

GLAT 1847
 1848
 1849

Appendix A – Accelerometer Sensitivities

TEM-TPS



GLAST LAT Project GASU/PDU 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	2271AM20	12.43	3	3000	1000
AZ1	3	AHKB25	2226C	3.030	30	3000	100
AZ2	6	16139	2226C	3.038	30	3000	100
AZ3	10	16139	2226C	3.027	30	3000	100
CX1		13048	2271AM20	12.43	3	3000	1000
AX1	3	16139	2226C	3.030	30	3000	100
AX2	6	AHKB25	2226C	3.038	30	3000	100
AX3	10	16139	2226C	3.027	30	3000	100
CY1		13048	2271AM20	12.43	3	3000	1000
AY1	3	AHKB25	2226C	3.030	30	3000	100
AY2	6	16139	2226C	3.038	30	3000	100
AY3	10	16139	2226C	3.027	30	3000	100

Appendix B - Test Log

1849
GLAT 1848
1847



GLAST LAT Project TEM/TPS Vibration Testing

Test Log

Date	Time	Unit #	Axis	Sine or Random	Level [g]/[grms]	Frequency [Hz]	File Name	Remarks
7/28	1:50	1848	Z	SIN-PRE	0.15	5-2000		
	2:00	1848	Z	Random	6.8	5-2000		
	2:15	1848	Z	SIN-Post	0.15	5-2000		
	2:35	1847	Z	SIN-Pre	0.15	5-2000		
	2:45	1847	Z	Random	6.8	5-2000		
	3:00	1847	Z	SIN-Post	0.15	5-2000		
	3:40	1847	X	SIN-PRE	0.15	5-2000		
	3:50	1847	X	Random	6.8	5-2000		
	4:05	1847	X	SIN-Post	0.15	5-2000		
	4:20	1847	Y	Pre	0.15	"		
	4:30	1847	Y	Random	6.8			
	4:50	1847	Y	Post	0.15			
	5:10	1848	X	Pre	0.15			
	5:20	1848	X	Random	6.8			
	5:30	1848	X	Post	0.15			
	5:40	1848	Y	Pre	0.15			
	5:50	1848	Y	Random	6.8			
	6:00	1848	Y	Post	0.15			
8/2	9:30	1849	X	Pre	0.15			Noise on ch 10 - chg
	9:45	1849	X	Pre	0.15			cable - chg charge amp.
	9:55	1849	X	Pre	0.15			
	10:10	1849	X	Random	6.8			
	10:25	1849	X	Post	0.15			
	10:50	1849	Y	Pre	0.15			
	11:00	1849	Y	Random	6.8			
	11:10	1849	Y	Post	0.15			freq. shift 424 → 397 Hz.
	11:25	1849	Y	Post	0.15		retorque = 403 Hz	retorque & retest low level sim
	12:30	1849	Z	Pre	0.15			
	12:40	1849	Z	Random	6.8			
	12:50	1849	Z	Post	0.15			

Appendix C – Procedure Variation



**GLAST LAT Project GASU/PDU Vibration Testing
Installation Steps and Procedure Variations**

Date	Axis	Test Setup	Installation Step Description	RE/QA Approval
7/29/05	N/A	[Signature]	Incoming Visual inspection (e.g. ensure taped gaps are still sealed)	
	Z	[Signature]	Torque vibration fixture bolts to shaker to 25 ft-lbf (300 in-lbf)	
	Z	[Signature]	Torque GASU/PDU to vibration fixture to 107 in-lbf ¹¹	
	Z	[Signature]	Confirm accelerometer installation	
	X	[Signature]	Torque vibration fixture bolts to shaker to 25 ft-lbf	
	X	[Signature]	Torque GASU/PDU to vibration fixture to 107 in-lbf ¹¹	
	X	[Signature]	Confirm accelerometer installation	
	Y	[Signature]	Torque vibration fixture bolts to shaker to 25 ft-lbf	
	Y	[Signature]	Torque GASU/PDU to vibration fixture to 107 in-lbf ¹¹	
	Y	[Signature]	Confirm accelerometer installation	
Date	Axis	Test Setup	Test Variation Description	RE/QA Approval

Appendix D – Test Data Package Checklist



GLAST LAT Project GASU/PDU Vibration Testing

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

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



TEST DATA

DATE STARTED 07-28-05	CUSTOMER Stanford Linear Accelerator		TECHNICIAN (SIGNATURE) <i>D. Wiltshire</i>		
DATE COMPLETED 07-29-05	SPECIMEN DESCRIPTION TEM / TPS, PDU		ENGINEER (SIGNATURE) <i>M. Heddesten</i>		
TEMPERATURE 73°F	TYPE OF TEST VISUAL EXAMINATION - Initial		ENGINEER <i>M. Heddesten</i>		
HUMIDITY 41% R.H.	MANUFACTURER Stanford Linear Accelerator		JOB NUMBER 49995.52115		
SPECIMEN NUMBER 1 - 3	TEST SPECIFICATION SOP 6-08, REV. L				
SPECIMEN NUMBER	SERIAL NUMBER	PART OR MODEL NUMBER	LOT NUMBER	DATE CODE	REMARKS
1	GLAT 1848	-	-	-	TEM / TPS
2	GLAT 1847	-	-	-	TEM / TPS
3	GLAT1898	-	-	-	PDU
					Note: No discrepancies noted.

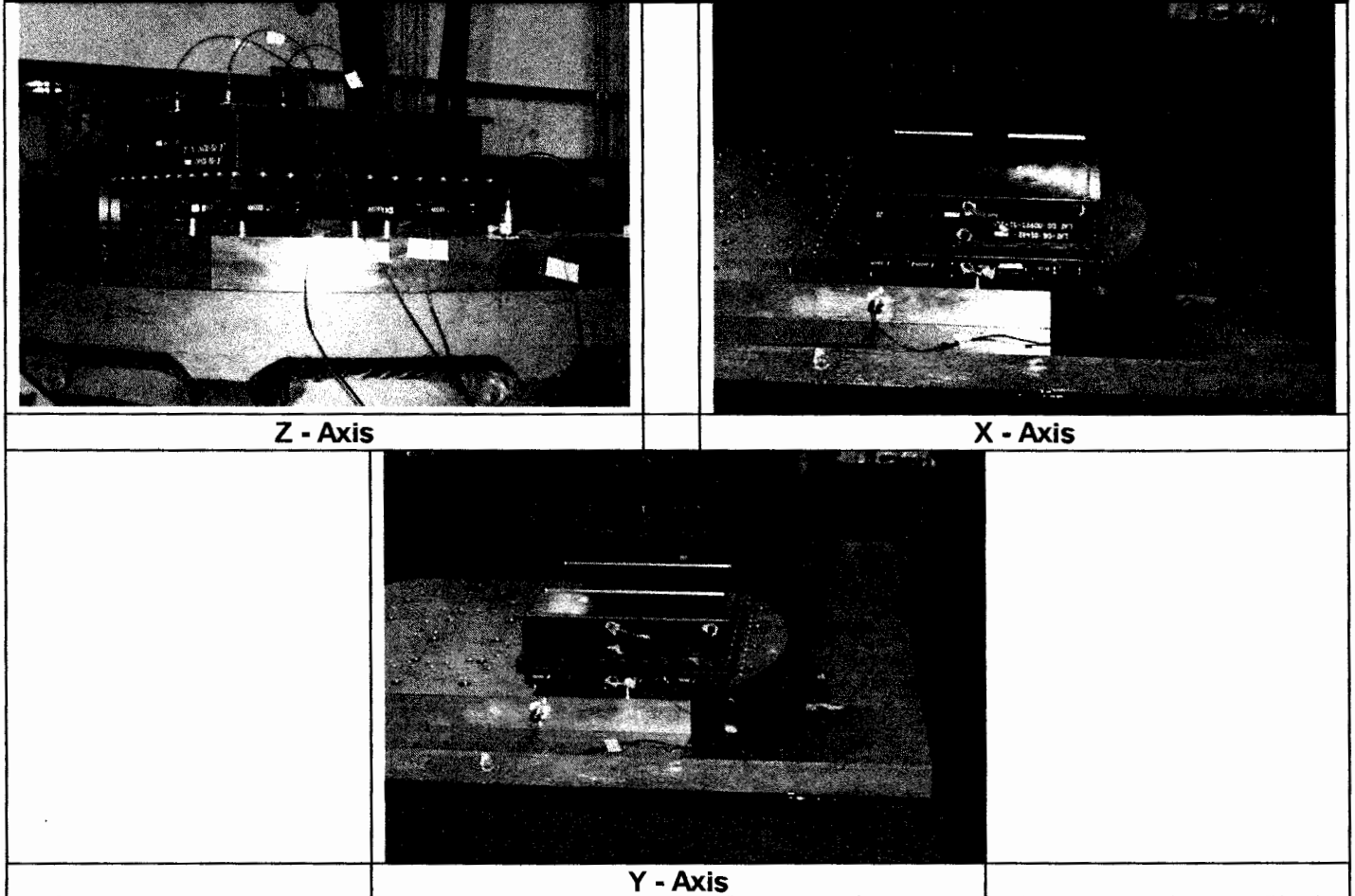


TEST DATA


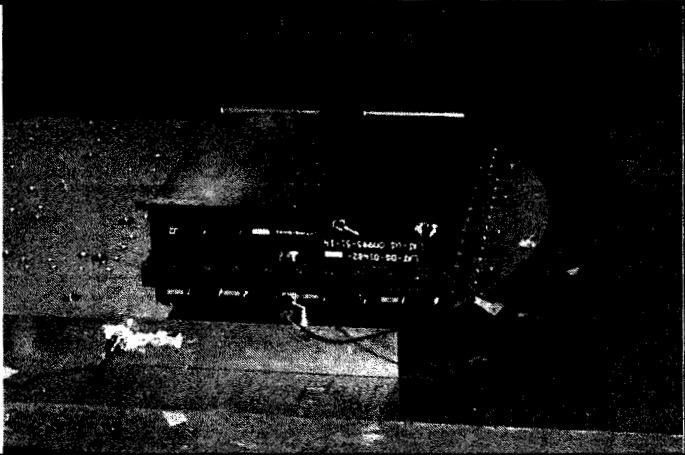

DATE STARTED 08-02-05		CUSTOMER Stanford Linear Accelerator			TECHNICIAN (SIGNATURE) <i>A. Wiltshire</i> WSC T-21	
DATE COMPLETED 08-02-05		SPECIMEN DESCRIPTION TEM / TPS			ENGINEER (SIGNATURE) <i>Sime Chasny</i> WSC Q-02	
TEMPERATURE 74°F		TYPE OF TEST VISUAL EXAMINATION - Initial			ENGINEER <i>Sime Chasny</i>	
HUMIDITY 38% R.H.		MANUFACTURER Stanford Linear Accelerator			JOB NUMBER 49995.52129	
SPECIMEN NUMBER 1		TEST SPECIFICATION SOP 6-08, REV. L				
SPECIMEN NUMBER	SERIAL NUMBER	PART OR MODEL NUMBER	LOT NUMBER	DATE CODE	REMARKS	
1	GLAT 1849	-	-	-	Note: No discrepancies noted.	

TEST DATA

DATE STARTED 07-28-05	CUSTOMER Stanford Linear Accelerator	TECHNICIAN (SIGNATURE) <i>D. Wiltshire</i> T-21
DATE COMPLETED 07-29-05	SPECIMEN DESCRIPTION TEM & TPS { See Initial Visual }	ENGINEER (SIGNATURE) <i>M. Heddleston</i>
TEMPERATURE 73°F	TYPE OF TEST SET-UP - Detail	ENGINEER <i>M. Heddleston</i>
HUMIDITY 41% R.H.	MANUFACTURER Stanford Linear Accelerator	JOB NUMBER 49995.52115
SPECIMEN NUMBER 1 - 3	TEST SPECIFICATION See Vibration Data	



TEST DATA

DATE STARTED 08-02-05	CUSTOMER Stanford Linear Accelerator	TECHNICIAN (SIGNATURE) <i>D. Wiltshire</i> WSC T-21
DATE COMPLETED 08-02-05	SPECIMEN DESCRIPTION TEM & TPS { See Initial Visual }	ENGINEER (SIGNATURE) <i>S. MacLennan</i> WSC Q-02
TEMPERATURE 74°F	TYPE OF TEST SET-UP - Detail	ENGINEER <i>S. MacLennan</i>
HUMIDITY 38% R.H.	MANUFACTURER Stanford Linear Accelerator	JOB NUMBER 49995.52129
SPECIMEN NUMBER 1	TEST SPECIFICATION See Vibration Data	
		
Z - Axis		X - Axis
		
Y - Axis		



TEST DATA

DATE STARTED 07-28-05		CUSTOMER Stanford Linear Accelerator			TECHNICIAN (SIGNATURE) <i>D. Wiltshire</i> [Stamp: WSC 7-21]	
DATE COMPLETED 07-29-05		SPECIMEN DESCRIPTION TEM / TPS { See Initial Visual }			ENGINEER (SIGNATURE) <i>M. Heddleston</i>	
TEMPERATURE 73°F		TYPE OF TEST VIBRATION - Sine and Random – Non-Op.			ENGINEER <i>M. Heddleston</i>	
HUMIDITY 41% R.H.		MANUFACTURER Stanford Linear Accelerator			JOB NUMBER 49995.52115	
SPECIMEN NUMBER 1 - 3		TEST SPECIFICATION SLAC LAT-TD-05649 & Customer Instruction				
SPECIMEN NUMBER	DATE	AXIS	TIME START	TIME STOP	VIBRATION FREQUENCIES AND LEVELS	REMARKS
1	07-28-05	Z	1341	+0:04:18	<p>Sine - Search ⁵20 - 2000Hz @ 0.15g 2 octaves / minute 1 sweep up / axis</p> <p>Random – Accept. 20Hz @ 0.01 G²/Hz 80 - 500Hz @ 0.04 G²/Hz 2000Hz @ 0.01 G²/Hz 6.79 Grms overall 1 minute / axis</p>	Sine Search
1			1359	+0:01:02		Random Accept.
1			1409	+0:04:18		Sine Search
2			1435	+0:04:18		Sine Search
			1448	+0:01:01		Random Accept.
		Z	1457	+0:04:18		Sine Search
		X	1551	+0:04:18		Sine Search
			1603	+0:01:00		Random Accept.
		X	1611	+0:04:18		Sine Search
		Y	1629	+0:04:18		Sine Search
			1640	+0:01:00		Random Accept.
2			1646	+0:04:18		Sine Search
1			1703	+0:04:18		Sine Search
1	07-28-05	Y	1715	+0:01:00		Random Accept.



TEST DATA

DATE STARTED 07-28-05	CUSTOMER Stanford Linear Accelerator	TECHNICIAN (SIGNATURE) <i>D. Wiltshire</i> WSC T-21
DATE COMPLETED 07-29-05	SPECIMEN DESCRIPTION TEM / TPS { See Initial Visual }	ENGINEER (SIGNATURE) <i>M. Heddleston</i>
TEMPERATURE 73°F	TYPE OF TEST VIBRATION - Sine and Random – Non-Op.	ENGINEER <i>M. Heddleston</i>
HUMIDITY 41% R.H.	MANUFACTURER Stanford Linear Accelerator	JOB NUMBER 49995.52115
SPECIMEN NUMBER 1 - 3	TEST SPECIFICATION SLAC LAT-TD-05649 & Customer Instruction	

SPECIMEN NUMBER	DATE	AXIS	TIME START	TIME STOP	VIBRATION FREQUENCIES AND LEVELS	REMARKS
1	07-28-05	Y	1720	+0:04:18	⁵ 20 - 2000Hz @ 0.15g 2 octaves / minute 1 sweep up / axis	Sine Search
		X	1733	+0:04:18		Sine Search
		X	1742	+0:01:00		Random Accept.
1	07-28-05	X	1748	+0:04:18	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
						Note: Specimens were returned to customer for a post test evaluation

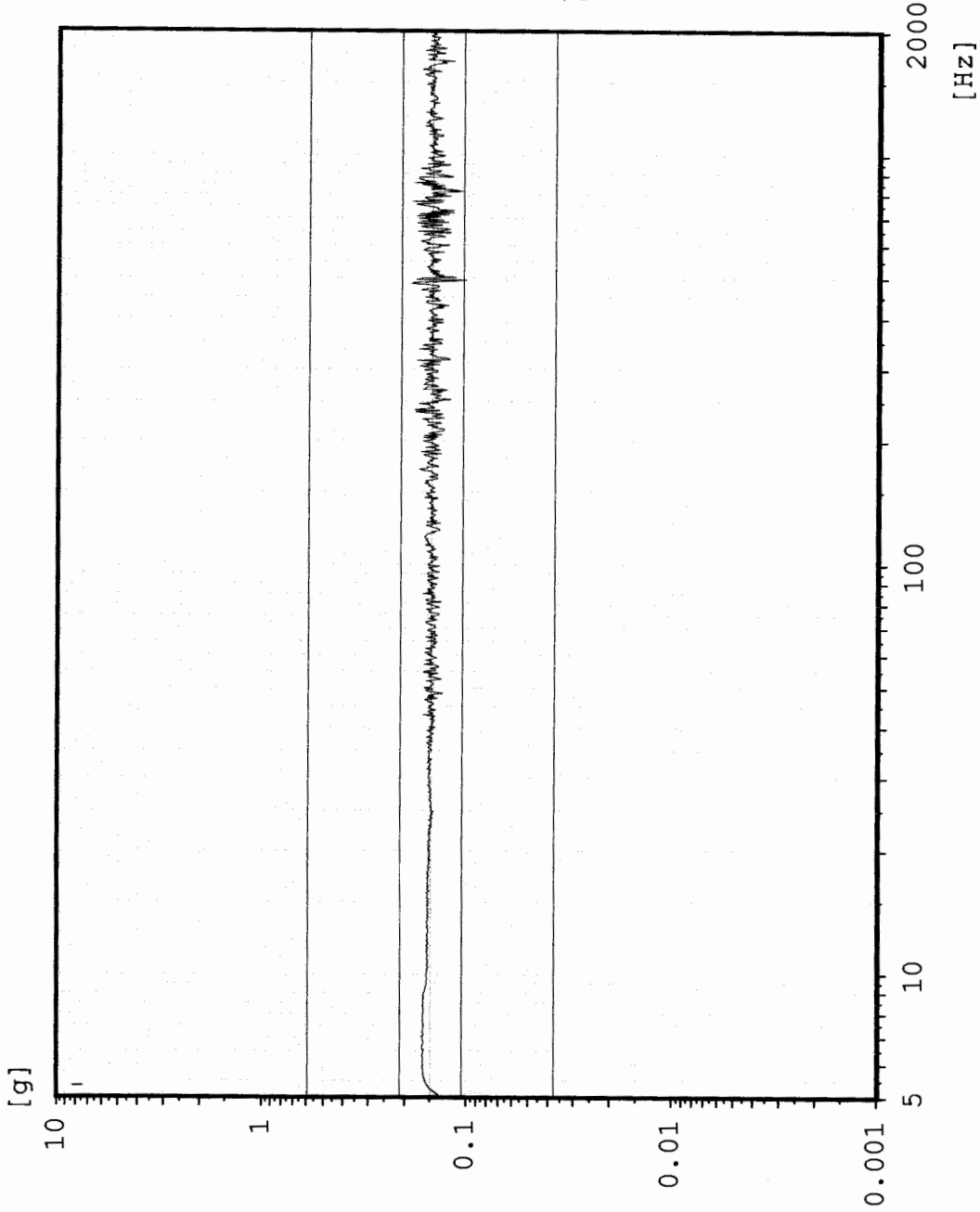


TEST DATA

DATE STARTED 08-02-05		CUSTOMER Stanford Linear Accelerator			TECHNICIAN (SIGNATURE) <i>D. Wittahie</i> WSC T-21	
DATE COMPLETED 08-02-05		SPECIMEN DESCRIPTION TEM / TPS { See Initial Visual }			ENGINEER (SIGNATURE) <i>S. MacChesney</i> WSC Q-02	
TEMPERATURE 74°F		TYPE OF TEST VIBRATION - Sine and Random - Non-Op.			ENGINEER <i>S. MacChesney</i>	
HUMIDITY 38% R.H.		MANUFACTURER Stanford Linear Accelerator			JOB NUMBER 49995.52129	
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	08-02-05	X	0922	+0:04:12	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;repeat,bad charge amp
		X	1003	+0:04:18		Sine Search
		X	1019	+0:01:00		Random Accept.
		X	1024	+0:04:18		Sine Search
		Y	1047	+0:04:18		Sine Search
		Y	1058	+0:01:00		Random Accept.
		Y	1106	+0:04:18		Sine Search;repeat,retorqued bolts
		Y	1121	+0:04:18		Sine Search
		Z	1223	+0:04:18		Sine Search
		Z	1235	+0:01:01		Random Accept.
1	08-02-05	Z	1243	+0:04:18		Sine Search
						Note:No external physical damage noted due to this test.

Sine CX1 X-Axis Control

Stanford Linear Accelerator
J/N 49995.52115
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

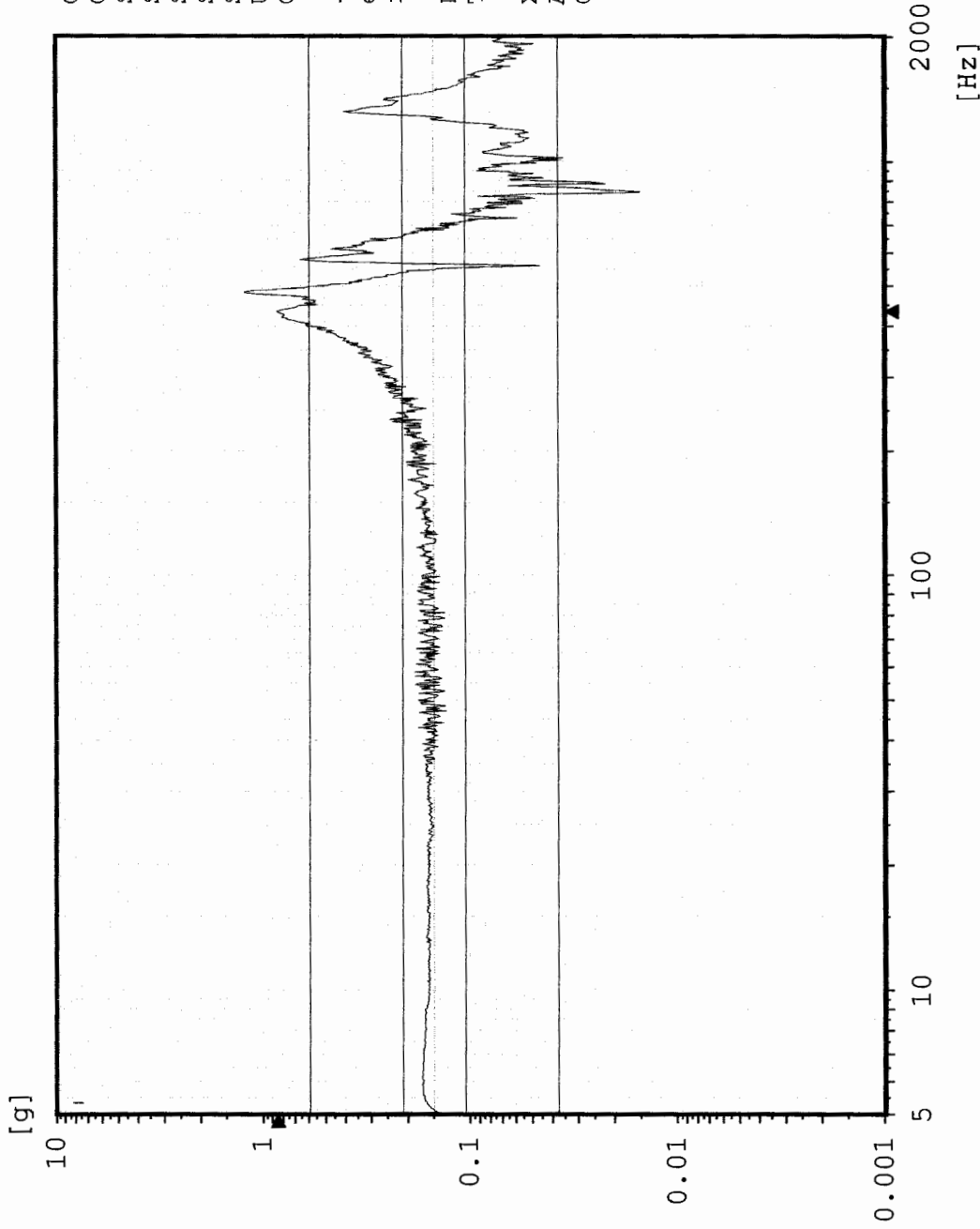
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 15:55:47

X - axis Pre Random
Acceptance Unit
GLAT 1847

Sine AX3 TPS top center

Stanford Linear Accelerator
J/N 49995.52115
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

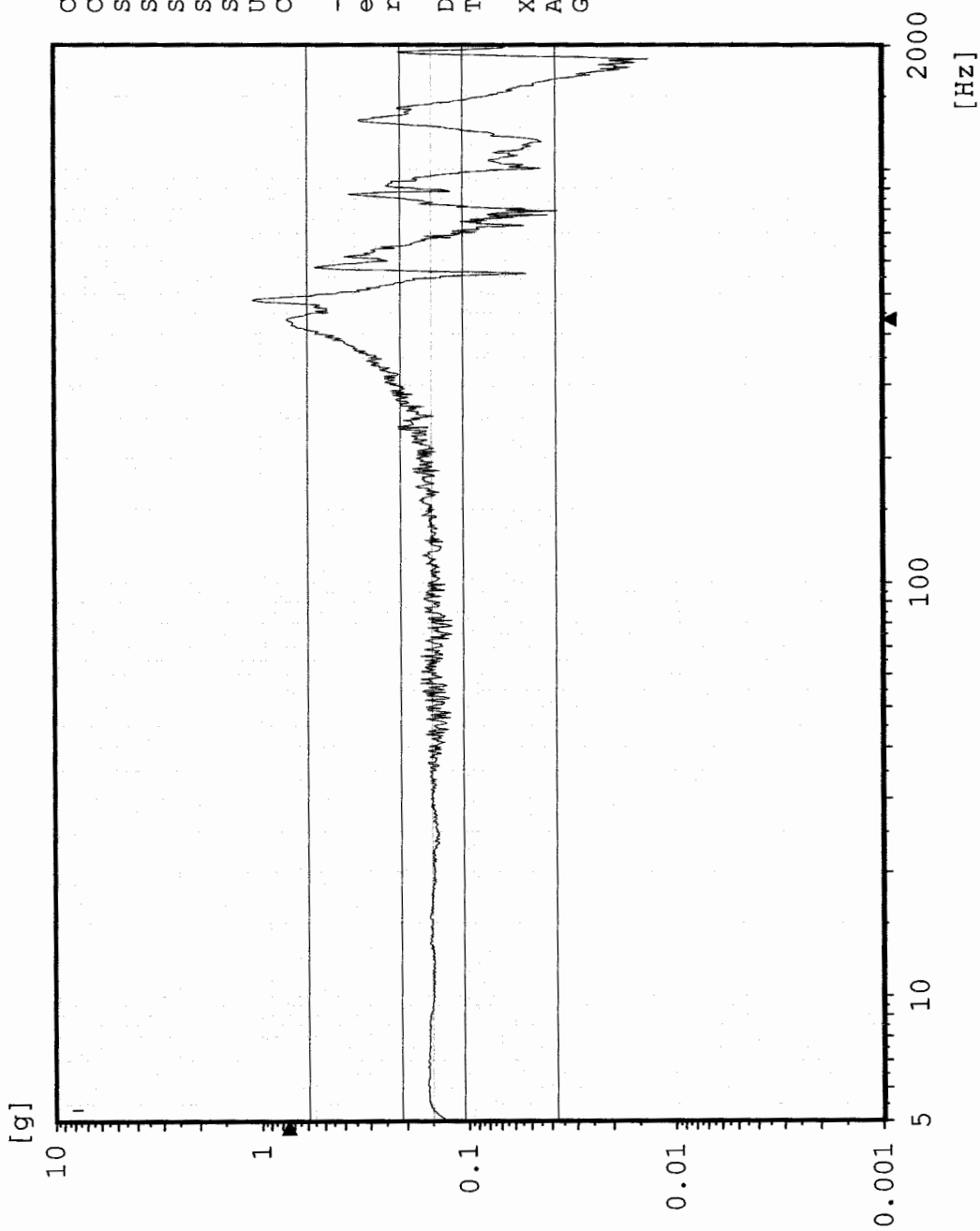
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 15:55:47

X - axis Pre Random
 Acceptance Unit
 GLAT 1847

Sine AX4 TPS top edge

Stanford Linear Accelerator
J/N 49995.52115
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

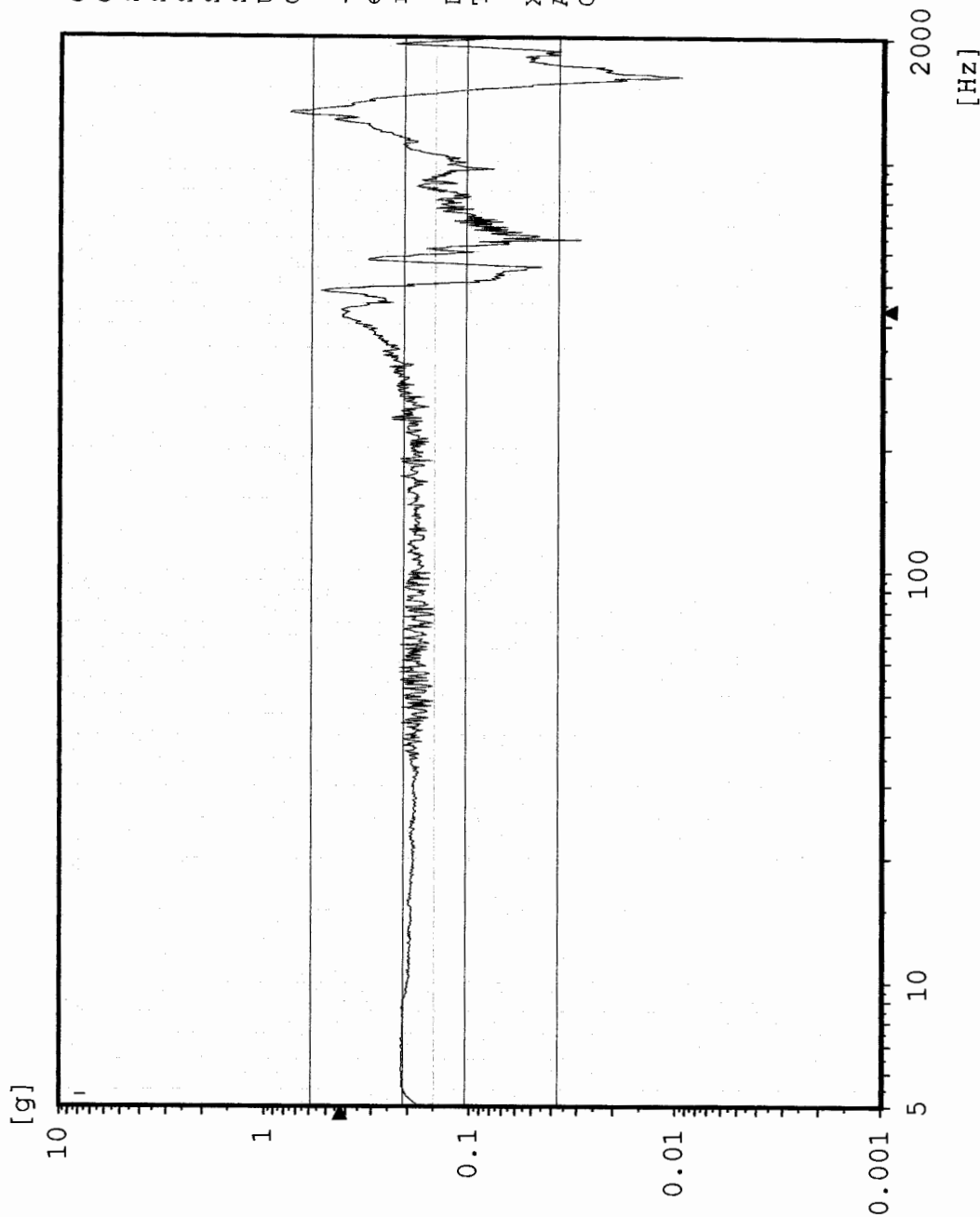
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 15:55:47

X - axis Pre Random
 Acceptance Unit
 GLAT 1847

Sine AX1 TEM center edge

Stanford Linear Accelerator
J/N 49995.52115
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

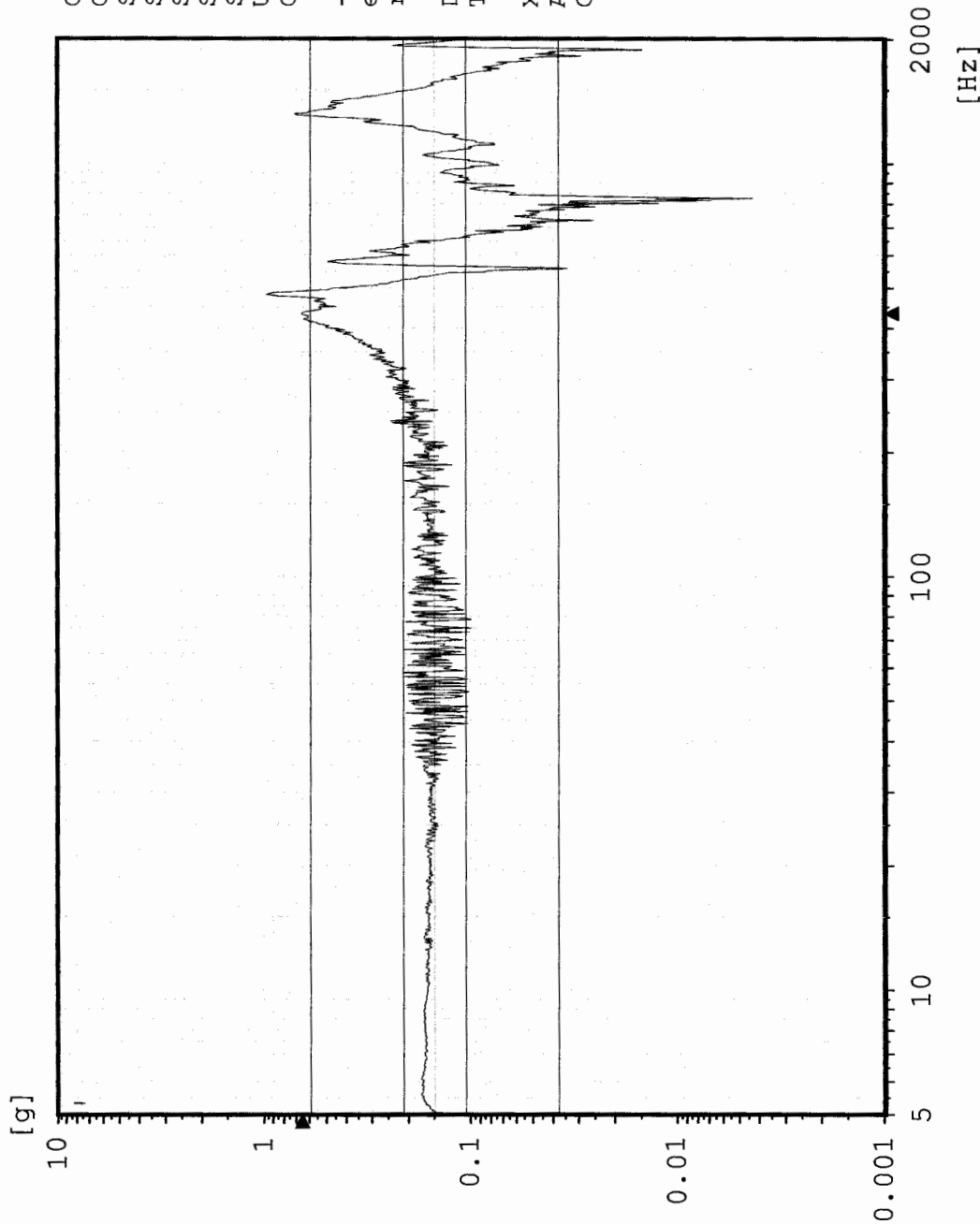
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 15:55:47

X - axis Pre Random
Acceptance Unit
GLAT 1847

AX2 TPS CG

Sine
Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
 Time: 15:55:47

X - axis Pre Random
 Acceptance Unit
 GIAT 1847

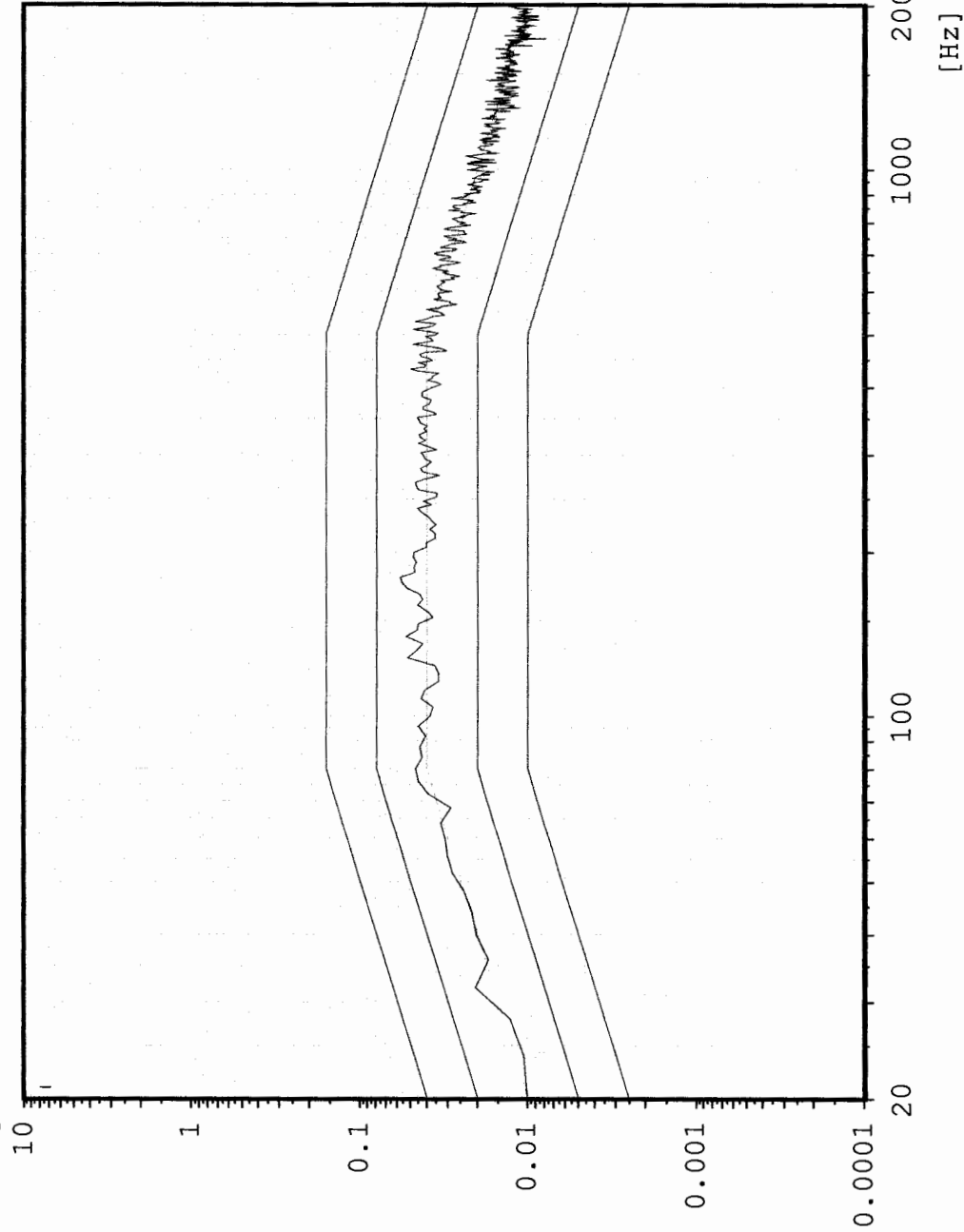
Random

Stanford Linear Accelerator
J/N 49995.52115
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.): 6.838 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: 07-28-05
Time: 16:04:10

X - Axis
Acceptance Unit
GLAT 1847

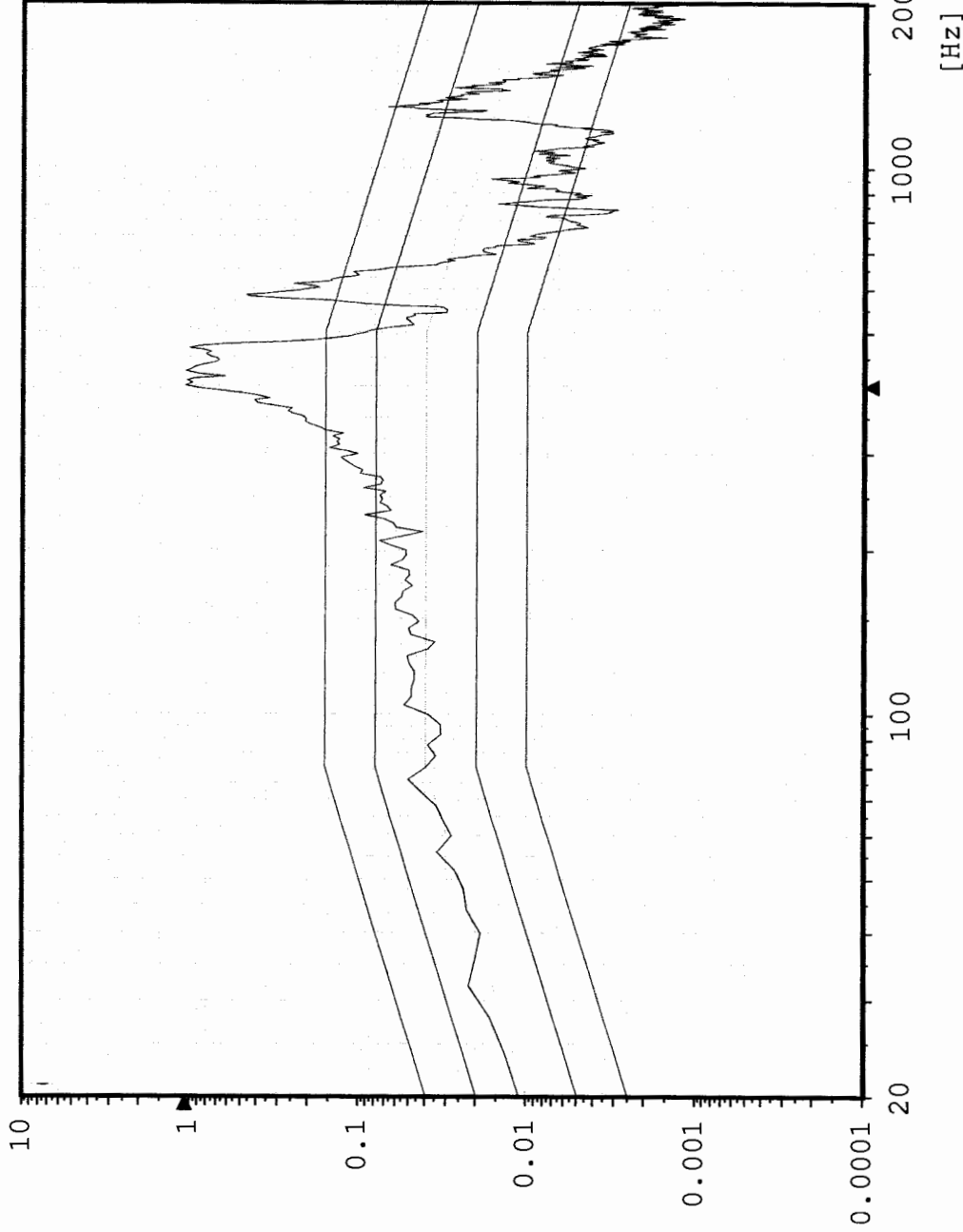
Cursor: 400 Hz 1.074 g²/Hz

Random AX4 TPS Top Center

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



[g²/Hz]



Chan.no: 2
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 12.26 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

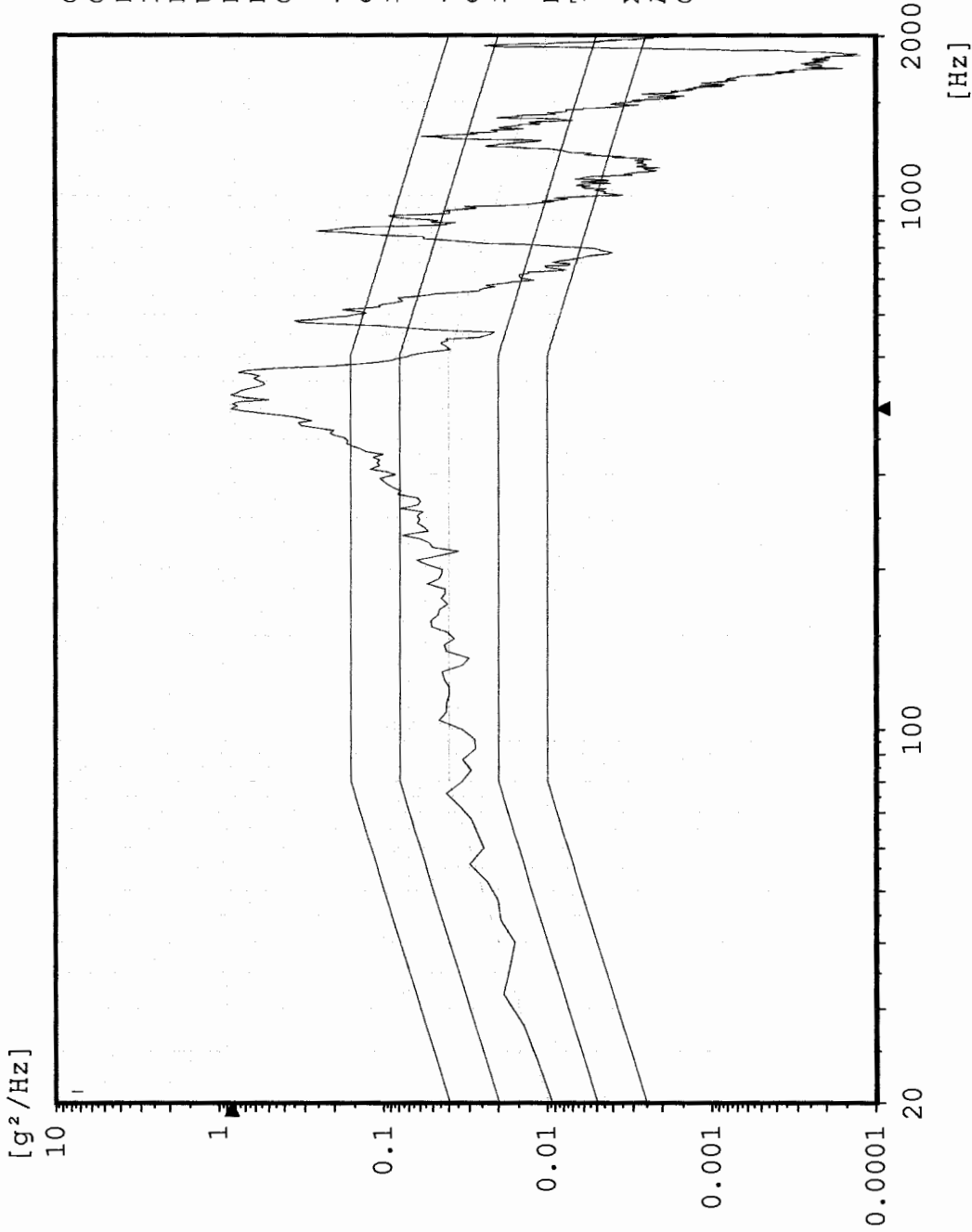
Date: 07-28-05
Time: 16:04:10

X - Axis
Acceptance Unit
GLAT 1847

Max: 400 Hz 0.8486 g²/Hz

Random AX3 TPS Top Edge

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



Chan.no: 3
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 11.27 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

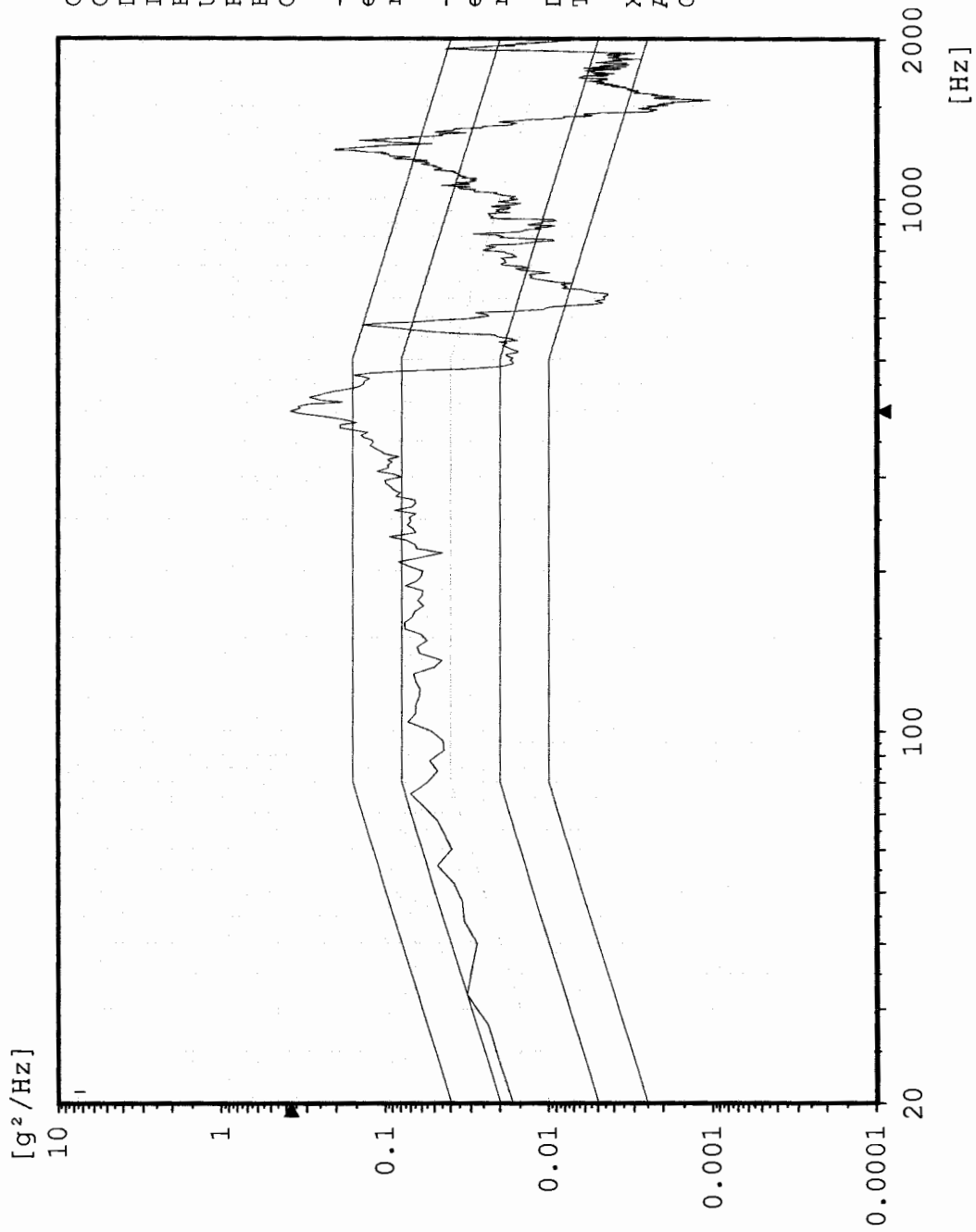
Date: 07-28-05
Time: 16:04:10

X - Axis
Acceptance Unit
GLAT 1847

Max: 400 Hz 0.3777 g²/Hz

Random CH# 5 TEM center edge

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



Chan.no: 5
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 9.245 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

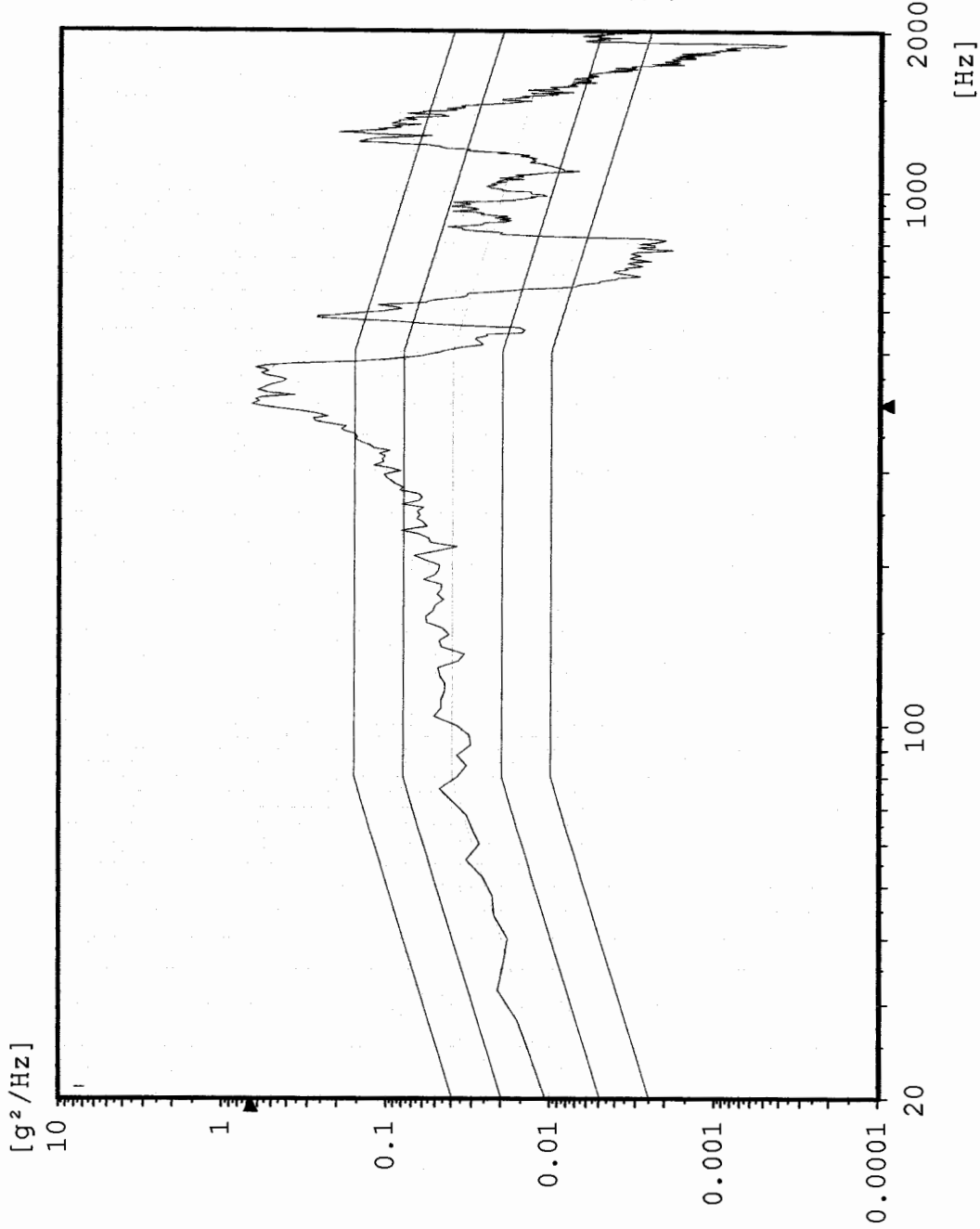
Date: 07-28-05
Time: 16:04:10

X - Axis
Acceptance Unit
GLAT 1847

Max: 400 Hz 0.6716 g²/Hz

Random AX2 TPS Bottom center

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



Chan.no: 10
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 10.99 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

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

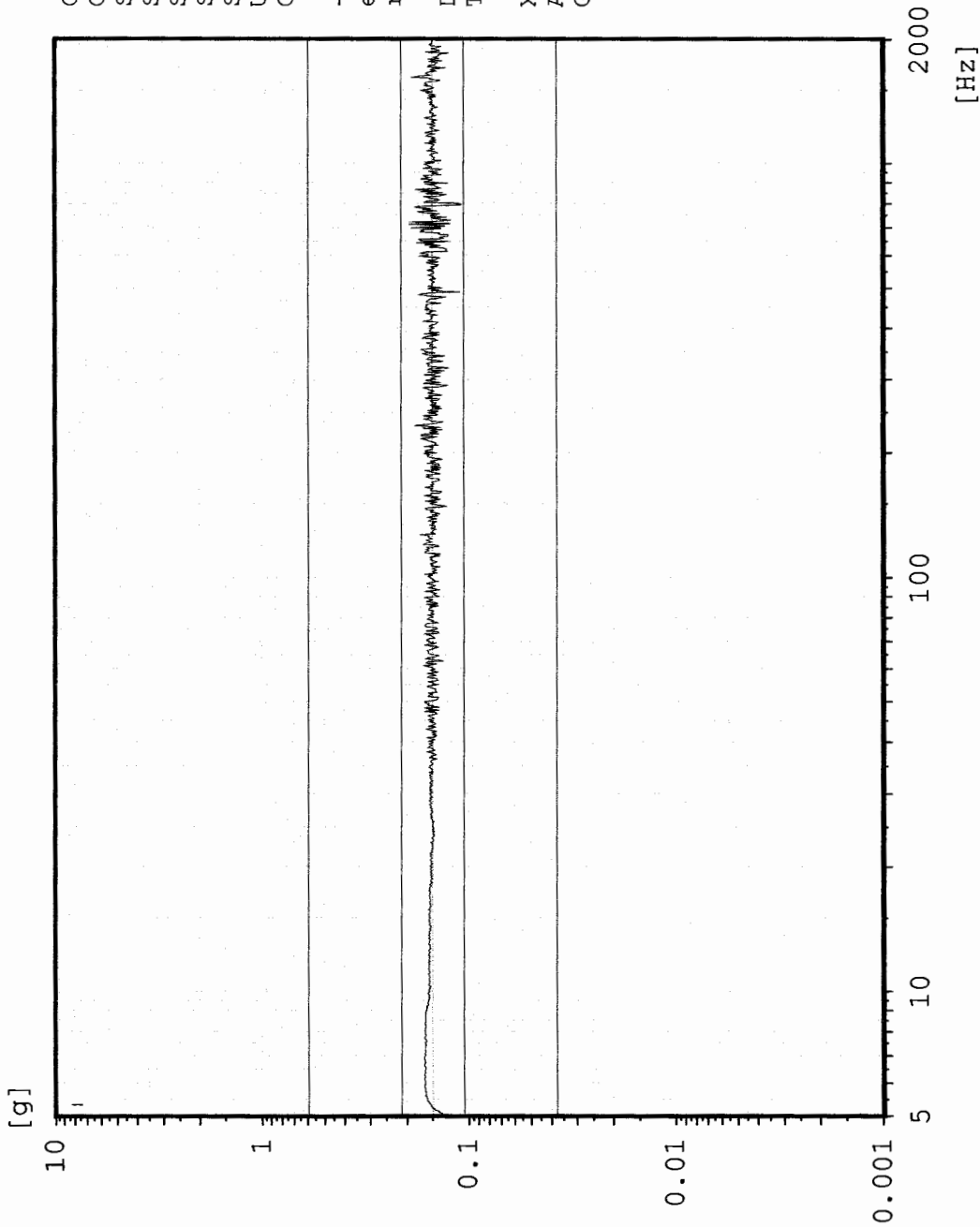
-- Time total --
elapsed: 000:02:53
remaining: 000:00:00

Date: 07-28-05
Time: 16:04:10

X - Axis
Acceptance Unit
GLAT 1847

Sine CX1 X-Axis Control

Stanford Linear Accelerator
J/N 49995.52115
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

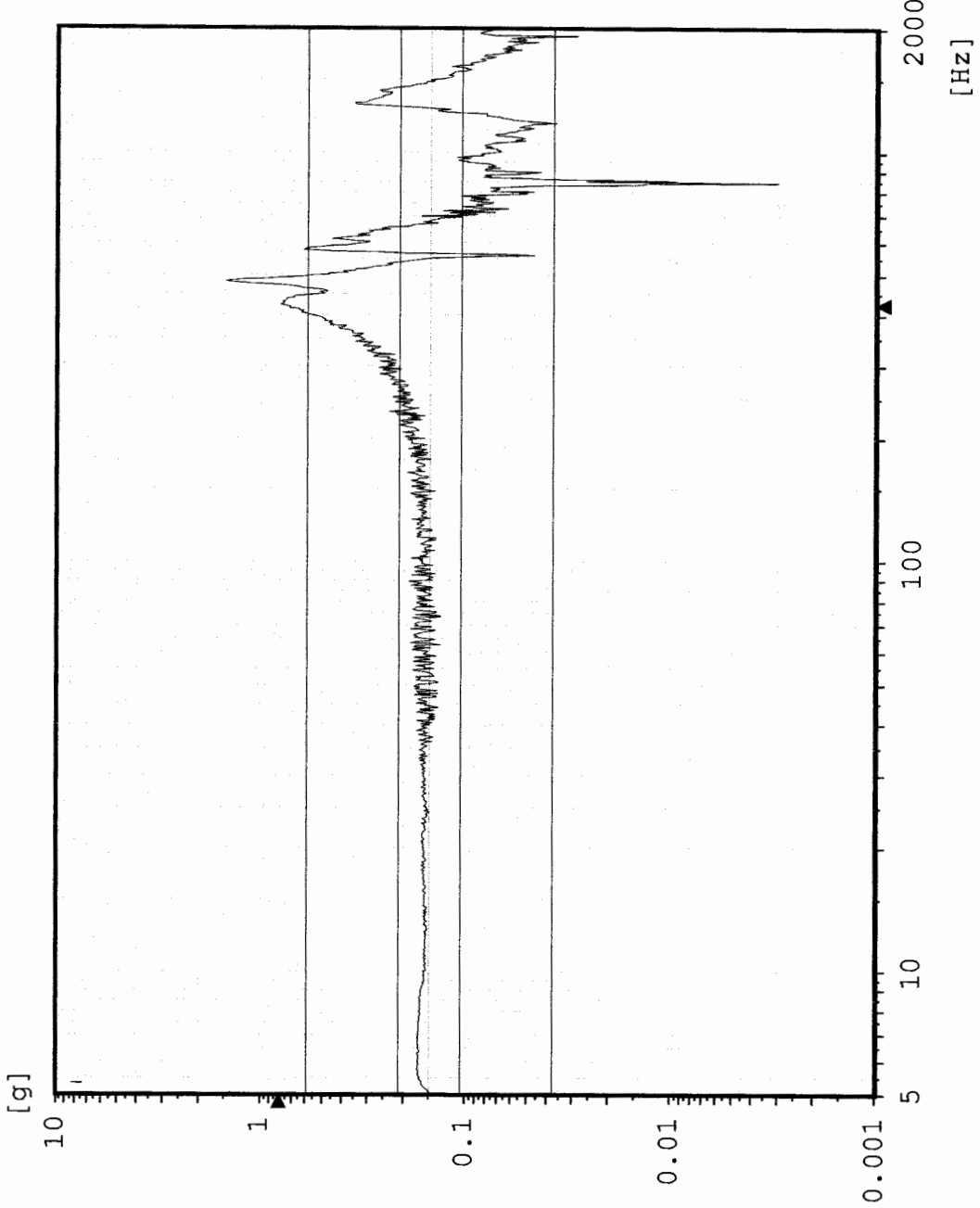
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 16:15:32

X - axis Post Random
Acceptance Unit
GLAT 1847

Sine AX3 TPS top center

Stanford Linear Accelerator
J/N 49995.52115
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

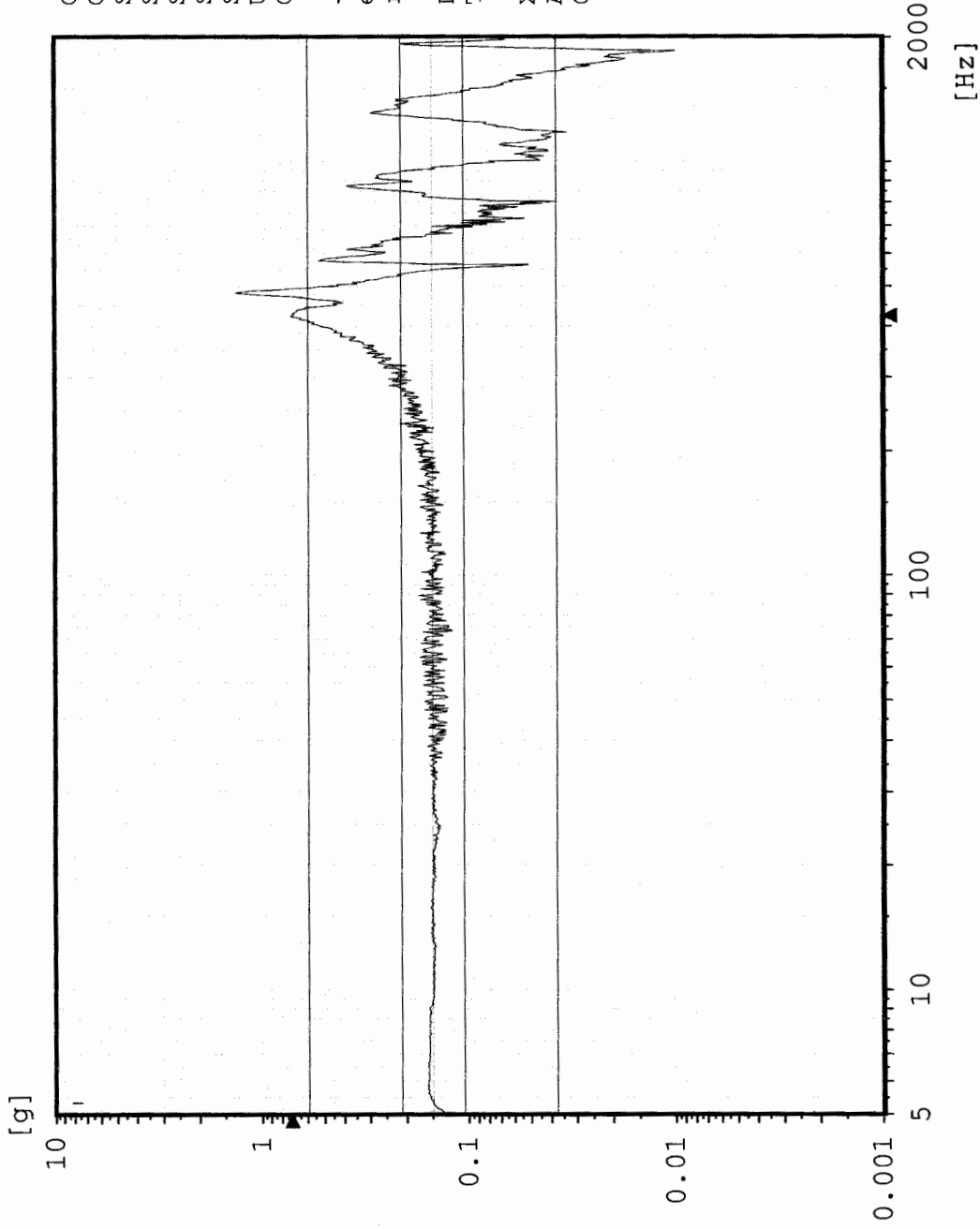
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 16:15:32

X - axis Post Random
Acceptance Unit
GLAT 1847

AX4 TPS top edge

Sine
Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
Time: 16:15:32

X - axis Post Random
Acceptance Unit
GLAT 1847

Sine AXI TEM center edge

Stanford Linear Accelerator
J/N 49995.52115
TEM / TPS

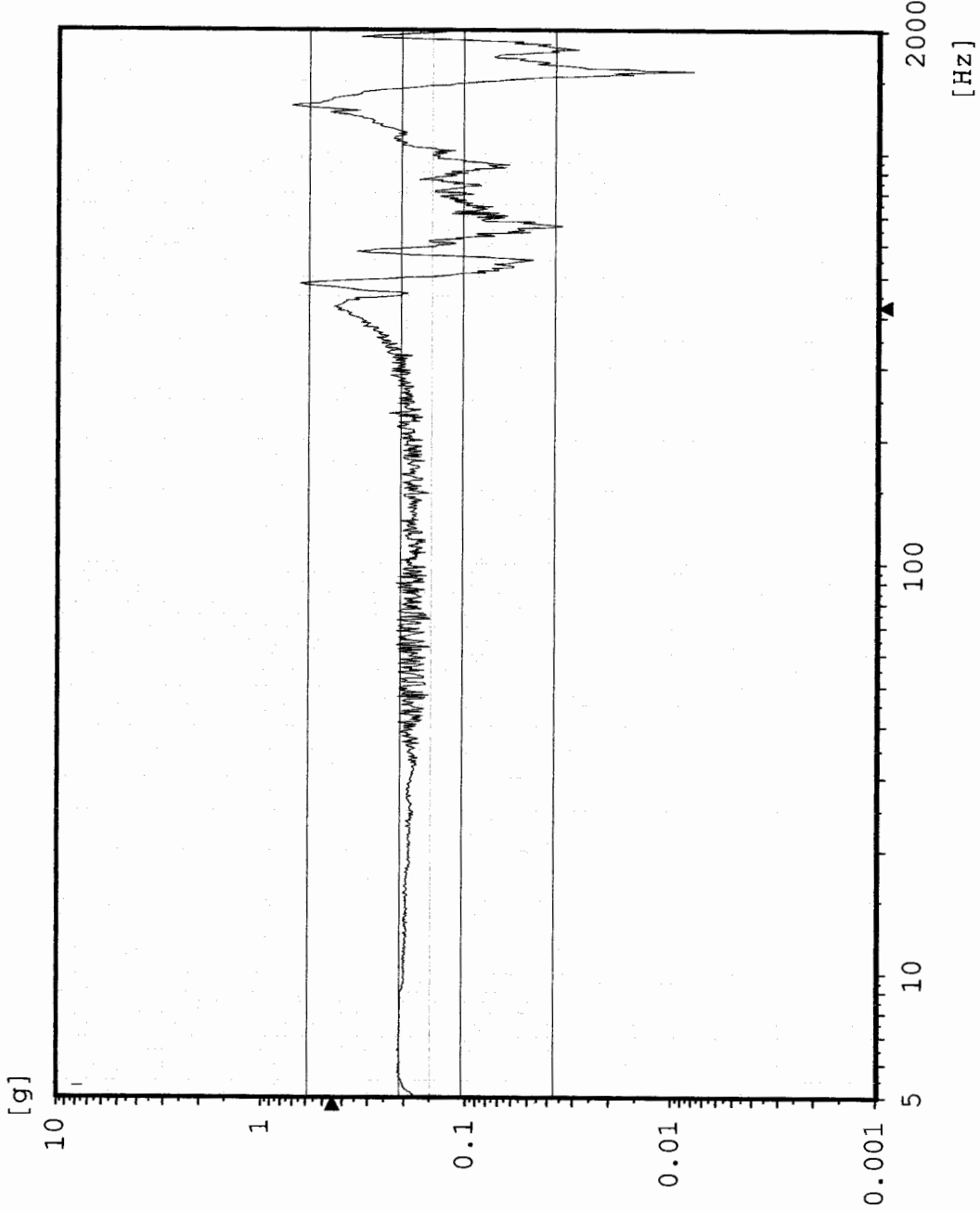


Chan.no: 5
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

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

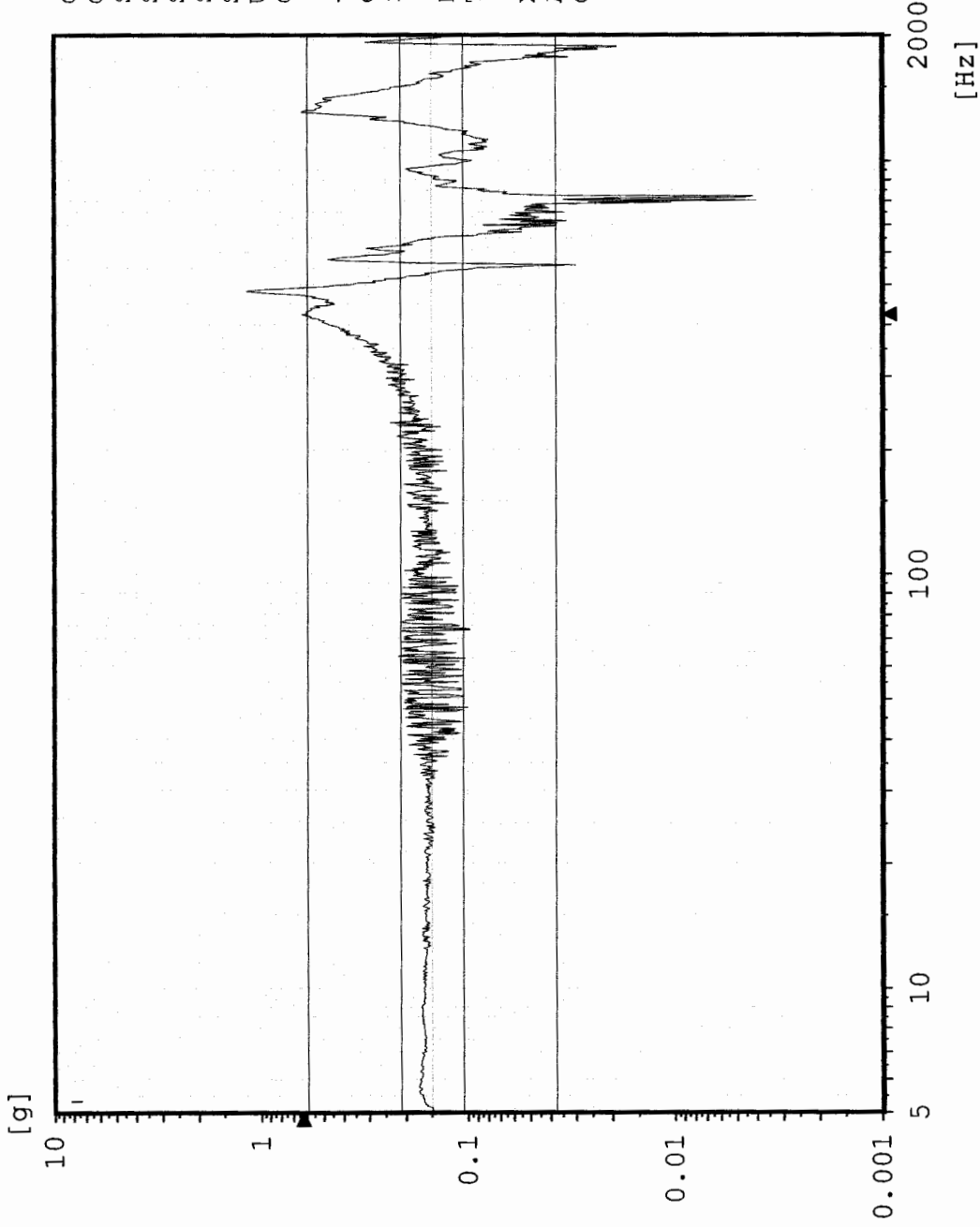
Date: 07-28-05
Time: 16:15:32

X - axis Post Random
Acceptance Unit
GLAT 1847



Sine AX2 TPS CG

Stanford Linear Accelerator
J/N 49995.52115
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

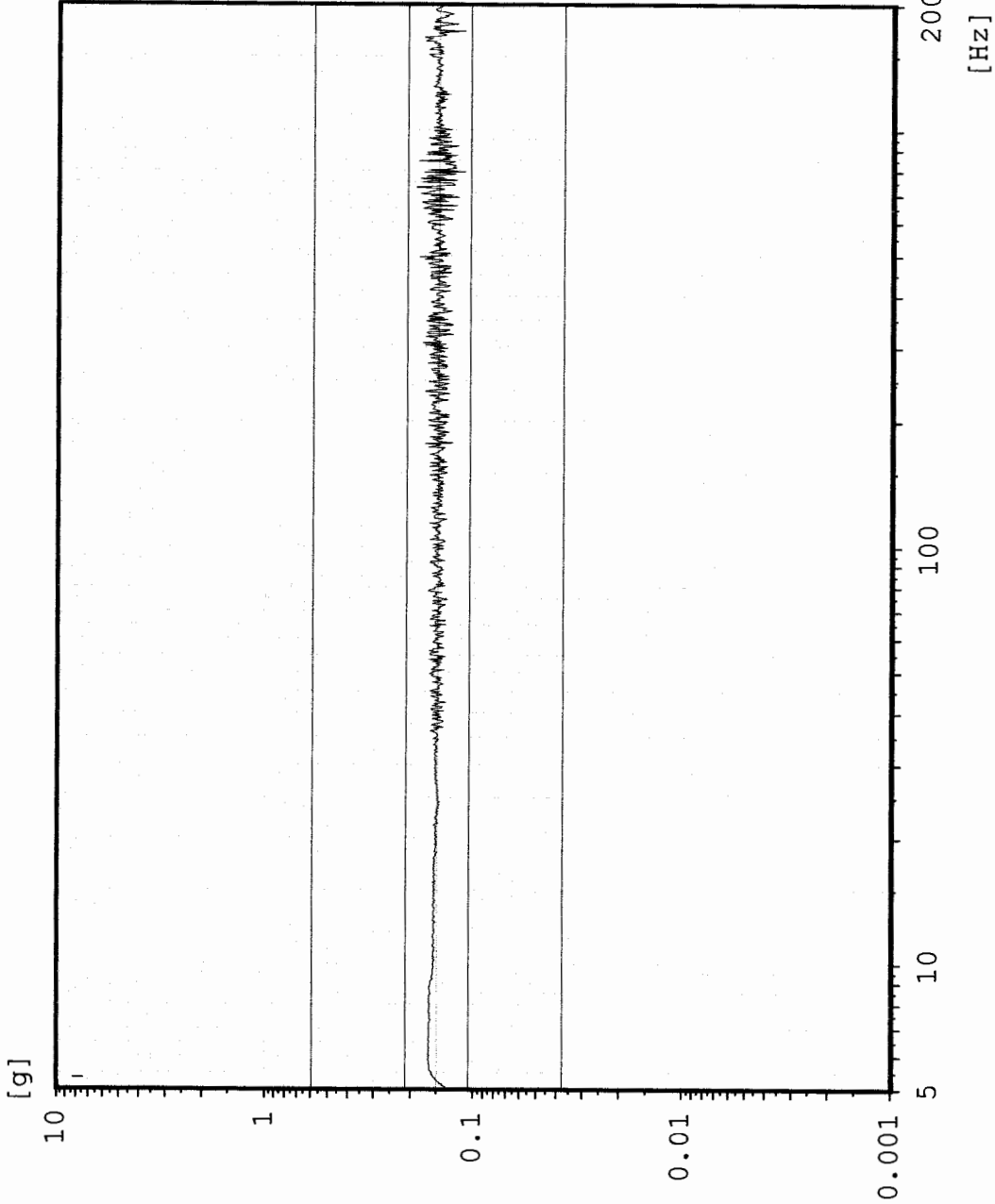
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 16:15:32

X - axis Post Random
 Acceptance Unit
 GLAT 1847

Sine CY1 Y-Axis Control

Stanford Linear Accelerator
J/N 49995.52115
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

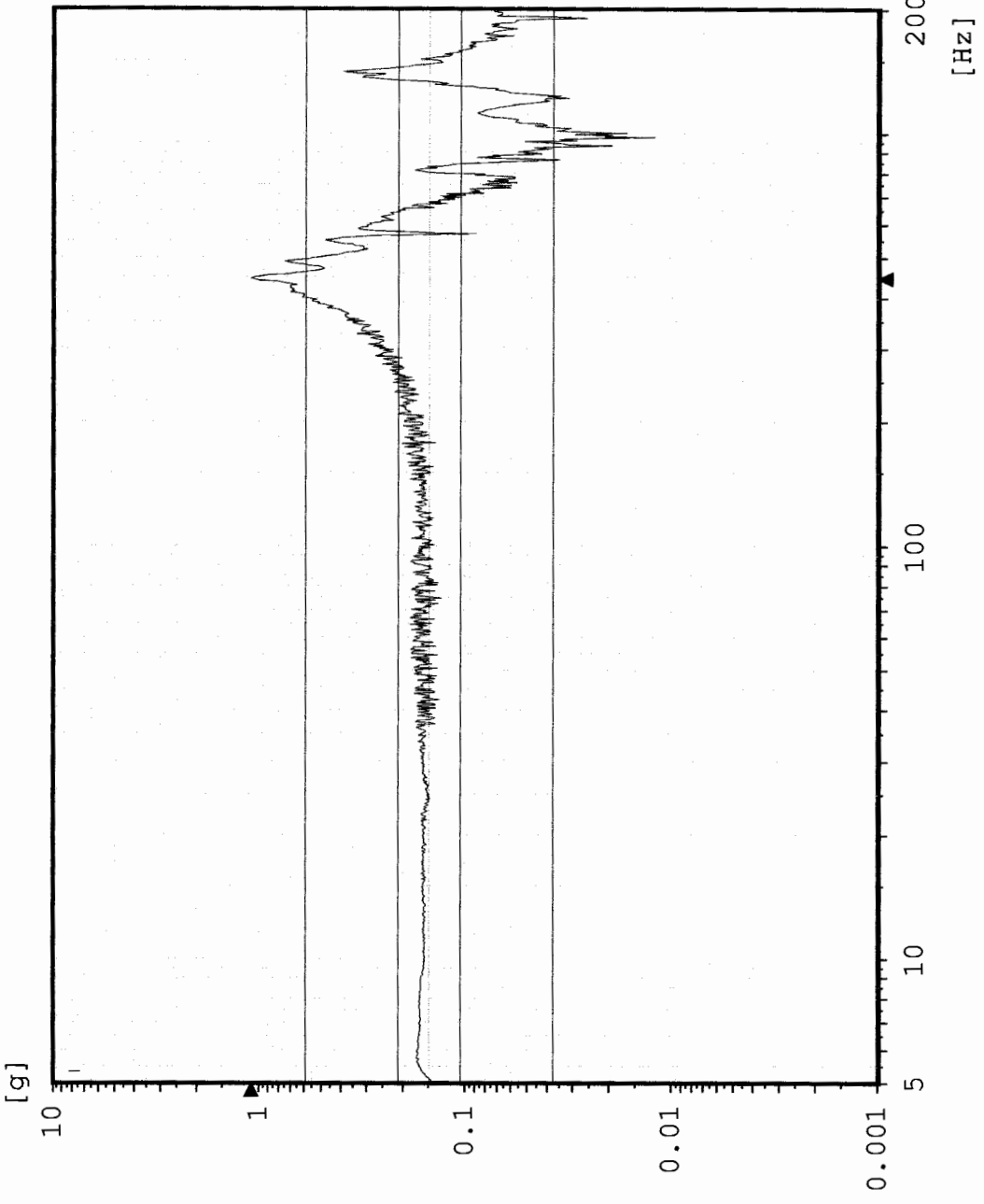
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 16:33:38

Y - axis Pre Random
Acceptance Unit
GLAT 1847

AY3 TPS Top Center

Sine
Stanford Linear Accelerator
J/N 49995.52115
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

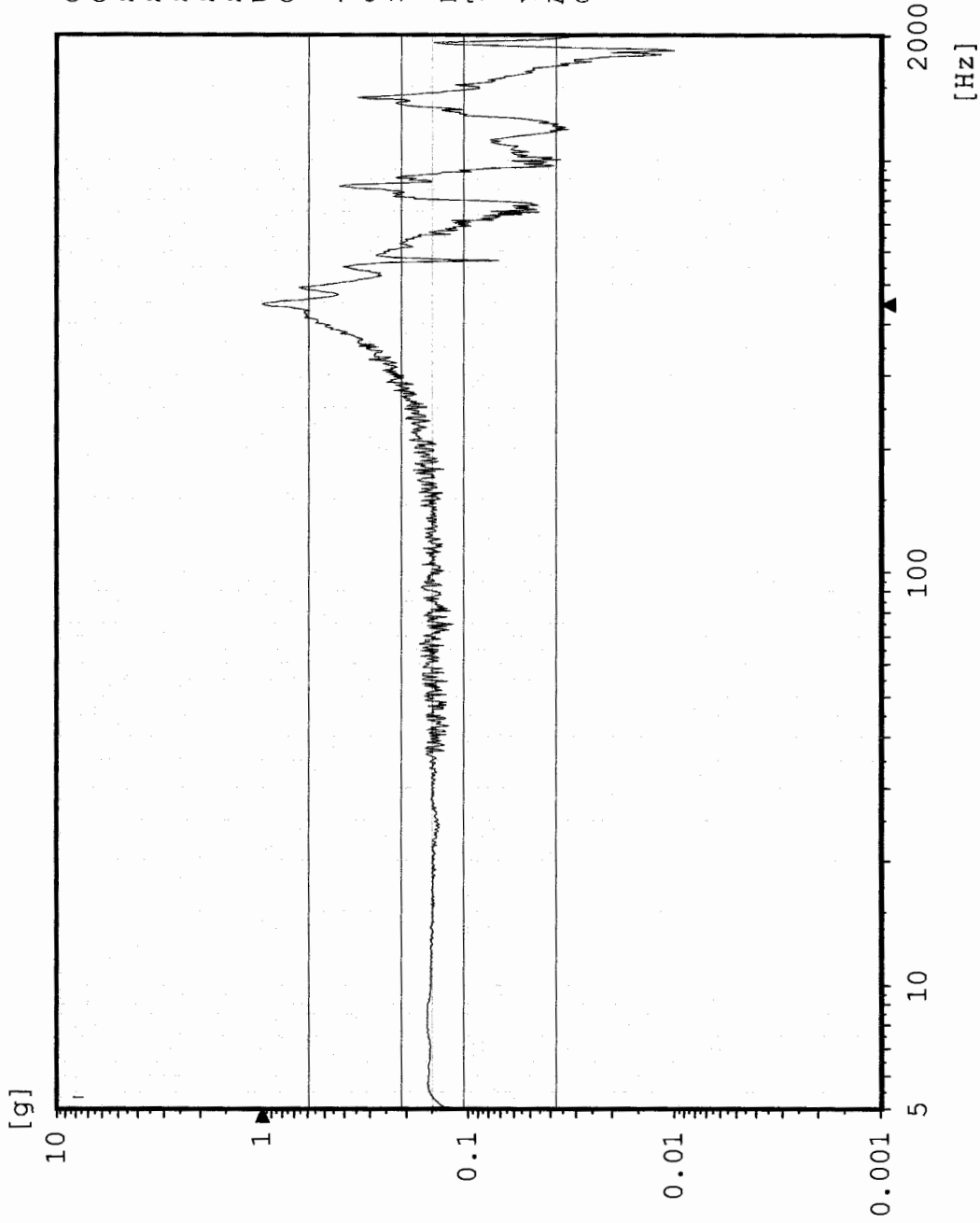
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 16:33:38

Y - axis Pre Random
 Acceptance Unit
 GLAT 1847

Sine AY4 TPS Top Edge

Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
 Time: 16:33:38

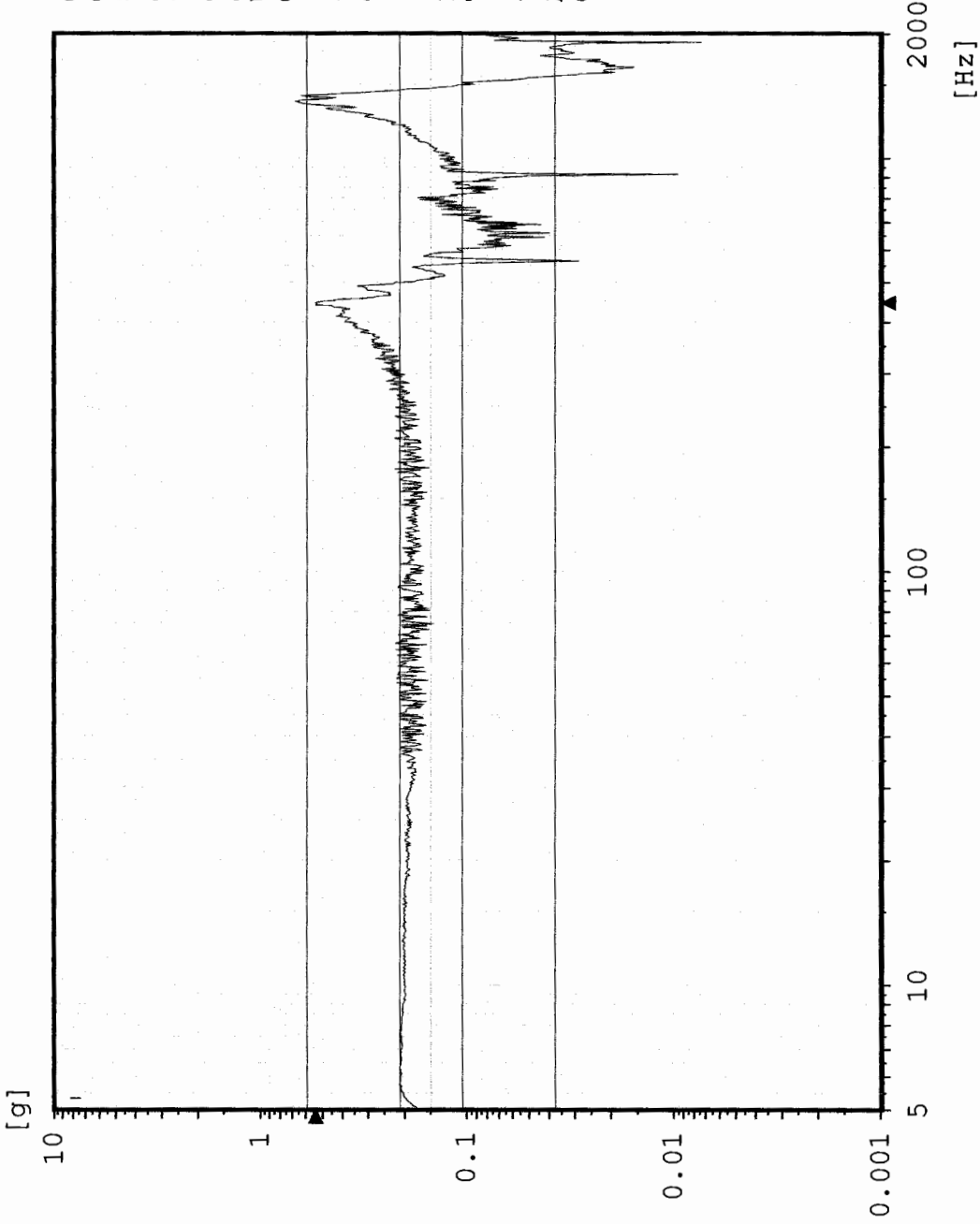
Y - axis Pre Random
 Acceptance Unit
 GLAT 1847

Sine AY1 TEM Center Edge

Stanford Linear Accelerator

J/N 49995.52115

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

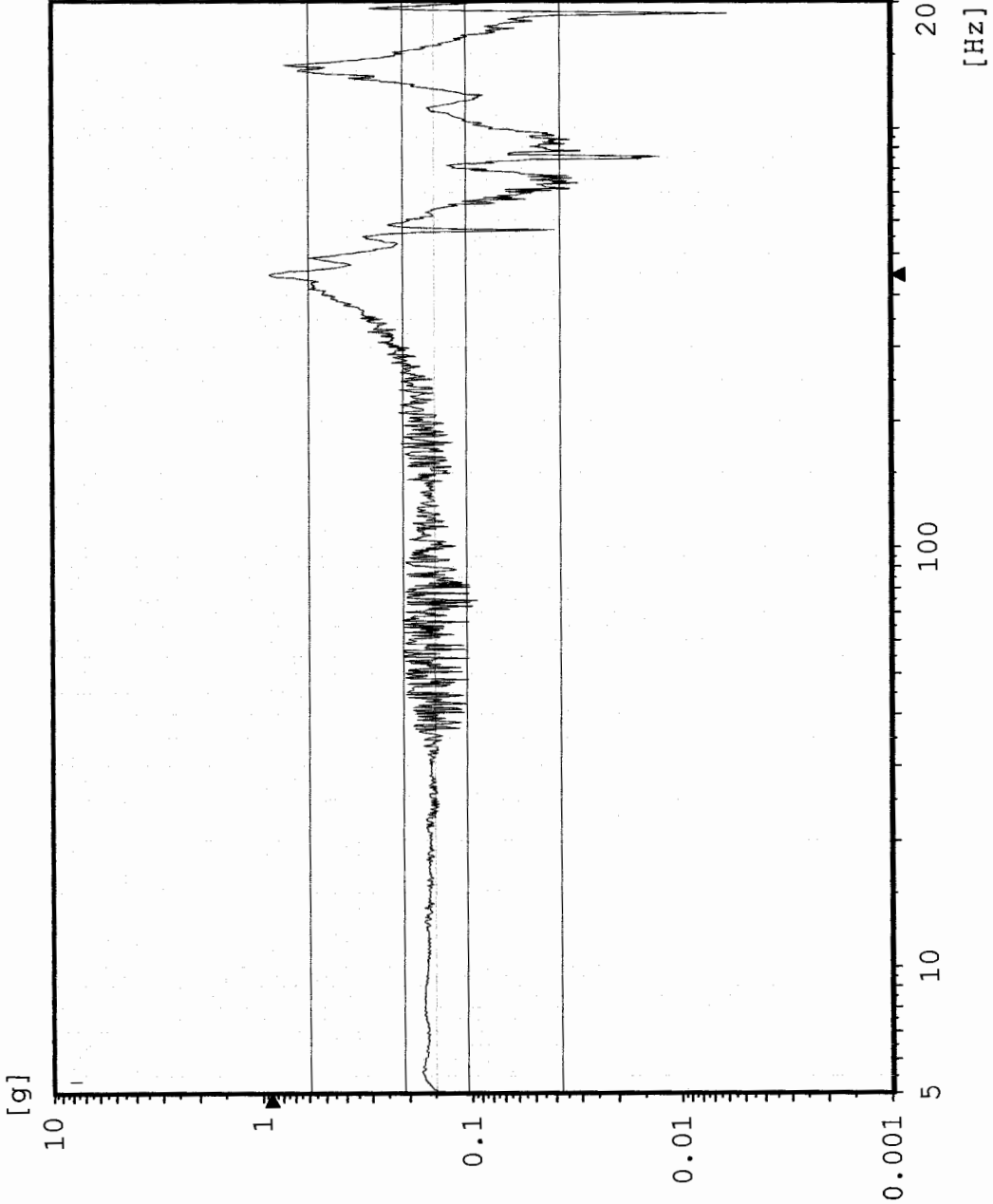
Date: 07-28-05
 Time: 16:33:38

Y - axis Pre Random
 Acceptance Unit
 GLAT 1847

Max: 446.6 Hz 0.9186 g

AY2 TPS CG

Sine
Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
 Time: 16:33:38

Y - axis Pre Random
 Acceptance Unit
 GLAT 1847

CY1 Y-Axis Control

Random
Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



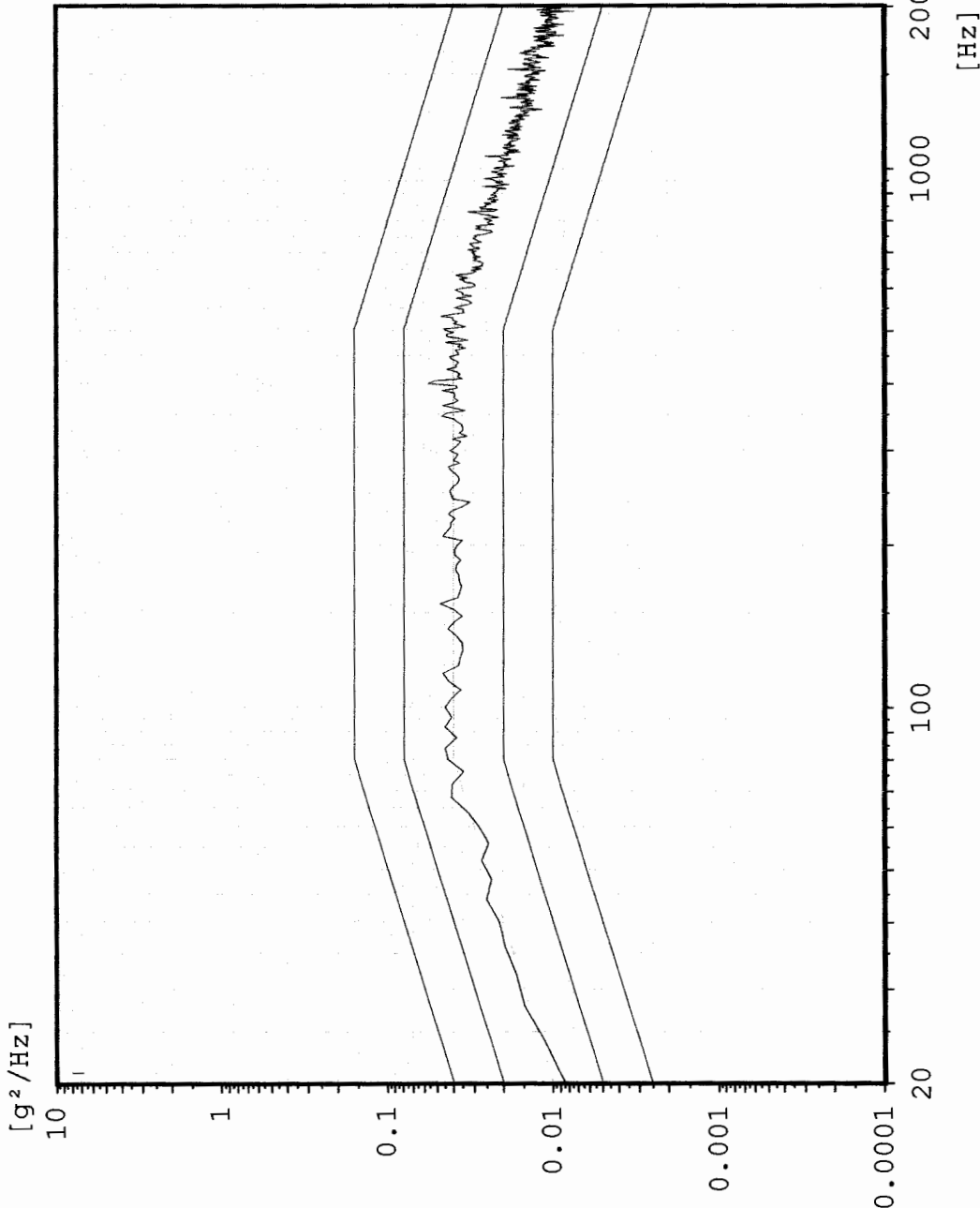
Chan.no: 1
Chan.type: C
DOF: 126
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 6.801 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

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

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

Date: 07-28-05
Time: 16:41:31

Y - Axis
Acceptance Unit
GLAT 1847



Max: 440 Hz 2.683 g²/Hz

Random AY3 TPS Top Center

Stanford Linear Accelerator

J/N 49995.52115

TEM & TPS



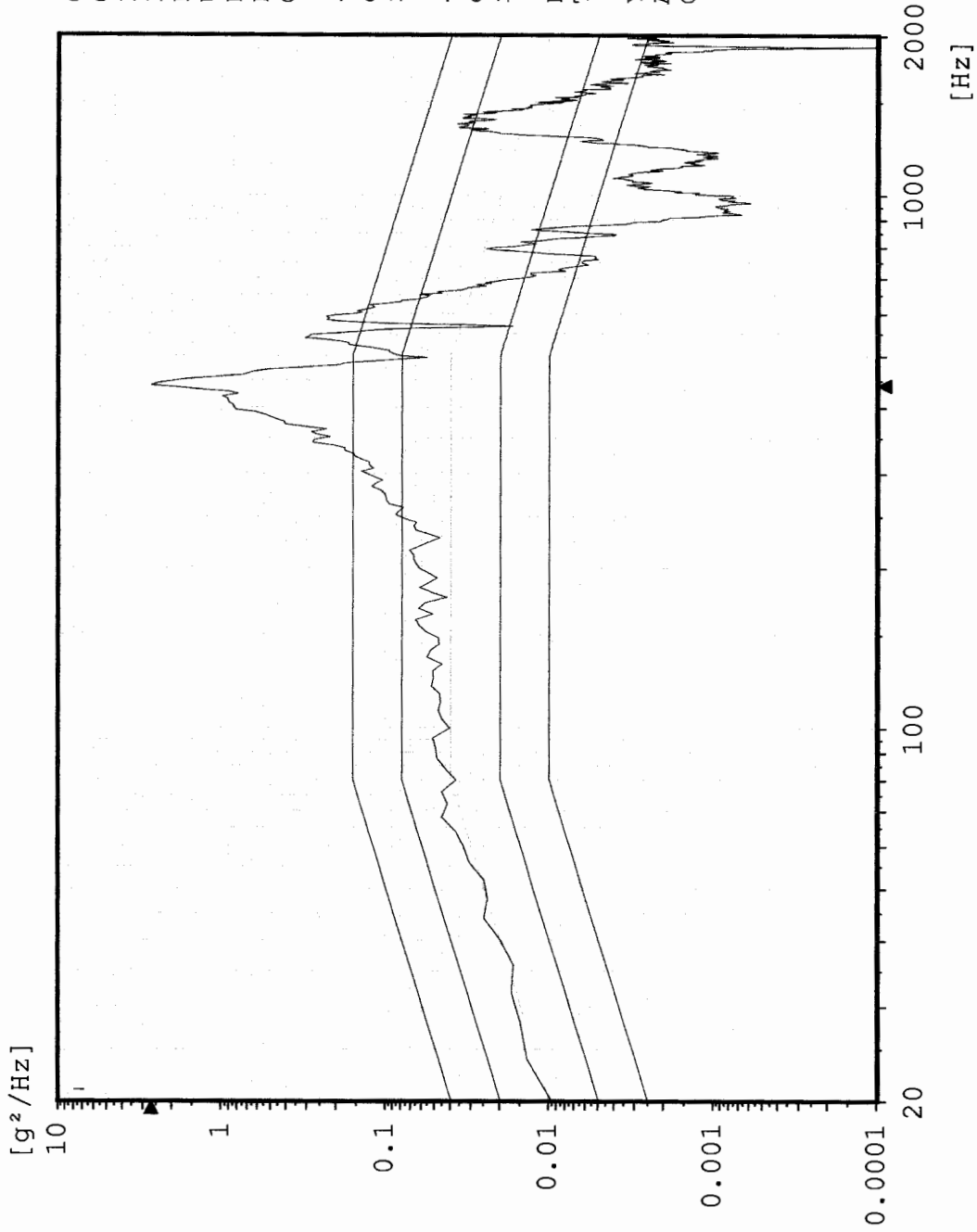
Chan.no: 2
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 13.13 g
RMS (req.): 6.787 g
Contr.strat.: Closed loop

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

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

Date: 07-28-05
Time: 16:41:31

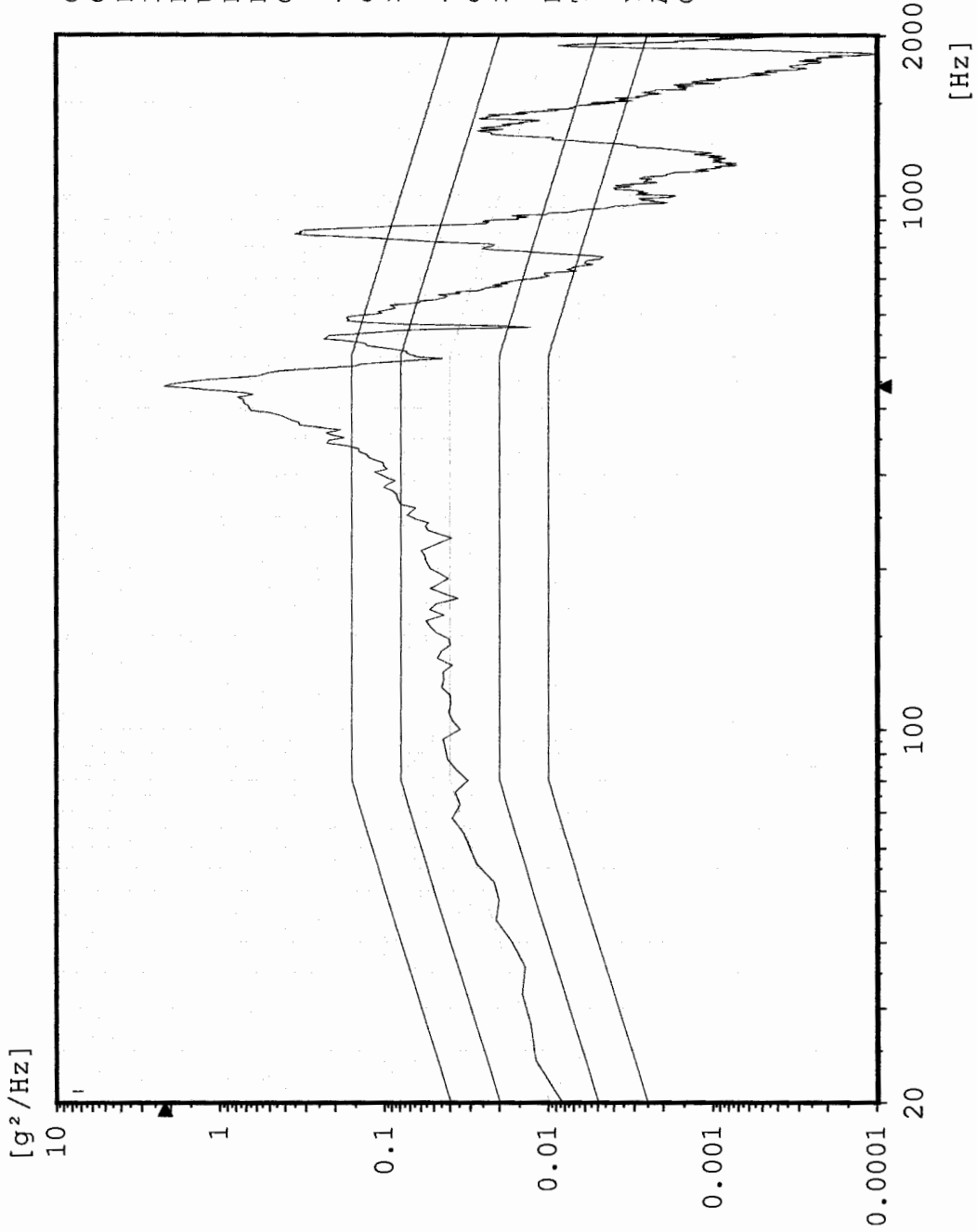
Y - Axis
Acceptance Unit
GLAT 1847



Max: 440 Hz 2.197 g²/Hz

Random AY4 TPS Top Edge

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



Chan.no: 3
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 12.22 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: 000:02:55
remaining: 000:00:00

Date: 07-28-05
Time: 16:41:31

Y - Axis
Acceptance Unit
GLAT 1847

Max: 440 Hz 0.6311 g²/Hz

Random AY1 TEM Center Edge

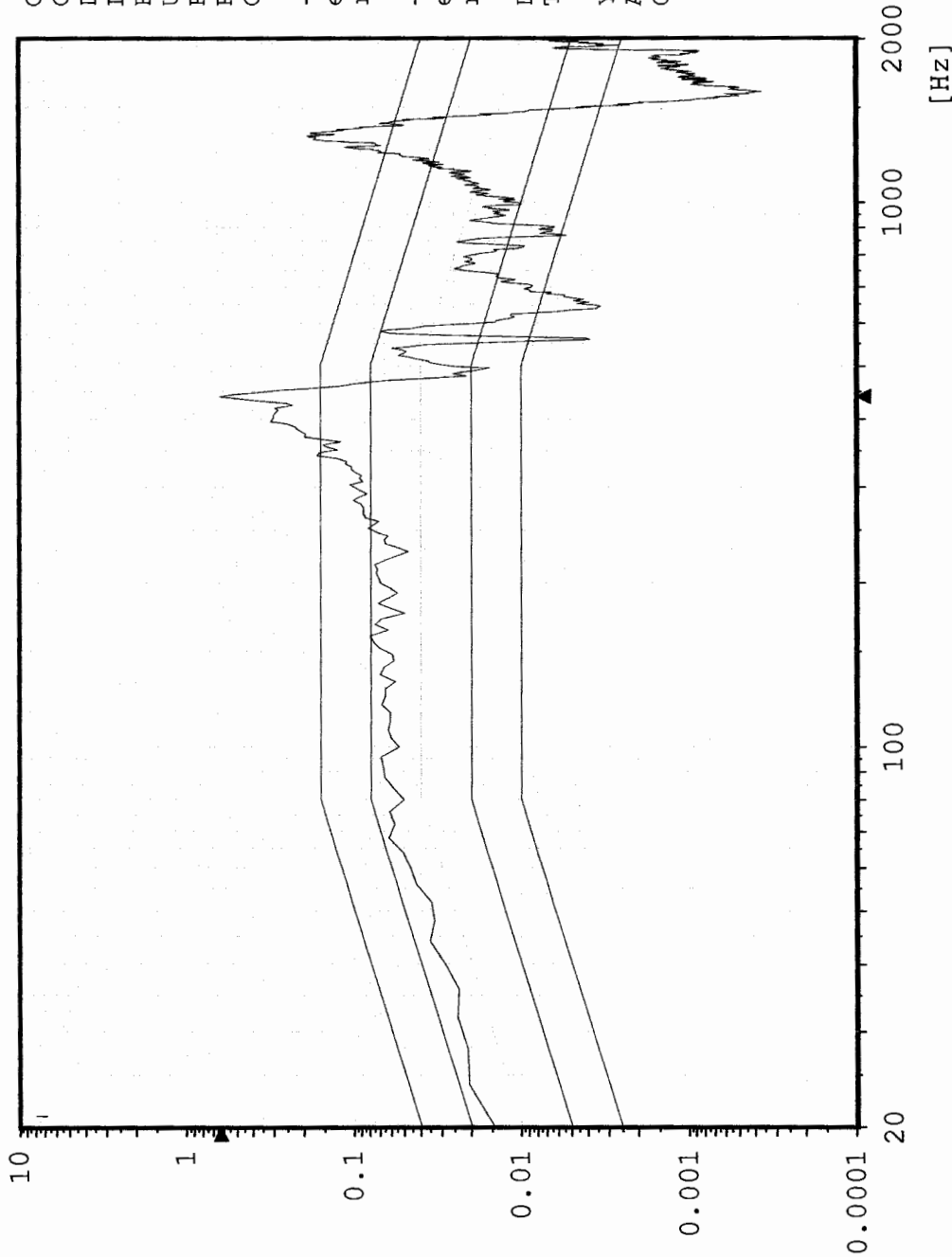
Stanford Linear Accelerator

J/N 49995.52115

TEM & TPS



[g²/Hz]



Chan.no: 5
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 9.584 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: 000:02:55
remaining: 000:00:00

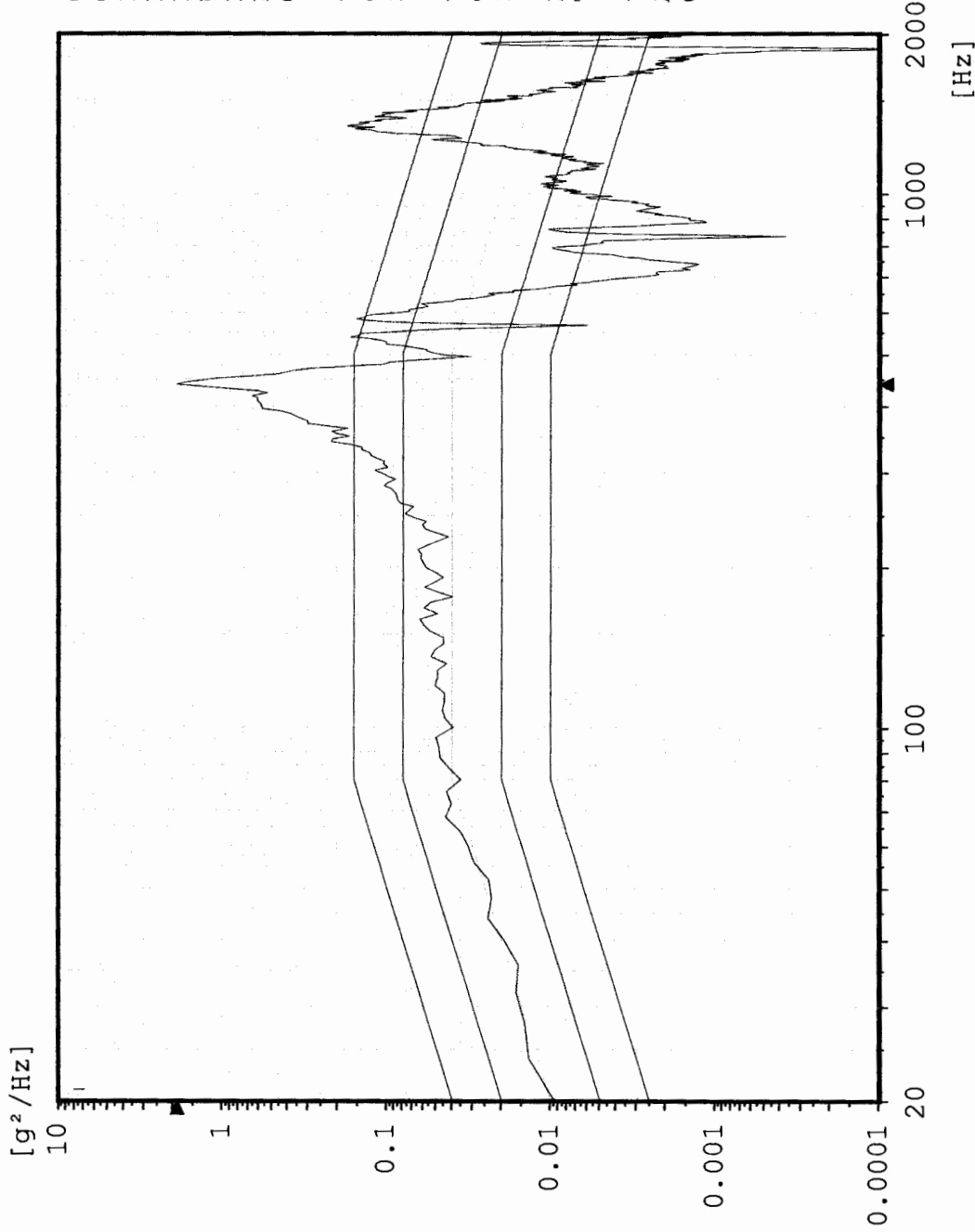
Date: 07-28-05
Time: 16:41:31

Y - Axis
Acceptance Unit
GLAT 1847

Max: 440 Hz 1.88 g²/Hz

Random AY2 TPS CG

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



Chan.no: 10
 Chan.type: M
 DOF: 100
 Level: 0.0 dB
 Resolution: 4 Hz
 Unit: g²/Hz
 RMS (act.): 11.79 g
 RMS (req.): 6.787 g
 Contr.strat.: Closed loop

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

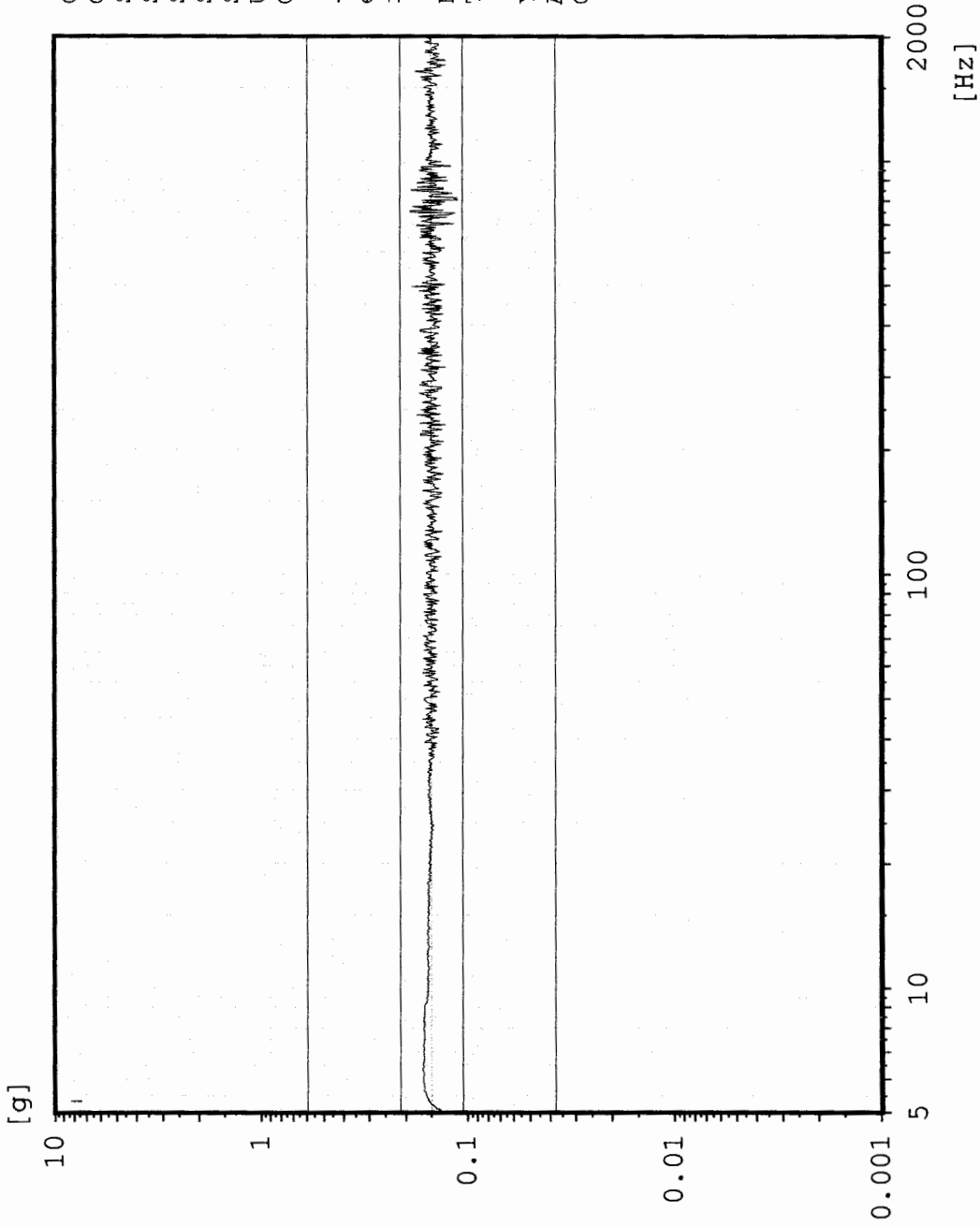
-- Time total --
 elapsed: 000:02:55
 remaining: 000:00:00

Date: 07-28-05
 Time: 16:41:31

Y - Axis
 Acceptance Unit
 GLAT 1847

CY1 Y-Axis Control

Sine
Stanford Linear Accelerator
J/N 49995.52115
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

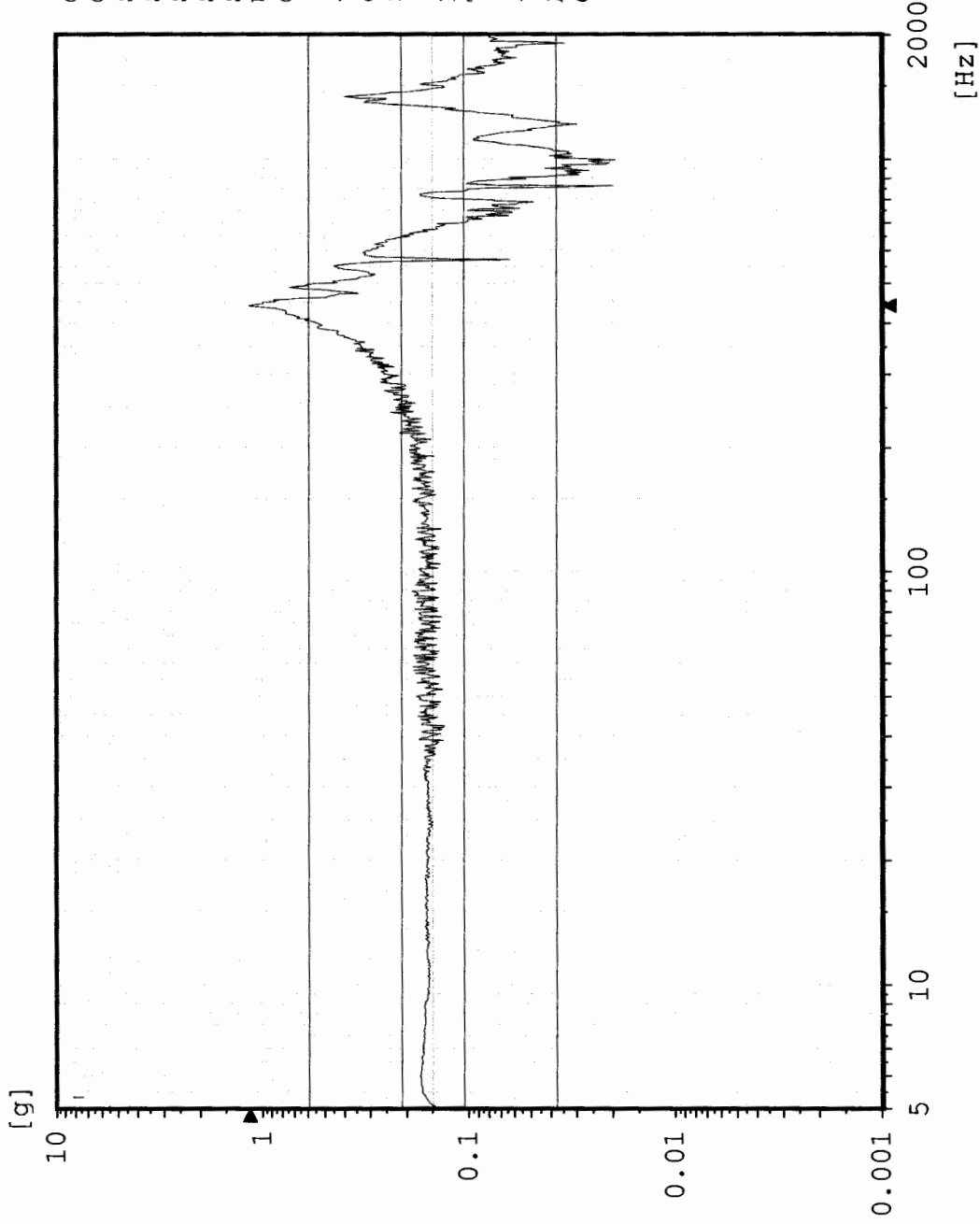
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 16:50:49

Y - axis Post Random
Acceptance Unit
GLAT 1847

Sine AY3 TPS Top Center

Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
 Time: 16:50:49

Y - axis Post Random
 Acceptance Unit
 GLAT 1847

AY4 TPS Top Edge

Sine
Stanford Linear Accelerator
J/N 49995.52115
TEM / TPS

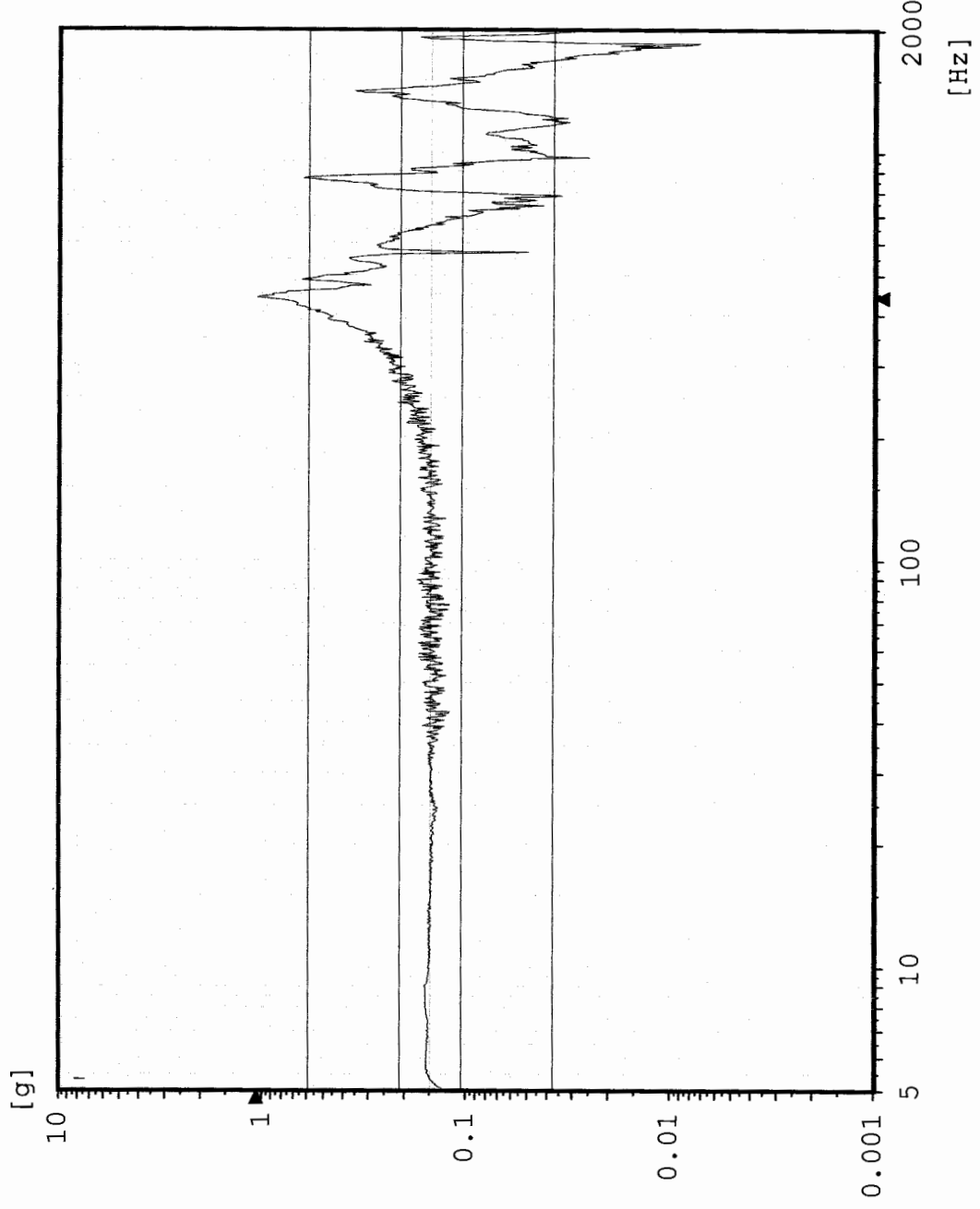


Chan.no: 3
Chan.type: M Filtered
Sweep type: logarithmic
Sweeps done: 1
Sweeps req.: 1
Sweep direct.: up
Sweep rate: 2.00 Oct/min
Unit: g
Contr.strat.: Closed loop

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

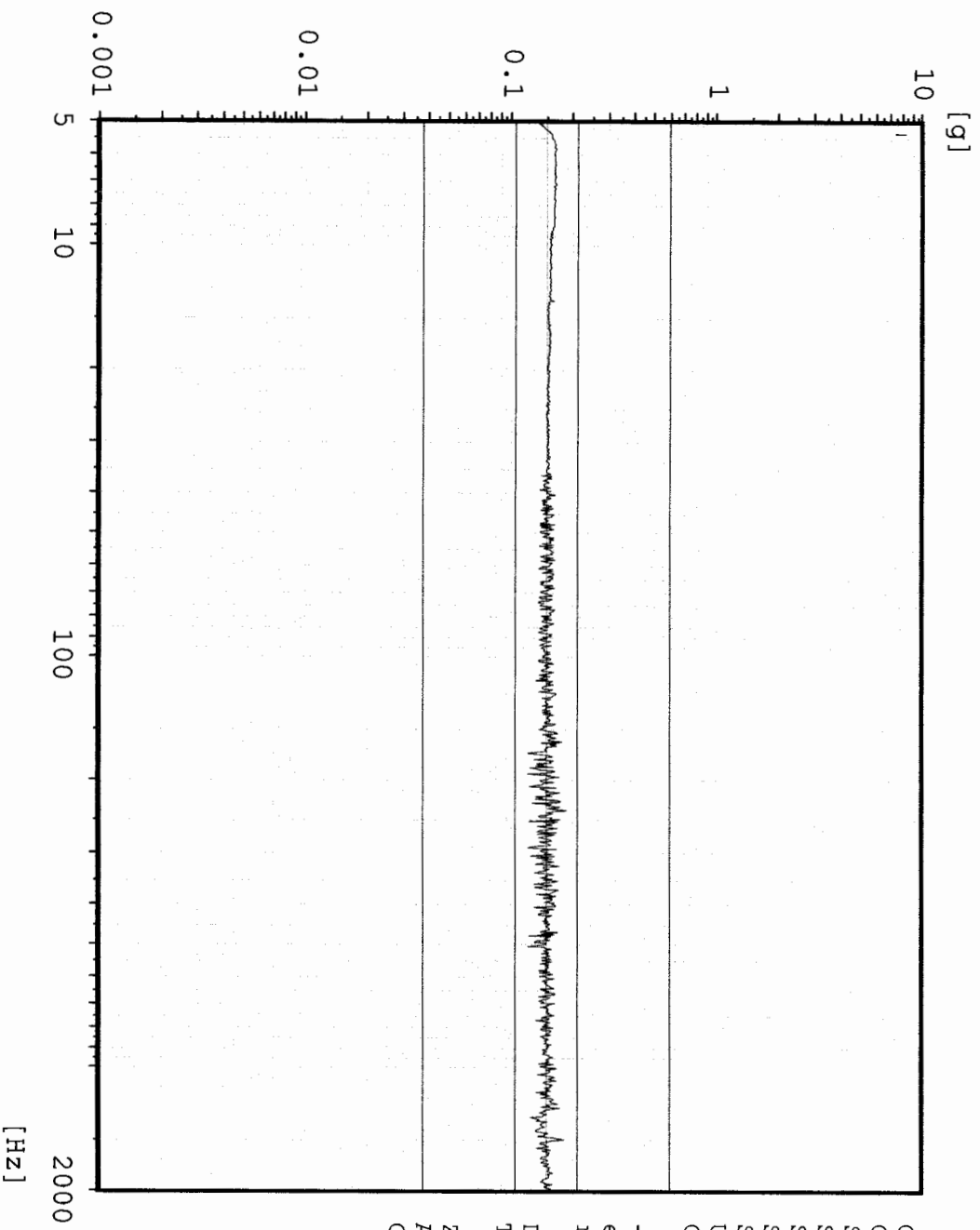
Date: 07-28-05
Time: 16:50:49

Y - axis Post Random
Acceptance Unit
GLAT 1847



Sine CZ1 Z-Axis Control

Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
Time: 14:39:26

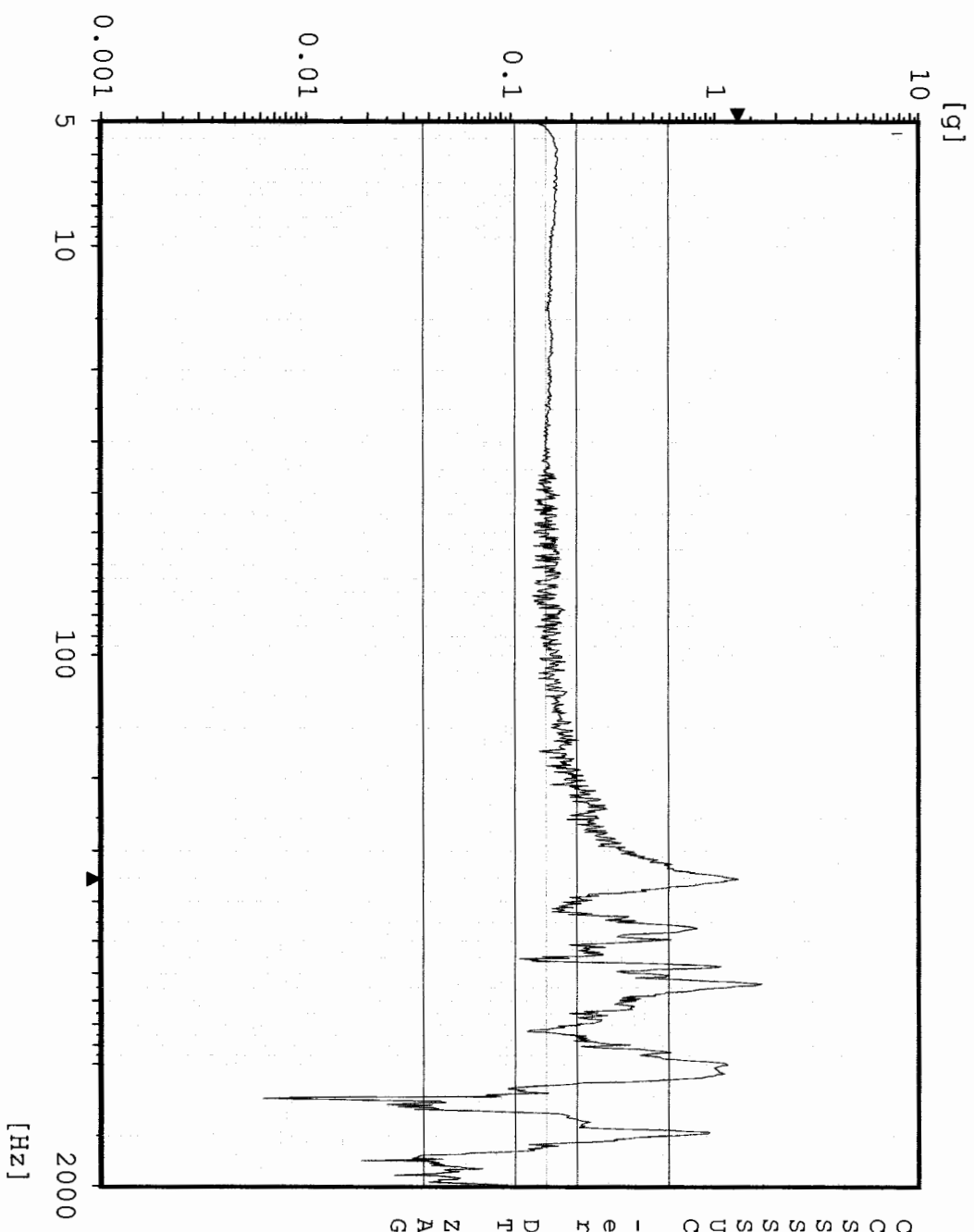
Z - axis Pre Random
Acceptance Unit
GLAT ~~1049~~
1847
du

Sine

AZ4 TPS Boss 2

Stanford Linear Accelerator
J/N 49995.52115

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: 07-28-05
Time: 14:39:26

```

```

Z - axis Pre Random
Acceptance Unit
GLAT 1049
1847.8

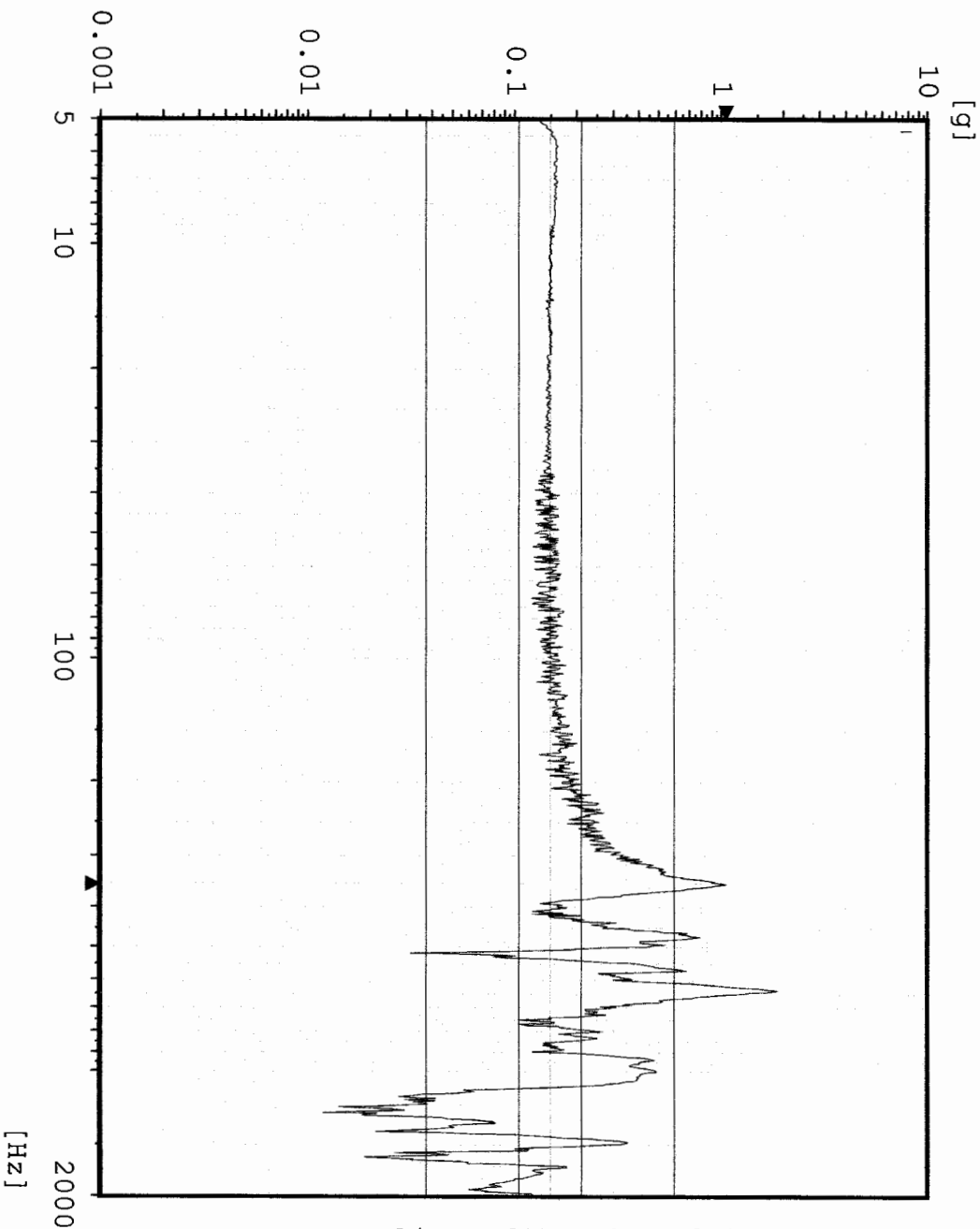
```

Sine Stanford Linear Accelerator

AZ3 TPS Boss 1

J/N 49995.52115

TEM / TPS



Chan.no: 3 M Filtered
 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

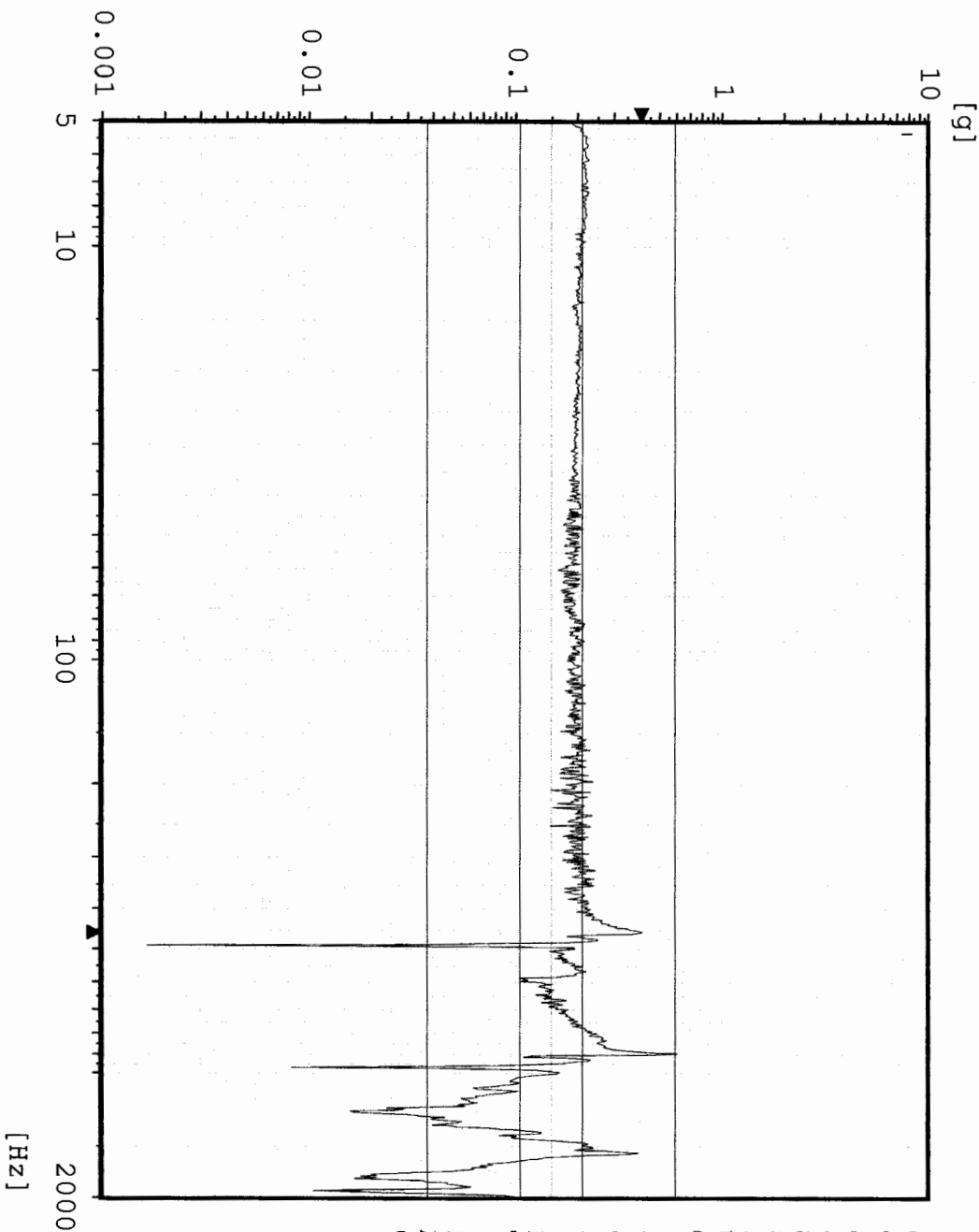
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 14:39:26

Z - axis Pre Random
 Acceptance Unit
 GIAT 1849
 /847 SW

Sine AZ5 TEM Bottom Edge

Stanford Linear Accelerator
J/N 49995.52115
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

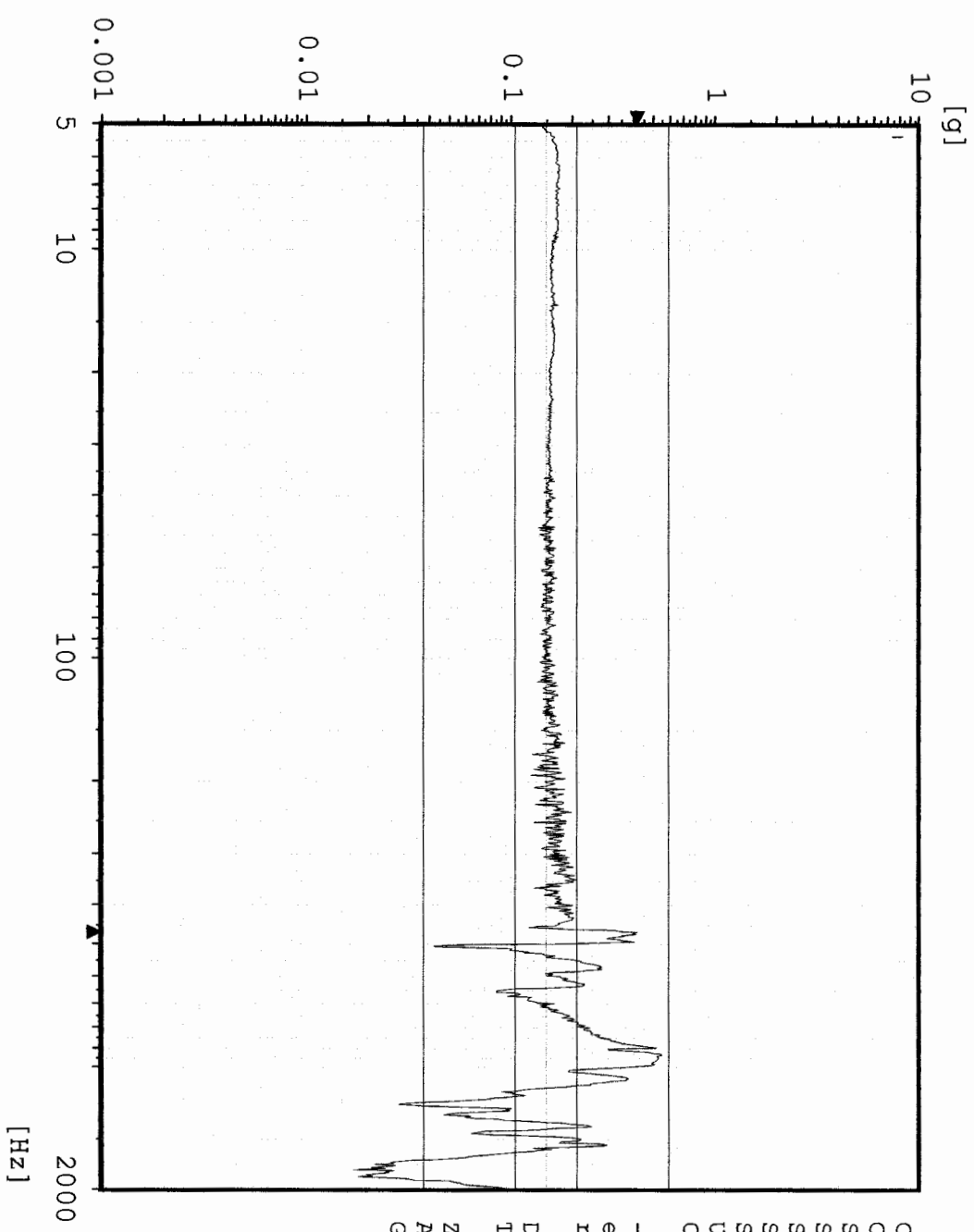
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 14:39:26

Z - axis Pre Random
 Acceptance Unit
 GLAT ~~4049~~
 1947

Sine AZ1 TPS Edge Center

Stanford Linear Accelerator
J/N 49995.52115
TEM / TPS



Chan.no: 6 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: 000:00:00

Date: 07-28-05
 Time: 14:39:26

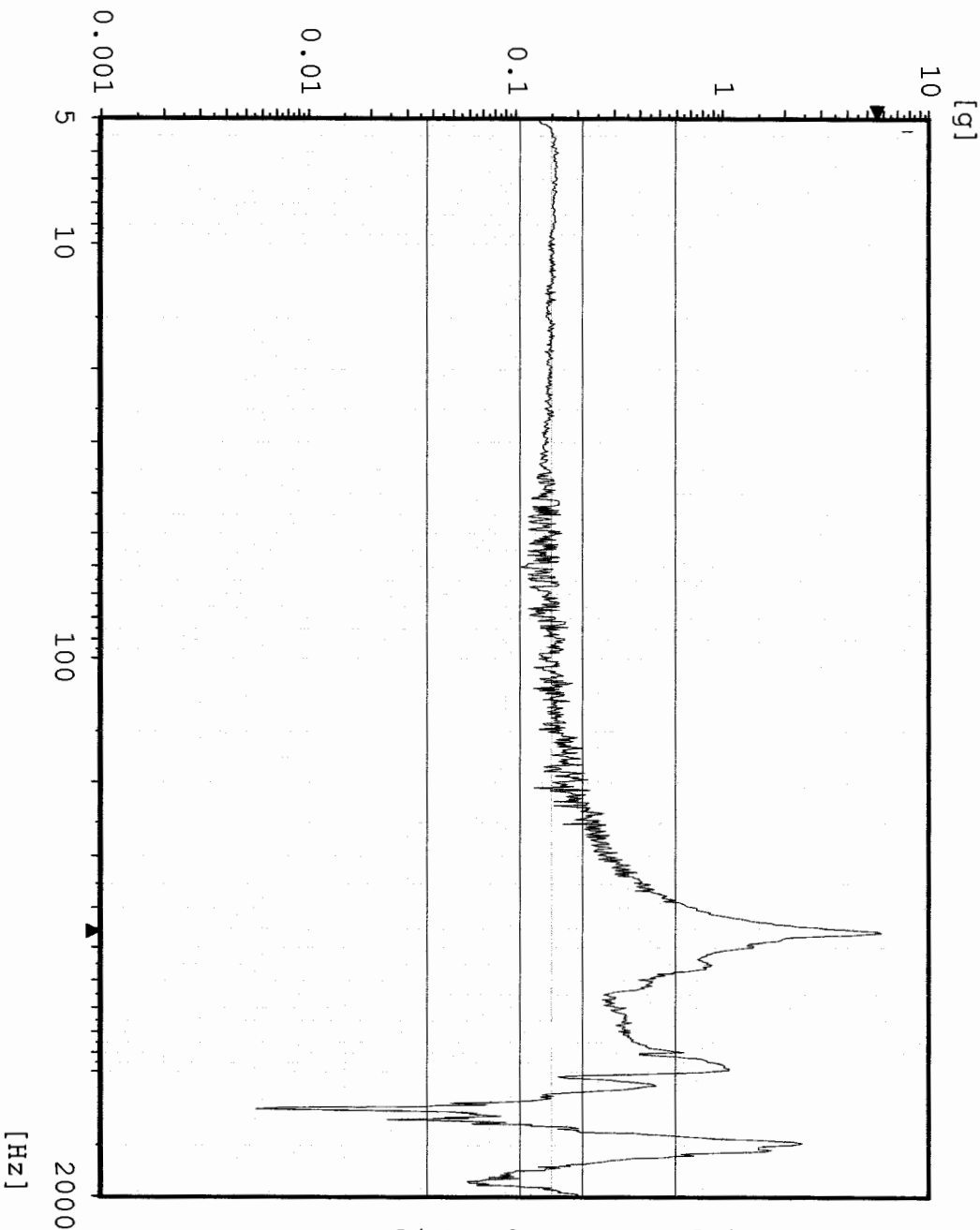
Z - axis Pre Random
 Acceptance Unit
 GIAT ~~1049~~
 1847 SW

Sine AZ6 TEM Bottom Center

Stanford Linear Accelerator

J/N 49995.52115

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: 07-28-05
 Time: 14:39:26

Z - axis Pre Random
 Acceptance Unit
 GIAT ~~1849~~
 1847 _{div}

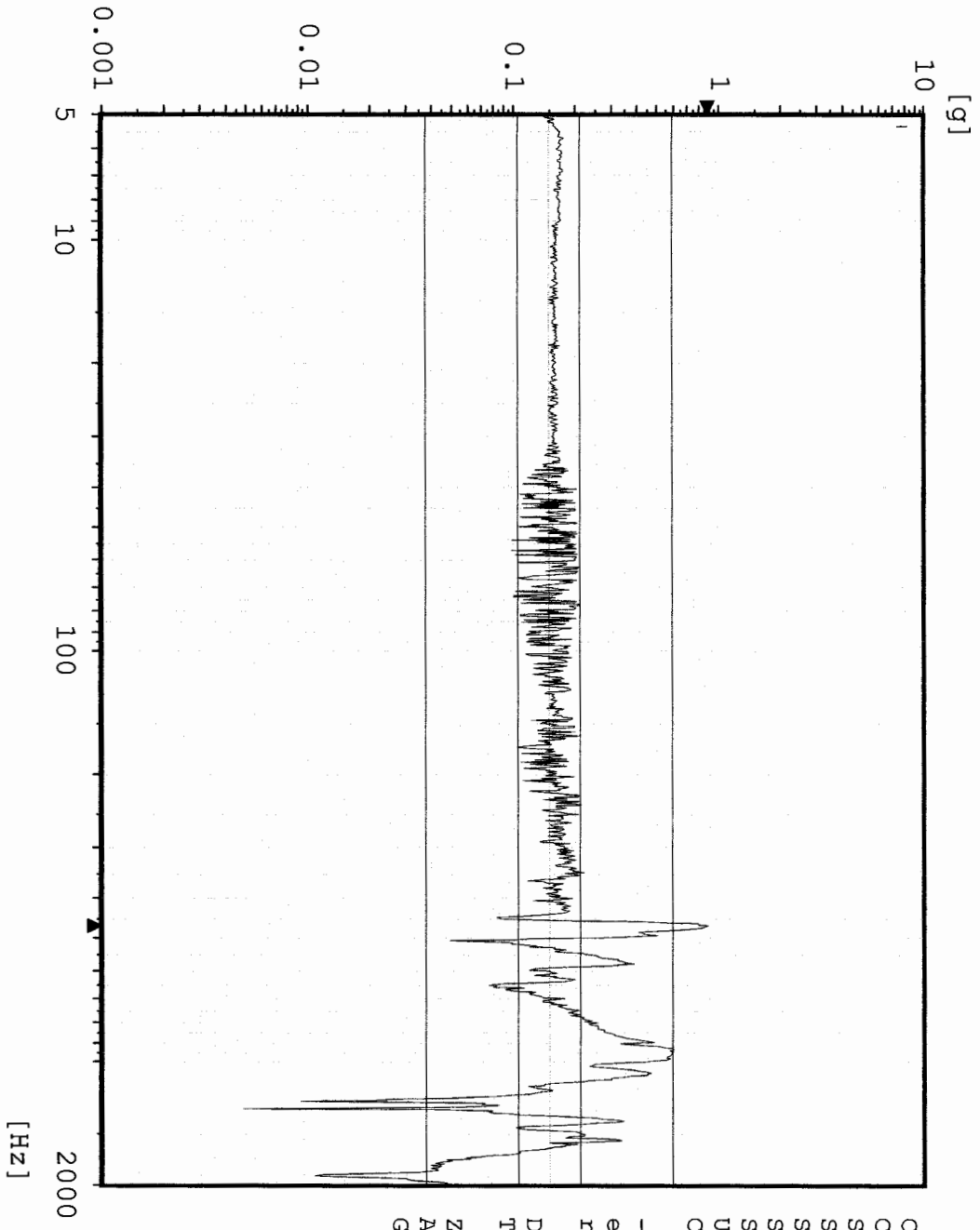
Max: 468 Hz 0.8863 g

Sine

AZ2 TPS Corner

Stanford Linear Accelerator
J/N 49995.52115

TEM / TPS



Chan.no: 10 M Filtered
 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: 07-28-05
 Time: 14:39:26

Z - axis Pre Random
 Acceptance Unit
 GIAT ~~1849~~
 1847 ^{new}

Random

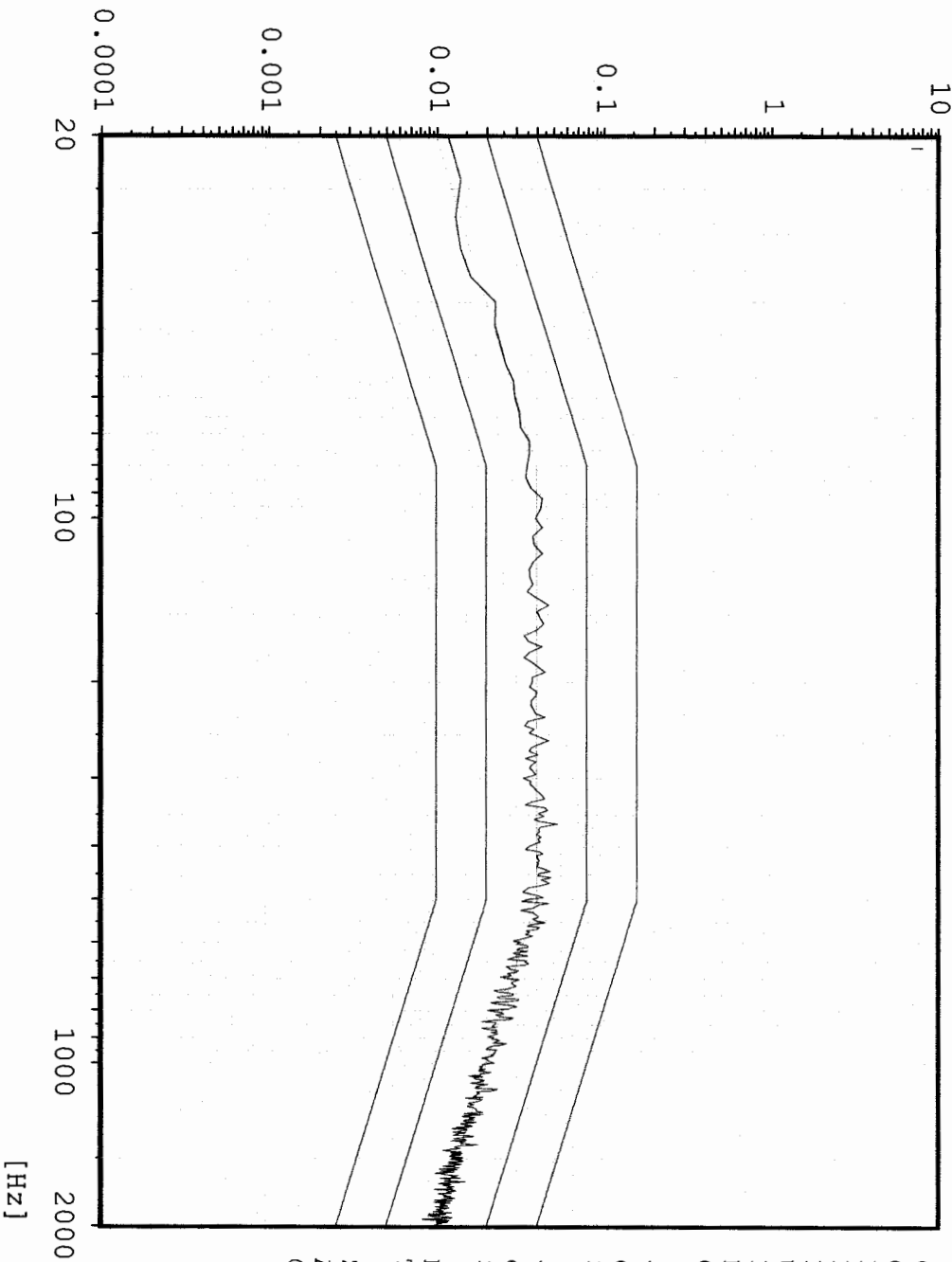
CZ1 Z-Axis Control

Stanford Linear Accelerator

J/N 49995.52115

TEM & TPS

[g²/Hz]



```

Chan.no: 1
Chan.type: C
DOF: 144
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 6.79 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: 000:02:56
remaining: 000:00:-1

```

```

Date: 07-28-05
Time: 14:49:11

```

```

Z - Axis
Acceptance Unit
GLAT 1949
      1847
      bu

```



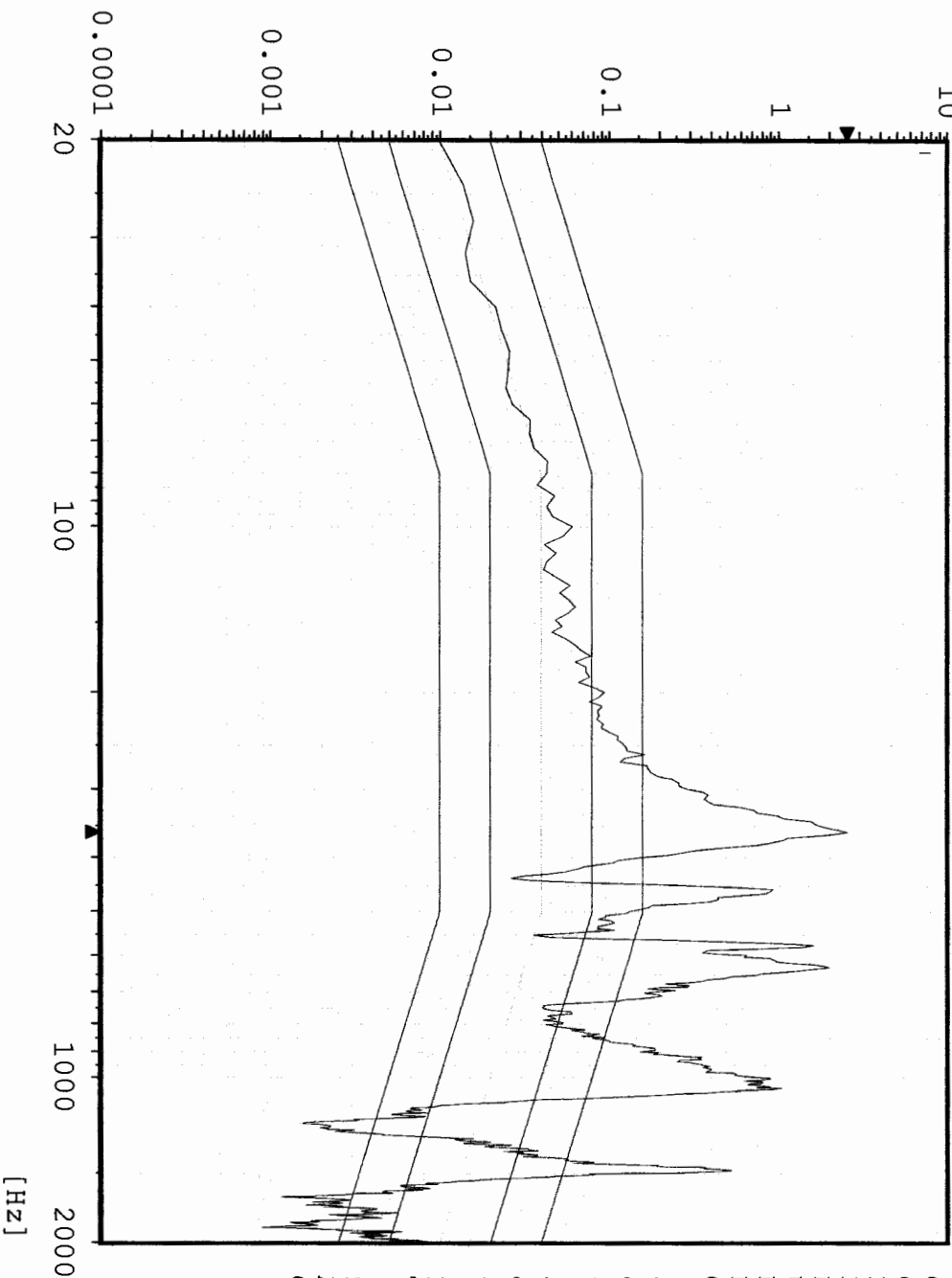
Random

AZ4 TPS Boss 2

Stanford Linear Accelerator
J/N 49995.52115

TEM & TPS

[g²/Hz]



```

Chan.no:      2
Chan.type:    M
DOF:          100
Level:        0.0 dB
Resolution:   4 Hz
Unit:         g2/Hz
RMS (act.):   19.93 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:      000:02:56
remaining:    000:00:-1
  
```

```

Date:         07-28-05
Time:         14:49:11
  
```

```

Z - Axis
Acceptance Unit
GIAT 1849
1847
  
```

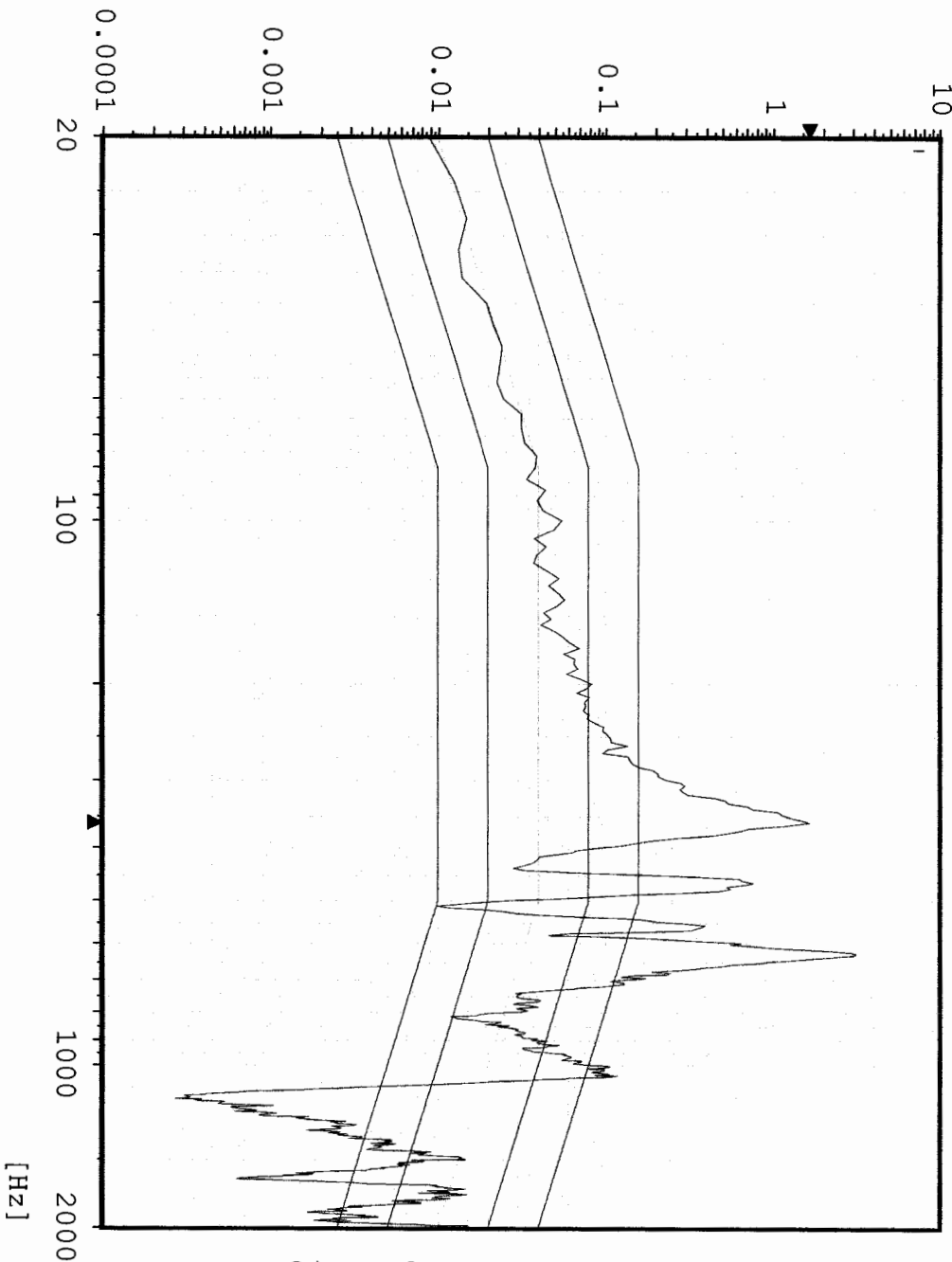

Random

AZ3 TPS Boss 1

Stanford Linear Accelerator
J/N 49995.52115

TEM & TPS

[g²/Hz]



```

Chan.no:      3
Chan.type:    M
DOF:          100
Level:        0.0 dB
Resolution:   4 Hz
Unit:         g2/Hz
RMS (act.):   15.85 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:      000:02:56
remaining:    000:00:-1
  
```

```

Date:         07-28-05
Time:         14:49:11
  
```

```

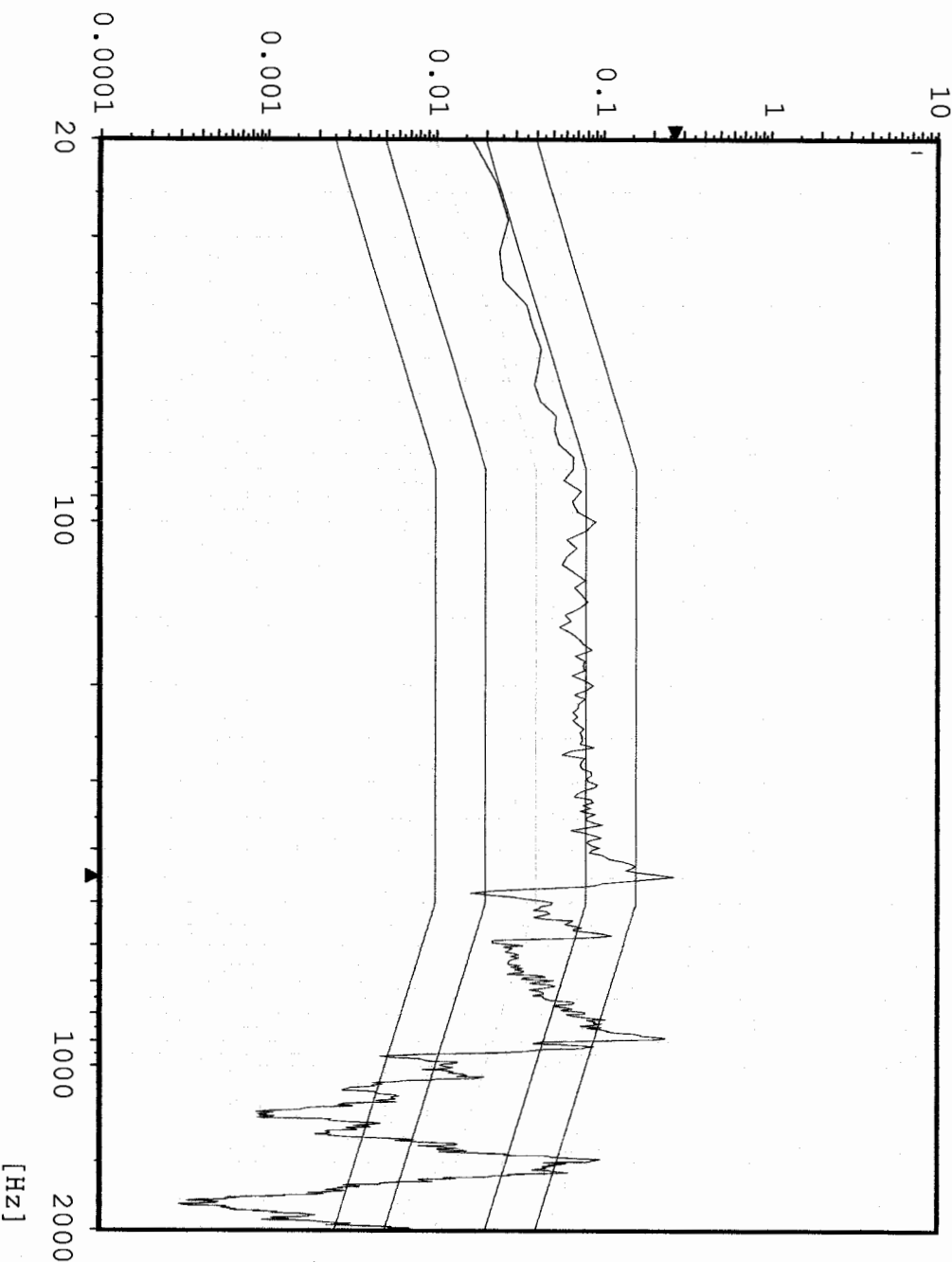
Z - Axis
Acceptance Unit
GIAT 1849
    1847
    8u
  
```

Random AZ5 TEM Bottom Edge

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



[g²/Hz]



```

Chan.no: 5
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 8.804 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: 000:02:56
remaining: 000:00:-1

```

```

Date: 07-28-05
Time: 14:49:11

```

```

Z - Axis
Acceptance Unit
GIAT 1849
      1847
      0w

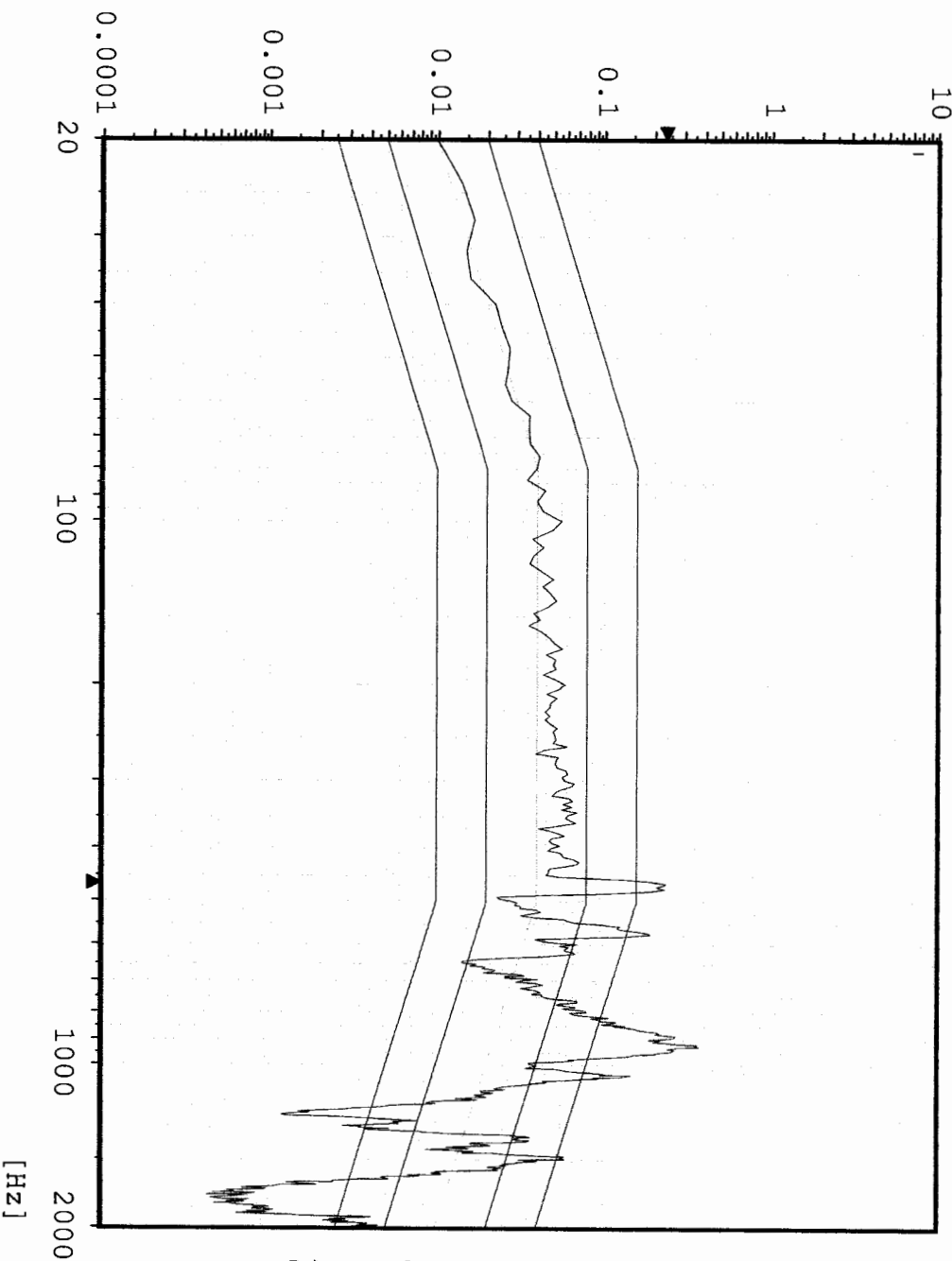
```

Random AZ1 TPS Edge Center

Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS



[g²/Hz]



Chan.no: 6
Chan.type: M
DOF: 100
Level: 0.0 dB
Resolution: 4 Hz
Unit: g²/Hz
RMS (act.): 9.65 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: 000:02:56
remaining: 000:00:-1

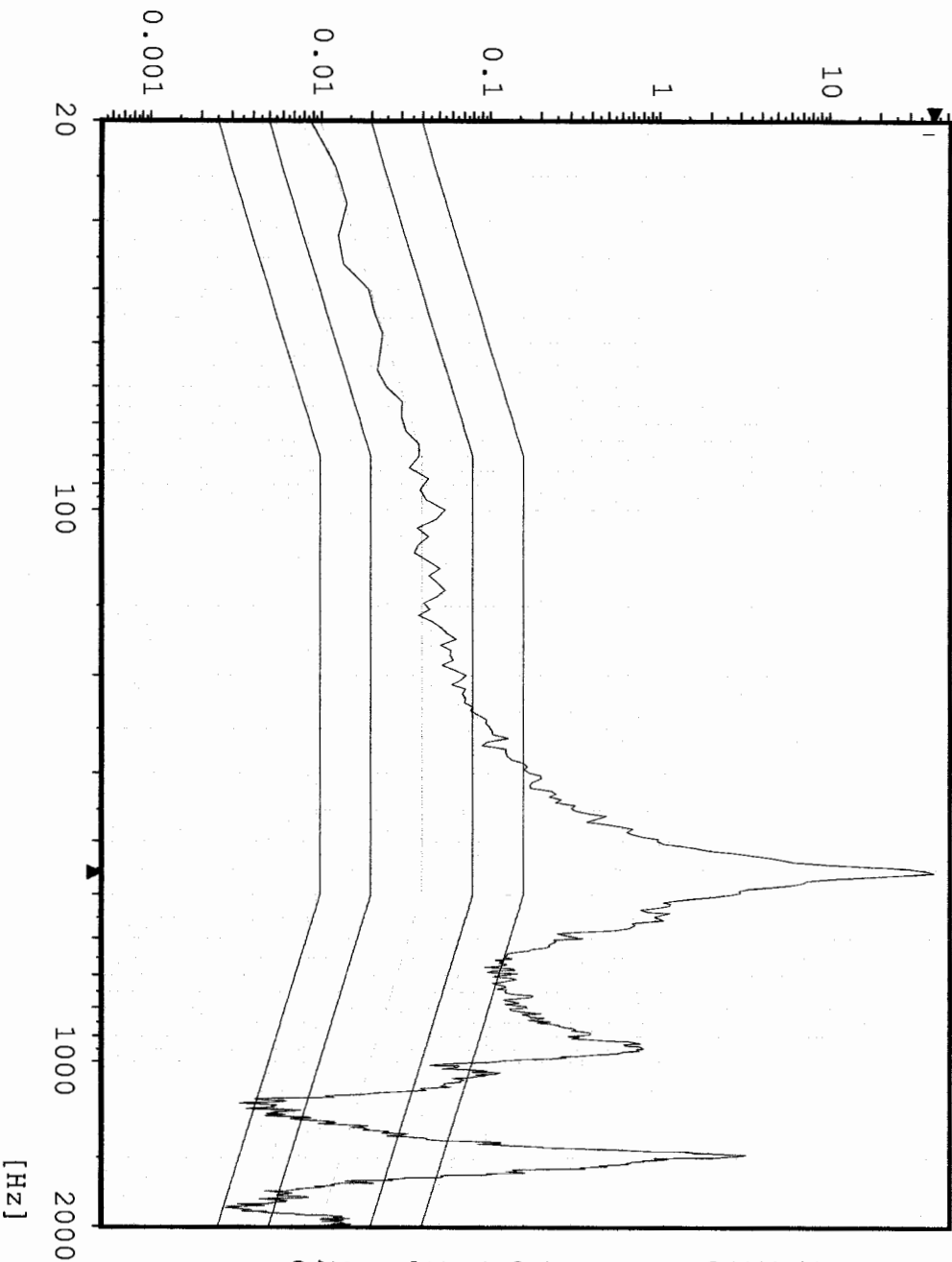
Date: 07-28-05
Time: 14:49:11

Z - Axis
Acceptance Unit
GLAT 1849
1947
SM

Random
Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS

AZ6 TEM Bottom Center

[g²/Hz]



Chan.no: 8
 Chan.type: M
 DOF: 100
 Level: 0.0 dB
 Resolution: 4 Hz
 Unit: g²/Hz
 RMS (act.): 38.22 g
 RMS (req.): 6.787 g
 Contr.strat.: Closed loop

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

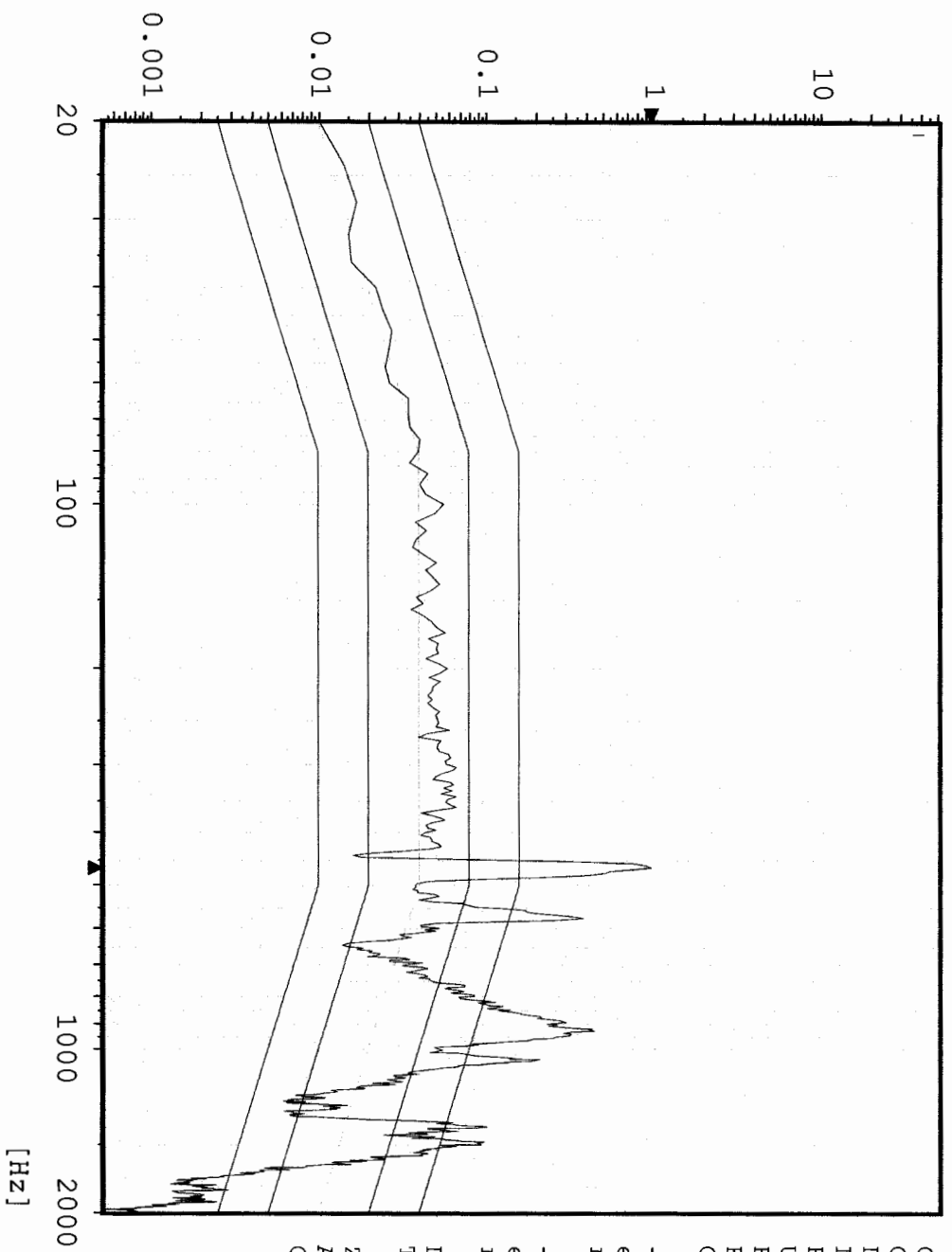
-- Time total --
 elapsed: 000:02:56
 remaining: 000:00:-1

Date: 07-28-05
 Time: 14:49:11

Z - Axis
 Acceptance Unit
 GIAT ~~4049~~
 1847 _{psw}

Random
Stanford Linear Accelerator
J/N 49995.52115
TEM & TPS
[g²/Hz]

AZ2 TPS Corner



Chan.no: 10
 Chan.type: M
 DOF: 100
 Level: 0.0 dB
 Resolution: 4 Hz
 Unit: g²/Hz
 RMS (act.): 11.34 g
 RMS (req.): 6.787 g
 Contr.strat.: Closed loop

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

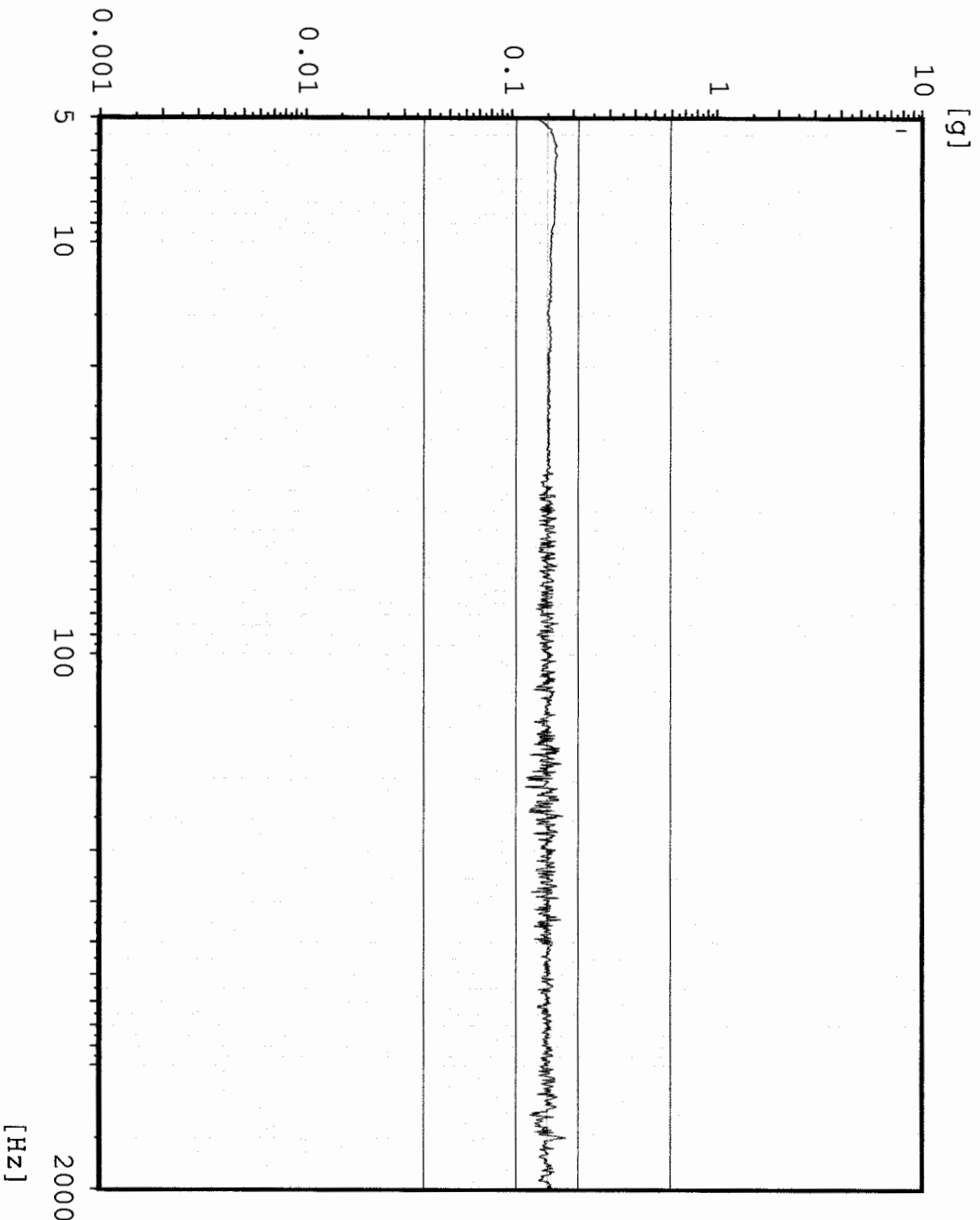
-- Time total --
 elapsed: 000:02:56
 remaining: 000:00:-1

Date: 07-28-05
 Time: 14:49:11

Z - Axis
 Acceptance Unit
 GLAT 1049
 1847
 pw

Sine CZ1 Z-Axis Control

Stanford Linear Accelerator
J/N 49995.52115
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

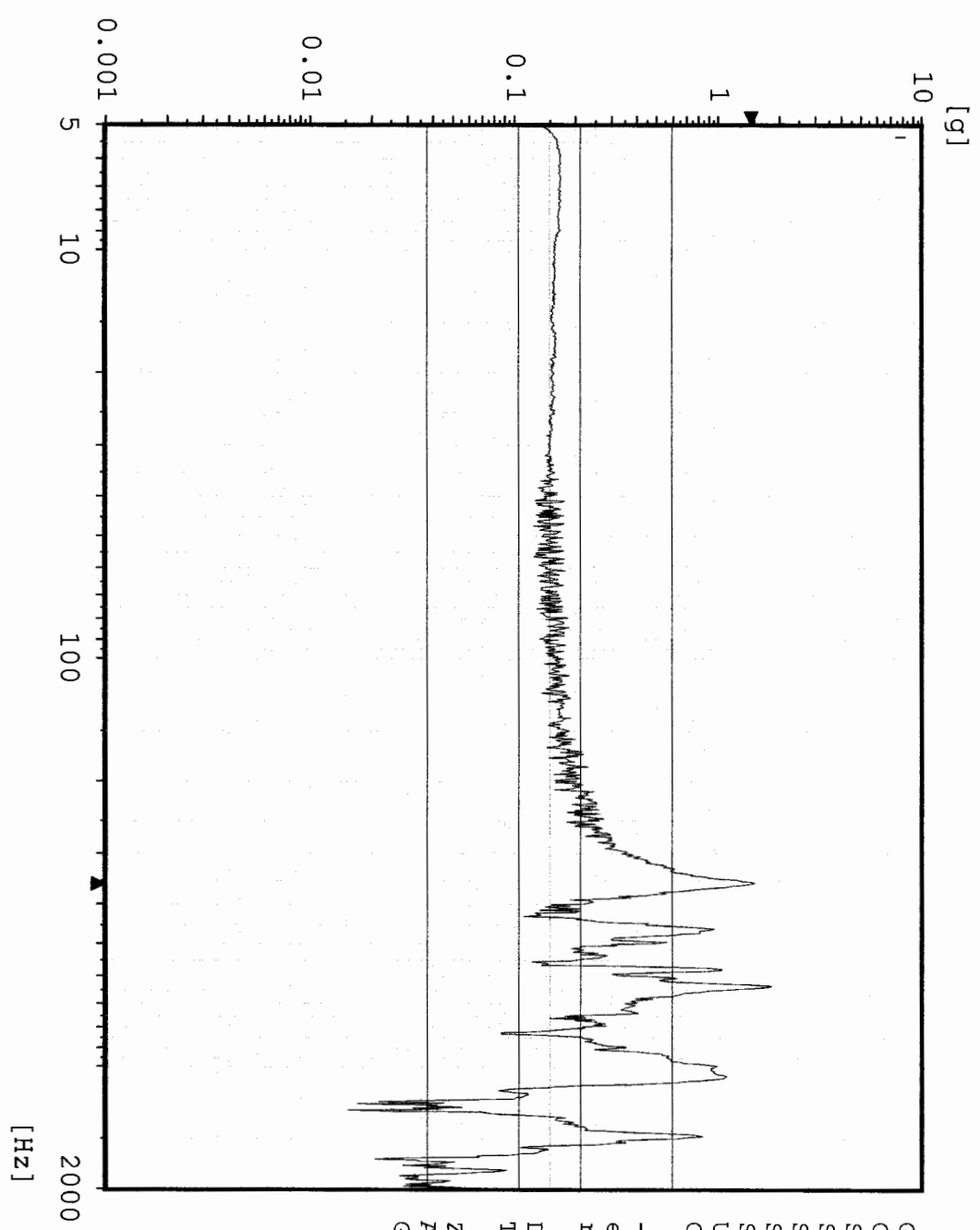
-- Testing time --
elapsed: 000:04:18
remaining: 000:00:00

Date: 07-28-05
Time: 15:02:03

Z - axis Post Random
Acceptance Unit
GIAT 1849
1847
ps

Sine AZ4 TPS Boss 2

Stanford Linear Accelerator
J/N 49995.52115
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: 07-28-05
 Time: 15:02:03

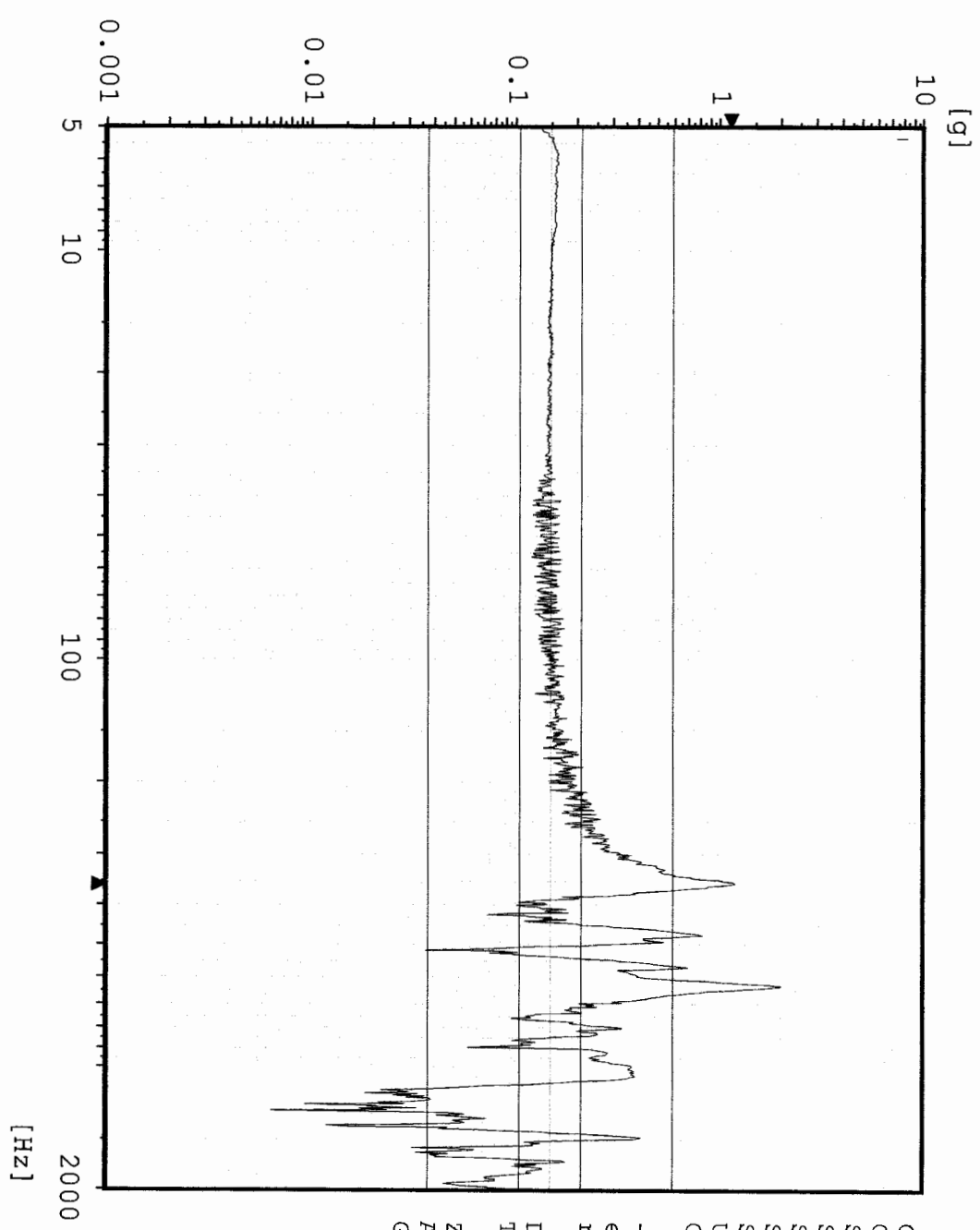
Z - axis Post Random
 Acceptance Unit
 GIAT ~~1849~~
 1847 ~~g~~

Sine AZ3 TPS Boss 1

Stanford Linear Accelerator

J/N 49995.52115

TEM / TPS



Chan.no: 3 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

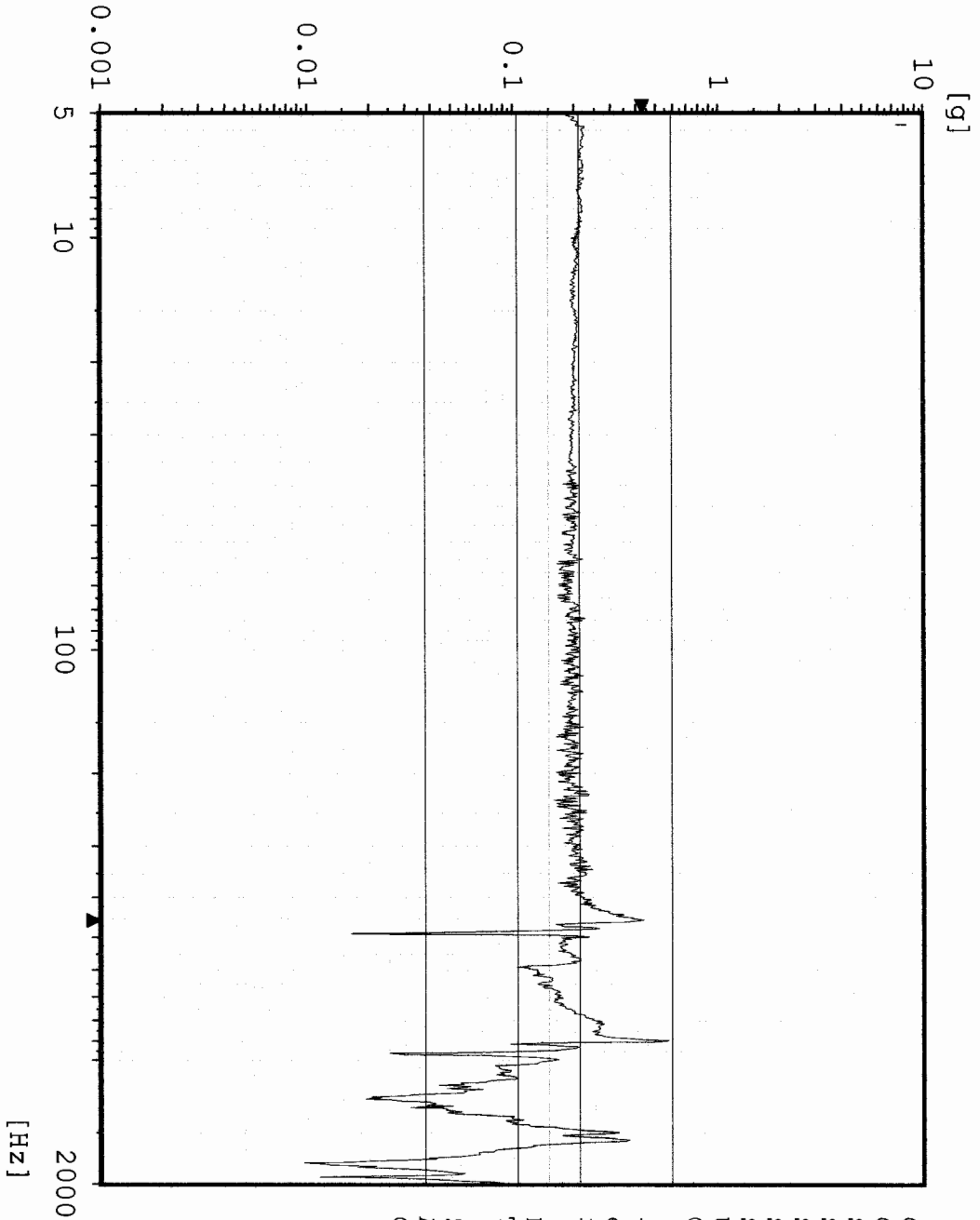
-- Testing time --
 elapsed: 000:04:18
 remaining: 000:00:00

Date: 07-28-05
 Time: 15:02:03

Z - axis Post Random
 Acceptance Unit
 GIAT ~~1849~~
 1847
 dm

Sine AZ5 TEM Bottom Edge

Stanford Linear Accelerator
J/N 49995.52115
TEM / TPS



Chan.no: 5 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: 07-28-05
 Time: 15:02:03

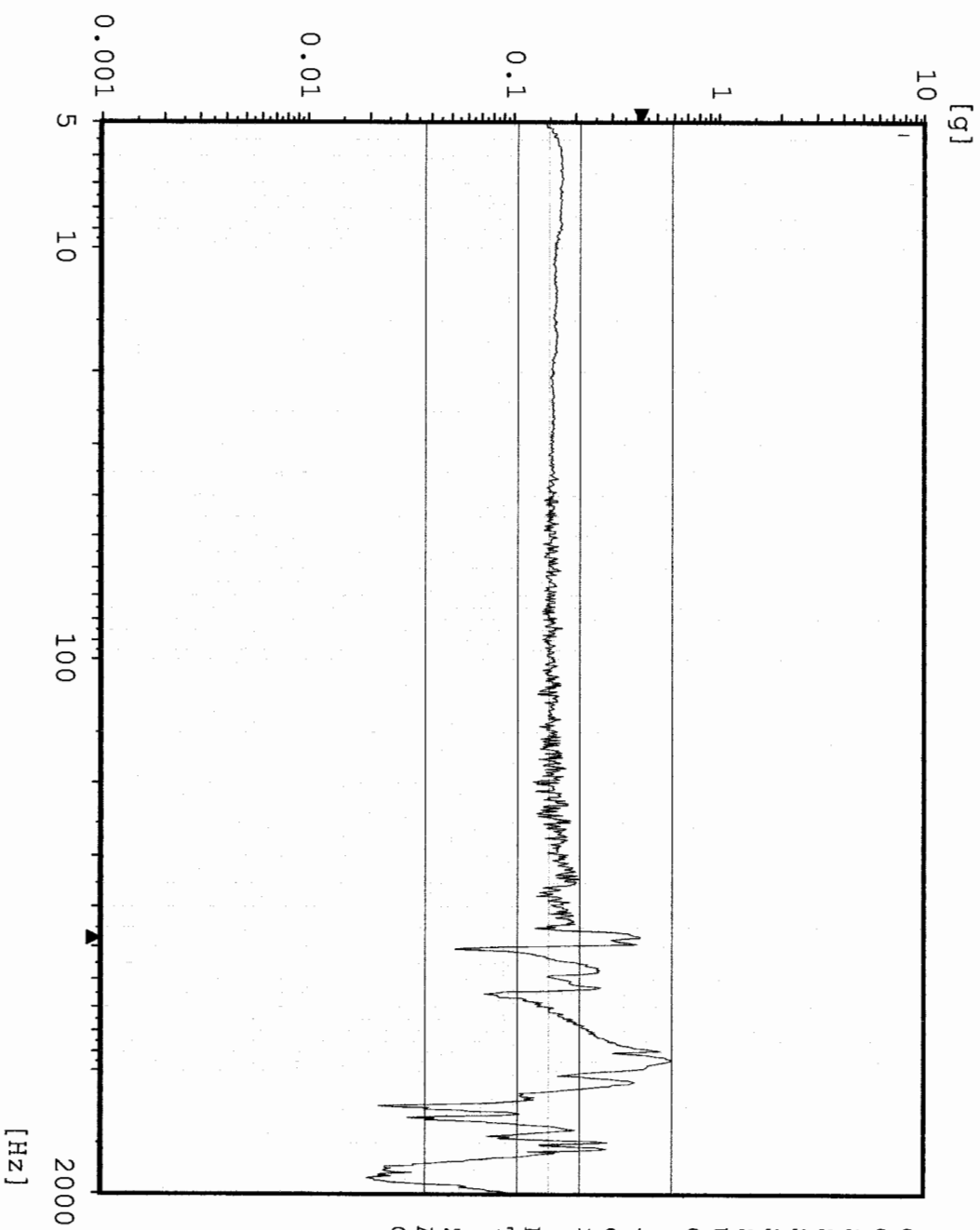
Z - axis Post Random
 Acceptance Unit
 GIAT ~~1049~~
 1847
 8w

Sine AZ1 TPS Edge Center

Stanford Linear Accelerator

J/N 49995.52115

TEM / TPS



[g]

[Hz]

Chan.no: 6 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: 000:00:00

Date: 07-28-05
 Time: 15:02:03

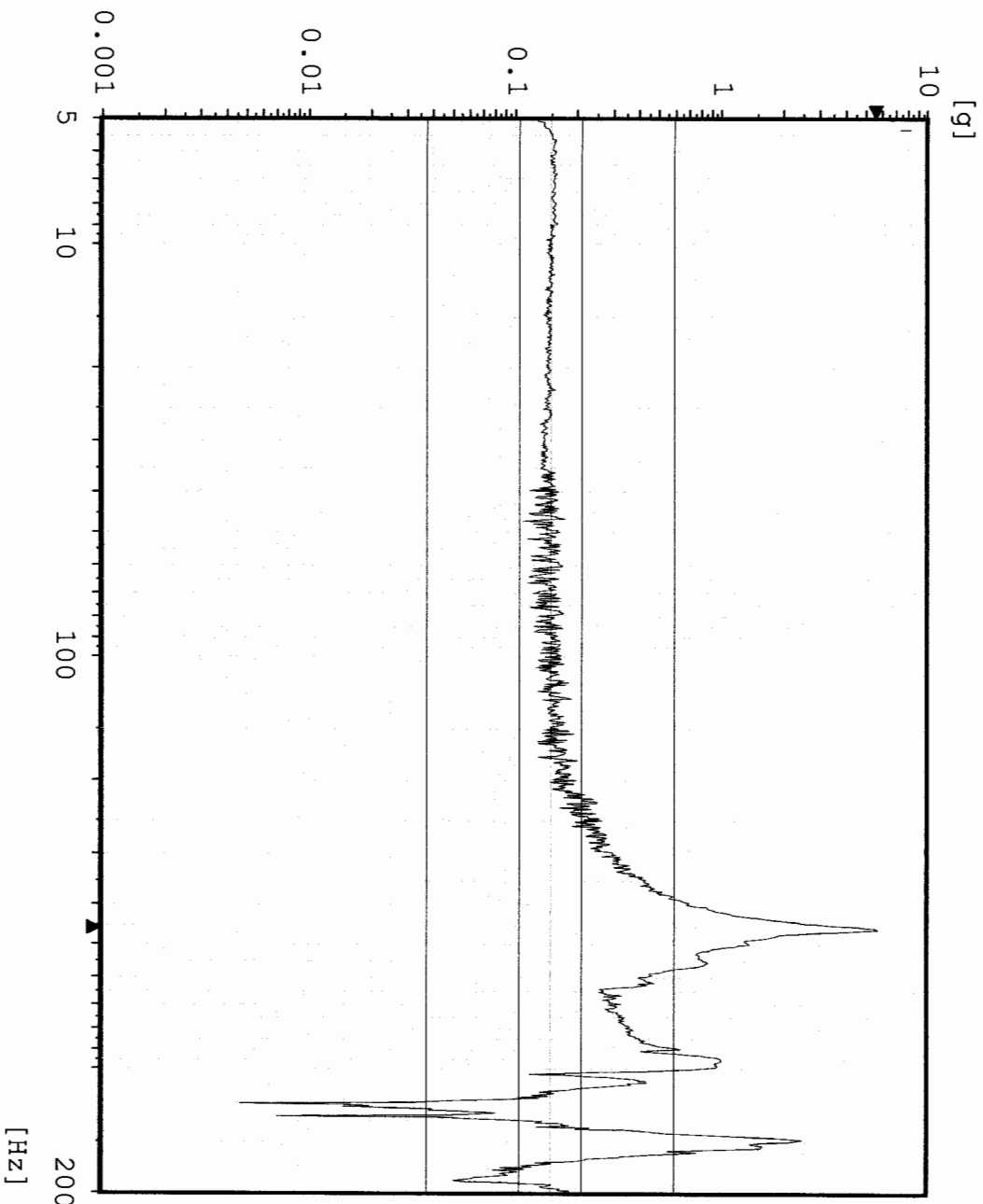
Z - axis Post Random
 Acceptance Unit
 GIAT 1849
 1847
 800

Sine AZ6 TEM Bottom Center

Stanford Linear Accelerator

J/N 49995.52115

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: 07-28-05
 Time: 15:02:03

Z - axis Post Random
 Acceptance Unit
 GLAT 1849
 1847
 1847 5w

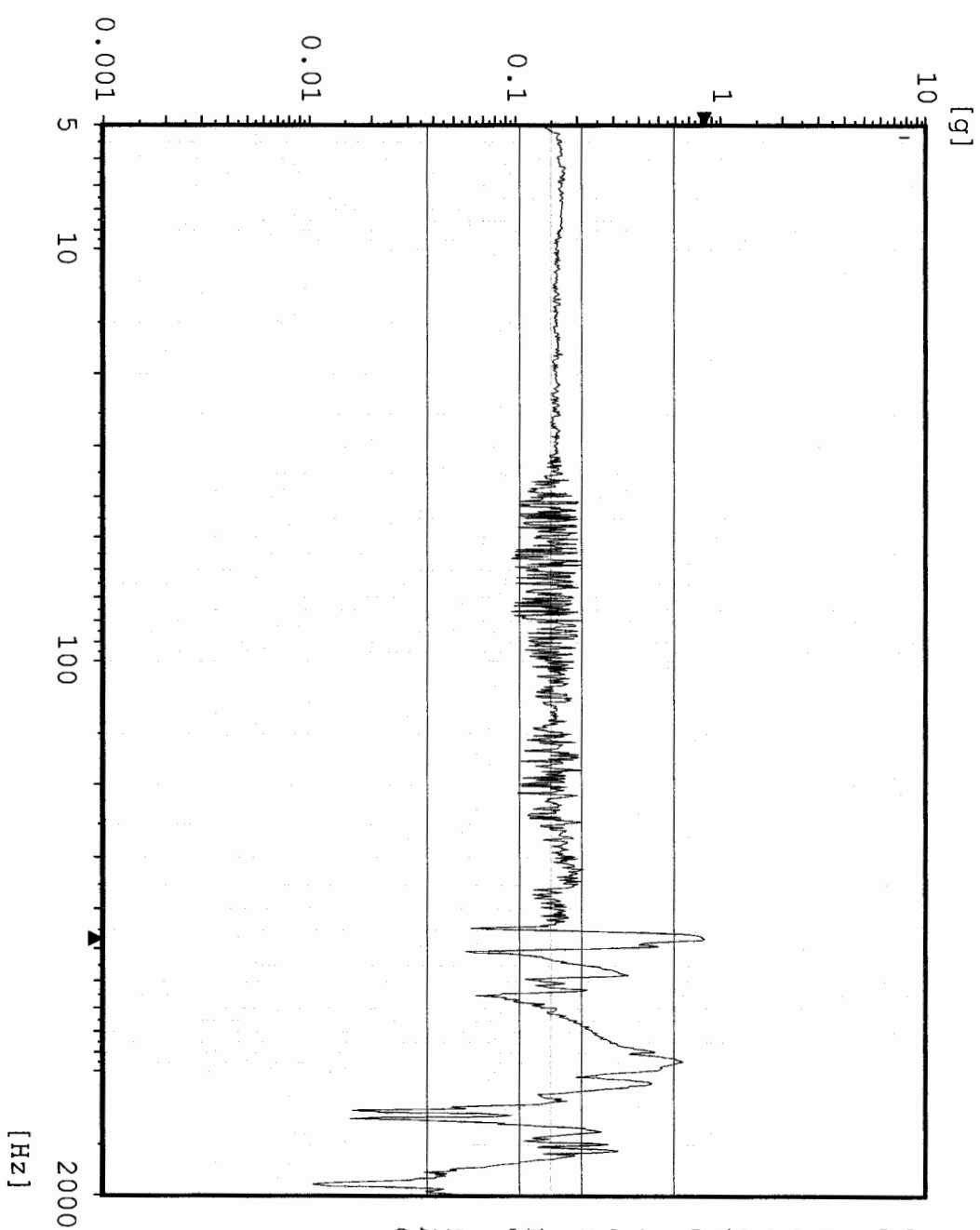
Max: 473.5 Hz 0.8381 g

Sine AZZ2 TPS Corner

Stanford Linear Accelerator

J/N 49995.52115

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: 07-28-05
 Time: 15:02:03

Z - axis Post Random
 Acceptance Unit
 GIAT ~~1849~~
 1847