

GLAT ~~1840~~
1844

Appendix A

~~5/1/05~~ ~~6/10/05~~ 7/1/05

Accelerometer Sensitivities and Charge Amp Settings



GLAST LAT Project TEM/TPS Vibration Testing

Accelerometer Sensitivities and Charge Amp Settings

Accel. #	Ch. #	S/N	Model	Sensitivity [pC/g]	F.S. Range [g]	Tape Gain [mV]	Sensitivity [mV/g]
CZ1		13048	2271Am7	12.43	3	3000	1000
AZ1	6	AHKB2	2226C	3.038	30	3000	100
AZ2	210	16139	2226C	3.027	30	3000	100
AZ3	23	16017	2226C	3.030	30	3000	100
AZ4	2	AHK69	2226C	3.006	30	3000	100
AZ5	5	30799	2222C	1.747	30	3000	100
AZ6	9	30743	2222C	1.595	30 100	3000	100 30
CX1		13048	2271Am20	12.43	30 3	2000	1000
AX1	5	30798	2222C	1.747	30	3000	100
AX2	10	0579	2222C	2.973	30	3000	100
AX3	2	AHK69	2226C	3.006	30	3000	100
AX4	3	16017	2226C	3.030	30	3000	100
CY1		13048	2271Am20	12.43	3	3000	1000
AY1	5	30798	2222C	1.747	30	3000	1000
AY2	10	0579	2222C	2.973	30	3000	100
AY3	2	AHK151	2226C	3.006	30	3000	100
AY4	3	16017	2226C	3.030	30	3000	100

16139 } 2226C } 3.027

Appendix D – Test Data Package Checklist



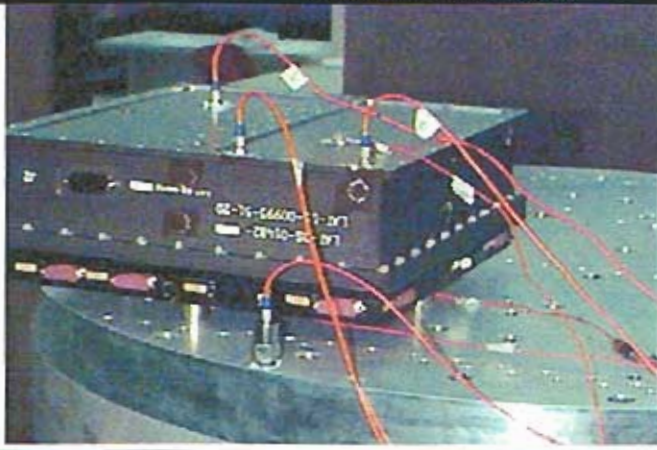
GLAST LAT Project TEM/TPS Vibration Testing

Qualification/Acceptance Test Data Package Checklist (Items supplied by Wyle Labs at end of test)

Item	✓	Description / Location
1	✓	Calibrated Equipment List
2	✓	Vibration Test plots (Pre- and Post test signature overlays and random vibration test data for Z, X, and Y axes)
3	✓	Electronic Data in UFF or equivalent format, if available
4	✓	Photographs of test setup <i>(Wyle provides with final pkg.)</i>
5	✓	Procedure data sheets (Appendices A, B, and C)
6	<i>N/A</i>	Visual Inspection Report
7	<i>N/A</i>	Test Control System Software Setup Sheets

TEST DATA

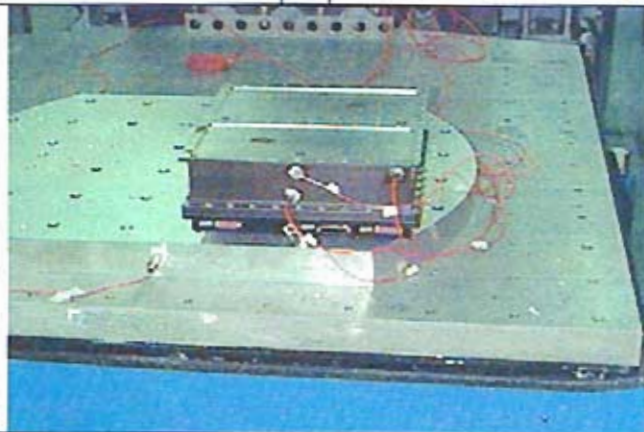
DATE STARTED 07-01-05	CUSTOMER Stanford Linear Accelerator	TECHNICIAN (SIGNATURE) <i>D. Wiltshire</i> 7-21
DATE COMPLETED 07-01-05	SPECIMEN DESCRIPTION TEM & TPS { See Initial Visual }	ENGINEER (SIGNATURE) <i>Lee Ann Bate</i>
TEMPERATURE 74°F	TYPE OF TEST SET-UP - Detail	ENGINEER <i>Lee Ann Bate</i>
HUMIDITY 41% R.H.	MANUFACTURER Stanford Linear Accelerator	JOB NUMBER 49995.52083
SPECIMEN NUMBER 1	TEST SPECIFICATION See Vibration Data	



Z - Axis



X - Axis



Y - Axis



TEST DATA

DATE STARTED 07-01-05	CUSTOMER Stanford Linear Accelerator	TECHNICIAN (SIGNATURE) <i>D. Wiltschko</i>				
DATE COMPLETED 07-01-05	SPECIMEN DESCRIPTION TEM / TPS { See Initial Visual }	ENGINEER (SIGNATURE) <i>Lee Ambata</i>				
TEMPERATURE 74°F	TYPE OF TEST VIBRATION - Sine and Random - Non-Op.	ENGINEER <i>Lee Ambata</i>				
HUMIDITY 41% R.H.	MANUFACTURER Stanford Linear Accelerator	JOB NUMBER 49995.52083				
SPECIMEN NUMBER 1	TEST SPECIFICATION SLAC LAT-TD-05649 & Customer Instruction					
SPECIMEN NUMBER	DATE	AXIS	TIME START	TIME STOP	VIBRATION FREQUENCIES AND LEVELS	REMARKS
1	07-01-05	X	0931	+0:04:18	Sine - Search 20 - 2000Hz @ 0.15g 2 octaves / minute 1 sweep up / axis Random - Accept. 20Hz @ 0.01 G ² /Hz 80 - 500Hz @ 0.04 G ² /Hz 2000Hz @ 0.01 G ² /Hz 6.79 Grms overall 1 minute / axis	Sine Search
		X	0947	+0:01:00		Random Accept.
		X	0954	+0:04:18		Sine Search
		Y	1012	+0:04:18		Sine Search
		Y	1024	+0:01:00		Random Accept.
		Y	1030	+0:04:18		Sine Search
		Z	1130	+0:04:18		Sine Search
		Z	1146	+0:01:01		Random Accept.
1	7-01-05	Z	1154	+0:04:18		Sine Search
						Note: No external physical damage noted due to this test.

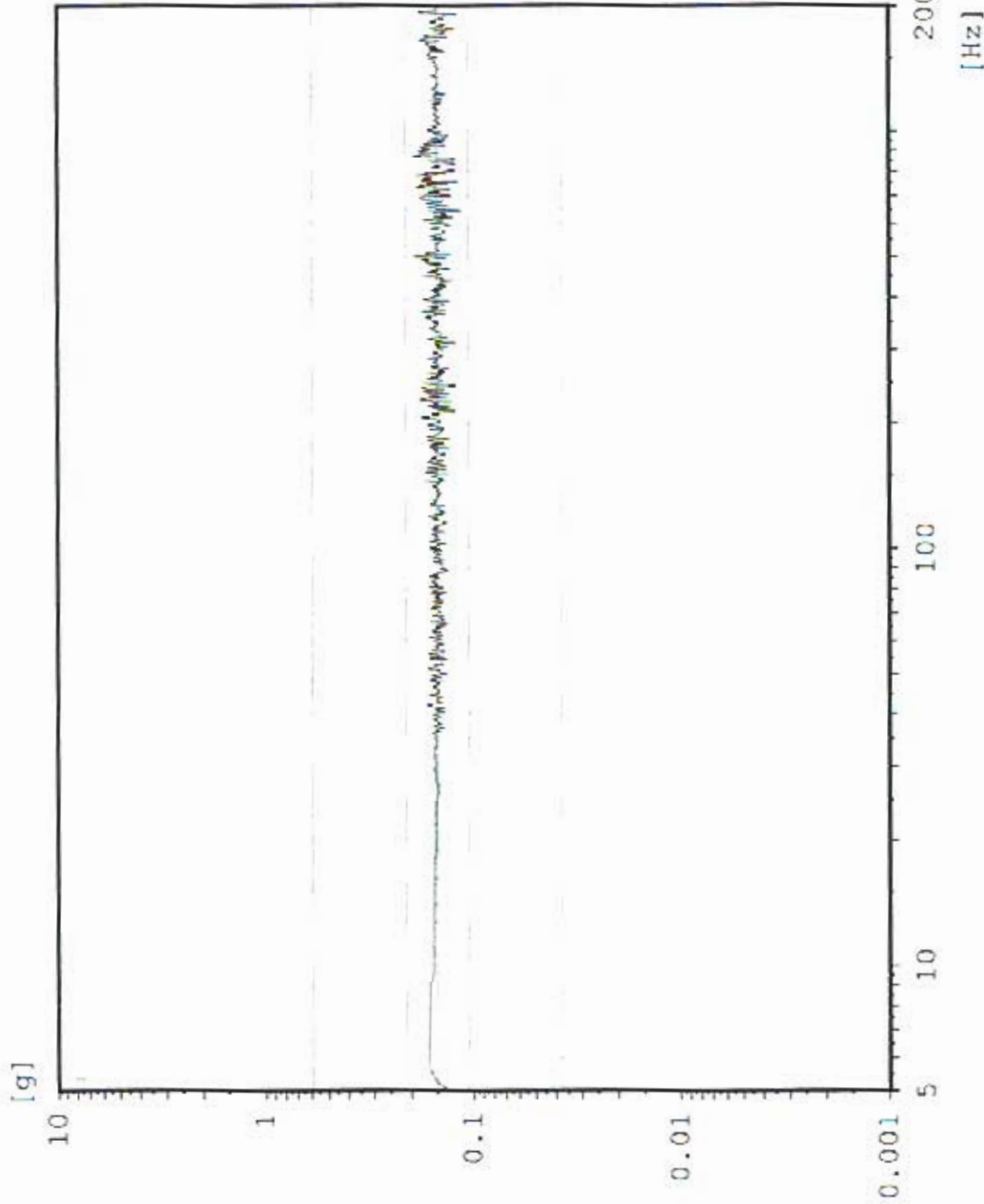
CX1 X-Axis Control

Sine

Starford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 1
Chan.type: CW Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 09:35:28

X - axis Pre Random
Acceptance Unit
GLAT 1844

Max: 433.7 Hz 1.643 g

Sine AX3 TPS top center

Stanford Linear Accelerator

J/N 49995.52083

TEX / TPS

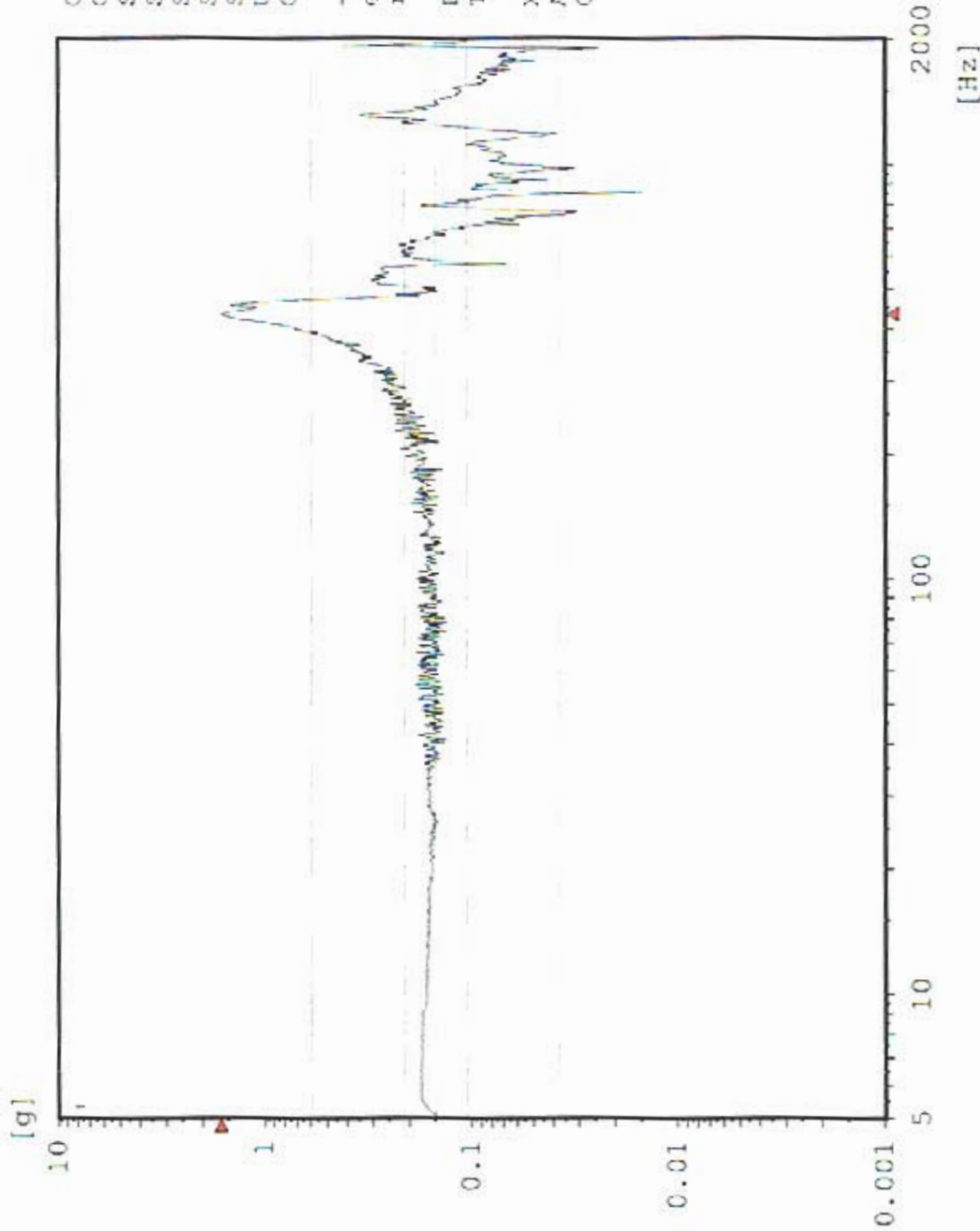


Chan.no: 2 M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 09:35:28

X - axis Pre Random
Acceptance Unit
GLAT 1844



AX4 TPS top edge

Sine
Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS

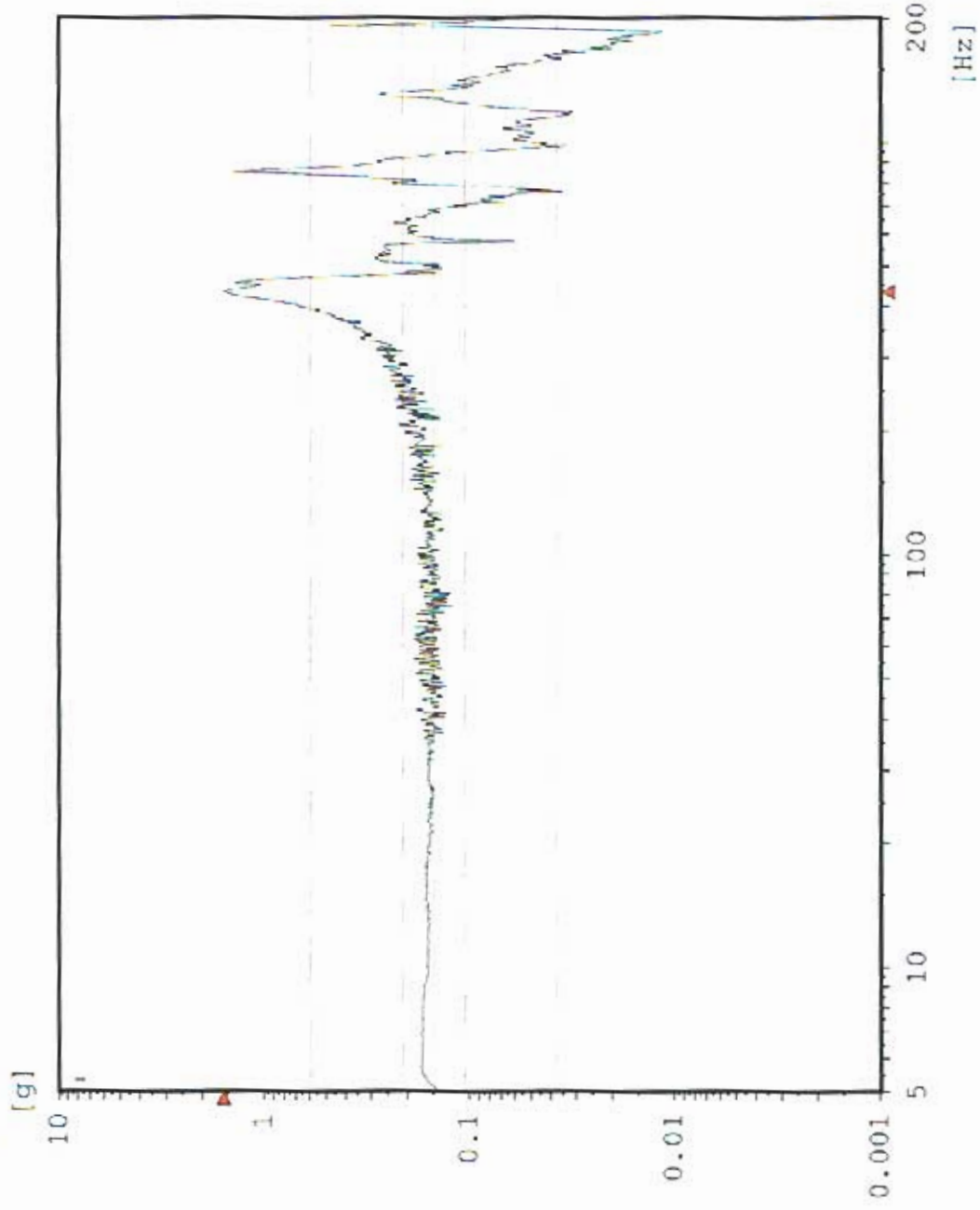


Chan.no: 3
Chan.type: M Filtered
Sweep type: Logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

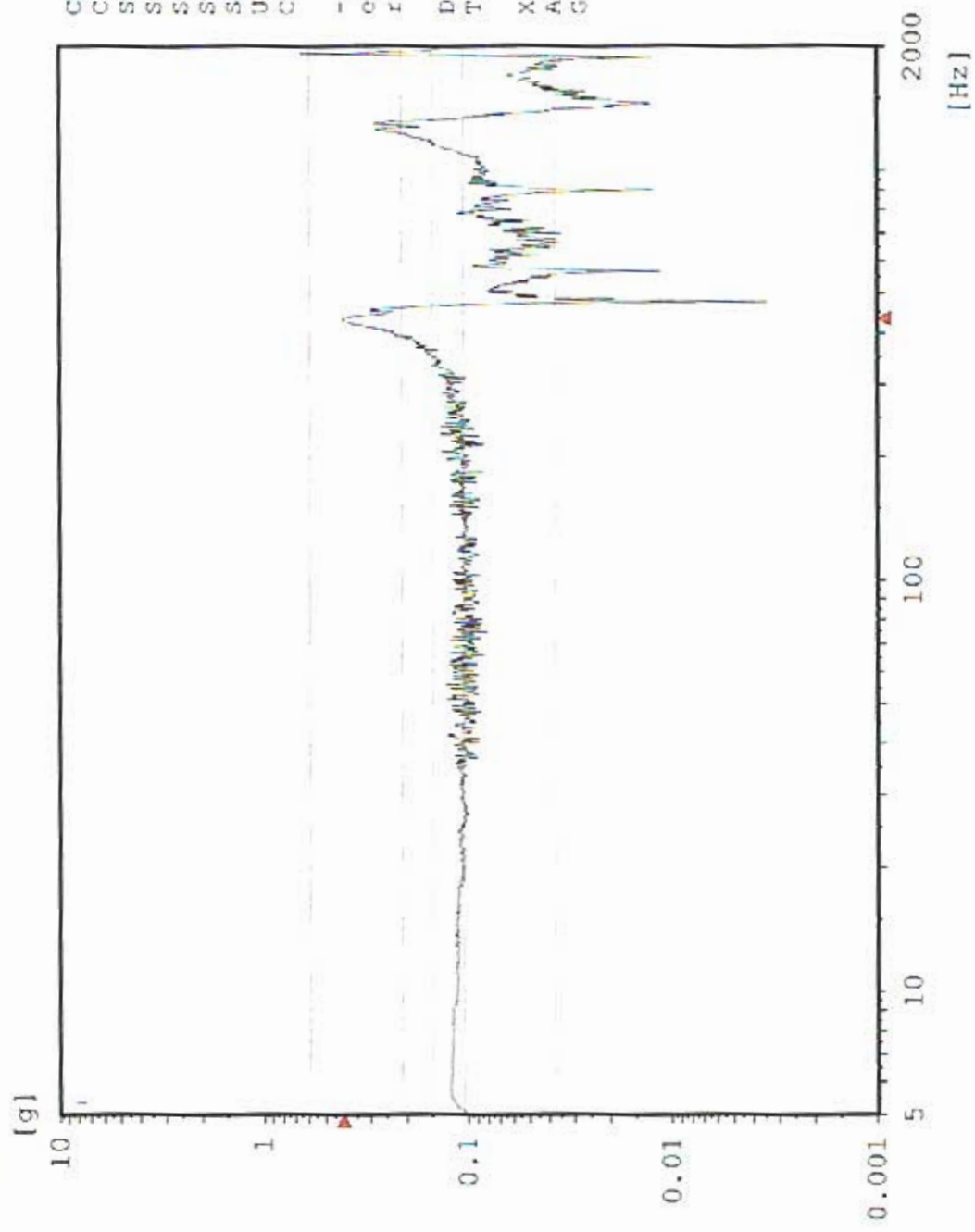
Date: 07-01-05
Time: 09:35:28

X - axis Pre Random
Acceptance Unit
GLAT 1844



Sine AX1 TEM center edge

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 5
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

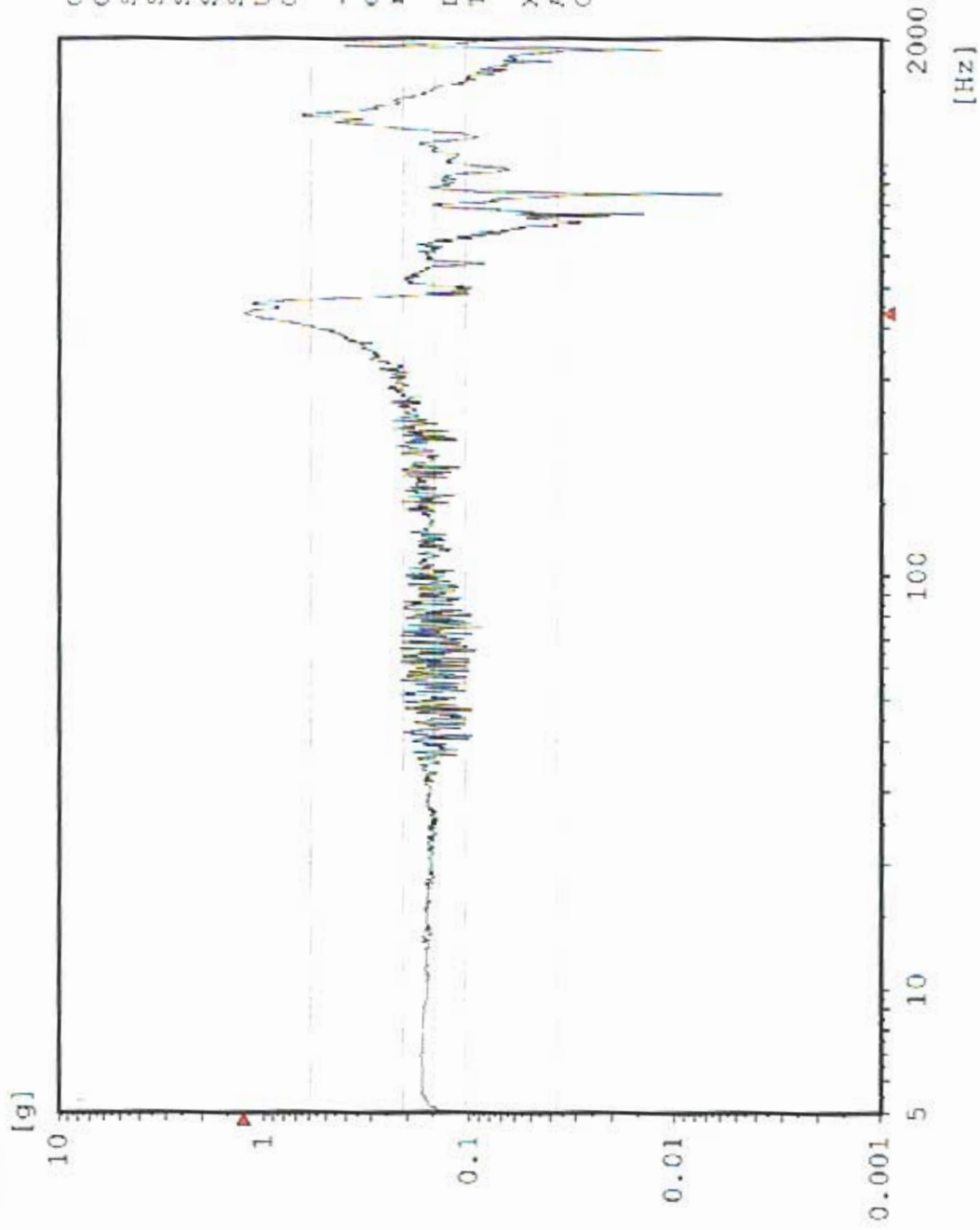
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 09:35:28

X - axis Pre Random
 Acceptance Unit
 GLAT 1844

Sine AX2 TPS CG

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 10
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 09:35:28

X - axis Pre Random
 Acceptance Unit
 GLAT 1844

Random

Stanford Linear Accelerator

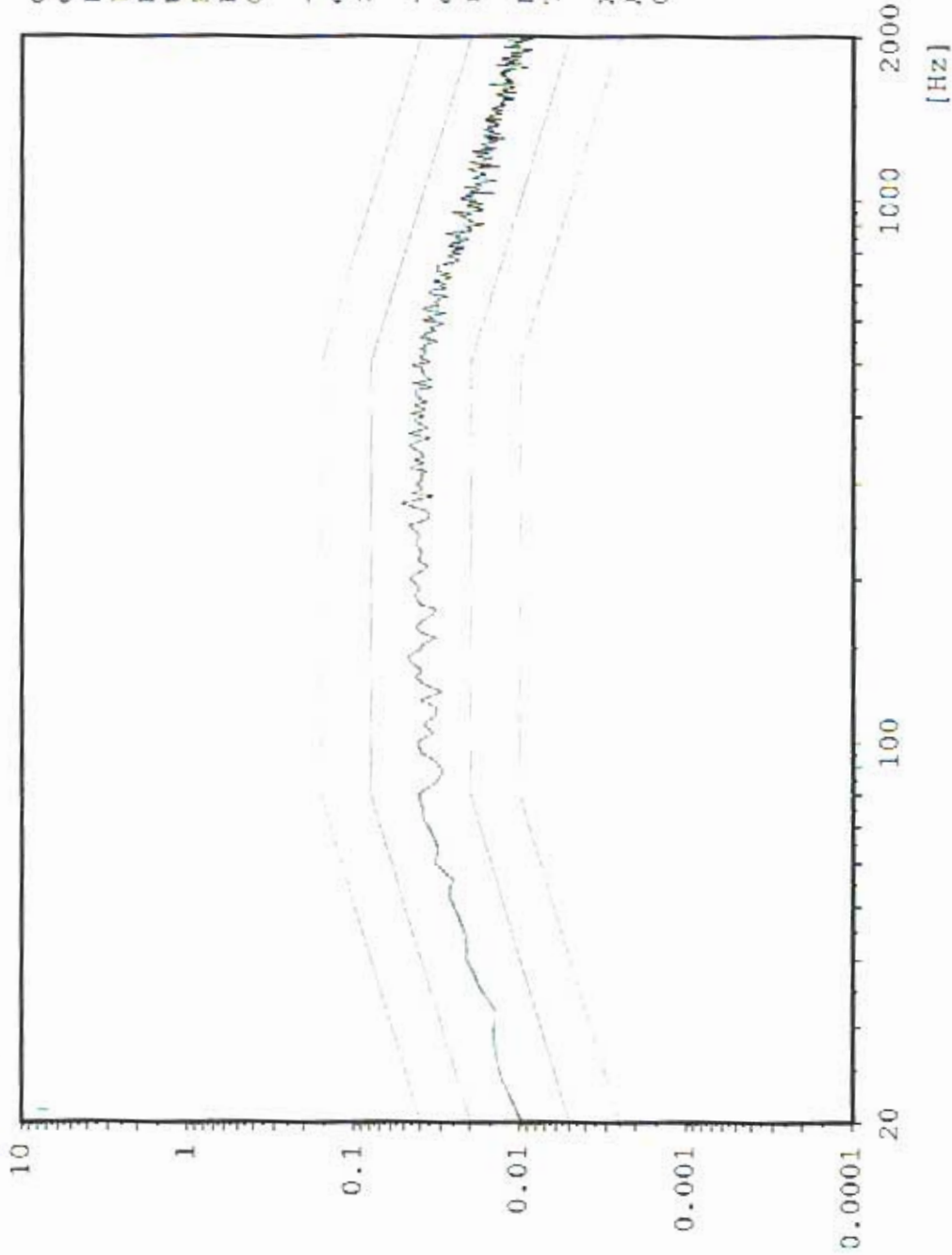
J/N 49995.52083

TEM & TPS

CX1 X-Axis Control



[g²/Hz]



Chan.no: 1

Chan.type: C

DOF: 126

Level: 0.0 dB

Resolution: 4 Hz

Unit: g²/Hz

RMS (act.): 6.811 g

RMS (req.): 6.787 g

Contr.strat.: Closed loop

-- Time on act. level --

elapsed: 000:01:00

remaining: 000:00:00

-- Time total --

elapsed: 000:02:53

remaining: 000:00:00

Date: 07-01-05

Time: 09:48:39

X - Axis

Acceptance Unit

GLAT 1844

fax: 420 Hz 2.909 g²/Hz

Random

Stanford Linear Accelerator

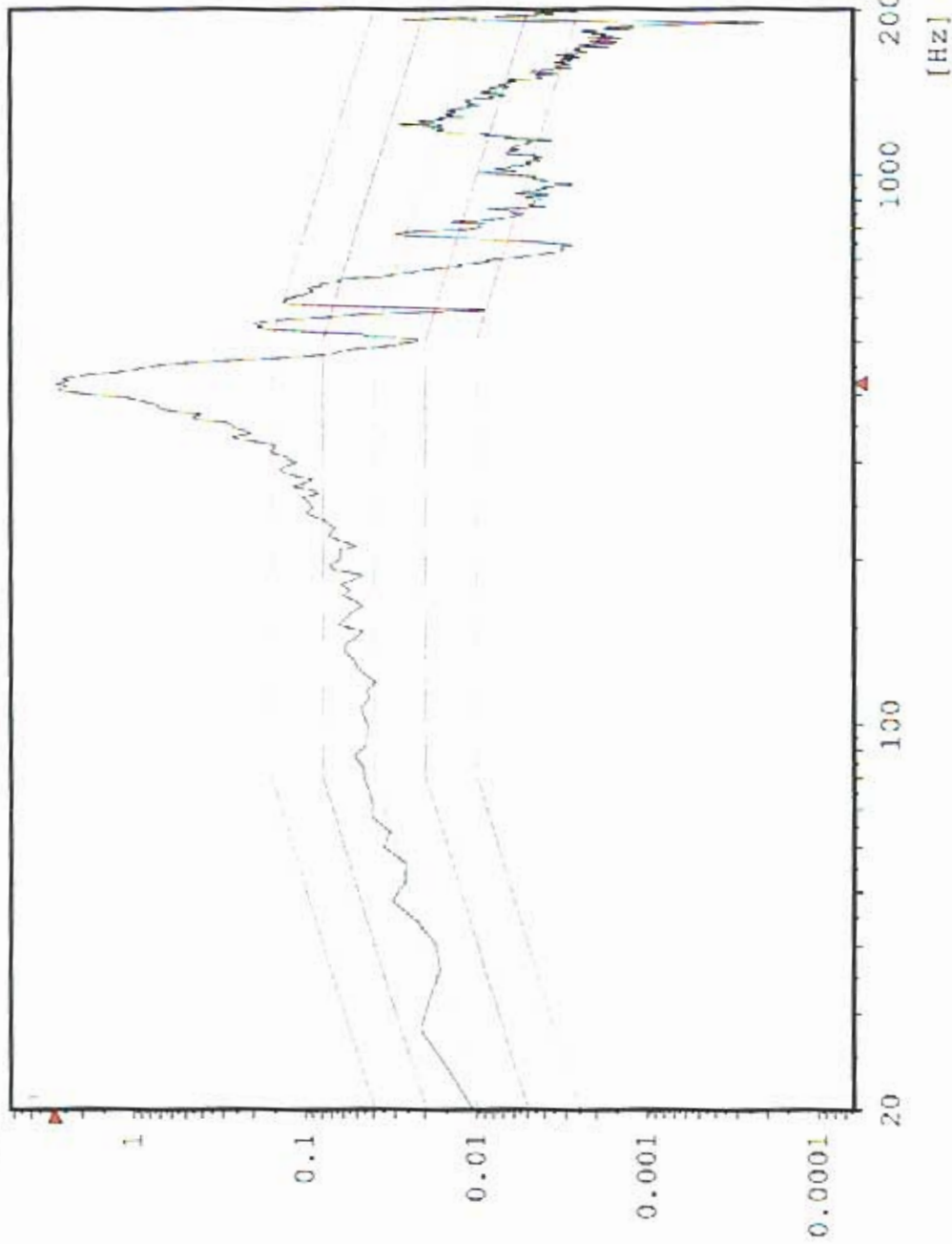
J/N 49995.52083

TEM & TPS

AX4 TPS Top Center



[g²/Hz]



Chan.no: 2
Chan.type: M
DOF: 100
Level: 6.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 14.03 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:53
remaining: 000:00:00

Date: 07-01-05
Time: 09:48:39

X - Axis
Acceptance Unit
GLAT 1844

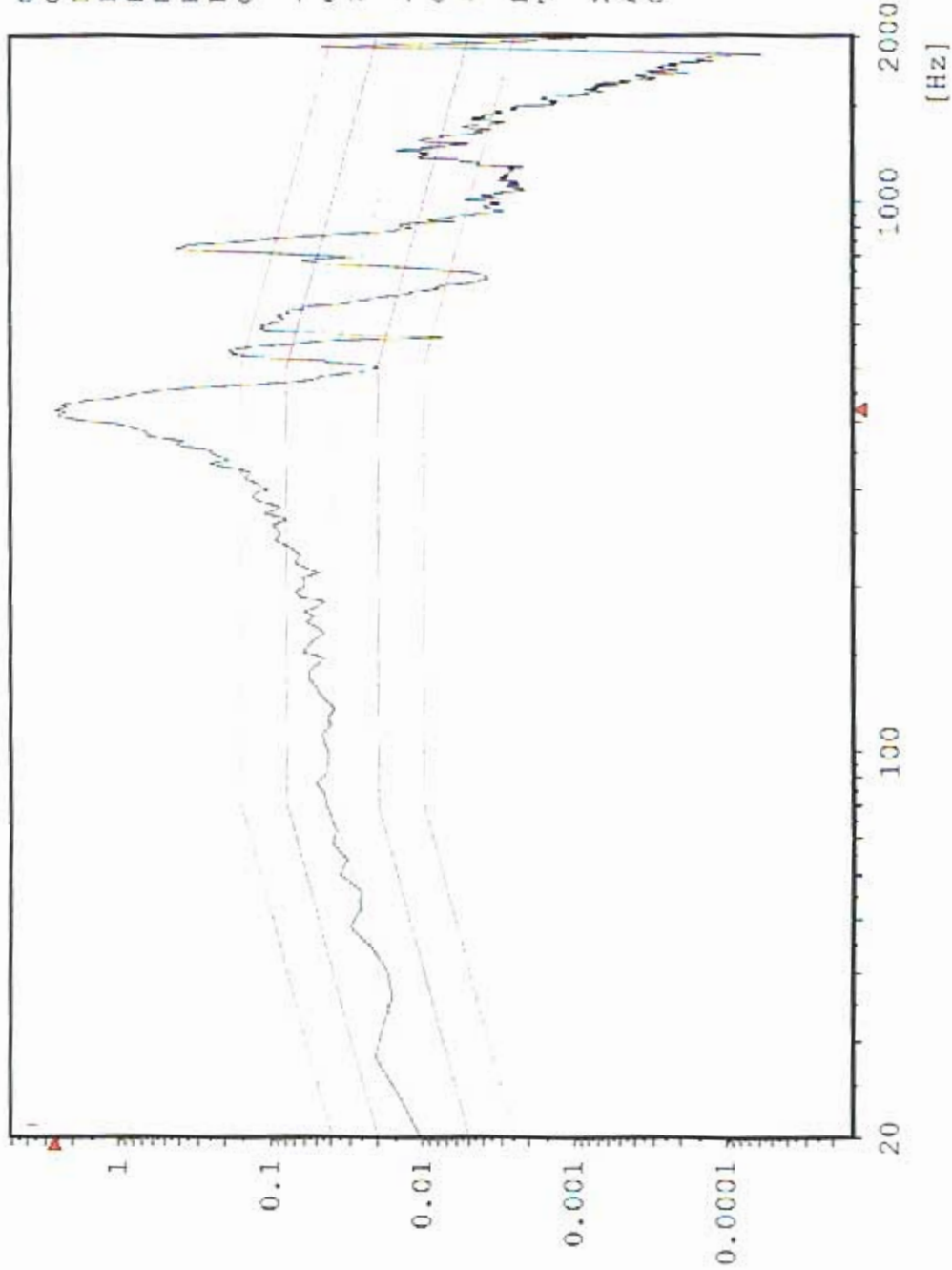
Max: 420 Hz 2.655 g²/Hz

Random AX3 TPS Top Edge

Stanford Linear Accelerator
J/N 49995.52083
TEM & TPS



[g²/Hz]



Chan.no: 3
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 13.92 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:53
remaining: 000:00:00

Date: 07-01-05
Time: 09:48:39

X - Axis
Acceptance Unit
GLAT 1844

Max: 408 Hz 0.2047 g²/Hz

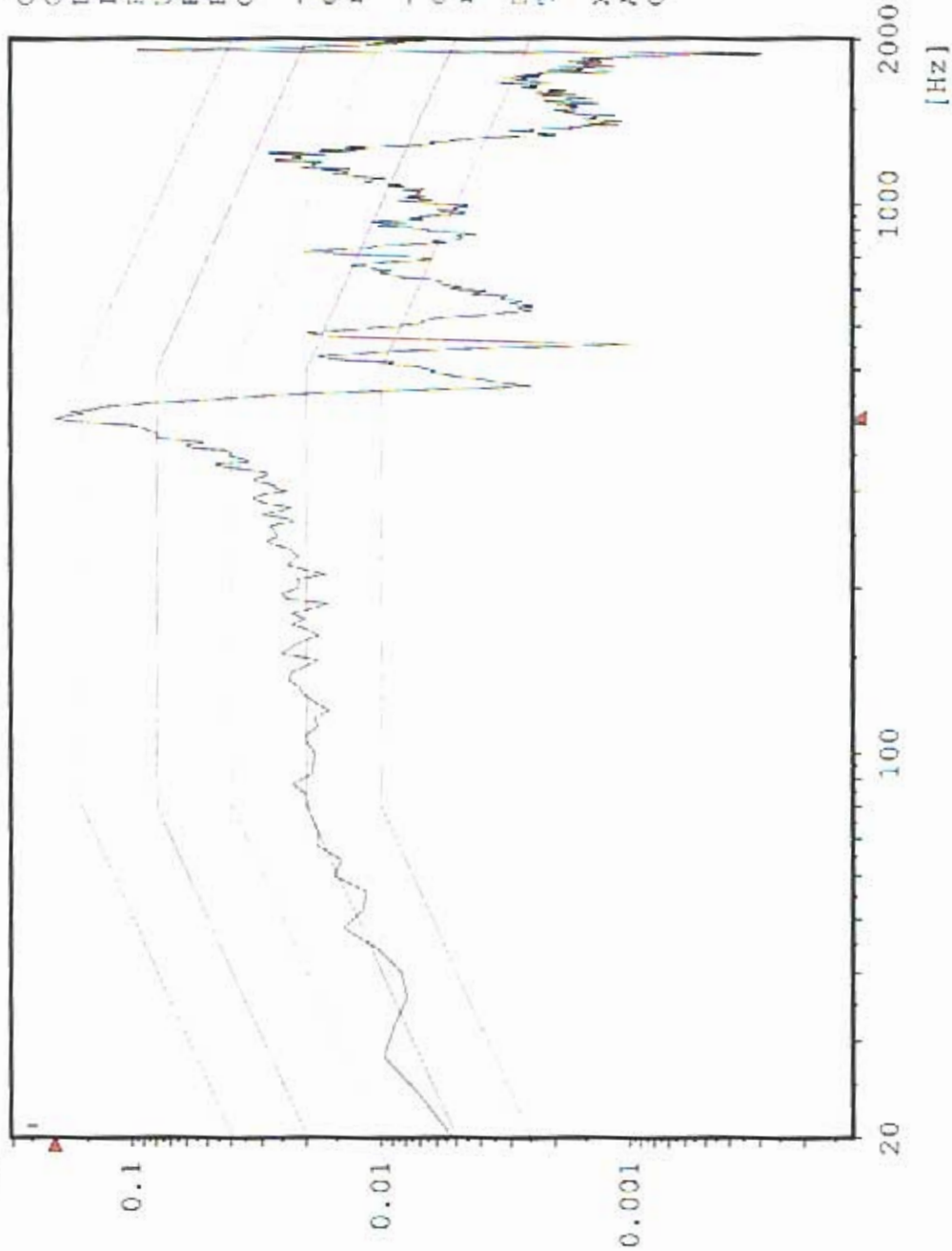
Random CH# 5 TEM center edge

Stanford Linear Accelerator

J/N 49995.52083

TEM & TPS

[g²/Hz]



Chan.no: 5
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 5.373 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:53
remaining: 000:00:00

Date: 07-01-05
Time: 09:48:39

X - Axis
Acceptance Unit
GLAT 1844

fax: 420 HZ 1.723 g²/Hz

Random AX2 TPS Bottom center

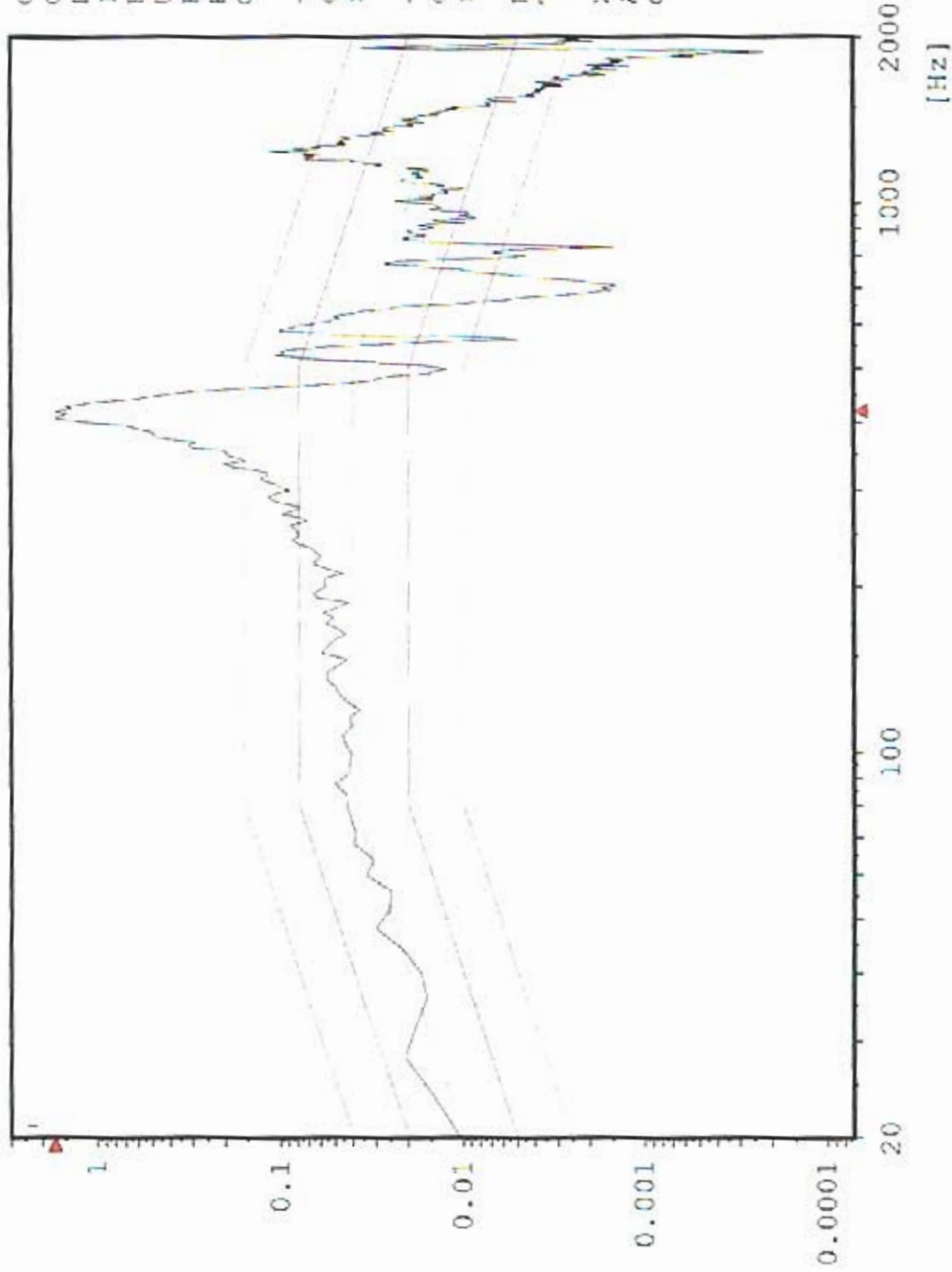
Stanford Linear Accelerator

J/N 49995.52083

TEM & TPS



[g²/Hz]



Chan.no: 10
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 11.83 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:53
remaining: 000:00:00

Date: 07-01-05
Time: 09:48:39

X - Axis
Acceptance Unit
GLAT 1844

ursor: 408 Hz 1.716 g²/Hz

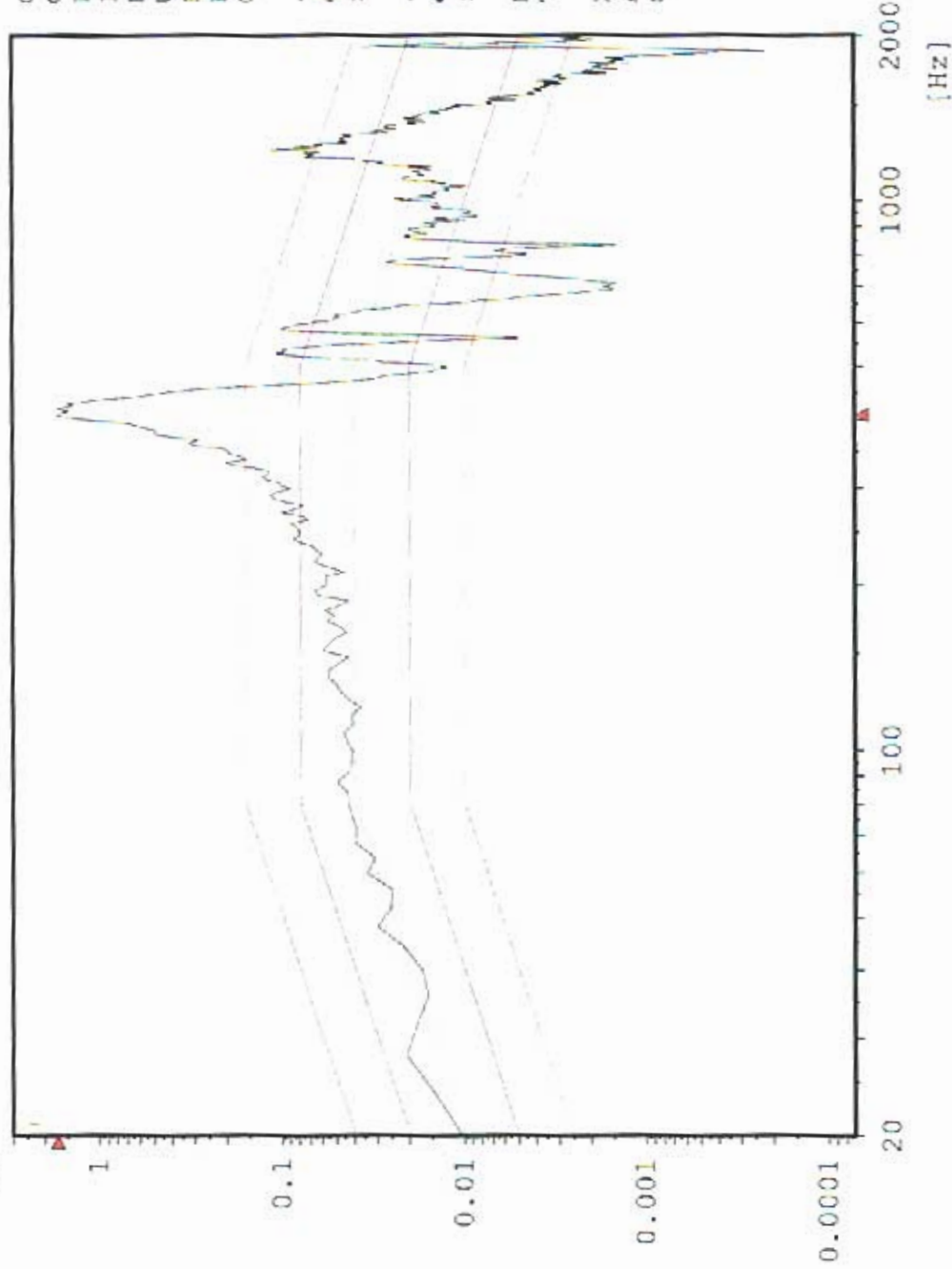
Random AX2 TPS Bottom center

Stanford Linear Accelerator

J/N 49995.52083

TEM & TPS

[g²/Hz]



Chan.no: 10
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 11.83 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:52
remaining: 000:00:00

Date: 07-01-05
Time: 09:48:39

X - Axis
Acceptance Unit
GLAT 1844

Sine CX1 X-Axis Control

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS

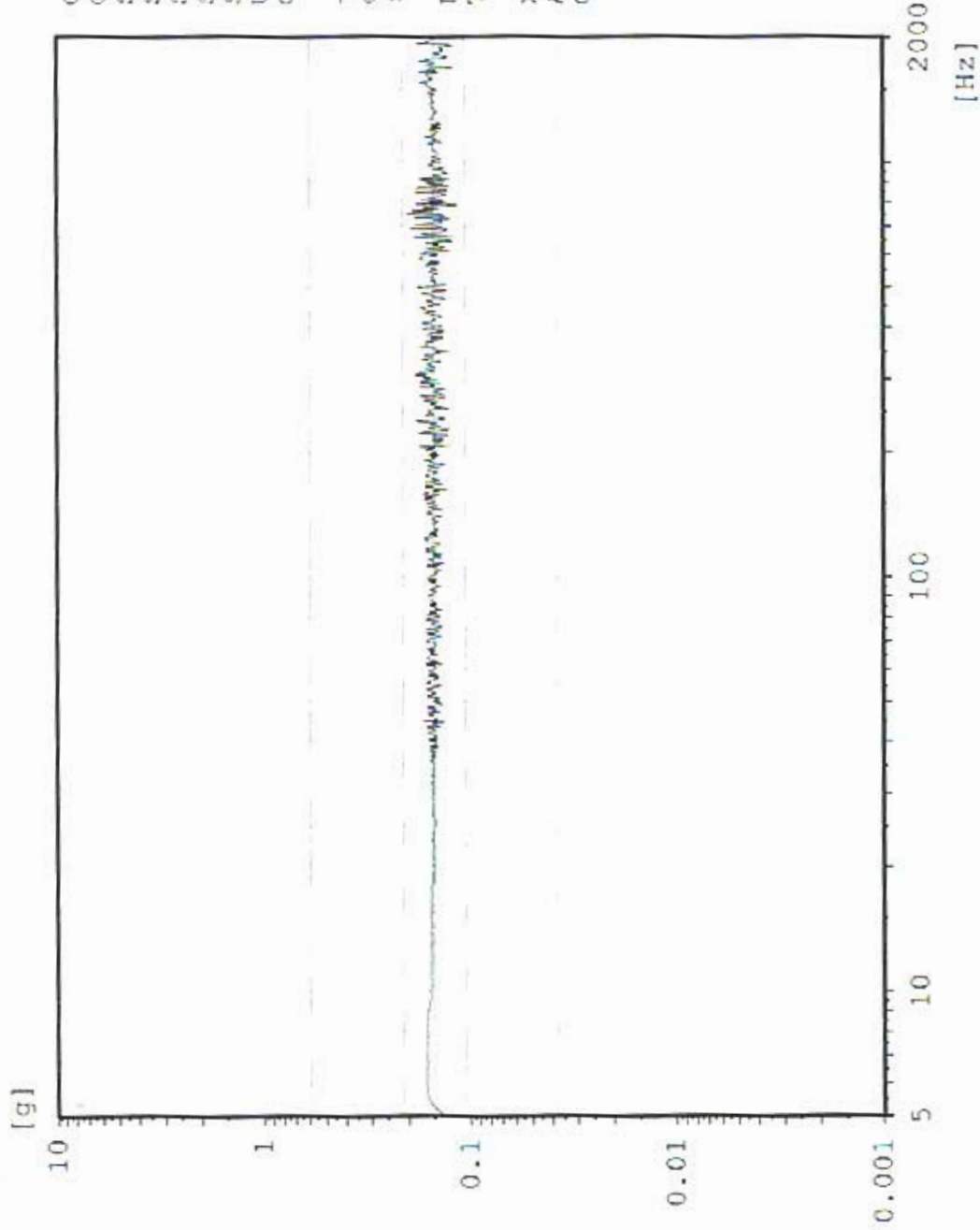


Chan.no: 1
Chan.type: CW Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 09:58:44

X - axis Post Random
Acceptance Unit
GLAT 1844



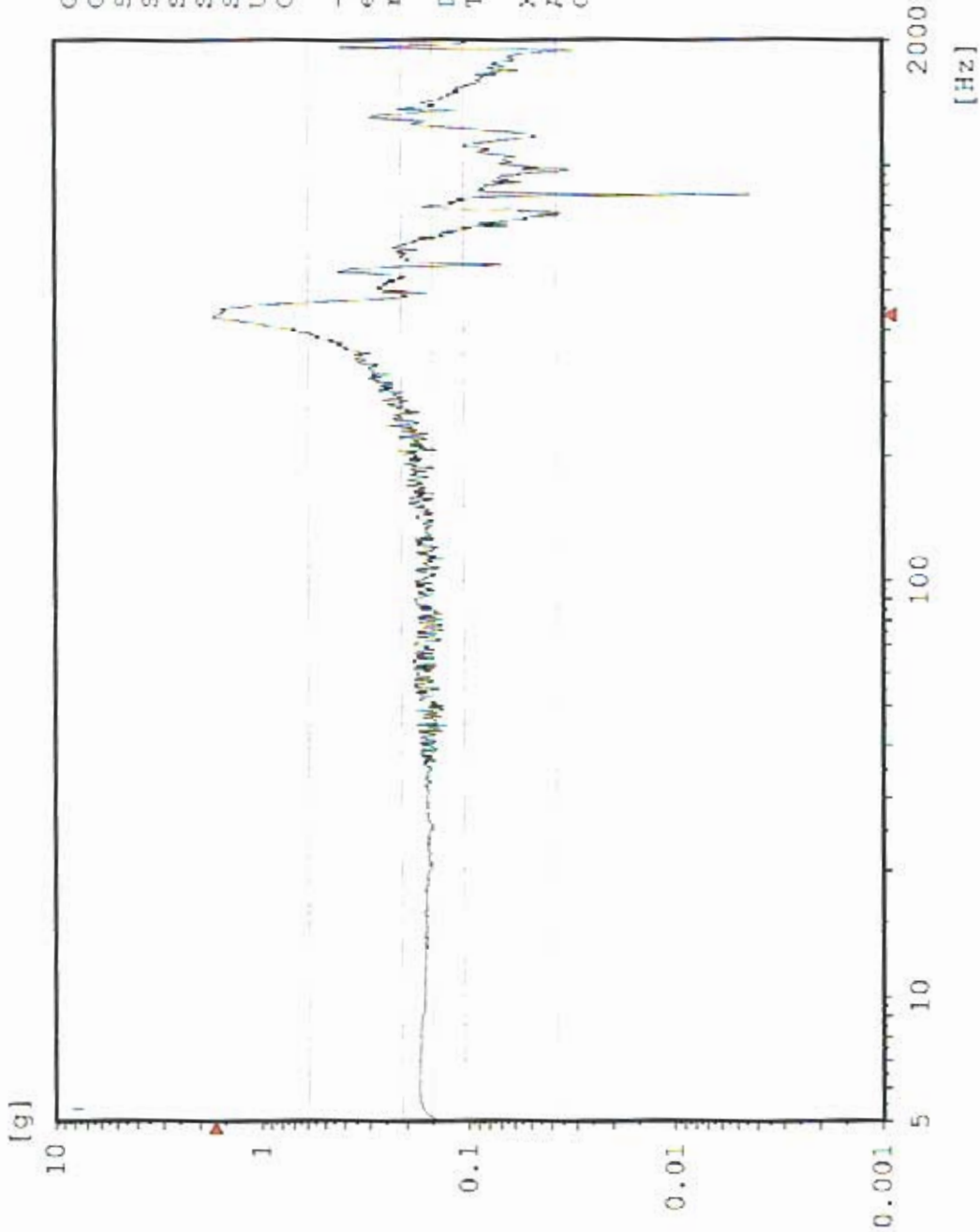
AX3 TPS top center

Sine

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 2 M Filtered
 Chan.type: logarithmic
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

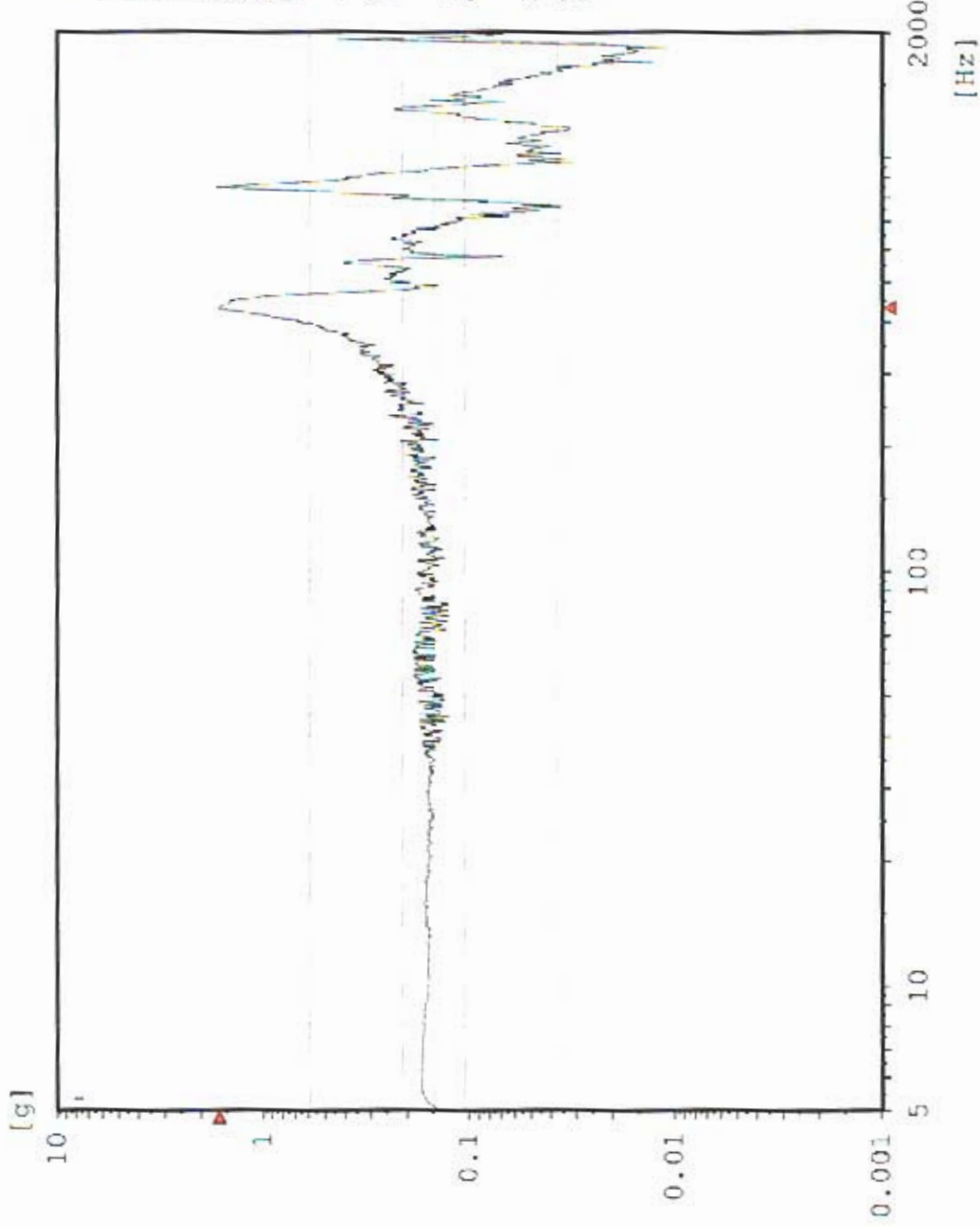
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 09:58:44

X - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AX4 TPS top edge

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 3 M Filtered
 Chan.type: Logarithmic
 Sweep type: 1
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

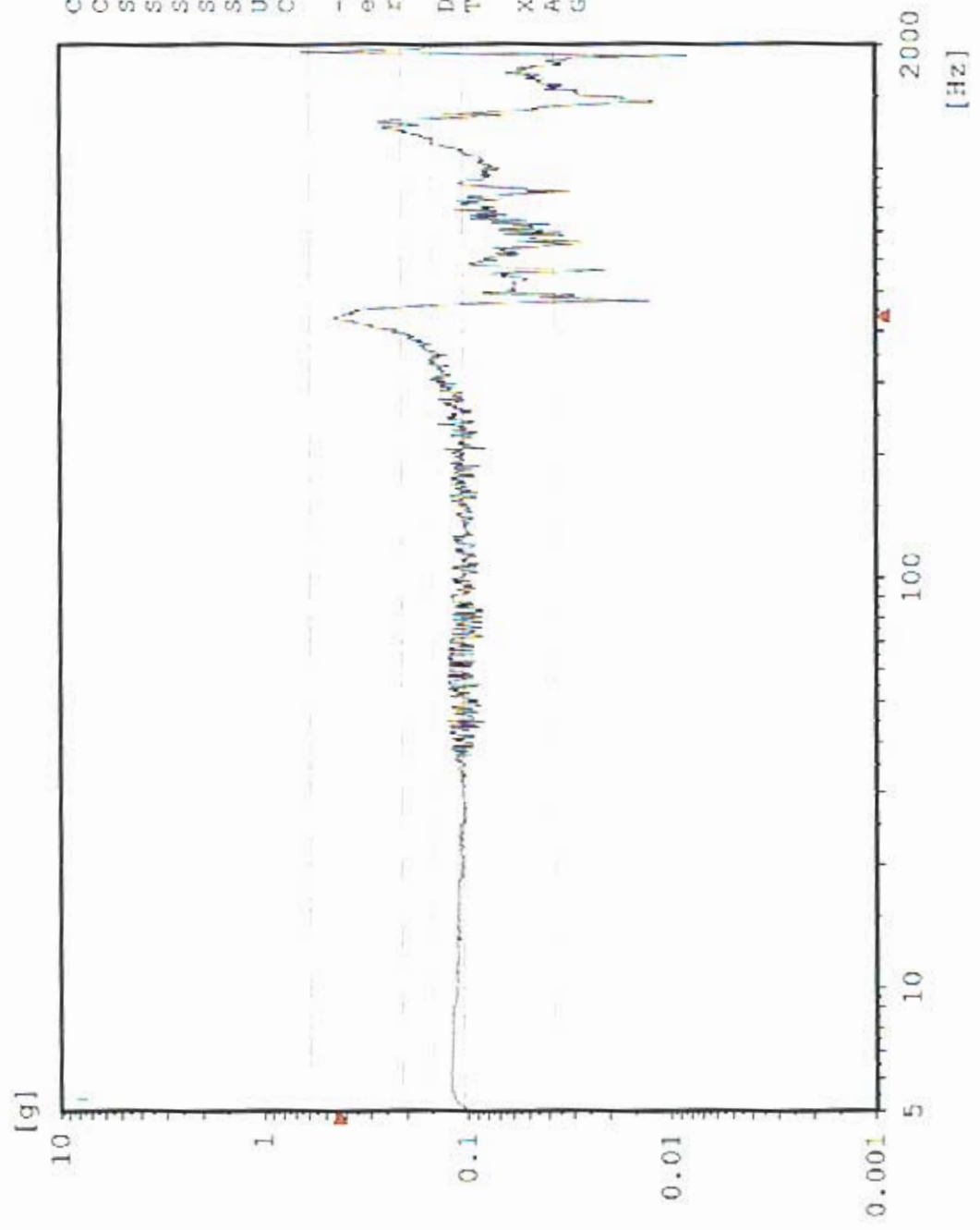
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:06:00

Date: 07-01-05
 Time: 09:58:44

X - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AX1 TEM center edge

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 5
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

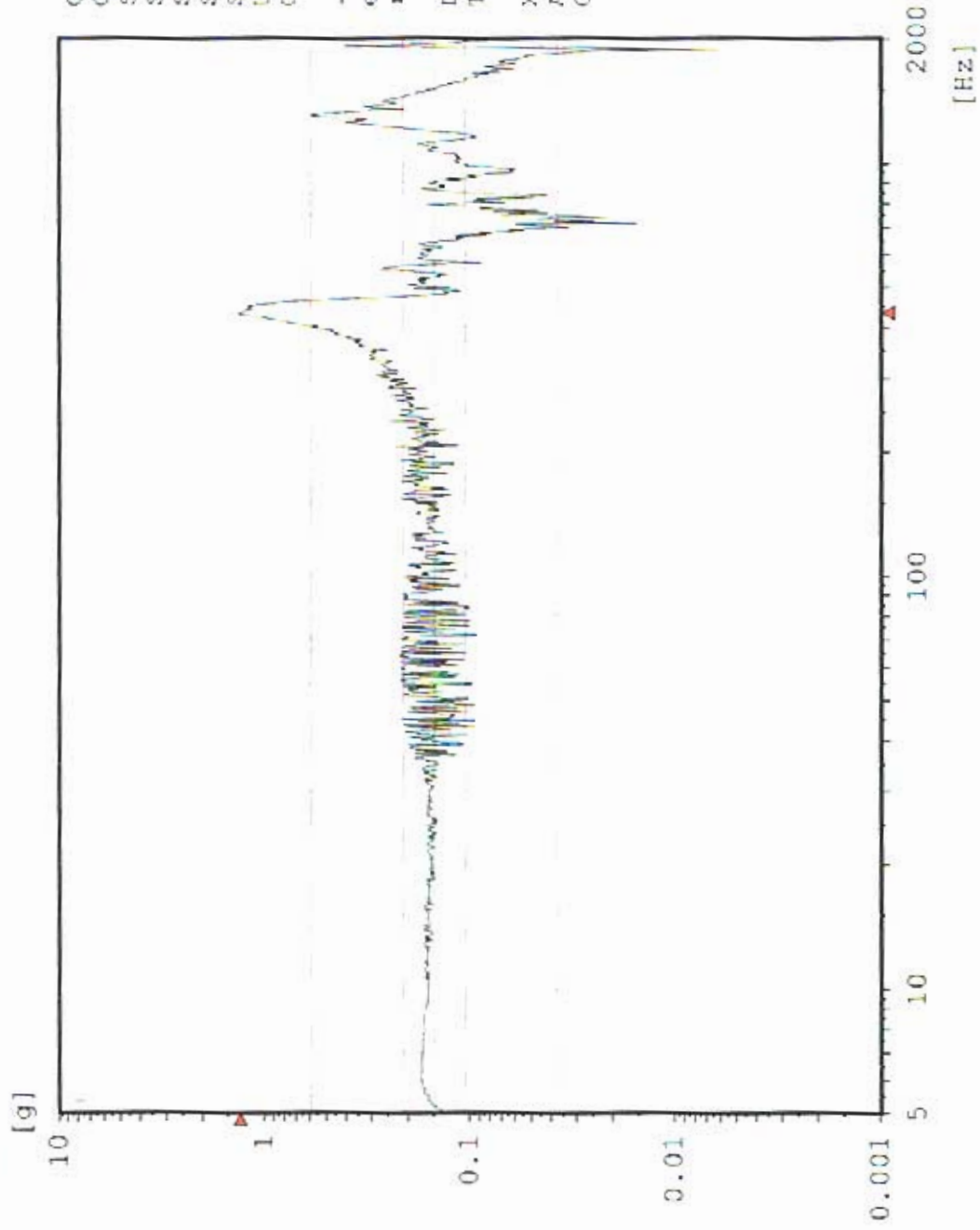
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 09:58:44

X - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AX2 TPS CG

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 10 M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 09:58:44

X - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine CY1 Y-Axis Control

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS

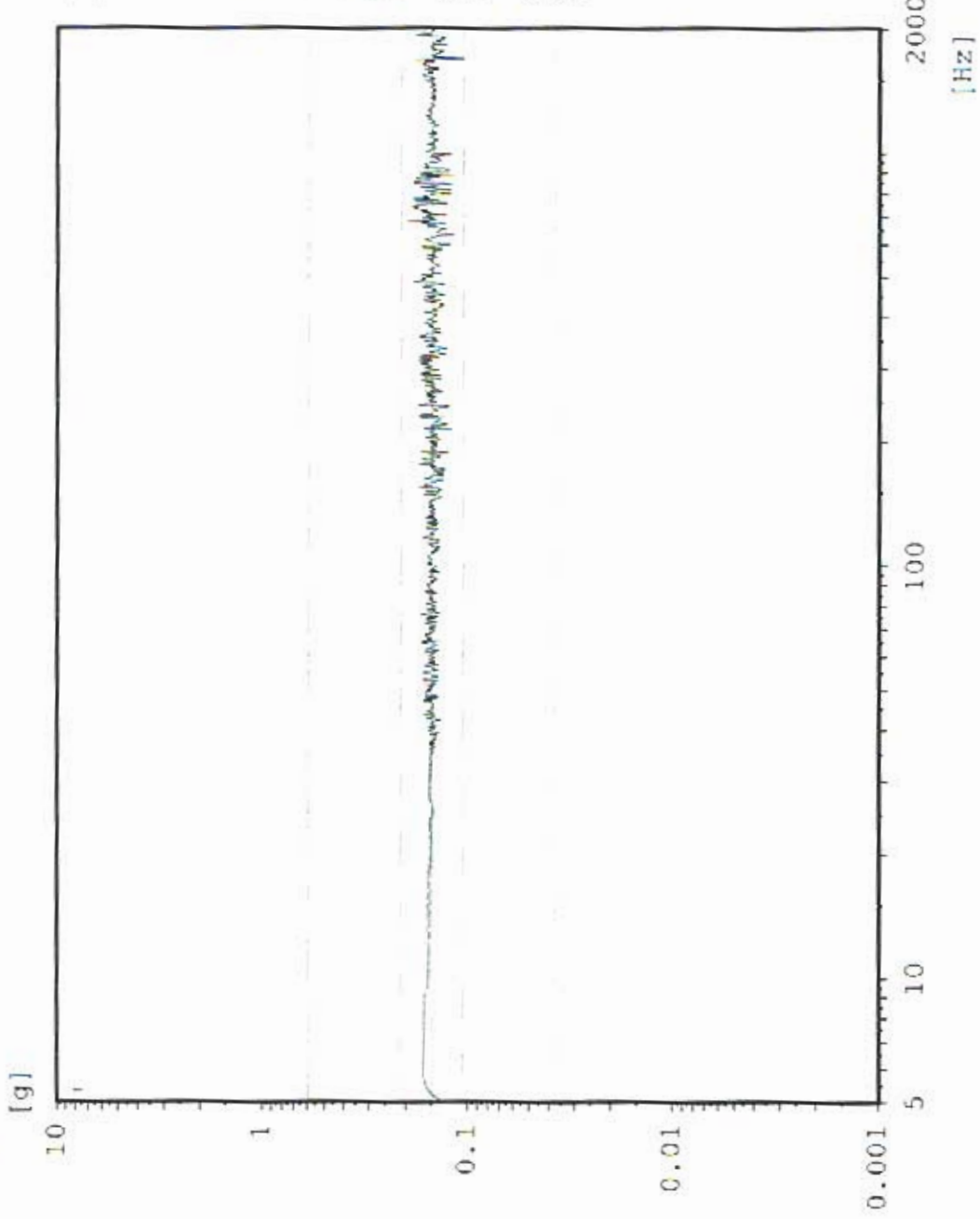


Chan.no: 1
Chan.type: CW Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 10:16:18

Y - axis Pre Random
Acceptance Unit
GLAT 1844



Sine AY3 TPS Top Center

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS

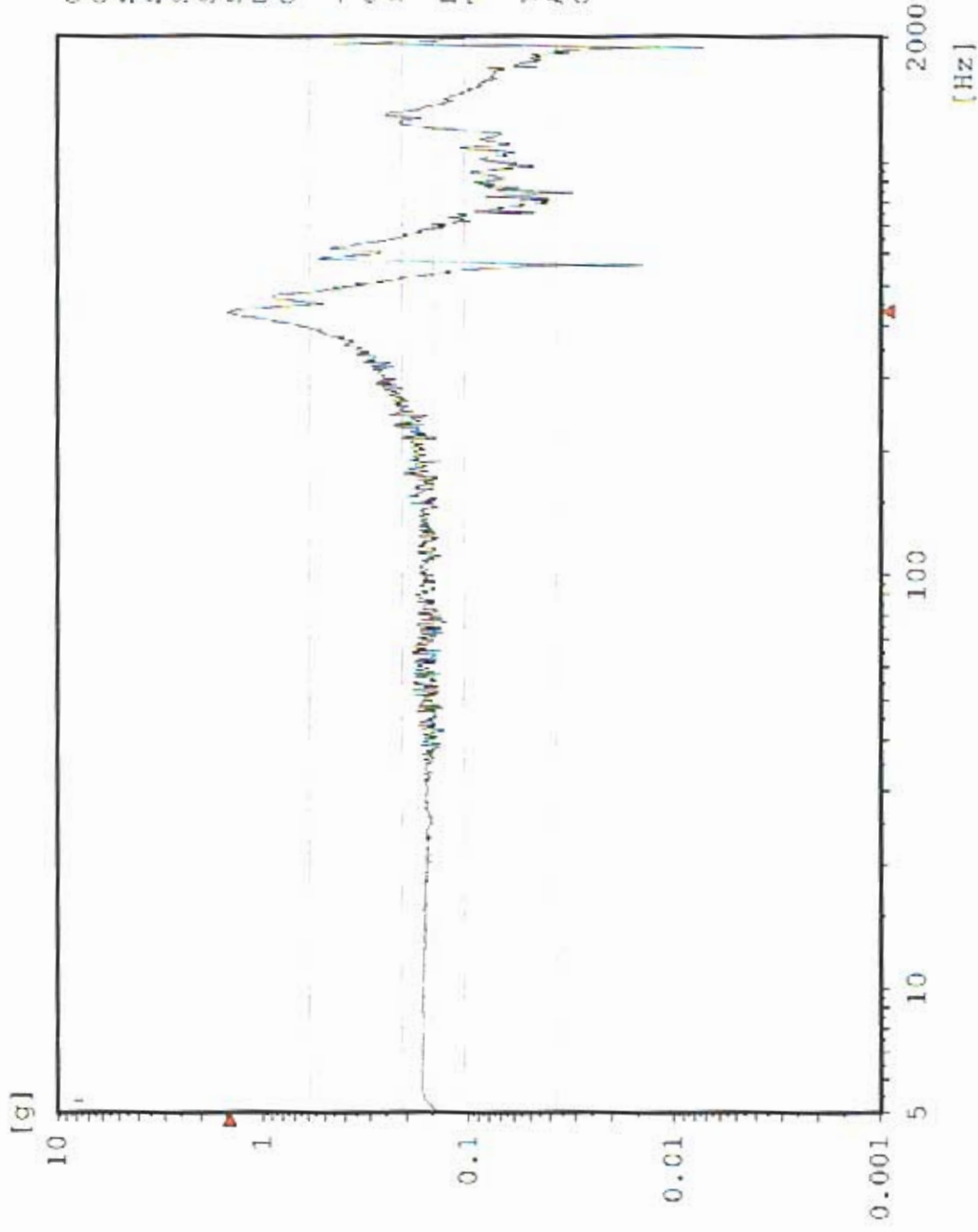


Chan.no: 2
Chan.type: M Filtered
Sweep type: Logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 10:16:18

Y - axis Pre Random
Acceptance Unit
SLAT 1844

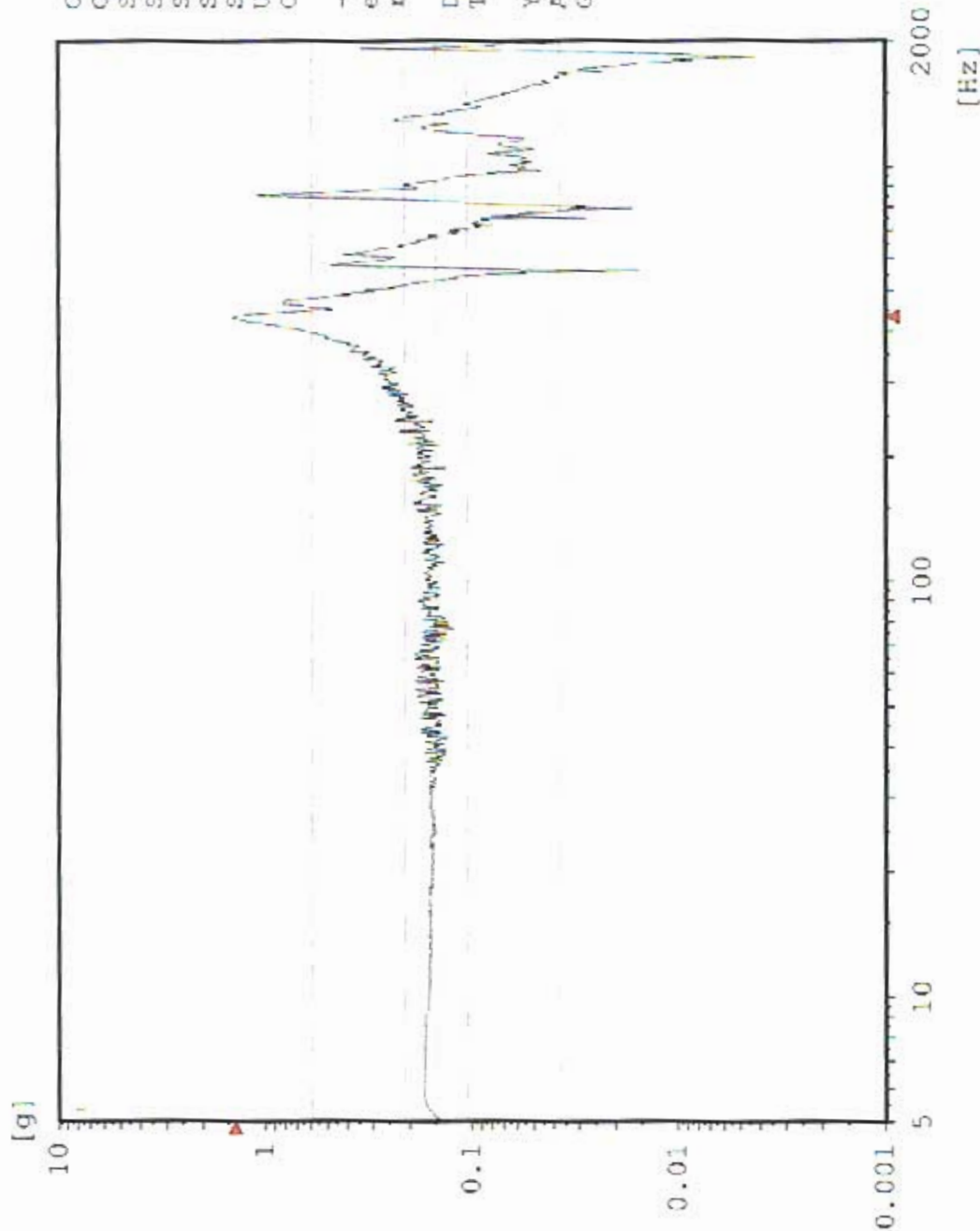


Sine AY4 TPS Top Edge

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 3
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 10:16:18

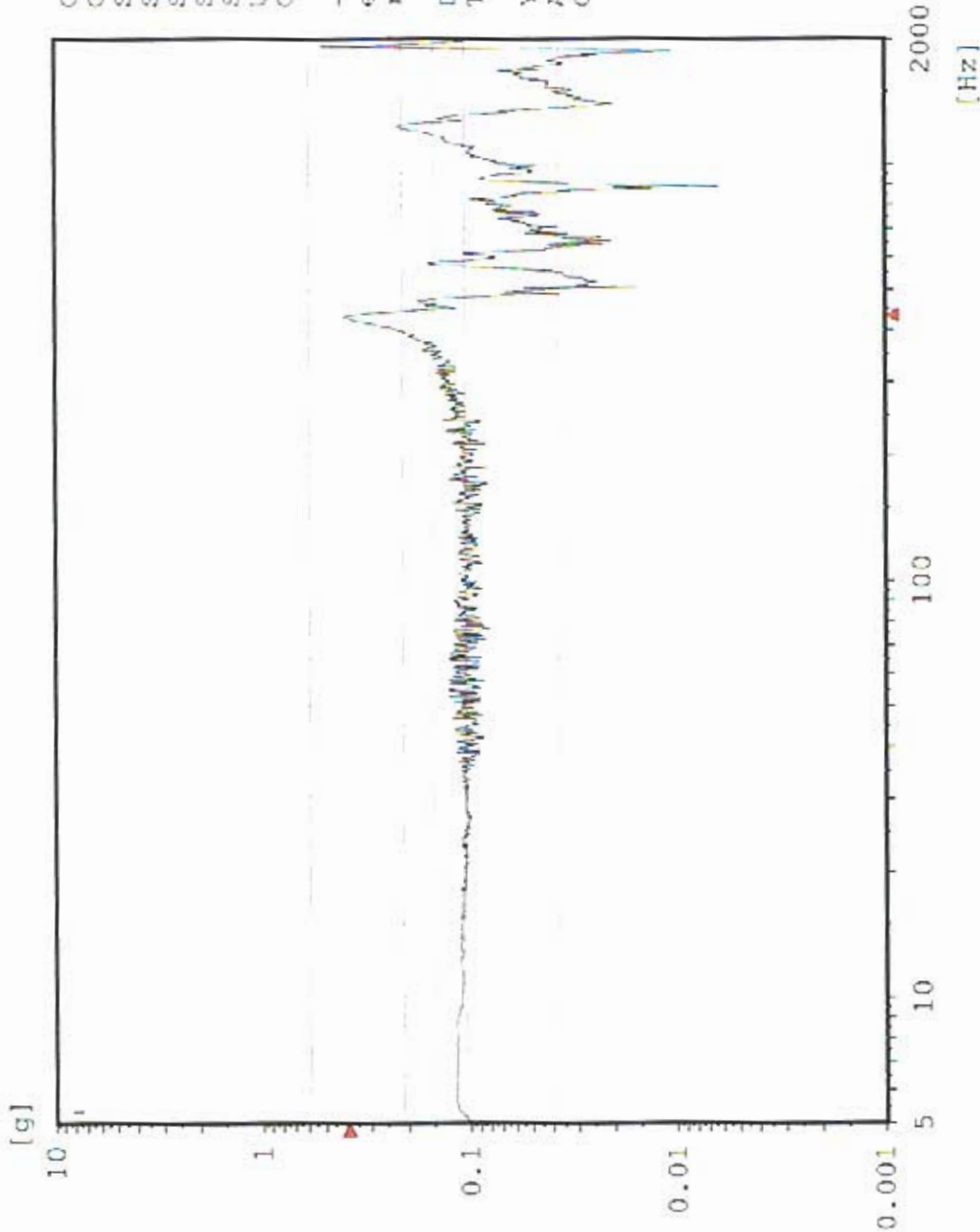
Y - axis Pre Random
 Acceptance Unit
 GLAT 1844

Sine AY1 TEM Center Edge

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 5
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 10:16:18

Y - axis Pre Random
Acceptance Unit
GLAT 1844

AY2 TPS CG

Sine
Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS

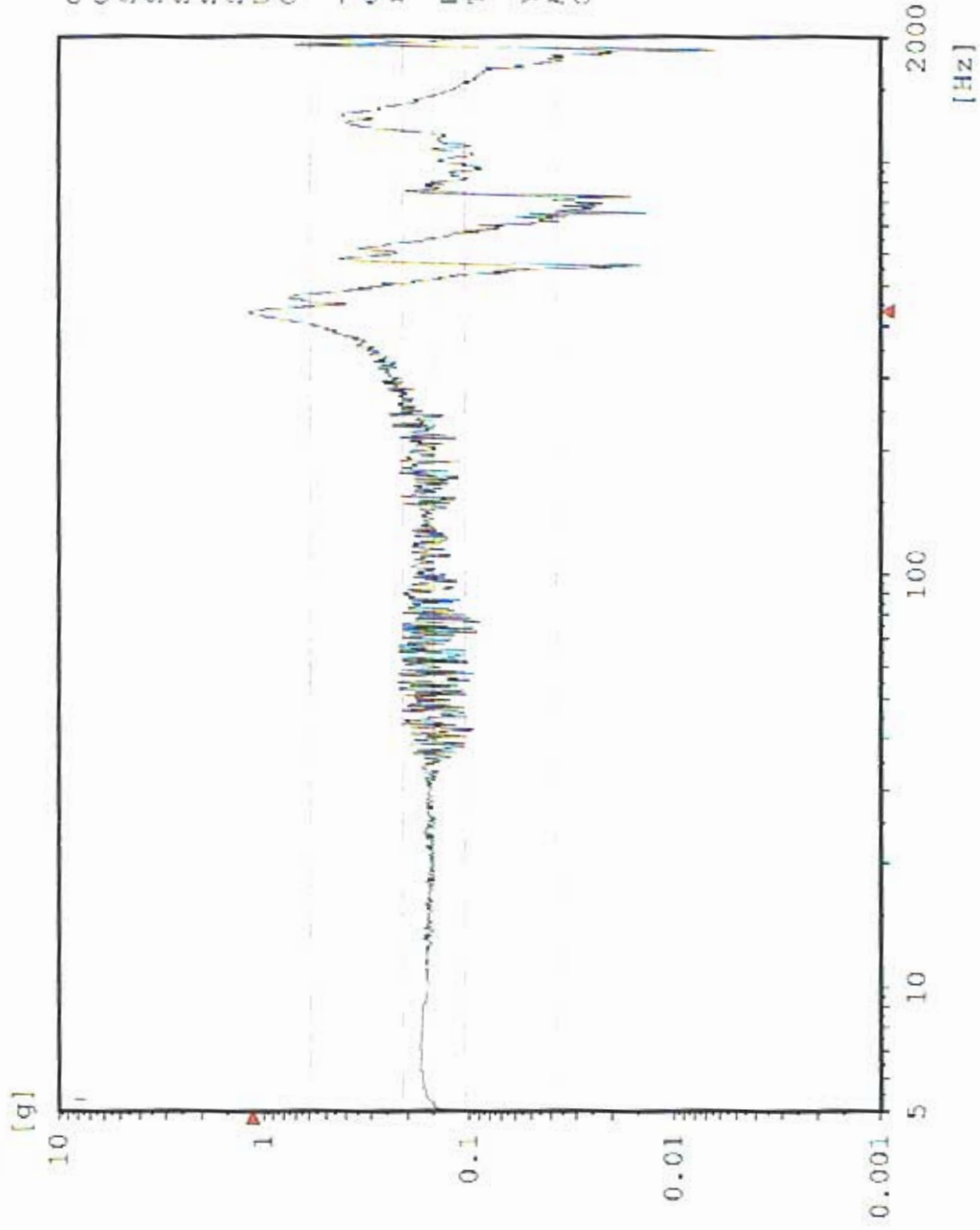


Chan.no: 10
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 10:16:18

Y - axis Pre Random
Acceptance Unit
GLAT 1844



CY1 Y-Axis Control

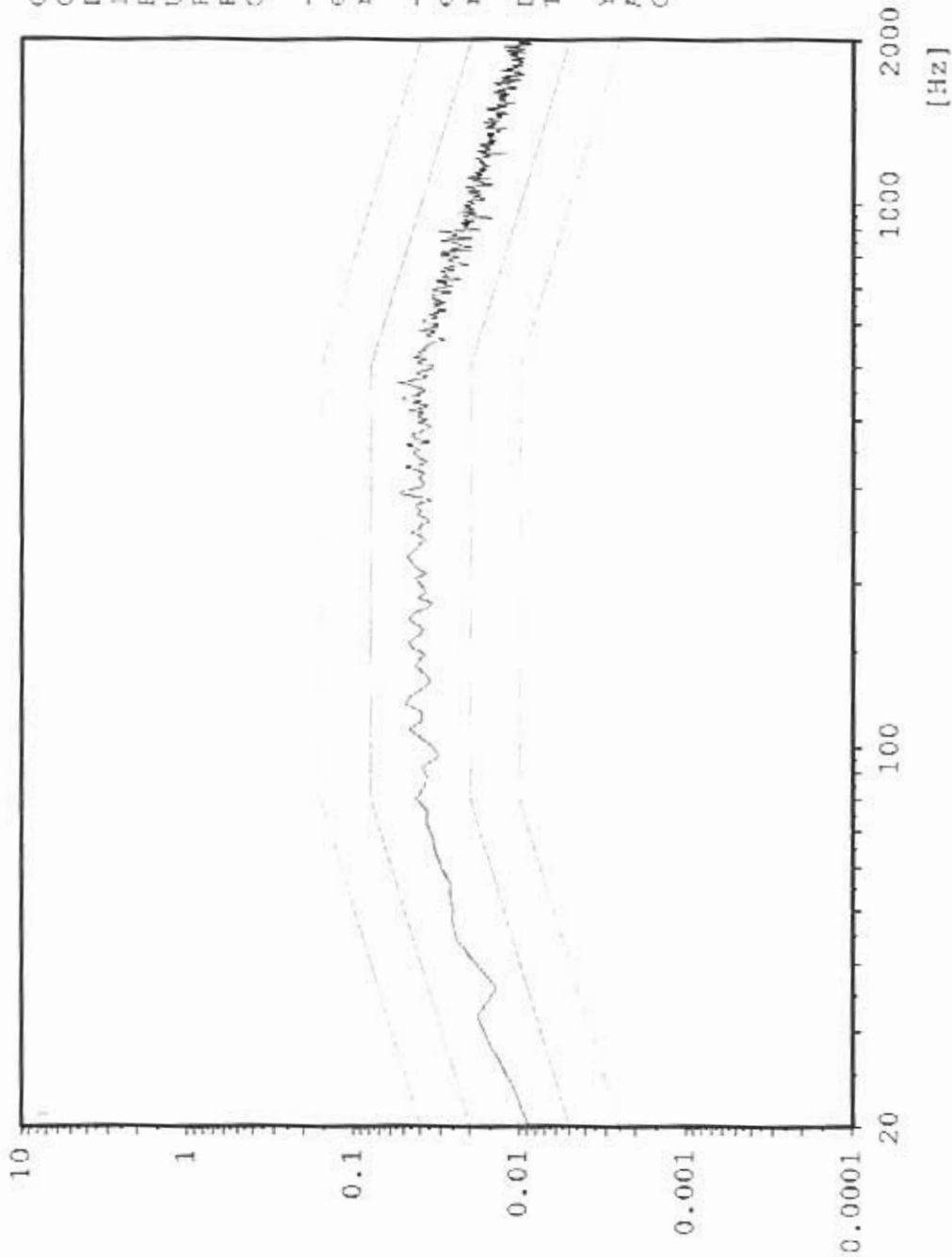
Random

Stanford Linear Accelerator

J/N 49995.52083

TEM & TPS

[g²/Hz]



Chan.no: 1
Chan.type: C
DOF: 126
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 6.846 g
RMS (req.): 6.767 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:47
remaining: 000:00:00

Date: 07-01-05
Time: 10:25:19

Y - Axis
Acceptance Unit
GLAT 1844

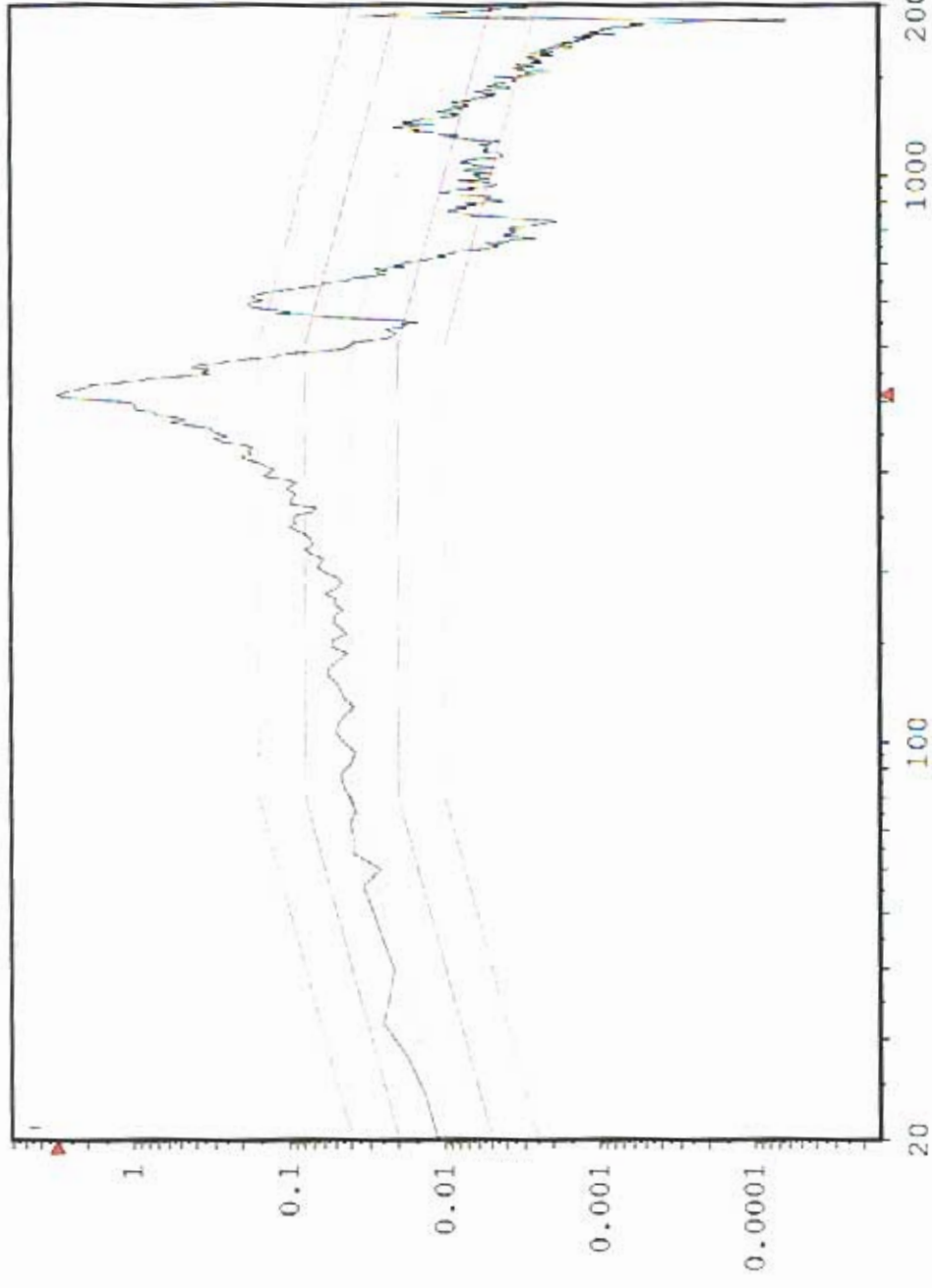
Max: 412 Hz 3.152 g²/Hz

Random AY3 TPS Top Center

Stanford Linear Accelerator
J/N 49995.52083
TEM & TPS



[g²/Hz]



Chan.no: 2
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 13.25 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:47
remaining: 000:00:00

Date: 07-01-05
Time: 10:25:10

Y - Axis
Acceptance Unit
GLAT 1844

[Hz]

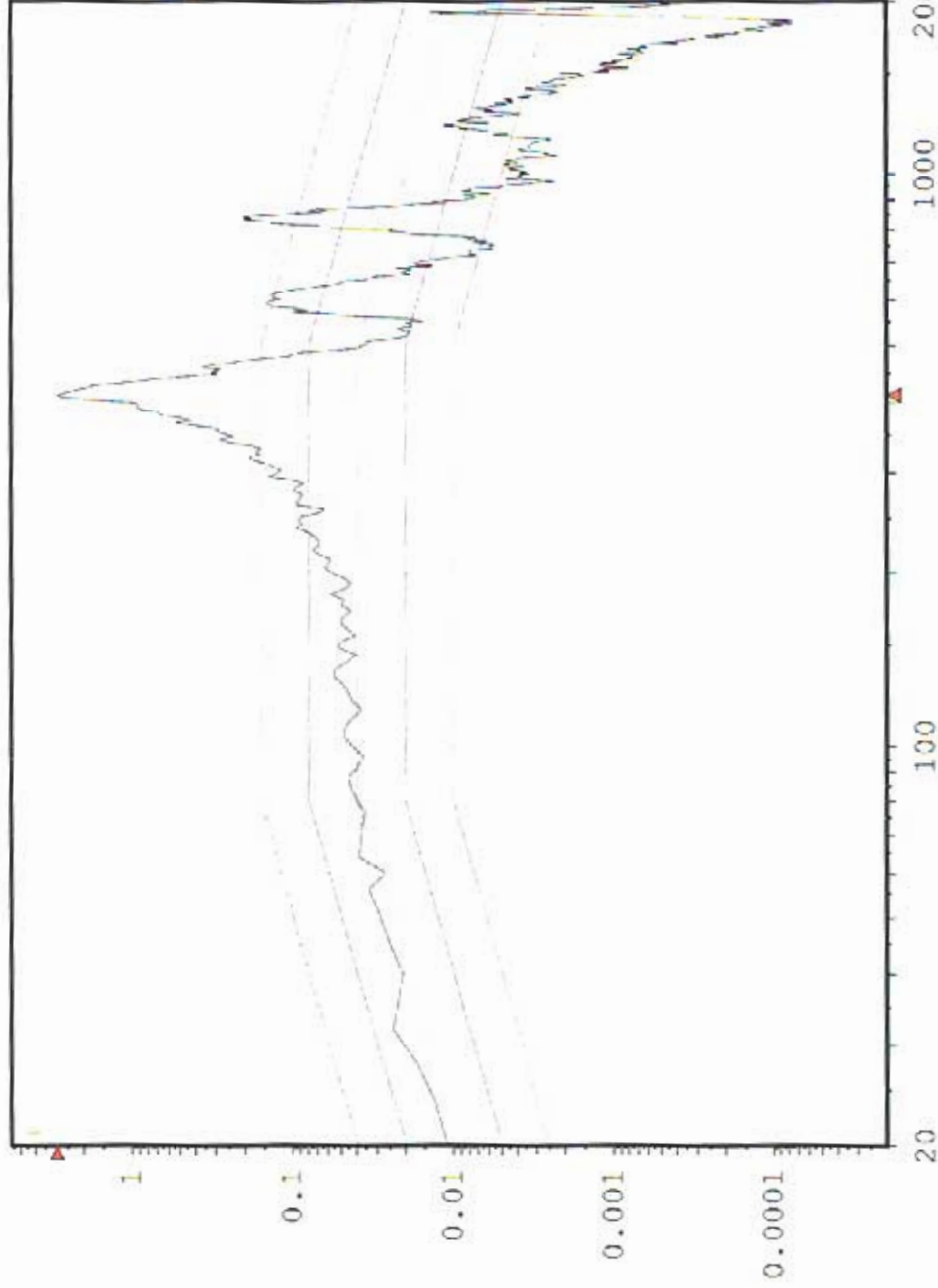
Max: 412 Hz 2.955 g²/Hz

Random AY4 TPS Top Edge

Random
Stanford Linear Accelerator
J/N 49995.52083
TEM & TPS



[g²/Hz]



[Hz]

Chan.no: 3
 Chan.type: M
 DOF: 100
 Level: 0.0 dB
 Resolution: 4 Hz
 Unit: g²/Hz
 RMS (act.): 12.98 g
 RMS (req.): 6.787 g
 Contr.strat.: Closed loop

-- Time on act. level --
 elapsed: 000:01:00
 remaining: 000:00:00

-- Time total --
 elapsed: 000:02:47
 remaining: 000:00:00

Date: 07-01-05
 Time: 10:25:10

Y - Axis
 Acceptance Unit
 GLAT 1844

Max: 412 Hz 0.2164 g²/Hz

Random AY1 TEM Center Edge

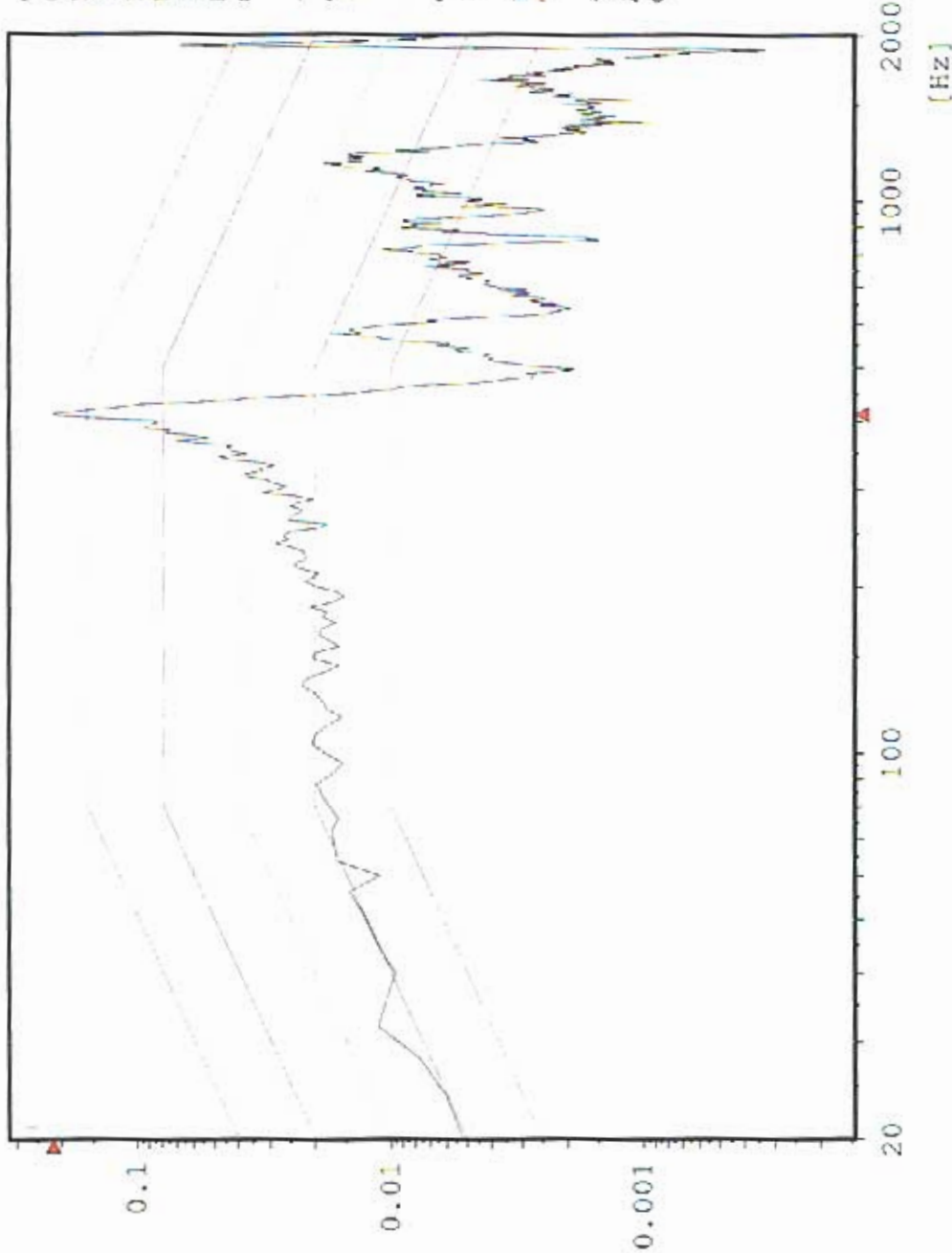
Stanford Linear Accelerator

J/N 49995.52083

TEM & TPS



[g²/Hz]



Chan.no: 5 M
Chan.type: 100
DOF: 0.0 dB
Level: 4 Hz
Resolution: g²/Hz
Unit: 4.968 g
RMS (act.): 6.787 g
RMS (req.): Closed loop
Contr.strat.:

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:06:00

-- Time total --
elapsed: 000:02:47
remaining: 000:00:00

Date: 07-01-05
Time: 10:25:10

Y - Axis
Acceptance Unit
GLAT 1844

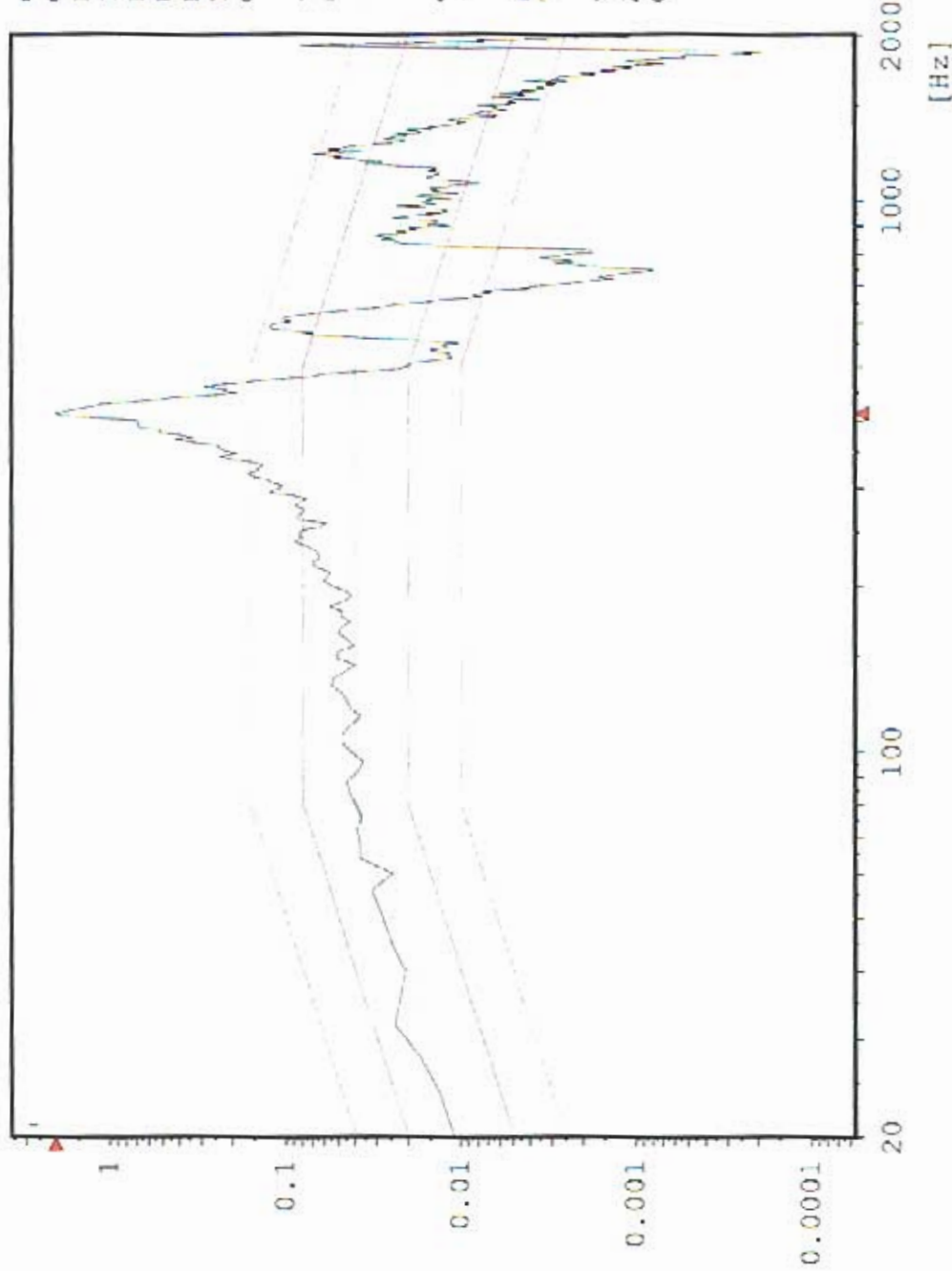
Max: 4.12 Hz 2.043 g²/Hz

Random AY2 TPS CG

Stanford Linear Accelerator
J/N 49995.52083
TEX & TPS



[g²/Hz]



Chan.no: 10
Chan.type: M
DGF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 11.43 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:00
remaining: 000:00:00

-- Time total --
elapsed: 000:02:47
remaining: 000:00:00

Date: 07-01-05
Time: 10:25:10

Y - Axis
Acceptance Unit
GLAT 1844

CY1 Y-Axis Control

Sine

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS

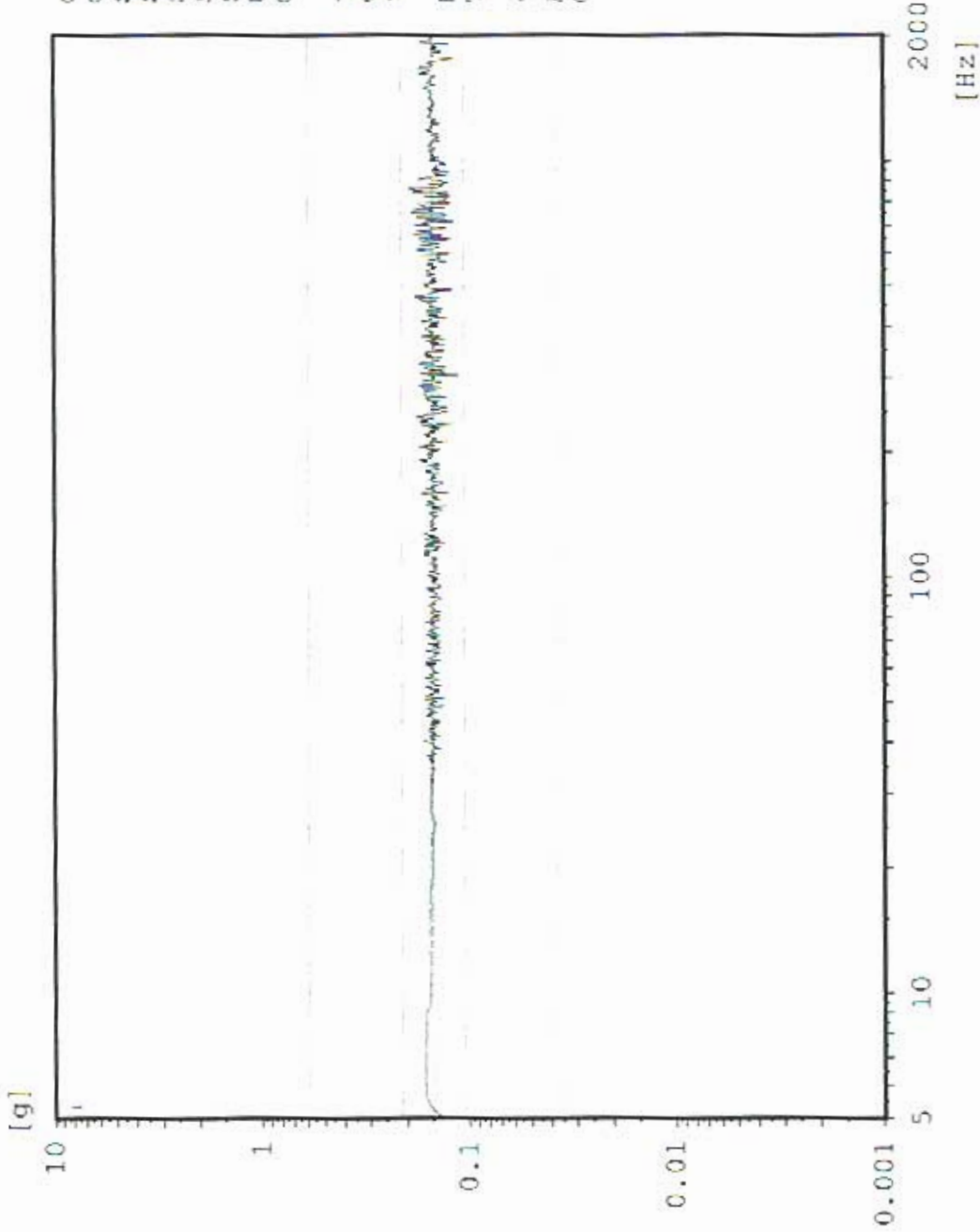


Chan.no: 1
Chan.type: CW Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 10:34:22

Y - axis Post Random
Acceptance Unit
GLAT 1844



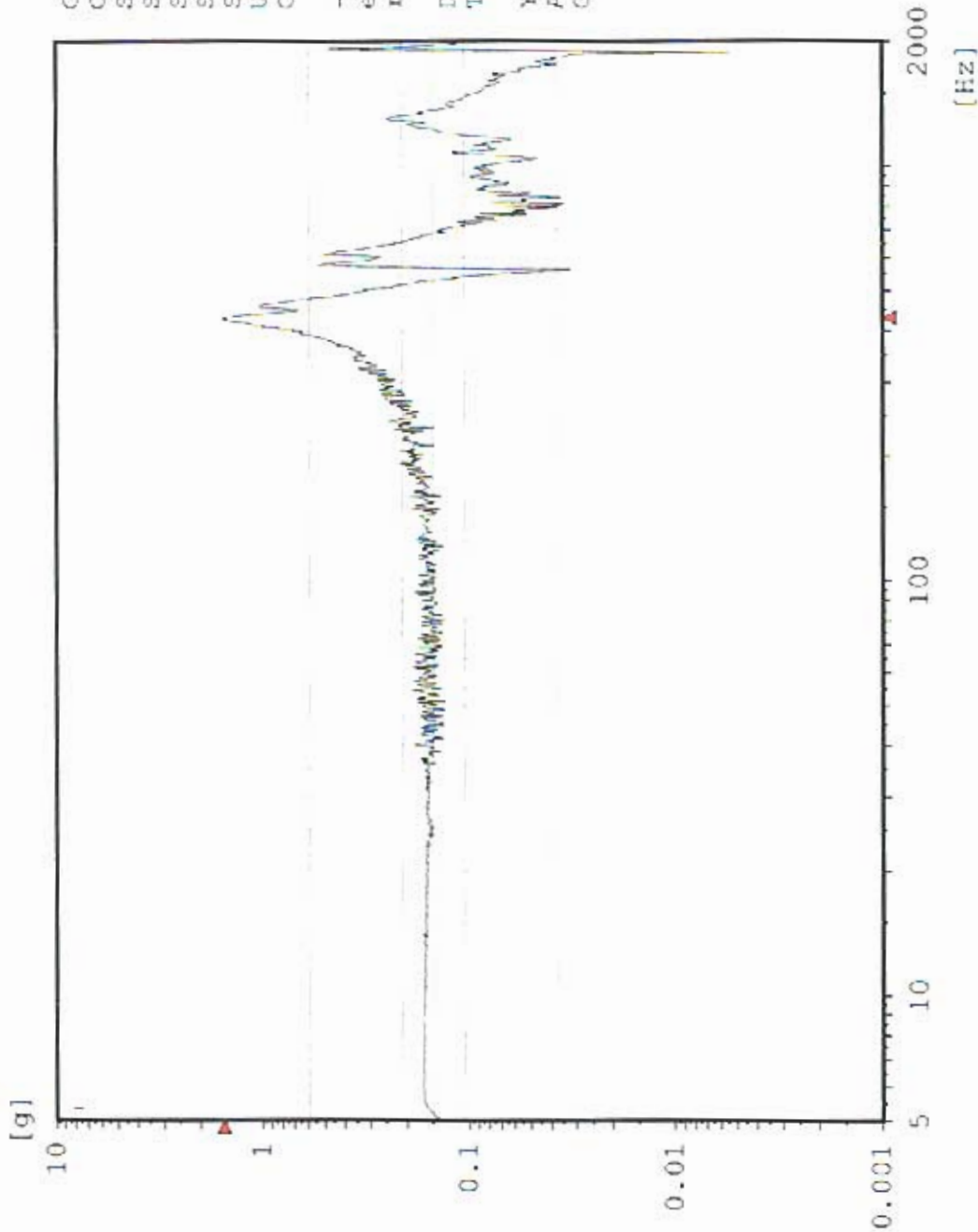
AY3 TPS Top Center

Sine

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 2
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

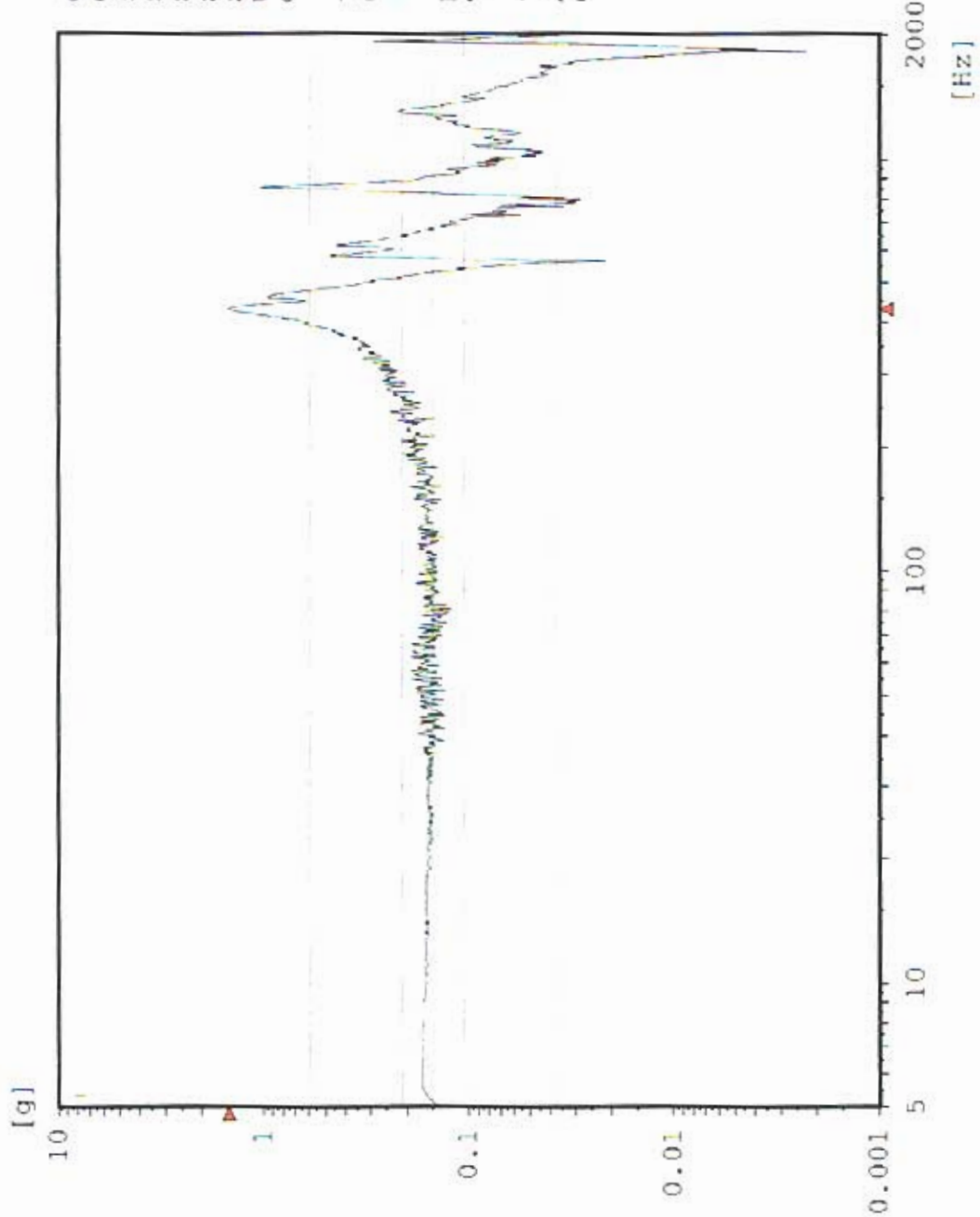
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 10:34:22

Y - axis Post Random
 Acceptance Unit
 GLAT 1844

AY4 TPS Top Edge

Sine
Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 3
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct./min
 Unit: g
 Contr.strat.: Closed loop

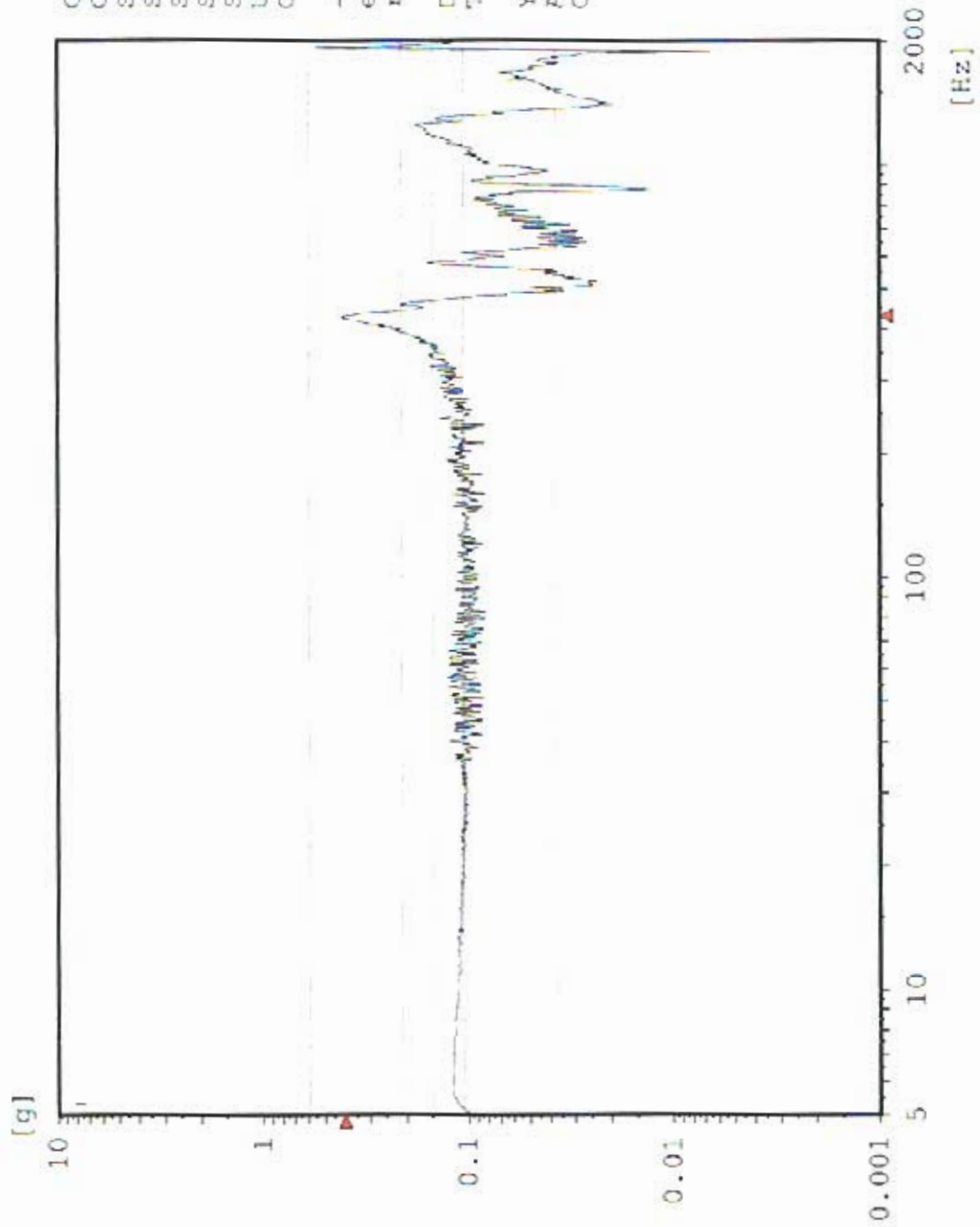
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 10:34:22

Y - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AY1 TEM Center Edge

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



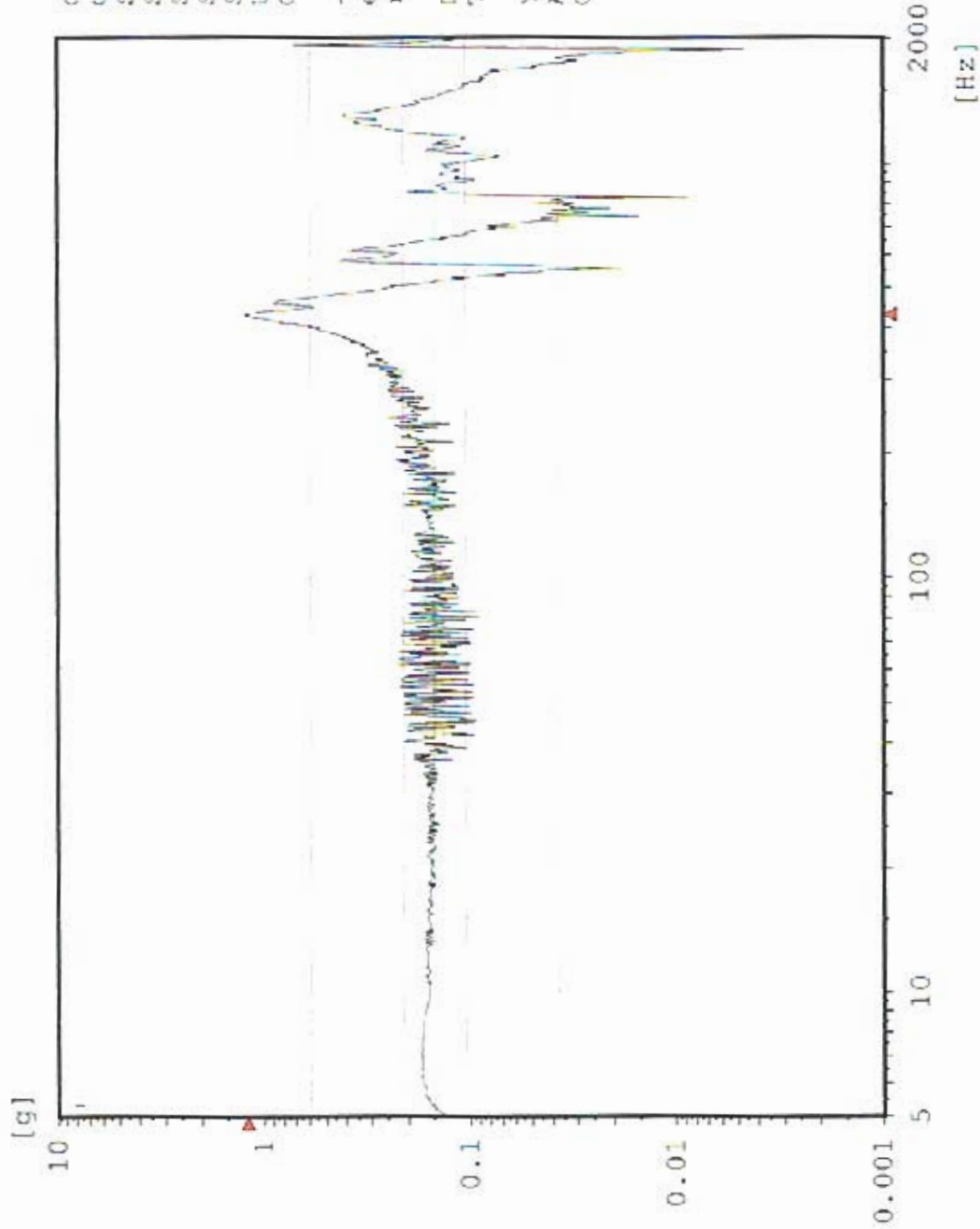
Chan.no: 5
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00
 Date: 07-01-05
 Time: 10:34:22

Y - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AY2 TPS CG

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 10
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 10:34:22

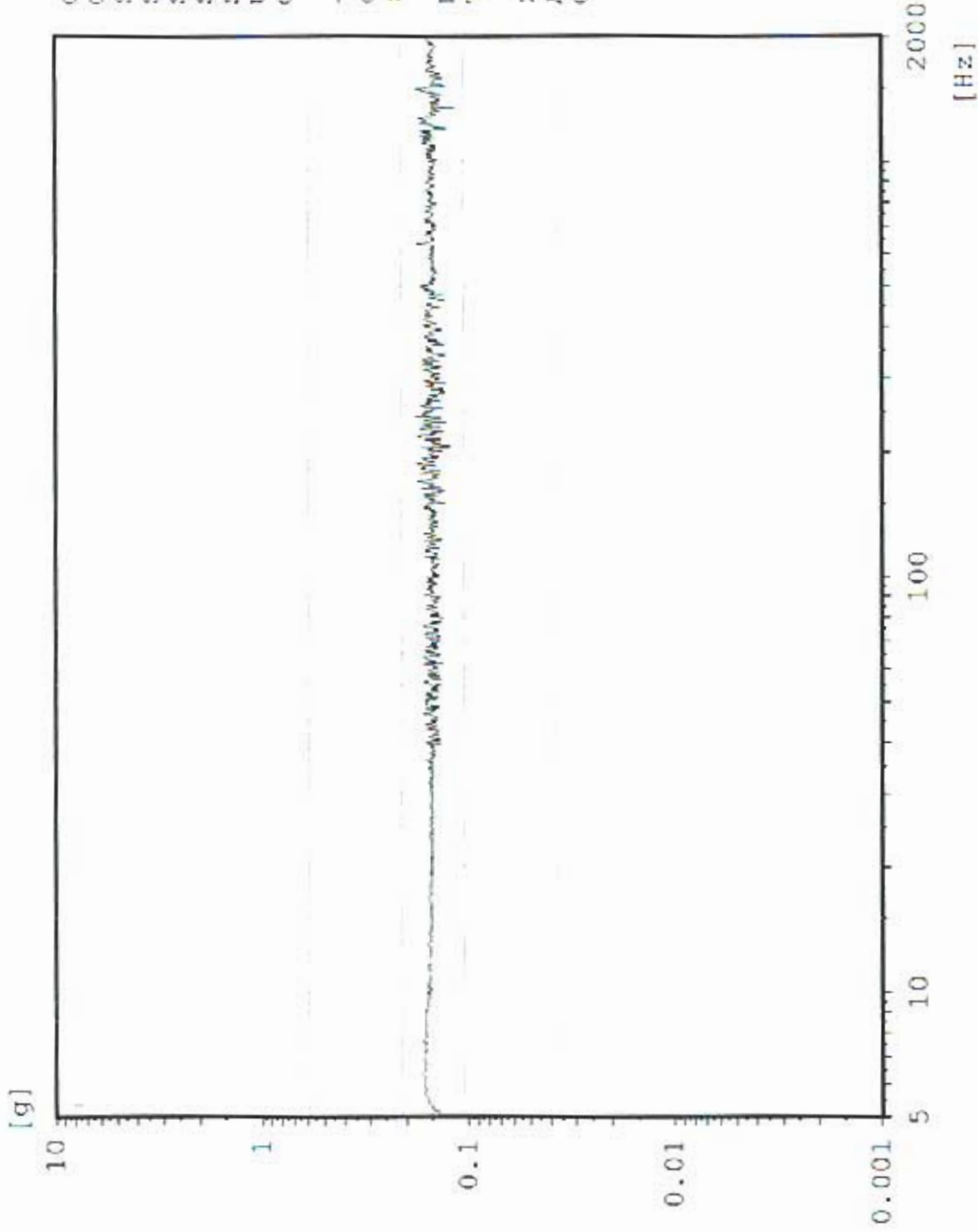
Y - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine CZ1 Z-Axis Control

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 1
Chan.type: CW Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

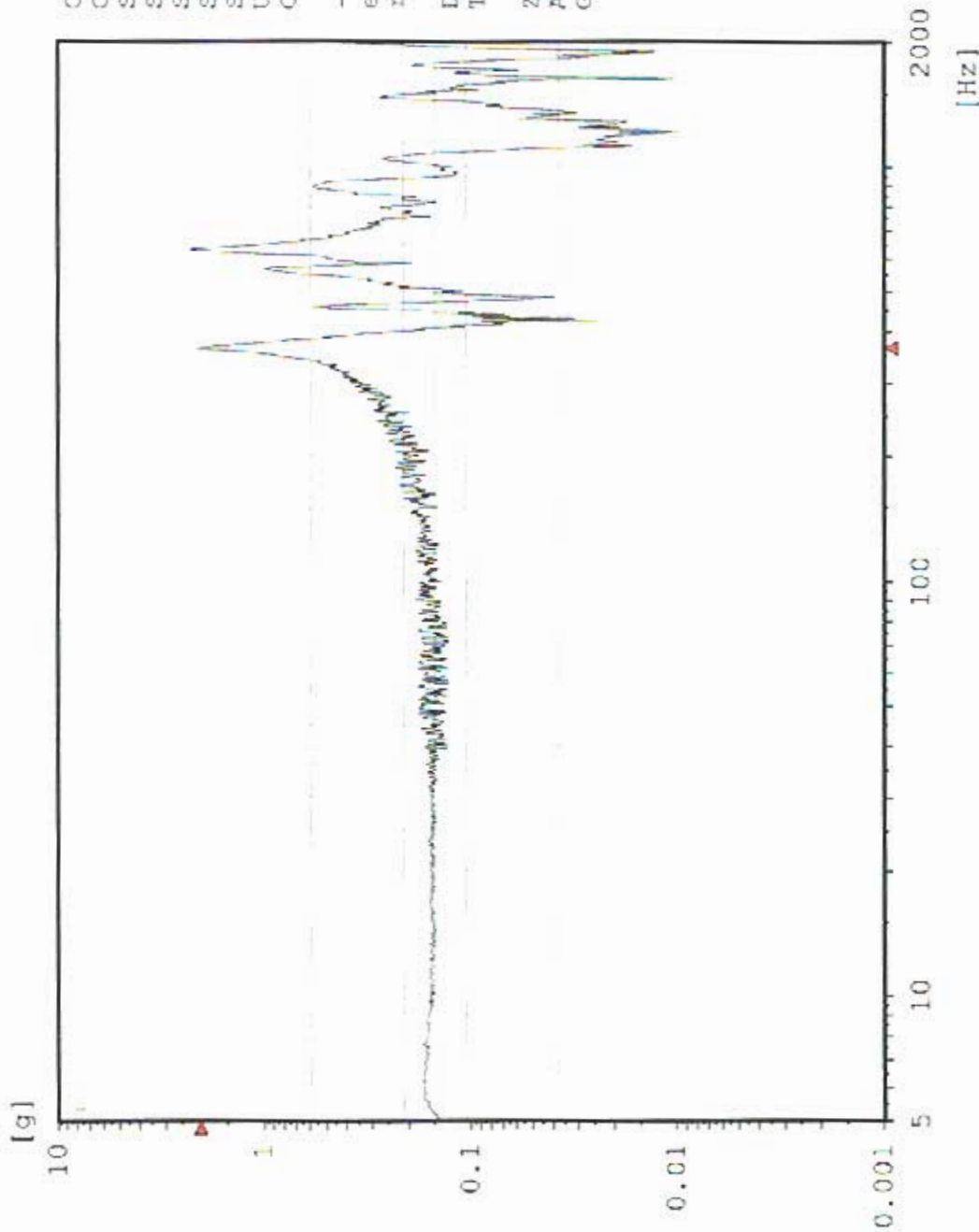
-- Testing Time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 11:34:35

Z - axis Pre Random
Acceptance Unit
GLAT 1844

Sine AZ4 TPS Boss 2

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 2
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct./min
Unit: g
Contr.strat.: Closed loop

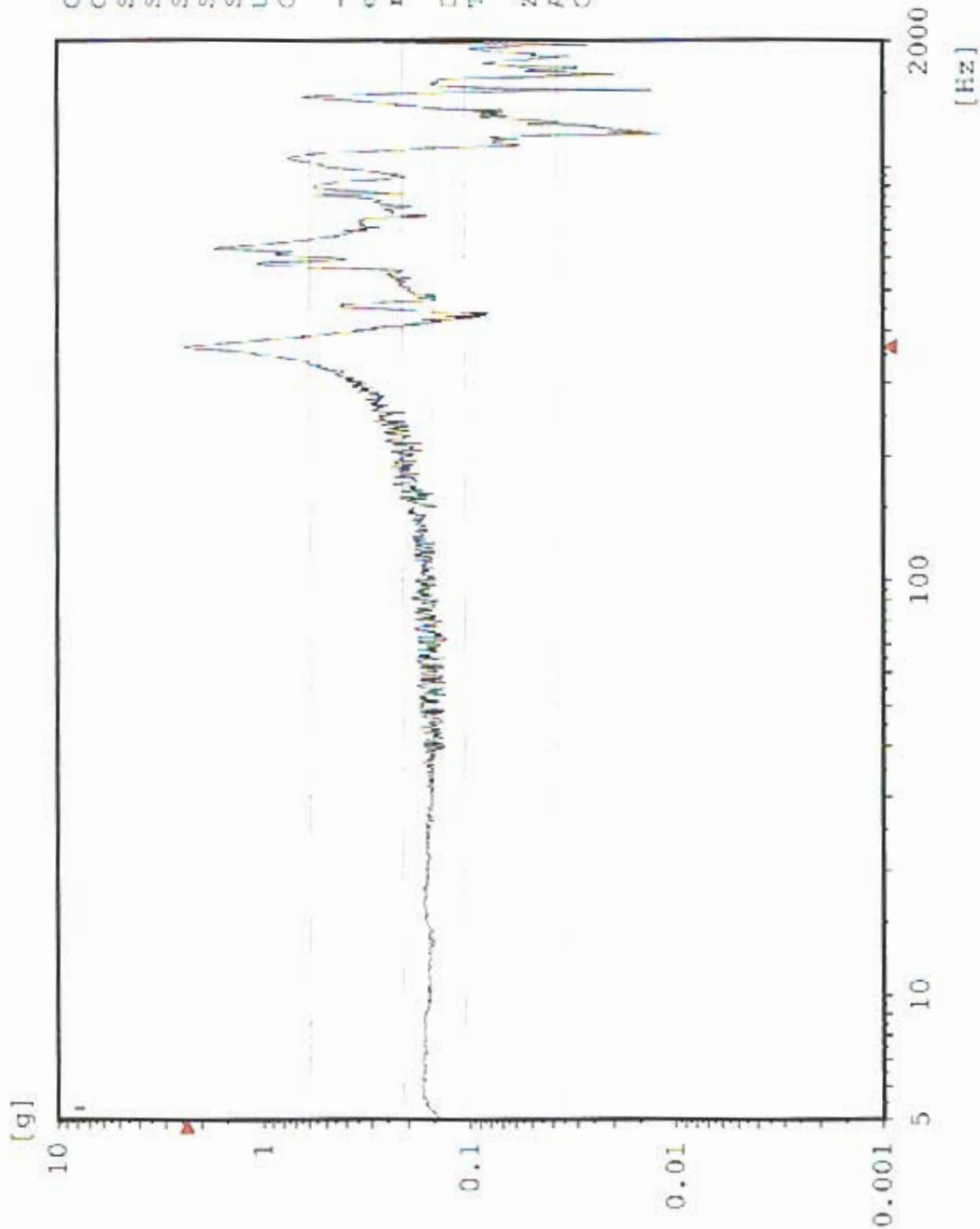
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 11:34:35

Z - axis Pre Random
Acceptance Unit
GLAT 1844

AZ3 TPS Boss 1

Sine
Stanford Linear Accelerator
J/N 4995.52083
TEM / TPS



Chan.no: 3 M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

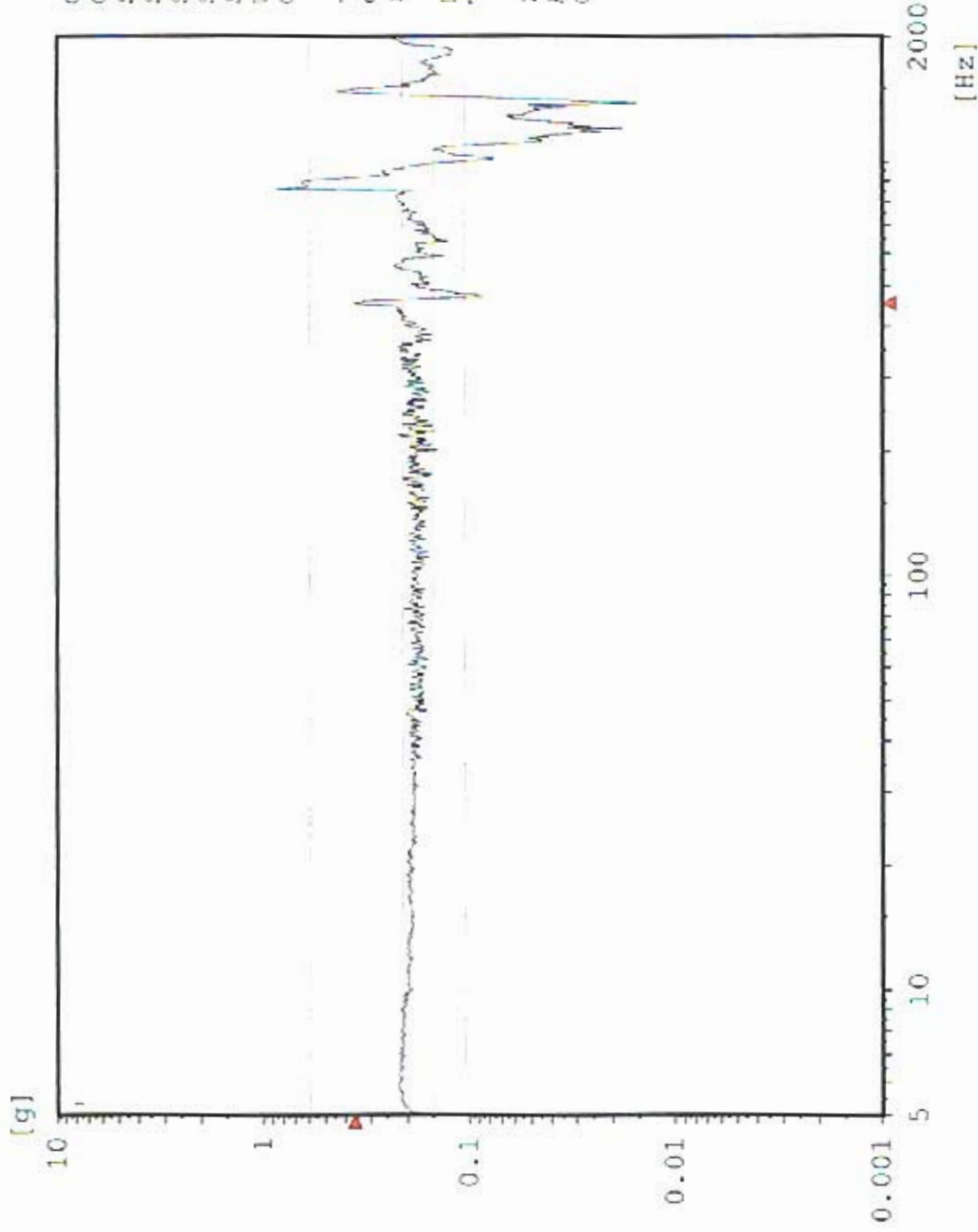
-- Testing Time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 11:34:35

Z - axis Pre Random
 Acceptance Unit
 GLAT 1844

Sine AZ5 TEM Bottom Edge

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 5
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00
 Date: 07-01-05
 Time: 11:34:35

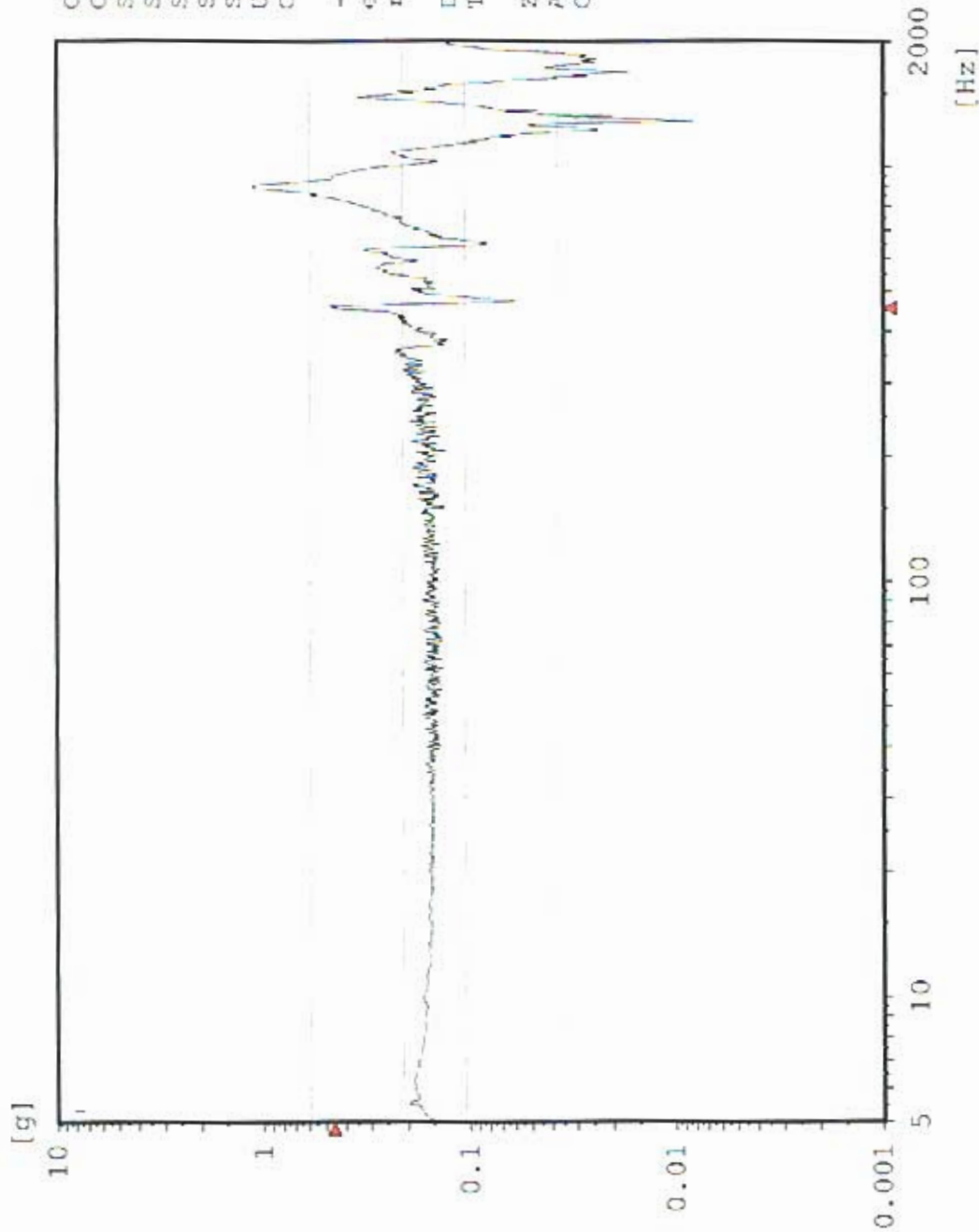
Z - axis Pre Random
 Acceptance Unit
 GLAT 1844

Sine AZ1 TPS Edge Center

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 6
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct./min
 Unit: g
 Contr.strat.: Closed loop

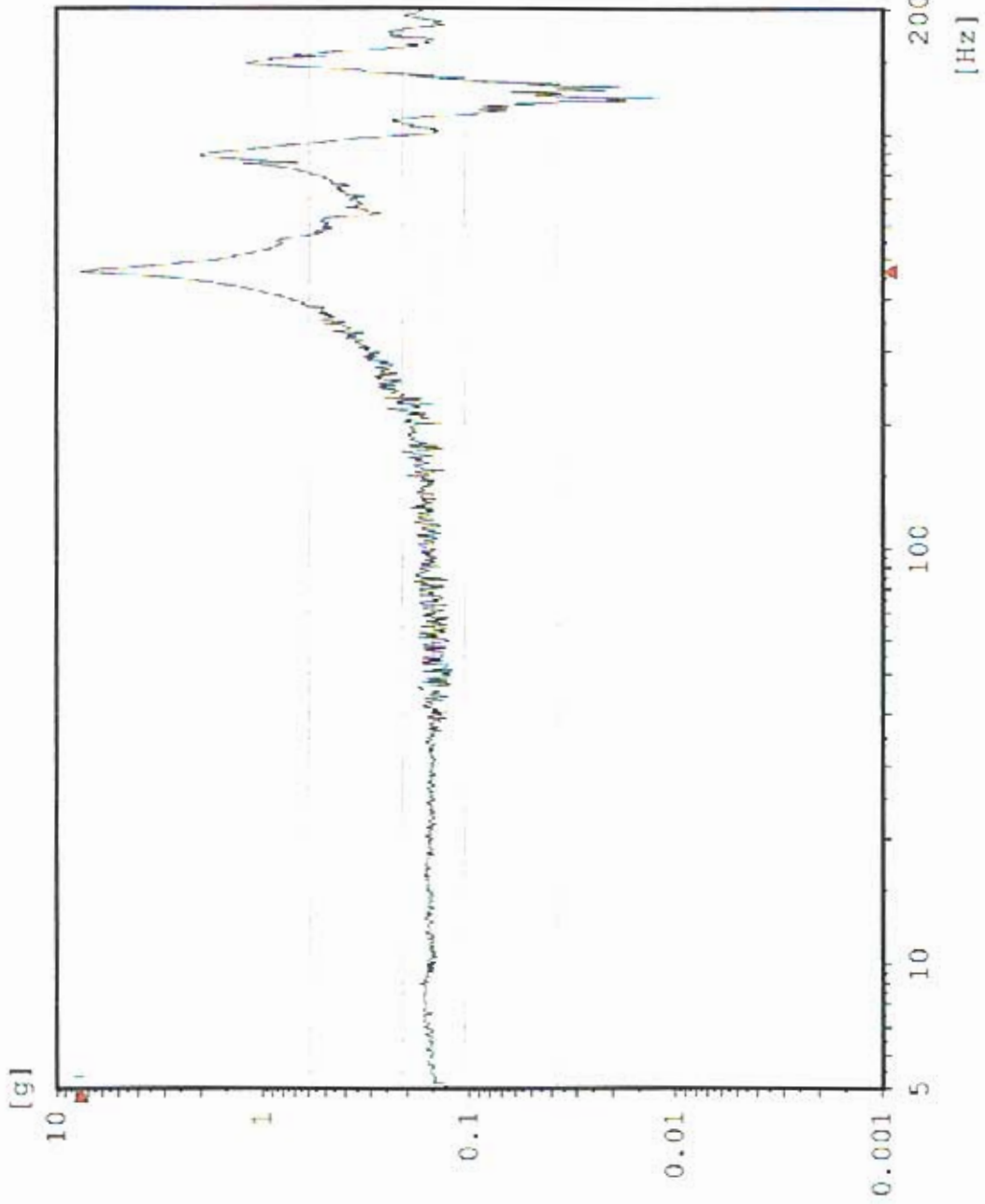
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 11:34:35

Z - axis Pre Random
 Acceptance Unit
 GLAT 1544

Sine AZ6 TEM Bottom Center

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 8
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct./min
 Unit: g
 Contr.strat.: Closed loop

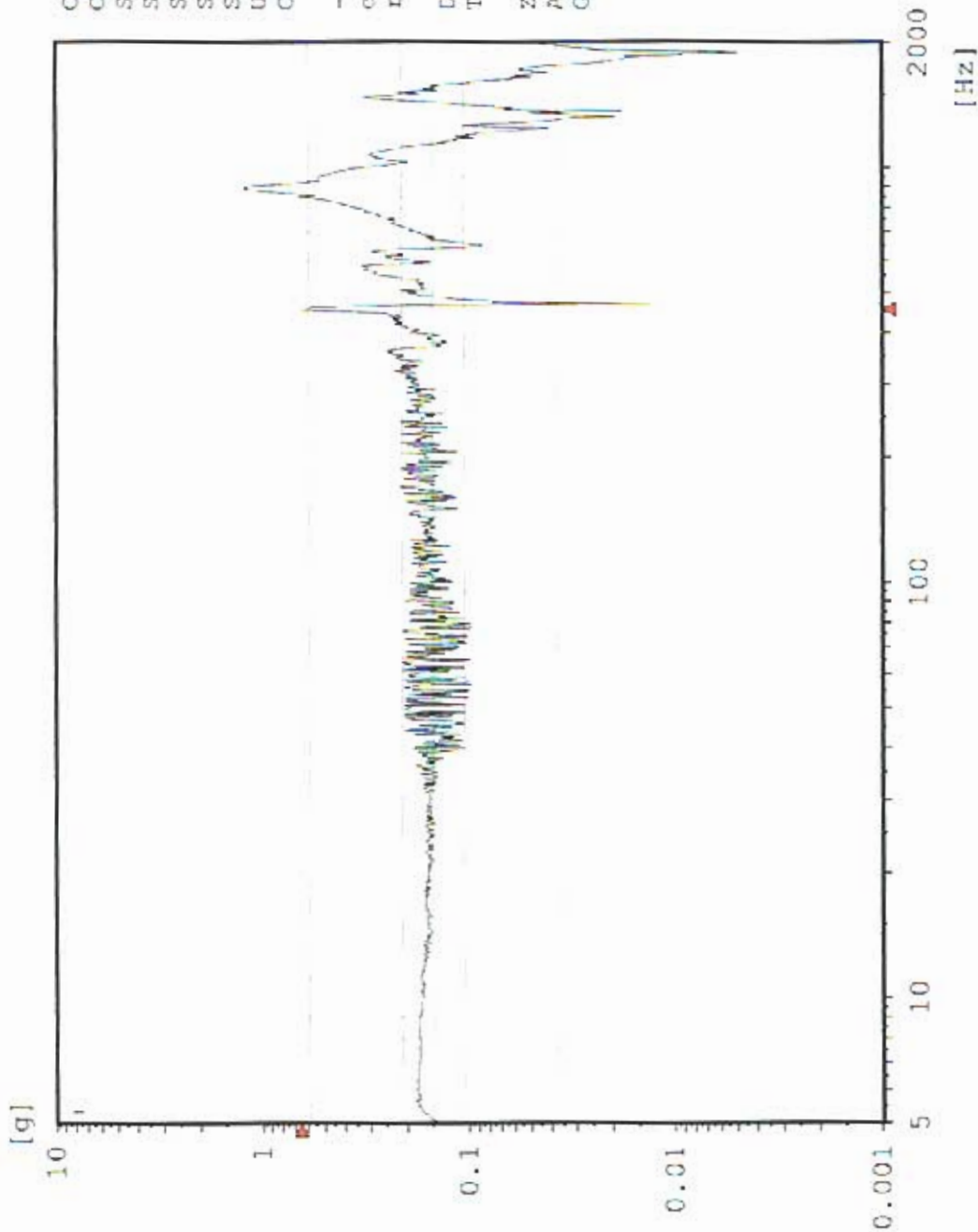
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 11:34:35

Z - axis Pre Random
 Acceptance Unit
 GLAT 1844

AZ2 TPS Corner

Sine
Stanford Linear Accelerator
J/N 4995.52083
TEM / TPS



Chan.no: 10
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00
 Date: 07-01-05
 Time: 11:34:35

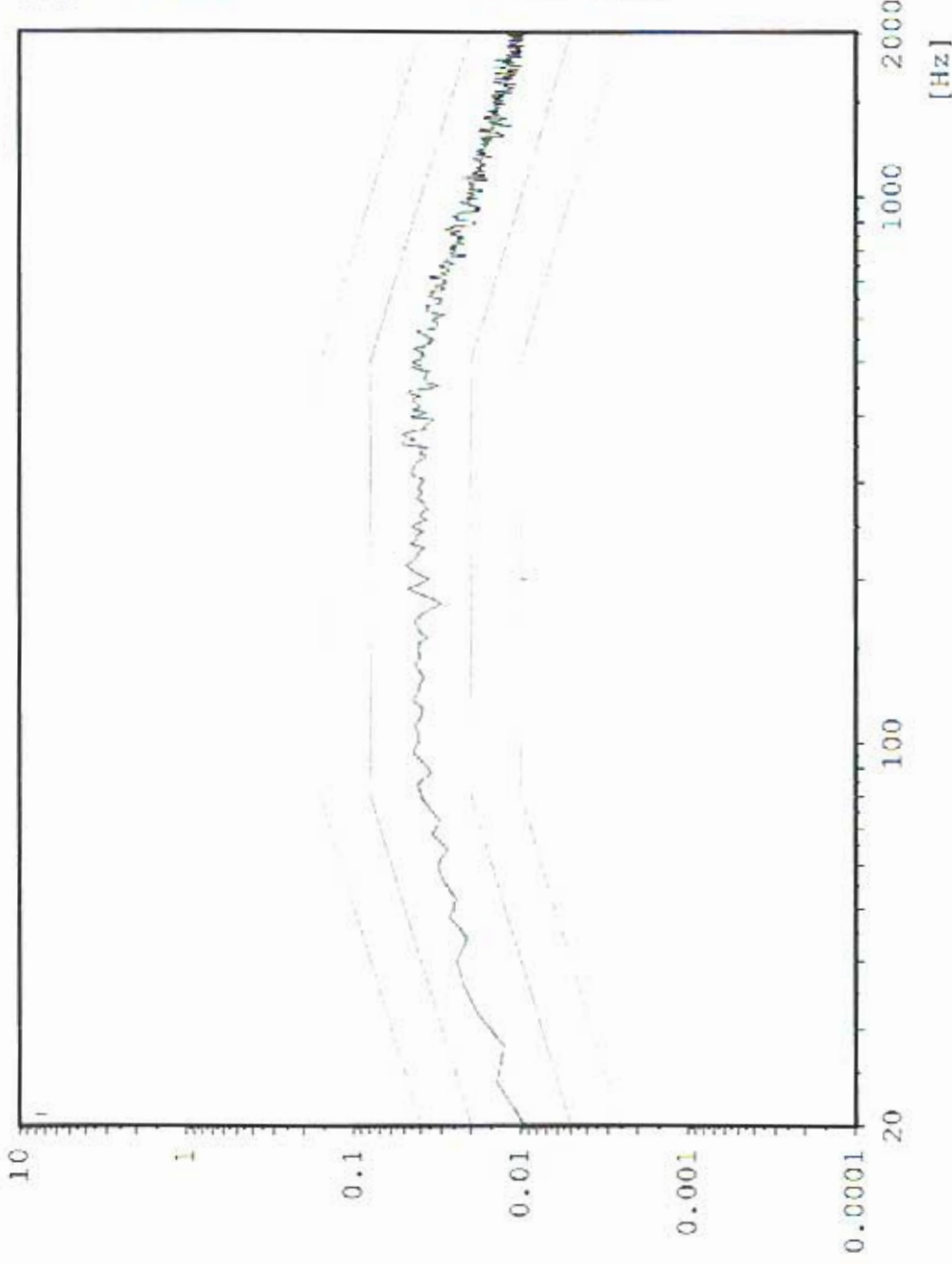
Z - axis Pre Random
 Acceptance Unit
 GLAT 1844

CZ1 Z-Axis Control

Random
Stanford Linear Accelerator
J/N 49995.52083
TEM & TPS



[g²/Hz]



Chan.no: 1
Chan.type: C
DOF: 126
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 6.852 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:01
remaining: 000:00:-1

-- Time total --
elapsed: 000:02:55
remaining: 000:00:-1

Date: 07-01-05
Time: 11:47:12

Z - Axis
Acceptance Unit
GLAT 1844

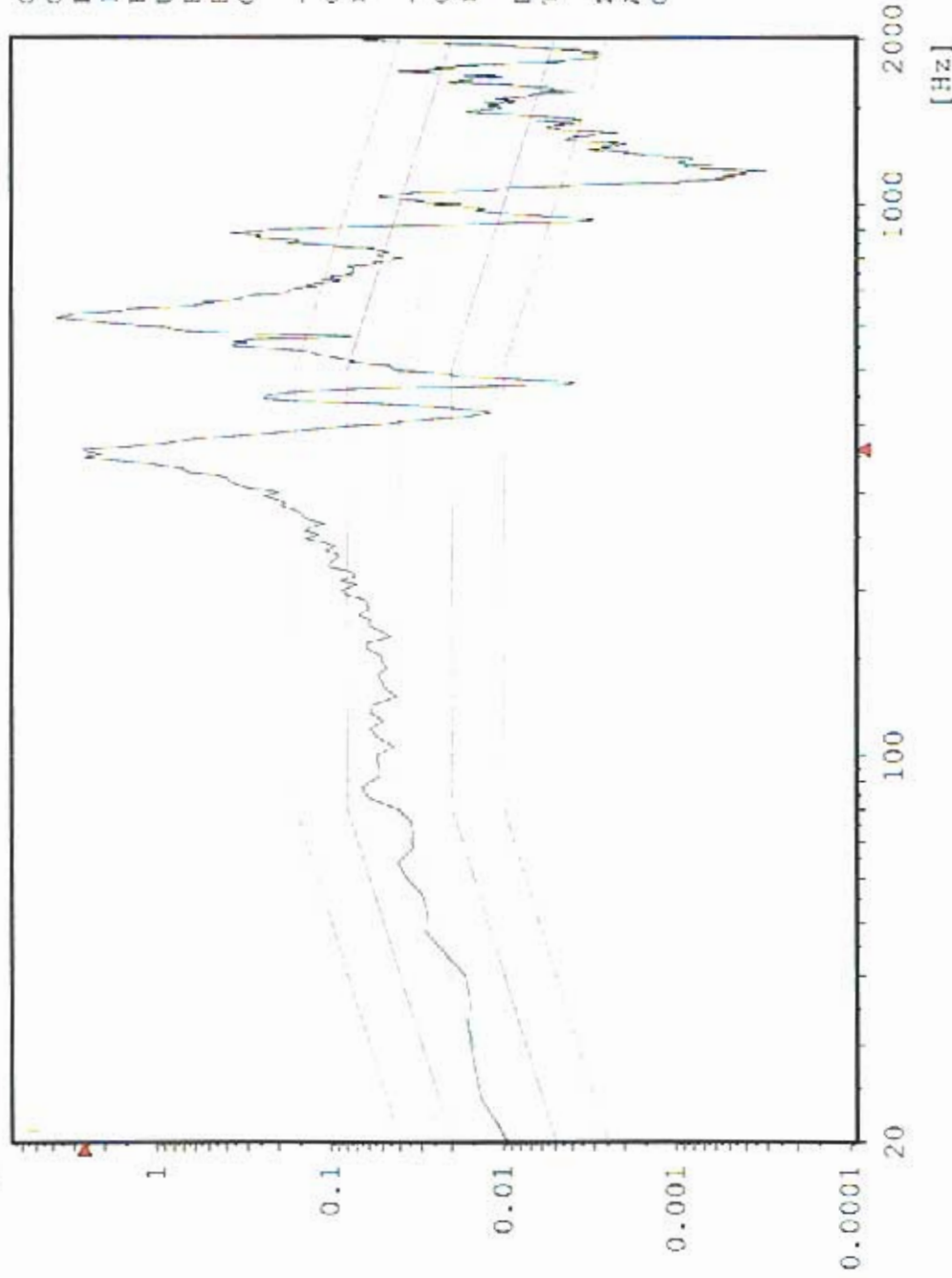
Cursor: 360 Hz 2.642 g²/Hz

Random AZ4 TPS Boss 2

Stanford Linear Accelerator
J/N 49995.52083
TEM & TPS



[g²/Hz]



Chan.no: 2
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 17.79 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:01
remaining: 000:00:-1

-- Time total --
elapsed: 000:02:55
remaining: 000:00:-1

Date: 07-01-05
Time: 11:47:12

Z - Axis
Acceptance Unit
GLAT 1644

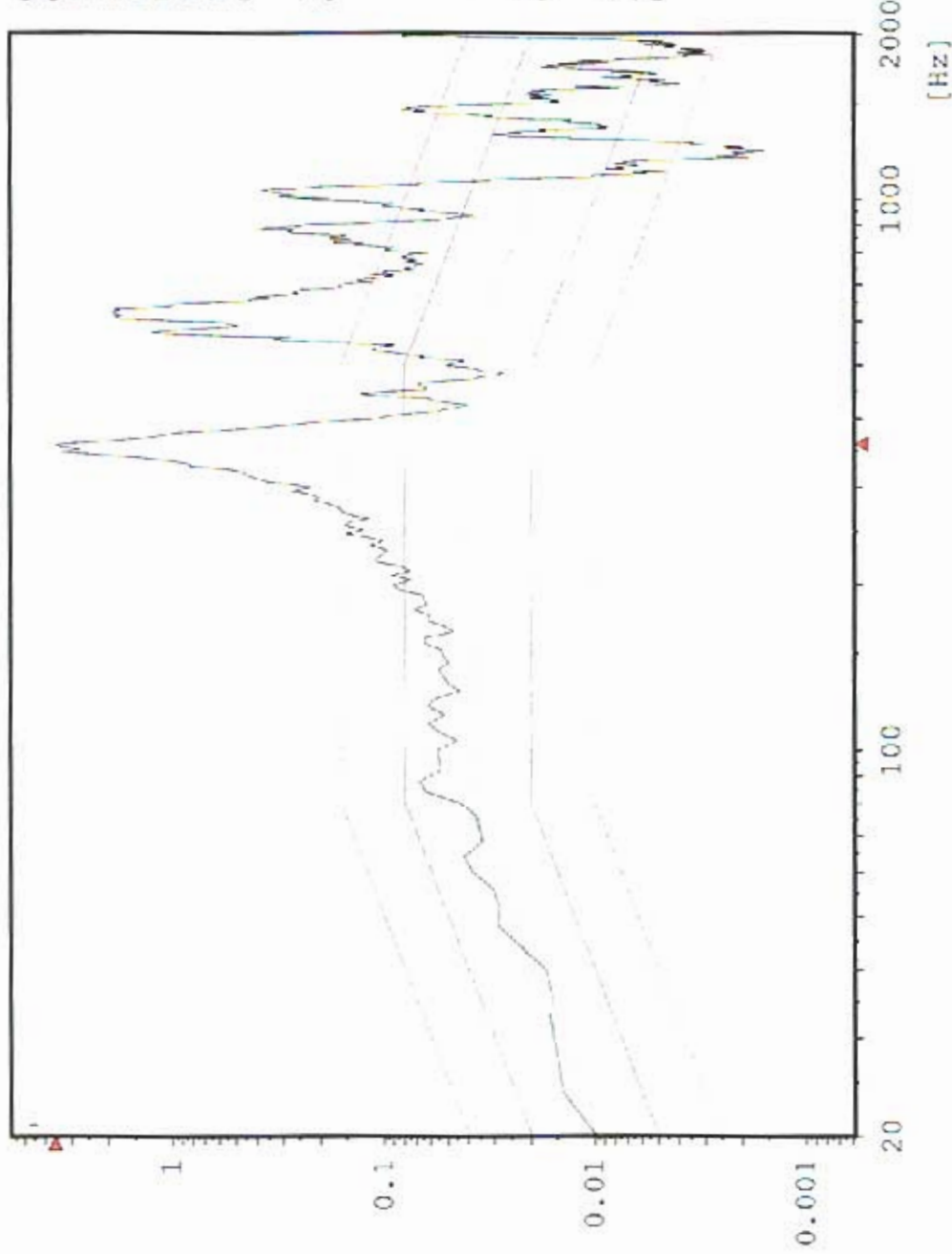
Max: 360 Hz 3.604 g²/Hz

Random AZ3 TPS Boss 1

Stanford Linear Accelerator
J/N 49995.52083
TEM & TPS



[g²/Hz]



Chan.no: 3
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 18.44 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:01
remaining: 000:00:-1

-- Time total --
elapsed: 000:02:55
remaining: 000:00:-1

Date: 07-01-05
Time: 11:47:12

Z - Axis
Acceptance Unit
GLAT 1844

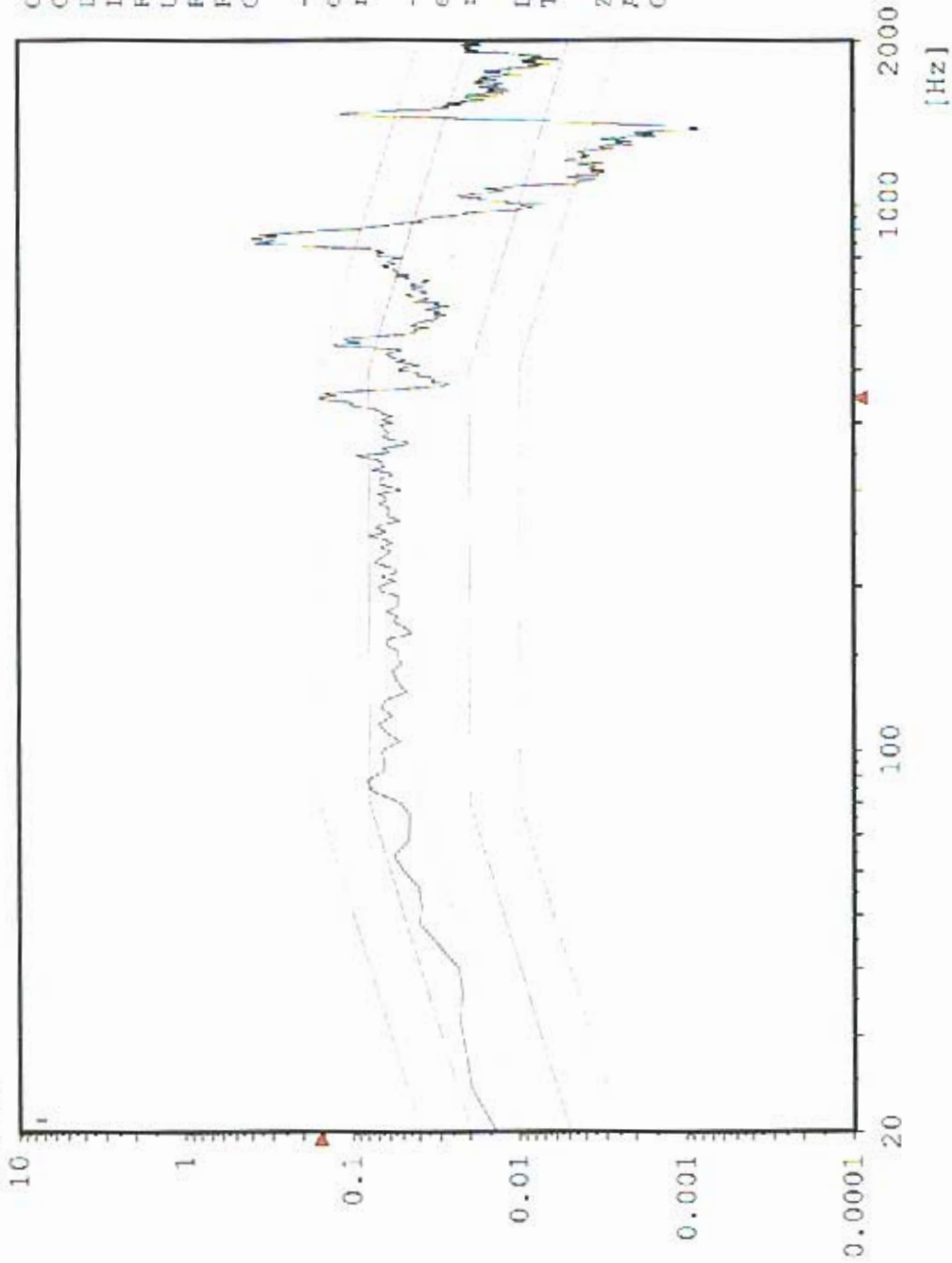
Cursor: 444 Hz 0.1573 g²/Hz

Random AZ5 TEM Bottom Edge

Stanford Linear Accelerator
J/N 4995.52083
TEM & TPS



[g²/Hz]



Chan.no: 5
Chan.Type: M
DCF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 9.125 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:01
remaining: 000:00:-1

-- Time total --
elapsed: 000:02:55
remaining: 000:00:-1

Date: 97-01-05
Time: 11:47:12

Z - Axis
Acceptance Unit
GLAT 1844

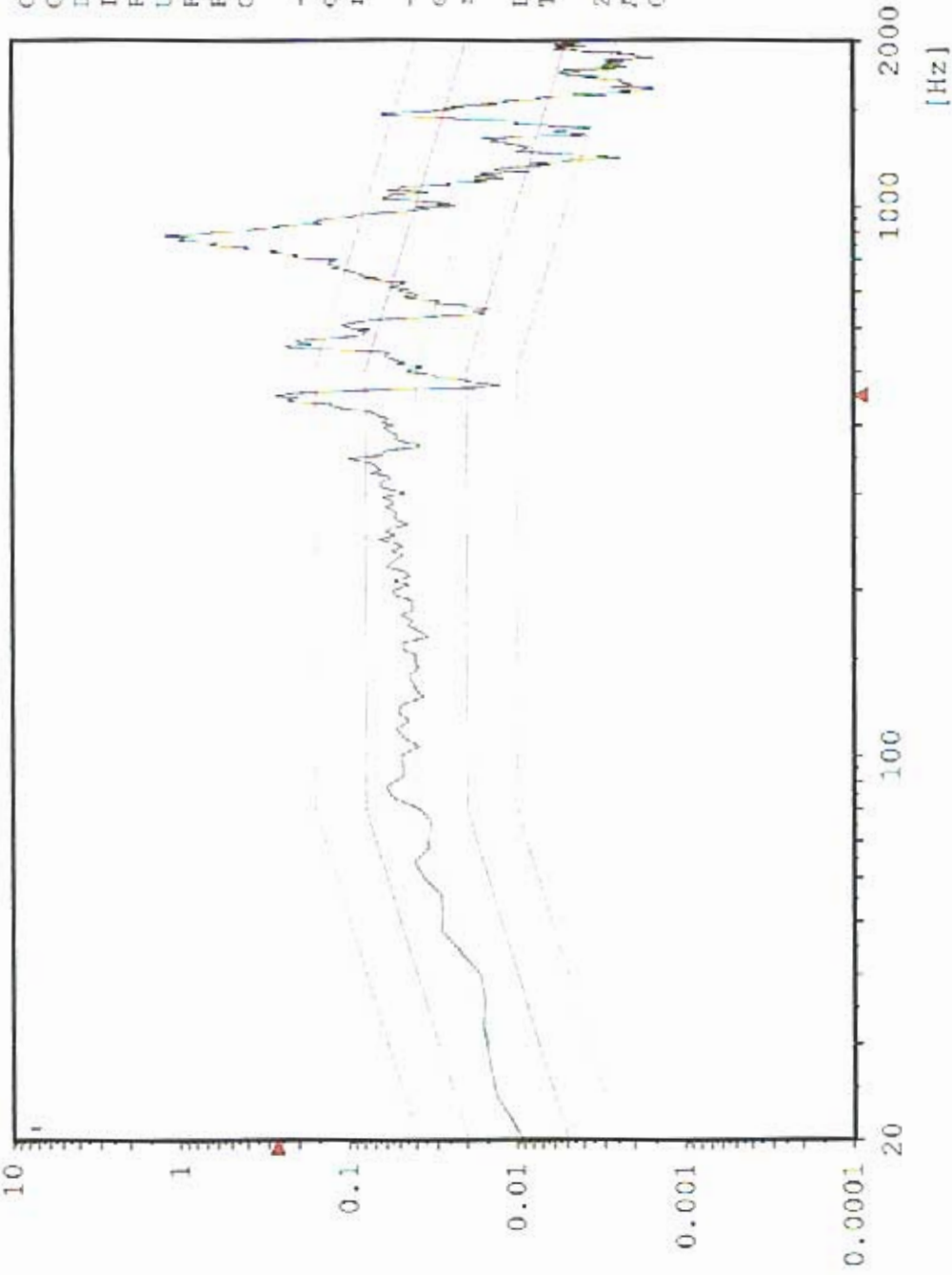
Cursor: 452 Hz 0.2712 g²/Hz

Random AZ1 TPS Edge Center

Stanford Linear Accelerator
J/N 4995.52083
TEM & TPS



[g²/Hz]



Chan.no: 6
Chan.Type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 11.64 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:01
remaining: 000:00:-1

-- Time total --
elapsed: 000:02:55
remaining: 000:00:-1

Date: 07-01-05
Time: 11:47:12

Z - Axis
Acceptance Unit
GLAT 1844

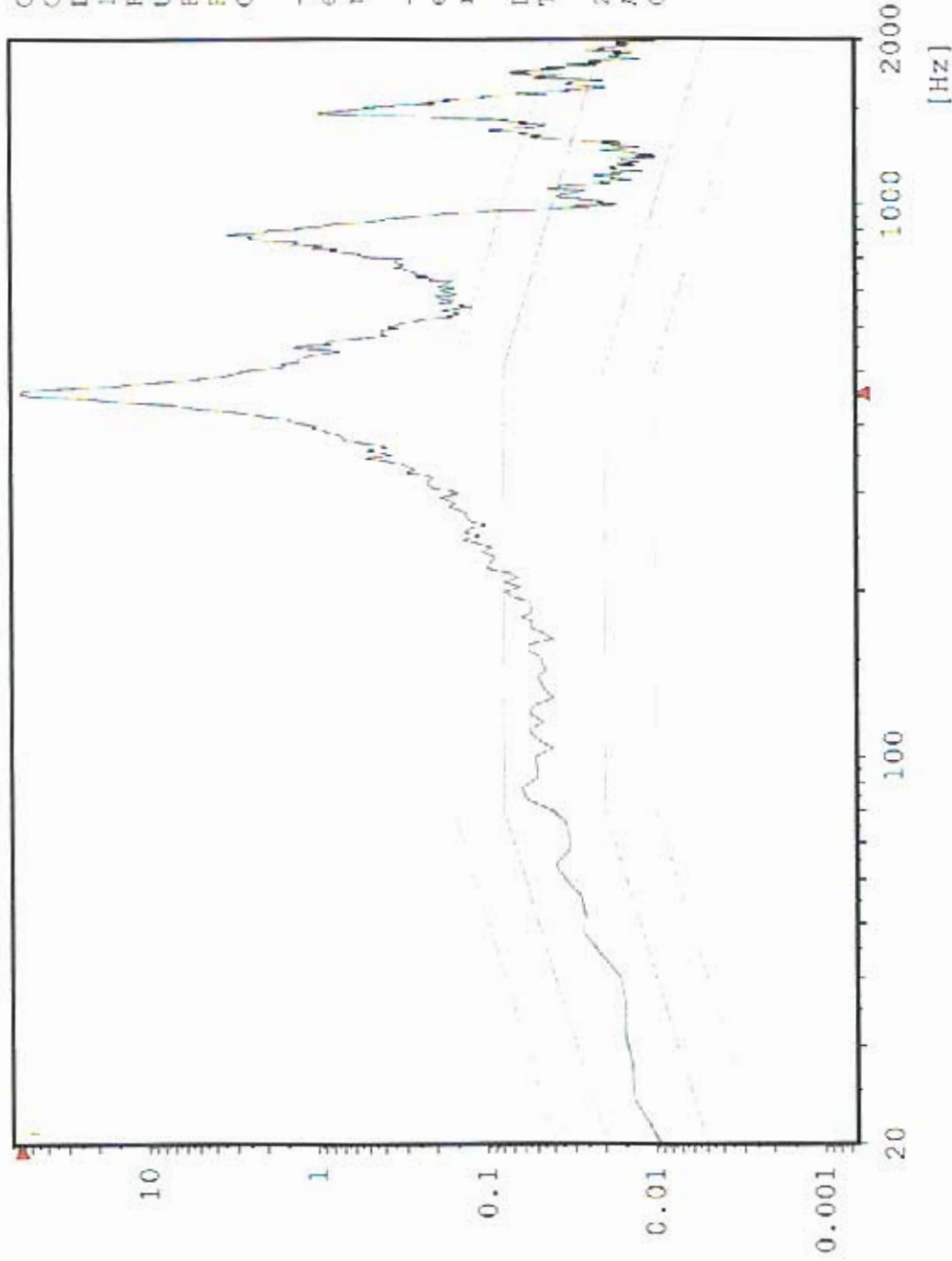
Max: 456 Hz 57.93 g²/Hz

Random AZ6 TEM Bottom Center

Stanford Linear Accelerator
.J/N 49995.52083
TEM & TPS



[g²/Hz]



Chan.no: 8
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 44.87 g
RMS (req.): 6.787 g
Contr.Strat.: Closed loop

-- Time on act. level --
elapsed: 000:01:01
remaining: 000:00:-1

-- Time total --
elapsed: 000:02:55
remaining: 000:00:-1

Date: 07-01-05
Time: 11:47:12

Z - Axis
Acceptance Unit
GLAT 1844

Cursor: 444 Hz

0.4 g²/Hz

Random

Stanford Linear Accelerator

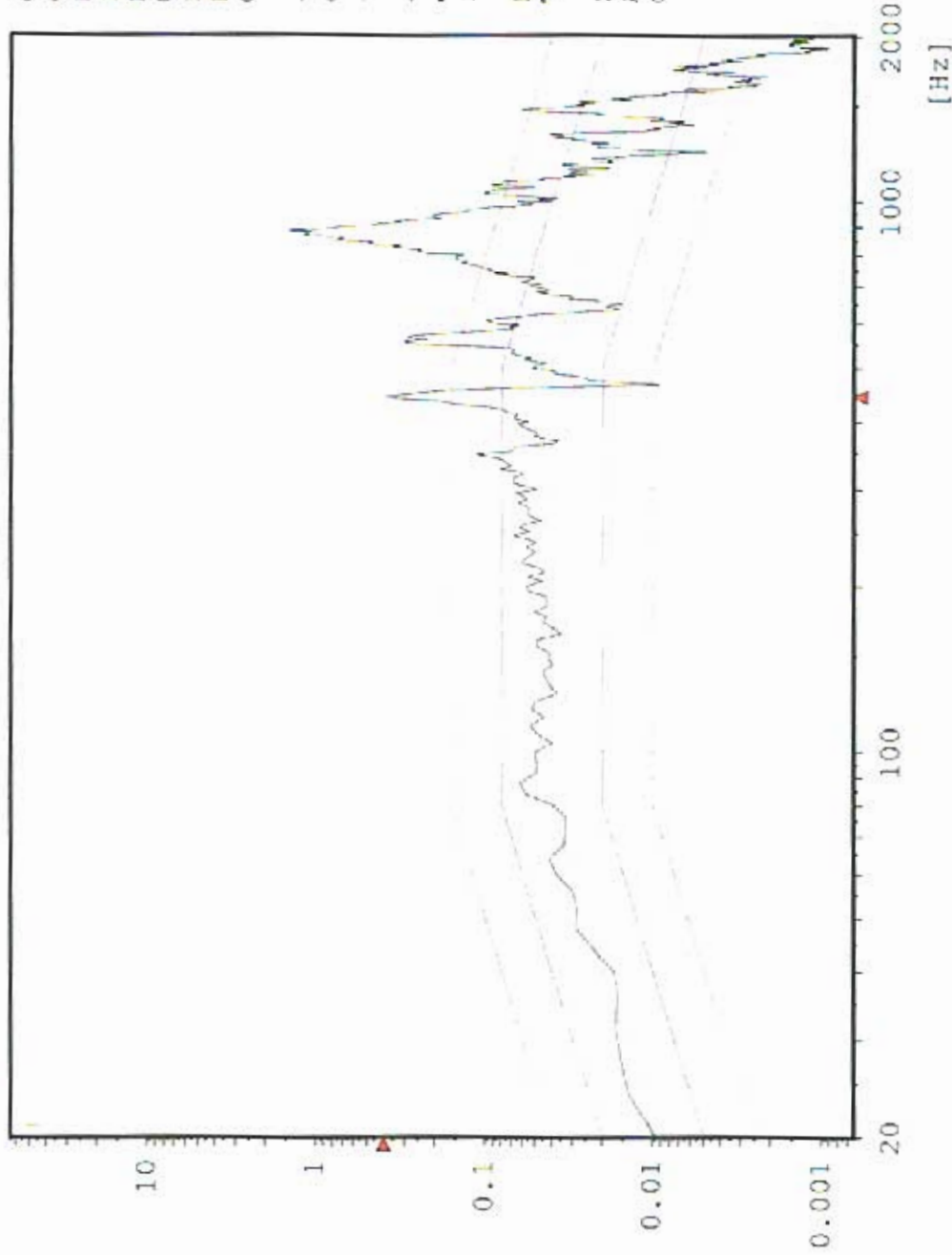
J/N 49994.52083

TEM & TPS

AZ2 TPS Corner



[g²/Hz]



Chan.no: 10
 Chan.type: M
 DOP: 100
 Level: 0.0 dB
 Resolution: 4 Hz
 Unit: g²/Hz
 RMS (act.): 12.74 g
 RMS (req.): 6.787 g
 Contr.strat.: Closed loop

-- Time on act. level --
 elapsed: 000:01:01
 remaining: 000:00:-1

-- Time total --
 elapsed: 000:02:55
 remaining: 000:00:-1

Date: 07-01-05
 Time: 11:47:12

Z - Axis
 Acceptance Unit
 GLAT 1844

Sine CZ1 Z-Axis Control

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS

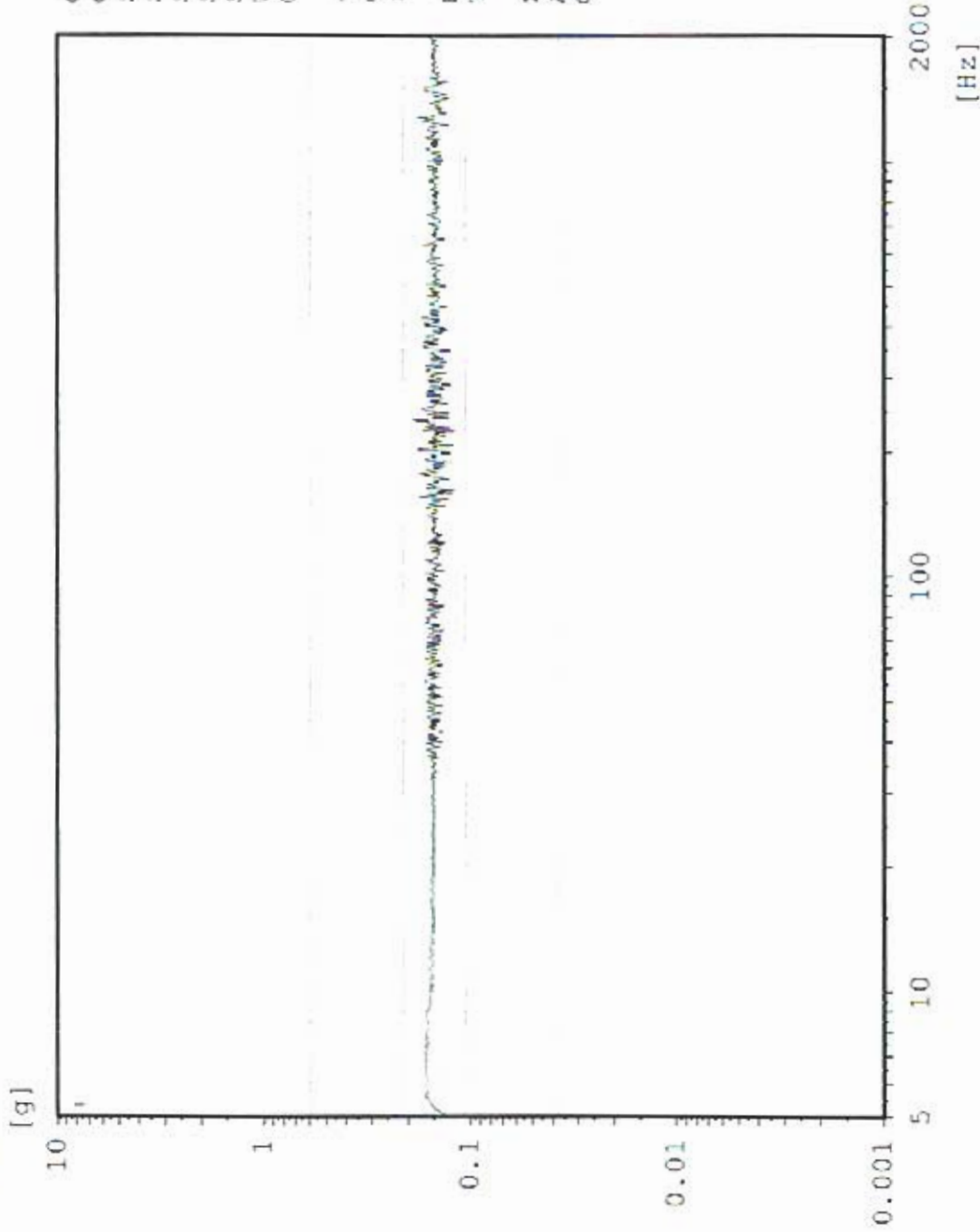


Chan.no: 1
Chan.type: CW Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

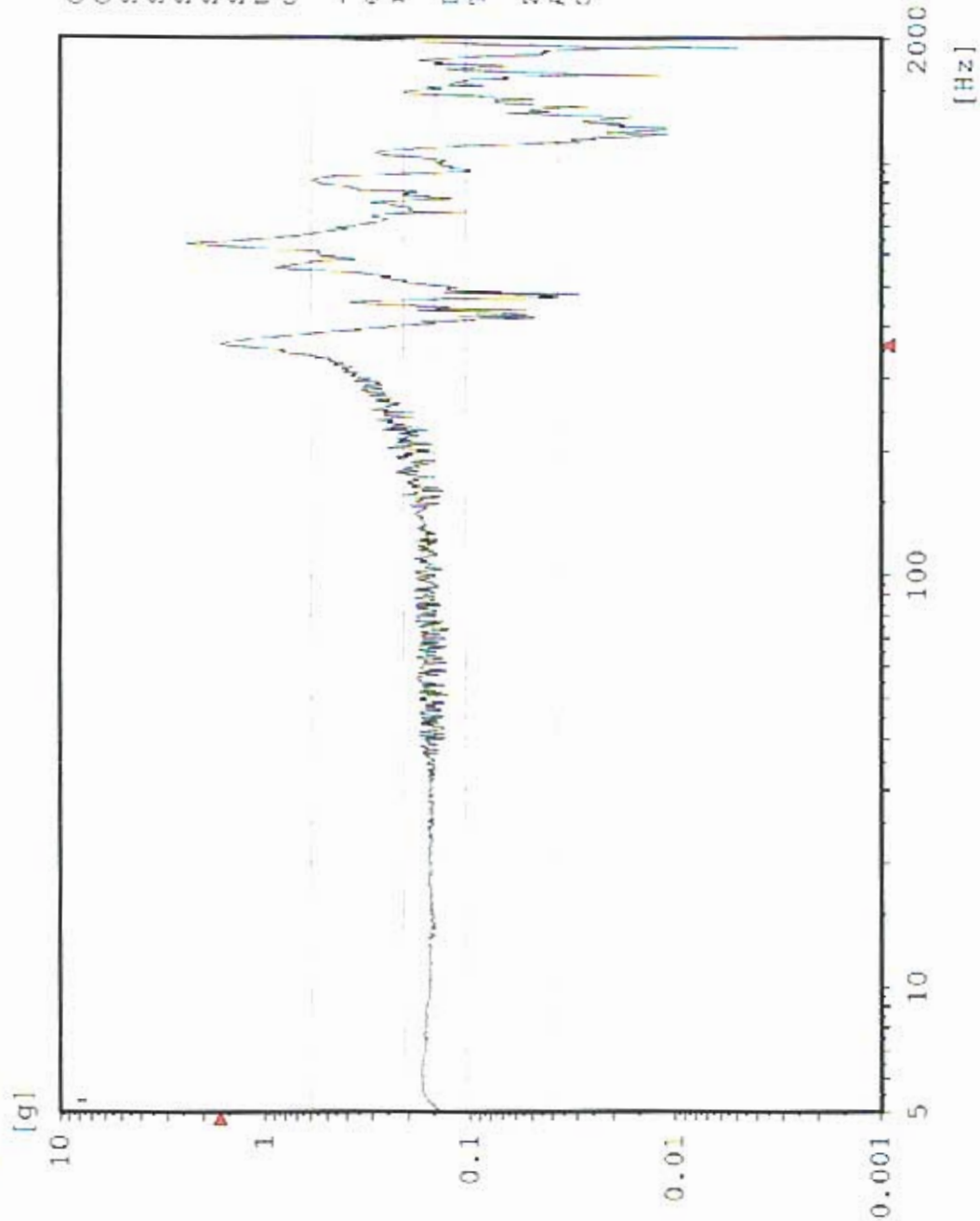
Date: 07-01-05
Time: 11:59:13

Z - axis Post Random
Acceptance Unit
GLAT 1844



Sine AZ4 TPS Boss 2

Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS



Chan.no: 2
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

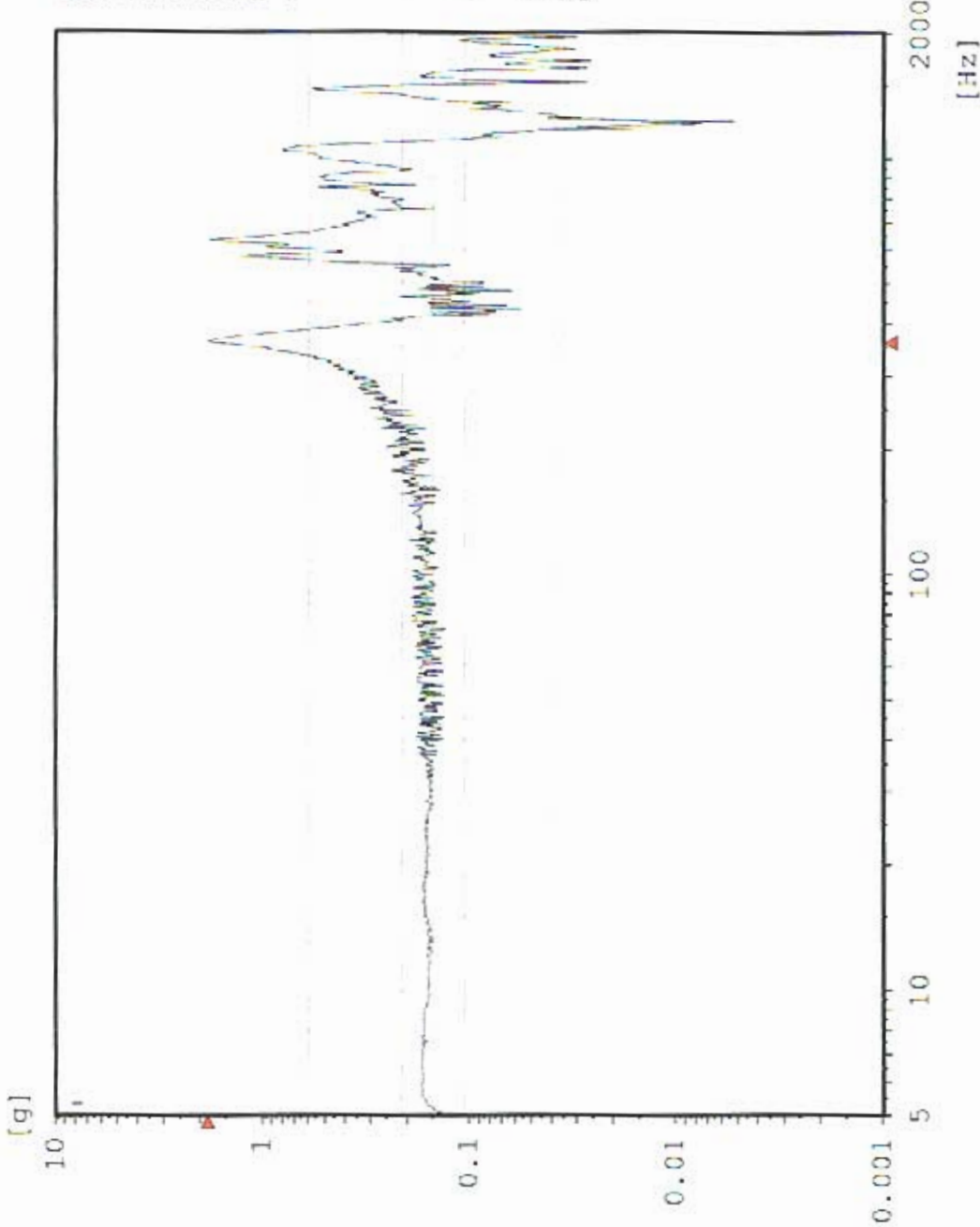
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 11:59:13

Z - axis Post Random
Acceptance Unit
SLAT 1844

AZ3 TPS Boss 1

Sine
Stanford Linear Accelerator
J/N 49995.52083
TEM / TPS

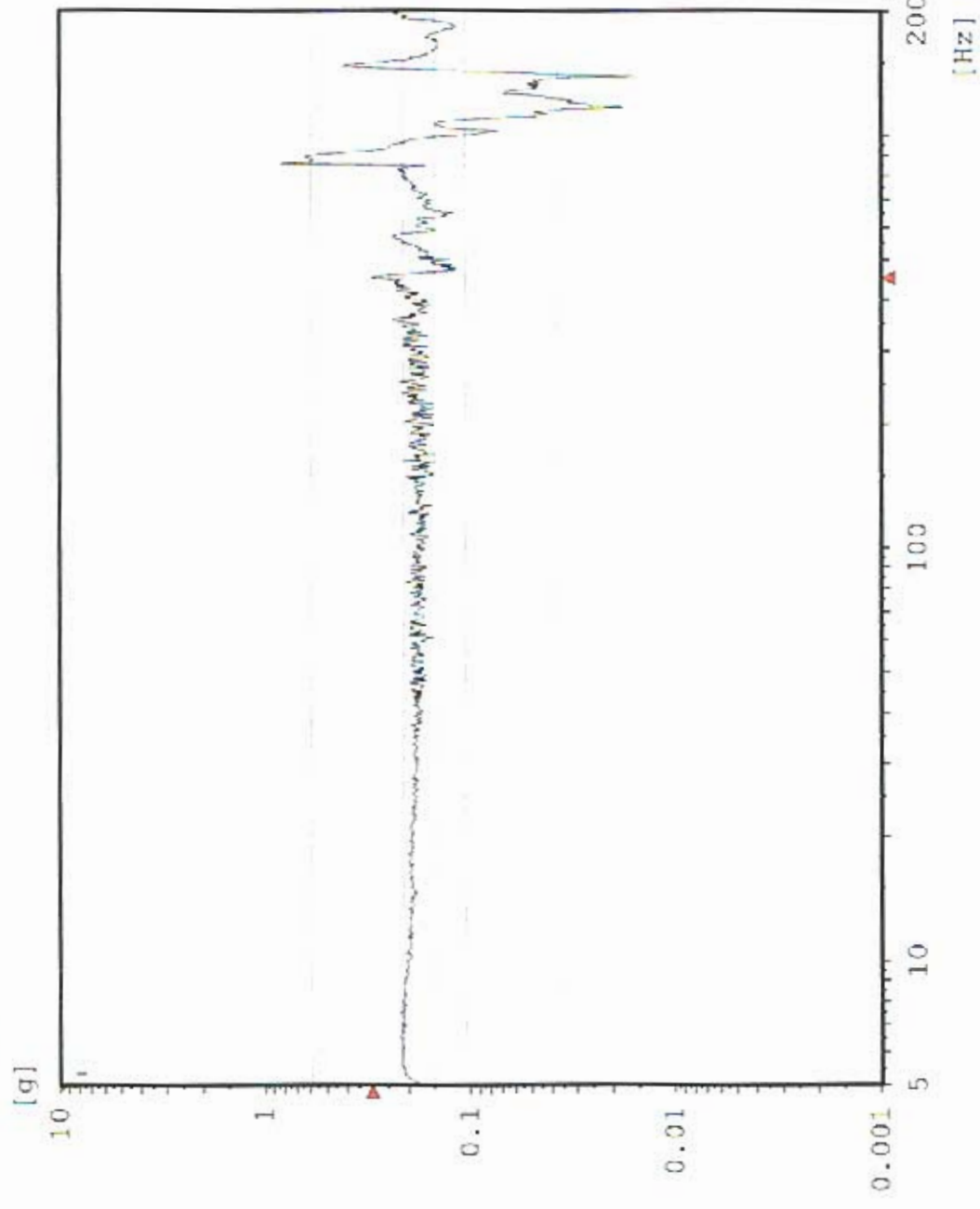


Chan.no: 3
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct./min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 00:04:18
 remaining: 00:00:00
 Date: 07-01-05
 Time: 11:59:13
 Z - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AZ5 TEM Bottom Edge

Stanford Linear Accelerator
J/N 4995.52083
TEM / TPS



Chan.no: 5
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 11:59:13

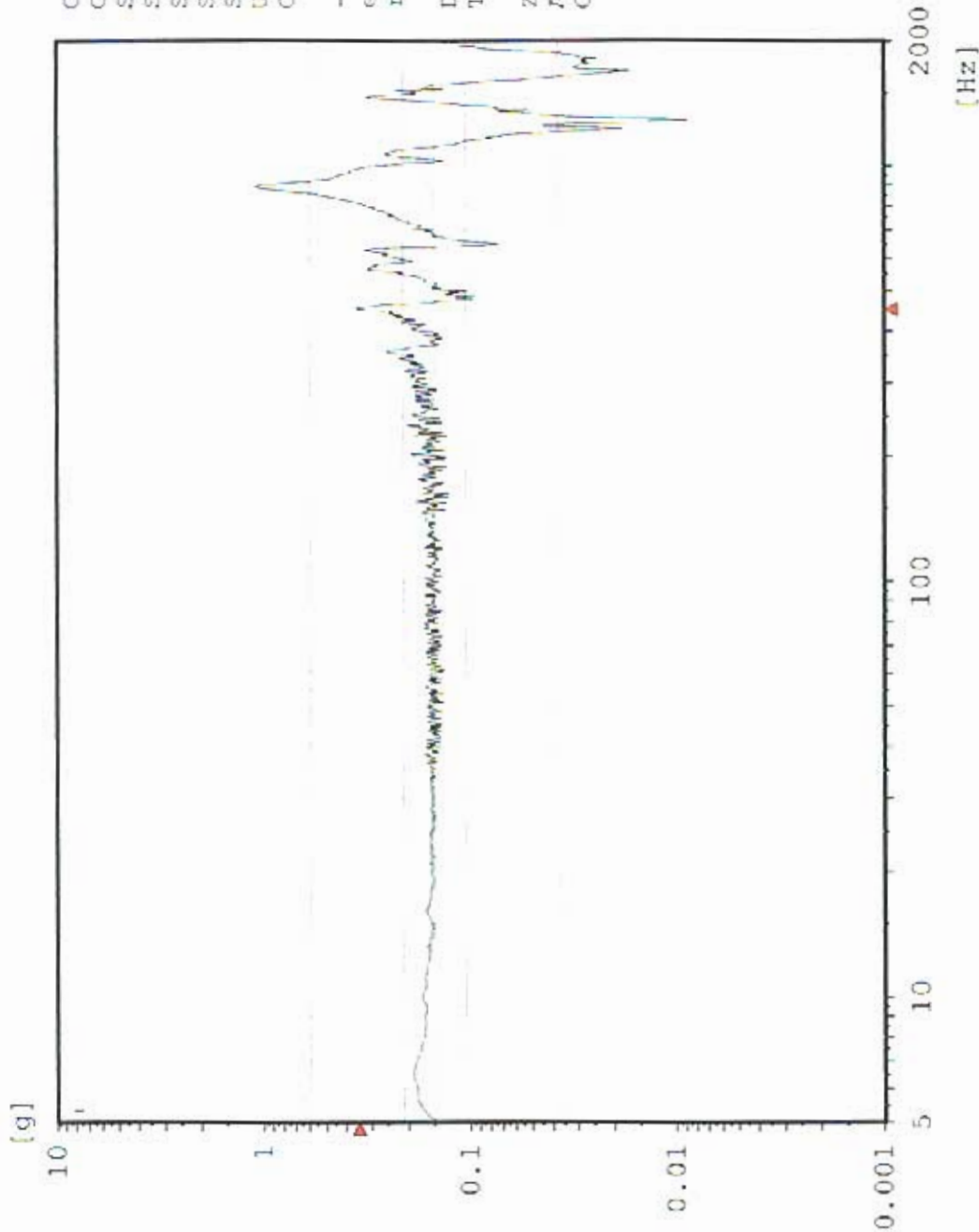
Z - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AZ1 TPS Edge Center

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 6
 Chan.type: M Filtered
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 11:59:13

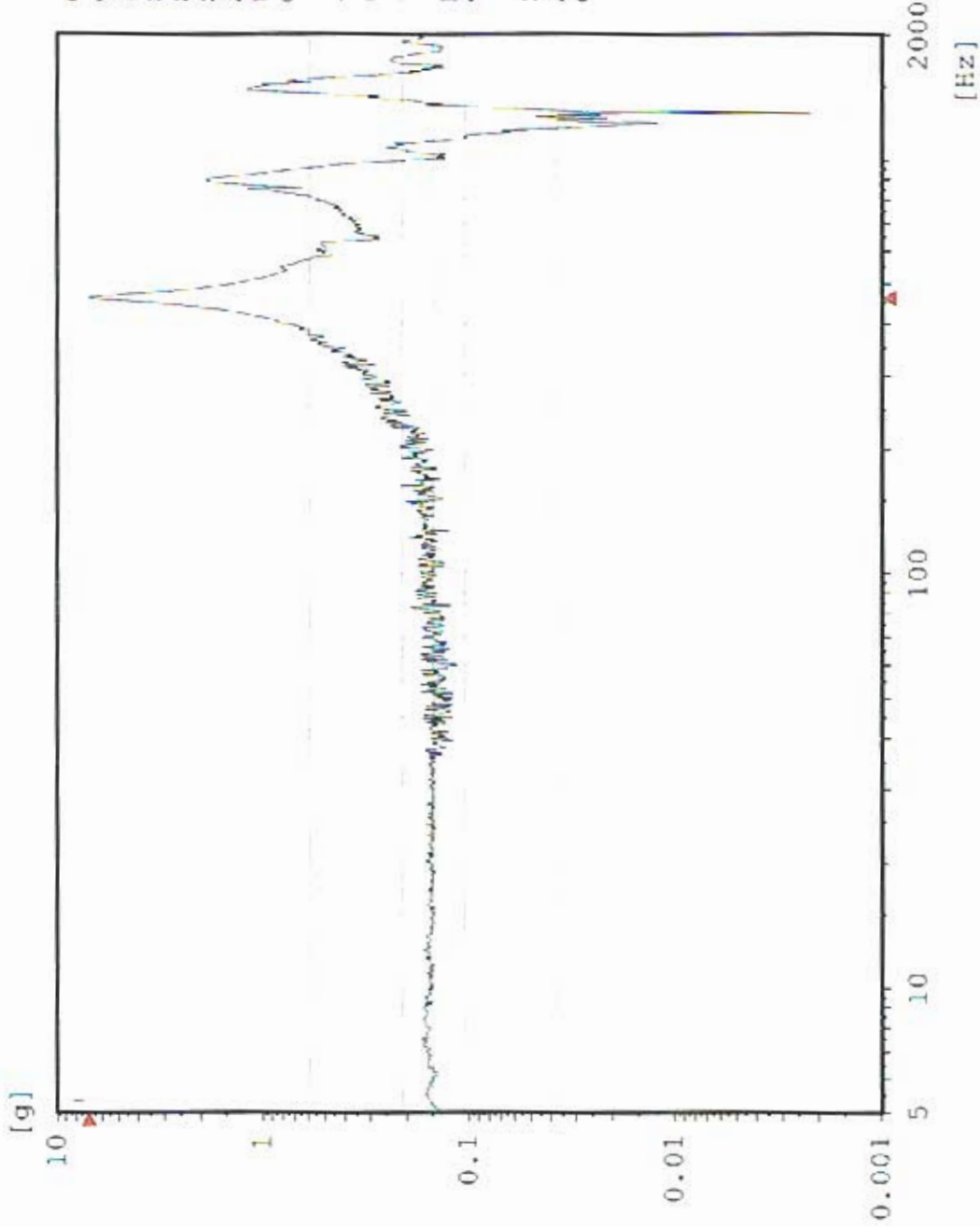
Z - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AZ6 TEM Bottom Center

Stanford Linear Accelerator

J/N 49995.52083

TEM / TPS



Chan.no: 8 M Filtered
 Chan.type: logarithmic
 Sweep type: logarithmic
 Sweeps done: 1
 Sweeps req.: 1
 Sweep direct.: up
 Sweep rate: 2.00 Oct/min
 Unit: g
 Contr.strat.: Closed loop

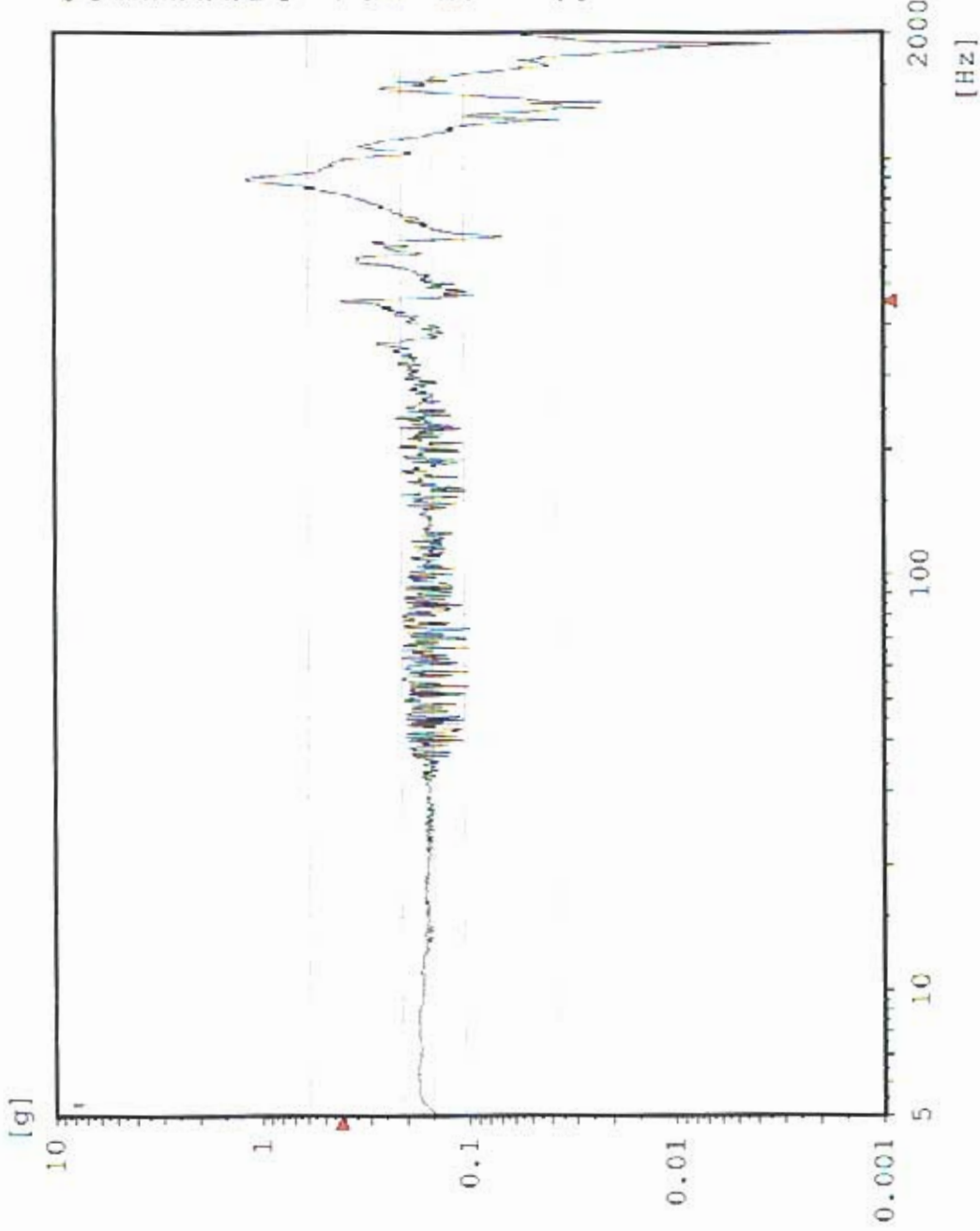
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-01-05
 Time: 11:59:13

Z - axis Post Random
 Acceptance Unit
 GLAT 1844

Sine AZ2 TPS Corner

Stanford Linear Accelerator
J/N 49995.52083
TEX / TPS



Chan.no: 10
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-01-05
Time: 11:59:13

Z - axis Post Random
Acceptance Unit
GLAT 1844



EQUIPMENT LIST

JOB NUMBER 49995.52083

TEST DESCRIPTION Random & Sine Vibration

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL NUMBER	ASSET NUMBER	RANGE	ACCURACY	CALIBRATION DATE	CALIBRATION PERIOD
Vibration System	Unholtz-Dickie	T1000	4-6242	17,500 Force Lbs: 2Hz - 3KHz	± 10%	07-01-05	T.O.T
Accelerometer	Endevco Corp.	2271A	4-42129	1,000 g's Max: 2Hz - 5.5KHz	± 5%	11-01-04	1 Yr.
	Endevco Corp.	2226C	4-42130	1,000 g's Max: 3Hz - 6KHz	± 5%	06-23-05	1 Yr.
	Endevco Corp.	2226C	4-64096	1,000 g's Max: 3Hz - 6KHz	± 5%	04-14-05	1 Yr.
	Endevco Corp.	2222C	4-42138	1,000 g's Max: 5Hz - 8KHz	± 5%	06-23-05	1 Yr.
	Endevco Corp.	2226C	4-64082	1,000 g's Max: 3Hz - 6KHz	± 5%	04-14-05	1 Yr.
	Endevco Corp.	2220D	4-6442	1,000 g's Max: 2Hz - 10KHz	± 5%	08-26-04	1 Yr.
	Endevco Corp.	2222C	4-42143	1,000 g's Max: 5Hz - 8KHz	± 5%	11-01-04	1 Yr.
Charge Amp.	Unholtz-Dickie	D22-8	4-64032	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
	Unholtz-Dickie	D22-8	4-6539	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
	Unholtz-Dickie	D22-8	4-6540	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
	Unholtz-Dickie	D22-8	4-6461	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
	Unholtz-Dickie	D22-8	4-6559	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
	Unholtz-Dickie	D22-8	4-6548	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
	Unholtz-Dickie	D22-8	4-6457	Freq. Response: 5Hz - 5KHz	± 2%	03-04-05	6 Mo.
Digital Vibration Control System	M + P International / Agilent	VXI E6408A	4-62092	Freq. Range: 23KHz Sample Rate: 51.2Ksa/sec Dynamic Range: 90dB Voltage: 10v Pk. Resolution: 20 Bit / 3200 lines Channels: 16; COLA; 1v Pk.	± 1%	03-14-05	2 Yr.