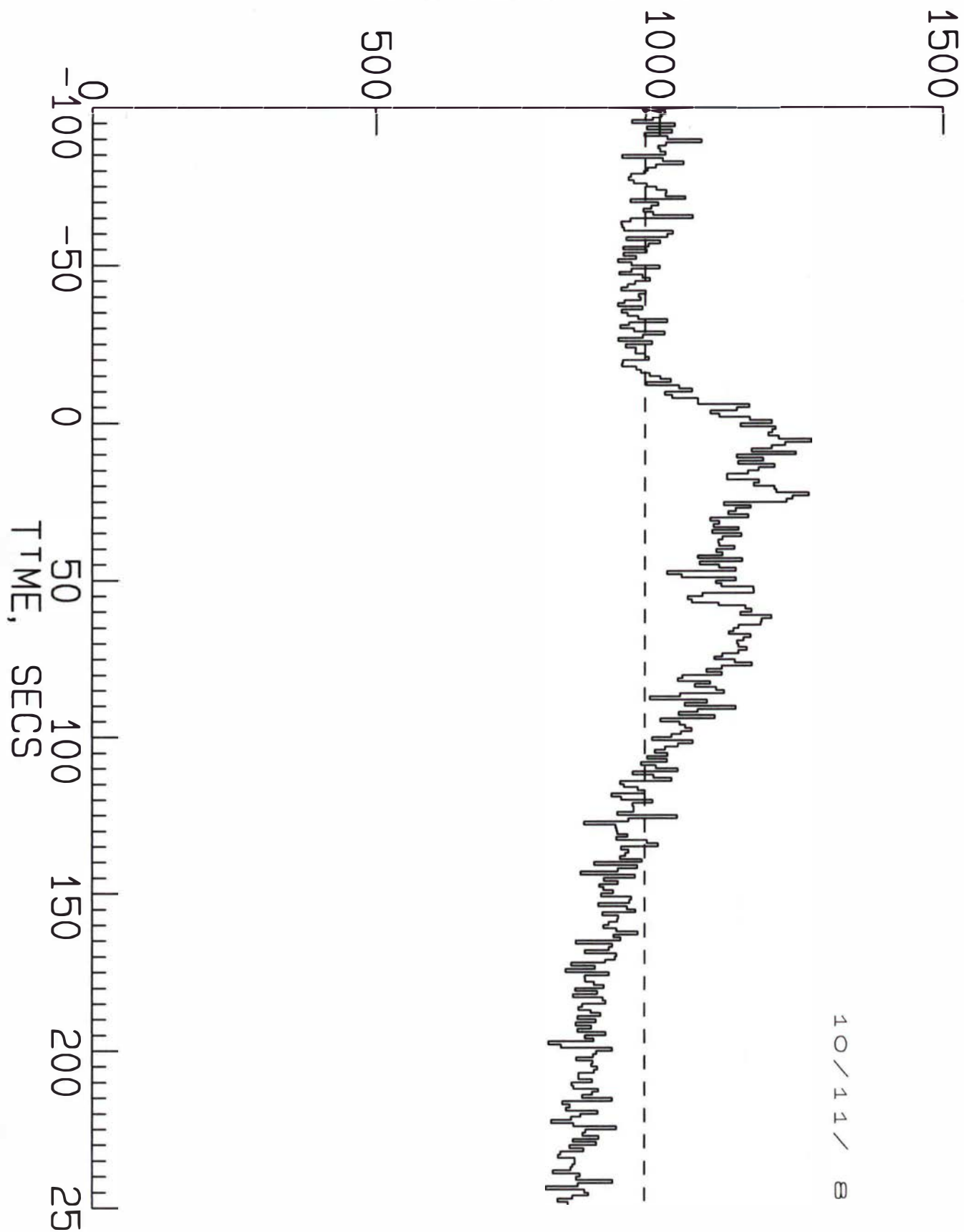
SUZAKU

06/10/05 69524.496

50- 240 keV

19:18:44

COUNTS/1.000 S



KONUS

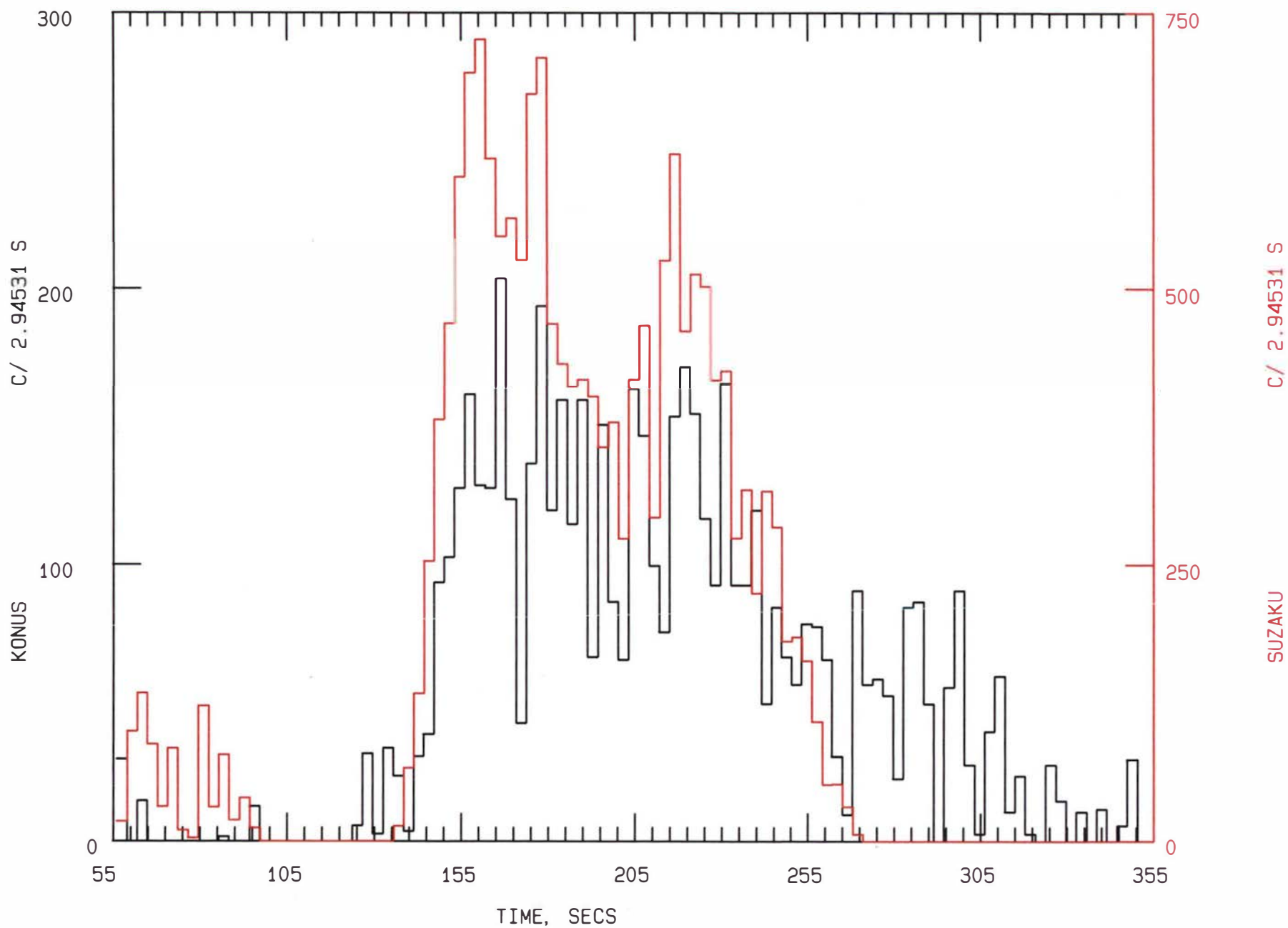
-SUZAKU

CORRELATION

06/10/05

69372.227

18/11/ 8



C

18/11/ 8

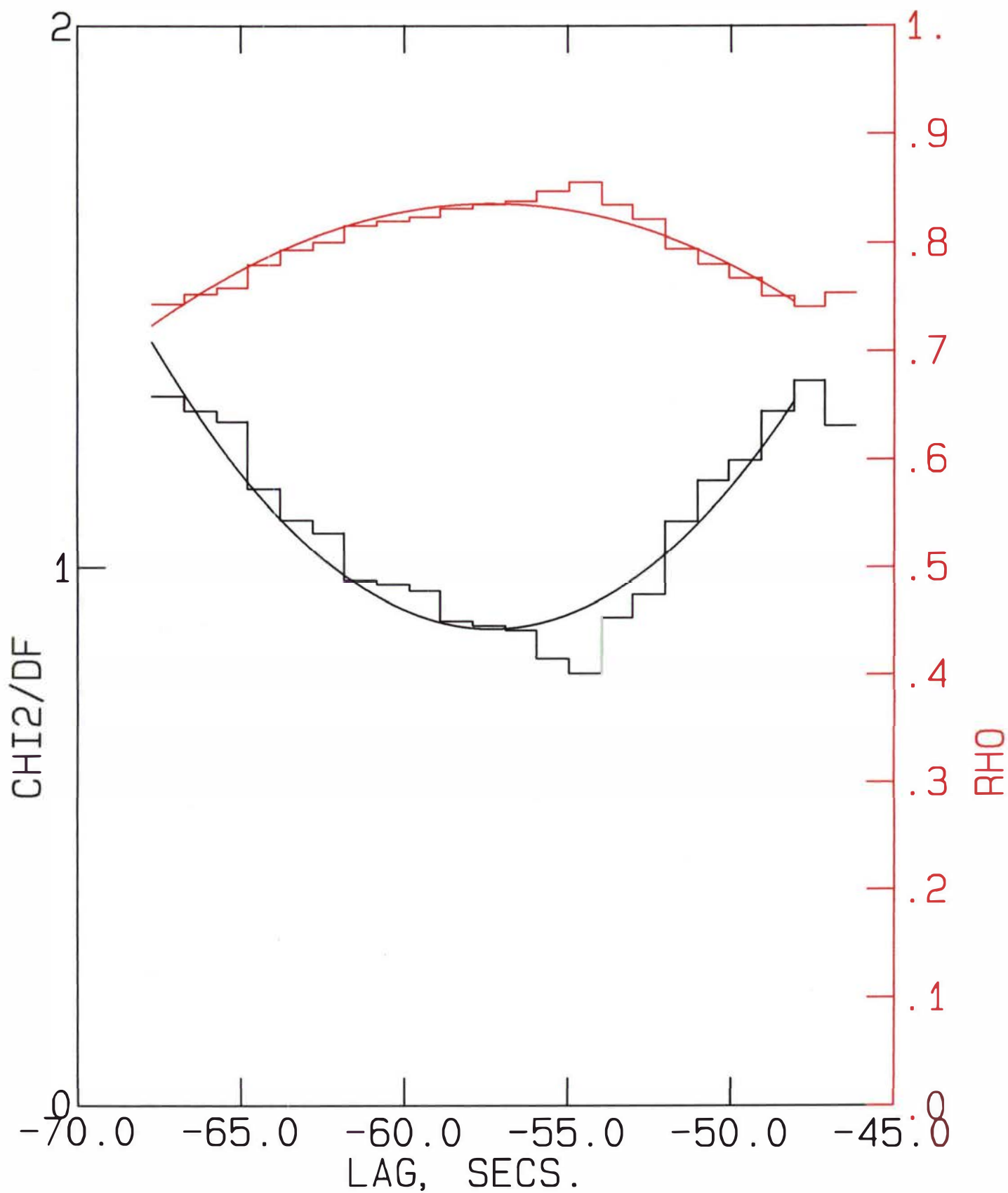
KONUS

-SUZAKU

CORRELATION

06/10/05

69372.227



D

From vxw@capella.gsfc.nasa.gov Thu Oct 6 13:34:18 2005
X-ASG-Debug-ID: 1128630884-24542-17-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Thu, 6 Oct 2005 16:34:44 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/SWIFT_BAT_LIGHTCURVE
Subject: GCN/SWIFT_BAT_LIGHTCURVE
Mime-Version: 1.0
Content-Disposition: inline
User-Agent: Mutt/1.4.2.1i
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

3A.8s

$1.34 \times 10^{-6} \text{ erg/cm}^2$

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Thu 06 Oct 05 20:34:13 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 158593, Seg_Num: 0
GRB_RA: 110.830d {+07h 23m 19s} (J2000),
110.909d {+07h 23m 38s} (current),
110.145d {+07h 20m 35s} (1950)
GRB_DEC: +9.531d {+09d 31' 50"} (J2000),
+9.519d {+09d 31' 09"} (current),
+9.628d {+09d 37' 41"} (1950)
GRB_DATE: 13649 TJD; 279 DOY; 05/10/06
GRB_TIME: 73833.25 SOD {20:30:33.25} UT
TRIGGER_INDEX: 307
RB_PHI: 120.81 [deg]
GRB_THETA: 35.80 [deg]
DELTA_TIME: 57.00 [sec]
TRIGGER_DUR: 4.096 [sec]
LC_URL: sw00158593000msb.lc
SUN_POSTN: 192.59d {+12h 50m 22s} -5.40d {-05d 23' 54"}
SUN_DIST: 82.74 [deg]
MOON_POSTN: 230.83d {+15h 23m 18s} -22.10d {-22d 05' 50"}
MOON_DIST: 121.20 [deg]
MOON_ILLUM: 12 [%]
GAL_COORDS: 207.96, 11.37 [deg] galactic lon,lat of the pointing direction
ECL_COORDS: 111.04, -12.40 [deg] ecliptic lon,lat of the pointing direction
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.

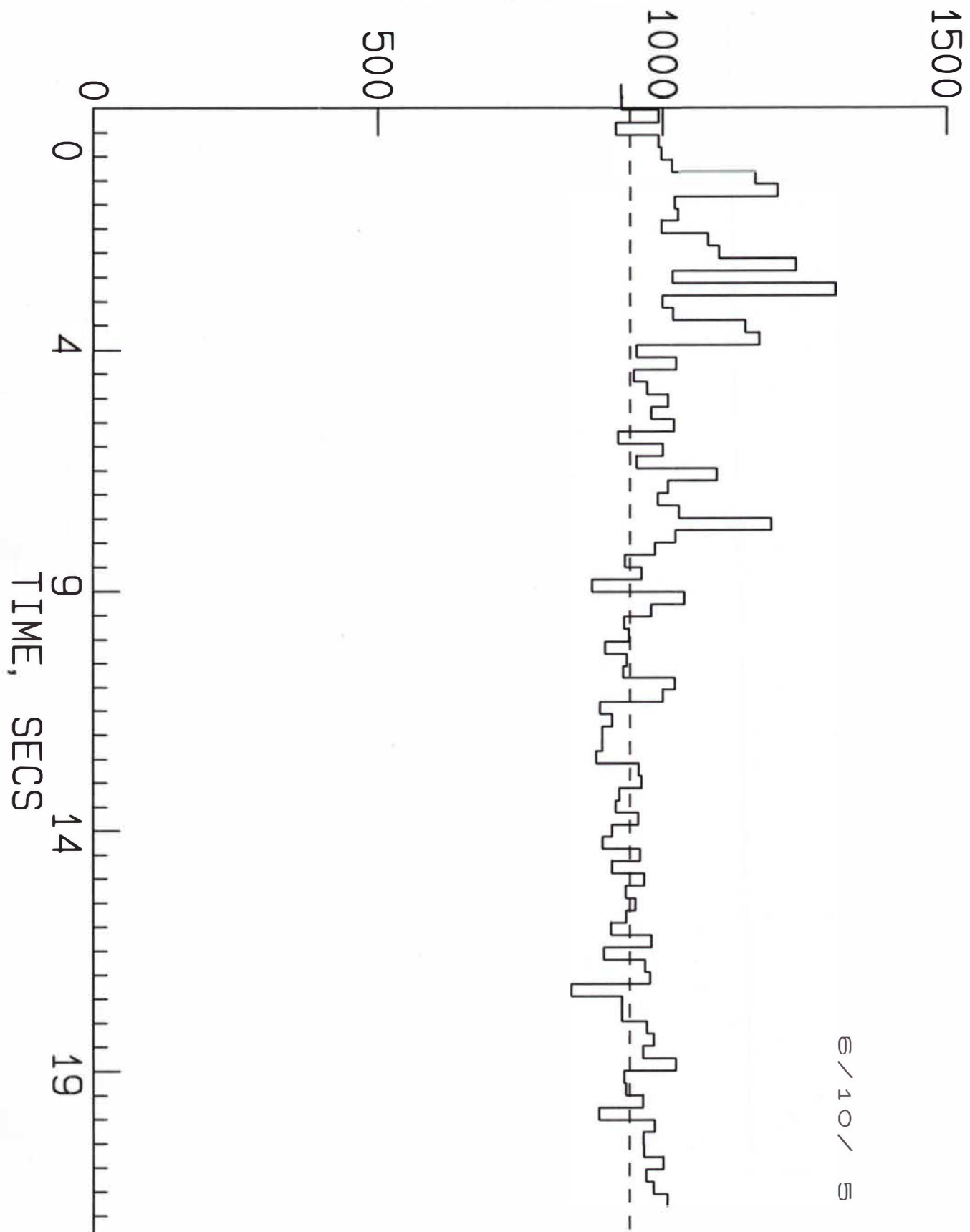
Added to ACCESS

SWIFT

06/10/05 73833.256

25- 100 keV

COUNTS/0.256 S



6/10/5

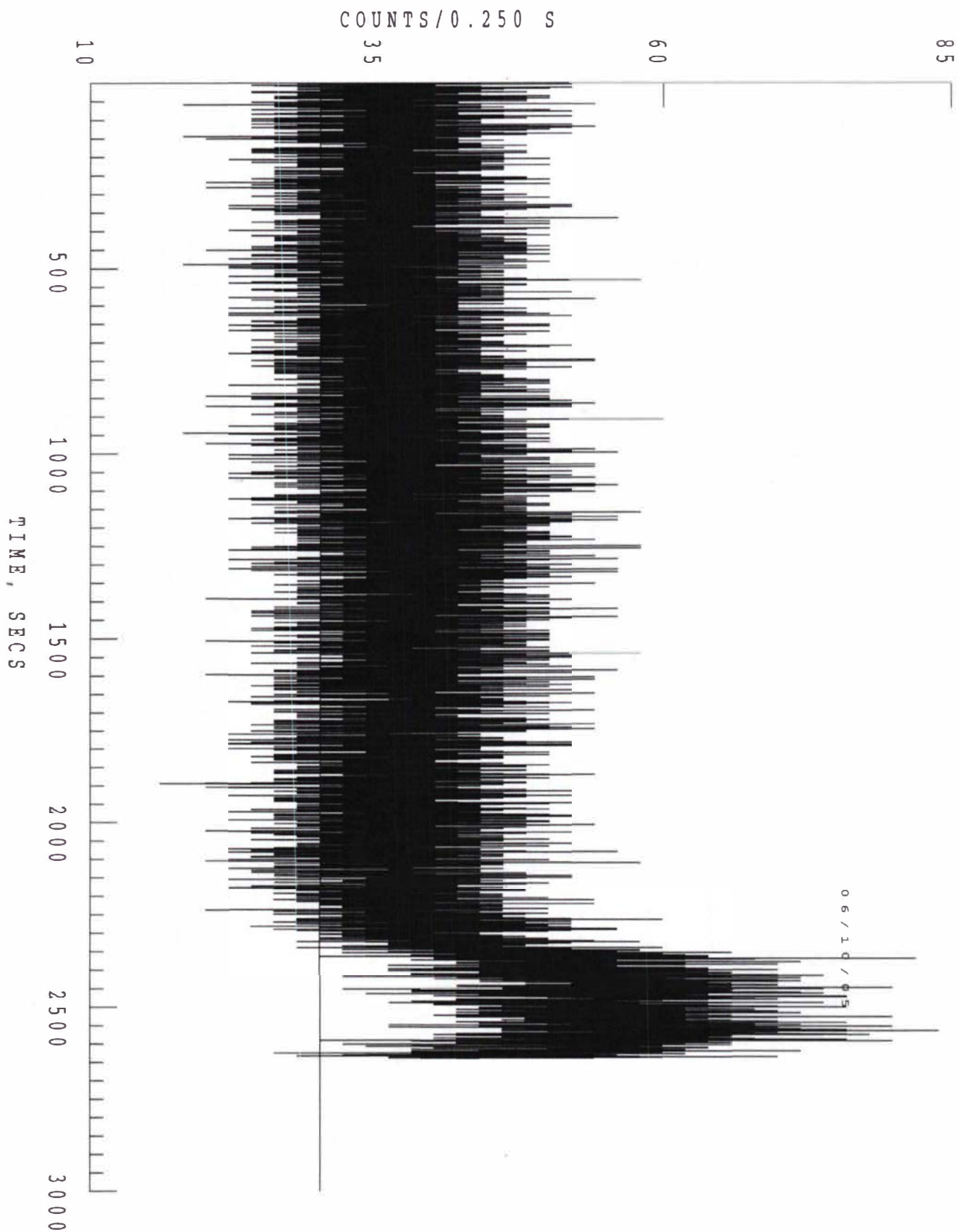
MS01

06/10/05

72519.318

D

50 - 3000 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GSwift-BAT_158593_0_20051006_73833)

BEG TIME: 06/10/05 DOY 279 Julian 2453651.35208 UT = 20.450 20:27:00 (73620.000 secs) [sct = 0019 c022 8583 295d]
 END TIME: 06/10/05 DOY 279 Julian 2453651.35667 UT = 20.560 20:33:36 (74016.000 secs) [sct = 0019 c022 9d1d a5af]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

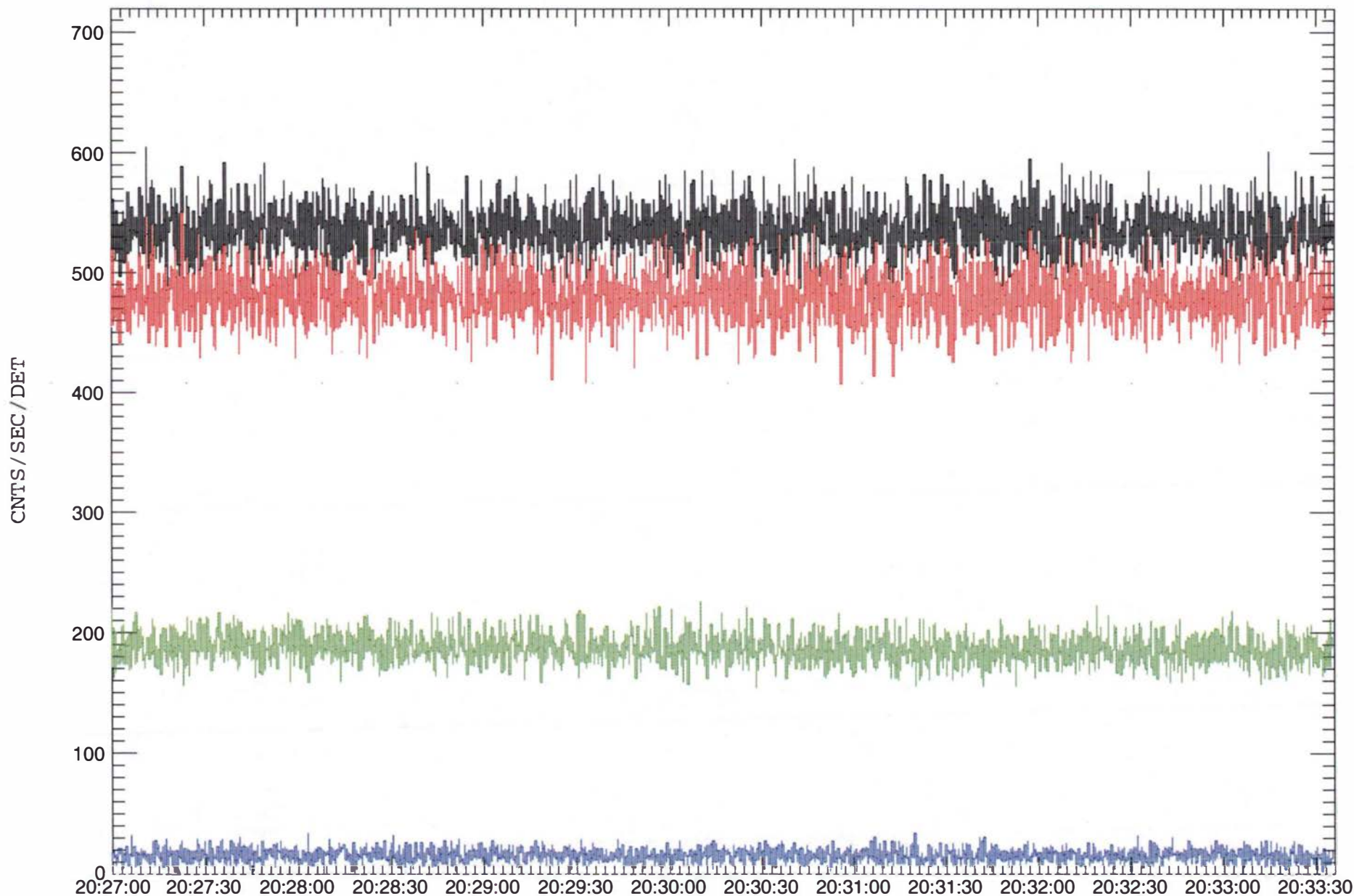
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



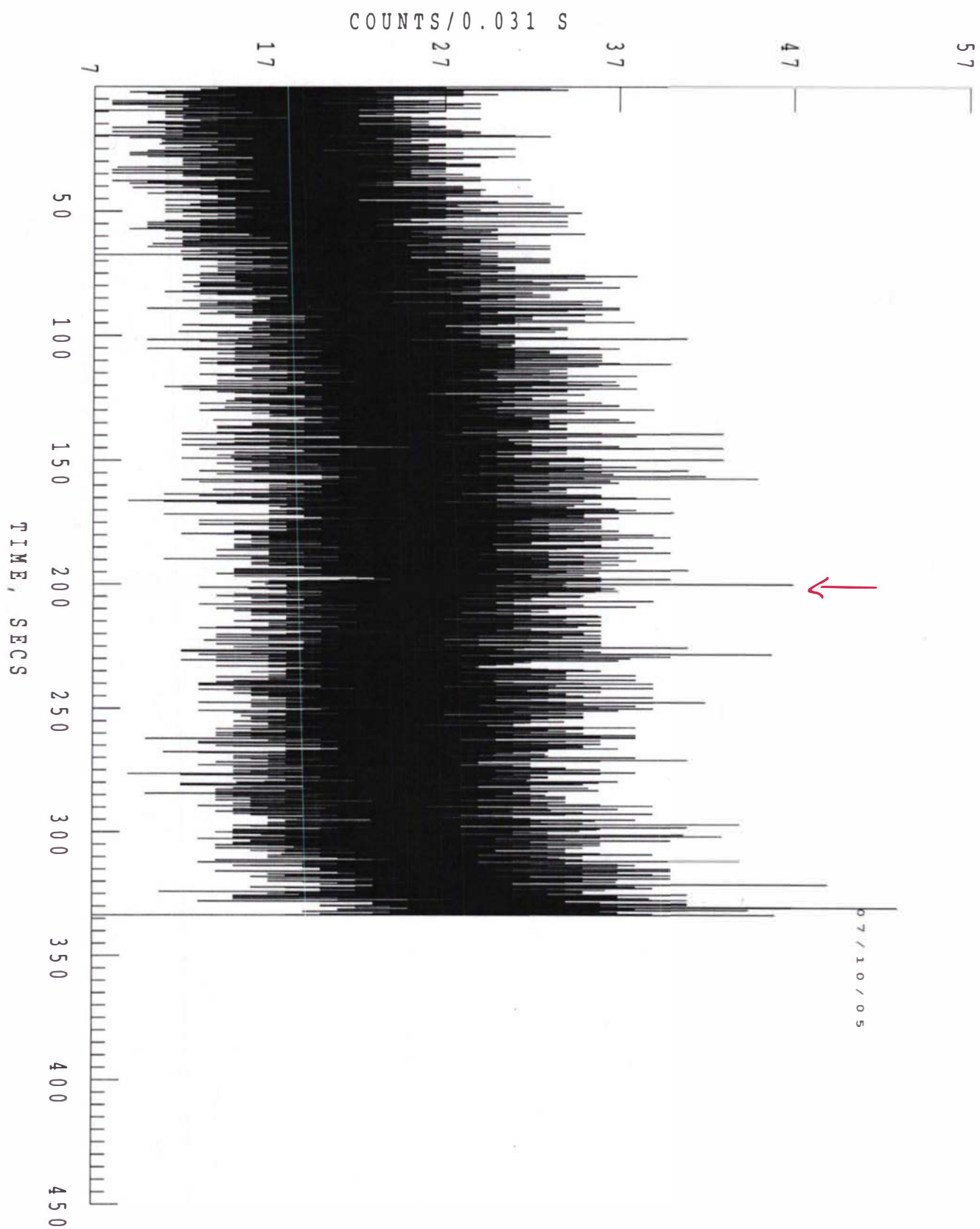
RS UT

HESSI

06/10/05 73633.000 (GSwift-BAT_158593_0_20051006_

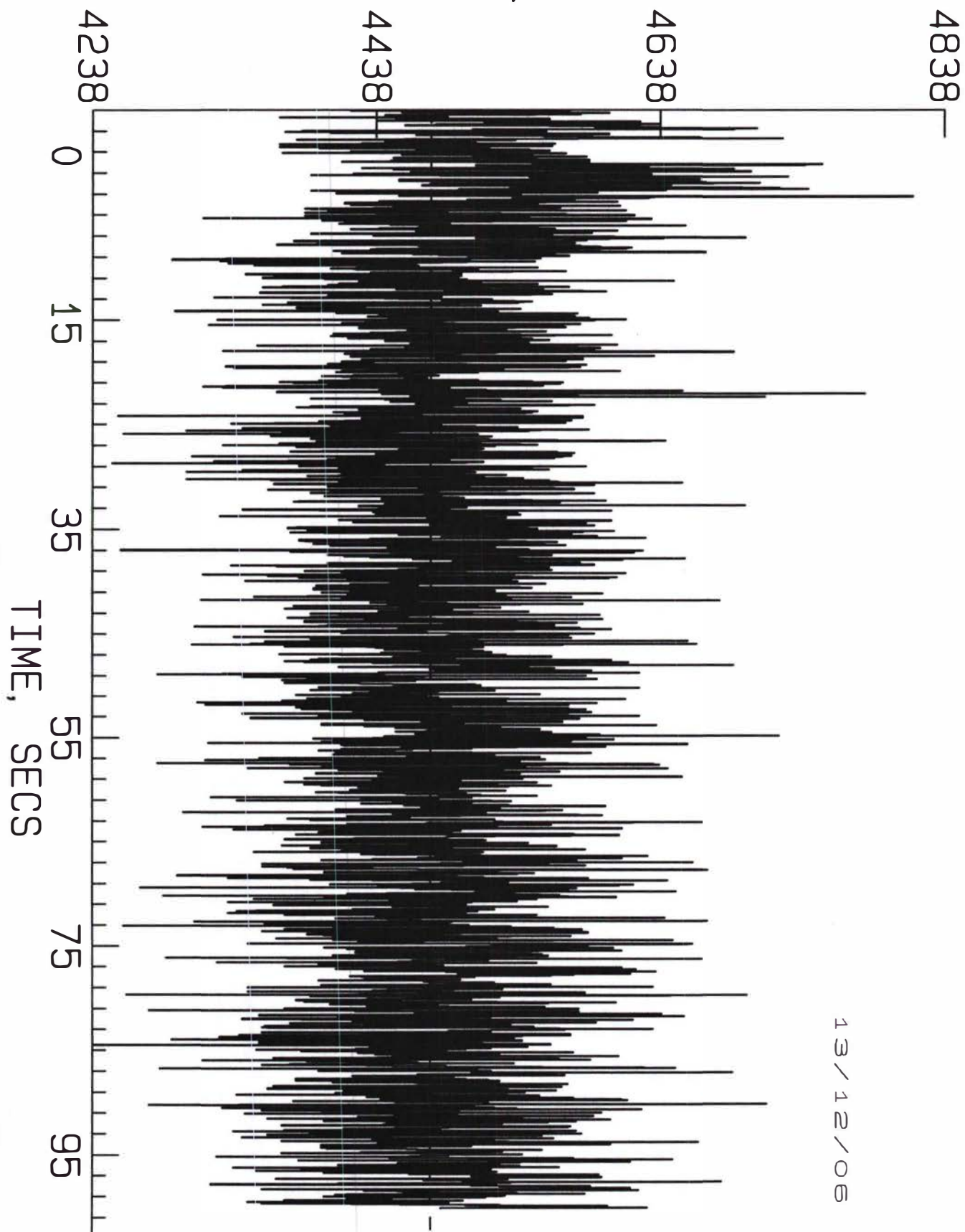
25- 150 keV

D



INTEGRAL 06/10/05 73834.016 20:30:34.0
100-10000 keV

COUNTS/0.050 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

06/10/05 DOY 279 Julian 2453650.50000 [est. sct = 0019 c011 616a 2751]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

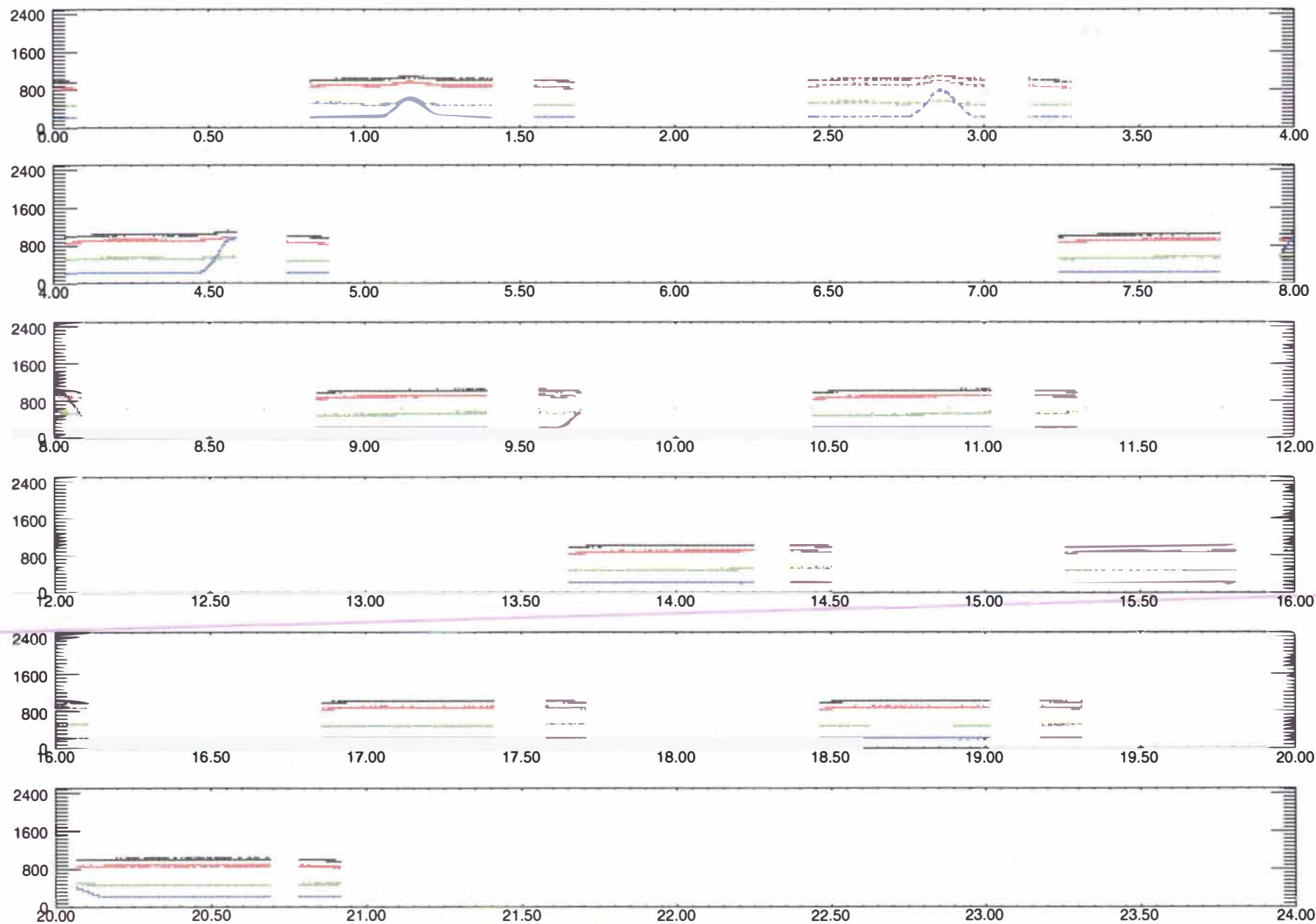
Channel 1 + 800

Channel 2 + 600

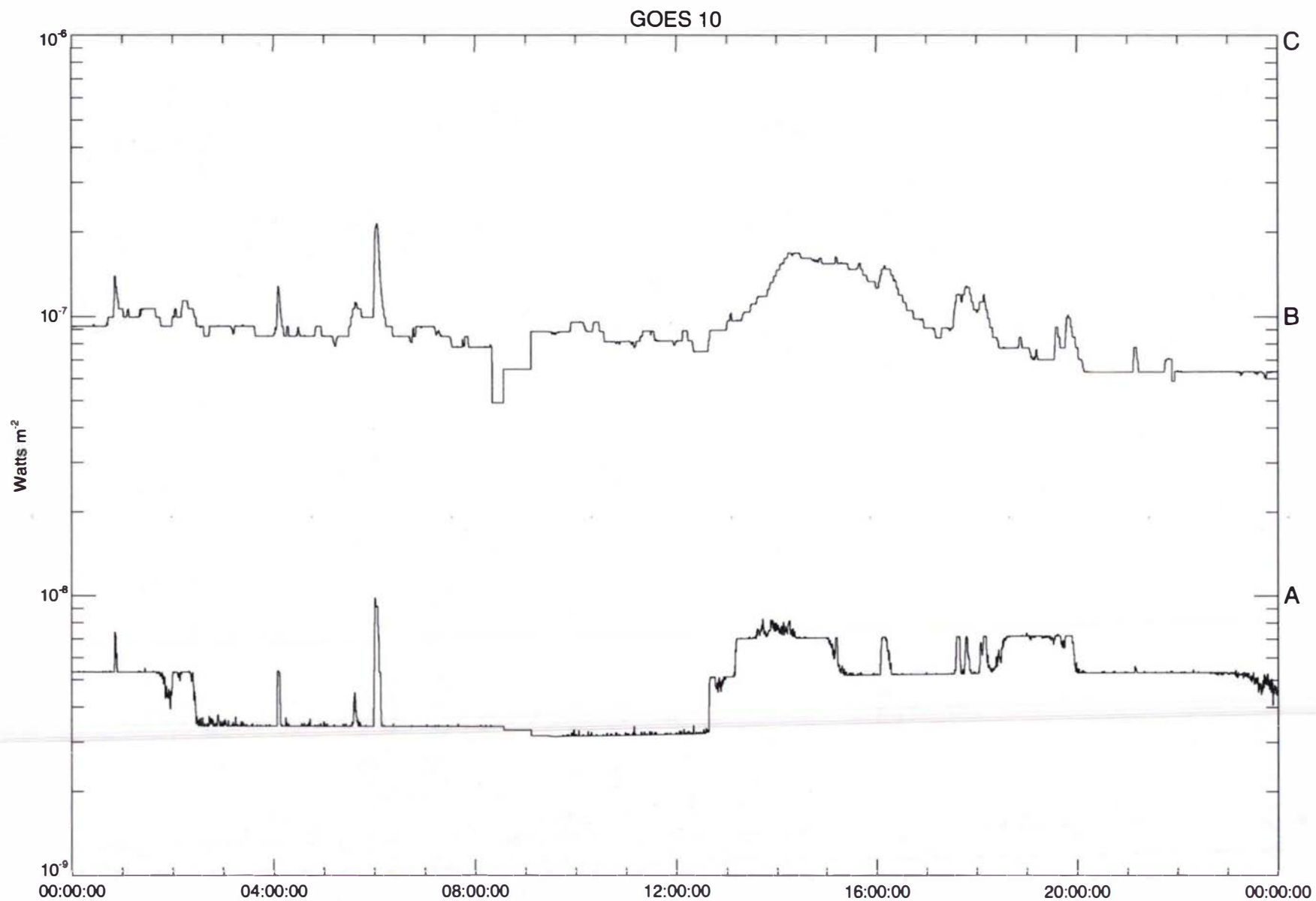
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT



Data Start: 05/10/06, 0000:00

Channel

1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

Plot created: 05/10/08, 0824

Sample average = 10

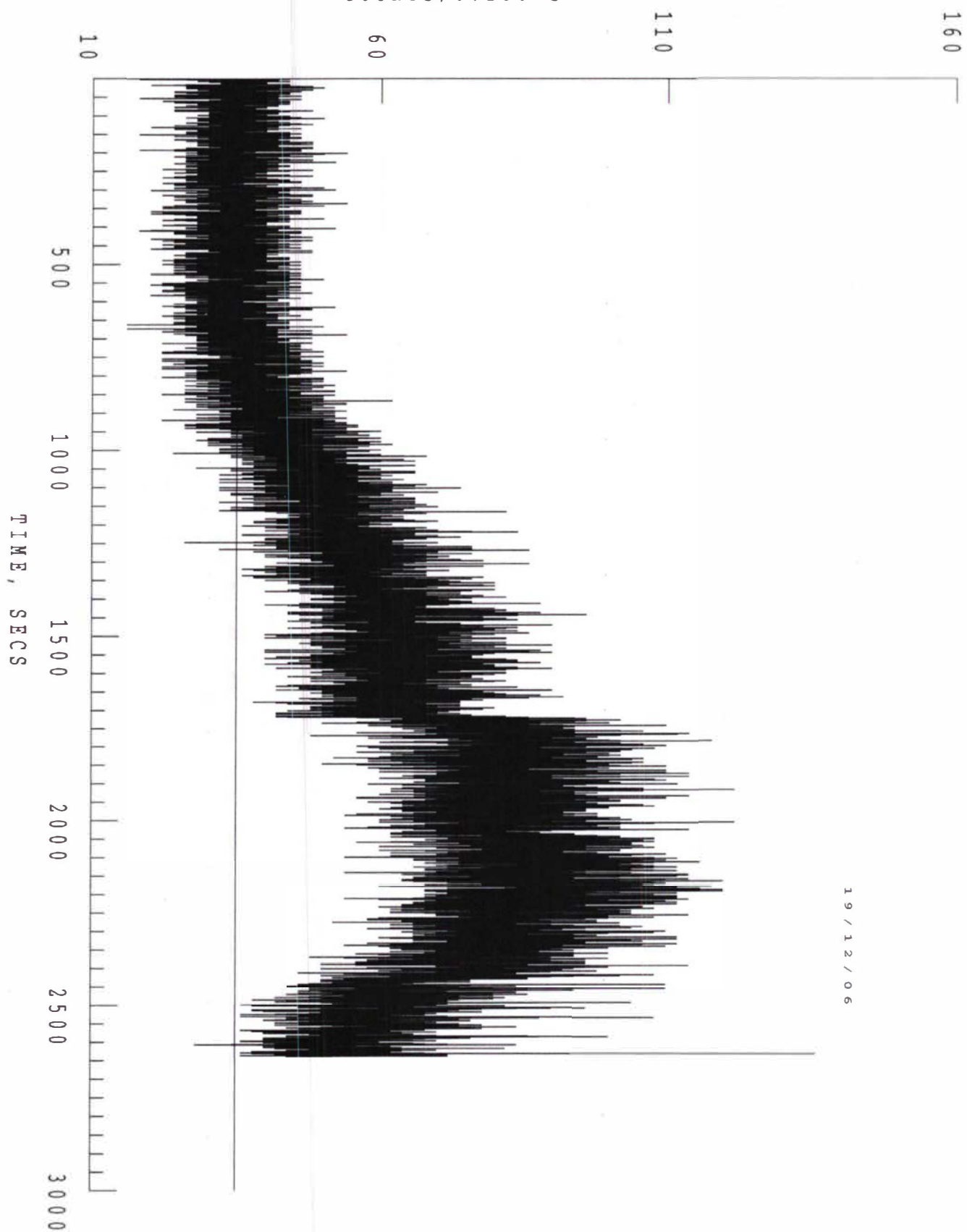
MS01

07/10/05

24878.895

50 - 3000 keV

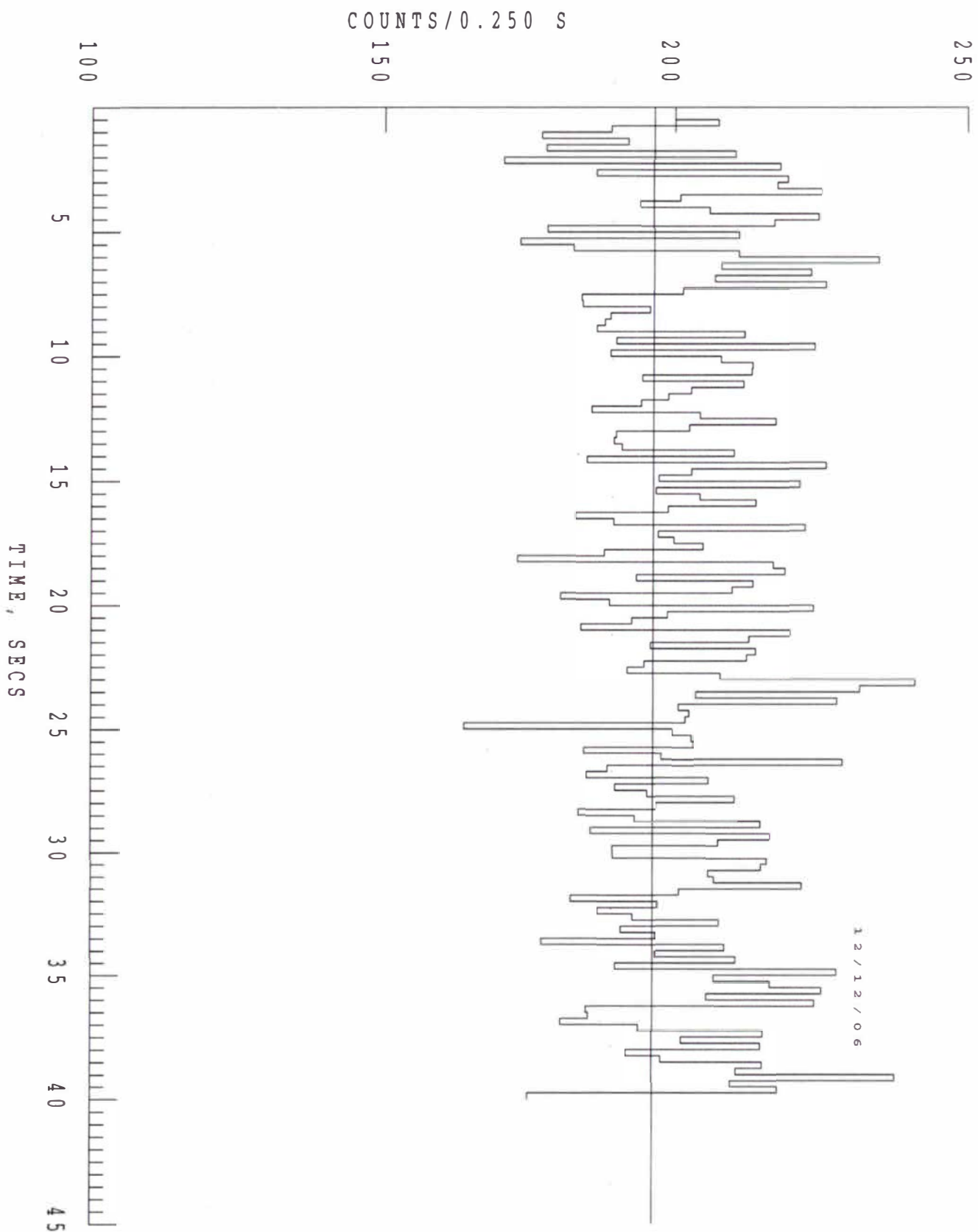
COUNTS/0.250 S



HESSI

07/10/05 26192.000 (SUZAKU_20051007_26212)

25- 150 keV



No SPI, GRS tugs

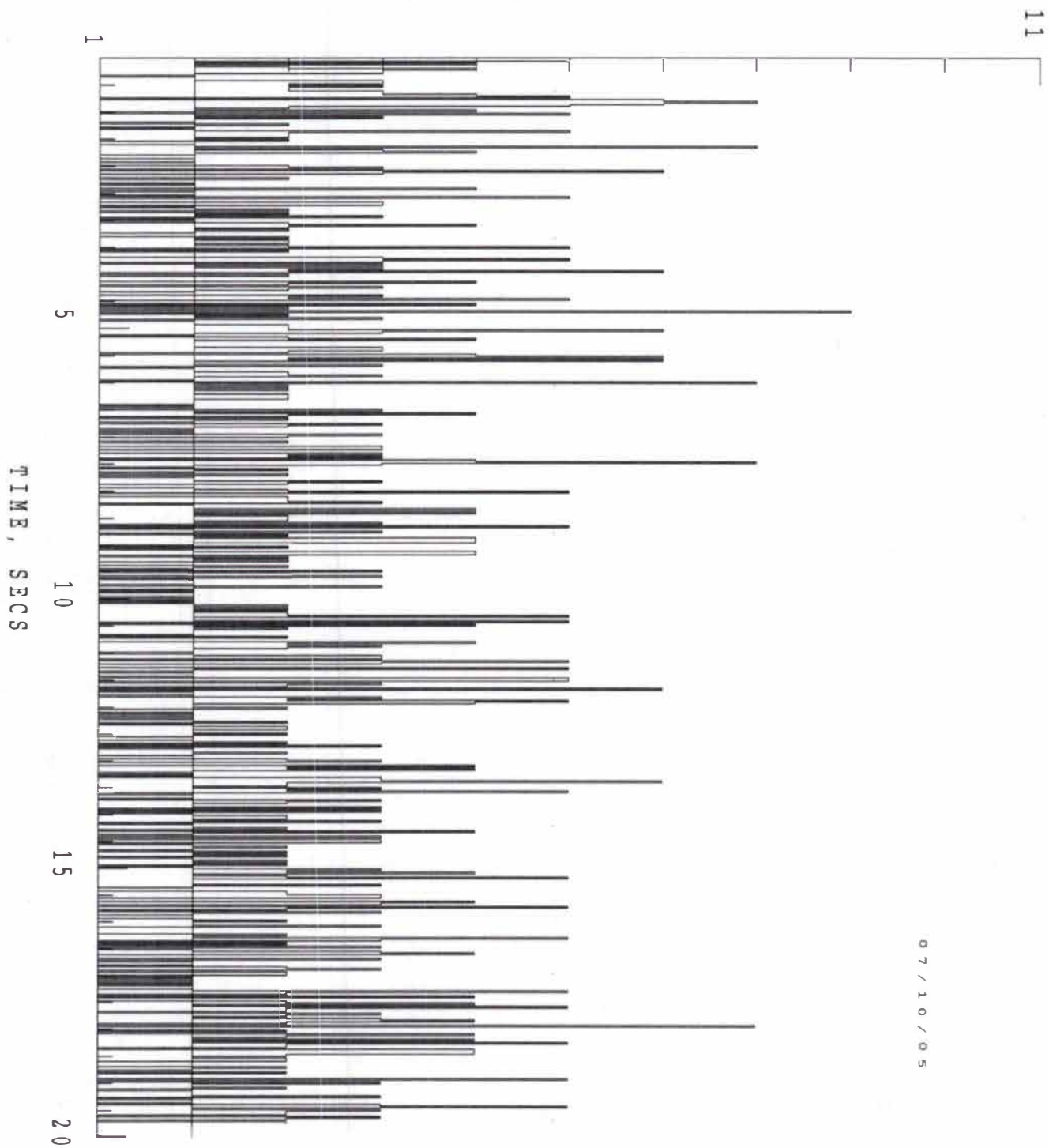
MO

07/10/05

29734.017

116 - 337 keV

COUNTS/0.032 S



07/10/05

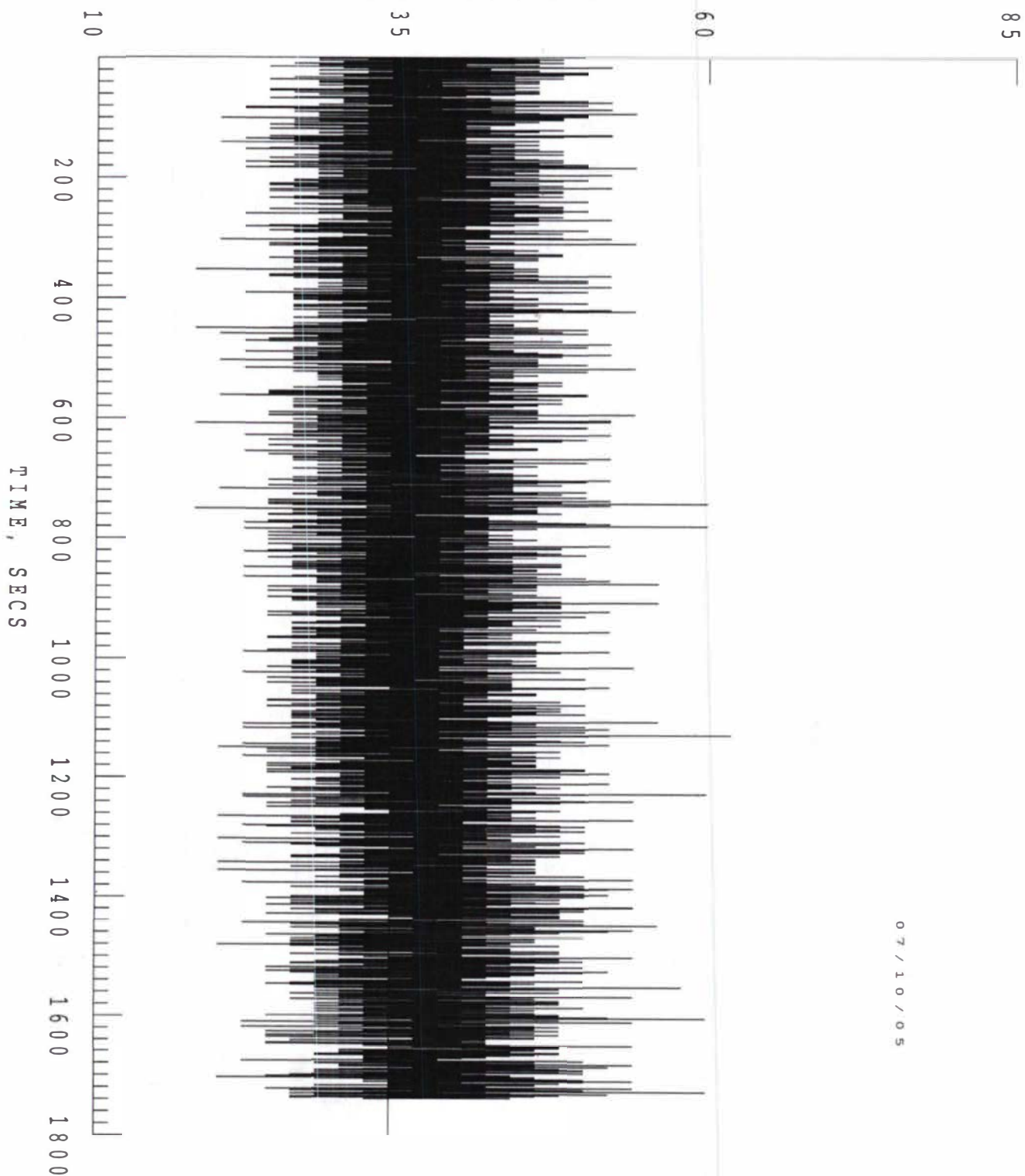
MS01

07/10/05

28419.100

50 - 3000 keV

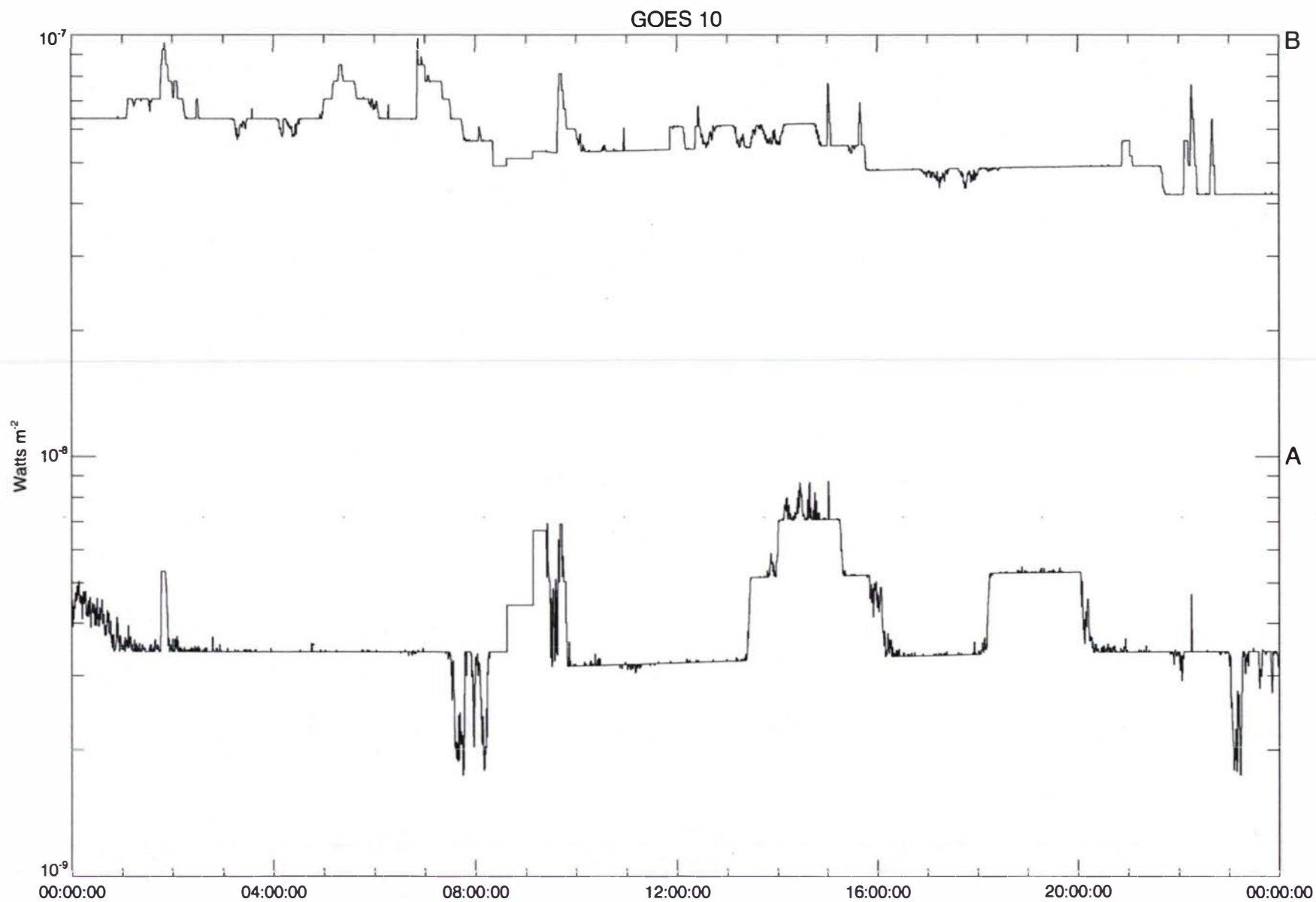
COUNTS/0.250 S



07/10/05

From williams@sunspot.ssl.berkeley.edu Fri Oct 7 05:55:16 2005
Date: Fri, 7 Oct 2005 06:02:05 -0700 (PDT)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_MO_GE_20051007_29734

HESSI 25 to 150 keV Counts
Created 7-Oct-2005 05:54:22.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
Full time range in eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry



Data Start: 05/10/07, 0000:00

Channel

1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

Plot created: 05/10/09, 0824

Sample average = 10

INTEGRAL

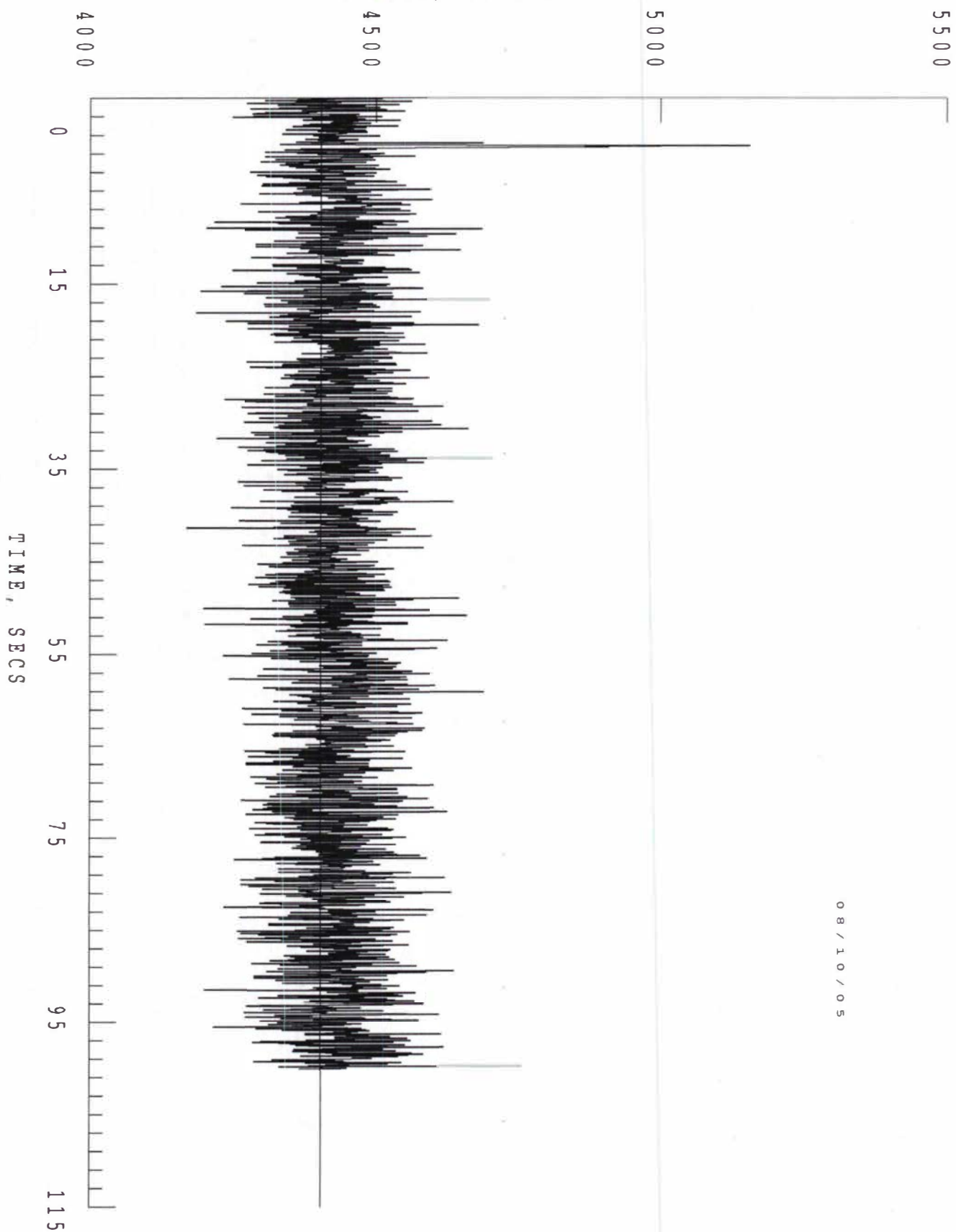
08/10/05

17788.938

100-10000 keV

04:56:29

COUNTS/0.050 S



08/10/05

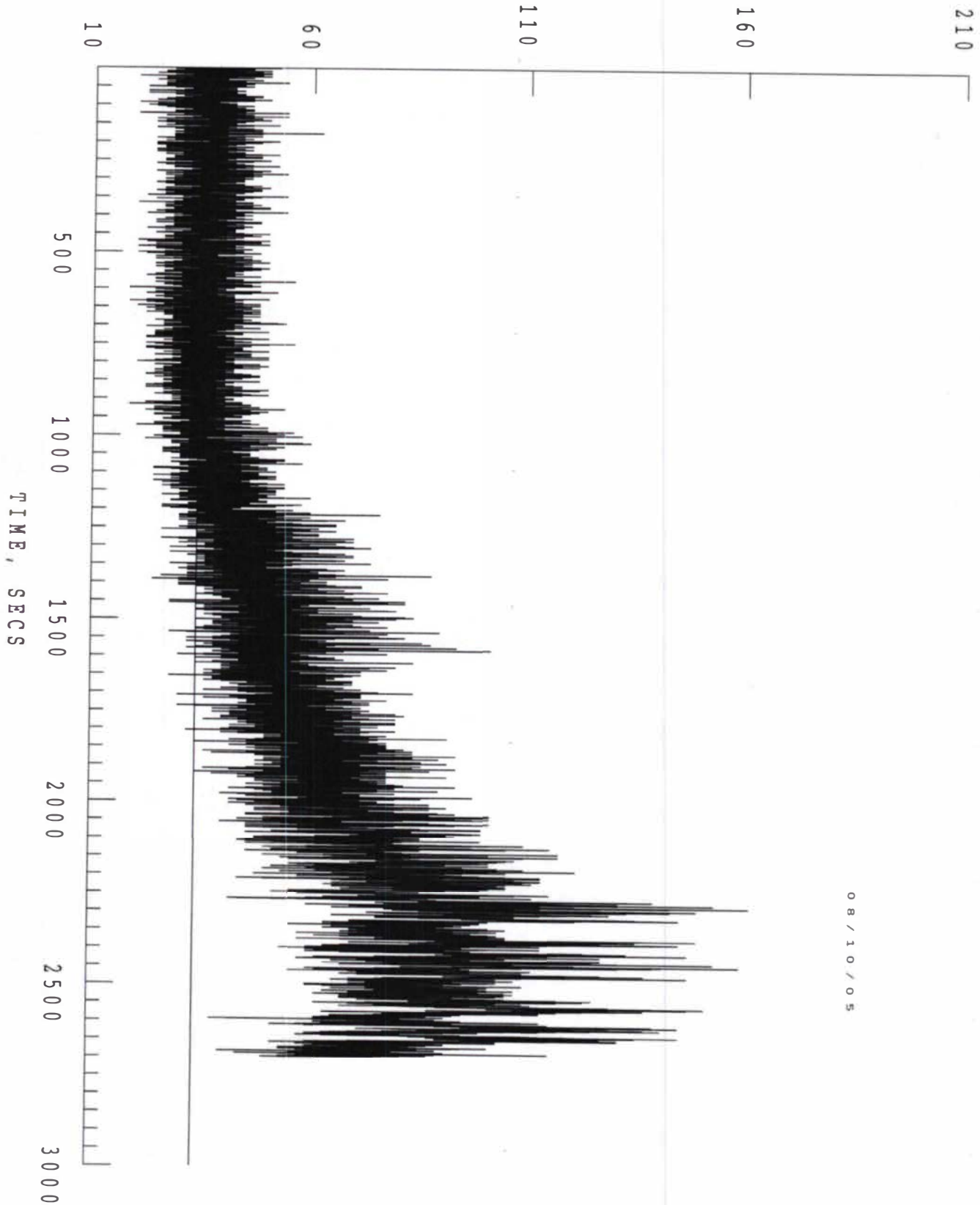
MS01

08/10/05

16417.836

50- 3000 keV

COUNTS/0.250 S



08/10/05

From williams@sunspot.ssl.berkeley.edu Sun Oct 9 00:58:08 2005
Date: Sun, 9 Oct 2005 01:05:00 -0700 (PDT)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_INTEGRAL_20051008_17788

HESSI 25 to 150 keV Counts
Created 9-Oct-2005 00:57:17.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
Full time range in eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

From vxw@capella.gsfc.nasa.gov Sat Oct 8 09:45:20 2005
X-ASG-Debug-ID: 1128789946-22272-2-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Sat, 8 Oct 2005 12:45:46 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/SWIFT_BAT_LIGHTCURVE
Subject: GCN/SWIFT_BAT_LIGHTCURVE
Mime-Version: 1.0
Content-Disposition: inline
User-Agent: Mutt/1.4.2.1i
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

>32s

$5.1 \times 10^{-6} \text{ erg/cm}^2$

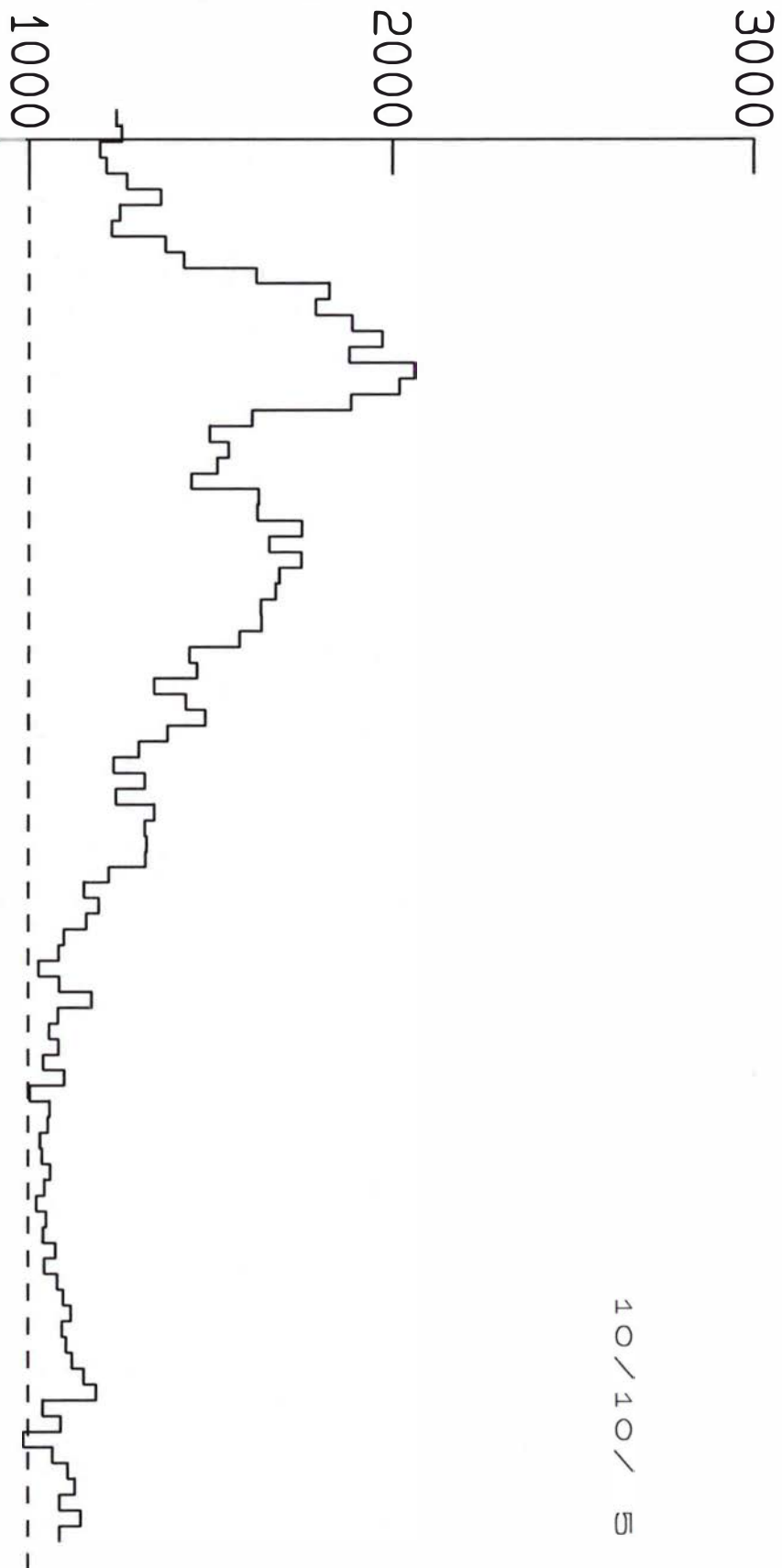
TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Sat 08 Oct 05 16:45:14 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 158855, Seg_Num: 0
GRB_RA: 202.870d {+13h 31m 29s} (J2000),
202.933d {+13h 31m 44s} (current),
202.327d {+13h 29m 18s} (1950)
GRB_DEC: +42.090d {+42d 05' 26"} (J2000),
+42.061d {+42d 03' 39"} (current),
+42.348d {+42d 20' 51"} (1950)
GRB_DATE: 13651 TJD; 281 DOY; 05/10/08
GRB_TIME: 59601.31 SOD {16:33:21.31} UT
TRIGGER_INDEX: 148
GRB_PHI: -28.68 [deg]
GRB_THETA: 44.02 [deg]
DELTA_TIME: 51.00 [sec]
TRIGGER_DUR: 1.024 [sec]
LC_URL: sw00158855000msb.lc
SUN_POSTN: 194.27d {+12h 57m 05s} -6.10d {-06d 05' 57"}
SUN_DIST: 48.80 [deg]
MOON_POSTN: 257.16d {+17h 08m 38s} -27.75d {-27d 45' 03"}
MOON_DIST: 85.86 [deg]
MOON_ILLUM: 28 [%]
GAL_COORDS: 96.83, 72.95 [deg] galactic lon,lat of the pointing direction
ECL_COORDS: 179.83, 46.86 [deg] ecliptic lon,lat of the pointing direction
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point_source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.

SWIFT

08/10/05 59601.316

25- 100 keV

COUNTS/0.256 S



10/10/5

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

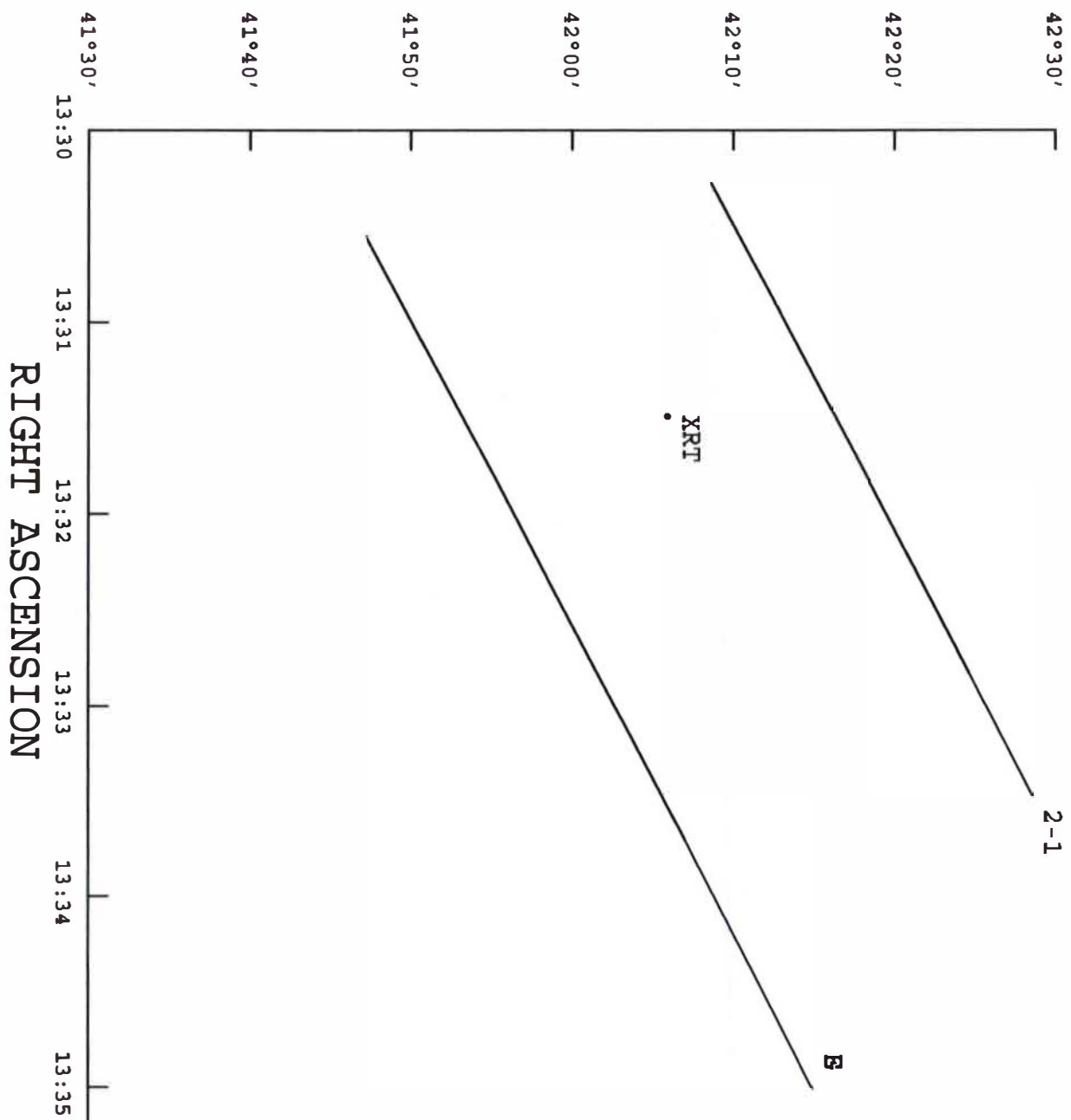
E=ECLIPTIC

G=GALACTIC EQUATOR

1 MO

2 KONUS2

DECLINATION



EVENT OF OCT 8, 2005 16:35

17/ 1/ 6

MO GE

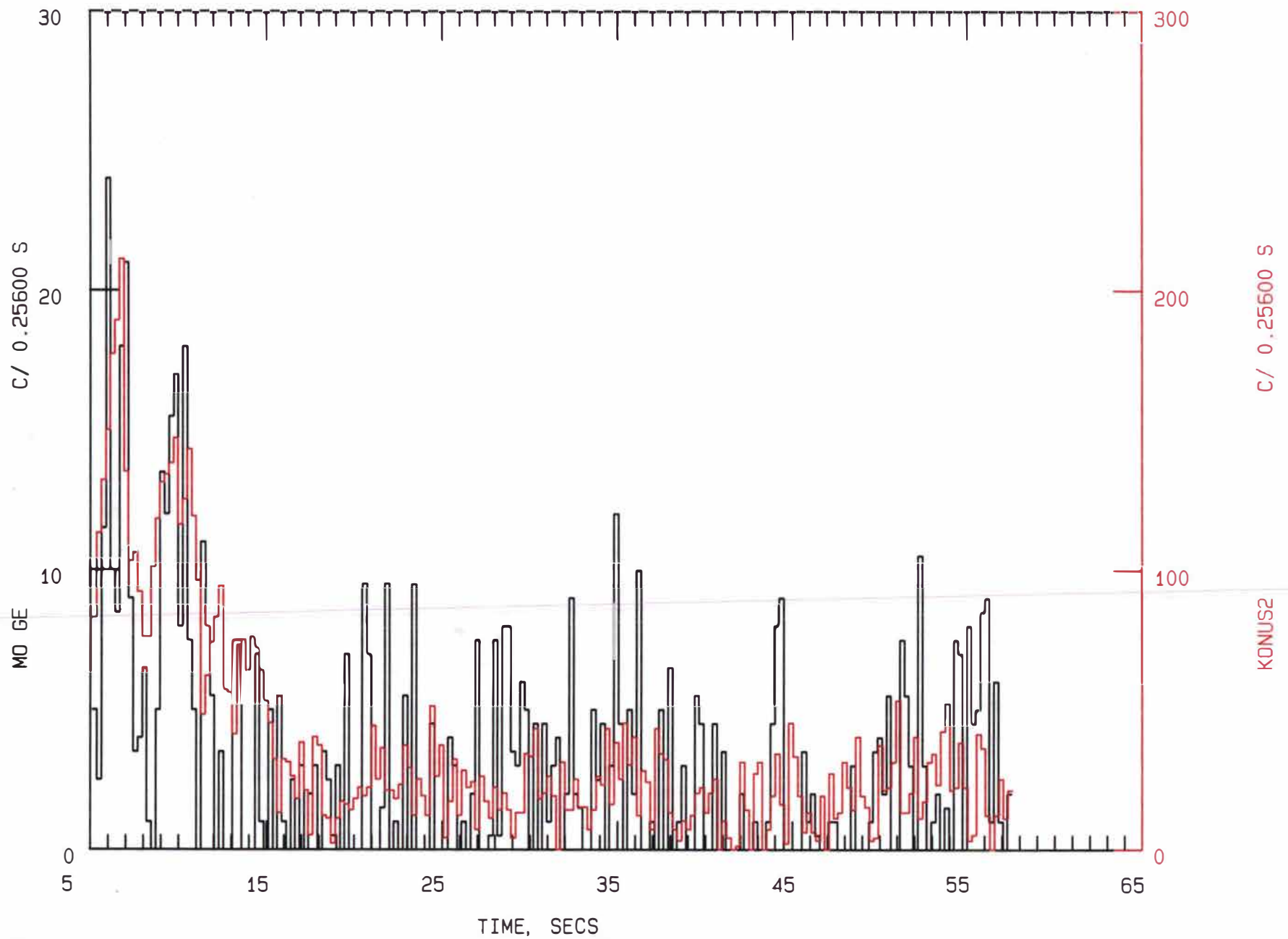
-KONUS2

CORRELATION

08/10/05

59706.190

17/ 1/ 6



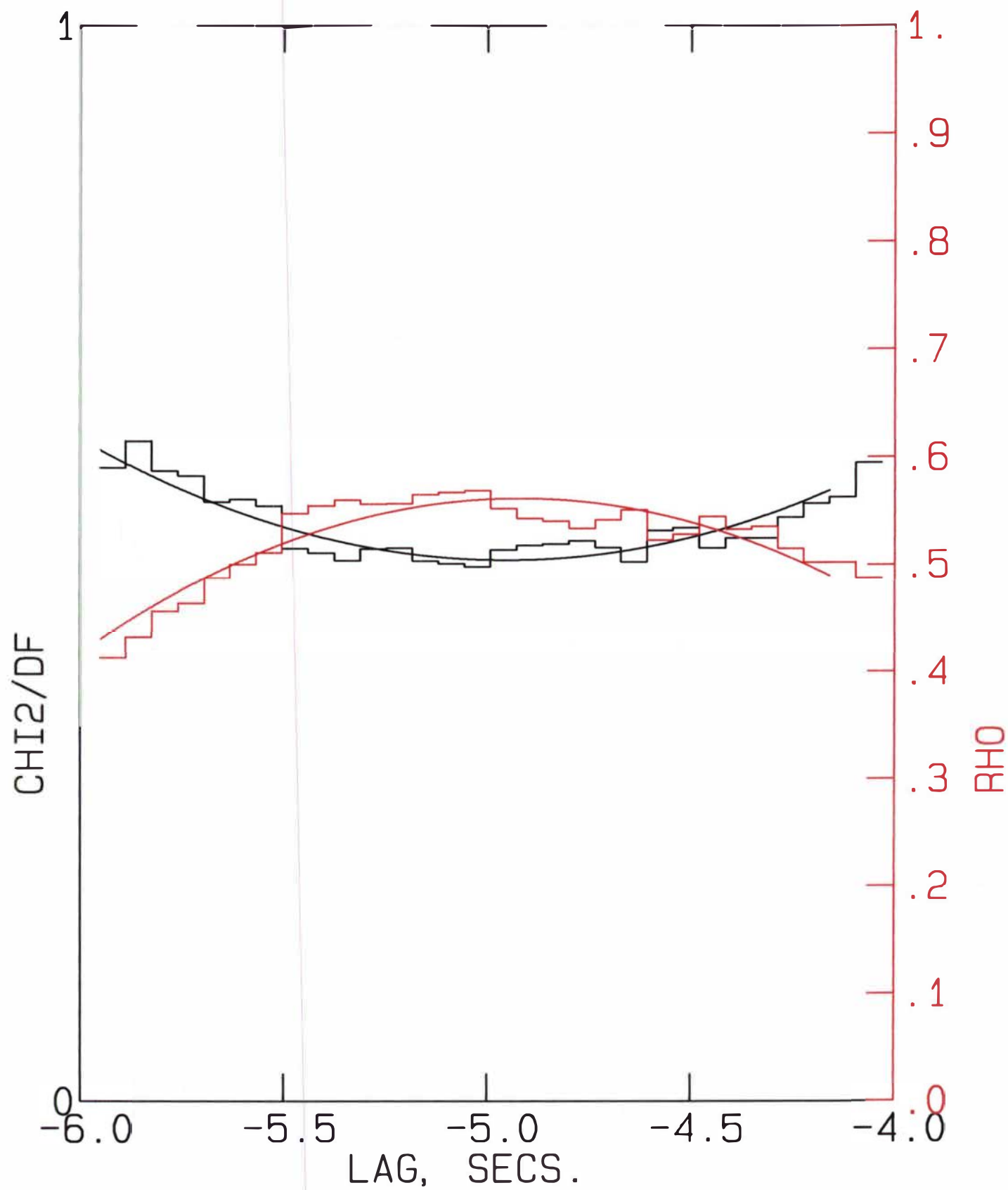
MO GE

-KONUS2

CORRELATION

08/10/05

59706.190



N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

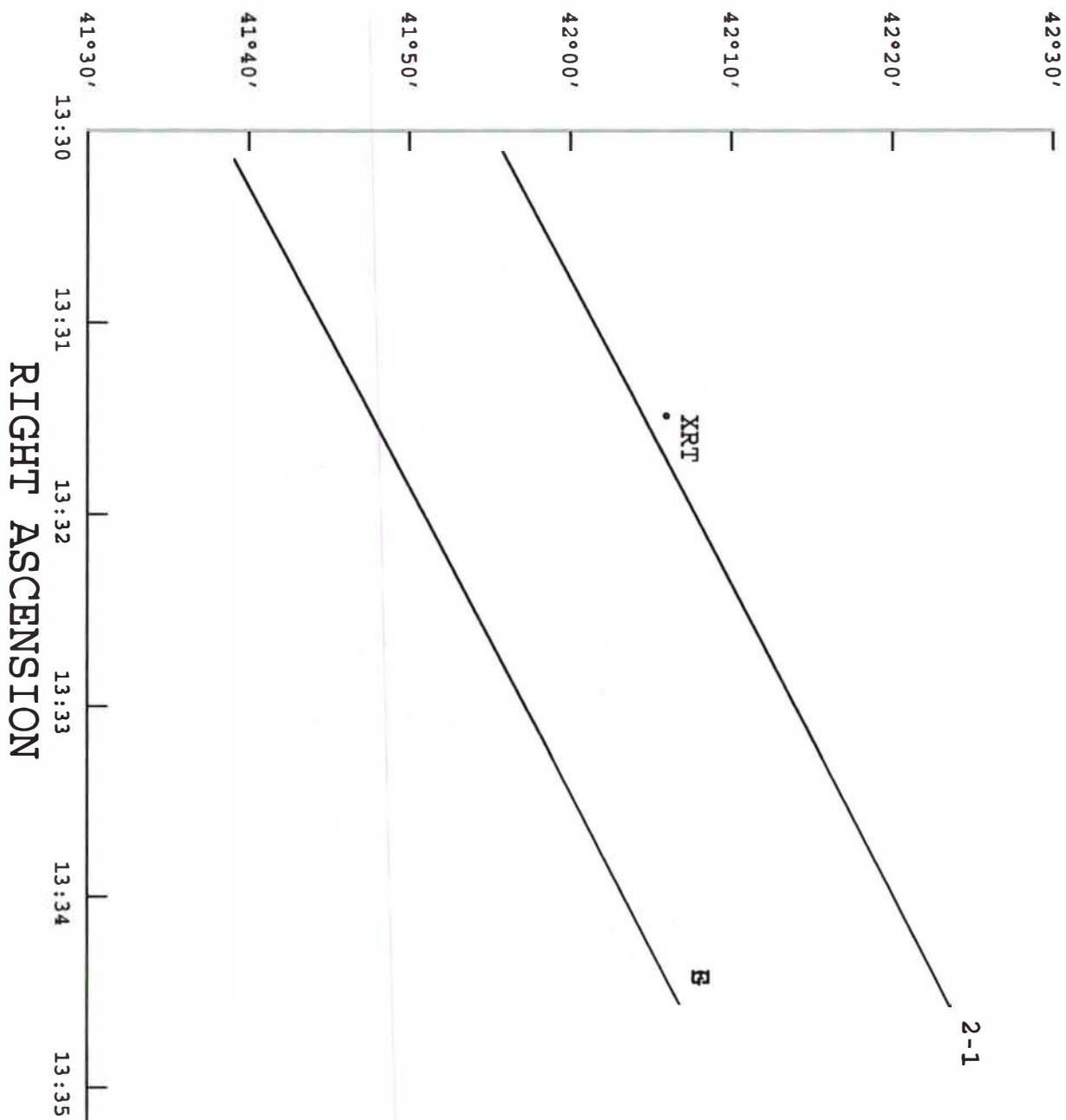
E=ECLIPTIC

G=GALACTIC EQUATOR

1 MO

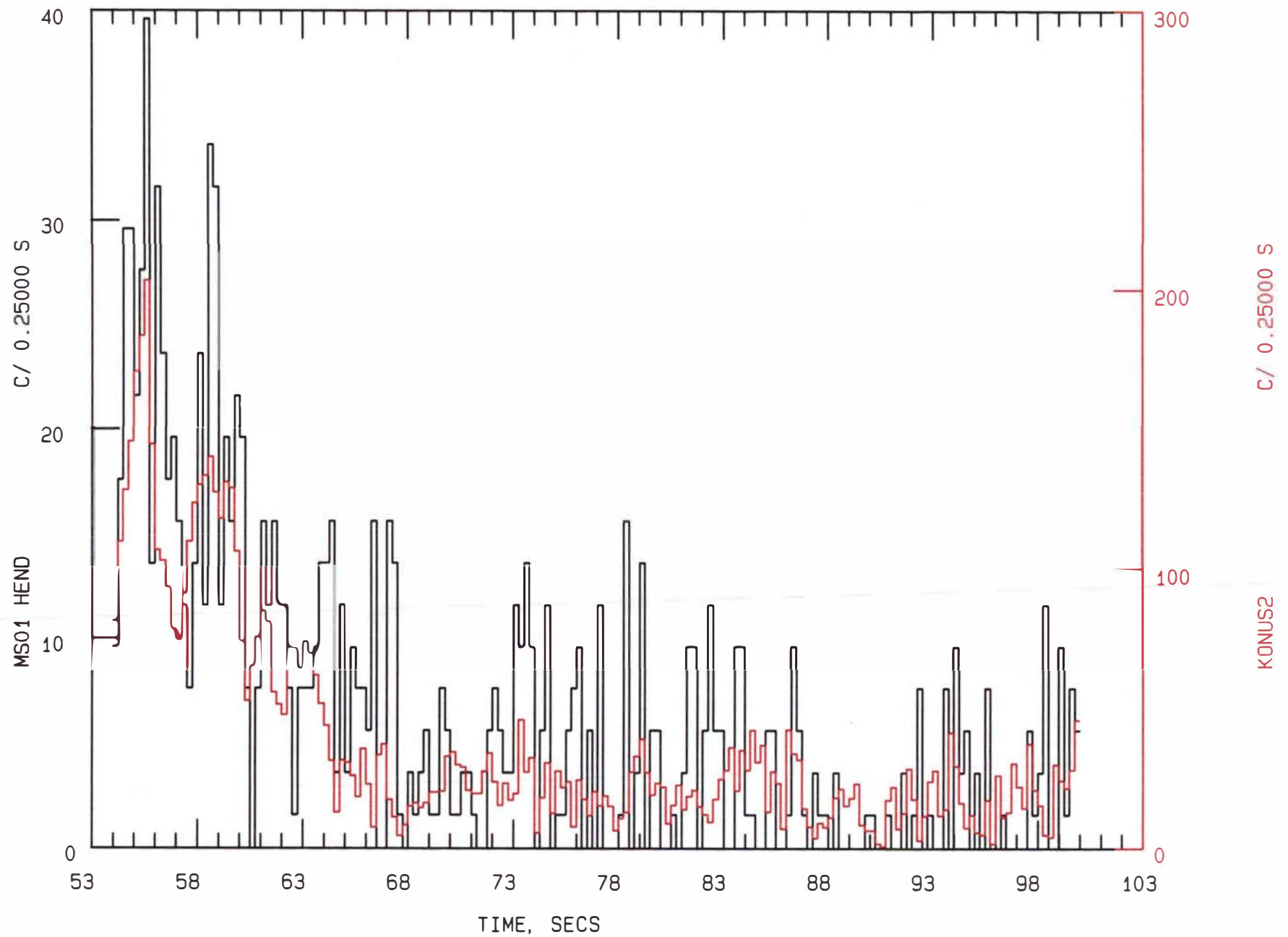
2 KONUS2

DECLINATION



EVENT OF OCT 8, 2005 16:34

17/ 1/ 6

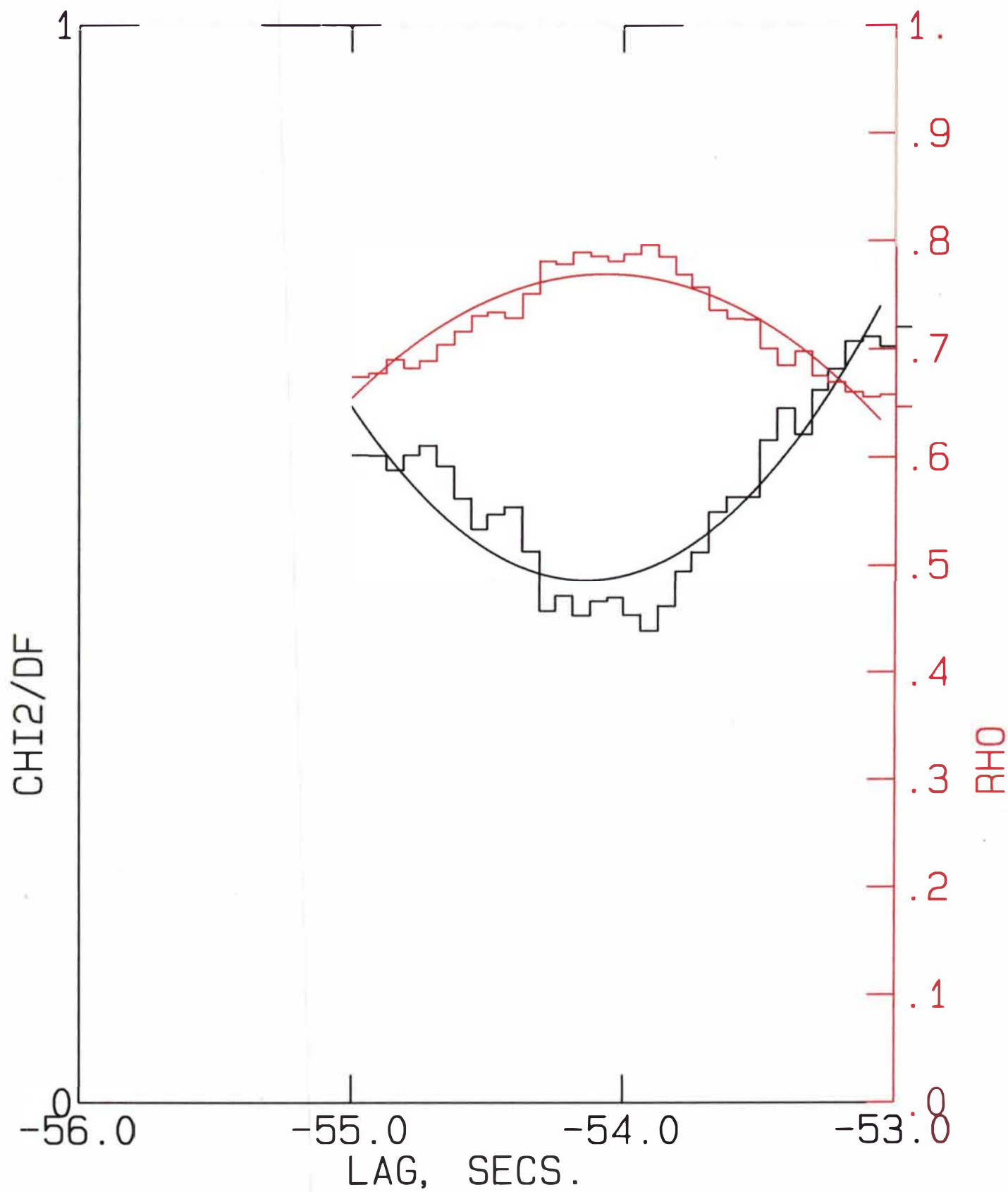


MS01 HEND -KONUS2

CORRELATION

08/10/05

59657.807



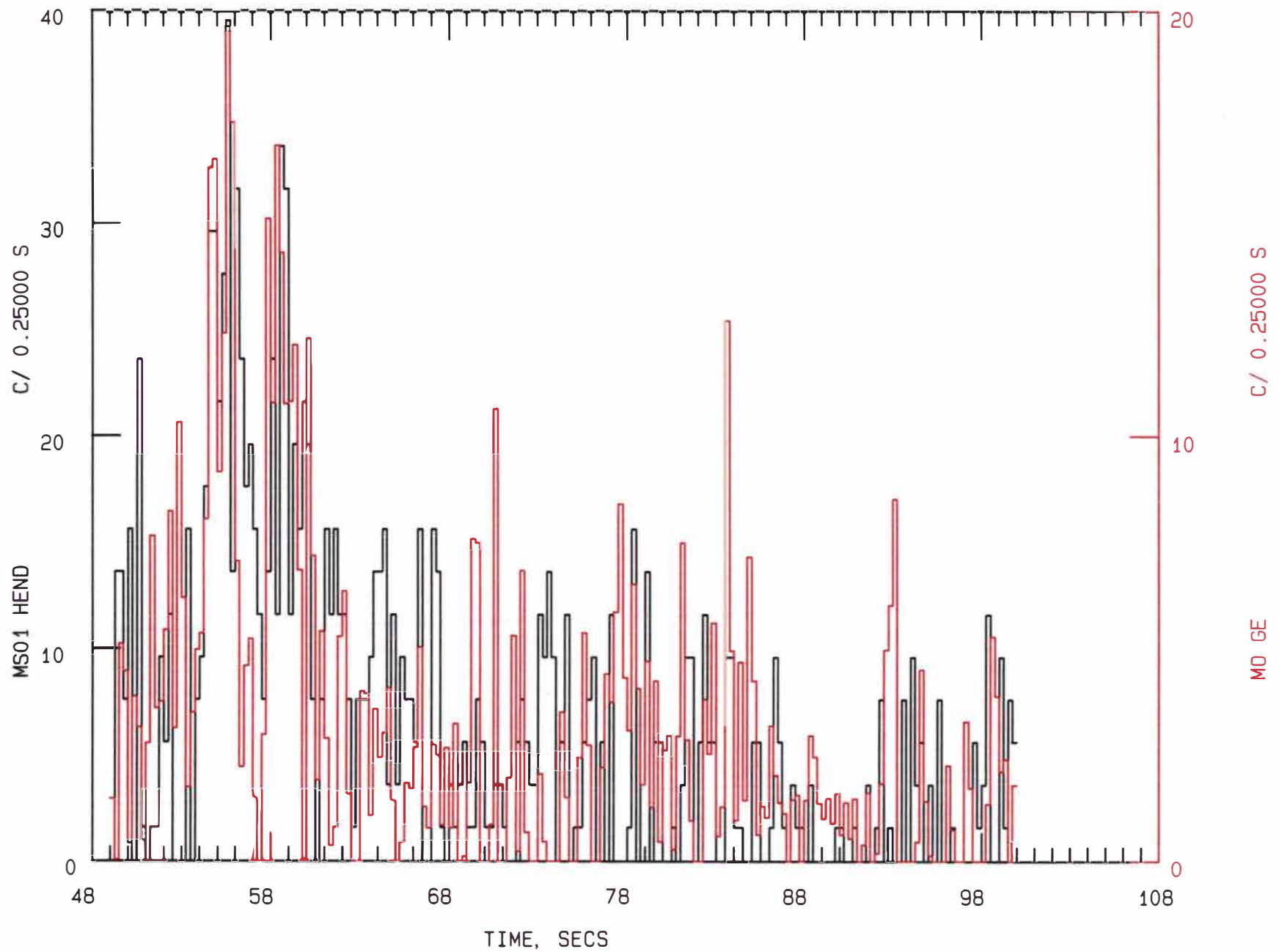
MS01 HEND -MO GE

CORRELATION

08/10/05

59657.807

17/ 1/ 6

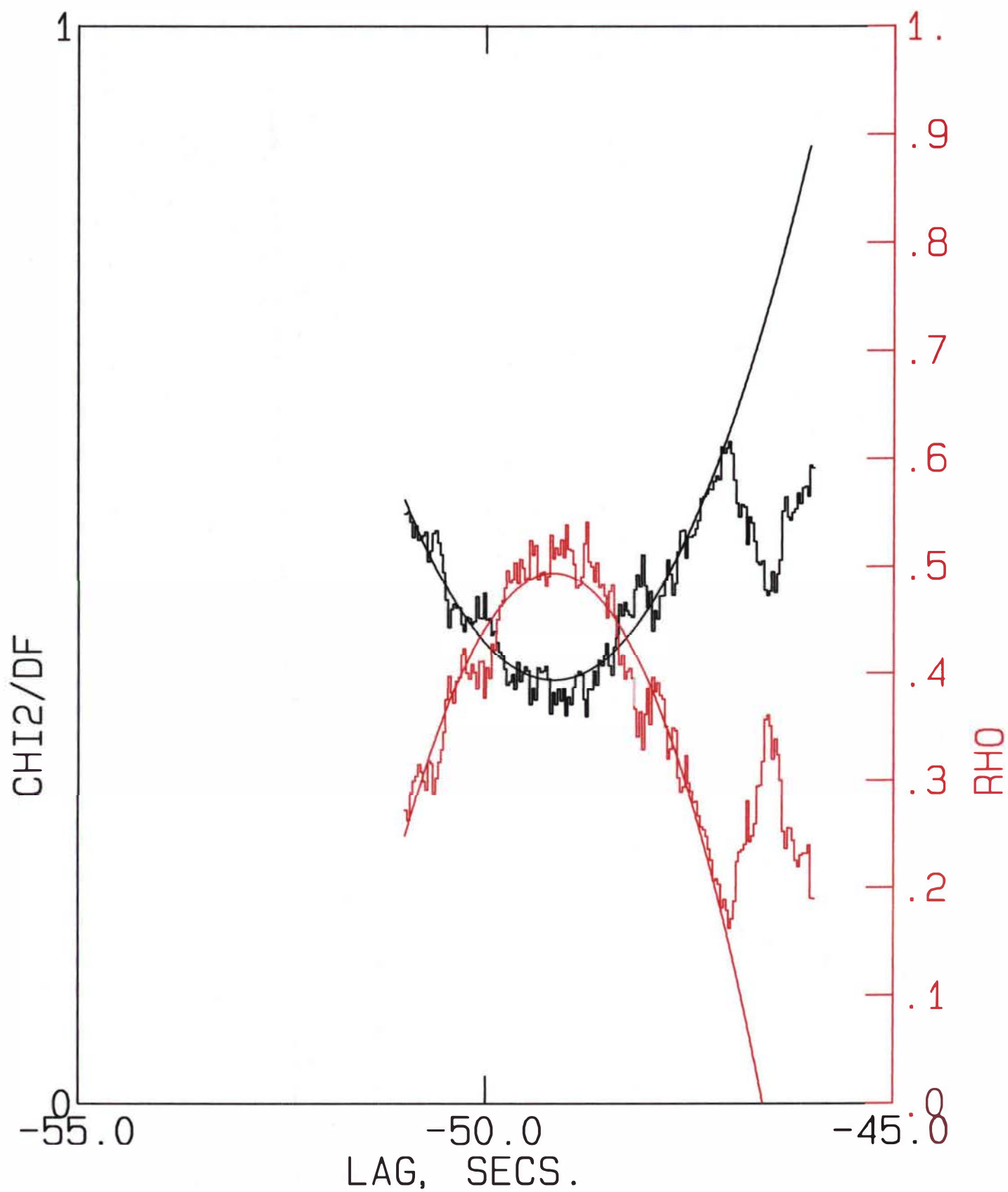


MS01 HEND -MO GE

CORRELATION

08/10/05

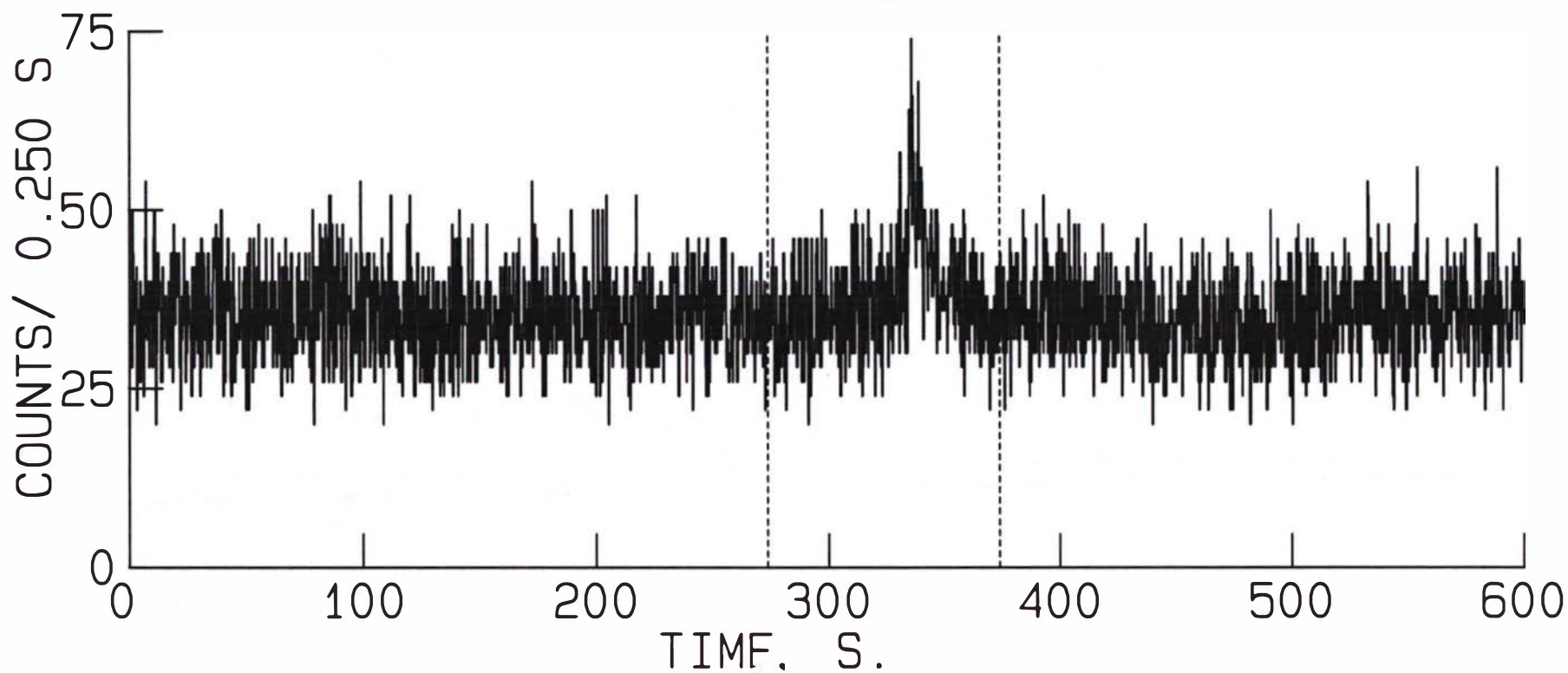
59657.807



MS01 HEND
08/10/05 59377.809 s
50-3000 keV

17/01/06

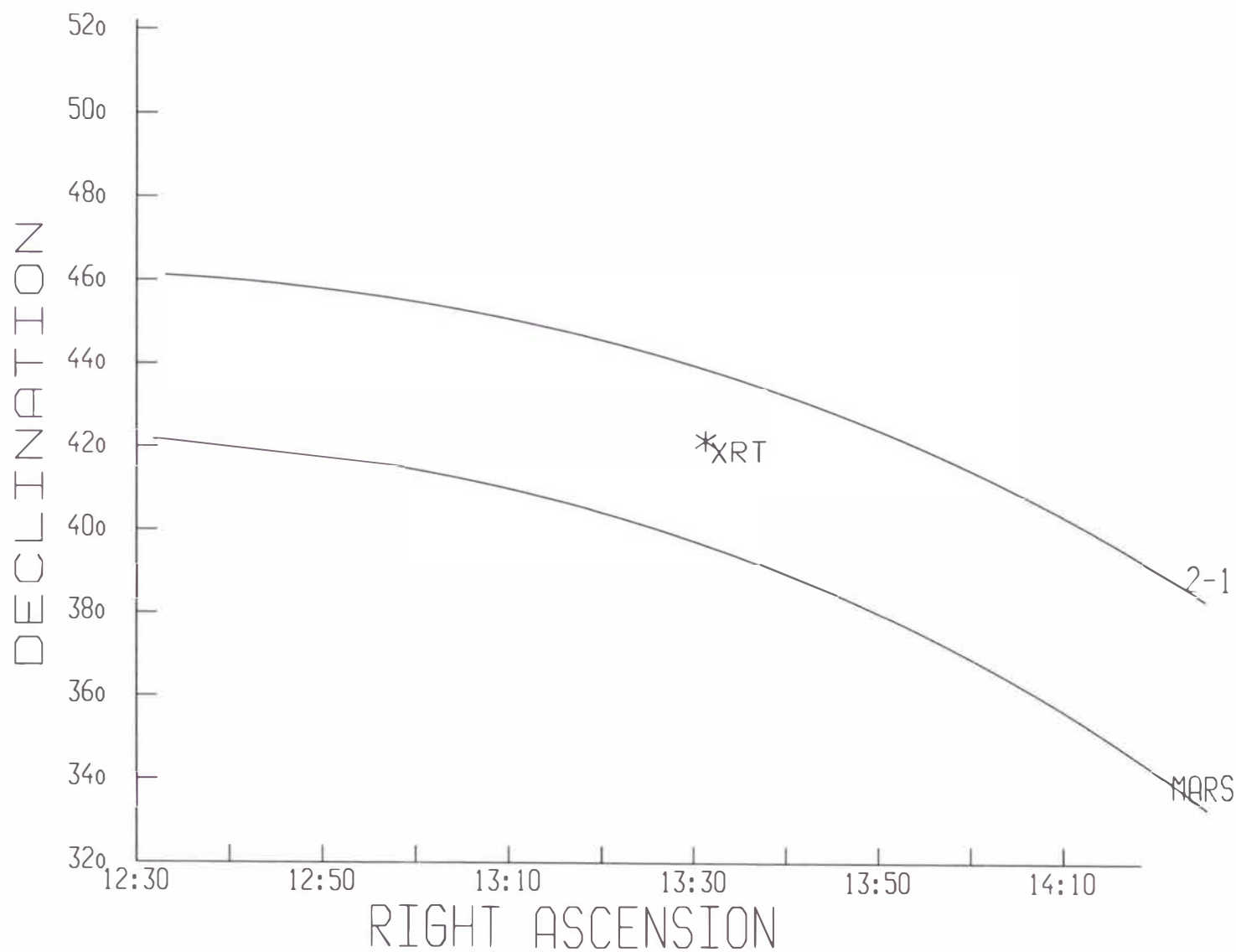
N= 10 M=60
>4.0 SIGMA FLUCTUATIONS



EVENT OF OCT 8, 2005 16:33

12/12/2011

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



KONUS2

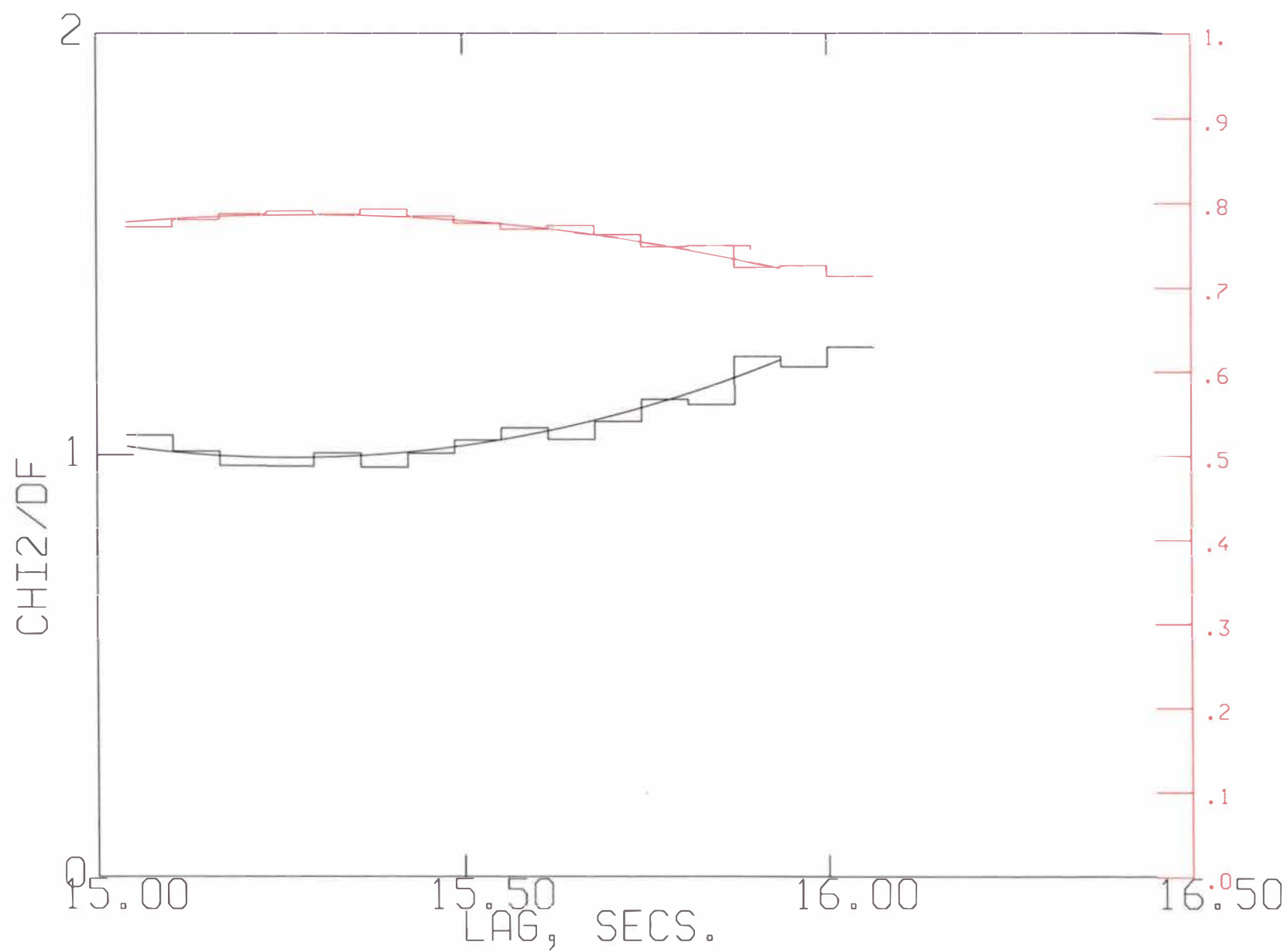
-INTEGRAL

CORRELATION

08/10/05

59600.762

12/12/11



KONUS2

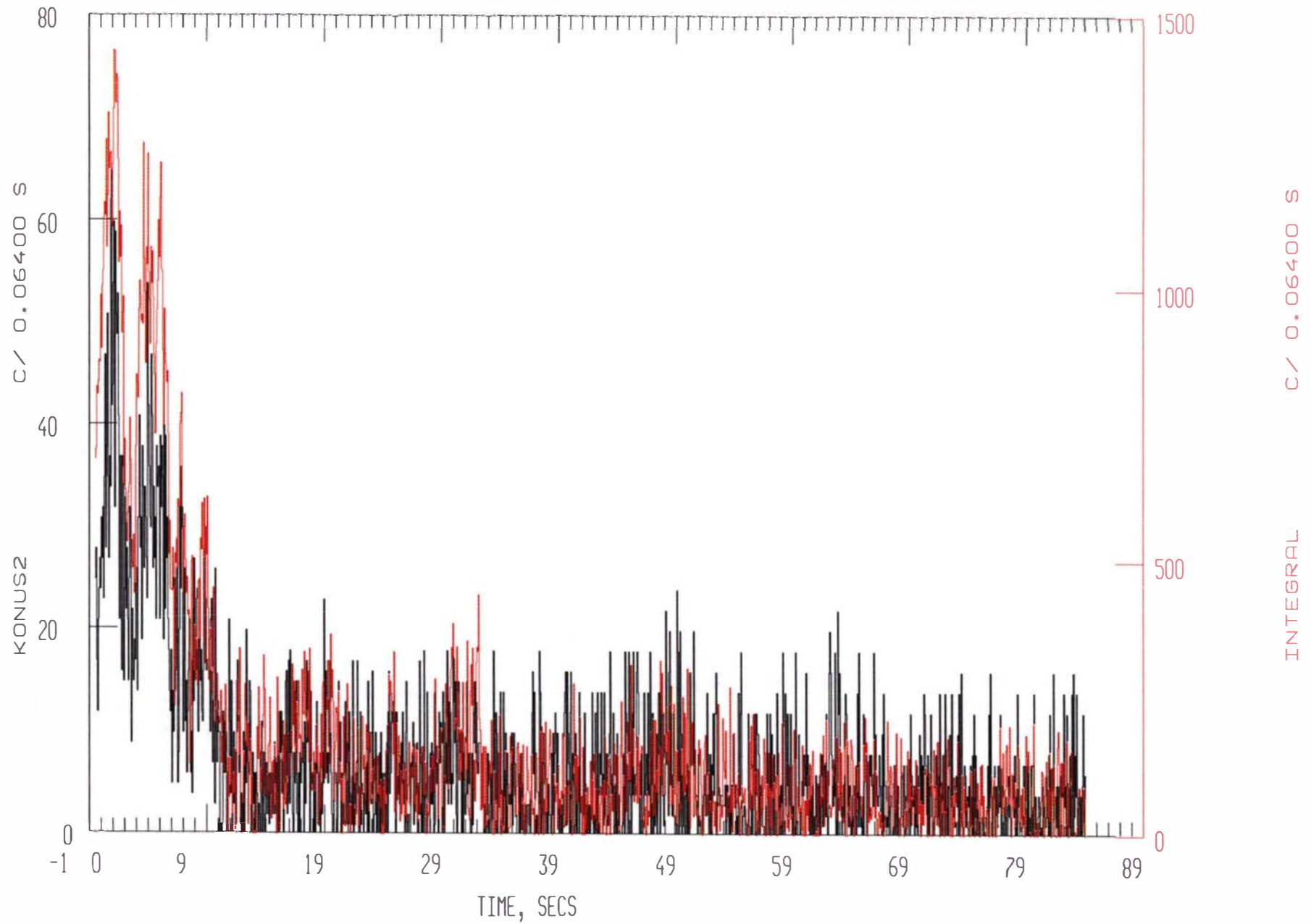
-INTEGRAL

CORRELATION

08/10/05

59600.762

12/12/11

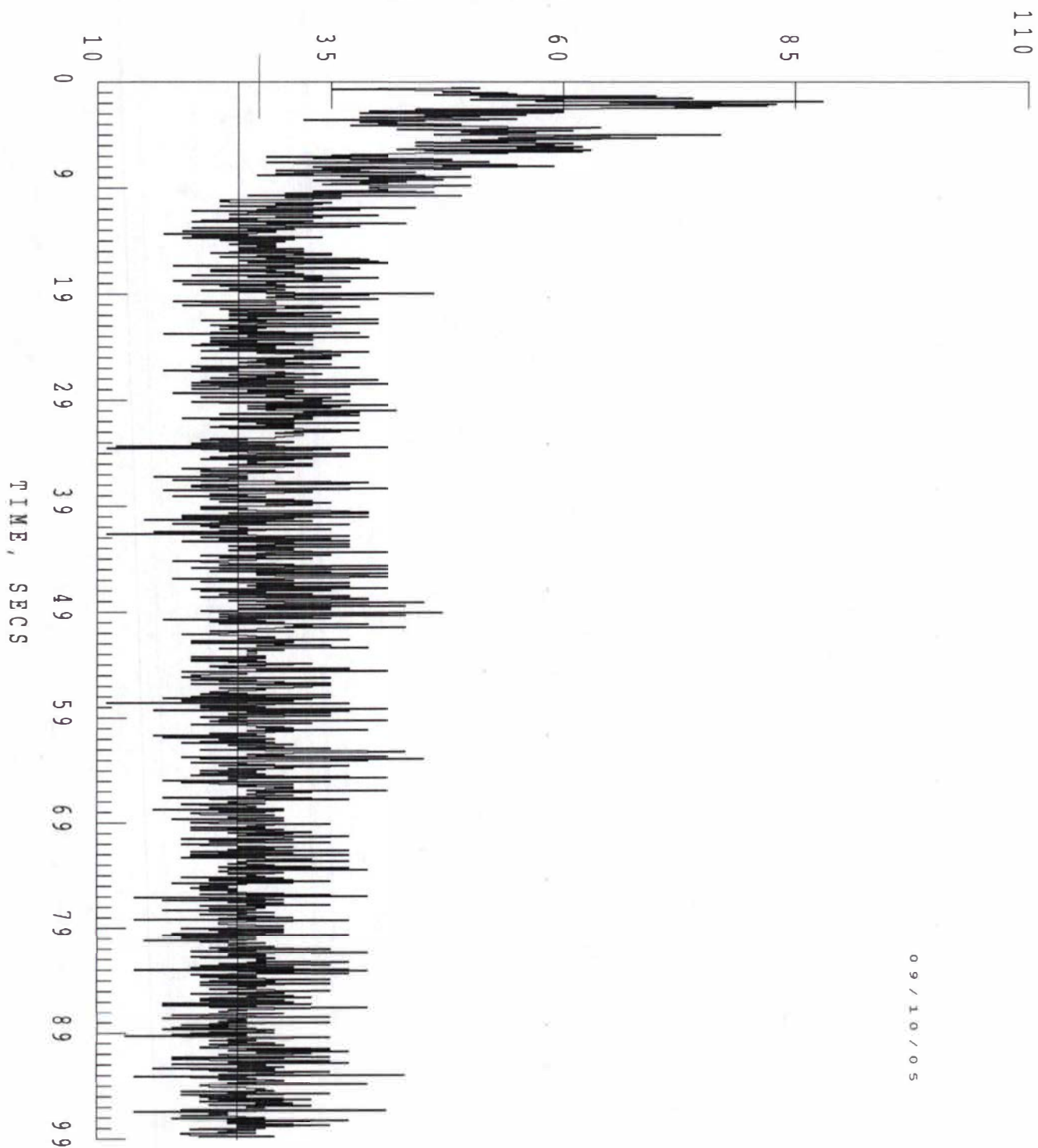


KONUS2

08/10/05 59600.762

50- 200 keV

COUNTS/0.064 S



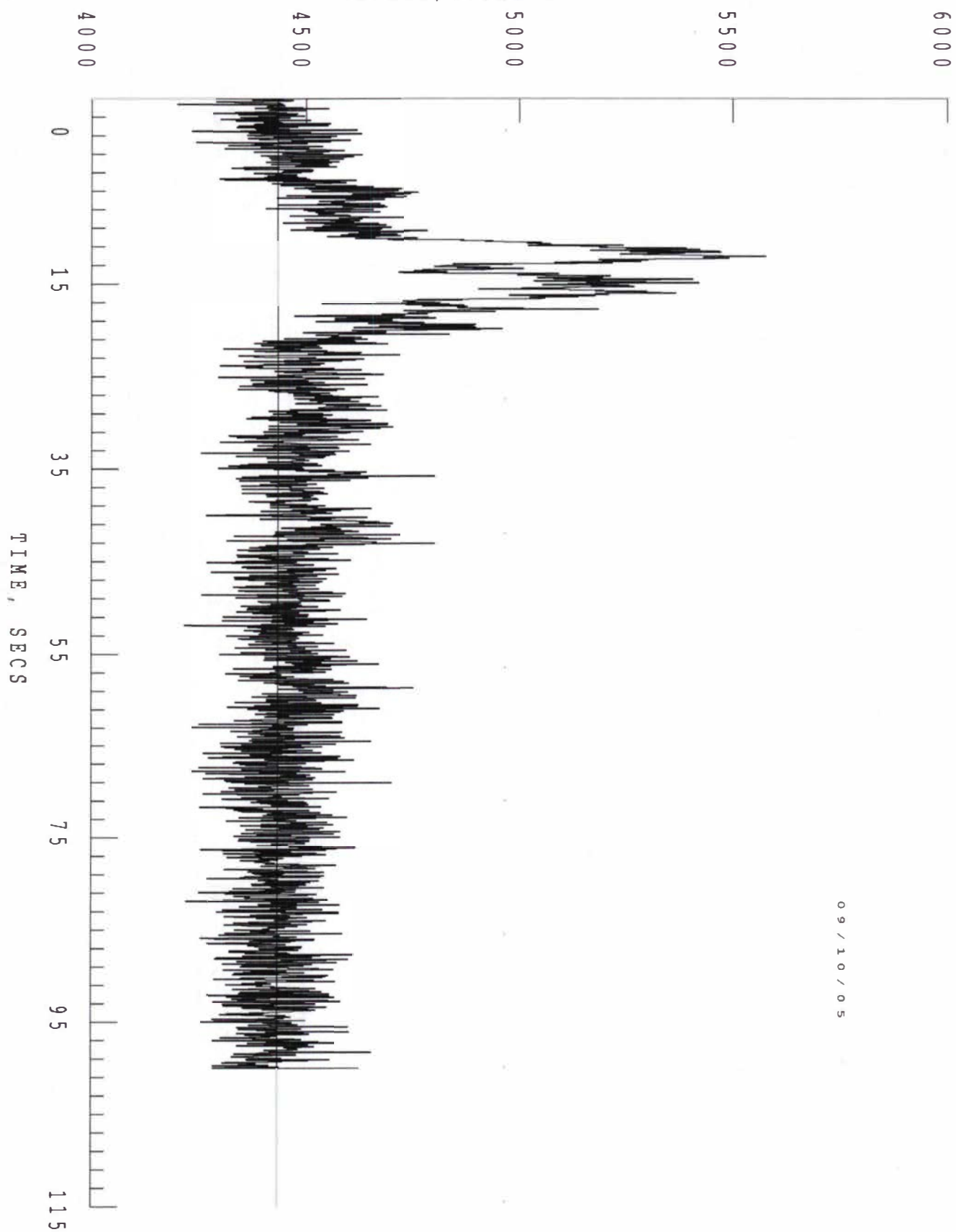
INTEGRAL

08/10/05

59592.159

100-10000 keV

COUNTS/0.050 S

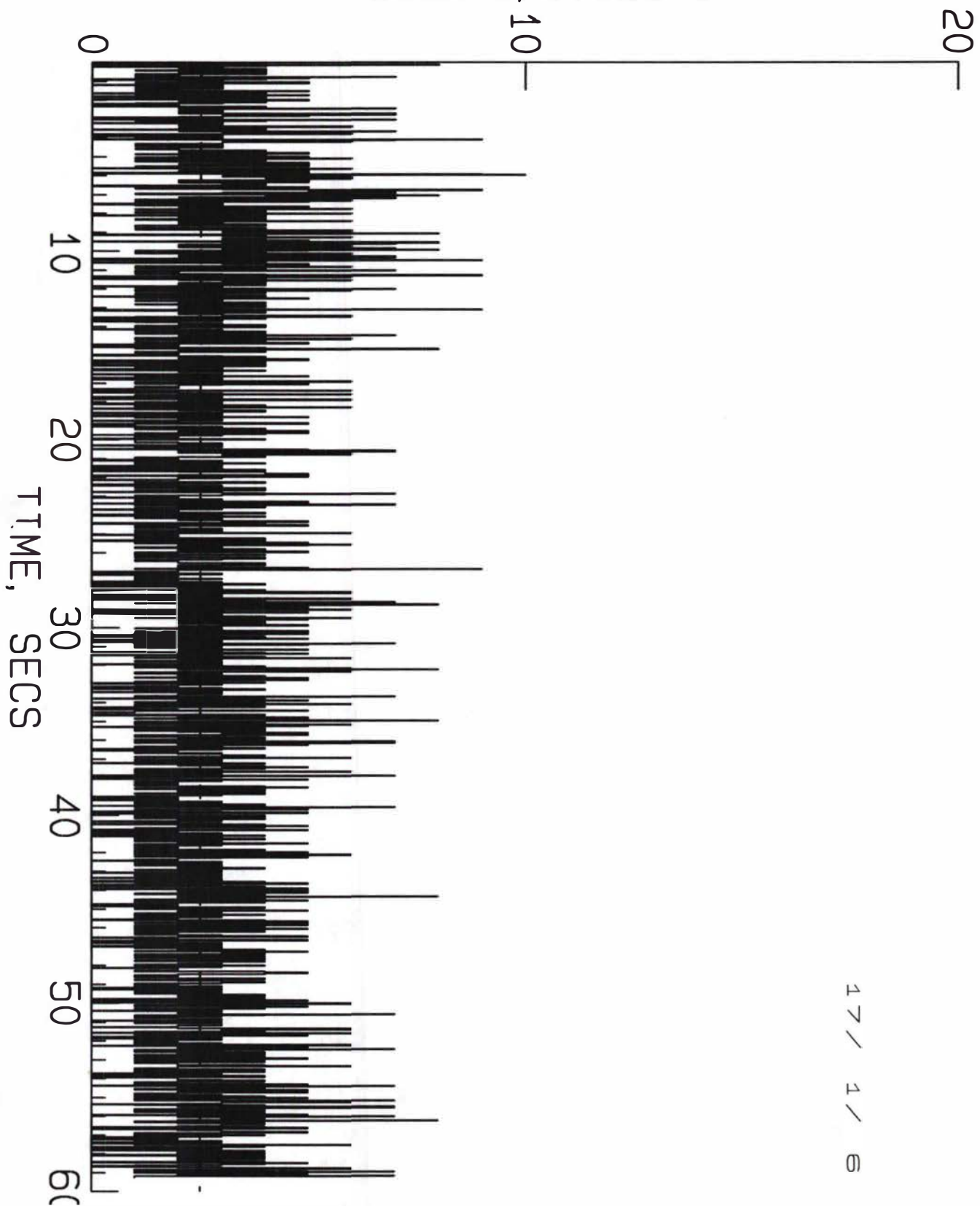


MO GE

08/10/05 59706.190

116- 337 keV

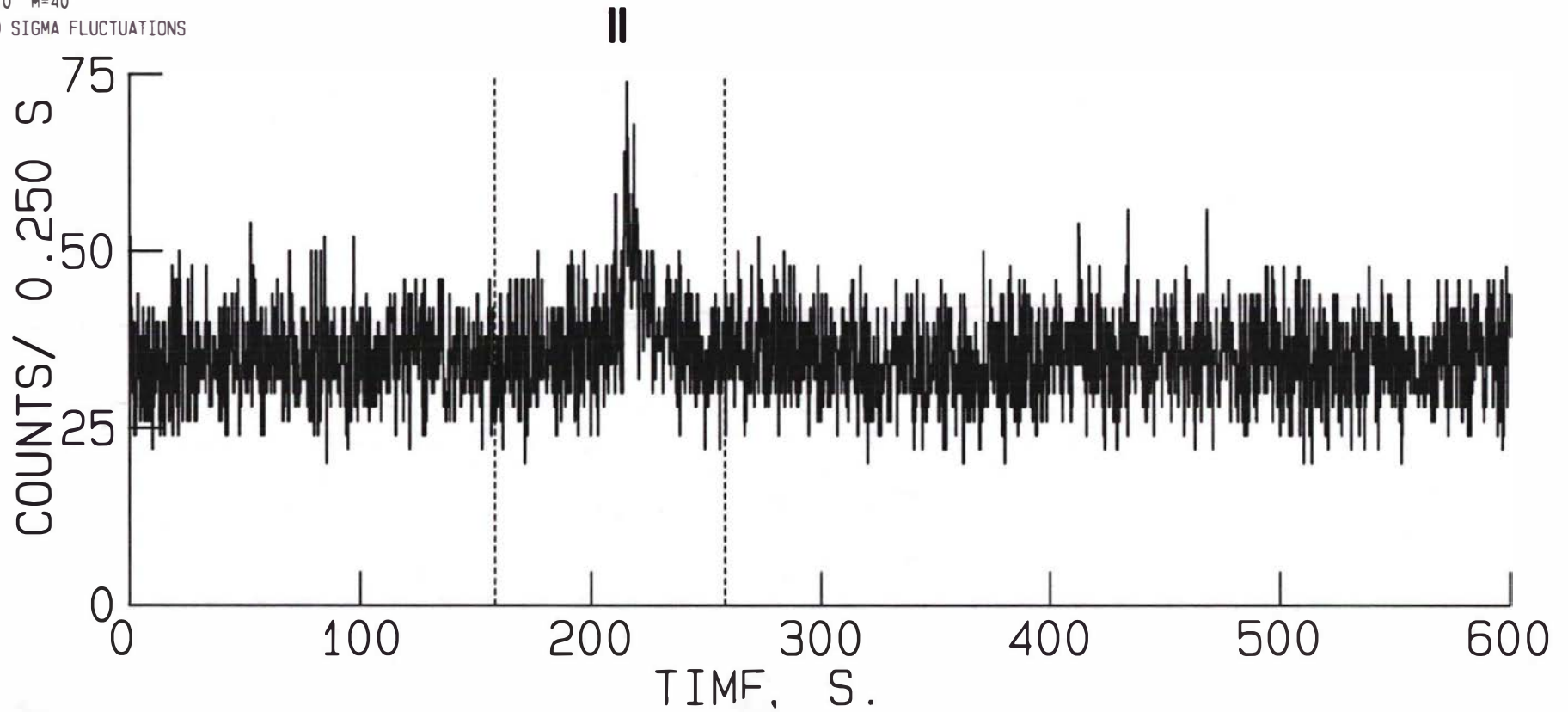
COUNTS/0.032 S



MS01 HEND
08/10/05 59497.801 s
50-3000 keV

12/12/05

N= 10 M=40
>4.0 SIGMA FLUCTUATIONS



HXD-WAM

GRB Table



Trigger No.	GRB	Date [YYYY-MM-DD]	Trigger Time UTC [hh:mm:ss]	Detector	Incident angle [degree]	Duration T90	Fluence	Light Curves	Spectra	Download
0086	GRB051111	2005-11-11	05:59:39	2,3	theta:116 phi:212	31.0938	8.4e-6 (100-700keV)	Click	---	C
0061	GRB051008	2005-10-08	16:33:18	0,2,3	theta:130 phi: 133	48.1875	3.2e-5 (0.1-2MeV)	Click	---	C

Return to [GRB Top](#) or [Suzaku Home Page](#).

KONUS HRES 20051008 59600

TRIGGER TIME: 08/10/05 DOY 281 Julian 2453653.18981 UT = 16.556 16:33:20 (59600.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

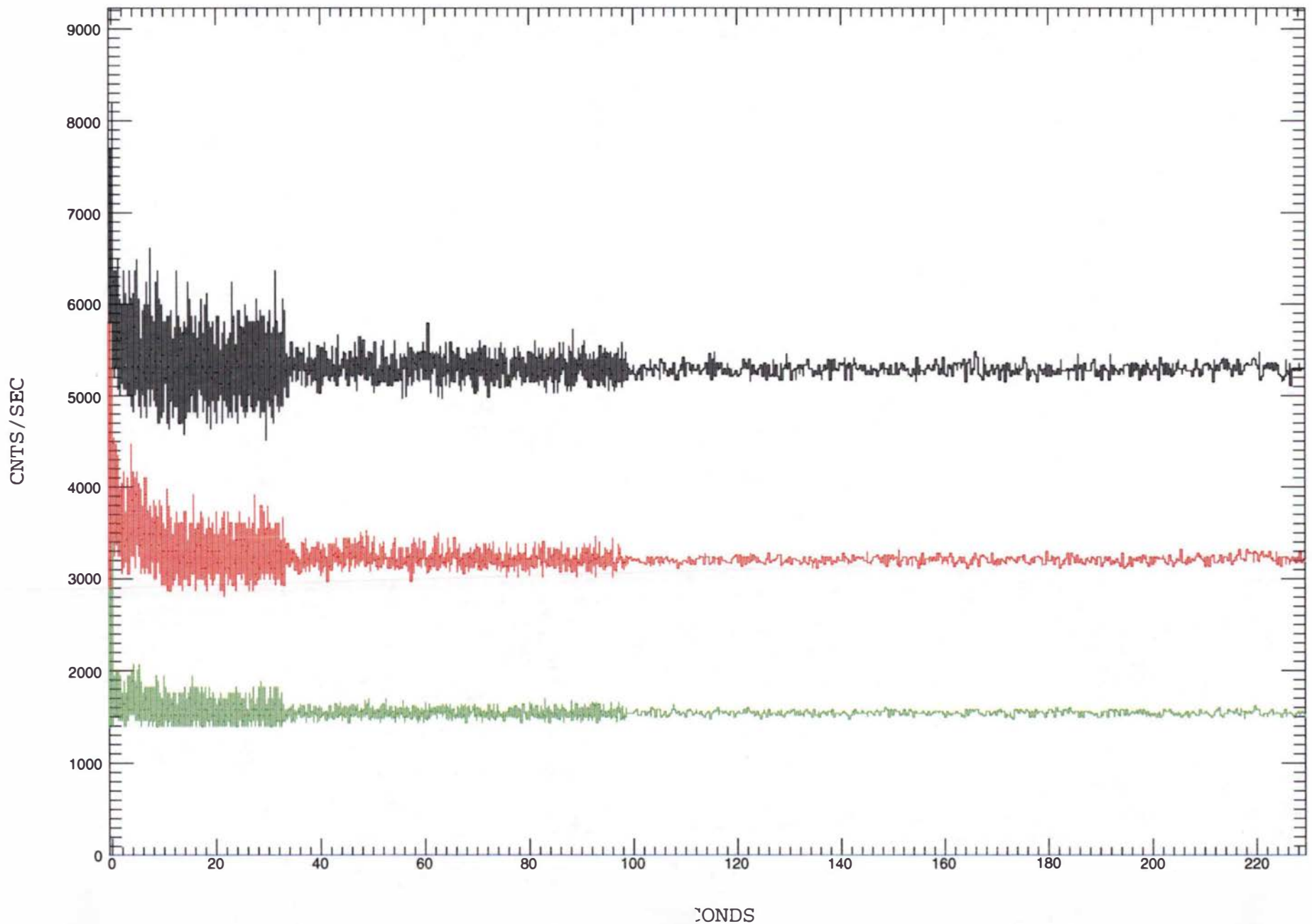
Chan 4 : [> 10 MeV]

Channel 1 + 4200

Channel 2 + 2800

Channel 3 + 1400

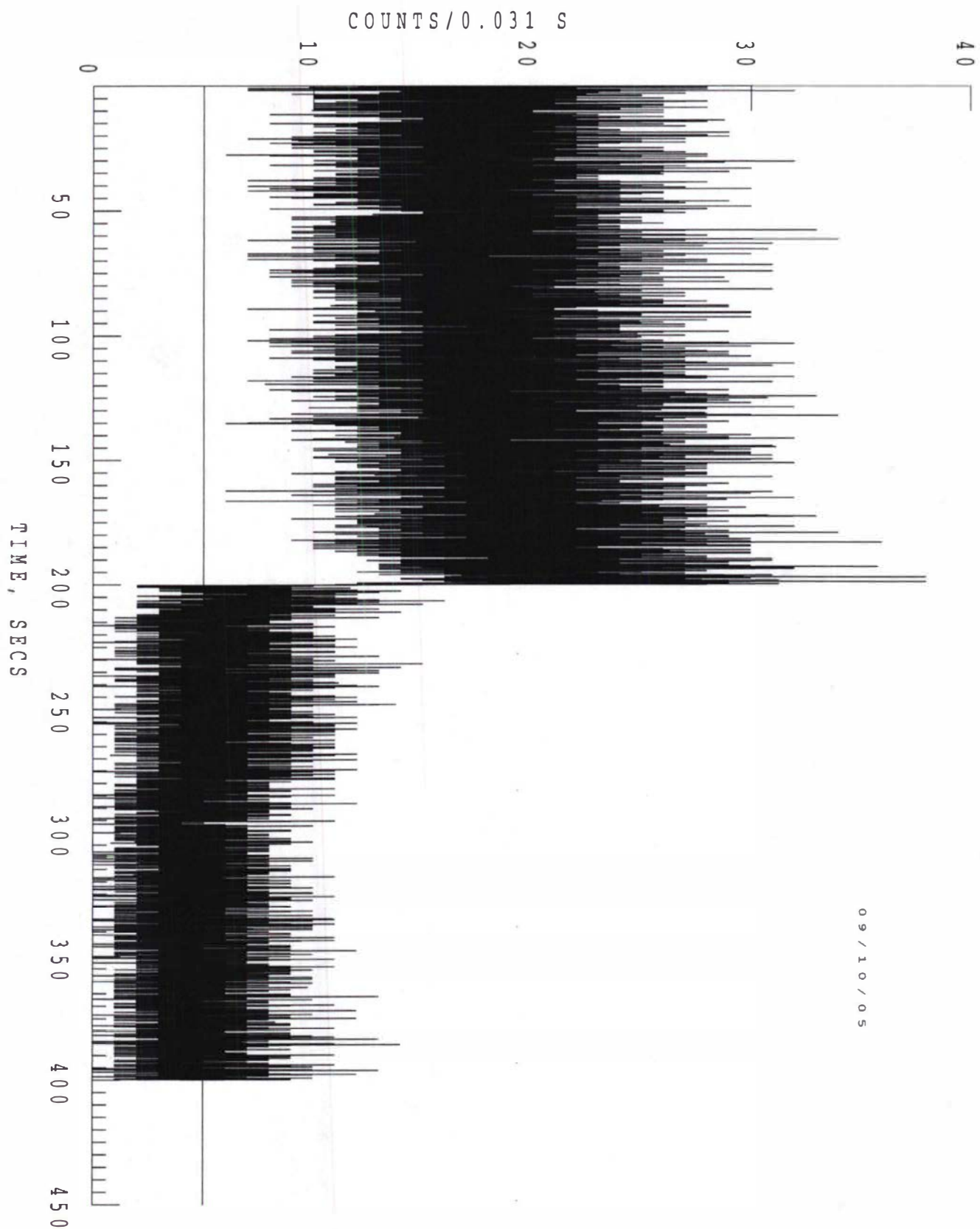
Channel 4 + 0



HESSI

08/10/05 59401.000 (GSwift-BAT_158855_0_20051008_

25- 150 keV



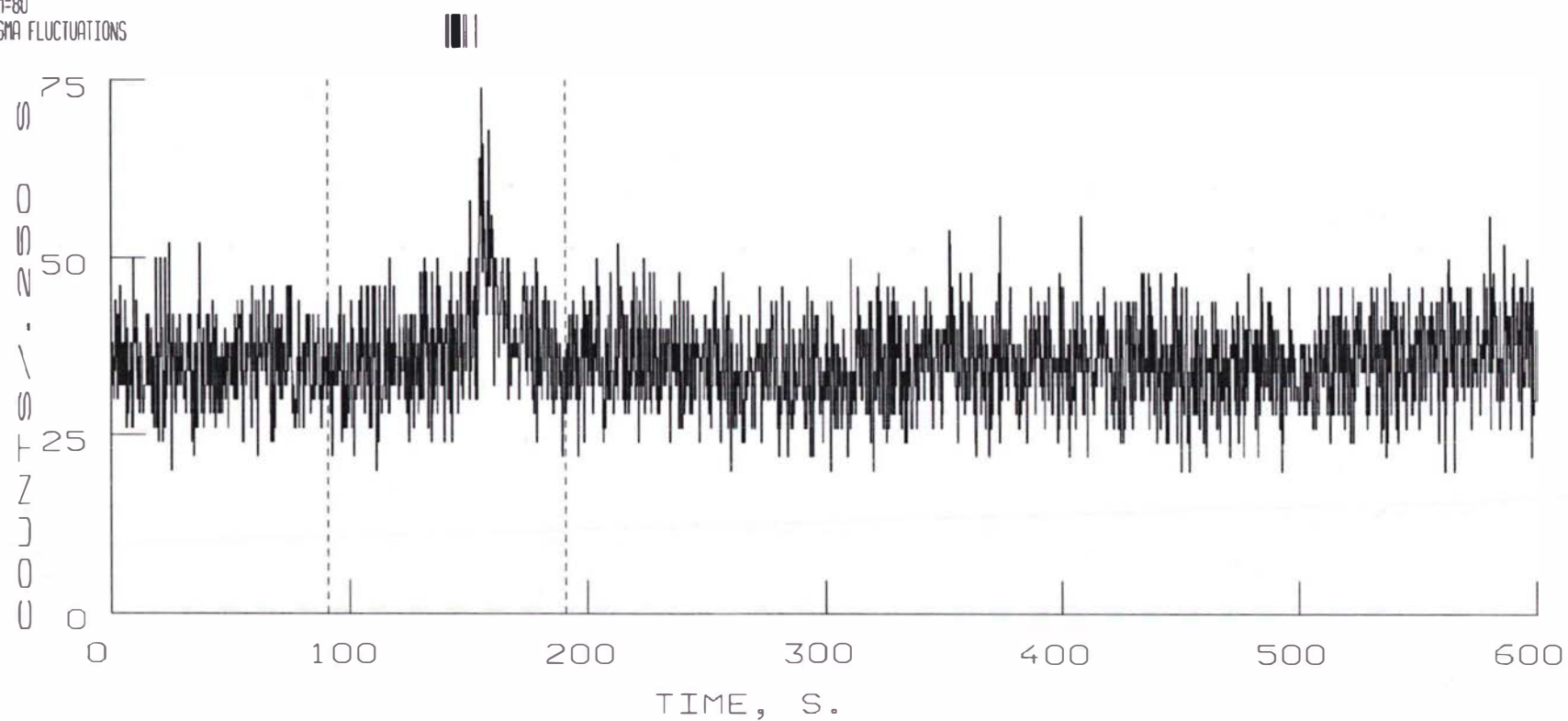
MS01 HEND

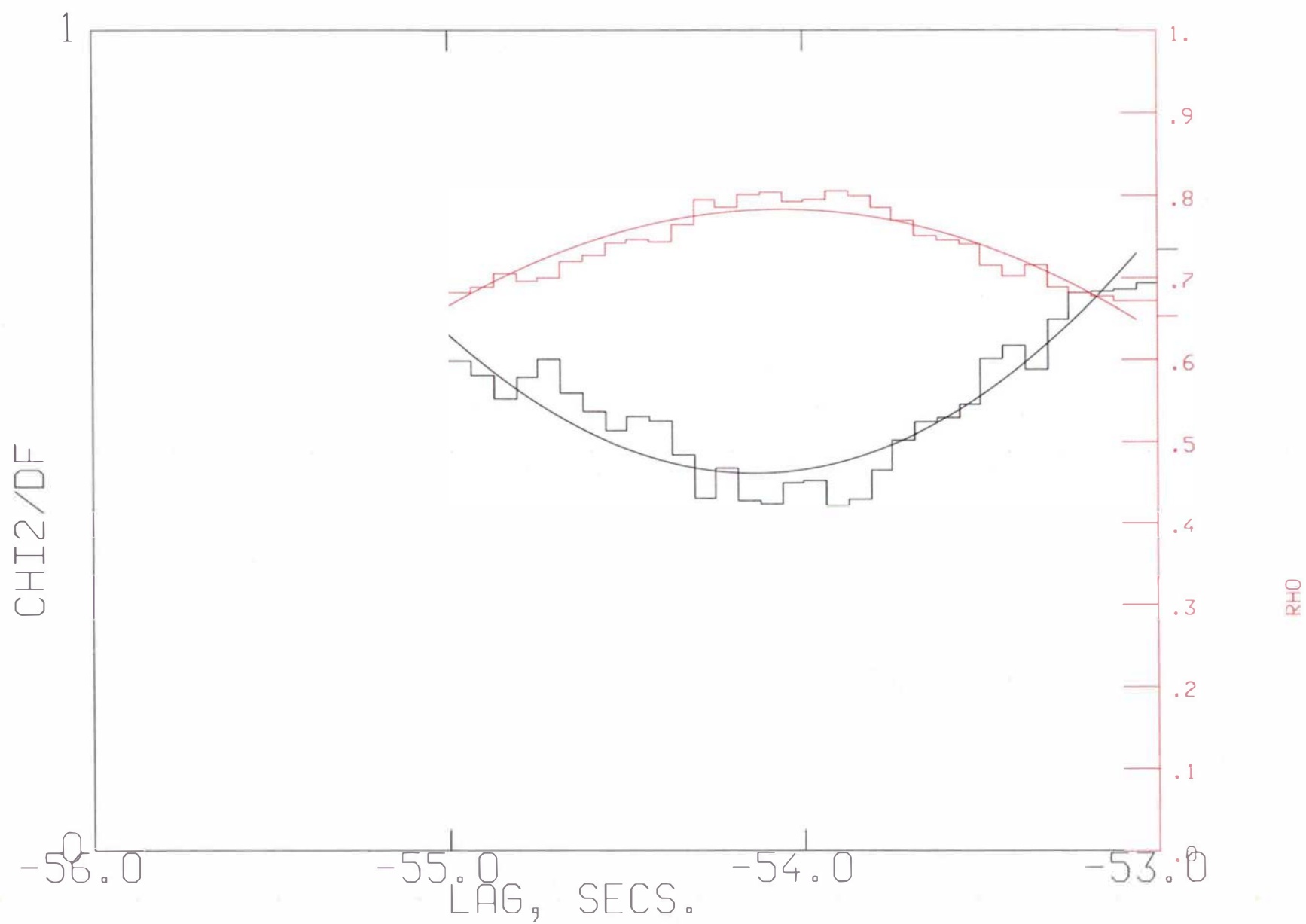
25/02/2014

08/10/2005 59557.078 s

50-3000 keV

N= 10 M=80
>4.0 SIGMA FLUCTUATIONS



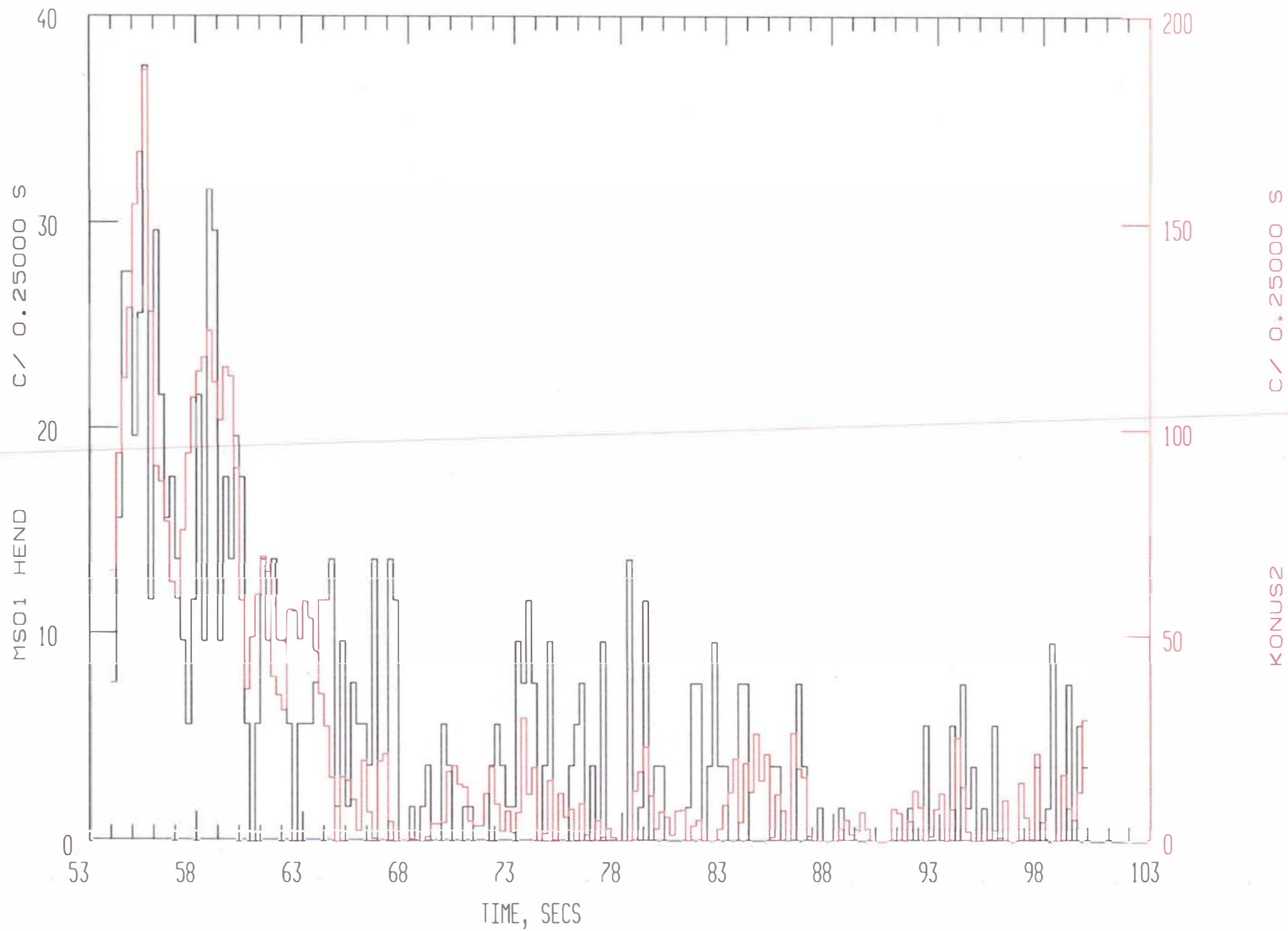


MS01 HEND -KONUS2

CORRELATION

08/10/05 59657.078

25/ 2/14

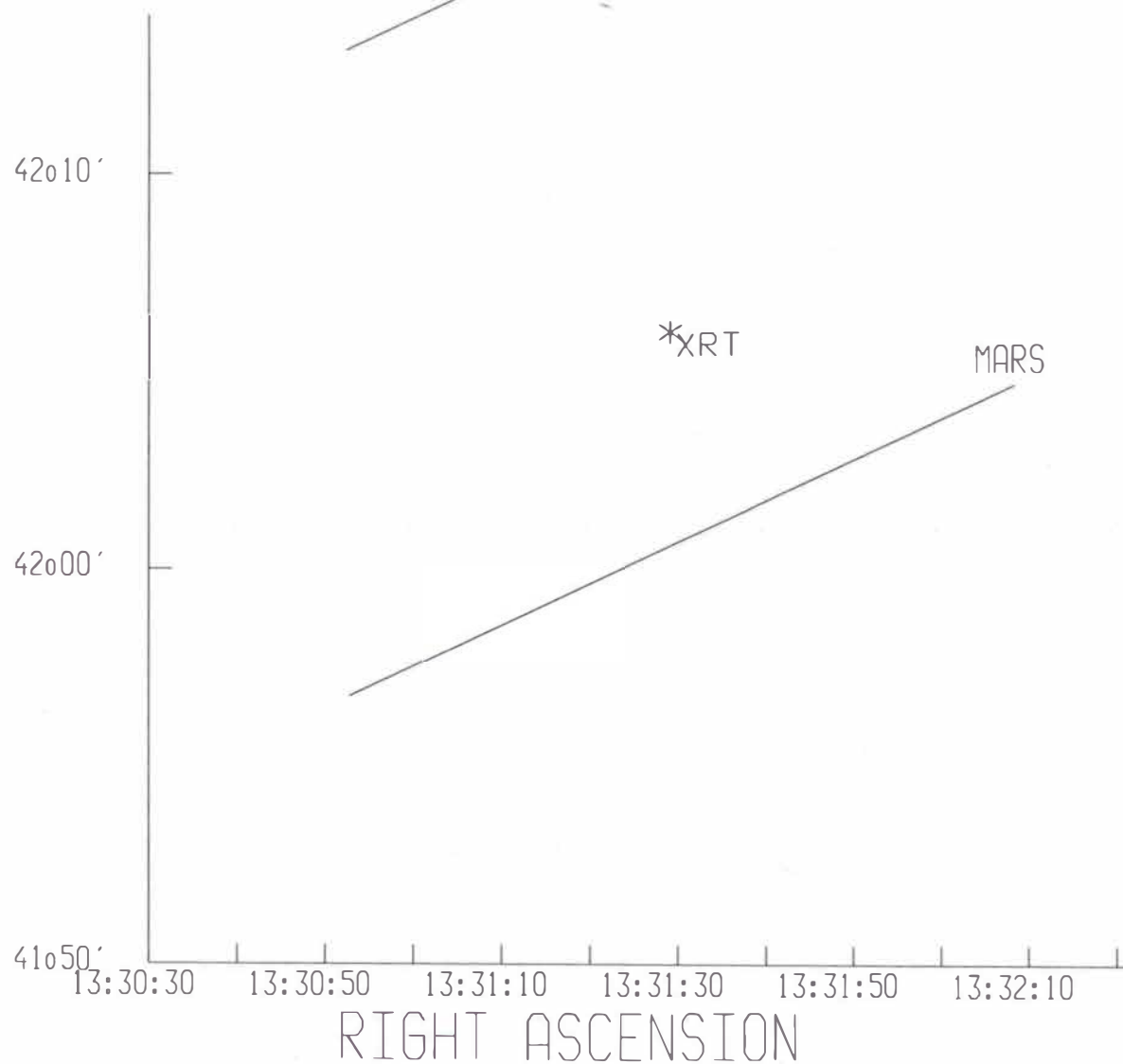


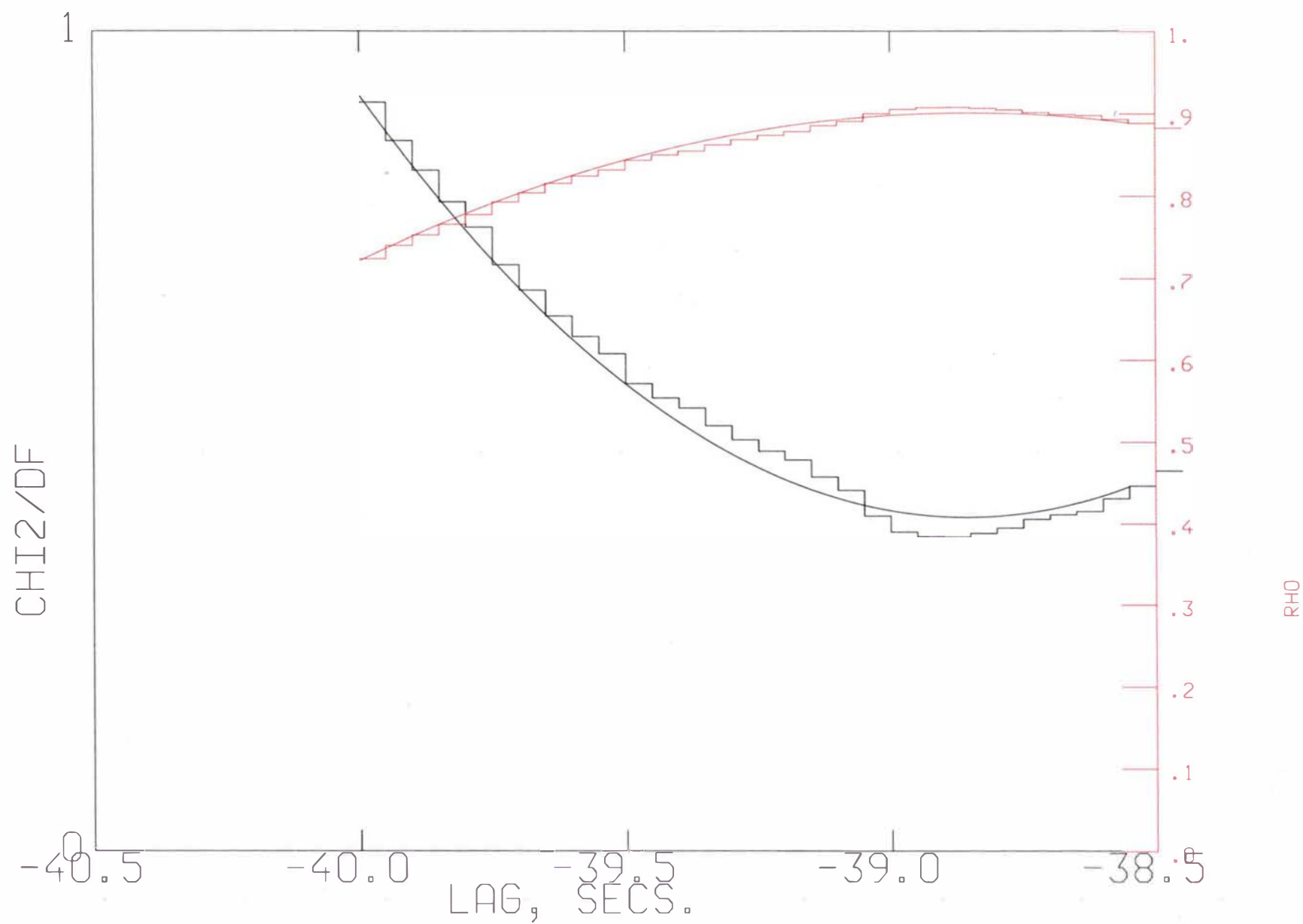
2-1
EVENT OF OCT 8, 2005 16:34

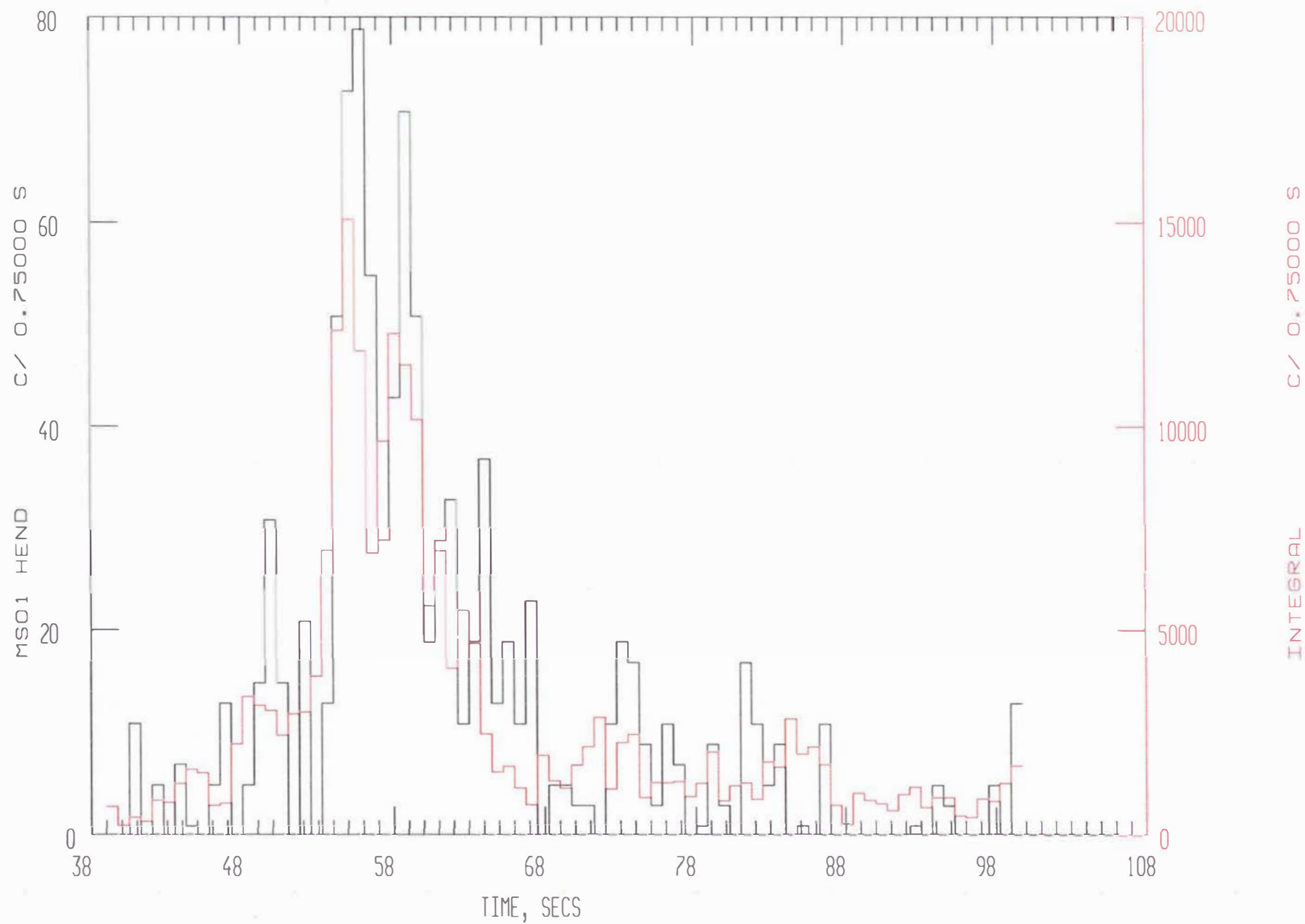
25/02/2014

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

DECLINATION





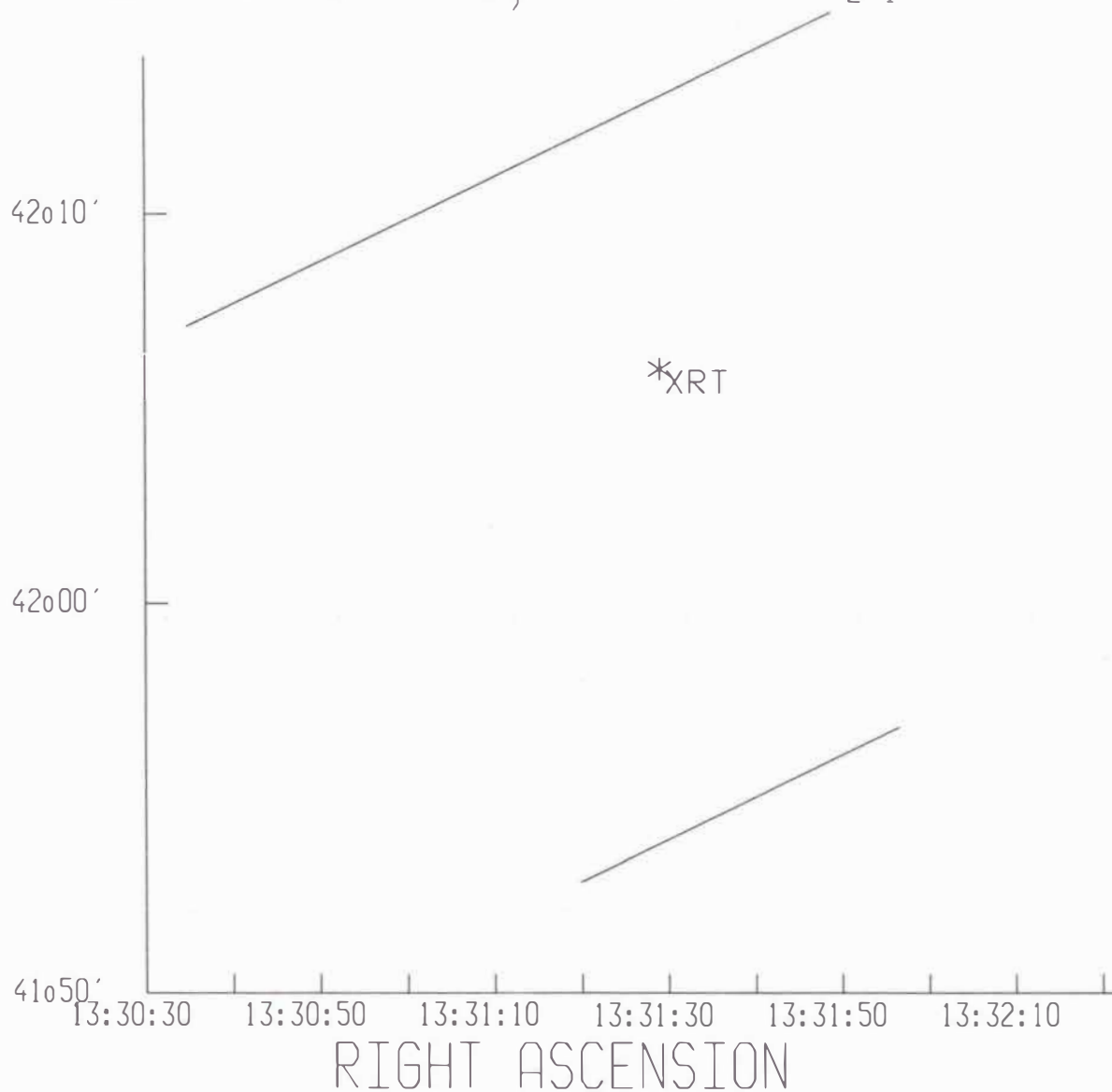


EVENT OF OCT 8, 2005 16:34₂₋₁

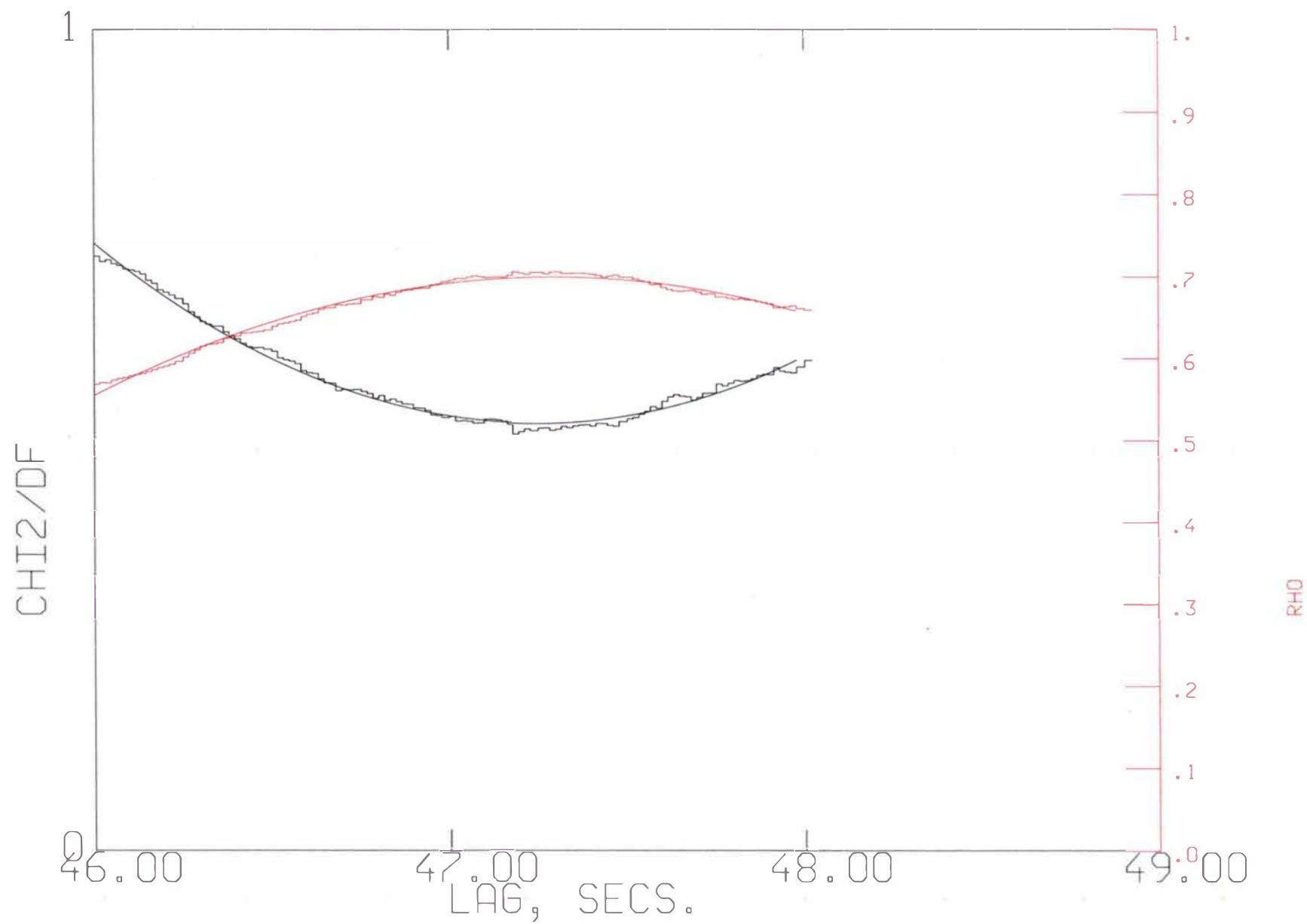
25/02/2014

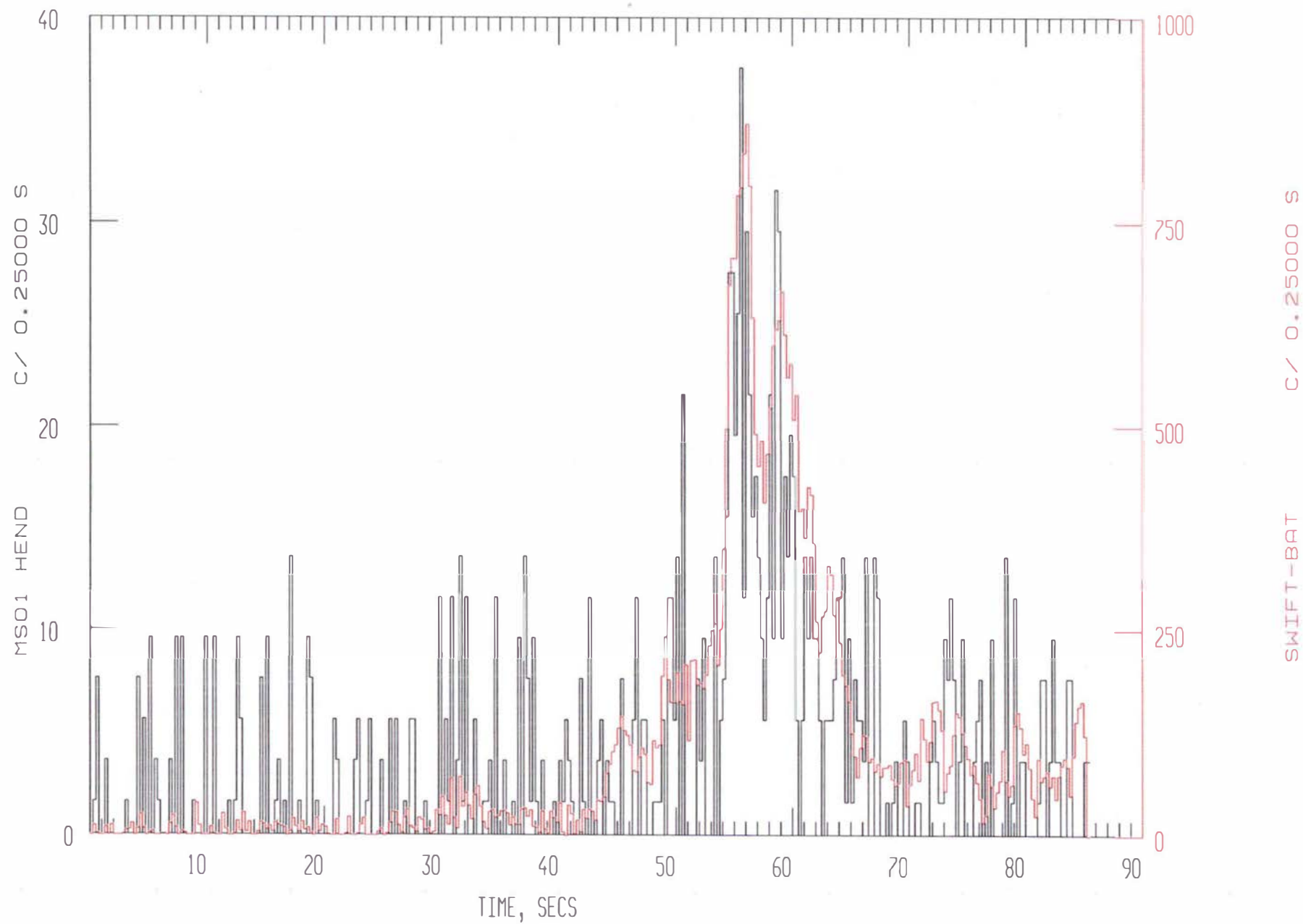
N-M = CORRELATION BETWEEN SATELLITES N AND M
EARTH-N = EARTH AS SEEN FROM SATELLITE N
S=SUN
E=ECLIPTIC
G=GALACTIC EQUATOR
1 MO
2 INTEGRAL

DECLINATION



RIGHT ASCENSION

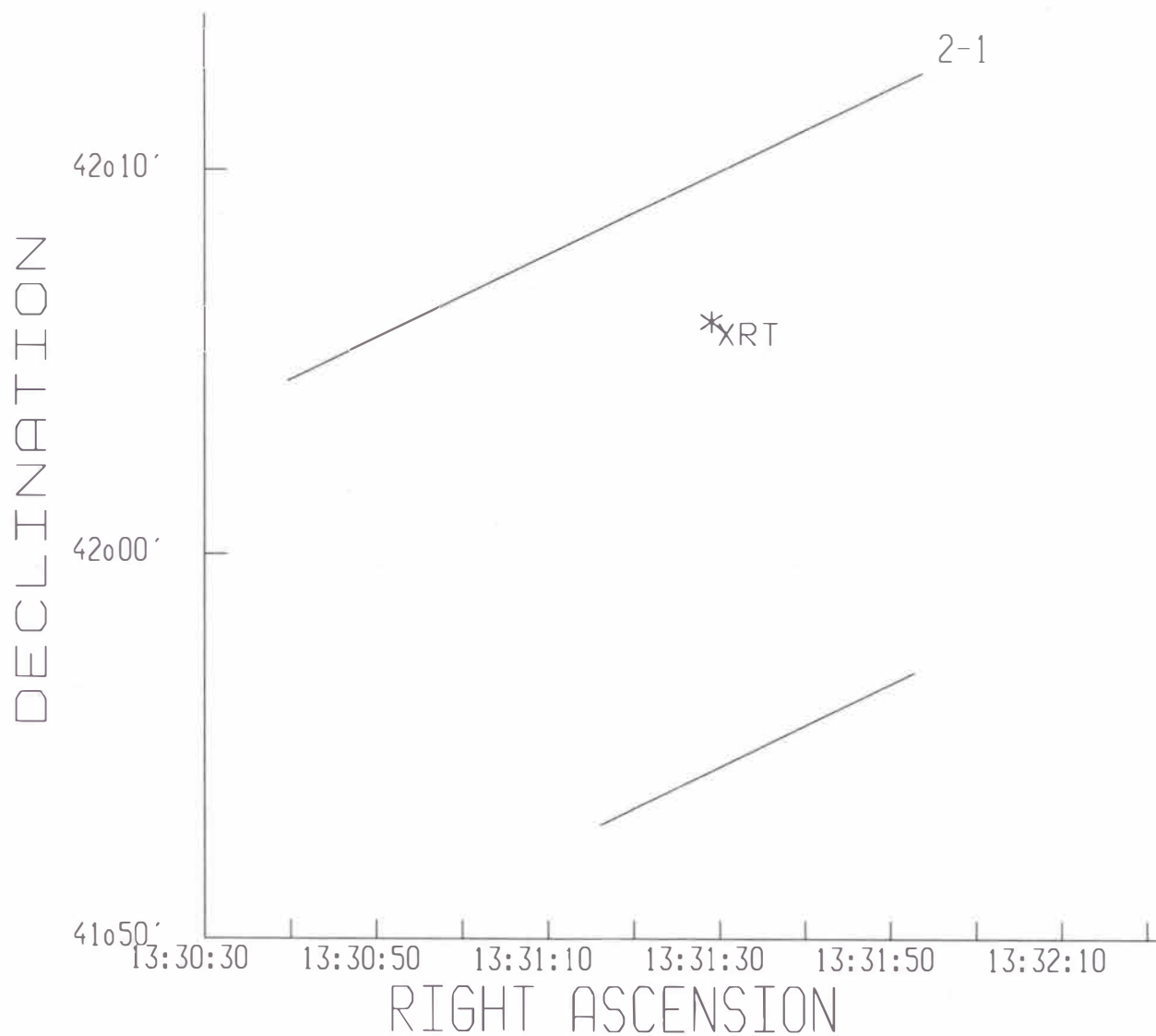


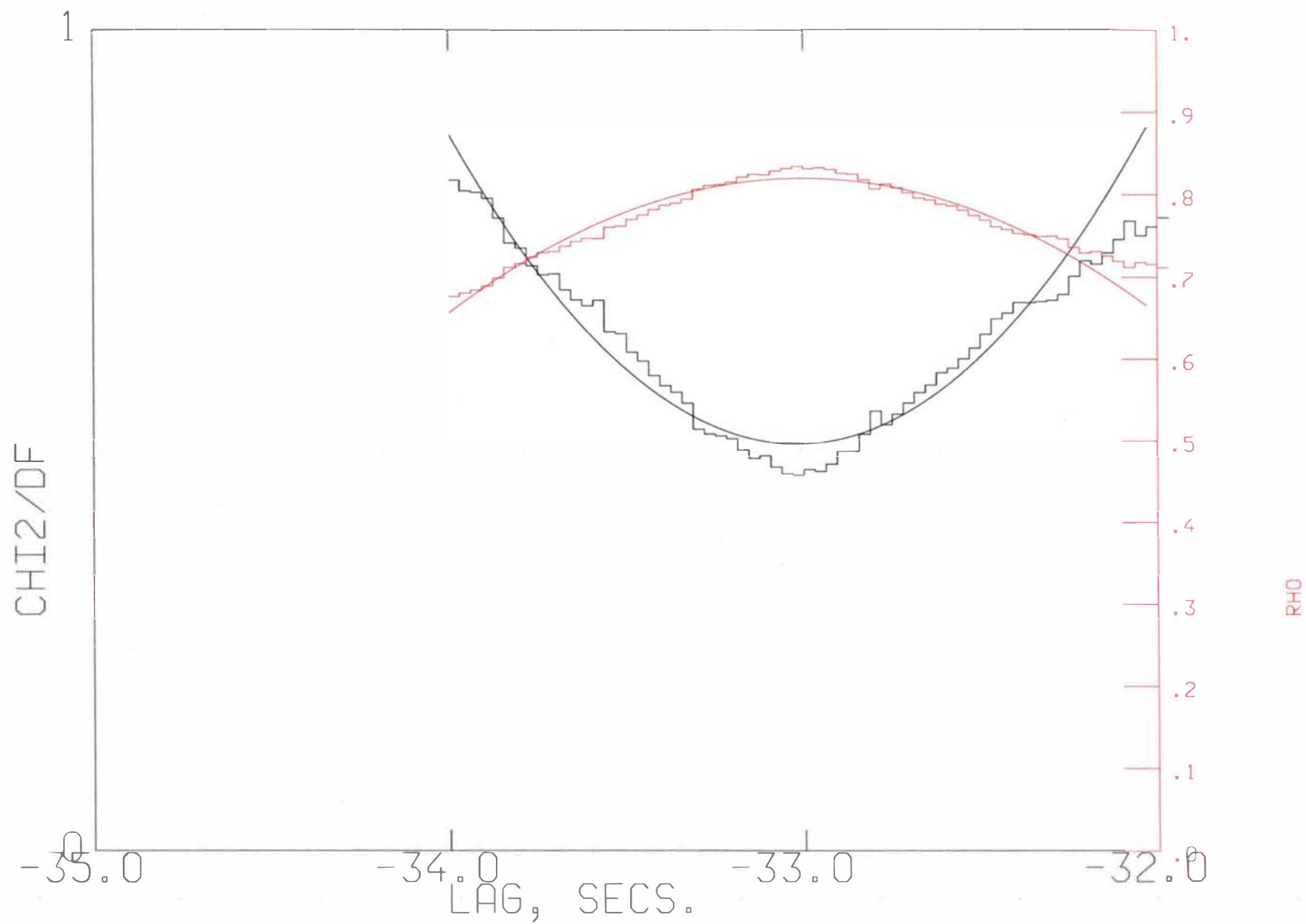


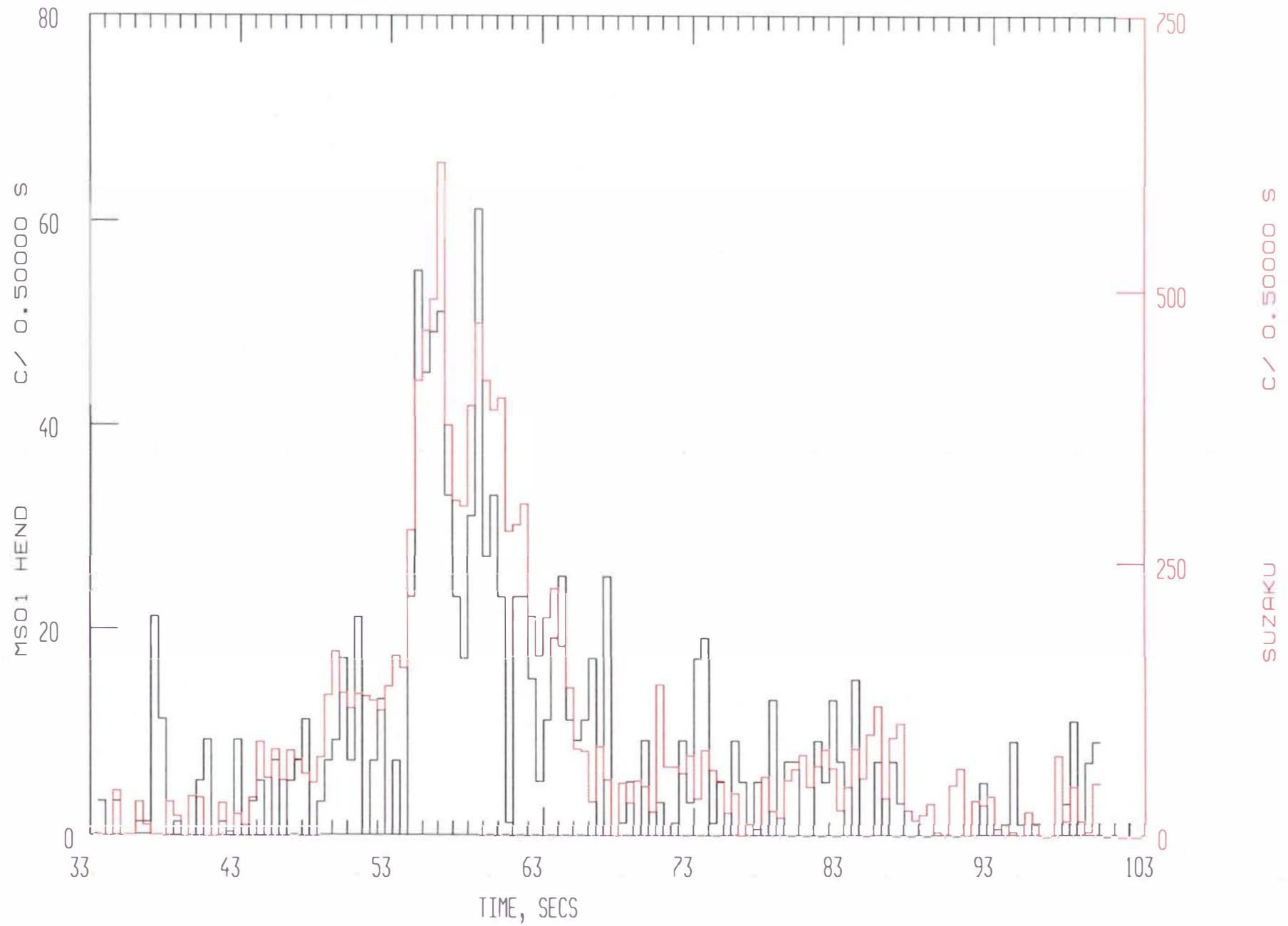
EVENT OF OCT 8, 2005 16:34

25/02/2014

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





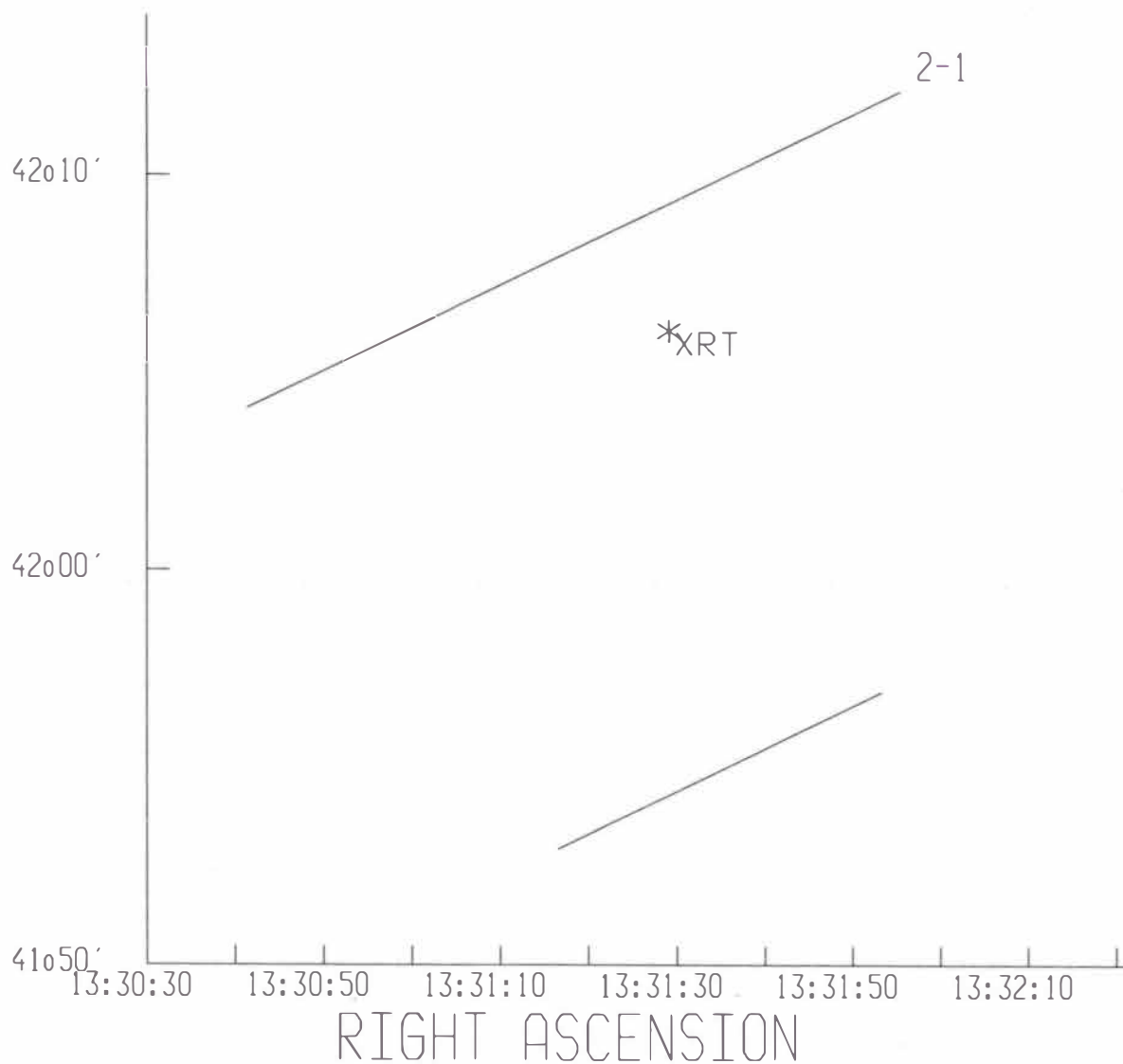


EVENT OF OCT 8, 2005 16:34

25/02/2014

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

DECLINATION



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

08/10/05 DOY 281 Julian 2453652.50000 [est. sct = 0019 c039 a0ee a2e5]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

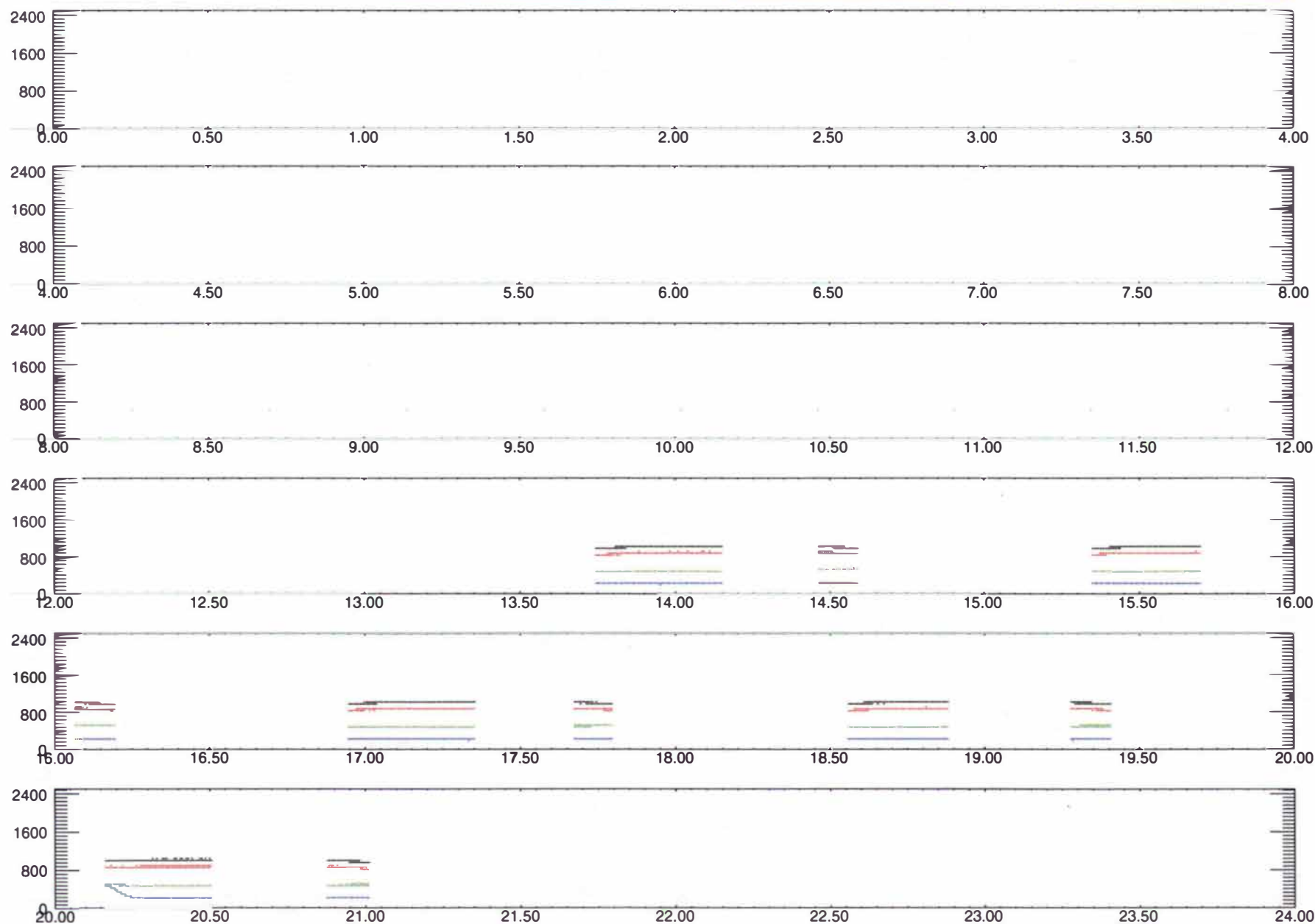
Channel 1 + 800

Channel 2 + 600

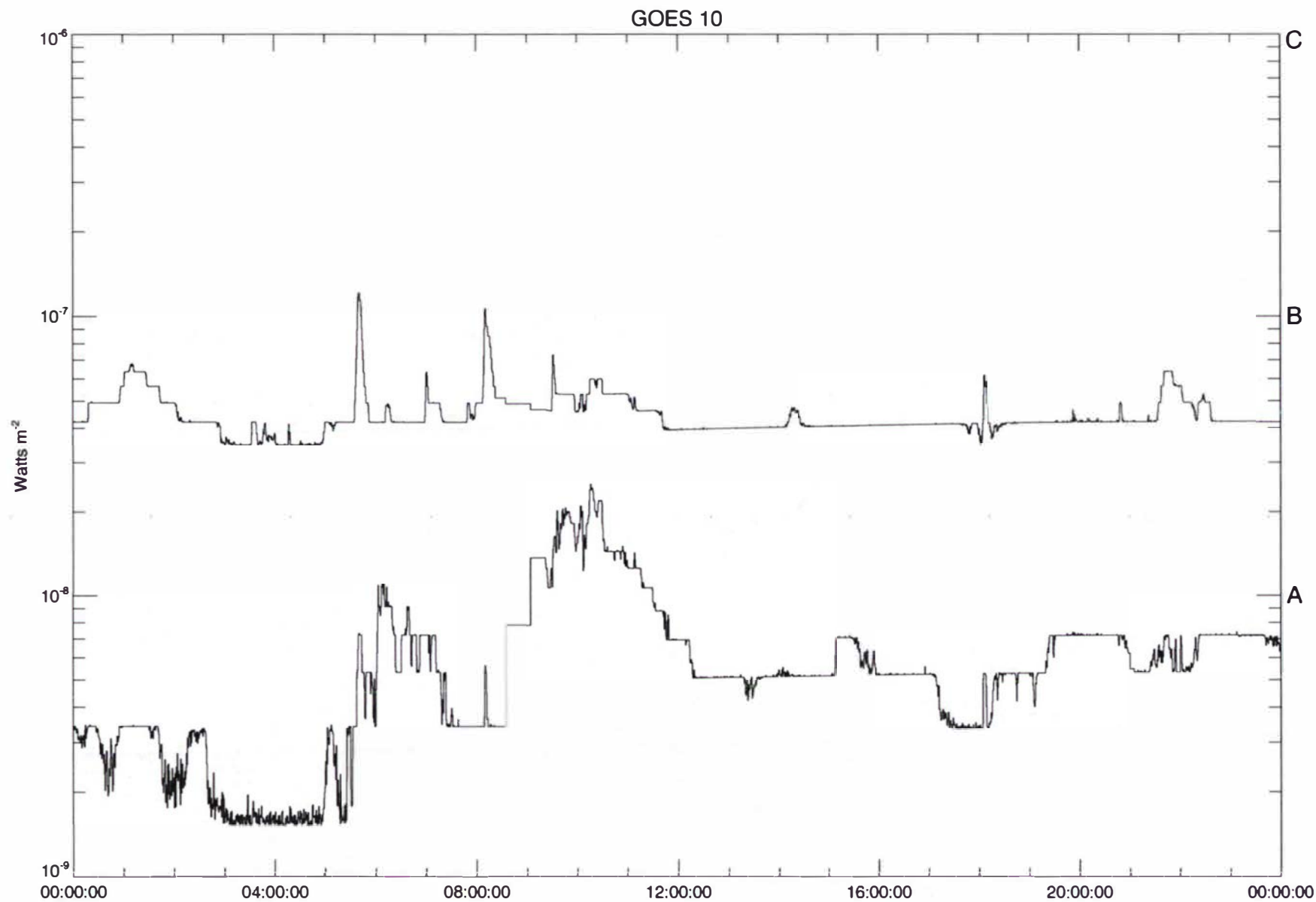
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT



Data Start: 05/10/08, 0000:00

Channel

1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

Plot created: 05/10/10, 0824

Sample average = 10

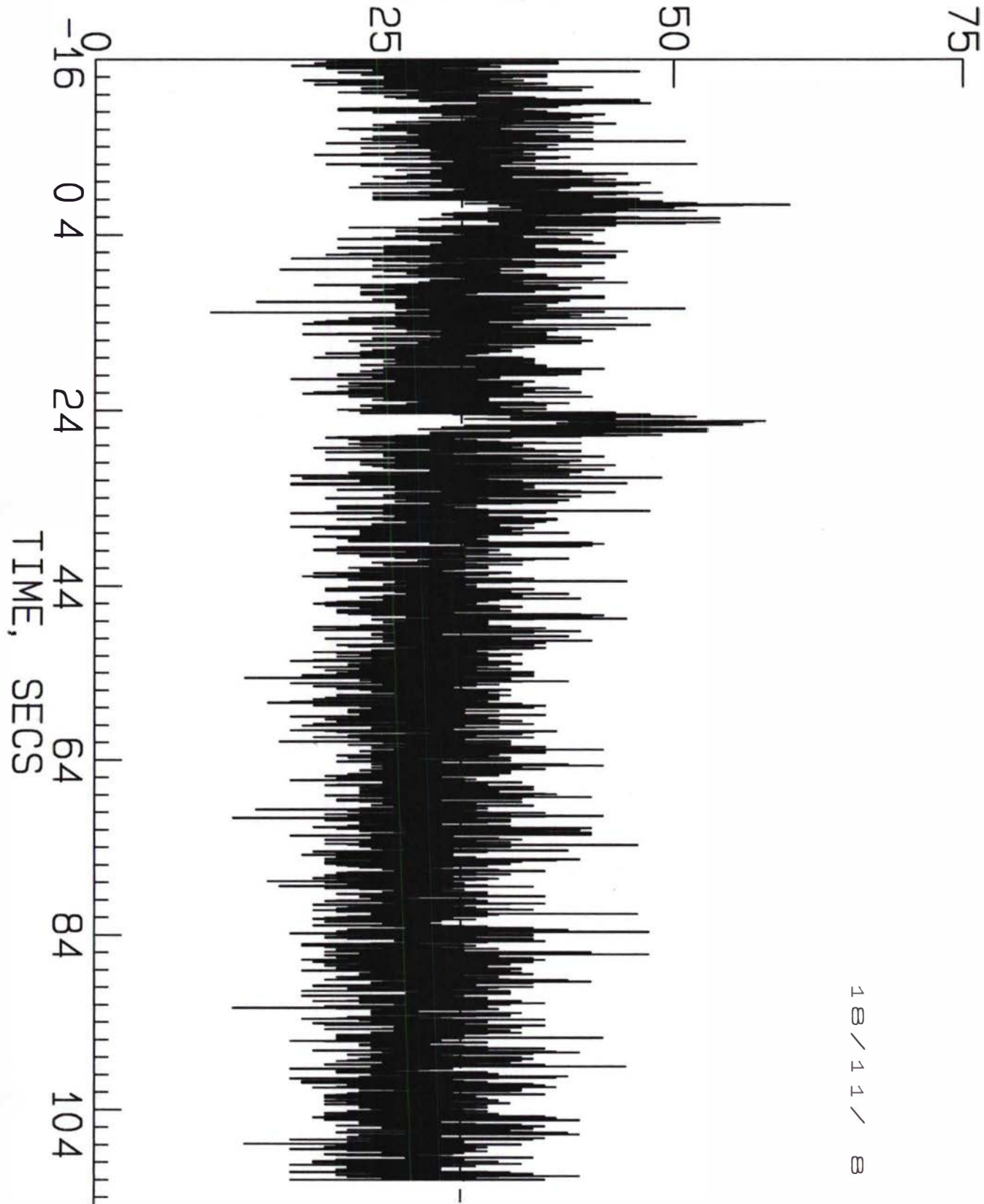
SUZAKU

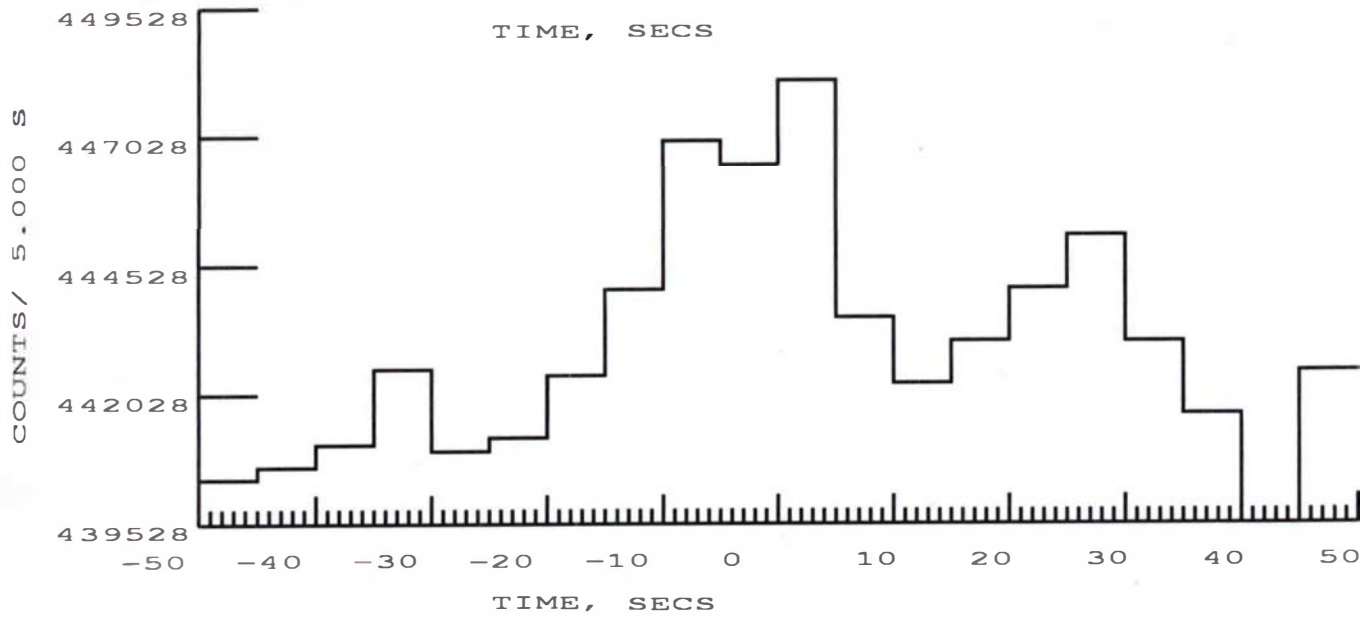
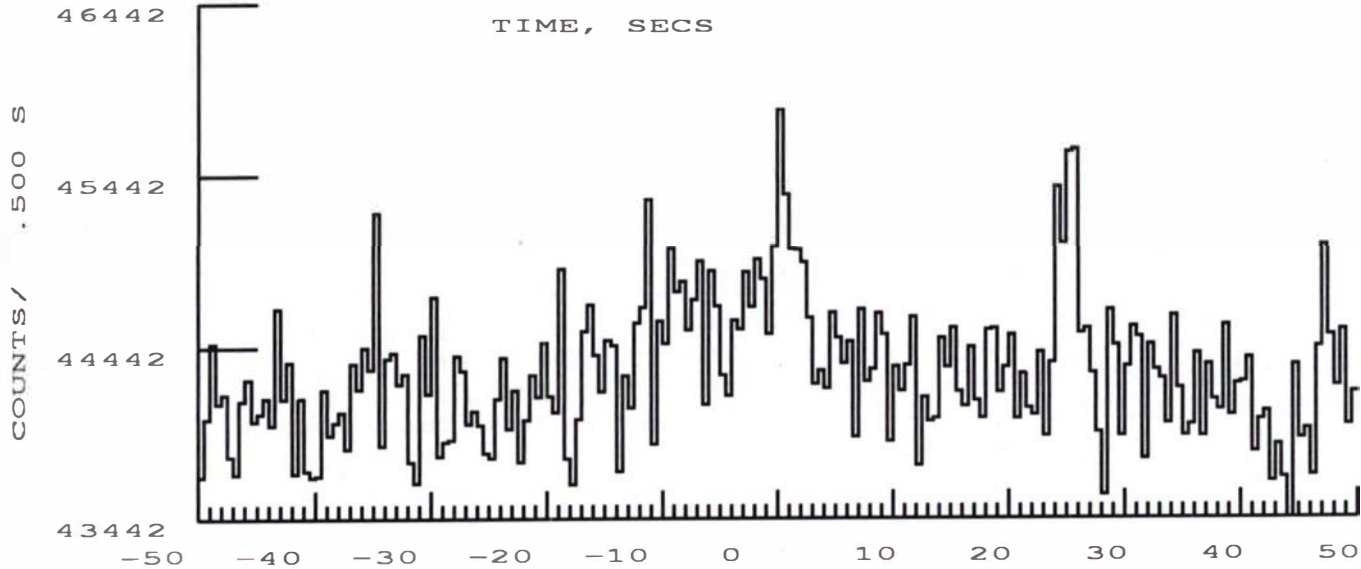
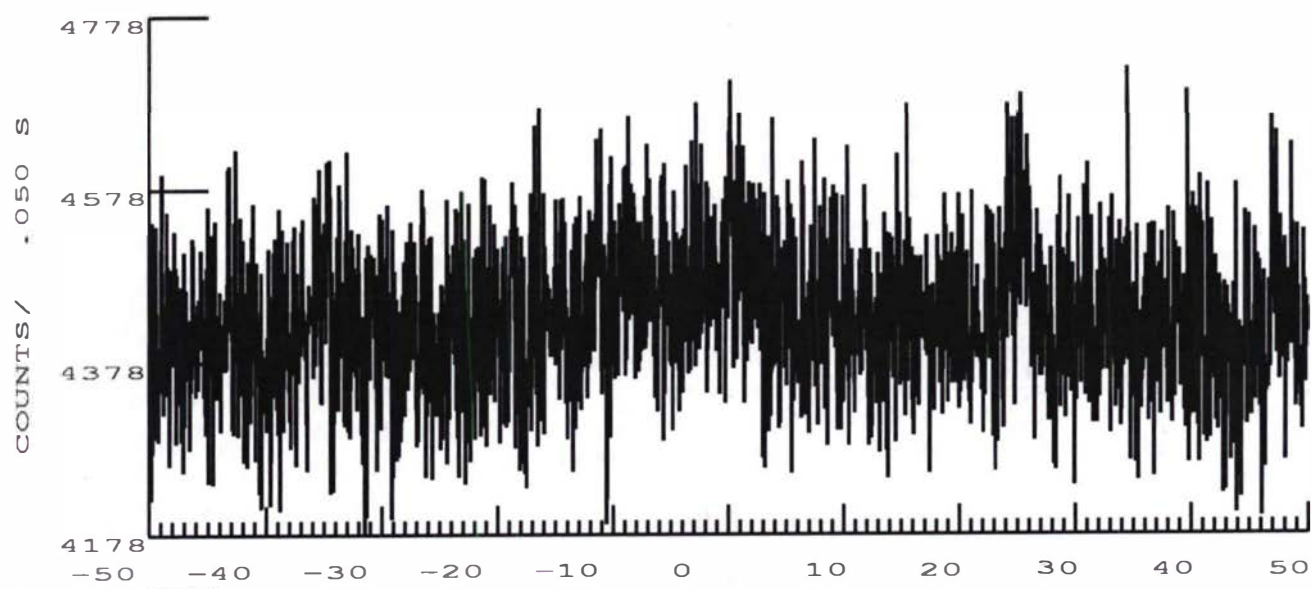
09/10/05 38917.461

50- 240 keV

10:48:37

COUNTS/0.031 S





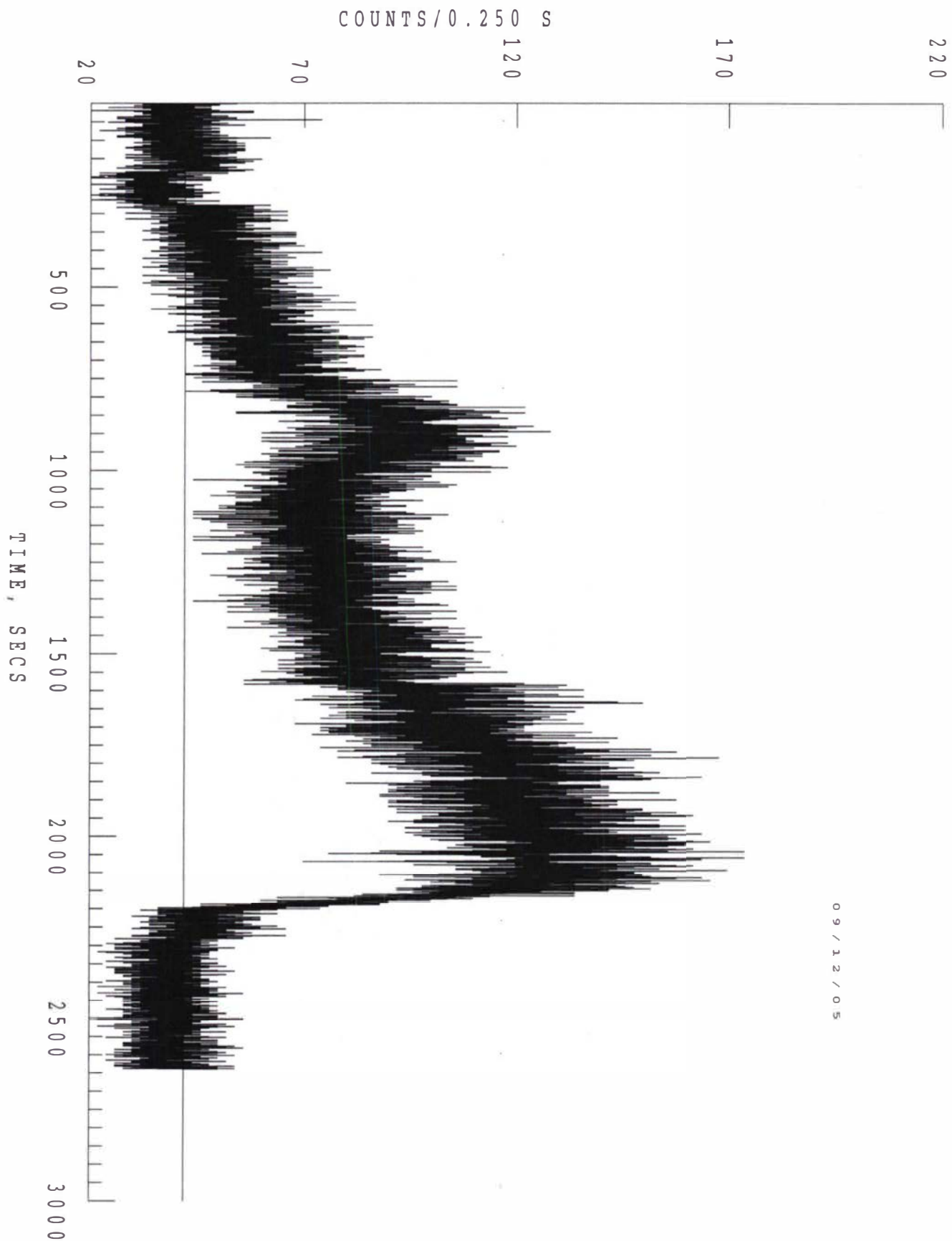
MS01

09/10/05

37596.727

50 - 3000 keV

Suzaku 10:48:38



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051009_38918)

BEG TIME: 09/10/05 DOY 282 Julian 2453653.95000 UT = 10.800 10:48:00 (38880.000 secs) [sct = 0019 c056 ccf2 c2ed]
 END TIME: 09/10/05 DOY 282 Julian 2453653.95083 UT = 10.820 10:49:12 (38952.000 secs) [sct = 0019 c056 d13d 677b]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

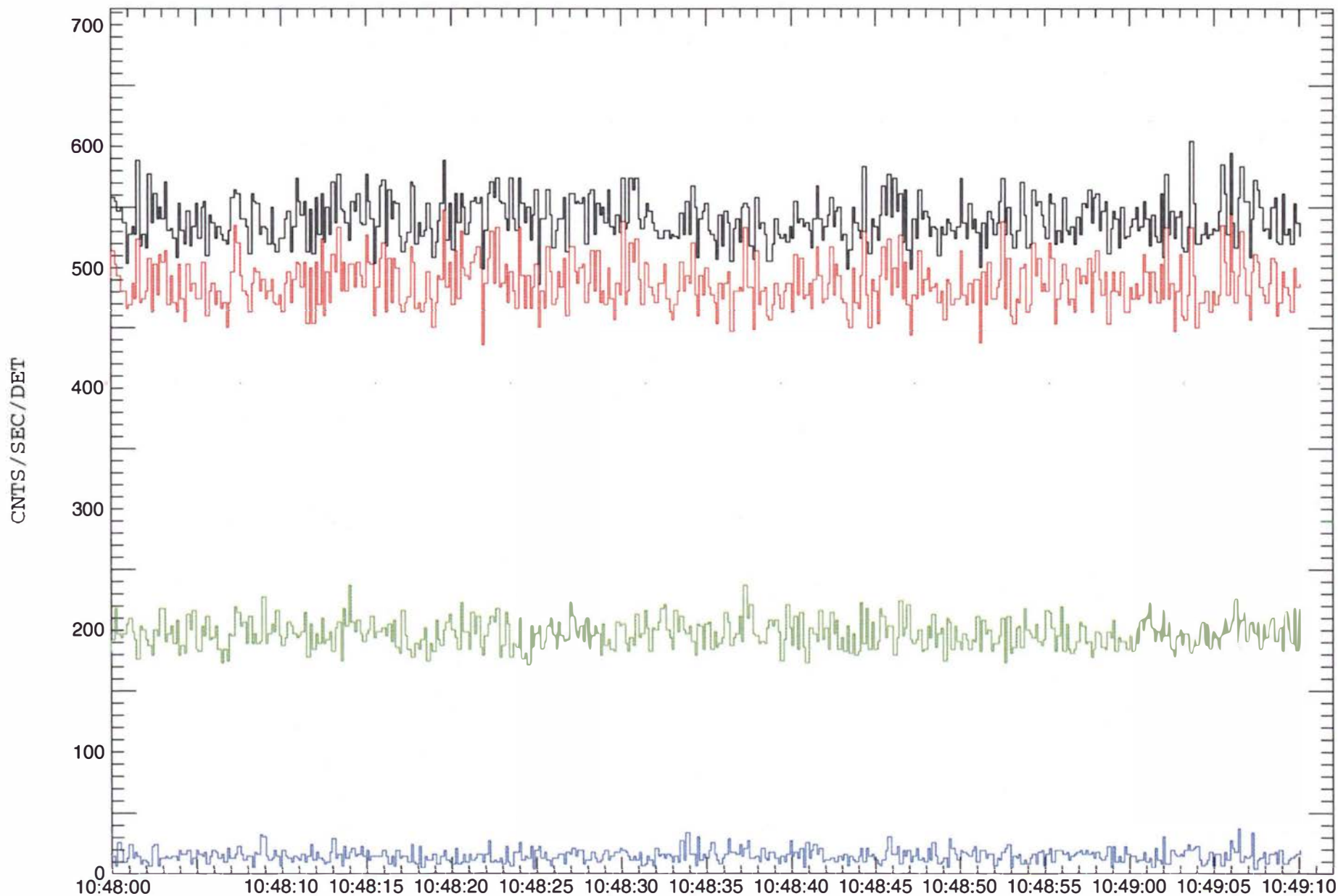
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



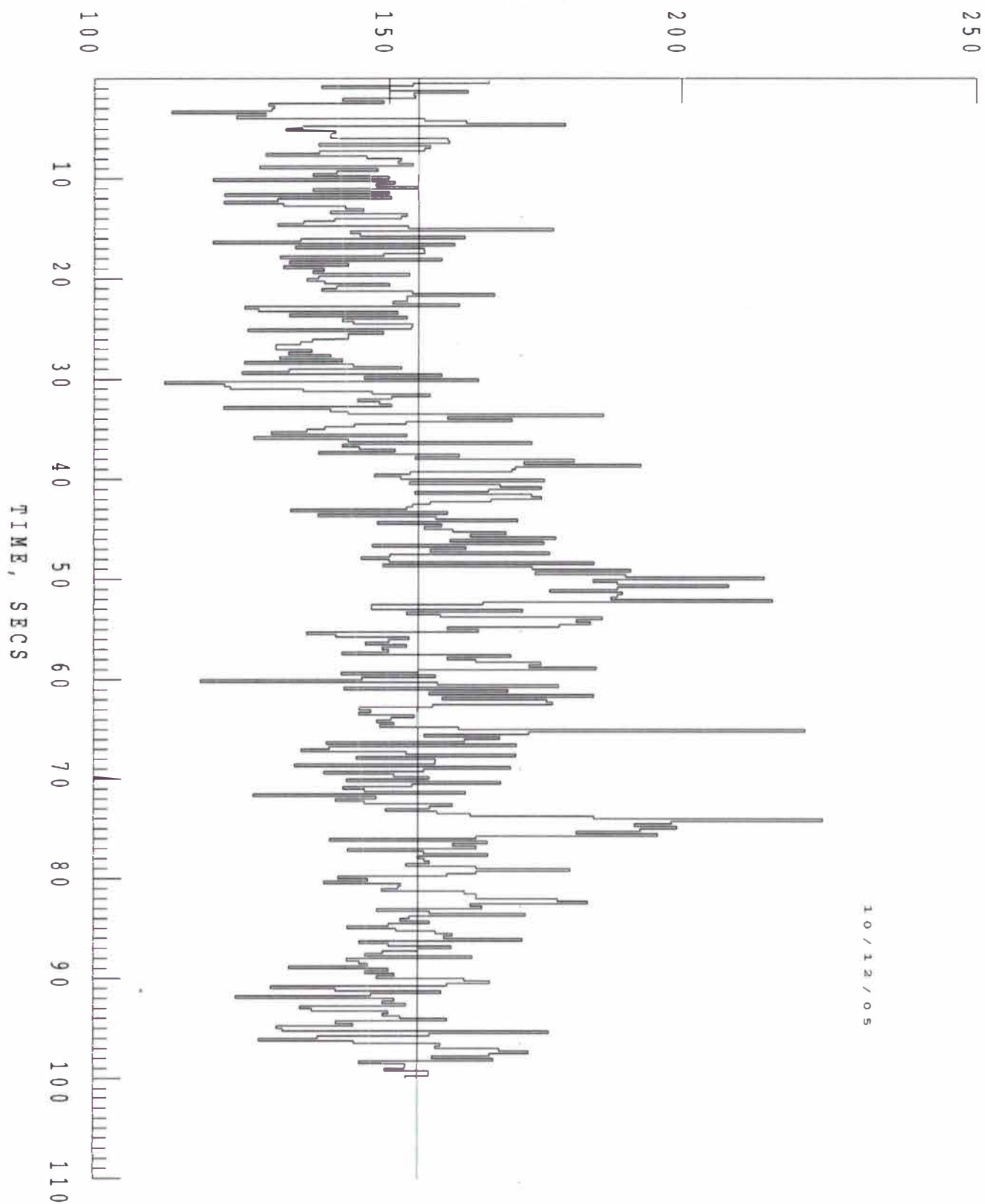
RS UT

HESSI

09/10/05 38868.000 (SUZAKU_20051009_38918)

25- 150 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

09/10/05 DOY 282 Julian 2453653.50000 [est. sct = 0019 c04d bf7f a821]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

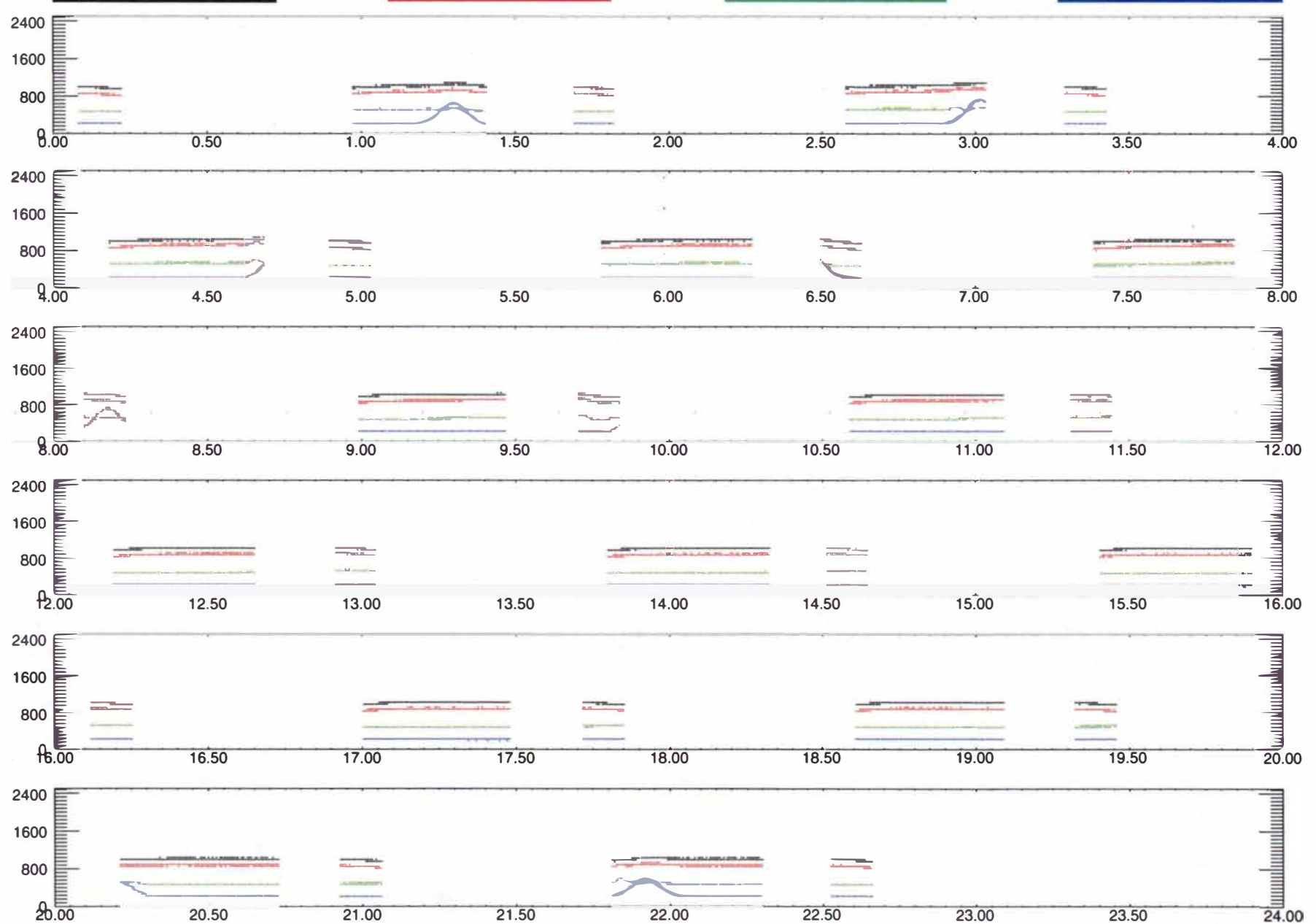
Channel 1 + 800

Channel 2 + 600

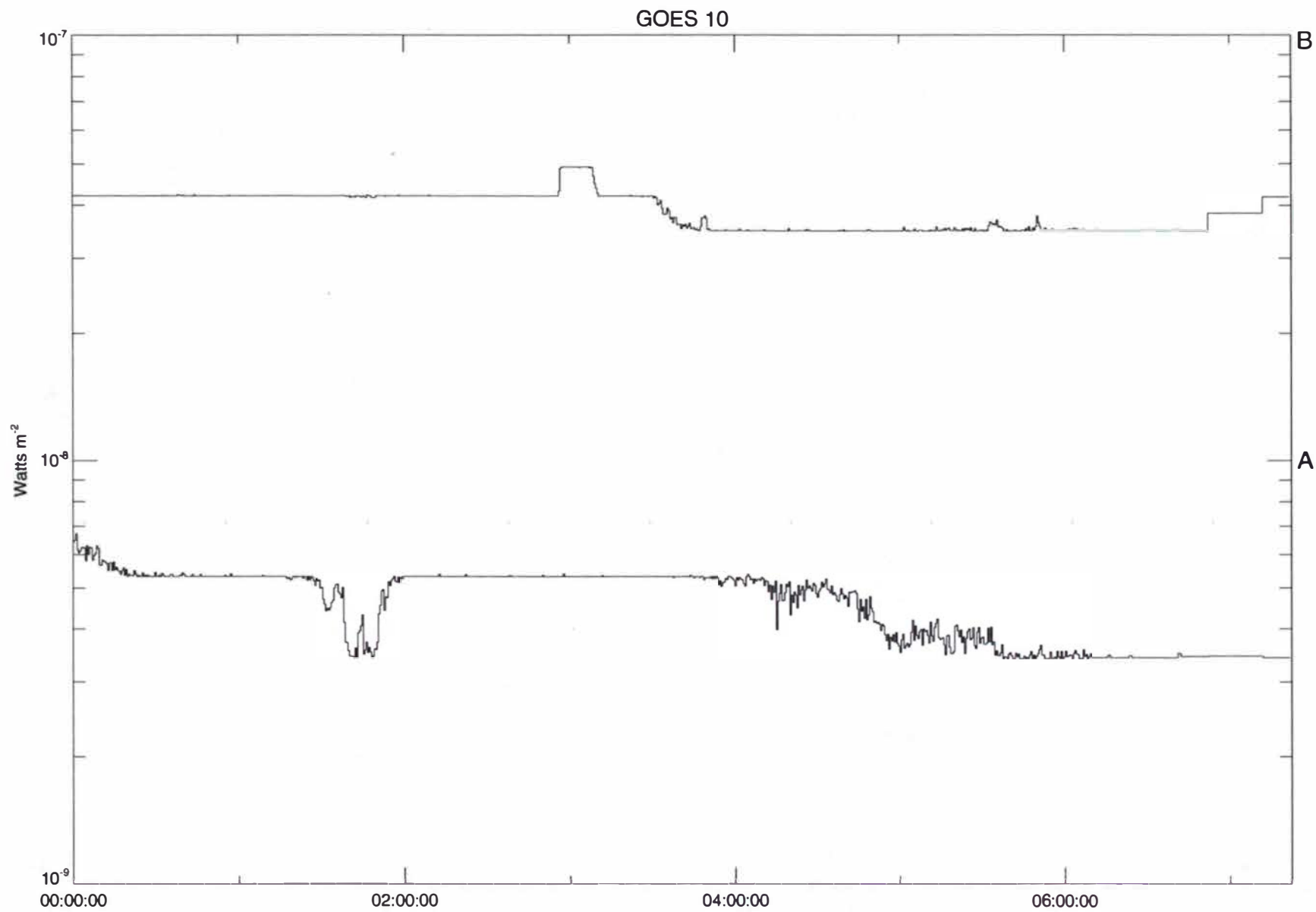
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/09, 0000:00

Plot created: 05/10/11, 0824

Channel

1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

Sample average = 10

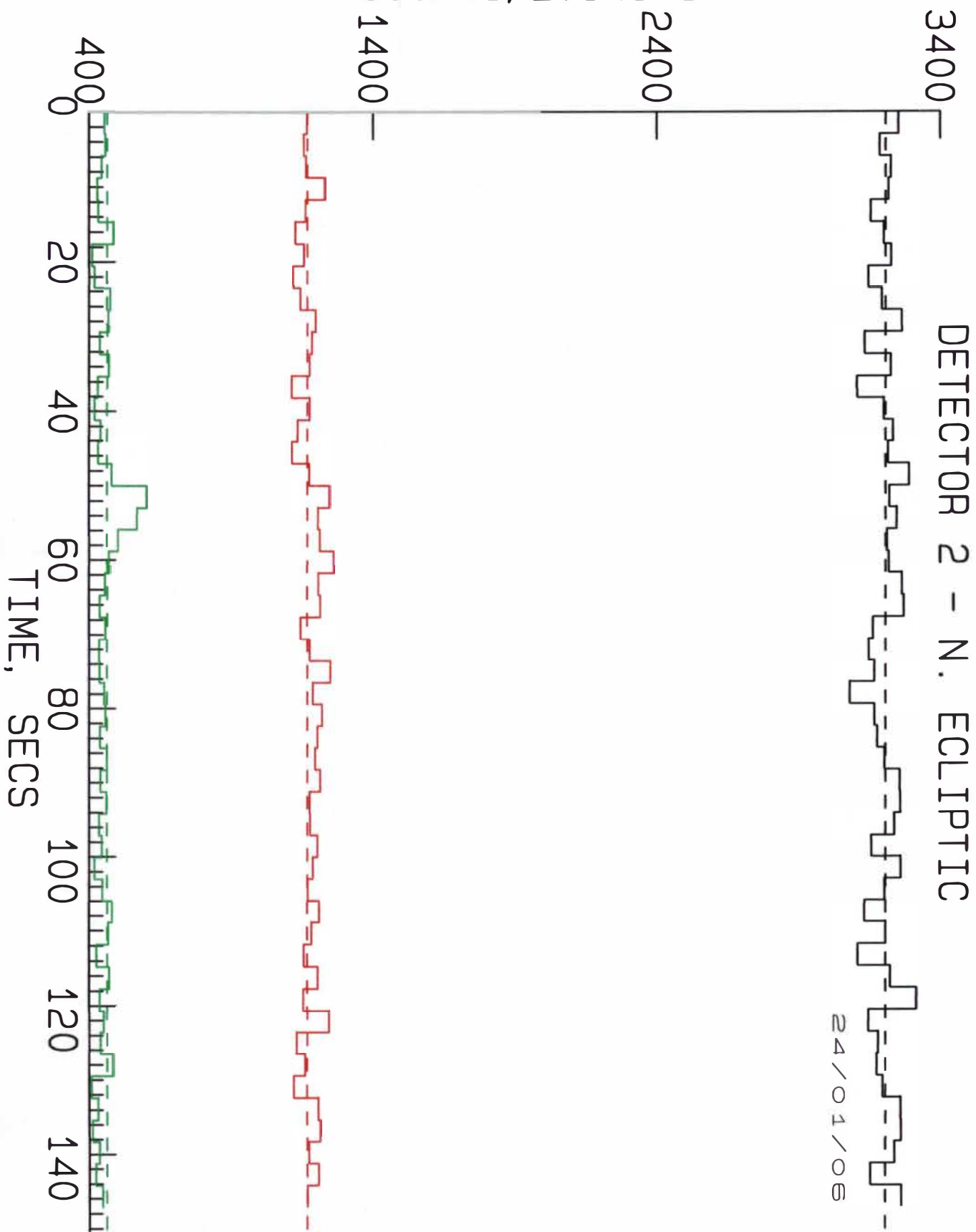
KONUS

06/10/05 54887.746

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S



KONUS

06/10/05 54887.746

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

3400

DETECTOR 1 - S. ECLIPTEIC

24/01/06

2400

1400

400

20

40

60

80

100

120

140

TIME, SECS

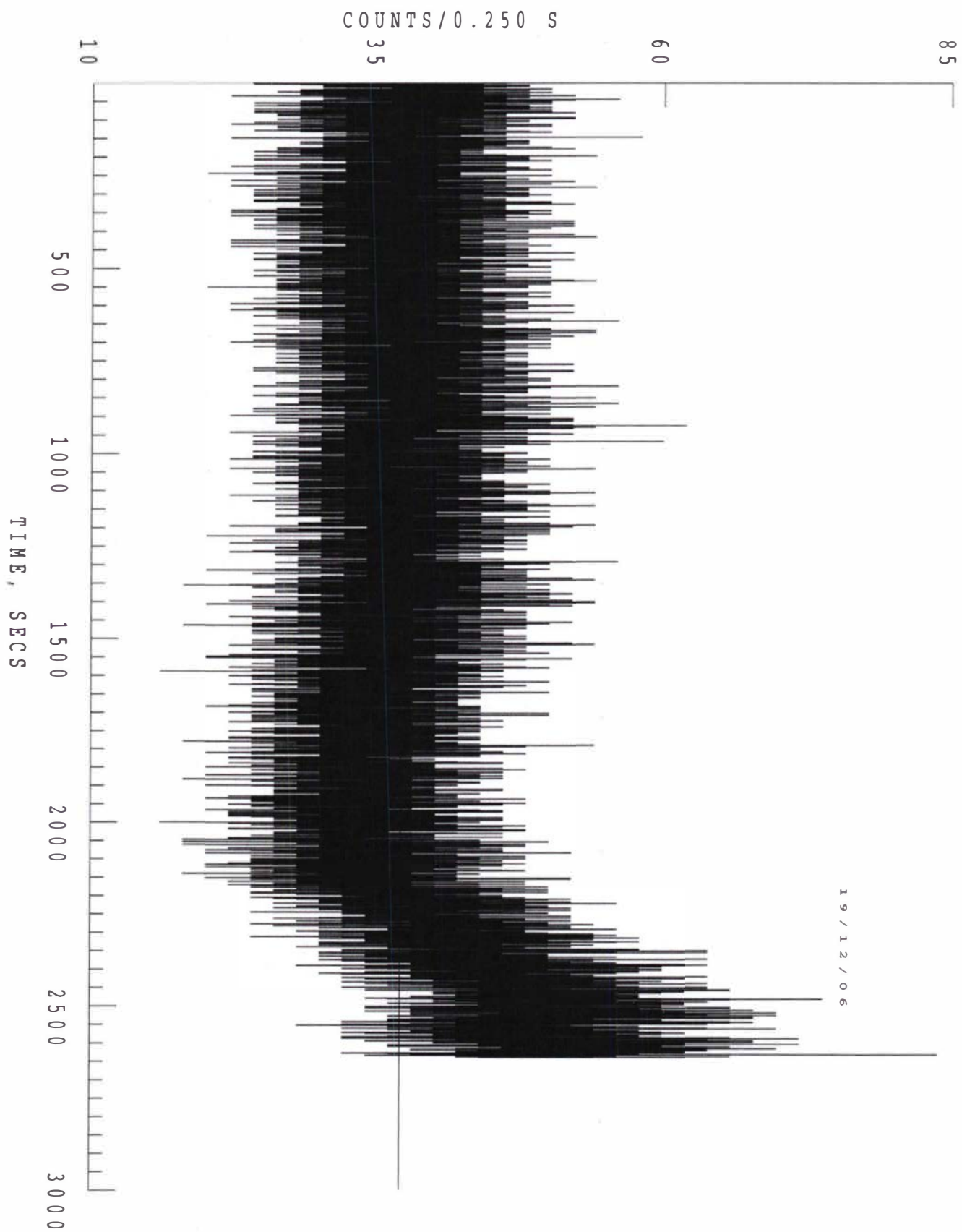


MS01

10/10/05

62914.821

50 - 3000 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051010_64232)

BEG TIME: 10/10/05 DOY 283 Julian 2453655.24292 UT = 17.830 17:49:47 (64188.000 secs) [sct = 0019 c070 cf53 0b6b]
 END TIME: 10/10/05 DOY 283 Julian 2453655.24417 UT = 17.860 17:51:36 (64296.000 secs) [sct = 0019 c070 d5c3 023f]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

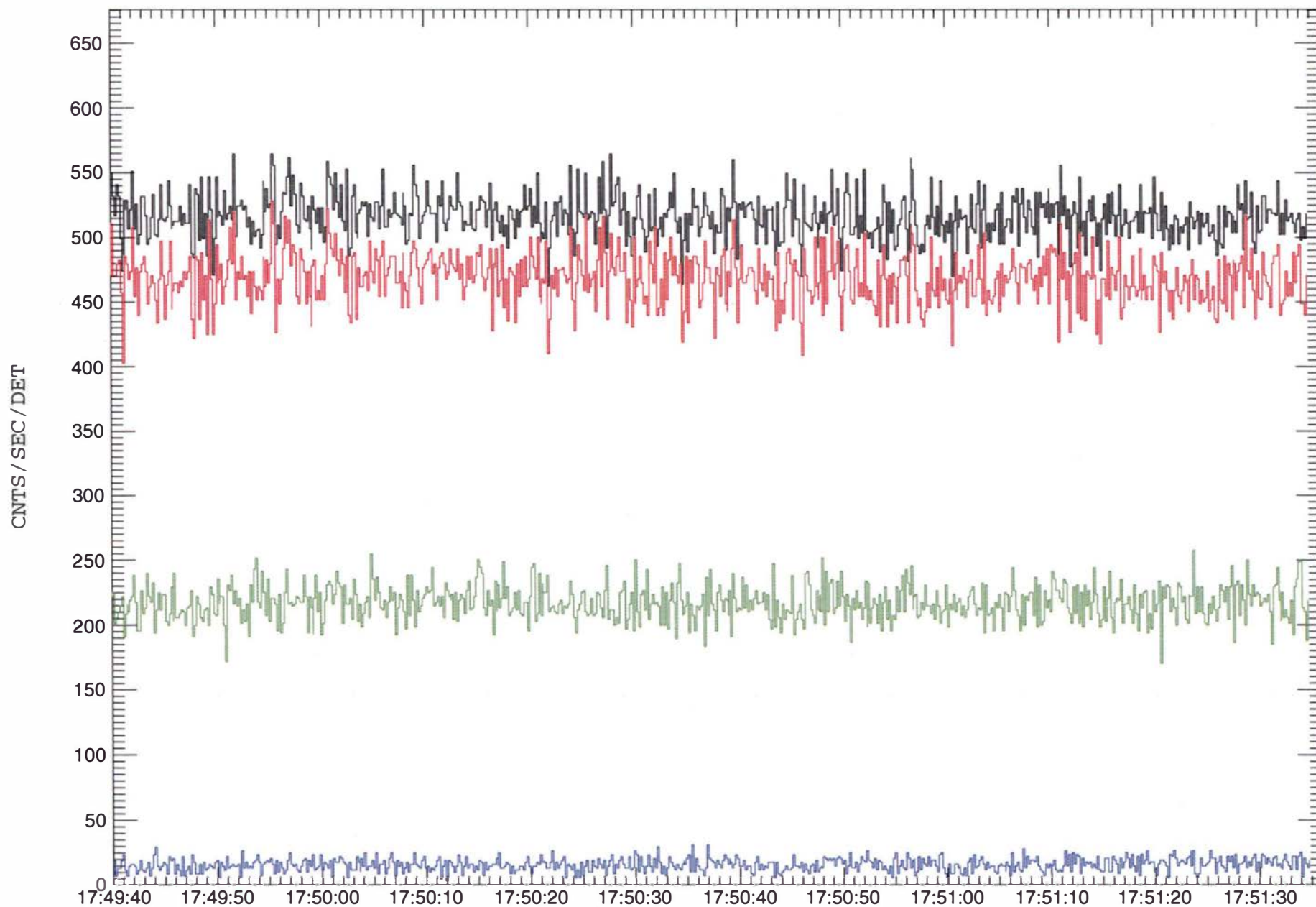
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

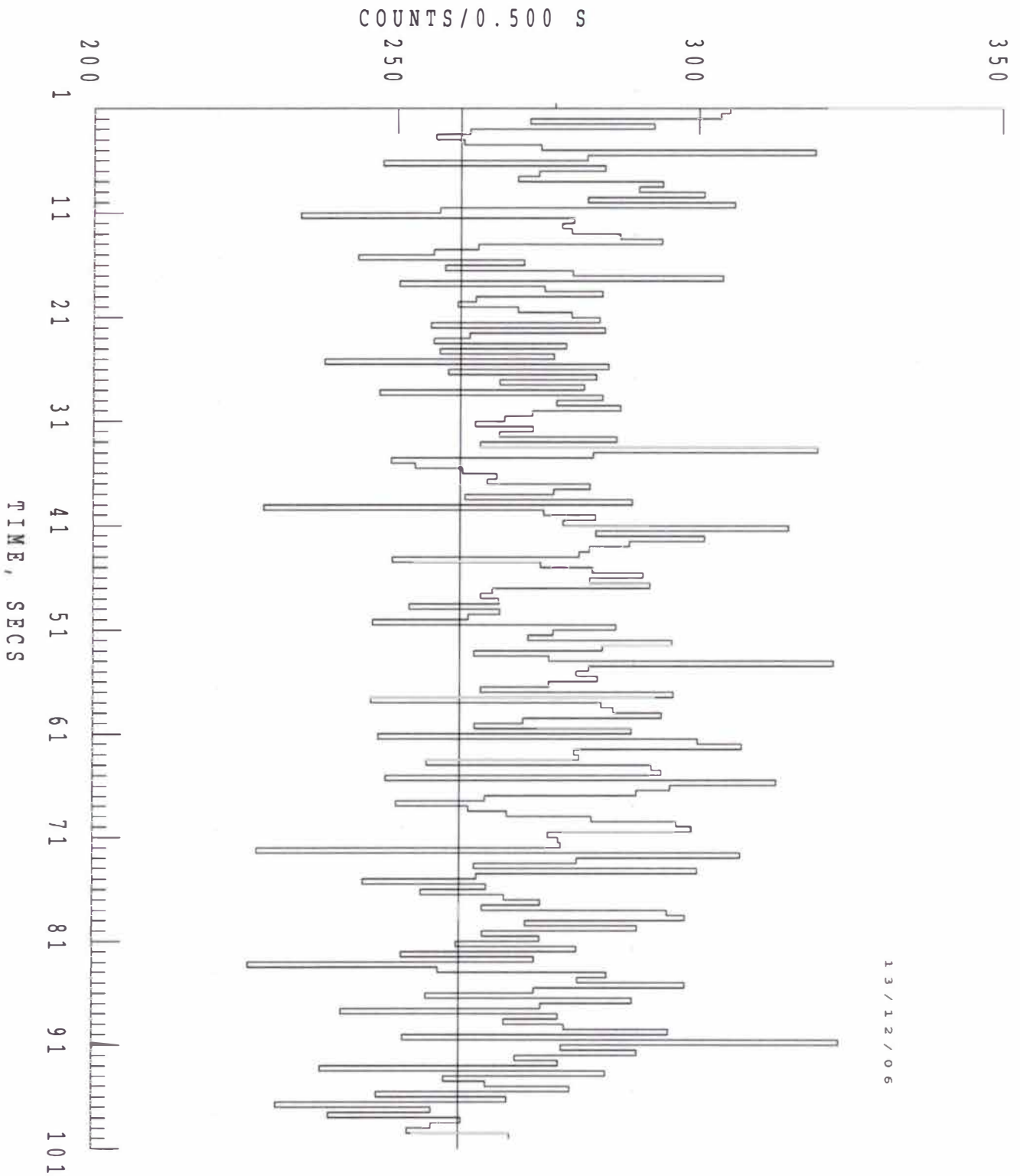


RS UT

HESSI

10/10/05 64182.000 (SUZAKU_20051010_64232)

25- 150 keV



No SRI, GRS tugs

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

10/10/05 DOY 283 Julian 2453654.50000 [est. sct = 0019 c061 dd63 0021]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

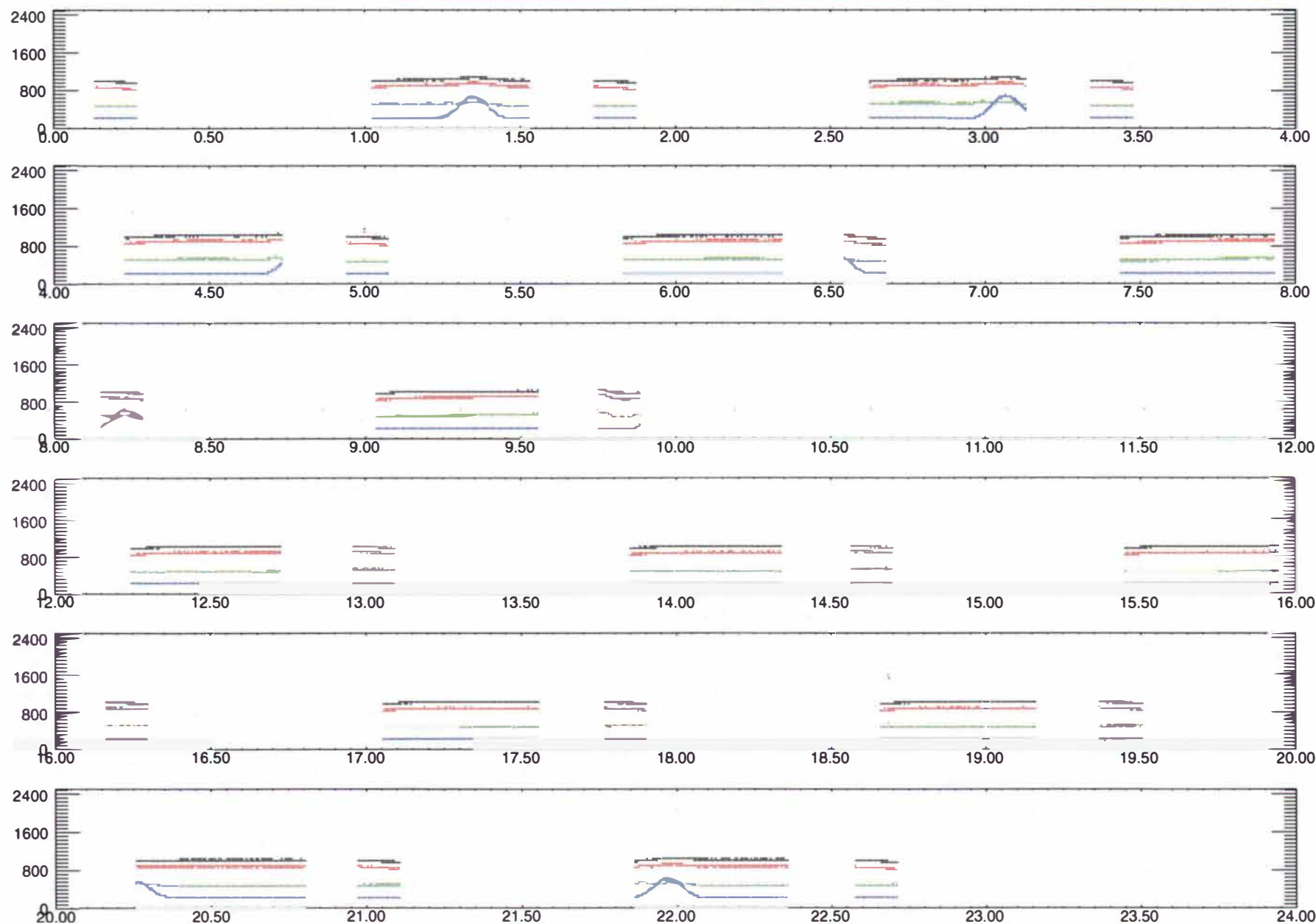
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT

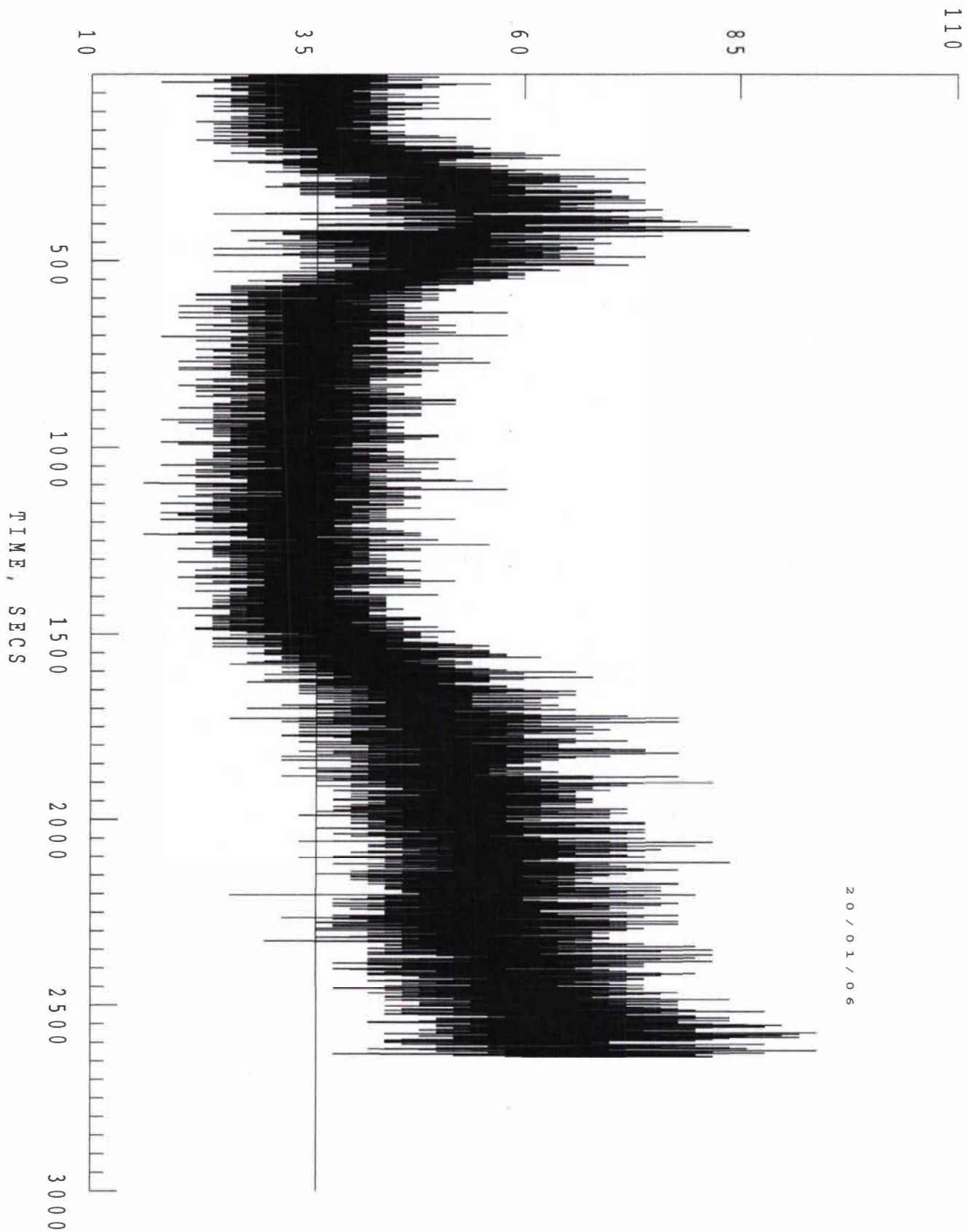
MS01

11/10/05

83614.246

50 - 3000 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (KONUS_RI_20051011_84943)

BEG TIME: 11/10/05 DOY 284 Julian 2453656.48250 UT = 23.580 23:34:48 (84888.000 secs) [sct = 0019 c089 bf0a 307e]
 END TIME: 11/10/05 DOY 284 Julian 2453656.48375 UT = 23.610 23:36:36 (84996.000 secs) [sct = 0019 c089 c57a 2752]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=19 E6=509]

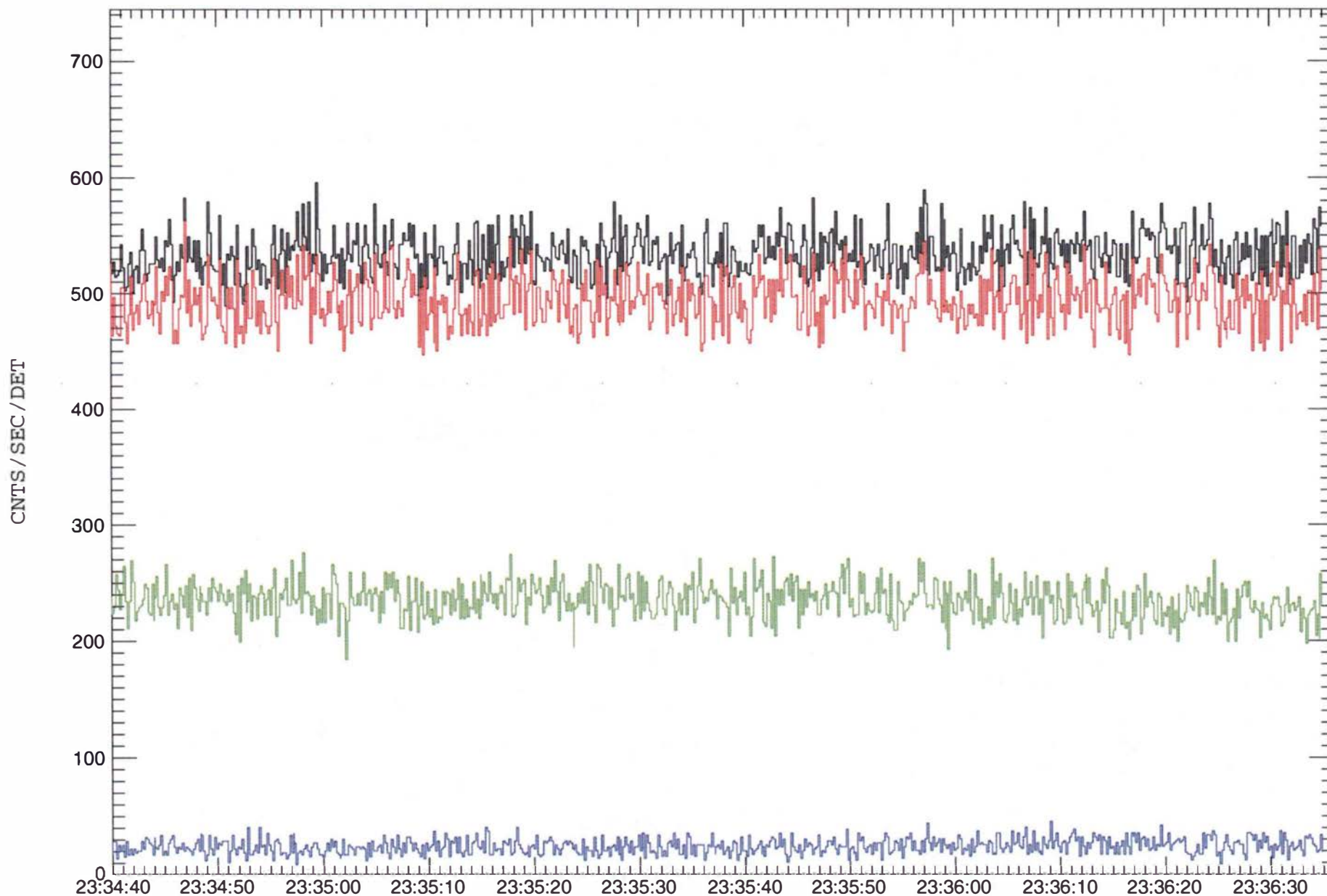
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



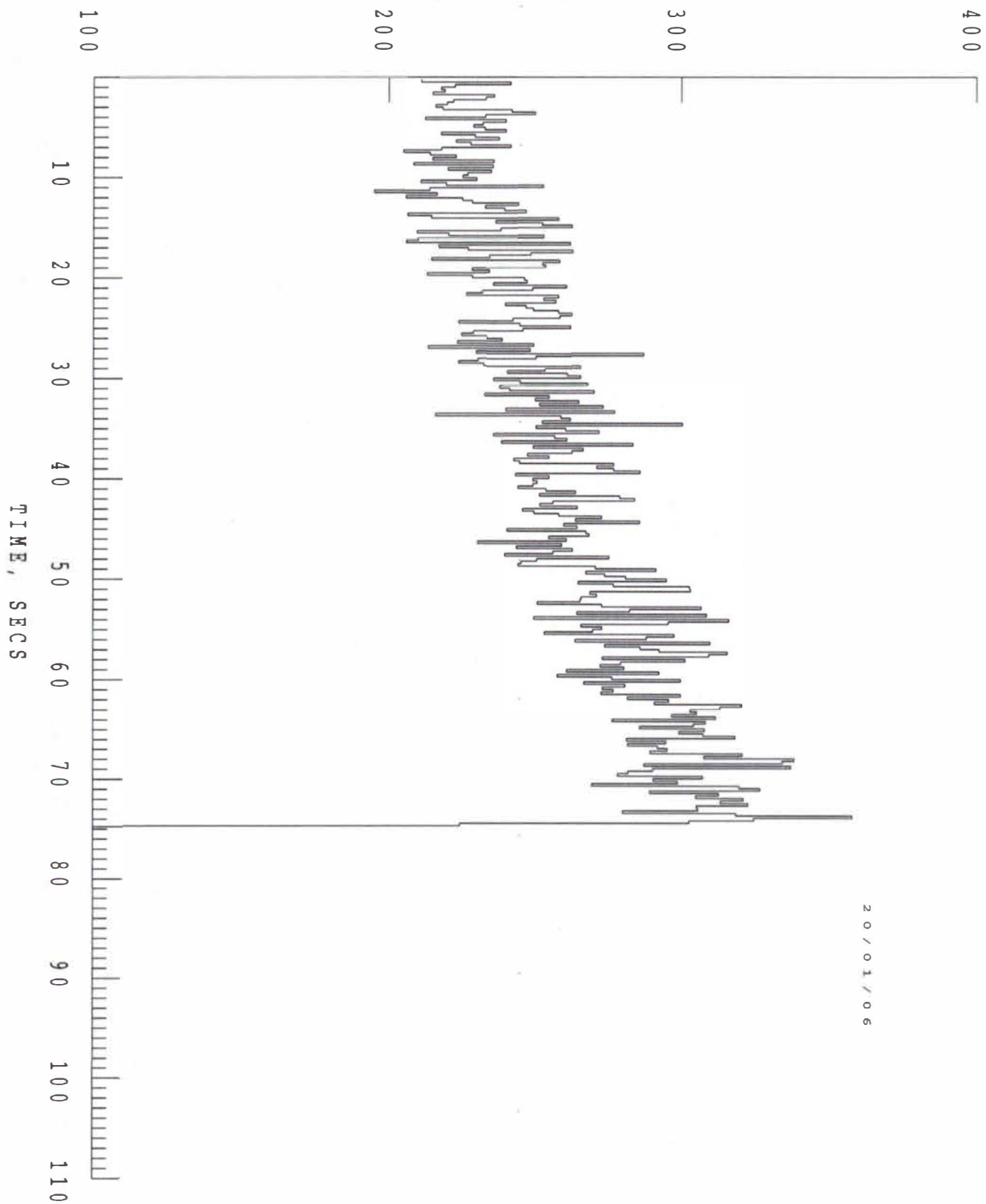
RS UT

HESSI

11/10/05 84893.000 (KONUS_RI_20051011_84943)

50- 200 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

11/10/05 DOY 284 Julian 2453655.50000 [est. sct = 0019 c075 fb46 581d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

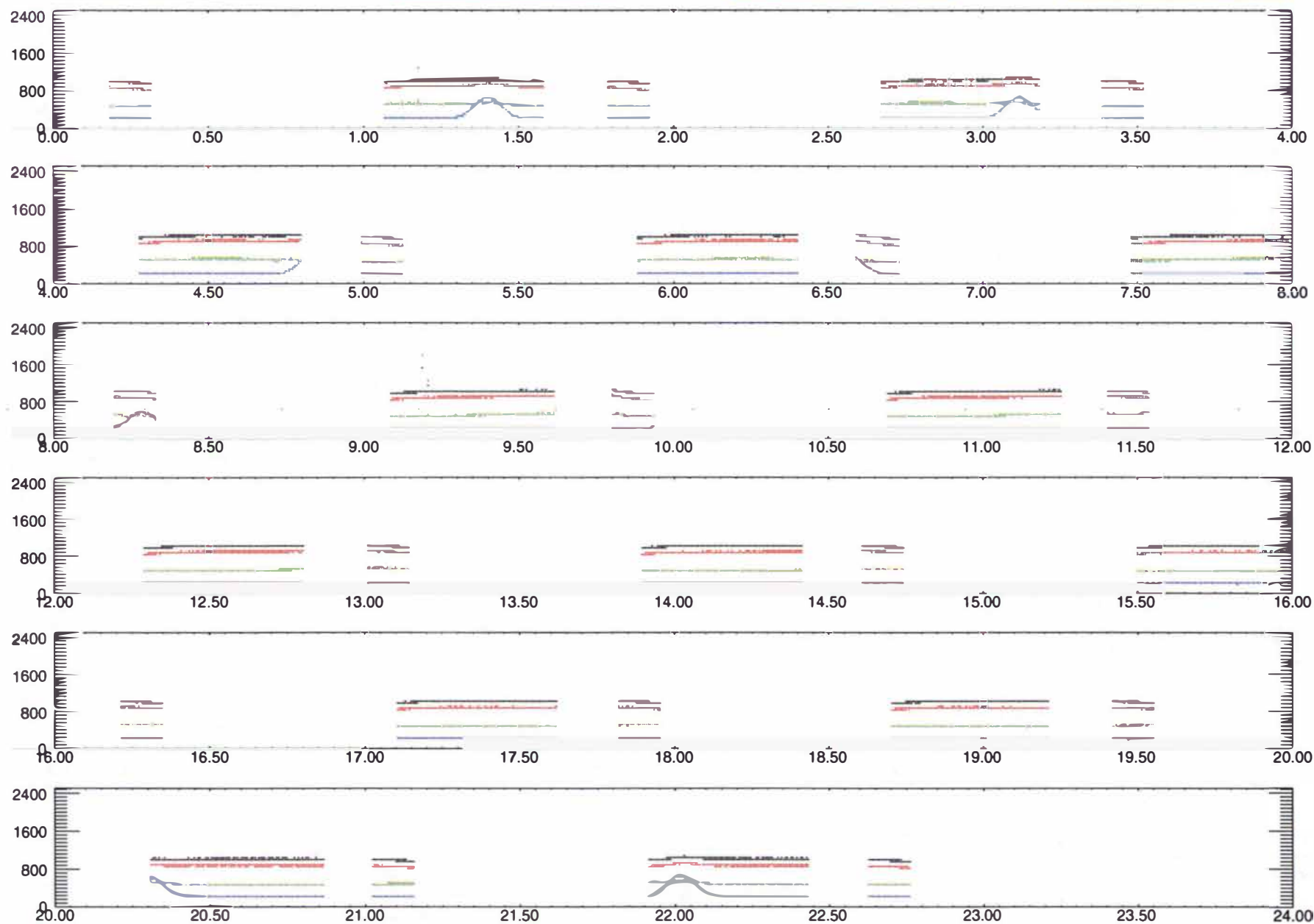
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT

Date: Oct 28 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

N/A

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☒ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

N/A

- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

N/A

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

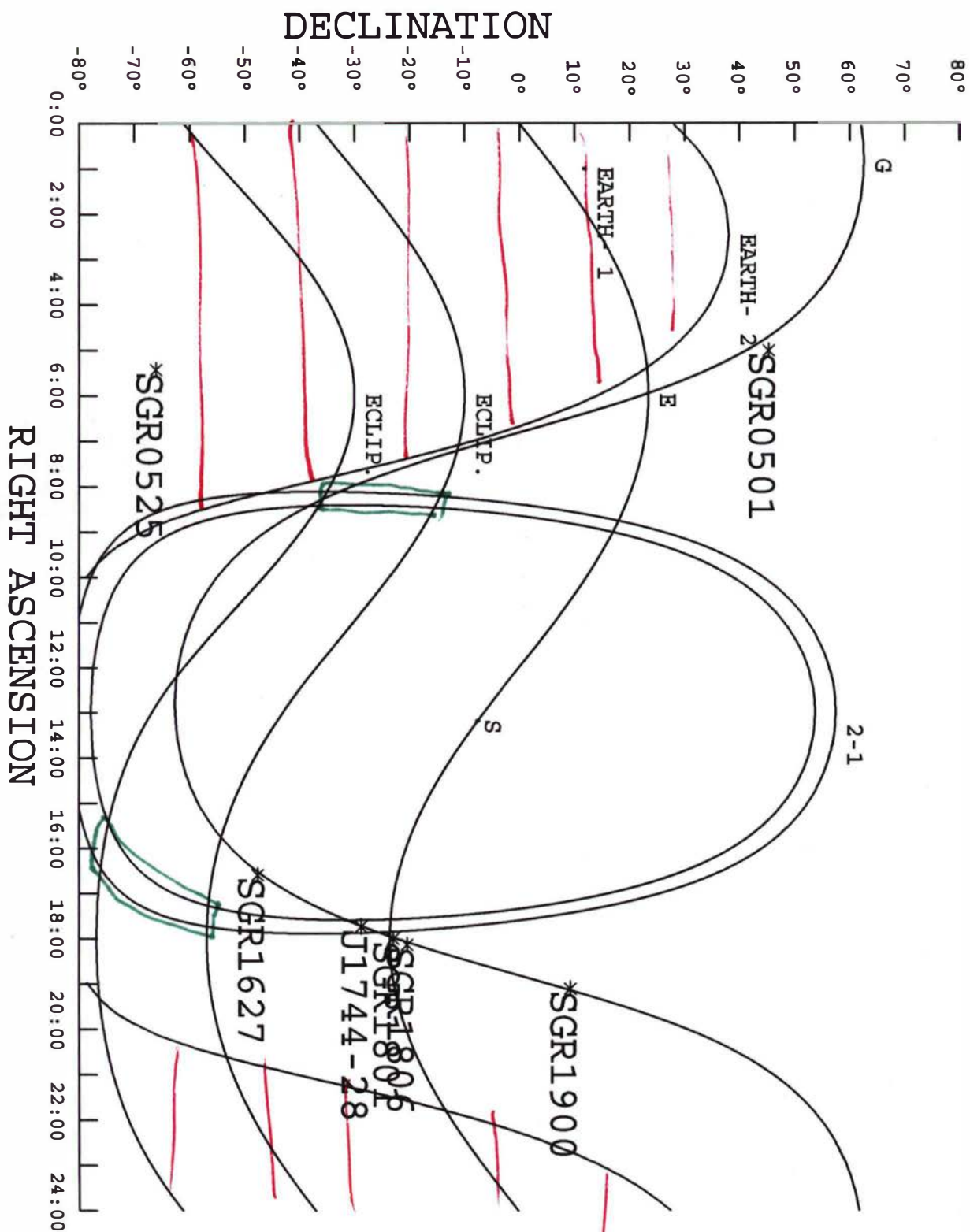
G=GALACTIC EQUATOR

1 KONUS1

2 HESSI

EVENT OF OCT 12, 2005 12:00

28/10/ 8



KONUS1

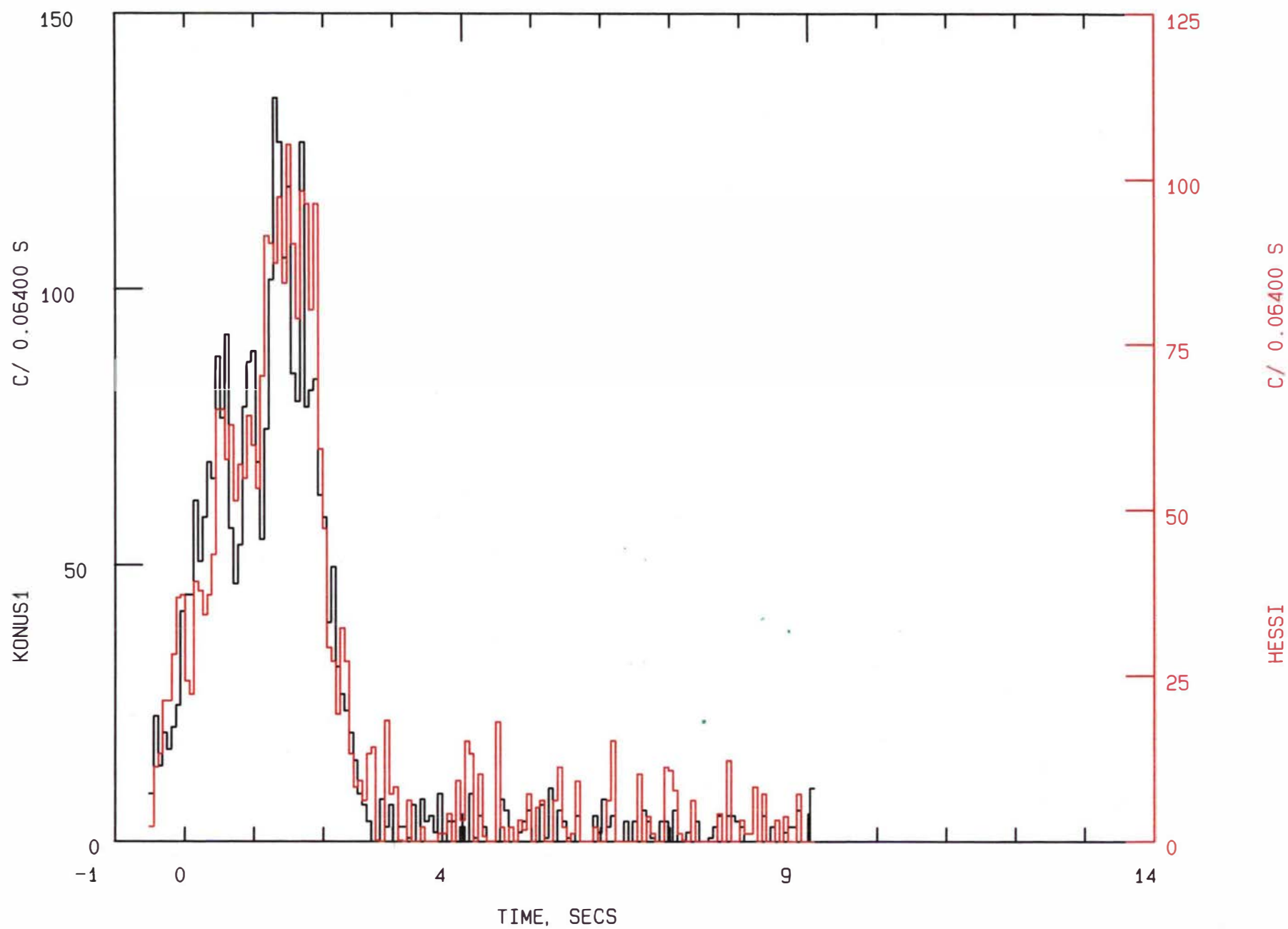
-HESSI

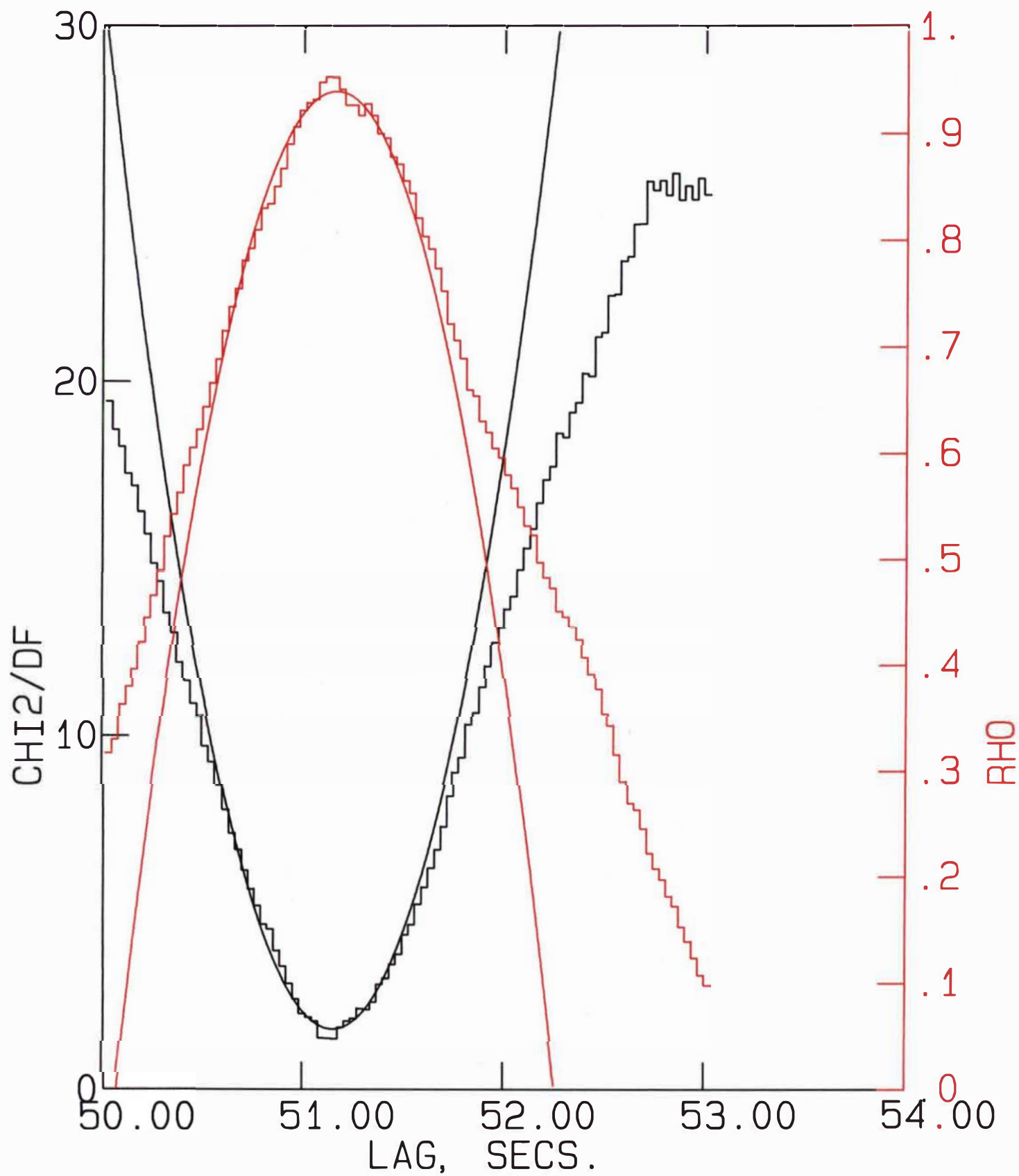
CORRELATION

12/10/05

43209.052

28/10/ 8

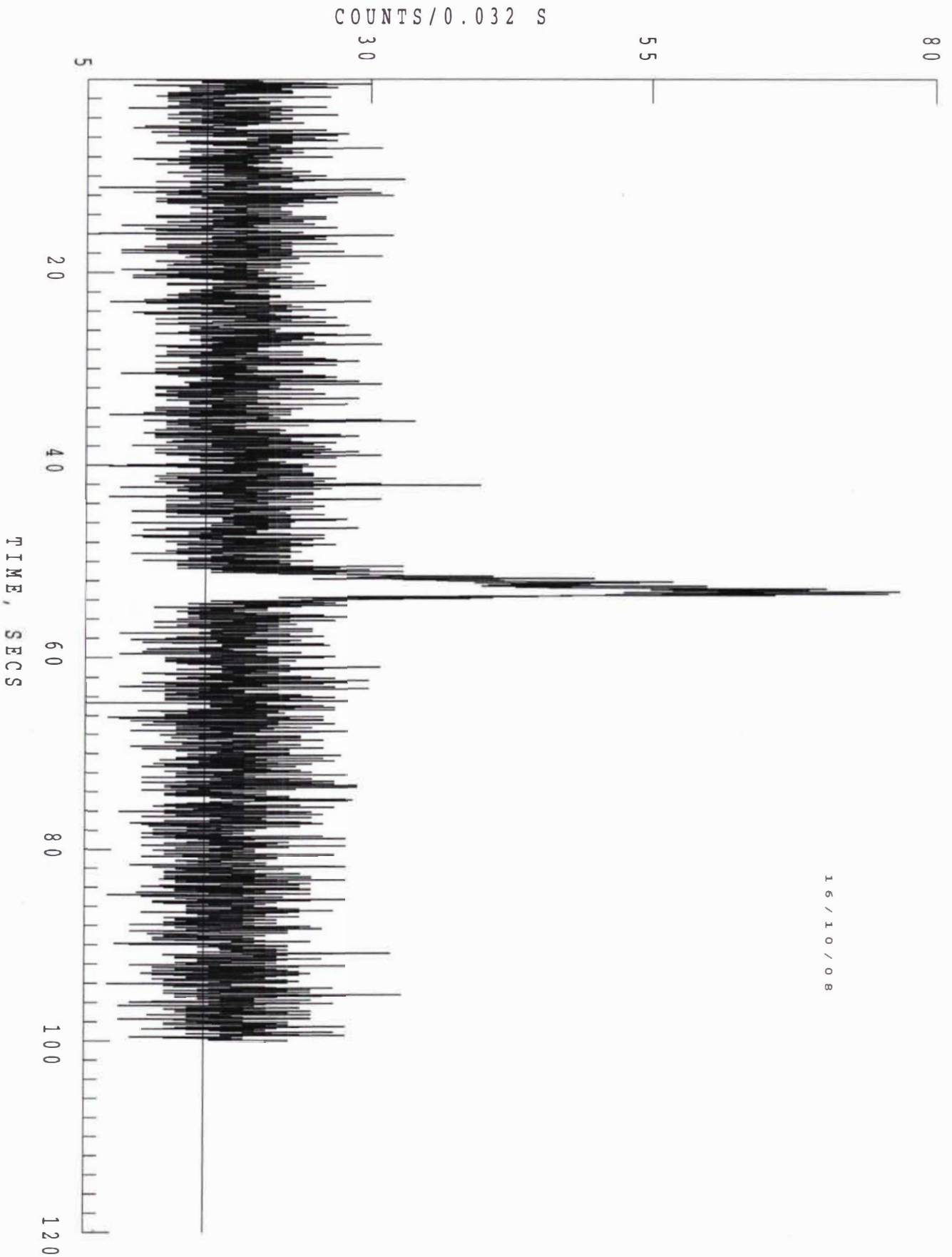




HESSI

12/10/05 43159.000 (KONUS_20051012_43209)

50- 200 keV



KONUS1

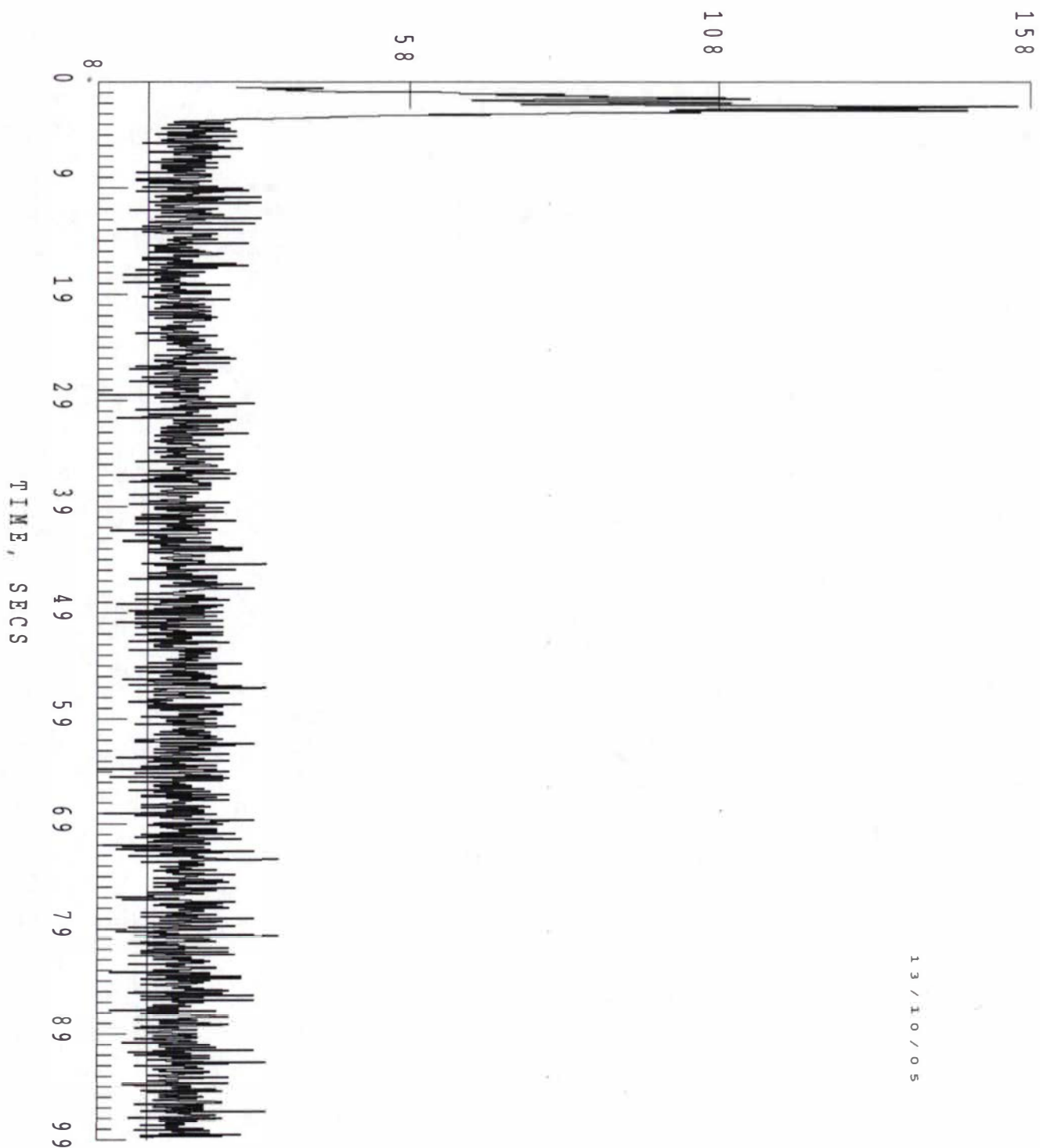
12/10/05

43209.052

50 - 200 keV

12:00:09

COUNTS/0.064 S



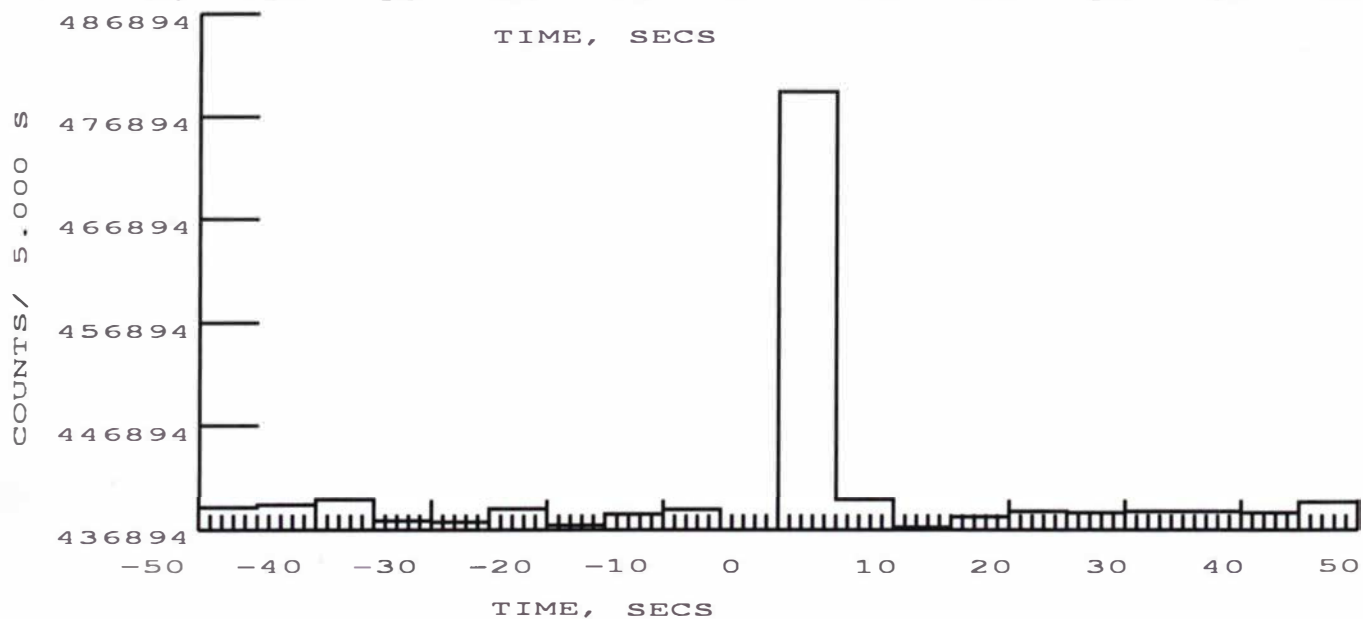
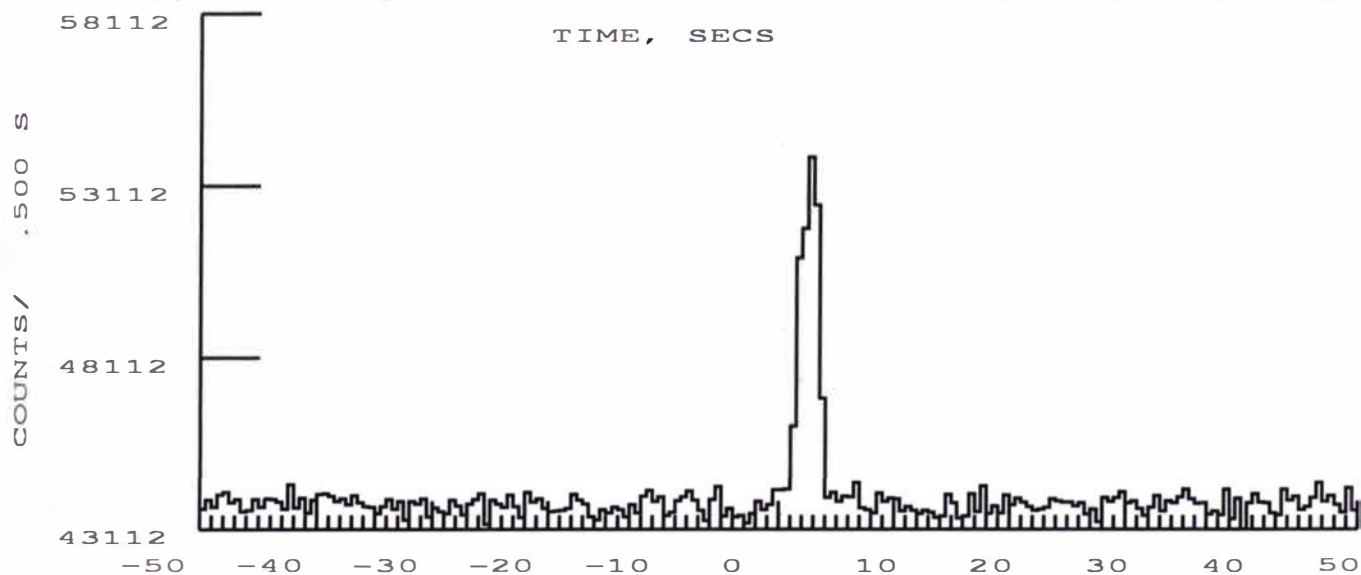
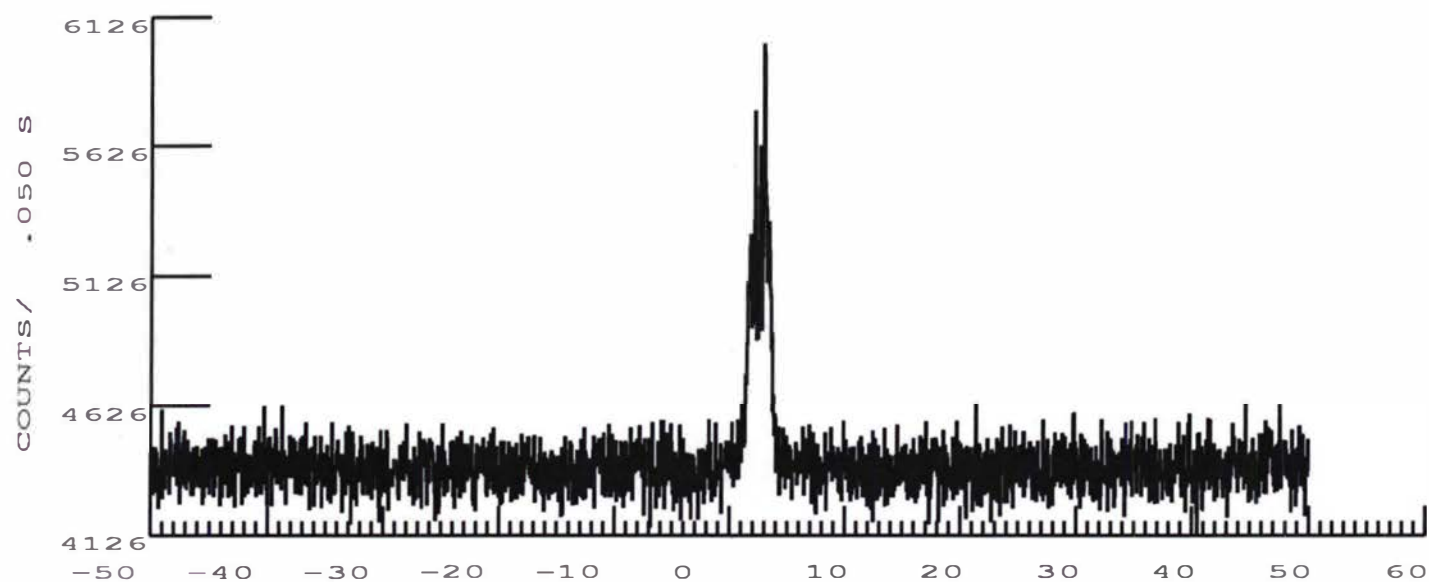
INTEGRAL

12/10/05

43209.000

12:00:09.0

27/01/14



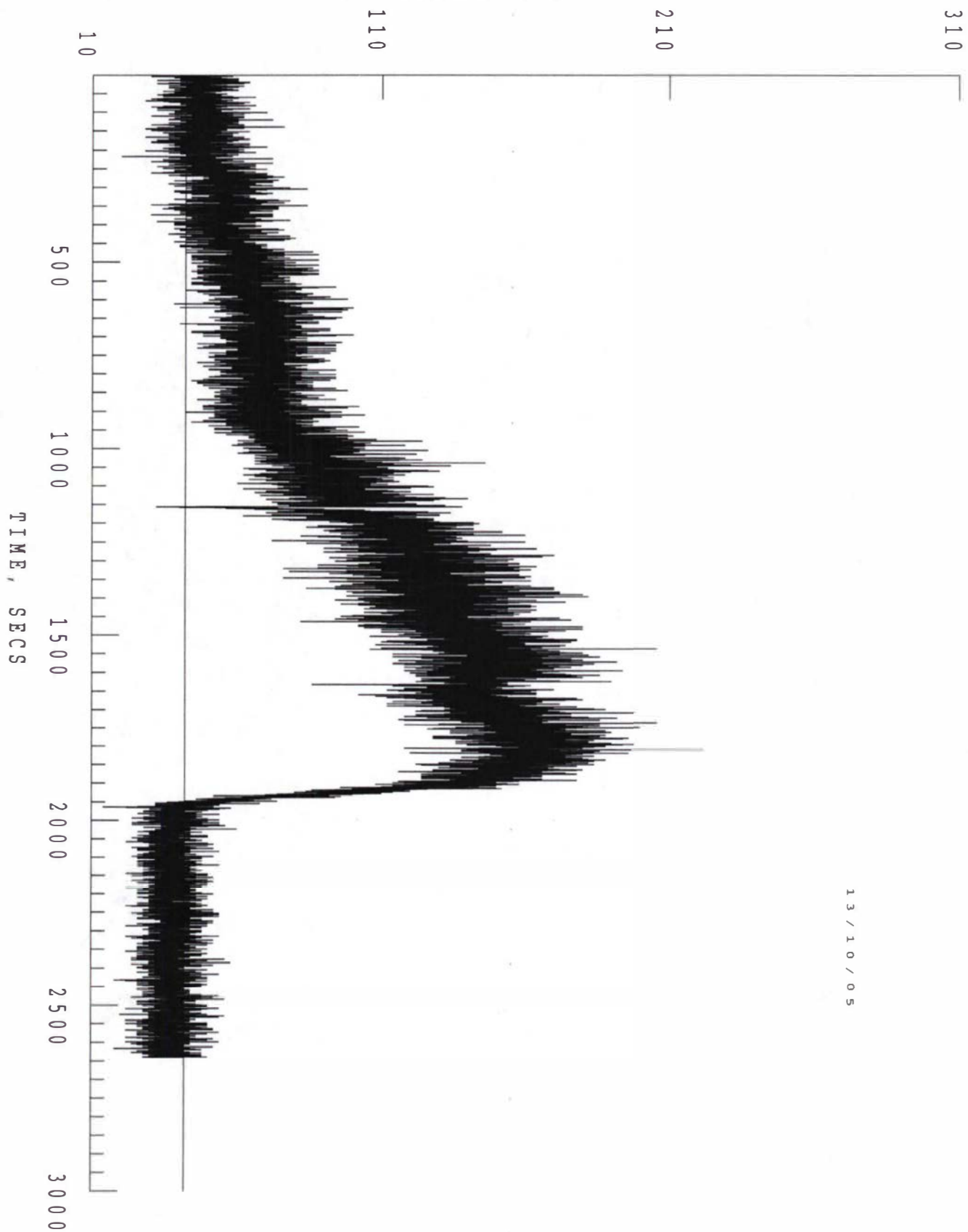
MS01

12/10/05

41853.520

50 - 3000 keV

COUNTS/0.250 S



13/10/05

KONUS HRES 20051012 43209

TRIGGER TIME: 12/10/05 DOY 285 Julian 2453657.00010 UT = 12.002 12:00:09 (43209.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

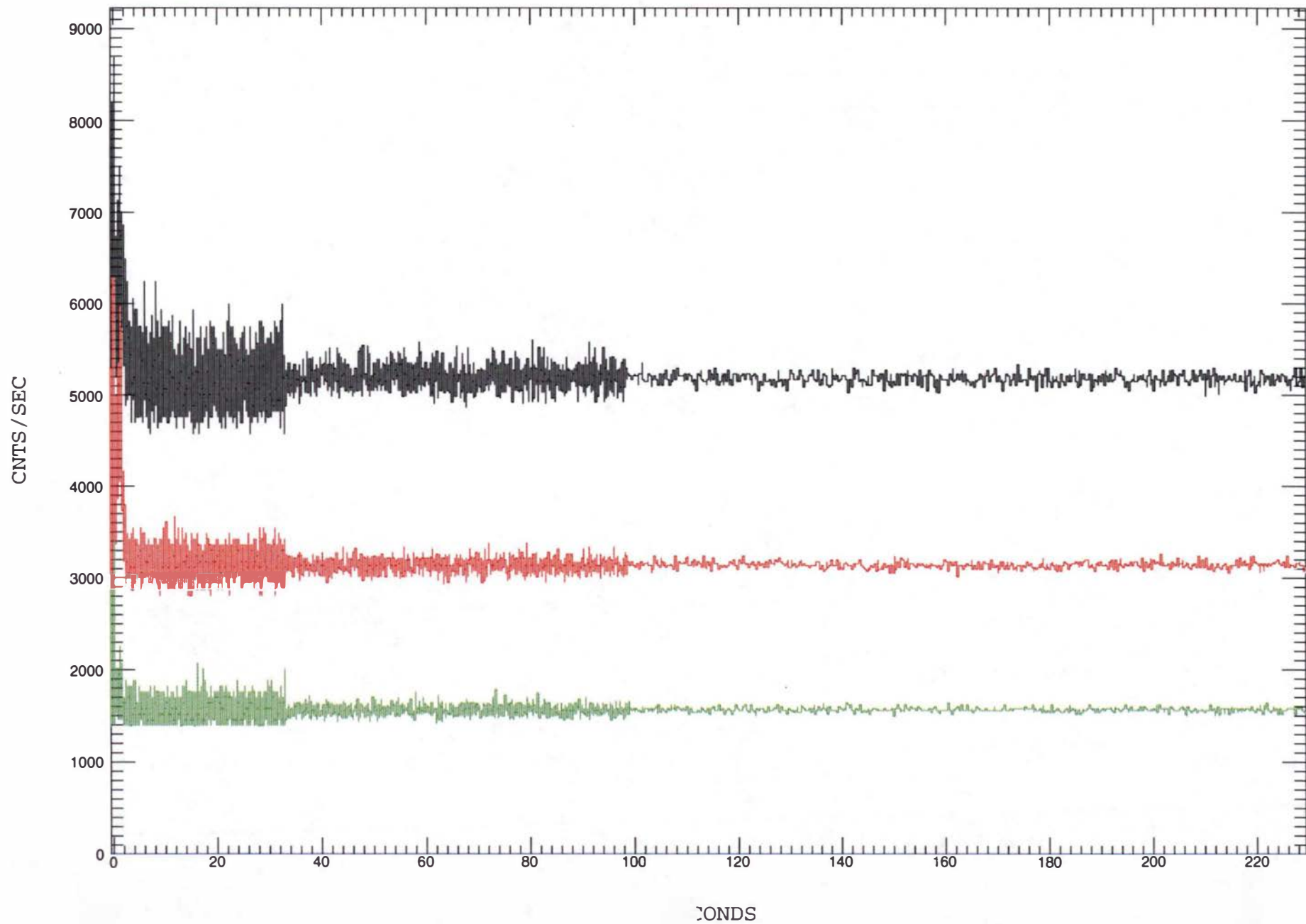
Chan 4 : [> 10 MeV]

Channel 1 + 4200

Channel 2 + 2800

Channel 3 + 1400

Channel 4 + 0



From gcncirc@capella.gsfc.nasa.gov Thu Oct 13 15:16:19 2005
X-ASG-Debug-ID: 1129241808-4147-3-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
~ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: GRB 051012: Swift-BAT detection of burst yesterday
Subject: GRB 051012: Swift-BAT detection of burst yesterday
To: khurley@ssl.berkeley.edu
Date: Thu, 13 Oct 2005 18:16:48 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4093
SUBJECT: GRB 051012: Swift-BAT detection of burst yesterday
DATE: 05/10/13 22:15:40 GMT
FROM: Jay R. Cummings at NASA/GSFC/Swift <jayc@milkyway.gsfc.nasa.gov>

G. Sato (ISAS), L. Barbier (GSFC), S. Barthelmy (GSFC),
J. Cummings (GSFC/NRC), N. Gehrels (GSFC), D. Hinshaw (GSFC-SPSYS),
H. Krimm (GSFC/USRA), K. McLean (LANL), C. Markwardt (GSFC/UMD),
D. Palmer (LANL), A. Parsons (GSFC), T. Sakamoto (GSFC), J. Tueller (GSFC),
n behalf of the Swift-BAT team:

61558

At 2005-10-12 17:05:58 UT, Swift-BAT triggered and detected GRB 051012 (trigger 159413). Because Swift was executing a preplanned slew, the burst was not identified onboard and no prompt notices were distributed. Using the data set from T-4 to T+16, the refined BAT ground position is RA, Dec 270.564d, -52.795d {18h 02m 15s, -52d 47' 40"} [deg; J2000], +- 1.8 arcmin (radius, sys+stat, 90% containment). The burst was in the fully-coded field of view.

The lightcurve shows a single weak peak with a slow rise and fall from approximately T-3 to T+11 sec. T90 (15-350 keV) was 13 +- 1 sec (estimated error including systematics). Because of the slew, we cannot rule out further emission after T+16 sec.

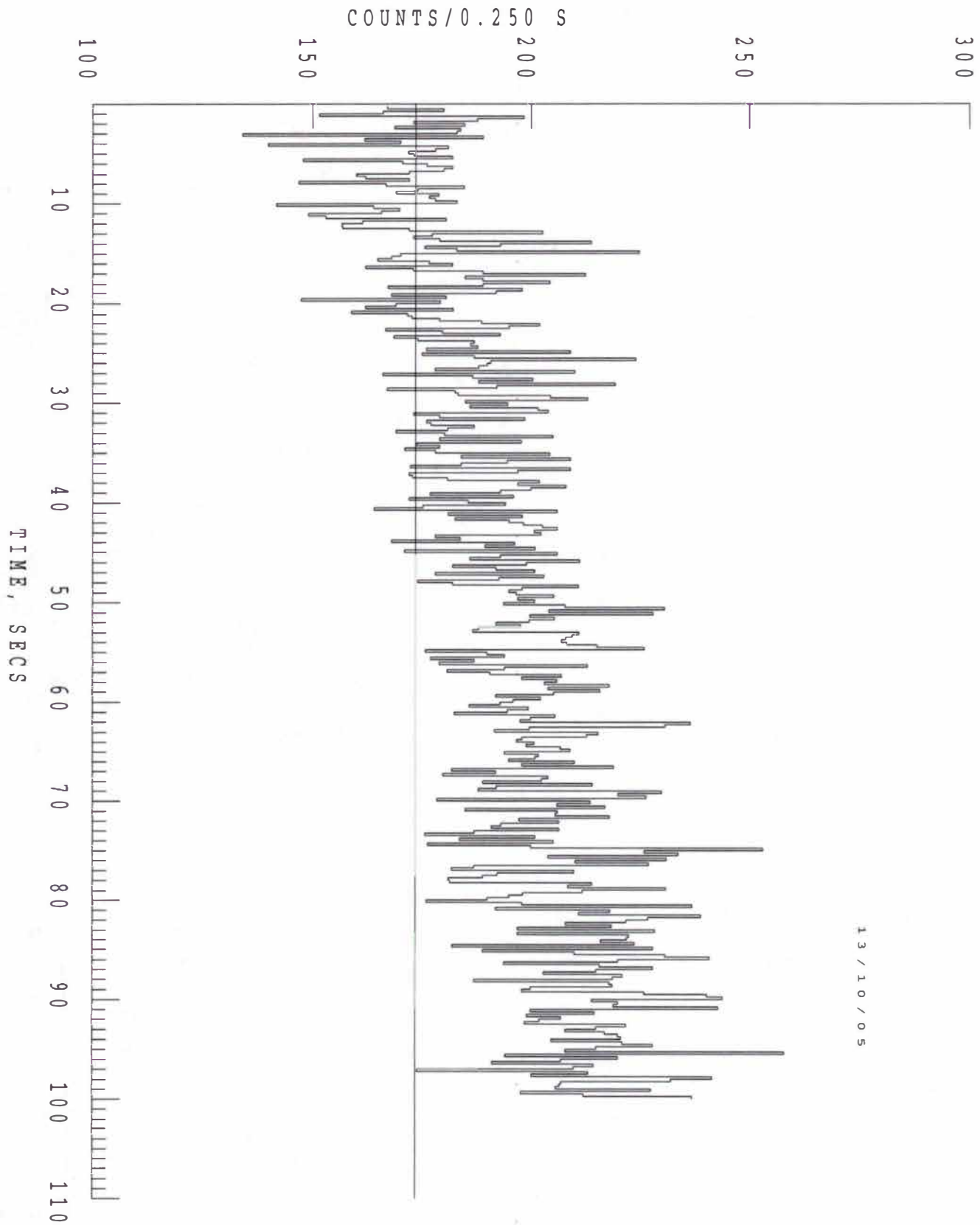
The power law index of the time-averaged spectrum was 2.25 +- 0.25. The fluence in the 15-150 keV band was $(2.9 \pm 0.5) \times 10^{-7}$ ergs / cm². The 1-sec peak flux measured from T+3 sec in the 15-150 keV band was 0.6 +- 0.2 photons / cm² sec. All the quoted errors are at the 90% confidence level.

Added to ACCESS

HESSI

12/10/05 61508.000 (SWIFT_20051012_61558)

25- 150 keV



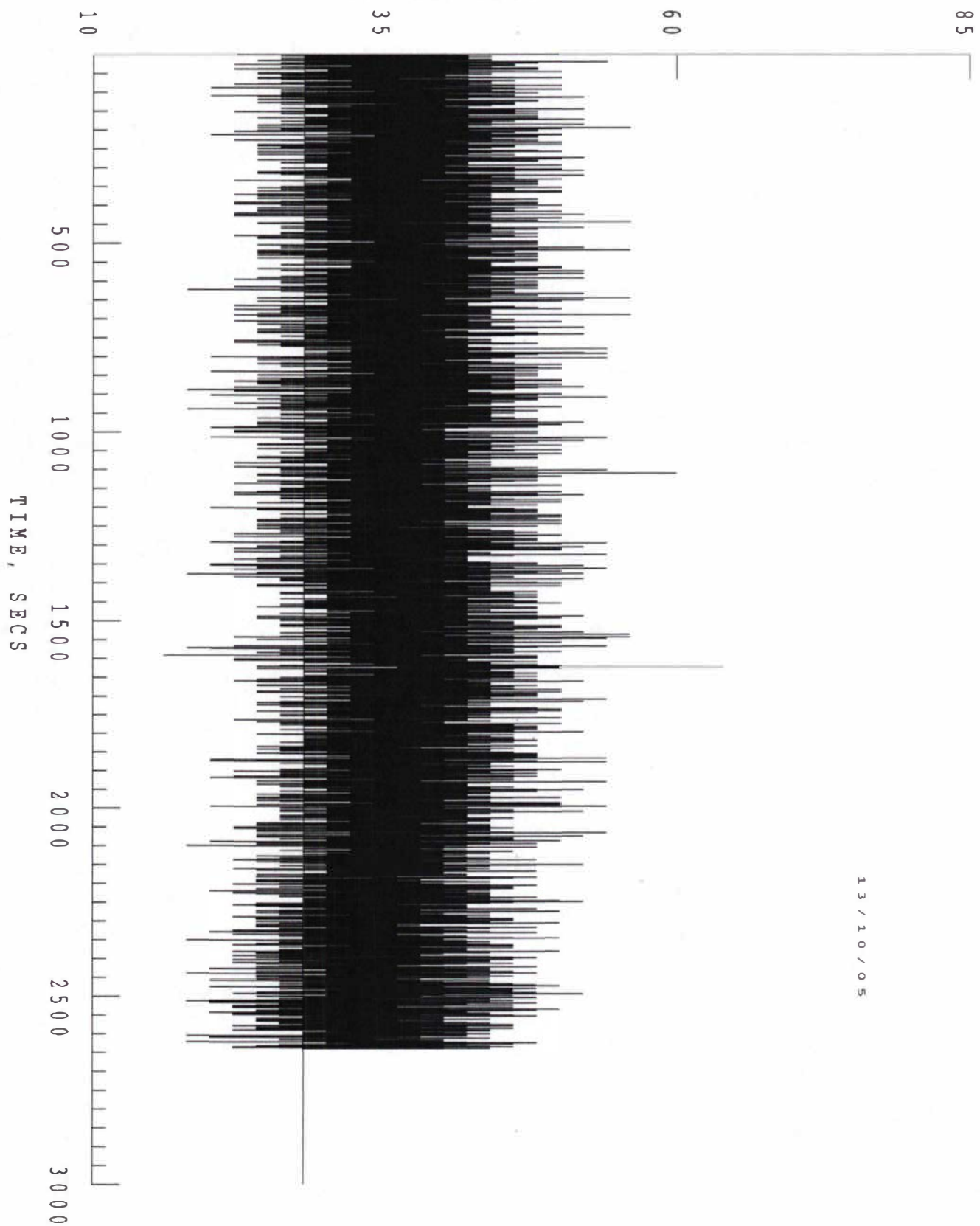
MS01

12/10/05

60213.199

50 - 3000 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

12/10/05 DOY 285 Julian 2453656.50000 [est. sct = 0019 c08a 1929 b01d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

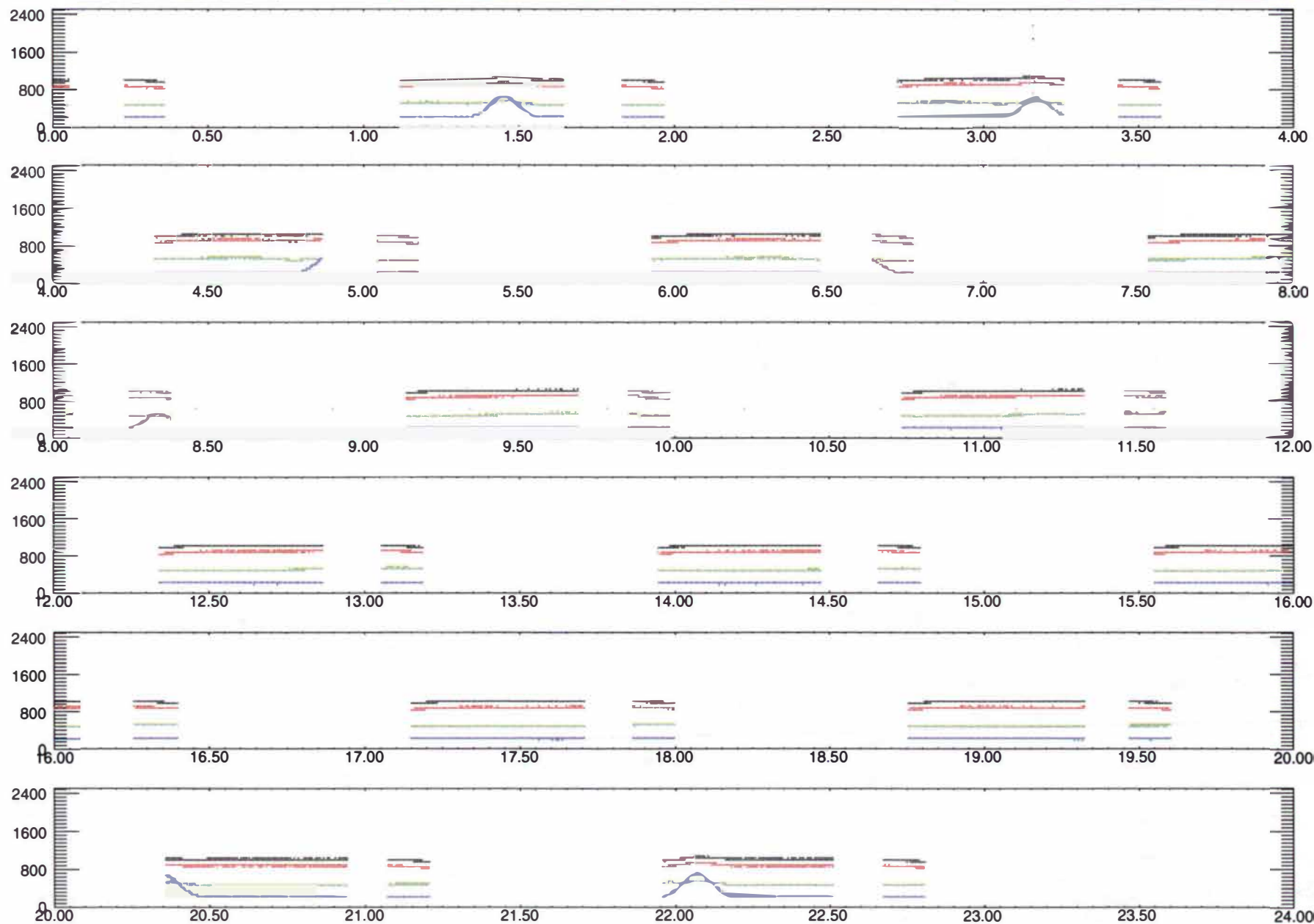
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT

Date: Nov 18 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☐ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

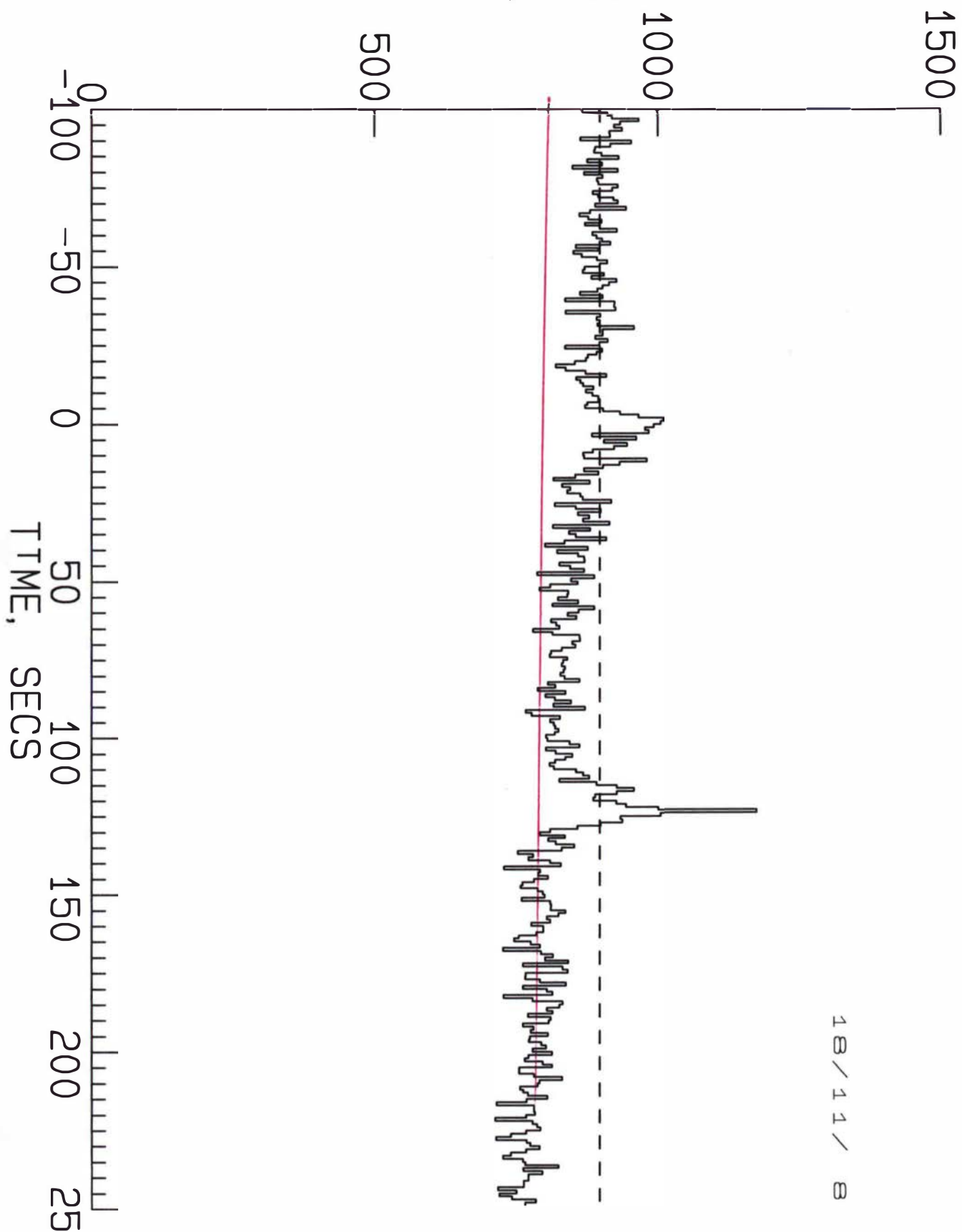
*Bad Konus - Suzaku match
EL + Earth-blocking only*

SUZAKU

13/10/05 63026.416

50- 240 keV

COUNTS/1.000 S



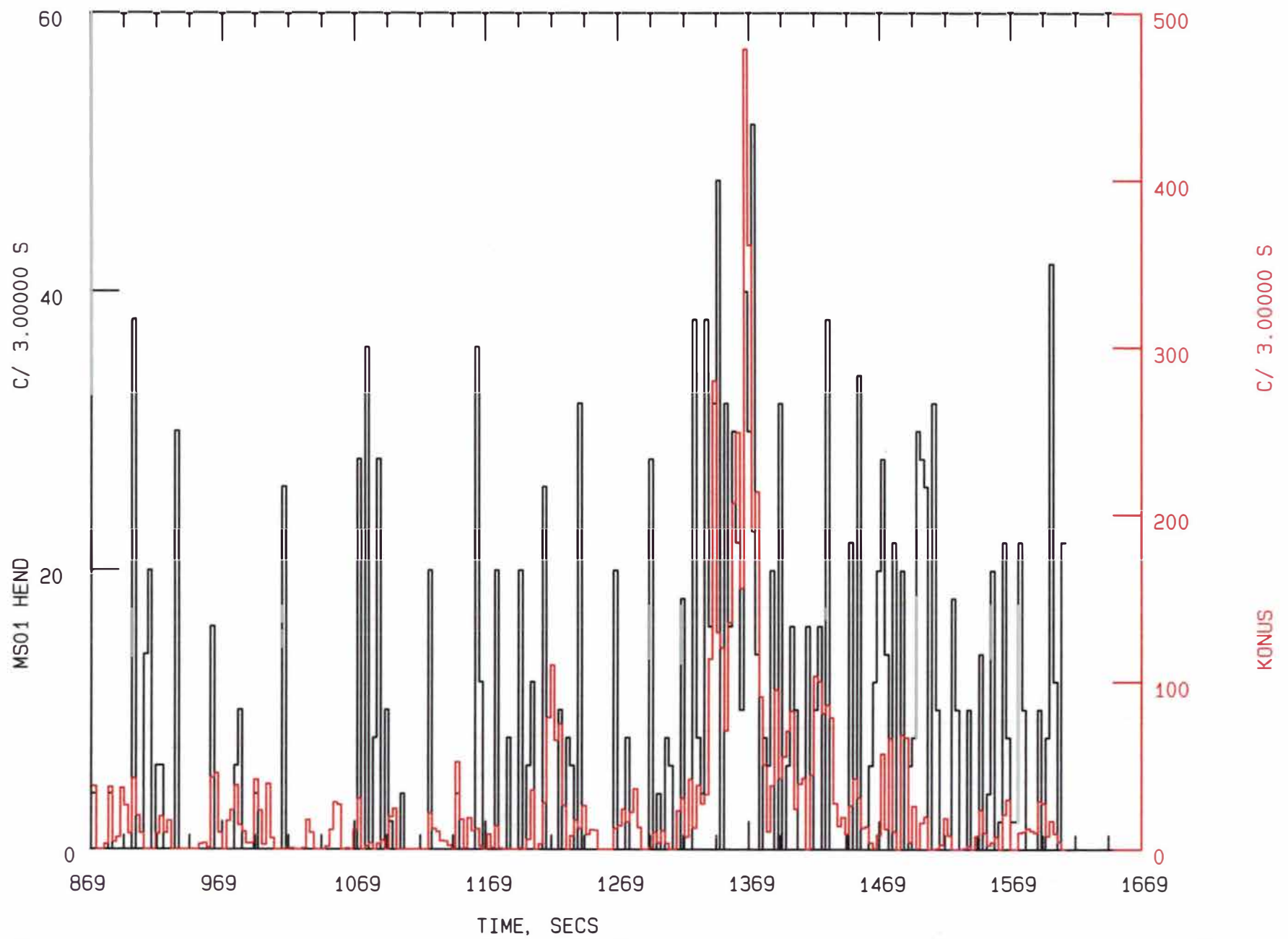
MS01 HEND -KONUS

CORRELATION

13/10/05

61714.160

18/11/ 8





KONUS

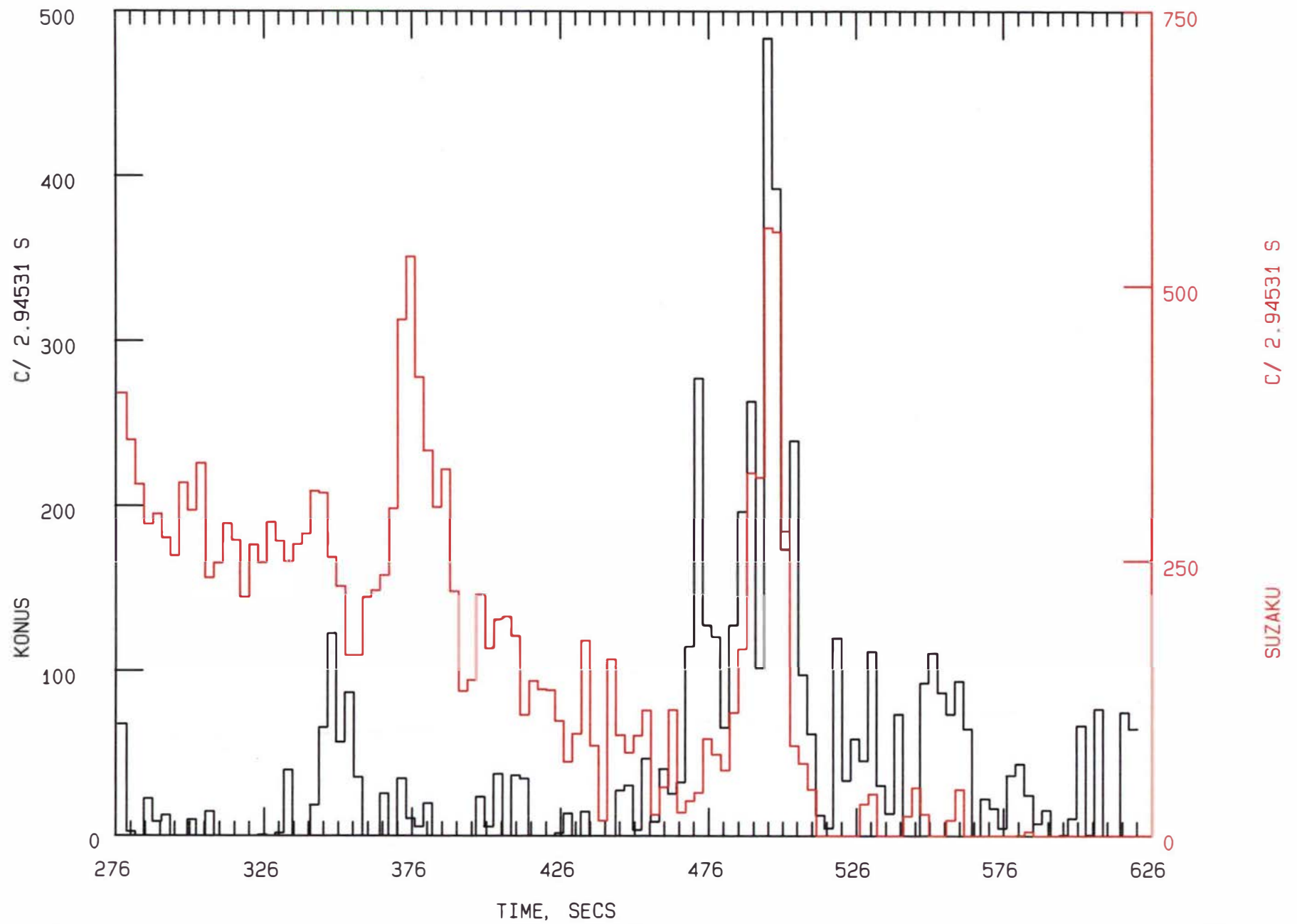
-SUZAKU

CORRELATION

13/10/05

62681.098

18/11/ 8



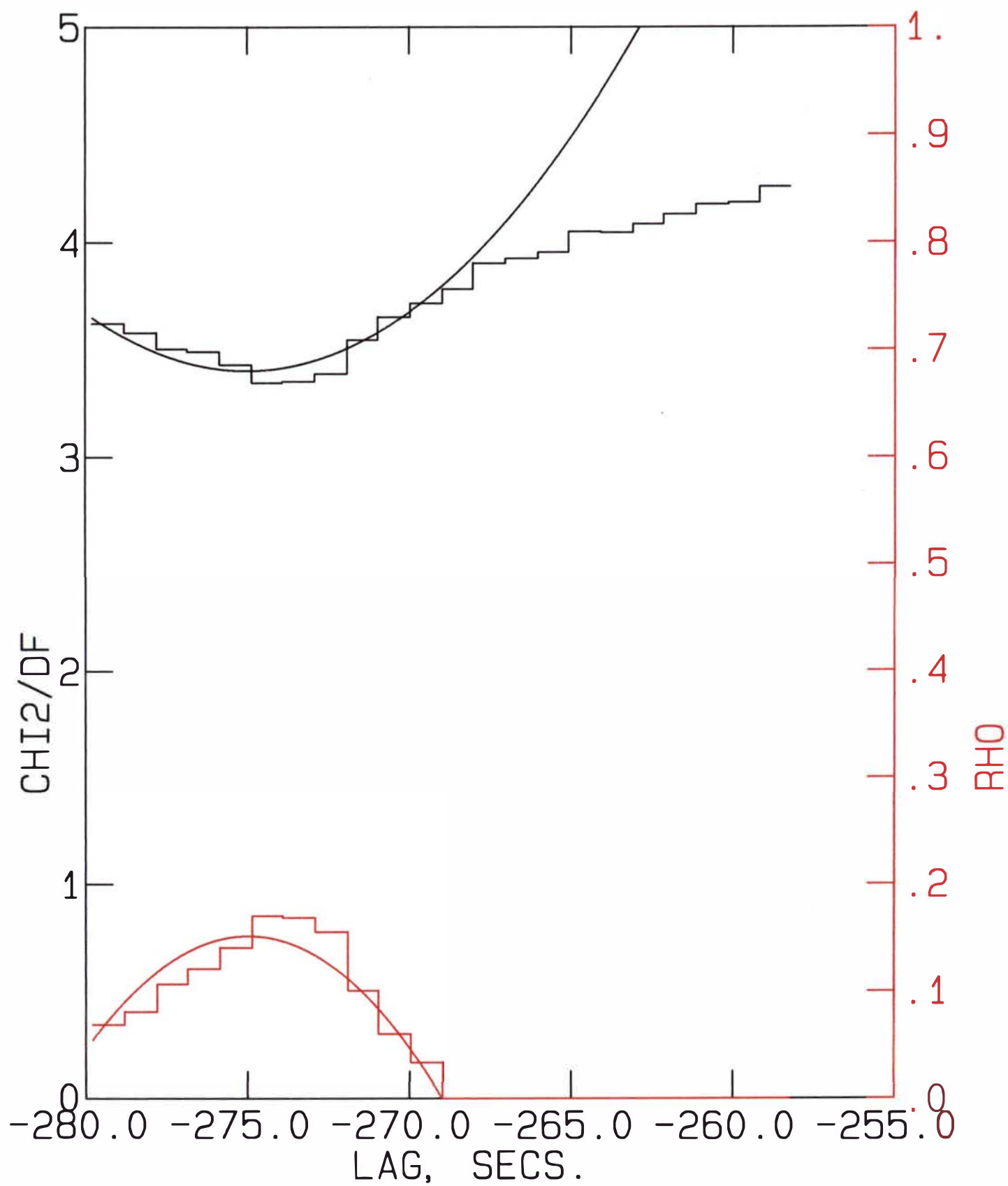
KONUS

-SUZAKU

CORRELATION

13/10/05

62681.098



KONUS

13/10/05 62681.098

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.945 S

4300

DETECTOR 2 - N. ECLIPIC

3300

2300

1300

300

100

200

300

400

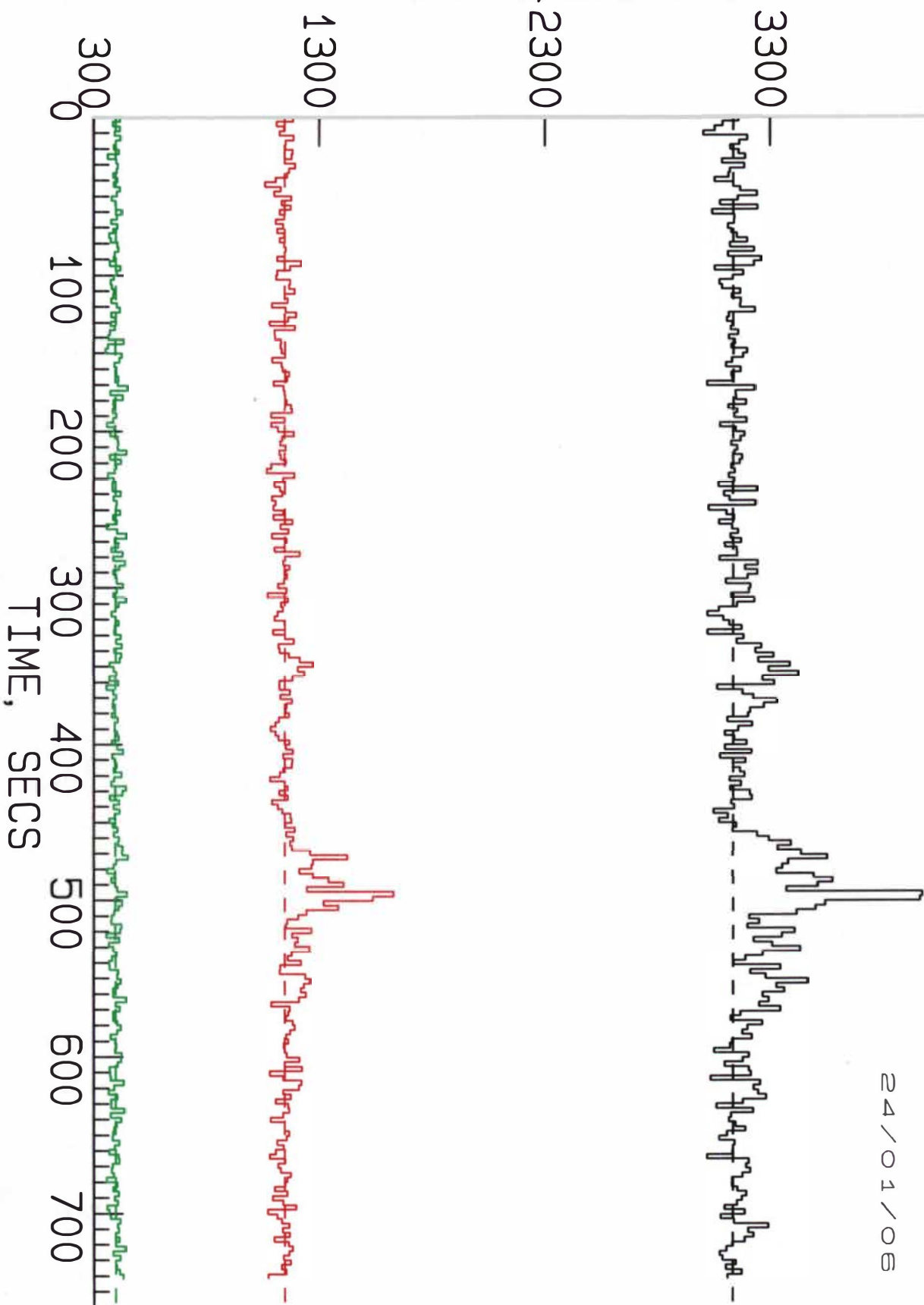
500

600

700

TIME, SECS

24/01/06



KONUS

13/10/05 62681.098

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.945 S

3400 —

DETECTOR 1 - S. ECLIPHTIC

24/01/06

2400 —

1400 —

400
0

100

200

300

400

500

600

700

TIME, SECS



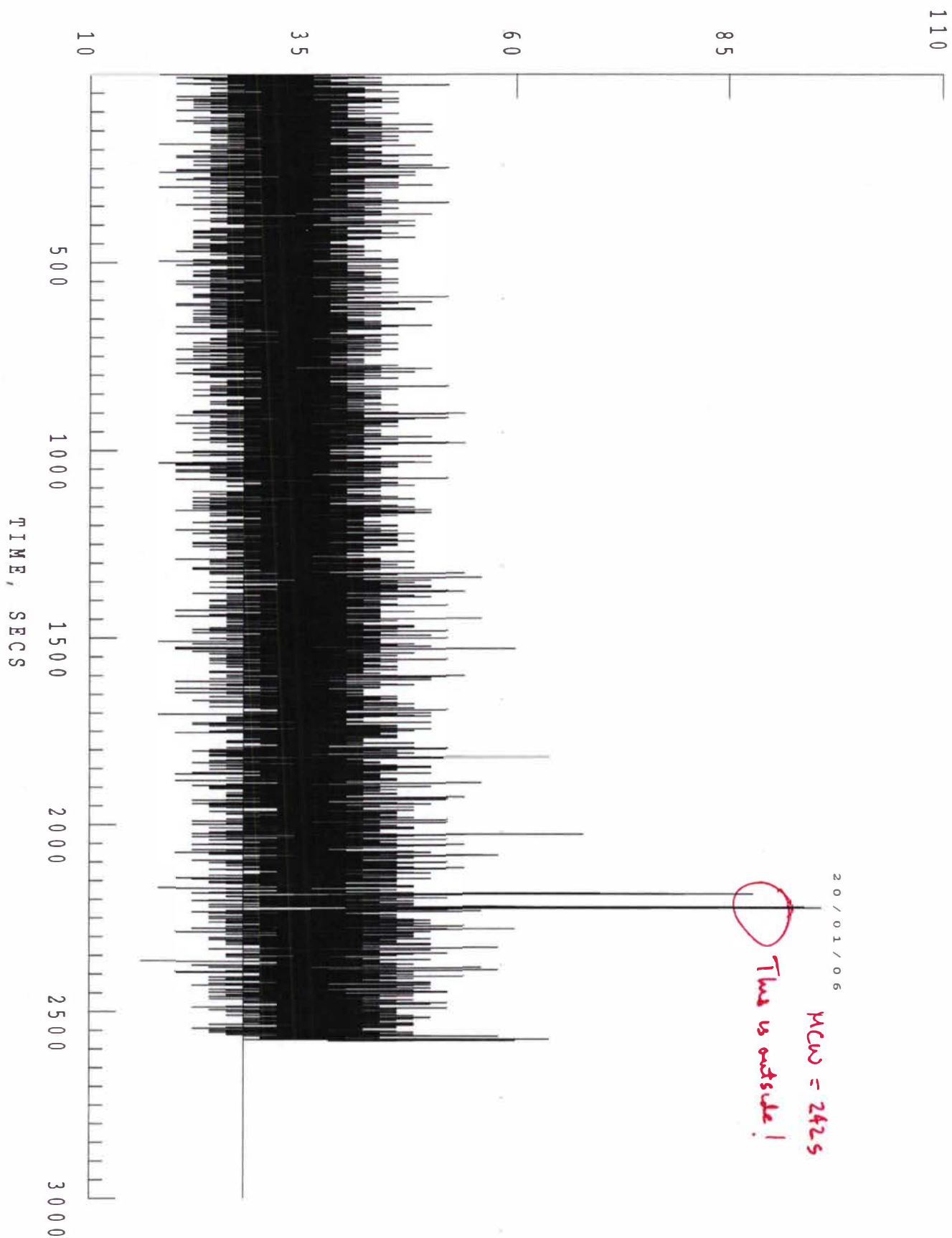
MS01

13/10/05

61714.160

50 - 3000 keV

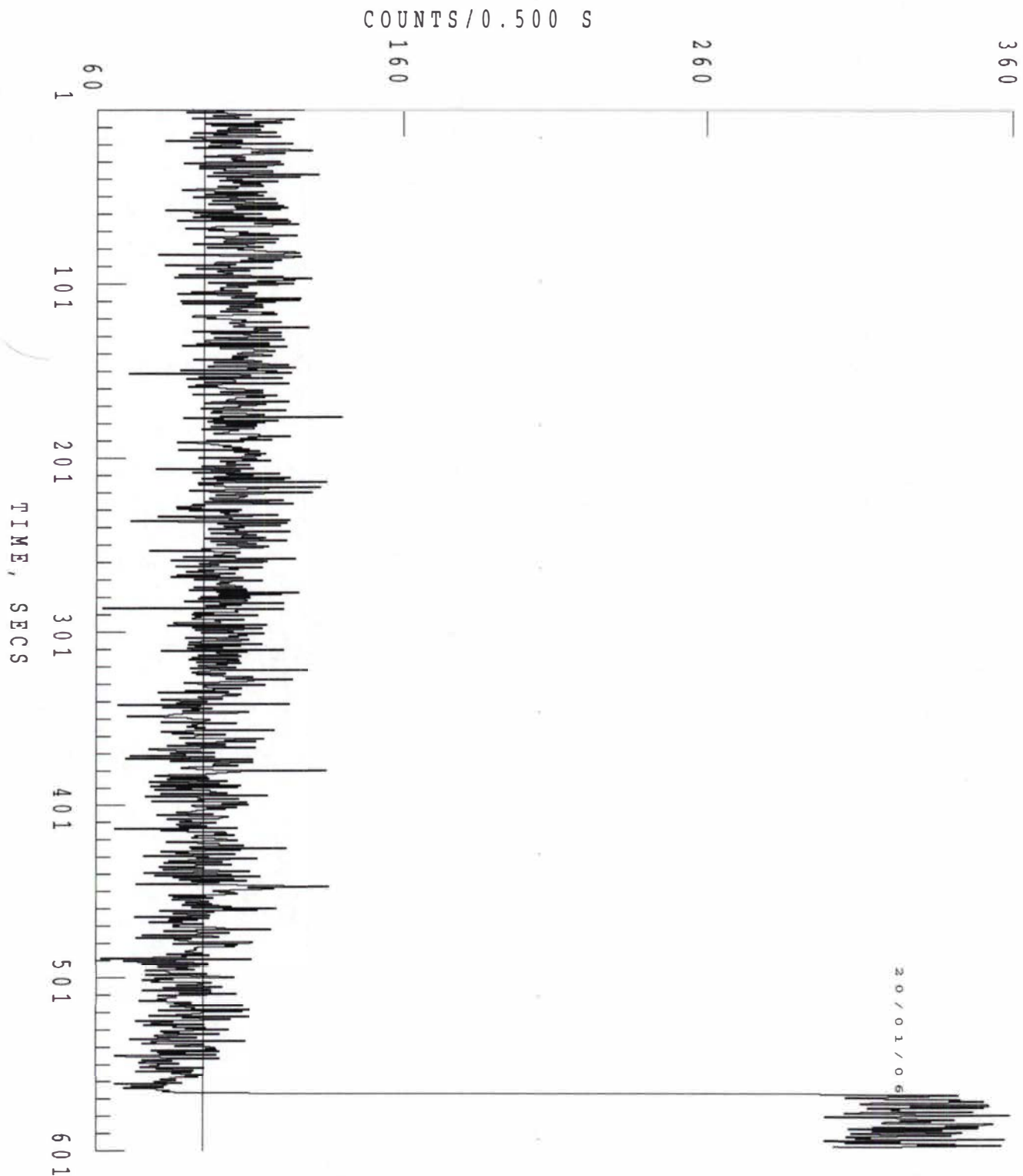
COUNTS/0.250 S



HESSI

13/10/05 62726.000 (KONUS_RI_20051013_63026)

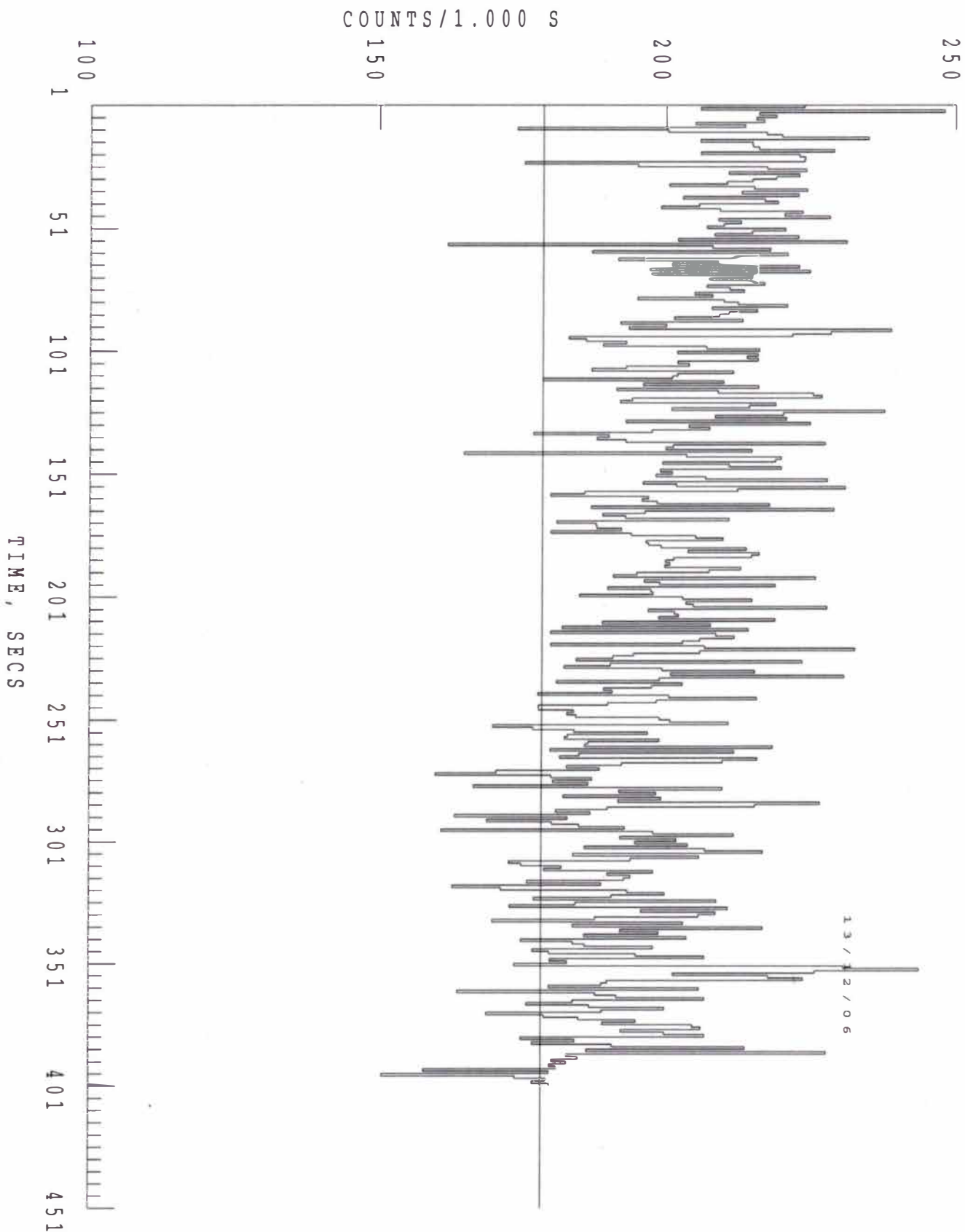
50- 200 keV + *Suzaku*



HESSI

13/10/05 62821.000 (SUZAKU_20051013_63022)

25- 150 keV



H0 SPI, ARS tugs

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

13/10/05 DOY 286 Julian 2453657.50000 [est. sct = 0019 c09e 370d 081b]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

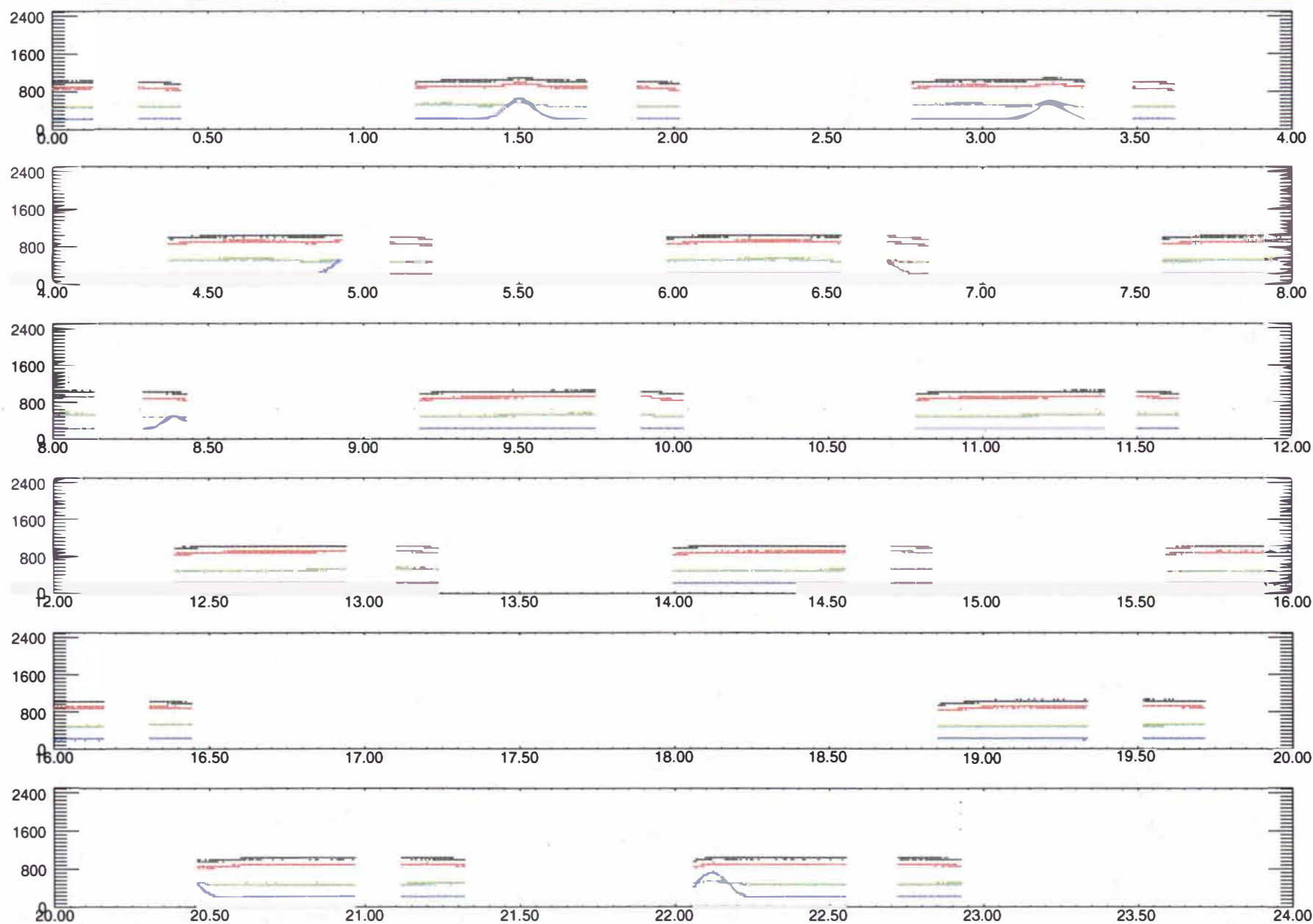
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

14/10/05 DOY 287 Julian 2453658.50000 [est. sct = 0019 c0b2 54f0 6019]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

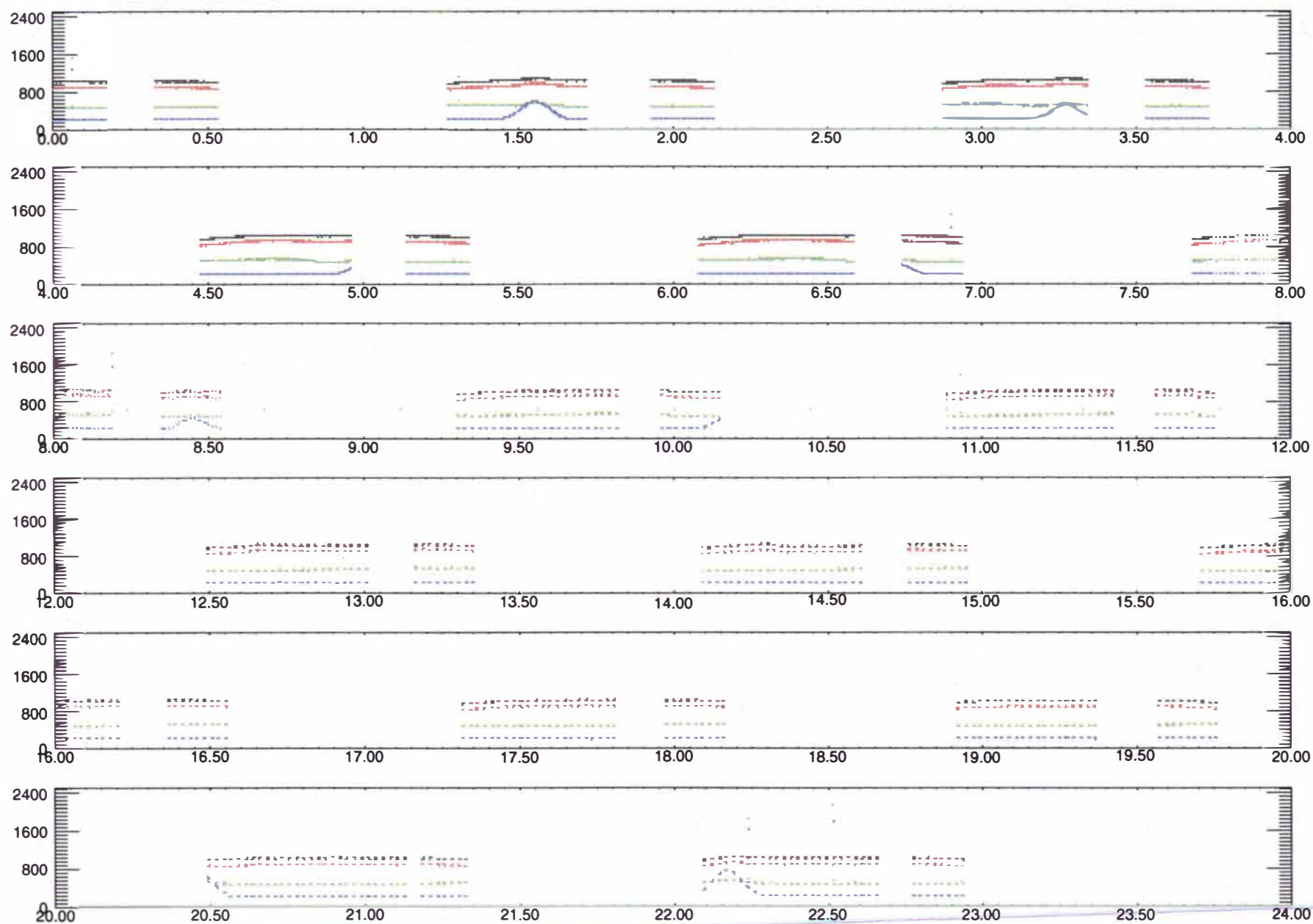
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



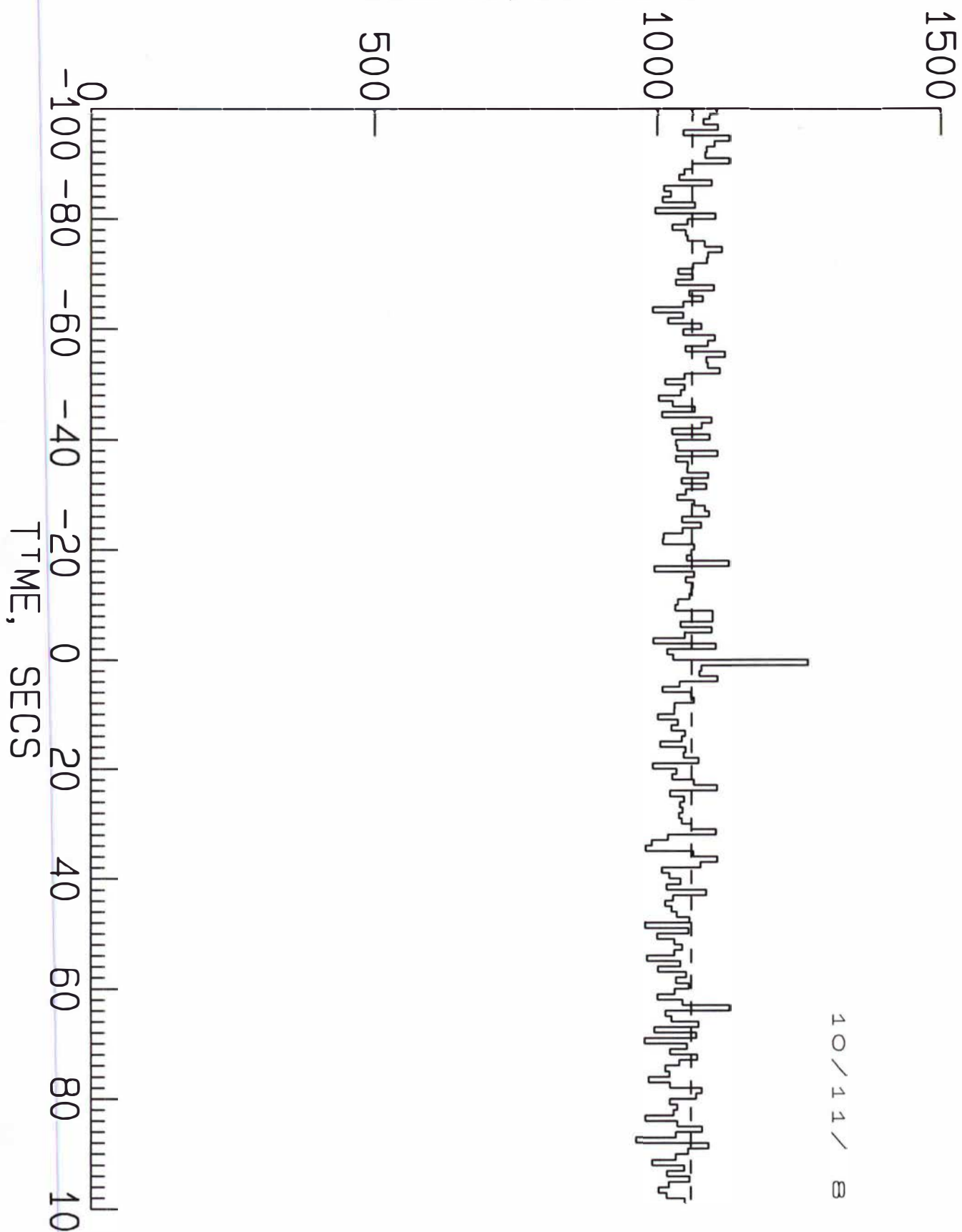
RS UT

SUZAKU

15/10/05 76528.403

50- 240 keV

COUNTS/1.000 S



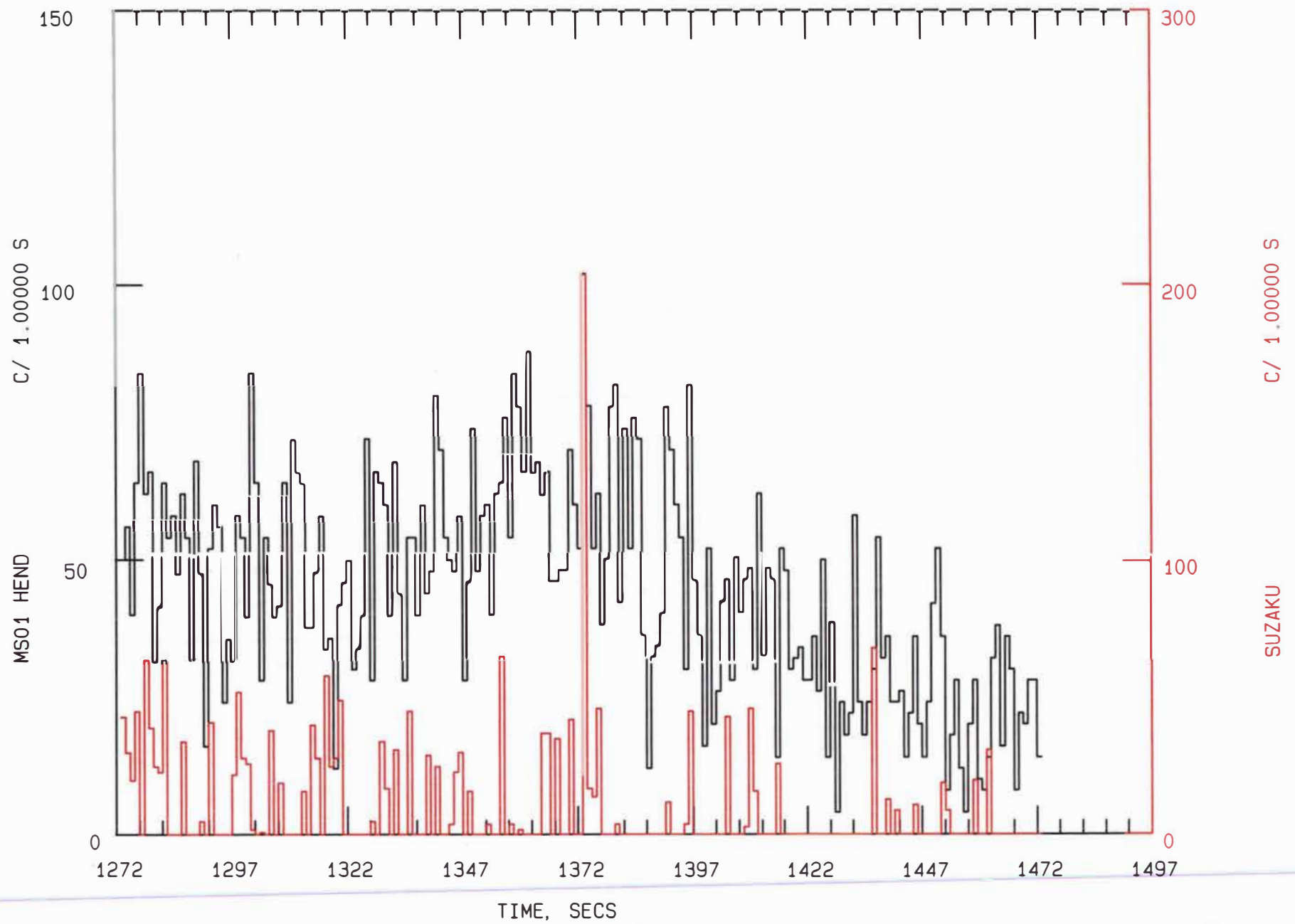
MS01 HEND -SUZAKU

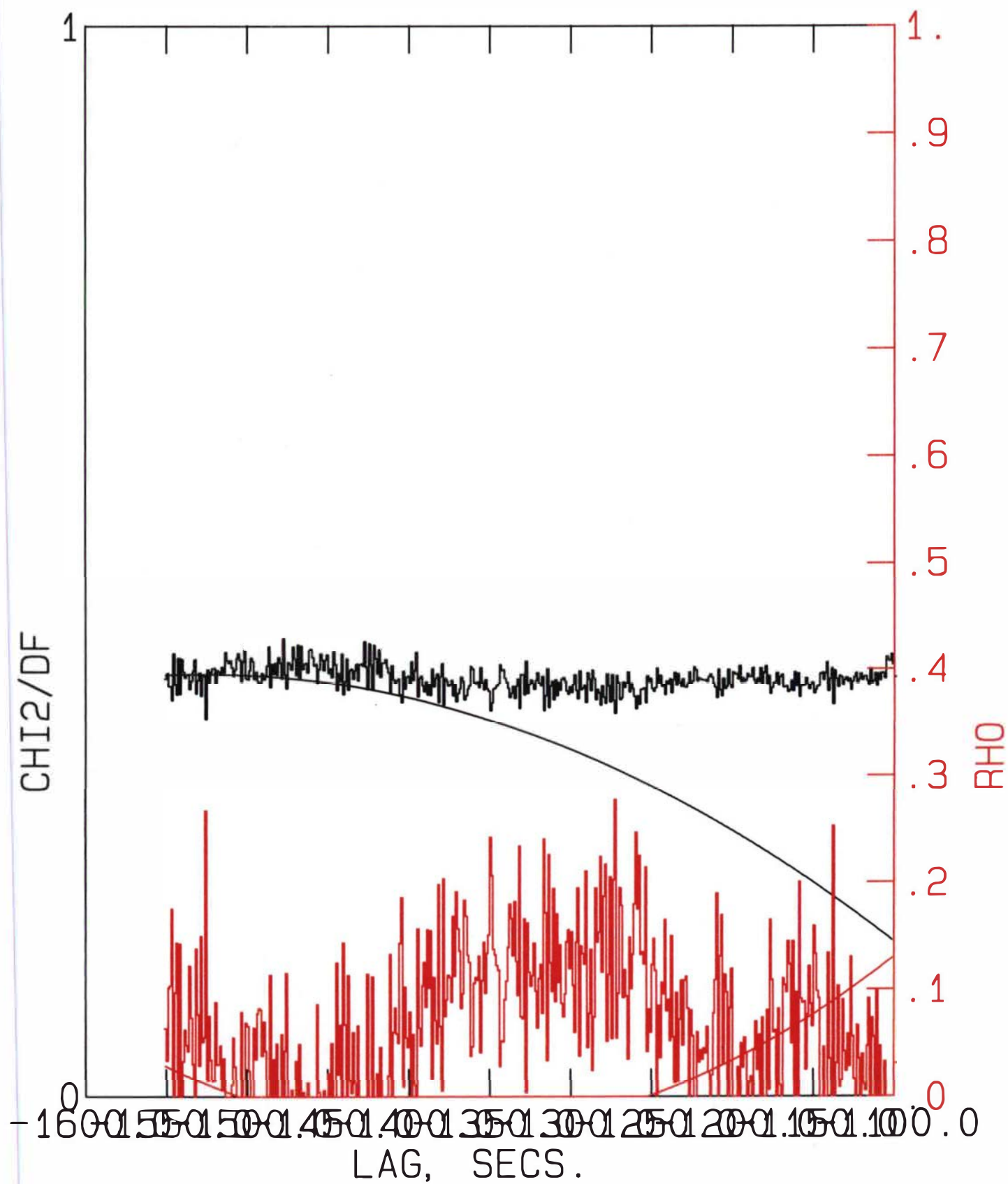
CORRELATION

15/10/05

75216.481

18/11/ 8





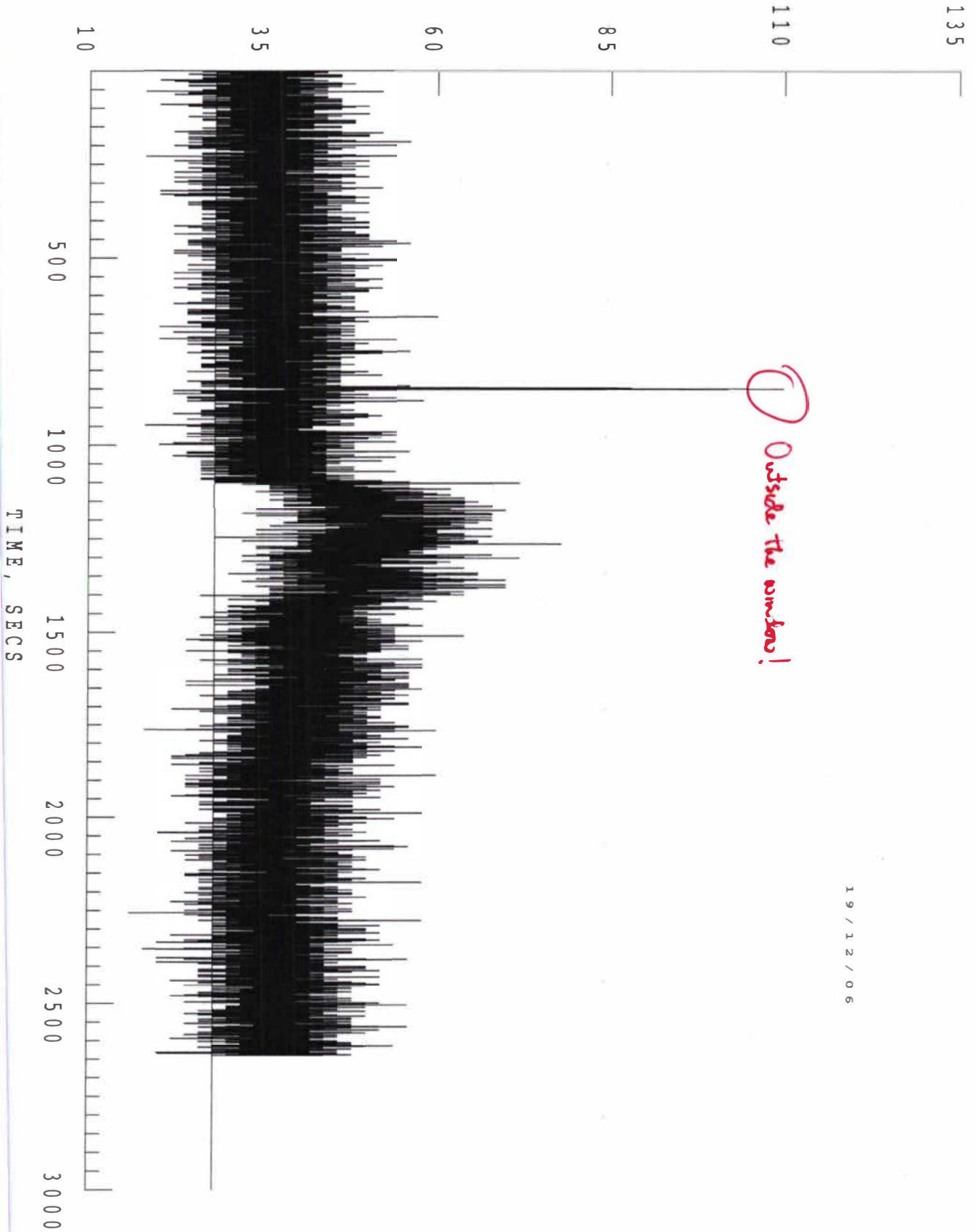
MS01

15/10/05

75216.481

50 - 3000 keV

COUNTS/0.250 S



19/12/06

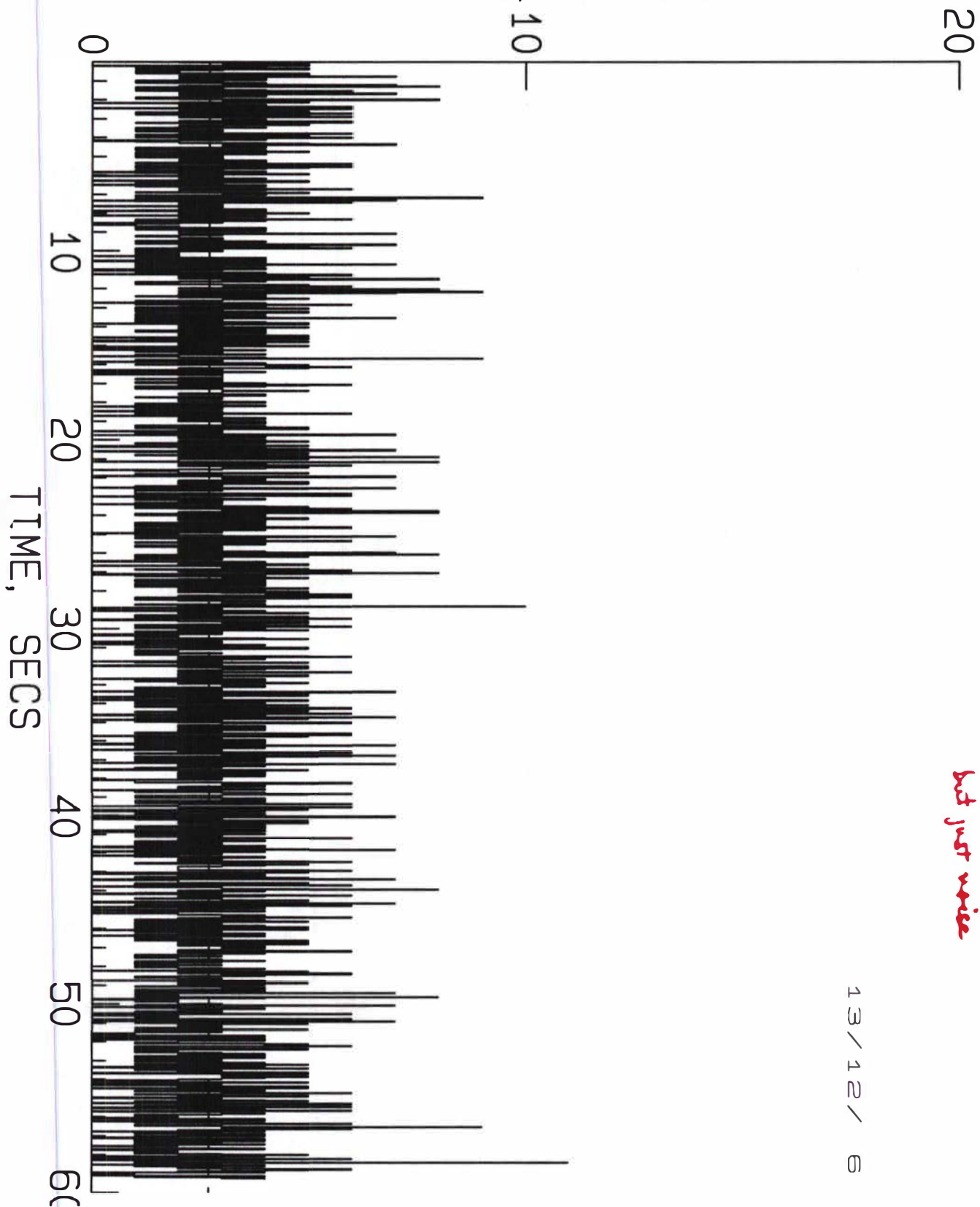
MCW = 240s

MO GE

15/10/05 76560.801

116- 337 keV

COUNTS/0.032 S

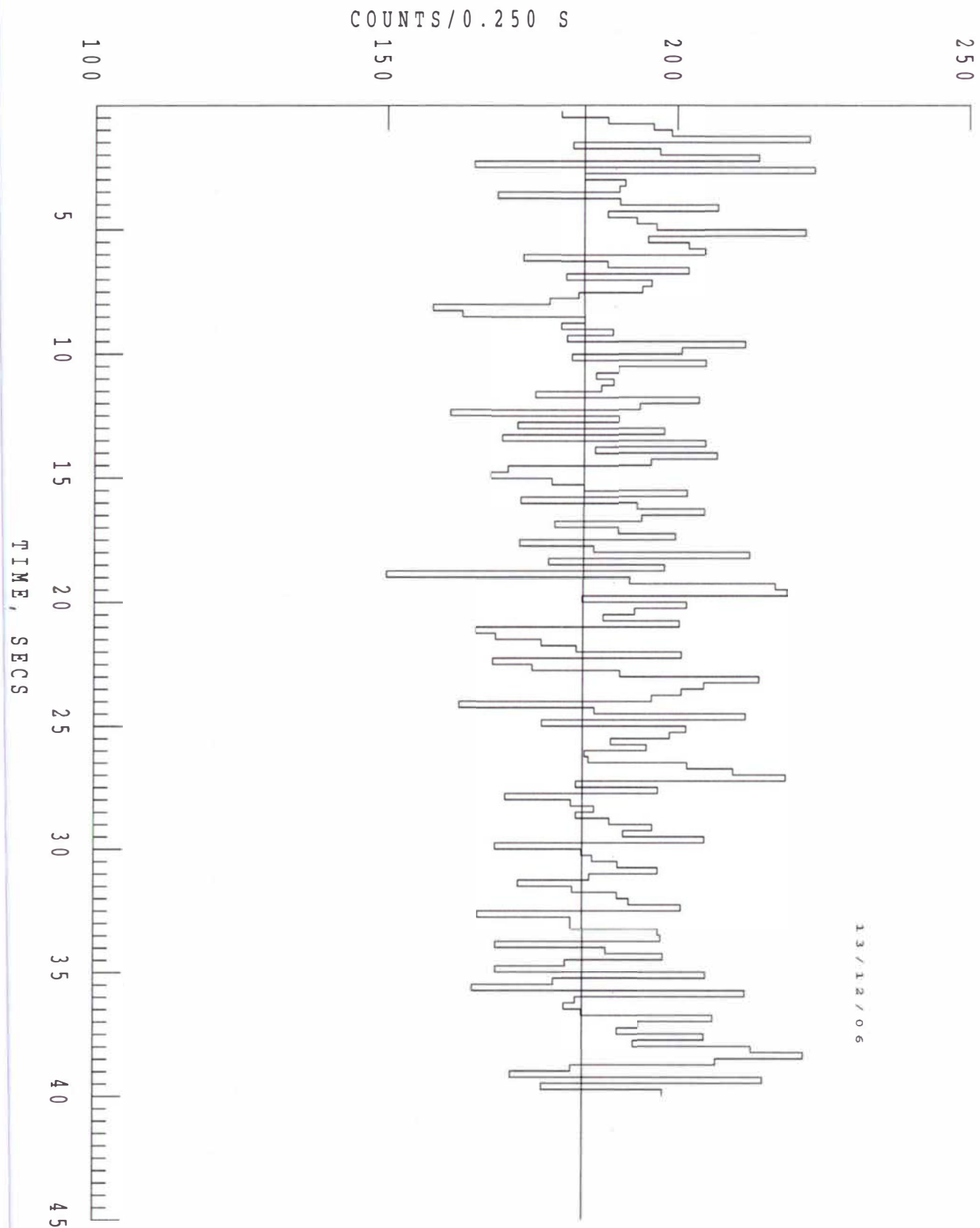


Suggest
Mo SPI tag
inside the window
but just noise

HESSI

15/10/05 76508.000 (SUZAKU_20051015_76528)

25- 150 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

15/10/05 DOY 288 Julian 2453659.50000 [est. sct = 0019 c0c6 72d3 b819]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

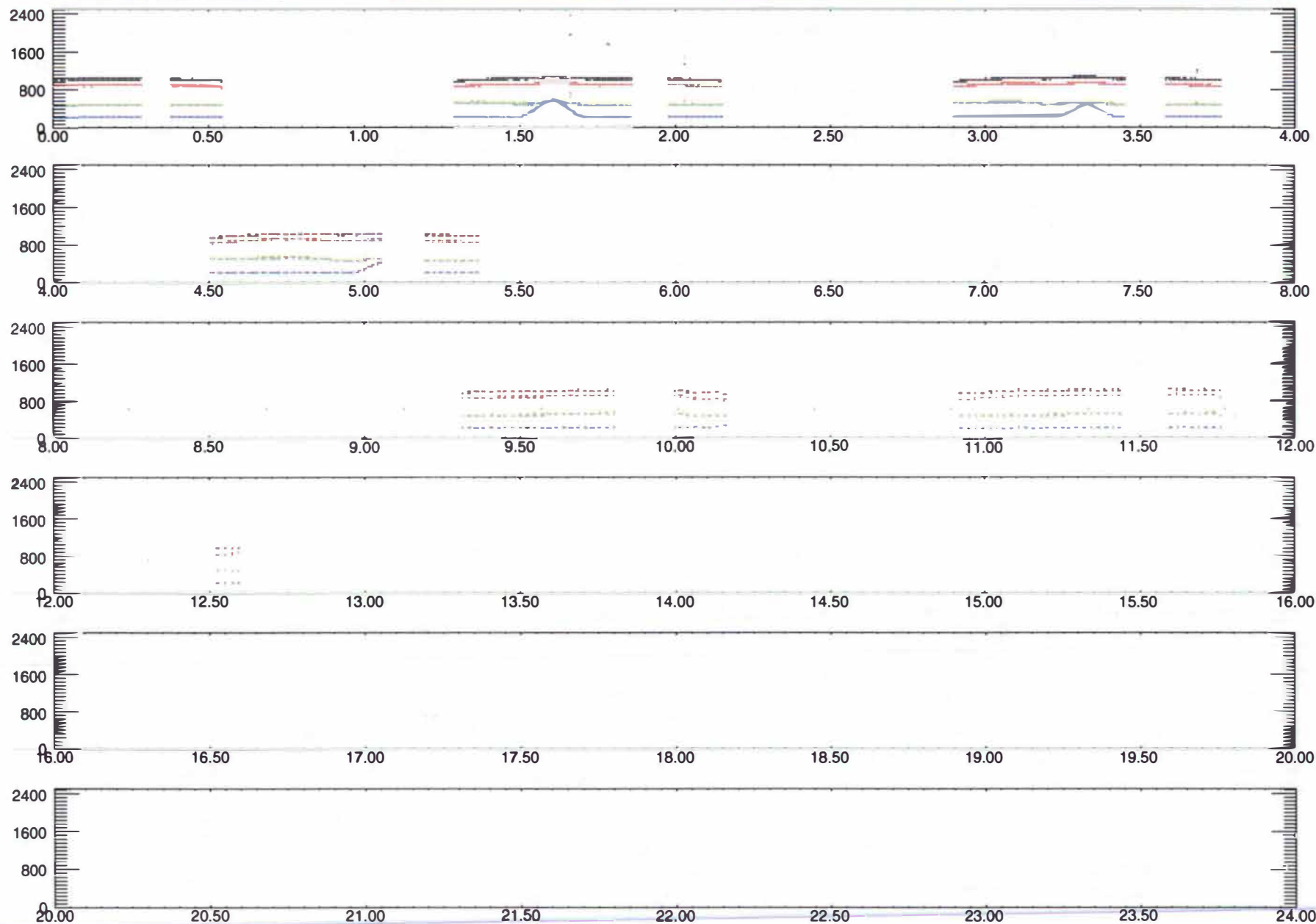
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



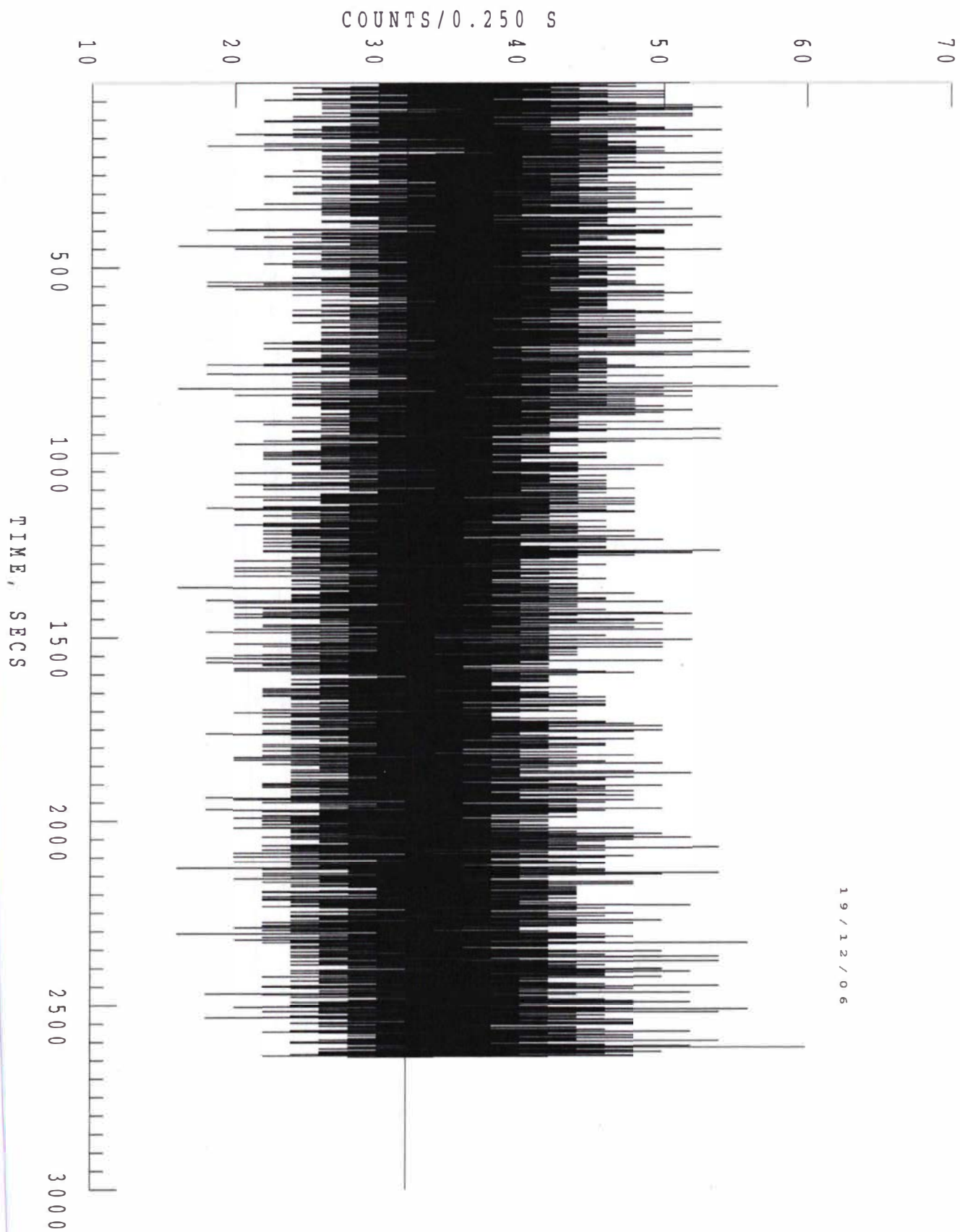
RS UT

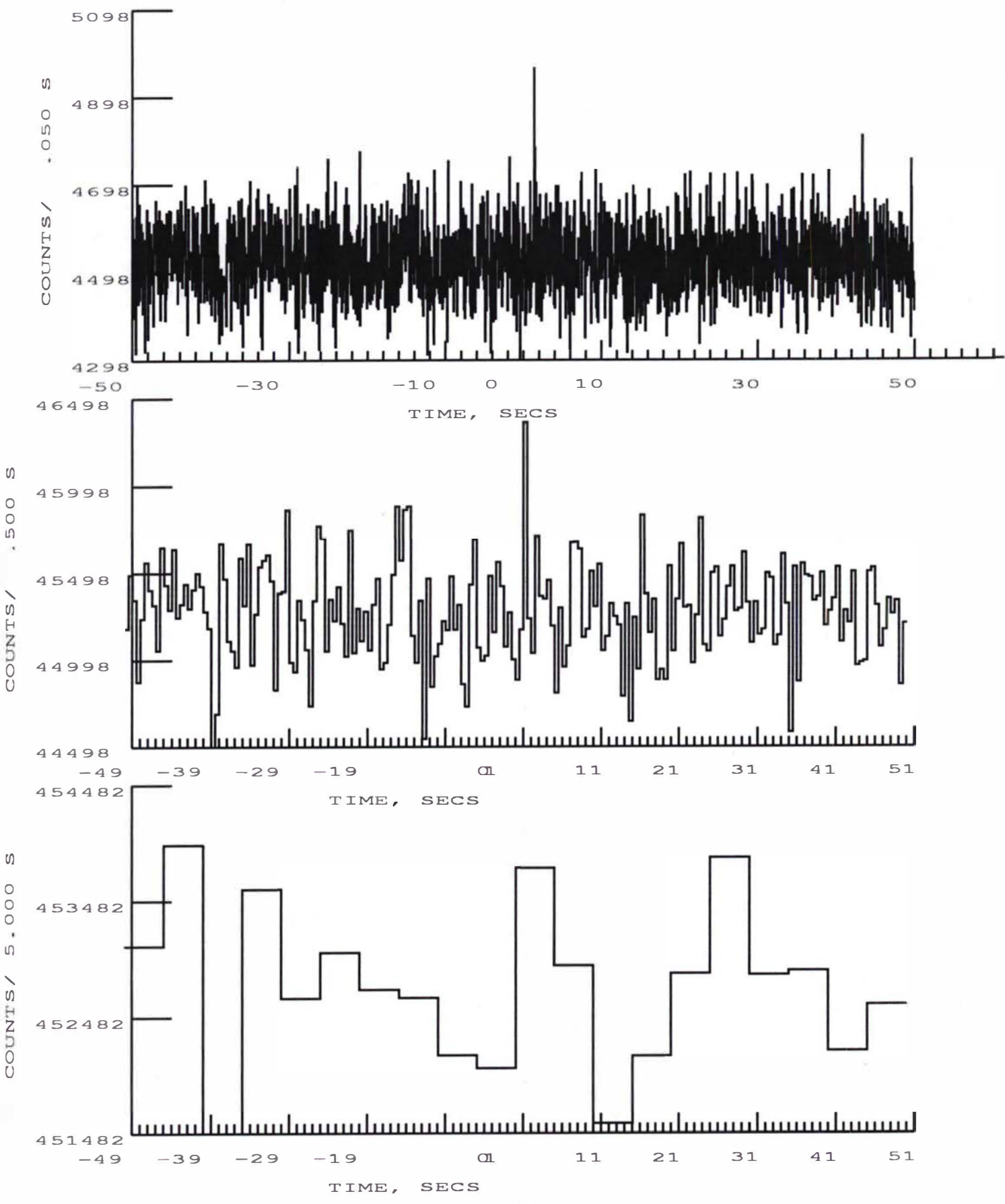
MS01

16/10/05

276.280

50 - 3000 keV





HESSI

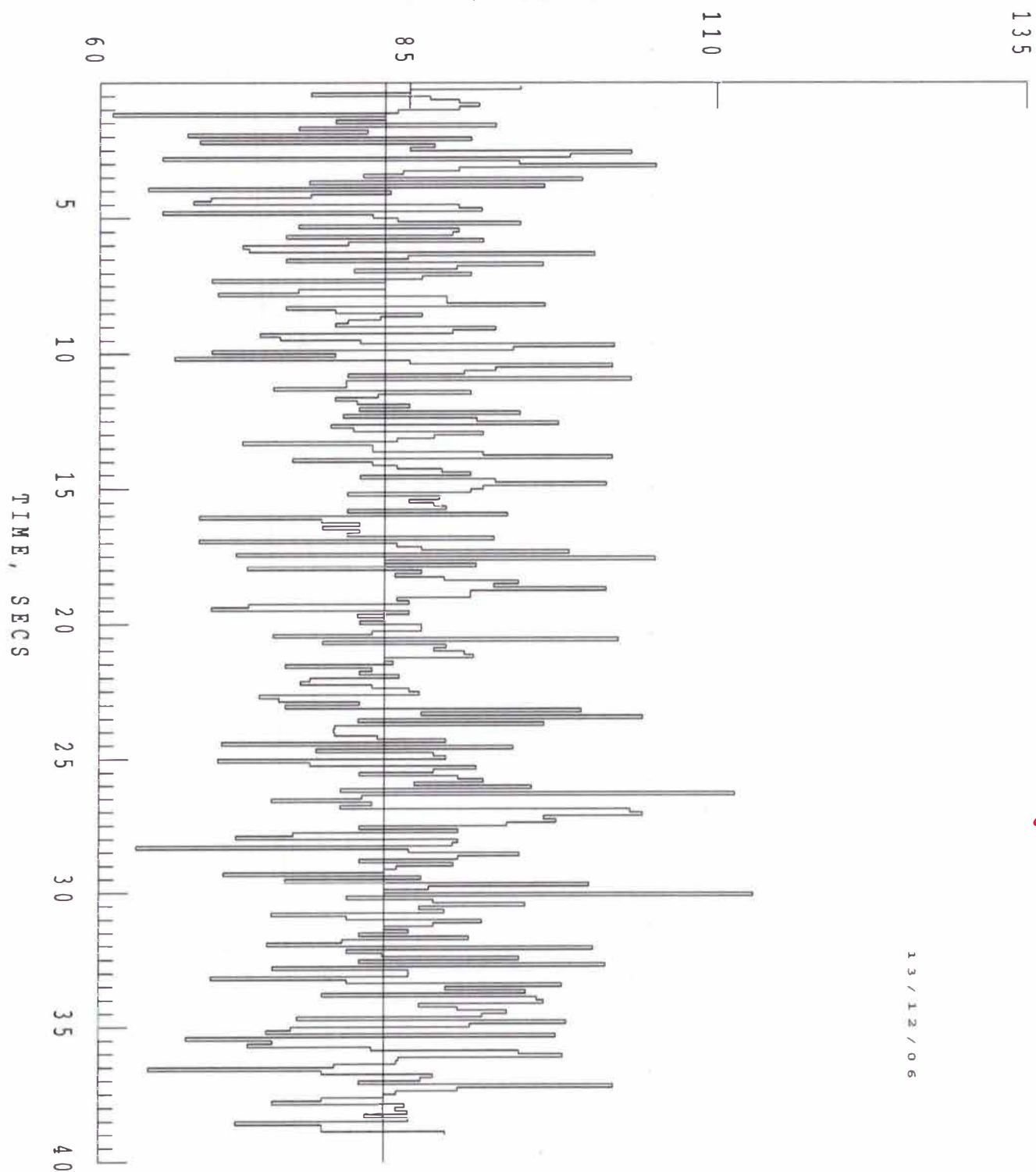
16/10/05

1570.000

(SUZAKU_20051016_01590)

25 - 150 keV

COUNTS/0.125 S



No SPI, GRS bugs

13/12/06

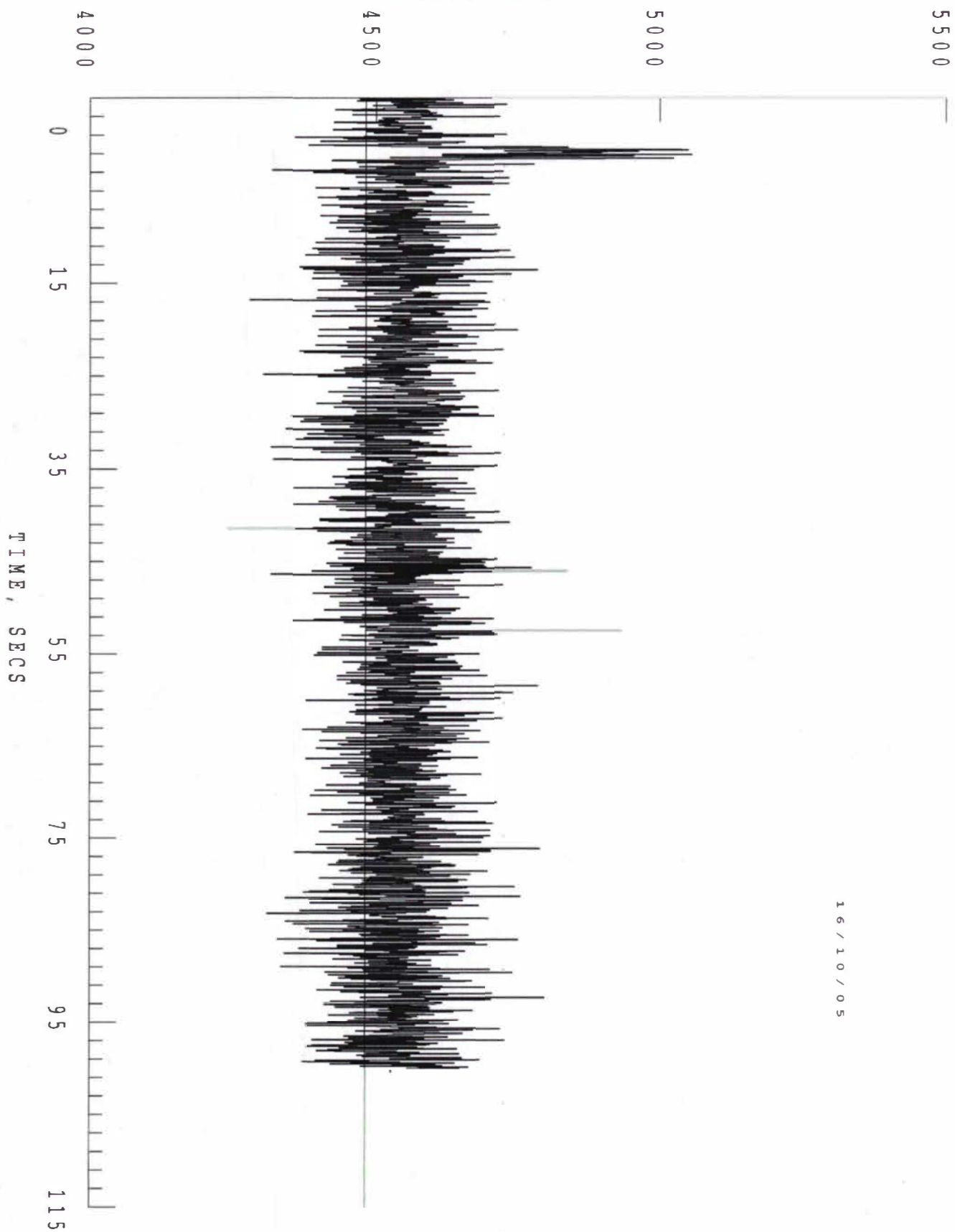
INTEGRAL

16/10/05 19177.376

100-10000 keV

05:19:37

COUNTS/0.050 S



KONUS

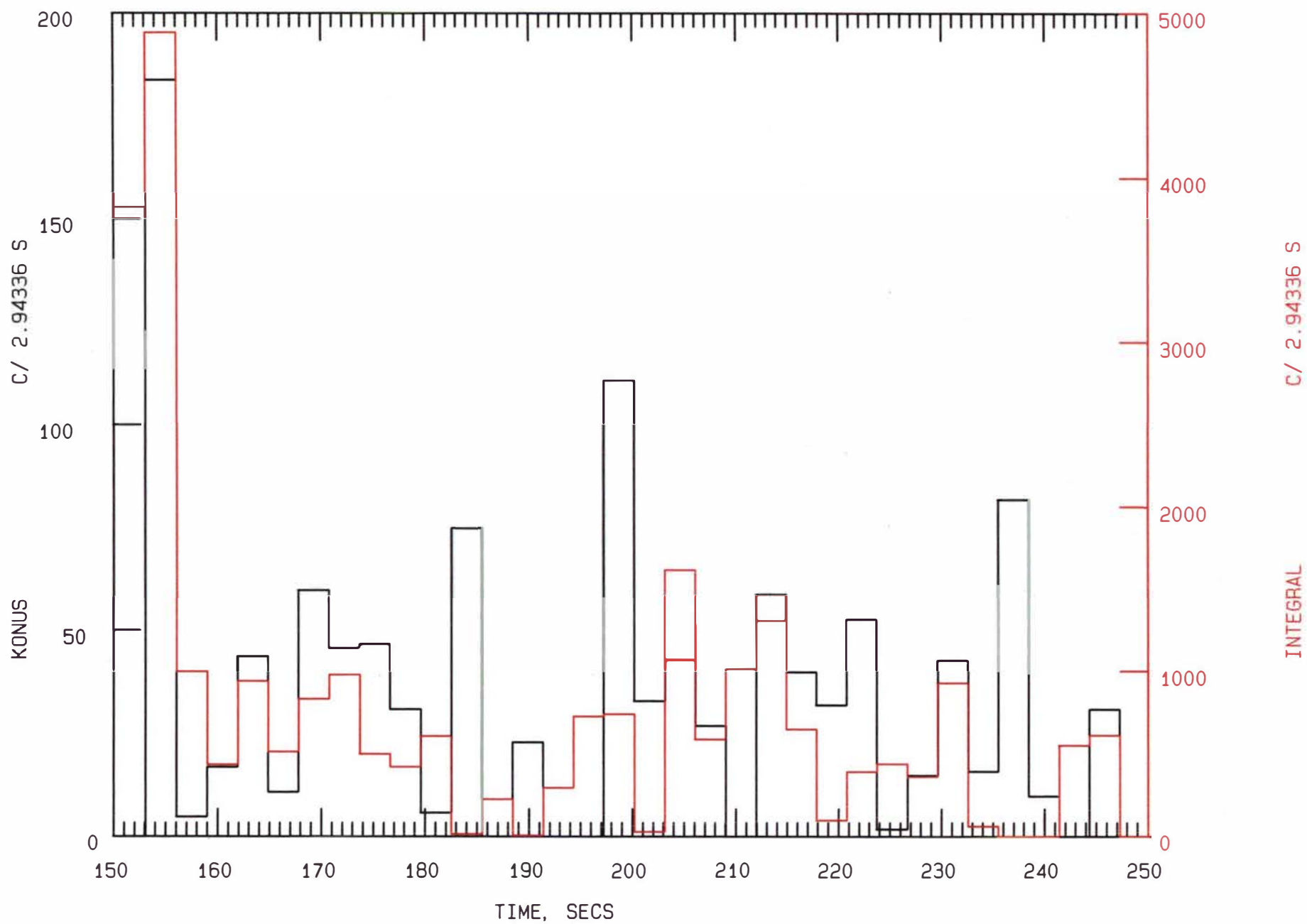
-INTEGRAL

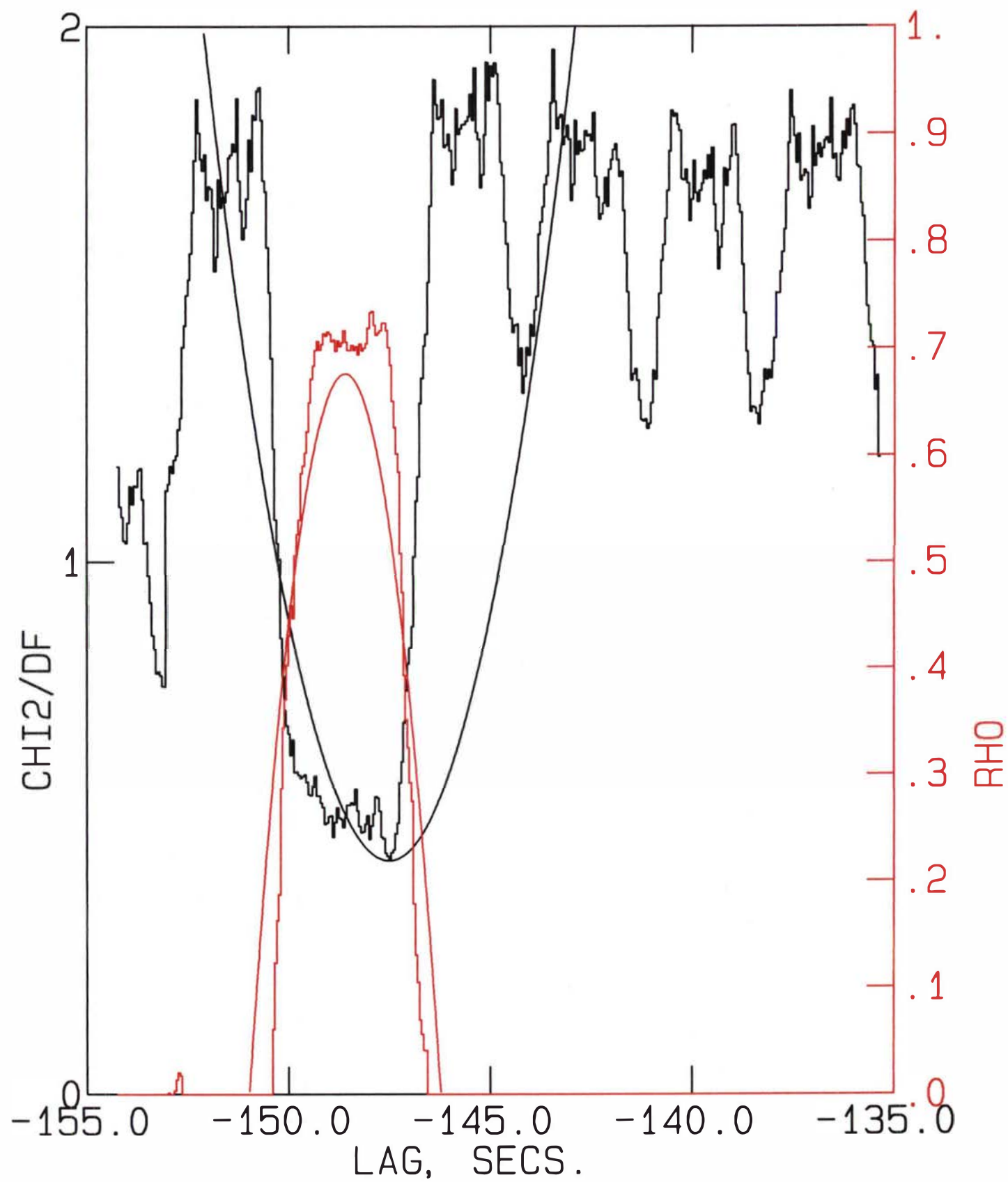
CORRELATION

16/10/05

19026.041

28/10/ 8





KONUS

16/10/05 19026.041

10- 50 keV

50- 200 keV

200- 750 keV

COUNTS/2.943 S

3300

2300

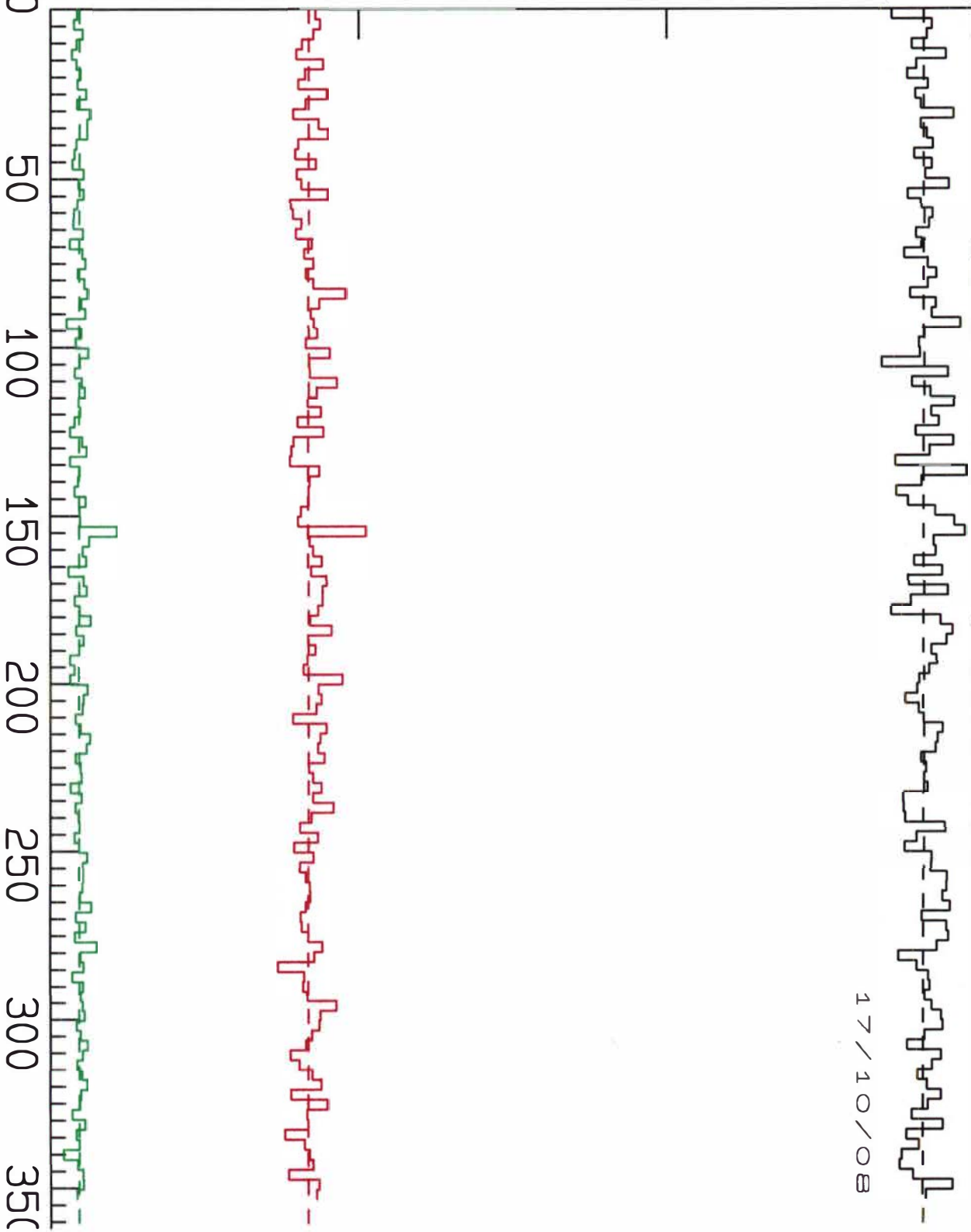
1300

300

DETECTOR 2 - N. ECLIPIC

17/10/08

0 50 100 150 200 250 300 350
TIME, SECS



KONUS

16/10/05 19026.041

10- 50 keV

50- 200 keV 200- 750 keV

COUNTS/2.943 S

3400

DETECTOR 1 - S. ECLIPTEIC

17 / 10 / 08

2400

1400

400

50

100

150

200

250

300

350

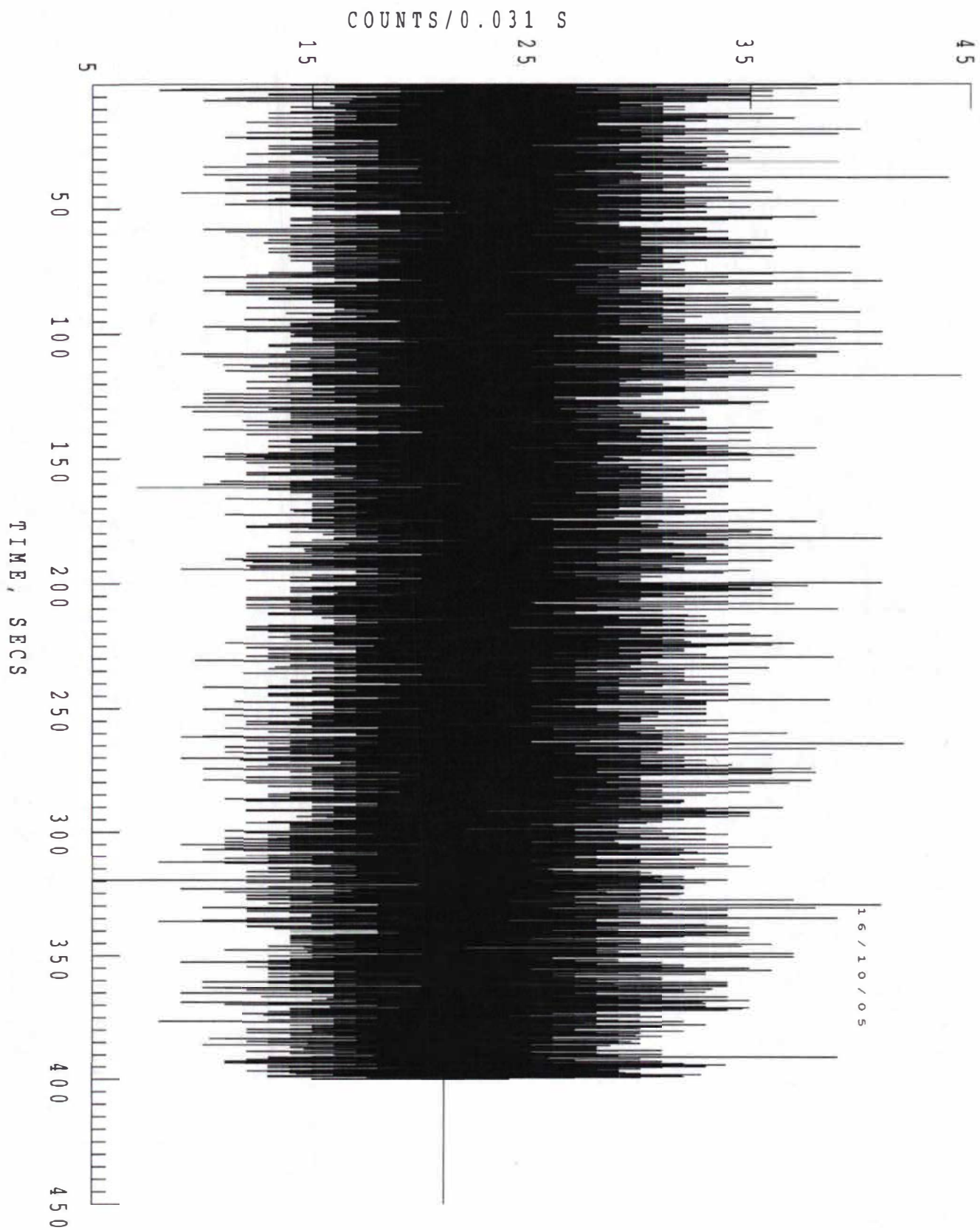
TIME, SECS

0

HESSI

16/10/05 18977.000 (INTEGRAL_20051016_19177)

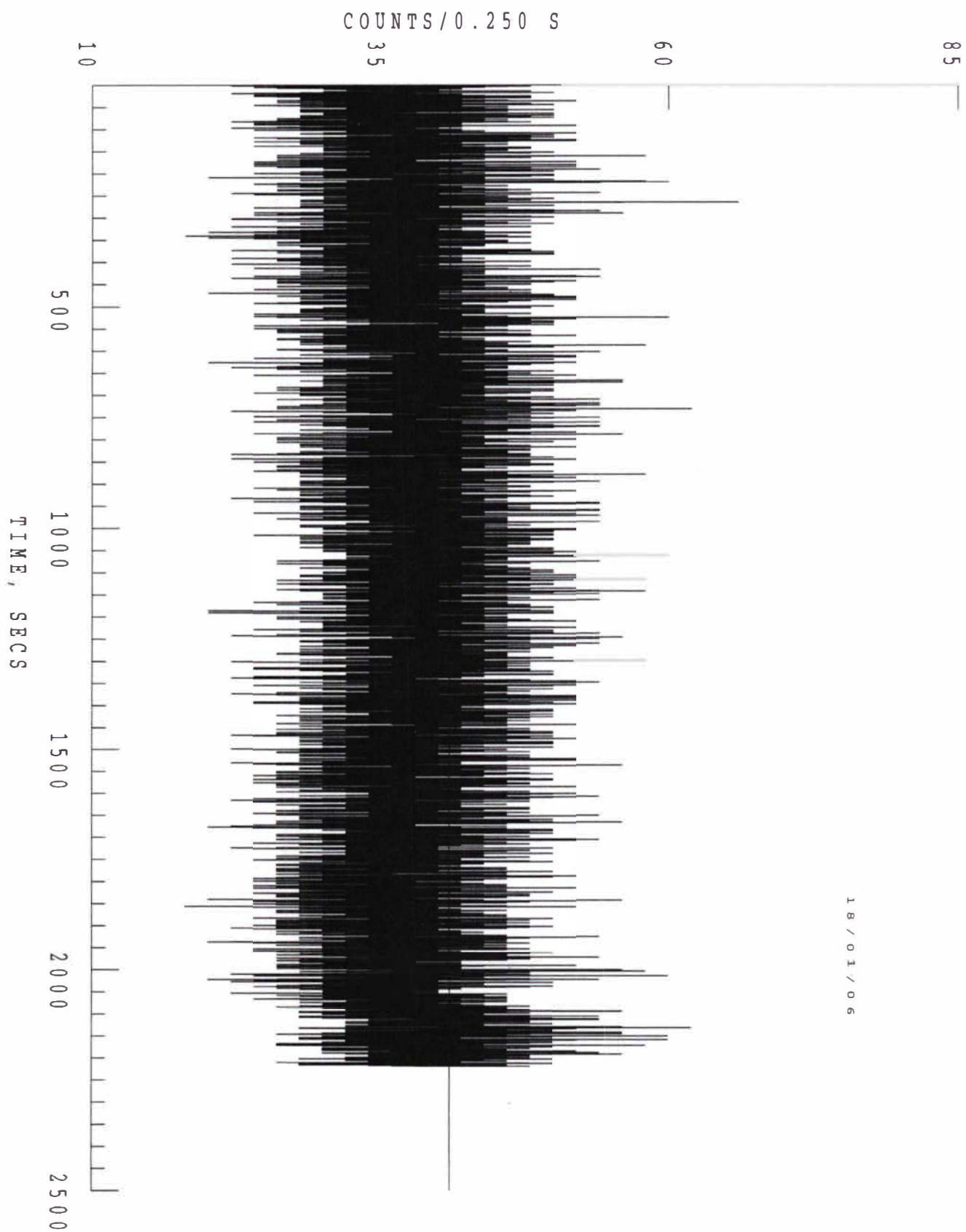
25- 150 keV



MS01

16/10/05 17856.234

50 - 3000 keV



From vxw@capella.gsfc.nasa.gov Sat Oct 15 22:27:25 2005
X-ASG-Debug-ID: 1129440476-17414-1-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
~ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Sun, 16 Oct 2005 01:27:56 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/SWIFT_BAT_LIGHTCURVE
Subject: GCN/SWIFT_BAT_LIGHTCURVE
Mime-Version: 1.0
Content-Disposition: inline
User-Agent: Mutt/1.4.2.1i
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

23 s
 $8.4 \times 10^{-7} \text{ erg/cm}^2$

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Sun 16 Oct 05 05:27:24 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 159913, Seg Num: 0
GRB_RA: 122.811d {+08h 11m 15s} (J2000),
122.877d {+08h 11m 30s} (current),
122.248d {+08h 08m 60s} (1950)
GRB_DEC: -18.311d {-18d 18' 39"} (J2000),
-18.329d {-18d 19' 42"} (current),
-18.161d {-18d 09' 40"} (1950)
GRB_DATE: 13659 TJD; 289 DOY; 05/10/16
GRB_TIME: 19411.35 SOD {05:23:31.35} UT
TRIGGER_INDEX: 301
GRB_PHI: 9.13 [deg]
GRB_THETA: 49.30 [deg]
DELTA_TIME: 6.00 [sec]
TRIGGER_DUR: 4.096 [sec]
LC_URL: sw00159913000msb.lc
SUN_POSTN: 201.23d {+13h 24m 56s} -8.92d {-08d 55' 20"}
SUN_DIST: 76.23 [deg]
MOON_POSTN: 5.60d {+00h 22m 23s} +1.74d {+01d 44' 18"}
MOON_DIST: 116.39 [deg]
MOON_ILLUM: 98 [%]
GAL_COORDS: 238.52, 8.34 [deg] galactic lon,lat of the pointing direction
ECL_COORDS: 130.28, -37.27 [deg] ecliptic lon,lat of the pointing direction
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.

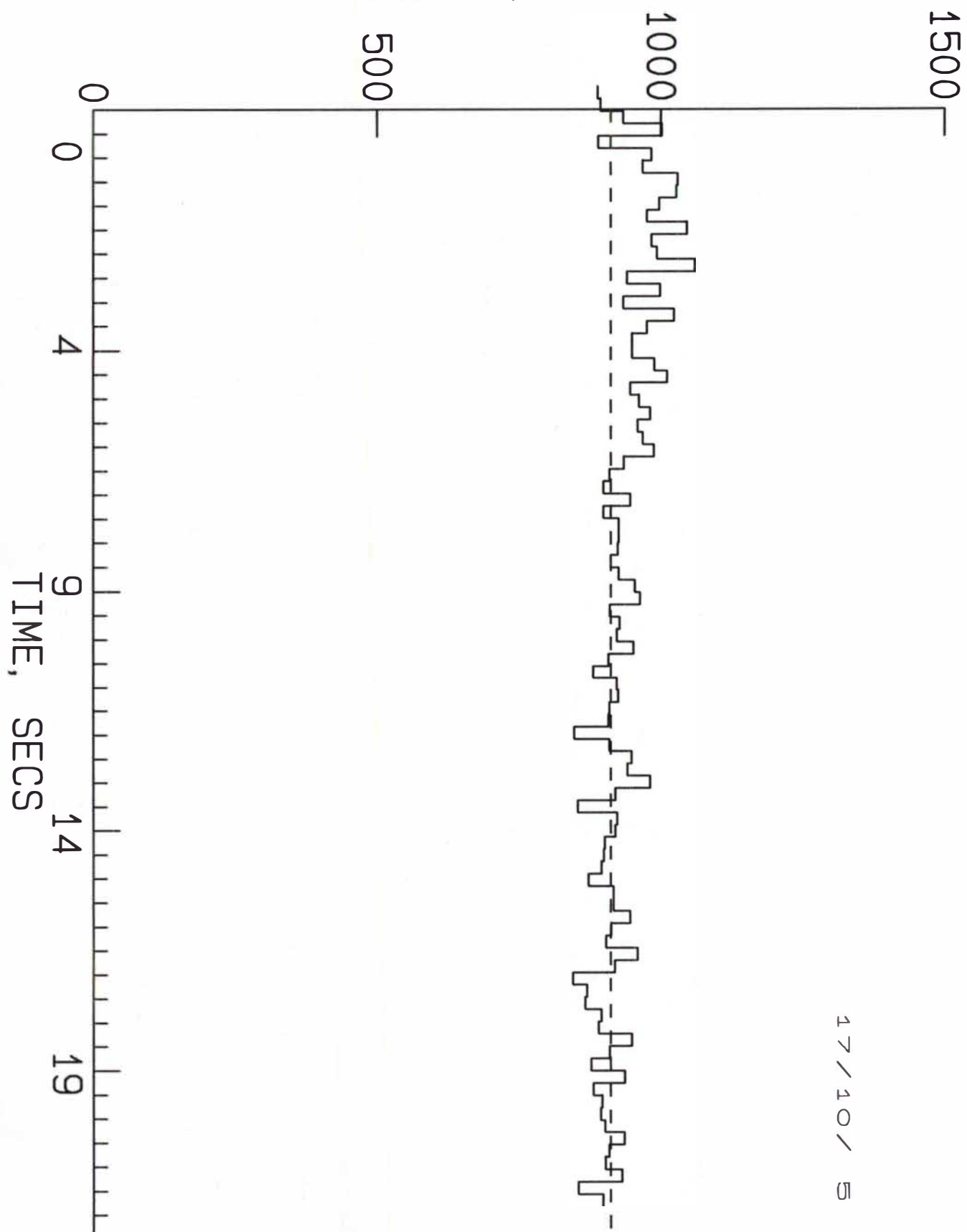
Added to ACCESS

SWIFT

16/10/05 19411.350

25- 100 keV

COUNTS/0.256 S



17/10/05

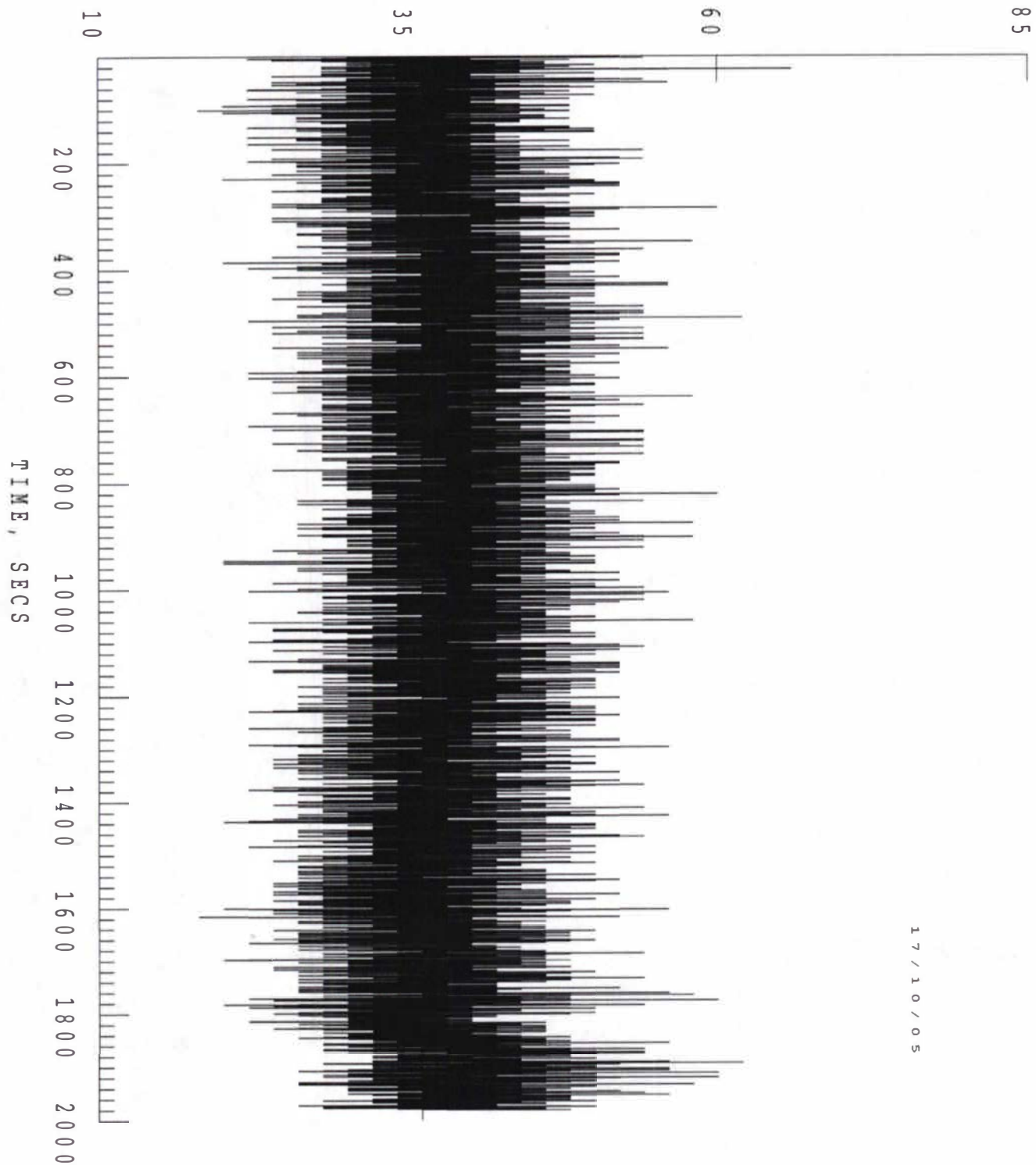
MS01

16/10/05

18096.271

50 - 3000 keV

COUNTS/0.250 S



17/10/05

From williams@sunspot.ssl.berkeley.edu Sun Oct 16 05:55:16 2005
Date: Sun, 16 Oct 2005 06:02:15 -0700 (PDT)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_GSwift-BAT_159913_0_20051016_19411

HESSI 25 to 150 keV Counts
Created 16-Oct-2005 05:54:19.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
Full time range in eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

From vxw@capella.gsfc.nasa.gov Sun Oct 16 11:42:53 2005
X-ASG-Debug-ID: 1129488204-27884-7-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
v-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Sun, 16 Oct 2005 14:34:15 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/SWIFT_BAT_LIGHTCURVE
Subject: GCN/SWIFT_BAT_LIGHTCURVE
Mime-Version: 1.0
Content-Disposition: inline
User-Agent: Mutt/1.4.2.1i
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

4 s

$1.7 \times 10^{-7} \text{ erg cm}^{-2}$

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Sun 16 Oct 05 18:33:30 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 159994, Seg_Num: 0
GRB_RA: 132.067d {+08h 48m 16s} (J2000),
132.147d {+08h 48m 35s} (current),
131.375d {+08h 45m 30s} (1950)
GRB_DEC: +13.658d {+13d 39' 27"} (J2000),
+13.636d {+13d 38' 09"} (current),
+13.843d {+13d 50' 34"} (1950)
GRB_DATE: 13659 TJD; 289 DOY; 05/10/16
GRB_TIME: 66488.98 SOD {18:28:08.98} UT
TRIGGER_INDEX: 121
GRB_PHI: -168.36 [deg]
GRB_THETA: 33.28 [deg]
DELTA_TIME: 65460.00 [sec]
TRIGGER_DUR: 0.512 [sec]
LC_URL: sw00159994000msb.lc
SUN_POSTN: 201.74d {+13h 26m 58s} -9.12d {-09d 07' 20"}
SUN_DIST: 72.71 [deg]
MOON_POSTN: 12.52d {+00h 50m 04s} +5.46d {+05d 27' 24"}
MOON_DIST: 117.12 [deg]
MOON_ILLUM: 99 [%]
GAL_COORDS: 213.34, 31.98 [deg] galactic lon,lat of the pointing direction
ECL_COORDS: 130.74, -4.03 [deg] ecliptic lon,lat of the pointing direction
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point_source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.

<This message contains 1 attachments (not printed)>

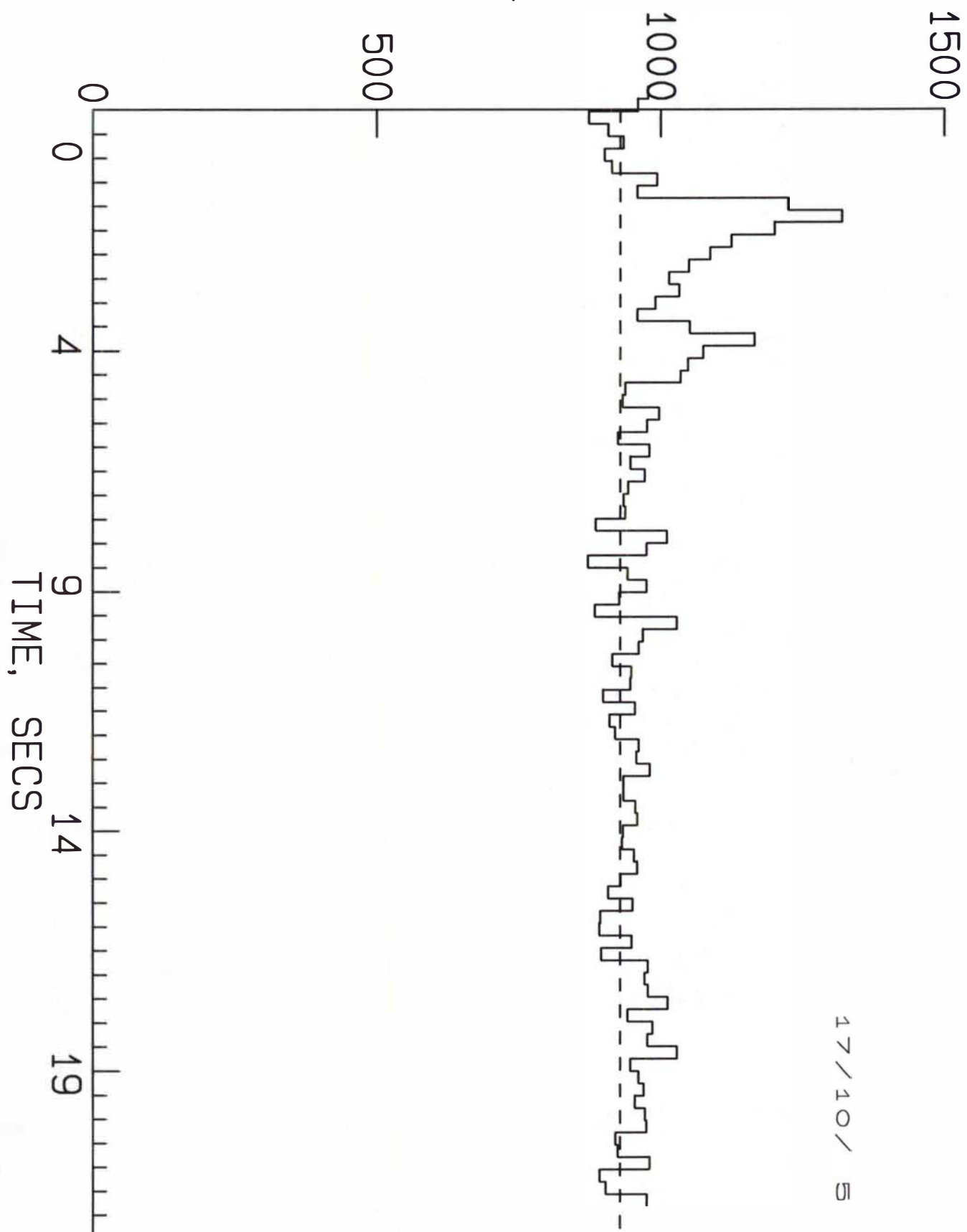
Added to ACCESS

SWIFT

16/10/05 66488.981

25- 100 keV

COUNTS/0.256 S



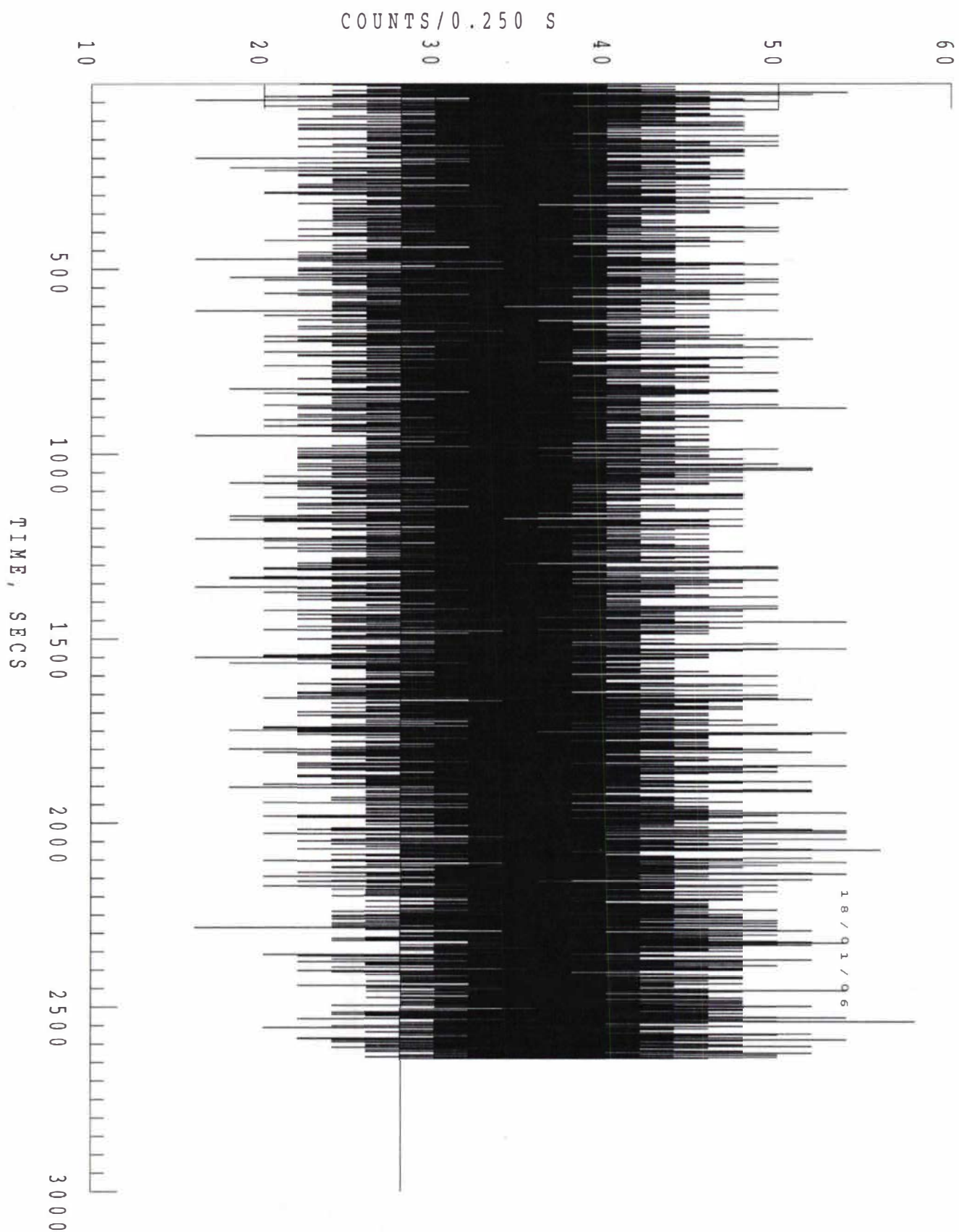
17/10/5

MS01

16/10/05

65136.420

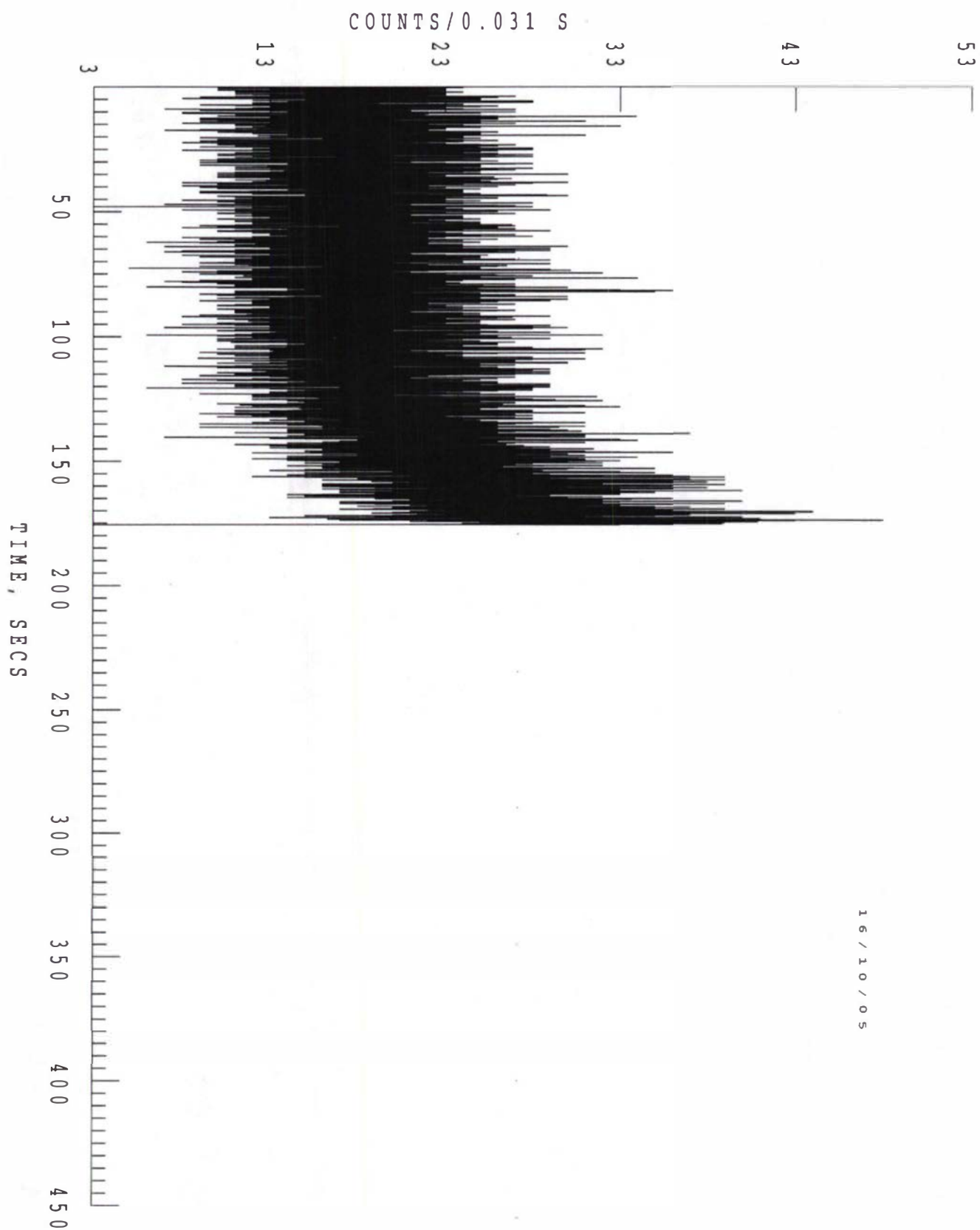
50 - 3000 keV



HESSI

16/10/05 66288.000 (GSwift-BAT_159994_0_20051016_

25- 150 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

16/10/05 DOY 289 Julian 2453660.50000 [est. sct = 0019 c0da 9063 05e9]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

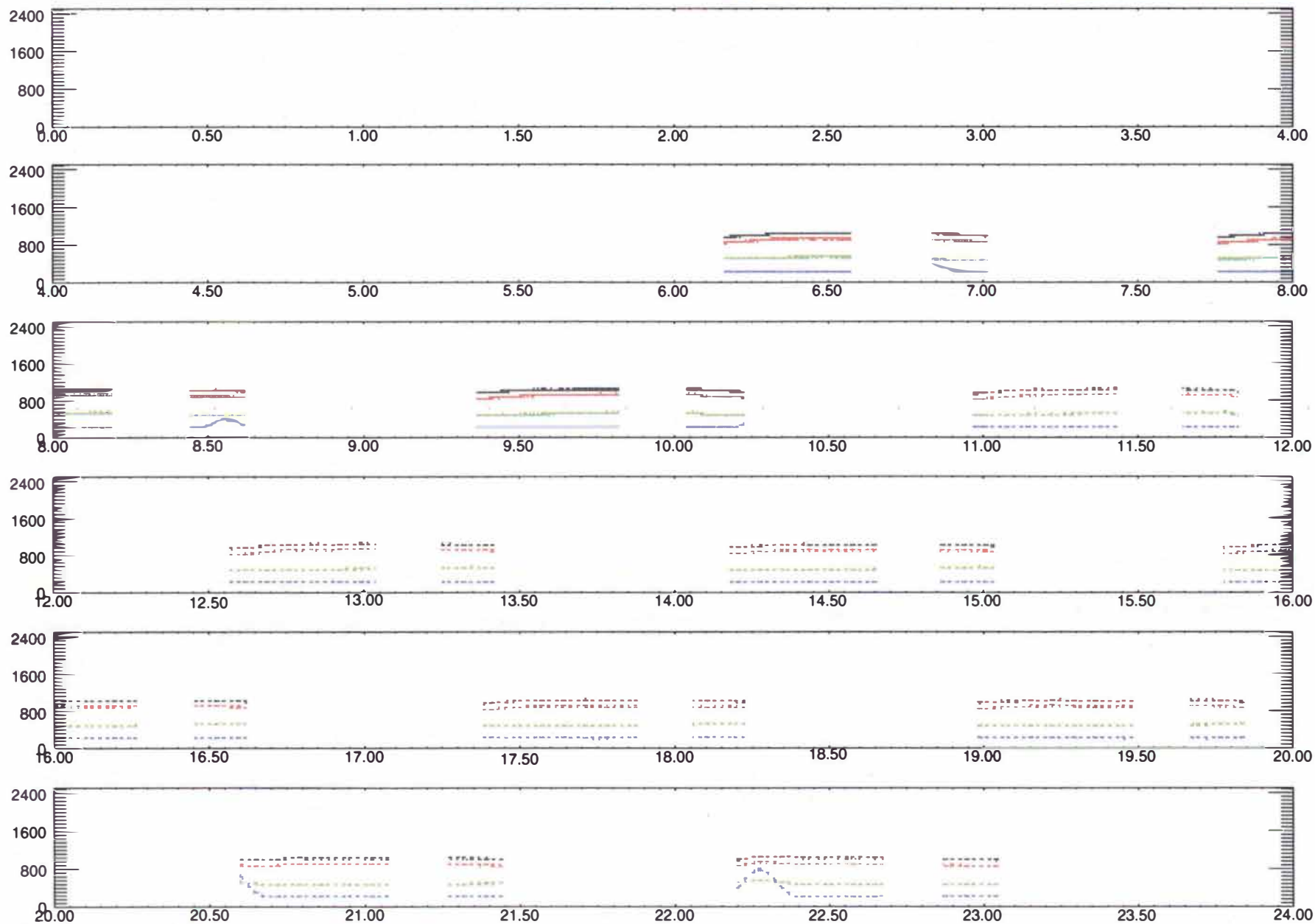
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

17/10/05 DOY 290 Julian 2453661.50000 [est. sct = 0019 c0ee ae3b 857f]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

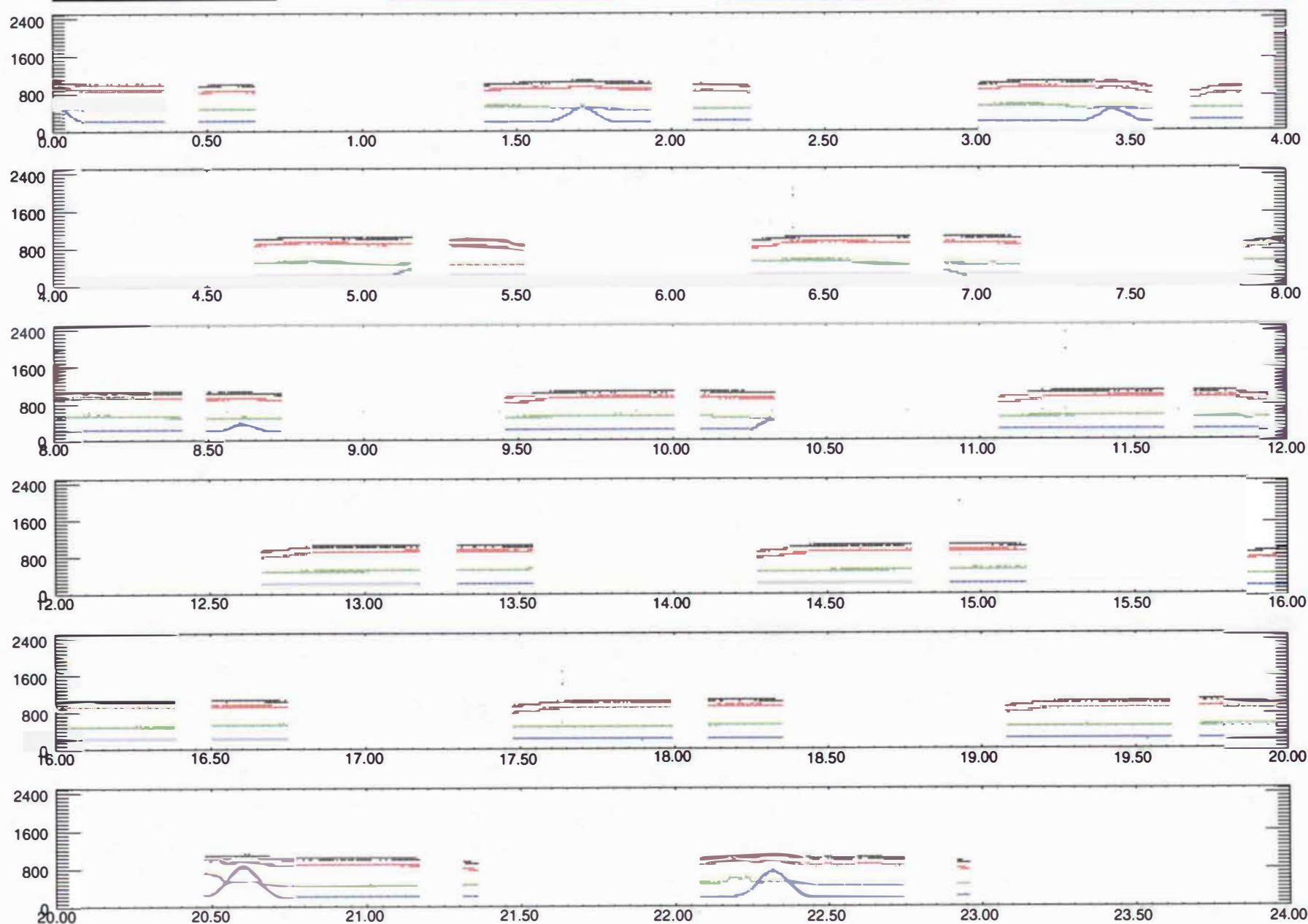
Channel 1 + 800

Channel 2 + 600

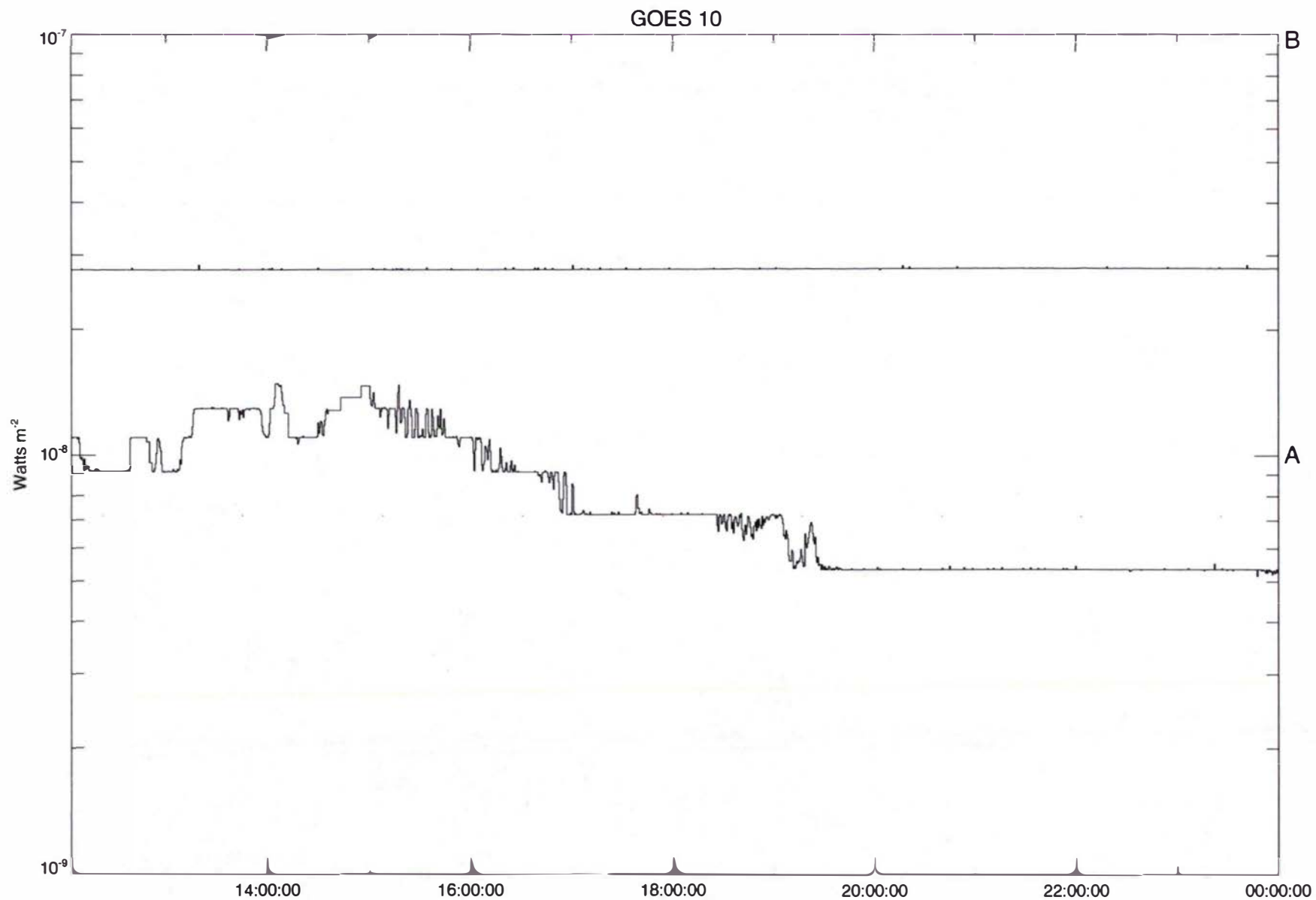
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/17, 1204:24

Channel

1 (1.0 - 8.0 Angstroms) Background not subtracted

2 (0.5 - 4.0 Angstroms) Background not subtracted

Plot created: 05/10/19, 0824

Sample average = 10

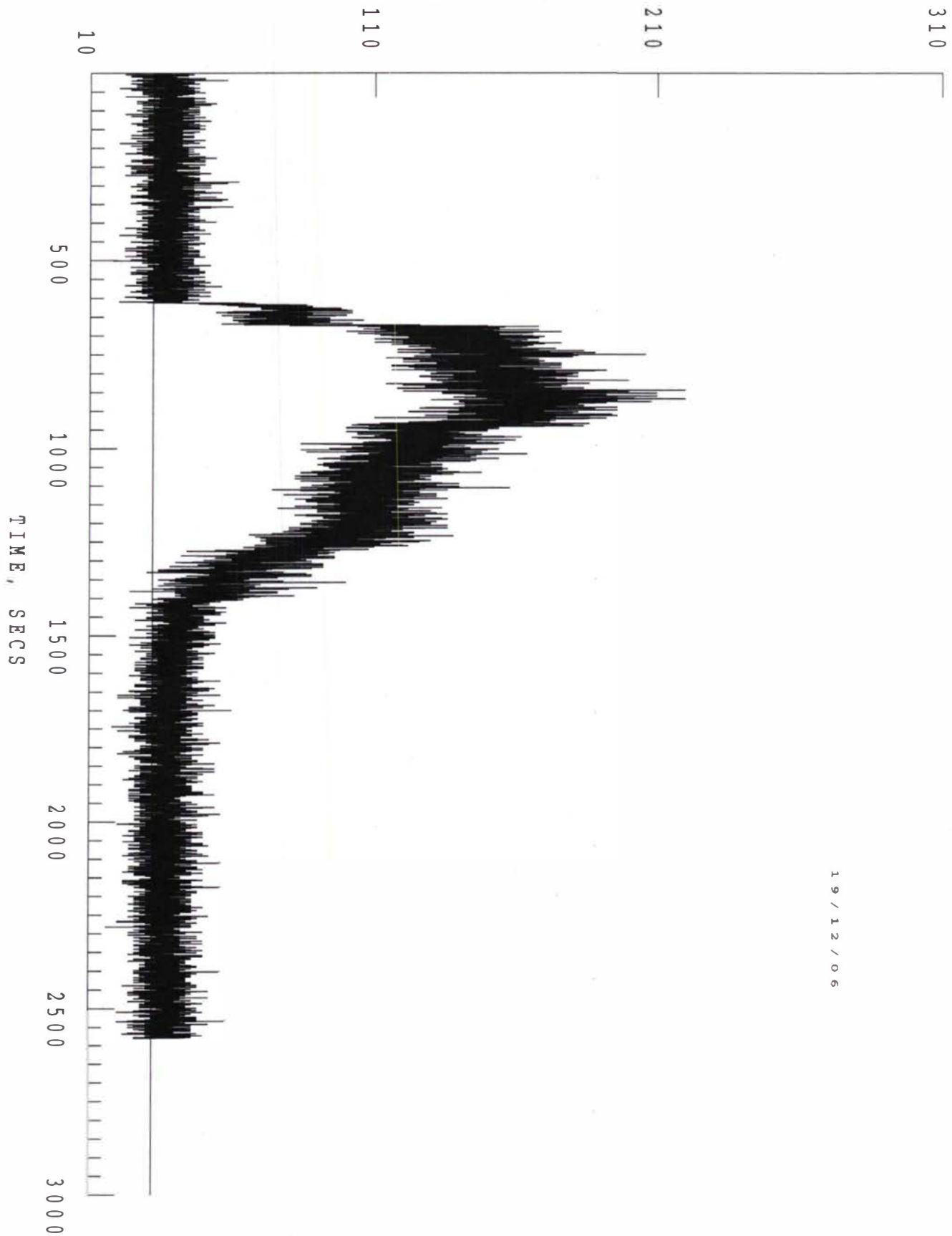
MS01

18/10/05

58355.826

50 - 3000 keV

COUNTS/0.250 S



19/12/06

No SPI, GRS tugs

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051018_59665)

BEG TIME: 18/10/05 DOY 291 Julian 2453663.19042 UT = 16.570 16:34:12 (59652.000 secs) [sct = 0019 c110 af9e 14a2]
END TIME: 18/10/05 DOY 291 Julian 2453663.19083 UT = 16.580 16:34:47 (59688.000 secs) [sct = 0019 c110 b1c3 65c1]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

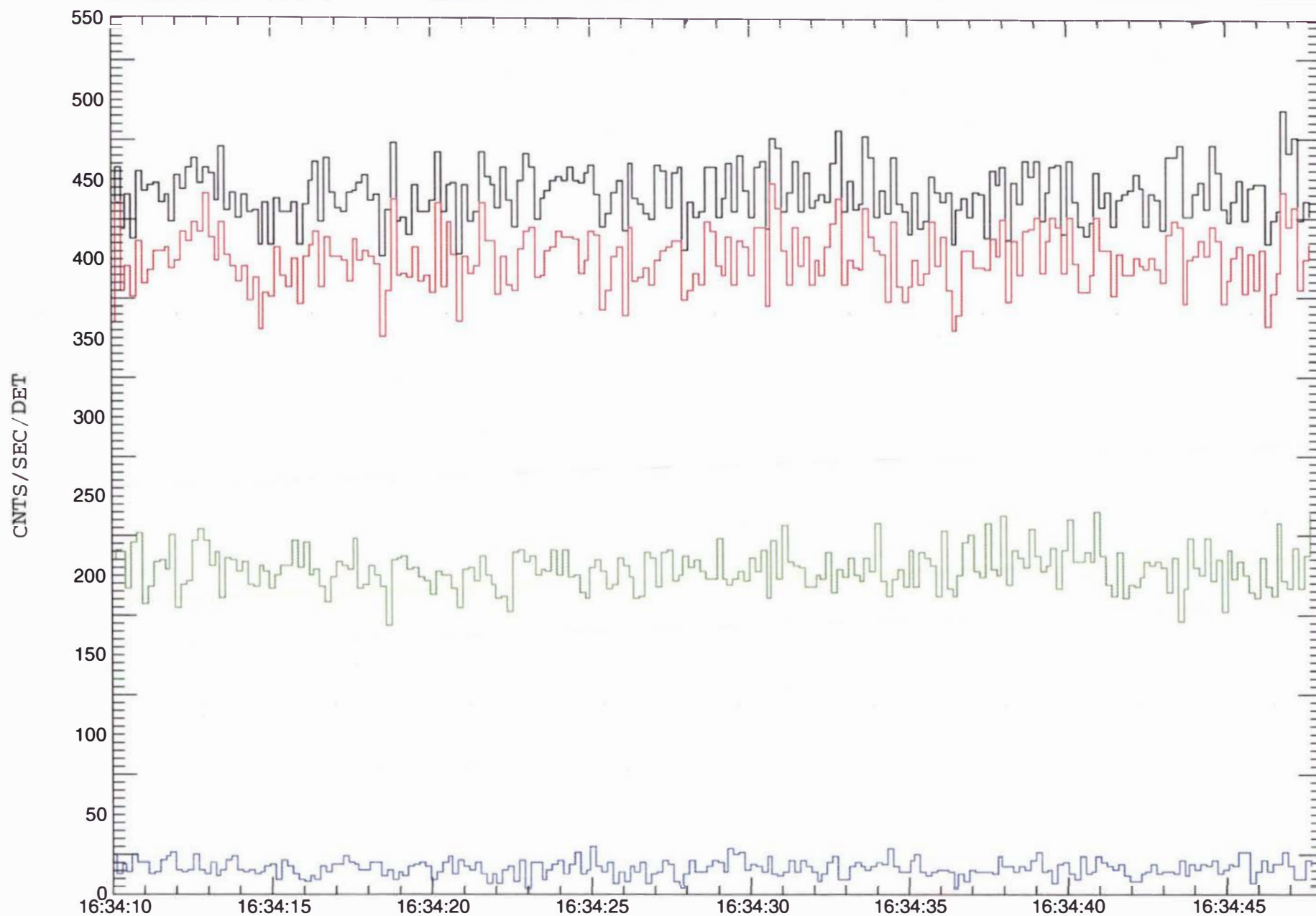
Chan 4:[E6=509 ->]

Channel 1 + 270

Channel 2 + 180

Channel 3 + 90

Channel 4 + 0

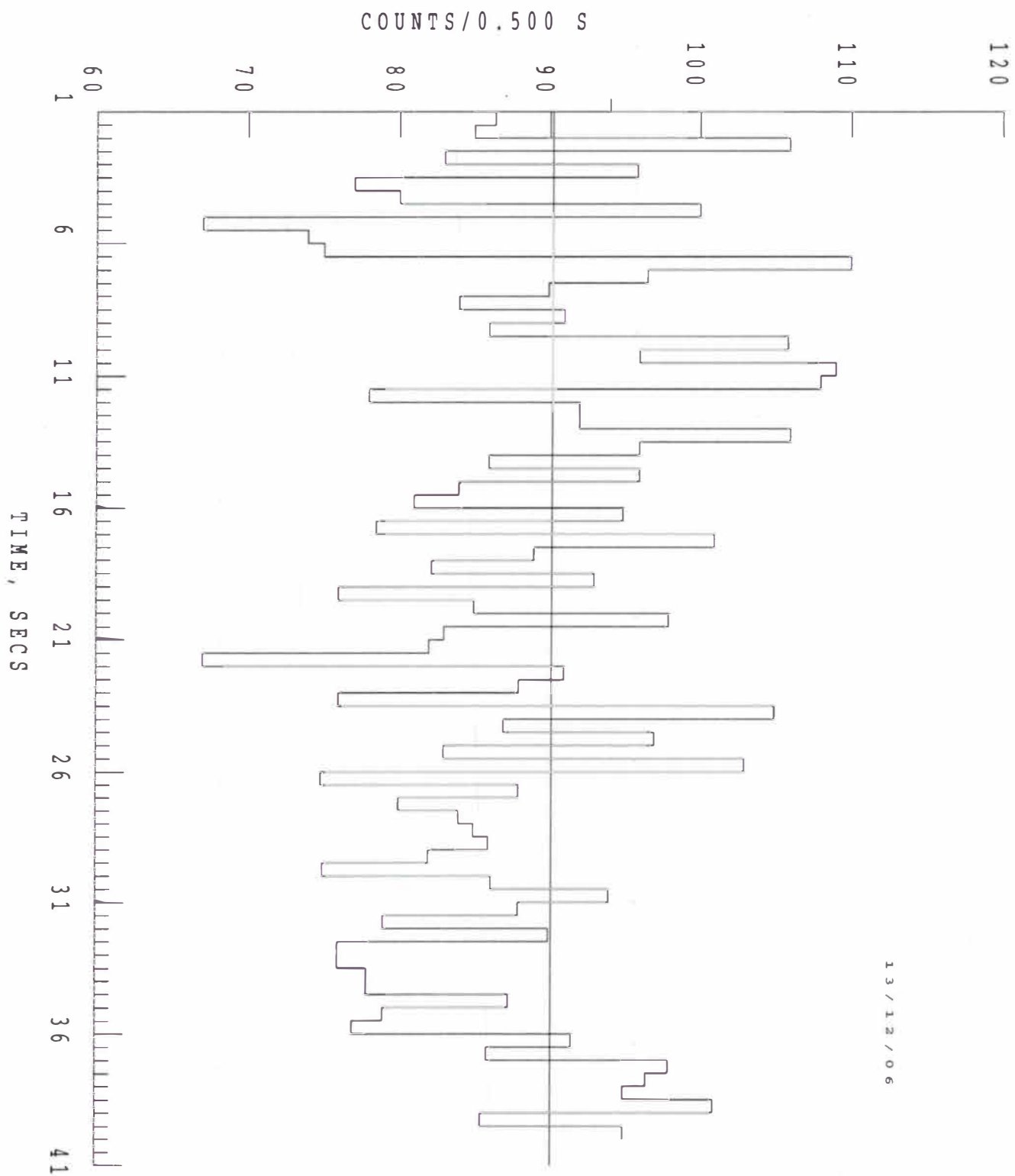


RS UT

HESSI

18/10/05 59645.000 (SUZAKU_20051018_59665)

25- 150 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (h3944_20051018_81086)

BEG TIME: 18/10/05 DOY 291 Julian 2453663.43833 UT = 22.520 22:31:12 (81072.000 secs) [sct = 0019 c115 ac59 9eef]
 END TIME: 18/10/05 DOY 291 Julian 2453663.43875 UT = 22.530 22:31:48 (81108.000 secs) [sct = 0019 c115 ae7e f00d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

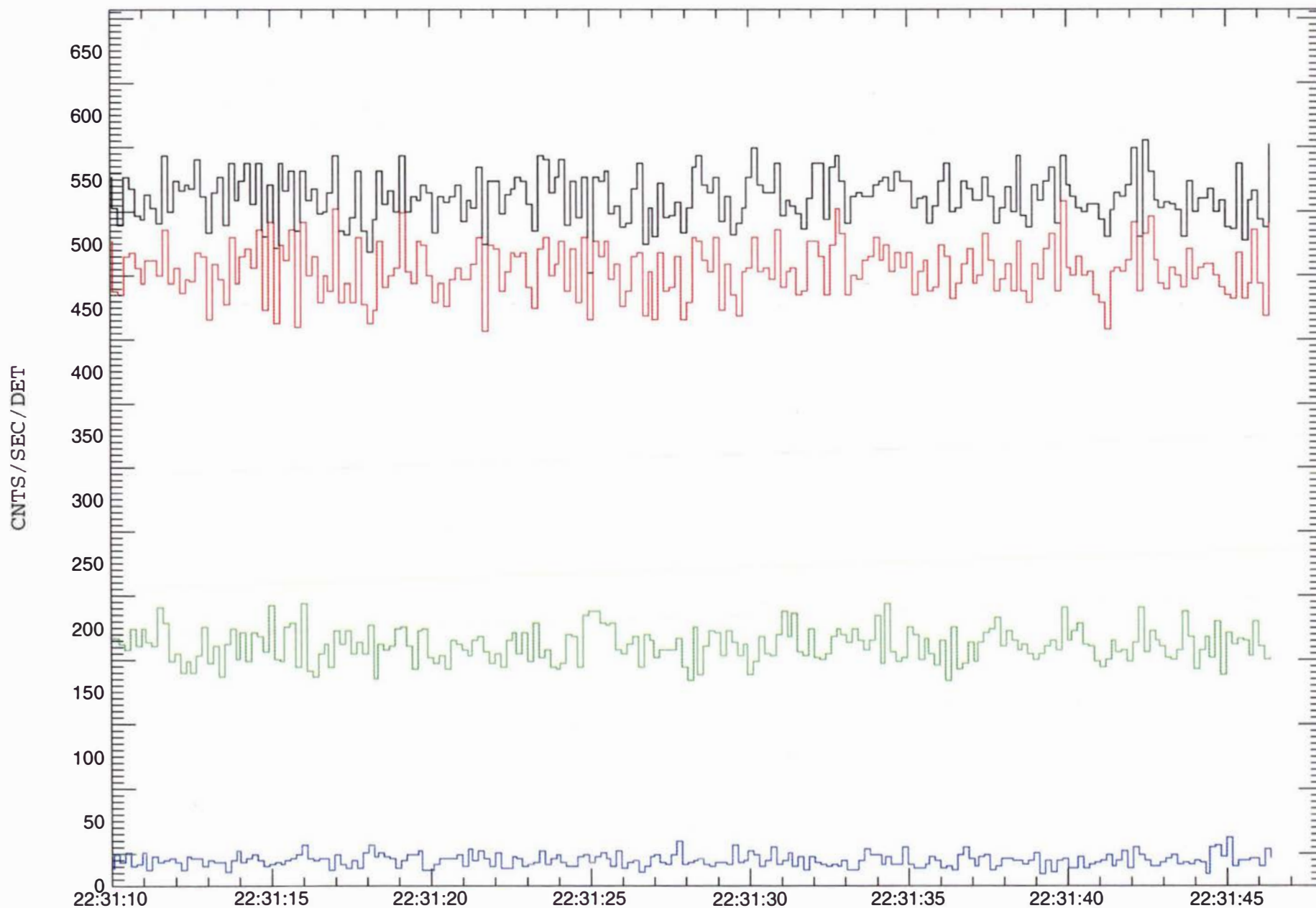
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



RS UT

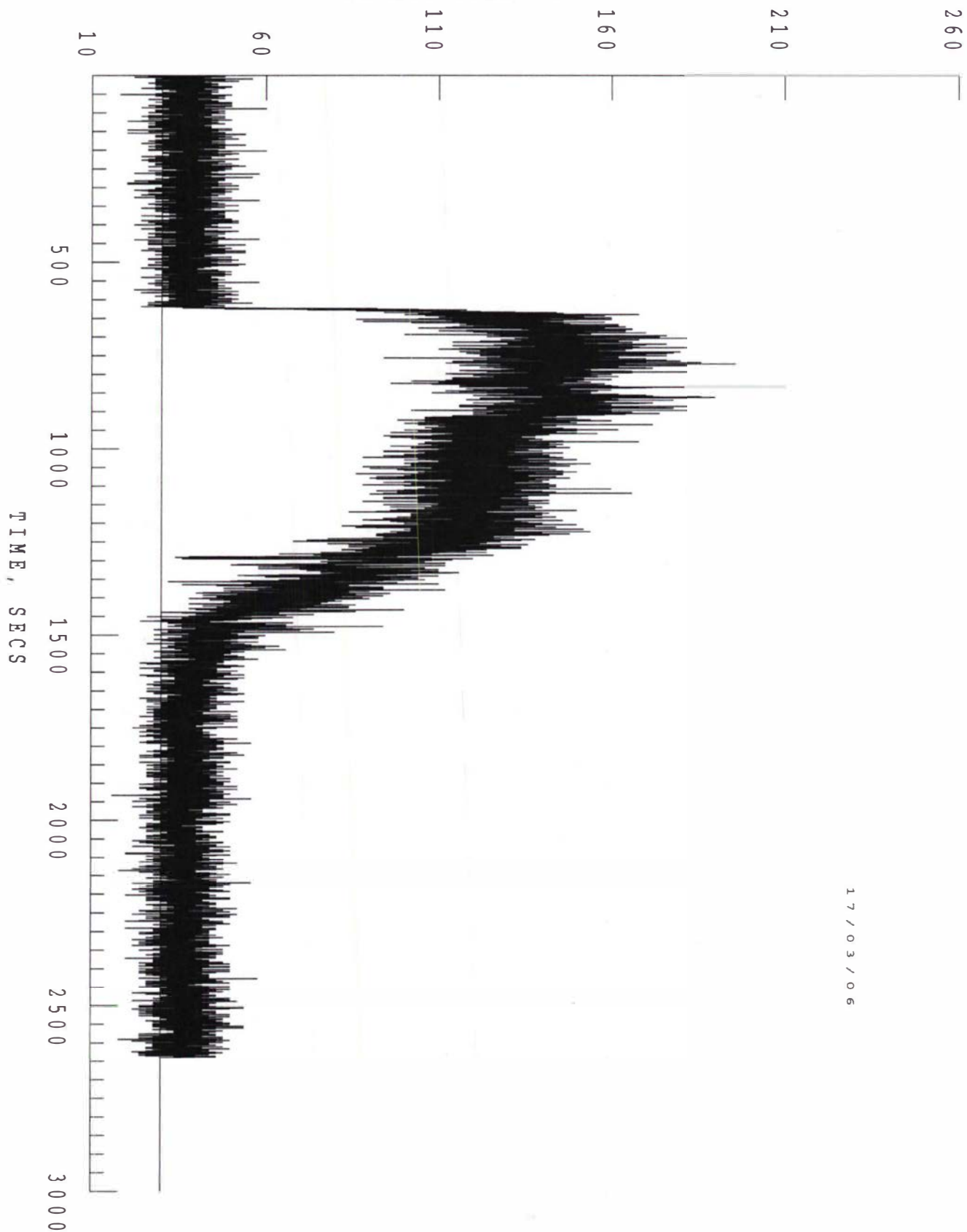
MS01

18/10/05

79715.957

50 - 3000 keV

COUNTS/0.250 S

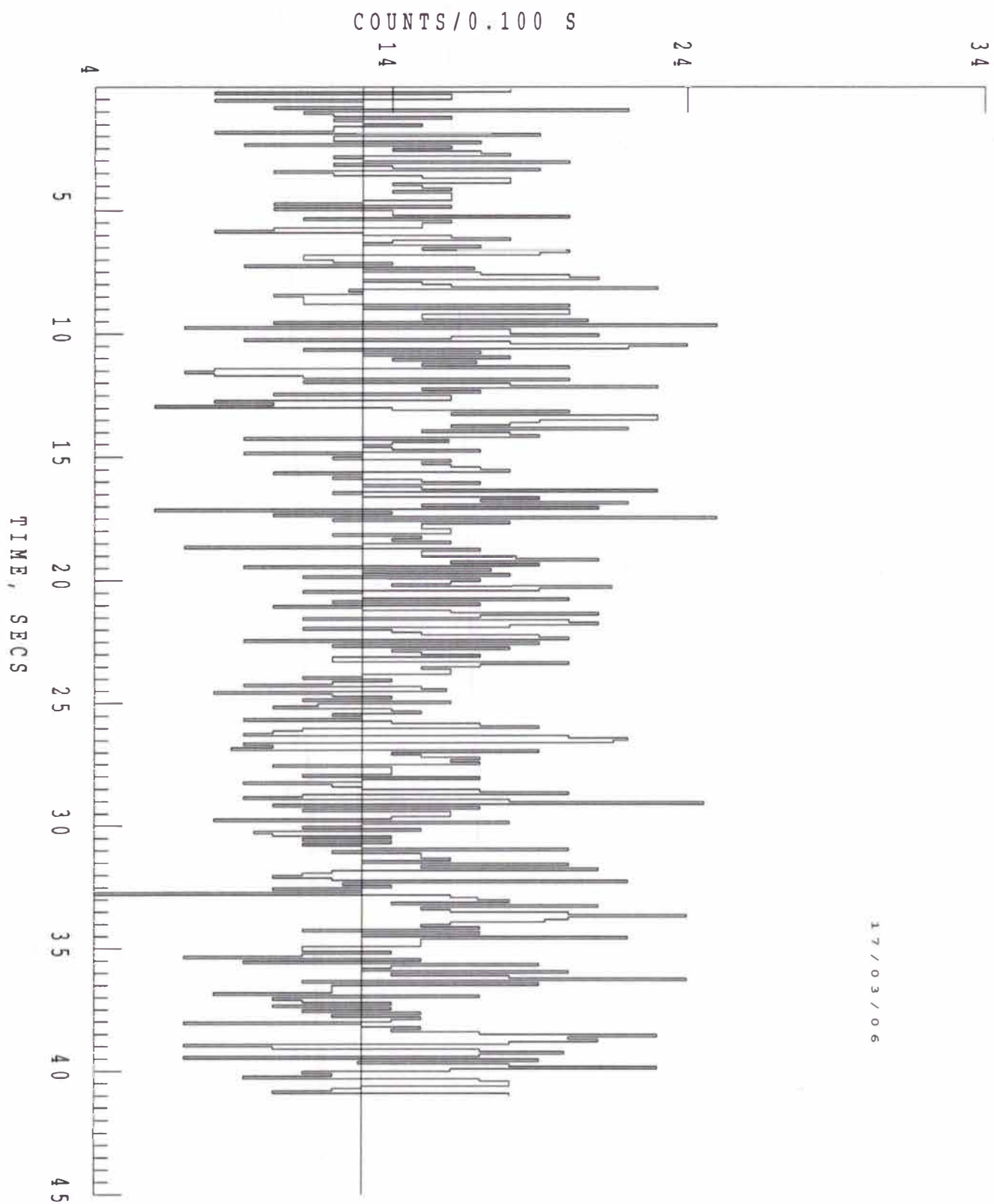


17/03/06

HESSI

18/10/05 81065.000 (h3944_20051018_81086)

25- 150 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

18/10/05 DOY 291 Julian 2453662.50000 [est. sct = 0019 c102 cc14 0515]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

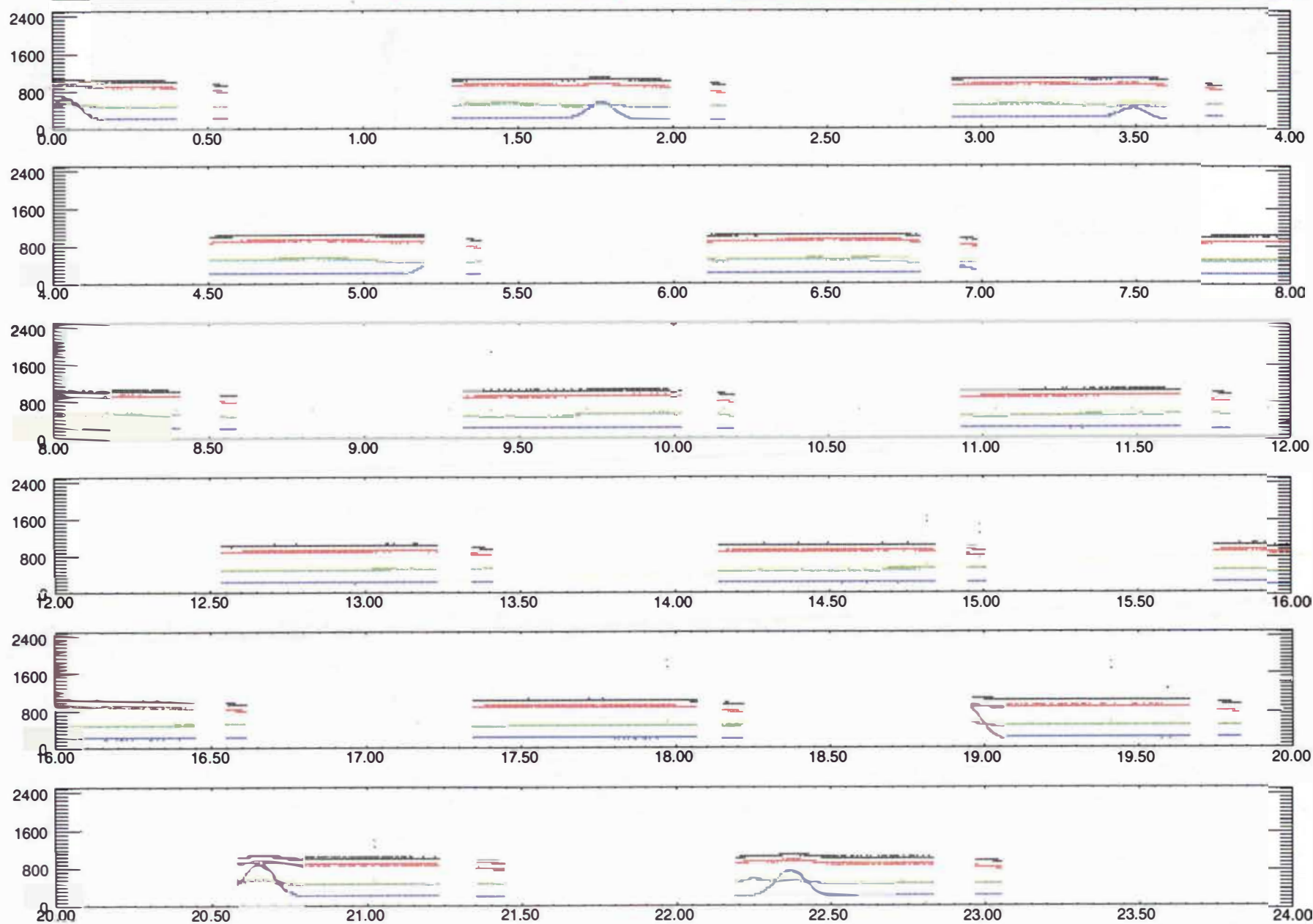
Channel 1 + 800

Channel 2 + 600

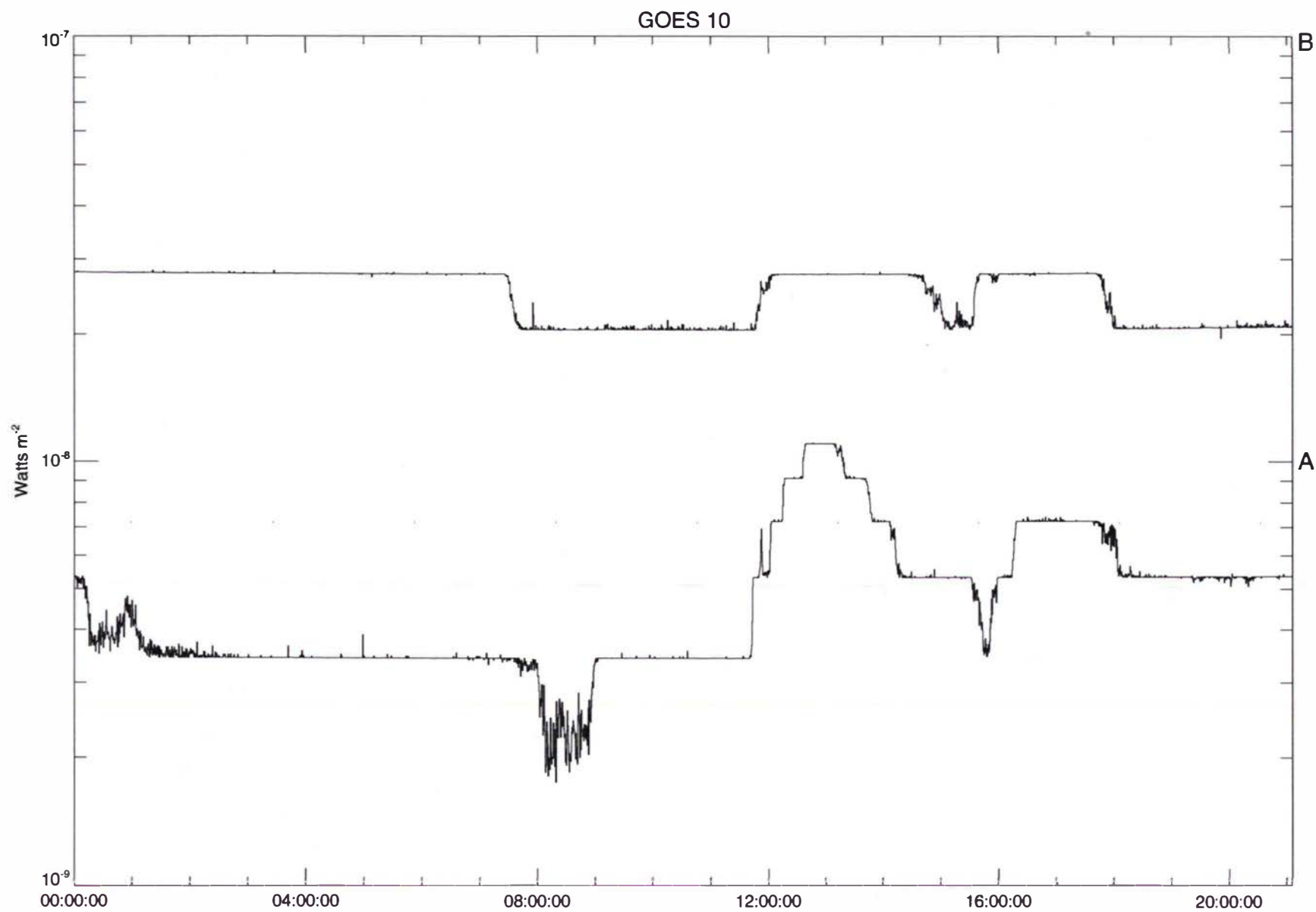
Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT



Data Start: 05/10/18, 0000:00

Channel

1 (1.0 - 8.0 Angstroms)

Background not subtracted

2 (0.5 - 4.0 Angstroms)

Background not subtracted

Plot created: 05/10/20, 0824

Sample average = 10

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

19/10/05 DOY 292 Julian 2453663.50000 [est. sct = 0019 c116 e9ec 84ab]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=19 E6=509]

Chan 4:[E6=509 ->]

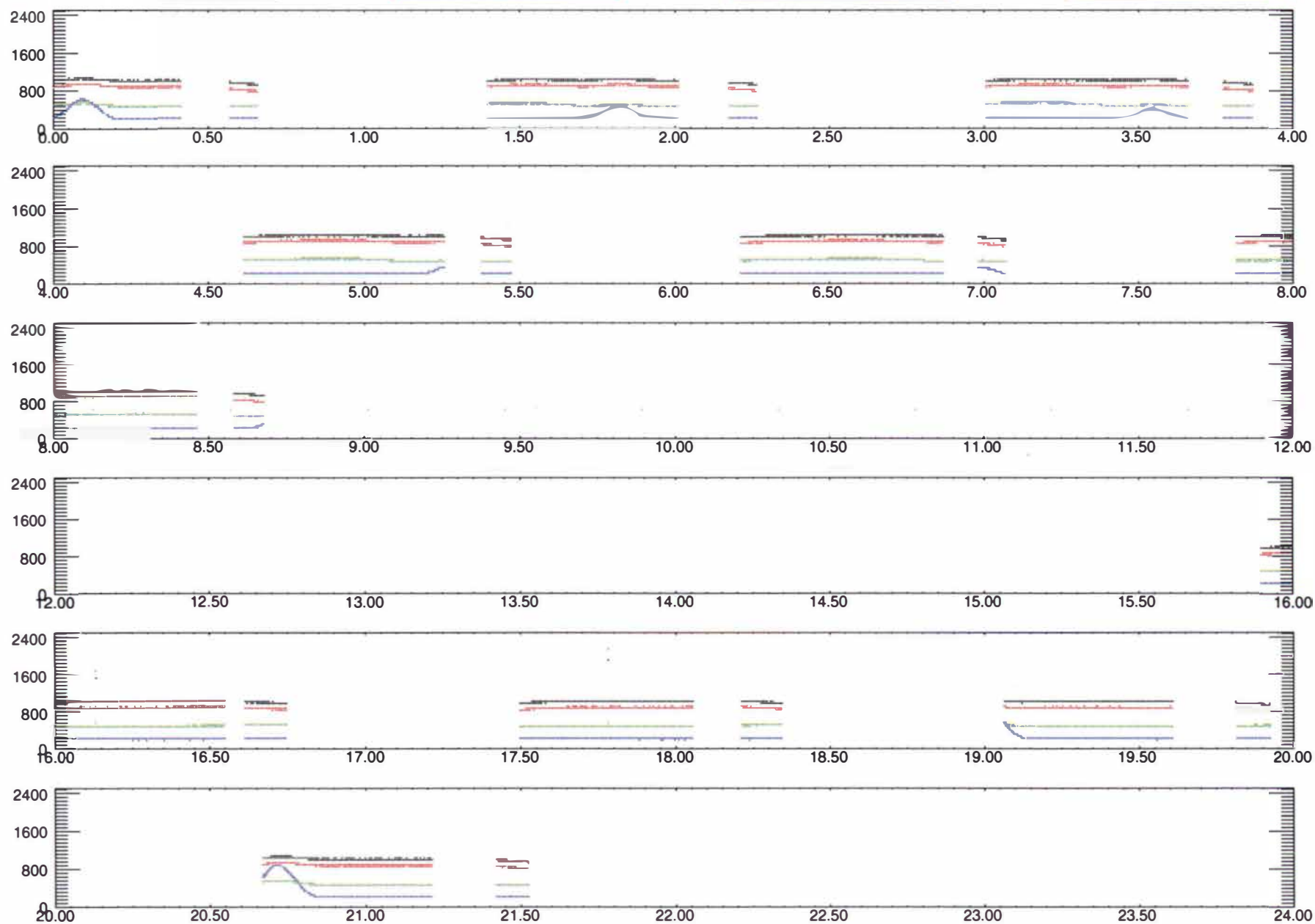
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT

Date: Oct 28 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data *N/A*

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☒ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~ 1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~ 1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

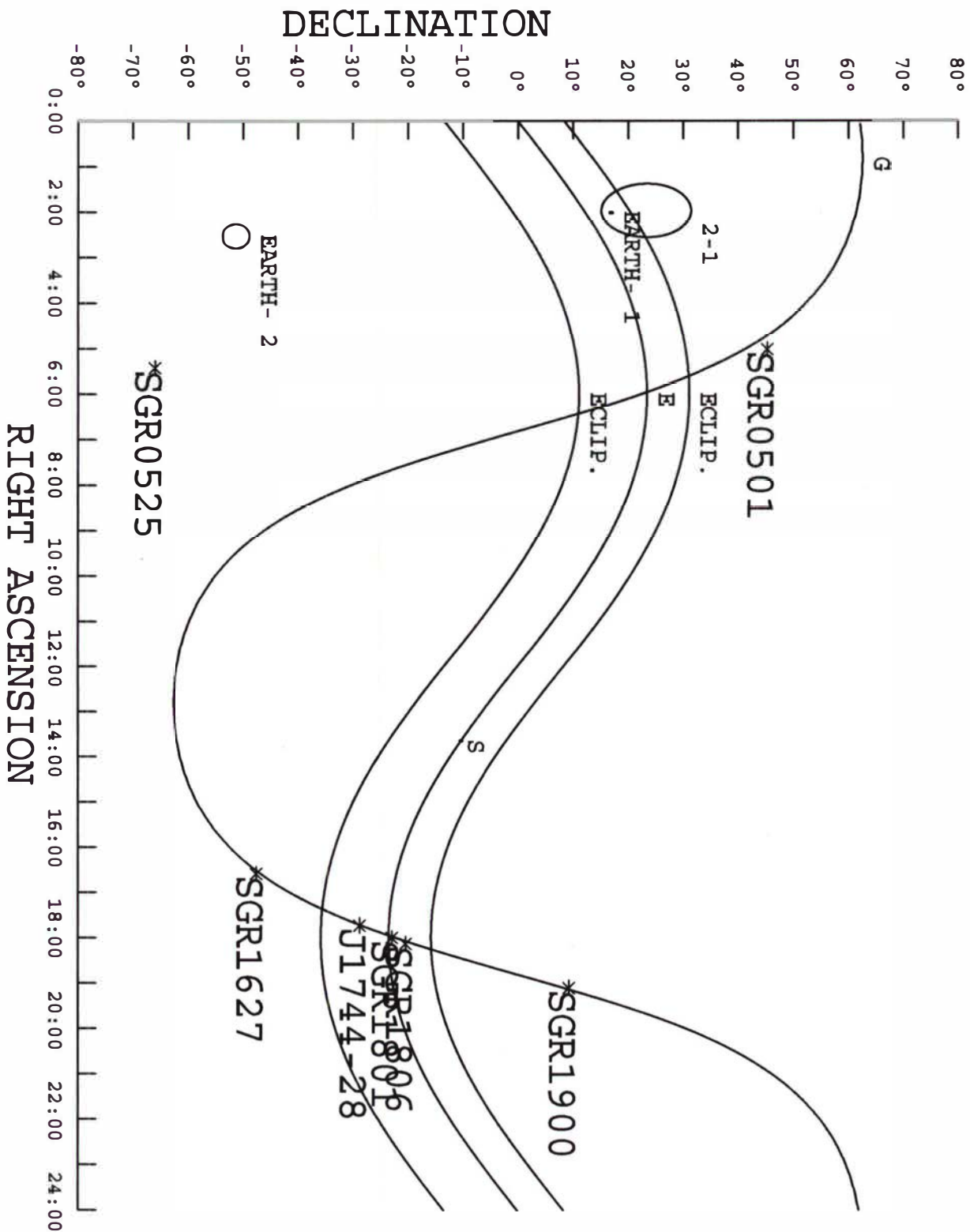
- ☒ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

EVENT OF OCT 20, 2005 2:22

28/10/ 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 KONUS1 2 INTEGRAL



KONUS1

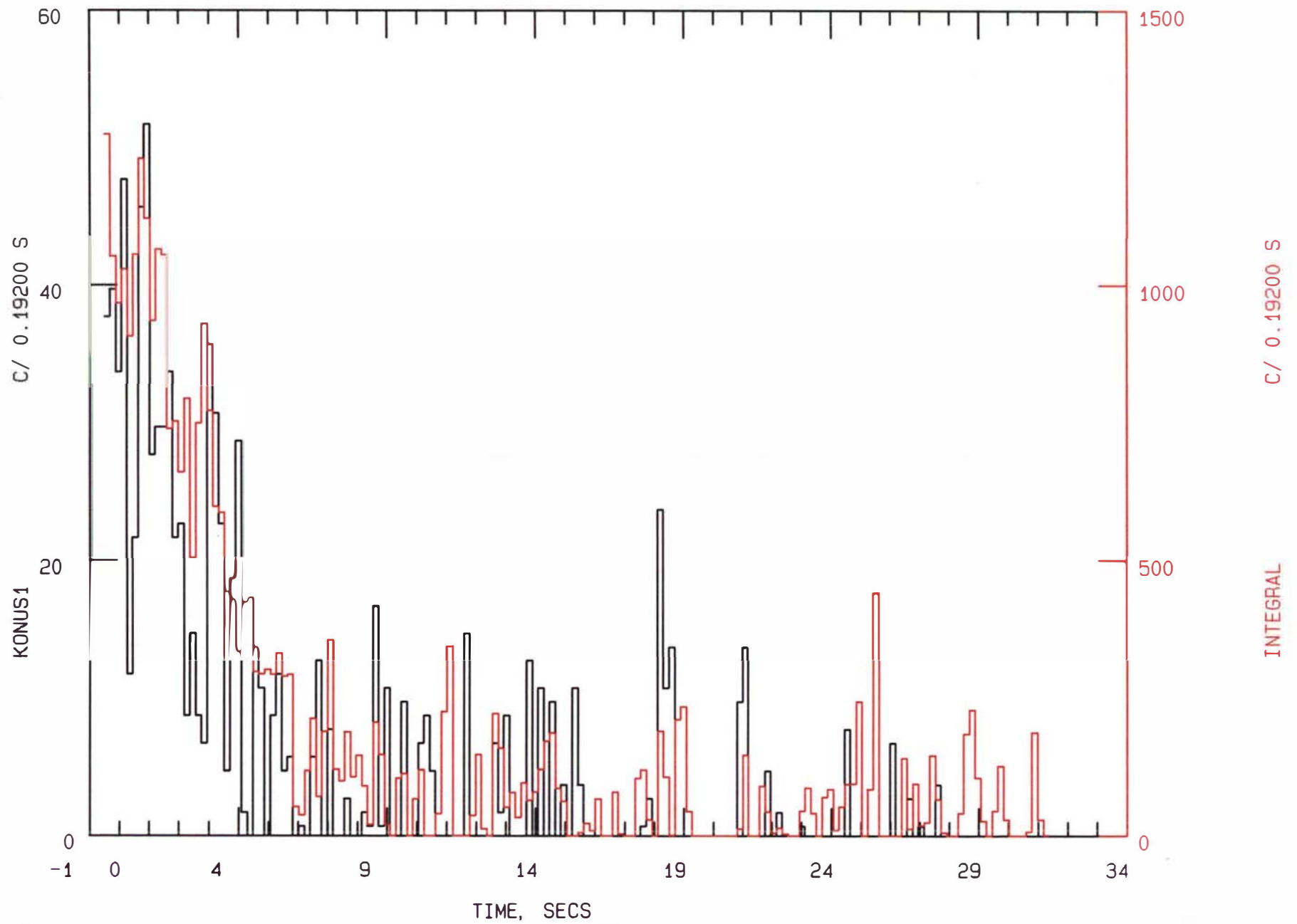
-INTEGRAL

CORRELATION

20/10/05

8528.081

28/10/ 8



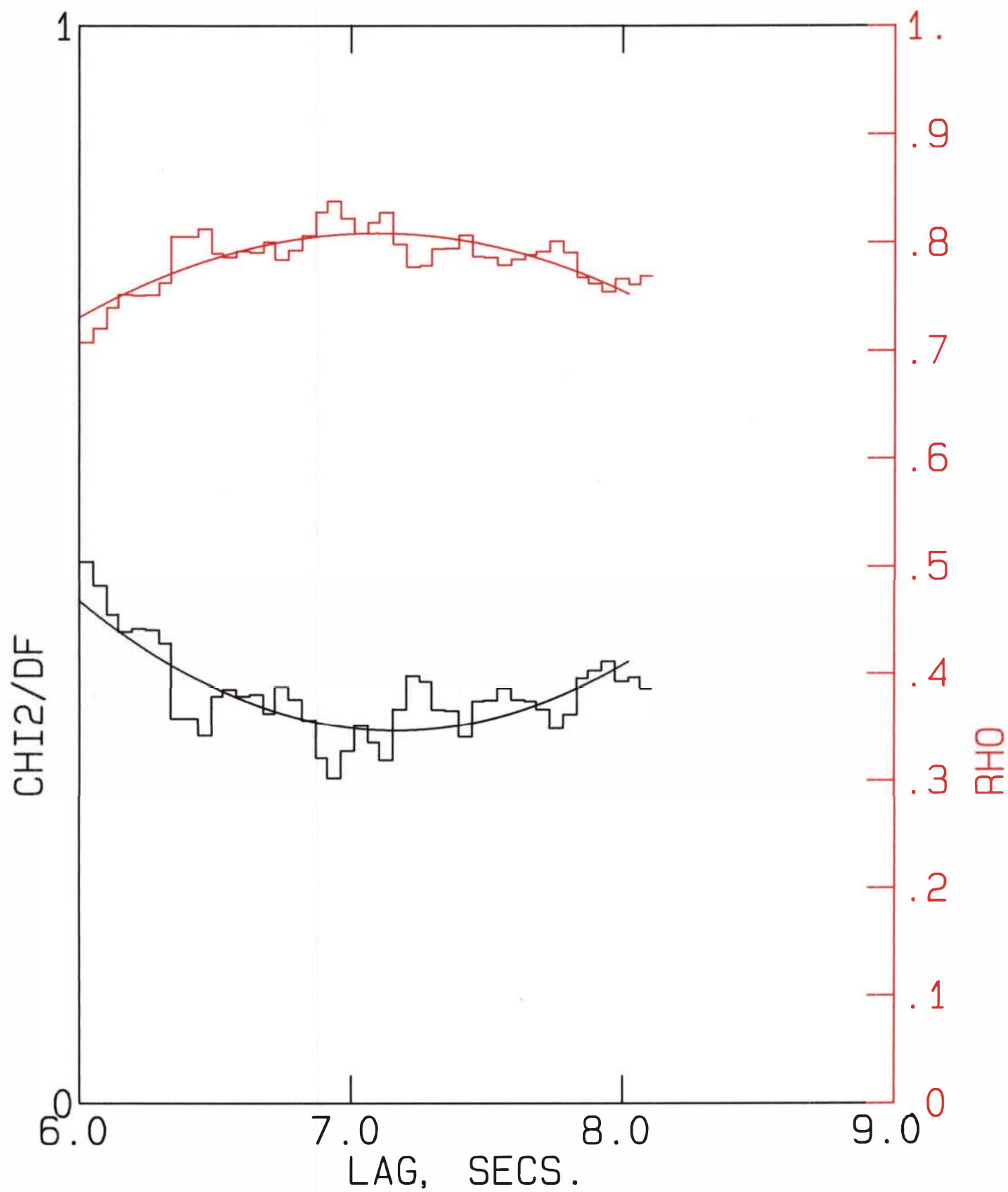
KONUS1

-INTEGRAL

CORRELATION

20/10/05

8528.081



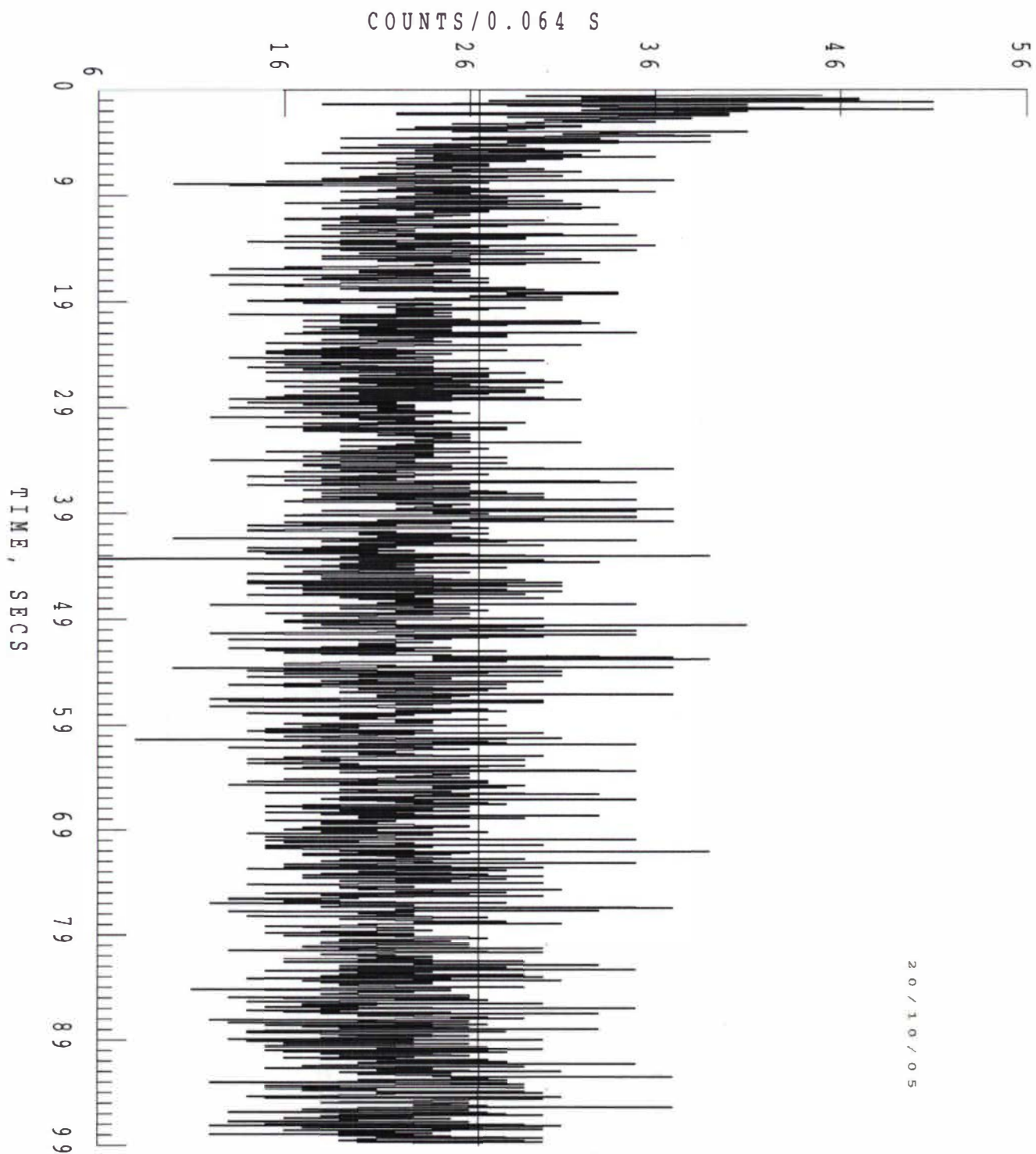
KONUS1

20/10/05

8528.081

50 - 200 keV

02:22:08



KONUS HRES 20051020 08528

TRIGGER TIME: 20/10/05 DOY 293 Julian 2453664.59870 UT = 02.369 02:22:08 (08528.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

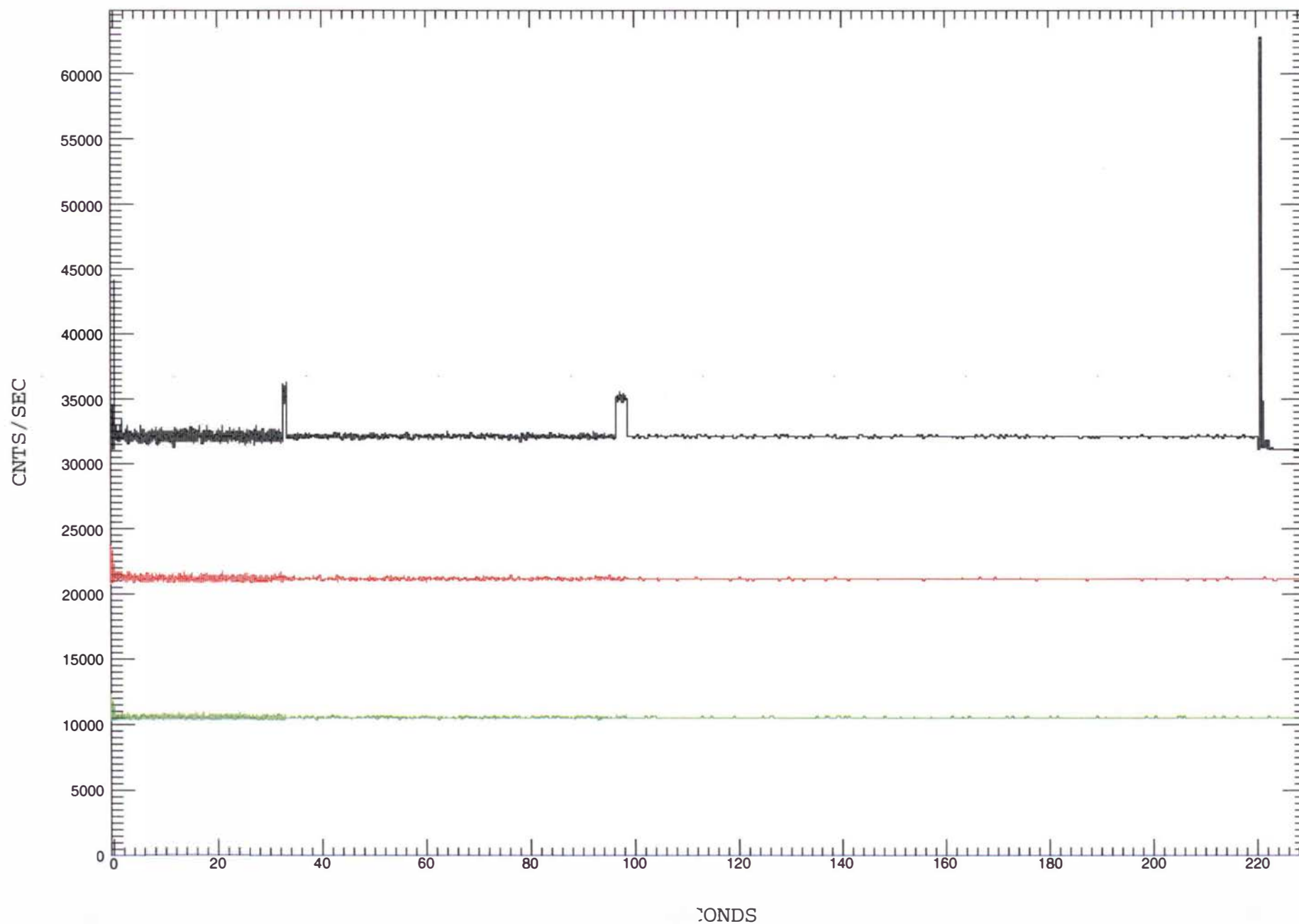
Chan 4 : [> 10 MeV]

Channel 1 + 31200

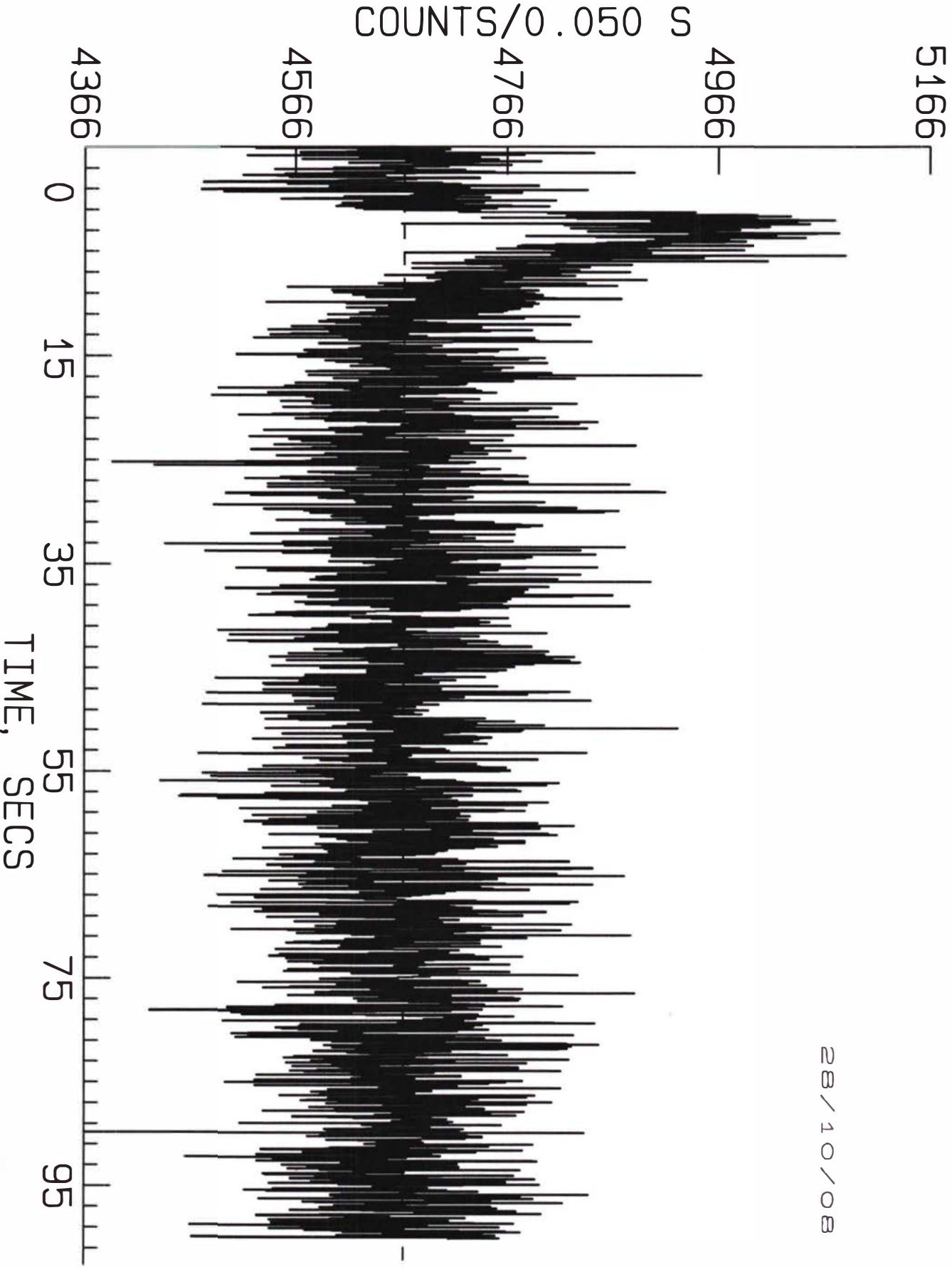
Channel 2 + 20800

Channel 3 + 10400

Channel 4 + 0



INTEGRAL 20/10/05 8520.824 02: 22: 00.8
100-10000 keV



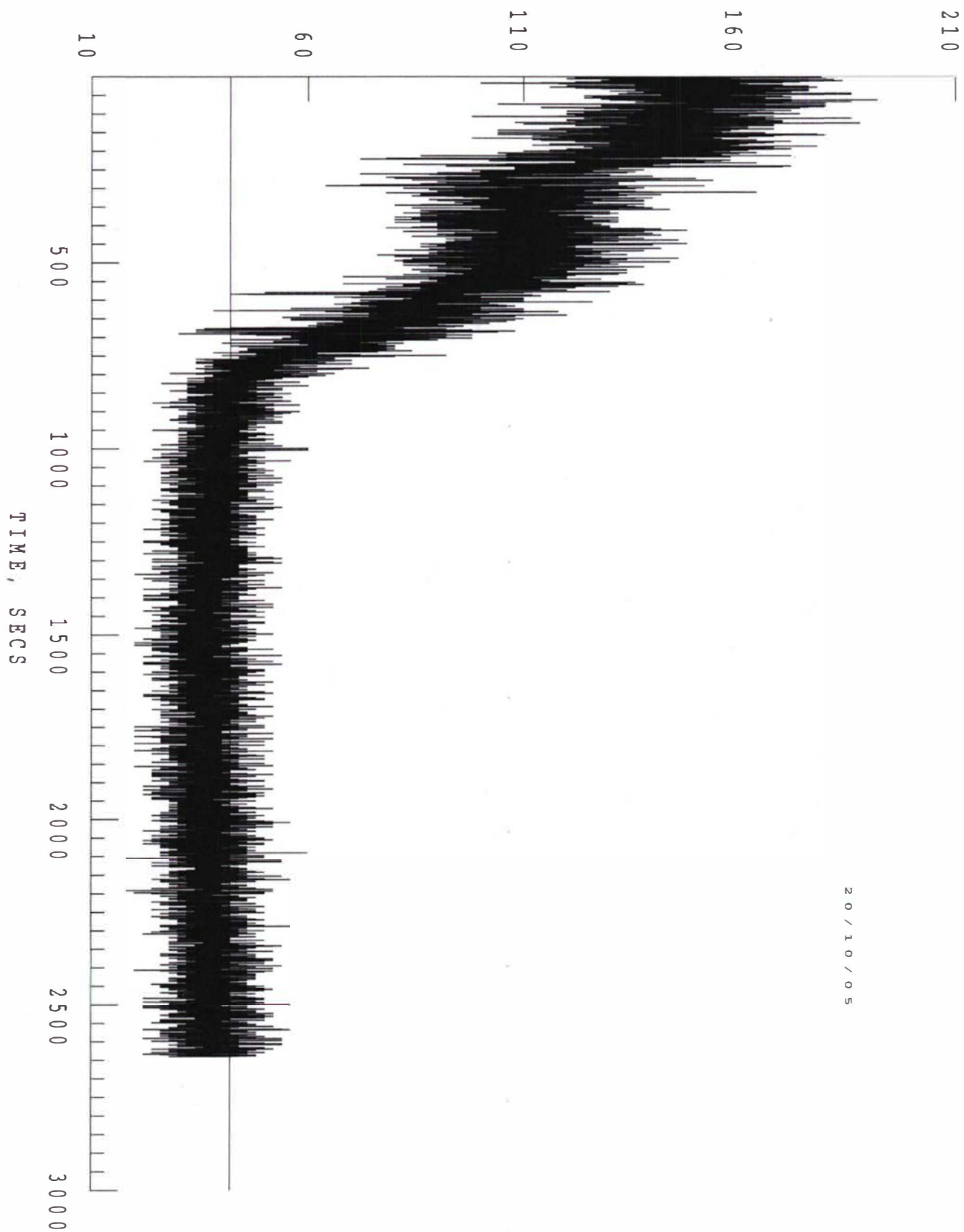
MS01

20/10/05

7174.551

50 - 3000 keV

COUNTS/0.250 S



HESSI

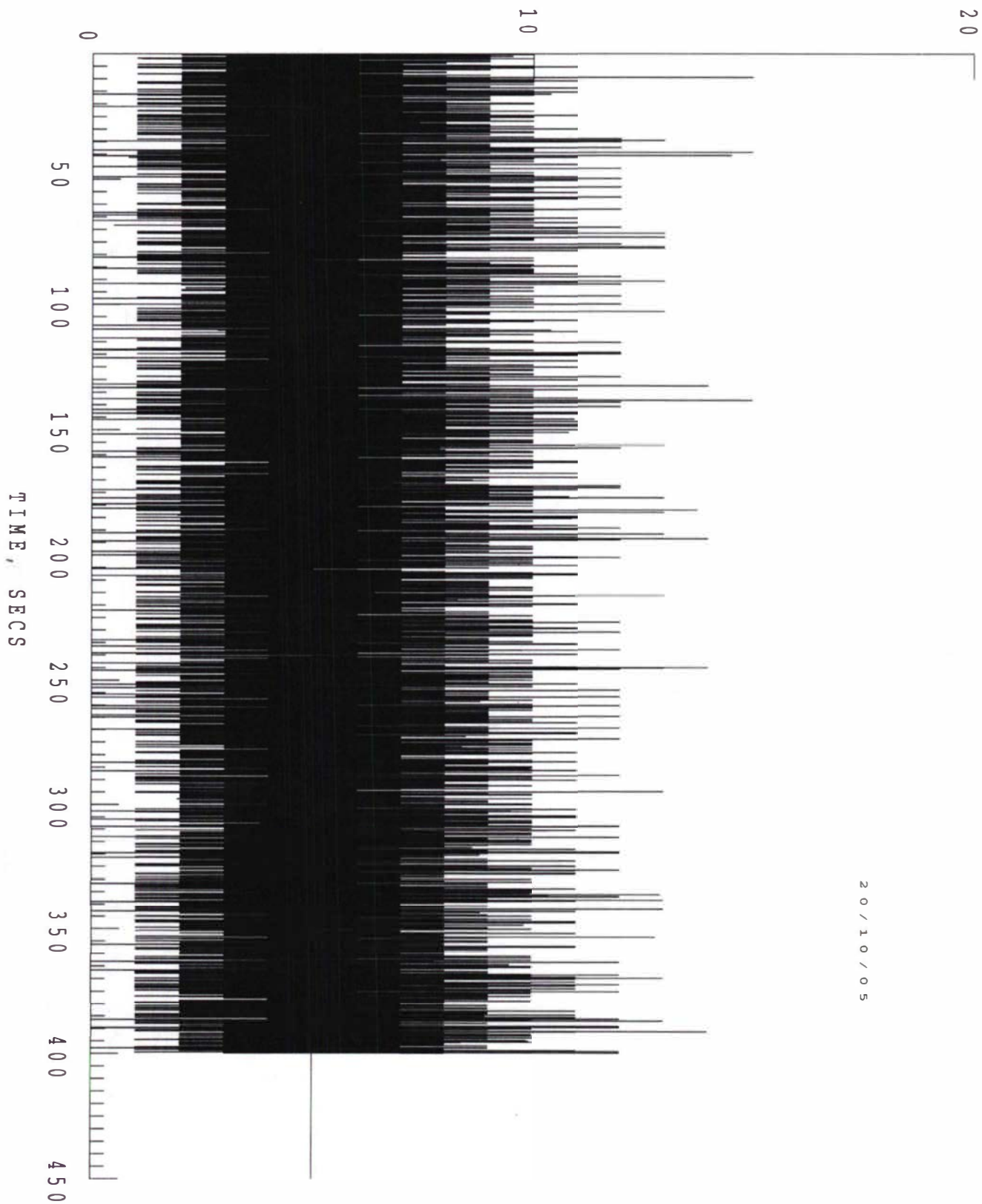
20/10/05

8328.000

(KONUS1_20051020_08528)

25- 150 keV

COUNTS/0.031 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (KONUS1_20051020_08528)

BEG TIME: 20/10/05 DOY 293 Julian 2453664.59625 UT = 02.310 02:18:36 (08316.000 secs) [sct = 0019 c12c f9ca 0369]
 END TIME: 20/10/05 DOY 293 Julian 2453664.60083 UT = 02.420 02:25:12 (08712.000 secs) [sct = 0019 c12d 1164 7fbb]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=19 E6=510]

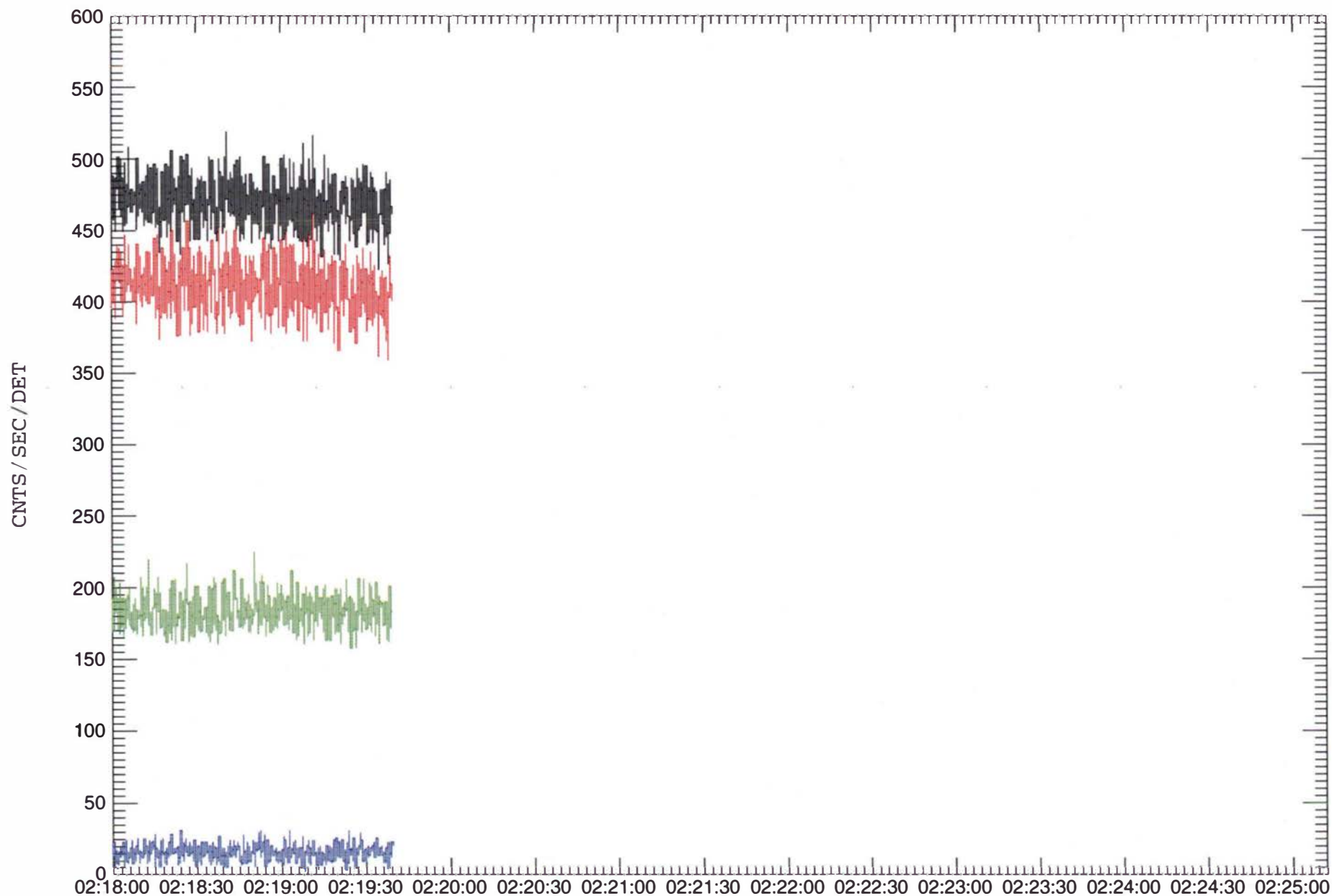
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



RS UT

From palmer@lanl.gov Tue Nov 15 08:38:58 2005
 X-ASG-Debug-ID: 1132072783-14717-19-0
 X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
 Time-Version: 1.0
 Date: Tue, 15 Nov 2005 09:40:54 -0700
 To: Kevin Hurley <khurley@ssl.berkeley.edu>
 From: David Palmer <palmer@lanl.gov>
 X-ASG-Orig-Subj: More unlocated possible GRBs
 Subject: More unlocated possible GRBs
 Cc: Scott Barthelmy <scott@milkyway.gsfc.nasa.gov>
 X-PMX-Version: 4.7.1.128075
 X-Barracuda-Spam-Report: Code version 3.02, rules version 3.0.5306
 Rule breakdown below pts rule name description

```

-----
-2.60 BAYES_00          BODY: Bayesian spam probability is 0 to 1%
                        [score: 0.0000]
  
```

Kevin,
 Do you see any of these with IPN?

2005-11-11 07:47:51
 2005-11-09 16:41:50
 2005-11-08 18:30:33
 2005-10-21 14:01:00
2005-10-20 02:22:03

== 051111_07:47 ==

```

{{{
Bright short burst presumably outside of the FOV Trigger 163443,
MET = 153388071.296 - ...71.808, 2005-11-11 07:47:51
  000 counts/0.512 s.
,}}
  
```

== 051109_16:41 ==

```

{{{
Triggers 163206 and 163207 looked like they were on a real
burst. It made a provisional trigger in one image, but
there is no bump at that position in a better interval.
  
```

It was probably out of the FOV.

The burst had a small initial spike at 2005-11-09T16:41:50.7
 or MET 153247310-311 and a main peak from 153247316-329. Peak
 1-second flux was about 2600.

The observation was 00163136001 and the first data is in
 pass_20053132026. We don't have events yet.

--
 Jay Cummings
 }}}

== 051108_18:30 ==

```

{{{
Unlocated burst Trigger 163092 at (2005-11-08 18:30:33) when we were
pointing at [9.436, -40.485 207.453] (Phoenix, Sculptor, Fornax region),
  300 counts/128 ms, with a PUNTMAX. Short trigger so we don't get any
  vent-by-event data.
}}}
  
```

== 051026_08:29 ==

```

{{{
Trigger #161246 an unidentified short (128 ms) large (4000 counts) burst at
  
```

MET 152008177.53600 (2005-10-26 08:29:37), when we were pointing in
Vela-Centaurus

}}}

= 051021_14:01 ==

{{

Long bright burst: #160634 MET 151596060-..76 (2005-10-21 14:01:00)

}}}

== 051020_02:22 ==

{{{

Possible GRB (1200 cts/s, 3 second FRED) at the end of a slew at
151467723 2005-10-20 02:22:03 . This would have been detected, but
background hadn't been accumulated.

}}}

--

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (HETE_20051020_63947)

BEG TIME: 20/10/05 DOY 293 Julian 2453665.24000 UT = 17.760 17:45:36 (63936.000 secs) [sct = 0019 c139 ed00 958b]
 END TIME: 20/10/05 DOY 293 Julian 2453665.24042 UT = 17.770 17:46:12 (63972.000 secs) [sct = 0019 c139 ef25 e6aa]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

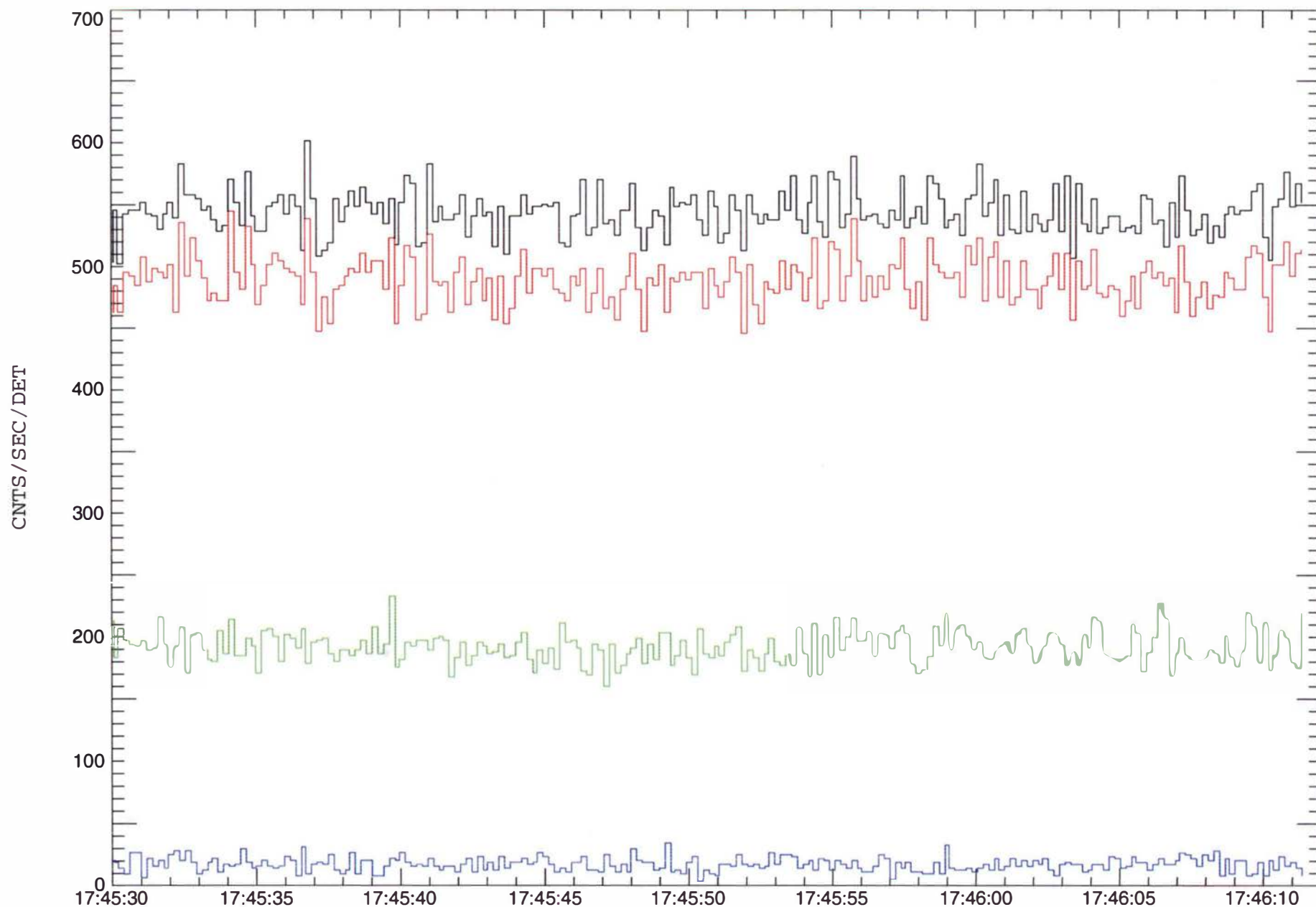
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

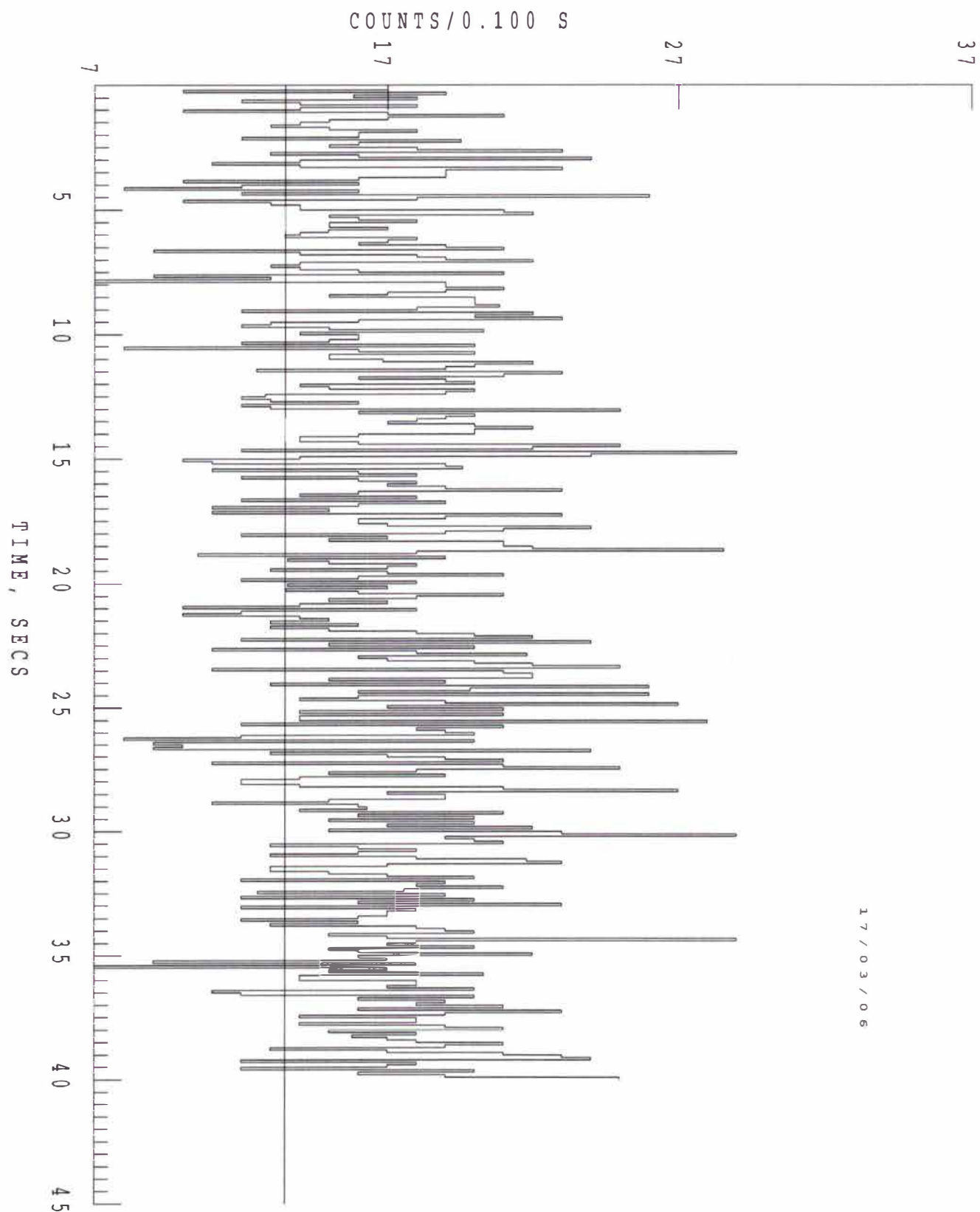


RS UT

HESSI

20/10/05 63927.000 (HETE_20051020_63947)

25- 150 keV



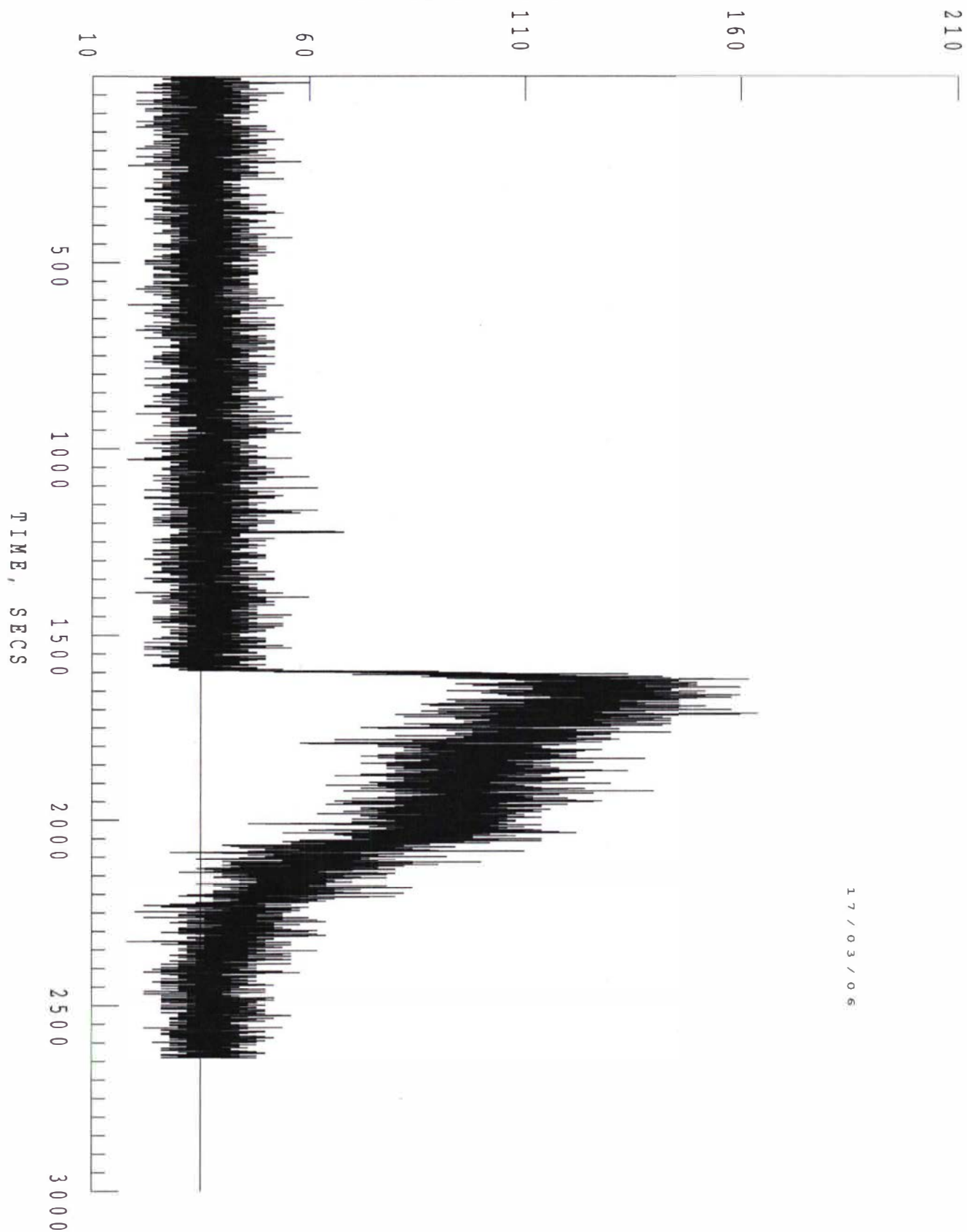
MS01

20/10/05

62613.534

50 - 3000 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

20/10/05 DOY 293 Julian 2453664.50000 [est. sct = 0019 c12b 0a1d d0bb]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

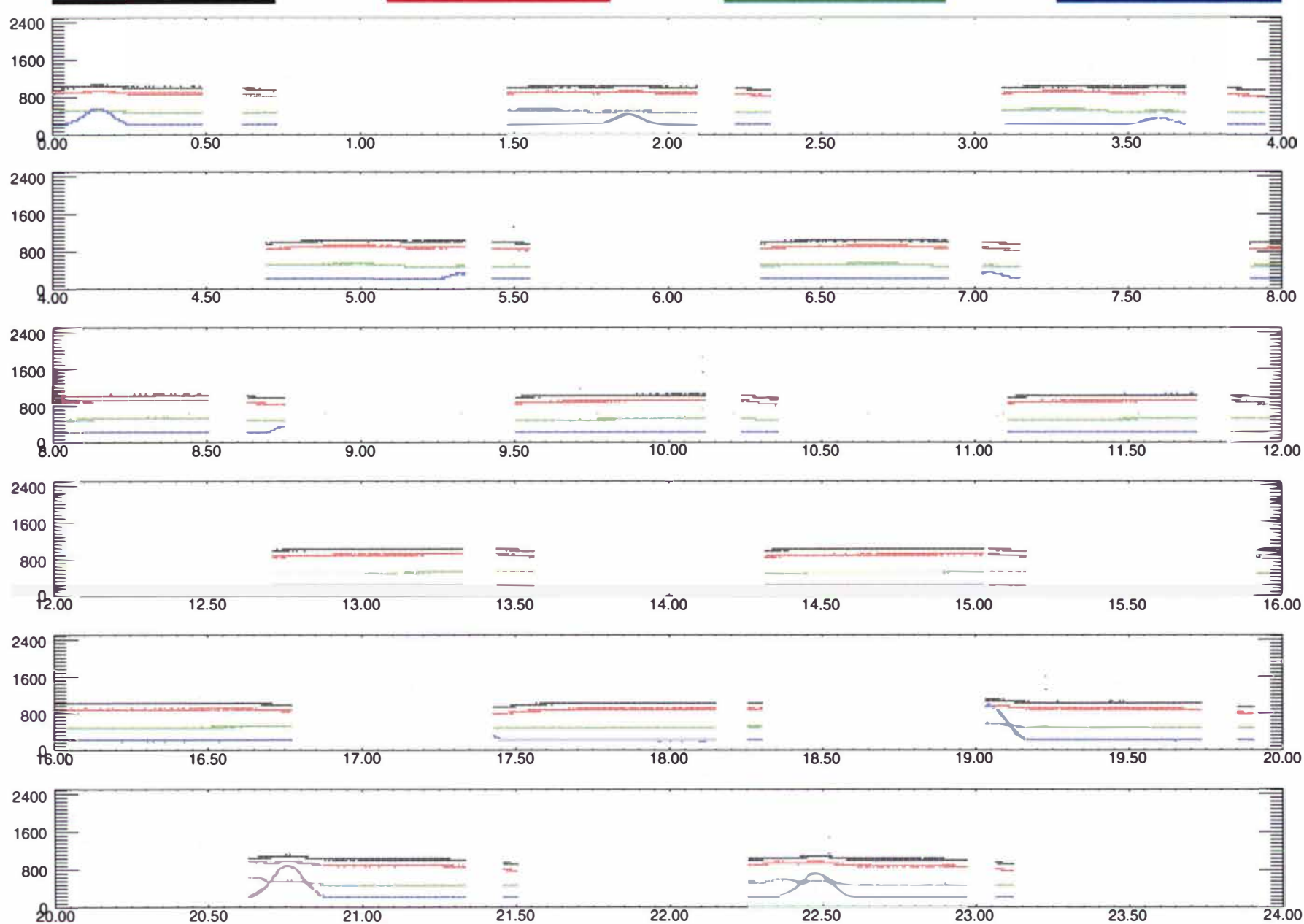
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



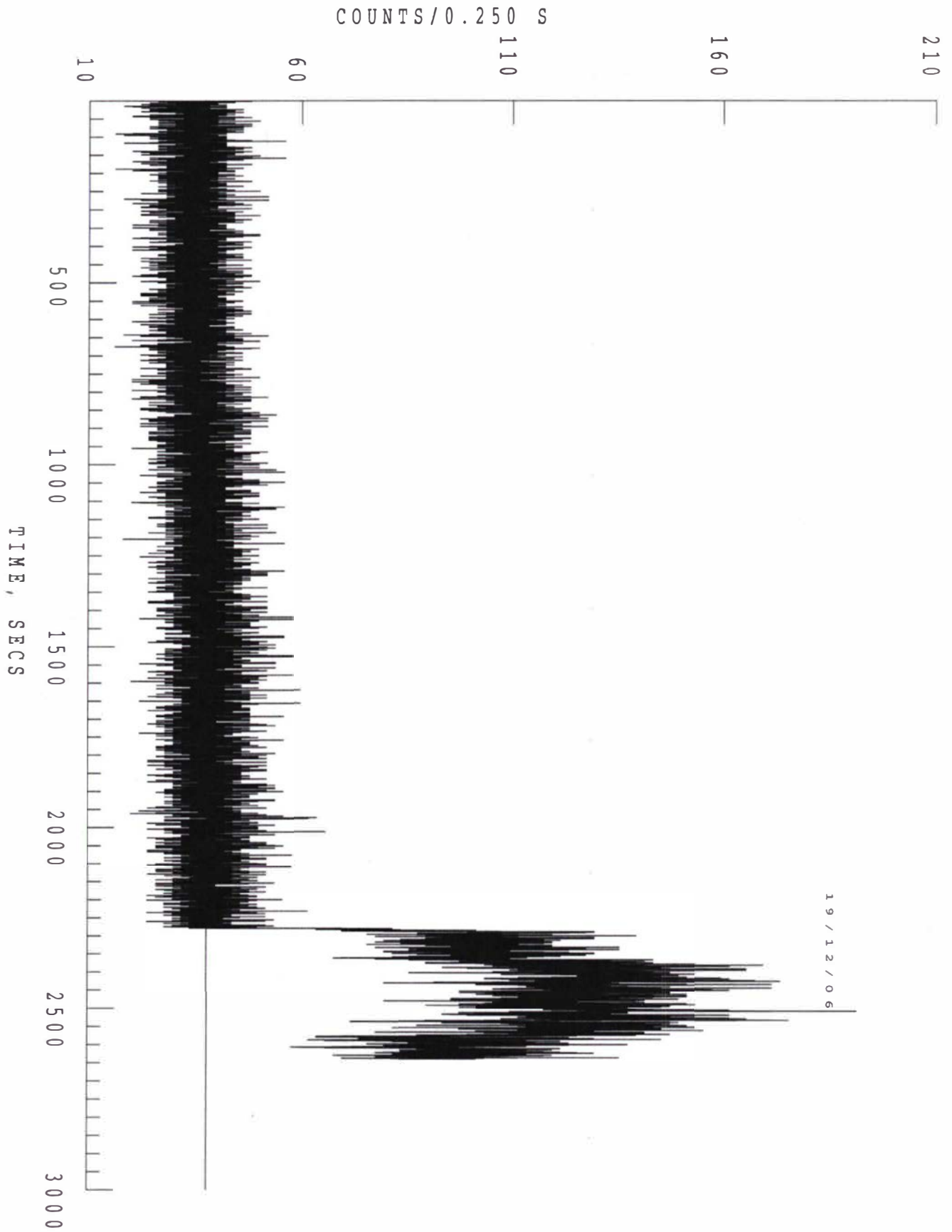
RS UT

MS01

21/10/05

10893.193

50 - 3000 keV



No SPI, ACS tugs

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051021_12206)

BEG TIME: 21/10/05 DOY 294 Julian 2453665.64125 UT = 03.390 03:23:24 (12204.000 secs) [sct = 0019 c141 ff60 bbf0]
END TIME: 21/10/05 DOY 294 Julian 2453665.64167 UT = 03.400 03:24:00 (12240.000 secs) [sct = 0019 c142 0186 0d0f]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

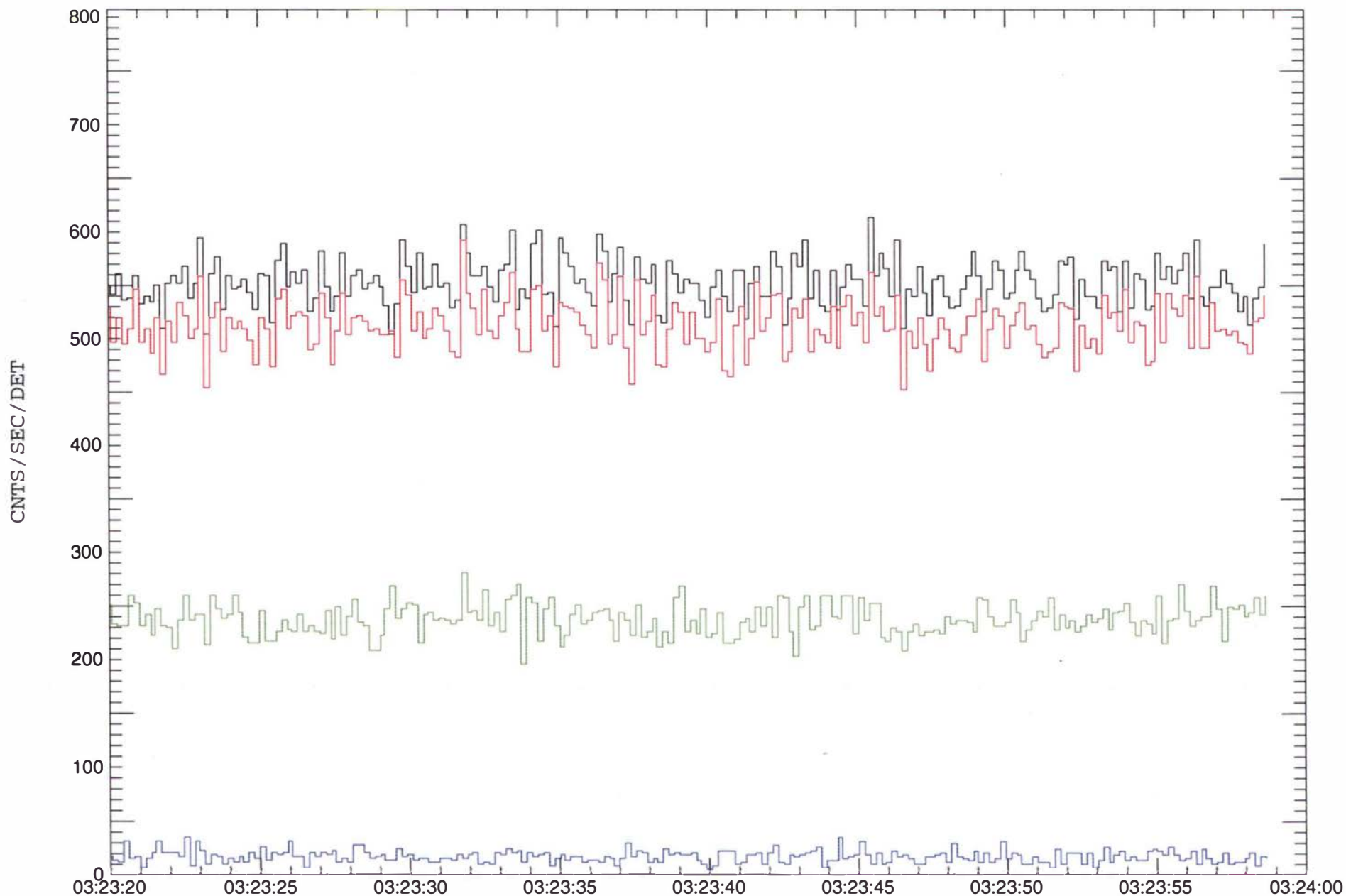
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

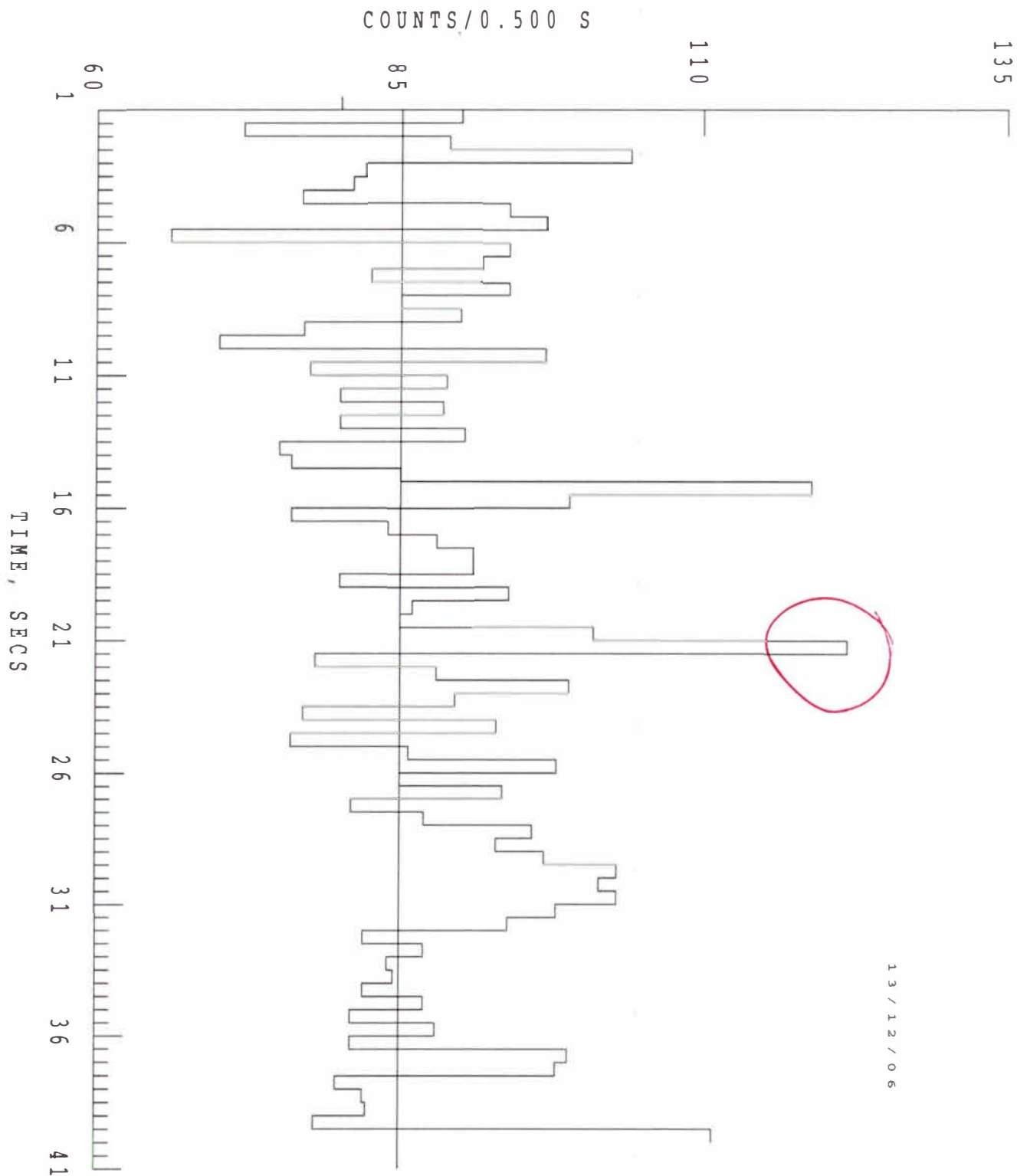


RS UT

HESSI

21/10/05 12186.000 (SUZAKU_20051021_12206)

25- 150 keV



From vxw@capella.gsfc.nasa.gov Fri Oct 21 06:22:40 2005
X-ASG-Debug-ID: 1129900993-14055-14-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Fri, 21 Oct 2005 09:23:13 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/HETE POSITION
Subject: GCN/HETE POSITION
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

Added to ACCESS

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Fri 21 Oct 05 13:22:11 UT
NOTICE_TYPE: HETE S/C Update
TRIGGER_NUM: 3947, Seq_Num: 2
GRB_DATE: 13664 TJD; 294 DOY; 05/10/21
GRB_TIME: 48116.60 SOD {13:21:56.60} UT
TRIGGER_SOURCE: Trigger on the 25-400 keV band.
GAMMA_RATE: 189 [cnts/s] on a 1.300 [sec] timescale
SC_Z_RA: 2 [deg]
SC_Z_DEC: 10 [deg]
SC_LONG: 196 [deg East]
WXM_CNTR_RA: 29.234d {+01h 56m 56s} (J2000),
29.311d {+01h 57m 15s} (current),
28.572d {+01h 54m 17s} (1950)
WXM_CNTR_DEC: +9.100d {+09d 06' 01"} (J2000),
+9.128d {+09d 07' 43"} (current),
+8.857d {+08d 51' 24"} (1950)
WXM_MAX_SIZE: 60.00 [arcmin] diameter
WXM_LOC_SN: 3 sig/noise (pt src in image)
WXM_IMAGE_SN: X= 2.5 Y= 3.0 [sig/noise]
WXM_LC_SN: X= 2.0 Y= 2.7 [sig/noise]
SUN_POSTN: 206.24d {+13h 44m 58s} -10.85d {-10d 51' 01"}
SUN_DIST: 176.52 [deg]
MOON_POSTN: 77.38d {+05h 09m 30s} +27.74d {+27d 44' 06"}
MOON_DIST: 48.86 [deg]
MOON_ILLUM: 82 [%]
GAL_COORDS: 148.85,-50.45 [deg] galactic lon,lat of the burst
ECL_COORDS: 30.39,-2.68 [deg] ecliptic lon,lat of the burst
COMMENTS: Probable GRB.
COMMENTS: WXM error box is circular; not rectangular.

NCT 47895s

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_3947_1_20051021_48116)

BEG TIME: 21/10/05 DOY 294 Julian 2453666.05458 UT = 13.310 13:18:36 (47916.000 secs) [sct = 0019 c14a 4ffb 12cf]
 END TIME: 21/10/05 DOY 294 Julian 2453666.05917 UT = 13.420 13:25:12 (48312.000 secs) [sct = 0019 c14a 6795 8f1f]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

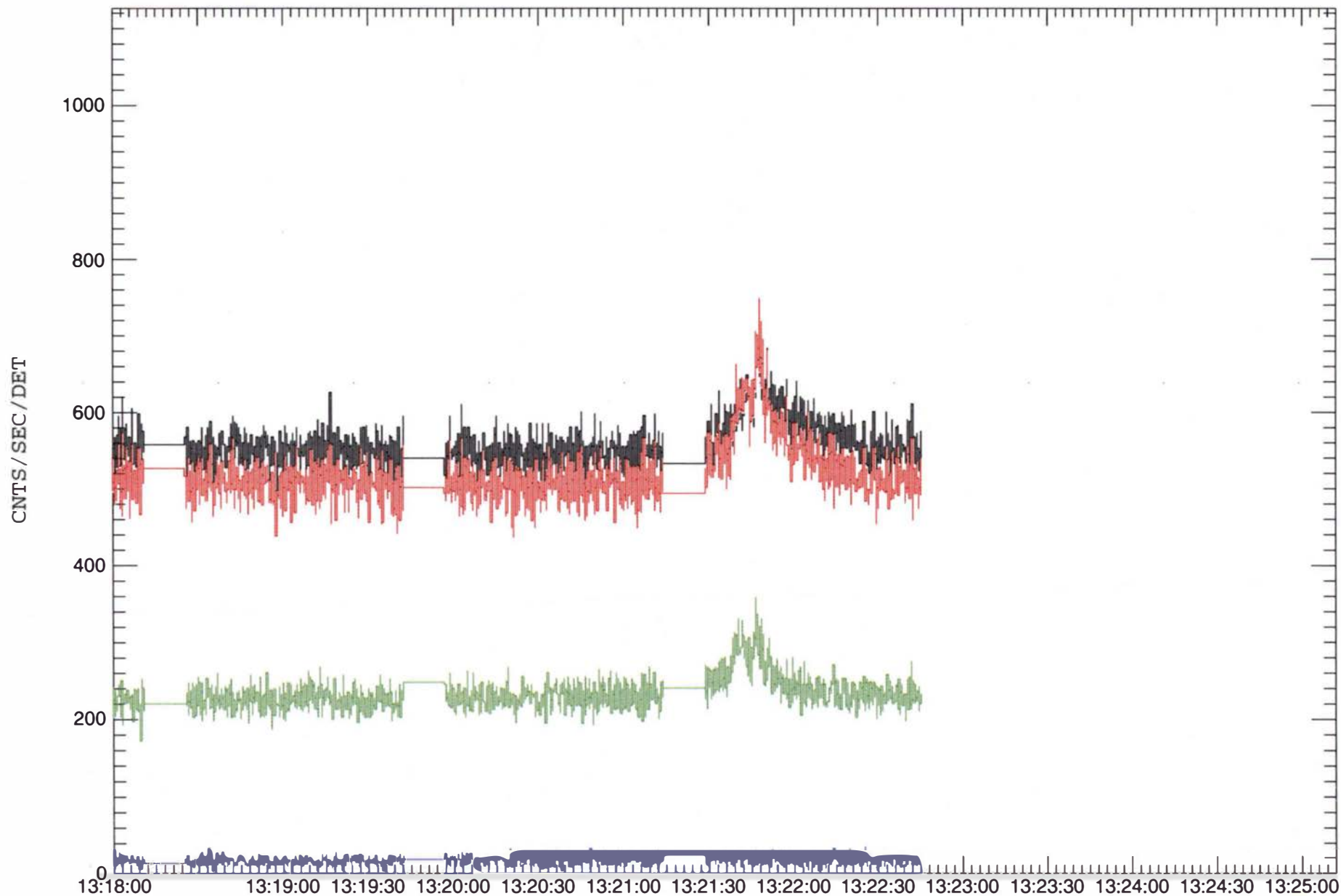
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



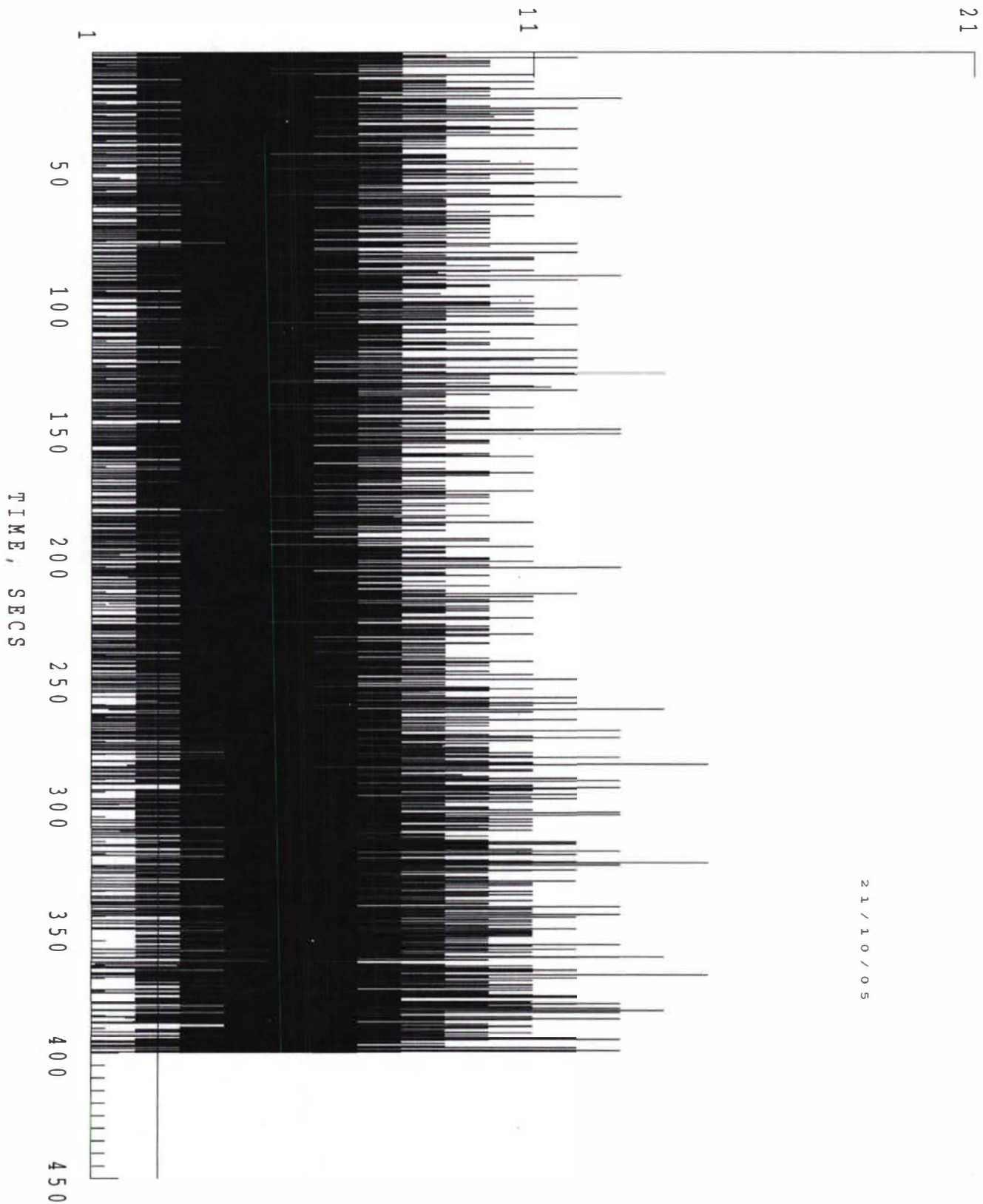
RS UT

HESSI

21/10/05 47915.000 (GHETE_9999_1_20051021_48115)

25- 150 keV

COUNTS/0.031 S



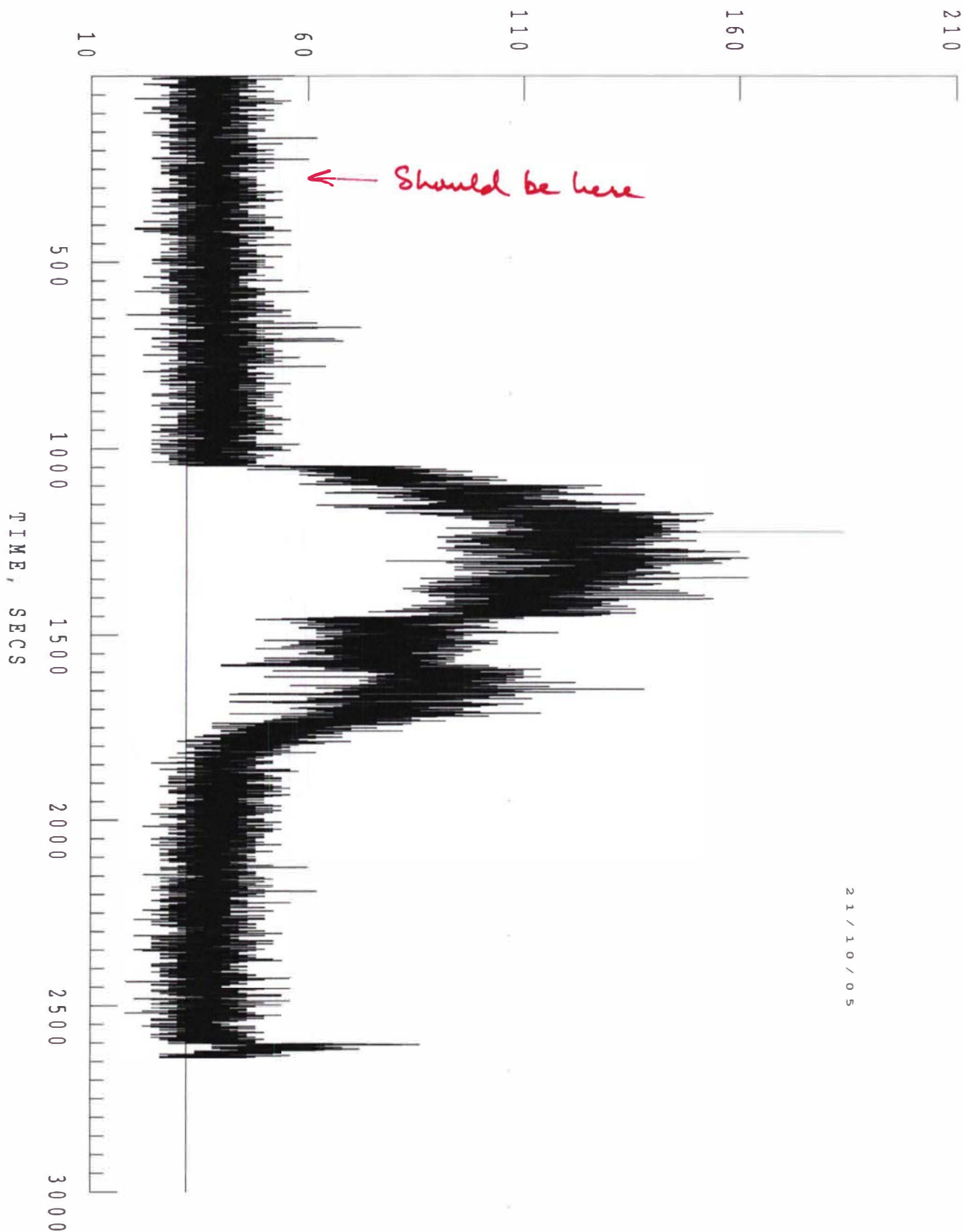
MS01

21/10/05

47672.891

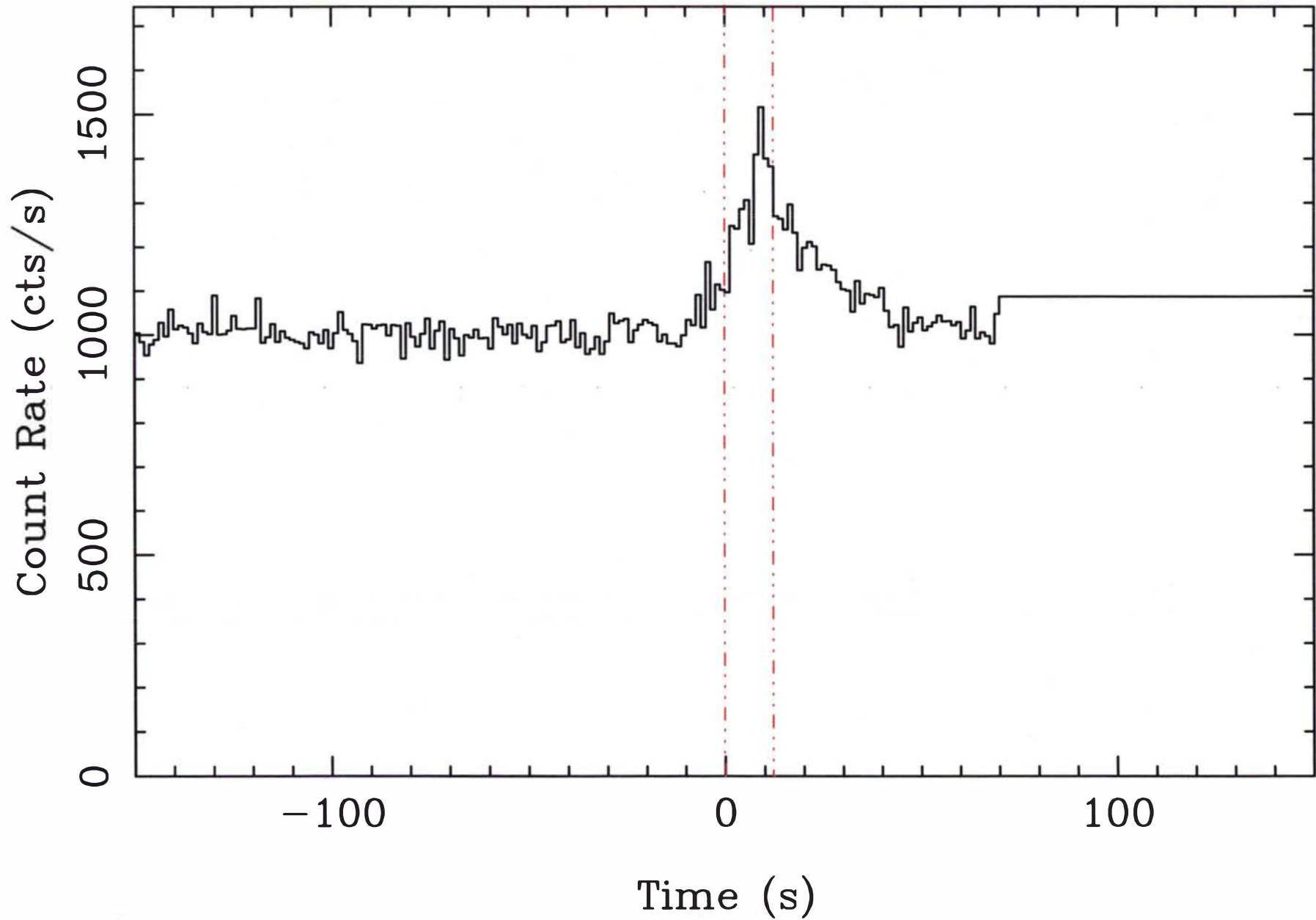
50 - 3000 keV

COUNTS/0.250 S



FREGATE Band A, 1.2s Resolution Data

Time Since UTC = 20051021_132155.992492



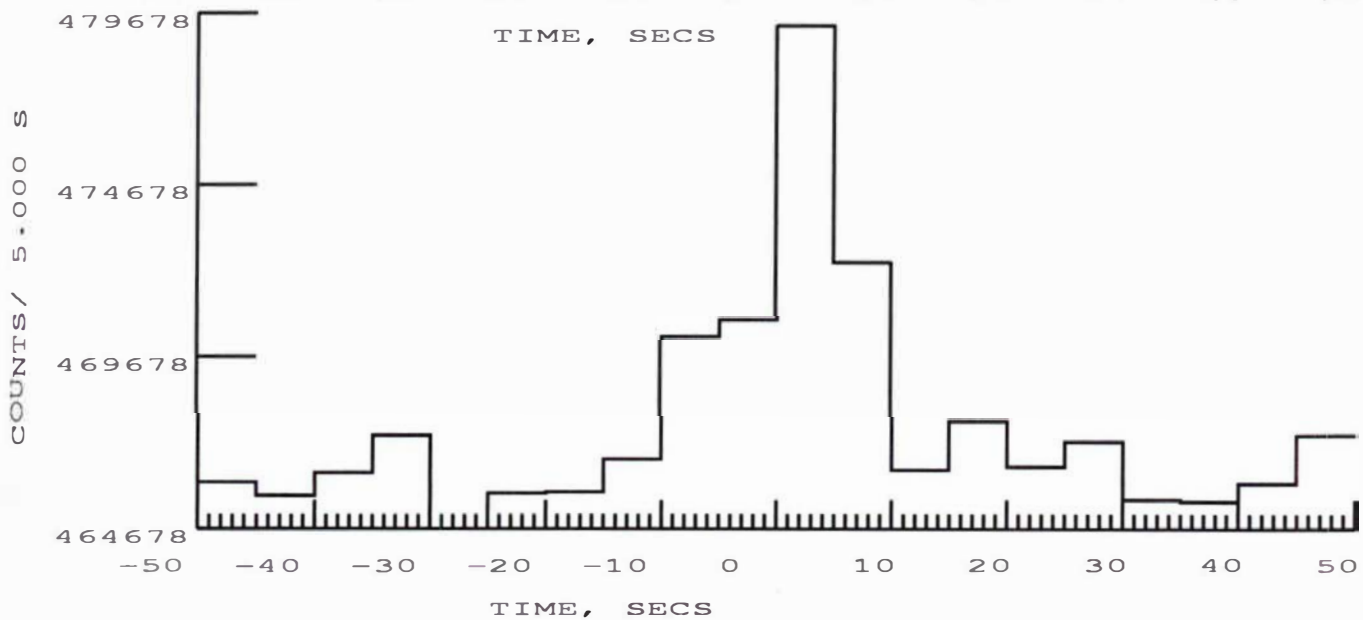
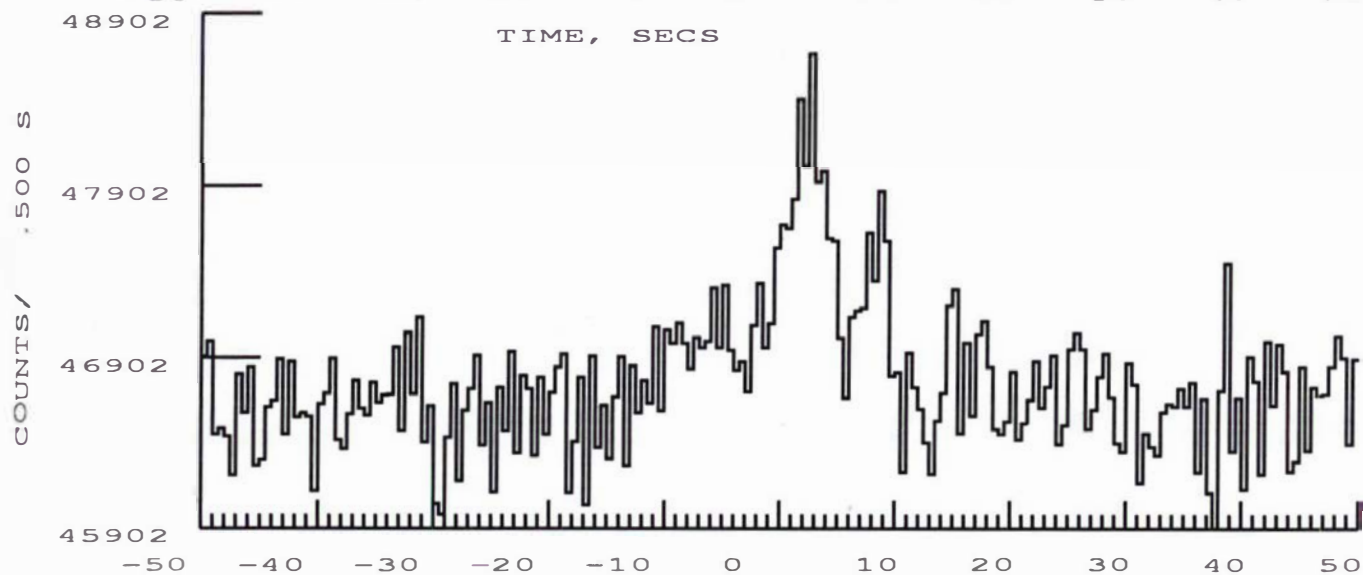
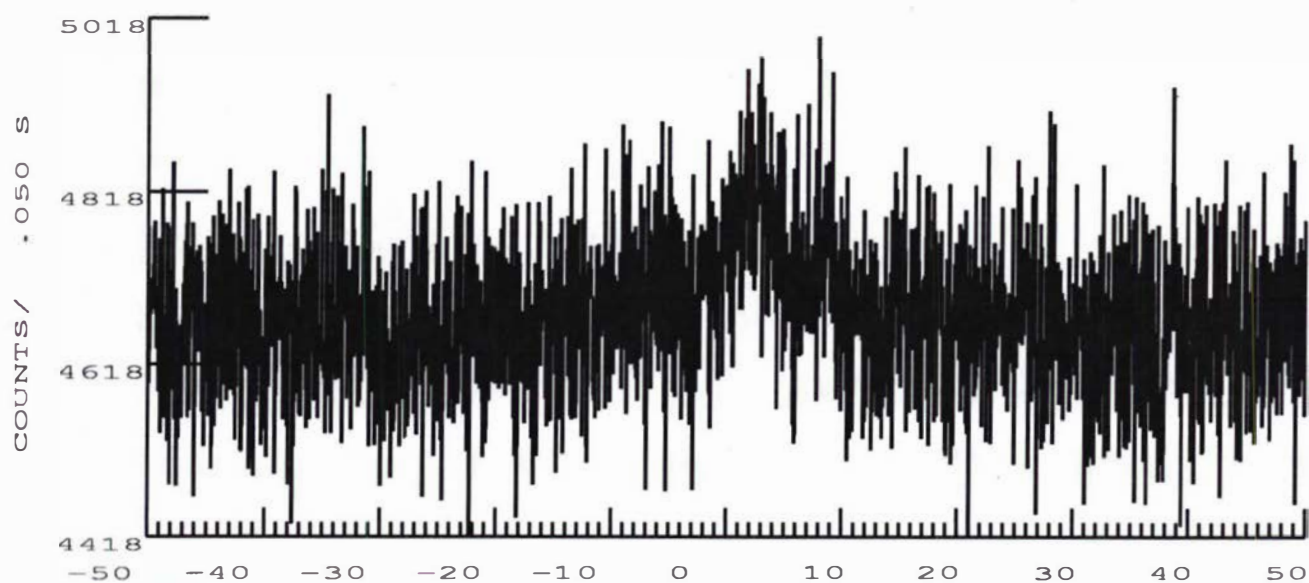
INTEGRAL

21/10/05

48116.000

13:21:56.0

27/01/14



Date: Oct 30 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

N/A

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☒ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☒ Was CHECKMO run to eliminate data gaps?
- ☒ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☒ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☒ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☒ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☒ $3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

G=GALACTIC EQUATOR

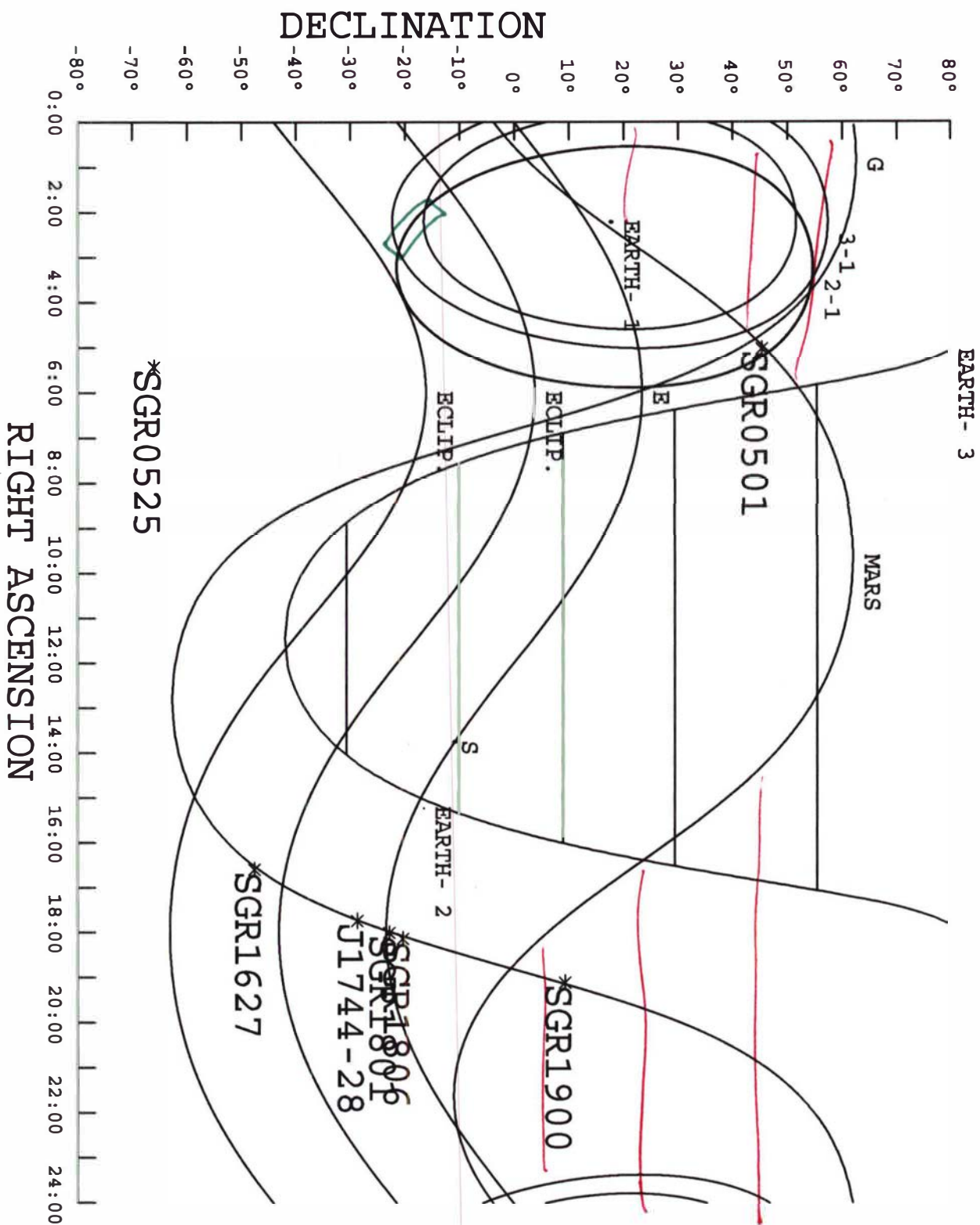
1 KONUS1

2 MO

3 HESSI

EVENT OF OCT 21, 2005 14:01

30/10/ 8



KONUS1

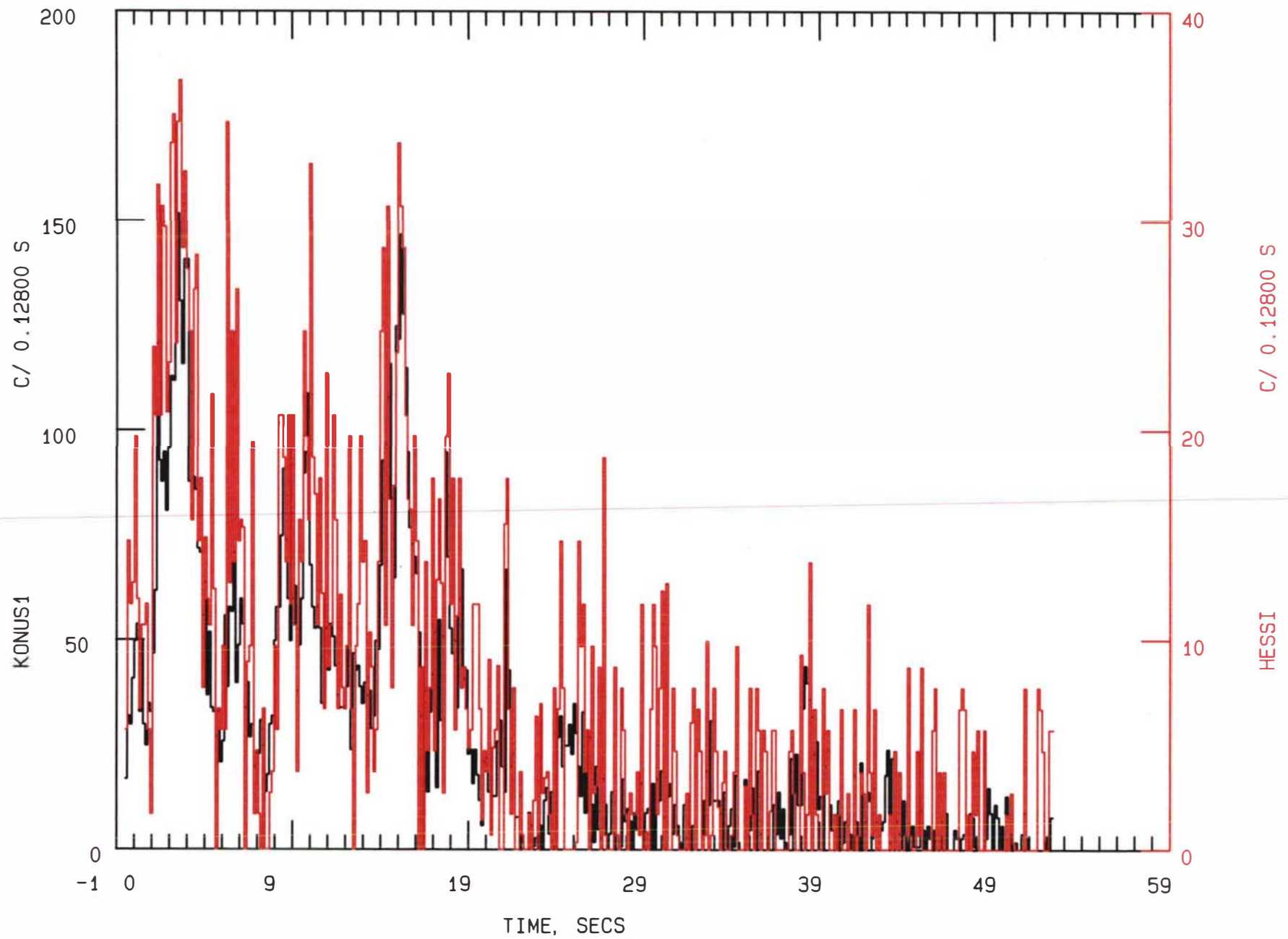
-HESSI

CORRELATION

21/10/05

50462.895

30/10/ 8



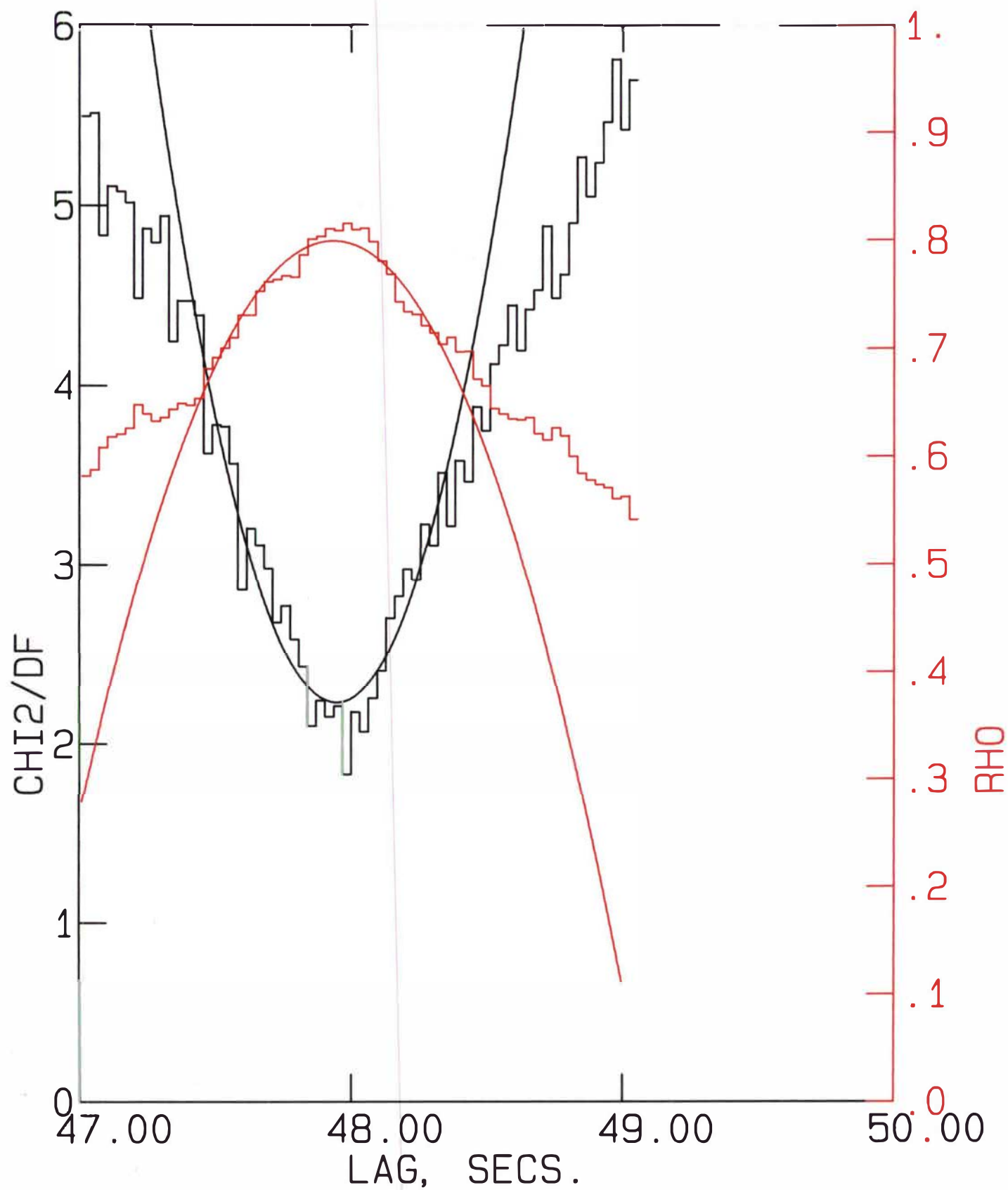
KONUS1

-HESSI

CORRELATION

21/10/05

50462.895



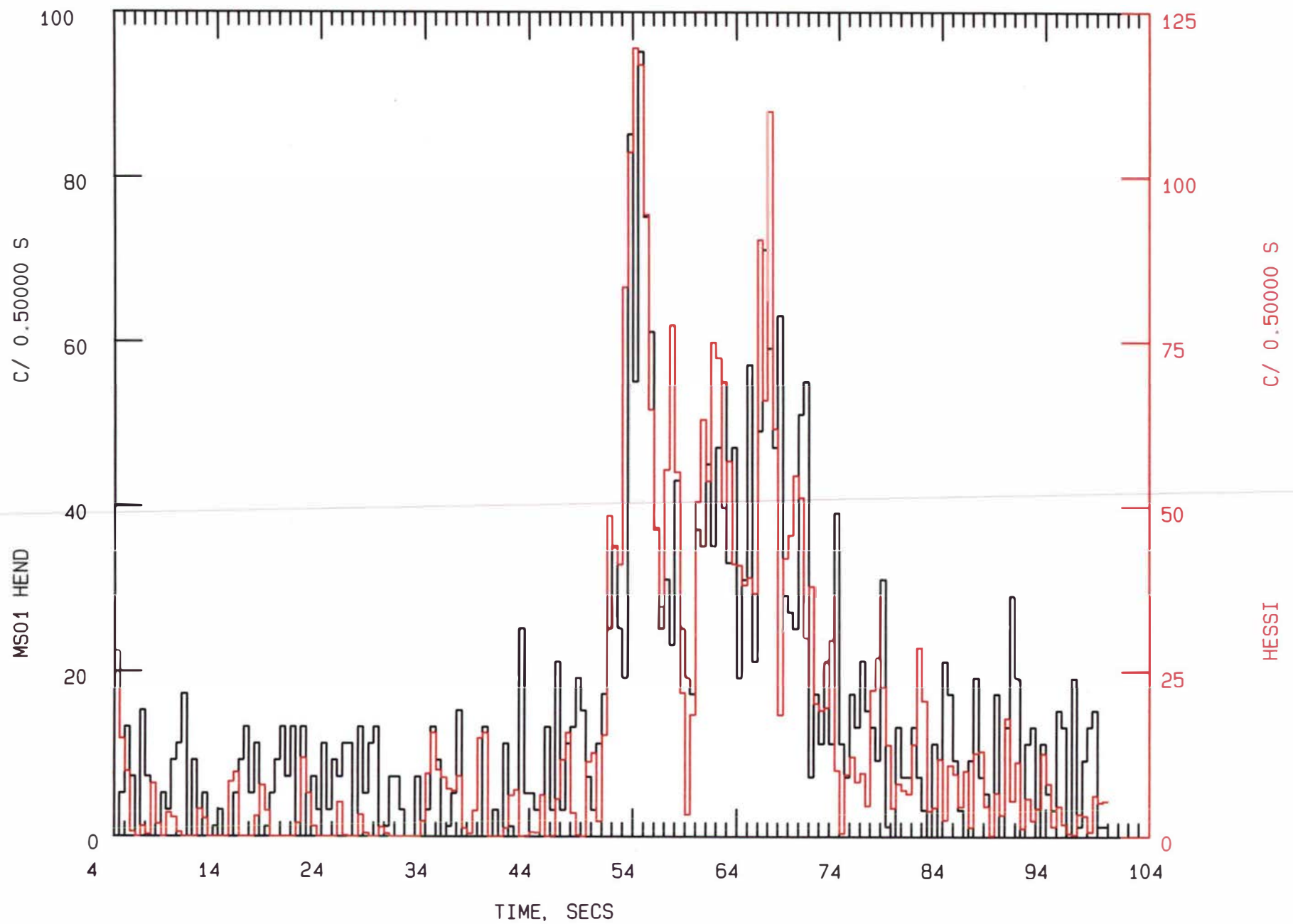
MS01 HEND -HESSI

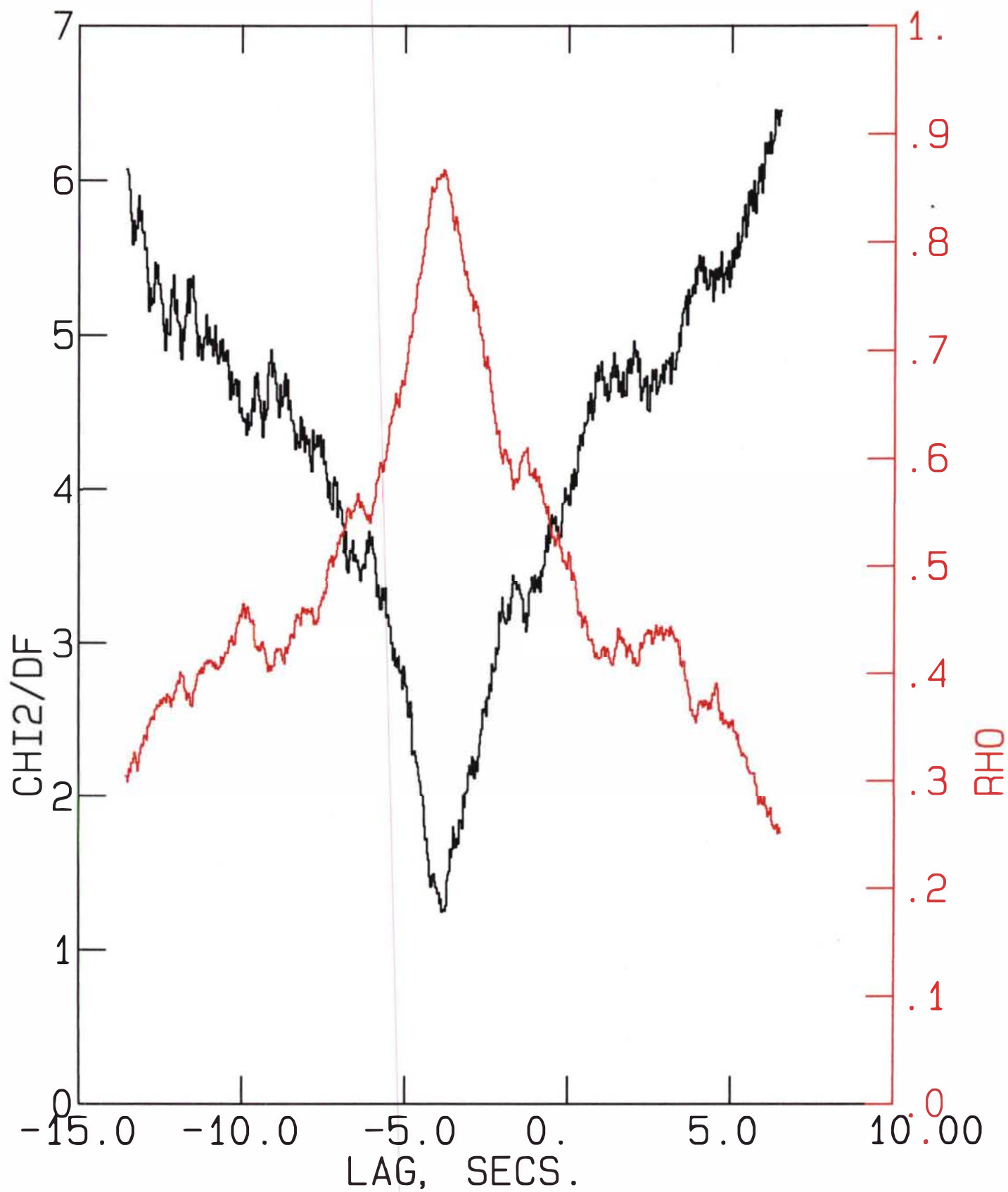
CORRELATION

21/10/05

50222.771

30/10/ 8





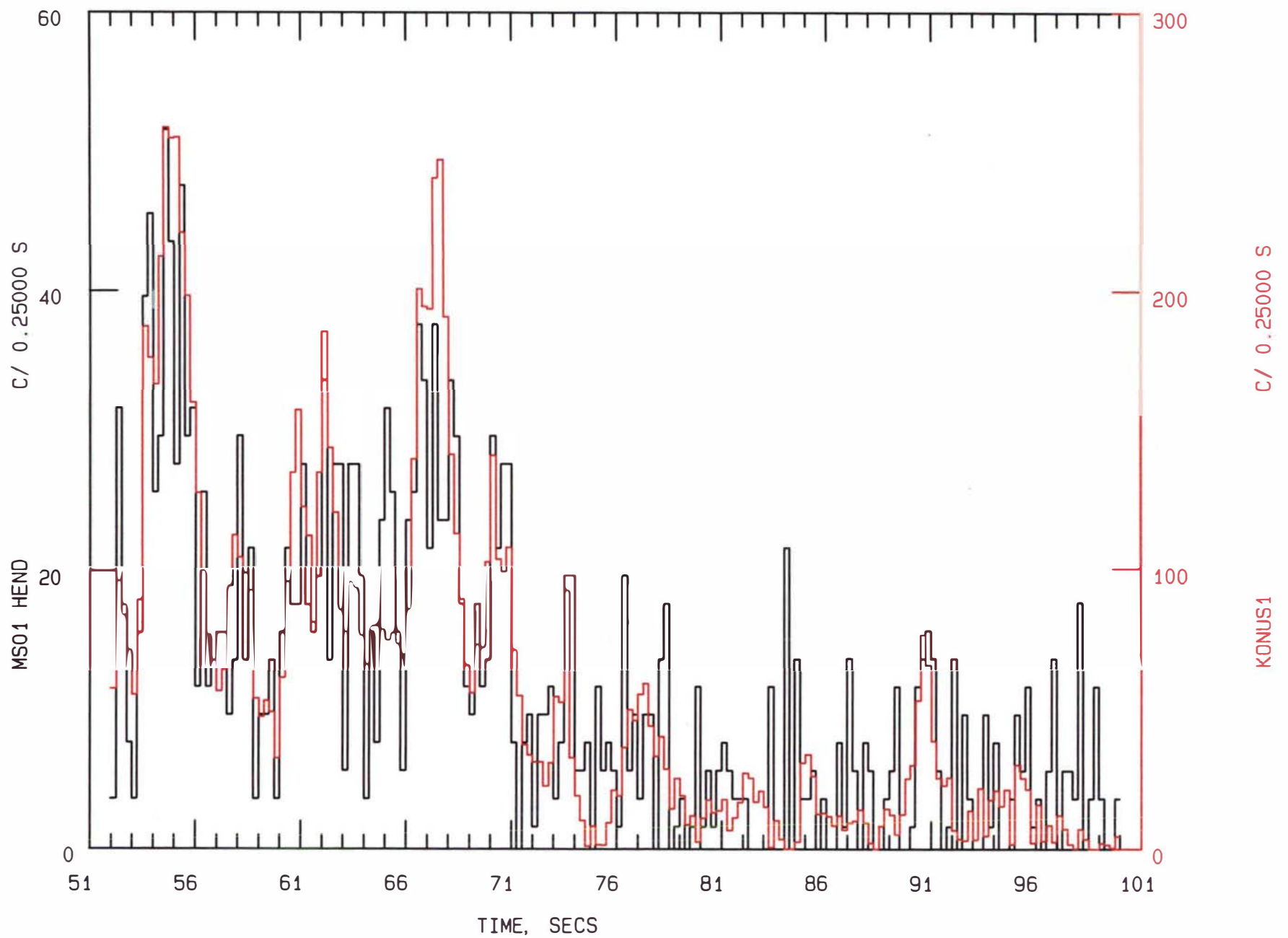
MS01 HEND -KONUS1

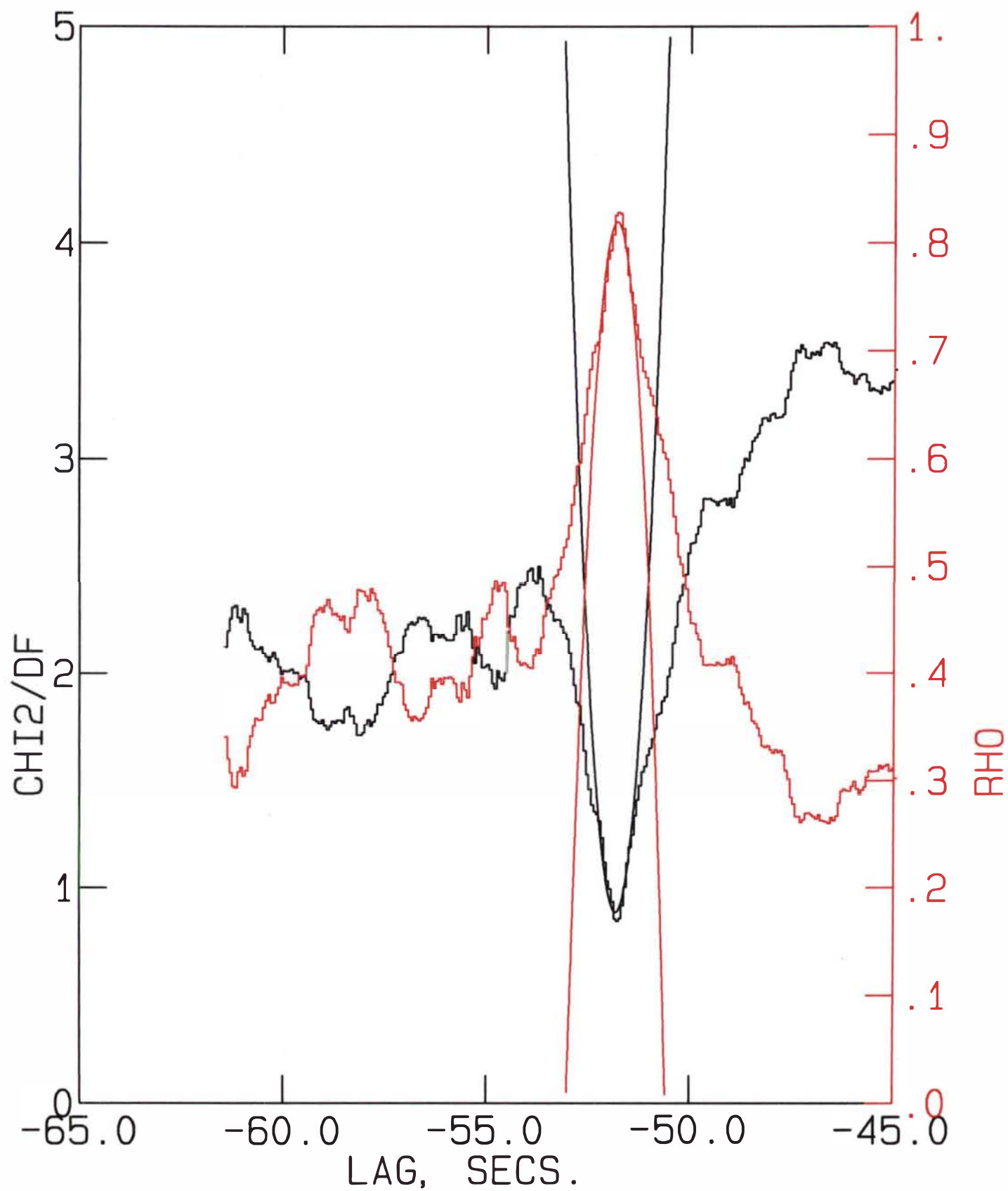
CORRELATION

21/10/05

50222.771

30/10/ 8



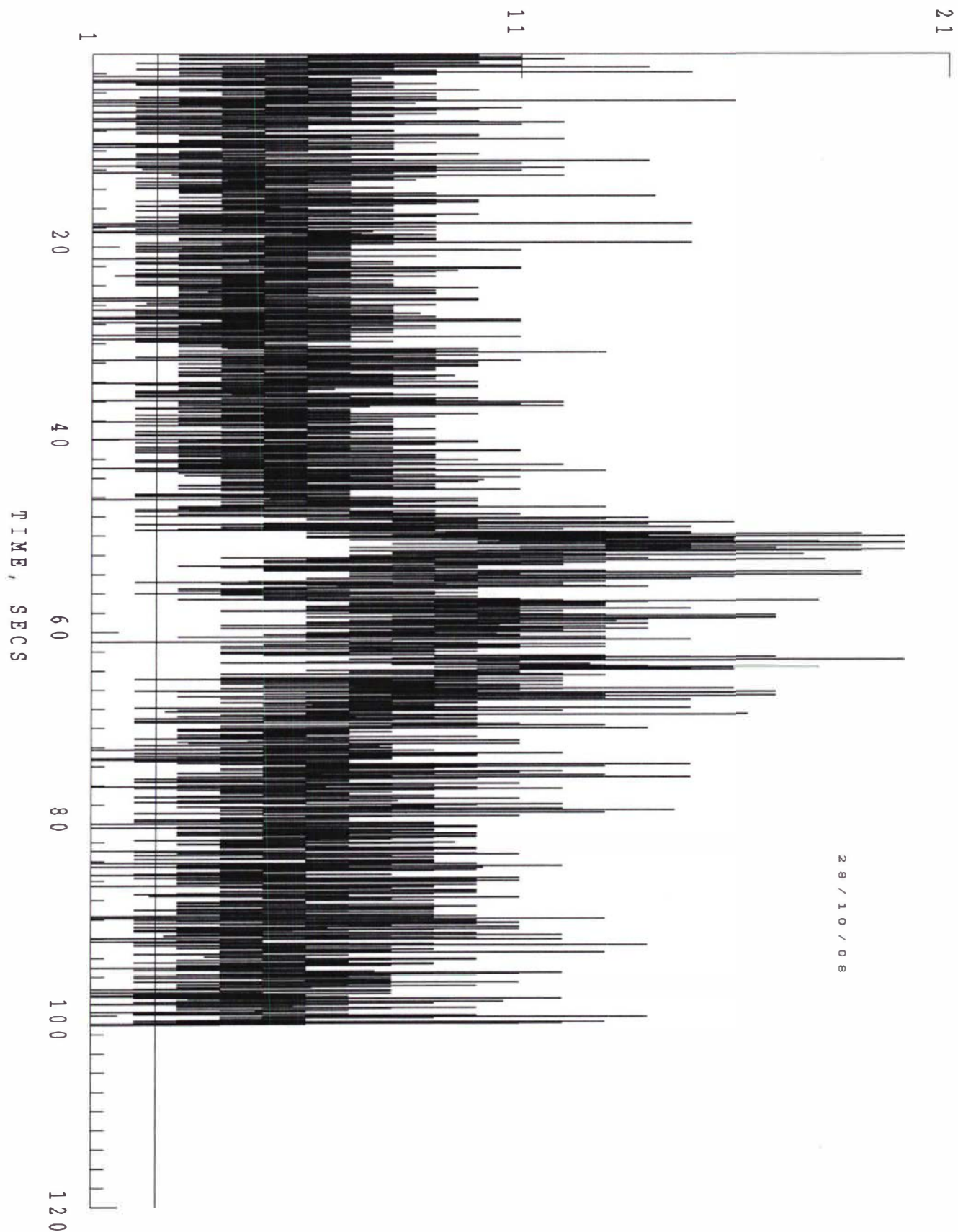


HESSI

21/10/05 50411.000 (KONUS_20051021_50462)

50 - 200 keV

COUNTS/0.032 S



28/10/08

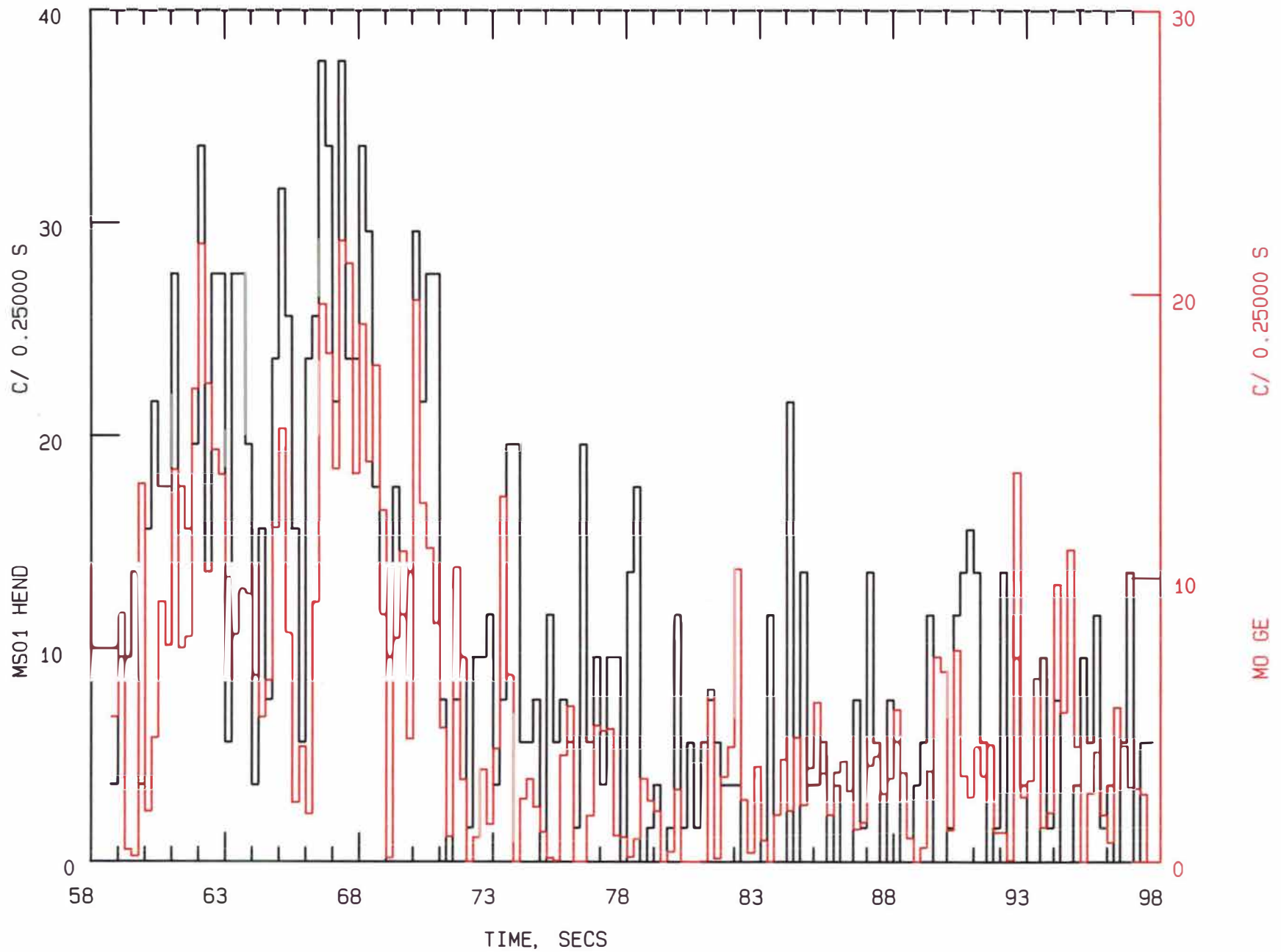
MS01 HEND -MO GE

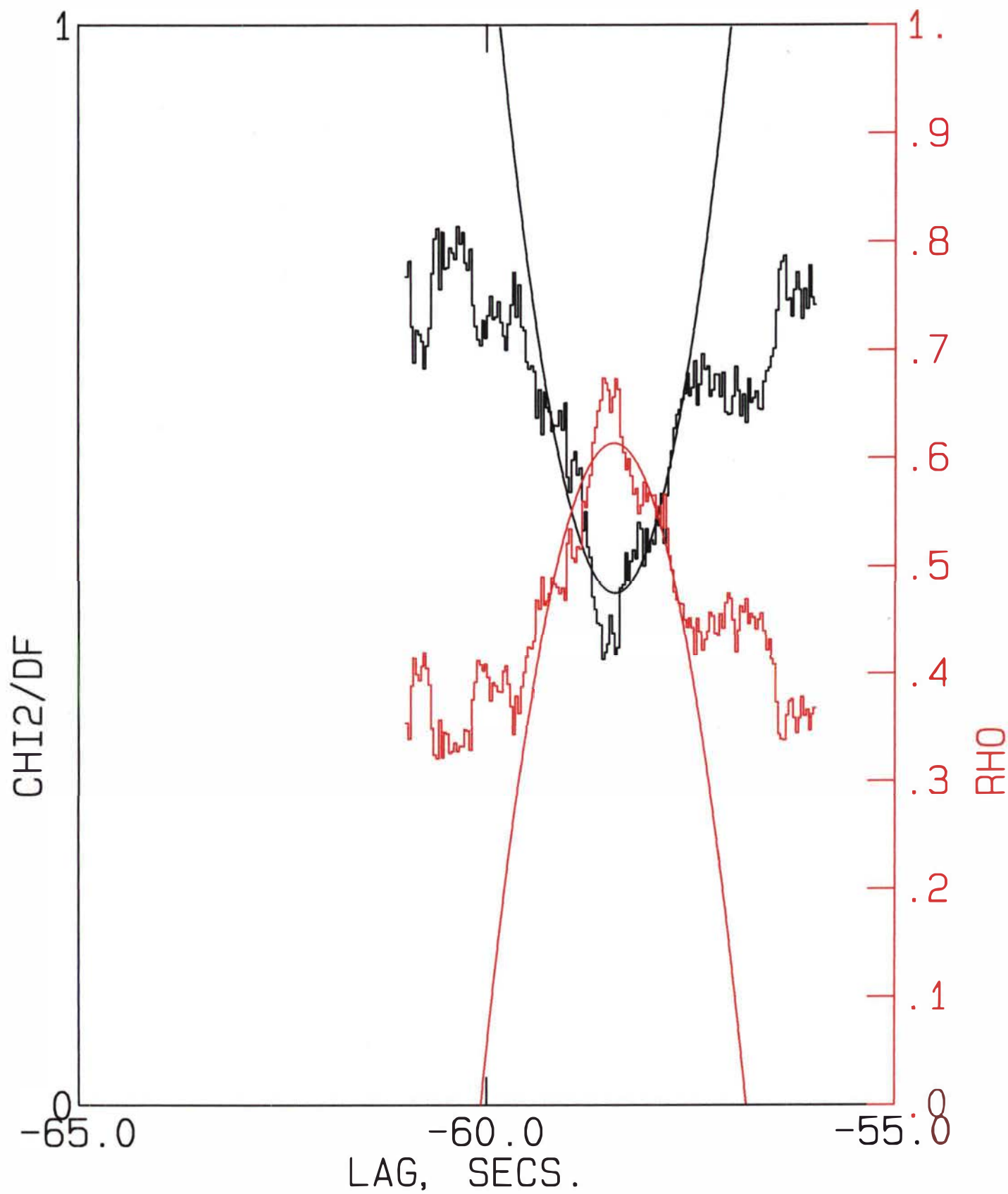
CORRELATION

21/10/05

50222.771

30/10/ 8



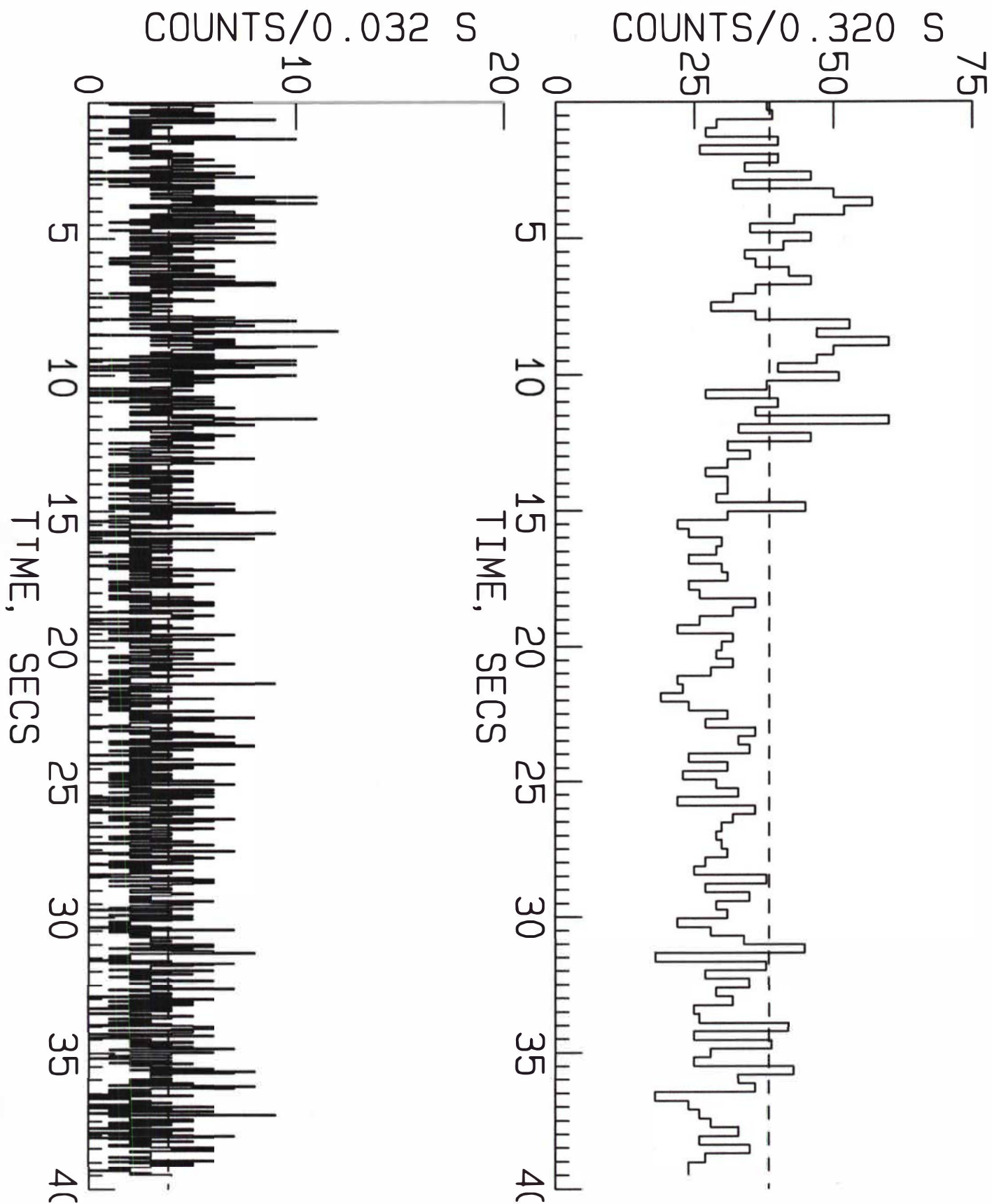


MO GE

21/10/05 50281.239

116- 337 keV

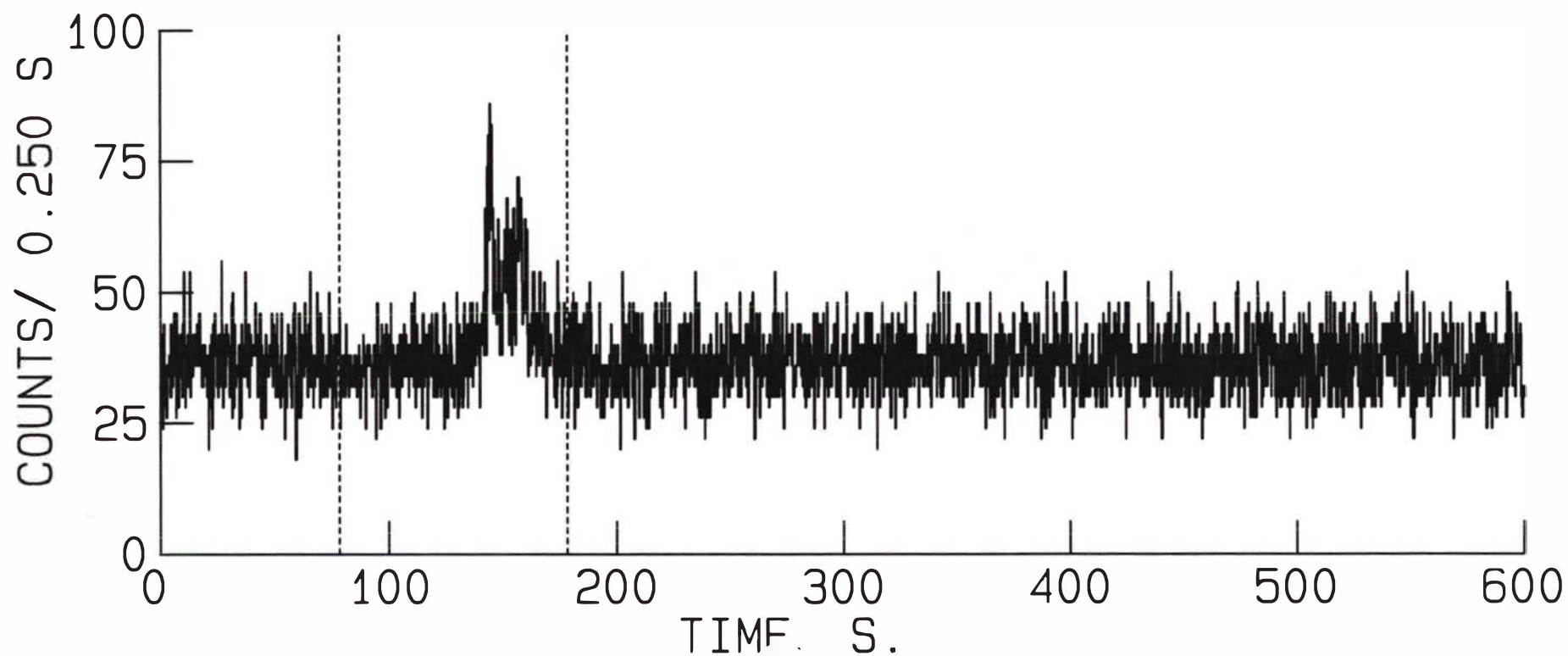
30/10/8



MS01 HEND
21/10/05 50132.773 s
50-3000 keV

30/10/08

N= 10 M=80
>4.0 SIGMA FLUCTUATIONS



KONUS1

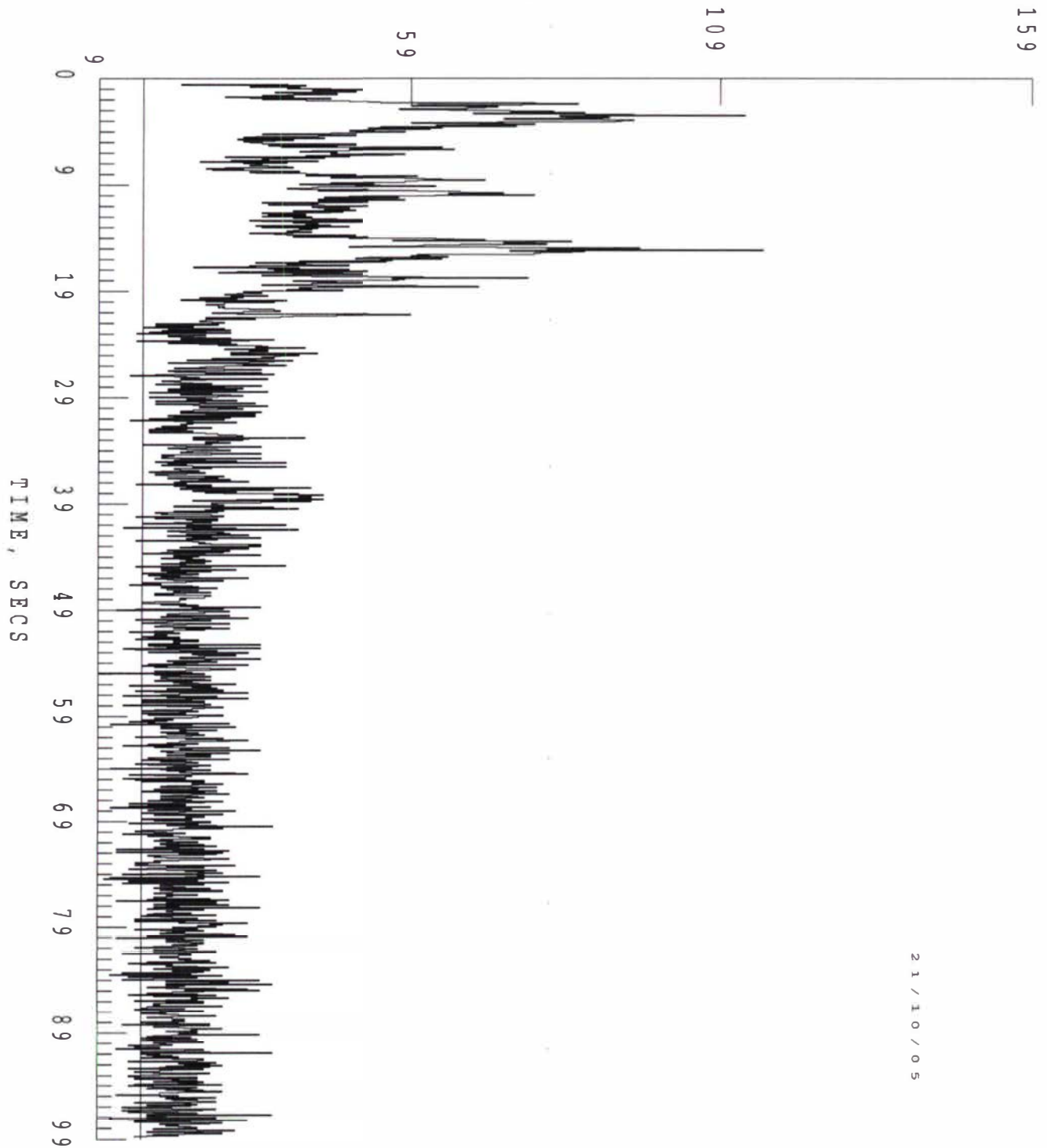
21/10/05

50462.895

14:01:02

50 - 200 keV

COUNTS/0.064 S



KONUS HRES 20051021 50462

TRIGGER TIME: 21/10/05 DOY 294 Julian 2453666.08405 UT = 14.017 14:01:02 (50462.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

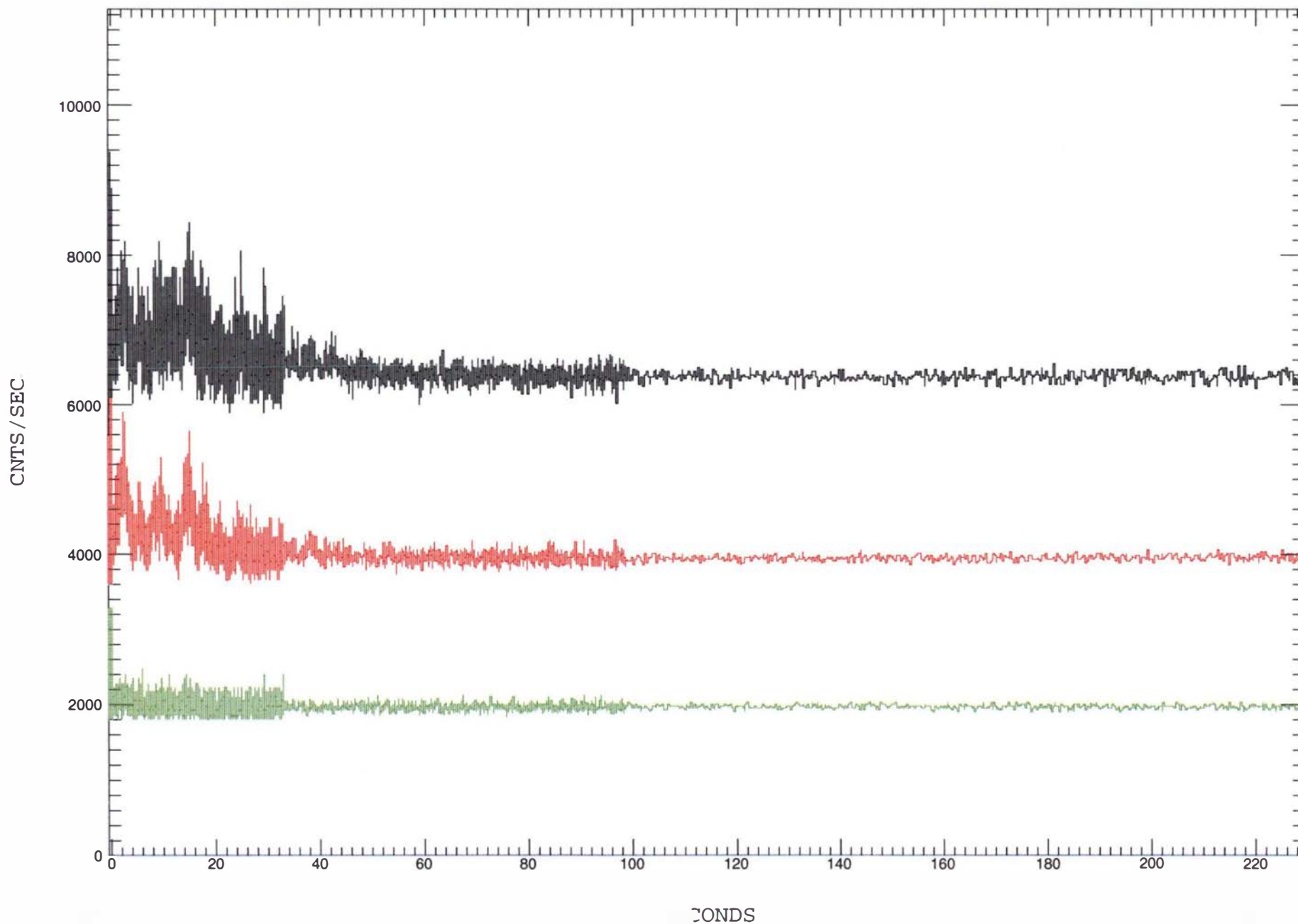
Chan 4 : [> 10 MeV]

Channel 1 + 5400

Channel 2 + 3600

Channel 3 + 1800

Channel 4 + 0



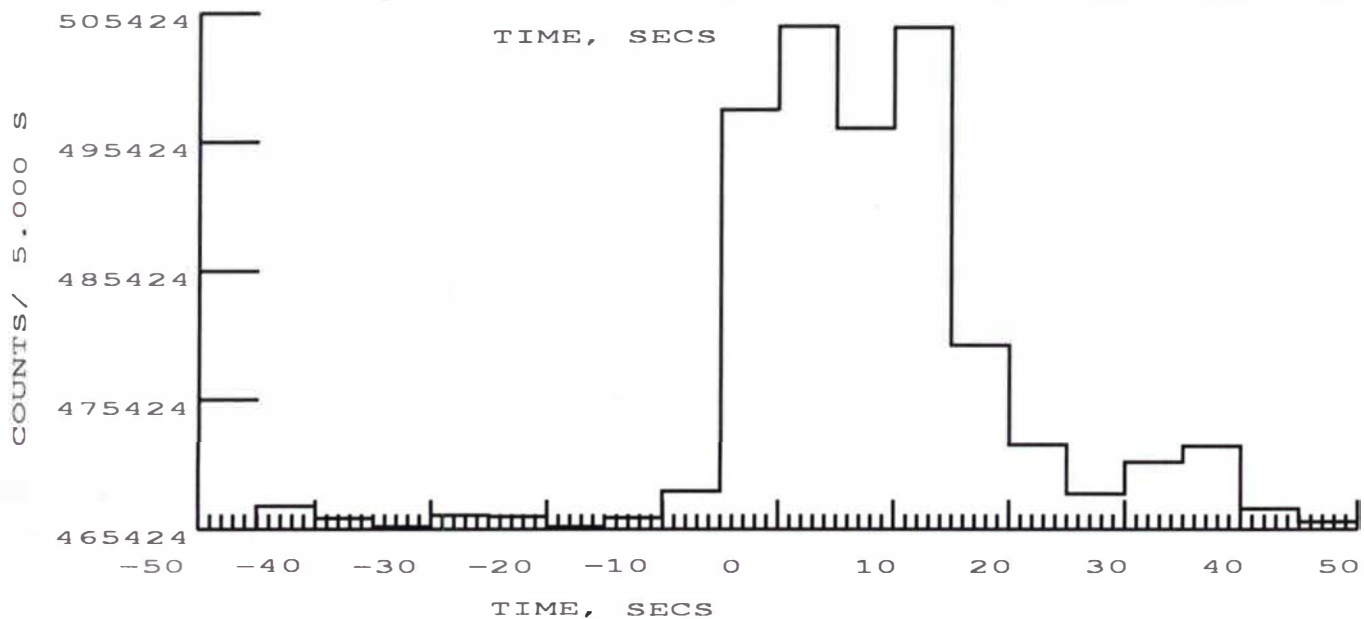
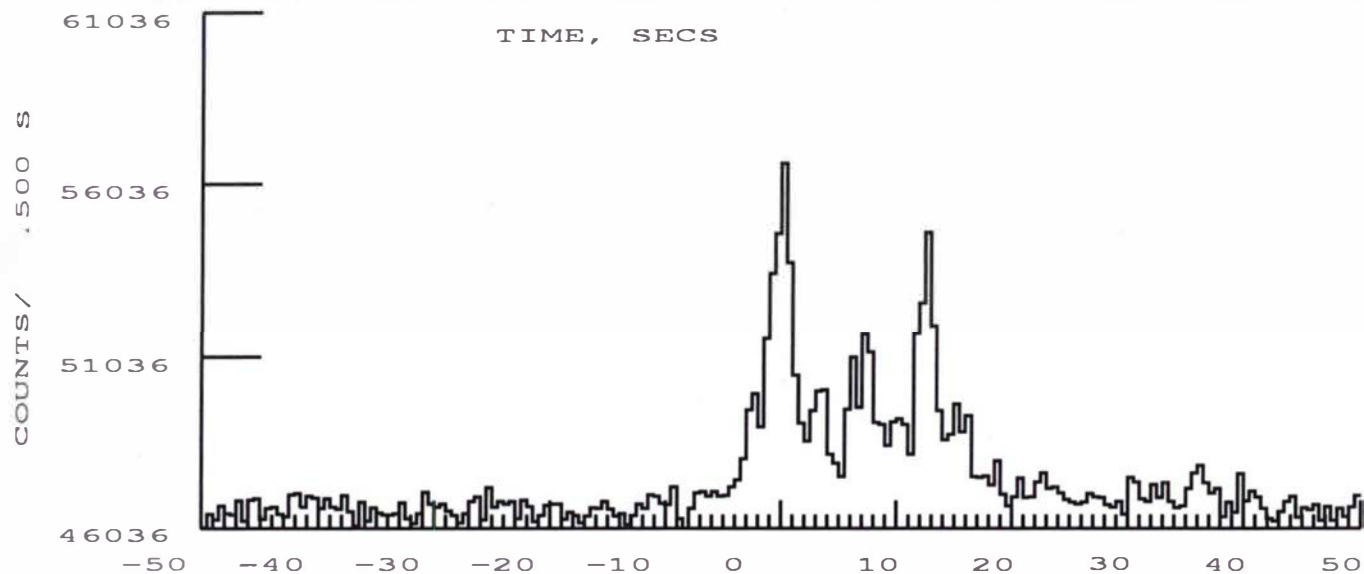
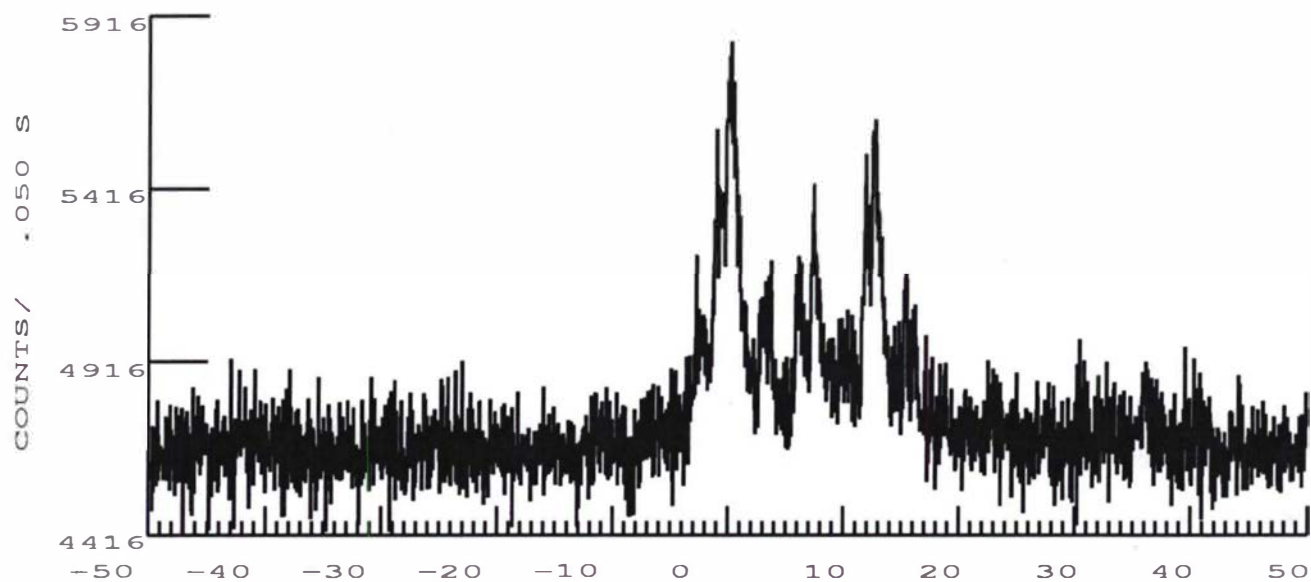
INTEGRAL

21/10/05

50462.000

14:01:02.0

27/01/14



From palmer@lanl.gov Tue Nov 15 08:38:58 2005
X-ASG-Debug-ID: 1132072783-14717-19-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
Time-Version: 1.0
Date: Tue, 15 Nov 2005 09:40:54 -0700
To: Kevin Hurley <khurley@ssl.berkeley.edu>
From: David Palmer <palmer@lanl.gov>
X-ASG-Orig-Subj: More unlocated possible GRBs
Subject: More unlocated possible GRBs
Cc: Scott Barthelmy <scott@milkyway.gsfc.nasa.gov>
X-PMX-Version: 4.7.1.128075
X-Barracuda-Spam-Report: Code version 3.02, rules version 3.0.5306
Rule breakdown below pts rule name description

-2.60 BAYES_00 BODY: Bayesian spam probability is 0 to 1%
[score: 0.0000]

Kevin,
Do you see any of these with IPN?

2005-11-11 07:47:51

2005-11-09 16:41:50

2005-11-08 18:30:33

2005-10-21 14:01:00 50460 s

2005-10-20 02:22:03

== 051111_07:47 ==

{
{
{
Bright short burst presumably outside of the FOV Trigger 163443,
MET = 153388071.296 - ...71.808, 2005-11-11 07:47:51
000 counts/0.512 s.
},
},
}

== 051109_16:41 ==

{
{
{
Triggers 163206 and 163207 looked like they were on a real
burst. It made a provisional trigger in one image, but
there is no bump at that position in a better interval.

It was probably out of the FOV.

The burst had a small initial spike at 2005-11-09T16:41:50.7
or MET 153247310-311 and a main peak from 153247316-329. Peak
1-second flux was about 2600.

The observation was 00163136001 and the first data is in
pass_20053132026. We don't have events yet.

--
Jay Cummings
}}}

== 051108_18:30 ==

{
{
{
Unlocated burst Trigger 163092 at (2005-11-08 18:30:33) when we were
pointing at [9.436, -40.485 207.453] (Phoenix, Sculptor, Fornax region),
1300 counts/128 ms, with a PUNTMAX. Short trigger so we don't get any
event-by-event data.
},
},
}

== 051026_08:29 ==

{
{
{
Trigger #161246 an unidentified short (128 ms) large (4000 counts) burst at

MET 152008177.53600 (2005-10-26 08:29:37), when we were pointing in
Vela-Centaurus

}}}

= 051021_14:01 ==

{{

Long bright burst: #160634 MET 151596060-..76 (2005-10-21 14:01:00)

}}}

== 051020_02:22 ==

{{{

Possible GRB (1200 cts/s, 3 second FRED) at the end of a slew at
151467723 2005-10-20 02:22:03 . This would have been detected, but
background hadn't been accumulated.

}}}

--

David Palmer palmer@lanl.gov (505)665-6863 (voice) (505)665-4414 (fax)

From vxw@capella.gsfc.nasa.gov Fri Oct 21 07:21:33 2005
X-ASG-Debug-ID: 1129904526-22239-7-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
v-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Fri, 21 Oct 2005 10:22:06 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/HETE POSITION
Subject: GCN/HETE POSITION
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Fri 21 Oct 05 14:21:14 UT
NOTICE_TYPE: HETE S/C Alert
TRIGGER_NUM: 3948, Seq_Num: 1
GRB_DATE: 13664 TJD; 294 DOY; 05/10/21
GRB_TIME: 51668.91 SOD {14:21:08.91} UT
TRIGGER_SOURCE: Trigger on the 25-400 keV band.
GAMMA_RATE: 123 [cnts/s] on a 1.300 [sec] timescale
SC_LONG: 44 [deg East]
SUN_POSTN: 206.28d {+13h 45m 07s} -10.87d {-10d 51' 53"}
MOON_POSTN: 77.96d {+05h 11m 51s} +27.80d {+27d 47' 59"}
MOON_ILLUM: 81 [%]
COMMENTS: No s/c ACS pointing info available yet.
COMMENTS: Probable GRB.

GRB?

FREGATE BURST #1 TIME HISTORY -- DETECTORS 1-4 SUMMED

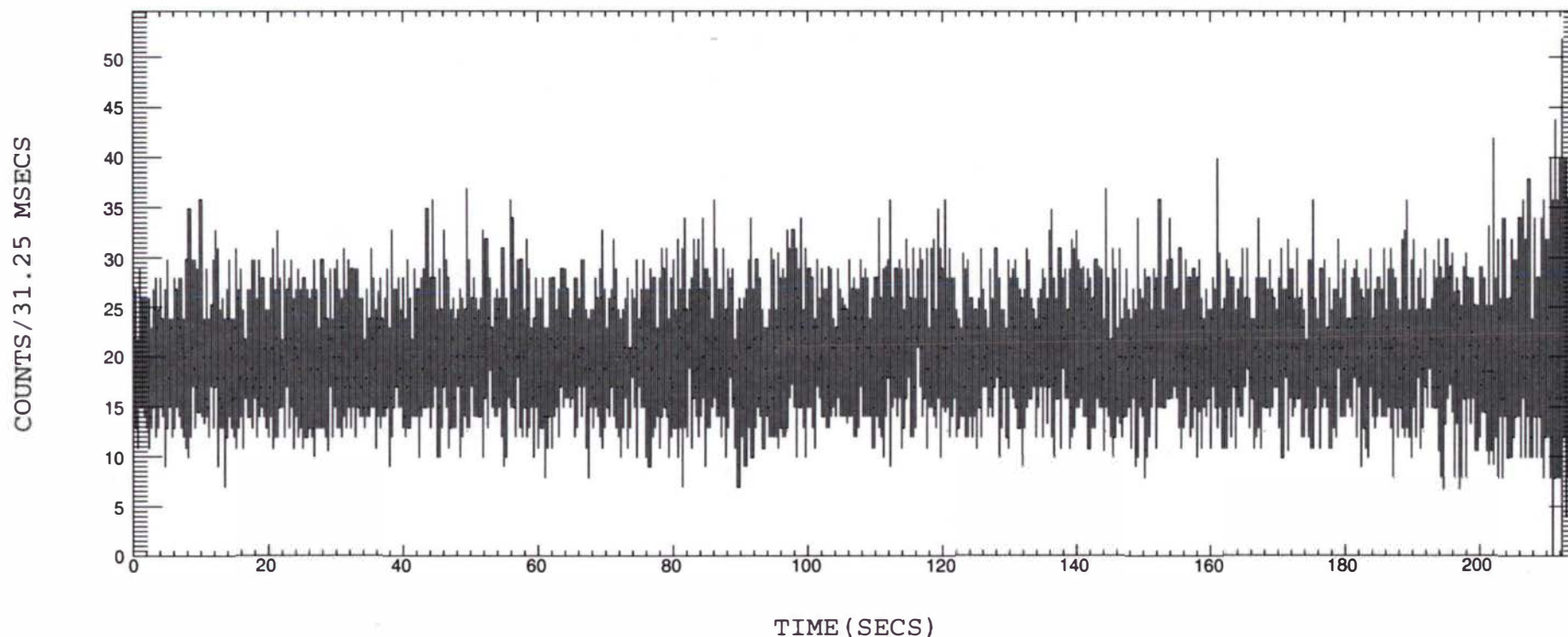
21/10/05 DOY 294 Julian 2453666.09804

TRIGGERED BY FREGATE UT = 14:21:10 (51670.25 secs) [sct = 0019 c14b 2fc0 7824]

PLOT STARTING TIME UT = NA (NA secs) [sct = NA]

BACKGRND SAMPLED FROM UT = 14:20:46 (51646.66 secs) [sct = 0019 c14b 2e58 7824]

BIN WIDTH 31.25 msecs INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 2, deltaT = 163.20ms, USING DETECTOR(S) 3 4

CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	30	31	0	0	133	141	0	0	816	869	0	0	3057	3263	0	0
EXC1 CNT RATES	10	12	0	0	85	118	0	0	674	736	0	0	2875	3047	0	0
EXC2 REF VALUES	30	31	0	0	133	141	0	0	816	869	0	0	3057	3263	0	0
EXC2 CNT RATES	10	12	0	0	95	89	0	0	763	765	0	0	2875	3047	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	15	15	0	0	54	54	0	0	311	311	0	0	1107	1105	0	0
EXC1 CNT RATES	4	5	0	0	42	55	0	0	242	231	0	0	1039	1002	0	0
EXC2 REF VALUES	15	15	0	0	54	54	0	0	311	311	0	0	1107	1105	0	0
EXC2 CNT RATES	2	5	0	0	29	37	0	0	319	287	0	0	1039	1002	0	0

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_3948_1_20051021_51668)

BEG TIME: 21/10/05 DOY 294 Julian 2453666.09583 UT = 14.300 14:18:00 (51480.000 secs) [sct = 0019 c14b 2469 71ab]
 END TIME: 21/10/05 DOY 294 Julian 2453666.10042 UT = 14.410 14:24:36 (51876.000 secs) [sct = 0019 c14b 3c03 edfd]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

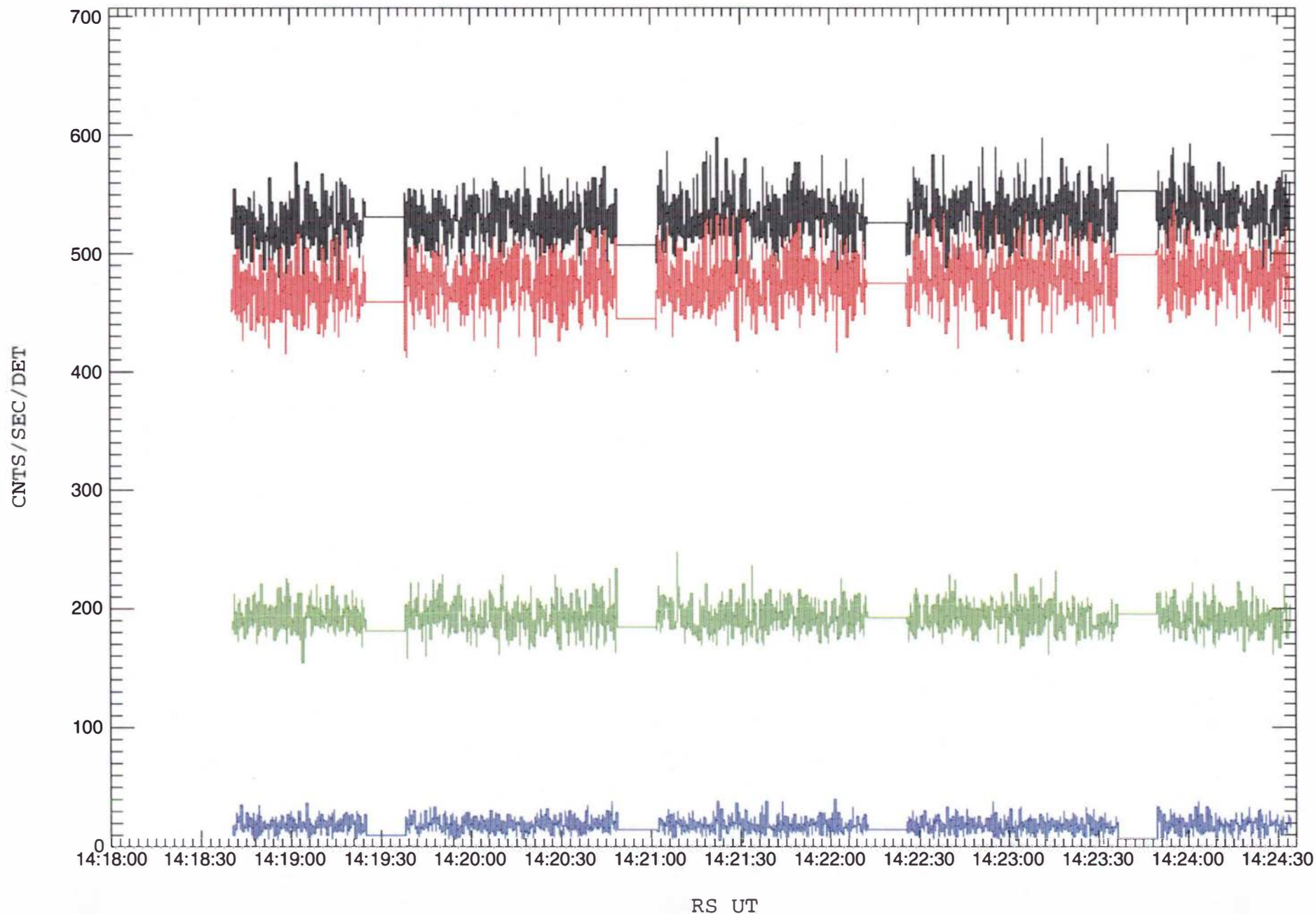
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0

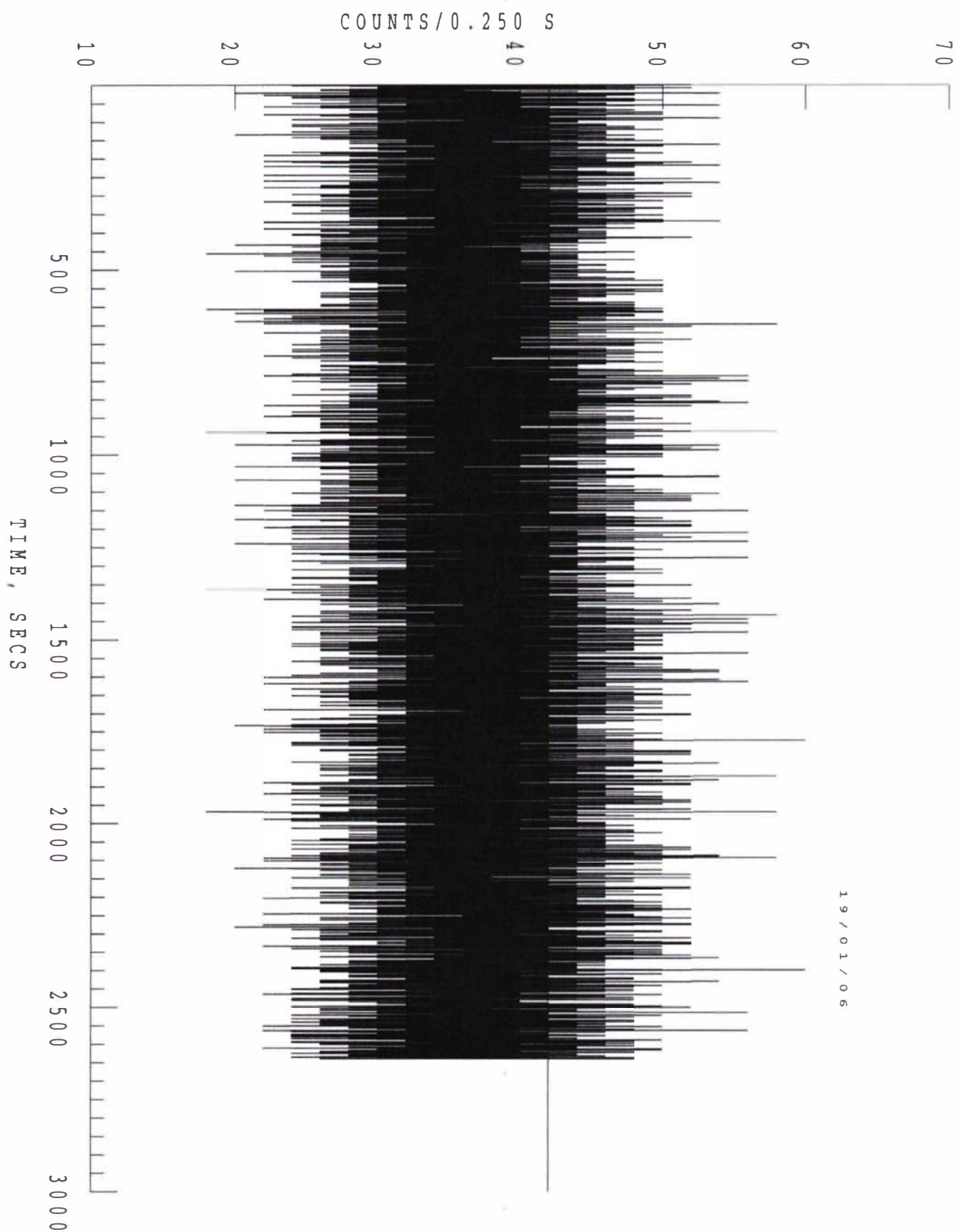


MS01

21/10/05

50312.763

50 - 3000 keV

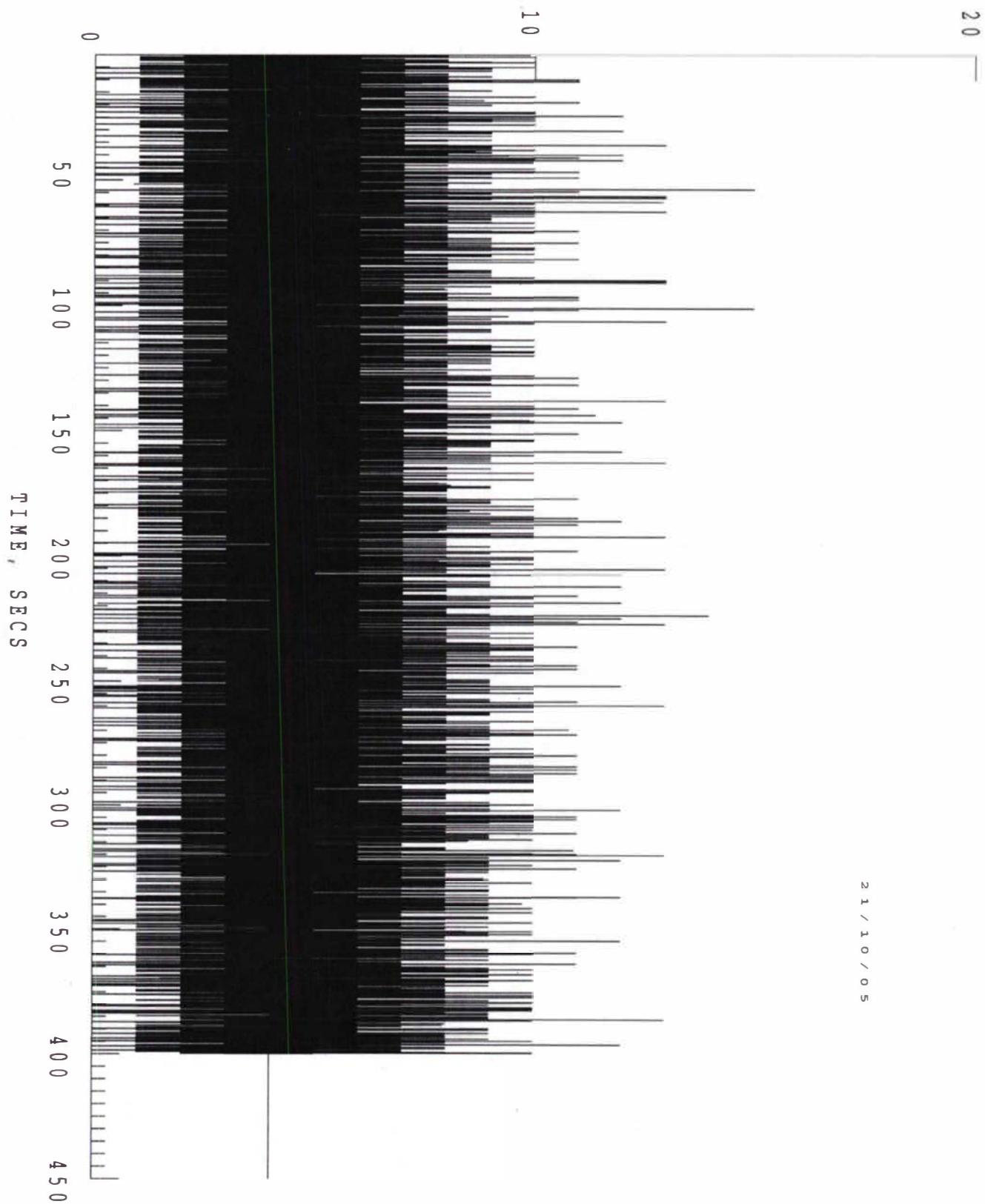


HESSI

21/10/05 51468.000 (GHETE_3948_1_20051021_51668)

25- 150 keV

COUNTS/0.031 S



21/10/05

From vxw@capella.gsfc.nasa.gov Fri Oct 21 16:35:30 2005
X-ASG-Debug-ID: 1129937763-4295-3-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
v-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Fri, 21 Oct 2005 19:36:02 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/SWIFT_BAT_LIGHTCURVE
Subject: GCN/SWIFT_BAT_LIGHTCURVE
Mime-Version: 1.0
Content-Disposition: inline
User-Agent: Mutt/1.4.2.1i

46.5s

$8.35 \times 10^{-7} \text{ erg cm}^{-2}$

Added to ACCESS

TITLE: GCN/SWIFT NOTICE
NOTICE_DATE: Fri 21 Oct 05 23:35:35 UT
NOTICE_TYPE: Swift-BAT GRB Lightcurve
TRIGGER_NUM: 160672, Seg_Num: 0
GRB_RA: 126.037d {+08h 24m 09s} (J2000),
126.085d {+08h 24m 20s} (current),
125.626d {+08h 22m 30s} (1950)
GRB_DEC: -45.519d {-45d 31' 09"} (J2000),
-45.538d {-45d 32' 17"} (current),
-45.356d {-45d 21' 22"} (1950)
GRB_DATE: 13664 TJD; 294 DOY; 05/10/21
GRB_TIME: 84713.67 SOD {23:31:53.67} UT
TRIGGER_INDEX: 146
GRB_PHI: -18.68 [deg]
GRB_THETA: 27.32 [deg]
ELTA_TIME: 12.00 [sec]
RIGGER_DUR: 1.024 [sec]
LC_URL: sw00160672000msb.lc
SUN_POSTN: 206.64d {+13h 46m 34s} -11.00d {-11d 00' 01"}
SUN_DIST: 75.58 [deg]
MOON_POSTN: 83.44d {+05h 33m 45s} +28.28d {+28d 16' 38"}
MOON_DIST: 83.36 [deg]
MOON_ILLUM: 78 [%]
GAL_COORDS: 262.68, -4.58 [deg] galactic lon,lat of the pointing direction
ECL_COORDS: 150.21, -61.64 [deg] ecliptic lon,lat of the pointing direction
COMMENTS: SWIFT-BAT GRB Lightcurve.
COMMENTS:
COMMENTS: The next comments were copied from the BAT_POS Notice:
COMMENTS: This is a rate trigger.
COMMENTS: A point_source was found.
COMMENTS: This does not match any source in the on-board catalog.
COMMENTS: This does not match any source in the ground catalog.
COMMENTS: This is a GRB.
COMMENTS: Since the IMAGE_SIGNIF is less than 7 sigma, this is a question

GRB

MCT 84726

From williams@sunspot.ssl.berkeley.edu Thu Jan 19 11:39:38 2006
Date: Thu, 19 Jan 2006 11:47:01 -0800 (PST)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_swift_20051021_84713

HESSI 25 to 100 keV Counts
Created 19-Jan-2006 11:38:26.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.500000
Full time range in SAA
Time Range Partially in eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

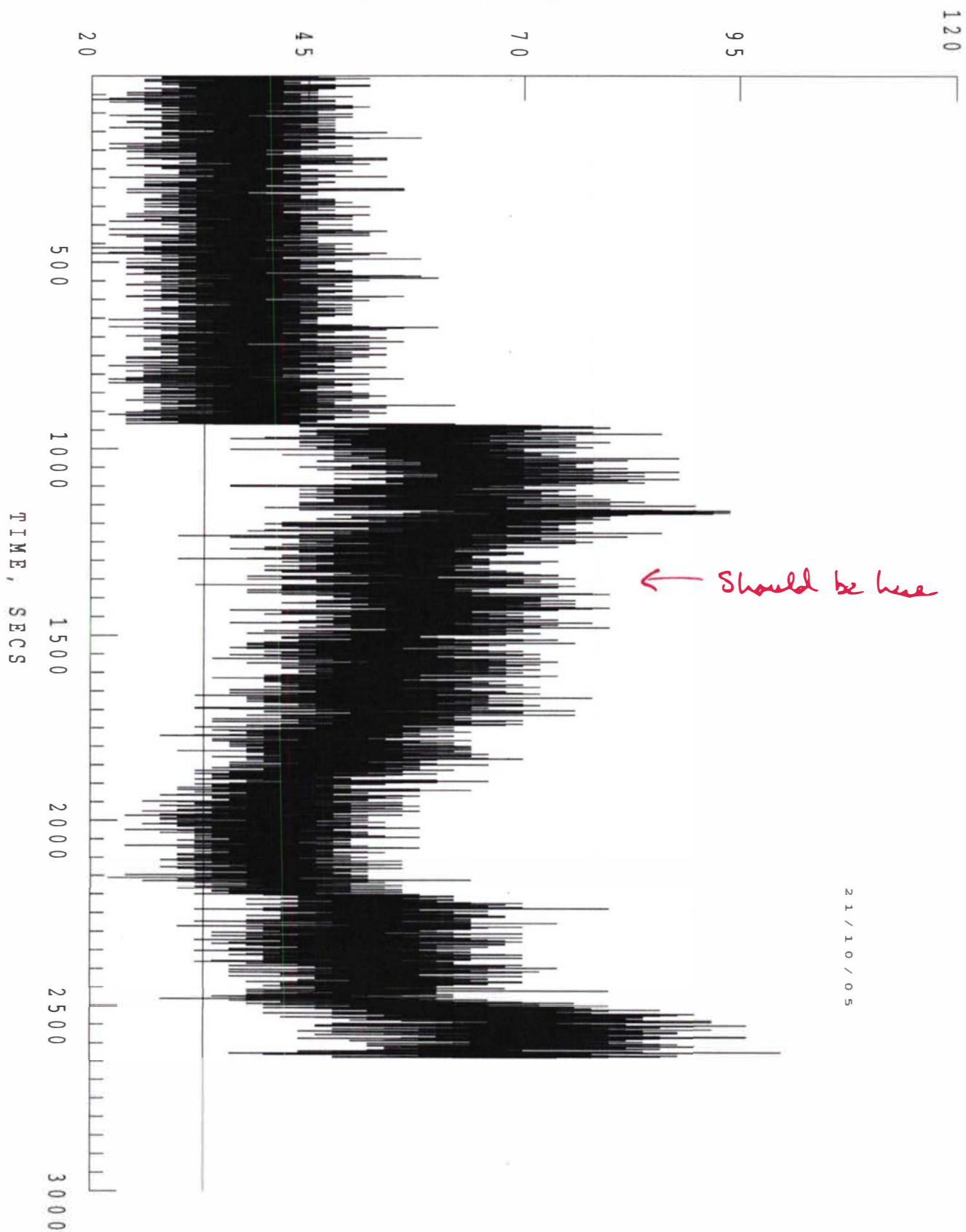
MS01

21/10/05

83373.220

50 - 3000 keV

COUNTS/0.250 S



21/10/05

From gcncirc@capella.gsfc.nasa.gov Thu Oct 27 01:10:15 2005
X-ASG-Debug-ID: 1130400651-7109-1-0
X-Barracuda-URL: <http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi>
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: SGR 1806-20: continued moderate activity seen with INTEGRAL
Subject: SGR 1806-20: continued moderate activity seen with INTEGRAL
To: khurley@ssl.berkeley.edu
Date: Thu, 27 Oct 2005 04:10:50 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4168
SUBJECT: SGR 1806-20: continued moderate activity seen with INTEGRAL
DATE: 05/10/27 08:09:41 GMT
FROM: Sandro Mereghetti at IASF/CNR <sandro@mi.iasf.cnr.it>

S. Mereghetti (IASF-Milano), D. Gotz (SAP, Saclay), M. Beck (ISDC, Versoix), J. Borkowski (CAMK, Torun) on behalf of the IBAS Localization Team, and I.F. Mirabel (ESO) on behalf of the INTEGRAL Science Working Team report:

The soft gamma-ray repeater SGR 1806-20 continues to be in an active bursting state. A few normal short bursts have been detected by IBAS in October 2005 (note that SGR 1806-20 was not observed continuously during this period; the INTEGRAL observation log can be found at <http://intweb.esac.esa.int/>).

Burst times, approximate durations, and fluences (15-100 keV) measured with the IBIS/ISGRI instrument are reported below:

Date and UT	Duration (s)	Fluence (erg cm ⁻²)
2005-10-01T07:47:10	0.1	3E-8
2005-10-04T02:54:14	0.1	2E-8
<u>2005-10-22T03:43:40</u>	0.1	4E-8
<u>2005-10-22T07:25:37</u>	0.38	9E-7
2005-10-22T08:52:42	0.07	2E-8
2005-10-25T04:48:31	0.11	2E-8

The burst at 2005-10-22T08:52:42 was followed by a fainter peak 4.4 s later, lasting 0.04 s.

We remind that the occurrence of SGR 1806-20 bursts detected with high signal to noise ratio is reported in real time with IBAS Alert Packets. See <http://ibas.mi.iasf.cnr.it/> for an updated table of all the IBAS Alerts and for information on how to receive the Alert Packets for soft repeaters and type I bursters.

his message can be cited.

From gcncirc@capella.gsfc.nasa.gov Thu Oct 27 01:10:15 2005
X-ASG-Debug-ID: 1130400651-7109-1-0
X-Barracuda-URL: <http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi>
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: SGR 1806-20: continued moderate activity seen with INTEGRAL
Subject: SGR 1806-20: continued moderate activity seen with INTEGRAL
To: khurley@ssl.berkeley.edu
Date: Thu, 27 Oct 2005 04:10:50 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4168
SUBJECT: SGR 1806-20: continued moderate activity seen with INTEGRAL
DATE: 05/10/27 08:09:41 GMT
FROM: Sandro Mereghetti at IASF/CNR <sandro@mi.iasf.cnr.it>

S. Mereghetti (IASF-Milano), D. Gotz (SAP, Saclay), M. Beck (ISDC, Versoix), J. Borkowski (CAMK, Torun) on behalf of the IBAS Localization Team, and I.F. Mirabel (ESO) on behalf of the INTEGRAL Science Working Team report:

The soft gamma-ray repeater SGR 1806-20 continues to be in an active bursting state. A few normal short bursts have been detected by IBAS in October 2005 (note that SGR 1806-20 was not observed continuously during this period; the INTEGRAL observation log can be found at <http://intweb.esac.esa.int/>).

Burst times, approximate durations, and fluences (15-100 keV) measured with the IBIS/ISGRI instrument are reported below:

Date and UT	Duration (s)	Fluence (erg cm ⁻²)
2005-10-01T07:47:10	0.1	3E-8
2005-10-04T02:54:14	0.1	2E-8
2005-10-22T03:43:40	0.1	4E-8
2005-10-22T07:25:37	0.38	9E-7
2005-10-22T08:52:42	0.07	2E-8
2005-10-25T04:48:31	0.11	2E-8

The burst at 2005-10-22T08:52:42 was followed by a fainter peak 4.4 s later, lasting 0.04 s.

We remind that the occurrence of SGR 1806-20 bursts detected with high signal to noise ratio is reported in real time with IBAS Alert Packets. See <http://ibas.mi.iasf.cnr.it/> for an updated table of all the IBAS Alerts and for information on how to receive the Alert Packets for soft repeaters and type I bursters.

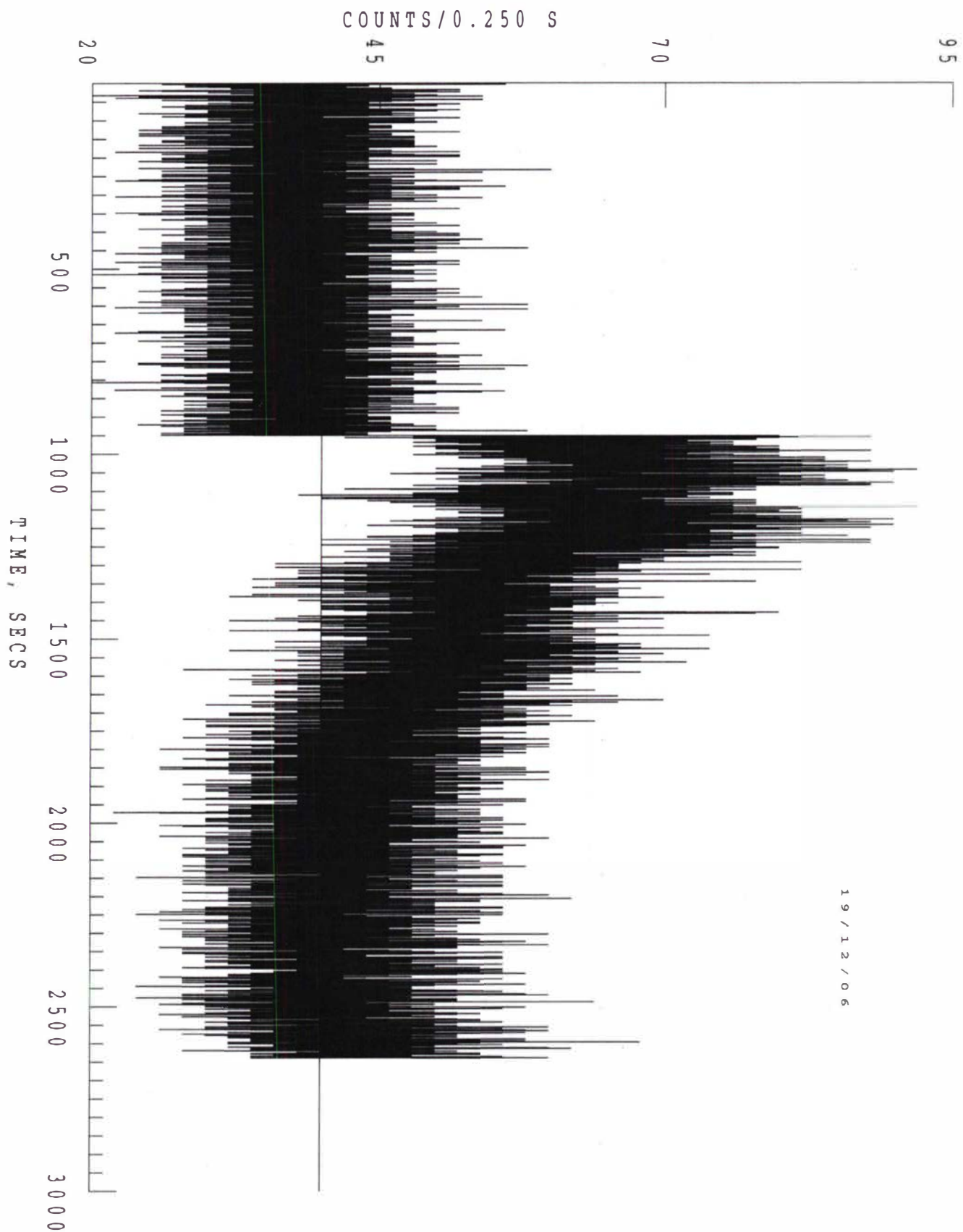
this message can be cited.

MS01

22/10/05

25412.461

50 - 3000 keV

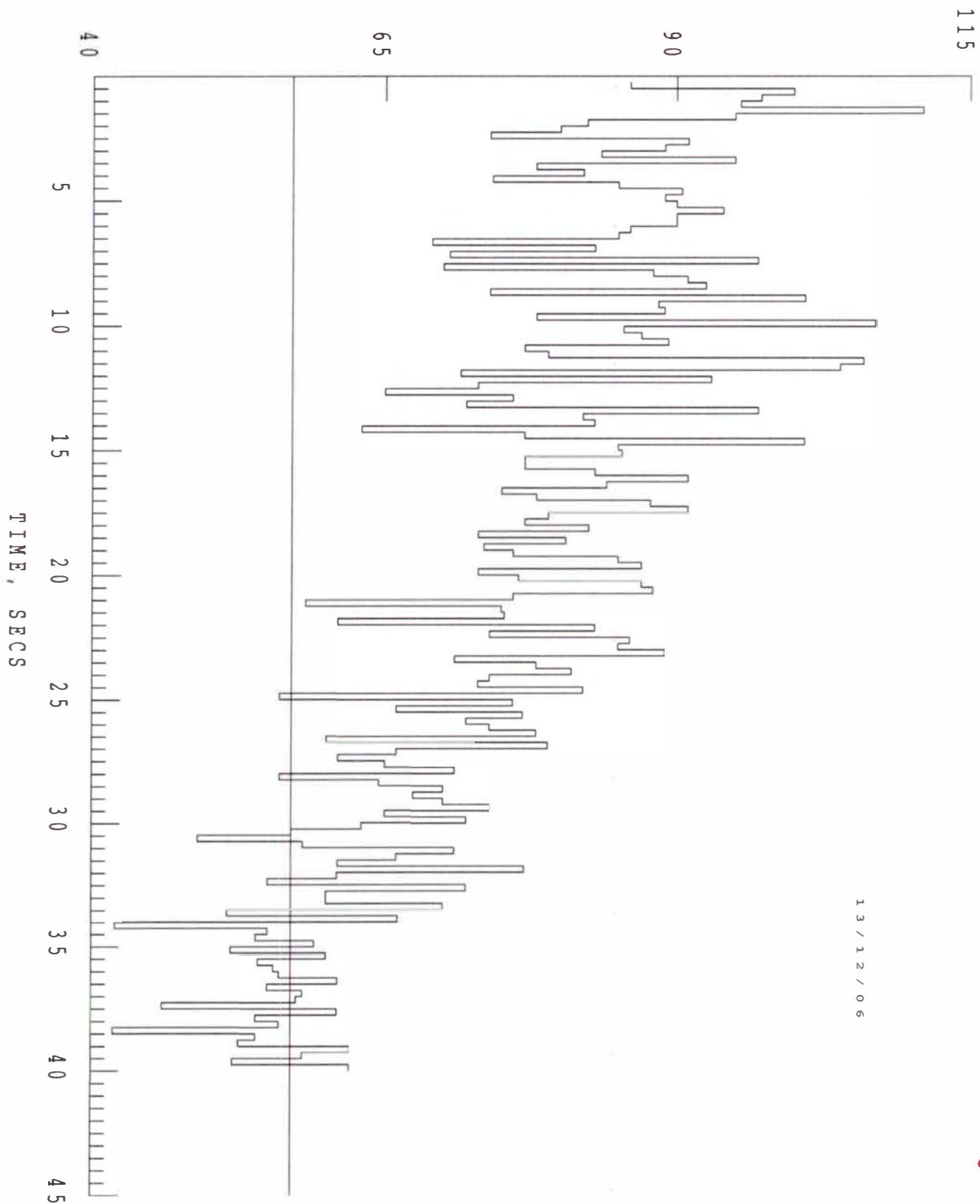


HESSI

22/10/05 26716.000 (SUZAKU_20051022_26736)

25- 150 keV

COUNTS/0.250 S



13 / 12 / 06

No SPI, GRS tugs

From gcncirc@capella.gsfc.nasa.gov Thu Oct 27 01:10:15 2005
X-ASG-Debug-ID: 1130400651-7109-1-0
X-Barracuda-URL: <http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi>
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: SGR 1806-20: continued moderate activity seen with INTEGRAL
Subject: SGR 1806-20: continued moderate activity seen with INTEGRAL
To: khurley@ssl.berkeley.edu
Date: Thu, 27 Oct 2005 04:10:50 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4168
SUBJECT: SGR 1806-20: continued moderate activity seen with INTEGRAL
DATE: 05/10/27 08:09:41 GMT
FROM: Sandro Mereghetti at IASF/CNR <sandro@mi.iasf.cnr.it>

S. Mereghetti (IASF-Milano), D. Gotz (SAP, Saclay), M. Beck (ISDC, Versoix), J. Borkowski (CAMK, Torun) on behalf of the IBAS Localization Team, and I.F. Mirabel (ESO) on behalf of the INTEGRAL Science Working Team report:

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Date and UT	Duration (s)	Fluence (erg cm ⁻²)
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2005-10-22T07:25:37	0.38	9E-7
2005-10-22T08:52:42	0.07	2E-8
2005-10-25T04:48:31	0.11	2E-8

The burst at 2005-10-22T08:52:42 was followed by a fainter peak 4.4 s later, lasting 0.04 s.

We remind that the occurrence of SGR 1806-20 bursts detected with high signal to noise ratio is reported in real time with IBAS Alert Packets. See <http://ibas.mi.iasf.cnr.it/> for an updated table of all the IBAS Alerts and for information on how to receive the Alert Packets for soft repeaters and type I bursters.

his message can be cited.

From gcncirc@capella.gsfc.nasa.gov Sat Oct 22 07:56:08 2005
X-ASG-Debug-ID: 1129993002-27405-5-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: GRB051022 (=H3590), A GRB Detected By HETE
Subject: GRB051022 (=H3590), A GRB Detected By HETE
To: khurley@ssl.berkeley.edu
Date: Sat, 22 Oct 2005 10:56:43 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4131
SUBJECT: GRB051022 (=H3590), A GRB Detected By HETE
DATE: 05/10/22 14:55:35 GMT
FROM: Carlo Graziani at U.Chicago <carlo@oddjob.uchicago.edu>

HETE Fregate, WXM, and SXC detected GRB 051022(=H3590) at 13:07:58 on 22 October 2005. The messages sent from the satellite in real time indicate that the burst is both valid and unusually bright.

Because of a dropout of the internet connection to our ground station at Mayenne, additional no data were downlinked at the last contact: if this dropout persists, we will not have complete spectral and temporal data from GRB051022 until 19h UT.

The HETE team believes that the coordinates distributed in real time are correct, and we urge that followup observations of these coordinates be made.

The localization distributed in real time from the WXM was

RA = 23h 55m 53s, Dec = +19d 37' 43" (J2000)
358.97083 +19.6286
with a 90% confidence error region of 14' radius. **0.233**

The localization distributed in real time from the SXC was

RA = 23h 56m 00s, DEC = +19d 35' 51" (J2000)
359.000 19.5975
with a 90% confidence error radius of 2.5 arcminutes. **0.042**

Since the SXC coordinates cannot be independently verified until after the full data set is downlinked, we urge imaging of the full WXM error region.

From gcncirc@capella.gsfc.nasa.gov Sat Oct 22 10:34:05 2005
X-ASG-Debug-ID: 1130002479-15875-9-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: GRB 051022 (=H3950): SXC Flight Localization is Valid
Subject: GRB 051022 (=H3950): SXC Flight Localization is Valid
To: khurley@ssl.berkeley.edu
Date: Sat, 22 Oct 2005 13:34:38 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4137
SUBJECT: GRB 051022 (=H3950): SXC Flight Localization is Valid
DATE: 05/10/22 17:33:30 GMT
FROM: George Ricker at MIT <grr@space.mit.edu>

GRB 051022 (=H3950): SXC Flight Localization is Valid

K. Tanaka, G. Ricker, J-L. Atteia, N. Kawai, D. Lamb, and S. Woosley,
on behalf of the HETE Science Team;

.. Arimoto, T. Donaghy, E. Fenimore, M. Galassi, C. Graziani, N.
Ishikawa, A. Kobayashi, J. Kotoku, M. Maetou, M. Matsuoka, Y.
Nakagawa, T. Sakamoto, R. Sato, T. Shimokawabe, Y. Shirasaki, S.
Sugita, M. Suzuki, T. Tamagawa, and A. Yoshida, on behalf of the HETE
WXM Team;

N. Butler, G. Crew, J. Doty, G. Prigozhin, R. Vanderspek, J.
Villasenor, J. G. Jernigan, A. Levine, G. Azzibrouck, J. Braga, R.
Manchanda, and G. Pizzichini, on behalf of the HETE Operations and
HETE Optical-SXC Teams;

M. Boer, J-F Olive, J-P Dezalay, and K. Hurley, on behalf of the HETE
FREGATE Team;

report:

The HETE team, after reviewing the the real-time messages from HETE
regarding GRB 051022(=H3950), believes that the SXC real-time
localization of this burst is valid. As reported in GCN Notices
beginning 118 seconds after the initial trigger and in GCN Circular
4131, the SXC real-time localization can be described as a circle
centered at

RA = 23h 56m 00s, DEC = +19d 35' 51" (J2000)

with a 90% confidence error radius of 2.5 arcminutes.

This SXC localization corresponds not only to the highest correlation
peak in the WXM error circle, but also to the highest correlation

peak in the entire SXC field-of-view. Therefore GRB 051022 was sufficiently bright in soft X-rays that the SXC position was determined independently of the WXM result.

In addition, there is good reason to believe that the duration of GRB 051022 is > 2 -4 minutes and that there are periods of low emission during the X-ray prompt emission. These indications, combined with the upper limit of $R > 20$ by Cenko et al (GCN 4134), suggest that searches at NIR and infrared wavelengths for a high redshift object in the SXC error region would be of interest.

Date: Oct 28 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data

N/A

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☐ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☒ Was CHECKMO run to eliminate data gaps?
- ☒ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☒ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☐ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

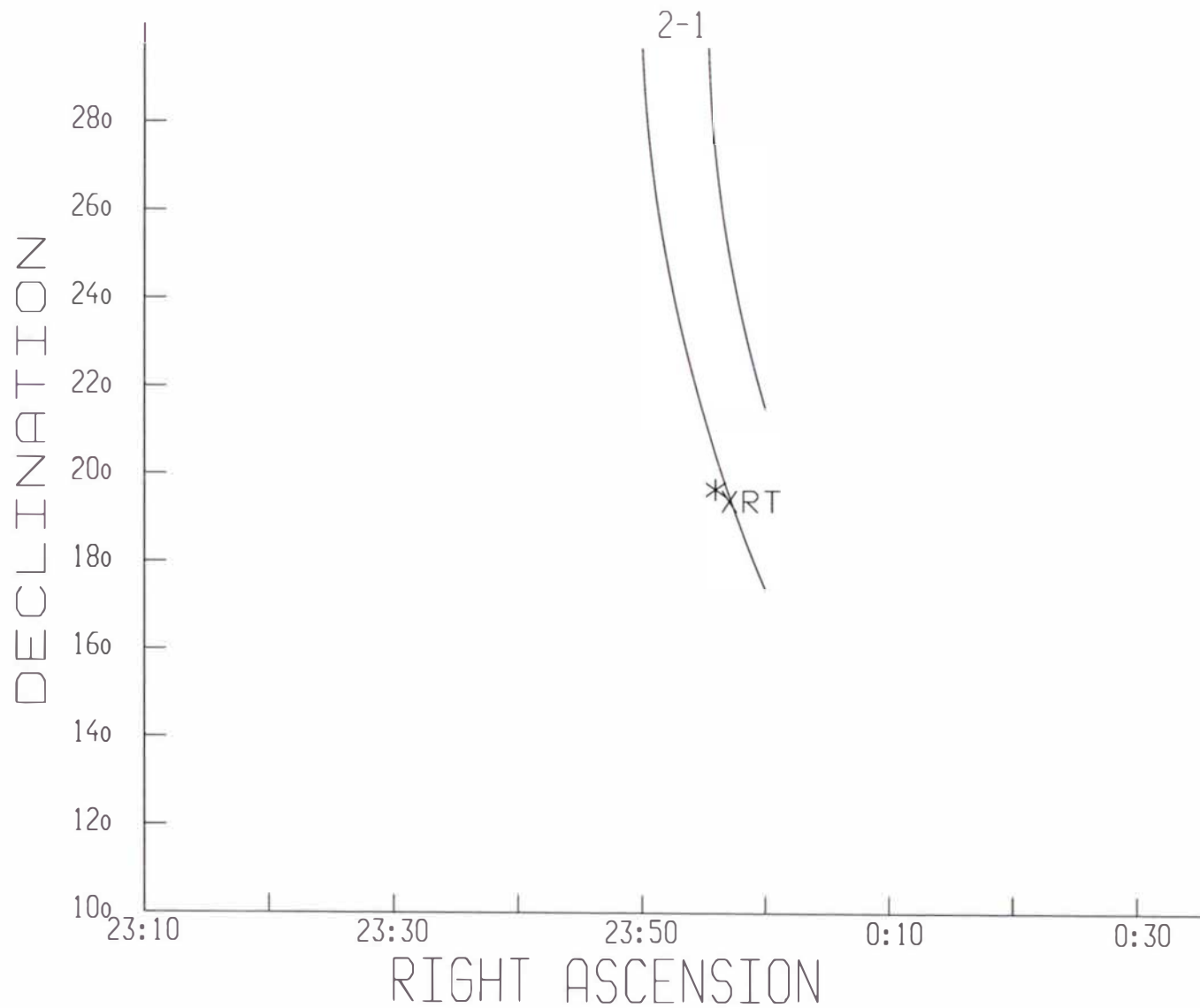
From vxw@capella.gsfc.nasa.gov Sat Oct 22 06:09:12 2005
X-ASG-Debug-ID: 1129986586-13501-1-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Sat, 22 Oct 2005 09:09:45 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/HETE_POSITION
Subject: GCN/HETE_POSITION
X-Virus-Scanned: by Barracuda Spam Firewall at ssl.berkeley.edu
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=1.0 QUA

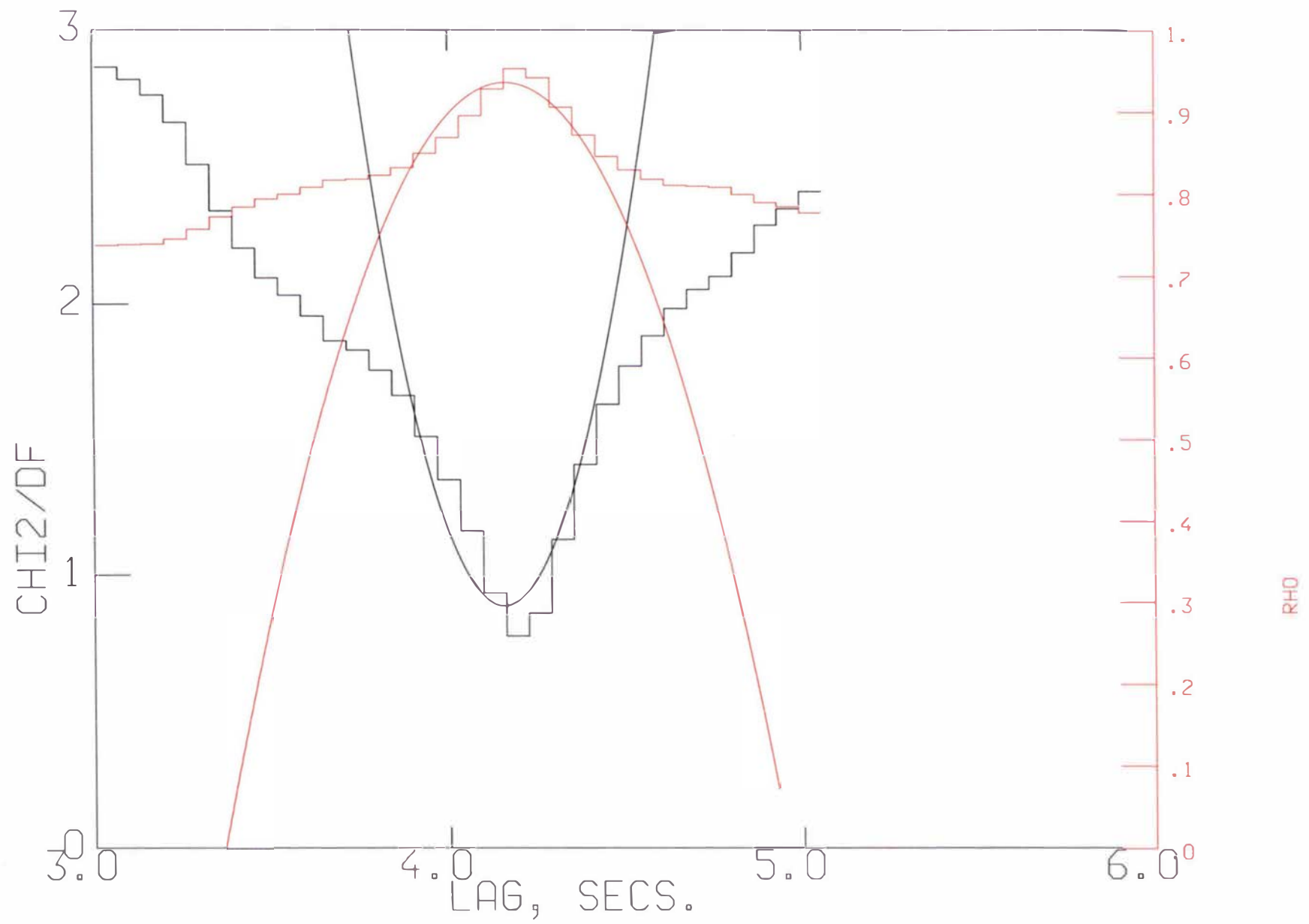
TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Sat 22 Oct 05 13:08:43 UT
NOTICE_TYPE: HETE S/C Update
TRIGGER_NUM: 3950, Seq_Num: 2
GRB_DATE: 13665 TJD; 295 DOY; 05/10/22
GRB_TIME: 47278.49 SOD {13:07:58.49} UT
TRIGGER_SOURCE: Trigger on the 25-400 keV band.
GAMMA_RATE: 118 [cnts/s] on a 5.200 [sec] timescale
SC_Z_RA: 16 [deg]
SC_Z_DEC: 11 [deg]
SC_LONG: 136 [deg East]
WXM_CNTR_RA: 358.937d {+23h 55m 45s} (J2000),
359.012d {+23h 56m 03s} (current),
358.299d {+23h 53m 12s} (1950)
WXM_CNTR_DEC: +19.669d {+19d 40' 08"} (J2000),
+19.701d {+19d 42' 05"} (current),
+19.391d {+19d 23' 26"} (1950)
WXM_MAX_SIZE: 28.00 [arcmin] diameter
WXM_LOC_SN: 17 sig/noise (pt src in image)
WXM_IMAGE_SN: X= 15.5 Y= 7.0 [sig/noise]
WXM_LC_SN: X= 20.7 Y= 7.5 [sig/noise]
SUN_POSTN: 207.18d {+13h 48m 43s} -11.20d {-11d 12' 01"}
SUN_DIST: 151.60 [deg]
MOON_POSTN: 91.50d {+06h 06m 01s} +28.58d {+28d 34' 49"}
MOON_DIST: 82.80 [deg]
MOON_ILLUM: 73 [%]
GAL_COORDS: 105.38,-41.30 [deg] galactic lon,lat of the burst
ECL_COORDS: 7.14,18.41 [deg] ecliptic lon,lat of the burst
COMMENTS: Probable GRB.
COMMENTS: WXM error box is circular; not rectangular.

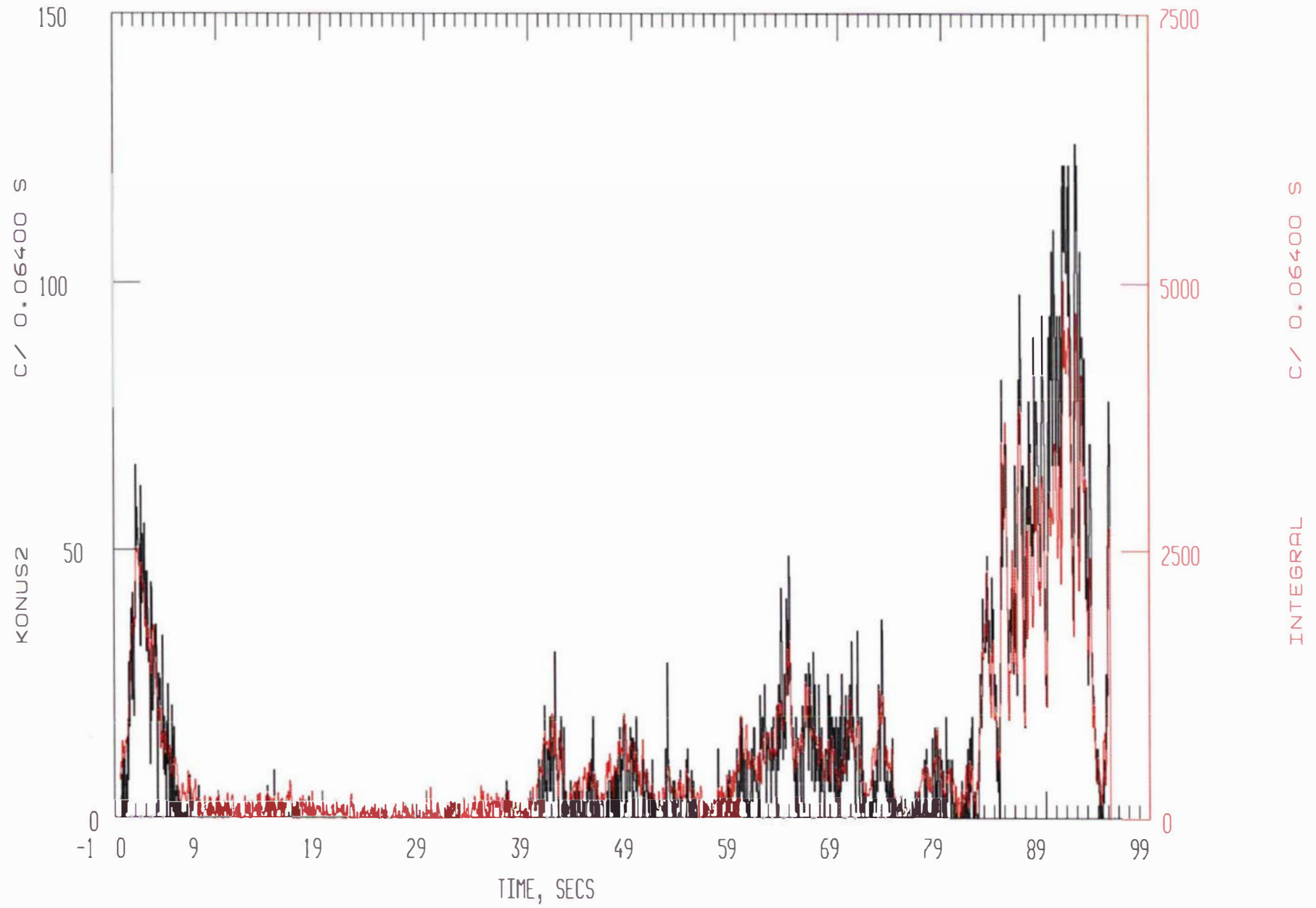
EVENT OF OCT 22, 2005 13:08

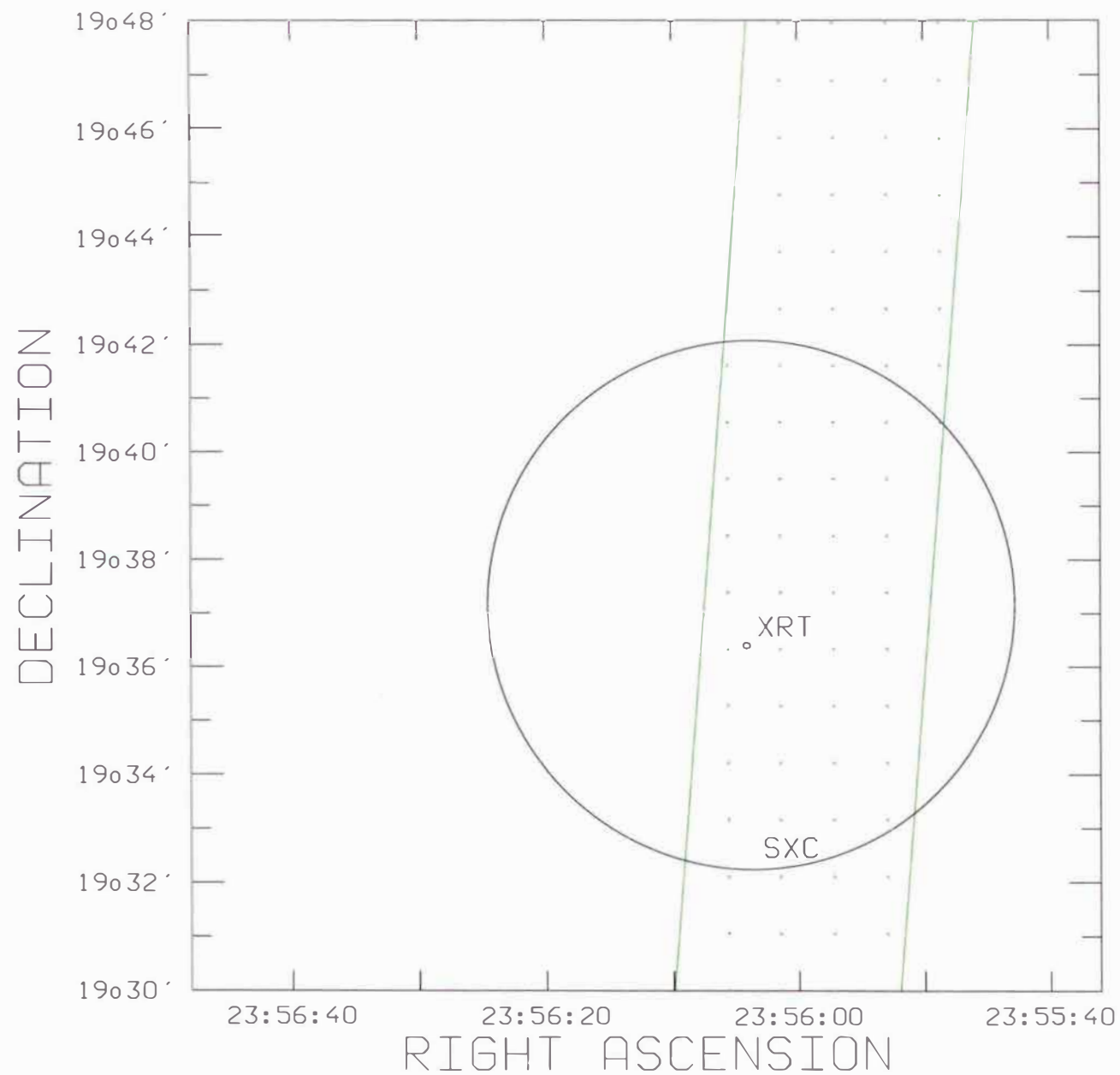
12/12/2011

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









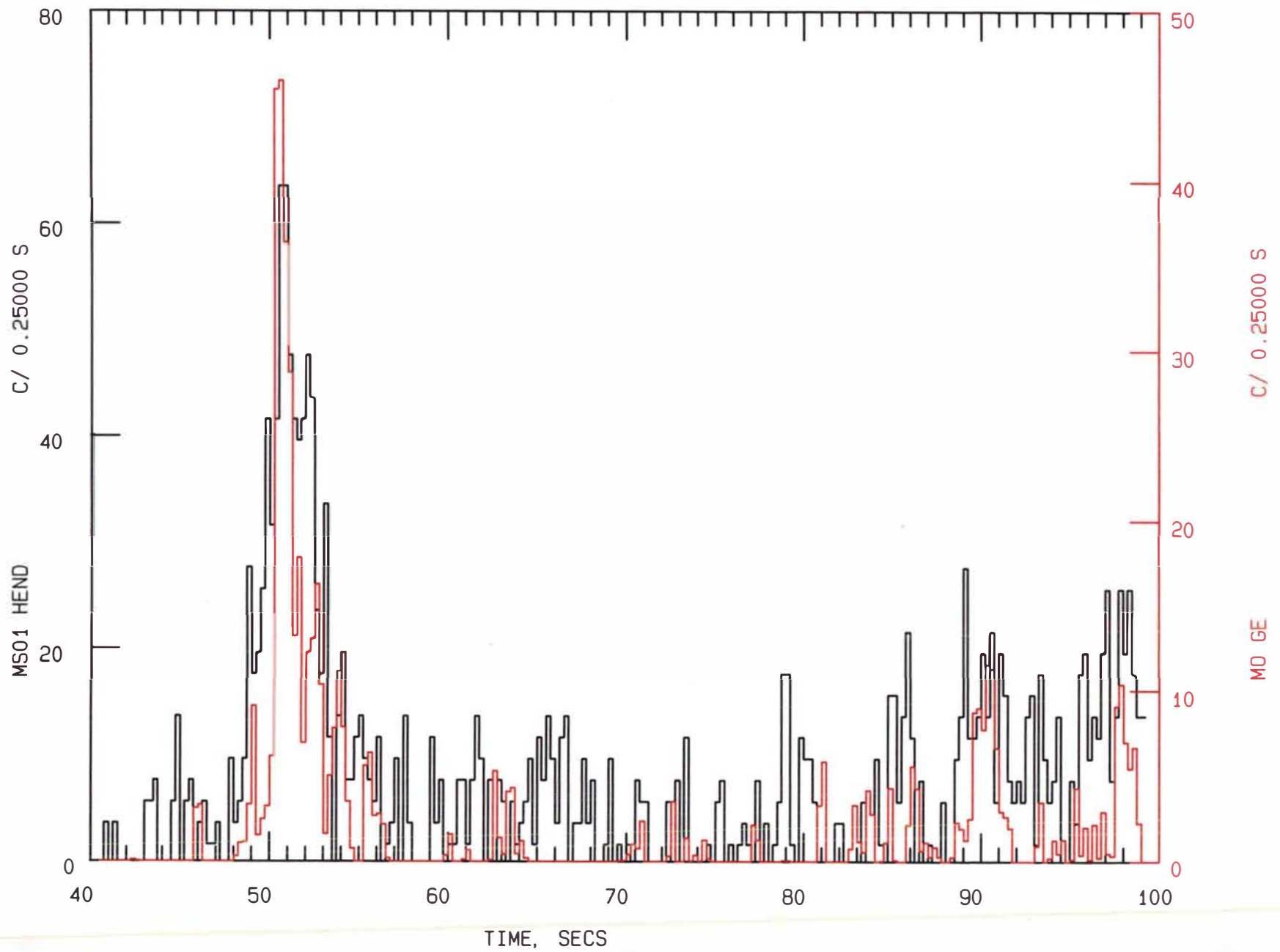
MS01 HEND -MO GE

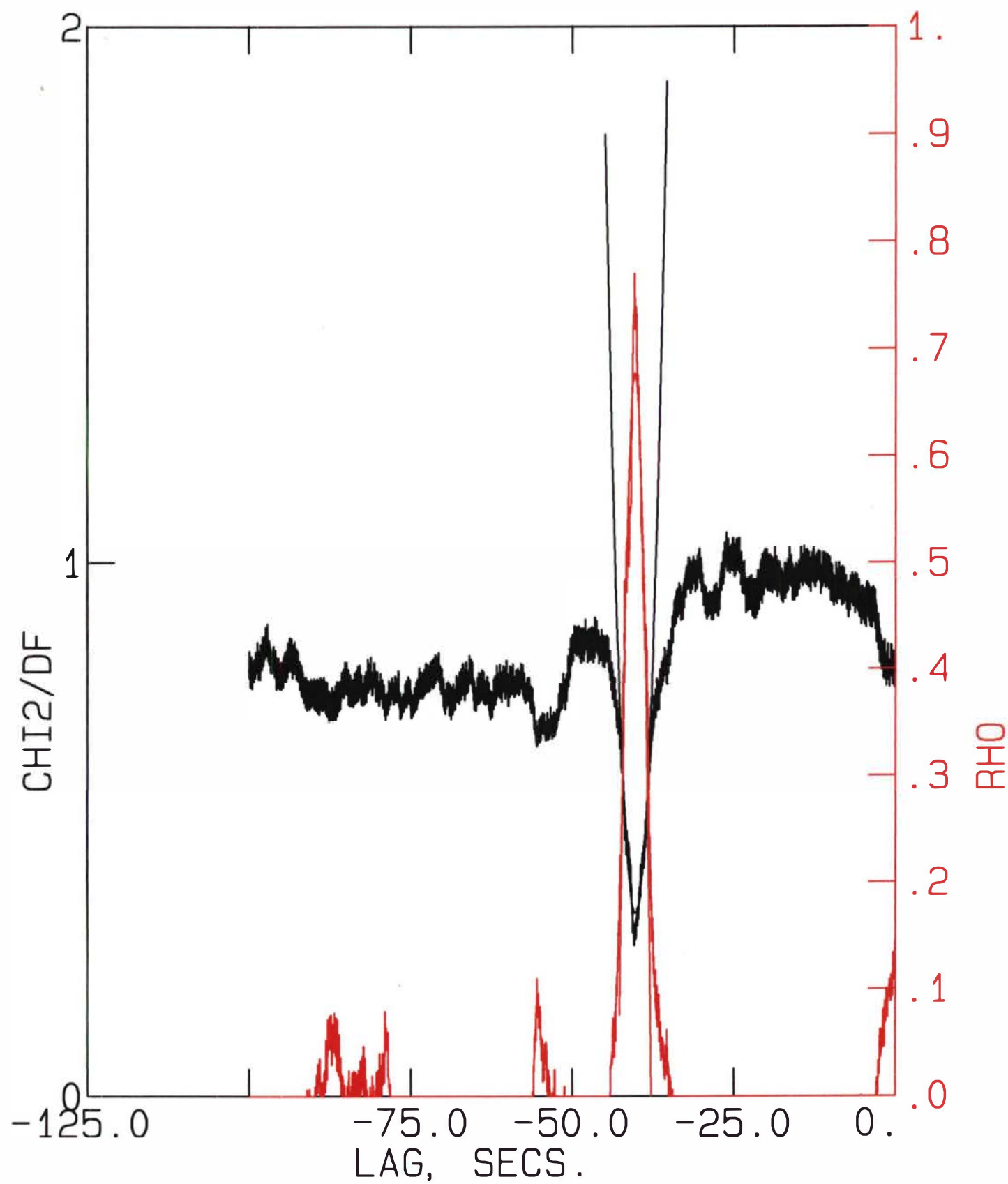
CORRELATION

22/10/05

47092.169

28/10/ 8





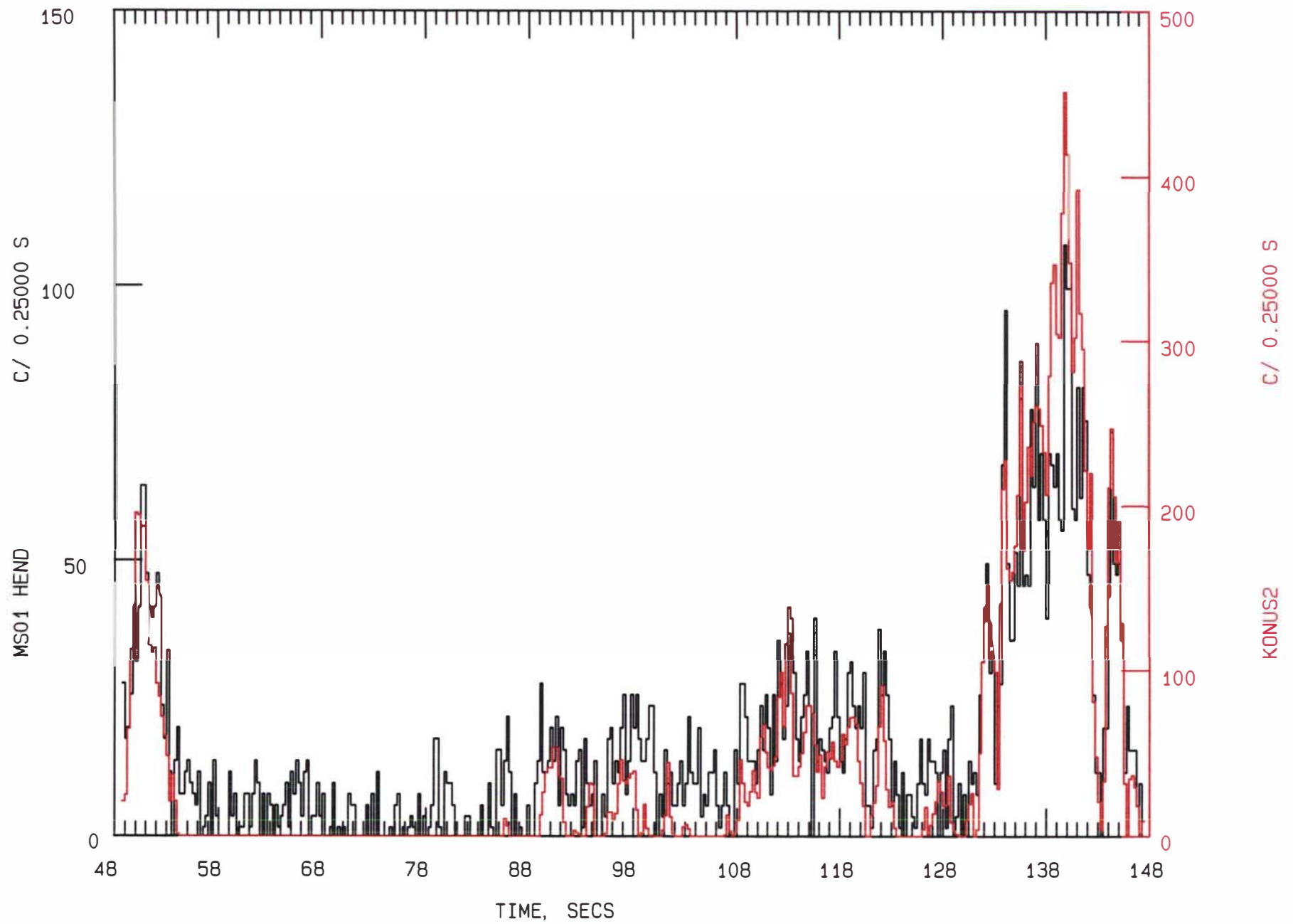
MS01 HEND -KONUS2

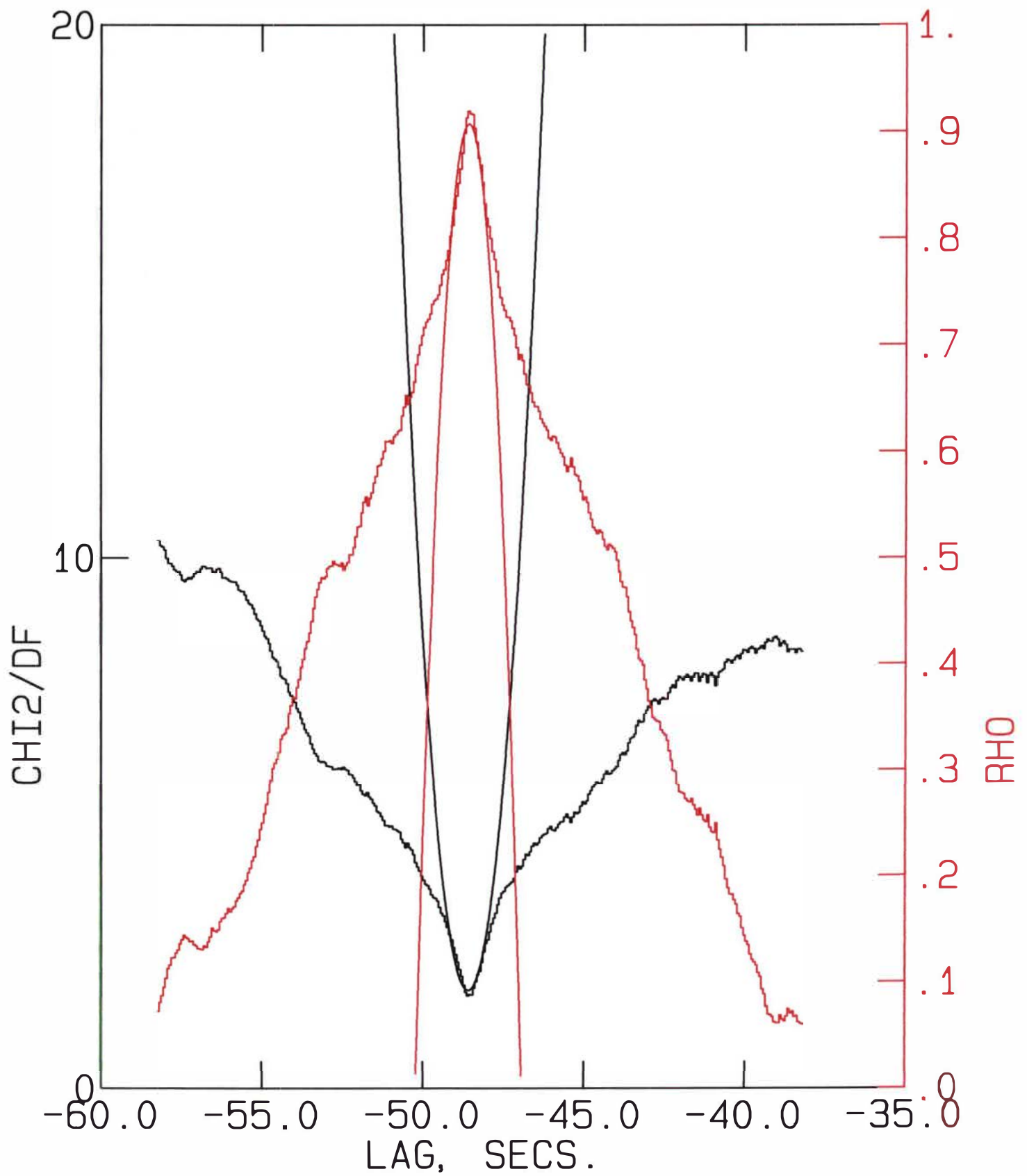
CORRELATION

22/10/05

47092.169

22/10/ 5



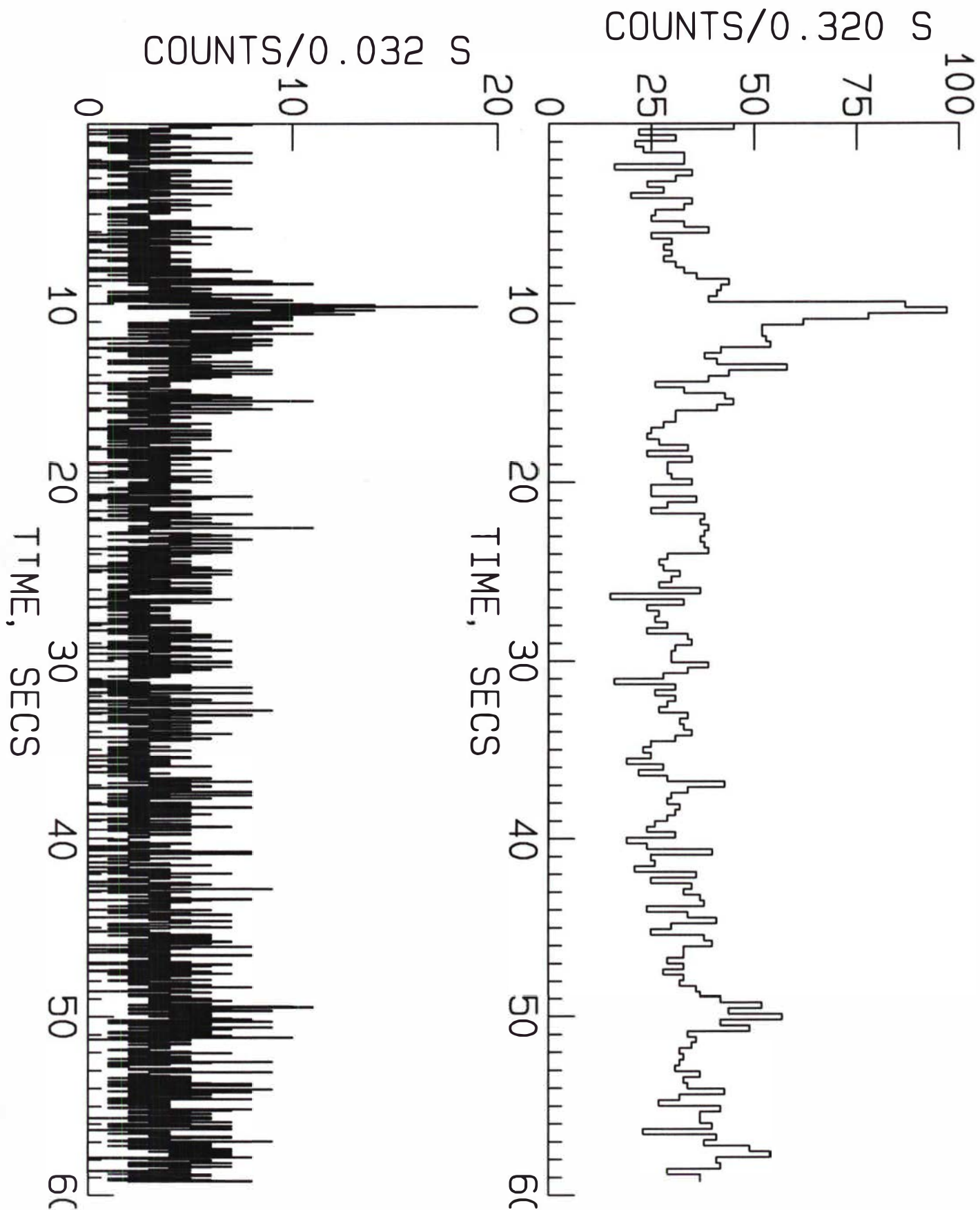


MO GE ' ' 2

05/04/13 35820.850

116- 337 keV

47132

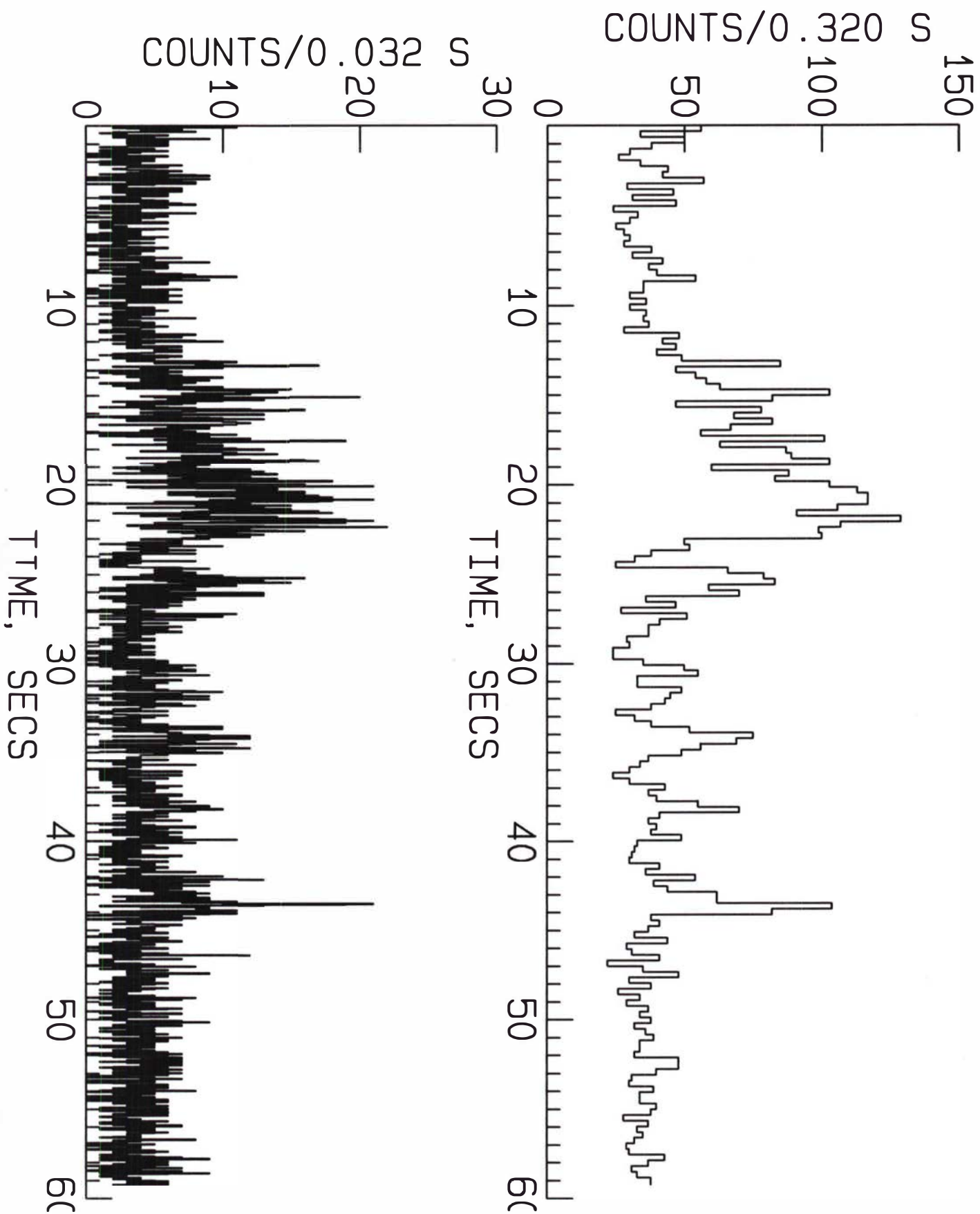


MO GE ' '2

05/04/21 38120.850

116- 337 keV

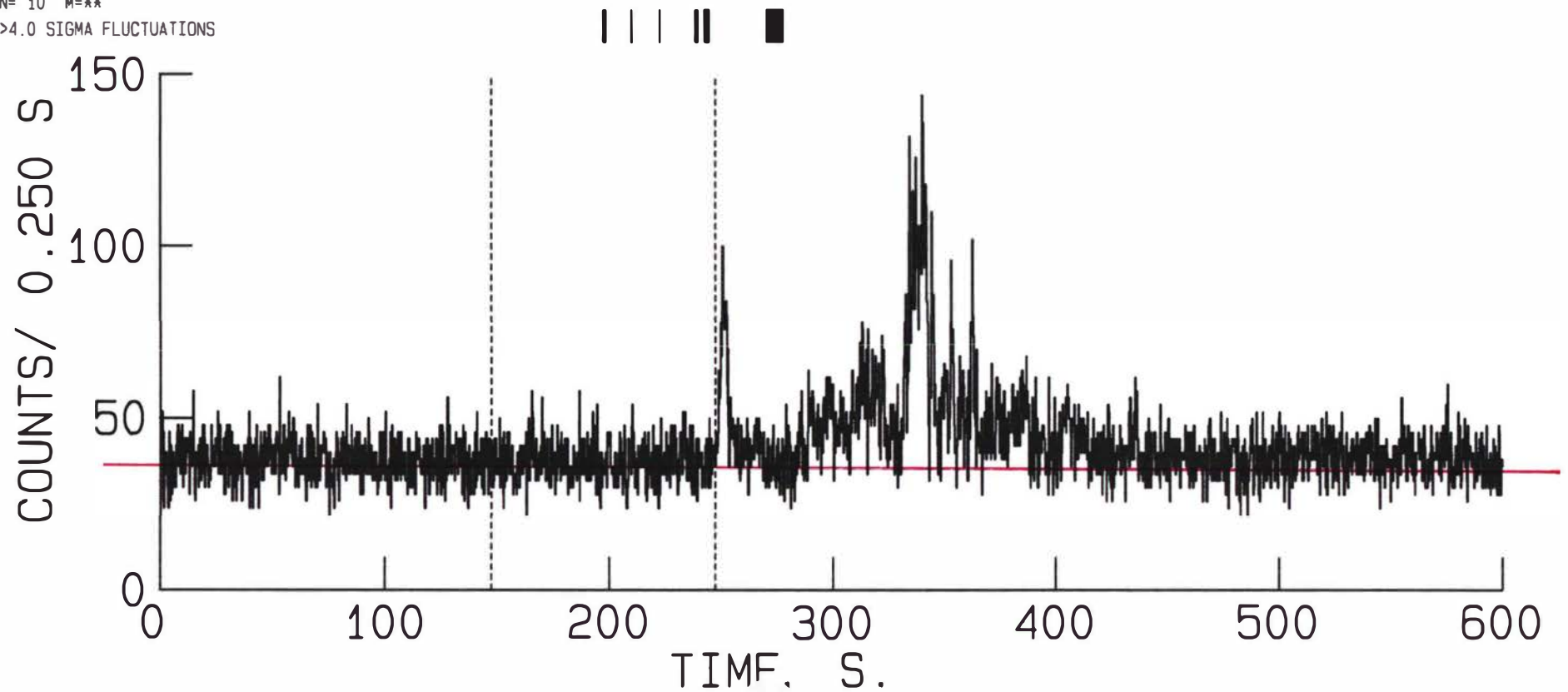
28/10/8



MS01 HEND
22/10/05 46892.172 s
50-3000 keV

22/10/05

N= 10 M=**
>4.0 SIGMA FLUCTUATIONS

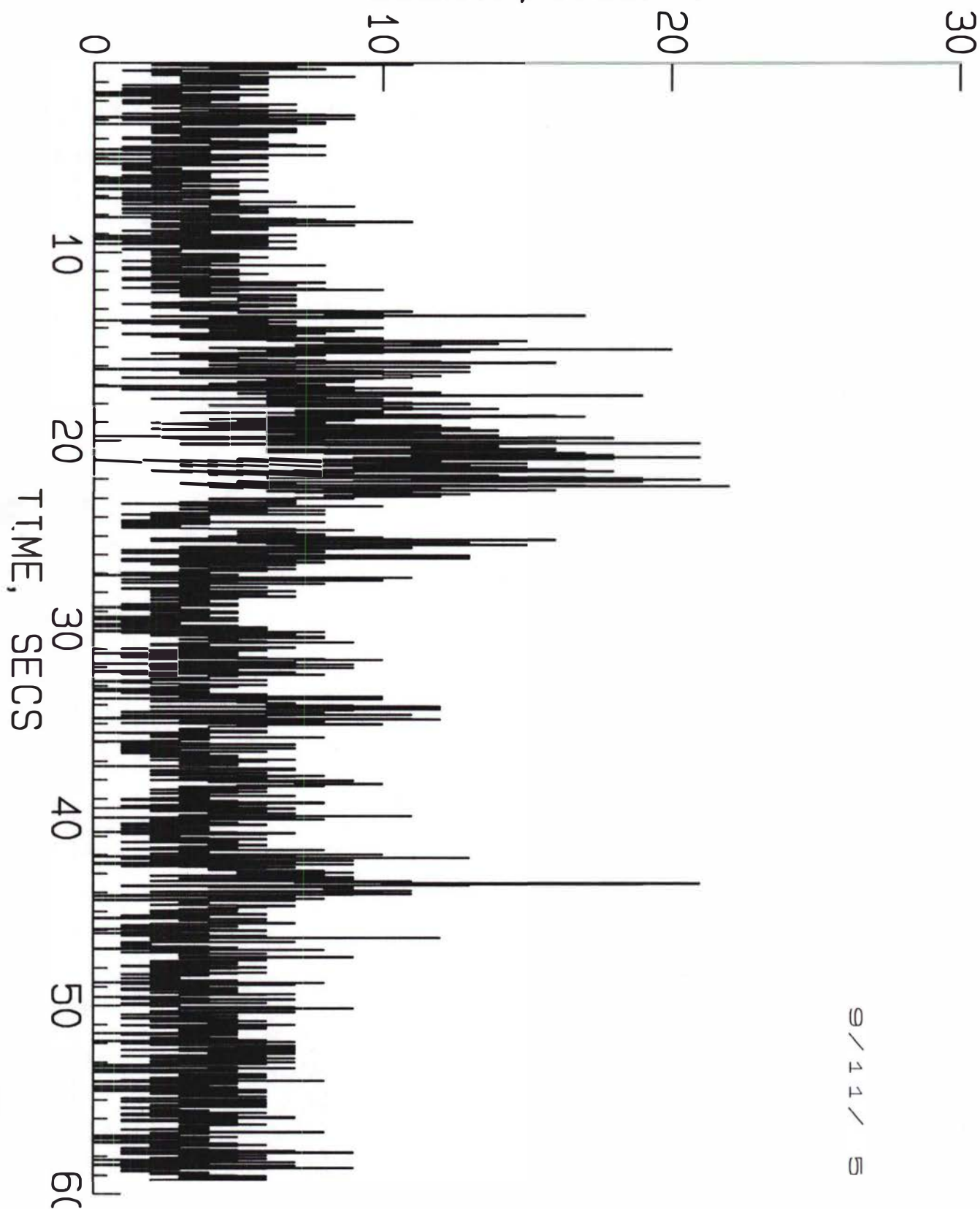


MO HEND

¹⁰ ²²
05/04/21 38120.850
116- 337 keV

~47100

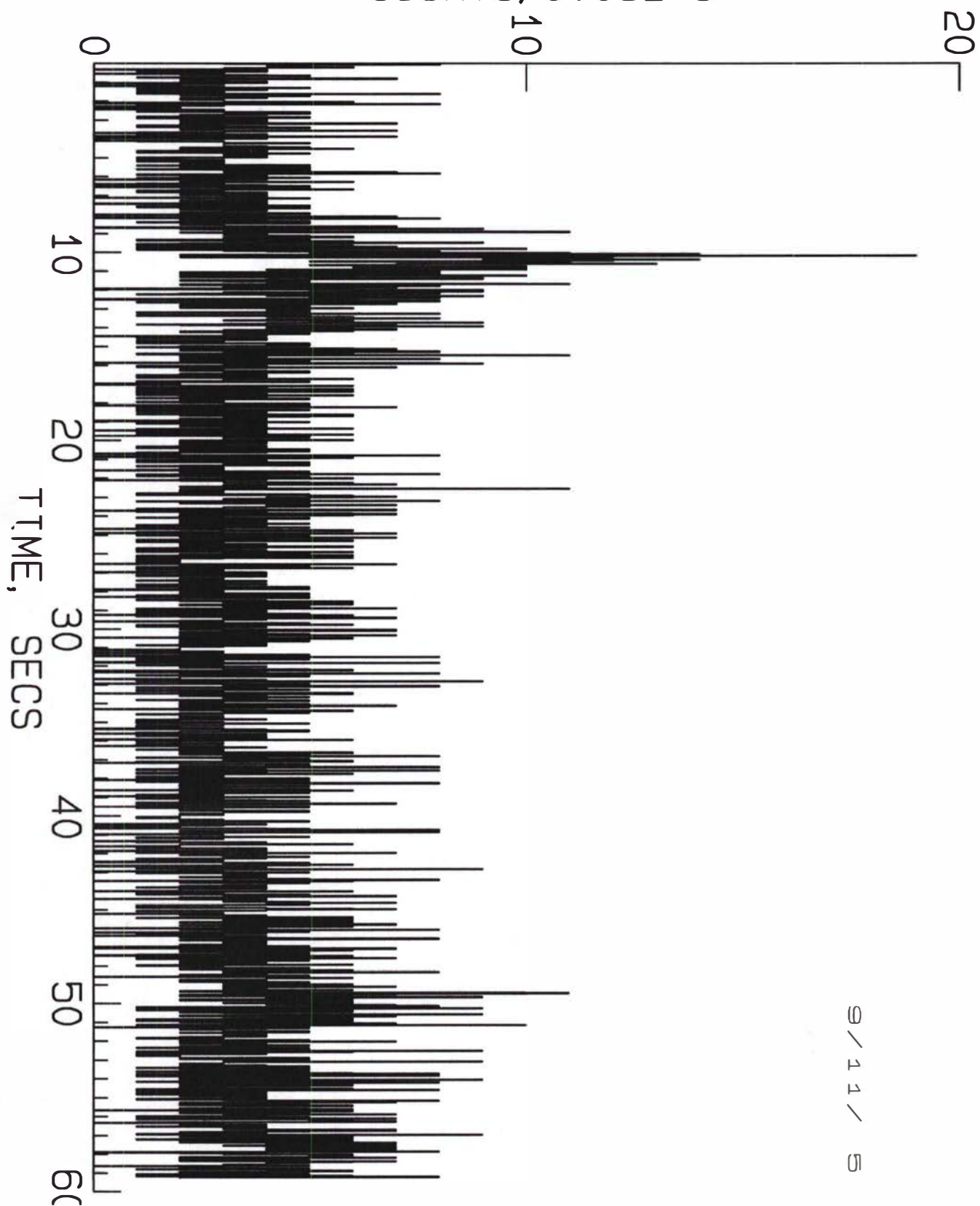
COUNTS/0.032 S



MO HEND

¹⁰ ²²
05/~~04~~/13 35820.850
116- 337 keV

COUNTS/0.032 S

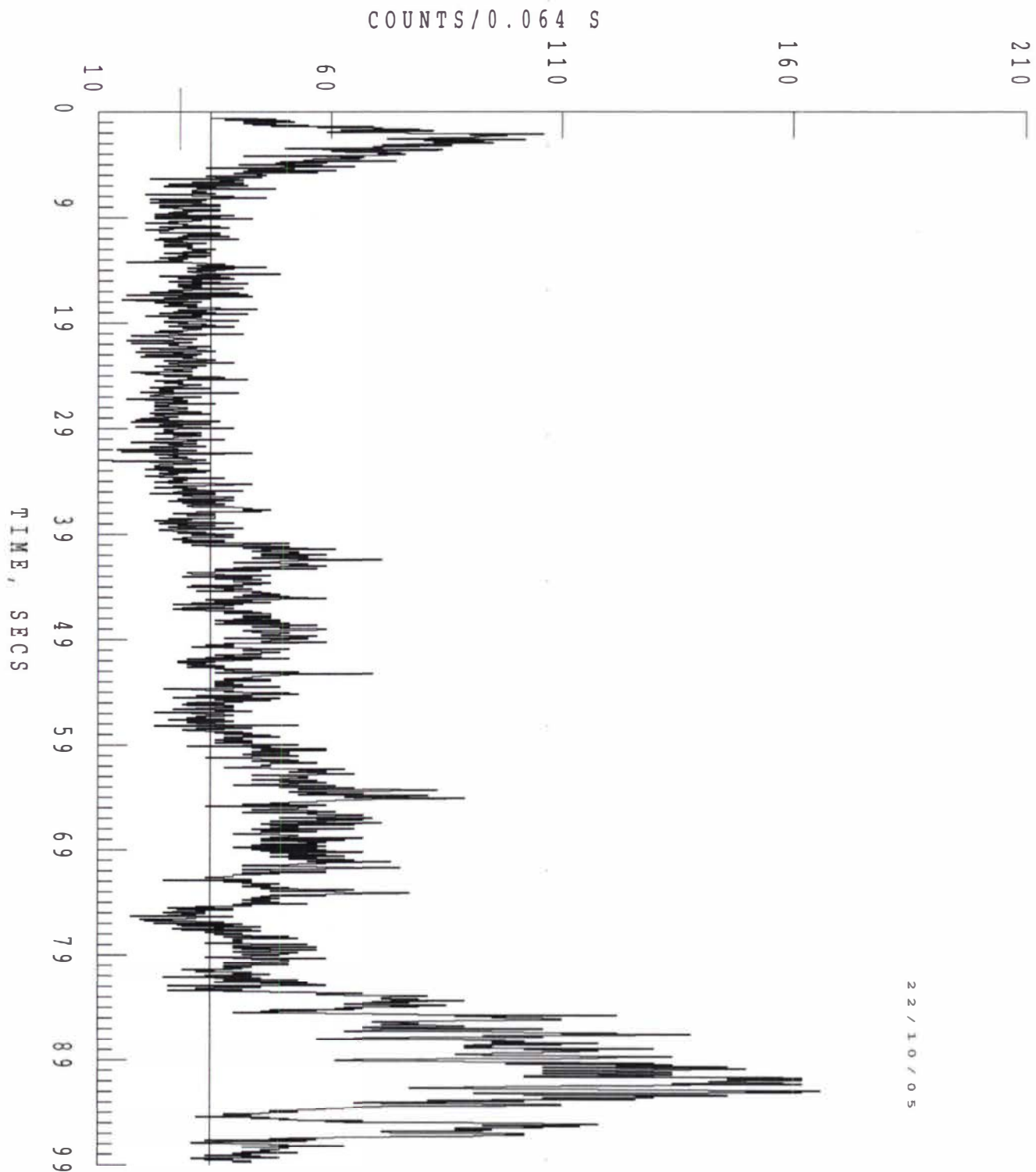


KONUS2

22/10/05

47305.298

50 - 200 keV



22/10/05

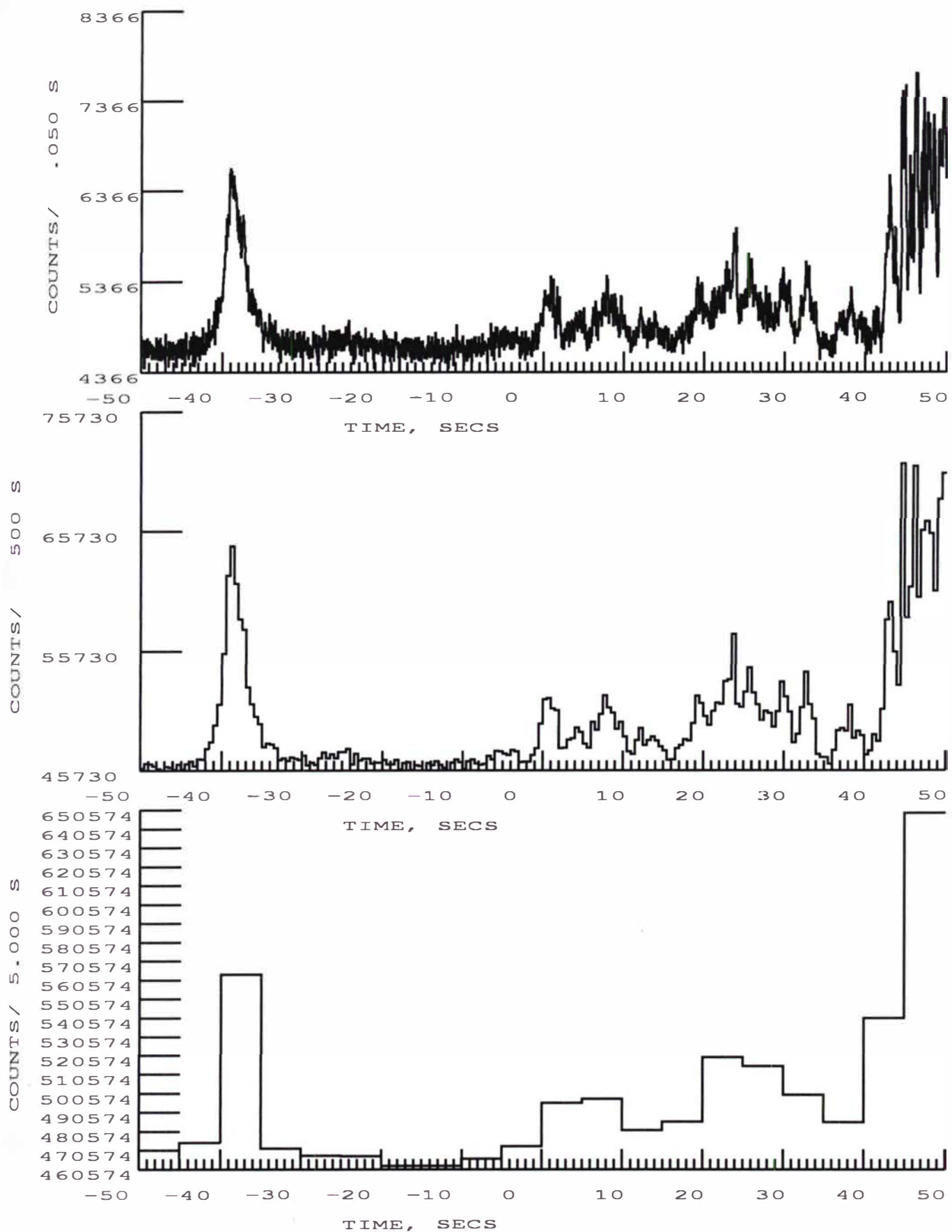
INTEGRAL

22/10/05

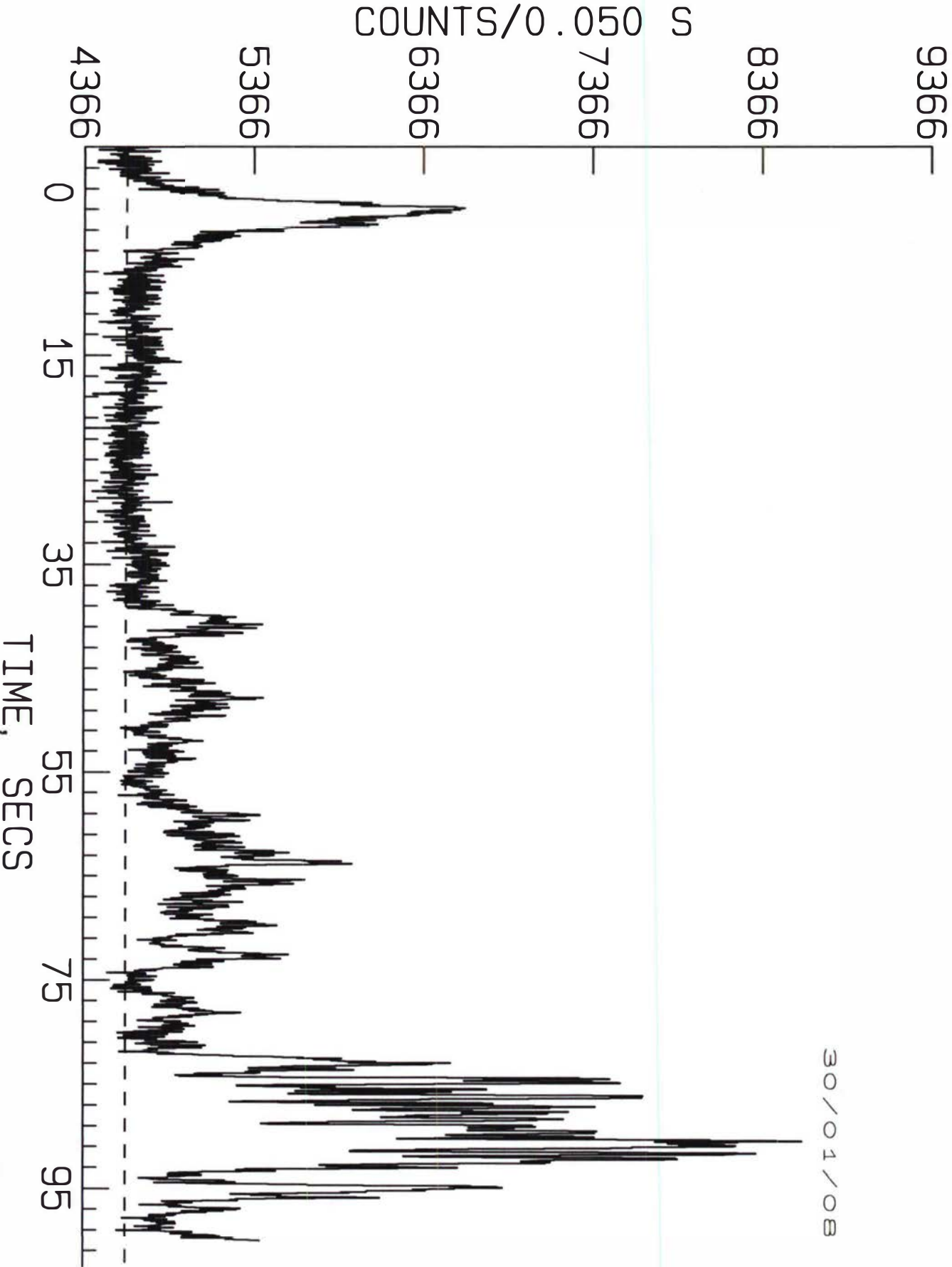
47342.000

13:09:02.0

27/08/15



INTEGRAL 22/10/05 47302.079 13: 08: 22.0
100-10000 keV



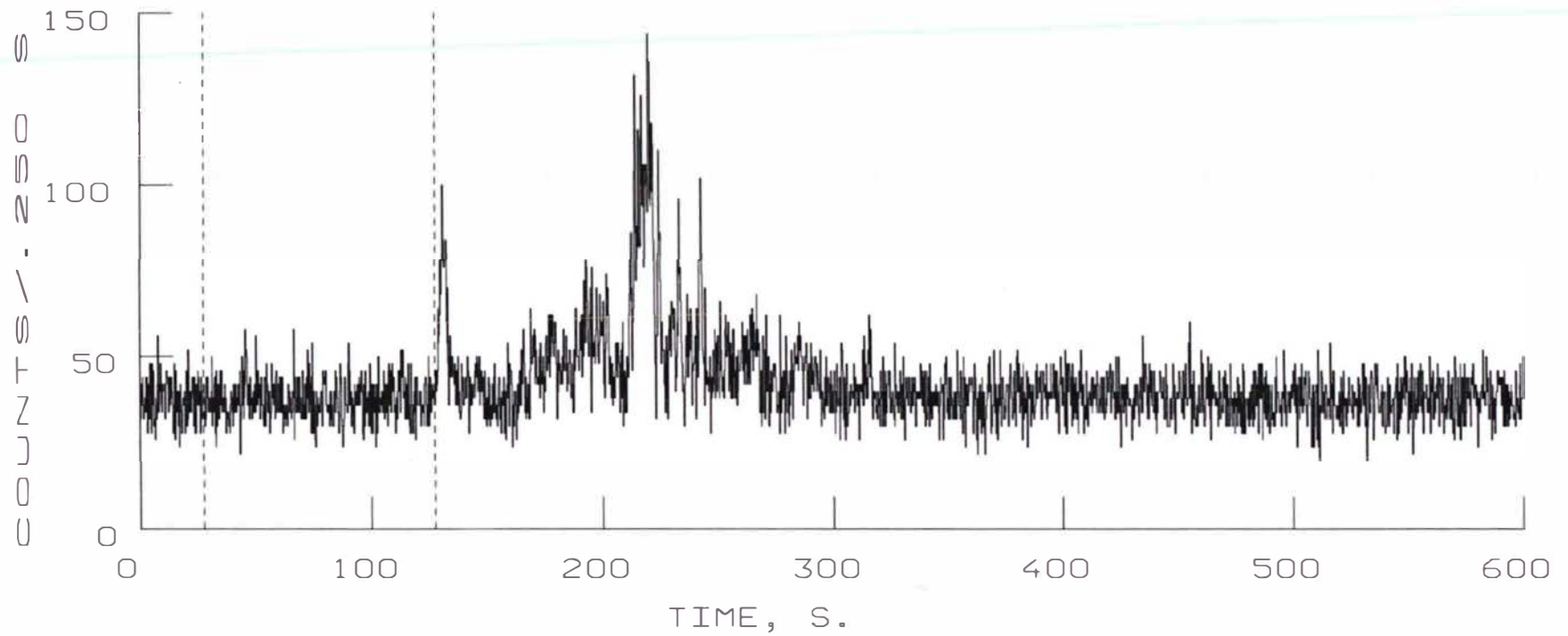
MS01 HEND

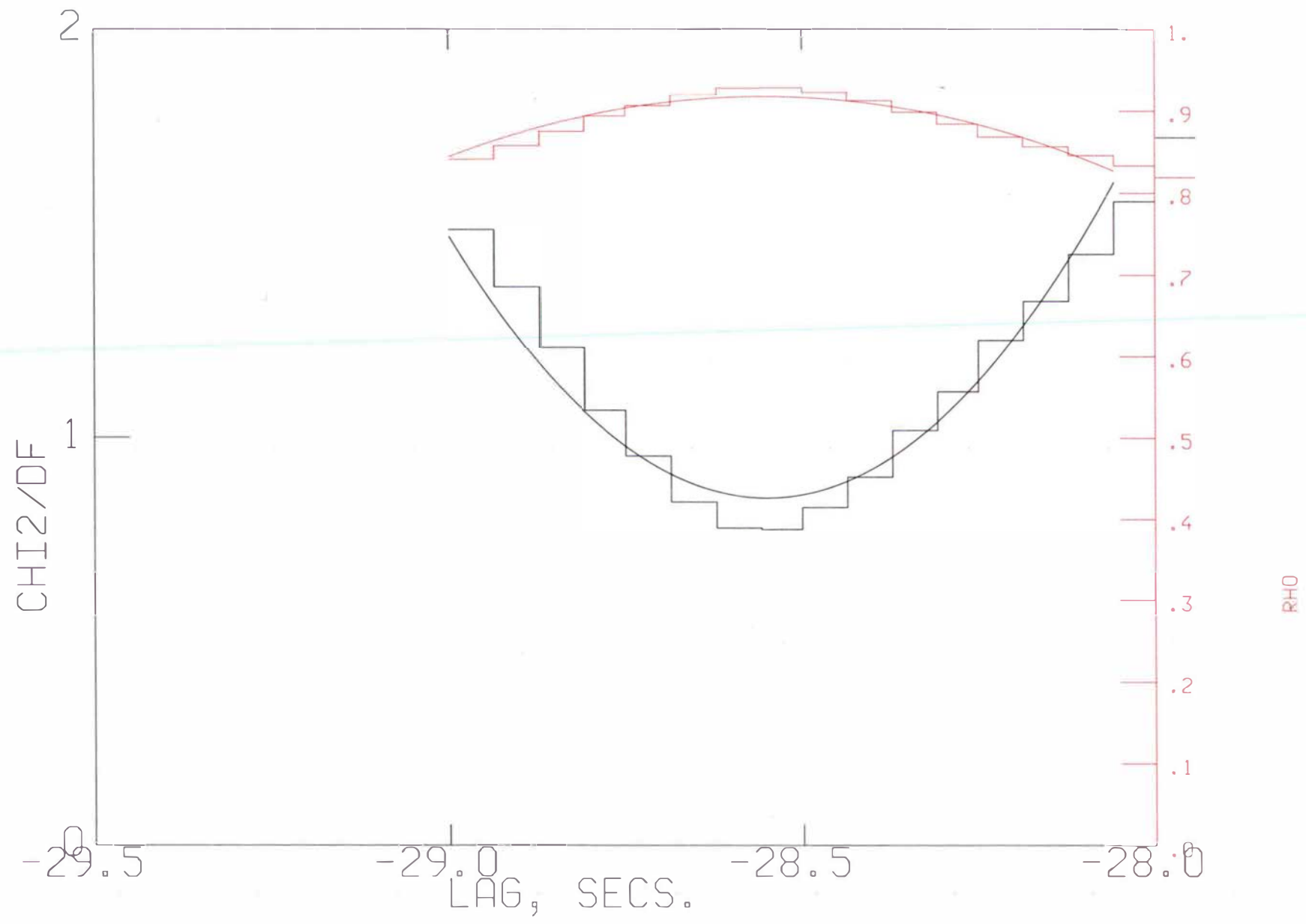
25/02/2014

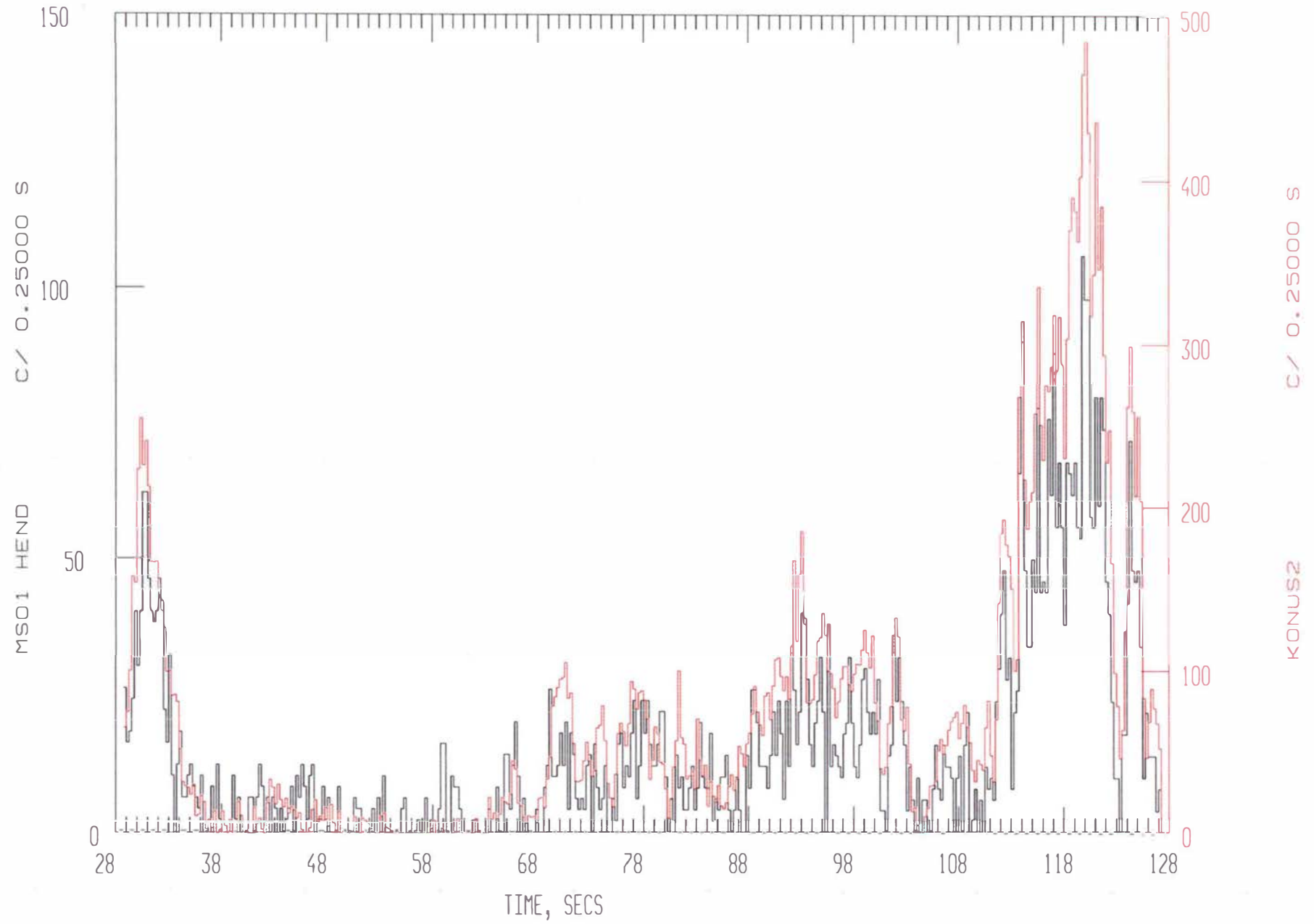
22/10/2005 47012.090 s

50-3000 keV

N= 10 M=**
>4.0 SIGMA FLUCTUATIONS





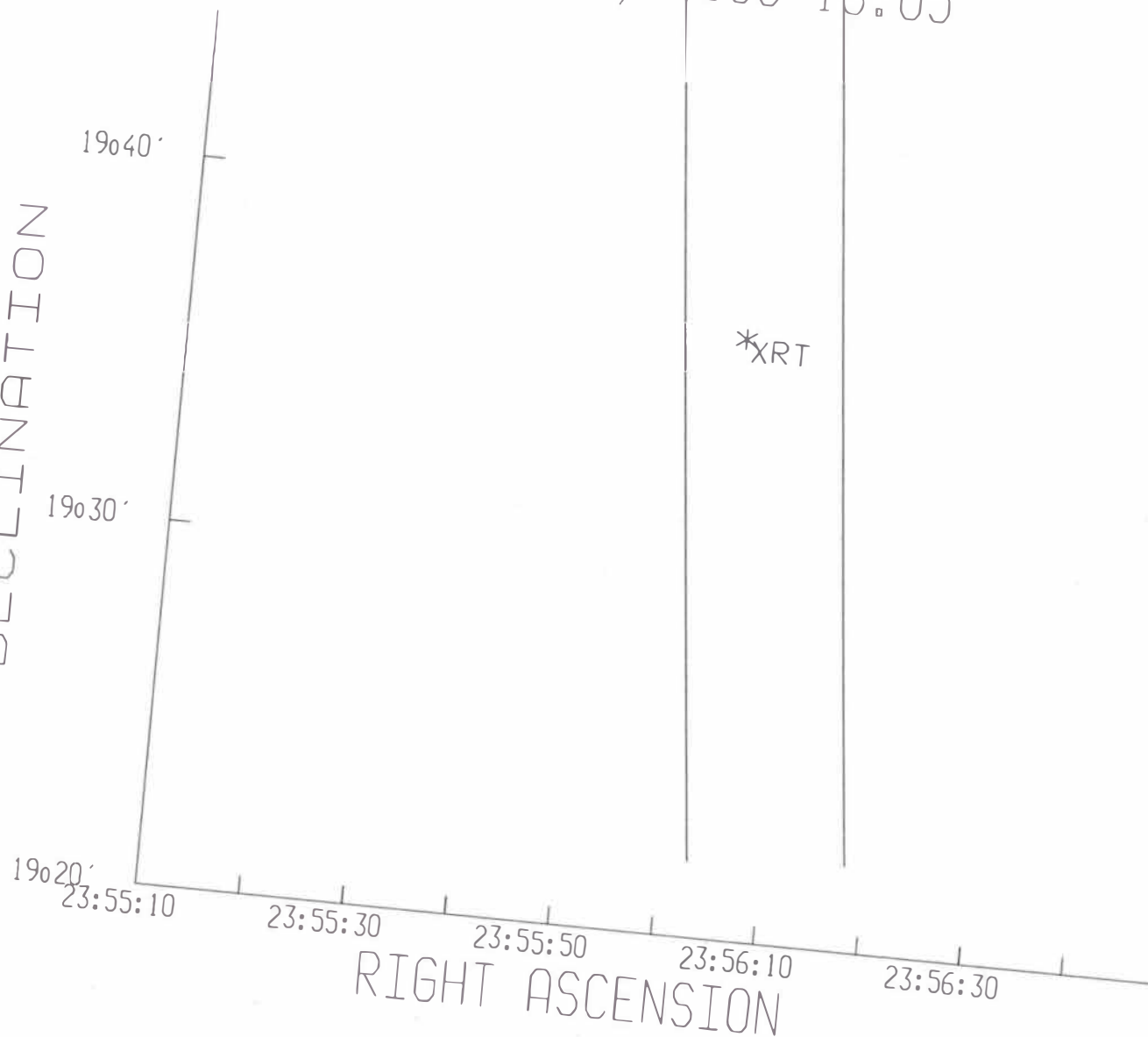


N-M = CORRELATION BETWEEN SATELLITES N AND M
 EARTH-N = EARTH AS SEEN FROM SATELLITE N
 S=SUN
 1 MO
 E=ECLIPTIC
 2 KONUS2
 G=GALACTIC EQUATOR

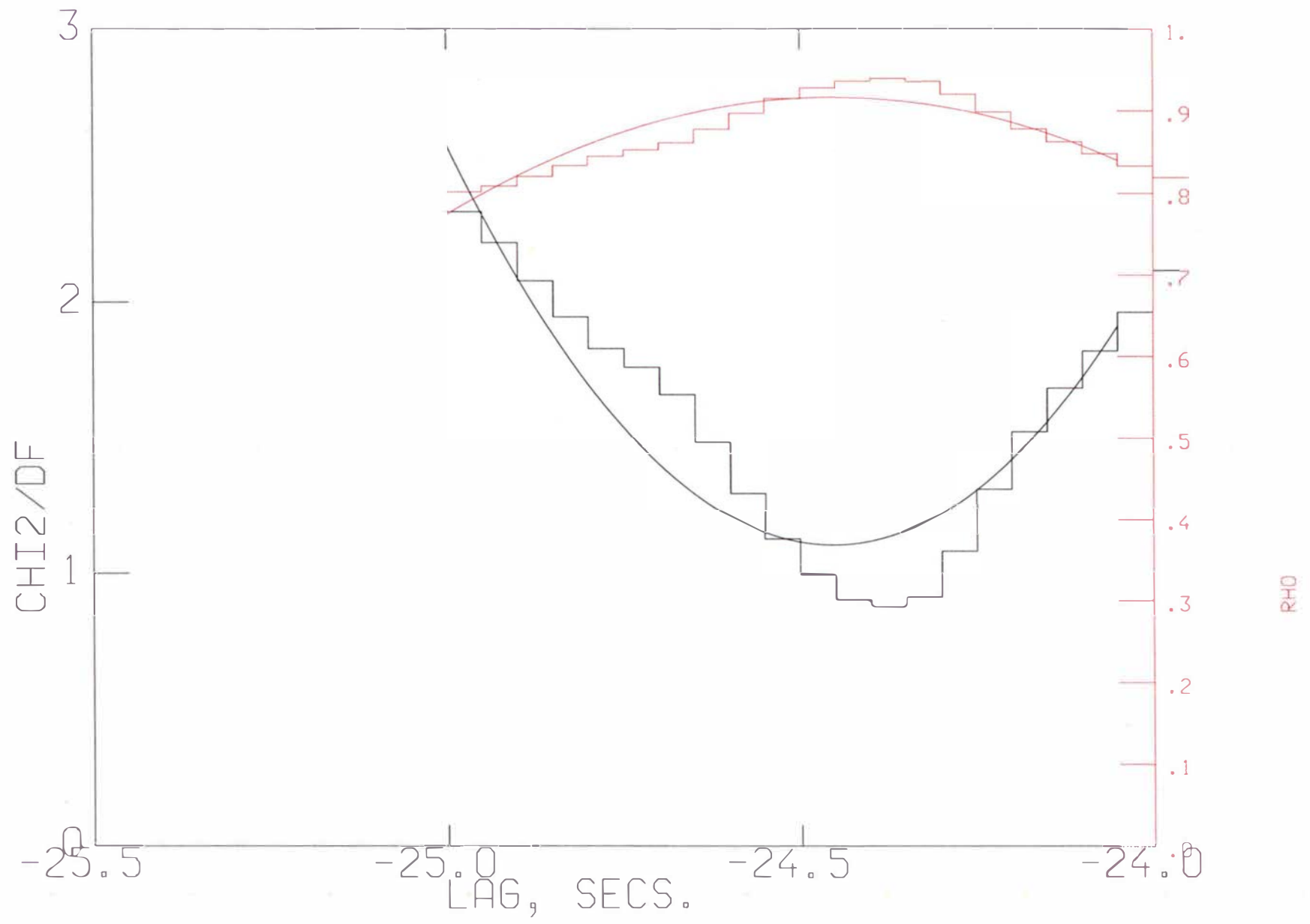
DECLINATION

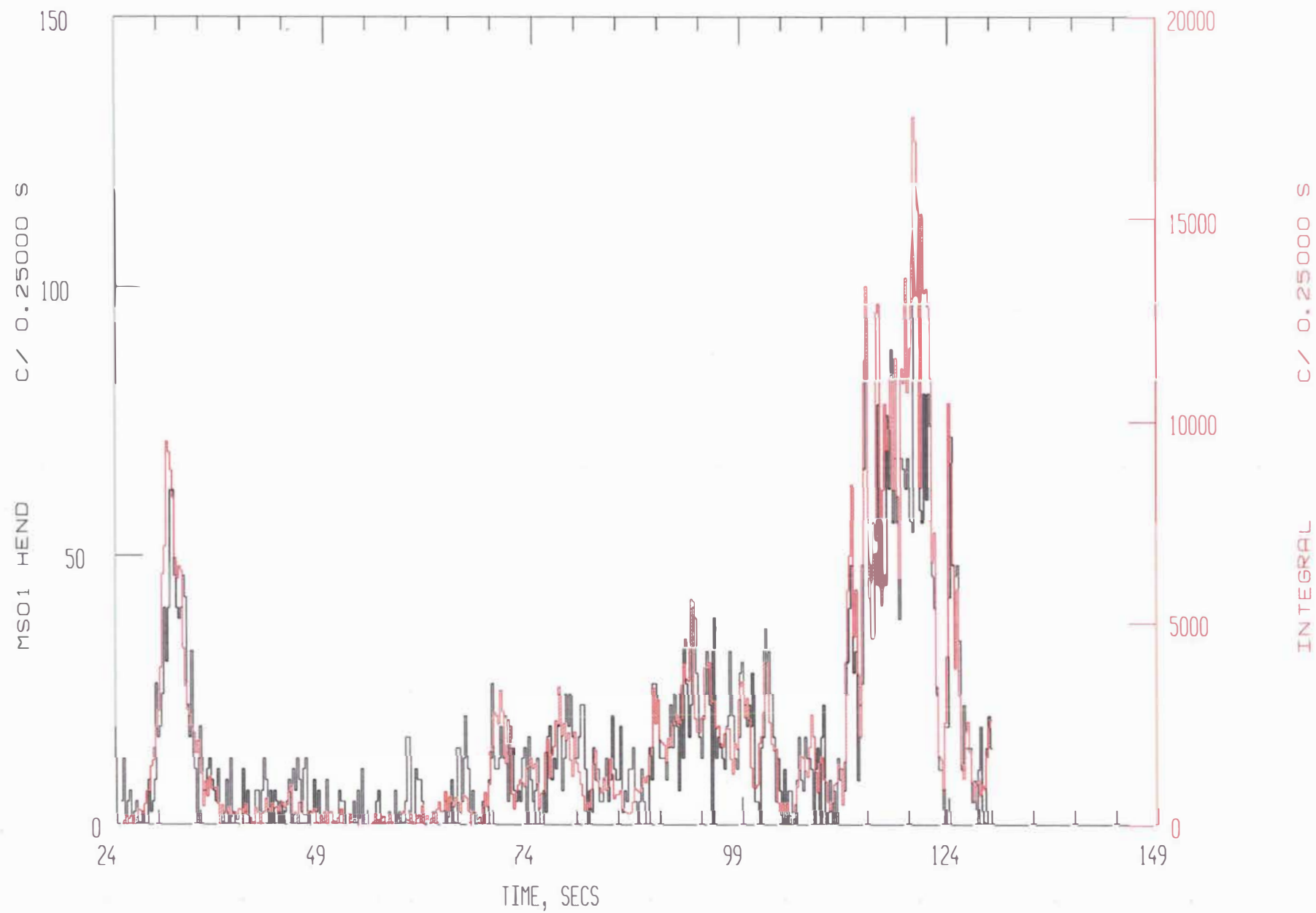
EVENT OF OCT 22, 2005 13:05

2-1



25/02/201





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

DECLINATION

19040'

19030'

19020'

23:55:10

23:55:30

23:55:50

23:56:10

23:56:30

RIGHT ASCENSION

EVENT OF OCT 22, 2005 13:05

2-1

*XRT

25/02/2014

FREGATE BURST #1 TIME HISTORY -- DETECTORS 1-4 SUMMED

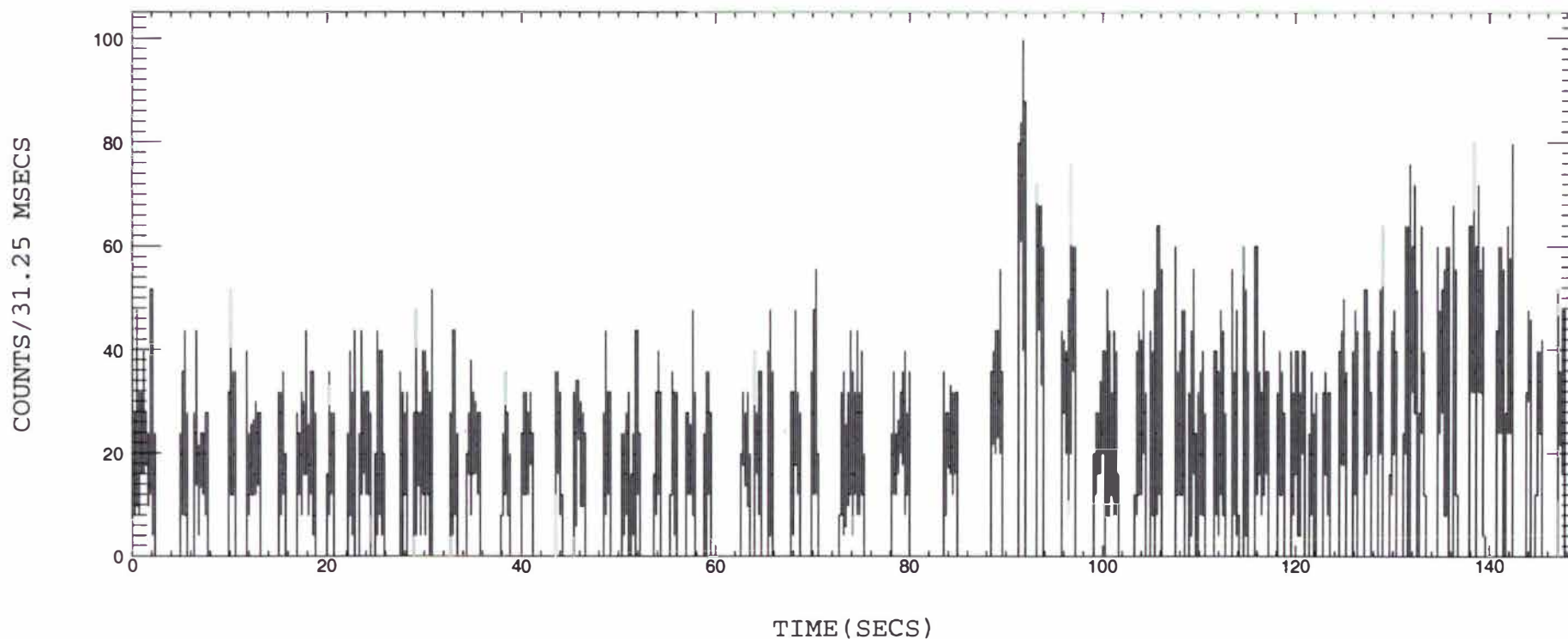
22/10/05 DOY 295 Julian 2453667.04727

TRIGGERED BY FREGATE UT = 13:08:03 (47283.79 secs) [sct = 0019 c15e 4824 d824]

PLOT STARTING TIME UT = 13:06:51 (47211.38 secs) [sct = 0019 c15e 43d3 db90]

BACKGRND SAMPLED FROM UT = 13:07:53 (47273.31 secs) [sct = 0019 c15e 4784 d825]

BIN WIDTH 31.25 msecS INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 2, deltaT = 5222.40ms, USING DETECTOR(S) 1 2

CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	31	33	0	0	139	148	0	0	852	915	0	0	3193	3439	0	0
EXC1 CNT RATES	9	17	0	0	97	106	0	0	755	825	0	0	3138	3396	0	0
EXC2 REF VALUES	31	33	0	0	139	148	0	0	852	915	0	0	3193	3439	0	0
EXC2 CNT RATES	9	17	0	0	97	106	0	0	755	825	0	0	3138	3396	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	15	16	0	0	55	57	0	0	320	329	0	0	1141	1173	0	0
EXC1 CNT RATES	2	6	0	0	32	38	0	0	279	296	0	0	1167	1181	0	0
EXC2 REF VALUES	15	16	0	0	55	57	0	0	320	329	0	0	1141	1173	0	0
EXC2 CNT RATES	2	6	0	0	32	38	0	0	279	296	0	0	1167	1181	0	0

FREGATE BURST #2 TIME HISTORY -- DETECTOR 1

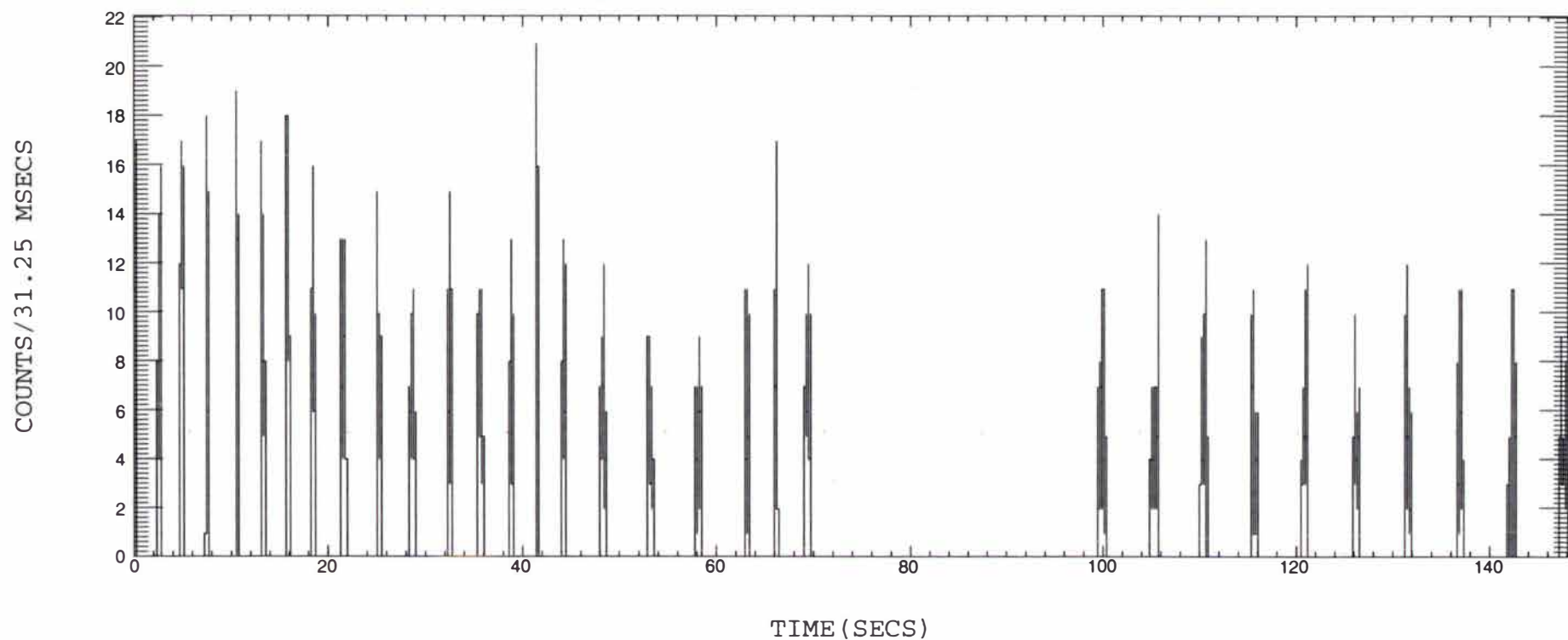
22/10/05 DOY 295 Julian 2453667.04970

TRIGGERED BY FREGATE UT = 13:11:33 (47493.75 secs) [sct = 0019 c15e 54a8 9824]

PLOT STARTING TIME UT = 13:10:22 (47422.59 secs) [sct = 0019 c15e 506a ac45]

```
BACKGRND SAMPLED FROM  UT = NA          (NA      secs)  [sct = NA          ]
```

BIN WIDTH 31.25 msecS INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = NA, deltaT = NA, USING DETECTOR(S) NA

[illegible]

KONUS HRES 20051022 47305

TRIGGER TIME: 22/10/05 DOY 295 Julian 2453667.04751 UT = 13.140 13:08:25 (47305.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

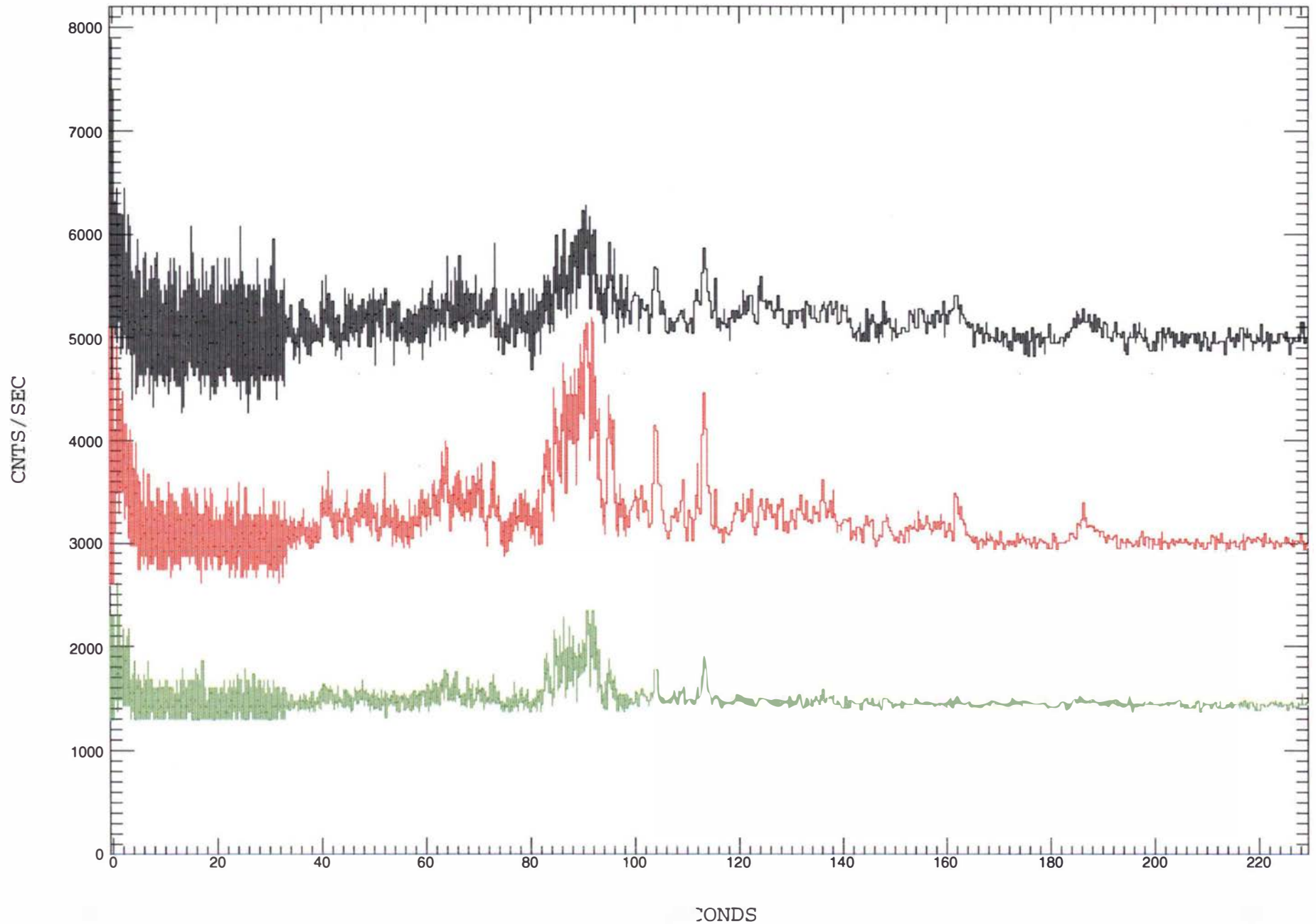
Chan 4 : [> 10 MeV]

Channel 1 + 3900

Channel 2 + 2600

Channel 3 + 1300

Channel 4 + 0



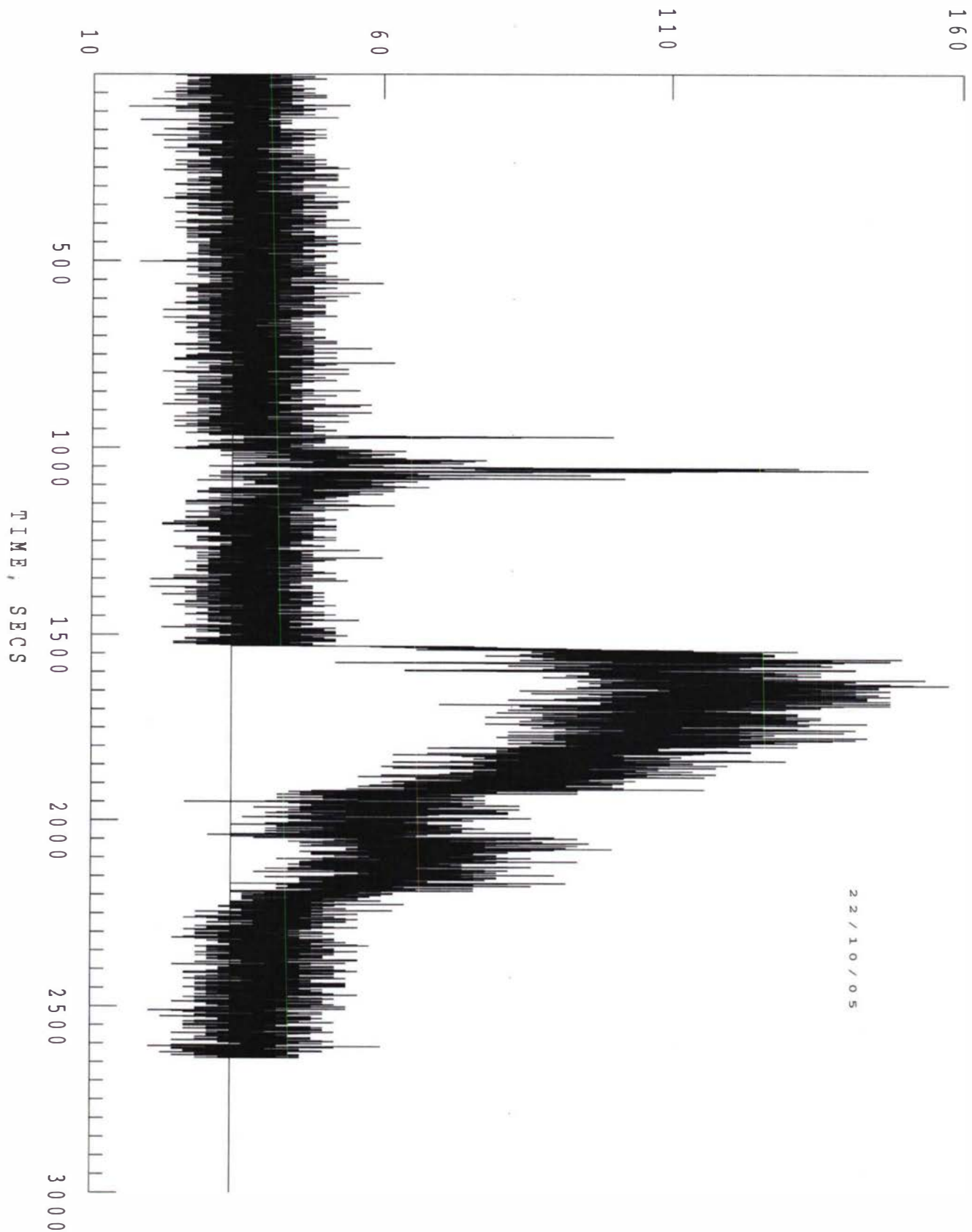
MS01

22/10/05

46172.184

50 - 3000 keV

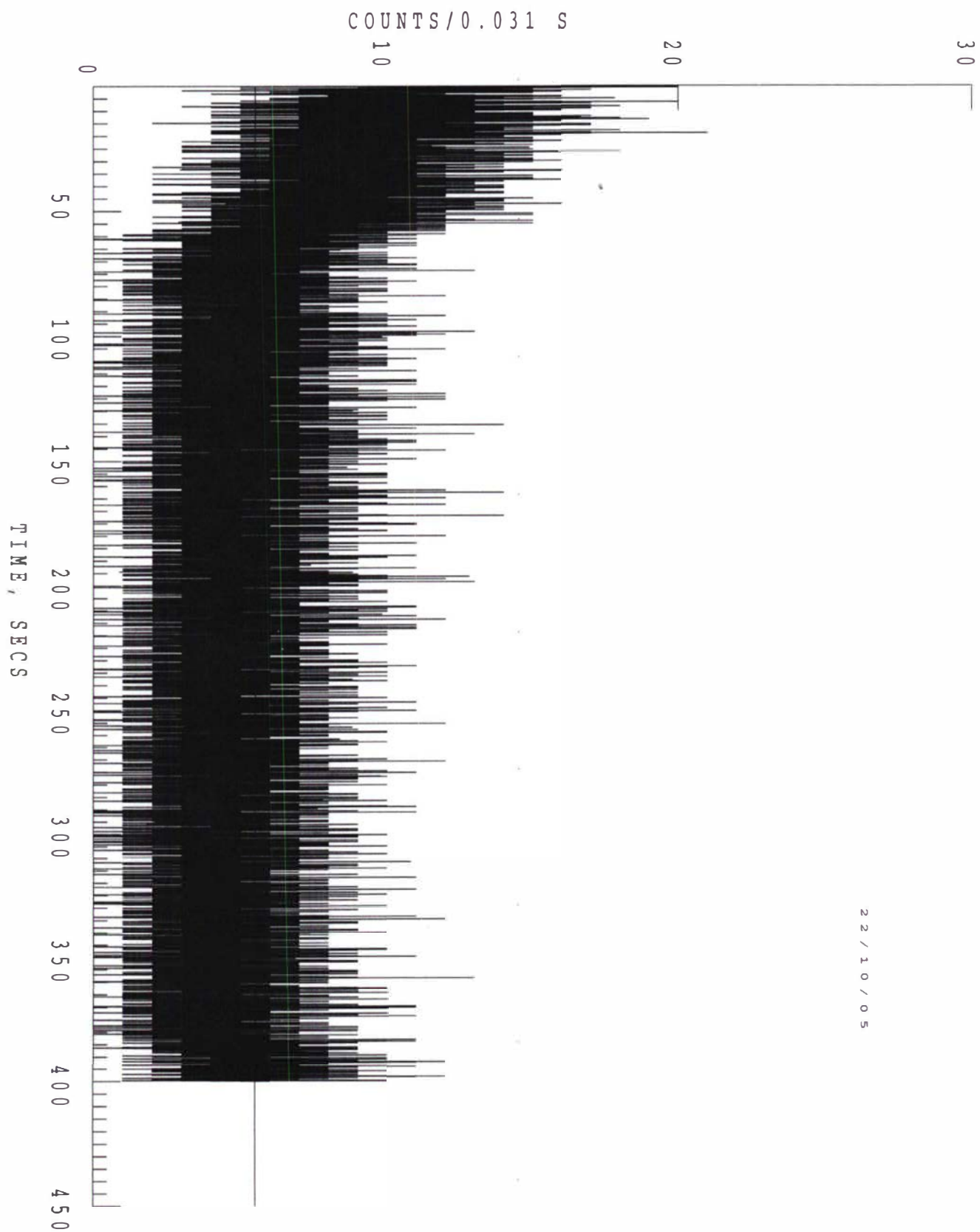
COUNTS/0.250 S



HESSI

22/10/05 47078.000 (GHETE_3950_1_20051022_47278)

25- 150 keV



INTEGRAL

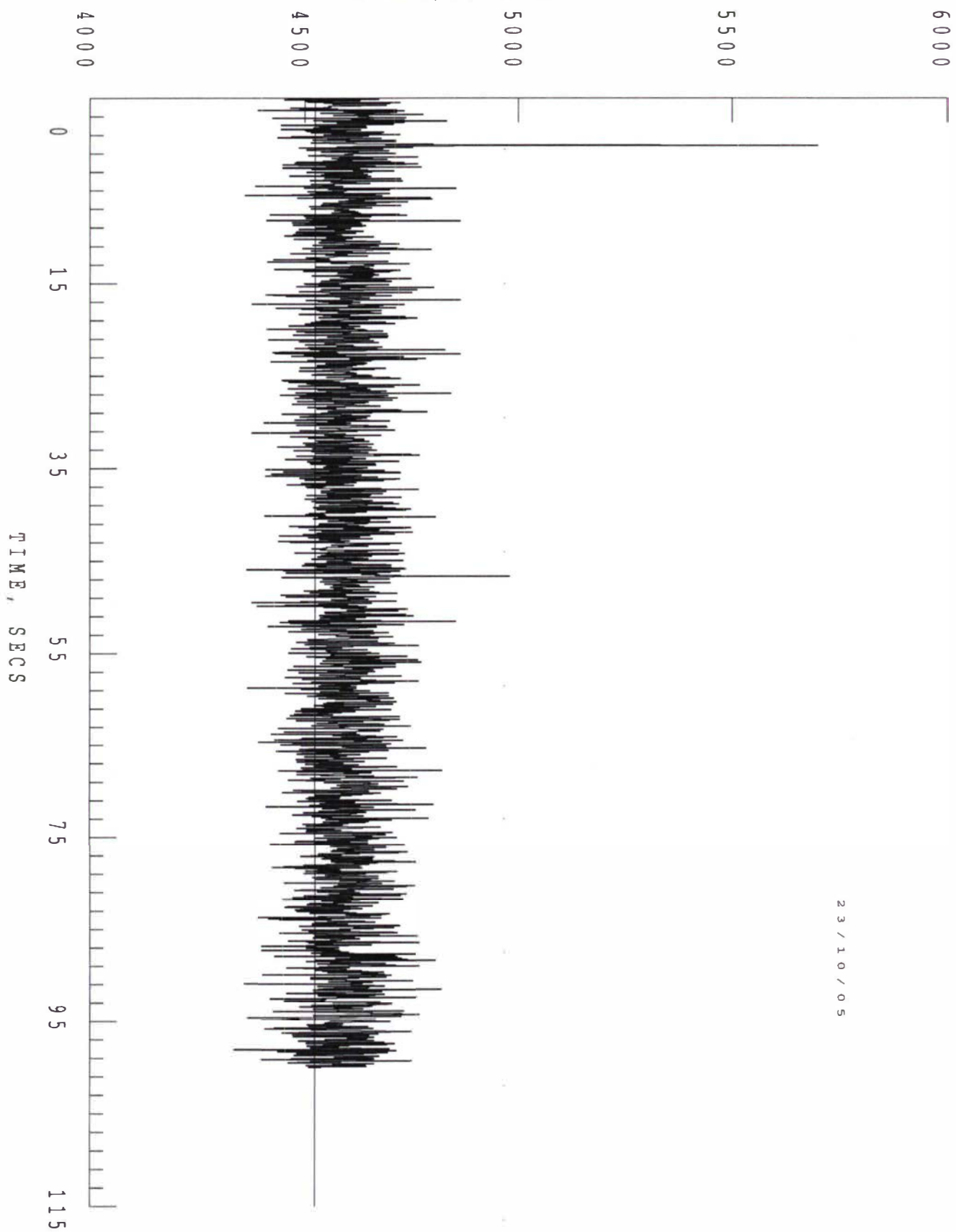
22/10/05

63979.045

100-10000 keV

17:46:19

COUNTS/0.050 S



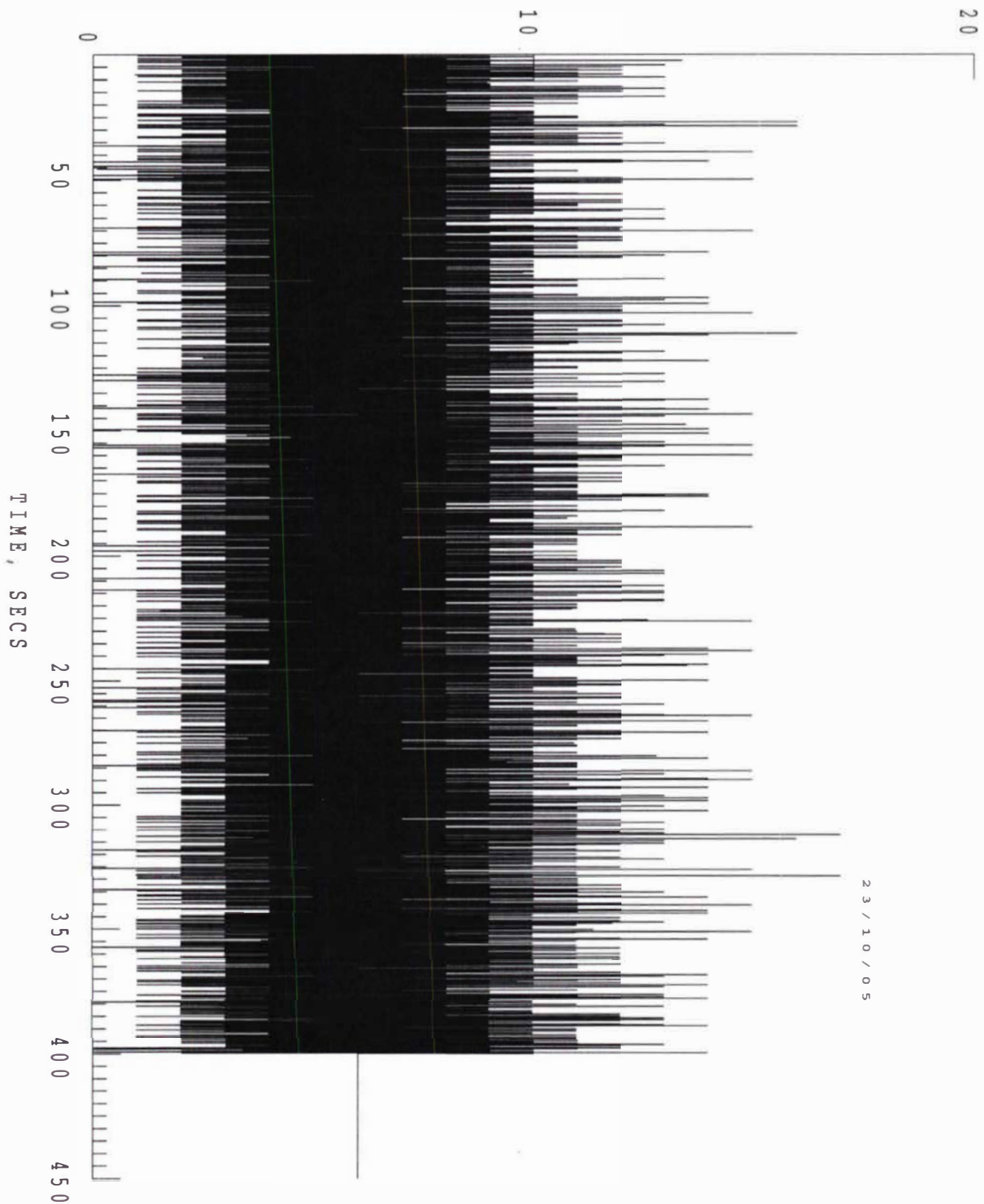
23 / 10 / 05

HESSI

22/10/05 63779.000 (INTEGRAL_20051022_63979)

25- 150 keV

COUNTS/0.031 S



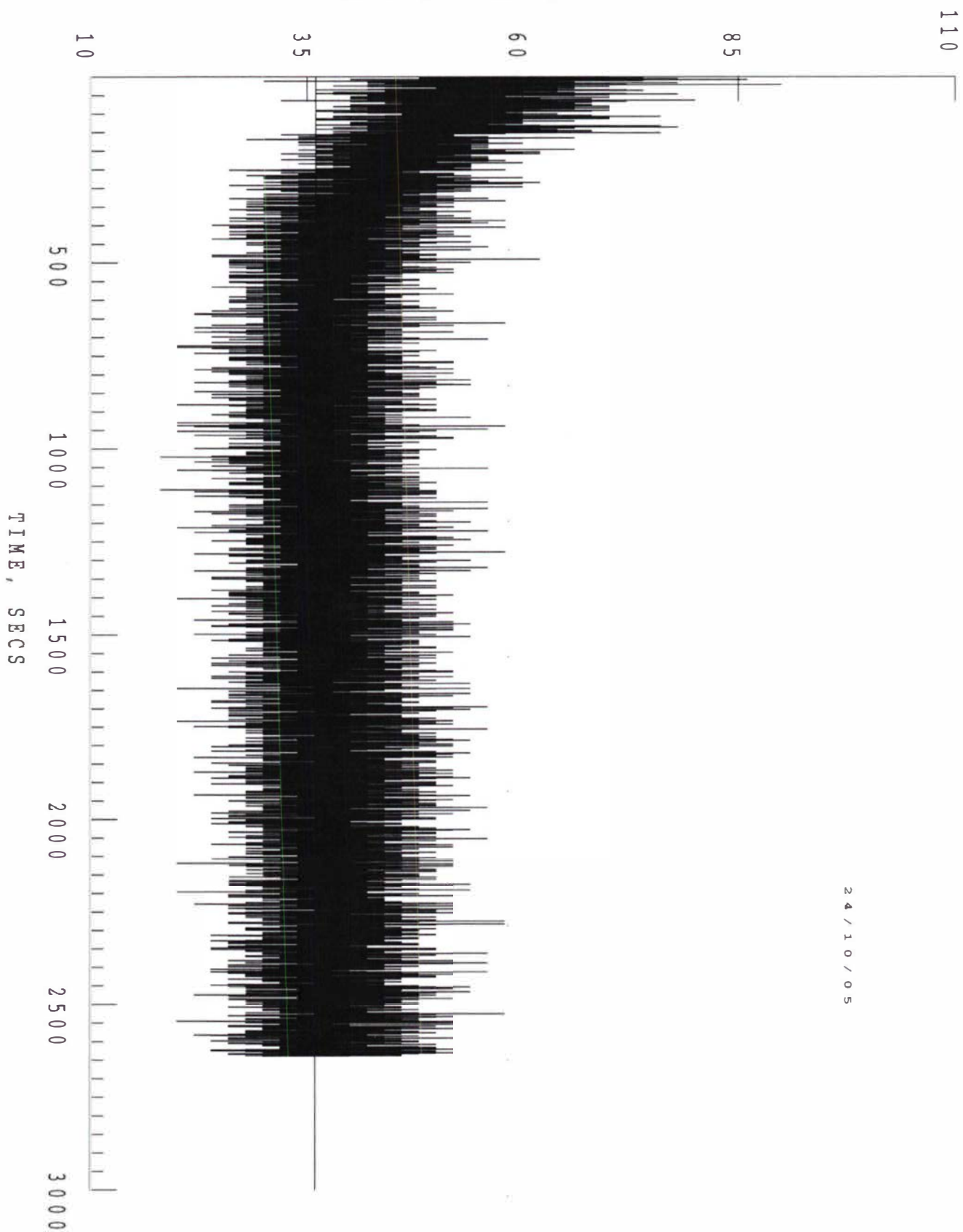
MS01

22/10/05

62612.148

50 - 3000 keV

COUNTS/0.250 S



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

22/10/05 DOY 295 Julian 2453666.50000 [est. sct = 0019 c153 45ce cfe5]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

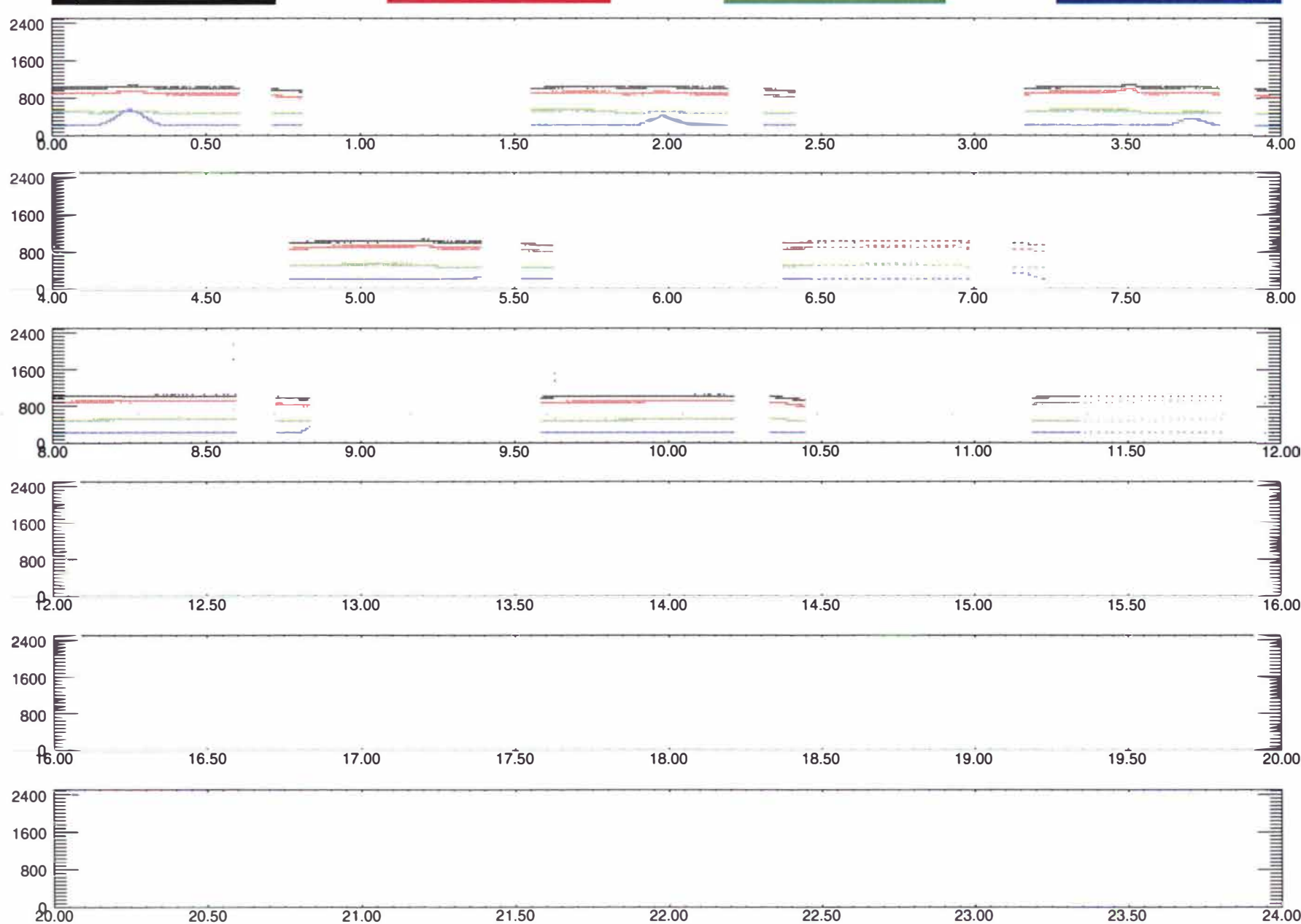
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



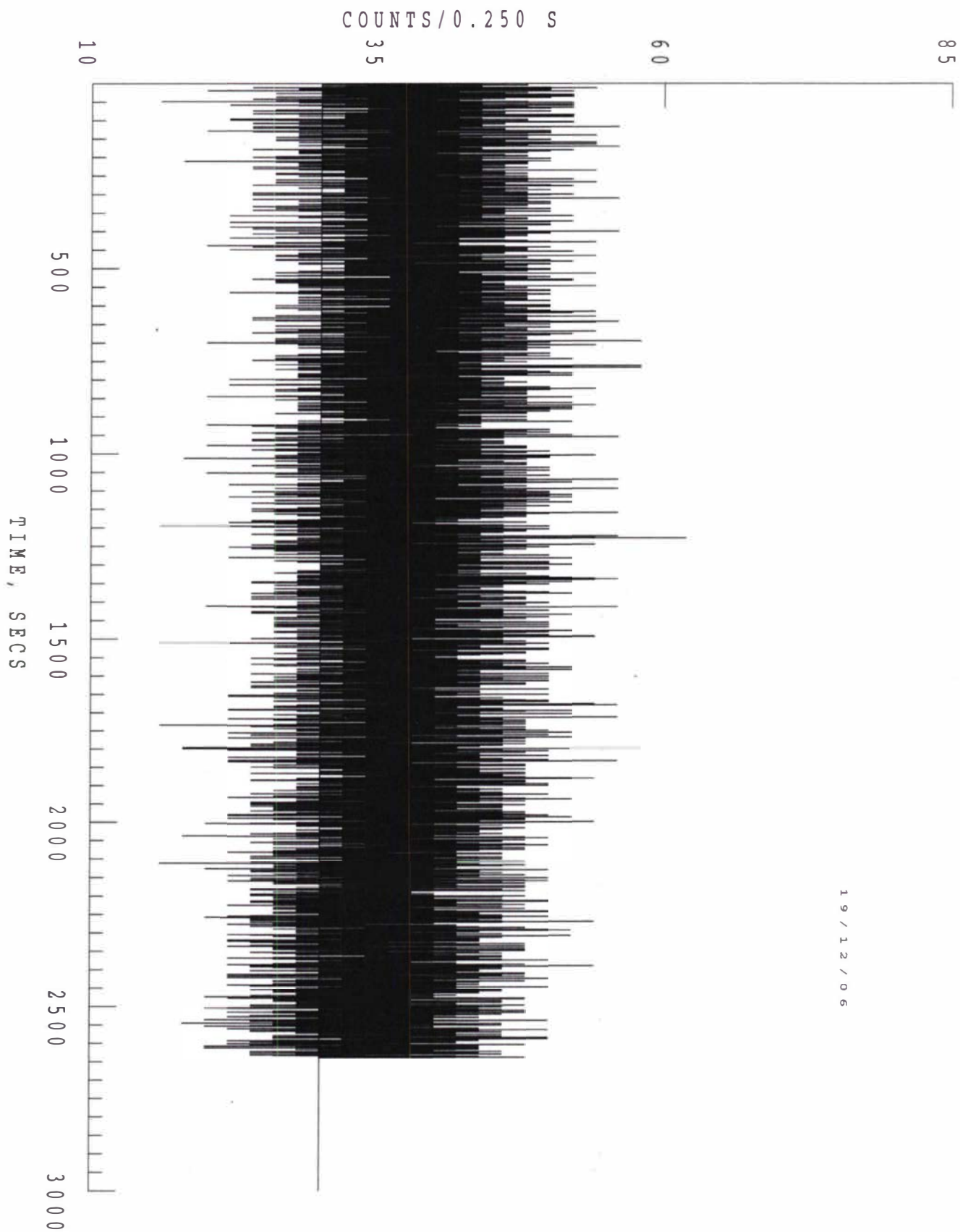
RS UT

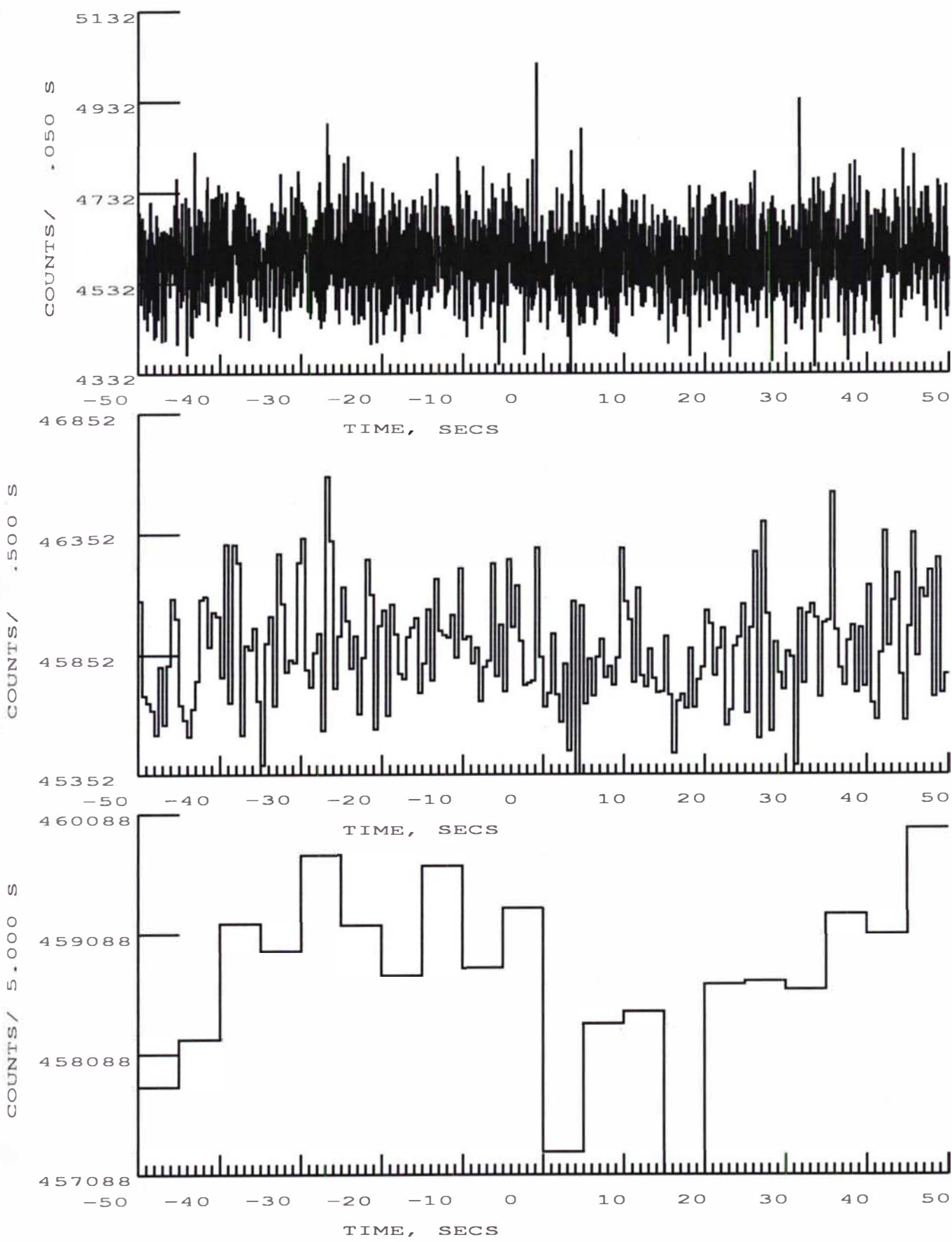
MS01

23/10/05

48930.827

50 - 3000 keV

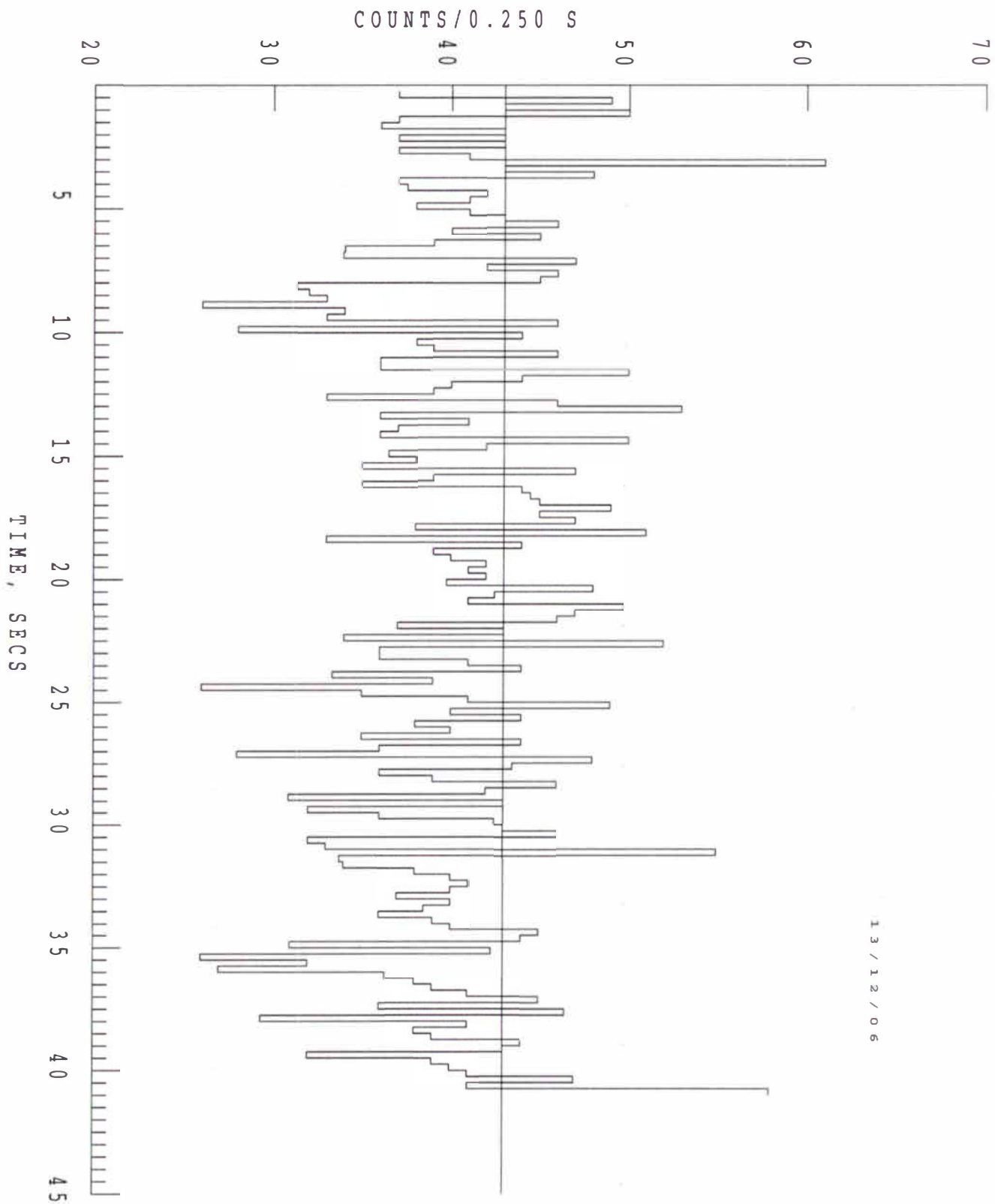




HESSI

23/10/05 50262.000 (SUZAKU_20051023_50283)

25- 150 keV



No SPI, GRS tugs

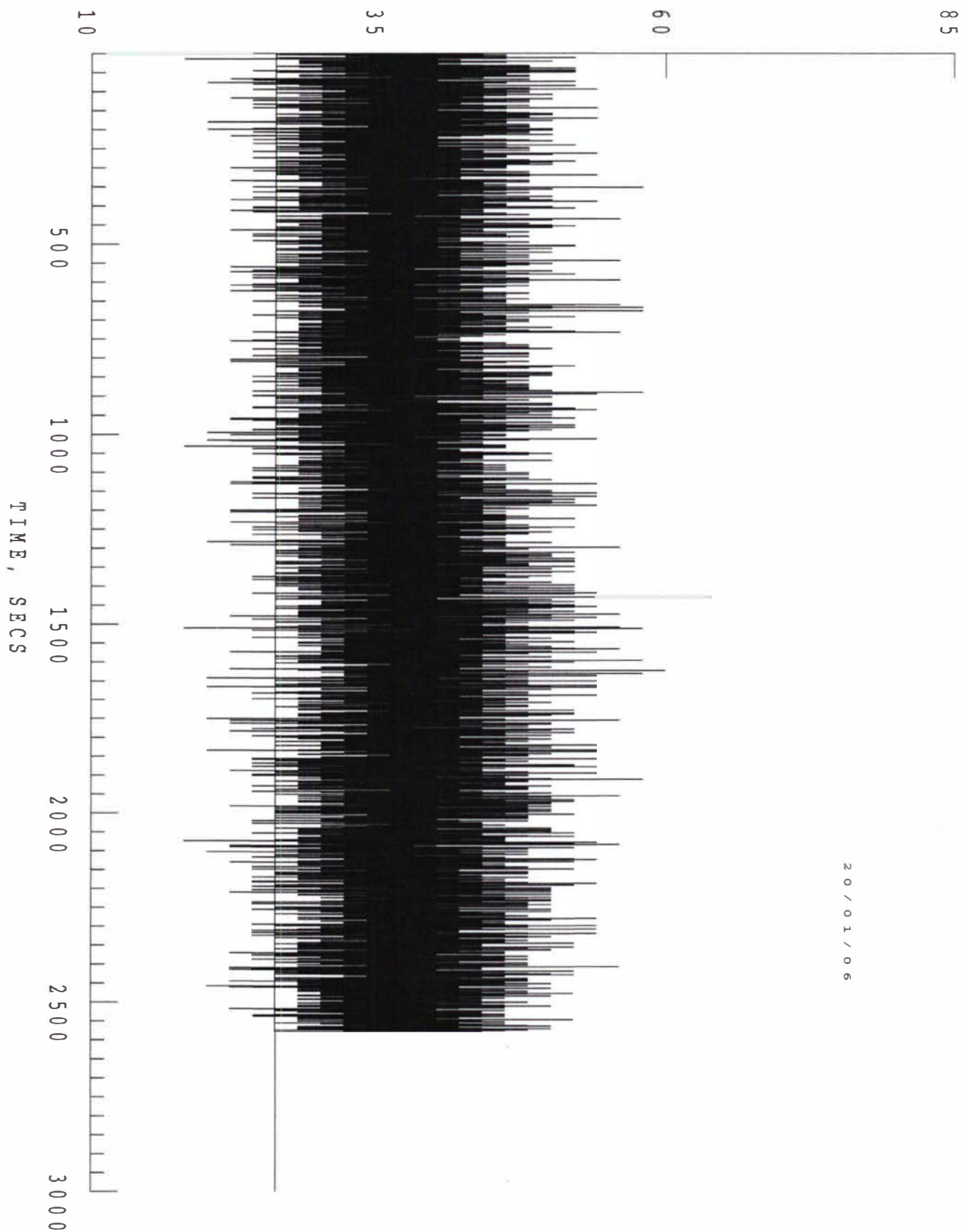
MS01

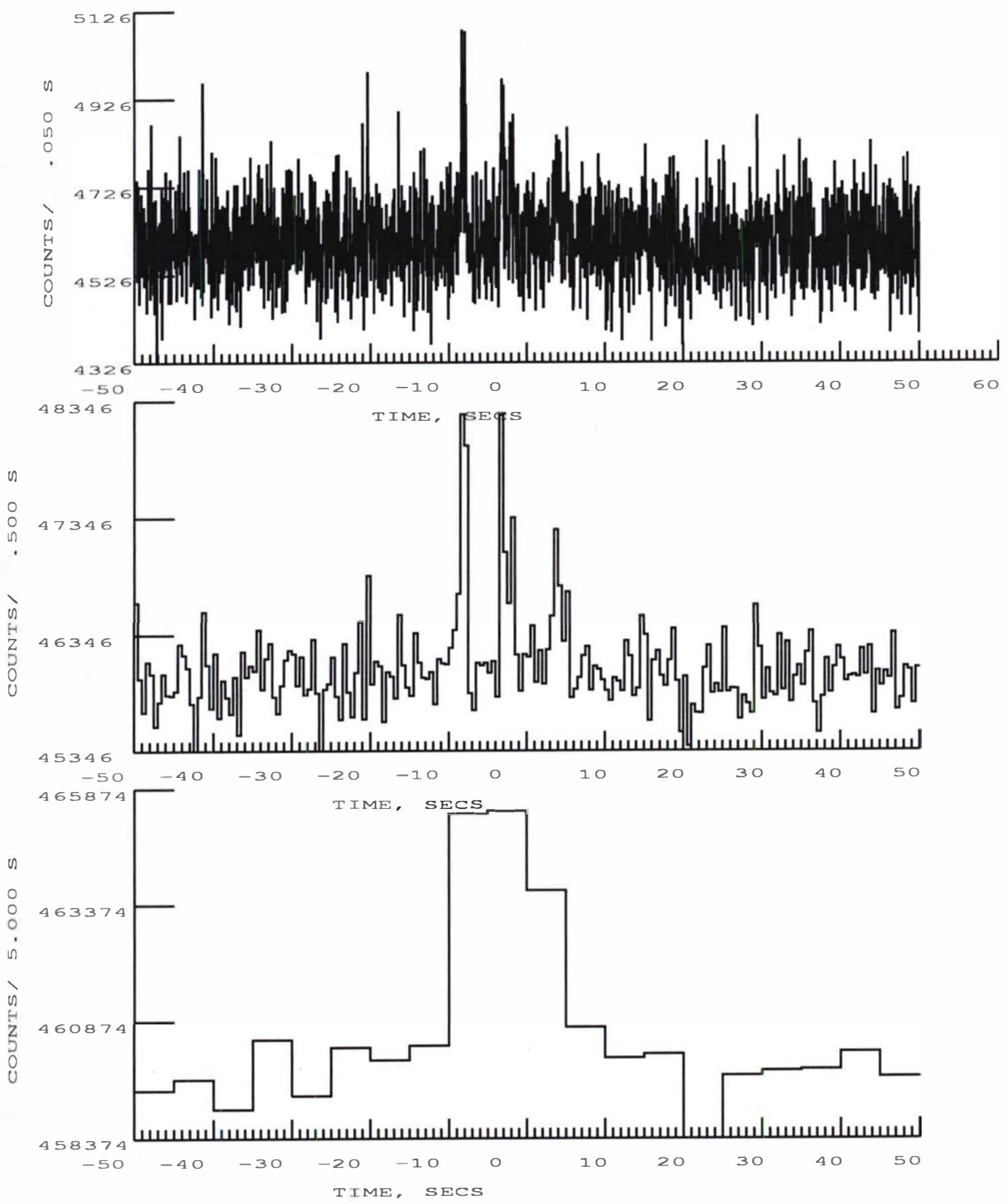
23/10/05

68790.484

50 - 3000 keV

COUNTS/0.250 S





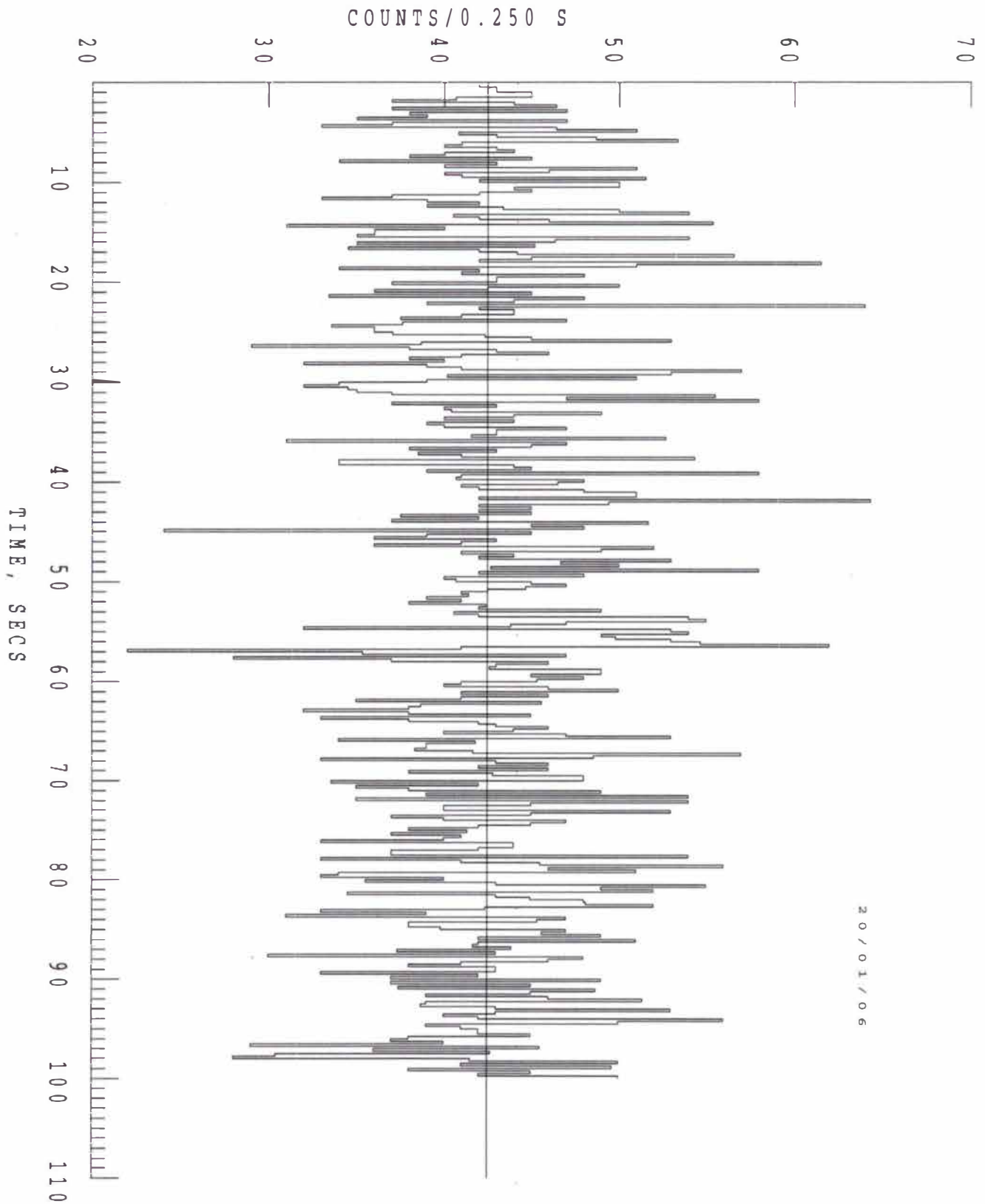
HESSI

23/10/05 70048.000 (KONUS_RI_20051023_70098)

50- 200 keV

+ Suzaku

No SPI, GRS tugs



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

24/10/05 DOY 297 Julian 2453668.50000 [est. sct = 0019 c17b 8265 5411]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

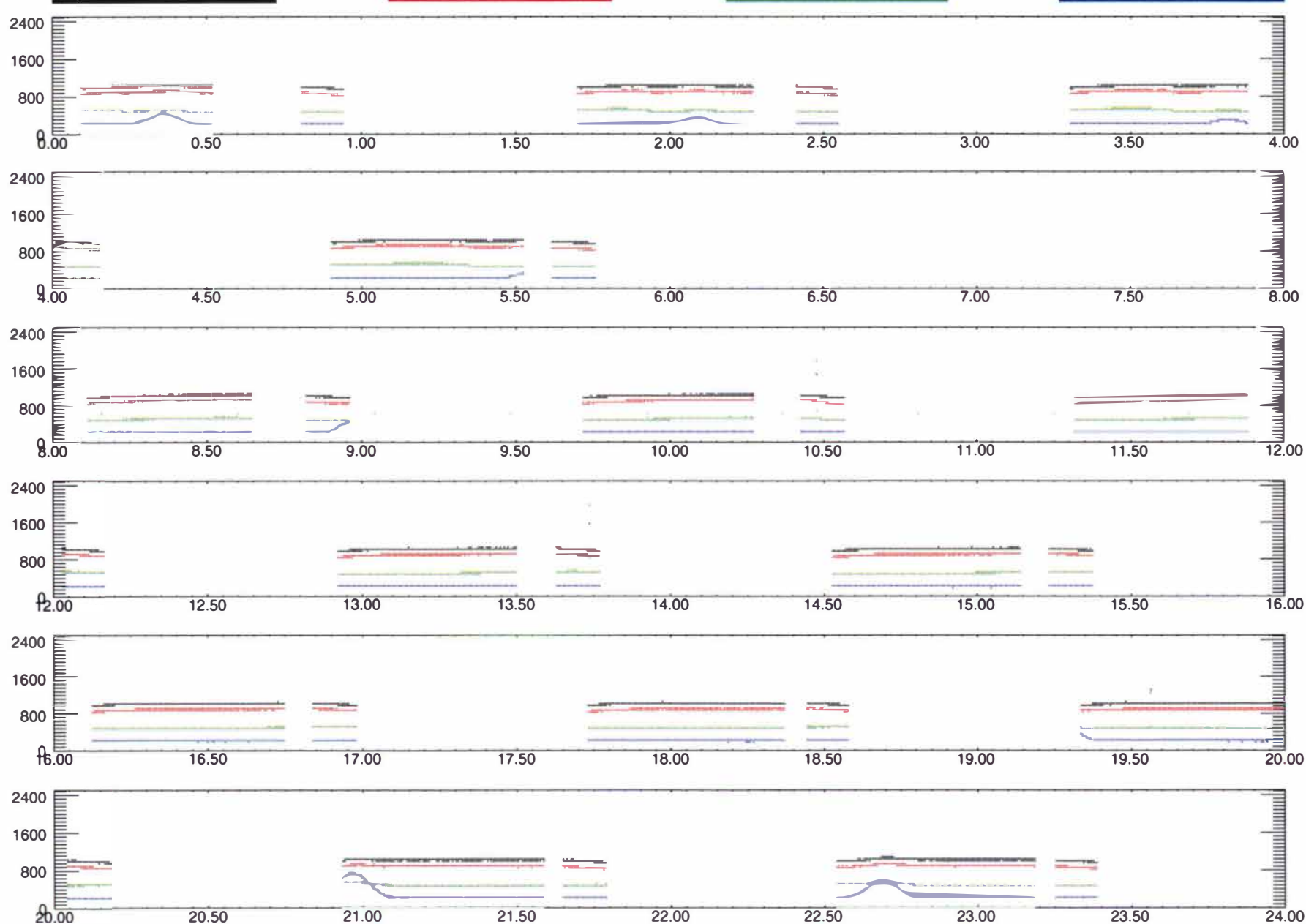
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT

From gcncirc@capella.gsfc.nasa.gov Thu Oct 27 01:10:15 2005
X-ASG-Debug-ID: 1130400651-7109-1-0
X-Barracuda-URL: <http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi>
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
From: GCN Circulars <gcncirc@capella.gsfc.nasa.gov>
X-ASG-Orig-Subj: SGR 1806-20: continued moderate activity seen with INTEGRAL
Subject: SGR 1806-20: continued moderate activity seen with INTEGRAL
To: khurley@ssl.berkeley.edu
Date: Thu, 27 Oct 2005 04:10:50 -0400 (EDT)
Project: GCN (GRB Coordinates Network)
Phone: 301-286-3106 (voice) (-1684 fax)
Pager: 3013463733@mmode.com
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit

TITLE: GCN GRB OBSERVATION REPORT
NUMBER: 4168
SUBJECT: SGR 1806-20: continued moderate activity seen with INTEGRAL
DATE: 05/10/27 08:09:41 GMT
FROM: Sandro Mereghetti at IASF/CNR <sandro@mi.iasf.cnr.it>

S. Mereghetti (IASF-Milano), D. Gotz (SAP, Saclay), M. Beck (ISDC, Versoix), J. Borkowski (CAMK, Torun) on behalf of the IBAS Localization Team, and I.F. Mirabel (ESO) on behalf of the INTEGRAL Science Working Team report:

The soft gamma-ray repeater SGR 1806-20 continues to be in an active bursting state. A few normal short bursts have been detected by IBAS in October 2005 (note that SGR 1806-20 was not observed continuously during this period; the INTEGRAL observation log can be found at <http://intweb.esac.esa.int/>).

Burst times, approximate durations, and fluences (15-100 keV) measured with the IBIS/ISGRI instrument are reported below:

Date and UT	Duration (s)	Fluence (erg cm ⁻²)
2005-10-01T07:47:10	0.1	3E-8
2005-10-04T02:54:14	0.1	2E-8
2005-10-22T03:43:40	0.1	4E-8
2005-10-22T07:25:37	0.38	9E-7
2005-10-22T08:52:42	0.07	2E-8
<u>2005-10-25T04:48:31</u>	0.11	2E-8

The burst at 2005-10-22T08:52:42 was followed by a fainter peak 4.4 s later, lasting 0.04 s.

We remind that the occurrence of SGR 1806-20 bursts detected with high signal to noise ratio is reported in real time with IBAS Alert Packets. See <http://ibas.mi.iasf.cnr.it/> for an updated table of all the IBAS Alerts and for information on how to receive the Alert Packets for soft repeaters and type I bursters.

this message can be cited.

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

25/10/05 DOY 298 Julian 2453669.50000 [est. sct = 0019 c18f a03d d3a7]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

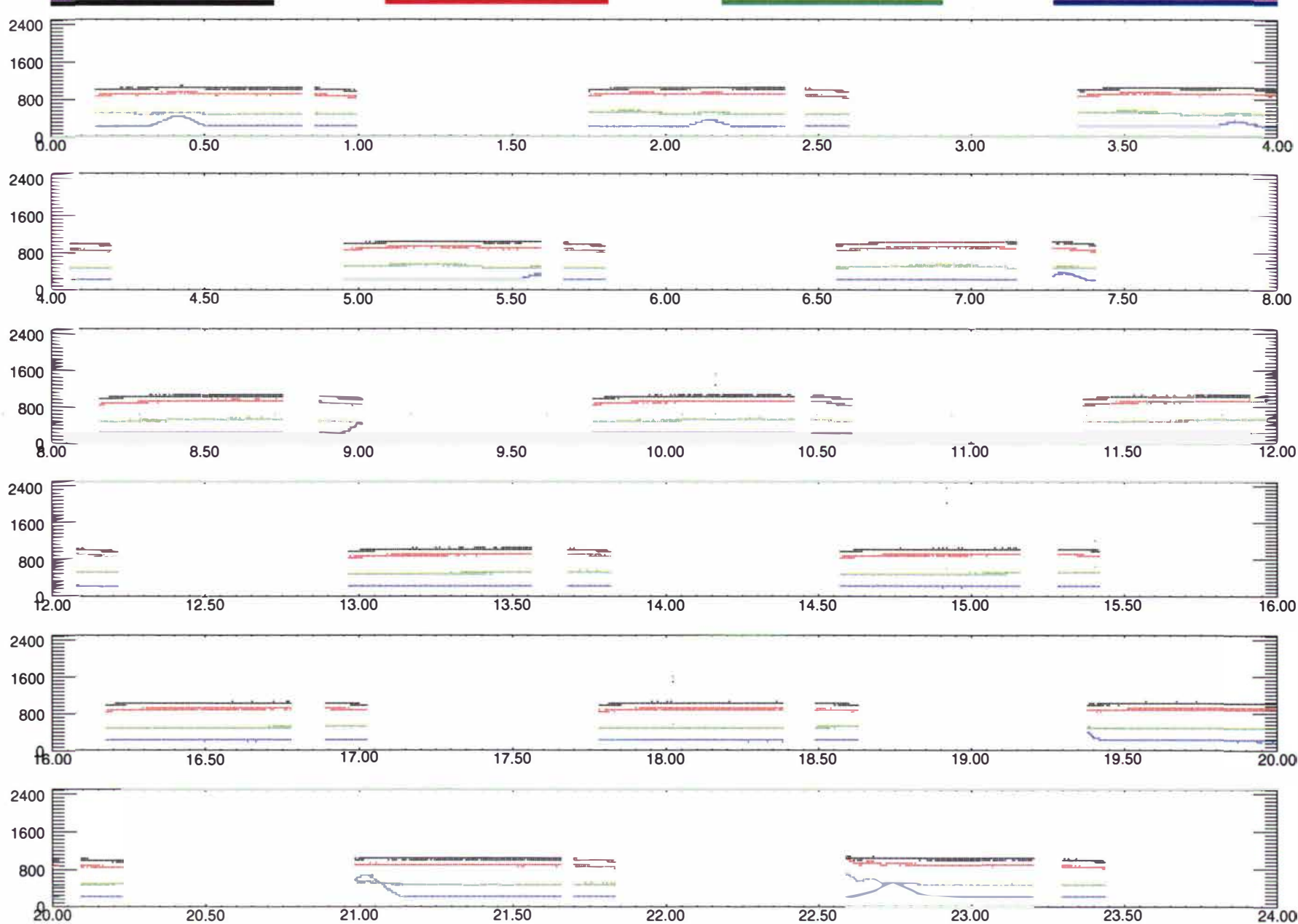
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT

INTEGRAL

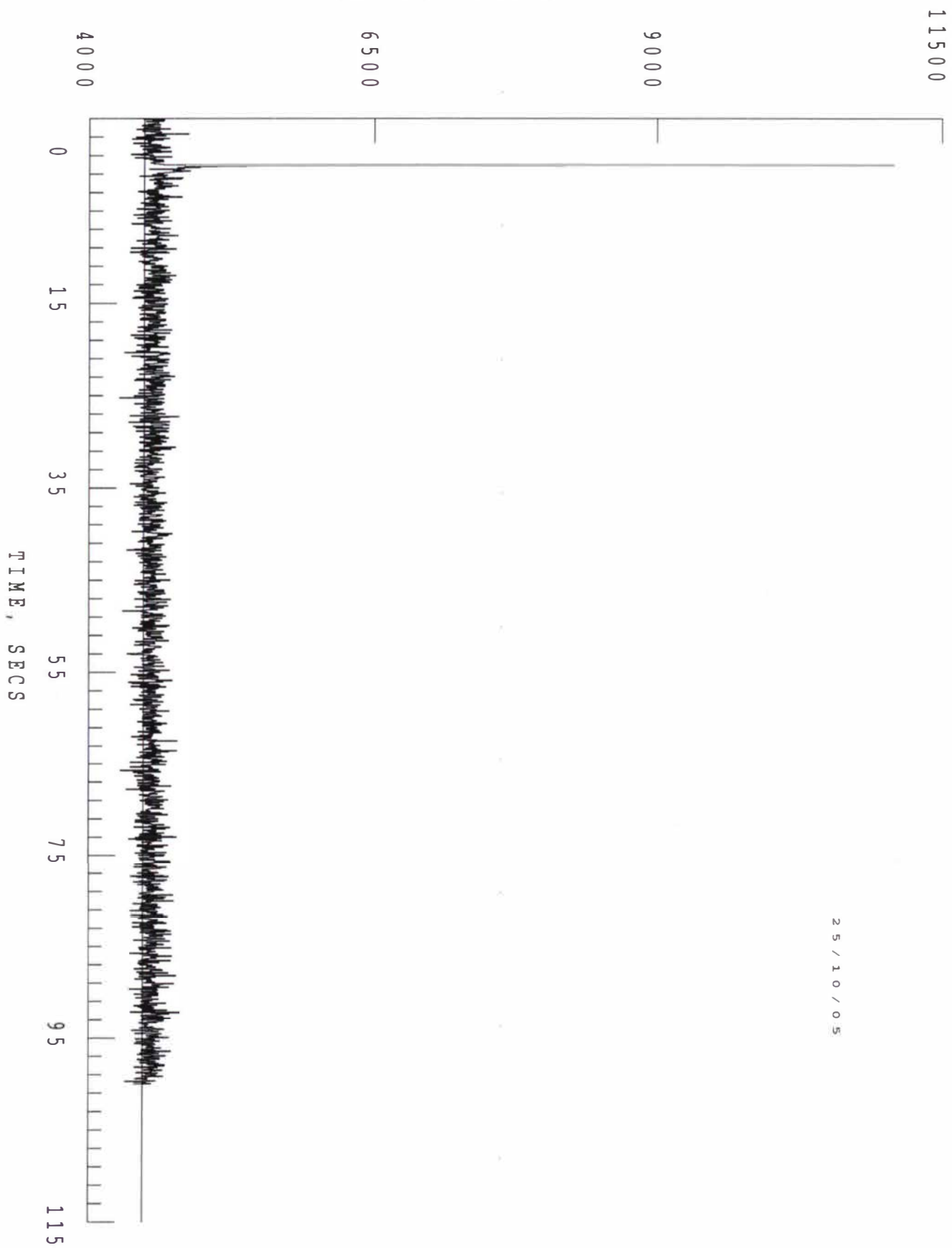
26/10/05

16299.921

100-10000 keV

04:31:40

COUNTS/0.050 S



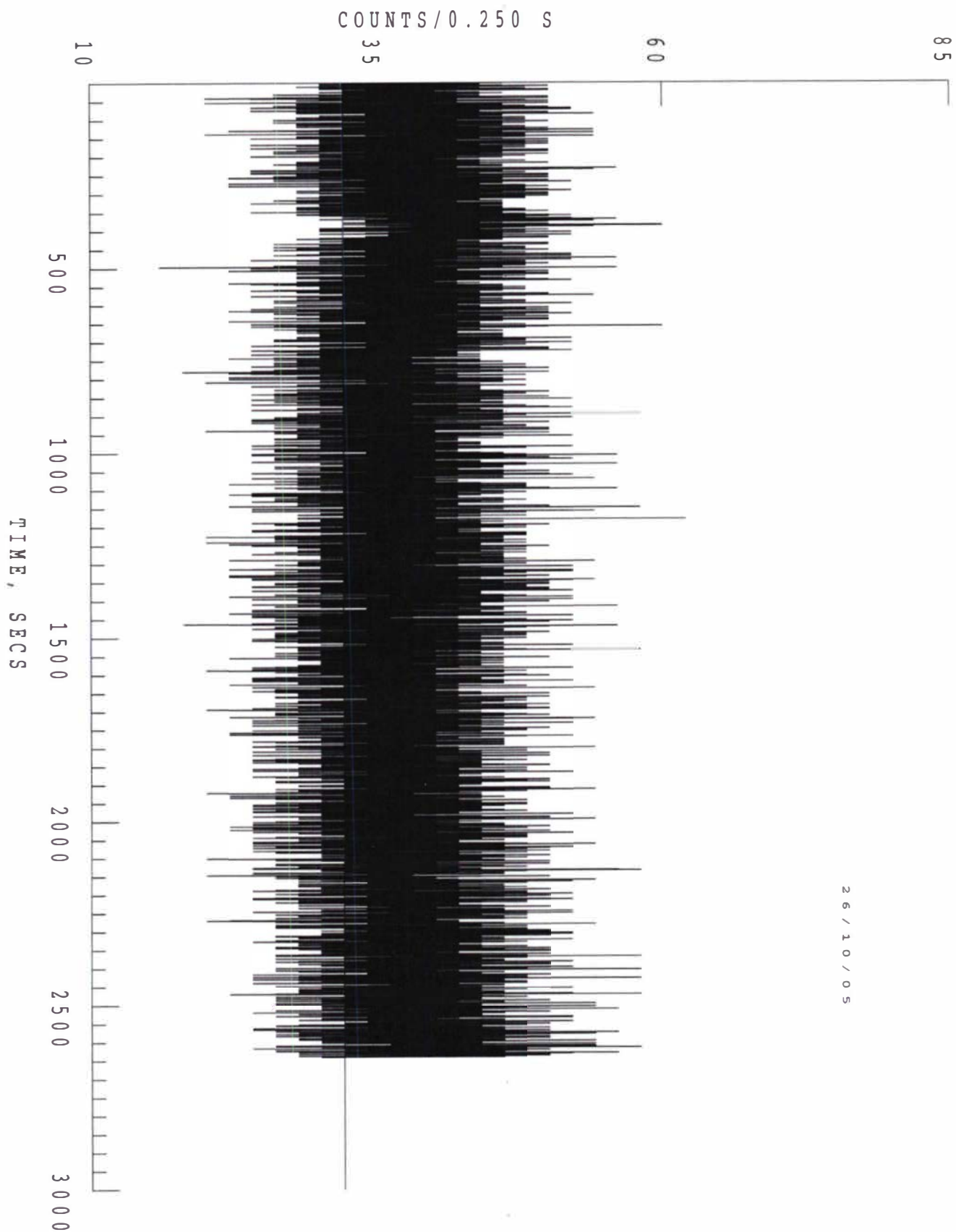
25 / 10 / 05

MS01

26/10/05

14967.816

50 - 3000 keV

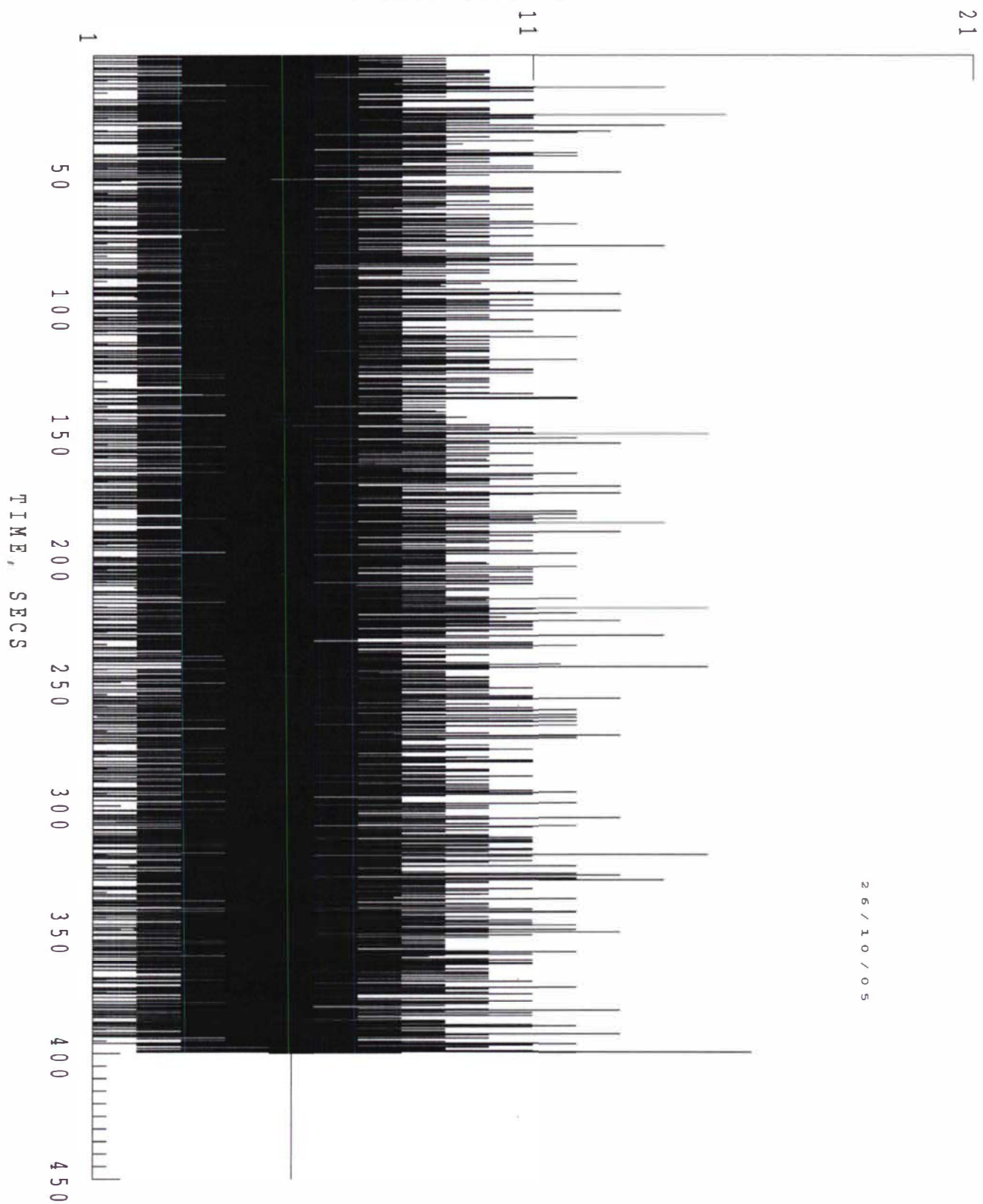


HESSI

26/10/05 16099.000 (INTEGRAL_20051026_16299)

25- 150 keV

COUNTS/0.031 S



26/10/05

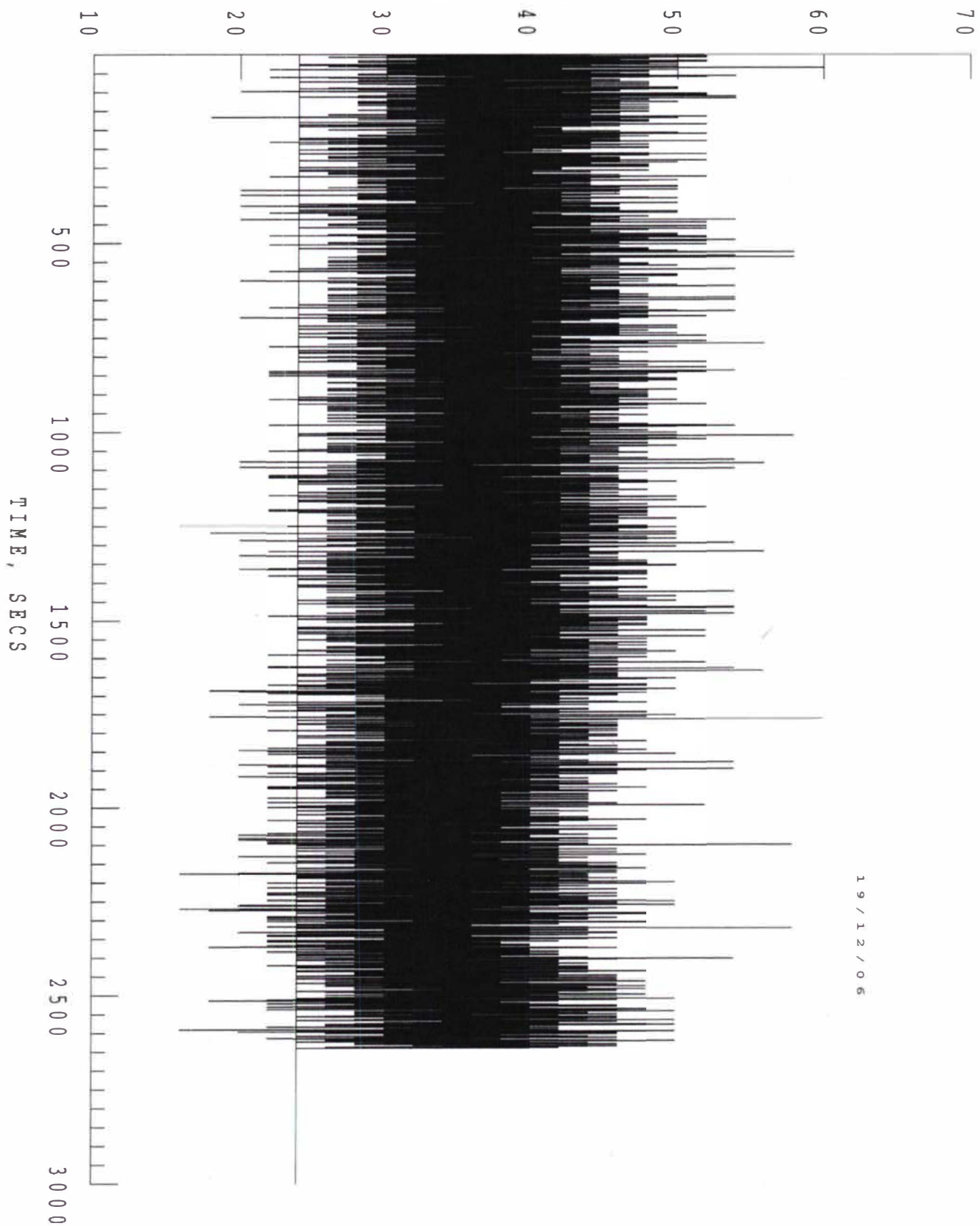
MS01

26/10/05

39147.552

50 - 3000 keV

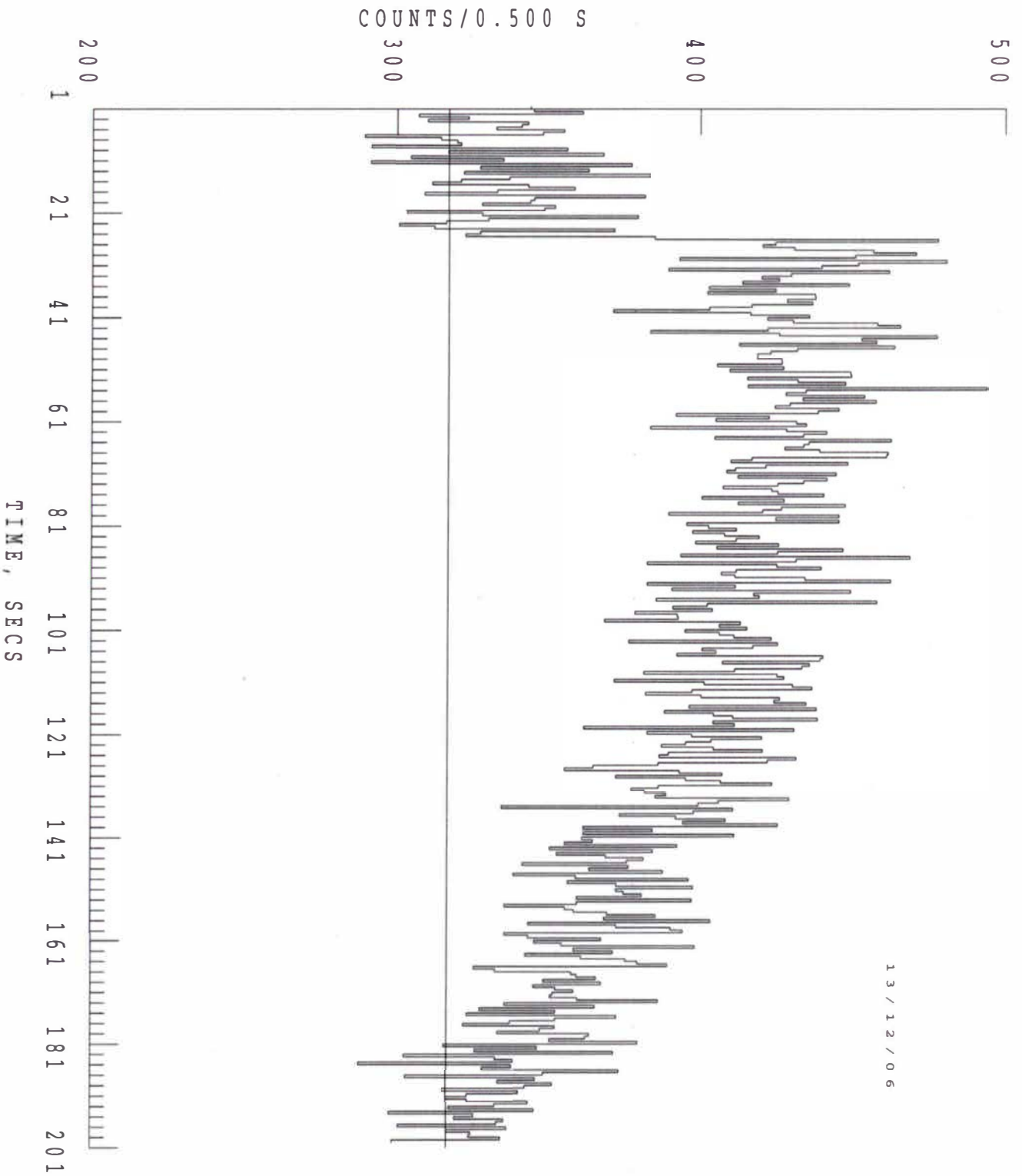
COUNTS/0.250 S



HESSI

26/10/05 40391.000 (SUZAKU_20051026_40491)

25- 150 keV

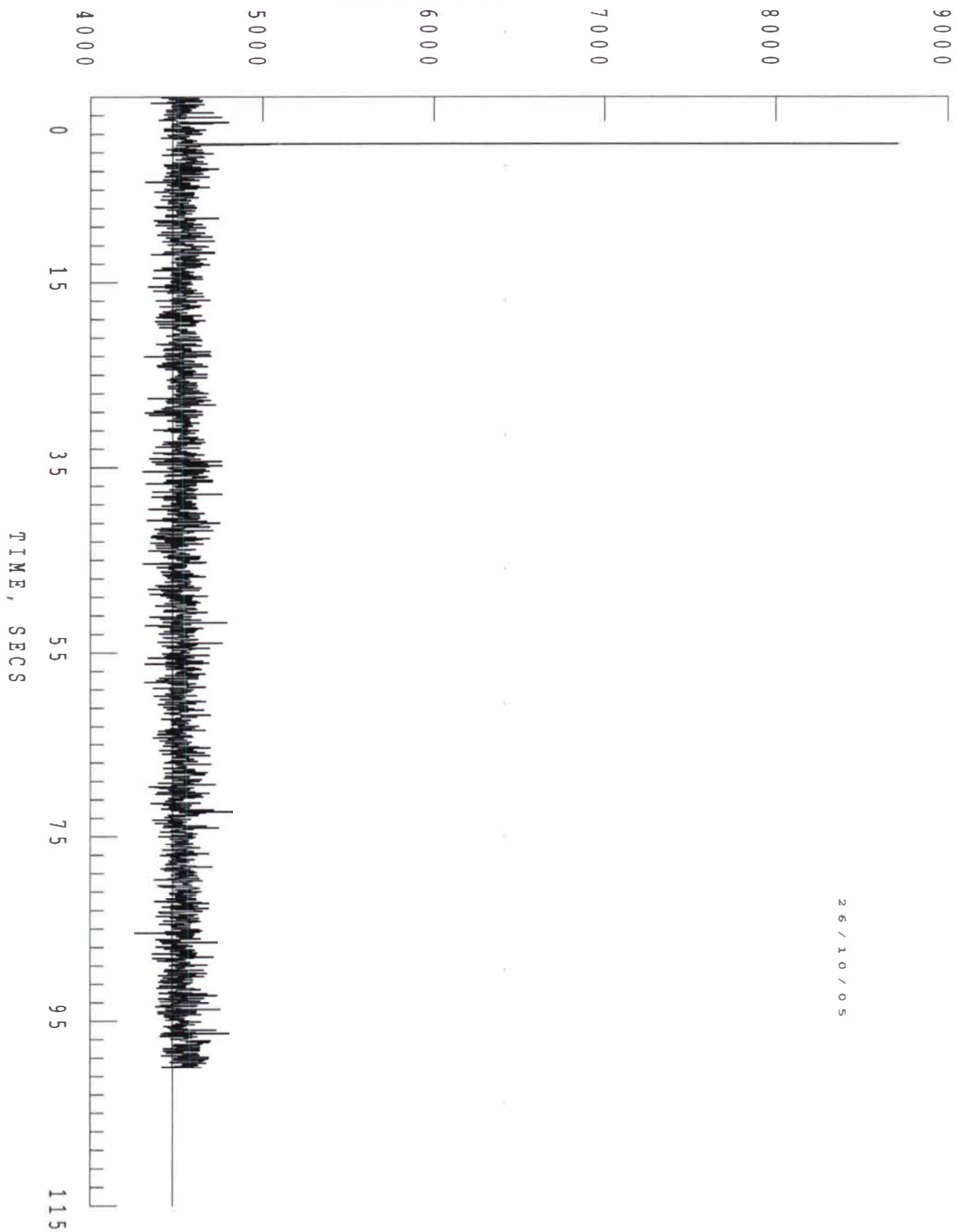


INTEGRAL

26/10/05 42513.423

100-10000 keV 11:48:33

COUNTS/0.050 S



26/10/05

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (INTEGRAL_20051026_42513)

BEG TIME: 26/10/05 DOY 299 Julian 2453670.98958 UT = 11.750 11:45:00 (42300.000 secs) [sct = 0019 clad 975d a707]
 END TIME: 26/10/05 DOY 299 Julian 2453670.99417 UT = 11.860 11:51:36 (42696.000 secs) [sct = 0019 clad aef8 235b]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

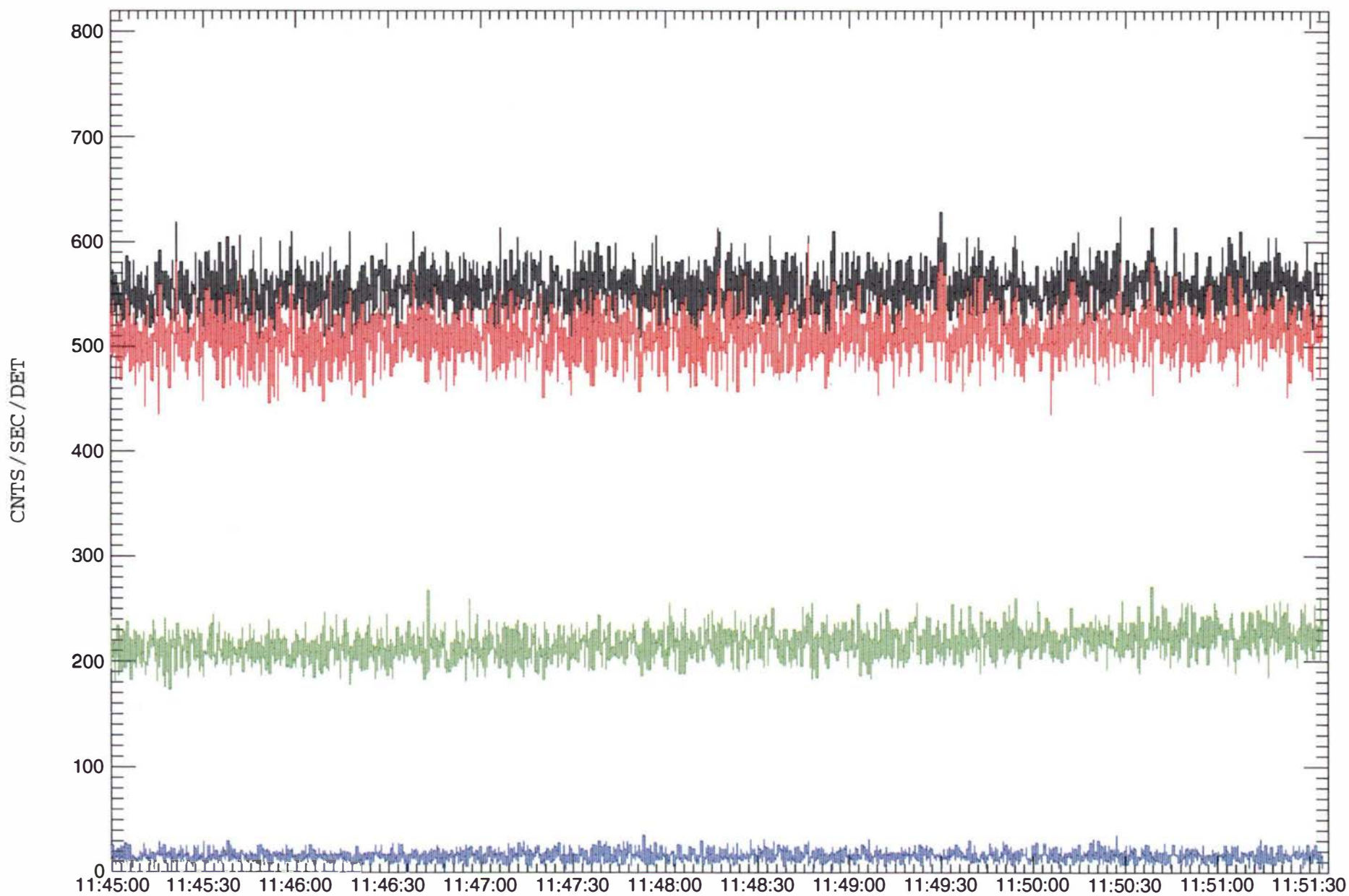
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



RS UT

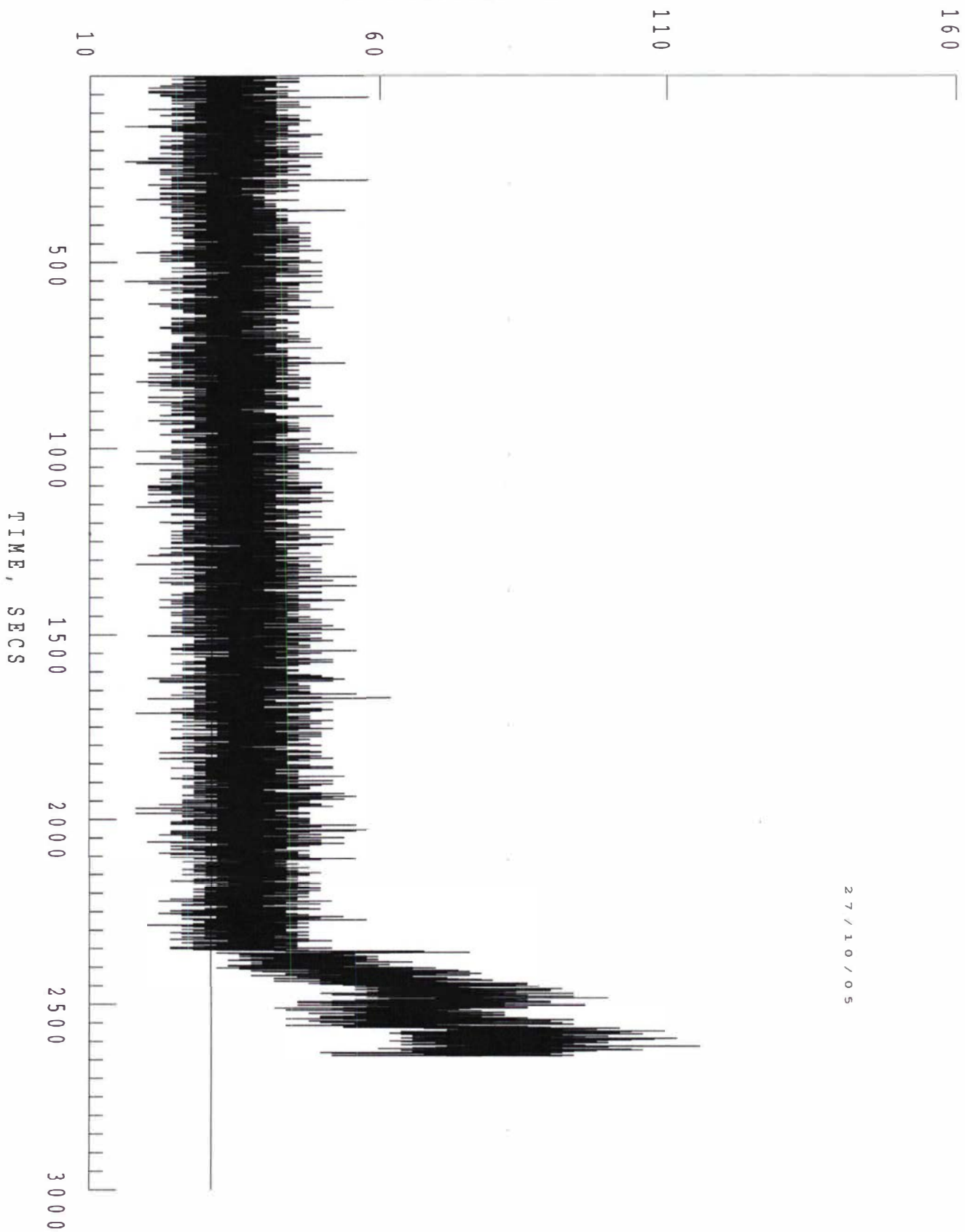
MS01

26/10/05

41187.614

50 - 3000 keV

COUNTS/0.250 S



27/10/05

From williams@sunspot.ssl.berkeley.edu Fri Oct 28 16:25:15 2005
Date: Fri, 28 Oct 2005 16:32:26 -0700 (PDT)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_INTEGRAL_20051026_42513

HESSI 25 to 150 keV Counts
Created 28-Oct-2005 16:24:27.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
No Eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

26/10/05 DOY 299 Julian 2453670.50000 [est. sct = 0019 cla3 be16 533d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

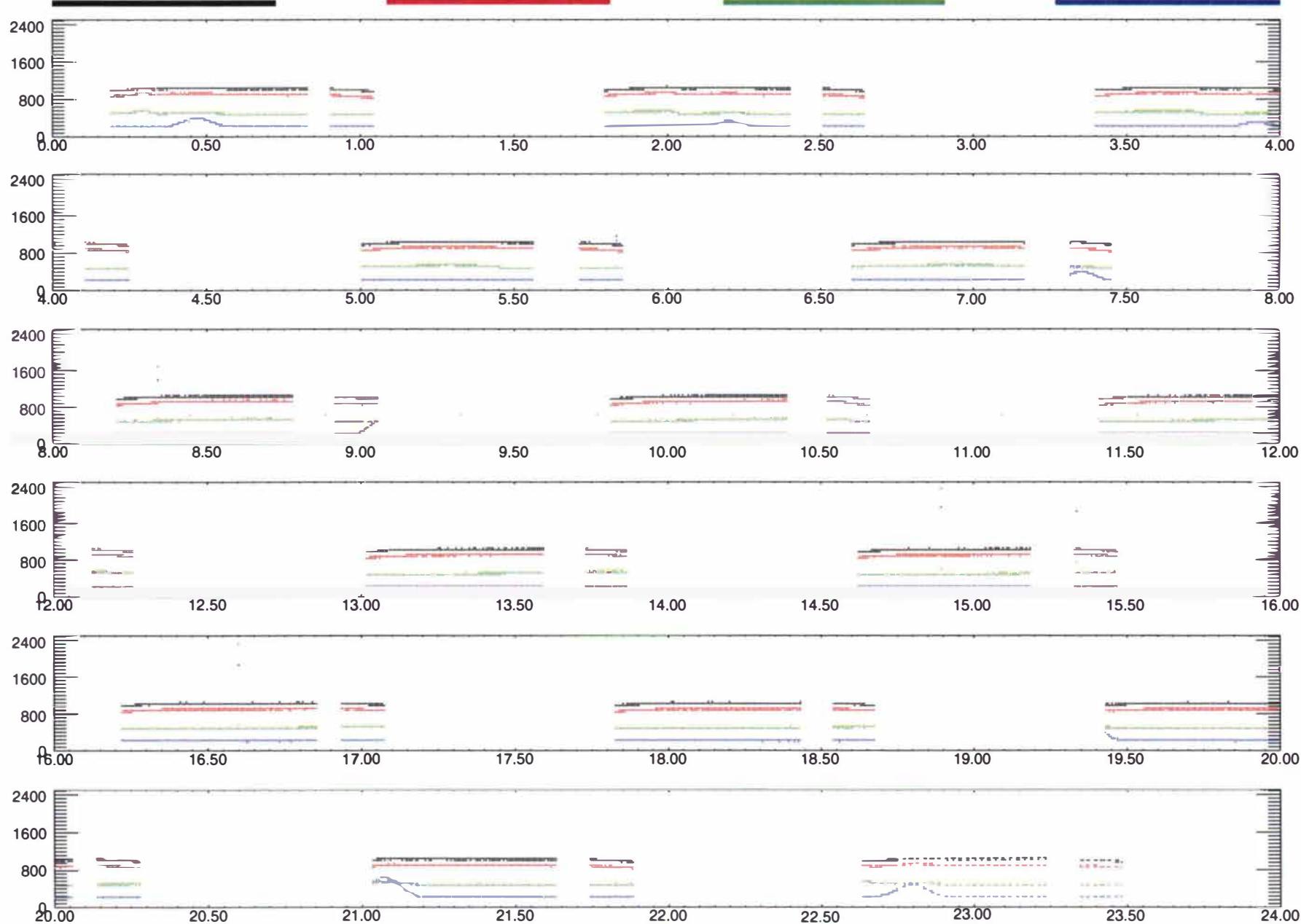
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT

KONUS1

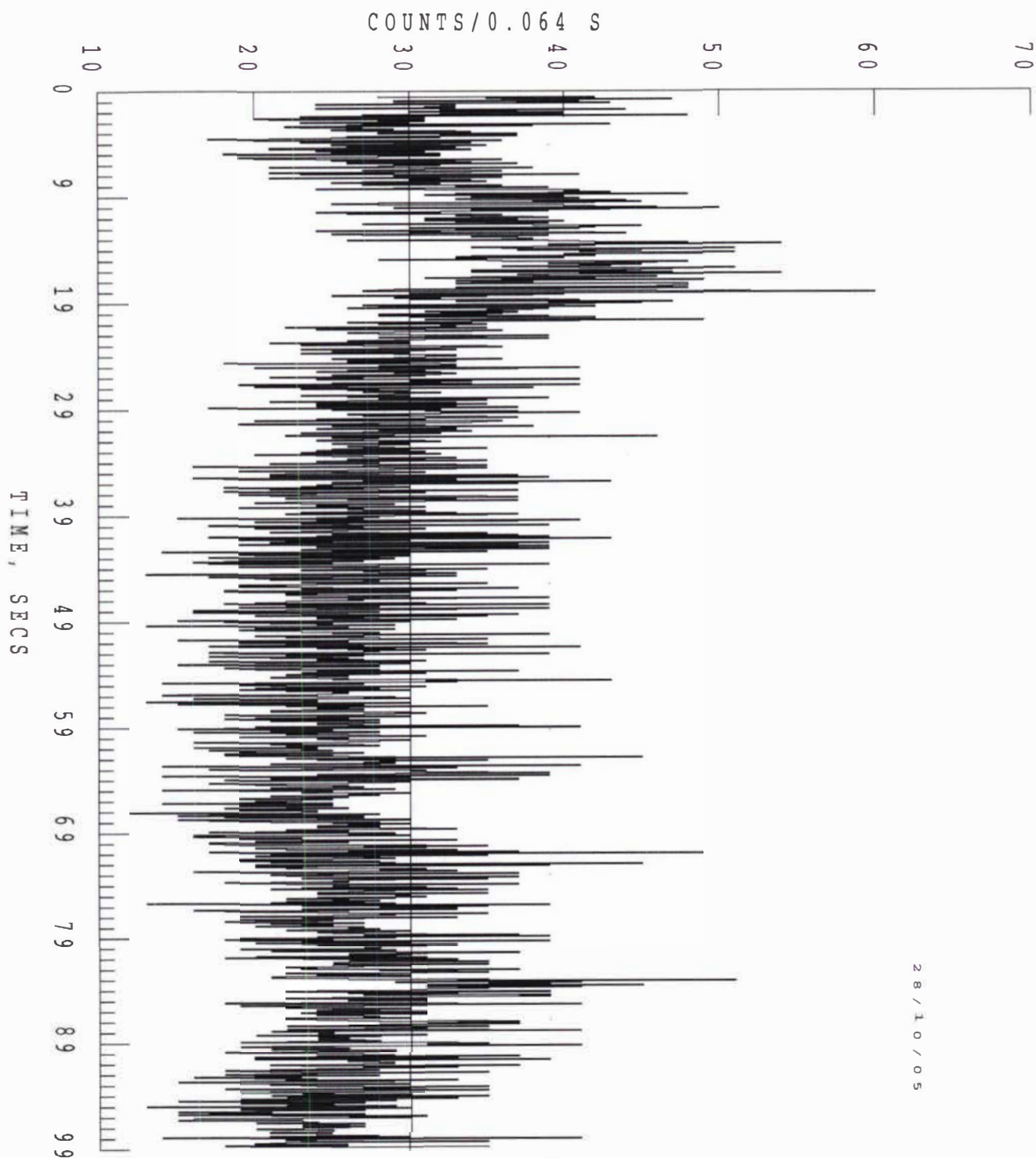
27/10/05

19823.210

50 - 200 keV

05:30:23

Konus EL added to Access



KONUS HRES 20051027 19823

TRIGGER TIME: 27/10/05 DOY 300 Julian 2453671.72943 UT = 05.506 05:30:23 (19823.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

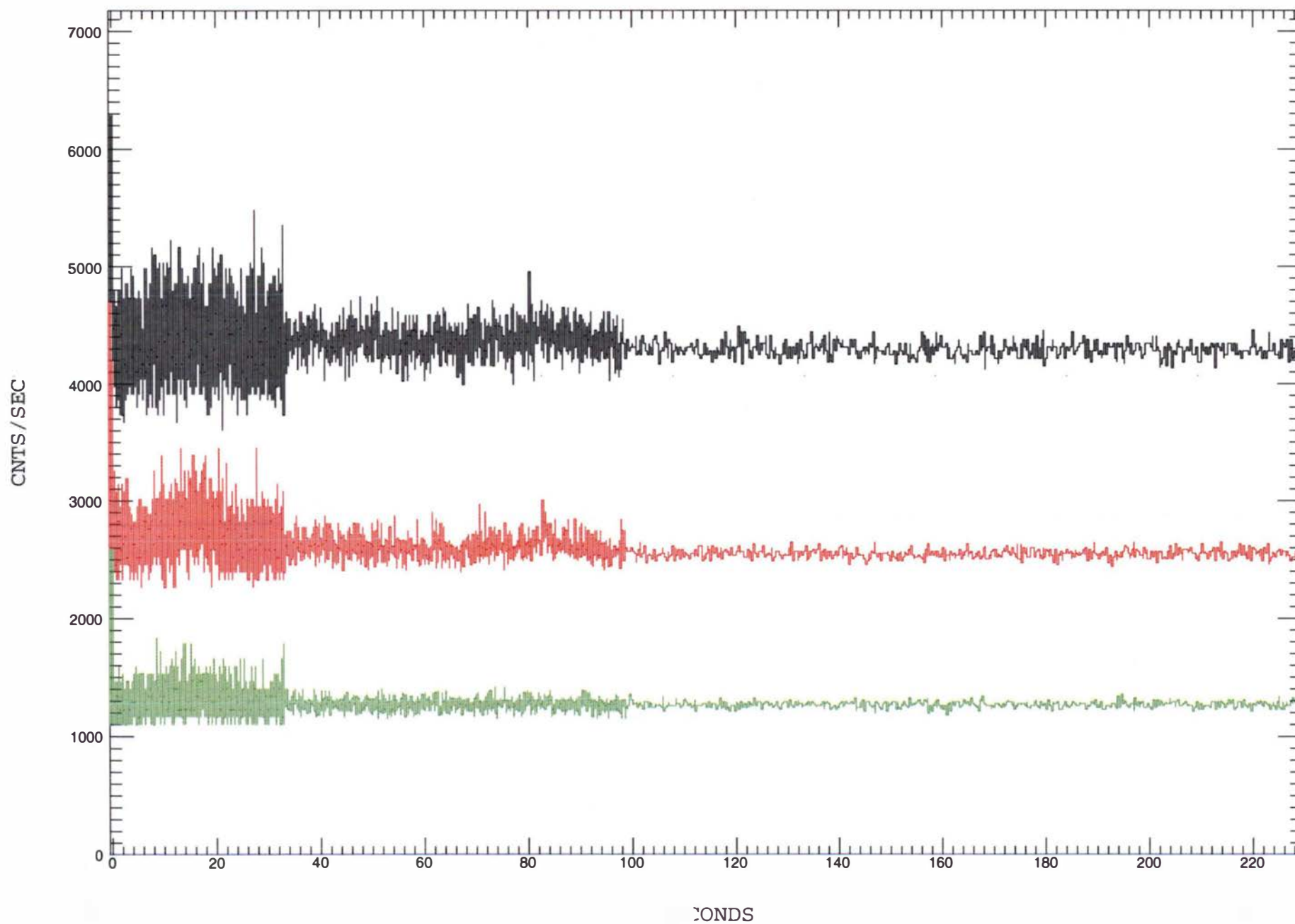
Chan 4 : [> 10 MeV]

Channel 1 + 3300

Channel 2 + 2200

Channel 3 + 1100

Channel 4 + 0



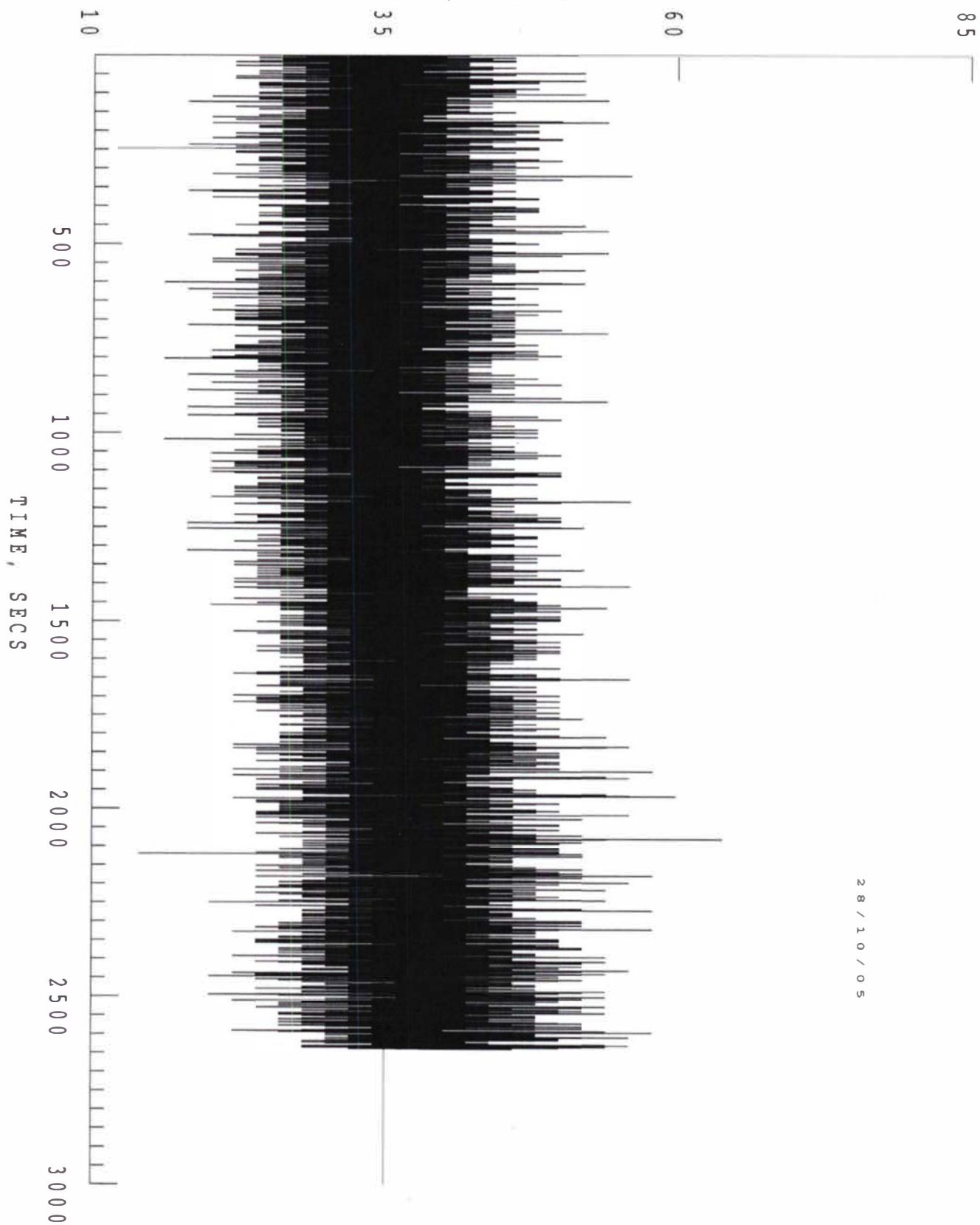
MS01

27/10/05

18506.529

50 - 3000 keV

COUNTS/0.250 S

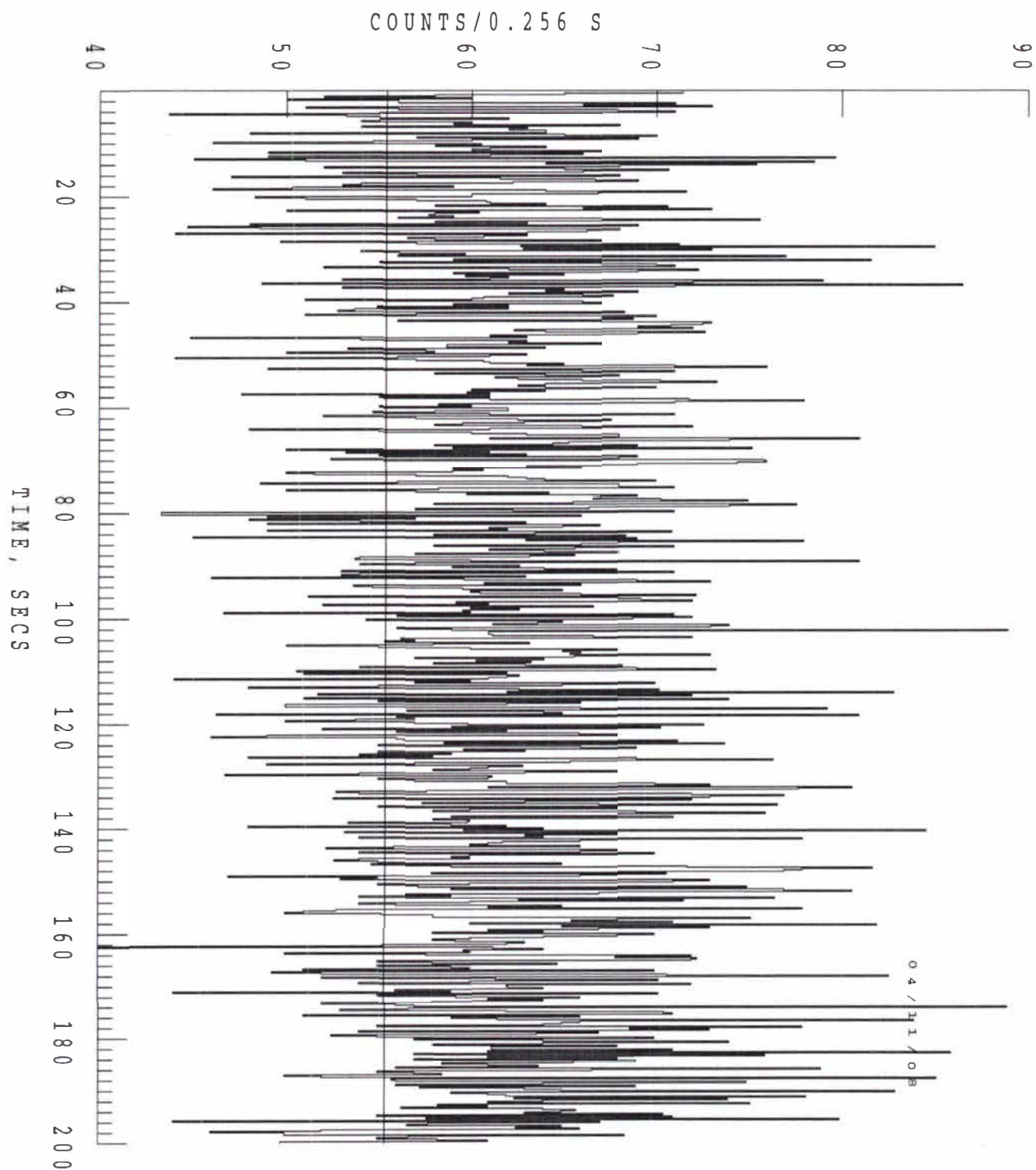


28 / 10 / 05

HESSI

27/10/05 19723.000 (konus_20051027_19823)

50 - 200 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (KONUS1_20051027_19823)

BEG TIME: 27/10/05 DOY 300 Julian 2453671.72708 UT = 05.450 05:27:00 (19620.000 secs) [sct = 0019 c1bc 6d60 8521]
 END TIME: 27/10/05 DOY 300 Julian 2453671.73167 UT = 05.560 05:33:36 (20016.000 secs) [sct = 0019 c1bc 84fb 0171]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

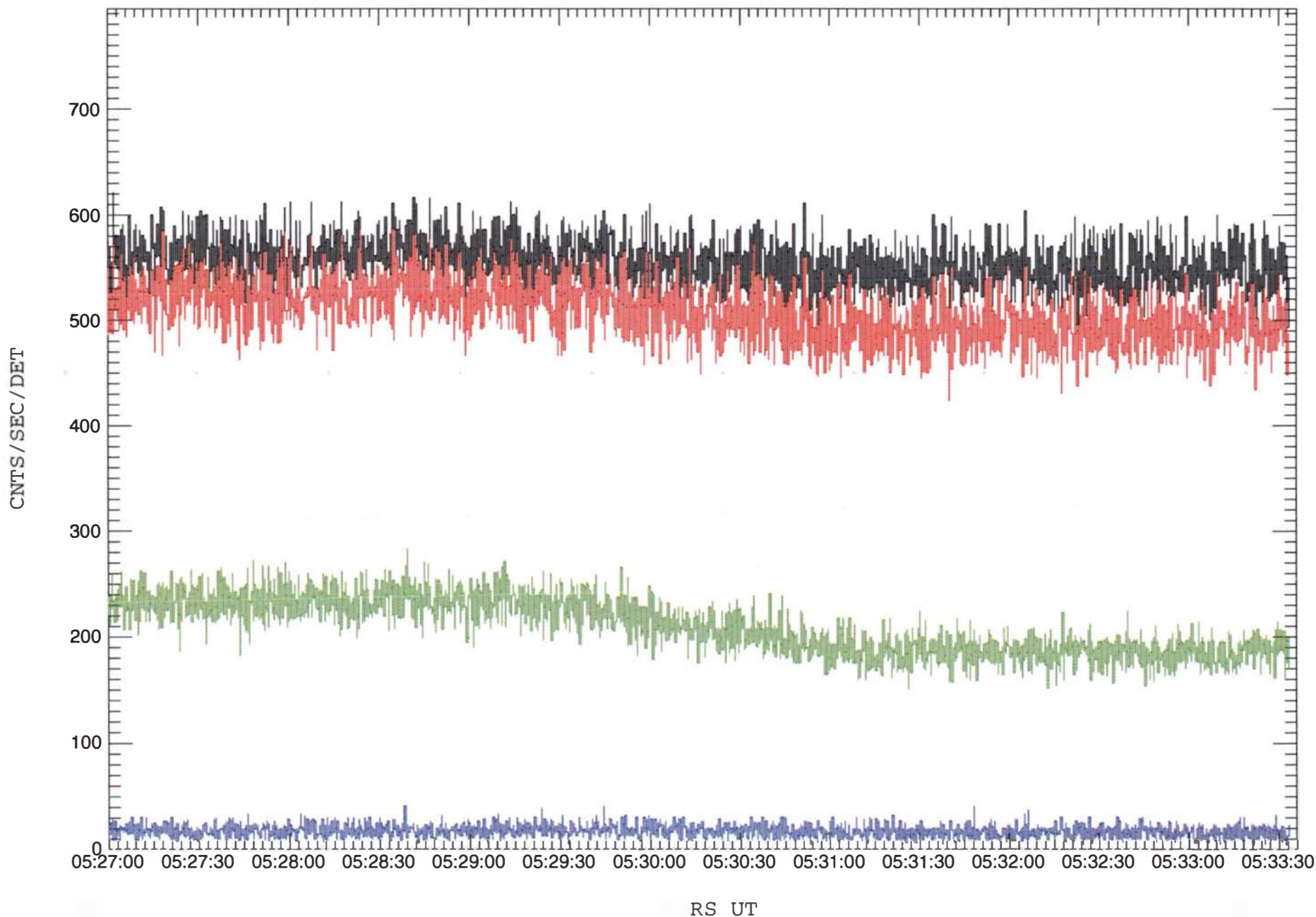
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

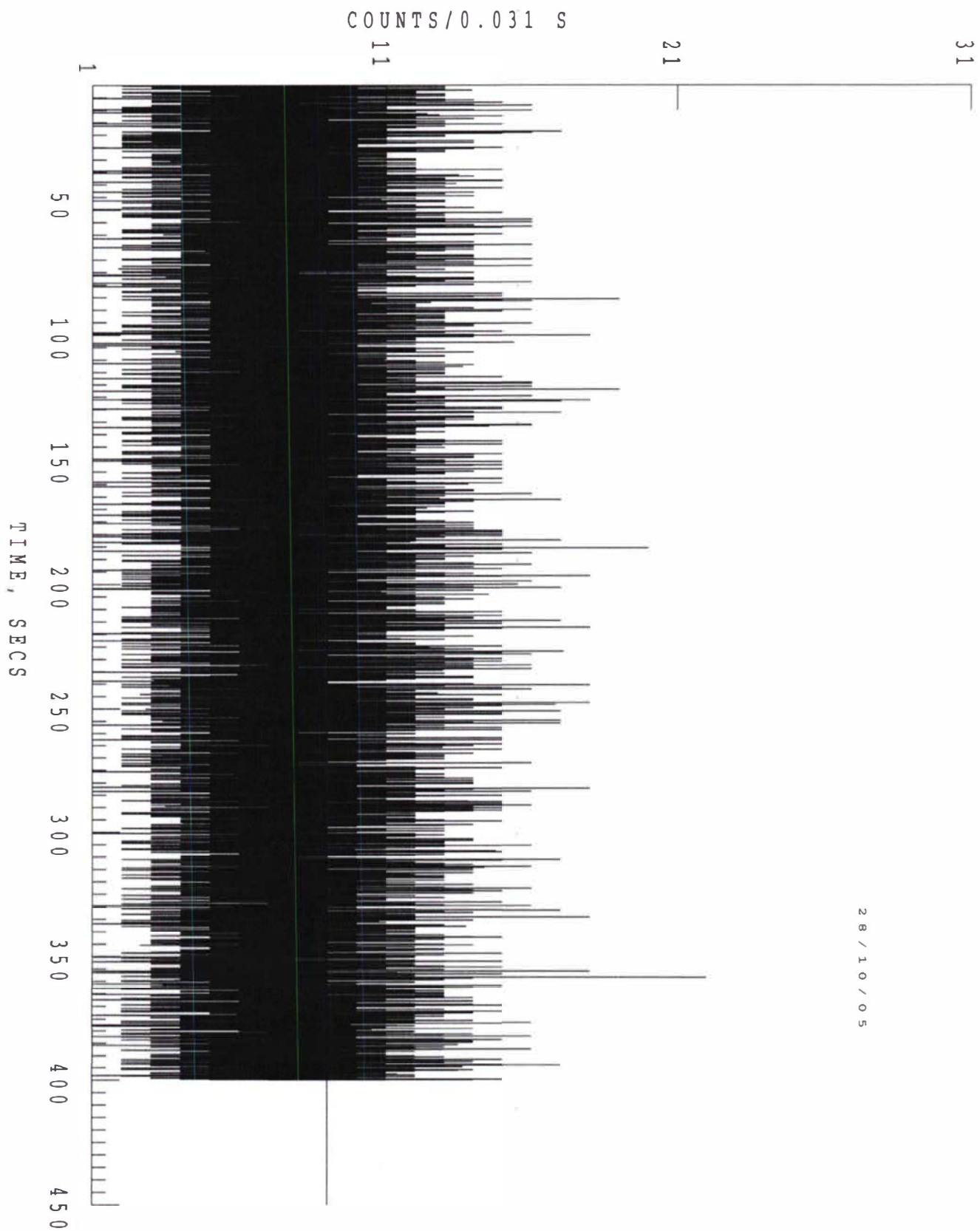
Channel 4 + 0



HESSI

27/10/05 19623.000 (KONUS1_20051027_19823)

25- 150 keV



From vxw@capella.gsfc.nasa.gov Fri Oct 28 08:39:35 2005
X-ASG-Debug-ID: 1130514012-10047-2-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
X-ASG-Whitelist: Sender
Date: Fri, 28 Oct 2005 11:40:12 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/HETE_POSITION
Subject: GCN/HETE_POSITION

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Fri 28 Oct 05 15:39:10 UT
NOTICE_TYPE: HETE Ground Analysis
TRIGGER_NUM: 3951, Seq_Num: 3
GRB_DATE: 13671 TJD; 301 DOY; 05/10/28
GRB_TIME: 48961.47 SOD {13:36:01.47} UT
TRIGGER_SOURCE: Trigger on the 25-400 keV band.
GAMMA_RATE: 182 [cnts/s] on a 1.300 [sec] timescale
SC_Z_RA: 34 [deg]
SC_Z_DEC: 14 [deg]
SC_LONG: 170 [deg East]
WXM_CNTR_RA: 27.163d {+01h 48m 39s} (J2000),
27.254d {+01h 49m 01s} (current),
26.385d {+01h 45m 32s} (1950)
WXM_CNTR_DEC: +47.808d {+47d 48' 31"} (J2000),
+47.837d {+47d 50' 14"} (current),
+47.560d {+47d 33' 36"} (1950)
WXM_CORNER1: 27.5820 47.6850 [deg]
WXM_CORNER2: 26.7550 47.6340 [deg]
WXM_CORNER3: 26.7430 47.9320 [deg]
WXM_CORNER4: 27.5730 47.9829 [deg]
WXM_MAX_SIZE: 39.05 [arcmin] diameter
WXM_LOC_SN: 10 sig/noise (pt src in image)
WXM_IMAGE_SN: X= 5.4 Y= 5.4 [sig/noise]
WXM_LC_SN: X= 9.9 Y= 3.0 [sig/noise]
SUN_POSTN: 212.94d {+14h 11m 46s} -13.27d {-13d 15' 56"}
SUN_DIST: 145.10 [deg]
MOON_POSTN: 165.86d {+11h 03m 26s} +8.98d {+08d 58' 41"}
MOON_DIST: 112.44 [deg]
MOON_ILLUM: 19 [%]
GAL_COORDS: 132.78,-13.97 [deg] galactic lon,lat of the burst
ECL_COORDS: 43.95,33.90 [deg] ecliptic lon,lat of the burst
COMMENTS: Definite GRB.
COMMENTS: Burst Validity flag is true.
COMMENTS: WXM data refined since S/C_Last Notice.

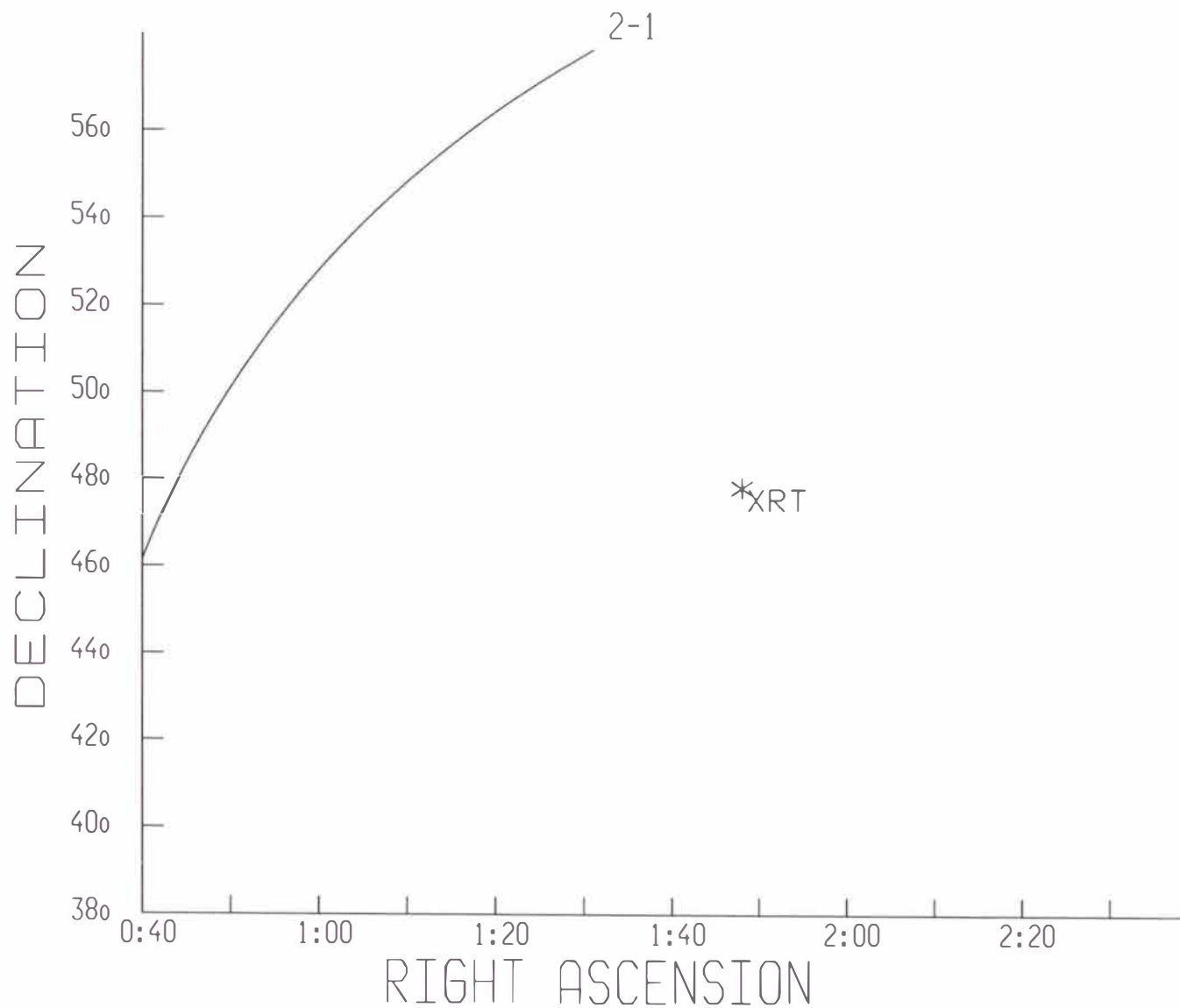
MCT 48771

Added to ACCESS

EVENT OF OCT 28, 2005 13:36

12/12/2011

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



KONUS2

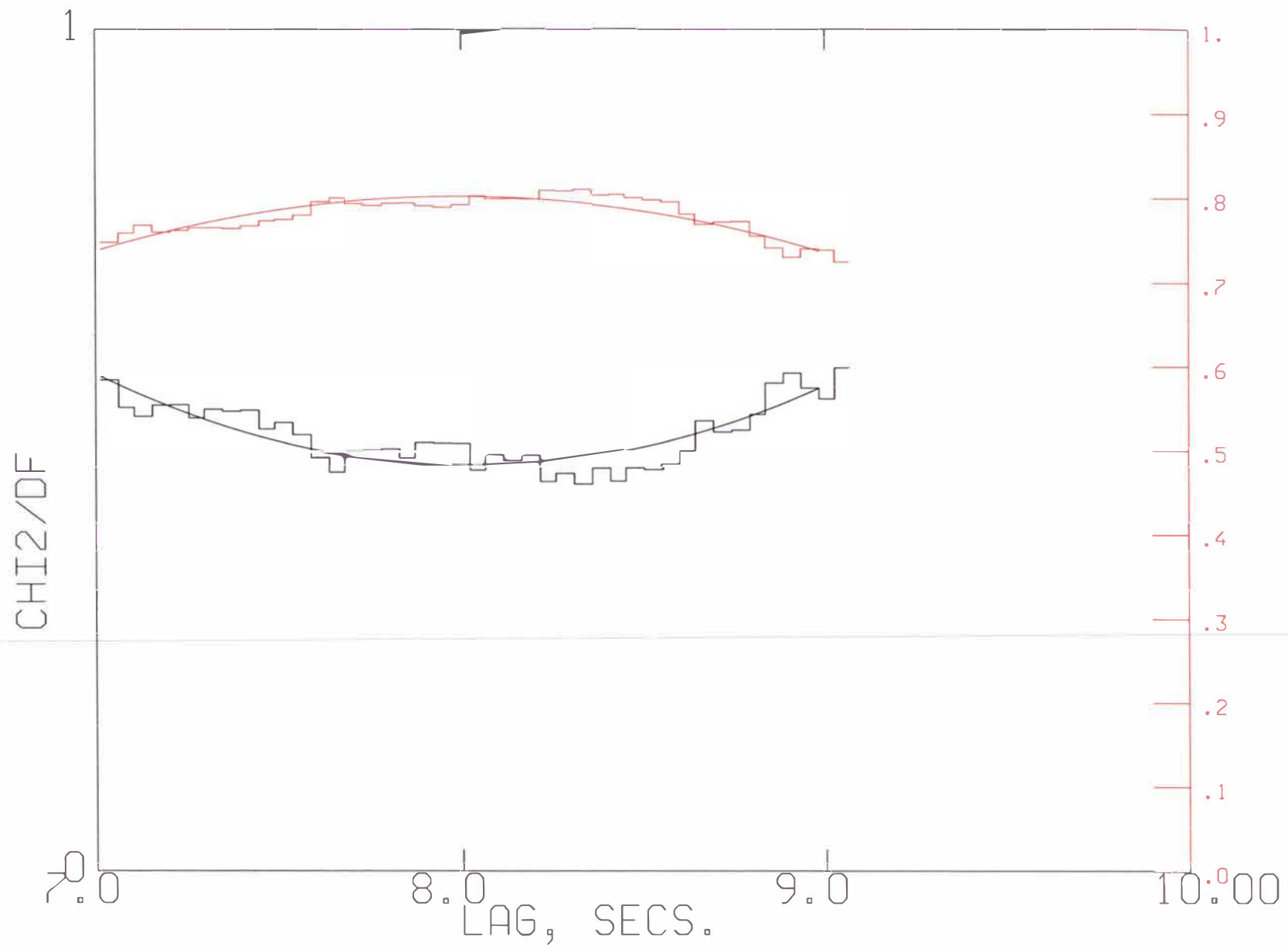
-INTEGRAL

CORRELATION

28/10/05

48967.159

12/12/11



KONUS2

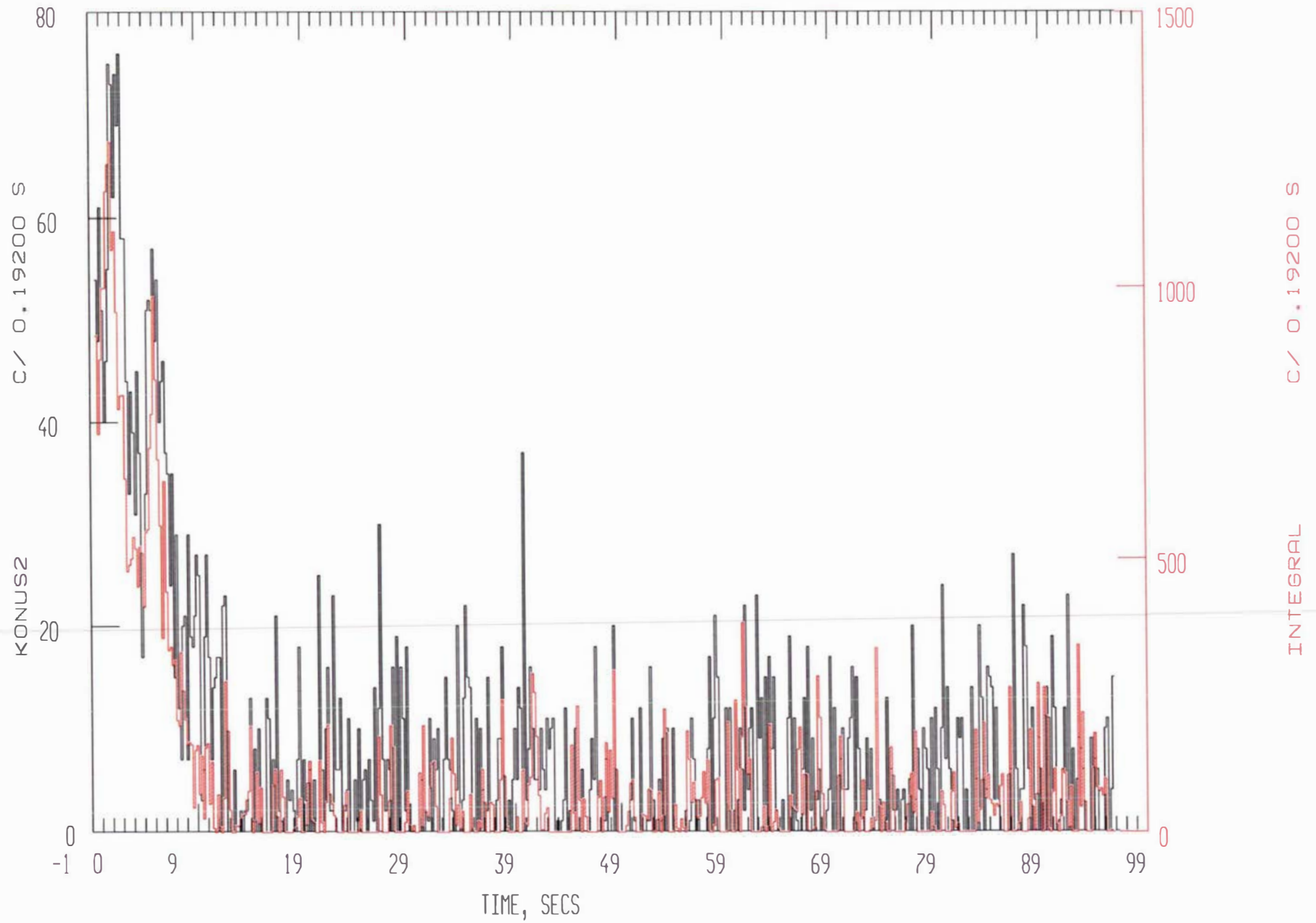
-INTEGRAL

CORRELATION

28/10/05

48967.159

12/12/11



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_3951_1_20051028_48961)

BEG TIME: 28/10/05 DOY 301 Julian 2453673.06417 UT = 13.540 13:32:24 (48744.000 secs) [sct = 0019 c1d7 5326 5ea6]
 END TIME: 28/10/05 DOY 301 Julian 2453673.06917 UT = 13.660 13:39:36 (49176.000 secs) [sct = 0019 c1d7 6ce6 2c17]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

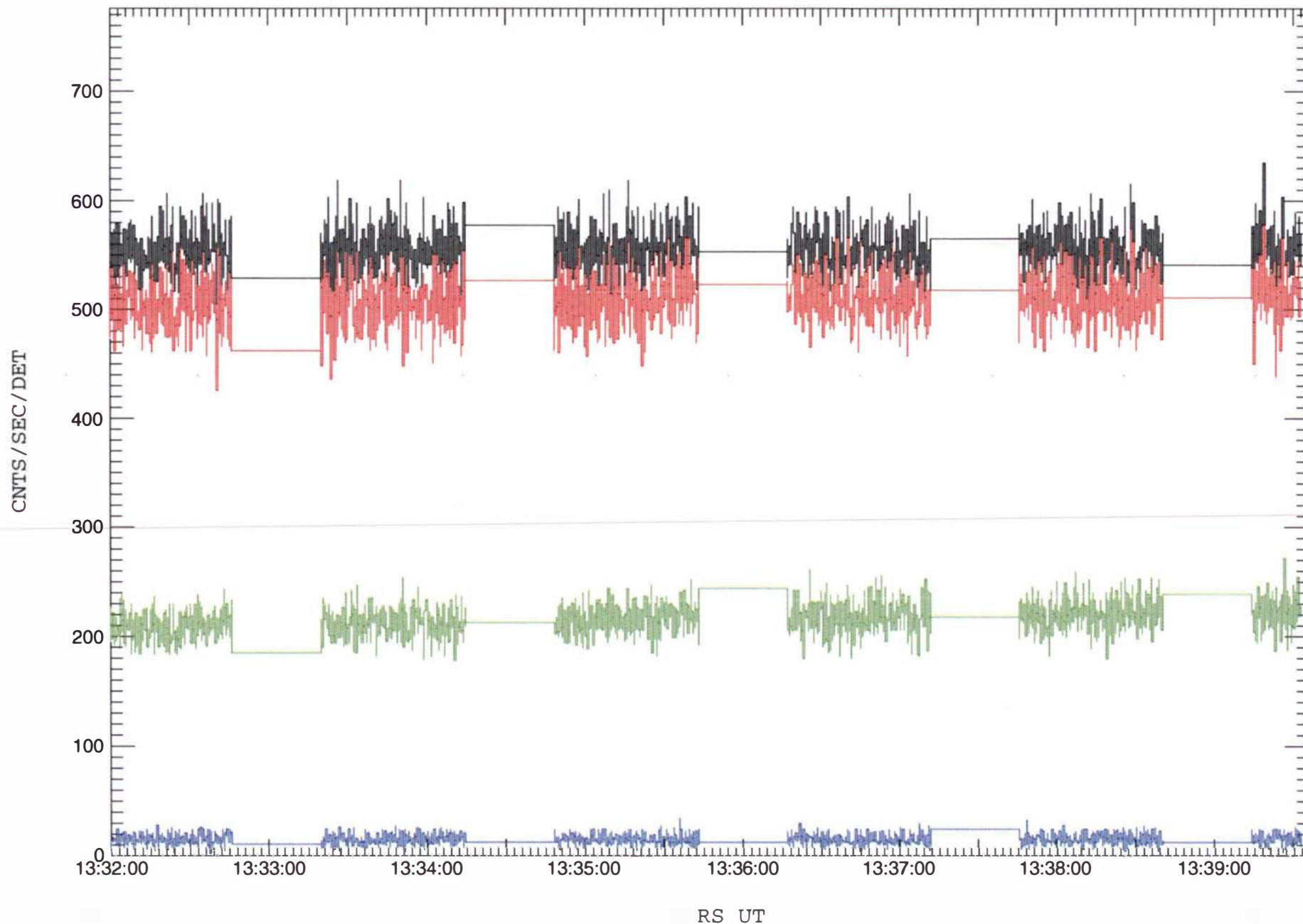
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

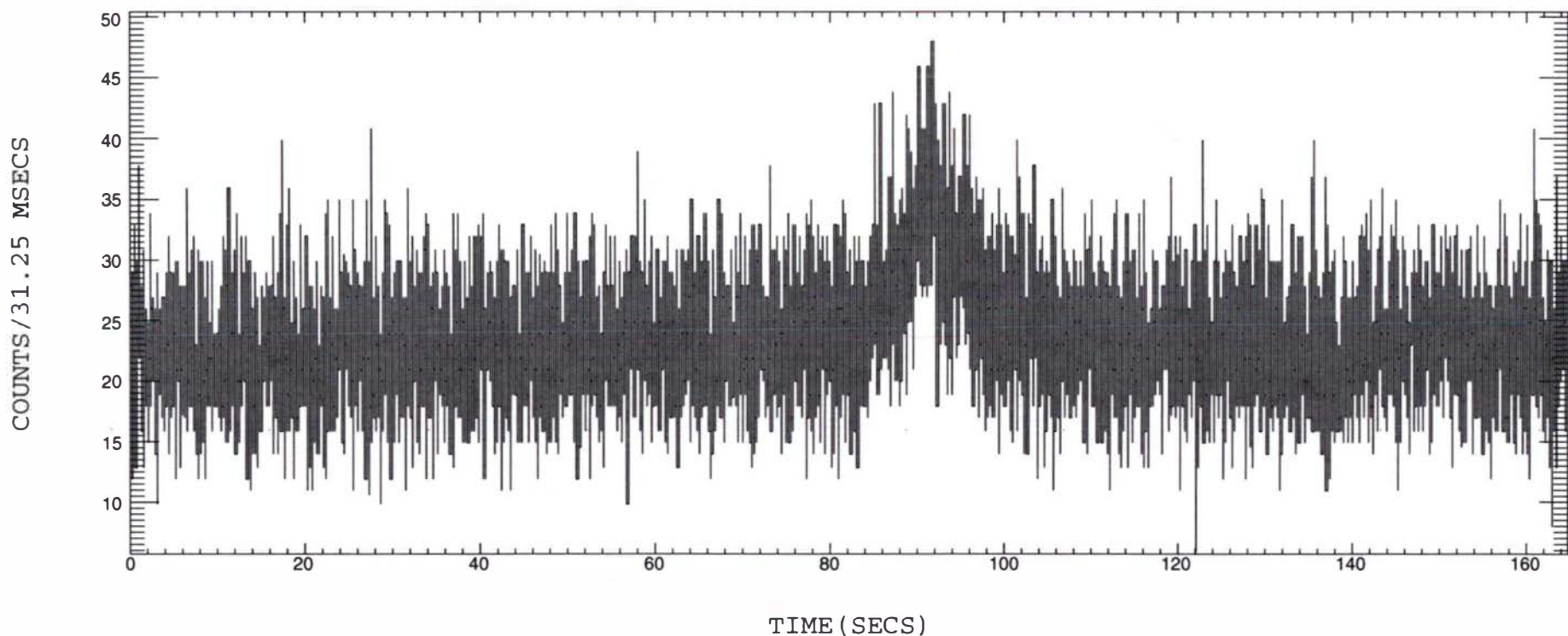
Channel 3 + 100

Channel 4 + 0



FREGATE BURST #1 TIME HISTORY -- DETECTORS 1-4 SUMMED

28/10/05 DOY 301 Julian 2453673.06670
 TRIGGERED BY FREGATE UT = 13:36:02 (48962.83 secs) [sct = 0019 c1d7 6031 7824]
 PLOT STARTING TIME UT = 13:34:32 (48872.74 secs) [sct = 0019 c1d7 5ad2 d06d]
 BACKGRND SAMPLED FROM UT = 13:35:48 (48948.41 secs) [sct = 0019 c1d7 5f55 7824]
 BIN WIDTH 31.25 msecs INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 2, deltaT = 163.20ms, USING DETECTOR(S) 3 4

CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC1 CNT RATES	17	24	0	0	108	150	0	0	908	963	0	0	3246	3599	0	0
EXC2 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC2 CNT RATES	18	11	0	0	123	131	0	0	944	1051	0	0	3246	3599	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC1 CNT RATES	10	13	0	0	61	69	0	0	377	383	0	0	1284	1347	0	0
EXC2 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC2 CNT RATES	3	4	0	0	52	64	0	0	428	464	0	0	1284	1347	0	0

FREGATE BURST #1 TIME HISTORY -- DETECTOR 1

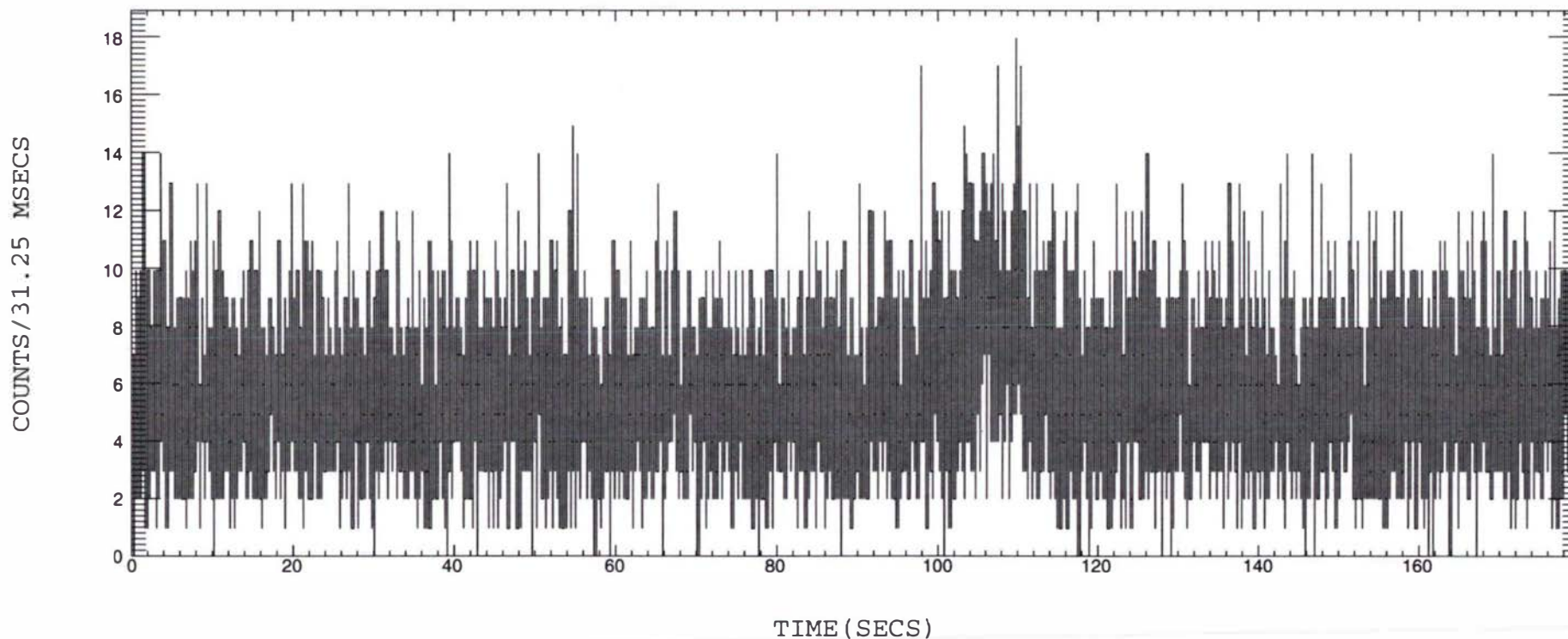
28/10/05 DOY 301 Julian 2453673.06670

TRIGGERED BY FREGATE UT = 13:36:02 (48962.83 secs) [sct = 0019 c1d7 6031 7824]

PLOT STARTING TIME UT = 13:34:17 (48857.95 secs) [sct = 0019 c1d7 59f1 0b4c]

BACKGRND SAMPLED FROM UT = 13:35:48 (48948.41 secs) [sct = 0019 c1d7 5f55 7824]

BIN WIDTH 31.25 msecS INTEGRATED OVER CHANS. 20-200

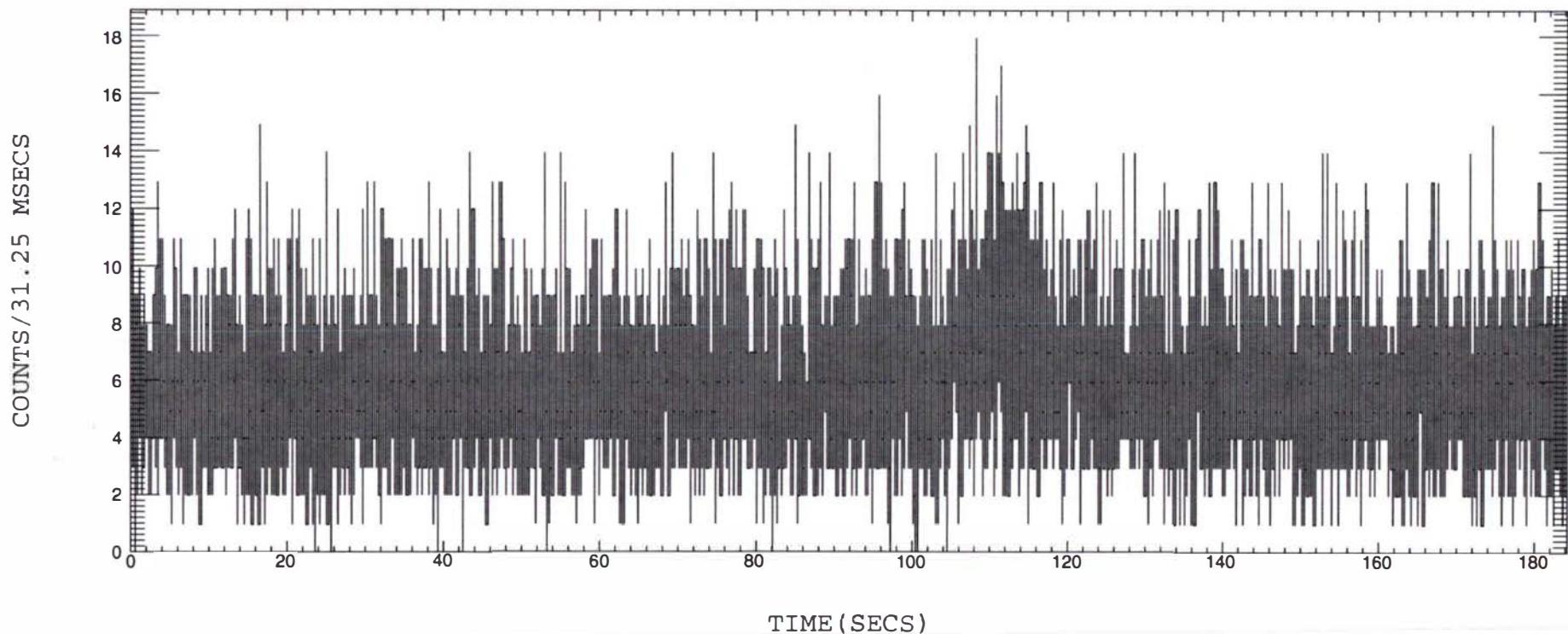


TRIGGER: deltaE = 2, deltaT = 163.20ms, USING DETECTOR(S) 3 4

CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC1 CNT RATES	17	24	0	0	108	150	0	0	908	963	0	0	3246	3599	0	0
EXC2 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC2 CNT RATES	18	11	0	0	123	131	0	0	944	1051	0	0	3246	3599	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC1 CNT RATES	10	13	0	0	61	69	0	0	377	383	0	0	1284	1347	0	0
EXC2 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC2 CNT RATES	3	4	0	0	52	64	0	0	428	464	0	0	1284	1347	0	0

FREGATE BURST #1 TIME HISTORY -- DETECTOR 2

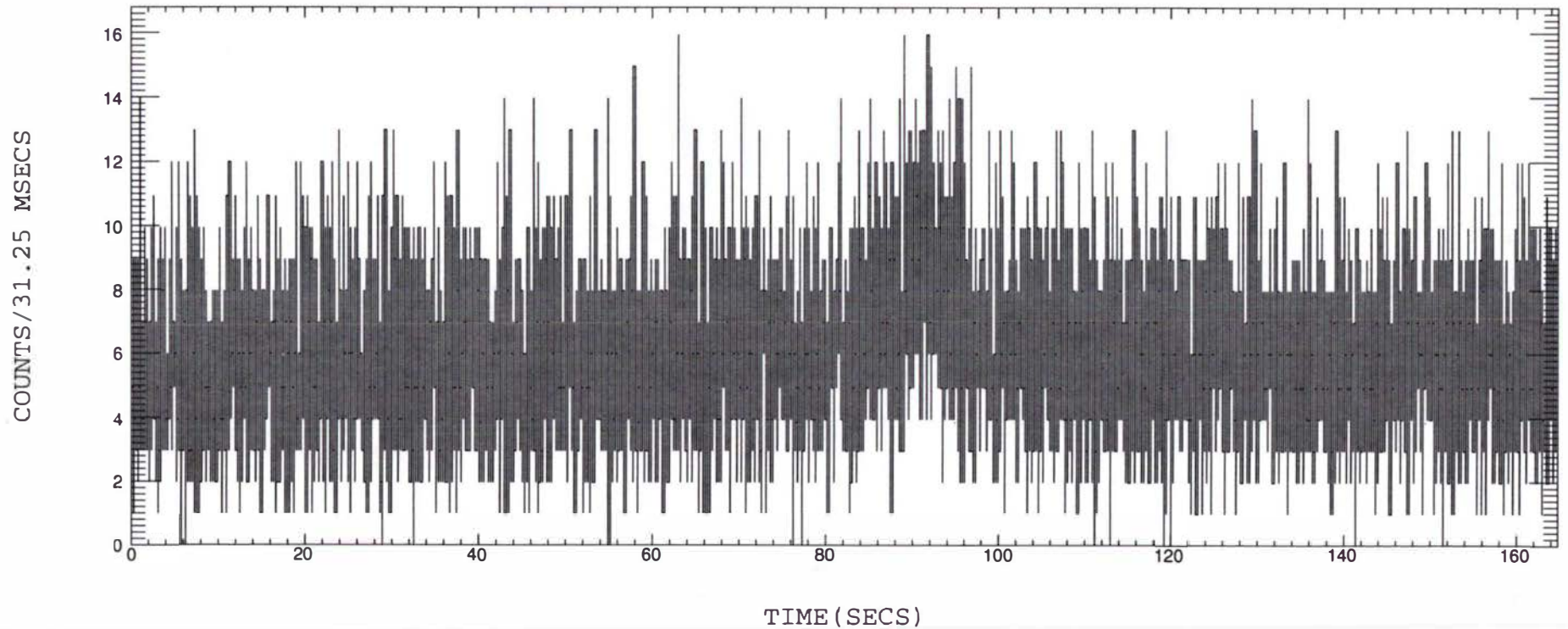
28/10/05 DOY 301 Julian 2453673.06670
 TRIGGERED BY FREGATE UT = 13:36:02 (48962.83 secs) [sct = 0019 c1d7 6031 7824]
 PLOT STARTING TIME UT = 13:34:13 (48853.31 secs) [sct = 0019 c1d7 59aa 5405]
 BACKGRND SAMPLED FROM UT = 13:35:48 (48948.41 secs) [sct = 0019 c1d7 5f55 7824]
 BIN WIDTH 31.25 msecs INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 2, deltaT = 163.20ms, USING DETECTOR(S) 3 4																
CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC1 CNT RATES	17	24	0	0	108	150	0	0	908	963	0	0	3246	3599	0	0
EXC2 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC2 CNT RATES	18	11	0	0	123	131	0	0	944	1051	0	0	3246	3599	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC1 CNT RATES	10	13	0	0	61	69	0	0	377	383	0	0	1284	1347	0	0
EXC2 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC2 CNT RATES	3	4	0	0	52	64	0	0	428	464	0	0	1284	1347	0	0

FREGATE BURST #1 TIME HISTORY -- DETECTOR 3

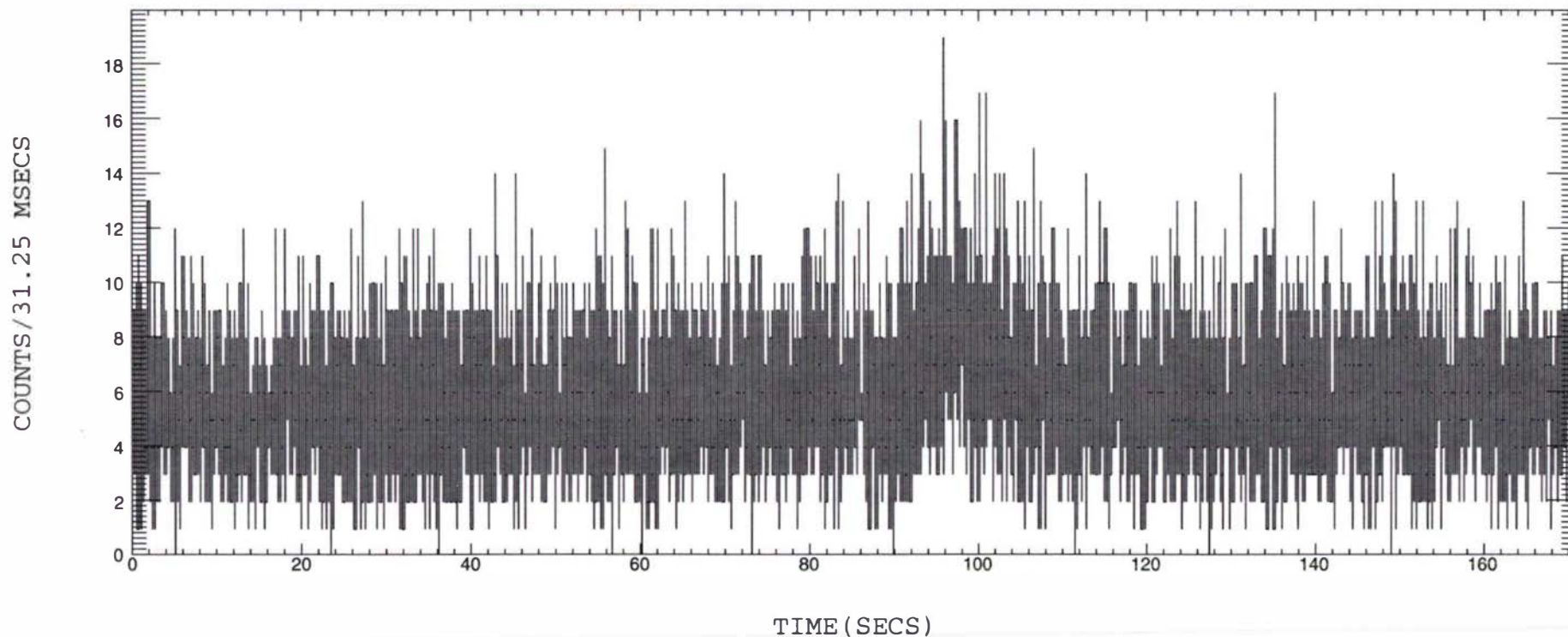
28/10/05 DOY 301 Julian 2453673.06670
 TRIGGERED BY FREGATE UT = 13:36:02 (48962.83 secs) [sct = 0019 c1d7 6031 7824]
 PLOT STARTING TIME UT = 13:34:32 (48872.74 secs) [sct = 0019 c1d7 5ad2 cbed]
 BACKGRND SAMPLED FROM UT = 13:35:48 (48948.41 secs) [sct = 0019 c1d7 5f55 7824]
 BIN WIDTH 31.25 msecs INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 2, deltaT = 163.20ms, USING DETECTOR(S) 3 4																
CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC1 CNT RATES	17	24	0	0	108	150	0	0	908	963	0	0	3246	3599	0	0
EXC2 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC2 CNT RATES	18	11	0	0	123	131	0	0	944	1051	0	0	3246	3599	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC1 CNT RATES	10	13	0	0	61	69	0	0	377	383	0	0	1284	1347	0	0
EXC2 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC2 CNT RATES	3	4	0	0	52	64	0	0	428	464	0	0	1284	1347	0	0

FREGATE BURST #1 TIME HISTORY -- DETECTOR 4

28/10/05 DOY 301 Julian 2453673.06670
 TRIGGERED BY FREGATE UT = 13:36:02 (48962.83 secs) [sct = 0019 c1d7 6031 7824]
 PLOT STARTING TIME UT = 13:34:26 (48866.76 secs) [sct = 0019 c1d7 5a77 87e3]
 BACKGRND SAMPLED FROM UT = 13:35:48 (48948.41 secs) [sct = 0019 c1d7 5f55 7824]
 BIN WIDTH 31.25 msecs INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 2, deltaT = 163.20ms, USING DETECTOR(S) 3 4																
CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC1 CNT RATES	17	24	0	0	108	150	0	0	908	963	0	0	3246	3599	0	0
EXC2 REF VALUES	33	35	0	0	148	157	0	0	917	980	0	0	3445	3691	0	0
EXC2 CNT RATES	18	11	0	0	123	131	0	0	944	1051	0	0	3246	3599	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC1 CNT RATES	10	13	0	0	61	69	0	0	377	383	0	0	1284	1347	0	0
EXC2 REF VALUES	17	17	0	0	64	66	0	0	378	385	0	0	1362	1384	0	0
EXC2 CNT RATES	3	4	0	0	52	64	0	0	428	464	0	0	1284	1347	0	0

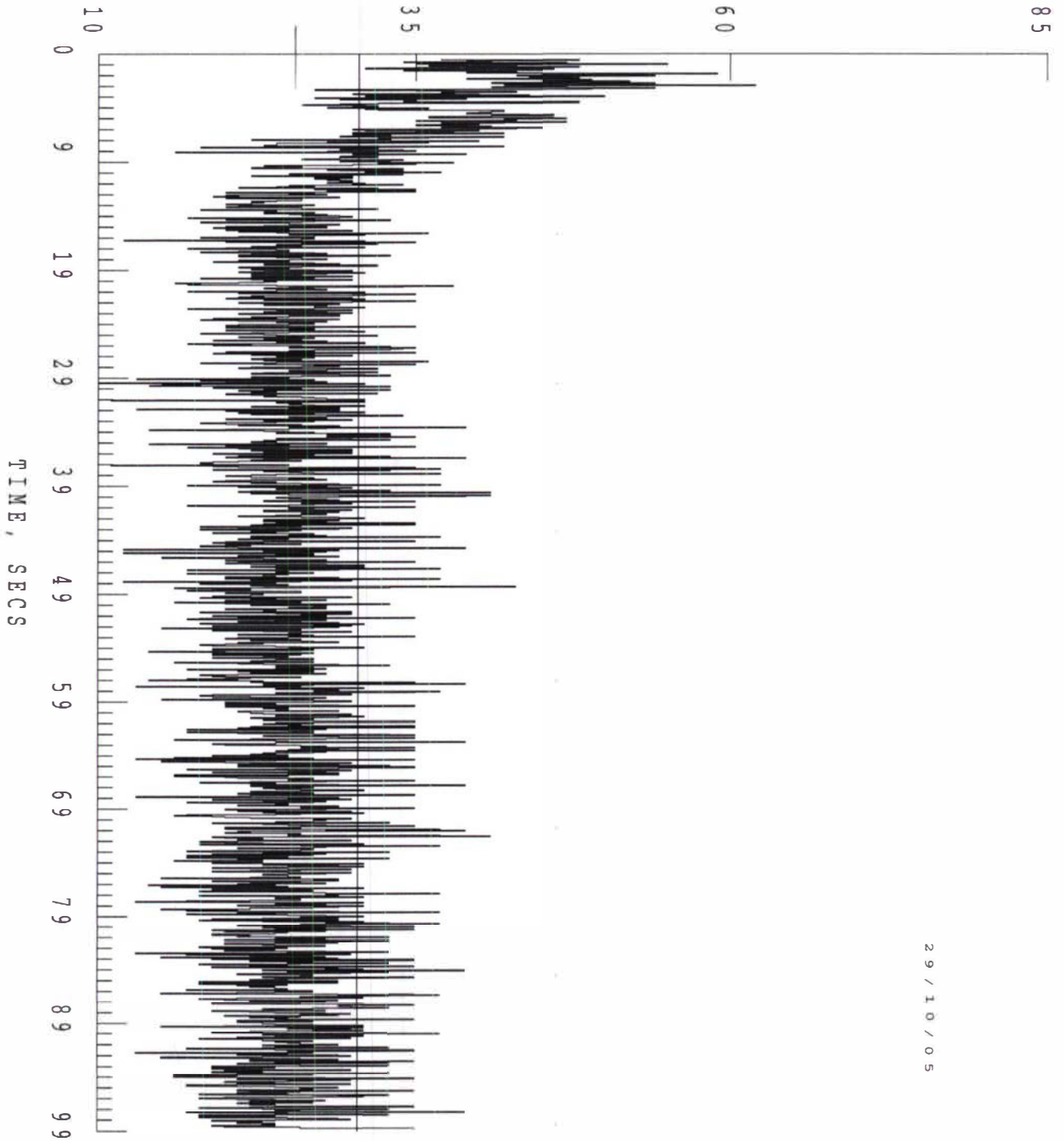
KONUS2

28/10/05

48967.159

50- 200 keV

COUNTS/0.064 S



29 / 10 / 05

KONUS HRES 20051028 48967

TRIGGER TIME: 28/10/05 DOY 301 Julian 2453673.06675 UT = 13.602 13:36:07 (48967.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

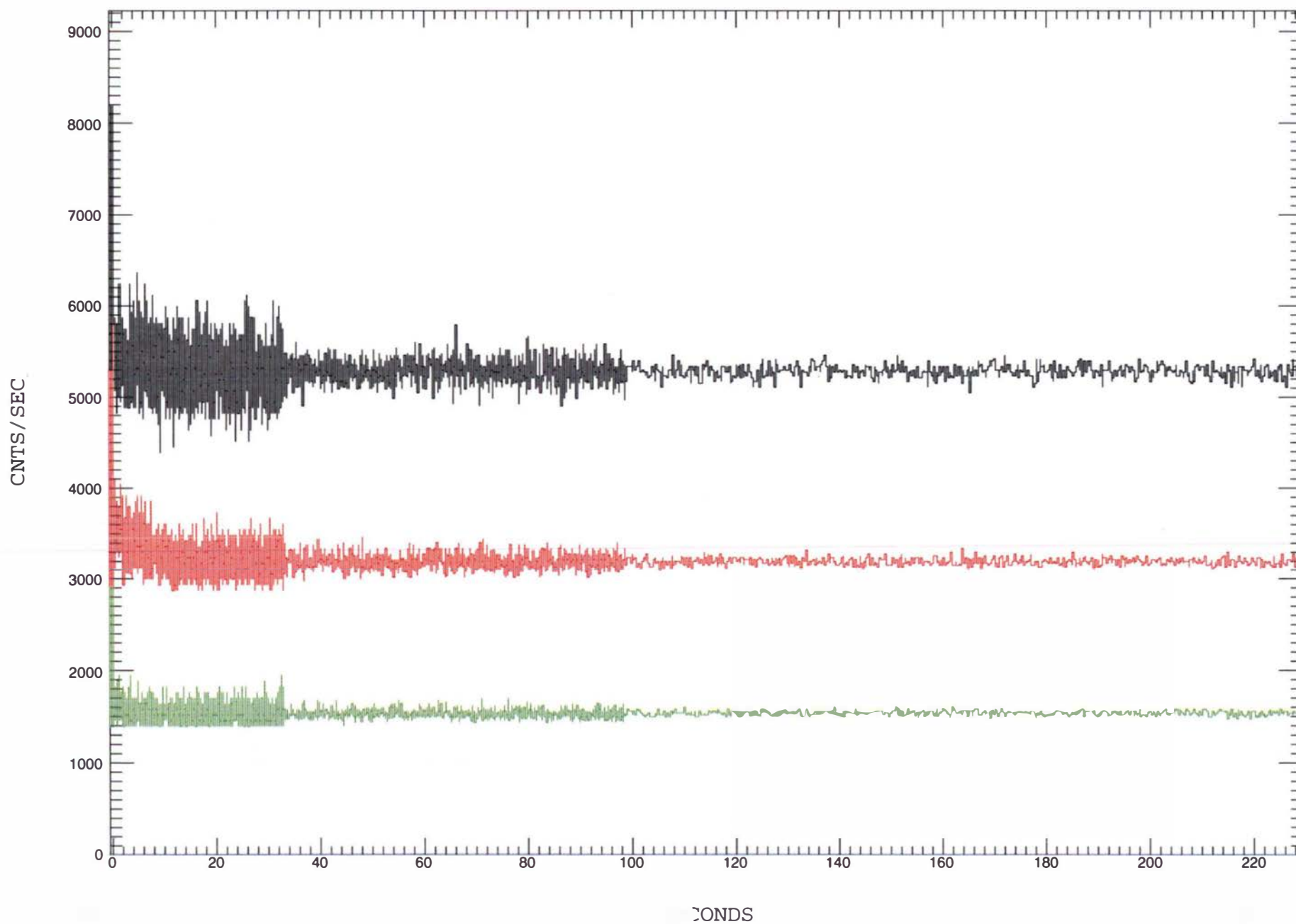
Chan 4 : [> 10 MeV]

Channel 1 + 4200

Channel 2 + 2800

Channel 3 + 1400

Channel 4 + 0



MS01

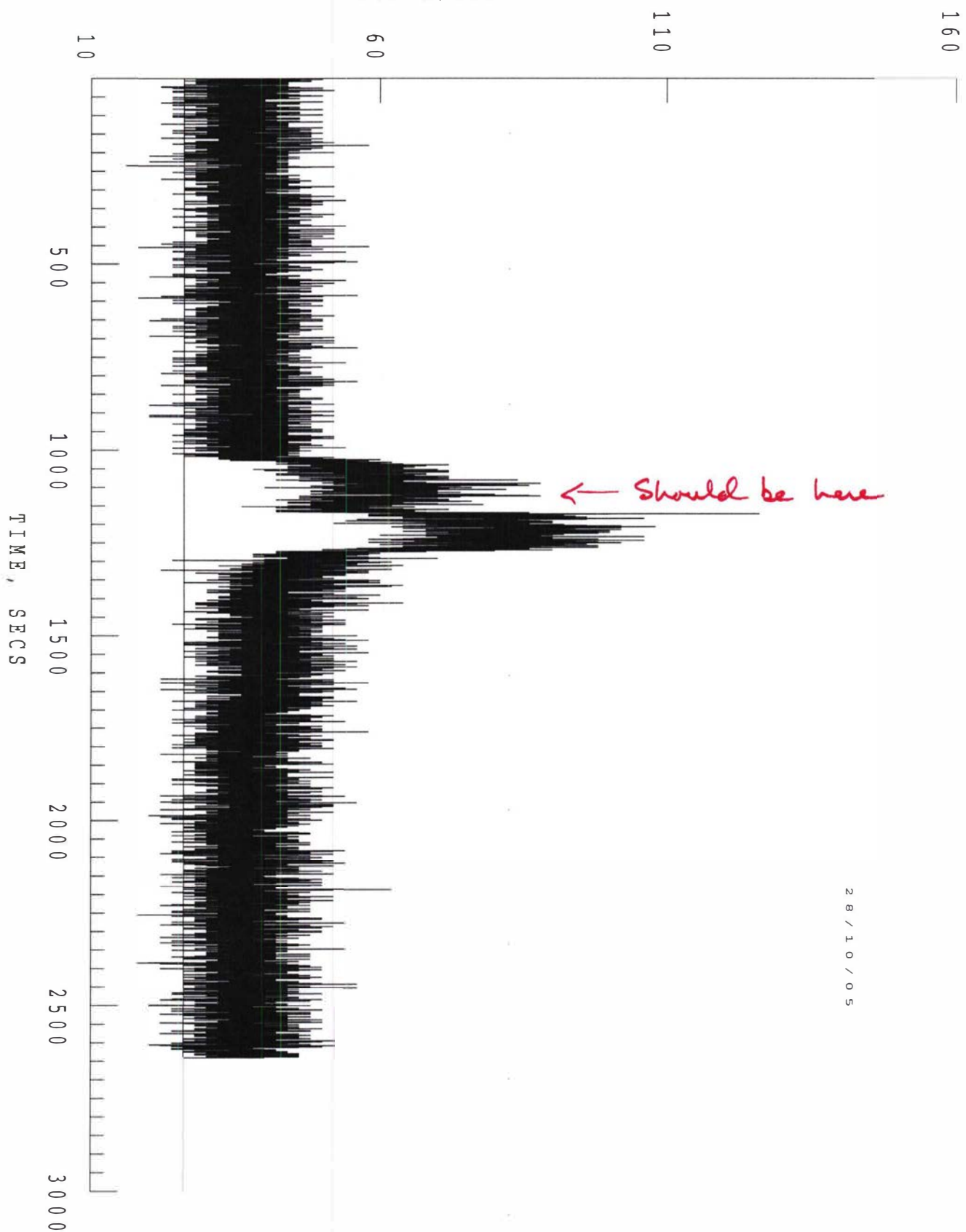
28/10/05

47606.620

No tug

50 - 3000 keV

COUNTS/0.250 S

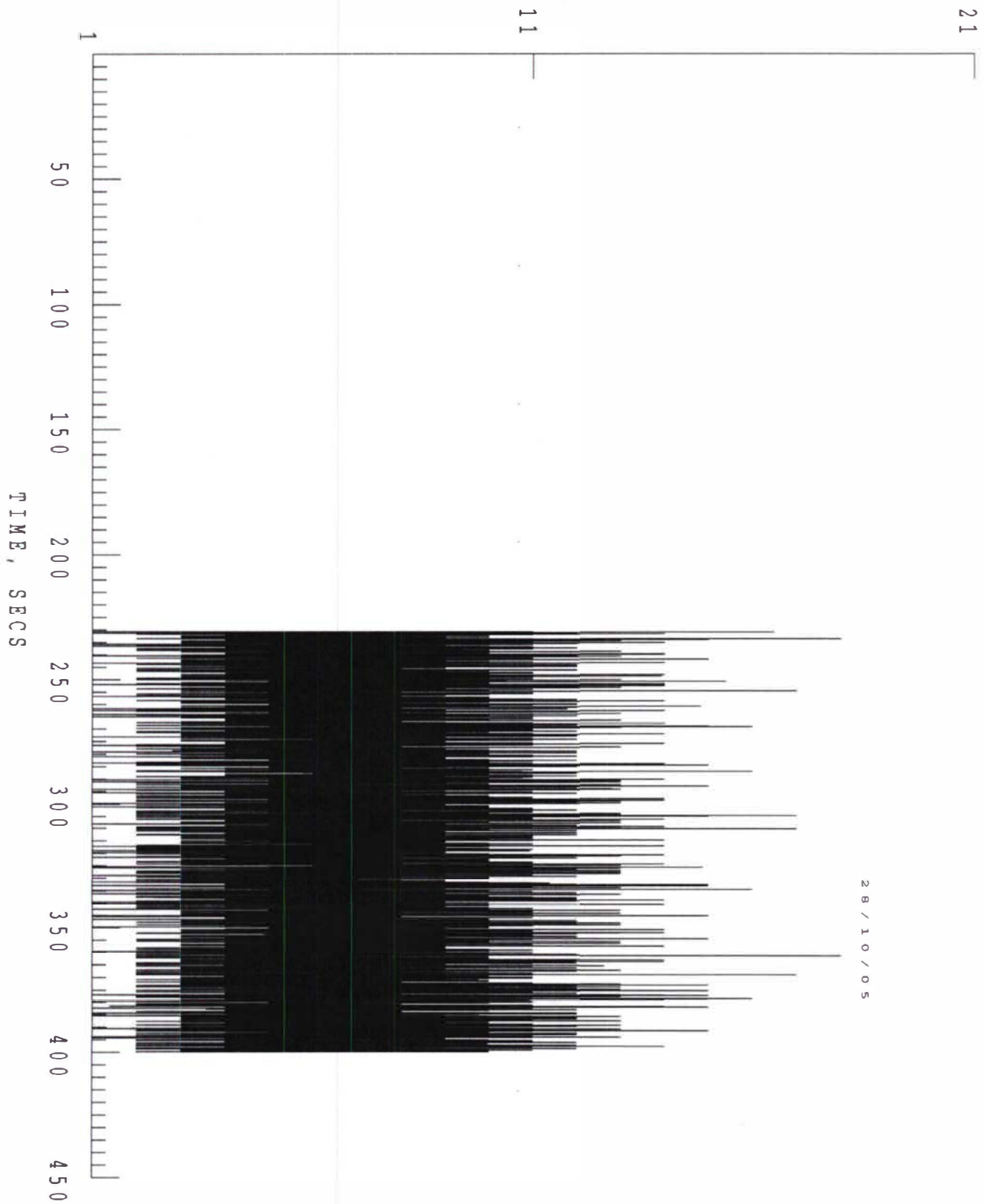


HESSI

28/10/05 48761.000 (GHETE_3951_1_20051028_48961)

25- 150 keV

COUNTS/0.031 S



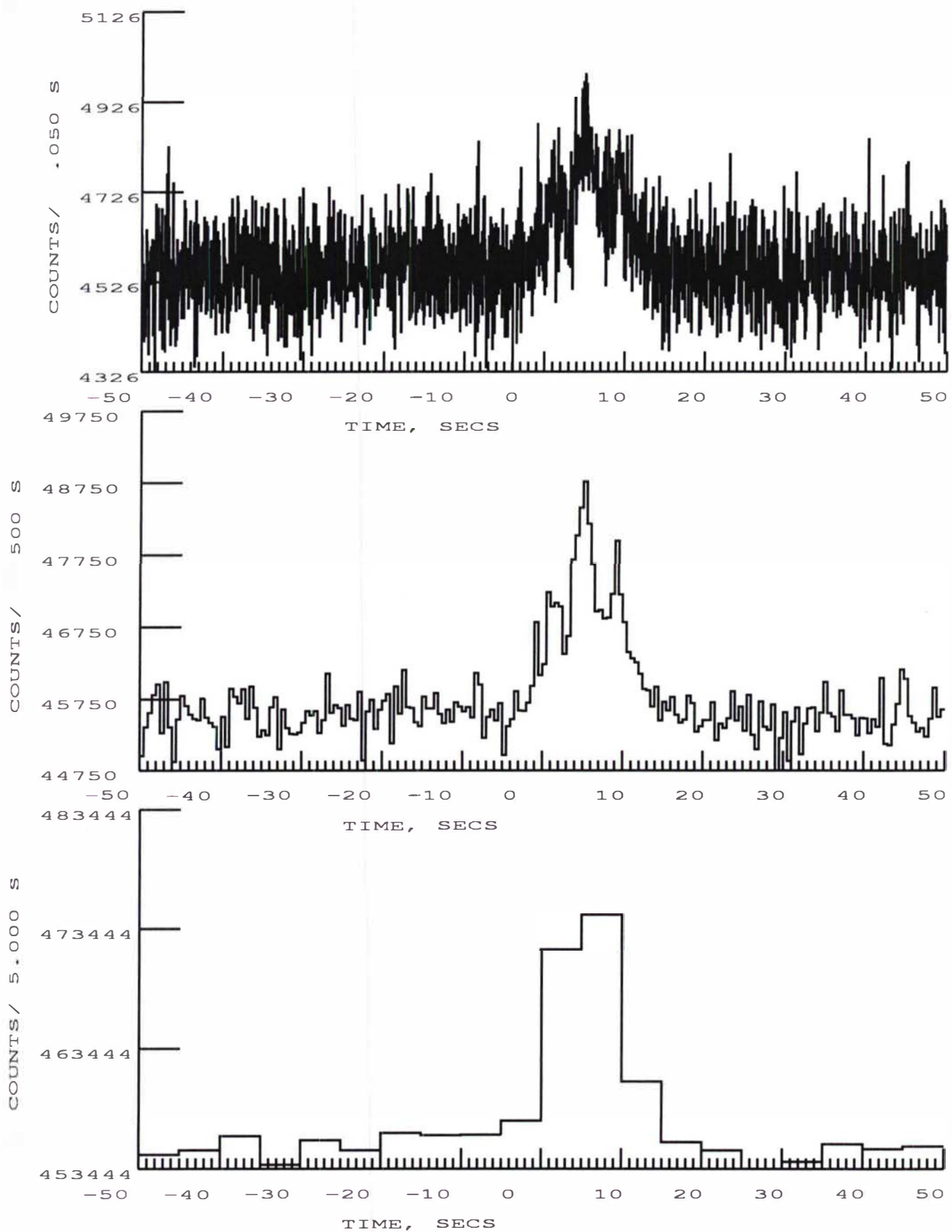
INTEGRAL

28/10/05

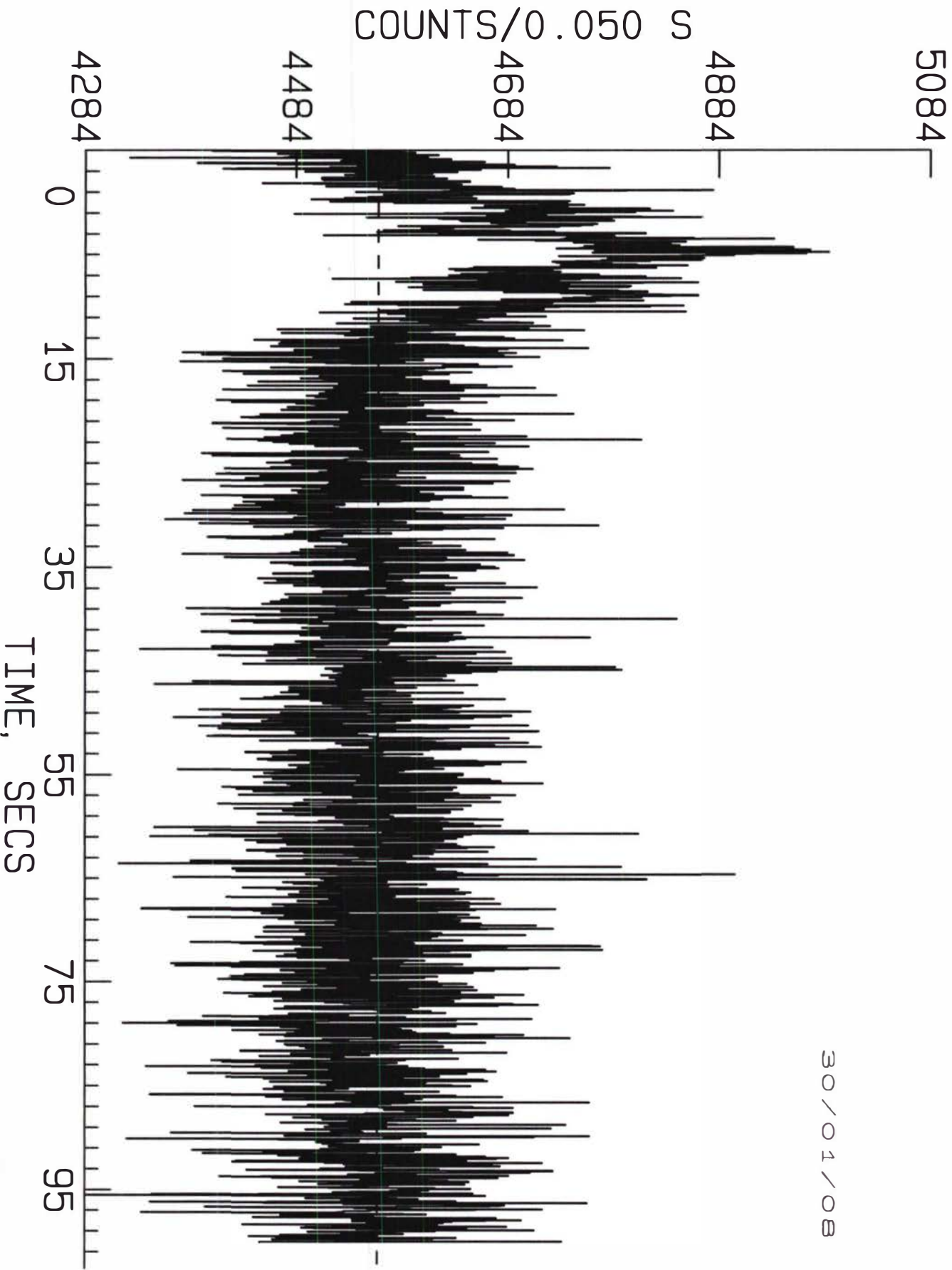
48959.000

13:35:59.0

27/08/15



INTEGRAL 28/10/05 48959.330 13: 35: 59.3
100-10000 keV



Date: Nov 6 '08

BURST TRIANGULATION CHECKLIST

1. Ulysses Data *N/A*

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☒ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record, usually ~1320 s prior to the request time; when there is no data in the database, the ephemeris is for the request time in the e-mail, so the request time in mosearch should be equal to the GRB time. Note that the time in the return e-mail will be ~1320 s prior to the time requested, in the line "no HEND data...")
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)
- ☐ GRS database searched for triggered data? Database data between August 2005 and January 2006 should be re-extracted, due to timing errors. (E-mailed data should be OK).
- ☐ GRS and HEND data cross-correlated to check timing?

2. For 3 or More Spacecraft events

- ☐ $\Sigma 3\Delta t$'s calculated, and/or BMAPSUM executed?

3. For INTEGRAL events

- ☒ INTEGRAL SPI-ACS website checked for bursts that weren't transmitted automatically?
- ☐ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
- ☐ Updated ephemeris used for bursts prior to September 30, 2003?

-
- ☒ ACCESS and MBL4 databases updated?

N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

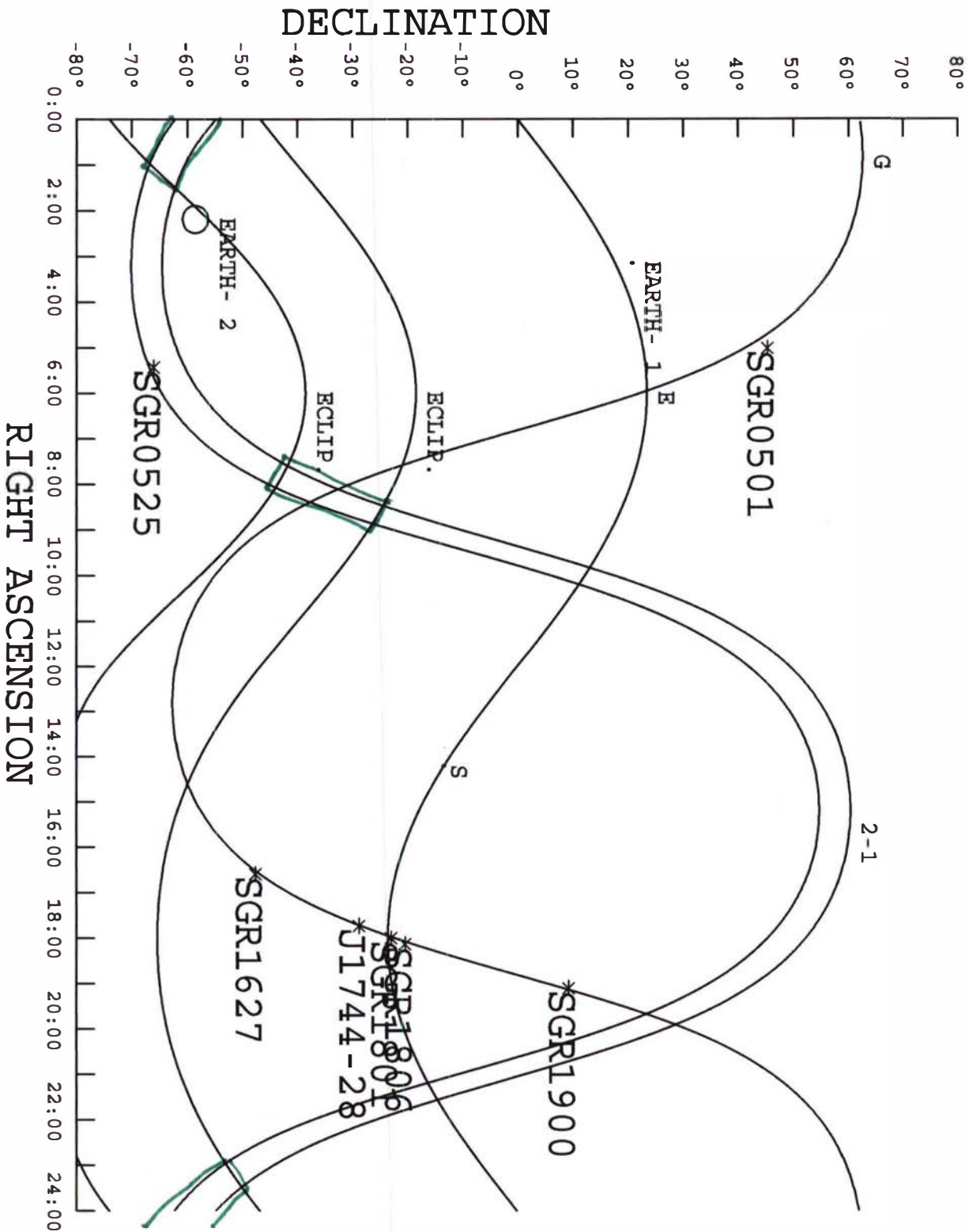
G=GALACTIC EQUATOR

1 KONUS1

2 INTEGRAL

EVENT OF OCT 28, 2005 18:27

6/11/ 8



KONUS1

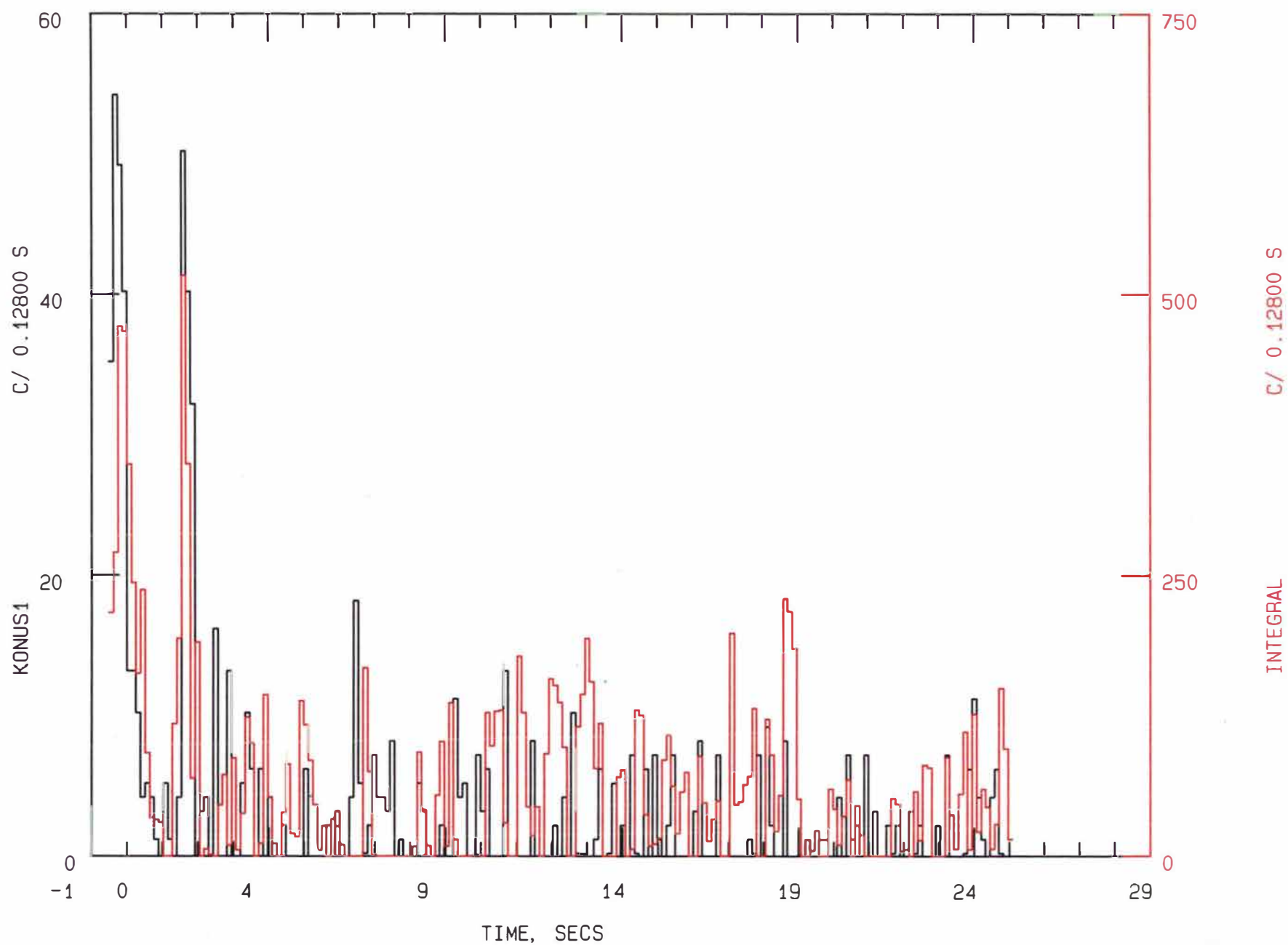
-INTEGRAL

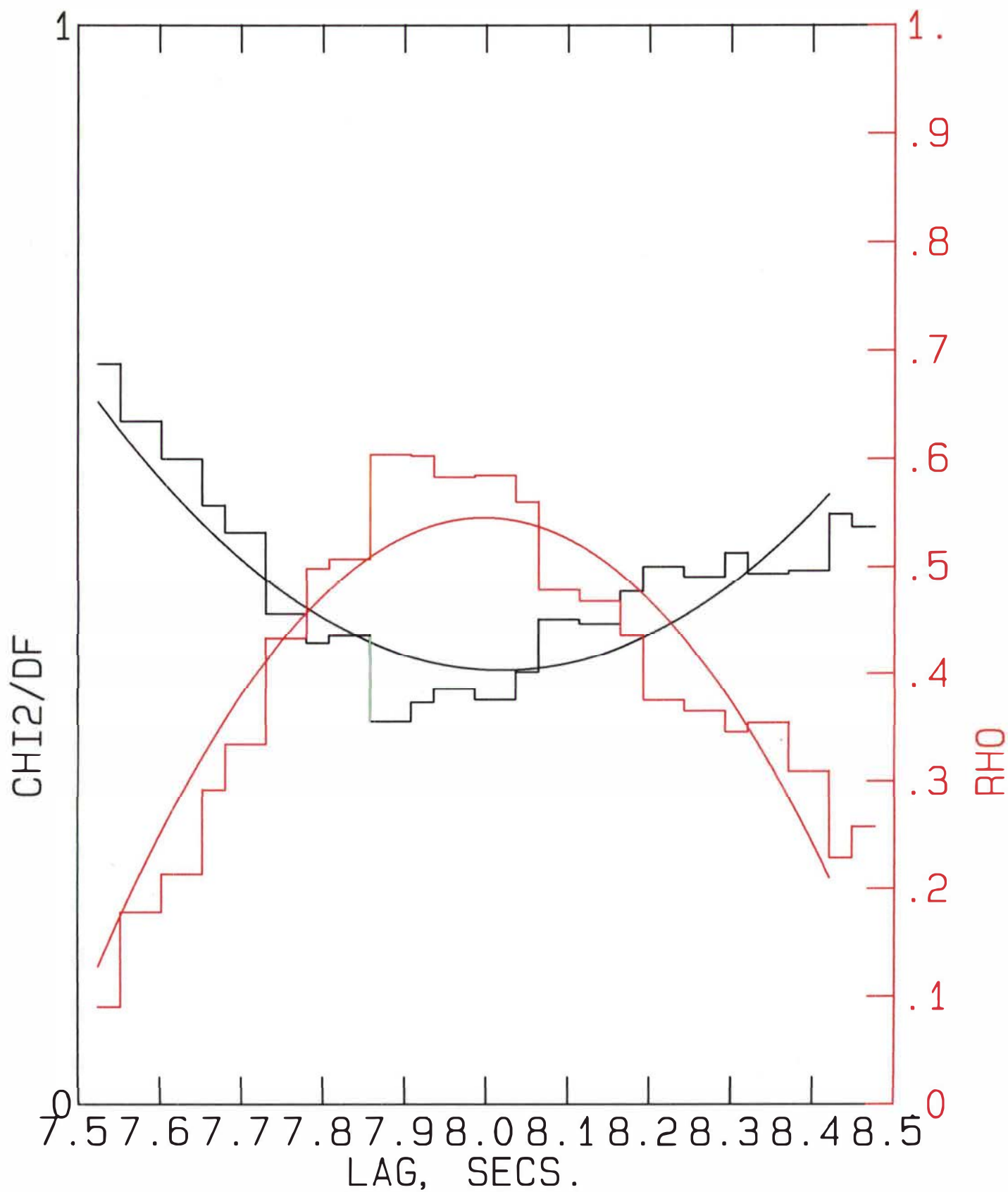
CORRELATION

28/10/05

66455.352

6/11/ 8





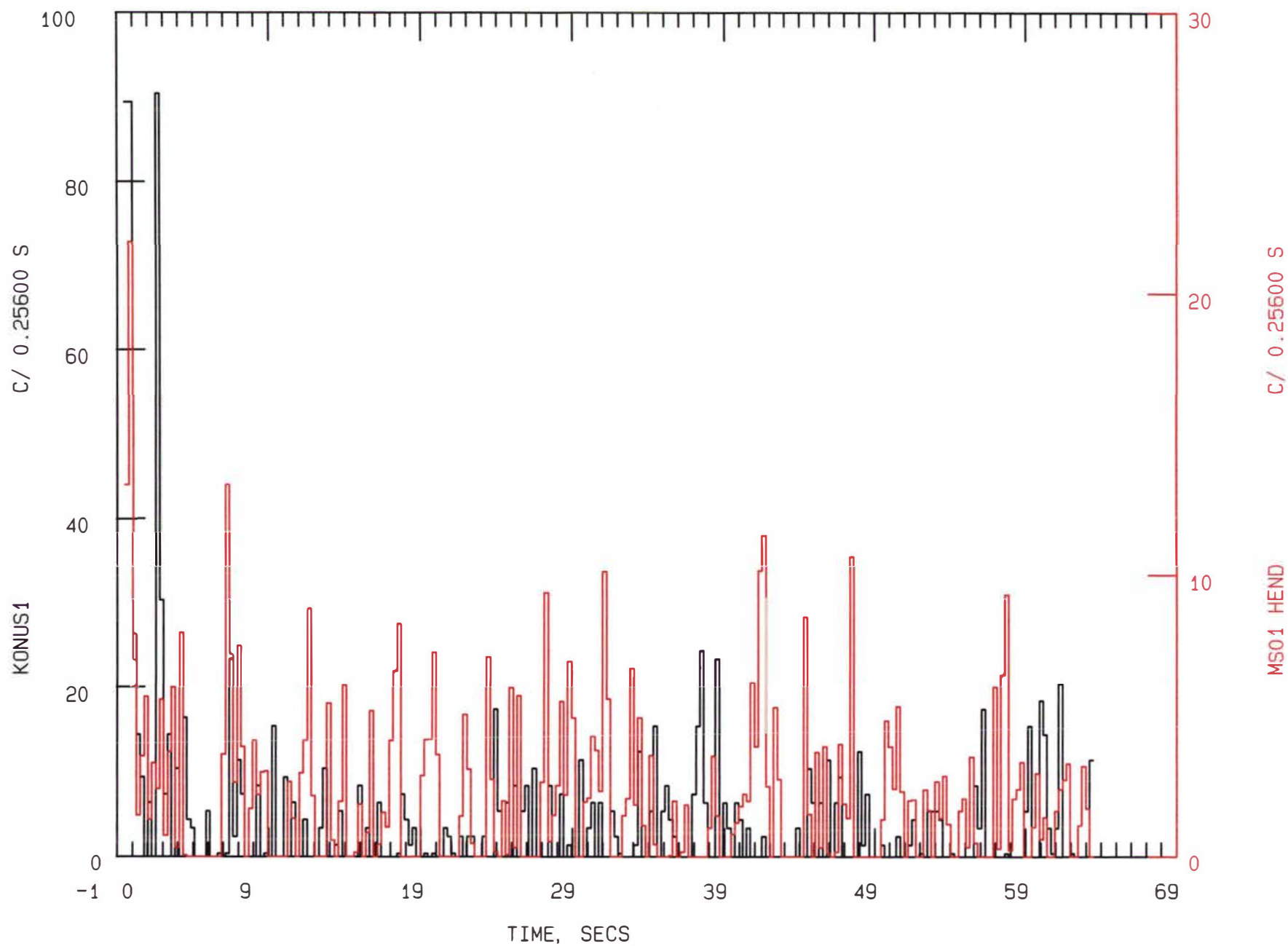
KONUS1

-MS01 HEND CORRELATION

28/10/05

66455.352

6/11/ 8



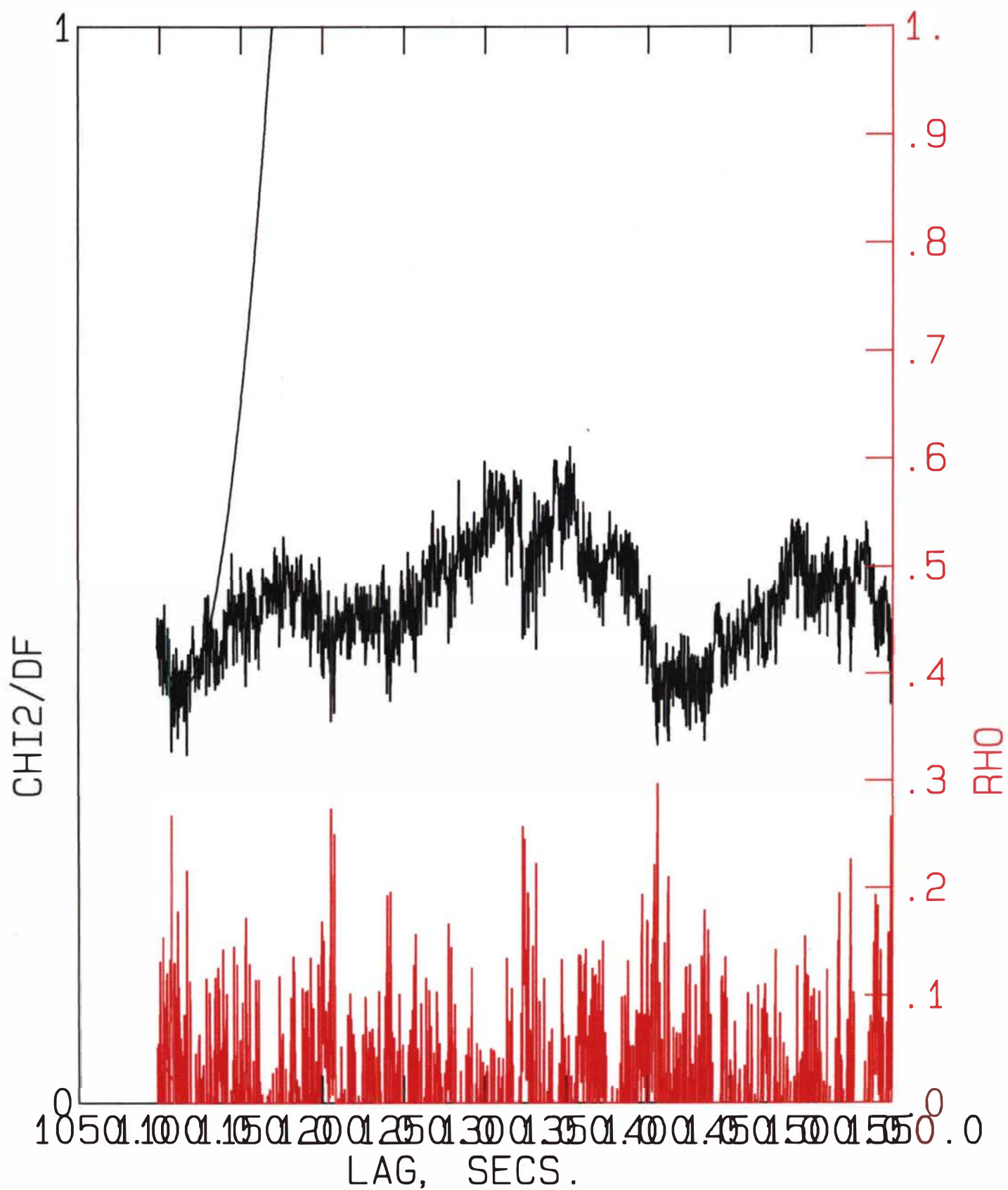
KONUS1

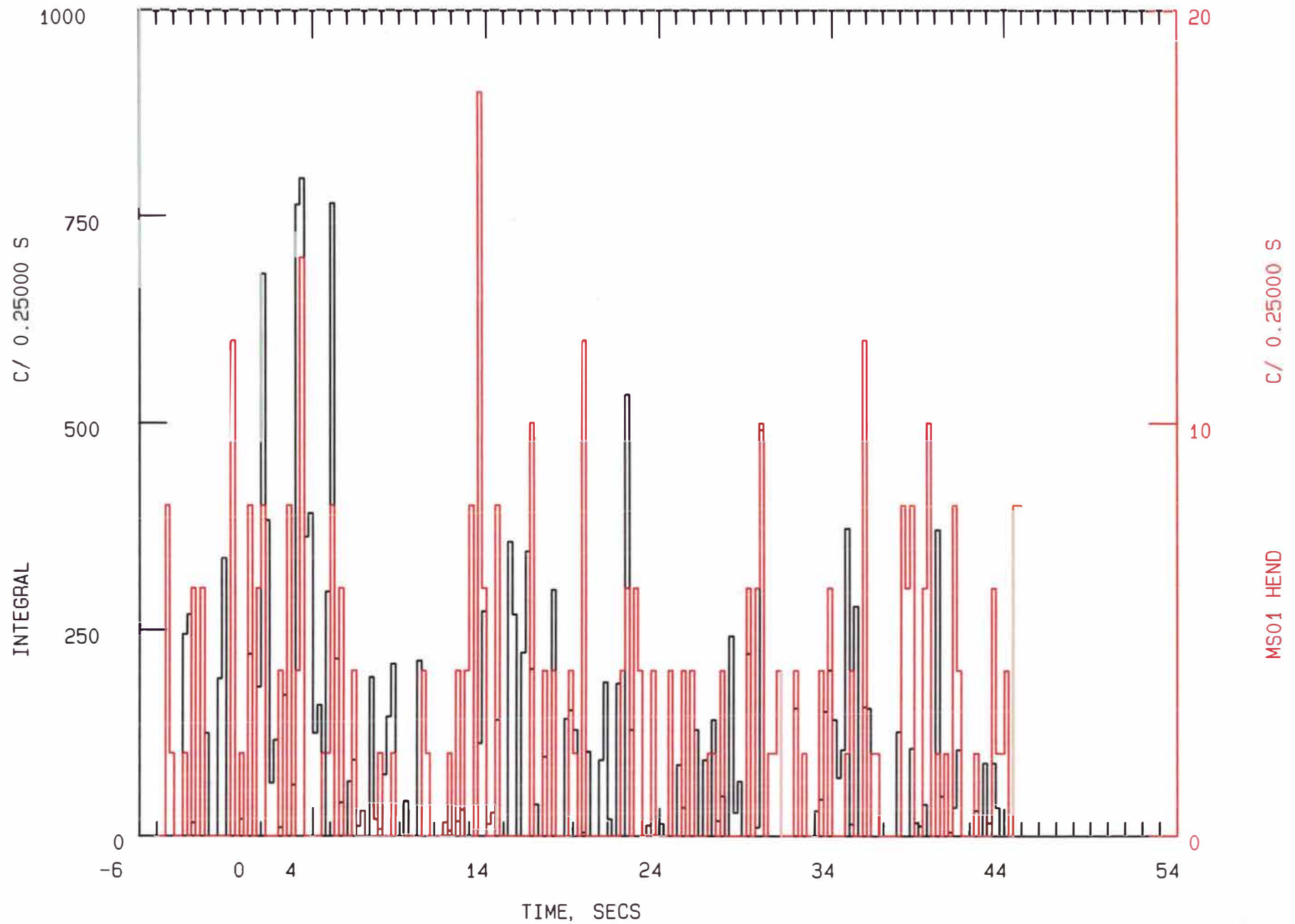
-MS01 HEND CORRELATION

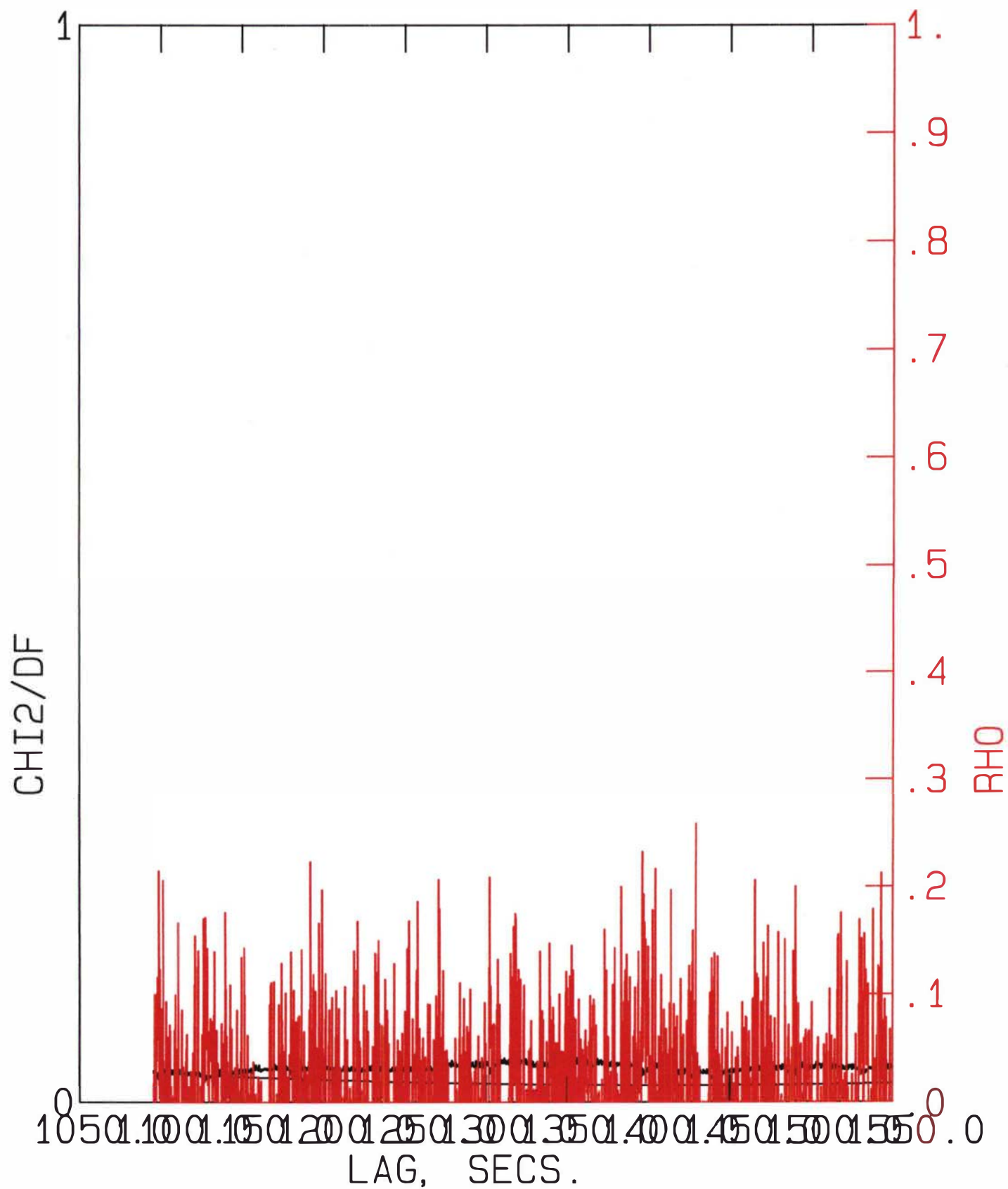
28/10/05

66455.352

6/11/ 8







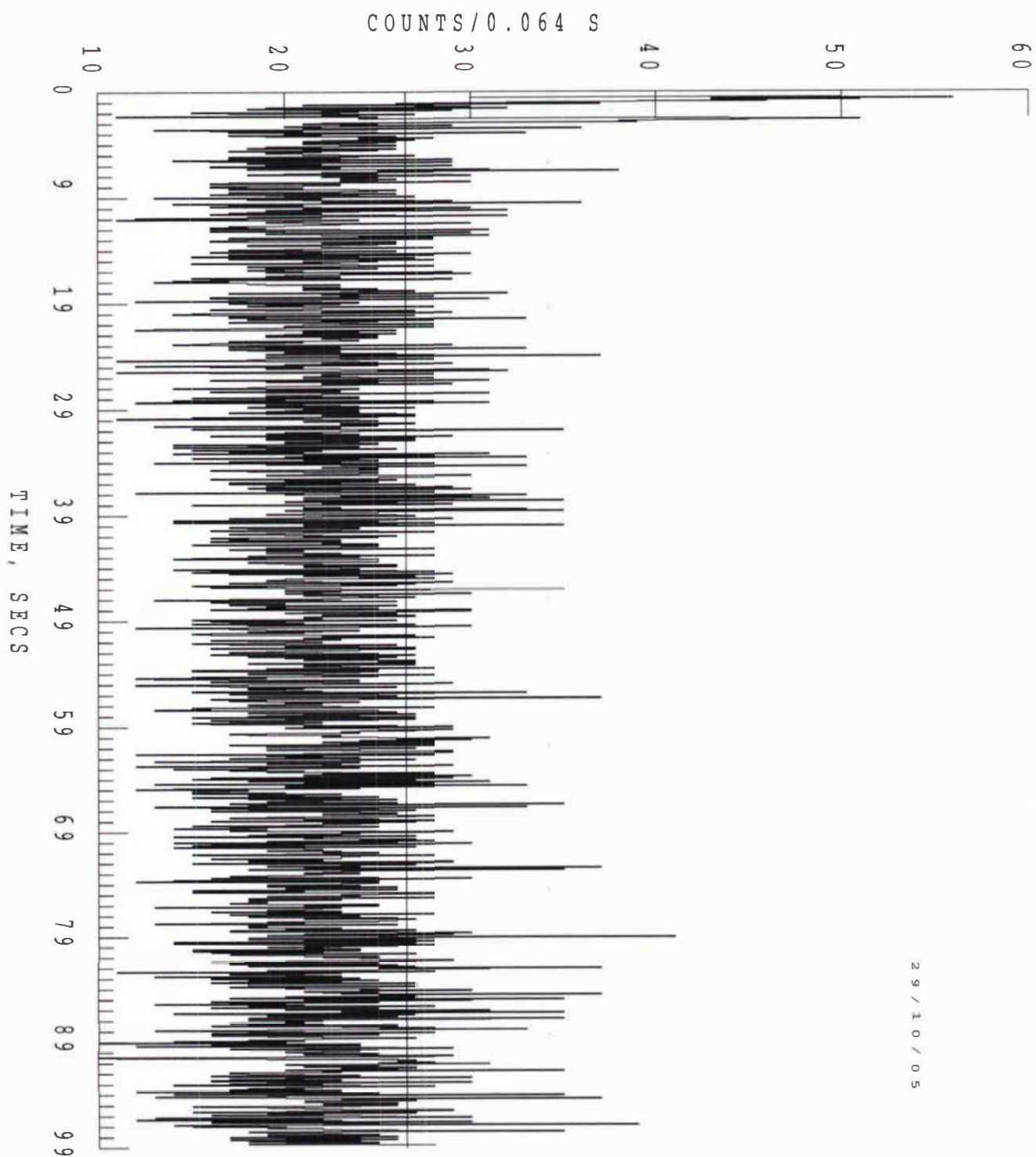
KONUS1

28/10/05

66455.352

50 - 200 keV

18:27:35



KONUS HRES 20051028 66455

TRIGGER TIME: 28/10/05 DOY 301 Julian 2453673.26916 UT = 18.460 18:27:35 (66455.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

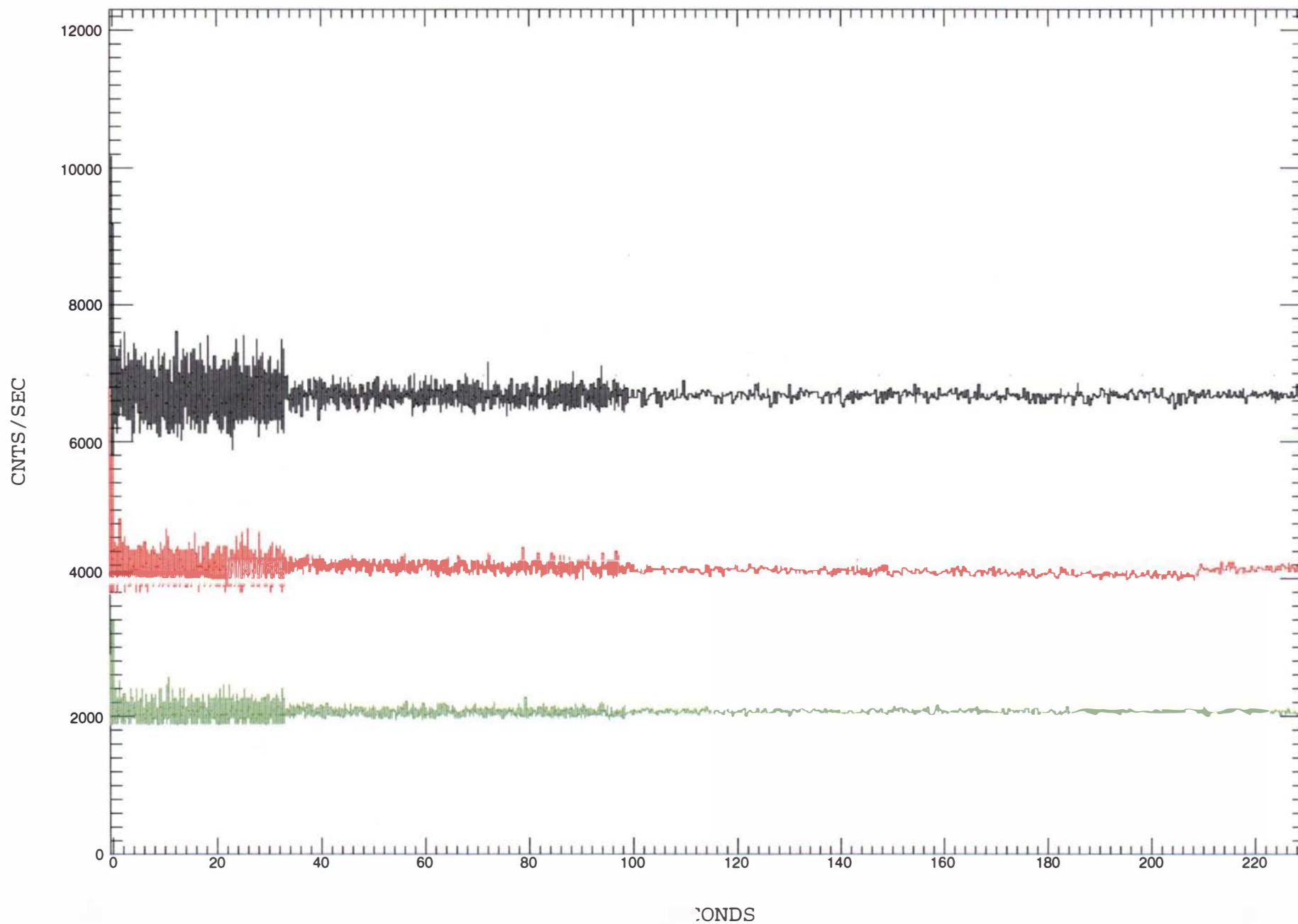
Chan 4 : [> 10 MeV]

Channel 1 + 5700

Channel 2 + 3800

Channel 3 + 1900

Channel 4 + 0

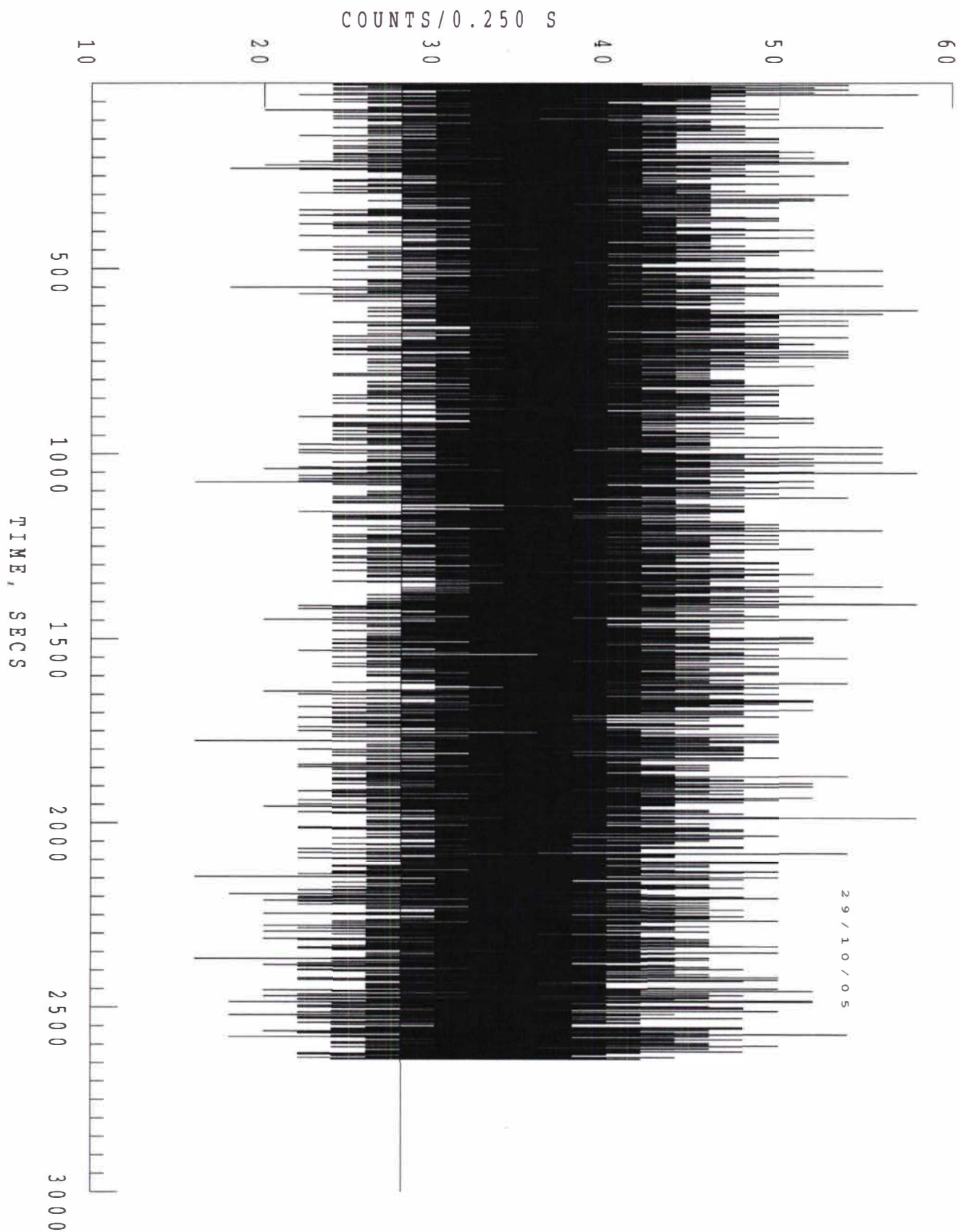


MS01

28/10/05

65126.800

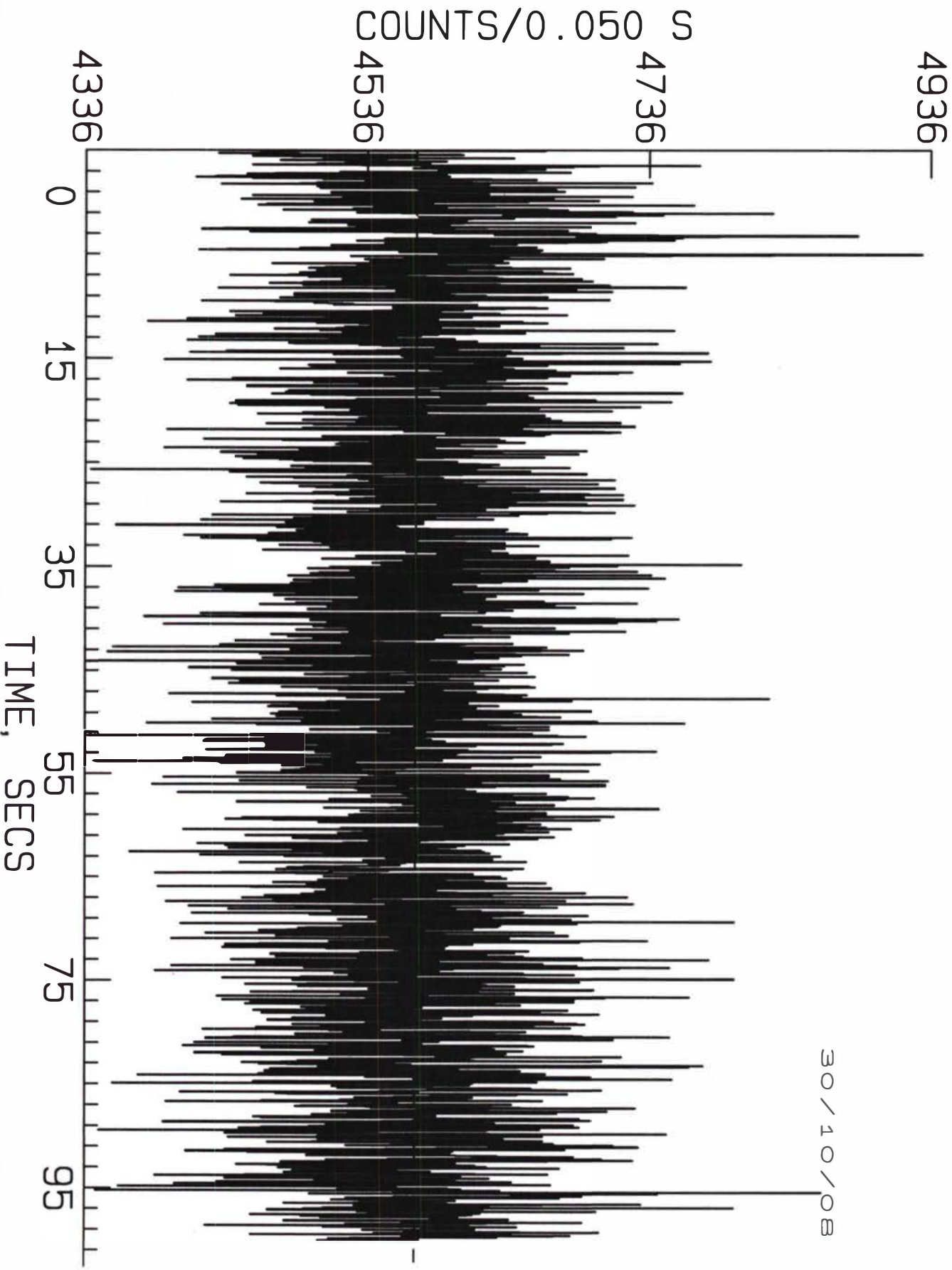
50 - 3000 keV



From williams@sunspot.ssl.berkeley.edu Sat Oct 29 08:31:04 2005
Date: Sat, 29 Oct 2005 08:38:15 -0700 (PDT)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_KONUS1_20051028_66455

HESSI 25 to 150 keV Counts
Created 29-Oct-2005 08:30:08.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
No Eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

INTEGRAL 28/10/05 66452.348 18: 27: 32.3
100-10000 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

28/10/05 DOY 301 Julian 2453672.50000 [est. sct = 0019 c1cb f9c7 5267]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

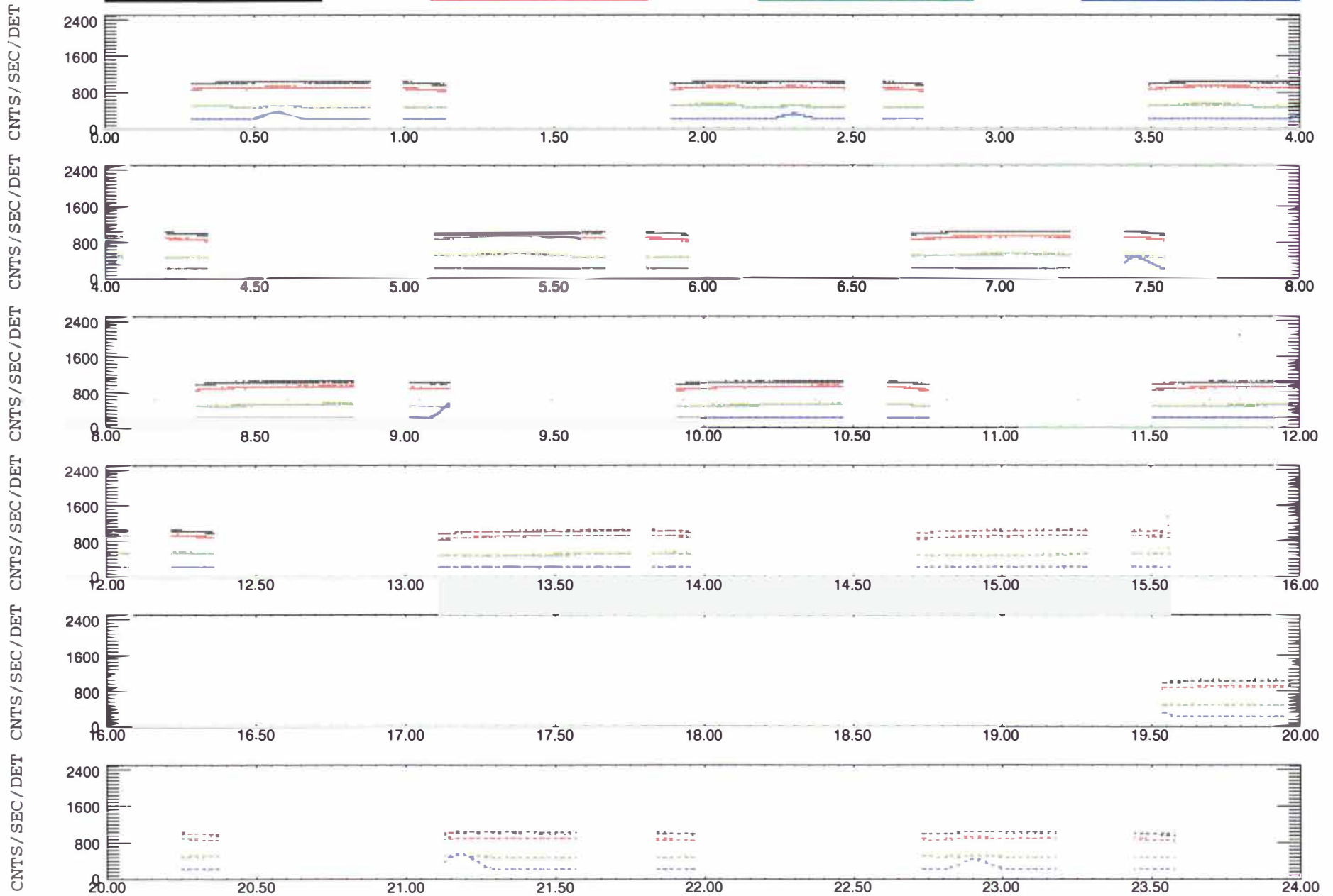
Chan 4:[E6=510 ->]

Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200



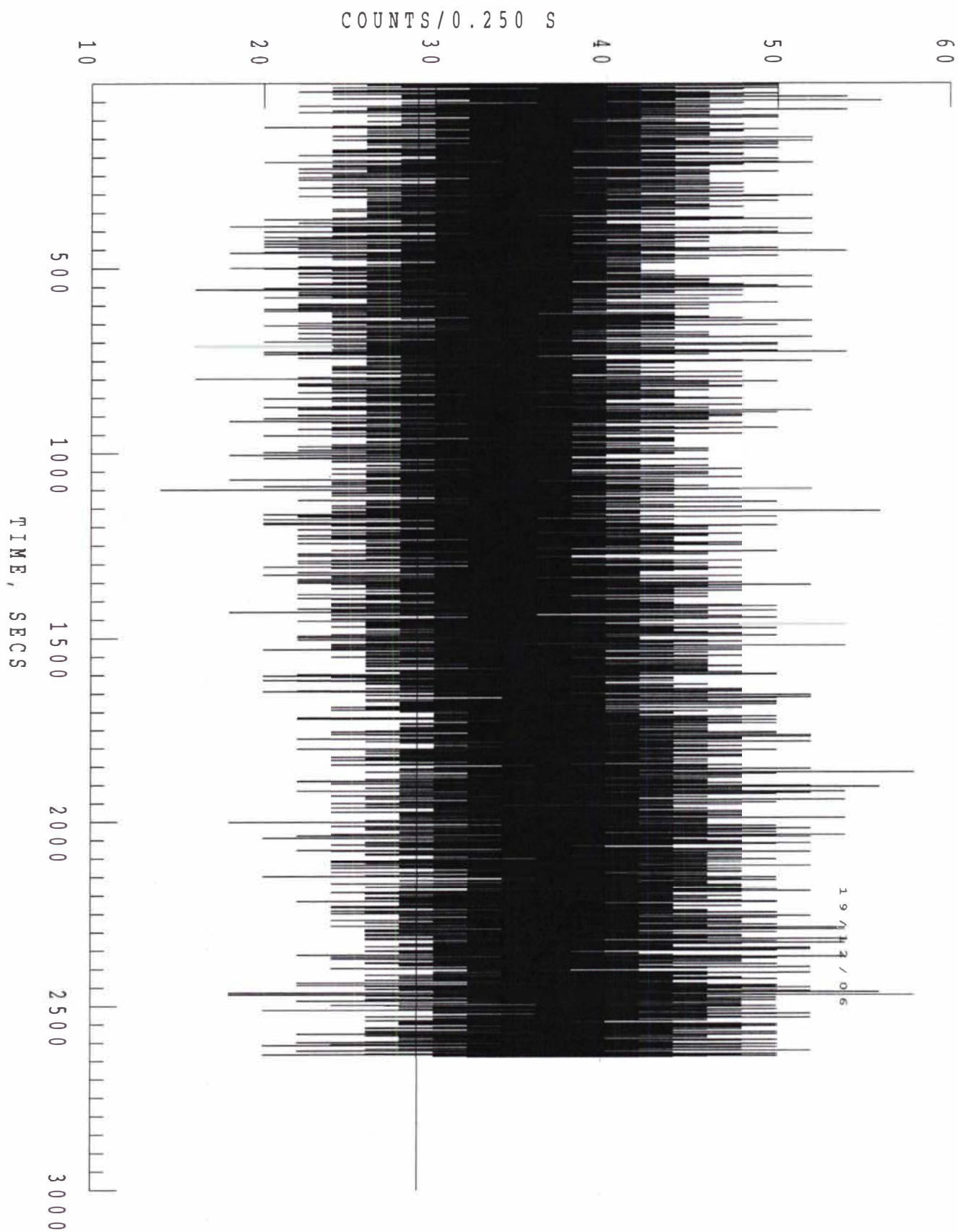
RS UT

MS01

29/10/05

30265.263

50 - 3000 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (SUZAKU_20051029_31624)

BEG TIME: 29/10/05 DOY 302 Julian 2453673.86500 UT = 08.760 08:45:36 (31536.000 secs) [sct = 0019 c1e7 6f51 66f5]
 END TIME: 29/10/05 DOY 302 Julian 2453673.86708 UT = 08.810 08:48:36 (31716.000 secs) [sct = 0019 c1e7 7a0b fc8d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

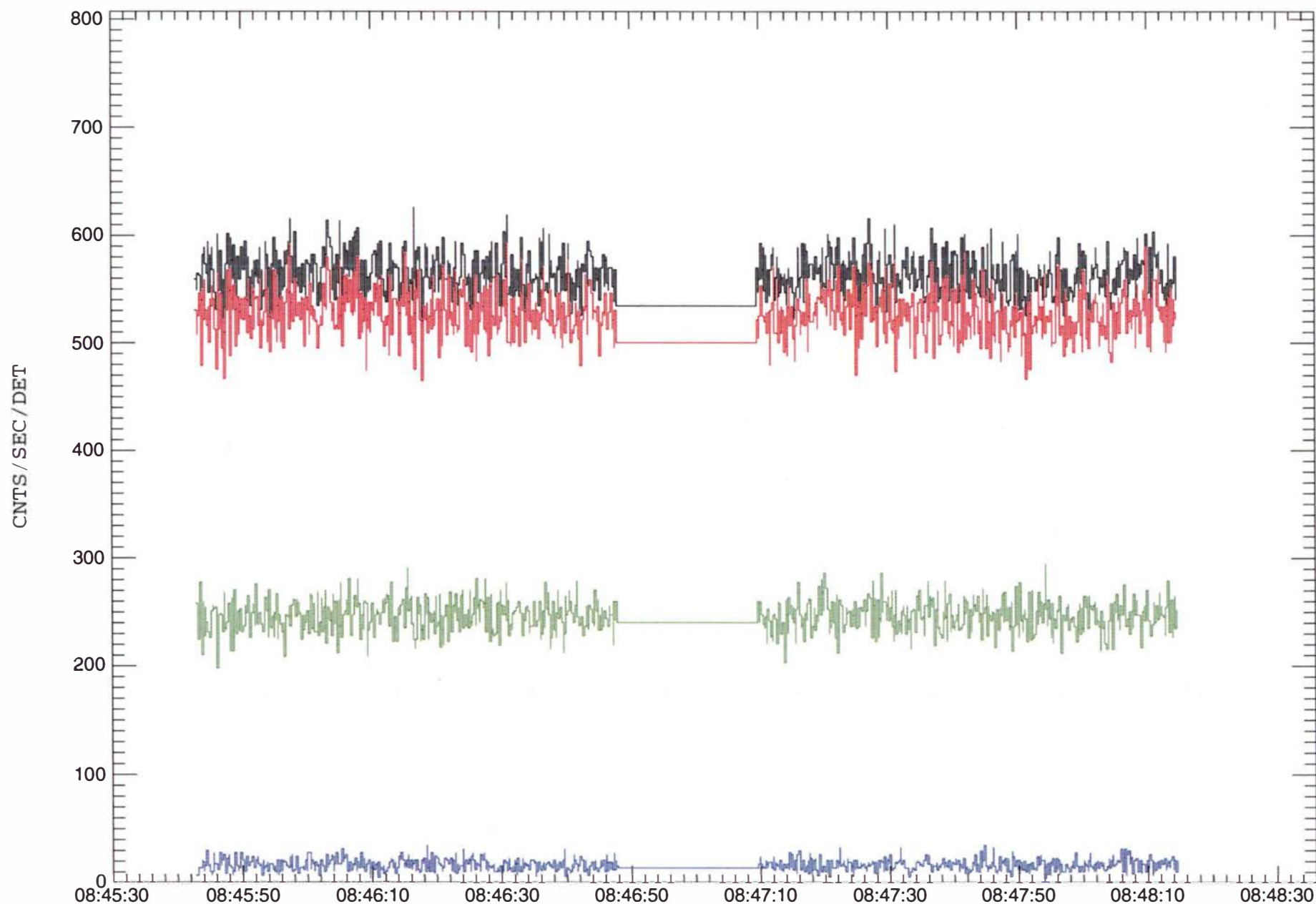
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



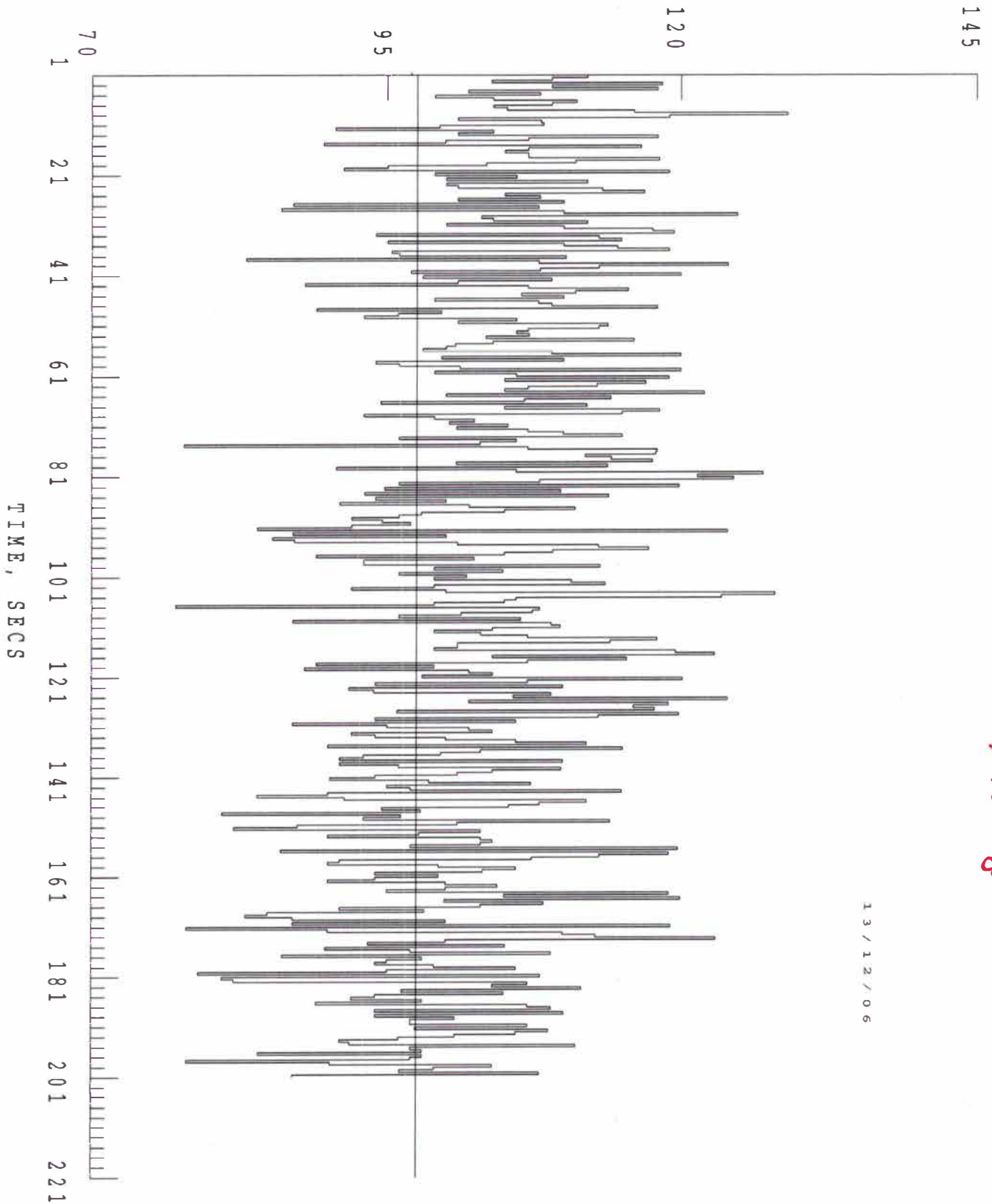
RS UT

HESSI

29/10/05 31523.000 (SUZAKU_20051029_31624)

25- 150 keV

COUNTS/0.500 S



No SPI, 6RS tugs

13 / 12 / 06

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

29/10/05 DOY 302 Julian 2453673.50000 [est. sct = 0019 c1e0 179f d1fd]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=510]

Chan 4:[E6=510 ->]

Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT

From vxw@capella.gsfc.nasa.gov Sun Oct 30 13:39:34 2005
X-ASG-Debug-ID: 1130708412-20159-1-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
X-ASG-Whitelist: Sender
-ASG-Whitelist: Sender
Date: Sun, 30 Oct 2005 16:40:12 -0500
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: khurley@ssl.berkeley.edu
X-ASG-Orig-Subj: GCN/HETE_POSITION
Subject: GCN/HETE_POSITION

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Sun 30 Oct 05 21:39:17 UT
NOTICE_TYPE: HETE S/C Alert
TRIGGER_NUM: 3953, Seq_Num: 1
GRB_DATE: 13673 TJD; 303 DOY; 05/10/30
GRB_TIME: 77943.45 SOD {21:39:03.45} UT
TRIGGER_SOURCE: Trigger on the 25-400 keV band.
WXM_SIG/NOISE: 0.1 sig/noise on a 1.280 [sec] timescale
SC_Z_RA: 37 [deg]
SC_Z_DEC: 14 [deg]
SC_LONG: 36 [deg East]
SUN_POSTN: 215.21d {+14h 20m 50s} -14.03d {-14d 02' 03"}
MOON_POSTN: 191.22d {+12h 44m 53s} -4.56d {-04d 33' 35"}
MOON_ILLUM: 5 [%]
COMMENTS: Probable GRB.

~~Collimator~~

TLA says noise,
not a GRB

FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_3953_1_20051030_77943)

BEG TIME: 30/10/05 DOY 303 Julian 2453675.40000 UT = 21.600 21:36:00 (77760.000 secs) [sct = 0019 c206 5054 c465]
 END TIME: 30/10/05 DOY 303 Julian 2453675.40458 UT = 21.710 21:42:36 (78156.000 secs) [sct = 0019 c206 67ef 40b7]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

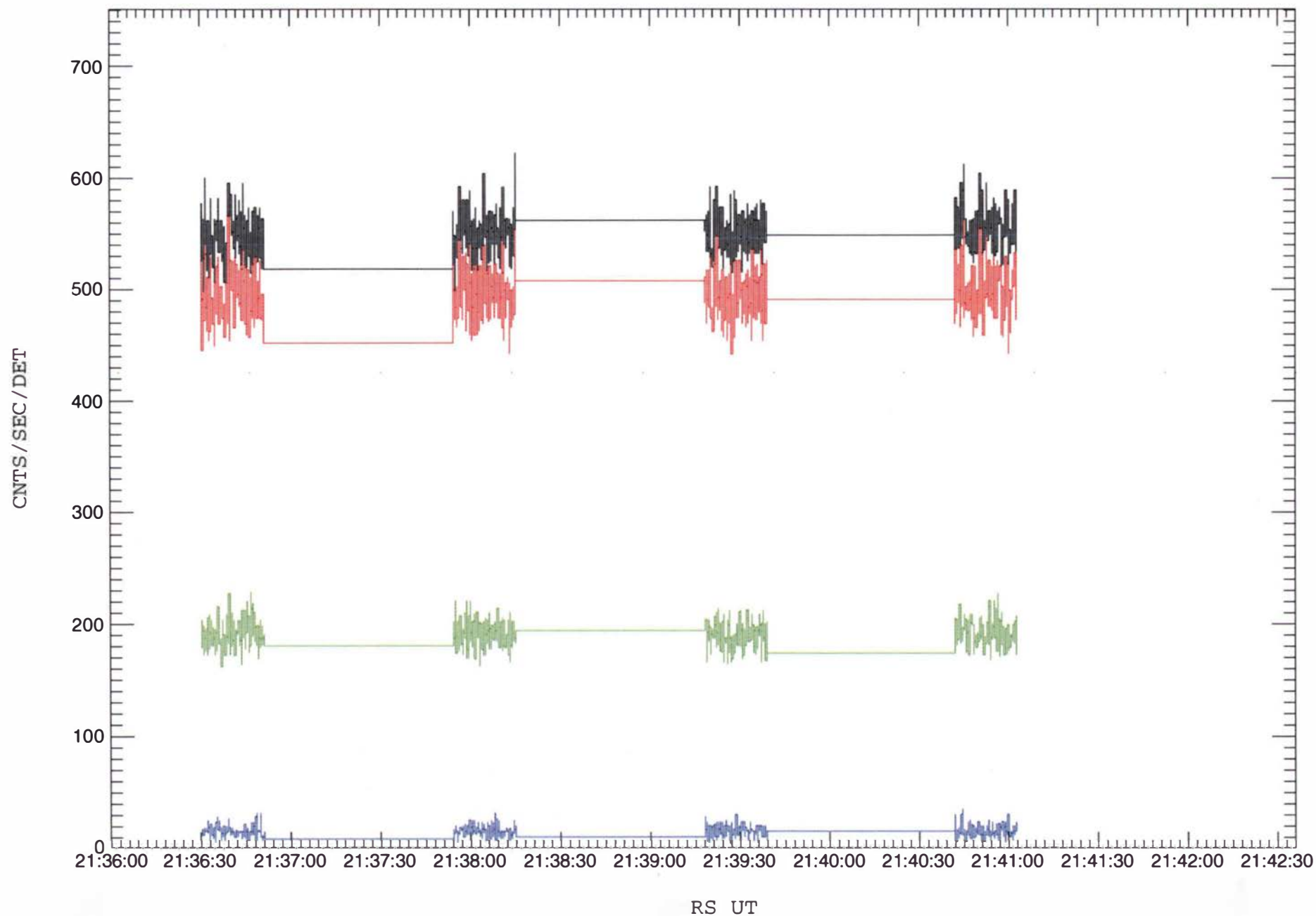
Chan 4:[E6=509 ->]

Channel 1 + 300

Channel 2 + 200

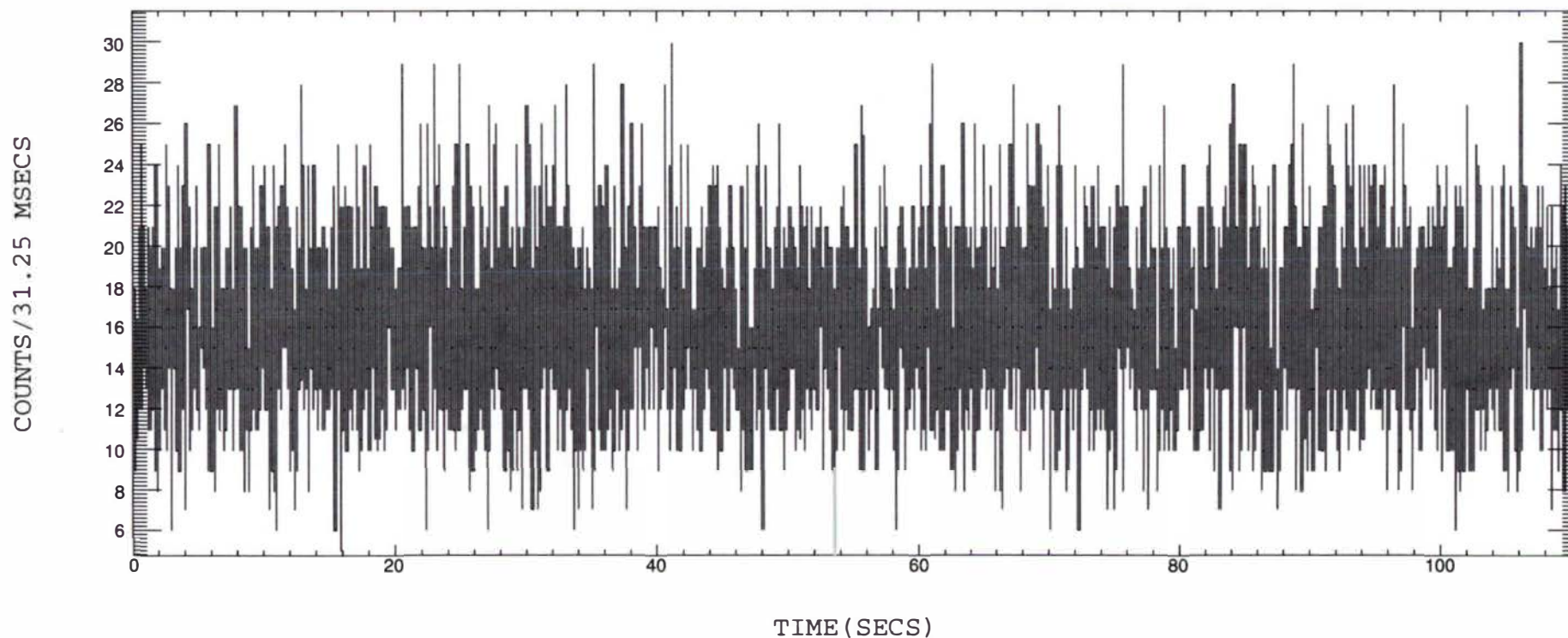
Channel 3 + 100

Channel 4 + 0



FREGATE BURST #1 TIME HISTORY -- DETECTORS 1-3 SUMMED

30/10/05 DOY 303 Julian 2453675.40221
 TRIGGERED BY FREGATE UT = 21:39:11 (77951.17 secs) [sct = 0019 c206 5bb9 c824]
 PLOT STARTING TIME (?) UT = 21:37:26 (77846.95 secs) [sct = 0019 c206 5583 8885]
 BACKGRND SAMPLED FROM UT = 21:38:49 (77929.67 secs) [sct = 0019 c206 5a71 a824]
 BIN WIDTH 31.25 msecs INTEGRATED OVER CHANS. 20-200



TRIGGER: deltaE = 0, deltaT = 20.40ms, USING DETECTOR(S) ?

CHANNELS	<01>	<02>	<03>	<04>	<05>	<06>	<07>	<08>	<09>	<10>	<11>	<12>	<13>	<14>	<15>	<16>
EXC1 REF VALUES	31	33	0	0	141	150	0	0	870	938	0	0	3265	3528	0	0
EXC1 CNT RATES	15	12	0	0	106	97	0	0	715	792	0	0	2926	3201	0	0
EXC2 REF VALUES	31	33	0	0	141	150	0	0	870	938	0	0	3265	3528	0	0
EXC2 CNT RATES	15	12	0	0	106	97	0	0	715	792	0	0	2926	3201	0	0
CHANNELS	<17>	<18>	<19>	<20>	<21>	<22>	<23>	<24>	<25>	<26>	<27>	<28>	<29>	<30>	<31>	<32>
EXC1 REF VALUES	15	14	0	0	53	53	0	0	307	301	0	0	1095	1070	0	0
EXC1 CNT RATES	4	4	0	0	34	38	0	0	251	209	0	0	959	907	0	0
EXC2 REF VALUES	15	14	0	0	53	53	0	0	307	301	0	0	1095	1070	0	0
EXC2 CNT RATES	4	4	0	0	34	38	0	0	251	209	0	0	959	907	0	0

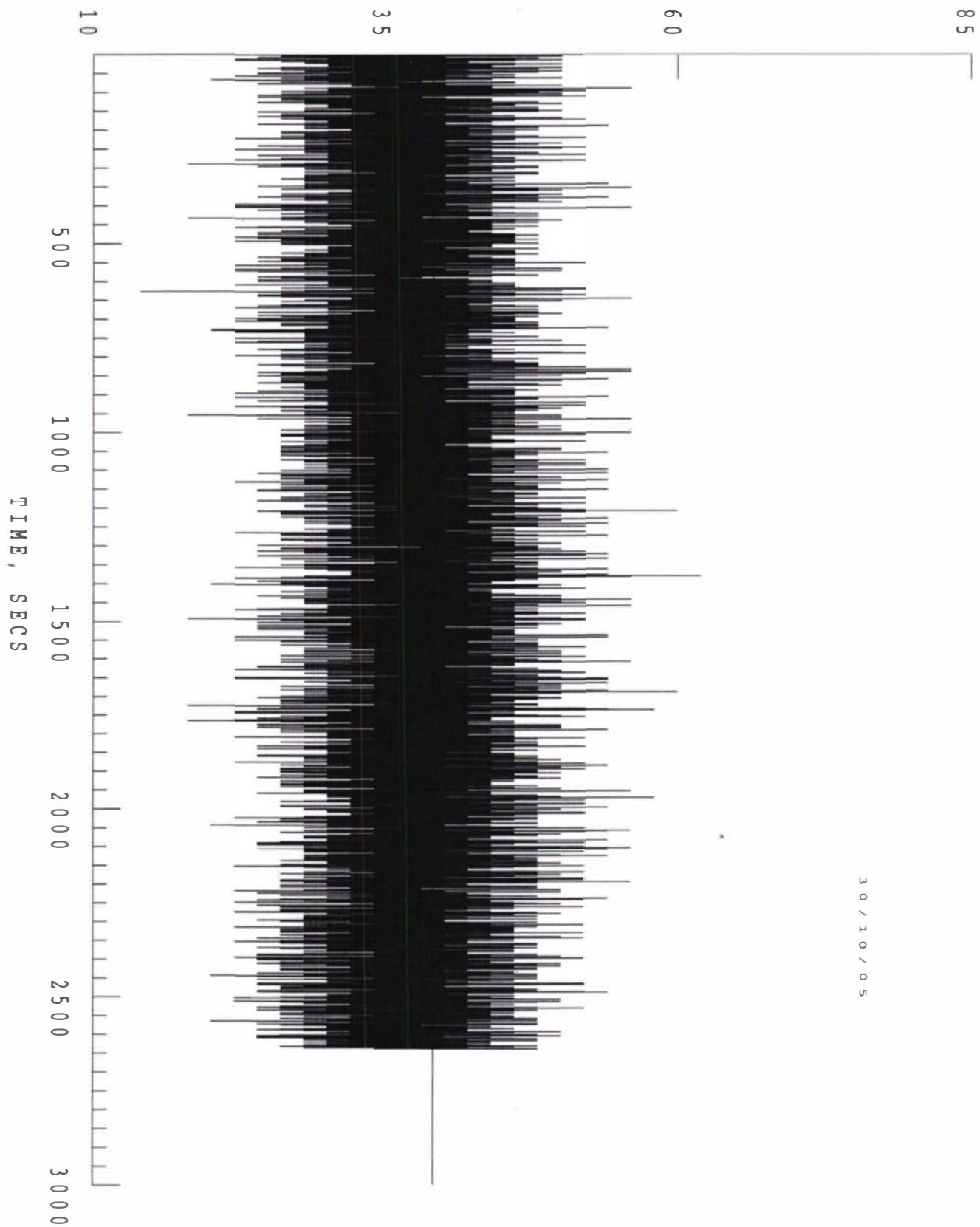
MS01

30/10/05

76583.363

50 - 3000 keV

COUNTS/0.250 S



From williams@sunspot.ssl.berkeley.edu Tue Nov 1 00:55:07 2005
Date: Tue, 1 Nov 2005 01:02:19 -0800 (PST)
From: williams@ssl.berkeley.edu
To: khurley@sunspot.ssl.berkeley.edu
Subject: No_RHESSI_data_for_GHETE_3953_1_20051030_77943

HESSI 25 to 150 keV Counts
Created 1-Nov-2005 00:54:18.00
Detectors: 3r 4r 5r 6r 8r 9r
columns: time (sec) counts (summed over detectors)
time_interval = 0.0312500
Full time range in SAA
No Eclipse
No non-SAA data gap
No Data Available For This Time Range
Do Not Retry

FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

30/10/05 DOY 303 Julian 2453674.50000 [est. sct = 0019 c1f4 3578 5191]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=77]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

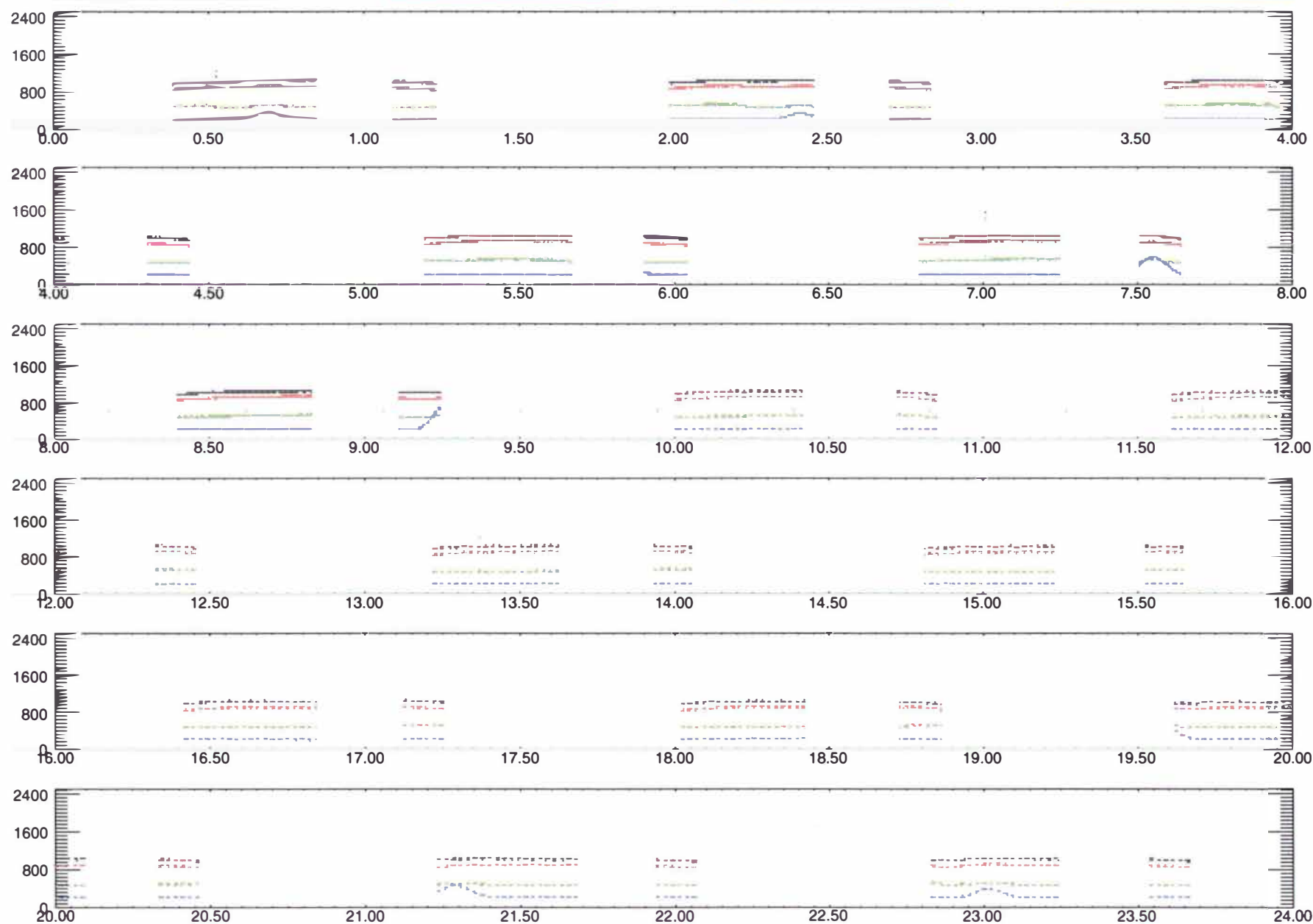
Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET
CNTS/SEC/DET



RS UT

Date: Nov 10 '05

BURST TRIANGULATION CHECKLIST

1. Ulysses Data N/A

- ☐ Jim Schmidling's stat file correction applied?
- ☐ Final ephemeris used?
- ☐ Final, CDROM data used?
- ☐ Is the order of the data in CORREL such that a vernier is done on the data with the best time resolution?

2. For Konus events

- ☒ Konus ecliptic latitude used with latest calibration?

2. For Odyssey events

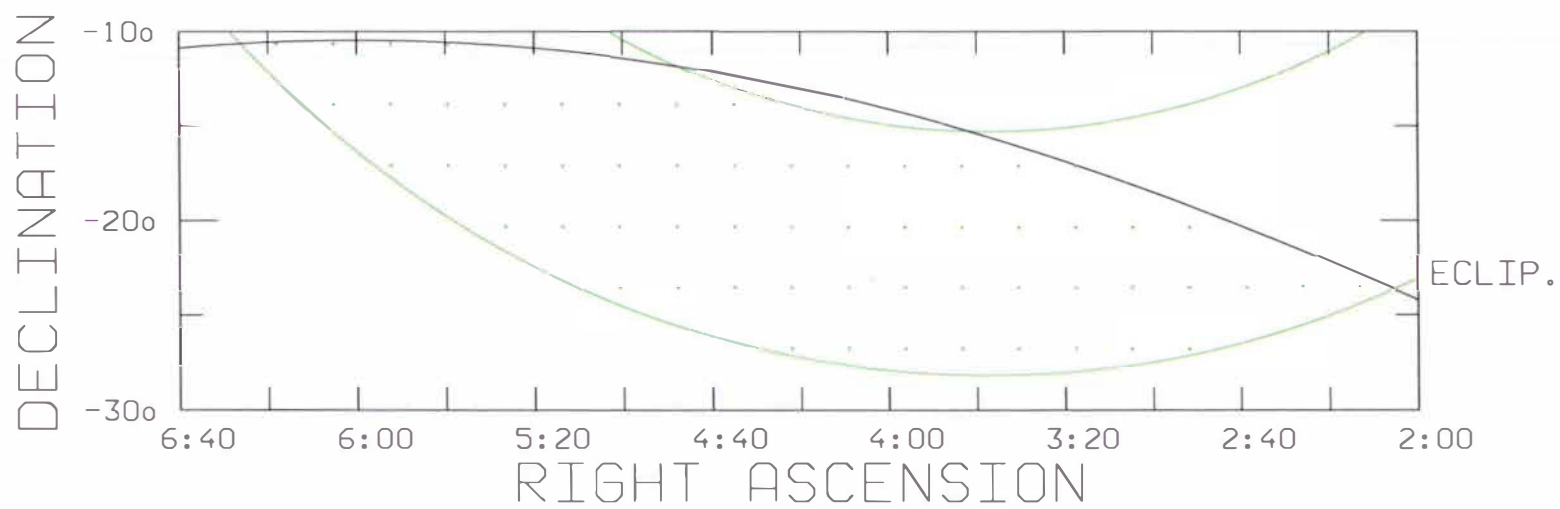
- ☐ Was CHECKMO run to eliminate data gaps?
- ☐ Did the Odyssey ephemeris correspond to the event time? (When there is data in the database, the ephemeris is for the start of record; when there is no data in the database, the ephemeris is for the time requested.)
- ☐ Was Mars-blocking used?
- ☐ For cruise phase data (April – October 2001), was the updated data used? (Old data has timing errors)

2. For 3 Spacecraft events

- ☒ $3\Delta t$'s calculated?

3. For INTEGRAL events

- ☒ 125 ms added to INTEGRAL SPI-ACS time for bursts prior to April 2 2004 11:00 UT?
 - ☒ Updated ephemeris used for bursts prior to September 30, 2003?
-
- ☒ ACCESS and MBL4 databases updated?



N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

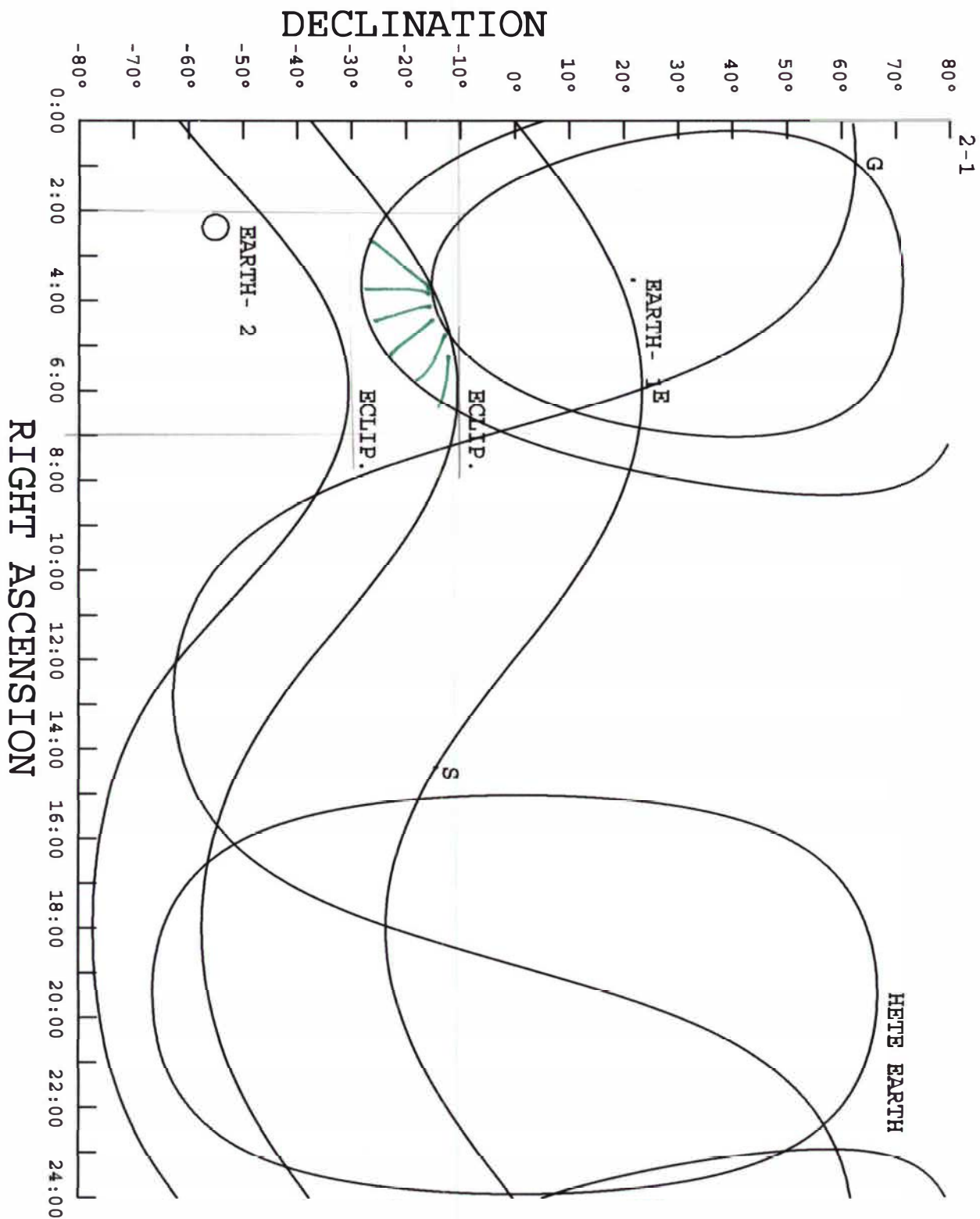
G=GALACTIC EQUATOR

1 KONUS1

2 INTEGRAL

EVENT OF OCT 31, 2005 22:01

10/11/ 5



N-M = CORRELATION BETWEEN SATELLITES N AND M

EARTH-N = EARTH AS SEEN FROM SATELLITE N

S=SUN

E=ECLIPTIC

G=GALACTIC EQUATOR

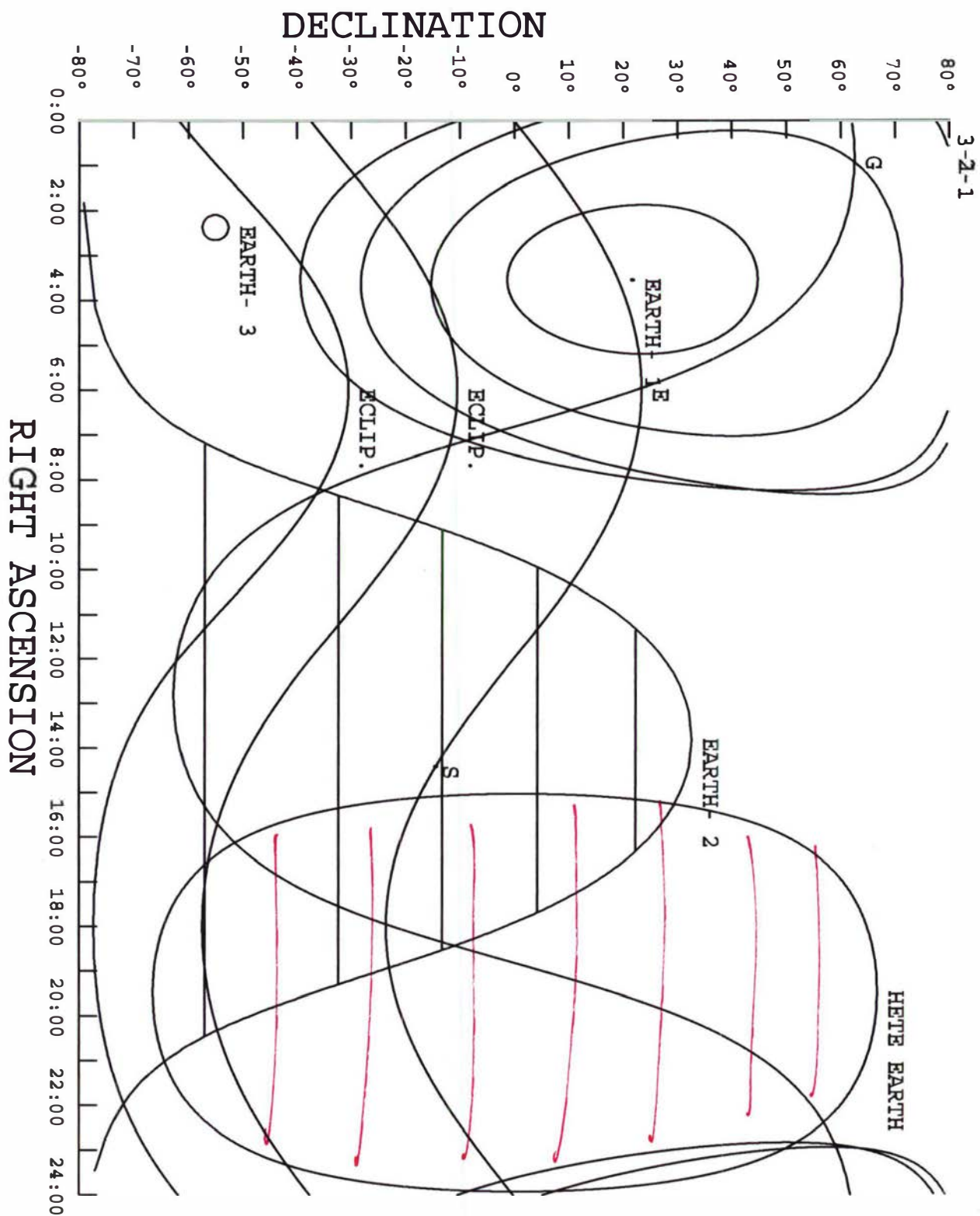
1 KONUS1

2 HESSI

3 INTEGRAL

EVENT OF OCT 31, 2005 22:01

10/11/ 5



HESSI

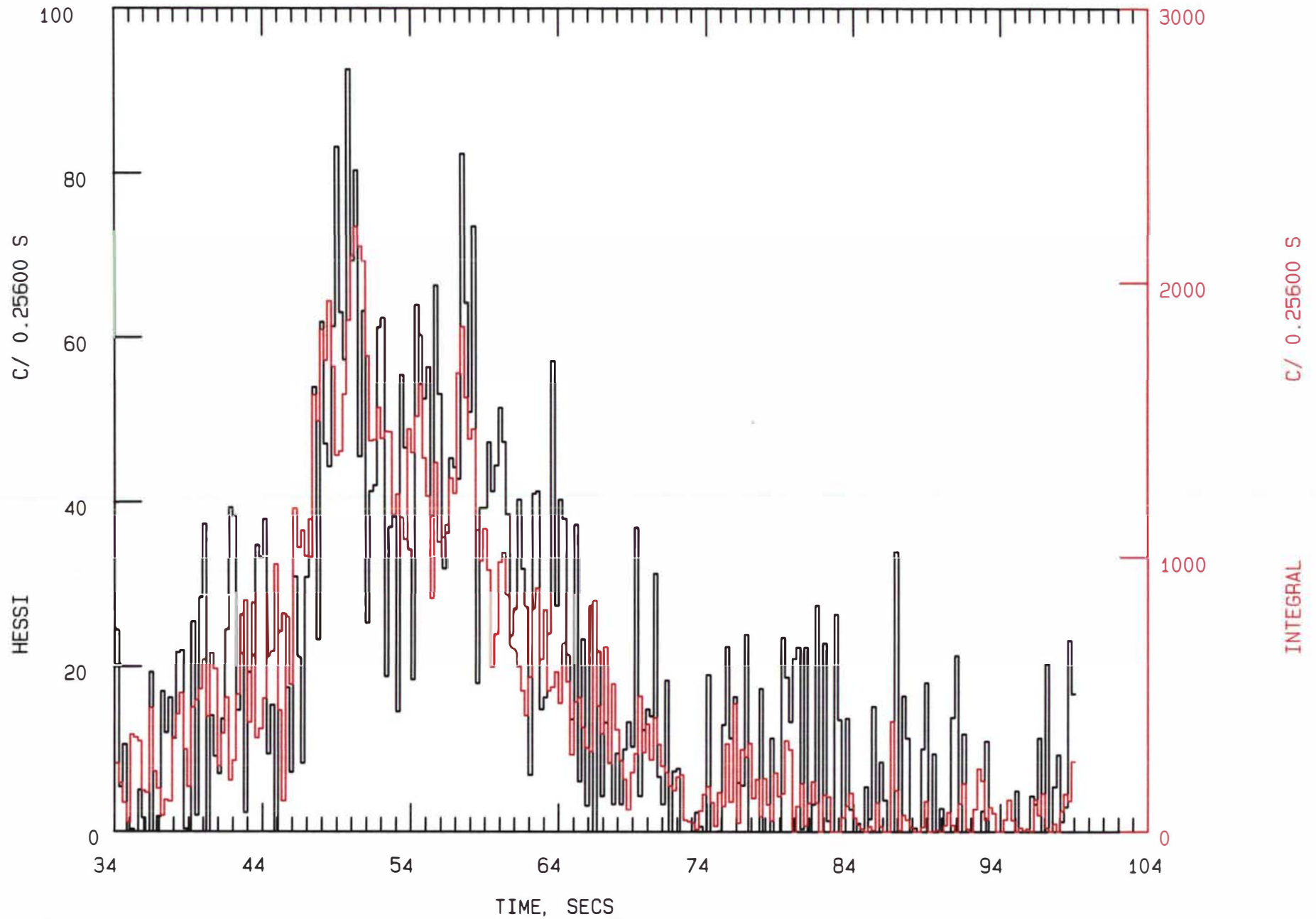
-INTEGRAL

CORRELATION

31/10/05

79215.000

10/11/ 5



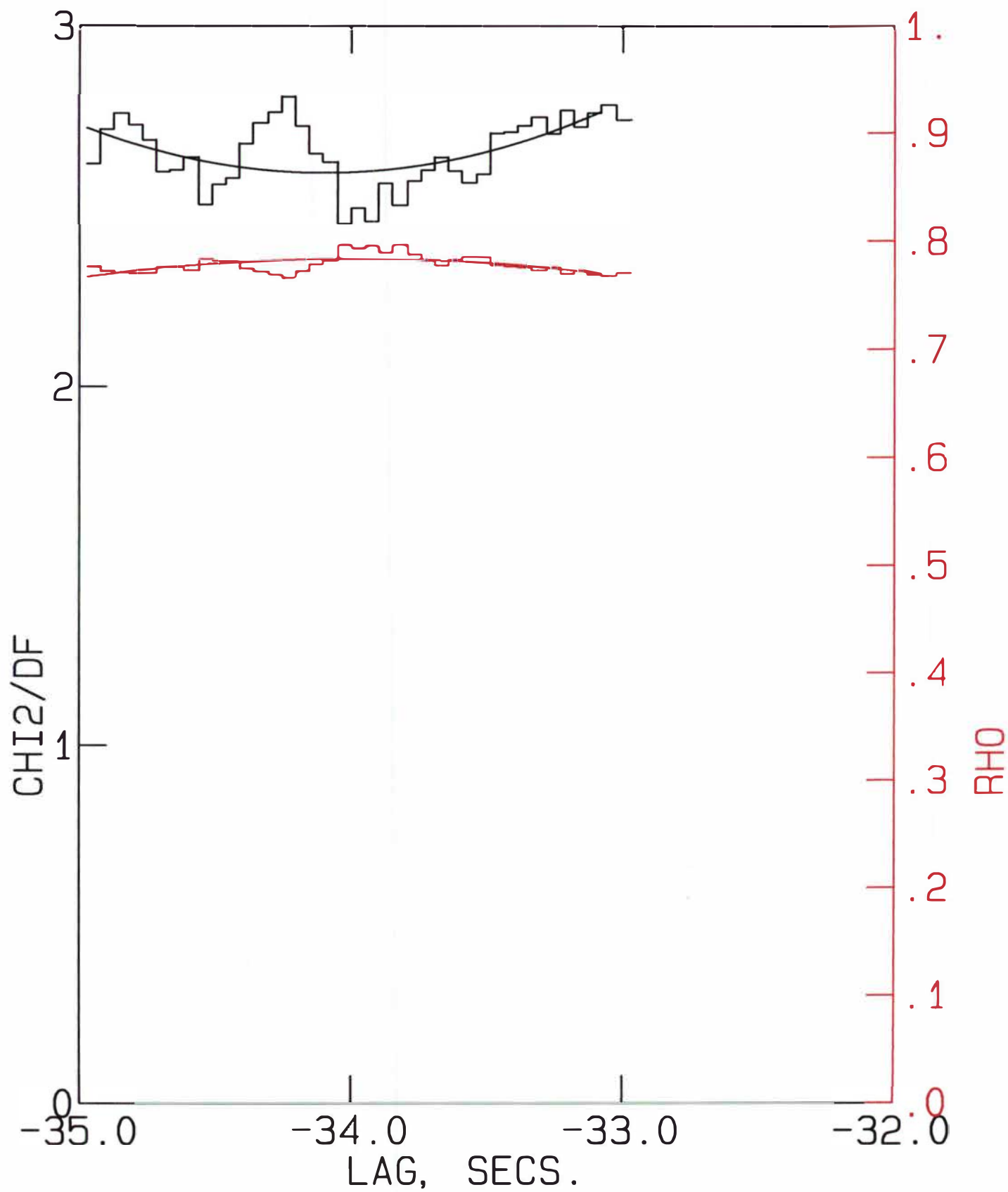
HESSI

-INTEGRAL

CORRELATION

31/10/05

79215.000



KONUS1

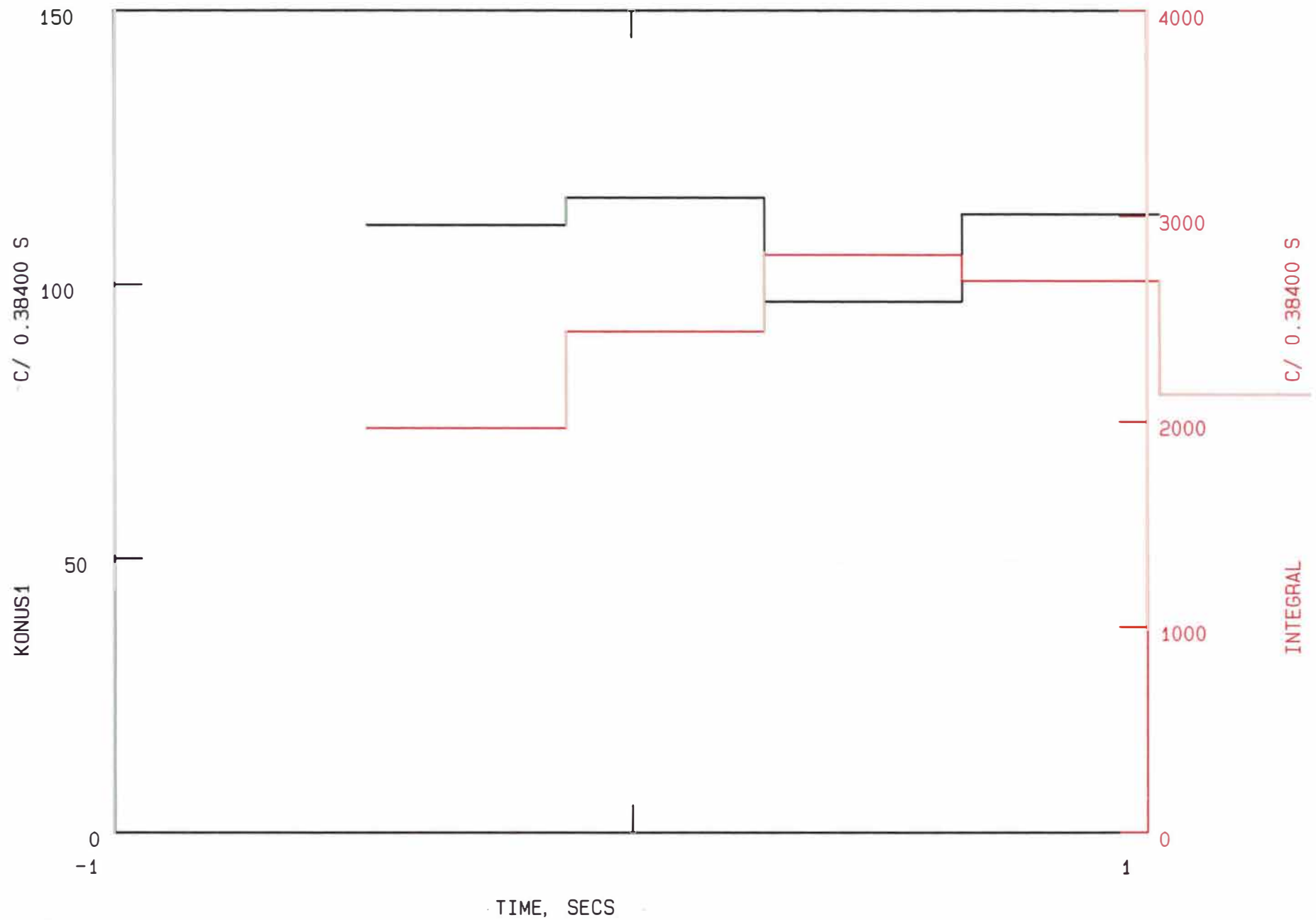
-INTEGRAL

CORRELATION

31/10/05

79265.834

10/11/ 5



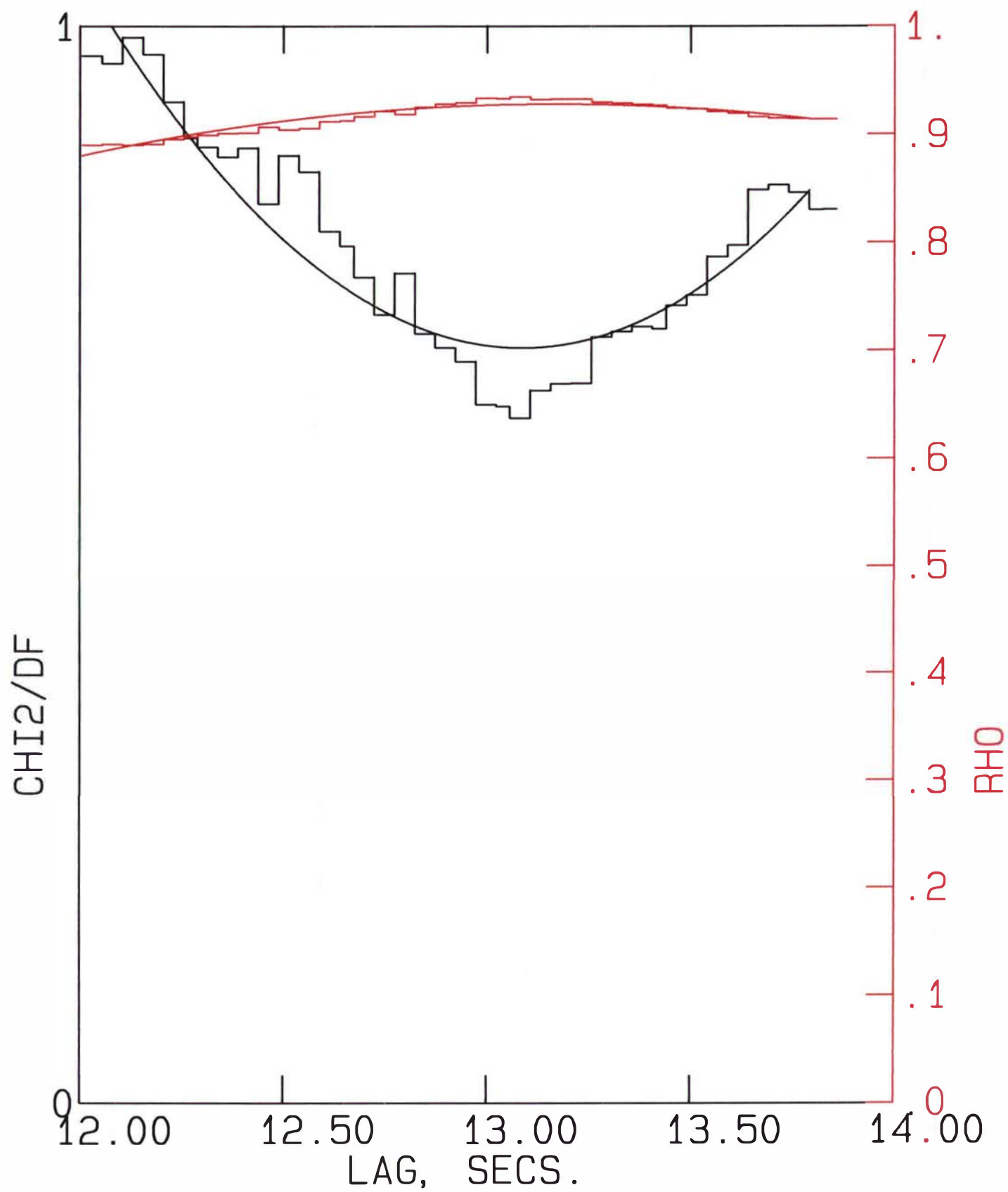
KONUS1

-INTEGRAL

CORRELATION

31/10/05

79265.834



KONUS1

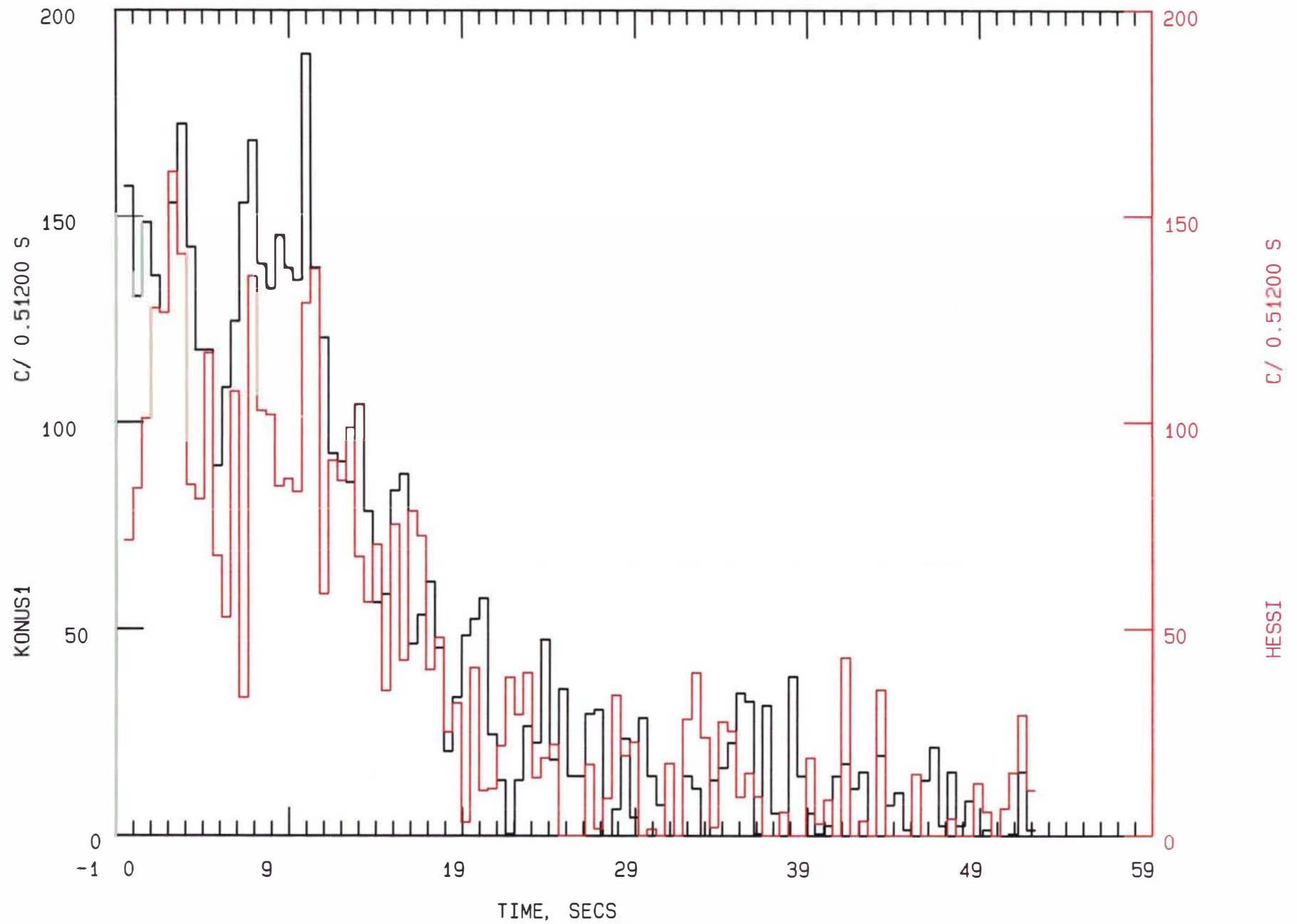
-HESSI

CORRELATION

31/10/05

79265.834

10/11/ 5



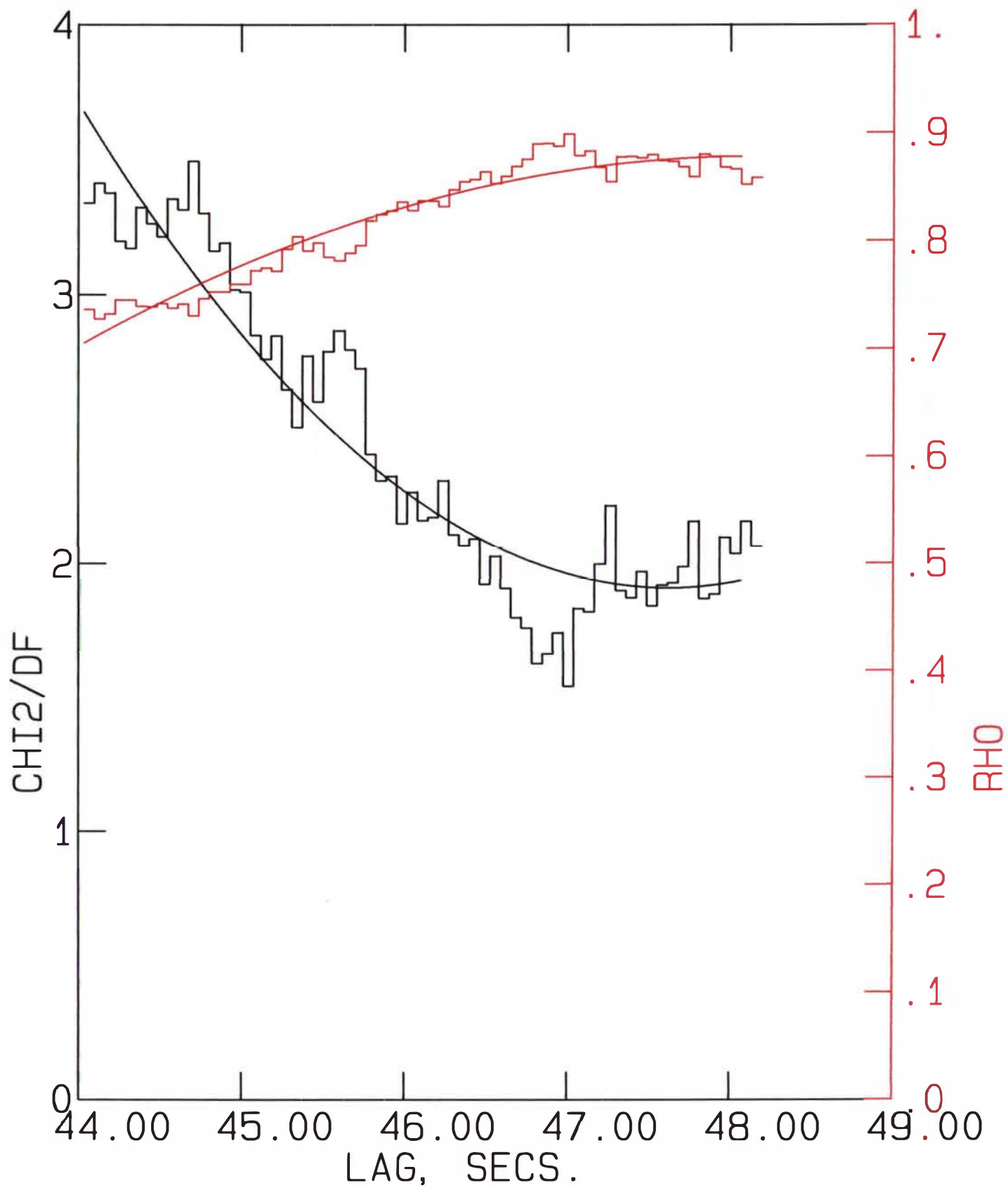
KONUS1

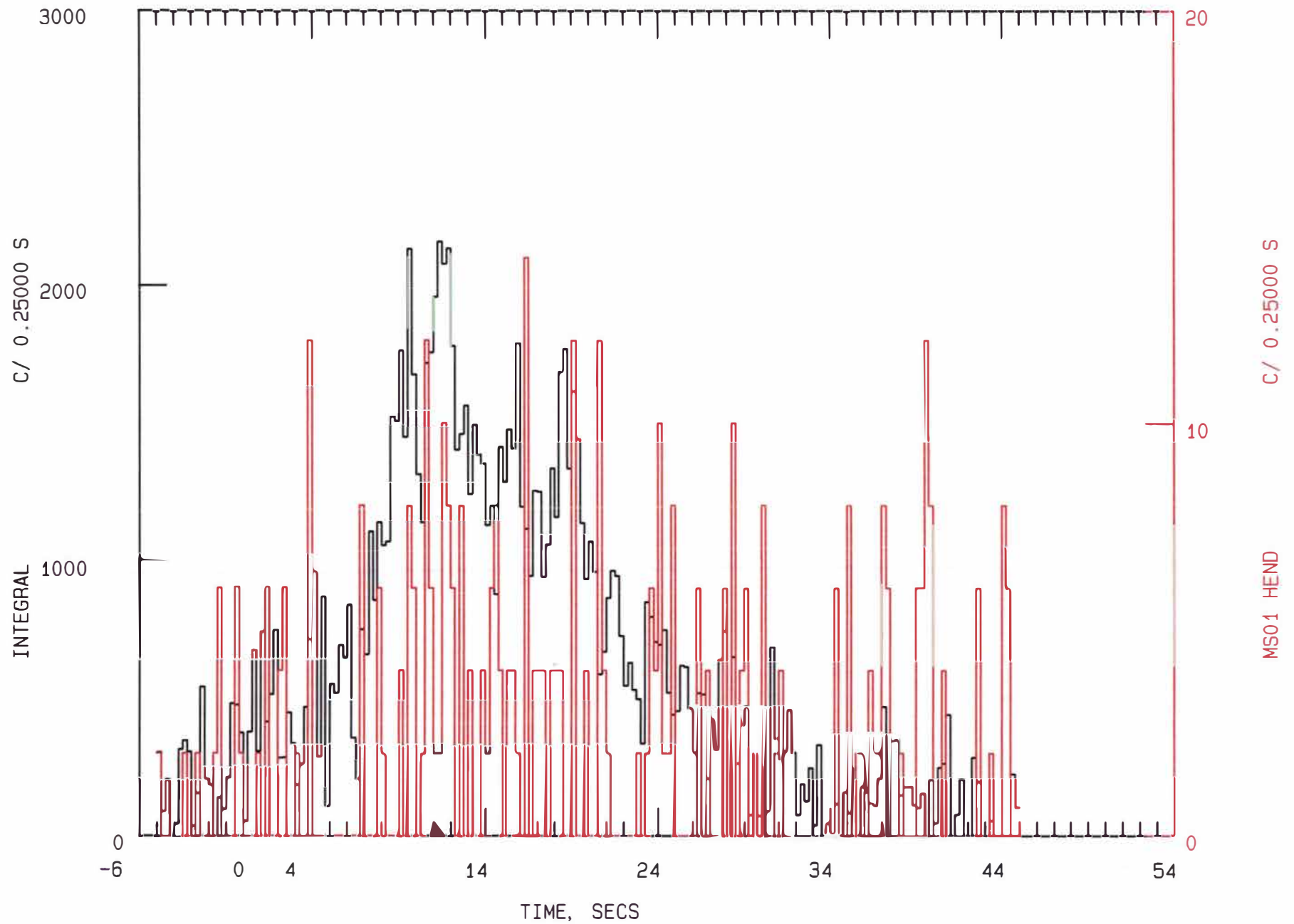
-HESSI

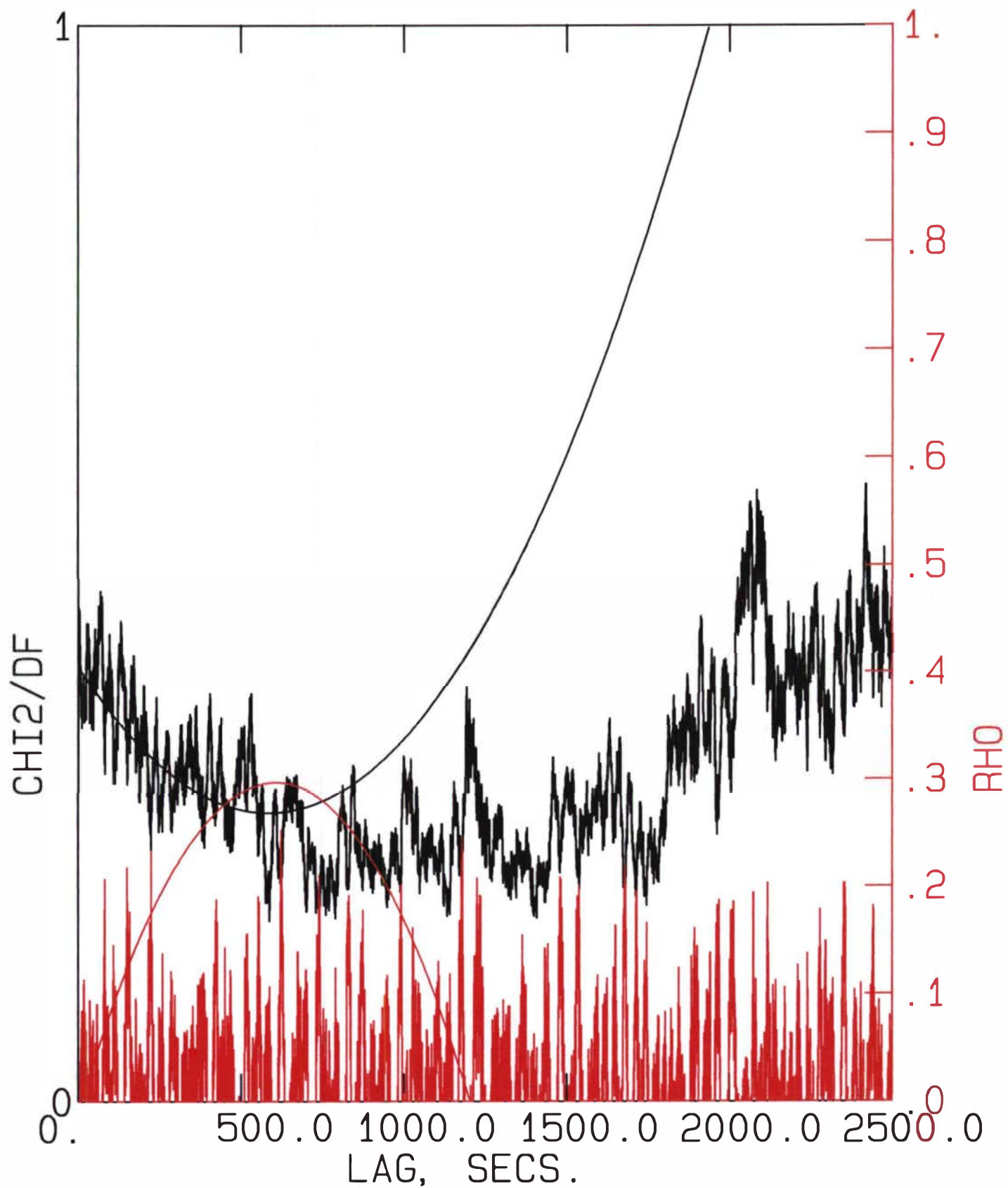
CORRELATION

31/10/05

79265.834







From hops@space.mit.edu Mon Oct 31 14:37:11 2005
X-ASG-Debug-ID: 1130798269-28034-12-0
X-Barracuda-URL: http://mailwall.ssl.berkeley.edu:8000/cgi-bin/mark.cgi
From: HETE Operator <hops@space.mit.edu>
-ASG-Orig-Subj: Trigger Notice
Subject: Trigger Notice
To: khurley@ssl.berkeley.edu, autobrst@sunspot.ssl.berkeley.edu
Date: Mon, 31 Oct 2005 22:37:49 +0000 (GMT)
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
X-ASG-Whitelist: Sender (Per-User)

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Mon Oct 31 22:37:48 GMT 2005
NOTICE_TYPE: HETE S/C Alert
TRIGGER_NUM: 9999, Seq_Num: 1
GRB_DATE: 13674 TJD; 304 DOY; 05/10/31
GRB_TIME: 79261.96 SOD {22:01:01.96} UT
TRIGGER_SOURCE: Nat's trigger robot
GAMMA_RATE: 130 [cnts/s] on a 1.300 [sec] timescale
SC_-Z_RA: 298 [deg]
SC_-Z_DEC: -20 [deg]
SC_LONG: 342 [deg East]
SUN_POSTN: 114.99d {+07h 39m 58s} +21.45d {+21d 27' 06"}
MOON_POSTN: 186.62d {+12h 26m 28s} +2.56d {+02d 33' 31"}
MOON_ILLUM: 35 [%]
COMMENTS: Probable GRB.

MCW 78661 - 79861

21:51:01 - 22:11:01

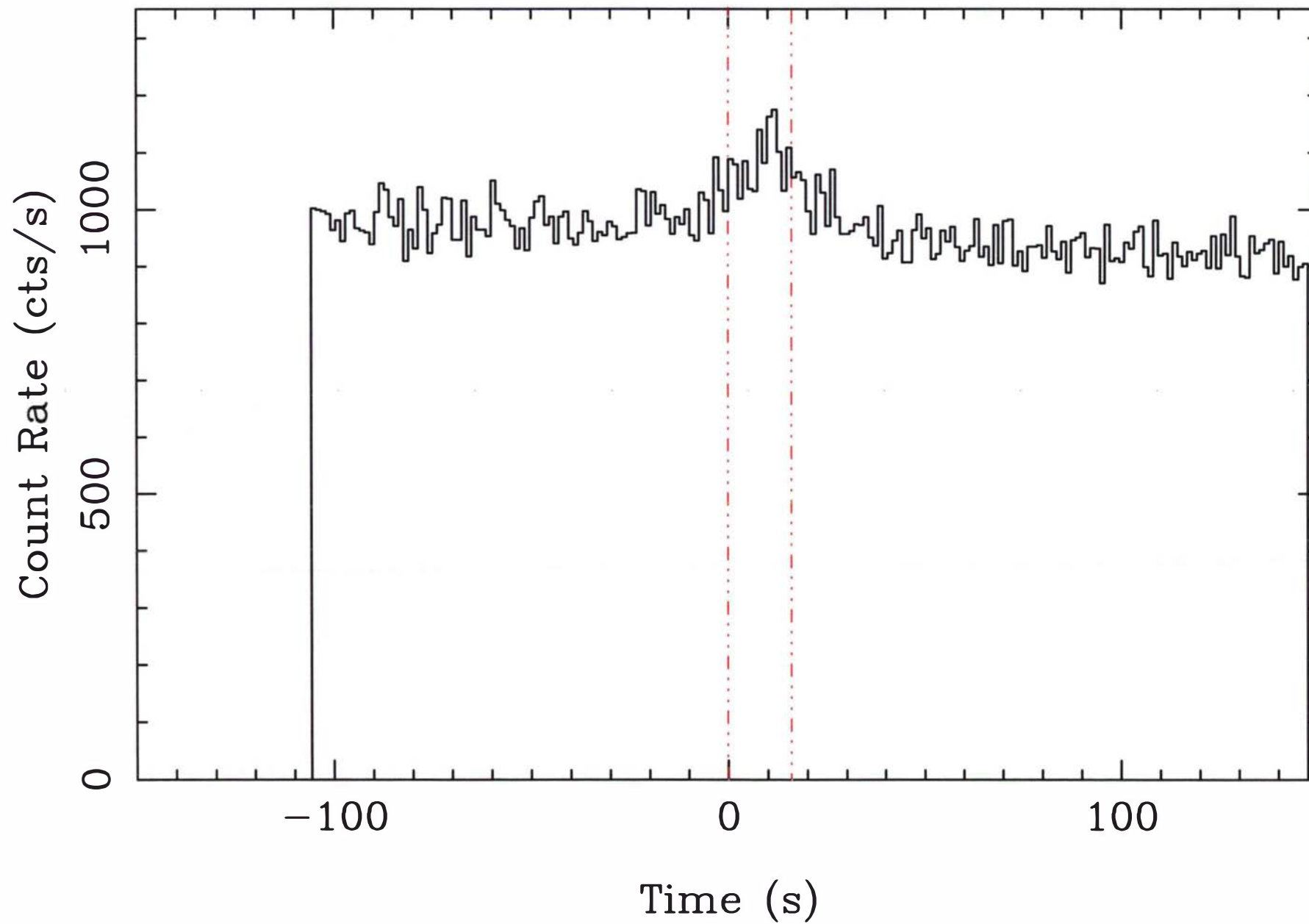
There's a GRS trigger in the
window, but it's noise

From hops@space.mit.edu Mon Oct 31 14:21:24 2005
Date: Mon, 31 Oct 2005 17:22:02 -0500 (EST)
From: HETE Operator <hops@space.mit.edu>
To: khurley@sunspot.ssl.berkeley.edu
Subject: Trigger Notice to IPN

TITLE: GCN/HETE BURST POSITION NOTICE
NOTICE_DATE: Mon Oct 31 22:20:28 GMT 2005
NOTICE_TYPE: HETE S/C Alert
TRIGGER_NUM: 9999, Seq_Num: 1
GRB_DATE: 13674 TJD; 304 DOY; 05/10/31
GRB_TIME: 79261.24 SOD {22:01:01.24} UT
TRIGGER_SOURCE: Carlo's trigger robot
GAMMA_RATE: Not computed, sorry
SC_Z_RA: No idea, sorry
SC_Z_DEC: Beats me
SC_LONG: Couldn't rightly say
SUN_POSTN: Don't know that one either
MOON_POSTN: There's an almanac around here somewhere...
MOON_ILLUM: Yes
COMMENTS: Improbable GRB

FREGATE Band A, 1.2s Resolution Data

Time Since UTC = 20051031_220101.245225



FREGATE SURVEY (TH) TIME HISTORY (AVG x1) -- DETECTORS 1-4 SUMMED (GHETE_9999_1_20051031_79261)

BEG TIME: 31/10/05 DOY 304 Julian 2453676.41500 UT = 21.960 21:57:36 (79056.000 secs) [sct = 0019 c21a bb6c ac4b]
 END TIME: 31/10/05 DOY 304 Julian 2453676.41958 UT = 22.070 22:04:12 (79452.000 secs) [sct = 0019 c21a d307 289d]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=510]

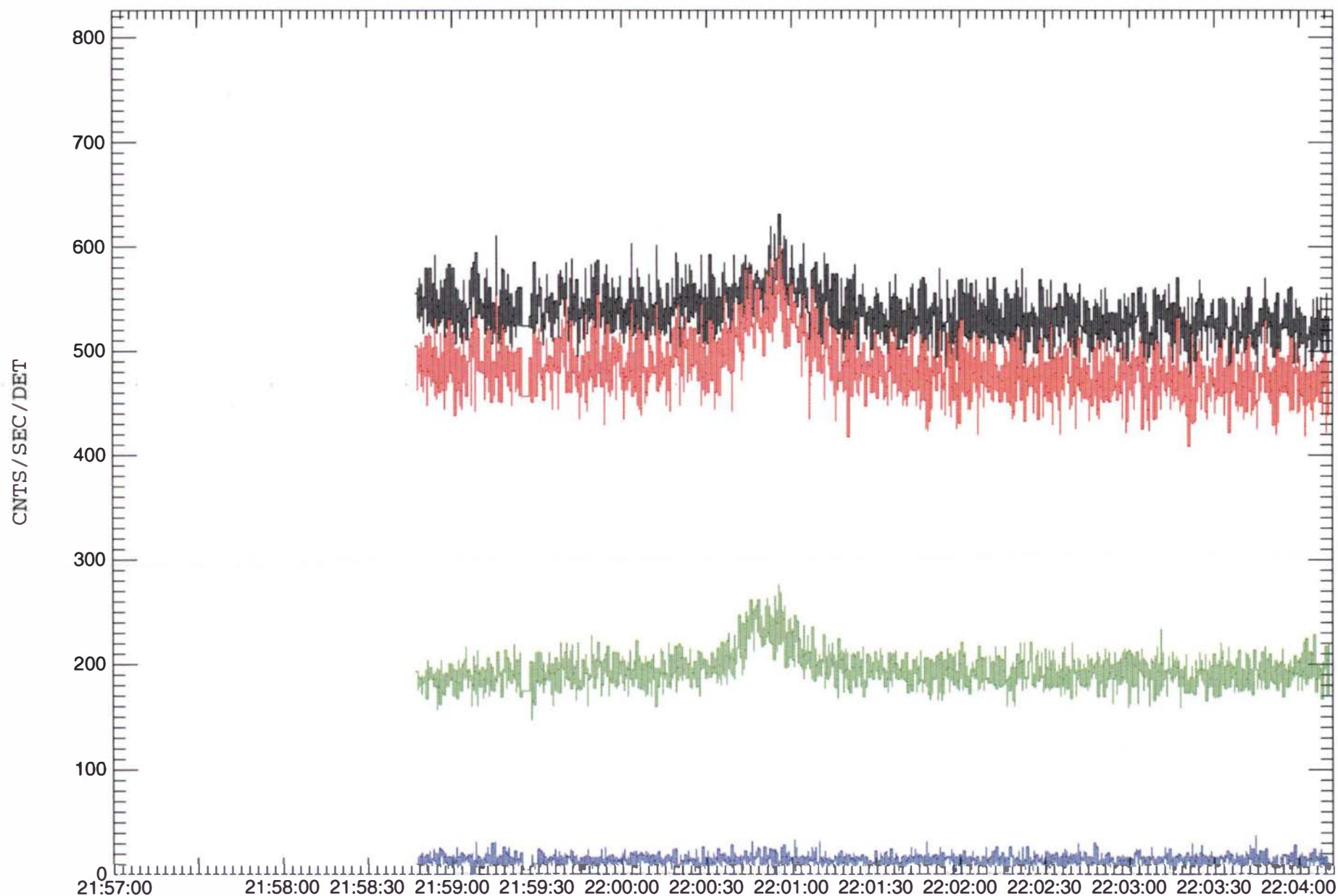
Chan 4:[E6=510 ->]

Channel 1 + 300

Channel 2 + 200

Channel 3 + 100

Channel 4 + 0



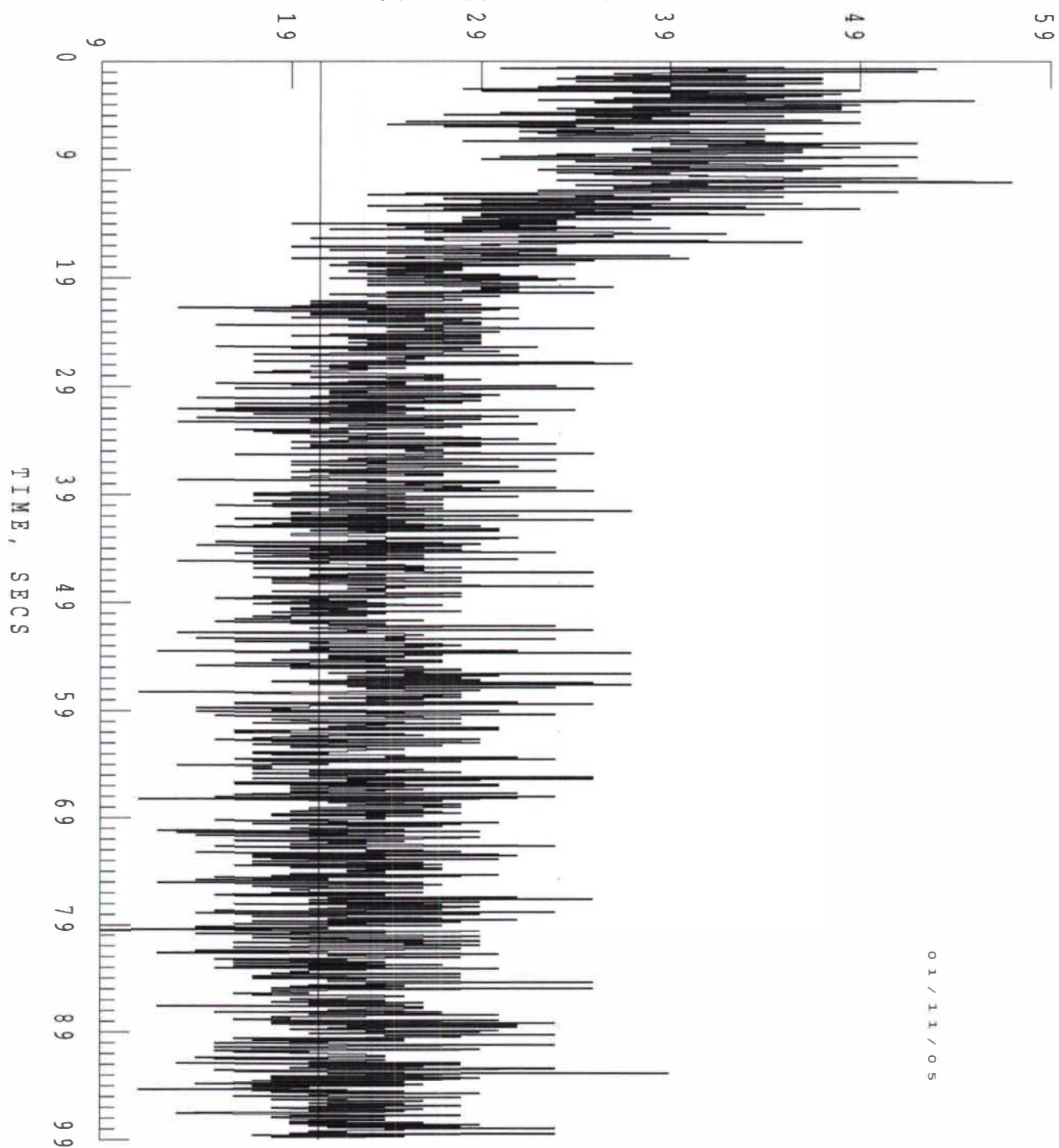
RS UT

KONUS1

31/10/05 79265.834

50 - 200 keV

COUNTS/0.064 S



KONUS HRES 20051031 79265

TRIGGER TIME: 31/10/05 DOY 304 Julian 2453676.41742 UT = 22.018 22:01:05 (79265.000 secs)

Chan 1 : [15 - 50 keV]

Chan 2 : [50 - 200 keV]

Chan 3 : [200 - 770 keV]

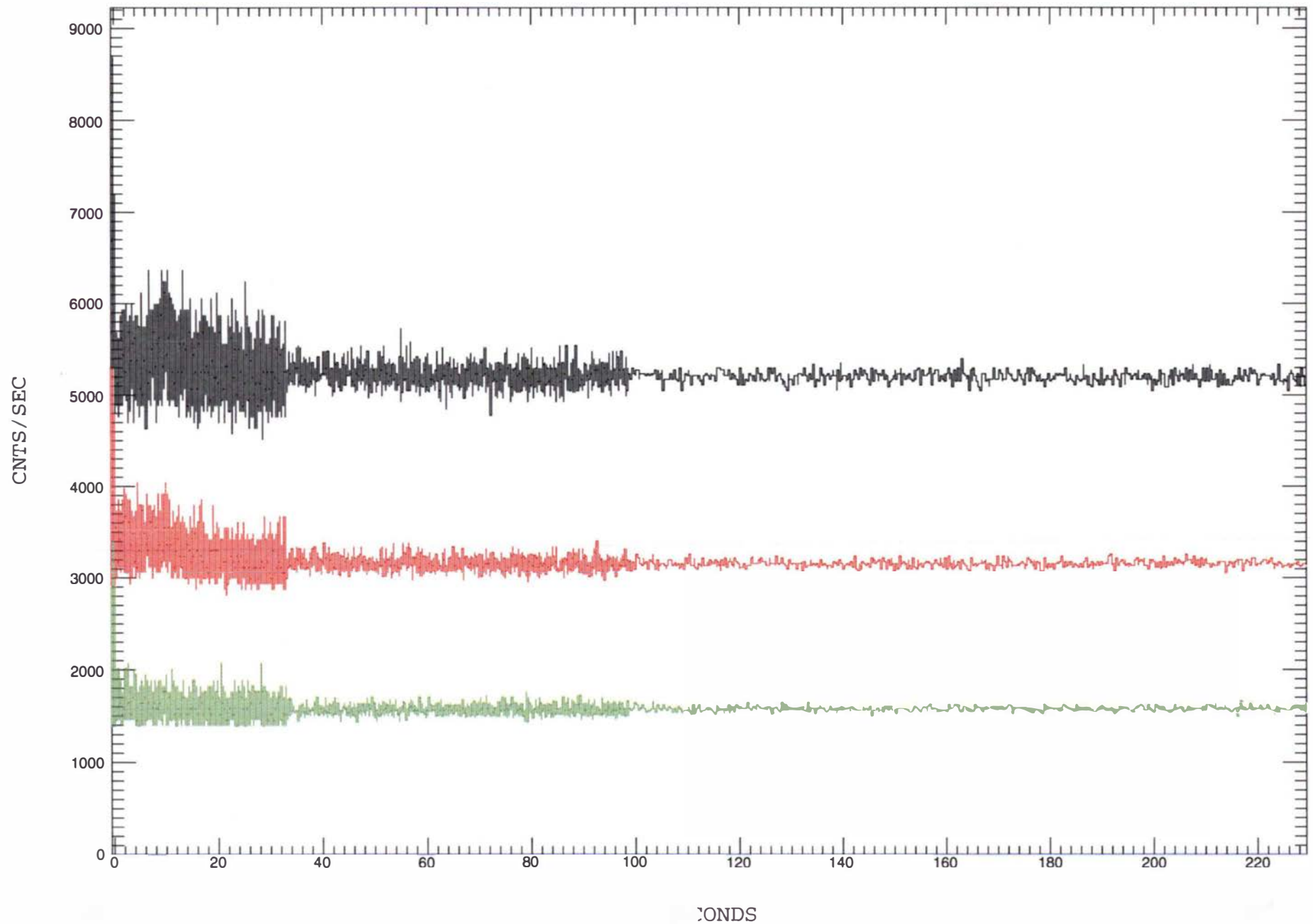
Chan 4 : [> 10 MeV]

Channel 1 + 4200

Channel 2 + 2800

Channel 3 + 1400

Channel 4 + 0



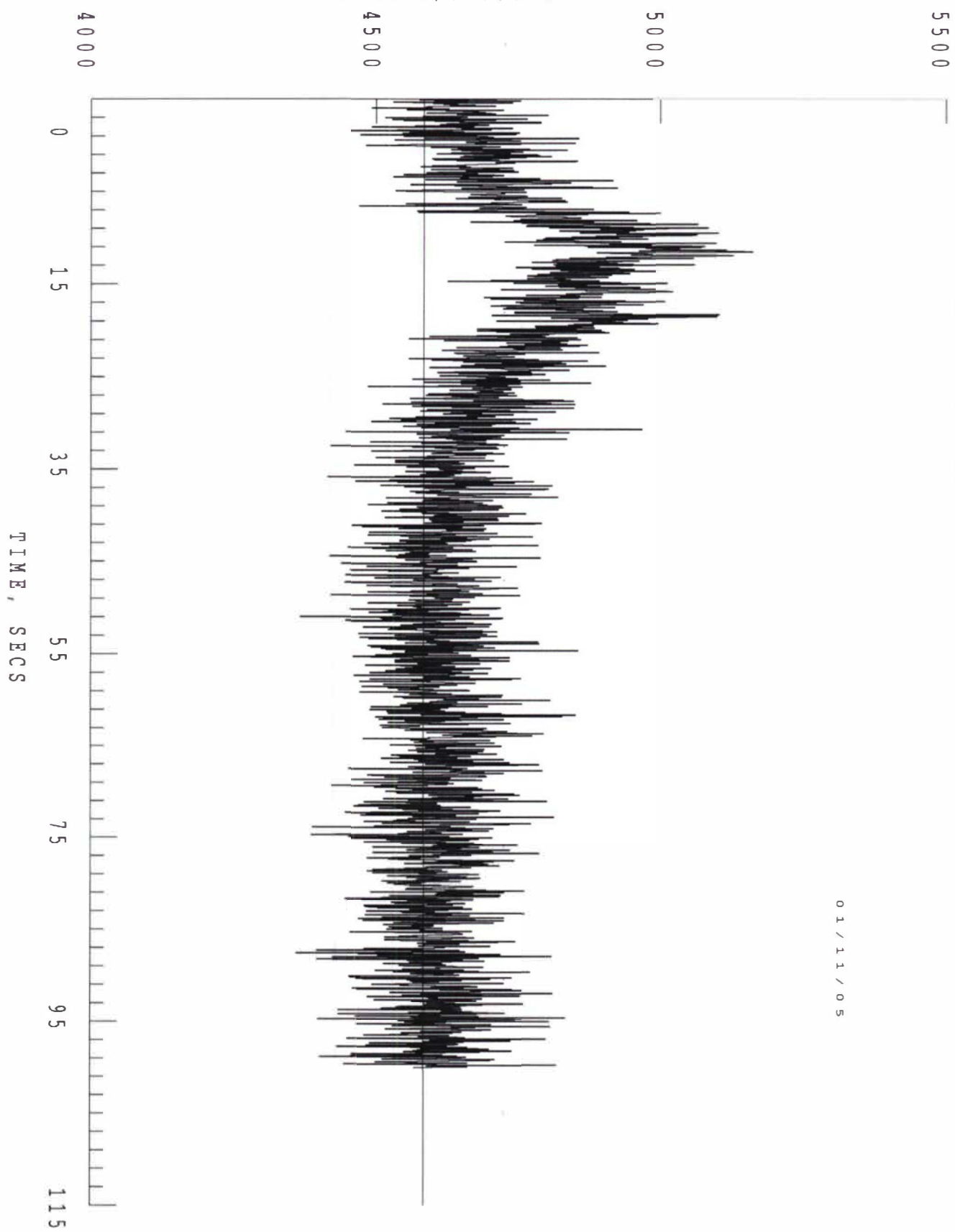
INTEGRAL

31/10/05

79254.418

100-10000 keV

COUNTS/0.050 S



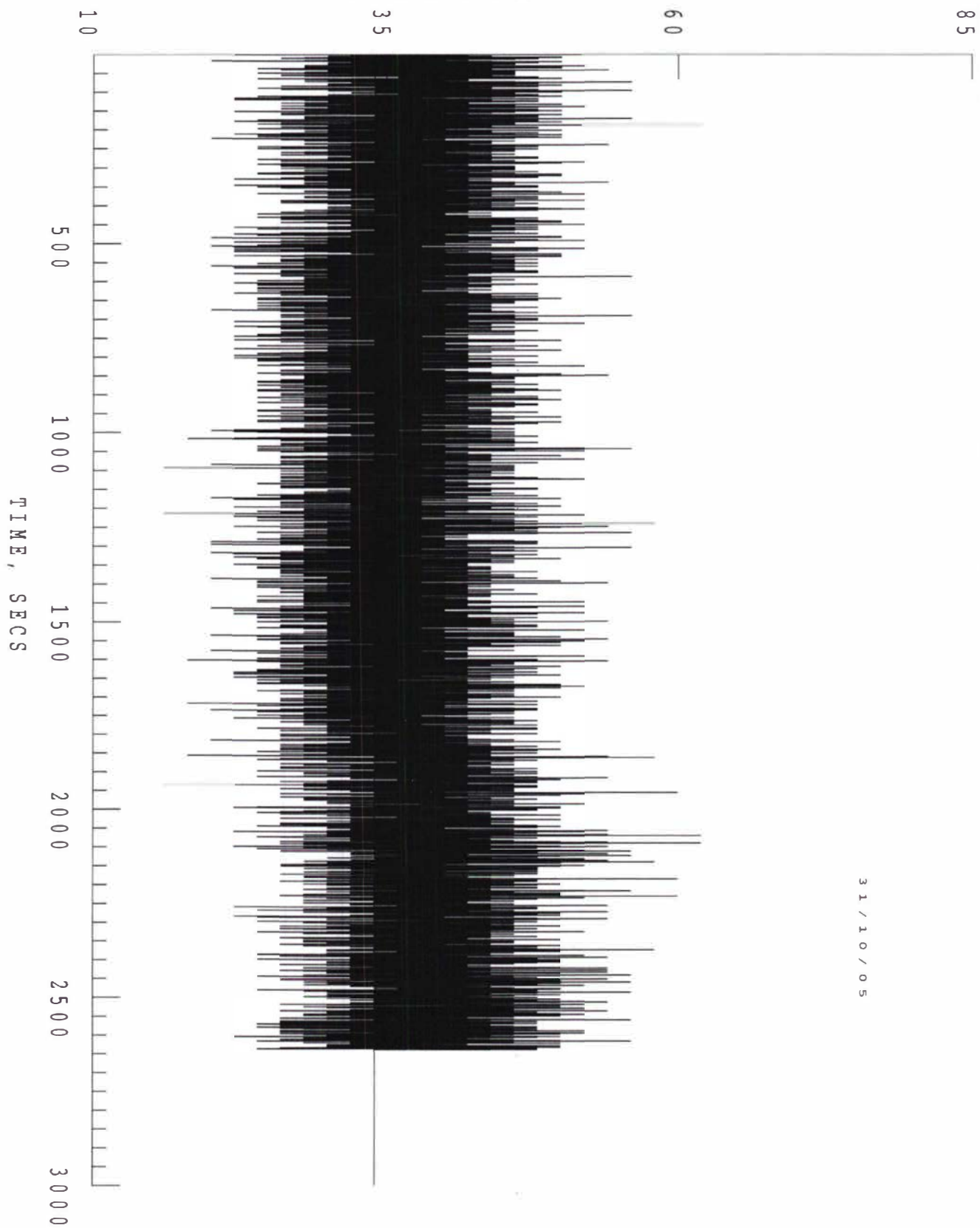
MS01

31/10/05

77902.865

50 - 3000 keV

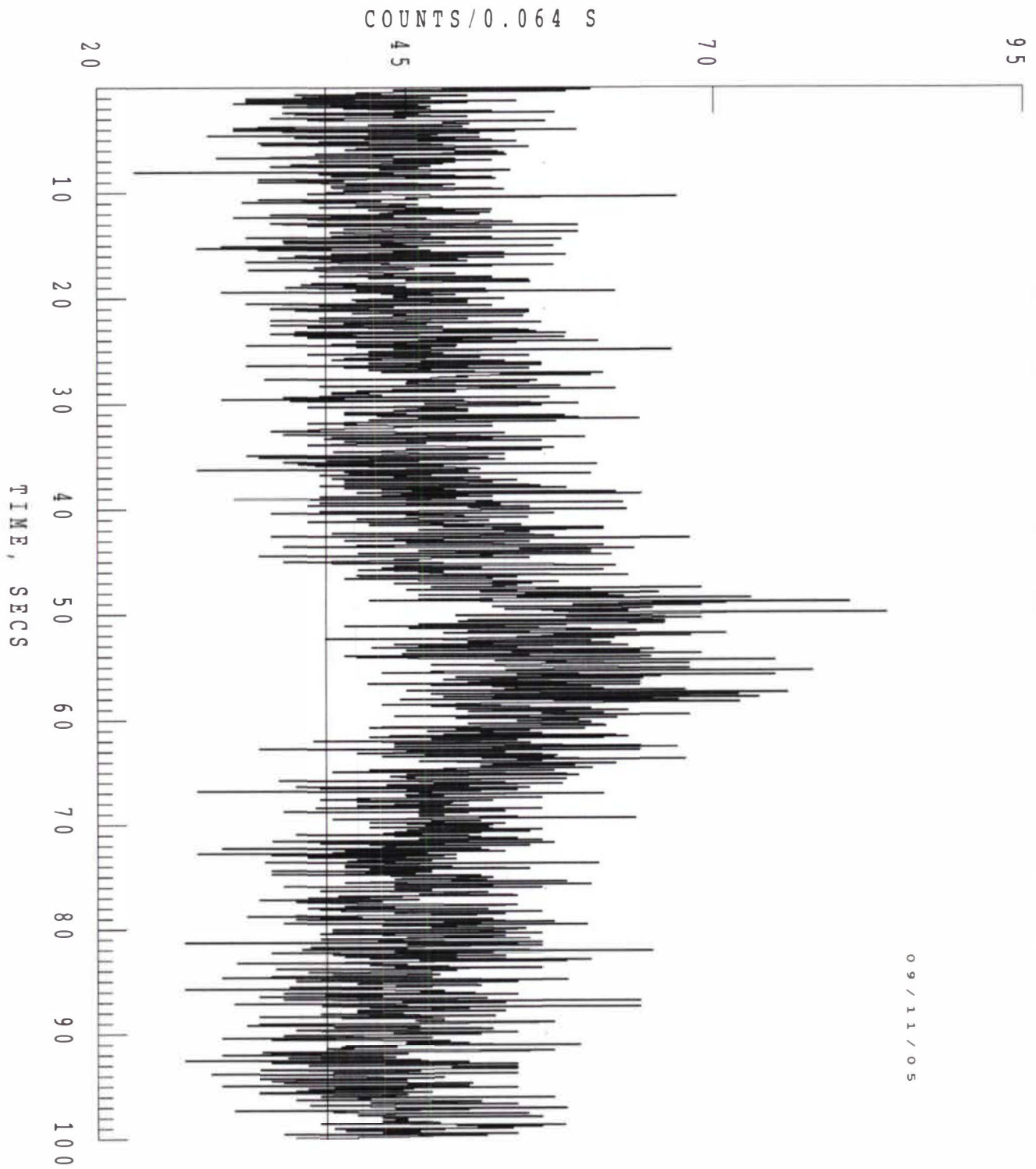
COUNTS/0.250 S



HESSI

31/10/05 79215.000 (HETE_20051031_79265)

50 - 200 keV



FREGATE SURVEY (TH) TIME HISTORY (AVG x16) -- DETECTORS 1-4 SUMMED

31/10/05 DOY 304 Julian 2453675.50000 [est. sct = 0019 c208 5350 d127]

Chan 1:[E1=19 E2=103]

Chan 2:[E3=18 E4=78]

Chan 3:[E5=20 E6=509]

Chan 4:[E6=509 ->]

Channel 1 + 800

Channel 2 + 600

Channel 3 + 400

Channel 4 + 200

CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET CNTS/SEC/DET



RS UT