

LOG SHEET SCIAMACHY CALIBRATION

date/time	description of action	measurement filename
	<p>probleem ratio 0 / 100 cm vult.</p> <p>ratio 50 / 100 cm te veel licht in 6/7/8.</p> <p>ratio 50 / 0 cm " " 6/7/8</p>	
	<p>Roer oplossing team 5 roer het in simetrie.</p> <p>dan meting 0 m 100 op de wand vande kraat zyn. een t50</p> <p>in het midden lyt het er op dat de voorste buis harding rond de</p> <p>lamp in het midden (t50) anders is dan aan de zijwanden.</p> <p>(NB de draaistuur is voor alle drie gelijk dus is)</p> <p>heeft de afwijking niet te maken met het of de buis vande lamp.</p> <p>het lyt er op dat de lamp zelf en ander spectrum of geeft...</p>	
	<p>test meting 1 van wyden voort dichte kraat en waer</p> <p>met behulp van alu folie de onderzijde gelijk voor</p> <p>midden t50 cm en achterkraat t150 cm. → ratio leemveld</p> <p>→ Vervol kraat. →</p>	<p>/ 22 u1031</p> <p>/ 23 u1030</p>
	<p>afwijking in 6/7/8.</p> <p>van wyden sekele kraat. → test. op +50 cm</p> <p>geen verschil</p> <p>constructie op +100 cm</p>	<p>/ 24, u1030</p> <p>/ u1031</p>

+ 50 cm

+ 1.0 m

Logging to this file started at Sat Aug 8 23:08:34 GMT 1998.

"08.08.1998 23:08:34" "CHANNEL A"

"08.08.1998 23:19:55" "%FEECHECK-W-EVENTS, 0000 0000 0000 0000 0000 0001 0000

"08.08.1998 23:20:06" "%FEECHECK-W-EVENTS, 0000 0000 0000 0000 0001 0001 0000

Formal Run of Measurement

(Measurement ID)

IRRADIANCE LINE

Request for Actual Status

(cross out entries that are **not** requested.)

Request for Modification

(fill in only entries to be modified)

Request for Run

(no entries = run based on actual default settings)

Scanner Positions

Azimuth deg
 Elevation deg

Timeline for each Data Acquisition Period during Measurement

	1	2	3	4	5	6	7	8	9	10
State ID	60									
Repetitions	18									

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	64	1						
1b	64	1						
2b	64	1						
2a	64	1						
3	4	16						
4	1	64						
5	2	32						
6	05	64						
7	1	64						
8	2	32						
State ID								

TEAR. 5 8/8
 23.00 TEST WITH
 ALU SHEET
 voorbrant radlebrut vgr.

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Signatures

Test Purpose		Date	Signature
Remark	WID 31	12-12-10	[Signature]
Data Directory	1220-12-01-21-122401-2	12-12-10	[Signature]

Stimuli

Config.

Lambda

PPC

Polar

Shutter

Acq.

S/S

ATC

Nadir

Limb

RAD-A

NCW

WLS

SLS

Sun (Subsolar)

Nadir

Limb
Sun/
Moon

Azimuth Scanner

Cover

UNLOCKED

Elevation Scanner

Cover

UNLOCKED

Aperture Stop

LARGE

Sun Sens

0	0
0	0

Telescope

Spectrom.

NDF

OUT

IICAOPT

PMD

Det.Temp -18.7 C

ElecTemp -17.7 C

Channel

1	2.50	0.00	1.73	3.19	240.66	219.51	259.26
2	2.50	0.00	1.71	3.18	240.79	219.06	259.09
3	2.50	0.00	1.71	3.19	244.69	232.22	259.54
4	2.50	0.00	1.72	3.18	244.76	231.14	259.27
5	2.50	0.00	1.72	3.17	243.99	230.12	259.41
6	-0.03	0.01	1.71	3.18	237.82	216.59	259.92
7	-0.05	0.01	1.72	3.19	214.39	159.66	259.36
8	-0.03	0.01	1.71	3.17	214.91	158.42	260.03

Exp. Mode

STOP

TLM Mode

MEAS-TL

ChkState

Format

Moni.

Anom.

OBT

~~Handwritten~~ UIV 31
Step 6.g.a.

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Bzw</u> <u>8-8-98</u>	
	What's the name of the (main) data input files generated by the EGSE? (*.dat)	<u>SCIA_08081998_231958187.dat</u>	
	Setup a three-window configuration on your SUN.		see course descr.
Cnstr directory	cd ~/DATA-DIR/IRRAD ; ls -l highest number in directory? New directory: mkdir <B+1> ls -l What's now the highest number in directory? <C> should be + 1 directory name is:	<u>21</u> <u>22</u>	Note: In window DATA-DIR (B) (C) (DIR-NAME)
Copy data	See Analysis sheet: Transfer Data File	<input checked="" type="checkbox"/> N /DATA-DIR/IRRAD/<C>	In DATA-DIR window
Cnstr EGSE_LTF	cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled) ls -l *.egse_ltf What's the name of the egse_ltf file <D> should be <A>.egse_ltf	<input checked="" type="checkbox"/> N <u>SCIA_08081998_231958187.EGSE_LTF</u>	Note: In window DATA-DIR; don't forget the dot !!!; May take more than 15 mins. (D)
Cnstr CAL files	idl_run_averscia (and select file <D> when asked)		Note: In window IDL
Check CAL files	Dark files: ls -l *du*.cal		In DATA-DIR window

Test → Kost om FEL lamp
ach + vorkant
nieuwident. + alu folie

size: 145998 should be approx 150Kb

ls -l *iu*.cal

size: 145998 should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command df -k | more).

Print postscript

Print postscript files:

lpr -P<printer> *.ps
 Contents dark file
 du.avg.cal.ps
 should be approx. constant within channels: Y / N

Contents light file
 iu.avg.cal.ps
 should resemble white light source: Y / N

Contents of
 rel_std.ps files
 should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y / N
 If not, value is: _____

Add postscript images to logbook, done Y / N

Print logfiles Y / N
 *.log
 Add logfiles to logbook, done

BB

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL
~~ls~~ ls -l

In DATA-DIR window

highest number in dir?

mkdir <B1>+1

<B1>

Now highest number in dir?

<C1>

<C1> should be <B1>+1

Y/N

Dir name is :

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dirname>

Let <D1>, <D2>, <D3>

directories containing

irradiance measurements

(thus, <D1>, <D2>, <D3>

are of the form

~/DATA+DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/*.dux.avg.cal <Dirname>

cp <D1>/*.iux.avg.cal <Dirname>

cp <D2>/*.dux.avg.cal <Dirname>

cp <D2>/*.iux.avg.cal <Dirname>

cp <D3>/*.dux.avg.cal <Dirname>

cp <D3>/*.iux.avg.cal <Dirname>

~~cd <Dirname>~~

cd <Dirname>

ls -l

Copied files present? Y/N.

Proceed with page 3.

let op; line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the *.cal file

IRRadiance processing <lightfile> is measured.

Run radiance idl do_irradiance

In IDL window

Check irradiance

ls -l *
 Size of file <D>.du*.cal.p1 _____
 Size of file <D>.du*.cal.~~2~~f455.p2 _____
 20).du*.cal.f456.p2
 Size of file <D>*.p1.*.log _____

Check irradiance visually

lpr -P<printer> *p[12]*.ps
 Value of P1 and P2 file resemble white light source? Y / N
 Add postscript images to logbook, done Y / N

Print logfiles

lpr -P<printer> *p[12]*.plog
 Add logfiles to logbook, done Y / N



Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).
 Name of backup CDs _____

Back up

See analysis sheet BackUp



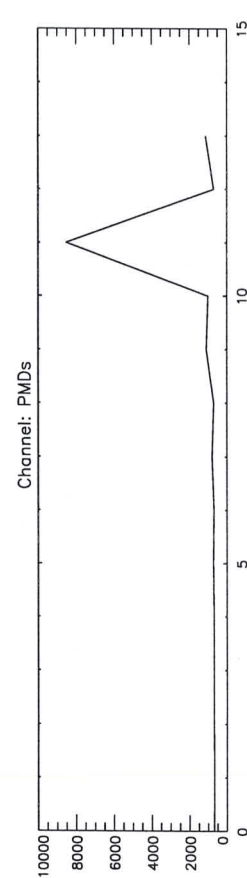
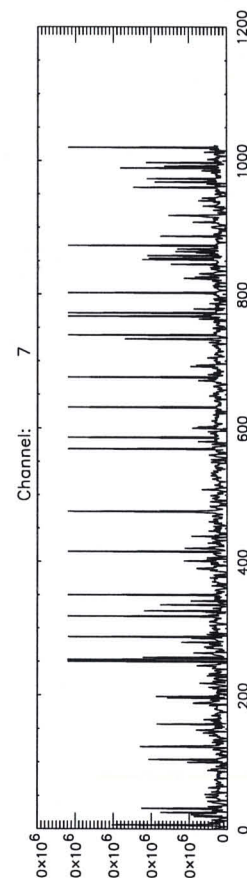
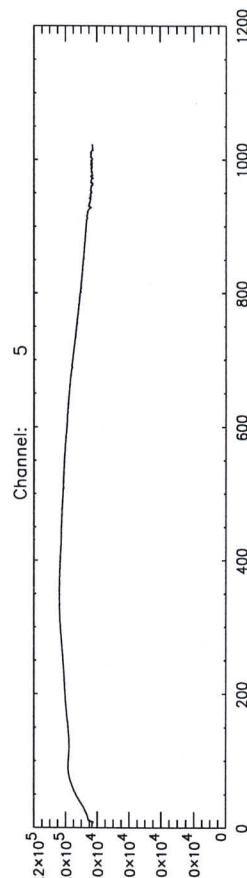
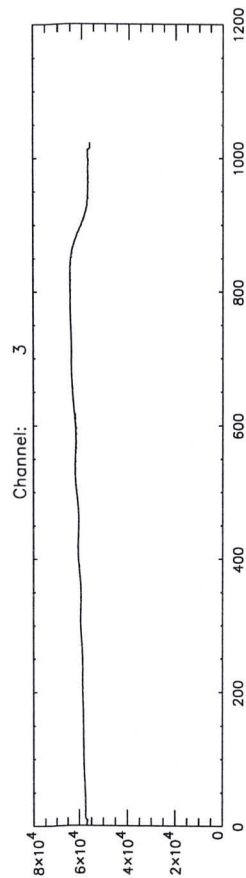
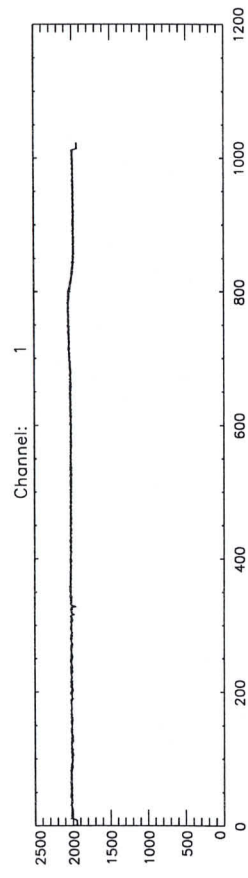
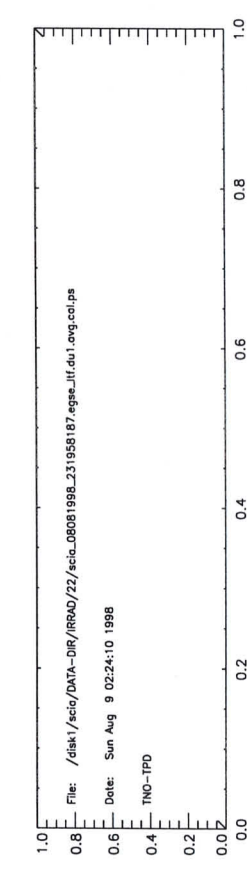
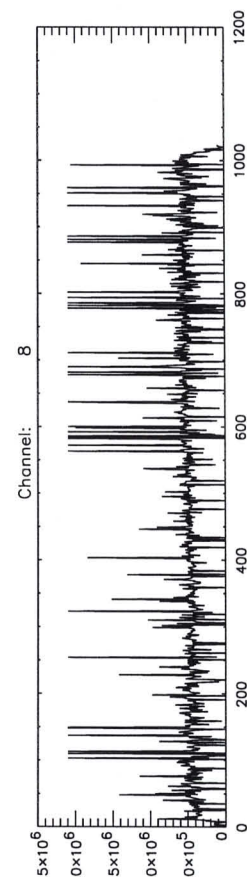
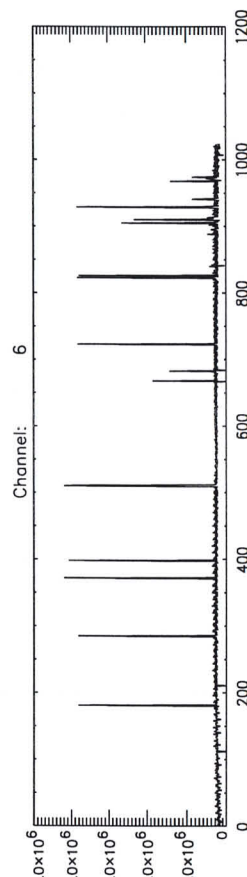
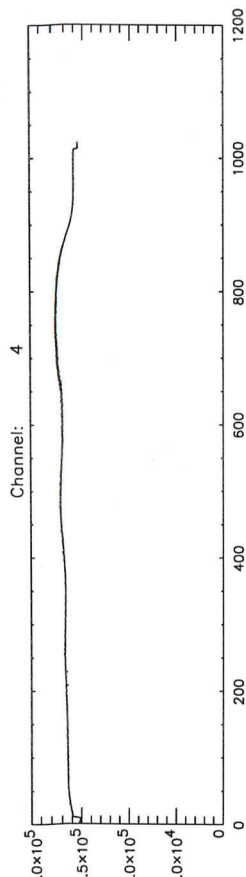
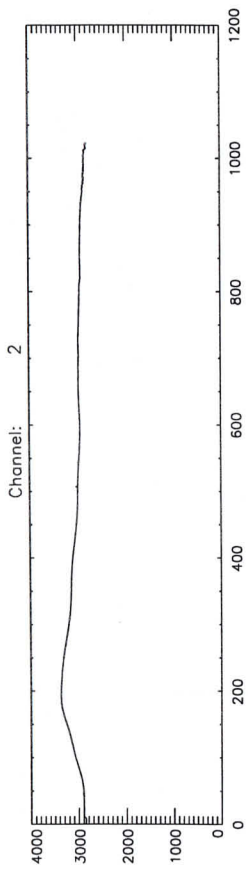
limb irradiance



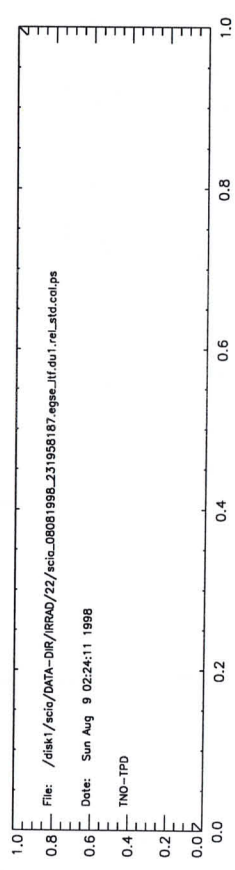
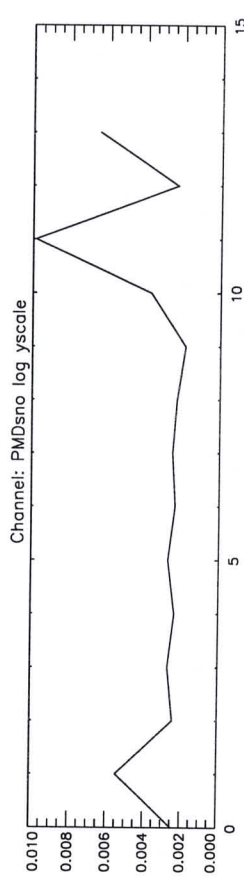
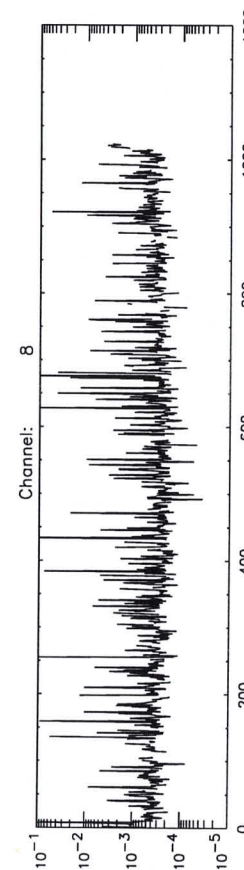
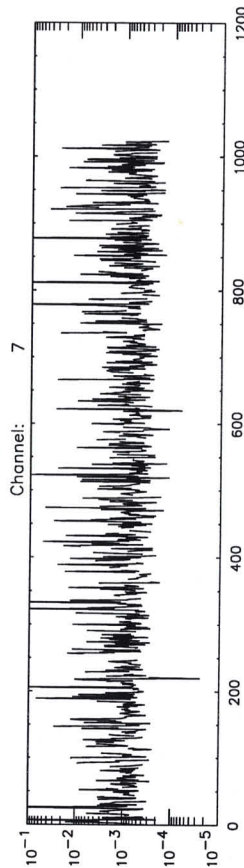
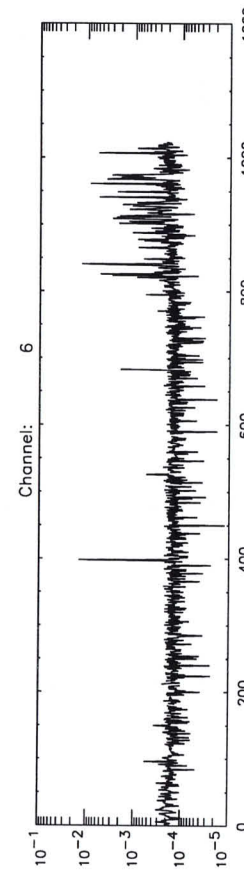
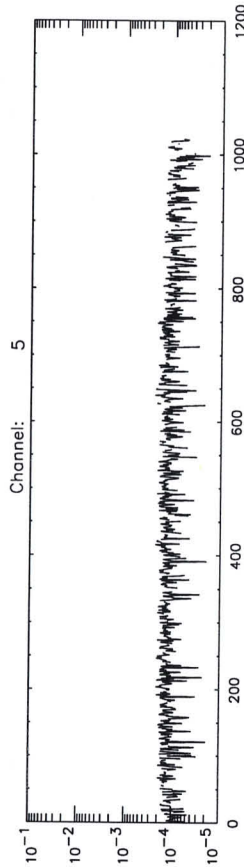
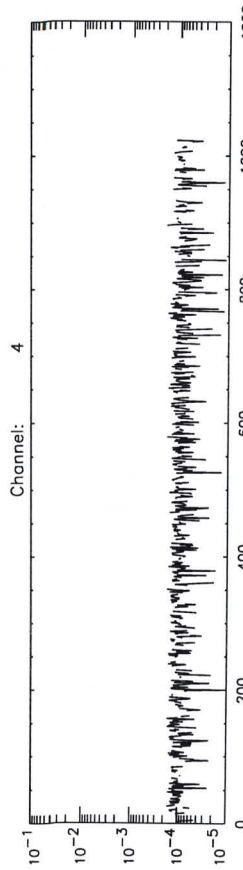
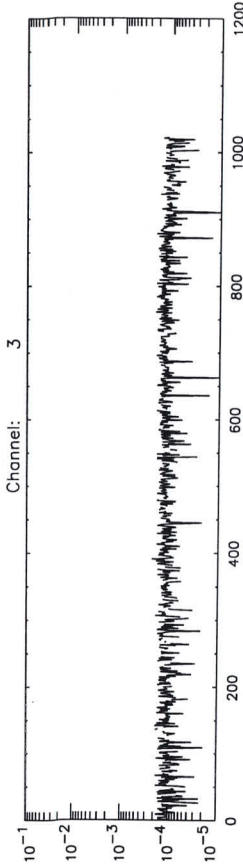
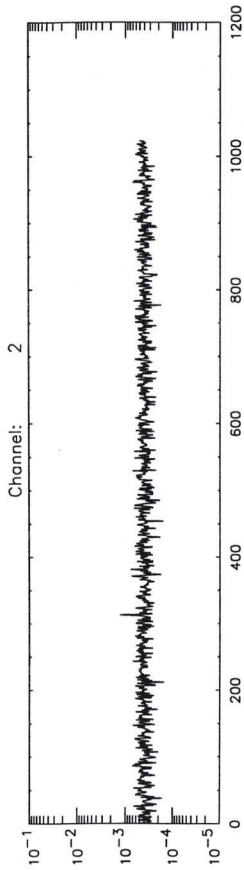
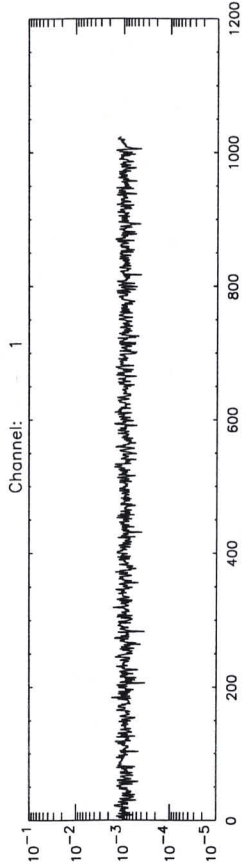
Sign:

Name
Date and time
Signature

0110 31



File: /disk1/scio/DATA-DIR/RRAD/22/scio_08081998_231958187.egse_jif.du1.avg.cai.ps
 Date: Sun Aug 9 02:24:10 1998
 TMO-TPD



Stimuli

Config. nm

Lambda nm

PPC deg

Polar deg

Shutter

Acq.

S/S

ATC

Nadir

Limb

RAD-A

Sun (Subsolar)

Nadir

Limb Sun/Moon

Cover UNLOCKED

Azimuth Scanner

ACTIVE

Cover UNLOCKED

Elevation Scanner

ACTIVE

Aperture Stop LARGE

Sun Sens

<input type="text" value="0"/>	<input type="text" value="0"/>
<input type="text" value="0"/>	<input type="text" value="0"/>

WLS OFF

A

B

SLS OFF

NCW CLOSED

IICAOPT

PMD

Det.Temp

ElecTemp

Telescope

Spectrom.

NDF OUT

Channel

1	2	3	4	5	6	7	8
Bias Volt.	2.50	2.50	2.50	2.50	-0.03	-0.05	-0.03
Test input	0.00	0.00	0.00	0.00	0.01	0.01	0.01
5V Supply	1.73	1.71	1.72	1.72	1.71	1.72	1.71
15V Supply	3.19	3.19	3.18	3.17	3.18	3.19	3.17
Shield temp	240.88	244.89	244.76	243.99	237.82	214.39	214.91
Block temp	219.51	232.22	231.14	230.12	216.59	159.88	156.42
DME temp	259.26	259.54	259.27	259.41	259.92	259.36	260.03

ChanState STATE

Format RTF 113

Moni. TRUE

ChkState STATE

OBT 0x07253516

Anom. 0

TLM Mode COMPLETE

Exp. Mode HEATER

STOP A, NOM 5

~~MAKING~~ UIR 31
Step 6.g.a.

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	B2W 8-8-98	
	What's the name of the (main) data input files generated by the EGSE? (*.dat)	SCIA_08081998_231958187.dat	

Setup a three-window configuration on your SUN. see course descr.

Cnstr directory	cd ~/DATA-DIR/IRRAD ; ls -l highest number in directory? New directory: mkdir <B+1> ls -l What's now the highest number in directory? <C> should be + 1 directory name is:	21 22	(B) (C) (DIR-NAME)
-----------------	---	----------	--------------------------

Copy data	See Analysis sheet: Transfer Data File		In DATA-DIR window
-----------	---	--	--------------------

Cnstr EGSE_LTF	cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled) ls -l *.egse_ltf What's the name of the egse_ltf file <D> should be <A>.egse_ltf		Note: In window DATA-DIR; don't forget the dot !!!; May take more than 15 mins.
----------------	---	--	--

Cnstr CAL files	idl_run_averscia (and select file <D> when asked)	SCIA_08081998_231958187.EGSE_LTF	(D)
-----------------	---	----------------------------------	-----

Cnstr CAL files	idl_run_averscia (and select file <D> when asked)		Note: In window IDL
-----------------	---	--	---------------------

Check CAL files	Dark files: ls -l *du*.cal		In DATA-DIR window
-----------------	-------------------------------	--	--------------------

Test → Kwest om FEL
lamp achi + vorkant
verjdenst. + cal folie

size:

145998

should be
approx
150Kb

ls -l *iu*.cal

size:

145998

should be
approx
150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print

postscript

Print postscript files:

`lpr -P<printer> *.ps`

Contents dark file

`*du*.avg.cal.ps`

should be approx. constant

within channels:

Y / N

Contents light file

`*iu*.avg.cal.ps`

should resemble white light

source:

Y / N

Contents of

`*rel_std*.ps` files

should be smaller than

0.01 (pixel 300 -- 800) for

all channels.

Y / N

If not, value is:

Add postscript images to

logbook, done

Y / N

`lpr -P<printer>`

Print logfiles

`*.log`

Add logfiles to logbook,

done

Y / N

BB

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL
~~ls~~ ls -l

In DATA-DIR window

highest number in dir?

<B1>

mkdir <B1>+1

Now highest number in dir?

<C1>

<C1> should be <B1>+1

Y/N

Dir name is:

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dirname>

Let <D1>, <D2>, <D3>
directories containing
irradiance measurements
(thus, <D1>, <D2>, <D3>
are of the form
~/DATA+DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/*.du*.avg.cal <Dirname>

cp <D1>/*.iu*.avg.cal <Dirname>

cp <D2>/*.du*.avg.cal <Dirname>

cp <D2>/*.iu*.avg.cal <Dirname>

cp <D3>/*.du*.avg.cal <Dirname>

cp <D3>/*.iu*.avg.cal <Dirname>

~~mkdir~~ mkdir

cd <Dirname>

ls -l

Copied files present? Y/N.

Proceed with page 3.

let op; line-feed aan het einde.

Construct control-file
in dir. <DIR-NAME> where
each line is of the form
<distance>
<lightfile>, where
<distance> is the relative
distance at which the
contents of the *.cal file

IRRadiance <lightfile> is
processing measured.

Run
radiance idl do_irradiance

In IDL
window

Check
irradiance ls -l *
Size of file
<D>.du*.cal.p1 _____
Size of file
<D>.du*.cal. *f455.p2* _____
<D>.du.cal.f456.p2*
Size of file
<D>*.p1.*.log _____

lpr -P<printer>
p[12].ps
Check irradiance Value of P1 and P2 file
visually resemble white light
source? Y/N
Add postscript images to
logbook, done Y/N

lpr -P<printer>
p[12].plog
Print logfiles Add logfiles to logbook,
done Y/N



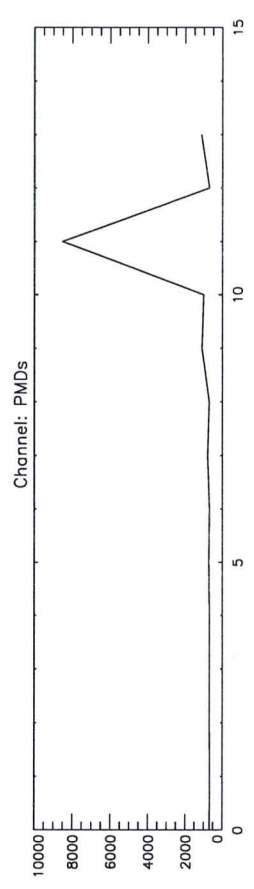
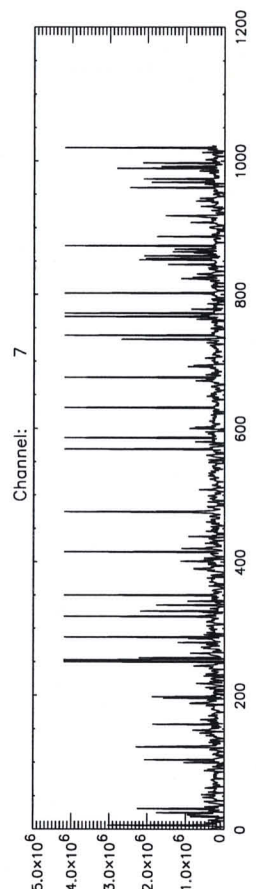
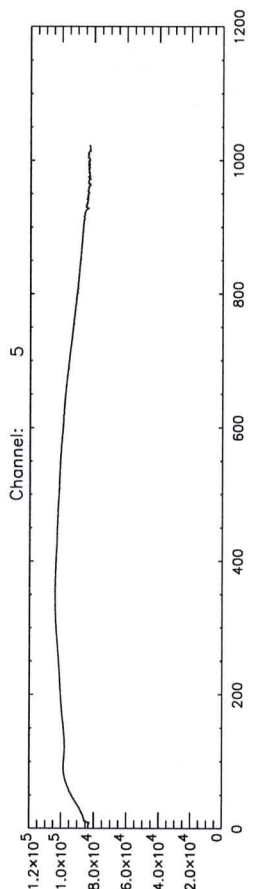
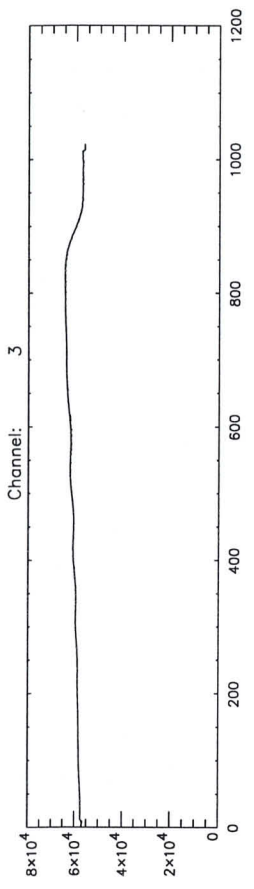
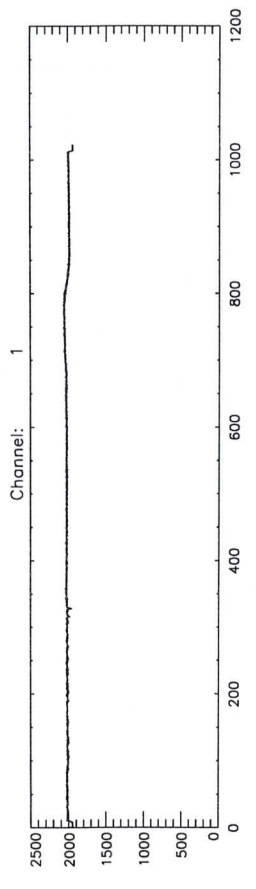
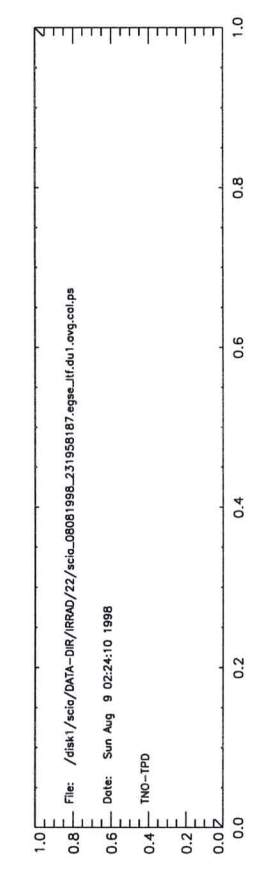
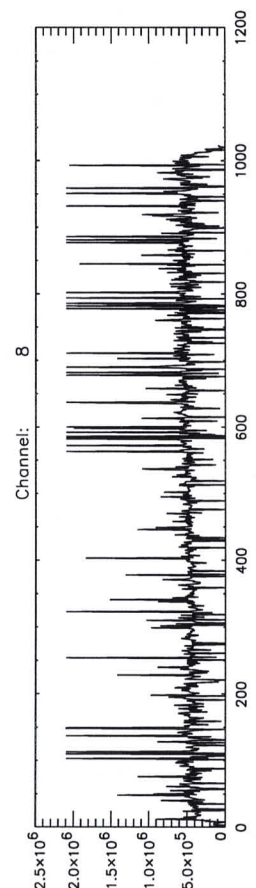
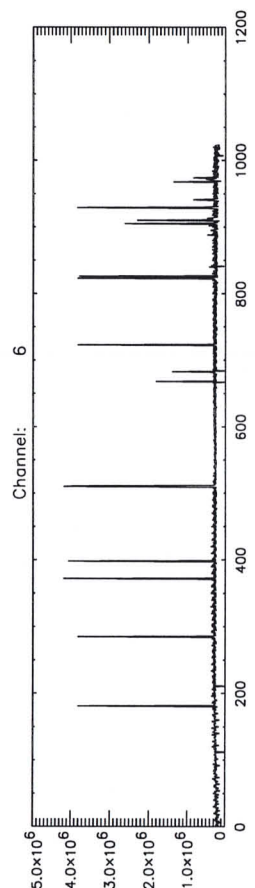
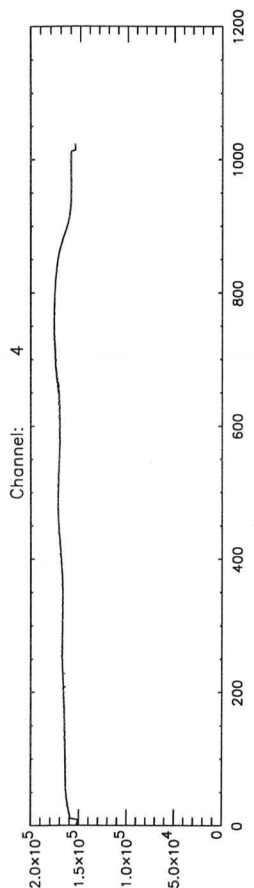
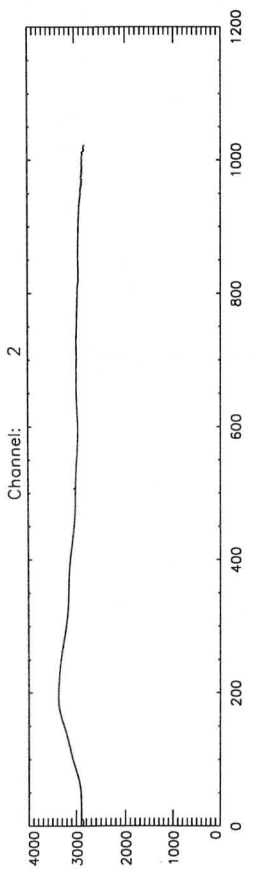
Create 3 sets of backup
CDs of directory <DIR-
NAME> (One CD has a
capacity of 600 Mbytes, the
UNIX command
/usr/bin/du -k .
gives the number of kilo
bytes in the current
directory).
Back up Name of backup CDs _____
See analysis
sheet
BackUp

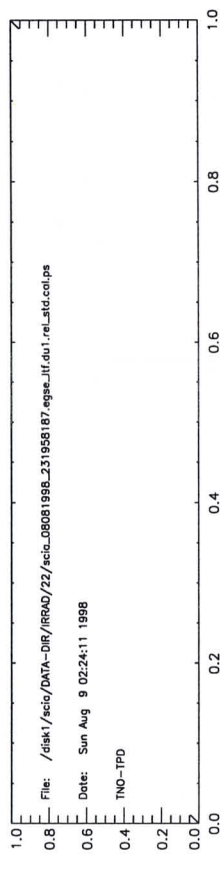
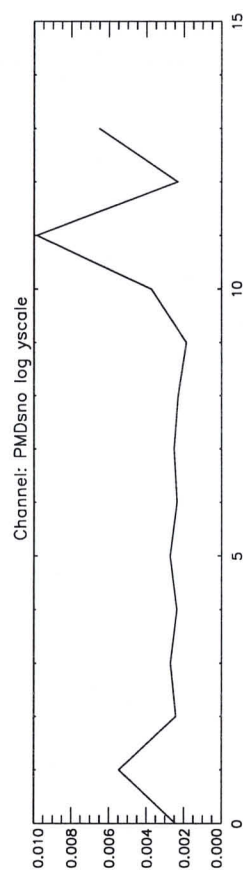
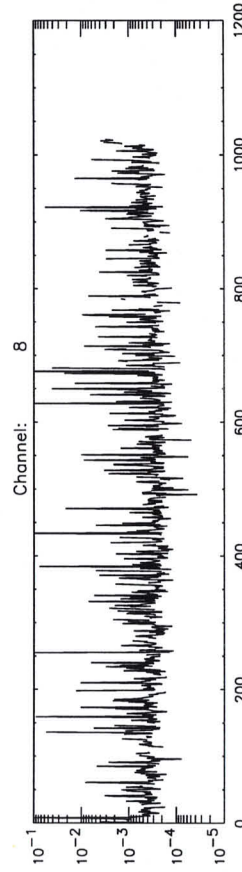
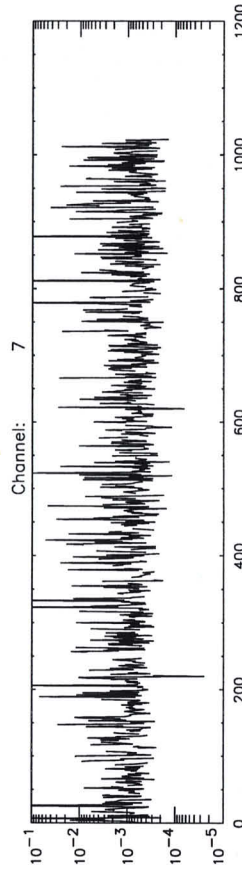
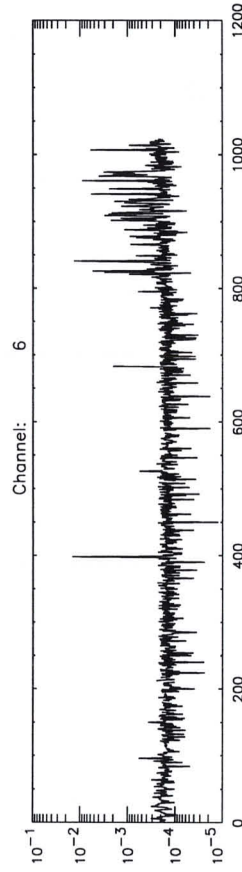
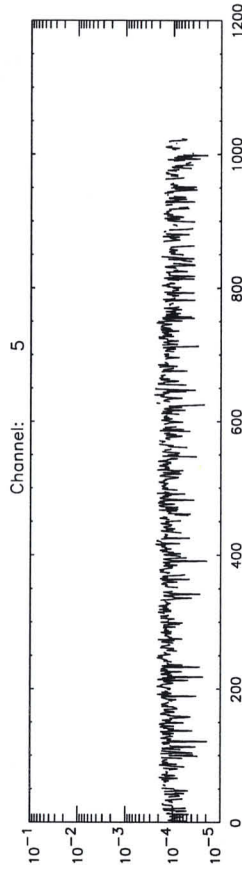
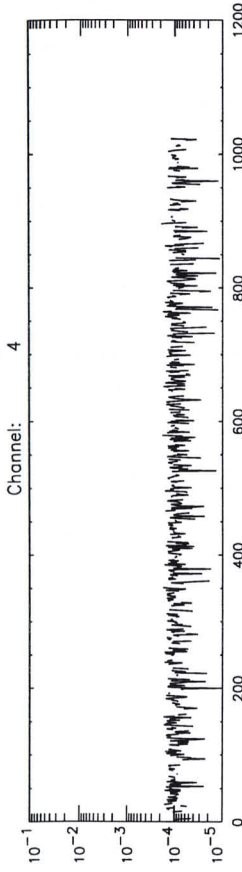
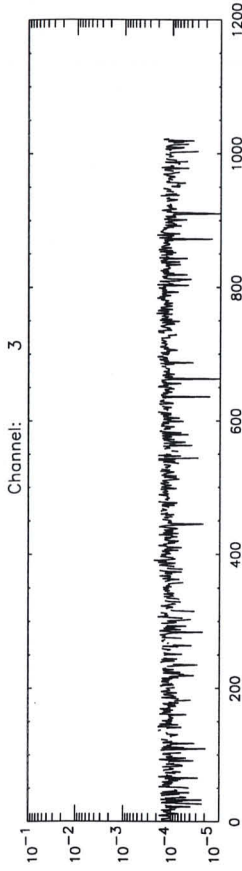
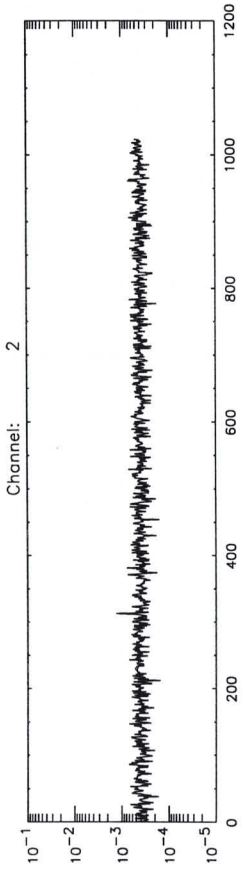
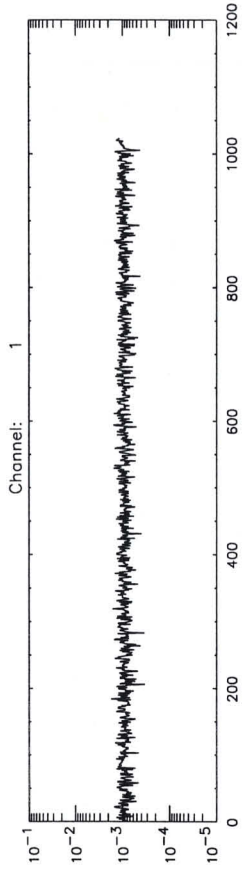


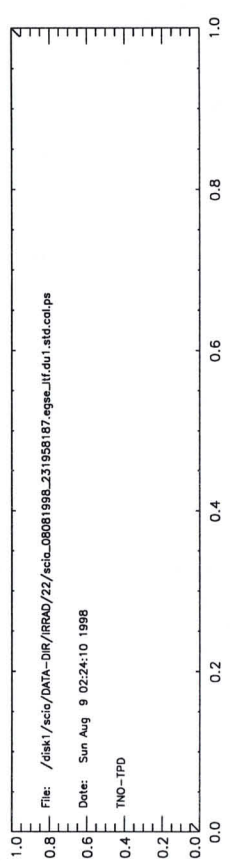
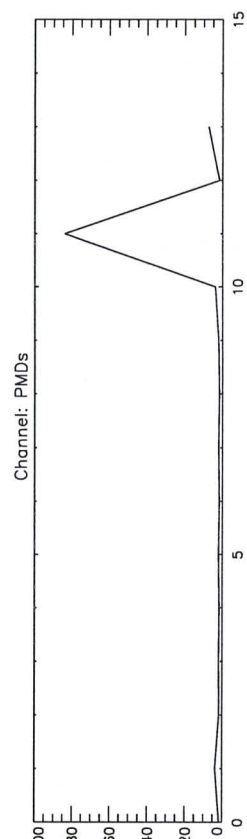
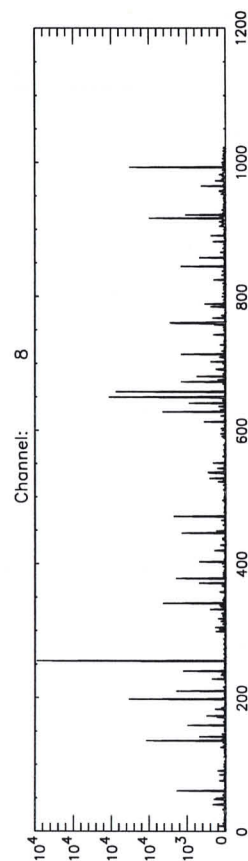
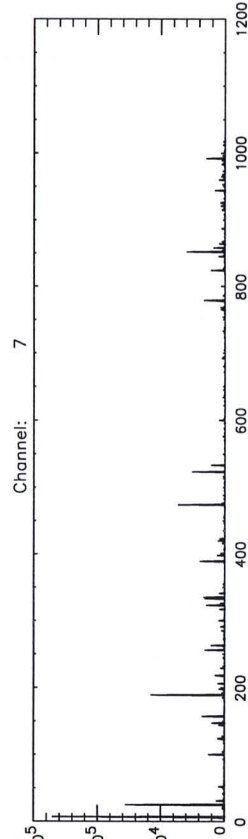
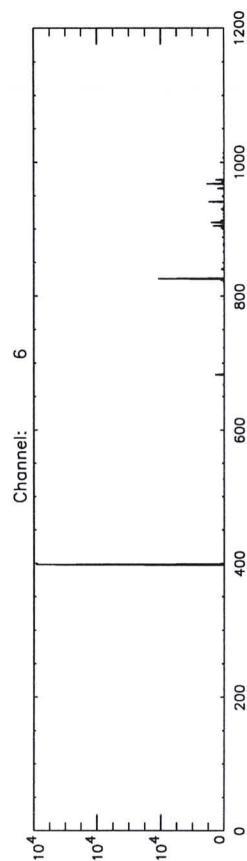
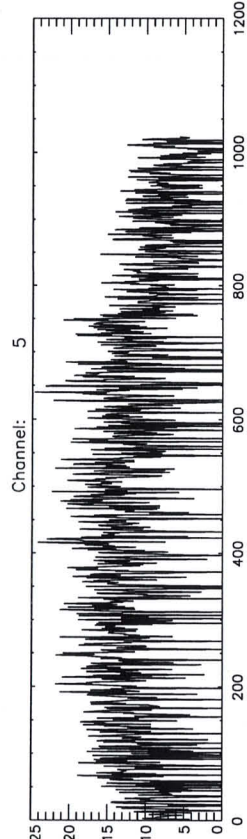
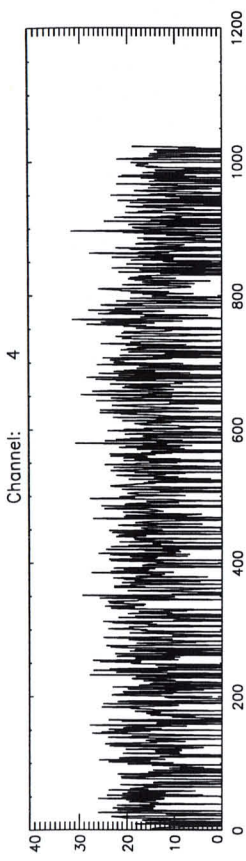
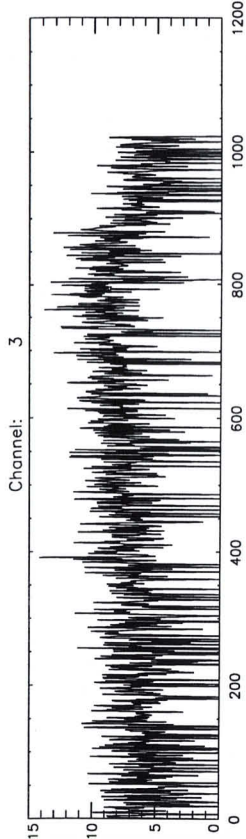
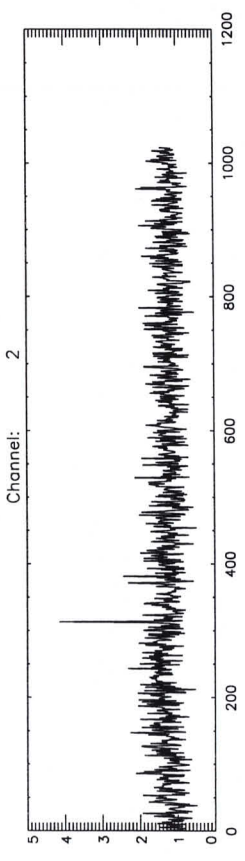
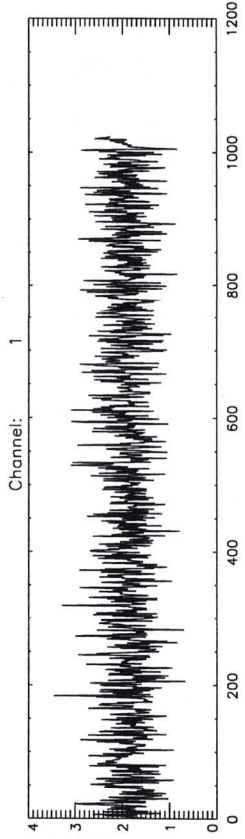
Sign:

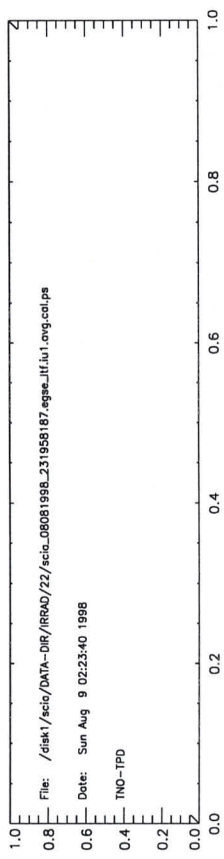
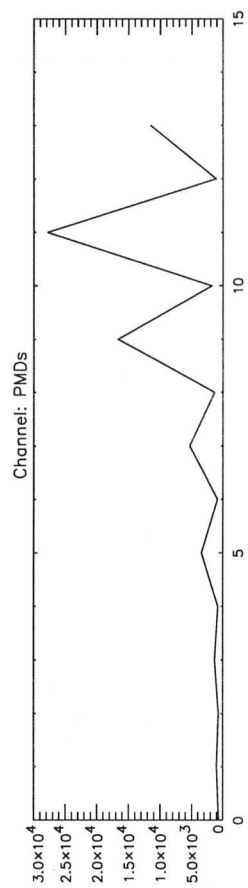
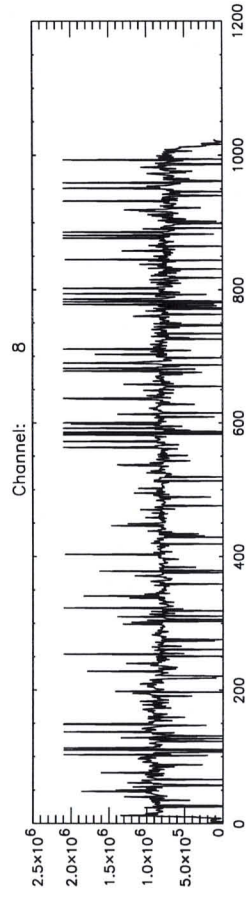
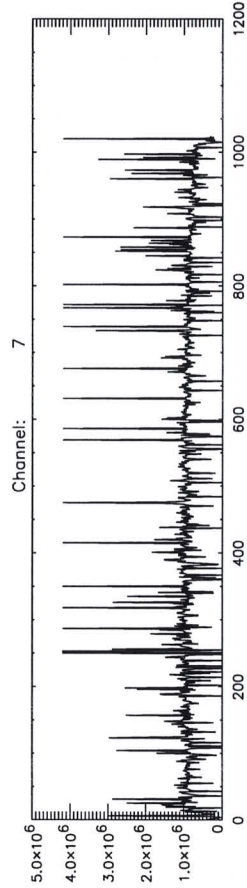
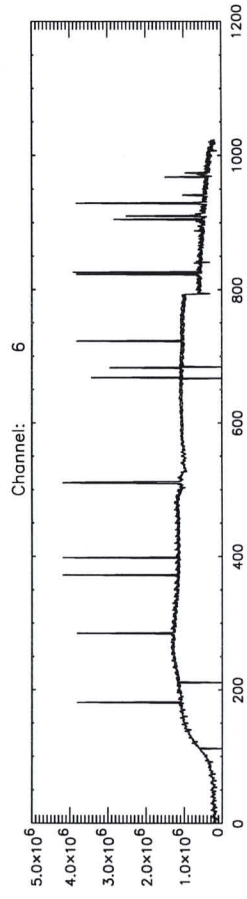
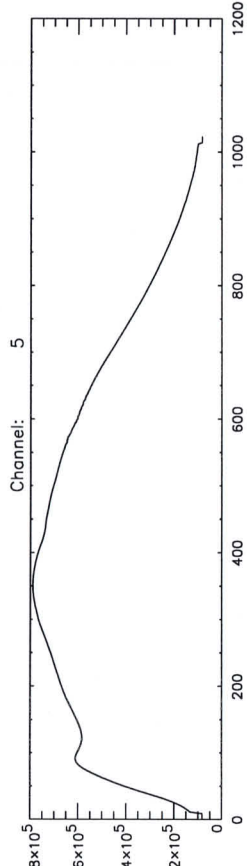
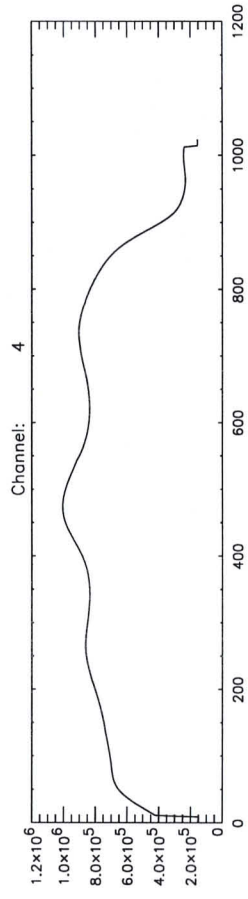
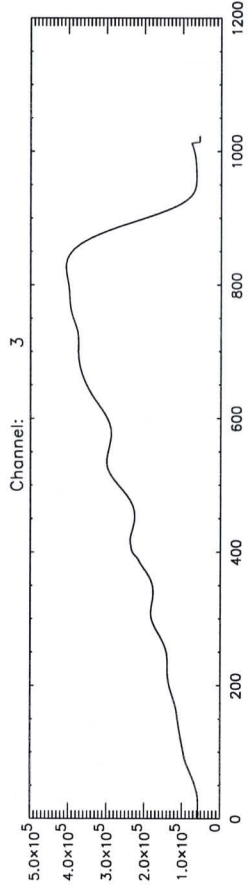
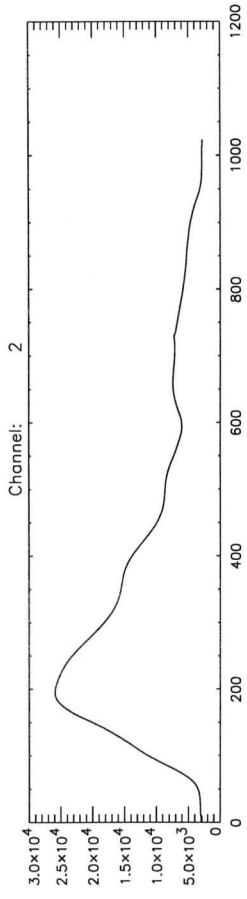
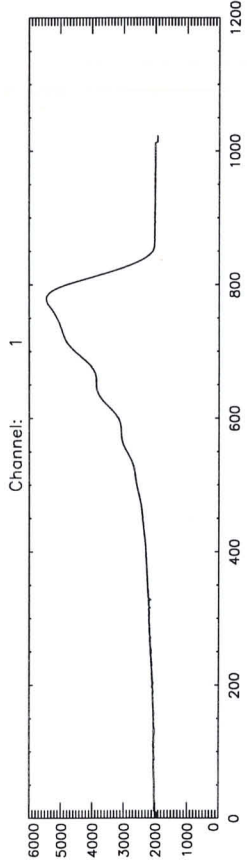
Name
Date and time
Signature

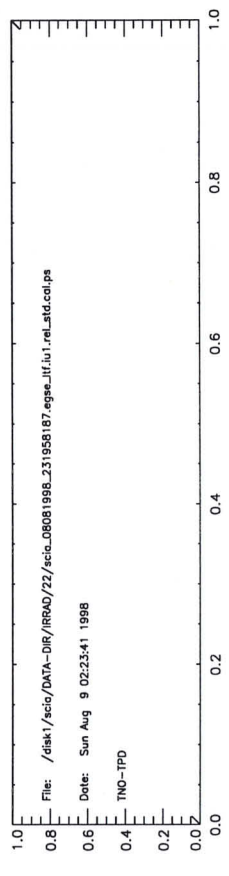
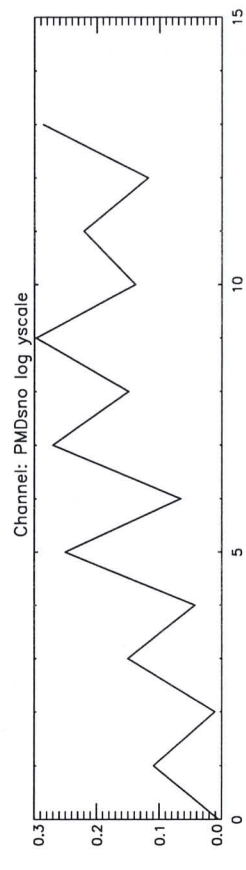
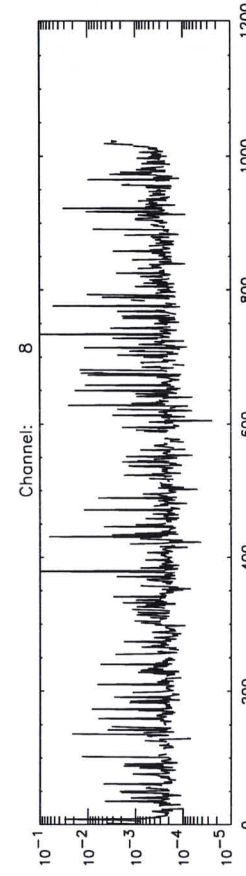
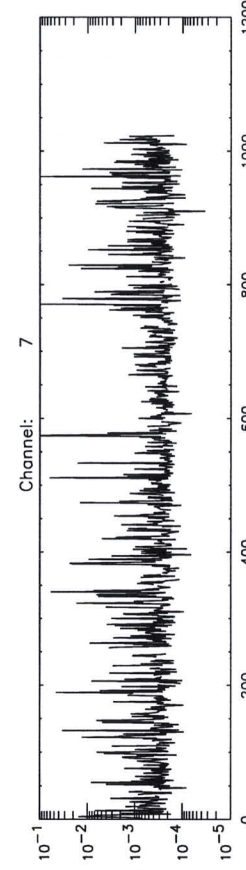
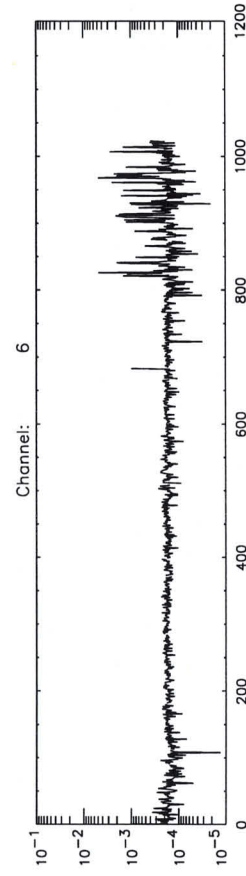
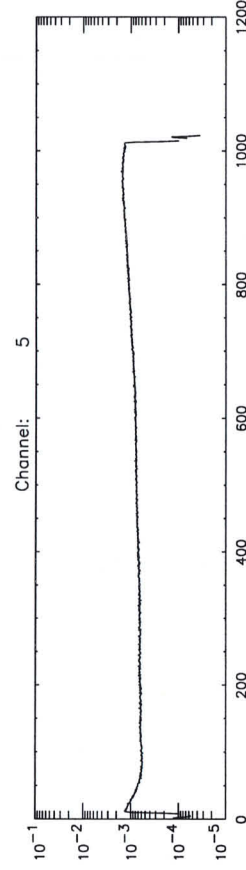
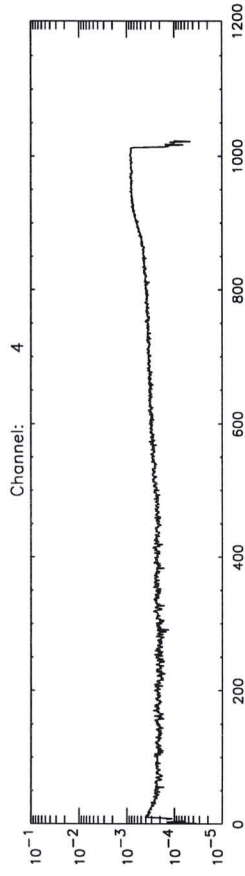
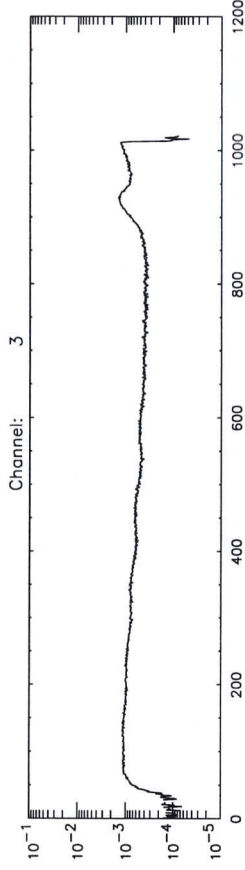
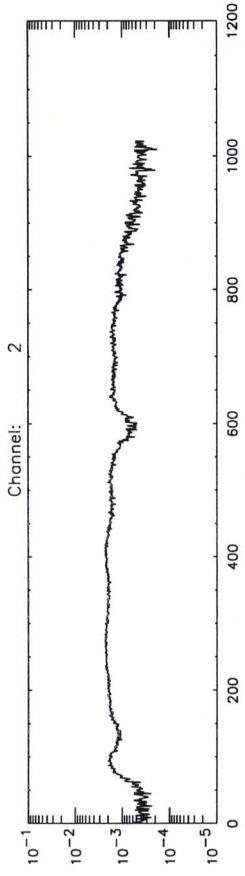
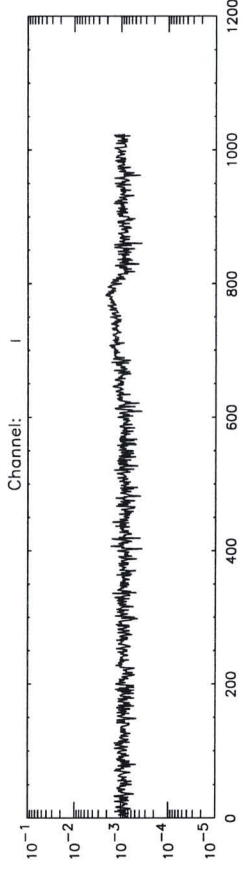
MIU 31

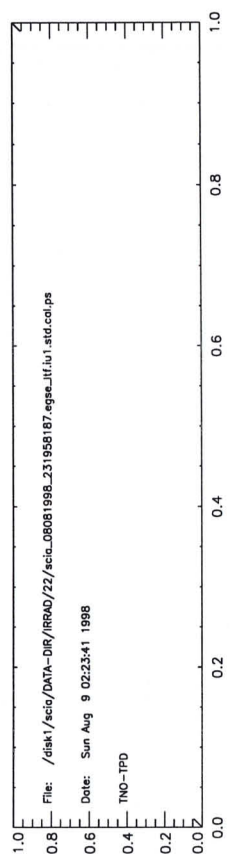
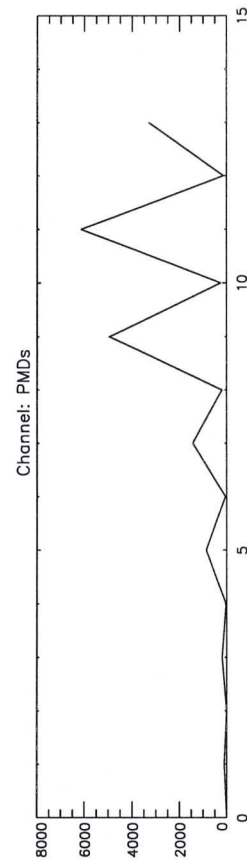
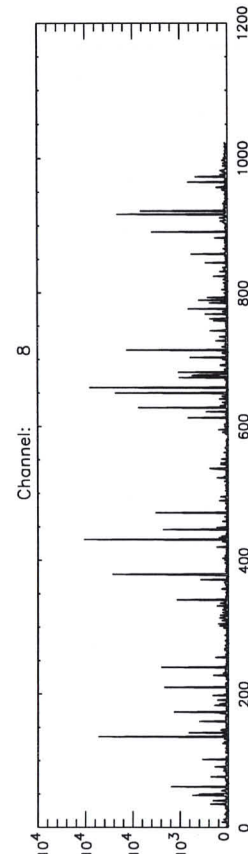
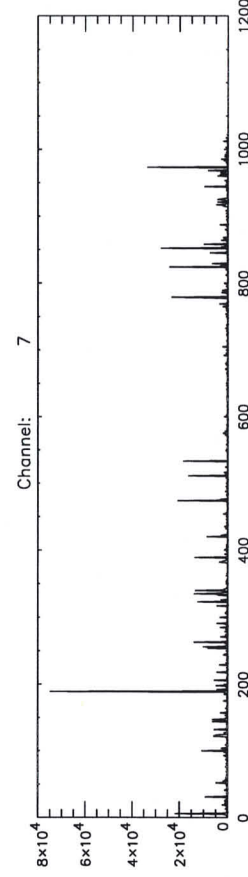
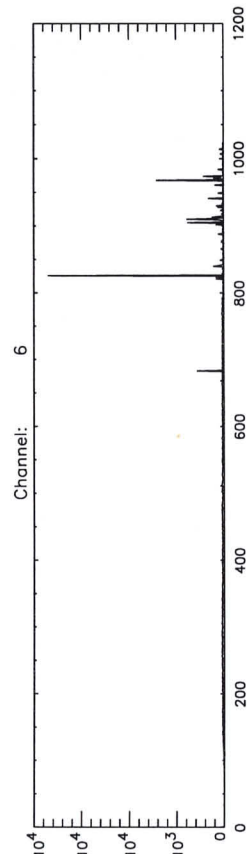
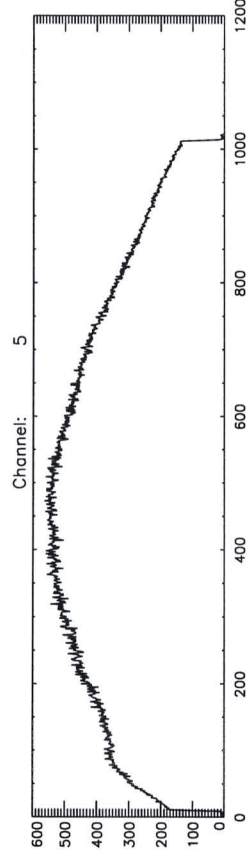
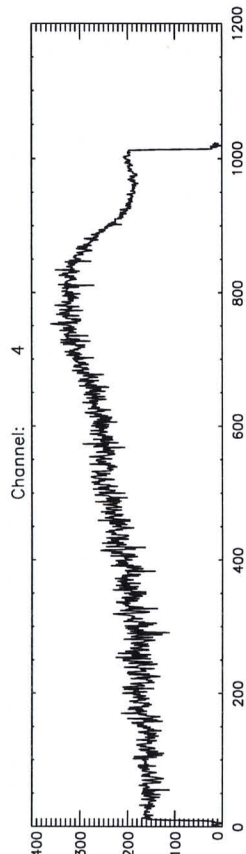
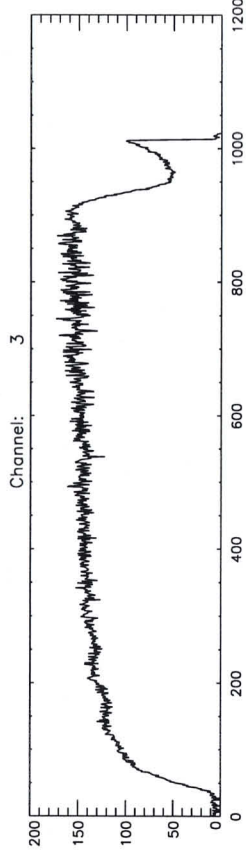
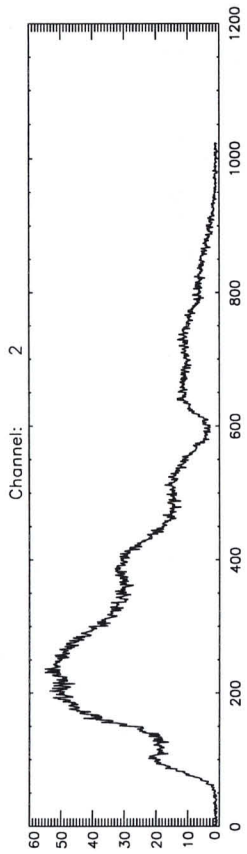
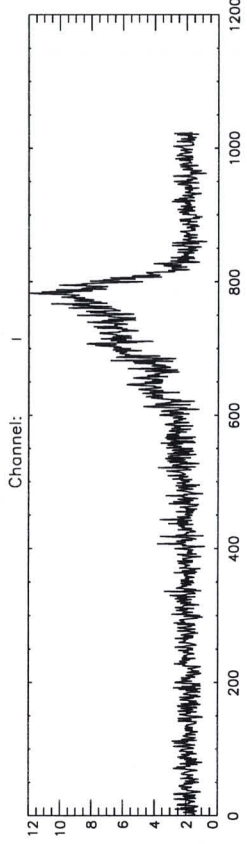












```
#!/bin/sh
mv f0 0220_23_49_18.HISTORY
mv f1 WS_FTP.LOG
mv f2 dapbchklog
mv f3 dapbseqlog
mv f4 egse.inf
mv f5 expert_ratio.22-div-23.ps
mv f6 gemsmpara.dat
mv f7 hk_ccb.dat
mv f8 scia_08081998_231958187.dat
mv f9 scia_08081998_231958187.egse_ltf
mv f10 scia_08081998_231958187.egse_ltf.du1.avg.cal
mv f11 scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal
mv f12 scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal.log
mv f13 scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal.ps
mv f14 scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal.ps.log
mv f15 scia_08081998_231958187.egse_ltf.du1.avg.cal.ps
mv f16 scia_08081998_231958187.egse_ltf.du1.log
mv f17 scia_08081998_231958187.egse_ltf.du1.rel_std.cal
mv f18 scia_08081998_231958187.egse_ltf.du1.rel_std.cal.ps
mv f19 scia_08081998_231958187.egse_ltf.du1.std.cal
mv f20 scia_08081998_231958187.egse_ltf.du1.std.cal.ps
r f21 scia_08081998_231958187.egse_ltf.iu1.avg.cal
mv f22 scia_08081998_231958187.egse_ltf.iu1.avg.cal.ps
mv f23 scia_08081998_231958187.egse_ltf.iu1.log
mv f24 scia_08081998_231958187.egse_ltf.iu1.rel_std.cal
mv f25 scia_08081998_231958187.egse_ltf.iu1.rel_std.cal.ps
mv f26 scia_08081998_231958187.egse_ltf.iu1.std.cal
mv f27 scia_08081998_231958187.egse_ltf.iu1.std.cal.ps
```

```
#!/bin/sh
mv 0220_23_49_18.HISTORY f0
mv WS_FTP.LOG f1
mv dapbchklog f2
mv dapbseqlog f3
mv egse.inf f4
mv expert_ratio.22-div-23.ps f5
mv gemsmpara.dat f6
mv hk_ccb.dat f7
mv scia_08081998_231958187.dat f8
mv scia_08081998_231958187.egse_ltf f9
mv scia_08081998_231958187.egse_ltf.du1.avg.cal f10
mv scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal f11
mv scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal.log f12
mv scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal.ps f13
mv scia_08081998_231958187.egse_ltf.du1.avg.cal.div.cal.ps.log f14
mv scia_08081998_231958187.egse_ltf.du1.avg.cal.ps f15
mv scia_08081998_231958187.egse_ltf.du1.log f16
mv scia_08081998_231958187.egse_ltf.du1.rel_std.cal f17
mv scia_08081998_231958187.egse_ltf.du1.rel_std.cal.ps f18
mv scia_08081998_231958187.egse_ltf.du1.std.cal f19
mv scia_08081998_231958187.egse_ltf.du1.std.cal.ps f20
mv scia_08081998_231958187.egse_ltf.iu1.avg.cal f21
mv scia_08081998_231958187.egse_ltf.iu1.avg.cal.ps f22
mv scia_08081998_231958187.egse_ltf.iu1.log f23
mv scia_08081998_231958187.egse_ltf.iu1.rel_std.cal f24
mv scia_08081998_231958187.egse_ltf.iu1.rel_std.cal.ps f25
mv scia_08081998_231958187.egse_ltf.iu1.std.cal f26
mv scia_08081998_231958187.egse_ltf.iu1.std.cal.ps f27
```


Formal Run of Measurement

(Measurement ID)

IRRADIANCE Limb

Request for Actual Status

(cross out entries that are **not** requested.)

Request for Modification

(fill in only entries to be modified)

Request for Run

(no entries = run based on actual default settings)

Scanner Positions

Azimuth

-45.00

deg

Elevation

-165.00

deg

Timeline for each Data Acquisition Period during Measurement

State ID

Repetitions

	1	2	3	4	5	6	7	8	9	10
State ID										
Repetitions										

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	64	1						
1b	64	1						
2b	64	1						
2a	64	1						
3	4	16						
4	1	64						
5	2	32						
6	0.5	64						
7	1	64						
8	2	32						
State ID								

TEAMS 9/8
00:10 TEST WITH
ALU SHEET
+ voo/brant + achik/brent/ry.

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Test Purpose

Remark

Data Directory

U1030
U1030
U1030

Signatures

Issued
< Performed

Date	Signature
8-8-98	[Signature]
8-8-98	[Signature]

STEP	ACTION	RESULT	MARKER
------	--------	--------	--------

Intro	Your name:	<u>Bzw</u>	
	Date:	<u>9-8-98</u>	

What's the name of the (main) data input files generated by the EGSE? (*.dat)

Scia_09081998_003818440.dat

Setup a three-window configuration on your SUN.

see course descr.

Cnstr directory

cd ~/DATA-DIR/IRRAD
; ls -l

Note: In window DATA-DIR

highest number in directory?

22

(B)

New directory: mkdir <B+1>

ls -l

What's now the highest number in directory?

23

(C)

<C> should be + 1
directory name is:

N

~/DATA-DIR/IRRAD/<C>

(DIR-NAME)

Copy data

See Analysis sheet:
Transfer Data File

N

In DATA-DIR window

cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)

Note: In window DATA-DIR; **don't forget the dot !!!;** May take more than 15 mins.

Cnstr EGSE_LTF

ls -l *.egse_ltf

What's the name of the egse_ltf file

<D> should be
<A>.egse_ltf

N

Scia_09081998_003818440.egse_ltf

Cnstr CAL files

idl run_averscia (and select file <D> when asked)

S

Note: In window IDL

Check CAL files

Dark files:

ls -l *du*.cal

S

In DATA-DIR window

Test → hand om FELLAN
achte + voorhand omzetting
+ data folie.

size: 145k should be approx 150Kb

ls -l *iu*.cal

size: 145k should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print

postscript

Print postscript files:

`lpr -P<printer> *.ps`

Contents dark file

`*du*.avg.cal.ps`

should be approx. constant within channels: Y / N

Contents light file

`*iu*.avg.cal.ps`

should resemble white light source: Y / N

Contents of

`*rel_std*.ps` files

should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y / N

If not, value is: _____

Add postscript images to logbook, done Y / N

`lpr -P<printer>`

Print logfiles

`*.log`

Add logfiles to logbook, done Y / N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL
~~ls -l~~

In DATA-DIR window

highest number in dir?

mkdir {B}+1

{B}

Now highest number in dir?

{C}

{C} should be {B}+1

Y/N

Dir name is :

~/DATA-DIR/IRRAD-TOTAL/{C}

{Dir name}

Let {D1}, {D2}, {D3} directories containing irradiance measurements

(thus, {D1}, {D2}, {D3} are of the form

~/DATA+DIR/IRRAD/{number})

In DATA-DIR window

cp {D1}/*du*.avg.cal {Dir name}

cp {D1}/*iu*.avg.cal {Dir name}

cp {D2}/*du*.avg.cal {Dir name}

cp {D2}/*iu*.avg.cal {Dir name}

cp {D3}/*du*.avg.cal {Dir name}

cp {D3}/*iu*.avg.cal {Dir name}

~~cd ~/DATA-DIR~~

cd {Dir name}

..

ls -l

Copied files present? Y/N.

Proceed with page 3.

let op: line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the *.cal file

IRRadiance processing <lightfile> is measured.

Run radiance idl do_irradiance

In IDL window

Check irradiance

ls -l *
 Size of file <D>.du*.cal.p1 _____
 Size of file <D>.du*.cal.~~2~~f456.p2 _____
 20).dux.cal.f456.p2
 Size of file <D>*.p1.*.log _____

Check irradiance visually

lpr -P<printer> *p[12]*.ps
 Value of P1 and P2 file resemble white light source? Y / N

Add postscript images to logbook, done Y / N

Print logfiles

lpr -P<printer> *p[12]*.plog
 Add logfiles to logbook, done Y / N



Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).

Back up

Name of backup CDs _____

See analysis sheet BackUp

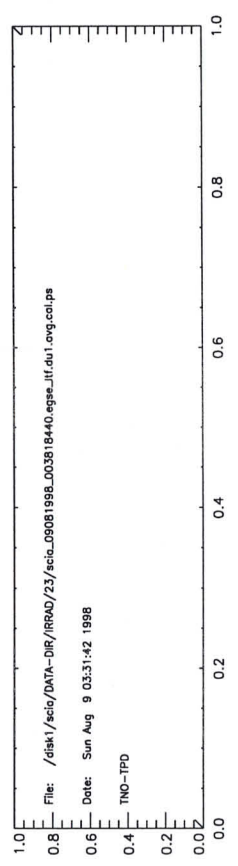
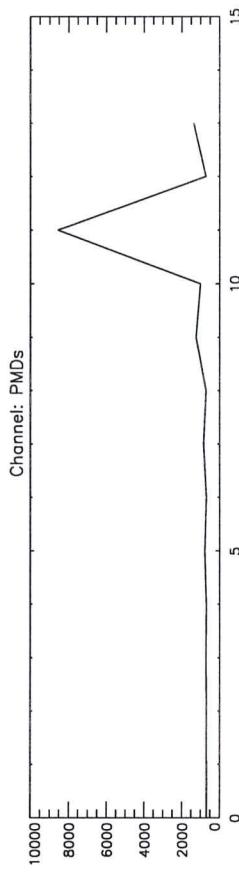
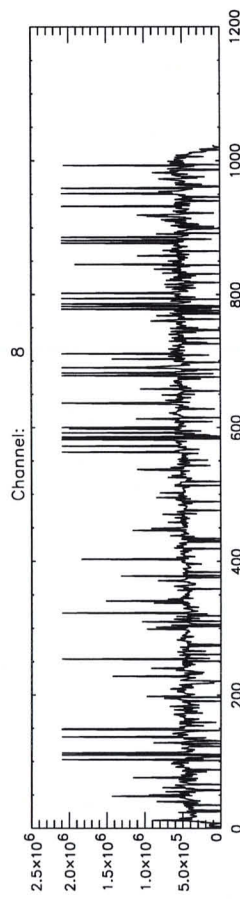
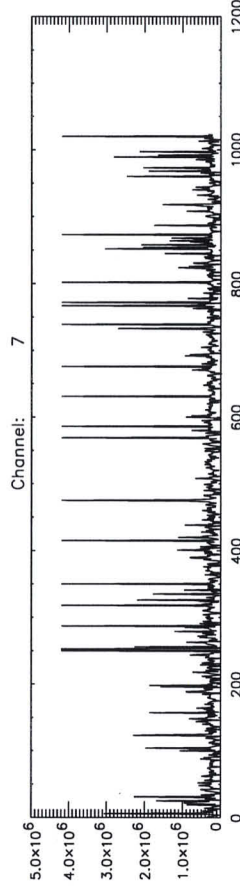
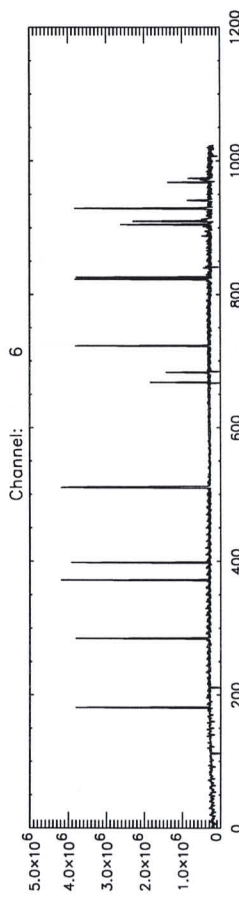
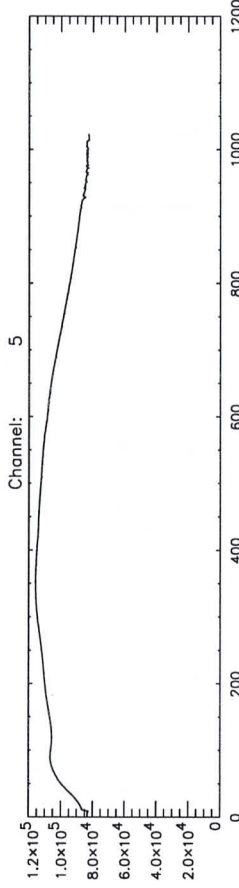
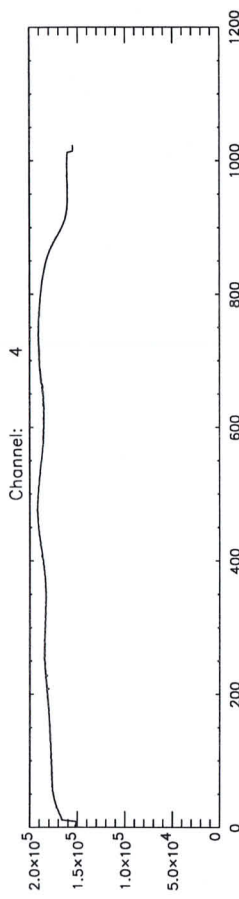
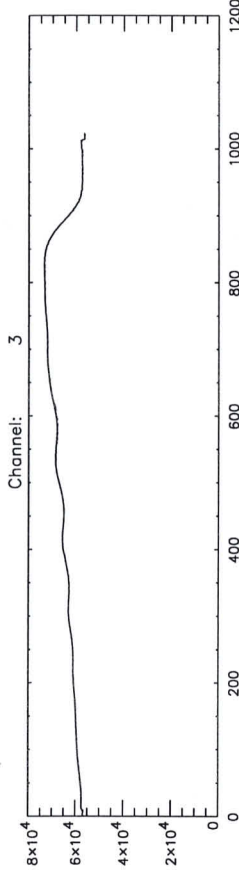
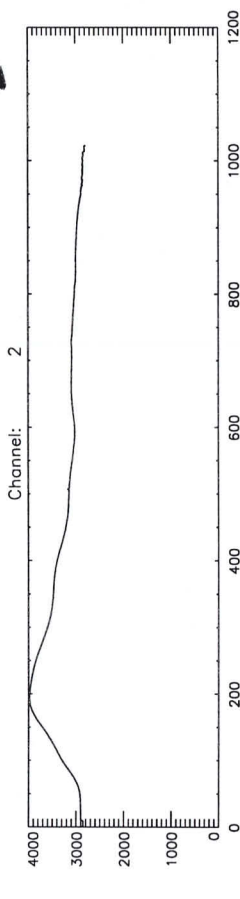
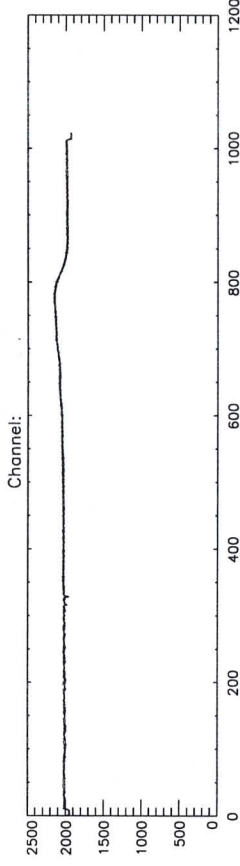


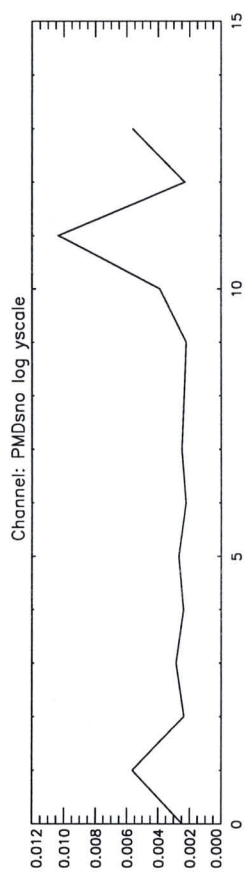
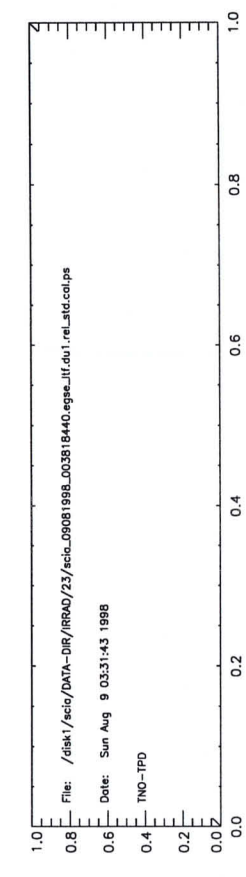
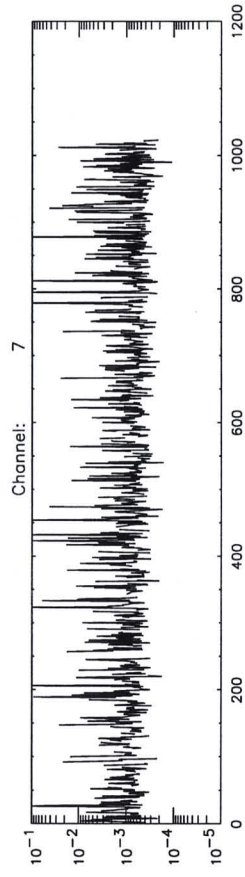
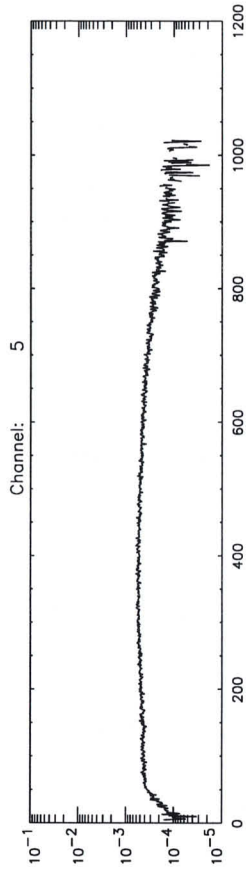
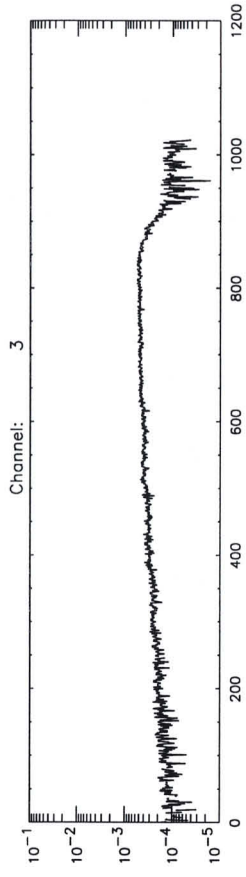
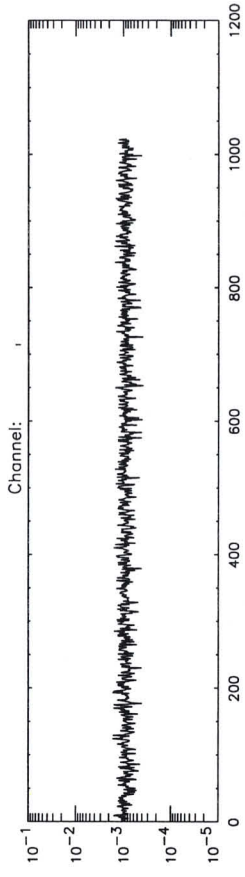
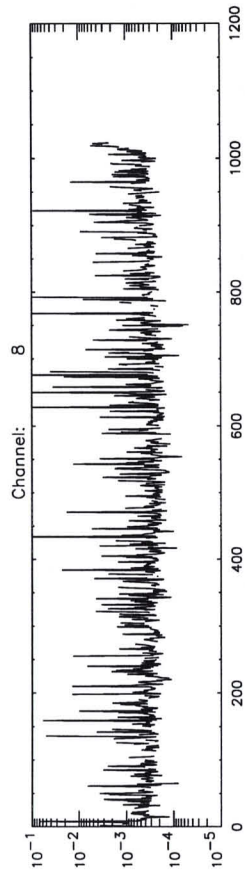
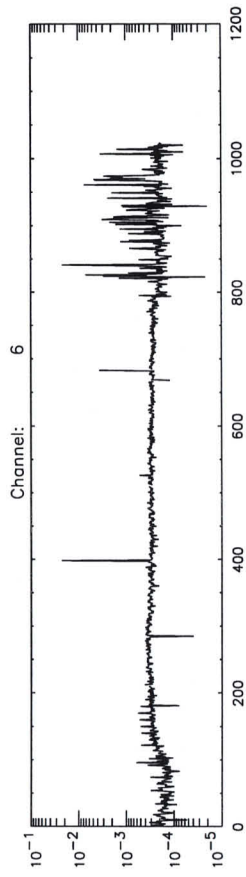
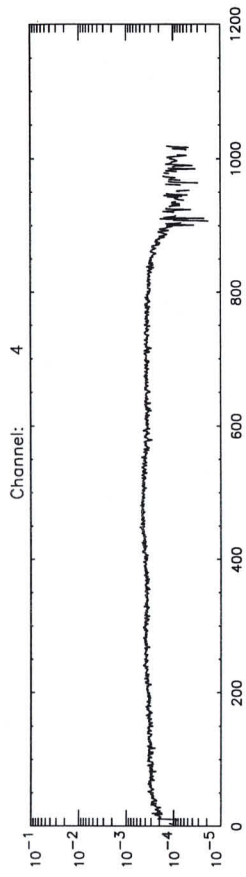
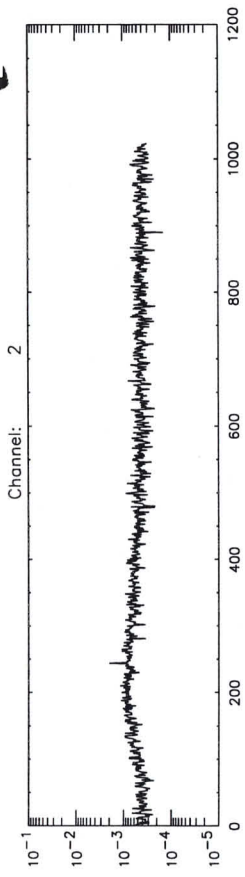
Sign:

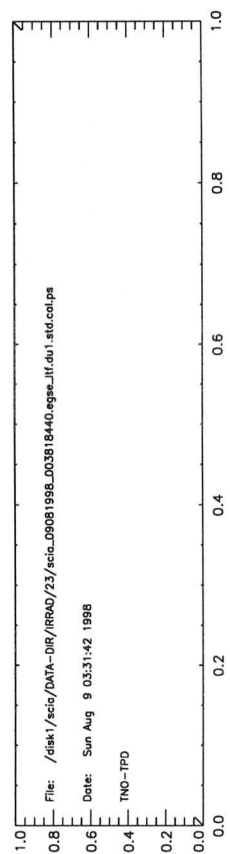
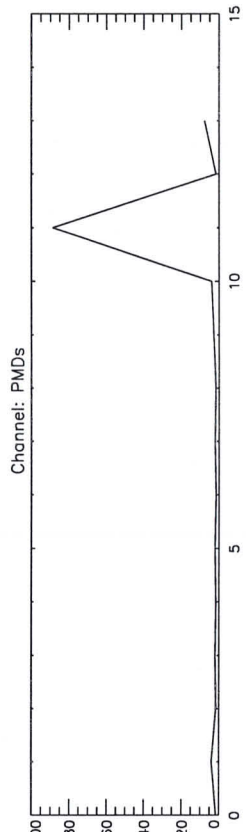
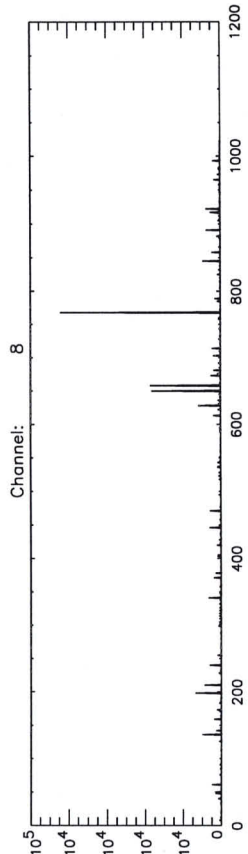
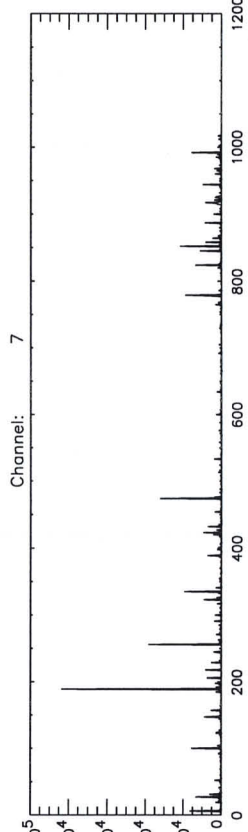
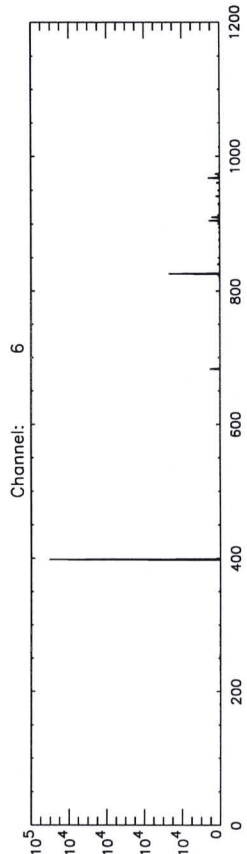
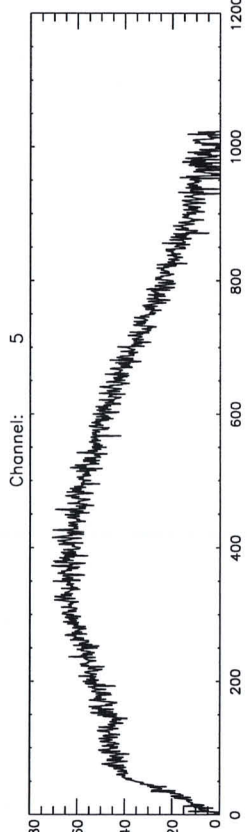
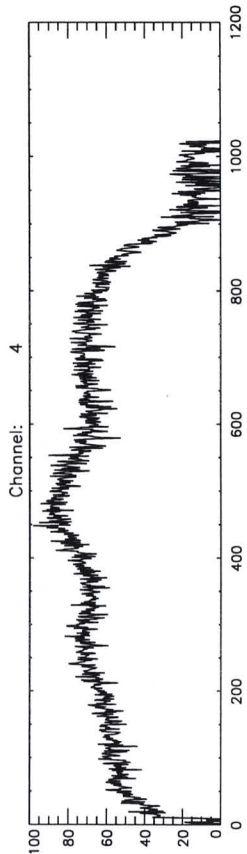
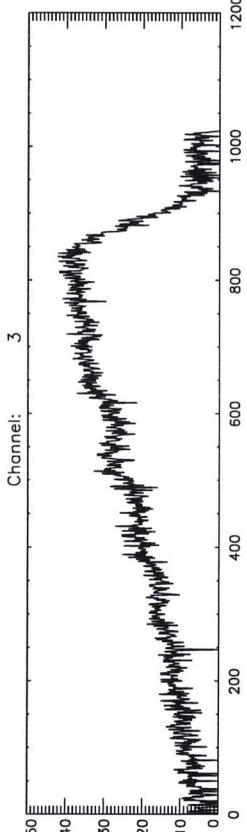
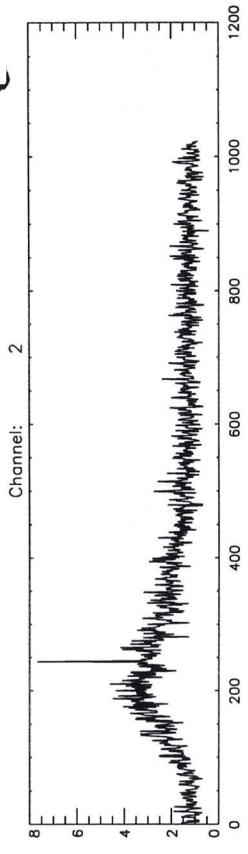
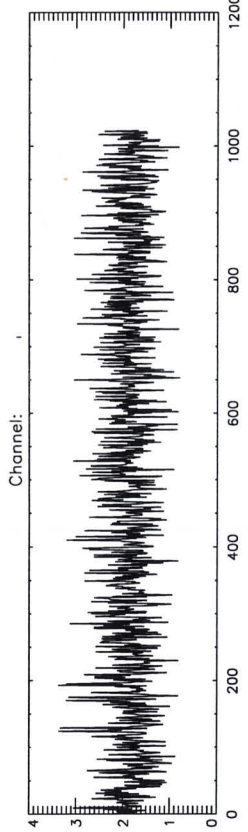
Name

Date and time

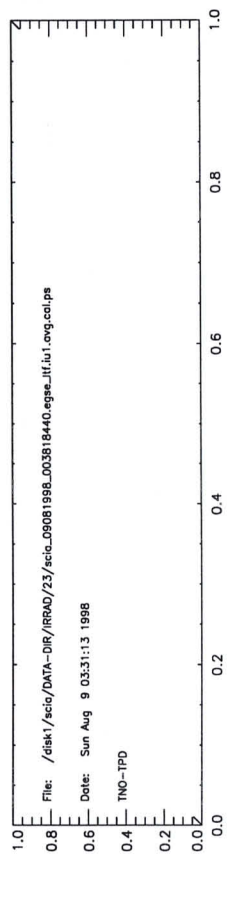
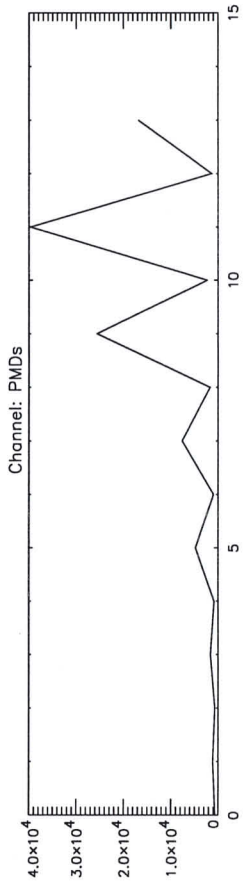
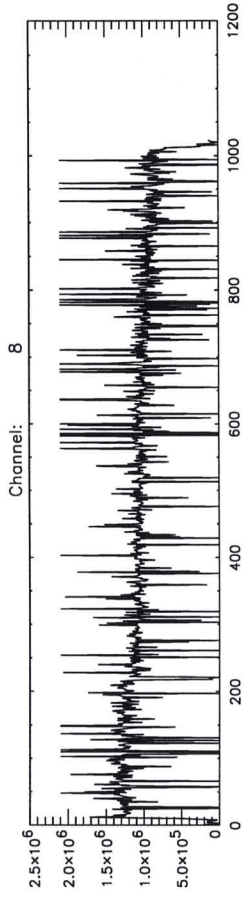
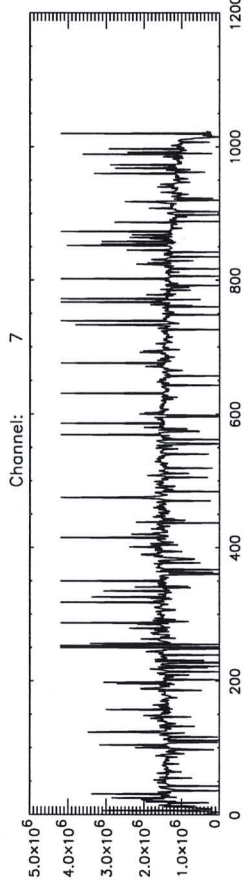
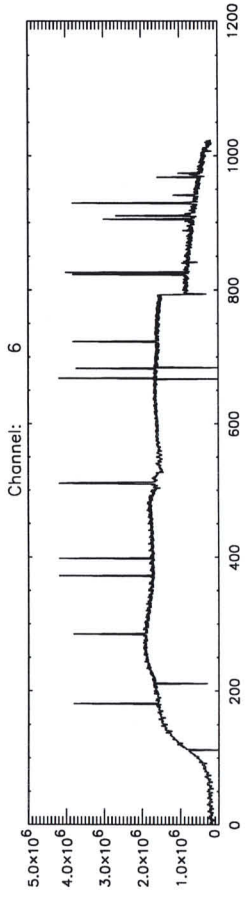
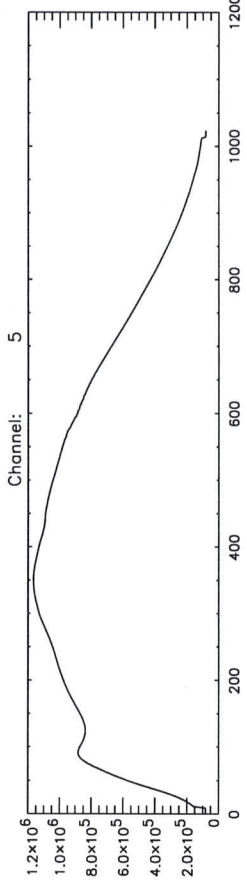
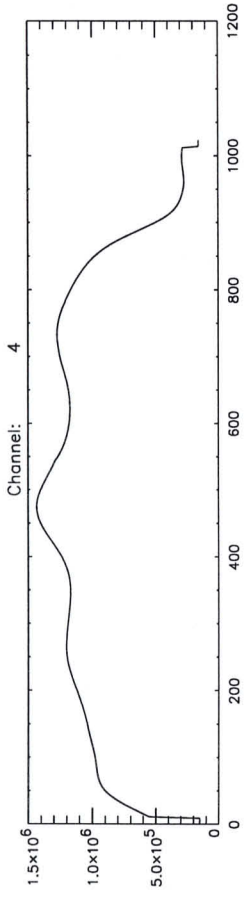
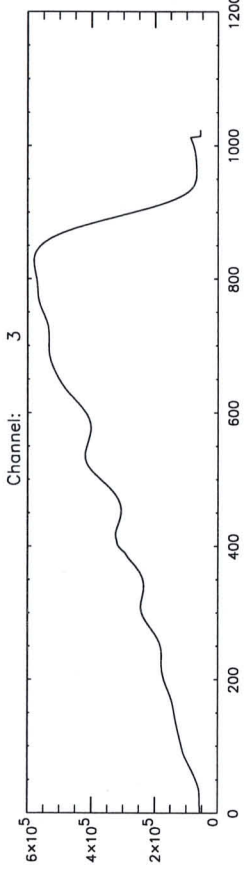
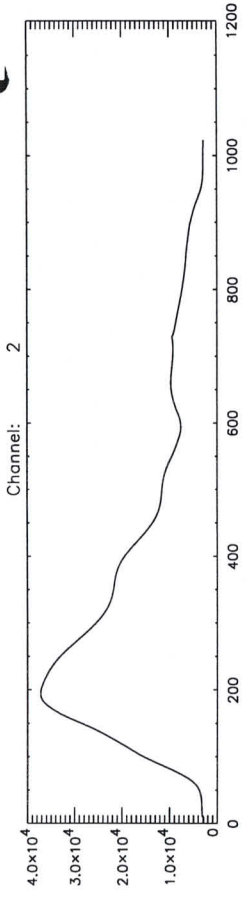
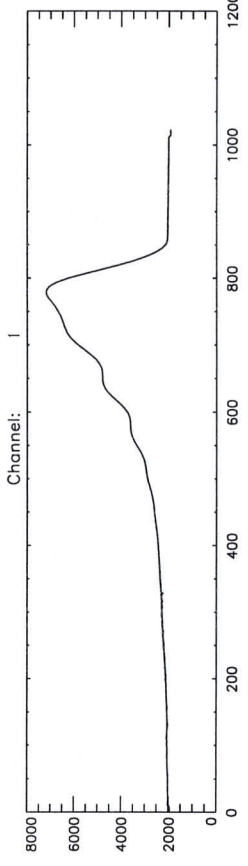
Signature



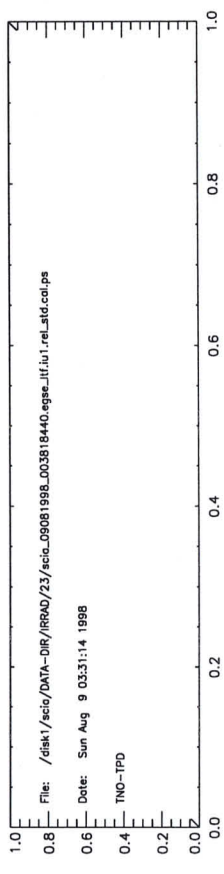
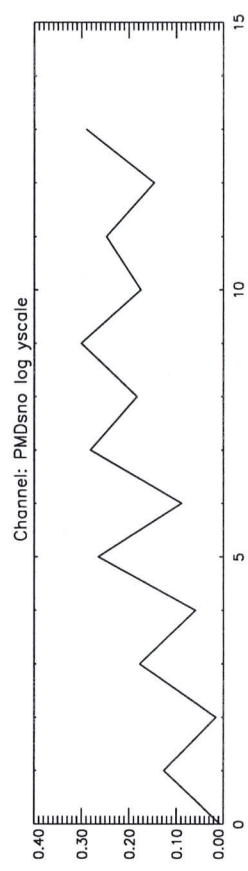
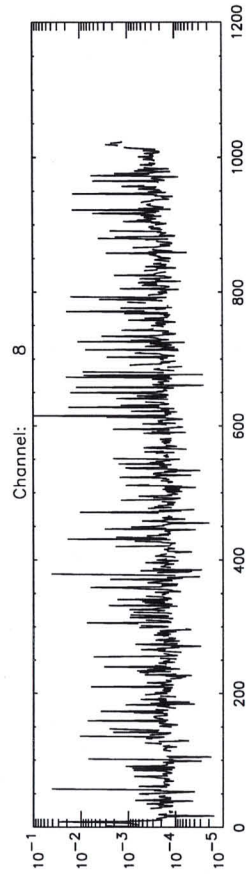
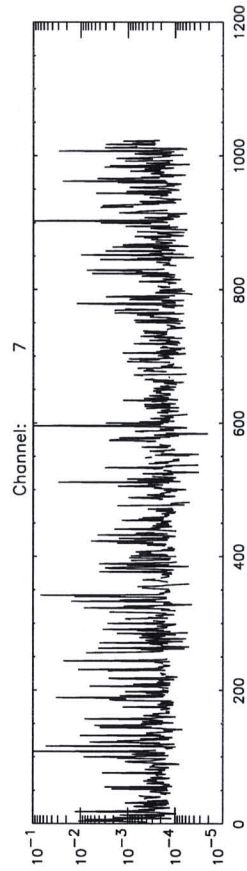
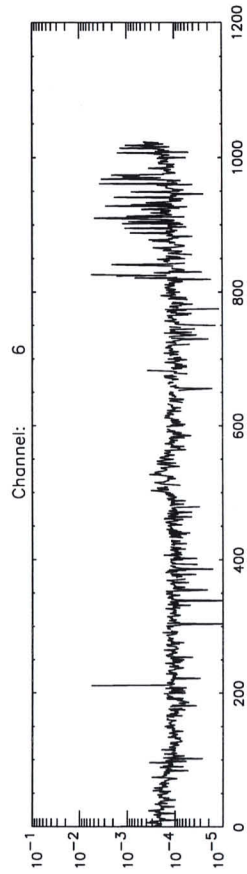
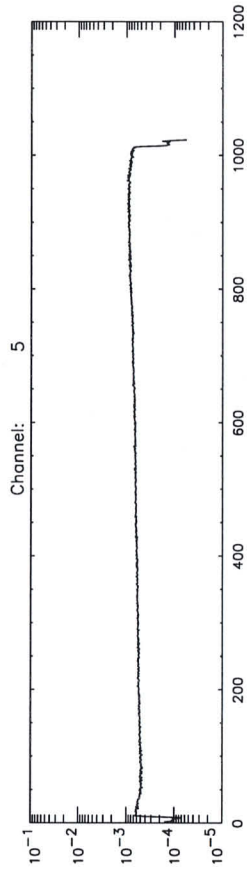
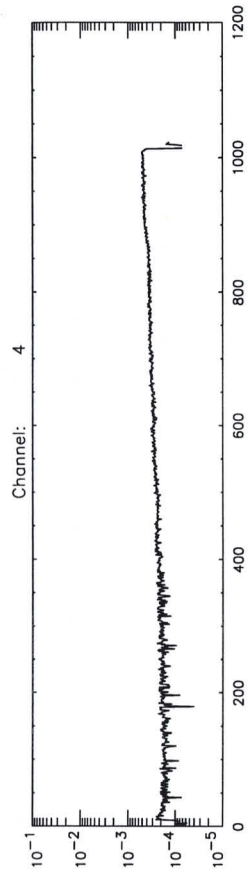
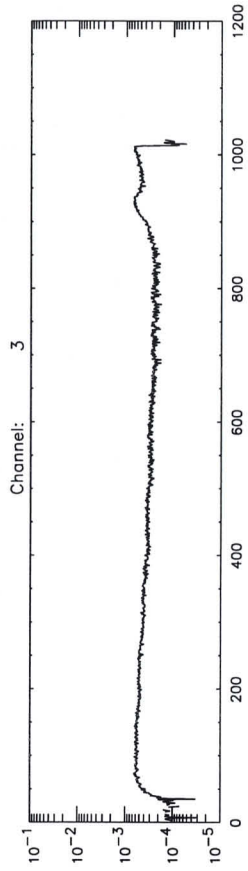
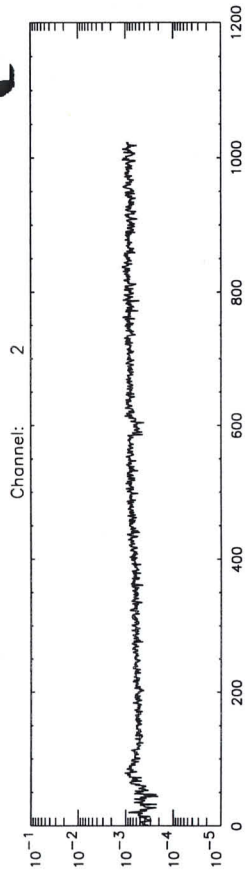
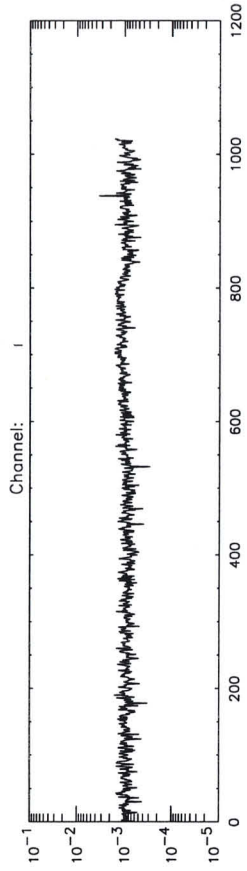




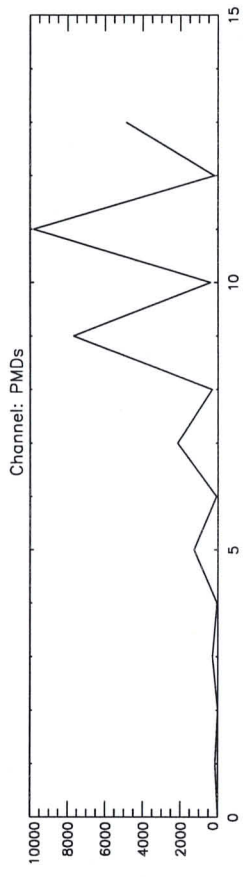
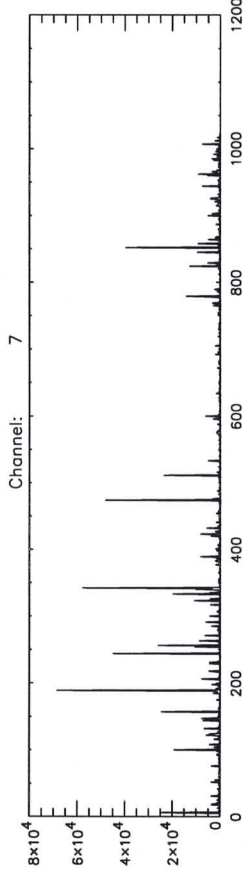
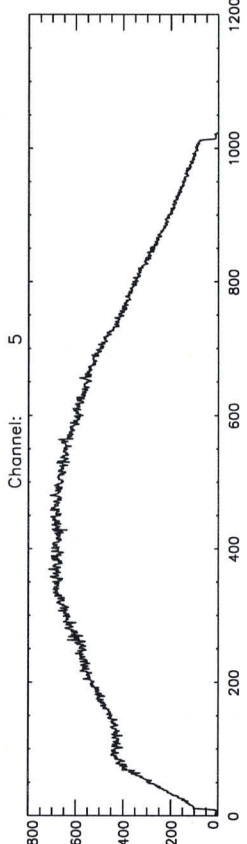
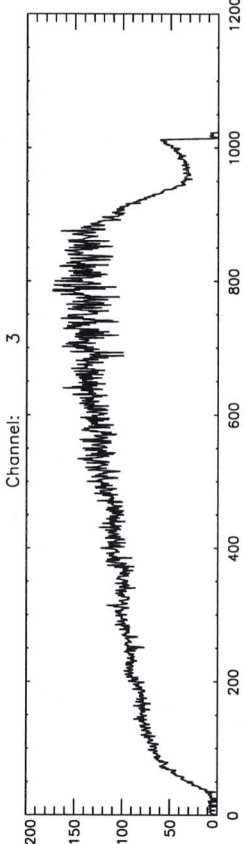
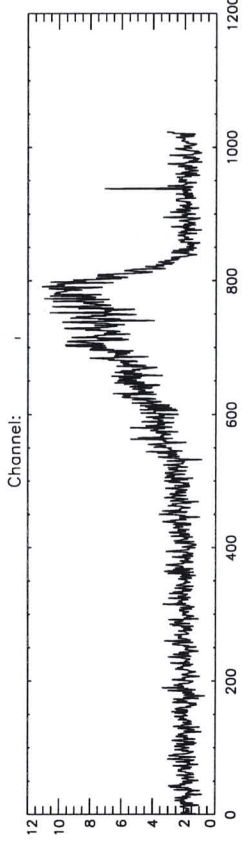
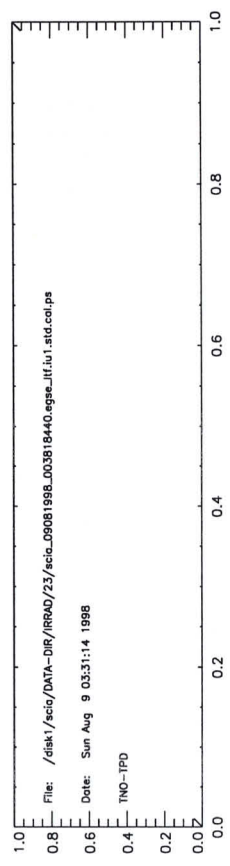
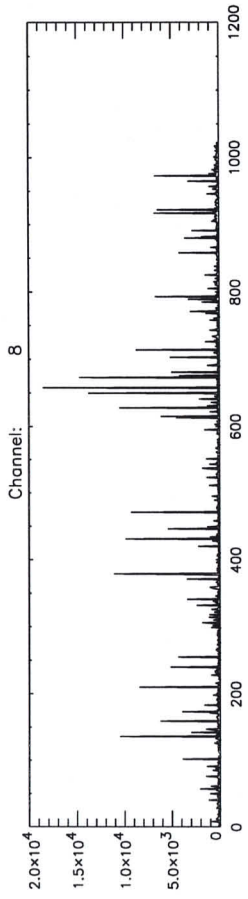
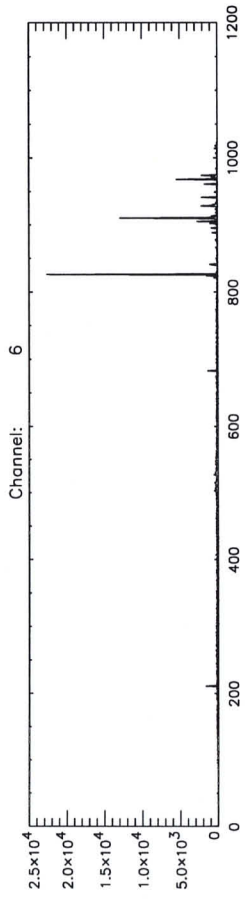
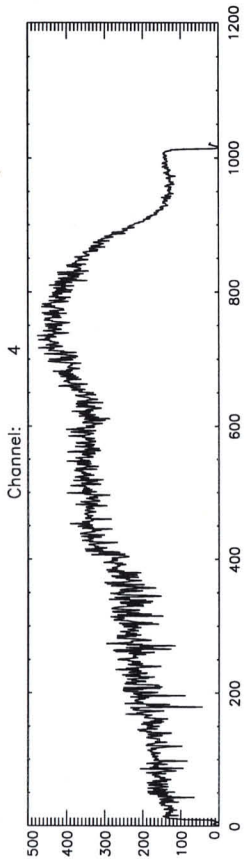
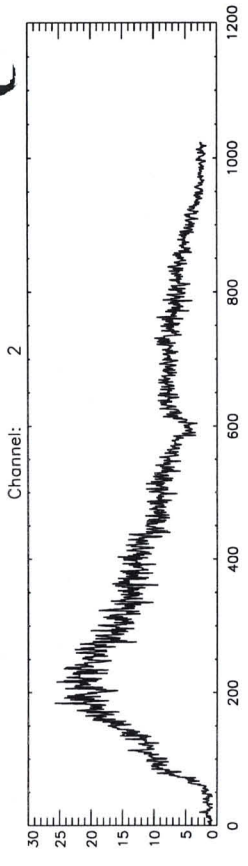
C



File: /disk1/acia/DATA-DIR/RRAD/23/acia_09081988_003818440.egse_lj1.1.0.001.ps
Date: Sun Aug 9 03:31:13 1998
TNO-IPD



C



time = Sun Aug 9 03:31:43 1998
batch = dnl
Start TOD = Sun 09-Aug-98 00:54:13
End TOD = Sun 09-Aug-98 01:05:38
Processing= computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 03:31:14 1998
batch = Jul
Start TOD = Sun 09-Aug-98 00:38:46
End TOD = Sun 09-Aug-98 00:54:13
Processing = computation of average, standard dev. and rel.standard dev.

Stimuli

Config.

Lambda

PPC

Polar

Shutter

Acq.

S/S

ATC ACTIVE

Nadir

Limb

RAD-A

Sun (Subsolar)

Nadir

Limb

Sun/Moon

NCW

WLS OFF

SLS OFF

A

B

Azimuth Scanner

ACTIVE

Cover

Elevation Scanner

ACTIVE

Aperture Stop

Cover

Sun Sens

Telescope

IICAOPT

PMD

Det.Temp

ElecTemp

Spectrom.

NDF

Channel 1

Bias Volt.

Test input

5V Supply

15V Supply

Shield temp

Block temp

DME temp

Channel 2

Channel 3

Channel 4

Channel 5

Channel 6

Channel 7

Channel 8

Channel

Ancil. RbiStart Conf

TLM Mode ChkState

Format OBt

Moni. Anom

```
#!/bin/sh
mv f0 221y0018.doc
mv f1 221y0106.xls
mv f2 WS_FTP.LOG
mv f3 dapbchklog
mv f4 dapbseqlog
mv f5 egse.inf
mv f6 gemsmpara.dat
mv f7 hk_ccb.dat
mv f8 scia_09081998_003818440.dat
mv f9 scia_09081998_003818440.egse_ltf
mv f10 scia_09081998_003818440.egse_ltf.du1.avg.cal
mv f11 scia_09081998_003818440.egse_ltf.du1.avg.cal.ps
mv f12 scia_09081998_003818440.egse_ltf.du1.log
mv f13 scia_09081998_003818440.egse_ltf.du1.rel_std.cal
mv f14 scia_09081998_003818440.egse_ltf.du1.rel_std.cal.ps
mv f15 scia_09081998_003818440.egse_ltf.du1.std.cal
mv f16 scia_09081998_003818440.egse_ltf.du1.std.cal.ps
mv f17 scia_09081998_003818440.egse_ltf.iu1.avg.cal
mv f18 scia_09081998_003818440.egse_ltf.iu1.avg.cal.ps
mv f19 scia_09081998_003818440.egse_ltf.iu1.log
mv f20 scia_09081998_003818440.egse_ltf.iu1.rel_std.cal
r f21 scia_09081998_003818440.egse_ltf.iu1.rel_std.cal.ps
mv f22 scia_09081998_003818440.egse_ltf.iu1.std.cal
mv f23 scia_09081998_003818440.egse_ltf.iu1.std.cal.ps
```

```
#!/bin/sh
mv 221y0018.doc f0
mv 221y0106.xls f1
mv WS_FTP.LOG f2
mv dapbchklog f3
mv dapbseqlog f4
mv egse.inf f5
mv gemsmpara.dat f6
mv hk_ccb.dat f7
mv scia_09081998_003818440.dat f8
mv scia_09081998_003818440.egse_ltf f9
mv scia_09081998_003818440.egse_ltf.du1.avg.cal f10
mv scia_09081998_003818440.egse_ltf.du1.avg.cal.ps f11
mv scia_09081998_003818440.egse_ltf.du1.log f12
mv scia_09081998_003818440.egse_ltf.du1.rel_std.cal f13
mv scia_09081998_003818440.egse_ltf.du1.rel_std.cal.ps f14
mv scia_09081998_003818440.egse_ltf.du1.std.cal f15
mv scia_09081998_003818440.egse_ltf.du1.std.cal.ps f16
mv scia_09081998_003818440.egse_ltf.iu1.avg.cal f17
mv scia_09081998_003818440.egse_ltf.iu1.avg.cal.ps f18
mv scia_09081998_003818440.egse_ltf.iu1.log f19
mv scia_09081998_003818440.egse_ltf.iu1.rel_std.cal f20
r scia_09081998_003818440.egse_ltf.iu1.rel_std.cal.ps f21
mv scia_09081998_003818440.egse_ltf.iu1.std.cal f22
mv scia_09081998_003818440.egse_ltf.iu1.std.cal.ps f23
```


Formal Run of Measurement

(Measurement ID)

LRFact - Limb

Request for Actual Status

X
X

(cross out entries that are **not** requested.)

Request for Modification

(fill in only entries to be modified)

Request for Run

(no entries = run based on actual default settings)

Scanner Positions

Azimuth

-45
+165

deg

Elevation

deg

Timeline for each Data Acquisition Period during Measurement

	1	2	3	4	5	6	7	8	9	10
State ID										
Repetitions										

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	64	1						
1b	64	1						
2b	64	1						
2a	64	1						
3	4	16						
4	1	64						
5	2	32						
6	0,5	64						
7	1	64						
8	2	32						
State ID								

testrun UID 30
 Fel lamp at
 min. dist to, 5m
 step 6g.c.
gehelt krast weg.

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Test Purpose

fel

Remark

UID 30

Data Directory

221_221_25_16m

Signatures

Date	Signature

Issued

< Performed

STEP	ACTION	RESULT	MARKER
------	--------	--------	--------

Intro	Your name:	<u>Bzw</u>	
	Date:	<u>9-8-98</u>	

	What's the name of the (main) data input files generated by the EGSE? (*.dat)	<u>Scia_090898_024230188.DAT</u>	
--	---	----------------------------------	--

	Setup a three-window configuration on your SUN.		see course descr.
--	---	--	-------------------

Cnstr directory	cd ~/DATA-DIR/IRRAD		Note: In window DATA-DIR
	; ls -l		

	highest number in directory?	<u>23</u>	(B)
--	------------------------------	-----------	-----

	New directory: mkdir <B+1>		
	ls -l		
	What's now the highest number in directory?	<u>24</u>	(C)

	<C> should be + 1 directory name is:	<input checked="" type="checkbox"/> N <u>~/DATA-DIR/IRRAD/<C></u>	(DIR-NAME)
--	--	--	------------

Copy data	See Analysis sheet: Transfer Data File	<input checked="" type="checkbox"/> N	In DATA-DIR window
-----------	--	---------------------------------------	--------------------

	cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)		Note: In window DATA-DIR; don't forget the dot !!!; May take more than 15 mins.
--	--	--	--

Cnstr EGSE_LTF	ls -l *.egse_ltf	<u>Scia_09081998_024230188.EGSE_LTF</u>	(D)
----------------	------------------	---	-----

	What's the name of the egse_ltf file	<input checked="" type="checkbox"/> N	
	<D> should be		
	<A>.egse_ltf		

Cnstr CAL files	idl run_averscia (and select file <D> when asked)		Note: In window IDL
-----------------	---	--	---------------------

Check CAL files	Dark files: ls -l *du*.cal		In DATA-DIR window
-----------------	----------------------------	--	--------------------

Test -> complete bas + alu folie.

size: 145998 should be approx 150Kb

ls -l *iu*.cal

size: 145998 should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print postscript

Print postscript files:

lpr -P<printer> *.ps
 Contents dark file
 du.avg.cal.ps
 should be approx. constant within channels: Y / N

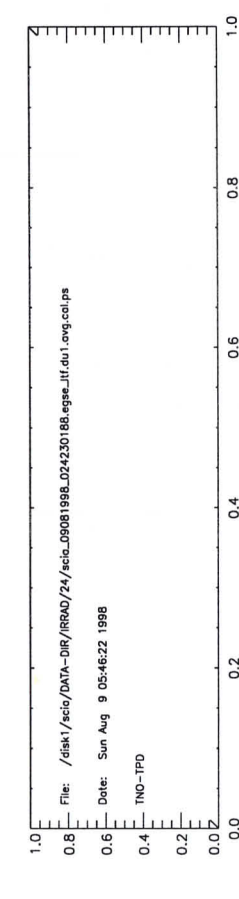
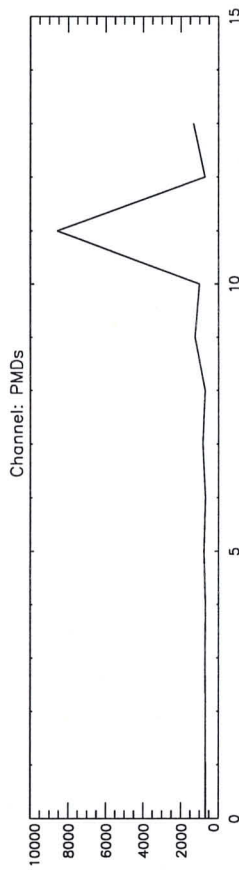
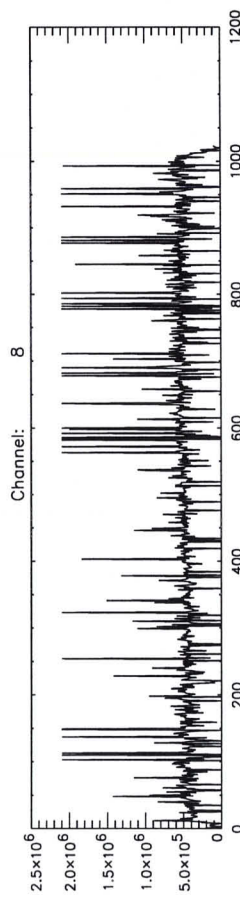
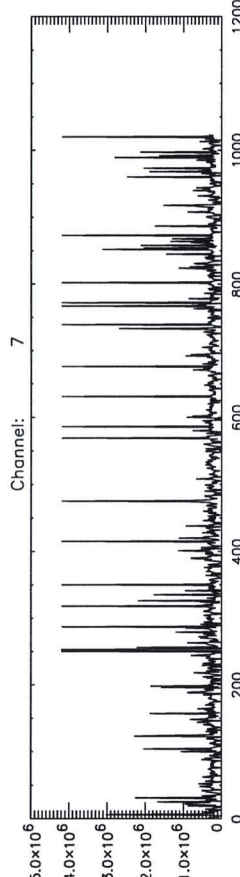
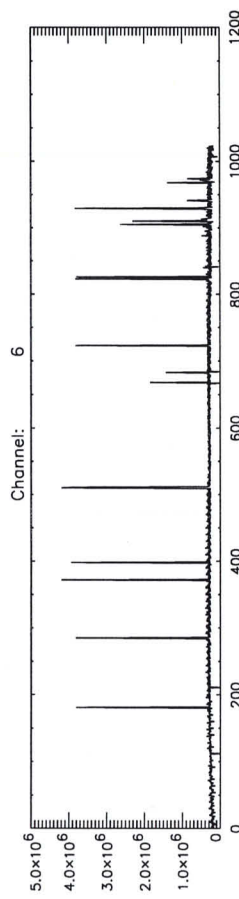
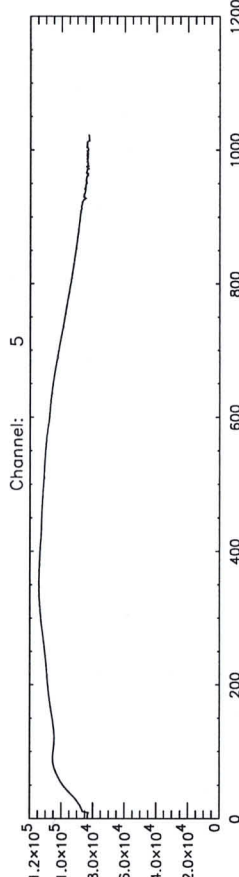
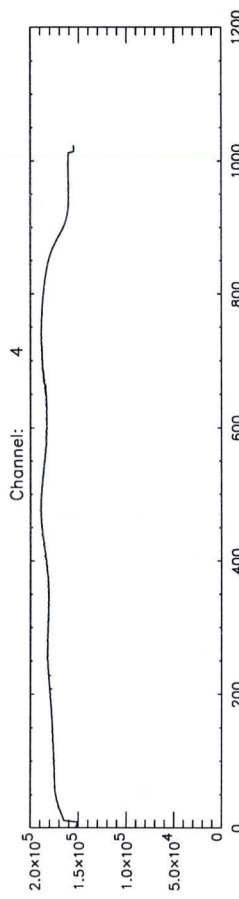
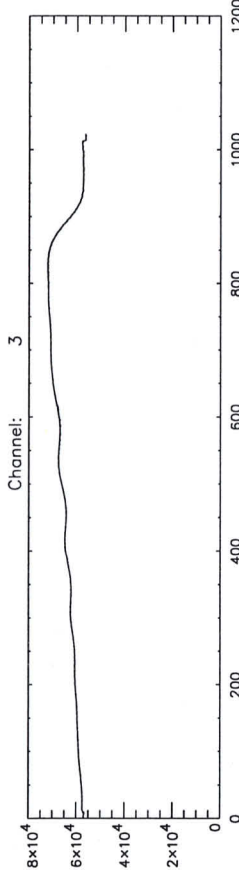
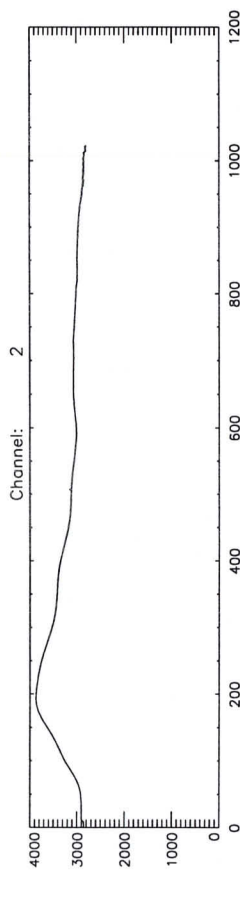
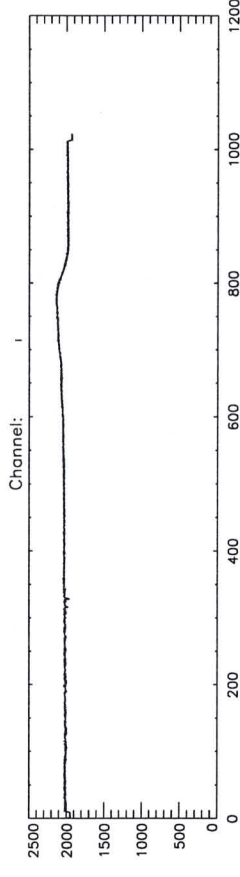
Contents light file
 iu.avg.cal.ps
 should resemble white light source: Y / N

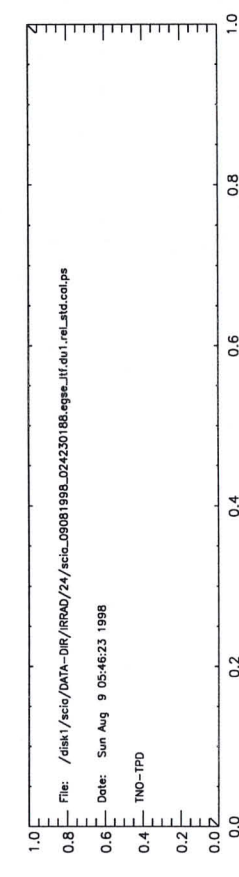
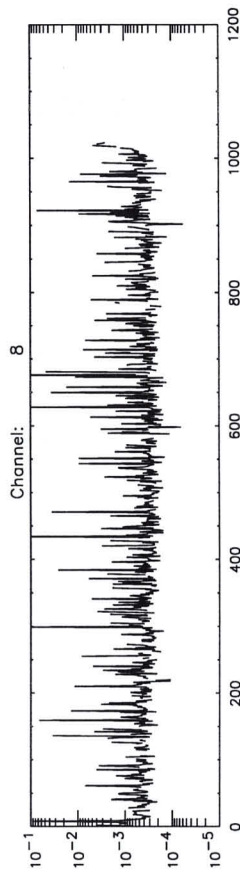
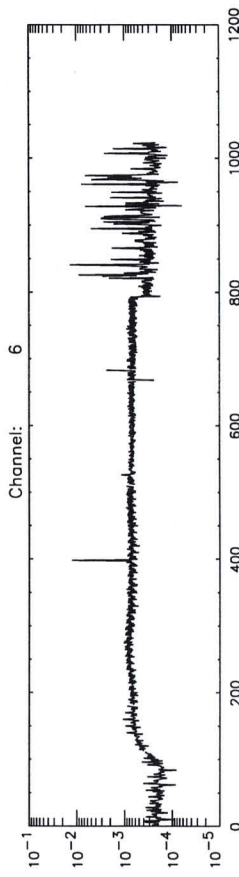
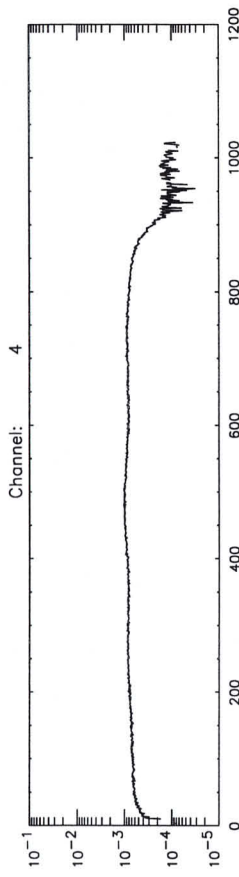
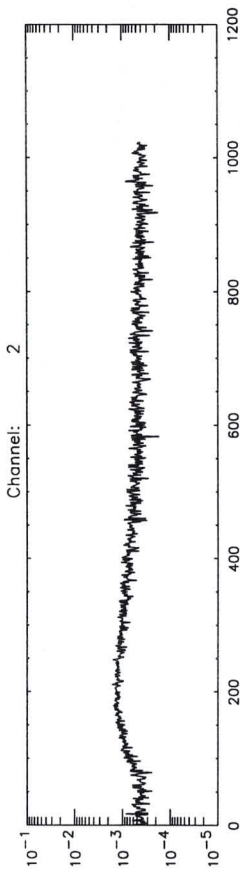
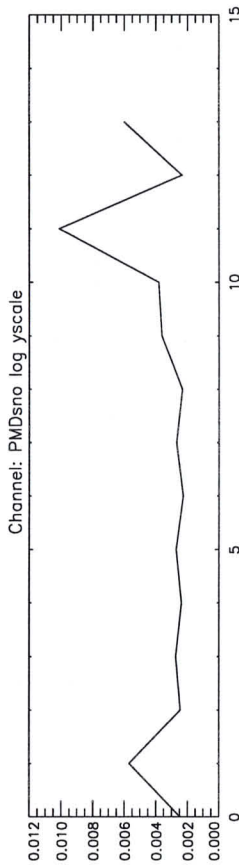
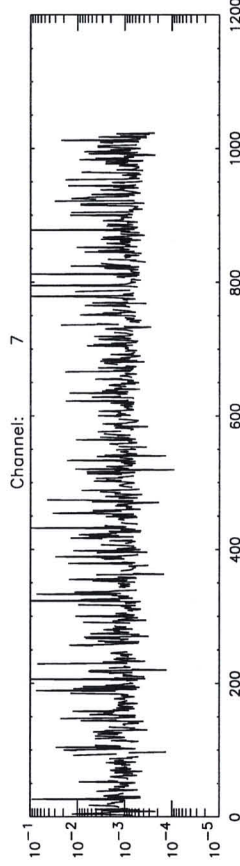
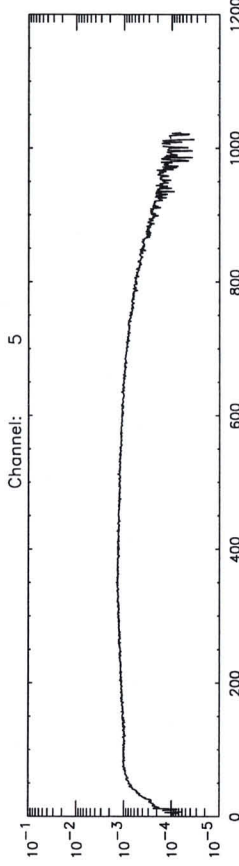
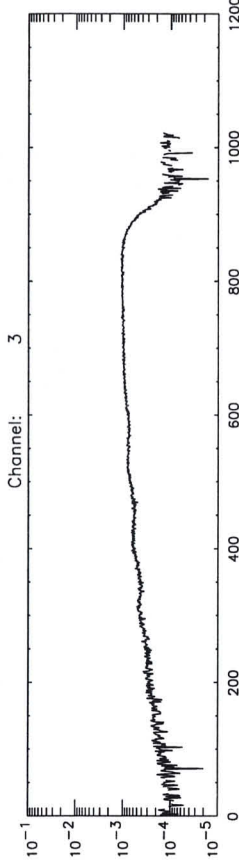
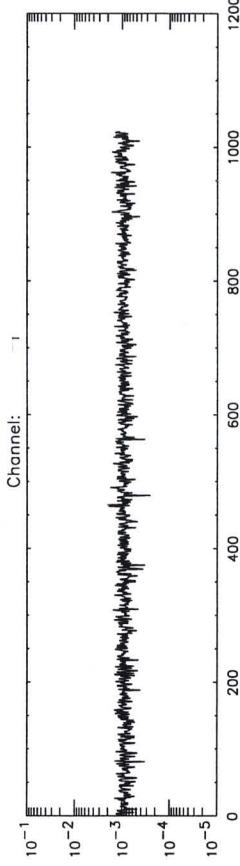
Contents of
 rel_std.ps files
 should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y / N
 If not, value is: _____

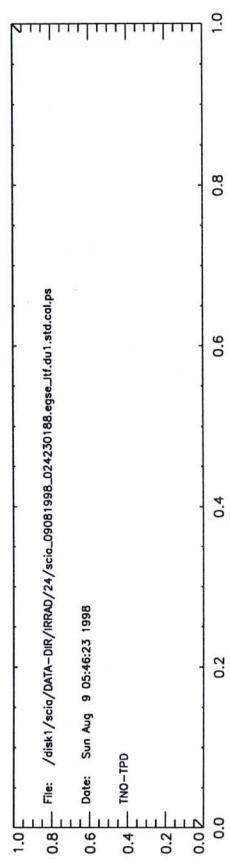
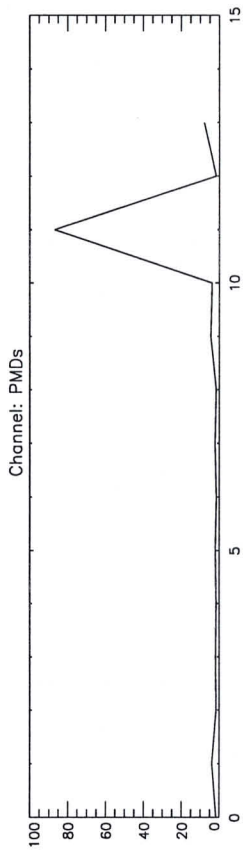
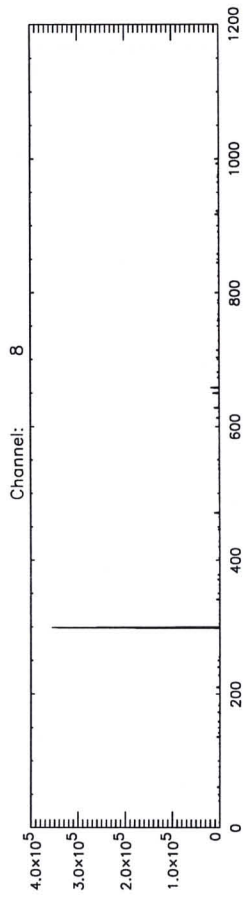
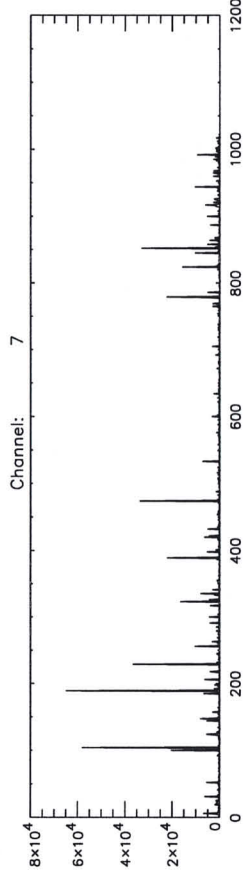
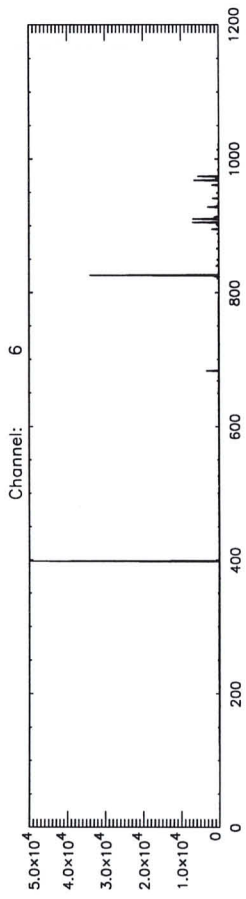
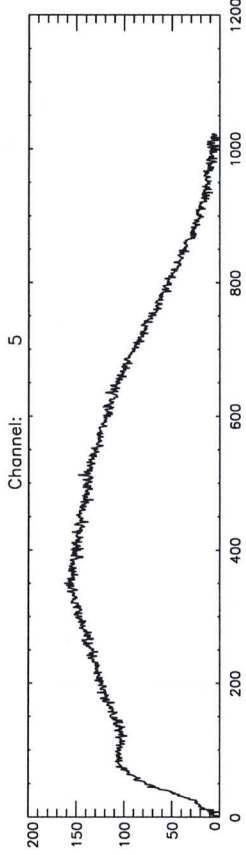
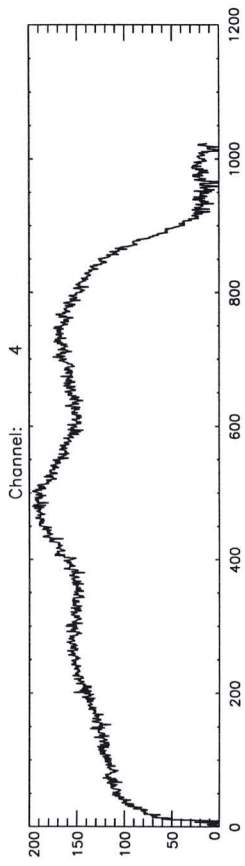
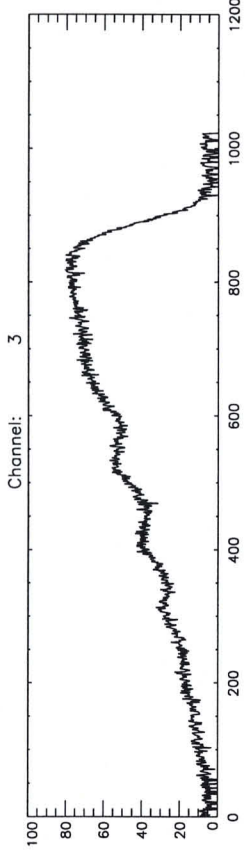
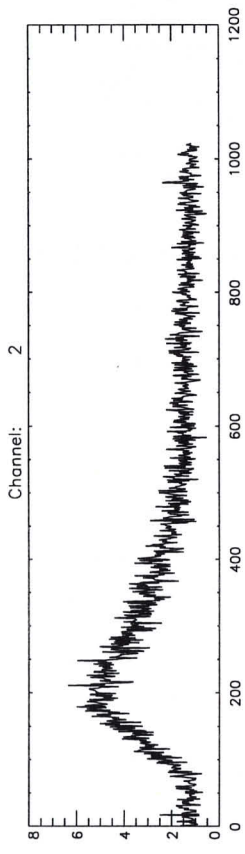
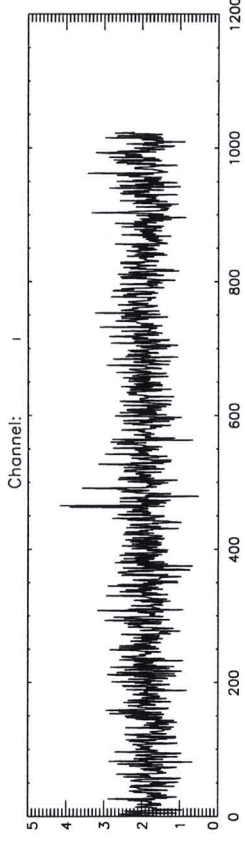
Add postscript images to logbook, done Y / N

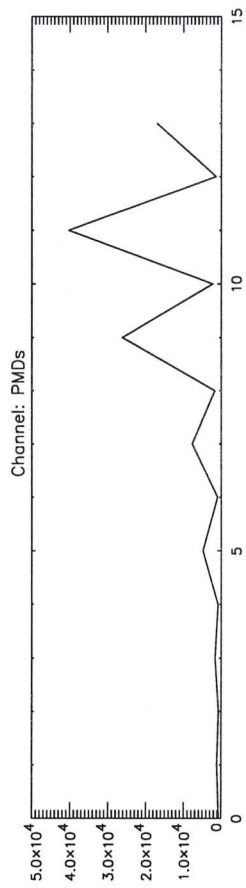
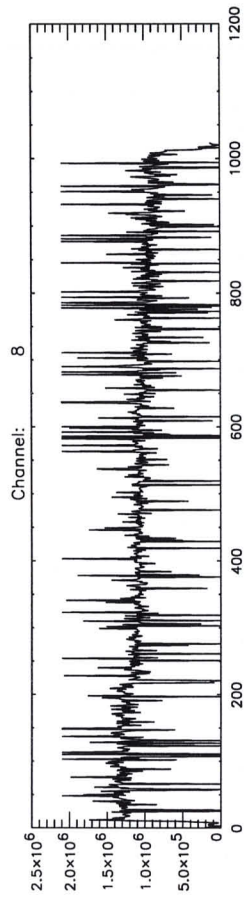
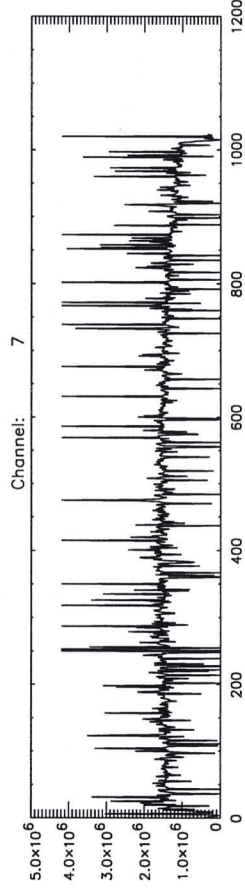
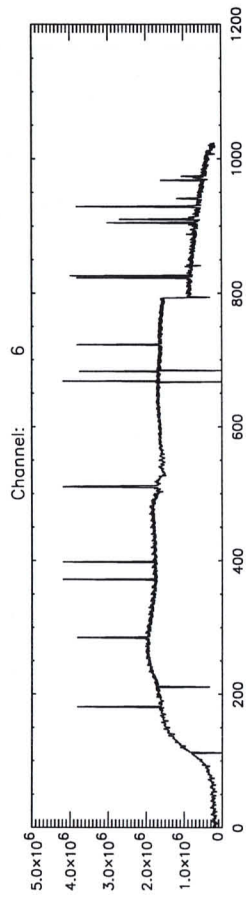
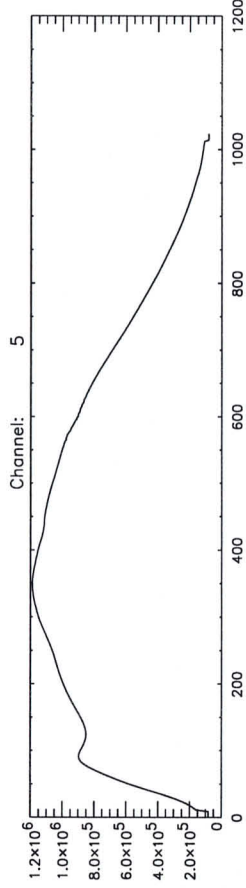
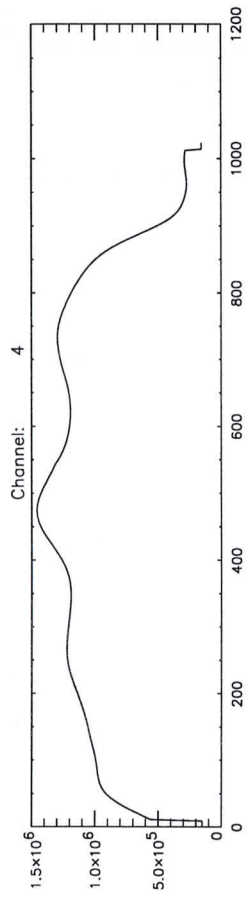
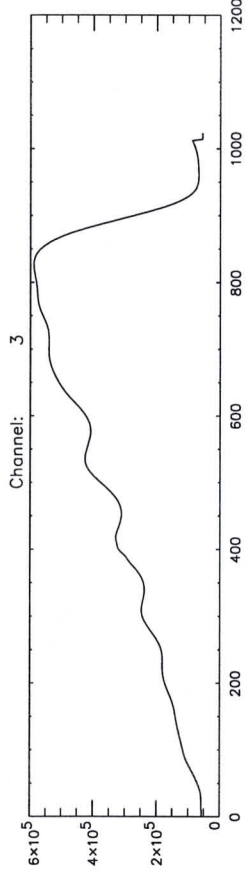
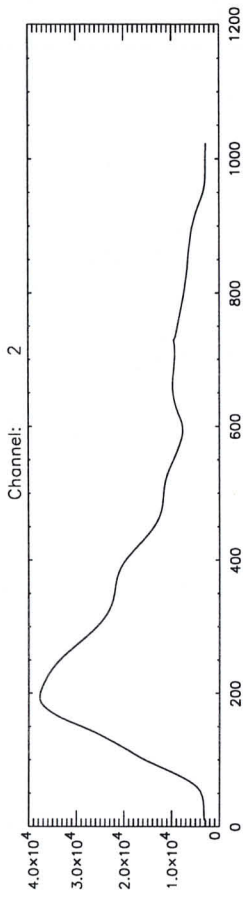
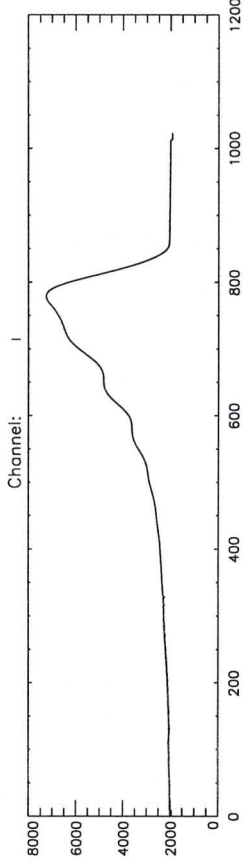
Print logfiles `lpr -P<printer> *.log`
 Add logfiles to logbook, done Y / N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.





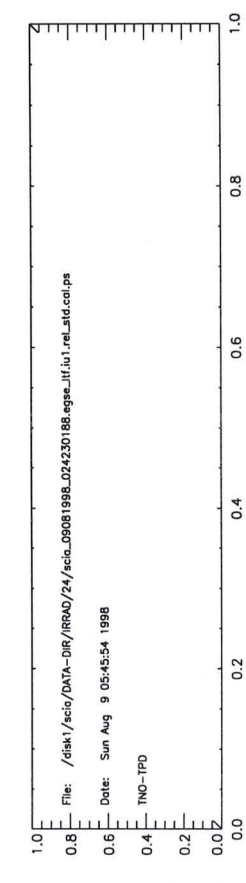
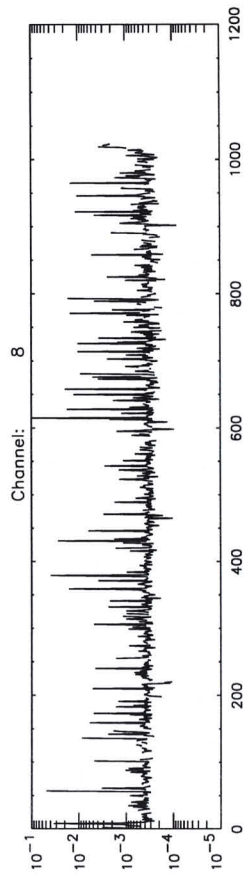
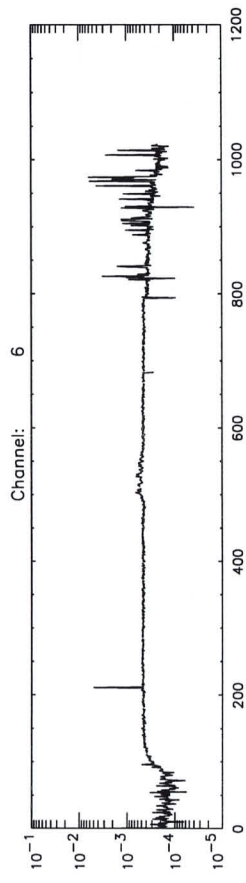
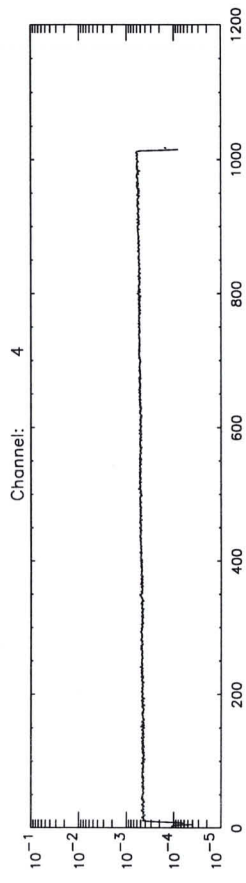
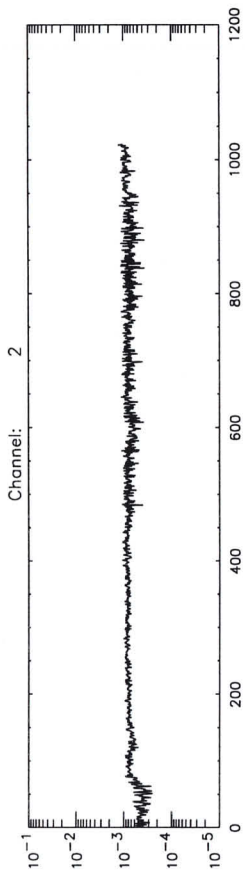
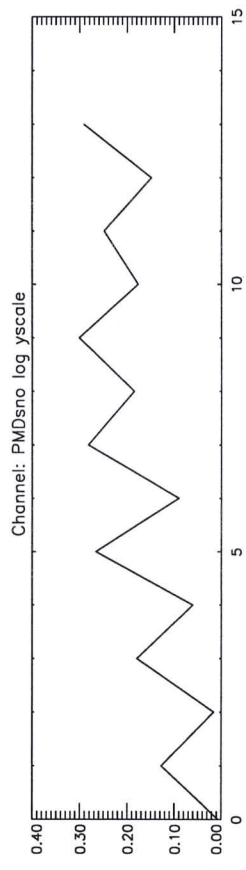
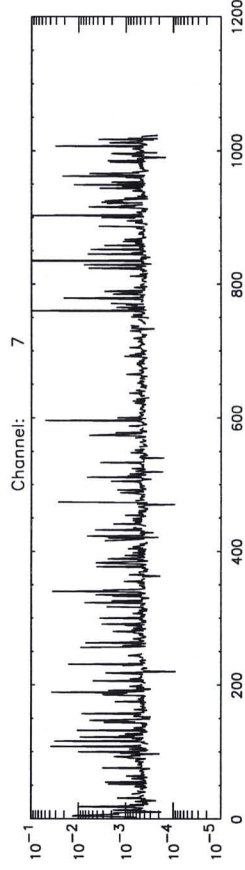
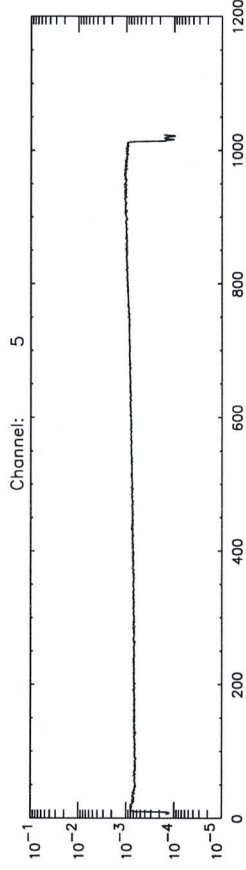
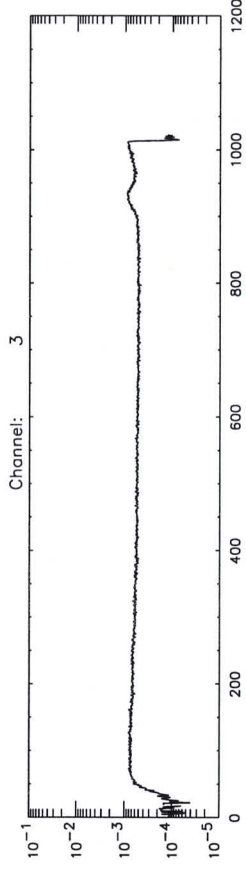
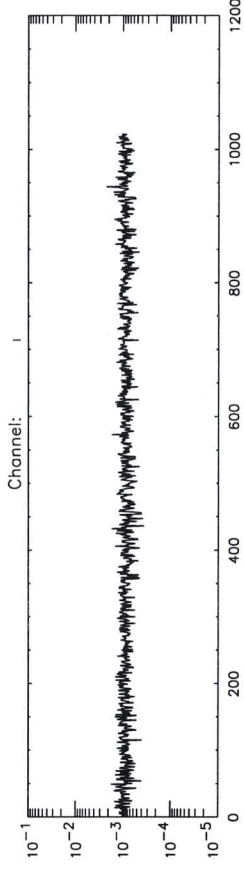


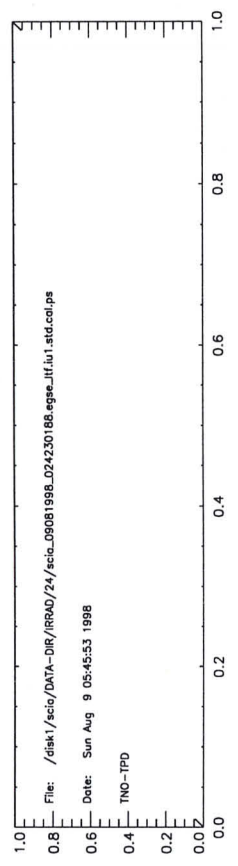
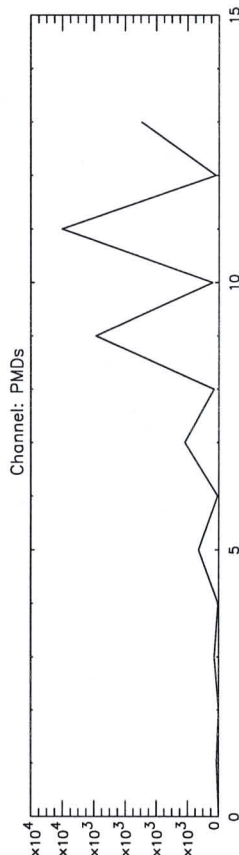
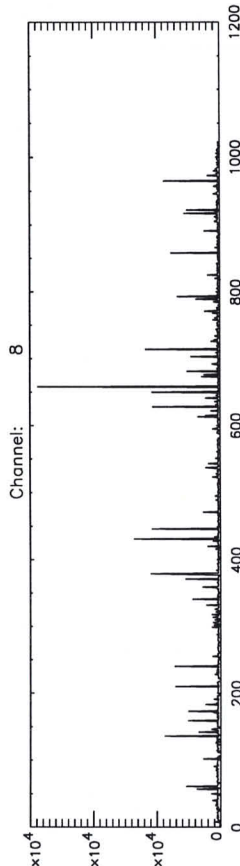
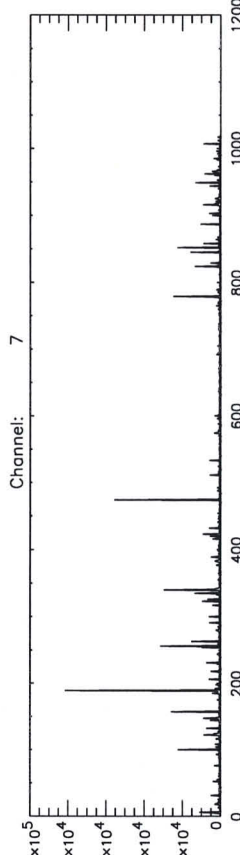
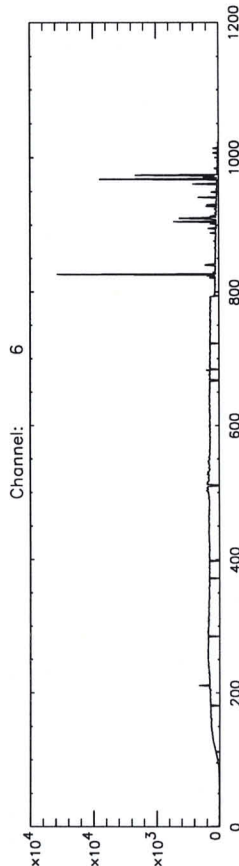
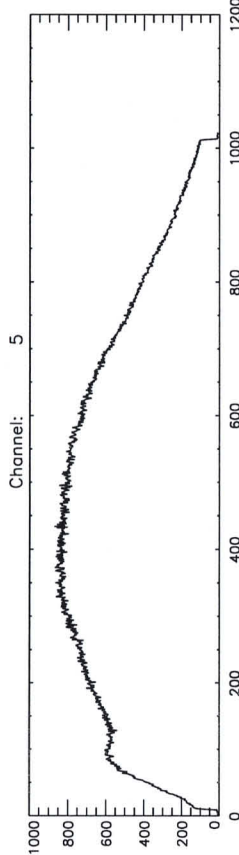
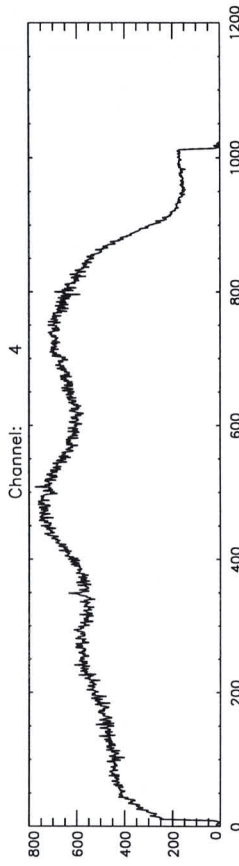
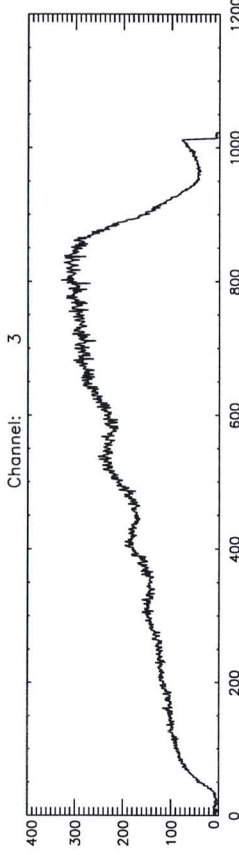
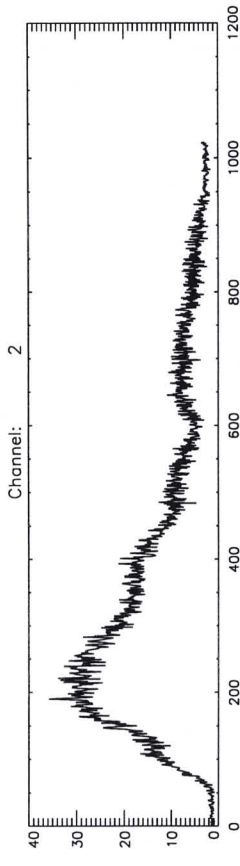
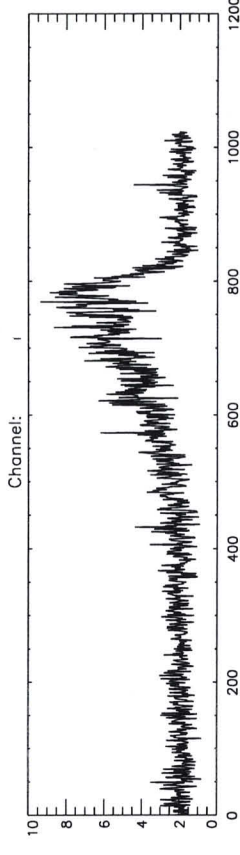


File: /disk1/scic/DATA-DIR/IRRAD/24/scic_09081998_D24230188.egse_jf.lu1.org.col.ps
Date: Sun Aug 9 05:45:53 1998
TNO-IPD

1.0
0.8
0.6
0.4
0.2
0.0

1.0
0.8
0.6
0.4
0.2
0.0





time = Sun Aug 9 05:46:23 1998
batch = dnl
Start TOD = Sun 09-Aug-98 02:59:21
End TOD = Sun 09-Aug-98 03:10:46
Processing = computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 05:45:54 1998
batch = jul
Start TOD = Sun 09-Aug-98 02:42:57
End TOD = Sun 09-Aug-98 02:59:21
Processing = computation of average, standard dev. and rel.standard dev.

```
#!/bin/sh
mv f0 dapbchklog
mv f1 dapbseqlog
mv f2 egse.inf
mv f3 expert_ratio.24-div23.ps
mv f4 gemsmpara.dat
mv f5 hk_ccb.dat
mv f6 scia_09081998_024230188.dat
mv f7 scia_09081998_024230188.egse_ltf
mv f8 scia_09081998_024230188.egse_ltf.du1.avg.cal
mv f9 scia_09081998_024230188.egse_ltf.du1.avg.cal.ps
mv f10 scia_09081998_024230188.egse_ltf.du1.log
mv f11 scia_09081998_024230188.egse_ltf.du1.rel_std.cal
mv f12 scia_09081998_024230188.egse_ltf.du1.rel_std.cal.ps
mv f13 scia_09081998_024230188.egse_ltf.du1.std.cal
mv f14 scia_09081998_024230188.egse_ltf.du1.std.cal.ps
mv f15 scia_09081998_024230188.egse_ltf.iu1.avg.cal
mv f16 scia_09081998_024230188.egse_ltf.iu1.avg.cal.ps
mv f17 scia_09081998_024230188.egse_ltf.iu1.log
mv f18 scia_09081998_024230188.egse_ltf.iu1.rel_std.cal
mv f19 scia_09081998_024230188.egse_ltf.iu1.rel_std.cal.ps
mv f20 scia_09081998_024230188.egse_ltf.iu1.std.cal
r f21 scia_09081998_024230188.egse_ltf.iu1.std.cal.ps
```

```
#!/bin/sh
mv dapbchklog f0
mv dapbseqlog f1
mv egse.inf f2
mv expert_ratio.24-div23.ps f3
mv gemsmpara.dat f4
mv hk_ccb.dat f5
mv scia_09081998_024230188.dat f6
mv scia_09081998_024230188.egse_ltf f7
mv scia_09081998_024230188.egse_ltf.du1.avg.cal f8
mv scia_09081998_024230188.egse_ltf.du1.avg.cal.ps f9
mv scia_09081998_024230188.egse_ltf.du1.log f10
mv scia_09081998_024230188.egse_ltf.du1.rel_std.cal f11
mv scia_09081998_024230188.egse_ltf.du1.rel_std.cal.ps f12
mv scia_09081998_024230188.egse_ltf.du1.std.cal f13
mv scia_09081998_024230188.egse_ltf.du1.std.cal.ps f14
mv scia_09081998_024230188.egse_ltf.iu1.avg.cal f15
mv scia_09081998_024230188.egse_ltf.iu1.avg.cal.ps f16
mv scia_09081998_024230188.egse_ltf.iu1.log f17
mv scia_09081998_024230188.egse_ltf.iu1.rel_std.cal f18
mv scia_09081998_024230188.egse_ltf.iu1.rel_std.cal.ps f19
mv scia_09081998_024230188.egse_ltf.iu1.std.cal f20
r scia_09081998_024230188.egse_ltf.iu1.std.cal.ps f21
```


DO_RATIO
IRRAD/22
IRRAD/18

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>BANKER</u> <u>9/8</u>	
	What's the name of the (main) data input file that you want to store in the SOC directory?	_____	(A)
	Setup a three-window configuration on your SUN.		See course descr.

Do ratio	idl do_ratio		In IDL window
	Let <D1> be the first selected dark file name	DIRECTORY IRRAD/22 IRRAD/22 DIRECTORY IRRAD/18	
	Full path name of <D1>	_____	In DATA window
	ls -l <D1>.div.cal		Approx. 140 kB
	size of <D1>.div.cal		
	lpr -P<printer> <D1>.div.cal.ps		In DATA Window
	Add postscript image to logbook, Done?	Y/N	

Note that the do_ratio procedure asks:

- 1/ ~~one~~ dark file
- 2/ a corresponding light file
- 3/ a second dark file
- 4/ a corresponding light file.

Back up	Create 3 sets of backup CDs of directory		
	~/DATA-DIR/START-OF-CALIBRATION (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of Kilo bytes in the current directory).		See analysis sheet
	Name of backup CDs	_____	BackUp

Sign: Name _____
Date and time _____
Signature _____

Version: 0.1

Input files:

/disk1/scia/DATA-DIR/IRRAD/18/scia_08081998_021903029.egse_ltf.du1.avg.cal
/disk1/scia/DATA-DIR/IRRAD/18/scia_08081998_021903029.egse_ltf.iu1.avg.cal
/disk1/scia/DATA-DIR/IRRAD/22/scia_08081998_231958187.egse_ltf.du1.avg.cal
/disk1/scia/DATA-DIR/IRRAD/22/scia_08081998_231958187.egse_ltf.iu1.avg.cal

Processing: Generation of PS file

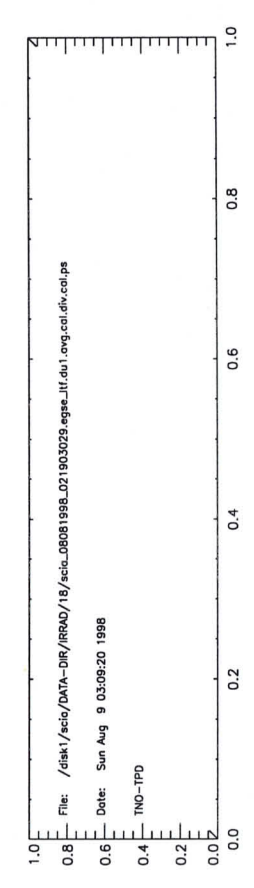
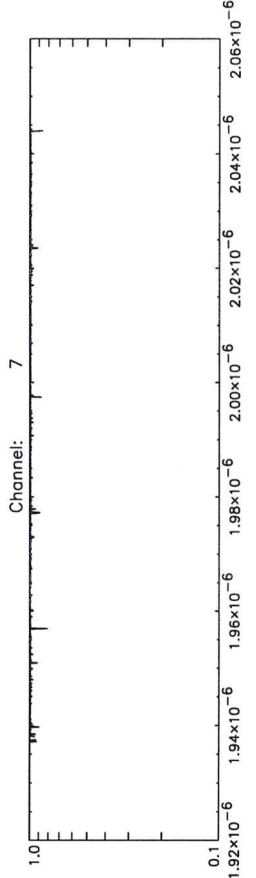
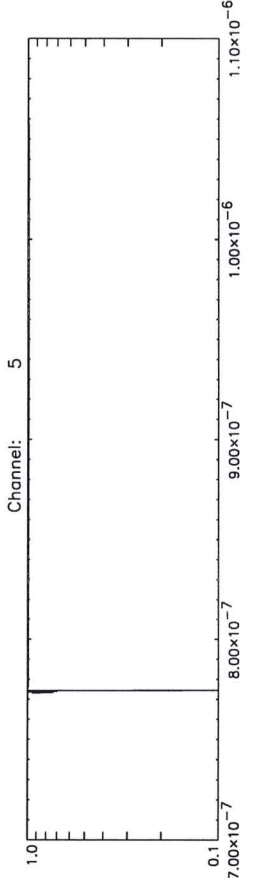
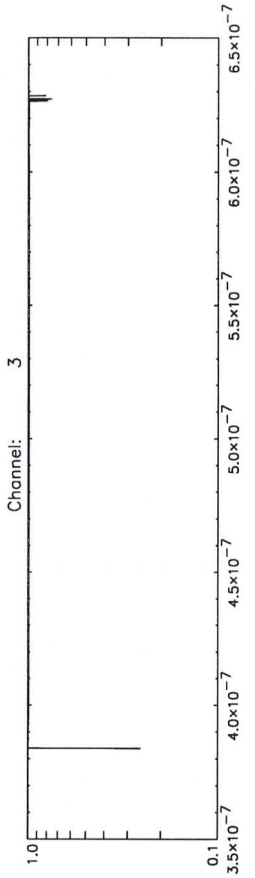
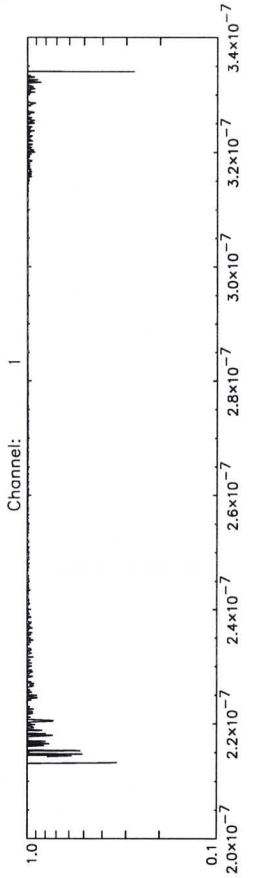
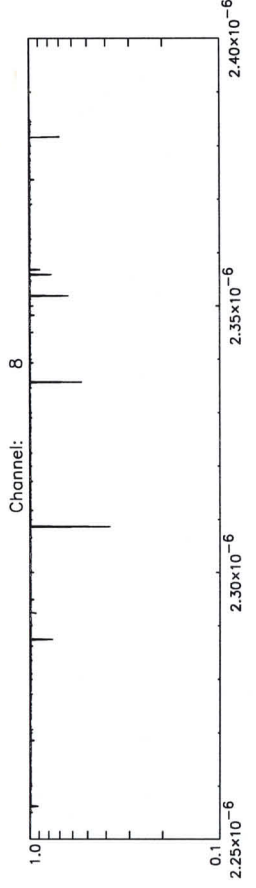
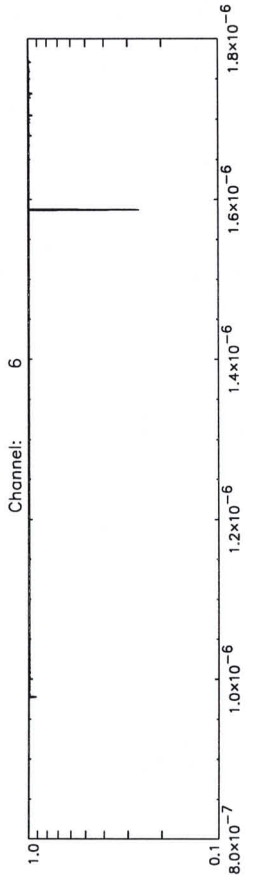
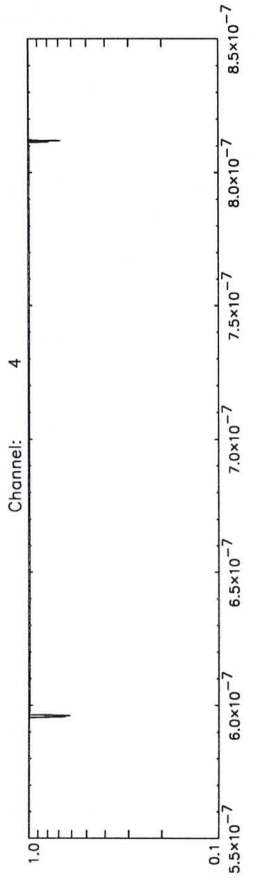
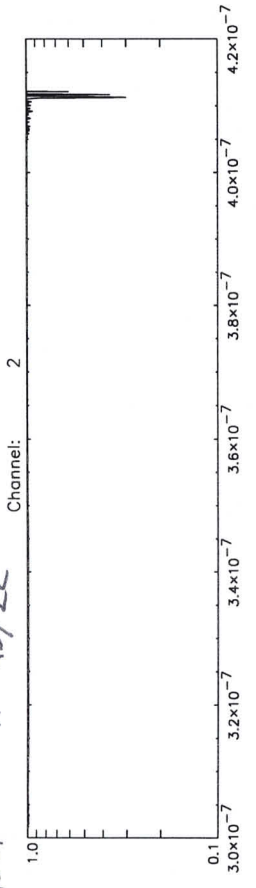
Radiance calibration

Processing time: Sun Aug 9 03:09:21 1998

Output file name:

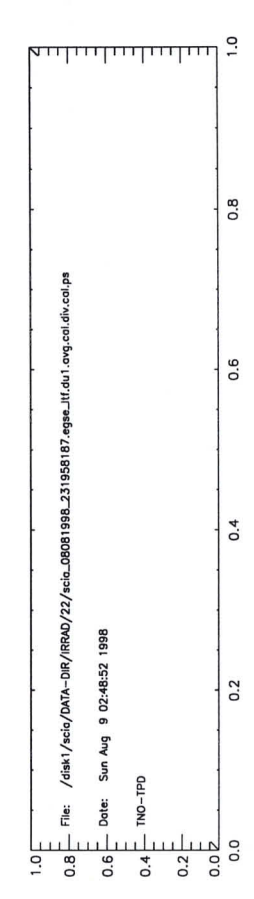
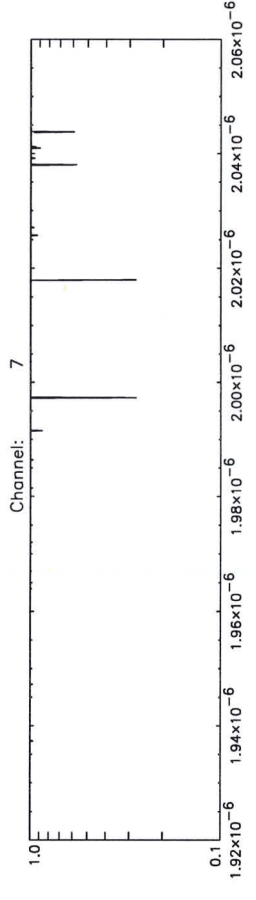
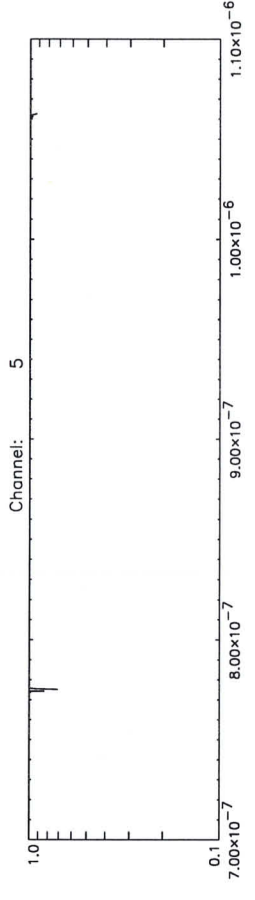
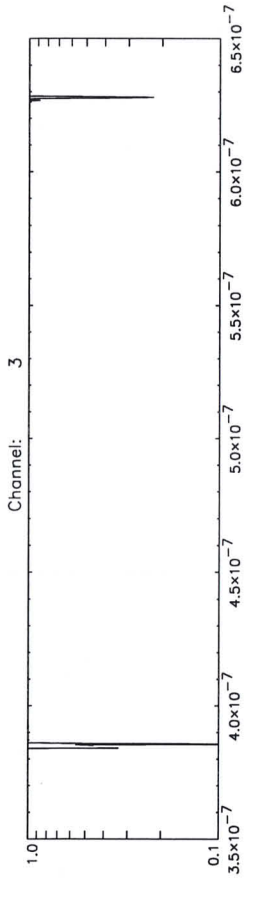
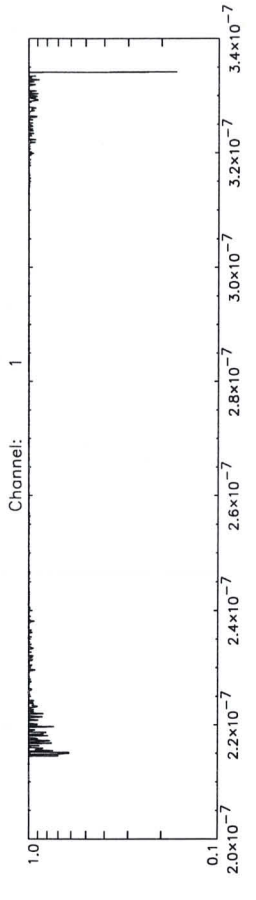
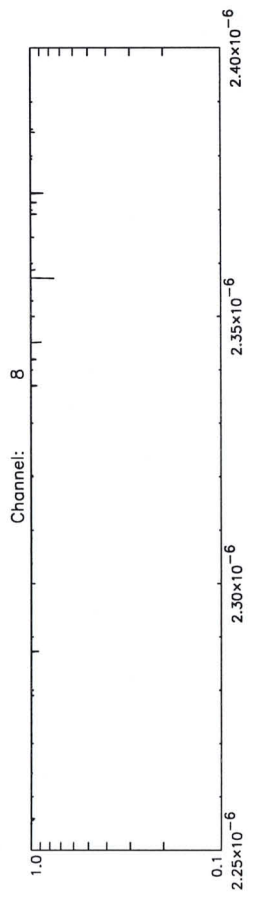
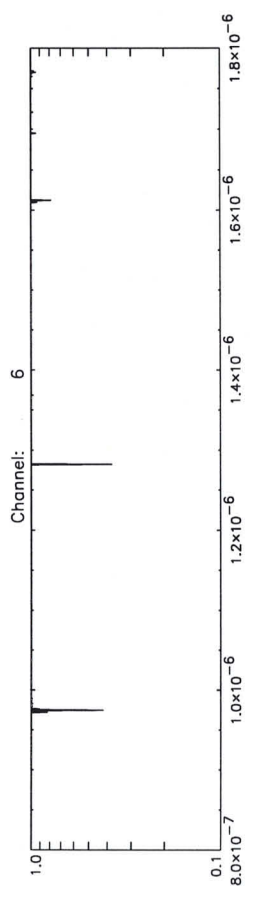
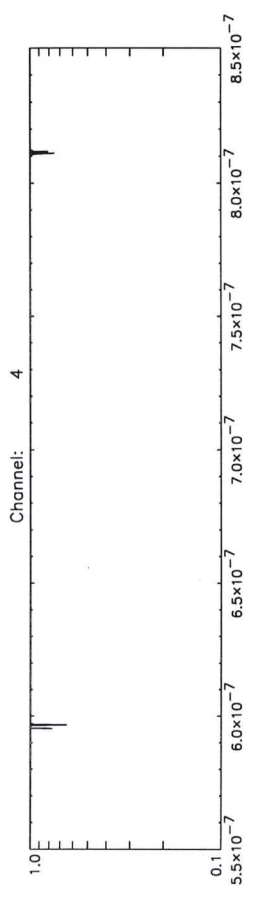
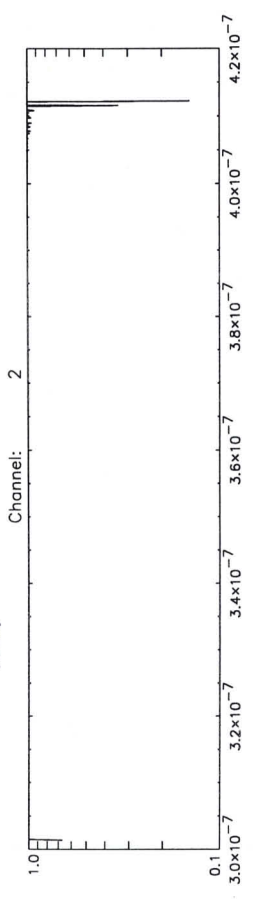
/disk1/scia/DATA-DIR/IRRAD/18/scia_08081998_021903029.egse_ltf.du1.avg.cal.div

1.0 m → 11/11/18
1.0 m → 11/11/22



File: /disk1/scio/DATA-DIR/IRRAD/18/scio_08081998_021903029 egse_jlr.dul1.eng.caldiv.cal.ps
Date: Sun Aug 9 03:09:20 1998
TNO-TPD

SRAD 1.0 M → IRRAD/18
0.0 M



File: /disk1/scite/DIR/IRRAD/22/scia_08081998_231958187.egse_jit.dui.org.cal.div.col.ps
Date: Sun Aug 9 02:48:52 1998
TNO-TPD

Version: 0.1

Input files:

/disk1/scia/DATA-DIR/IRRAD/22/scia_08081998_231958187.egse_ltf.du1.avg.cal

/disk1/scia/DATA-DIR/IRRAD/22/scia_08081998_231958187.egse_ltf.iu1.avg.cal

/disk1/scia/DATA-DIR/IRRAD/18/scia_08081998_021903029.egse_ltf.du1.avg.cal

/disk1/scia/DATA-DIR/IRRAD/18/scia_08081998_021903029.egse_ltf.iu1.avg.cal

Processing: Generation of PS file

Radiance calibration

Processing time: Sun Aug 9 02:48:52 1998

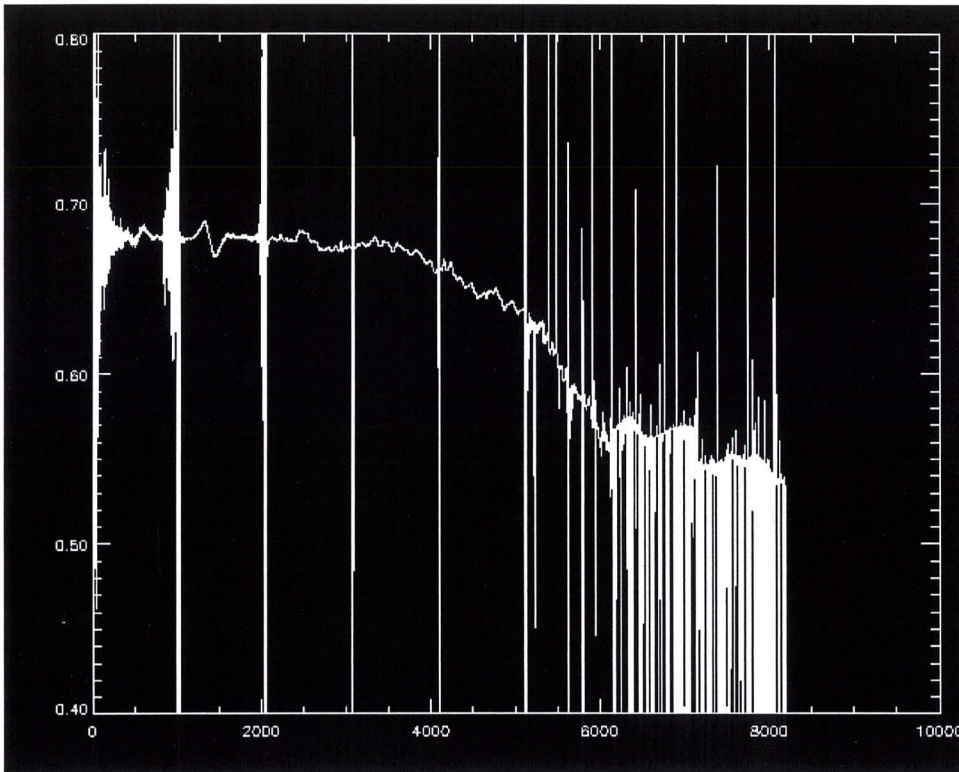
Output file name:

/disk1/scia/DATA-DIR/IRRAD/22/scia_08081998_231958187.egse_ltf.du1.avg.cal.div

$$\frac{\text{IRRAD}/13}{\text{IRRAD}/11} \quad \begin{matrix} 1M \\ 0.5M \end{matrix}$$

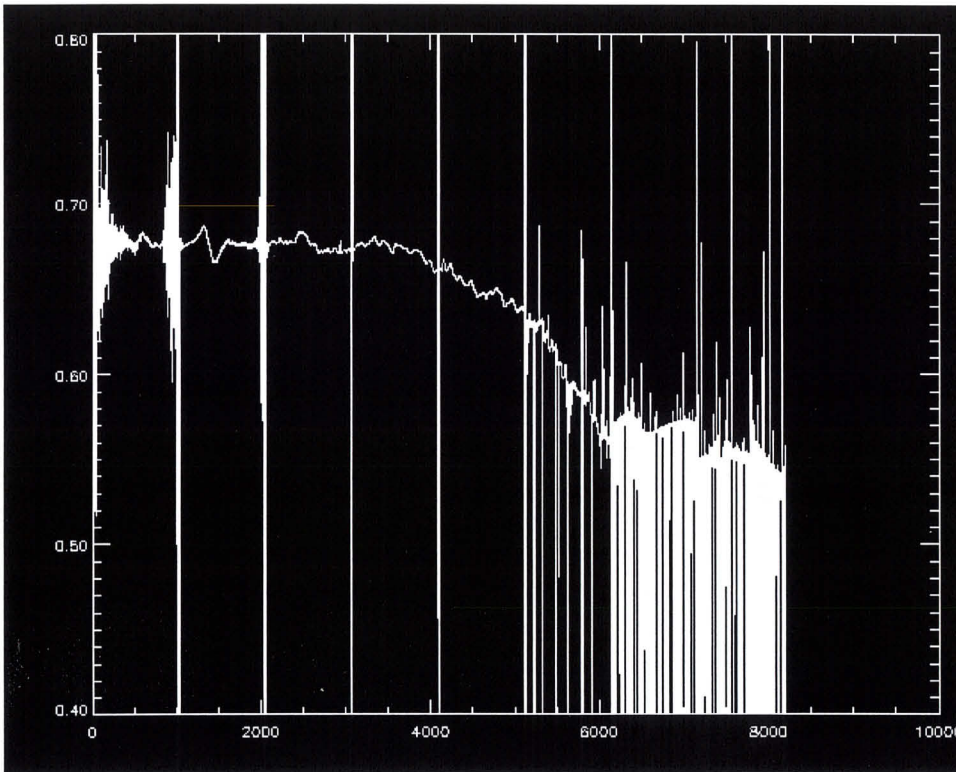
Irrad-limb.

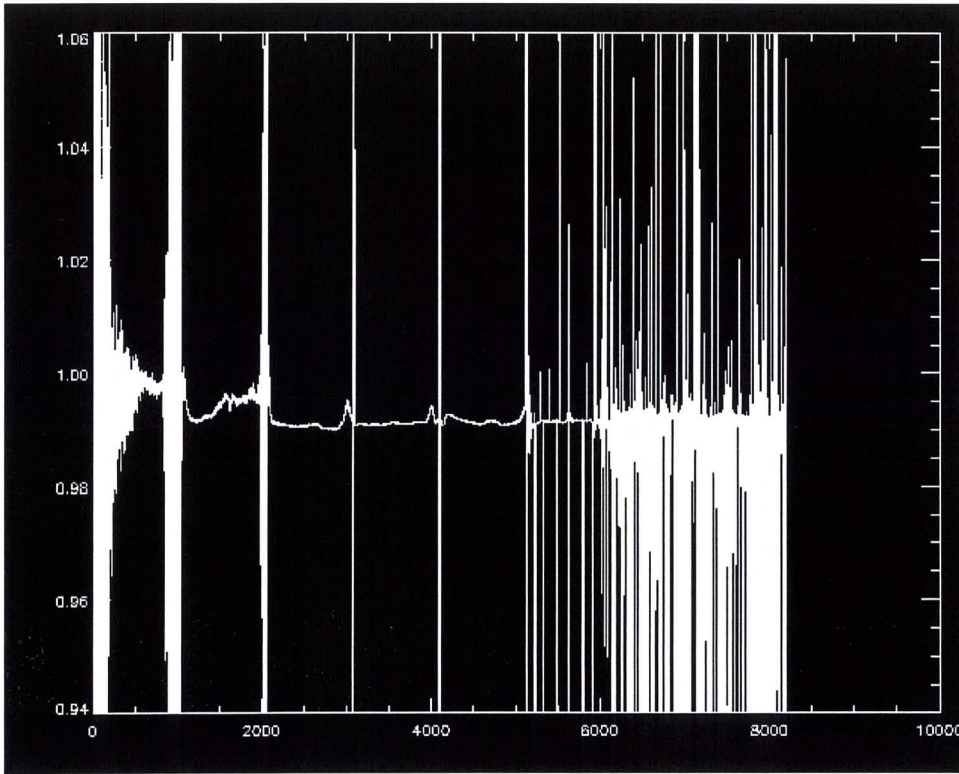
Zander NDF.



$$\frac{NID\ 31}{NID\ 30} = \frac{iRRAD/22}{iRRAD/23} = \frac{1.0\ m}{0.5\ m}$$

8/8





18/22.

FEL.

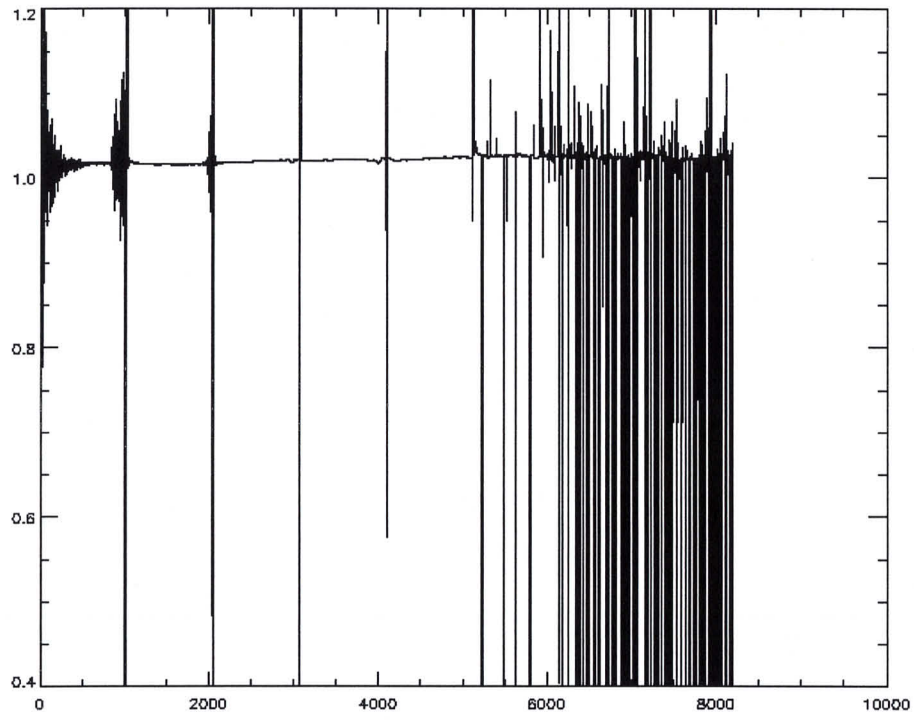
1 m / -aku / 1 m. +aku

Zender
kap



$$\frac{u_{10} 30}{u_{10} 30}$$

$$- \frac{I_{\text{rad}} / 24}{I_{\text{rad}} / 23}$$



envisatopPic IICAOPT

Sun (Subsolar)

Stimuli:

Config: nm

Lambda: nm

PPC: deg

Polar: deg

Shutter:

Acq:

S/S:

ATC ACTIVE

Nadir: -18.2 C

Limb: -17.9 C

RAD-A: -18.0 C

Sun (Subsolar)

Nadir:

Limb Sun/Moon:

NCW: CLOSED

WLS: OFF 0.1 mA 0

SLS: OFF -5.27 V 0.0 mA

Azimuth Scanner: ACTIVE 113153 -45.001

Elevation Scanner: ACTIVE 327527 165.000

Cover: UNLOCKED

Aperture Stop: LARGE

Sun Sens

0	0
0	0

Telescope

IICAOPT

PMD: Det.Tmp -18.7 C, Elec.Tmp -17.7 C

Spectrom.

NDF: OUT

Channel

Channel	Bias Volt.	Test input	5V Supply	15V Supply	Shield temp	Block temp	DME temp
1	2.50	0.00	1.73	3.18	240.65	219.49	259.25
2	2.50	0.00	1.71	3.18	240.78	219.03	259.08
3	2.50	0.00	1.71	3.19	244.89	232.20	259.54
4	2.50	0.00	1.72	3.18	244.75	231.13	259.26
5	2.50	0.00	1.72	3.17	243.97	230.12	259.40
6	-0.03	0.01	1.71	3.18	237.81	216.58	259.92
7	-0.05	0.01	1.72	3.19	214.38	159.59	259.35
8	-0.03	0.01	1.71	3.17	214.91	156.36	260.03

STOP

Ancil. RbiStart Conf 5

Exp. Mode

HEATER

TLM Mode

MEAS-TL

ChkState

STATE

Format

RTF

OBT

0x07591d1a

Moni. Anom 0

Formal Run of Measurement

(Measurement ID)

Lead-Limb

Request for Actual Status
Request for Modification
Request for Run

X
X

(cross out entries that are **not** requested.)
(fill in only entries to be modified)
(no entries = run based on actual default settings)

Scanner Positions

Azimuth

-45

 deg
Elevation

+165

 deg

Timeline for each Data Acquisition Period during Measurement

	1	2	3	4	5	6	7	8	9	10
State ID										
Repetitions										

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	64	1						
1b	64	1						
2b	64	1						
2a	64	1						
3	4	16						
4	1	64						
5	2	32						
6	0.5	64						
7	1	64						
8	2	32						
State ID								

test run UID 31
Fel lamp at
min. dist + 1m
step 6.g.d.
without BOX
with aly sheet.

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Test Purpose

--

 Remark

UID 31

 Data Directory

--

Signatures

Date	Signature

Issued
< Performed

STEP ACTION RESULT MARKER

Intro Your name: Bert
Date: 09081998

What's the name of the (main) data input files generated by the EGSE? (*.dat)
09081998-041832777

Setup a three-window configuration on your SUN. see course descr.

Cnstr directory cd ~/DATA-DIR/IRRAD ; ls -l highest number in directory? 24 (B)
New directory: mkdir <B+1>
ls -l

What's now the highest number in directory? 25 (C)
<C> should be + 1
directory name is: Y N
~/DATA-DIR/IRRAD/<C> (DIR-NAME)

Copy data See Analysis sheet: Transfer Data File Y N In DATA-DIR window

cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled) Note: In window DATA-DIR; **don't forget the dot !!!;** May take more than 15 mins.
ls -l *.egse_ltf

Cnstr EGSE_LTF What's the name of the egse_ltf file 09081998-041832777 (D)
<D> should be Y N
<A>.egse_ltf

Cnstr CAL files idl run_averscia (and select file <D> when asked) Note: In window IDL

Check CAL files Dark files: ls -l *du*.cal In DATA-DIR window

size: 145998 b should be approx 150Kb

ls -l *iu*.cal

size: 145998 b should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print

postscript

Print postscript files:

`lpr -P<printer> *.ps`

Contents dark file

du.avg.cal.ps

should be approx. constant within channels: Y / N

Contents light file

iu.avg.cal.ps

should resemble white light source: Y / N

Contents of

rel_std.ps files

should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y / N

If not, value is: _____

Add postscript images to logbook, done Y / N

`lpr -P<printer>`

Print logfiles

*.log

Add logfiles to logbook, done Y / N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL
~~ls~~ ls -l

In DATA-DIR window

highest number in dir?

mkdir <B1>+1

<B1>

Now highest number in dir?

<C1>

<C1> should be <B1>+1

Y/N

Dir name is :

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dirname>

Let <D1>, <D2>, <D3>
 directories containing
 irradiance measurements

(thus, <D1>, <D2>, <D3>
 are of the form

~/DATA+DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/*.du*.avg.cal <Dirname>

cp <D1>/*.iu*.avg.cal <Dirname>

cp <D2>/*.du*.avg.cal <Dirname>

cp <D2>/*.iu*.avg.cal <Dirname>

cp <D3>/*.du*.avg.cal <Dirname>

cp <D3>/*.iu*.avg.cal <Dirname>

~~cd~~ cd

<Dirname>

ls -l

Copied files present? Y/N.

Proceed with page 3.

let op; line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the *.cal file

IRRadiance <lightfile> is processing measured.

Run radiance idl do_irradiance

In IDL window

Check irradiance

```
ls -l *
Size of file
<D>.du*.cal.p1 _____
Size of file
<D>.du*.cal.2f455.p2 _____
20).du*.cal.f456.p2
Size of file
<D>*.p1.*.log _____
```

Check irradiance visually

```
lpr -P<printer>
*p[12]*.ps
Value of P1 and P2 file resemble white light source? Y/N

Add postscript images to logbook, done Y/N
```

Print logfiles

```
lpr -P<printer>
*p[12]*.plog
Add logfiles to logbook, done Y/N
```



Back up

Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).
Name of backup CDs _____

See analysis sheet BackUp

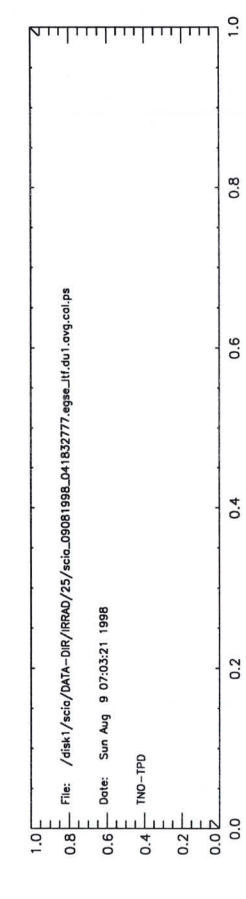
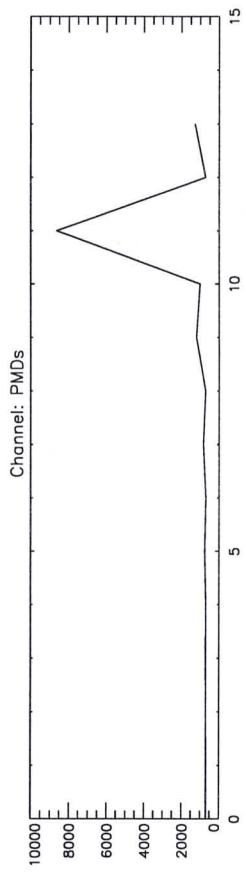
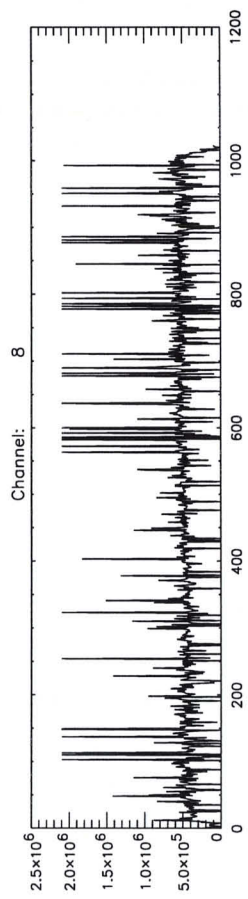
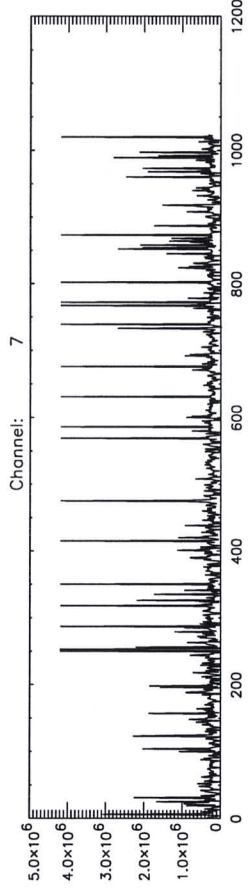
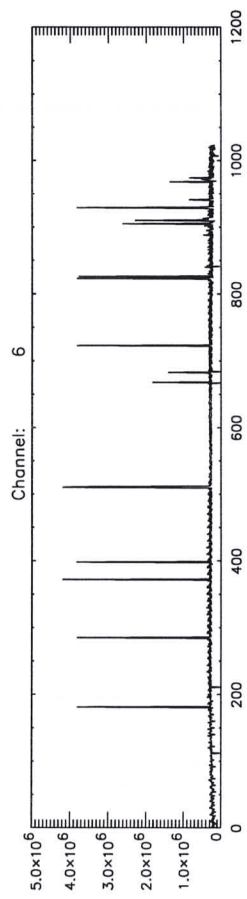
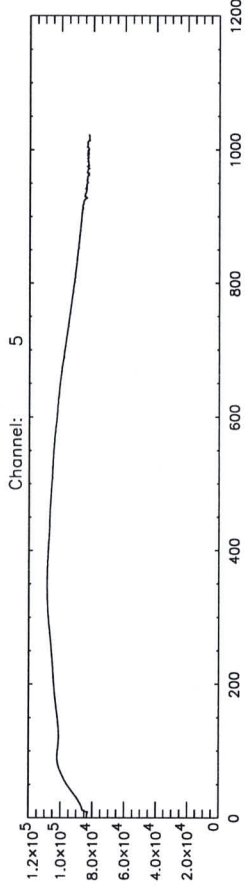
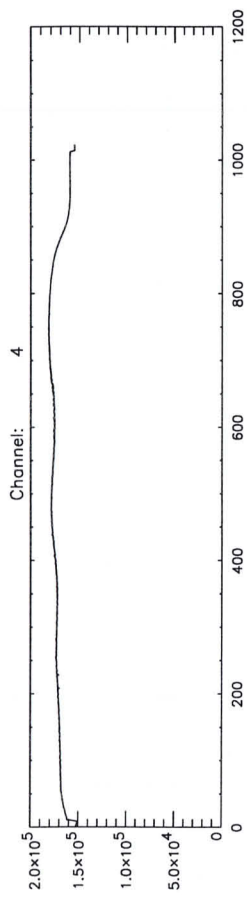
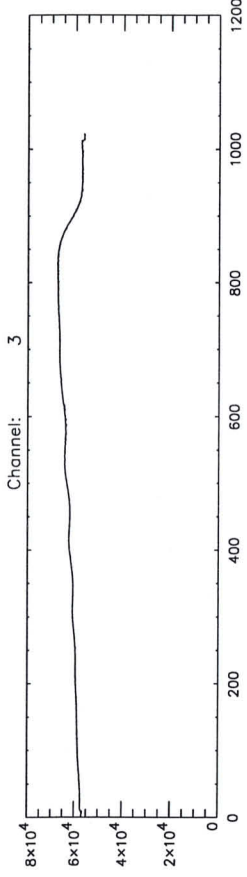
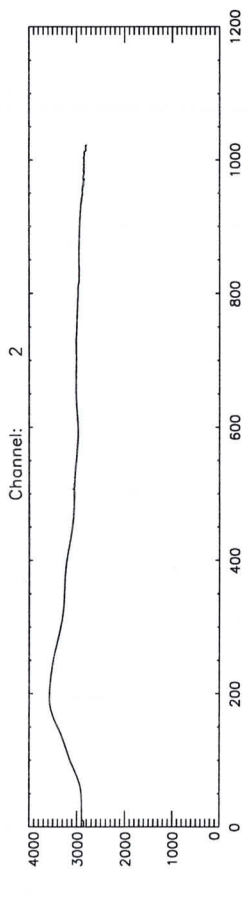
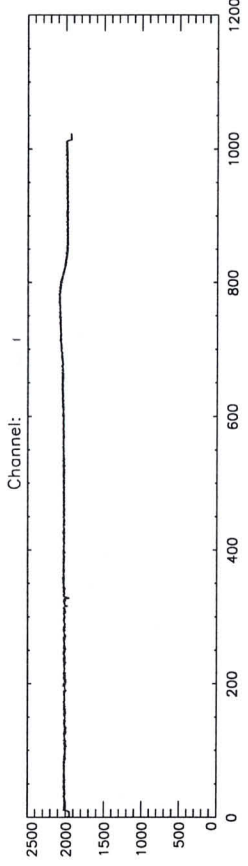


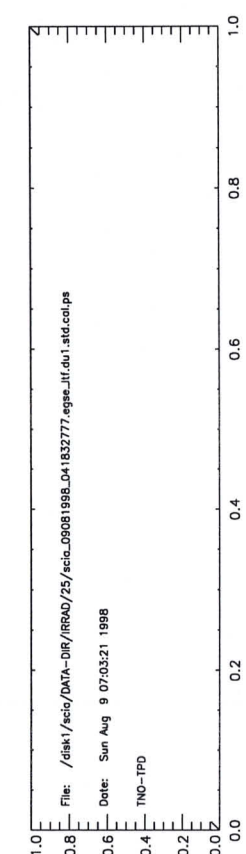
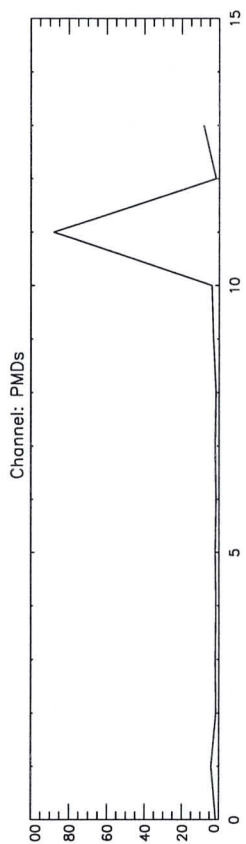
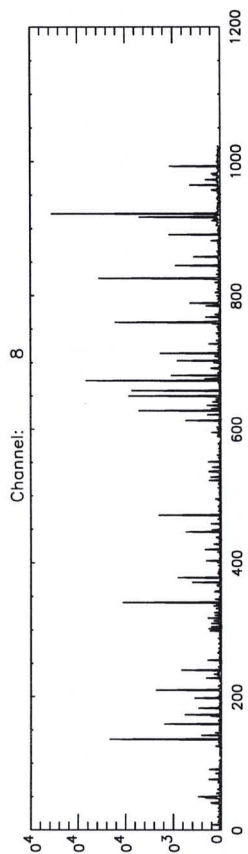
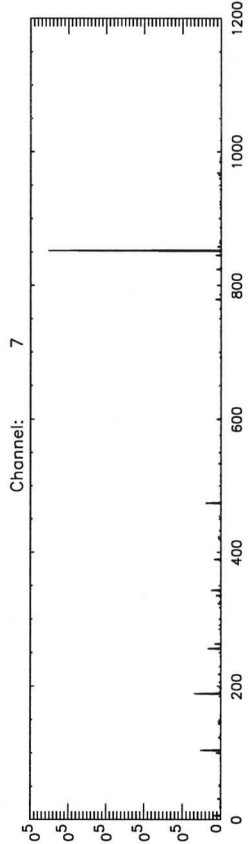
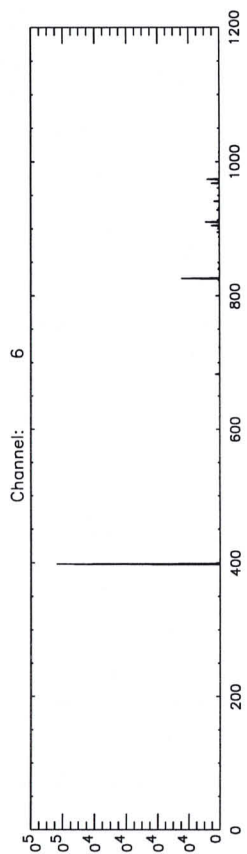
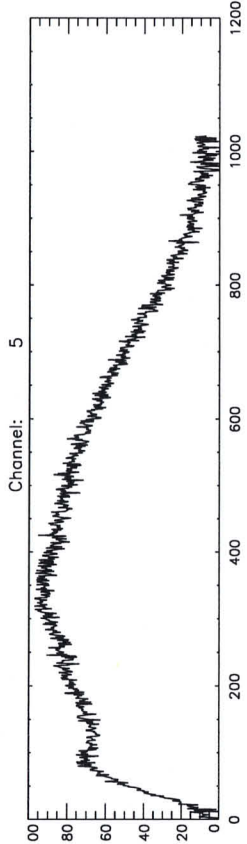
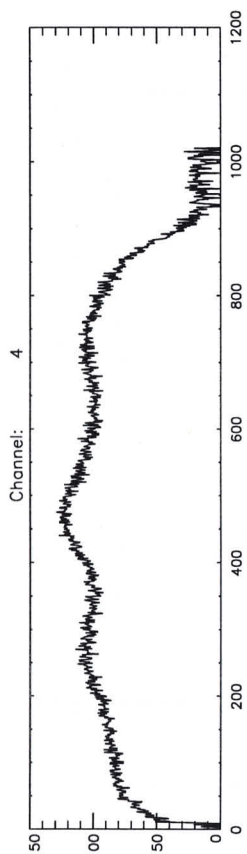
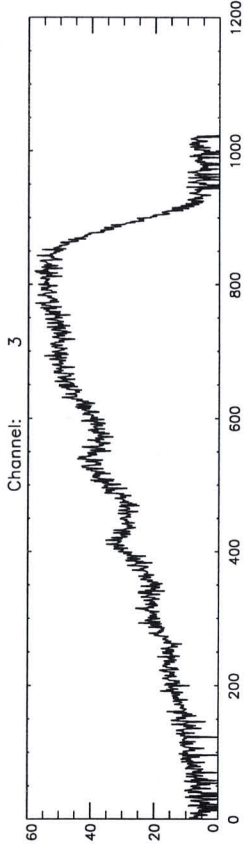
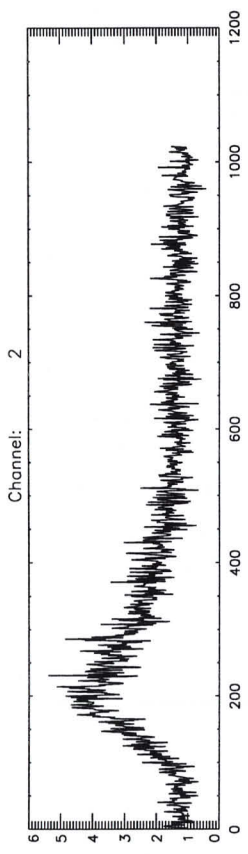
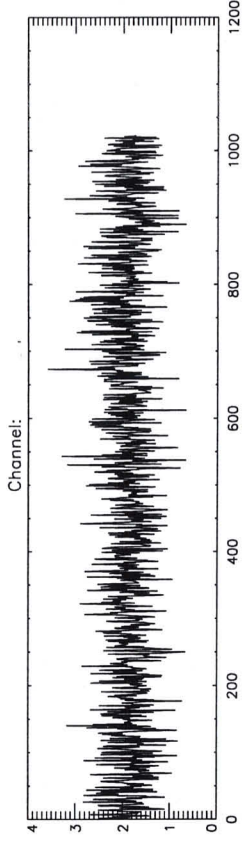
Sign:

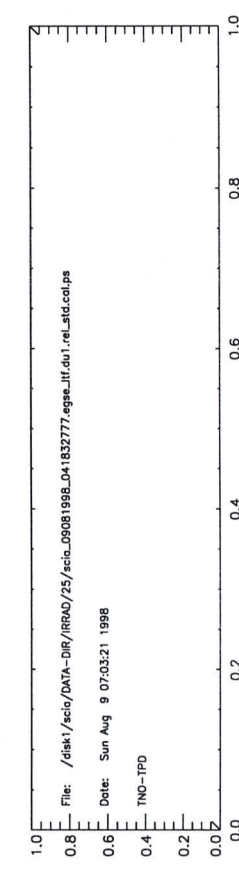
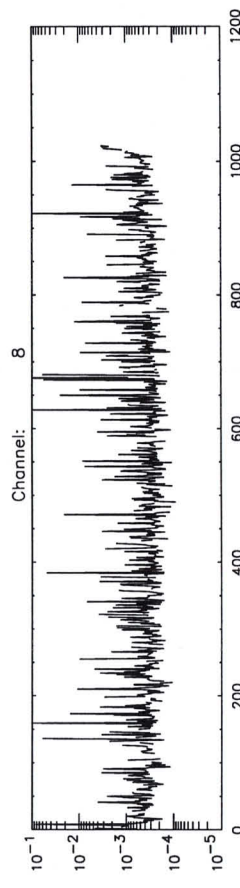
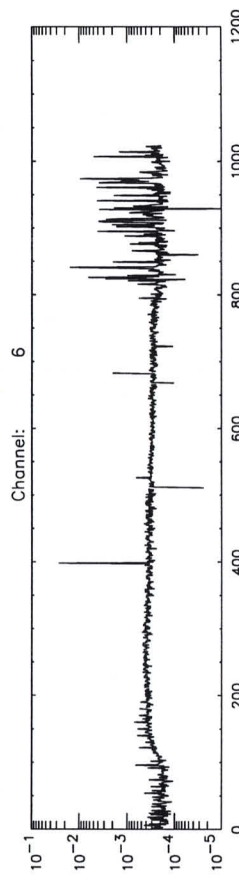
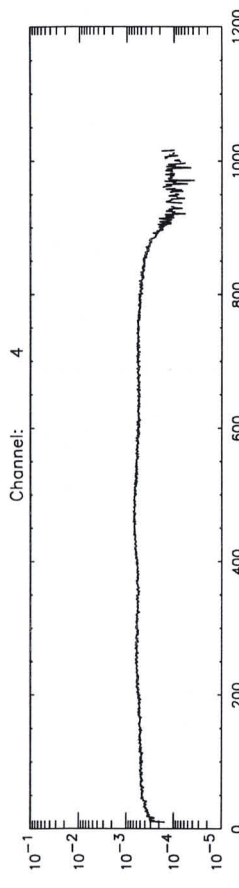
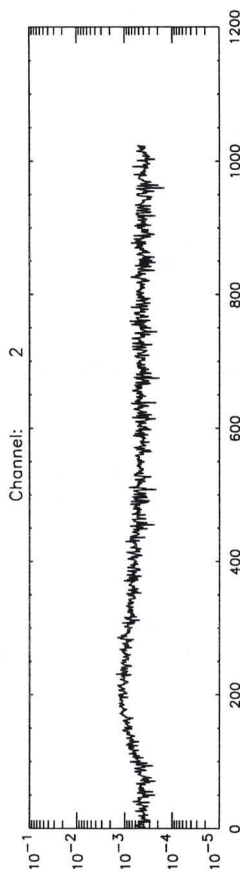
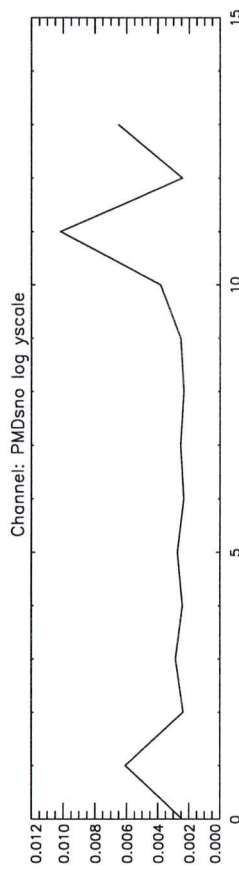
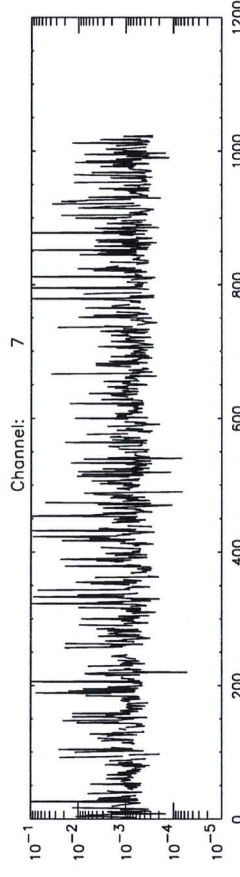
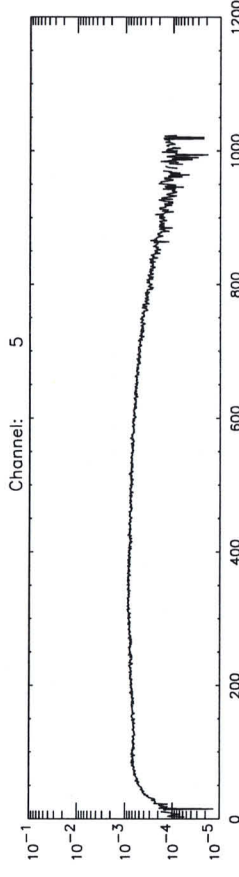
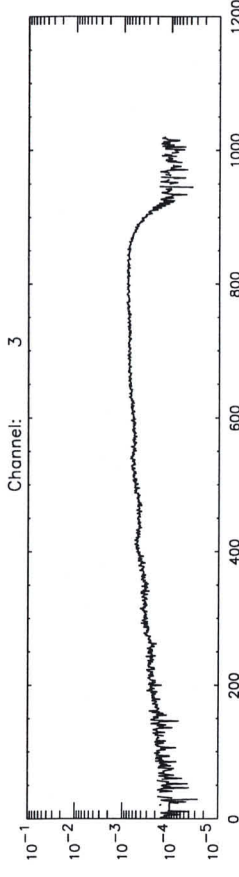
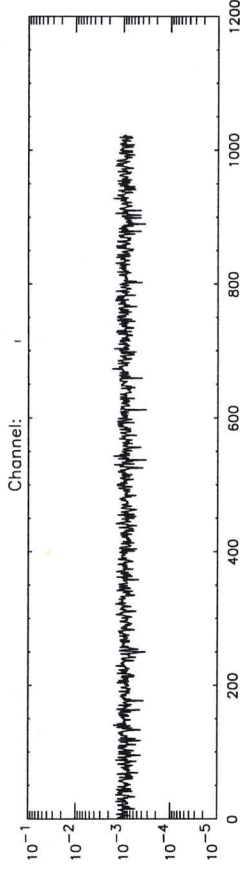
Name

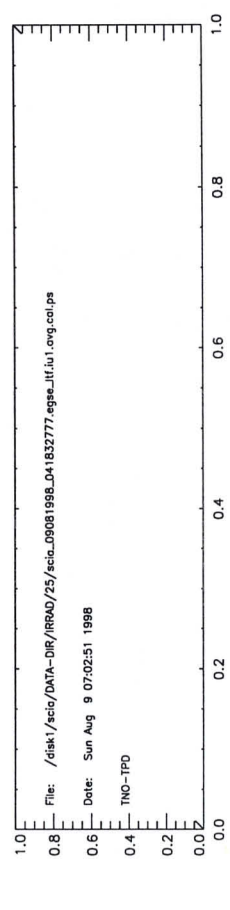
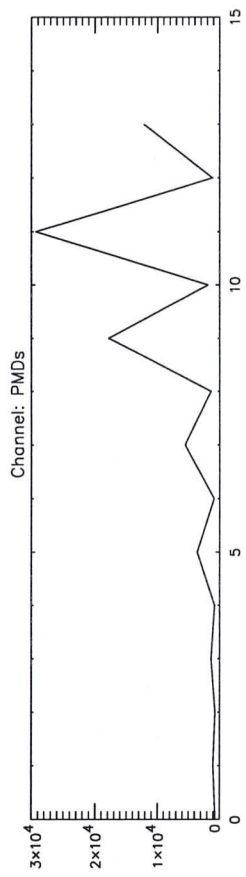
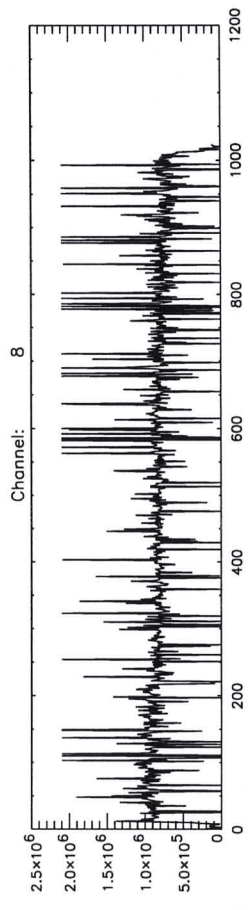
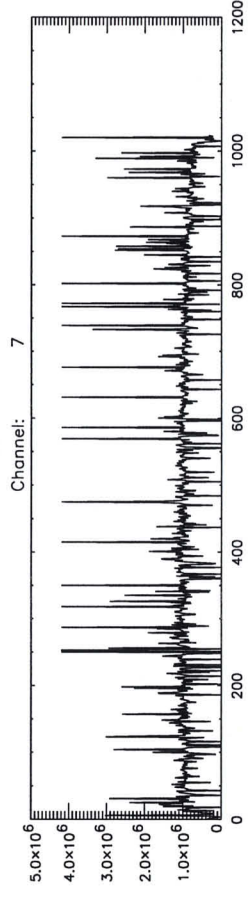
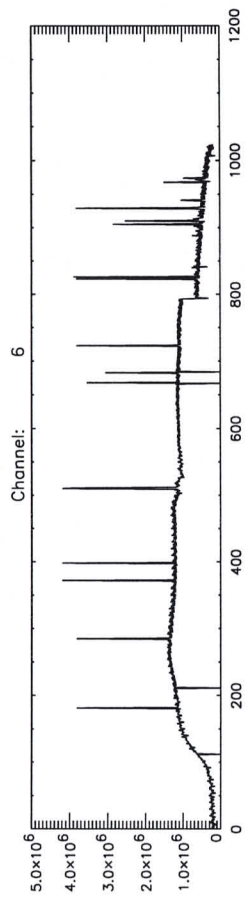
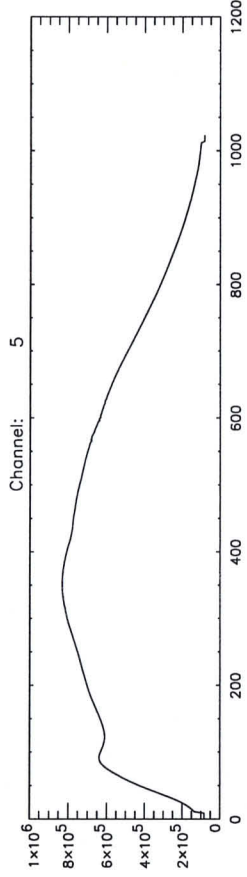
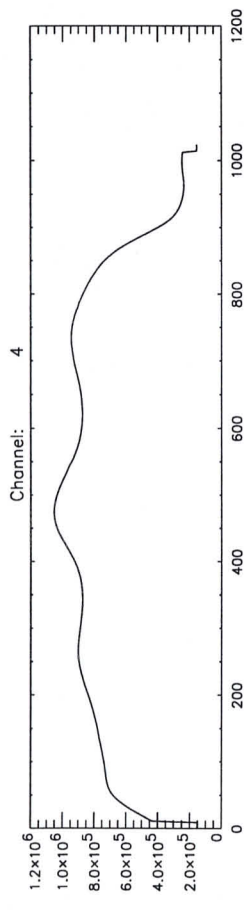
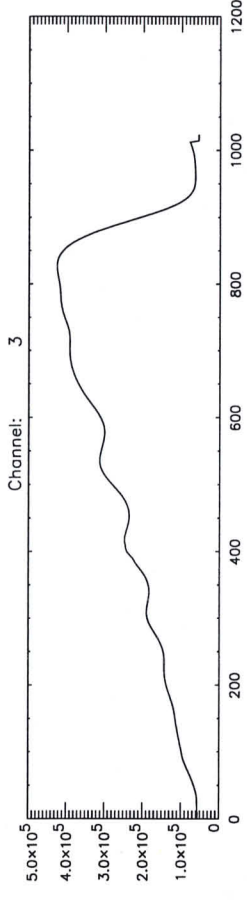
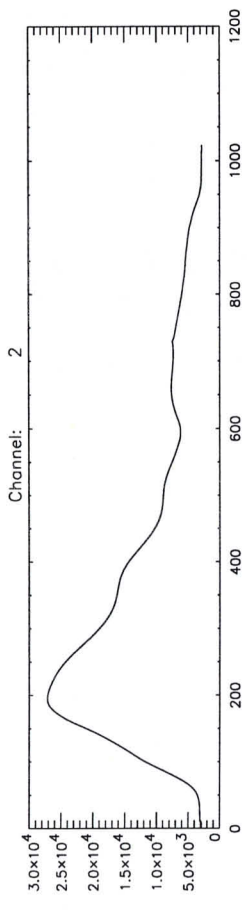
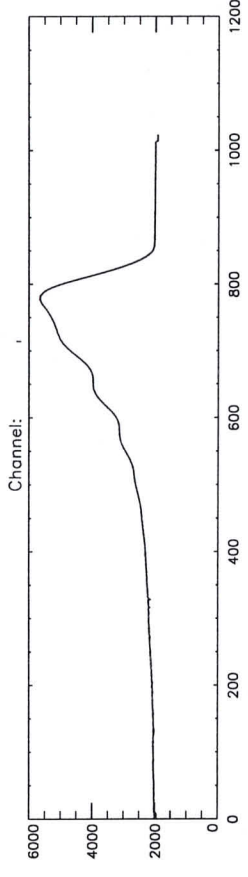
Date and time

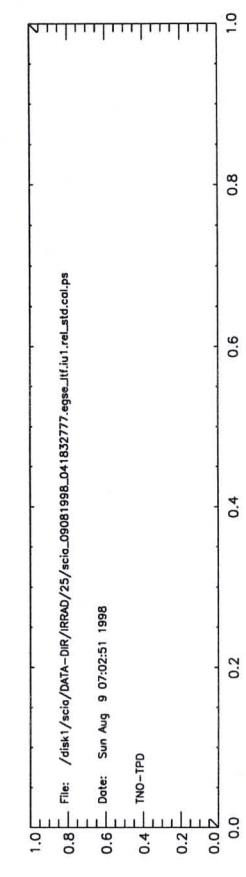
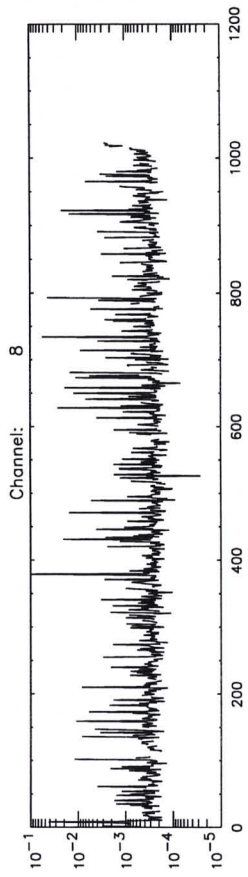
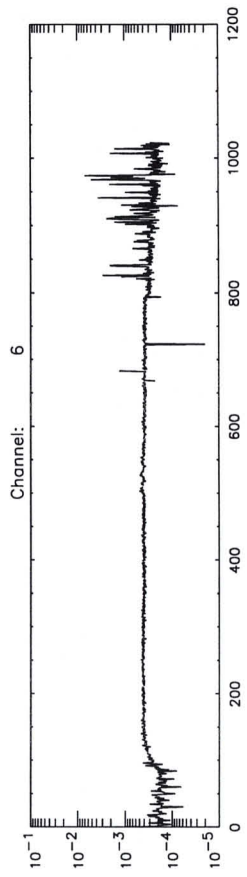
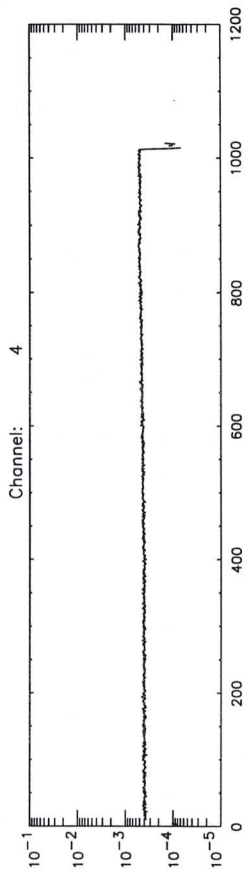
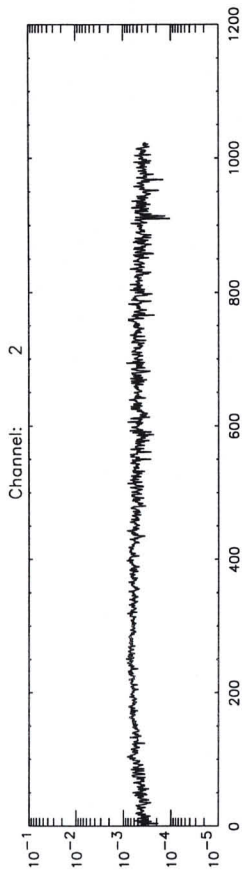
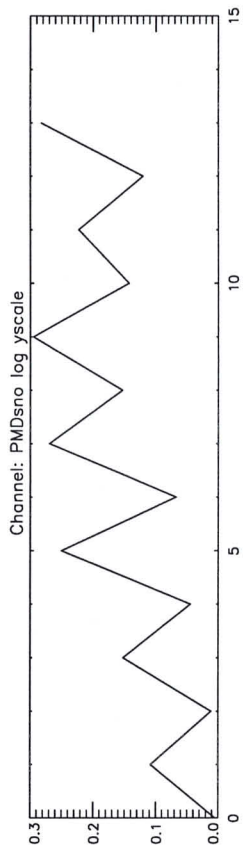
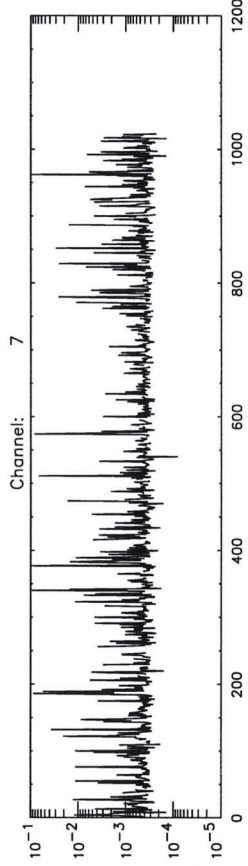
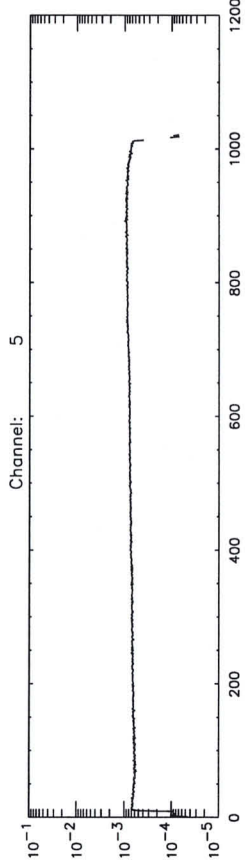
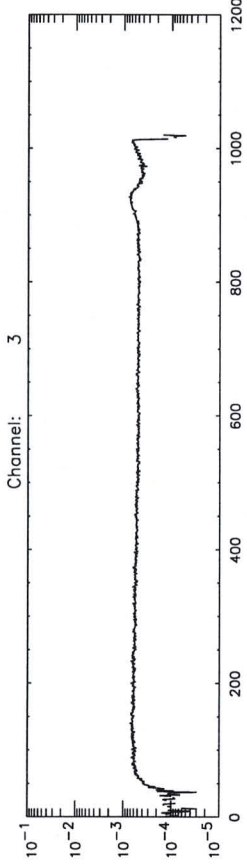
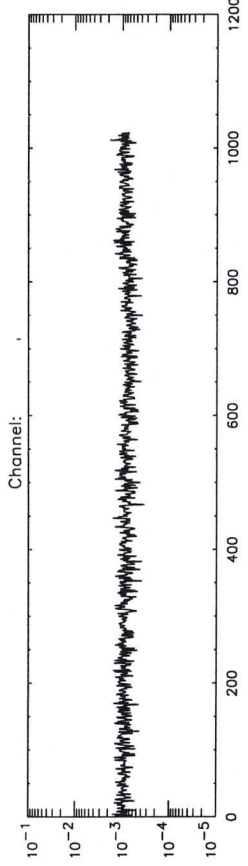
Signature

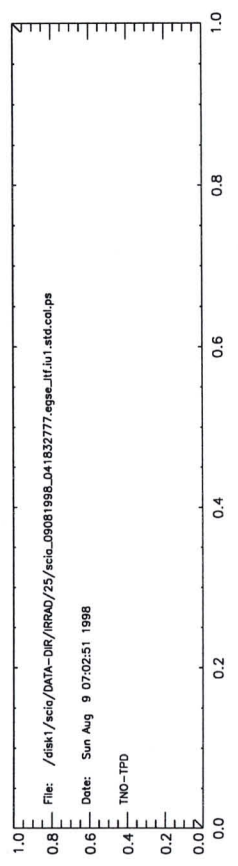
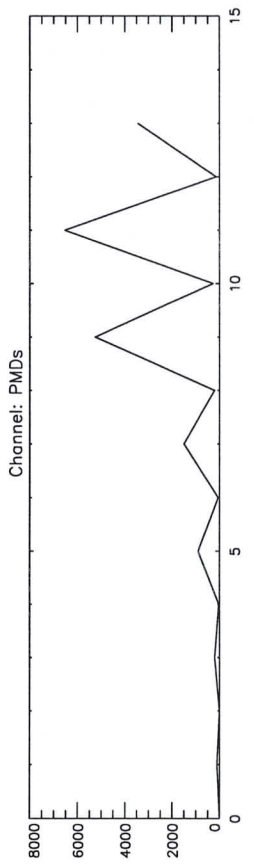
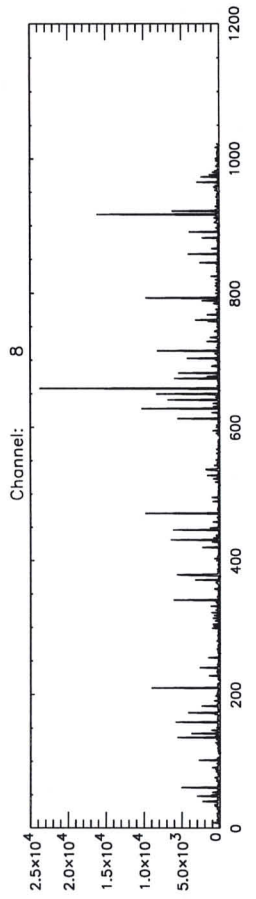
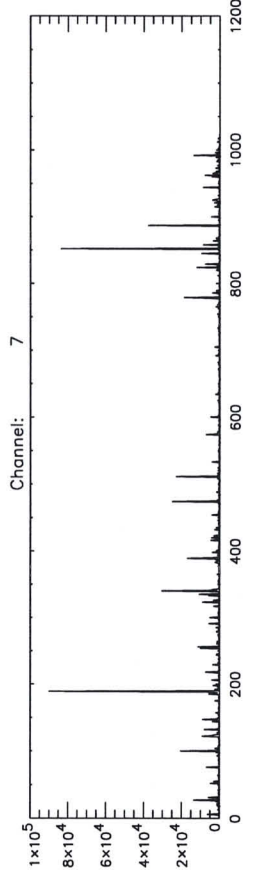
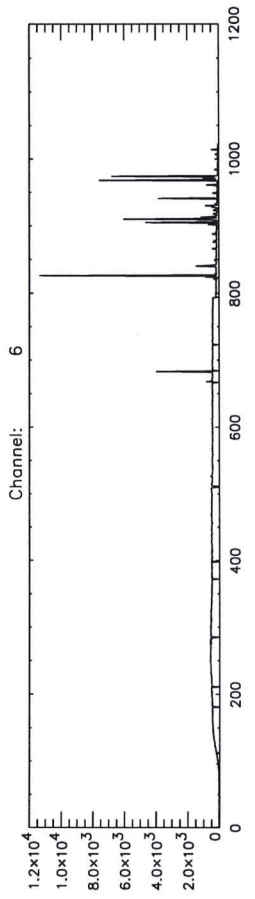
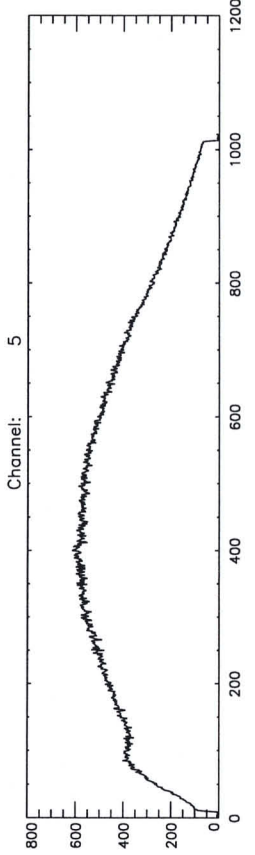
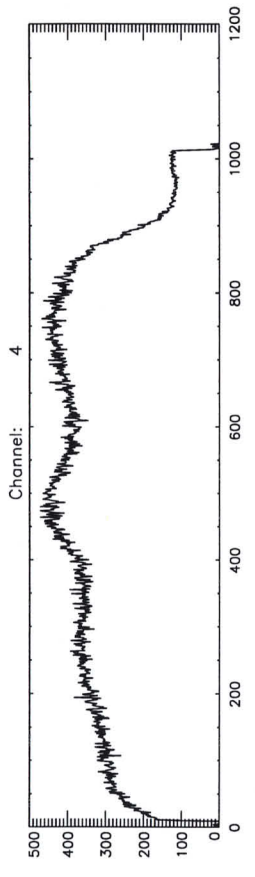
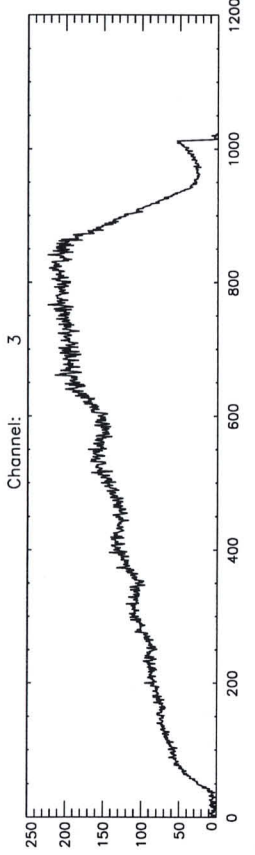
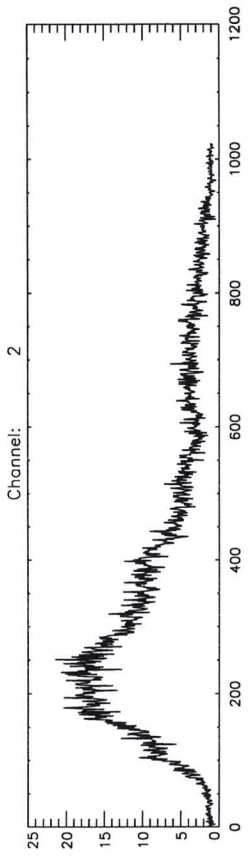
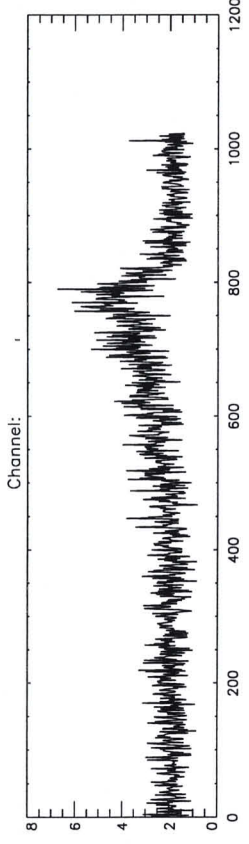












time = Sun Aug 9 07:03:21 1998

batch = du1

Start TOD = Sun 09-Aug-98 04:33:03

End TOD = Sun 09-Aug-98 04:44:29

Processing= computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 07:02:51 1998

batch = iu1

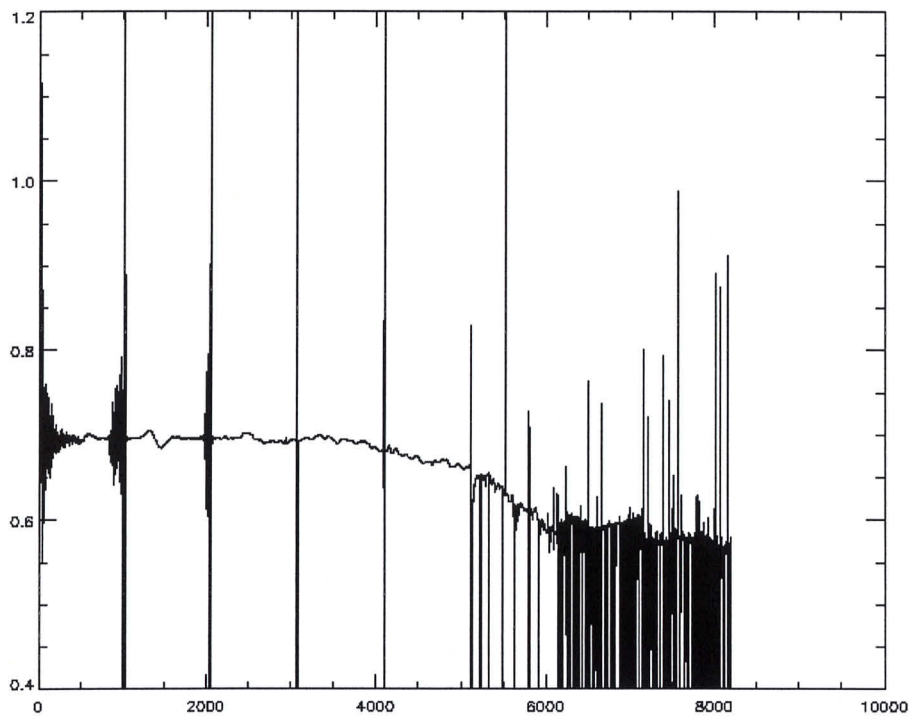
Start TOD = Sun 09-Aug-98 04:19:00

End TOD = Sun 09-Aug-98 04:33:03

Processing= computation of average, standard dev. and rel.standard dev.

$$\text{ratio} \frac{25}{24} = \frac{+0,5}{+1.00}$$

zoude boost-
conclusie. helpt niet.



expet_ratio. 25 - div -24. ps.

```
#!/bin/sh
mv f0 dapbchklog
mv f1 dapbseqlog
mv f2 egse.inf
mv f3 expert_ratio.25-div-24.ps
mv f4 gemsmpara.dat
mv f5 hk_ccb.dat
mv f6 scia_09081998_041832777.dat
mv f7 scia_09081998_041832777.egse_ltf
mv f8 scia_09081998_041832777.egse_ltf.du1.avg.cal
mv f9 scia_09081998_041832777.egse_ltf.du1.avg.cal.ps
mv f10 scia_09081998_041832777.egse_ltf.du1.log
mv f11 scia_09081998_041832777.egse_ltf.du1.rel_std.cal
mv f12 scia_09081998_041832777.egse_ltf.du1.rel_std.cal.ps
mv f13 scia_09081998_041832777.egse_ltf.du1.std.cal
mv f14 scia_09081998_041832777.egse_ltf.du1.std.cal.ps
mv f15 scia_09081998_041832777.egse_ltf.iu1.avg.cal
mv f16 scia_09081998_041832777.egse_ltf.iu1.avg.cal.ps
mv f17 scia_09081998_041832777.egse_ltf.iu1.log
mv f18 scia_09081998_041832777.egse_ltf.iu1.rel_std.cal
mv f19 scia_09081998_041832777.egse_ltf.iu1.rel_std.cal.ps
mv f20 scia_09081998_041832777.egse_ltf.iu1.std.cal
r f21 scia_09081998_041832777.egse_ltf.iu1.std.cal.ps
```



```
#!/bin/sh
mv dapbchklog f0
mv dapbseqlog f1
mv egse.inf f2
mv expert_ratio.25-div-24.ps f3
mv gemsmpara.dat f4
mv hk_ccb.dat f5
mv scia_09081998_041832777.dat f6
mv scia_09081998_041832777.egse_ltf f7
mv scia_09081998_041832777.egse_ltf.du1.avg.cal f8
mv scia_09081998_041832777.egse_ltf.du1.avg.cal.ps f9
mv scia_09081998_041832777.egse_ltf.du1.log f10
mv scia_09081998_041832777.egse_ltf.du1.rel_std.cal f11
mv scia_09081998_041832777.egse_ltf.du1.rel_std.cal.ps f12
mv scia_09081998_041832777.egse_ltf.du1.std.cal f13
mv scia_09081998_041832777.egse_ltf.du1.std.cal.ps f14
mv scia_09081998_041832777.egse_ltf.iu1.avg.cal f15
mv scia_09081998_041832777.egse_ltf.iu1.avg.cal.ps f16
mv scia_09081998_041832777.egse_ltf.iu1.log f17
mv scia_09081998_041832777.egse_ltf.iu1.rel_std.cal f18
mv scia_09081998_041832777.egse_ltf.iu1.rel_std.cal.ps f19
mv scia_09081998_041832777.egse_ltf.iu1.std.cal f20
r scia_09081998_041832777.egse_ltf.iu1.std.cal.ps f21
```


LOG SHEET SCIAMACHY CALIBRATION

date/time	description of action	measurement filename
0900-00	Al baffles made by Bert removed new black baffles on top of Al test rail	
7:8:00 UTC	Dark and light seems ok	
	Ratio with Bert's last measurement deviates i.e. less UV and More NIR	

Formal Run of Measurement

(Measurement ID) **Irrad_Limb**

Request for Actual Status

Request for Modification

Request for Run

<input checked="" type="checkbox"/>

(cross out entries that are not requested.)

(fill in only entries to be modified)

(no entries = run based on actual default settings)

Scanner Positions

Azimuth **-45** deg
Elevation **+165** deg

Timeline for each Data Acquisition Period during Measurement

State ID	1	2	3	4	5	6	7	8	9	10
Repetitions	39									
	10									

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	64	1						
1b	64	1						
2b	64	1						
2a	64	1						
3	4	16						
4	1	64						
5	2	32						
6	0.5	64						
7	1	64						
8	2	32						
State ID								

Min + 1 M
§6.9.4

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Test Purpose

Remark

Data Directory

UID31
No black-box
0221_05.28.07_IRRAD_LIMB

Signatures

Issued

< Performed

Date	Signature
9.9.98	A. Auer

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090898</u>	
	What's the name of the (main) data input files generated by the EGSE? (*.dat)	<u>scia_09081998_060148196.dat</u>	
	Setup a three-window configuration on your SUN.		see course descr.
Cnstr directory	cd ~/DATA-DIR/IRRAD ; ls -l highest number in directory? New directory: mkdir <B+1> ls -l What's now the highest number in directory? <C> should be + 1 directory name is:	<u>25</u> <u>26</u>	Note: In window DATA-DIR (B) (C) (DIR-NAME)
Copy data	See Analysis sheet: Transfer Data File	<input checked="" type="checkbox"/> Y	In DATA-DIR window
Cnstr EGSE_LTF	cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled) ls -l *.egse_ltf What's the name of the egse_ltf file <D> should be <A>.egse_ltf	<input checked="" type="checkbox"/> Y <u>scia_09081998_060148196.egse_ltf</u>	Note: In window DATA-DIR; don't forget the dot !!!; May take more than 15 mins. (D)
Cnstr CAL files	idl run_averscia (and select file <D> when asked)		Note: In window IDL
Check CAL files	Dark files: ls -l *du*.cal		In DATA-DIR window

size: 145998 b should be approx 150Kb

`ls -l *iu*.cal`

size: 145998 b should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print

postscript Print postscript files:

`lpr -P<printer> *.ps`
 Contents dark file
`*du*.avg.cal.ps`
 should be approx. constant within channels: Y / N
 Contents light file
`*iu*.avg.cal.ps`
 should resemble white light source: Y / N

Contents of
`*rel_std*.ps` files
 should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y / N
 If not, value is: _____

Add postscript images to logbook, done Y / N

`lpr -P<printer> *.log`
 Print logfiles
 Add logfiles to logbook, done Y / N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL
~~ls~~ ls -l

In DATA-DIR window

highest number in dir?

mkdir <B1>+1

<B1>

Now highest number in dir?

<C1>

<C1> should be <B1>+1

Y/N

Dir name is :

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dirname>

Let <D1>, <D2>, <D3>
directories containing

irradiance measurements

(thus, <D1>, <D2>, <D3>

are of the form

~/DATA+DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/*.du*.avg.cal <Dirname>

cp <D1>/*.iu*.avg.cal <Dirname>

cp <D2>/*.du*.avg.cal <Dirname>

cp <D2>/*.iu*.avg.cal <Dirname>

cp <D3>/*.du*.avg.cal <Dirname>

cp <D3>/*.iu*.avg.cal <Dirname>

~~cd~~ cd

<Dirname>

ls -l

Copied files present? Y/N.

Proceed with page 3.

let op; line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the *.cal file

IRRadiance processing <lightfile> is measured.

Run radiance idl do_irradiance

In IDL window

Check irradiance

ls -l *
 Size of file
 <D>.du*.cal.p1 _____
 Size of file
 <D>.du*.cal. *f455.p2* _____
201.dux.cal.f456.p2
 Size of file
 <D>*.p1.*.log _____

Check irradiance visually

lpr -P<printer> *p[12]*.ps
 Value of P1 and P2 file resemble white light source? Y / N
 Add postscript images to logbook, done Y / N

Print logfiles

lpr -P<printer> *p[12]*.plog
 Add logfiles to logbook, done Y / N



Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).
 Name of backup CDs _____

Back up

See analysis sheet BackUp



limb irradiance

Sign:

Name

Date and time

Signature

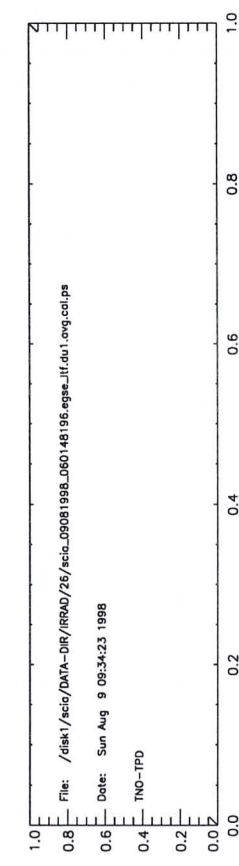
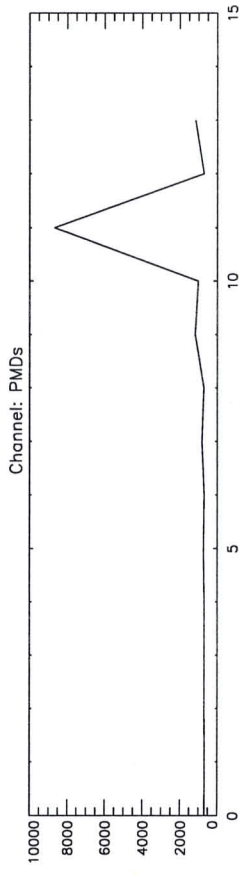
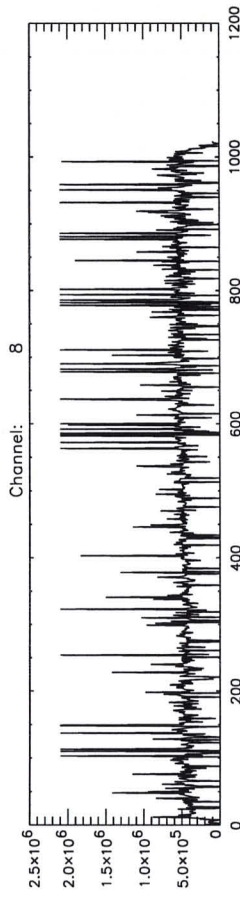
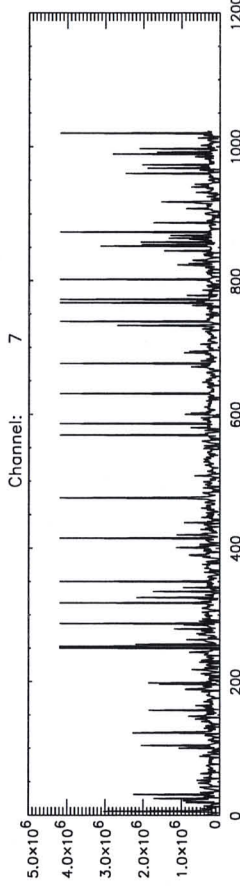
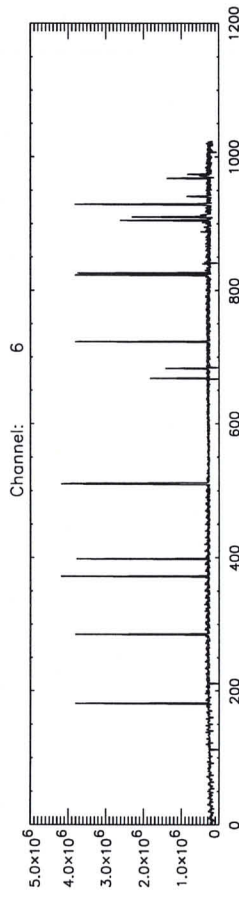
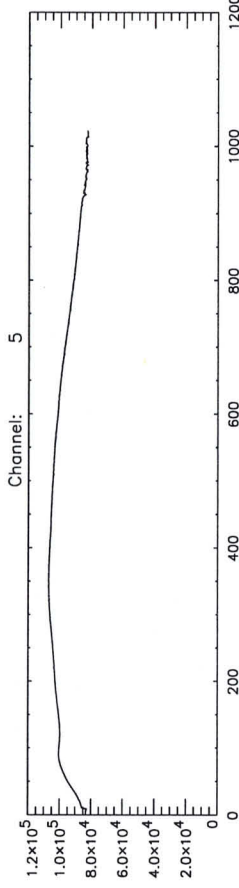
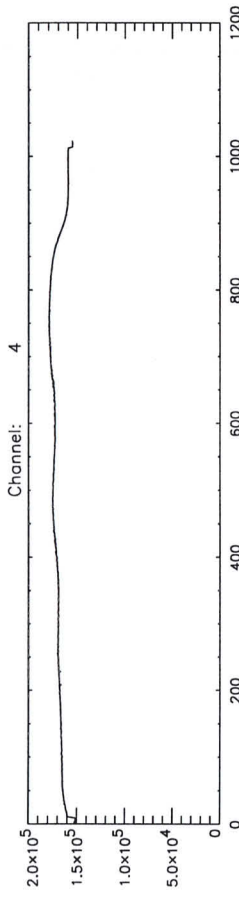
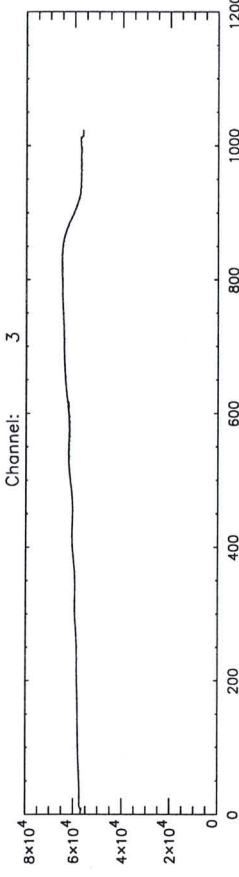
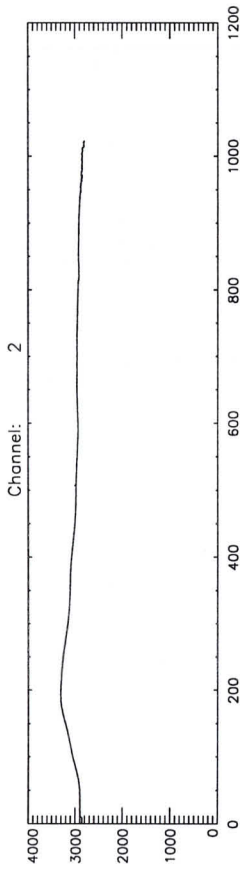
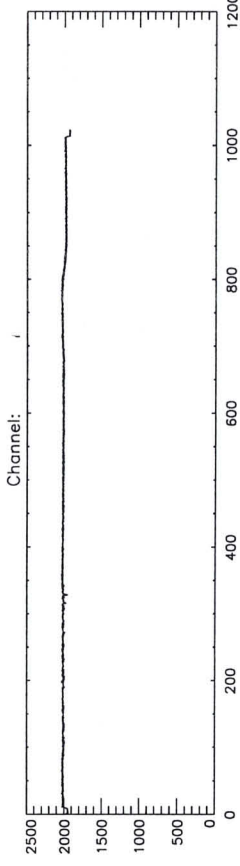
Marion
090897 7.40 UTC
M. Stepp

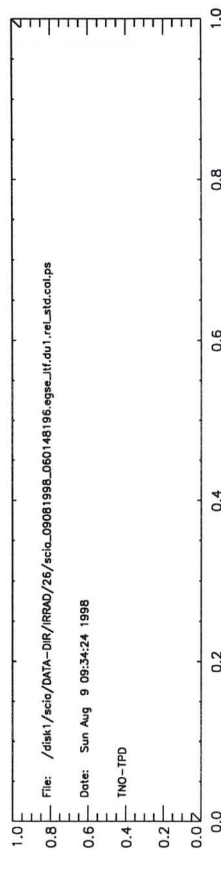
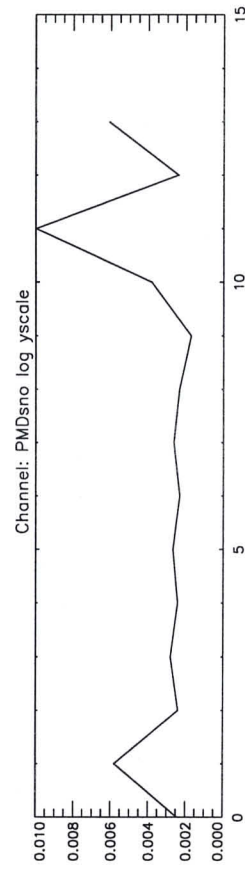
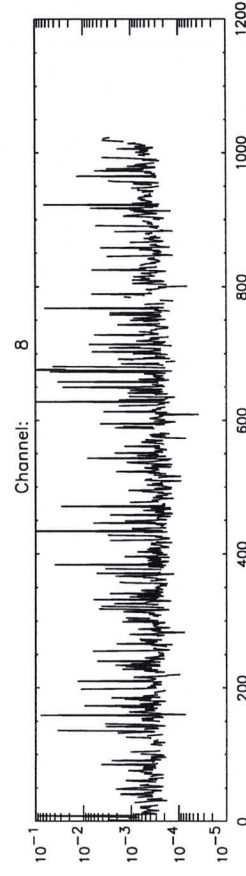
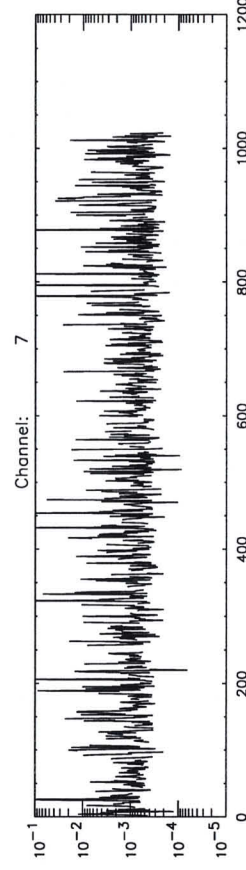
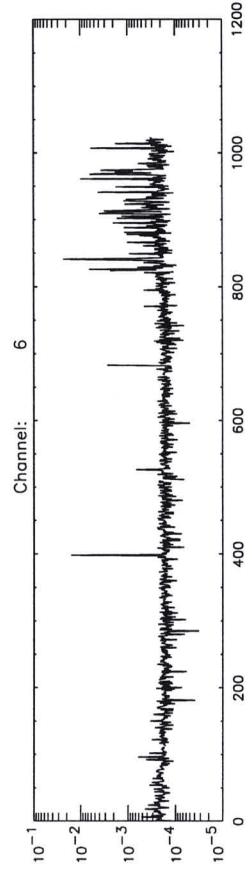
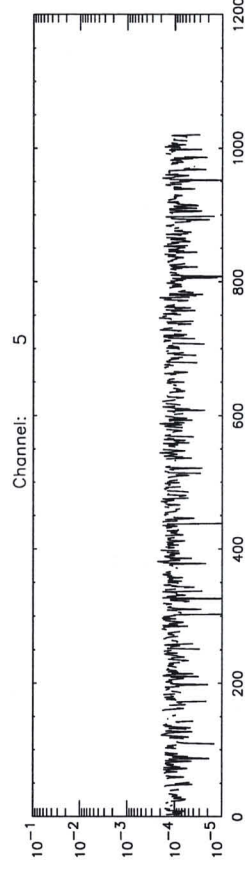
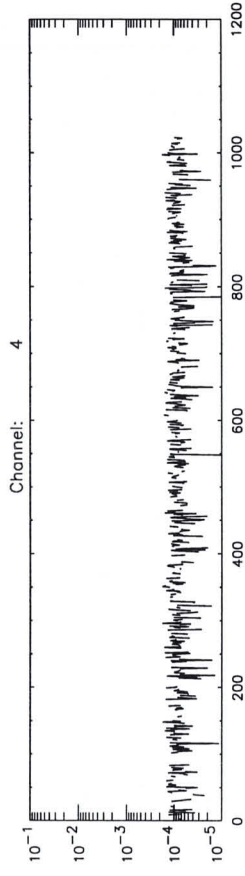
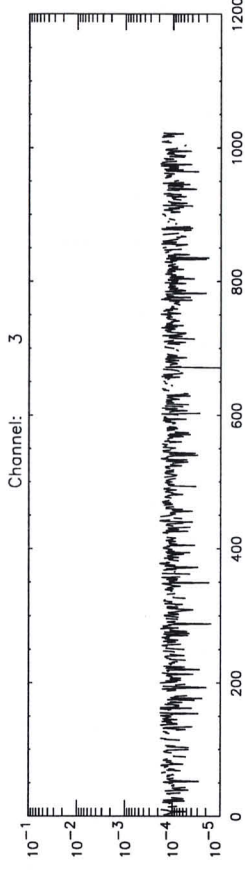
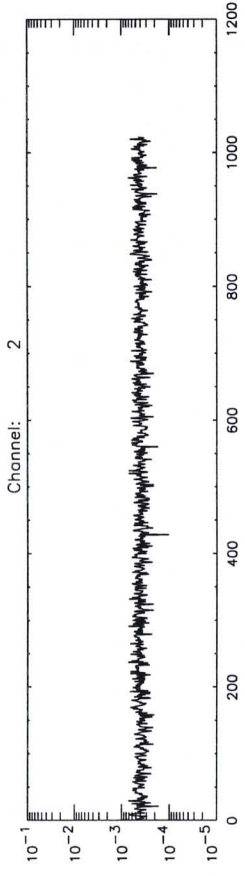
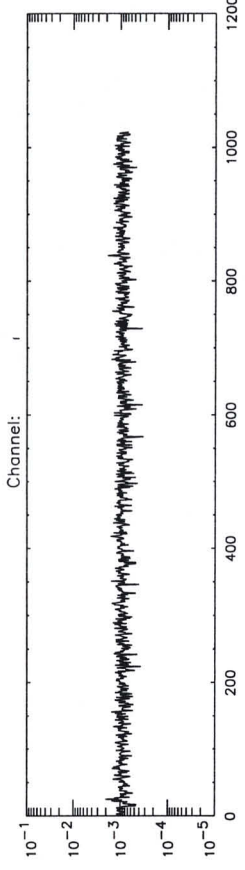
Transfer Data File

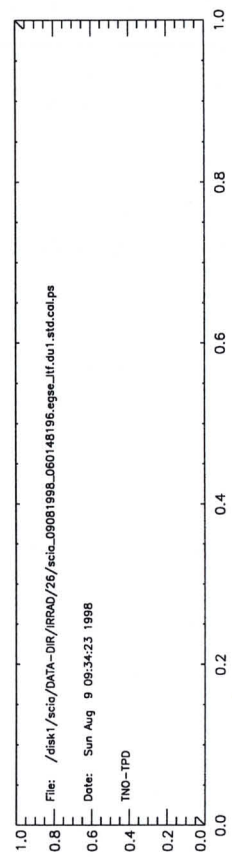
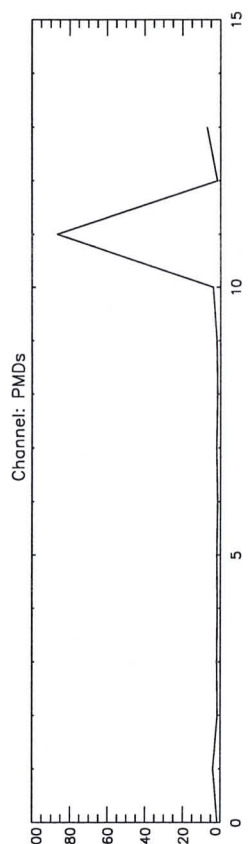
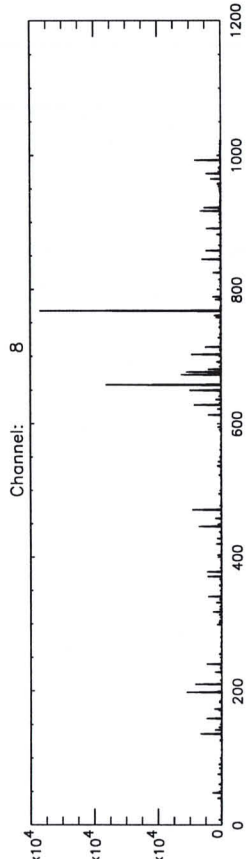
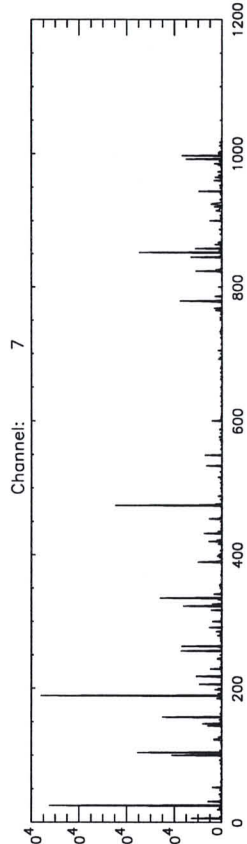
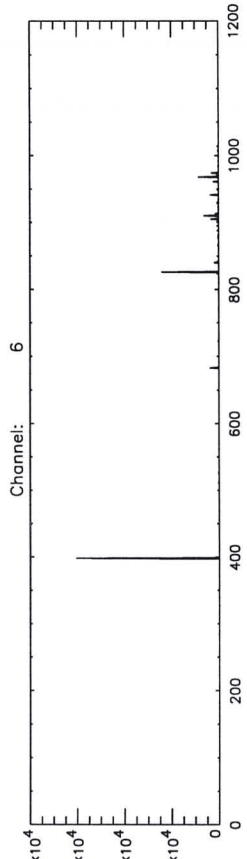
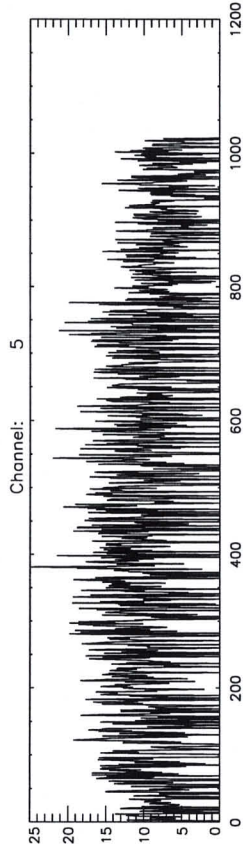
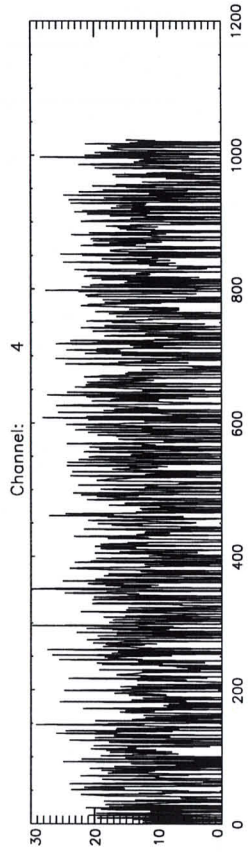
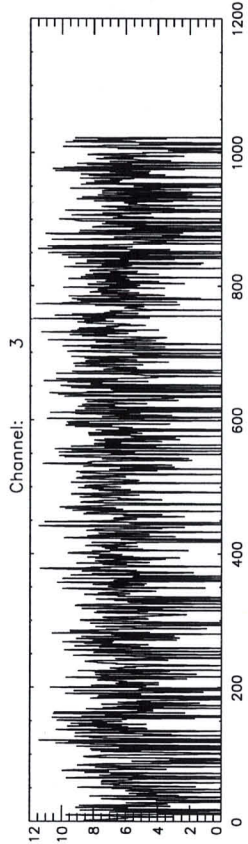
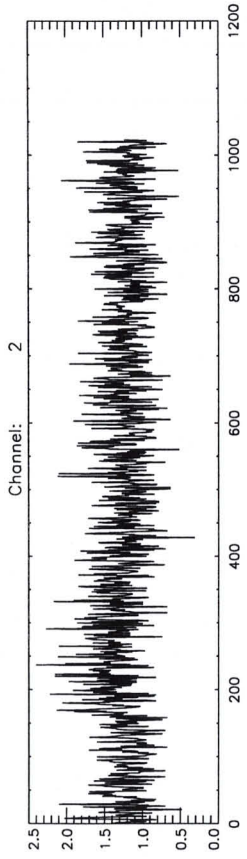
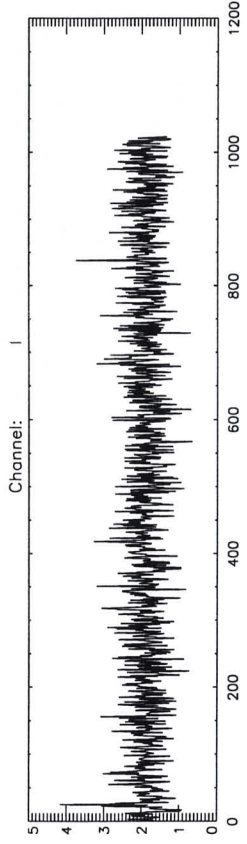
STEP	ACTION	RESULT	MARKER
Intro	Your name: Date: What's the name of the (main) data input files that you want to store on the SUN named scia6?	<u>Marion</u> <u>09-08-98</u> <u>0221-05.28.07-IRRAD-Limb</u> (A)	
	Setup a three-window configuration on your SUN.		See course descr.

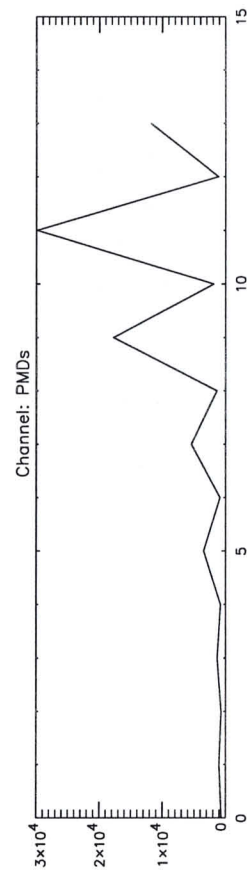
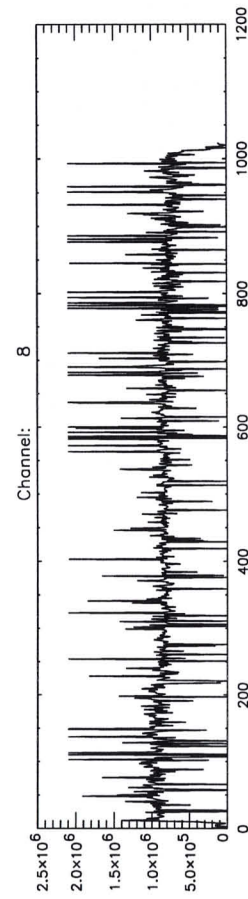
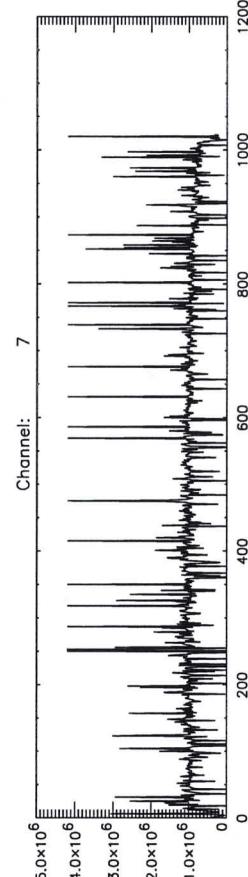
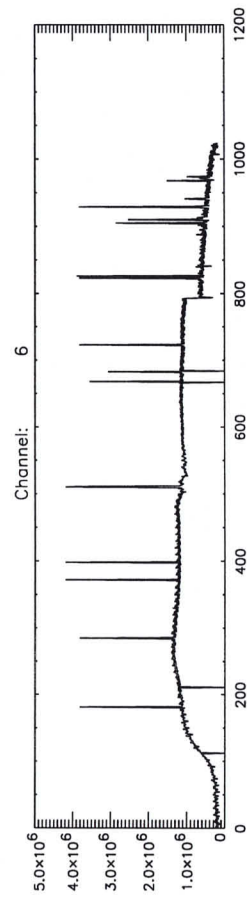
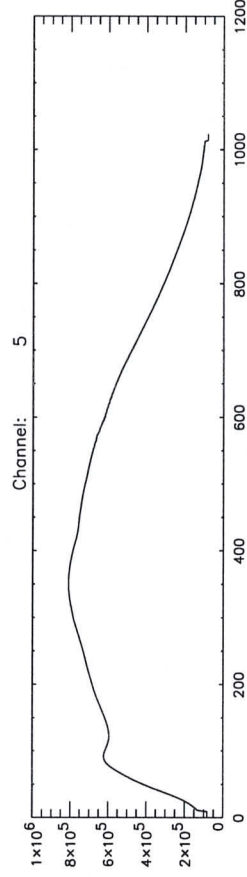
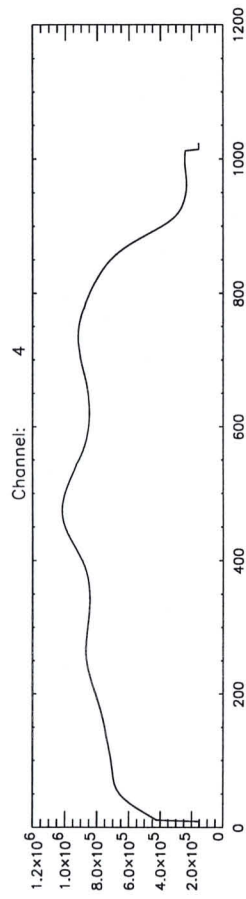
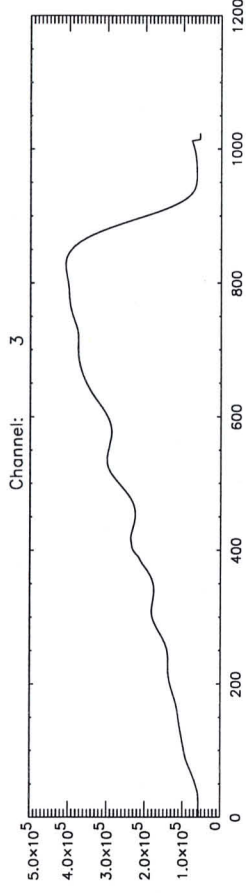
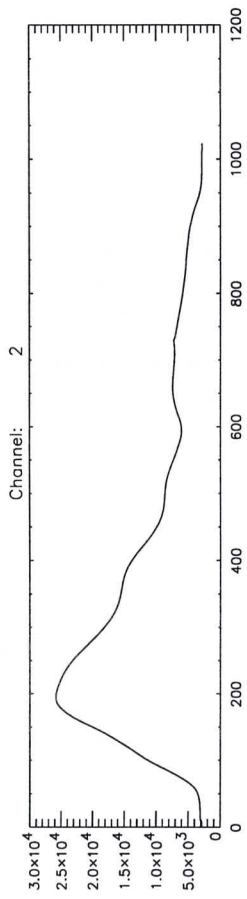
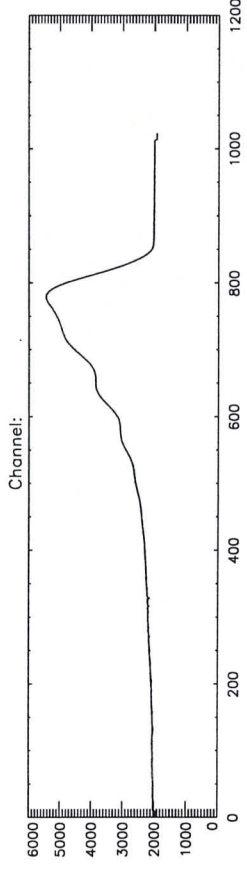
Do Transfer	Be sure that you are in the directory you want your files in ftp <internet-address>, where you can find the address of the PC in the file /etc/hosts (entry: cdwpc). The address will also be next to you on paper (most probably). When asked for user, fill in: anonymous, when asked for an email address, fill in your email address on TPD. Set in binary: binary mget * (and return y to every file). bye		In DATA-DIR window In DATA window Approx. 140 kB
-------------	---	--	--

Sign:	Name Date and time Signature	<u>Marion</u> <u>090898</u> 7:15 <u>M. J. [Signature]</u>
-------	------------------------------------	---





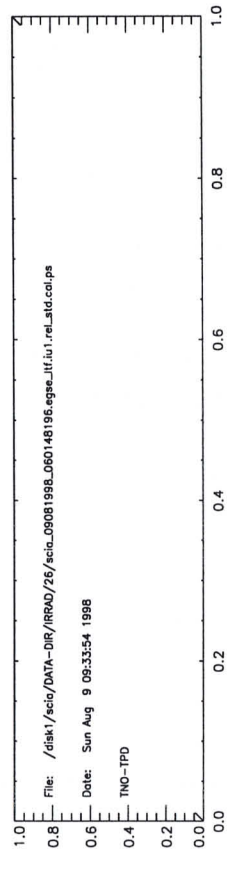
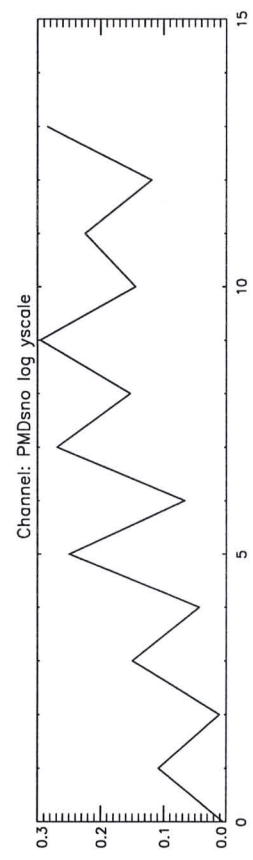
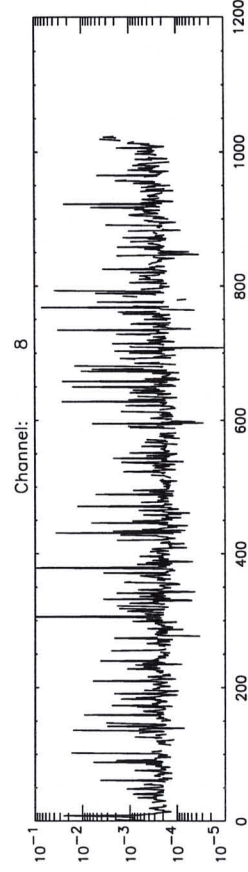
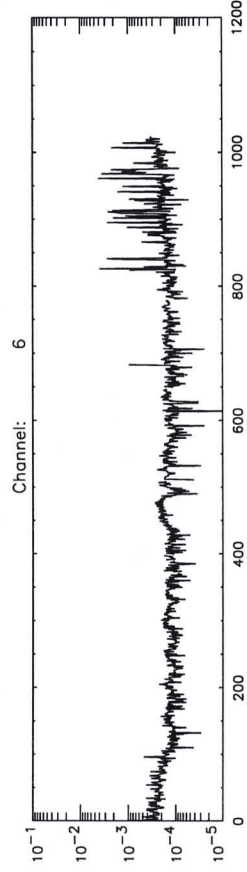
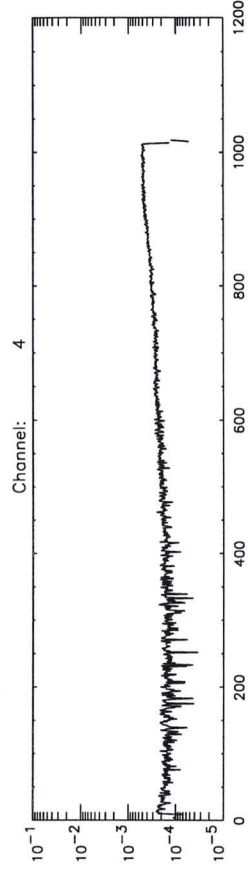
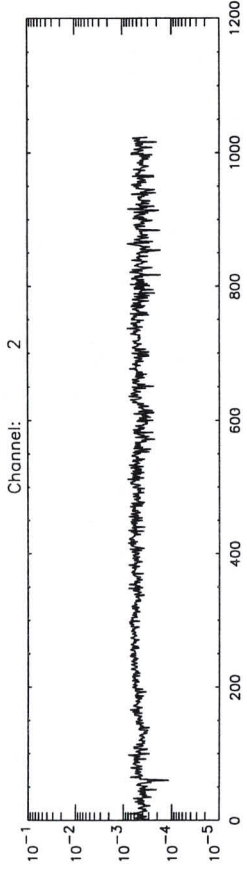
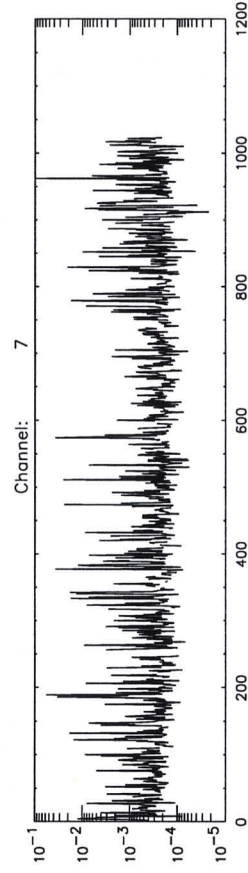
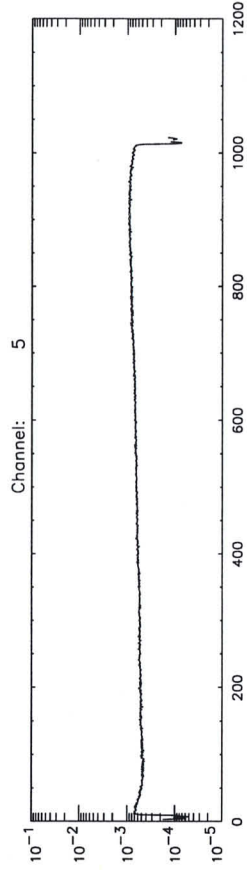
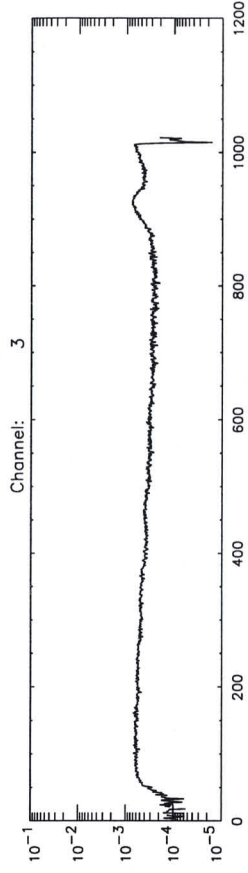
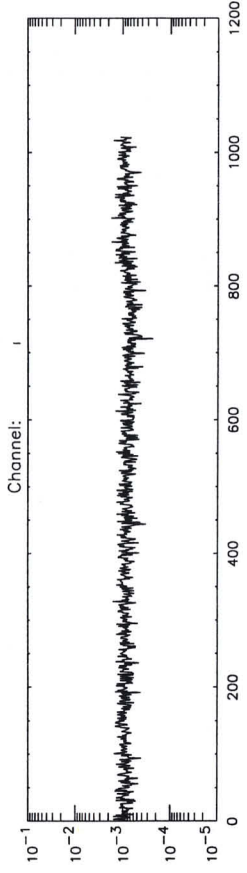


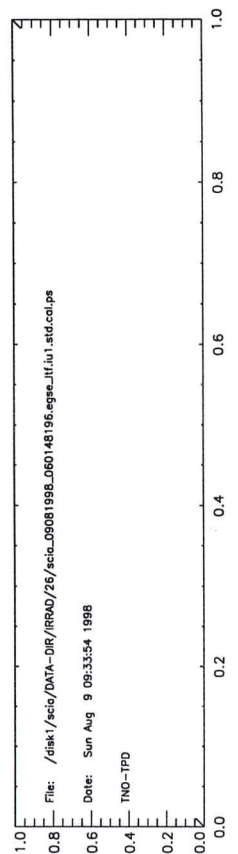
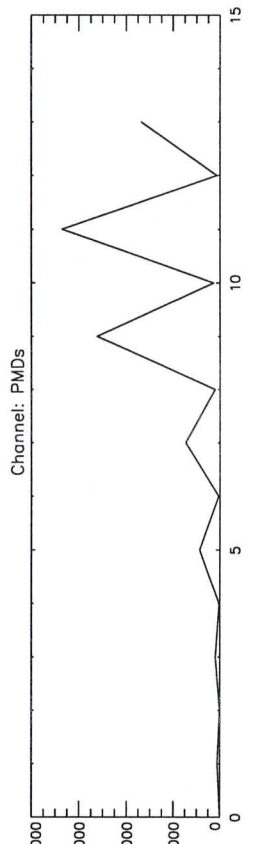
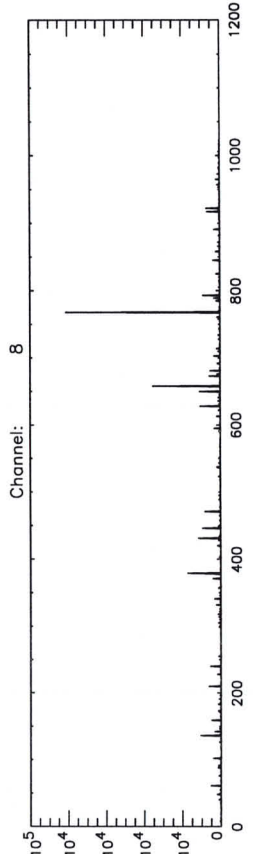
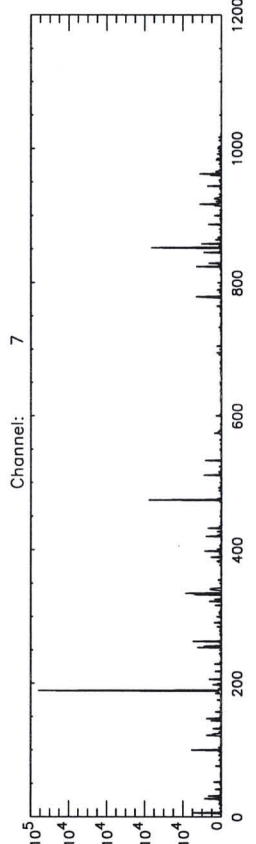
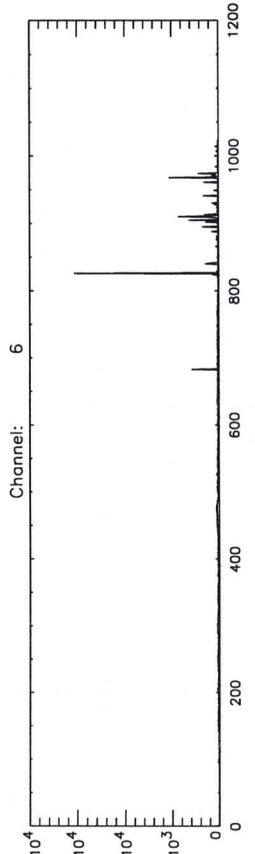
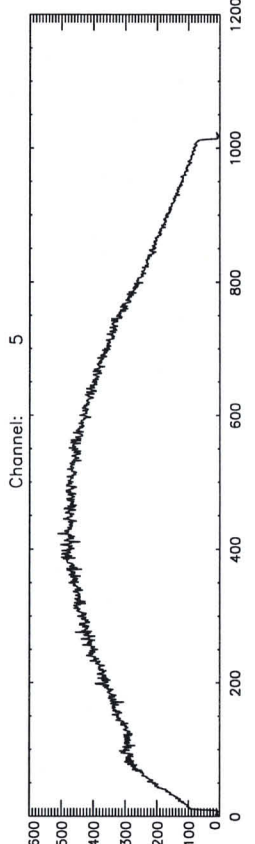
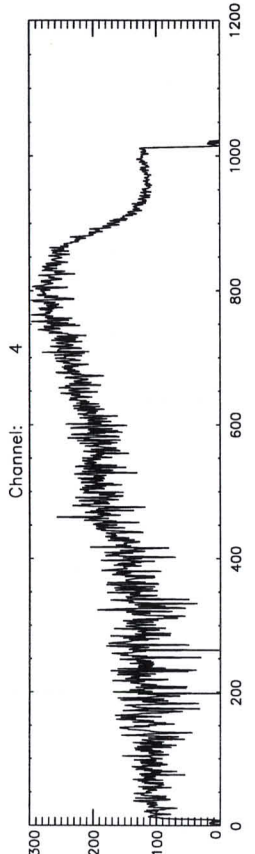
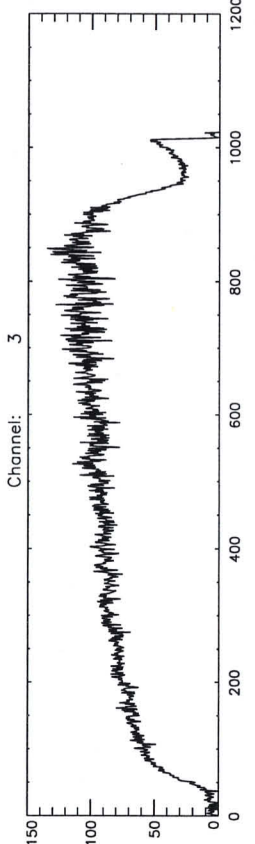
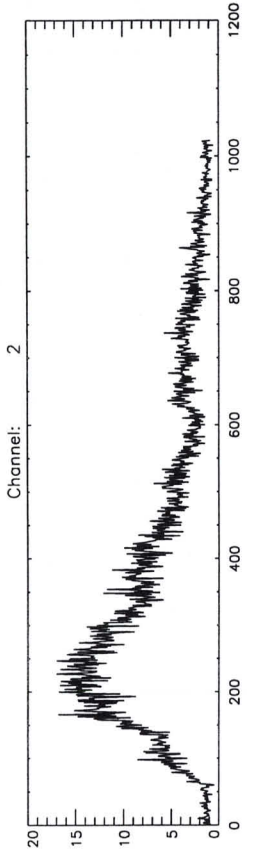
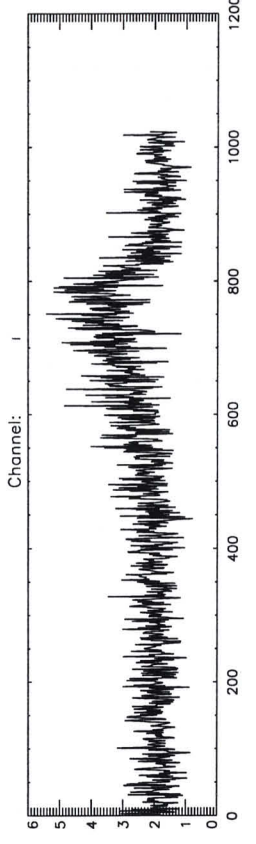


File: /disk1/scie/DATA-DIR/IRRAD/26/scie_09081998_060148196.egse_jf1.uv.org.csl.pa
Date: Sun Aug 9 09:33:53 1998
TNO-TPD

1.0
0.8
0.6
0.4
0.2
0.0

1.0
0.8
0.6
0.4
0.2
0.0





time = Sun Aug 9 09:34:24 1998

batch = du1

Start TOD = Sun 09-Aug-98 06:18:57

End TOD = Sun 09-Aug-98 06:30:22

Processing= computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 09:33:54 1998

batch = iu1

Start TOD = Sun 09-Aug-98 06:02:15

End TOD = Sun 09-Aug-98 06:18:57

Processing= computation of average, standard dev. and rel.standard dev.

26/25

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090890</u>	
	What's the name of the (main) data input file that you want to store in the SOC directory?	_____	(A)
	Setup a three-window configuration on your SUN.		See course descr.

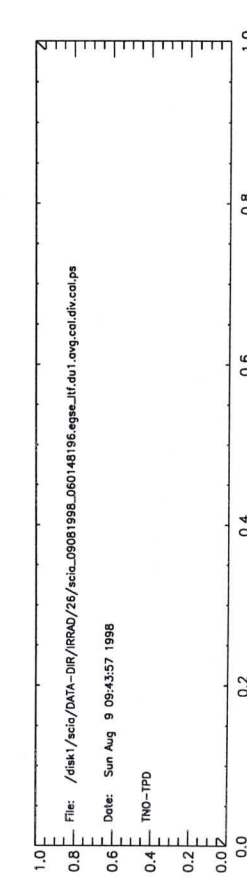
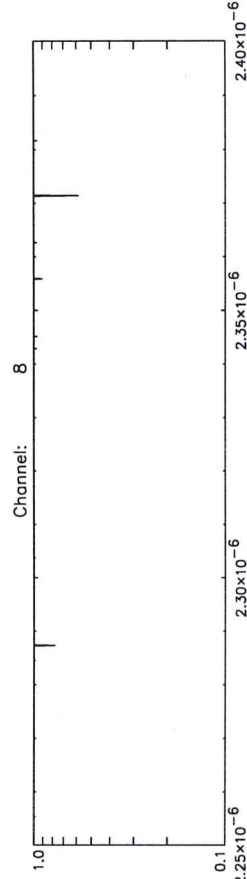
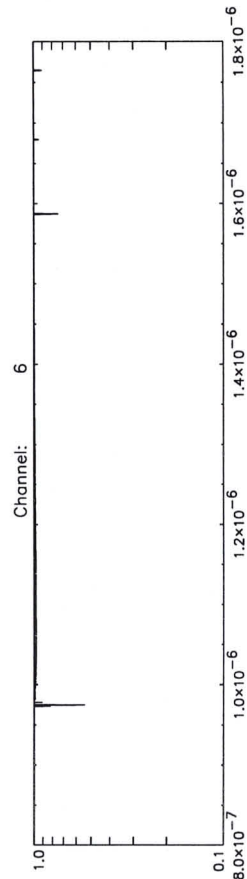
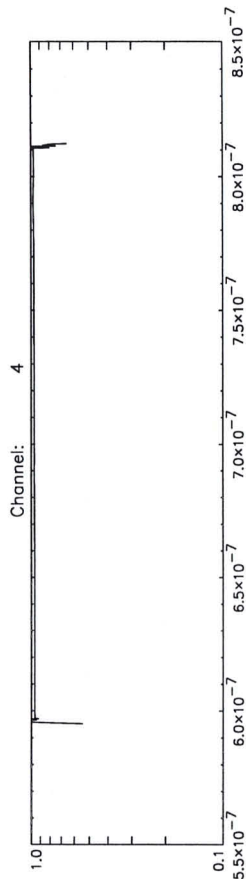
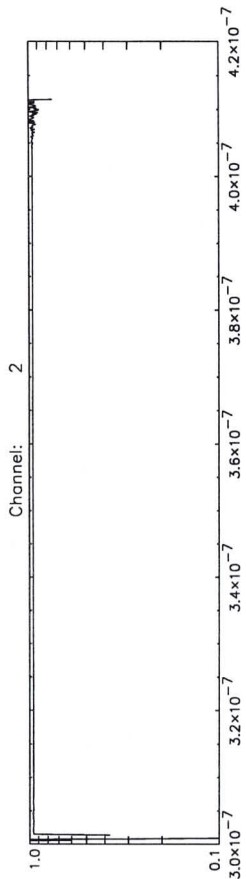
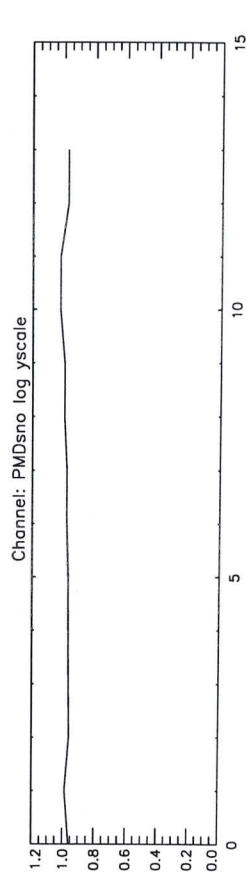
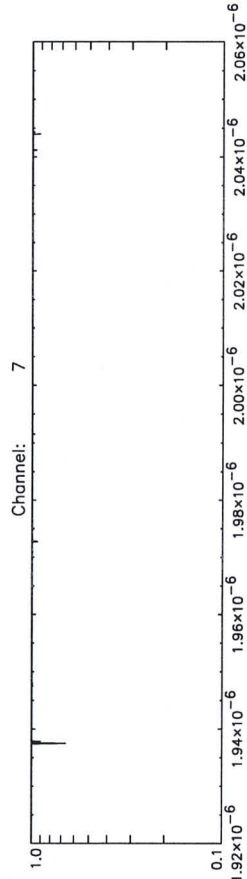
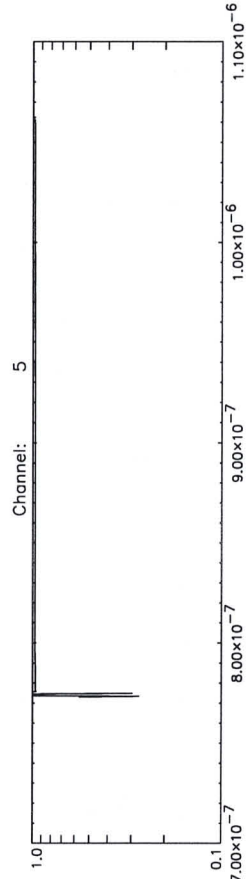
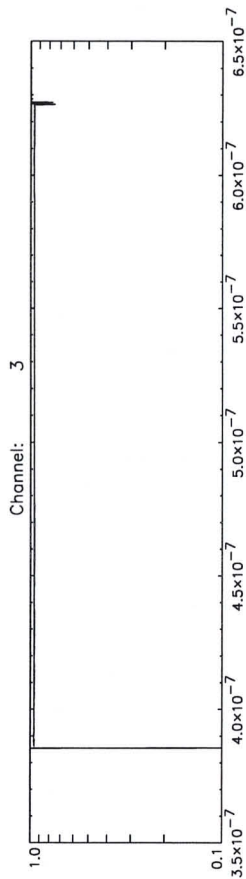
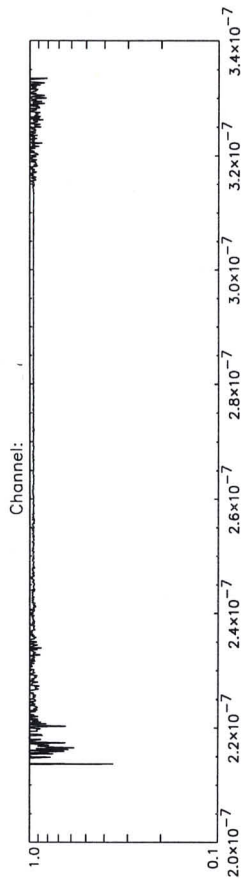
Do ratio	idl do_ratio Let <D1> be the <u>first</u> selected dark file name		In IDL window
	Full path name of <D1> ls -l <D1>.div.cal	<u>du1.aug.cal.</u>	In DATA window
	size of <D1>.div.cal	<u>145.998 kB</u>	Approx. 140 kB
	lpr -P<printer> <D1>.div.cal.ps Add postscript image to logbook, Done?	<u>(Y) N</u>	In DATA Window

Note that the do_ratio procedure asks:

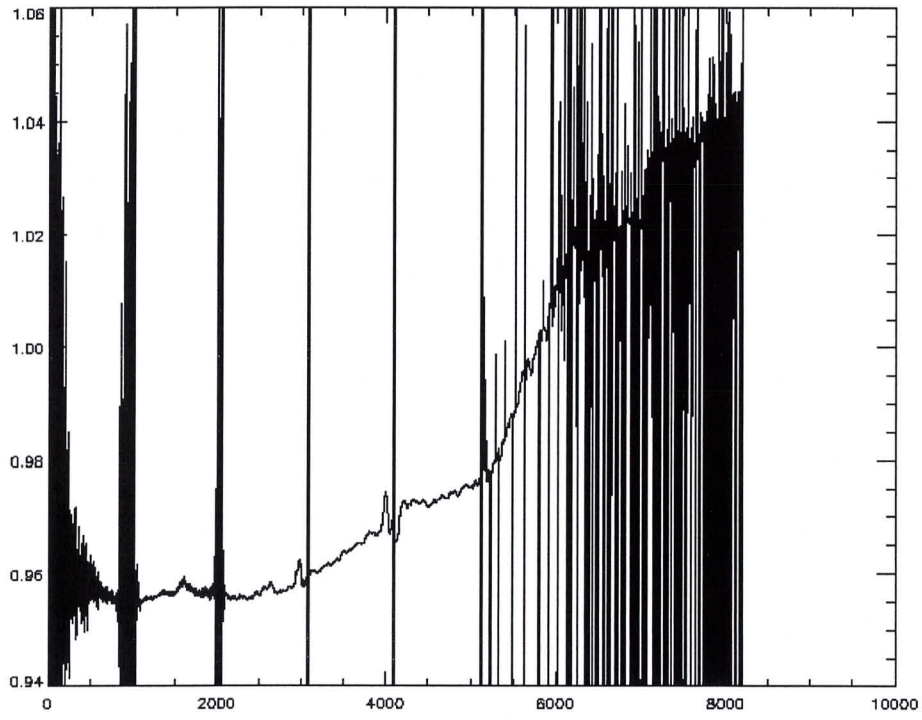
- 1/ ~~an~~ dark file
- 2/ a corresponding light file
- 3/ a second dark file
- 4/ a corresponding light file.

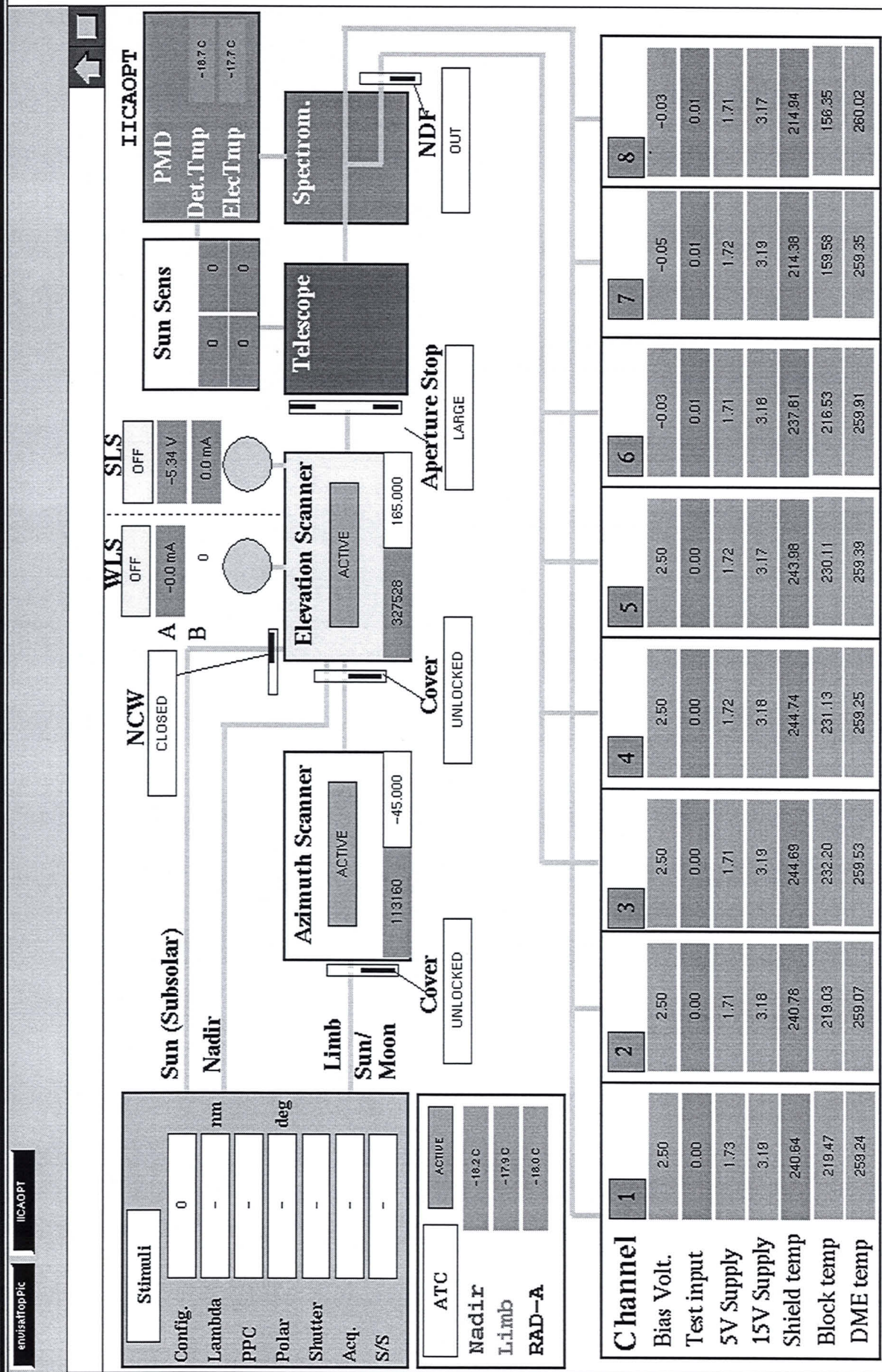
Back up	Create 3 sets of backup CDs of directory ~/DATA-DIR/START-OF-CALIBRATION (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory). Name of backup CDs	_____	See analysis sheet BackUp
---------	---	------------------	------------------------------

Sign:	Name	<u>Marion</u>
	Date and time	<u>090890 7:45</u>
	Signature	<u>M. Stopp</u>



26/25



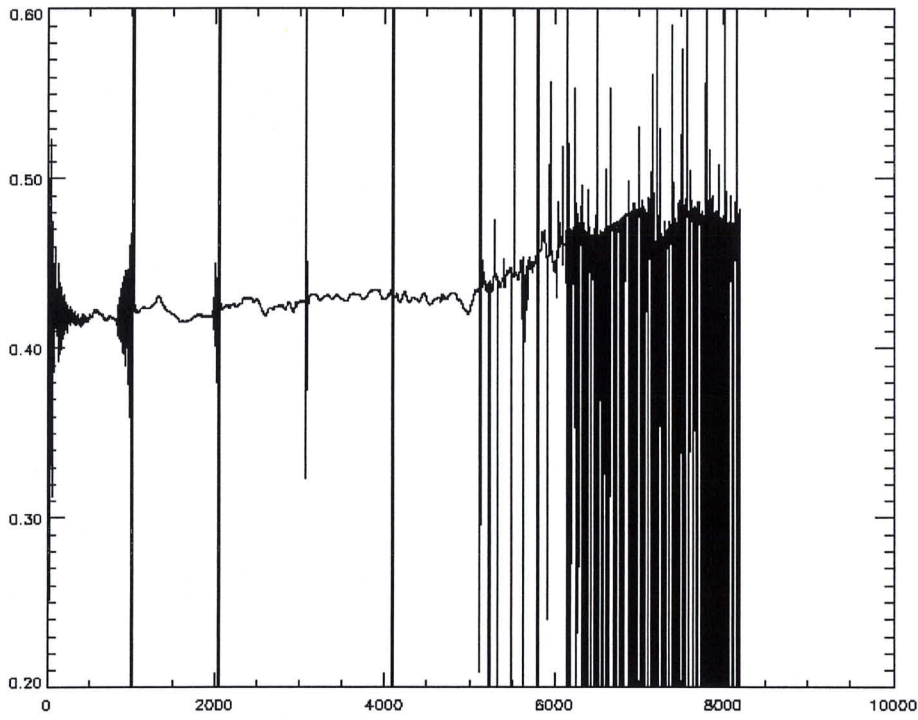


Channel	Bias Volt.	Test input	5V Supply	15V Supply	Shield temp	Block temp	DME temp	1	2	3	4	5	6	7	8	Moni.	Anom
1	2.50	0.00	1.73	3.18	240.64	219.47	259.24	2.50	0.00	1.71	3.18	243.98	230.11	216.53	156.35	TRUE	0
2	2.50	0.00	1.71	3.18	240.78	219.03	259.07	2.50	0.00	1.72	3.18	244.74	231.13	216.53	159.58	TRUE	0
3	2.50	0.00	1.71	3.19	244.69	232.20	259.53	2.50	0.00	1.72	3.18	243.98	230.11	216.53	159.58	TRUE	0
4	2.50	0.00	1.72	3.18	244.74	231.13	259.25	2.50	0.00	1.72	3.18	243.98	230.11	216.53	159.58	TRUE	0
5	2.50	0.00	1.72	3.17	243.98	230.11	259.39	2.50	0.00	1.72	3.17	243.98	230.11	216.53	159.58	TRUE	0
6	2.50	0.00	1.71	3.18	244.74	231.13	259.25	-0.03	0.01	1.71	3.18	237.61	216.53	159.58	259.35	TRUE	0
7	2.50	0.00	1.72	3.19	243.98	230.11	259.39	-0.05	0.01	1.72	3.19	214.38	159.58	259.35	260.02	TRUE	0
8	2.50	0.00	1.71	3.17	243.98	230.11	259.39	-0.03	0.01	1.71	3.17	214.94	156.35	260.02	260.02	TRUE	0

11RAD

26
28

1.0m
0.0m



LOG SHEET SCIAMACHY CALIBRATION

date/time	description of action	measurement filename
7-8	new extra baffles	
11:00 utc	UID 30 i.e. min +0.5 m	
	light seems oke	
	dash seems oke	
	ratio with irrad at min distance	
	gives increased value	
	at NIR	

Formal Run of Measurement

(Measurement ID)

Irрад. limb

Request for Actual Status

Request for Modification

Request for Run

(cross out entries that are not requested.)

(fill in only entries to be modified)

(no entries = run based on actual default settings)

Scanner Positions

Azimuth

-45
+165

deg

Elevation

deg

Timeline for each Data Acquisition Period during Measurement

	1	2	3	4	5	6	7	8	9	10
State ID	39									
Repetitions	10									

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	64	1						
1b	64	1						
2b	64	1						
2a	64	1						
3	4	16						
4	1	64						
5	2	32						
6	0.5	64						
7	1	64						
8	2	32						
State ID								

Min + 0.5 m
- § 6.9.3

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Signatures

Test Purpose: UID 30

Remark: extra back baffles

Data Directory: 0221_07.42.05_IRRAD_LIMB

Date	Signature
<u>9-8-90</u>	<u>M. Stapp</u>
<u>9. P. 3P</u>	<u>A. Cur</u>

Issued < Performed

Transfer Data File

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090890</u>	
	What's the name of the (main) data input files that you want to store on the SUN named scia6?	_____ <u>0221_07.42.05 - Irrad-Limb.</u>	(A)
	Setup a three-window configuration on your SUN.		See course descr.

Do Transfer	Be sure that you are in the directory you want your files in ftp <internet-address>, where you can find the address of the PC in the file /etc/hosts (entry: cdwpc). The address will also be next to you on paper (most probably). When asked for user, fill in: anonymous, when asked for an email address, fill in your email address on TPD. Set in binary: binary mget * (and return y to every file). bye		In DATA- DIR window
			In DATA window
			Approx. 140 kB

Sign:	Name	<u>Marion</u>
	Date and time	<u>090890 8:50</u>
	Signature	<u>M. Stopp</u>

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090898</u>	
	What's the name of the (main) data input files generated by the EGSE? (*.dat)	<u>scia_090898 - 080512152</u>	
	Setup a three-window configuration on your SUN.		see course descr.
Cnstr directory	cd ~/DATA-DIR/IRRAD ; ls -l highest number in directory? New directory: mkdir <B+1> ls -l What's now the highest number in directory? <C> should be + 1 directory name is:	<u>26</u> <u>27</u>	Note: In window DATA-DIR (B) (C) (DIR-NAME)
Copy data	See Analysis sheet: Transfer Data File	<input checked="" type="radio"/> Y <input type="radio"/> N	In DATA-DIR window
Cnstr EGSE_LTF	cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled) ls -l *.egse_ltf What's the name of the egse_ltf file <D> should be <A>.egse_ltf	<input checked="" type="radio"/> Y <input type="radio"/> N	Note: In window DATA-DIR; don't forget the dot !!!; May take more than 15 mins. (D)
Cnstr CAL files	idl run_averscia (and select file <D> when asked)		Note: In window IDL
Check CAL files	Dark files: ls -l *du*.cal		In DATA-DIR window

size:

145998 b

should be approx 150Kb

ls -l *iu*.cal

size:

145998 b

should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print

postscript

Print postscript files:

`lpr -P<printer> *.ps`

Contents dark file

du.avg.cal.ps

should be approx. constant within channels: Y / N

Contents light file

iu.avg.cal.ps

should resemble white light source: Y / N

Contents of

rel_std.ps files

should be smaller than

0.01 (pixel 300 -- 800) for all channels. Y / N

If not, value is: _____

Add postscript images to

logbook, done Y / N

`lpr -P<printer>`

Print logfiles

*.log

Add logfiles to logbook, done Y / N

If you have measured the irradiance at 3 distances, then proceed otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL

~~ls~~ ls -l

In DATA-DIR window

highest number in dir?

mkdir {B1}+1

<B1>

Now highest number in dir?

<C1> should be {B1}+1

<C1>

Y/N

Dir name is:

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dir name>

Let <D1>, <D2>, <D3>
directories containing

irradiance measurements

(thus, <D1>, <D2>, <D3>

are of the form

~/DATA+DIR/IRRAD/(number))

In DATA-DIR window

cp <D1>/*.dux.avg.col <Dir name>

cp <D1>/*.iux.avg.col <Dir name>

cp <D2>/*.dux.avg.col <Dir name>

cp <D2>/*.iux.avg.col <Dir name>

cp <D3>/*.dux.avg.col <Dir name>

cp <D3>/*.iux.avg.col <Dir name>

ls -l

cd <Dir name>

ls -l

Copied files present? Y/N.

Proceed with page 3.

let op: line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the *.cal file

IRRadiance <lightfile> is processing measured.

Run radiance idl do_irradiance In IDL window

Check irradiance ls -l *
 Size of file <D>.du*.cal.p1 _____
 Size of file <D>.du*.cal.~~2~~fuss.p2 _____
 20).du*.cal.fuss.p2
 Size of file <D>*.p1.*.log _____

Check irradiance visually lpr -P<printer> *p[12]*.ps Value of P1 and P2 file resemble white light source? Y / N

Add postscript images to logbook, done Y / N

Print logfiles lpr -P<printer> *p[12]*.plog Add logfiles to logbook, done Y / N

Back up Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory). Name of backup CDs _____ See analysis sheet BackUp

Sign:

Name

Date and time

Signature

Marion
07/08/90 9.00
M. Stepp

STEP ACTION RESULT MARKER

Intro Your name: Marion
Date: 090898

What's the name of the (main) data input file that you want to store in the SOC directory? _____ (A)

Setup a three-window configuration on your SUN. See course descr.

Do ratio

idl do_ratio In IDL window
 Let <D1> be the first selected dark file name
 Full path name of <D1> *.dul.avg.cal.div.cal. In DATA window
 ls -l <D1>.div.cal
 size of <D1>.div.cal 145998 Approx. 140 kB
 lpr -P<printer> <D1>.div.cal.ps In DATA Window
 Add postscript image to logbook, Done? (Y) N

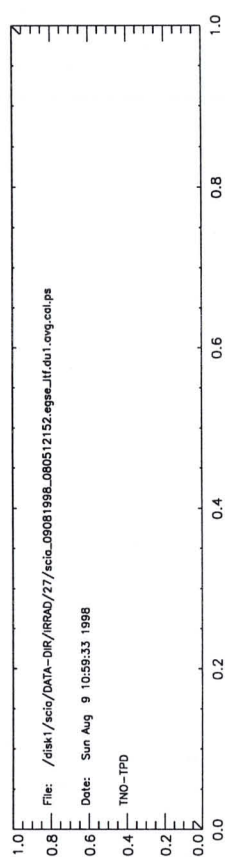
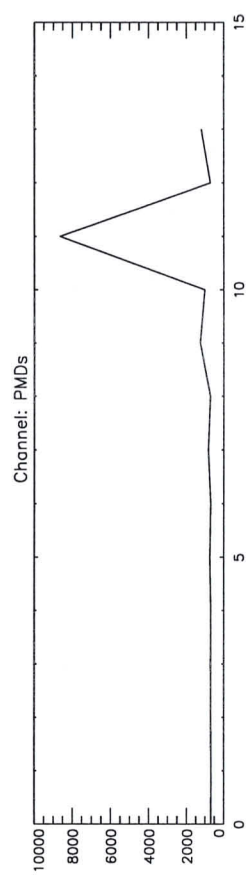
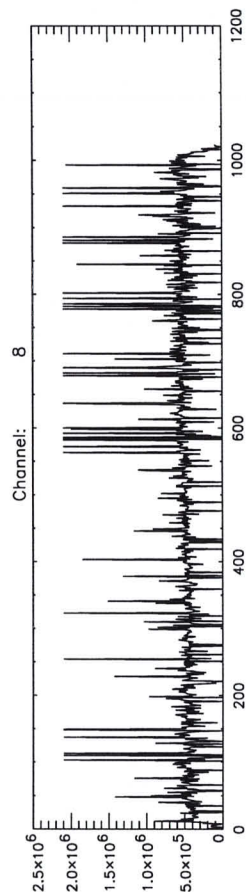
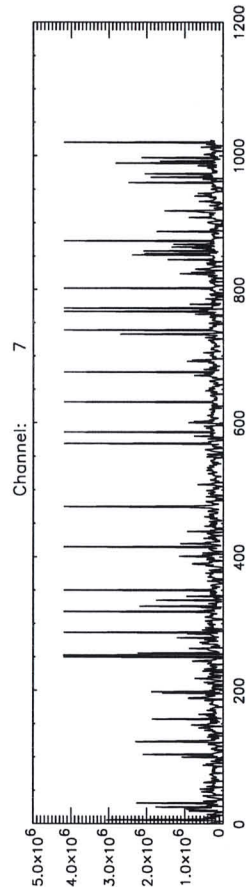
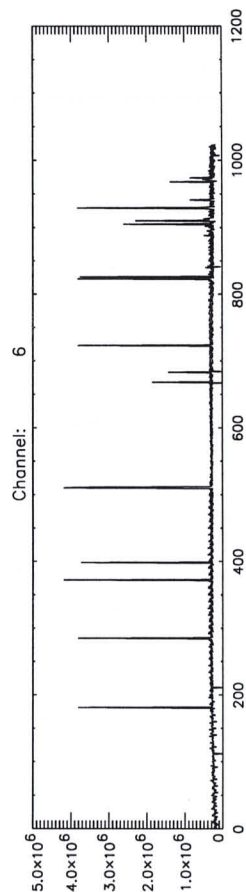
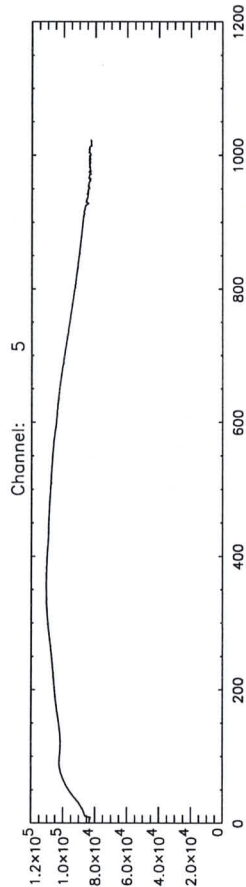
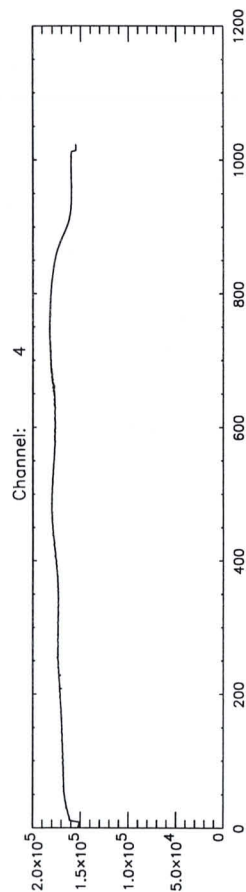
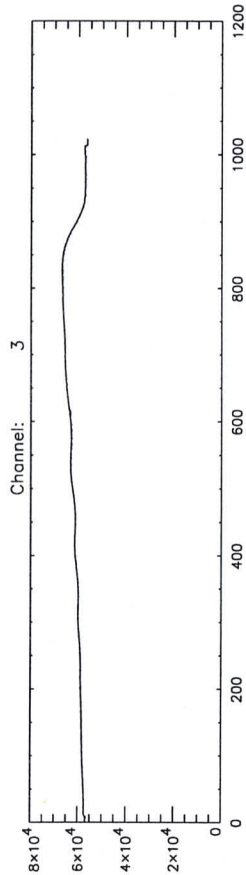
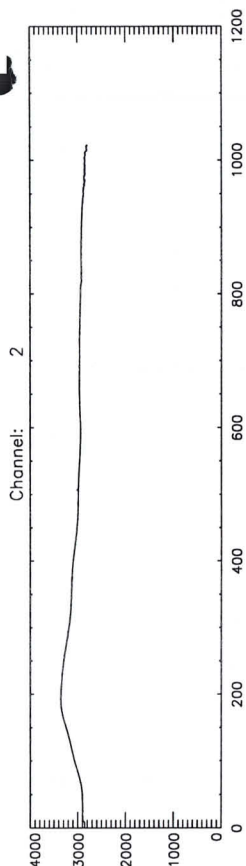
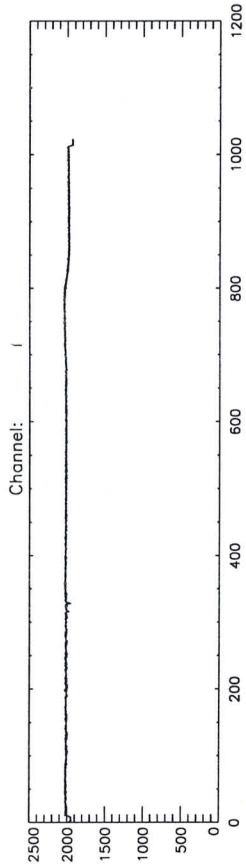
Note that the do-ratio procedure asks:

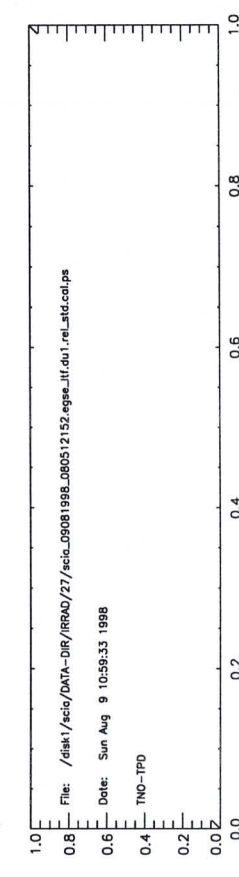
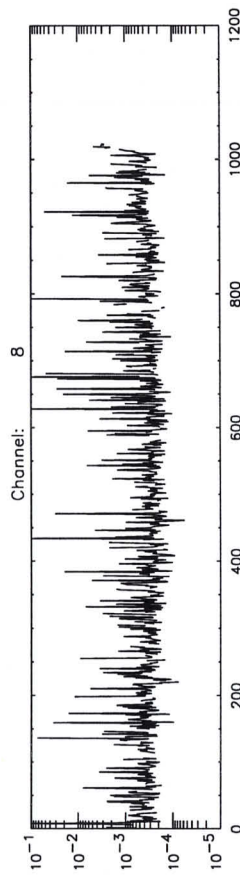
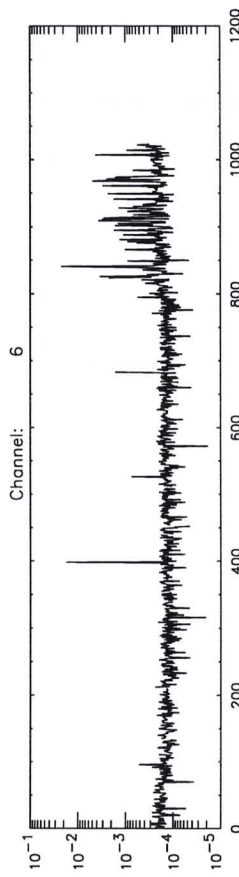
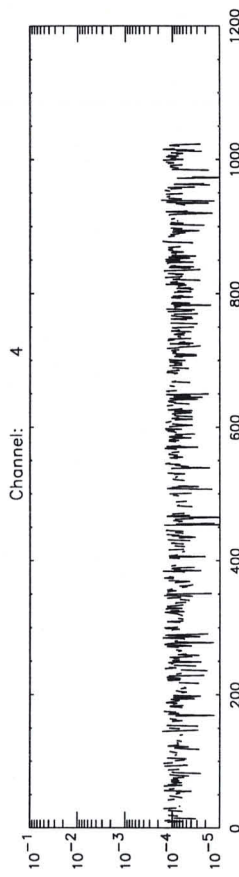
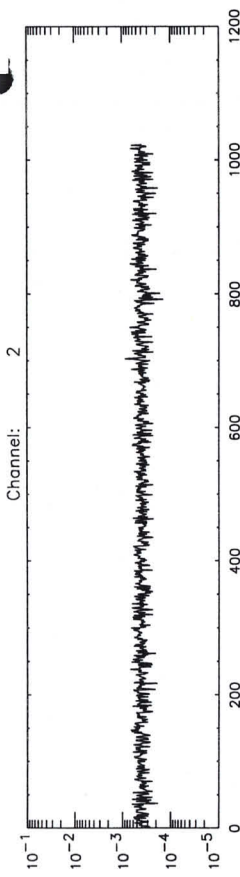
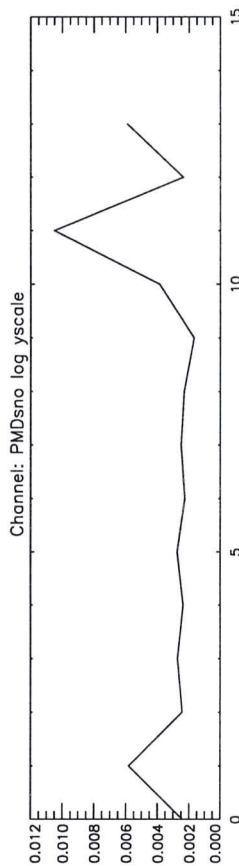
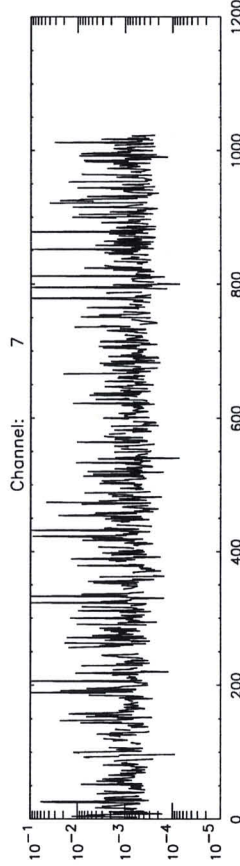
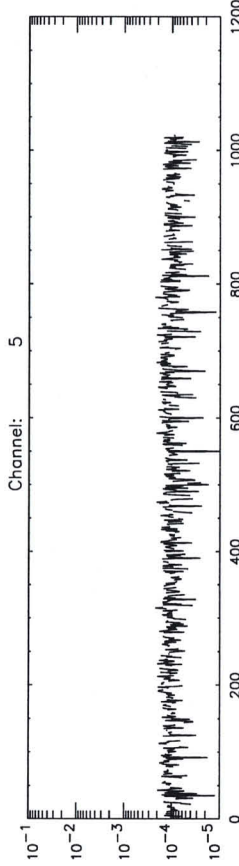
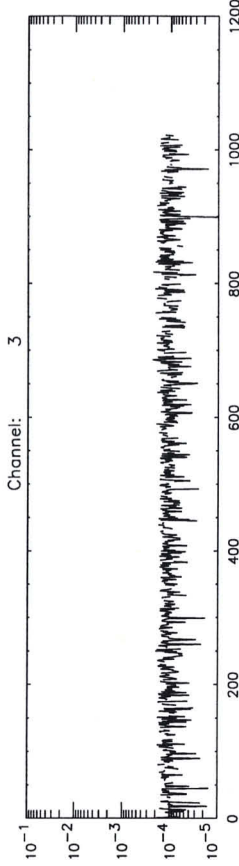
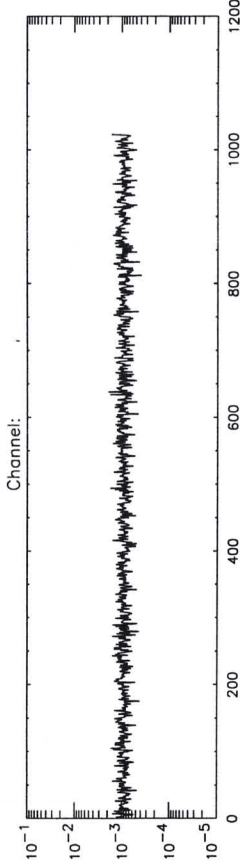
- 1/ ~~one~~ dark file
- 2/ a corresponding light file
- 3/ a second dark file
- 4/ a corresponding light file.

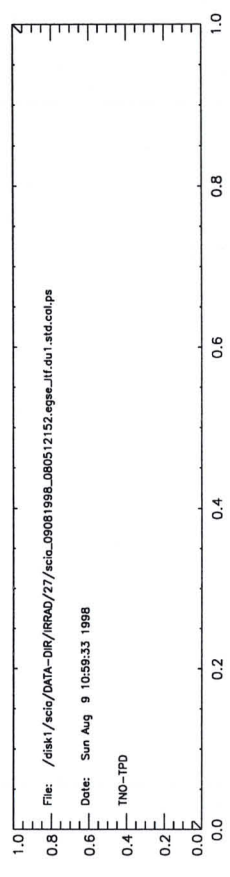
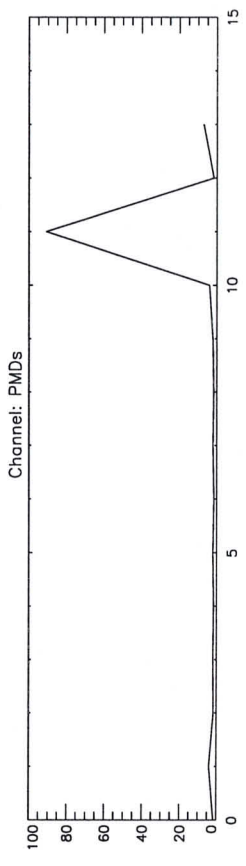
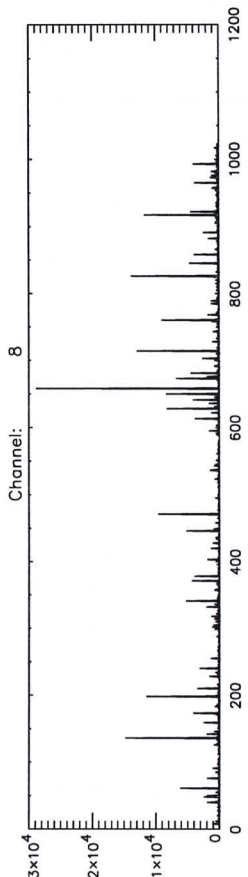
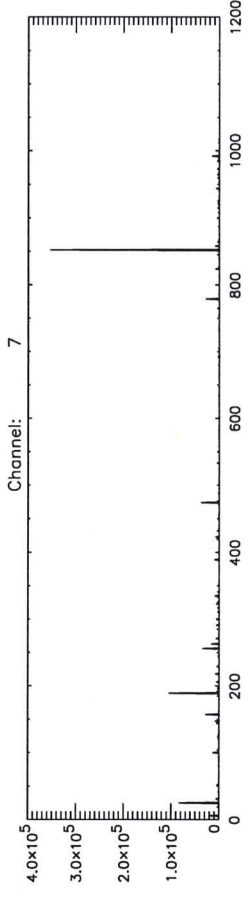
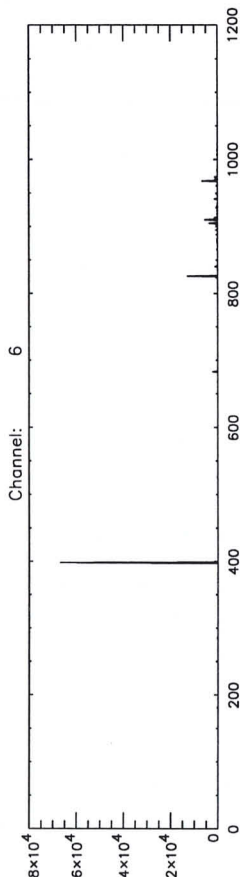
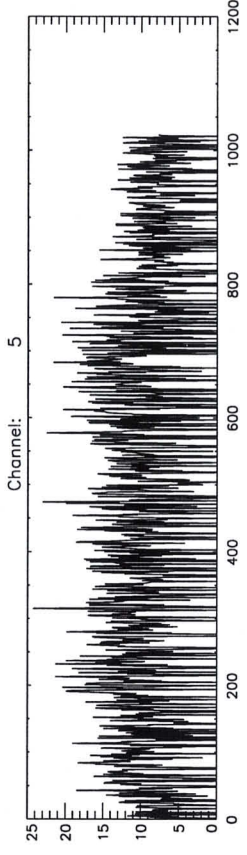
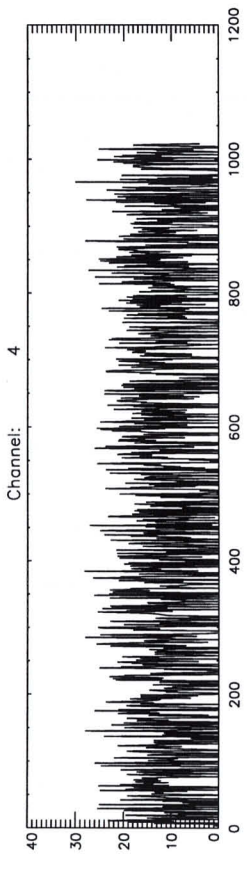
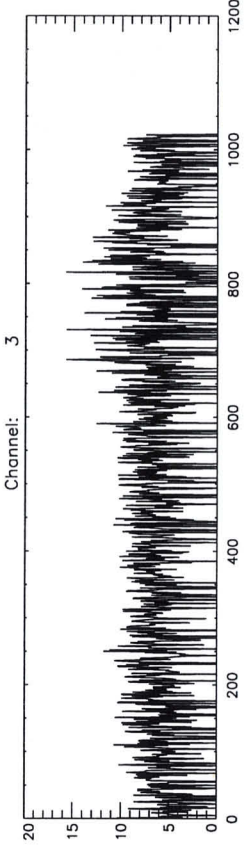
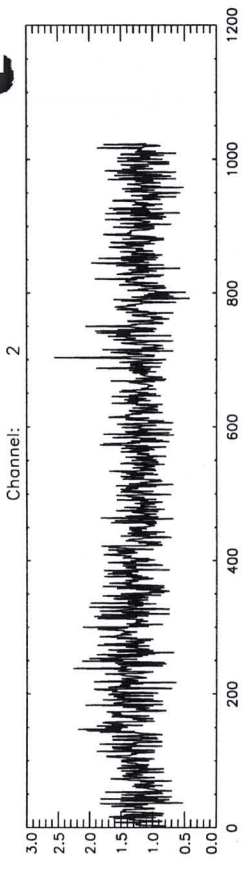
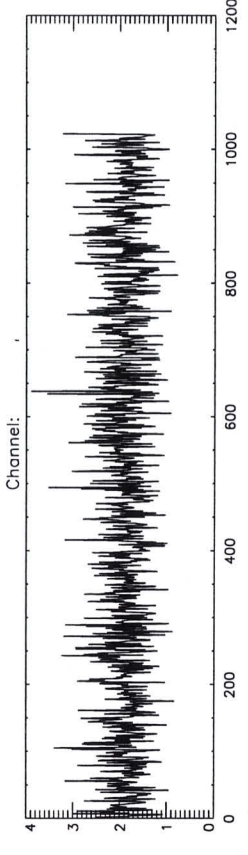
~~Create 3 sets of backup CDs of directory
 ~/DATA-DIR/START-OF-CALIBRATION
 (One CD has a capacity of 600 Mbytes, the UNIX command
 /usr/bin/du -k . gives the number of kilo bytes in the current directory).
 Name of backup CDs _____~~

See analysis sheet BackUp

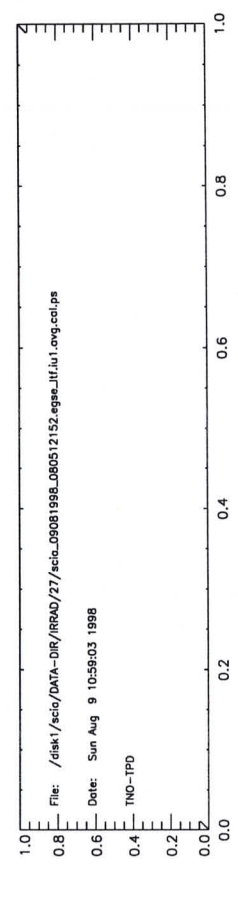
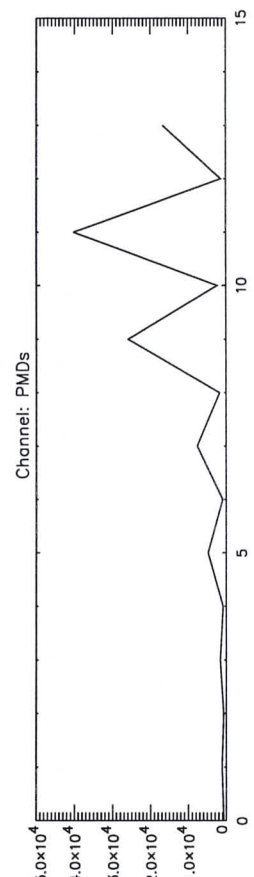
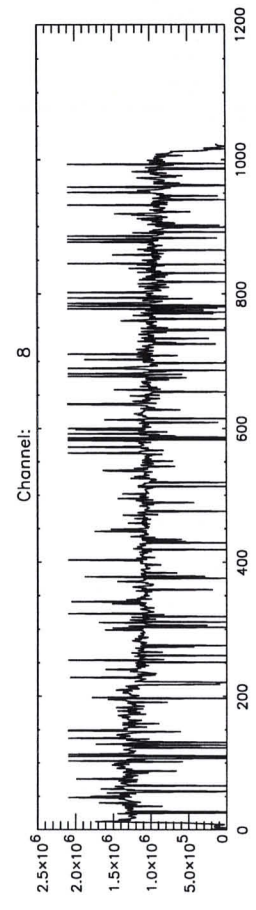
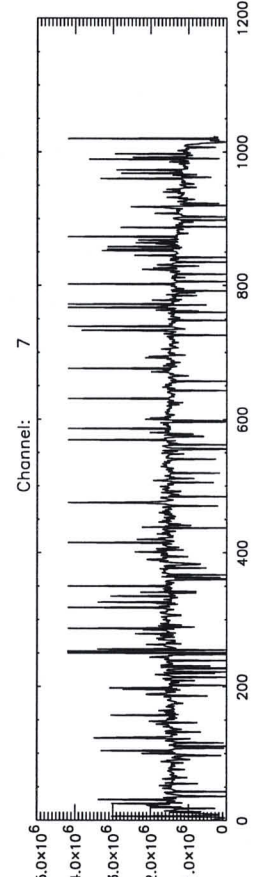
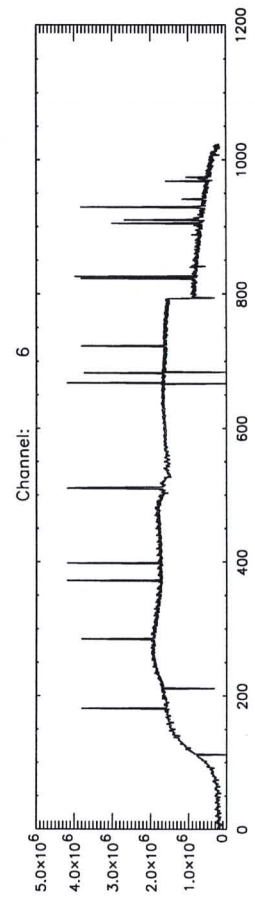
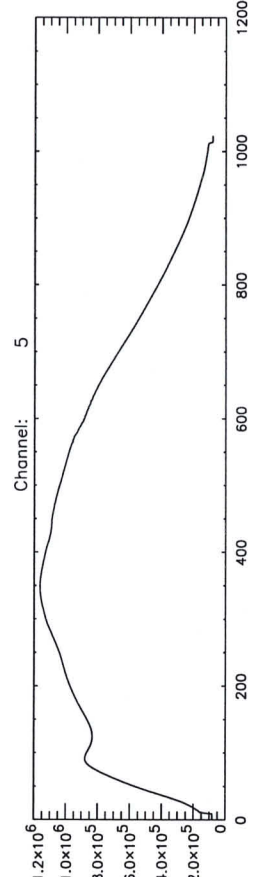
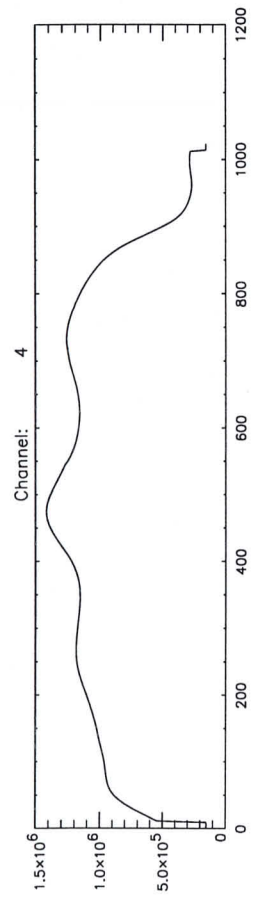
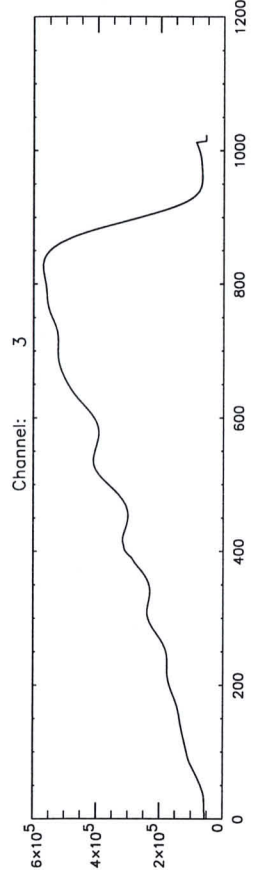
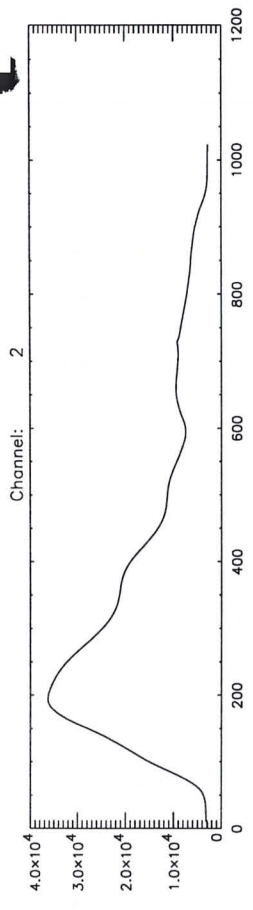
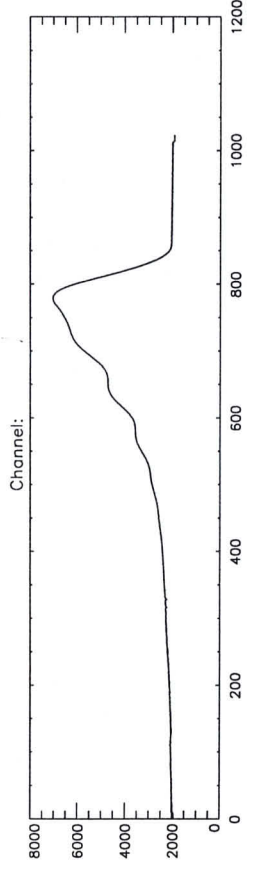
Sign: Name Marion
 Date and time 090898 9:02
 Signature MLSP99



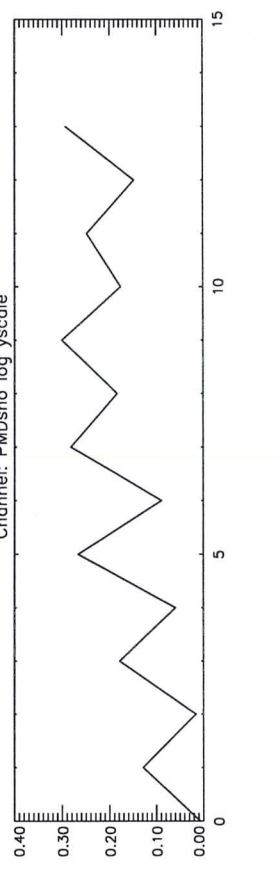
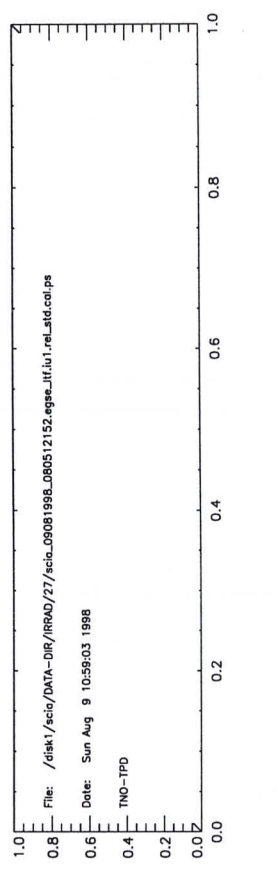
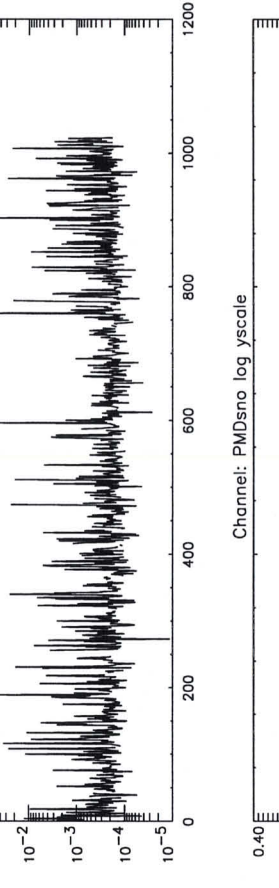
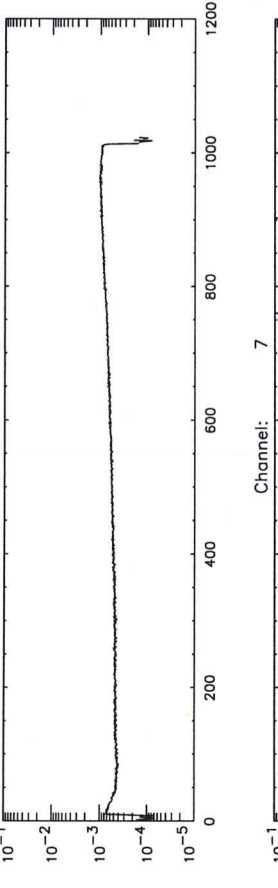
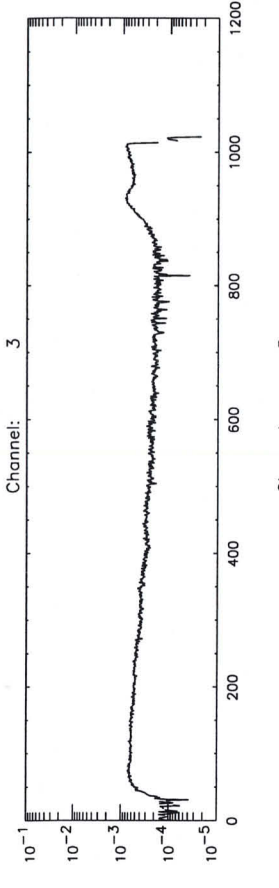
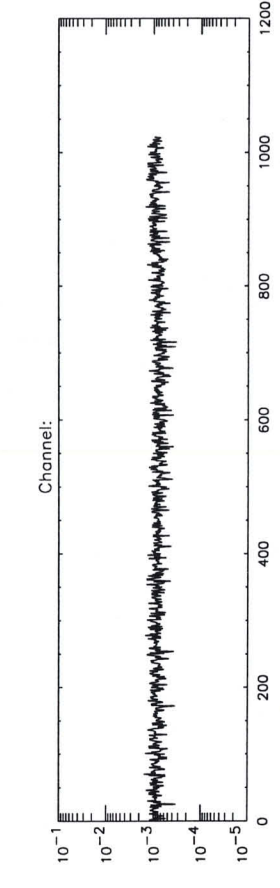
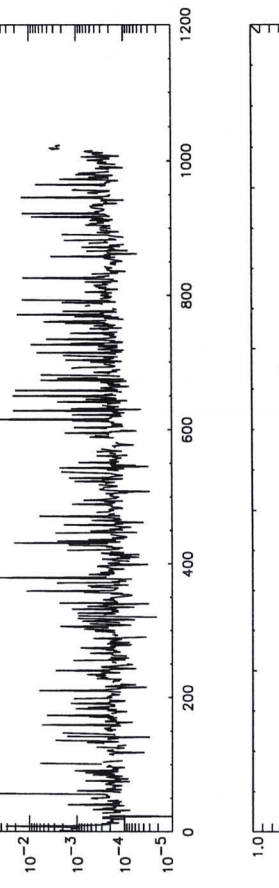
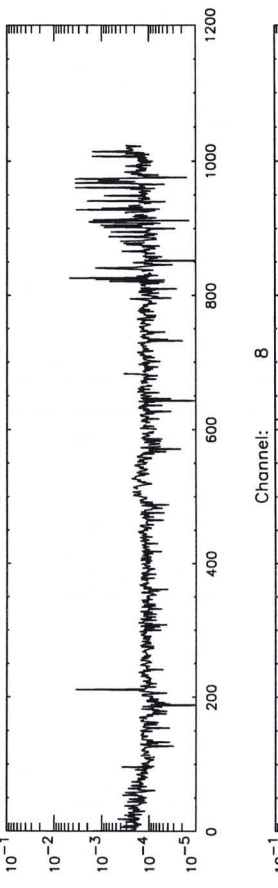
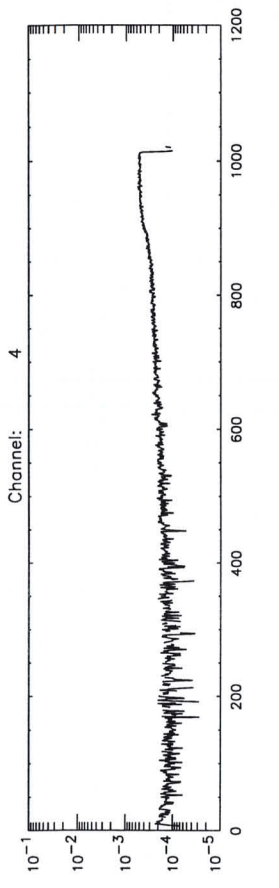
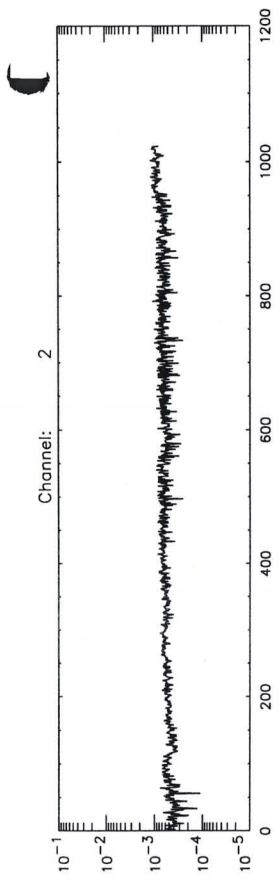




C

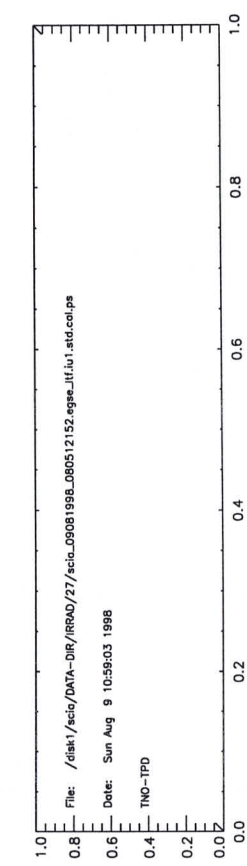
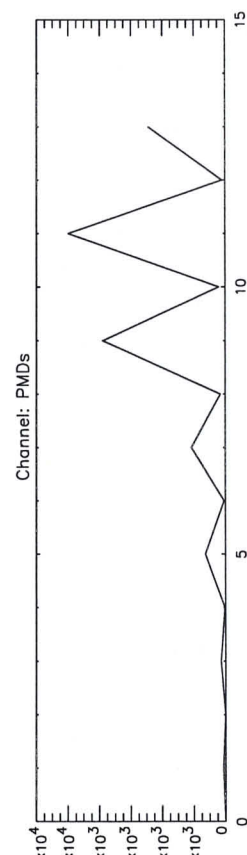
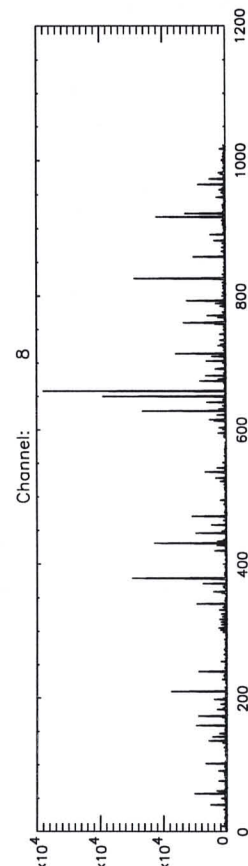
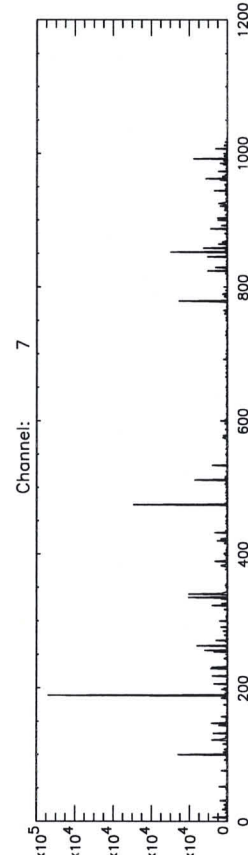
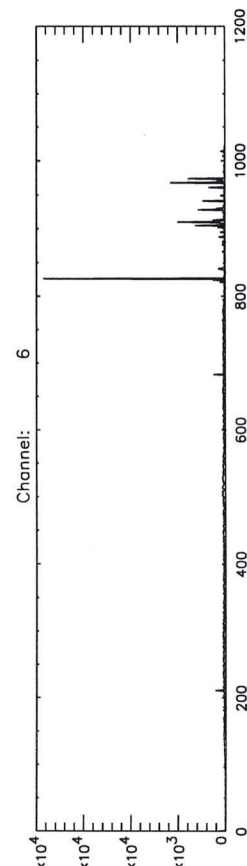
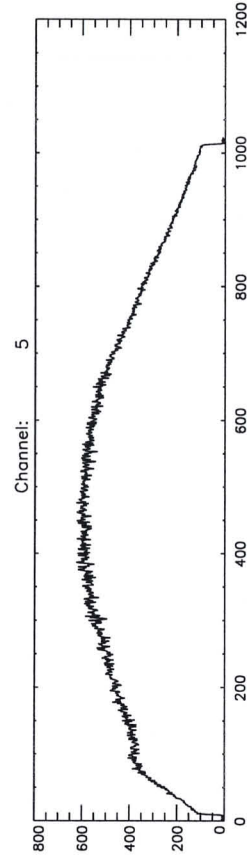
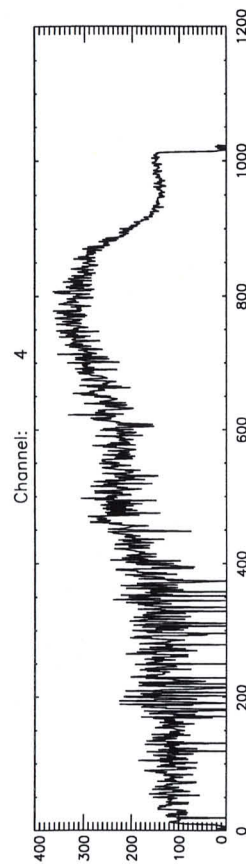
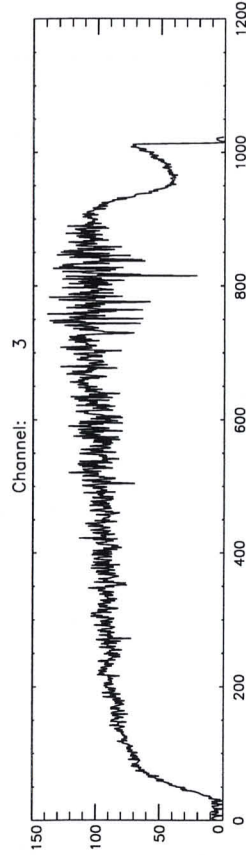
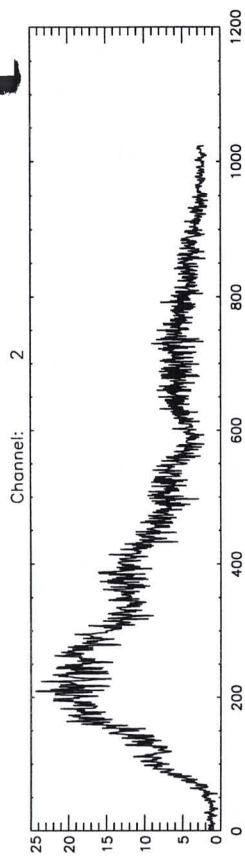
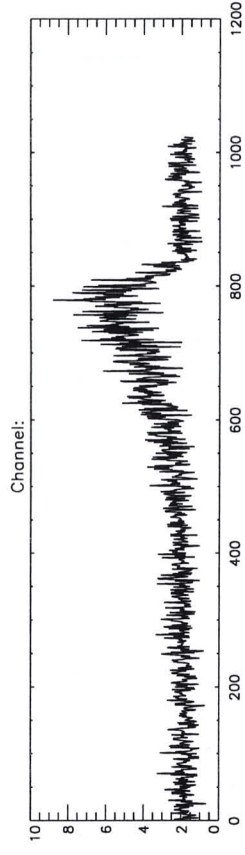


File: /disk1/scic/DIR/IRRAD/27/scic_09081998_080512152_egse_jt1.t_avg.col.pa
Date: Sun Aug 9 10:59:03 1998
TNO-TPD



File: /disk1/scic/DATA-DIR/RRAD/27/scia_09081998_080512152.egse_jlf.iu1.rel_std.col.pa
Date: Sun Aug 9 10:59:03 1998
TNO-TPD

C



time = Sun Aug 9 10:59:33 1998

batch = dul

Start TOD = Sun 09-Aug-98 08:20:27

End TOD = Sun 09-Aug-98 08:31:52

Processing= computation of average, standard dev. and rel.standard dev.

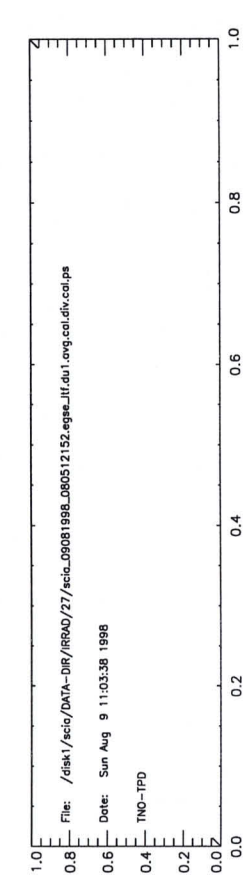
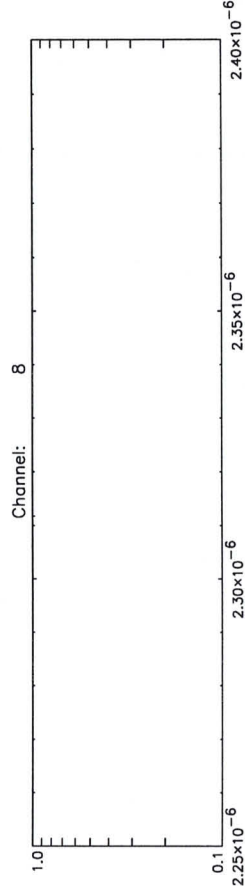
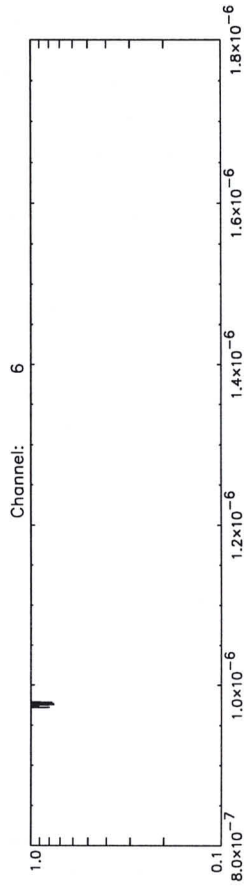
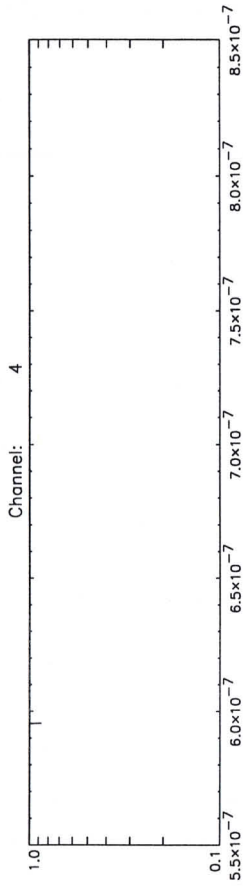
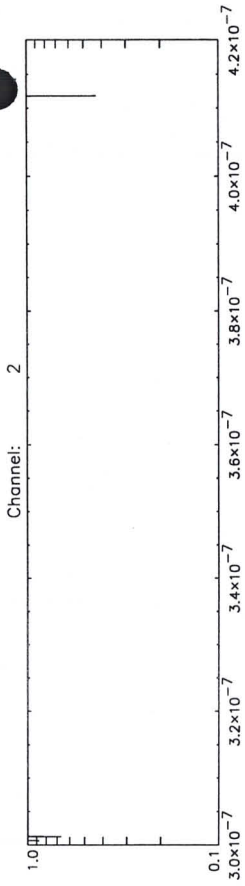
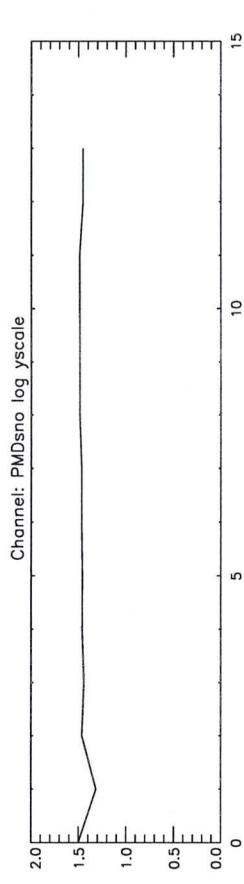
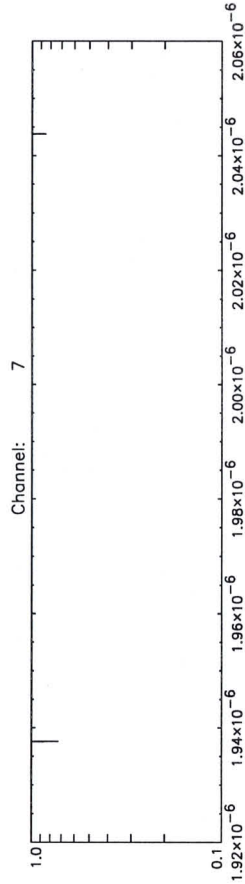
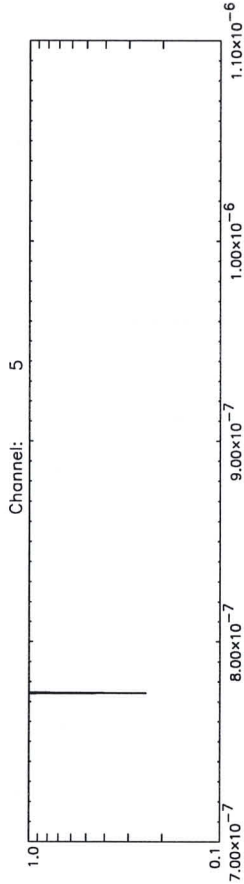
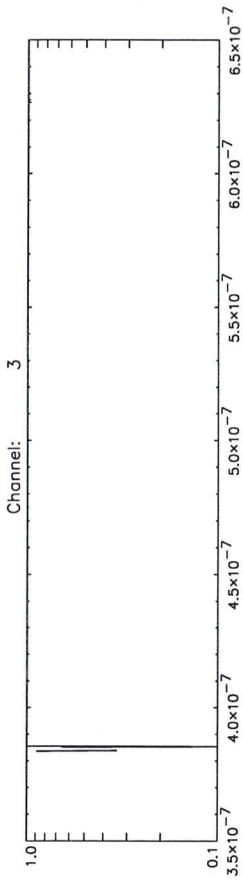
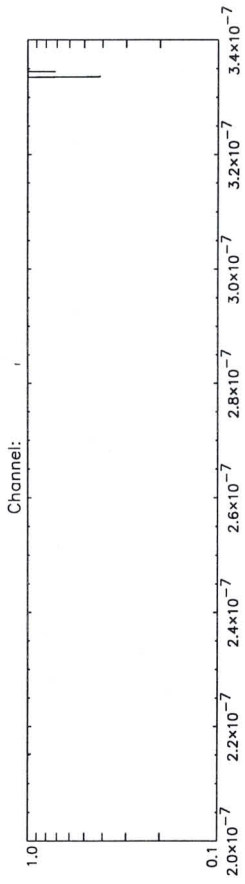
time = Sun Aug 9 10:59:03 1998

batch = iul

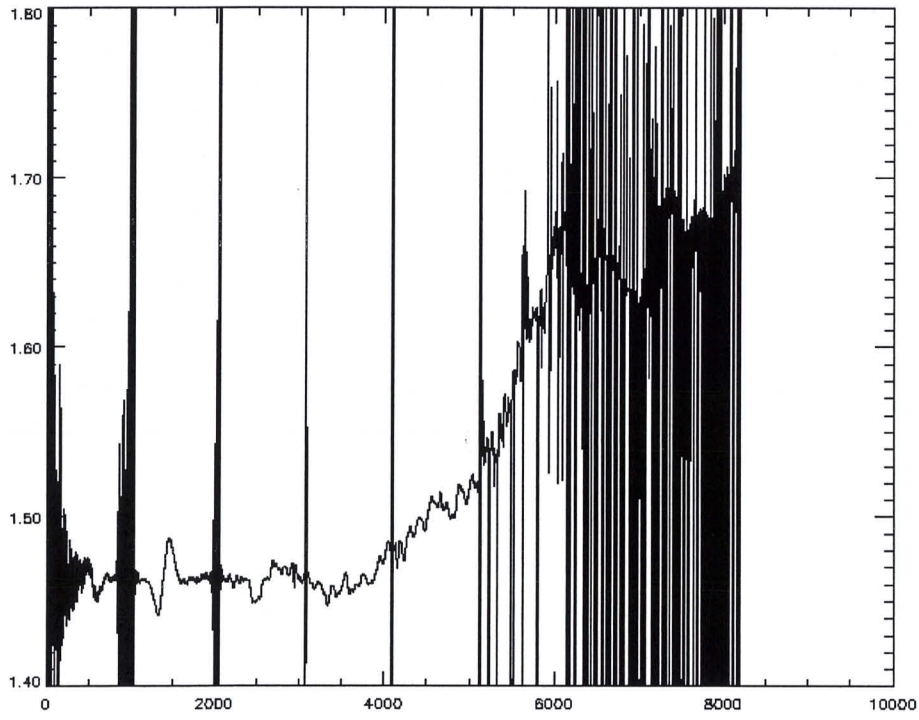
Start TOD = Sun 09-Aug-98 08:05:39

End TOD = Sun 09-Aug-98 08:20:27

Processing= computation of average, standard dev. and rel.standard dev.



27/26



Stimuli

Config. nm

Lambda deg

PPC

Polar

Shutter

Acq.

S/S

ATC ACTIVE

Nadir

Limb

RAD-A

NCW CLOSED

WLS OFF

SLS OFF

A -5.22 V

B 0.0 mA

Sun (Subsolar)

Nadir 0

Limb 0

Azimuth Scanner

ACTIVE

Cover UNLOCKED

Elevation Scanner

ACTIVE

Aperture Stop

Cover UNLOCKED

Sun Sens

<input type="text" value="0"/>	<input type="text" value="0"/>
<input type="text" value="0"/>	<input type="text" value="0"/>

Telescope

IICAOPT

PMD

Det.Temp

ElecTemp

Spectrom.

NDF

OUT

Channel	1	2	3	4	5	6	7	8
Bias Volt.	2.50	2.50	2.50	2.50	2.50	-0.03	-0.05	-0.03
Test input	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
5V Supply	1.73	1.71	1.71	1.72	1.72	1.71	1.72	1.71
15V Supply	3.19	3.18	3.19	3.18	3.17	3.18	3.19	3.17
Shield temp	240.64	240.78	244.68	244.74	243.97	237.78	214.38	214.82
Block temp	219.48	219.03	232.18	231.10	230.12	216.55	159.59	158.39
DME temp	259.24	259.07	259.52	259.24	259.38	259.90	259.34	260.02

Channel

Bias Volt.

Test input

5V Supply

15V Supply

Shield temp

Block temp

DME temp

1

2

3

4

5

6

7

8

Exp. Mode

HEATER

ChkState

STATE

Format

RTF

OBT

0x078ed518

Moni.

TRUE

Anom

0

STEP ACTION RESULT MARKER

Intro Your name: JGS
 Date: 9-8

What's the name of the (main) data input file that you want to store in the SOC directory? _____ (A)

Setup a three-window configuration on your SUN. See course descr.

Do ratio idl do_ratio In IDL window
 Let <D1> be the first selected dark file name

Full path name of <D1> IRRAD/27/ In DATA window
 ls -l <D1>.div.cal

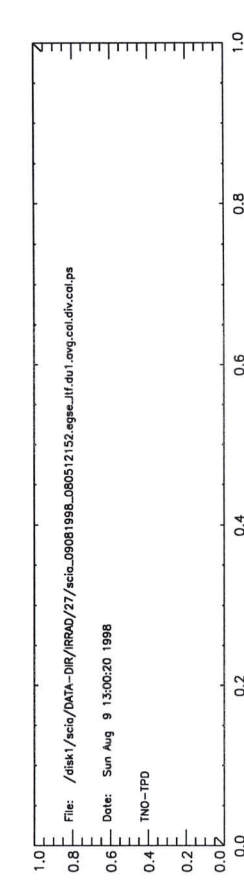
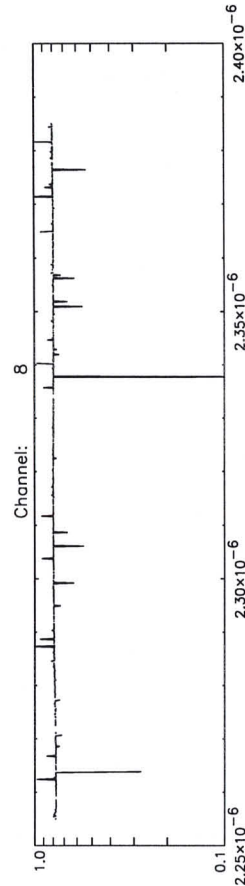
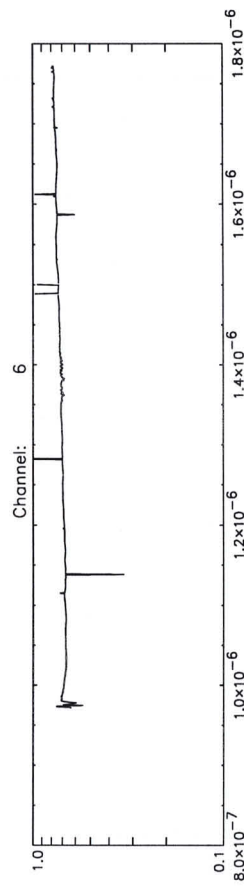
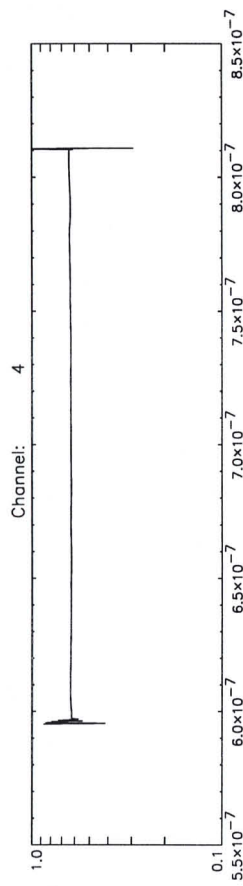
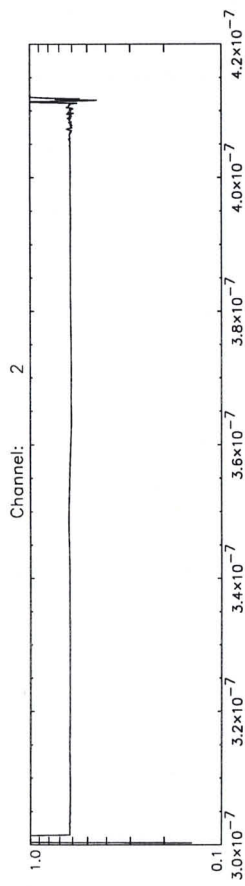
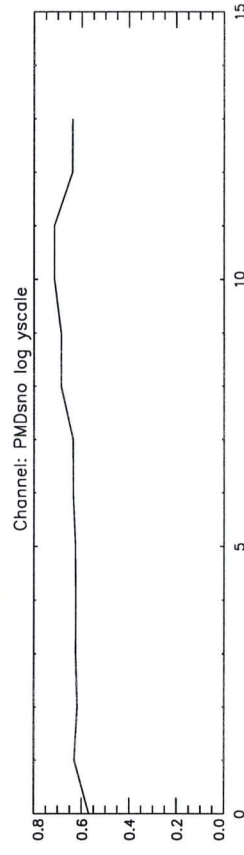
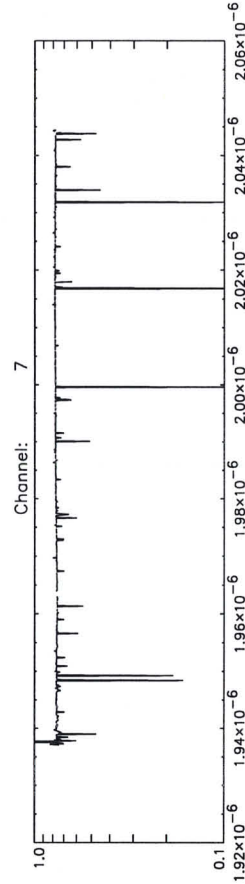
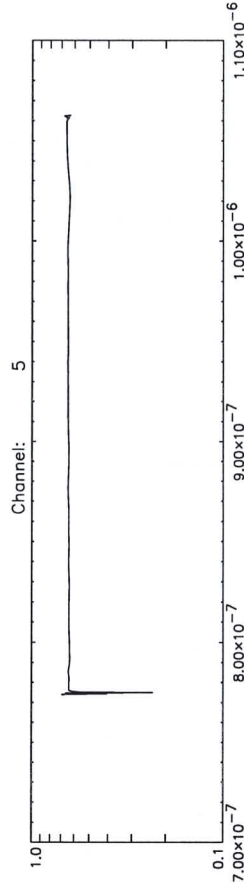
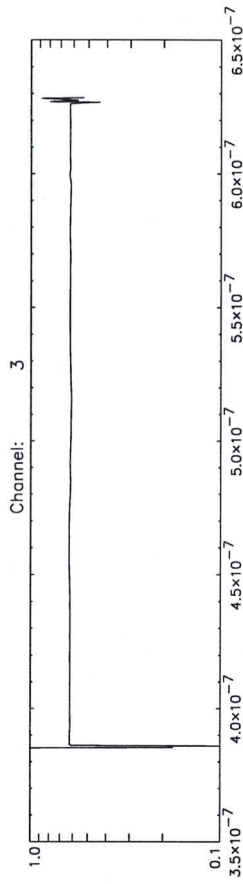
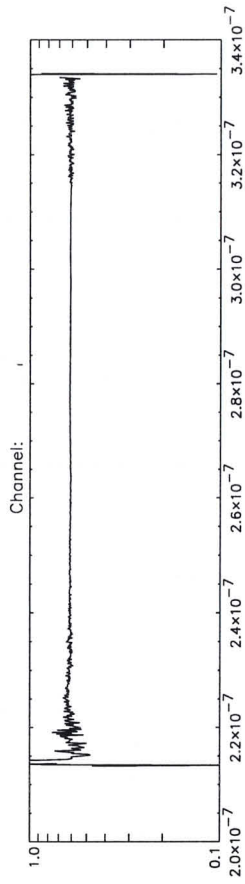
size of <D1>.div.cal scia_09081998_080512152 Approx. 140 kB

lpr -P<printer> <D1>.div.cal.ps In DATA Window
 Add postscript image to logbook, Done? Y/N

Note that the do_ratio procedure asks:
 1/ ~~one~~ dark file
 2/ a corresponding light file
 3/ a second dark file
 4/ a corresponding light file.

Back up Create 3 sets of backup CDs of directory
 ~/DATA-DIR/START-OF-CALIBRATION
 (One CD has a capacity of 600 Mbytes, the UNIX command
 /usr/bin/du -k . gives the number of kilo bytes in the current directory).
 Name of backup CDs _____ See analysis sheet BackUp

Sign: Name _____
 Date and time _____
 Signature _____



LOG SHEET SCIAMACHY CALIBRATION

date/time	description of action	measurement filename
9-8 10:33UTC	New black baffles at top of PL-rail	
	UID 29 i.e. at 0.5 m without ND	
	light seems oke	
	dark seems oke	
	ratio 0.5 m still high values of NIR	
	0.0 m	
	conclusion: new baffles insufficient	
	maybe unwanted reflection in dark window	

Formal Run of Measurement

(Measurement ID)

Irrad_Limb

Request for Actual Status

Request for Modification

Request for Run



(cross out entries that are not requested.)

(fill in only entries to be modified)

(no entries = run based on actual default settings)

Scanner Positions

Azimuth -45 deg

Elevation +165 deg

Timeline for each Data Acquisition Period during Measurement

	1	2	3	4	5	6	7	8	9	10
State ID	<u>30</u>									
Repetitions	<u>10</u>									

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	<u>64</u>	<u>1</u>						
1b	<u>64</u>	<u>1</u>						
2b	<u>64</u>	<u>1</u>						
2a	<u>64</u>	<u>1</u>						
3	<u>4</u>	<u>16</u>						
4	<u>1</u>	<u>64</u>						
5	<u>2</u>	<u>32</u>						
6	<u>0.5</u>	<u>64</u>						
7	<u>1</u>	<u>64</u>						
8	<u>2</u>	<u>32</u>						
State ID								

step 6-9-1

min dist

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Test Purpose

Remark

Data Directory

WID 29
extra black baffles
0221_08_54.32_IRRAD_LIMB

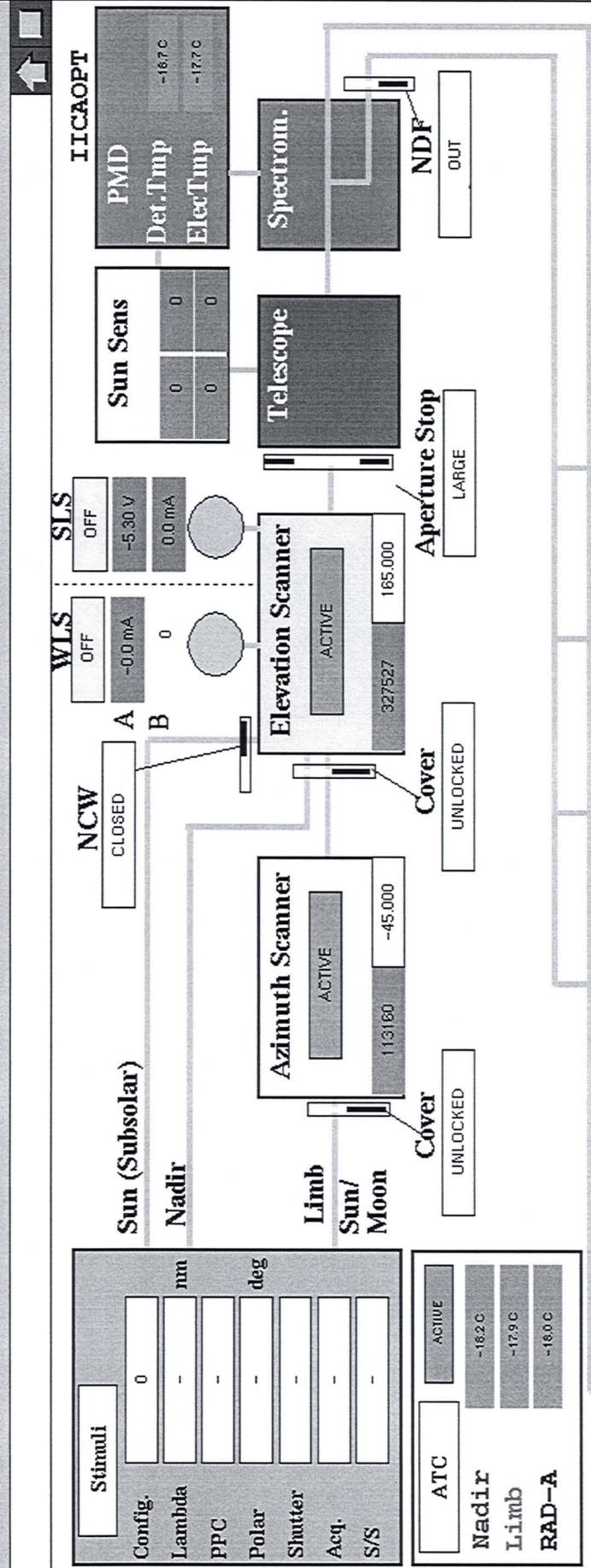
Signatures

Issued

< Performed

Date	Signature
<u>9-8-98</u>	<u>H. Stopp</u>
<u>5.8.98</u>	<u>A. Cur</u>

envisatopPic IICAOPT



Channel	Bias Volt.	Test input	5V Supply	15V Supply	Shield temp	Block temp	DME temp
1	2.50	0.00	1.75	3.19	240.64	219.47	259.23
2	2.50	0.00	1.71	3.18	240.77	218.99	259.07
3	2.50	0.00	1.71	3.19	244.66	232.18	259.52
4	2.50	0.00	1.72	3.18	244.74	231.12	259.24
5	2.50	0.00	1.72	3.17	243.96	230.10	259.38
6	-0.03	0.01	1.71	3.18	237.80	216.53	259.90
7	-0.05	0.01	1.72	3.19	214.36	159.62	259.33
8	-0.03	0.01	1.71	3.17	214.93	156.40	260.01

Ancil. RbiStart Conf TLM Mode ChkState Format OBt Moni. Anom

STOP	A, NOM	5	HEATER	MEAS-TL	COMPLETE	RTF	34	0x07a00915	TRUE	0
------	--------	---	--------	---------	----------	-----	----	------------	------	---

Transfer Data File

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090890</u>	
	What's the name of the (main) data input files that you want to store on the SUN named scia6?	<u>0221_08.54.32_IRR90_Lijn B</u>	(A)

Setup a three-window configuration on your SUN. See course descr.

Do Transfer	Be sure that you are in the directory you want your files in ftp <internet-address>, where you can find the address of the PC in the file /etc/hosts (entry: cdwpc). The address will also be next to you on paper (most probably). When asked for user, fill in: anonymous, when asked for an email address, fill in your email address on TPD.		In DATA-DIR window
	Set in binary: binary mget * (and return y to every file). bye	_____	In DATA window Approx. 140 kB

Sign:	Name	<u>Marion</u>
	Date and time	<u>090890</u>
	Signature	<u>Marion</u>

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090899</u>	
	What's the name of the (main) data input files generated by the EGSE? (*.dat)	<u>scia_09081998</u>	
	Setup a three-window configuration on your SUN.		see course descr.
Cnstr directory	cd ~/DATA-DIR/IRRAD ; ls -l highest number in directory? New directory: mkdir <B+1> ls -l What's now the highest number in directory? <C> should be + 1 directory name is:	<u>37</u> <u>28</u> Y N ~/DATA-DIR/IRRAD/<C>	Note: In window DATA-DIR (B) (C) (DIR-NAME)
Copy data	See Analysis sheet: Transfer Data File	Y N	In DATA-DIR window
Cnstr EGSE_LTF	cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled) ls -l *.egse_ltf What's the name of the egse_ltf file <D> should be <A>.egse_ltf	 <u>scia_09081998_092225009.egse_ltf</u> Y N	Note: In window DATA-DIR; don't forget the dot !!!; May take more than 15 mins. (D)
Cnstr CAL files	idl run_averscia (and select file <D> when asked)		Note: In window IDL
Check CAL files	Dark files: ls -l *du*.cal		In DATA-DIR window

size: 145.0 kb should be approx 150Kb

ls -l *iu*.cal

size: 145 kb should be approx 150Kb

Note: all files should be present, if not:

(a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels

(b) Check if enough disk space is available (Unix command df -k | more).

Print postscript

Print postscript files:

lpr -P<printer> *.ps

Contents dark file

du.avg.cal.ps

should be approx. constant within channels: Y/N

Contents light file

iu.avg.cal.ps

should resemble white light source: Y/N

Contents of

rel_std.ps files

should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y/N

If not, value is: _____

Add postscript images to logbook, done Y N

lpr -P<printer>

Print logfiles *.log

Add logfiles to logbook, done Y N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL
~~ls -l~~

In DATA-DIR window

highest number in dir?

mkdir <B1>+1

<B1>

Now highest number in dir?

<C1> should be <B1>+1

<C1>

Y/N

Dir name is:

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dir name>

Let <D1>, <D2>, <D3>
directories containing
irradiance measurements
(thus, <D1>, <D2>, <D3>
are of the form
~/DATA-DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/*.dux.avg.ed <Dir name>

cp <D1>/*.iux.avg.ed <Dir name>

cp <D2>/*.dux.avg.ed <Dir name>

cp <D2>/*.iux.avg.ed <Dir name>

cp <D3>/*.dux.avg.ed <Dir name>

cp <D3>/*.iux.avg.ed <Dir name>

~~ls -l~~

cd <Dir name>

ls -l

Copied files, next? Y/N.

Proceed with page 3.

let op: line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the *.cal file

IRRadiance processing <lightfile> is measured.

Run radiance idl do_irradiance In IDL window

Check irradiance ls -l *
 Size of file <D>.du*.cal.p1 _____
 Size of file <D>.du*.cal. *f45c.p2* _____
20).du.cal.f45b.p2*
 Size of file <D>*.p1.*.log _____

Check irradiance visually lpr -P<printer> *p[12]*.ps Value of P1 and P2 file resemble white light source? Y / N

Add postscript images to logbook, done Y / N

Print logfiles lpr -P<printer> *p[12]*.plog Add logfiles to logbook, done Y / N



Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory). Name of backup CDs _____

Back up

See analysis sheet BackUp



Sign:

Name

Date and time

Signature

STEP	ACTION	RESULT	MARKER
------	--------	--------	--------

Intro	Your name:	_____	
	Date:	_____	

	What's the name of the (main) data input file that you want to store in the SOC directory?	_____	(A)
--	--	-------	-----

	Setup a three-window configuration on your SUN.		See course descr.
--	---	--	-------------------

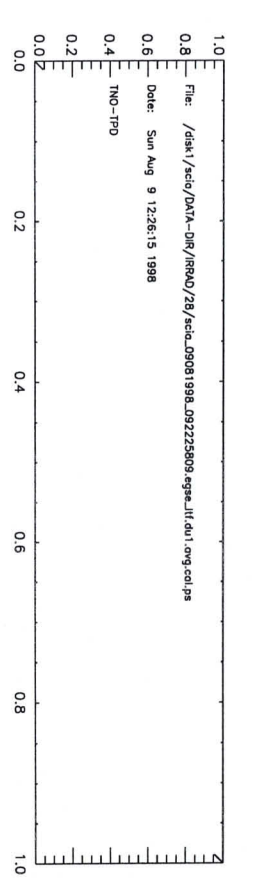
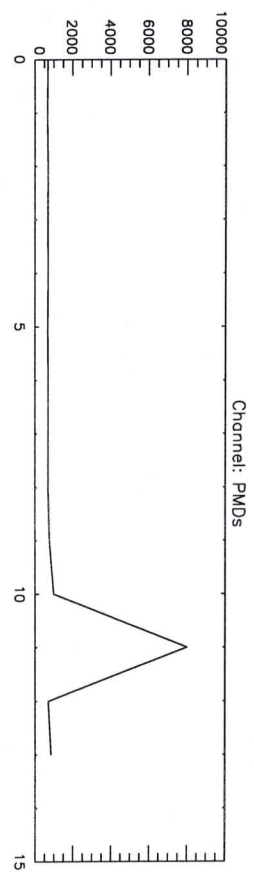
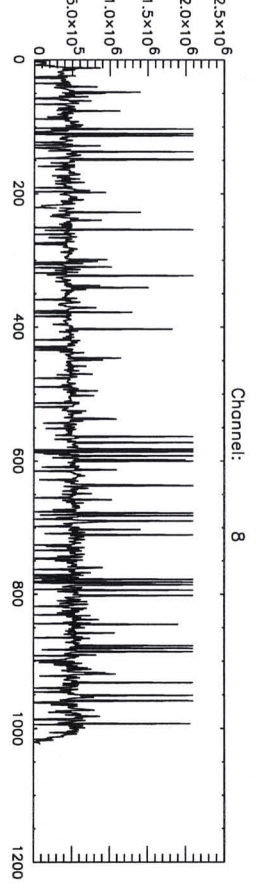
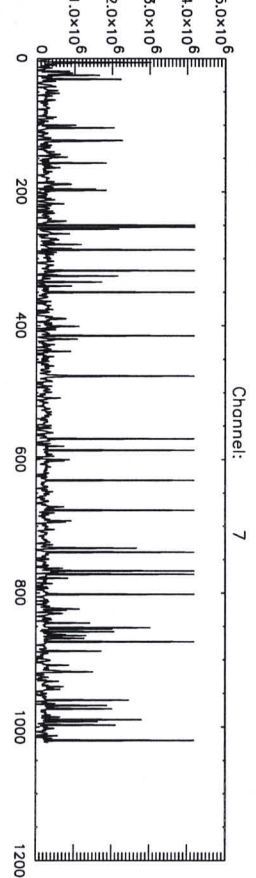
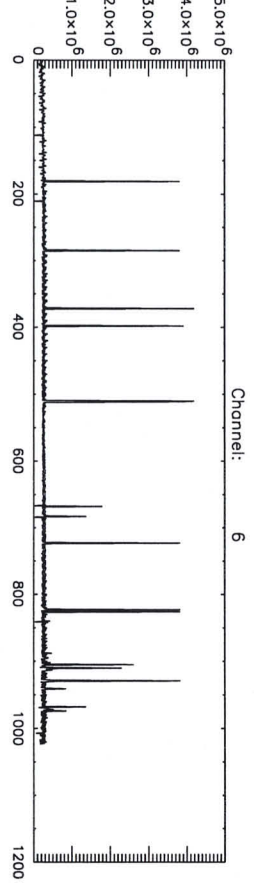
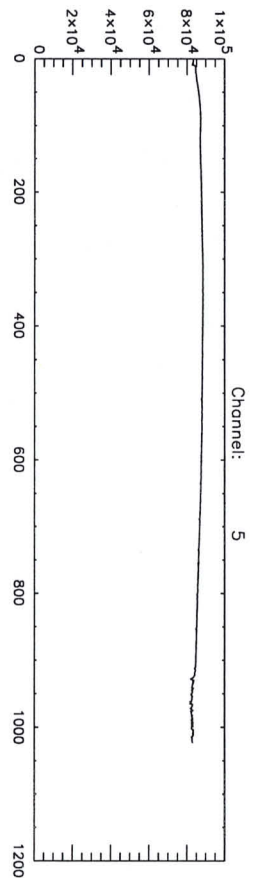
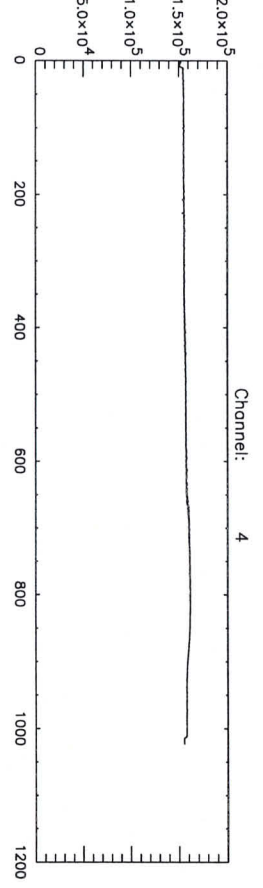
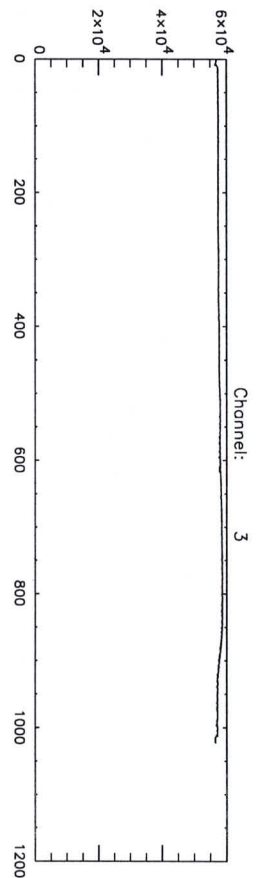
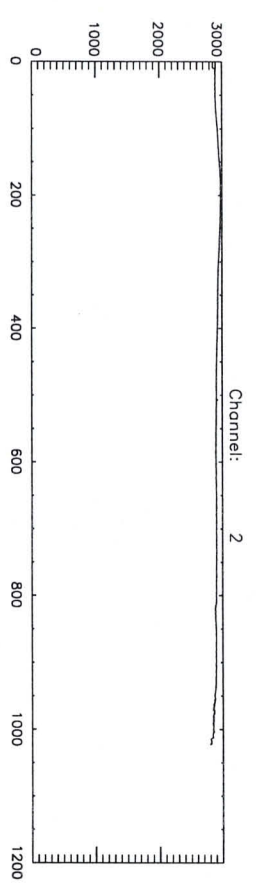
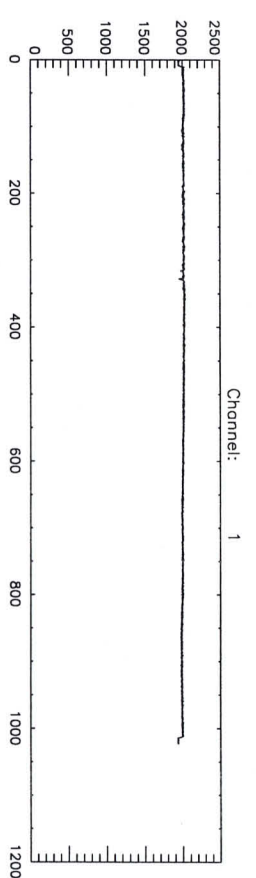
Do ratio	idl do_ratio		In IDL window
	Let <D1> be the <u>first</u> selected dark file name		
	Full path name of <D1>	_____	In DATA window
	ls -l <D1>.div.cal		Approx. 140 kB
	size of <D1>.div.cal		
	lpr -P<printer> <D1>.div.cal.ps		In DATA Window
	Add postscript image to logbook, Done?	Y / N	

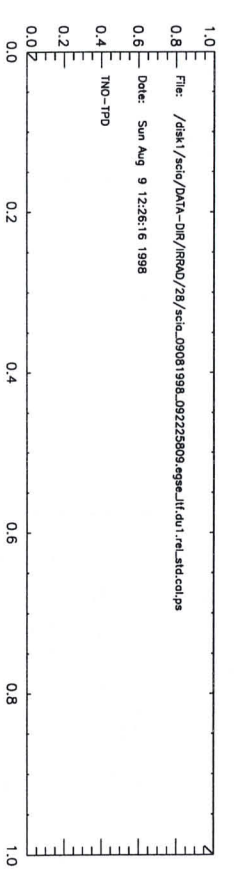
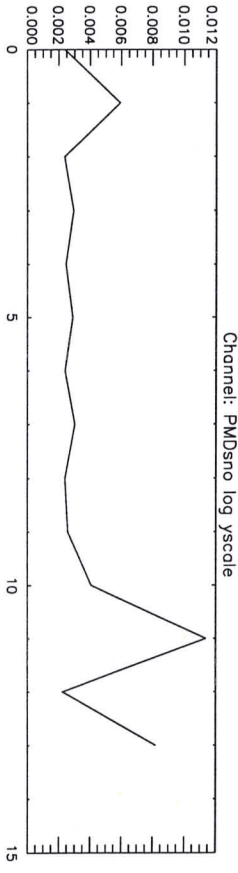
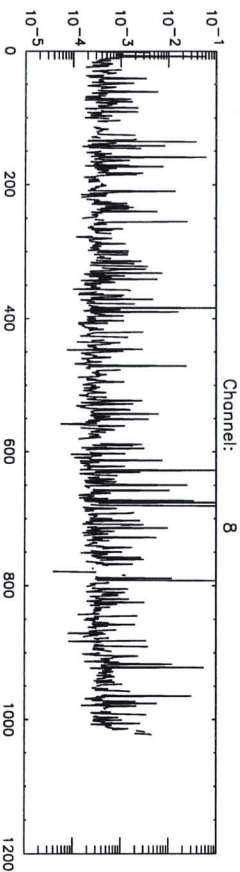
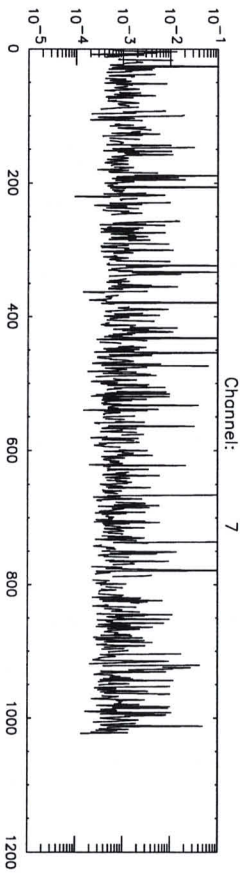
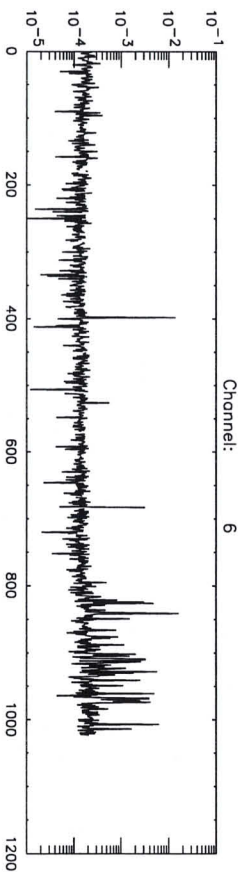
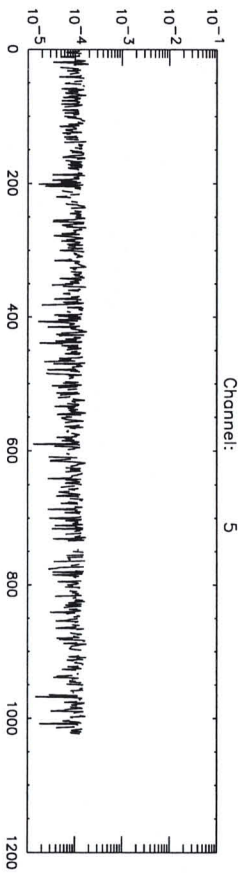
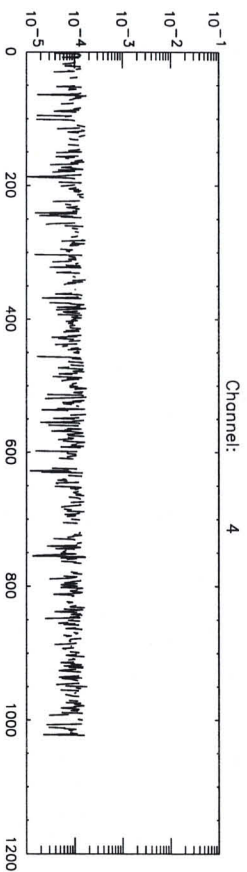
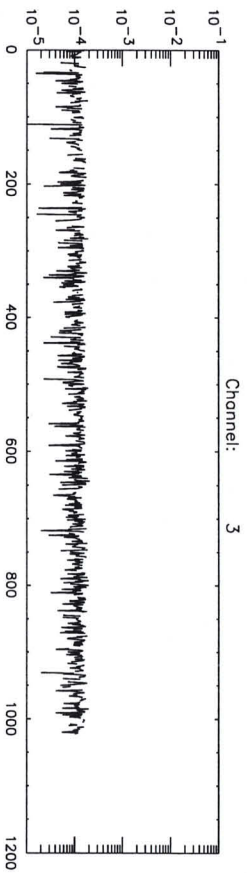
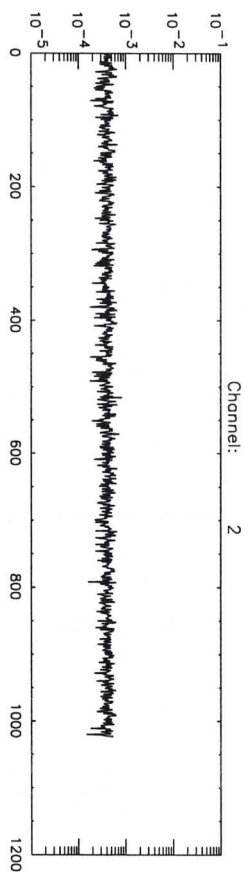
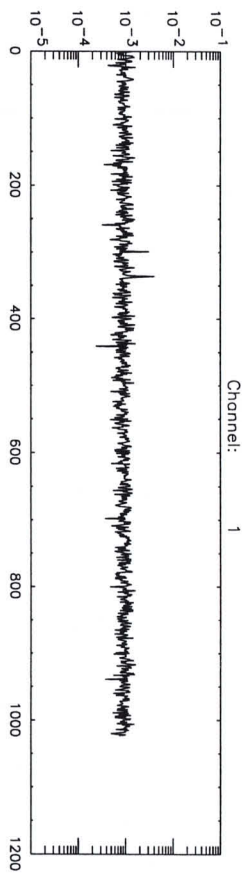
Note that the do-ratio procedure asks

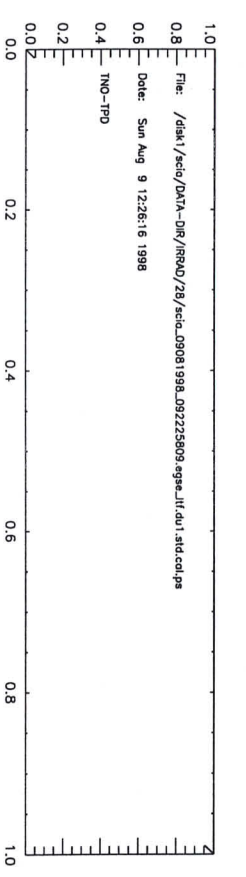
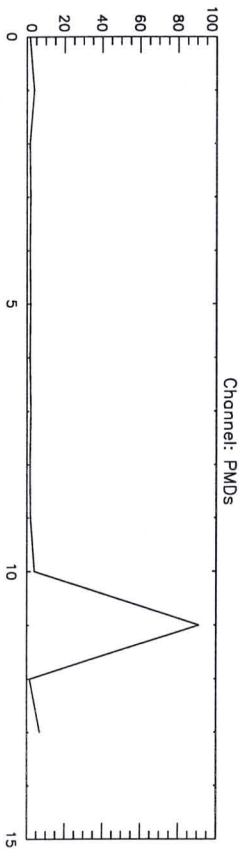
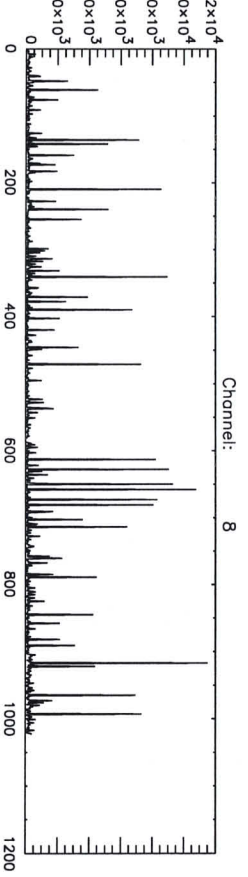
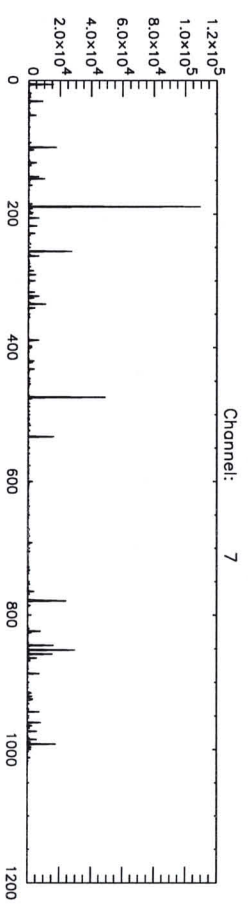
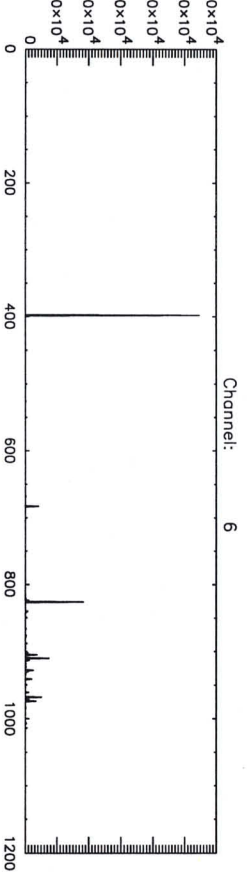
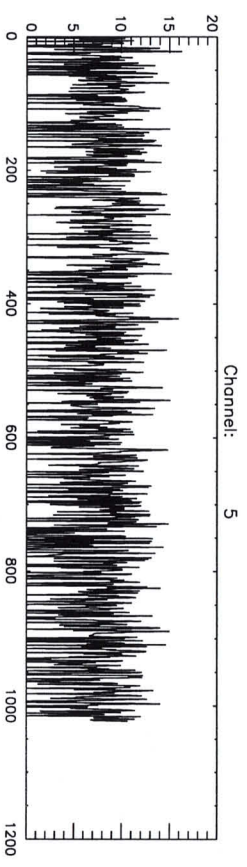
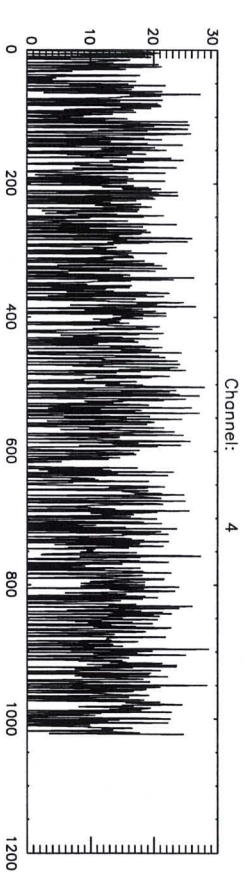
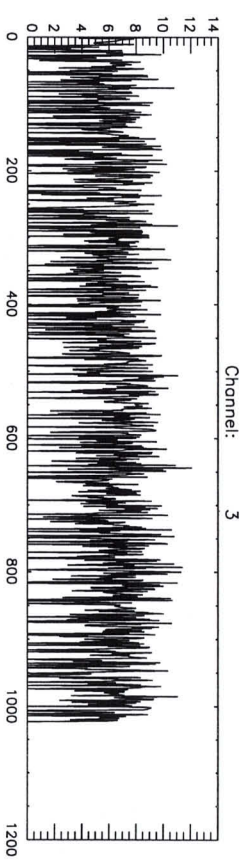
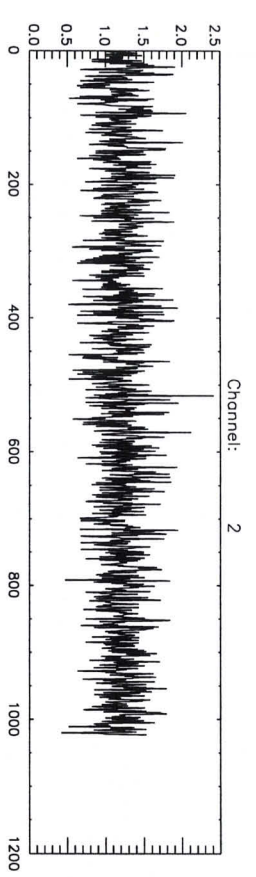
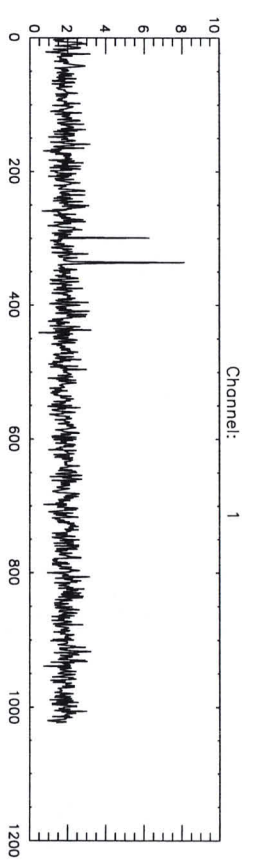
- 1/ ~~one~~ dark file
- 2/ a corresponding light file
- 3/ a second dark file
- 4/ a corresponding light file.

Back up	Create 3 sets of backup CDs of directory		
	~/DATA-DIR/START-OF-CALIBRATION (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k gives the number of kilobytes in the current directory).		See analysis sheet
	Name of backup CDs	_____	BackUp

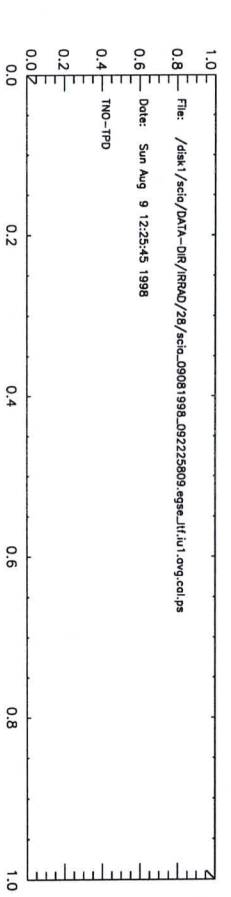
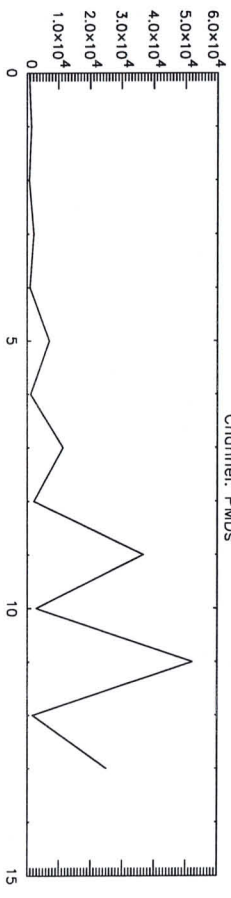
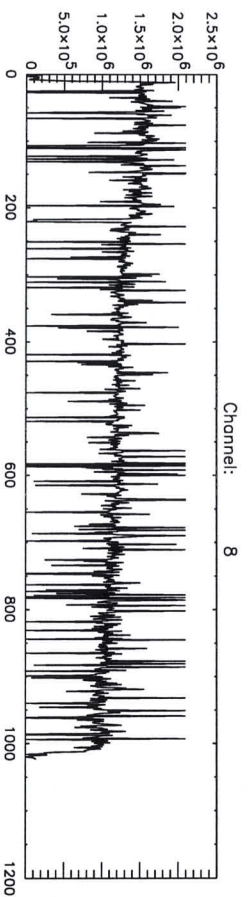
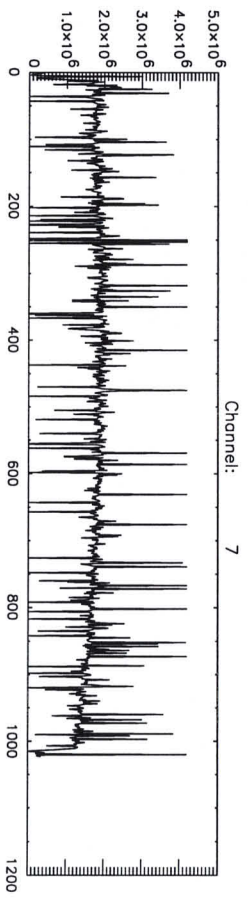
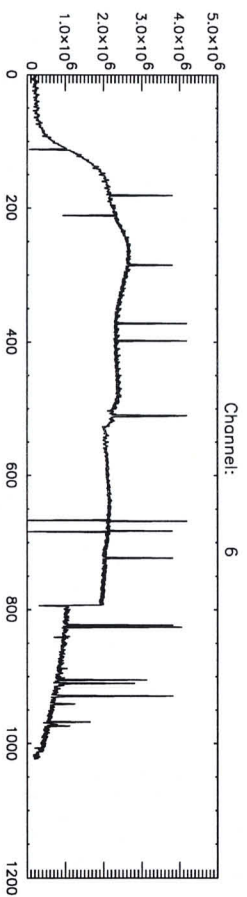
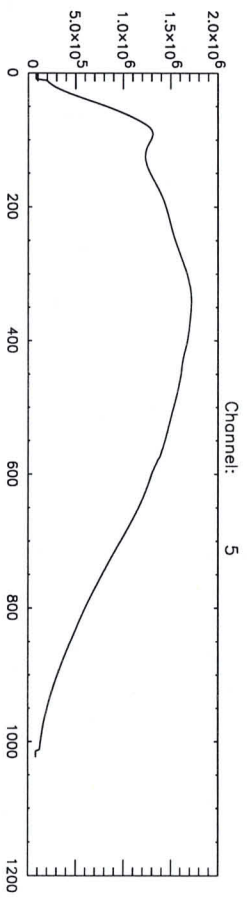
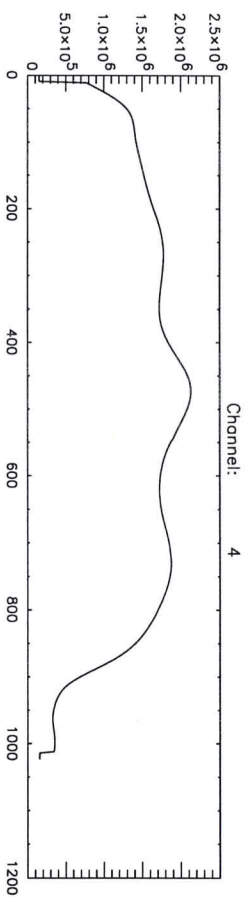
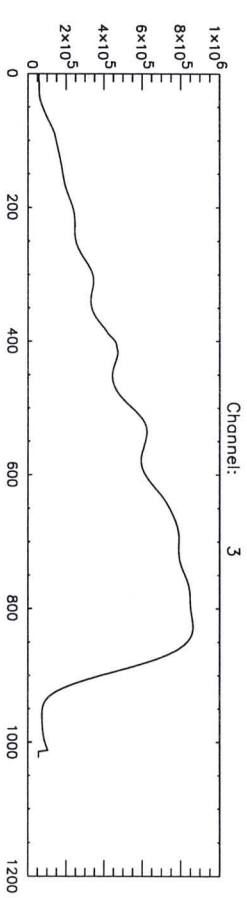
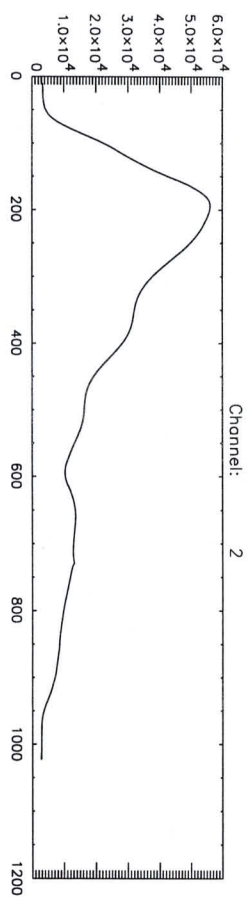
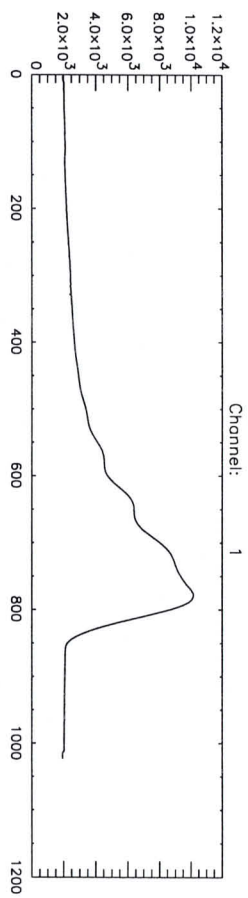
Sign:	Name	_____
	Date and time	_____
	Signature	_____

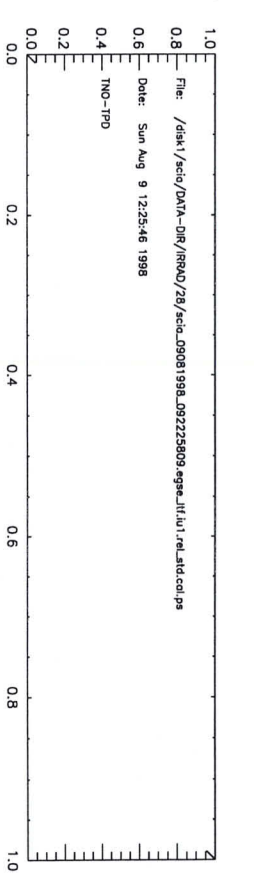
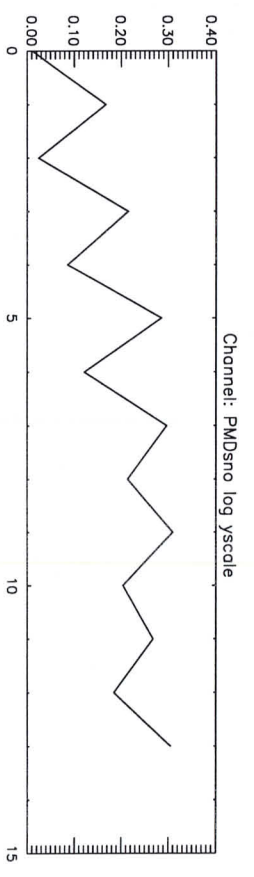
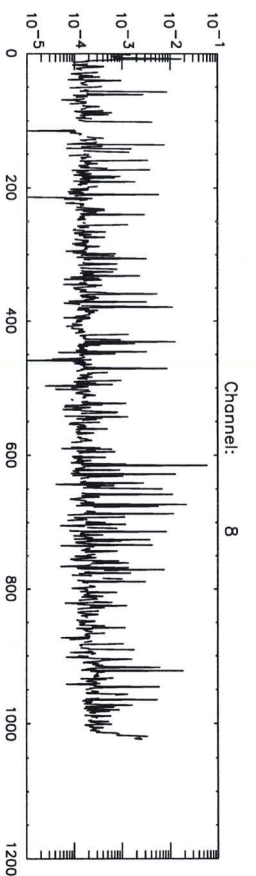
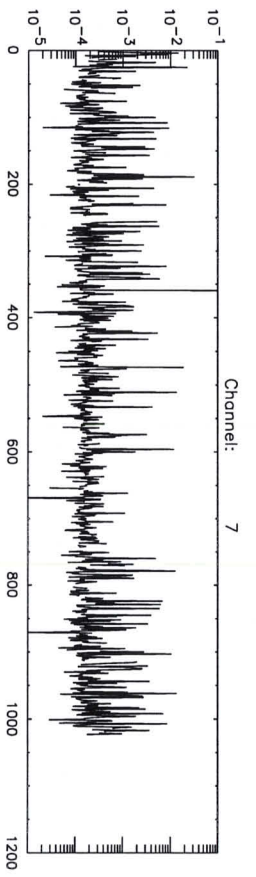
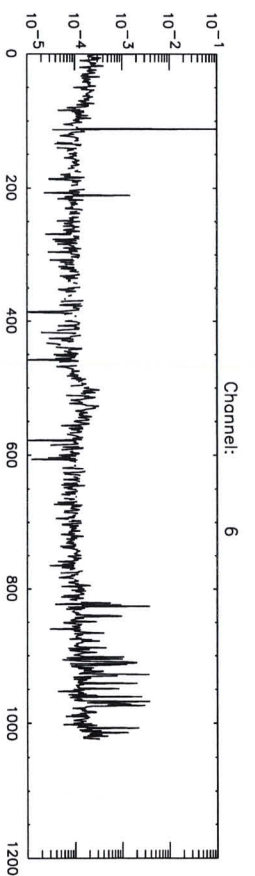
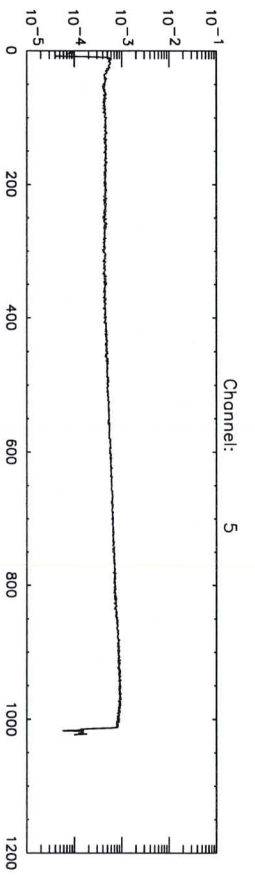
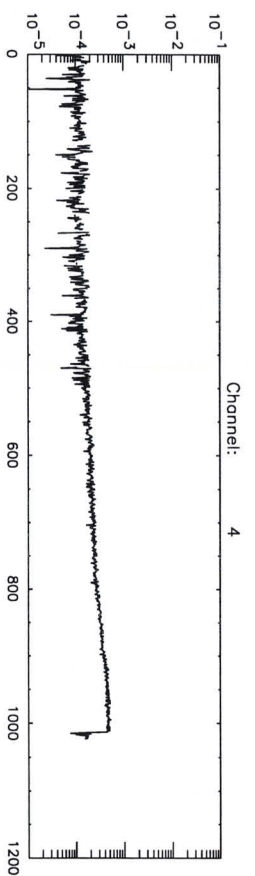
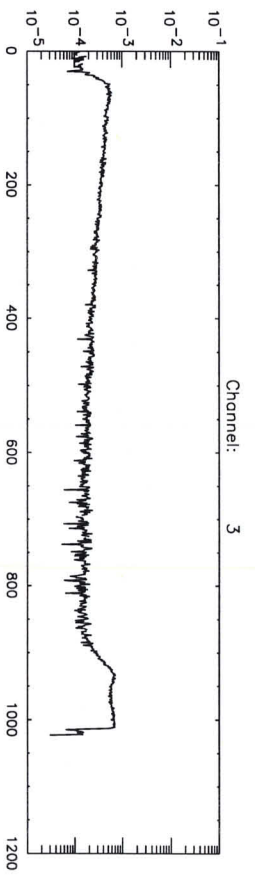
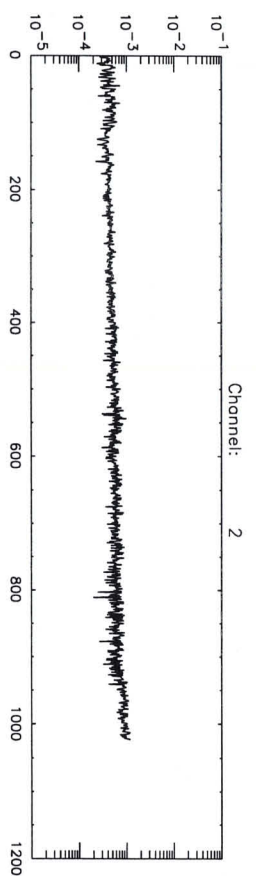
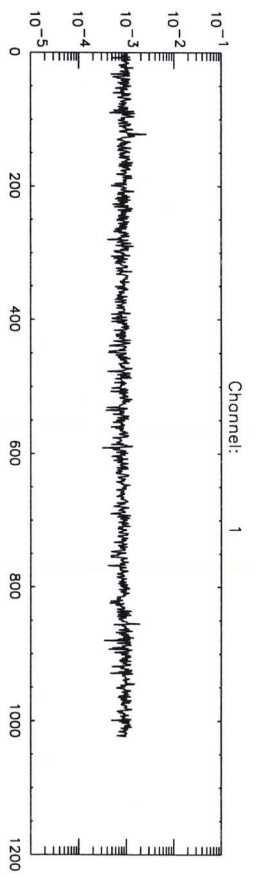


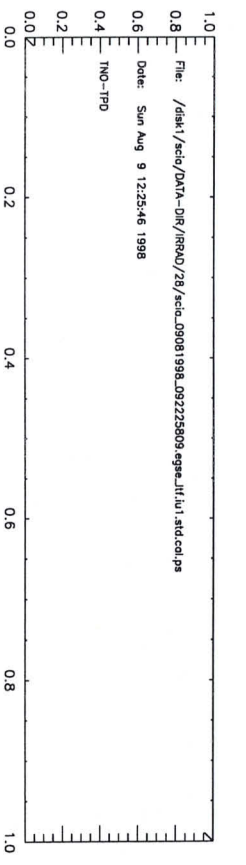
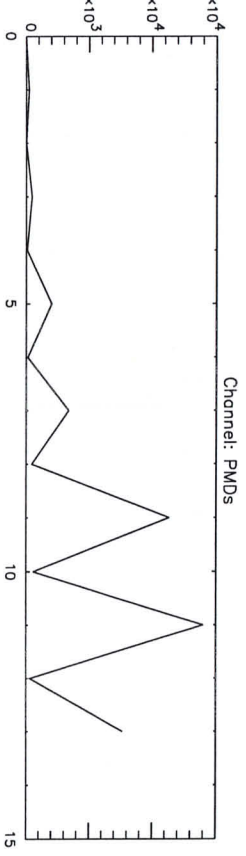
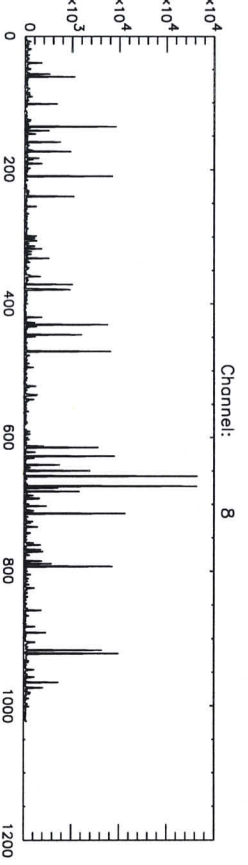
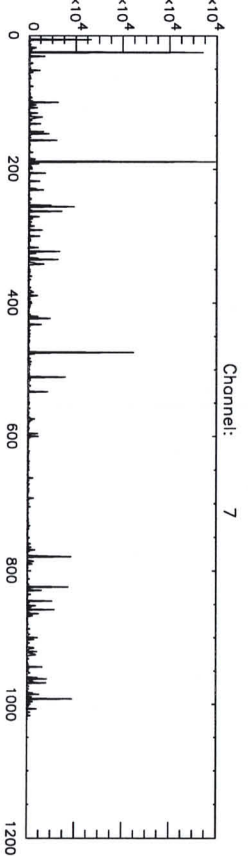
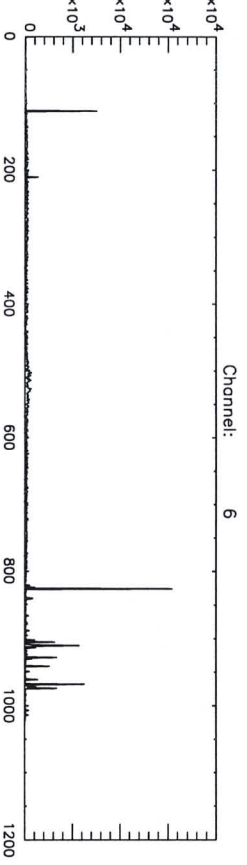
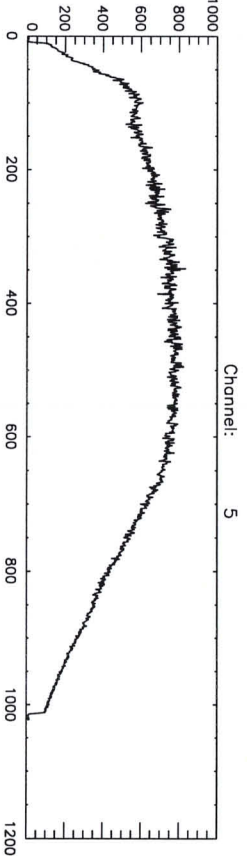
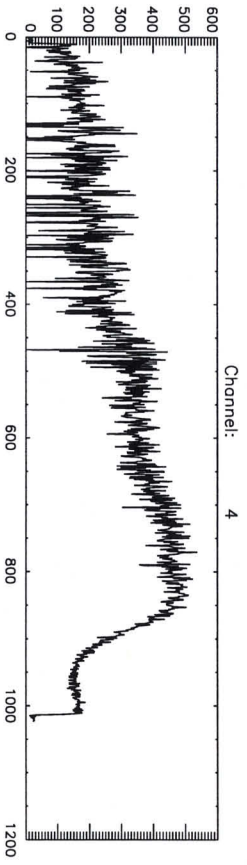
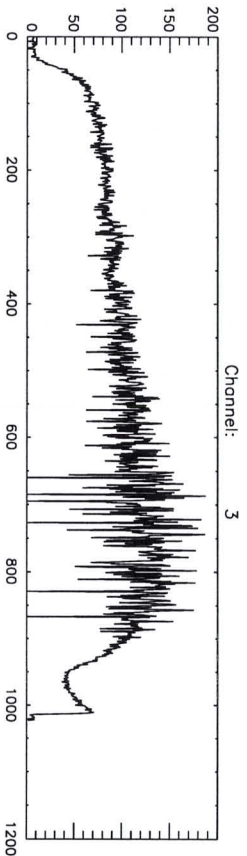
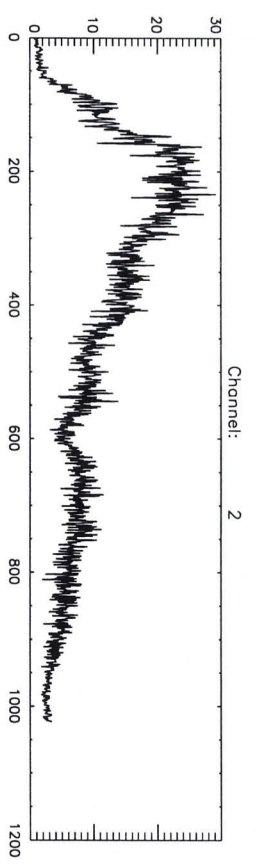
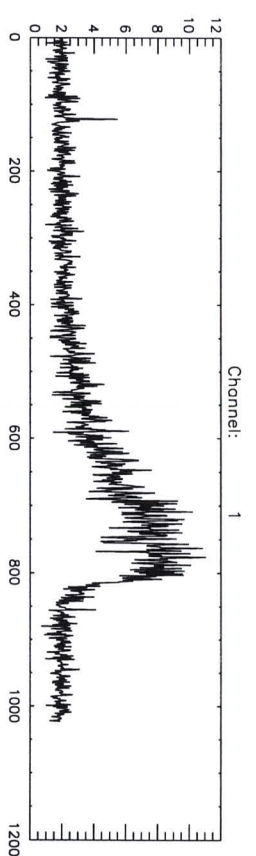




File: /disk1/scid/DATA-01R/RRAD/29/scid_09081998_092225809_egse_jit_du_1.std.col.gps
 Date: Sun Aug 9 12:28:16 1998
 TNO-TPD







time = Sun Aug 9 12:26:16 1998

batch = dul

Start TOD = Sun 09-Aug-98 09:39:46

End TOD = Sun 09-Aug-98 09:51:11

Processing= computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 12:25:46 1998

batch = iu1

Start TOD = Sun 09-Aug-98 09:22:53

End TOD = Sun 09-Aug-98 09:39:46

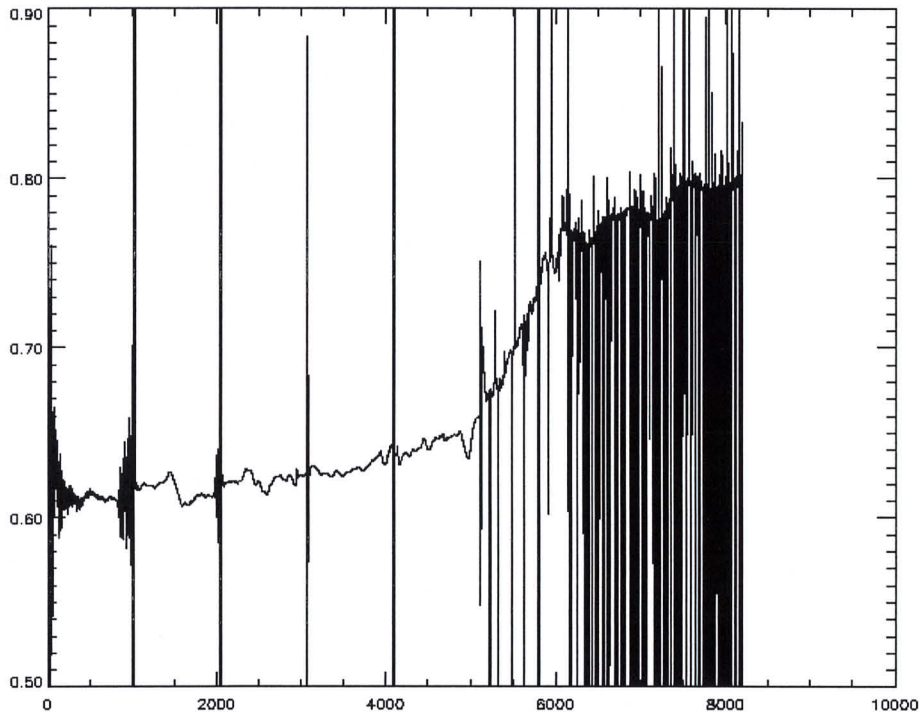
Processing= computation of average, standard dev. and rel.standard dev.

IRRAD

$$\frac{27}{28}$$

→

$$\frac{0.5m}{0.0m}$$



Pagenumber:

LOG SHEET SCIAMACHY CALIBRATION

date/time	description of action	measurement filename
9-8	wid 25 = internal WLS	
11:25 UTC	light seems oke	
	dark seems oke	
	ratio with previous at same temp is 7	
	ppg seems oke	
	efolon seems oke	
	both copied to latest	

Formal Run of Measurement

(Measurement ID)

WLS-Int

Request for Actual Status

Request for Modification

Request for Run

(cross out entries that are not requested.)

(fill in only entries to be modified)

(no entries = run based on actual default settings)

Scanner Positions

Azimuth +45 deg
 Elevation +10.523 deg

Timeline for each Data Acquisition Period during Measurement

	1	2	3	4	5	6	7	8	9	10
State ID	44	45								
Repetitions										

State Parameters for States used in Timeline (State ID must be given)

Channel	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding	PET [s] or H#	Co-Adding
1a	4	1						
1b	4	1						
2b	0.5	0						
2a	0.5	0						
3	0.125	32						
4	0.0625	64						
5	0.0625	64						
6	H0	64						
7	H1	64						
8	H0	64						
State ID								

Step 6-10

Stimuli Settings for Existing Blocks in Measurement

Block No	Stimuli Setup ID	PPC [deg]	Polarizer [deg]	Shutter open/close	Acquisition Time [s]	Lambda [nm]			Repetition Factor	Message	OS Setup Time [s]
						Start	Stop	Step			

Measurement Data Description

Test Purpose U1025
 Remark
 Data Directory 022A_10.01.11.WLS_INT

Signatures

Issued 090090
 < Performed 9. P. 9P

Date	Signature
090090	M. Slapp
9. P. 9P	D. [Signature]

Transfer Data File

STEP ACTION RESULT MARKER

Intro

Your name:
Date:

JCS
9-8

What's the name of the (main) data input files that you want to store on the SUN named scia6?

0221-10.01.11_WLS-Int (A)

Setup a three-window configuration on your SUN.

See course descr.

Do Transfer

Be sure that you are in the directory you want your files in ftp <internet-address>, where you can find the address of the PC in the file /etc/hosts (entry: cdwpc). The address will also be next to you on paper (most probably).

When asked for user, fill in: anonymous, when asked for an email address, fill in your email address on TPD.

Set in binary: binary
mget * (and return y to every file).
bye

In DATA-DIR window

In DATA window

Approx. 140 kB

Sign:

Name
Date and time
Signature

JCS
9-8

Construct CORR directory

STEP	ACTION	RESULT	MARKER
Intro	Your name: Date:	<u>Marion</u> <u>090898</u>	
	Setup a three-window configuration on your SUN.		See course descr.

Cnstr correction directory

cd ~/DATA-DIR/CORR ; ls
If there isn't a subdirectory corresponding to the current date, then mk_corr_dir <date>, where <date> is formatted as follows DDMMYY (where DD, MM and YY correspond to the current date, DD = day, MM = month, YY = year 98).

Note: In window DATA-DIR

What is the name of the new directory?

090898 (A)

Check

ls -l <A>
etalon.cal present?
dead_bad.pix present?
stray.data present?
wl.data present?
ppg.cal present?

Y/N
Y/N
Y/N
Y/N
Y/N

Sign:

Name
Date and time
Signature

Marion
090898 11:21
M. Stapp

STEP	ACTION	RESULT	MARKER
Intro	Your name:	<u>Jos</u>	
	Date:	<u>090898</u>	
	What's the name of the (main) data input files generated by the EGSE? (* .dat)	<u>scia-09081998-100409817</u>	(A)
	Setup a three-window configuration on your SUN.		See course descr.
Cnstr directory	cd ~/DATA-DIR/WLS ; ls -l		Note: In window DATA-DIR
	highest number in directory? New directory: mkdir <B+1>	<u>4</u>	(B)
	ls -l What's now the highest number in directory? <C> should be + 1 directory name is:	<u>8</u> <input checked="" type="radio"/> Y / <input type="radio"/> N ~/DATA-DIR/WLS/<C>	(C) (DIR-NAME)
Copy data	See Analysis sheet: Transfer Data File	<input checked="" type="radio"/> Y / <input type="radio"/> N	In DATA-DIR window
Cnstr correction directory	ls -l ~/DATA-DIR/CORR If there isn't a subdirectory corresponding to the current date, then construct a CORRECTION directory (see: analysis sheet Construct CORR directory). What is the value of the correction subdirectory corresponding to the current date. When running the PPG analysis, you will be asked to select this directory when storing the resulting PPG correction file.	_____	In DATA-DIR window

PPG

If not, value is: _____

Add postscript images to logbook, done Y/N

Print logfiles lpr -P<printer> *.log
Add logfiles to logbook, done Y/N

PPG processing

Run PPG idl do_ppg In IDL window

Check PPG ls -l * In DATA-DIR Window should be approx 150Kb
Size of file *.du*.cal.ppg.cal 145 k

Size of file *.du*.cal.ppg.cal.log 360 b

Size of file *.du*.cal.ppg.cal.ps 145 kb

Check PPG visually lpr -P<printer> *.du*.cal.ppg.~~cal~~.ps
Value of PPG should show only a small variation around 1.0 (like noise). Y/N
Add postscript images to logbook, done Y/N

Print logfiles lpr -P<printer> *.du*.cal.ppg.cal.log
Add logfiles to logbook, done Y/N

Back up Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory). See analysis sheet BackUp

Name of backup CDs _____

Sign: Name Jos
Date and time 090898 11.47

STEP	ACTION	RESULT	MARKER
Intro	<p>Your name: _____</p> <p>Date: _____</p> <p>What's the name of the (main) data input files generated by the EGSE? (* .dat)</p>	<p>Jos</p> <p>090898</p> <p>scia_090898-100409817</p>	<p>(A)</p> <p>See course descr.</p>
Cnstr directory	<p>cd ~/DATA-DIR/WLS ; ls -l</p> <p>highest number in directory?</p> <p>New directory: mkdir <B+1></p> <p>ls -l</p> <p>What's now the highest number in directory?</p> <p><C> should be + 1</p> <p>directory name is:</p>	<p>090897</p> <p>_____</p> <p>Y / N</p> <p>~/DATA-DIR/WLS/<C></p>	<p>Note: In window DATA-DIR (B)</p> <p>(Do this only when you haven't already a directory with the source file for PPG purposes.)</p> <p>(C)</p> <p>(DIR-NAME)</p>
Copy data	<p>See Analysis sheet: Transfer Data File</p>	<p>(Y) N</p>	<p>In DATA-DIR window</p>
Cnstr correction directory	<p>ls -l ~/DATA-DIR/CORR</p> <p>If there isn't a subdirectory corresponding to the current date, then construct a CORRECTION directory (see: analysis sheet Construct CORR directory).</p> <p>What is the value of the correction subdirectory corresponding to the current date.</p> <p>When running the ETALON analysis, you will be asked to select this directory when storing the resulting ETALON correction file.</p>	<p>_____</p>	<p>In DATA-DIR Window</p>

Etalon

Contents of *rel_std*.ps files should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y / N
If not, value is: _____

Add postscript images to logbook, done Y / N

Print logfiles lpr -P<printer> *.log
Add logfiles to logbook, done Y / N

ETALON processing



Run ETALON idl do_etalon

In IDL window

Check ETALON ls -l <DIR-NAME>/*

In DATA-DIR window should be approx 150Kb

Size of file *.du*.avg.cal.etalon.cal 145 kb

Check ETALON visually lpr -P<printer> *.du*.avg.cal.etalon.cal.ps
Value of ETALON should show only a small variation around 1.0 (like noise). Y / N
Add postscript images to logbook, done Y / N

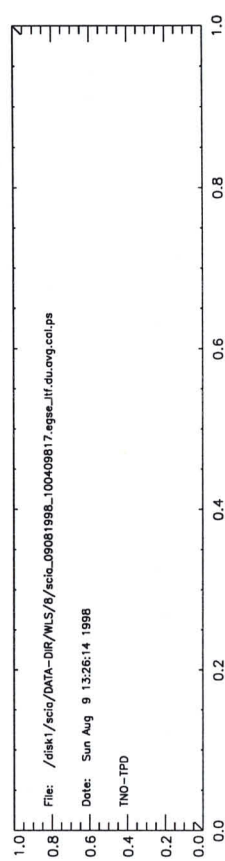
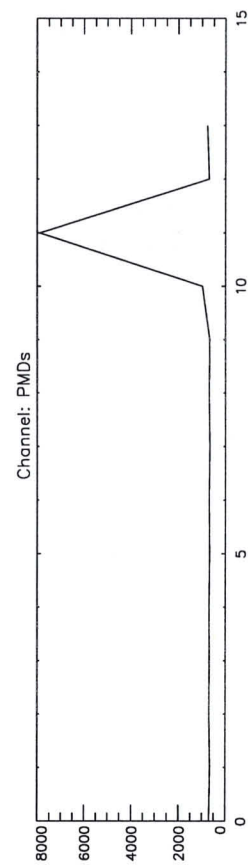
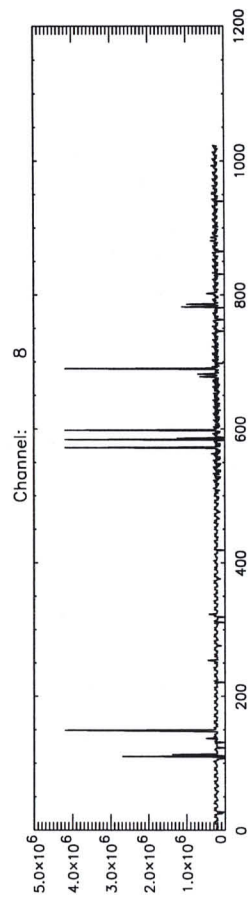
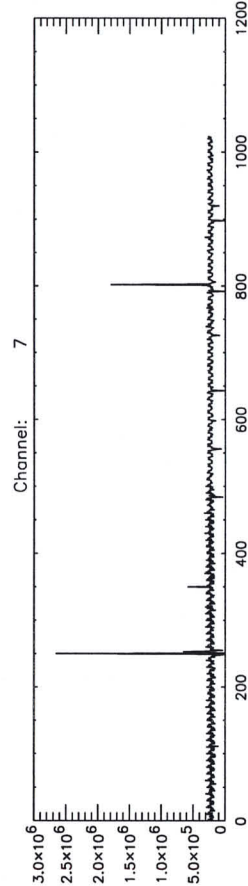
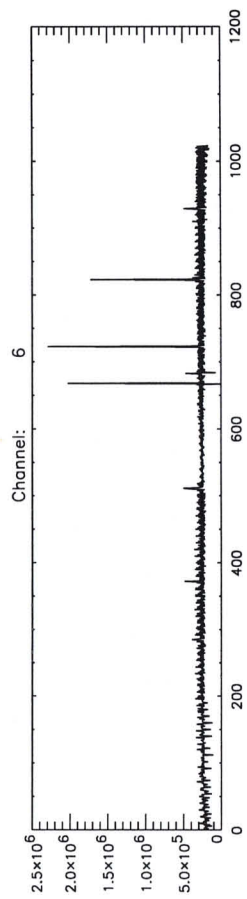
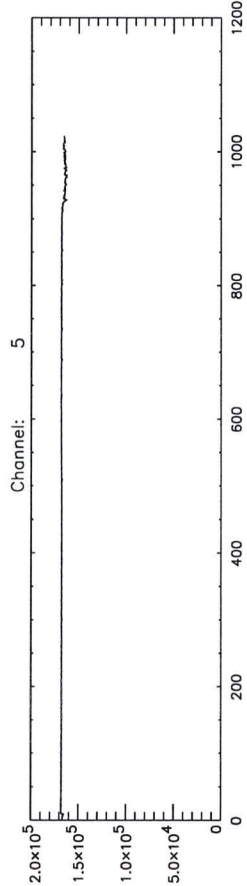
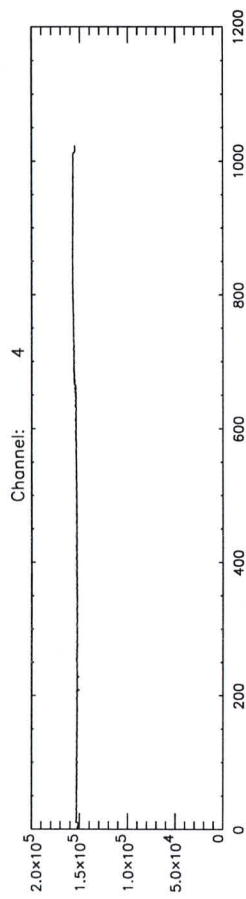
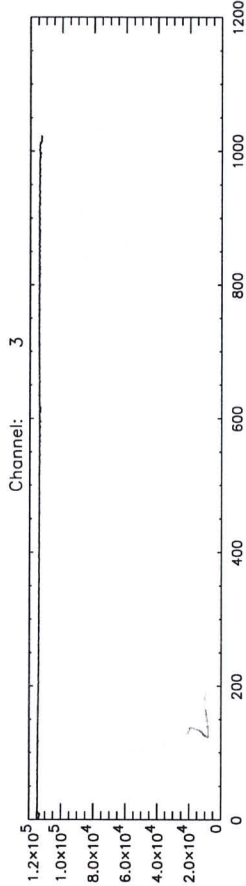
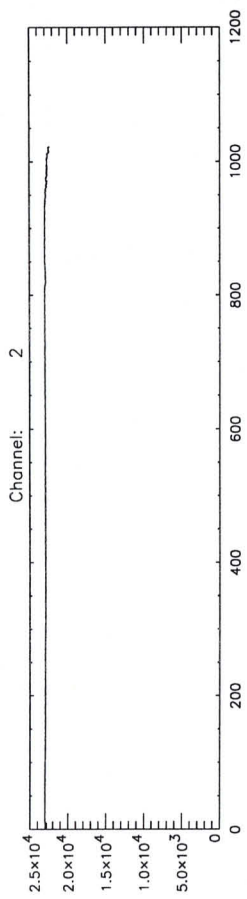
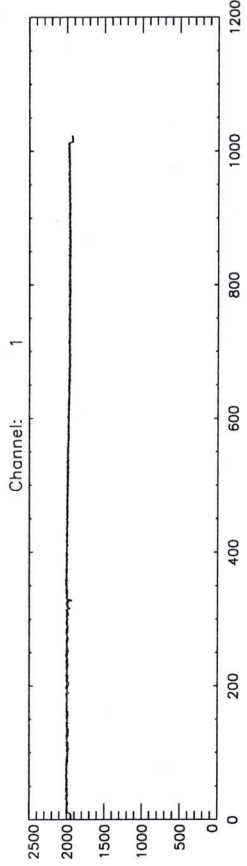
Print logfiles lpr -P<printer> *.du*.avg.cal.etalon.cal.log
Add logfiles to logbook, done Y / N

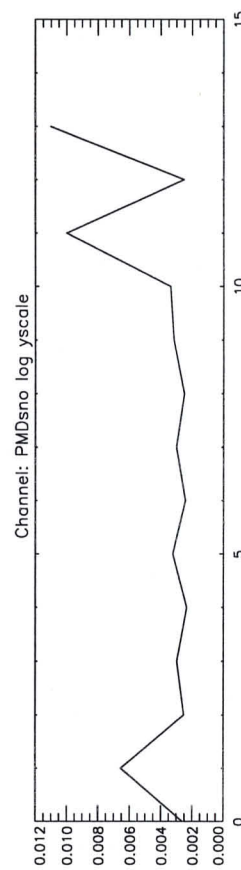
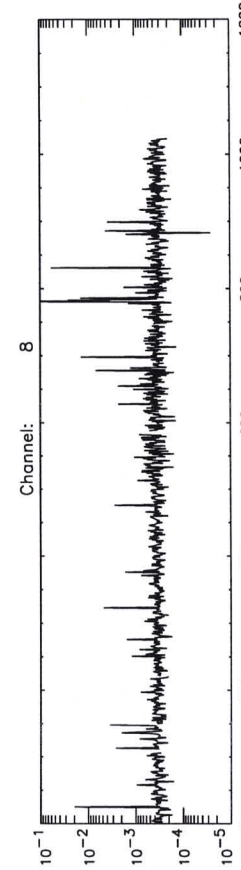
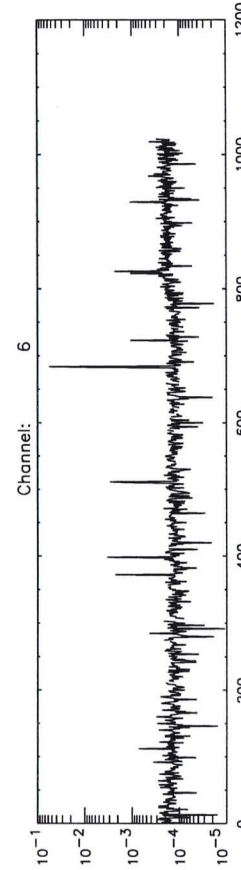
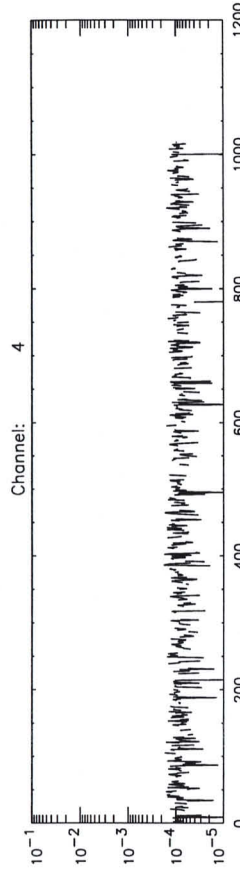
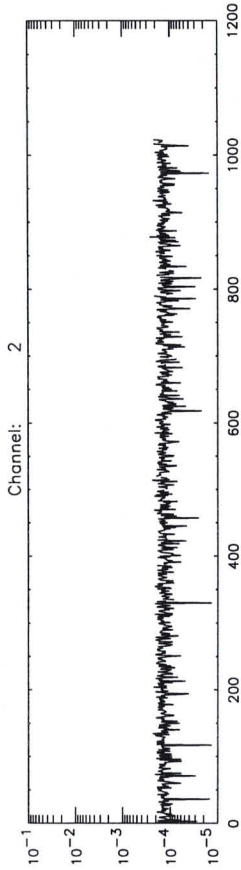
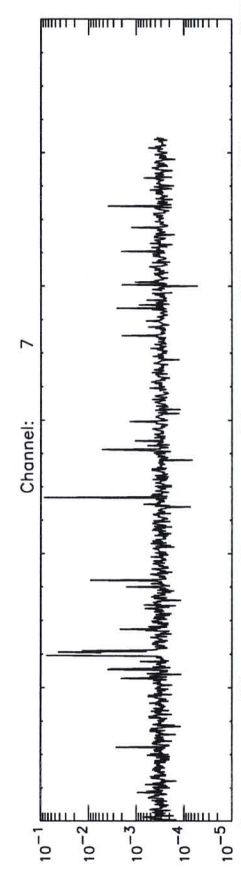
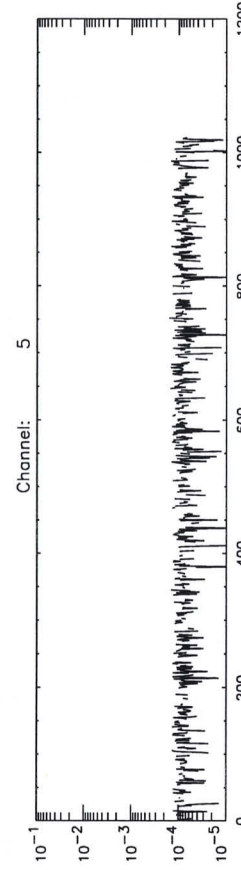
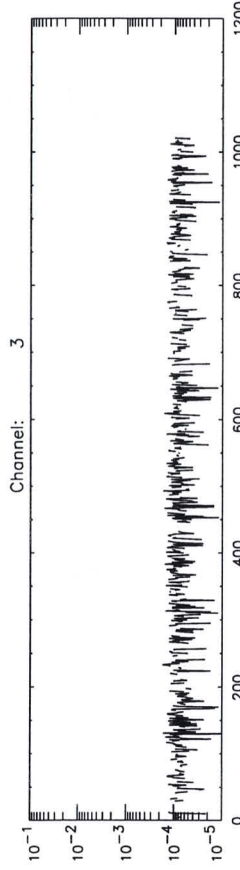
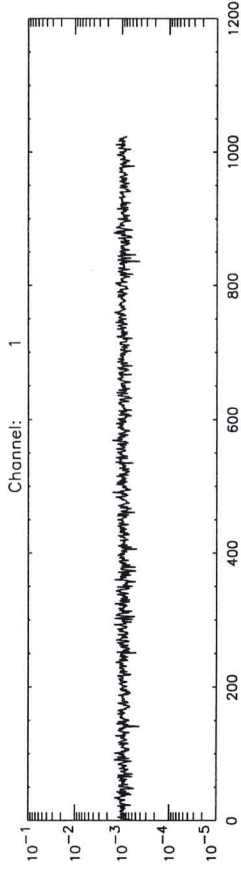
When asked a file containing reference WLS spectrum (START-OF-CAL) select the right subdirectory START-OF-CAL-WARM or START-OF-CAL-COLD. (depending on detector temp.)

Back up Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).
Name of backup CDs _____

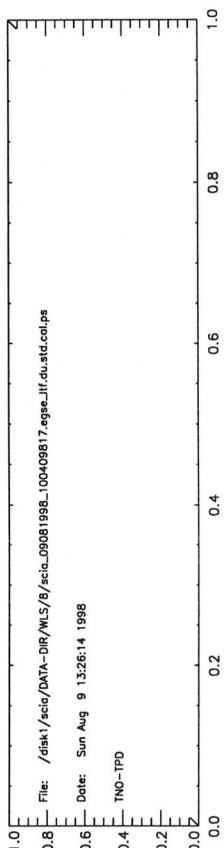
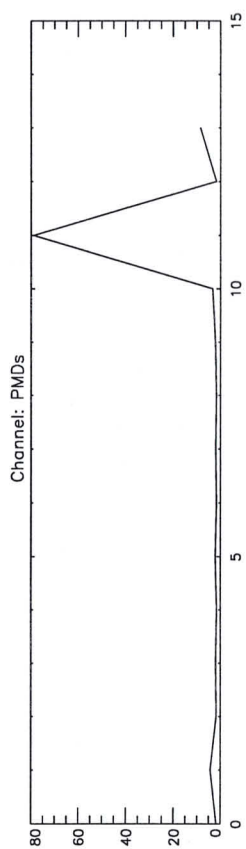
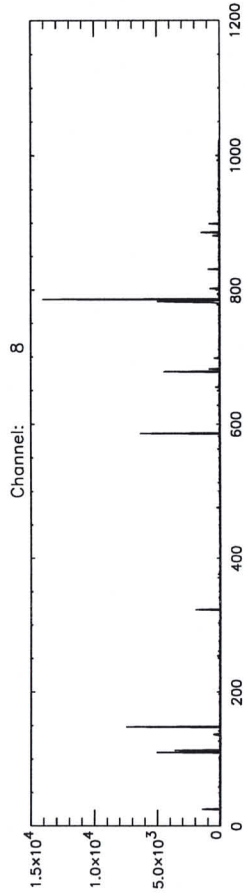
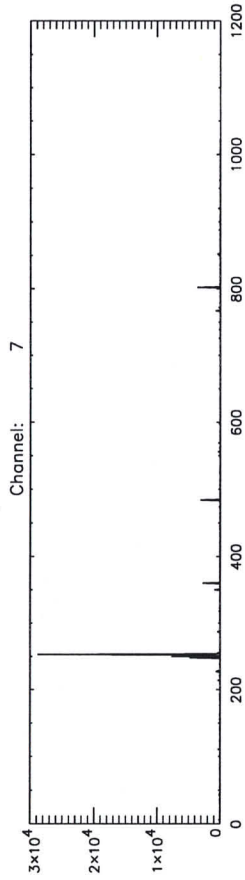
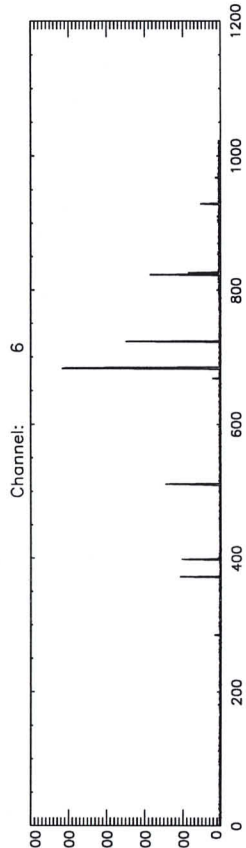
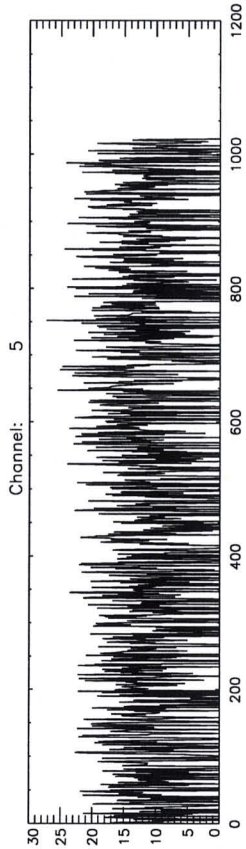
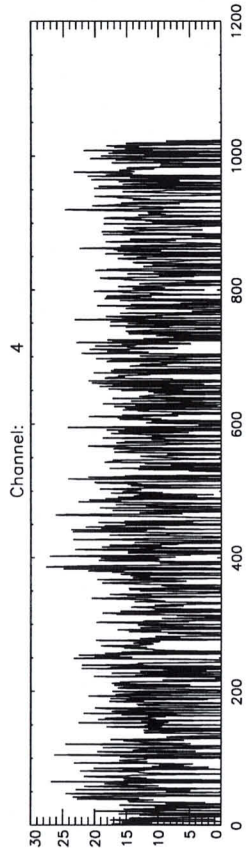
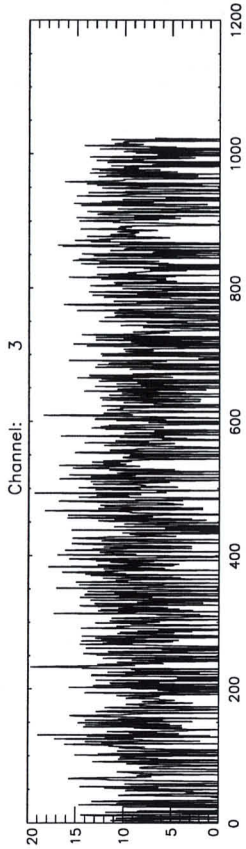
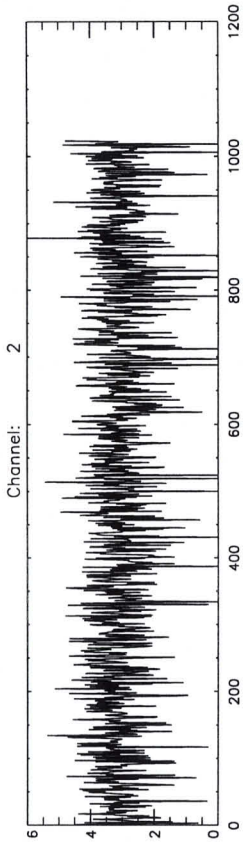
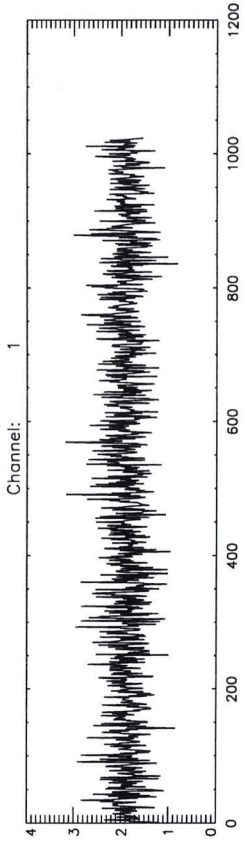
See analysis sheet BackUp

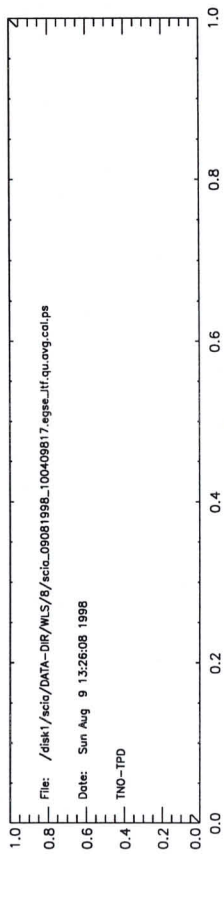
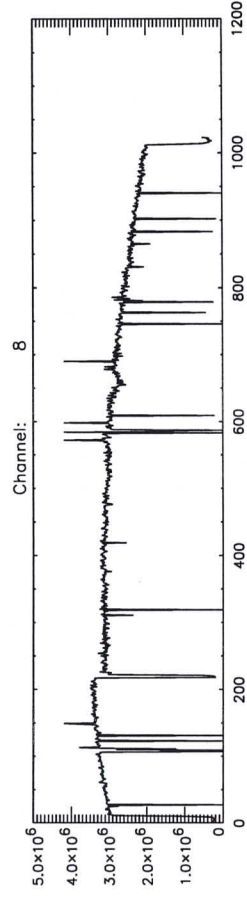
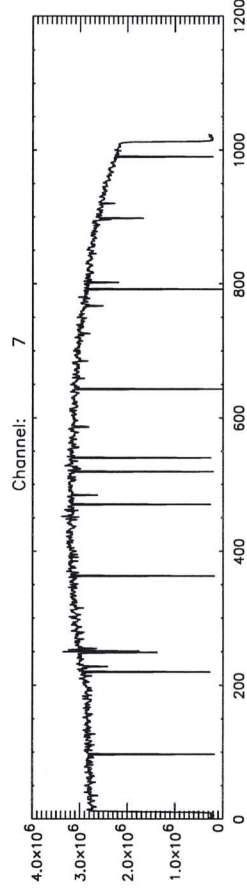
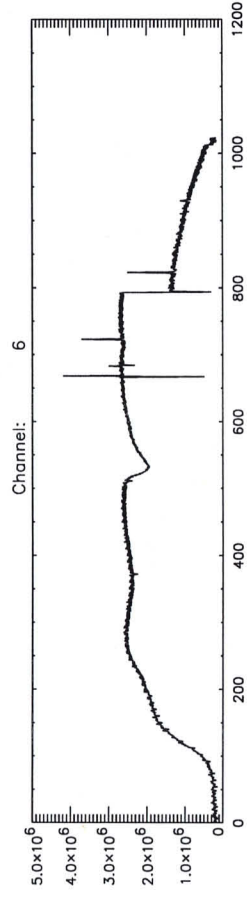
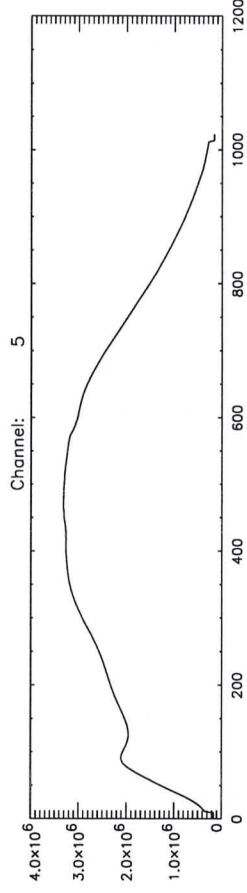
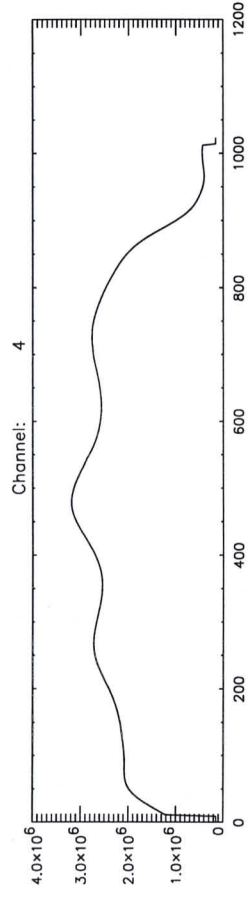
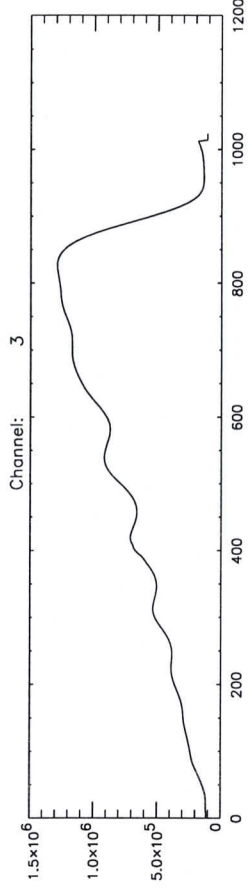
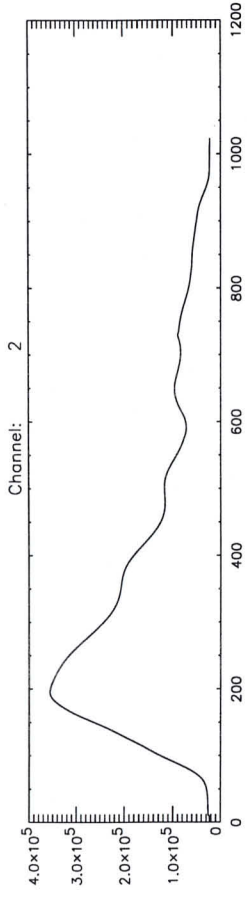
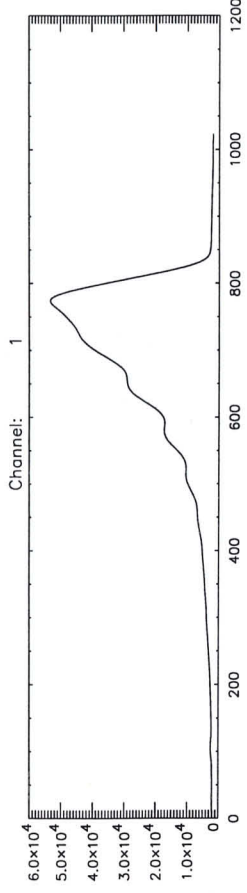
Sign: _____ Name _____

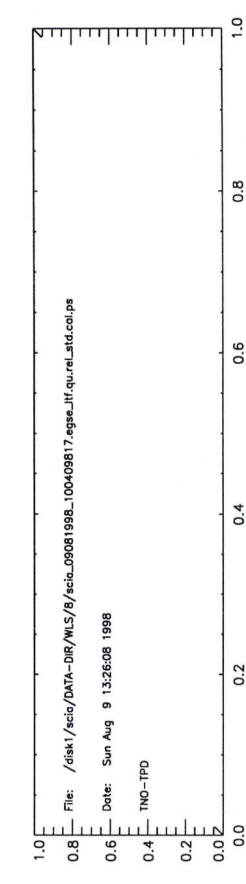
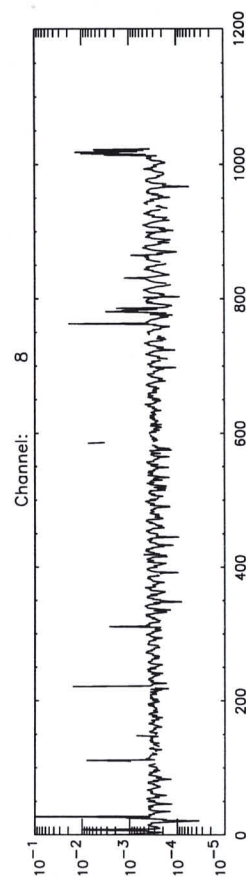
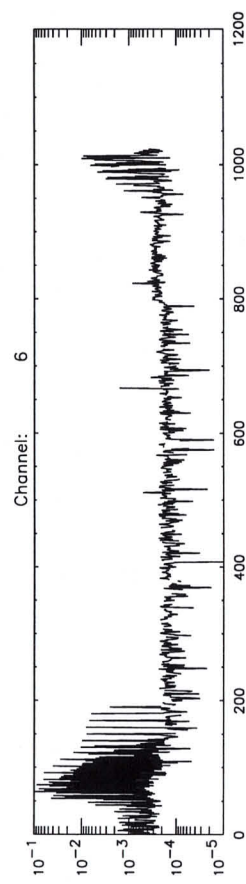
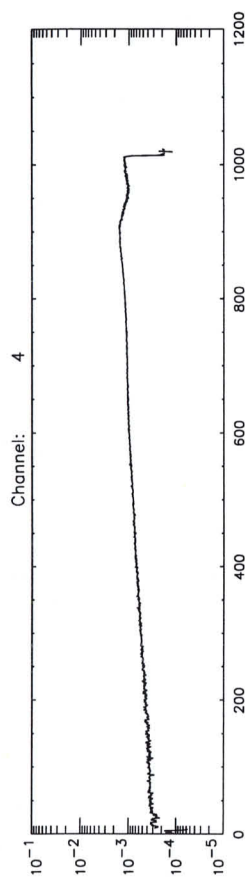
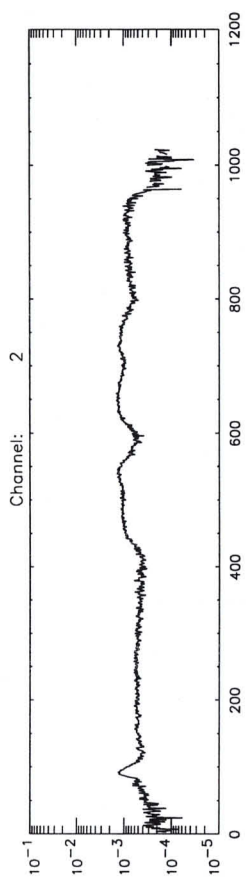
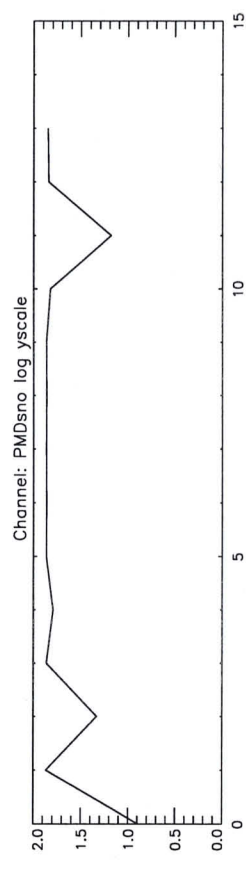
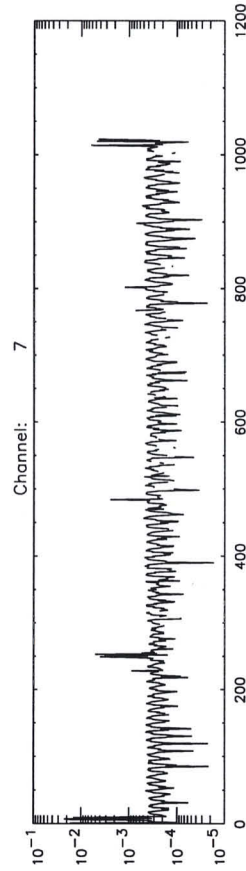
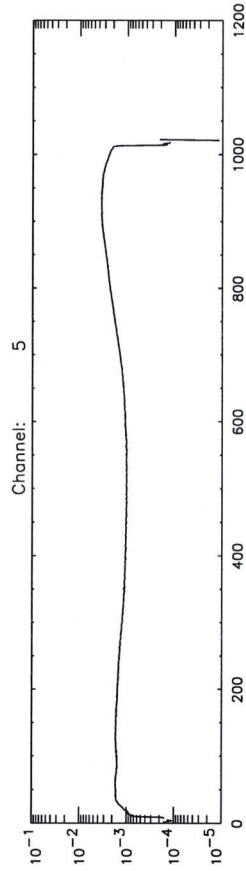
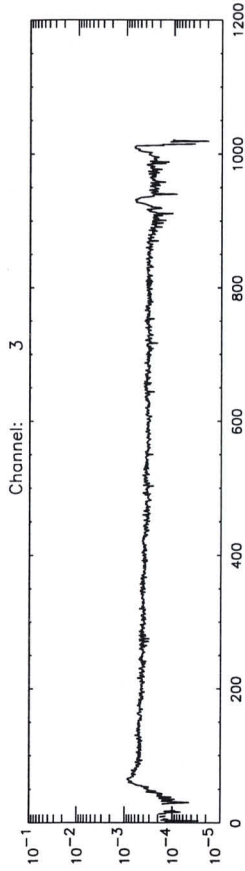
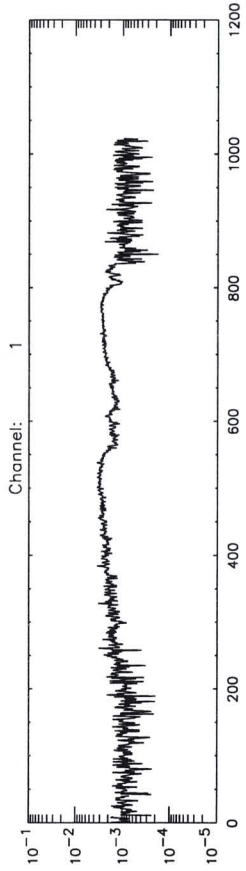


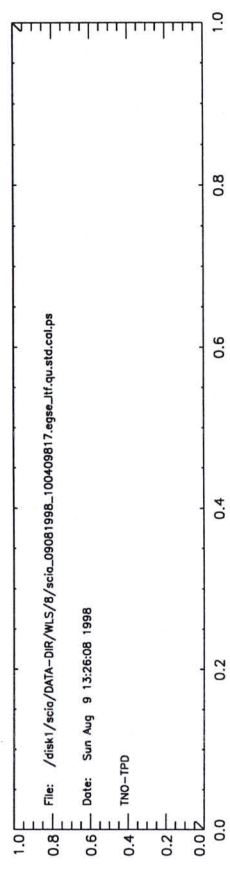
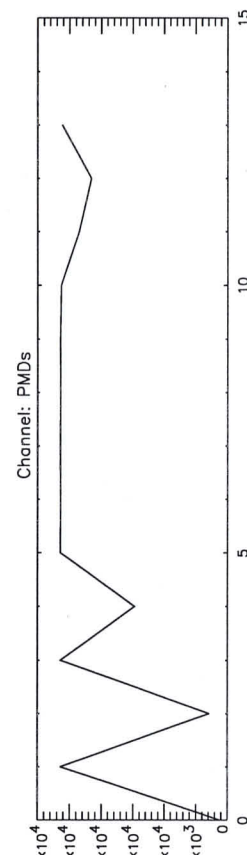
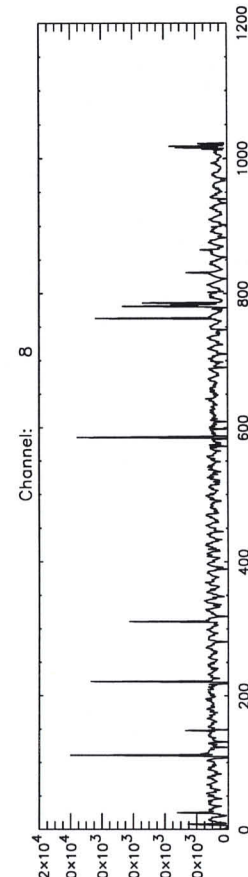
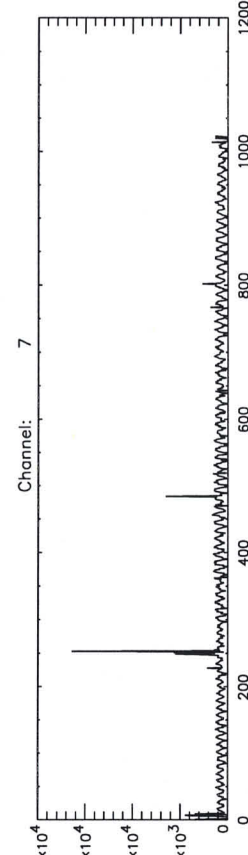
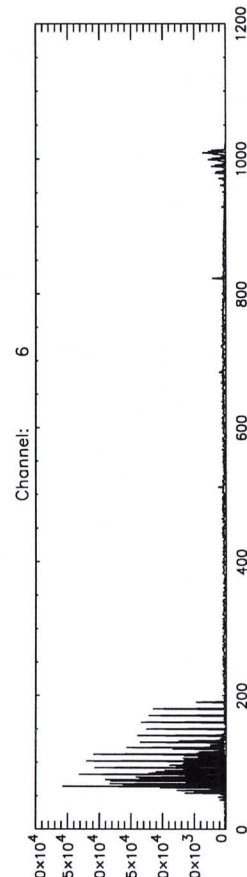
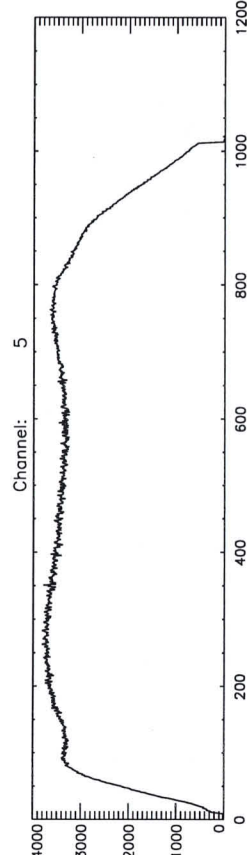
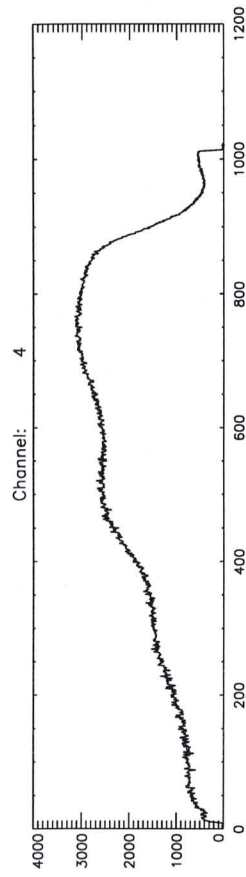
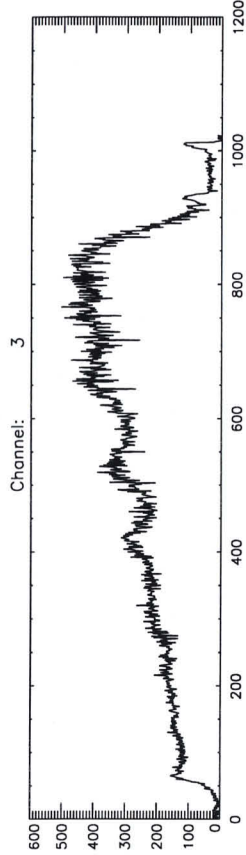
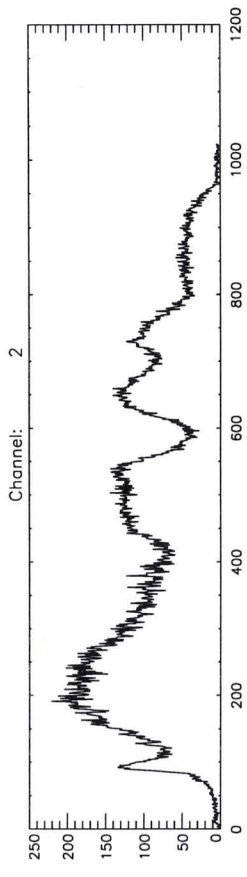
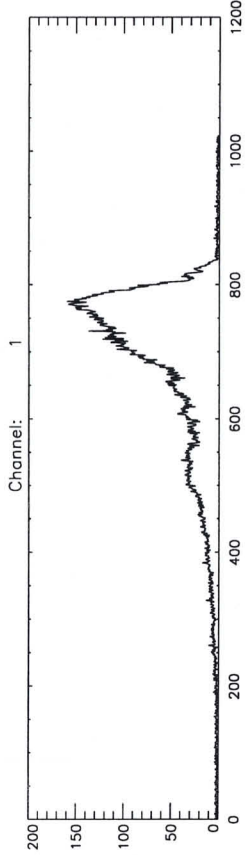


File: /disk1/asci/DIR/WLS/B/asci_09081998_100409817_egse-itr.du.rel_atd.col.ps
Date: Sun Aug 9 13:26:14 1998
TNO-TPD









time = Sun Aug 9 13:26:14 1998

batch = du

Start TOD = Sun 09-Aug-98 10:04:35

End TOD = Sun 09-Aug-98 10:05:35

Processing= computation of average, standard dev. and rel.standard dev.

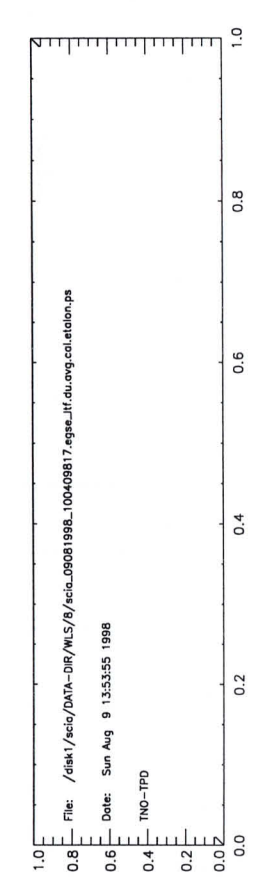
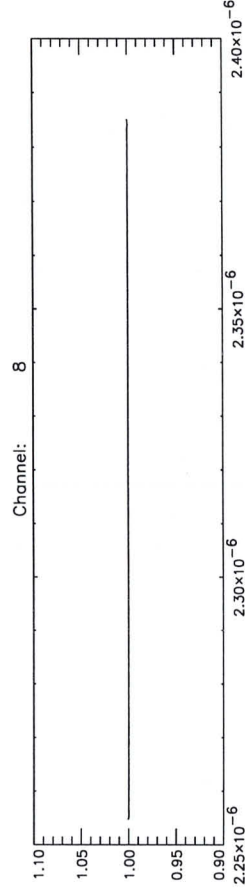
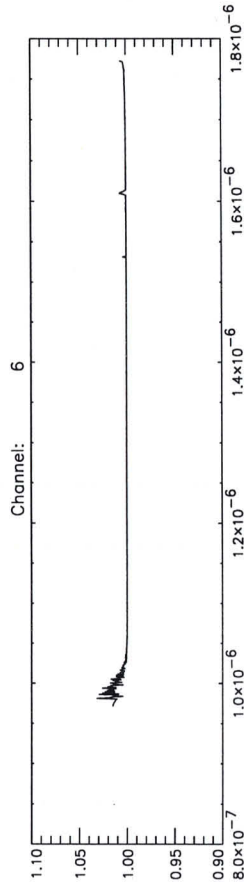
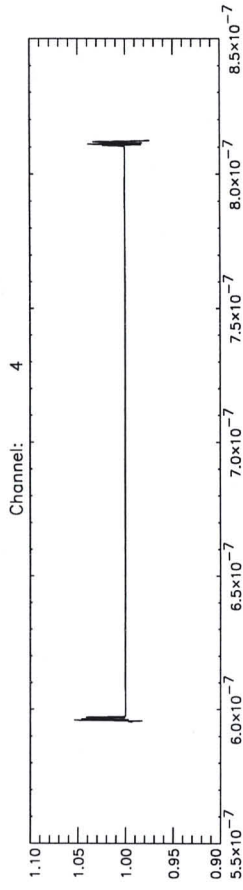
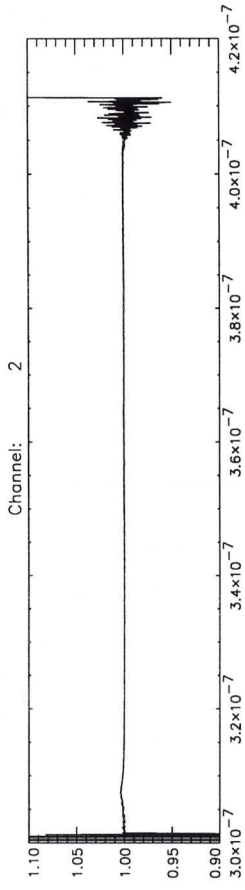
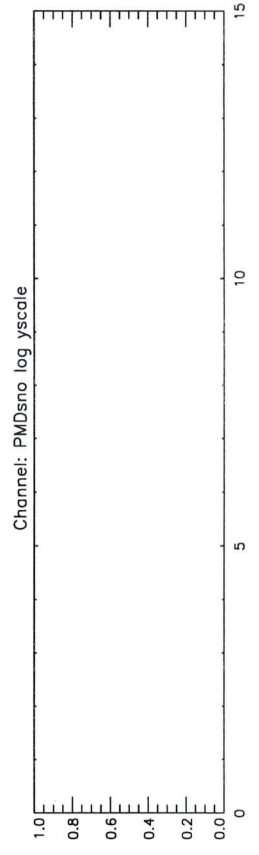
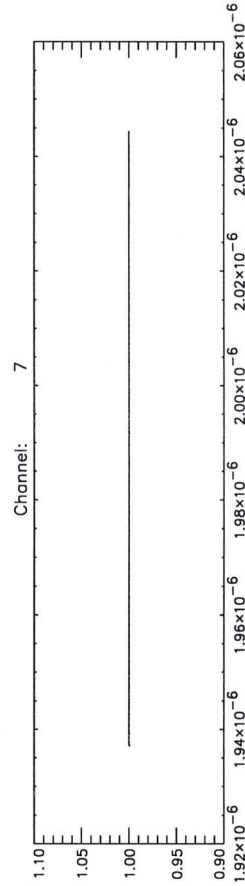
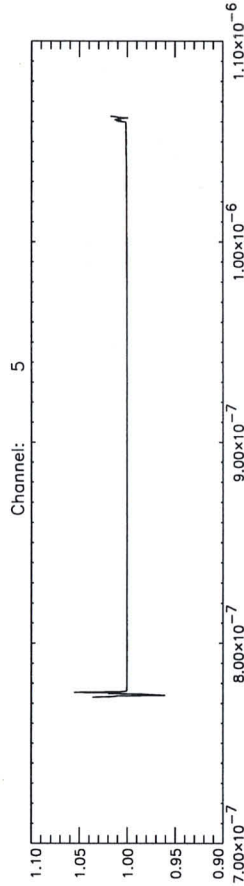
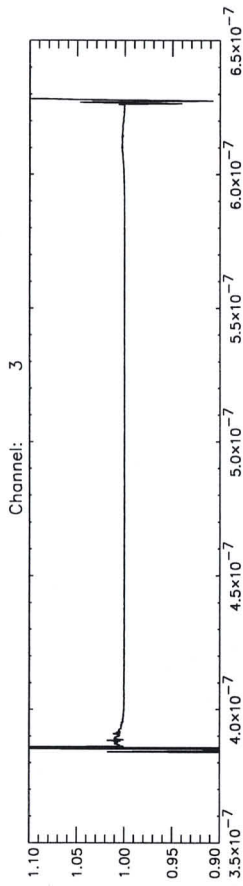
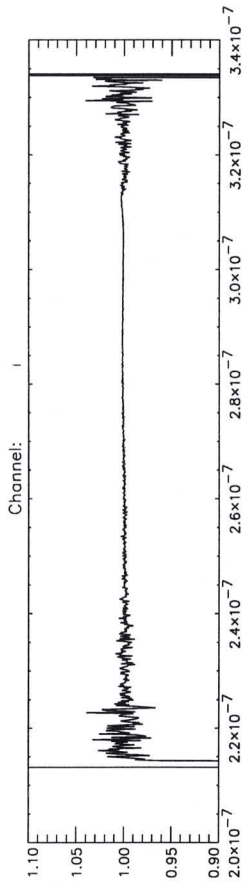
time = Sun Aug 9 13:26:08 1998

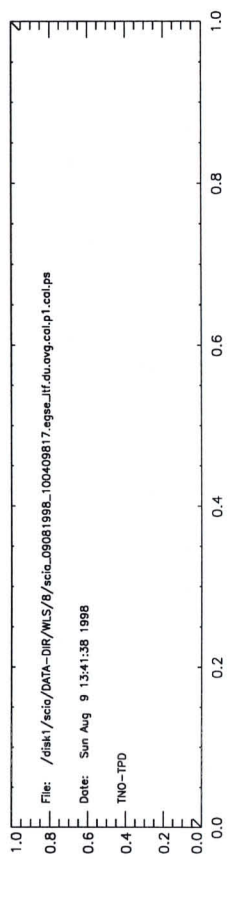
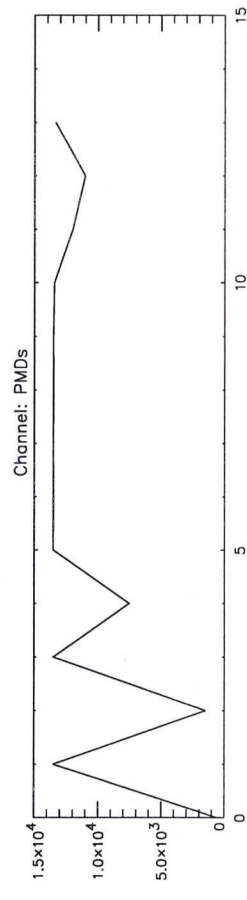
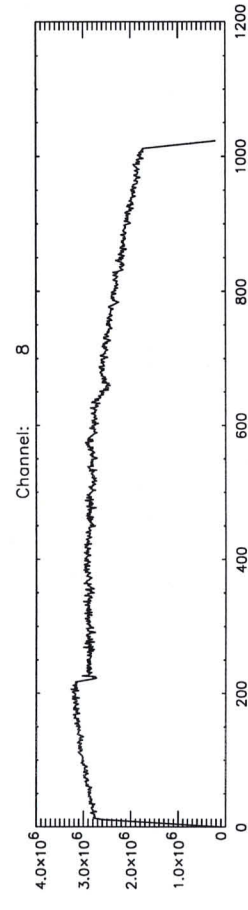
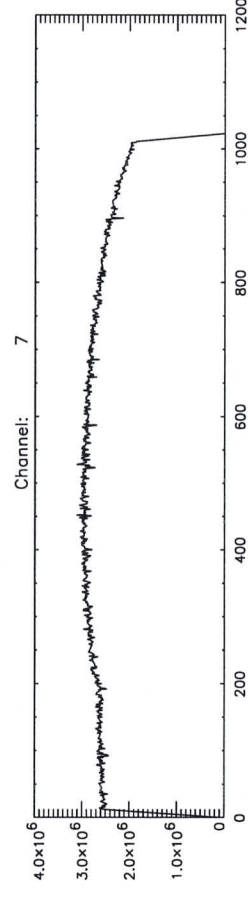
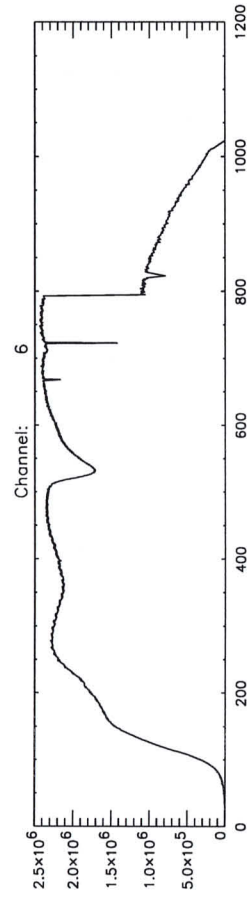
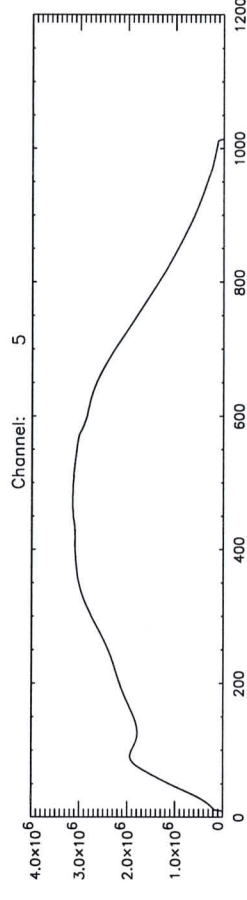
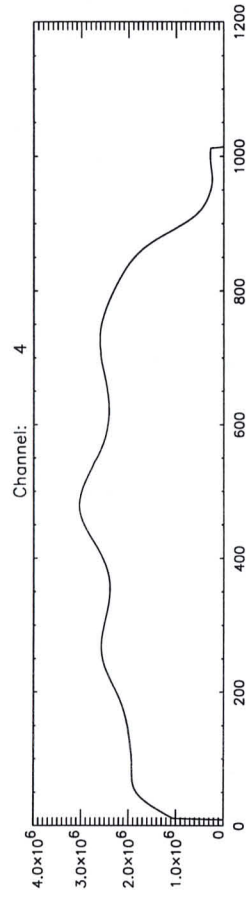
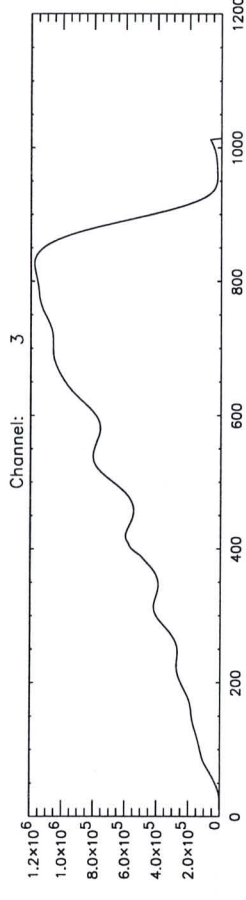
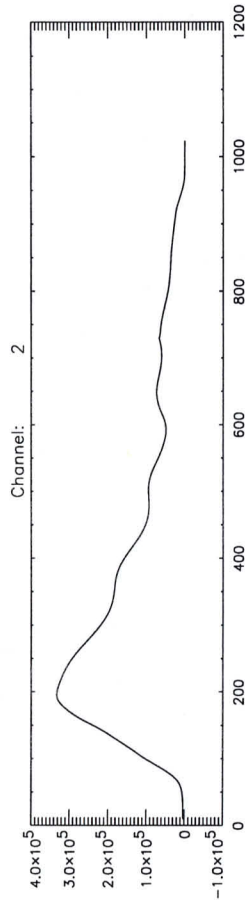
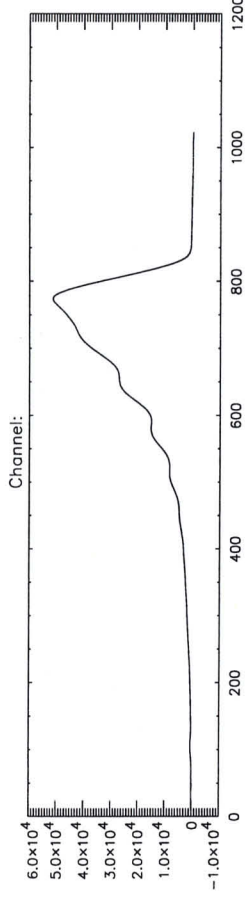
batch = qu

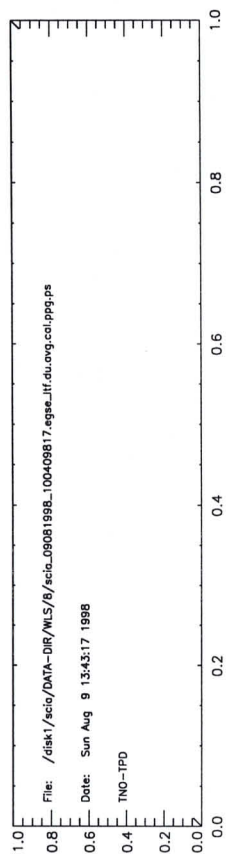
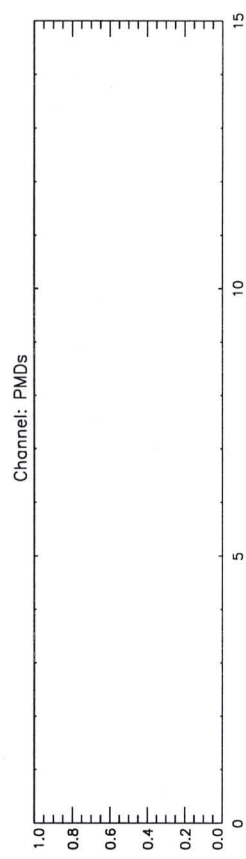
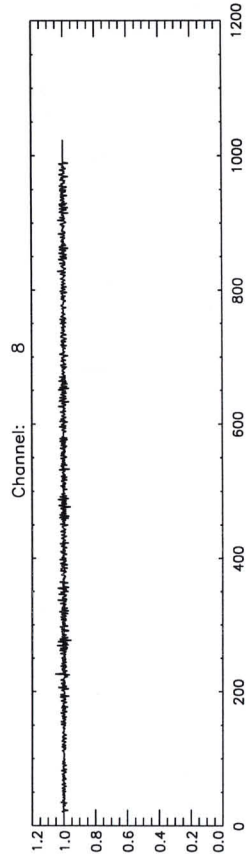
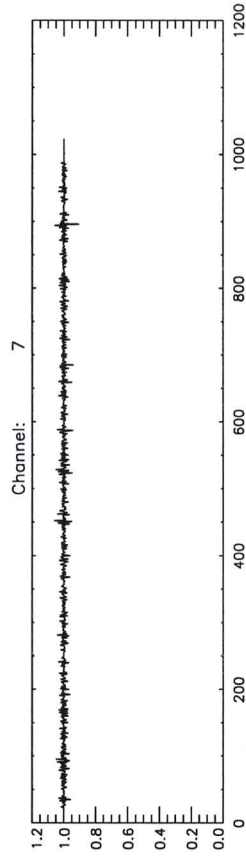
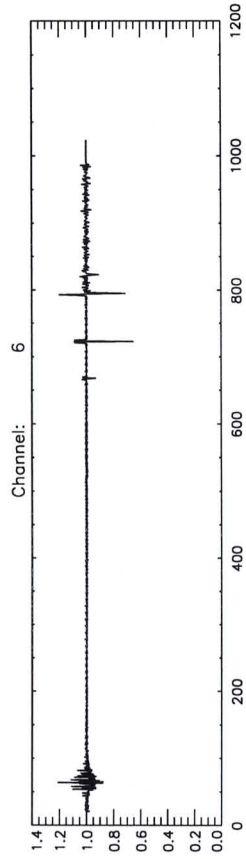
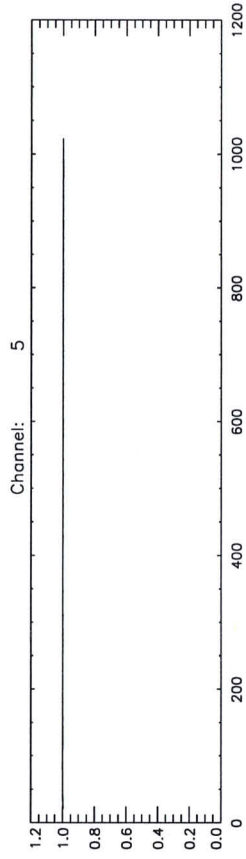
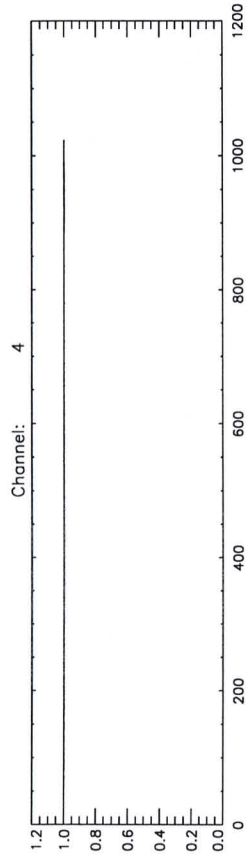
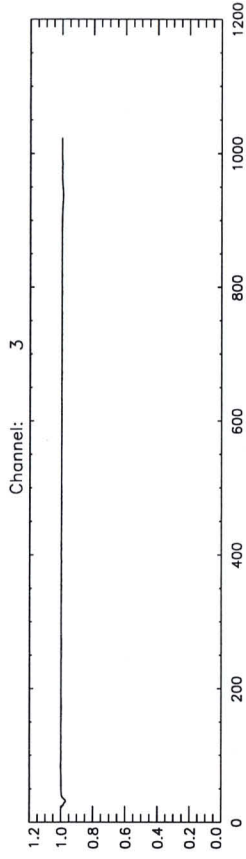
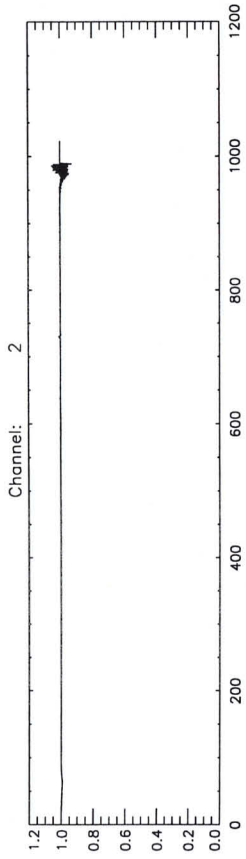
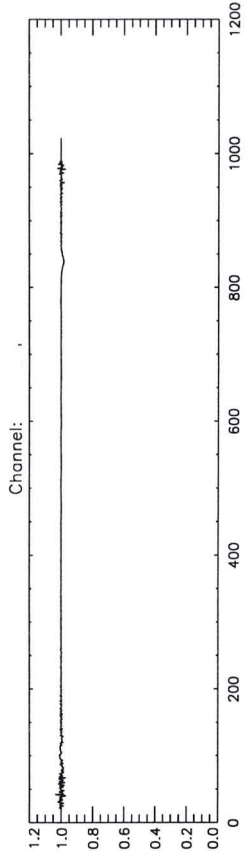
Start TOD = Sun 09-Aug-98 10:04:09

End TOD = Sun 09-Aug-98 10:04:35

Processing= computation of average, standard dev. and rel.standard dev.







envisatopPic IICAOPT

Stimuli

Config. -1

Lambda - nm

PPC - deg

Polar -

Shutter -

Acq. -

S/S -

ATC ACTIVE

Nadir -16.2 C

Limb -17.9 C

RAD-A -18.0 C

Sun (Subsolar)

Nadir

Limb Sun/Moon

Cover UNLOCKED

Azimuth Scanner

ACTIVE

273160 45.000

Cover UNLOCKED

NCW CLOSED

A B

WLS ON

400.3 mA 0

SLS OFF

-5.27 V 0.0 mA

Elevation Scanner

ACTIVE

52901 10.523

Aperture Stop LARGE

Sun Sens

0	0
0	0

Telescope

IICAOPT

PMD

Det.Tmp -16.7 C

Elect.Tmp -17.8 C

Spectrom.

NDF IN

↑

Channel

Channel	Bias Volt.	Test input	5V Supply	15V Supply	Shield temp	Block temp	DME temp
1	2.50	0.00	1.73	3.19	240.64	219.46	259.23
2	2.50	0.00	1.71	3.18	240.77	219.01	259.07
3	2.50	0.00	1.71	3.19	244.68	232.18	259.52
4	2.50	0.00	1.72	3.18	244.73	231.09	259.29
5	2.50	0.00	1.72	3.17	243.86	230.12	259.38
6	-0.03	0.01	1.71	3.18	237.78	218.54	259.89
7	-0.05	0.01	1.72	3.19	214.37	159.61	259.34
8	-0.03	0.01	1.71	3.17	214.91	156.40	260.01

Ancil. RbiStart Conf 5

STOP A, NOM

Exp. Mode HEATER

TLM Mode MEAS-TL COMPLETE

ChkState STATE

Format RTF 192

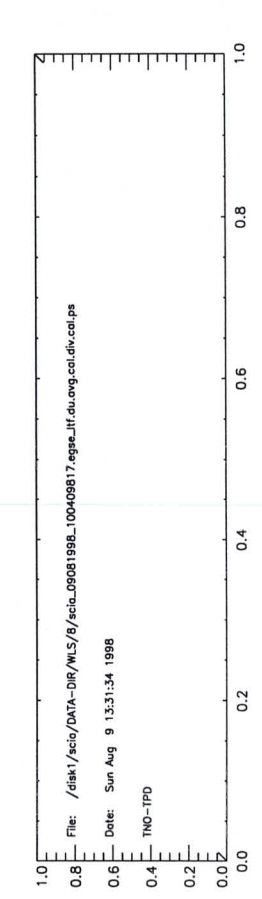
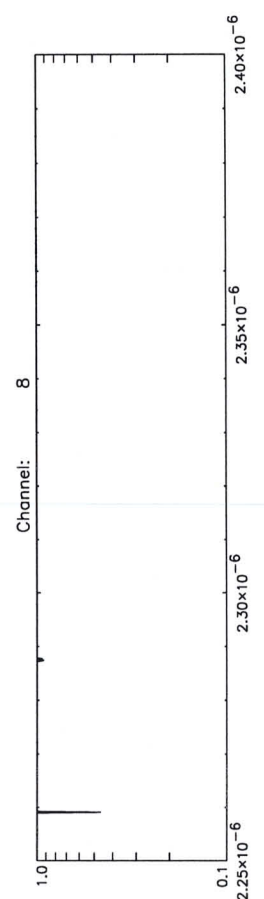
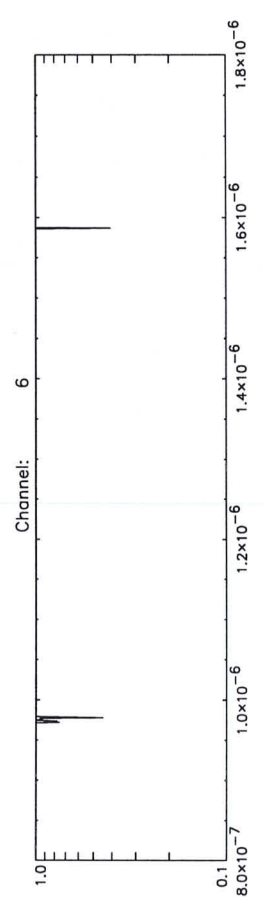
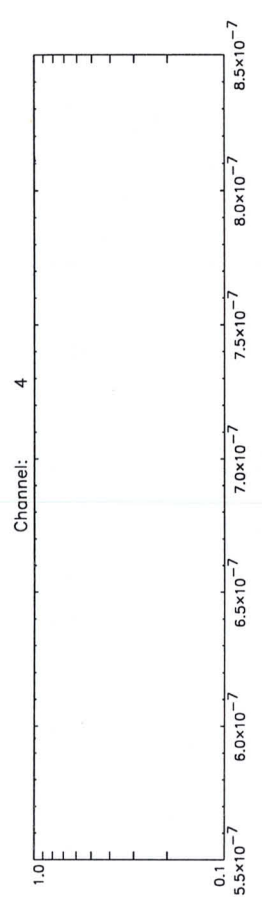
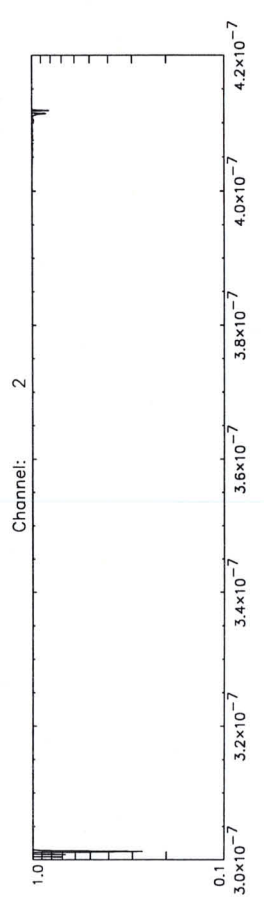
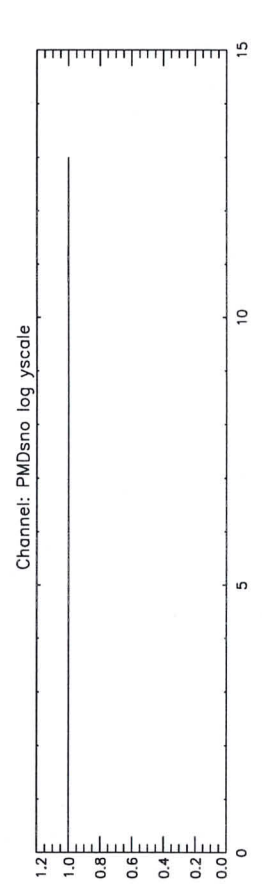
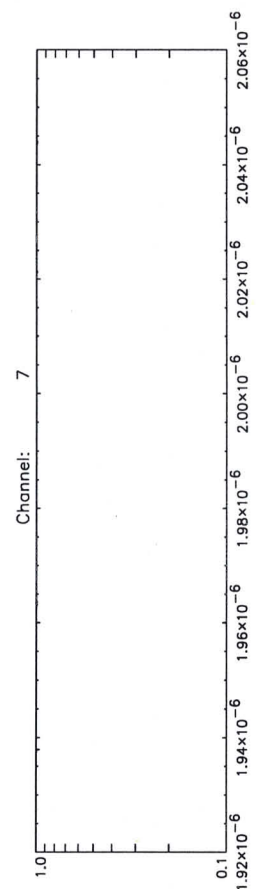
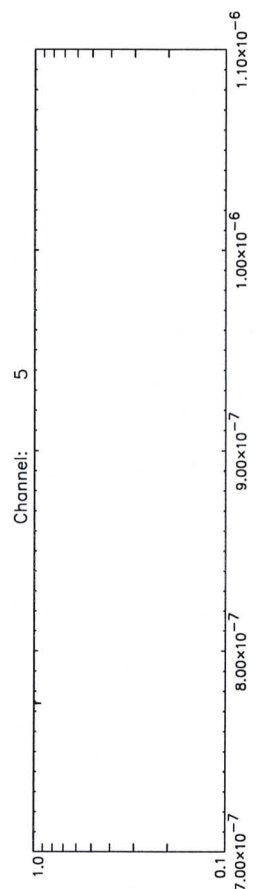
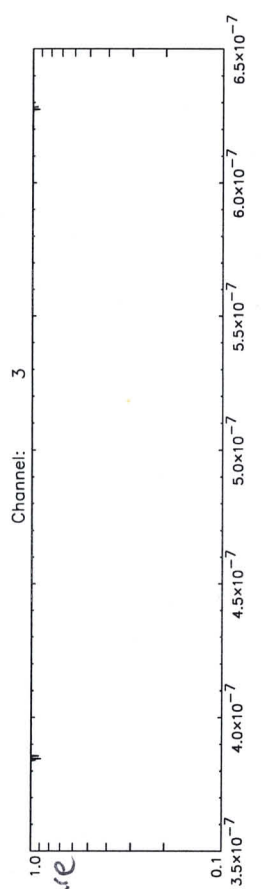
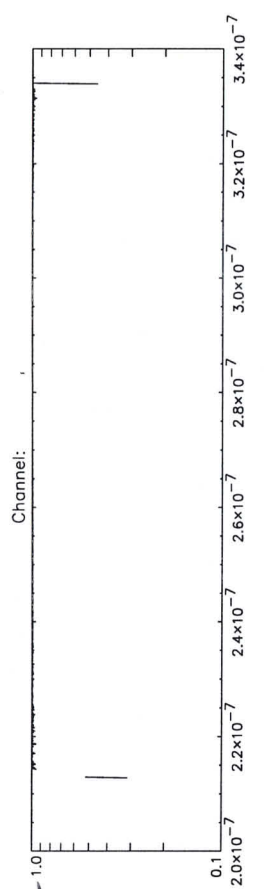
OBT 0x07a9dd14

Moni. Anom TRUE 0

ratio

WLS - Int $\sigma_{1/5}$

e. Current internal WLS revealed by previous at same temperature



File: /disk1/scis/DATA-DIR/MIS/9/scia_09081998_100409817.egse_jlf.du.avg.cai.dir.cai.ps
Date: Sun Aug 9 13:31:54 1998
TMO-TPD

compare
WLS_Int
WLS 8/5

STEP ACTION RESULT MARKER

Intro Your name: jos
Date: 090809

What's the name of the (main) data input file that you want to store in the SOC directory? [scribble] (A)

Setup a three-window configuration on your SUN. See course descr.

Do ratio idl do_ratio In IDL window

Let <D1> be the first selected dark file name
Full path name of <D1> scia_090809_100409d17.espe.tif In DATA window

ls -l <D1>.div.cal Approx. 140 kB

size of <D1>.div.cal
lpr -P<printer> <D1>.div.cal.ps In DATA Window
Add postscript image to logbook, Done? Y/N

Note that the do_ratio procedure cal. 1/ ~~one~~ dark file
div.cal.
2/ a corresponding light file
3/ a second dark file
4/ a corresponding light file.

Create 3 sets of backup CDs of directory

~~~/DATA-DIR/START-OF-CALIBRATION  
(One CD has a capacity of 600 Mbytes, the UNIX command~~

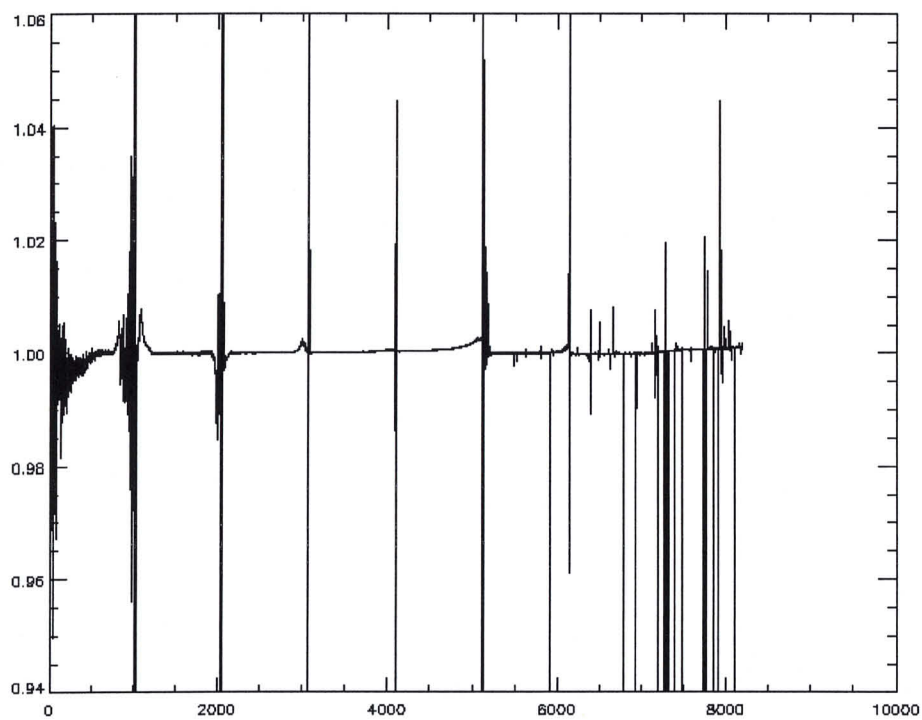
~~/usr/bin/du -k . gives the number of kilo bytes in the current directory).~~

Name of backup CDs [scribble]

See analysis sheet BackUp

Sign: Name \_\_\_\_\_  
Date and time \_\_\_\_\_  
Signature \_\_\_\_\_

WLS Int 8/5





# Formal Run of Measurement

(Measurement ID) **SLS-Int**

Request for Actual Status  
Request for Modification  
Request for Run



(cross out entries that are not requested.)  
(fill in only entries to be modified)  
(no entries = run based on actual default settings)

## Scanner Positions

Azimuth **+45** deg  
Elevation **+9,765** deg

## Timeline for each Data Acquisition Period during Measurement

|             | 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|----|----|---|---|---|---|---|---|---|----|
| State ID    | 41 | 42 |   |   |   |   |   |   |   |    |
| Repetitions |    |    |   |   |   |   |   |   |   |    |

## State Parameters for States used in Timeline (State ID must be given)

| Channel  | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding |
|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| 1a       | 4             | 1         |               |           |               |           |               |           |
| 1b       | 4             | 1         |               |           |               |           |               |           |
| 2b       | 1             | 4         |               |           |               |           |               |           |
| 2a       | 1             | 4         |               |           |               |           |               |           |
| 3        | 0,125         | 32        |               |           |               |           |               |           |
| 4        | 0,25          | 64        |               |           |               |           |               |           |
| 5        | 0,25          | 16        |               |           |               |           |               |           |
| 6        | 0,25          | 16        |               |           |               |           |               |           |
| 7        | 1             | 4         |               |           |               |           |               |           |
| 8        | 1             | 4         |               |           |               |           |               |           |
| State ID |               |           |               |           |               |           |               |           |

Step 6-10

## Stimuli Settings for Existing Blocks in Measurement

| Block No | Stimuli Setup ID | PPC [deg] | Polarizer [deg] | Shutter open/close | Acquisition Time [s] | Lambda [nm] |      |      | Repetition Factor | Message | OS Setup Time [s] |
|----------|------------------|-----------|-----------------|--------------------|----------------------|-------------|------|------|-------------------|---------|-------------------|
|          |                  |           |                 |                    |                      | Start       | Stop | Step |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |

## Measurement Data Description

Test Purpose **UID 24**  
Remark  
Data Directory **0221\_10.25.07\_SLS\_INT**

## Signatures

Issued **< Performed**  
Date **090898** Signature **M. Stepp**  
**9.P. 9P** Signature **A. Buel**

**Stimuli**

Config.  nm

Lambda  nm

PPC  deg

Polar  deg

Shutter

Acq.

S/S

**ATC**  ACTIVE

Nadir

Limb

RAD-A

**WLS** OFF

A

B

**SLS** ON

**NCW** CLOSED

**Sun (Subsolar)**

**Nadir**

**Limb Sun/Moon**

**Azimuth Scanner**

ACTIVE

Cover UNLOCKED

**Elevation Scanner**

ACTIVE

Aperture Stop LARGE

**Sun Sens**

|                                |                                |
|--------------------------------|--------------------------------|
| <input type="text" value="0"/> | <input type="text" value="0"/> |
| <input type="text" value="0"/> | <input type="text" value="0"/> |

**Telescope**

**Spectrom.**

**NDF** OUT

**IICA OPT**

**PMD**

Det.Temp

ElecTemp

| Channel     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.19   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 240.64 | 240.77 | 244.67 | 244.73 | 243.97 | 237.78 | 214.34 | 214.32 |
| Block temp  | 219.46 | 219.02 | 232.20 | 231.10 | 230.07 | 216.55 | 159.61 | 156.40 |
| DME temp    | 259.23 | 259.06 | 259.52 | 259.23 | 259.36 | 259.90 | 259.33 | 260.01 |

Ancil.  RbiStart  Conf

STOP

TLM Mode  MEAS-TL

ChkState

Format

OB T

Moni.  Anom



| STEP            | ACTION                                                                                                                                                                                                                                                         | RESULT                                                           | MARKER                                                                                             |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Intro           | Your name:<br>Date:                                                                                                                                                                                                                                            | <u>Marion</u><br><u>090898</u>                                   |                                                                                                    |
|                 | What's the name of the (main) data input files generated by the EGSE? (*.dat)                                                                                                                                                                                  | _____                                                            | (A)                                                                                                |
|                 | Setup a three-window configuration on your SUN.                                                                                                                                                                                                                |                                                                  | see course descr.                                                                                  |
|                 |                                                                                                                                                                                                                                                                |                                                                  |                                                                                                    |
| Cnstr directory | cd ~/DATA-DIR/SPEC-CAL/<br>; ls -l<br>highest number in directory?<br>New directory: mkdir <B+1><br>ls -l<br>What's now the highest number in directory?<br><C> should be <B> + 1                                                                              | <u>10</u><br><u>11</u><br><input checked="" type="radio"/> Y / N | Note: In window DATA-DIR (B)<br><br>(C)                                                            |
|                 | directory name is:                                                                                                                                                                                                                                             | ~/DATA-DIR/SPECCAL/<C>                                           | (DIR-NAME)                                                                                         |
| Copy data       | See Analysis sheet: Transfer Data File                                                                                                                                                                                                                         | <input checked="" type="radio"/> Y / N                           | In DATA-DIR window                                                                                 |
| Cnstr EGSE_LTF  | cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)<br>ls -l *.egse_ltf<br>What's the name of the egse_ltf file | <u>scia_09081998_102755084.egse_ltf</u>                          | Note: In window DATA-DIR; <b>don't forget the dot !!!</b> ; May take more than 15 mins.<br><br>(D) |
|                 | <D> should be<br><A>.egse_ltf                                                                                                                                                                                                                                  | <input checked="" type="radio"/> Y / N                           |                                                                                                    |
| Cnstr CAL files | idl run_averscia (and select file <D> when asked)                                                                                                                                                                                                              |                                                                  | Note: In window IDL                                                                                |
| Check CAL files | Dark files:<br>ls -l *du*.avg.cal                                                                                                                                                                                                                              |                                                                  | In DATA-DIR window                                                                                 |
|                 | size:                                                                                                                                                                                                                                                          | <u>145</u> kb                                                    | should be approx 150kb                                                                             |
|                 | SLS light file:                                                                                                                                                                                                                                                |                                                                  |                                                                                                    |

Note:  
dremark1  
label starts  
either with 'su'  
or with 'pu'  
(here we have  
taken the 'su'-  
case).

ls -l \*~~p~~u\*.avg.cal

size:

146 kb

should be  
approx 150kb

Note: all files should be present,  
if not:

(a) Check file <D> using SOLAN  
and check whether DU, and SU  
labels are present in dremark1  
labels

(b) Check if enough disk space  
is available (Unix command df -  
k l more).

Print postscript

lpr -P<printer>

\*du\*.\*.cal.ps

\*su\*.\*.cal.ps

Contents dark file

\*du\*.avg.cal should be  
approx. constant within  
channels:

Y /  N

Contents of file

\*SU\*.avg.cal.ps should  
contain peak signals in  
channels (cannot be seen in  
channels 7 and 8):

Y /  N

Contents of \*rel\_std\*.ps  
files should be smaller than 0.01  
(pixel 300 -- 800) for all  
channels.

Y /  N

If not, value is: \_\_\_\_\_

Add postscript images to  
logbook, done

Y /  N

Print logfiles

lpr -P<printer> \*.log

Add logfiles to logbook, done

Y /  N

Spec line  
processing

Run Spec

idl do\_spec\_cal

In IDL window



In DATA DIR window should be approx a few kilobytes

Check spec `ls -l wl.data`

Size of file wl.data

927 b

Check XSI visually

`lpr -P<printer> *.data.ps`

Is the value of the spectral calibration approx. a straight line in all channels? (Note: in channel 2: negative slope)

Y / N

Add postscript images to logbook, done

Y / N

Print logfiles

`lpr -P<printer> *.log`  
Add logfiles to logbook, done

Y / N



Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command `/usr/bin/du -k .` gives the number of kilo bytes in the current directory).  
Name of backup CDs

Back up

See analysis sheet BackUp

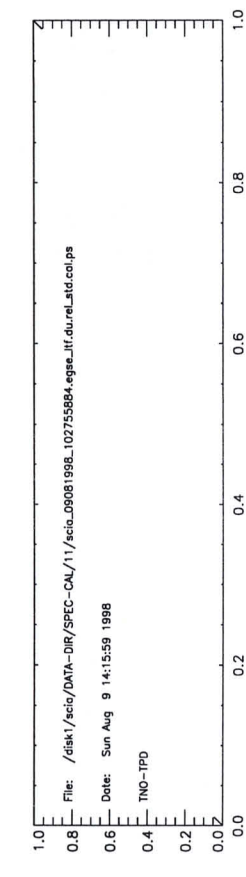
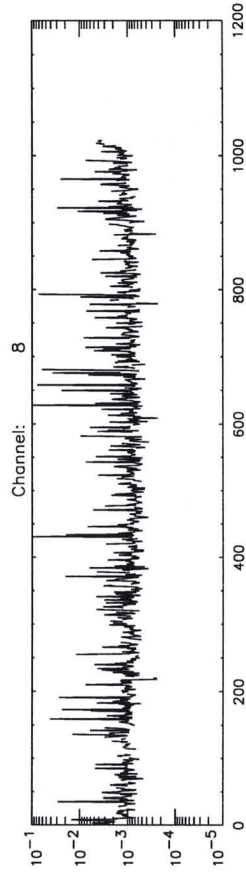
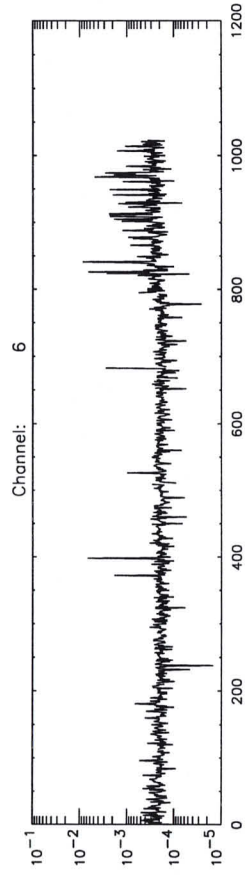
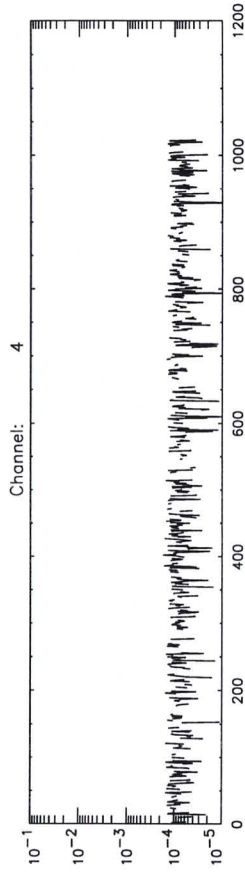
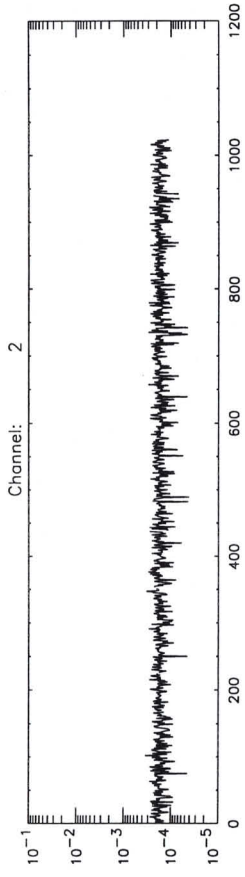
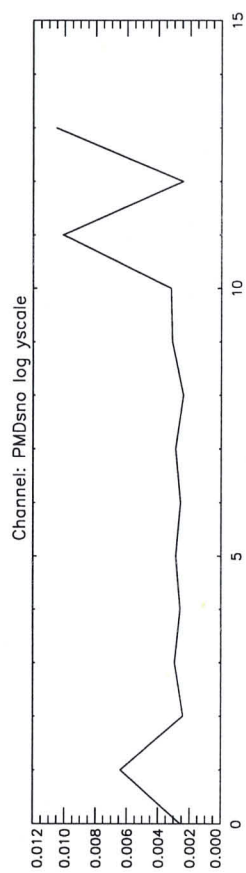
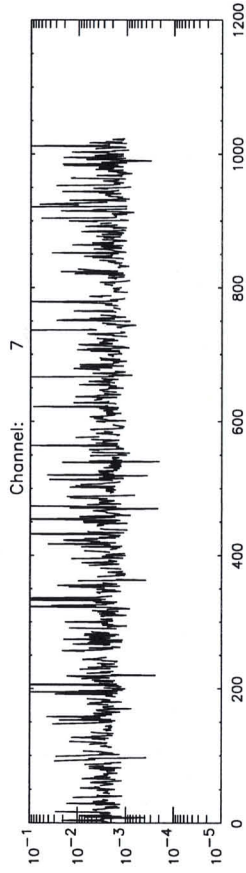
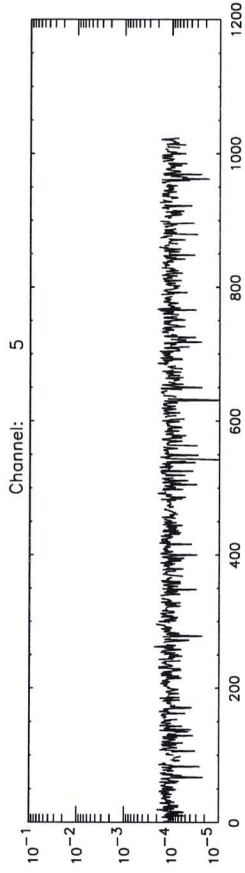
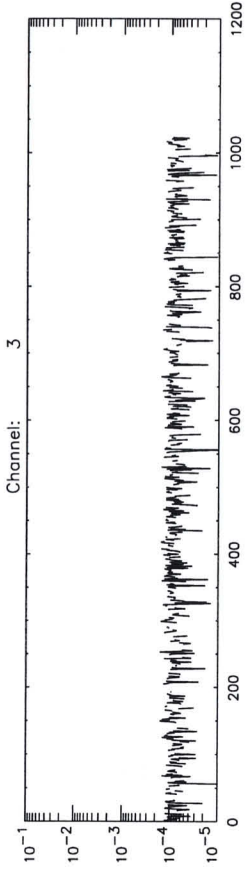
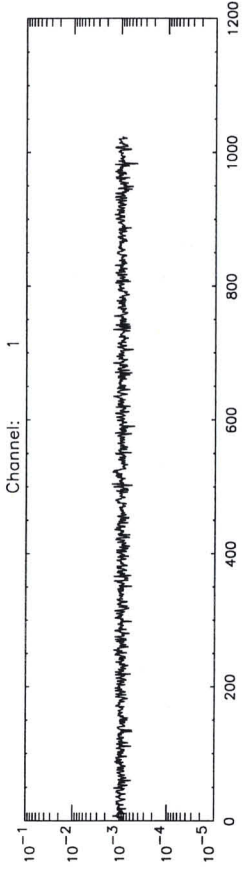
\_\_\_\_\_

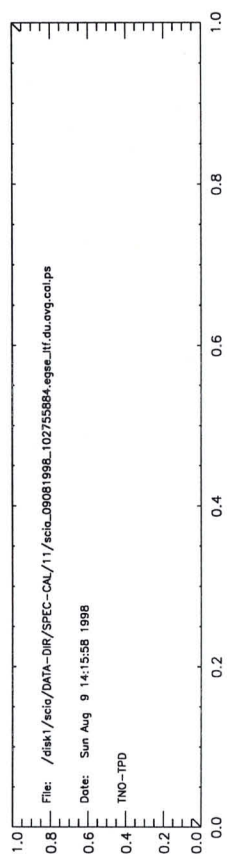
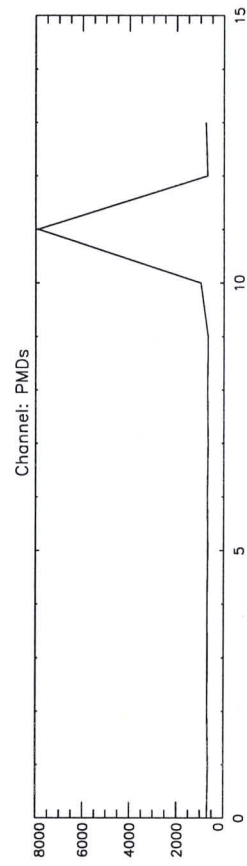
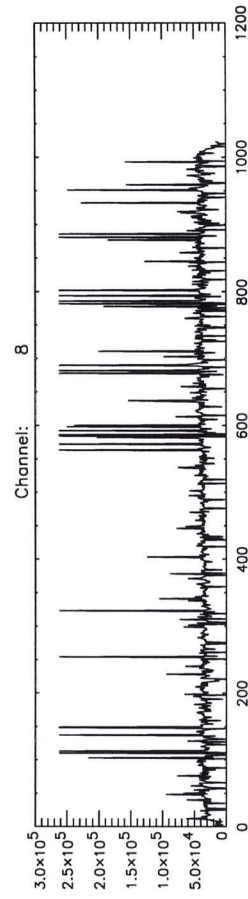
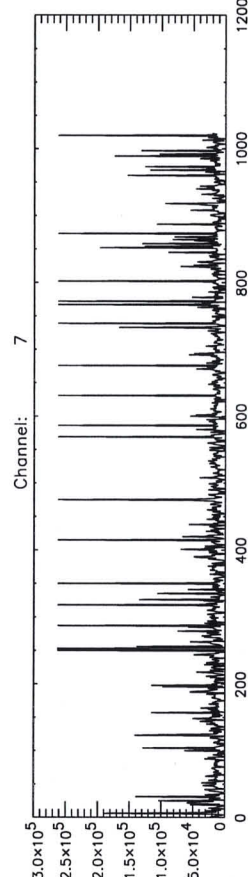
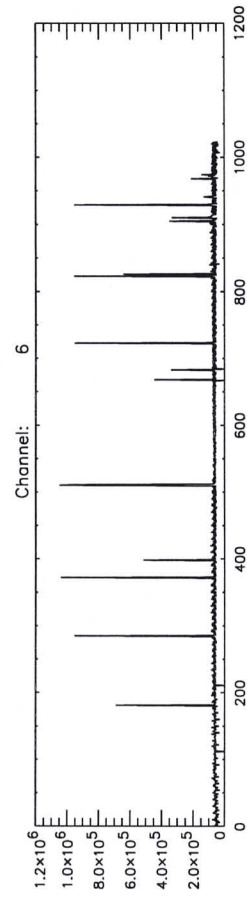
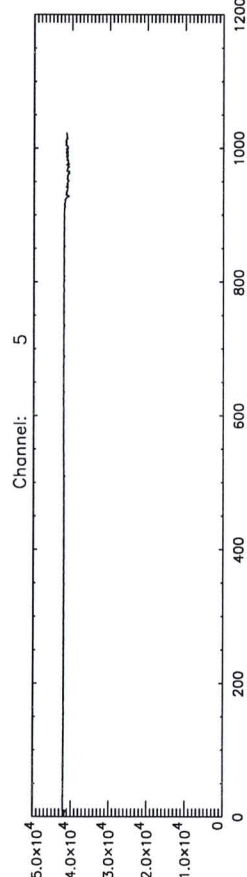
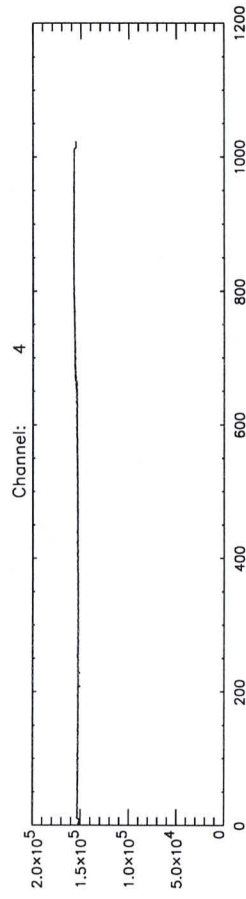
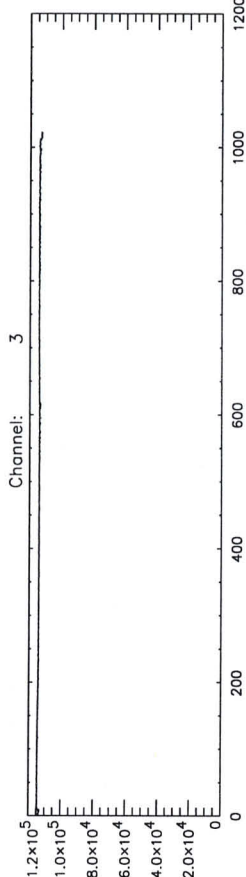
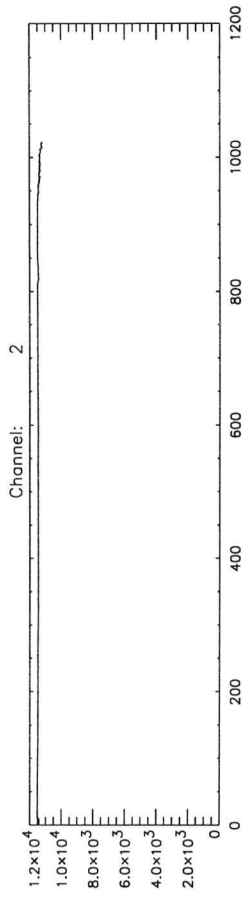
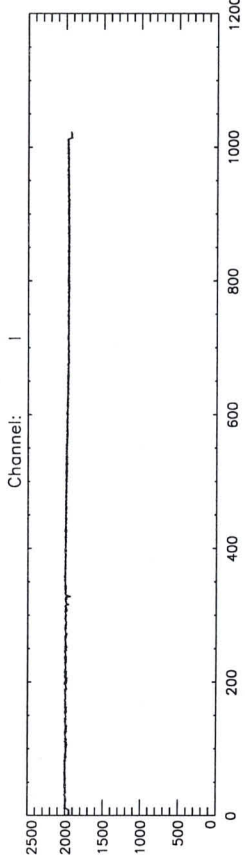


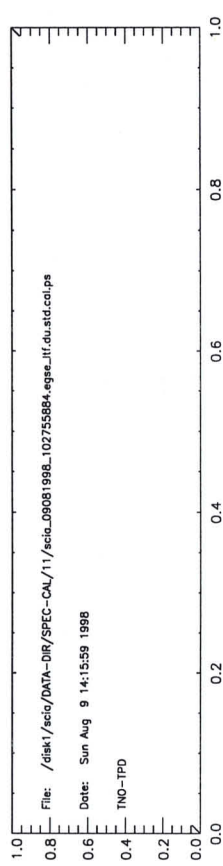
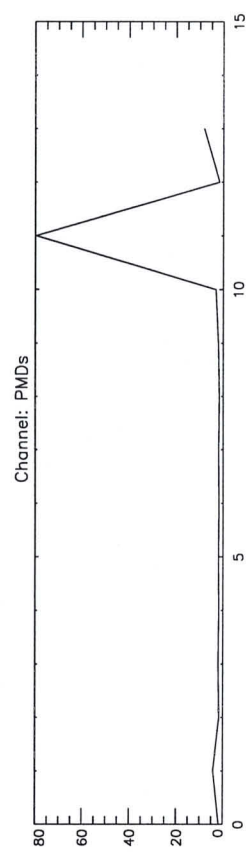
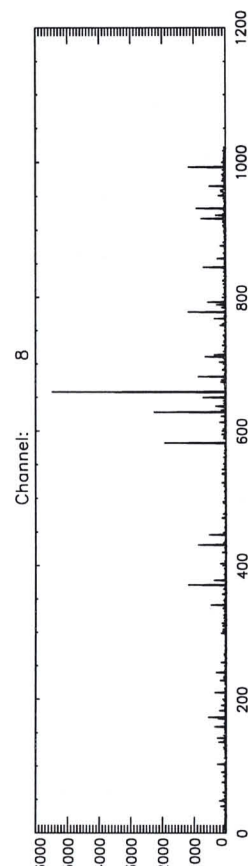
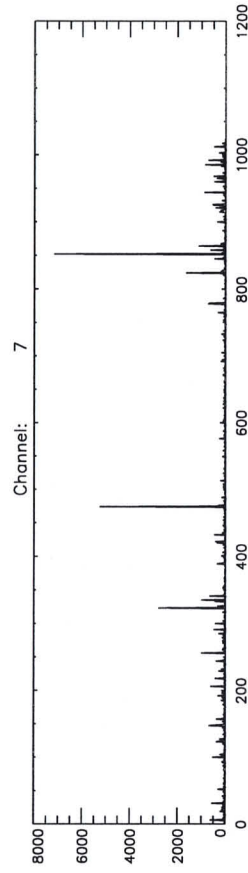
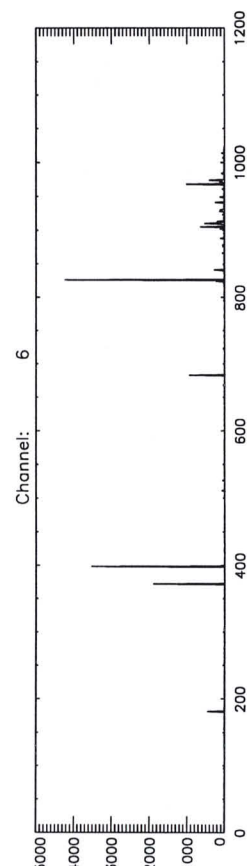
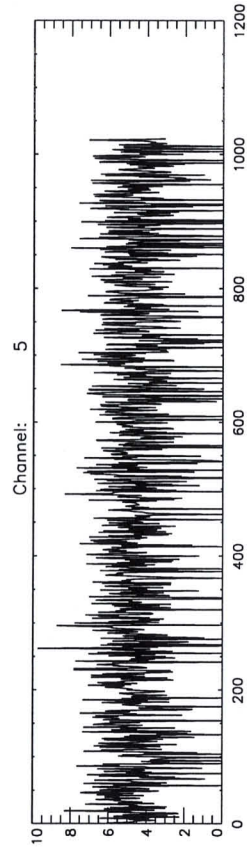
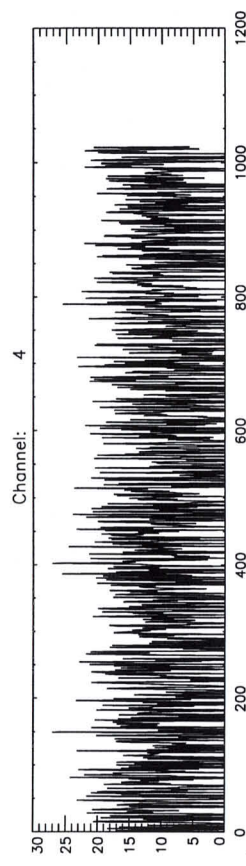
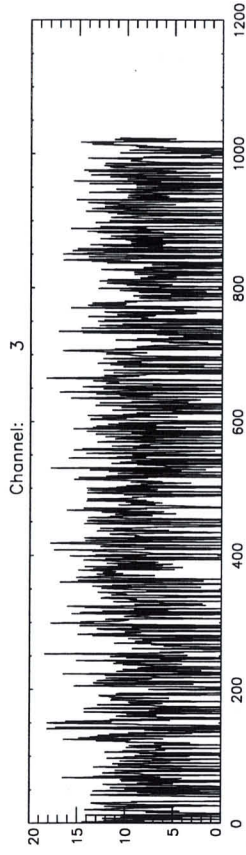
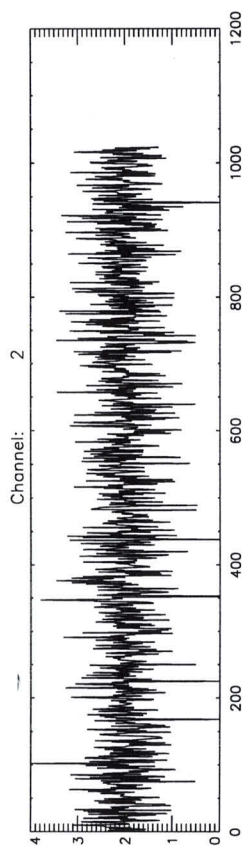
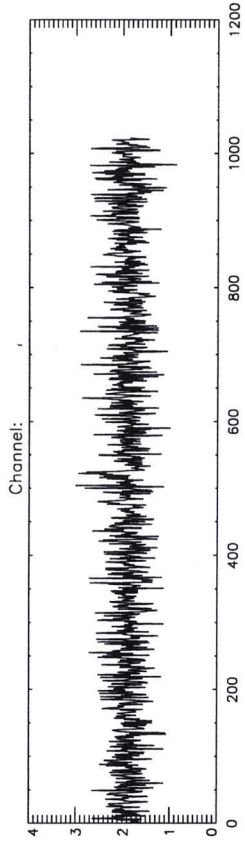
Sign:

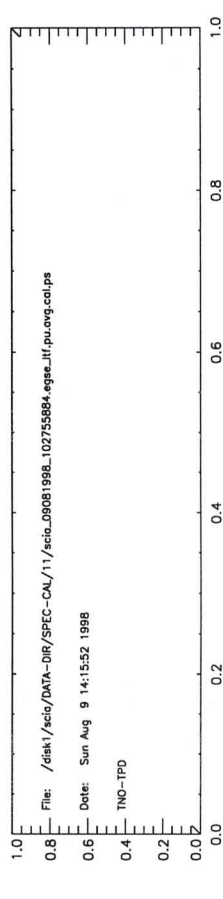
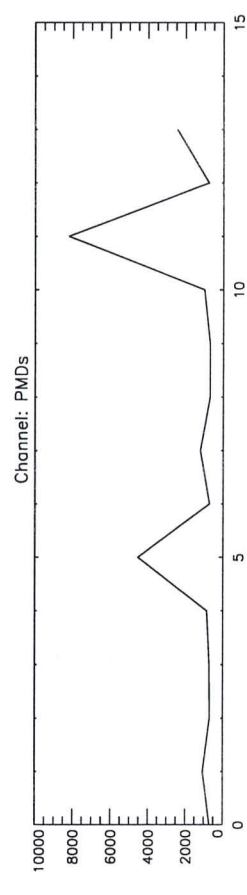
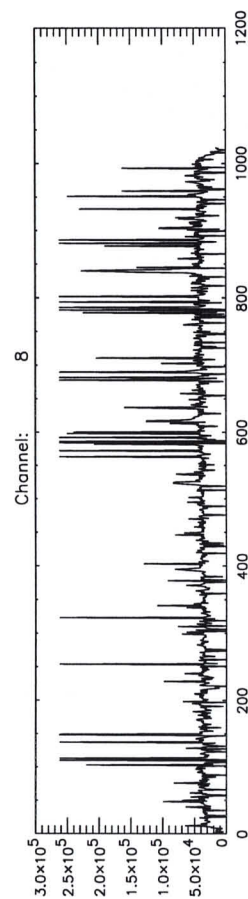
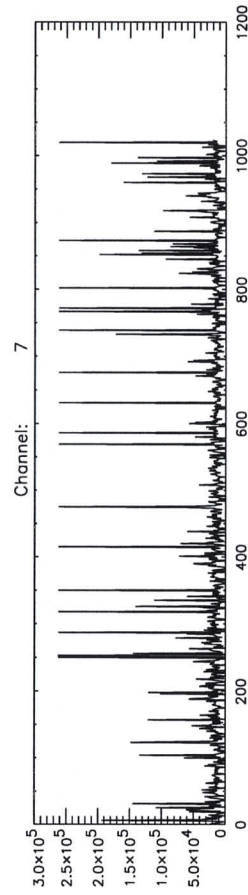
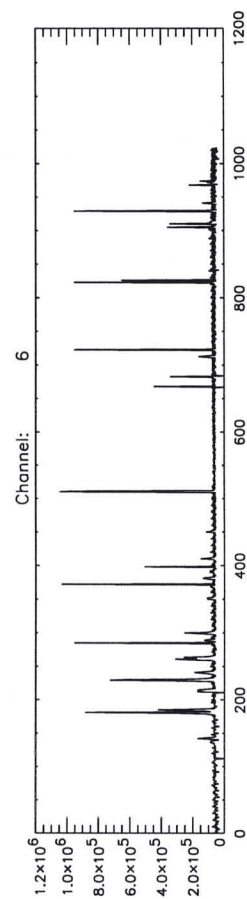
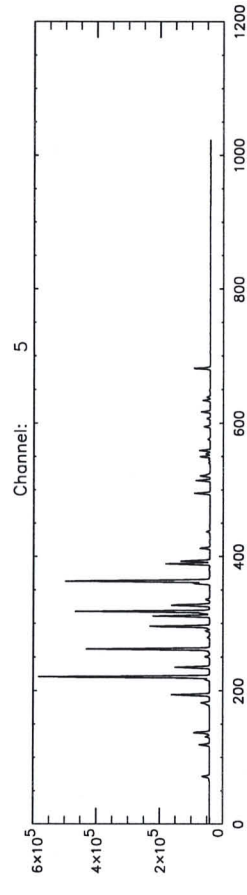
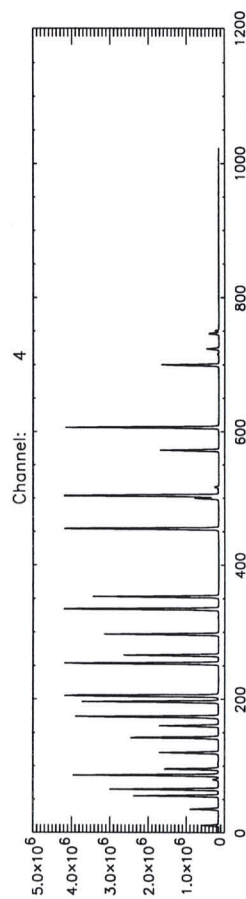
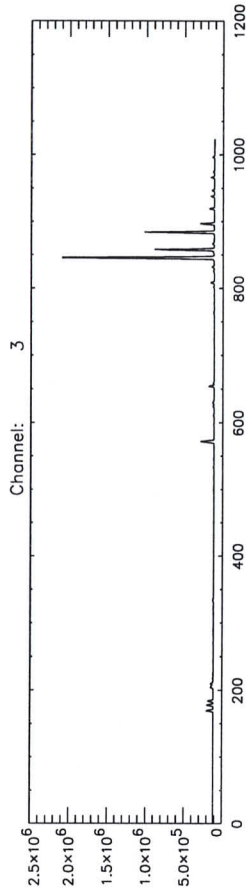
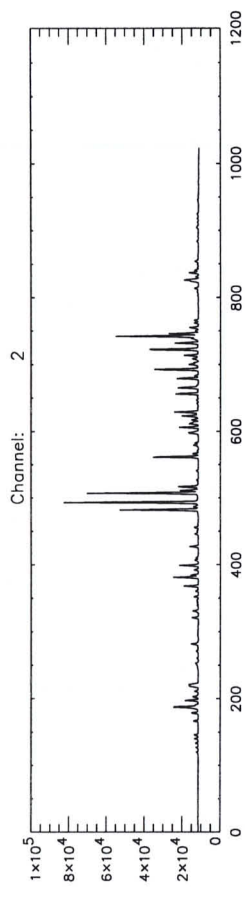
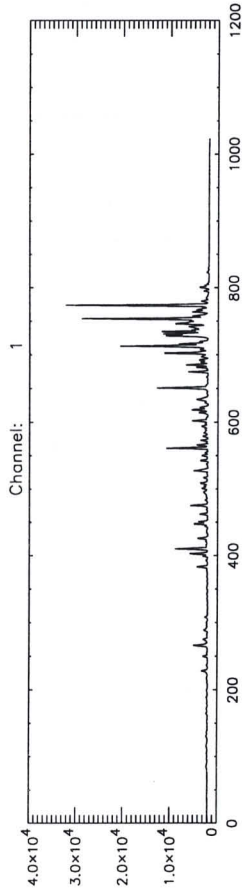
Name  
Date and time  
Signature

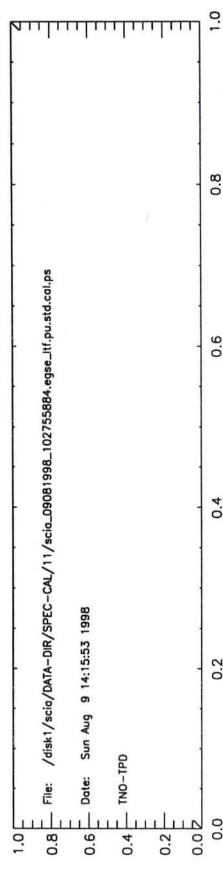
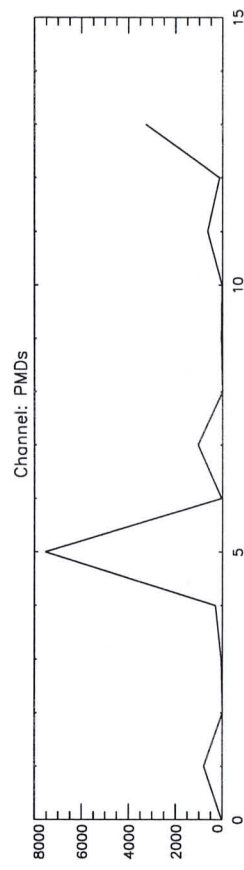
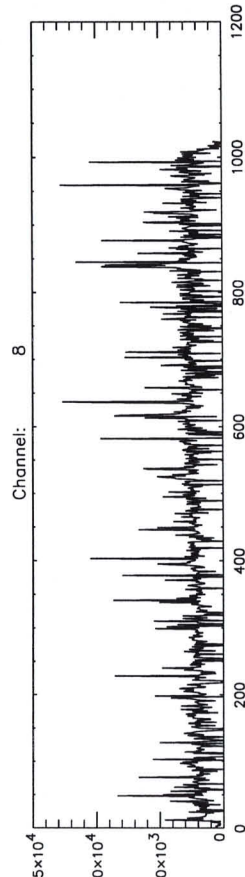
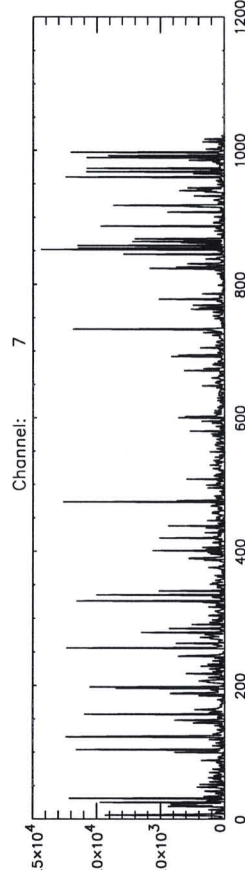
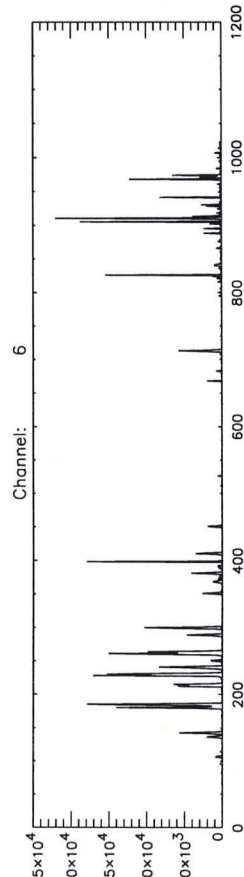
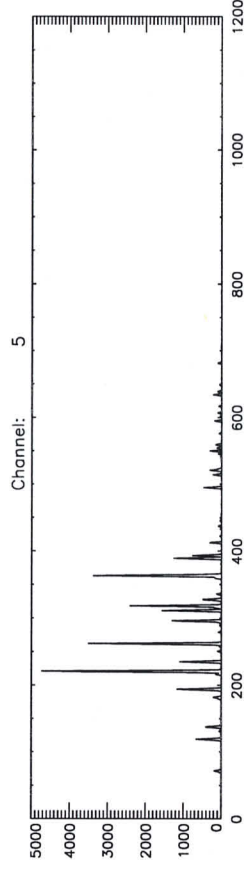
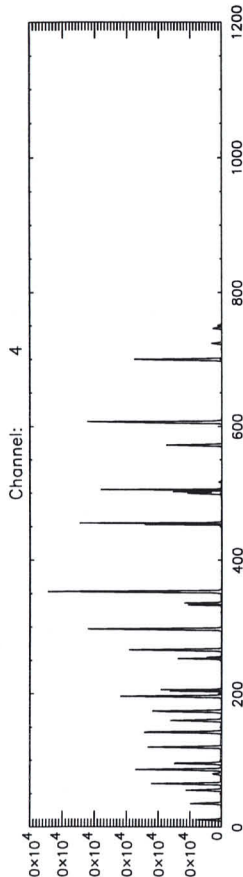
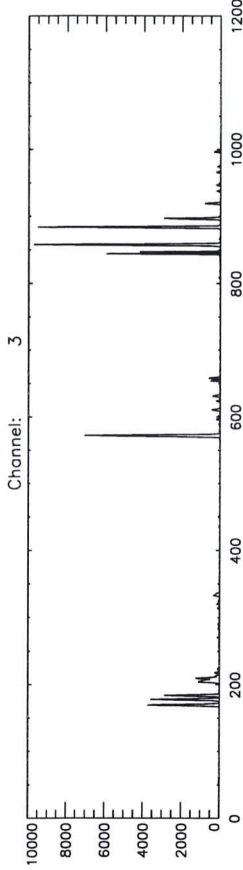
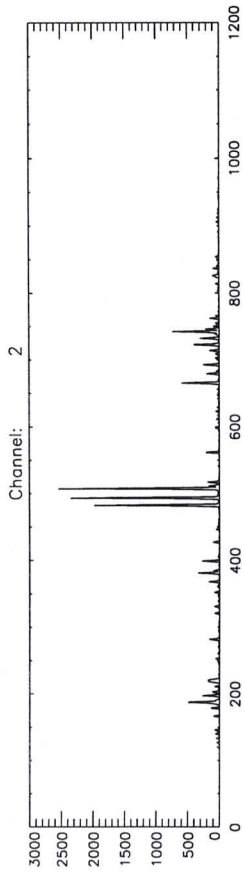
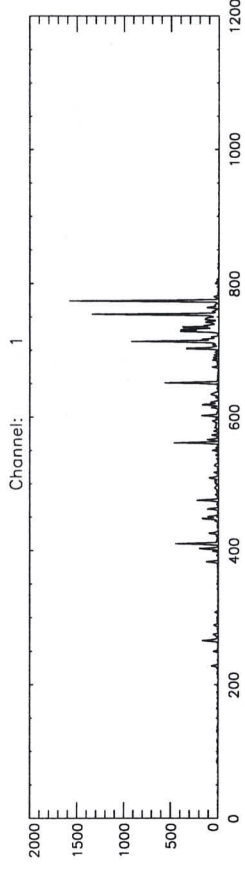
Marion  
mod98 12:30  
M. Stepp

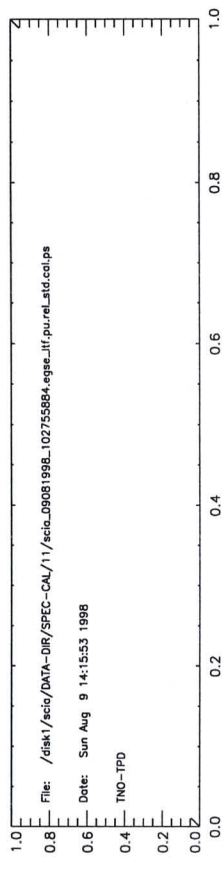
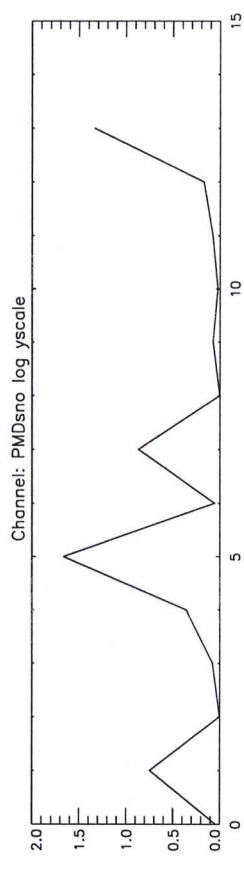
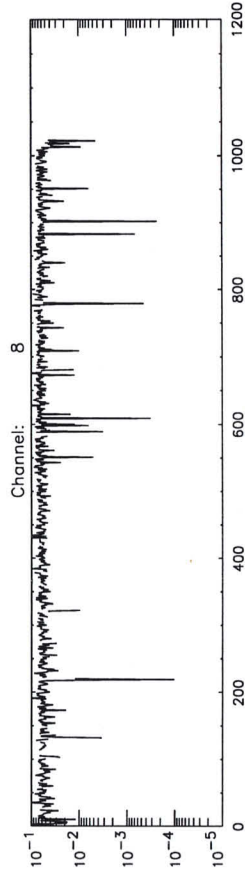
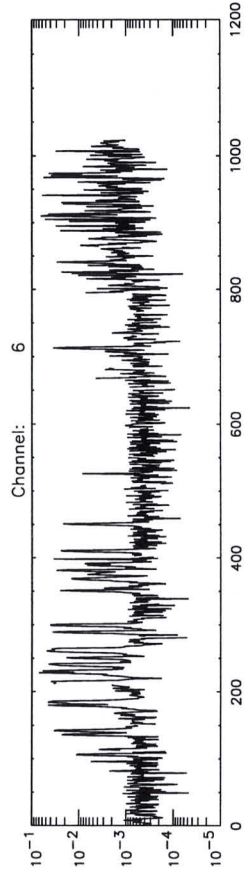
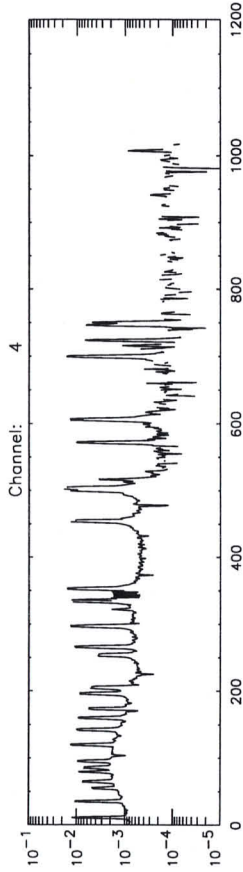
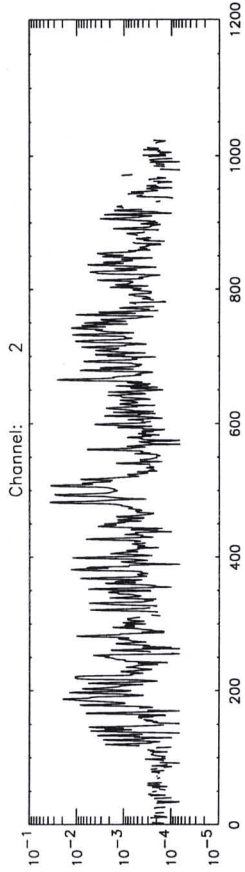
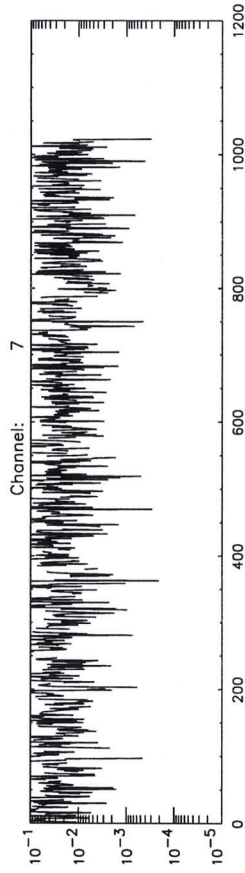
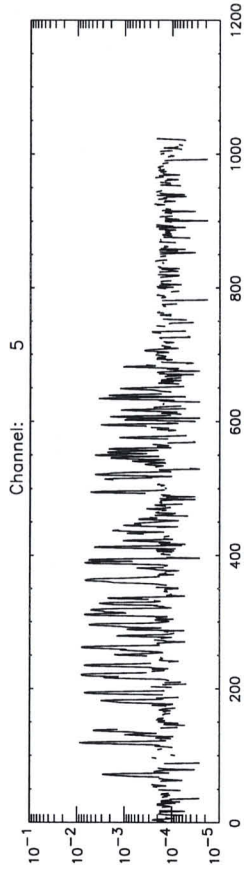
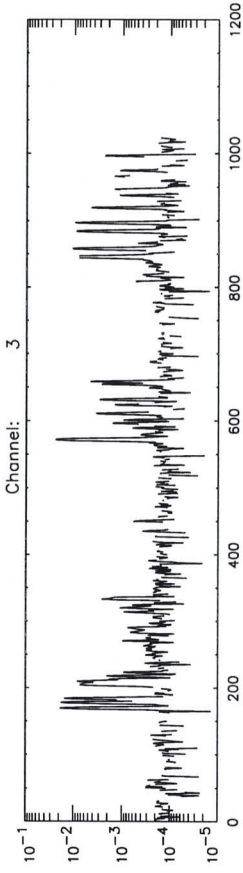
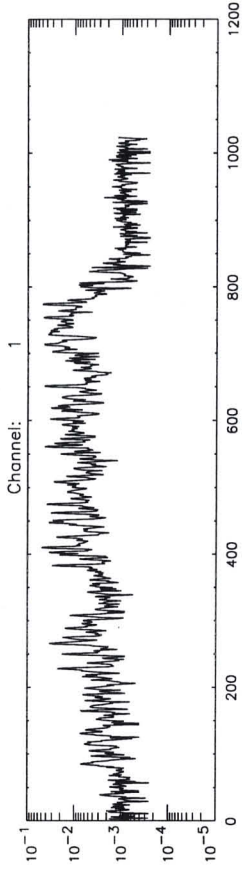


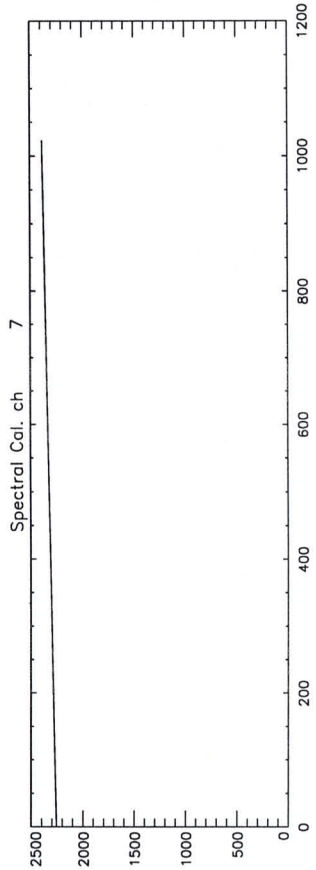
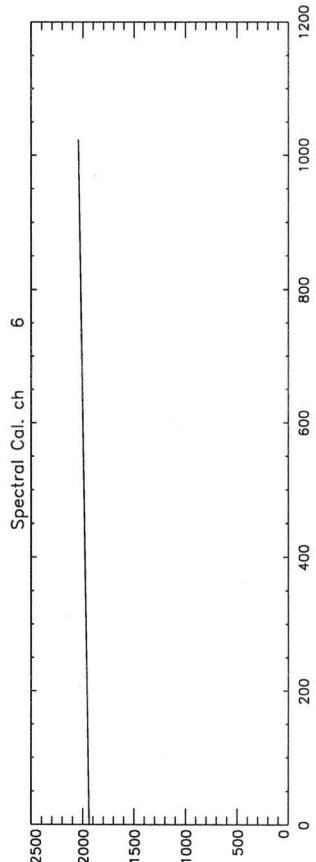
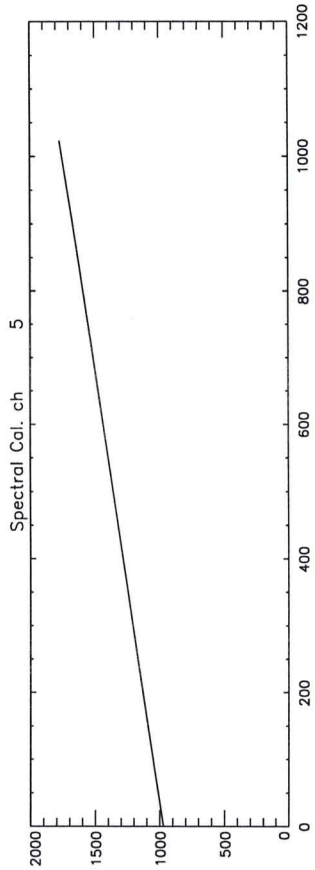
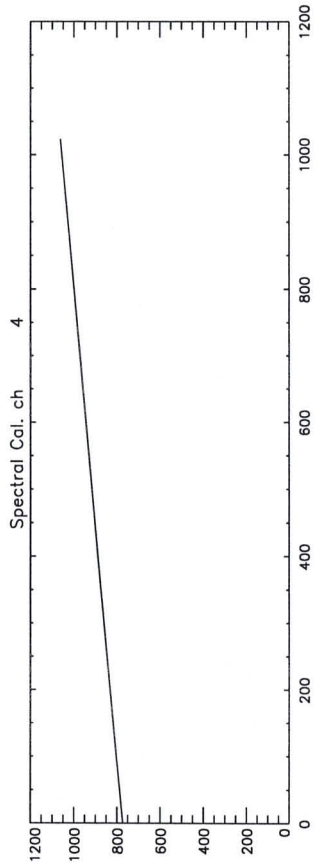
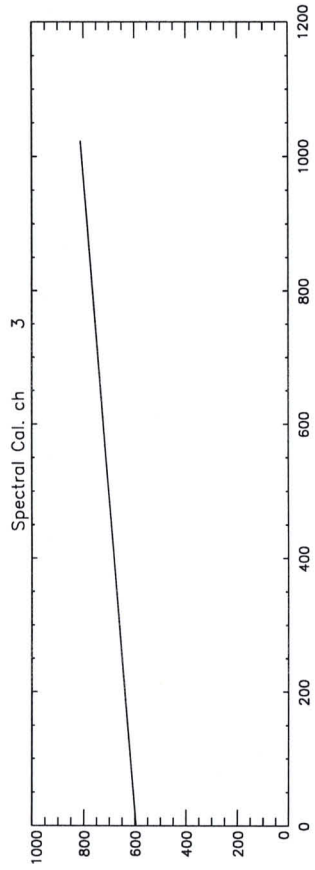
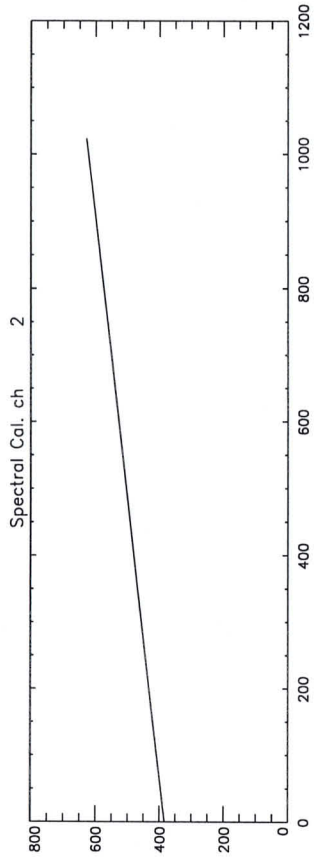
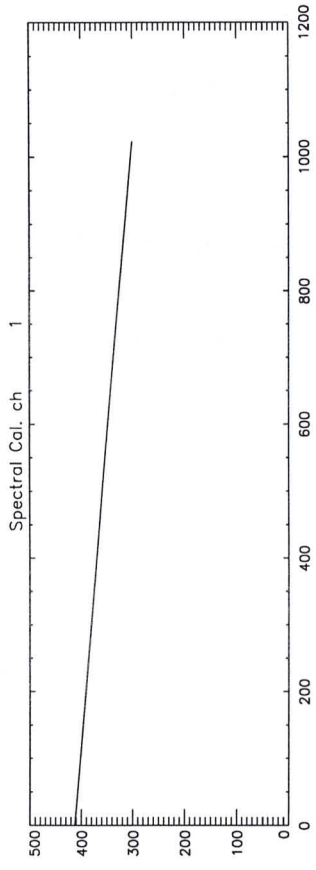
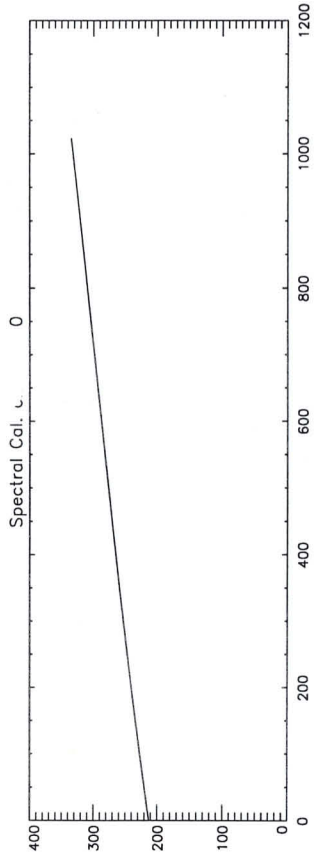














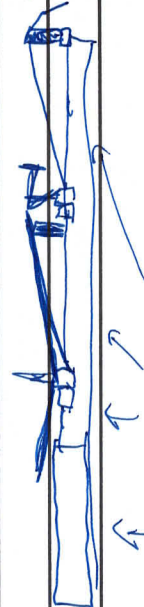
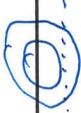


```
#!/bin/sh
mv f0 221y1024.doc
mv f1 221y1026.doc
mv f2 221y1030.xls
mv f3 WS_FTP.LOG
mv f4 dapbchklog
mv f5 dapbseqlog
mv f6 egse.inf
mv f7 gemsmpara.dat
mv f8 hk_ccb.dat
mv f9 scia_09081998_102755884.dat
mv f10 scia_09081998_102755884.egse_ltf
mv f11 scia_09081998_102755884.egse_ltf.du.avg.cal
mv f12 scia_09081998_102755884.egse_ltf.du.avg.cal.ps
mv f13 scia_09081998_102755884.egse_ltf.du.avg.cal.slsfit.fal
mv f14 scia_09081998_102755884.egse_ltf.du.avg.cal.slsfit.gau
mv f15 scia_09081998_102755884.egse_ltf.du.avg.cal.spectrum.ps
mv f16 scia_09081998_102755884.egse_ltf.du.avg.cal.wl.data
mv f17 scia_09081998_102755884.egse_ltf.du.avg.cal.wl.data.log
mv f18 scia_09081998_102755884.egse_ltf.du.avg.cal.wl.data.ps
mv f19 scia_09081998_102755884.egse_ltf.du.log
mv f20 scia_09081998_102755884.egse_ltf.du.rel_std.cal
r f21 scia_09081998_102755884.egse_ltf.du.rel_std.cal.ps
mv f22 scia_09081998_102755884.egse_ltf.du.std.cal
mv f23 scia_09081998_102755884.egse_ltf.du.std.cal.ps
mv f24 scia_09081998_102755884.egse_ltf.pu.avg.cal
mv f25 scia_09081998_102755884.egse_ltf.pu.avg.cal.ps
mv f26 scia_09081998_102755884.egse_ltf.pu.log
mv f27 scia_09081998_102755884.egse_ltf.pu.rel_std.cal
mv f28 scia_09081998_102755884.egse_ltf.pu.rel_std.cal.ps
mv f29 scia_09081998_102755884.egse_ltf.pu.std.cal
mv f30 scia_09081998_102755884.egse_ltf.pu.std.cal.ps
```

```
#!/bin/sh
mv 221y1024.doc f0
mv 221y1026.doc f1
mv 221y1030.xls f2
mv WS_FTP.LOG f3
mv dapbchklog f4
mv dapbseqlog f5
mv egse.inf f6
mv gemsmpara.dat f7
mv hk_ccb.dat f8
mv scia_09081998_102755884.dat f9
mv scia_09081998_102755884.egse_ltf f10
mv scia_09081998_102755884.egse_ltf.du.avg.cal f11
mv scia_09081998_102755884.egse_ltf.du.avg.cal.ps f12
mv scia_09081998_102755884.egse_ltf.du.avg.cal.slsfit.fal f13
mv scia_09081998_102755884.egse_ltf.du.avg.cal.slsfit.gau f14
mv scia_09081998_102755884.egse_ltf.du.avg.cal.spectrum.ps f15
mv scia_09081998_102755884.egse_ltf.du.avg.cal.wl.data f16
mv scia_09081998_102755884.egse_ltf.du.avg.cal.wl.data.log f17
mv scia_09081998_102755884.egse_ltf.du.avg.cal.wl.data.ps f18
mv scia_09081998_102755884.egse_ltf.du.log f19
mv scia_09081998_102755884.egse_ltf.du.rel_std.cal f20
mv scia_09081998_102755884.egse_ltf.du.rel_std.cal.ps f21
mv scia_09081998_102755884.egse_ltf.du.std.cal f22
mv scia_09081998_102755884.egse_ltf.du.std.cal.ps f23
mv scia_09081998_102755884.egse_ltf.pu.avg.cal f24
mv scia_09081998_102755884.egse_ltf.pu.avg.cal.ps f25
mv scia_09081998_102755884.egse_ltf.pu.log f26
mv scia_09081998_102755884.egse_ltf.pu.rel_std.cal f27
mv scia_09081998_102755884.egse_ltf.pu.rel_std.cal.ps f28
mv scia_09081998_102755884.egse_ltf.pu.std.cal f29
mv scia_09081998_102755884.egse_ltf.pu.std.cal.ps f30
```

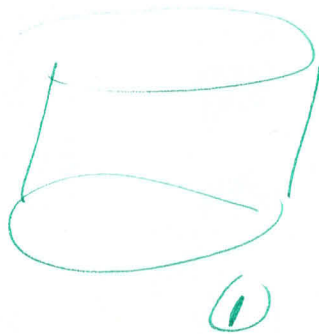


# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                                                 | measurement filename |
|-----------|---------------------------------------------------------------------------------------|----------------------|
| 9-8       | Stikstof alarm #4 by OPTEC                                                            |                      |
| 13-17 UTC | Hans Oudshoorn onderzoek → Sensor 4 in hoepel en wordt uitgeschakeld                  |                      |
|           | UID 30 (bimbo irrad minimal distance +0,5 m) with some additional                     |                      |
|           | Straightlight baffling                                                                |                      |
|           | Bare lamp msn, no box, baffling as described below, min +0.5 m.                       |                      |
|           | Res with black screens (mylon)                                                        |                      |
|           |    |                      |
|           |   |                      |
|           |  |                      |
|           | <p>top view</p> <p>side view</p>                                                      |                      |
|           | <p>3 black metal baffle plates</p> <p>Shadow of baffling just</p>                     |                      |
|           | <p>1 black plastic baffle plate</p> <p>under OPTEC window</p>                         |                      |
|           |    |                      |
|           | <p>...</p>                                                                            |                      |

Mirror (3) ↑

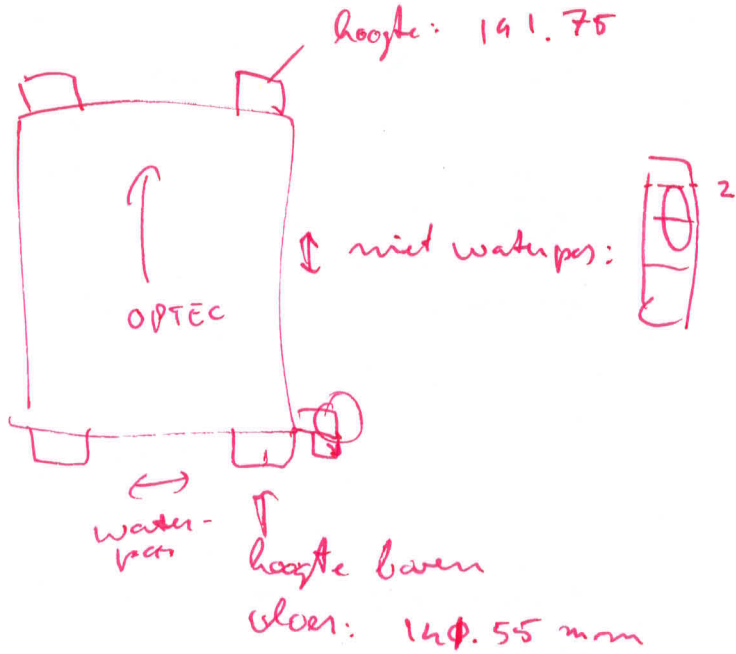
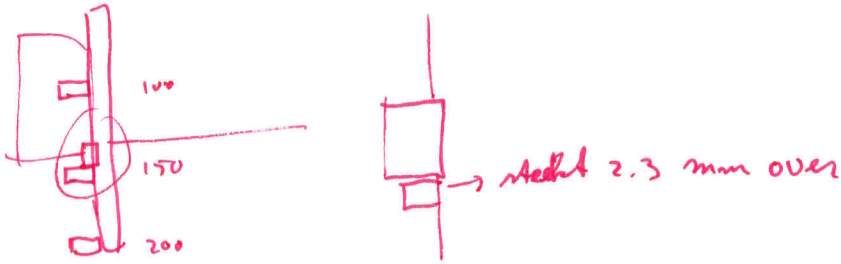
(X)  
lamp  
(2)



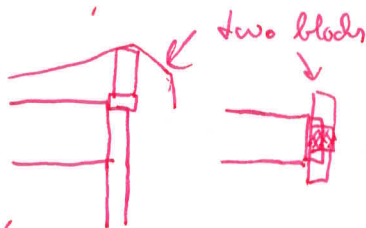
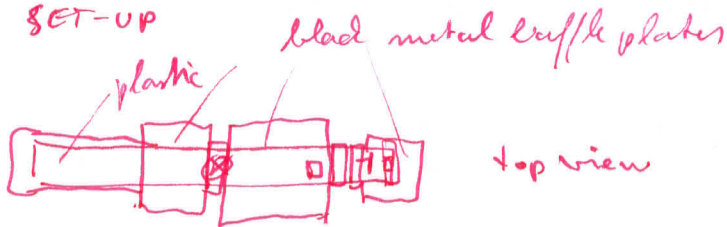
baffle

oebje 1 → met cirkel gat  
" 3 → met sleufgat

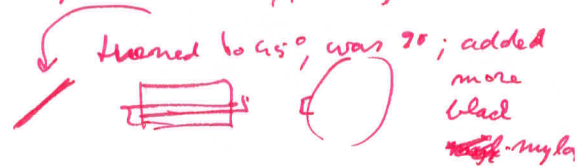
149.9 cm



SET-UP



Background Baffling



shadow just under OPTEC window



16.03 aan  
16:45 uit



# Formal Run of Measurement

(Measurement ID)

02021113

L KKHJ - LHM13

Request for Actual Status

|                                     |
|-------------------------------------|
| <input type="checkbox"/>            |
| <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> |

(cross out entries that are **not** requested.)

Request for Modification

(fill in only entries to be modified)

Request for Run

(no entries = run based on actual default settings)

## Scanner Positions

Azimuth

|         |
|---------|
| -45,00  |
| +165,00 |

deg

deg



## Timeline for each Data Acquisition Period during Measurement

State ID  
Repetitions

|             |    |   |   |   |   |   |   |   |   |    |
|-------------|----|---|---|---|---|---|---|---|---|----|
|             | 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| State ID    | 39 | ✓ |   |   |   |   |   |   |   |    |
| Repetitions | 10 |   |   |   |   |   |   |   |   |    |

## State Parameters for States used in Timeline (State ID must be given)

| Channel  | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding |
|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| 1a       | 64            | 1         |               |           |               |           |               |           |
| 1b       | 64            | 1         |               |           |               |           |               |           |
| 2b       | 64            | 1         |               |           |               |           |               |           |
| 2a       | 64            | 1         |               |           |               |           |               |           |
| 3        | 4             | 16        | ✓             |           |               |           |               |           |
| 4        | 1             | 64        |               |           |               |           |               |           |
| 5        | 2             | 32        |               |           |               |           |               |           |
| 6        | 0,5           | 64        |               |           |               |           |               |           |
| 7        | 1             | 64        |               |           |               |           |               |           |
| 8        | 2             | 32        |               |           |               |           |               |           |
| State ID |               |           |               |           |               |           |               |           |

not listed in the list but formal test  
baffle

## Stimuli Settings for Existing Blocks in Measurement

| Block No | Stimuli Setup ID | PPC [deg] | Polarizer [deg] | Shutter open/close | Acquisition time [s] | Lambda [nm] |      |      | Repetition Factor | Message | OS Setup Time [s] |
|----------|------------------|-----------|-----------------|--------------------|----------------------|-------------|------|------|-------------------|---------|-------------------|
|          |                  |           |                 |                    |                      | Start       | Stop | Step |                   |         |                   |
| 1        | 0                |           |                 |                    |                      |             |      |      |                   |         |                   |
| 2        | 0                |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |

## Measurement Data Description

## Signatures

Test Purpose

Remark

Data Directory

|          |
|----------|
| UID30    |
| 02021113 |

Issued

< Performed

| Date     | Signature |
|----------|-----------|
| 9-8-1998 | MJ        |
| 3-3-1998 | C. H. ... |

enviastopPic
IICAOPT

**Stimuli**

|         |   |     |
|---------|---|-----|
| Config. | 0 | nm  |
| Lambda  | - | deg |
| PPC     | - |     |
| Polar   | - |     |
| Shutter | - |     |
| Acq.    | - |     |
| S/S     | - |     |

**ATC**  ACTIVE

**Nadir** -16.2°C

**Limb** -17.9°C

**RAD-A** -16.0°C

**NCW** CLOSED

**WLS** OFF

**SLS** OFF

**A** 0.0 mA

**B** 0

**-5.28 V**

**0.0 mA**

**Sun (Subsolar)**

**Nadir**

**Limb Sun/Moon**

**Cover** UNLOCKED

**Azimuth Scanner**

ACTIVE

113160 -45.000

**Cover** UNLOCKED

**Elevation Scanner**

ACTIVE

327527 165.000

**Aperture Stop** LARGE

**Telescope**

**Spectrom.**

**NDF** OUT

**Sun Sens**

|   |   |
|---|---|
| 0 | 0 |
| 0 | 0 |

**IICAOPT**

**PMD**

Det.Temp -16.7°C

ElecTemp -17.7°C

**Channel**

| 1           | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.19   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 240.63 | 244.66 | 244.73 | 243.96 | 237.77 | 214.34 | 214.31 |
| Block temp  | 219.46 | 232.17 | 231.09 | 230.10 | 216.53 | 159.59 | 156.38 |
| DME temp    | 259.23 | 259.54 | 259.27 | 259.39 | 259.90 | 259.33 | 260.00 |

**Ancil.**  **RbiStart**  **Conf**  **Moni.**  **Anom**

|      |        |   |        |         |          |       |     |     |            |      |   |
|------|--------|---|--------|---------|----------|-------|-----|-----|------------|------|---|
| STOP | A, NOM | 5 | HEATER | MEAS-TL | COMPLETE | STATE | RTF | 121 | 0x07e55514 | TRUE | 0 |
|------|--------|---|--------|---------|----------|-------|-----|-----|------------|------|---|

**Format**  **ChkState**  **TLM Mode**  **OB**  **Moni.**  **Anom**





size:

\_\_\_\_\_

should be  
approx  
150Kb

ls -l \*iu\*.cal

size:

\_\_\_\_\_

should be  
approx  
150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print  
postscript

Print postscript files:

`lpr -P<printer> *.ps`

Contents dark file

`*du*.avg.cal.ps`

should be approx. constant within channels:  Y / N

Contents light file

`*iu*.avg.cal.ps`

should resemble white light source:  Y / N

Contents of

`*rel_std*.ps` files

should be smaller than 0.01 (pixel 300 -- 800) for all channels.  Y / N

If not, value is: \_\_\_\_\_

Add postscript images to logbook, done  Y / N

`lpr -P<printer>`

Print logfiles `*.log`

Add logfiles to logbook, done  Y / N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL  
~~ls -l~~

In DATA-DIR window

largest number in dir?

mkdir {B1}+1

\_\_\_\_\_

<B1>

Now largest number in dir?

\_\_\_\_\_

<C1>

<C1> should be <B1>+1

Y/N

Dir name is:

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dir name>

Let <D1>, <D2>, <D3>  
directories containing

irradiance measurements

(thus, <D1>, <D2>, <D3>

are of the form

~/DATA+DIR/IRRAD/(number))

In DATA-DIR window

cp <D1>/ \* du \*.avg cal <Dir name>

cp <D1>/ \* ir \*.avg cal <Dir name>

cp <D2>/ \* du \*.avg cal <Dir name>

cp <D2>/ \* ir \*.avg cal <Dir name>

cp <D3>/ \* du \*.avg cal <Dir name>

cp <D3>/ \* ir \*.avg cal <Dir name>

~~ls -l~~ <Dir

cd <Dir name>

ls -l

Copied files max? Y/N.

Proceed with page 3.

let op: line-feed aan het einde.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the \*.cal file

IRRadiance processing <lightfile> is measured.

Run radiance idl do\_irradiance In IDL window

Check irradiance ls -l \*  
 Size of file <D>.du\*.cal.p1 \_\_\_\_\_  
 Size of file <D>.du\*.cal.~~2~~ f455.p2 \_\_\_\_\_  
 2D).du\*.cal.f456.p2  
 Size of file <D>\*.p1.\*.log \_\_\_\_\_

Check irradiance visually lpr -P<printer> \*p[12]\*.ps Value of P1 and P2 file resemble white light source? Y / N

Add postscript images to logbook, done Y / N

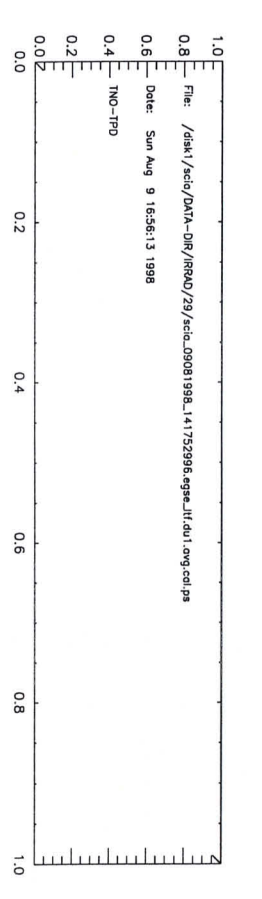
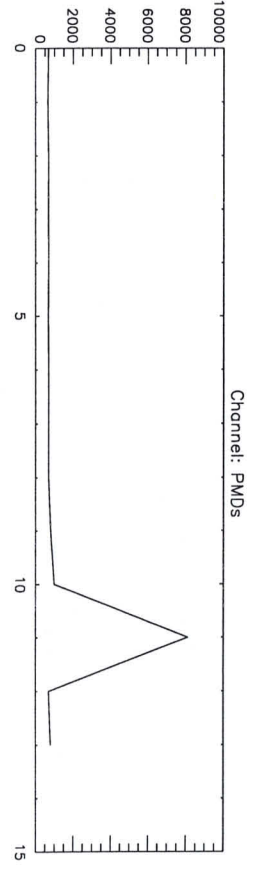
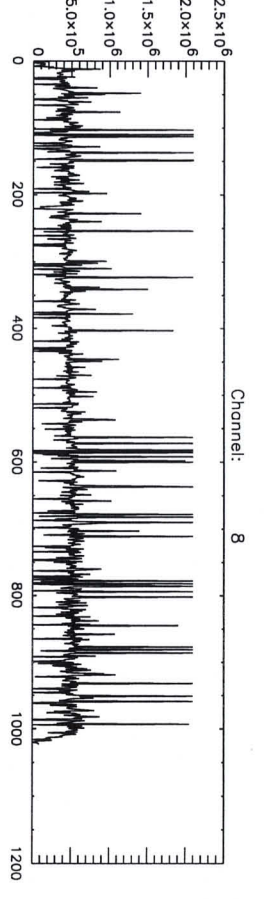
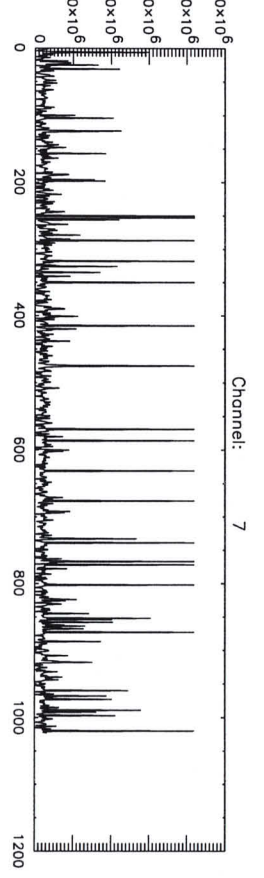
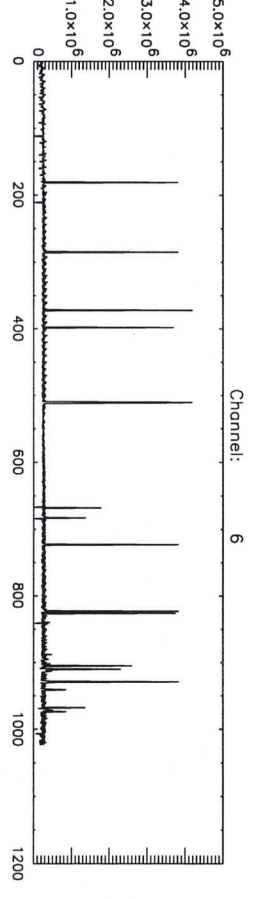
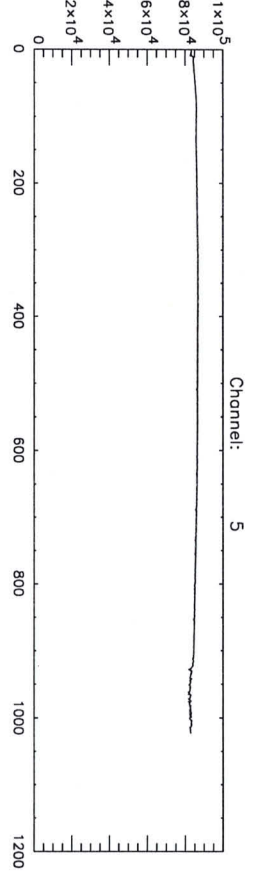
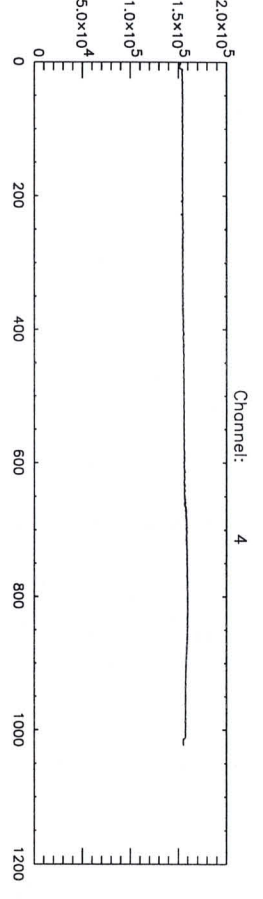
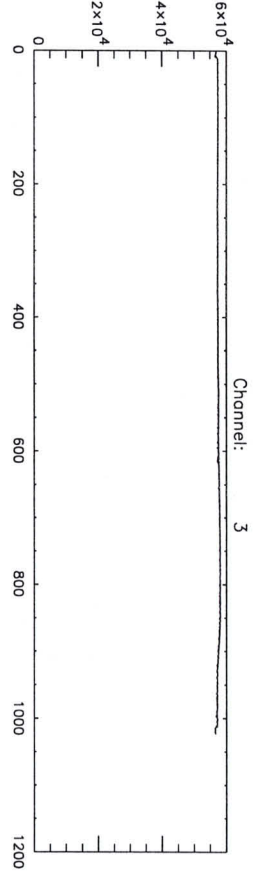
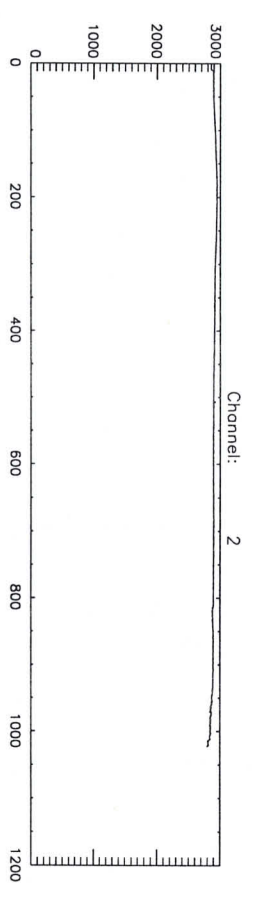
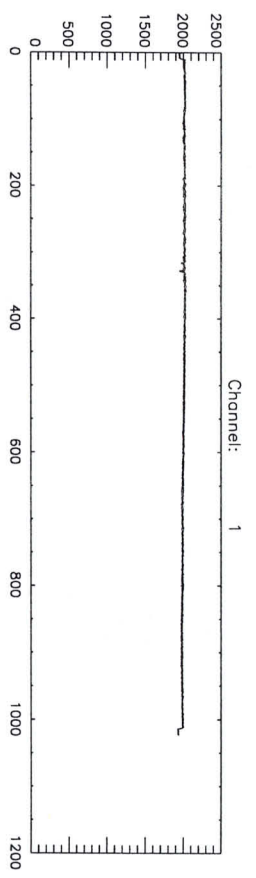
Print logfiles lpr -P<printer> \*p[12]\*.plog Add logfiles to logbook, done Y / N

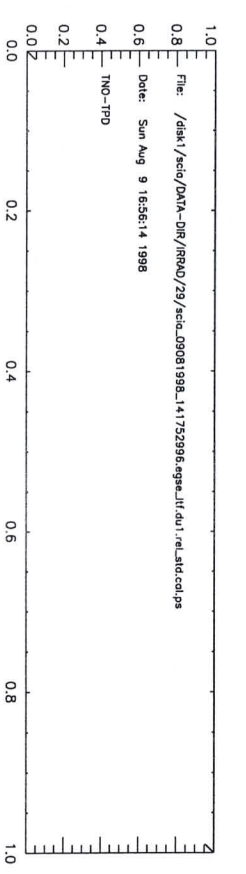
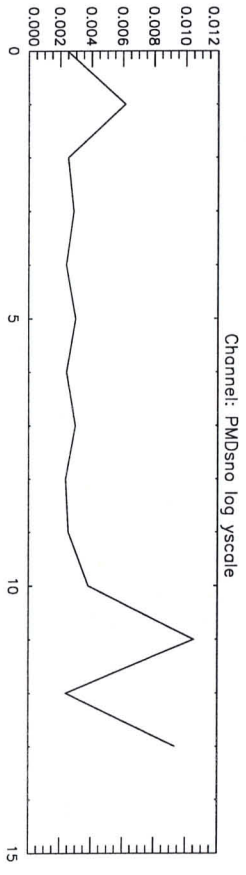
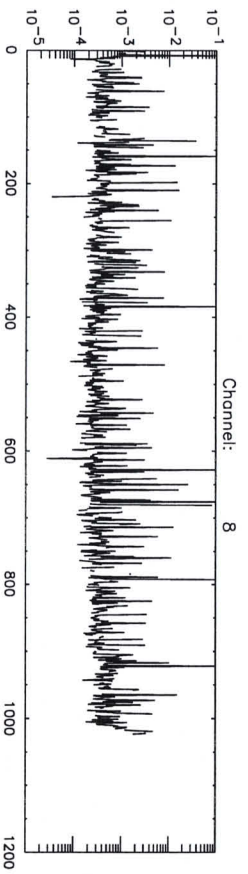
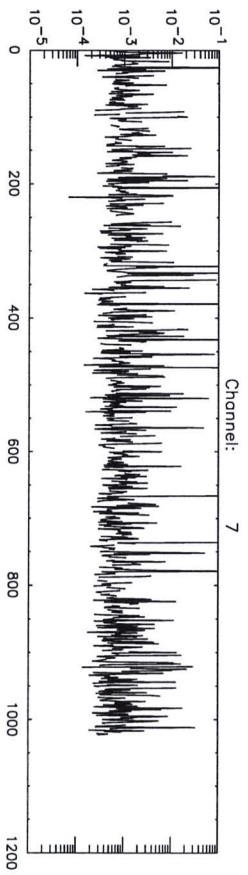
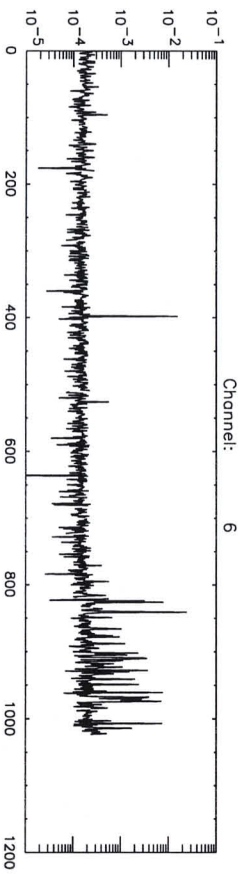
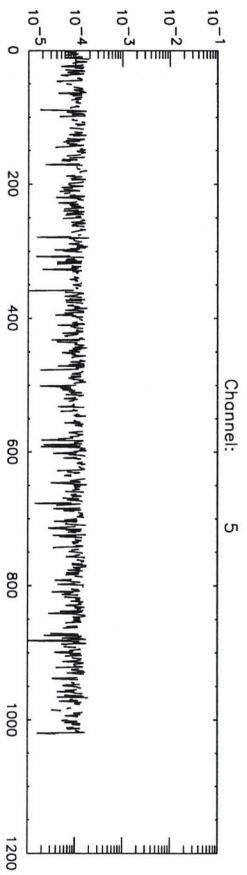
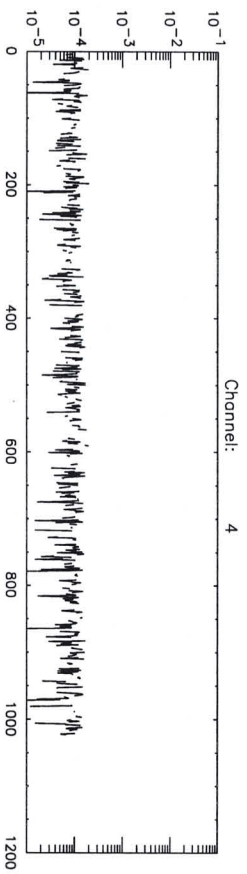
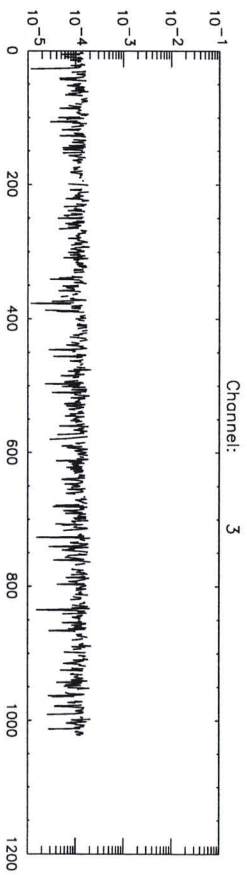
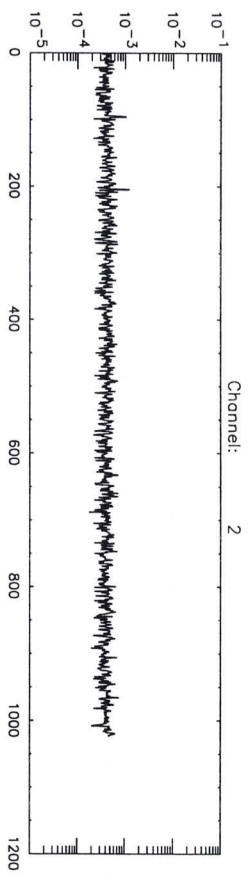
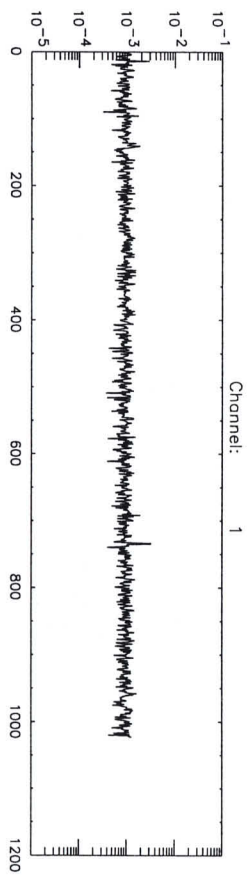
Back up Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory). Name of backup CDs \_\_\_\_\_ See analysis sheet BackUp

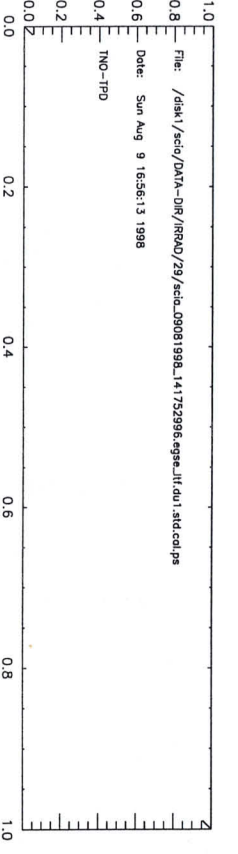
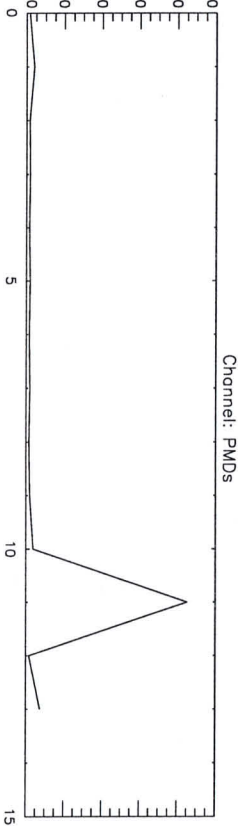
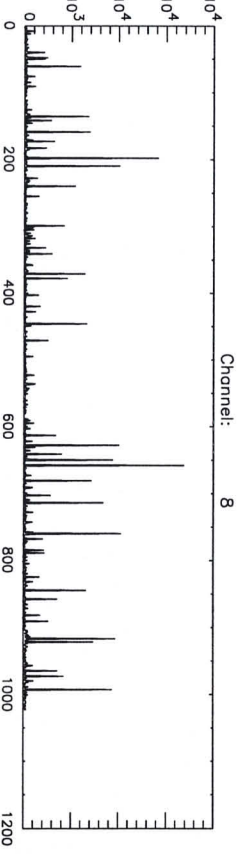
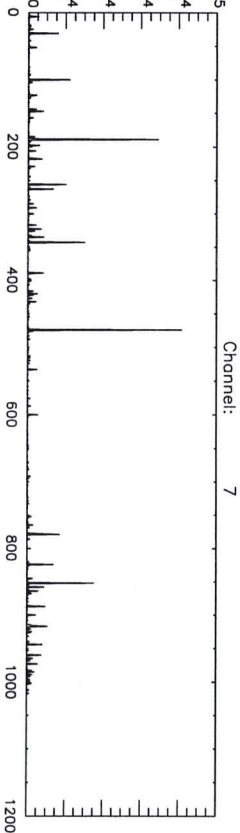
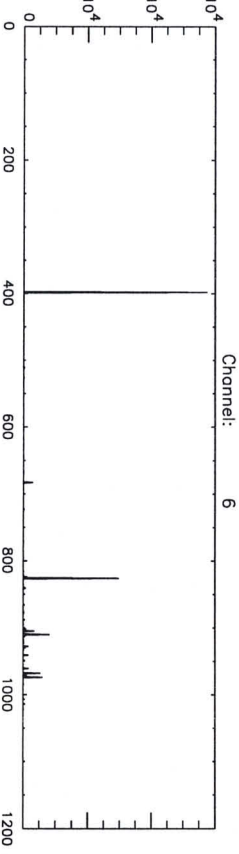
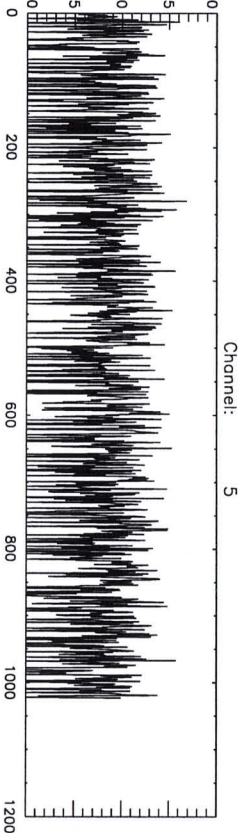
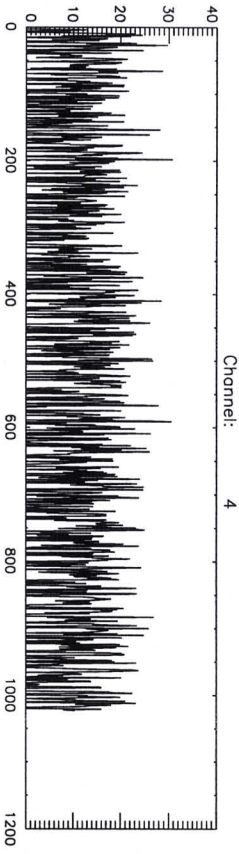
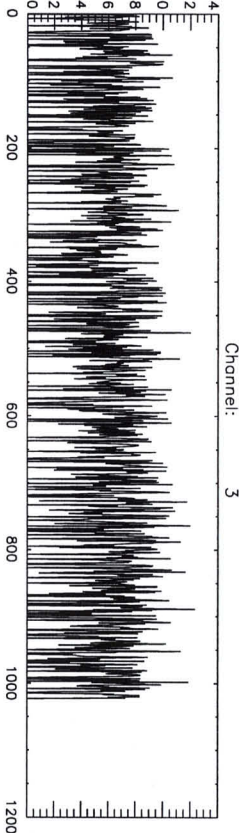
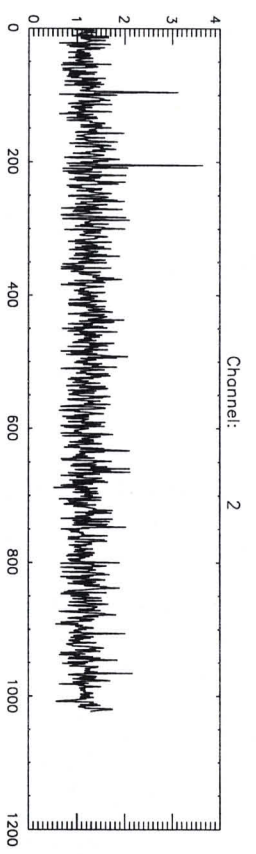
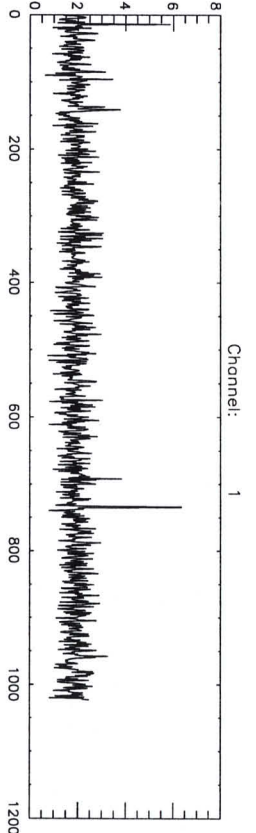
Sign:

Name  
Date and time  
Signature

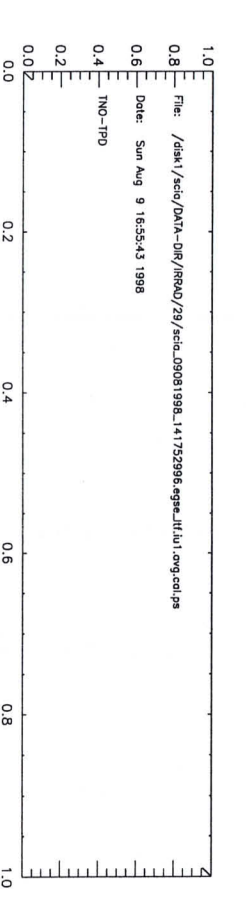
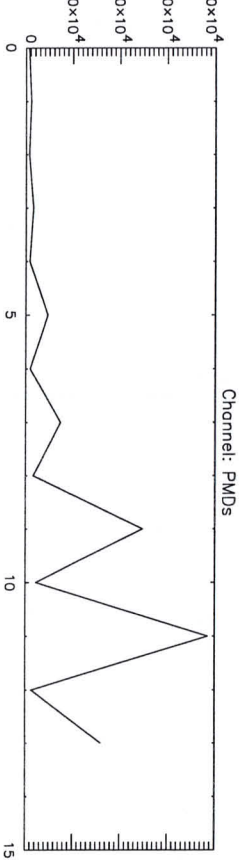
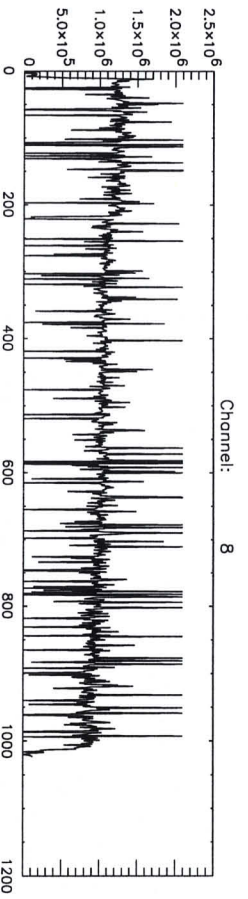
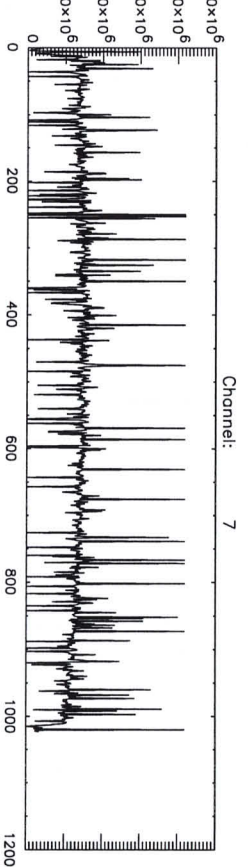
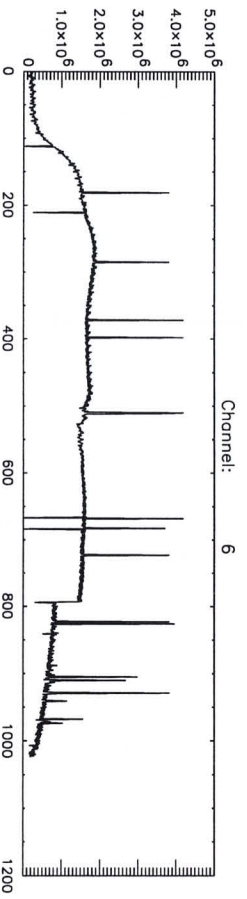
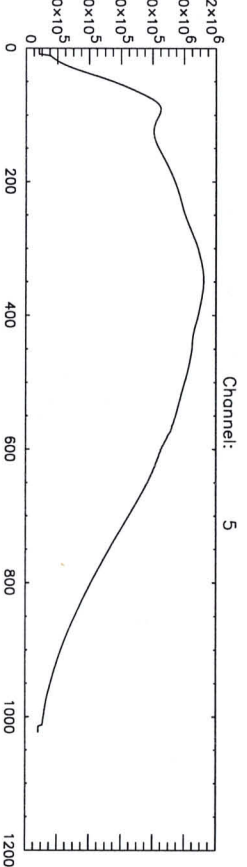
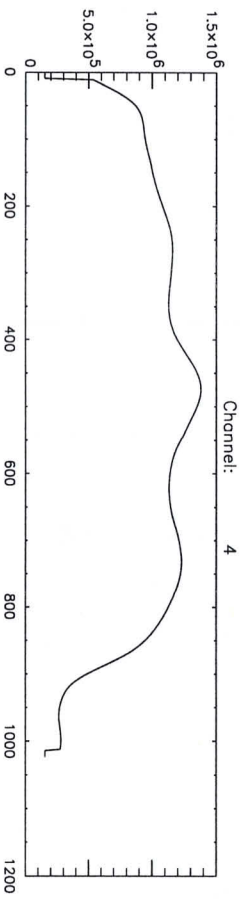
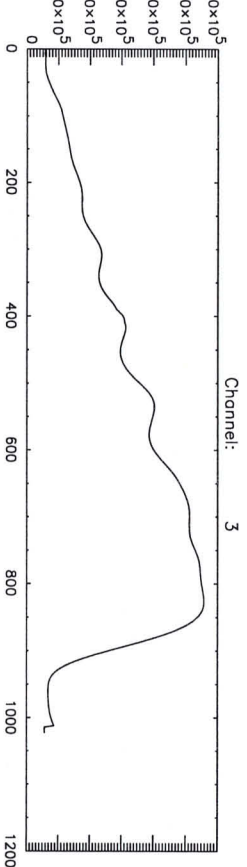
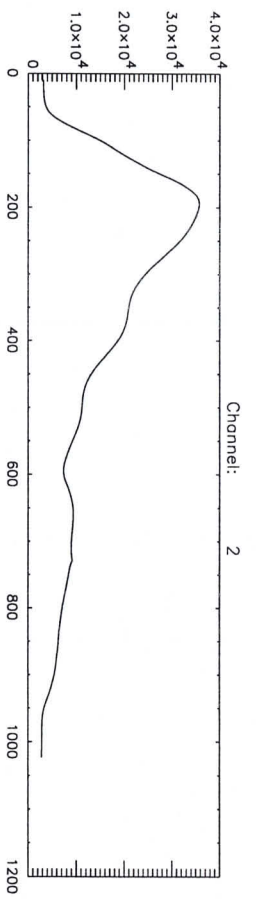
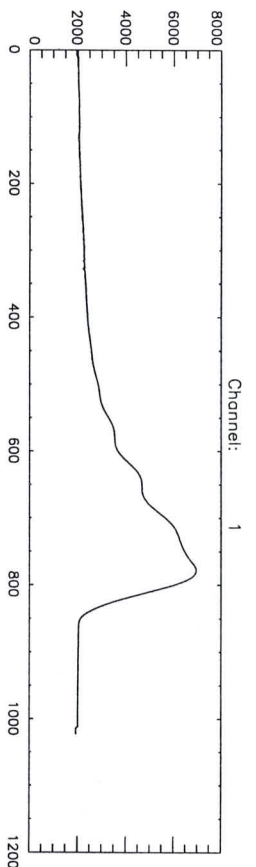
Marcel Dobber  
09-08-1998  
X

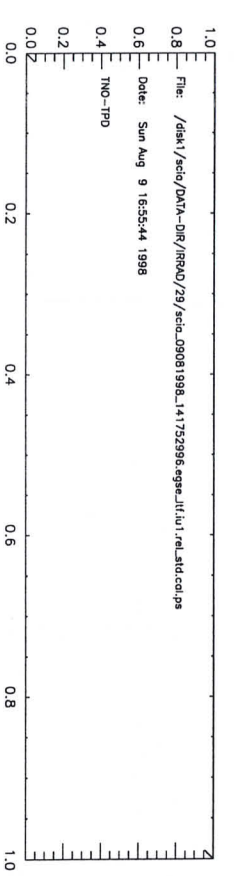
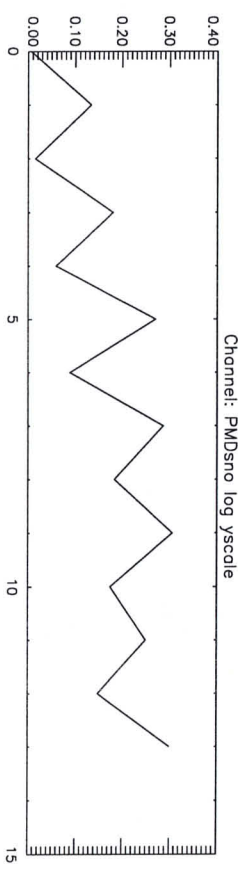
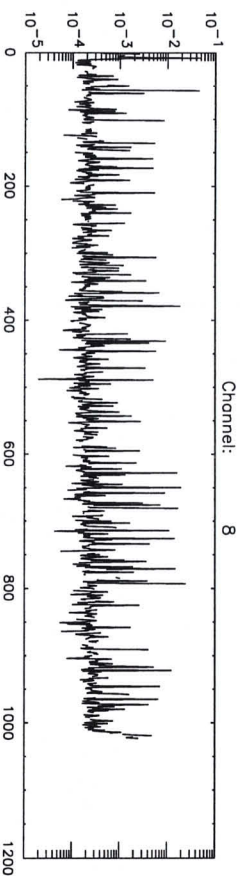
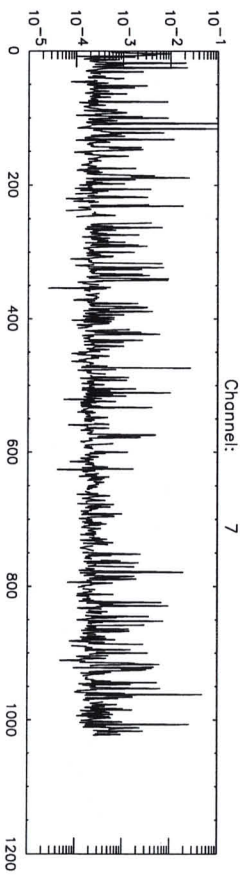
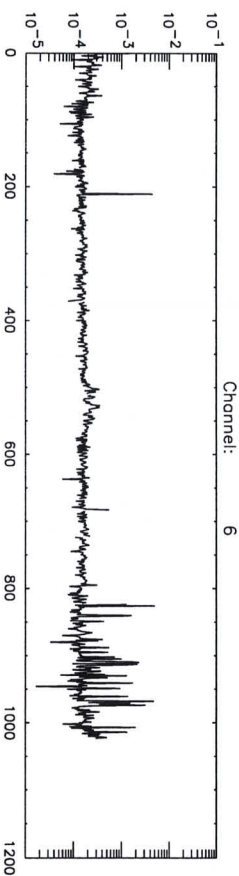
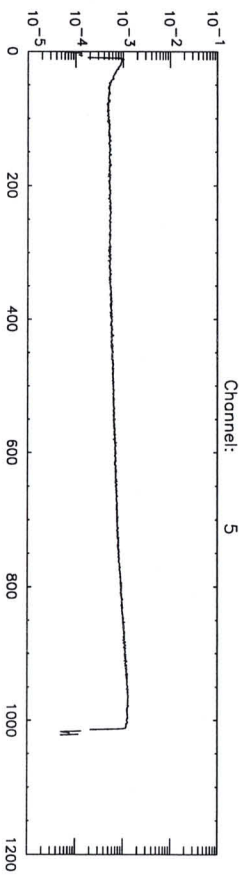
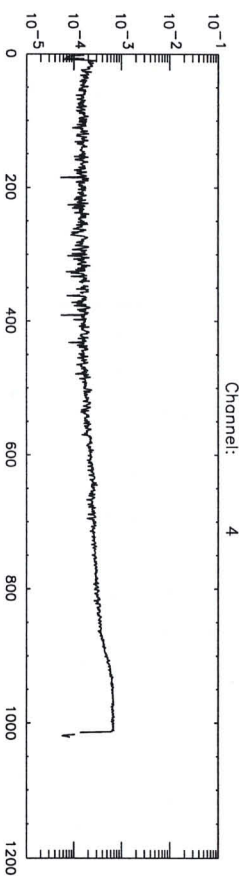
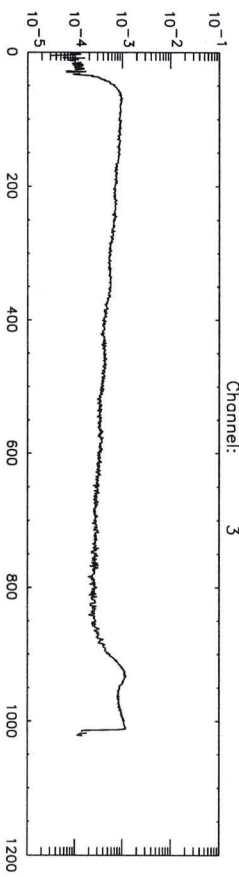
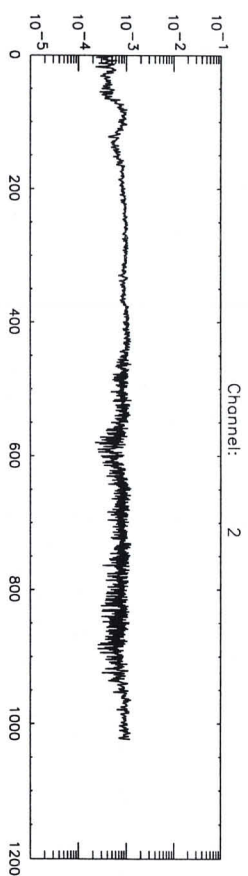
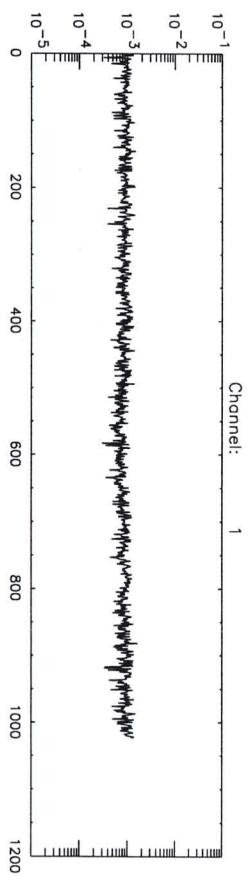


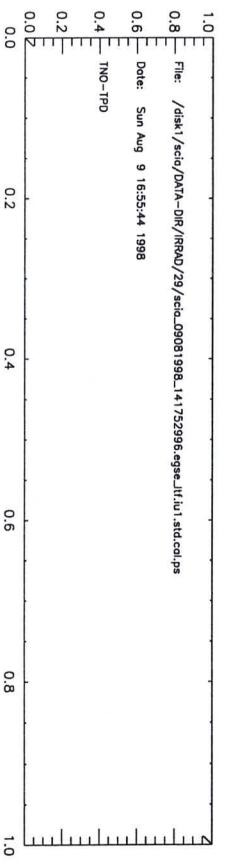
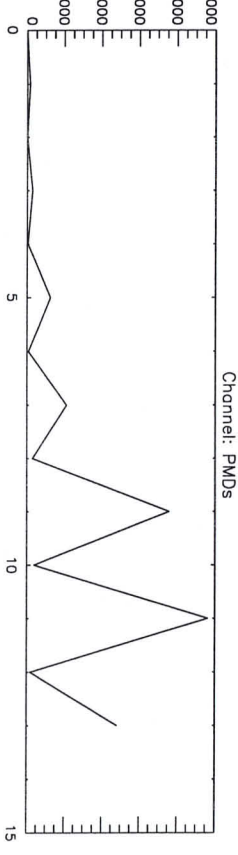
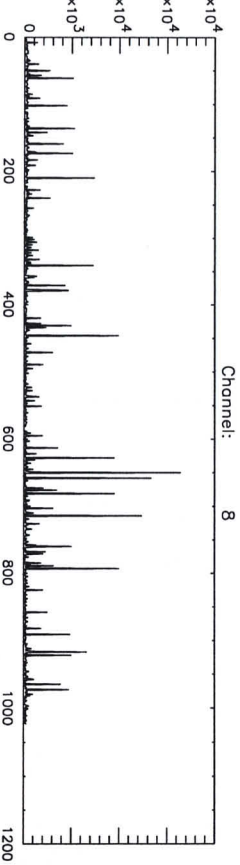
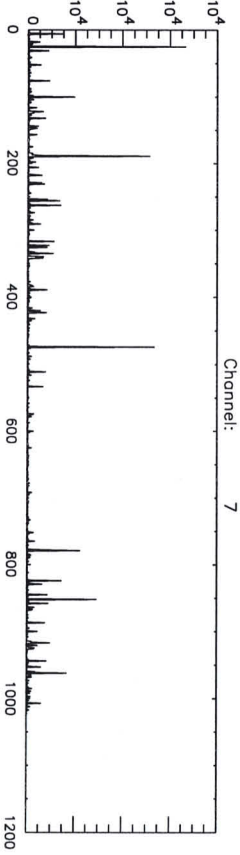
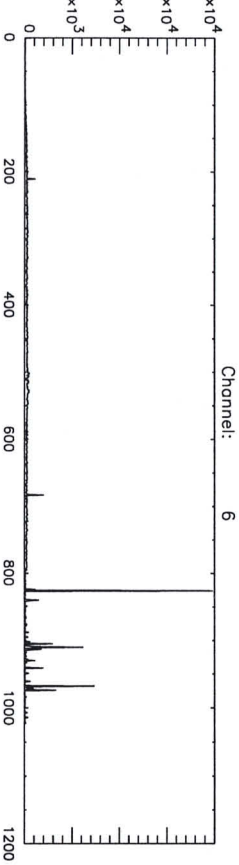
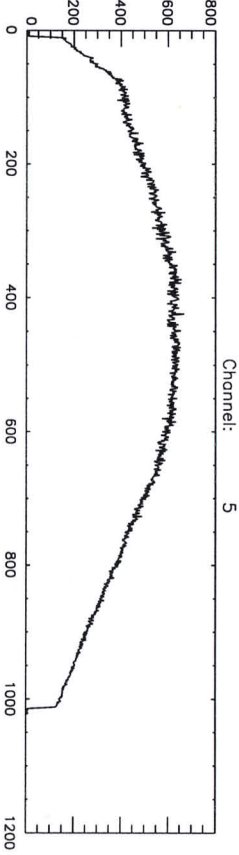
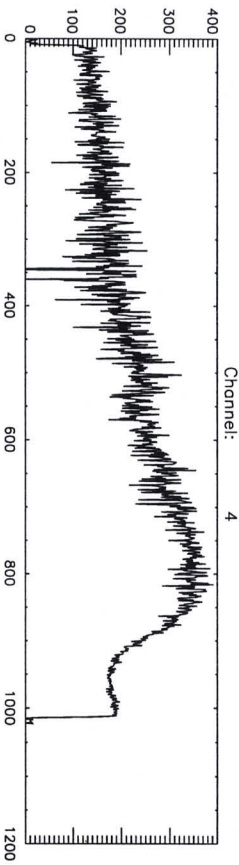
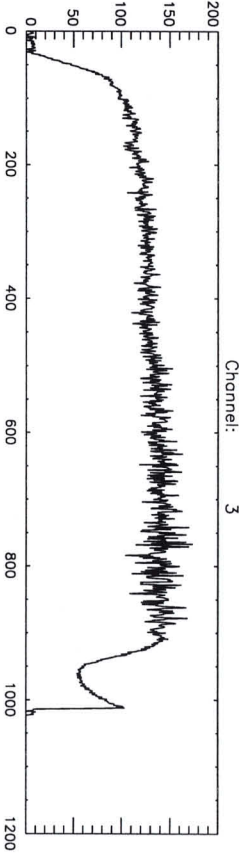
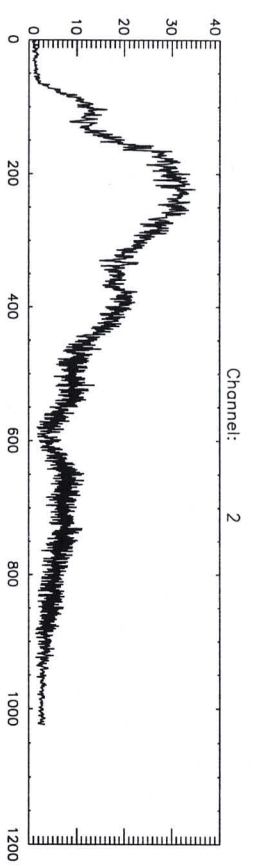
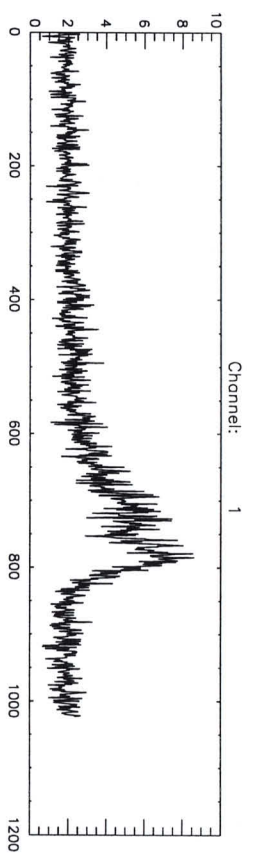












time = Sun Aug 9 16:56:14 1998

batch = dul

Start TOD = Sun 09-Aug-98 14:31:29

End TOD = Sun 09-Aug-98 14:42:55

Processing= computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 16:55:44 1998

batch = iul

Start TOD = Sun 09-Aug-98 14:18:20

End TOD = Sun 09-Aug-98 14:31:29

Processing= computation of average, standard dev. and rel.standard dev.



Pagenumber:

# LOG SHEET SCIAMACHY CALIBRATION

| date/time  | description of action                                                                                                                     | measurement filename |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 9-8-1998   | Omgebouwd van lare lamp zonder straight doos naar limb irradiance with spherical mirror and straight box. Uitgelijnd op minimum distance. |                      |
| Step 6.9.3 | UID 39                                                                                                                                    |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |
|            |                                                                                                                                           |                      |

envisatTopPic IICAOPT

WLS OFF -0.0 mA 0

SLS OFF -5.29 V 0.0 mA

IICAOPT PMD Def.Temp -16.7 C ElerTemp -17.7 C

NCW CLOSED

A B

Elevation Scanner ACTIVE 327527 165.000

Aperture Stop LARGE

Sun (Subsolar) Nadir

Limb Sun/Moon

Azimuth Scanner ACTIVE 113160 -45.000

Cover UNLOCKED

Telescope

Spectrom.

NDF OUT

Stimuli

|         |   |     |
|---------|---|-----|
| Config. | 0 | nm  |
| Lambda  | - |     |
| PPC     | - |     |
| Polar   | - | deg |
| Shutter | - |     |
| Acq.    | - |     |
| S/S     | - |     |

ATC ACTIVE

Nadir -16.2 C

Limb -17.9 C

RAD-A -16.0 C

Channel 1

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.73   |
| 15V Supply  | 3.19   |
| Shield temp | 240.63 |
| Block temp  | 219.46 |
| DME temp    | 259.25 |

Channel 2

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.18   |
| Shield temp | 240.76 |
| Block temp  | 219.02 |
| DME temp    | 259.08 |

Channel 3

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.19   |
| Shield temp | 244.67 |
| Block temp  | 232.17 |
| DME temp    | 259.53 |

Channel 4

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.18   |
| Shield temp | 244.73 |
| Block temp  | 231.09 |
| DME temp    | 259.26 |

Channel 5

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.17   |
| Shield temp | 243.96 |
| Block temp  | 230.10 |
| DME temp    | 259.40 |

Channel 6

|             |        |
|-------------|--------|
| Bias Volt.  | -0.03  |
| Test input  | 0.01   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.18   |
| Shield temp | 237.80 |
| Block temp  | 218.55 |
| DME temp    | 259.91 |

Channel 7

|             |        |
|-------------|--------|
| Bias Volt.  | -0.05  |
| Test input  | 0.01   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.19   |
| Shield temp | 214.33 |
| Block temp  | 159.60 |
| DME temp    | 259.35 |

Channel 8

|             |        |
|-------------|--------|
| Bias Volt.  | -0.03  |
| Test input  | 0.01   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.17   |
| Shield temp | 214.89 |
| Block temp  | 156.37 |
| DME temp    | 260.02 |

● Ancil. ● RbiStart ● Conf

STOP A, NOM 5

● TLM Mode

MEAS-TL COMPLETE

● ChkState

STATE

● Format

RTF 211

● OB T

0x082ae914

● Moni. ● Anom

TRUE 0



# Formal Run of Measurement

(Measurement ID)

IRRAD - LIMB

Request for Actual Status

|  |
|--|
|  |
|--|

(cross out entries that are **not** requested.)

Request for Modification

|  |
|--|
|  |
|--|

(fill in only entries to be modified)

Request for Run

|   |
|---|
| X |
|---|

(no entries = run based on actual default settings)

## Scanner Positions

Azimuth

-45,00

deg

Elevation

+165,00

deg

## Timeline for each Data Acquisition Period during Measurement

State ID

|             |    |   |   |   |   |   |   |   |   |    |
|-------------|----|---|---|---|---|---|---|---|---|----|
|             | 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Repetitions | 39 |   |   |   |   |   |   |   |   |    |

## State Parameters for States used in Timeline (State ID must be given)

| Channel  | 1             |           | 2             |           | 3             |           | 4             |           | 5             |           | 6             |           | 7             |           | 8             |           |
|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
|          | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding |
| 1a       | 16            | 4         |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 1b       | 16            | 4         |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 2b       | 2             | 32        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 2a       | 2             | 32        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 3        | 0,125         | 64        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 4        | 0,0625        | 64        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 5        | 0,0625        | 64        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 6        | H9            | 64        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 7        | 0,0625        | 64        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| 8        | 0,125         | 64        |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| State ID |               |           |               |           |               |           |               |           |               |           |               |           |               |           |               |           |

Step 6-9

## Stimuli Settings for Existing Blocks in Measurement

| Block No | Stimuli Setup ID | PPC [deg] | Polarizer [deg] | Shutter open/close | Acquisition Time [s] | Lambda [nm] |      |      | Repetition Factor | Message | OS Setup Time [s] |
|----------|------------------|-----------|-----------------|--------------------|----------------------|-------------|------|------|-------------------|---------|-------------------|
|          |                  |           |                 |                    |                      | Start       | Stop | Step |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |

## Measurement Data Description

Test Purpose

Remark

Data Directory

|        |
|--------|
|        |
| UID 39 |
|        |

## Signatures

Issued

< Performed

| Date     | Signature   |
|----------|-------------|
| 9-8-1998 | [Signature] |
|          |             |

| STEP            | ACTION                                                                                                                                                                                                                                                                                          | RESULT                                                | MARKER                                                                                              |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Intro           | Your name:<br>Date:                                                                                                                                                                                                                                                                             | <u>MARCEL DOBBER</u><br><u>9-8-1998</u>               |                                                                                                     |
|                 | What's the name of the (main) data input files generated by the EGSE? (*.dat)                                                                                                                                                                                                                   | <u>scia_09081998_191459491.dat</u>                    |                                                                                                     |
|                 | Setup a three-window configuration on your SUN.                                                                                                                                                                                                                                                 |                                                       | see course descr.                                                                                   |
| Cnstr directory | cd ~/DATA-DIR/IRRAD<br>; ls -l<br>highest number in directory?<br>New directory: mkdir <B+1><br>ls -l<br>What's now the highest number in directory?<br><C> should be <B> + 1<br>directory name is:                                                                                             | <u>29</u><br><u>30</u><br>Y N<br>~/DATA-DIR/IRRAD/<C> | Note: In window DATA-DIR<br>(B)<br>(C)<br>(DIR-NAME)                                                |
| Copy data       | See Analysis sheet:<br>Transfer Data File                                                                                                                                                                                                                                                       | Y N                                                   | In DATA-DIR window                                                                                  |
| Cnstr EGSE_LTF  | cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)<br>ls -l *.egse_ltf<br>What's the name of the egse_ltf file<br><D> should be<br><A>.egse_ltf | <u>scia_09081998_191459491.egse_ltf</u><br>Y N        | Note: In window DATA-DIR;<br><b>don't forget the dot !!!;</b><br>May take more than 15 mins.<br>(D) |
| Cnstr CAL files | idl run_averscia (and select file <D> when asked)                                                                                                                                                                                                                                               |                                                       | Note: In window IDL                                                                                 |
| Check CAL files | Dark files:<br>ls -l *du*.cal                                                                                                                                                                                                                                                                   |                                                       | In DATA-DIR window                                                                                  |

size:

46

should be approx 150Kb

ls -l \*iu\*.cal

size:

46

should be approx 150Kb

Note: all files should be present, if not:

- (a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels
- (b) Check if enough disk space is available (Unix command `df -k | more`).

Print

postscript

Print postscript files:

`lpr -P<printer> *.ps`

Contents dark file

`*du*.avg.cal.ps`

should be approx. constant

within channels:

Y/N

Contents light file

`*iu*.avg.cal.ps`

should resemble white light

source:

Y/N

Contents of

`*rel_std*.ps` files

should be smaller than

0.01 (pixel 300 -- 800) for

all channels.

Y/N

If not, value is:

\_\_\_\_\_

Add postscript images to

logbook, done

Y/N

`lpr -P<printer>`

Print logfiles

`*.log`

Add logfiles to logbook,

done

Y/N

If you have measured the irradiance at 3 distances, then proceed. otherwise, sign at the end of this sheet.

cd ~/DATA-DIR/IRRAD-TOTAL  
~~ls -l~~

In DATA-DIR window

highest number in dir?

\_\_\_\_\_

<B1>

mkdir <B1>+1

New highest number in dir?

\_\_\_\_\_

<C1>

<C1> should be <B1>+1

Y/N

Dir name is:

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dir name>

Let <D1>, <D2>, <D3>  
directories containing  
irradiance measurements  
(thus, <D1>, <D2>, <D3>  
are of the form  
~/DATA-DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/\*.du\*.avg.cal <Dir name>

cp <D1>/\*.iu\*.avg.cal <Dir name>

cp <D2>/\*.du\*.avg.cal <Dir name>

cp <D2>/\*.iu\*.avg.cal <Dir name>

cp <D3>/\*.du\*.avg.cal <Dir name>

cp <D3>/\*.iu\*.avg.cal <Dir name>

~~mkdir~~

cd <Dir name>

ls -l

Copied files, next? Y/N.

Proceed with page 3

let op: line-feed aan het einde.

Construct control-file  
in dir. <DIR-NAME> where  
each line is of the form  
<distance>  
<lightfile>, where  
<distance> is the relative  
distance at which the  
contents of the \*.cal file

IRRadiance <lightfile> is  
processing measured.

Run  
radiance idl do\_irradiance

In IDL  
window

Check  
irradiance ls -l \*  
Size of file  
<D>.du\*.cal.pl \_\_\_\_\_  
Size of file  
<D>.du\*.cal. *f456.p2* \_\_\_\_\_  
*<D>.du\*.cal.f456.p2*  
Size of file  
<D>\*.pl.\*.log \_\_\_\_\_

Check  
irradiance visually lpr -P<printer>  
\*p[12]\*.ps  
Value of P1 and P2 file  
resemble white light  
source? Y / N

Add postscript images to  
logbook, done Y / N

Print logfiles lpr -P<printer>  
\*p[12]\*.plog  
Add logfiles to logbook,  
done Y / N



Create 3 sets of backup  
CDs of directory <DIR-  
NAME> (One CD has a  
capacity of 600 Mbytes, the  
UNIX command  
/usr/bin/du -k .  
gives the number of kilo  
bytes in the current  
directory).

Back up

Name of backup CDs \_\_\_\_\_

See analysis  
sheet  
BackUp



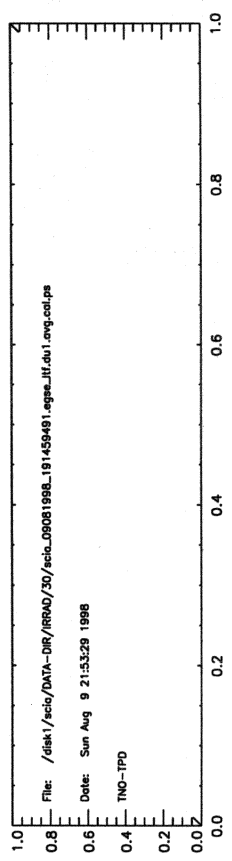
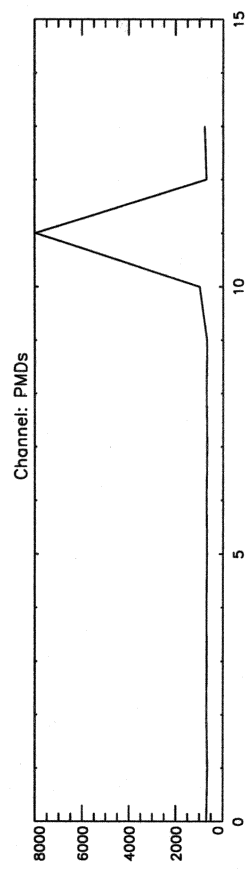
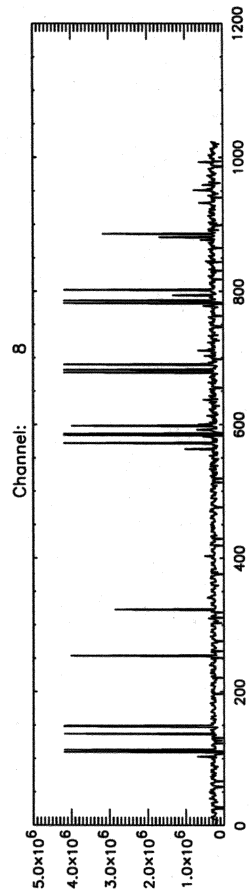
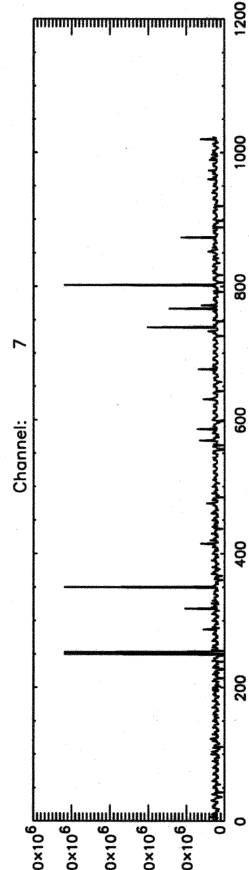
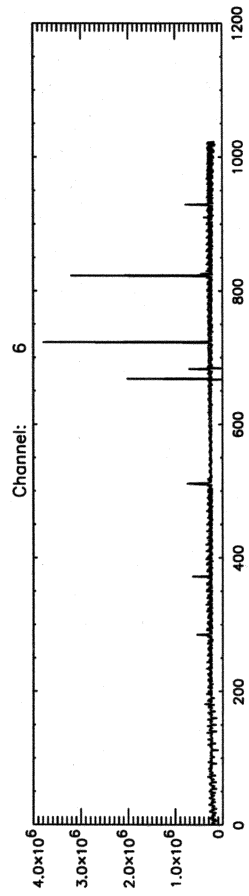
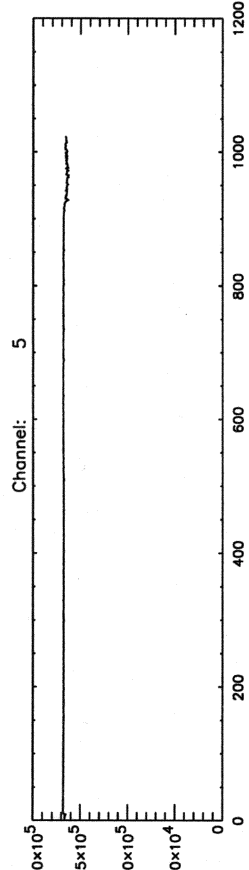
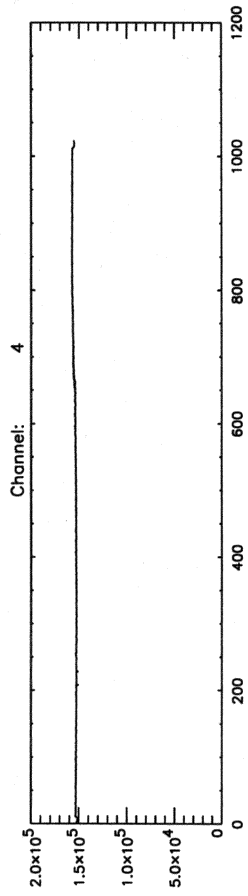
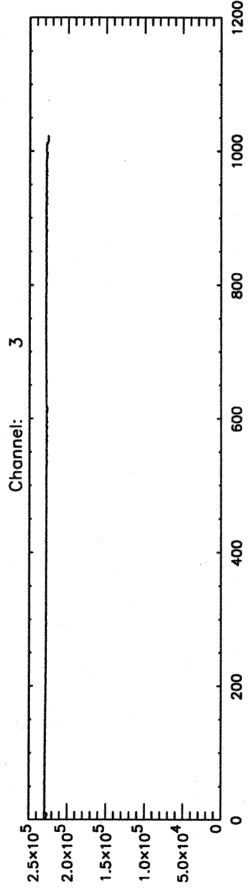
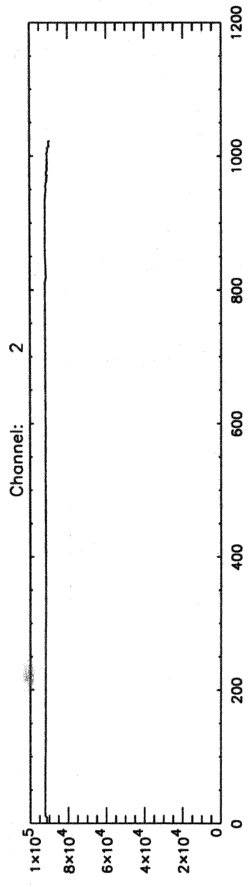
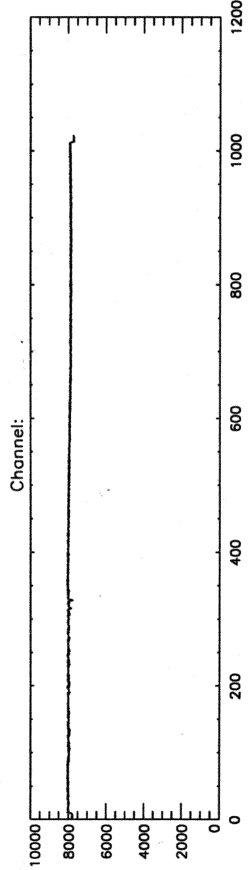
Sign:

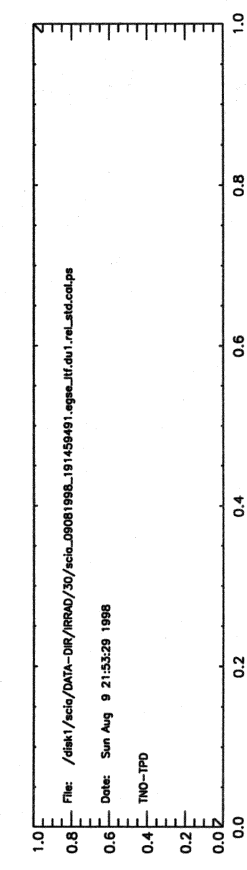
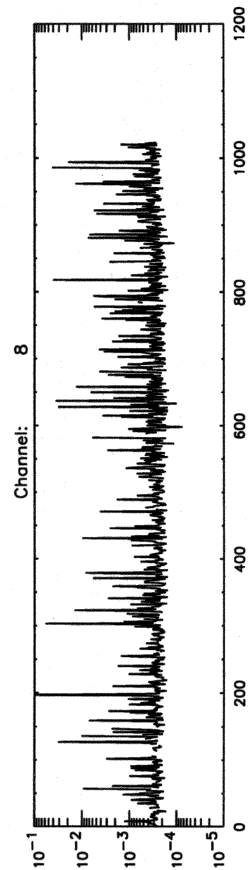
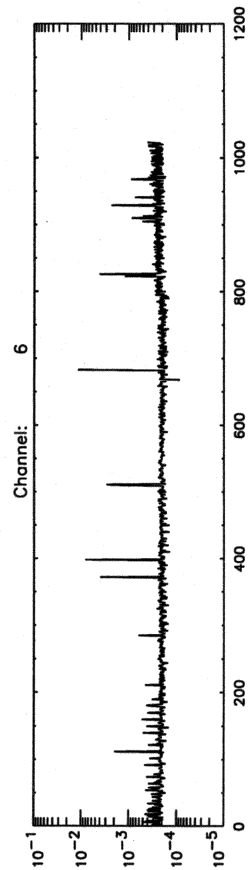
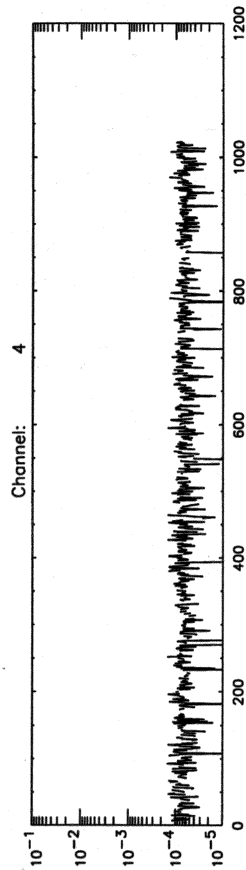
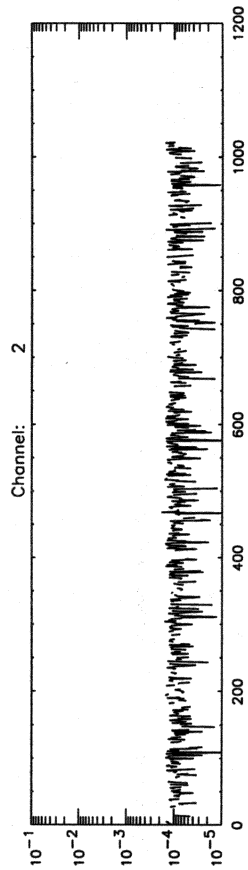
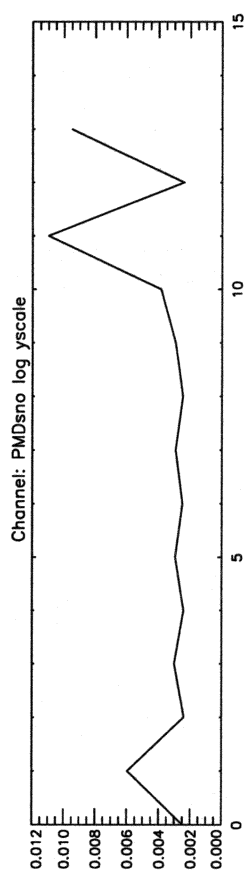
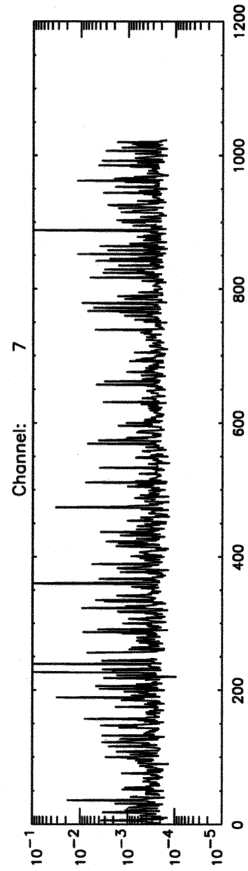
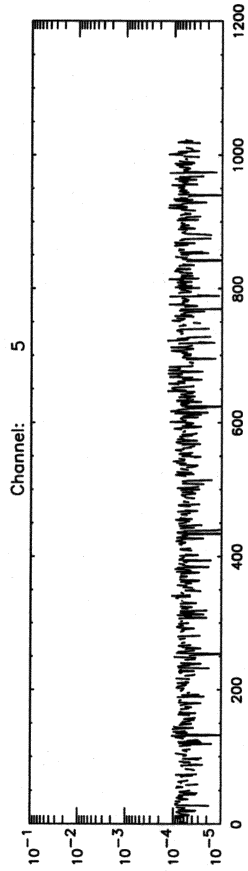
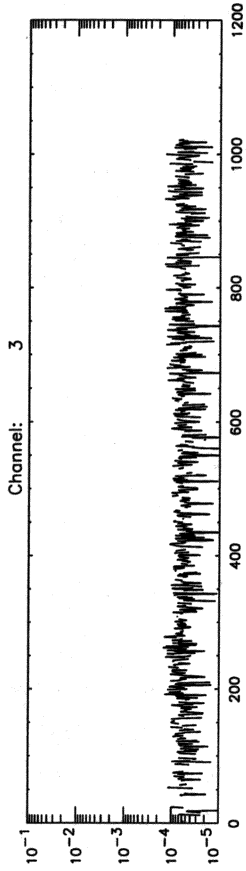
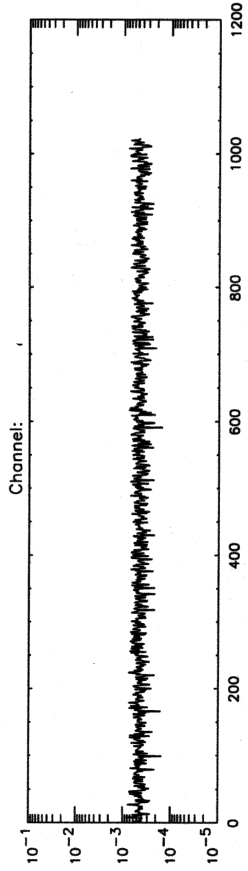
Name  
Date and time  
Signature

Marul Dobler

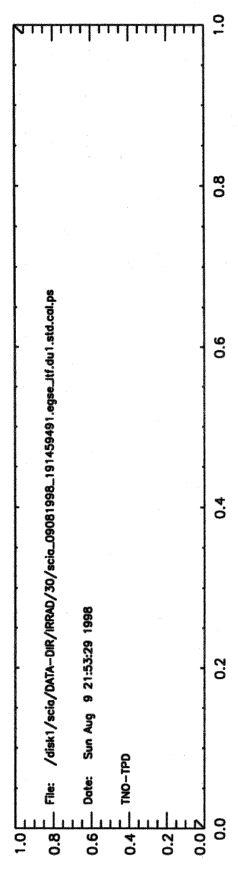
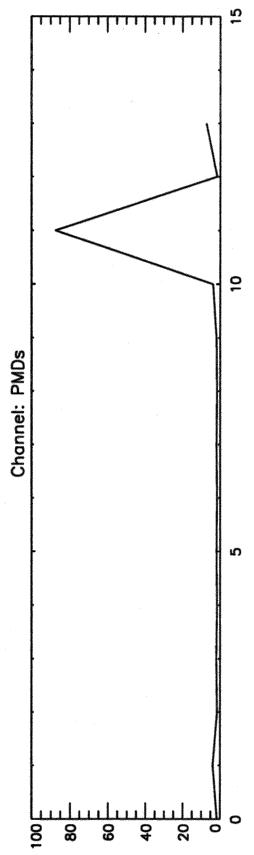
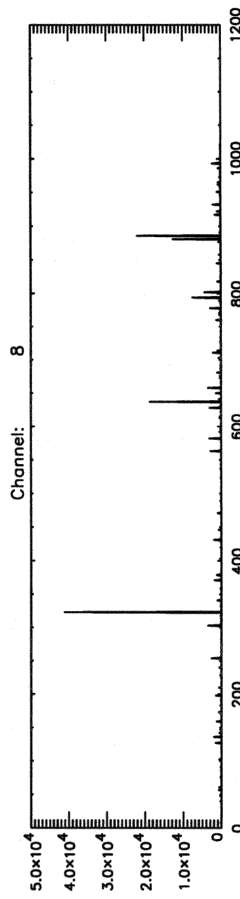
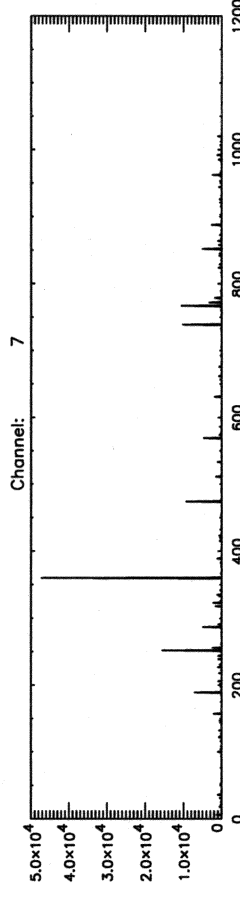
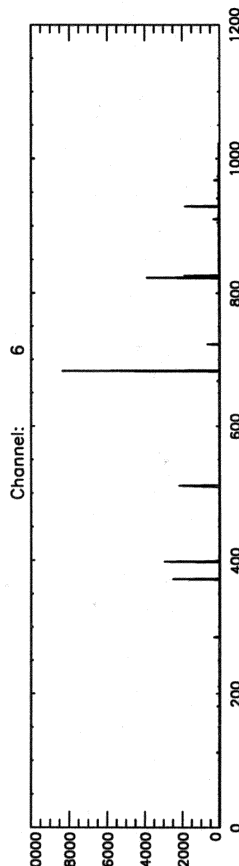
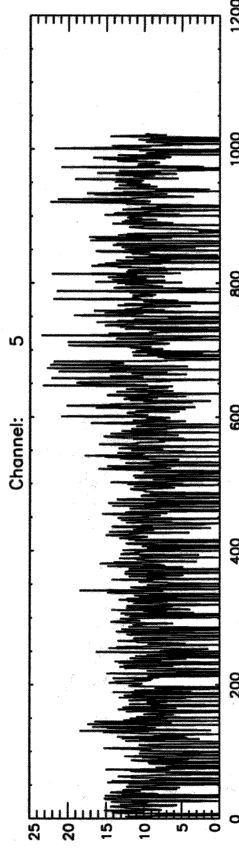
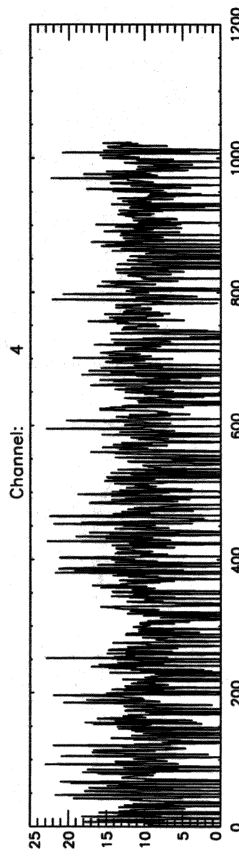
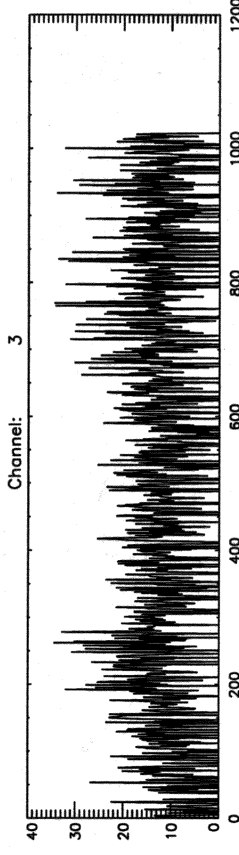
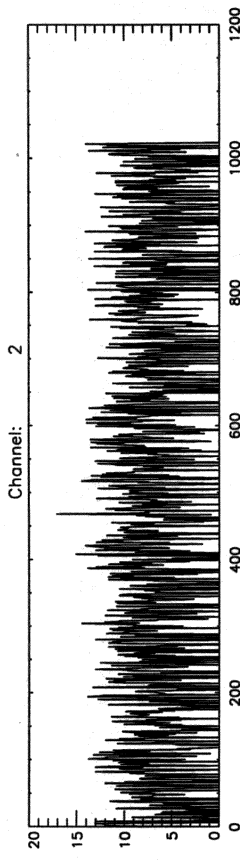
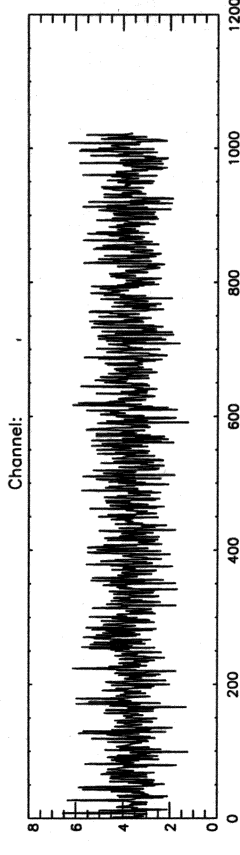
09-08-1998

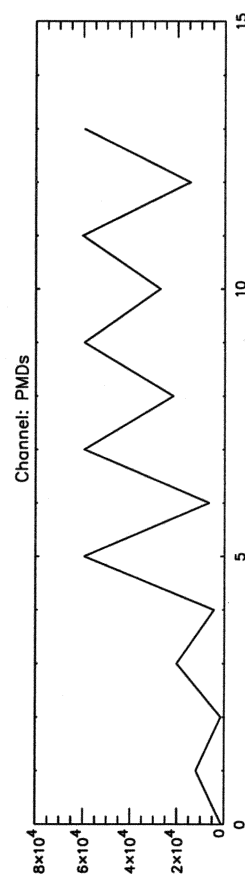
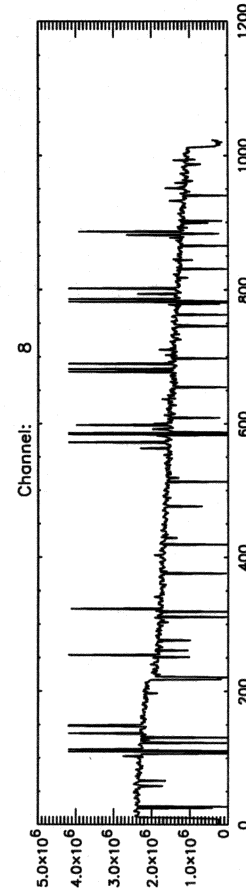
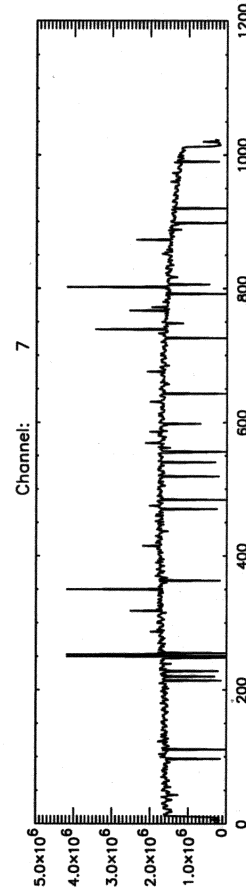
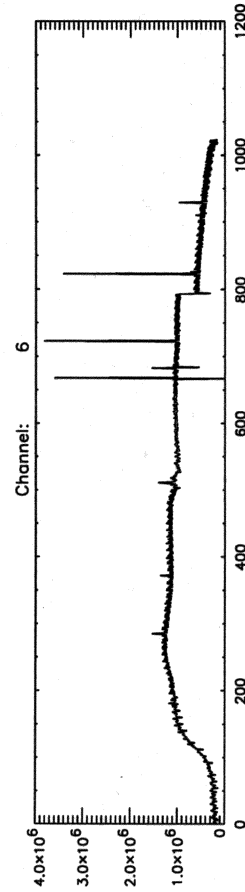
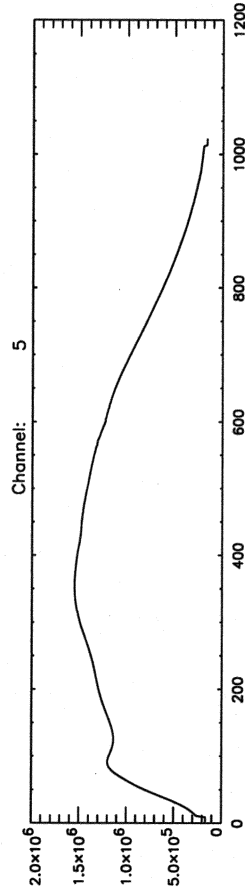
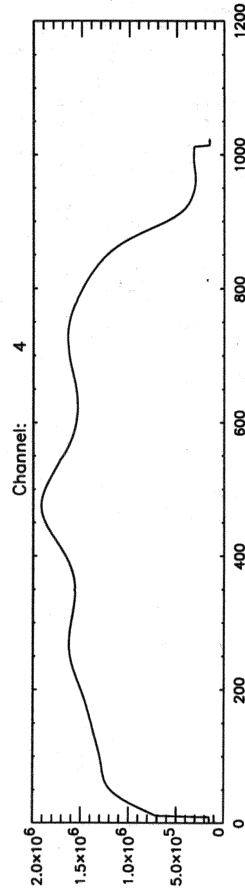
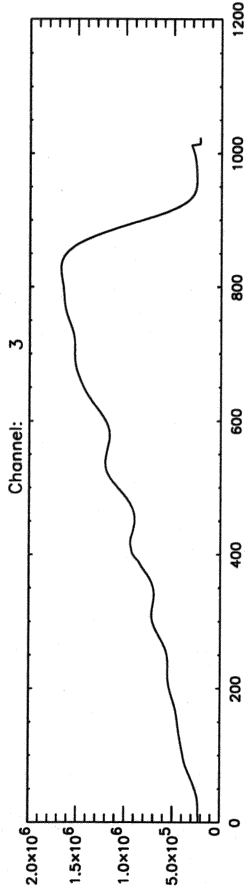
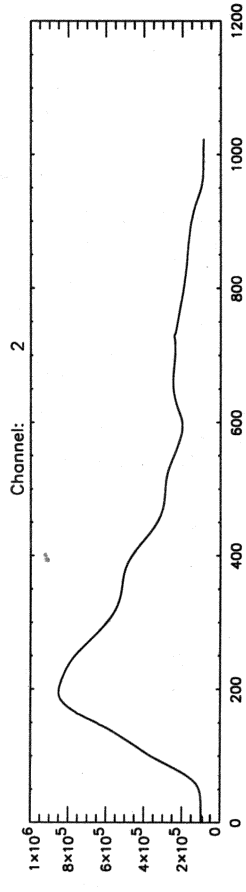
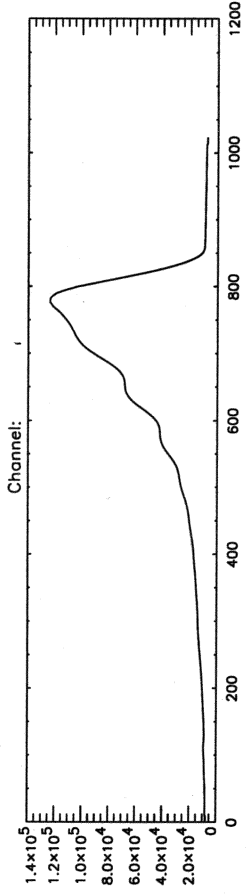
X







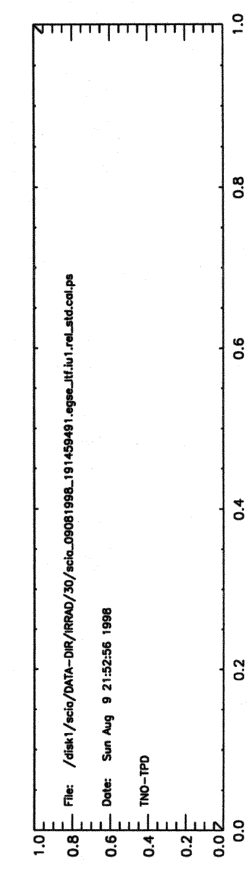
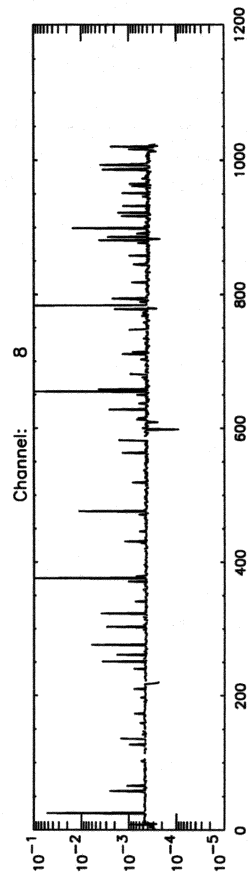
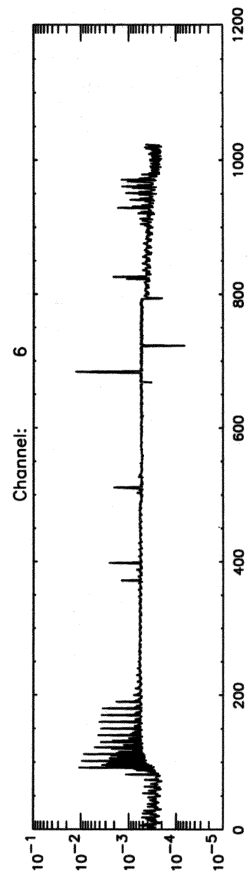
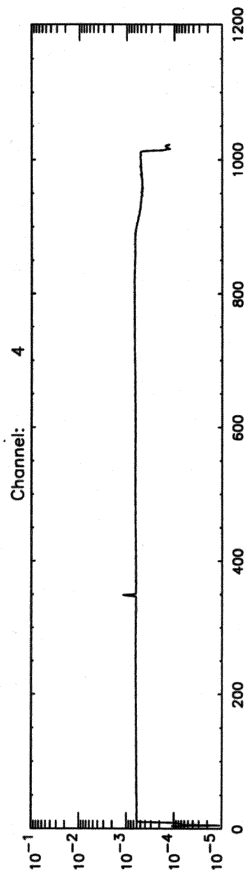
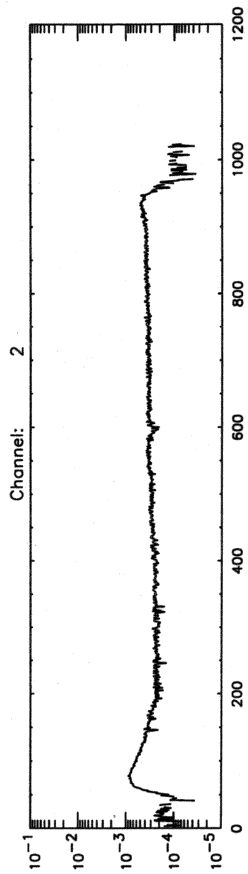
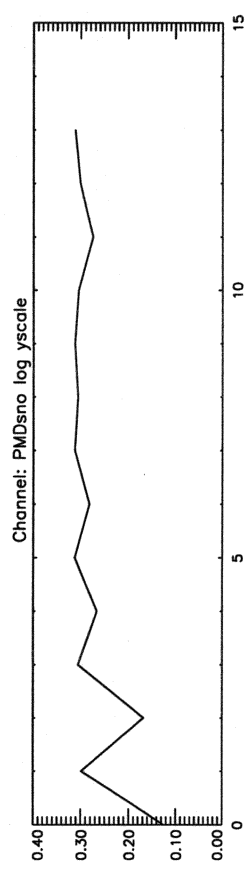
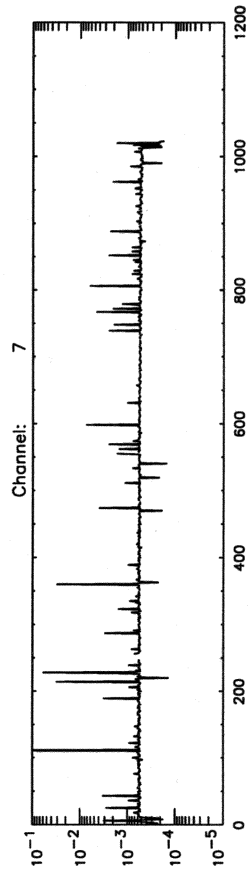
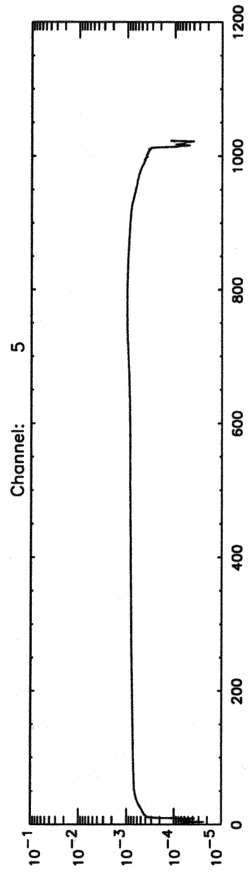
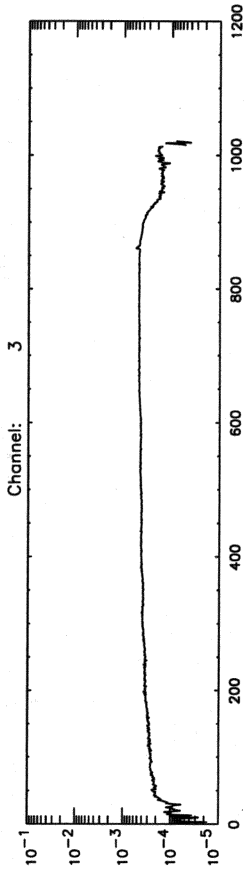
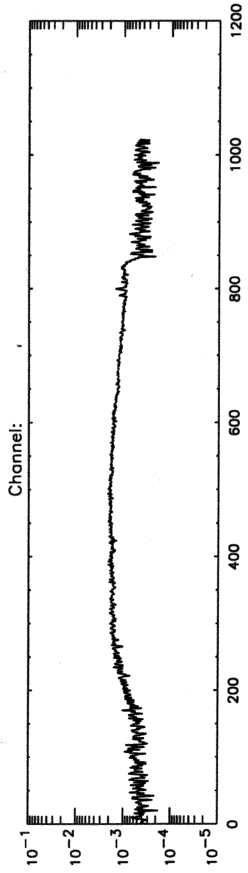


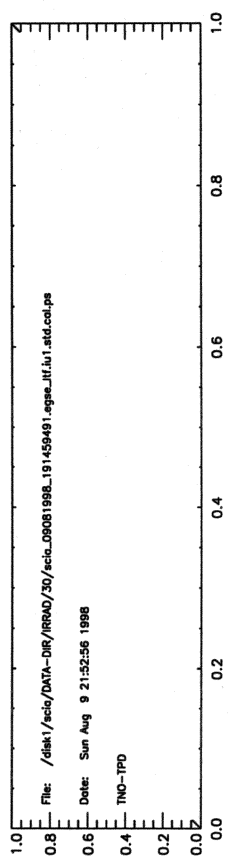
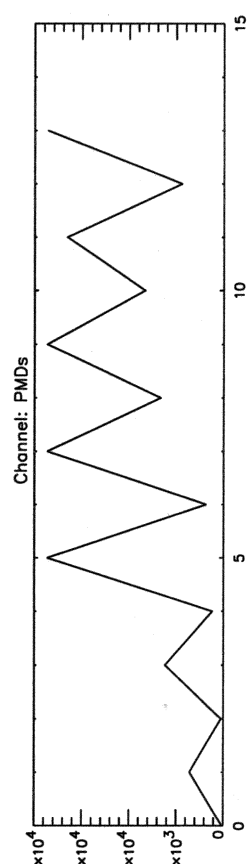
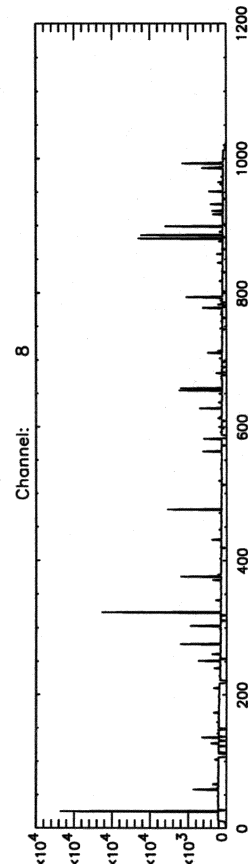
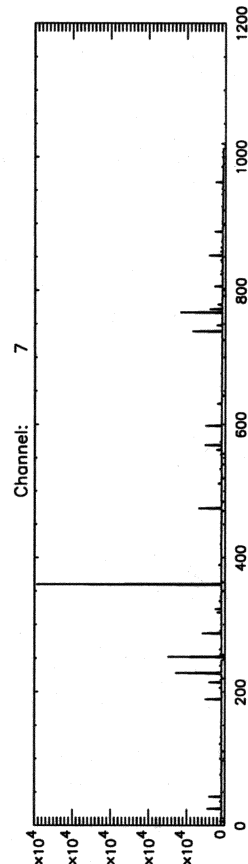
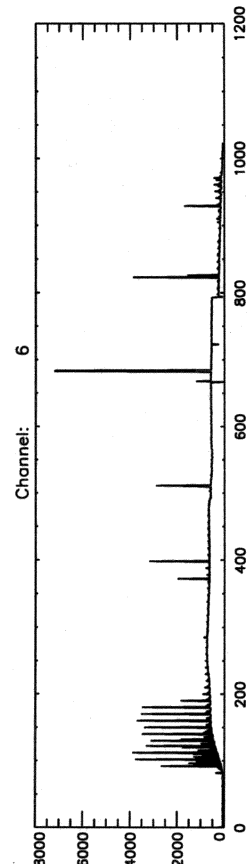
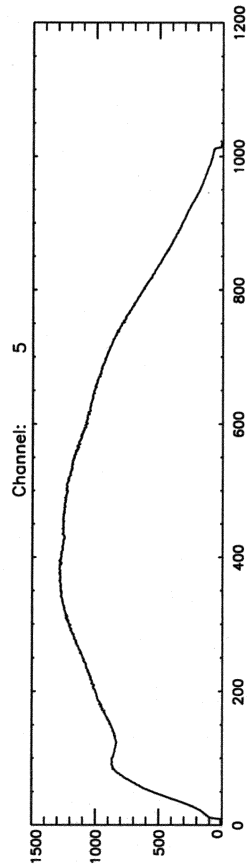
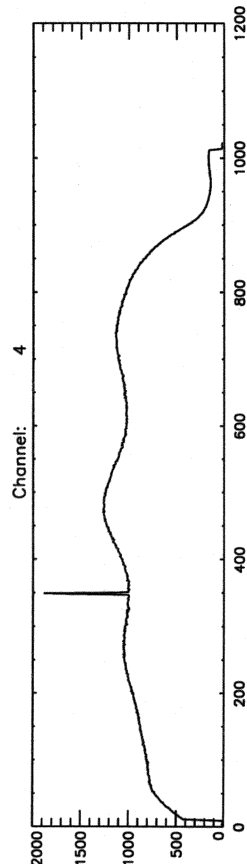
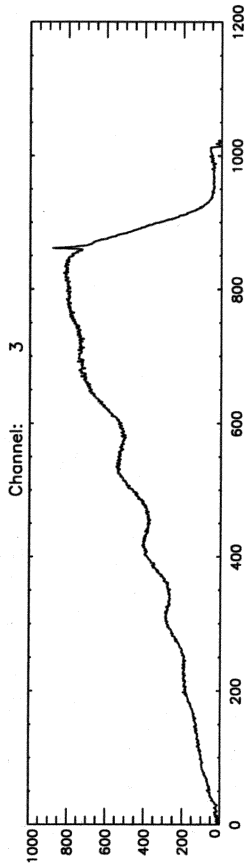
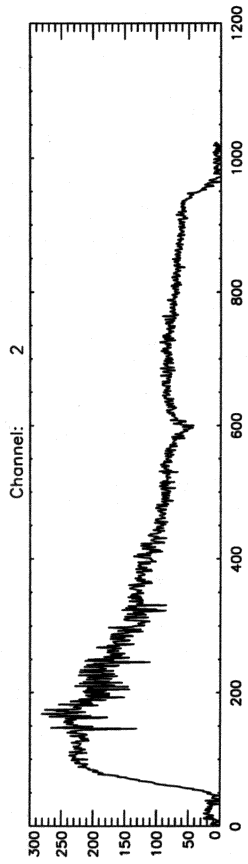
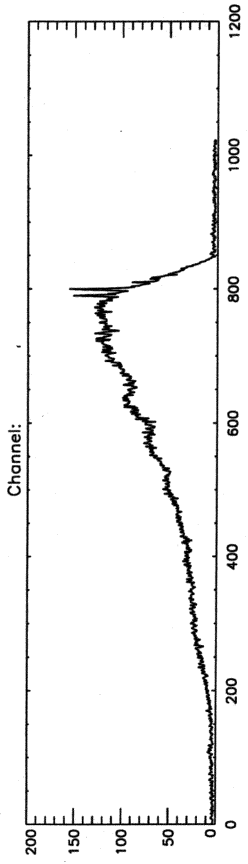


File: /disk1/asci/DATA-DIR/IRRAD/30/asci\_09081998\_191459491\_egse\_jlf.lu1.vng.cnl.ps  
Date: Sun Aug 9 21:52:56 1998  
TND-TPD

Y-axis labels: 1.0, 0.8, 0.6, 0.4, 0.2, 0.0

X-axis labels: 0.0, 0.2, 0.4, 0.6, 0.8, 1.0





time = Sun Aug 9 21:53:29 1998

batch = dul

Start TOD = Sun 09-Aug-98 19:28:10

End TOD = Sun 09-Aug-98 19:40:04

Processing= computation of average, standard dev. and rel.standard dev.

time = Sun Aug 9 21:52:56 1998

batch = iu1

Start TOD = Sun 09-Aug-98 19:14:59

End TOD = Sun 09-Aug-98 19:28:10

Processing= computation of average, standard dev. and rel.standard dev.

---



# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                             | measurement filename |
|-----------|-------------------------------------------------------------------|----------------------|
| 9/8/98    | 20:55 UTC Start lamp voor meting UID 40                           |                      |
|           | step 6.g.?                                                        |                      |
|           | 21:10 UTC start meting.                                           |                      |
|           | 21:40 einde meting                                                |                      |
|           | Run - alesscia done                                               |                      |
|           |                                                                   |                      |
| 9/8 23:00 | do-16radiance werkt niet met 2 files (slechts 0,0 + 0,5 m gedaan) |                      |
|           |                                                                   |                      |
| 9/8 23:30 | do-radio om 1/5 0,5/m <del>3</del> Data-Dir / Iread / 30 +        | 31 / 30              |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |
|           |                                                                   |                      |



enviSatopPic IICAOPT

←

**Sun (Subsolar)**

Stimuli: 0

Config: 0 nm

Lambda: - deg

PPC: -

Polar: -

Shutter: -

Acq.: -

S/S: -

**Nadir**

ATC: ACTIVE

Nadir: -16.2 C

Limb: -17.9 C

RAD-A: -16.0 C

**WLS** OFF

A: -0.1 mA

B: 0

**SLS** OFF

-5.26 V

0.0 mA

**NCW** CLOSED

**Aperture Stop** LARGE

**Cover** UNLOCKED

**Cover** UNLOCKED

**Azimuth Scanner**

ACTIVE

113160 -45.000

**Elevation Scanner**

ACTIVE

327527 165.000

**Sun Sens**

|   |   |
|---|---|
| 0 | 0 |
| 0 | 0 |

**Telescope**

**Limb Sun/Moon**

Cover UNLOCKED

**Spectrom.**

**IICAOPT**

PMD

Det.Temp: -16.7 C

ElecTemp: -17.7 C

**Channel 1**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.73   |
| 15V Supply  | 3.19   |
| Shield temp | 240.64 |
| Block temp  | 219.44 |
| DME temp    | 259.26 |

**Channel 2**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.18   |
| Shield temp | 240.77 |
| Block temp  | 219.03 |
| DME temp    | 259.10 |

**Channel 3**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.19   |
| Shield temp | 244.69 |
| Block temp  | 232.20 |
| DME temp    | 259.57 |

**Channel 4**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.18   |
| Shield temp | 244.73 |
| Block temp  | 231.10 |
| DME temp    | 259.31 |

**Channel 5**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.17   |
| Shield temp | 243.97 |
| Block temp  | 230.14 |
| DME temp    | 259.45 |

**Channel 6**

|             |        |
|-------------|--------|
| Bias Volt.  | -0.03  |
| Test input  | 0.01   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.18   |
| Shield temp | 237.81 |
| Block temp  | 216.56 |
| DME temp    | 259.95 |

**Channel 7**

|             |        |
|-------------|--------|
| Bias Volt.  | -0.05  |
| Test input  | 0.01   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.19   |
| Shield temp | 214.36 |
| Block temp  | 159.63 |
| DME temp    | 259.39 |

**Channel 8**

|             |        |
|-------------|--------|
| Bias Volt.  | -0.03  |
| Test input  | 0.01   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.17   |
| Shield temp | 214.88 |
| Block temp  | 156.41 |
| DME temp    | 260.05 |

**STOP**

**Ancil.**  RbiStart  Conf

A, NOM 5

**Exp. Mode**

HEATER

**TLM Mode**

MEAS-TL COMPLETE

**ChkState**

STATE

**Format**

RTF 128

**OBT**

0x0845a114

**Moni.**  Anom

TRUE 0

# Formal Run of Measurement

(Measurement ID)

Urad-1111b

Request for Actual Status

(cross out entries that are **not** requested.)

Request for Modification

(fill in only entries to be modified)

Request for Run

(no entries = run based on actual default settings)

## Scanner Positions

Azimuth

-45

deg

Elevation

+165

deg

## Timeline for each Data Acquisition Period during Measurement

|             | 1         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|-----------|---|---|---|---|---|---|---|---|----|
| State ID    | <u>23</u> |   |   |   |   |   |   |   |   |    |
| Repetitions | <u>32</u> |   |   |   |   |   |   |   |   |    |

## State Parameters for States used in Timeline (State ID must be given)

| Channel  | P/T [s] or I/# | Co-Adding | P/T [s] or I/# | Co-Adding | P/T [s] or I/# | Co-Adding | P/T [s] or I/# | Co-Adding |
|----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|
| 1a       | <u>16</u>      | <u>4</u>  |                |           |                |           |                |           |
| 1b       | <u>16</u>      | <u>4</u>  |                |           |                |           |                |           |
| 2b       | <u>2</u>       | <u>32</u> |                |           |                |           |                |           |
| 2a       | <u>2</u>       | <u>32</u> |                |           |                |           |                |           |
| 3        | <u>0.125</u>   | <u>64</u> |                |           |                |           |                |           |
| 4        | <u>0.0625</u>  | <u>64</u> |                |           |                |           |                |           |
| 5        | <u>0.0625</u>  | <u>64</u> |                |           |                |           |                |           |
| 6        | <u>119</u>     | <u>64</u> |                |           |                |           |                |           |
| 7        | <u>0.0625</u>  | <u>64</u> |                |           |                |           |                |           |
| 8        | <u>0.125</u>   | <u>64</u> |                |           |                |           |                |           |
| State ID |                |           |                |           |                |           |                |           |

UID 40  
min. dist + 9,5m  
with spherical mirror  
Change!

## Stimuli Settings for Existing Blocks in Measurement

| Block No | Stimuli Setup ID | PPC [deg] | Polarizer [deg] | Shutter open/close | Acquisition time [s] | Lambda [nm] |      |      | Repetition factor | Message | OS Setup time [s] |
|----------|------------------|-----------|-----------------|--------------------|----------------------|-------------|------|------|-------------------|---------|-------------------|
|          |                  |           |                 |                    |                      | start       | stop | Step |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |
|          |                  |           |                 |                    |                      |             |      |      |                   |         |                   |

## Measurement Data Description

Test Purpose

Remark

UID 40

Data Directory

2024-03-14 10:44:11

## Signatures

Issued

< Performed

| Date          | Signature       |
|---------------|-----------------|
| <u>9-8-20</u> | <u>M. Kelly</u> |
| <u>9-5-20</u> | <u>...</u>      |

step 6.g.g  
41040

| STEP            | ACTION                                                                                                                                                                                                                                                                                          | RESULT                                                                                  | MARKER                                                                                              |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Intro           | Your name:<br>Date:                                                                                                                                                                                                                                                                             | <u>BANNEREN</u><br><u>9/8/98</u>                                                        |                                                                                                     |
|                 | What's the name of the (main) data input files generated by the EGSE? (*.dat)                                                                                                                                                                                                                   | <u>SCIA_09081998_210900065.DAT</u>                                                      |                                                                                                     |
|                 | Setup a three-window configuration on your SUN.                                                                                                                                                                                                                                                 |                                                                                         | see course descr.                                                                                   |
| Cnstr directory | cd ~/DATA-DIR/IRRAD<br>; ls -l<br>highest number in directory?<br>New directory: mkdir <B+1><br>ls -l<br>What's now the highest number in directory?<br><C> should be <B> + 1<br>directory name is:                                                                                             | <u>30</u><br><u>31</u><br><input checked="" type="checkbox"/> N<br>~/DATA-DIR/IRRAD/<C> | Note: In window DATA-DIR<br>(B)<br>(C)<br>(DIR-NAME)                                                |
| Copy data       | See Analysis sheet:<br>Transfer Data File                                                                                                                                                                                                                                                       | <input checked="" type="checkbox"/> N                                                   | In DATA-DIR window                                                                                  |
| Cnstr EGSE_LTF  | cal_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)<br>ls -l *.egse_ltf<br>What's the name of the egse_ltf file<br><D> should be<br><A>.egse_ltf | <u>SCIA_09081998_210900065.EGSE_LTF</u><br><input checked="" type="checkbox"/> N        | Note: In window DATA-DIR;<br><b>don't forget the dot !!!;</b><br>May take more than 15 mins.<br>(D) |
| Cnstr CAL files | idl run_averscia (and select file <D> when asked)                                                                                                                                                                                                                                               |                                                                                         | Note: In window IDL                                                                                 |
| Check CAL files | Dark files:<br>ls -l *du*.cal                                                                                                                                                                                                                                                                   |                                                                                         | In DATA-DIR window                                                                                  |

size: 145.998 should be approx 150Kb

ls -l \*iu\*.cal

size: 145.998 should be approx 150Kb

Note: all files should be present, if not:

(a) Check file <D> using SOLAN and check whether DU, and IU labels are present in dremark1 labels

(b) Check if enough disk space is available (Unix command df -k | more).

Print postscript

Print postscript files:

lpr -P<printer> \*.ps

Contents dark file

\*du\*.avg.cal.ps

should be approx. constant within channels:  Y / N

Contents light file

\*iu\*.avg.cal.ps

should resemble white light source:  Y / N

Contents of

\*rel\_std\*.ps files

should be smaller than 0.01 (pixel 300 -- 800) for all channels.  Y / N

If not, value is: \_\_\_\_\_

Add postscript images to logbook, done  Y / N

lpr -P<printer>

Print logfiles \*.log

Add logfiles to logbook, done  Y / N

*If you have received the information at 3 minutes 30 seconds please inform me by the end of that time.*

cd ~/DATA-DIR/IRRAD-TOTAL

In DATA-DIR window

~~cd~~ ls -l

highest number in dir?

\_\_\_\_\_

<B1>

mkdir <B1>+1

Now highest number in dir?

\_\_\_\_\_

<C1>

<C1> should be <B1>+1

Y/N

Dir name is :

~/DATA-DIR/IRRAD-TOTAL/<C1>

<Dirname>

Let <D1>, <D2>, <D3>

directories containing

irradiance measurements

(thus, <D1>, <D2>, <D3>

are of the form

~/DATA-DIR/IRRAD/<number>)

In DATA-DIR window

cp <D1>/\*.dux.avg.cal <Dirname>

cp <D1>/\*.iux.avg.cal <Dirname>

cp <D2>/\*.dux.avg.cal <Dirname>

cp <D2>/\*.iux.avg.cal <Dirname>

cp <D3>/\*.dux.avg.cal <Dirname>

cp <D3>/\*.iux.avg.cal <Dirname>

~~cd~~ cd

<Dirname>

ls -l

Copied files present? Y/N.

Proceed with page 3.

Construct control-file in dir. <DIR-NAME> where each line is of the form <distance> <lightfile>, where <distance> is the relative distance at which the contents of the \*.cal file

let op: line-feed aan het einde.

IRRadiance processing measured.

DEZE meting is op 2 afstanden gedaan nl: 0.0 m &

Run radiance idl do\_irradiance

In IDL window

0.5 m =>

verder processing niet mogelijk. DMV.

Check irradiance ls -l \*

Size of file <D>.du\*.cal.p1 \_\_\_\_\_  
Size of file <D>.du\*.cal. f455.p2 \_\_\_\_\_  
20).du\*.cal. f456.p2 \_\_\_\_\_  
Size of file <D>\*.p1.\*.log \_\_\_\_\_

EXPERT\_RATIO toch vergelijk gemaakt. zie print.

lpr -P<printer> \*p[12]\*.ps  
Check irradiance Value of P1 and P2 file resemble white light source? Y / N

Add postscript images to logbook, done Y / N

lpr -P<printer> \*p[12]\*.plog  
Print logfiles Add logfiles to logbook, done Y / N

Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).  
Name of backup CDs

Back up

Wodg8A

See analysis sheet BackUp

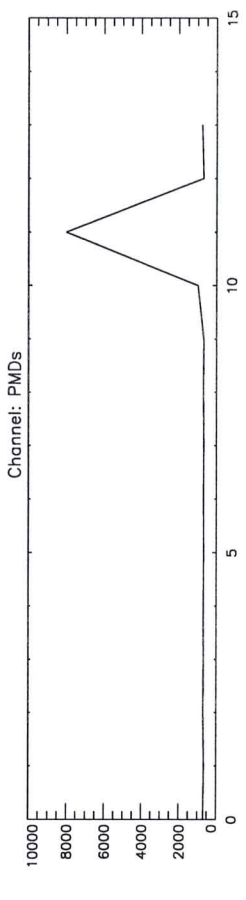
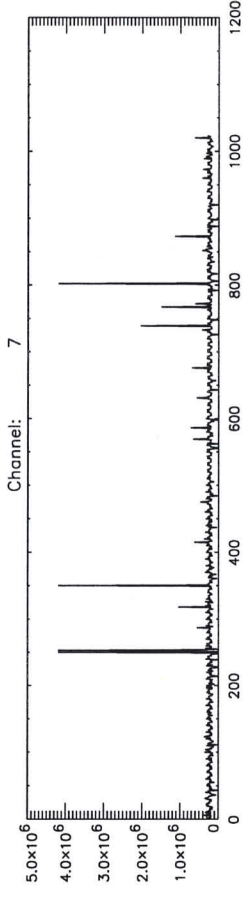
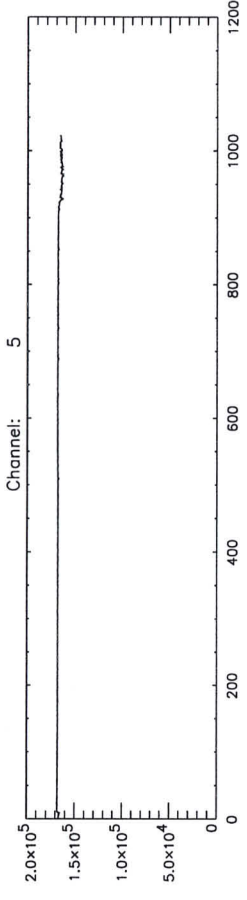
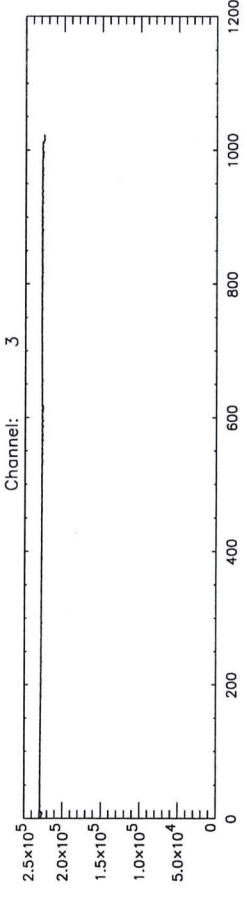
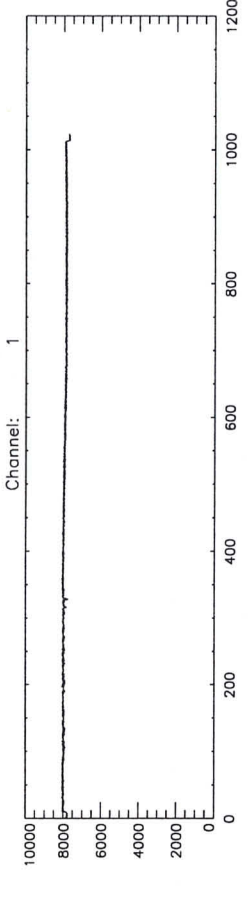
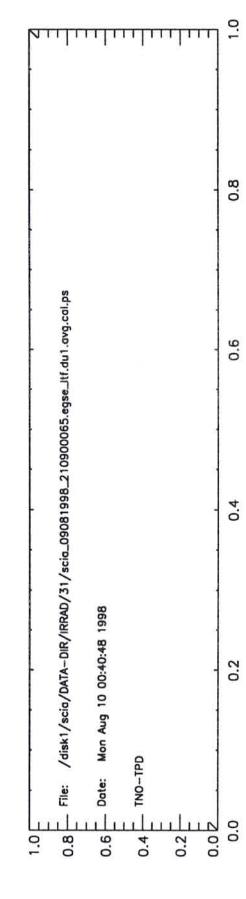
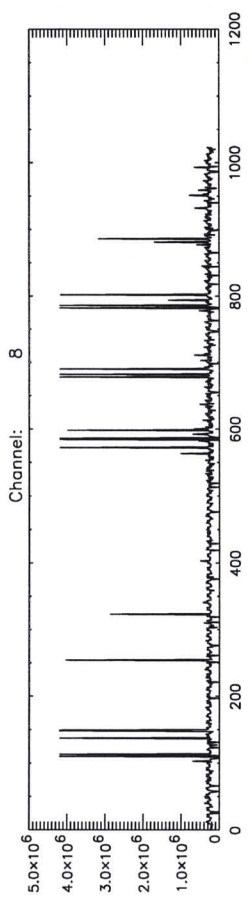
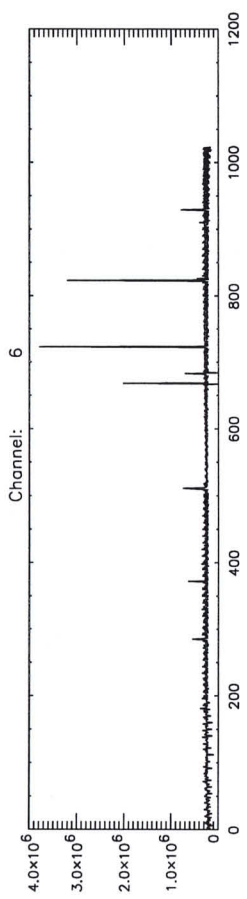
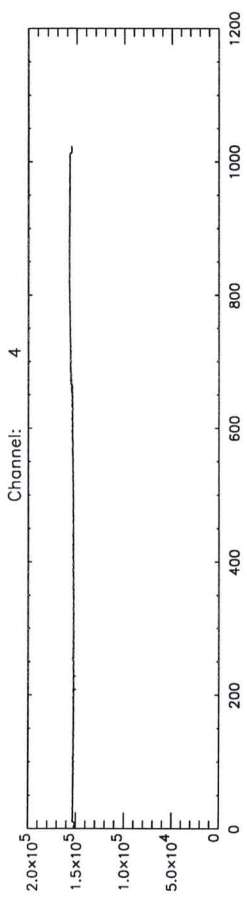
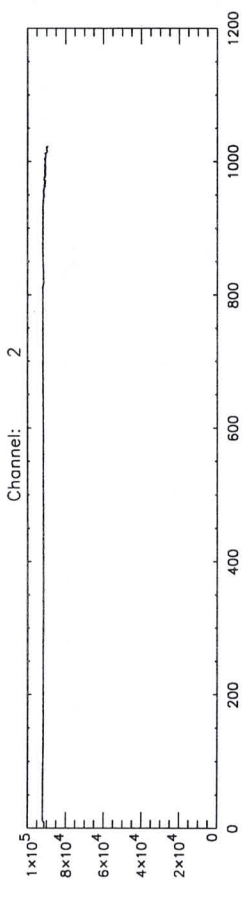
limb irradiance

Sign:

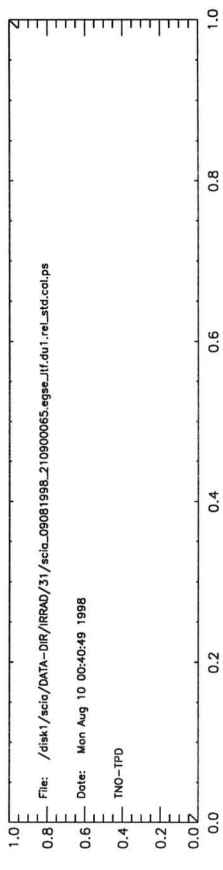
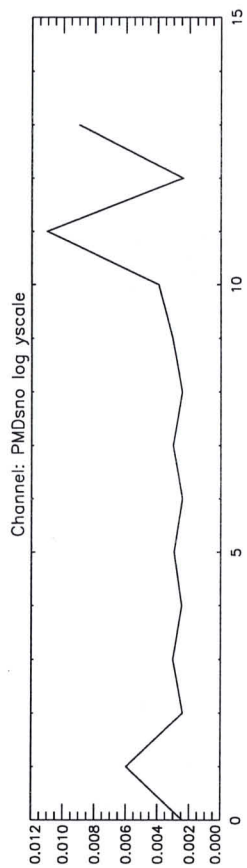
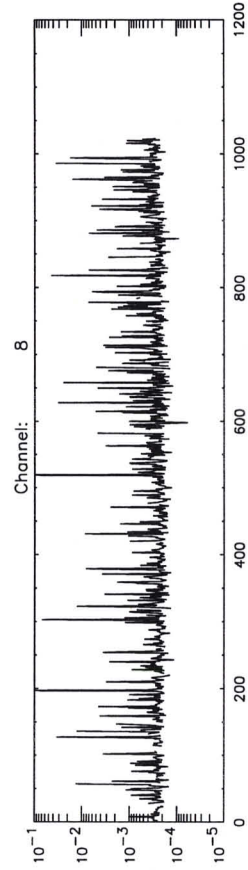
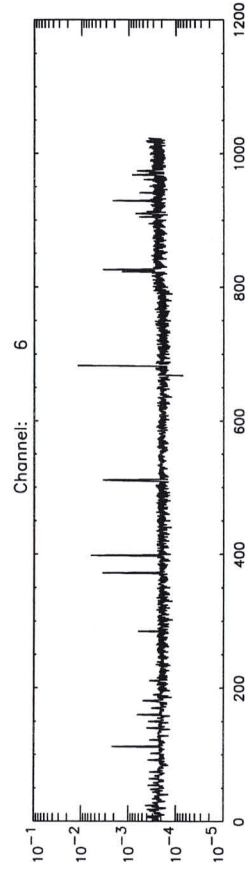
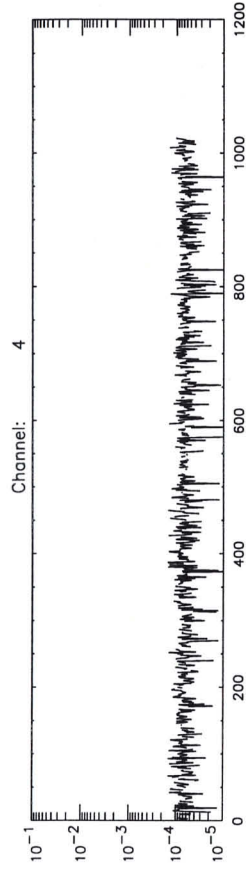
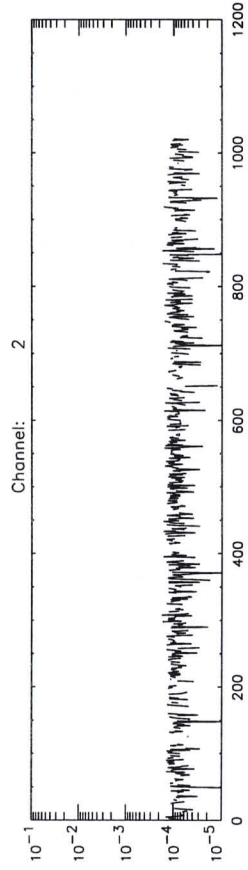
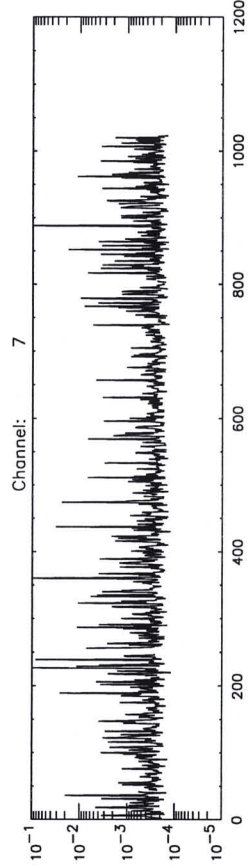
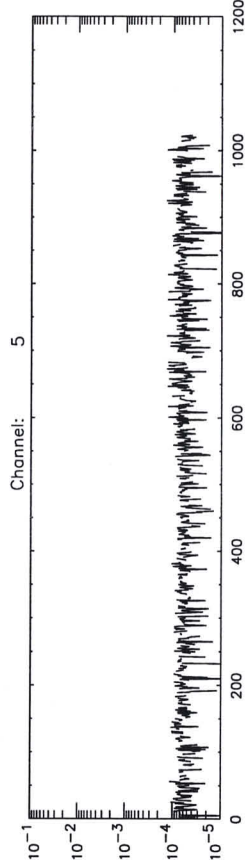
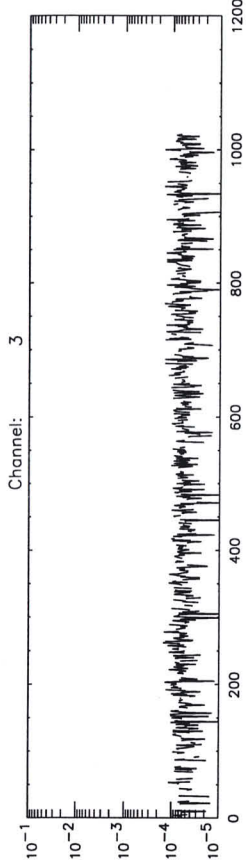
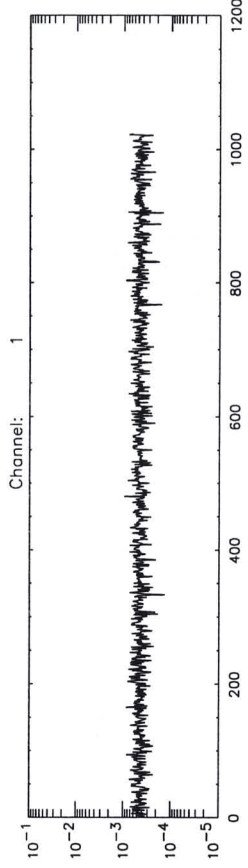
Name  
Date and time  
Signature

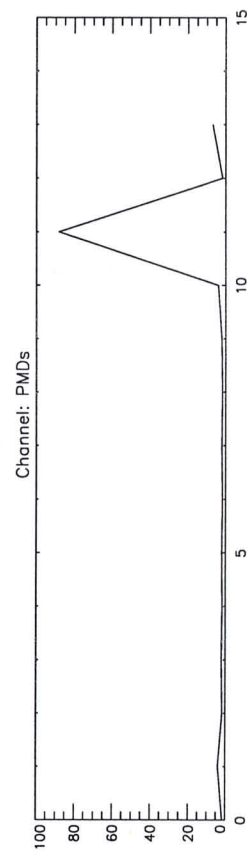
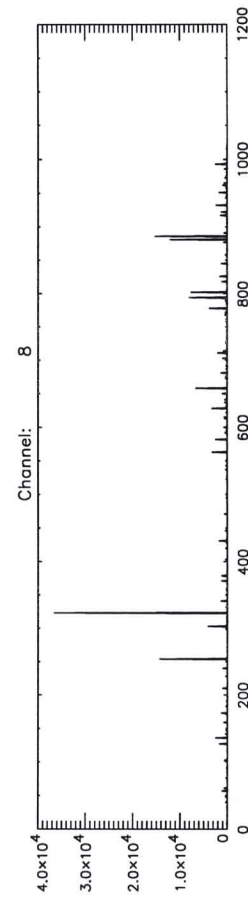
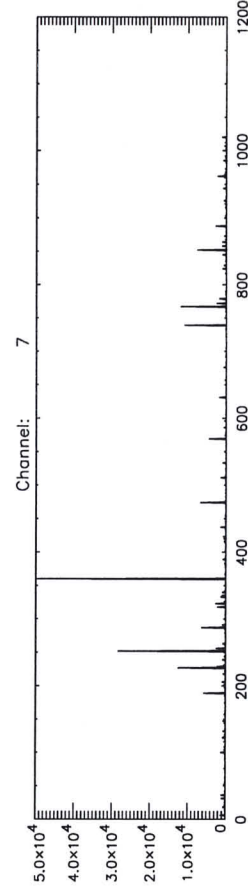
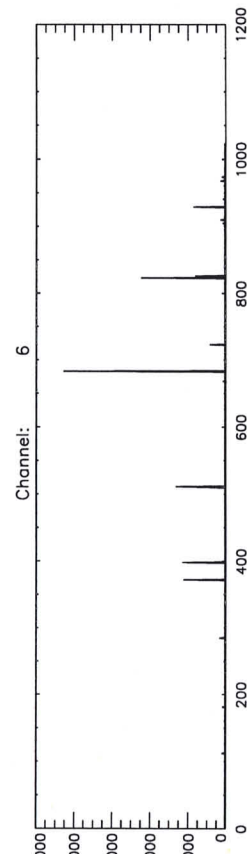
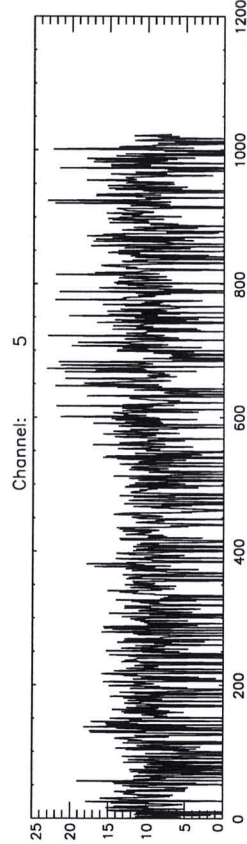
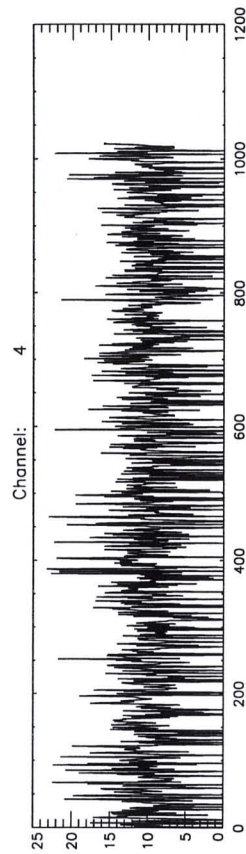
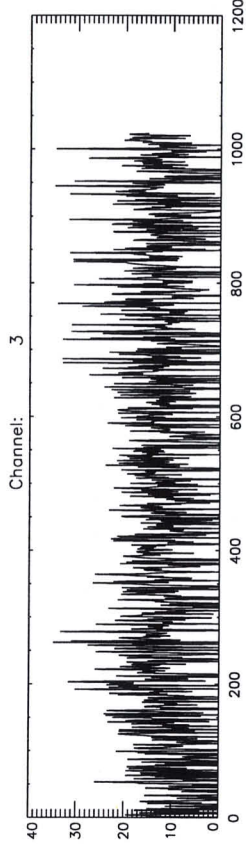
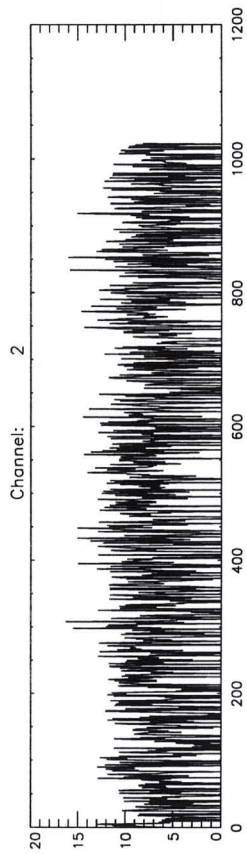
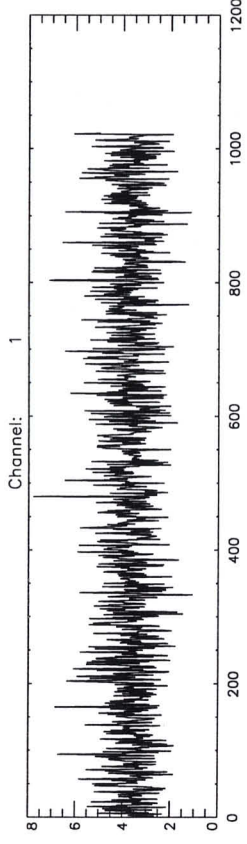
M. Kalf  
12-02-98  
M. Kalf

Step 6.g.y. 41070

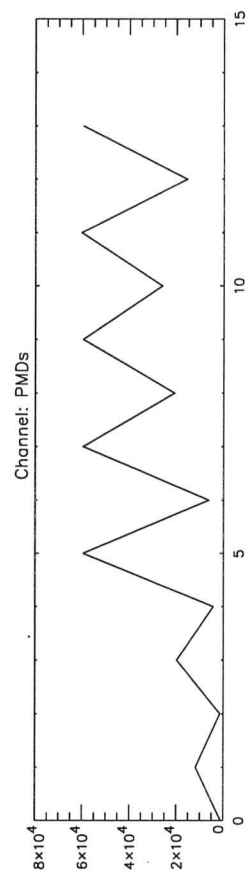
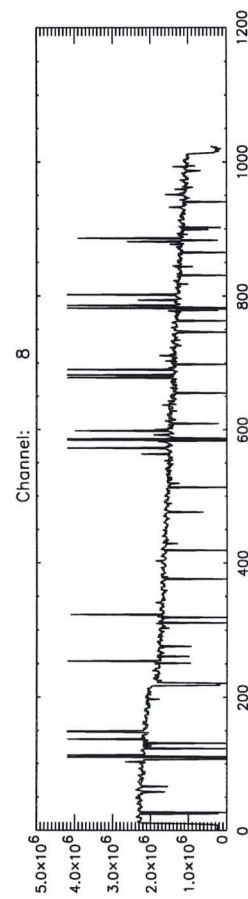
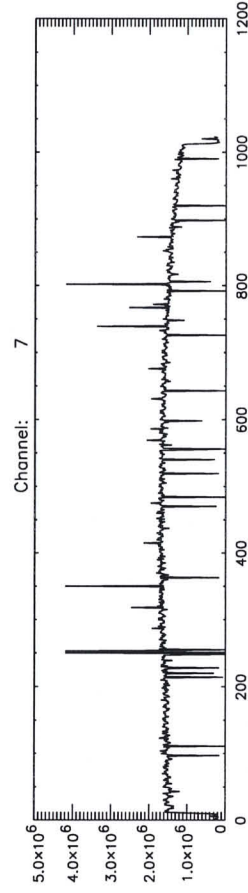
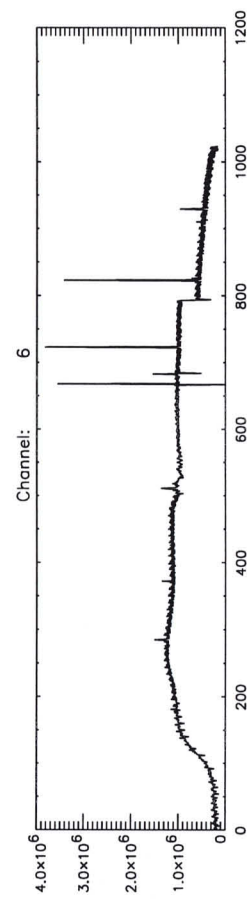
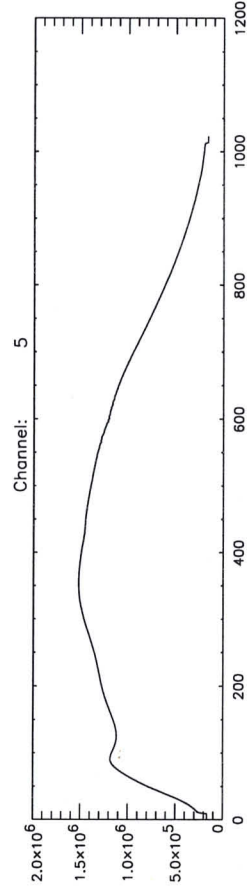
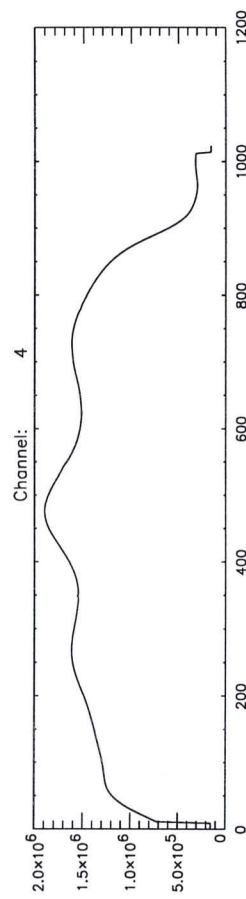
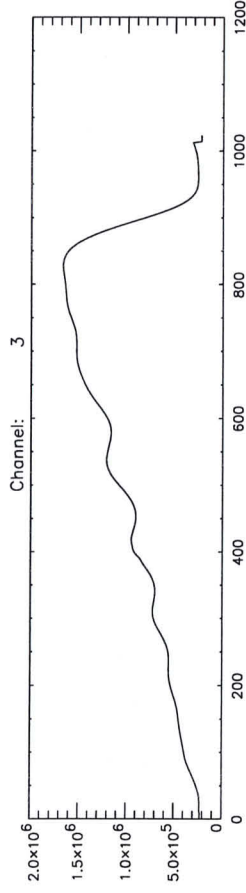
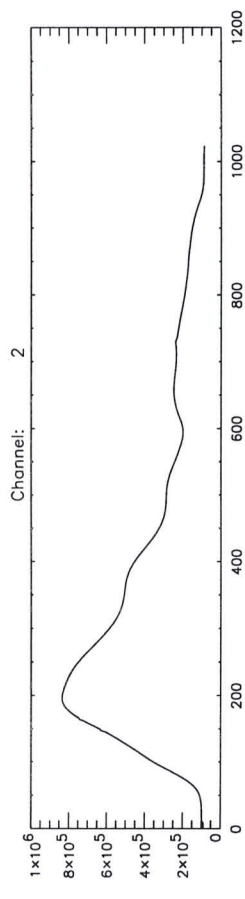
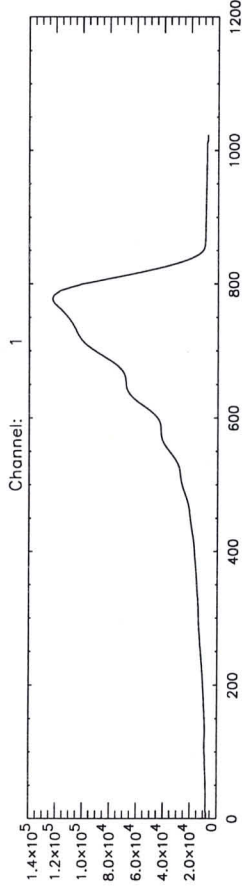




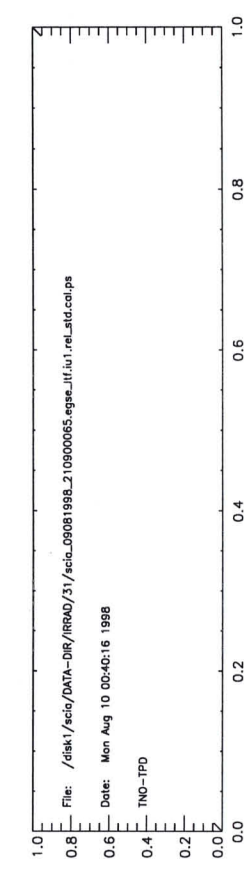
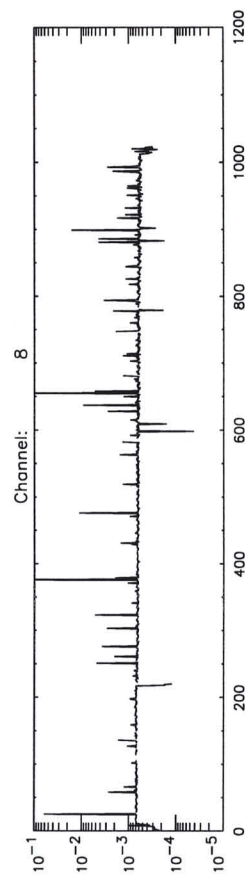
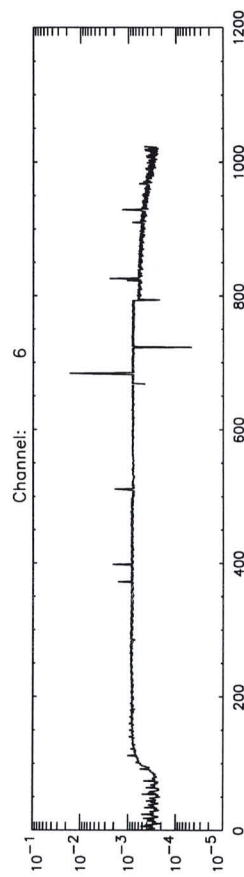
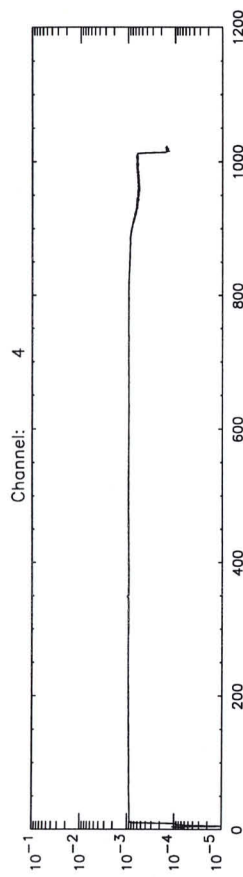
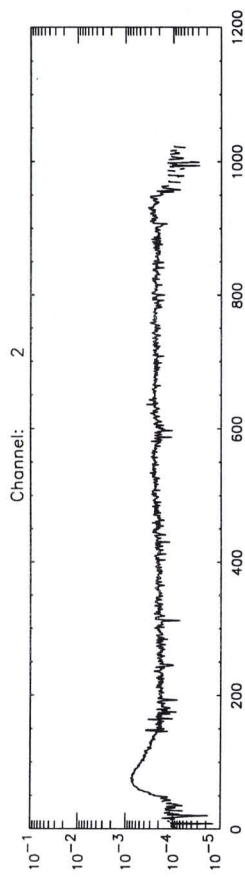
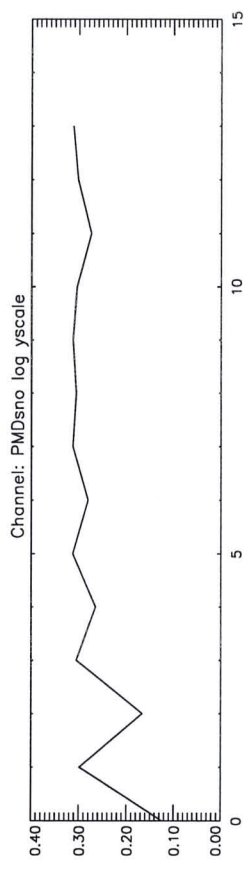
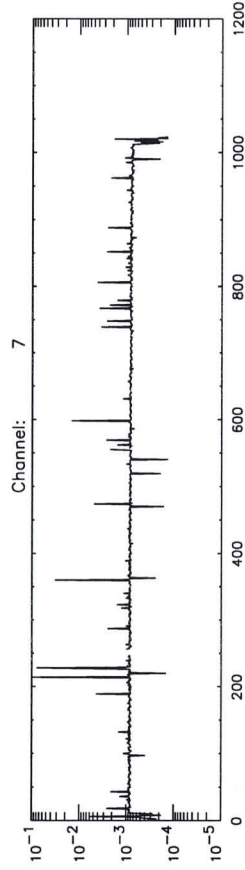
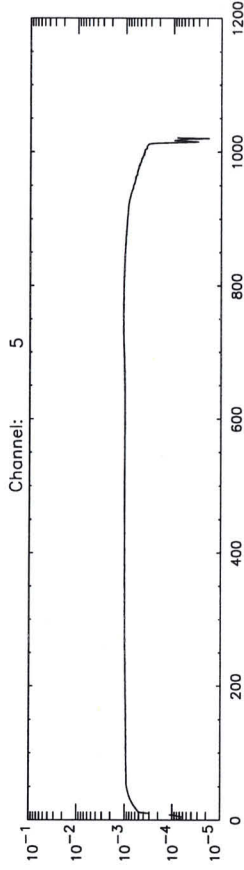
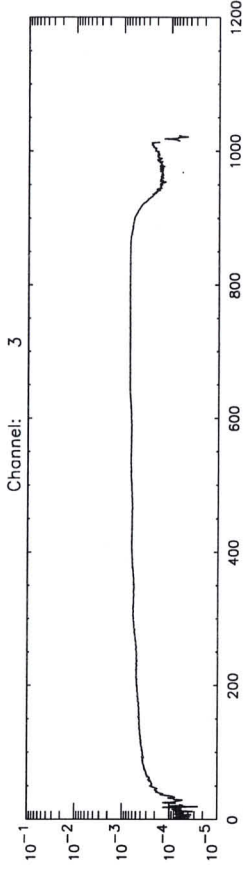
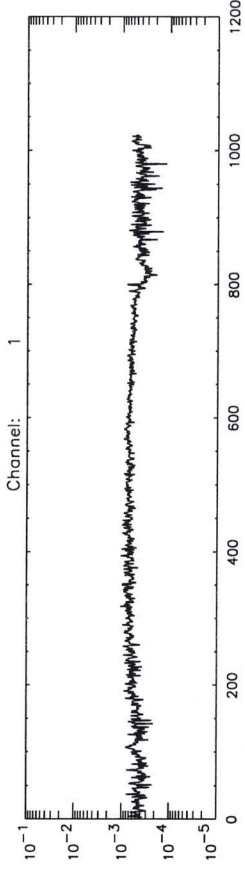


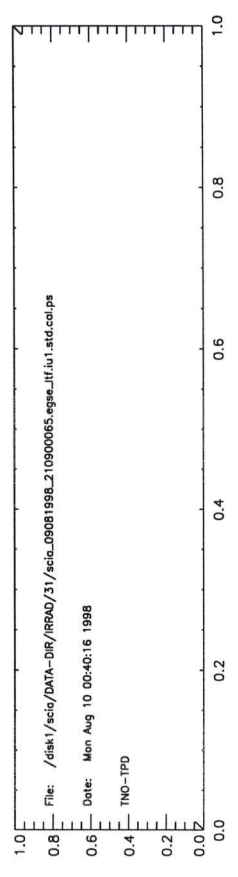
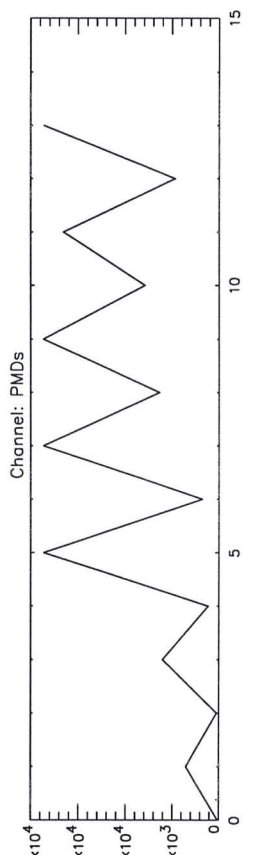
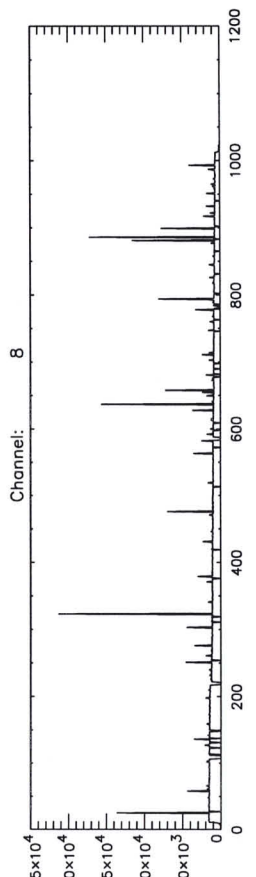
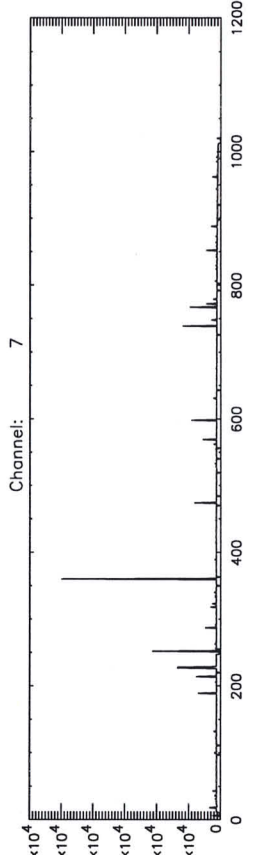
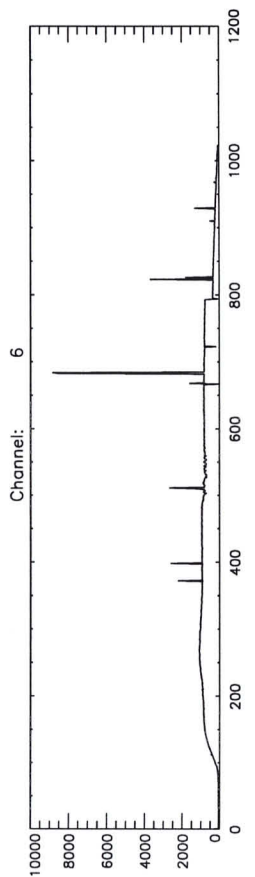
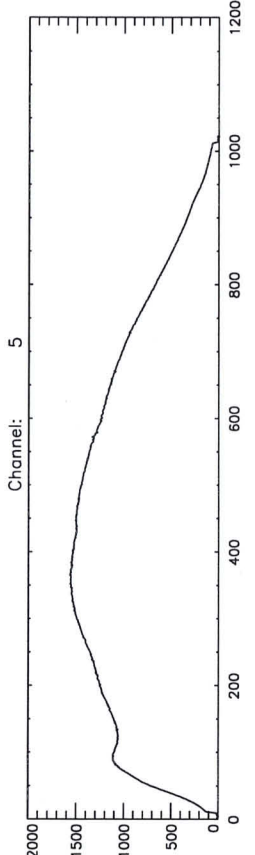
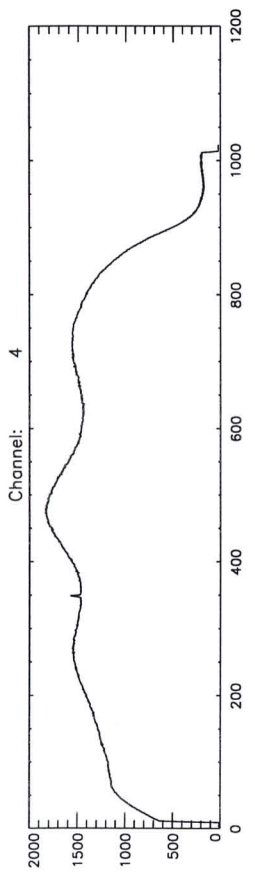
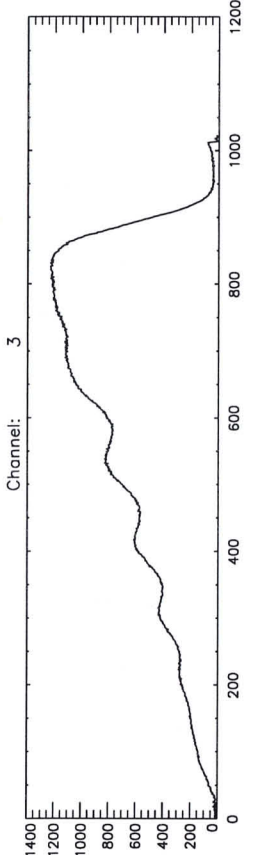
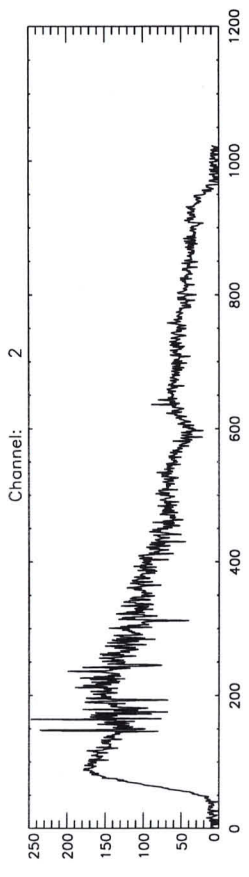
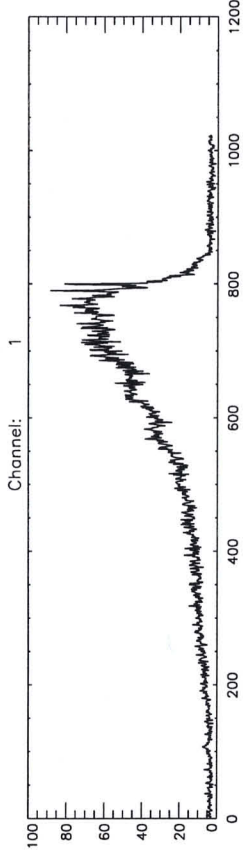


File: /disk1/scia/DATA-DIR/IRRAD/31/scia\_09081998\_210900065.egse\_jif.dui\_std.calps  
Date: Mon Aug 10 00:40:48 1998  
TNO-TPD



File: /disk1/scic/DATA-DIR/RRAD/31/scia\_09081998\_210900065.egse-11f.tu1.avg.cai.ps  
Date: Mon Aug 10 00:40:15 1998  
TND-TPD





time = Mon Aug 10 00:40:49 1998

batch = du1

Start TOD = Sun 09-Aug-98 21:27:33

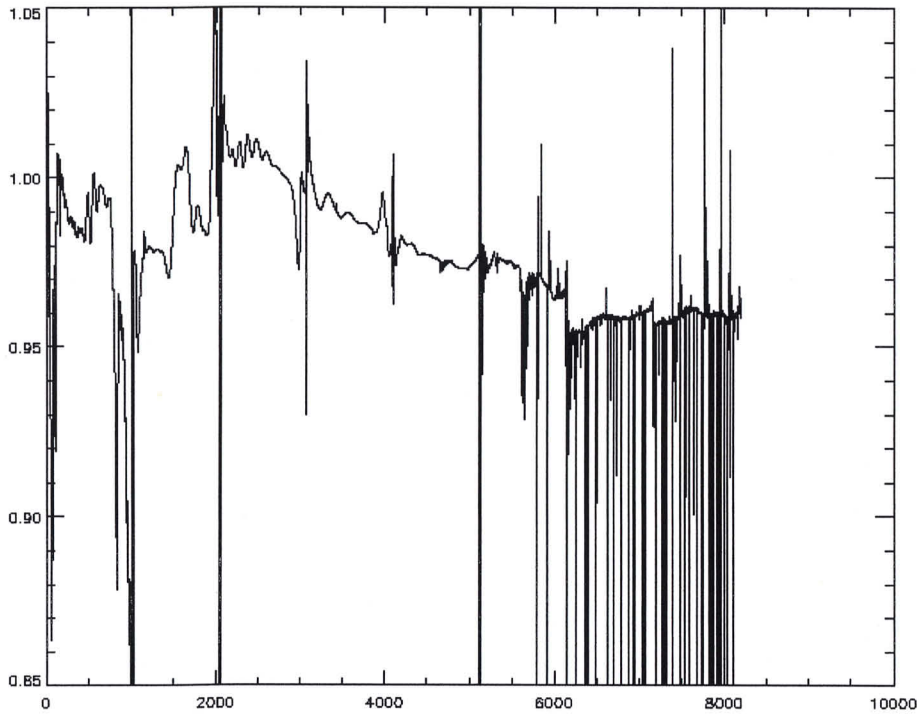
End TOD = Sun 09-Aug-98 21:39:27

Processing= computation of average, standard dev. and rel.standard dev.

time = Mon Aug 10 00:40:16 1998  
batch = iu1  
Start TOD = Sun 09-Aug-98 21:09:00  
End TOD = Sun 09-Aug-98 21:27:33  
Processing= computation of average, standard dev. and rel.standard dev.

IRRAD  $31/30 = \frac{0,5m}{0,0m}$   
+SPIEGEL

9/8/1998 BART



zelfde trend als .

$1.00/0,5$  zonder spiegel. ?

~~trend met~~





# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                                                                                                                                   | measurement filename |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 16-8-98   | Bert changed temp <sup>at 0908-98</sup> some were between<br>22:00 UTC and 04:00 UTC <sup>at 10-08-98</sup> without filling in<br>the log book for the temp. controller |                      |
|           | * Edge-system is tijdelijk buiten bedrijf geweest                                                                                                                       |                      |
|           | dus ook DM niet actief geweest. (15 L)                                                                                                                                  |                      |
|           | temp voor ① en na ② (linker boven hoek)                                                                                                                                 |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |
|           |                                                                                                                                                                         |                      |

envisaPopPic IICA-OPT IIEGSE

**Stirml**

|         |    |
|---------|----|
| Config. | -1 |
| Lambda  | -  |
| PPC     | -  |
| Polar   | -  |
| Shutter | -  |
| Acq.    | -  |
| S/S     | -  |

nm deg

IICA-OPT

PMD  
Det.Temp -16.7C  
ElecTemp -17.7C

**Sun (Subsolar)**

Nadir

**WLS** OFF  
-0.0 mA

**SLS** OFF  
-5.30 V  
0.0 mA

**NCW** CLOSED

**Azimuth Scanner** ACTIVE  
273160 45.000

**Elevation Scanner** ACTIVE  
594194 -45.000

**Spectrom.**

**Telescope**

**Aperture Stop** LARGE

**NDF** OUT

**Cover** UNLOCKED

**Cover** UNLOCKED

**Cover** UNLOCKED

**ATC** ACTIVE

**Nadir** -16.2C

**Limb** -17.9C

**RAD-A** -18.0C

**Channel**

| 1           | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 240.65 | 244.68 | 244.75 | 243.86 | 237.74 | 214.36 | 214.81 |
| Block temp  | 219.47 | 232.20 | 231.13 | 230.11 | 216.04 | 159.62 | 156.31 |
| DME temp    | 259.26 | 259.57 | 259.30 | 259.44 | 259.95 | 259.39 | 260.05 |

**Exp. Mode** HEATER

**TLM Mode** COMPLETE

**ChkState** STATE

**Format** RTF 12

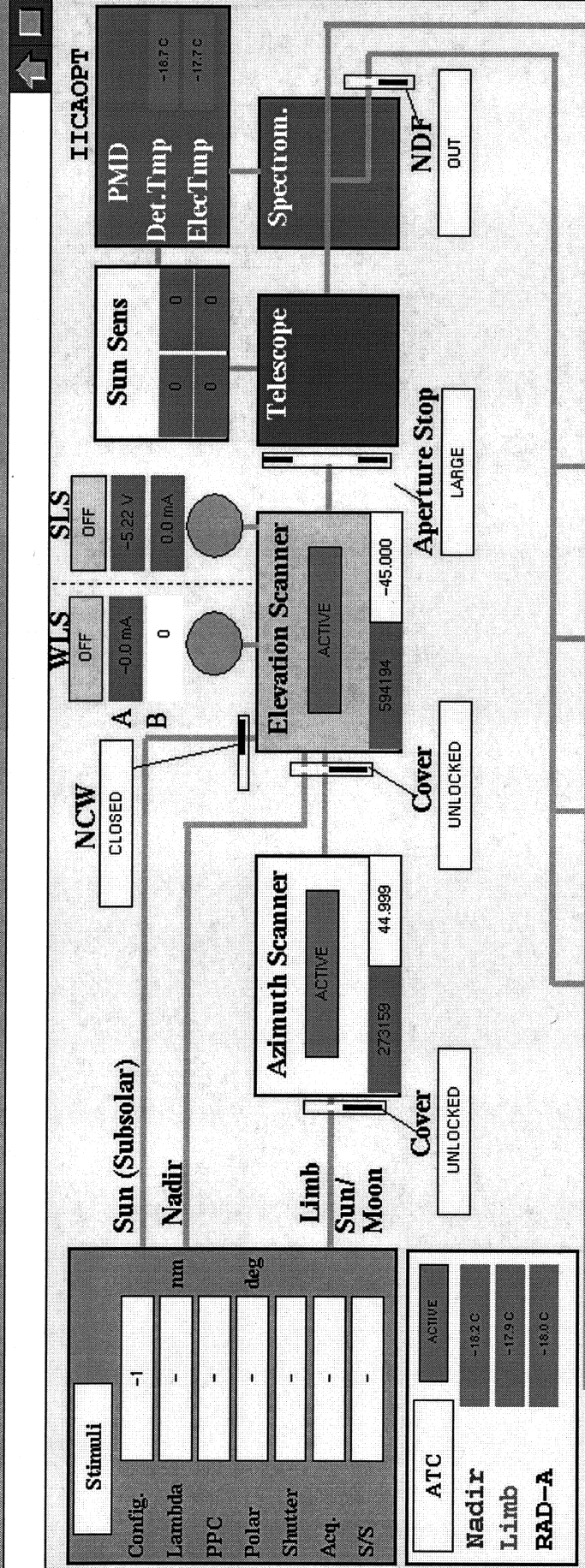
**OB T** 0x086e5514

**Moni.** TRUE

**Anom** 0

System Control

ENVISATOPPic IICA OPT IIEGSE



|         |    |
|---------|----|
| Stimuli | -1 |
| Config. | -  |
| Lambda  | -  |
| PPC     | -  |
| Polar   | -  |
| Slutter | -  |
| Acq.    | -  |
| S/S     | -  |

|       |         |
|-------|---------|
| ATC   | ACTIVE  |
| Nadir | -16.2 C |
| Limb  | -17.9 C |
| RAD-A | -16.0 C |

| Channel     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.19   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 240.36 | 240.50 | 244.61 | 244.65 | 243.85 | 235.56 | 214.09 | 214.51 |
| Block temp  | 216.92 | 216.28 | 231.75 | 230.45 | 229.40 | 205.20 | 157.49 | 152.93 |
| DME temp    | 259.26 | 259.09 | 259.55 | 259.28 | 259.41 | 259.92 | 259.36 | 260.03 |

|                              |                                |                            |                                |                              |                           |                             |                            |
|------------------------------|--------------------------------|----------------------------|--------------------------------|------------------------------|---------------------------|-----------------------------|----------------------------|
| <input type="radio"/> Ancil. | <input type="radio"/> RbiStart | <input type="radio"/> Conf | <input type="radio"/> ChkState | <input type="radio"/> Format | <input type="radio"/> OBT | <input type="radio"/> Moni. | <input type="radio"/> Anom |
| STOP                         | A, NOM                         | 5                          | MEAS-TL                        | RTF                          | 221                       | TRUE                        | 0                          |
|                              |                                |                            | COMPLETE                       | 0x087b6514                   |                           |                             |                            |
|                              |                                |                            | STATE                          |                              |                           |                             |                            |
|                              |                                |                            | HEATER                         |                              |                           |                             |                            |
|                              |                                |                            | COMPLETE                       |                              |                           |                             |                            |
|                              |                                |                            | STATE                          |                              |                           |                             |                            |

envisatropPic IICA-OPT IEGSE

↑

**Stirnli**

|         |    |     |
|---------|----|-----|
| Config. | -1 | nm  |
| Lambda  | -  | deg |
| PPC     | -  |     |
| Polar   | -  |     |
| Shutter | -  |     |
| Acq.    | -  |     |
| S/S     | -  |     |

**ATC**

**Nadir** ACTIVE

**Limb** -18.2C

**RAD-A** -17.9C

-16.0C

**NCW** CLOSED

**A**

**B**

**WLS** OFF

-0.1 mA

0

**SLS** OFF

-5.22 V

0.0 mA

**IICA-OPT**

**PMD**

Det.Temp -16.7C

ElecTemp -17.7C

**Sun (Subsolar)**

**Nadir**

**Limb Sun/Moon** UNLOCKED

**Azimuth Scanner** ACTIVE

273180 45.000

**Cover** UNLOCKED

**Elevation Scanner** ACTIVE

594194 -45.000

**Aperture Stop** LARGE

**Cover** UNLOCKED

**Spectrom.**

**NDF** OUT

**Channel**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.73   |
| 15V Supply  | 3.19   |
| Shield temp | 239.10 |
| Block temp  | 211.81 |
| DME temp    | 259.23 |

| Channel     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.19   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 239.29 | 244.24 | 244.20 | 244.20 | 243.34 | 233.12 | 213.35 | 213.78 |
| Block temp  | 211.10 | 230.22 | 230.22 | 228.47 | 227.29 | 198.96 | 154.41 | 150.09 |
| DME temp    | 259.23 | 259.06 | 259.52 | 259.25 | 259.38 | 259.88 | 259.34 | 260.02 |

**Moni.** ● **Anom**

|      |        |   |        |         |          |       |     |     |            |      |   |
|------|--------|---|--------|---------|----------|-------|-----|-----|------------|------|---|
| STOP | A, NOM | 5 | HEATER | MEAS-TL | COMPLETE | STATE | RTF | 207 | 0x088a8516 | TRUE | 0 |
|------|--------|---|--------|---------|----------|-------|-----|-----|------------|------|---|

envistaTopPic IICA-OPT IIEGSE

NCW CLOSED

WLS OFF -0.0 mA 0

SLS OFF -5.23 V 0.0 mA

IICROPT

PMD Def.Tmp -16.7 C ElecTemp -17.7 C

**Sun (Subsolar)**

Nadir

Limb Sun/Moon

**Azimuth Scanner**

ACTIVE

273160 45.000

Cover UNLOCKED

**Elevation Scanner**

ACTIVE

594194 -45.000

Aperture Stop LARGE

Cover UNLOCKED

**Telescope**

NDF OUT

**Spectrom.**

**ATC** ACTIVE

**Nadir** -18.2 C

**Limb** -17.9 C

**RAD-A** -18.0 C

| Channel | Bias Volt. | Test input | 5V Supply | 15V Supply | Shield temp | Block temp | DME temp |
|---------|------------|------------|-----------|------------|-------------|------------|----------|
| 1       | 2.50       | 0.00       | 1.73      | 3.19       | 237.63      | 208.10     | 259.19   |
| 2       | 2.50       | 0.00       | 1.71      | 3.18       | 237.81      | 207.41     | 259.04   |
| 3       | 2.50       | 0.00       | 1.71      | 3.19       | 243.74      | 226.53     | 259.49   |
| 4       | 2.50       | 0.00       | 1.72      | 3.18       | 243.62      | 226.54     | 259.22   |
| 5       | 2.50       | 0.00       | 1.72      | 3.17       | 242.73      | 225.28     | 259.36   |
| 6       | -0.03      | 0.01       | 1.71      | 3.18       | 231.89      | 186.41     | 259.84   |
| 7       | -0.05      | 0.01       | 1.72      | 3.19       | 212.75      | 152.66     | 259.31   |
| 8       | -0.03      | 0.01       | 1.71      | 3.17       | 213.18      | 148.66     | 259.99   |

**Format** RTF 160

**Obt** 0x08979515

**Moni.** TRUE

**Anom** 0

**Exp. Mode** HEATER

**TLM Mode** COMPLETE

**Meas-TL** MEAS-TL

**ChkState** STATE

**RbiStart** A, NOM 5

**Conf** 5

**STOP**

enustTopPic

IICAOPT

IIEGSE

I1DETMOD

**Stimuli**

|         |    |     |
|---------|----|-----|
| Config. | -1 | run |
| Lambda  | -  | deg |
| PPC     | -  |     |
| Polar   | -  |     |
| Shutter | -  |     |
| Acq.    | -  |     |
| S/S     | -  |     |

**ATC** ACTIVE

**Nadir** -16.2 C

**Limb** -17.9 C

**RAD-A** -18.0 C

**NCW** CLOSED

**WLS** OFF

**SLS** OFF

**IICAOPT**

**Sun (Subsolar)**

**Nadir**

**Limb Sun/Moon**

**Azimuth Scanner**

**Elevation Scanner**

**Telescope**

**Spectrom.**

**PMD**

**Sun Sens**

**Det. Temp** -16.7 C

**Elec Temp** -17.7 C

**Aperture Stop** LARGE

**COVER** UNLOCKED

**COVER** UNLOCKED

**COVER** UNLOCKED

**NDF** OUT

**Channel**

| Channel     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.18   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 236.60 | 236.82 | 243.26 | 243.10 | 242.16 | 231.50 | 212.33 | 212.87 |
| Block temp  | 206.55 | 205.97 | 227.28 | 225.16 | 223.85 | 189.77 | 151.64 | 147.85 |
| DME temp    | 259.16 | 259.01 | 259.46 | 259.20 | 259.33 | 259.81 | 259.29 | 259.96 |

**STOP**

**Conf** 5

**Exp. Mode** HEATER

**TLM Mode** COMPLETE

**ChkState** STATE

**Format** RTF 82

**OB** 0x08a2b514

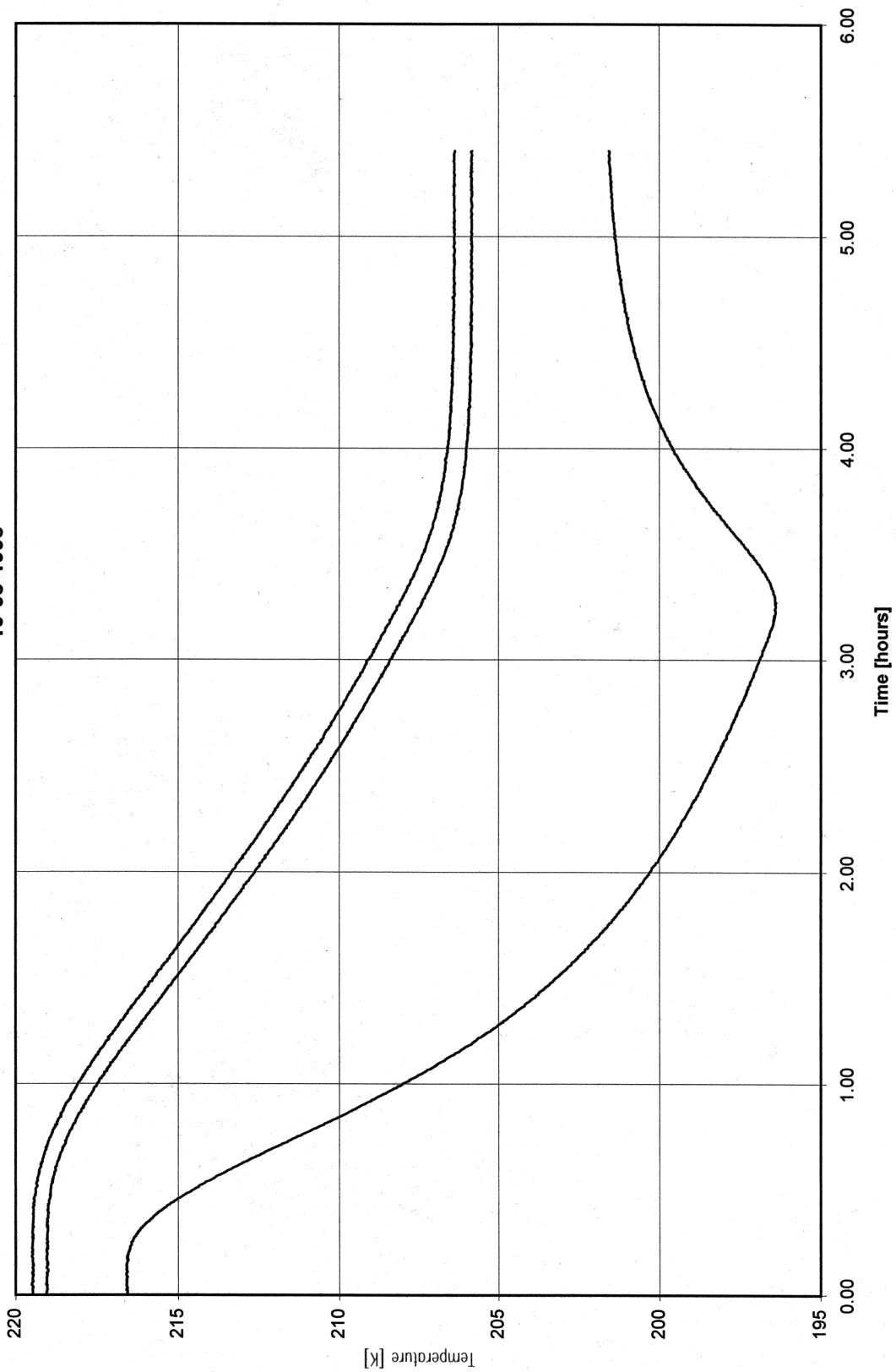
**Moni.** TRUE

**Anom** 0

5.29 UTC

0221\_23\_42\_50 Chart 1

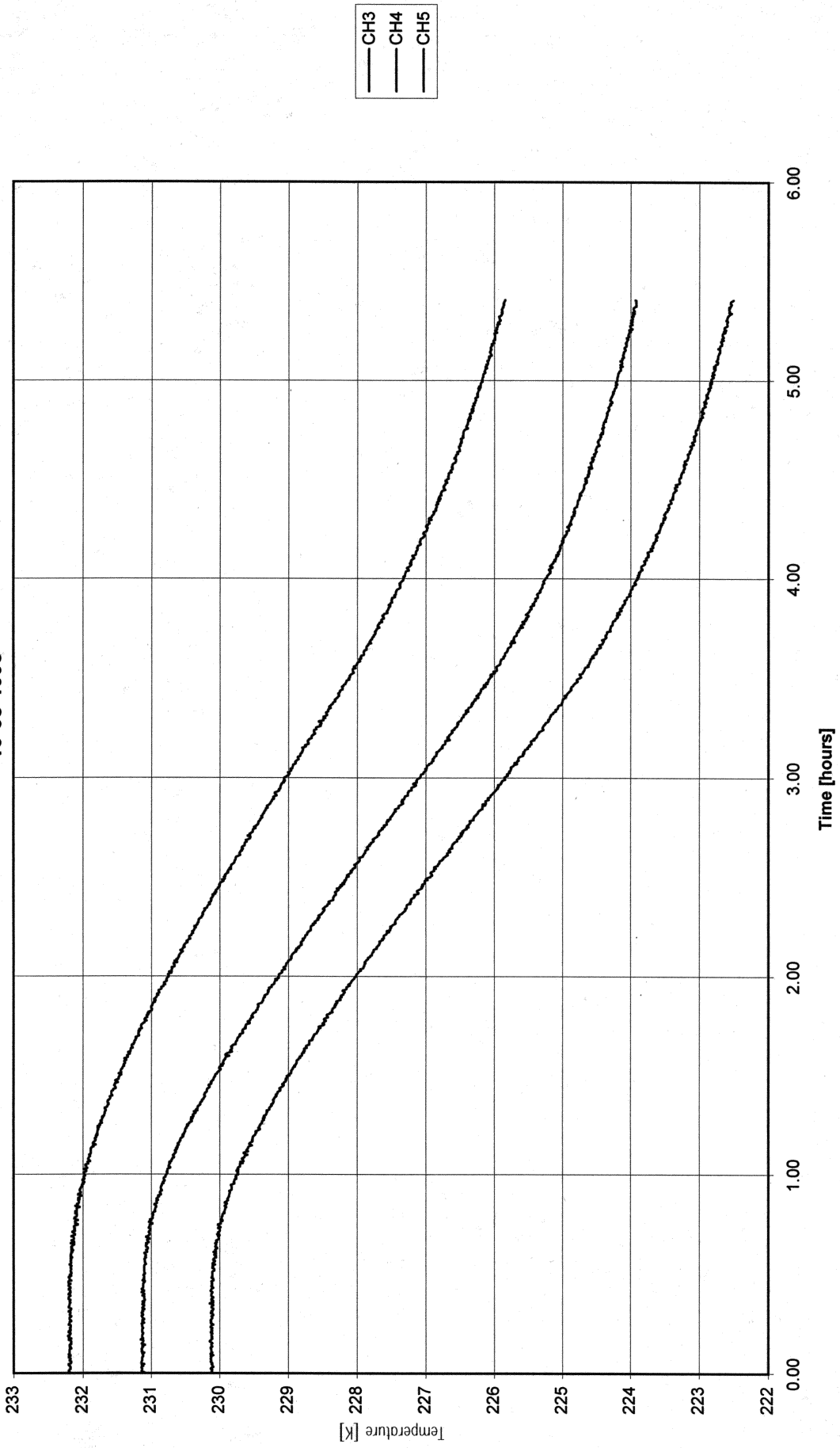
### DM Temperature change 10-08-1998



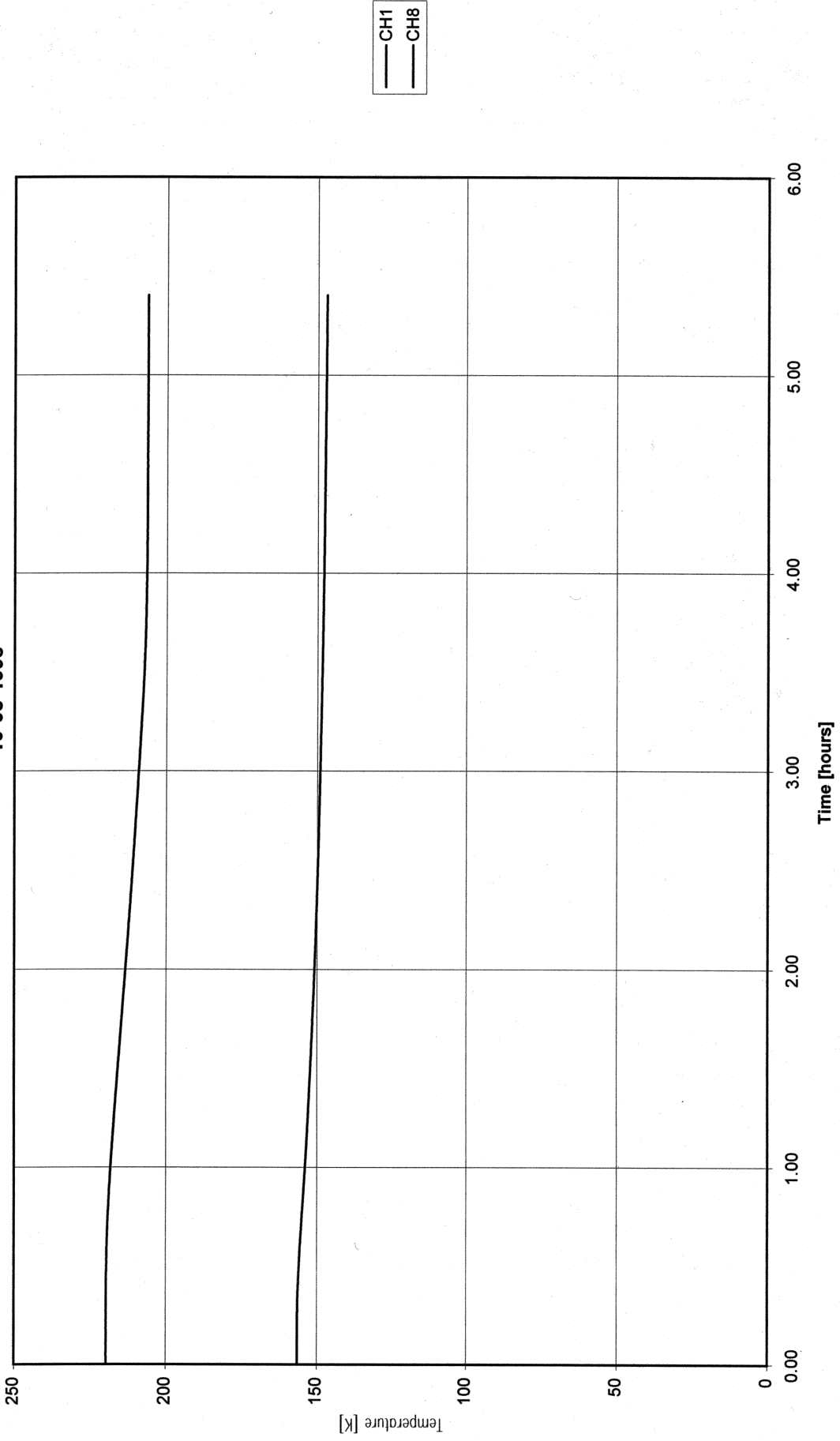
CH1  
CH2  
CH6



DM Temperature change  
10-08-1998

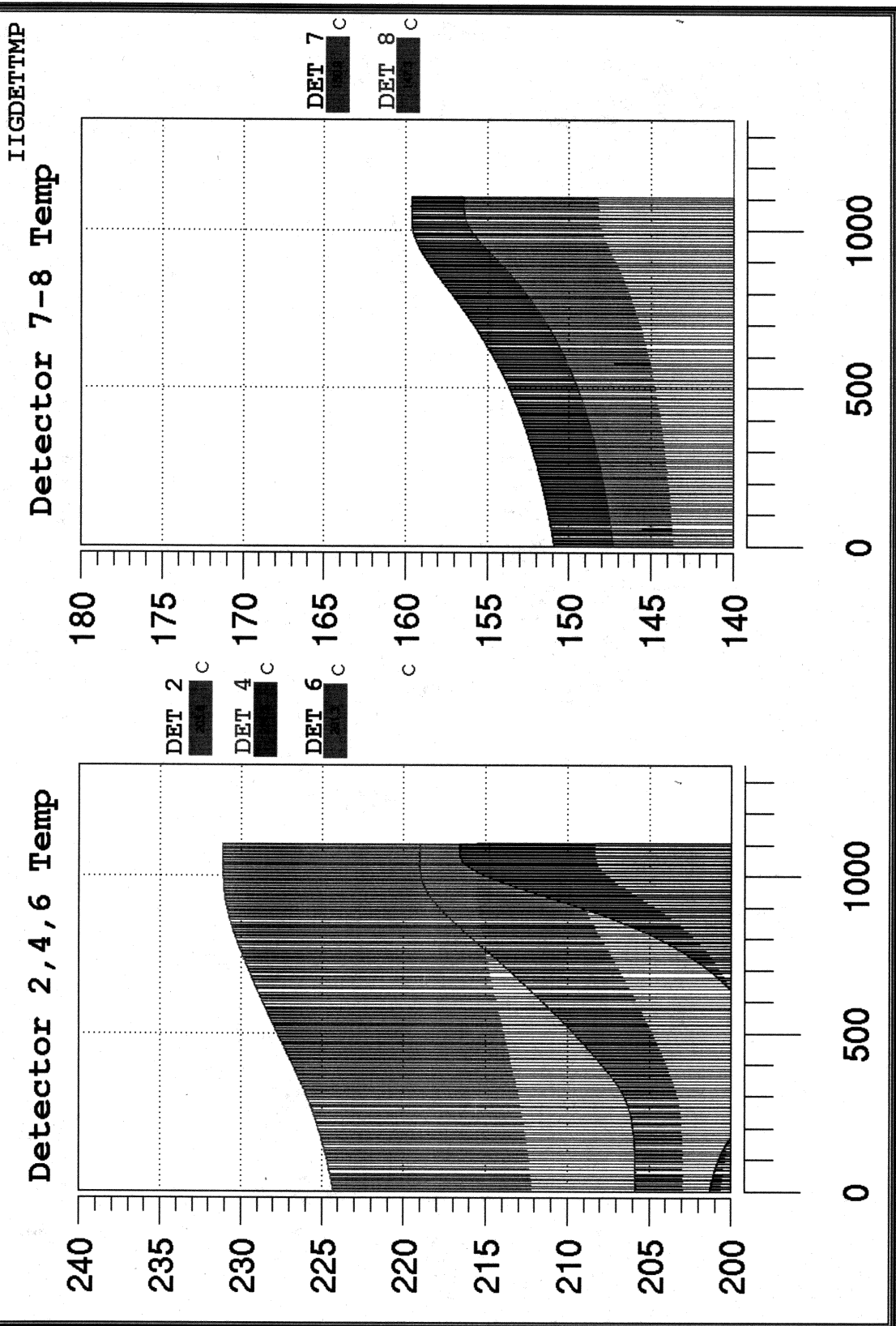


DM Temperature change  
10-08-1998



— CH1  
— CH8

environmentPic IICALERY IIEASSEY IICAFEAS IICAUOPT IIGDETTMP  
picture title



19:49:20  
12:06:45

envisatopPic IICAOPT IEGSE IIDE1H00

←

**Stimuli**

Config. -1 nm

Lambda - deg

PPC -

Polar -

Shutter -

Acq. -

S/S -

**ATC**

Nadir -18.2C

Limb -17.9C

RAD-A -18.0C

**Sun (Subsolar)**

Nadir

Limb Sun/Moon

**NCW**

CLOSED

**WLS**

OFF

-0.1 mA

0

**SLS**

OFF

-5.30 V

0.0 mA

**IICAOPT**

PMD

Det.Temp -18.7C

ElectTemp -17.8C

**Sun Sens**

|   |   |
|---|---|
| 0 | 0 |
| 0 | 0 |

**Telescope**

Aperture Stop

LARGE

**Elevation Scanner**

ACTIVE

594194

-15.000

Cover UNLOCKED

**Azimuth Scanner**

ACTIVE

273160

25.000

Cover UNLOCKED

**Spectrom.**

NDF OUT

**Channel 1**

|            |            |           |            |             |            |          |
|------------|------------|-----------|------------|-------------|------------|----------|
| 2.50       | 0.00       | 1.73      | 3.19       | 235.17      | 206.43     | 259.10   |
| Bias Volt. | Test input | 5V Supply | 15V Supply | Shield temp | Block temp | DME temp |

**Channel 2**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 235.43 | 205.89 | 258.94 |
|------|------|------|------|--------|--------|--------|

**Channel 3**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 4**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 5**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 6**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 7**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 8**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 9**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 10**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 11**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 12**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 13**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 14**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 15**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 16**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 17**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 18**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 19**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 20**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 21**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 22**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 23**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 24**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 25**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 26**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 27**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 28**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 29**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 30**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 31**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 32**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 33**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 34**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 35**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 36**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 37**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 38**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 39**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 40**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 41**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 42**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 43**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 44**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 45**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 46**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 47**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 48**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 49**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 50**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 51**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 52**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 53**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 54**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 55**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 56**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 57**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 58**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 59**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 60**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 61**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 62**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 63**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 64**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 65**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 66**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 67**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 68**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 69**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 70**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 71**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 72**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 73**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 74**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 75**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 76**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 77**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 78**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 79**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 80**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 81**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 82**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 83**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 84**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 85**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 86**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 87**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 88**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 89**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 90**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 91**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

**Channel 92**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.17 | 211.81 | 146.36 | 259.92 |
|-------|------|------|------|--------|--------|--------|

**Channel 93**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.19 | 241.56 | 224.15 | 259.39 |
|------|------|------|------|--------|--------|--------|

**Channel 94**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.73 | 3.19 | 235.17 | 206.43 | 259.10 |
|------|------|------|------|--------|--------|--------|

**Channel 95**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.71 | 3.18 | 241.54 | 222.58 | 259.12 |
|------|------|------|------|--------|--------|--------|

**Channel 96**

|      |      |      |      |        |        |        |
|------|------|------|------|--------|--------|--------|
| 2.50 | 0.00 | 1.72 | 3.17 | 240.64 | 221.15 | 259.27 |
|------|------|------|------|--------|--------|--------|

**Channel 97**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.03 | 0.01 | 1.71 | 3.18 | 231.72 | 201.78 | 259.78 |
|-------|------|------|------|--------|--------|--------|

**Channel 98**

|       |      |      |      |        |        |        |
|-------|------|------|------|--------|--------|--------|
| -0.05 | 0.01 | 1.72 | 3.19 | 211.25 | 149.77 | 259.24 |
|-------|------|------|------|--------|--------|--------|

envisatopPic
IICAOPT
IEGSE
IIDE1MOD

**Stürruli**

|         |    |     |
|---------|----|-----|
| Config. | -1 | nm  |
| Lambda  | -  | deg |
| PPC     | -  |     |
| Polar   | -  |     |
| Shutter | -  |     |
| Acq.    | -  |     |
| S/S     | -  |     |

**ATC**

**Nadir**  ACTIVE

**Limb** -16.2 C

**RAD-A** -17.9 C

-18.0 C

**NCW** CLOSED

**A**  OFF

**B**  OFF

**Sun (Subsolar)**

**Nadir**

**Limb Sun/Moon**

**Cover** UNLOCKED

**WLS** OFF

**SLS** OFF

**Aperture Stop** LARGE

**Cover** UNLOCKED

**Azimuth Scanner**

ACTIVE

273159    44.989

**Elevation Scanner**

ACTIVE

594194    -45.000

**Sun Sens**

|   |   |
|---|---|
| 0 | 0 |
| 0 | 0 |

**Telescope**

**Spectrom.**

**NDF** OUT

**IICAOPT**

**PMD**

Det.Temp -16.8 C

ElecTemp -18.4 C

**Channel**

| Channel     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.19   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 235.15 | 235.42 | 241.51 | 241.50 | 240.59 | 231.70 | 211.20 | 211.85 |
| Block temp  | 206.43 | 205.89 | 224.07 | 222.53 | 221.12 | 201.70 | 149.66 | 146.29 |
| DME temp    | 257.93 | 257.80 | 258.18 | 257.96 | 258.09 | 258.48 | 258.02 | 258.66 |

**Exp. Mode** HEATER

**TLM Mode** COMPLETE

**Format** RTF

**Obt** 0x0004c914

**Moni.** TRUE

**Anom** 0

STOP

A, NOM

5

HEATER

MEAS-TL

COMPLETE

STATE

RTF

69

0x0004c914

TRUE

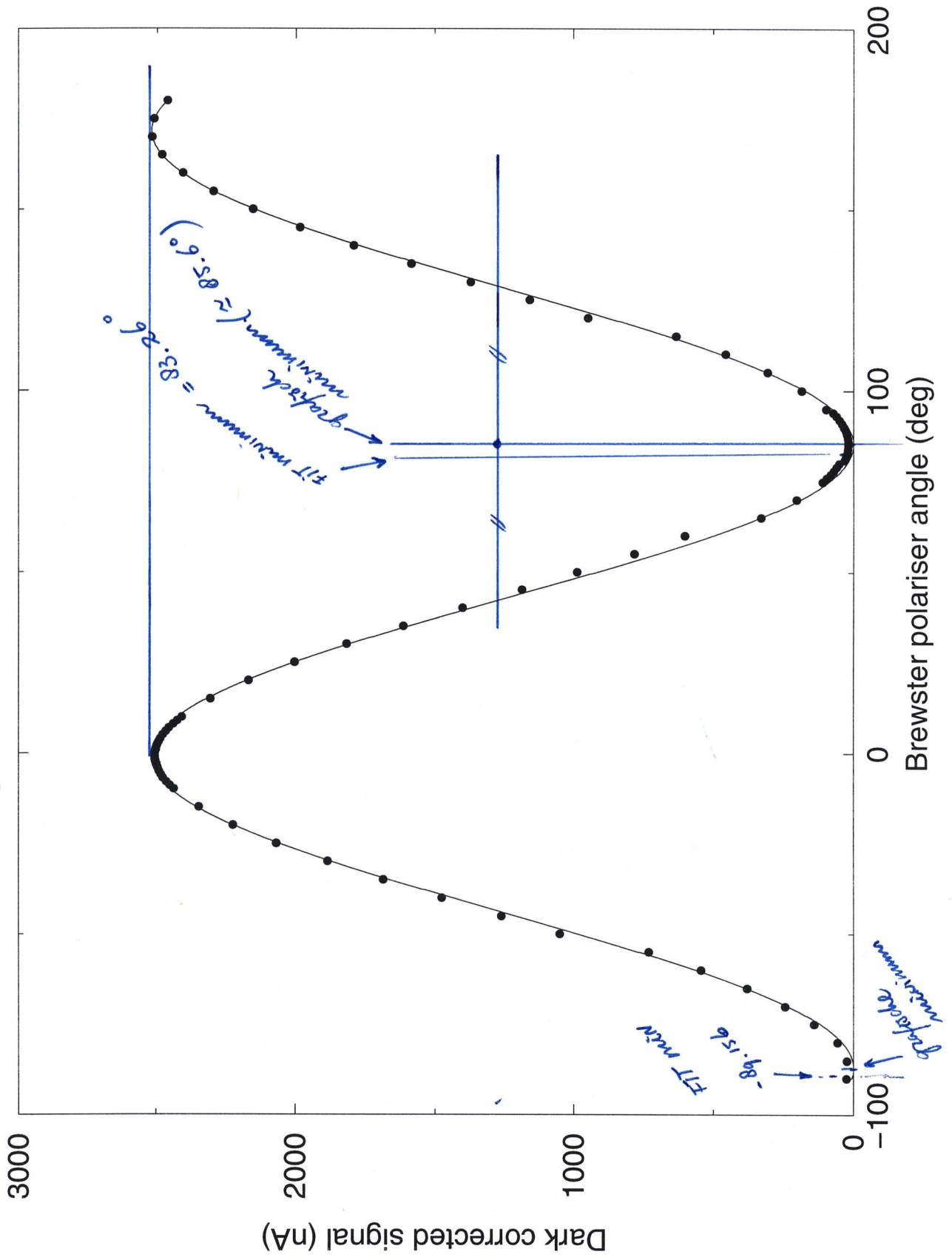
0



# LOG SHEET SCIAMACHY CALIBRATION

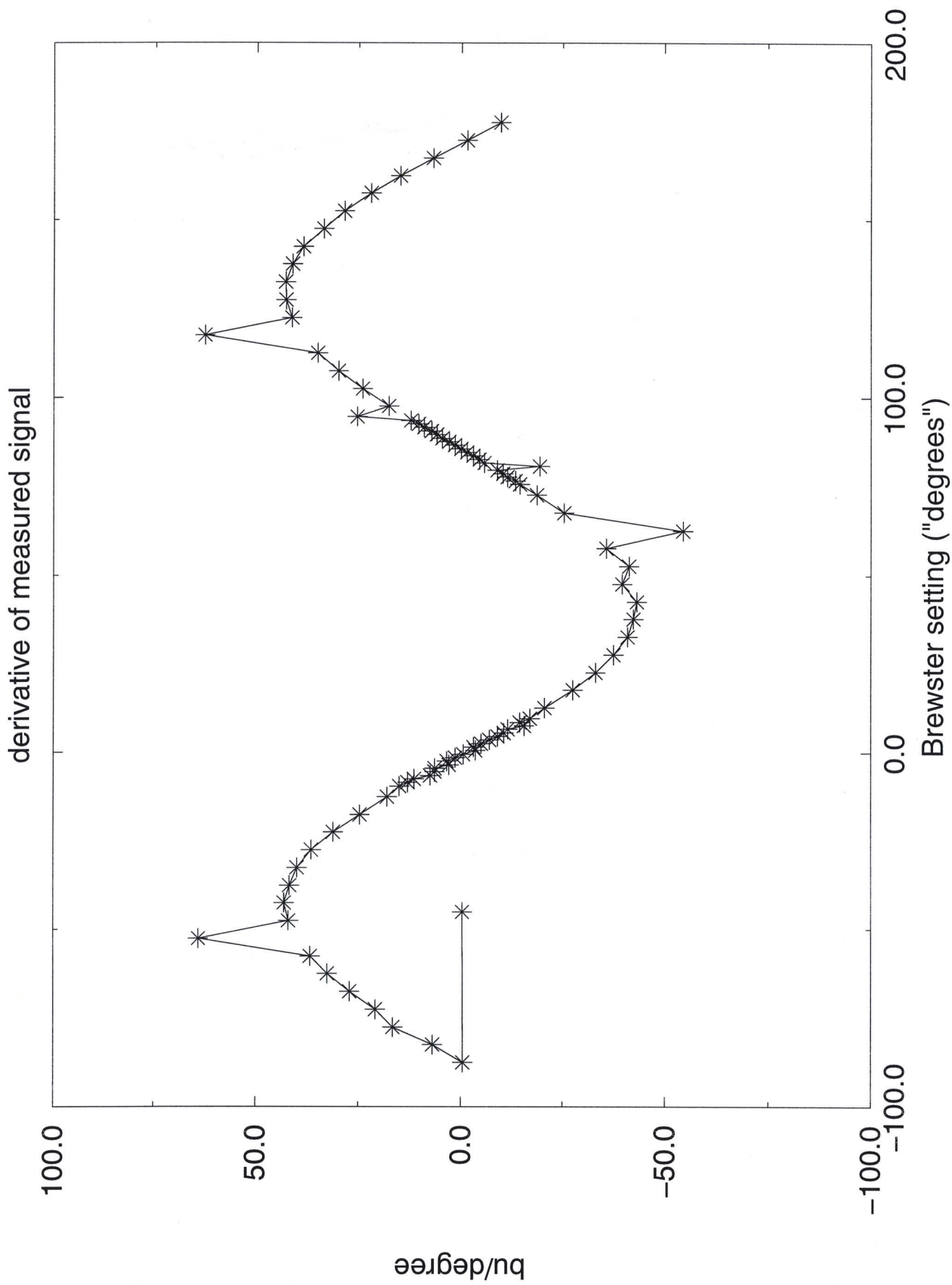
| date/time | description of action                                                 | measurement filename |
|-----------|-----------------------------------------------------------------------|----------------------|
| 10-8-98   | optical stimuli rek voor nadirpeert geploakt (m.b.v. Jos en Maurice). |                      |
|           |                                                                       |                      |
|           | * <u>Hard gezocht naar filter</u>                                     |                      |
|           |                                                                       |                      |
|           | * Breedbandmeting polarisation commissioning of Brewster              |                      |
|           |                                                                       |                      |
|           | * data vorige punt geanalyseerd:                                      |                      |
|           | * background = 0 (fixed)                                              |                      |
|           | amplitude = 2,520802 .... (fitted)                                    |                      |
|           | period = 3,448329 .... (fitted)                                       |                      |
|           | phase = -8,915588 .... (fitted)                                       |                      |
|           |                                                                       |                      |
| 11-8-98   | Data analysed for filters 400nm, 900nm.                               |                      |
|           | 400nm: Xe lamp, 2uv diffusers; PPC = 15°                              |                      |
|           | 900nm: Qth lamp; 2 NIR diffusers; PPC = 15°.                          |                      |
|           |                                                                       |                      |

Broad band polarisation of Brewster  
Xe lamp + 2 UV diffusers, no interference filters





# Polarisation commissioning



```

Background : a[1] = 0.0000000000000000e+00 fixed
Amplitude   : a[2] = 2.52080249918124e+03 fitted
Period      : a[3] = 3.44832910014757e+02 fitted
Phase       : a[4] = -8.91558804642731e+01 fitted
Background  : a[5] = 0.0000000000000000e+00 fixed

```

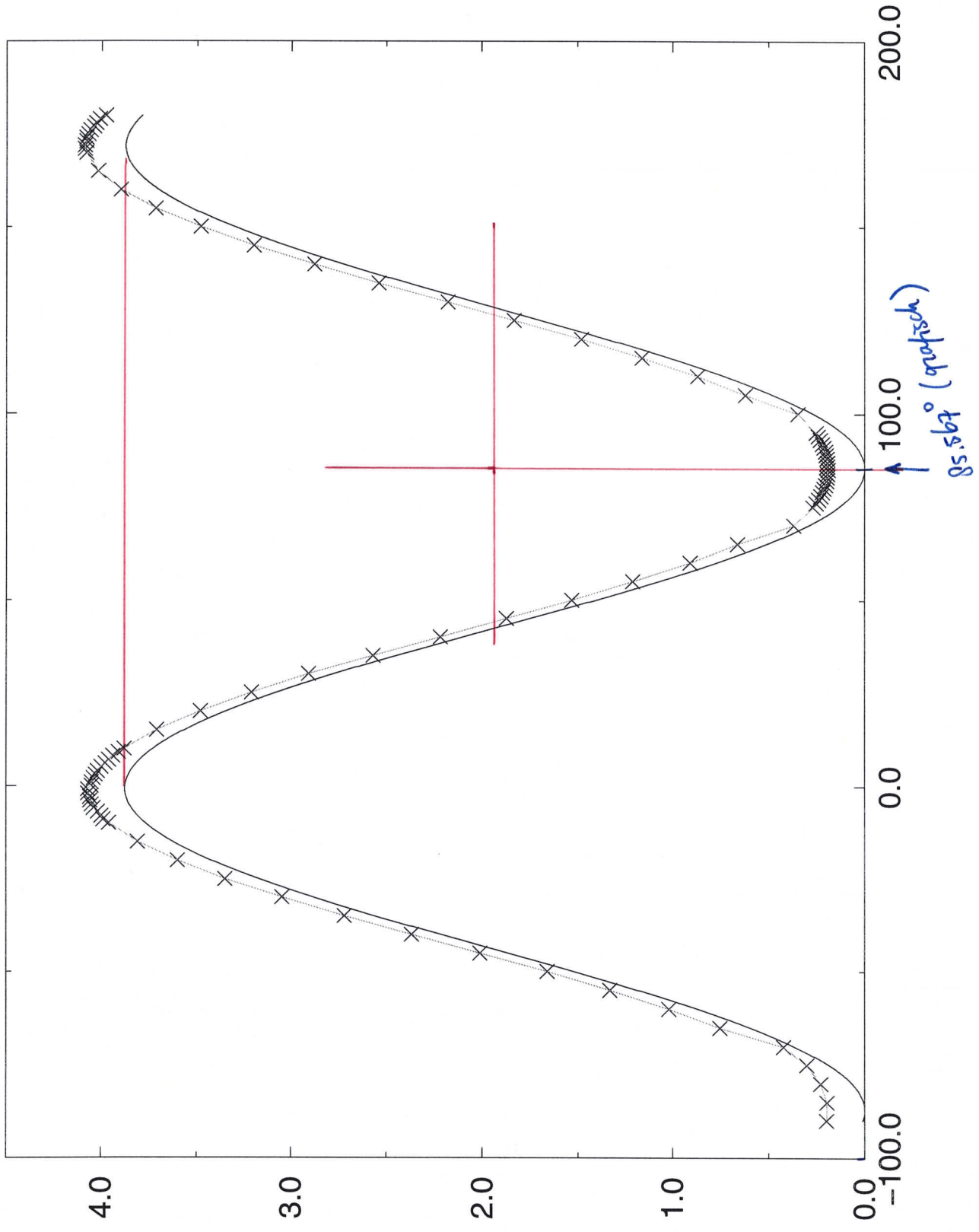
| x           | y             | fittedy       | y-fittedy    |
|-------------|---------------|---------------|--------------|
| -1.57079635 | 25.81700000   | 7.44086858    | 18.37613142  |
| -1.48352989 | 23.48200000   | 3.40253941    | 20.07946059  |
| -1.39626342 | 58.08200000   | 40.98164189   | 17.10035811  |
| -1.30899696 | 141.03200000  | 118.93398560  | 22.09801440  |
| -1.22173049 | 245.38200000  | 234.67867982  | 10.70332018  |
| -1.13446403 | 381.63200000  | 384.38358305  | -2.75158305  |
| -1.04719757 | 544.78200000  | 563.09217982  | -18.31017982 |
| -0.95993110 | 728.78200000  | 764.88768376  | -36.10568376 |
| -0.87266464 | 1049.28200000 | 983.08893401  | 66.19306599  |
| -0.78539817 | 1259.78200000 | 1210.47159889 | 49.31040111  |
| -0.69813171 | 1475.78200000 | 1439.50736317 | 36.27463683  |
| -0.61086525 | 1685.28200000 | 1662.61317989 | 22.66882011  |
| -0.52359878 | 1885.28200000 | 1872.40233417 | 12.87966583  |
| -0.43633232 | 2068.28200000 | 2061.92900679 | 6.35299321   |
| -0.34906586 | 2224.28200000 | 2224.91824038 | -0.63624038  |
| -0.26179939 | 2347.78200000 | 2355.97369423 | -8.19169423  |
| -0.17453293 | 2437.78200000 | 2450.75630949 | -12.97430949 |
| -0.15707963 | 2452.78200000 | 2465.06148840 | -12.27948840 |
| -0.13962634 | 2465.78200000 | 2477.76703989 | -11.98503989 |
| -0.12217305 | 2477.28200000 | 2488.85609269 | -11.57409269 |
| -0.10471976 | 2484.78200000 | 2498.31392203 | -13.53192203 |
| -0.08726646 | 2491.28200000 | 2506.12796916 | -14.84596916 |
| -0.06981317 | 2497.78200000 | 2512.28785810 | -14.50585810 |
| -0.05235988 | 2500.78200000 | 2516.78540932 | -16.00340932 |
| -0.03490659 | 2504.28200000 | 2519.61465068 | -15.33265068 |
| -0.01745329 | 2505.78200000 | 2520.77182533 | -14.98982533 |
| 0.00000000  | 2505.28200000 | 2520.25539670 | -14.97339670 |
| 0.01745329  | 2501.78200000 | 2518.06605054 | -16.28405054 |
| 0.03490659  | 2498.78200000 | 2514.20669399 | -15.42469399 |
| 0.05235988  | 2493.78200000 | 2508.68245178 | -14.90045178 |
| 0.06981317  | 2486.78200000 | 2501.50065935 | -14.71865935 |
| 0.08726646  | 2477.78200000 | 2492.67085316 | -14.88885316 |
| 0.10471976  | 2467.28200000 | 2482.20475802 | -14.92275802 |
| 0.12217305  | 2455.78200000 | 2470.11627149 | -14.33427149 |
| 0.13962634  | 2440.28200000 | 2456.42144546 | -16.13944546 |
| 0.15707963  | 2425.78200000 | 2441.13846484 | -15.35646484 |
| 0.17453293  | 2408.78200000 | 2424.28762337 | -15.50562337 |
| 0.26179939  | 2306.28200000 | 2317.36977838 | -11.08777838 |
| 0.34906586  | 2168.78200000 | 2175.45721530 | -6.67521530  |
| 0.43633232  | 2003.78200000 | 2003.24845638 | 0.53354362   |
| 0.52359878  | 1816.78200000 | 1806.44508761 | 10.33691239  |
| 0.61086525  | 1612.28200000 | 1591.56298740 | 20.71901260  |
| 0.69813171  | 1400.78200000 | 1365.71659513 | 35.06540487  |
| 0.78539817  | 1184.78200000 | 1136.38336221 | 48.39863779  |
| 0.87266464  | 986.78200000  | 911.15618438  | 75.62581562  |
| 0.95993110  | 780.28200000  | 697.49201175  | 82.78998825  |
| 1.04719757  | 602.28200000  | 502.46495986  | 99.81704014  |
| 1.13446403  | 330.43200000  | 332.53209580  | -2.10009580  |
| 1.22173049  | 204.18200000  | 193.31965393  | 10.86234607  |
| 1.30899696  | 110.88200000  | 89.43675935   | 21.44524065  |
| 1.32645025  | 96.38200000   | 73.22440363   | 23.15759637  |
| 1.34390354  | 82.98200000   | 58.58845972   | 24.39354028  |
| 1.36135684  | 71.58200000   | 45.54836221   | 26.03363779  |
| 1.37881013  | 61.23200000   | 34.12142658   | 27.11057342  |
| 1.39626342  | 52.33200000   | 24.32282629   | 28.00917371  |
| 1.41371672  | 32.96200000   | 16.16557256   | 16.79642744  |
| 1.43117001  | 27.26200000   | 9.66049712    | 17.60150288  |
| 1.44862330  | 22.83200000   | 4.81623786    | 18.01576214  |

|            |               |               |              |
|------------|---------------|---------------|--------------|
| 1.46607659 | 19.94700000   | 1.63922729    | 18.30777271  |
| 1.48352989 | 18.63200000   | 0.13368406    | 18.49831594  |
| 1.50098318 | 18.74700000   | 0.30160733    | 18.44539267  |
| 1.51843647 | 20.35700000   | 2.14277413    | 18.21422587  |
| 1.53588976 | 23.38200000   | 5.65473962    | 17.72726038  |
| 1.55334306 | 28.03200000   | 10.83284038   | 17.19915962  |
| 1.57079635 | 34.09200000   | 17.67020061   | 16.42179939  |
| 1.58824964 | 41.46700000   | 26.15774118   | 15.30925882  |
| 1.60570294 | 50.60200000   | 36.28419180   | 14.31780820  |
| 1.62315623 | 60.96200000   | 48.03610589   | 12.92589411  |
| 1.64060952 | 73.23200000   | 61.39787847   | 11.83412153  |
| 1.65806281 | 98.68200000   | 76.35176691   | 22.33023309  |
| 1.74532928 | 186.78200000  | 174.23552015  | 12.54647985  |
| 1.83259574 | 307.18200000  | 308.08066908  | -0.89866908  |
| 1.91986221 | 457.68200000  | 473.45579202  | -15.77379202 |
| 2.00712867 | 633.68200000  | 664.88555489  | -31.20355489 |
| 2.09439513 | 947.78200000  | 876.03199170  | 71.75000830  |
| 2.18166160 | 1155.28200000 | 1099.90434556 | 55.37765444  |
| 2.26892806 | 1369.78200000 | 1329.09052265 | 40.69147735  |
| 2.35619453 | 1584.78200000 | 1556.00249602 | 28.77950398  |
| 2.44346099 | 1791.78200000 | 1773.12753440 | 18.65446560  |
| 2.53072745 | 1985.78200000 | 1973.27693793 | 12.50506207  |
| 2.61799392 | 2154.78200000 | 2149.82404577 | 4.95795423   |
| 2.70526038 | 2297.78200000 | 2296.92363540 | 0.85836460   |
| 2.79252684 | 2408.28200000 | 2409.70544953 | -1.42344953  |
| 2.87979331 | 2482.78200000 | 2484.43544340 | -1.65344340  |
| 2.96705977 | 2517.78200000 | 2518.63941367 | -0.85741367  |
| 3.05432624 | 2510.78200000 | 2511.18491576 | -0.40291576  |
| 3.14159270 | 2462.28200000 | 2462.31875743 | -0.03675743  |

sin chi^2: 7.85456909586875e+02

Pol. commissions

#. Using filter: 400 nm



400 nm

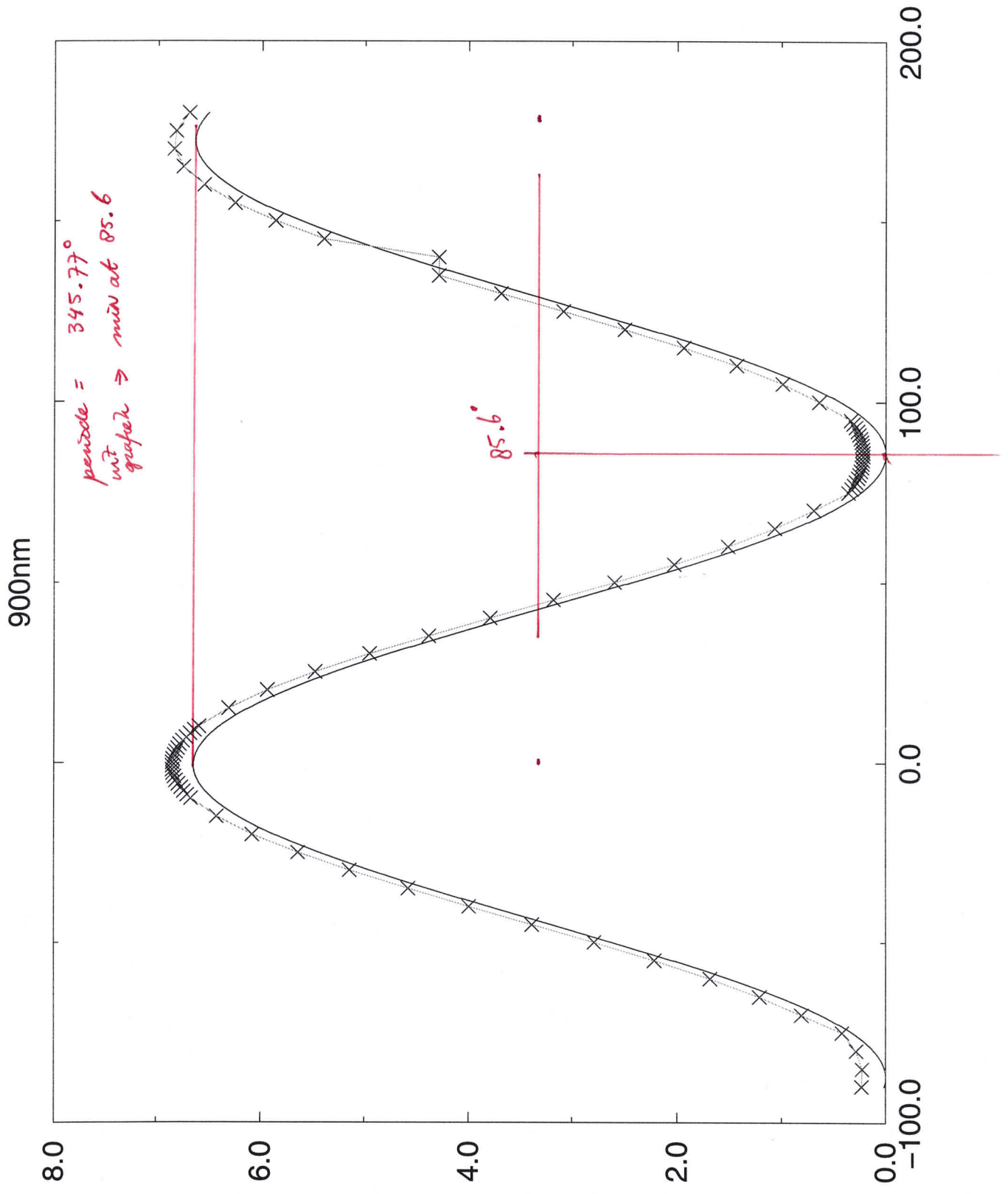
Background : a[1] = 0.000000000000000e+00 fixed  
Amplitude : a[2] = 3.87670908052429e+00 fitted  
Period : a[3] = 3.45000019429039e+02 fitted  
Phase : a[4] = -2.69132001275606e+02 fitted  
Background : a[5] = 0.000000000000000e+00 fixed

| x           | y          | fittedy    | y-fittedy   |
|-------------|------------|------------|-------------|
| -1.57079635 | 0.02300000 | 0.01093947 | 0.01206053  |
| -1.48352989 | 0.02100000 | 0.00557016 | 0.01542984  |
| -1.39626342 | 0.05400000 | 0.06413078 | -0.01013078 |
| -1.30899696 | 0.12400000 | 0.18468433 | -0.06068433 |
| -1.22173049 | 0.24700000 | 0.36324332 | -0.11624332 |
| -1.13446403 | 0.57800000 | 0.59390163 | -0.01590163 |
| -1.04719757 | 0.84400000 | 0.86902985 | -0.02502985 |
| -0.95993110 | 1.15400000 | 1.17952770 | -0.02552770 |
| -0.87266464 | 1.48400000 | 1.51512495 | -0.03112495 |
| -0.78539817 | 1.83400000 | 1.86472120 | -0.03072120 |
| -0.69813171 | 2.19400000 | 2.21675299 | -0.02275299 |
| -0.61086525 | 2.54400000 | 2.55957630 | -0.01557630 |
| -0.52359878 | 2.87400000 | 2.88185172 | -0.00785172 |
| -0.43633232 | 3.17400000 | 3.17291946 | 0.00108054  |
| -0.34906586 | 3.42400000 | 3.42315200 | 0.00084800  |
| -0.26179939 | 3.63400000 | 3.62427249 | 0.00972751  |
| -0.17453293 | 3.78400000 | 3.76962857 | 0.01437143  |
| -0.15707963 | 3.81400000 | 3.79155048 | 0.02244952  |
| -0.13962634 | 3.82400000 | 3.81101399 | 0.01298601  |
| -0.12217305 | 3.84400000 | 3.82799326 | 0.01600674  |
| -0.10471976 | 3.86400000 | 3.84246577 | 0.02153423  |
| -0.08726646 | 3.87400000 | 3.85441233 | 0.01958767  |
| -0.06981317 | 3.88400000 | 3.86381709 | 0.02018291  |
| -0.05235988 | 3.88400000 | 3.87066756 | 0.01333244  |
| -0.03490659 | 3.89400000 | 3.87495466 | 0.01904534  |
| -0.01745329 | 3.89400000 | 3.87667272 | 0.01732728  |
| 0.00000000  | 3.87400000 | 3.87581943 | -0.00181943 |
| 0.01745329  | 3.87400000 | 3.87239594 | 0.00160406  |
| 0.03490659  | 3.86400000 | 3.86640680 | -0.00240680 |
| 0.05235988  | 3.85400000 | 3.85785993 | -0.00385993 |
| 0.06981317  | 3.84400000 | 3.84676669 | -0.00276669 |
| 0.08726646  | 3.82400000 | 3.83314179 | -0.00914179 |
| 0.10471976  | 3.80400000 | 3.81700330 | -0.01300330 |
| 0.12217305  | 3.78400000 | 3.79837263 | -0.01437263 |
| 0.13962634  | 3.76400000 | 3.77727450 | -0.01327450 |
| 0.15707963  | 3.73400000 | 3.75373690 | -0.01973690 |
| 0.17453293  | 3.70400000 | 3.72779104 | -0.02379104 |
| 0.26179939  | 3.53400000 | 3.56325183 | -0.02925183 |
| 0.34906586  | 3.30400000 | 3.34496655 | -0.04096655 |
| 0.43633232  | 3.03400000 | 3.08015533 | -0.04615533 |
| 0.52359878  | 2.73400000 | 2.77757724 | -0.04357724 |
| 0.61086525  | 2.39400000 | 2.44724051 | -0.05324051 |
| 0.69813171  | 2.04400000 | 2.10007157 | -0.05607157 |
| 0.78539817  | 1.69400000 | 1.74755358 | -0.05355358 |
| 0.87266464  | 1.35400000 | 1.40134664 | -0.04734664 |
| 0.95993110  | 1.03400000 | 1.07290209 | -0.03890209 |
| 1.04719757  | 0.73400000 | 0.77308376 | -0.03908376 |
| 1.13446403  | 0.48600000 | 0.51180862 | -0.02580862 |
| 1.22173049  | 0.19200000 | 0.29771875 | -0.10571875 |
| 1.30899696  | 0.09200000 | 0.13789554 | -0.04589554 |
| 1.32645025  | 0.07700000 | 0.11294187 | -0.03594187 |
| 1.34390354  | 0.06400000 | 0.09040976 | -0.02640976 |
| 1.36135684  | 0.05300000 | 0.07032909 | -0.01732909 |
| 1.37881013  | 0.04400000 | 0.05272651 | -0.00872651 |
| 1.39626342  | 0.03600000 | 0.03762537 | -0.00162537 |
| 1.41371672  | 0.02900000 | 0.02504570 | 0.00395430  |
| 1.43117001  | 0.02400000 | 0.01500418 | 0.00899582  |
| 1.44862330  | 0.02000000 | 0.00751414 | 0.01248586  |

|            |            |            |             |
|------------|------------|------------|-------------|
| 1.46607659 | 0.01800000 | 0.00258552 | 0.01541448  |
| 1.48352989 | 0.01600000 | 0.00022485 | 0.01577515  |
| 1.50098318 | 0.01700000 | 0.00043526 | 0.01656474  |
| 1.51843647 | 0.01800000 | 0.00321648 | 0.01478352  |
| 1.53588976 | 0.02100000 | 0.00856482 | 0.01243518  |
| 1.55334306 | 0.02500000 | 0.01647317 | 0.00852683  |
| 1.57079635 | 0.03000000 | 0.02693106 | 0.00306894  |
| 1.58824964 | 0.03700000 | 0.03992460 | -0.00292460 |
| 1.60570294 | 0.04500000 | 0.05543656 | -0.01043656 |
| 1.62315623 | 0.05500000 | 0.07344636 | -0.01844636 |
| 1.64060952 | 0.06600000 | 0.09393012 | -0.02793012 |
| 1.65806281 | 0.07800000 | 0.11686065 | -0.03886065 |
| 1.74532928 | 0.17200000 | 0.26703905 | -0.09503905 |
| 1.83259574 | 0.44800000 | 0.47249887 | -0.02449887 |
| 1.91986221 | 0.69700000 | 0.72644421 | -0.02944421 |
| 2.00712867 | 0.98600000 | 1.02047542 | -0.03447542 |
| 2.09439513 | 1.30400000 | 1.34486694 | -0.04086694 |
| 2.18166160 | 1.65400000 | 1.68888900 | -0.03488900 |
| 2.26892806 | 2.00400000 | 2.04116254 | -0.03716254 |
| 2.35619453 | 2.36400000 | 2.39003554 | -0.02603554 |
| 2.44346099 | 2.70400000 | 2.72396847 | -0.01996847 |
| 2.53072745 | 3.02400000 | 3.03191597 | -0.00791597 |
| 2.61799392 | 3.30400000 | 3.30369218 | 0.00030782  |
| 2.70526038 | 3.54400000 | 3.53030767 | 0.01369233  |
| 2.79252684 | 3.72400000 | 3.70426677 | 0.01973323  |
| 2.87979331 | 3.84400000 | 3.81981552 | 0.02418448  |
| 2.96705977 | 3.90400000 | 3.87313194 | 0.03086806  |
| 2.98451307 | 3.91400000 | 3.87613503 | 0.03786497  |
| 3.00196636 | 3.91400000 | 3.87656751 | 0.03743249  |
| 3.01941965 | 3.90400000 | 3.87442878 | 0.02957122  |
| 3.03687294 | 3.90400000 | 3.86972170 | 0.03427830  |
| 3.05432624 | 3.89400000 | 3.86245251 | 0.03154749  |
| 3.07177953 | 3.88400000 | 3.85263085 | 0.03136915  |
| 3.08923282 | 3.86400000 | 3.84026975 | 0.02373025  |
| 3.10668611 | 3.85400000 | 3.82538560 | 0.02861440  |
| 3.12413941 | 3.83400000 | 3.80799816 | 0.02600184  |
| 3.14159270 | 3.80400000 | 3.78813048 | 0.01586952  |

sin chi^2: 1.07233021516441e-03

# Pol. commissioning



```

Background : a[1] = 0.0000000000000000e+00 fixed
Amplitude  : a[2] = 6.64584017086148e+00 fitted
Period     : a[3] = 3.45942016527888e+02 fitted
Phase      : a[4] = -2.69169992134096e+02 fitted
Background : a[5] = 0.0000000000000000e+00 fixed

```

| x           | y          | fittedy    | y-fittedy   |
|-------------|------------|------------|-------------|
| -1.57079635 | 0.03800000 | 0.01616960 | 0.02183040  |
| -1.48352989 | 0.03400000 | 0.01142095 | 0.02257905  |
| -1.39626342 | 0.09300000 | 0.11561134 | -0.02261134 |
| -1.30899696 | 0.22900000 | 0.32531320 | -0.09631320 |
| -1.22173049 | 0.62100000 | 0.63362794 | -0.01262794 |
| -1.13446403 | 1.01600000 | 1.03041286 | -0.01441286 |
| -1.04719757 | 1.48700000 | 1.50261485 | -0.01561485 |
| -0.95993110 | 2.01600000 | 2.03469978 | -0.01869978 |
| -0.87266464 | 2.59400000 | 2.60916355 | -0.01516355 |
| -0.78539817 | 3.19200000 | 3.20710791 | -0.01510791 |
| -0.69813171 | 3.80200000 | 3.80886217 | -0.00686217 |
| -0.61086525 | 4.38900000 | 4.39463029 | -0.00563029 |
| -0.52359878 | 4.94800000 | 4.94514215 | 0.00285785  |
| -0.43633232 | 5.44600000 | 5.44228745 | 0.00371255  |
| -0.34906586 | 5.88100000 | 5.86971150 | 0.01128850  |
| -0.26179939 | 6.22500000 | 6.21335324 | 0.01164676  |
| -0.17453293 | 6.47400000 | 6.46190782 | 0.01209218  |
| -0.15707963 | 6.51000000 | 6.49943027 | 0.01056973  |
| -0.13962634 | 6.54400000 | 6.53276175 | 0.01123825  |
| -0.12217305 | 6.57000000 | 6.56185826 | 0.00814174  |
| -0.10471976 | 6.59900000 | 6.58668143 | 0.01231857  |
| -0.08726646 | 6.62000000 | 6.60719850 | 0.01280150  |
| -0.06981317 | 6.63400000 | 6.62338241 | 0.01061759  |
| -0.05235988 | 6.64700000 | 6.63521180 | 0.01178820  |
| -0.03490659 | 6.65500000 | 6.64267106 | 0.01232894  |
| -0.01745329 | 6.65400000 | 6.64575035 | 0.00824965  |
| 0.00000000  | 6.65200000 | 6.64444562 | 0.00755438  |
| 0.01745329  | 6.64700000 | 6.63875858 | 0.00824142  |
| 0.03490659  | 6.63700000 | 6.62869673 | 0.00830327  |
| 0.05235988  | 6.62000000 | 6.61427335 | 0.00572665  |
| 0.06981317  | 6.60200000 | 6.59550747 | 0.00649253  |
| 0.08726646  | 6.58100000 | 6.57242385 | 0.00857615  |
| 0.10471976  | 6.55200000 | 6.54505294 | 0.00694706  |
| 0.12217305  | 6.52000000 | 6.51343086 | 0.00656914  |
| 0.13962634  | 6.48200000 | 6.47759933 | 0.00440067  |
| 0.15707963  | 6.43900000 | 6.43760562 | 0.00139438  |
| 0.17453293  | 6.39600000 | 6.39350250 | 0.00249750  |
| 0.26179939  | 6.11000000 | 6.11356760 | -0.00356760 |
| 0.34906586  | 5.74000000 | 5.74182820 | -0.00182820 |
| 0.43633232  | 5.28300000 | 5.29051350 | -0.00751350 |
| 0.52359878  | 4.76100000 | 4.77447049 | -0.01347049 |
| 0.61086525  | 4.19300000 | 4.21067554 | -0.01767554 |
| 0.69813171  | 3.59500000 | 3.61767592 | -0.02267592 |
| 0.78539817  | 2.98700000 | 3.01497965 | -0.02797965 |
| 0.87266464  | 2.39600000 | 2.42241377 | -0.02641377 |
| 0.95993110  | 1.82800000 | 1.85947202 | -0.03147202 |
| 1.04719757  | 1.31600000 | 1.34467361 | -0.02867361 |
| 1.13446403  | 0.87100000 | 0.89495397 | -0.02395397 |
| 1.22173049  | 0.50200000 | 0.52510762 | -0.02310762 |
| 1.30899696  | 0.16900000 | 0.24730146 | -0.07830146 |
| 1.32645025  | 0.14000000 | 0.20364633 | -0.06364633 |
| 1.34390354  | 0.11600000 | 0.16410665 | -0.04810665 |
| 1.36135684  | 0.09500000 | 0.12873461 | -0.03373461 |
| 1.37881013  | 0.07800000 | 0.09757687 | -0.01957687 |
| 1.39626342  | 0.06200000 | 0.07067454 | -0.00867454 |
| 1.41371672  | 0.05000000 | 0.04806312 | 0.00193688  |
| 1.43117001  | 0.04100000 | 0.02977242 | 0.01122758  |
| 1.44862330  | 0.03400000 | 0.01582660 | 0.01817340  |



|            |            |            |             |
|------------|------------|------------|-------------|
| 1.46607659 | 0.03000000 | 0.00624404 | 0.02375596  |
| 1.48352989 | 0.02600000 | 0.00103740 | 0.02496260  |
| 1.50098318 | 0.02600000 | 0.00021353 | 0.02578647  |
| 1.51843647 | 0.02800000 | 0.00377353 | 0.02422647  |
| 1.53588976 | 0.03400000 | 0.01171270 | 0.02228730  |
| 1.55334306 | 0.04100000 | 0.02402056 | 0.01697944  |
| 1.57079635 | 0.05100000 | 0.04068089 | 0.01031911  |
| 1.58824964 | 0.06300000 | 0.06167168 | 0.00132832  |
| 1.60570294 | 0.07800000 | 0.08696526 | -0.00896526 |
| 1.62315623 | 0.09700000 | 0.11652825 | -0.01952825 |
| 1.64060952 | 0.11900000 | 0.15032164 | -0.03132164 |
| 1.65806281 | 0.14300000 | 0.18830085 | -0.04530085 |
| 1.74532928 | 0.44800000 | 0.43904101 | 0.00895899  |
| 1.83259574 | 0.79900000 | 0.78465272 | 0.01434728  |
| 1.91986221 | 1.23500000 | 1.21376631 | 0.02123369  |
| 2.00712867 | 1.74100000 | 1.71226516 | 0.02873484  |
| 2.09439513 | 2.30100000 | 2.26375004 | 0.03724996  |
| 2.18166160 | 2.89100000 | 2.85007866 | 0.04092134  |
| 2.26892806 | 3.49200000 | 3.45196243 | 0.04003757  |
| 2.35619453 | 4.09700000 | 4.04960106 | 0.04739894  |
| 2.44346099 | 4.09900000 | 4.62333393 | -0.52433393 |
| 2.53072745 | 5.20700000 | 5.15428683 | 0.05271317  |
| 2.61799392 | 5.67400000 | 5.62499289 | 0.04900711  |
| 2.70526038 | 6.06300000 | 6.01996720 | 0.04303280  |
| 2.79252684 | 6.36200000 | 6.32621621 | 0.03578379  |
| 2.87979331 | 6.56400000 | 6.53366519 | 0.03033481  |
| 2.96705977 | 6.65600000 | 6.63548965 | 0.02051035  |
| 3.05432624 | 6.63500000 | 6.62833985 | 0.00666015  |
| 3.14159270 | 6.50400000 | 6.51245099 | -0.00845099 |

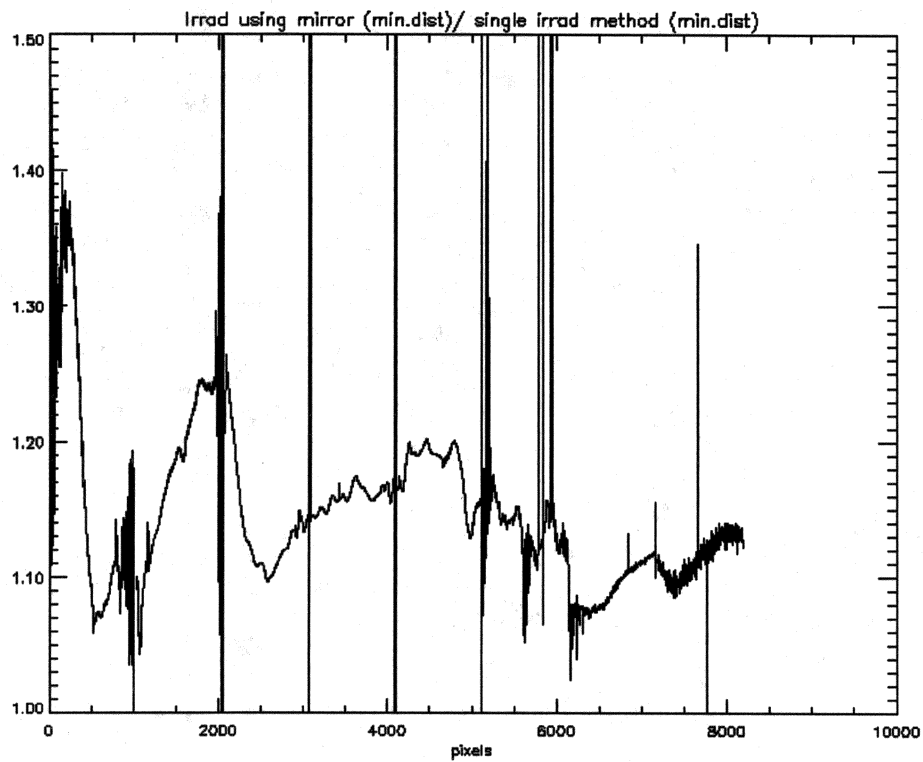
sin chi^2: 4.07667918345819e-03

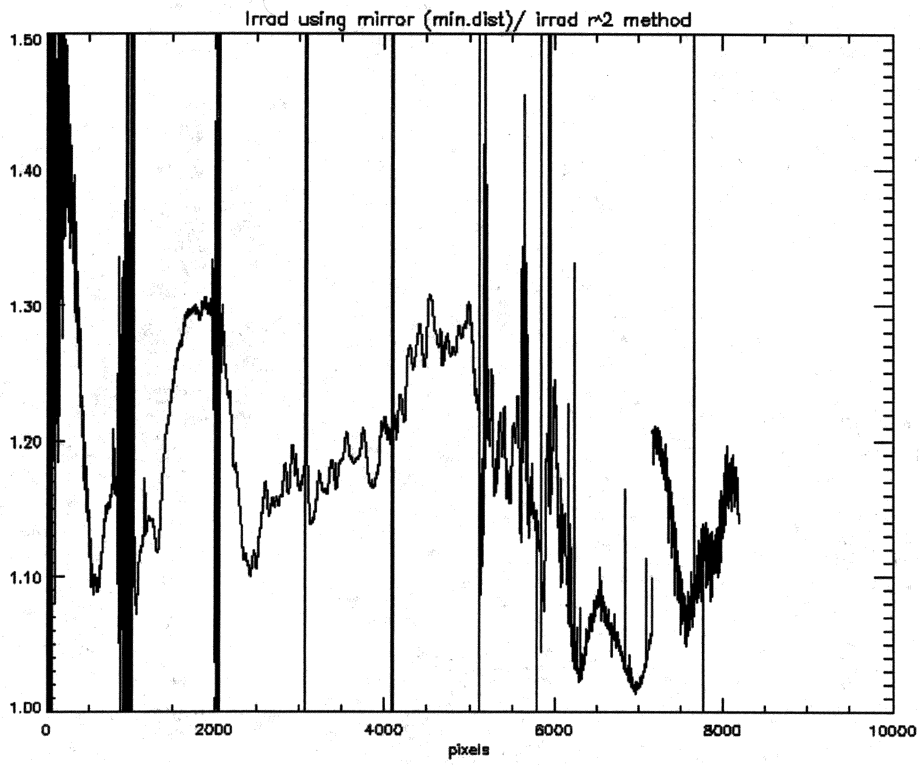


Pagenumber:

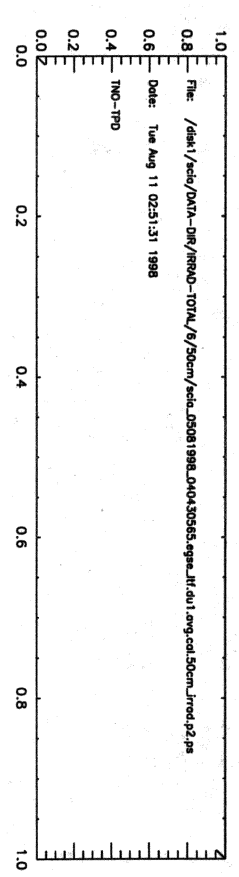
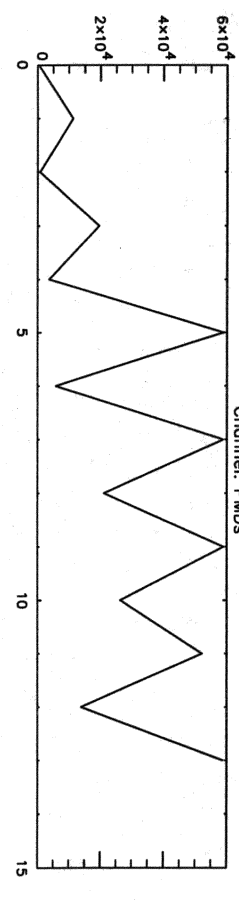
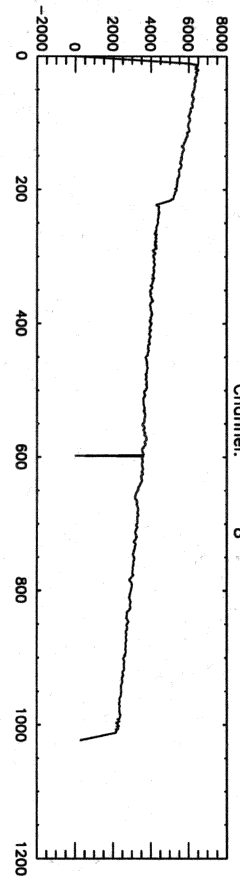
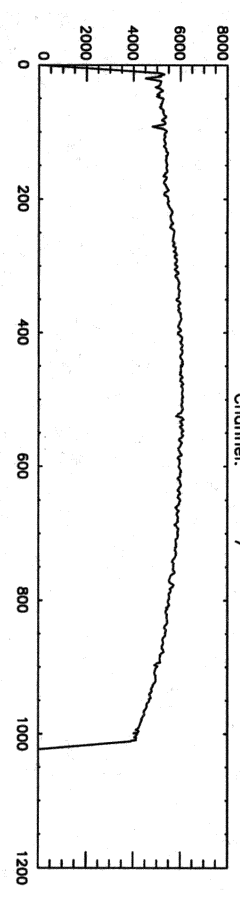
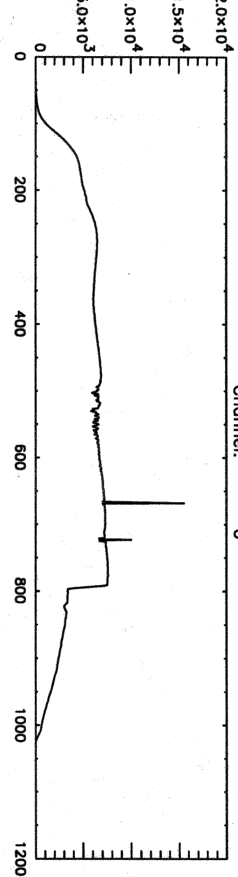
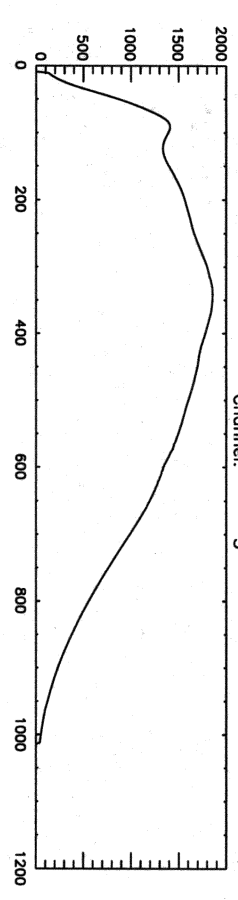
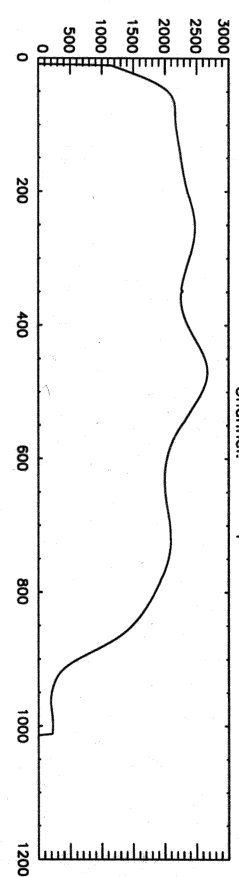
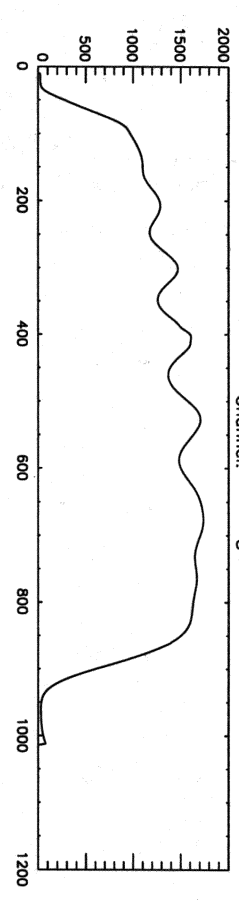
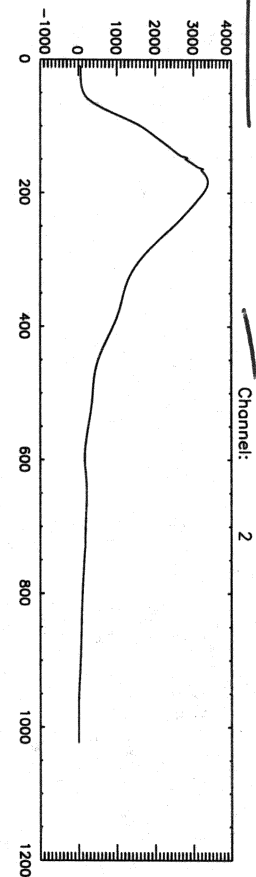
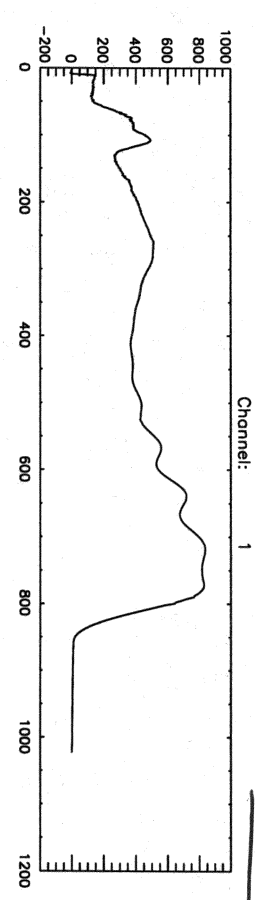
# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                         | measurement filename |
|-----------|---------------------------------------------------------------|----------------------|
| 11-05-95  | Comparison 3 methods of computing irradiance Low Temperature. | IRRAD-TOTOL-3        |
|           | ①: r <sup>2</sup> method                                      |                      |
|           | ②: absolute diste.                                            |                      |
|           | ③: using mirror (50cm).                                       |                      |
|           | <del>④: using mirror (1.10)</del>                             |                      |
|           | ⑤/④ ≈ 1.2.                                                    |                      |
|           | ⑥/③ ≈ 0.95                                                    |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |
|           |                                                               |                      |





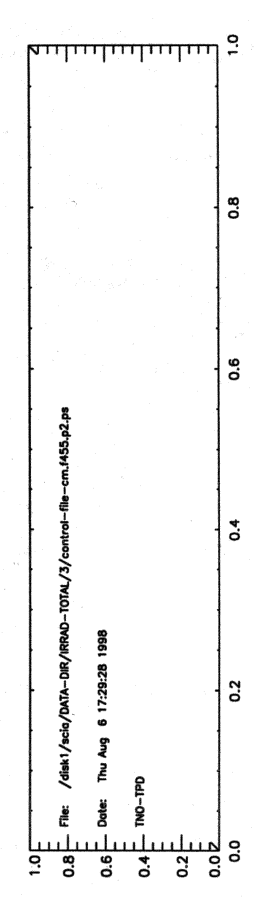
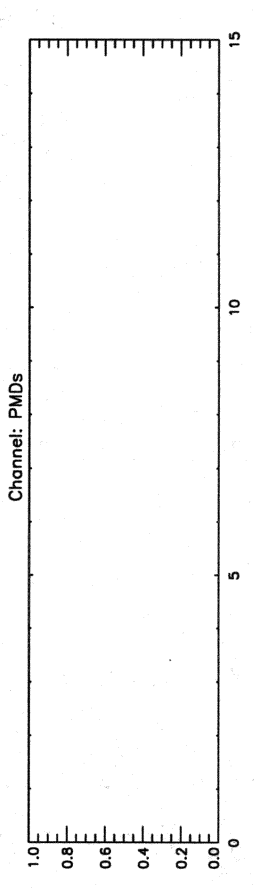
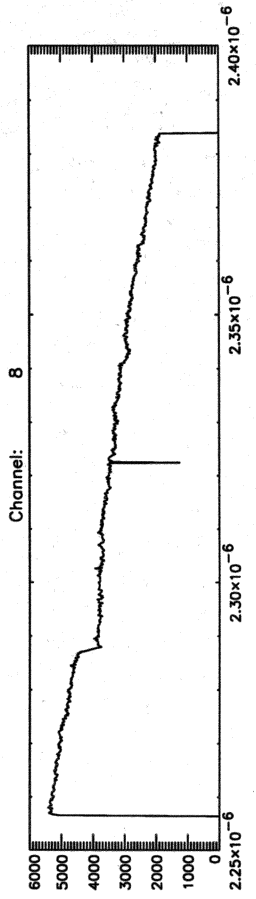
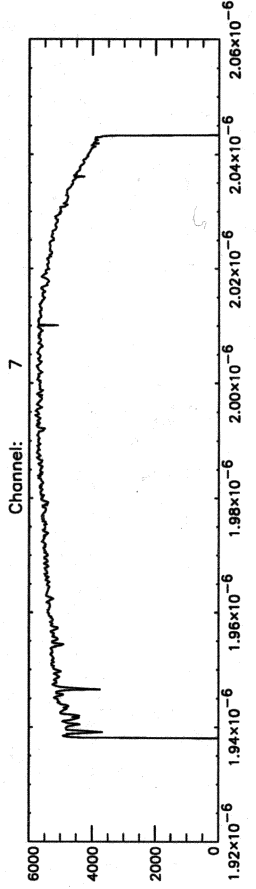
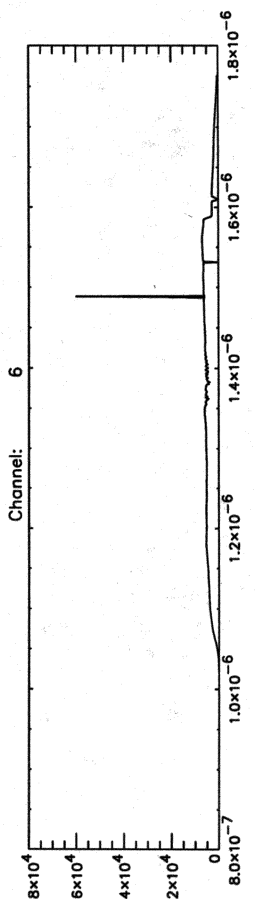
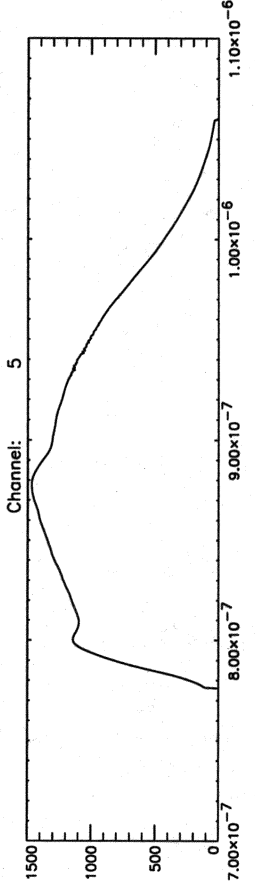
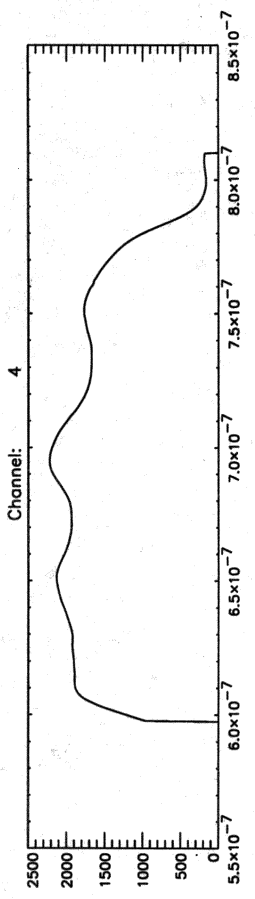
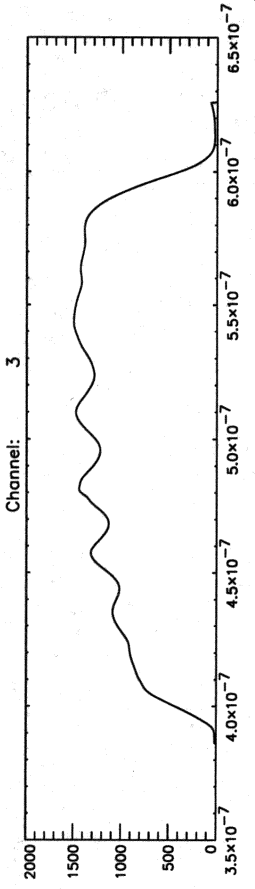
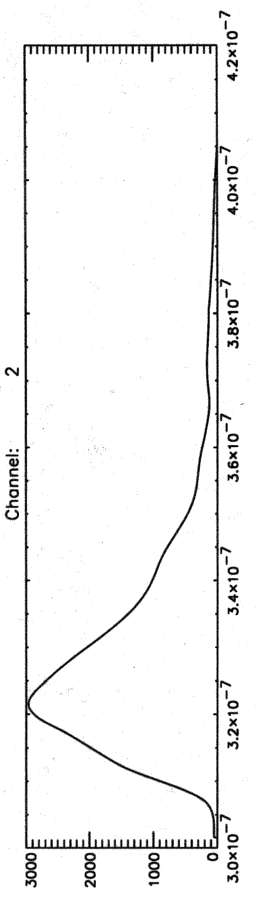
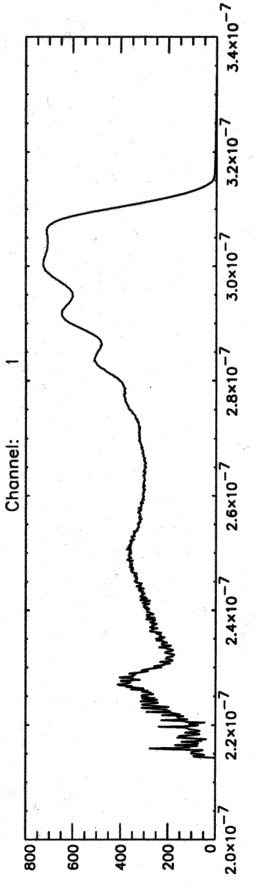
iread + mirror iread.



File: /disk1/scid/DATA-DIR/IR900-107M/6/50cm/scid\_05081998\_040430565.aseg.jl.dat\_1\_ang.cal:50cm\_irrad.f2.ps  
Date: Tue Aug 11 02:51:31 1998  
TMO-TPO

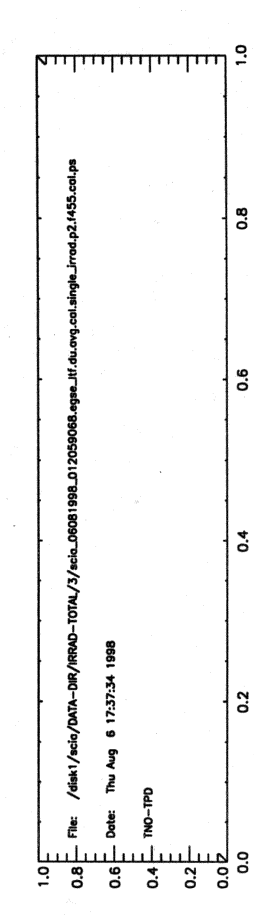
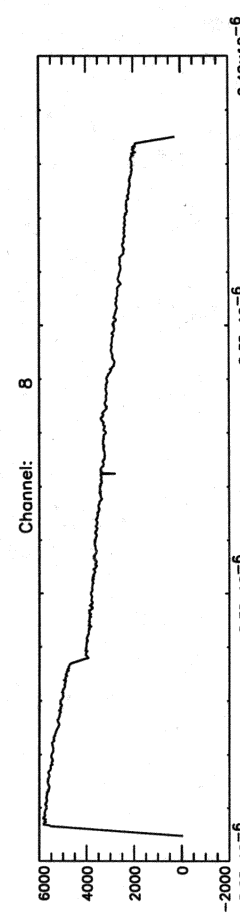
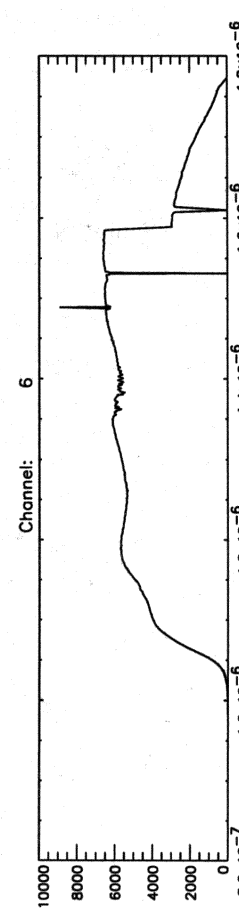
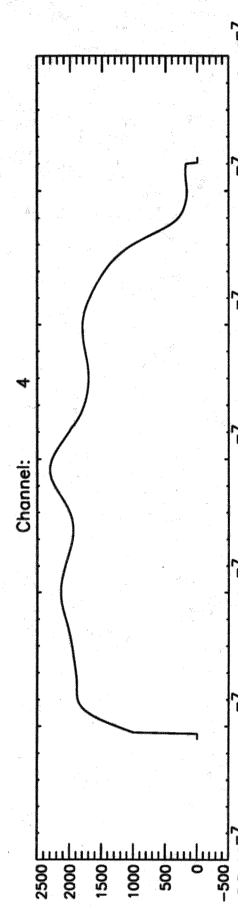
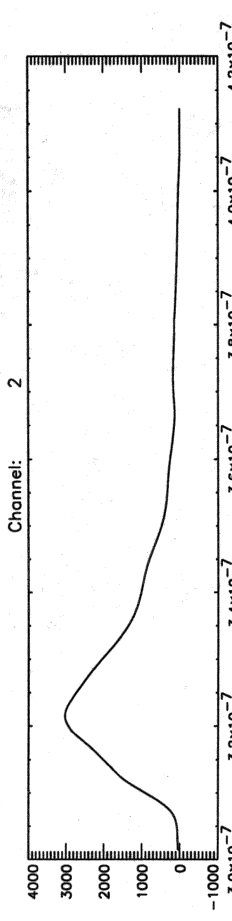
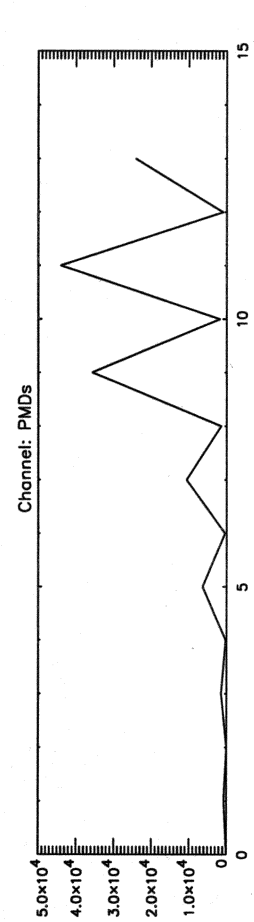
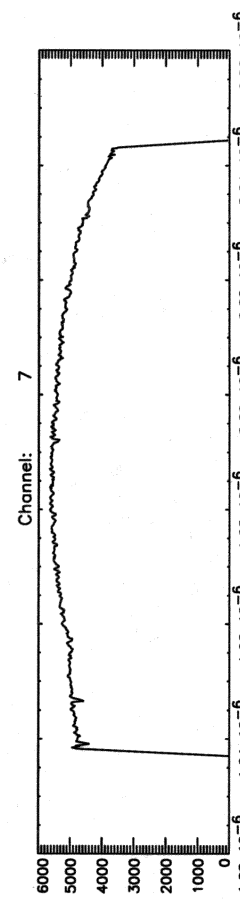
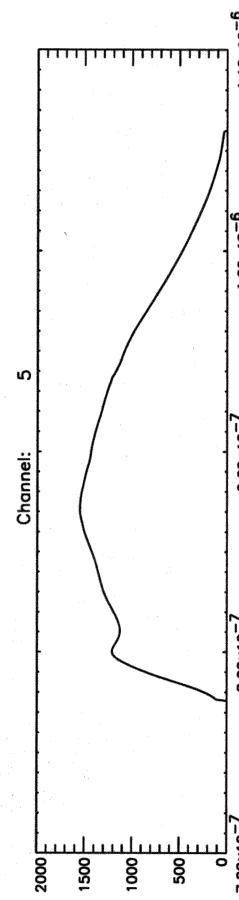
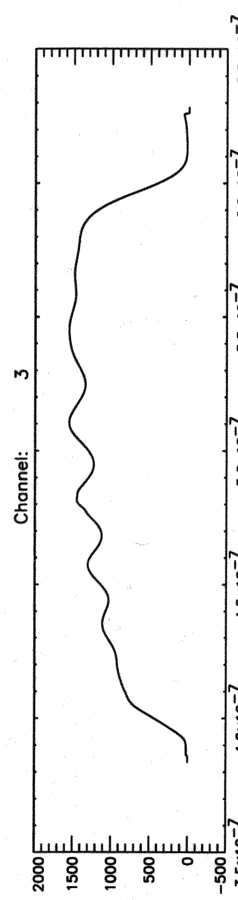
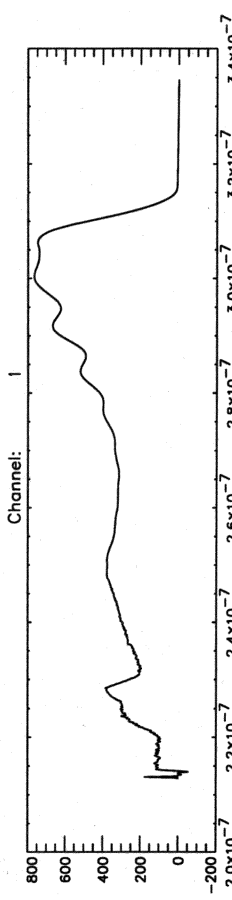
11/10/00/00/00

1 - 1000000



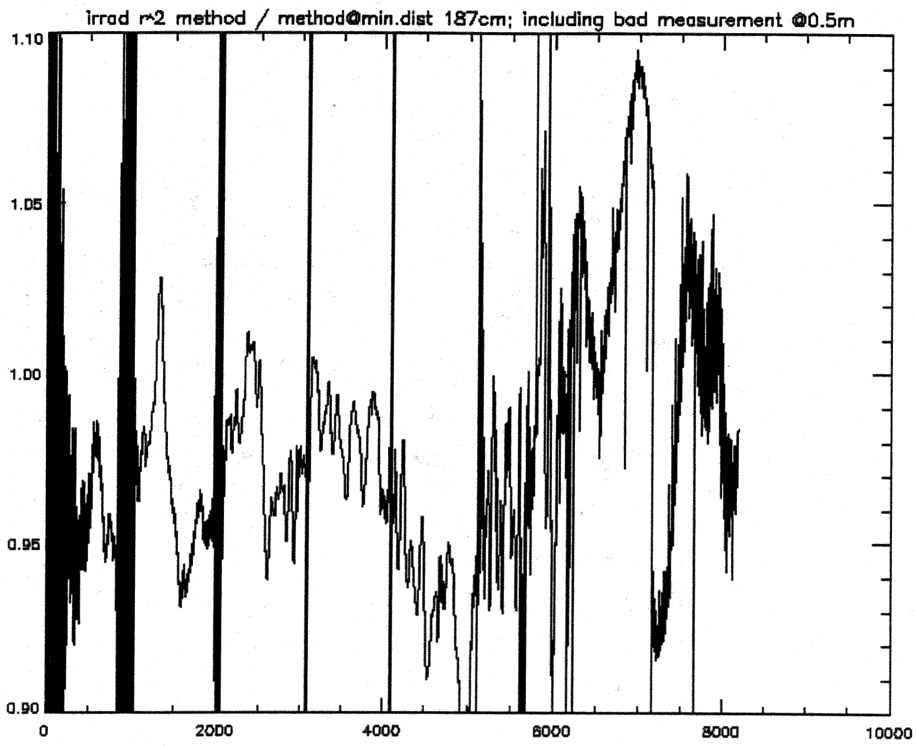
File: /disk1/acie/DATA-DIR/IRRAD-TOTAL/3/control-file-cm.f455.p2.ps  
 Date: Thu Aug 6 17:29:28 1998  
 TMO-TPD

irrodine abs.dilute methoJ



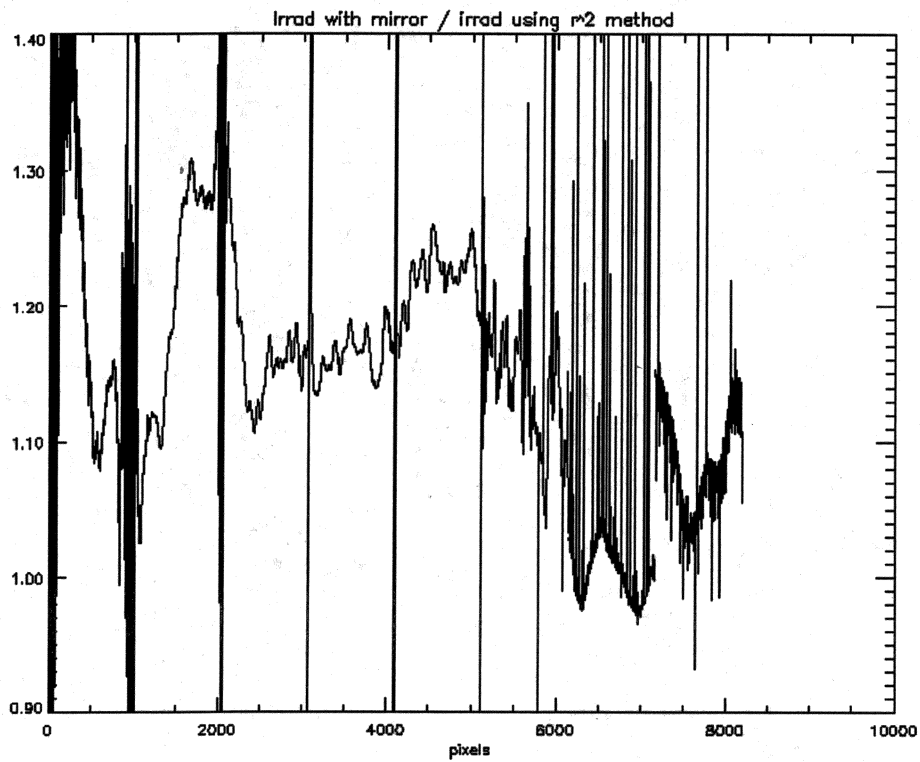
File: /disk1/scic/DATA-DR/IRRAD-TOTAL/3/scic\_06081988\_D12059068.egss\_jif.du.org.col.single\_irrad.p2.1455.col.ps  
Date: Thu Aug 6 17:37:34 1988  
TMO-TPD

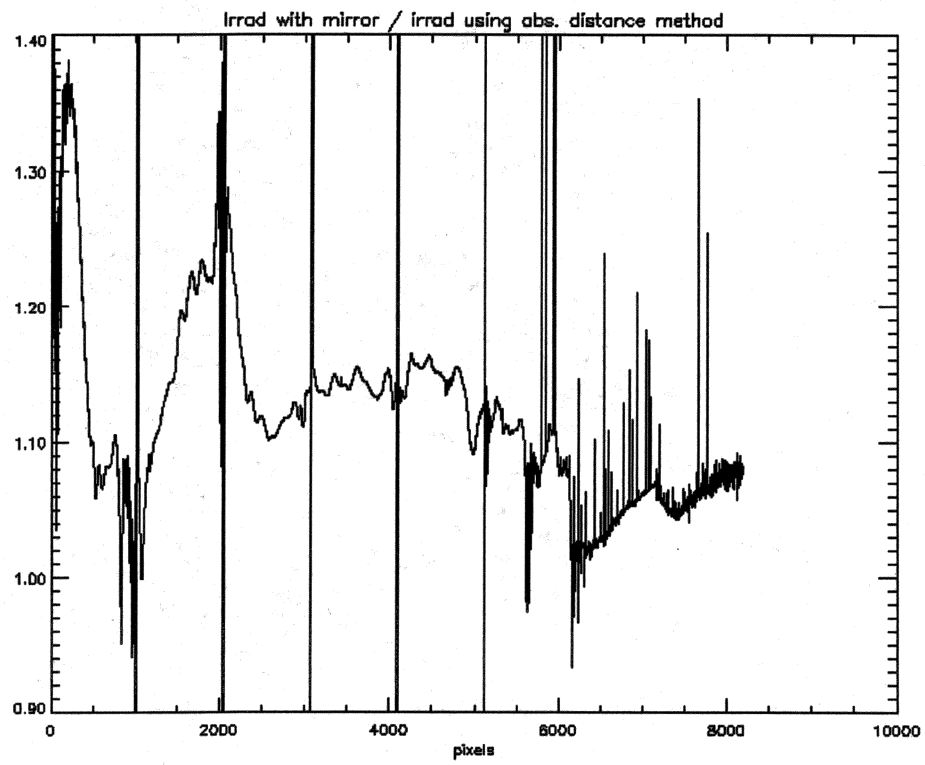


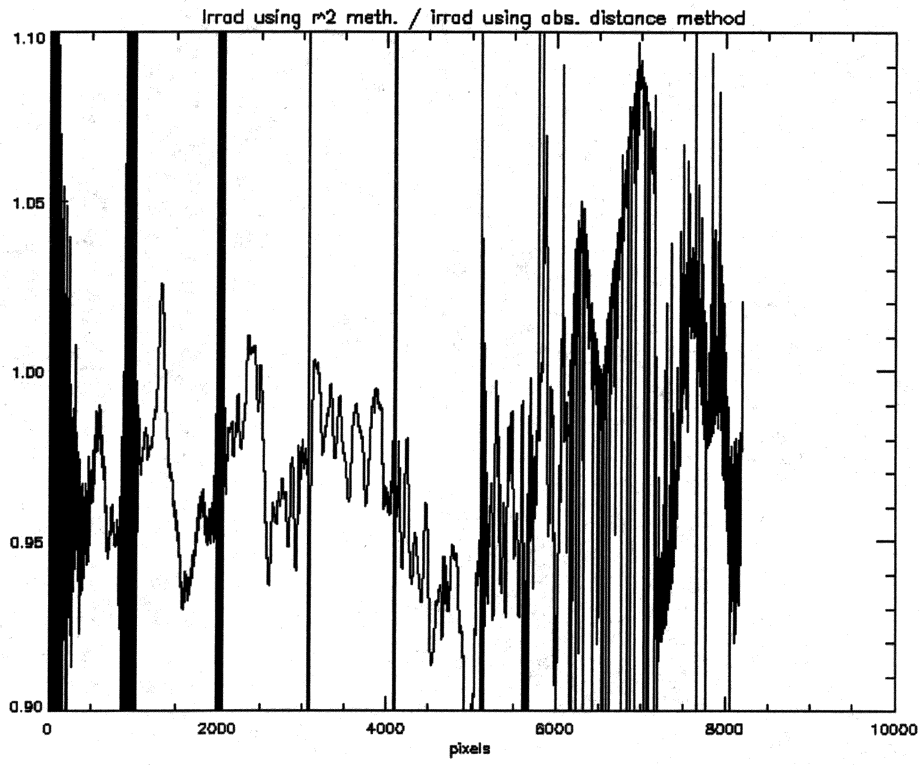


# LOG SHEET SCIAMACHY CALIBRATION

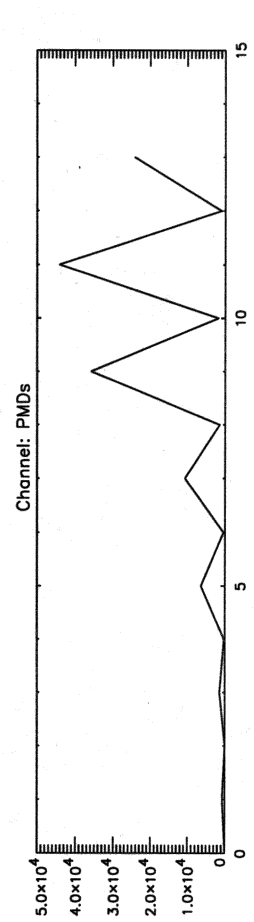
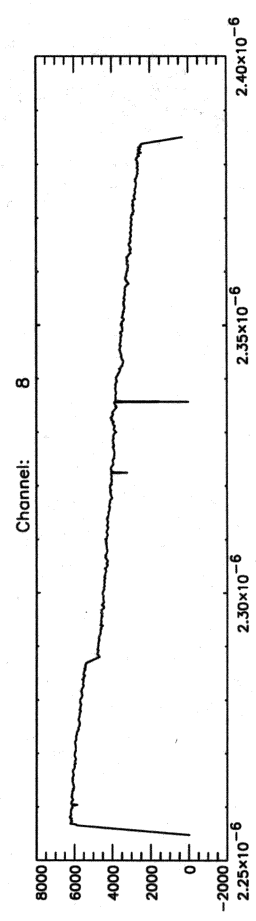
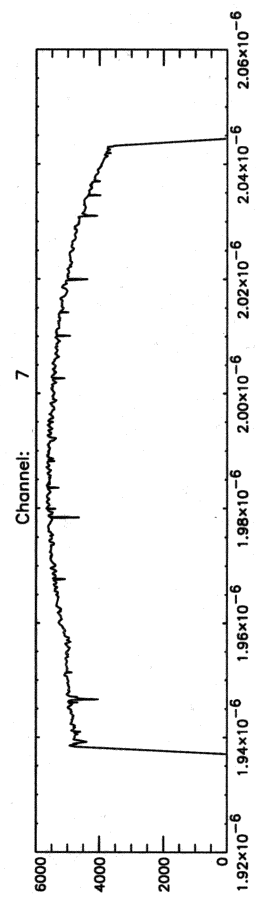
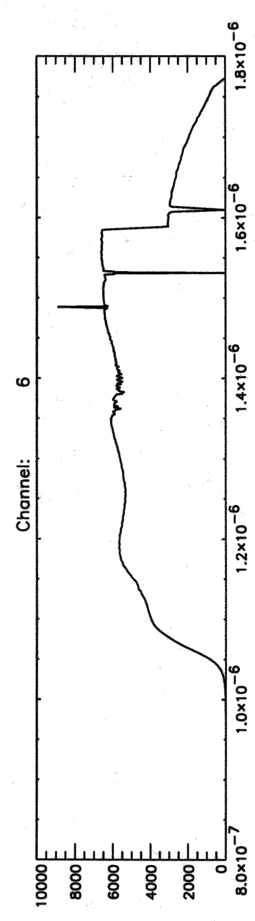
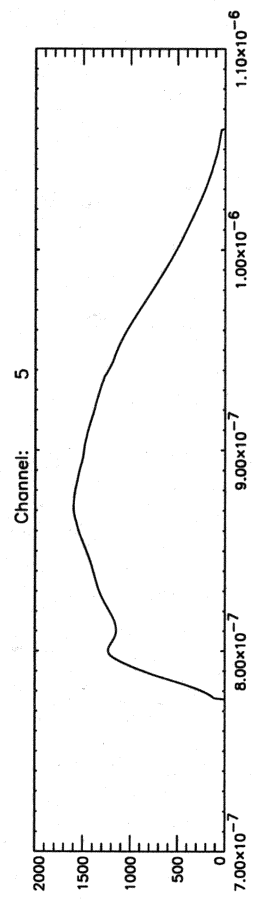
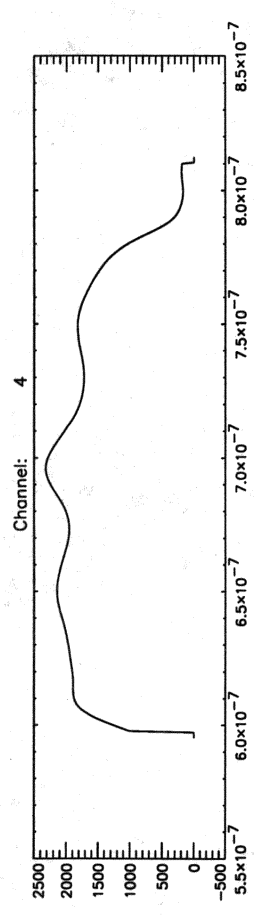
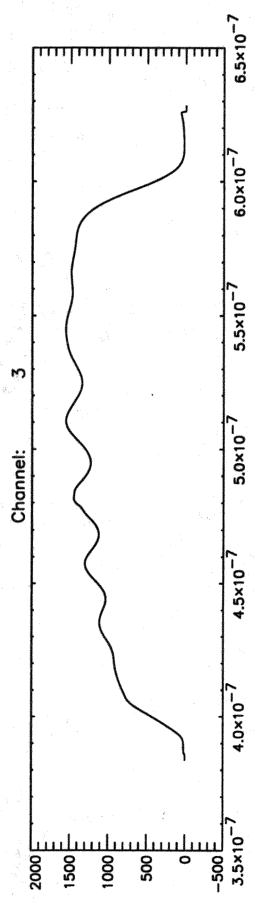
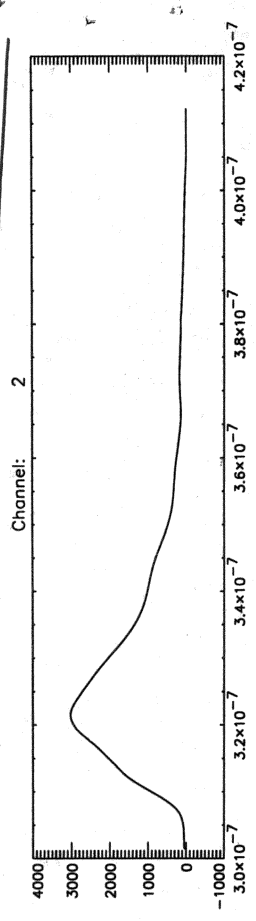
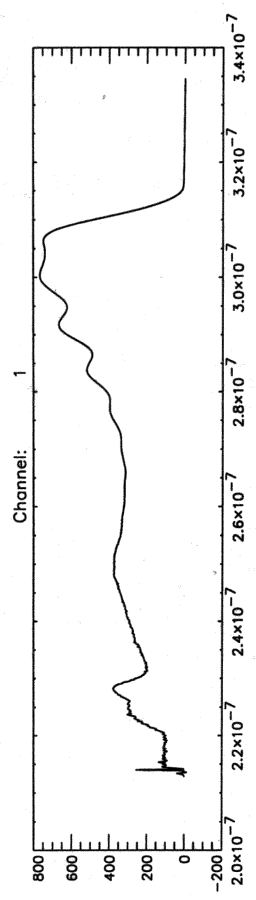
| date/time | description of action                                          | measurement filename |
|-----------|----------------------------------------------------------------|----------------------|
| 11-8-98   | Comparison 3 methods of comp High Tempatures                   | IRRAD-TOTAL-6        |
|           | ① r <sup>2</sup> method IRRAD-15/IRRAD-16/IRRAD-18             |                      |
|           | ② abs. diode IRRAD-16                                          |                      |
|           | <del>DR = 0.95 ± 0.05</del>                                    |                      |
|           | <u>Note</u> I have some to identify the mirror with the mirror |                      |
|           | ③ using mirror IRRAD-31                                        |                      |
|           | ③/① ≈ 1.0 ↔ 1.3                                                |                      |
|           | ③/② ≈ 1.0 ↔ 1.3                                                |                      |
|           | ①/② ≈ 1.0 ↔ 1.1                                                |                      |
|           |                                                                |                      |
|           |                                                                |                      |
|           |                                                                |                      |
|           |                                                                |                      |
|           |                                                                |                      |





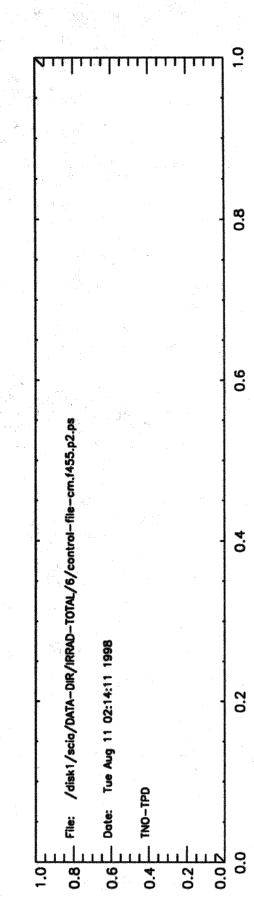
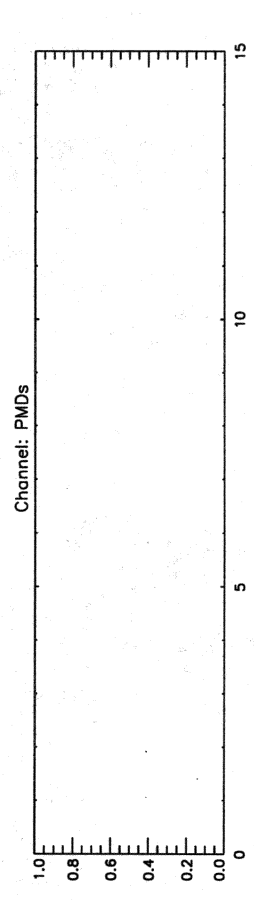
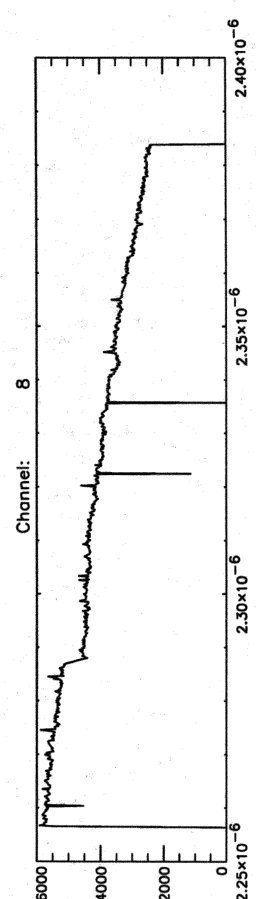
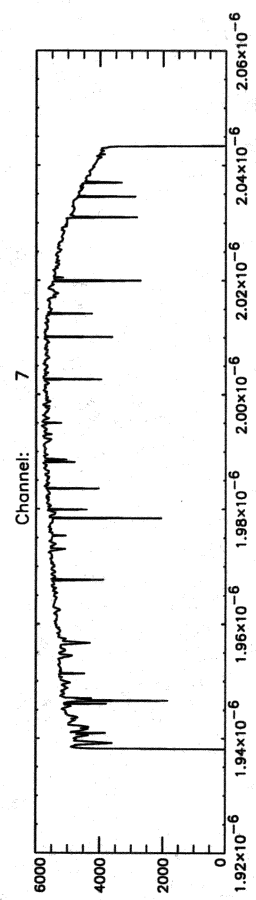
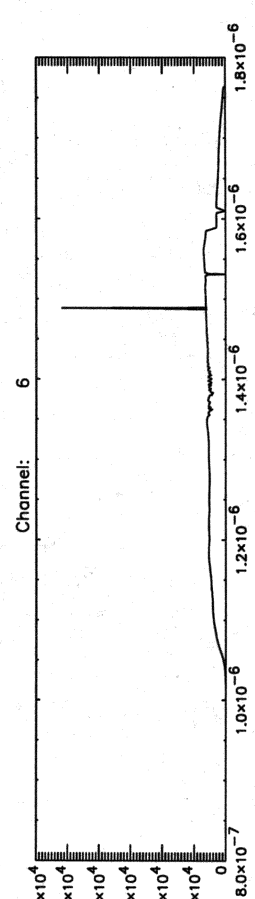
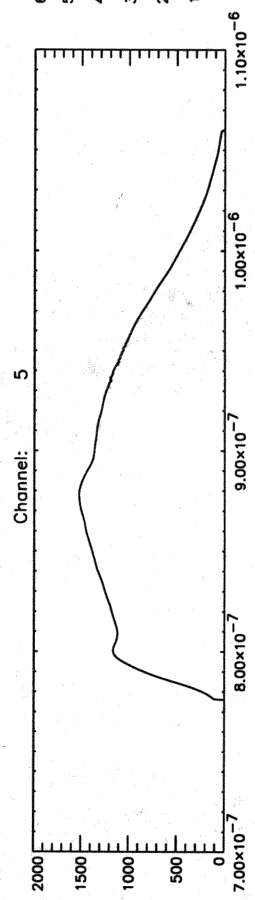
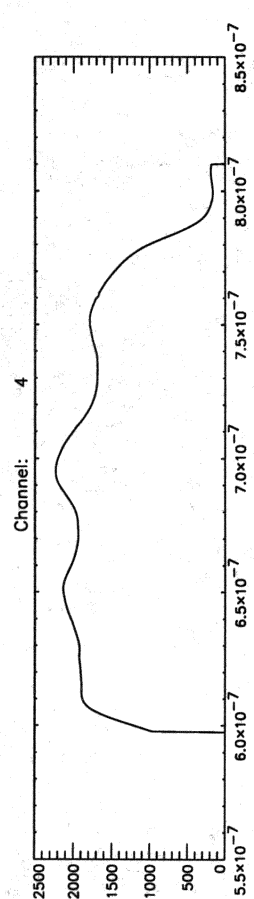
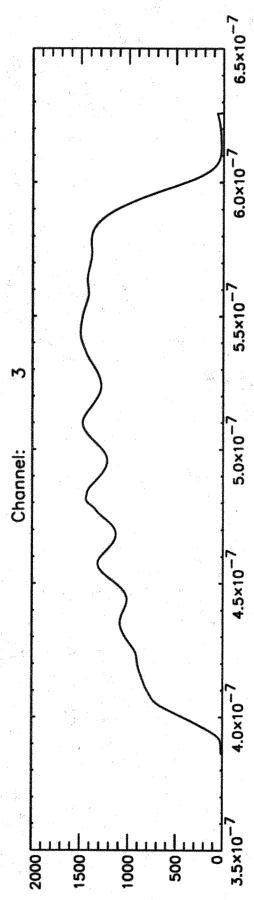
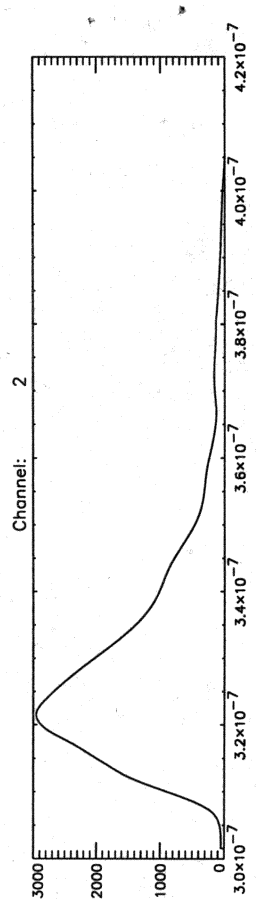
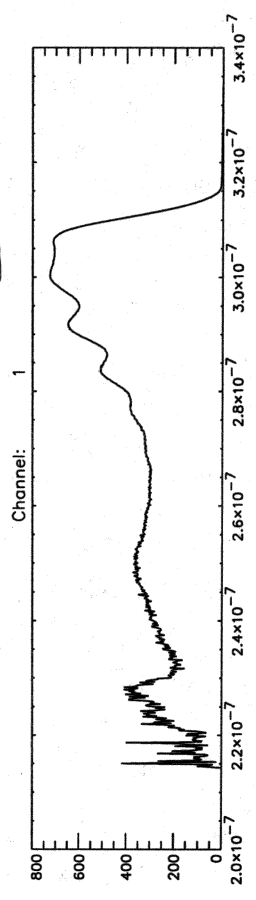


IRRAD E direct distance method using min. distance



File: /disk1/scis/DATA-DIR/IRRAD-TOTAL/S/scis\_06081998\_004359054.egs\_jif.du1.org.col.langle\_jrad.p2.1455.col.ps  
Date: Tue Aug 11 02:16:26 1998  
TMO-TPD

IRRAD:  $r^2$  method.



File: /disk1/secta/DATA-DIR/IRRAD-TOTAL/9/control-file-cm.f455.p2.pa  
Date: Tue Aug 11 02:14:11 1998  
TNO-TPD







11/8/98

enuisatropPic IICAOPT IEGSE IIDE1MOD

**Stimuli**

Config.  nm

Lambda  deg

PPC

Polar

Shutter

Acq.

S/S

IICAOPT

PMD  
Det.Temp -18.7 C  
ElecTemp -17.7 C

Sun Sens  
0 0  
0 0

Spectrom.

NDF  
OUT

NCW CLOSED

A B

WLS OFF

-0.0 mA

0

SLS OFF

-5.24 V

0.0 mA

Sun (Subsolar)

Nadir

Elevation Scanner  
ACTIVE  
594194 -45.000

Aperture Stop  
LARGE

Cover UNLOCKED

Azimuth Scanner  
ACTIVE  
273159 44.989

Cover UNLOCKED

Limb Sun/Moon

Cover UNLOCKED

ATC ACTIVE

Nadir -16.2 C

Limb -17.9 C

RAD-A -16.0 C

| Channel     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bias Volt.  | 2.50   | 2.50   | 2.50   | 2.50   | 2.50   | -0.03  | -0.05  | -0.03  |
| Test input  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   |
| 5V Supply   | 1.73   | 1.71   | 1.71   | 1.72   | 1.72   | 1.71   | 1.72   | 1.71   |
| 15V Supply  | 3.19   | 3.18   | 3.19   | 3.18   | 3.17   | 3.18   | 3.19   | 3.17   |
| Shield temp | 235.18 | 235.44 | 241.34 | 241.40 | 240.50 | 231.77 | 211.15 | 211.70 |
| Block temp  | 206.48 | 205.95 | 223.83 | 222.41 | 220.97 | 201.84 | 149.77 | 146.41 |
| DME temp    | 259.14 | 259.99 | 259.43 | 259.17 | 259.32 | 259.80 | 259.25 | 259.94 |

Moni.  Anom

TRUE 0

Exp. Mode HEATER

TLM Mode COMPLETE

ChkState STATE

Format RTF 156

OBT 0X014a1715

STOP

envistropic IICAOPT IEGSE IIDETMOD

WLS OFF

SLS OFF

NCW CLOSED

IICAOPT

PMD

Det.Tmp -18.7 C

ElecTemp -17.7 C

**Sun (Subsolar)**

Stimuli

Config. -1 nm

Lambda - deg

PPC -

Polar -

Shutter -

Acq. -

S/S -

**Sun Sens**

|   |   |
|---|---|
| 0 | 0 |
| 0 | 0 |

**Elevation Scanner**

ACTIVE

594194 -45.000

Aperture Stop LARGE

**Telescope**

NDF OUT

**Spectrom.**

**Azimuth Scanner**

ACTIVE

273159 44.999

Cover UNLOCKED

**Limb Sun/Moon**

Cover UNLOCKED

**ATC**

ACTIVE

Nadir -18.2 C

Limb -17.9 C

RAD-A -16.0 C

**Channel 1**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.73   |
| 15V Supply  | 3.19   |
| Shield temp | 235.18 |
| Block temp  | 206.48 |
| DME temp    | 259.15 |

**Moni.**

TRUE

**Channel 2**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.18   |
| Shield temp | 235.44 |
| Block temp  | 205.95 |
| DME temp    | 259.00 |

**Moni.**

TRUE

**Channel 3**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.19   |
| Shield temp | 241.33 |
| Block temp  | 223.82 |
| DME temp    | 259.45 |

**Moni.**

TRUE

**Channel 4**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.18   |
| Shield temp | 241.41 |
| Block temp  | 222.38 |
| DME temp    | 259.18 |

**Moni.**

TRUE

**Channel 5**

|             |        |
|-------------|--------|
| Bias Volt.  | 2.50   |
| Test input  | 0.00   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.17   |
| Shield temp | 240.50 |
| Block temp  | 220.98 |
| DME temp    | 259.32 |

**Moni.**

TRUE

**Channel 6**

|             |        |
|-------------|--------|
| Bias Volt.  | -0.03  |
| Test input  | 0.01   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.18   |
| Shield temp | 231.76 |
| Block temp  | 201.87 |
| DME temp    | 259.81 |

**Moni.**

TRUE

**Channel 7**

|             |        |
|-------------|--------|
| Bias Volt.  | -0.05  |
| Test input  | 0.01   |
| 5V Supply   | 1.72   |
| 15V Supply  | 3.19   |
| Shield temp | 211.15 |
| Block temp  | 149.76 |
| DME temp    | 259.26 |

**Moni.**

TRUE

**Channel 8**

|             |        |
|-------------|--------|
| Bias Volt.  | -0.03  |
| Test input  | 0.01   |
| 5V Supply   | 1.71   |
| 15V Supply  | 3.17   |
| Shield temp | 211.74 |
| Block temp  | 146.42 |
| DME temp    | 259.94 |

**Moni.**

TRUE

**Format**

RTF 194

**ChkState**

STATE

**OBT**

0x015c7718

**TLM Mode**

COMPLETE

**Exp. Mode**

HEATER

**Conf**

5

**Ancil.**

STOP

**RbiStart**

A, NOM

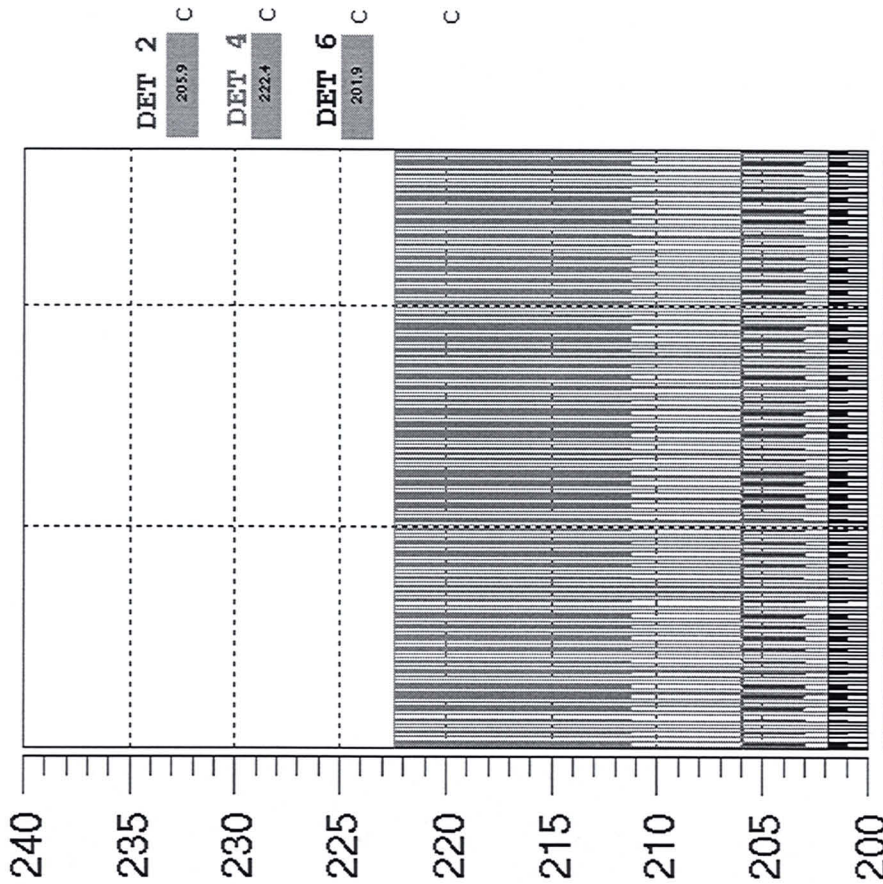
**Anom**

0

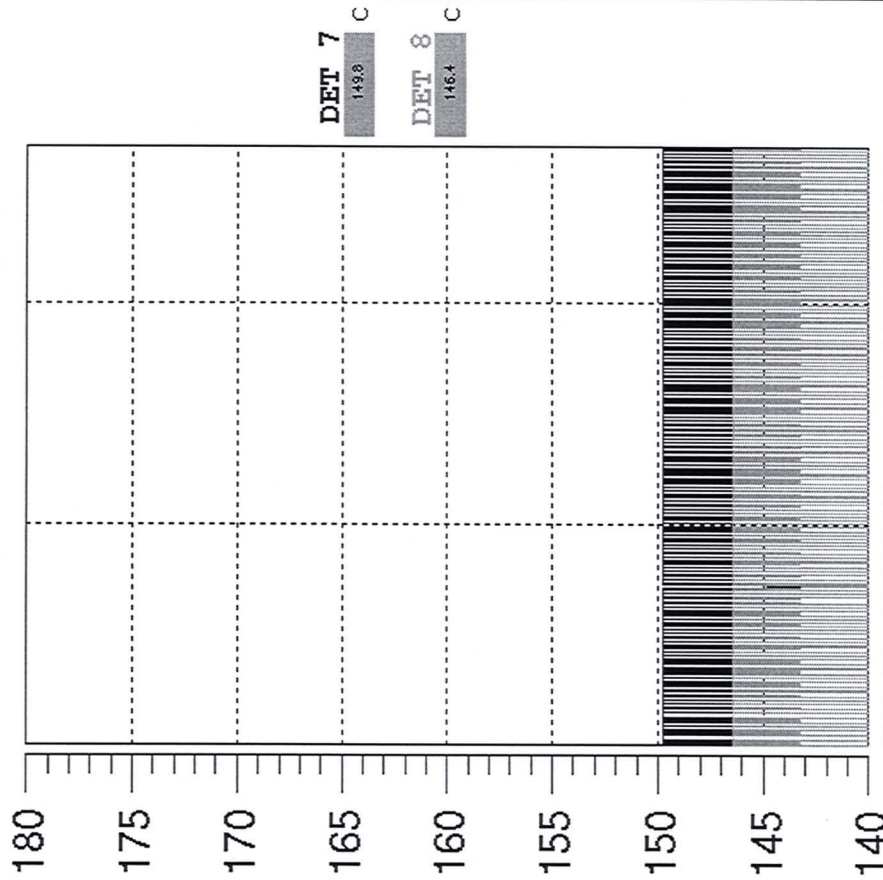
envisafropic IICAOPT IIEGSE IIDETMOD

picture title

### Detector 2,4,6 Temp



### Detector 7-8 Temp



IIGDETTMP



11/8/98.

③

Pagenumber:

# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                                                                      | measurement filename |
|-----------|------------------------------------------------------------------------------------------------------------|----------------------|
|           | Phase shift as determined by EXCEL are in very good agreement with graphically found phase shifts (-85.6°) |                      |
|           | So: when Brewster is oriented at +85.38° →<br>Signal after TPO-GT was minimum.                             |                      |
|           | Corrected for ① scia's position in TVC,                                                                    |                      |
|           | ② misalignment alignment cube wrt. OSM                                                                     |                      |
|           | ③ Fact that perfect vertical was not 11.44° as set during measurements but 11.469° →                       |                      |
|           |                                                                                                            |                      |
|           |                                                                                                            |                      |

②

11/8/98

Pagenumber:

# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                                      | measurement filename |
|-----------|----------------------------------------------------------------------------|----------------------|
|           | Previous Fitted data is not correct.                                       |                      |
|           | We newly fitted the data                                                   |                      |
|           | There are 4 files: - white light (240 - 1100 nm)                           |                      |
|           | - 400 nm                                                                   |                      |
|           | - 900 nm                                                                   |                      |
|           | - IR (1000 - 1700 nm)                                                      |                      |
|           | Used fit function:                                                         |                      |
|           | $a_0 + a_1 \cdot \sin^2(a_2 \cdot (x + a_3))$                              |                      |
|           | $a_0 = \text{offset}$                                                      |                      |
|           | $a_1 = \text{amplitude}$                                                   |                      |
|           | $a_2 = \text{period correction (Bramley has 345.8 period instead of 360)}$ |                      |
|           | $a_3 = \text{phase shift.}$                                                |                      |
|           | Found phase shift                                                          |                      |
|           | White light                                                                | phase shift          |
|           | 400 nm                                                                     | -85.46               |
|           | 900 nm                                                                     | -85.37               |
|           | IR                                                                         | -85.640              |
|           |                                                                            | -85.30               |
|           | average: phase shift = <u>-85.38°</u>                                      |                      |
|           |                                                                            | -85.38°              |

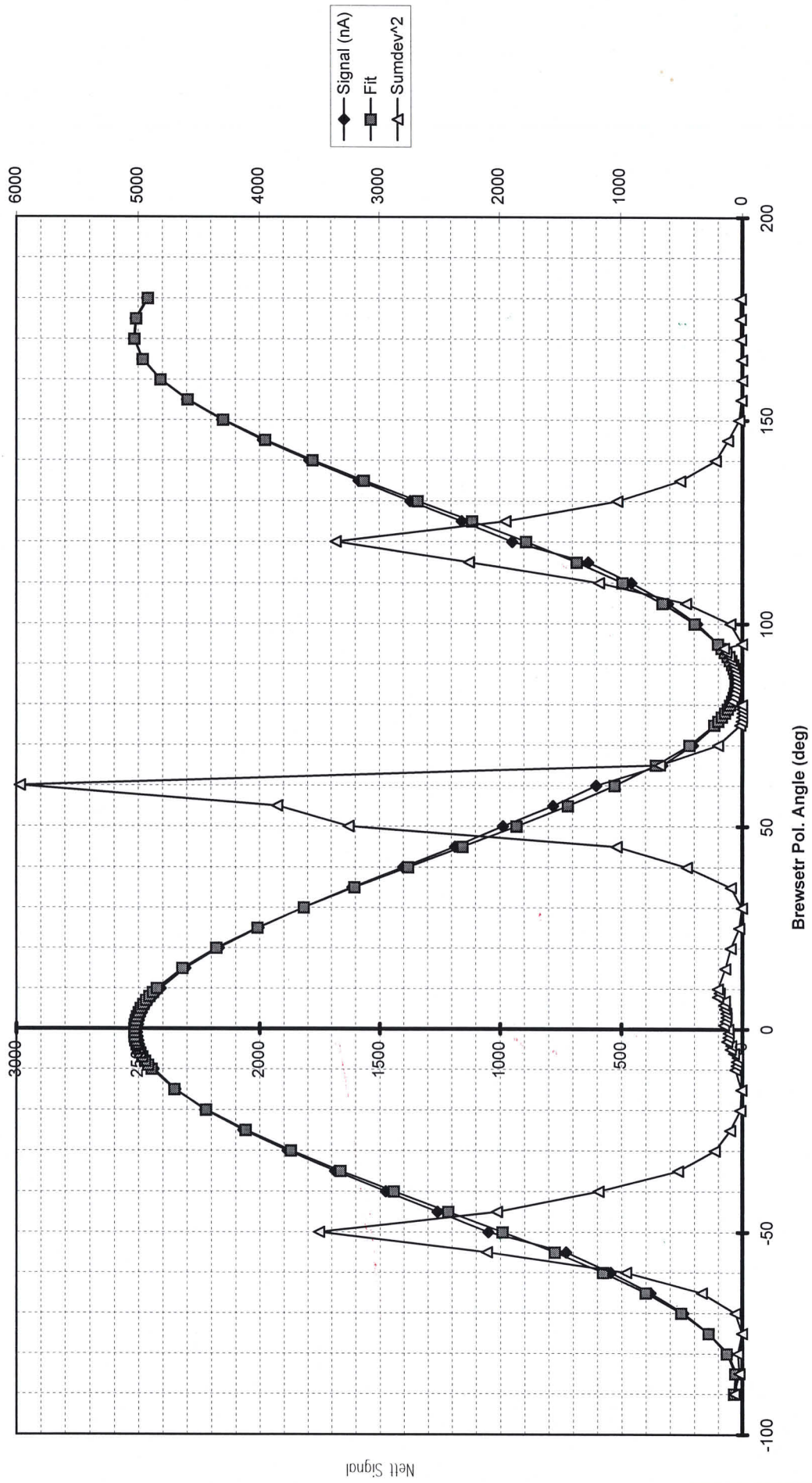


| <b>POLARISATION<br/>DIRECTIONS FOR NADIR<br/>(11/8/98)</b> | <b>SET BREWSTER STIMULI AT:</b> |
|------------------------------------------------------------|---------------------------------|
| <b>P</b>                                                   | <b>+ 85.36</b>                  |
| <b>S</b>                                                   | <b>+ 171.57</b>                 |
| <b>+45 DEG</b>                                             | <b>+ 128.46</b>                 |
| <b>-45 DEG</b>                                             | <b>+ 42.26</b>                  |

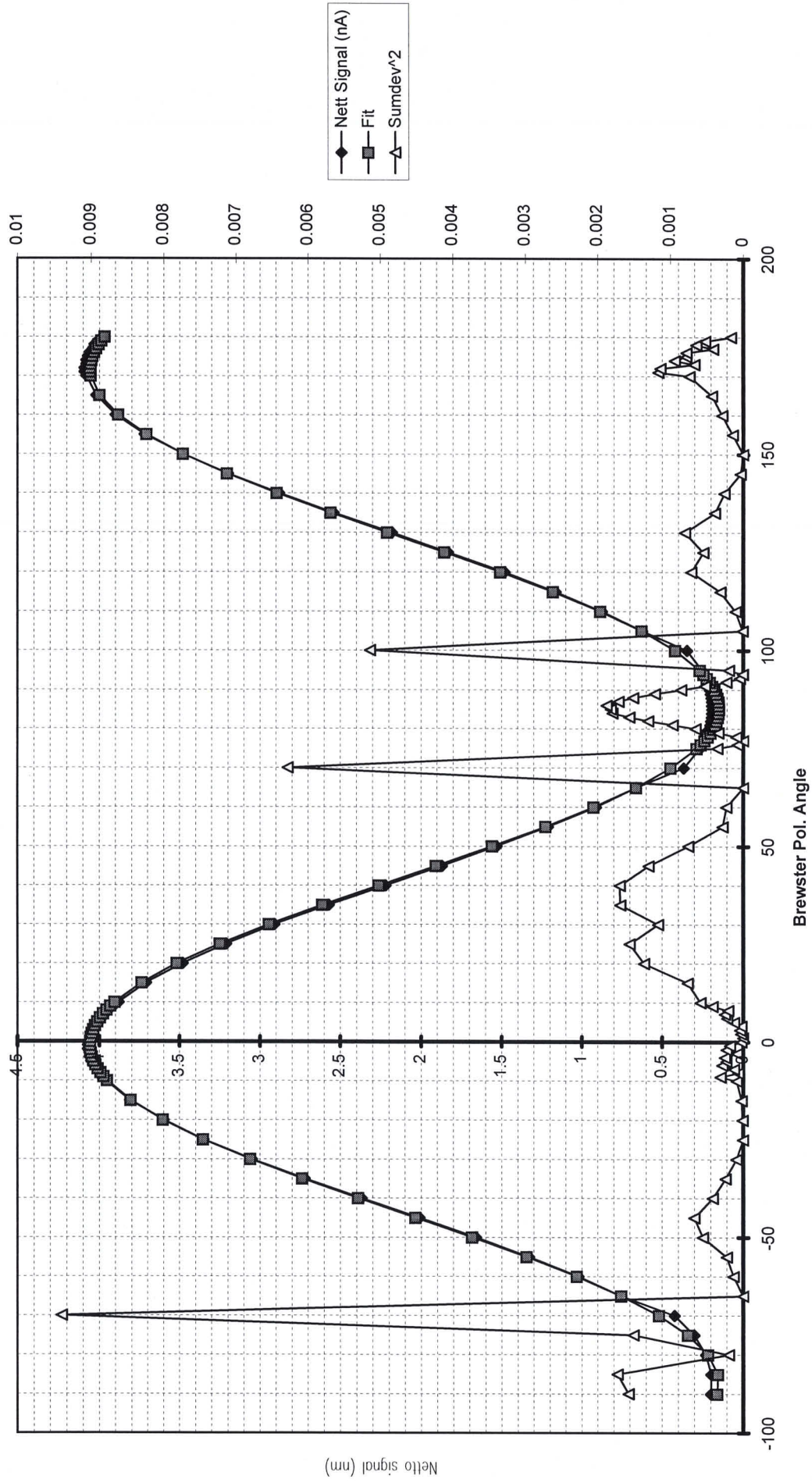


sinfit Chart 2

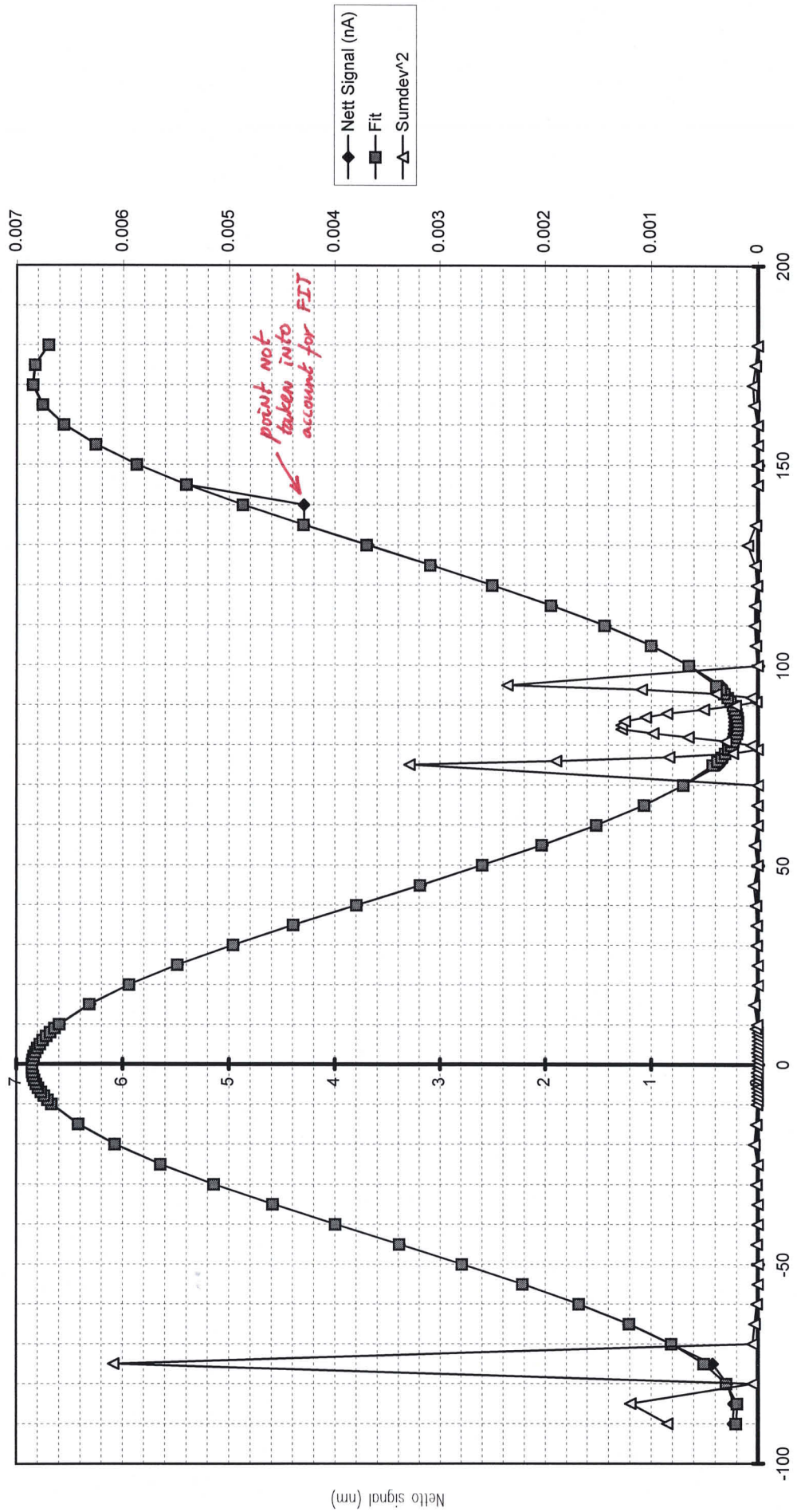
WLS



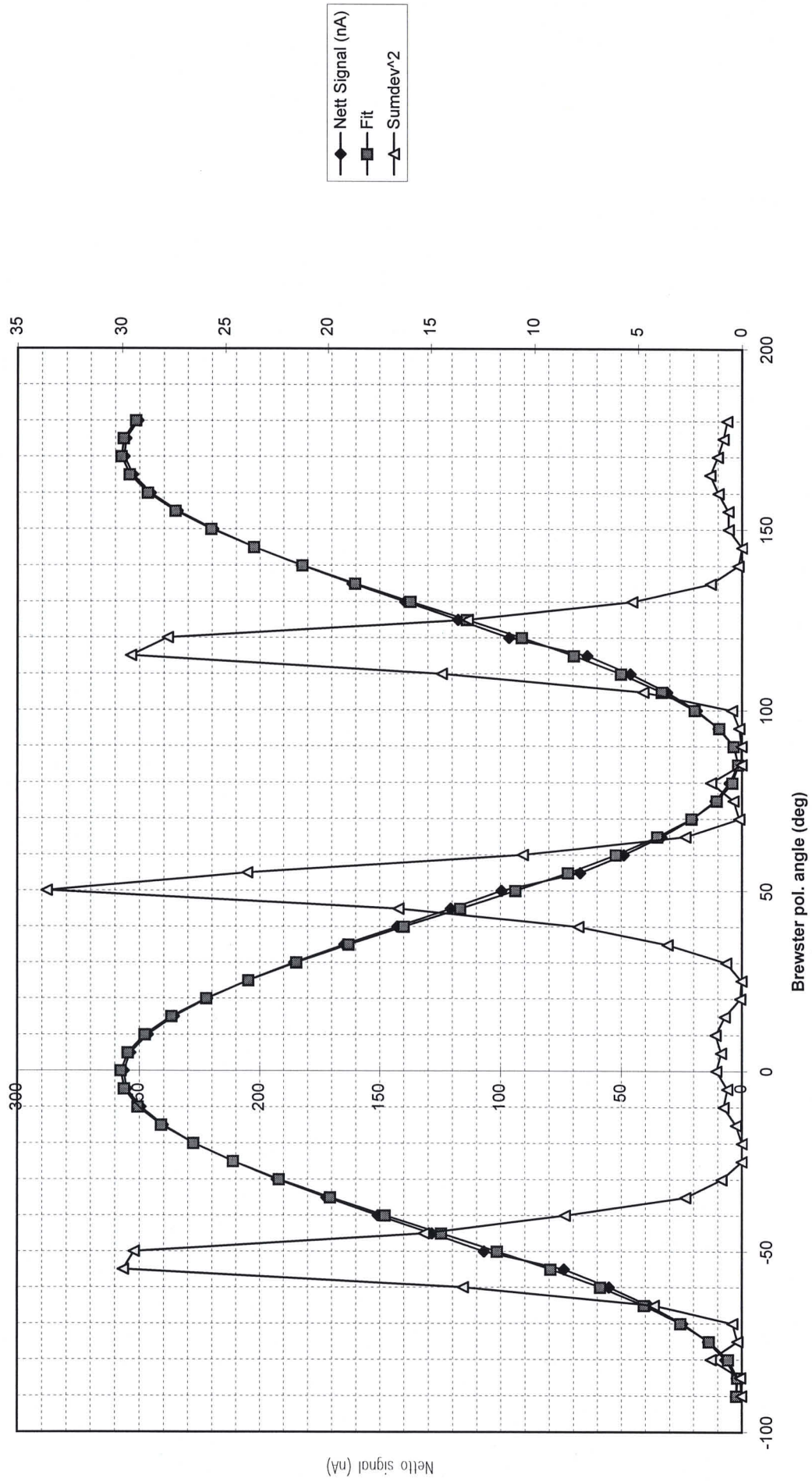
400 nm



900 nm



IR data





Result

| Polarisation Data |          |          |          |          |          |
|-------------------|----------|----------|----------|----------|----------|
|                   | WLS      | IR       | 400 nm   | 900 nm   | Average  |
| Offset            | 25.90366 | 1.517546 | 0.149179 | 0.18592  |          |
| Amplitude         | 2490.807 | 256.0715 | 3.907256 | 6.665016 |          |
| Period correction | 1.044744 | 1.04455  | 1.043027 | 1.043633 | 1.043988 |
| Phase shift       | -85.4594 | -85.2961 | -85.3728 | -85.4029 | -85.3828 |
|                   | 41983.7  | 319.5282 | 0.071955 | 0.027567 |          |

period Brewster =  $\frac{260}{1.043988} = \underline{344.83^\circ}$



11/8/98

Pagenumber:

# LOG SHEET SCIAMACHY CALIBRATION

| date/time | description of action                                              | measurement filename |
|-----------|--------------------------------------------------------------------|----------------------|
| 11/8/90   | M te Plate, PJ Nyssen, Lou vld Spek.                               |                      |
|           | Proceeding with polarization direction commissioning.              |                      |
|           | Previous beams did white light, 400nm & 900 nm. (All Si)           |                      |
|           | We performed a measurement with the Twgats detector                |                      |
|           | (1000 nm - 1700 nm) and QTH Camp.                                  |                      |
|           | Data was processed and fitted with $\sin^2$ function               |                      |
|           | results: period: deg                                               |                      |
|           | phase: deg                                                         |                      |
|           | Fits <u>lijken</u> niet te kloppen:                                |                      |
|           | Grafisch gevonden minima lijken niet te kloppen met de             |                      |
|           | minima berekend uit de fit parameters (scheelt $\approx 3^\circ$ ) |                      |





# Formal Run of Measurement

(Measurement ID) **WLS\_EXT**

Request for Actual Status

Request for Modification

Request for Run

|                                     |
|-------------------------------------|
| <input type="checkbox"/>            |
| <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> |

(cross out entries that are not requested.) § 9.1  
 (fill in only entries to be modified)  
 (no entries = run based on actual default settings)

## Scanner Positions

Azimuth **+45.00** deg  
 Elevation **-45.00** deg

## Timeline for each Data Acquisition Period during Measurement

|             |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|----|
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| State ID    | 5 |   |   |   |   |   |   |   |   |    |
| Repetitions | 5 |   |   |   |   |   |   |   |   |    |

## State Parameters for States used in Timeline (State ID must be given)

| Channel  | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding |
|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| 1a       | 64            | 1         |               |           |               |           |               |           |
| 1b       | 64            | 1         |               |           |               |           |               |           |
| 2b       | 8             | 8         |               |           |               |           |               |           |
| 2a       | 8             | 8         |               |           |               |           |               |           |
| 3        | 0.125         | 32        |               |           |               |           |               |           |
| 4        | 0.0625        | 64        |               |           |               |           |               |           |
| 5        | 0.0325        | 64        |               |           |               |           |               |           |
| 6        | H5            | 64        |               |           |               |           |               |           |
| 7        | H6            | 64        |               |           |               |           |               |           |
| 8        | H7            | 64        |               |           |               |           |               |           |
| State ID |               |           |               |           |               |           |               |           |

~~Failed!~~  
~~Crash!~~

wrong PET in

## Stimuli Settings for Existing Blocks in Measurement

system  
other  
than  
commanded

| Block No | Stimuli Setup ID | APPC [deg] | Polarizer [deg] | Shutter open/close | Acquisition Time [s] | Lambda [nm] |      |      | Repetition Factor | Message | OS Setup Time [s] |
|----------|------------------|------------|-----------------|--------------------|----------------------|-------------|------|------|-------------------|---------|-------------------|
|          |                  |            |                 |                    |                      | Start       | Stop | Step |                   |         |                   |
| 1        | 2                | 15         | 171.6           | open               | 1                    | 240         | 240  | 0    | 1                 | WS1     | 12                |
| 2        | 2                | 15         | 85.4            | open               | 1                    | 240         | 240  | 0    | 1                 | WP1     | 20                |
| 3        | 2                | 15         | 85.4            | close              | 1                    | 240         | 240  | 0    | 1                 | DV1     | 8                 |

## Measurement Data Description

## Signatures

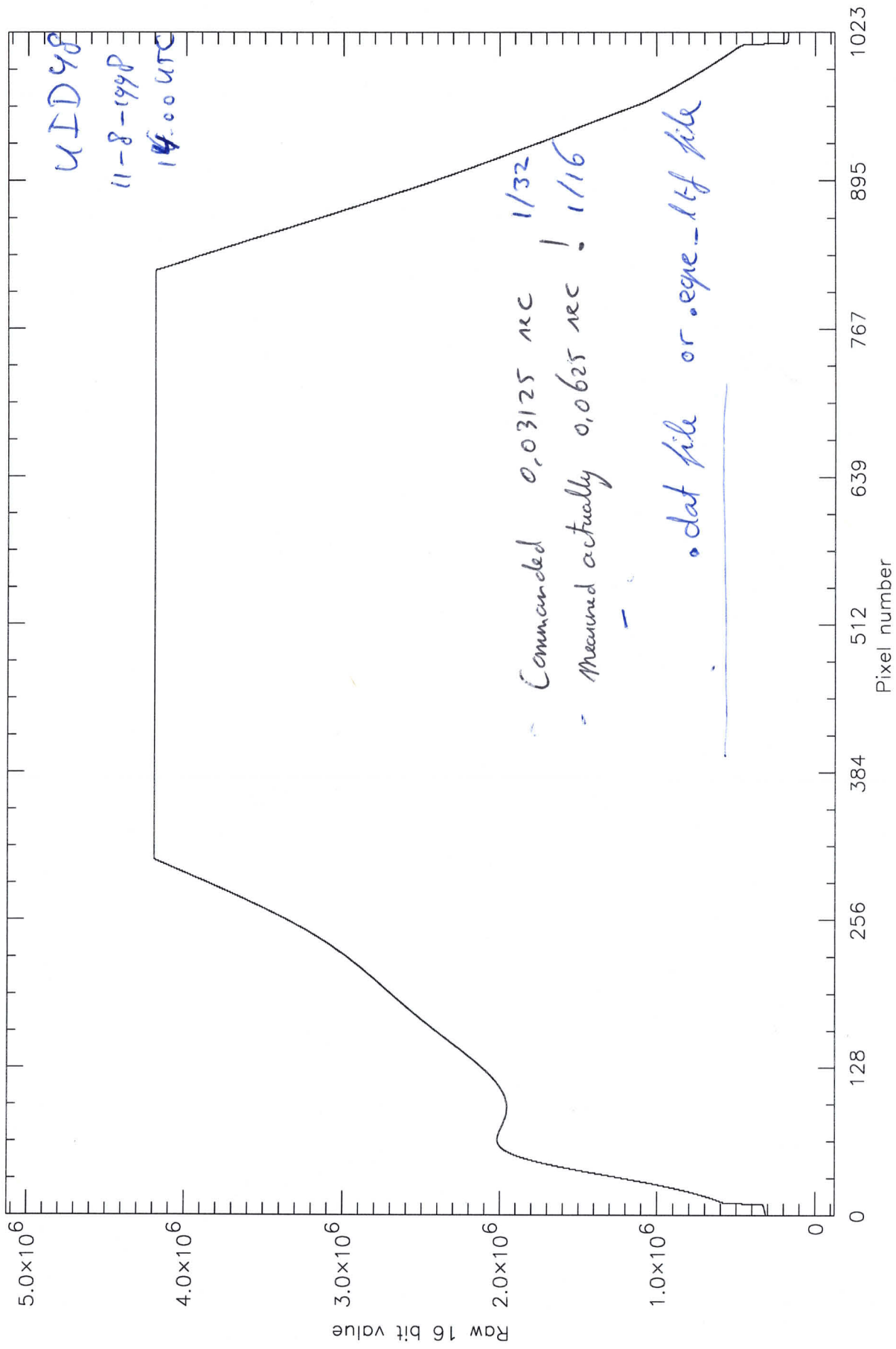
Test Purpose **UTD 48**  
 Remark  
 Data Directory **0223\_13.48.01**

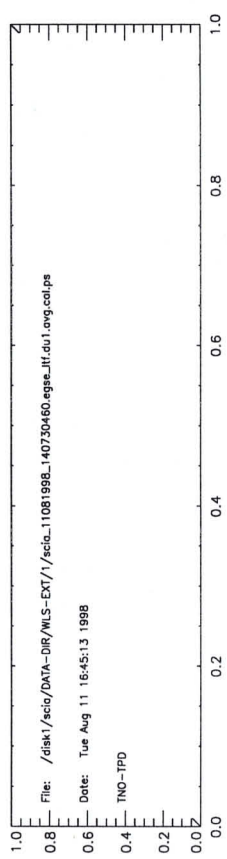
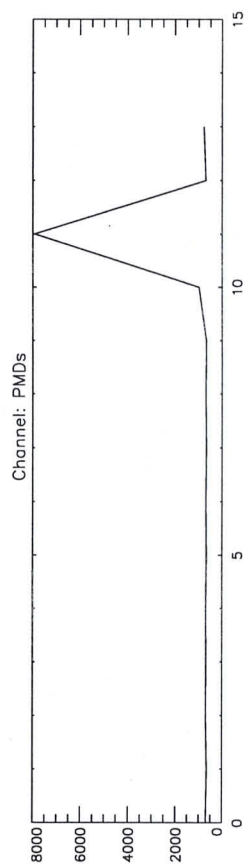
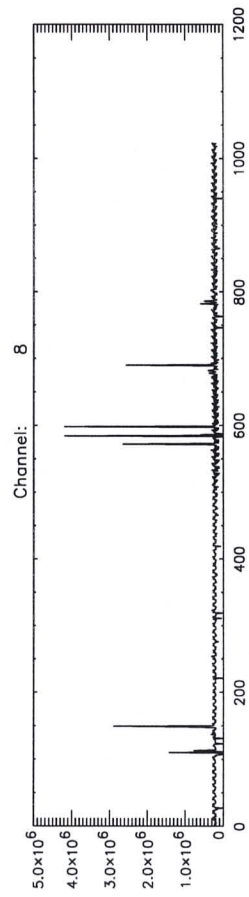
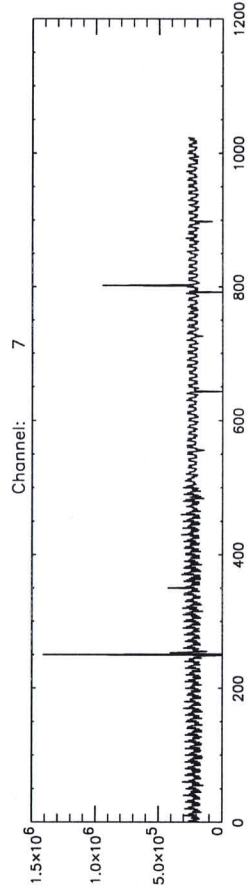
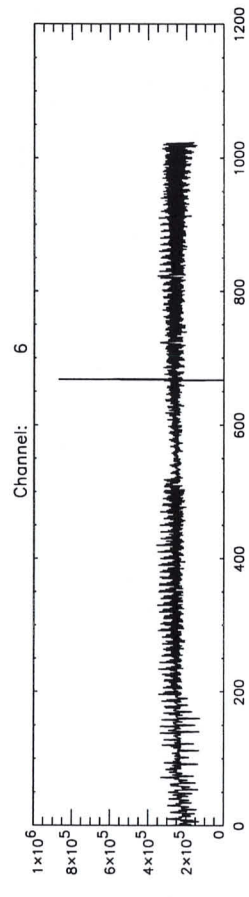
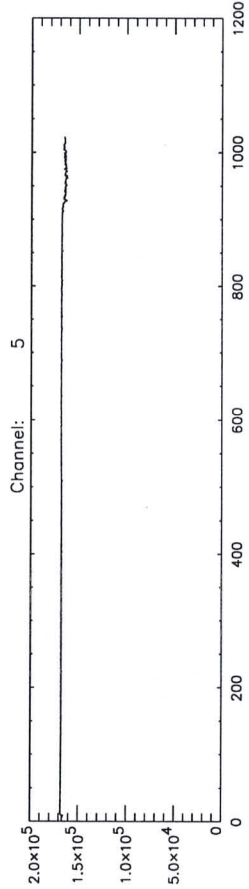
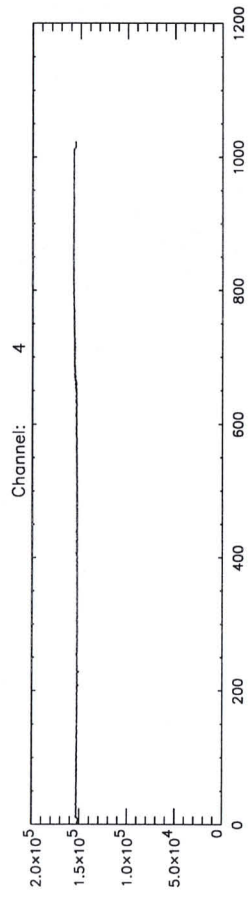
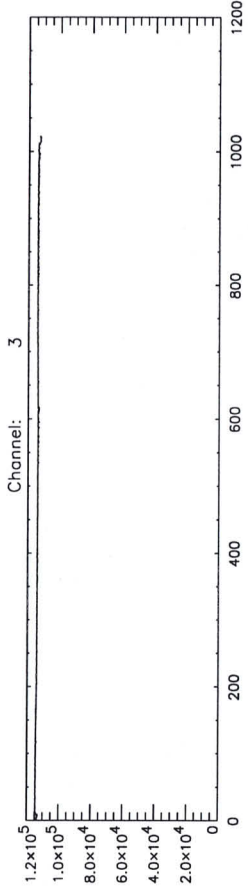
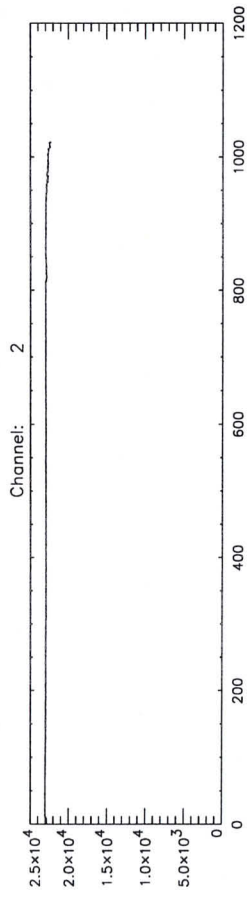
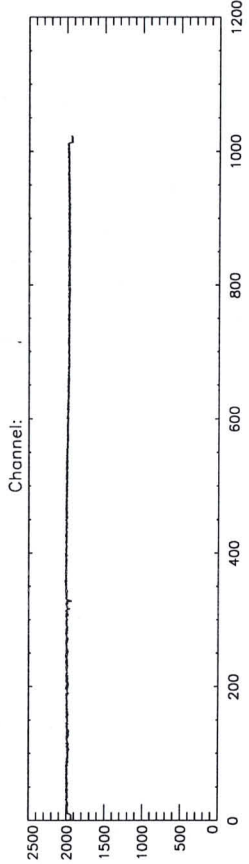
| Date    | Signature     |
|---------|---------------|
| 11-8-98 | X             |
| 11-8-98 | Ben J. Cas... |

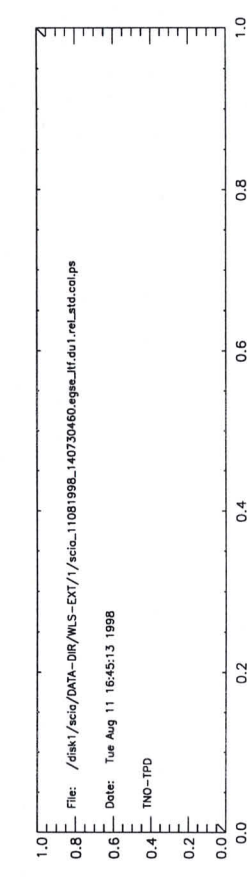
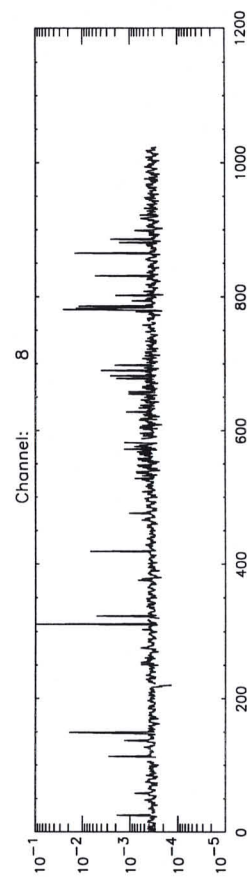
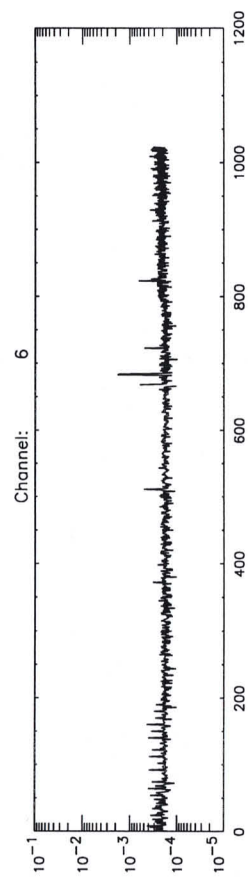
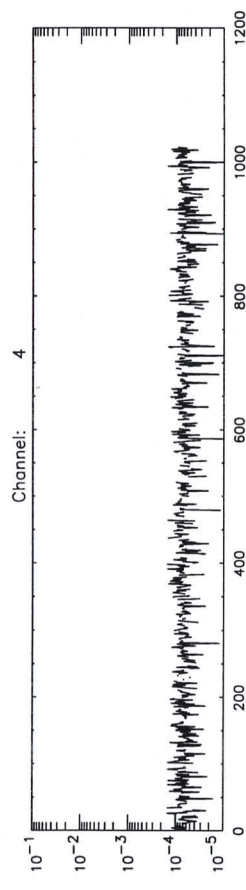
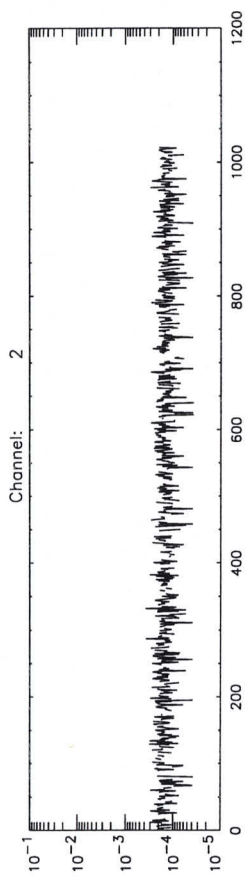
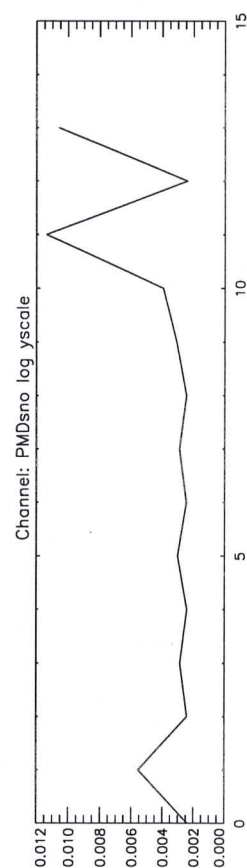
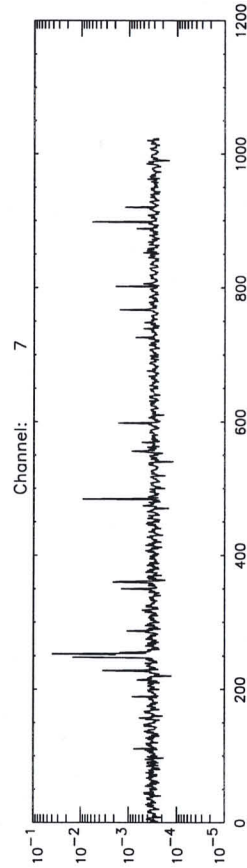
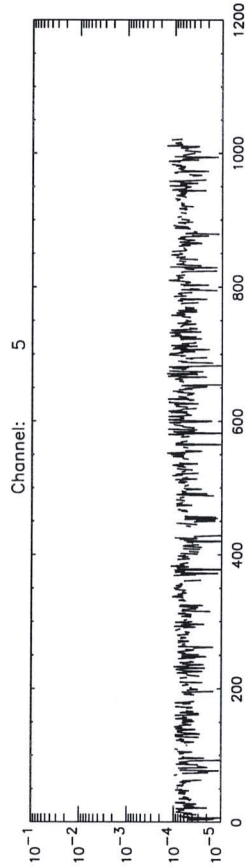
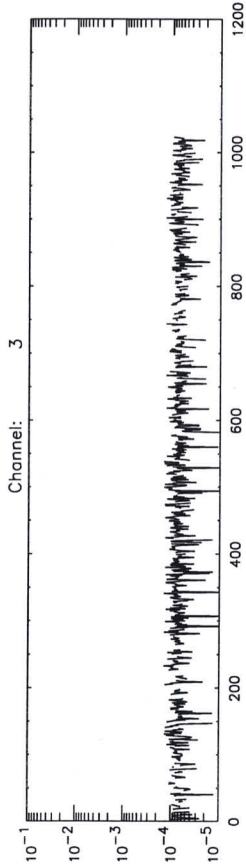
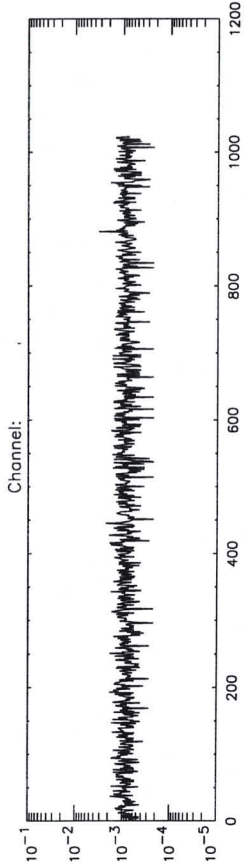
WLS\_EXT

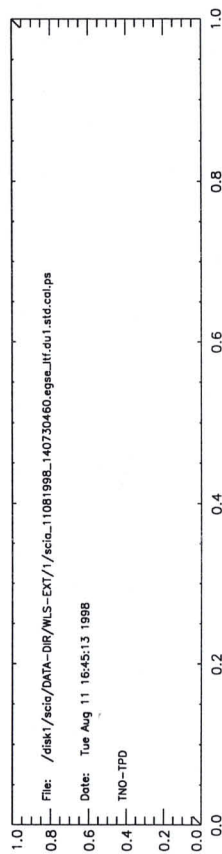
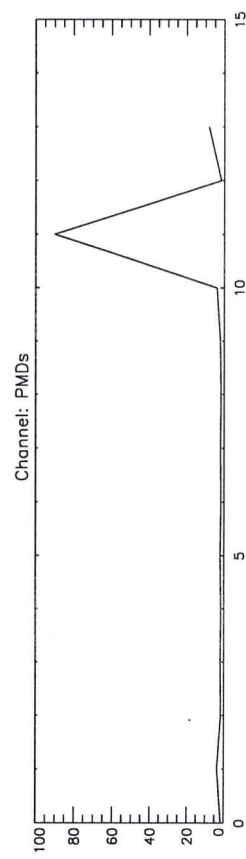
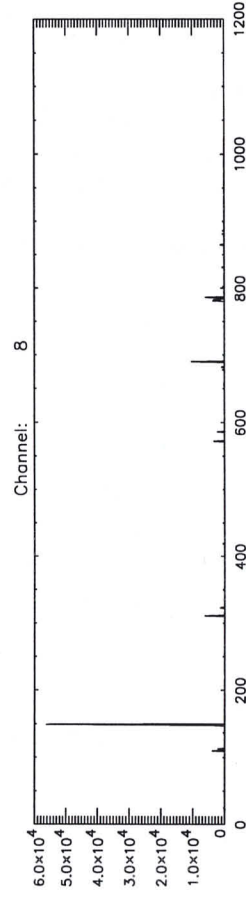
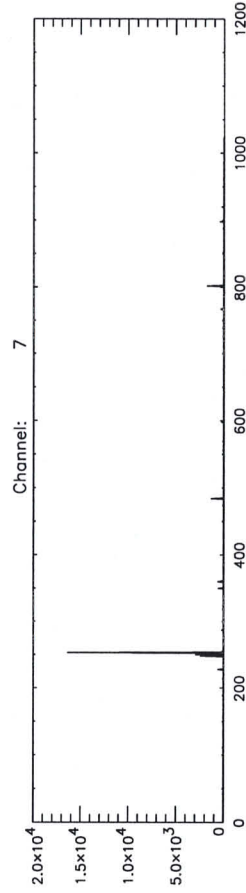
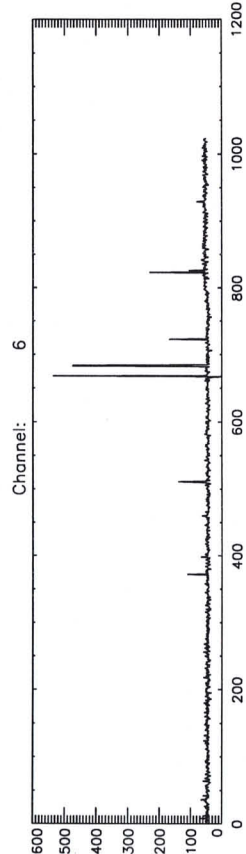
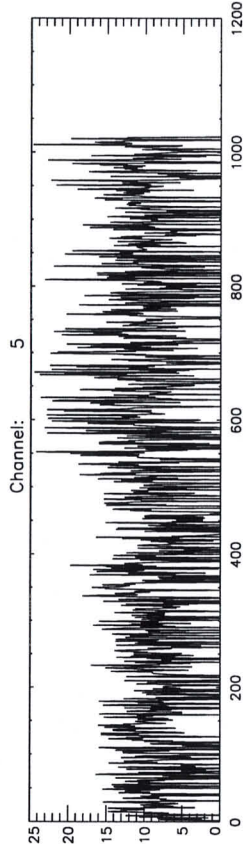
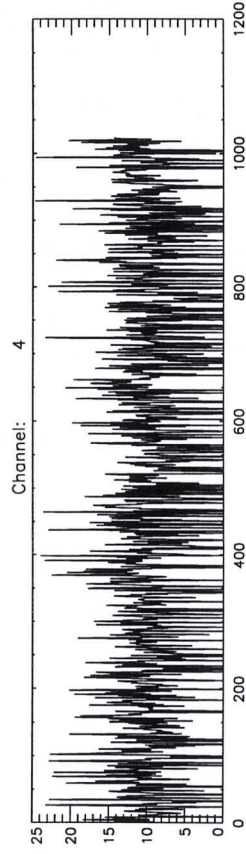
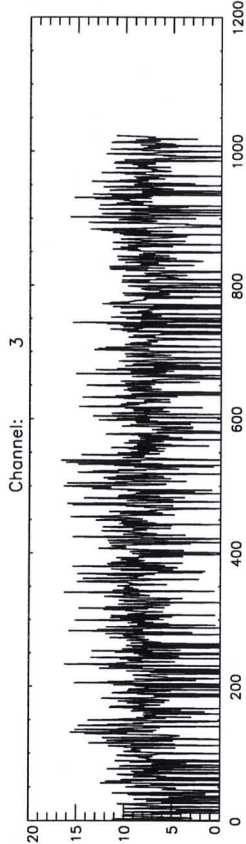
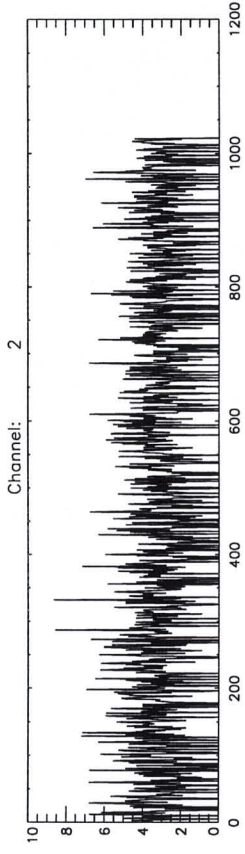
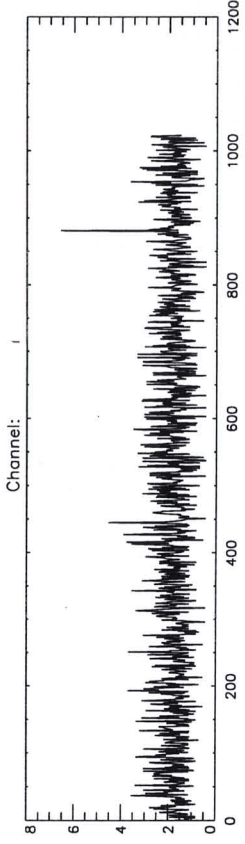
Remark : UID 48

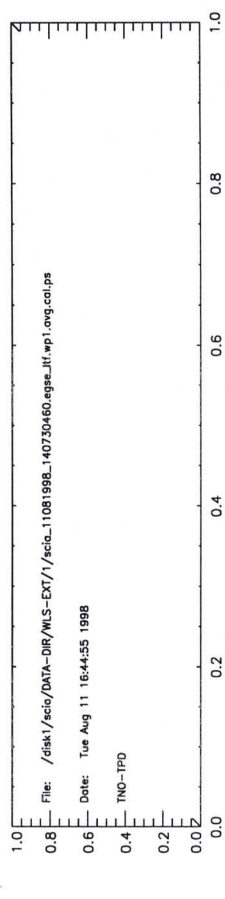
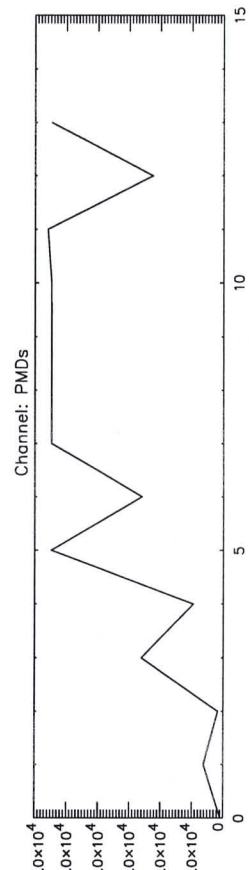
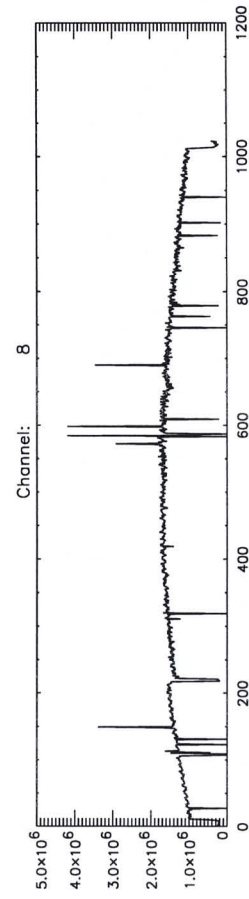
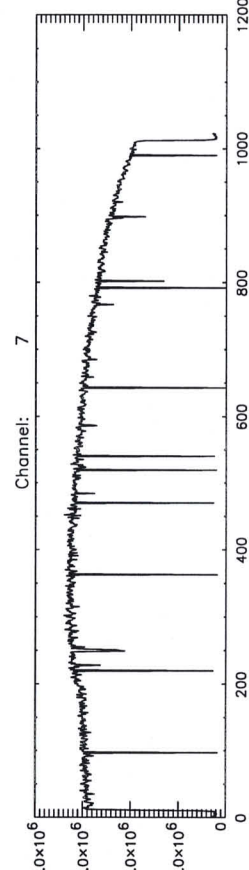
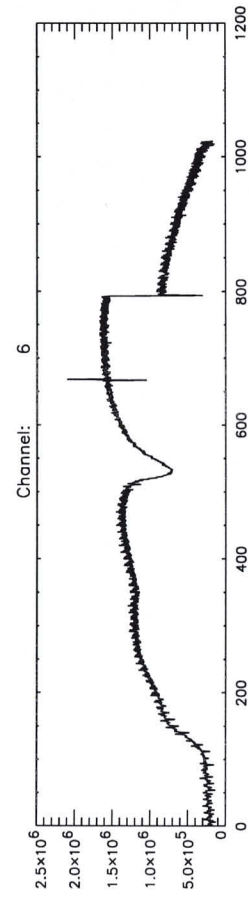
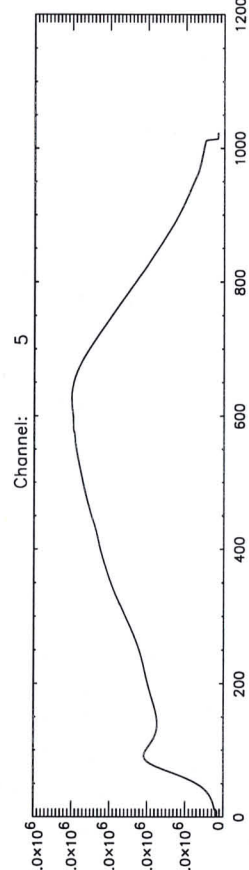
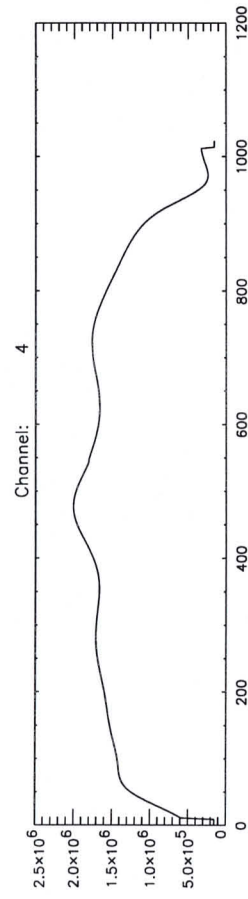
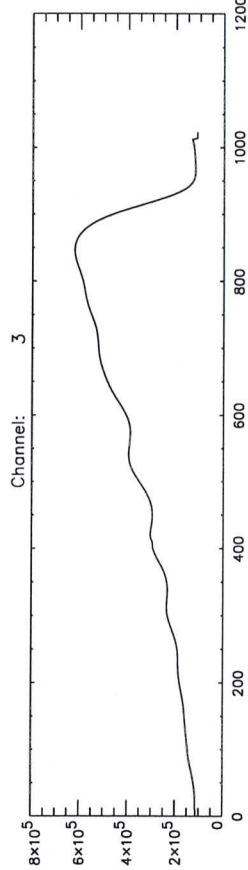
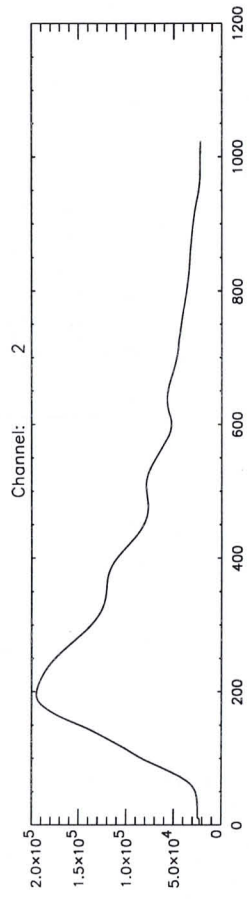
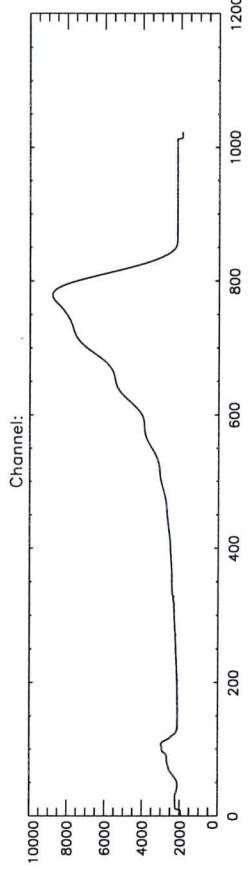
EGSE-File : /disk1/SciaSCOE/log/DATA-DIR/WLS-EXT/1/scia\_11081998\_140730460.egse\_ltf record = 94  
Date : Tue 11-Aug-98 14:08:30 Channel # 5FM

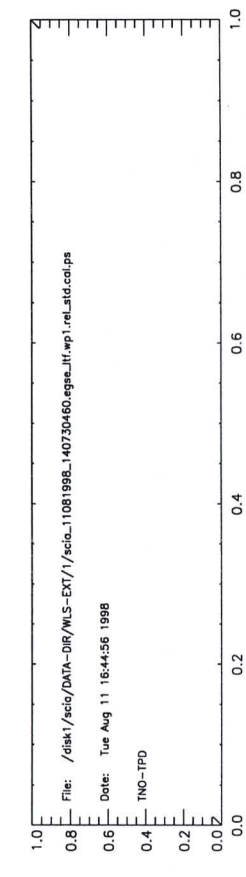
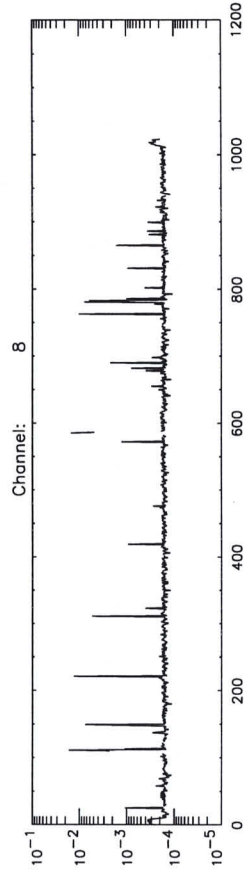
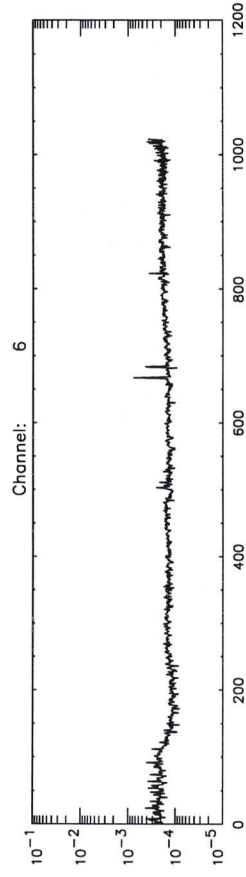
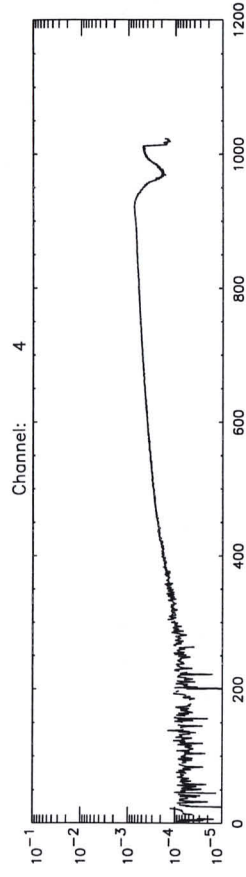
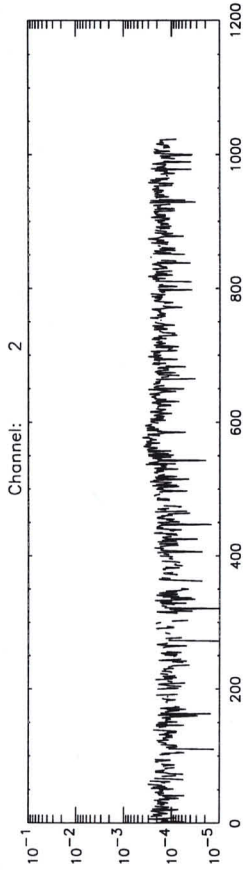
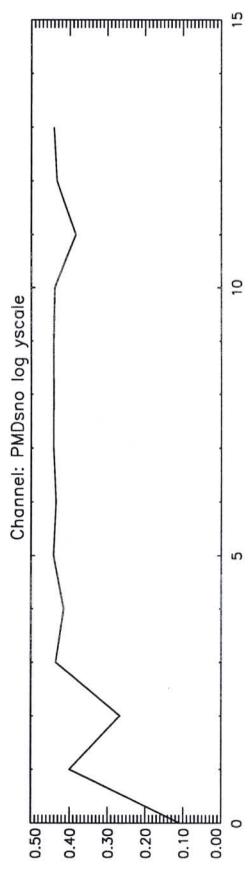
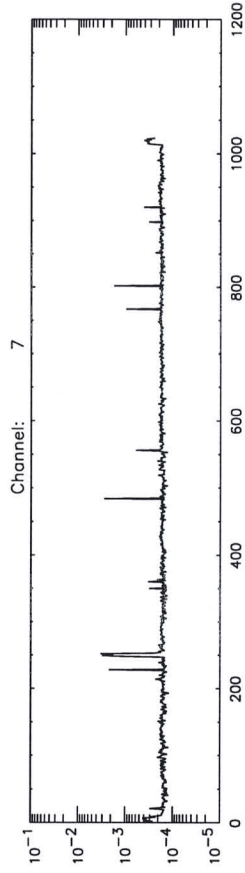
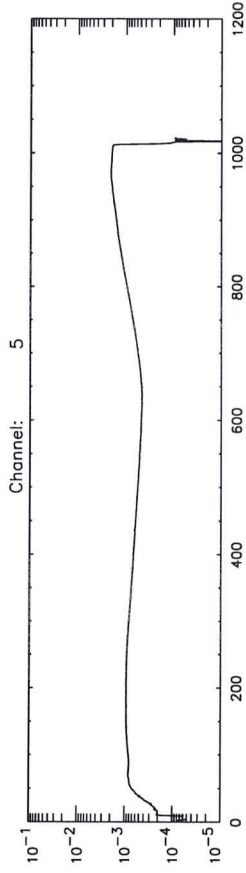
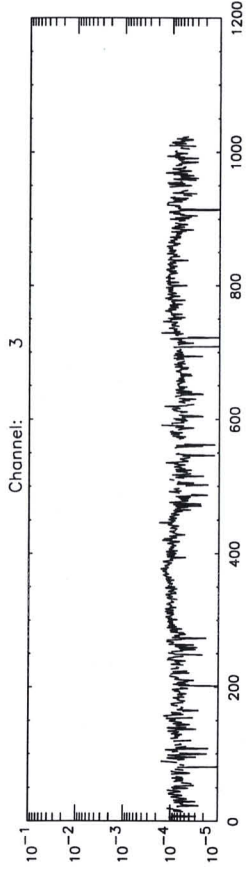
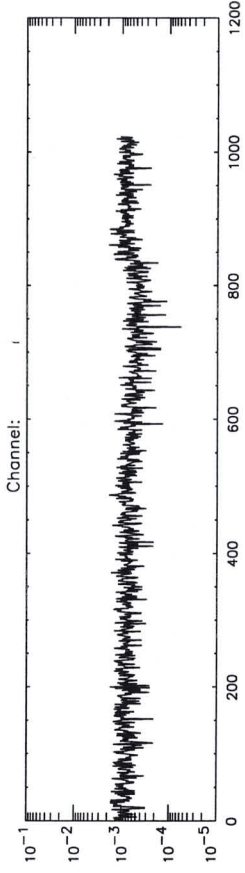




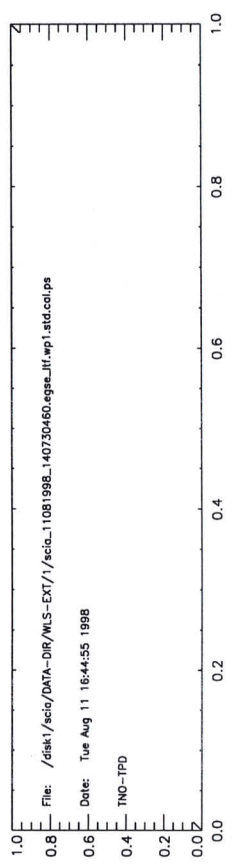
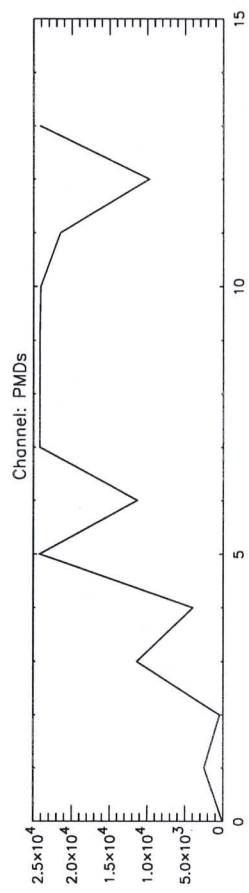
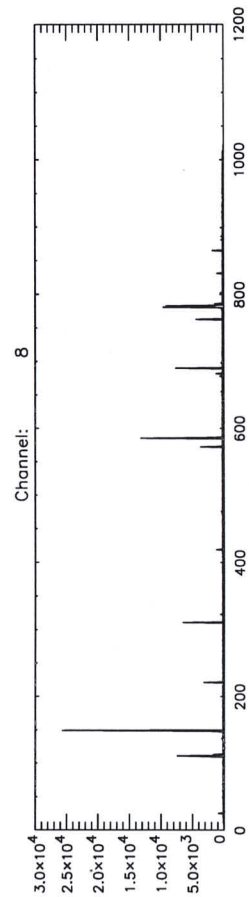
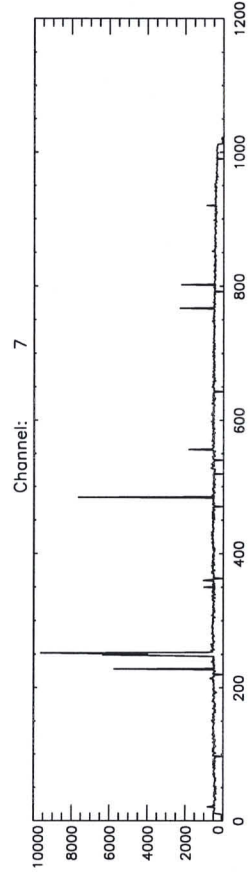
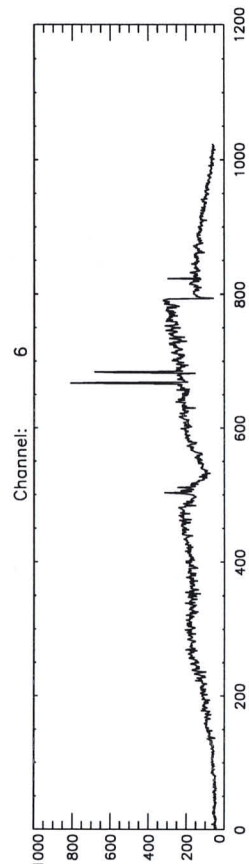
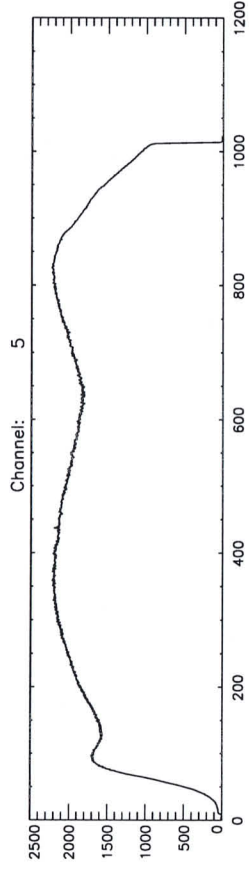
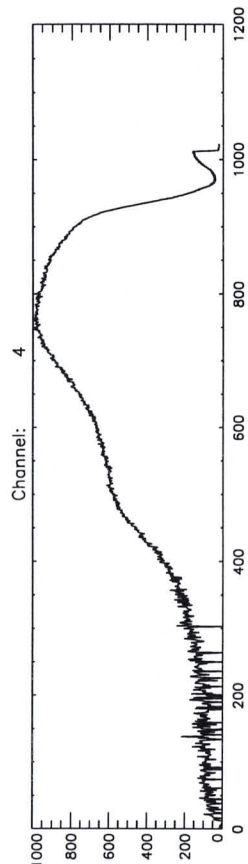
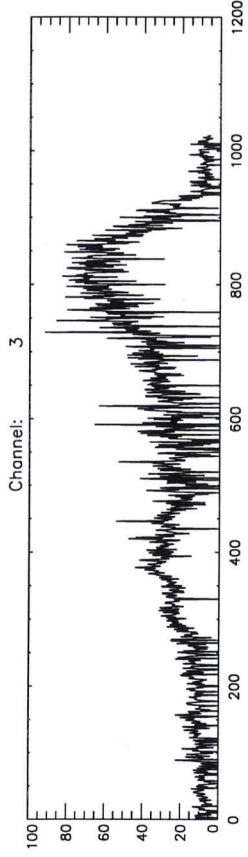
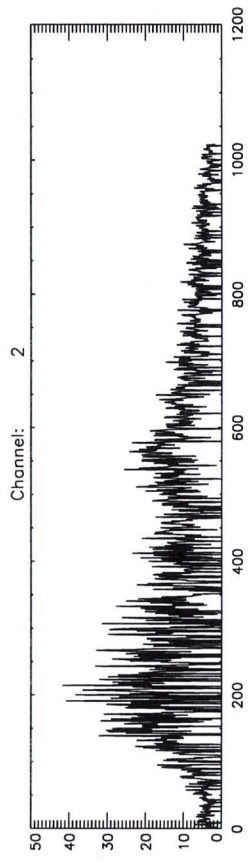
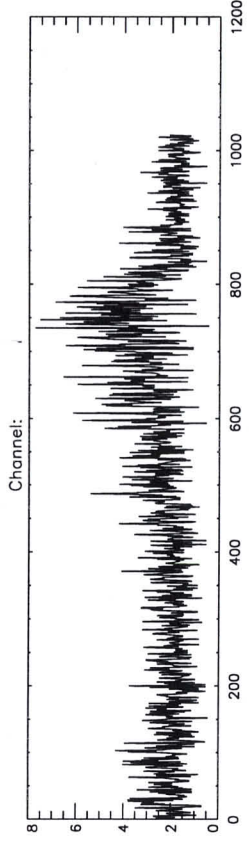


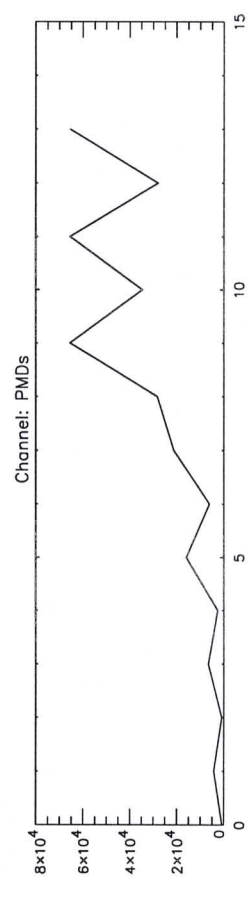
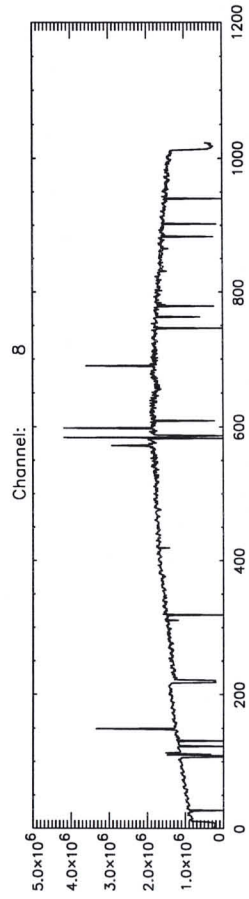
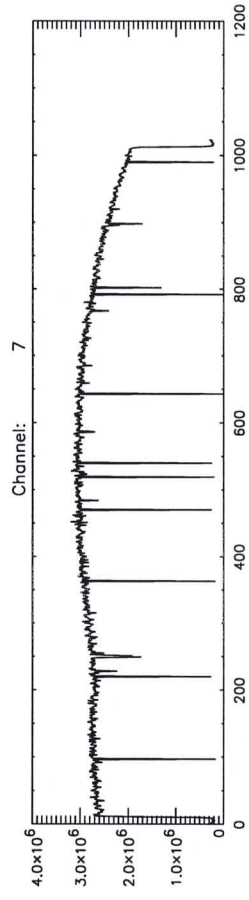
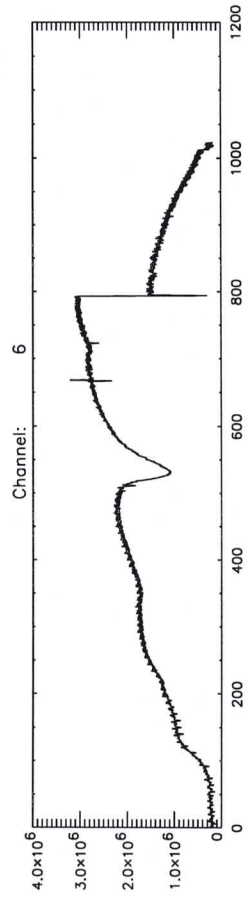
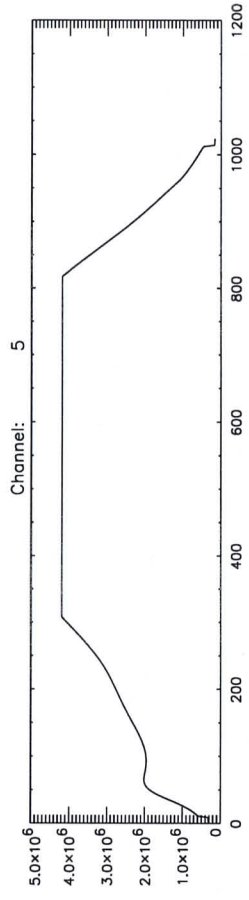
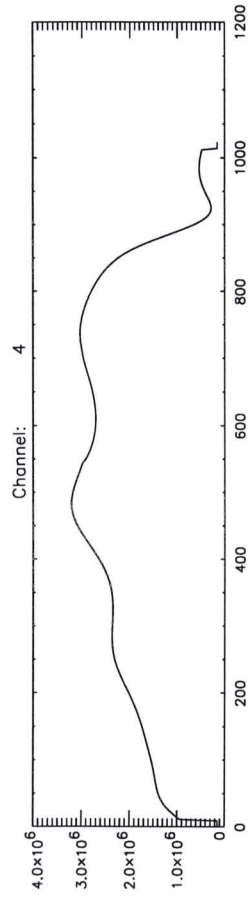
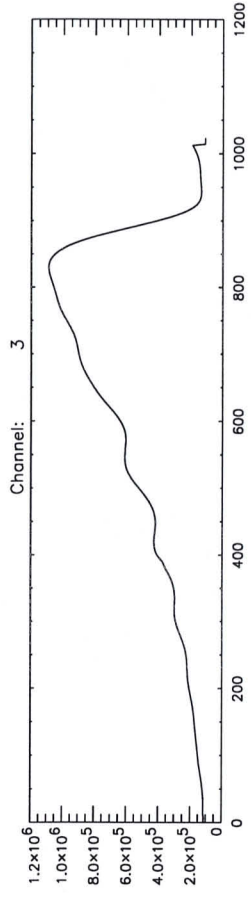
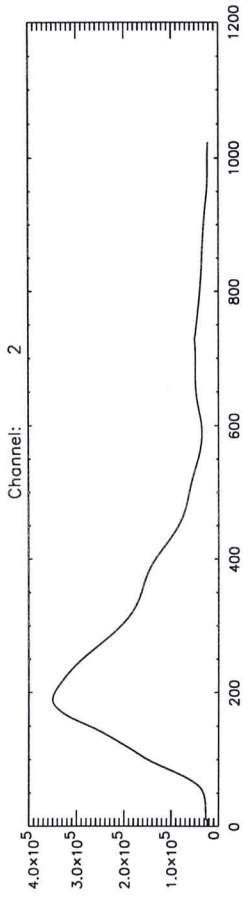
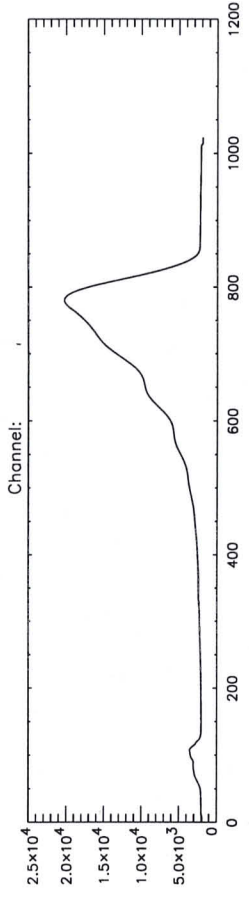








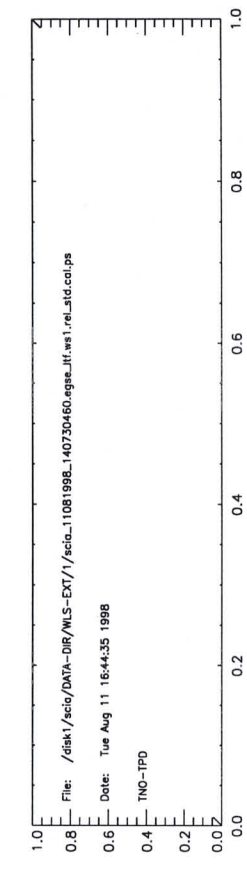
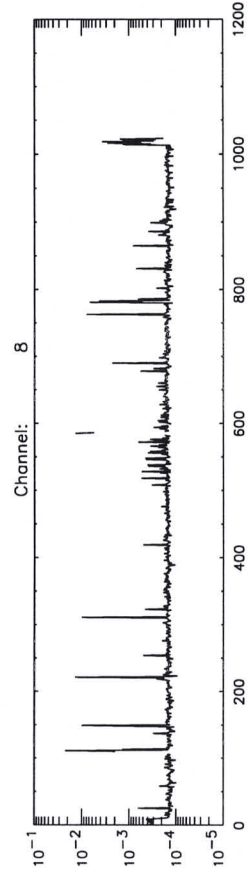
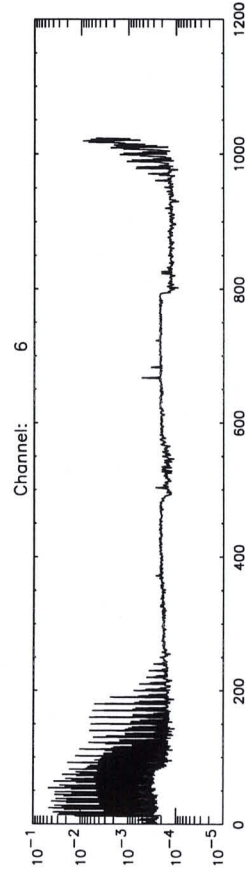
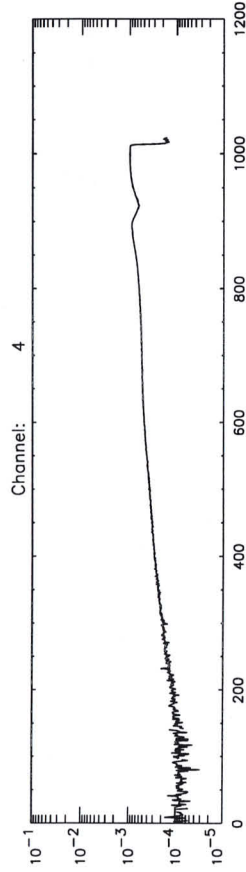
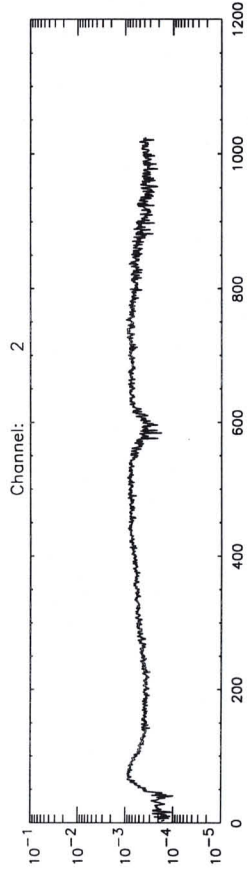
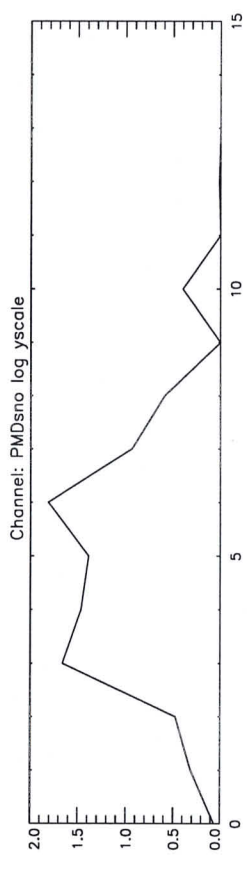
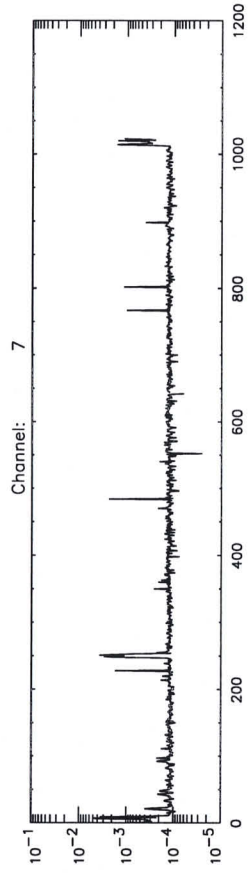
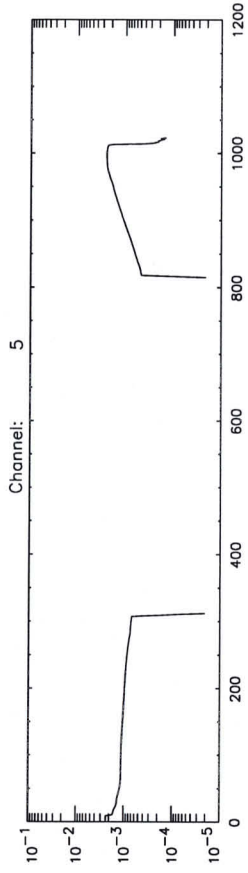
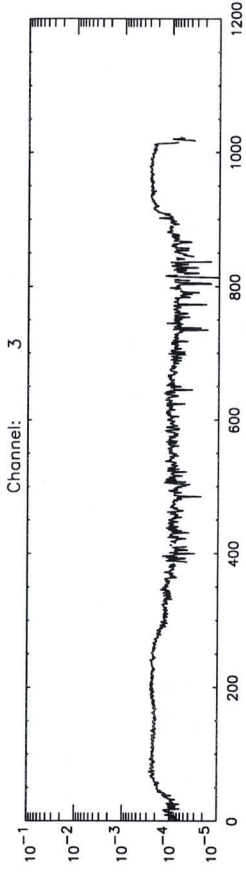
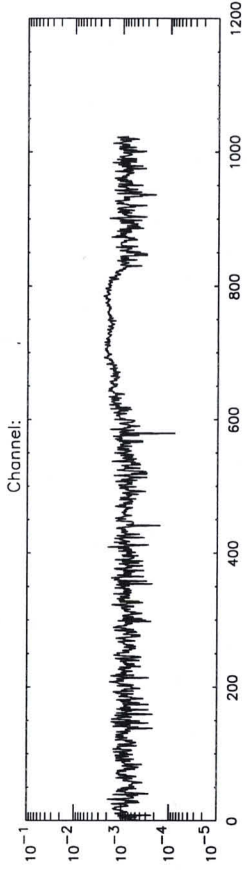


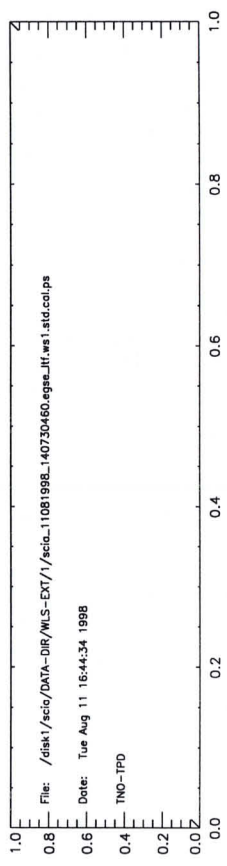
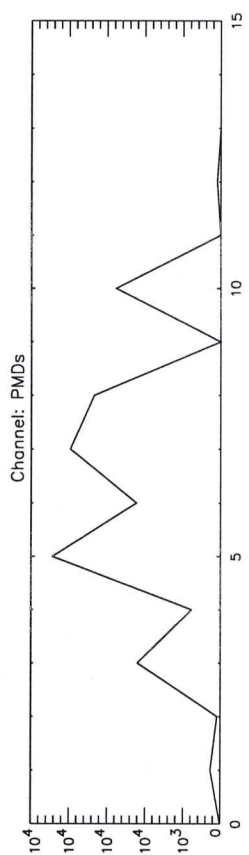
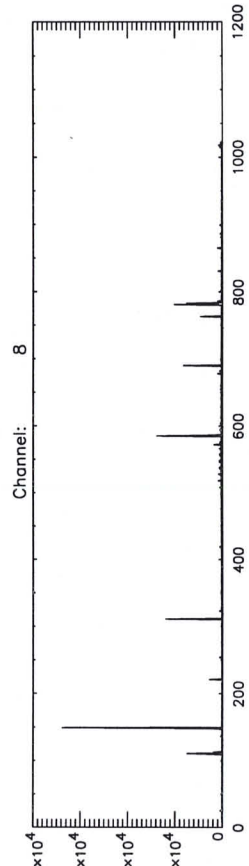
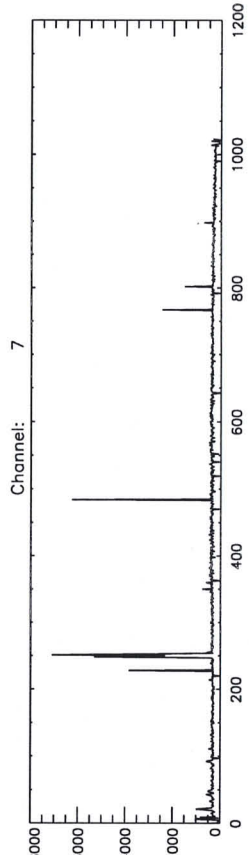
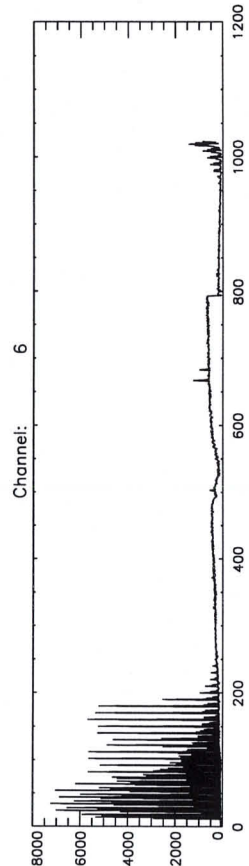
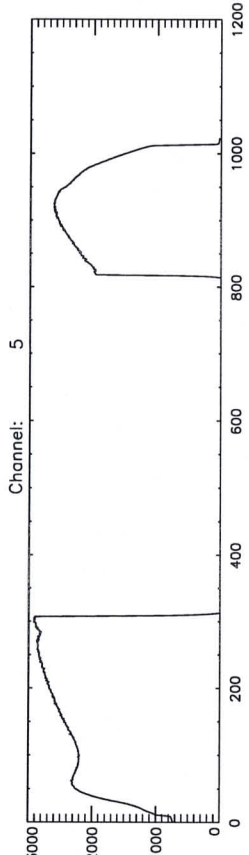
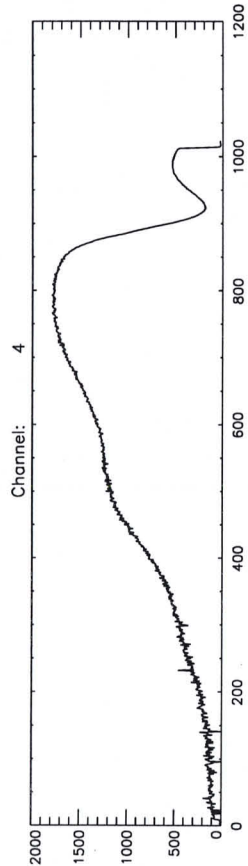
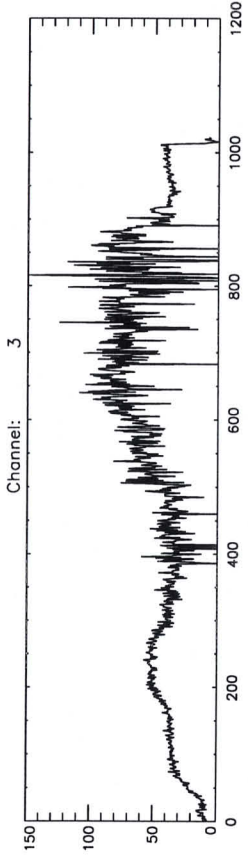
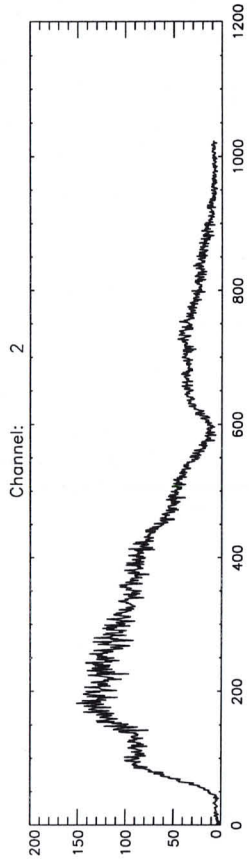
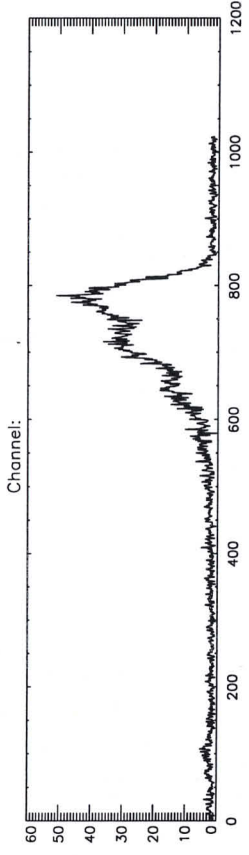


File: /disk1/scio/DATA-DIR/MLS-EXT/1/scia\_11081998\_140730460.egse\_jlr\_ws1.org.cal.ps  
Date: Tue Aug 11 16:44:34 1998  
TNO-IPD

Y-axis: 1.0, 0.8, 0.6, 0.4, 0.2, 0.0

X-axis: 0.0, 0.2, 0.4, 0.6, 0.8, 1.0





File: /disk1/scio/DATA-DIR/MLS-EXT/1/scio\_11081998\_140730460.egse\_jlr.ws1.std.colpa  
Date: Tue Aug 11 16:44:34 1998  
TNO-TPD

time = Tue Aug 11 16:45:14 1998

batch = dul

Start TOD = Tue 11-Aug-98 14:20:49

End TOD = Tue 11-Aug-98 14:26:40

Processing= computation of average, standard dev. and rel.standard dev.

time = Tue Aug 11 16:44:56 1998

batch = wp1

Start TOD = Tue 11-Aug-98 14:14:21

End TOD = Tue 11-Aug-98 14:20:49

Processing= computation of average, standard dev. and rel.standard dev.

time = Tue Aug 11 16:44:35 1998  
batch = ws1  
Start TOD = Tue 11-Aug-98 14:07:30  
End TOD = Tue 11-Aug-98 14:14:21  
Processing= computation of average, standard dev. and rel.standard dev.





# Formal Run of Measurement

(Measurement ID)

**WLS\_EXT**

Request for Actual Status

Request for Modification

Request for Run

|   |
|---|
|   |
|   |
| X |

(cross out entries that are not requested.)

(fill in only entries to be modified)

(no entries = run based on actual default settings)

§ 9.1

## Scanner Positions

Azimuth **+45.00** deg  
 Elevation **-45.00** deg

## Timeline for each Data Acquisition Period during Measurement

|             |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|----|
| State ID    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Repetitions | 5 |   |   |   |   |   |   |   |   |    |

## State Parameters for States used in Timeline (State ID must be given)

| Channel  | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding | PET [s] or H# | Co-Adding |
|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| 1a       | 64            | 1         |               |           |               |           |               |           |
| 1b       | 64            | 1         |               |           |               |           |               |           |
| 2b       | 8             | 8         |               |           |               |           |               |           |
| 2a       | 8             | 8         |               |           |               |           |               |           |
| 3        | 0.125         | 82        |               |           |               |           |               |           |
| 4        | 0.0625        | 64        |               |           |               |           |               |           |
| 5        | 0.0325        | 64        |               |           |               |           |               |           |
| 6        | H5            | 64        |               |           |               |           |               |           |
| 7        | H6            | 64        |               |           |               |           |               |           |
| 8        | H7            | 64        |               |           |               |           |               |           |
| State ID |               |           |               |           |               |           |               |           |

## Stimuli Settings for Existing Blocks in Measurement

| Block No | Stimuli Setup ID | PPC [deg] | Polarizer [deg] | Shutter open/close | Acquisition Time [s] | Lambda [nm] |      |      | Repetition Factor | Message | OS Setup Time [s] |
|----------|------------------|-----------|-----------------|--------------------|----------------------|-------------|------|------|-------------------|---------|-------------------|
|          |                  |           |                 |                    |                      | Start       | Stop | Step |                   |         |                   |
| 1        | 2                | 15        | 171.6           | open               | 1                    | 240         | 240  | 0    | 1                 | W51     | 12                |
| 2        | 2                | 15        | 85.4            | open               | 1                    | 240         | 240  | 0    | 1                 | WPI     | 20                |
| 3        | 2                | 15        | 85.4            | close              | 1                    | 240         | 240  | 0    | 1                 | DUI     | 8                 |

## Measurement Data Description

Test Purpose

UTD 48

Remark

Data Directory

0223.15.12.03-

## Signatures

Issued

< Performed

| Date    | Signature   |
|---------|-------------|
| 11-8-98 | X           |
| 11-8-98 | Bert Allers |

**Stimuli**

|         |           |
|---------|-----------|
| Config. | 2         |
| Lambda  | 240 nm    |
| PPC     | 15.0      |
| Polar   | 171.6 deg |
| Shutter | open      |
| Acq.    | 1         |
| S/S     | start     |

**ATC**

|       |         |
|-------|---------|
| Nadir | ACTIVE  |
| Limb  | -18.2 C |
| RAD-A | -17.9 C |
|       | -18.0 C |

**Sun (Subsolar)**

Nadir

Limb

Sun/Moon

**Azimuth Scanner**

ACTIVE

273160 45.000

Cover UNLOCKED

**Elevation Scanner**

ACTIVE

534194 -45.000

Cover UNLOCKED

**Aperture Stop**

LARGE

**Sun Sens**

|   |   |
|---|---|
| 0 | 0 |
| 0 | 0 |

**Telescope**

**Spectrom.**

NDF OUT

**IICAOPT**

PMD

Det.Temp -18.7 C

ElecTemp -17.7 C

**WLS**

OFF

-0.0 mA

0

**SLS**

OFF

-5.22 V

0.0 mA

**NCW**

CLOSED

**Channel**

| Channel | Bias Volt. | Test input | 5V Supply | 15V Supply | Shield temp | Block temp | DME temp |
|---------|------------|------------|-----------|------------|-------------|------------|----------|
| 1       | 2.50       | 0.00       | 1.73      | 3.19       | 235.19      | 206.50     | 259.17   |
| 2       | 2.50       | 0.00       | 1.71      | 3.18       | 235.46      | 205.96     | 259.02   |
| 3       | 2.50       | 0.00       | 1.71      | 3.19       | 241.35      | 223.85     | 259.49   |
| 4       | 2.50       | 0.00       | 1.72      | 3.18       | 241.41      | 222.42     | 259.24   |
| 5       | 2.50       | 0.00       | 1.72      | 3.17       | 240.51      | 221.02     | 259.43   |
| 6       | -0.03      | 0.01       | 1.71      | 3.18       | 231.79      | 201.88     | 259.67   |
| 7       | -0.05      | 0.01       | 1.72      | 3.19       | 211.22      | 149.77     | 259.32   |
| 8       | -0.03      | 0.01       | 1.71      | 3.17       | 211.77      | 146.44     | 260.00   |

**Control Panel**

Ancil. 
  RbiStart 
  Conf 
  TLM Mode 
  ChkState 
  Format 
  OBt 
  Moni 
  Anom

| STEP                       | ACTION                                                                                                                                                                                                                                                                                                                                                                                              | RESULT                     | MARKER                        |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------|
| Intro                      | Your name:                                                                                                                                                                                                                                                                                                                                                                                          | A. Bos                     |                               |
|                            | Date:                                                                                                                                                                                                                                                                                                                                                                                               | 12-08                      |                               |
|                            | What's the name of the (main) data input files generated by the EGSE? (*.dat)                                                                                                                                                                                                                                                                                                                       | Scia-11081990-15150540.dat | (A)                           |
|                            | Setup a three-window configuration on your SUN.                                                                                                                                                                                                                                                                                                                                                     |                            | See course descr.             |
| Cnstr directory            | cd ~/DATA-DIR/WLS ; ls -l                                                                                                                                                                                                                                                                                                                                                                           |                            | Note: In window DATA-DIR      |
|                            | highest number in directory?                                                                                                                                                                                                                                                                                                                                                                        | 1                          | (B)                           |
|                            | New directory: mkdir <B+1>                                                                                                                                                                                                                                                                                                                                                                          |                            |                               |
|                            | ls -l                                                                                                                                                                                                                                                                                                                                                                                               |                            |                               |
|                            | What's now the highest number in directory?                                                                                                                                                                                                                                                                                                                                                         | 2                          | (C)                           |
|                            | <C> should be <B> + 1                                                                                                                                                                                                                                                                                                                                                                               | Y/N                        | (DIR-NAME)                    |
|                            | directory name is:                                                                                                                                                                                                                                                                                                                                                                                  | ~/DATA-DIR/WLS/<C>         |                               |
| Copy data                  | See Analysis sheet: Transfer Data File                                                                                                                                                                                                                                                                                                                                                              | Y/N                        | In DATA-DIR window            |
| Cnstr correction directory | ls -l ~/DATA-DIR/CORR<br>If there isn't a subdirectory corresponding to the current date, then construct a CORRECTION directory (see: analysis sheet Construct CORR directory).<br>What is the value of the correction subdirectory corresponding to the current date.<br>When running the PPG analysis, you will be asked to select this directory when storing the resulting PPG correction file. |                            | In DATA-DIR window<br><br>EXT |

Note: In window DATA-DIR; your current directory should be ~/DATA-DIR/WLS/<C>; don't forget the dot !!! May take more than 15 mins.

Cnstr EGSE\_LTF cal\_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)  
ls -l \*.egse\_ltf

What's the name of the egse\_ltf file \_\_\_\_\_ (D)

<D> should be <A>.egse\_ltf Y/N

Cnstr CAL files idl run\_averscia (and select file <D> when asked)

Note: In window IDL

Check CAL files

Dark files:  
ls -l \*du\*.avg.cal

size: \_\_\_\_\_ should be approx 150Kb

White light file:  
ls -l \*.wu\*.avg.cal

size: \_\_\_\_\_ should be approx 150Kb

Note: all files should be present, if not:  
(a) Check file <D> using SOLAN and check whether DU, WS and WP labels are present in dremark1 labels  
(b) Check if enough disk space is available (Unix command df -k | more).

Print postscript Print postscript files:

lpr -P<printer> \*.ps  
Contents dark file \*du\*.avg.cal.ps should be approx. constant within channels: Y/N

Contents of file \*wu\*.avg.cal.ps should resemble white light source: Y/N  
Contents of \*rel\_std\*.ps files should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y/N

PPG

If not, value is:

\_\_\_\_\_ *[Handwritten signature]*

Add postscript images to logbook, done

Y/N

Print logfiles `lpr -P<printer> *.log`  
Add logfiles to logbook, done

Y/N

PPG processing

Run PPG

*do\_ext\_ppg*  
~~idl do\_ppg~~

In IDL window

Check PPG

*wp*  
`ls -l *`

In DATA-DIR Window should be approx 150Kb

Size of file `*.du*.cal.ppg.cal` \_\_\_\_\_

Size of file `*.du*.cal.ppg.cal.log` \_\_\_\_\_

Size of file `*.du*.cal.ppg.cal.ps` \_\_\_\_\_

Check PPG visually

`lpr -P<printer> *.du*.cal.ppg.cal.ps`  
Value of PPG should show only a small variation around 1.0 (like noise).

Y/N

Add postscript images to logbook, done

Y/N

Print logfiles

`lpr -P<printer> *.du*.cal.ppg.cal.log`  
Add logfiles to logbook, done

Y/N

Back up

Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command `/usr/bin/du -k .` gives the number of kilo bytes in the current directory).

See analysis sheet BackUp

Name of backup CDs \_\_\_\_\_

Sign:

Name

\_\_\_\_\_ *P. Bos*

Date and time

\_\_\_\_\_ *12-01-98*

PPG

Signature

---

Etalon

| STEP                       | ACTION                                                                                                                                                                                                                                                                                                                                                                                                        | RESULT                                | MARKER                                                                                                          |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Intro                      | Your name:<br>Date:                                                                                                                                                                                                                                                                                                                                                                                           | <u>A. Bor</u><br><u>12-8</u>          |                                                                                                                 |
|                            | What's the name of the (main) data input files generated by the EGSE? (*.dat)                                                                                                                                                                                                                                                                                                                                 | <u>Scia-11021990 15150540.dat</u>     | (A)                                                                                                             |
|                            | Setup a three-window configuration on your SUN.                                                                                                                                                                                                                                                                                                                                                               |                                       | See course descr.                                                                                               |
| Cnstr directory            | cd ~/DATA-DIR/WLS ; ls -l<br>highest number in directory?                                                                                                                                                                                                                                                                                                                                                     | <u>1</u>                              | Note: In window DATA-DIR (B)                                                                                    |
|                            | New directory: mkdir <B+1><br>ls -l<br>What's now the highest number in directory?<br><C> should be <B> + 1<br>directory name is:                                                                                                                                                                                                                                                                             | <u>2</u><br>Y/N<br>~/DATA-DIR/WLS/<C> | (Do this only when you haven't already a directory with the source file for PPG purposes.)<br>(C)<br>(DIR-NAME) |
| Copy data                  | See Analysis sheet: Transfer Data File                                                                                                                                                                                                                                                                                                                                                                        | <u>Y</u><br>Y/N                       | In DATA-DIR window                                                                                              |
| Cnstr correction directory | ls -l ~/DATA-DIR/CORR<br>If there isn't a subdirectory corresponding to the current date, then construct a CORRECTION directory (see: analysis sheet Construct CORR directory).<br>What is the value of the correction subdirectory corresponding to the current date.<br><br>When running the ETALON analysis, you will be asked to select this directory when storing the resulting ETALON correction file. | <u>EXT</u>                            | In DATA-DIR Window                                                                                              |

Note: In window DATA-DIR; your current directory should be ~/DATA-DIR/WLS/<C>; don't forget the dot !!! May take more than 15 mins.

Cnstr EGSE\_LTF

cal\_raw2ltf . (Error messages are not necessarily fatal; check with SOLAN --in solan window-- whether output file is okay: there should be a signal present, and dremark1 labels should be filled)  
ls -l \*.egse\_ltf

What's the name of the egse\_ltf file \_\_\_\_\_ (D)

<D> should be <A>.egse\_ltf Y / N

Cnstr CAL files

idl run\_averscia (and select file <D> when asked)

Note: In window IDL

Check CAL files

Dark files:  
ls -l \*du\*.avg.cal

In DATA-DIR window

size: \_\_\_\_\_

should be approx 150Kb

White light file:  
ls -l \*wu\*.avg.cal

size: \_\_\_\_\_

should be approx 150Kb

Note: all files should be present, if not:  
(a) Check file <D> using SOLAN and check whether DU, WS and WP labels are present in dremark1 labels  
(b) Check if enough disk space is available (Unix command df -k | more).

Print postscript

Print postscript files:  
lpr -P<printer> \*.ps  
Contents dark file  
\*du\*.avg.cal.ps should be approx. constant within channels: Y / N

Contents of file \*uw\*.avg.cal.ps should resemble white light source: Y / N



Etalon

Contents of \*rel\_std\*.ps files should be smaller than 0.01 (pixel 300 -- 800) for all channels. Y/N  
 If not, value is: \_\_\_\_\_

Add postscript images to logbook, done Y/N

Print logfiles lpr -P<printer> \*.log Y/N  
 Add logfiles to logbook, done



ETALON processing



Run ETALON idl do\_etalon

In IDL window

Check ETALON ls -l <DIR-NAME>/\*  
 Size of file  
 \*.du\*.avg.cal.etalon.cal \_\_\_\_\_

In DATA-DIR window should be approx 150Kb

Check ETALON visually lpr -P<printer> \*.du\*.avg.cal.etalon.cal.p s  
 Value of ETALON should show only a small variation around 1.0 (like noise). Y/N  
 Add postscript images to logbook, done Y/N

Print logfiles lpr -P<printer> \*.du\*.avg.cal.etalon.cal.l og  
 Add logfiles to logbook, done Y/N

*(\*) When asked a file containing reference WLS spectrum (START-OF-CAL) select the right subdirect: START-OF-CAL-WARM or START-OF-CAL-COLD. (depending on detector temp.)*



Back up Create 3 sets of backup CDs of directory <DIR-NAME> (One CD has a capacity of 600 Mbytes, the UNIX command /usr/bin/du -k . gives the number of kilo bytes in the current directory).  
 Name of backup CDs \_\_\_\_\_

*↑ if using external lap look at:*

See analysis sheet BackUp

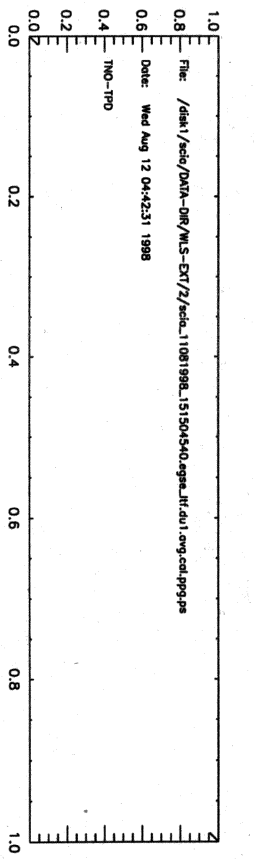
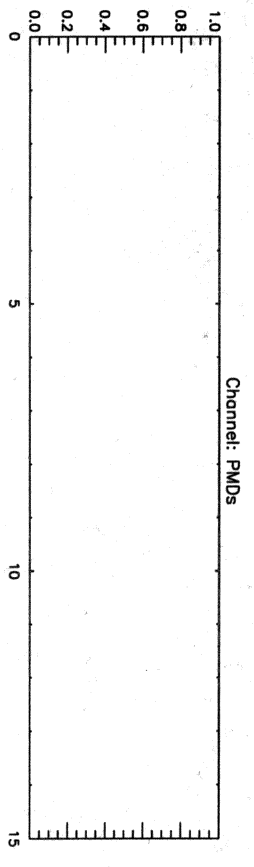
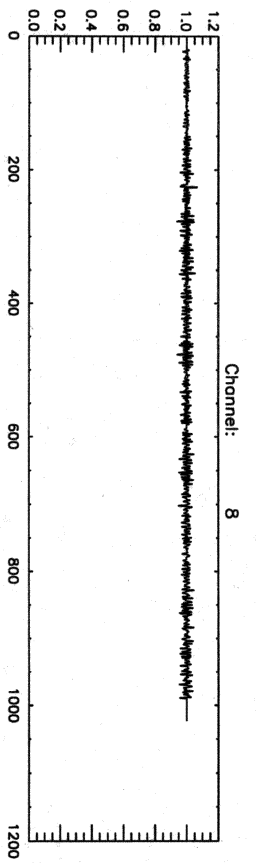
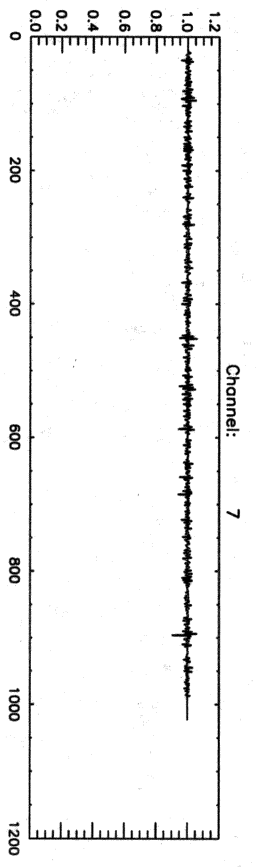
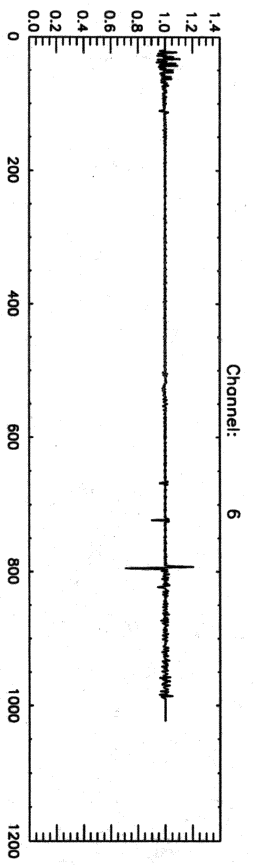
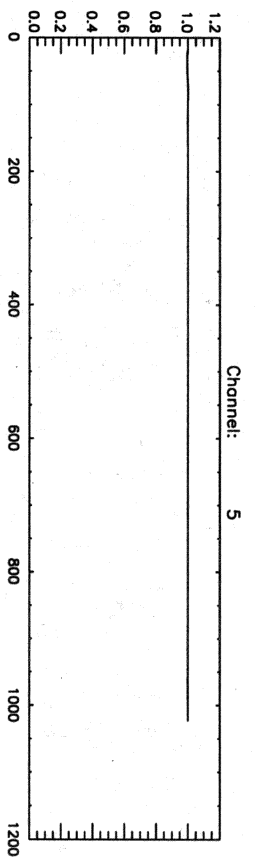
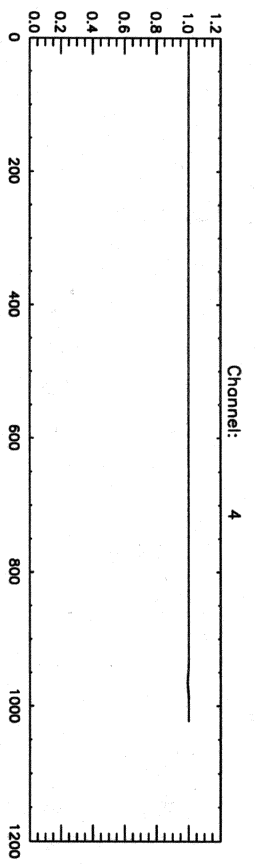
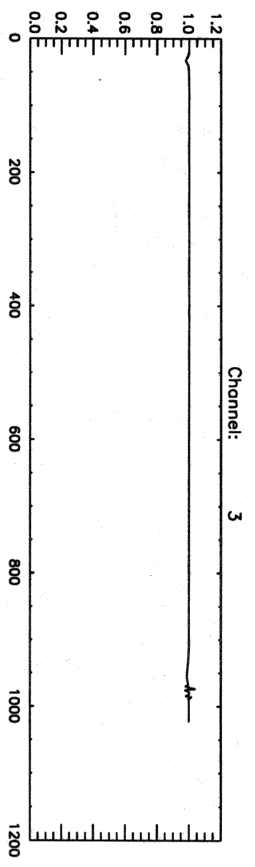
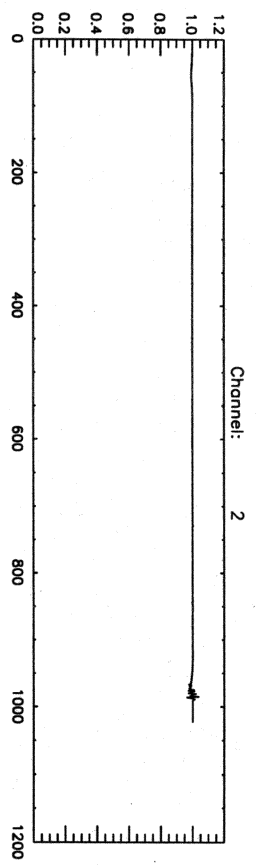
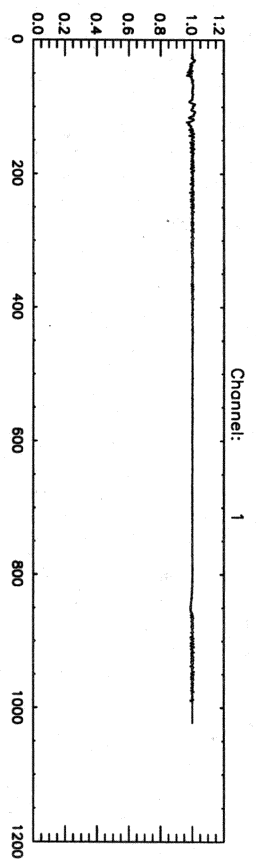
Sign: \_\_\_\_\_ Name \_\_\_\_\_

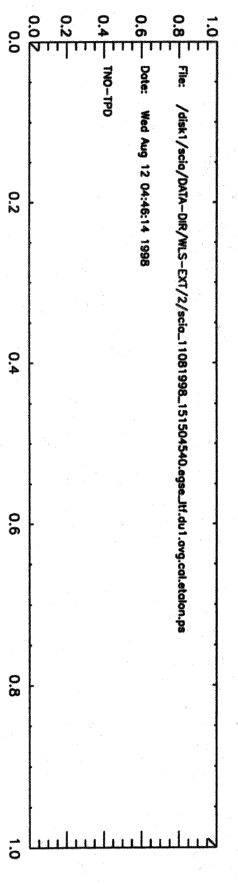
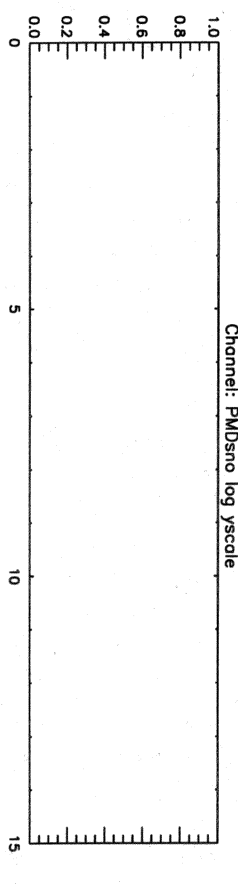
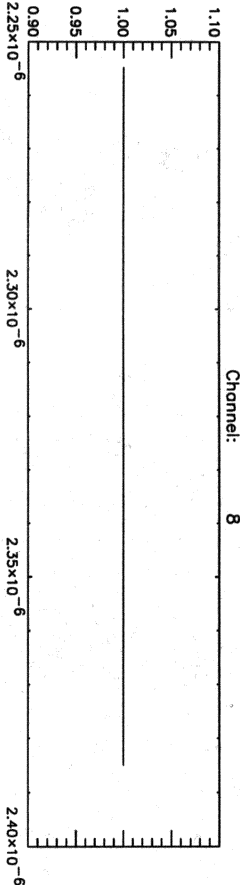
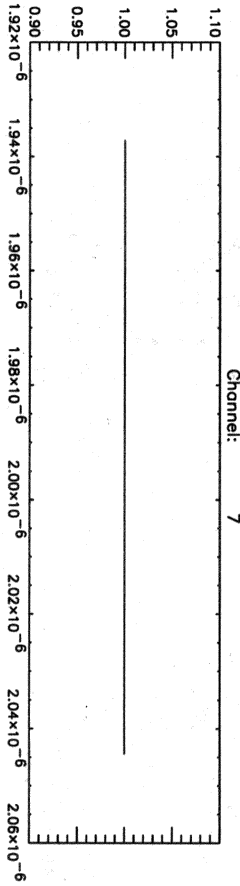
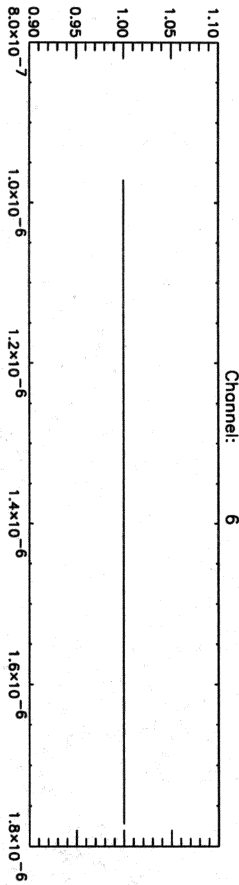
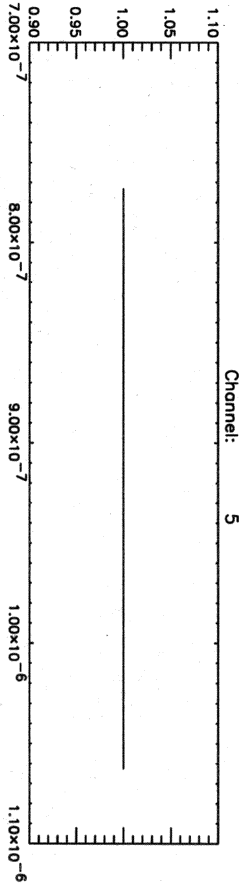
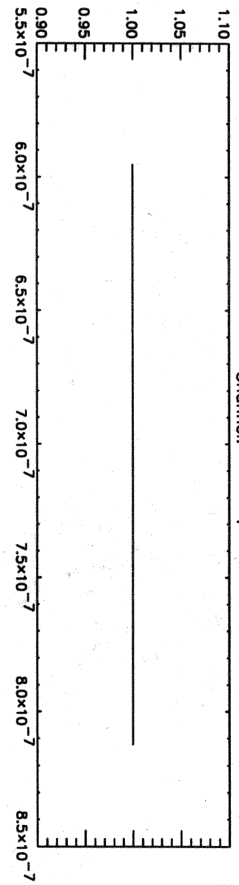
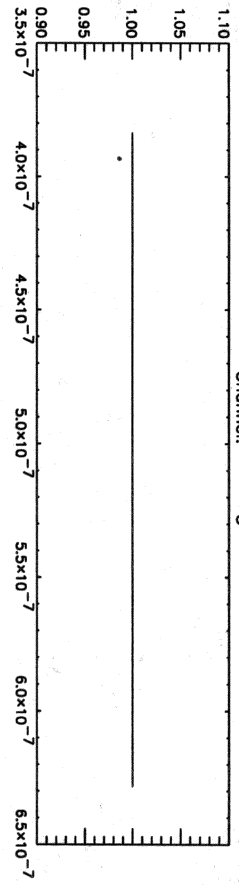
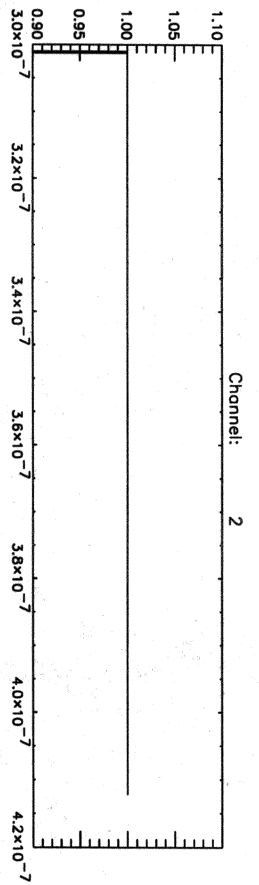
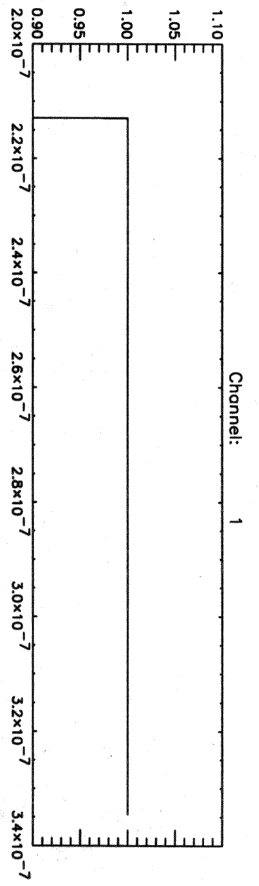
Etalon

Date and time  
Signature

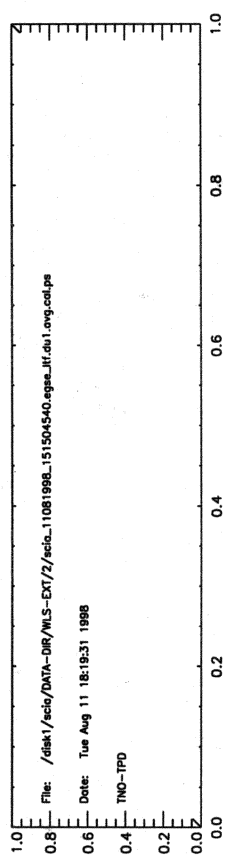
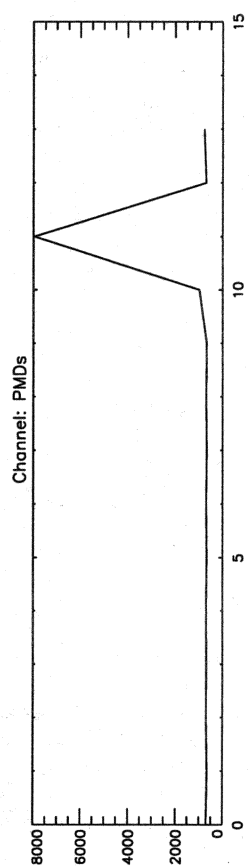
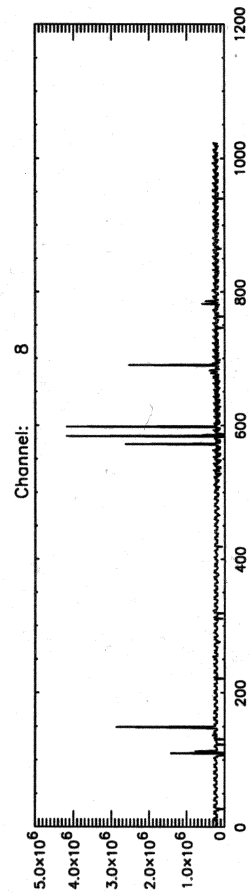
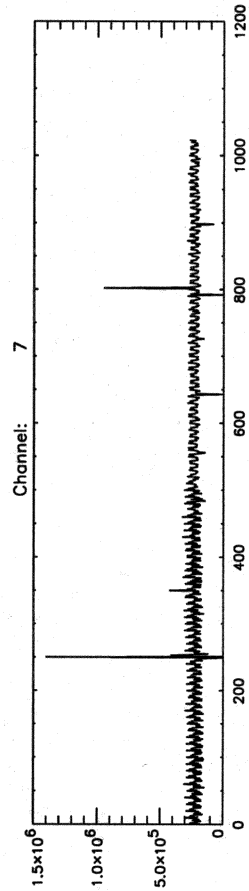
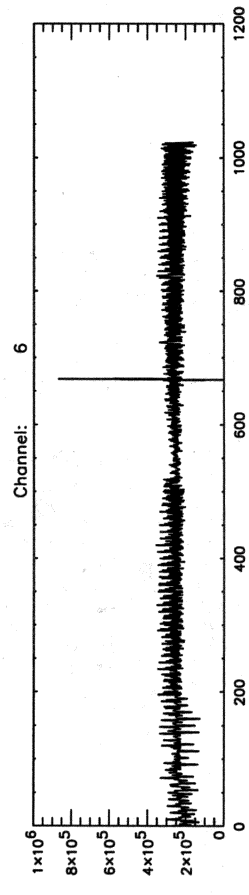
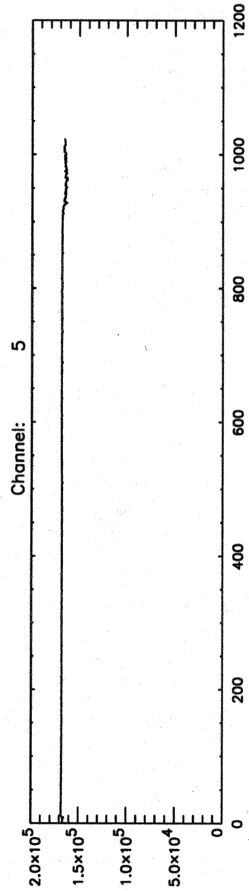
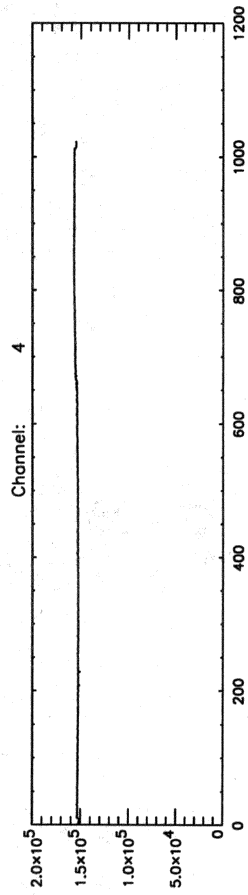
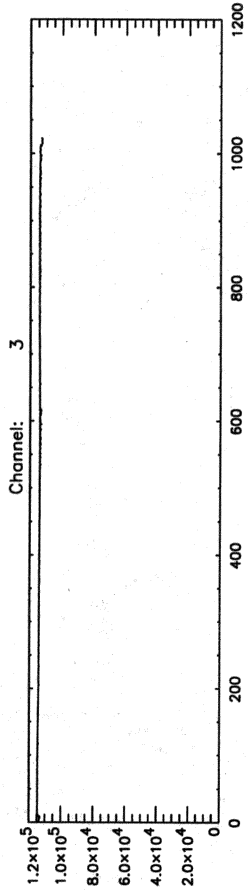
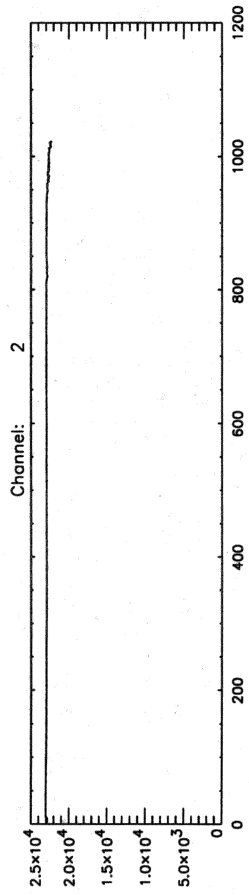
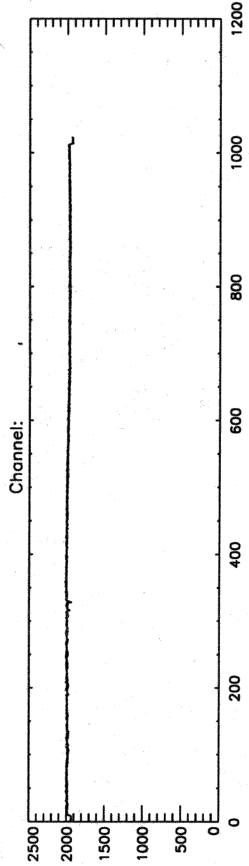
\_\_\_\_\_  
\_\_\_\_\_

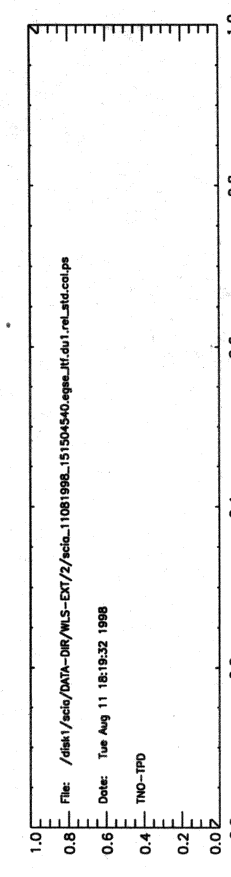
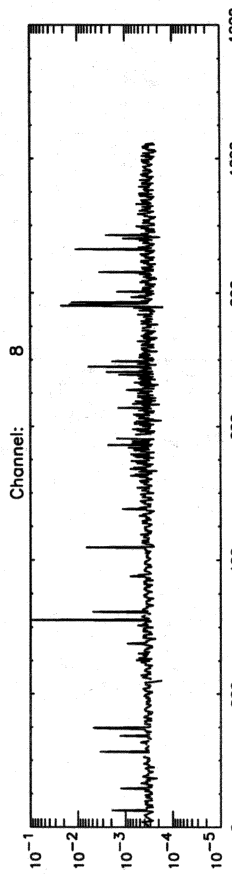
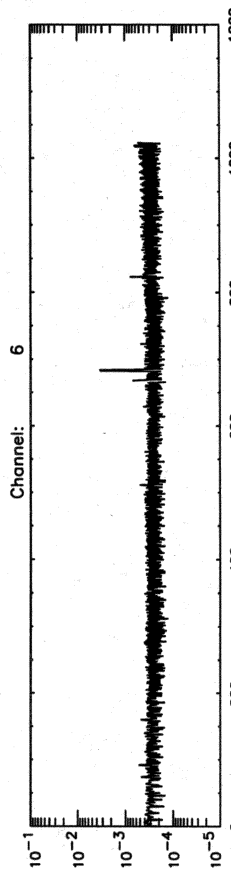
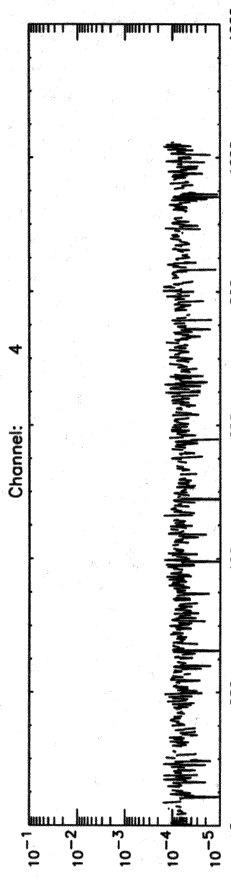
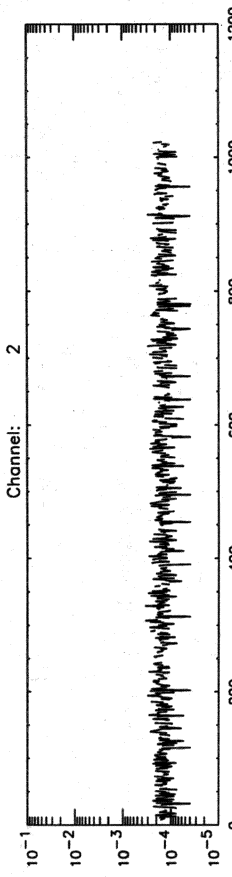
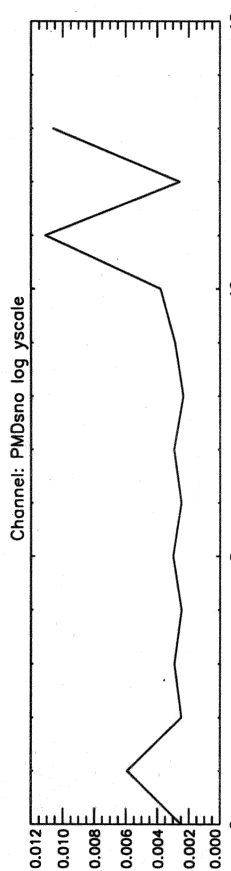
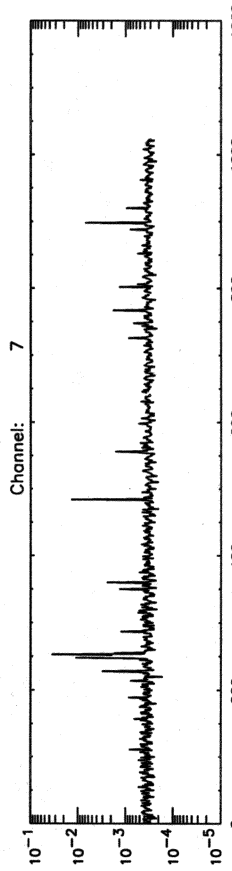
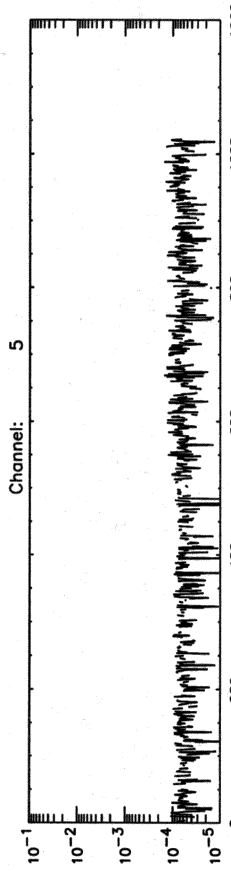
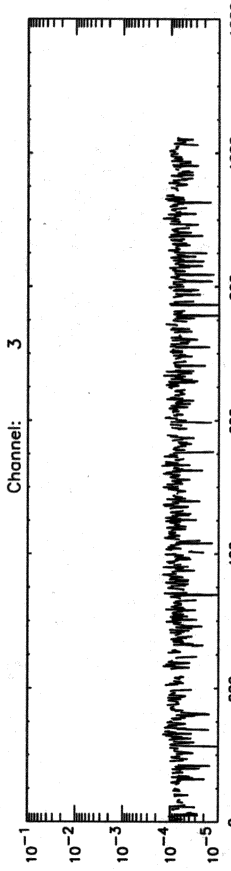
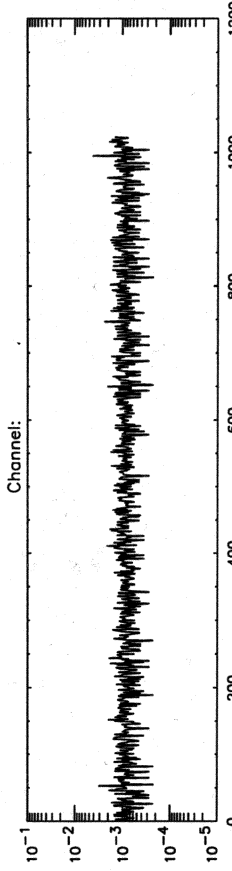


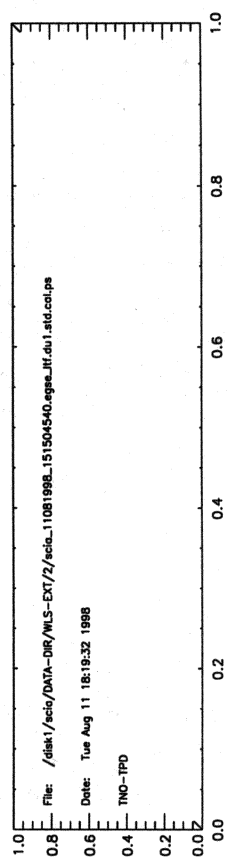
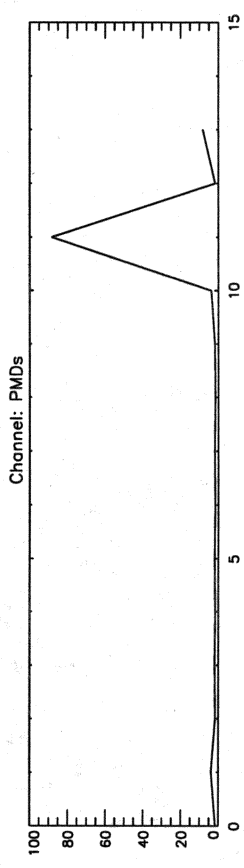
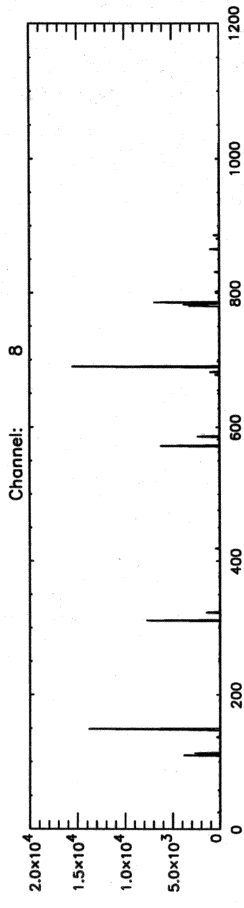
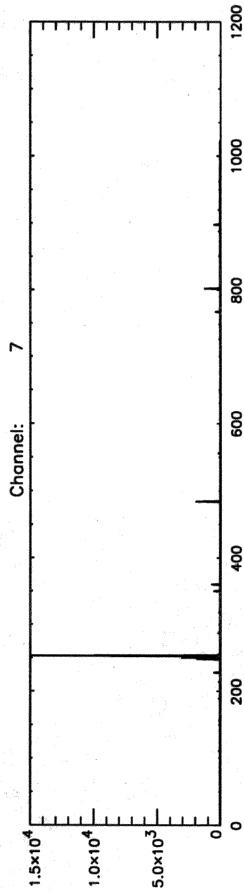
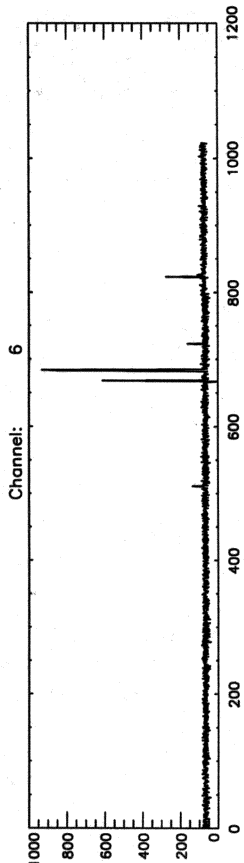
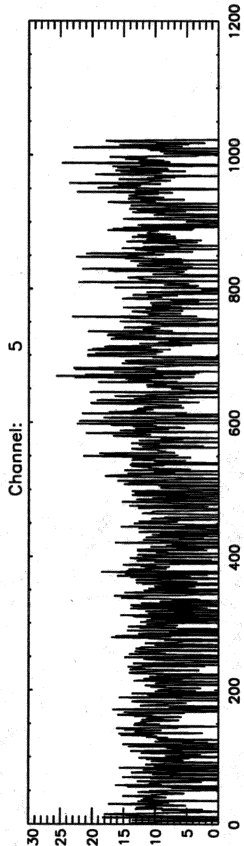
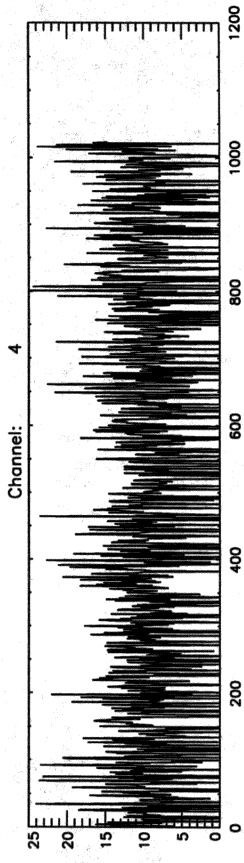
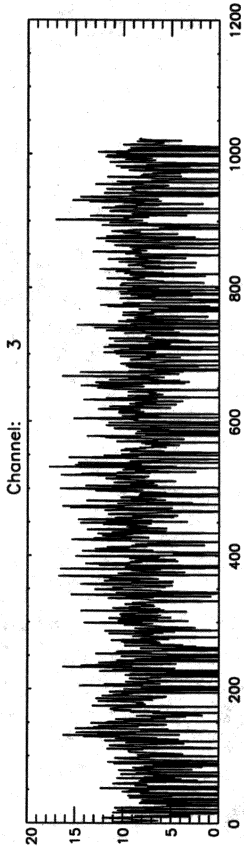
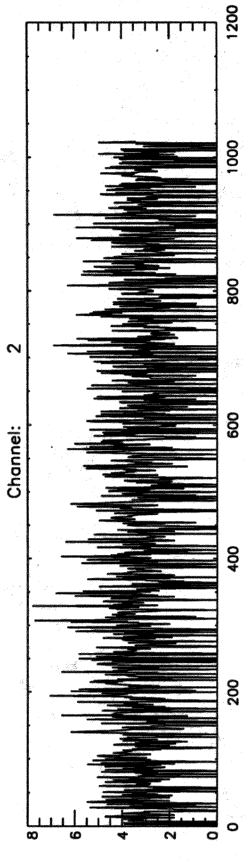
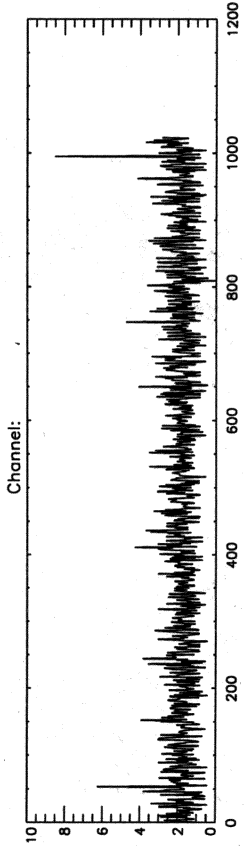


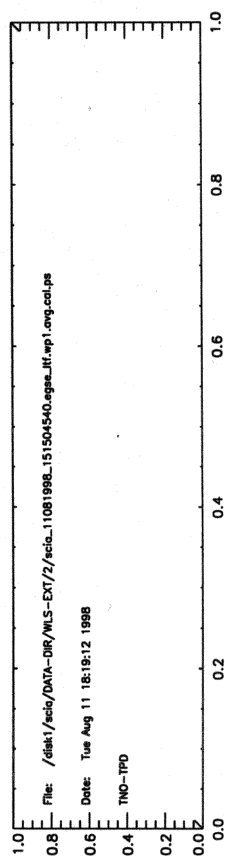
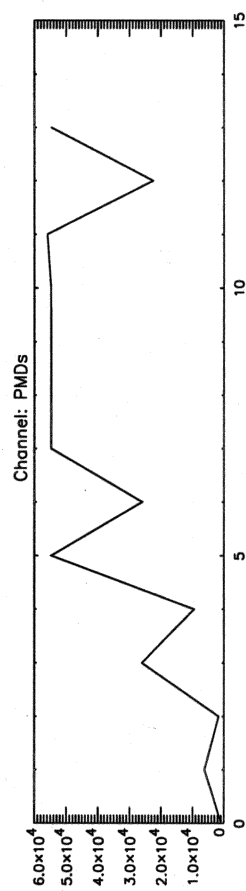
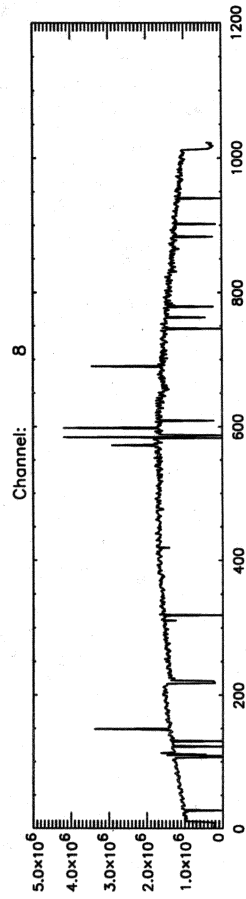
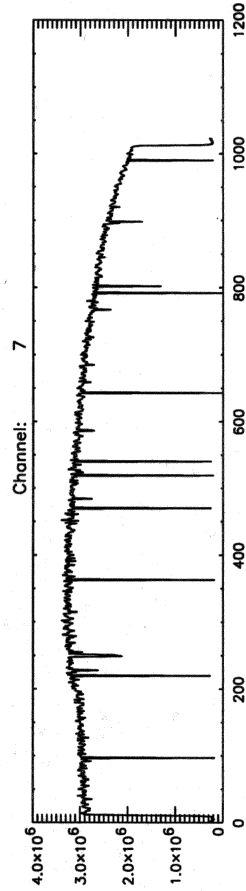
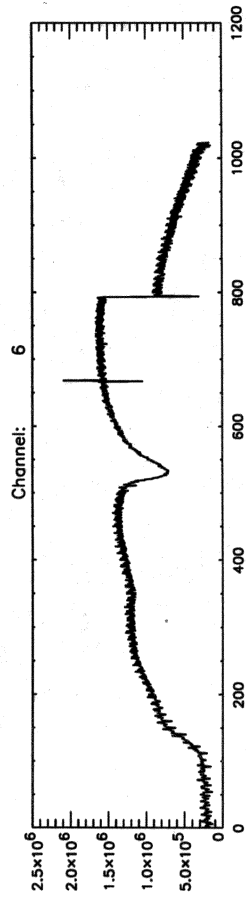
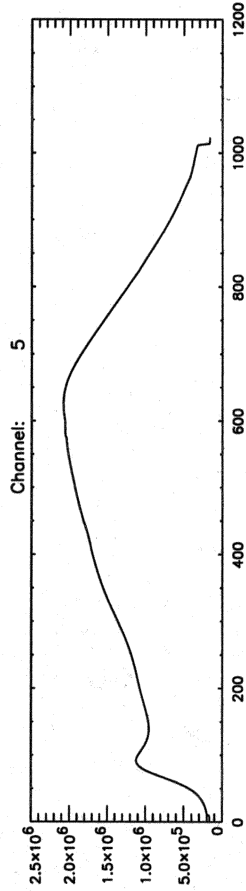
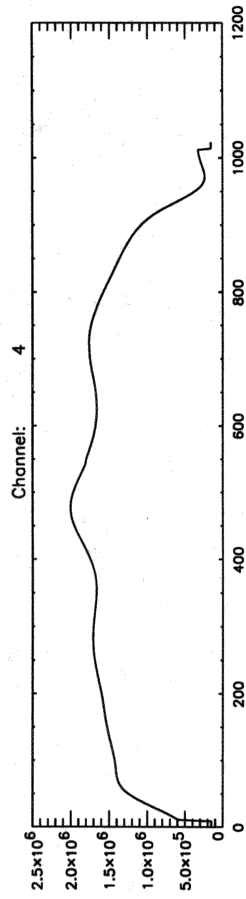
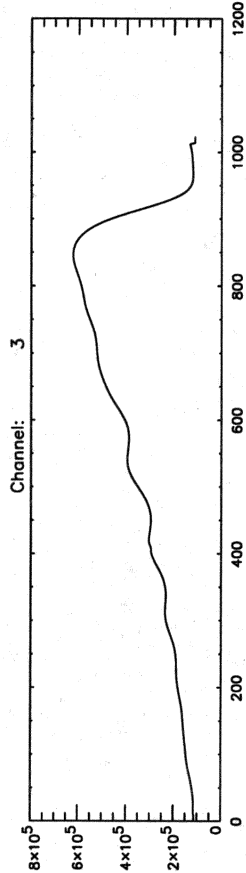
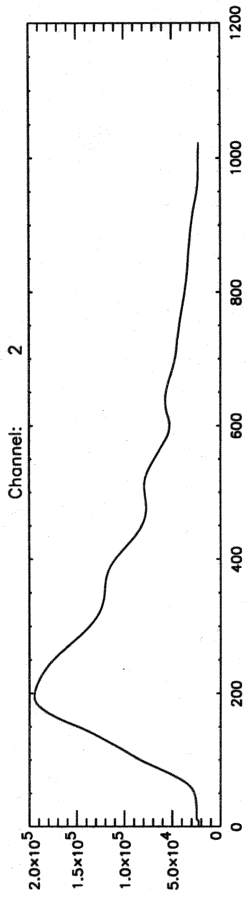
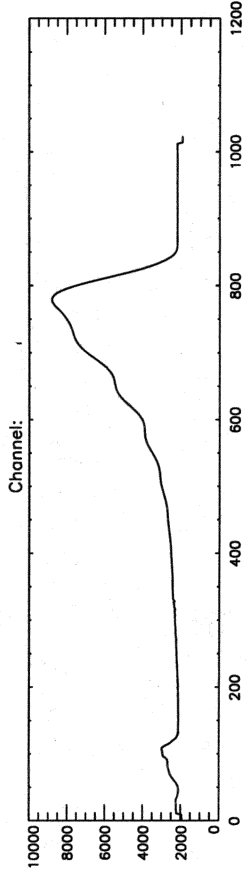


File: /desk/pcdv/DATA-DIR/MS-EXT/2/pcdv\_11081998\_151504540.gps.jfr.dat.org.caldata.gps  
 Date: Wed Aug 12 04:46:14 1998  
 TMO-TPD

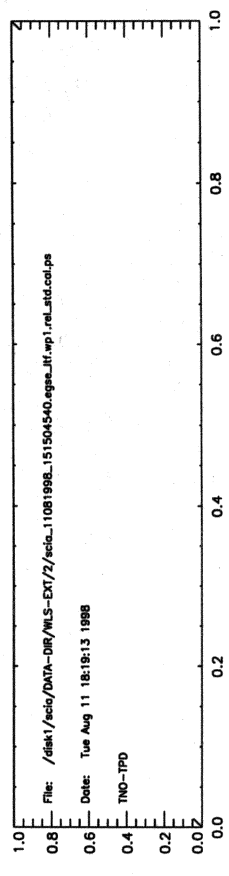
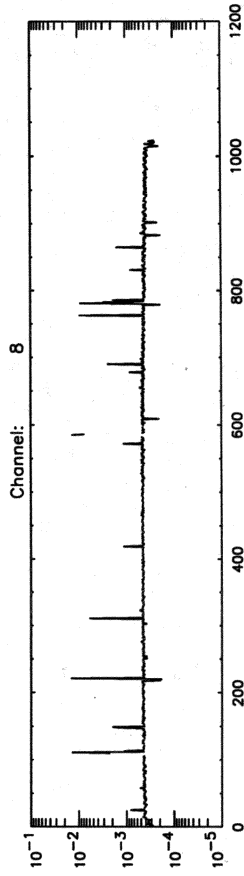
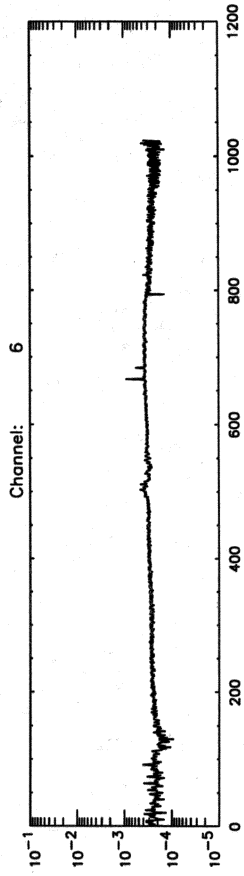
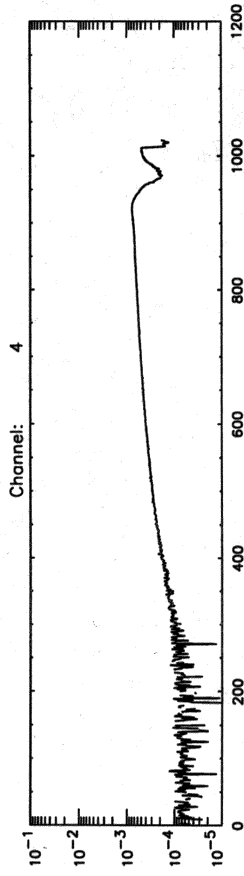
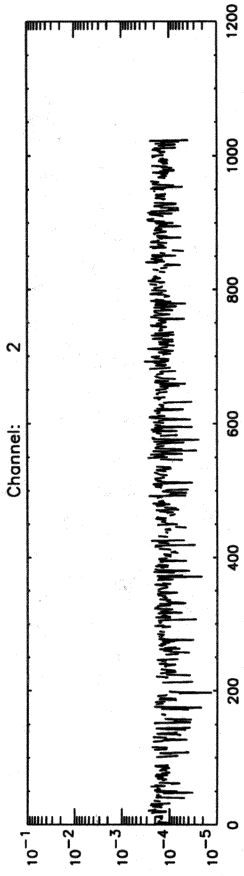
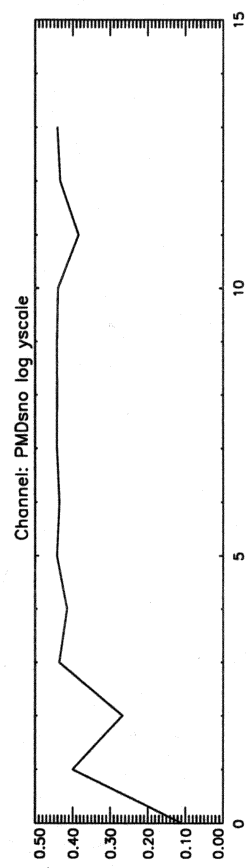
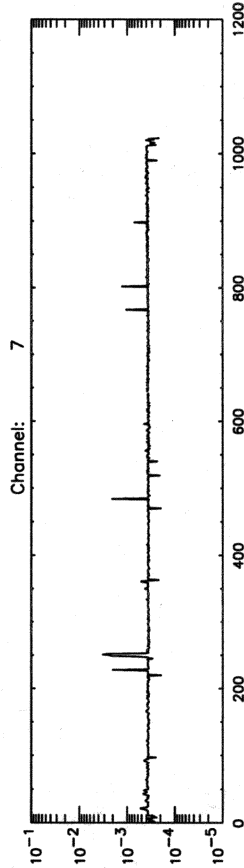
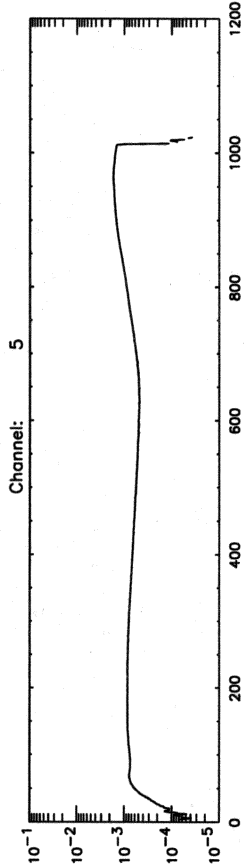
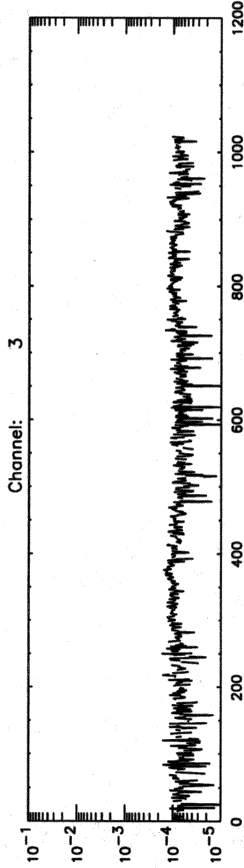
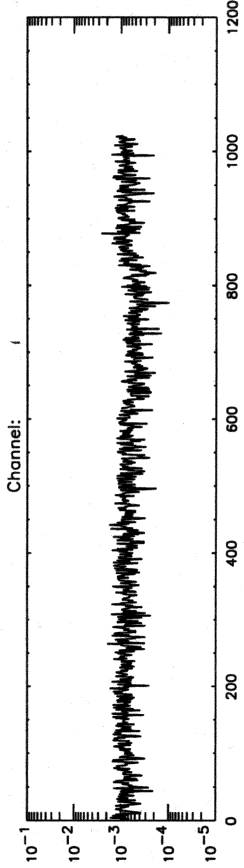


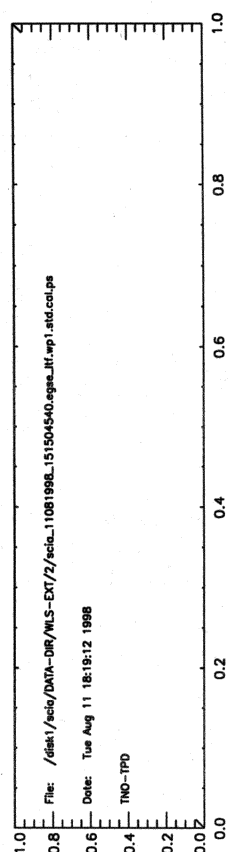
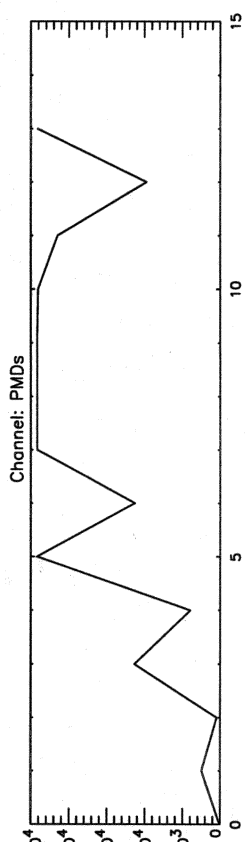
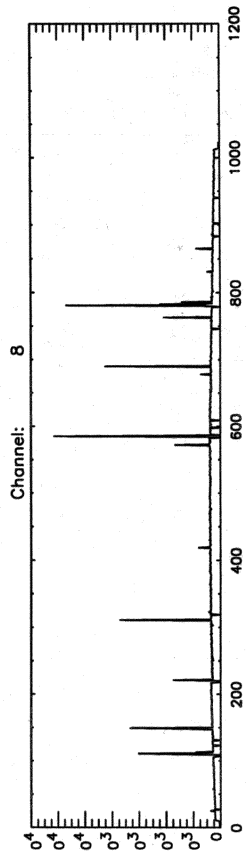
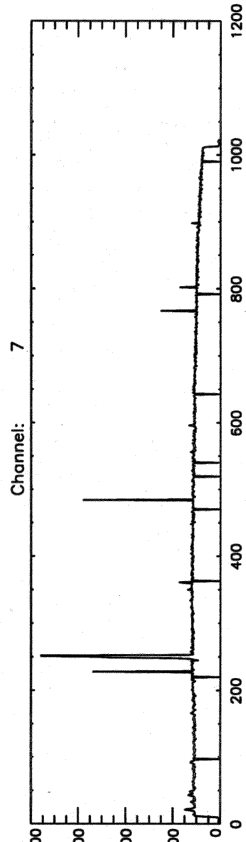
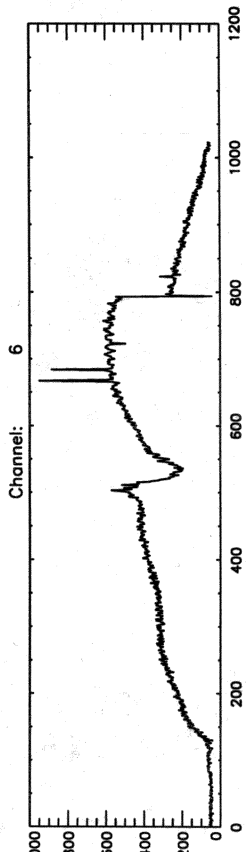
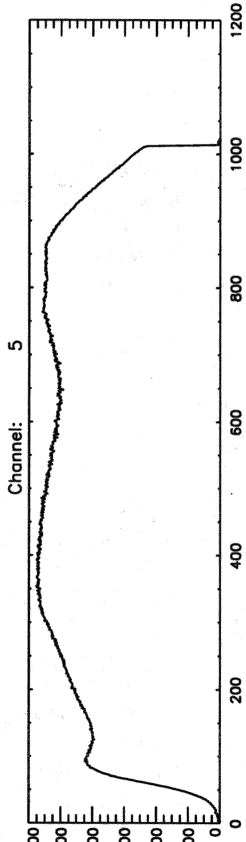
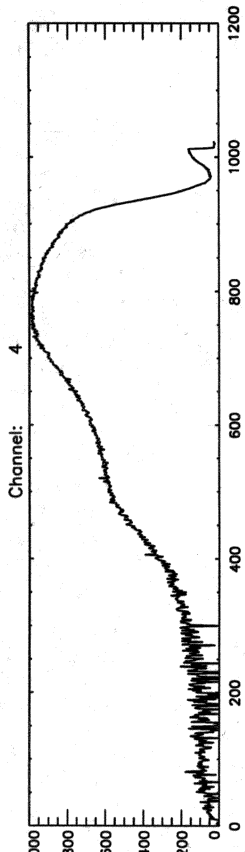
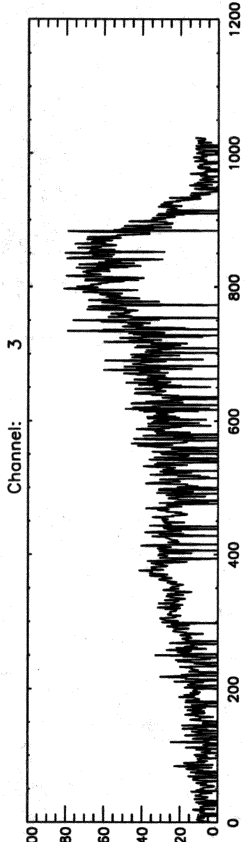
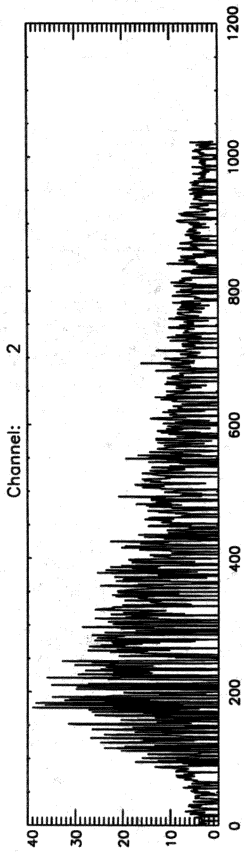
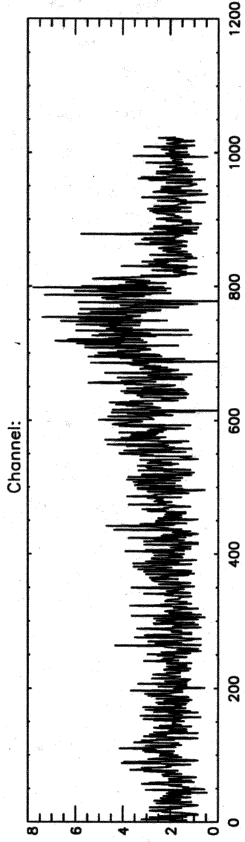


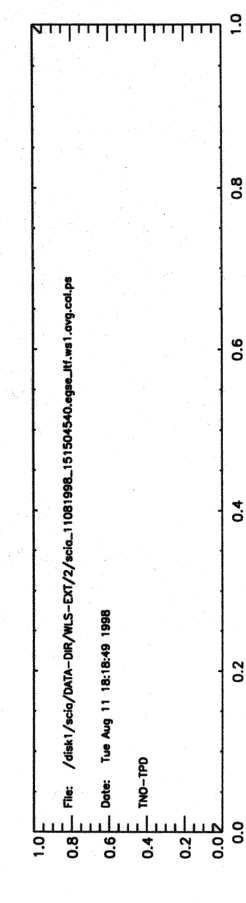
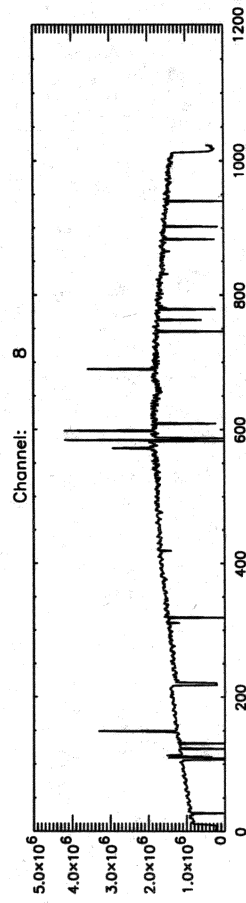
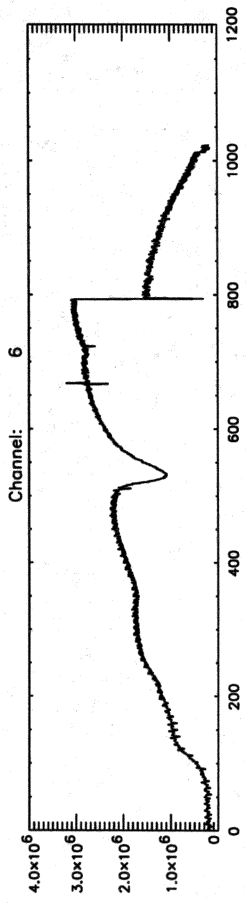
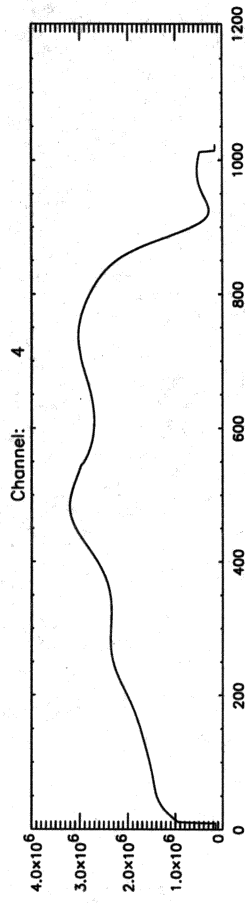
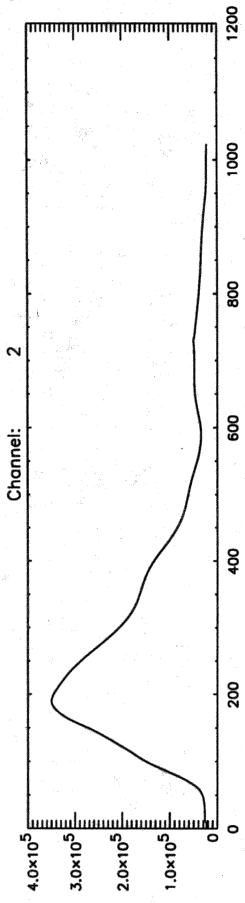
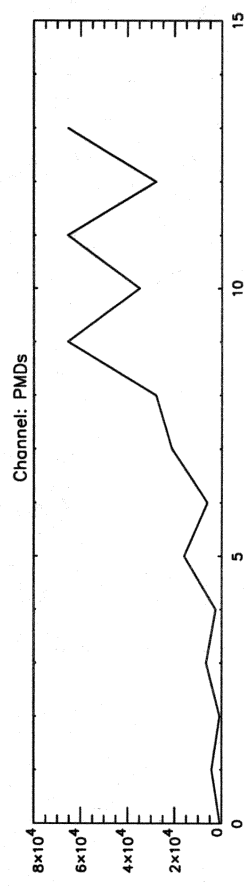
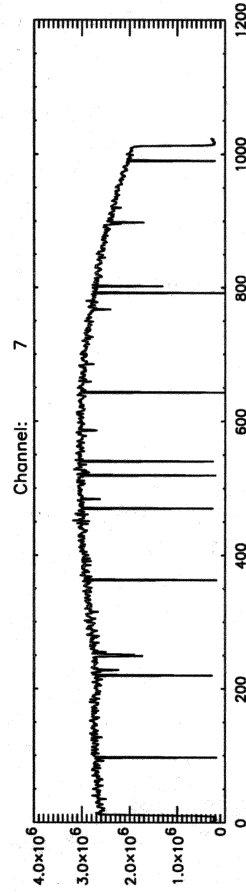
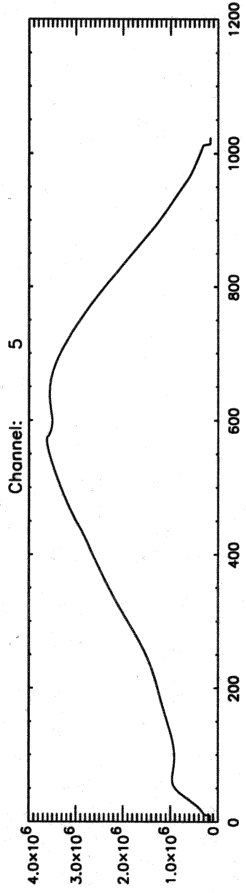
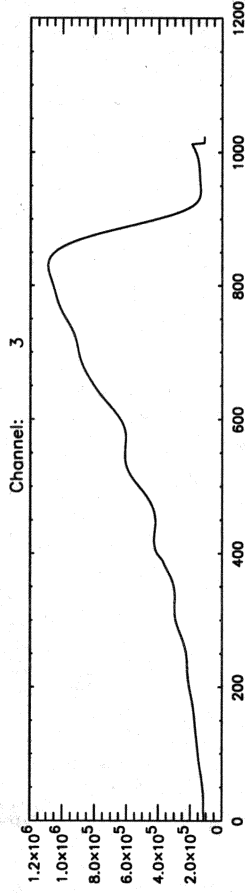
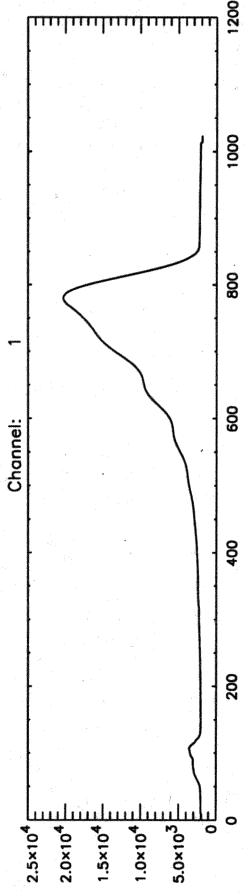


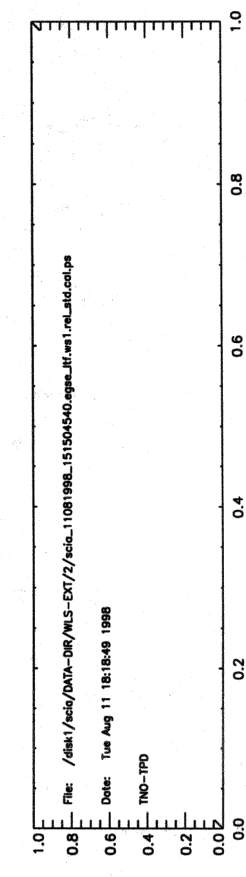
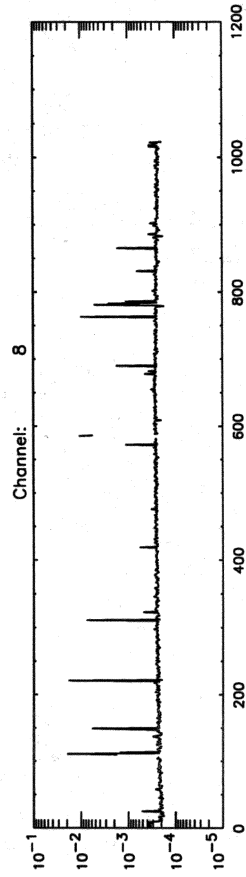
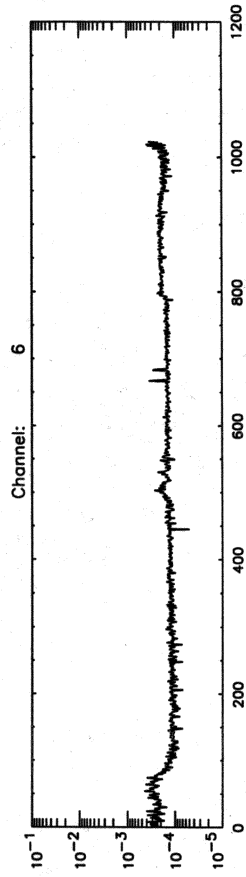
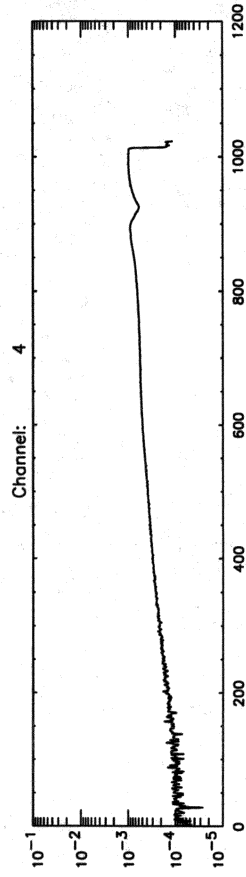
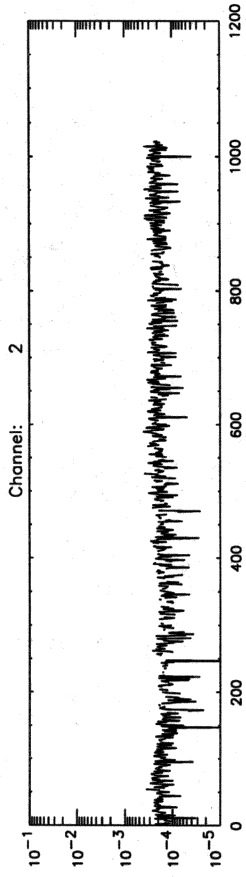
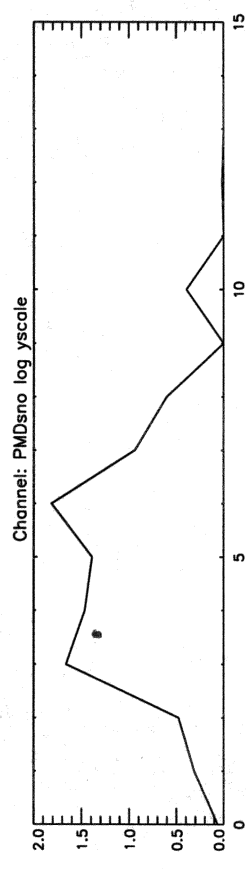
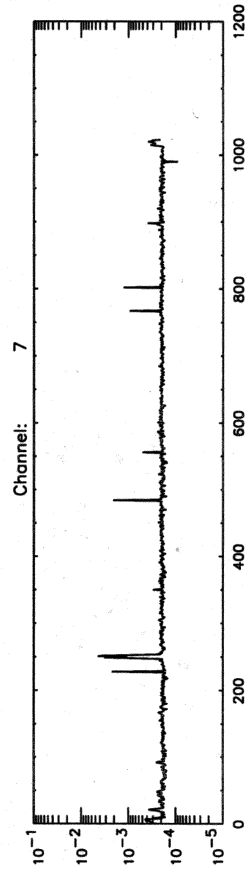
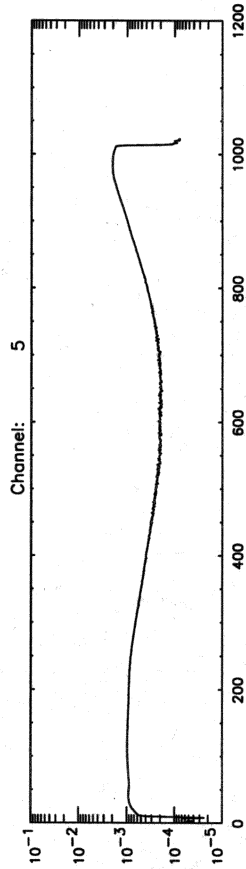
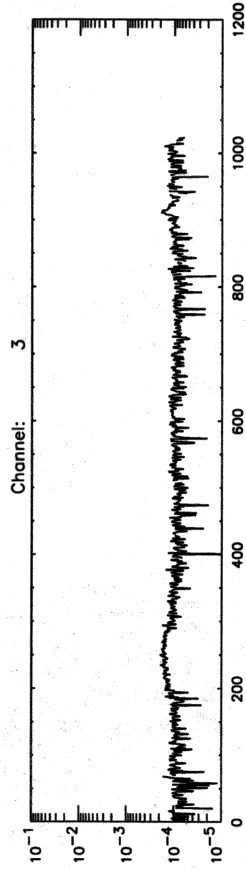
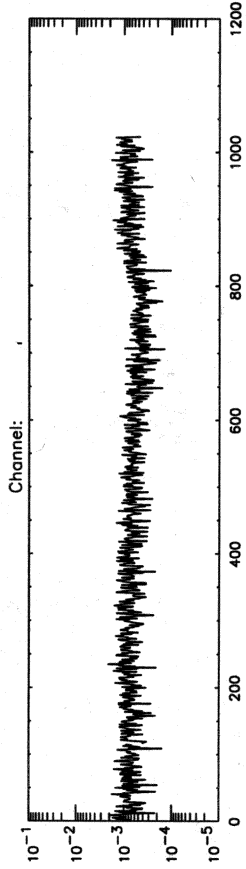


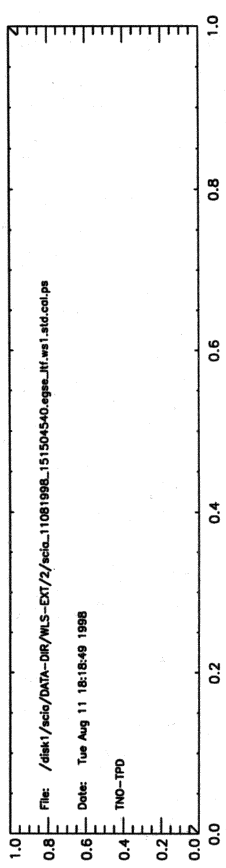
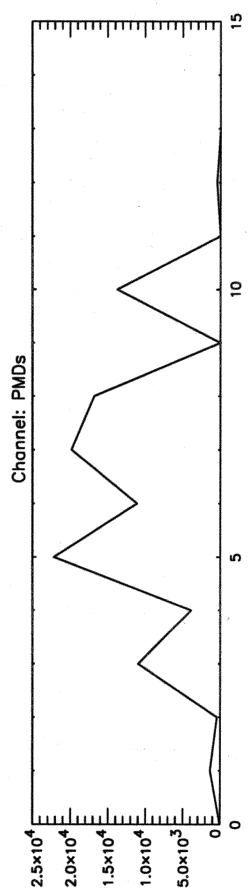
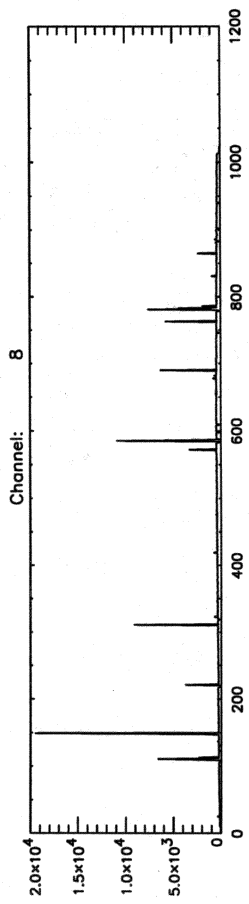
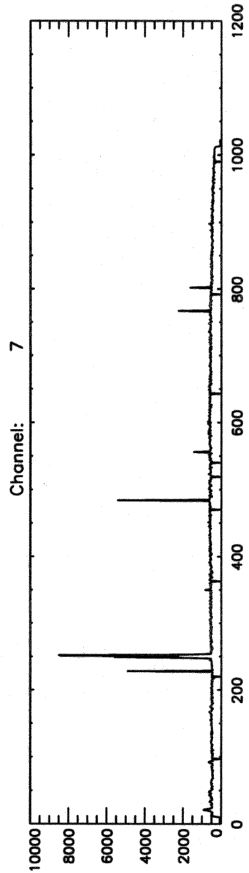
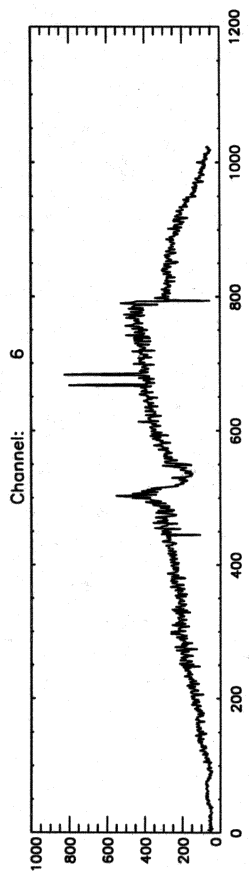
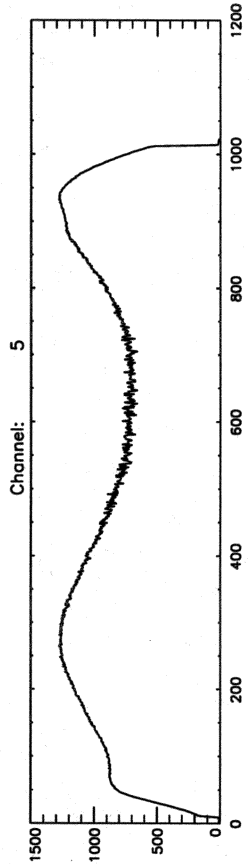
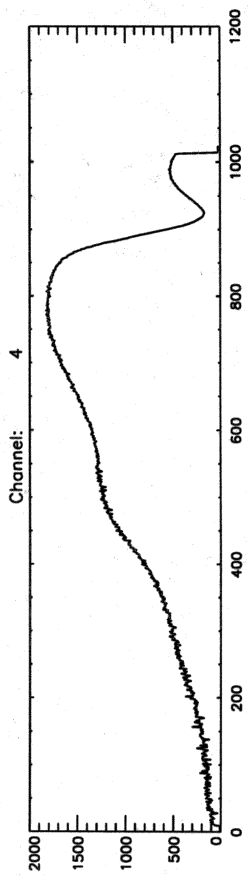
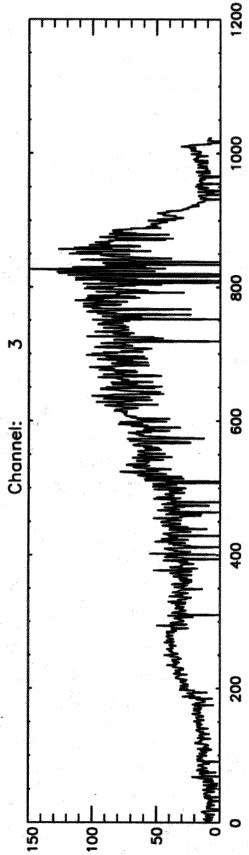
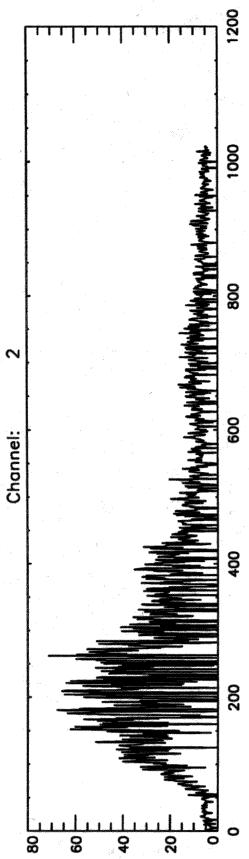
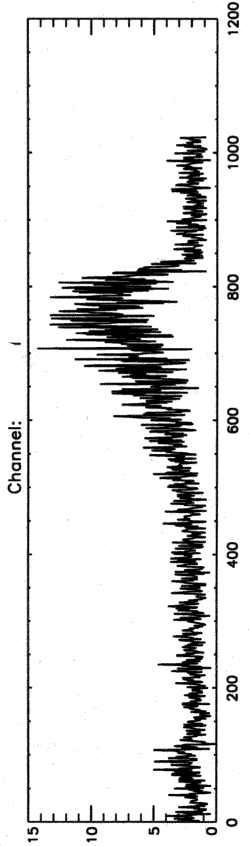












time = Tue Aug 11 18:19:32 1998

batch = dul

Start TOD = Tue 11-Aug-98 15:28:21

End TOD = Tue 11-Aug-98 15:34:12

Processing= computation of average, standard dev. and rel.standard dev.

time = Tue Aug 11 18:19:13 1998

batch = wp1

Start TOD = Tue 11-Aug-98 15:21:52

End TOD = Tue 11-Aug-98 15:28:21

Processing= computation of average, standard dev. and rel.standard dev.

time = Tue Aug 11 18:18:49 1998

batch = ws1

Start TOD = Tue 11-Aug-98 15:15:04

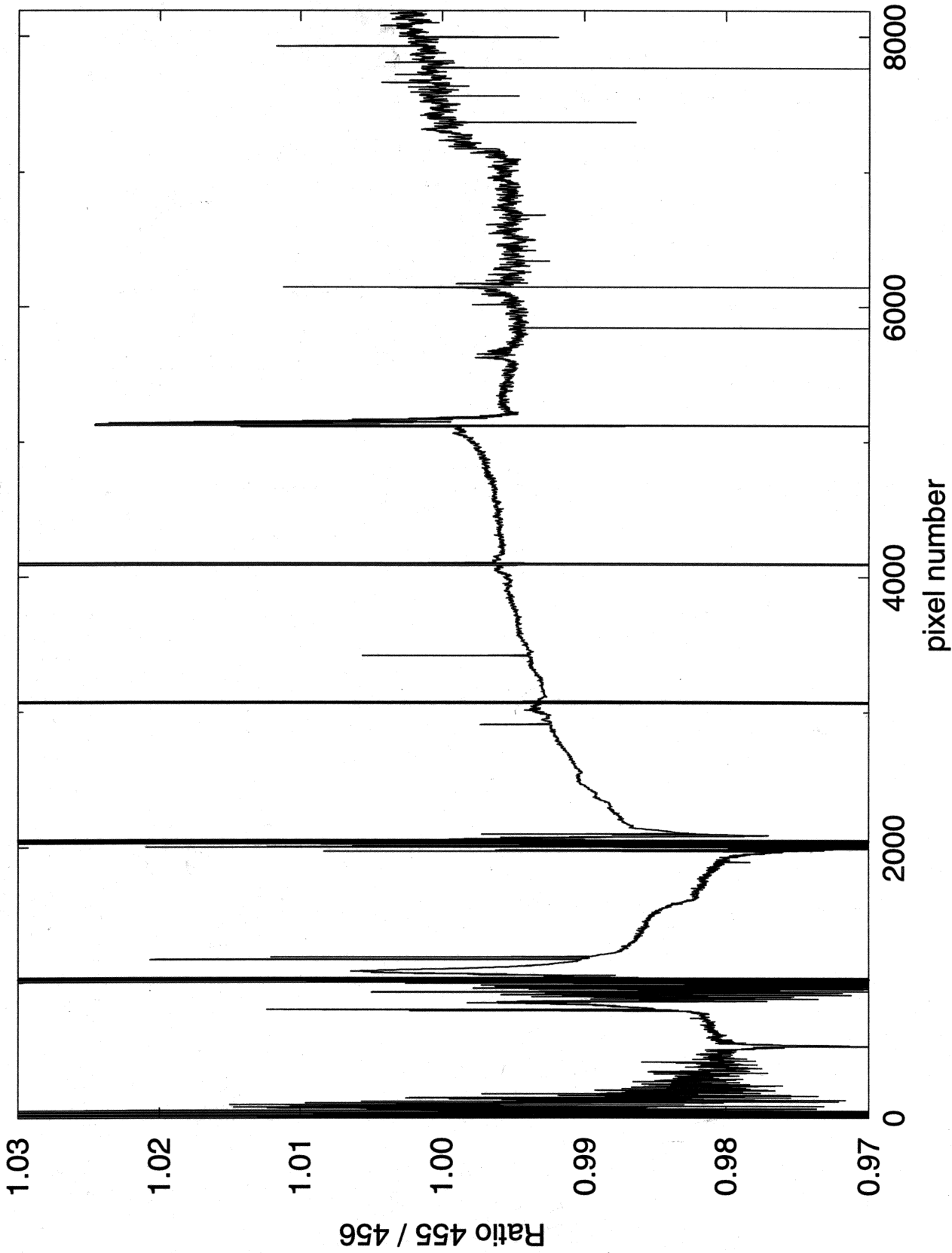
End TOD = Tue 11-Aug-98 15:21:52

Processing= computation of average, standard dev. and rel.standard dev.

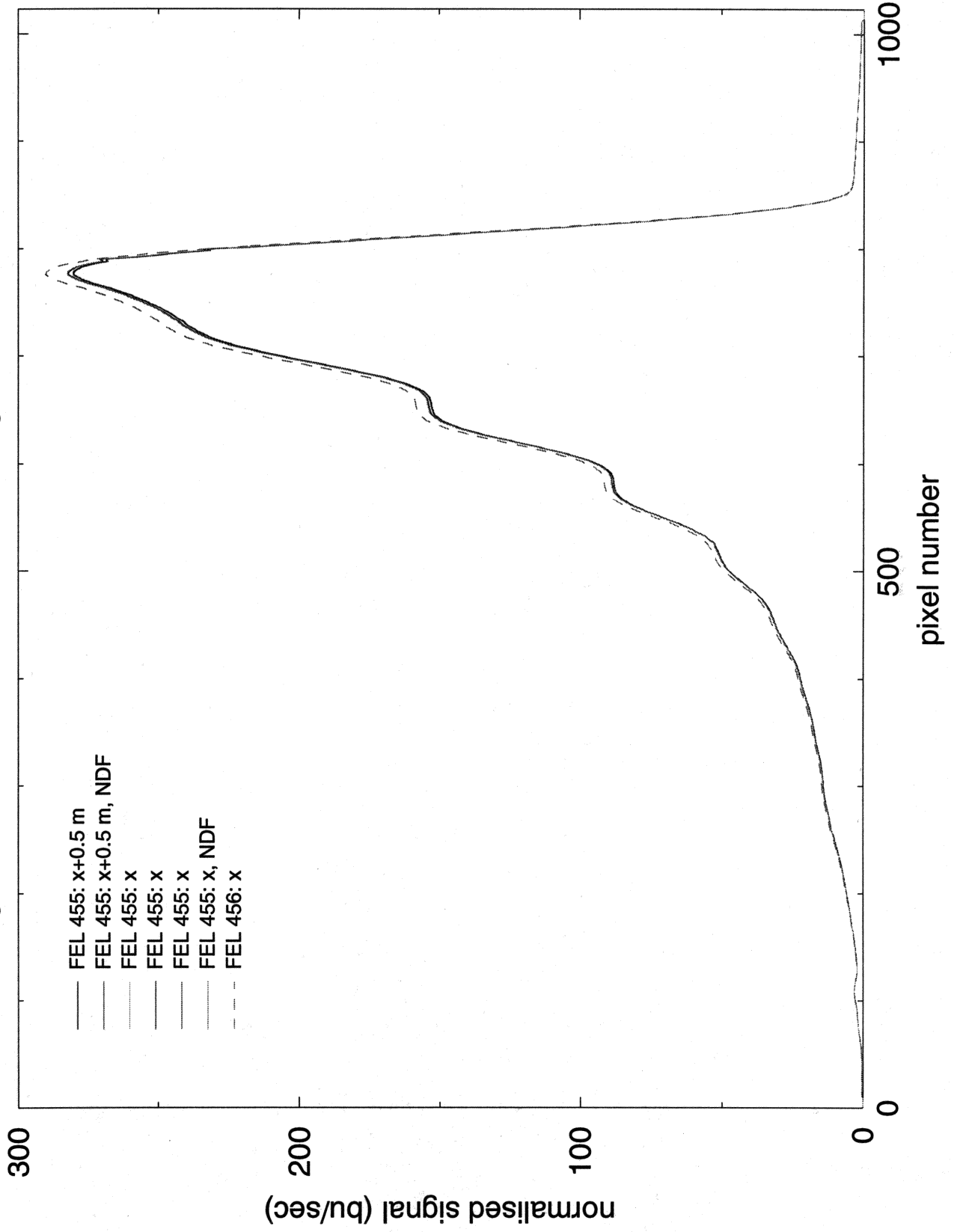




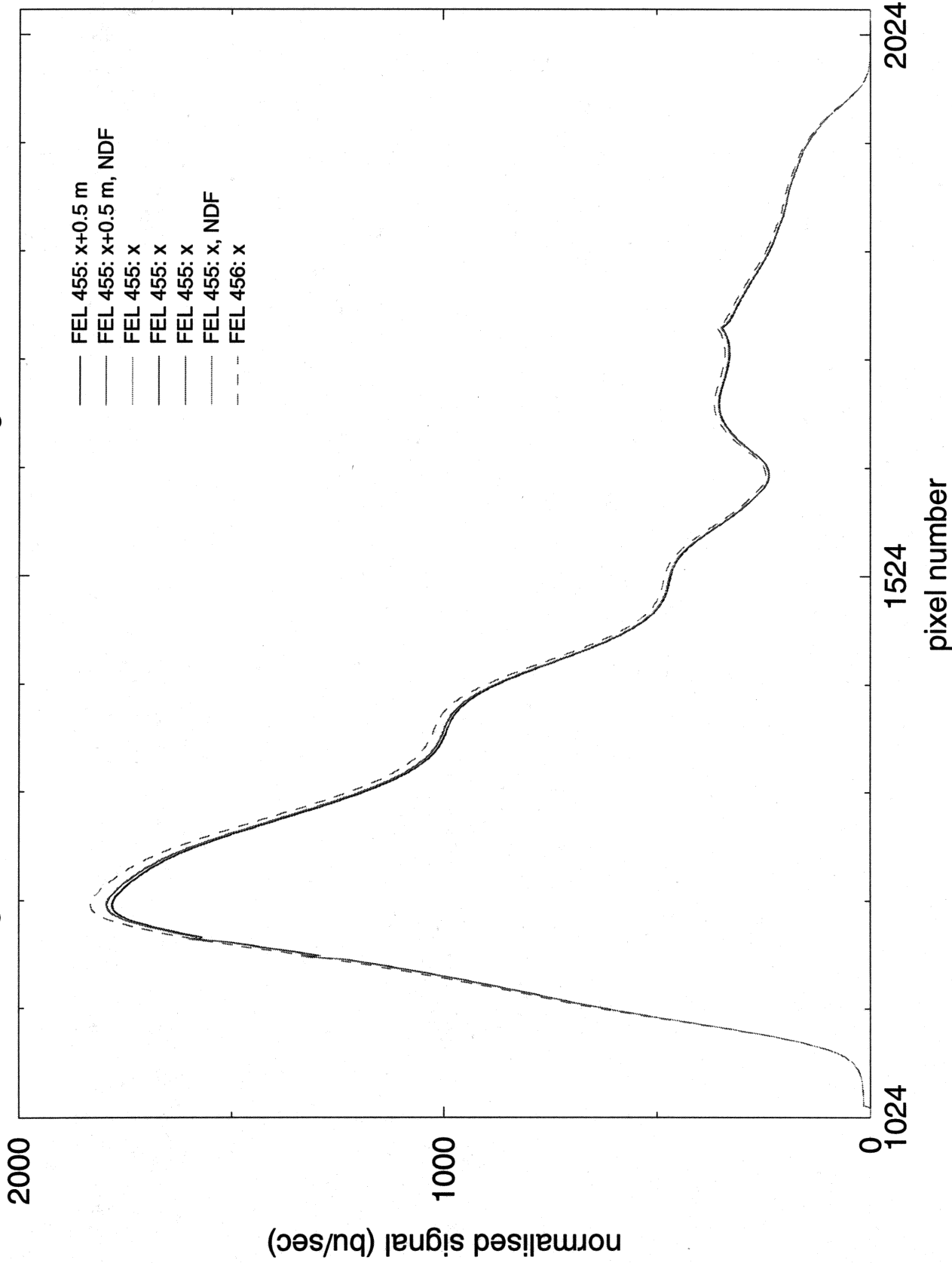
Ratio 455 / 456 corrected FEL 1000 W lamp limb radiance spectra  
Spectra corrected for respective lamp outputs and window transmission



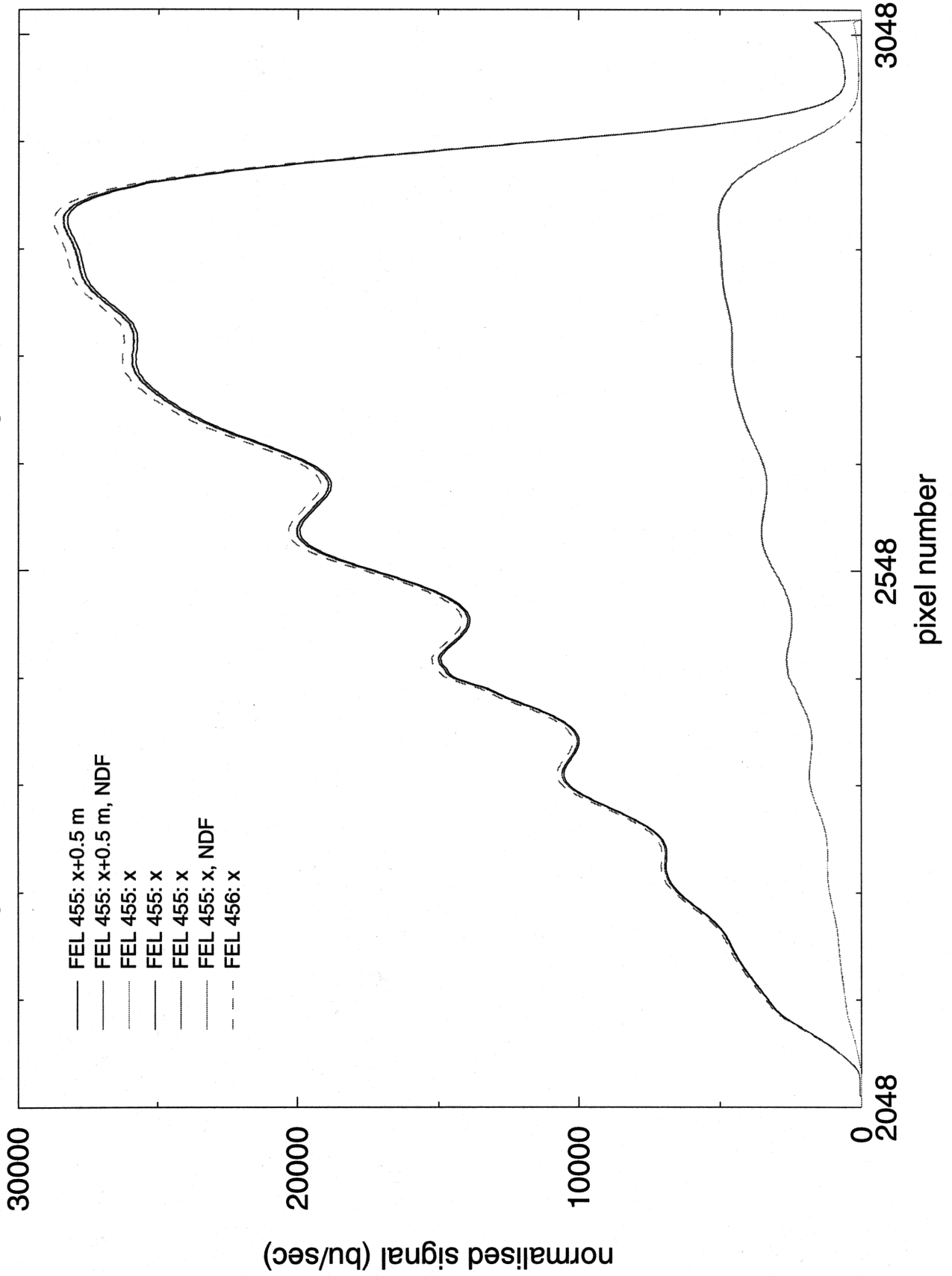
Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 1



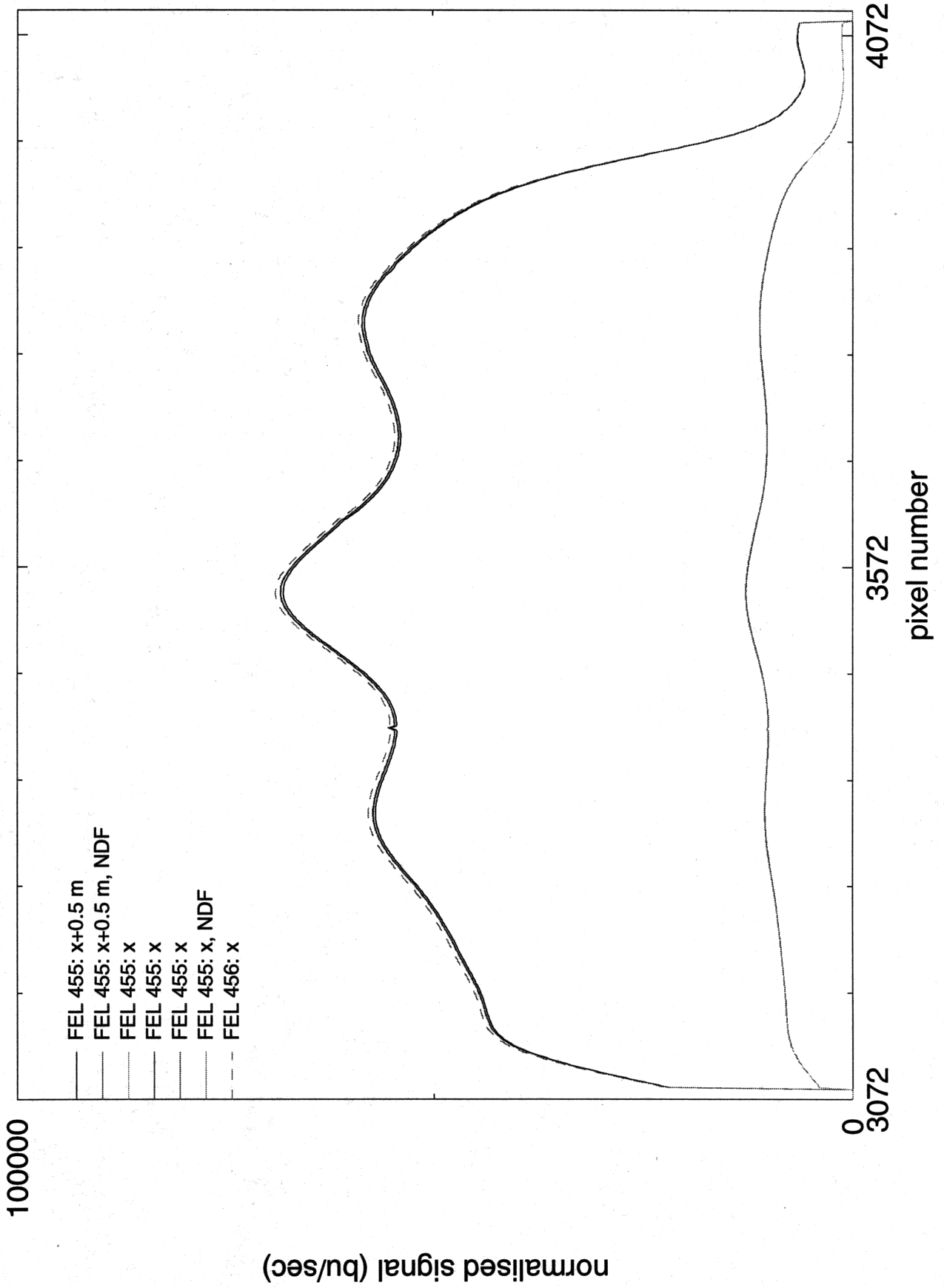
Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 2



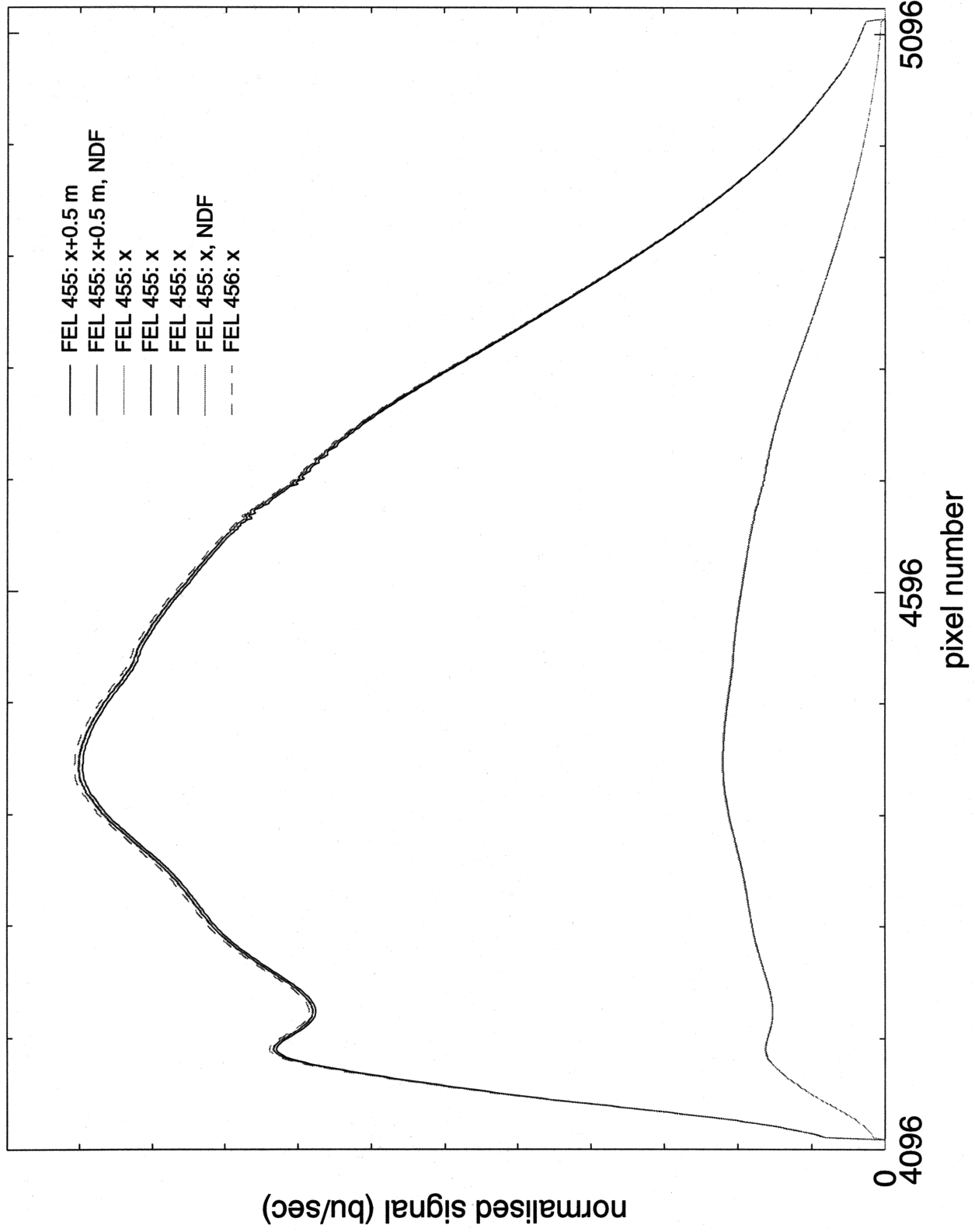
Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 3



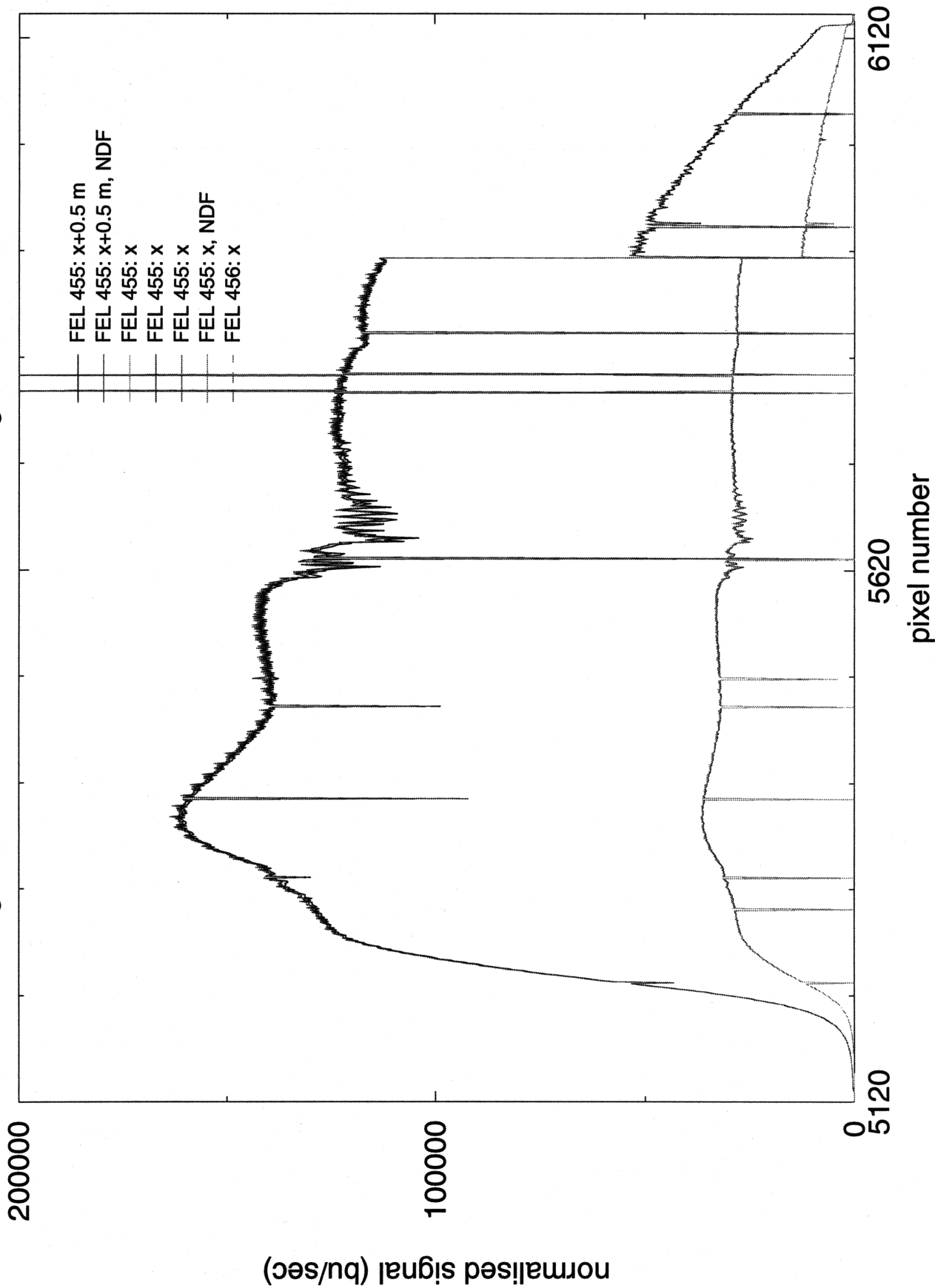
Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 4



Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 5

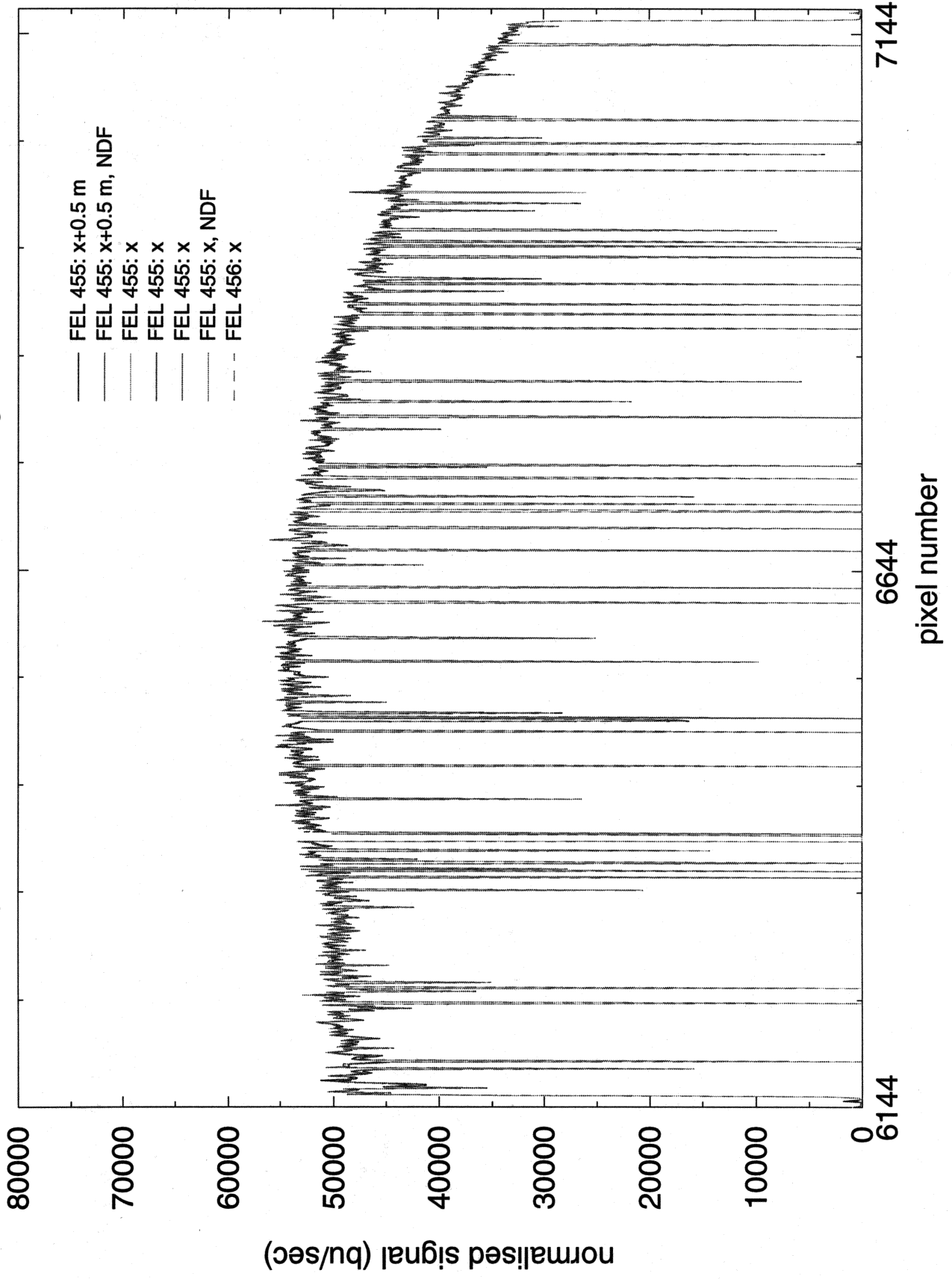


Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 6

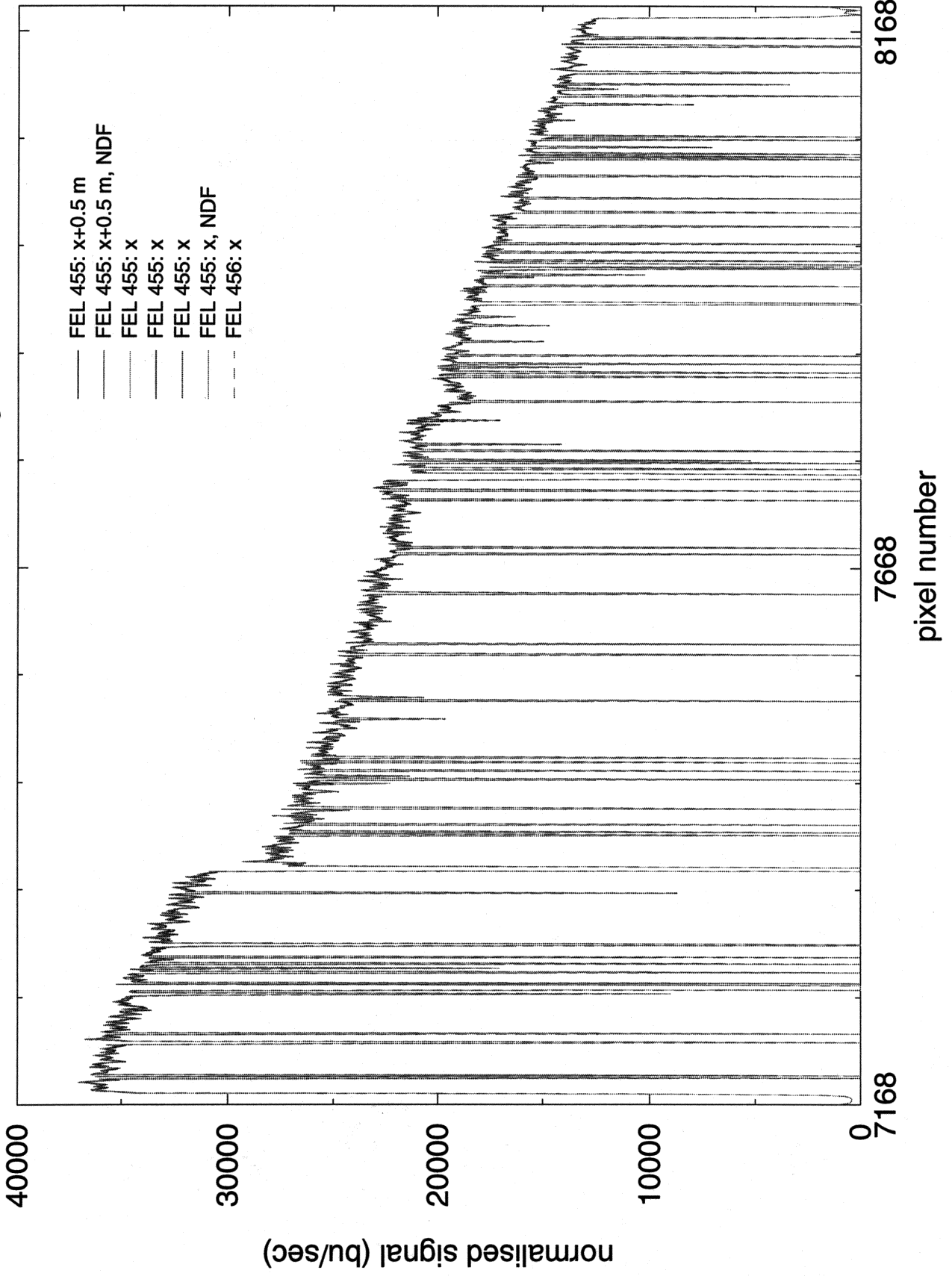




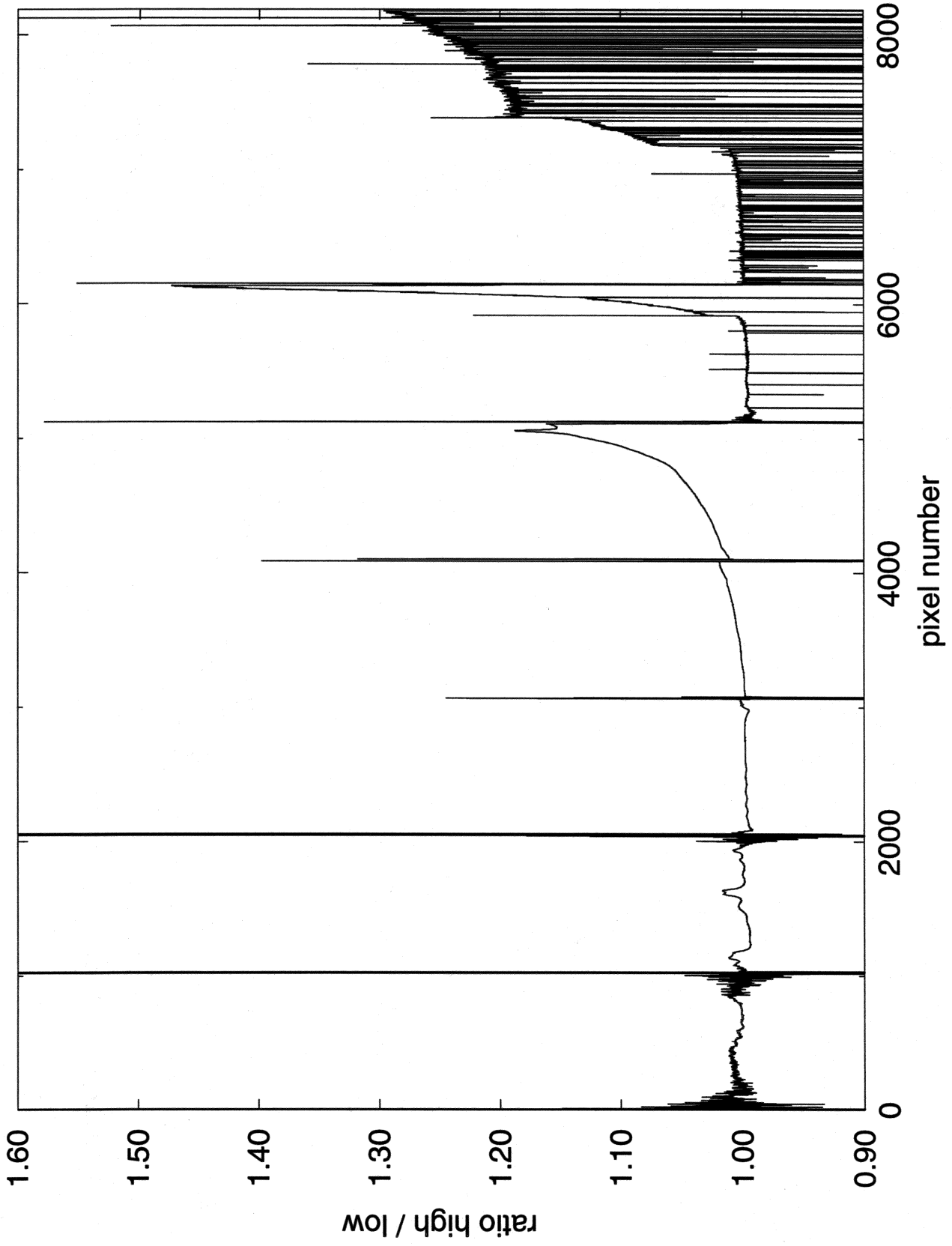
Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 7



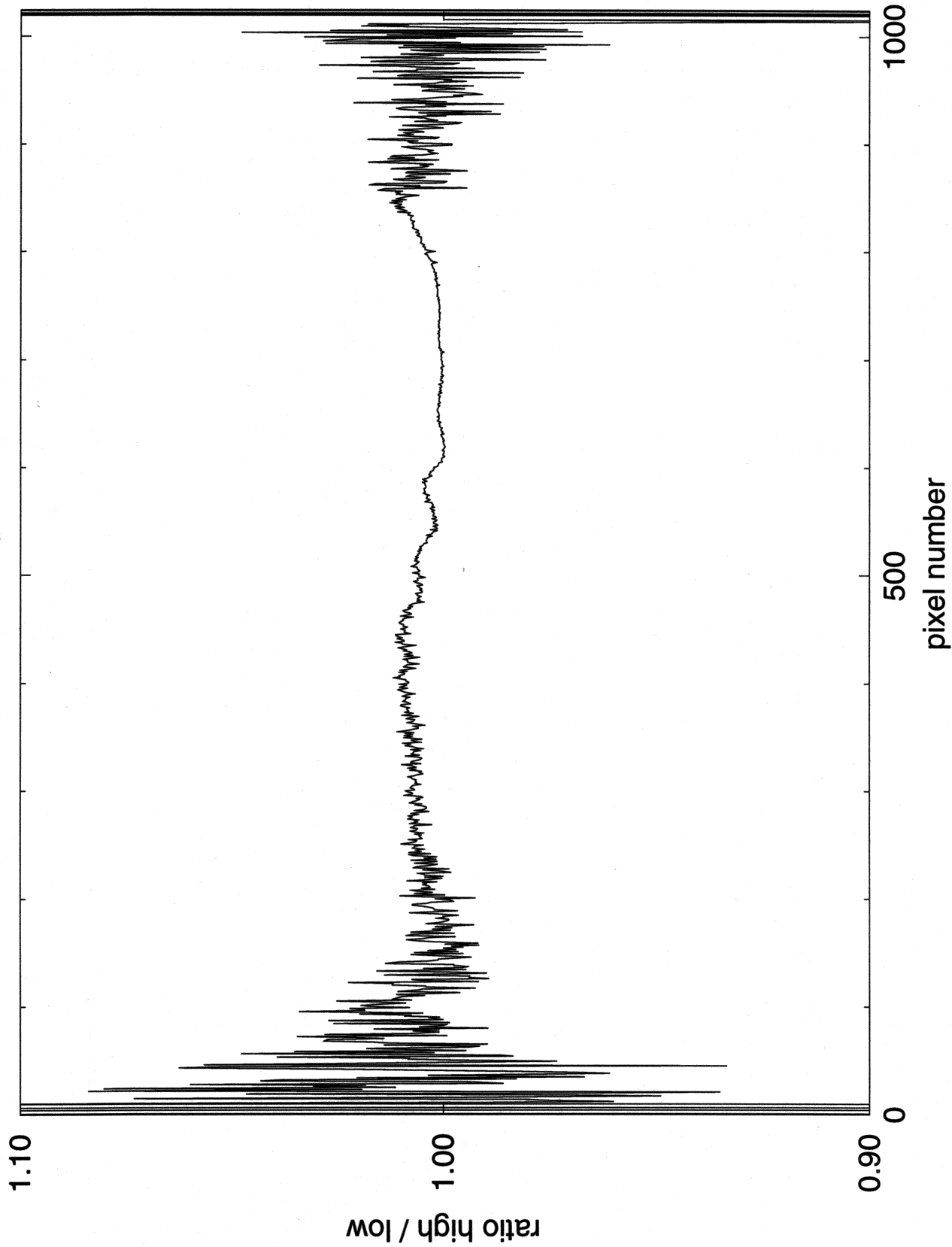
Limb radiance measurements  
Signal normalised w.r.t. PET & coadding factor: Channel 8



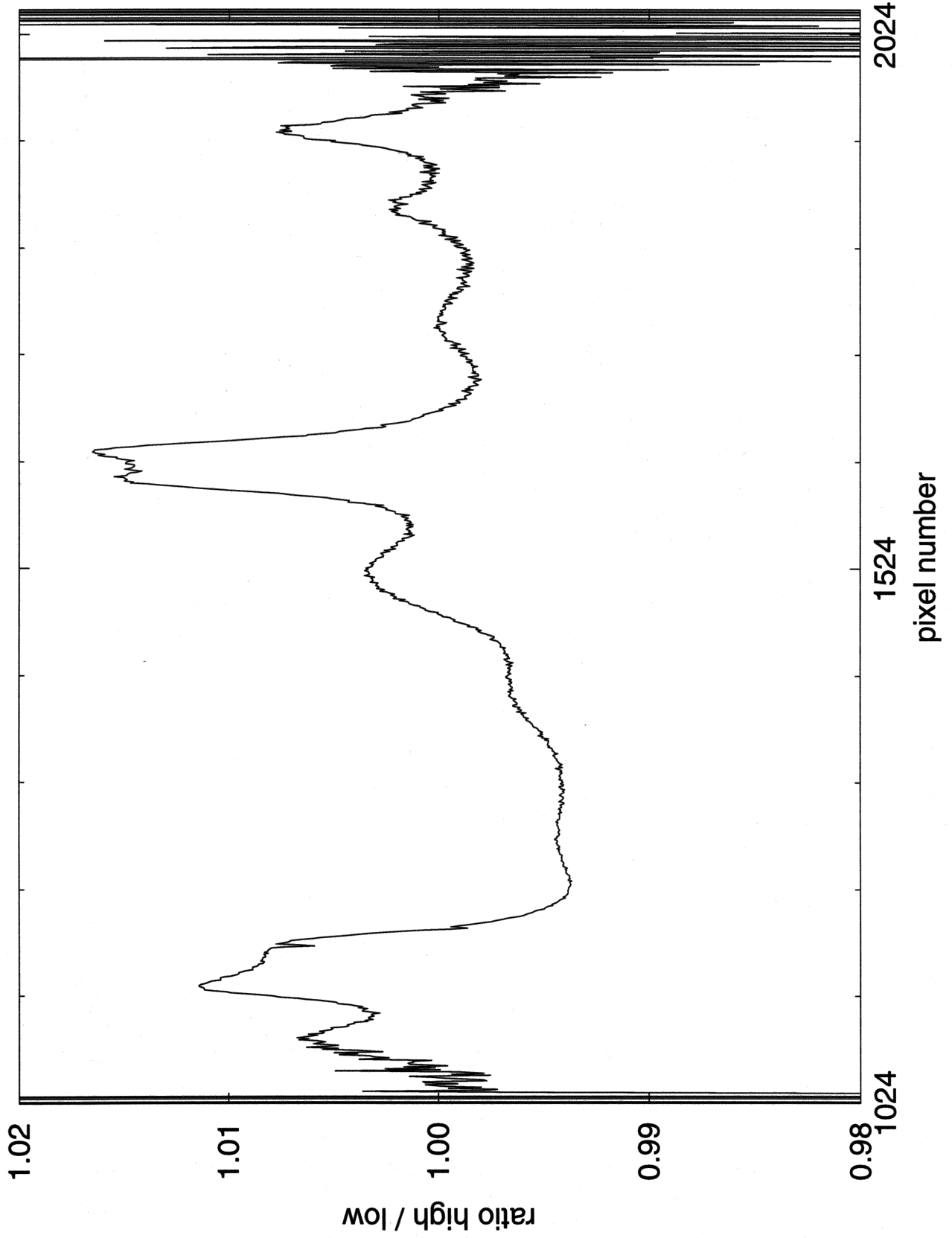
High DM temperatures / low DM temperatures  
Limb radiance



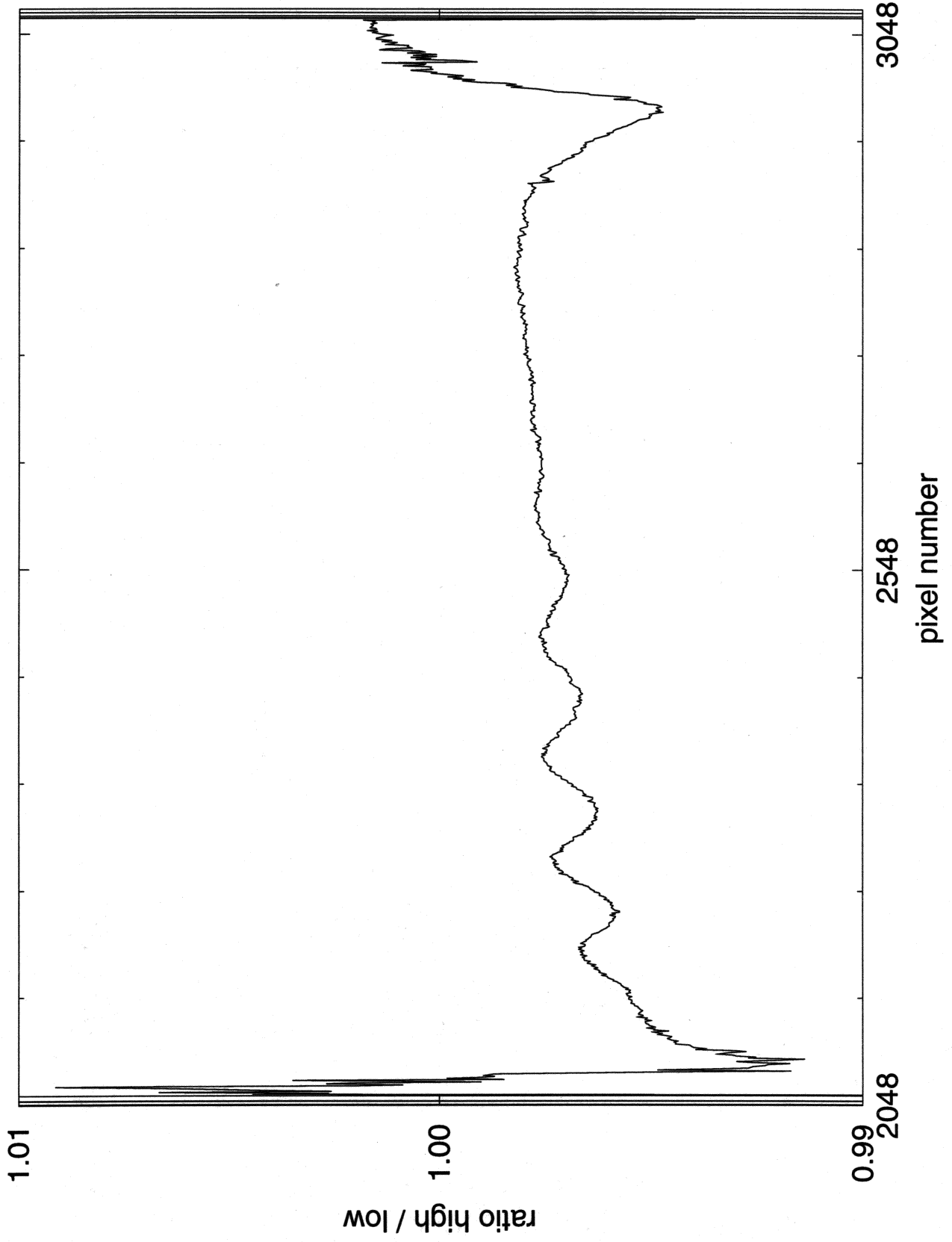
High DM temperatures / low DM temperatures  
Limb radiance, channel 1



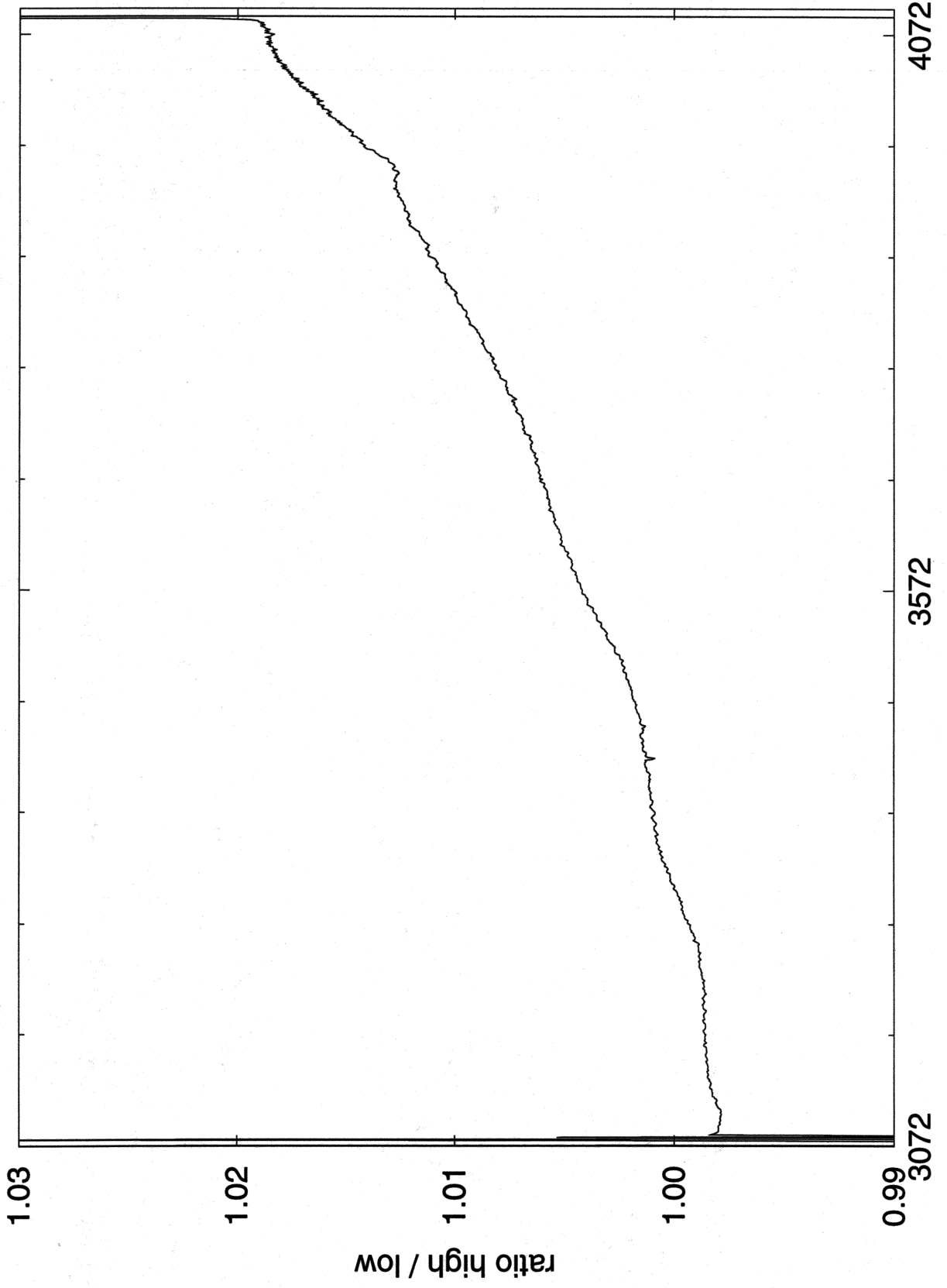
High DM temperatures / low DM temperatures  
Limb radiance, channel 2



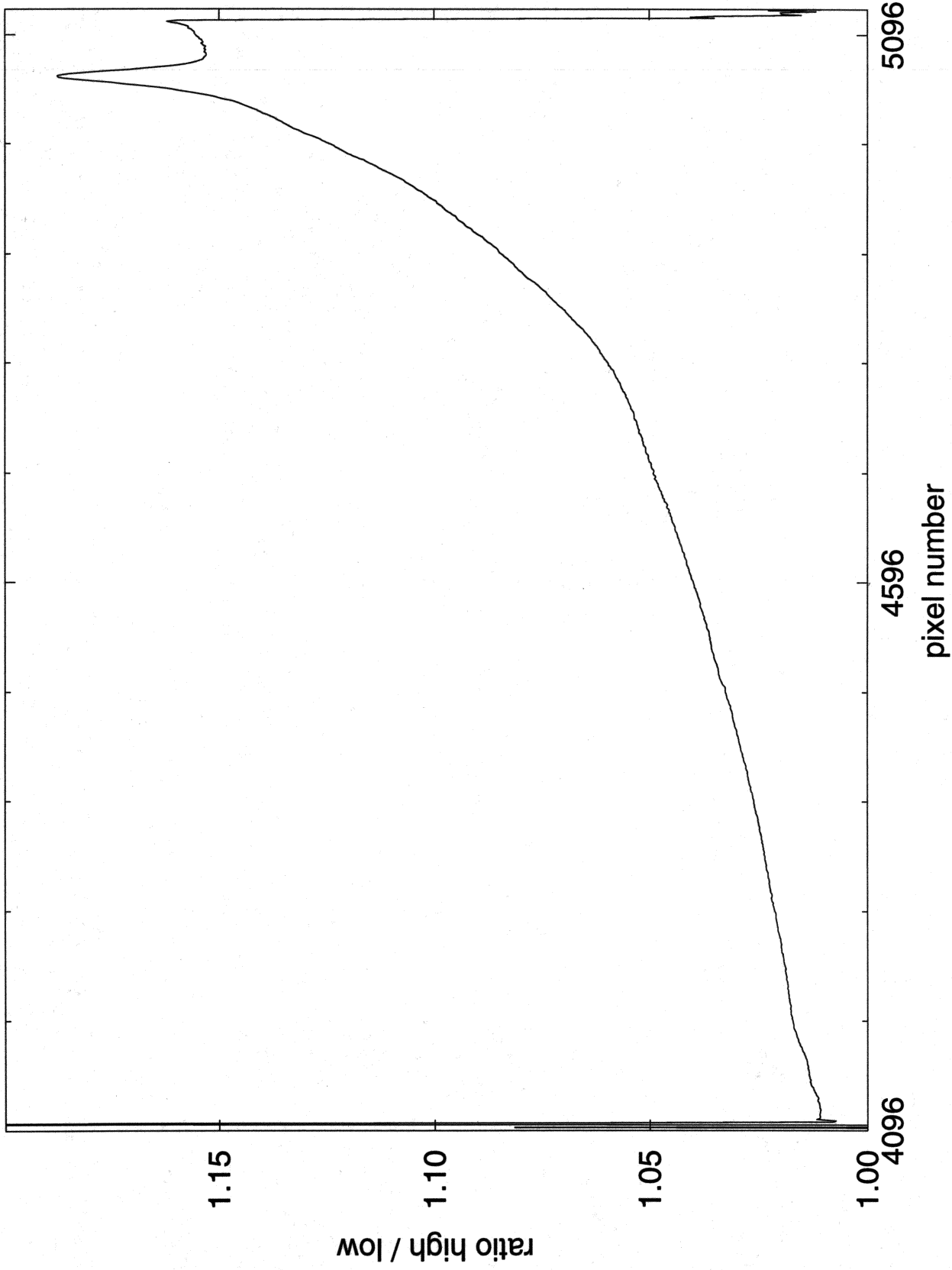
High DM temperatures / low DM temperatures  
Limb radiance, channel 3



High DM temperatures / low DM temperatures  
Limb radiance, channel 4

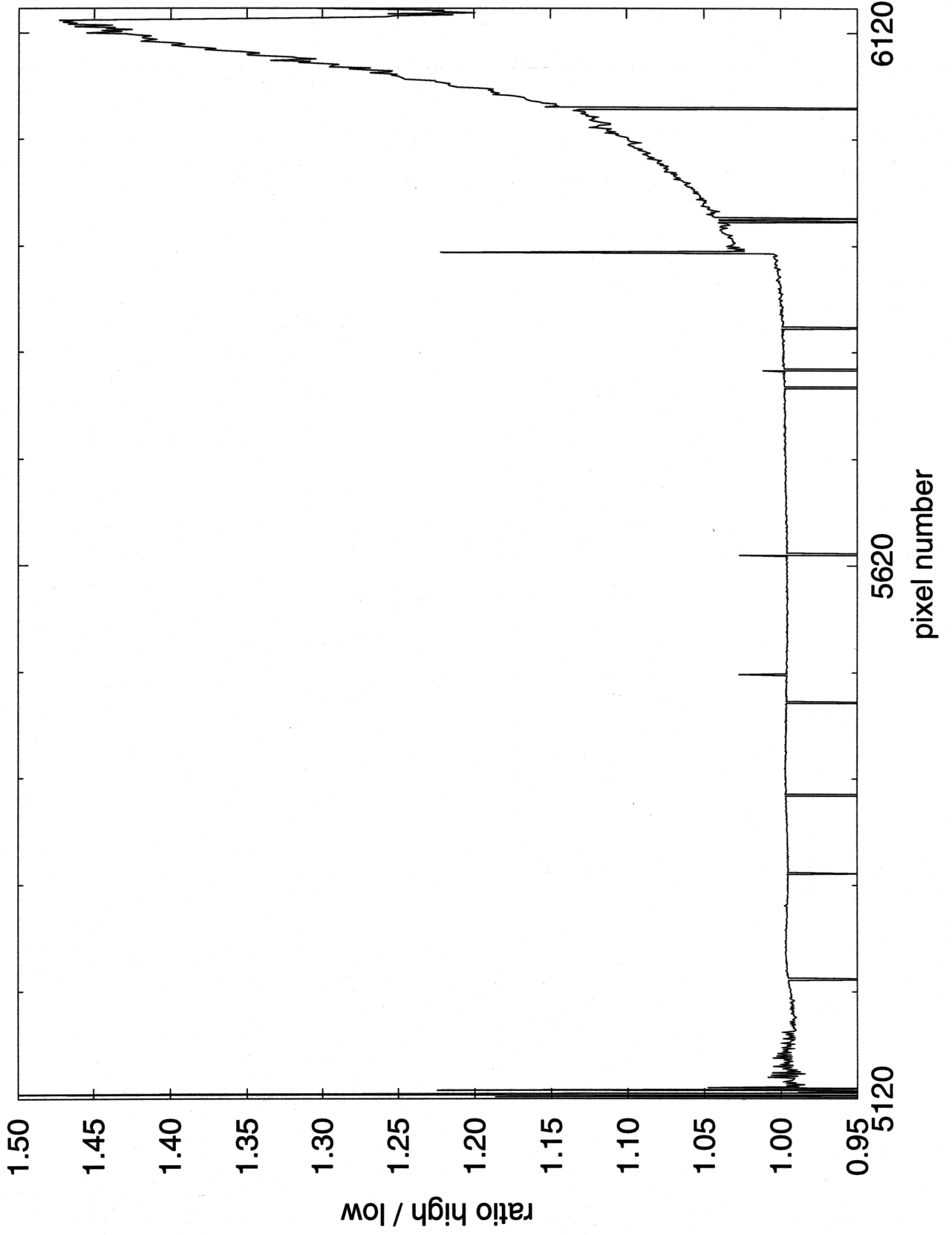


High DM temperatures / low DM temperatures  
Limb radiance, channel 5

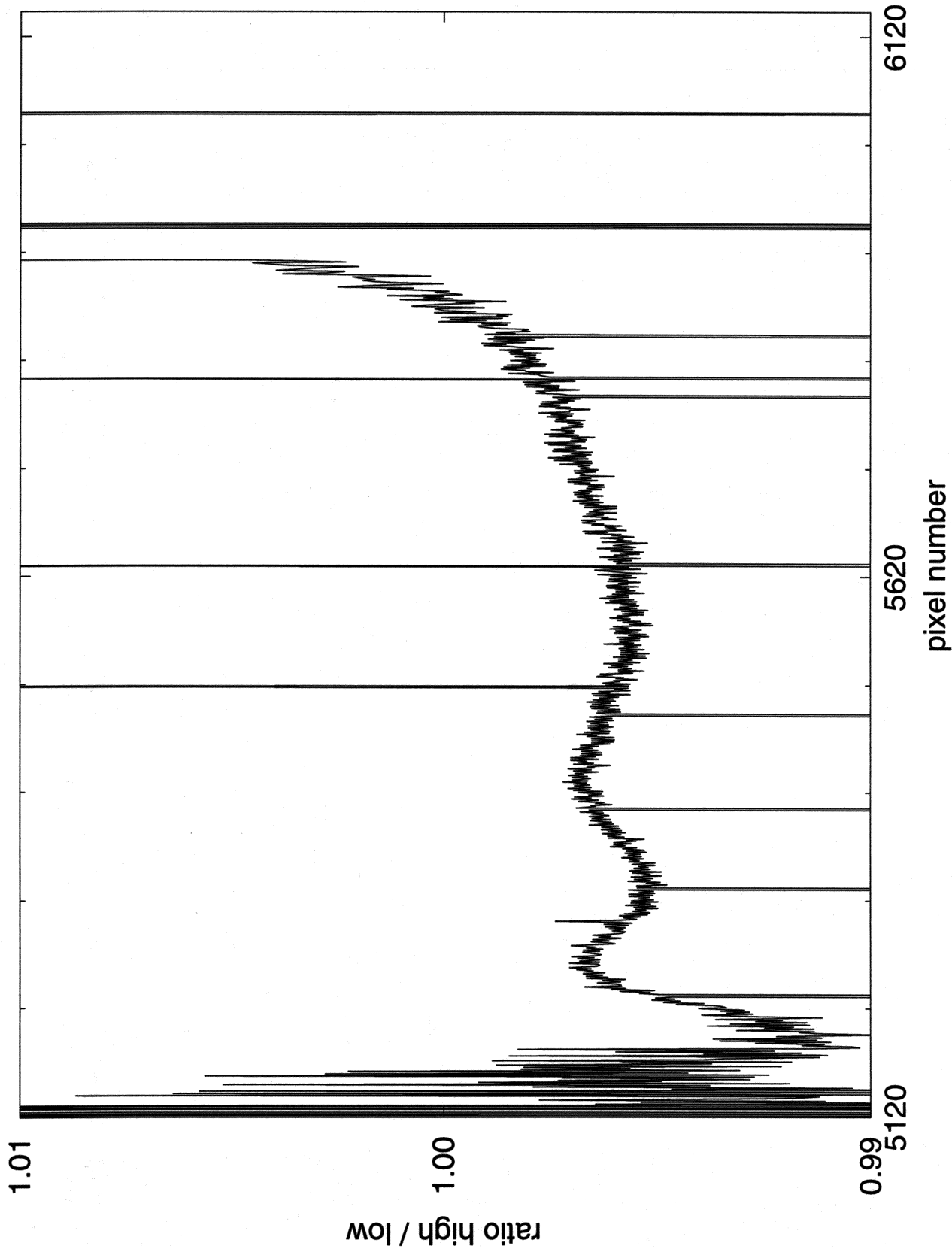




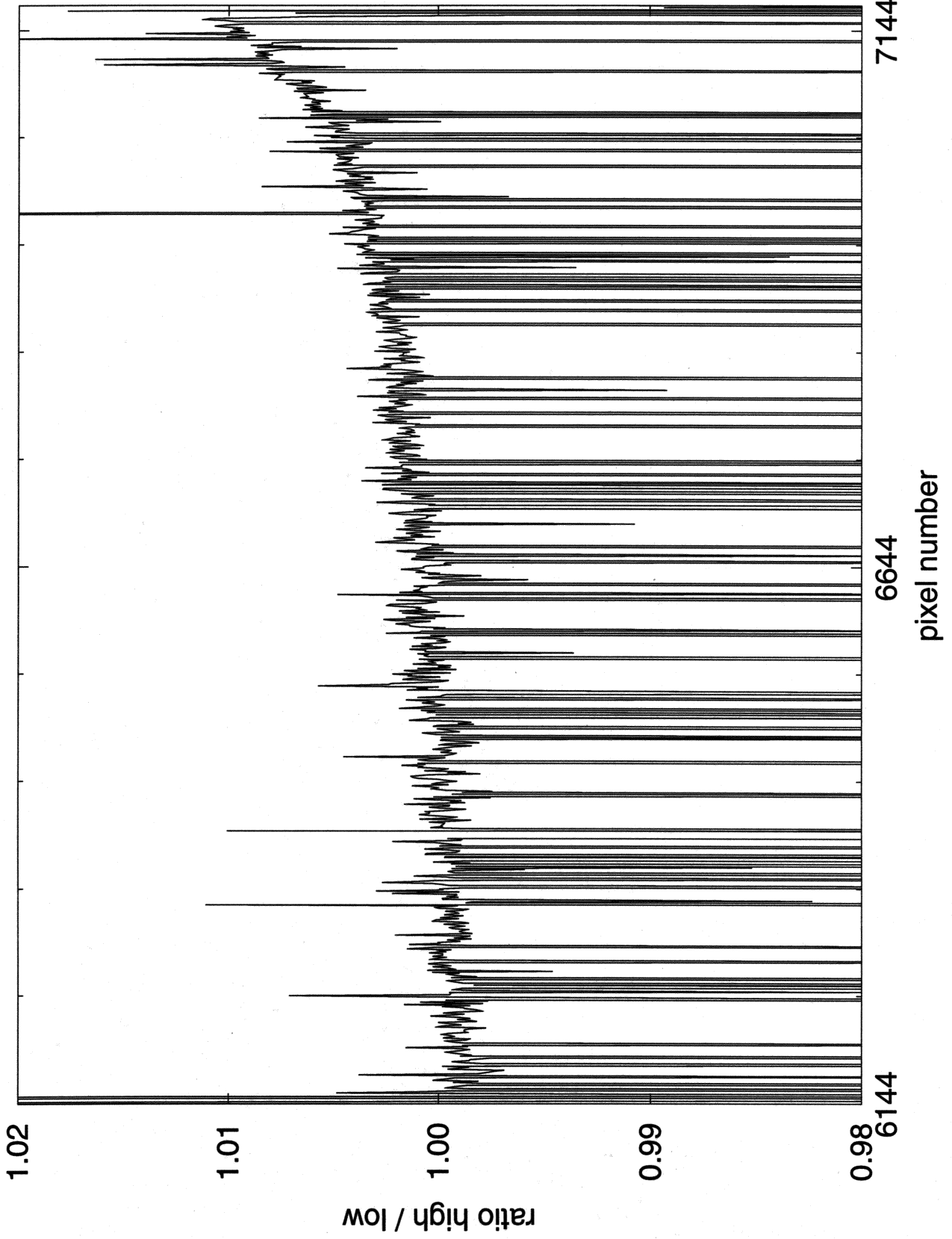
High DM temperatures / low DM temperatures  
Limb radiance, channel 6



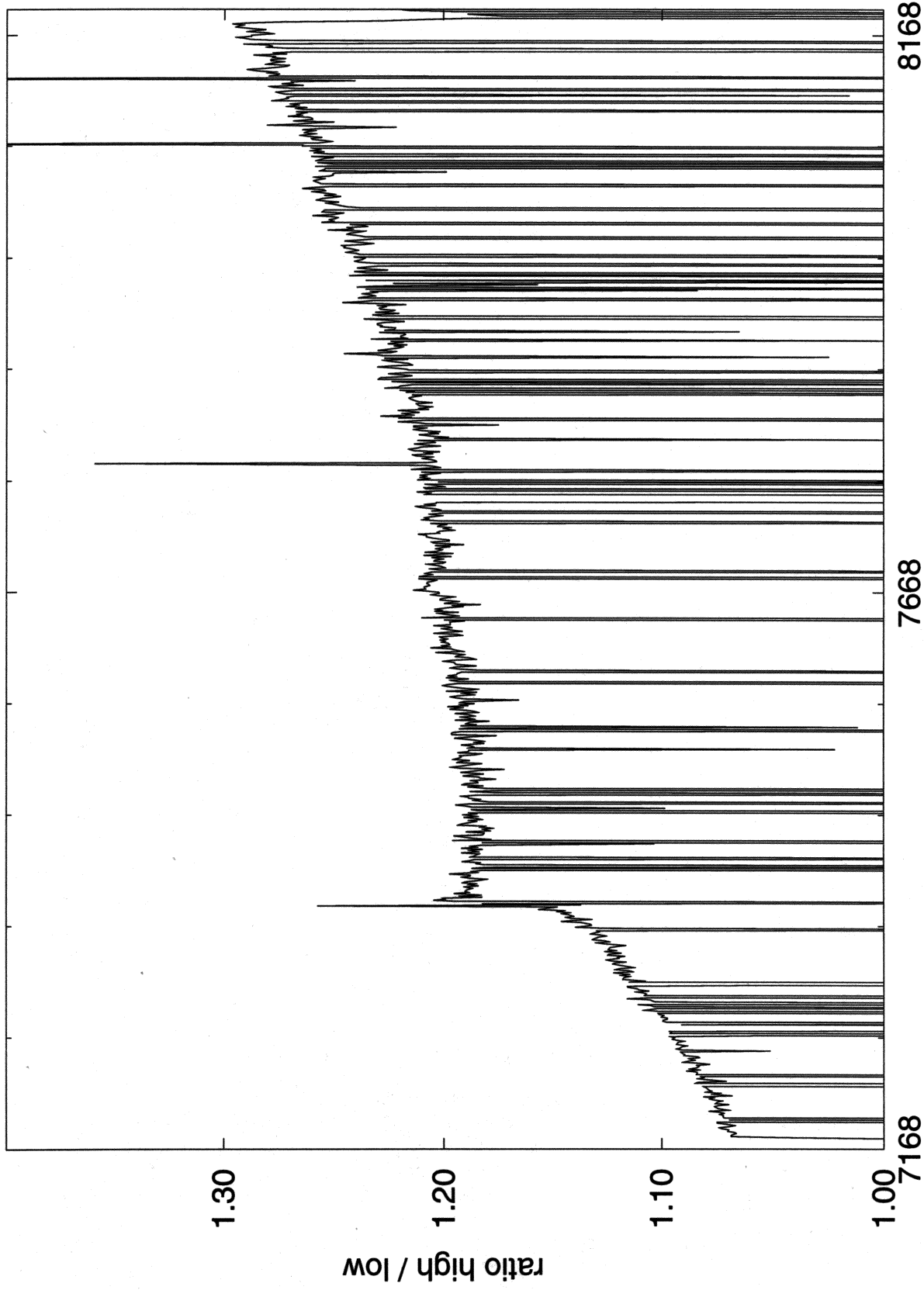
High DM temperatures / low DM temperatures  
Limb radiance, channel 6



High DM temperatures / low DM temperatures  
Limb radiance, channel 7

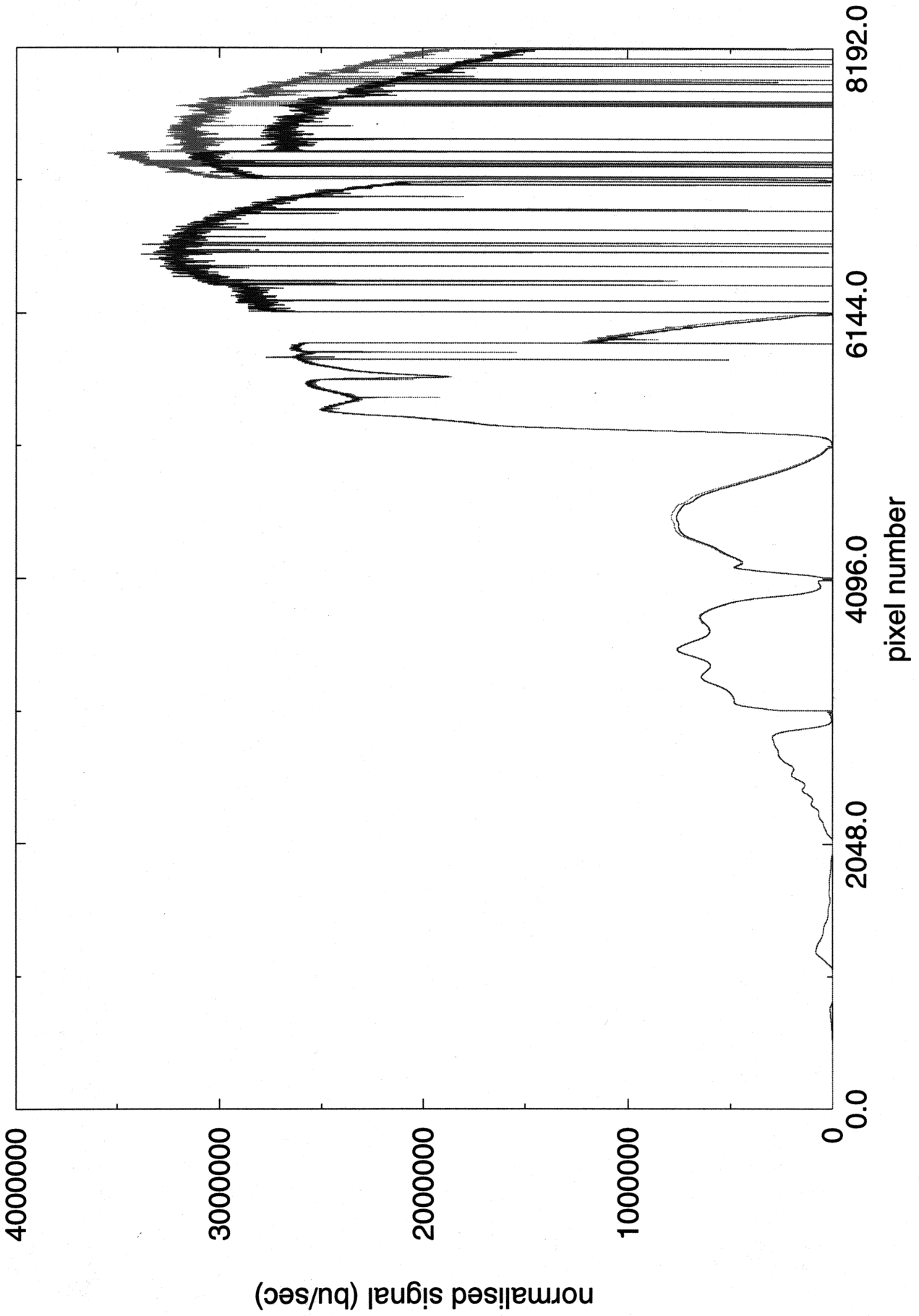


High DM temperatures / low DM temperatures  
Limb radiance, channel 8



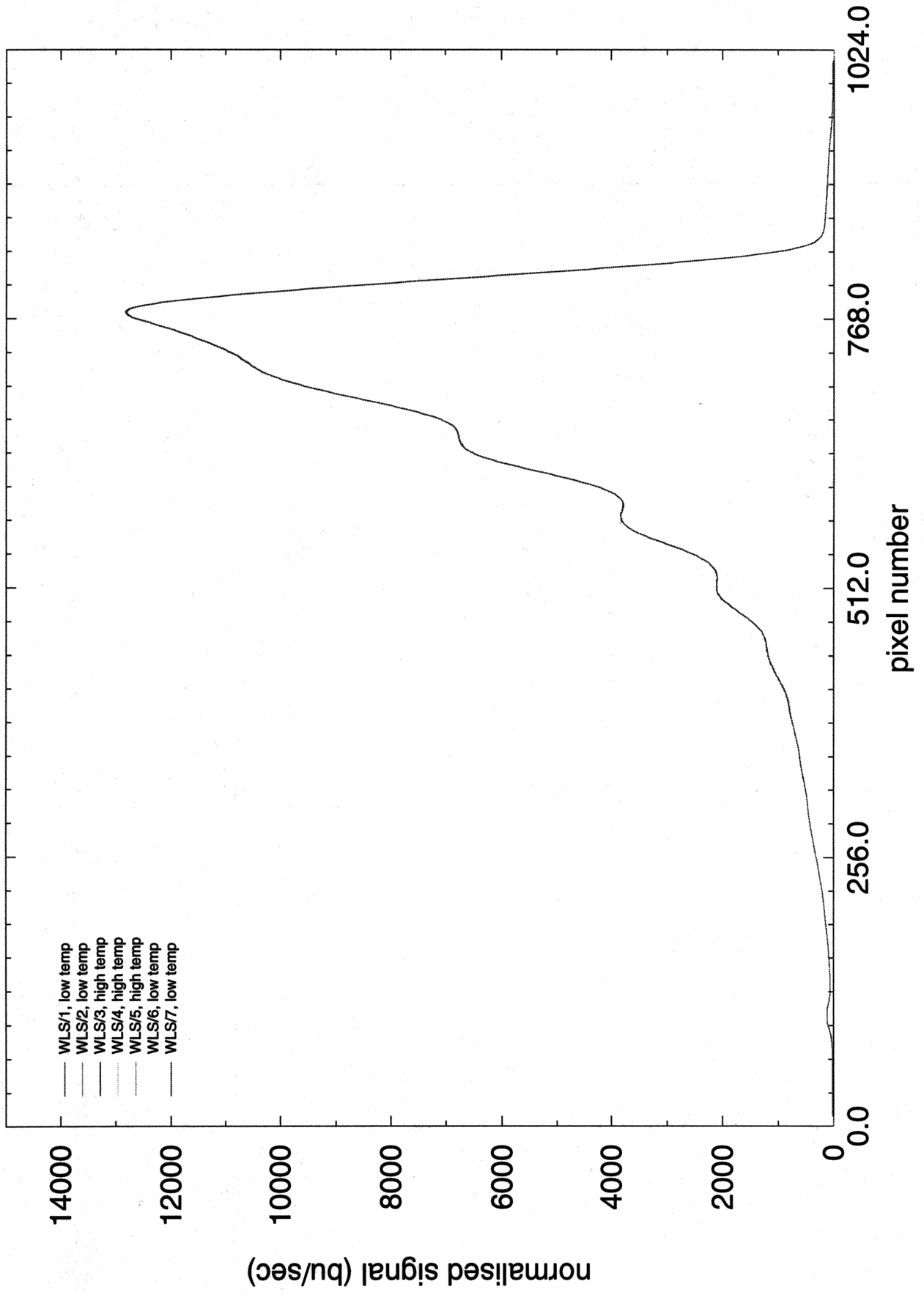
# Internal WLS measurements

Signal normalised w.r.t. PET & coadding factor



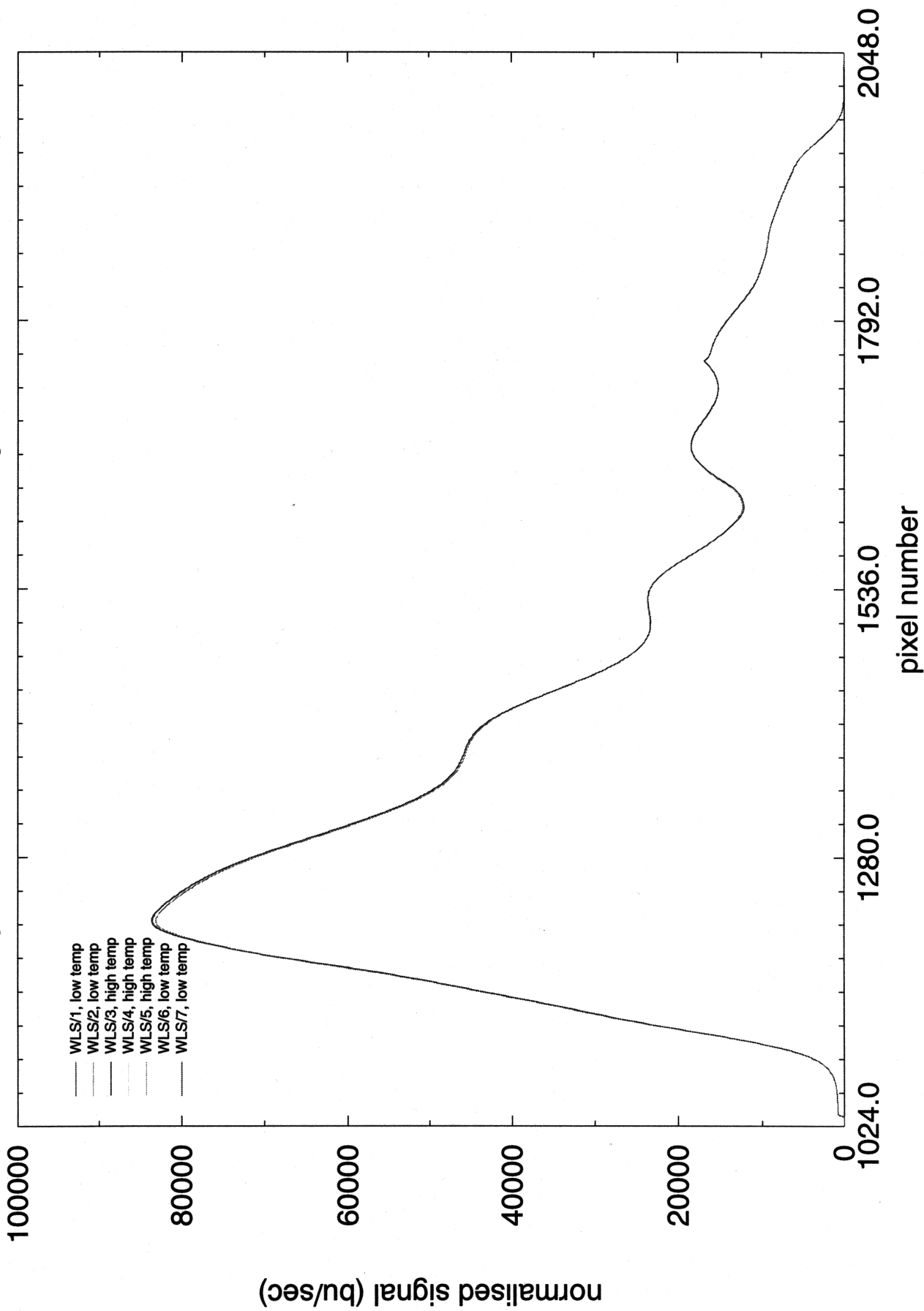
# Internal WLS measurements

Signal normalised w.r.t. PET & coadding factor: Channel 1



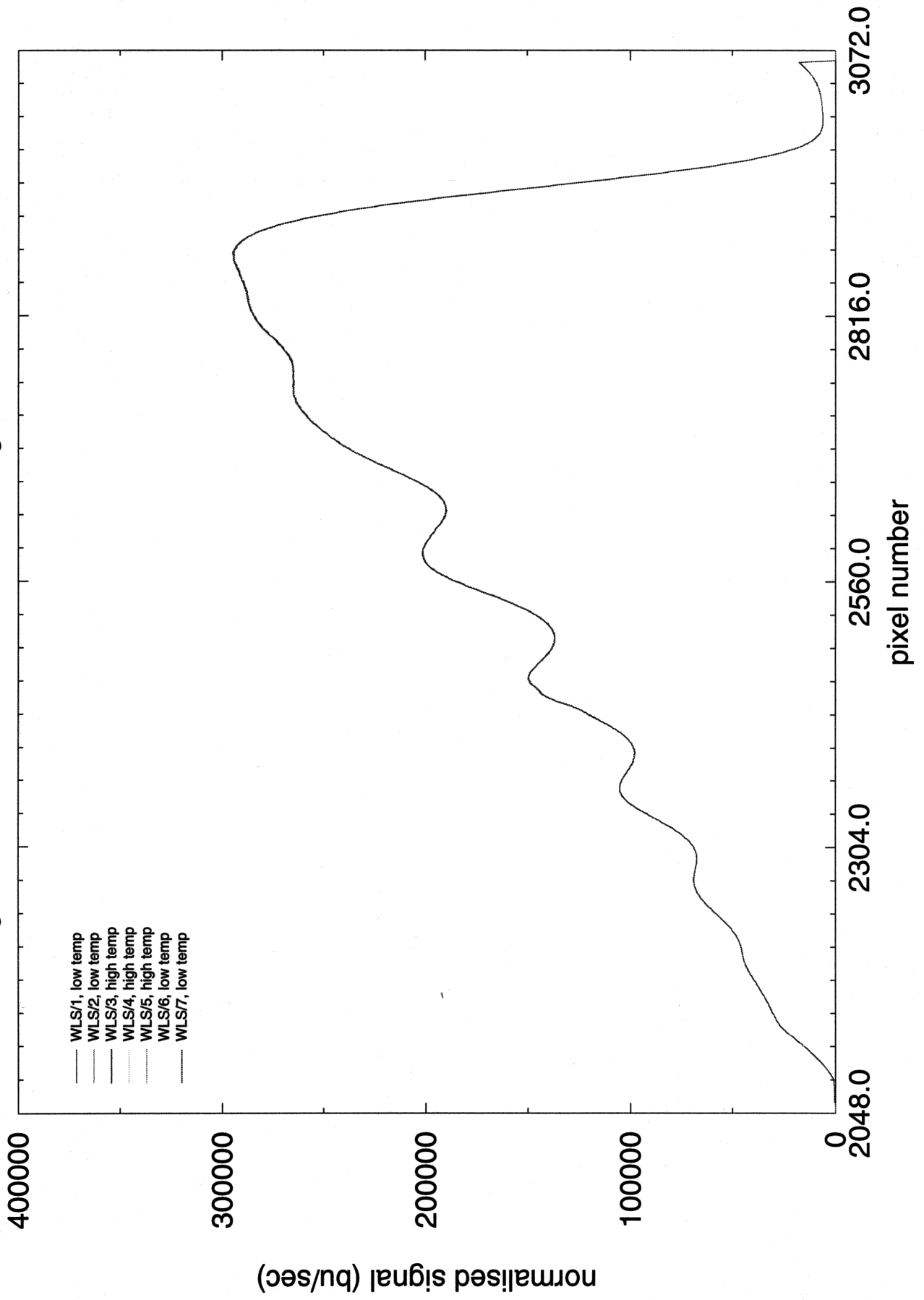
# Internal WLS measurements

Signal normalised w.r.t. PET & coadding factor: Channel 2



# Internal WLS measurements

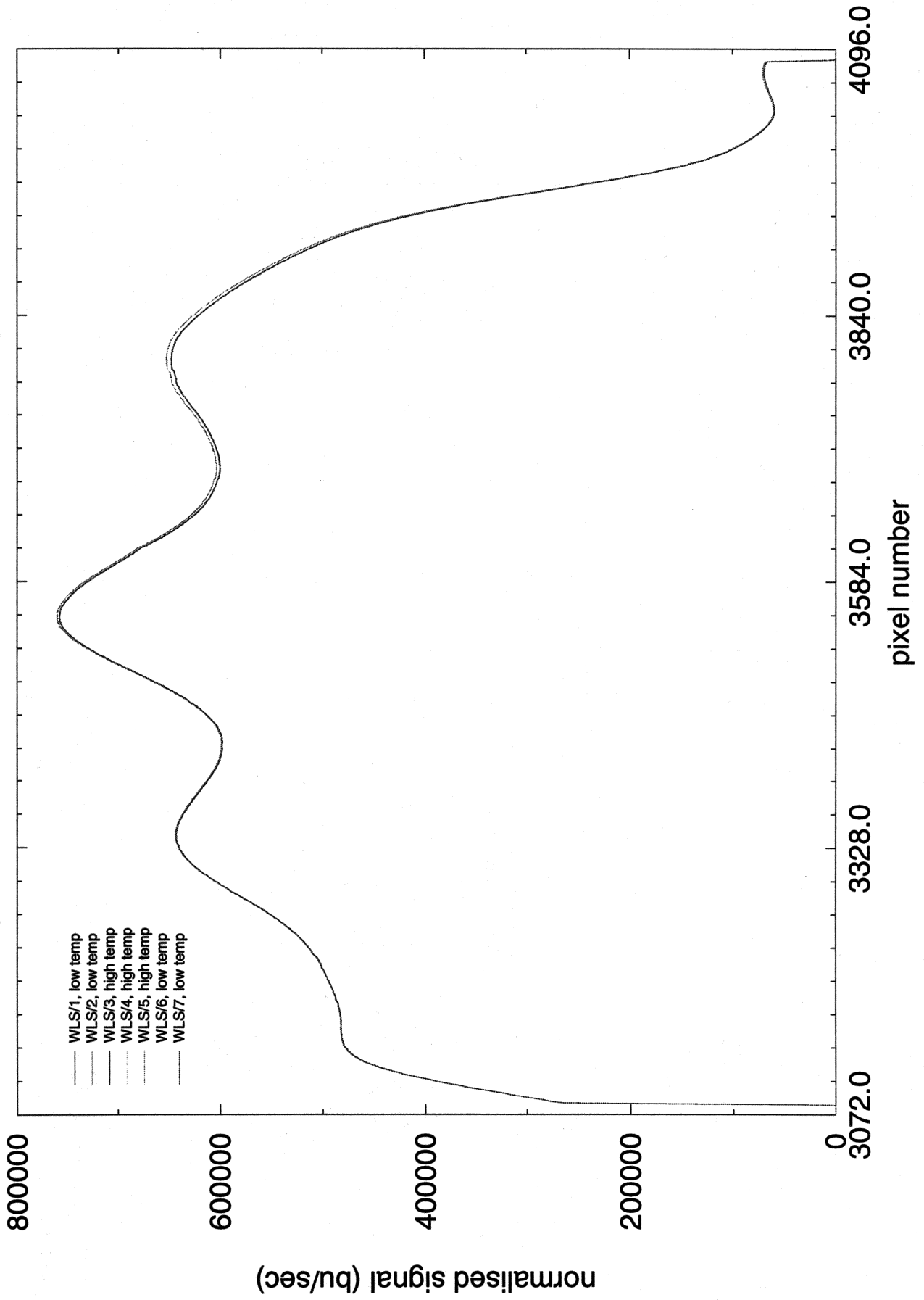
Signal normalised w.r.t. PET & coadding factor: Channel 3





# Internal WLS measurements

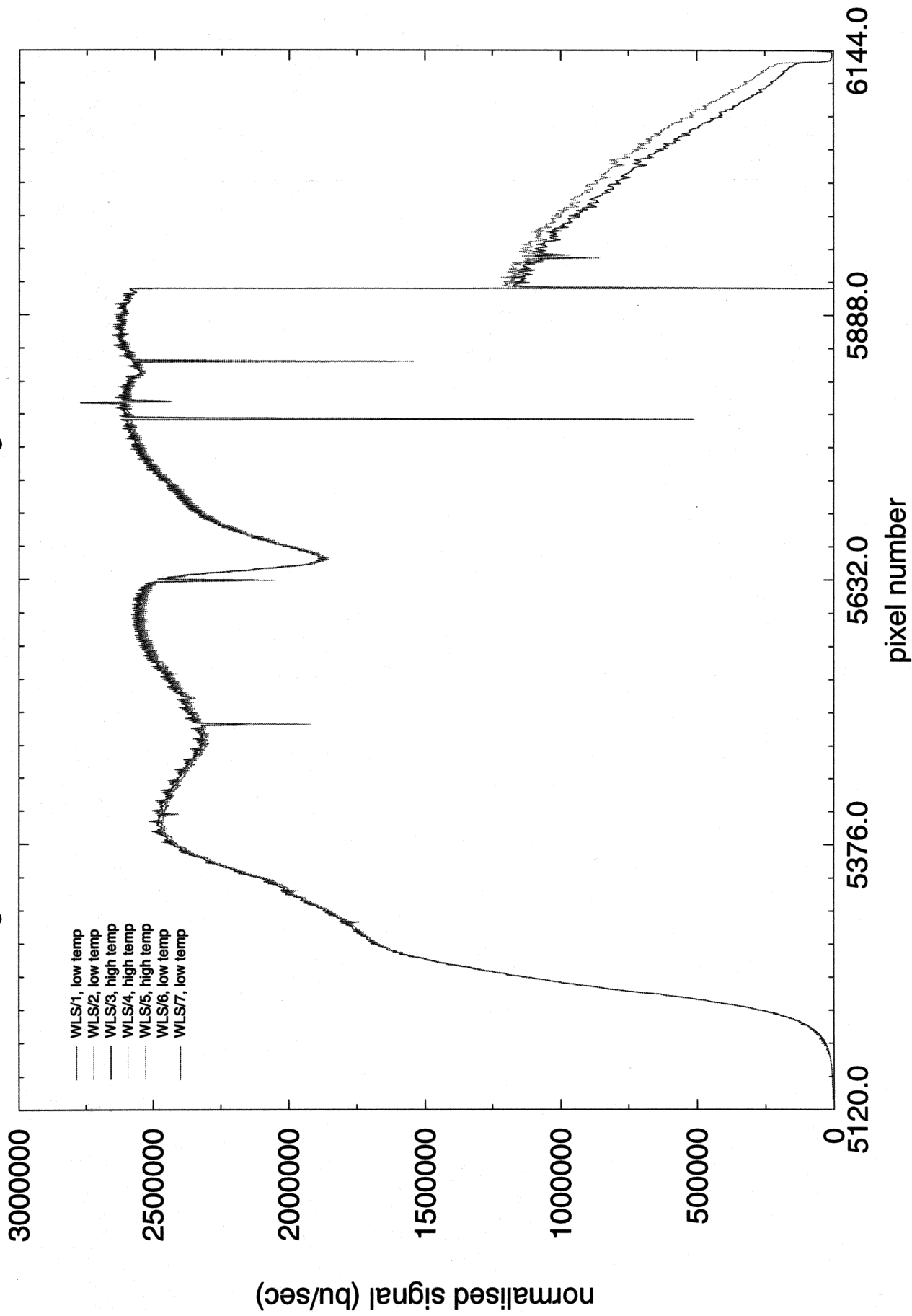
Signal normalised w.r.t. PET & coadding factor: Channel 4





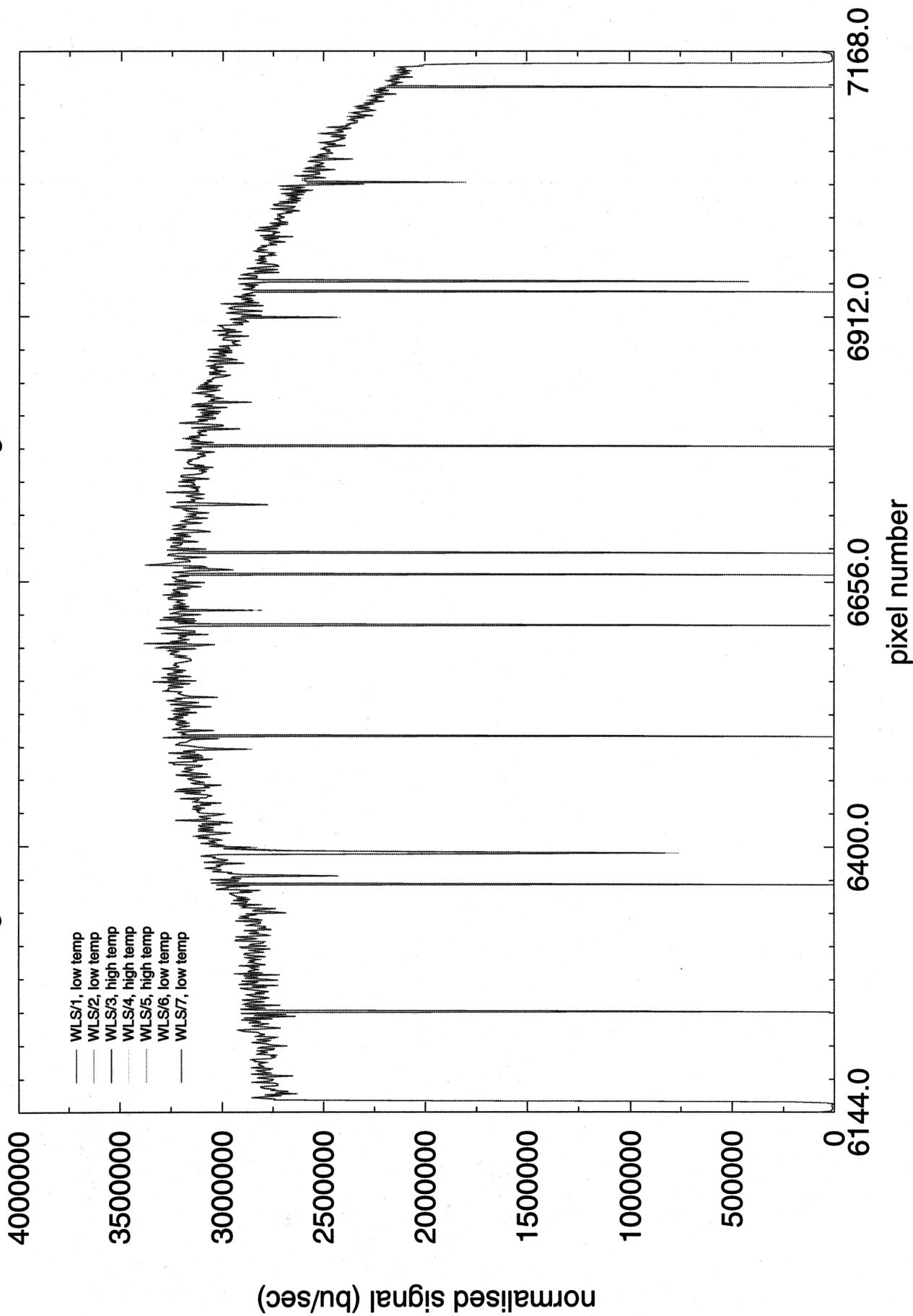
# Internal WLS measurements

Signal normalised w.r.t. PET & coadding factor: Channel 6



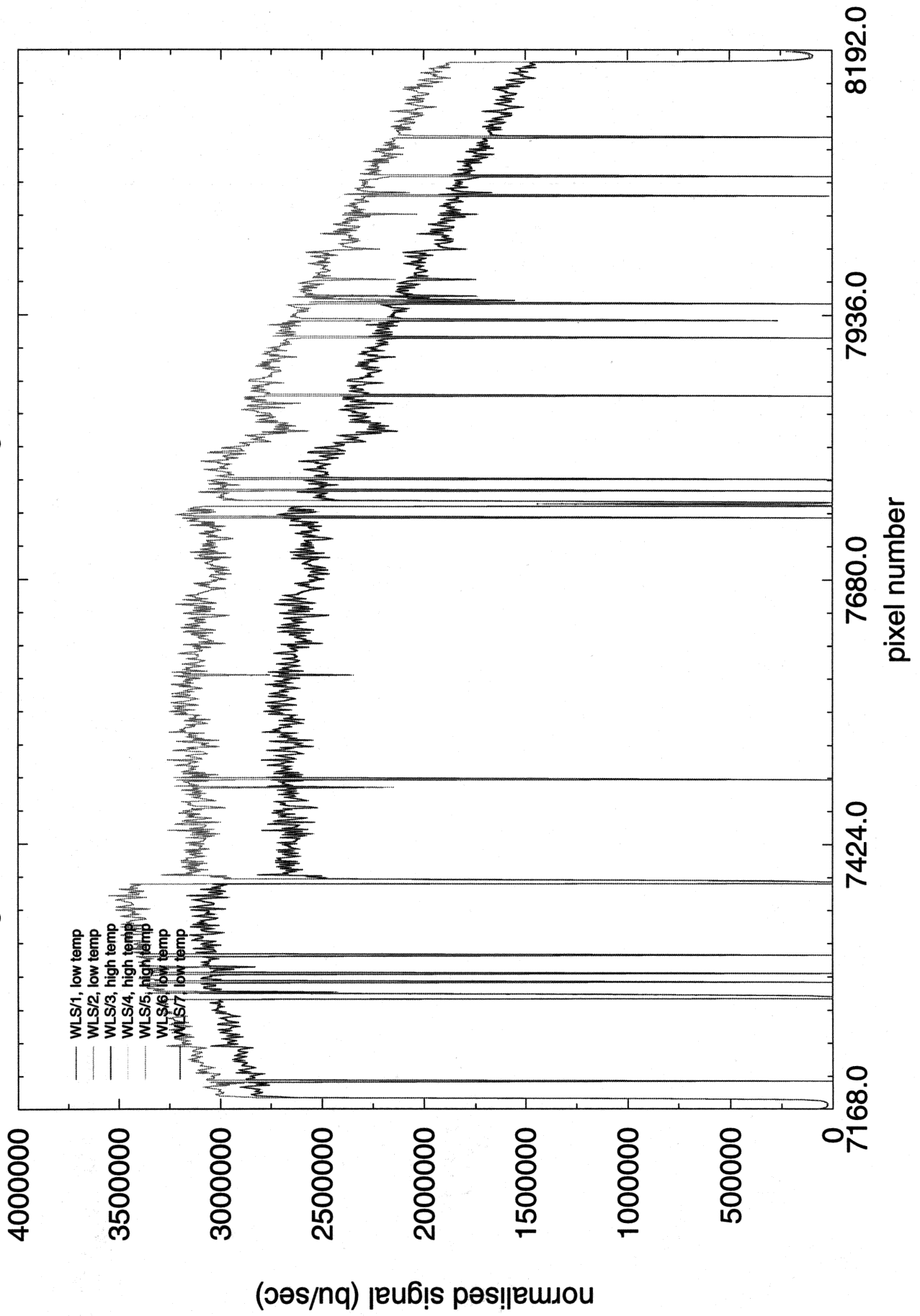
# Internal WLS measurements

Signal normalised w.r.t. PET & coadding factor: Channel 7



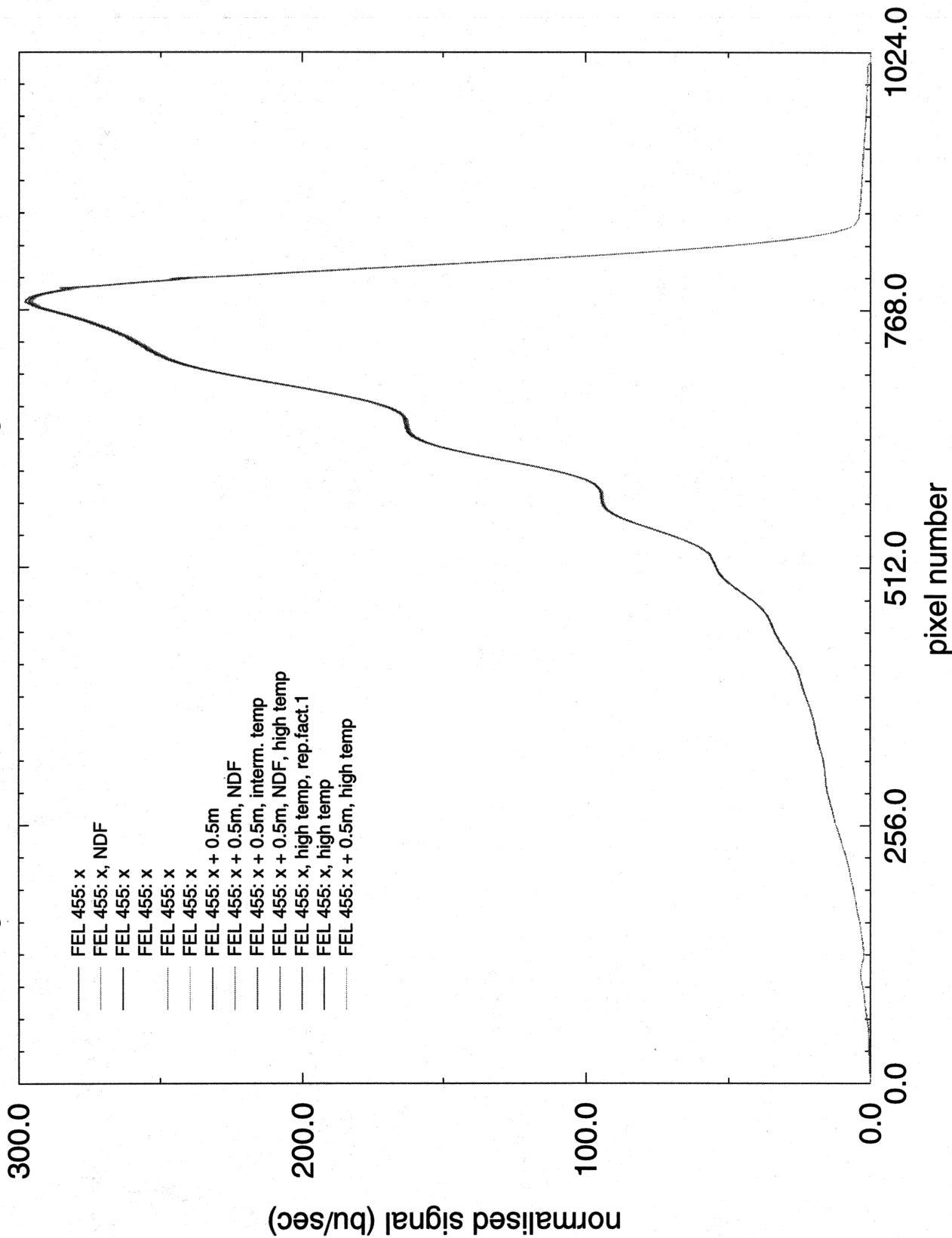
# Internal WLS measurements

Signal normalised w.r.t. PET & coadding factor: Channel 8



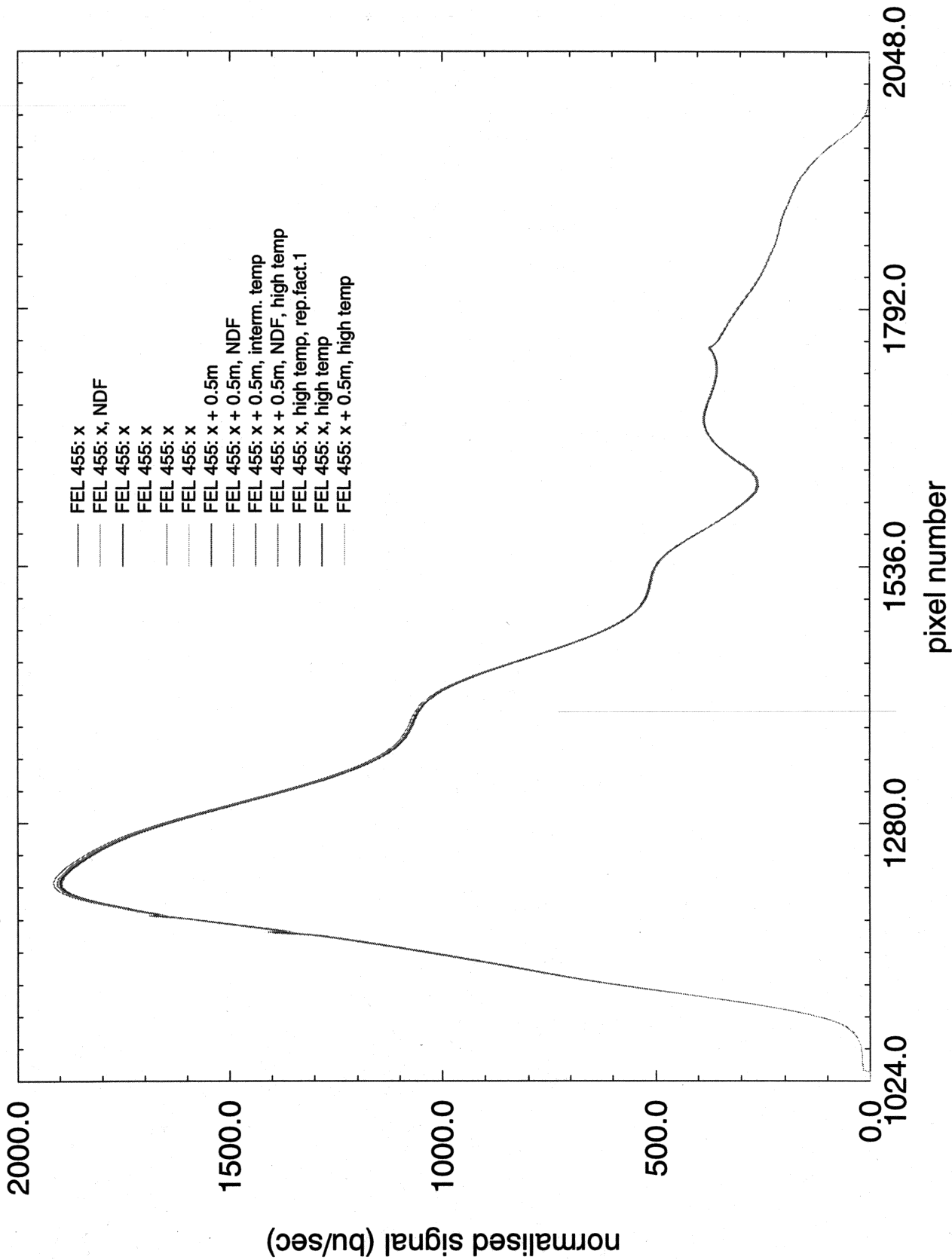
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 1



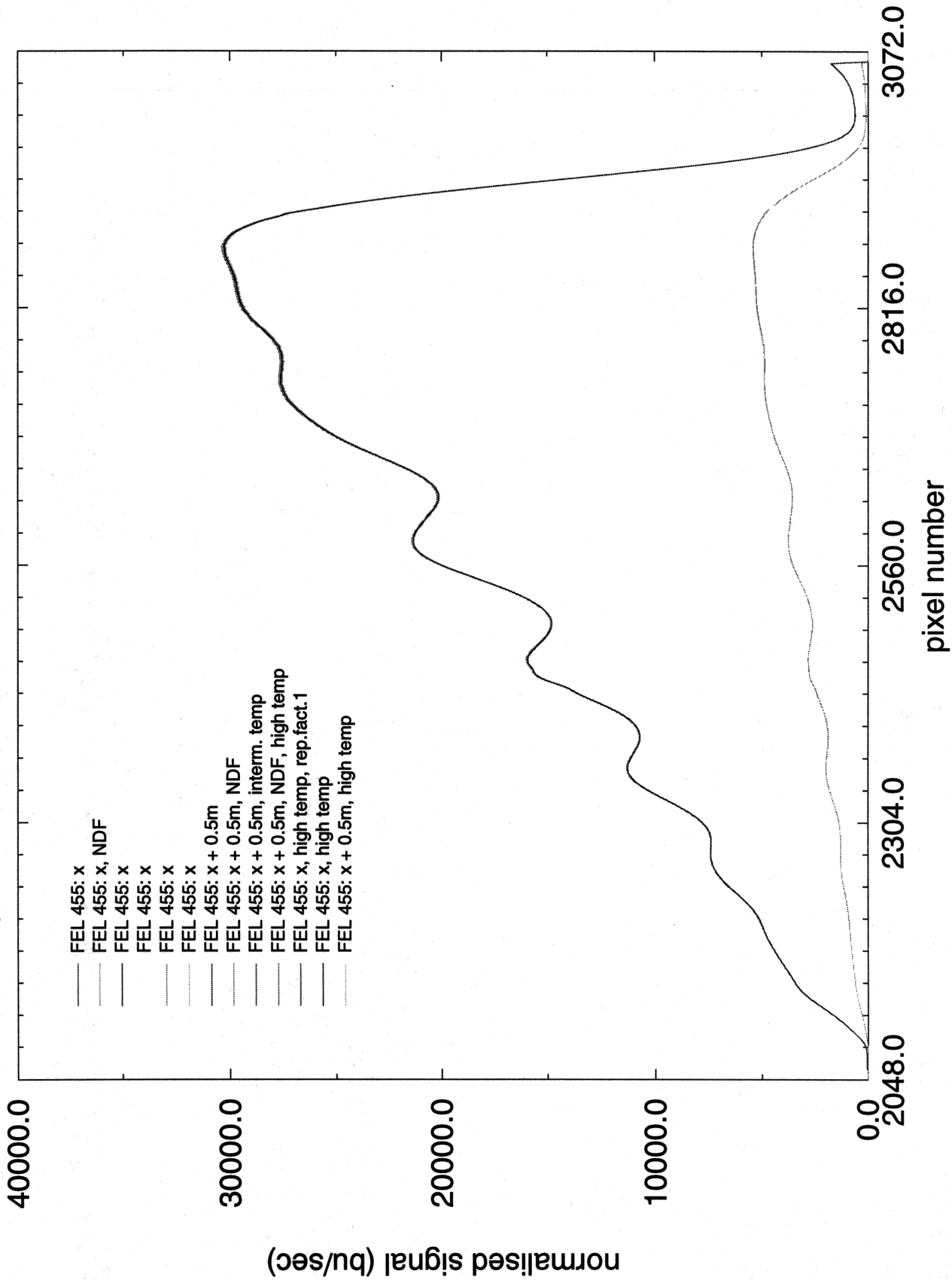
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 1



# Nadir radiance measurements

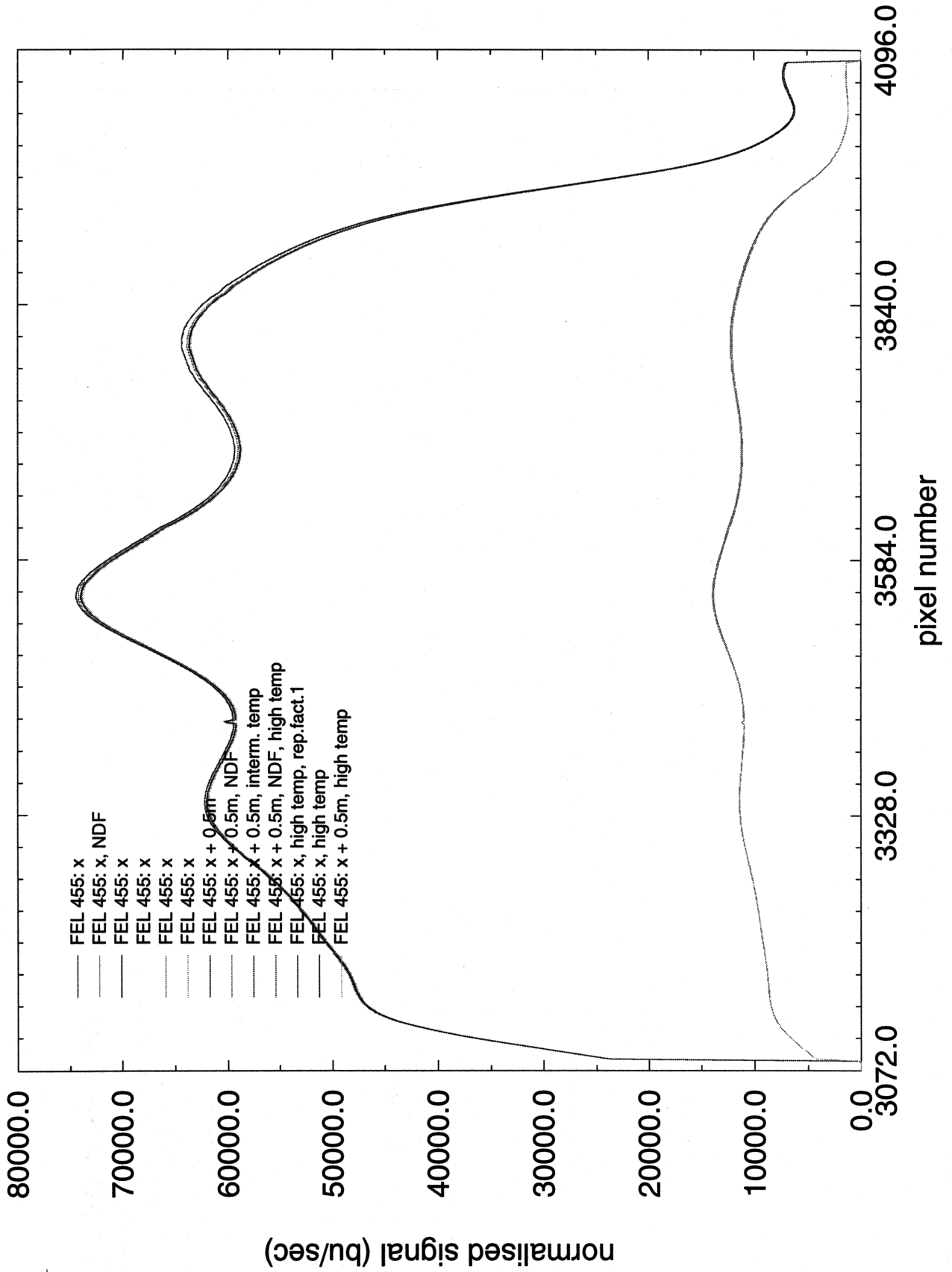
Signal normalised w.r.t. PET & coadding factor: Channel 3





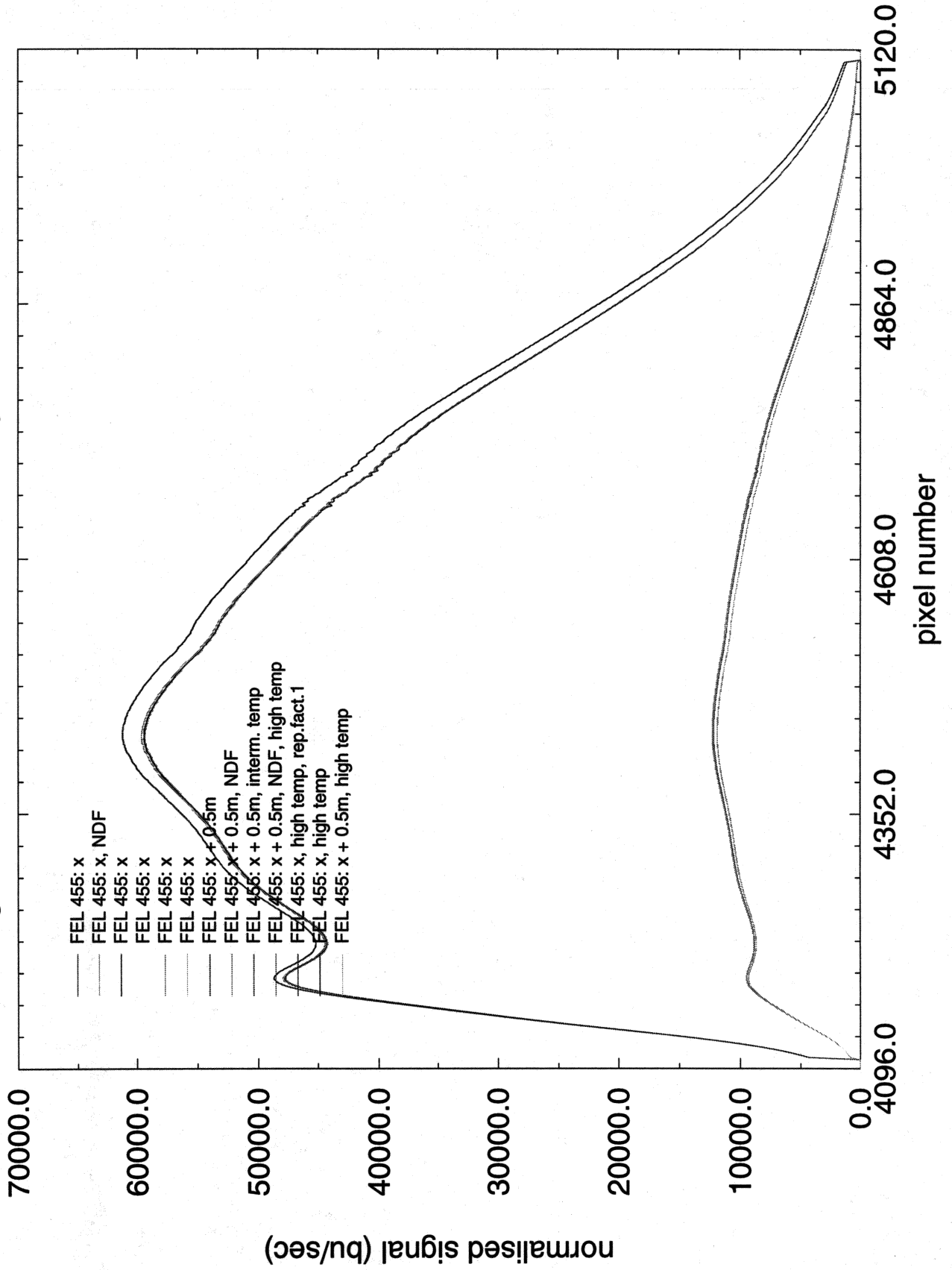
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 4



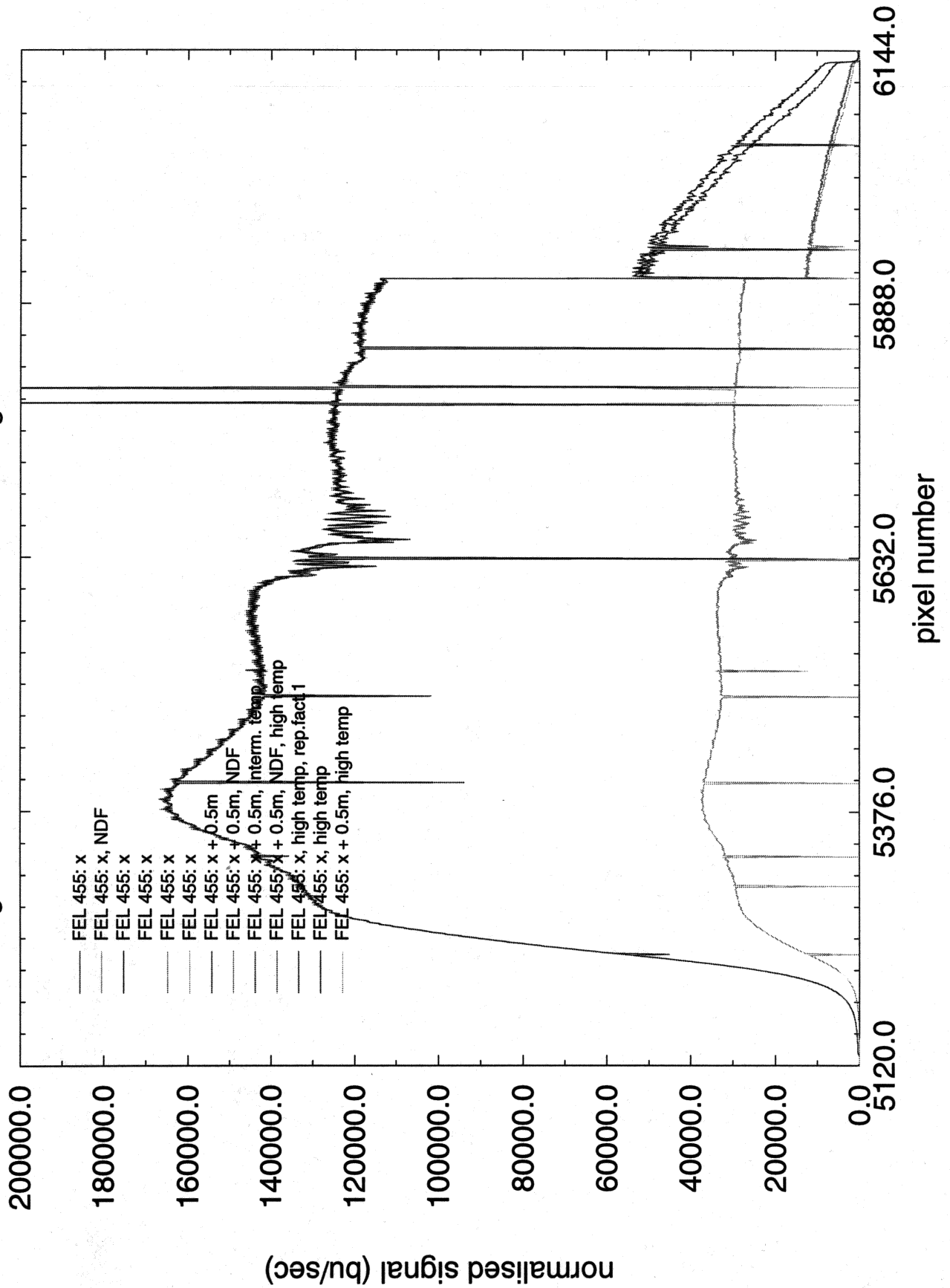
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 5



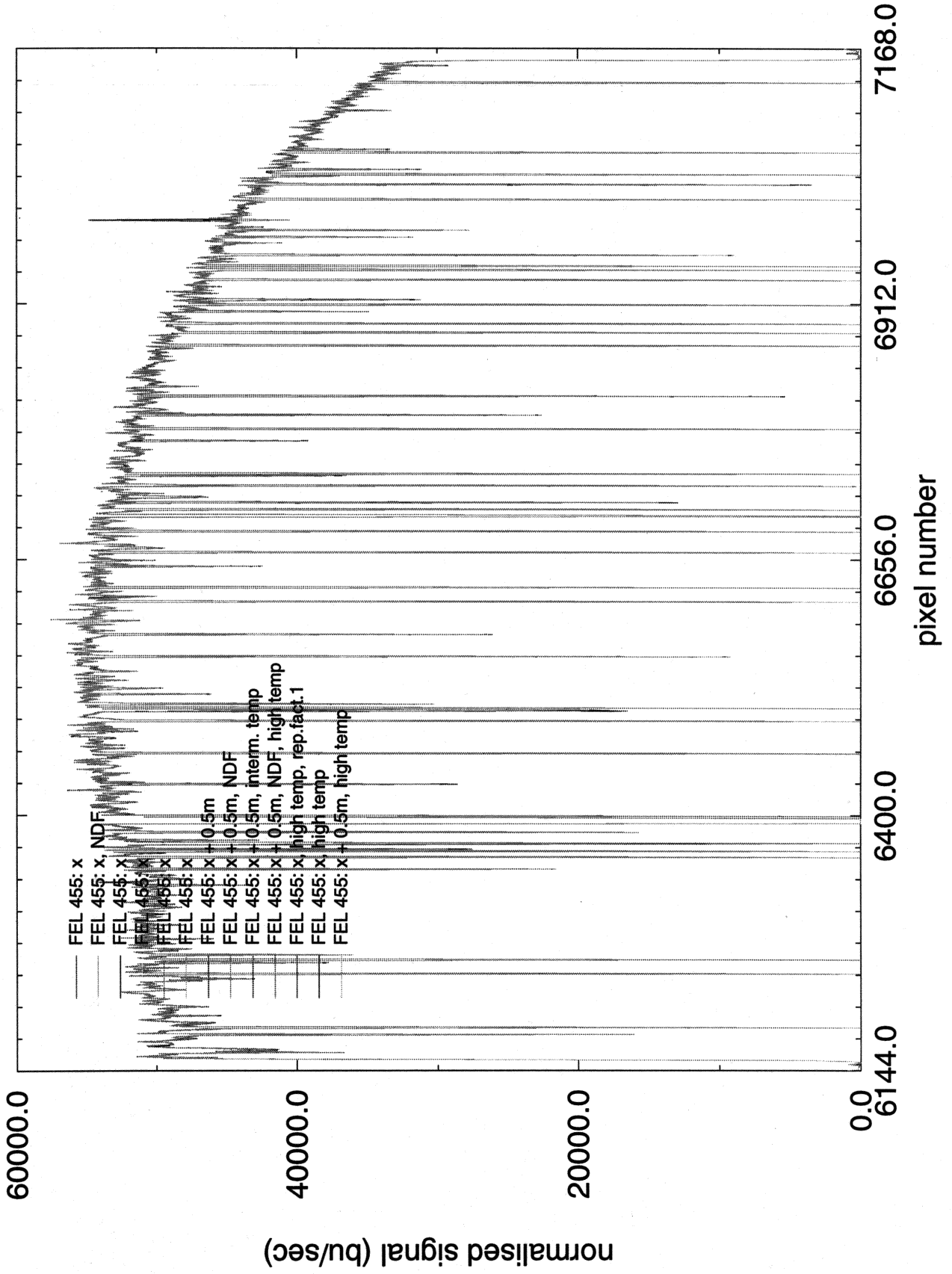
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 6



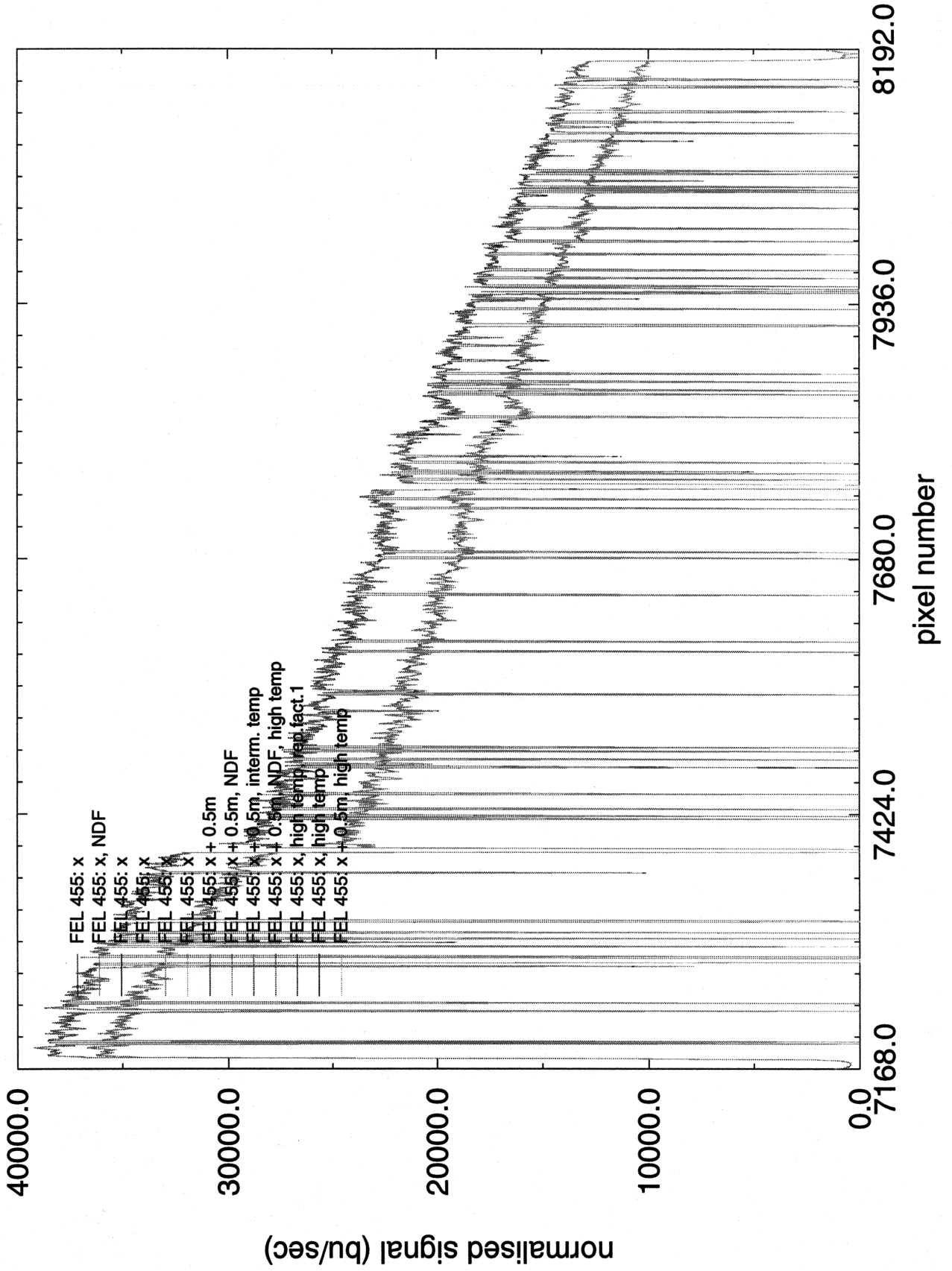
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 7



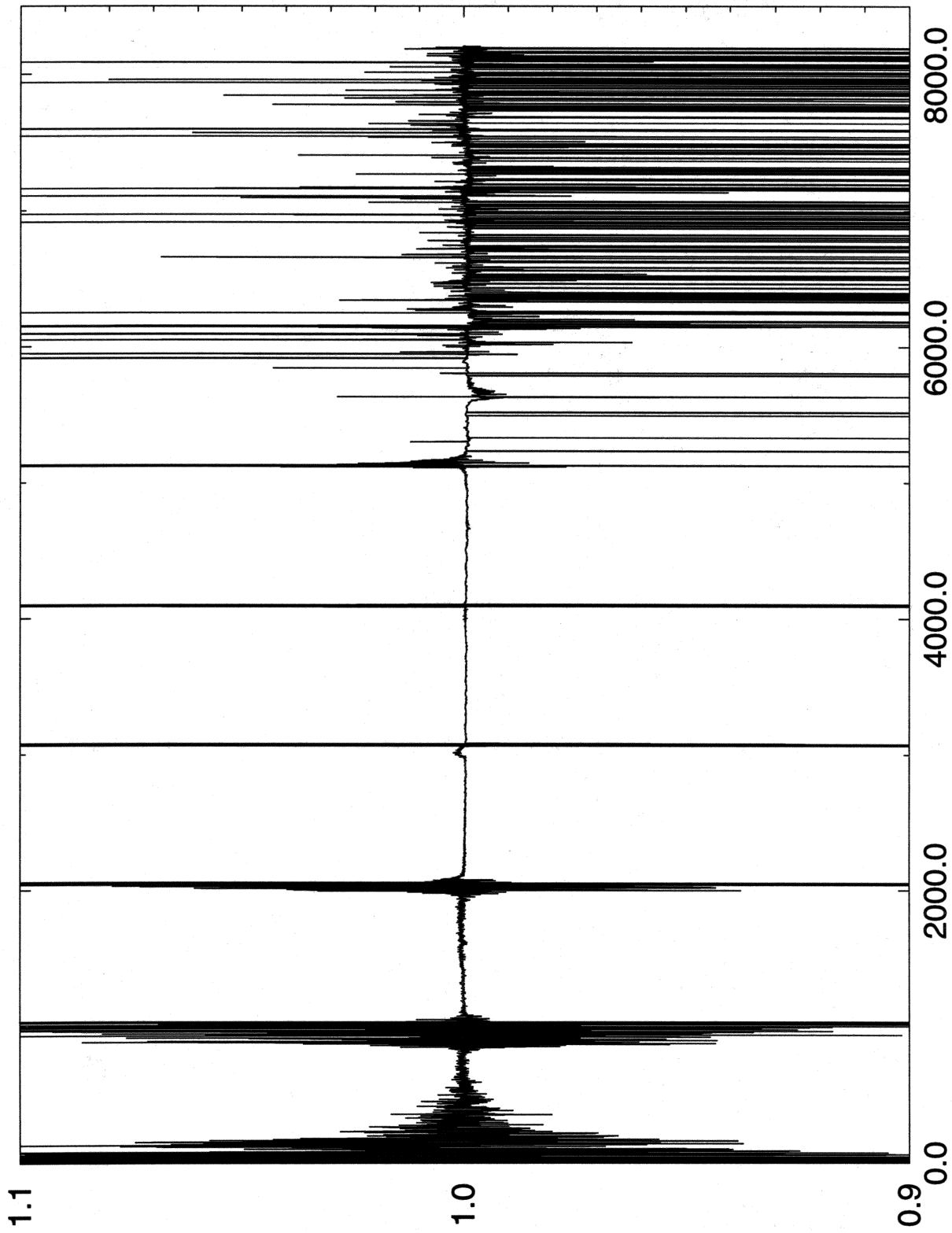
# Nadir radiance measurements

Signal normalised w.r.t. PET & coadding factor: Channel 8



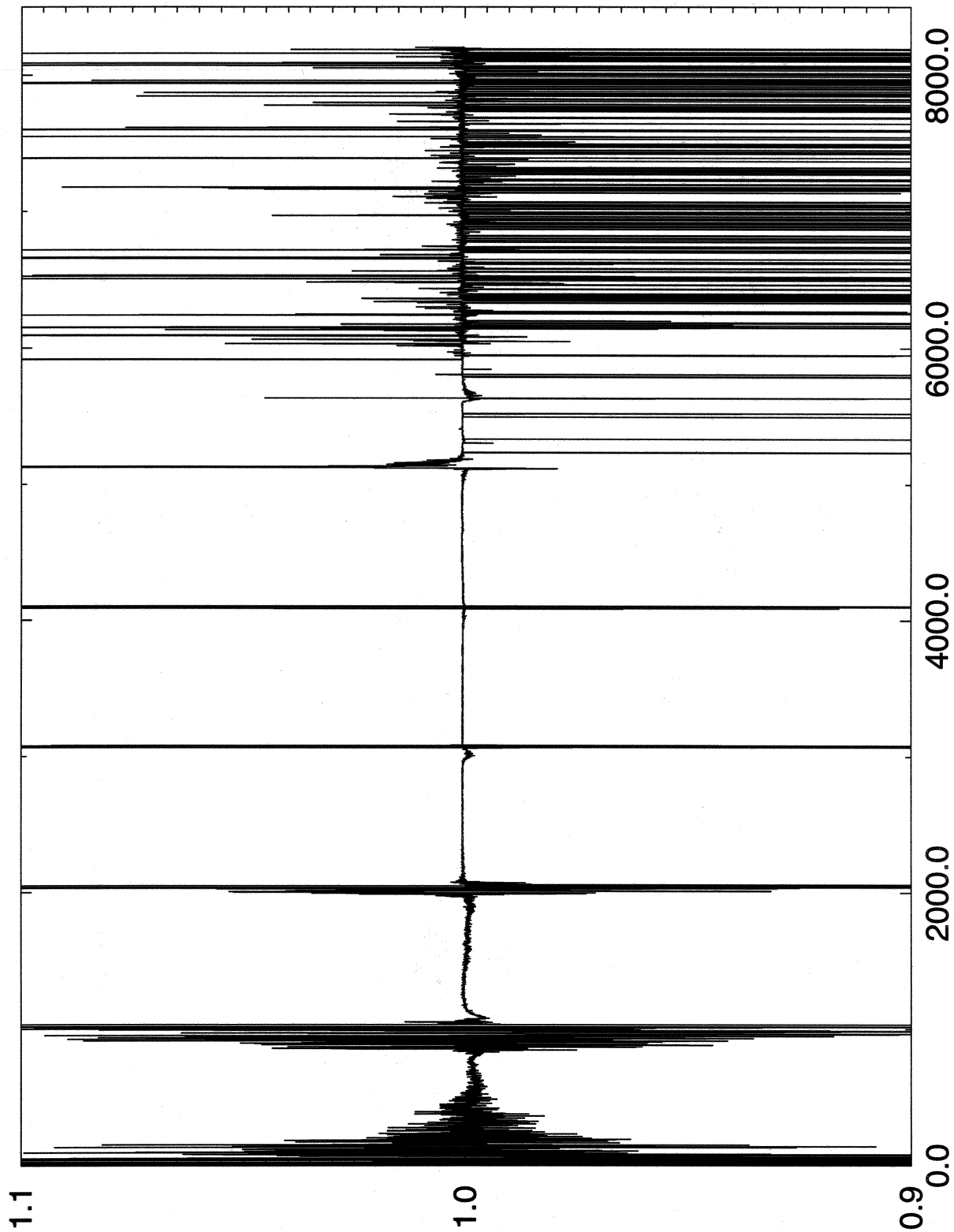
# IRRAD 21/ IRRAD 19

Ratio twice F-456



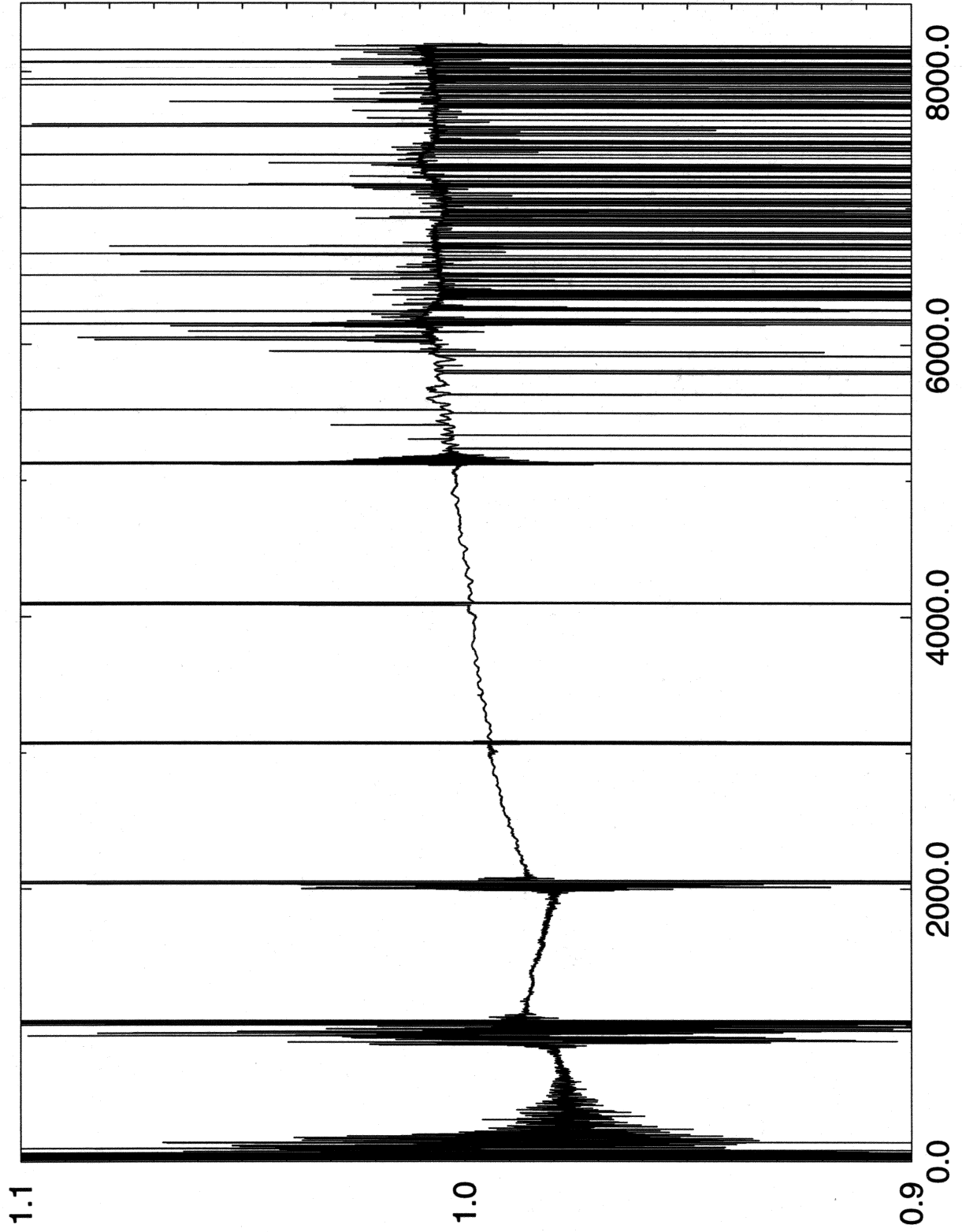
# IRRAD 20/IRRAD 18

Ratio twice F-455



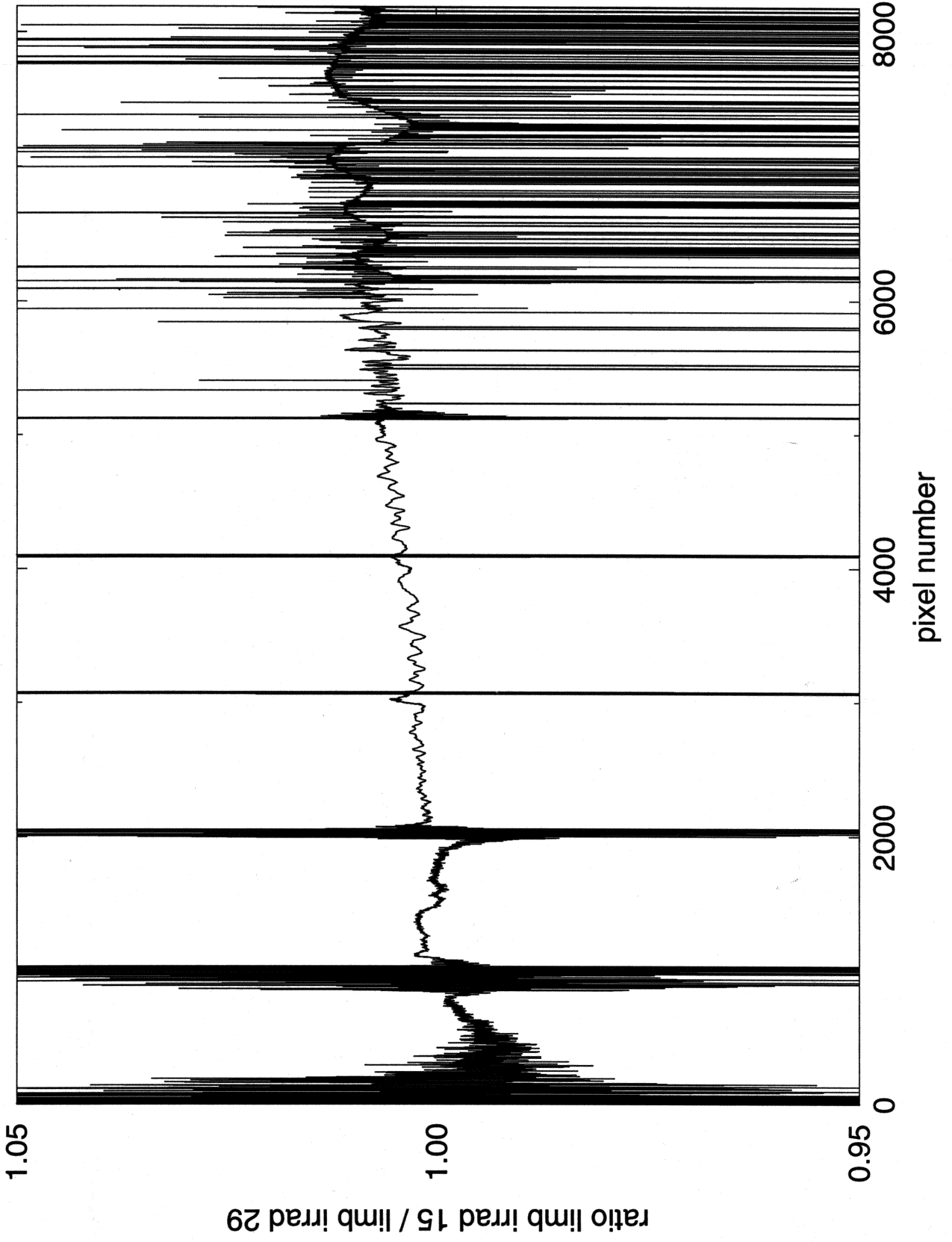
# IRRAD 20/ IRRAD 21

Ratio 455/456

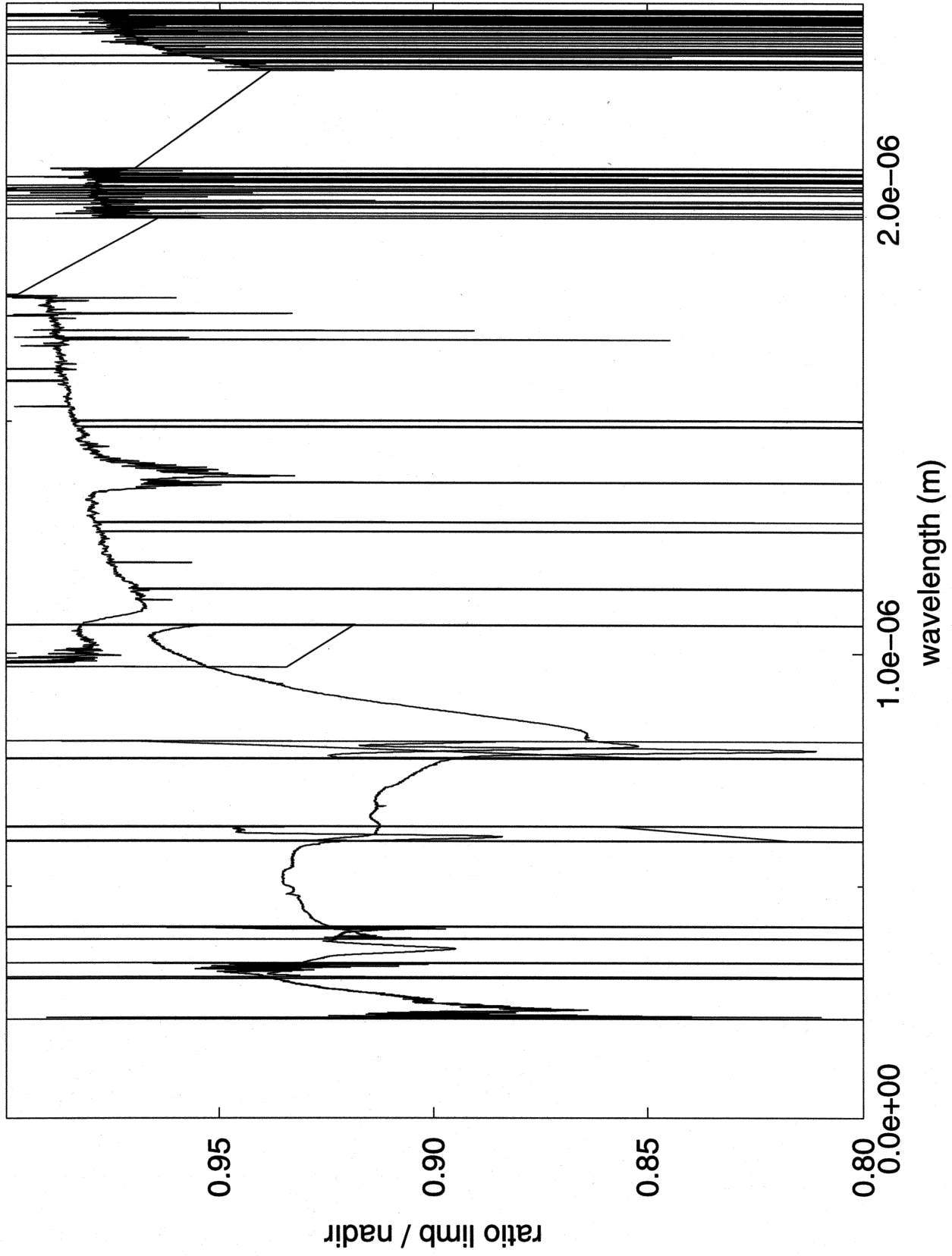




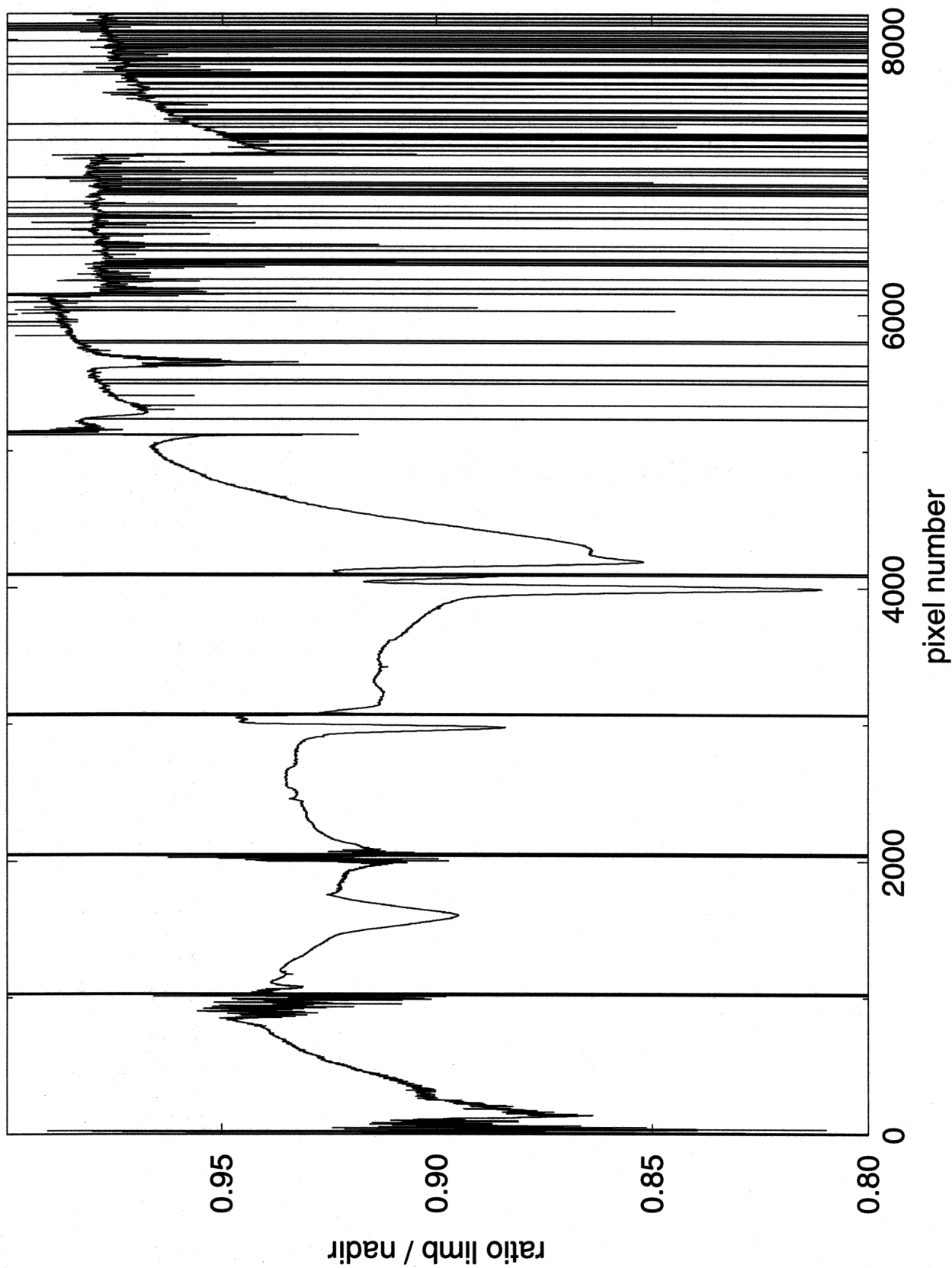
Limb irradiance 29 (min. dist. + 0.5 m) with extra straylight baffling  
Limb irradiance 15 / limb irradiance 29



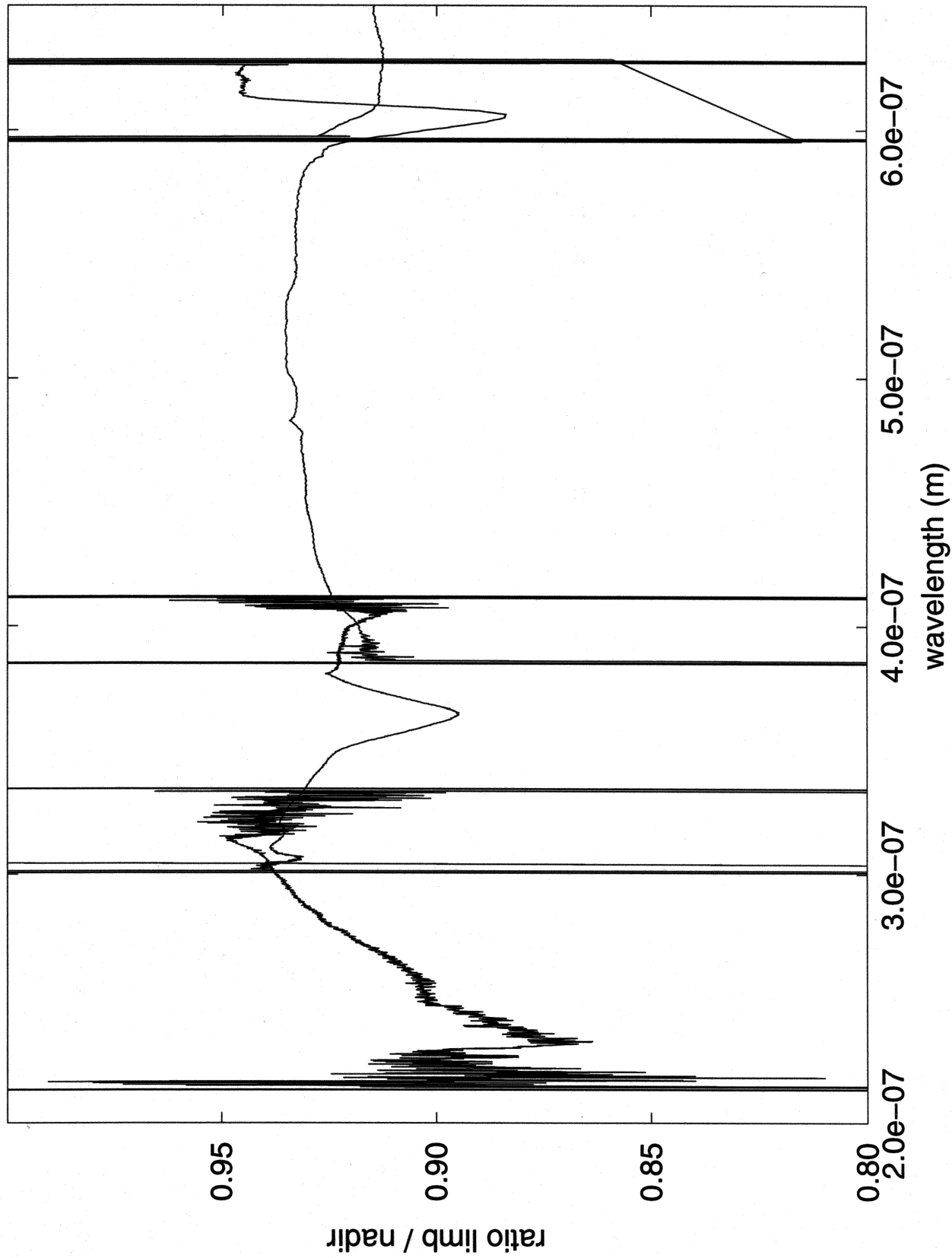
Limb radiance / nadir radiance (both with NDF)  
nadir #13 / limb #2, DM temperatures high



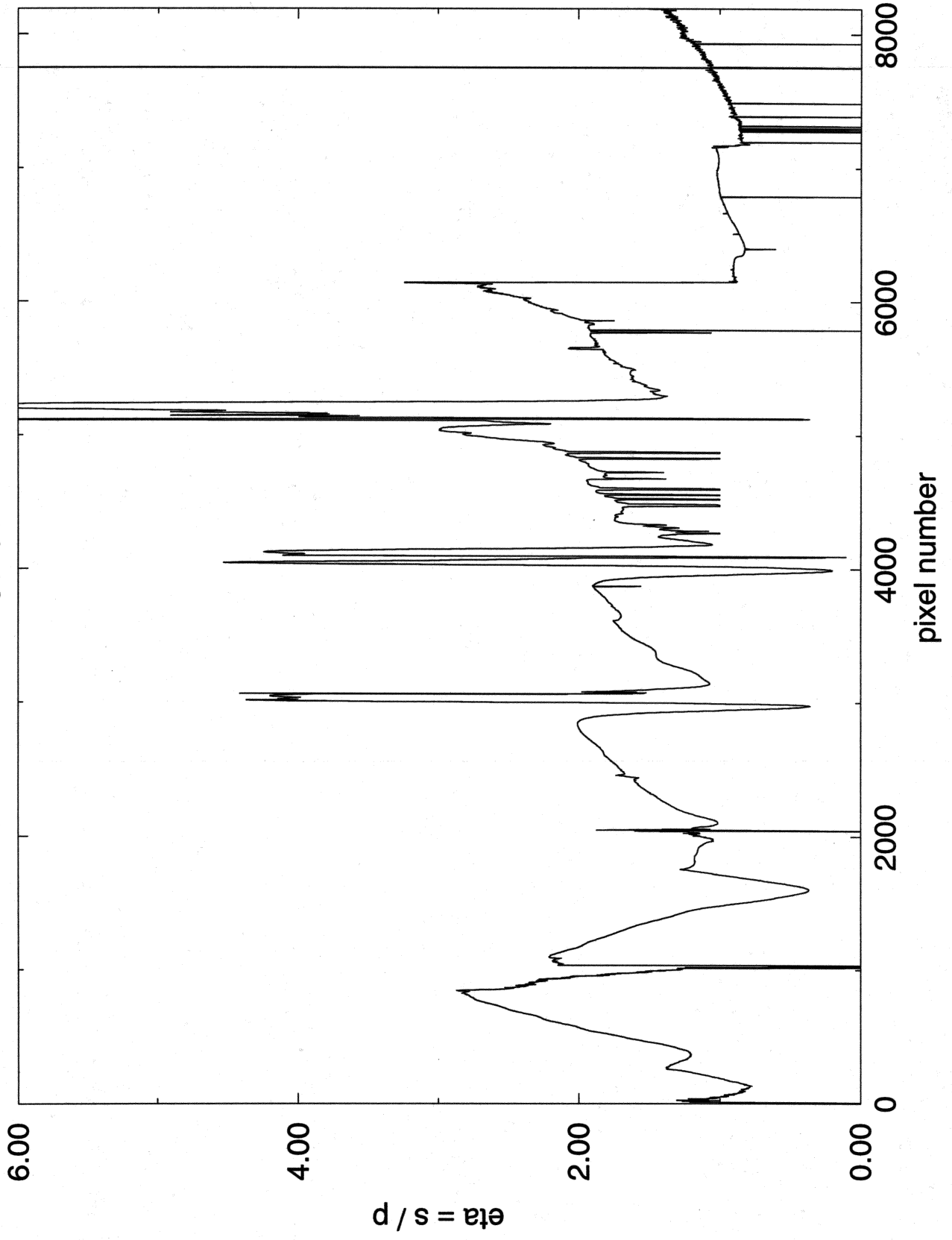
Limb radiance / nadir radiance (both with NDF)  
nadir #13 / limb #2, DM temperatures high



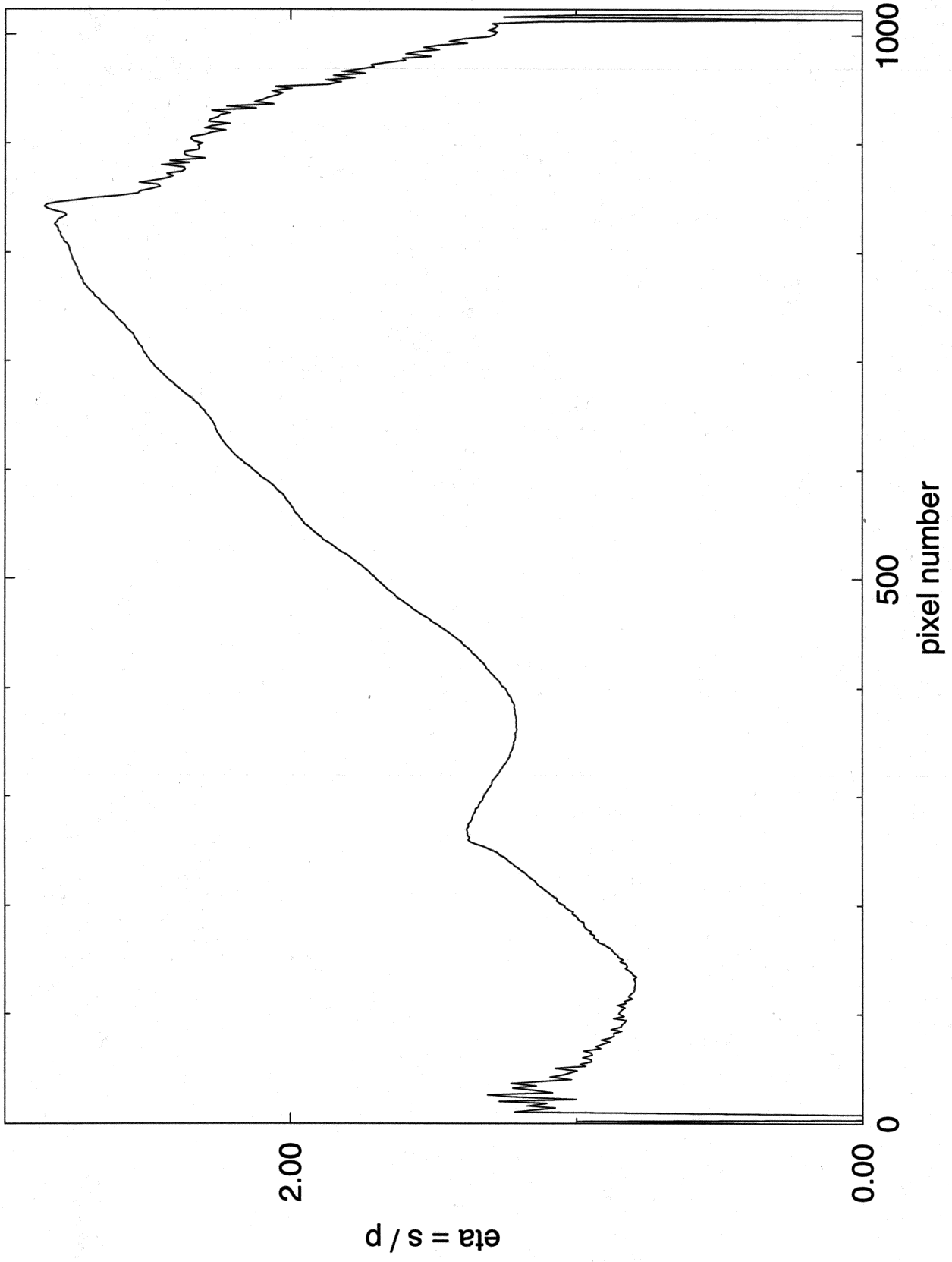
Limb radiance / nadir radiance (both with NDF)  
nadir #13 / limb #2, DM temperatures high



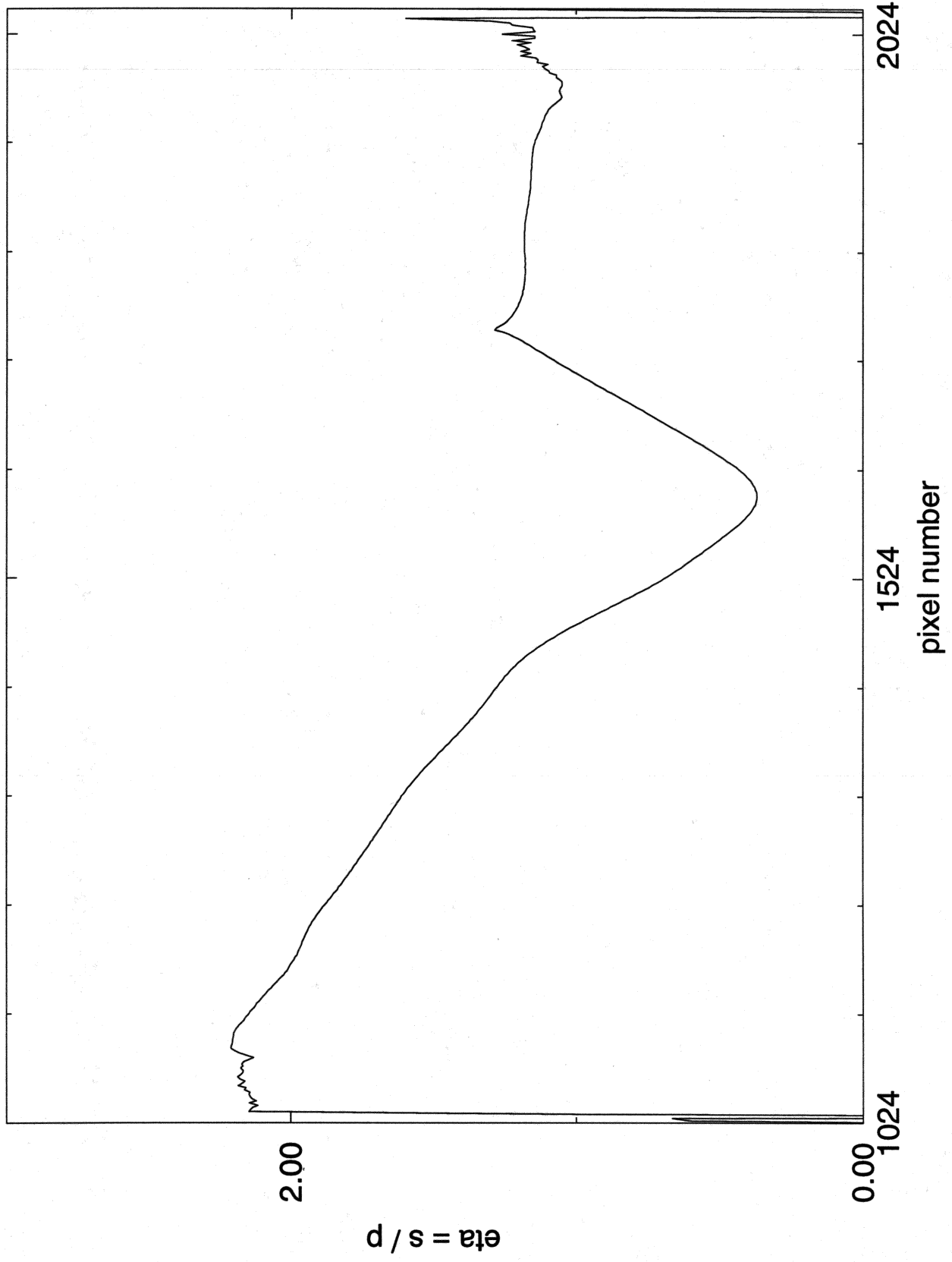
AIT testing july 1998: ETA



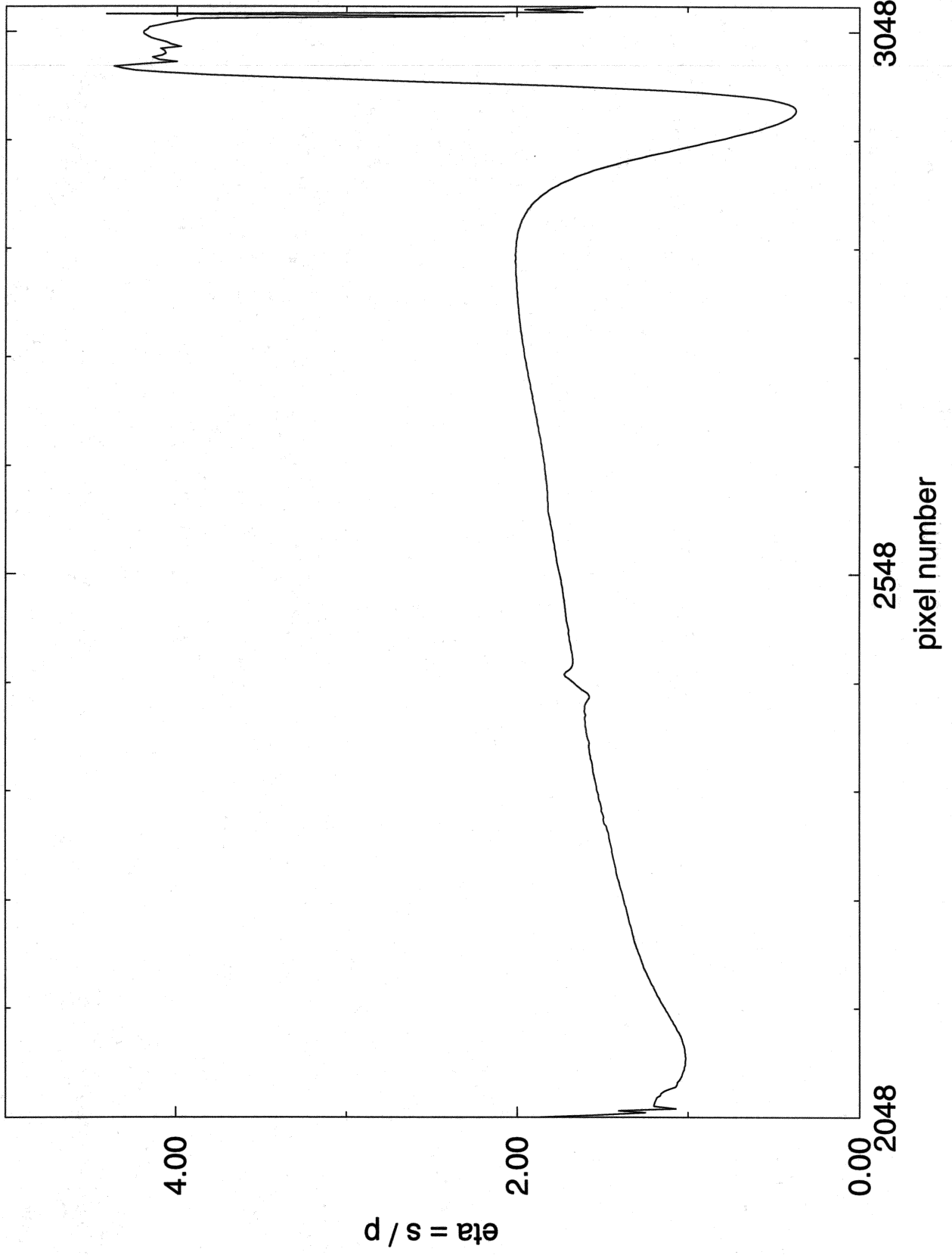
Channel 1  
AIT testing july 1998: ETA



Channel 2  
AIT testing july 1998: ETA

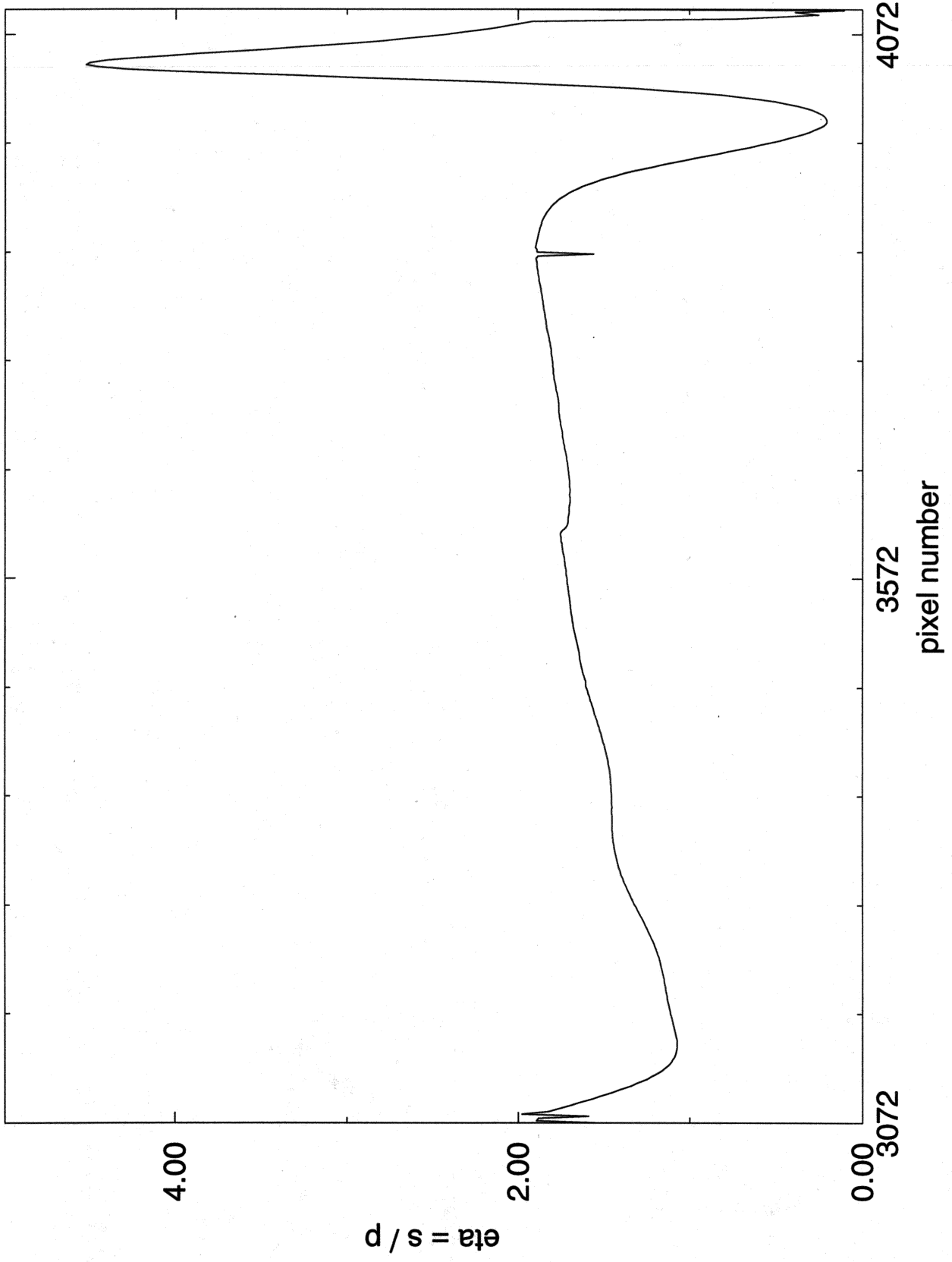


Channel 3  
AIT testing july 1998: ETA

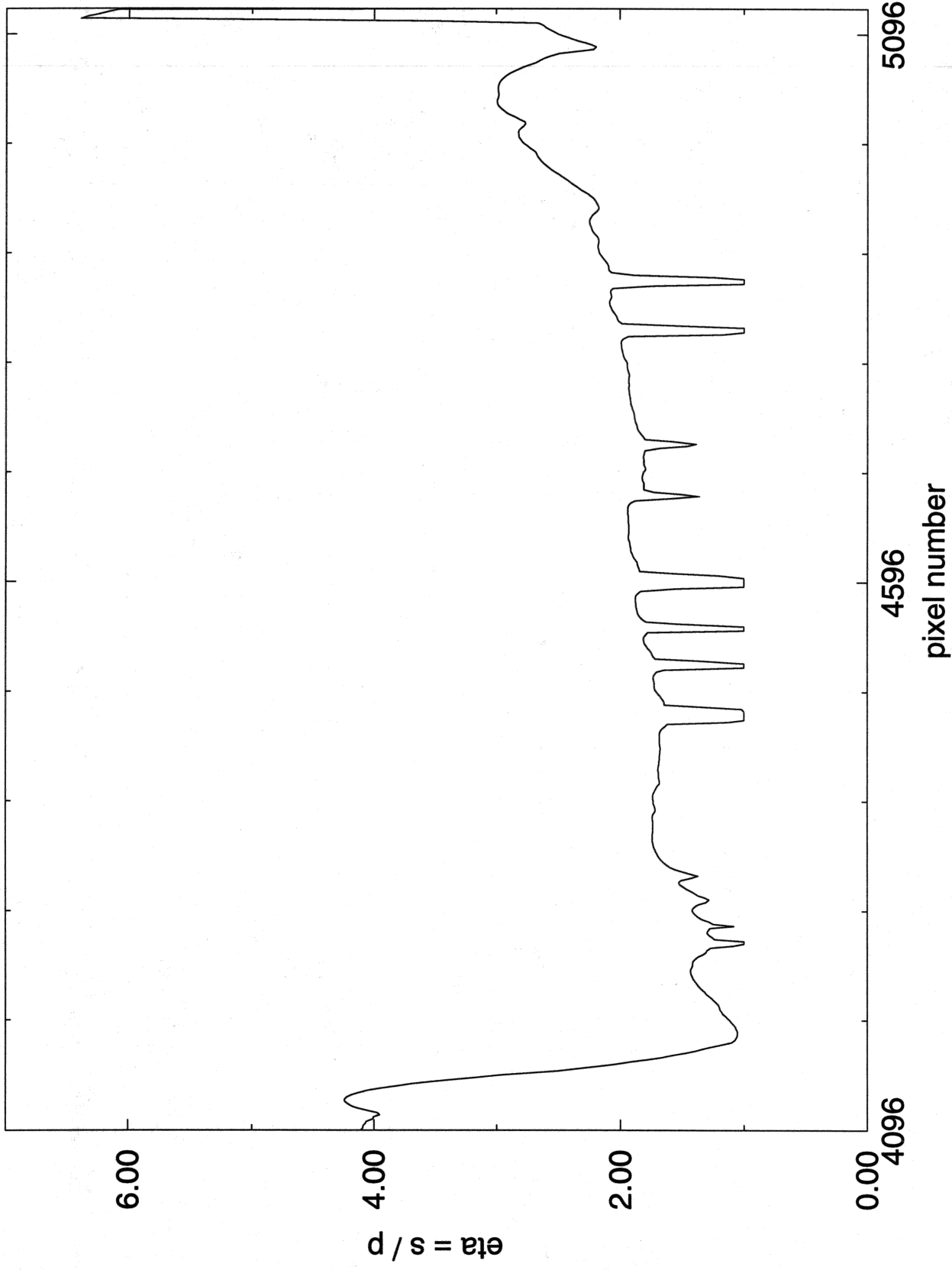




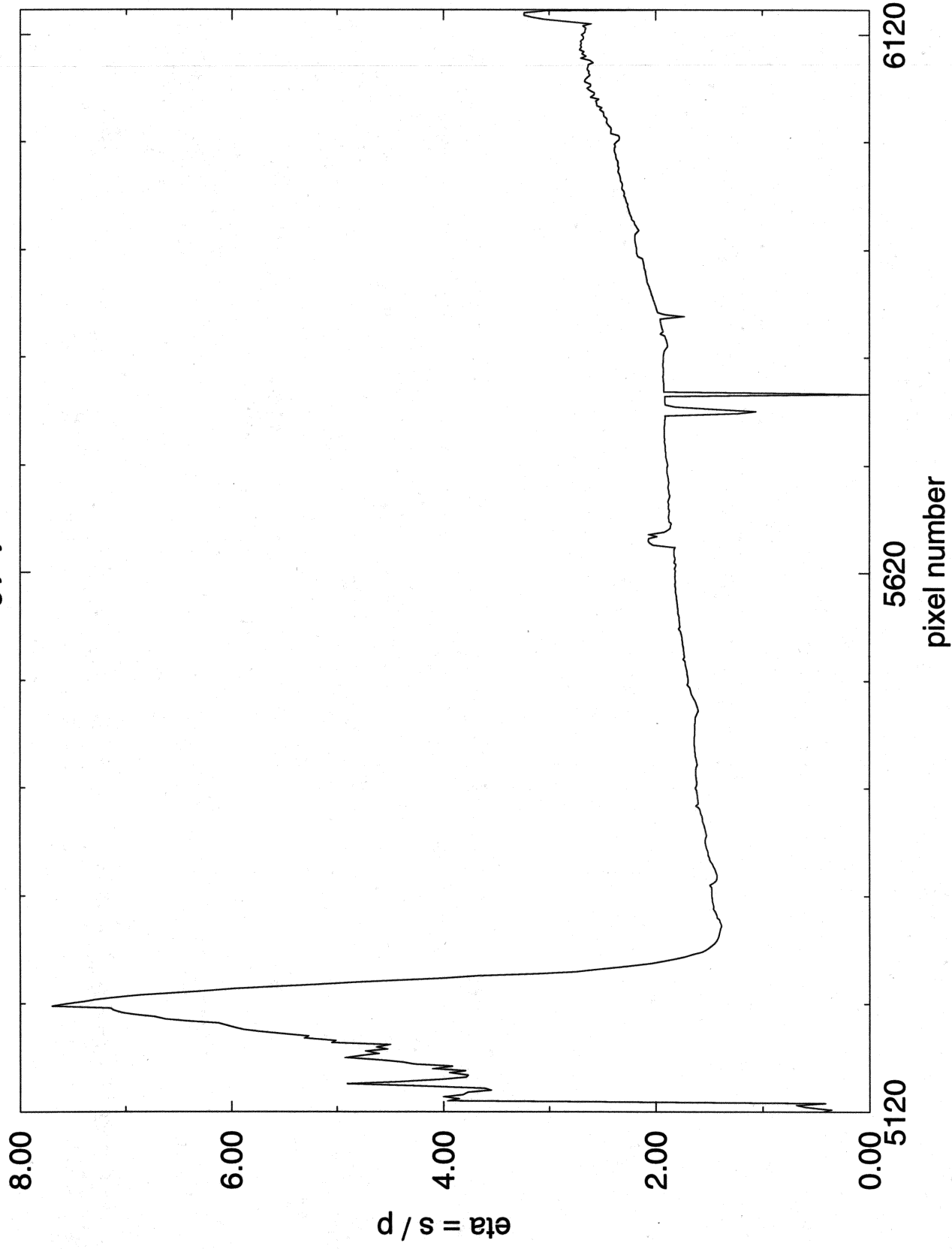
Channel 4  
AIT testing july 1998: ETA



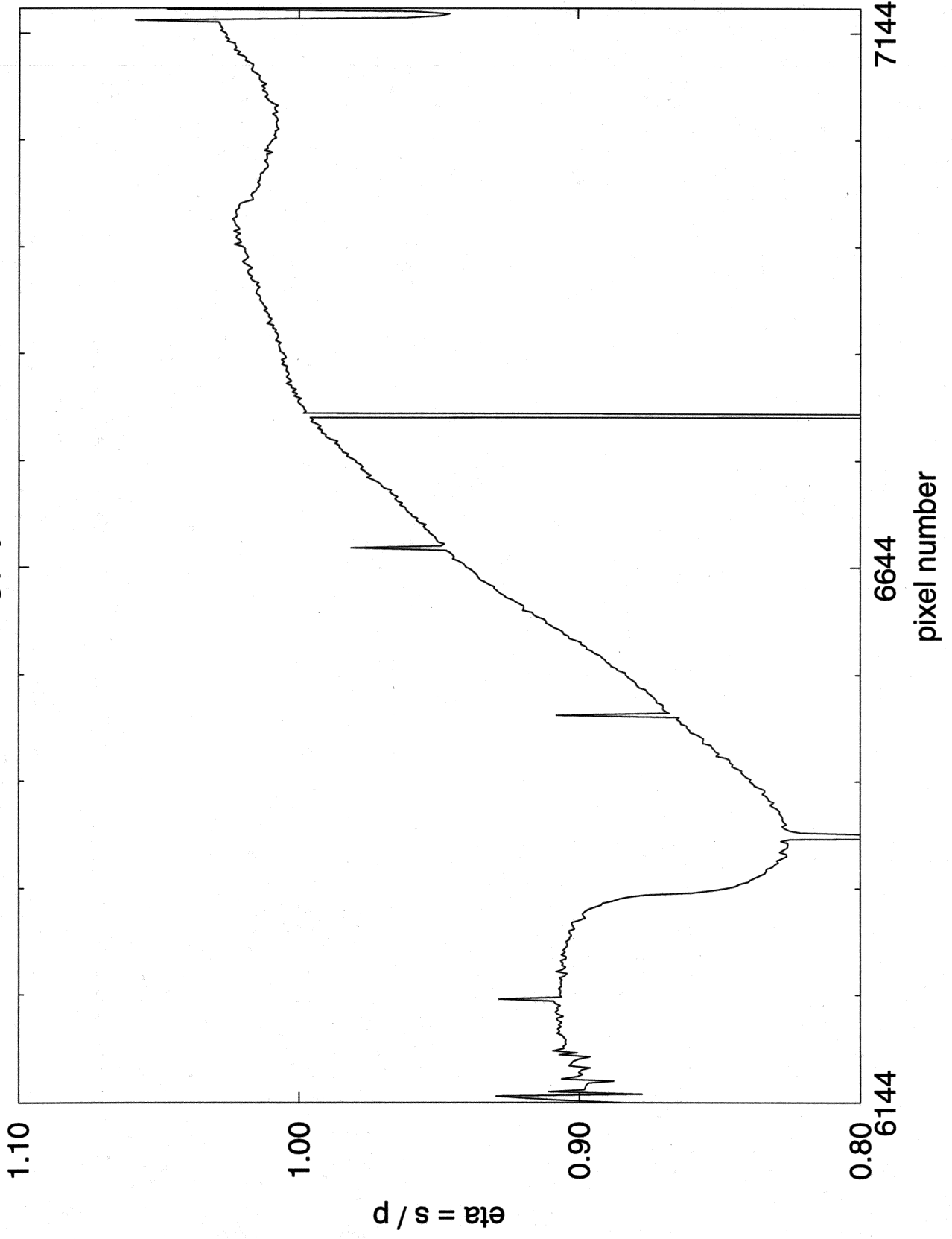
Channel 5  
AIT testing july 1998: ETA



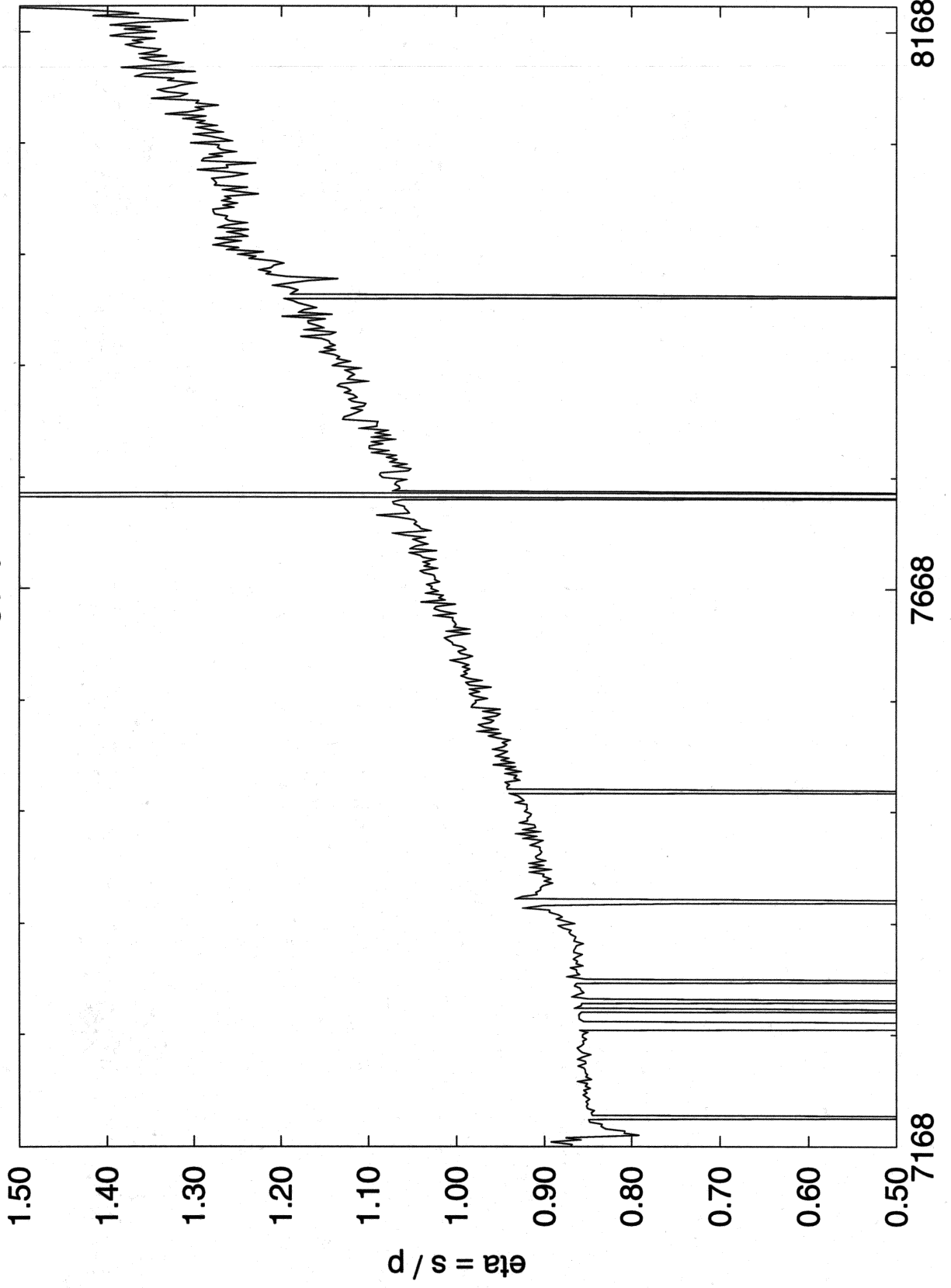
Channel 6  
AIT testing july 1998: ETA



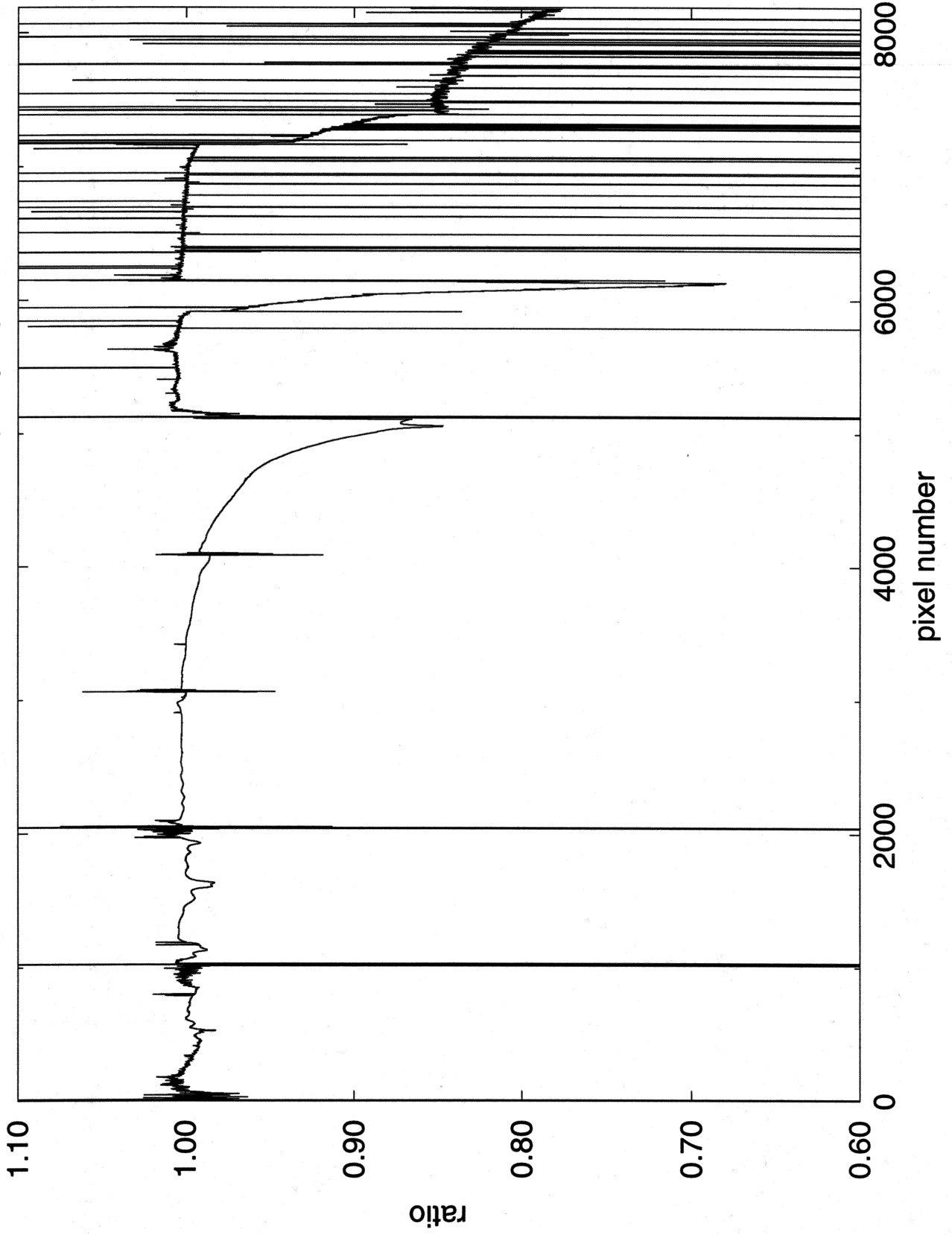
Channel 7  
AIT testing july 1998: ETA



Channel 8  
AIT testing july 1998: ETA

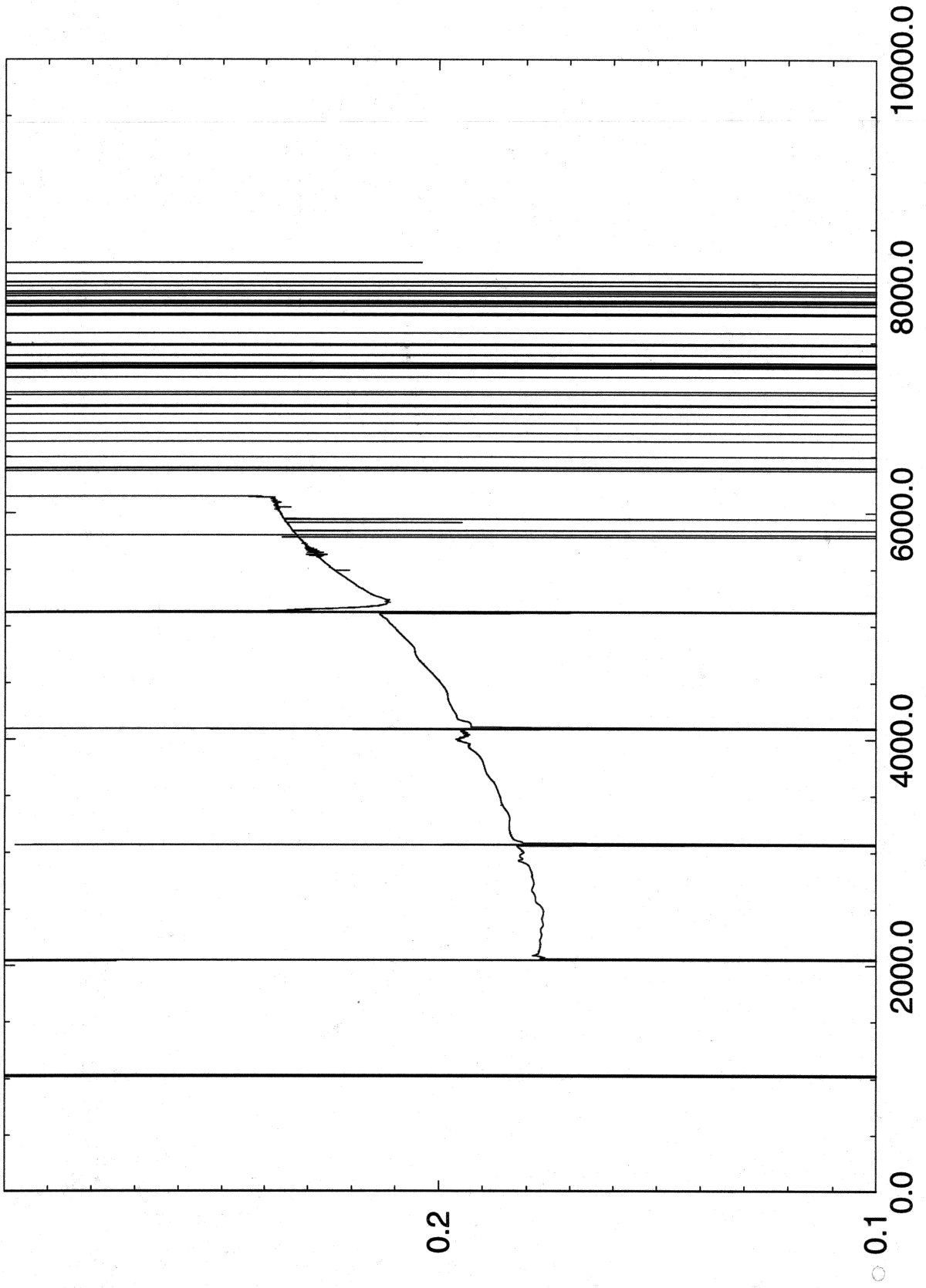


Ratio limb irradiances with spherical mirror cold DMs / warm DMs  
Limb irradi #4 / Limb irradi #30: looks pretty reproducible



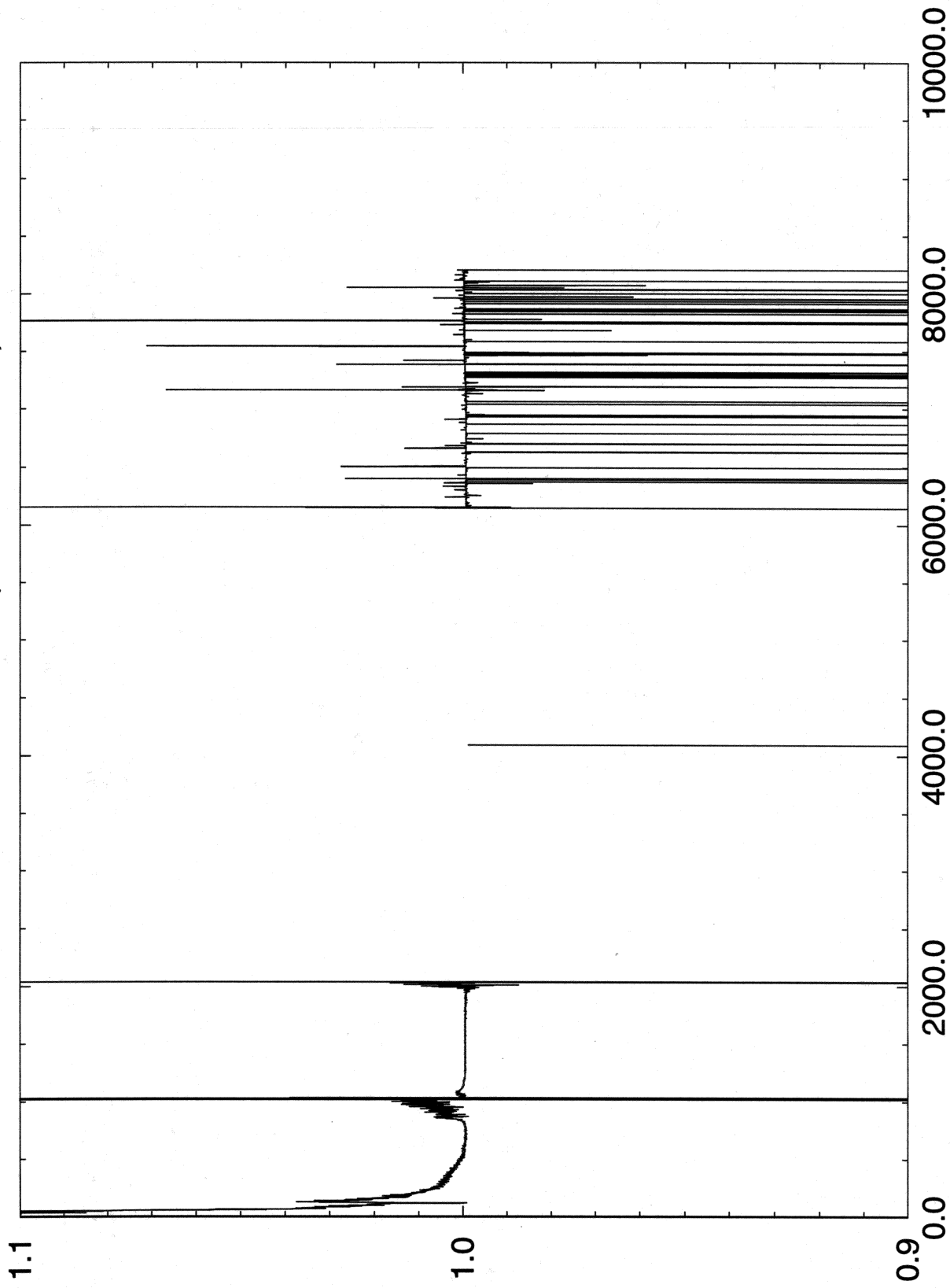
# Limb Irradiance low temp and min. distance (IRR5/4)

Ratio With/Without NDF (Channels 3,4,5,6)



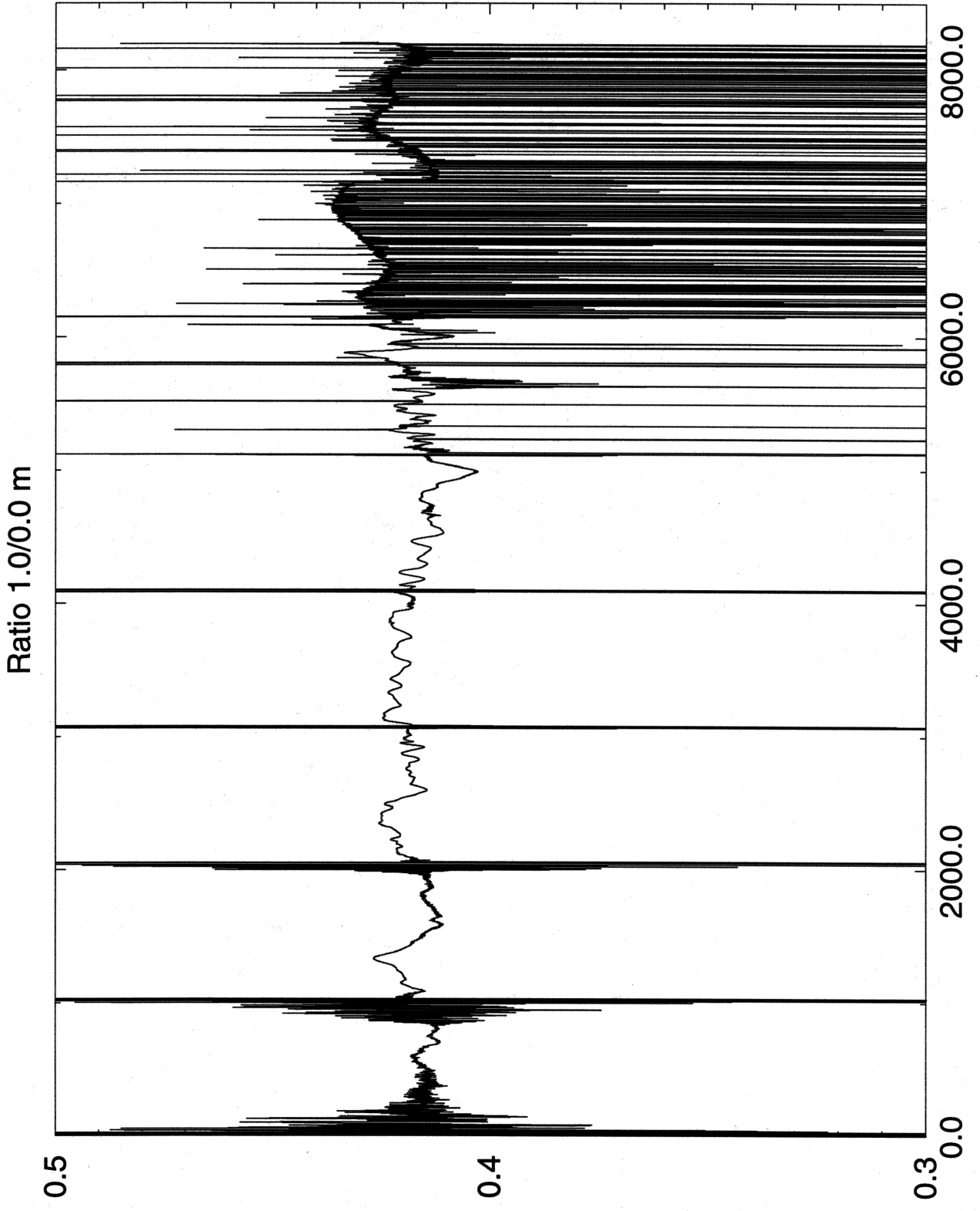
# Limb Irradiance low temp and min. distance (IRR5/4)

Ratio With/Without NDF (Channels 1,2,7,8)

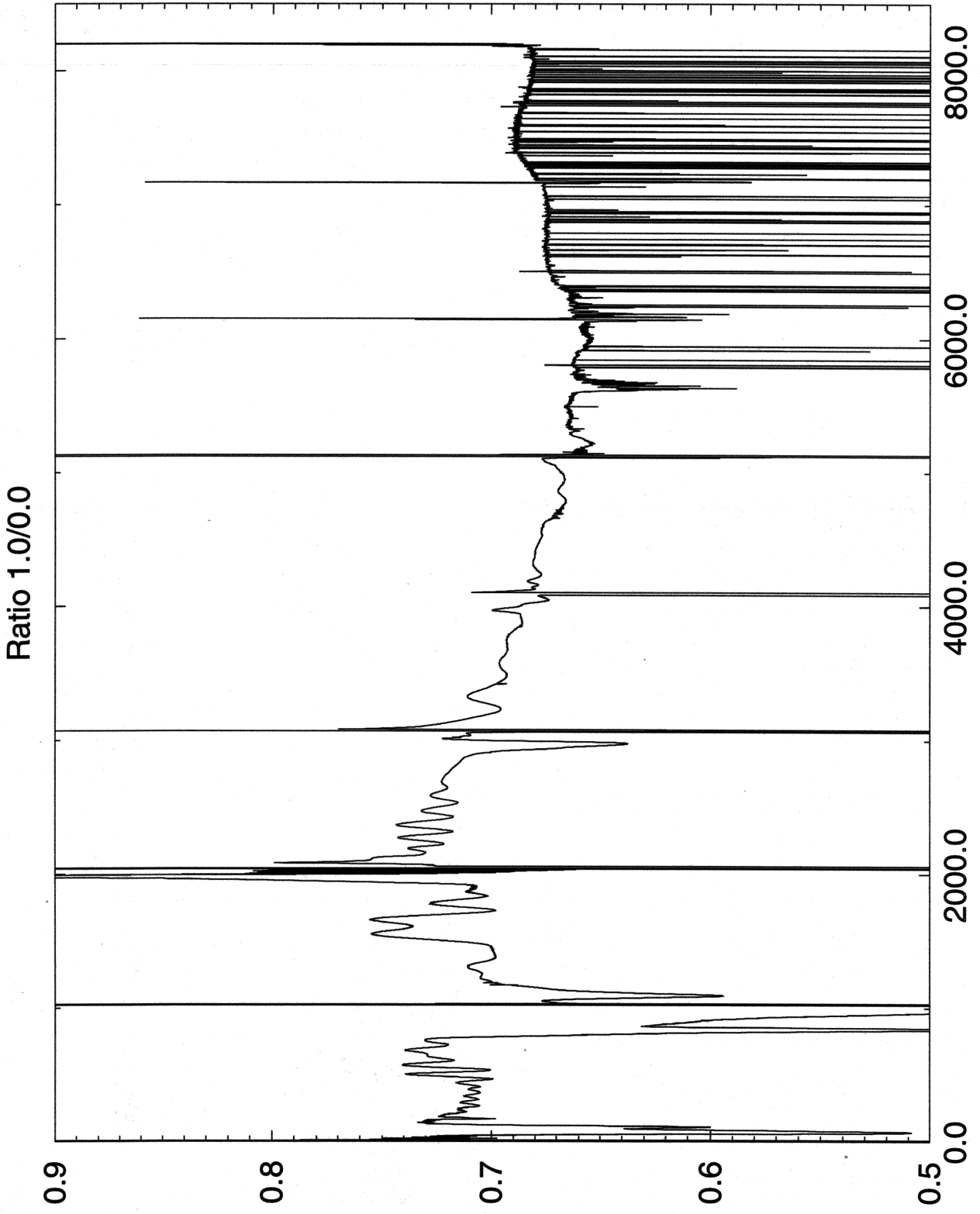




# Limb Irradiance bare lamp high temp (IRRAD14/16)

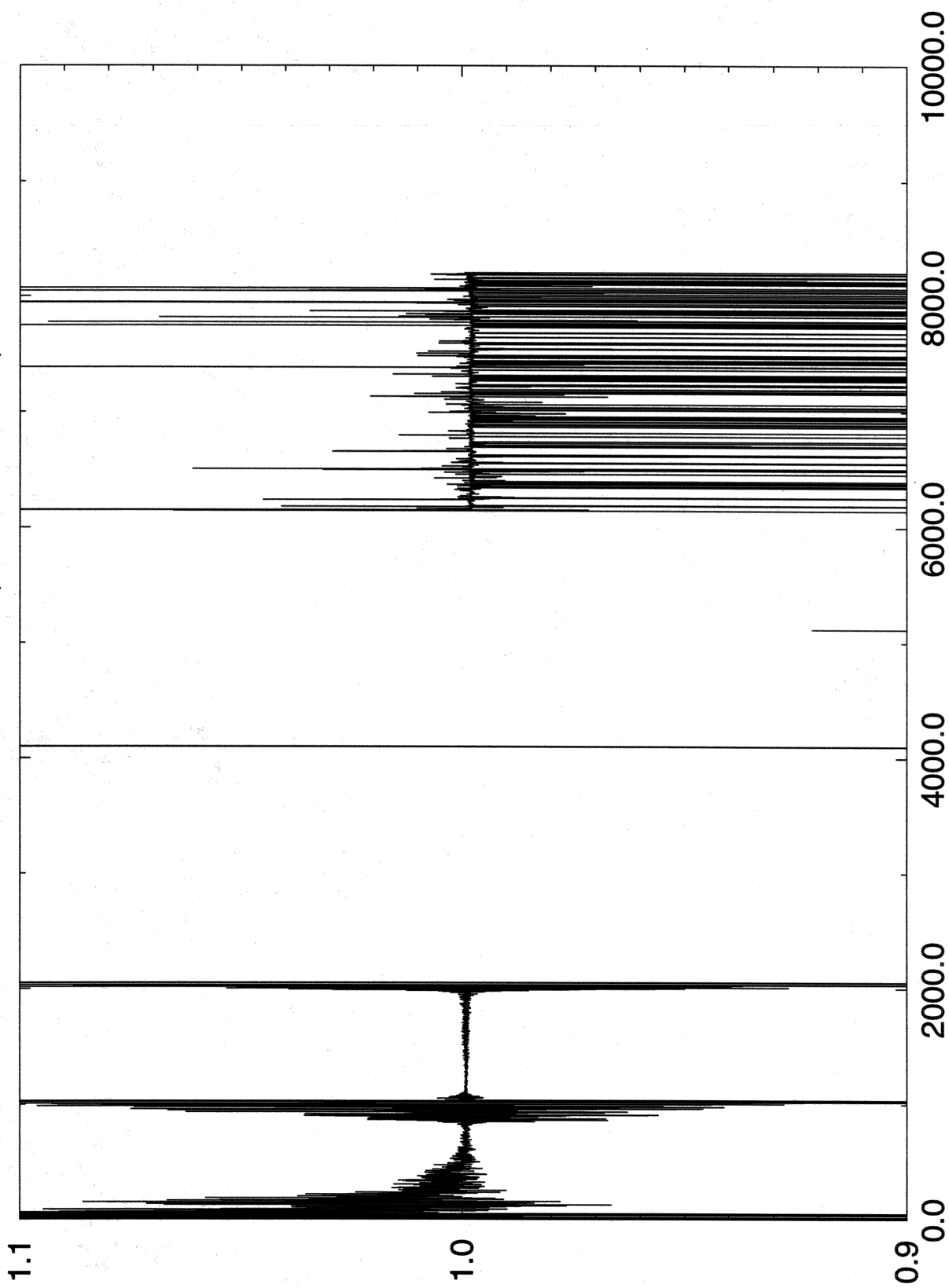


# Limb Irradiance bare lamp low temp (IRR2/4)



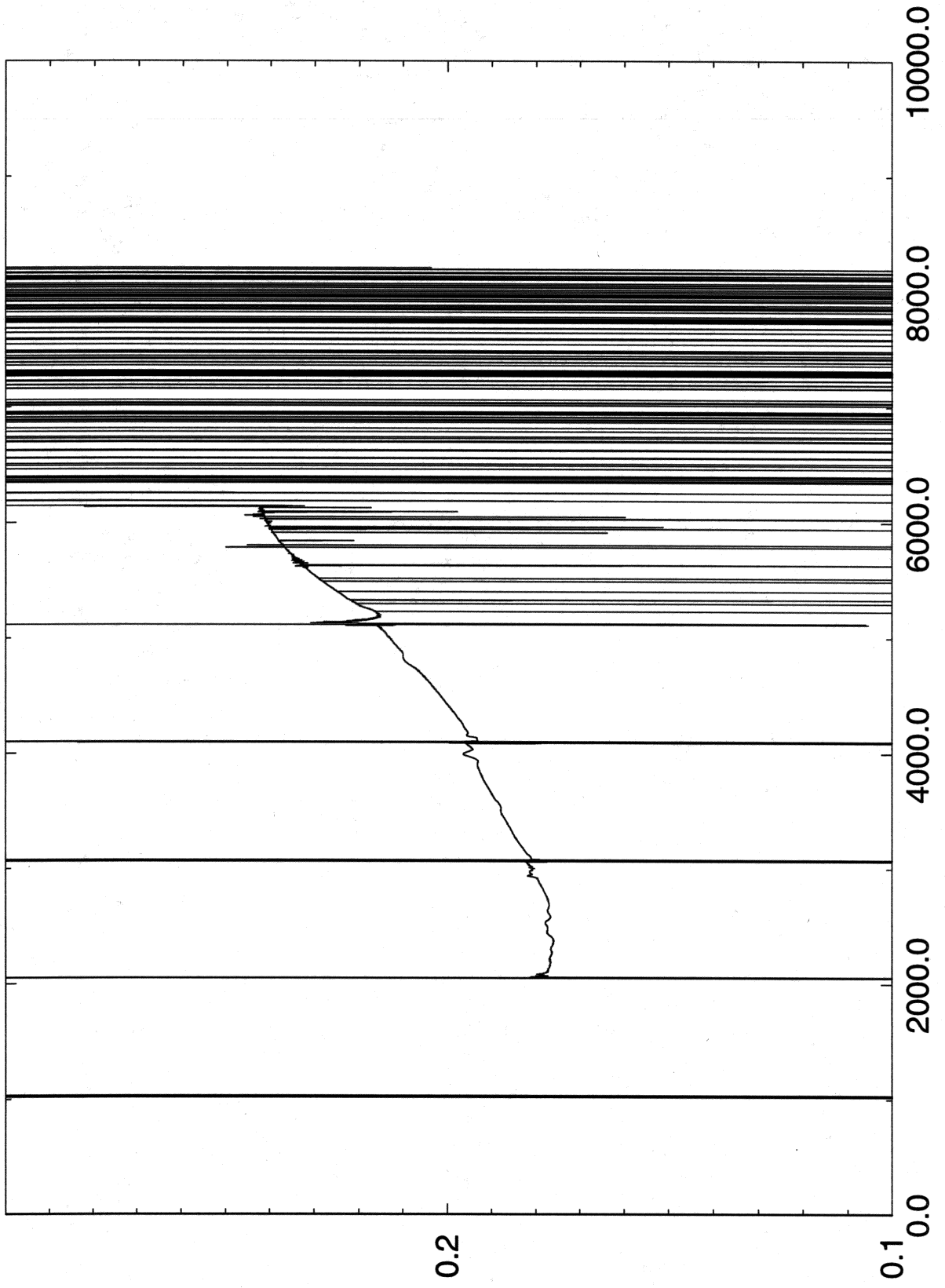
# Limb Irradiance low temp at 0.5 m (IRR10/11)

Ratio With/Without NDF (Channels 1,2,7,8)



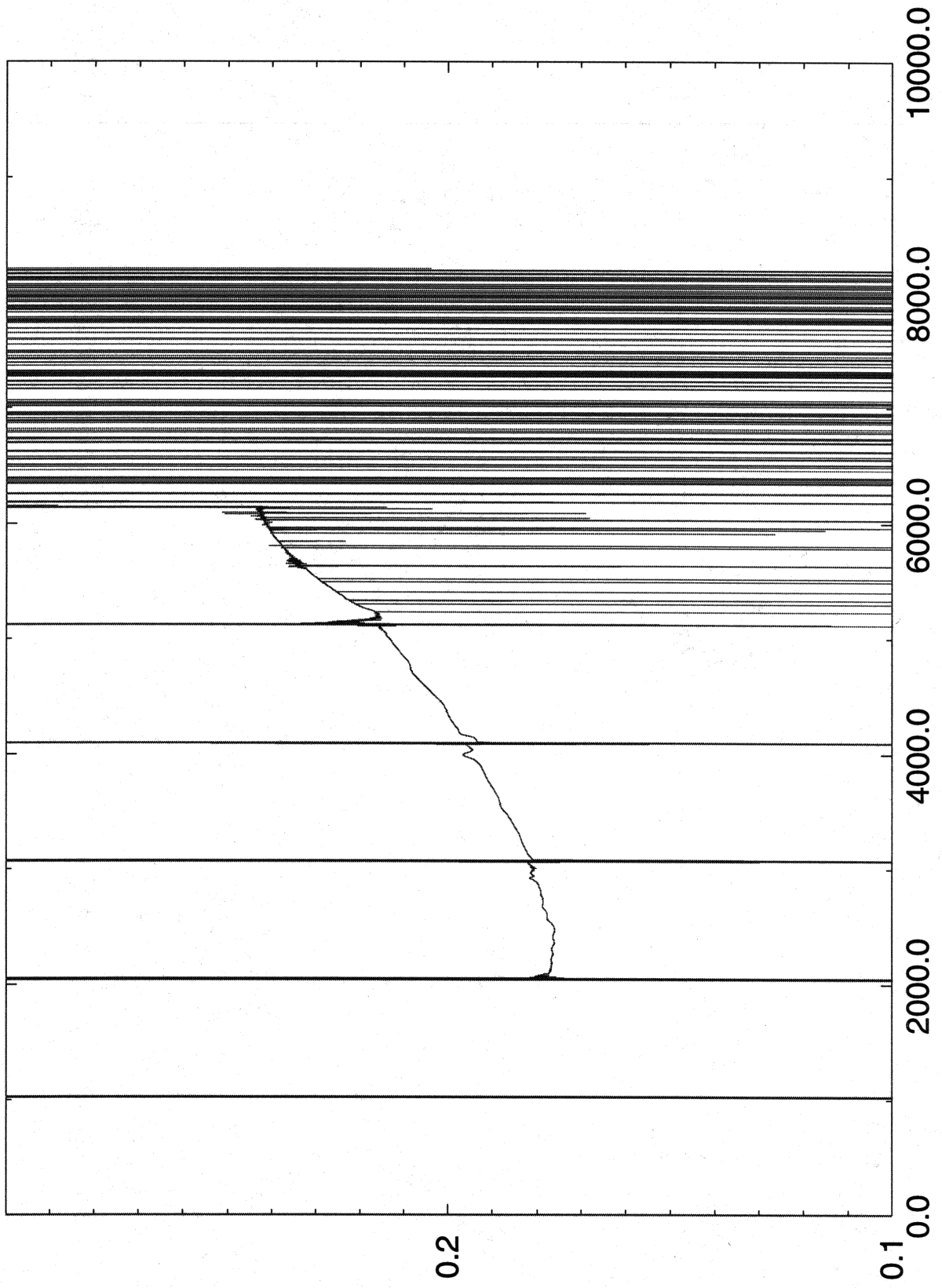
# Limb Irradiance low temp at 0.5 m (IRR10/11)

Ratio With/Without NDF (Channels 3,4,5,6)



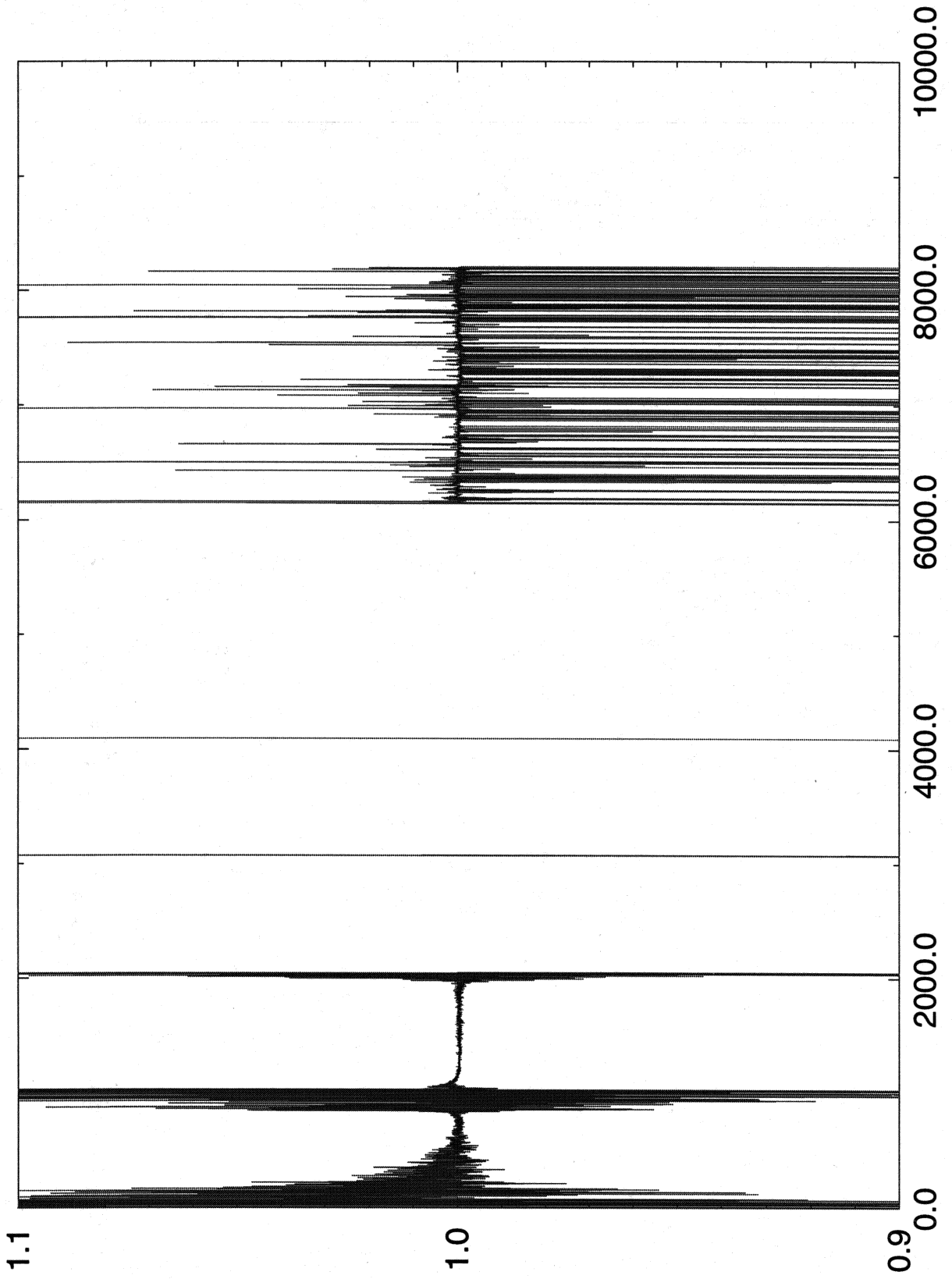
# Limb Irradiance low temp at 1.0 m (IRRAD12/13)

Ratio With/Without NDF (Channels 3,4,5,6)



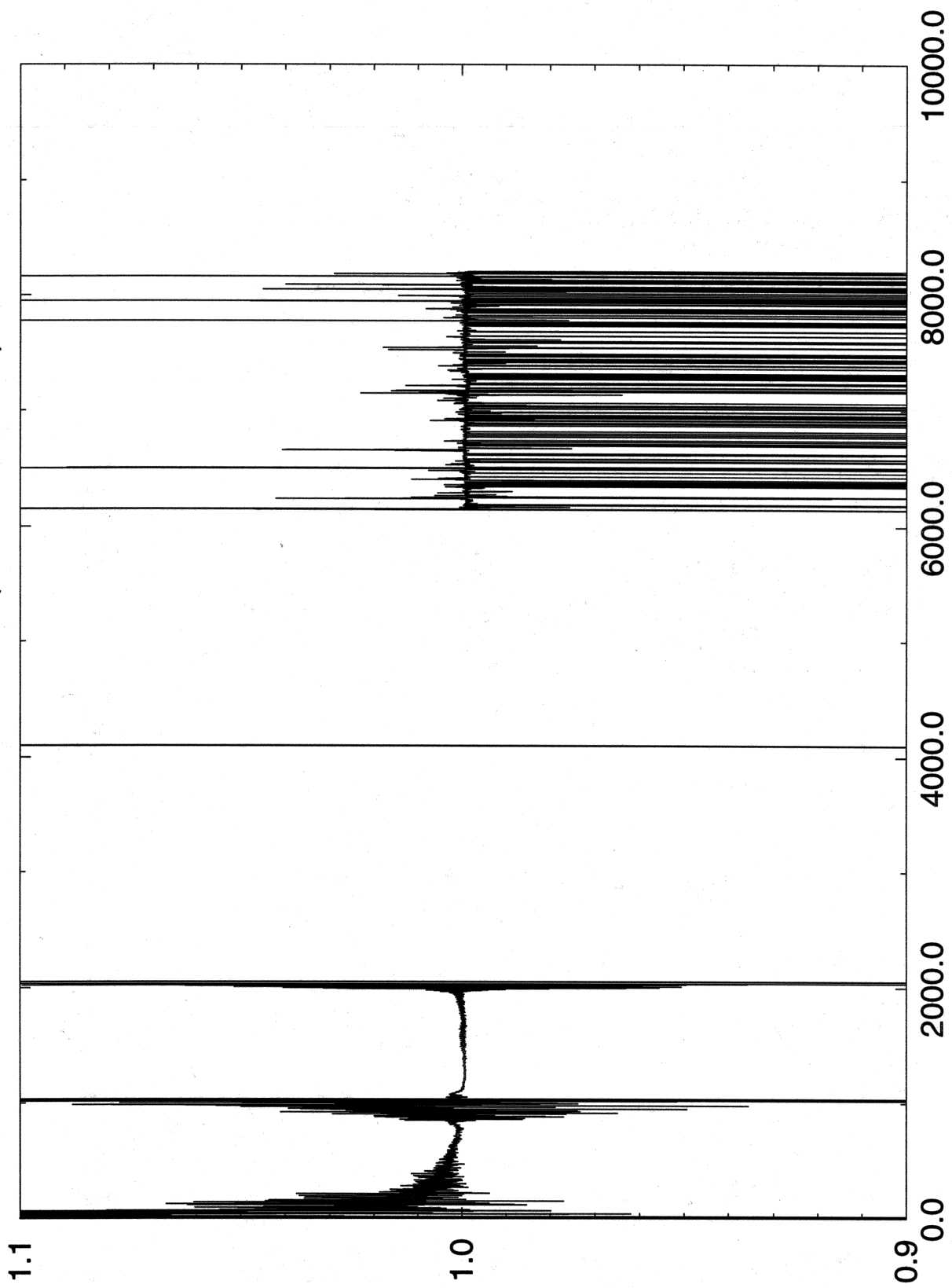
# Limb Irradiance low temp at 1.0 m (IRRAD12/13)

Ratio With/Without NDF (Channels 1,2,7,8)



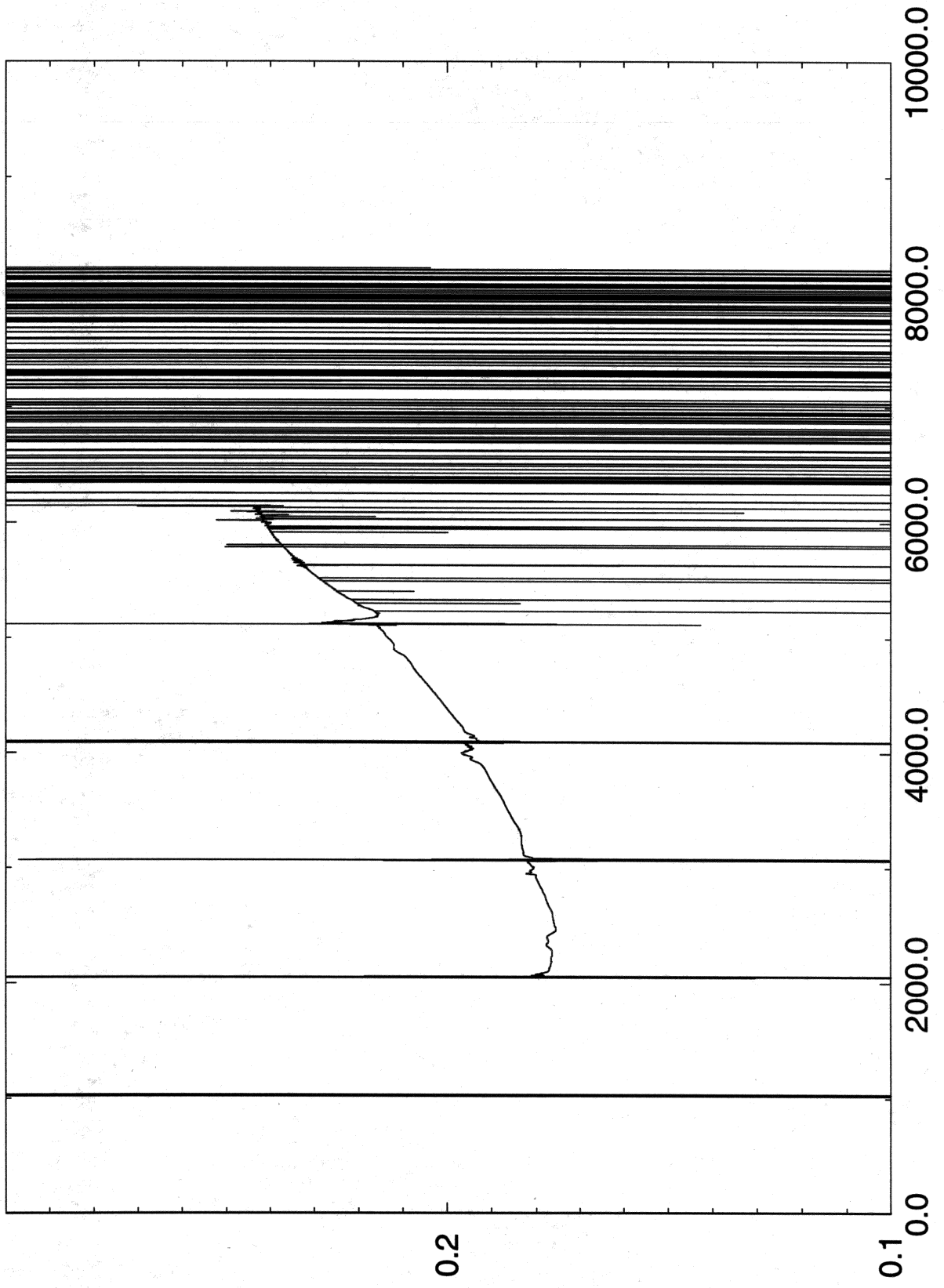
# Limb Irradiance high temp at 0.0 m (IRR17/16)

Ratio With/Without NDF (Channels 1,2,7,8)



# Limb Irradiance high temp at 0.0 m (IRR17/16)

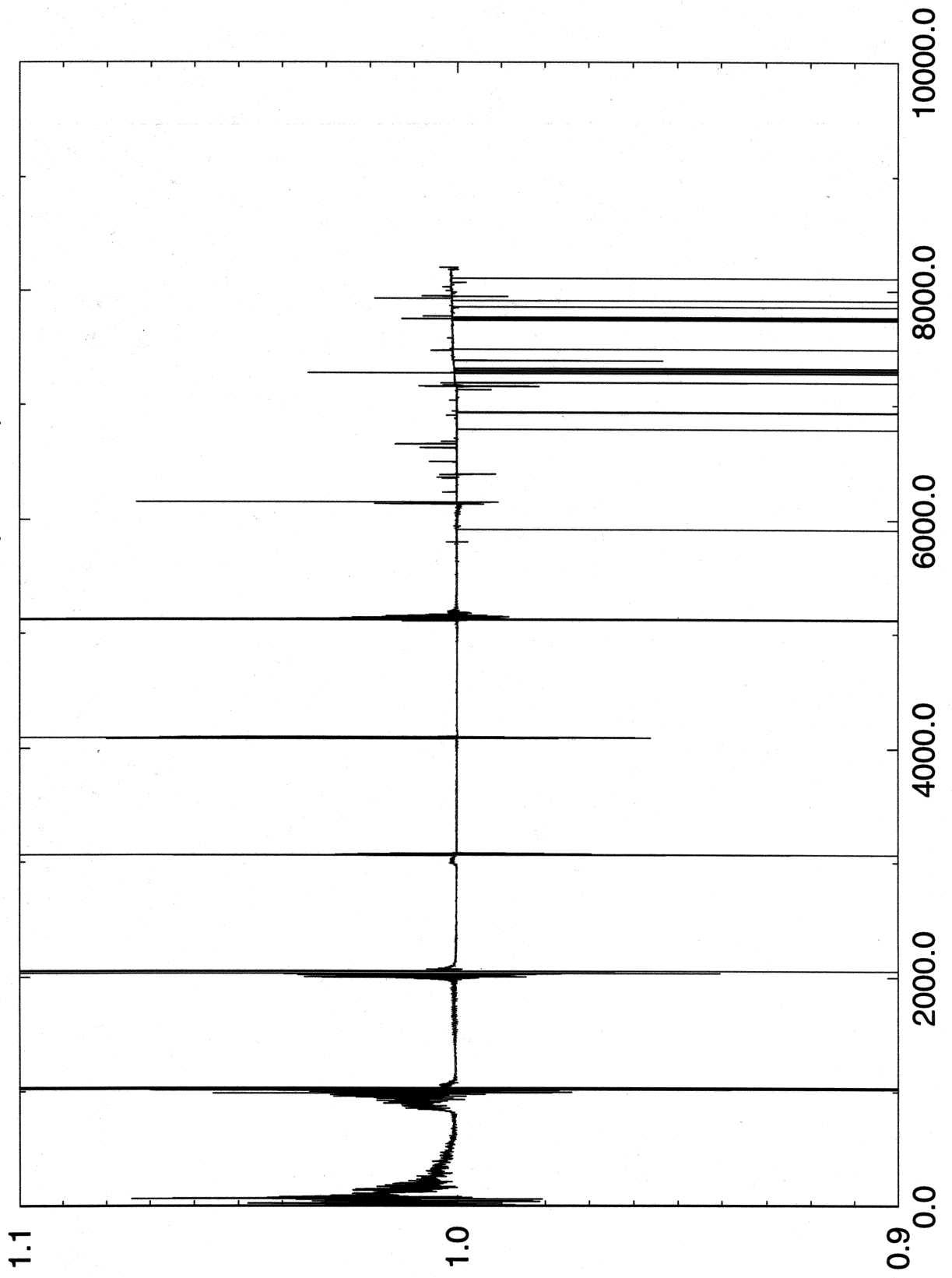
Ratio With/Without NDF (Channels 3,4,5,6)





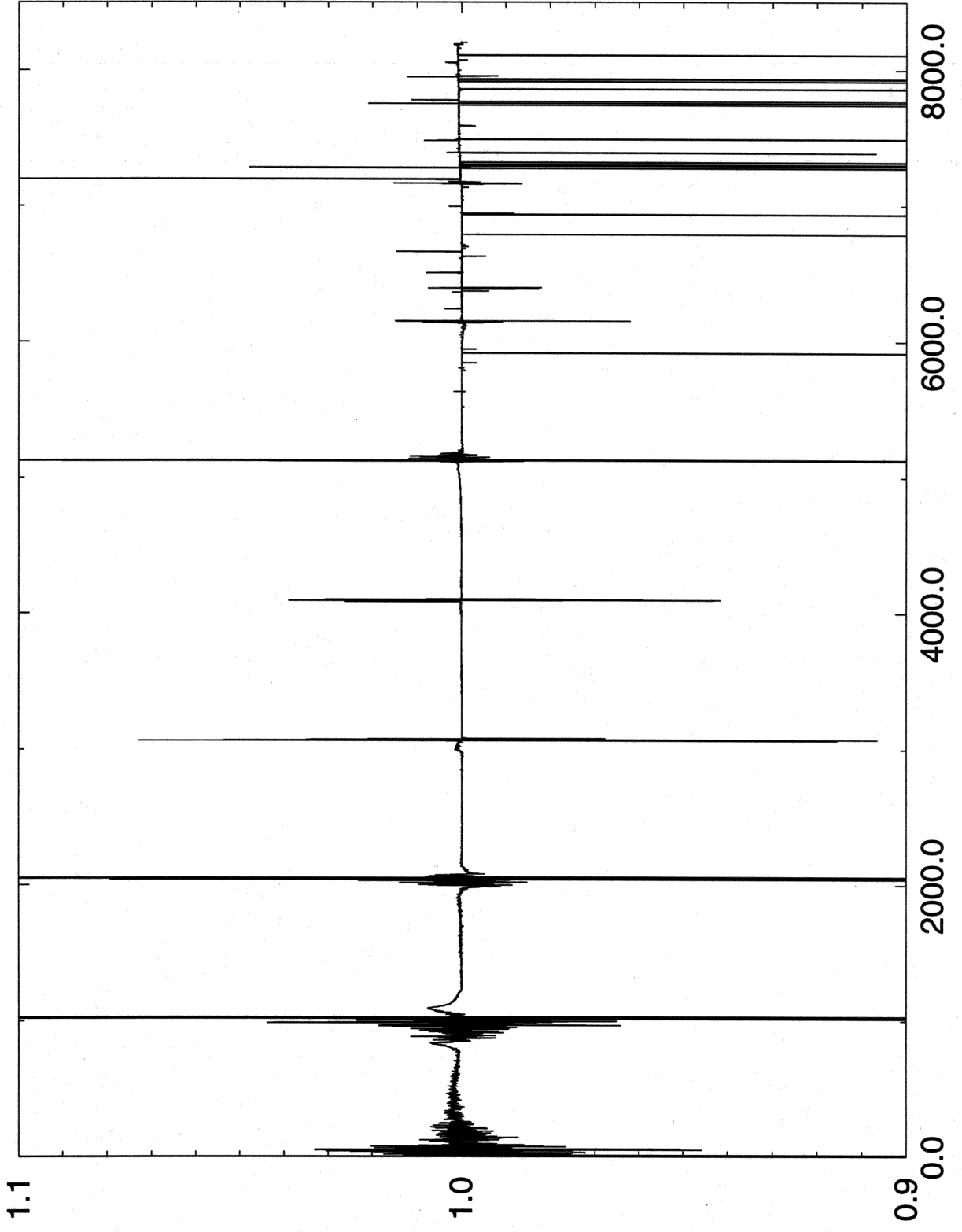
# Stability WLS Int at low temp

Ratio 060898/040898 (WLS7/6)



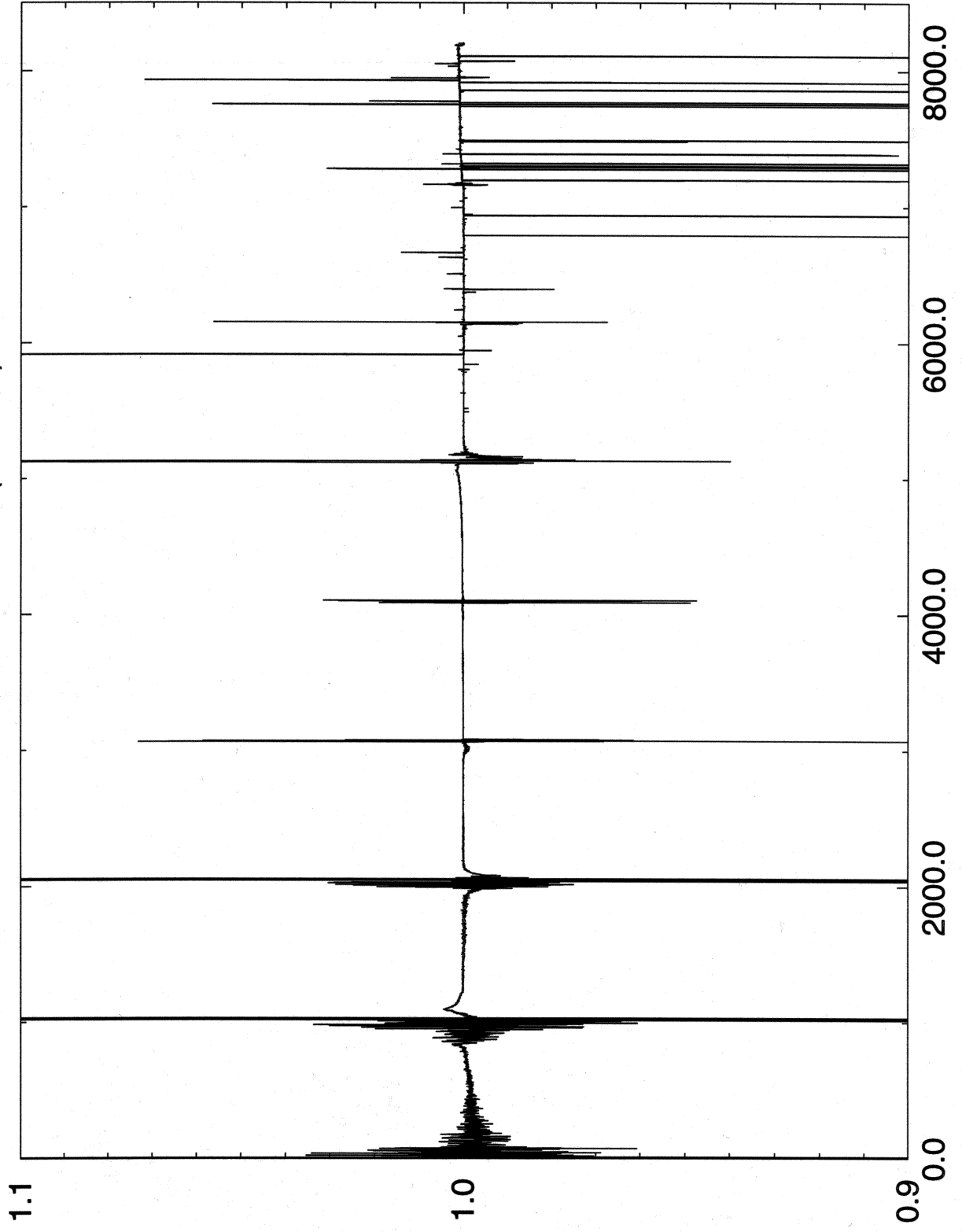
# Stability WLS Int at high temp

Ratio 020898/030898 (WLS3/5)



# Stability WLS Int at high temp

Ratio 020898/030898 (WLS4/5)



# Stability WLS Int at high temp

Ratio 020898/090898 (WLS3/8)

