

REPORT NUMBER: SNCAP-CAL-01-2

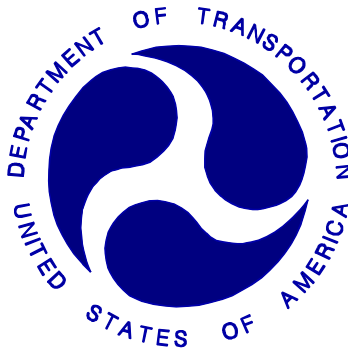
**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

**TOYOTA MOTOR CORPORATION
2001 LEXUS RX300
4-DOOR MPV**

NHTSA NUMBER: M15105

VERIDIAN ENGINEERING TEST NUMBER: 8506-15

VERIDIAN ENGINEERING
TRANSPORTATION SCIENCES CENTER
P.O. BOX 400
BUFFALO, NEW YORK 14225



February 13, 2001

FINAL REPORT

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Safety Performance Standards
Office of Crashworthiness Standards
Mail Code: NPS-10
400 Seventh Street, SW, Room No. 5313
Washington, DC 20590

This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-98-C-02001. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

Prepared By:

James A. Czarnecki, Project Engineer

Approved By:

David J. Travale, Program Manager
Transportation Sciences Center

Approval Date:

FINAL REPORT ACCEPTANCE BY:

Accepted By:

Acceptance Date:

TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No. SNCAP-CAL-01-2	2. Government Accession No.	3. Recipient's Catalog No.																															
4. Title and Subtitle Final Report of new Car Assessment Program Side Impact Testing of a 2001 Lexus RX300 4-Door SUV NHTSA No.: M15105		5. Report Date February 13, 2001																															
		6. Performing Organization Code CAL																															
7. Author(s) James A. Czarnecki, Project Engineer David J. Travale, Program Manager		8. Performing Organization Report No. 8605-15																															
9. Performing Organization Name and Address Veridian Engineering Transportation Sciences Center P.O. Box 400 Buffalo, New York 14225		10. Work Unit No.																															
		11. Contract or Grant No. DTNH22-98-C-02001																															
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Office of Crashworthiness Standards Mail Code: NPS-10 400 Seventh , SW, Room 5313 Washington, D.C. 20590		13. Type of Report and Period Covered Final Report, February 2001																															
		14. Sponsoring Agency Code NPS-10																															
15. Supplementary Notes																																	
16. Abstract A 55/28 kph 90° Impact Moving Deformable Barrier NCAP Side Impact Test was conducted on the subject 2001 Lexus RX300 4-Door SUV in accordance with the specifications of the Office of Crashworthiness Standards Test Procedure for the generation of consumer information on vehicle side crash protection. This test was conducted at the Veridian Engineering Crash Test Facility in Buffalo, New York, on February 13, 2001. The impact velocity of the Moving Deformable Barrier (MDB) was 61.64 kph, and the ambient temperature at the struck (driver's) side of the target vehicle at the time of impact was 21 °C. The target vehicle post-test maximum crush was 290 mm at level 3. The test or target vehicle's performance is given below: <table border="0"> <thead> <tr> <th></th> <th><u>Front SID</u></th> <th></th> <th><u>Rear SID</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration:</td> <td><u>35</u></td> <td>g's</td> <td><u>41</u></td> <td>g's</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td><u>30</u></td> <td>g's</td> <td><u>50</u></td> <td>g's</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td><u>30</u></td> <td>g's</td> <td><u>48</u></td> <td>g's</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td><u>32</u></td> <td>g's</td> <td><u>49</u></td> <td>g's</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td><u>46</u></td> <td>g's</td> <td><u>74</u></td> <td>g's</td> </tr> </tbody> </table> The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.					<u>Front SID</u>		<u>Rear SID</u>		Left Upper Rib Acceleration:	<u>35</u>	g's	<u>41</u>	g's	Left Lower Rib Acceleration:	<u>30</u>	g's	<u>50</u>	g's	Lower Spine Acceleration:	<u>30</u>	g's	<u>48</u>	g's	Thoracic Trauma Index (TTI):	<u>32</u>	g's	<u>49</u>	g's	Pelvis Acceleration (PEV):	<u>46</u>	g's	<u>74</u>	g's
	<u>Front SID</u>		<u>Rear SID</u>																														
Left Upper Rib Acceleration:	<u>35</u>	g's	<u>41</u>	g's																													
Left Lower Rib Acceleration:	<u>30</u>	g's	<u>50</u>	g's																													
Lower Spine Acceleration:	<u>30</u>	g's	<u>48</u>	g's																													
Thoracic Trauma Index (TTI):	<u>32</u>	g's	<u>49</u>	g's																													
Pelvis Acceleration (PEV):	<u>46</u>	g's	<u>74</u>	g's																													
17. Key Words New Car Assessment Program (NCAP) Side Impact MDB Side Impact Dummy (SID)		18. Distribution Statement <u>Copies of this report are available from:</u> National Highway Traffic Safety Administration Technical Reference Division Room 5108 (NAD-52) 400 Seventh St., S.W. Washington, D.C. 20590 Telephone No. (202) 366-4946 ATTN: Robert Hornicle																															
19. Security Classification of Report UNCLASSIFIED	20. Security Classification of Page UNCLASSIFIED	21. No. of Pages 292	22. Price																														

TABLE OF CONTENTS

<u>Section</u>		<u>Page No.</u>
1	PURPOSE AND TEST PROCEDURE	1-1
2	SUMMARY OF SIDE IMPACT TEST	2-1
3	VEHICLE TEST DATA	3-1
	Data Sheet 1 - General Vehicle Test Parameter Data	3-2
	Data Sheet 2 - Test Vehicle Summary of Results	3-5
	Data Sheet 3 - Moving Deformable Barrier (MDB) Summary	3-6
	Data Sheet 4 - Post Test Observations	3-7
4	OCCUPANT AND VEHICLE INFORMATION	4-1
	Data Sheet 5 - SID Instrumentation Data	4-2
	Data Sheet 6 - Vehicle Pre- And Post Test Measurements	4-3
	Data Sheet 7 - SID Longitudinal Clearance Dimensions	4-4
	Data Sheet 8 - SID Lateral Clearance Dimensions	4-5
	Data Sheet 9 - Vehicle Side Measurements	4-6
	Data Sheet 10 - Vehicle Exterior Crush Profiles - All Levels	4-7
	Data Sheet 11 - Vehicle Damage Profile Distances	4-13
	Data Sheet 12 - Exterior Static Crush For Impactor Face	4-14
	Data Sheet 13 - Test Vehicle Accelerometer Locations And Data Summary	4-16
	Data Sheet 14 - MDB Accelerometer Locations and Data Summary	4-19
	Data Sheet 15 - High Speed Camera Locations and Data	4-20
5	VEHICLE FUEL SYSTEM INTEGRITY	5-1
	Data Sheet 16 - FMVSS 301 Fuel System Integrity Data	5-2
	Data Sheet 17 - FMVSS 301 Rollover Data	5-3
APPENDIX A	PHOTOGRAPHS	A-1
APPENDIX B	VEHICLE, MDB AND SID RESPONSE DATA	B-1
APPENDIX C	SID CONFIGURATION AND PERFORMANCE VERIFICATION DATA	C-1
APPENDIX D	TEST EQUIPMENT LIST AND CALIBRATION INFORMATION	D -1

SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY2000 New Car Assessment Program Side Impact Protection sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-98-C-02001. The purpose of this test was to generate comparative side impact performance in a 2001 Lexus RX300 4-Door MPV. The test was conducted in accordance with the Office of Crashworthiness Standards's Laboratory Test Procedure dated July, 1997.

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 2001 Lexus RX300 4-Door MPV was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the monorail at a velocity of 61.64 kph (38.3 mph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by the Veridian Engineering Transportation Sciences Center in Buffalo, New York on February 13, 2001. Pre- and post-test photographs of the test vehicle, the moving deformable barrier (MDB), and the side impact dummies (SIDs) are included in Appendix A.

Two restrained Side Impact Dummies (SIDs) were placed in the driver (Pos. #1) and left rear (Pos. #4) designated seating positions according to the instructions specified in the OCWS Side Impact Laboratory Test Procedure which is dated July, 1997. The side impact test was documented by one real-time camera and 9 high-speed cameras. Camera locations and other pertinent camera information are included in this report.

The SIDs were instrumented with the following accelerometers:

1. Left Upper Rib (LUR) uniaxial and redundant accelerometer (Y-direction)
2. Left Lower Rib (LLR) uniaxial and redundant accelerometer (Y-direction)
3. Lower Thoracic Spine (T₁₂) uniaxial and redundant accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial and redundant accelerometer (Y-direction)
5. Head triaxial accelerometers (X-, Y- and Z-direction)

A summary of the side impact dummy (SID) configuration and verification test data can be found in Appendix C. A total of 54 channels of data were recorded. Appendix B contains the vehicle, MDB and dummy response data traces.

The following table summarizes the results of the test.

Injury Criteria	Front SID	Rear SID
TTI (g)	32	49
PEV (g)	46	74

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style:	2001 Lexus RX300 4-Door MPV		
Vehicle Body Color:	White	VIN:	JTJHF10U610184756
Vehicle NHTSA No.:	M15105	Month & Year of Manufacture:	10-00
Engine Data:	6	Cylinders;	-
		CID;	3.0
		Liters;	-
		cc	
Engine Placement:	-	Longitudinal;	or
			x
		Lateral	
Transmission:	4	Speed;	-
		Manual;	x
		Automatic;	-
		Overdrive	
Final Drive:	-	Rear Wheel Drive;	-
		Front Wheel Drive;	x
		Four Wheel	
Odometer Reading	22	km	
Options:	x	A/C;	x
		Power Steering;	x
		Pwr.Brakes;	x
		Pwr. Windows	

DATA FROM TIRE PLACARD

Tire Pressure* (at capacity);	210	kPa FRONT
	210	kPa REAR
Recommended Tire Size:	P225/70R16	
Tires on Test Vehicle:	P225/70R16	; Manufacturer: Bridgestone
Vehicle Capacity Data:		
Number of Occupants:	2	Front;
	3	Rear;
	-	3rd Seat;
	5	Total
Type of Front Seats:	x	Bucket;
	-	Bench;
	-	Split Bench
Type of Front Seat Back:	-	Fixed;
	x	Adjustable with
	x	Lever or
	-	Knob
Vehicle Max Capacity Loading =	380	kg (A)
No. of Occupants x 68.04 kg. =	340.2	kg (B)
Vehicle Cargo Capacity =	39.8	kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front	=	529.5	kg	Left Rear	=	388.5	kg
Right Front	=	526	kg	Right Rear	=	383	kg
TOTAL FRONT	=	1055.5	kg	TOTAL REAR	=	771.5	kg
% of Total Weight	=	57.8	%	% of Total Weight	=	42.2	%
TOTAL WEIGHT	=	1827.0	kg				

* Tire pressure used in test.

DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids	=	<u>1827.0</u>	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	<u>39.8</u>	kg (B)
Weight of instrumented Side Impact Dummies (1 or 2 X <u>81.2</u> kg)	=	<u>162.4</u>	kg (C)
TEST VEHICLE TARGET WEIGHT:	=	<u>2029.2</u>	kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDVW + 1 or 2 SID(s) + CARGO):

Left Front	=	<u>580</u>	kg	Left Rear	=	<u>486</u>	kg
Right Front	=	<u>528.5</u>	kg	Right Rear	=	<u>445</u>	kg
TOTAL FRONT	=	<u>1108.5</u>	kg	TOTAL REAR	=	<u>931.0</u>	kg
% of Total Weight	=	<u>54.4</u>	%	% of Total Weight	=	<u>45.6</u>	%
TOTAL TEST WEIGHT	=	<u>2039.5</u>	kg				

AS TESTED WEIGHT OF TEST VEHICLE (1 OR 2 SID(s) + CARGO + EQUIPMENT & INSTRUMENTATION):

Left Front	=	<u>577</u>	kg	Left Rear	=	<u>492</u>	kg
Right Front	=	<u>525</u>	kg	Right Rear	=	<u>439</u>	kg
TOTAL FRONT	=	<u>1102.0</u>	kg	TOTAL REAR	=	<u>931.0</u>	kg
% of Total Weight	=	<u>54.2</u>	%	% of Total Weight	=	<u>45.8</u>	%
TOTAL TEST WEIGHT	=	<u>2033.0</u>	kg				

TEST VEHICLE ATTITUDE (all dimensions in millimeters):

AS DELIVERED:

Left Front	<u>820</u>	Right Front	<u>818</u>	Left Rear	<u>829</u>	Right Rear	<u>827</u>
------------	------------	-------------	------------	-----------	------------	------------	------------

FULLY LOADED:

Left Front	<u>802</u>	Right Front	<u>813</u>	Left Rear	<u>809</u>	Right Rear	<u>798</u>
------------	------------	-------------	------------	-----------	------------	------------	------------

READY FOR TEST:

Left Front	<u>804</u>	Right Front	<u>815</u>	Left Rear	<u>809</u>	Right Rear	<u>799</u>
------------	------------	-------------	------------	-----------	------------	------------	------------

Test Vehicle Wheelbase: 2615 millimeters

C.G. = 1197.5 millimeters rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side	=	<u>4425</u>	millimeters
Left Side	=	<u>4425</u>	millimeters
Centerline	=	<u>4588</u>	millimeters

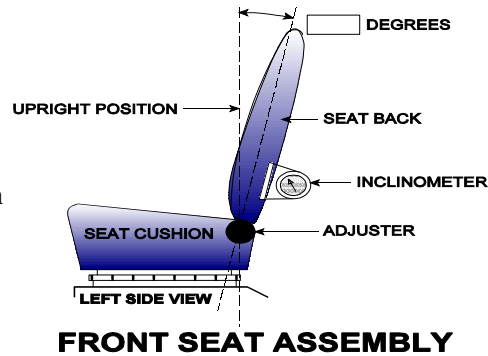
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

Nominal Design Riding Position for adjustable driver and passenger seat backs. Please describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent, if applicable.



FRONT SEAT CUSHION PLACEMENT: Mid-Position

Total Length of Adjustment Travel: 240 millimeters

Total Number of Adjustment Positions or Detents: Placed in electronic middle - 120 mm

FRONT SEAT BACK ADJUSTMENT POSITION: Reclined 7.4 degrees rearward from full upright

Seat Back Torso Angle: 7.4 degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: 120 millimeters

Seat Back Adjustment Position: 1 notch back from front

ADJUSTABLE STEERING COLUMN POSITION: 6 positions - placed in 3rd from bottom most

WINDOW POSITIONS: Left Front: Closed Left Rear: Closed

Right Front: Removed Right Rear: Removed

Note: Windows will be in closed position on struck side of test vehicle and in open position on opposite side.

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

75.0 liters (Fuel Tank Usable Capacity)

69.5 liters used for test (92%-94% of Fuel Tank Usable Capacity)

LOCATION OF IMPACT POINT ON TEST VEHICLE SIDE TO BE IMPACTED:

Wheelbase = 2615 millimeters

Impact Point is 368 millimeters rearward of front axle centerline

(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 364 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2001 Lexus RX300

Body Style: 4-Door SUV

VIN: JTJHF10U610184756

NHTSA No.: M15105

Test Date: February 13, 2001

Overall Length = 4588 millimeters; Overall Width = 1814 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front = 577 kg Left Rear = 492 kg

Right Front = 525 kg Right Rear = 439 kg

TOTAL FRONT = 1102.0 kg TOTAL REAR = 931.0 kg

TOTAL VEHICLE WEIGHT 2033.0 kg

Wheelbase = 2615 millimeters

Longitudinal C.G. from Center of Front Axle = 1197.5 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

Actual Impact Point is 4 mm forward of nominal impact ref. line (Lateral)

Actual Impact Point is 5 mm below nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (399 mm above ground) = 172 millimeters

2. LEVEL 2 (712 mm above ground) = 282 millimeters

3. LEVEL 3 (821 mm above ground) = 290 millimeters

4. LEVEL 4 (1061 mm above ground) = 141 millimeters

5. LEVEL 5 (1598 mm above ground) = 10 millimeters

Maximum Post-Test Intrusion = 290 millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification 013 027

Restraints Used 3 point belt system with side airbag 3 point belt system

INSTRUMENTATION:

Number of Vehicle Data Channels: = 26

Number of Cameras: Onboard = 3

Offboard = 8

TOTAL = 11

DATA SHEET 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

MDB FACE MANUFACTURER AND SERIAL NUMBER:

Plascore, Inc.

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to left

MDB DETAILS:

Overall Width of Framework Carriage	=	<u>1250</u>	millimeters
Overall Length of MDB (incl. honeycomb impact face)	=	<u>4120</u>	millimeters
Wheelbase of Framework Carriage	=	<u>2590</u>	millimeters
Tread of Framework Carriage (Front & Rear)	=	<u>1875</u>	millimeters
C.G. Location Rearward of Front Axle	=	<u>1104</u>	millimeters

MDB WEIGHT:

Left Front	=	<u>409.5</u>	kg	Left Rear	=	<u>281.5</u>	kg
Right Front	=	<u>372.5</u>	kg	Right Rear	=	<u>299.0</u>	kg
TOTAL FRONT =		<u>782.0</u>	kg	TOTAL REAR =		<u>580.5</u>	kg
TOTAL MDB WEIGHT =		<u>1362.5</u>	kg				
Impact Angle (MDB C/L to Target Vehicle C/L)	=	<u>90</u>	degrees				
Impact Speed	=	<u>61.64</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>181</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>123</u>	millimeters
3. Row C at Mid Level	=	<u>78</u>	millimeters
4. Row D at Top of Stack Level	=	<u>146</u>	millimeters

INSTRUMENTATION:

Number of MDB Data Channels	=	<u>5</u>
-----------------------------	---	----------

DATA SHEET 4

POST-TEST OBSERVATIONS

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

VISIBLE DUMMY CONTACT POINTS:

	<u>LEFT FRONT SID</u>	<u>LEFT REAR SID</u>
Head:	<u>Headrest / D-ring</u>	<u>C-pillar / Headrest</u>
Upper Torso:	<u>Door skin / Airbag</u>	<u>Door skin</u>
Lower Torso:	<u>Arm rest</u>	<u>Arm rest</u>
Left Knee:	<u>Door skin / Arm rest</u>	<u>Door skin / Arm rest</u>
Right Knee:	<u>Left knee</u>	<u>Left knee</u>

DOOR OPENING:

	<u>LEFT DOOR</u>	<u>RIGHT DOOR</u>
Front:	<u>Closed / Inoperable</u>	<u>Closed / Operable</u>
Rear:	<u>Closed / Inoperable</u>	<u>Closed / Operable</u>

MDB DISTANCE FROM TARGET IMPACT POINT:

Vertical: 5 below
Horizontal: 4 forward

ARM REST LOCATIONS:

Front:	<u>Inboard</u>
Rear:	<u>Inboard</u>

SEAT MOVEMENT:

Front:	<u>Inboard</u>
Rear:	<u>Inboard</u>

GLAZING DAMAGE:

Windshield:	<u>No damage</u>
Window:	<u>No damage</u>

PILLAR PERFORMANCE:

No visible tears or separation

SILL SEPARATION:

None

AIR BAG DEPLOYMENT STATUS:

	<u>DRIVER</u>	<u>FRONT PASSENGER</u>	<u>REAR PASSENGER</u>
<u>FRONT</u>	<u>No</u>	<u>No</u>	<u>N/A</u>
<u>SIDE</u>	<u>Deployed</u>	<u>No</u>	<u>N/A</u>

OTHER NOTABLE IMPACT EFFECTS:

Bumper partially torn off front of vehicle (increasing vehicle length measurement).

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID INSTRUMENTATION DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

	Front Dummy ID# 013				Rear Dummy ID# 027			
	Pos. Direction		Neg. Direction		Pos. Direction		Neg. Direction	
	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
HEAD ACCELERATIONS:								
Longitudinal X	11.7	139.3	-13.8	87.4	8.2	72.7	-28.5	85.6
Lateral Y	25.7	60.0	-2.8	142.4	189.7	63.6	-19.9	73.1
Vertical Z	17.0	57.3	-1.0	16.0	15.6	54.2	-47.8	71.7
Resultant R	29.2	57.1	0.0	-9.9	191.1	63.6	0.0	-9.7
HIC	56.7				1267.1			
RIB ACCELERATIONS:								
Upper Rib Lateral . . Y	34.9	55.0	-5.1	91.9	41.0	51.9	-3.2	226.3
Upper Rib Lateral . . Y(R)	34.5	55.6	-4.9	92.5	41.6	51.9	-3.4	226.3
Lower Rib Lateral . . Y	30.0	55.6	-4.9	66.3	49.6	51.3	-3.9	78.1
Lower Rib Lateral . . Y(R)	29.4	55.6	-4.9	66.9	48.3	51.3	-3.8	78.1
SPINE ACCELERATIONS:								
Lower Lateral Y	30.1	48.8	-5.4	103.8	48.1	50.0	-15.6	73.2
Lower Lateral Y(R)	29.1	48.8	-5.2	103.8	48.1	49.4	-16.0	73.2
PELVIC ACCELERATIONS:								
Lateral Y	46.1	33.1	-11.0	58.2	73.5	41.9	-9.2	61.3
Lateral Y(R)	46.8	33.1	-11.1	58.2	74.8	41.9	-8.8	61.3

REFERENCE: Positive Direction - Longitudinal (X) = forward
Lateral (Y) = to right
Vertical (Z) = up
Negative Direction - Longitudinal (X) = rearward
Lateral (Y) = to left
Vertical (Z) = down

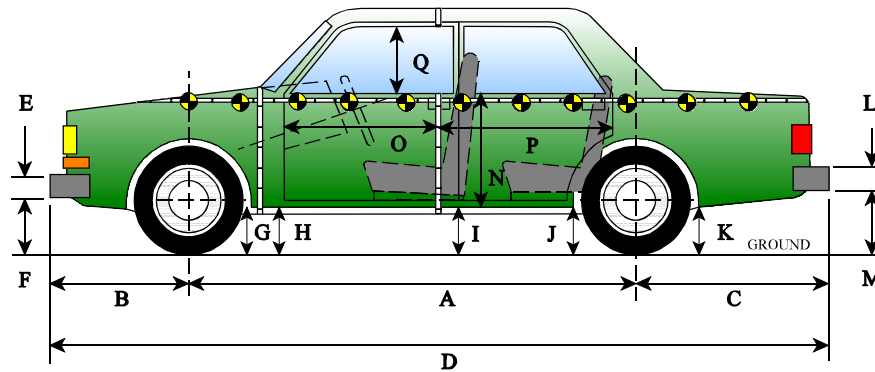
Note: Above data has been FIR filtered, Y(R) denotes redundant Y direction accelerometer.
Head Accelerations are filtered at SAE Class 1000.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



LEFT SIDE VIEW

NOTE: all dimensions are in millimeters with tolerance of ± 3 mm

	PRE-TEST (as delivered)	PRE-TEST (as tested)	POST-TEST (as tested)	Δ CHANGE
A	2615	-	2617	2
B	977	-	989	12
C	996	-	994	-2
D	4588	-	4600	12
E	189	-	189	0
F	454	375	389	14
G	314	302	331	29
H	312	301	334	33
I	341	351	369	18
J1	278	361	365	4
J2	311	303	307	4
K	406	398	400	2
L	234	-	234	0
M	448	446	446	0
N	745	-	701	-44
O	1013	-	995	-18
P	994	-	957	-37
Q	494	-	519	25
R	4425	-	4409	-16
S	4425	-	4482	57
T	1814	-	1641	-173

D = Length at Centerline
T = Width at B-Pillar

E&L = Bumper Thickness
J1 = To Pinch Weld

R = Right Side Length
J2 = To Sill

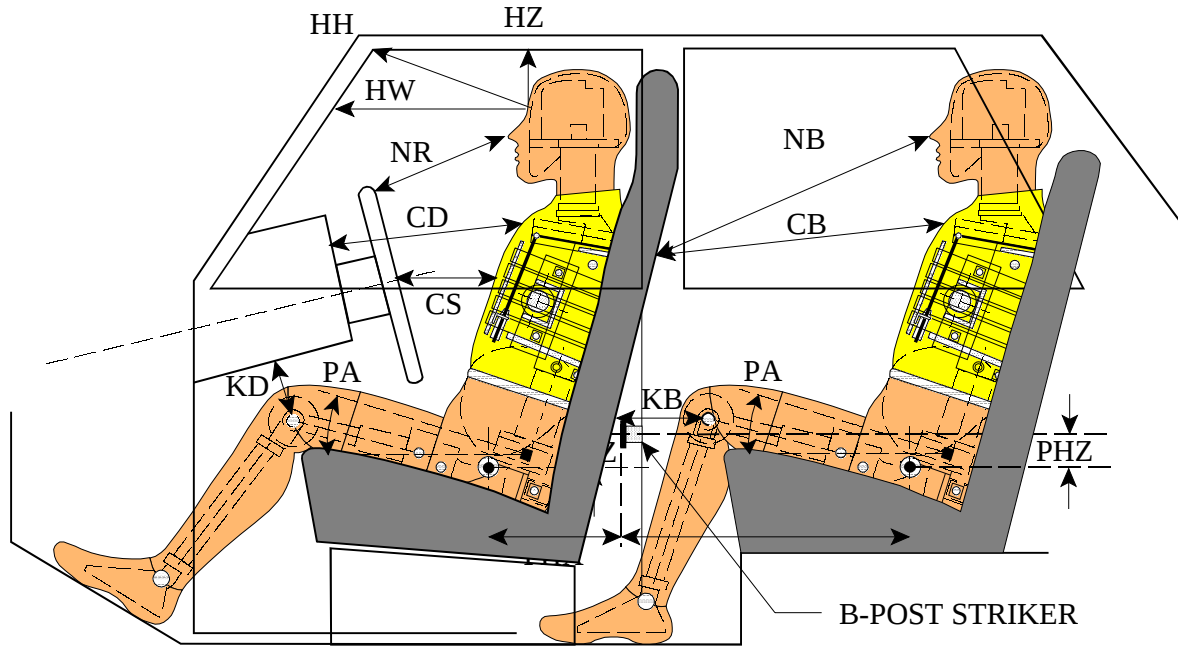
S = Left Side Length

DATA SHEET 7

SID LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



LEFT SIDE VIEW

NOTE: 2-DOOR VEHICLE SHOWN.
REAR DUMMY PHX & PHZ
MEASUREMENTS FOR A 4-DOOR
VEHICLE WOULD USE THE C-POST
STRIKER AS A REFERENCE POINT

NOTE: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID# <u>013</u>	LEFT REAR PASS. ID# <u>027</u>
HH	452	N/A
HW	706	N/A
HZ	163	154
NR/NB	531	531
CD/CB	584	482
CS	336	N/A
KDL(KDA°)/KBL(KDA°)	165 / (34 °)	211 / (24 °)
KDR(KBA°)/KBR(KBA°)	151 / (51 °)	218 / (21 °)
PA°	23.5 °	23.8 °
PHX	196	291
PHZ	130	283

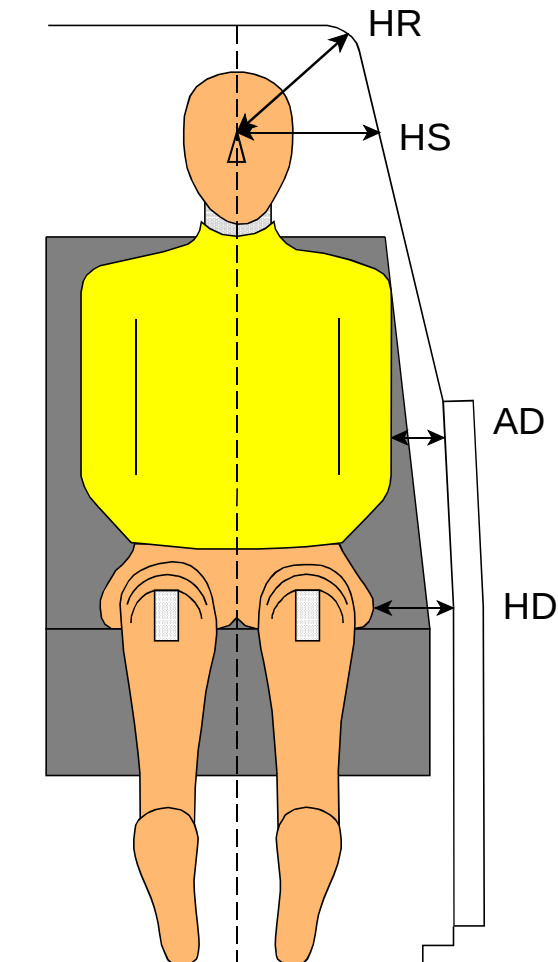
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID LATERAL CLEARANCE DIMENSIONS

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



NOTE: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID # <u>013</u>		LEFT REAR PASS. ID # <u>027</u>	
HR	219		211	
HS	321		335	
AD*	LOWER: 119	UPPER: 114	LOWER: 132	UPPER: 129
HD	149		191	

* Lower measurement is taken laterally at the center of the lower rib accelerometer height from the SID arm segment to the closest part of the vehicle side.

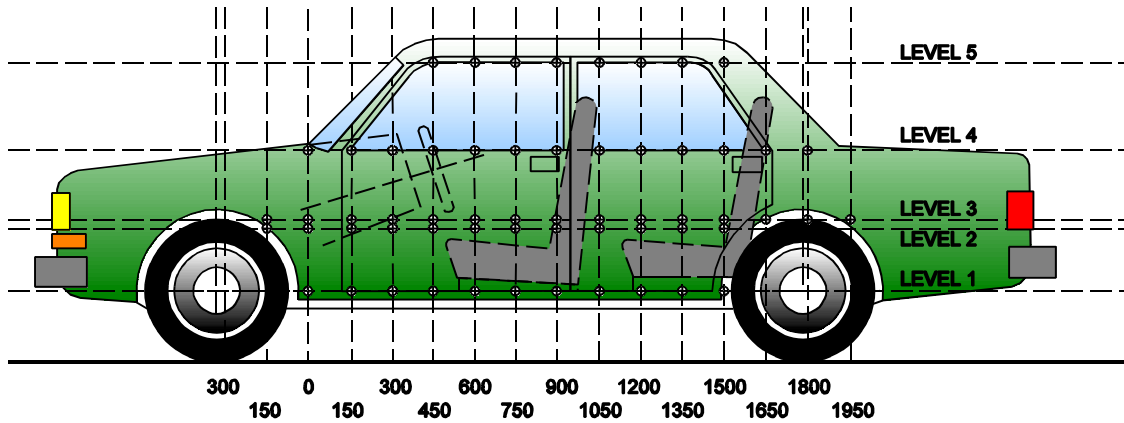
Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



LEFT SIDE VIEW

NOTE: All measurements are in millimeters (mm)

LEVEL 5 - WINDOW TOP
LEVEL 4 - WINDOW SILL
LEVEL 3 - MID-DOOR
LEVEL 2 - OCCUPANT H-POINT
LEVEL 1 - AXLE CENTERLINE HEIGHT OR SILL TOP HEIGHT

MEASUREMENTS ARE TAKEN WHEN THE VEHICLE IS IN THE "AS TESTED" CONFIGURATION.

Measurements Along the Vertical 750 mm Line Shown Above:

Level 5 @ Window Top	=	<u>1598</u>	millimeters
Level 4 @ Window Sill	=	<u>1061</u>	millimeters
Level 3 @ Mid Door	=	<u>821</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>712</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>399</u>	millimeters

DATA SHEET 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

NOTE: All dimensions are in millimeters with a tolerance of ± 3 mm

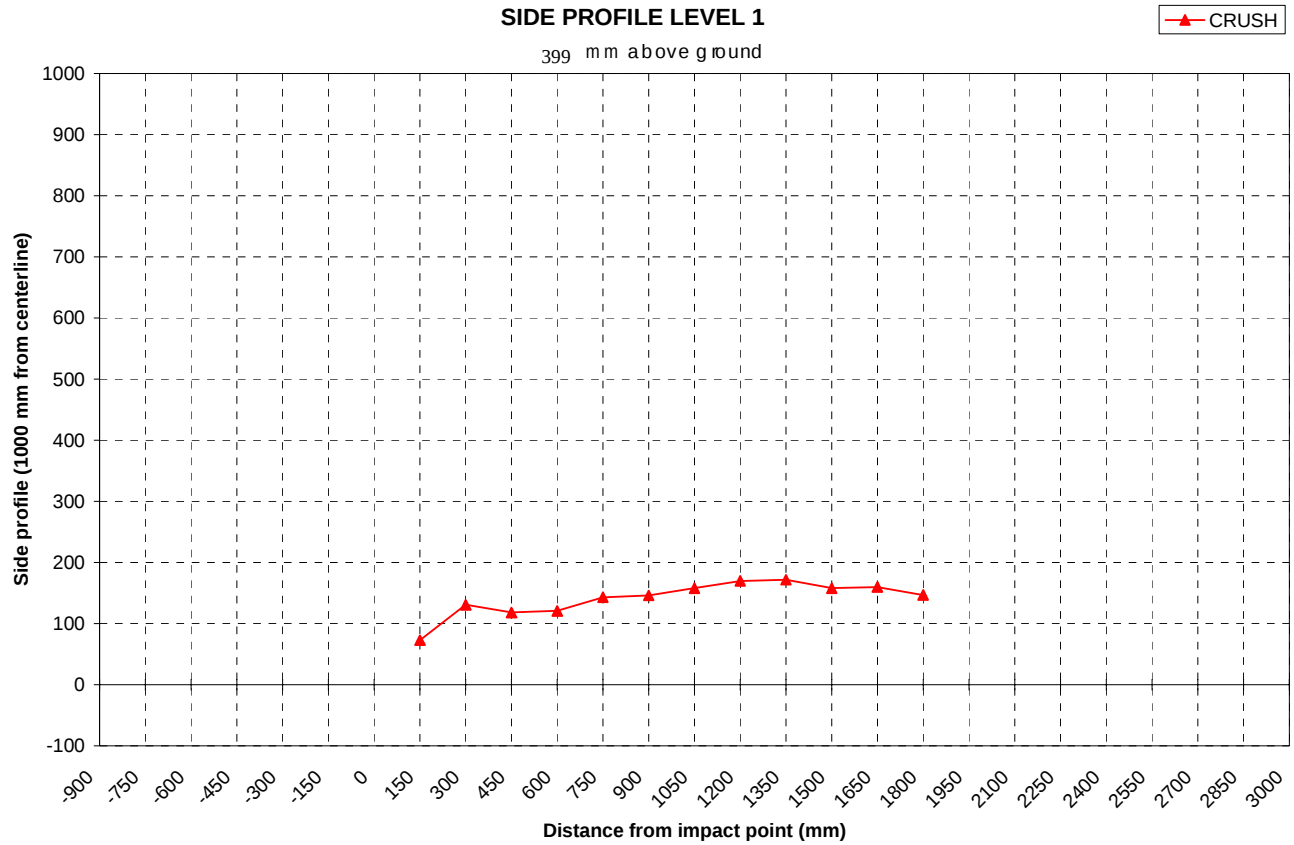
		DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT																											
LEVEL	HEIGHT (mm)		-900	-750	-600	-450	-300	-150	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000
LEVEL 1 SIDE SILL	399	PRE	--	--	--	--	--	--	--	158	174	176	174	165	168	168	170	174	176	175	--	--	--	--	--	--	--	--	--
		POST	--	--	--	--	--	--	--	231	305	294	295	308	314	326	338	342	332	336	322	--	--	--	--	--	--	--	--
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	73	131	118	121	143	146	158	170	172	158	160	147	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 2 H POINT	712	PRE	184	128	--	--	--	--	106	114	117	117	113	117	113	113	117	120	119	125	124	109	--	--	--	119	149	187	232
		POST	138	94	--	--	--	--	161	223	302	308	317	343	365	393	374	383	400	407	341	188	--	--	--	152	168	200	238
		CRUSH	-46	-34	N/A	N/A	N/A	N/A	55	109	185	191	204	226	252	280	257	263	281	282	217	79	N/A	N/A	N/A	33	19	13	6
LEVEL 3 MID DOOR	821	PRE	207	161	118	98	95	93	105	114	107	105	104	102	102	102	104	106	107	112	117	115	111	110	119	135	165	193	241
		POST	158	125	89	84	107	117	170	226	246	274	296	315	333	336	334	364	397	388	358	255	185	154	145	147	168	180	217
		CRUSH	-49	-36	-29	-14	12	24	65	112	139	169	192	213	231	234	230	258	290	276	241	140	74	44	26	12	3	-13	-24
LEVEL 4 WINDOW SILL	1061	PRE	--	--	--	239	206	187	178	171	109	158	155	150	147	144	142	142	144	145	150	154	158	161	171	179	192	216	257
		POST	--	--	--	239	178	163	163	168	118	190	192	202	230	244	283	279	284	264	236	210	170	187	195	177	189	200	245
		CRUSH	N/A	N/A	N/A	0	-28	-24	-15	-3	9	32	37	52	83	100	141	137	140	119	86	56	12	26	24	-2	-3	-16	-12
LEVEL 5 WINDOW TOP	1598	PRE	--	--	--	--	--	--	--	--	--	--	--	--	416	409	403	405	403	408	416	422	432	446	463	--	--	--	--
		POST	--	--	--	--	--	--	--	--	--	--	--	--	406	401	413	402	404	406	412	420	432	444	462	--	--	--	--
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-10	-8	10	-3	1	-2	-4	-2	0	-2	-1	N/A	N/A	N/A	N/A

DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2001 Lexus RX300

NHTSA No. No.

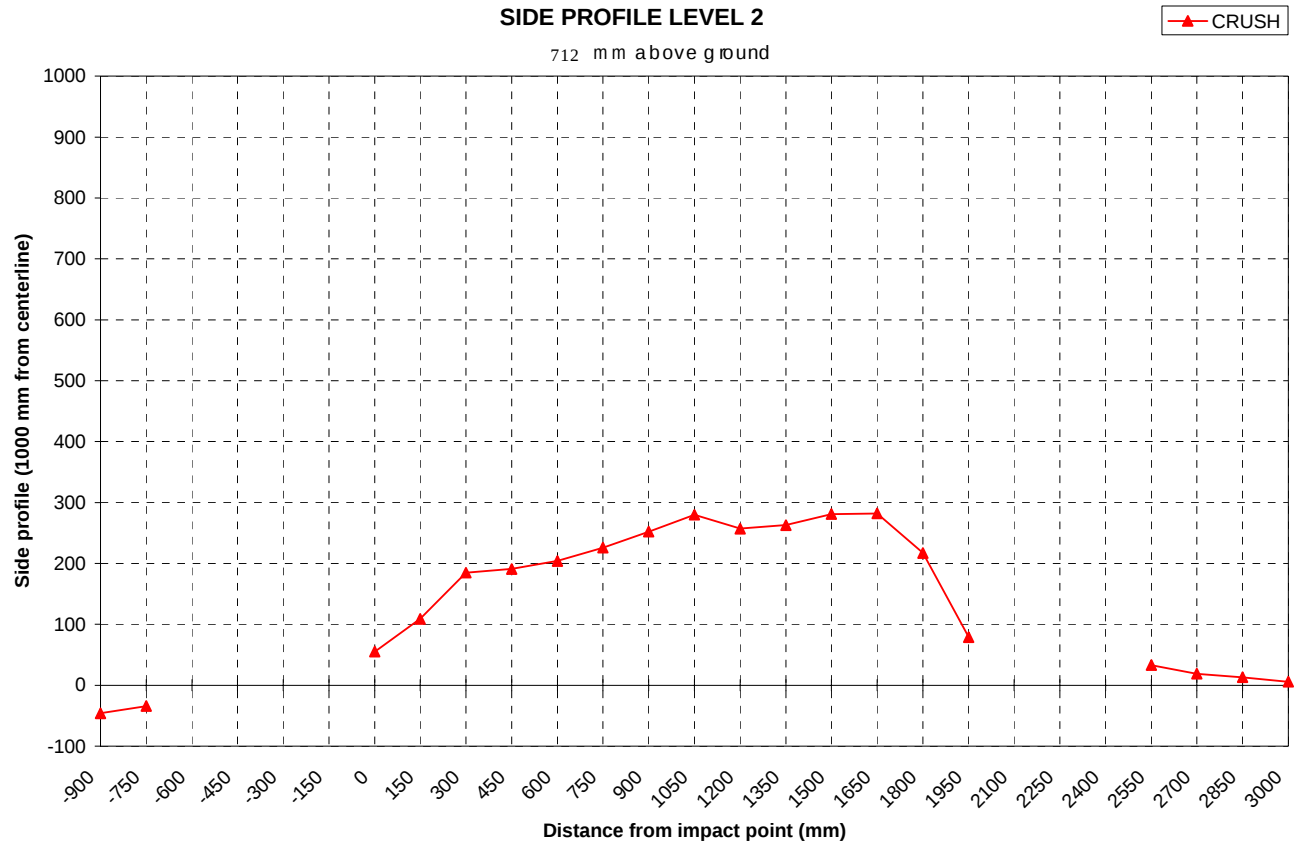


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

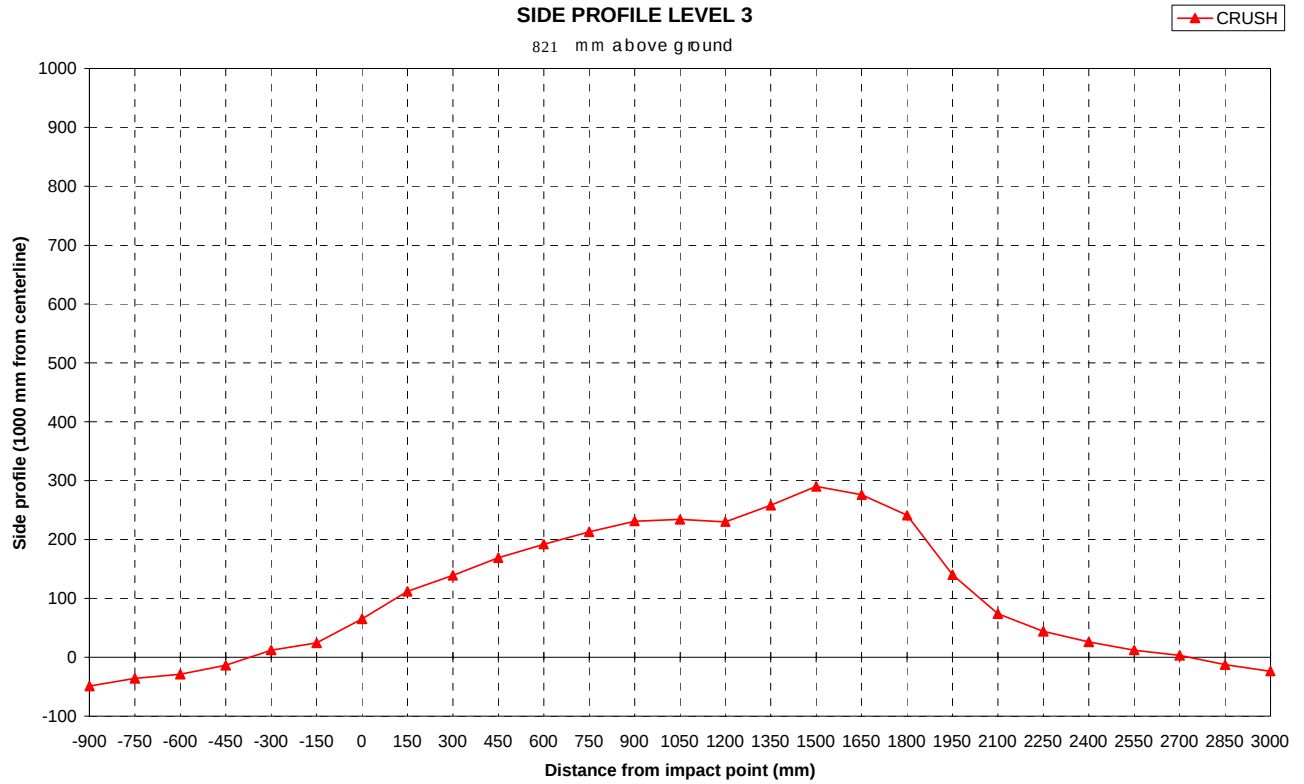


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

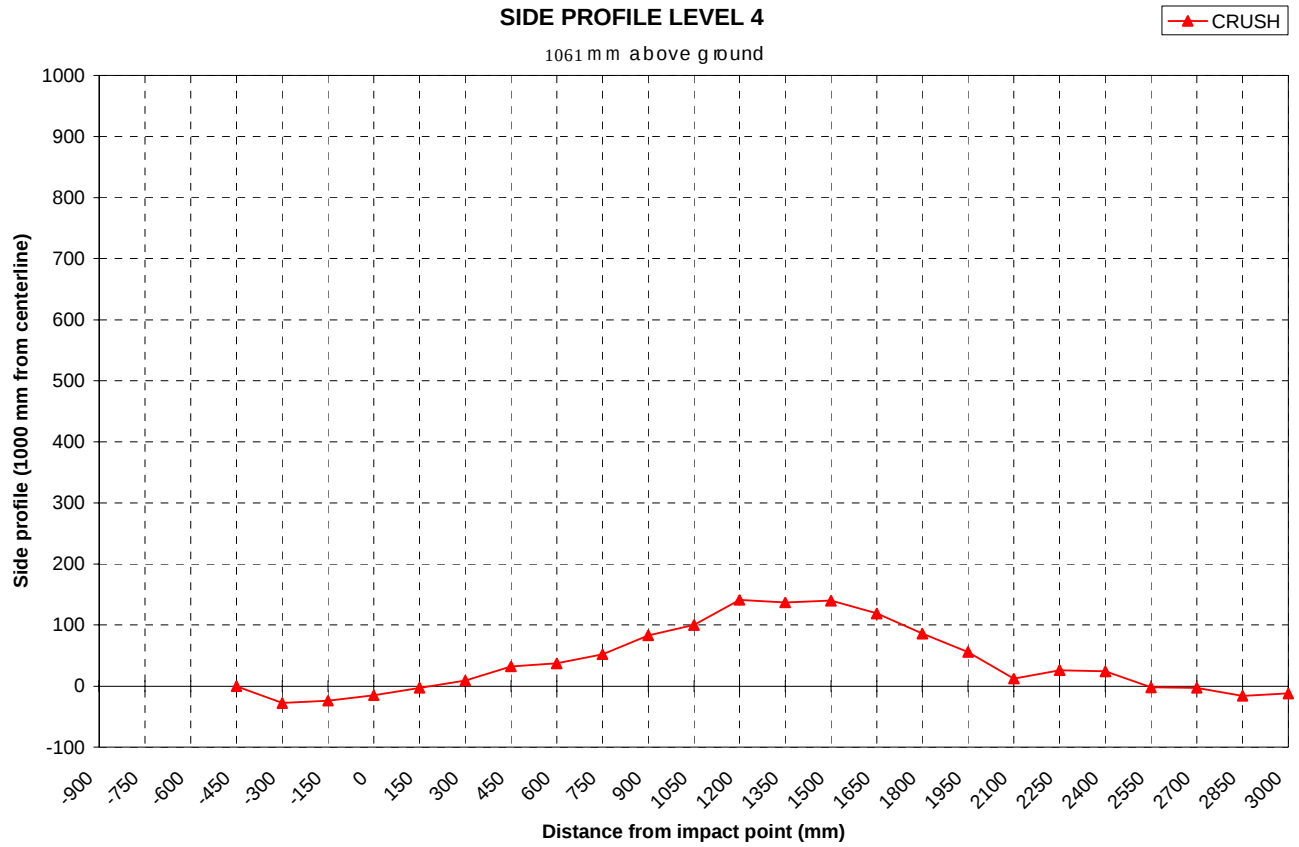


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

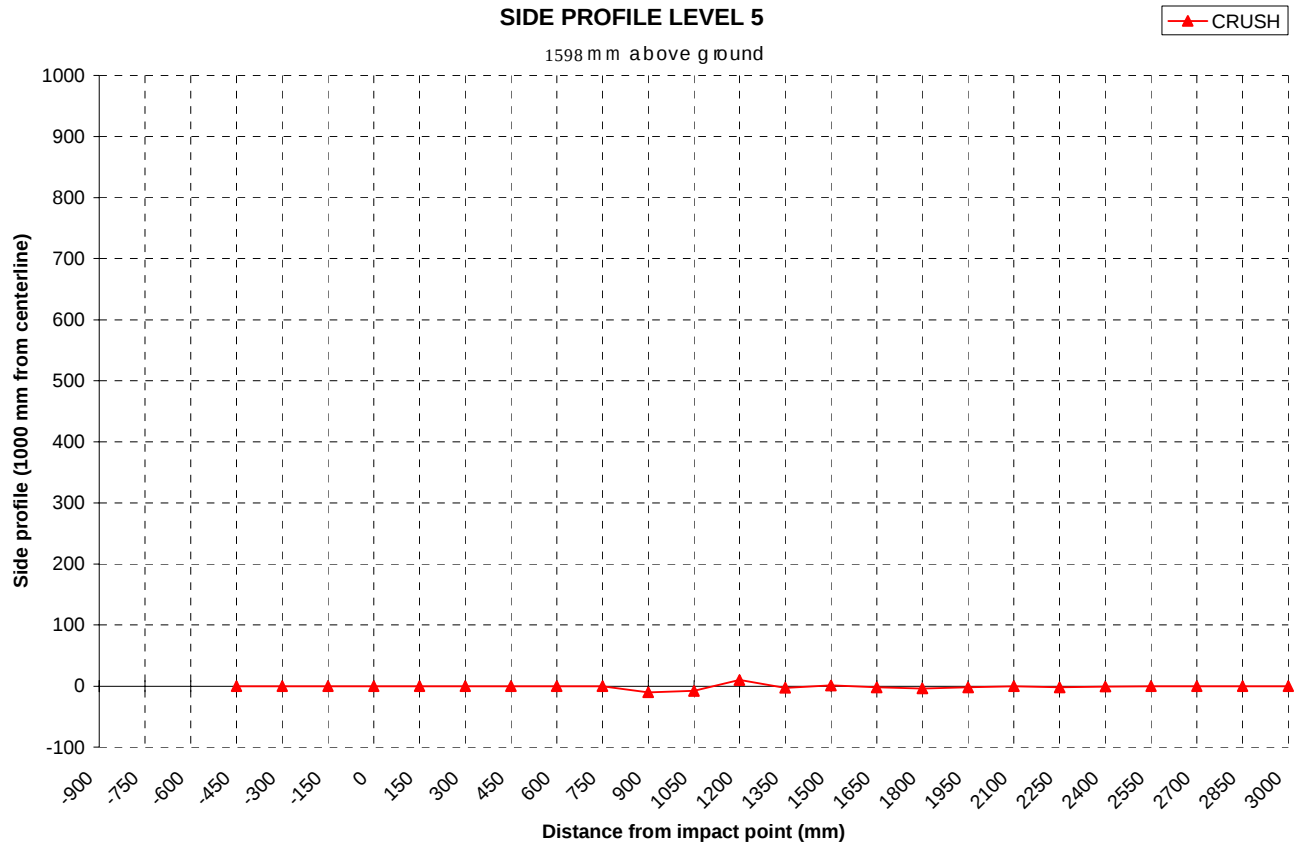


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

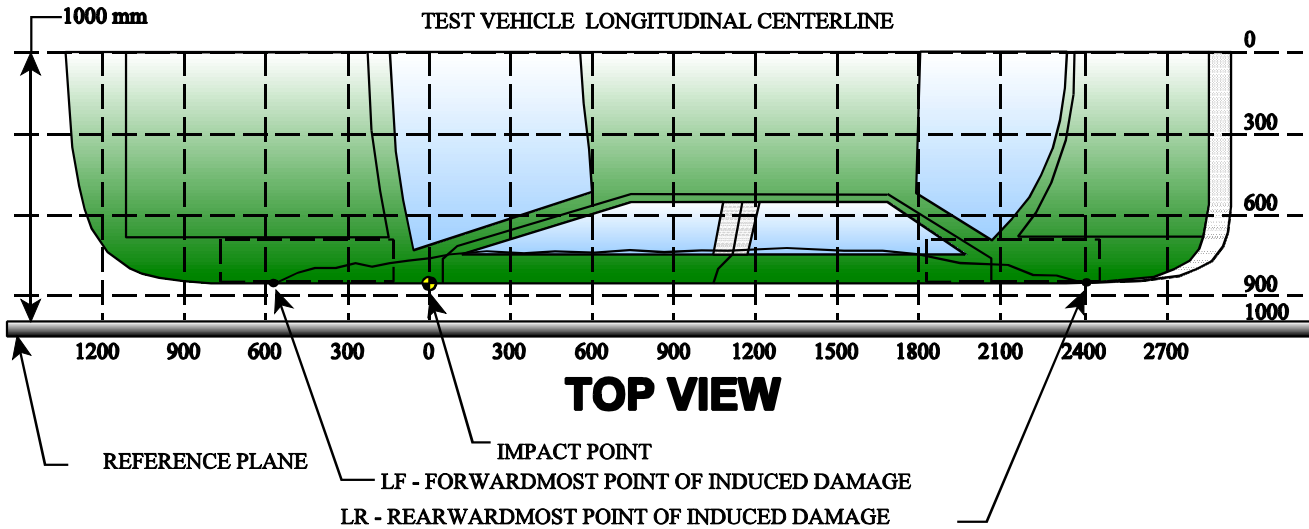


DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



MEASUREMENT CONVENTIONS:

Forward of the impact point (towards front of vehicle) is considered negative (—).
Rearward of the impact point (toward rearend of vehicle) is considered positive (+).

NOTE: All dimensions are in millimeters with tolerance of ± 3 mm.

DPD MEASUREMENTS		POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1	(LF = <u>-365</u> mm)	96	97	-1
2	308	302	117	185
3	981	380	113	267
4	1654	405	125	280
5	2327	149	115	34
6	(LR = <u>3000</u> mm)	238	232	6

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE (Grid as looking at MDB from front)

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

NOTE: All dimensions are in millimeters with a tolerance of ± 3 mm

			DISTANCE RIGHT OF CENTER (mm)									DISTANCE LEFT OF CENTER (mm)							
LEVEL	HEIGHT AT CL (mm)*		800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800
LEVEL 4 TOP STACK	813	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	655	632	622	621	635	666	676	659	648	654	663	672	682	699	719	746	765
		CRUSH	36	13	3	2	16	47	57	40	29	35	44	53	63	80	100	127	146
LEVEL 3 MID LEVEL	686	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	671	641	638	647	652	657	657	638	639	644	645	649	654	660	668	681	697
		CRUSH	52	22	19	28	33	38	38	19	20	25	26	30	35	41	49	62	78
LEVEL 2 TOP BUMPER	533	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	734	726	716	712	704	713	711	710	703	709	704	707	710	710	713	723	742
		CRUSH	115	107	97	93	85	94	92	91	84	90	85	88	91	91	94	104	123
LEVEL 1 MID BUMPER	432	PRE	535	519	518	518	518	518	518	518	518	518	518	518	518	518	518	519	535
		POST	705	692	680	676	669	669	670	672	670	664	665	665	663	656	659	691	716
		CRUSH	170	173	162	158	151	151	152	154	152	146	147	147	145	138	141	172	181

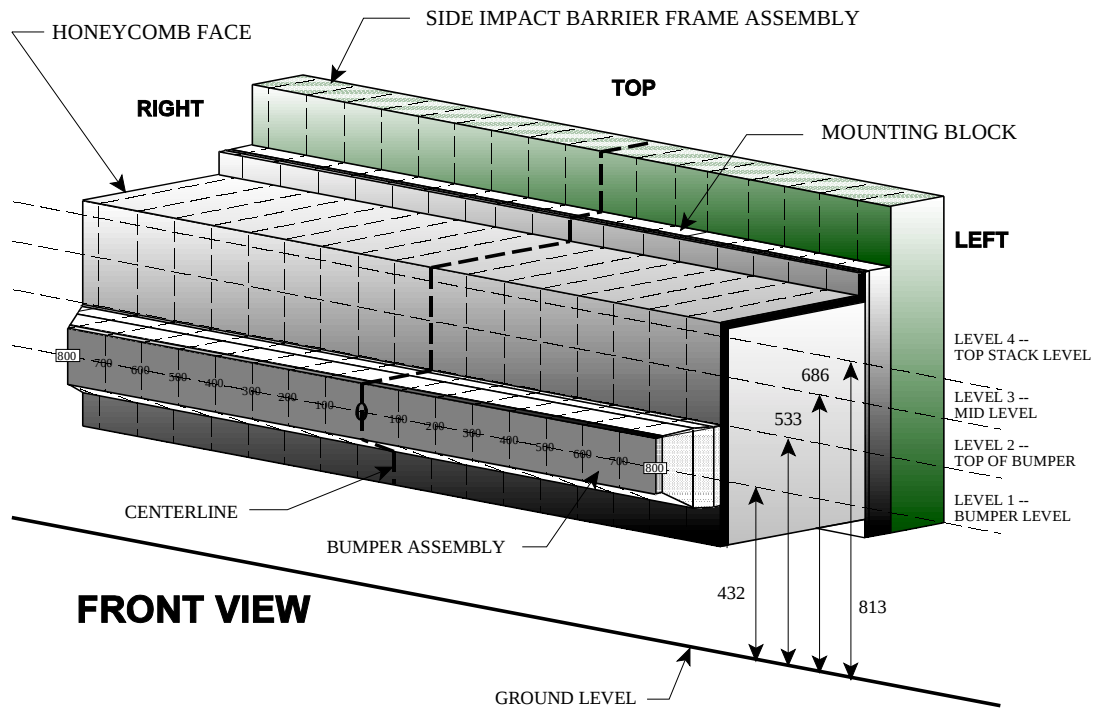
*Heights measured above ground level.

DATA SHEET 12 (continued)

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



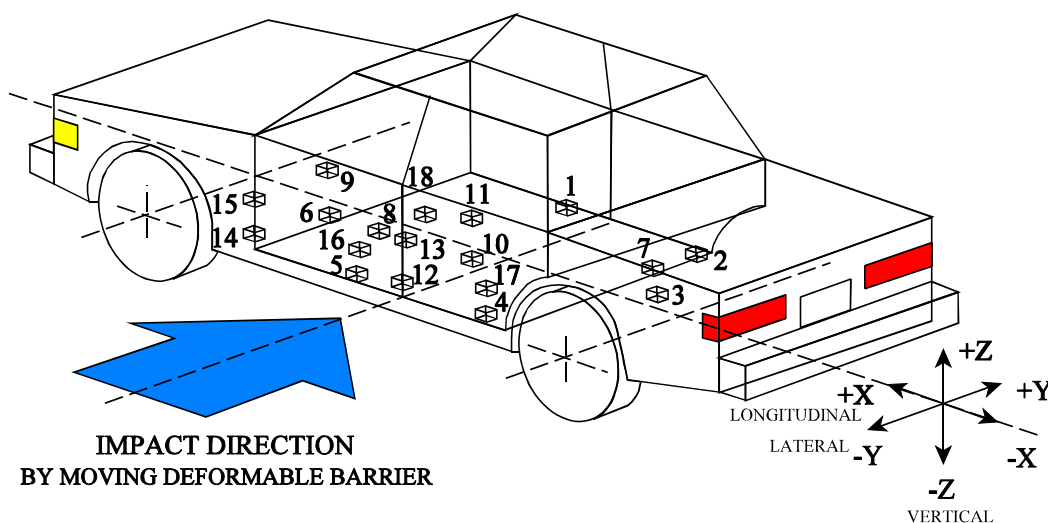
NOTE: Dimensions are shown in millimeters, mm

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



1-Right Side Sill @ Front Seat
2-Right Side Sill @ Rear Seat
3-Rear Floorpan Above Axle
4-Left Side Sill @ Rear Seat
5-Left Side Sill @ Front Seat
6-Left Front Door on Centerline
7-Right Rear Occupant Compartment
8-Midrear of Left Front Door
9-Left Front Door Upper Centerline

10-Midrear of Left Rear Door
11-Left Rear Door Upper Centerline
12-Left Lower B-Pillar
13-Left Middle B-Pillar
14-Left Lower A-Pillar
15-Left Middle A-Pillar
16-Front Seat Track
17-Rear Seat Track
18-Vehicle CG

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
		X*	Y*	Z*		Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
1	Right Side Sill at Front Seat	2838	697	436	pos.	3.0	61.3	30.4	7.5	6.5	16.6	30.6	7.6
					neg.	-6.0	9.9	-2.3	189.3	-11.4	20.5	0.0	-19.2
2	Right Side Sill at Rear Seat	1897	626	423	pos.	3.5	62.0	35.0	7.4	5.3	81.3	35.0	7.3
					neg.	-7.3	10.5	-2.3	138.1	-7.6	23.5	0.0	-14.8
3	Rear Floorpan Above Axle	1025	58	673	pos.	5.7	16.2	23.8	8.7	19.3	17.0	26.2	8.5
					neg.	-11.4	21.0	-1.9	112.9	-13.7	13.1	0.0	-14.3
4	Left Side Sill at Rear Seat	1854	-651	407	pos.	-	-	54.9	10.7	-	-	-	-
					neg.	-	-	-14.2	19.5	-	-	-	-
5	Left Side Sill at Front Seat	2777	-614	408	pos.	-	-	57.1	7.2	-	-	-	-
					neg.	-	-	-16.4	17.2	-	-	-	-
6	Left Front Door on Centerline	2660	-1207	897	pos.	-	-	135.8	15.1	-	-	-	-
					neg.	-	-	-212.2	29.7	-	-	-	-
7	Right Rear Occupant Compartment	1901	338	417	pos.	-	-	34.9	7.3	-	-	-	-
					neg.	-	-	-2.3	137.5	-	-	-	-
8	Midrear of Left Front Door	2535	-1406	919	pos.	-	-	182.3	20.1	-	-	-	-
					neg.	-	-	-144.2	16.0	-	-	-	-
9	Left Front Door Upper Centerline	2745	-1289	913	pos.	-	-	277.5	12.1	-	-	-	-
					neg.	-	-	-205.0	16.6	-	-	-	-
10	Midrear of Left Rear Door	1570	-1331	920	pos.	-	-	98.4	7.9	-	-	-	-
					neg.	-	-	-115.1	33.0	-	-	-	-
11	Left Rear Door Upper Centerline	1719	-1111	942	pos.	-	-	111.9	23.1	-	-	-	-
					neg.	-	-	-120.0	29.7	-	-	-	-

*Reference: X - Rear Bumper (+ Forward)

Y - Vehicle Centerline (+ To Right)

Z - Ground Level (+ Up)

**Accelerometer was not requested by COTR.

4-17

8506-15

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
		X*	Y*	Z*		Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
12	Left Lower B-Pillar	2142	-657	506	pos. neg.	- -	- -	301.0 -217.0	7.7 11.7	- -	- -	- -	- -
13	Left Middle B-Pillar	2079	-698	972	pos. neg.	- -	- -	** **	** **	- -	- -	- -	- -
14	Left Lower A-Pillar	3097	-677	500	pos. neg.	- -	- -	130.3 -136.7	6.5 20.0	- -	- -	- -	- -
15	Left Middle A-Pillar	3176	-660	1091	pos. neg.	- -	- -	28.5 -17.4	9.4 39.0	- -	- -	- -	- -
16	Front Seat Track	2285	-558	389	pos. neg.	- -	- -	83.4 -63.7	15.9 41.1	- -	- -	- -	- -
17	Rear Seat Track	1656	-502	463	pos. neg.	- -	- -	23.6 -5.8	8.6 20.3	- -	- -	- -	- -
18	Vehicle CG	2170	0	668	pos. neg.	*** ***	*** ***	34.0 -2.6	7.2 137.3	11.9 -10.3	8.8 55.5	*** ***	*** ***

*Reference: X - Rear Bumper (+ Forward)

Y - Vehicle Centerline (+ To Right)

Z - Ground Level (+ Up)

**Wire cut at 20 ms

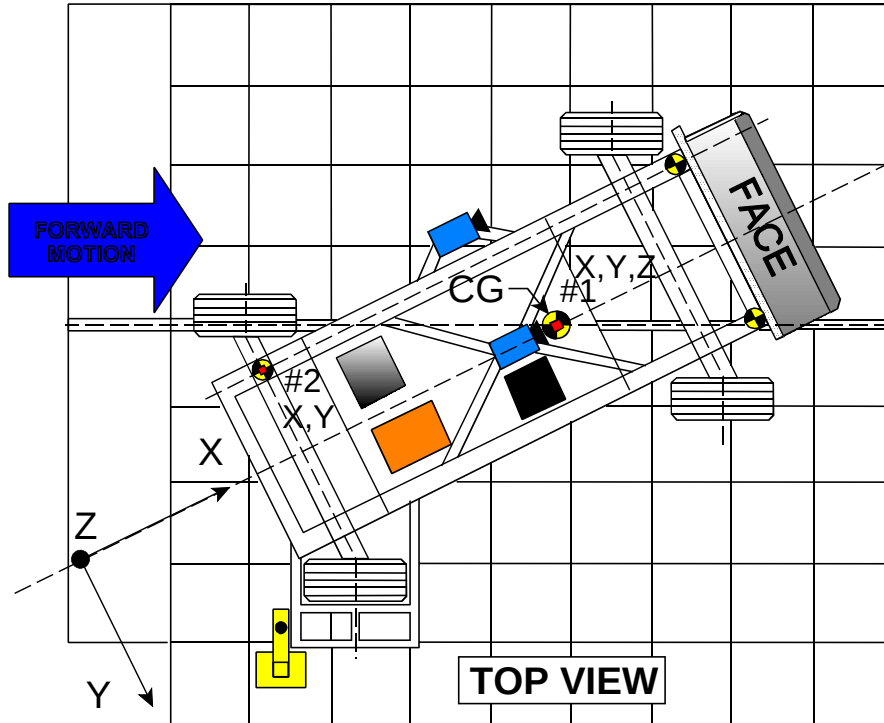
*** - Data is not accurate

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



Accel. No.	Location	Coordinates (millimeters)			Pos. Direct.		Neg. Direct.	
					Max (g)	Time (msec)	Max (g)	Time (msec)
		X*	Y*	Z*				
1	MDB Center of Gravity							
	Longitudinal... X	1859	0	330	1.1	100.7	-22.5	32.8
	Lateral..... Y				1.2	62.9	-11.0	31.4
	Vertical..... Z				13.3	89.3	-14.7	21.9
	Resultant..... R				26.1	32.3	0.1	130.0
2	Rear Frame Member							
	Longitudinal... X	386	-660	660	1.9	96.8	-23.7	31.7
	Lateral..... Y				4.9	14.9	-2.6	67.4

*Reference: X = Rear Bumper (+ Forward)

Y = Vehicle Centerline (+ To Right)

Z = Ground Level (+ Up)

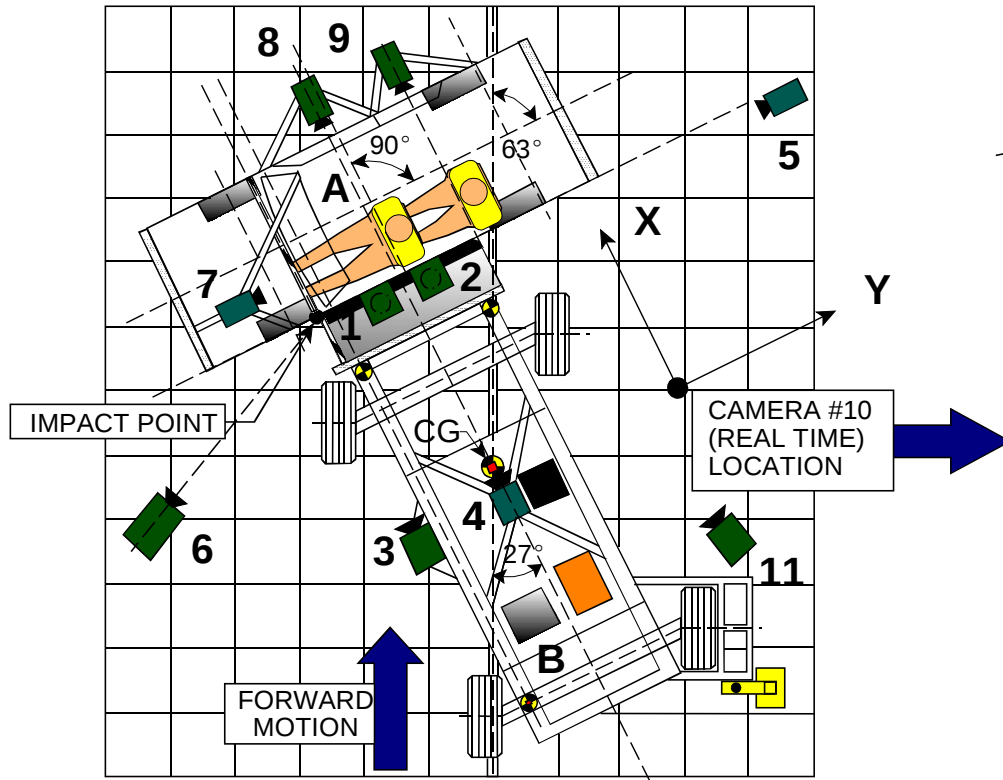
All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2001 Lexus RX300

NHTSA No. M15105



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle			4880		8	1050
2	Overhead closeup view of impact plane			4880	-90	12.5	1000
3	MDB onboard closeup view of impact point	1470	0	847	0	13	1035
4	MDB onboard view of driver dummy	1140	838	1586	-17	7.5	1035
5	Right side ground level overall view	1645	9410	1100	2.3	25	1020
6	Left side ground level overall view	1923	1537	1086	5.8	13	1010
7	Test vehicle onboard driver front view	515	2128	1408	9.7	13	1010
8	Test vehicle onboard driver side view	1748	754	1180	12.4	8	885
9	Test vehicle onboard passenger side view	1750	1655	1212	-9.4	8	1020
10	Real time film coverage of test	-	-	-	-	-	24
11	Secondary impact point view	5180	3500	1065	3.0	25	1010

* Reference (from point of impact); all measurements accurate to within ± 6 mm.

+X = Forward

+Y = To Right

+Z = Upward

SECTION 5

FUEL SYSTEM INTEGRITY

DATA SHEET 16

FMVSS 301 FUEL SYSTEM INTEGRITY DATA

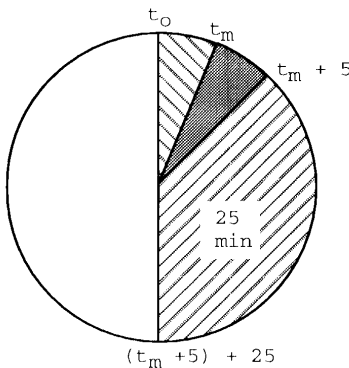
NHTSA No.: M15105 TEST DATE: February 13, 2001

Vehicle Mfgr./Make/Model : 2001 Lexus RX300 4-Door SUV

TEST VEHICLE IMPACT TYPE :

- Frontal (48.28 kph)
- Oblique (48.28 kph) with - ° barrier face first
contacting the - side
(driver/passenger)
- Rear Moving Barrier (48.28 kph)
- Lateral Moving Barrier (32.19 kph)
- X Side Impact Moving Deformable Barrier (62.0 kph)
contacting the driver side side
(driver/passenger)

FUEL SPILLAGE MEASUREMENT:



1. From impact until vehicle motion ceases
2. For five minute period after vehicle motion ceases
3. For next 25 minutes

ACTUAL	MAX ALLOWED
0 g	28 g
0 g	142 g
0 g	28 g/1 min.

SOLVENT SPILLAGE DETAILS :

None

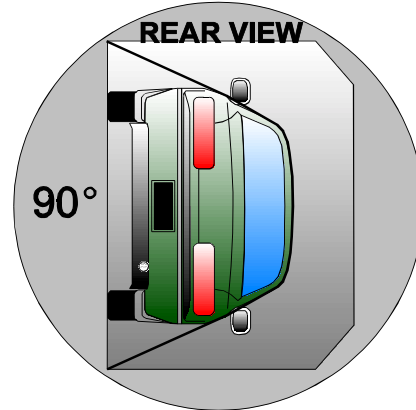
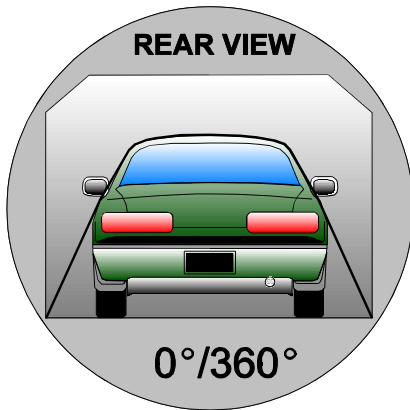
DATA SHEET 17

ROLLOVER DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

0 - 90 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	1	minutes	21	seconds
(Spec. Range = 1 to 3 minutes)				
FMVSS 301 Position Hold Time +	5	minutes	0	seconds
TOTAL	6	minutes	21	seconds
Next whole minute interval	7	minutes		

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S) :

None

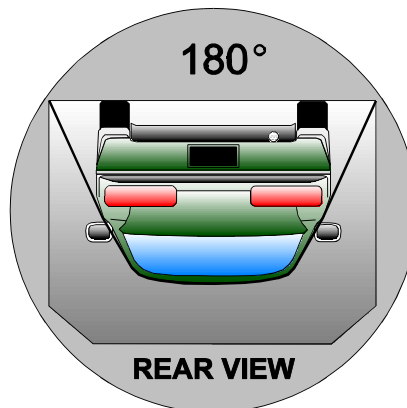
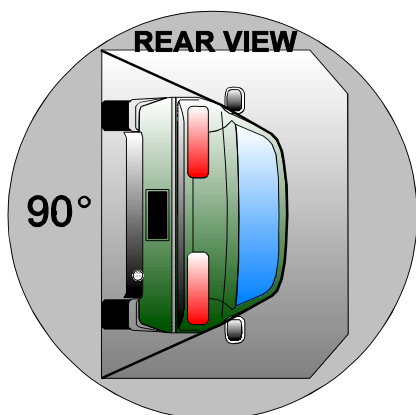
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

90 - 180 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>19</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>19</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S) :

None

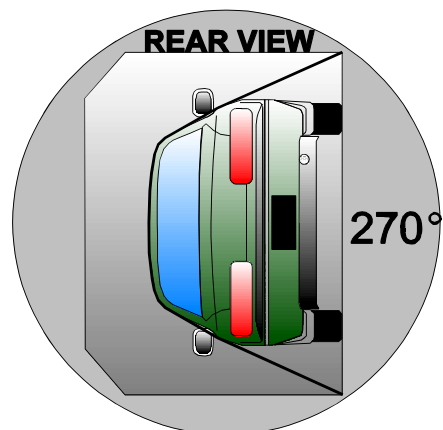
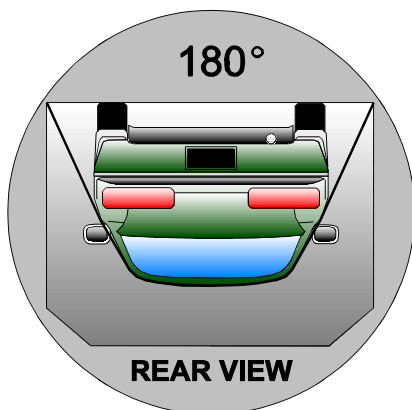
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

180 - 270 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>25</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>25</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S) :

None

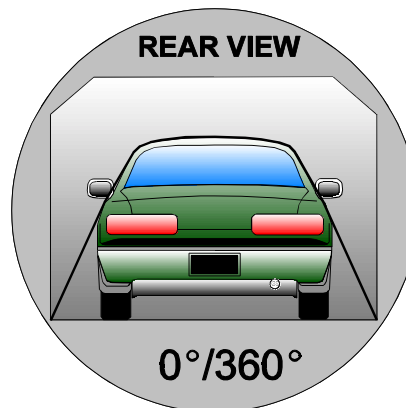
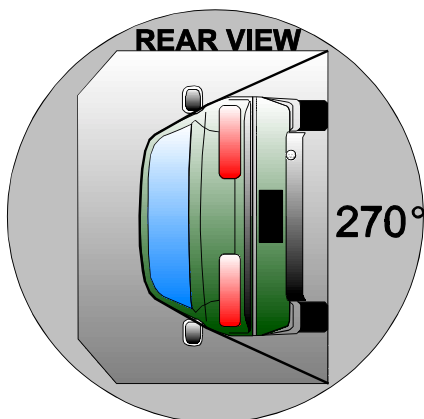
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 2001 Lexus RX300

NHTSA No. M15105

270 - 360 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>22</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>22</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S) :

None

APPENDIX A

PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

<u>Figure</u>	<u>Photograph Title</u>	<u>Page</u>
Figure A- 1	PRE-TEST FRONTAL VIEW OF TEST VEHICLE	A- 3
Figure A- 2	POST-TEST FRONTAL VIEW OF TEST VEHICLE	A- 4
Figure A- 3	PRE-TEST REAR VIEW OF TEST VEHICLE	A- 5
Figure A- 4	POST-TEST REAR VIEW OF TEST VEHICLE	A- 6
Figure A- 5	PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE	A- 7
Figure A- 6	POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE	A- 8
Figure A- 7	PRE-TEST FRONTAL VIEW OF IMPACTOR FACE	A- 9
Figure A- 8	POST-TEST FRONTAL VIEW OF IMPACTOR FACE	A- 10
Figure A- 9	PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE	A- 11
Figure A- 10	POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE	A- 12
Figure A- 11	PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE	A- 13
Figure A- 12	POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE	A- 14
Figure A- 13	PRE-TEST TOP VIEW OF IMPACTOR FACE	A- 15
Figure A- 14	POST-TEST TOP VIEW OF IMPACTOR FACE	A- 16
Figure A- 15	PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE	A- 17
Figure A- 16	POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE	A- 18
Figure A- 17	PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID	A- 19
Figure A- 18	POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID	A- 20
Figure A- 19	PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID	A- 21
Figure A- 20	POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID	A- 22
Figure A- 21	PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID	A- 23
Figure A- 22	POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID	A- 24
Figure A- 23	PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID	A- 25
Figure A- 24	POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID	A- 26
Figure A- 25	PRE-TEST INTERIOR OF FRONT DOOR	A- 27
Figure A- 26	POST-TEST INTERIOR OF FRONT DOOR SHOWING SID IMPACT LOCATIONS	A- 28
Figure A- 27	PRE-TEST INTERIOR OF REAR DOOR	A- 29
Figure A- 28	POST-TEST INTERIOR OF REAR DOOR SHOWING SID IMPACT LOCATIONS	A- 30
Figure A- 29	PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION	A- 31
Figure A- 30	PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION	A- 32
Figure A- 31	POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET	A- 33
Figure A- 32	CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL	A- 34
Figure A- 33	CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL	A- 35
Figure A- 34	IMPACT PHOTO	A- 36
Figure A- 35	ROLLOVER 90 DEGREES	A- 37
Figure A- 36	ROLLOVER 180 DEGREES	A- 38
Figure A- 37	ROLLOVER 270 DEGREES	A- 39
Figure A- 38	ROLLOVER 360 DEGREES	A- 40



Figure A-1 PRE-TEST FRONTAL VIEW OF TEST VEHICLE



Figure A-2 POST-TEST FRONTAL VIEW OF TEST VEHICLE



Figure A-3 PRE-TEST REAR VIEW OF TEST VEHICLE



Figure A-4 POST-TEST REAR VIEW OF TEST VEHICLE



Figure A-5 PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE



Figure A-6 POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE

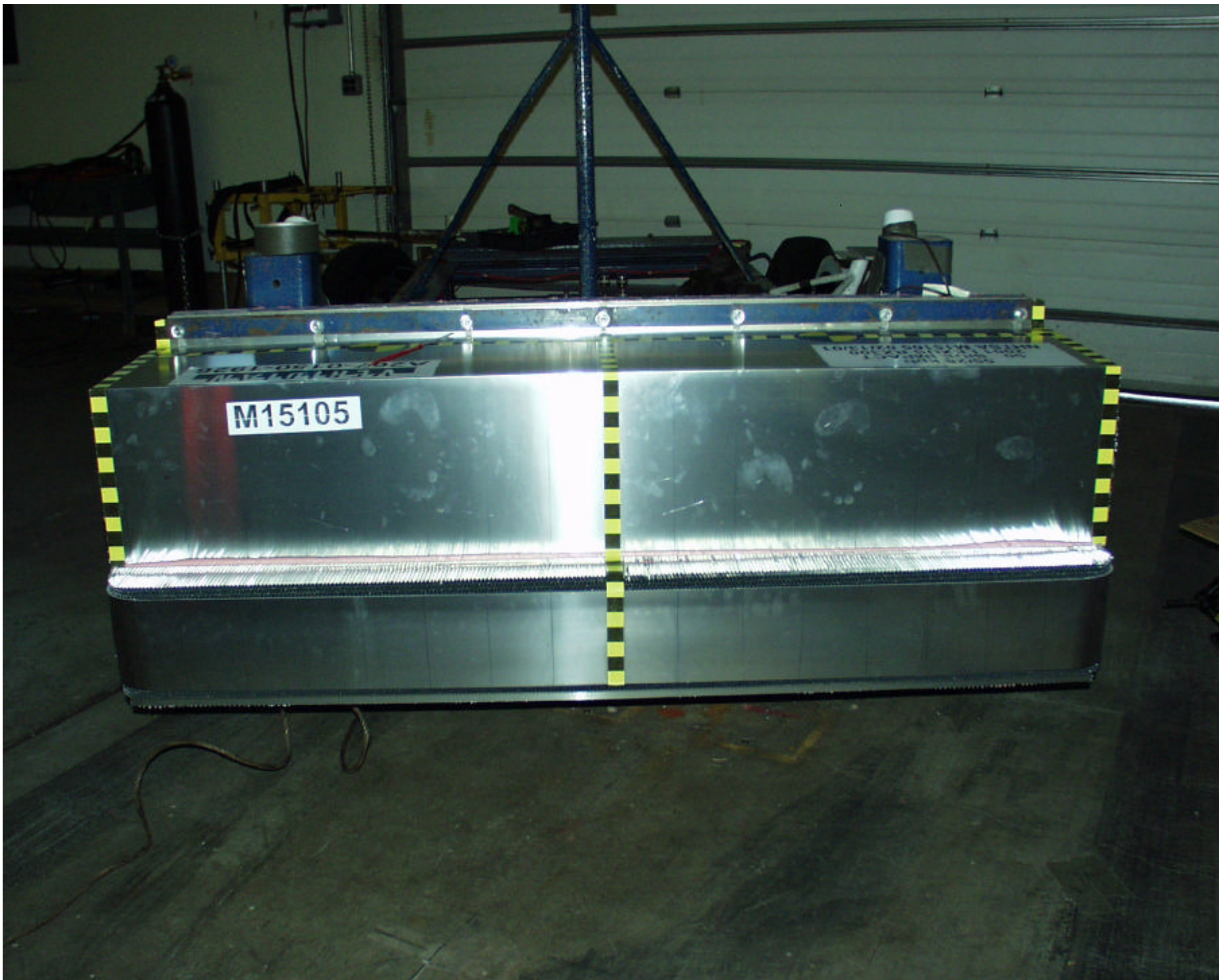


Figure A-7 PRE-TEST FRONTAL VIEW OF IMPACTOR FACE



Figure A-8 POST-TEST FRONTAL VIEW OF IMPACTOR FACE

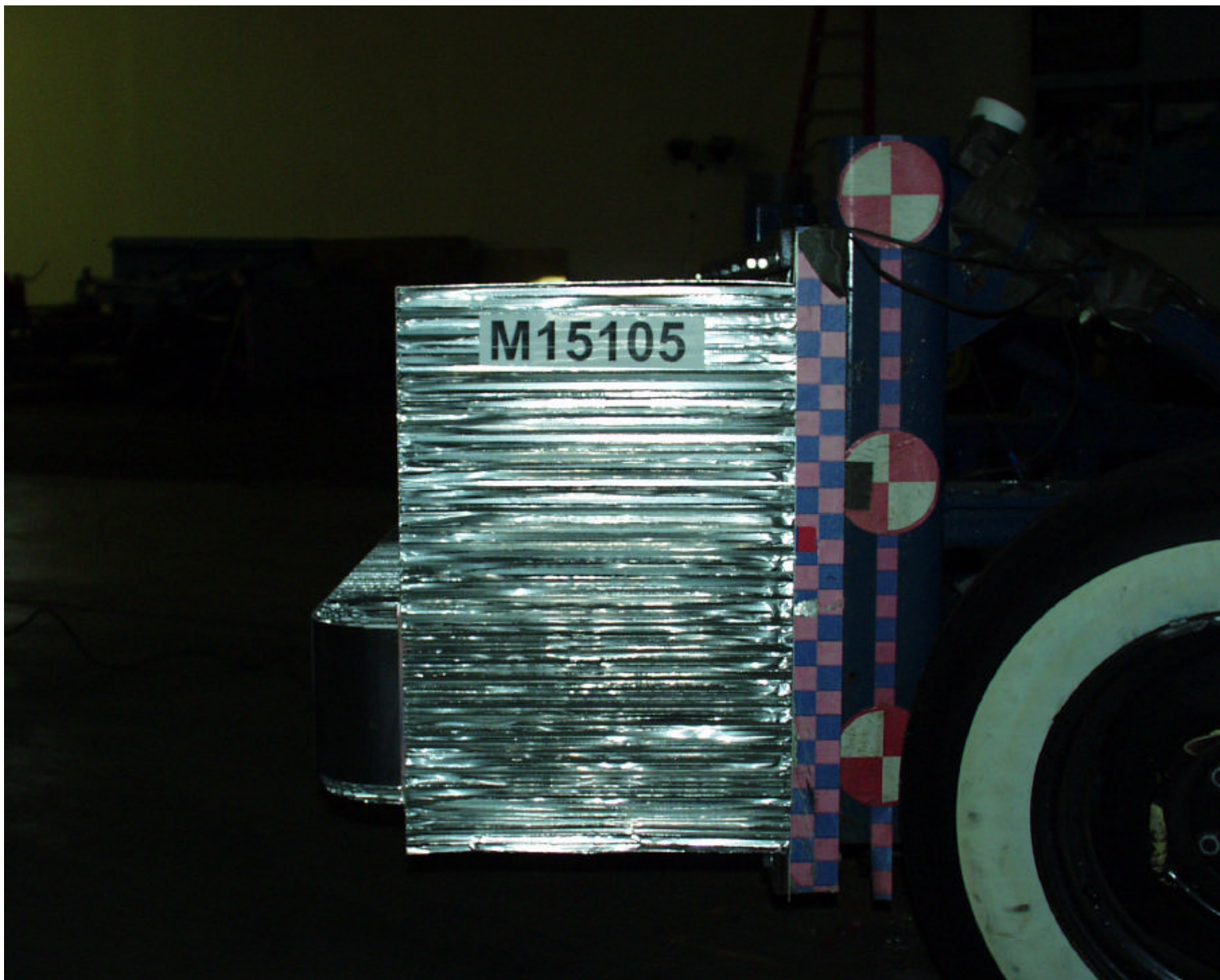


Figure A-9 PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE

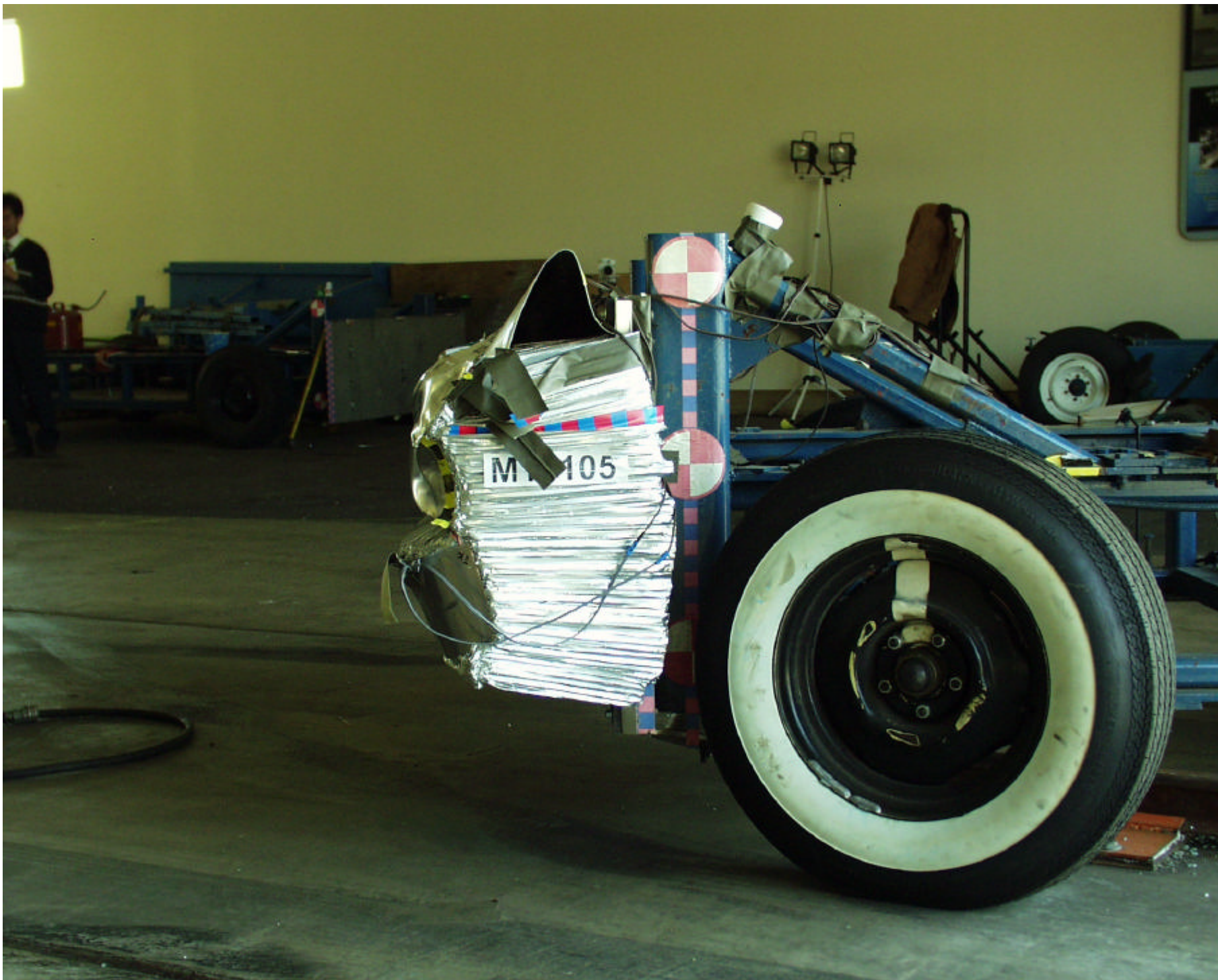


Figure A-10 POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE



Figure A-11 PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



Figure A-12 POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



Figure A-13 PRE-TEST TOP VIEW OF IMPACTOR FACE

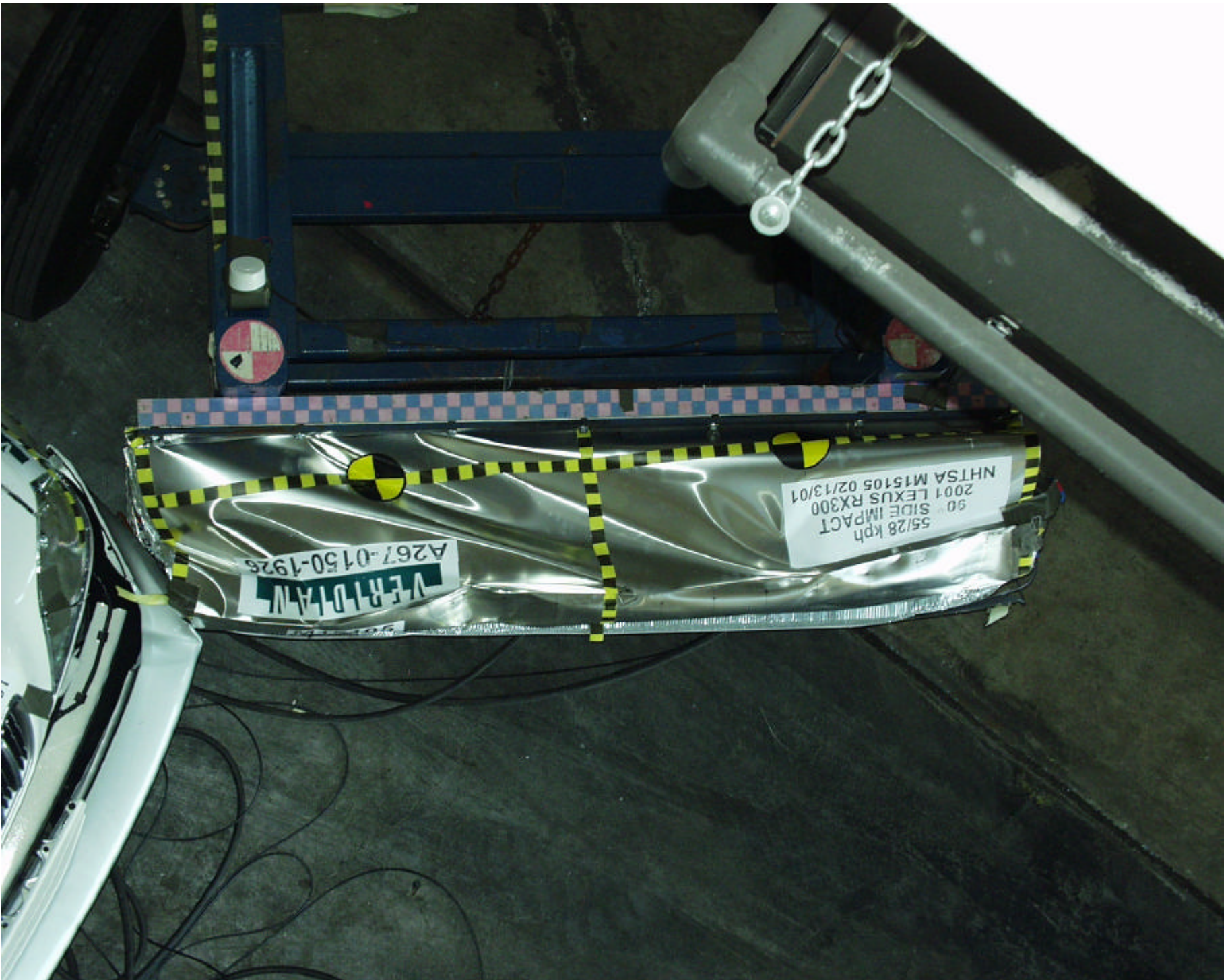


Figure A-14 POST-TEST TOP VIEW OF IMPACTOR FACE

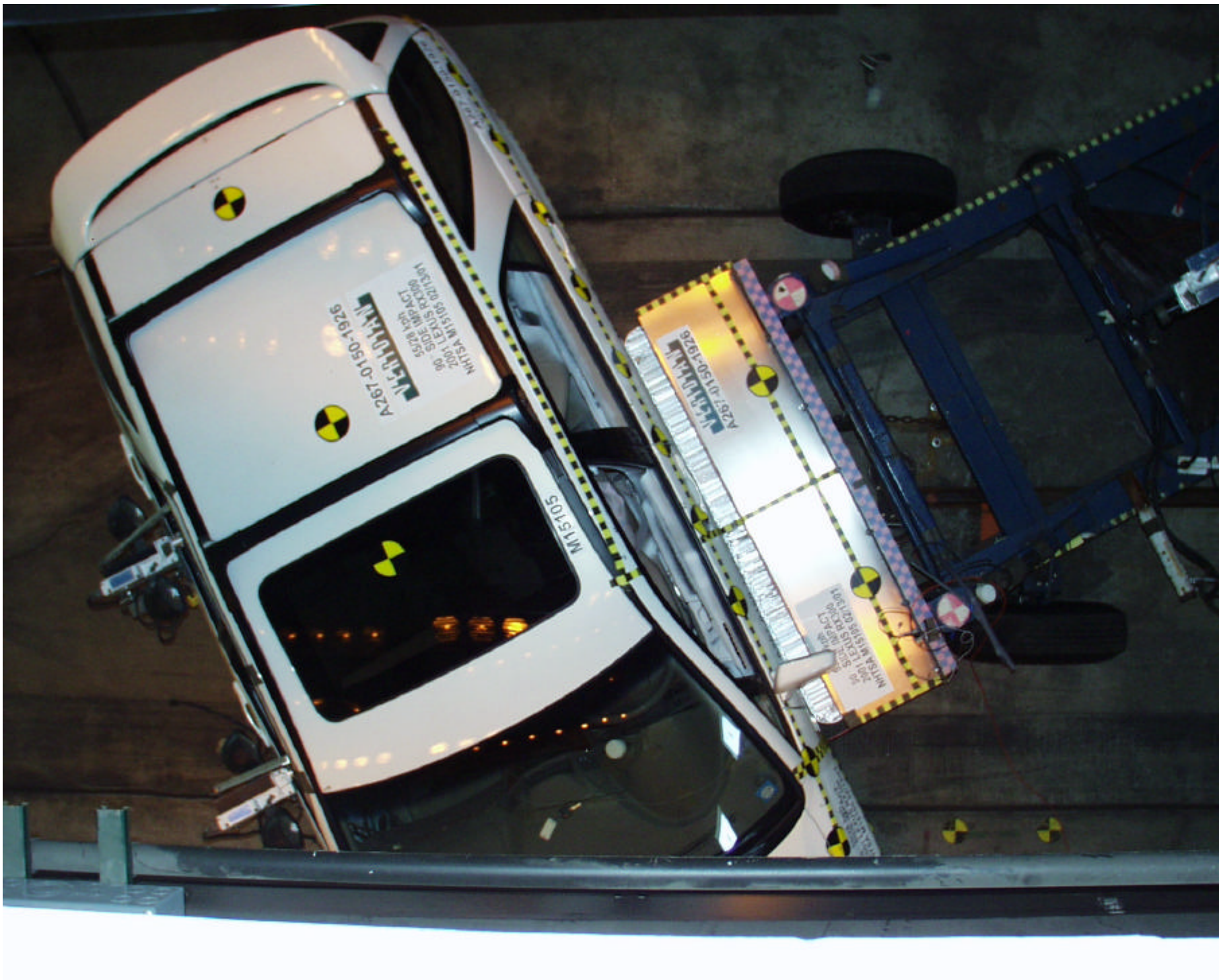


Figure A-15 PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE



Figure A-16 POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE



Figure A-17 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-18 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-19 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-20 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-21 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-22 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-23 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-24 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-25 PRE-TEST INTERIOR OF FRONT DOOR



Figure A-26 POST-TEST INTERIOR OF FRONT DOOR SHOWING SID IMPACT LOCATIONS



Figure A-27 PRE-TEST INTERIOR OF REAR DOOR



Figure A-28 POST-TEST INTERIOR OF REAR DOOR SHOWING SID IMPACT LOCATIONS



Figure A-29 PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION



Figure A-30 PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION



Figure A-31 POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET



Figure A-32 CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL



Figure A-33 CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL



Figure A-34 IMPACT PHOTO



Figure A-35 ROLLOVER 90 DEGREES



Figure A-36 ROLLOVER 180 DEGREES



Figure A-37 ROLLOVER 270 DEGREES



Figure A-38 ROLLOVER 360 DEGREES

APPENDIX B

VEHICLE, MDB AND SID RESPONSE DATA

TABLE OF DATA PLOTS

DRIVER AND PASSENGER DUMMY INSTRUMENTATION PLOTS ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180 INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
1	DRIVER HEAD (X) ACCELERATION VS TIME	B- 6
2	DRIVER HEAD (X) VELOCITY VS TIME	B- 7
3	DRIVER HEAD (Y) ACCELERATION VS TIME	B- 8
4	DRIVER HEAD (Y) VELOCITY VS TIME	B- 9
5	DRIVER HEAD (Z) ACCELERATION VS TIME	B- 10
6	DRIVER HEAD (Z) VELOCITY VS TIME	B- 11
7	DRIVER HEAD RESULTANT ACCELERATION VS TIME	B- 12
8	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 13
9	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 14
10	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 15
11	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 16
12	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 17
13	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 18
14	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 19
15	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 20
16	PASSENGER HEAD (X) ACCELERATION VS TIME	B- 21
17	PASSENGER HEAD (X) VELOCITY VS TIME	B- 22
18	PASSENGER HEAD (Y) ACCELERATION VS TIME	B- 23
19	PASSENGER HEAD (Y) VELOCITY VS TIME	B- 24
20	PASSENGER HEAD (Z) ACCELERATION VS TIME	B- 25
21	PASSENGER HEAD (Z) VELOCITY VS TIME	B- 26
22	PASSENGER HEAD RESULTANT ACCELERATION VS TIME	B- 27
23	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 28
24	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 29
25	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 30
26	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 31
27	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 32
28	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 33
29	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 34
30	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 35

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
31	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 36
32	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 37
33	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 38
34	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 39
35	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 40
36	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 41
37	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 42
38	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 43

TEST VEHICLE INSTRUMENTATION PLOTS

ACCELERATION DATA - FILTER CLASS 60

INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
39	RIGHT SIDE SILL AT FRONT SEAT (X) ACCELERATION VS TIME	B- 44
40	RIGHT SIDE SILL AT FRONT SEAT (X) VELOCITY VS TIME	B- 45
41	RIGHT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 46
42	RIGHT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 47
43	RIGHT SIDE SILL AT FRONT SEAT (Z) ACCELERATION VS TIME	B- 48
44	RIGHT SIDE SILL AT FRONT SEAT (Z) VELOCITY VS TIME	B- 49
45	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION VS TIME	B- 50
46	RIGHT SIDE SILL AT REAR SEAT (X) ACCELERATION VS TIME	B- 51
47	RIGHT SIDE SILL AT REAR SEAT (X) VELOCITY VS TIME	B- 52
48	RIGHT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 53
49	RIGHT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 54
50	RIGHT SIDE SILL AT REAR SEAT (Z) ACCELERATION VS TIME	B- 55
51	RIGHT SIDE SILL AT REAR SEAT (Z) VELOCITY VS TIME	B- 56
52	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION VS TIME	B- 57
53	REAR FLOORPAN ABOVE AXLE (X) ACCELERATION VS TIME	B- 58
54	REAR FLOORPAN ABOVE AXLE (X) VELOCITY VS TIME	B- 59
55	REAR FLOORPAN ABOVE AXLE (Y) ACCELERATION VS TIME	B- 60
56	REAR FLOORPAN ABOVE AXLE (Y) VELOCITY VS TIME	B- 61
57	REAR FLOORPAN ABOVE AXLE (Z) ACCELERATION VS TIME	B- 62
58	REAR FLOORPAN ABOVE AXLE (Z) VELOCITY VS TIME	B- 63
59	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION VS TIME	B- 64
60	LEFT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 65
61	LEFT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 66
62	LEFT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 67
63	LEFT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 68
64	LEFT FRONT DOOR ON CENTERLINE (Y) ACCELERATION VS TIME	B- 69
65	LEFT FRONT DOOR ON CENTERLINE (Y) VELOCITY VS TIME	B- 70
66	RIGHT REAR OCCUPANT COMPARTMENT (Y) ACCELERATION VS TIME	B- 71
67	RIGHT REAR OCCUPANT COMPARTMENT (Y) VELOCITY VS TIME	B- 72
68	MID REAR OF LEFT FRONT DOOR (Y) ACCELERATION VS TIME	B- 73
69	MID REAR OF LEFT FRONT DOOR (Y) VELOCITY VS TIME	B- 74
70	LEFT FRONT DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 75
71	LEFT FRONT DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 76
72	MID REAR OF LEFT REAR DOOR (Y) ACCELERATION VS TIME	B- 77
73	MID REAR OF LEFT REAR DOOR (Y) VELOCITY VS TIME	B- 78
74	LEFT REAR DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 79
75	LEFT REAR DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 80
76	LOWER B-POST (Y) ACCELERATION VS TIME	B- 81
77	LOWER B-POST (Y) VELOCITY VS TIME	B- 82
78	UPPER B-POST (Y) ACCELERATION VS TIME	B- 83
79	UPPER B-POST (Y) VELOCITY VS TIME	B- 84
80	LOWER A-POST (Y) ACCELERATION VS TIME	B- 85

TEST VEHICLE INSTRUMENTATION PLOTS

ACCELERATION DATA - FILTER CLASS 60

INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
81	LOWER A-POST (Y) VELOCITY VS TIME	B- 86
82	UPPER A-POST (Y) ACCELERATION VS TIME	B- 87
83	UPPER A-POST (Y) VELOCITY VS TIME	B- 88
84	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 89
85	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 90
86	REAR SEAT TRACK (Y) ACCELERATION VS TIME	B- 91
87	REAR SEAT TRACK (Y) VELOCITY VS TIME	B- 92
88	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 93
89	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 94
90	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 95
91	VEHICLE CENTER OF GRAVITY (Y) VELOCITY ACCELERATION VS TIME	B- 96
92	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 97
93	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 98
94	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 99

MDB INSTRUMENTATION PLOTS

ACCELERATION DATA - FILTER CLASS 60

INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
95	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 100
96	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 101
97	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 102
98	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 103
99	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 104
100	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 105
101	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 106
102	MDB REAR (X) ACCELERATION VS TIME	B- 107
103	MDB REAR (X) VELOCITY VS TIME	B- 108
104	MDB REAR (Y) ACCELERATION VS TIME	B- 109
105	MDB REAR (Y) VELOCITY VS TIME	B- 110

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
106	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 111
107	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 112
108	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 113
109	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 114
110	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 115
111	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 116
112	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 117
113	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 118
114	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 119
115	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 120
116	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 121
117	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 122
118	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 123
119	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 124
120	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 125
121	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 126

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
122	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 127
123	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 128
124	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 129
125	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 130
126	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 131
127	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 132
128	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 133
129	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 134

SNCAP Test 15 2001 Lexus RX300

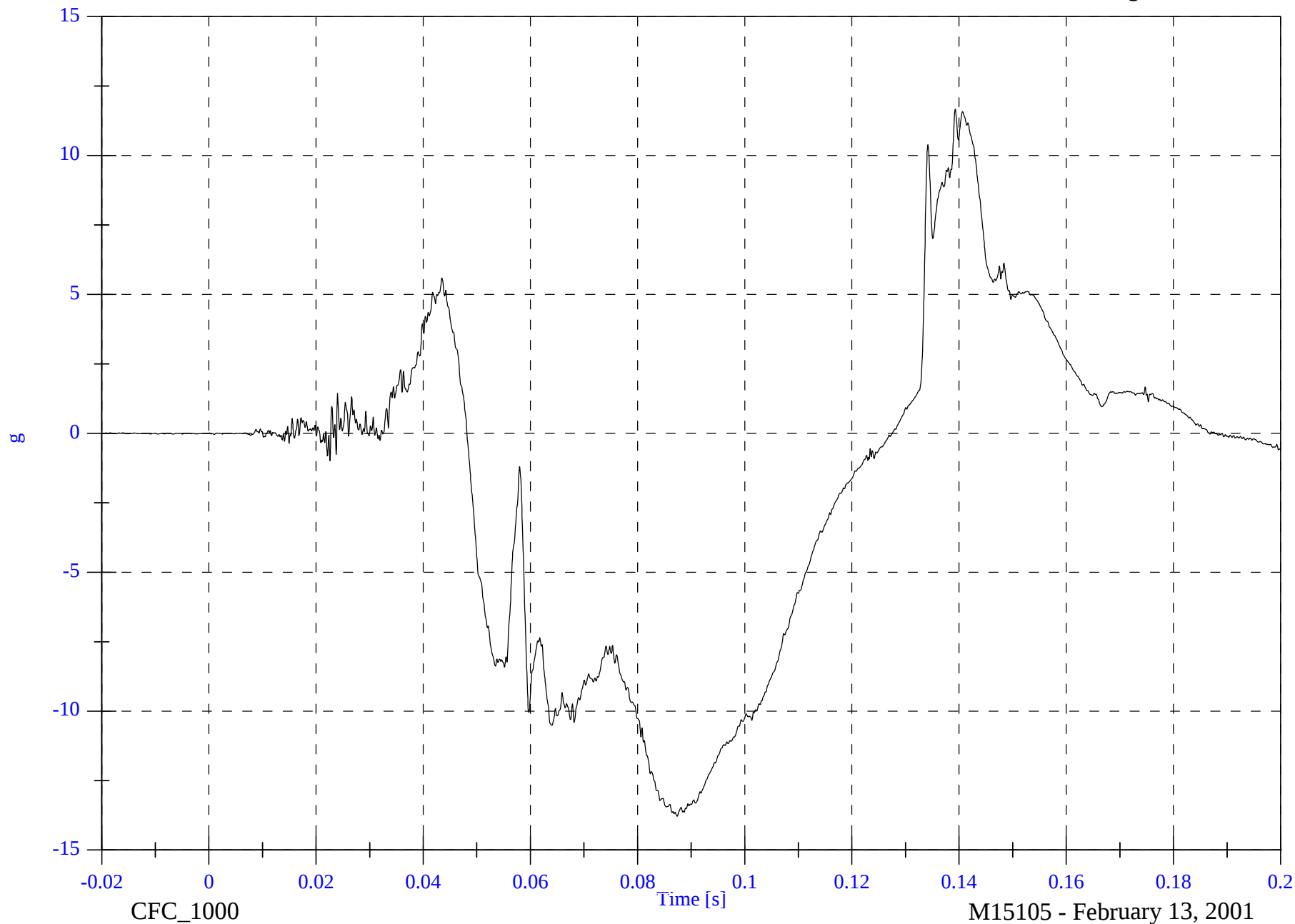
P1 Head x

Max: 11.7 [g] at 0.139 [s]

Min: -13.8 [g] at 0.087 [s]

B-6

8506-15

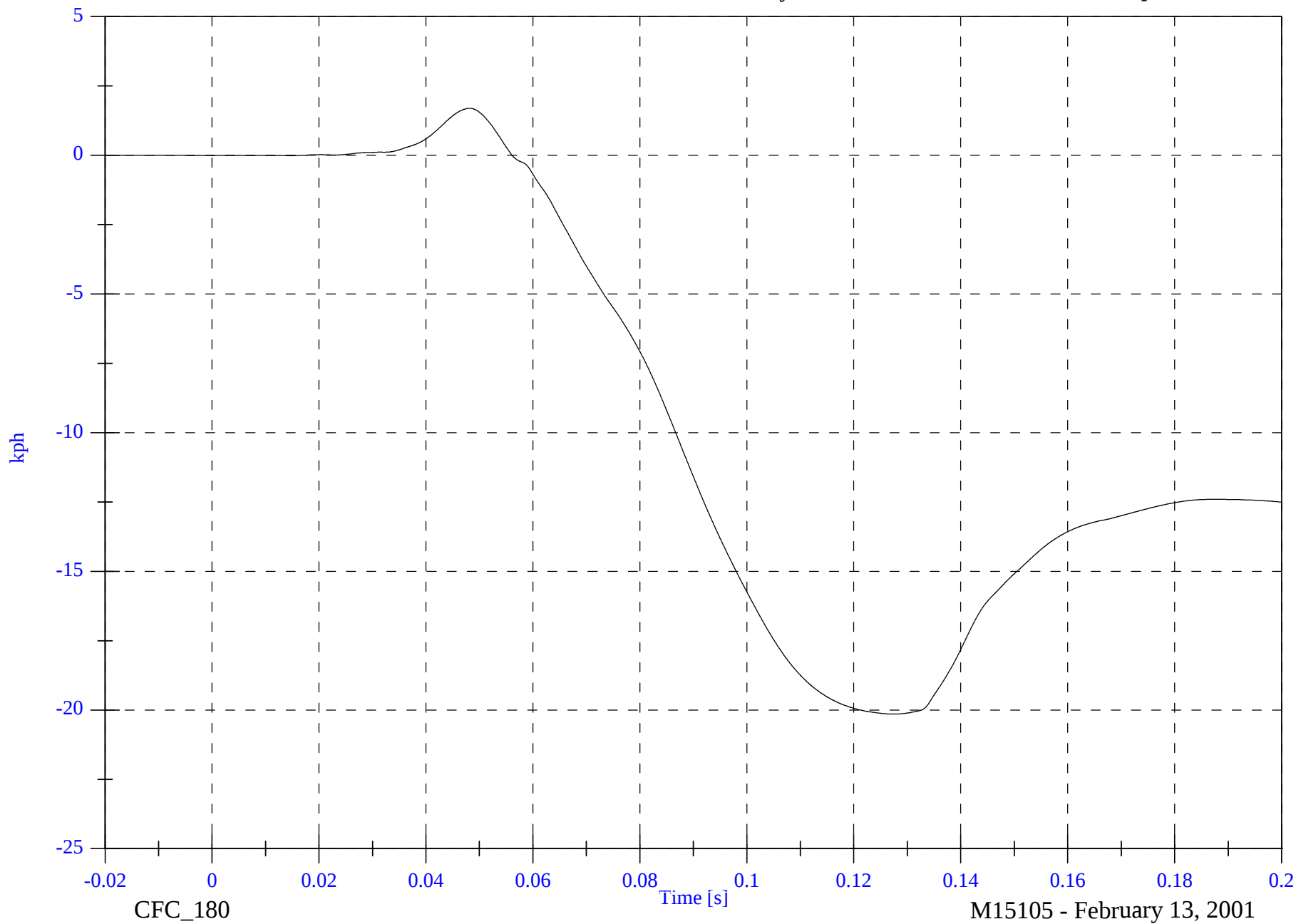


SNCAP Test 15 2001 Lexus RX300

P1 Head x Velocity

Max: 1.7 [kph] at 0.048 [s]

Min: -20.1 [kph] at 0.128 [s]



B-7

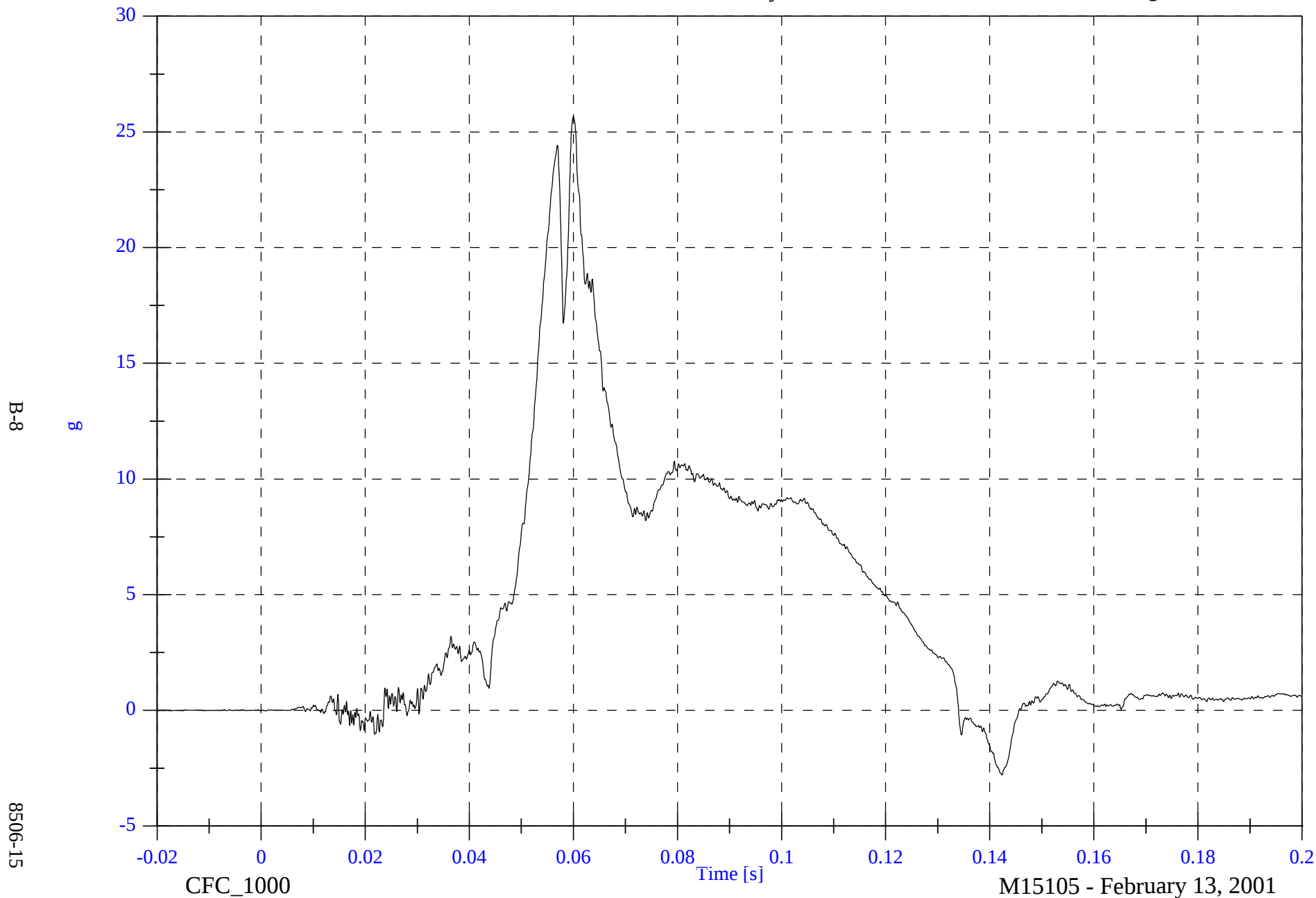
8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Head y

Max: 25.7 [g] at 0.060 [s]

Min: -2.8 [g] at 0.142 [s]

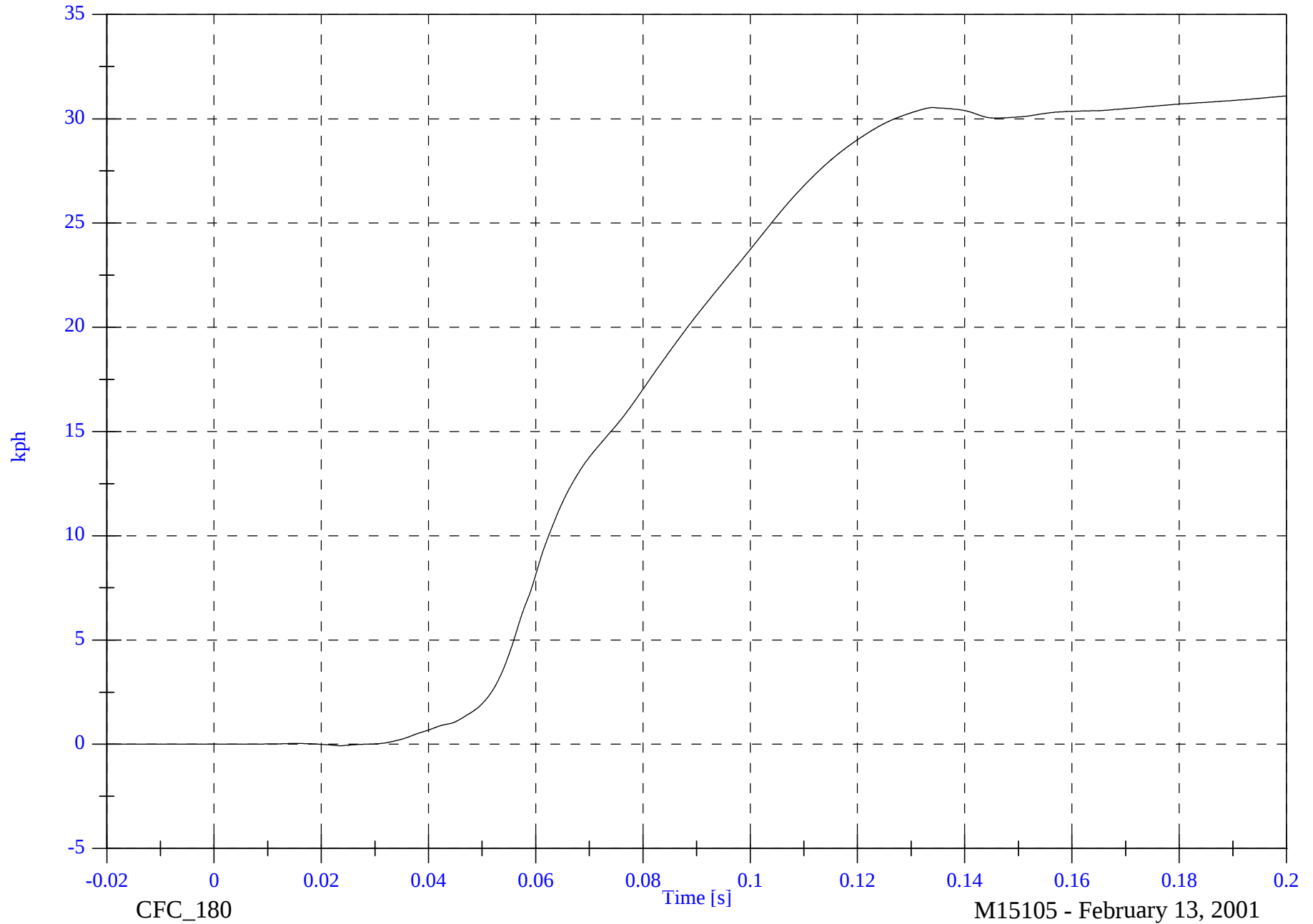


SNCAP Test 15 2001 Lexus RX300

P1 Head y Velocity

Max: 31.1 [kph] at 0.200 [s]

Min: -0.1 [kph] at 0.024 [s]



B-9

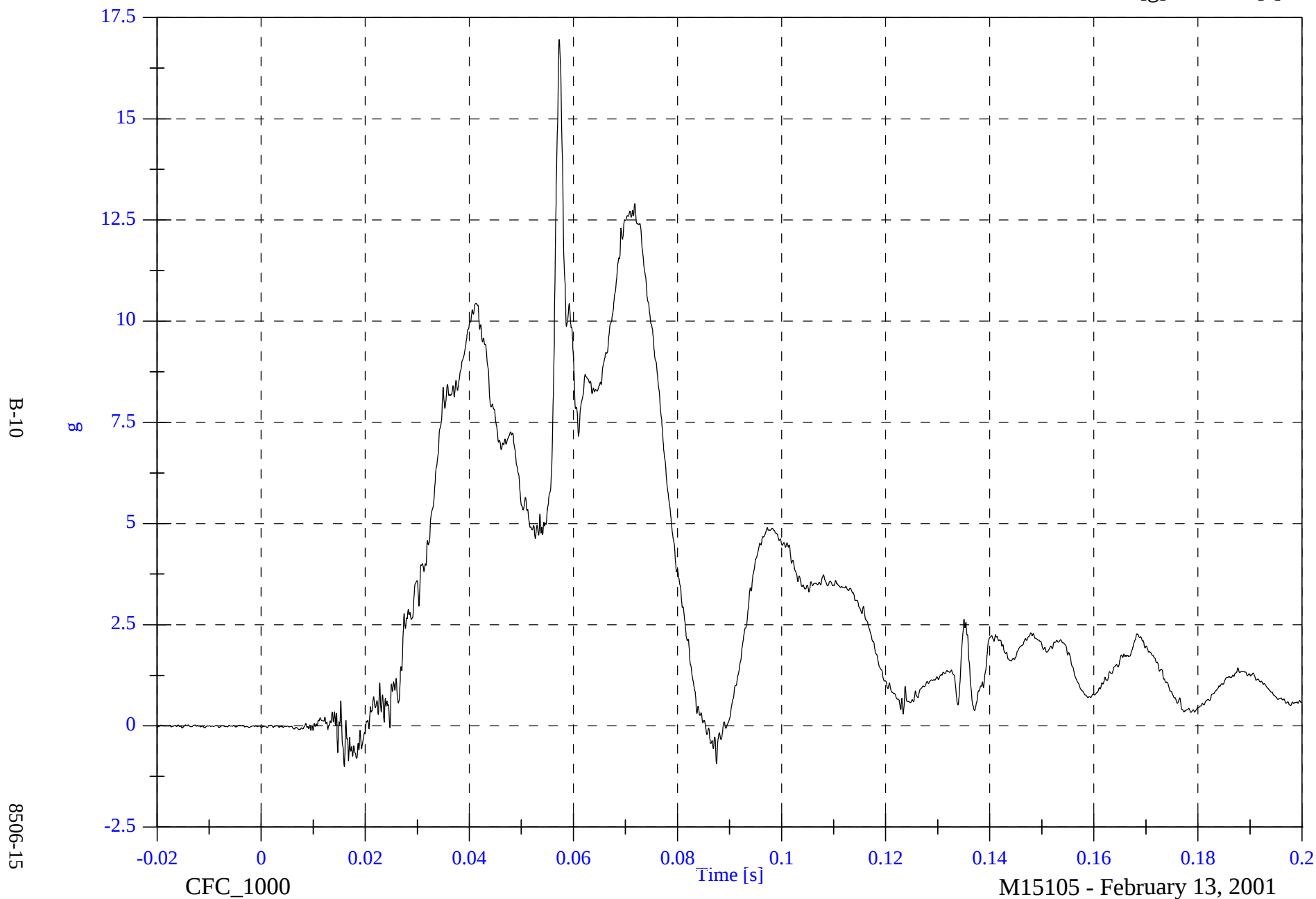
8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Head z

Max: 17.0 [g] at 0.057 [s]

Min: -1.0 [g] at 0.016 [s]

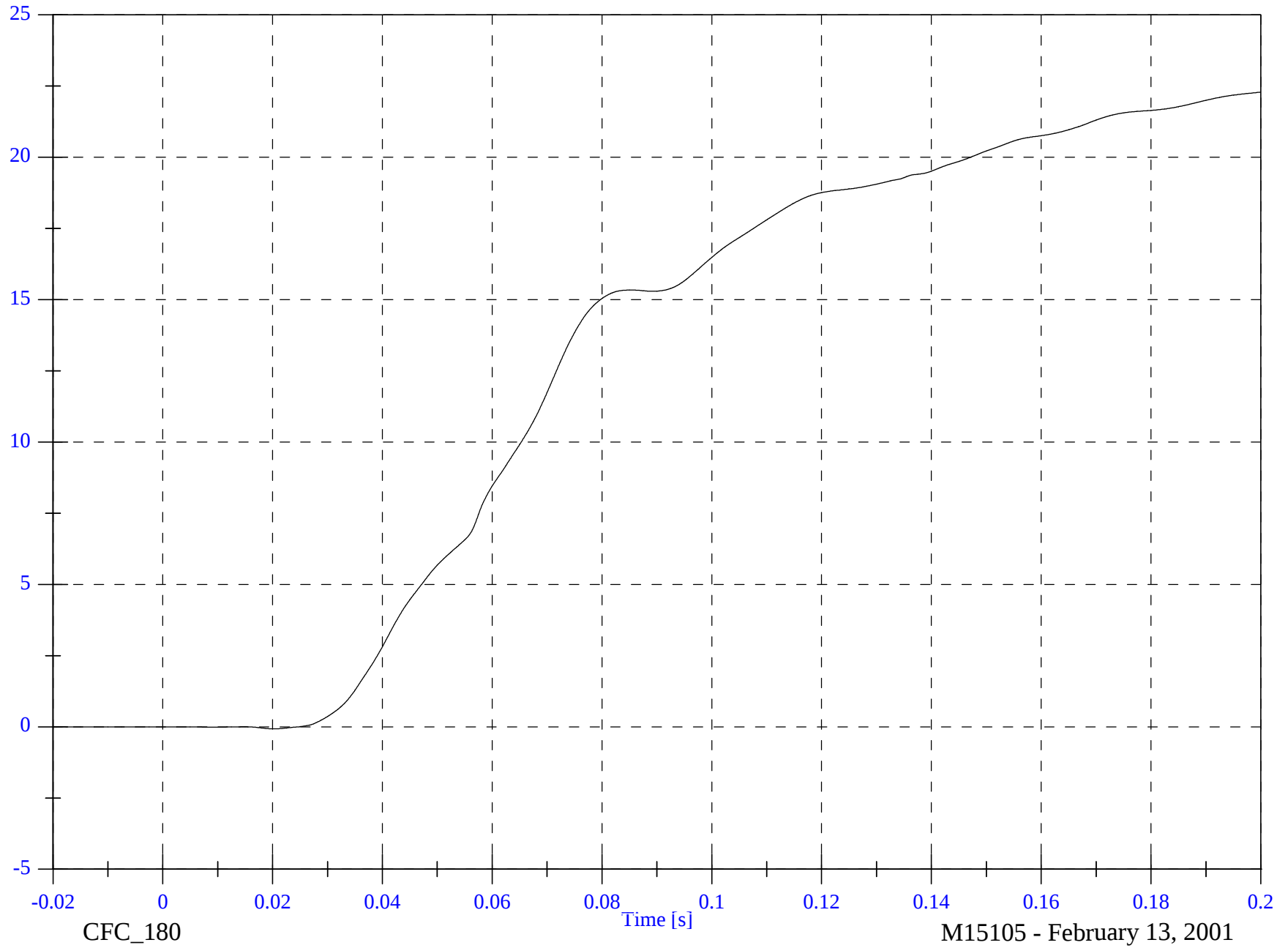


SNCAP Test 15 2001 Lexus RX300

P1 Head z Velocity

Max: 22.3 [kph] at 0.200 [s]

Min: -0.1 [kph] at 0.020 [s]



B-11

8506-15

CFC_180

M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

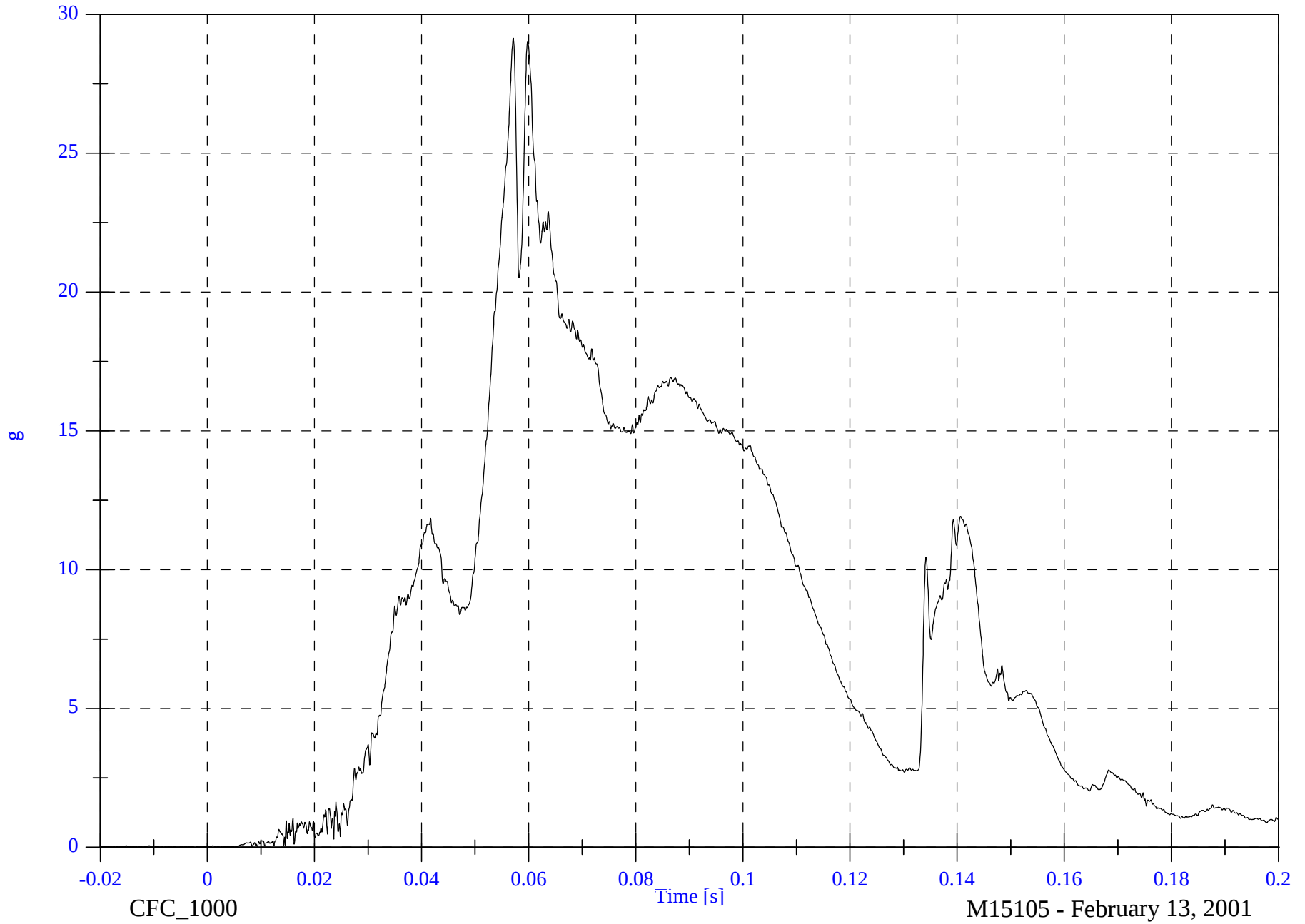
P1 Head Resultant

Max: 29.2 [g] at 0.057 [s]

Min: 0.0 [g] at -0.010 [s]

B-12

8506-15



SNCAP Test 15 2001 Lexus RX300

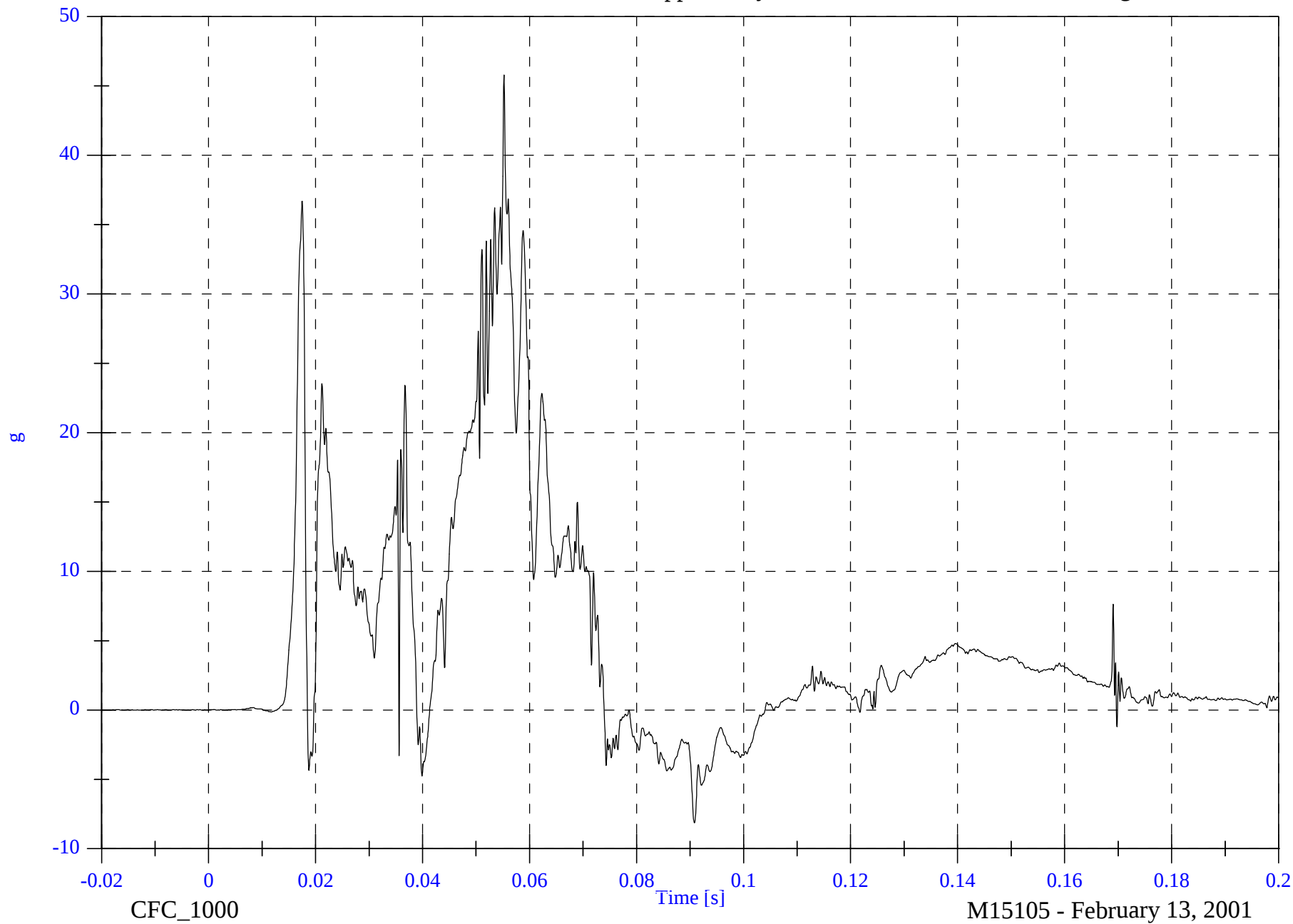
P1 Upper Rib y

Max: 45.8 [g] at 0.055 [s]

Min: -8.1 [g] at 0.091 [s]

B-13

8506-15

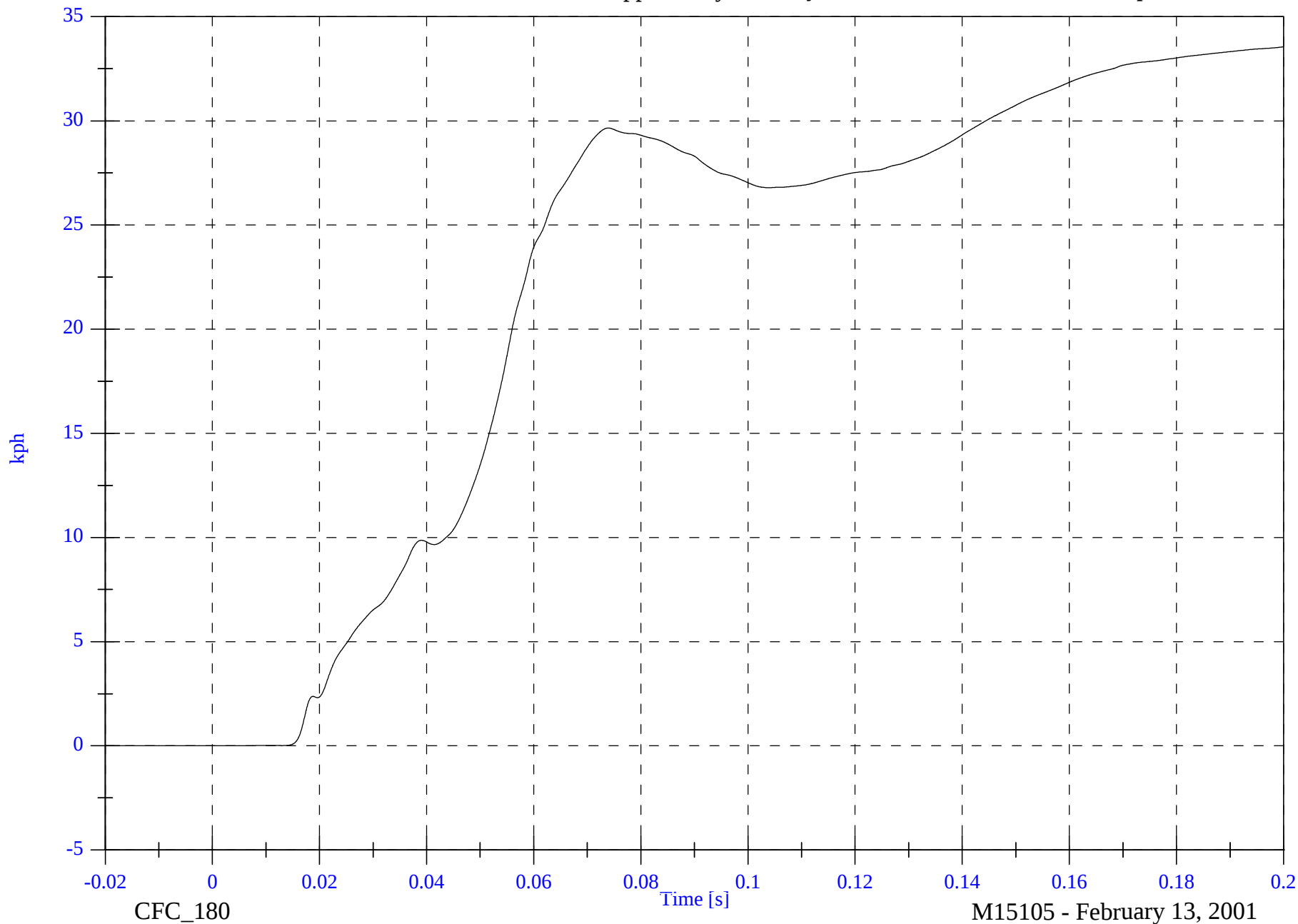


SNCAP Test 15 2001 Lexus RX300

P1 Upper Rib y Velocity

Max: 33.6 [kph] at 0.200 [s]

Min: -0.0 [kph] at -0.018 [s]



B-14

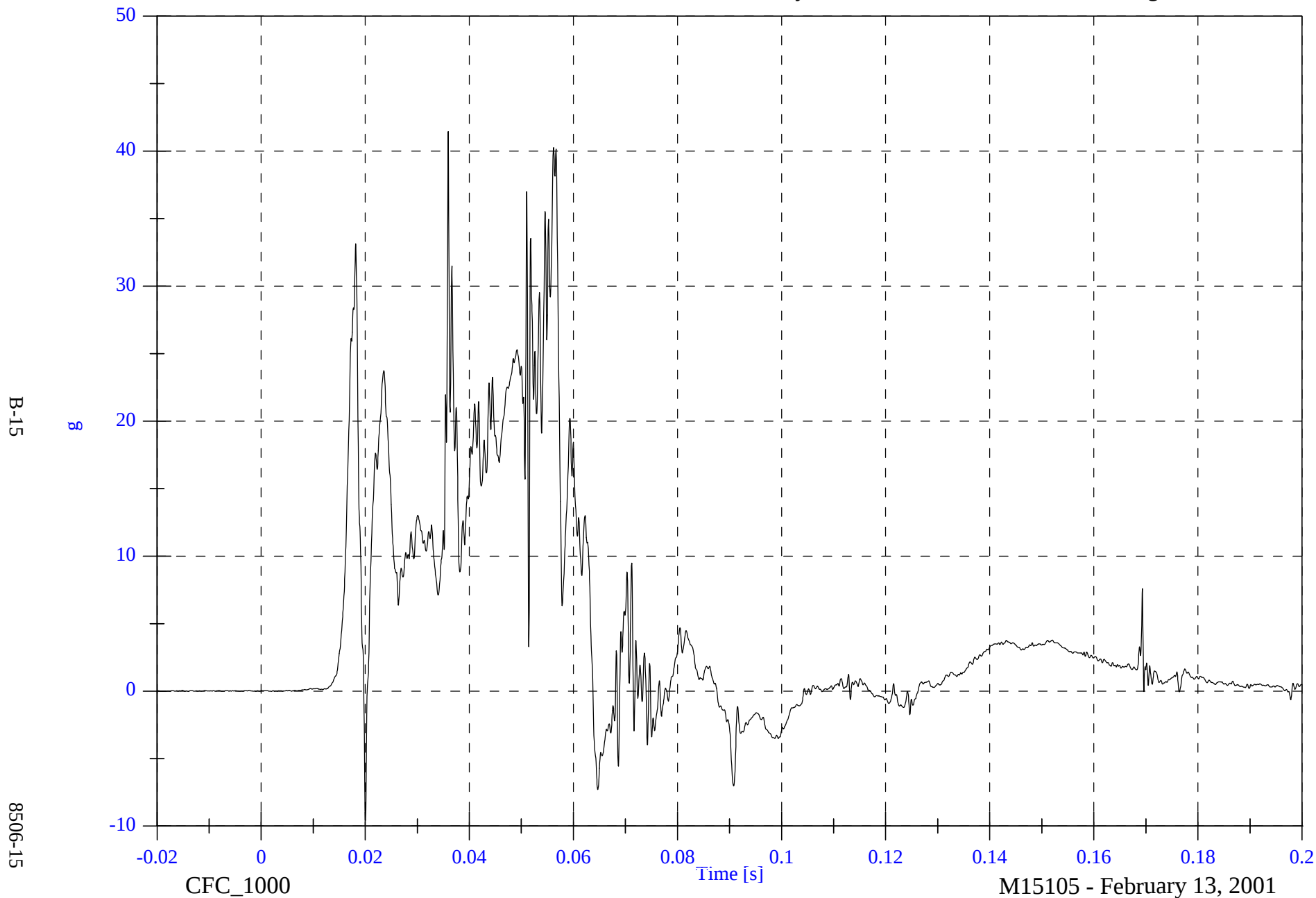
8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Lower Rib y

Max: 41.4 [g] at 0.036 [s]

Min: -9.6 [g] at 0.020 [s]

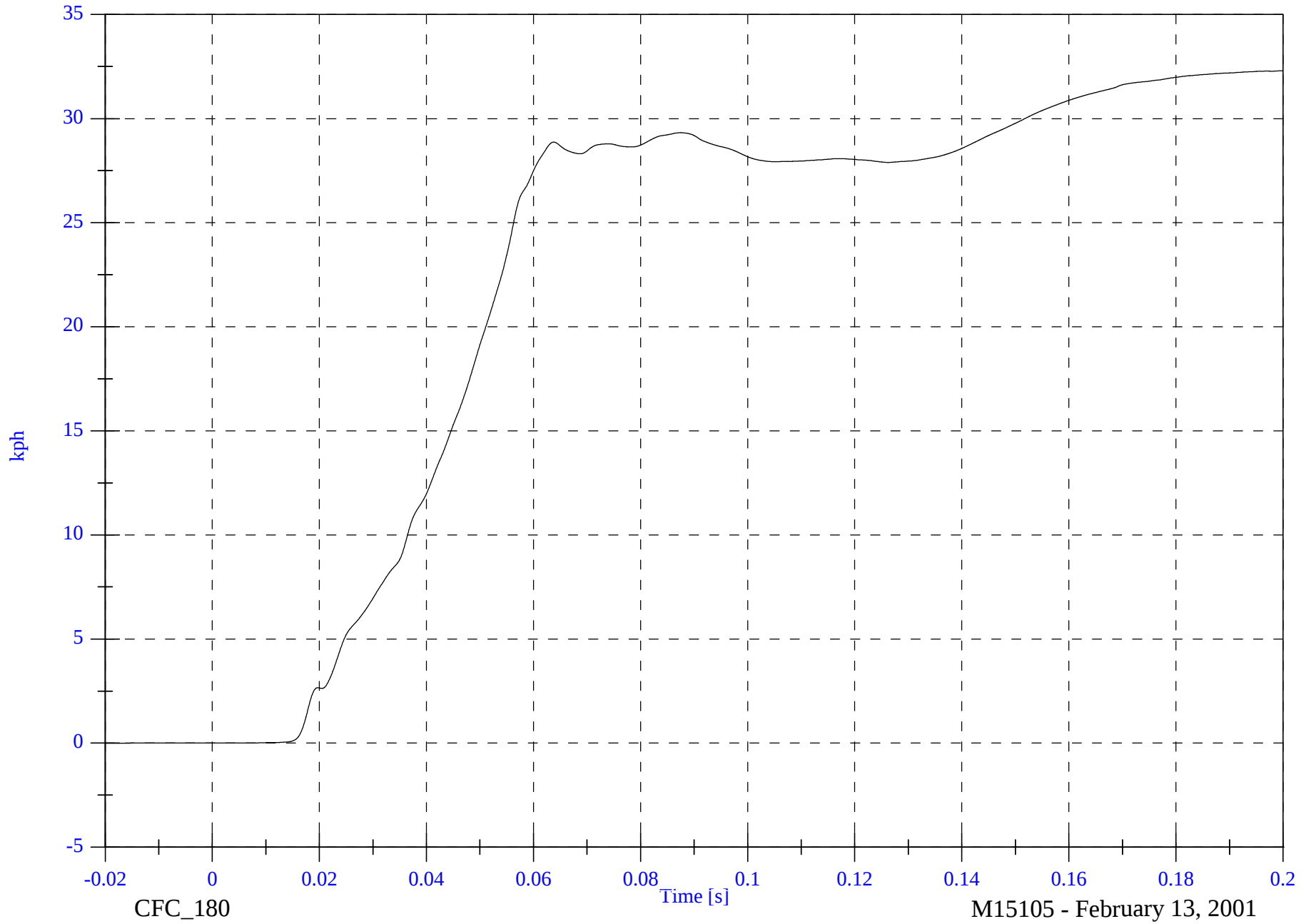


SNCAP Test 15 2001 Lexus RX300

P1 Lower Rib y Velocity

Max: 32.3 [kph] at 0.200 [s]

Min: -0.0 [kph] at -0.018 [s]



B-16

8506-15

SNCAP Test 15 2001 Lexus RX300

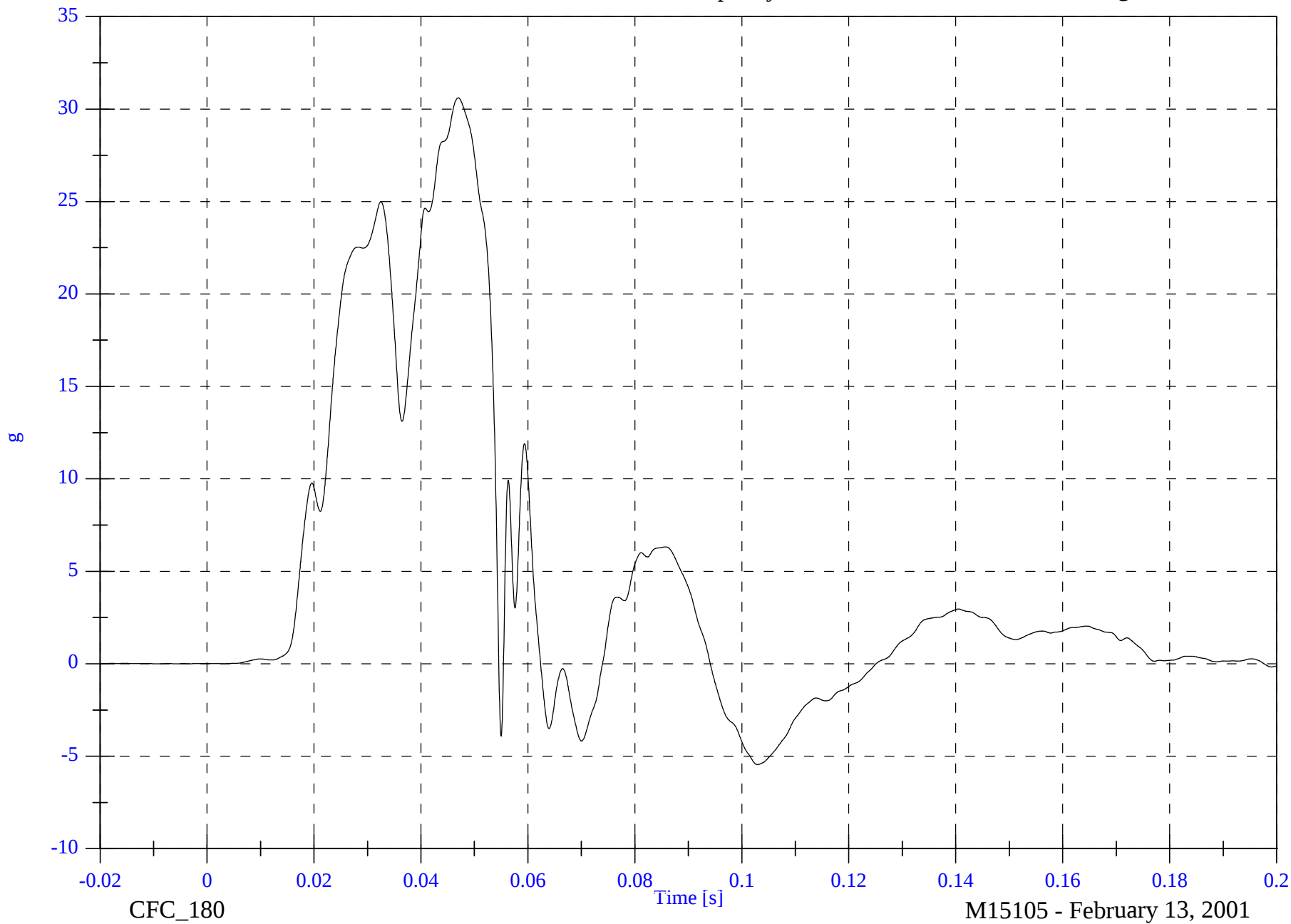
P1 Lower Spine y

Max: 30.6 [g] at 0.047 [s]

Min: -5.5 [g] at 0.103 [s]

B-17

8506-15

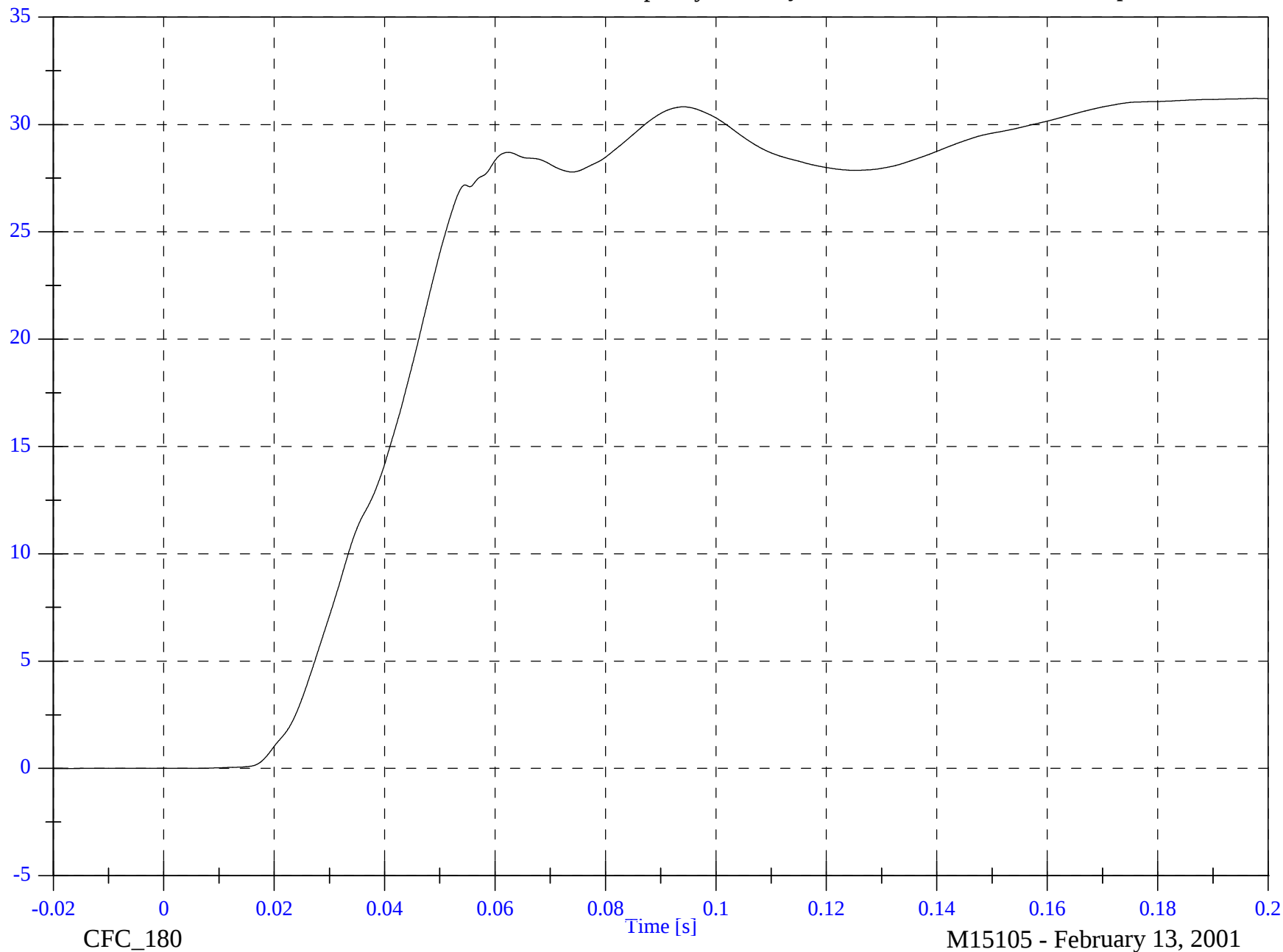


SNCAP Test 15 2001 Lexus RX300

P1 Lower Spine y Velocity

Max: 31.2 [kph] at 0.198 [s]

Min: -0.0 [kph] at -0.020 [s]



B-18

8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Pelvic y

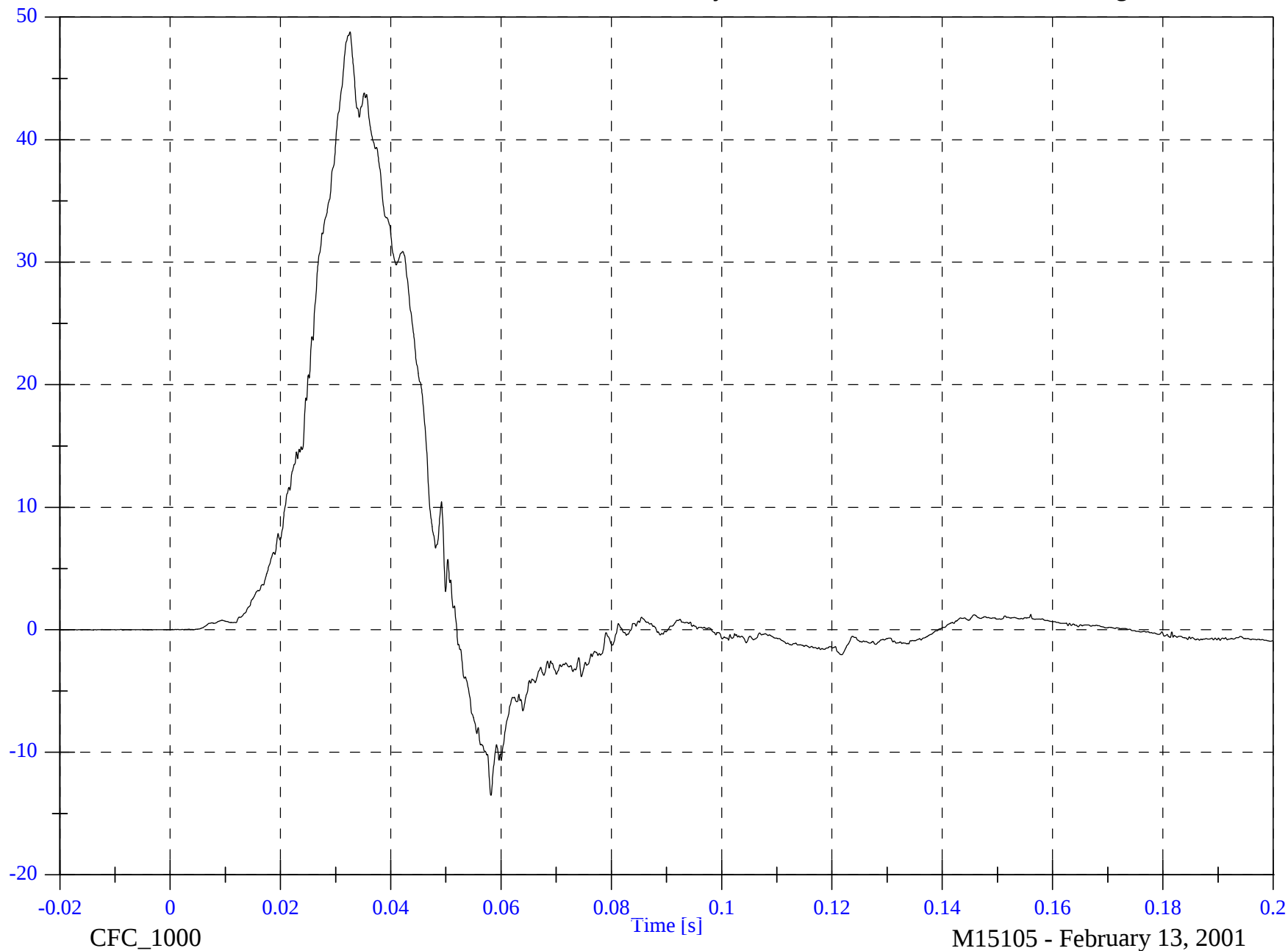
Max: 48.8 [g] at 0.033 [s]

Min: -13.5 [g] at 0.058 [s]

B-19

g

8506-15

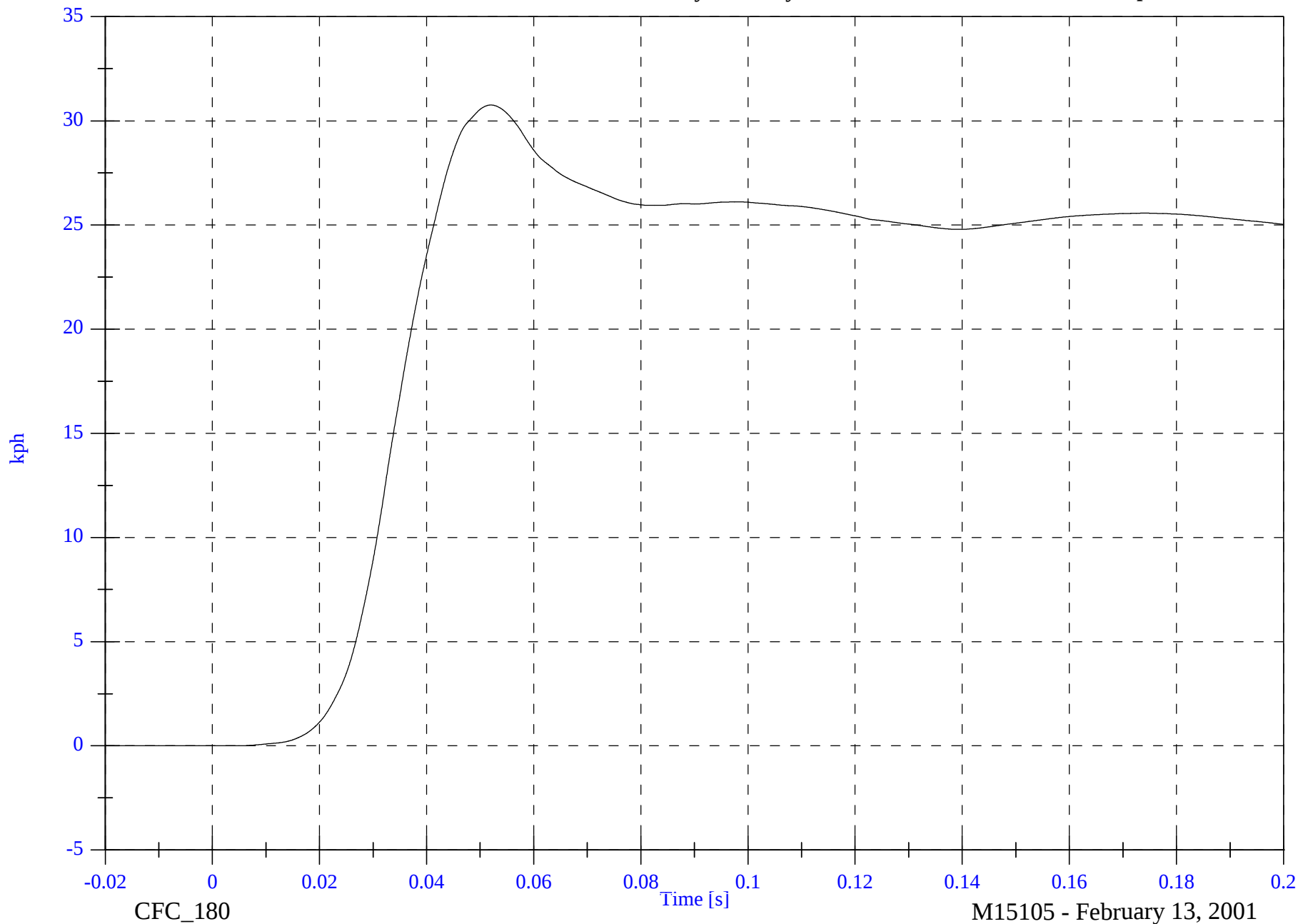


SNCAP Test 15 2001 Lexus RX300

P1 Pelvic y Velocity

Max: 30.8 [kph] at 0.052 [s]

Min: -0.0 [kph] at -0.019 [s]



B-20

8506-15

SNCAP Test 15 2001 Lexus RX300

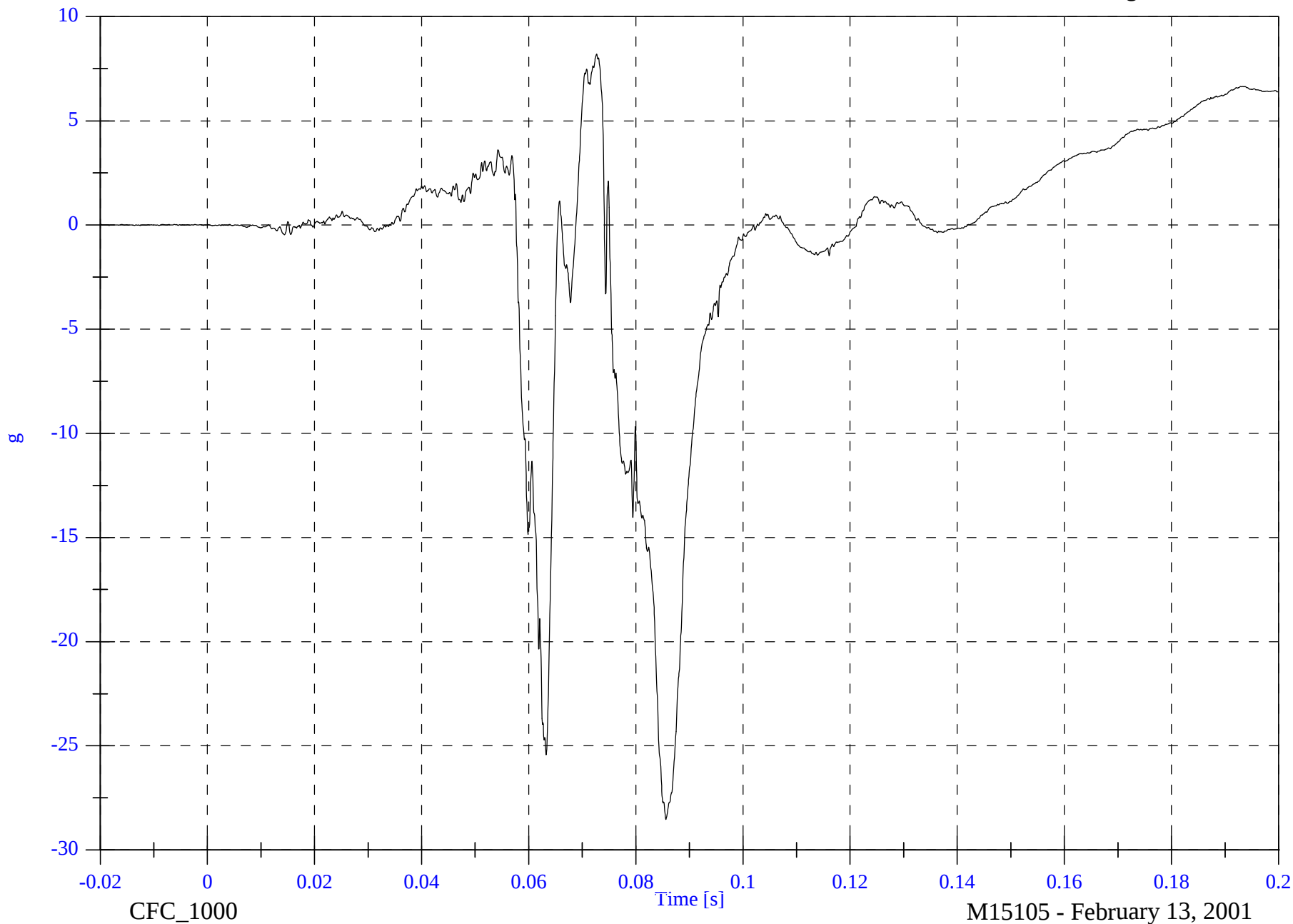
Max: 8.2 [g] at 0.073 [s]

Min: -28.5 [g] at 0.086 [s]

P4 Head x

B-21

8506-15

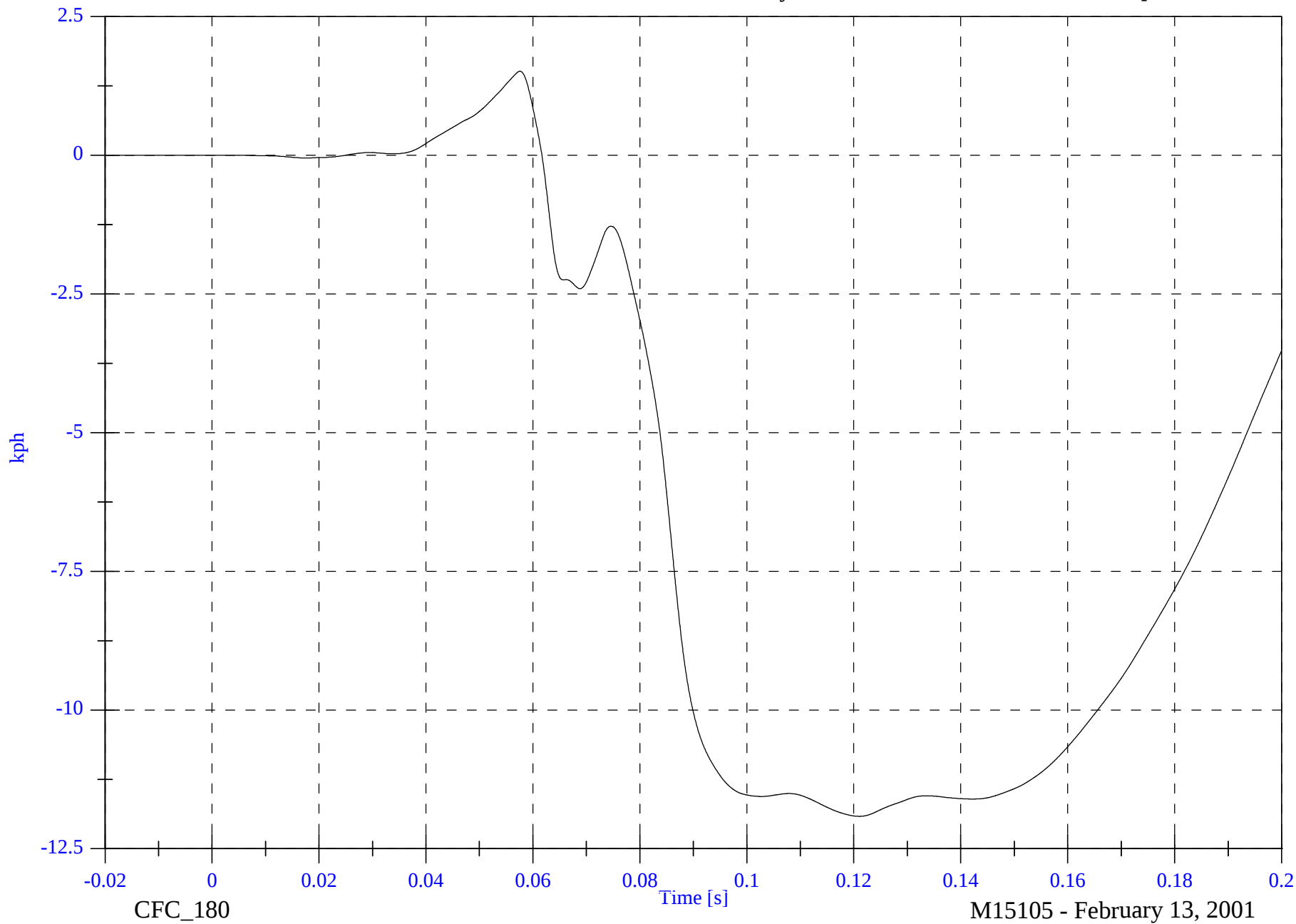


SNCAP Test 15 2001 Lexus RX300

P4 Head x Velocity

Max: 1.5 [kph] at 0.058 [s]

Min: -11.9 [kph] at 0.121 [s]



B-22

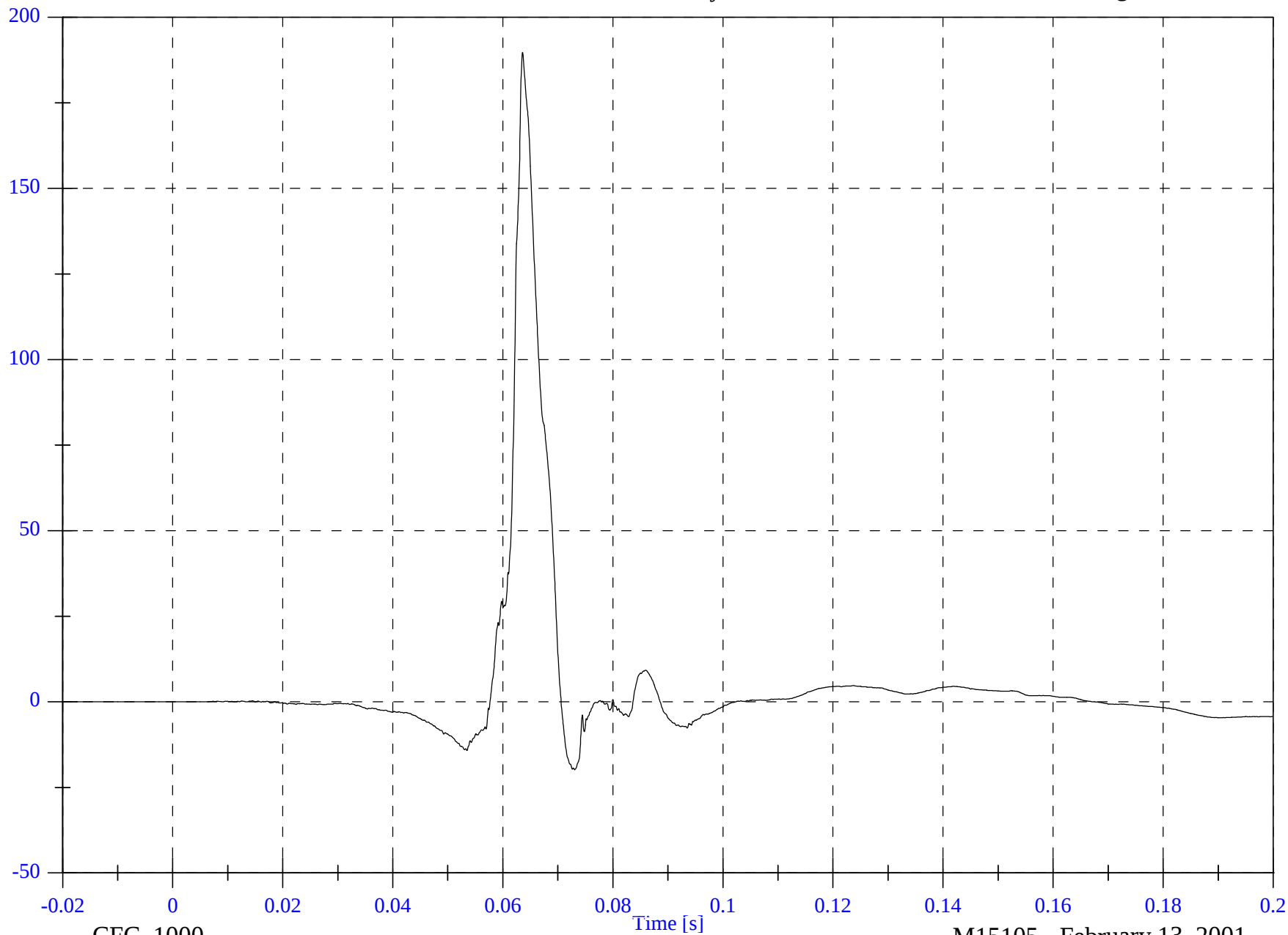
8506-15

SNCAP Test 15 2001 Lexus RX300

P4 Head y

Max: 189.7 [g] at 0.064 [s]

Min: -19.9 [g] at 0.073 [s]



B-23

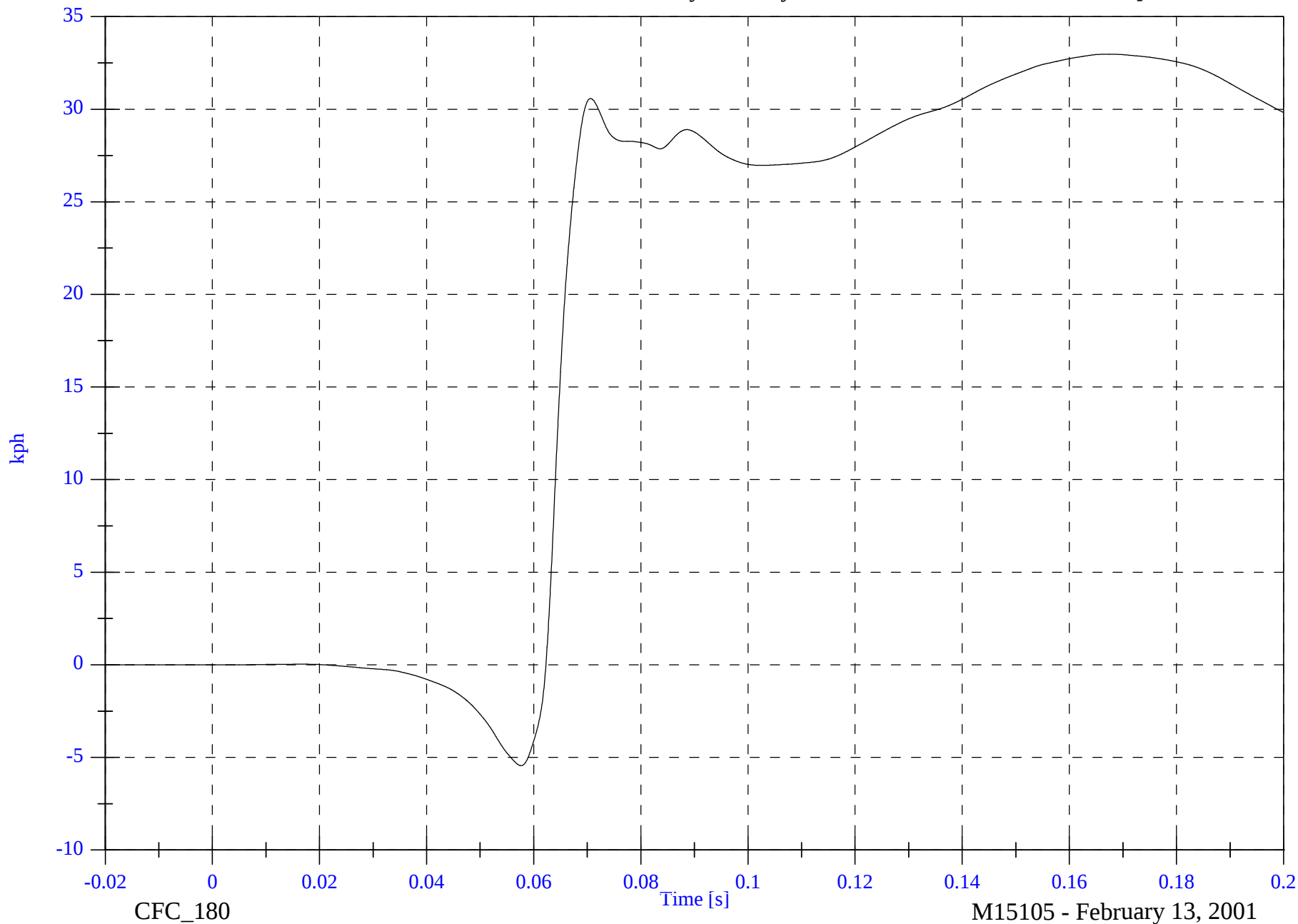
8506-15

SNCAP Test 15 2001 Lexus RX300

P4 Head y Velocity

Max: 33.0 [kph] at 0.167 [s]

Min: -5.4 [kph] at 0.058 [s]



B-24

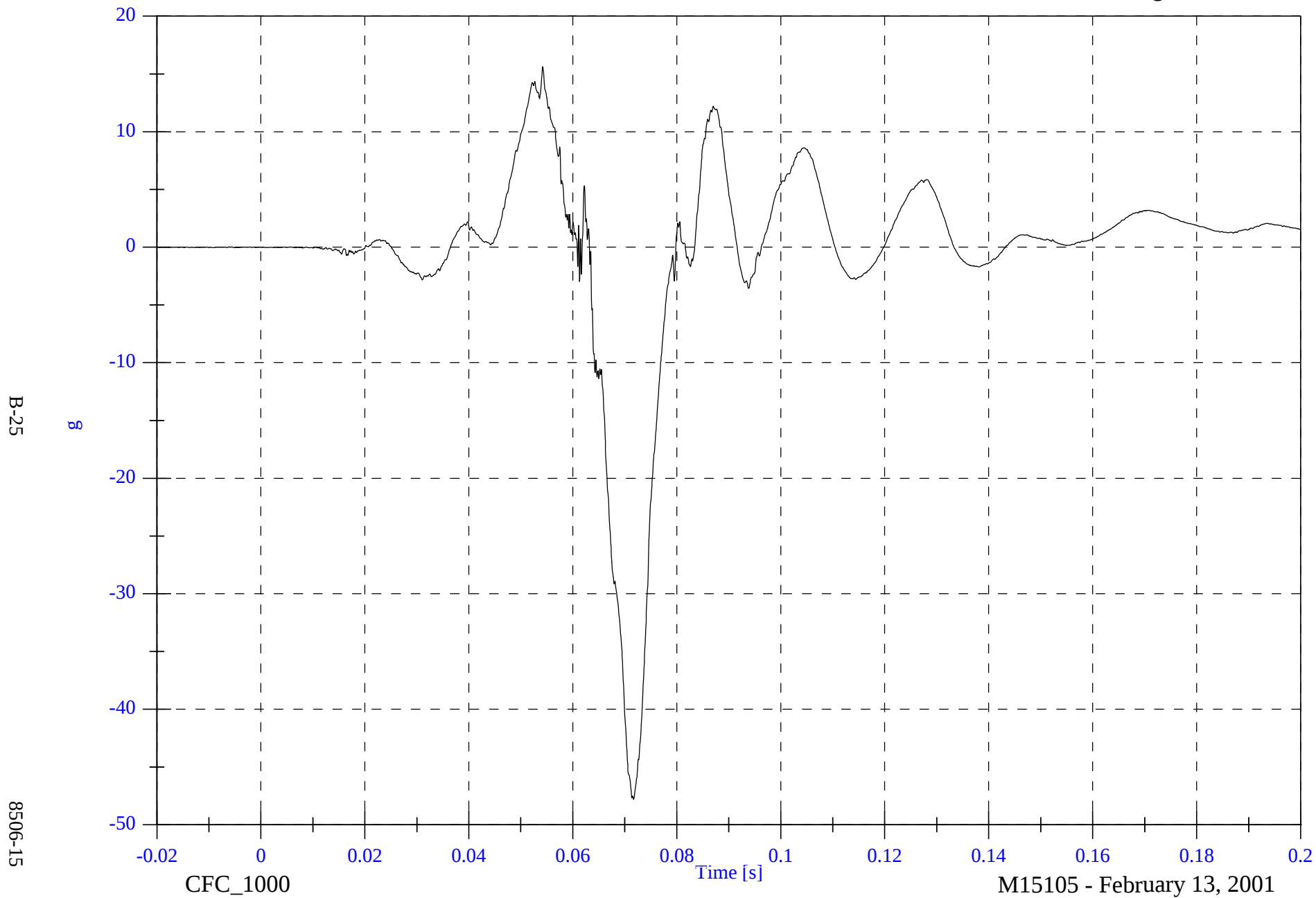
8506-15

SNCAP Test 15 2001 Lexus RX300

P4 Head z

Max: 15.6 [g] at 0.054 [s]

Min: -47.8 [g] at 0.072 [s]

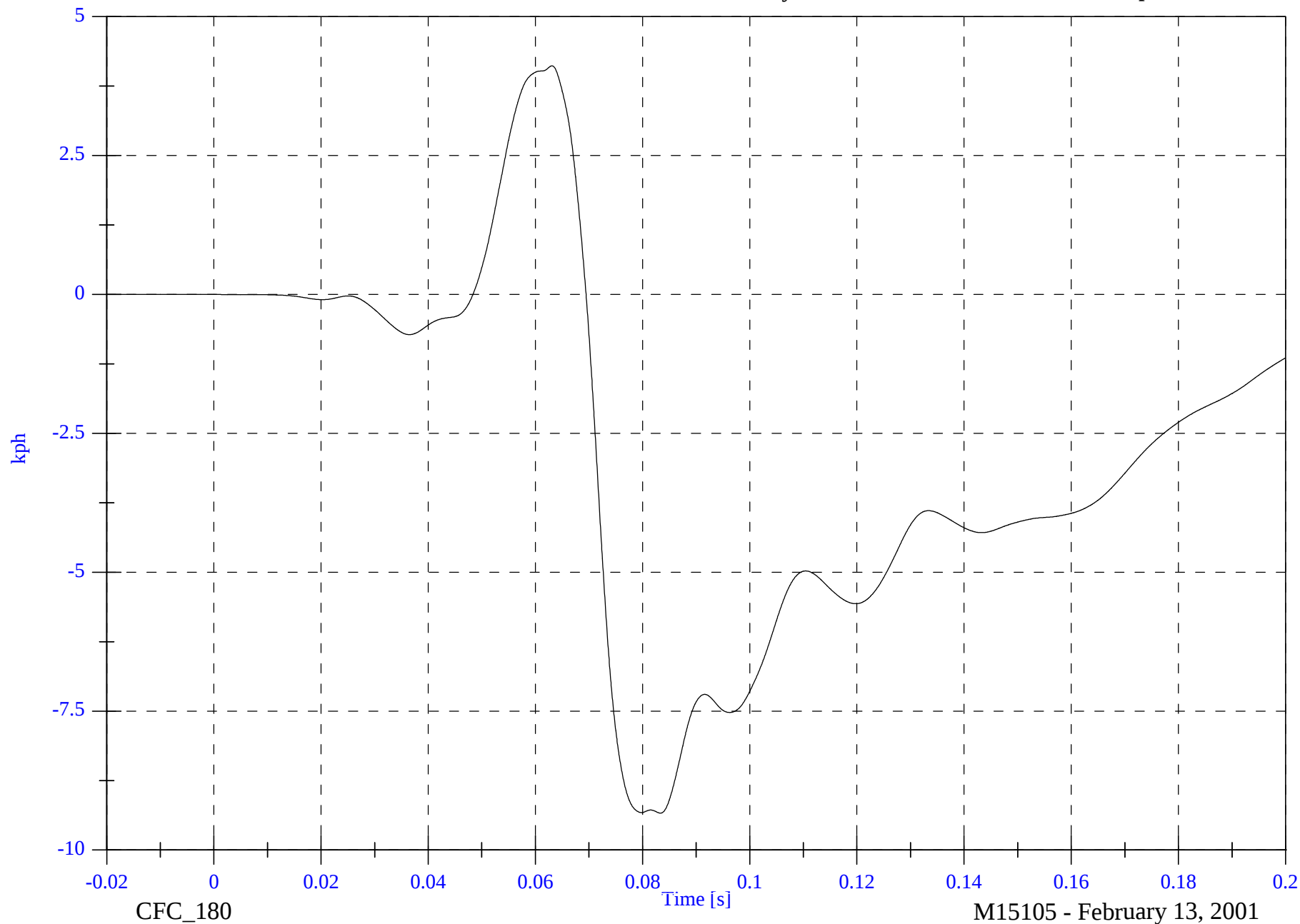


SNCAP Test 15 2001 Lexus RX300

P4 Head z Velocity

Max: 4.1 [kph] at 0.063 [s]

Min: -9.3 [kph] at 0.083 [s]



B-26

8506-15

CFC_180

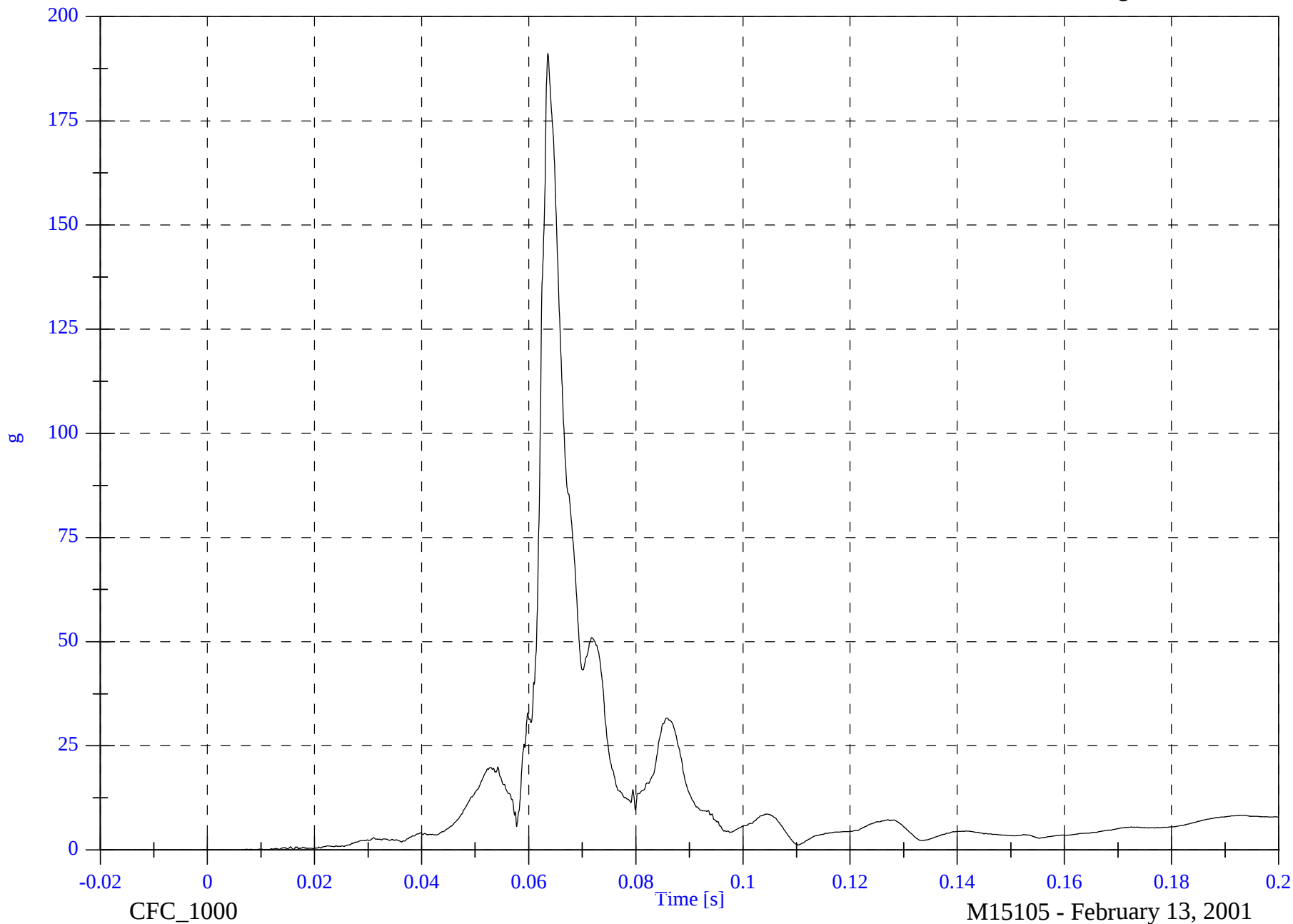
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

P4 Head Resultant

Max: 191.1 [g] at 0.064 [s]

Min: 0.0 [g] at -0.010 [s]



B-27

8506-15

CFC_1000

M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

P4 Upper Rib y

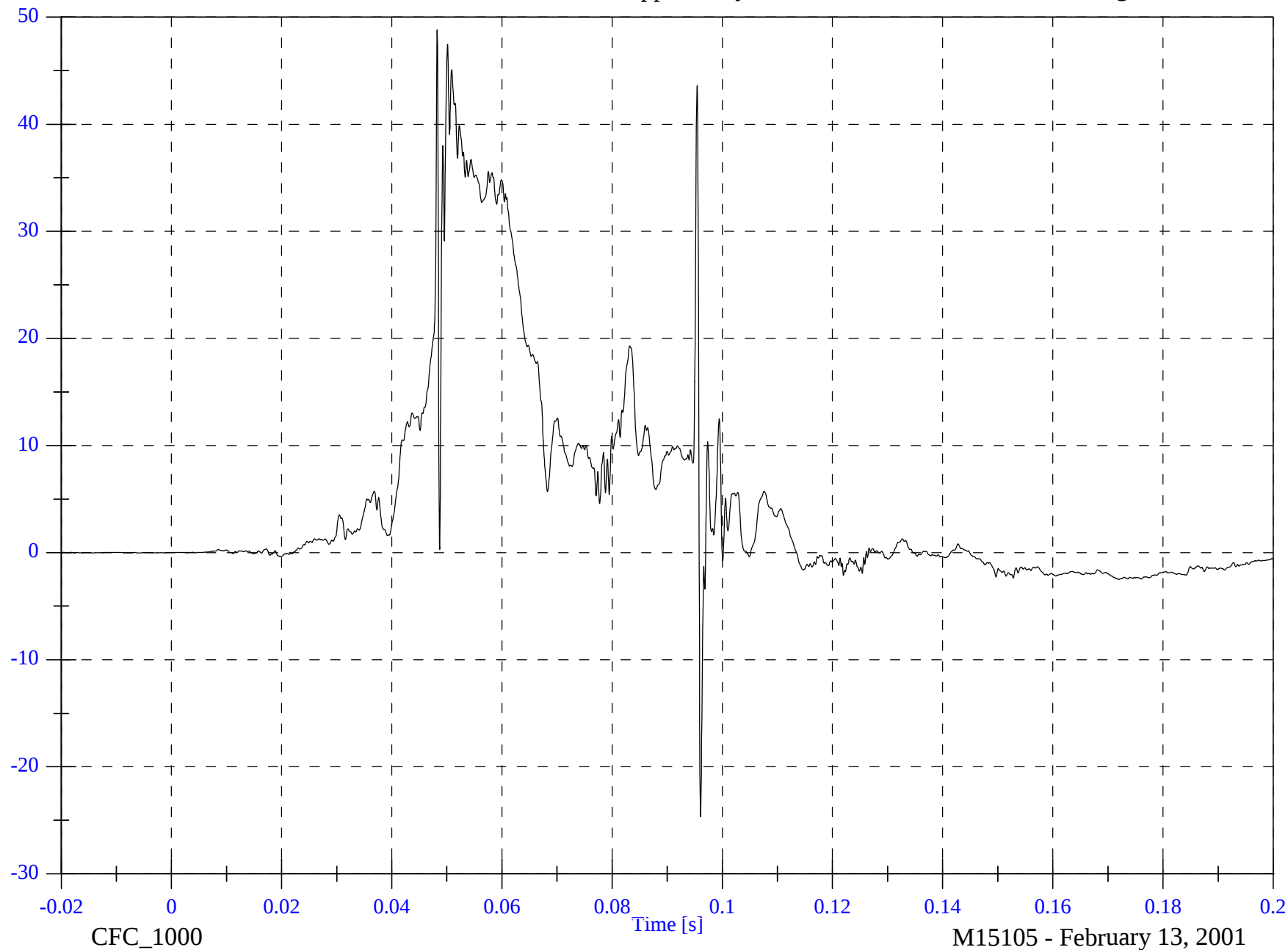
Max: 48.8 [g] at 0.048 [s]

Min: -24.7 [g] at 0.096 [s]

B-28

g

8506-15



CFC_1000

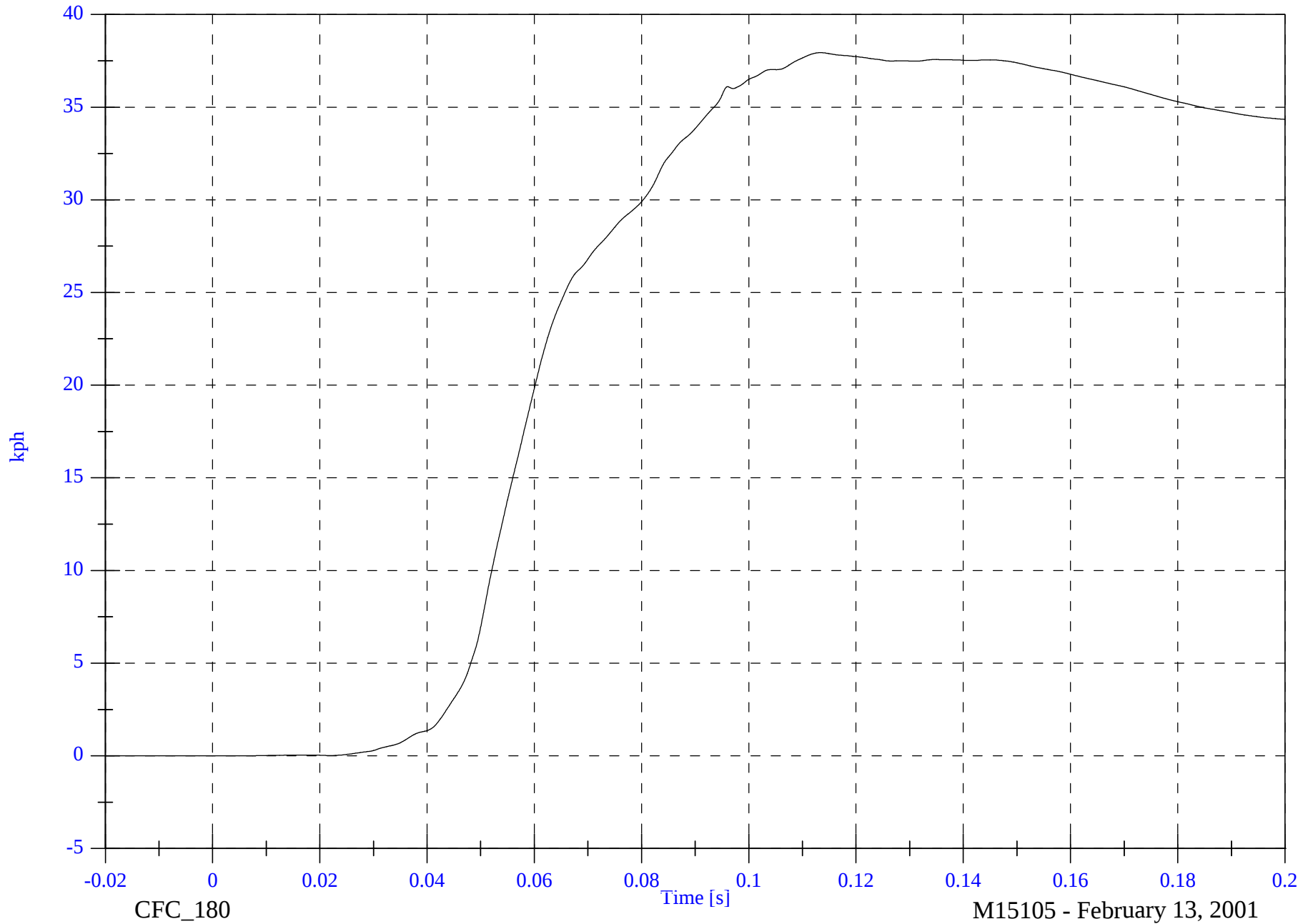
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

P4 Upper Rib y Velocity

Max: 37.9 [kph] at 0.113 [s]

Min: -0.0 [kph] at -0.000 [s]



B-29

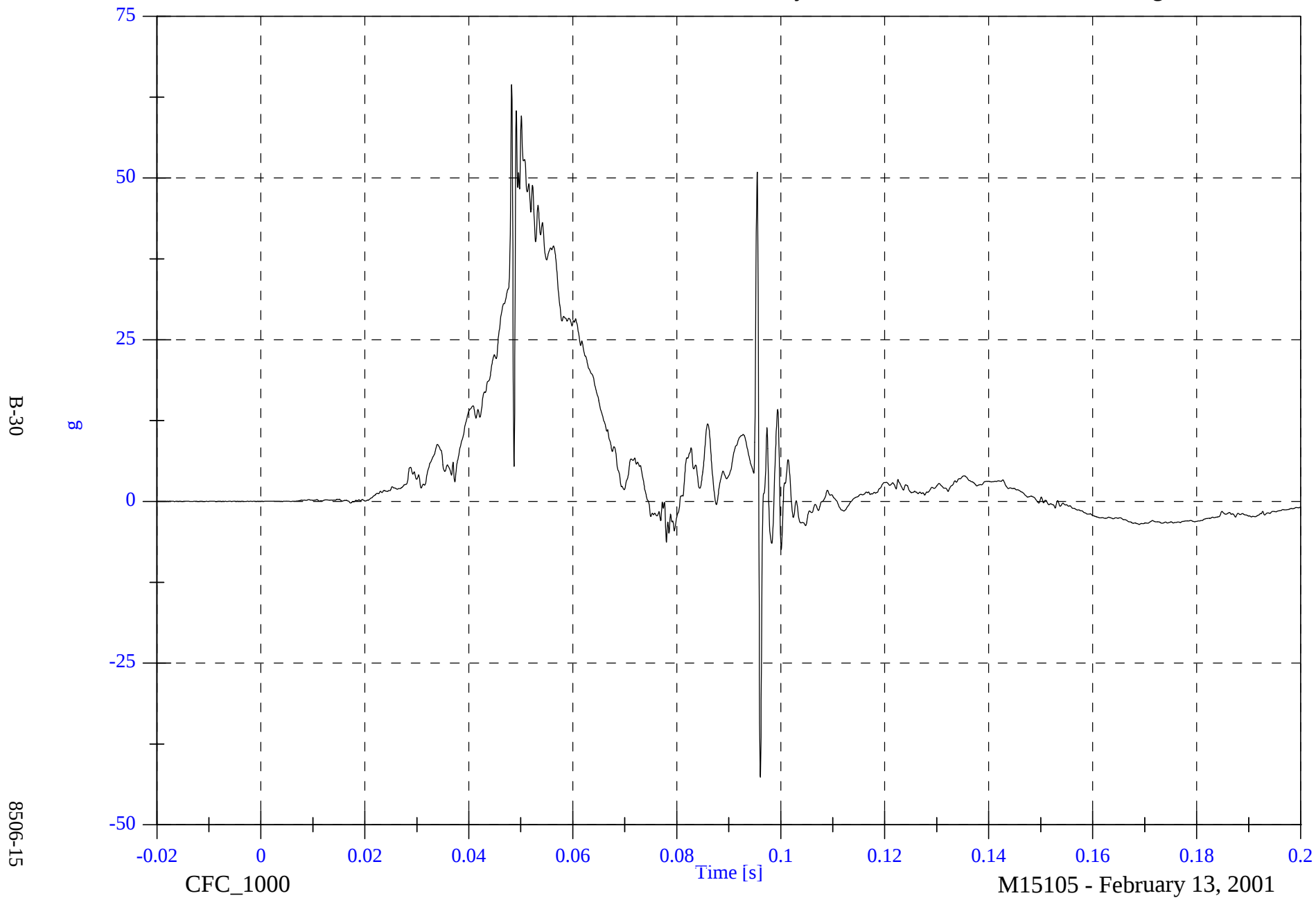
8506-15

SNCAP Test 15 2001 Lexus RX300

P4 Lower Rib y

Max: 64.4 [g] at 0.048 [s]

Min: -42.7 [g] at 0.096 [s]



SNCAP Test 15 2001 Lexus RX300

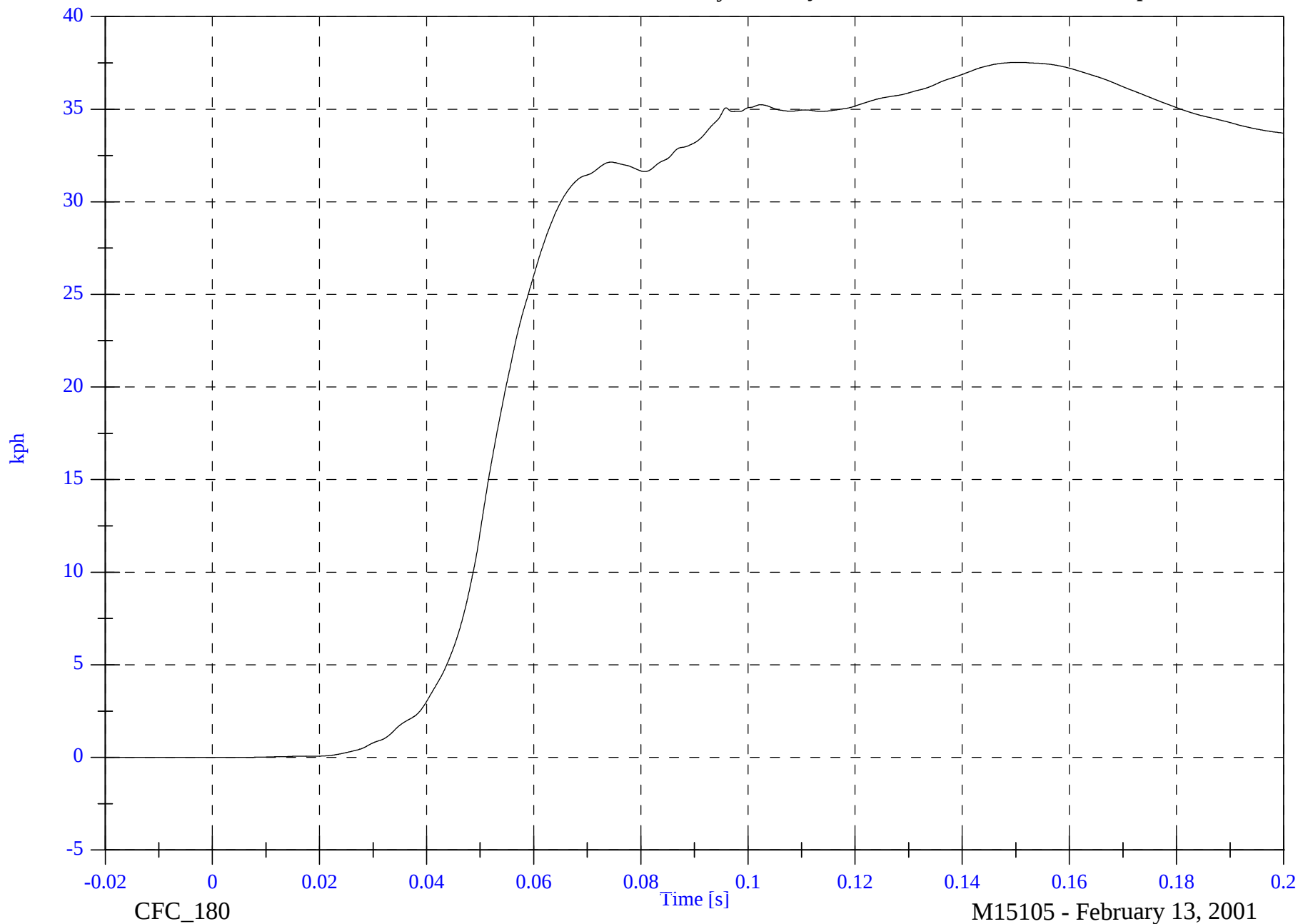
P4 Lower Rib y Velocity

Max: 37.5 [kph] at 0.151 [s]

Min: -0.0 [kph] at -0.020 [s]

B-31

8506-15



SNCAP Test 15 2001 Lexus RX300

P4 Lower Spine y

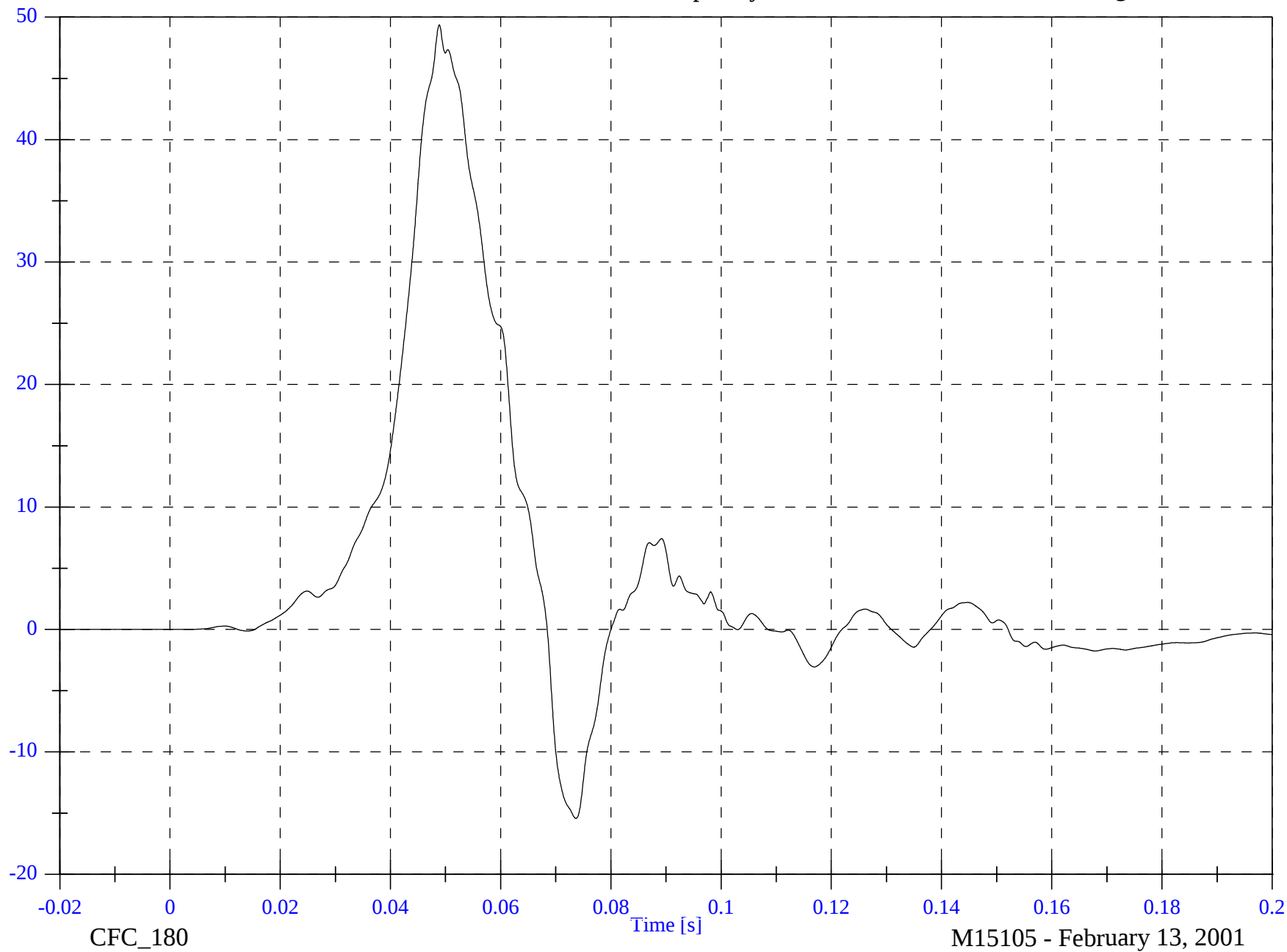
Max: 49.4 [g] at 0.049 [s]

Min: -15.4 [g] at 0.074 [s]

B-32

g

8506-15

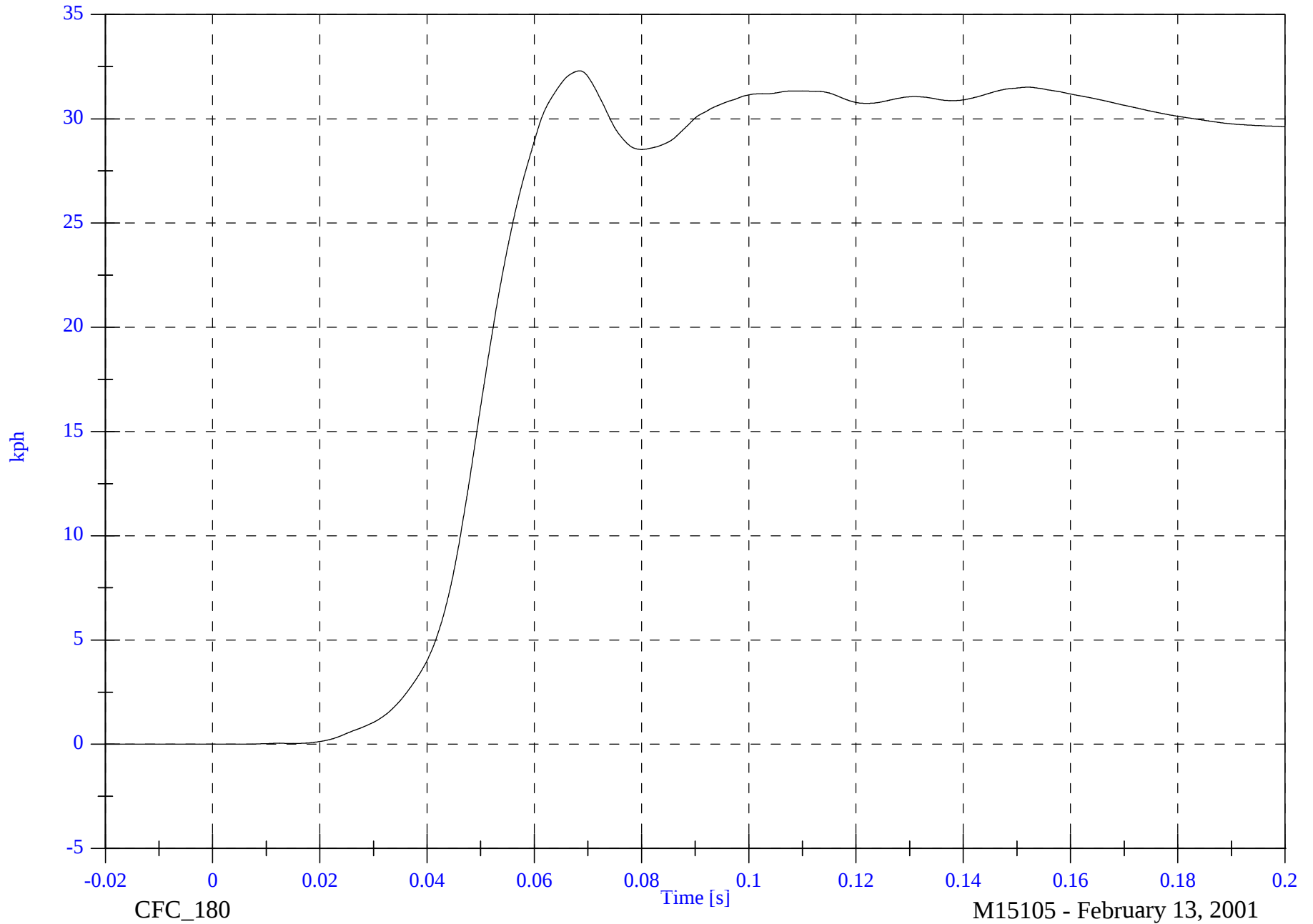


SNCAP Test 15 2001 Lexus RX300

P4 Lower Spine y Velocity

Max: 32.3 [kph] at 0.068 [s]

Min: -0.0 [kph] at -0.020 [s]



B-33

8506-15

CFC_180

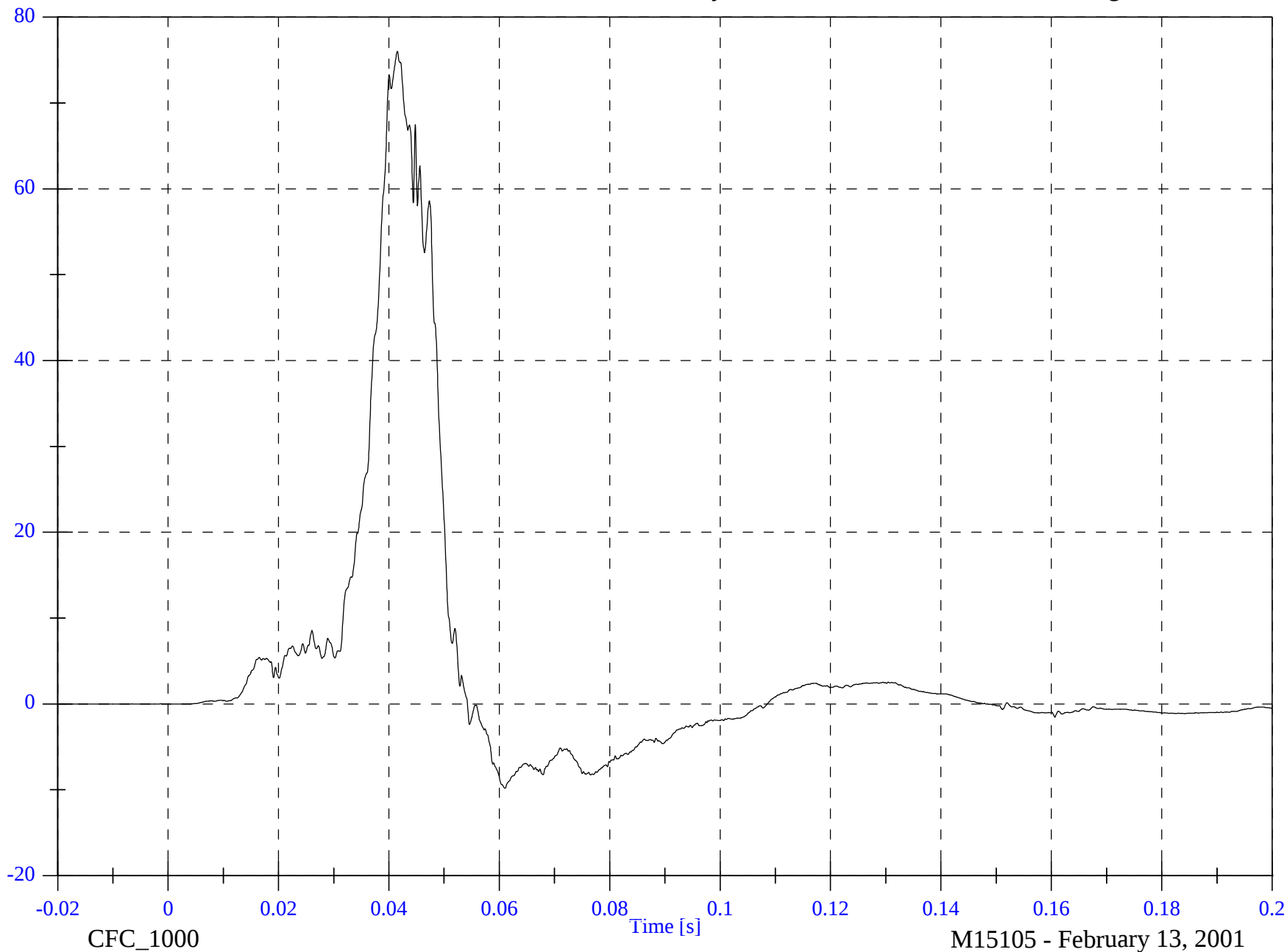
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

P4 Pelvic y

Max: 76.0 [g] at 0.042 [s]

Min: -9.8 [g] at 0.061 [s]



B-34

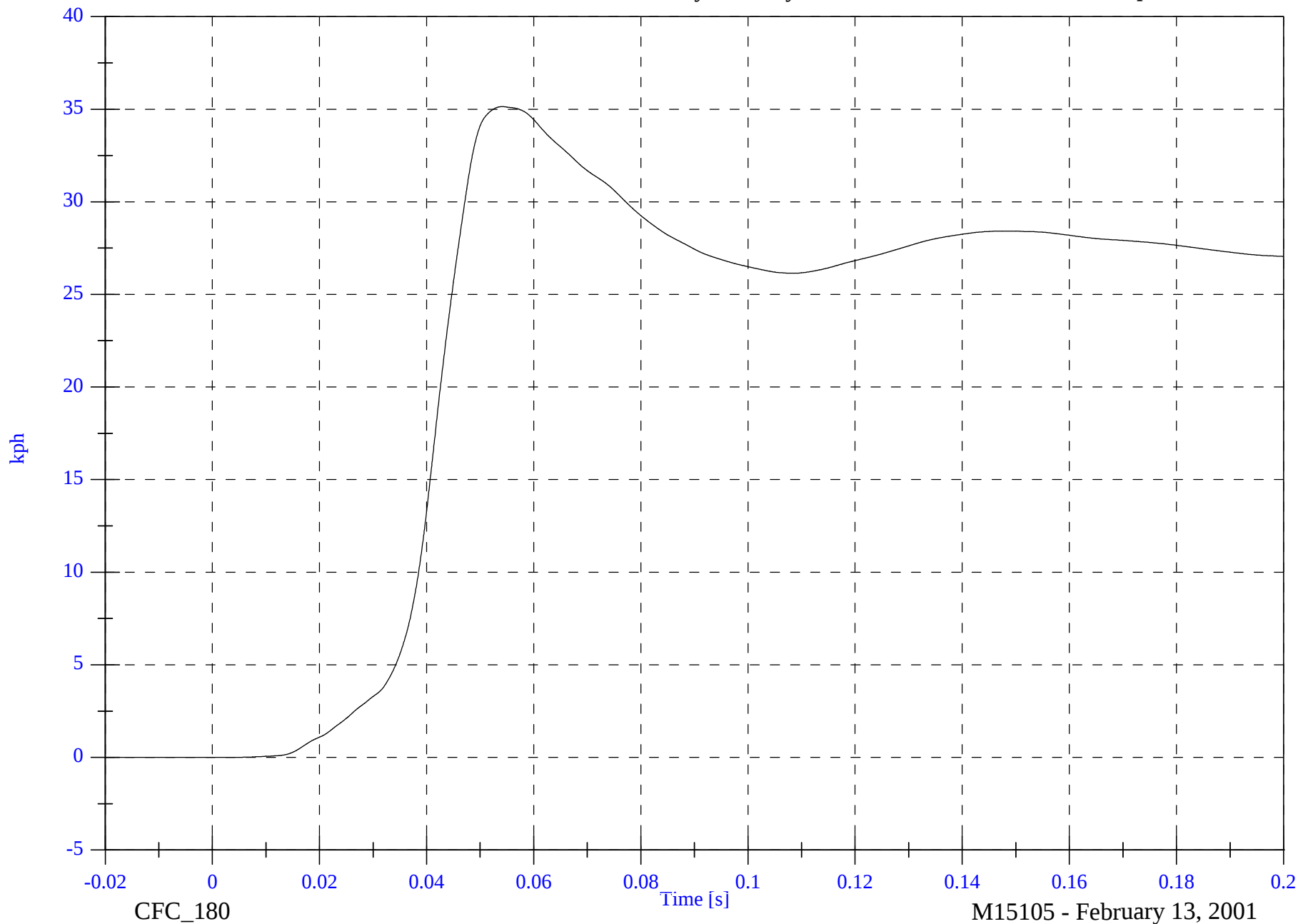
8506-15

SNCAP Test 15 2001 Lexus RX300

P4 Pelvic y Velocity

Max: 35.1 [kph] at 0.054 [s]

Min: -0.0 [kph] at -0.019 [s]



B-35

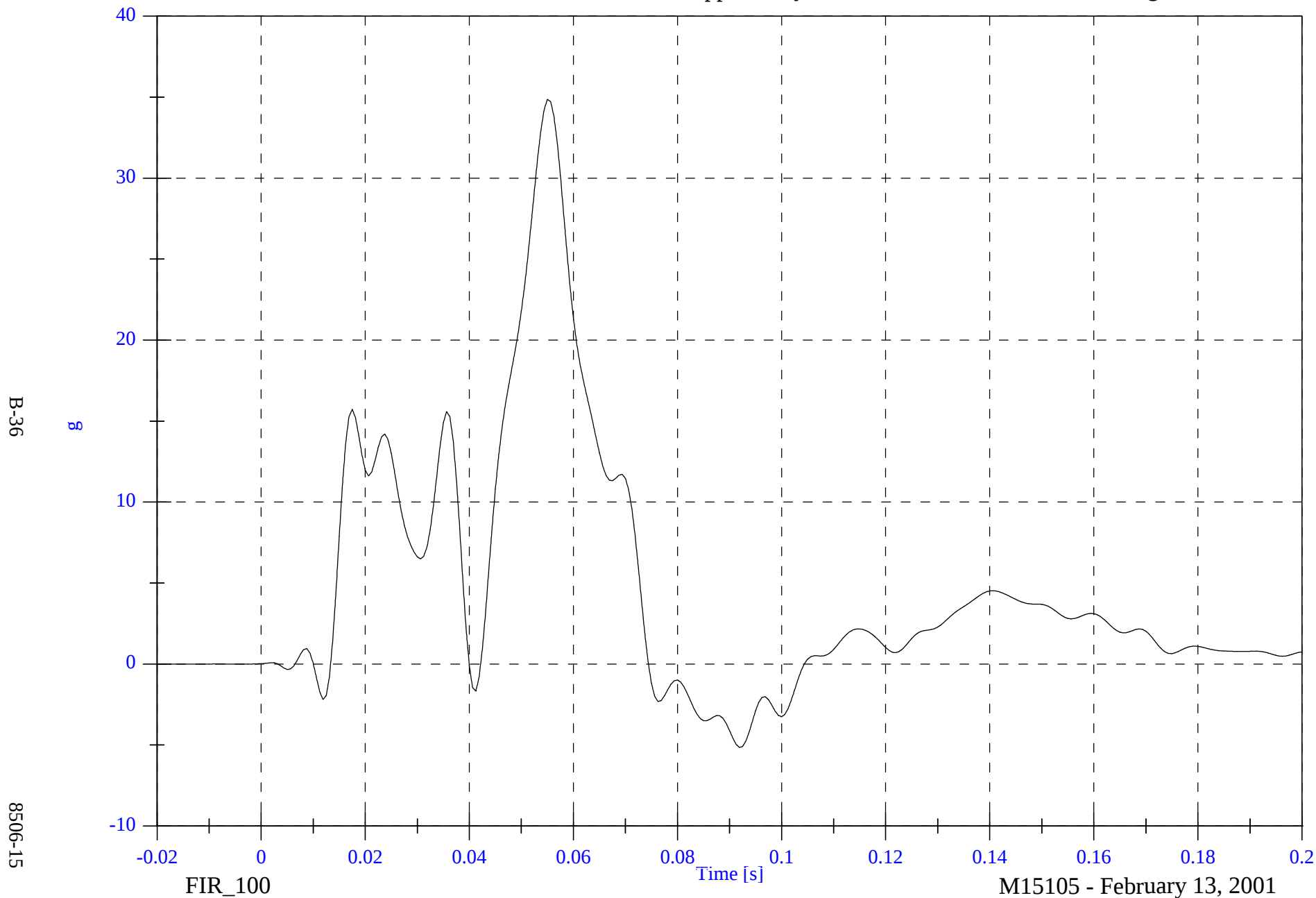
8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Upper Rib y

Max: 34.9 [g] at 0.055 [s]

Min: -5.1 [g] at 0.092 [s]



SNCAP Test 15 2001 Lexus RX300

P1 Lower Rib y

Max: 30.0 [g] at 0.056 [s]

Min: -4.9 [g] at 0.066 [s]

B-37

8506-15



SNCAP Test 15 2001 Lexus RX300

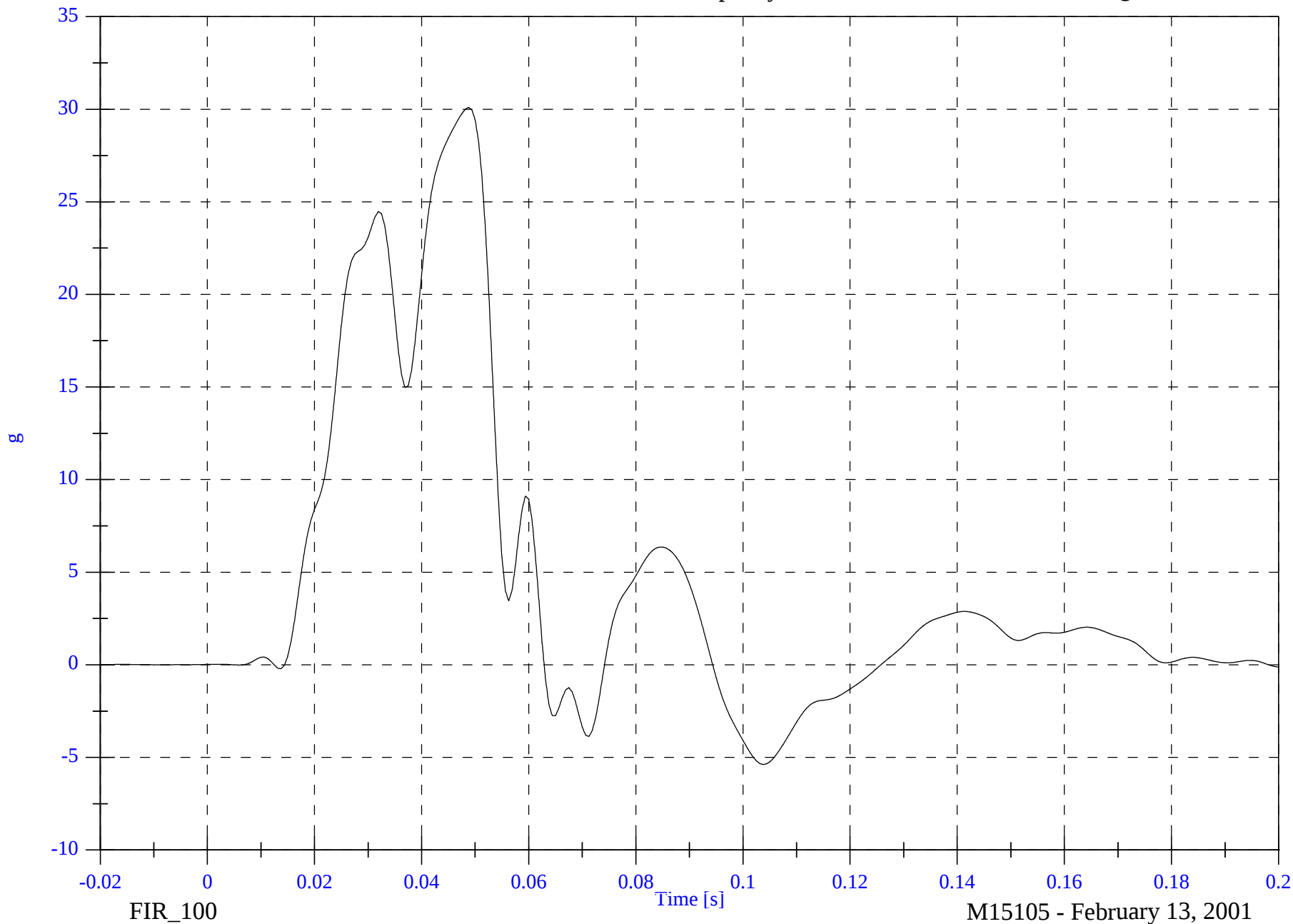
P1 Lower Spine y

Max: 30.1 [g] at 0.049 [s]

Min: -5.4 [g] at 0.104 [s]

B-38

8506-15



SNCAP Test 15 2001 Lexus RX300

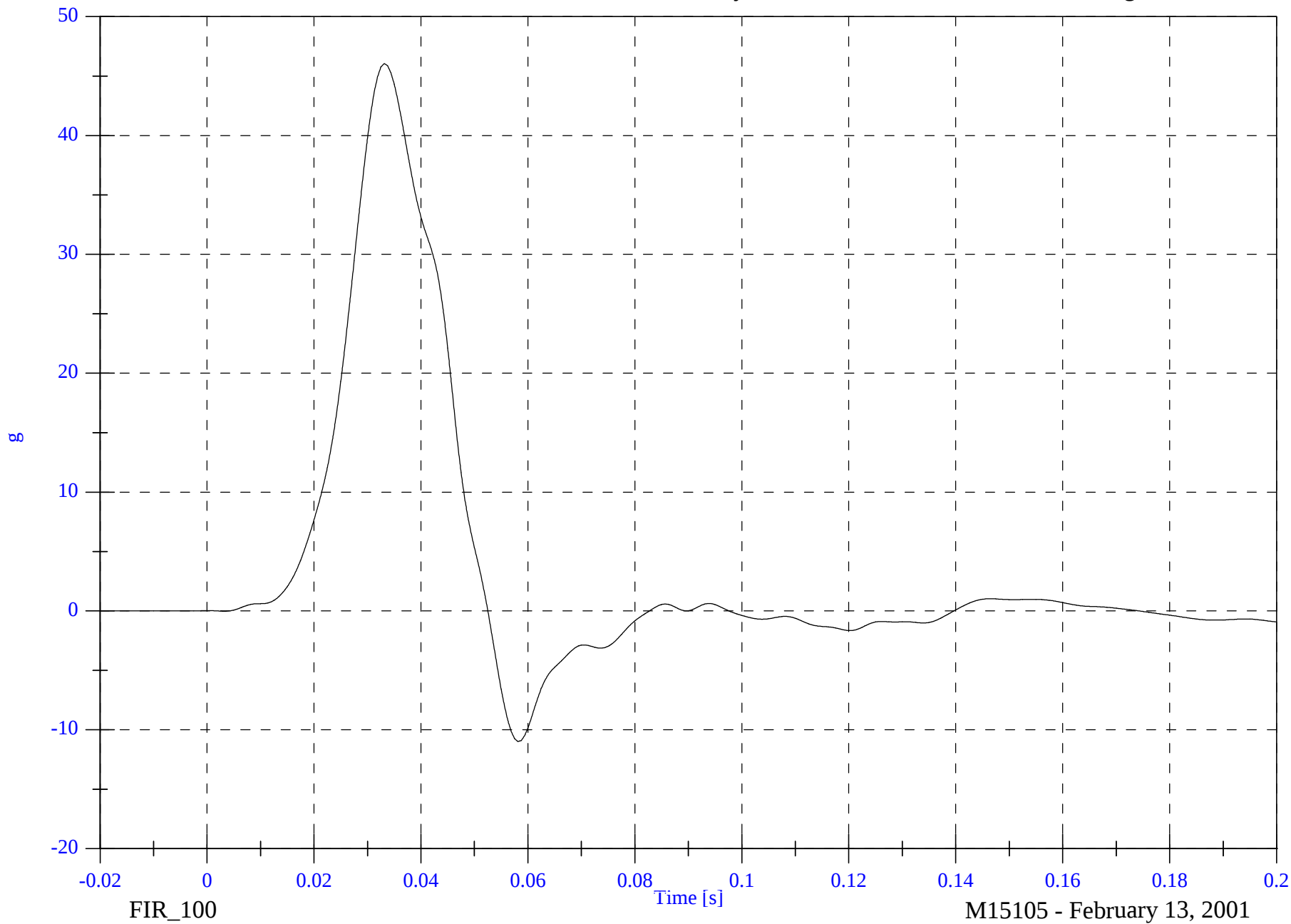
P1 Pelvic y

Max: 46.1 [g] at 0.033 [s]

Min: -11.0 [g] at 0.058 [s]

B-39

8506-15

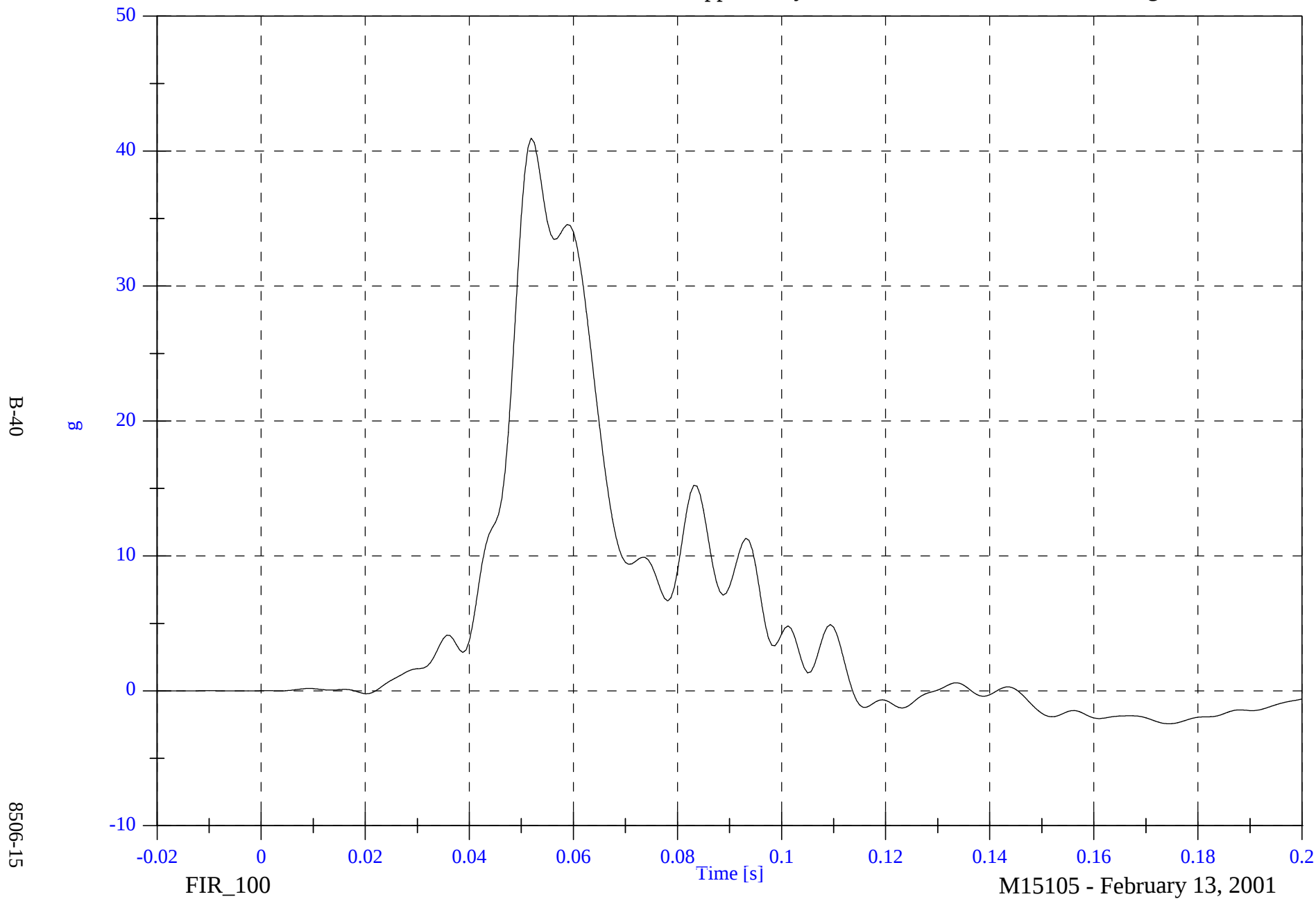


SNCAP Test 15 2001 Lexus RX300

P4 Upper Rib y

Max: 41.0 [g] at 0.052 [s]

Min: -2.5 [g] at 0.174 [s]



SNCAP Test 15 2001 Lexus RX300

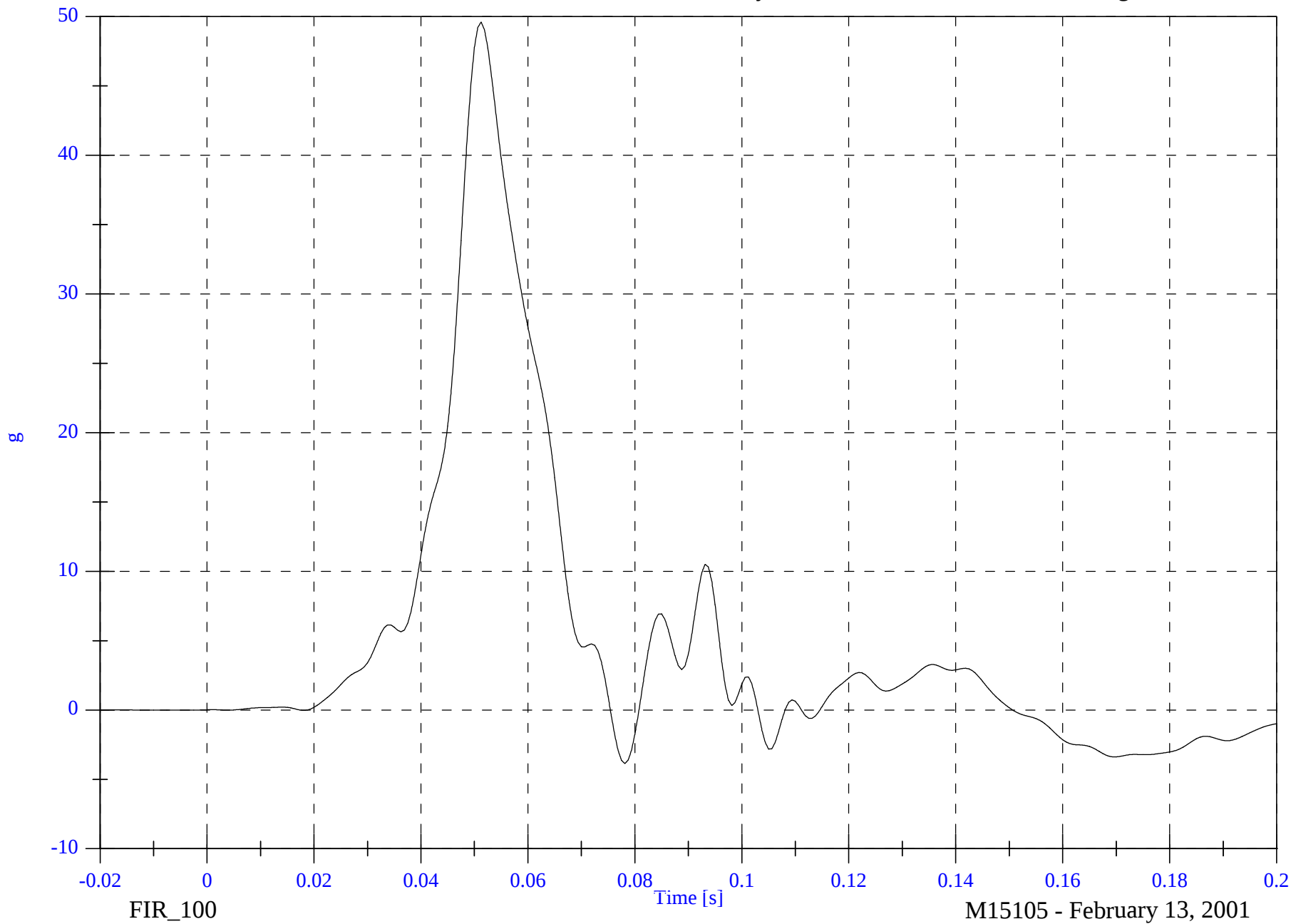
P4 Lower Rib y

Max: 49.6 [g] at 0.051 [s]

Min: -3.9 [g] at 0.078 [s]

B-41

8506-15

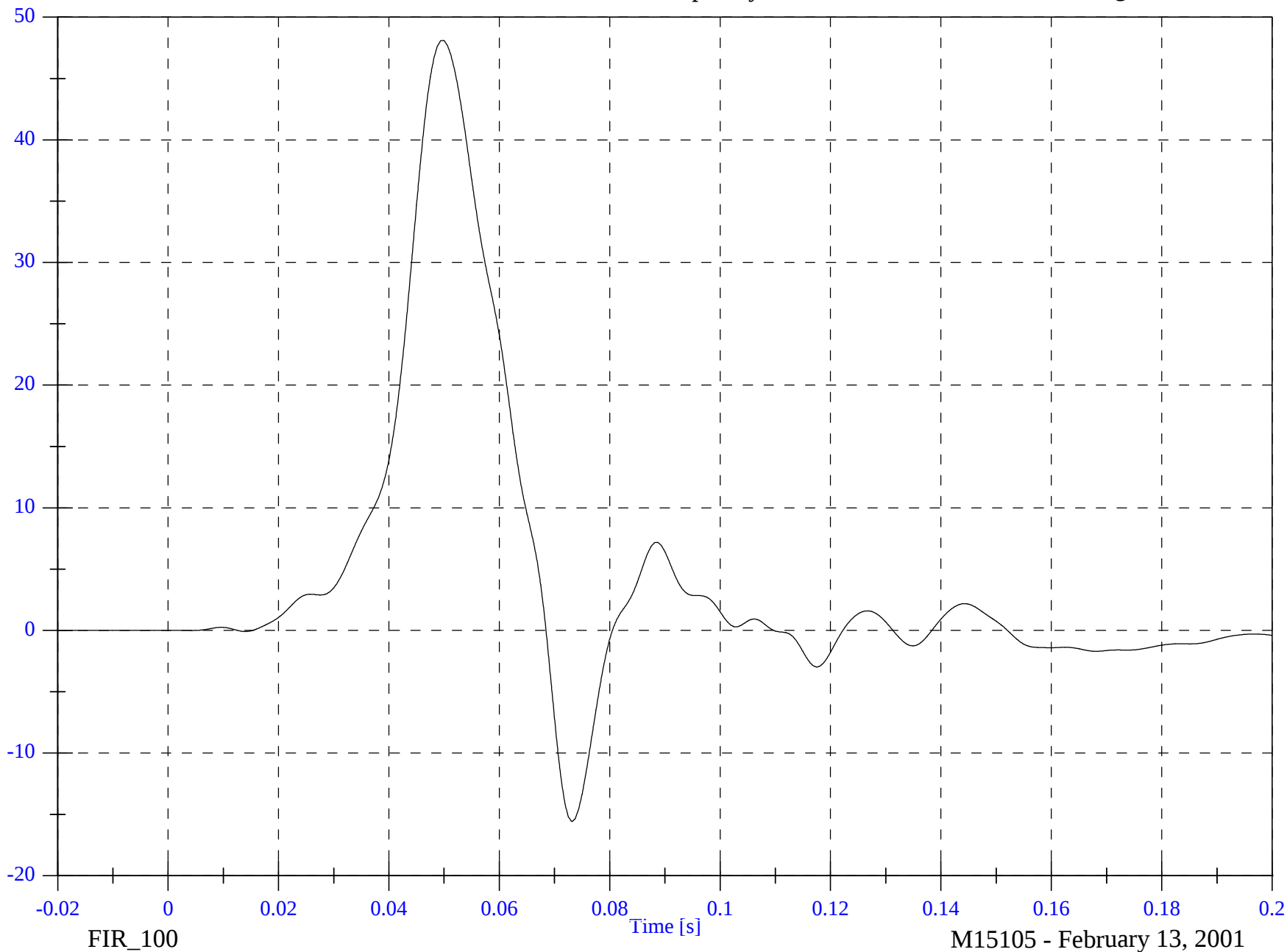


SNCAP Test 15 2001 Lexus RX300

P4 Lower Spine y

Max: 48.1 [g] at 0.050 [s]

Min: -15.6 [g] at 0.073 [s]



B-42

8506-15

FIR_100

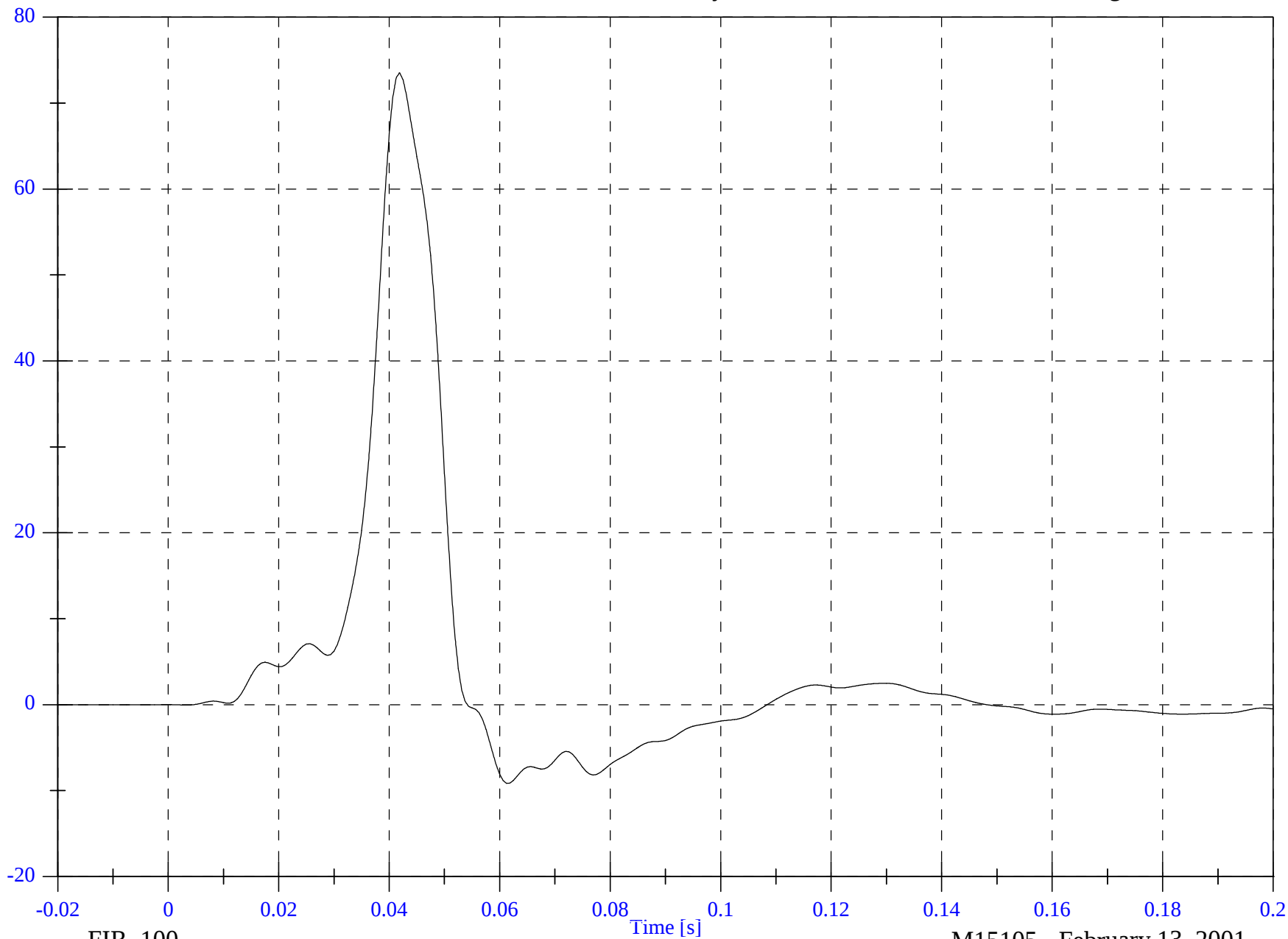
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

P4 Pelvic y

Max: 73.5 [g] at 0.042 [s]

Min: -9.2 [g] at 0.061 [s]



B-43

8506-15

FIR_100

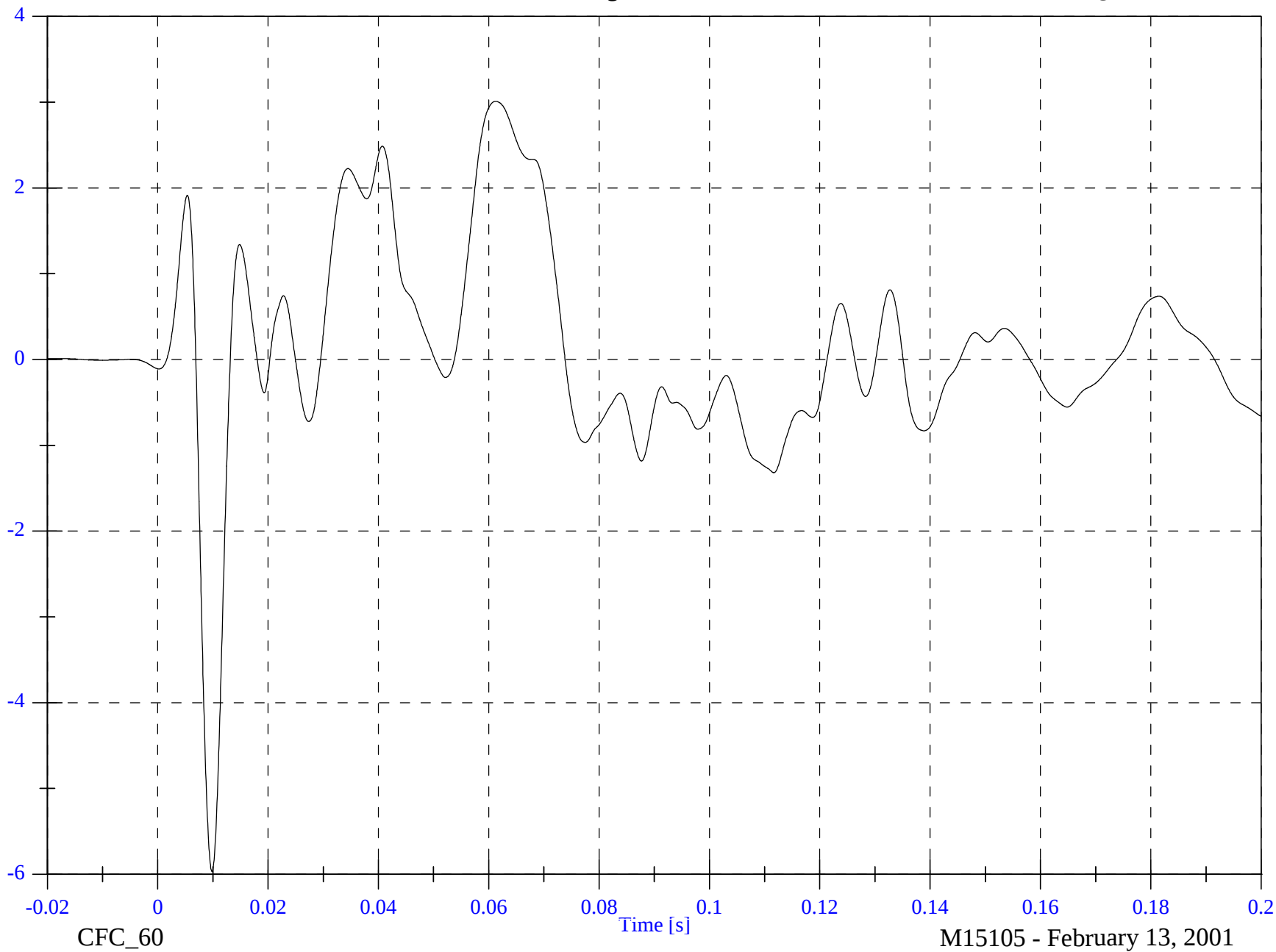
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A1 Right Front Sill X

Max: 3.0 [g] at 0.061 [s]

Min: -6.0 [g] at 0.010 [s]



B-44

8506-15

SNCAP Test 15 2001 Lexus RX300

A1 Right Front Sill X Velocity

Max: 2.0 [kph] at 0.074 [s]

Min: -0.7 [kph] at 0.012 [s]



B-45

8506-15

CFC_180

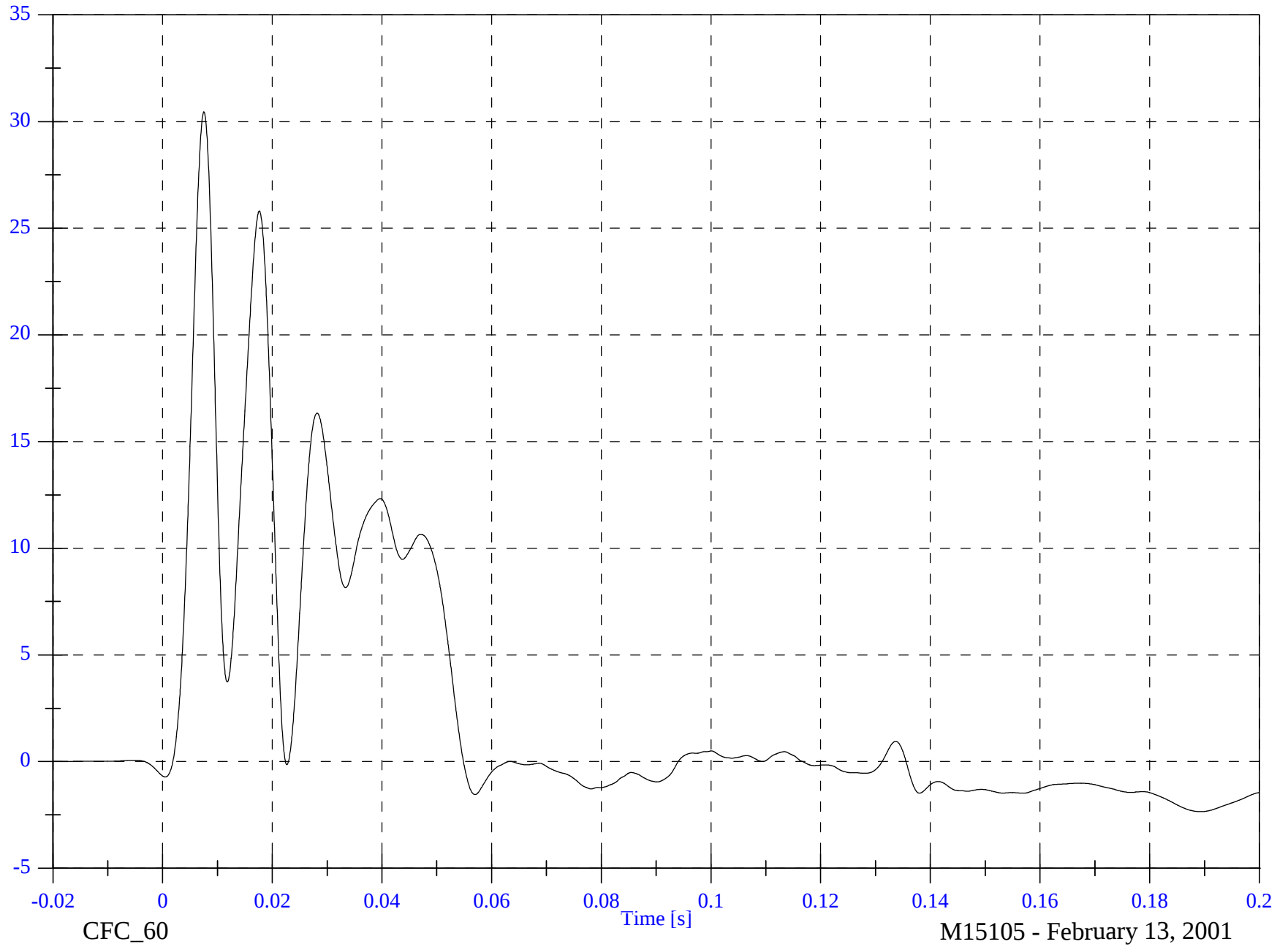
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A1 Right Front Sill Y

Max: 30.4 [g] at 0.008 [s]

Min: -2.3 [g] at 0.189 [s]



B-46

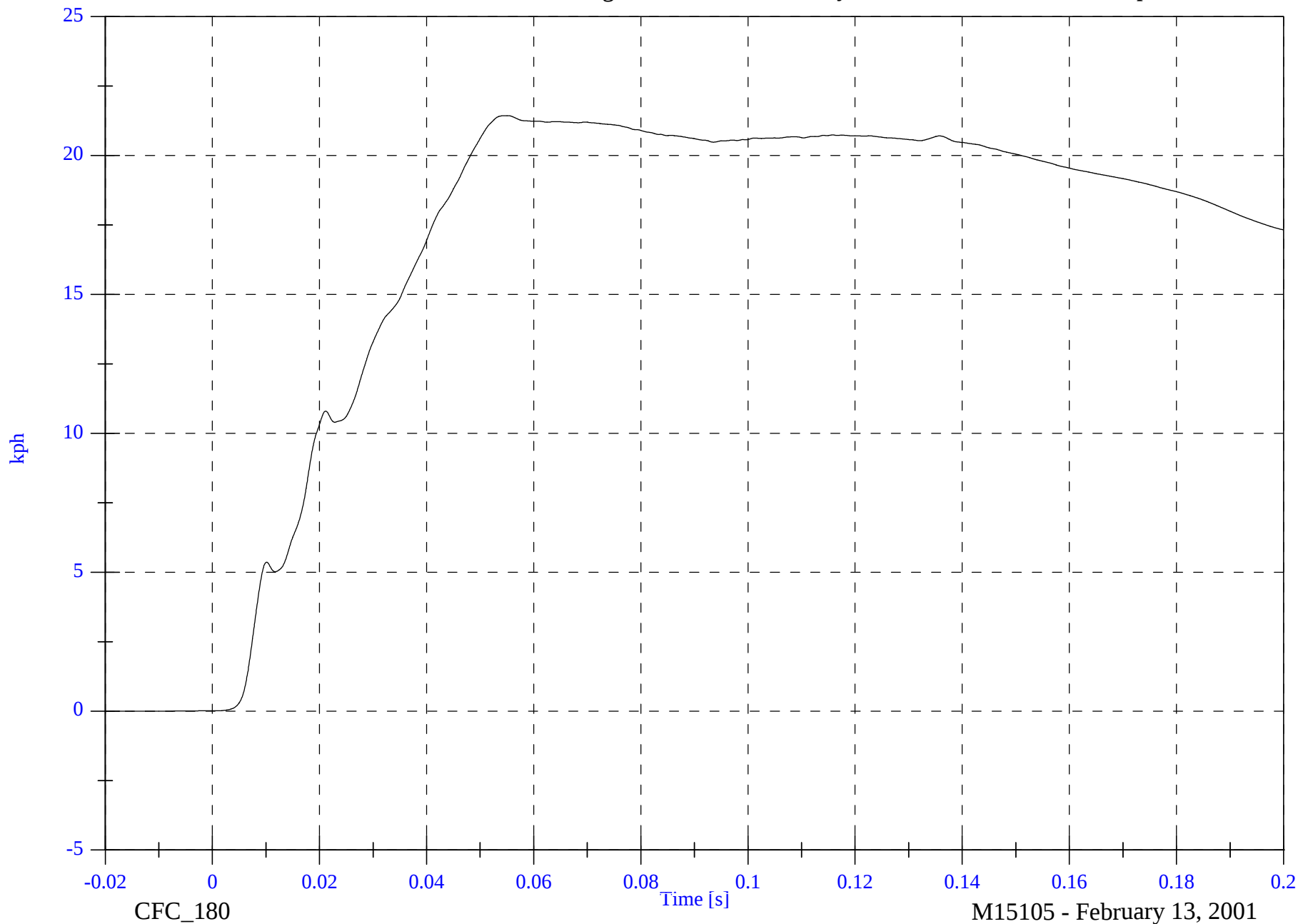
8506-15

SNCAP Test 15 2001 Lexus RX300

A1 Right Front Sill Y Velocity

Max: 21.4 [kph] at 0.055 [s]

Min: -0.0 [kph] at -0.018 [s]



B-47

8506-15

SNCAP Test 15 2001 Lexus RX300

A1 Right Front Sill Z

Max: 6.5 [g] at 0.017 [s]

Min: -11.4 [g] at 0.020 [s]



SNCAP Test 15 2001 Lexus RX300

A1 Right Front Sill Z Velocity

Max: 5.2 [kph] at 0.200 [s]

Min: -4.2 [kph] at 0.053 [s]

B-49

8506-15



SNCAP Test 15 2001 Lexus RX300

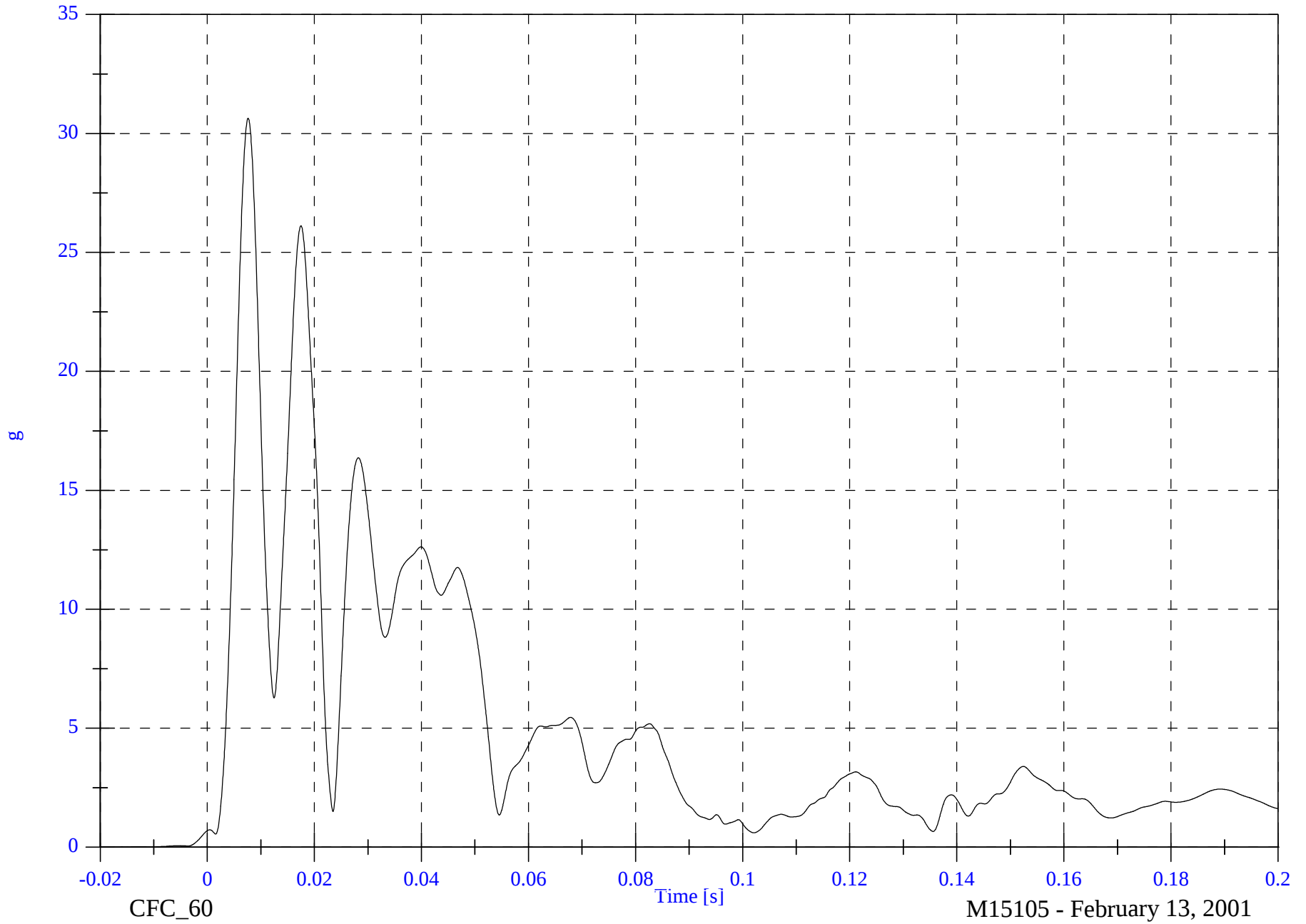
A1 Right Front Sill Resultant

Max: 30.6 [g] at 0.008 [s]

Min: 0.0 [g] at -0.019 [s]

B-50

8506-15

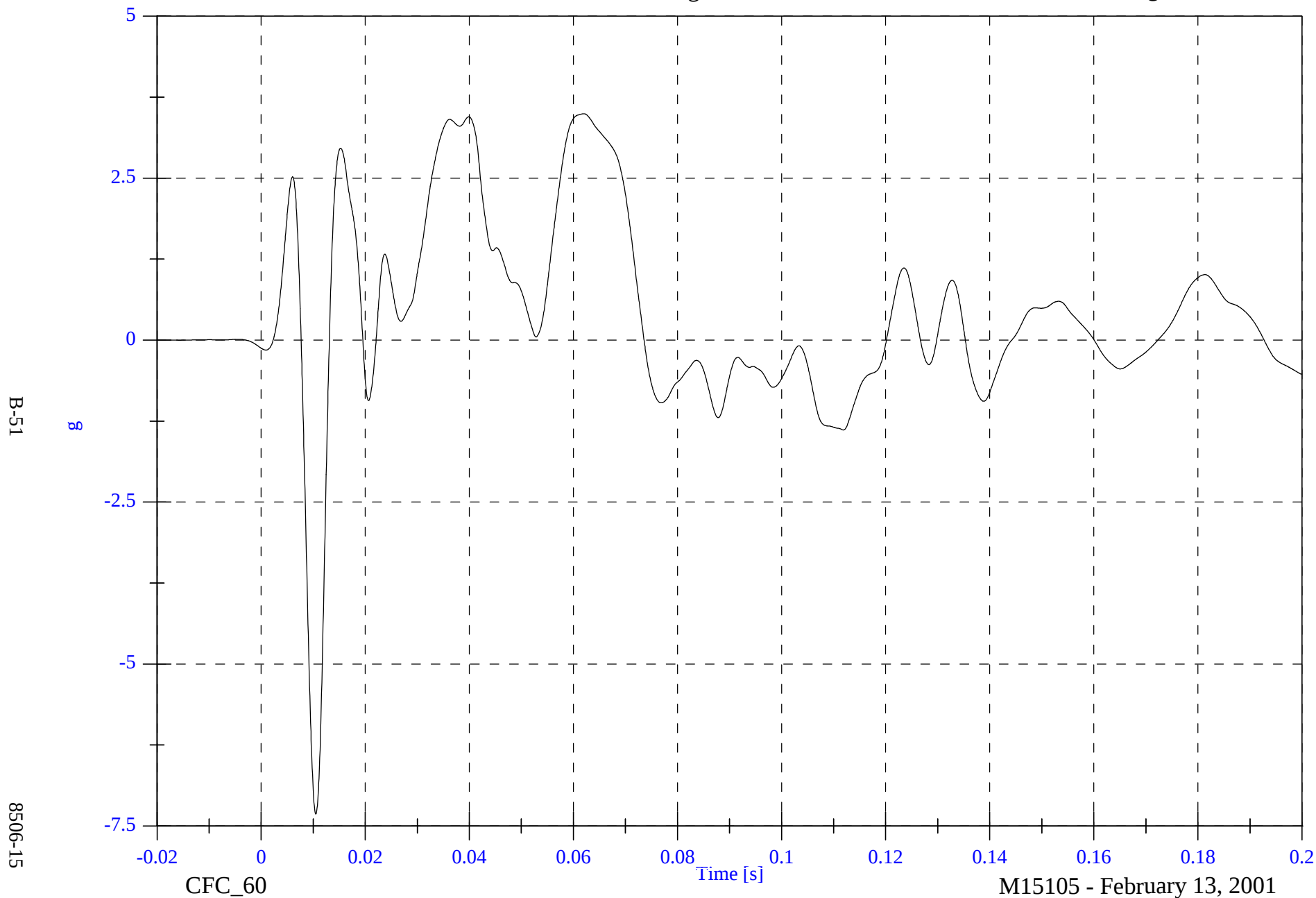


SNCAP Test 15 2001 Lexus RX300

A2 Right Rear Sill X

Max: 3.5 [g] at 0.062 [s]

Min: -7.3 [g] at 0.011 [s]



SNCAP Test 15 2001 Lexus RX300

A2 Right Rear Sill X Velocity

Max: 3.3 [kph] at 0.074 [s]

Min: -0.8 [kph] at 0.012 [s]



B-52

8506-15

SNCAP Test 15 2001 Lexus RX300

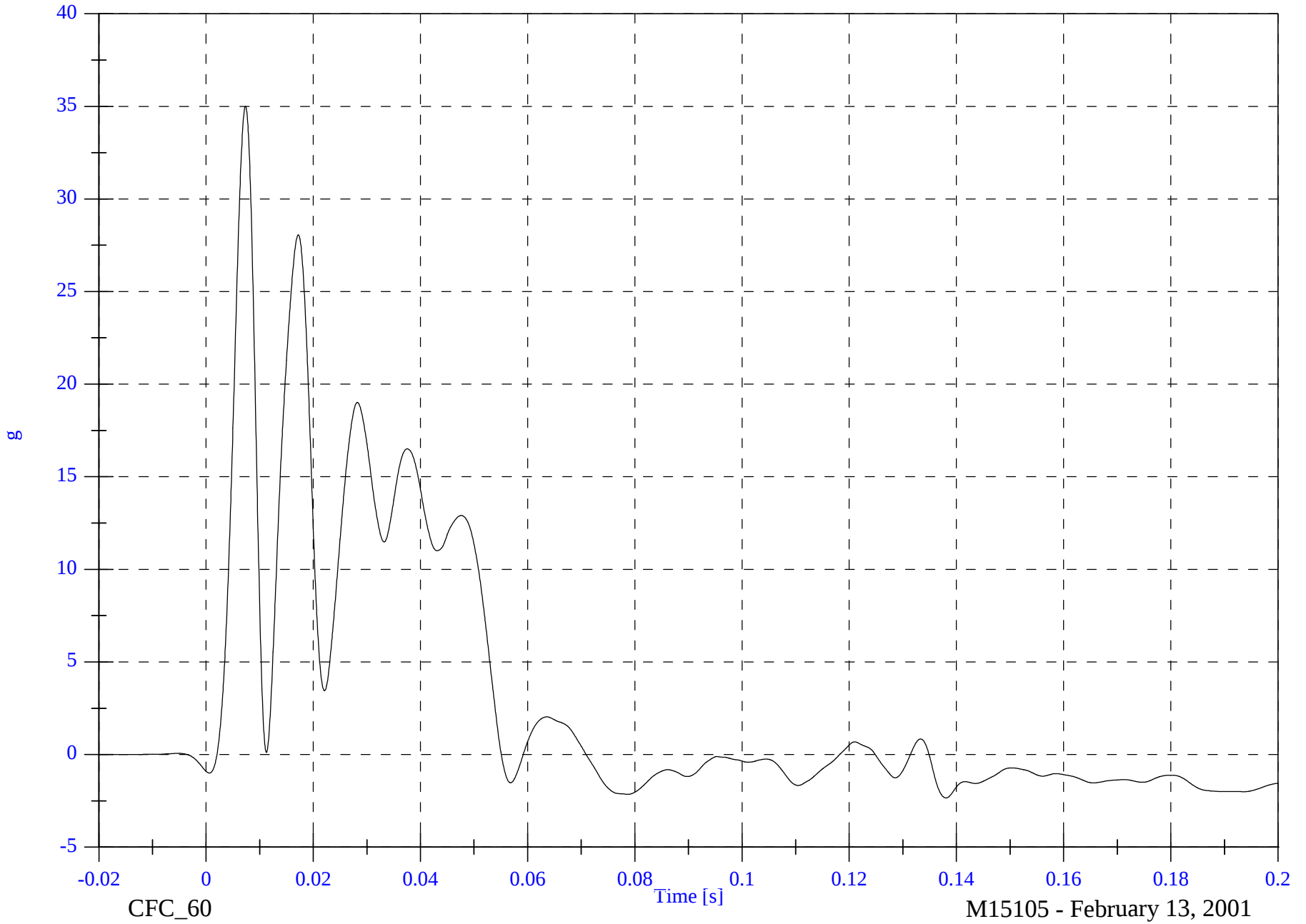
A2 Right Rear Sill Y

Max: 35.0 [g] at 0.007 [s]

Min: -2.3 [g] at 0.138 [s]

B-53

8506-15

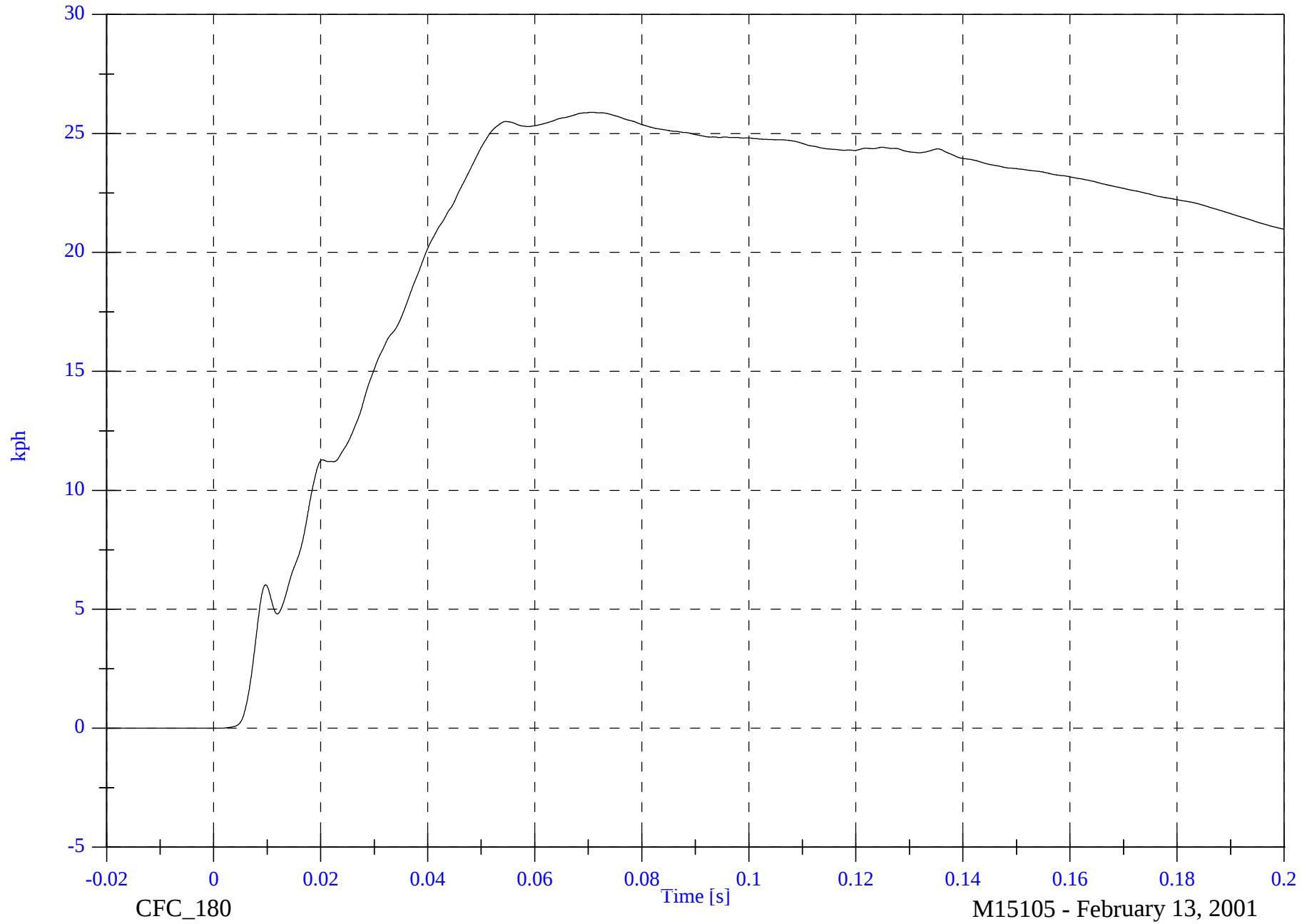


SNCAP Test 15 2001 Lexus RX300

A2 Right Rear Sill Y Velocity

Max: 25.9 [kph] at 0.071 [s]

Min: -0.0 [kph] at -0.015 [s]



B-54

8506-15

CFC_180

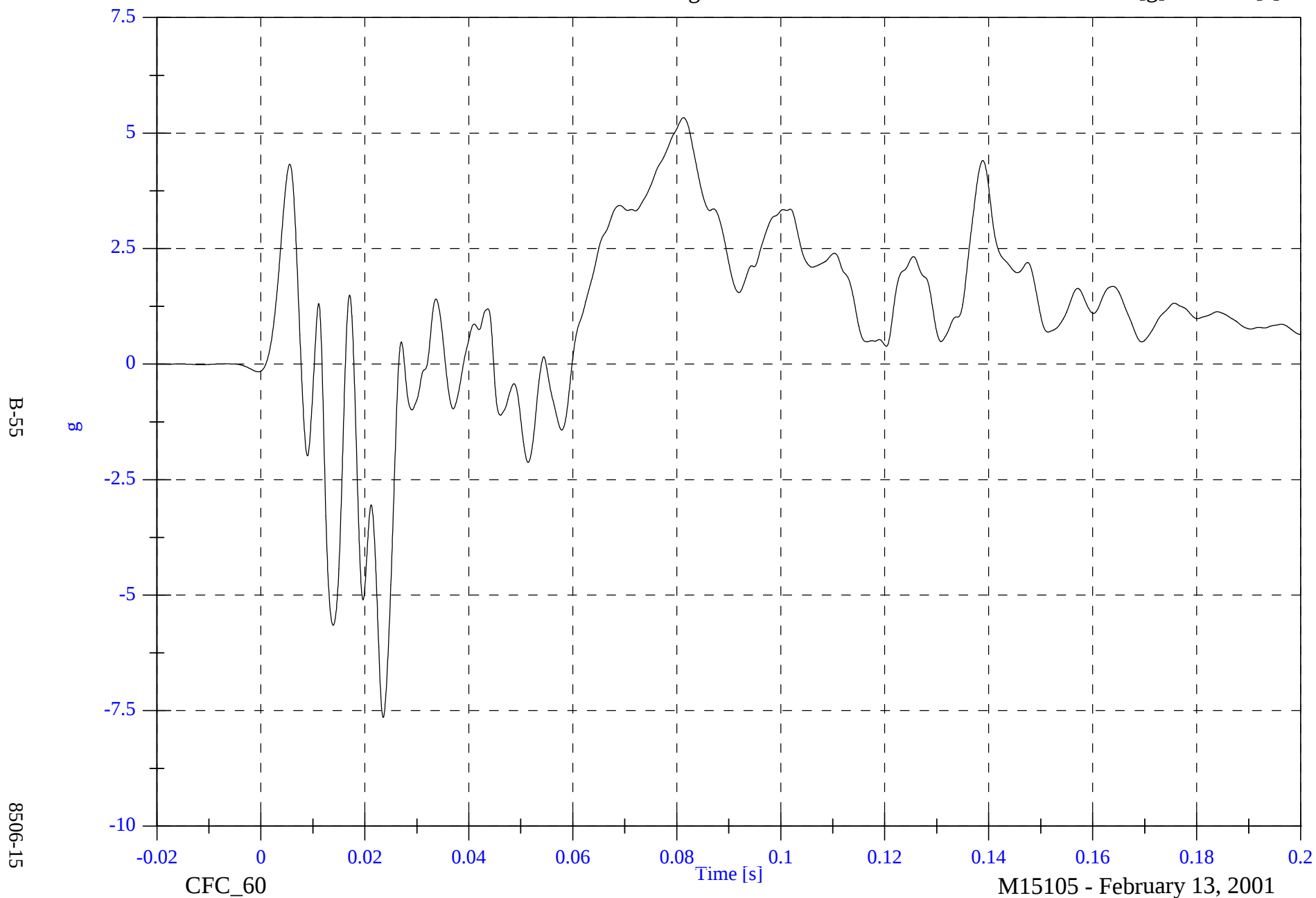
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A2 Right Rear Sill Z

Max: 5.3 [g] at 0.081 [s]

Min: -7.6 [g] at 0.024 [s]

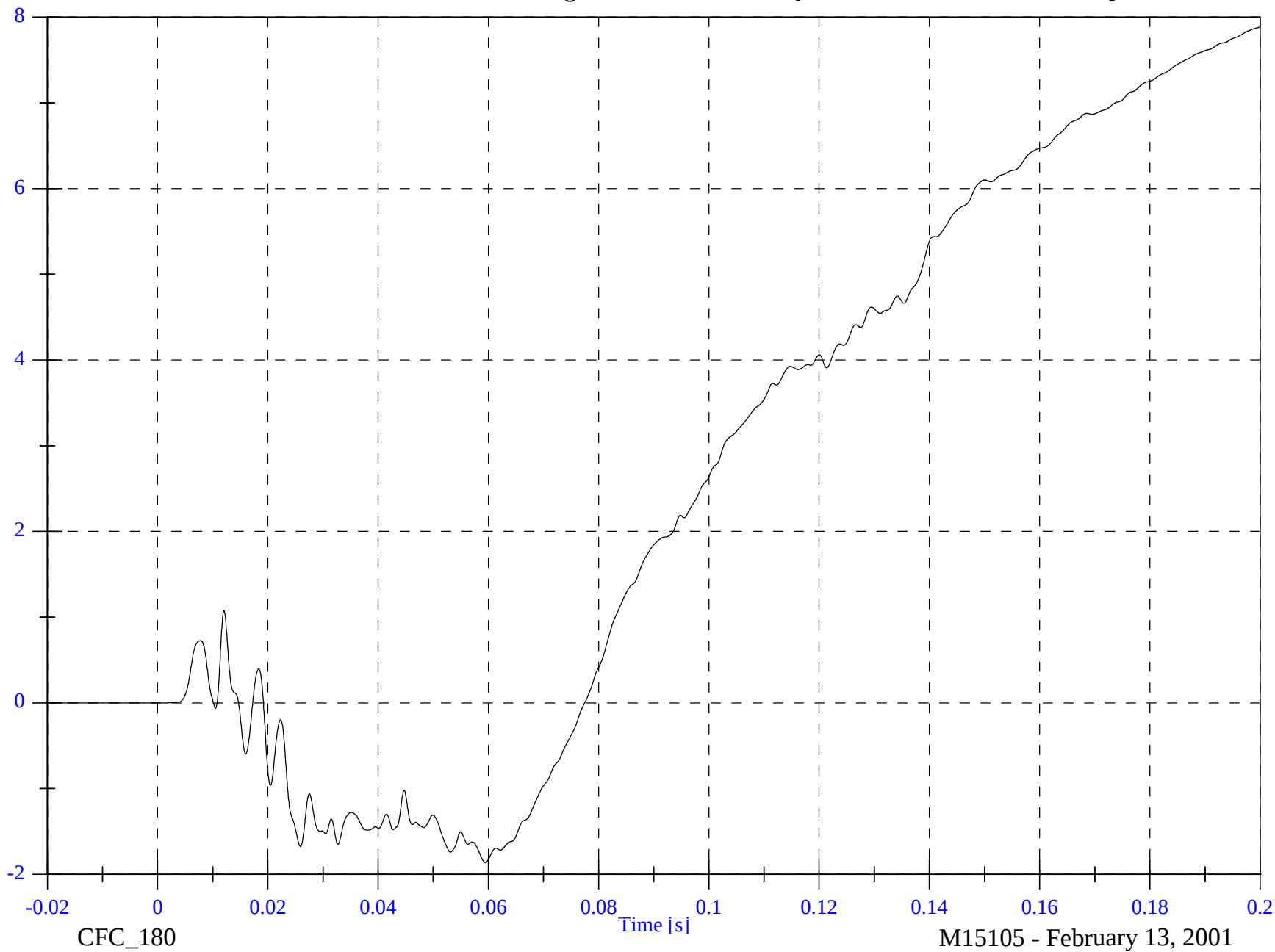


SNCAP Test 15 2001 Lexus RX300

A2 Right Rear Sill Z Velocity

Max: 7.9 [kph] at 0.200 [s]

Min: -1.9 [kph] at 0.059 [s]



B-56

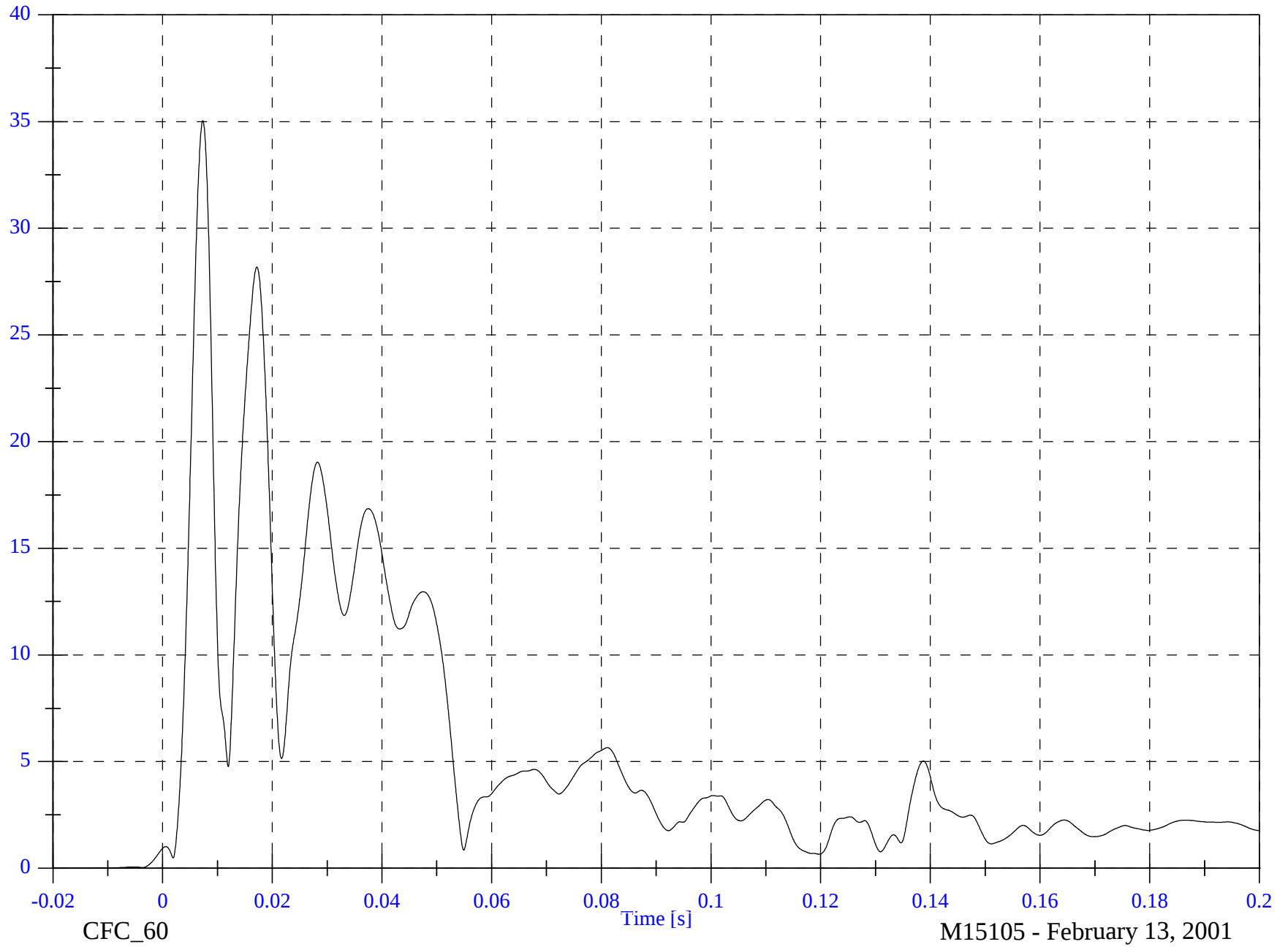
8506-15

SNCAP Test 15 2001 Lexus RX300

A2 Right Rear Sill Resultant

Max: 35.0 [g] at 0.007 [s]

Min: 0.0 [g] at -0.015 [s]



B-57

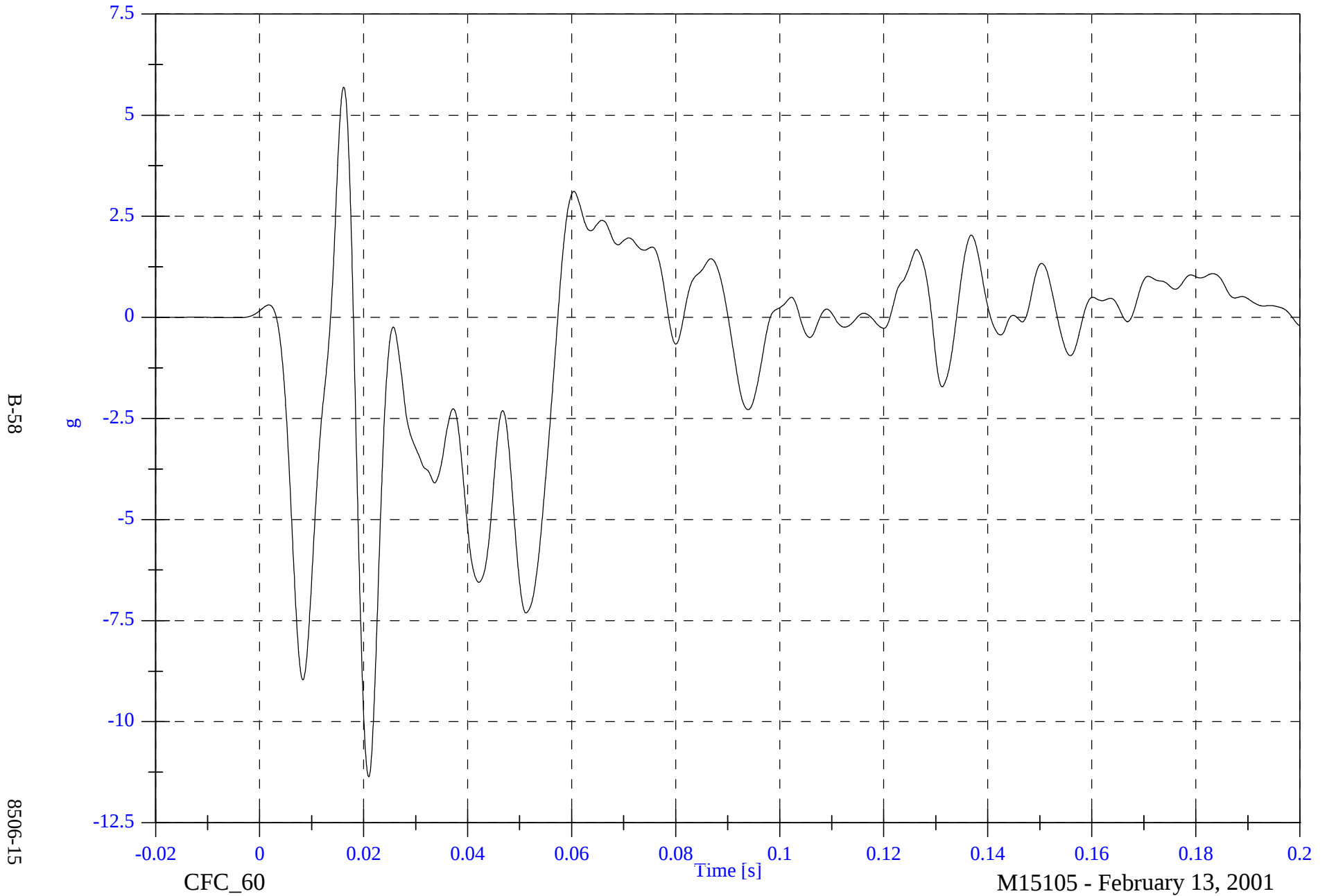
8506-15

SNCAP Test 15 2001 Lexus RX300

A3 Rear Floorpan X

Max: 5.7 [g] at 0.016 [s]

Min: -11.4 [g] at 0.021 [s]



SNCAP Test 15 2001 Lexus RX300

A3 Rear Floorpan X Velocity

Max: 0.0 [kph] at 0.002 [s]

Min: -7.2 [kph] at 0.058 [s]



B-59

8506-15

CFC_180

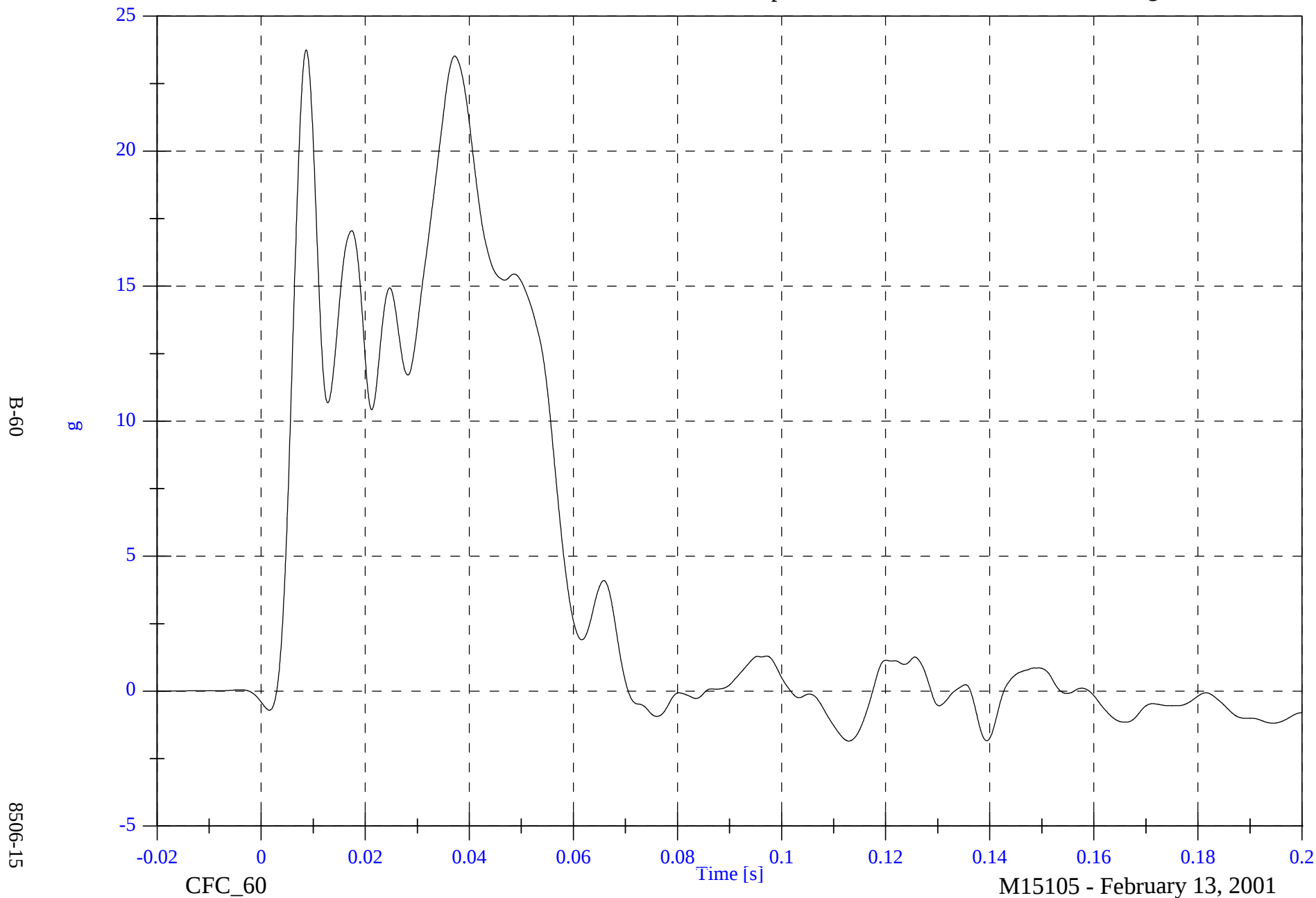
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A3 Rear Floorpan Y

Max: 23.8 [g] at 0.009 [s]

Min: -1.9 [g] at 0.113 [s]

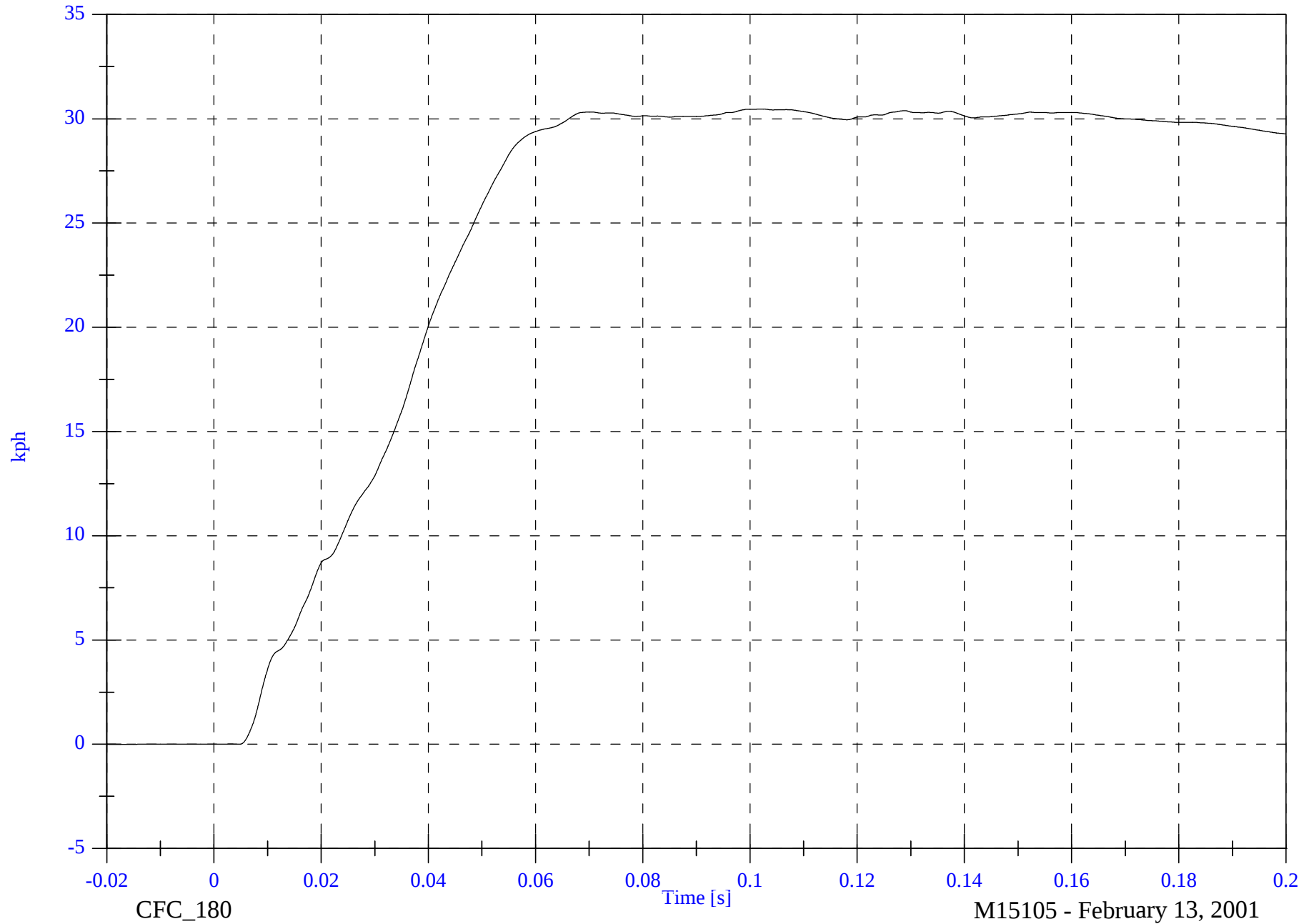


SNCAP Test 15 2001 Lexus RX300

A3 Rear Floorpan Y Velocity

Max: 30.5 [kph] at 0.102 [s]

Min: -0.0 [kph] at -0.020 [s]



B-61

8506-15

CFC_180

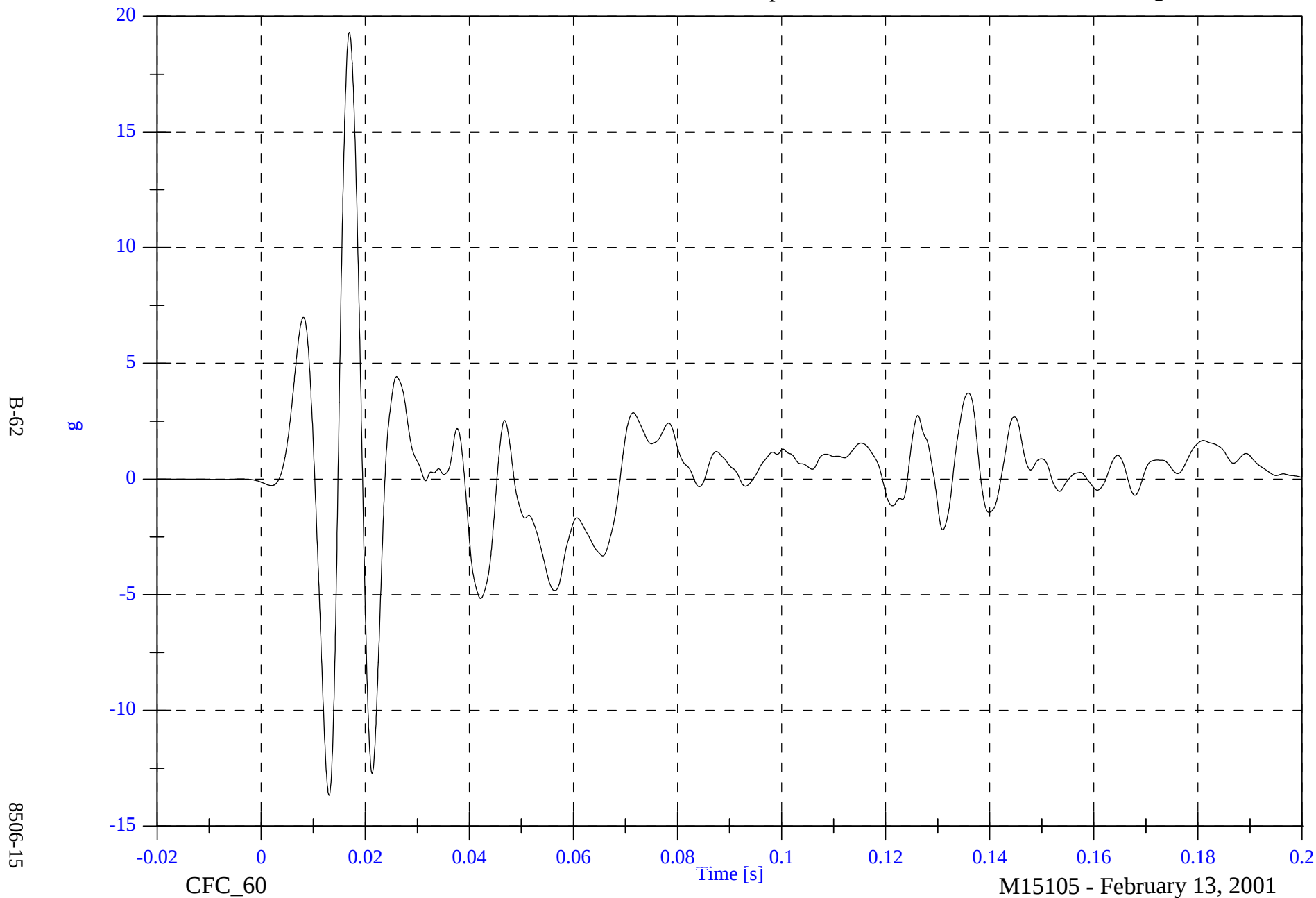
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A3 Rear Floorplan Z

Max: 19.3 [g] at 0.017 [s]

Min: -13.7 [g] at 0.013 [s]



SNCAP Test 15 2001 Lexus RX300

A3 Rear Floorplan Z Velocity

Max: 2.1 [kph] at 0.019 [s]

Min: -1.5 [kph] at 0.015 [s]

B-63

8506-15



SNCAP Test 15 2001 Lexus RX300

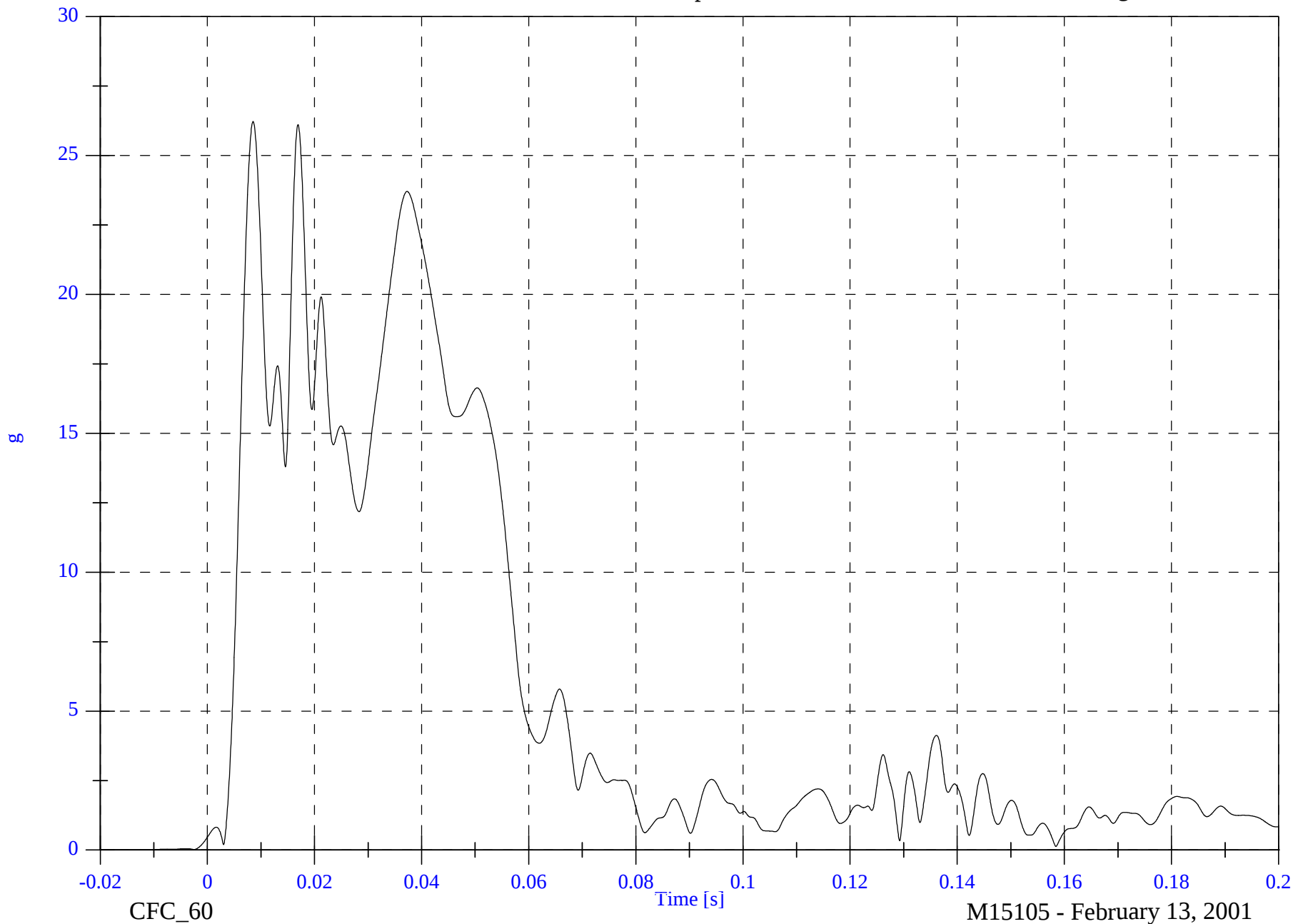
A3 Rear Floorpan Resultant

Max: 26.2 [g] at 0.009 [s]

Min: 0.0 [g] at -0.014 [s]

B-64

8506-15



SNCAP Test 15 2001 Lexus RX300

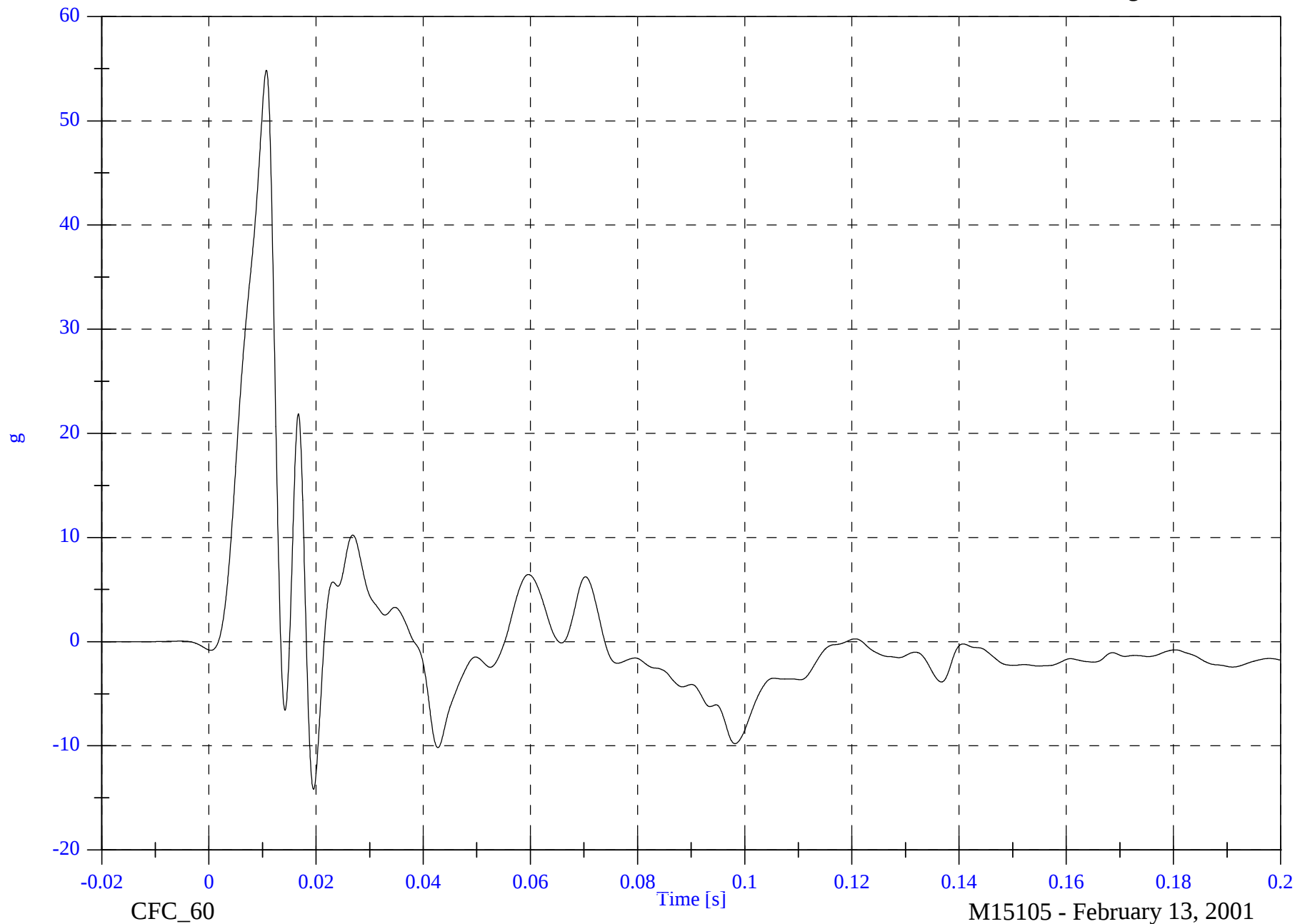
A4 Left Rear Sill Y

Max: 54.9 [g] at 0.011 [s]

Min: -14.2 [g] at 0.020 [s]

B-65

8506-15



SNCAP Test 15 2001 Lexus RX300

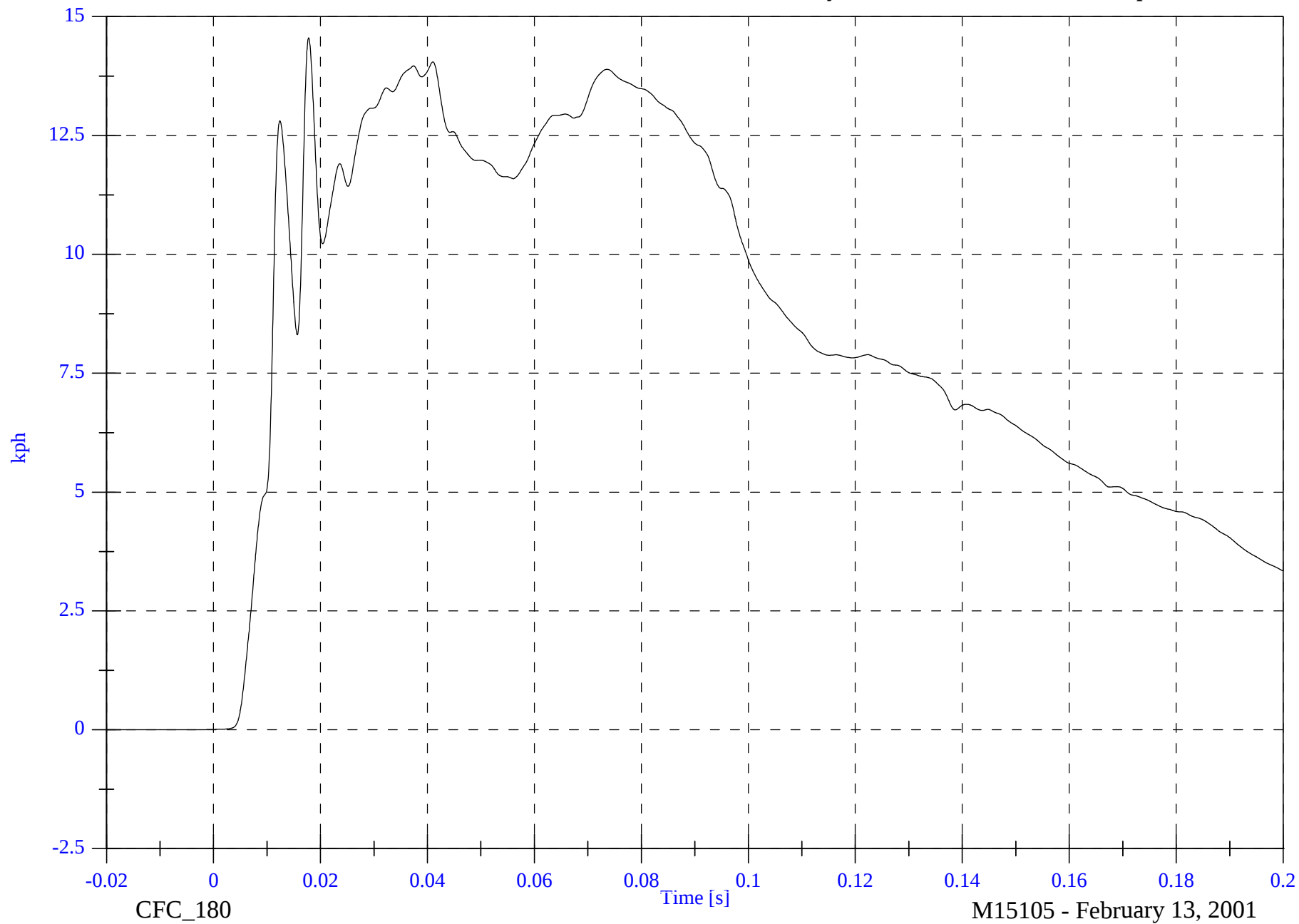
A4 Left Rear Sill Y Velocity

Max: 14.6 [kph] at 0.018 [s]

Min: -0.0 [kph] at -0.013 [s]

B-66

8506-15

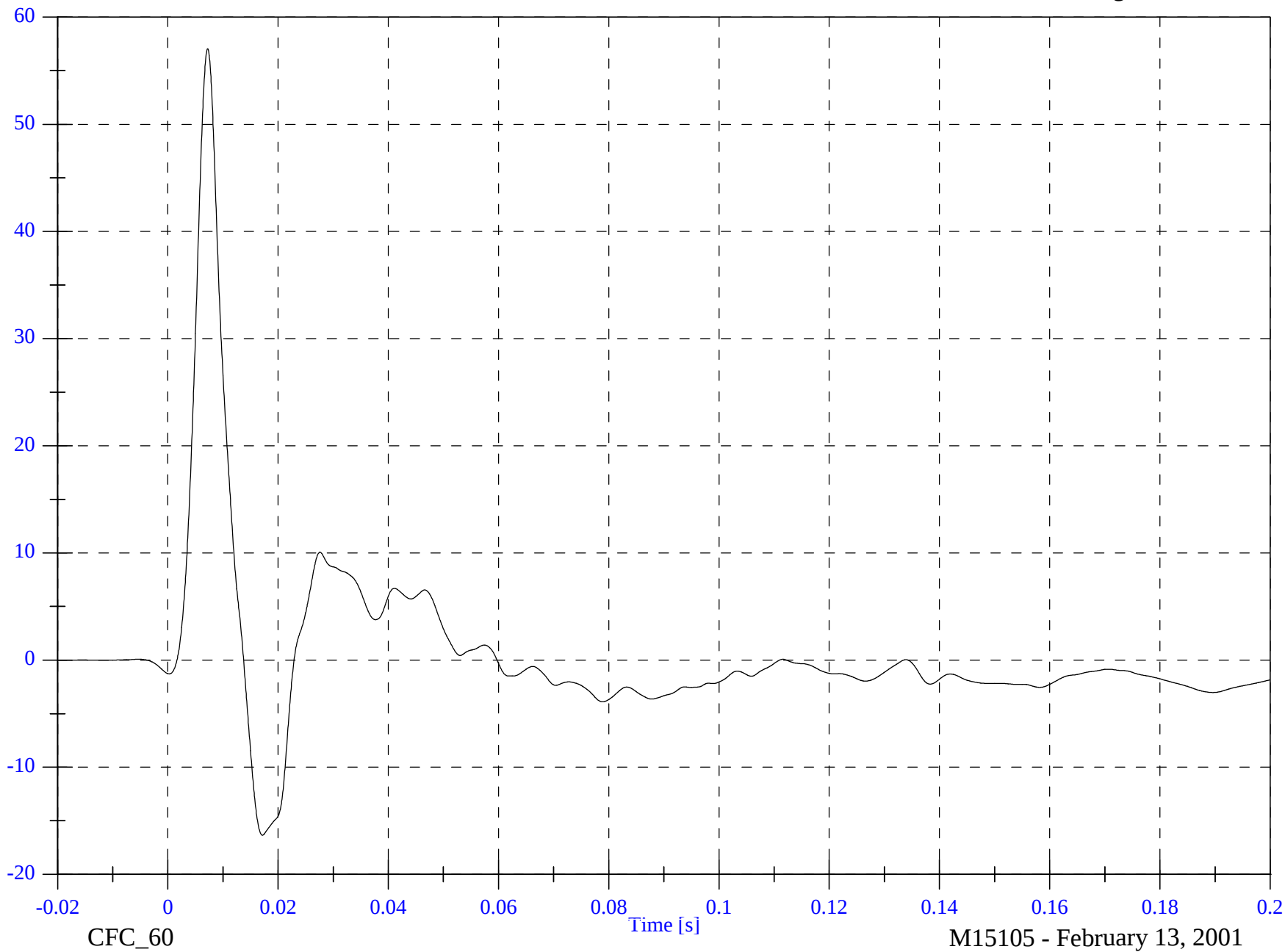


SNCAP Test 15 2001 Lexus RX300

A5 Left Front Sill Y

Max: 57.1 [g] at 0.007 [s]

Min: -16.4 [g] at 0.017 [s]



B-67

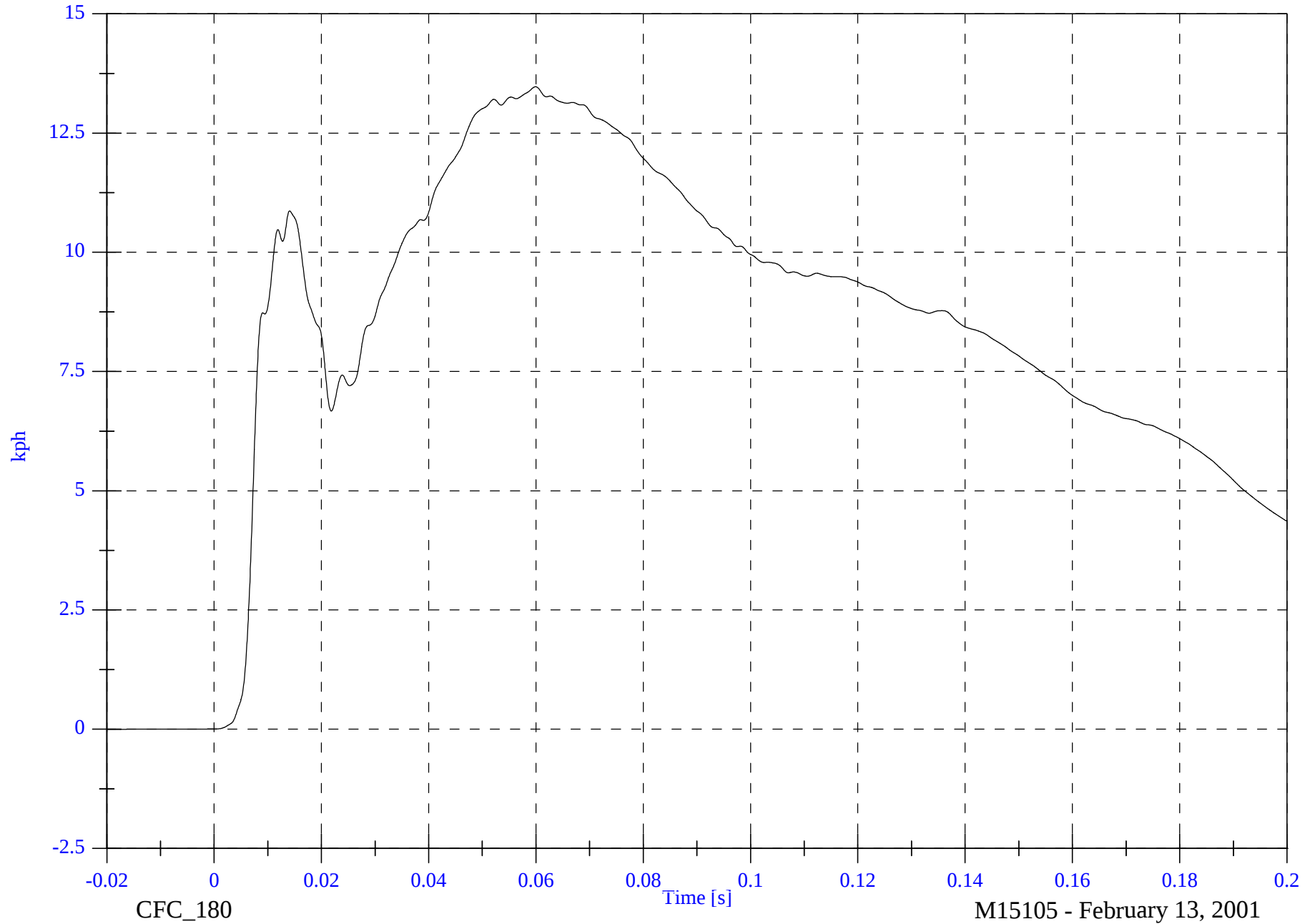
8506-15

SNCAP Test 15 2001 Lexus RX300

A5 Left Front Sill Y Velocity

Max: 13.5 [kph] at 0.060 [s]

Min: -0.0 [kph] at -0.017 [s]



B-68

8506-15

SNCAP Test 15 2001 Lexus RX300

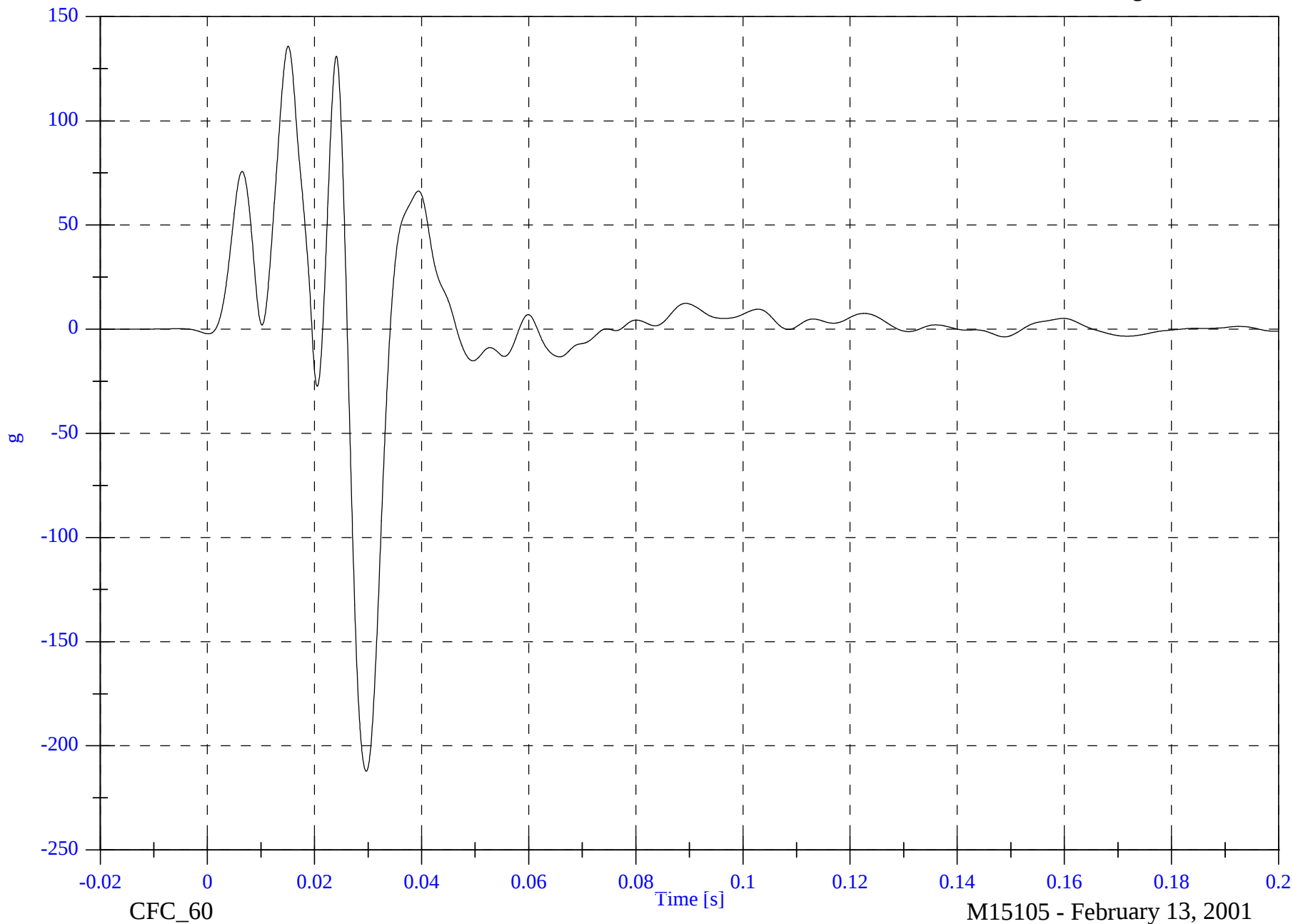
A6 Left Front Door CL Y

Max: 135.8 [g] at 0.015 [s]

Min: -212.2 [g] at 0.030 [s]

B-69

8506-15



SNCAP Test 15 2001 Lexus RX300

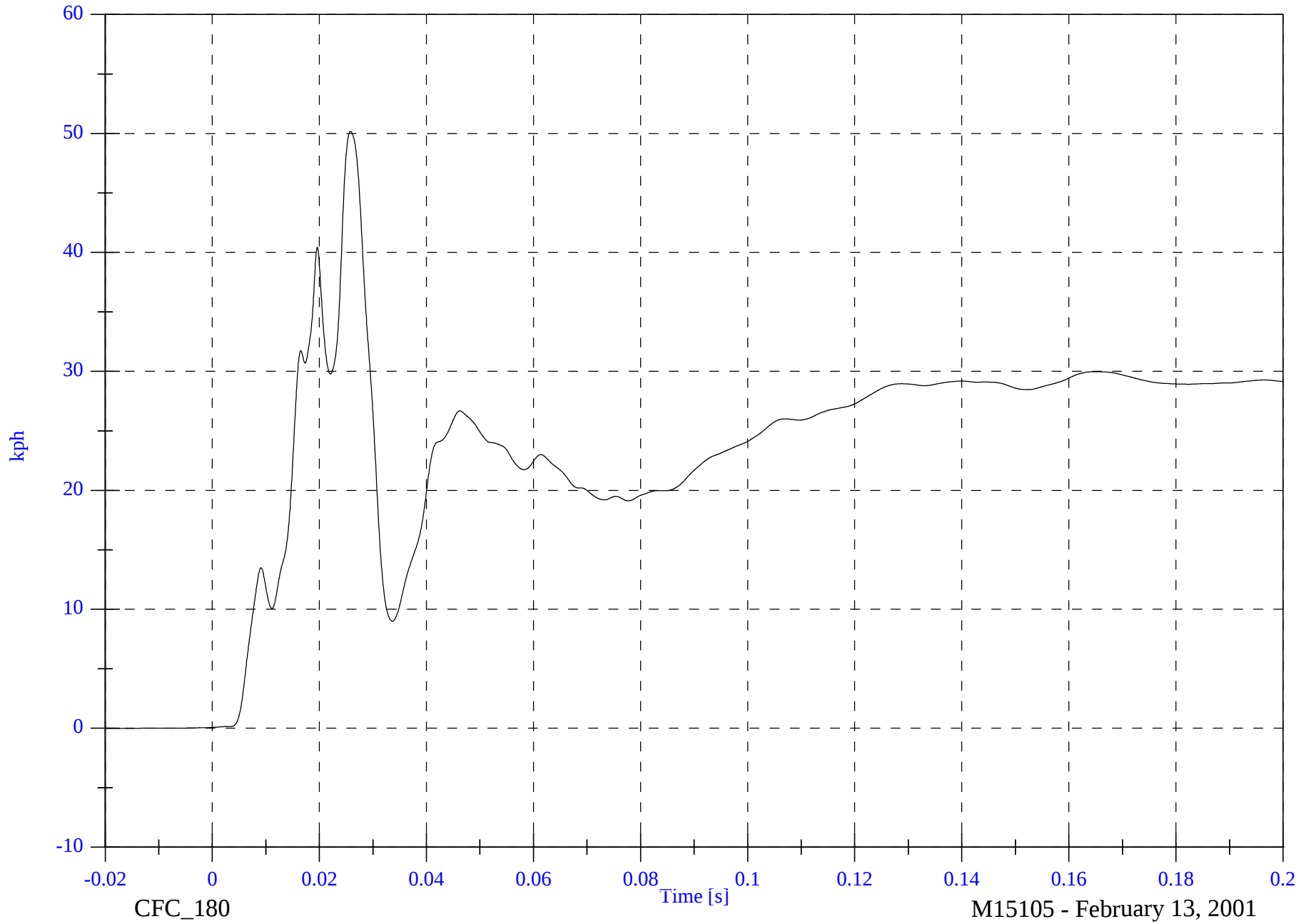
A6 Left Front Door CL Y Velocity

Max: 50.2 [kph] at 0.026 [s]

Min: -0.0 [kph] at -0.017 [s]

B-70

8506-15

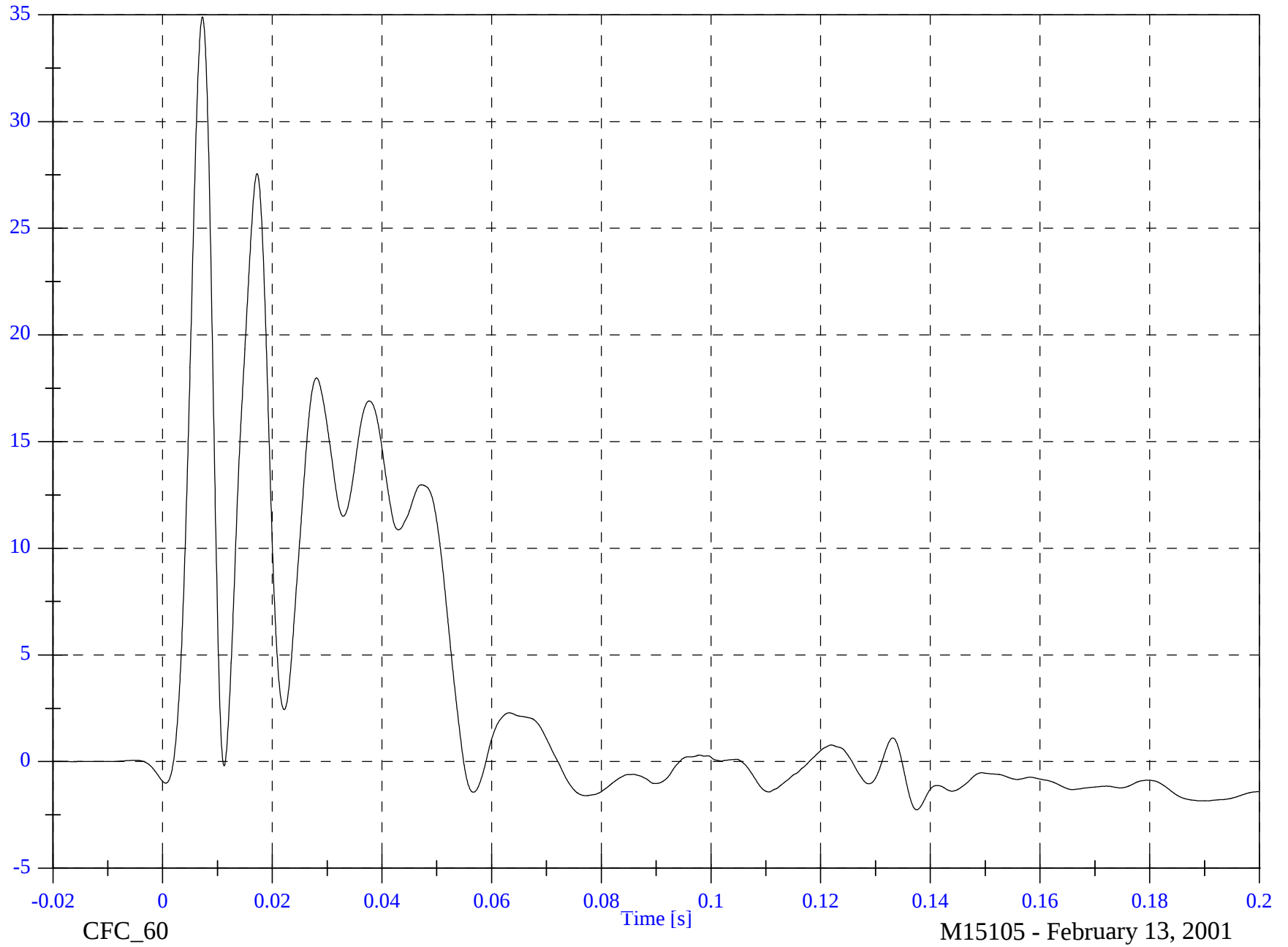


SNCAP Test 15 2001 Lexus RX300

A7 Right Rear Compartment Y

Max: 34.9 [g] at 0.007 [s]

Min: -2.3 [g] at 0.138 [s]



B-71

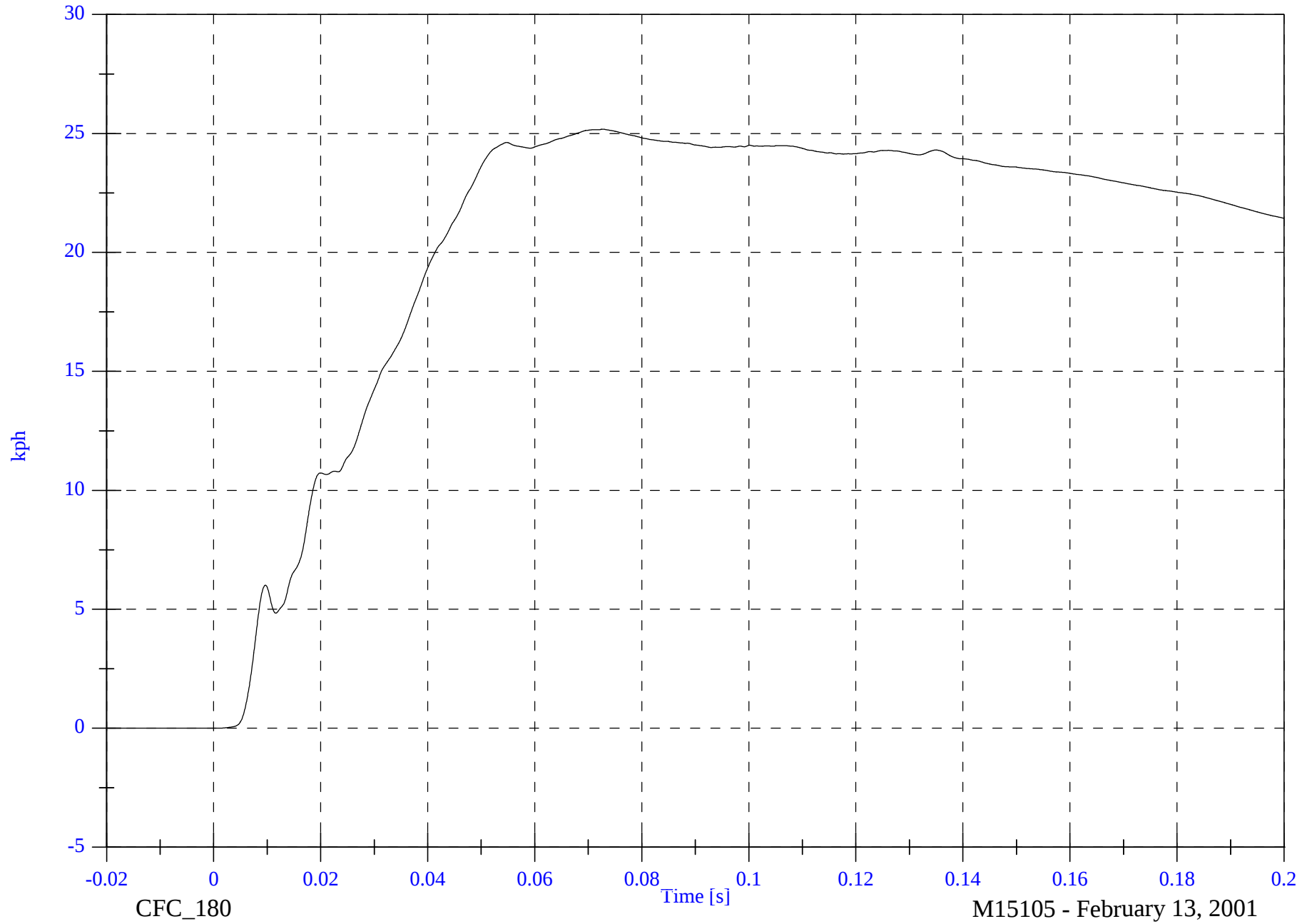
8506-15

SNCAP Test 15 2001 Lexus RX300

A7 Right Rear Compartment Y Velocity

Max: 25.2 [kph] at 0.073 [s]

Min: -0.0 [kph] at -0.016 [s]



B-72

8506-15

CFC_180

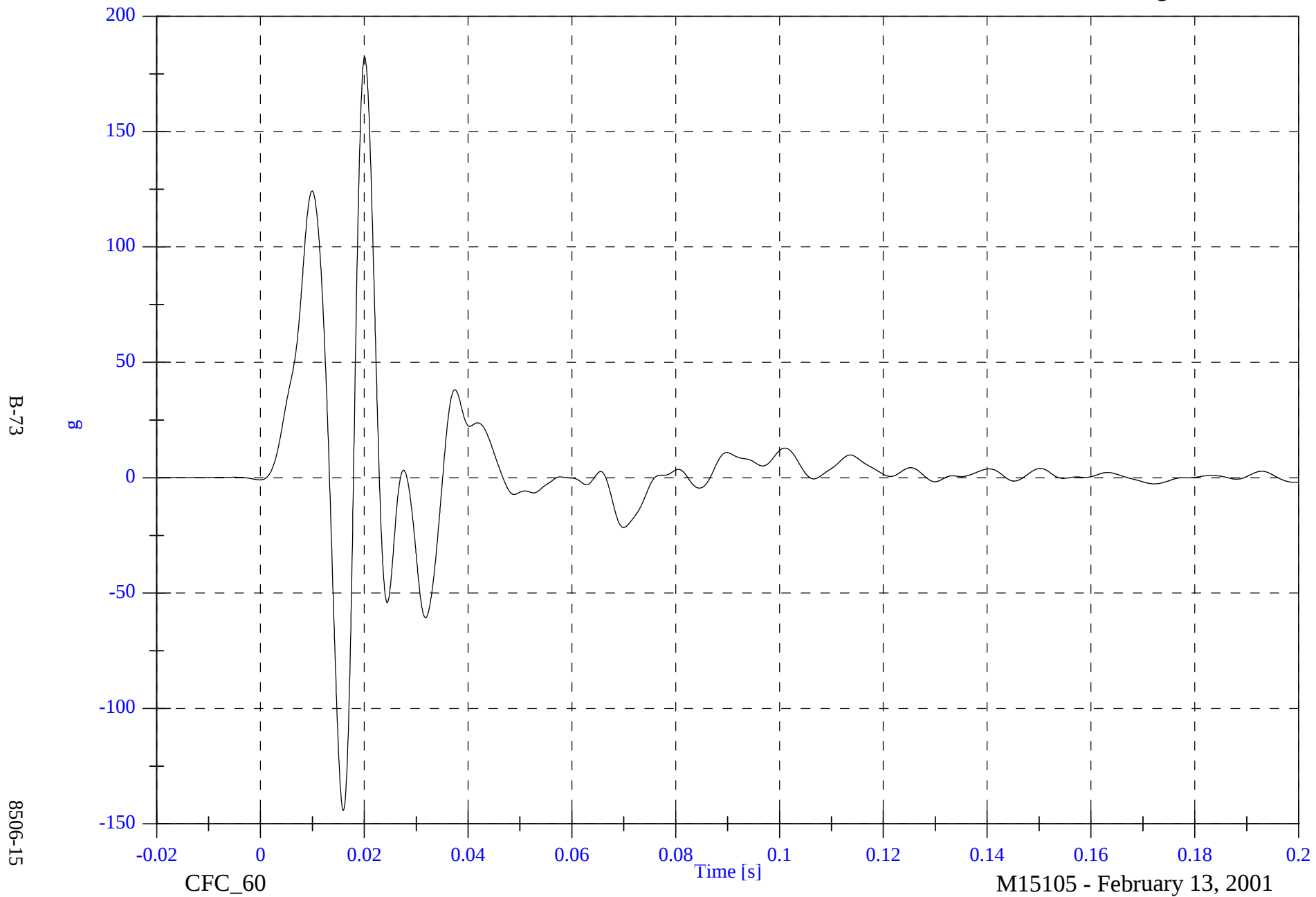
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A8 Left Front Door Midrear Y

Max: 182.3 [g] at 0.020 [s]

Min: -144.2 [g] at 0.016 [s]

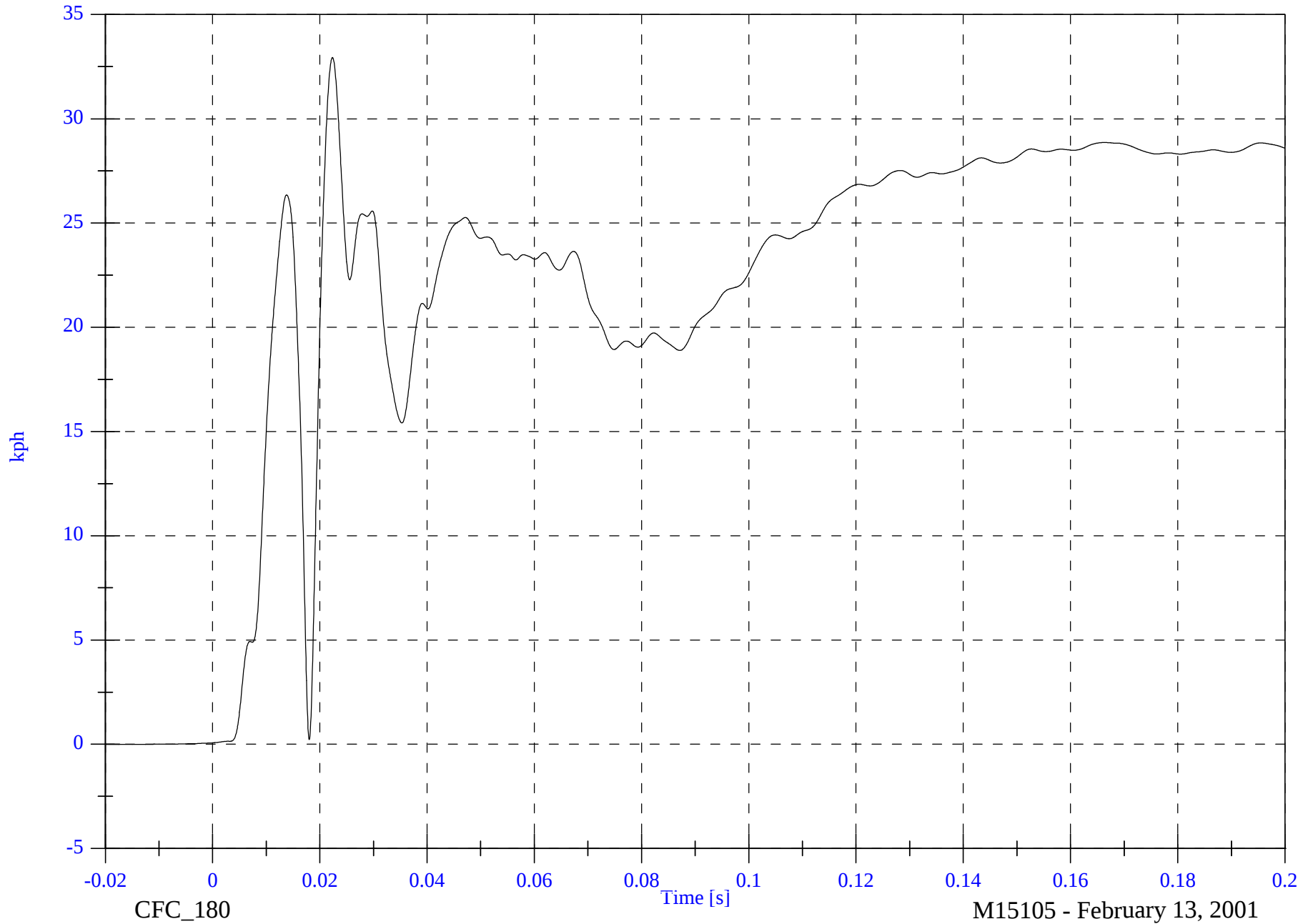


SNCAP Test 15 2001 Lexus RX300

A8 Left Front Door Midrear Y Velocity

Max: 32.9 [kph] at 0.022 [s]

Min: -0.0 [kph] at -0.020 [s]



B-74

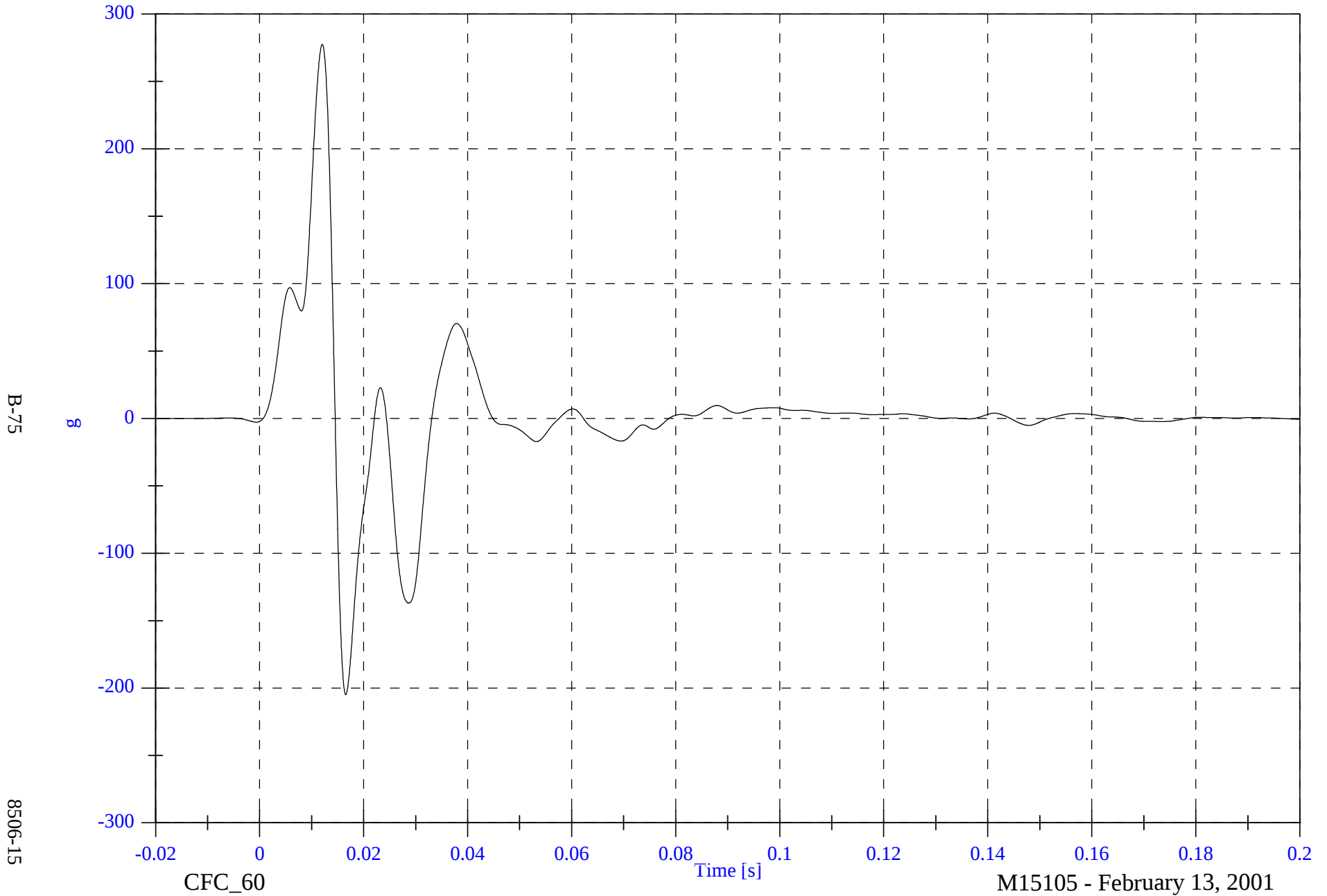
8506-15

SNCAP Test 15 2001 Lexus RX300

A9 Left Front Door Upper C/L Y

Max: 277.5 [g] at 0.012 [s]

Min: -205.0 [g] at 0.017 [s]

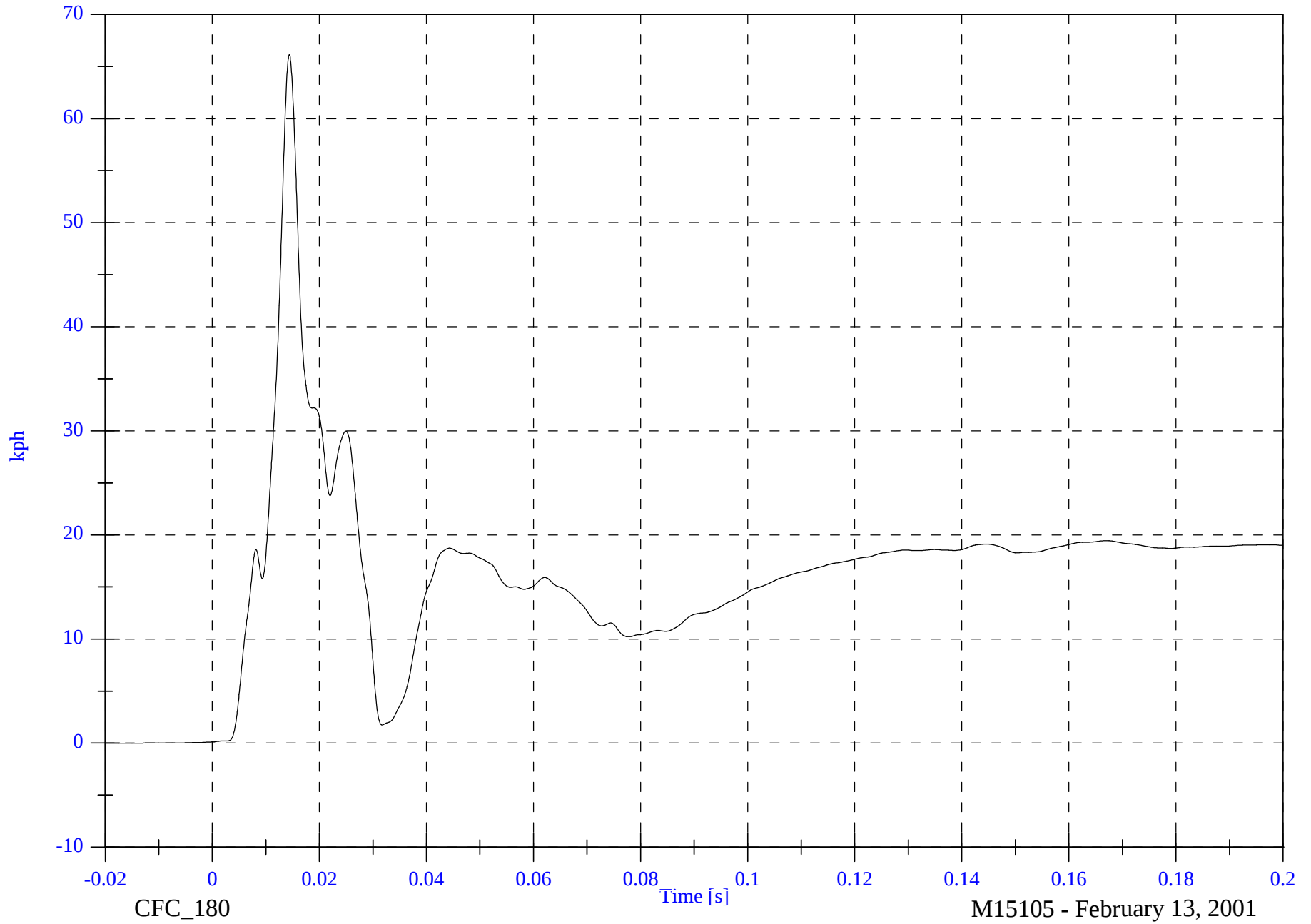


SNCAP Test 15 2001 Lexus RX300

A9 Left Front Door Upper C/L Y Velocity

Max: 66.2 [kph] at 0.014 [s]

Min: -0.0 [kph] at -0.018 [s]



B-76

8506-15

CFC_180

Time [s]

M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A10 Left Rear Door Midrear Y

Max: 98.4 [g] at 0.008 [s]

Min: -115.1 [g] at 0.033 [s]

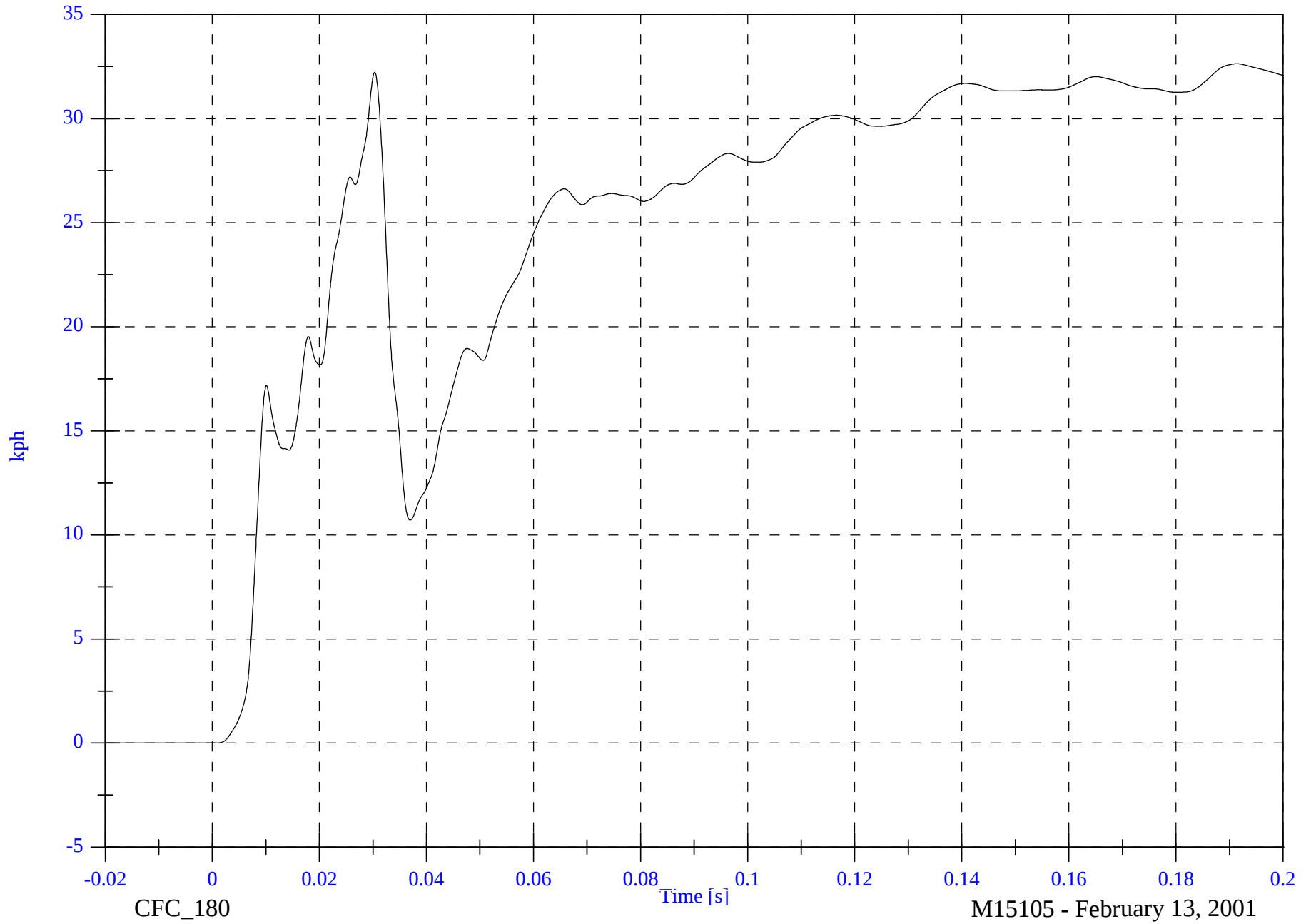


SNCAP Test 15 2001 Lexus RX300

A10 Left Rear Door Midrear Y Velocity

Max: 32.6 [kph] at 0.191 [s]

Min: -0.0 [kph] at -0.012 [s]



B-78

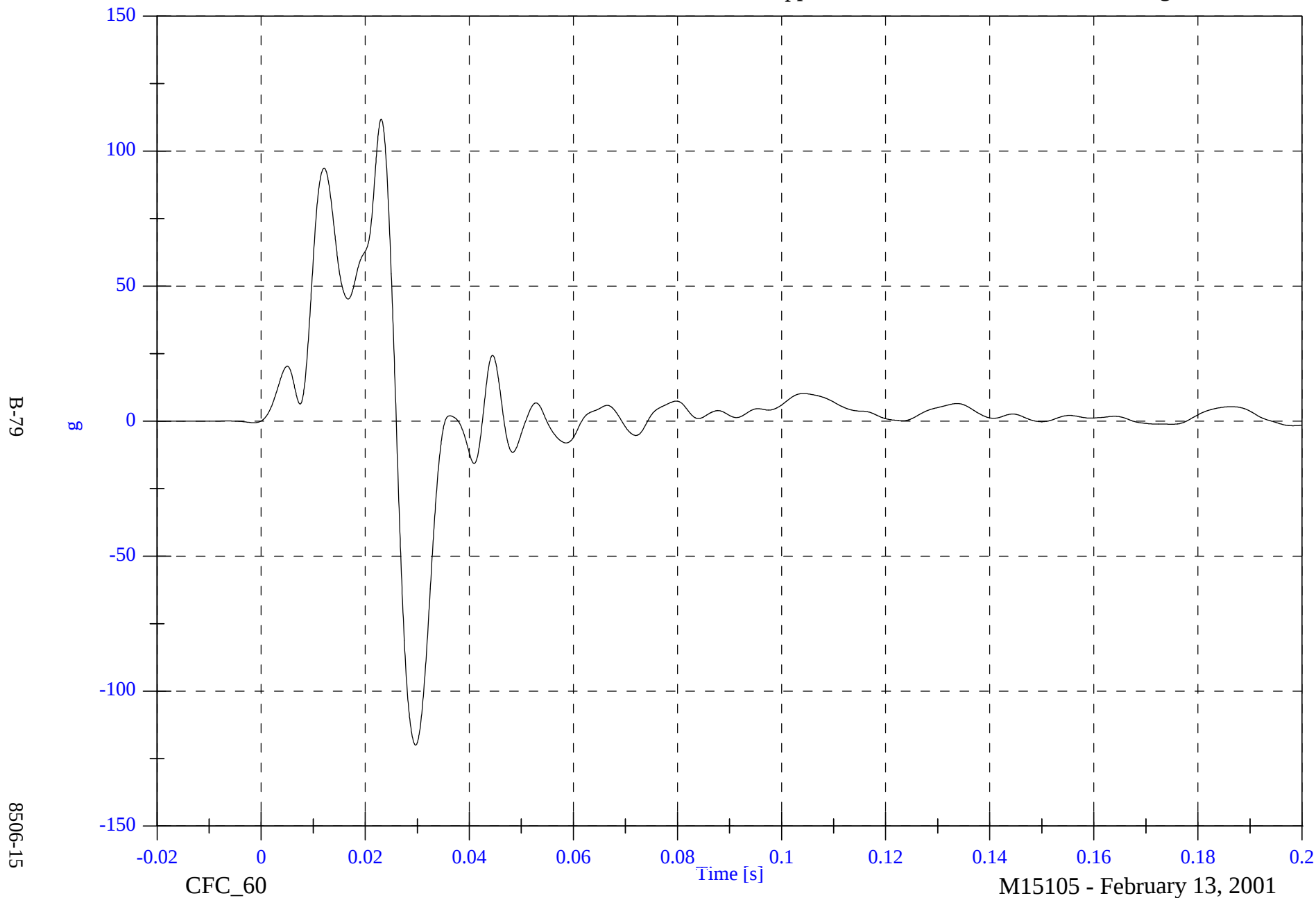
8506-15

SNCAP Test 15 2001 Lexus RX300

A11 Left Rear Door Upper C/L Y

Max: 111.9 [g] at 0.023 [s]

Min: -120.0 [g] at 0.030 [s]



SNCAP Test 15 2001 Lexus RX300

A11 Left Rear Door Upper C/L Y Velocity

Max: 46.6 [kph] at 0.026 [s]

Min: -0.0 [kph] at -0.017 [s]

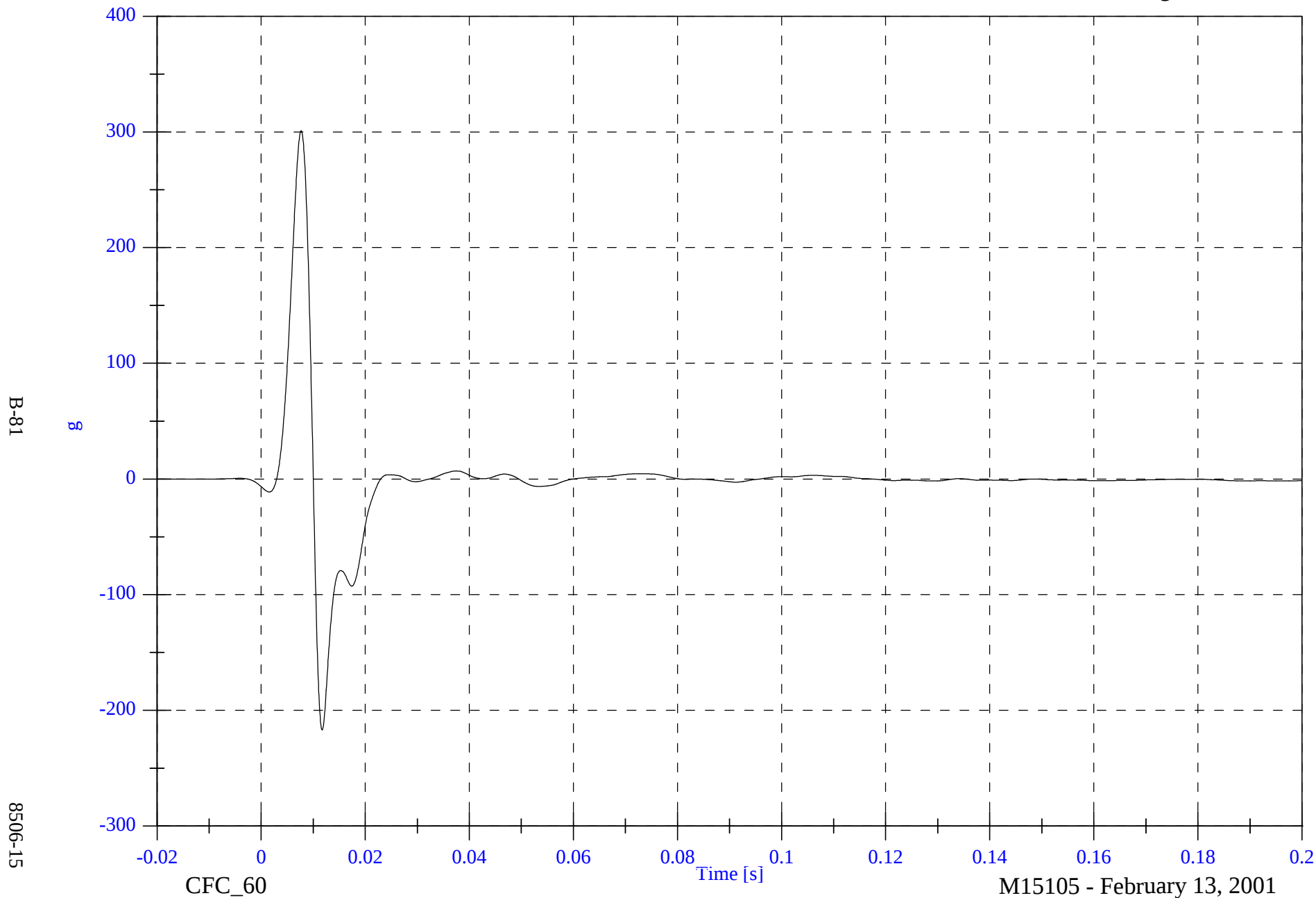


SNCAP Test 15 2001 Lexus RX300

A12 Left Lower B Post Y

Max: 301.0 [g] at 0.008 [s]

Min: -217.0 [g] at 0.012 [s]



SNCAP Test 15 2001 Lexus RX300

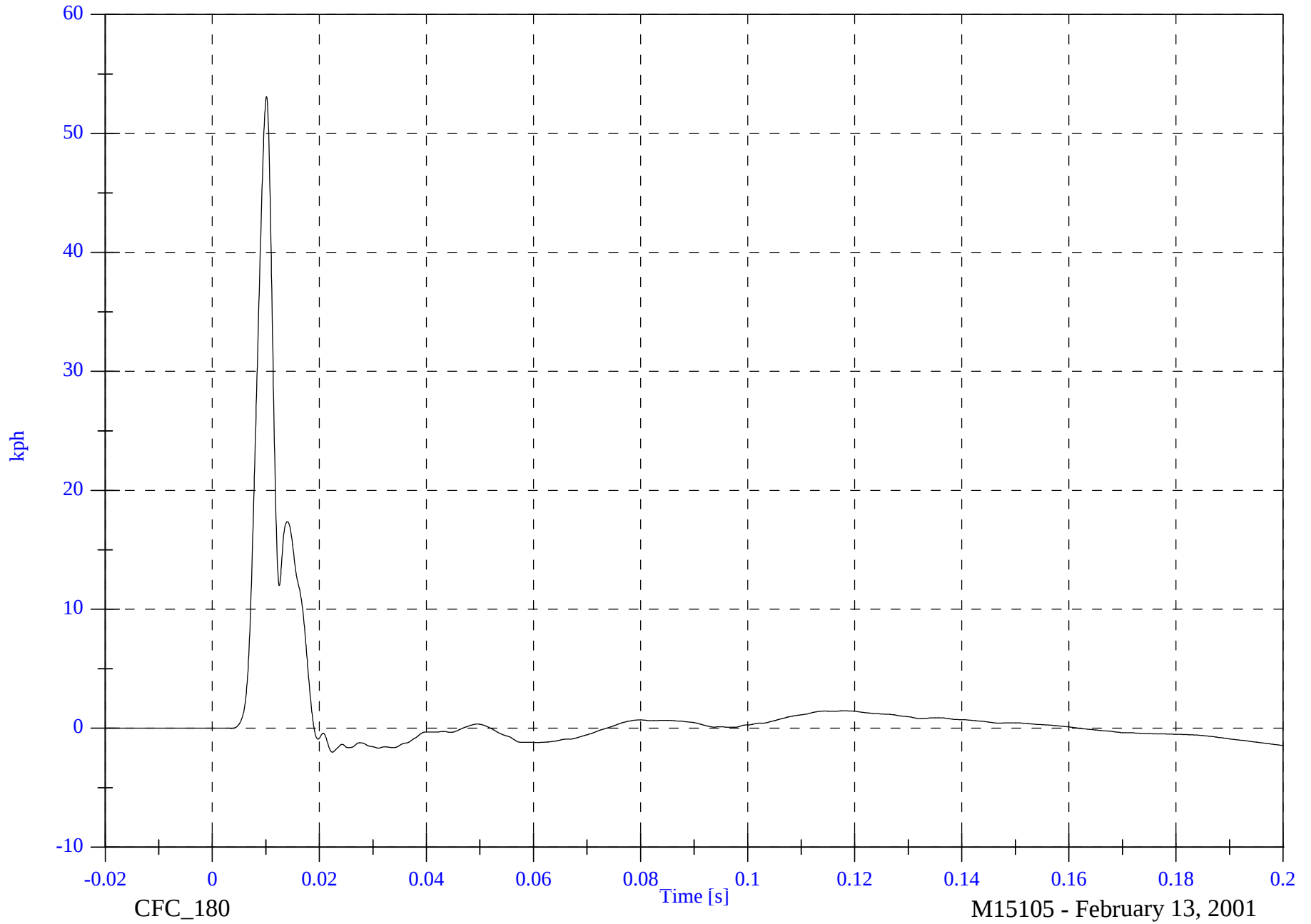
A12 Left Lower B Post Y Velocity

Max: 53.1 [kph] at 0.010 [s]

Min: -2.0 [kph] at 0.022 [s]

B-82

8506-15

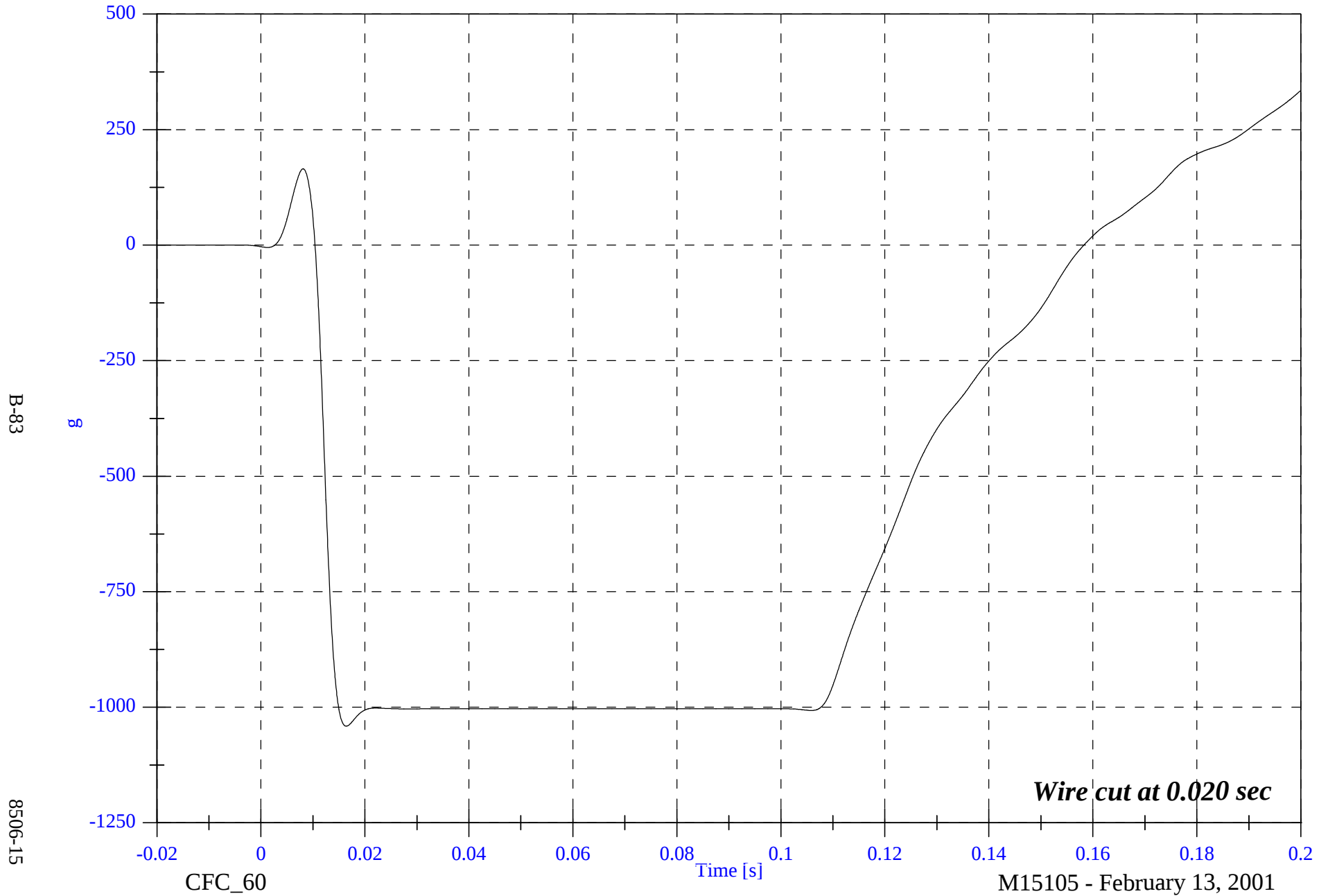


SNCAP Test 15 2001 Lexus RX300

A13 Left Mid B Post Y

Max: 334.3 [g] at 0.200 [s]

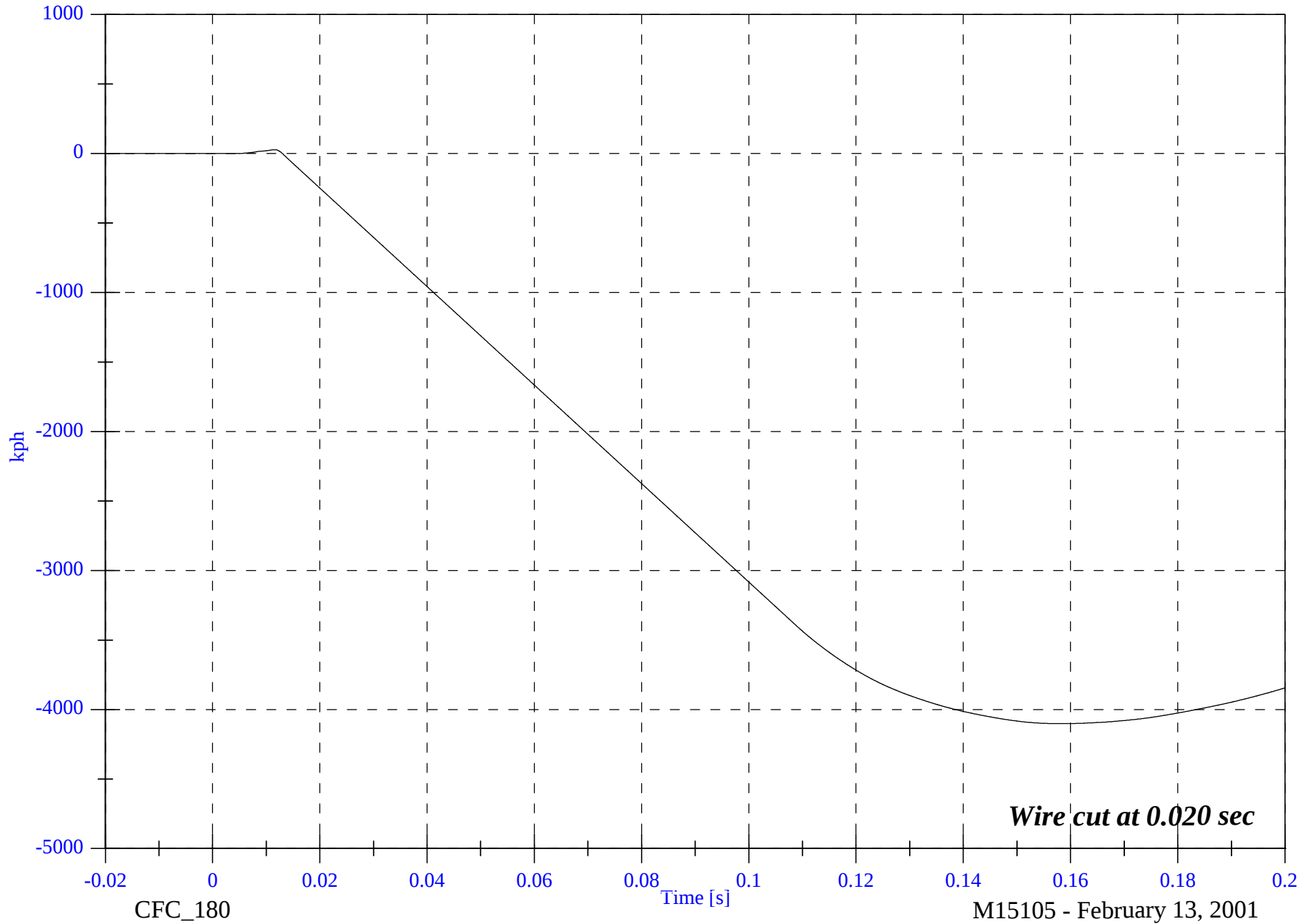
Min: -1041.0 [g] at 0.016 [s]



SNCAP Test 15 2001 Lexus RX300

A13 Left Mid B Post Y Velocity

Max: 27.7 [kph] at 0.012 [s]
Min: -4101.9 [kph] at 0.158 [s]



B-84

8506-15

CFC_180

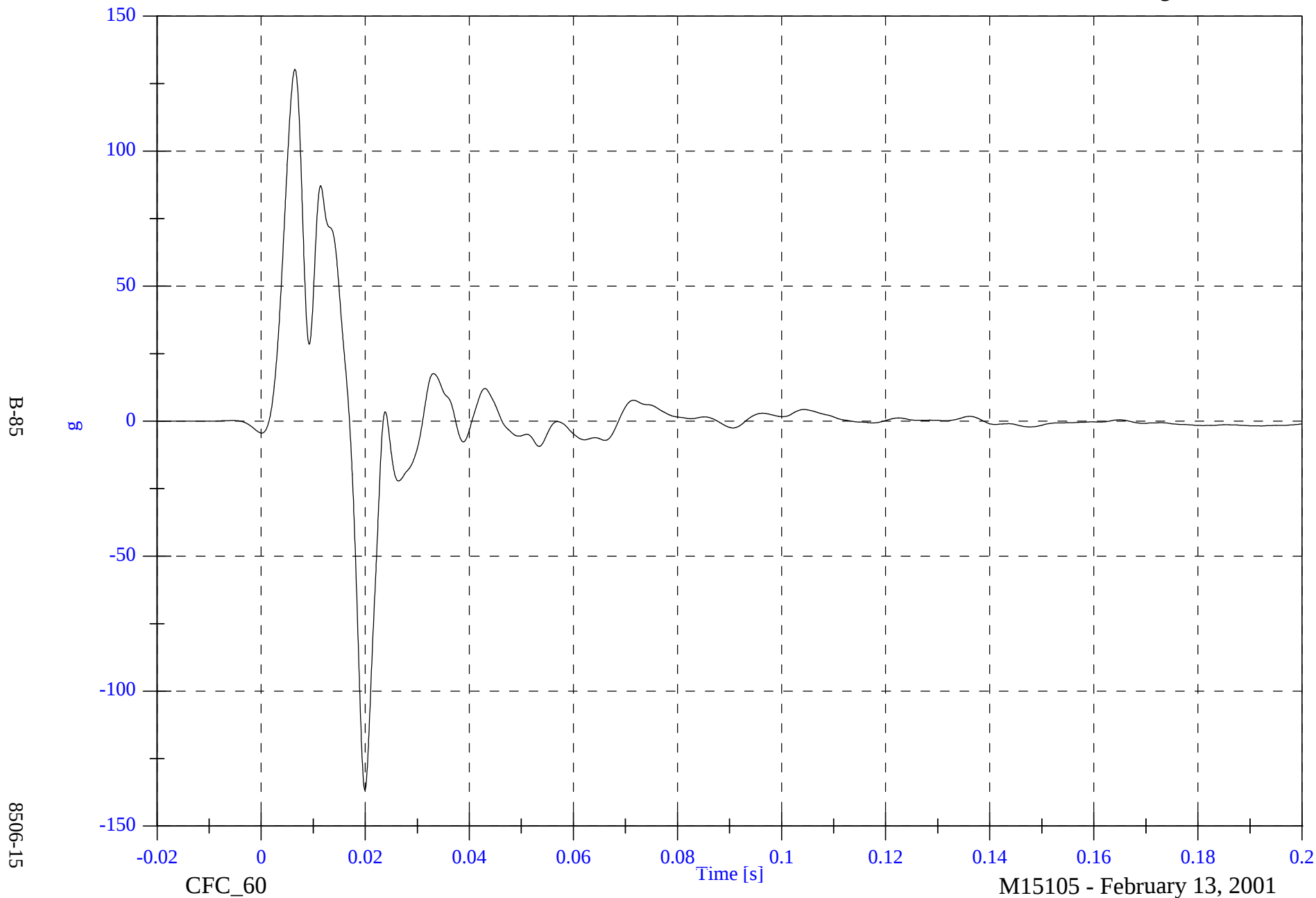
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A14 Left Lower A Post Y

Max: 130.3 [g] at 0.007 [s]

Min: -136.7 [g] at 0.020 [s]

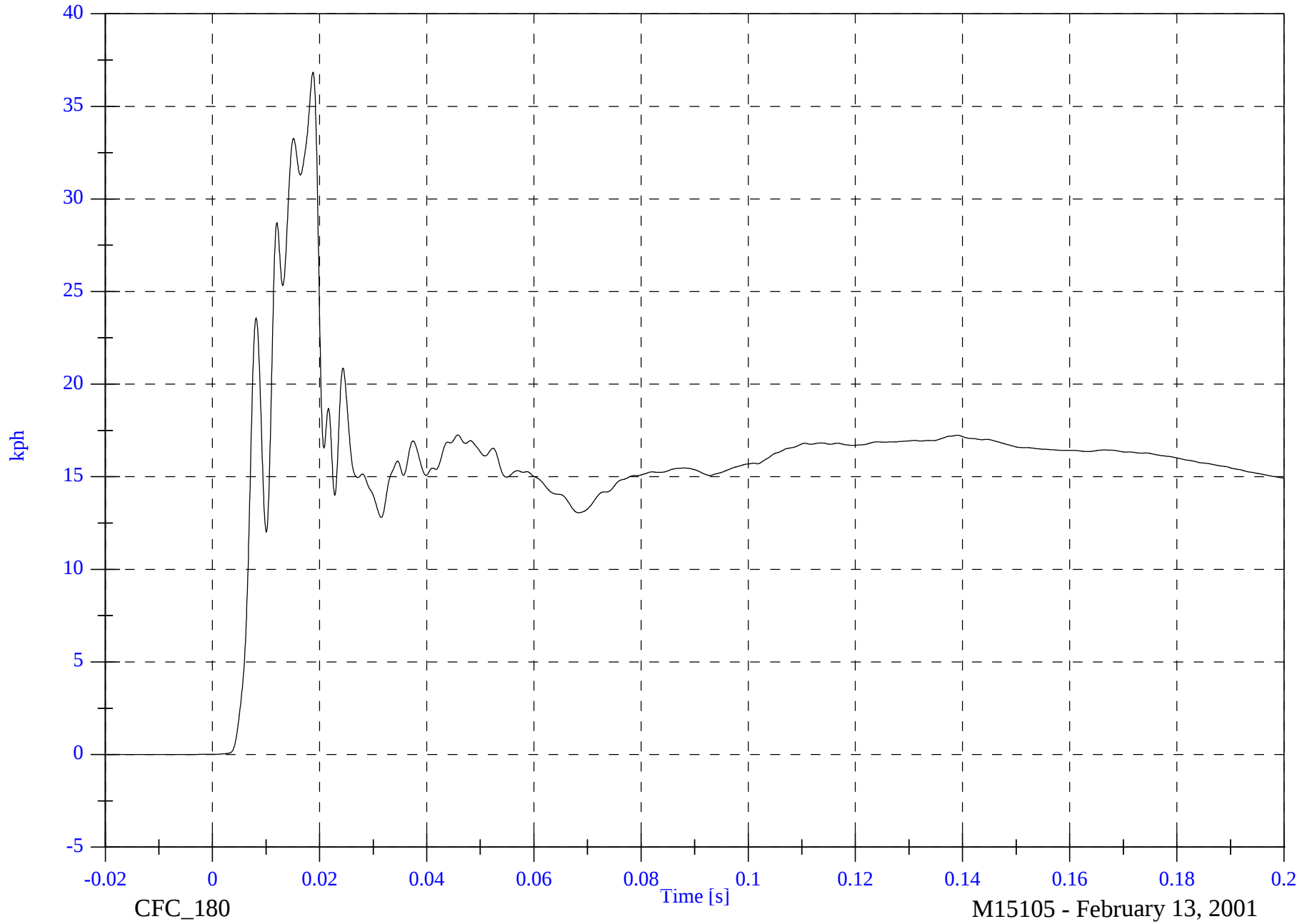


SNCAP Test 15 2001 Lexus RX300

A14 Left Lower A Post Y Velocity

Max: 36.9 [kph] at 0.019 [s]

Min: -0.0 [kph] at -0.020 [s]



B-86

8506-15

CFC_180

Time [s]

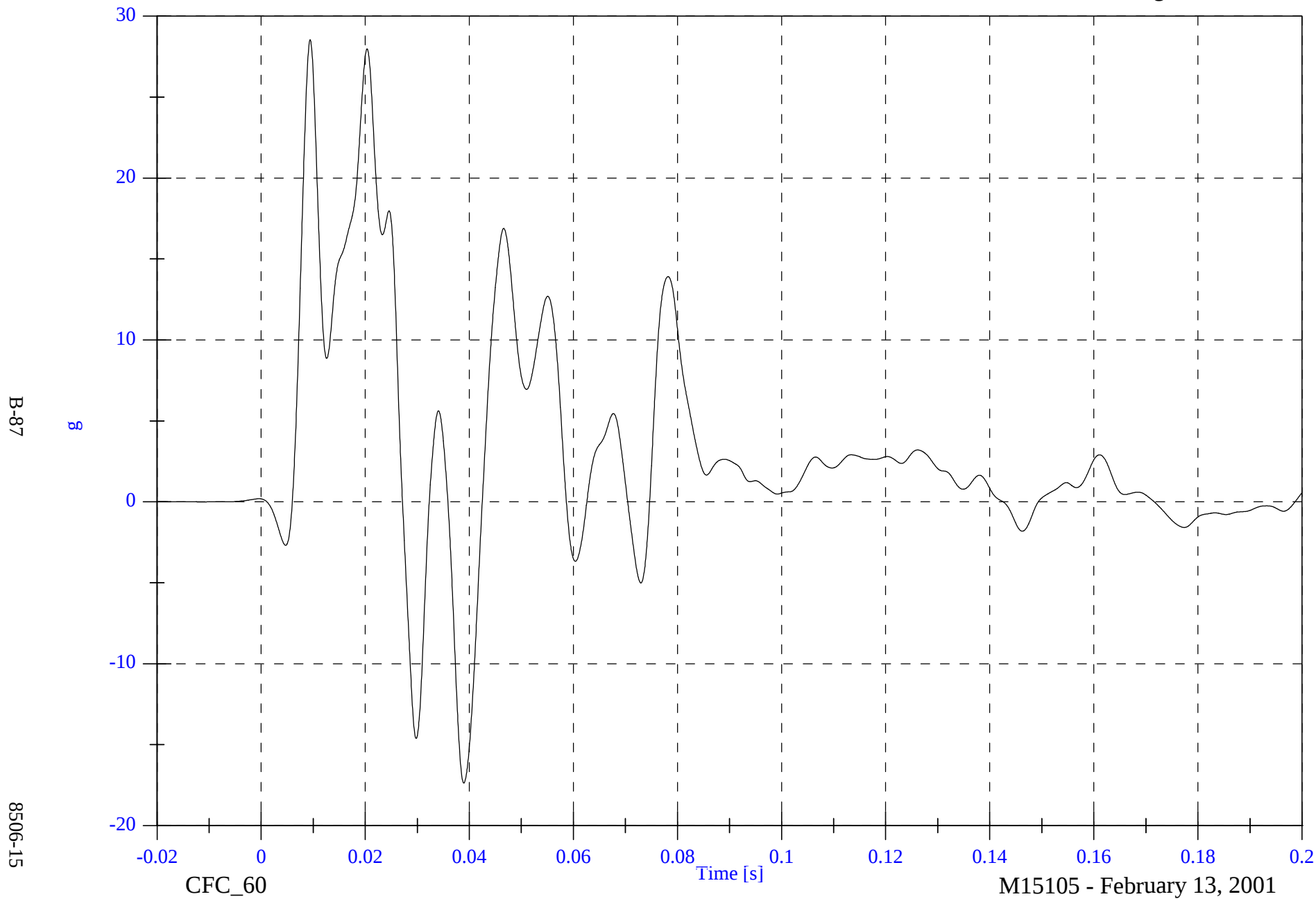
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A15 Left Mid A Post Y

Max: 28.5 [g] at 0.009 [s]

Min: -17.4 [g] at 0.039 [s]



SNCAP Test 15 2001 Lexus RX300

A15 Left Mid A Post Y Velocity

Max: 22.2 [kph] at 0.172 [s]

Min: -0.5 [kph] at 0.007 [s]

B-88

8506-15

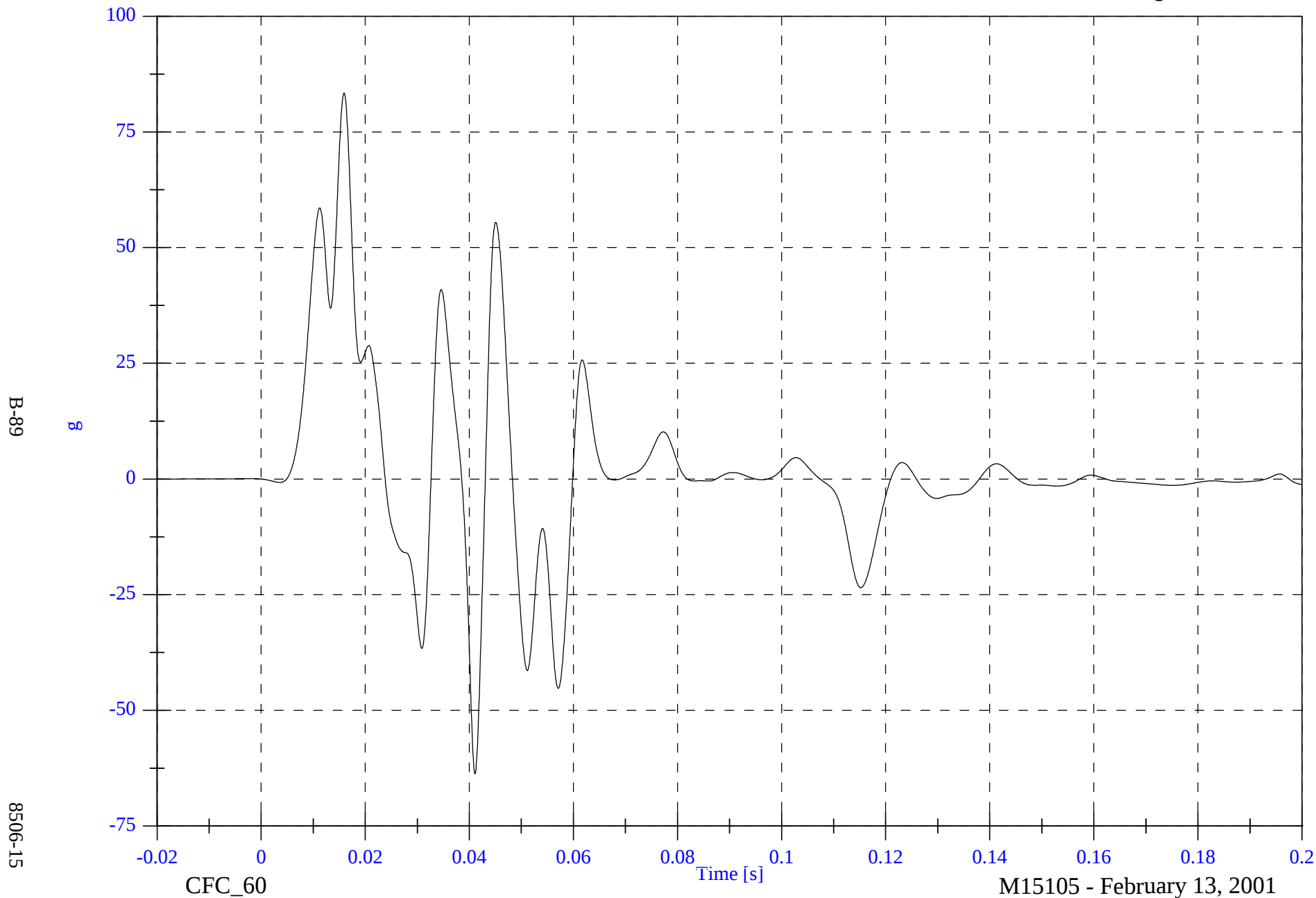


SNCAP Test 15 2001 Lexus RX300

A16 Front Seat Track Y

Max: 83.4 [g] at 0.016 [s]

Min: -63.7 [g] at 0.041 [s]

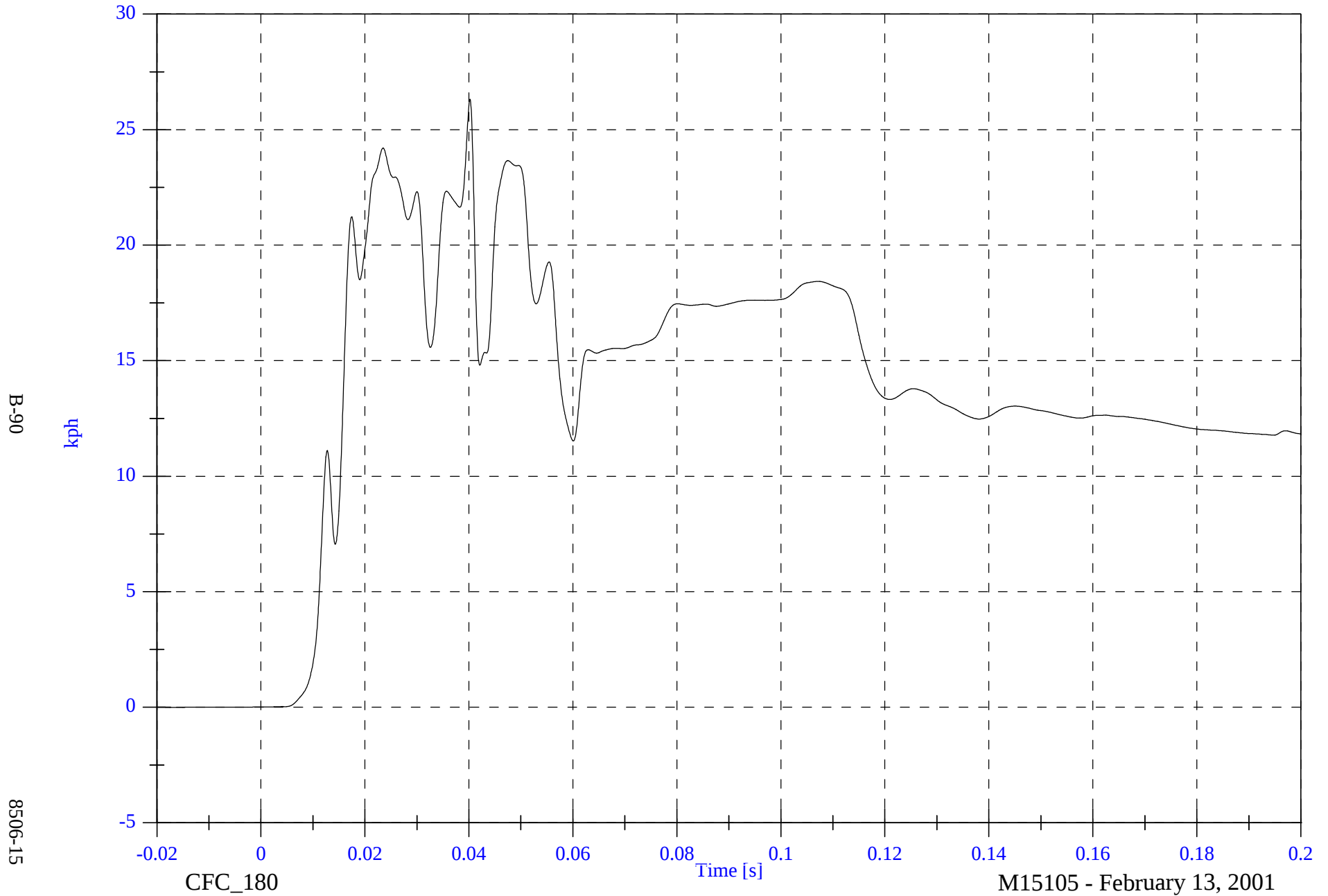


SNCAP Test 15 2001 Lexus RX300

A16 Front Seat Track Y Velocity

Max: 26.3 [kph] at 0.040 [s]

Min: -0.0 [kph] at -0.016 [s]

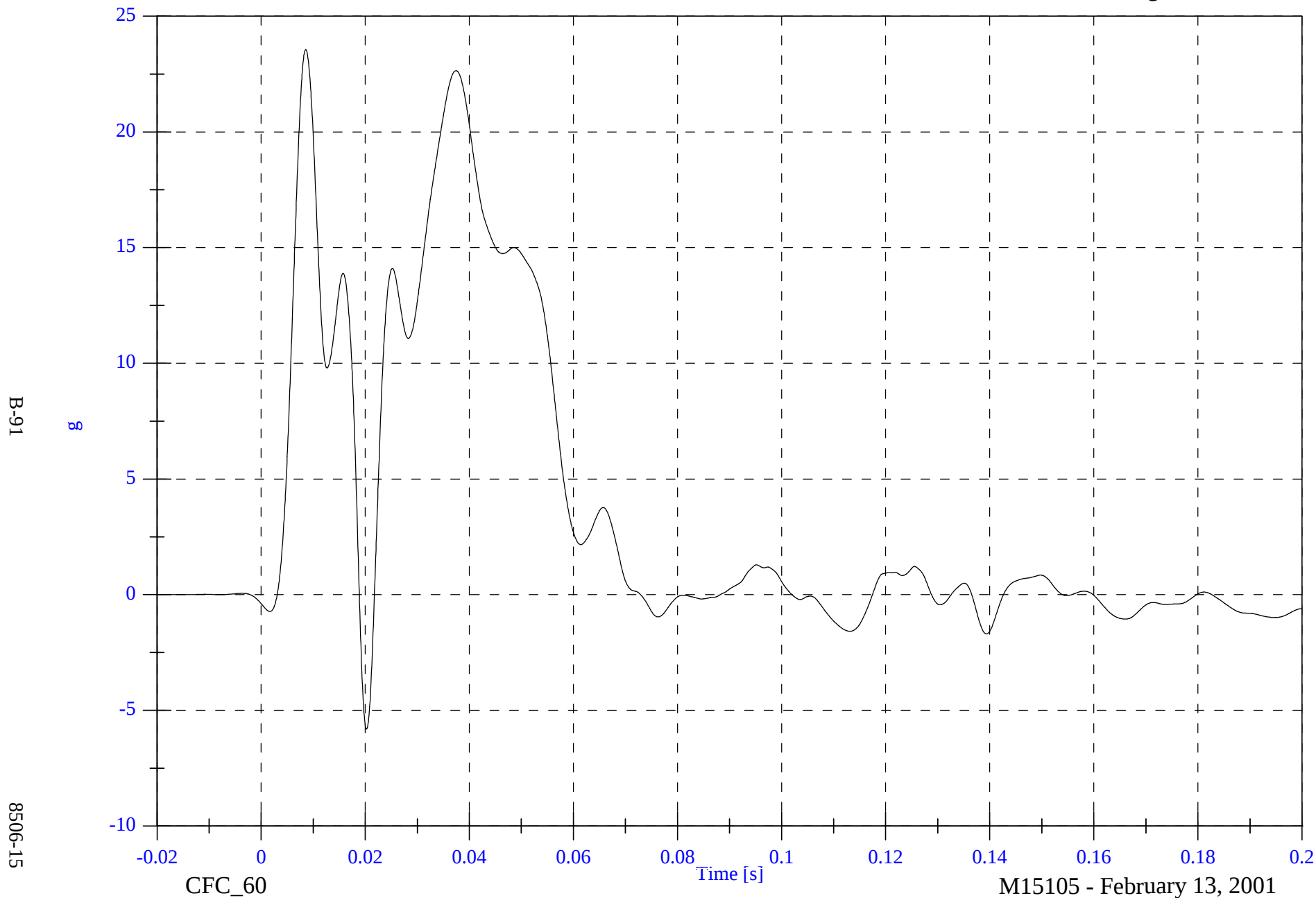


SNCAP Test 15 2001 Lexus RX300

A17 Rear Seat Track Y

Max: 23.6 [g] at 0.009 [s]

Min: -5.8 [g] at 0.020 [s]

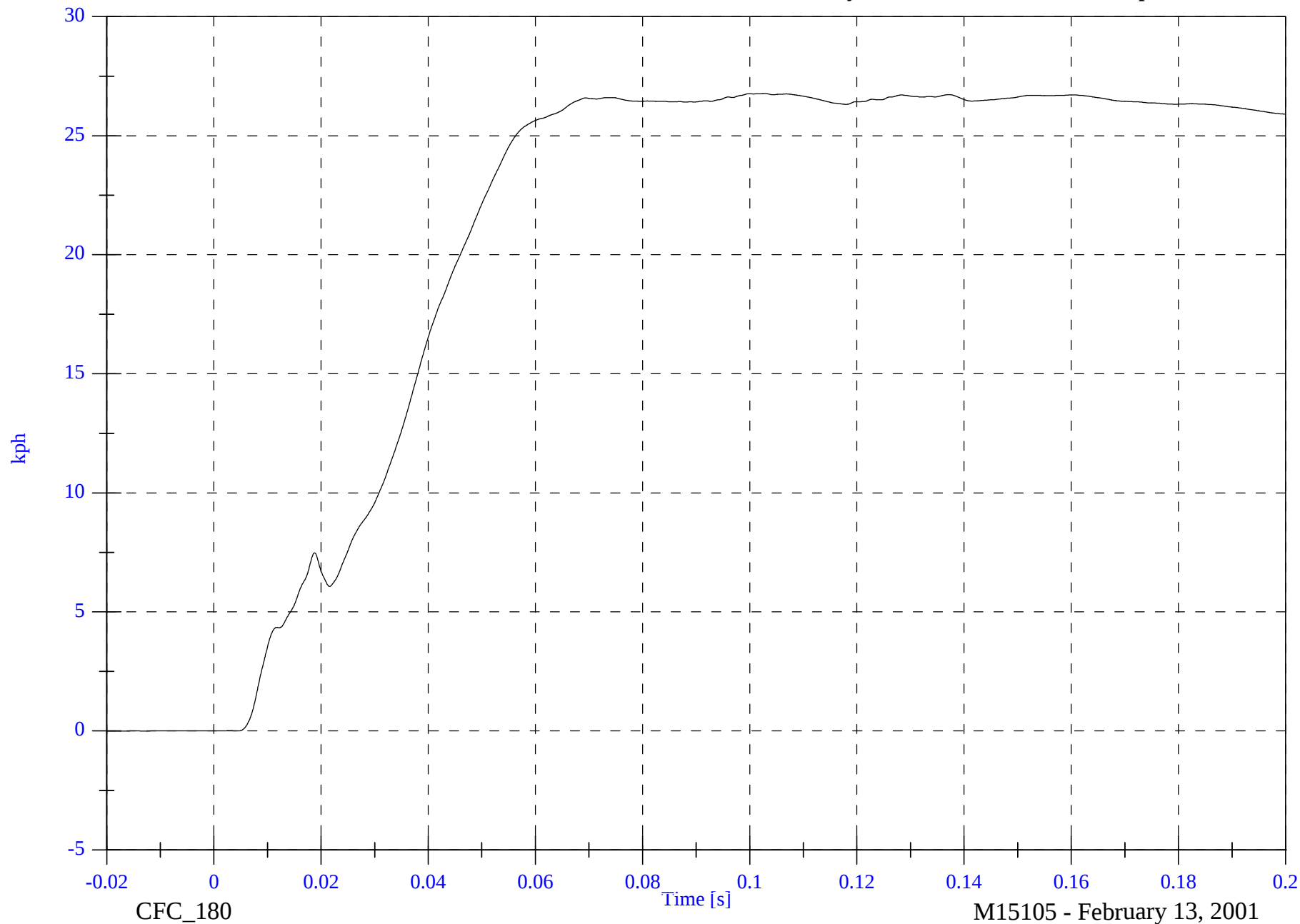


SNCAP Test 15 2001 Lexus RX300

A17 Rear Seat Track Y Velocity

Max: 26.8 [kph] at 0.103 [s]

Min: -0.0 [kph] at -0.020 [s]



B-92

8506-15

CFC_180

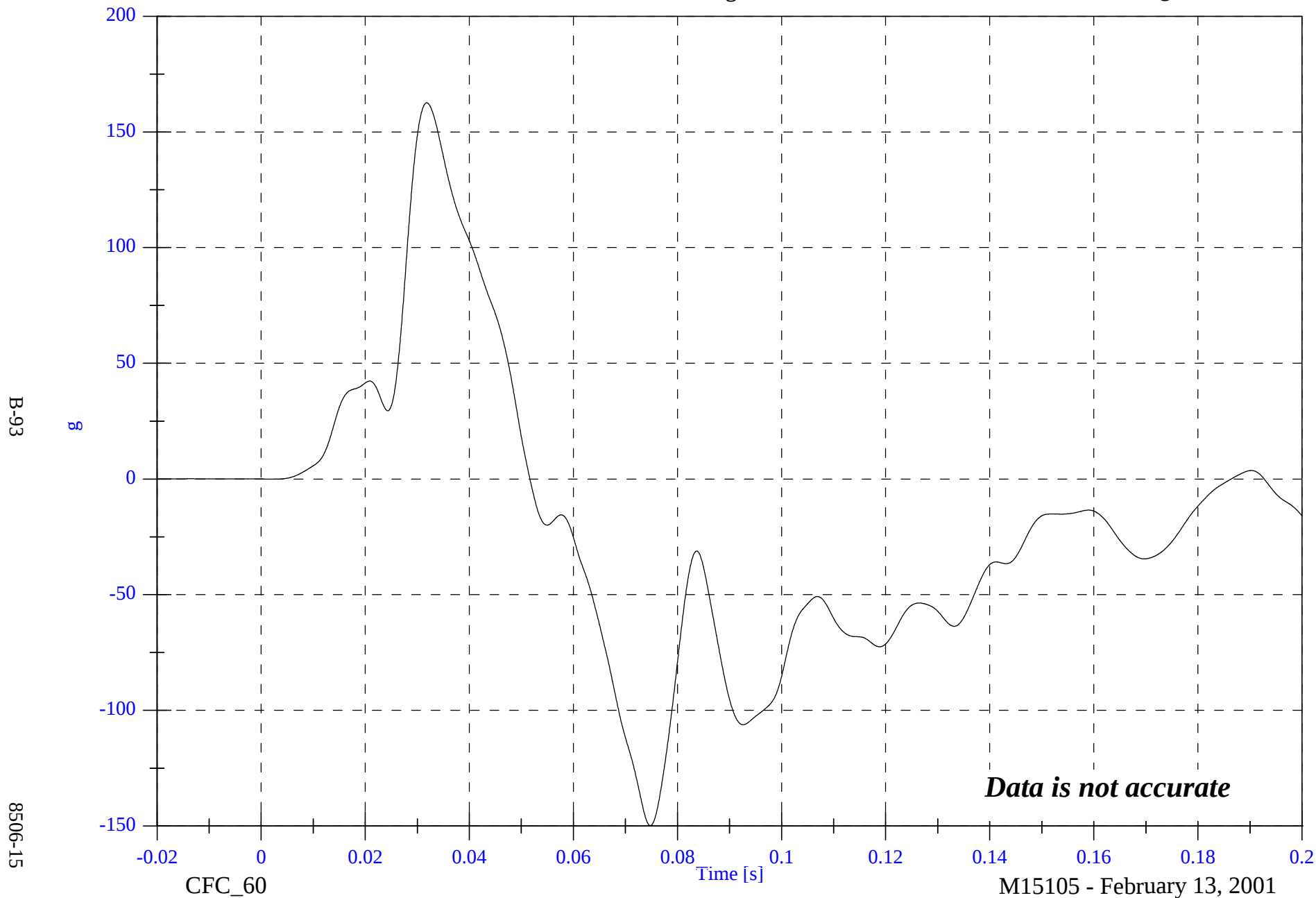
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

A18 Target CG X

Max: 162.6 [g] at 0.032 [s]

Min: -149.8 [g] at 0.075 [s]

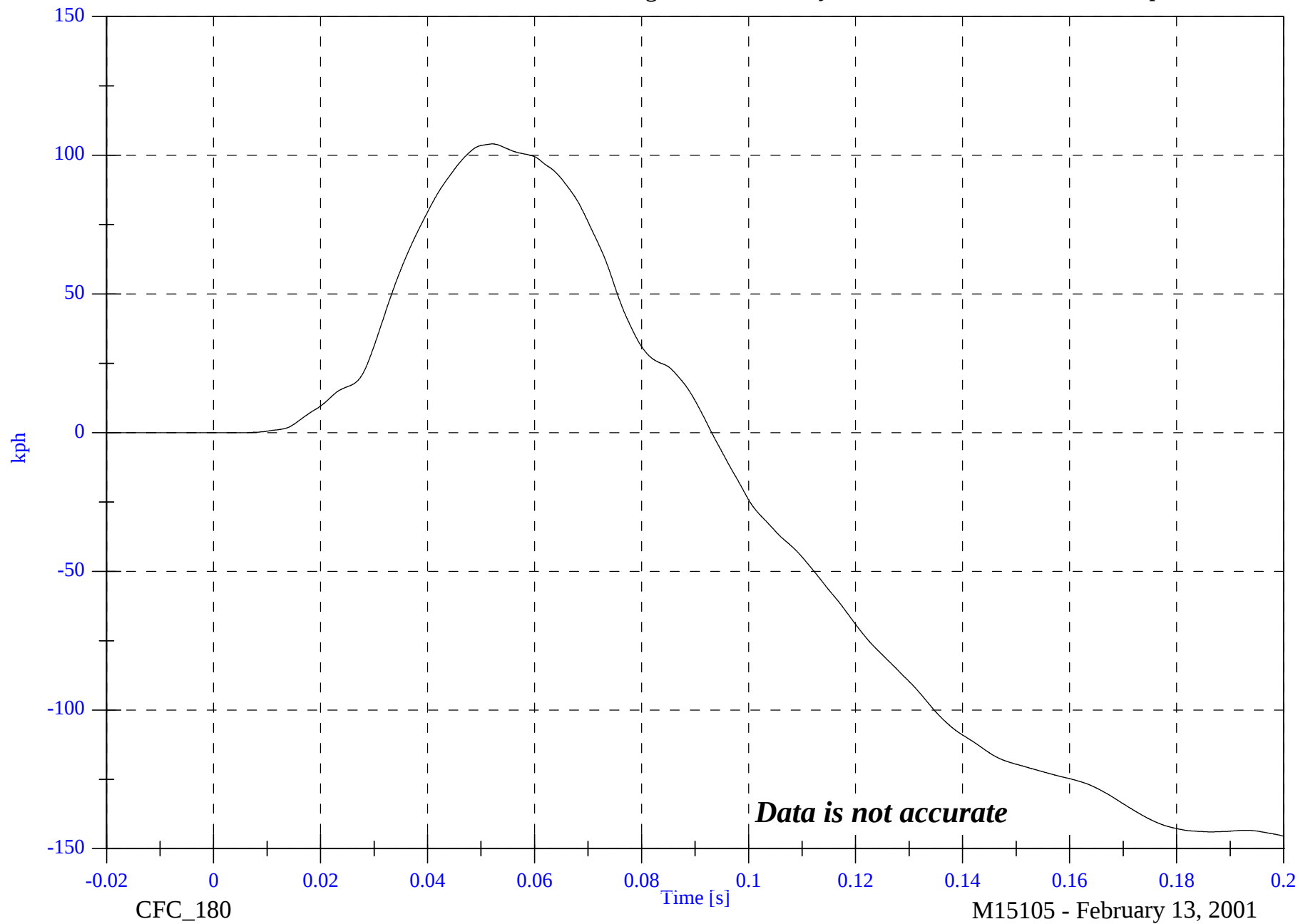


SNCAP Test 15 2001 Lexus RX300

A18 Target CG X Velocity

Max: 104.1 [kph] at 0.052 [s]

Min: -145.5 [kph] at 0.200 [s]



B-94

8506-15

CFC_180

Time [s]

M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

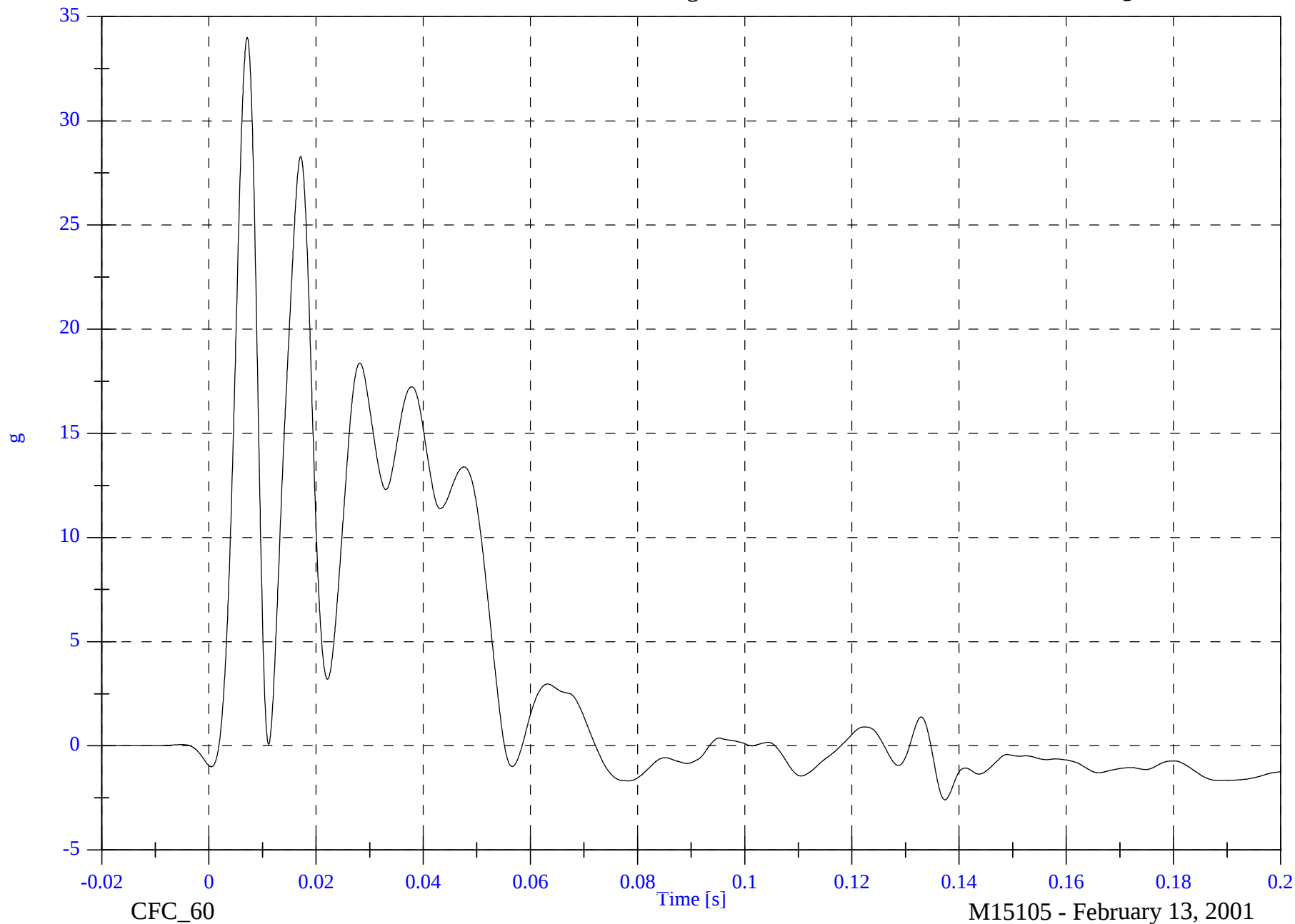
A18 Target CG Y

Max: 34.0 [g] at 0.007 [s]

Min: -2.6 [g] at 0.137 [s]

B-95

8506-15



SNCAP Test 15 2001 Lexus RX300

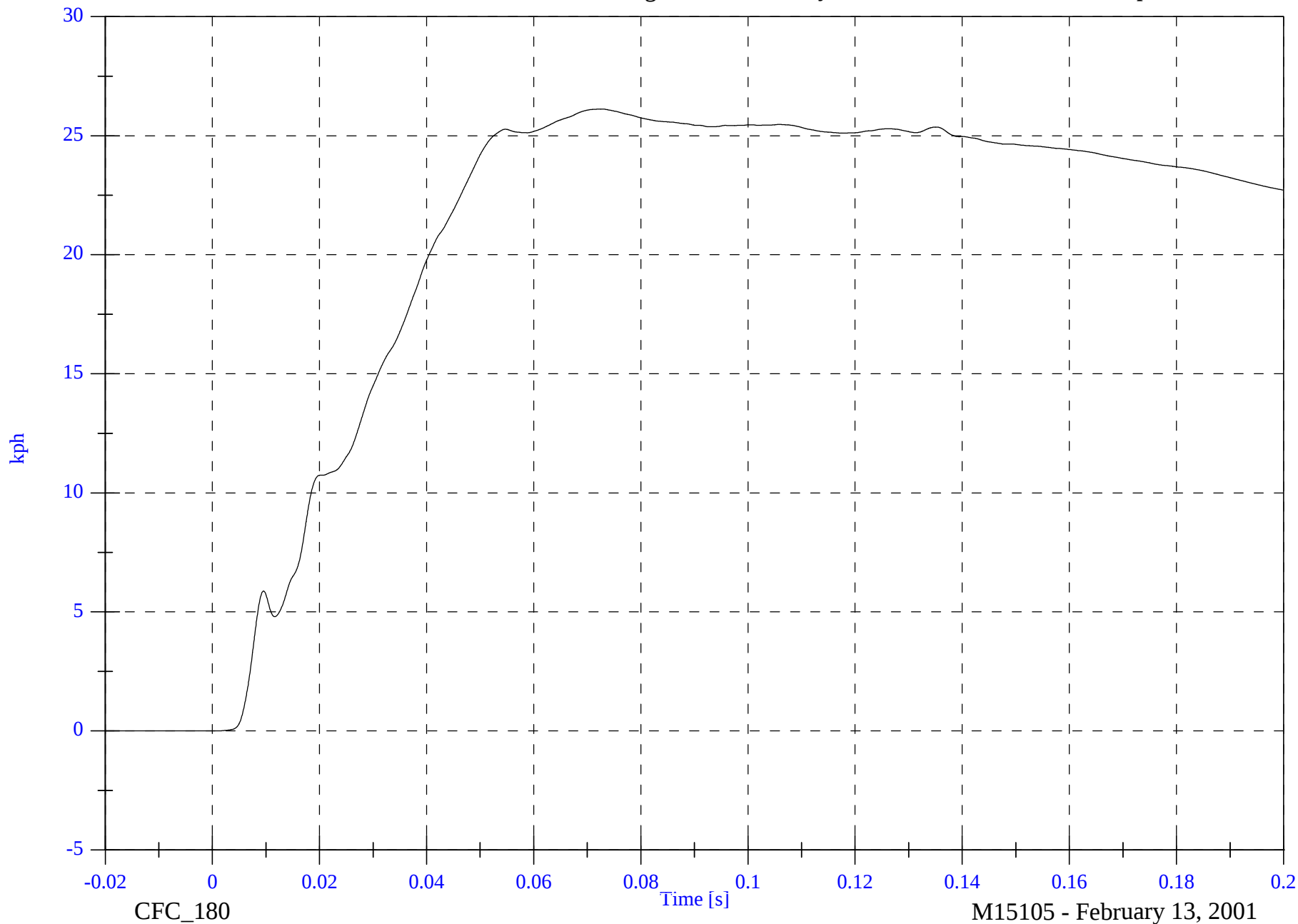
A18 Target CG Y Velocity

Max: 26.1 [kph] at 0.073 [s]

Min: -0.0 [kph] at -0.019 [s]

B-96

8506-15

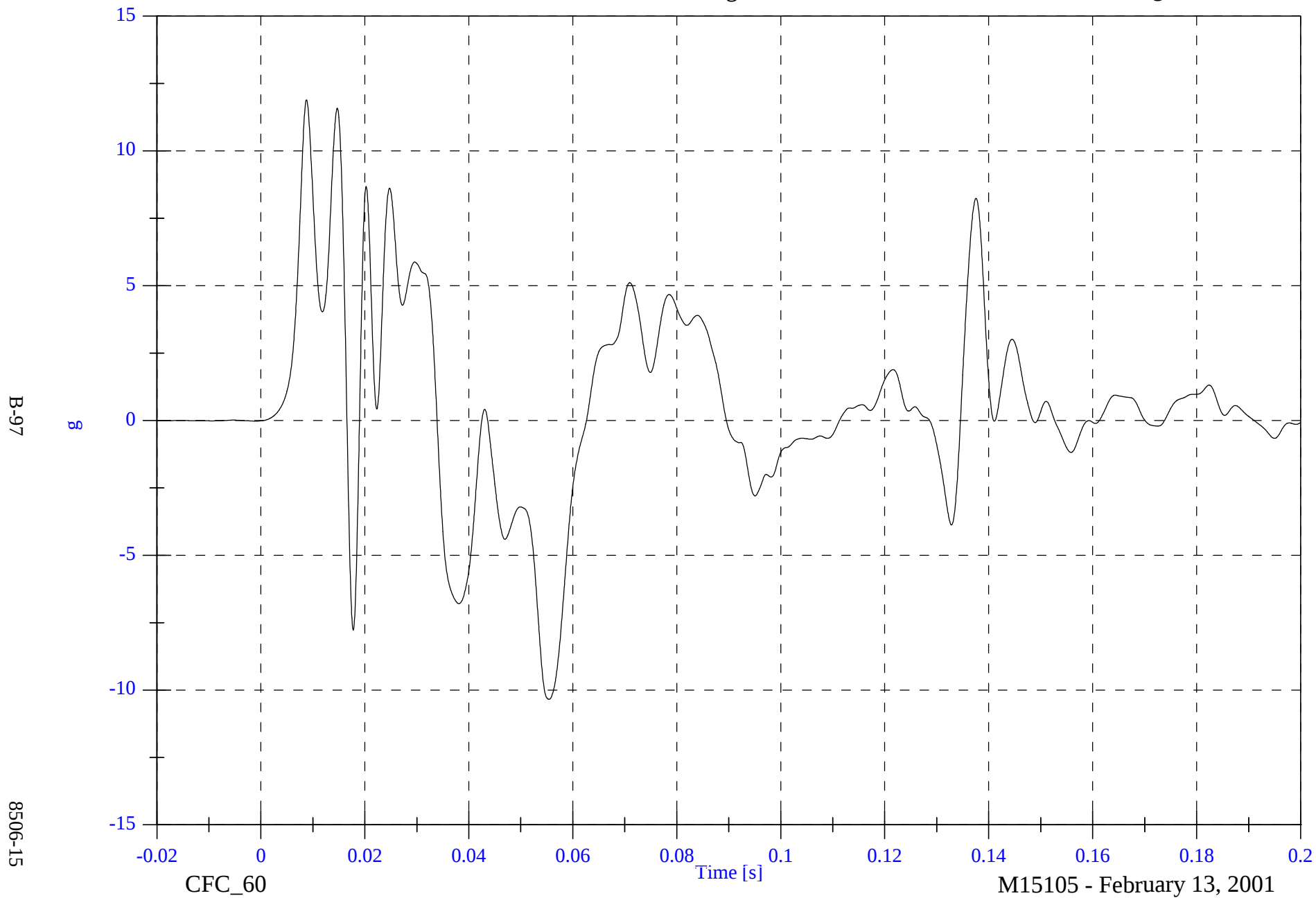


SNCAP Test 15 2001 Lexus RX300

A18 Target CG Z

Max: 11.9 [g] at 0.009 [s]

Min: -10.3 [g] at 0.055 [s]

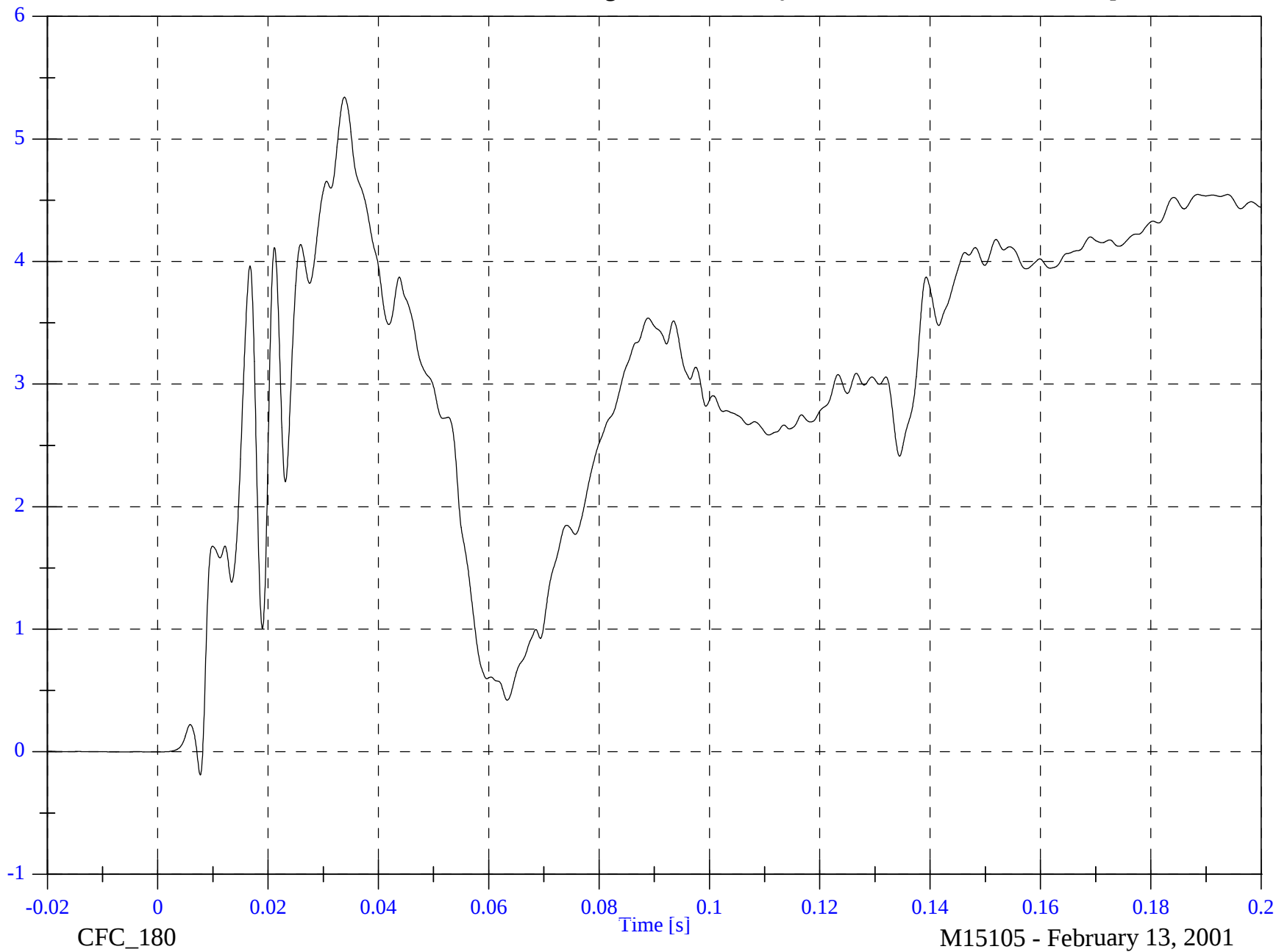


SNCAP Test 15 2001 Lexus RX300

A18 Target CG Z Velocity

Max: 5.3 [kph] at 0.034 [s]

Min: -0.2 [kph] at 0.008 [s]



B-98

8506-15

SNCAP Test 15 2001 Lexus RX300

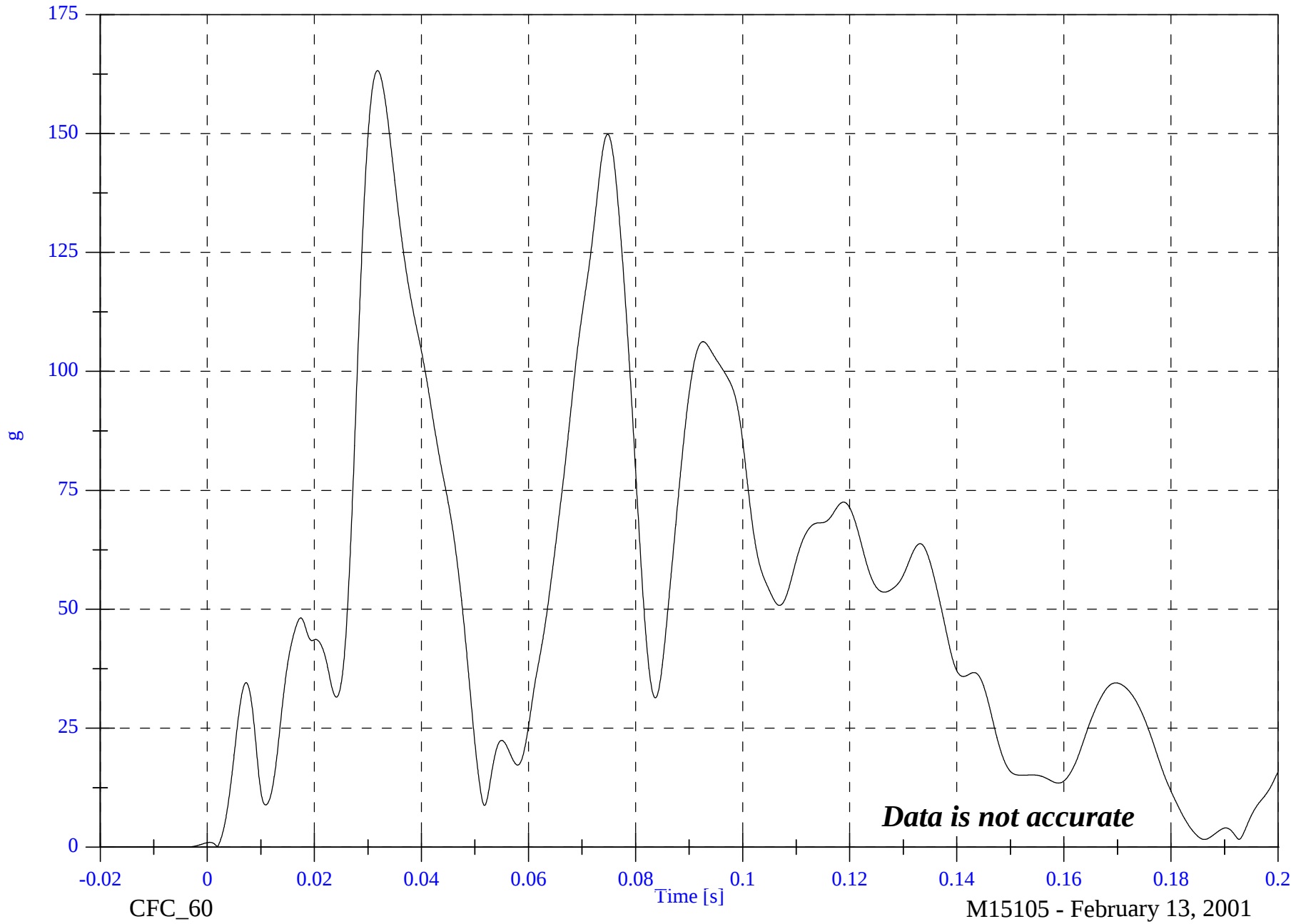
A18 Target CG Resultant

Max: 163.2 [g] at 0.032 [s]

Min: 0.0 [g] at -0.018 [s]

B-99

8506-15

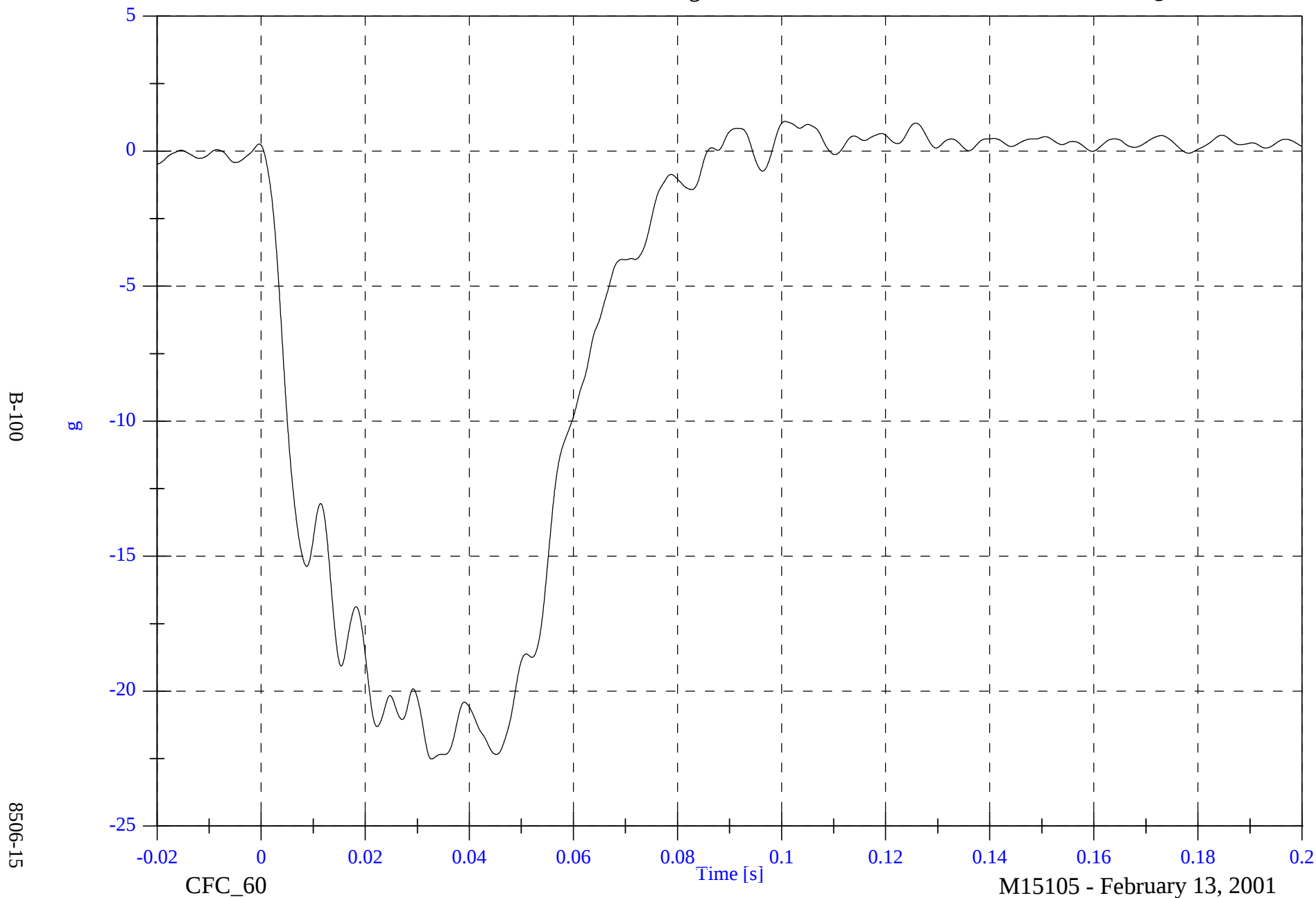


SNCAP Test 15 2001 Lexus RX300

Moving Barrier CG X

Max: 1.1 [g] at 0.101 [s]

Min: -22.5 [g] at 0.033 [s]

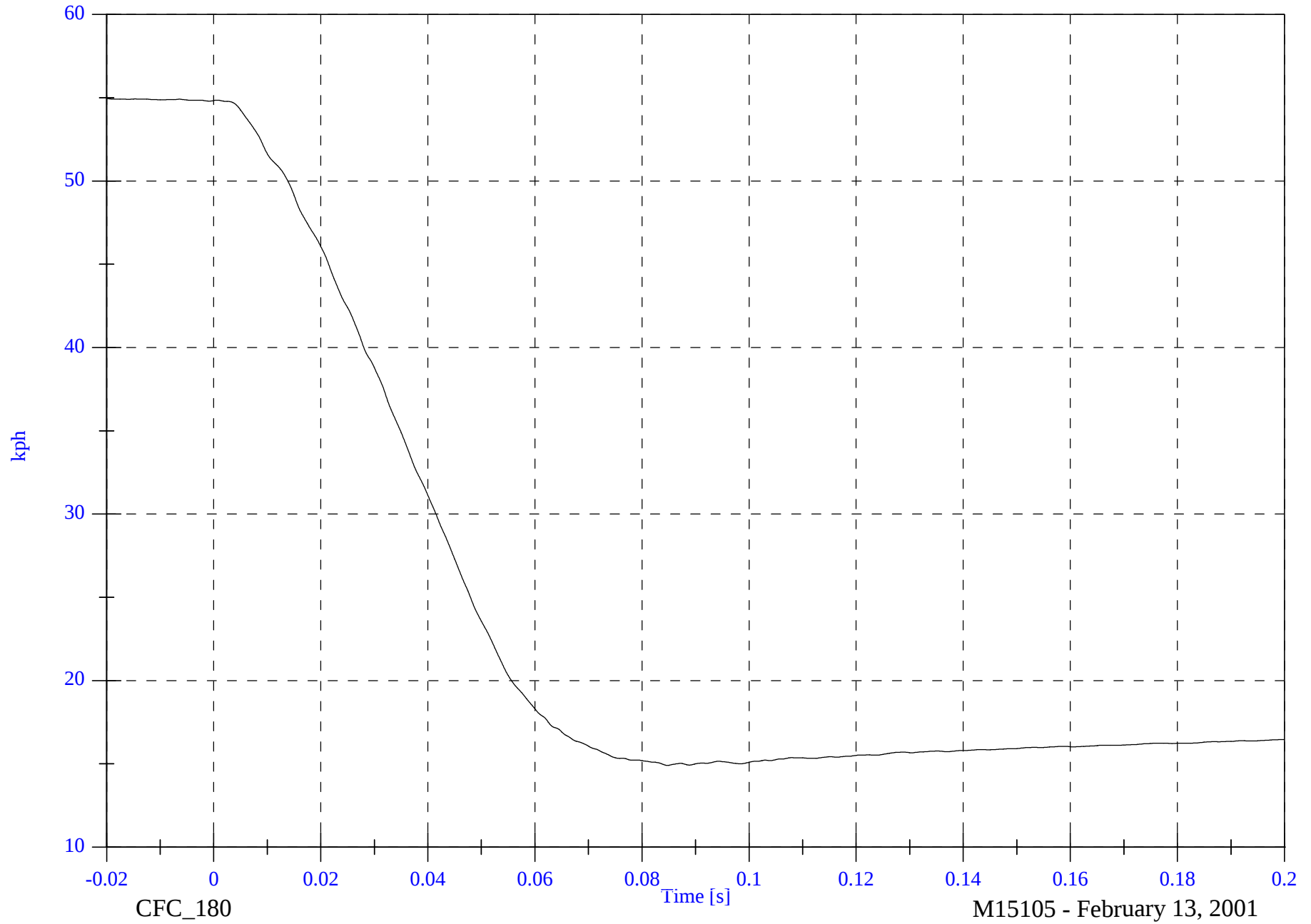


SNCAP Test 15 2001 Lexus RX300

Moving Barrier CG X Velocity

Max: 54.9 [kph] at -0.020 [s]

Min: 14.9 [kph] at 0.085 [s]



B-101

8506-15

CFC_180

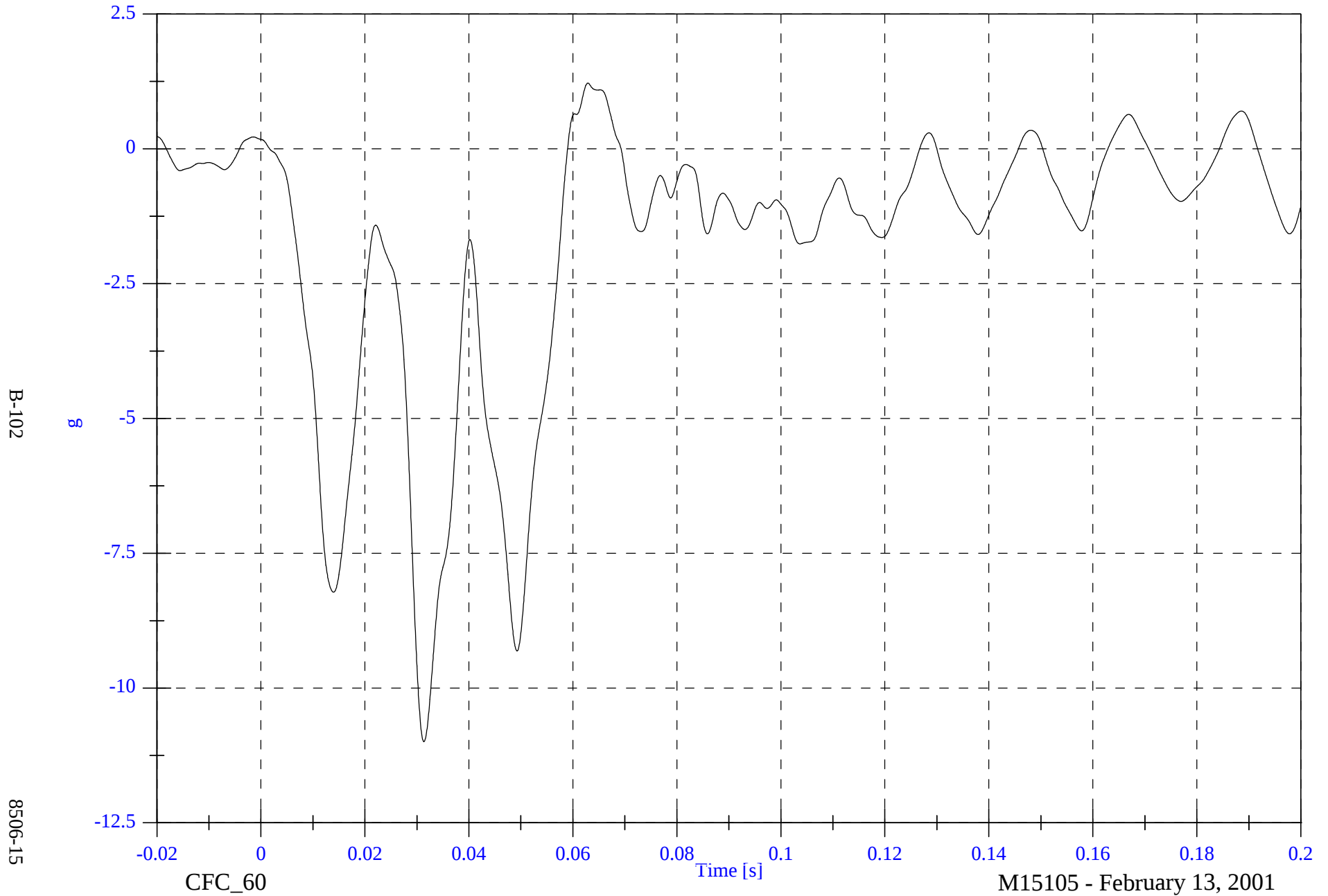
M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

Moving Barrier CG Y

Max: 1.2 [g] at 0.063 [s]

Min: -11.0 [g] at 0.031 [s]

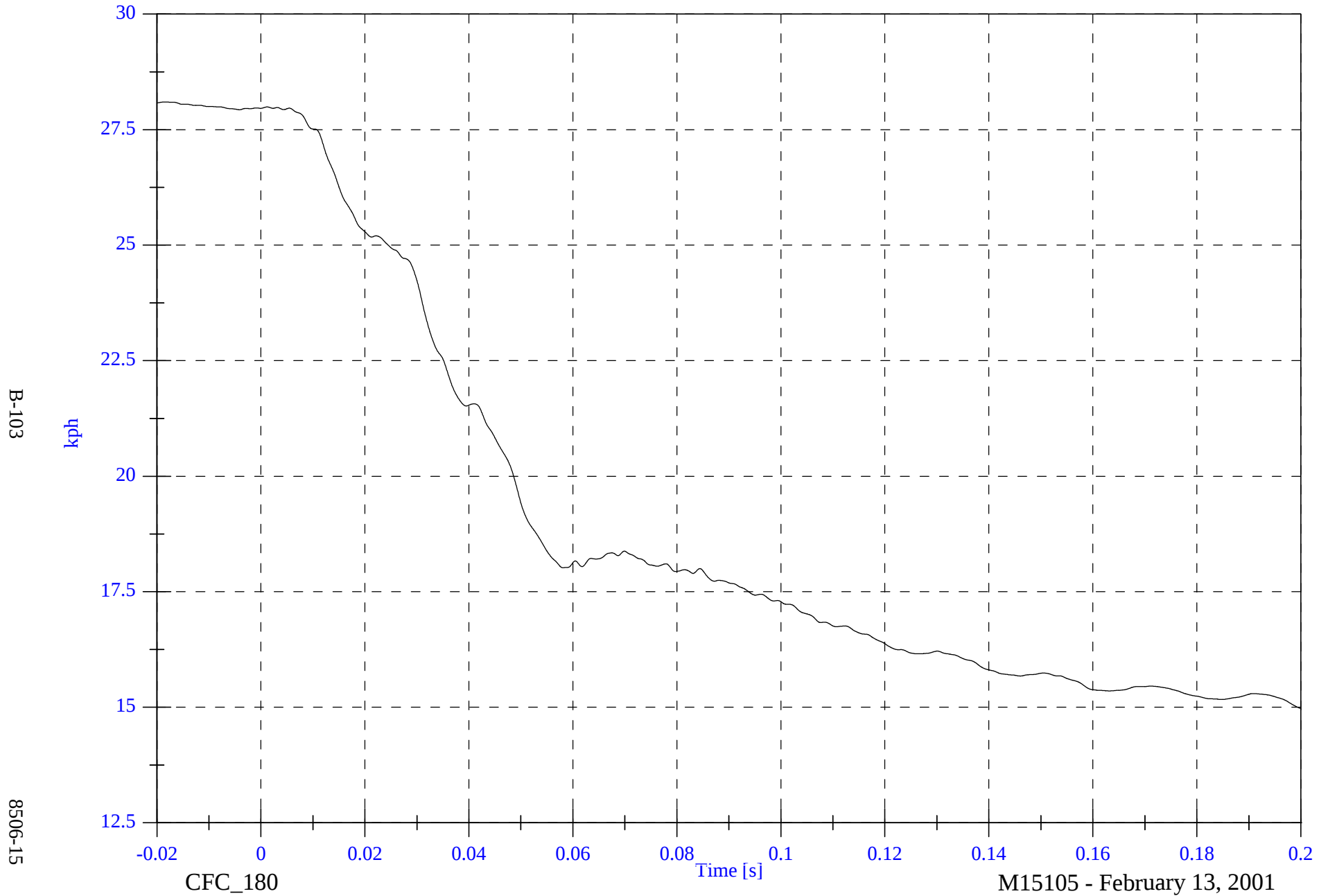


SNCAP Test 15 2001 Lexus RX300

Moving Barrier CG Y Velocity

Max: 28.1 [kph] at -0.018 [s]

Min: 15.0 [kph] at 0.200 [s]

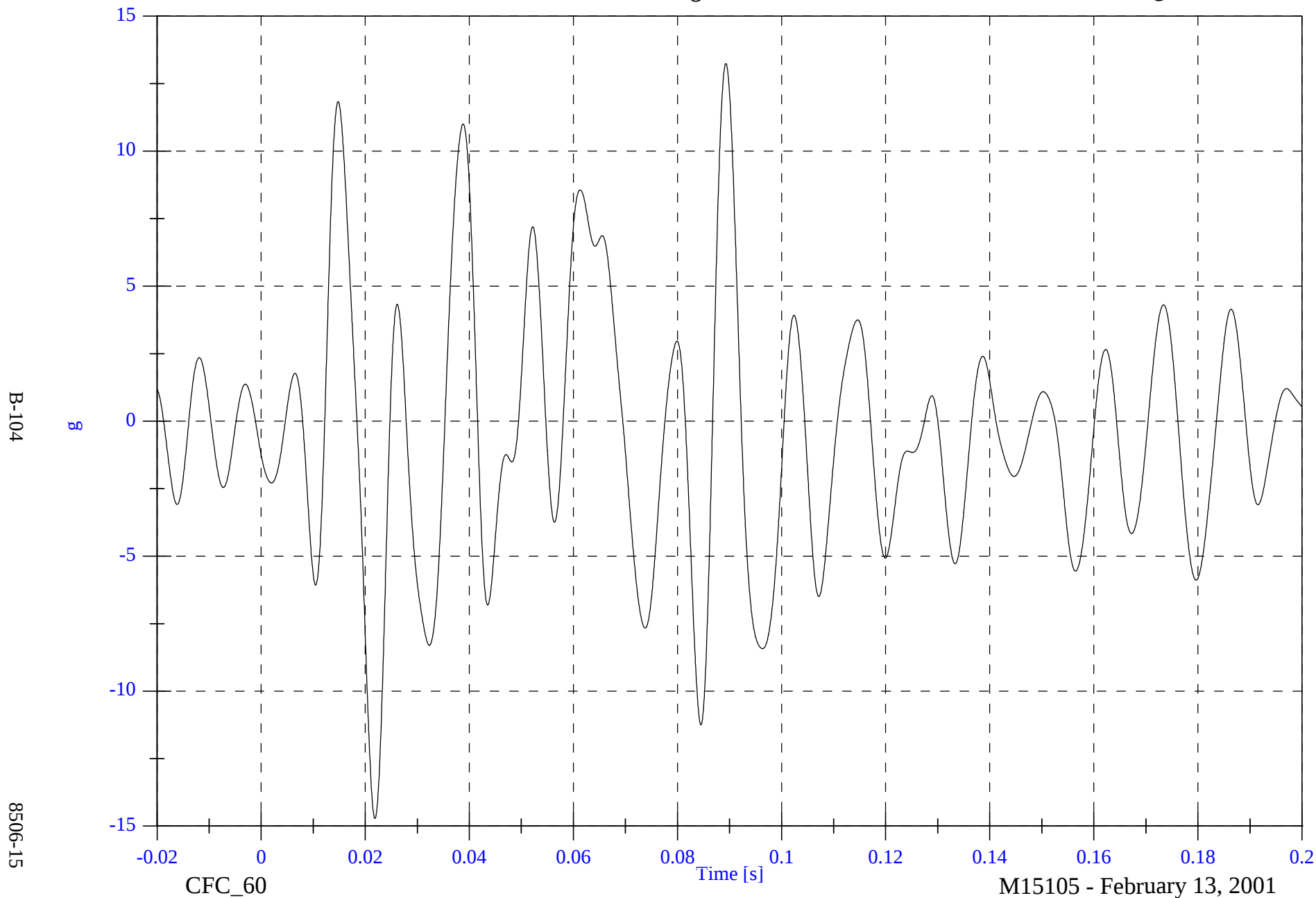


SNCAP Test 15 2001 Lexus RX300

Moving Barrier CG Z

Max: 13.3 [g] at 0.089 [s]

Min: -14.7 [g] at 0.022 [s]



SNCAP Test 15 2001 Lexus RX300

Moving Barrier CG Z Velocity

Max: 1.1 [kph] at 0.070 [s]

Min: -4.5 [kph] at 0.184 [s]



SNCAP Test 15 2001 Lexus RX300

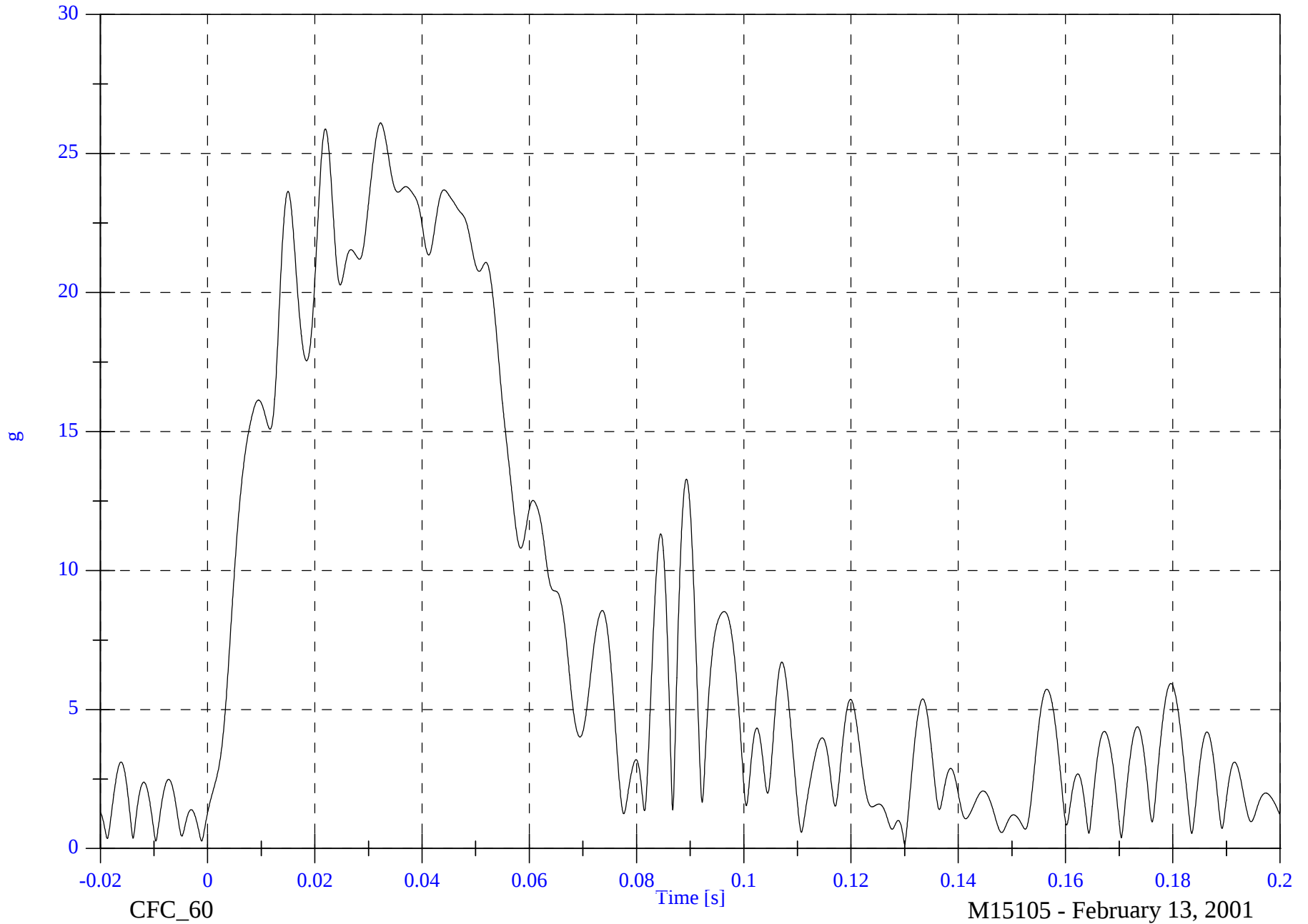
Moving Barrier CG Resultant

Max: 26.1 [g] at 0.032 [s]

Min: 0.1 [g] at 0.130 [s]

B-106

8506-15

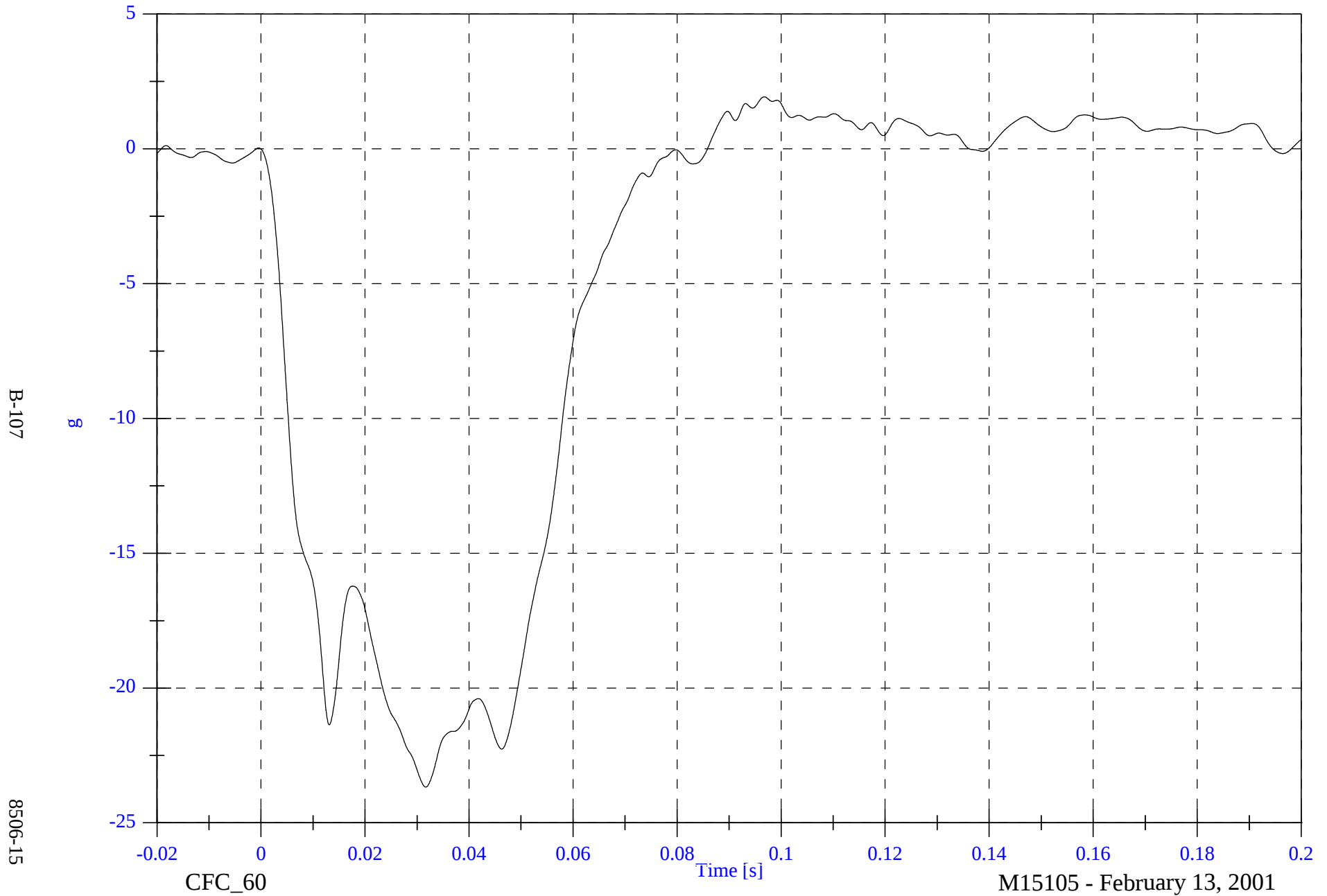


SNCAP Test 15 2001 Lexus RX300

Moving Barrier Left Rail X

Max: 1.9 [g] at 0.097 [s]

Min: -23.7 [g] at 0.032 [s]

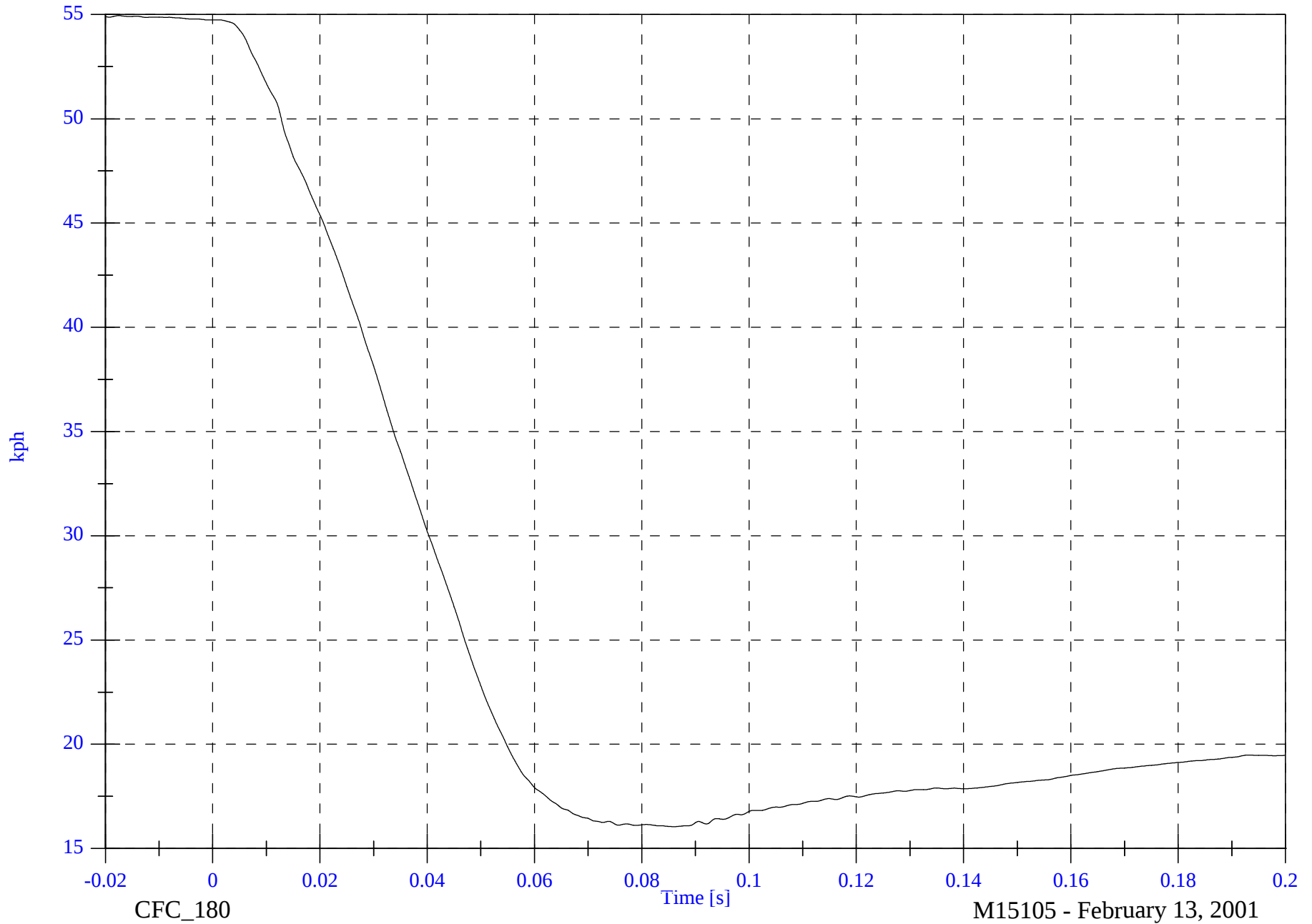


SNCAP Test 15 2001 Lexus RX300

Moving Barrier Left Rail X Velocity

Max: 54.9 [kph] at -0.018 [s]

Min: 16.0 [kph] at 0.086 [s]



B-108

8506-15

CFC_180

M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

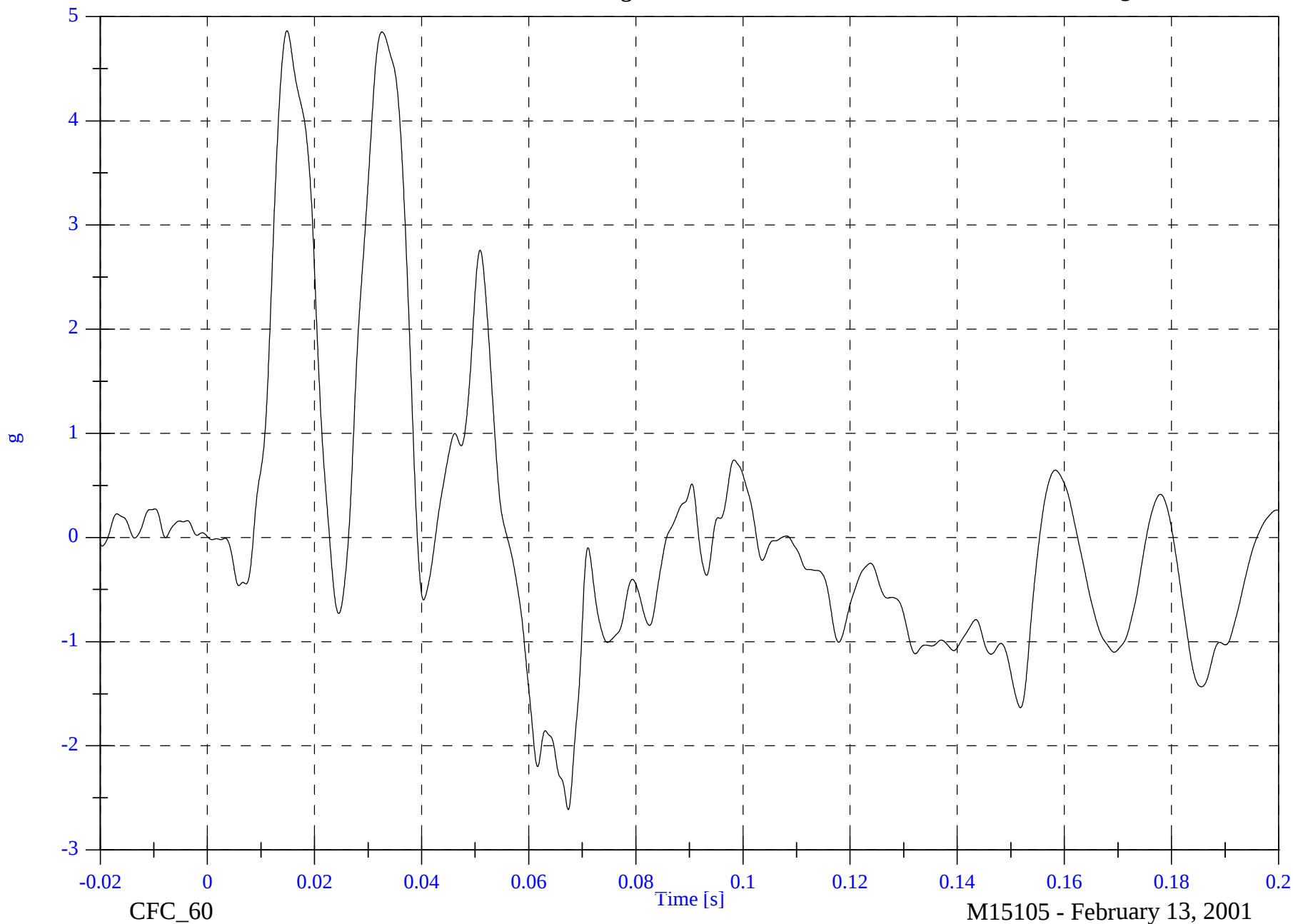
Moving Barrier Left Rail Y

Max: 4.9 [g] at 0.015 [s]

Min: -2.6 [g] at 0.067 [s]

B-109

8506-15



SNCAP Test 15 2001 Lexus RX300

Moving Barrier Left Rail Y Velocity

Max: 31.2 [kph] at 0.054 [s]

Min: 27.9 [kph] at 0.009 [s]

B-110

8506-15



SNCAP Test 15 2001 Lexus RX300

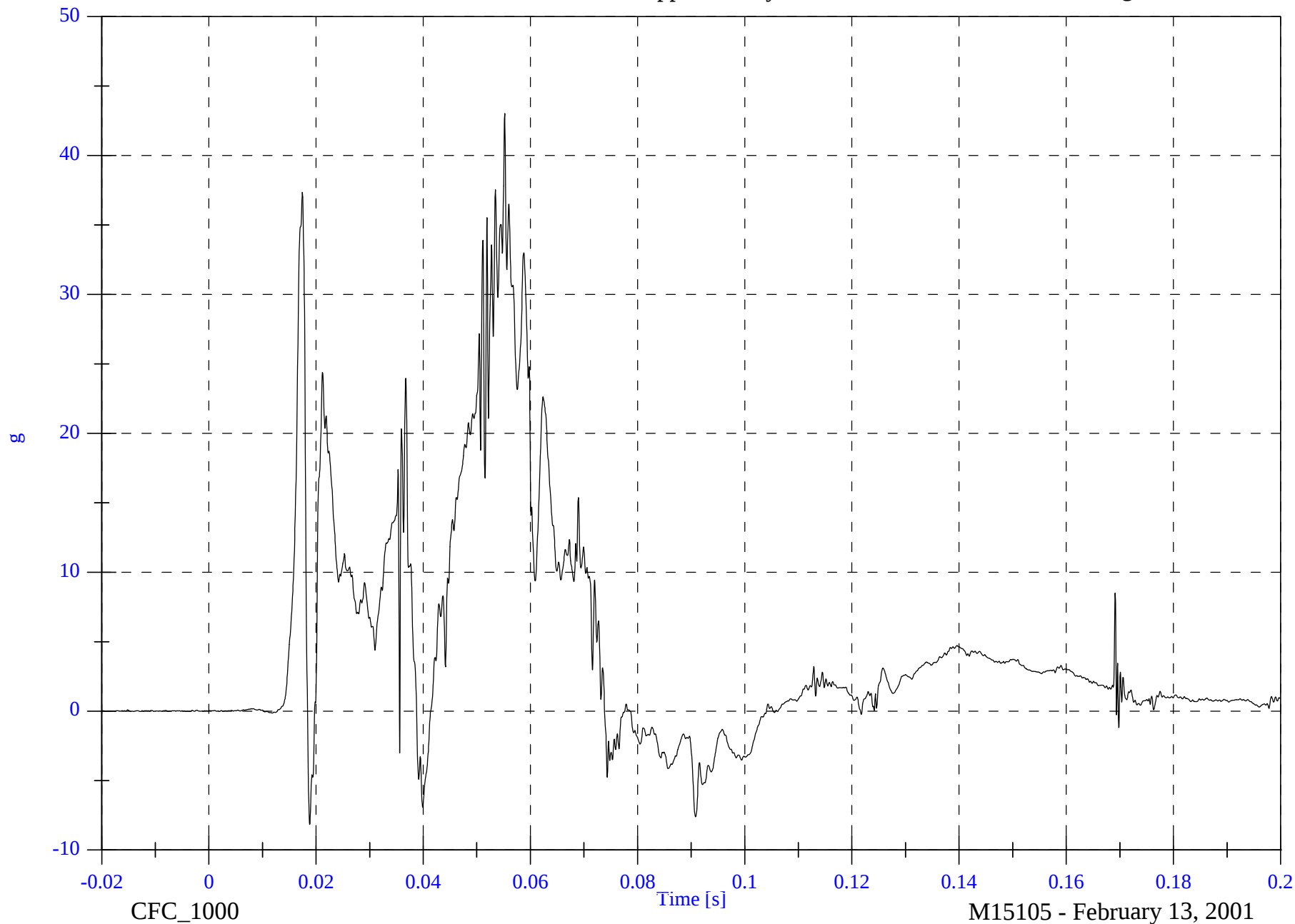
P1 Upper Rib Ry

Max: 43.0 [g] at 0.055 [s]

Min: -8.2 [g] at 0.019 [s]

B-111

8506-15

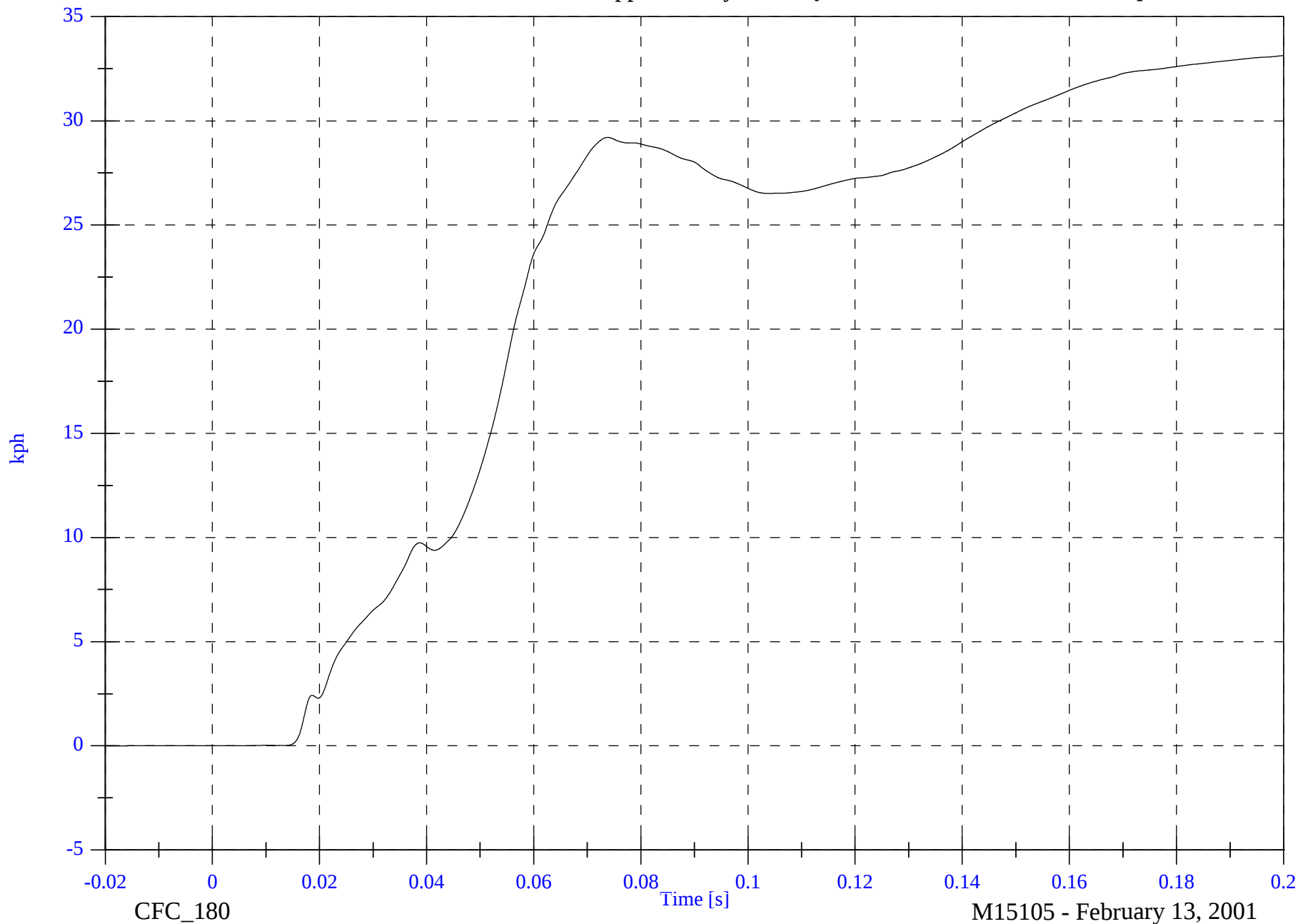


SNCAP Test 15 2001 Lexus RX300

P1 Upper Rib Ry Velocity

Max: 33.1 [kph] at 0.200 [s]

Min: -0.0 [kph] at -0.018 [s]



B-112

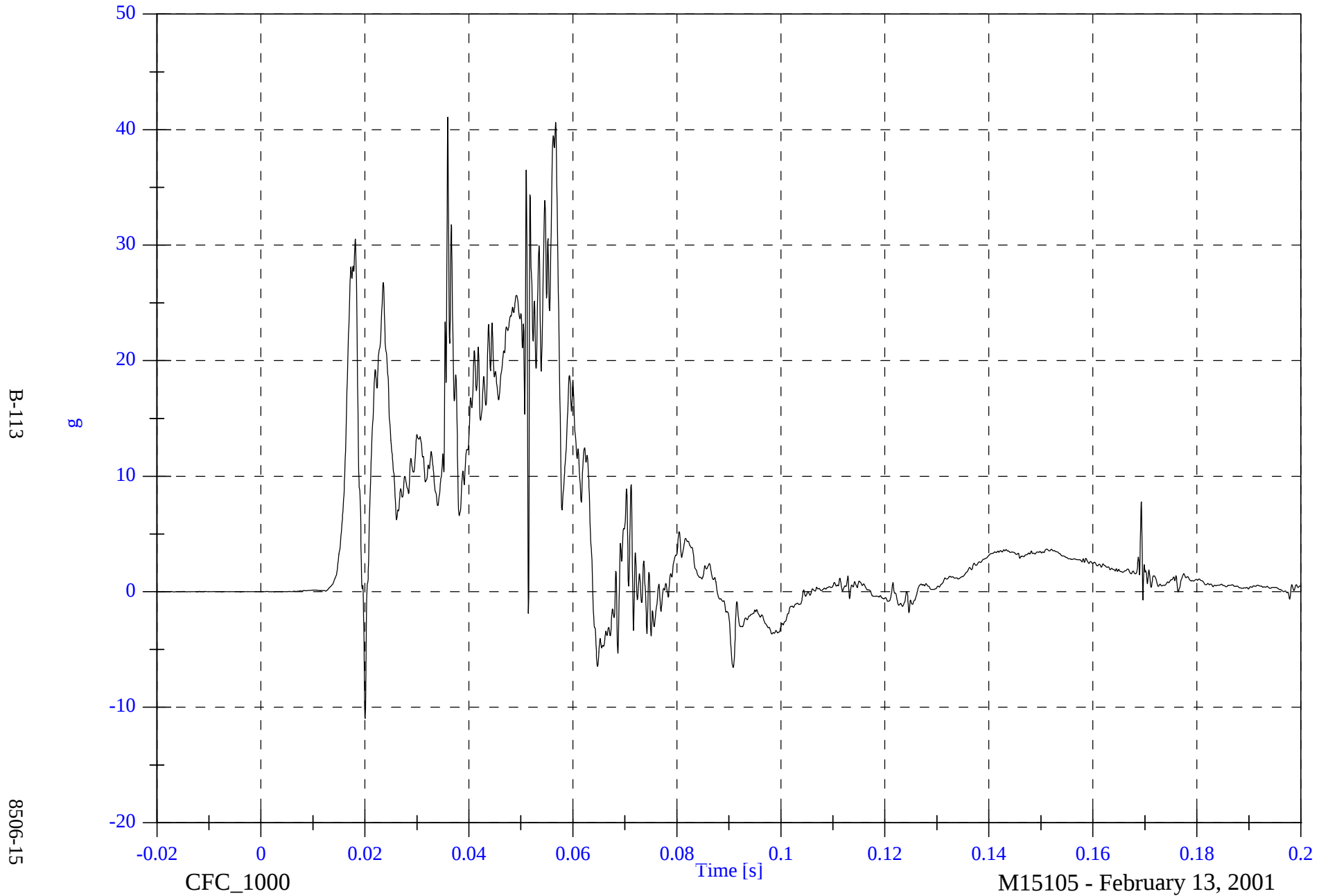
8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Lower Rib Ry

Max: 41.1 [g] at 0.036 [s]

Min: -11.0 [g] at 0.020 [s]

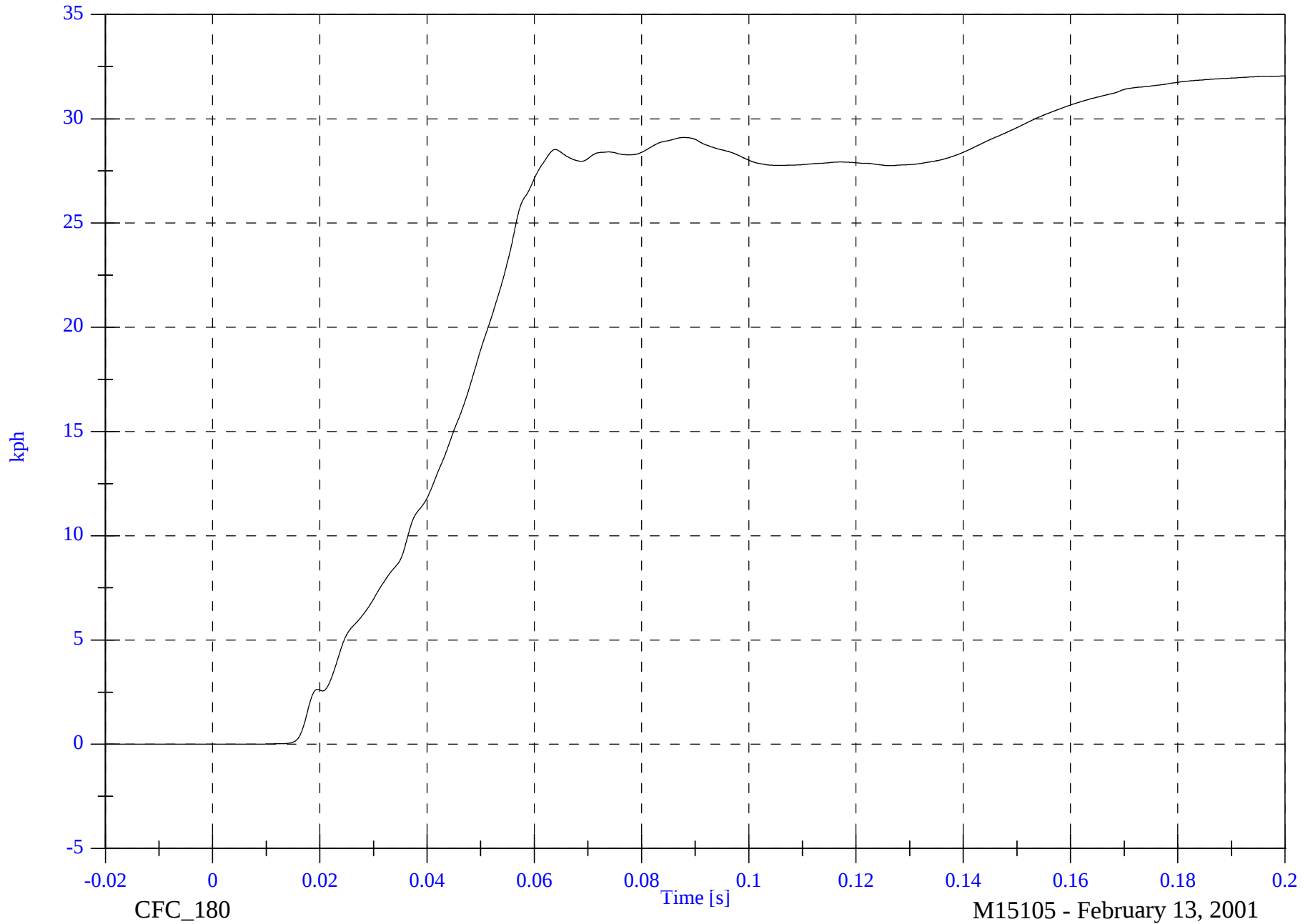


SNCAP Test 15 2001 Lexus RX300

P1 Lower Rib Ry Velocity

Max: 32.1 [kph] at 0.200 [s]

Min: -0.0 [kph] at -0.020 [s]



B-114

8506-15

SNCAP Test 15 2001 Lexus RX300

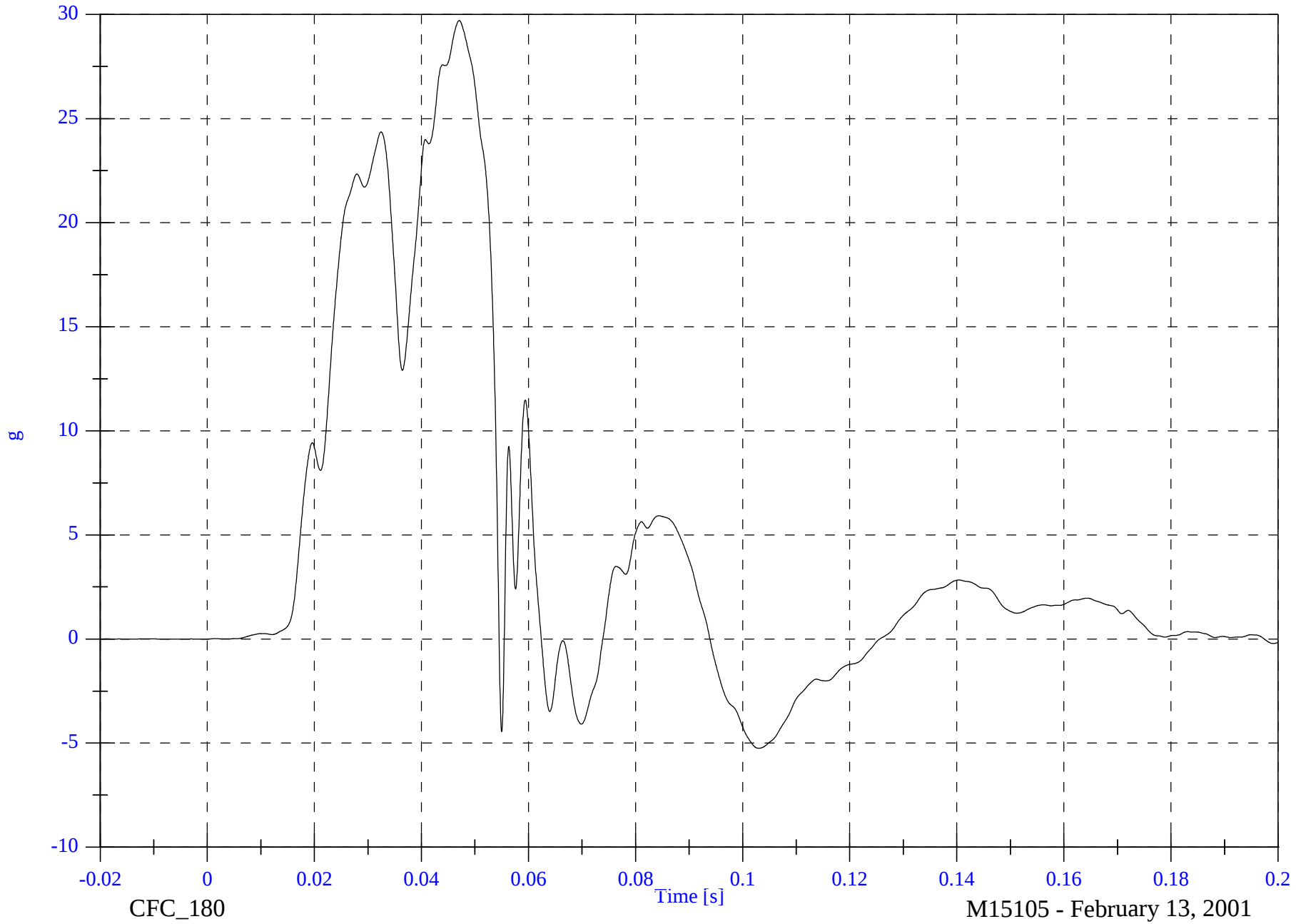
P1 Lower Spine Ry

Max: 29.7 [g] at 0.047 [s]

Min: -5.3 [g] at 0.103 [s]

B-115

8506-15

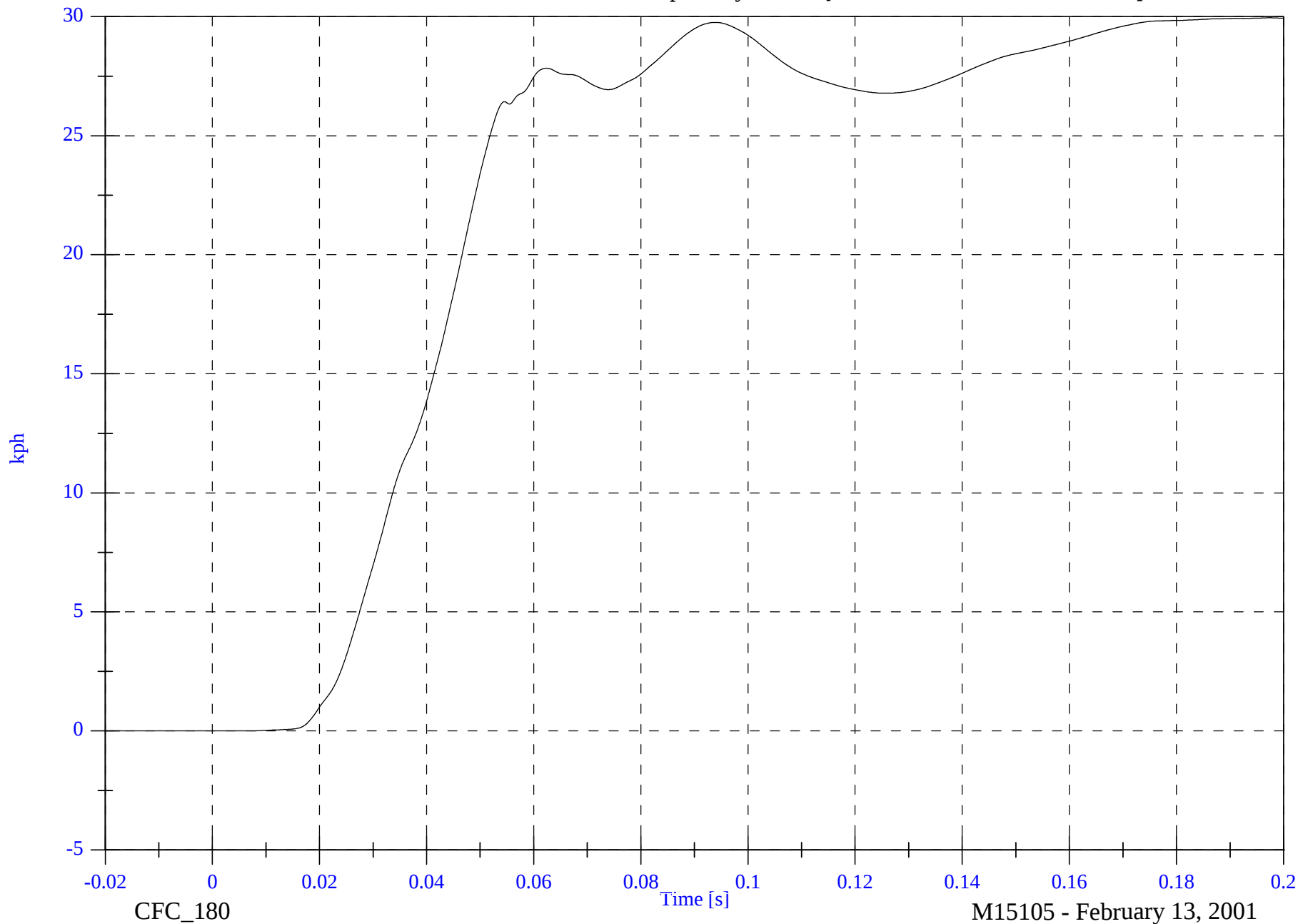


SNCAP Test 15 2001 Lexus RX300

P1 Lower Spine Ry Velocity

Max: 30.0 [kph] at 0.197 [s]

Min: -0.0 [kph] at -0.020 [s]



B-116

8506-15

SNCAP Test 15 2001 Lexus RX300

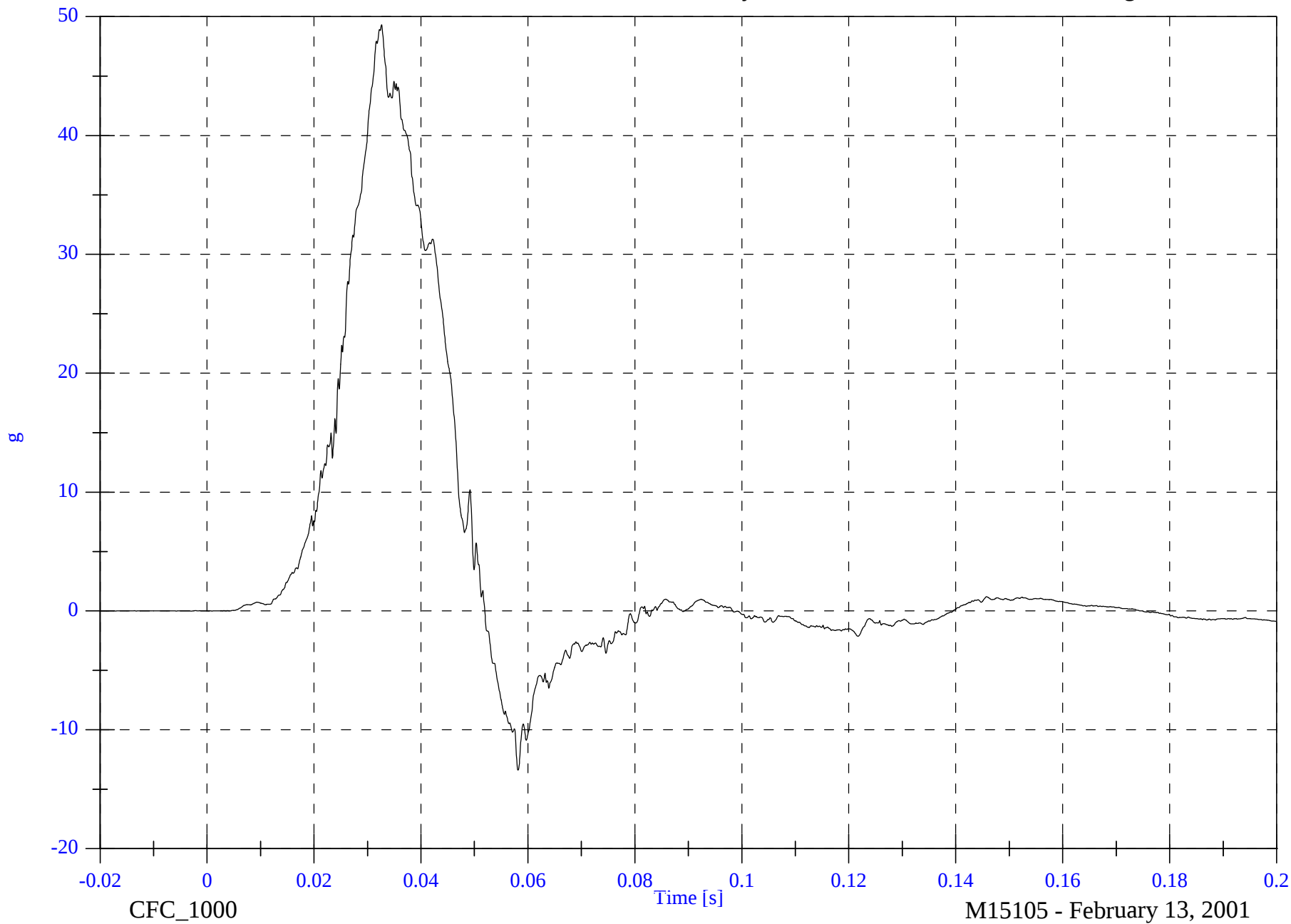
P1 Pelvic Ry

Max: 49.3 [g] at 0.033 [s]

Min: -13.4 [g] at 0.058 [s]

B-117

8506-15

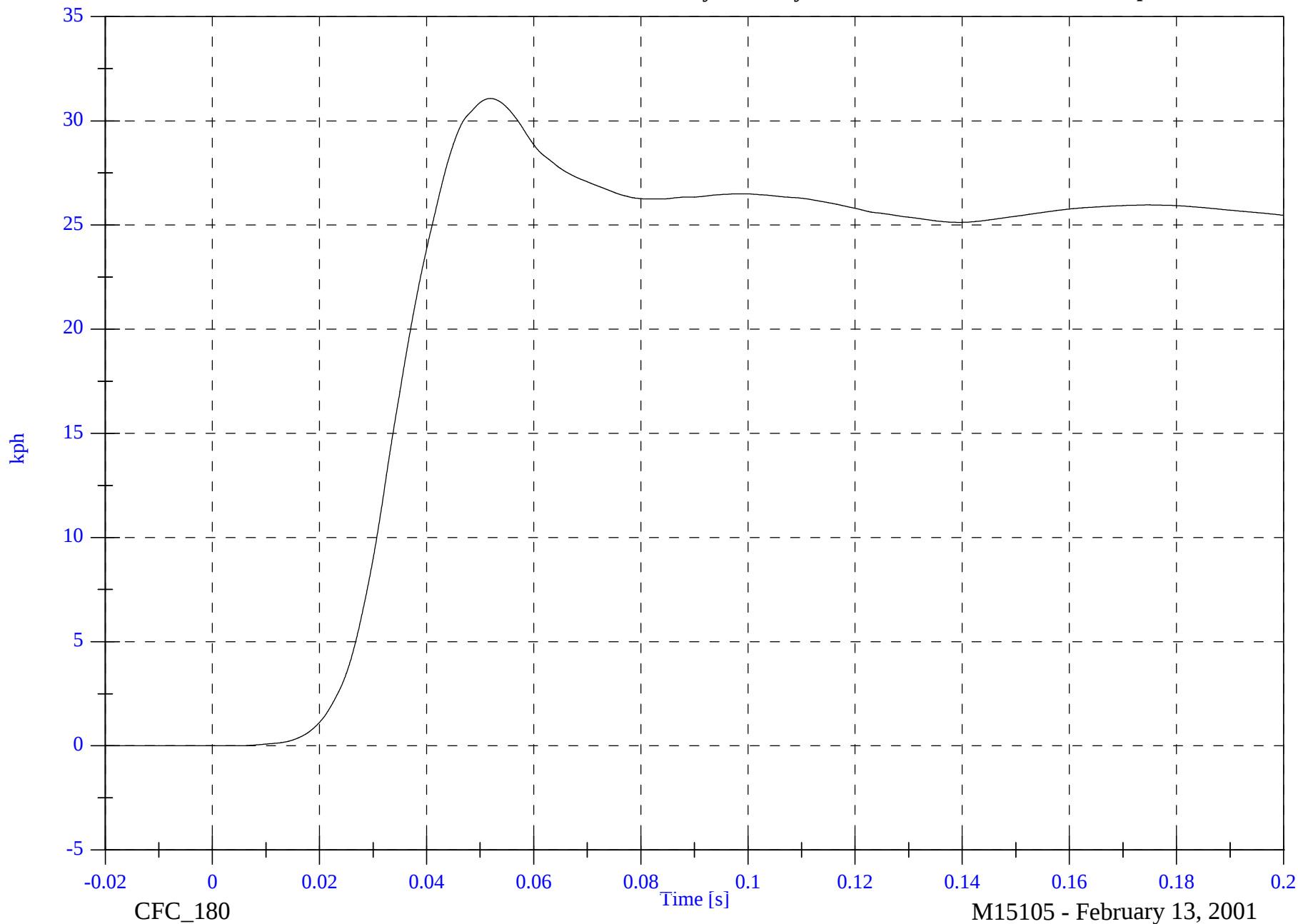


SNCAP Test 15 2001 Lexus RX300

P1 Pelvic Ry Velocity

Max: 31.1 [kph] at 0.052 [s]

Min: -0.0 [kph] at -0.018 [s]



B-118

8506-15

SNCAP Test 15 2001 Lexus RX300

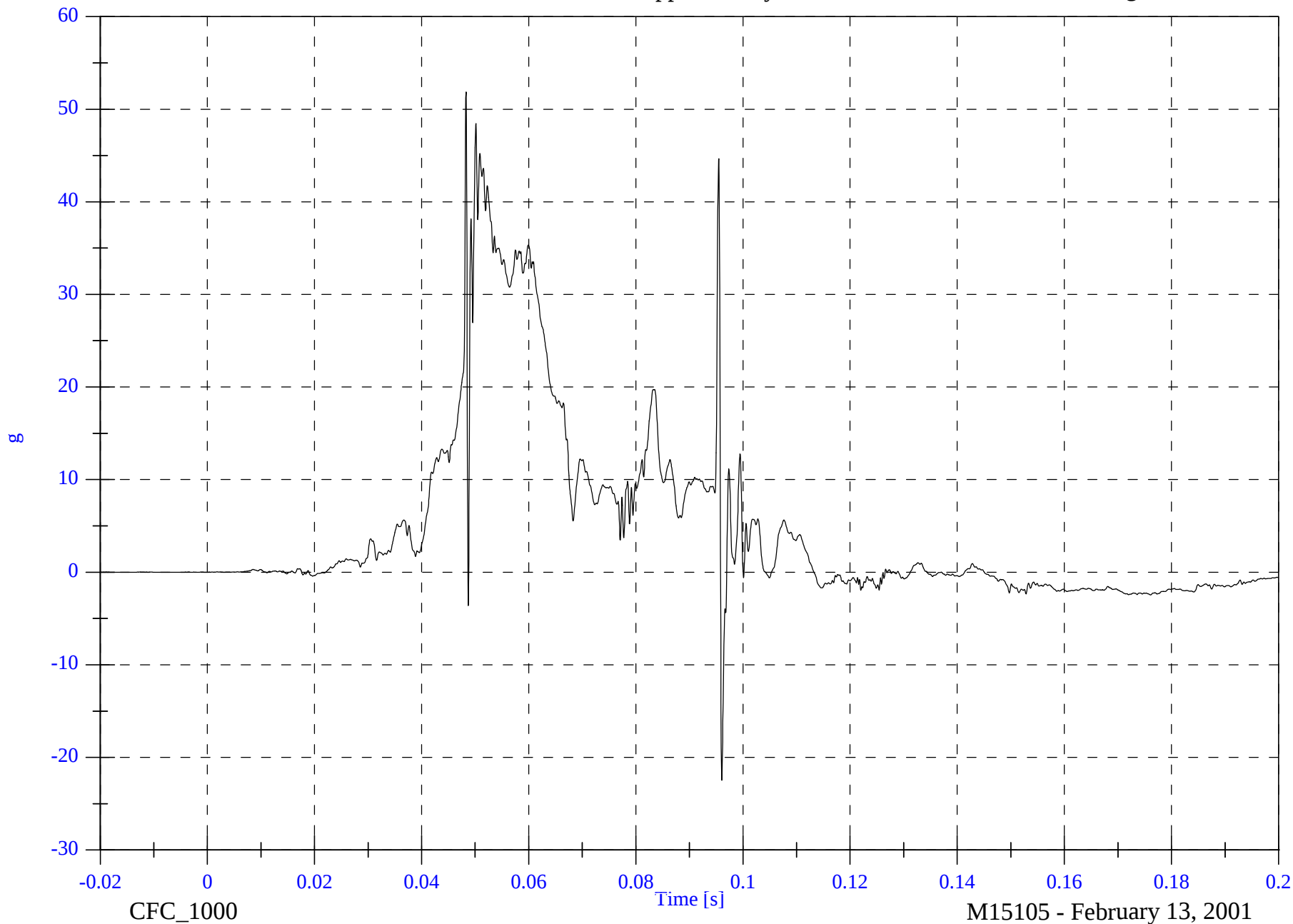
P4 Upper Rib Ry

Max: 51.9 [g] at 0.048 [s]

Min: -22.5 [g] at 0.096 [s]

B-119

8506-15

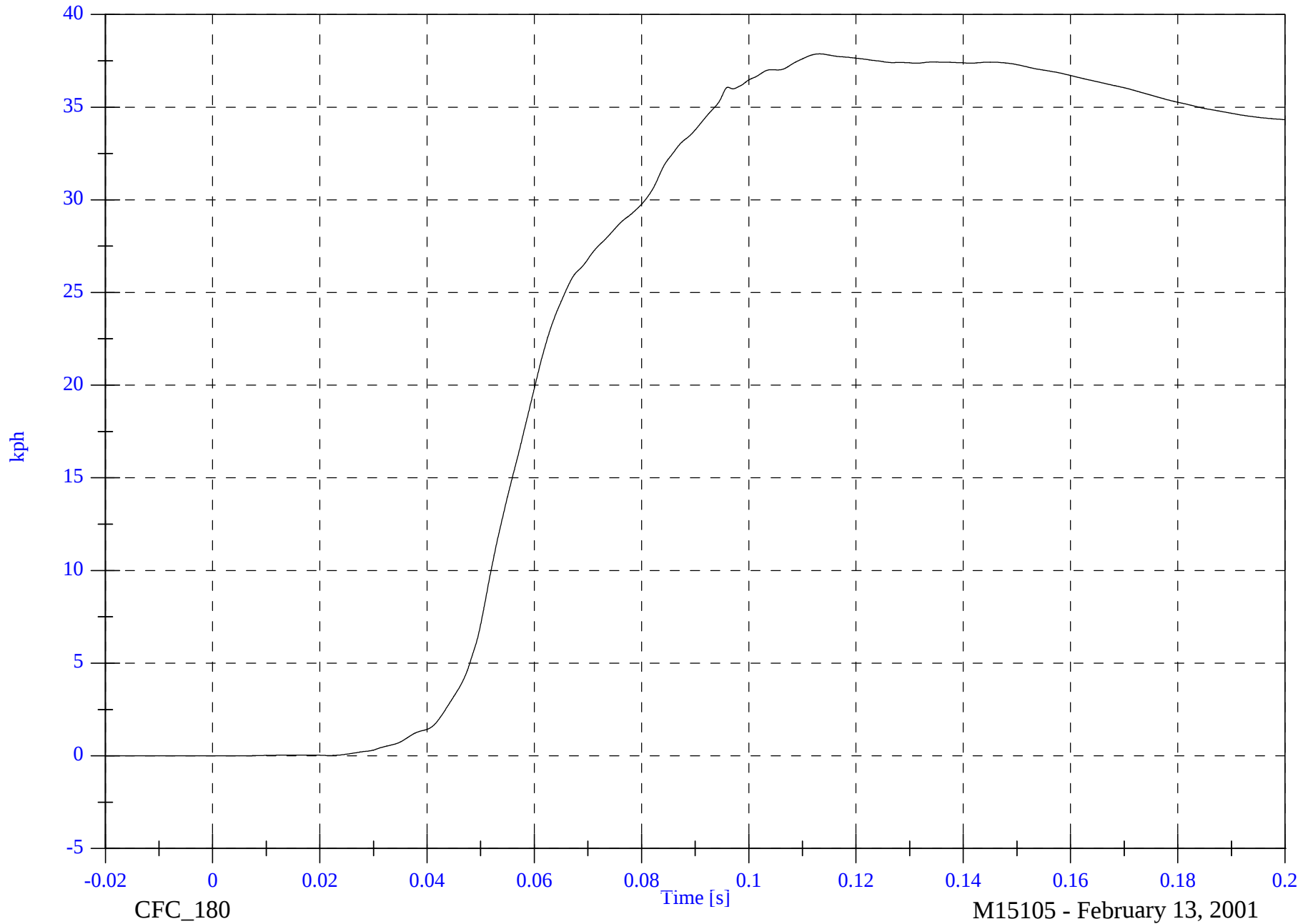


SNCAP Test 15 2001 Lexus RX300

P4 Upper Rib Ry Velocity

Max: 37.9 [kph] at 0.113 [s]

Min: -0.0 [kph] at -0.020 [s]



B-120

8506-15

CFC_180

M15105 - February 13, 2001

SNCAP Test 15 2001 Lexus RX300

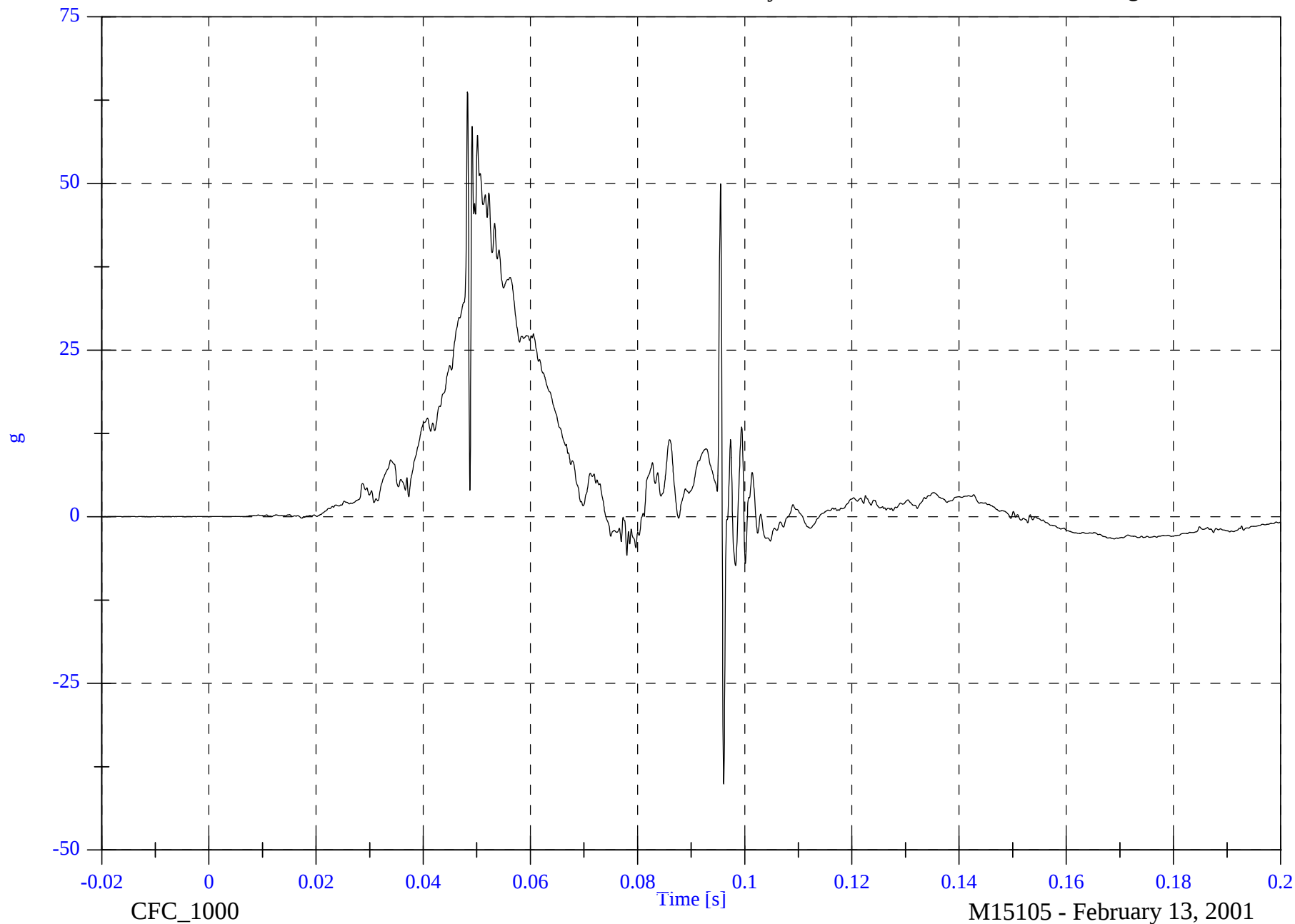
P4 Lower Rib Ry

Max: 63.7 [g] at 0.048 [s]

Min: -40.1 [g] at 0.096 [s]

B-121

8506-15

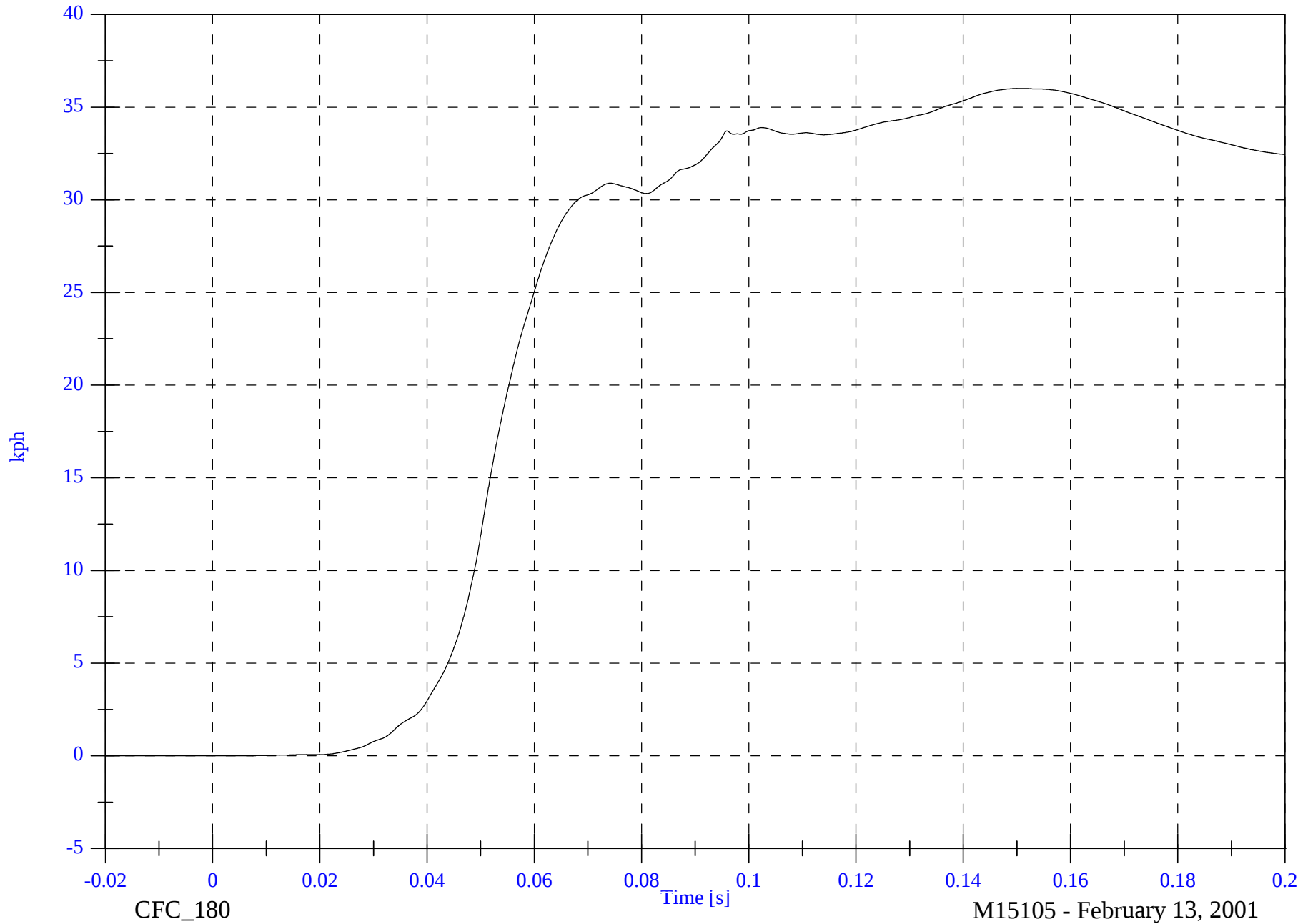


SNCAP Test 15 2001 Lexus RX300

P4 Lower Rib Ry Velocity

Max: 36.0 [kph] at 0.151 [s]

Min: -0.0 [kph] at -0.020 [s]



B-122

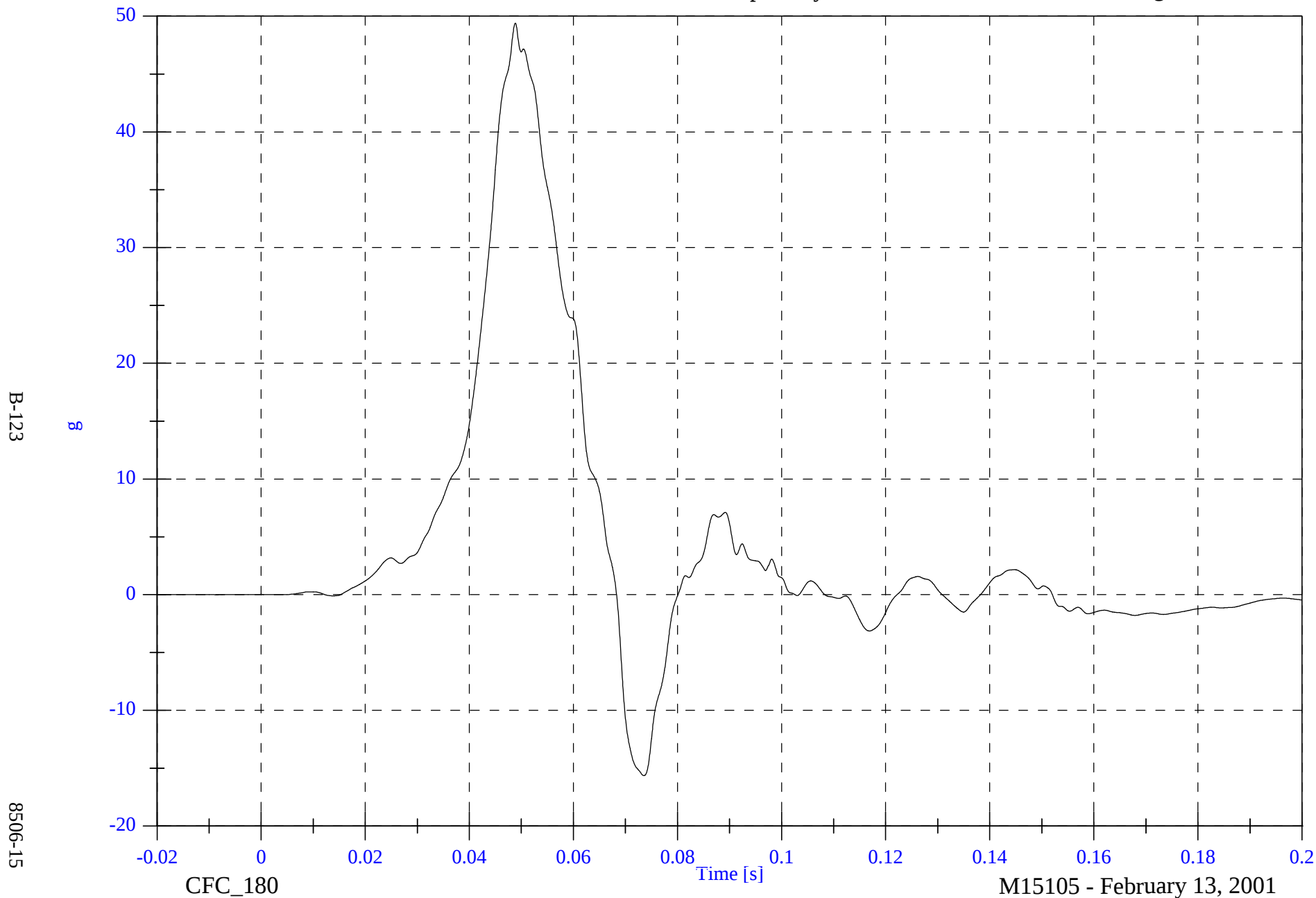
8506-15

SNCAP Test 15 2001 Lexus RX300

P4 Lower Spine Ry

Max: 49.4 [g] at 0.049 [s]

Min: -15.6 [g] at 0.074 [s]

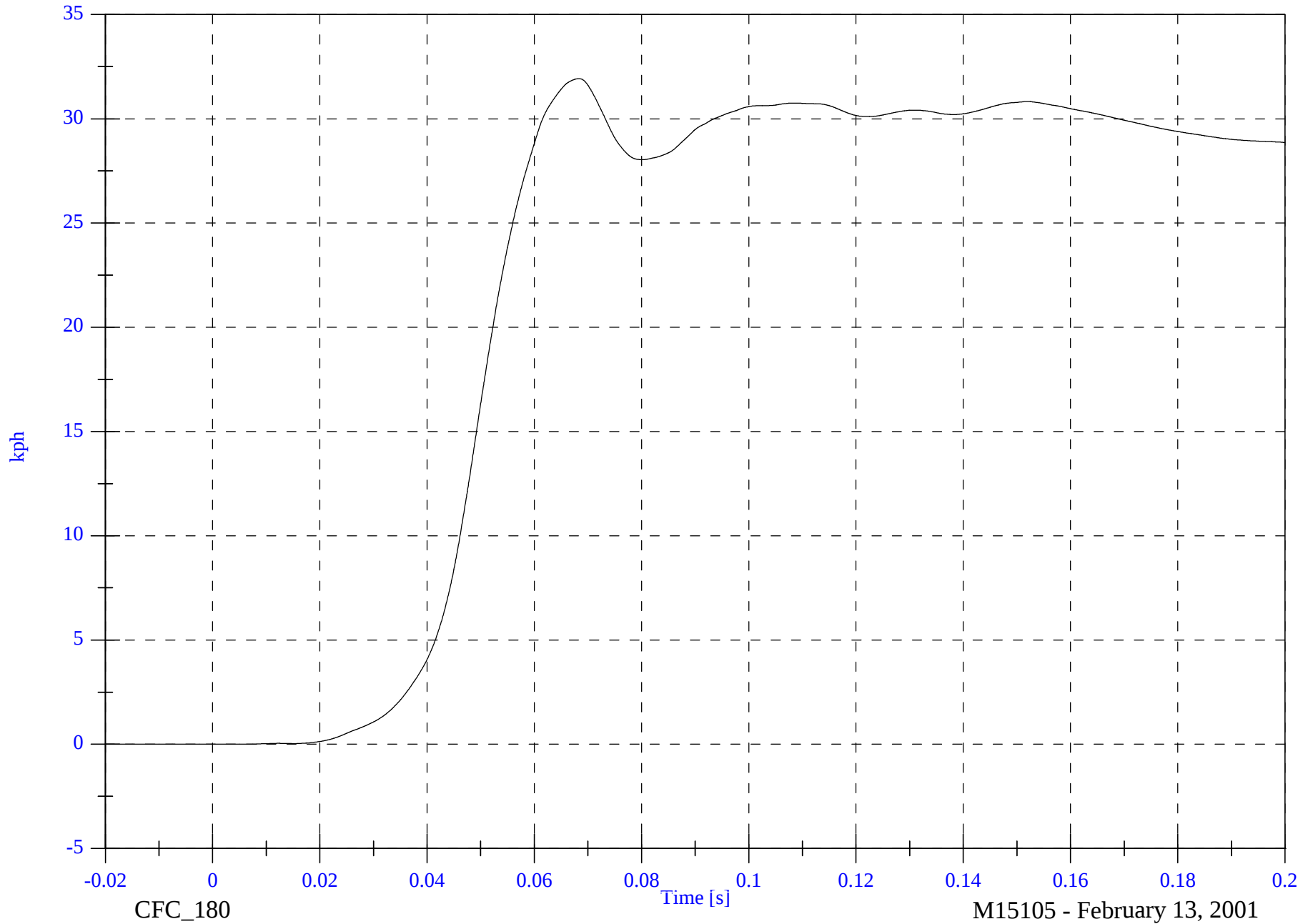


SNCAP Test 15 2001 Lexus RX300

P4 Lower Spine Ry Velocity

Max: 31.9 [kph] at 0.068 [s]

Min: -0.0 [kph] at -0.020 [s]



B-124

8506-15

SNCAP Test 15 2001 Lexus RX300

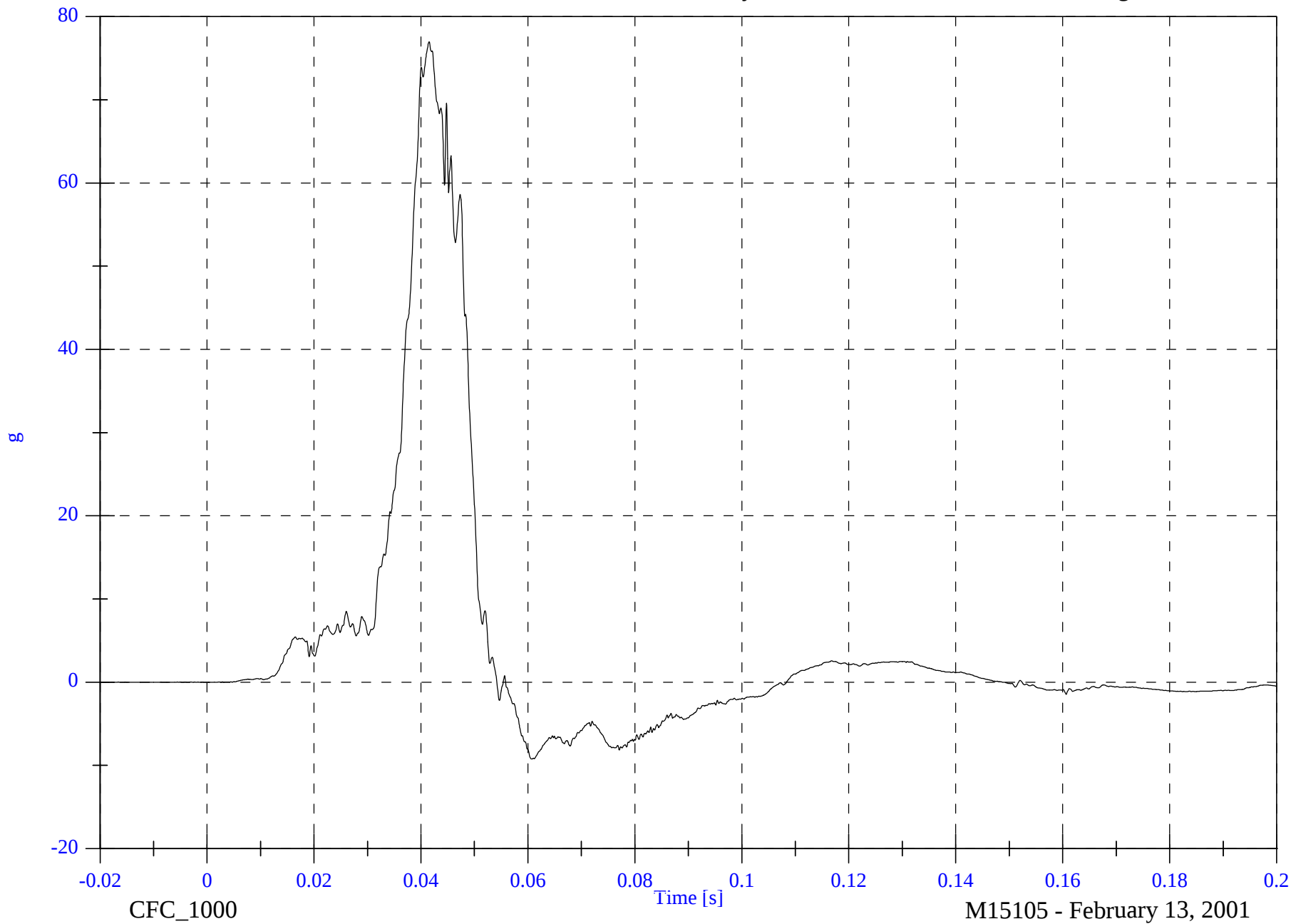
P4 Pelvic Ry

Max: 77.0 [g] at 0.042 [s]

Min: -9.2 [g] at 0.061 [s]

B-125

8506-15

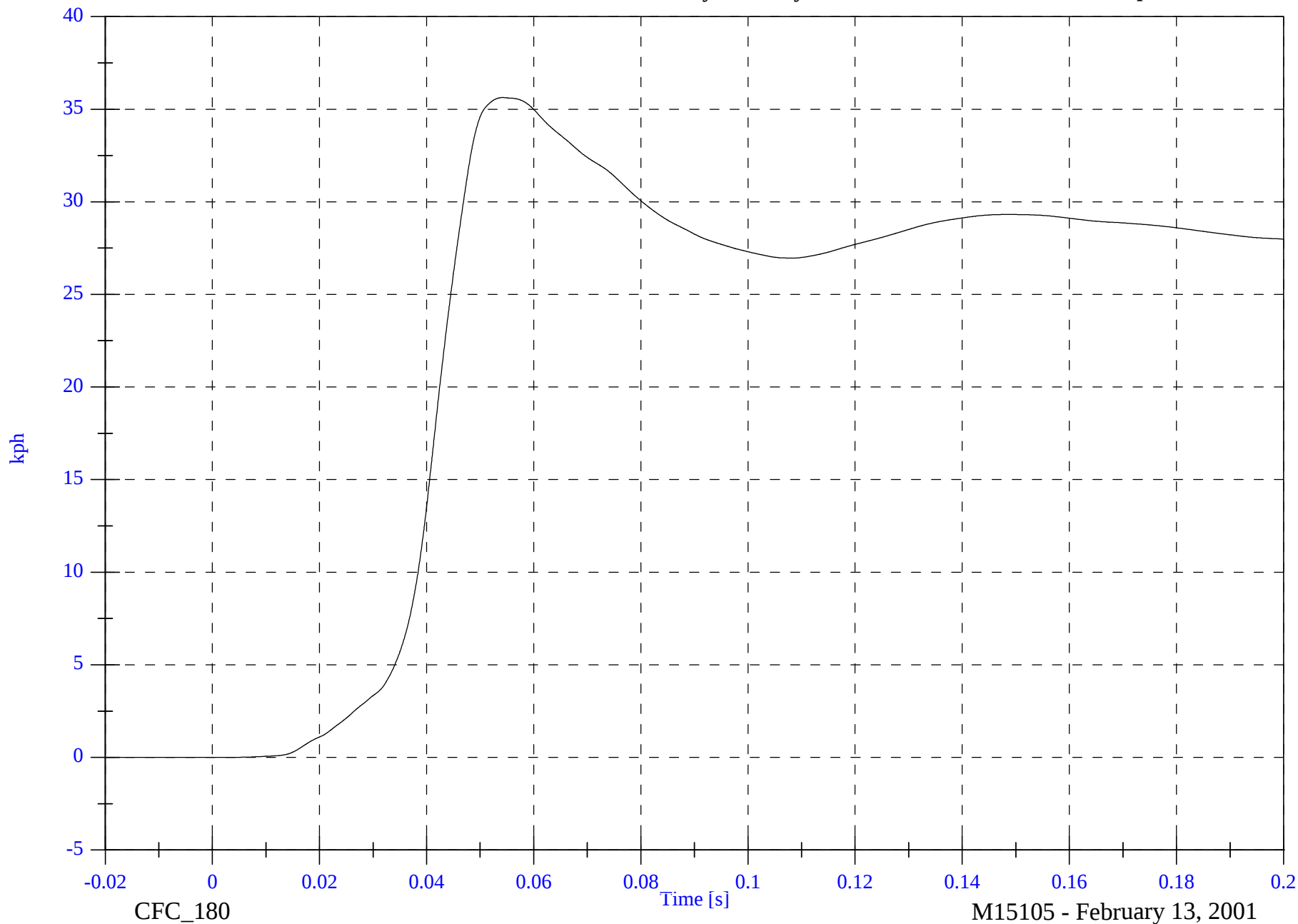


SNCAP Test 15 2001 Lexus RX300

P4 Pelvic Ry Velocity

Max: 35.6 [kph] at 0.054 [s]

Min: -0.0 [kph] at -0.020 [s]



B-126

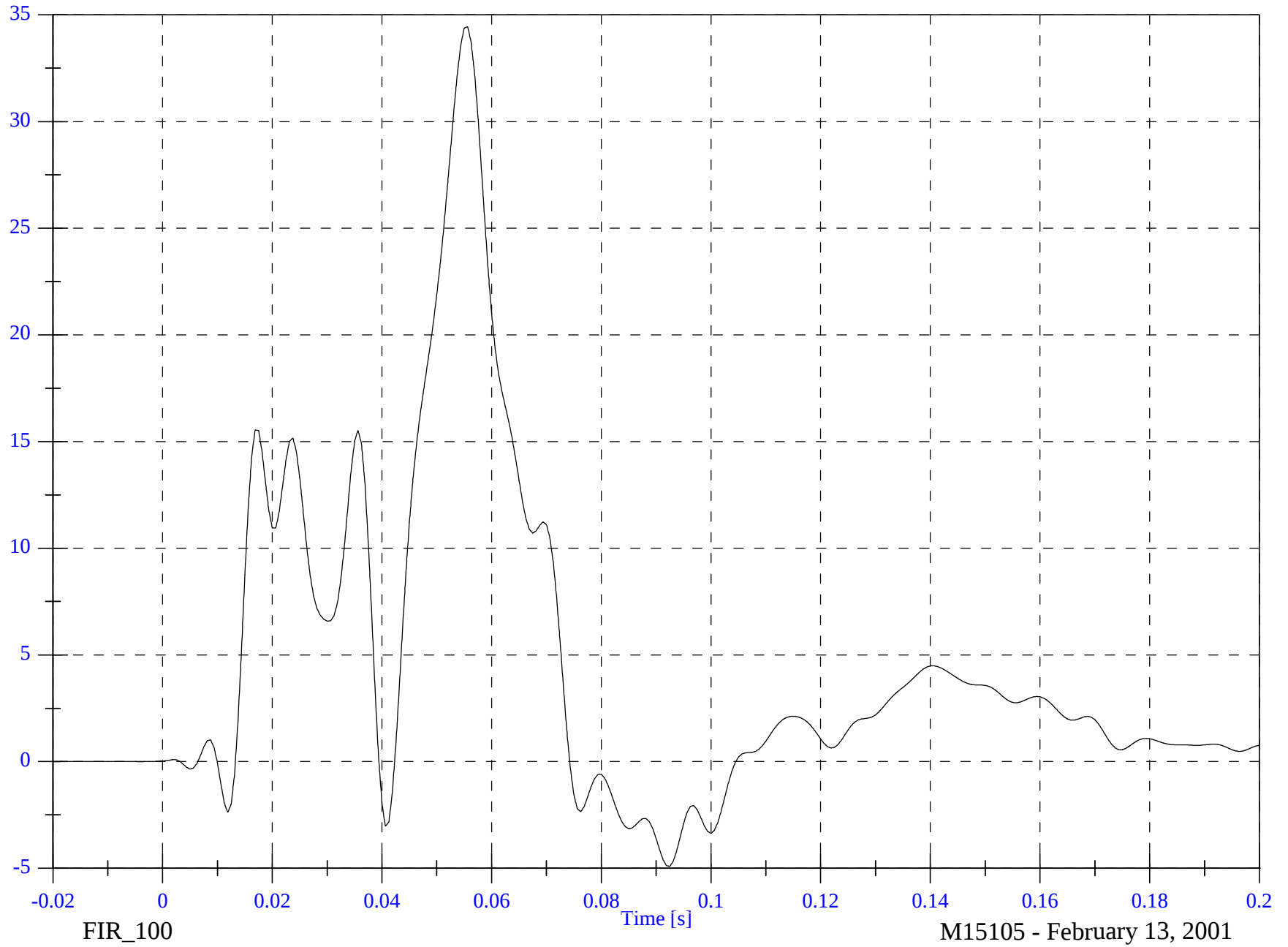
8506-15

SNCAP Test 15 2001 Lexus RX300

P1 Upper Rib Ry

Max: 34.4 [g] at 0.056 [s]

Min: -4.9 [g] at 0.093 [s]



B-127

8506-15

SNCAP Test 15 2001 Lexus RX300

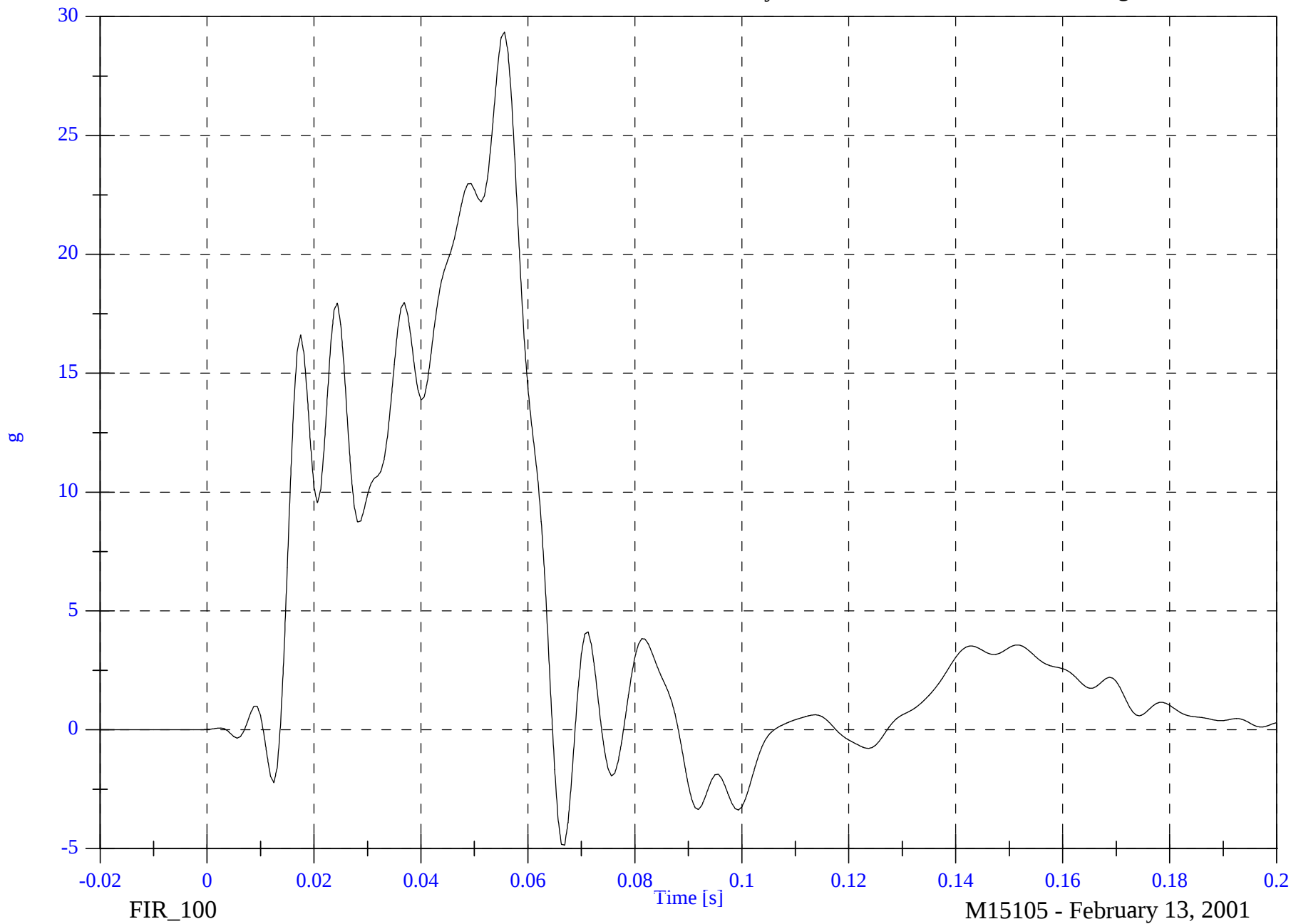
P1 Lower Rib Ry

Max: 29.4 [g] at 0.056 [s]

Min: -4.9 [g] at 0.067 [s]

B-128

8506-15



SNCAP Test 15 2001 Lexus RX300

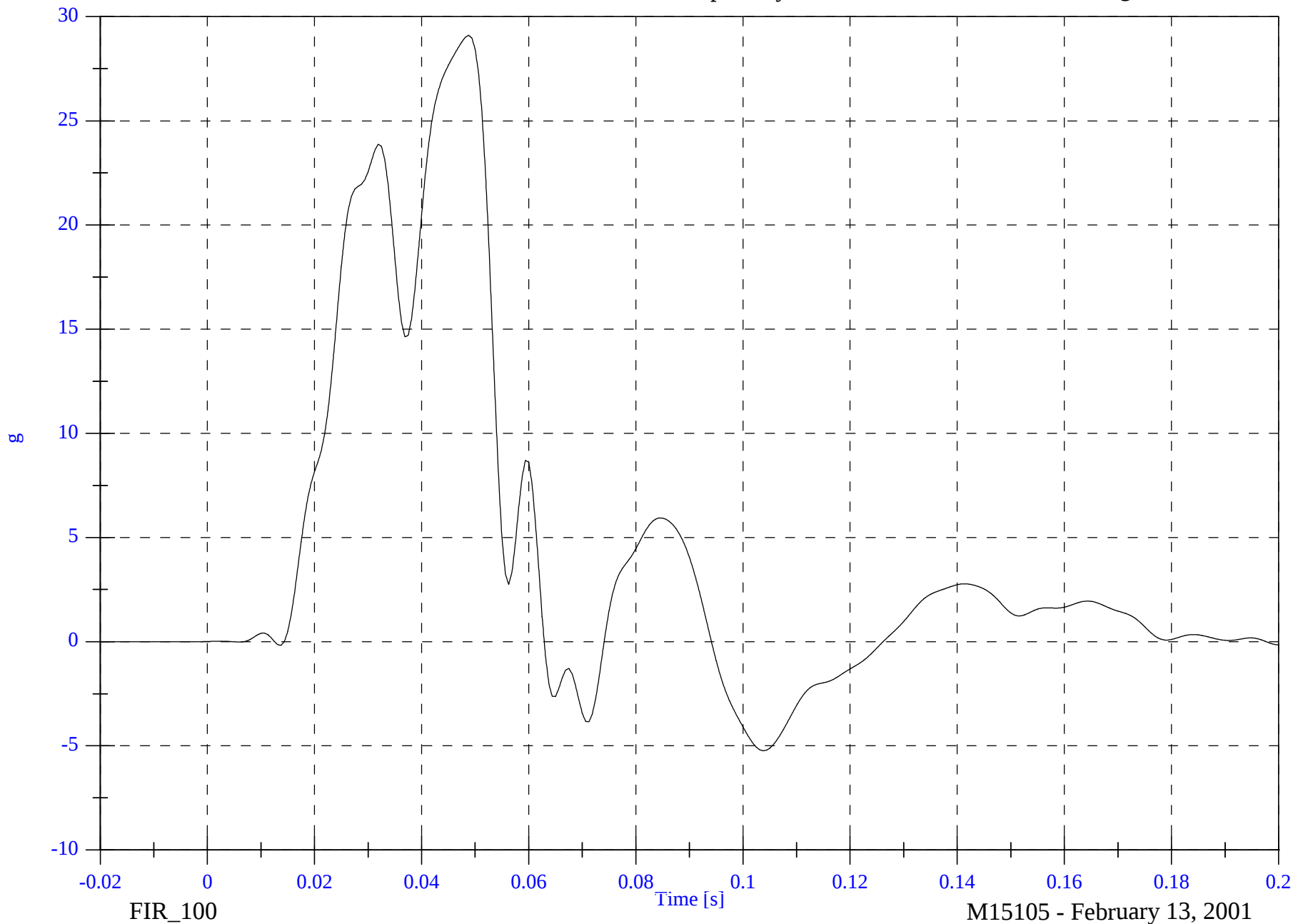
P1 Lower Spine Ry

Max: 29.1 [g] at 0.049 [s]

Min: -5.2 [g] at 0.104 [s]

B-129

8506-15

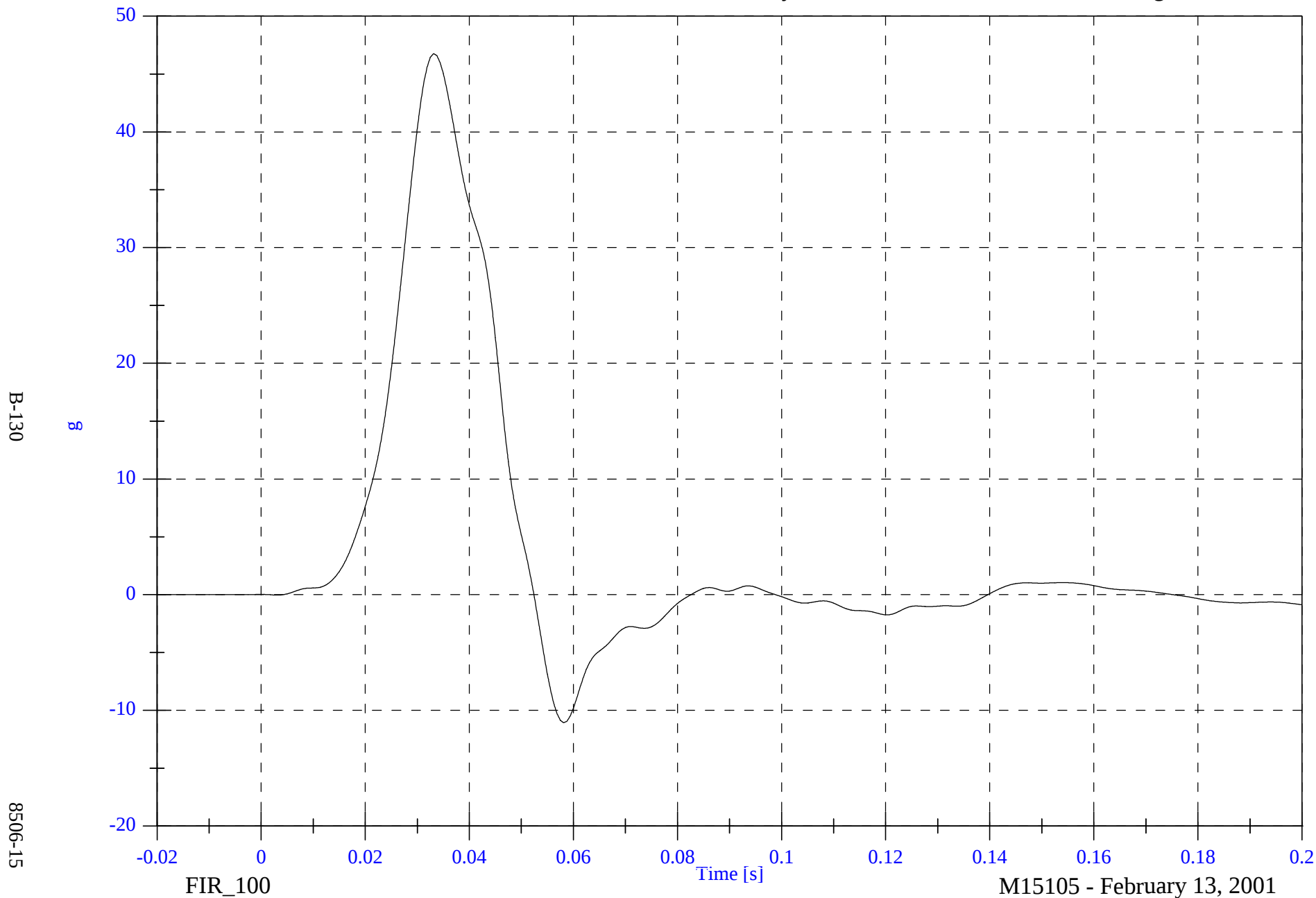


SNCAP Test 15 2001 Lexus RX300

P1 Pelvic Ry

Max: 46.8 [g] at 0.033 [s]

Min: -11.1 [g] at 0.058 [s]



SNCAP Test 15 2001 Lexus RX300

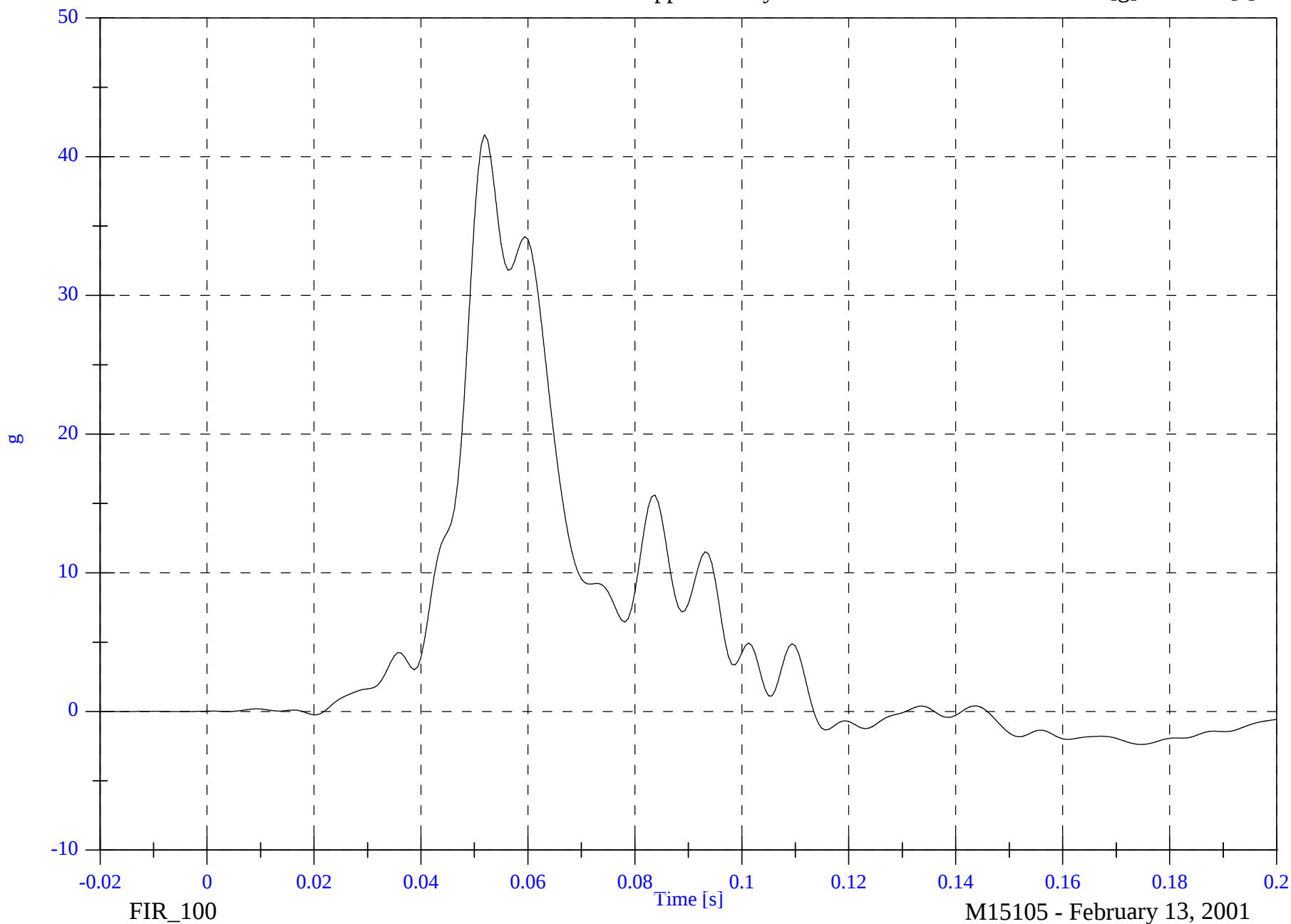
P4 Upper Rib Ry

Max: 41.6 [g] at 0.052 [s]

Min: -2.4 [g] at 0.175 [s]

B-131

8506-15



SNCAP Test 15 2001 Lexus RX300

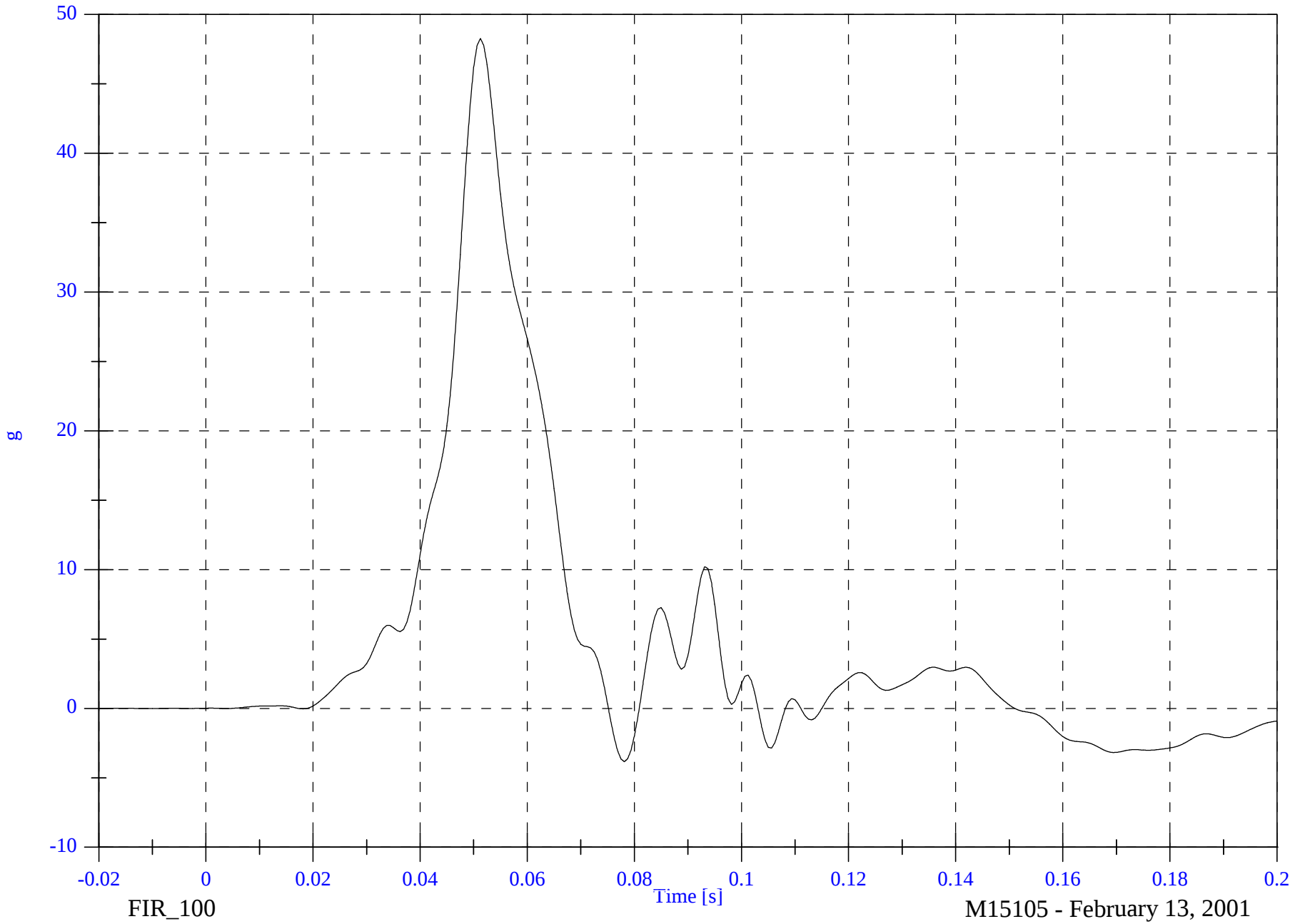
P4 Lower Rib Ry

Max: 48.3 [g] at 0.051 [s]

Min: -3.8 [g] at 0.078 [s]

B-132

8506-15

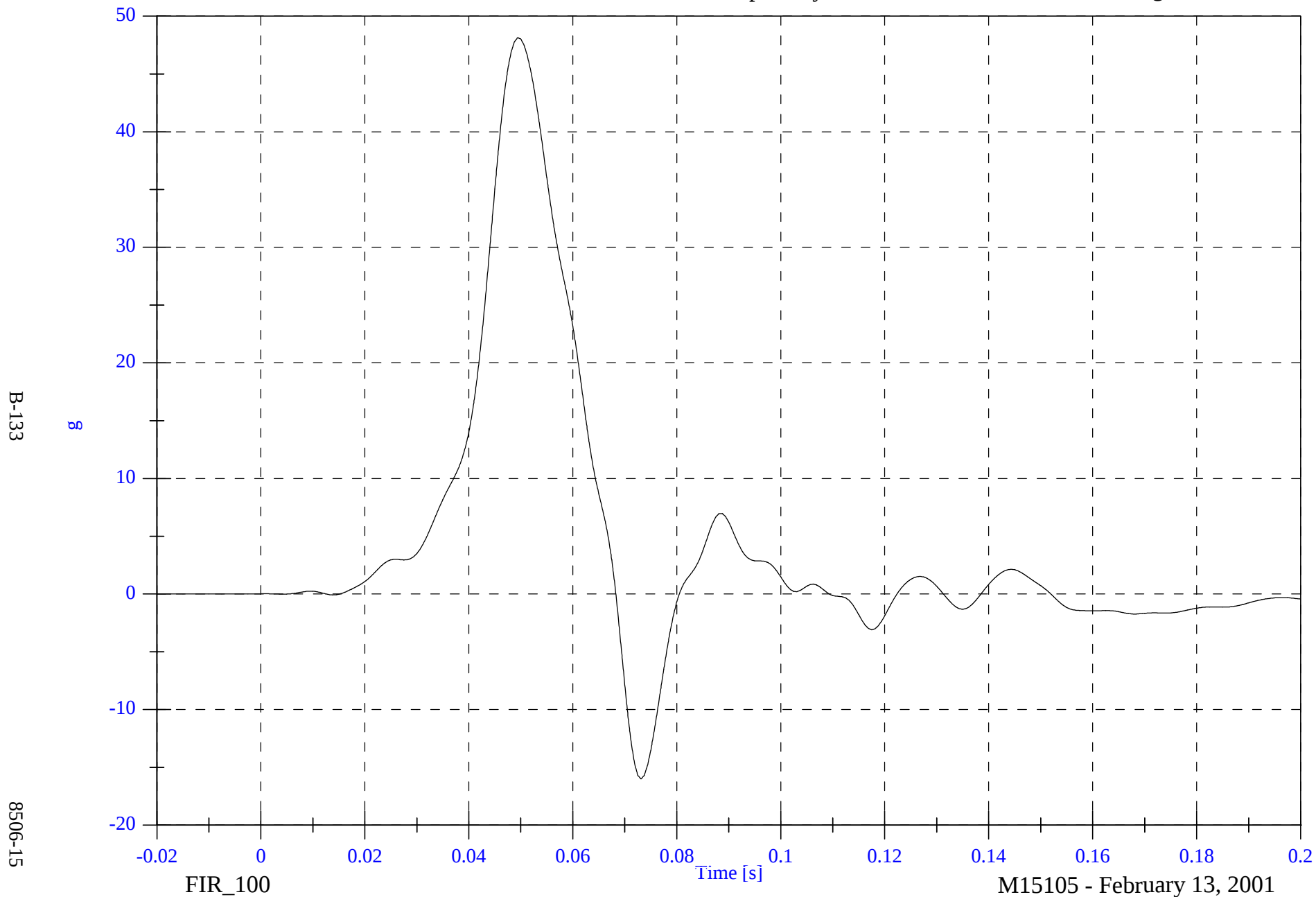


SNCAP Test 15 2001 Lexus RX300

P4 Lower Spine Ry

Max: 48.1 [g] at 0.049 [s]

Min: -16.0 [g] at 0.073 [s]



SNCAP Test 15 2001 Lexus RX300

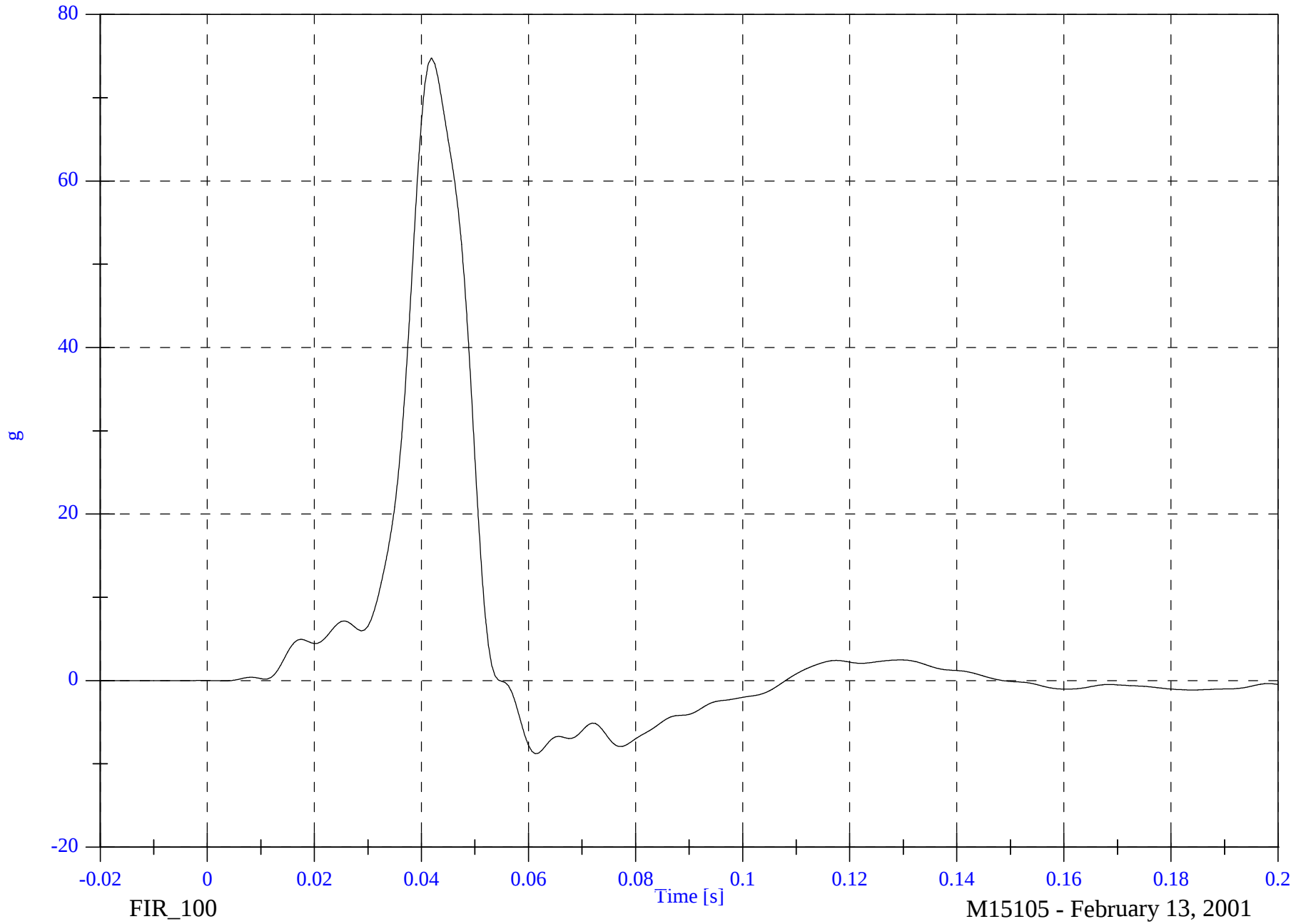
P4 Pelvic Ry

Max: 74.8 [g] at 0.042 [s]

Min: -8.8 [g] at 0.061 [s]

B-134

8506-15



APPENDIX C

SID CONFIGURATION AND PERFORMANCE VERIFICATION DATA

SUMMARY
SID PRE & POST TEST CALIBRATION

CONFIGURED FOR LEFT SIDE IMPACT

Date: 1/21/01, 1/26/01; 2/15/01, 2/16/01 Sequential Test Number: 5;1
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID NO.: 013		SID NO.: 027	
		PRE TEST	POST TEST	PRE TEST	POST TEST
SH- Seated Height (mm)	889 - 909	902	900	904	907
RH- Rib Height (mm)	501 - 521	512	511	518	518
HP- Hip Pivot Height (mm)	99 ref.	99	99	99	99
RD- Rib from Back Line (mm)	229 - 241	236	236	236	236
KV- Knee Pivot from Back Line (mm)	511 - 526	518	518	518	518
SW- Knee Pivot to Floor (mm)	490 - 505	493	493	494	493
HW- Hip Width (mm)	356 - 391	373	376	368	368
THORAX IMPACTS					
TEMPERATURE (°C)	18.9 - 25.5	21.7	21.7	21.1	20.1
RELATIVE HUMIDITY (%)	10 - 70	31	31	32	31
PROBE SPEED (m/s)	4.27 - 4.33	4.29	4.29	4.30	4.33
UPPER RIB (g's)	37 - 46	38.8	39.7	38.3	37.2
LOWER RIB (g's)	37 - 46	38.1	40.3	39.2	38.6
LOWER SPINE (g's)	15 - 22	20.2	21.7	20.1	21.0
PELVIS IMPACT					
TEMPERATURE (°C)	18.9 - 25.5	21.7	21.7	21.1	20.1
RELATIVE HUMIDITY (%)	10 - 70	31	32	32	31
PROBE SPEED (m/s)	4.27 - 4.33	4.29	4.28	4.27	4.27
PELVIS (g's)	40 - 60	44.1	43.4	50.0	49.7

REMARKS: None

**CALIBRATION TEST RESULTS
PRE-TEST**

SID NO.: 013

CONFIGURED FOR LEFT SIDE IMPACT

CALIBRATION TEST RESULTS SUMMARY
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
THORACIC SHOCK ABSORBER TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	512
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	373

REMARKS: None

THORACIC SHOCK ABSORBER TESTS
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: September 26, 2000 Laboratory Technician: B. Swiecicki

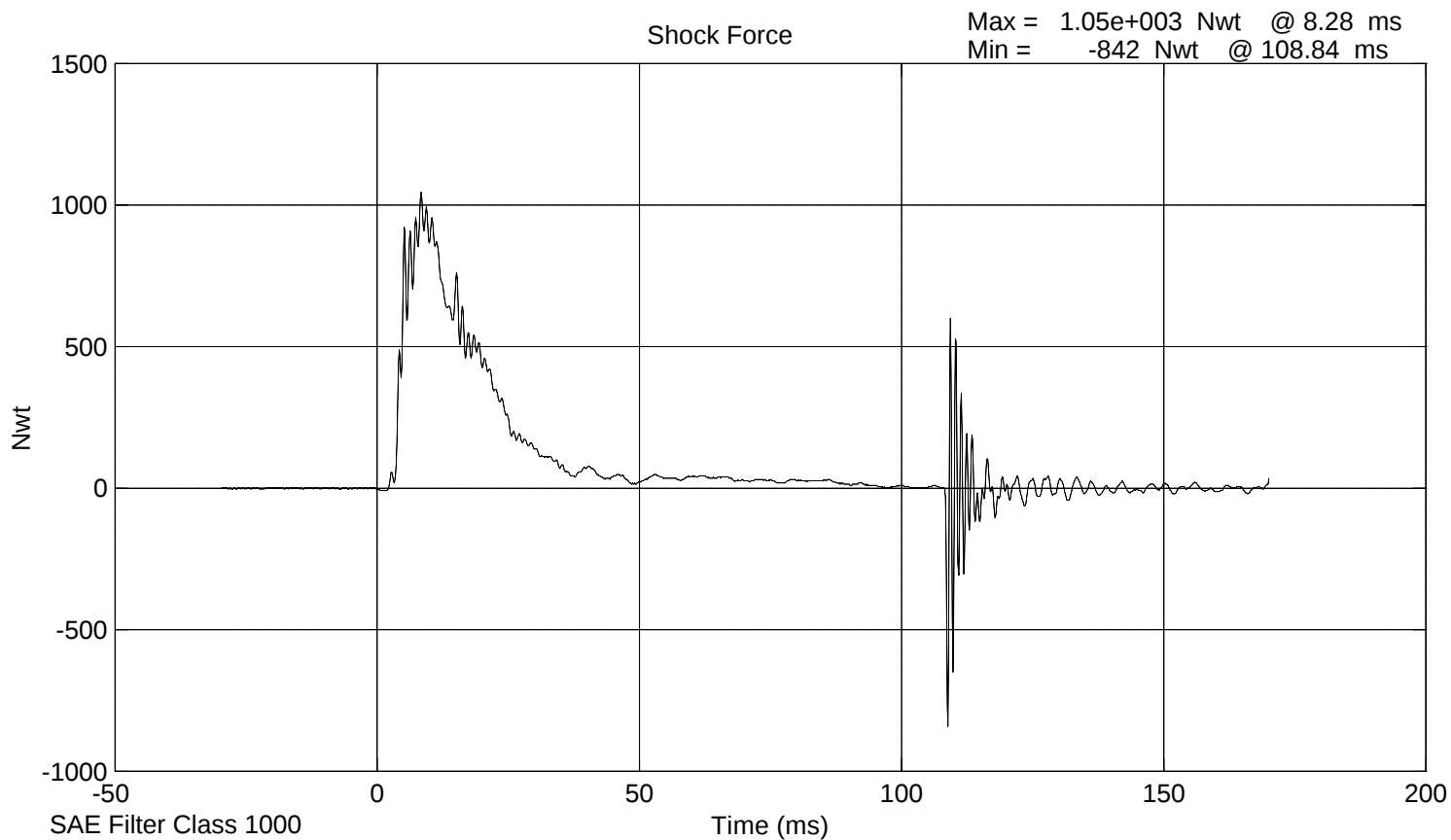
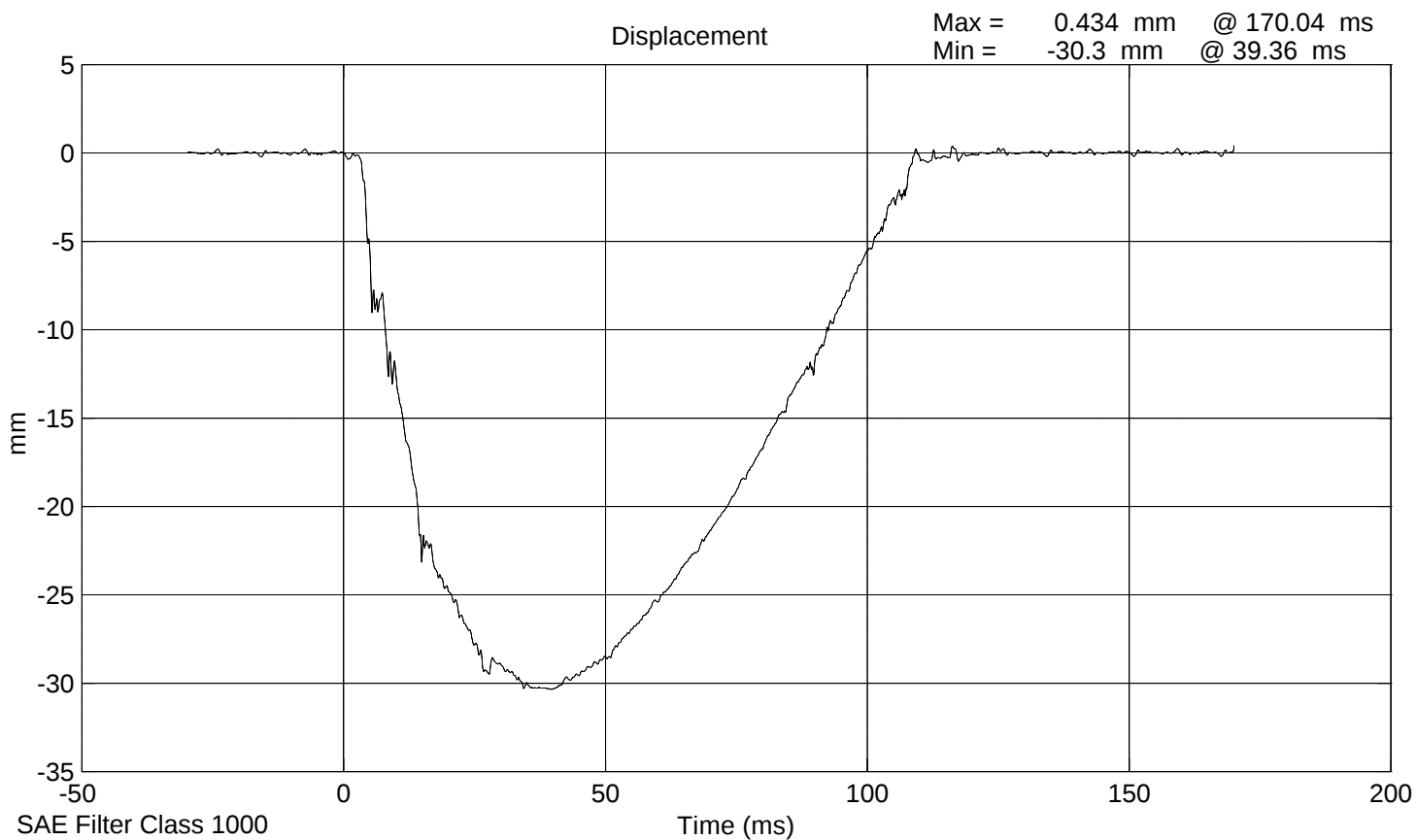
DAMPER IDENTIFICATION: 013

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)		10 - 70	30
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	1046
	DISPLACEMENT (mm)	30 - 35	30
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	1899
	DISPLACEMENT (mm)	32 - 37	34
VELOCITY 6.10 m/s	FORCE (N)	3741 - 4448	4263
	DISPLACEMENT (mm)	33 - 40	36

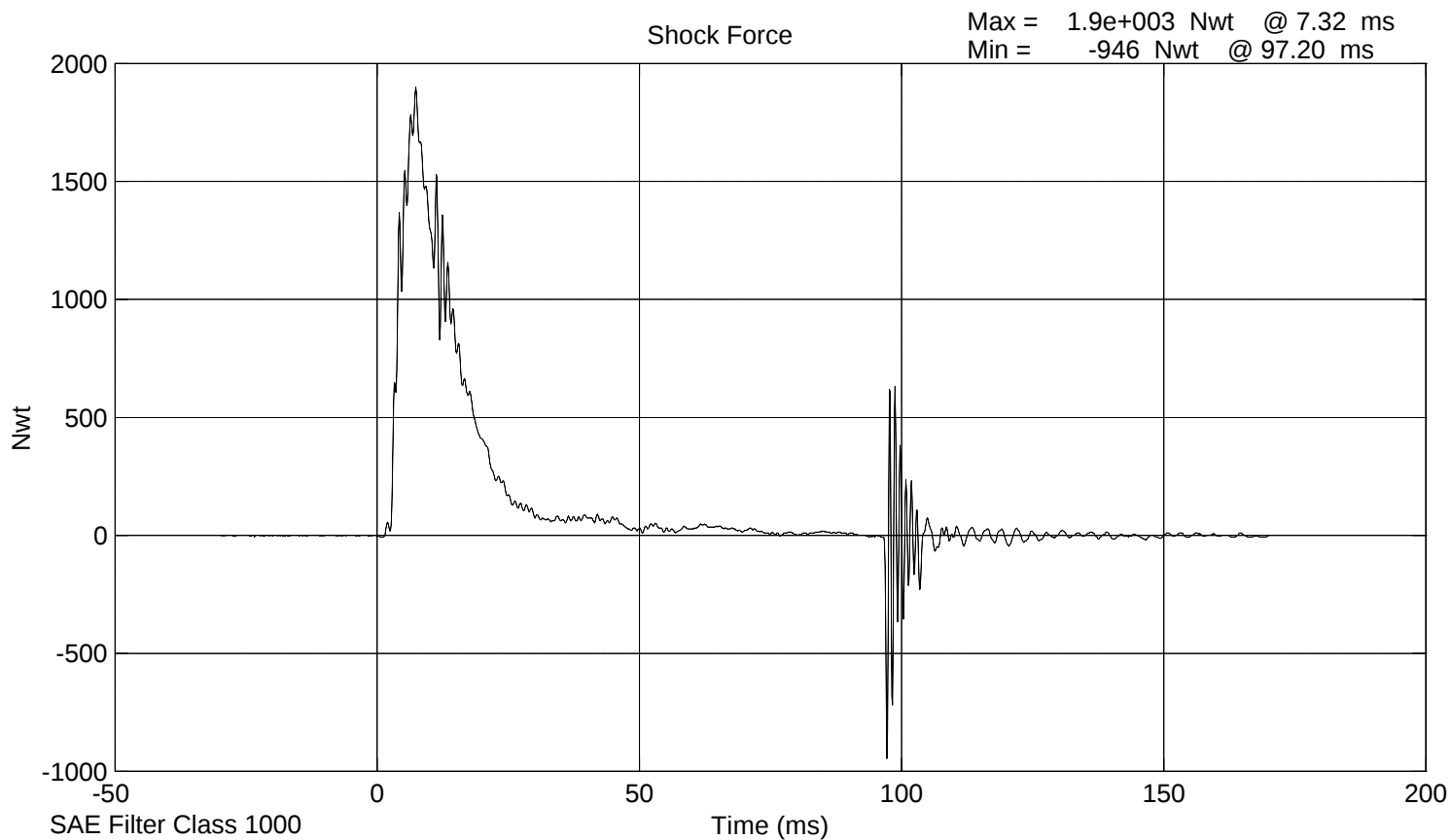
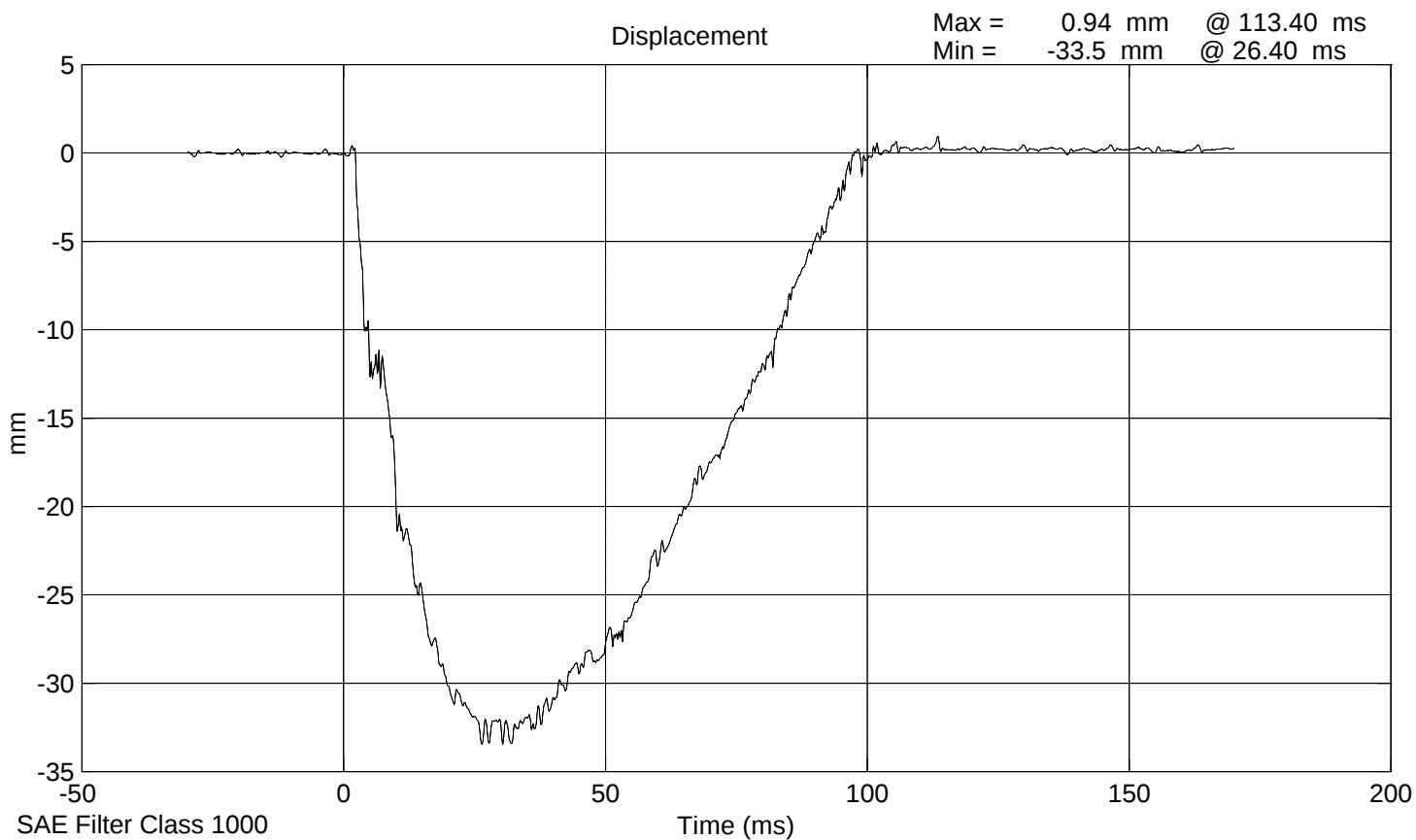
DAMPER SETTING: 5

REMARKS: None

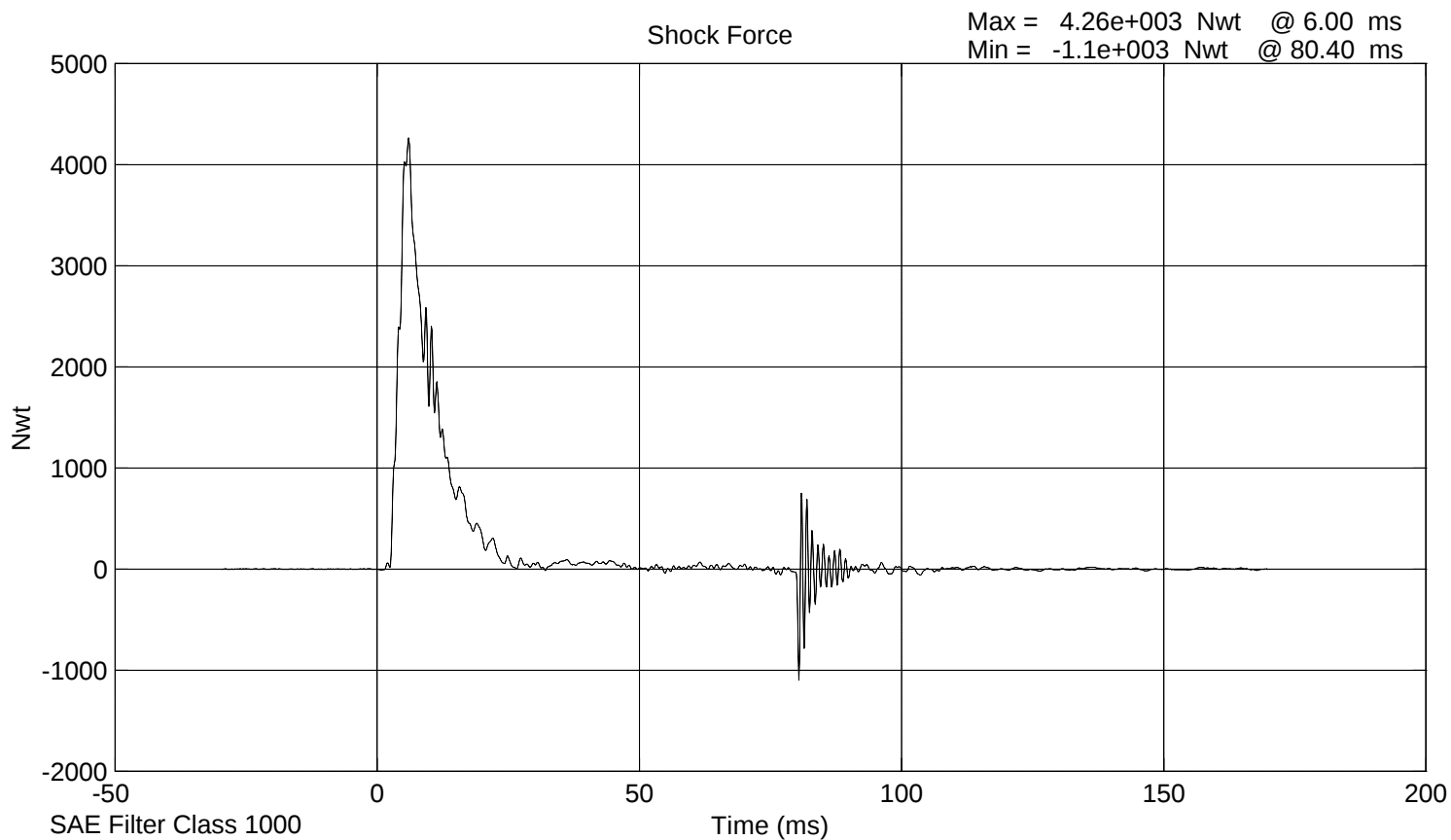
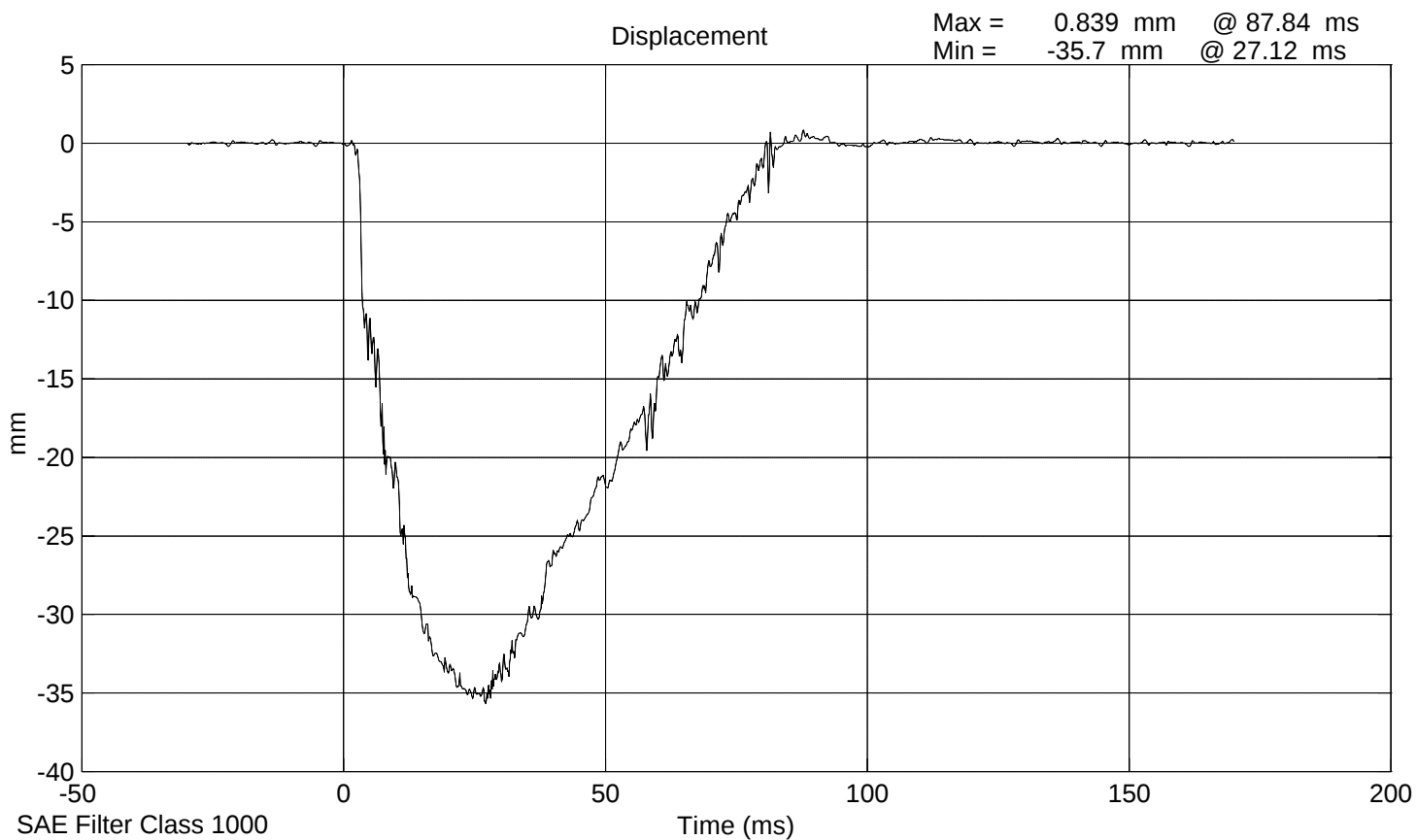
SID 013 Shock Absorber Impact Test @ 3.048 m/s



SID 013 Shock Absorber Impact Test @ 4.2672 m/s



SID 013 Shock Absorber Impact Test @ 6.096 m/s



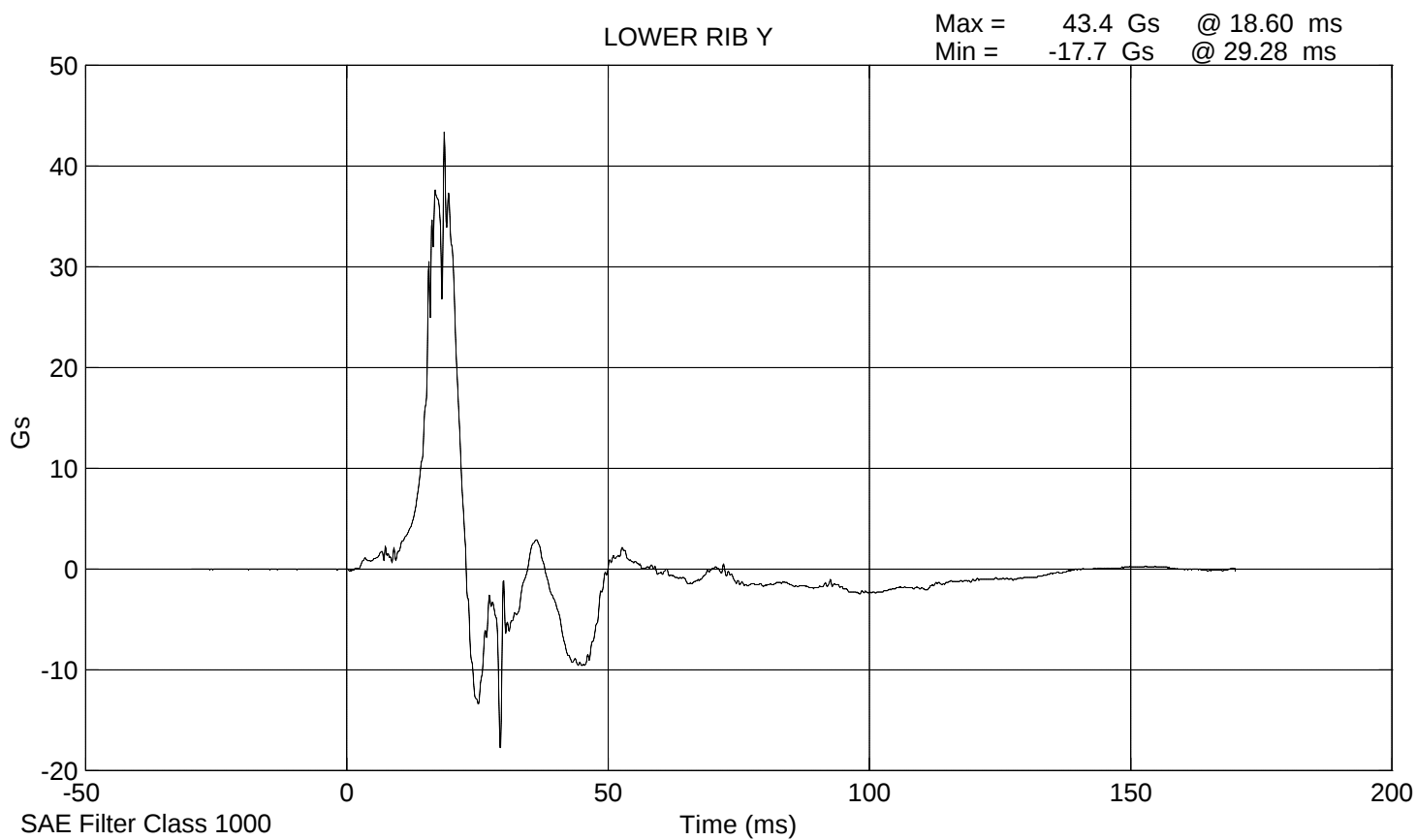
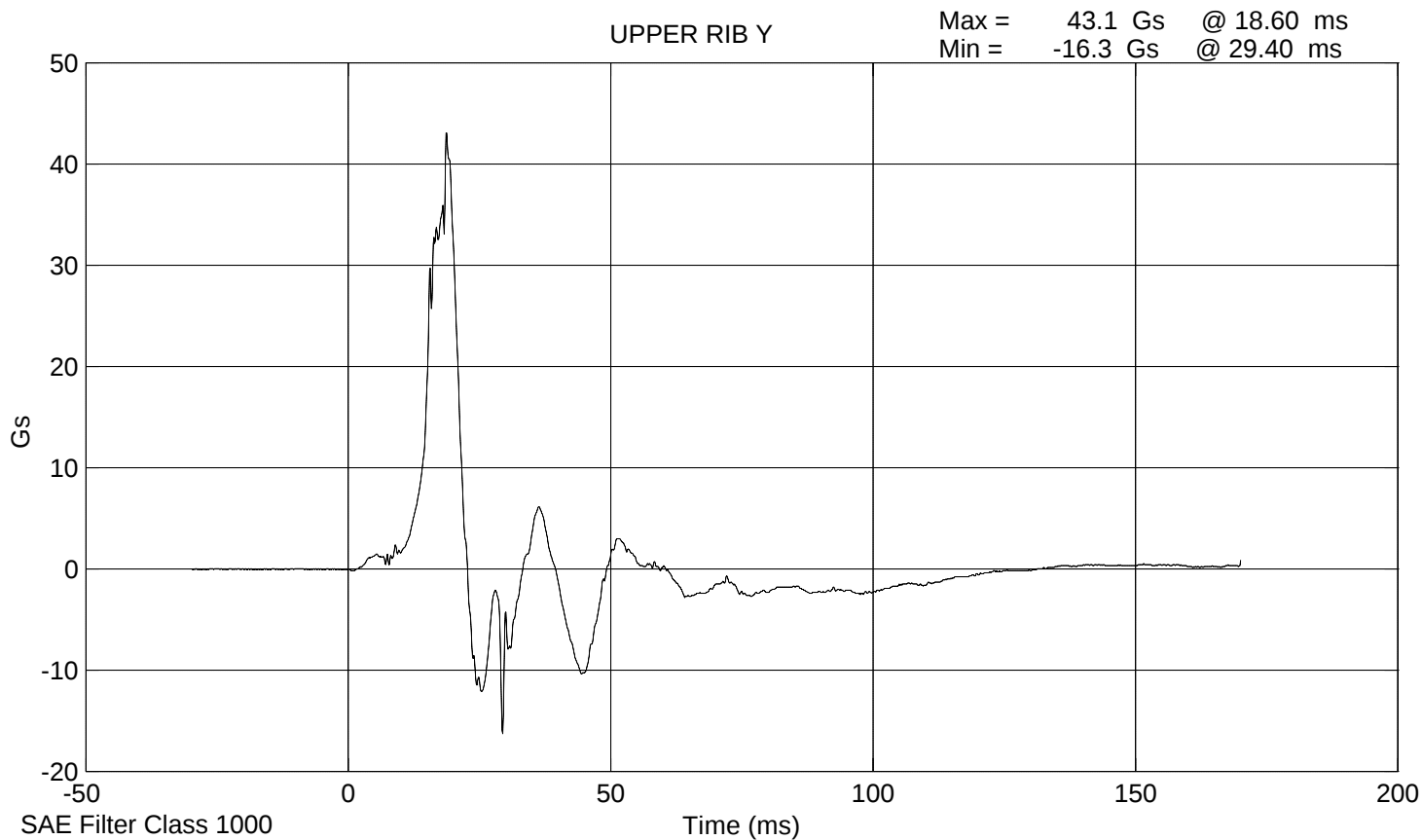
**LATERAL THORAX IMPACT TEST
PRE-TEST**

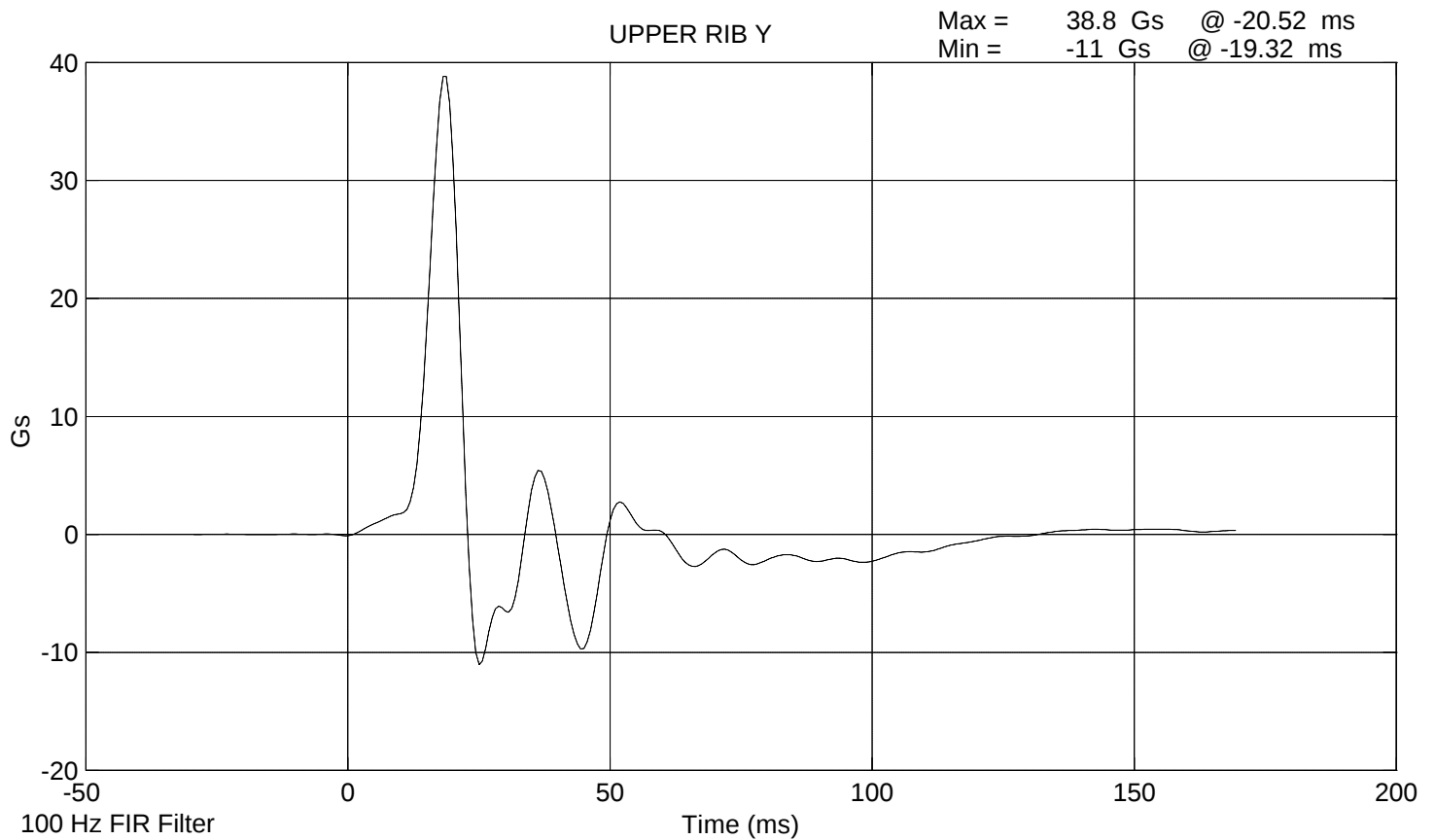
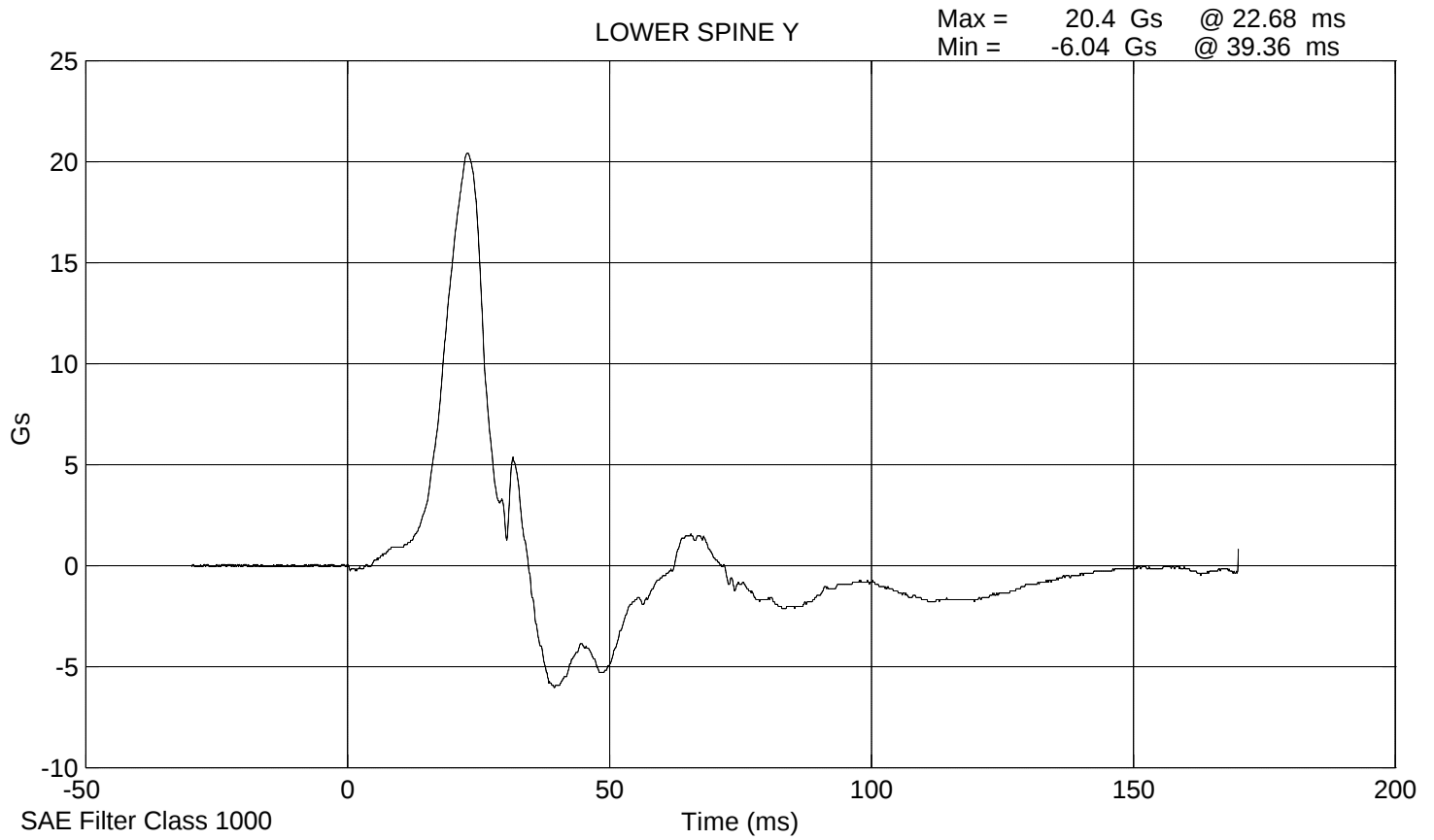
CONFIGURED FOR LEFT SIDE IMPACT

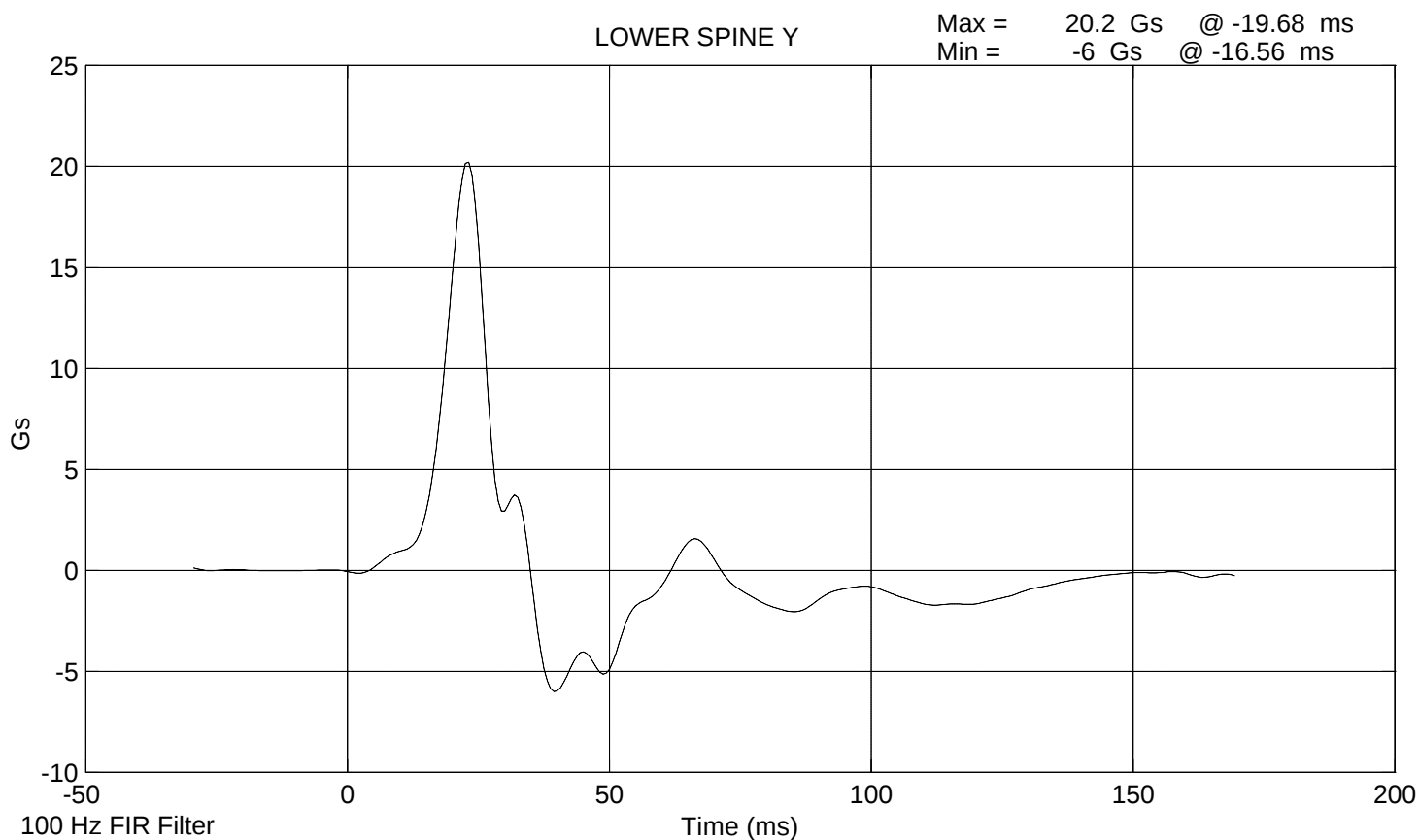
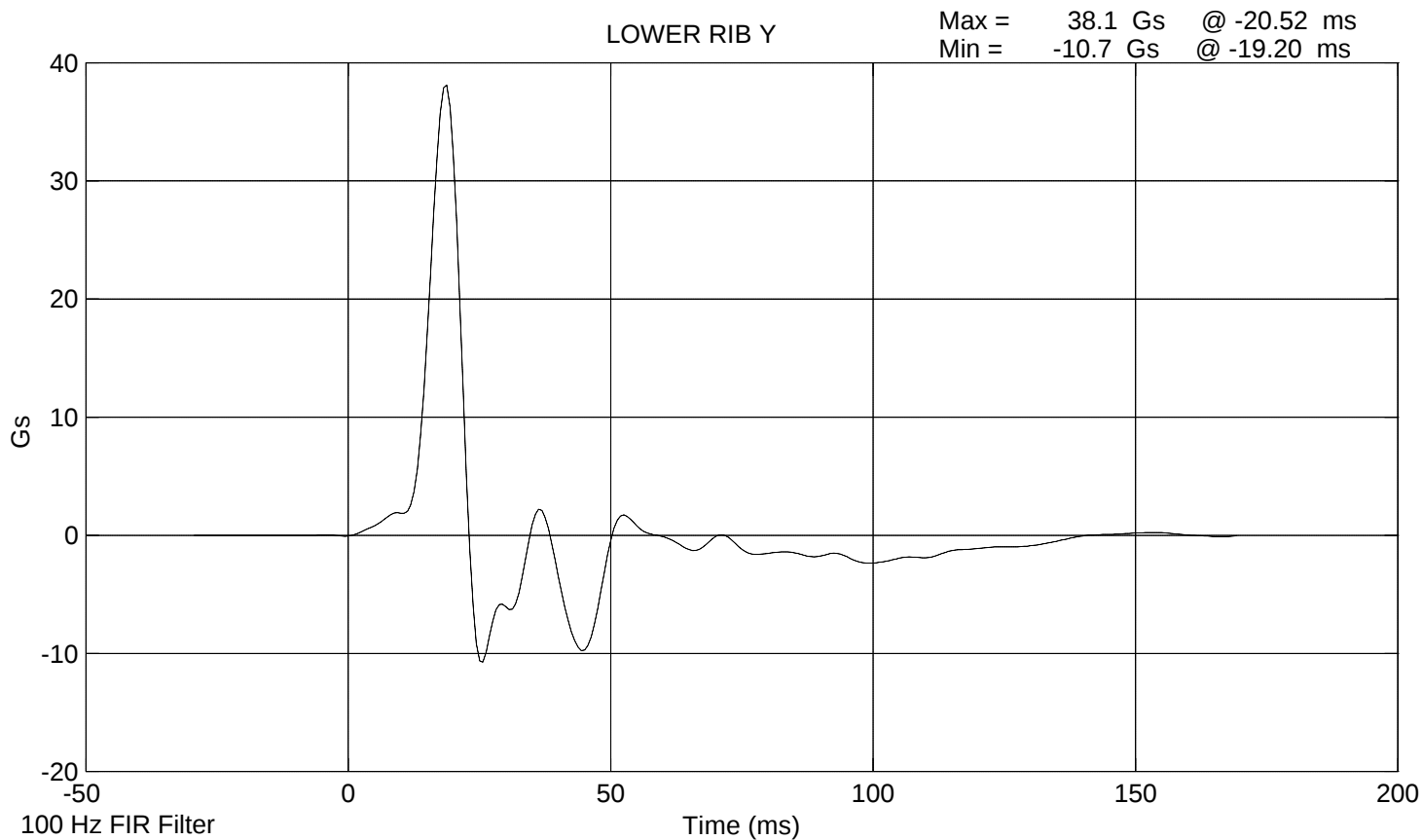
SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
PROBE SPEED (m/s)	4.27 - 4.33	4.29
UPPER RIB (g's)	37 - 46	38.8
LOWER RIB (g's)	37 - 46	38.1
LOWER SPINE (g's)	15 - 22	20.2

REMARKS: None







**LATERAL PELVIS IMPACT TEST
PRE-TEST**

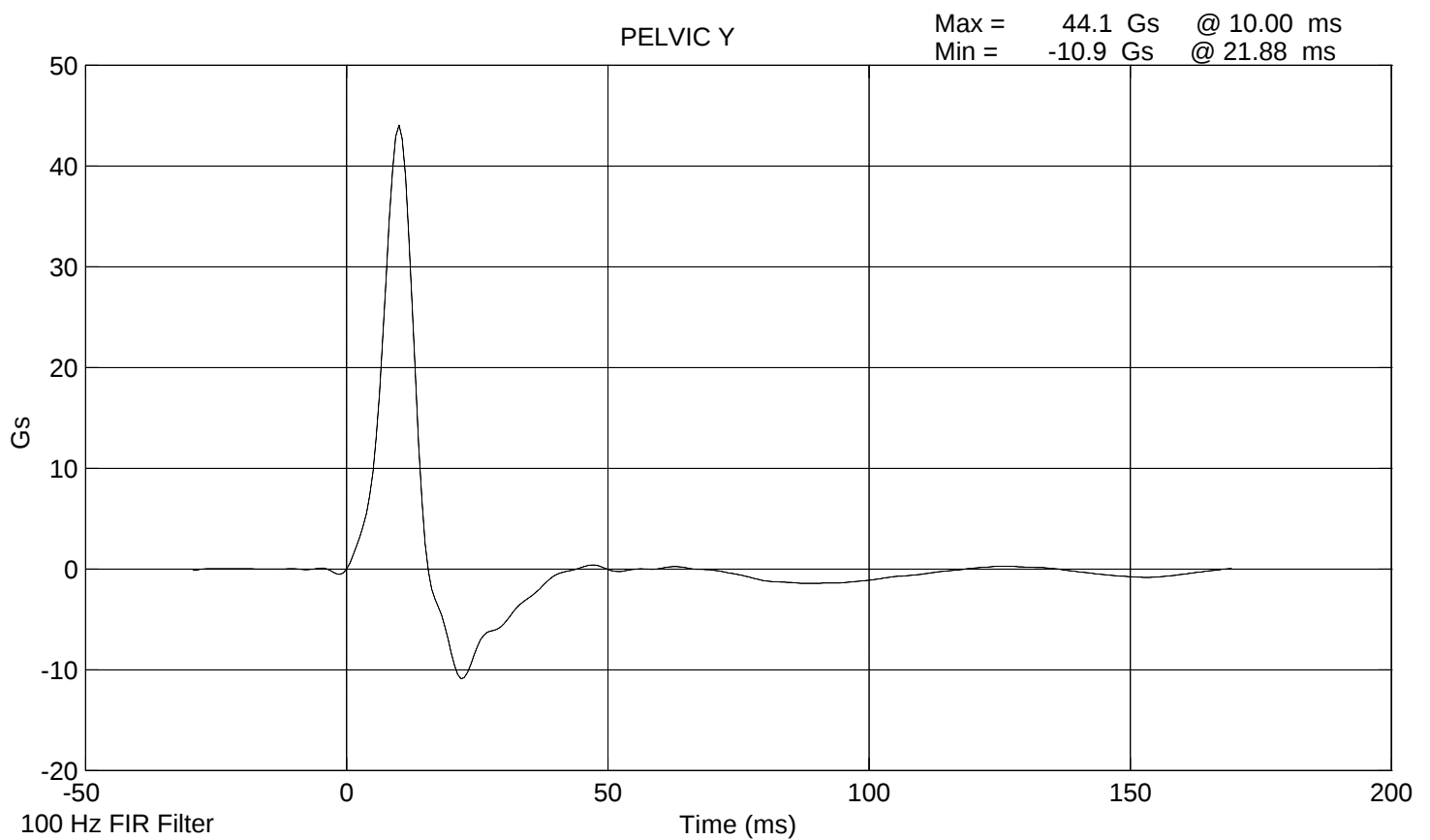
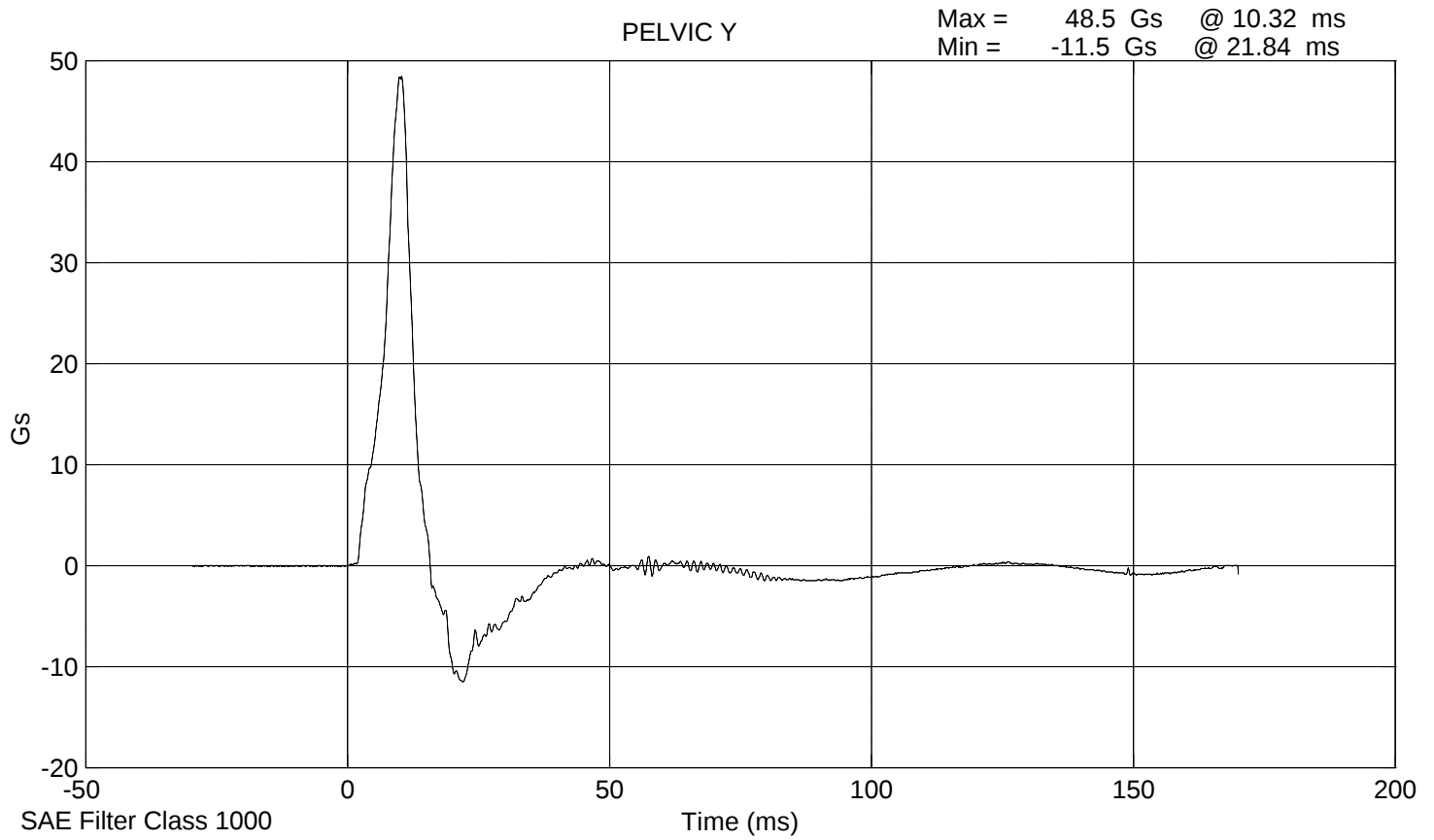
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
PROBE SPEED (m/s)	4.27 - 4.33	4.29
PELVIS ACCELERATION (g's)	40 - 60	44.1

REMARKS: None

SID 013 Pelvic Impact Test @ 4.2855 m/s



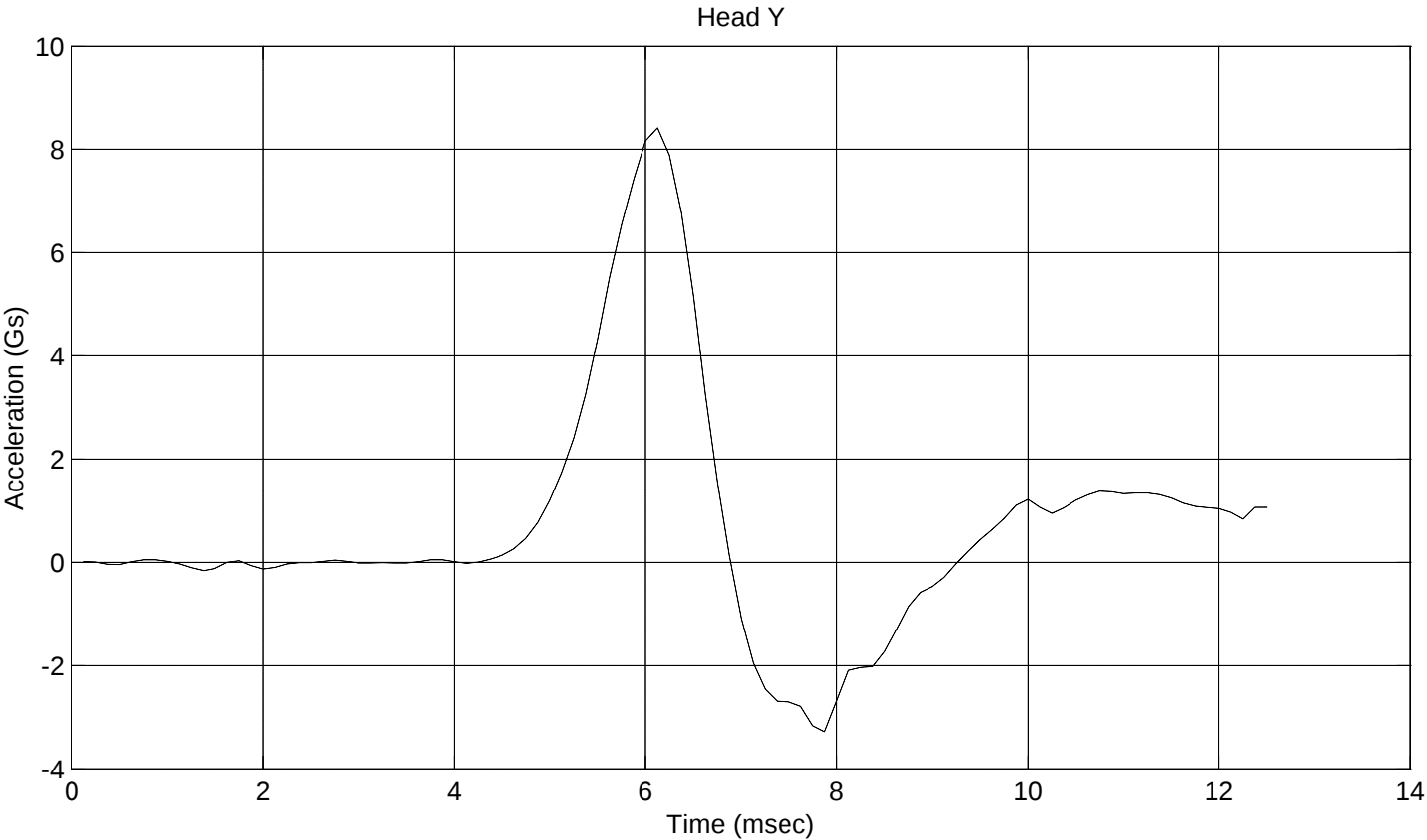
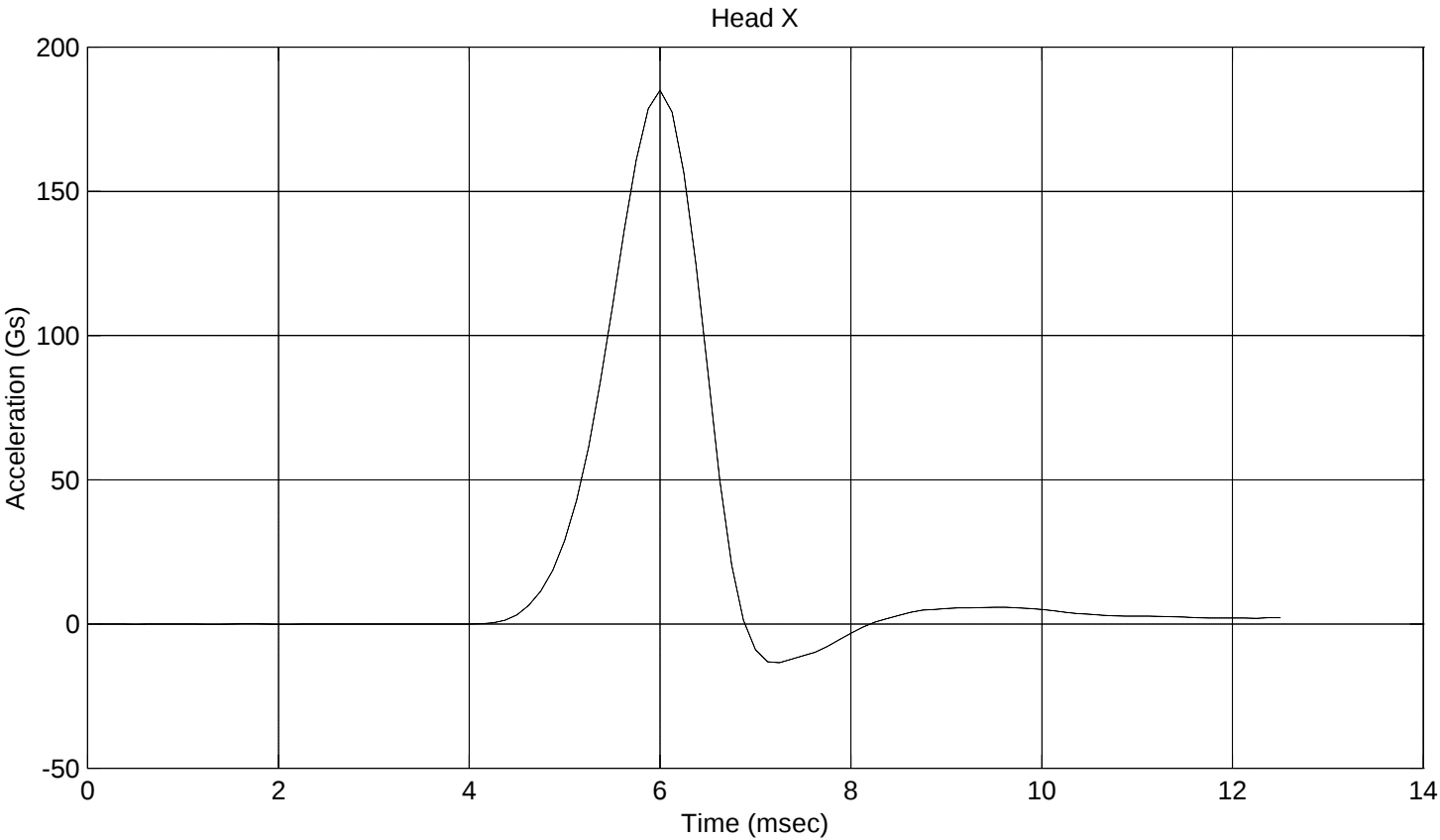
HEAD DROP TEST
PRE-TEST
(Test not required for SID certification)

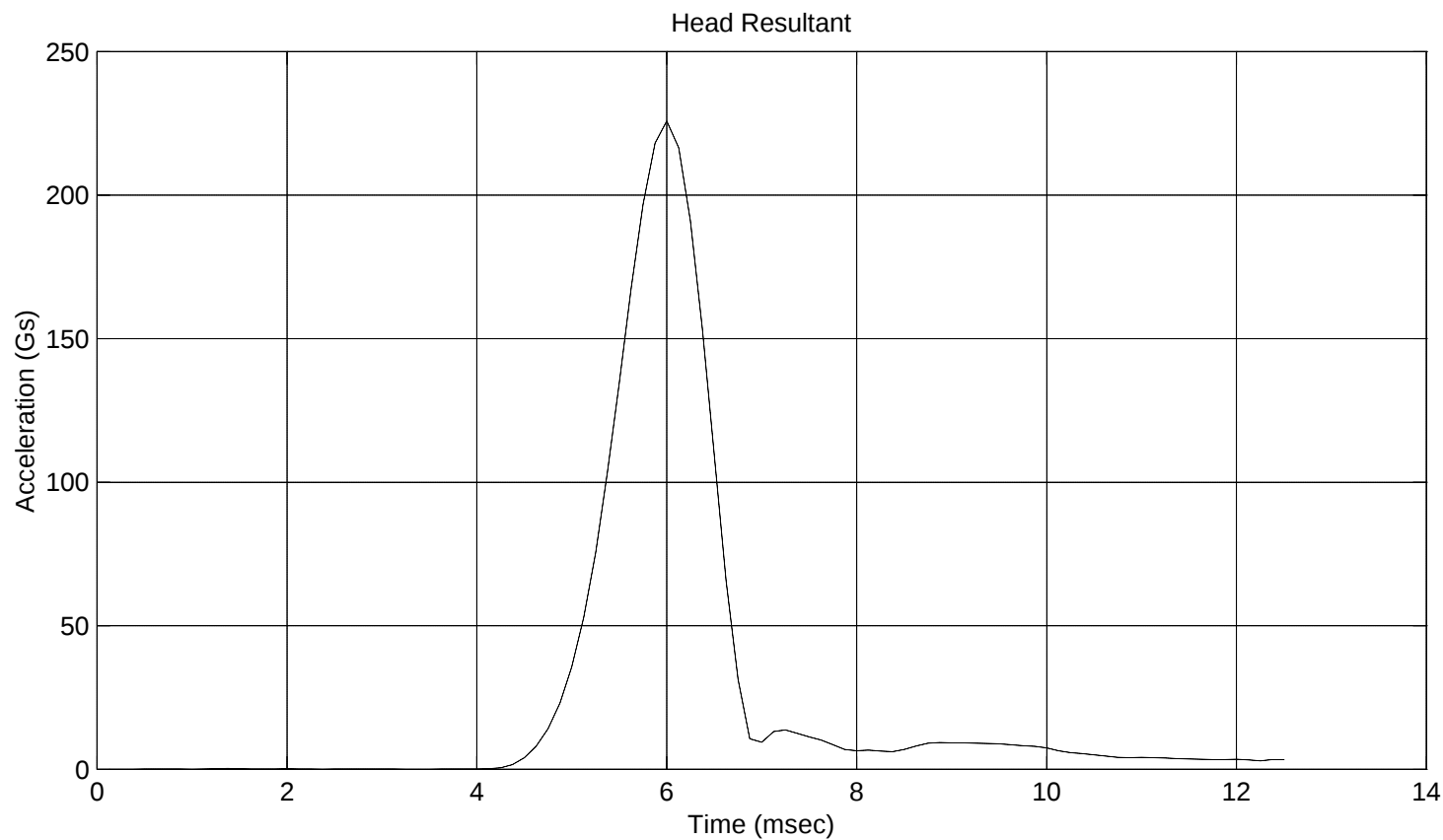
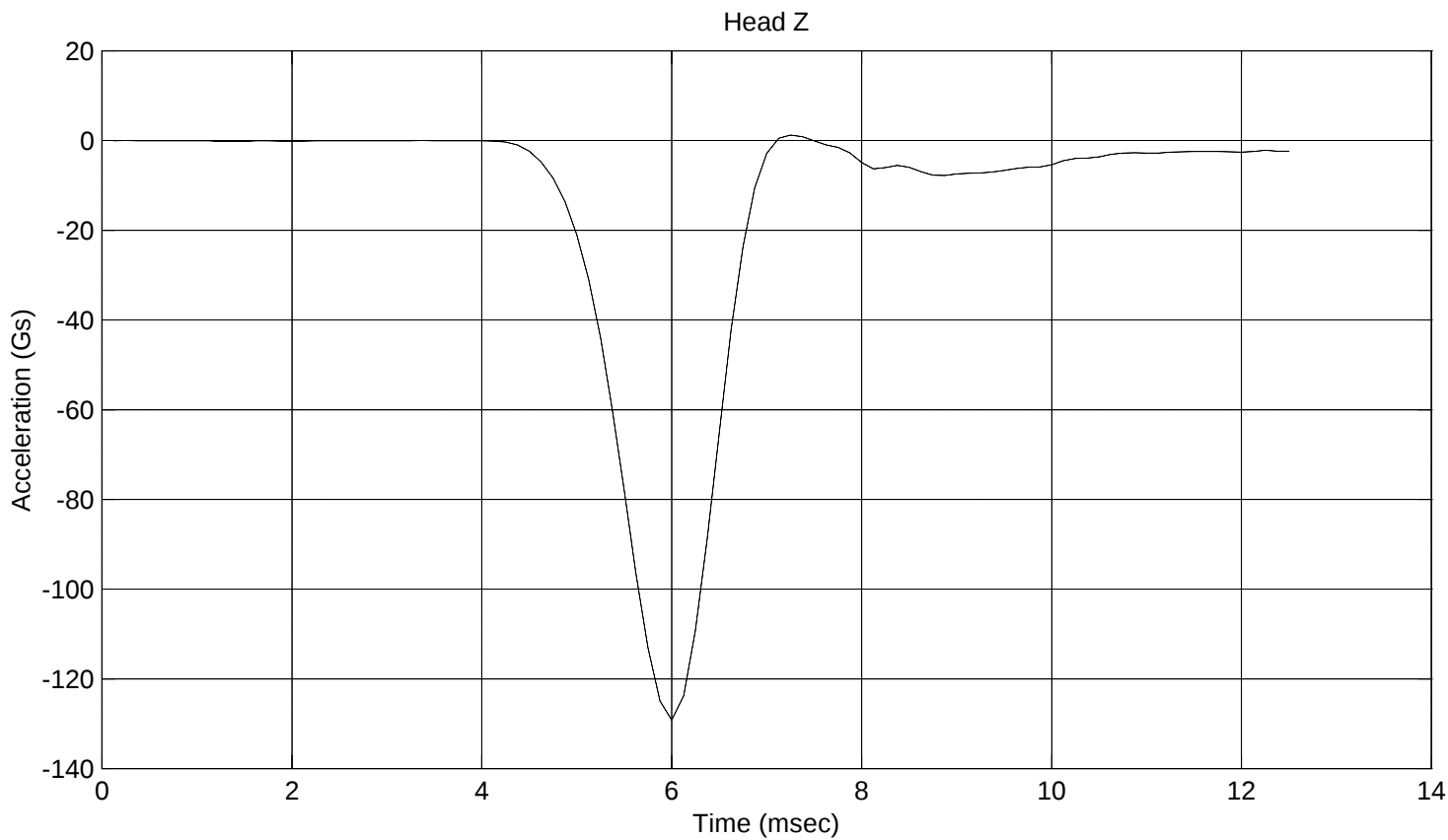
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	225.8
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	8.4
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.1

REMARKS: None





ABDOMINAL COMPRESSION TEST**PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACTSID Serial No.: 013Sequential Test Number: 5Date: January 21, 2001Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	30
FORCE @ 13 mm (N)	104 - 162	111
FORCE @ 19 mm (N)	163 - 221	175
FORCE @ 25 mm (N)	222 - 280	238
FORCE @ 33 mm (N)	325 - 391	348

REMARKS: None

Dummy S/N 013

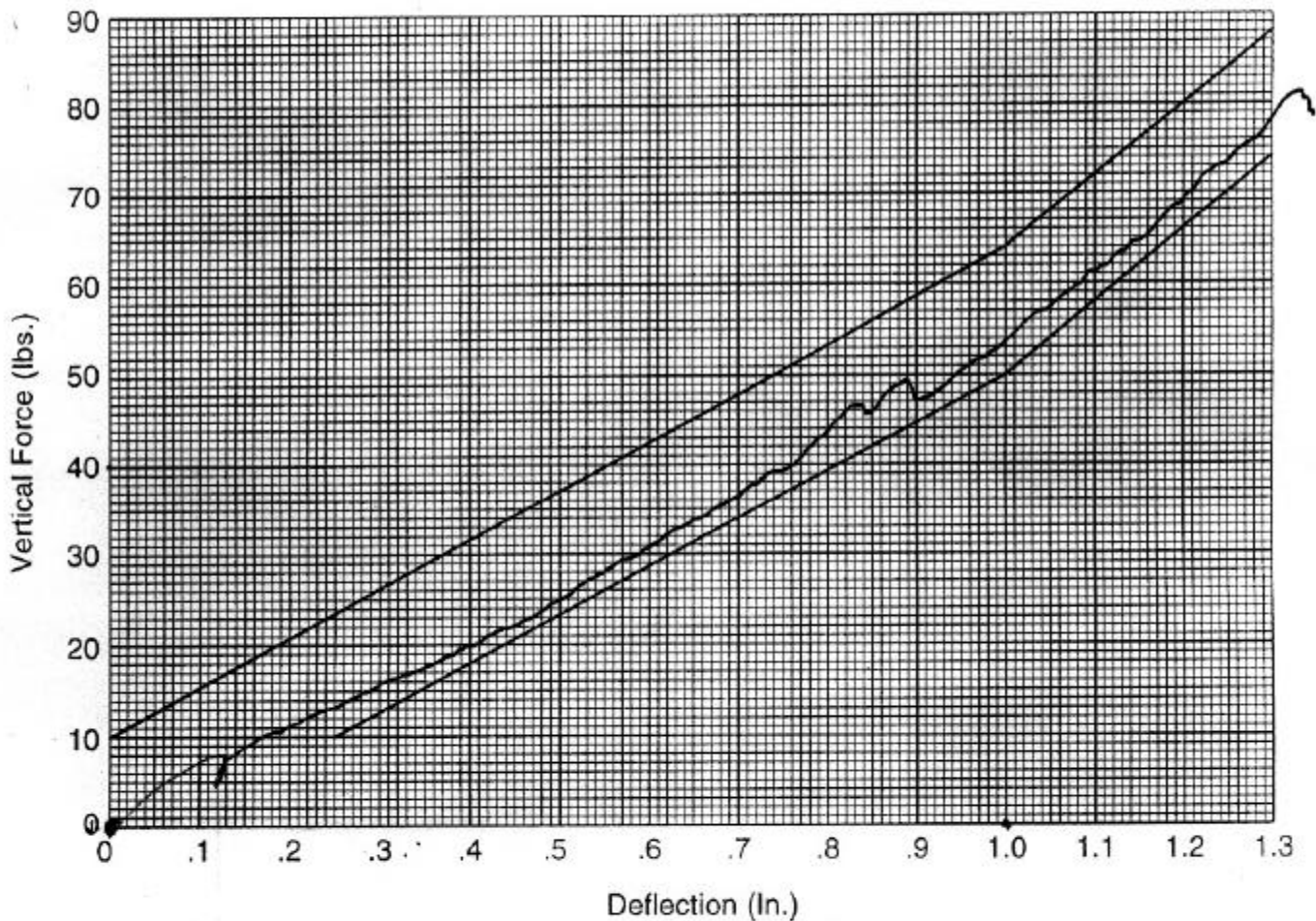
W/A _____

Date 1-21-2001

Performed By [Signature]

Temp. 71°

Humidity 30%



Hybrid II
Abdomen Static Press

LUMBAR FLEXION TEST
PRE-TEST
(Test not required for SID certification)

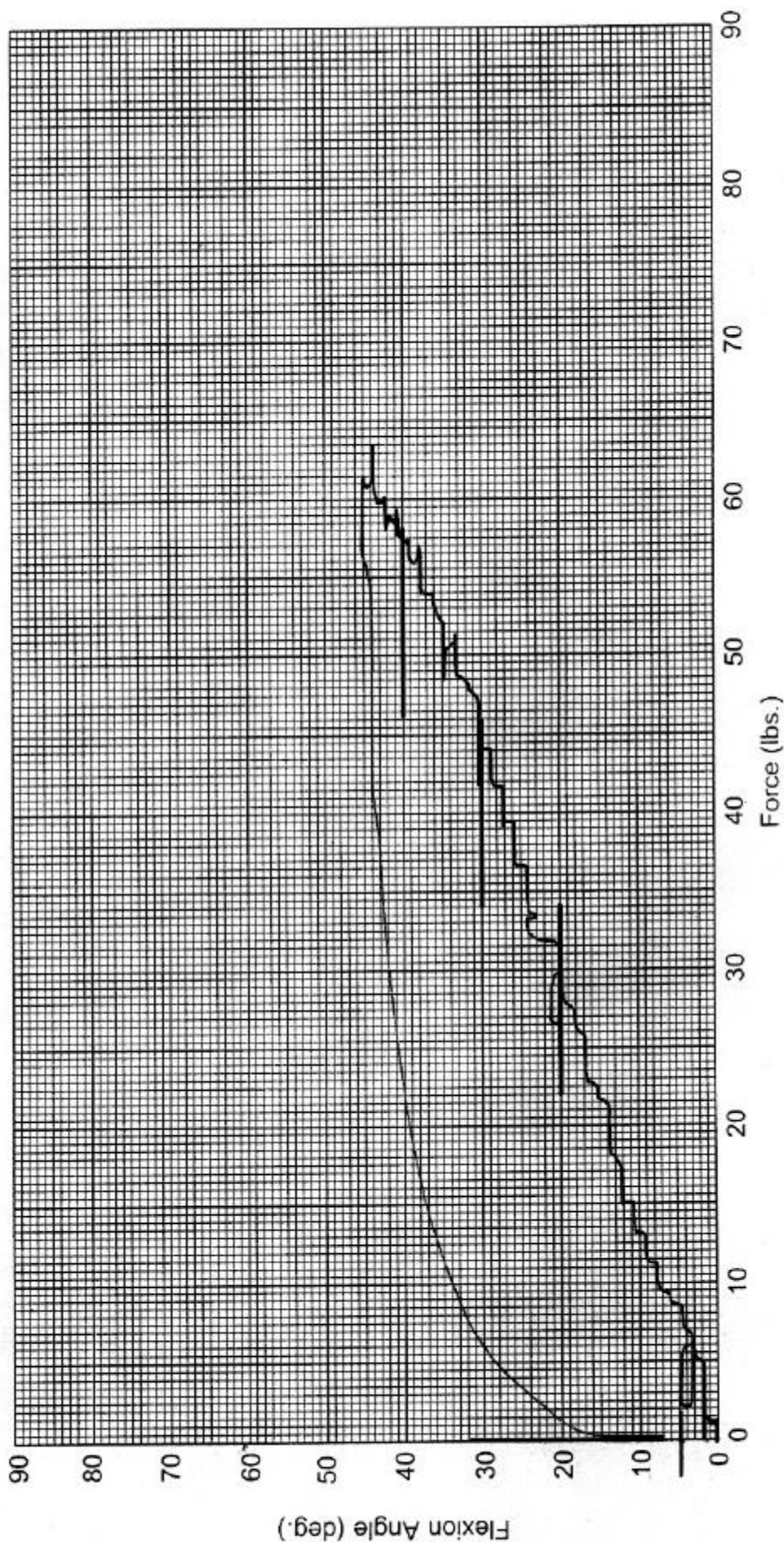
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	30
FORCE @ 0° (N)	0 - 26.7	0.0
FORCE @ 20° (N)	97.8 - 151.2	132.3
FORCE @ 30° (N)	151.2 - 204.6	196.2
FORCE @ 40° (N)	204.6 - 258	254.9
RETURN ANGLE	12° max.	4.8°

REMARKS: None

Dummy S/N 013
 W/A _____
 Date 1-21-2001
 Performed By [Signature]
 Temp. 71°
 Humidity 30%



Hybrid II Lumbar Spine Flexion Test

PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 5
Date: January 21, 2001 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

CALIBRATION TEST RESULTS
PRE-TEST

SID NO.: 027

CONFIGURED FOR LEFT SIDE IMPACT

CALIBRATION TEST RESULTS SUMMARY
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 5
Date: January 26, 2001 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
THORACIC SHOCK ABSORBER TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 5
Date: January 26, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	904
RH- Rib Height (mm)	502 - 520	518
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	494
HW- Hip Width (mm)	356 - 391	368

REMARKS: None

THORACIC SHOCK ABSORBER TESTS
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 5
Date: June 19, 2000 Laboratory Technician: B. Swiecicki

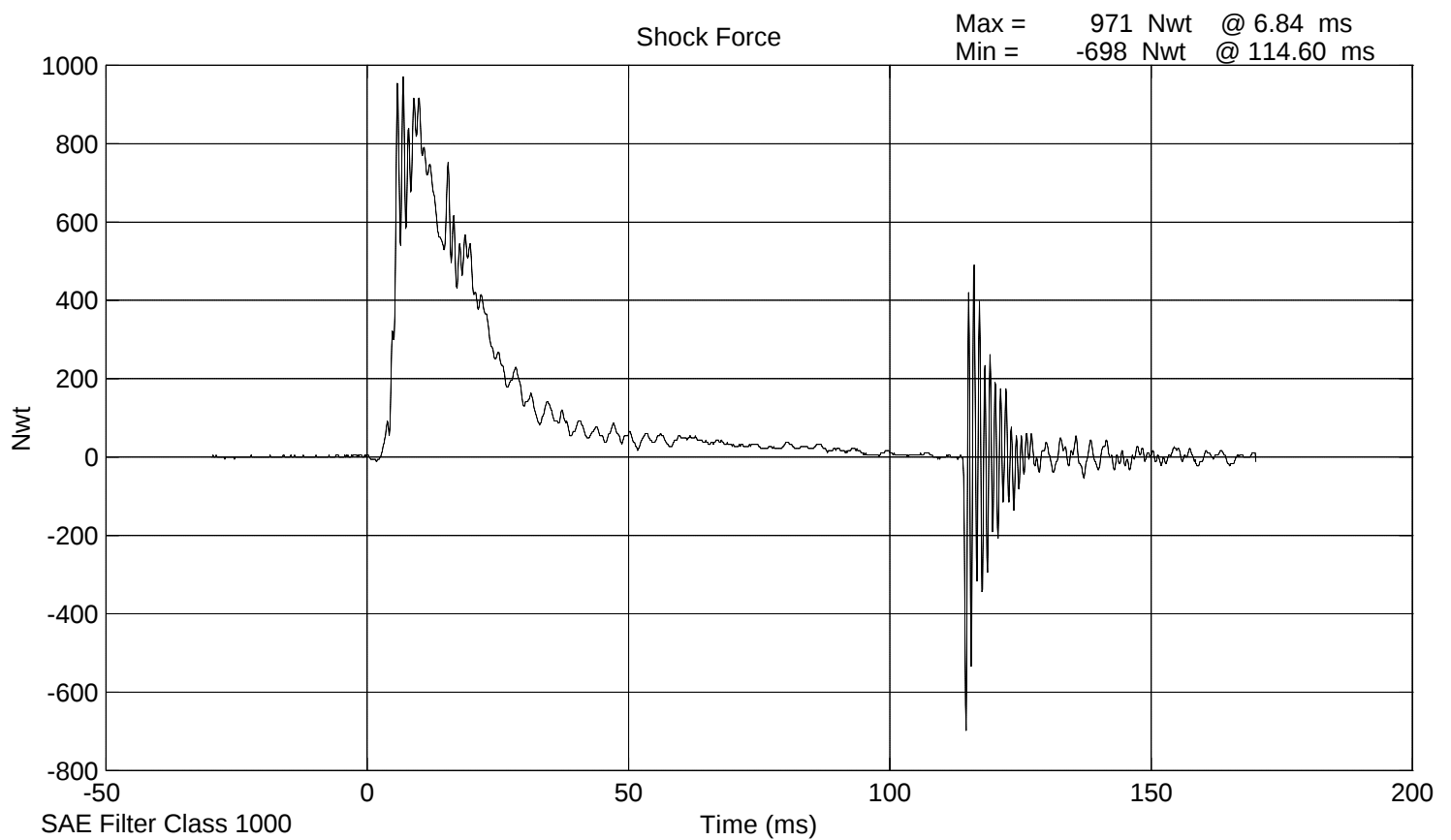
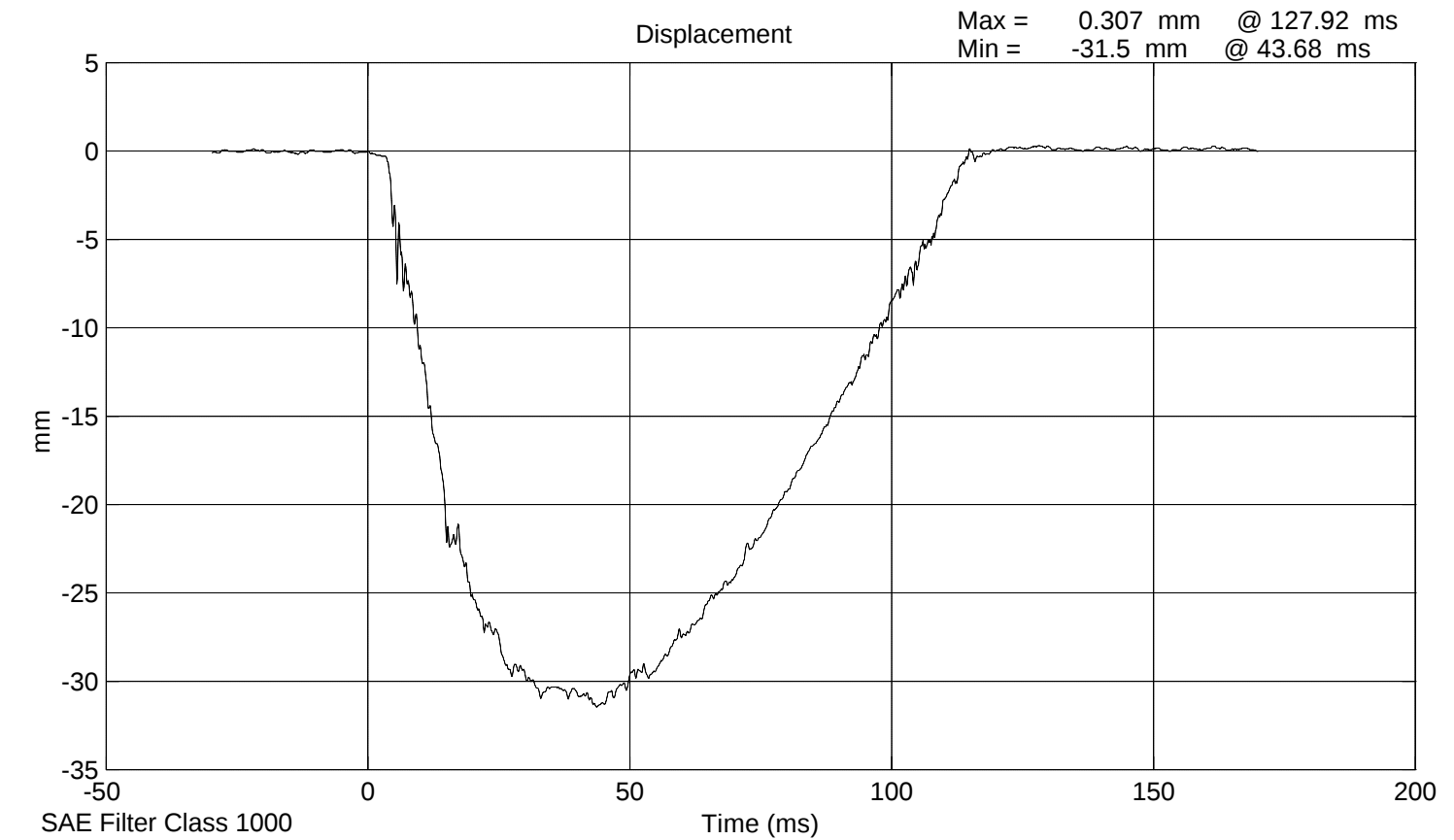
DAMPER IDENTIFICATION: 027

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)		10 - 70	31
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	970.6
	DISPLACEMENT (mm)	30 - 35	31.5
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	1825.9
	DISPLACEMENT (mm)	32 - 37	34.8
VELOCITY 6.10 m/s	FORCE (N)	3741 - 4448	3875.5
	DISPLACEMENT (mm)	33 - 40	35.4

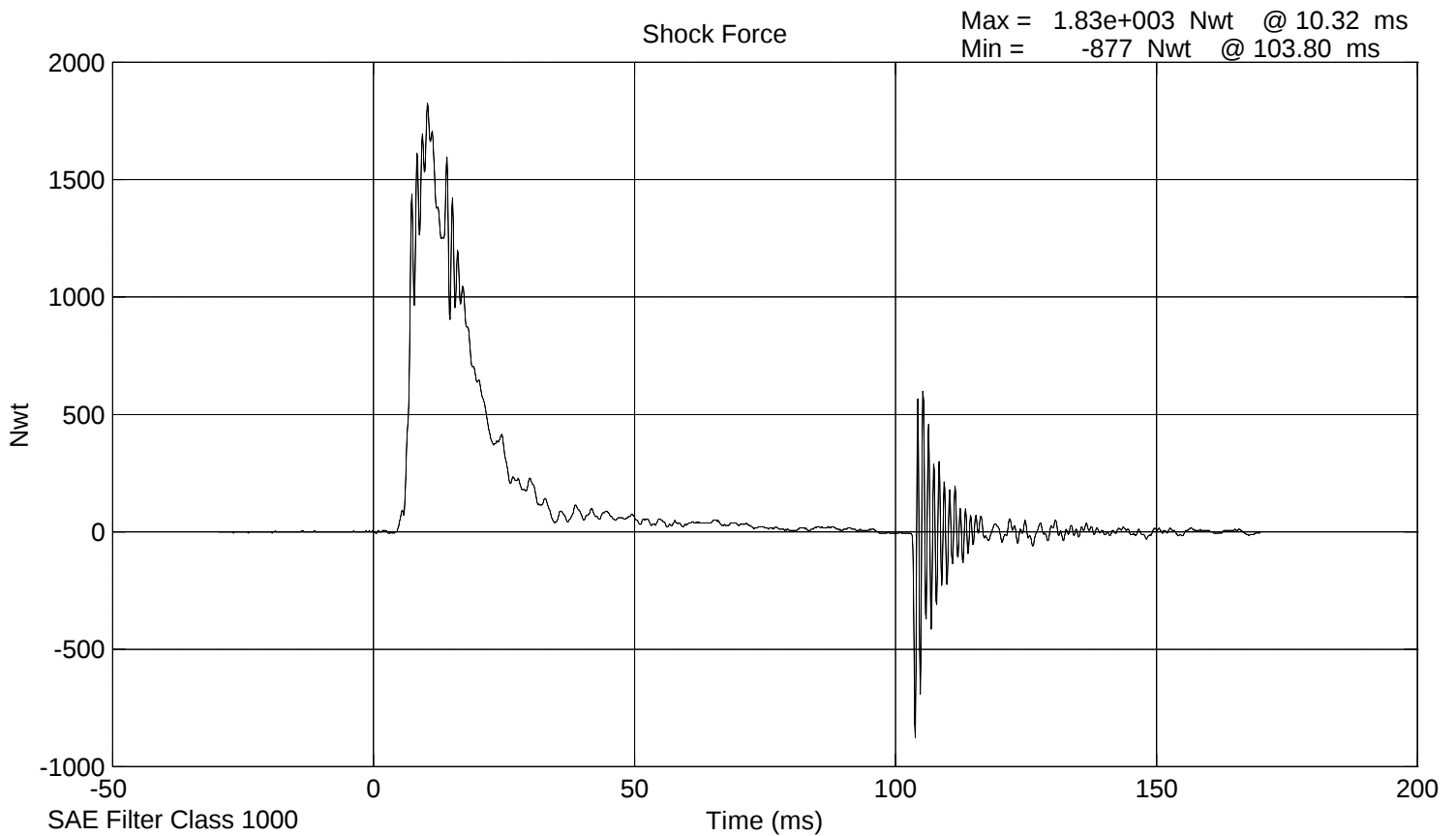
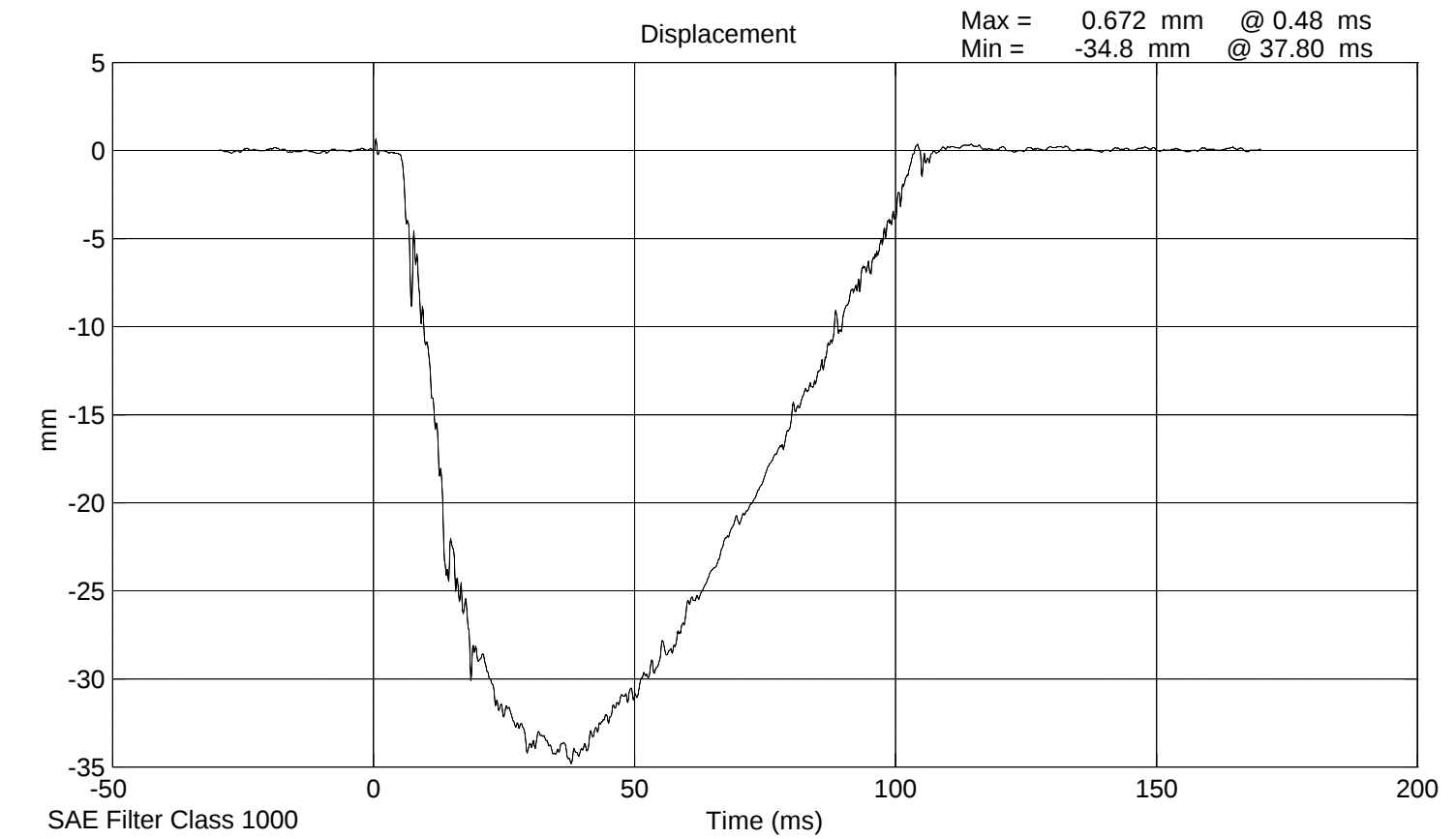
DAMPER SETTING: 5

REMARKS: None

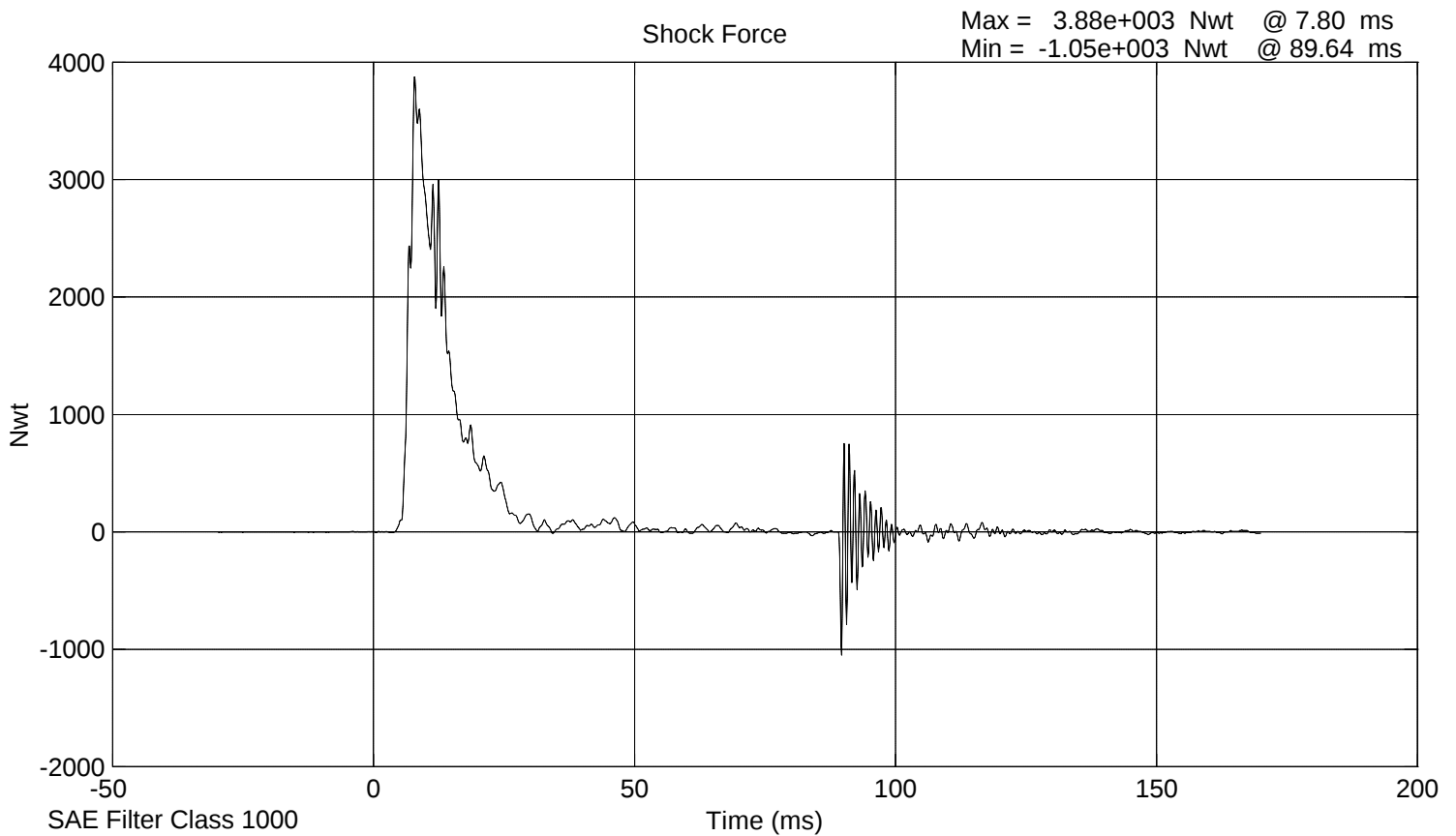
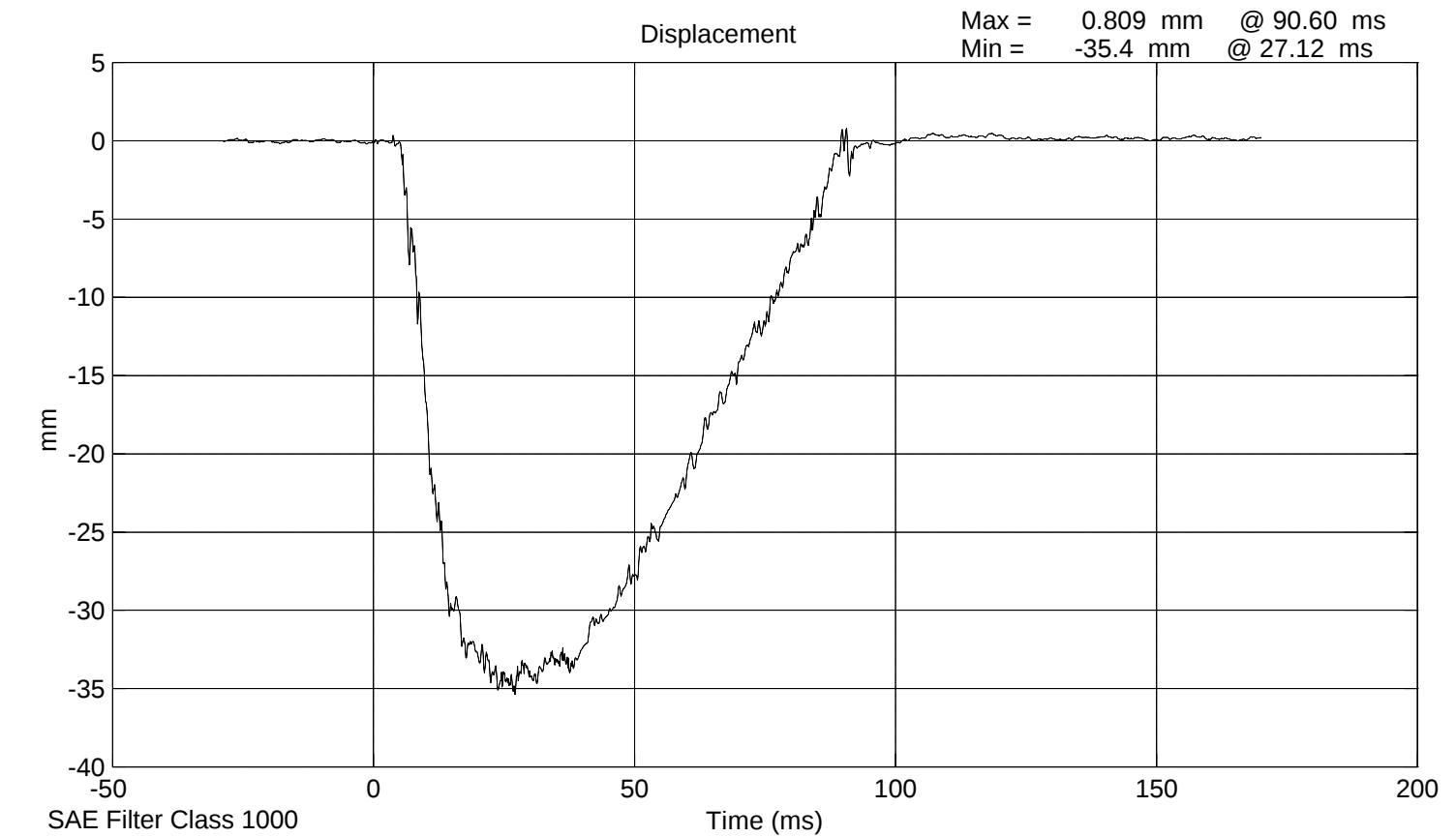
SID 027 Shock Absorber Impact Test @ 3.048 m/s



SID 027 Shock Absorber Impact Test @ 4.572 m/s



SID 027 Shock Absorber Impact Test @ 6.096 m/s



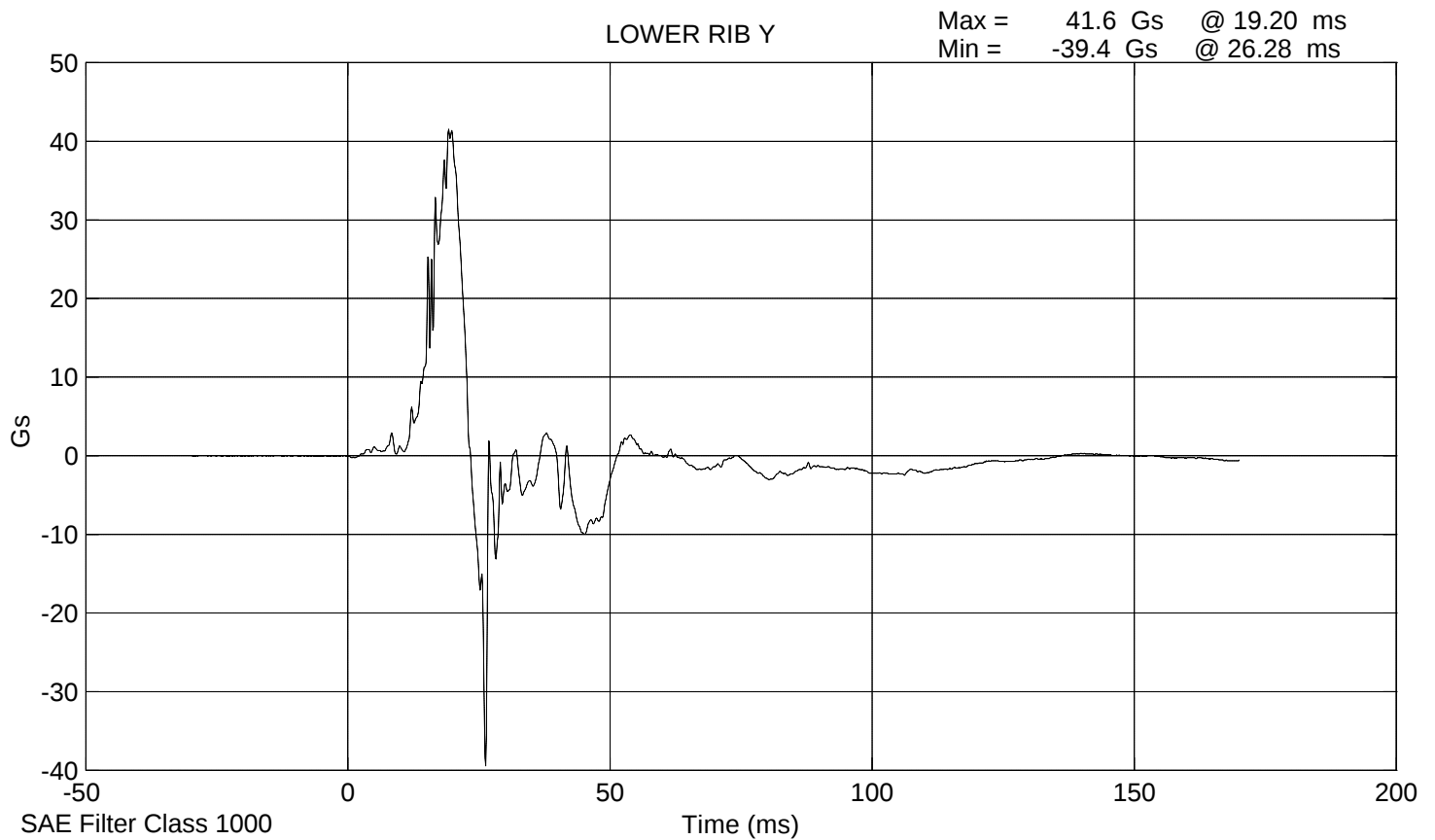
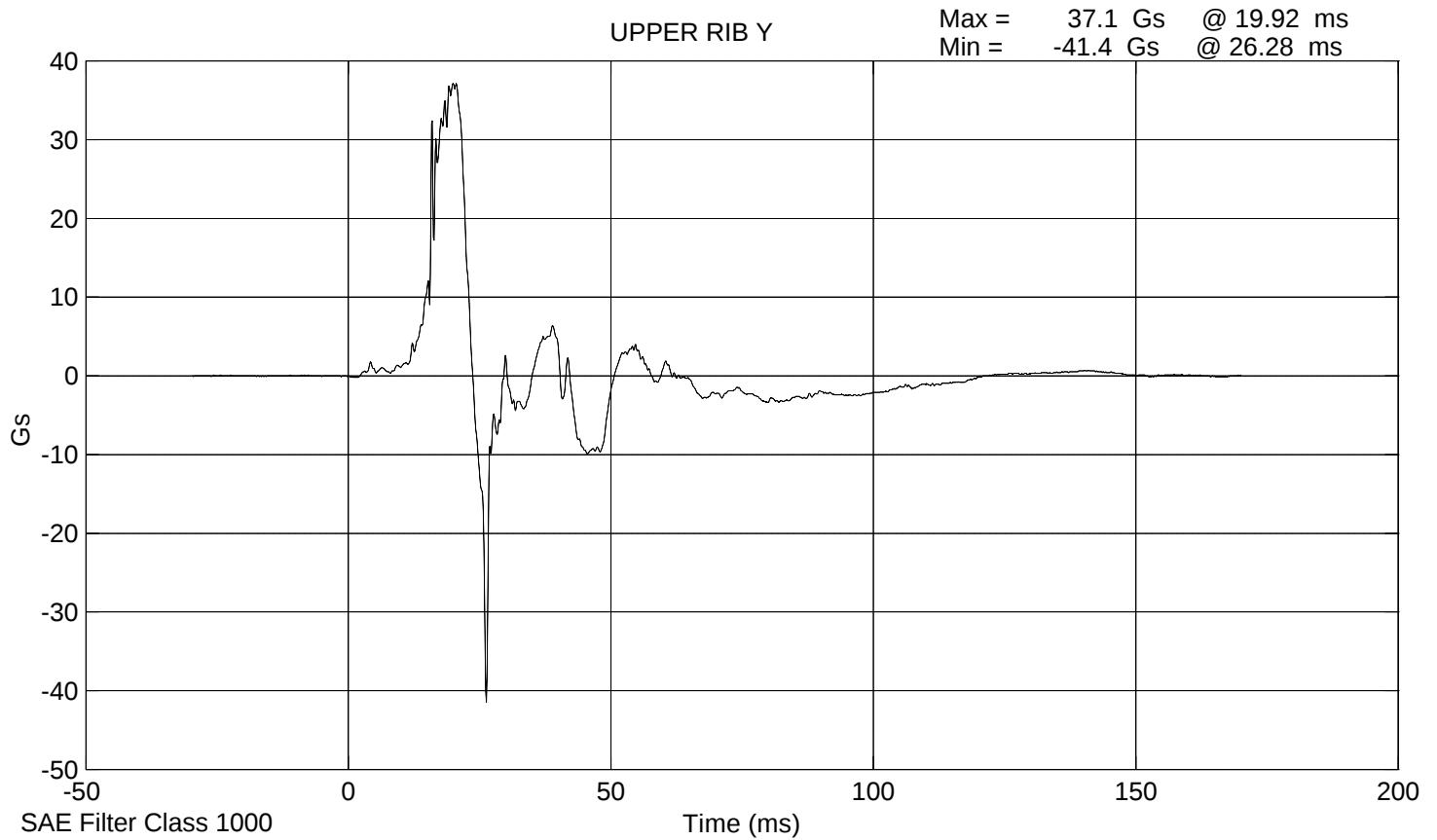
**LATERAL THORAX IMPACT TEST
PRE-TEST**

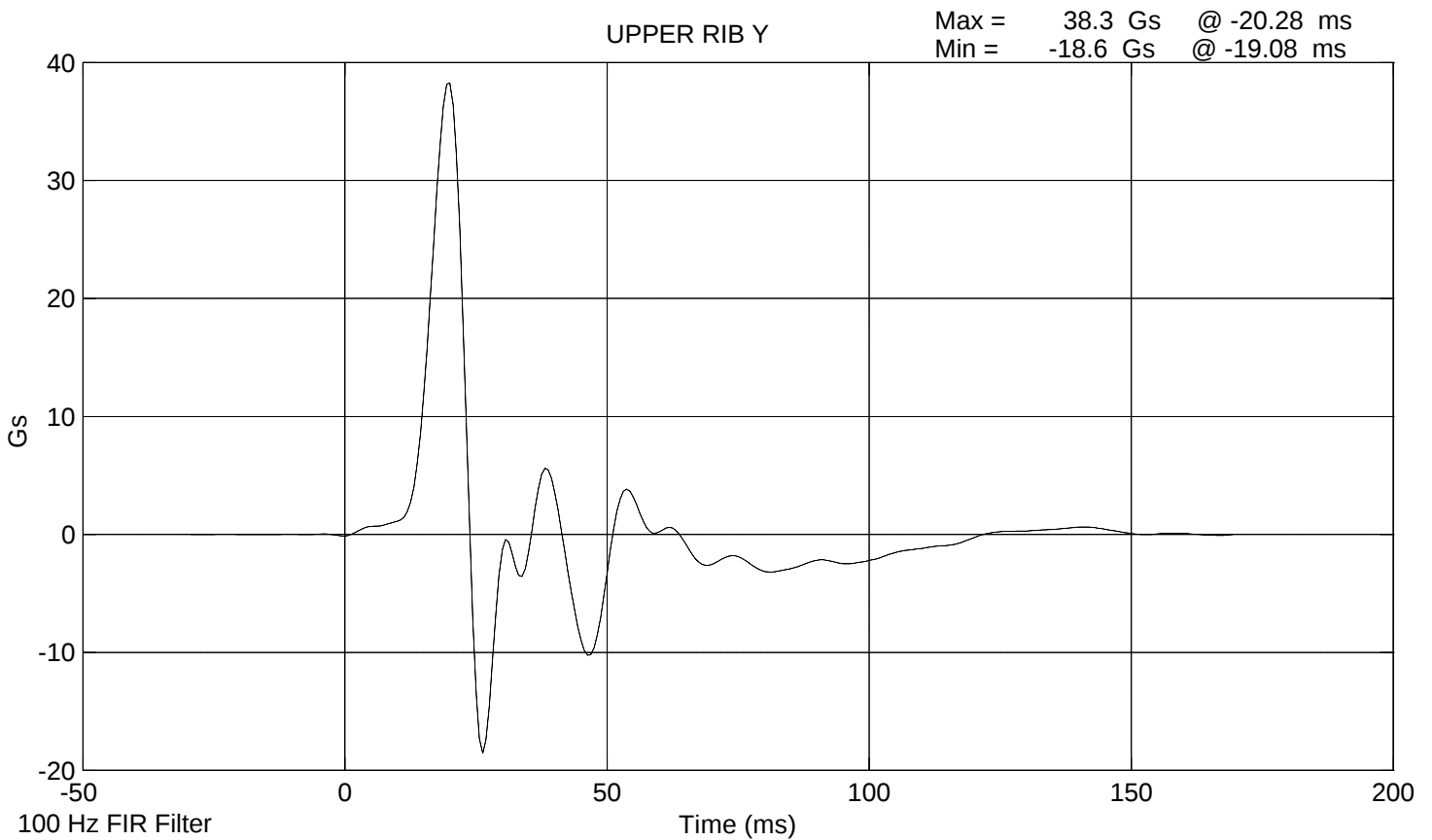
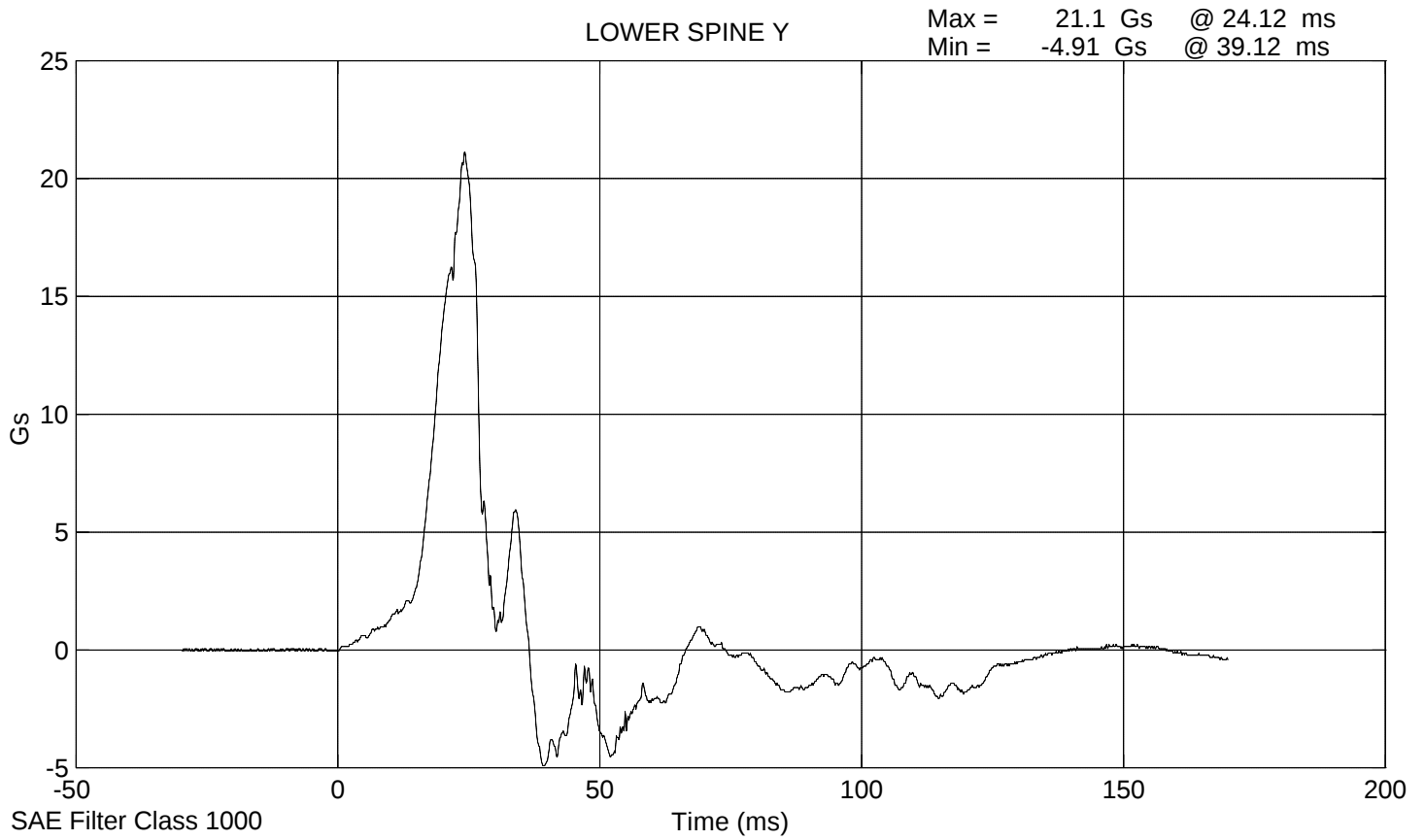
CONFIGURED FOR LEFT SIDE IMPACT

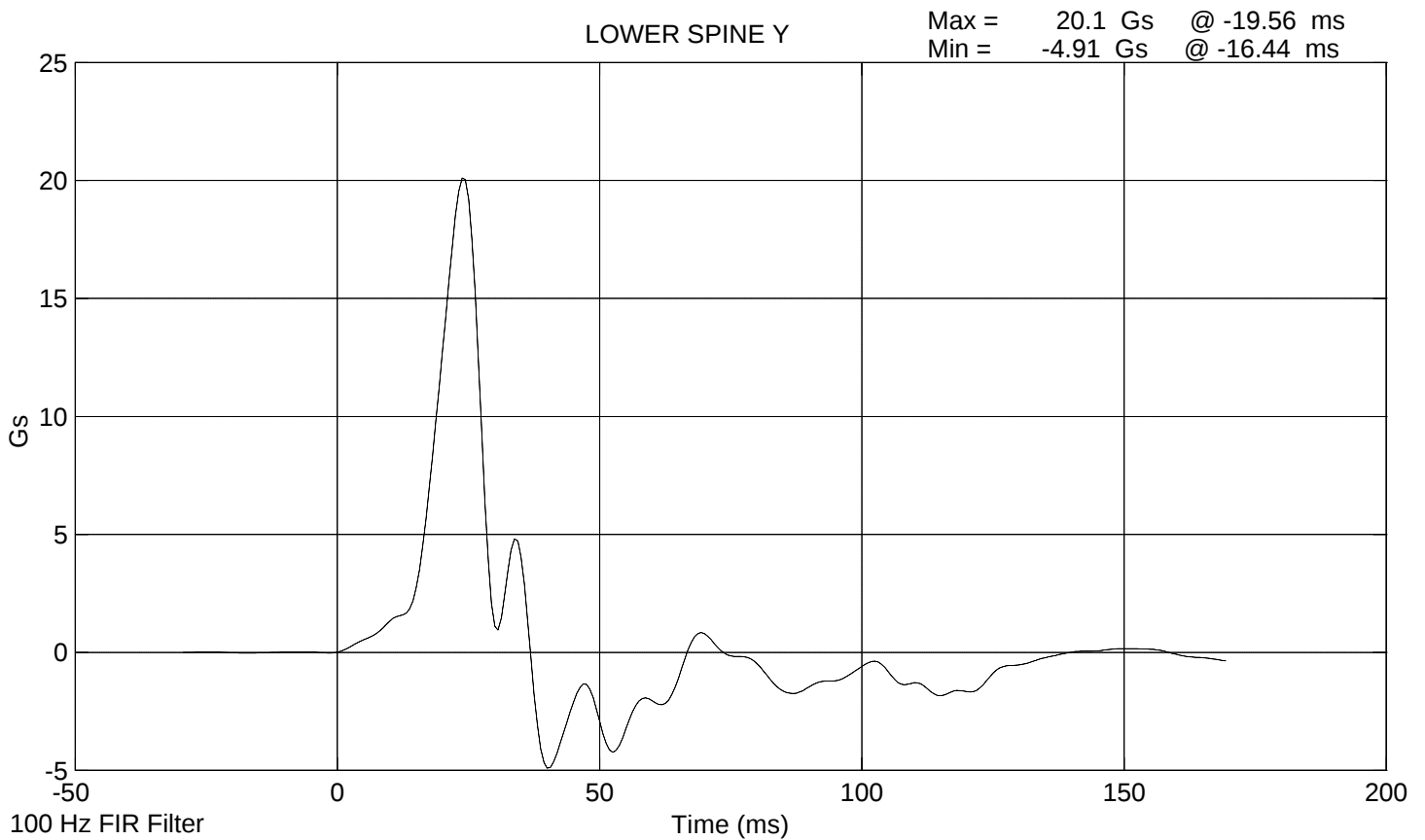
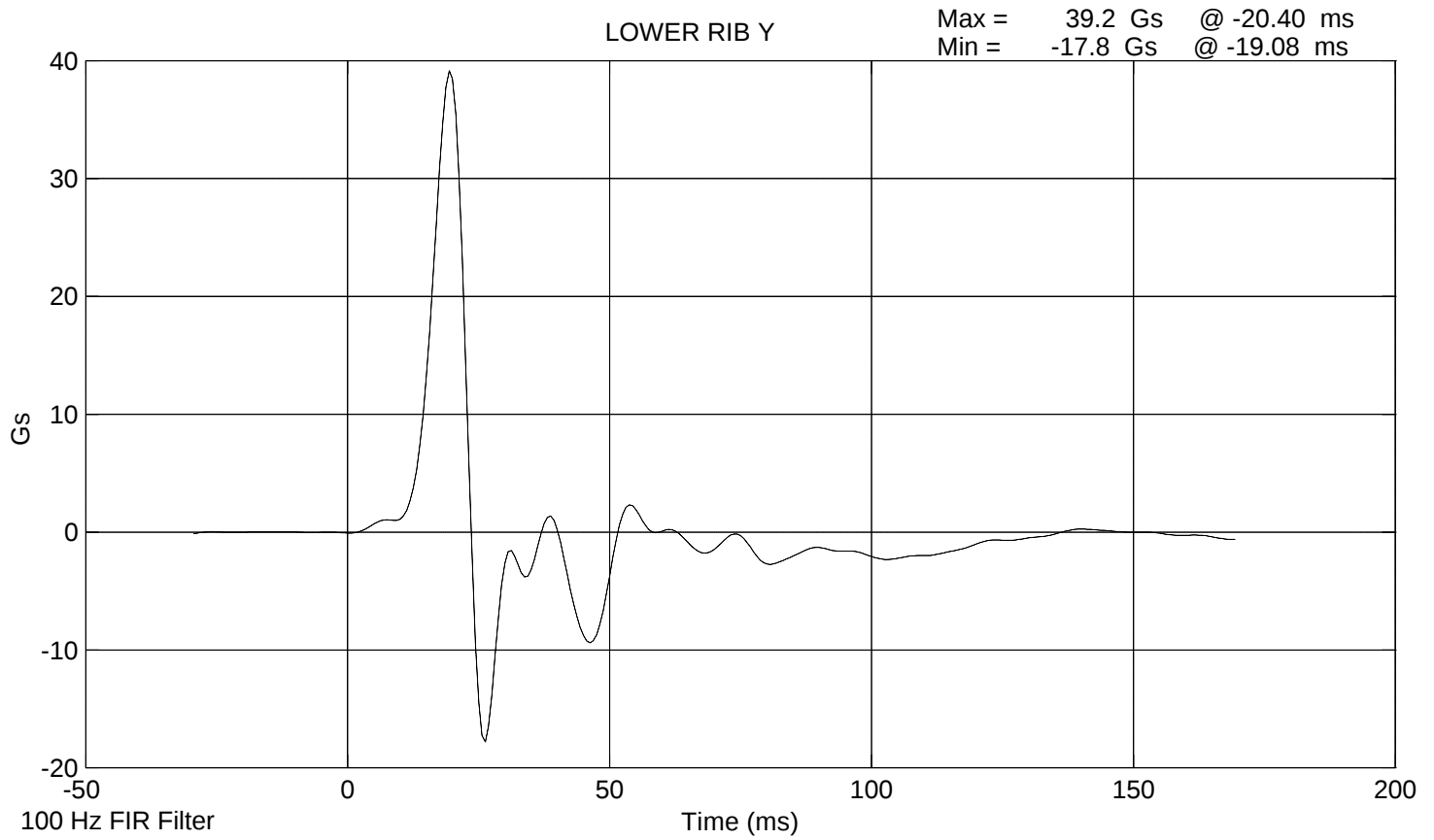
SID Serial No.: 027 Sequential Test Number: 5
Date: January 25, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	32
PROBE SPEED (m/s)	4.27 - 4.33	4.30
UPPER RIB (g's)	37 - 46	38.3
LOWER RIB (g's)	37 - 46	39.2
LOWER SPINE (g's)	15 - 22	20.1

REMARKS: None







**LATERAL PELVIS IMPACT TEST
PRE-TEST**

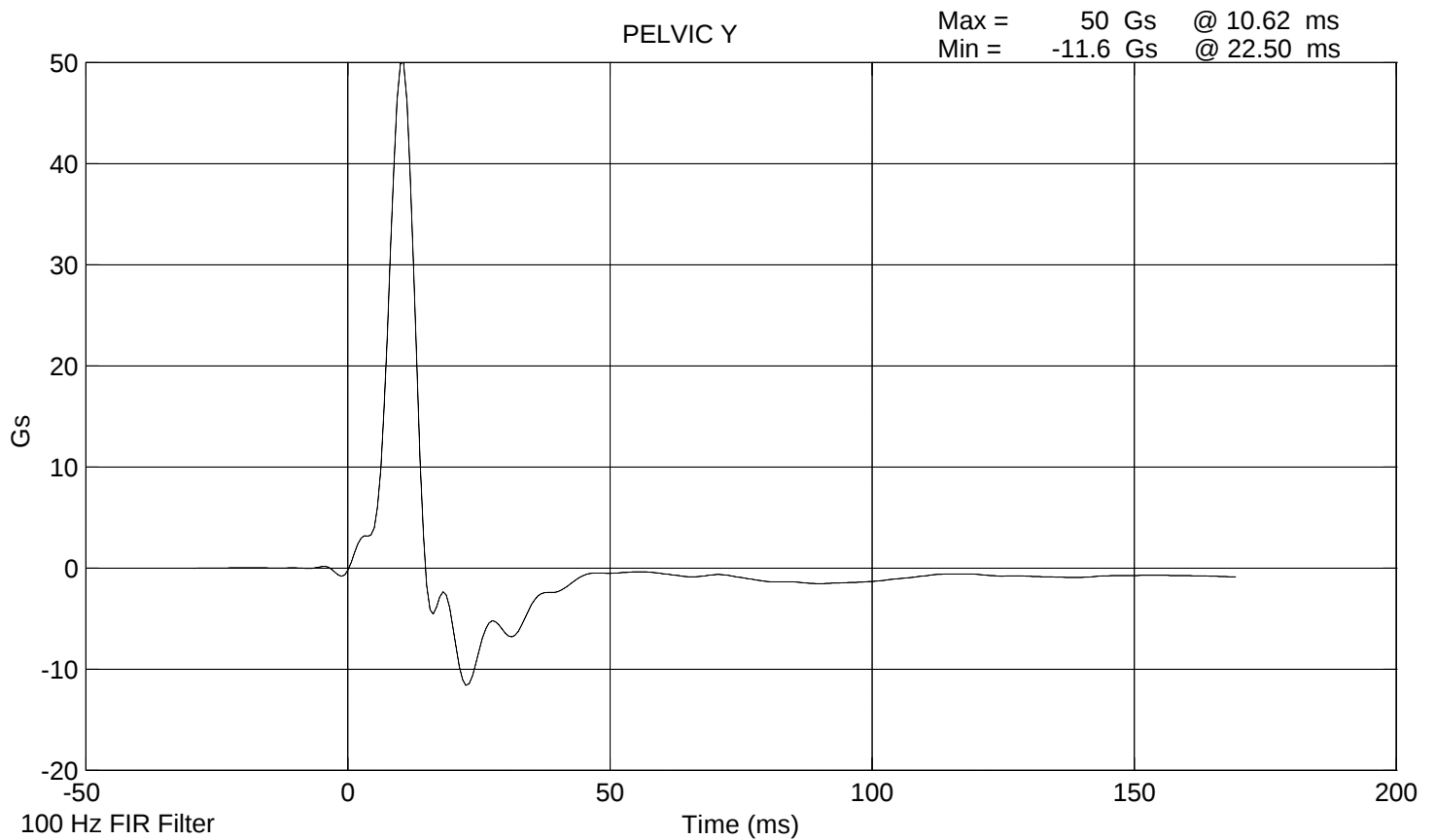
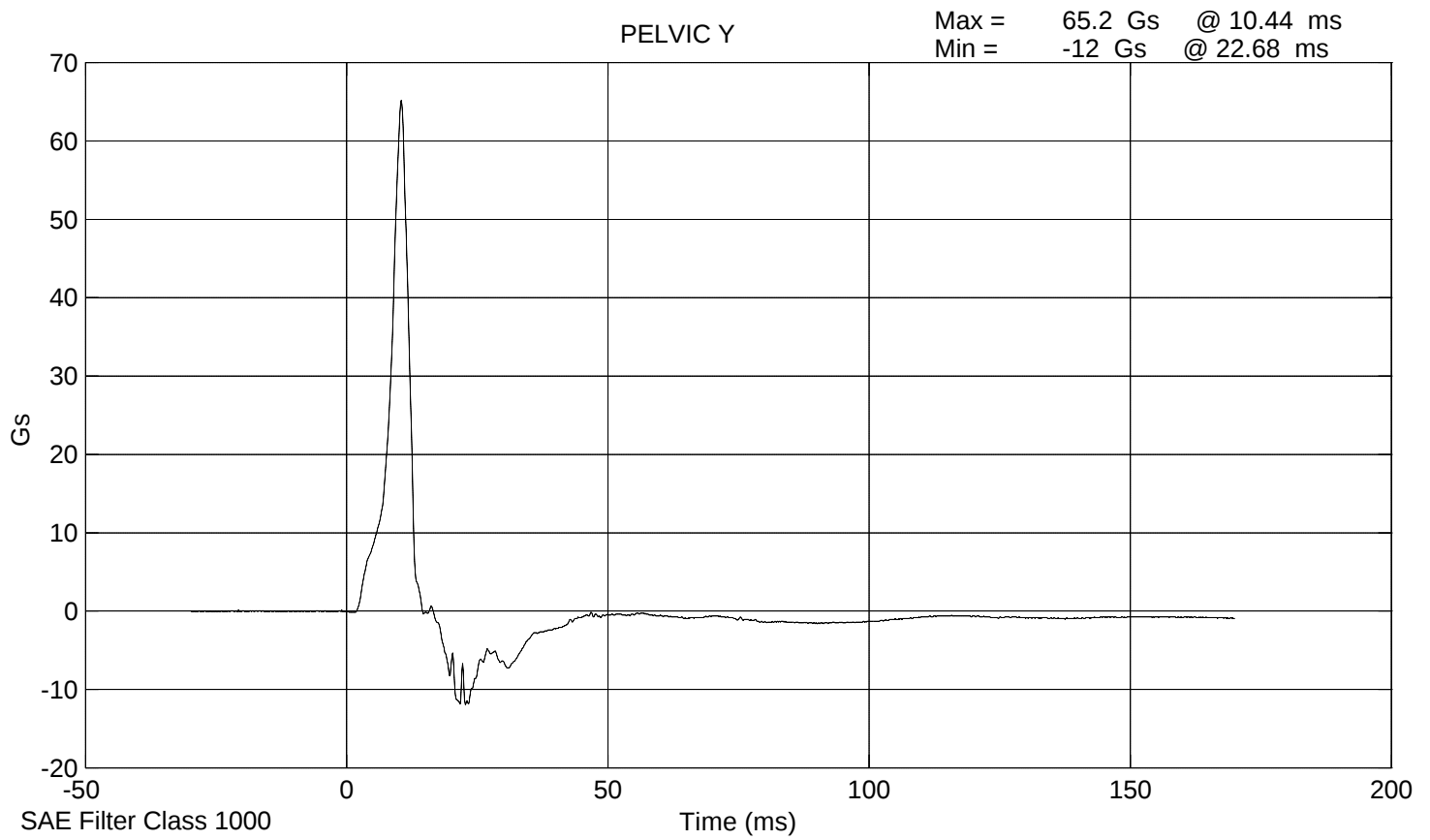
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 5
Date: January 25, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	32
PROBE SPEED (m/s)	4.27 - 4.33	4.27
PELVIS ACCELERATION (g's)	40 - 60	50.0

REMARKS: None

SID 027 Pelvic Impact Test @ 4.2702 m/s



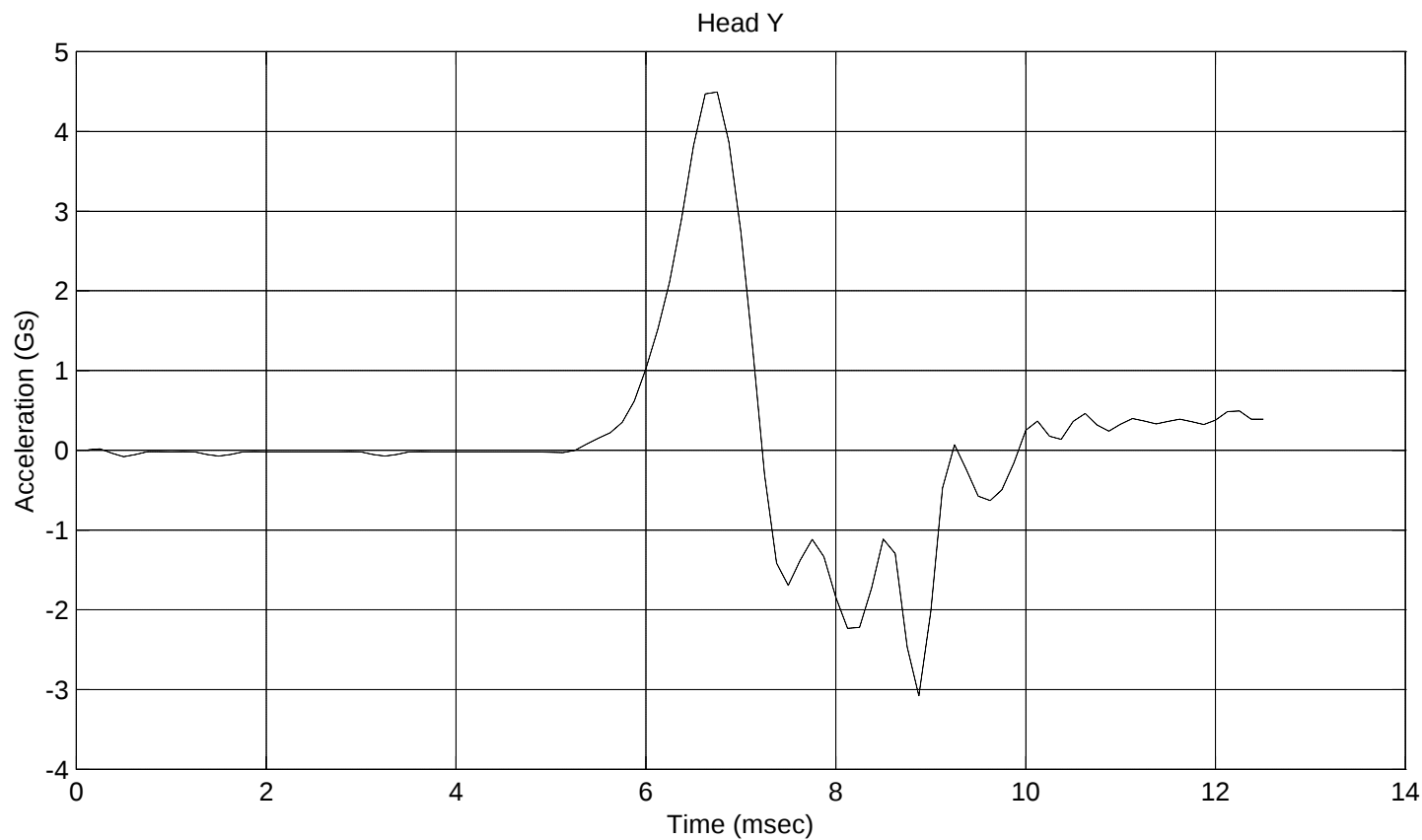
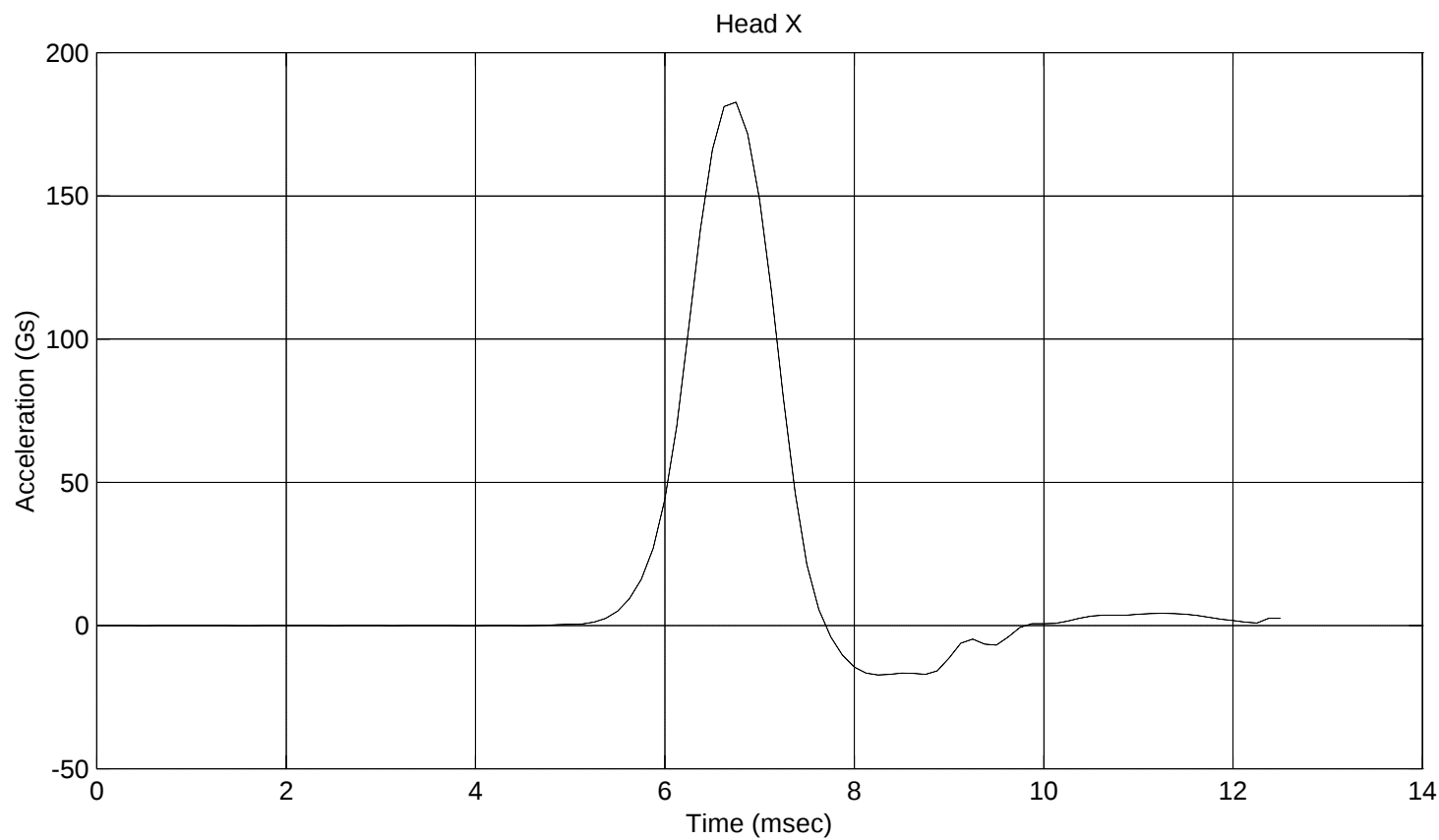
HEAD DROP TEST
PRE-TEST
(Test not required for SID certification)

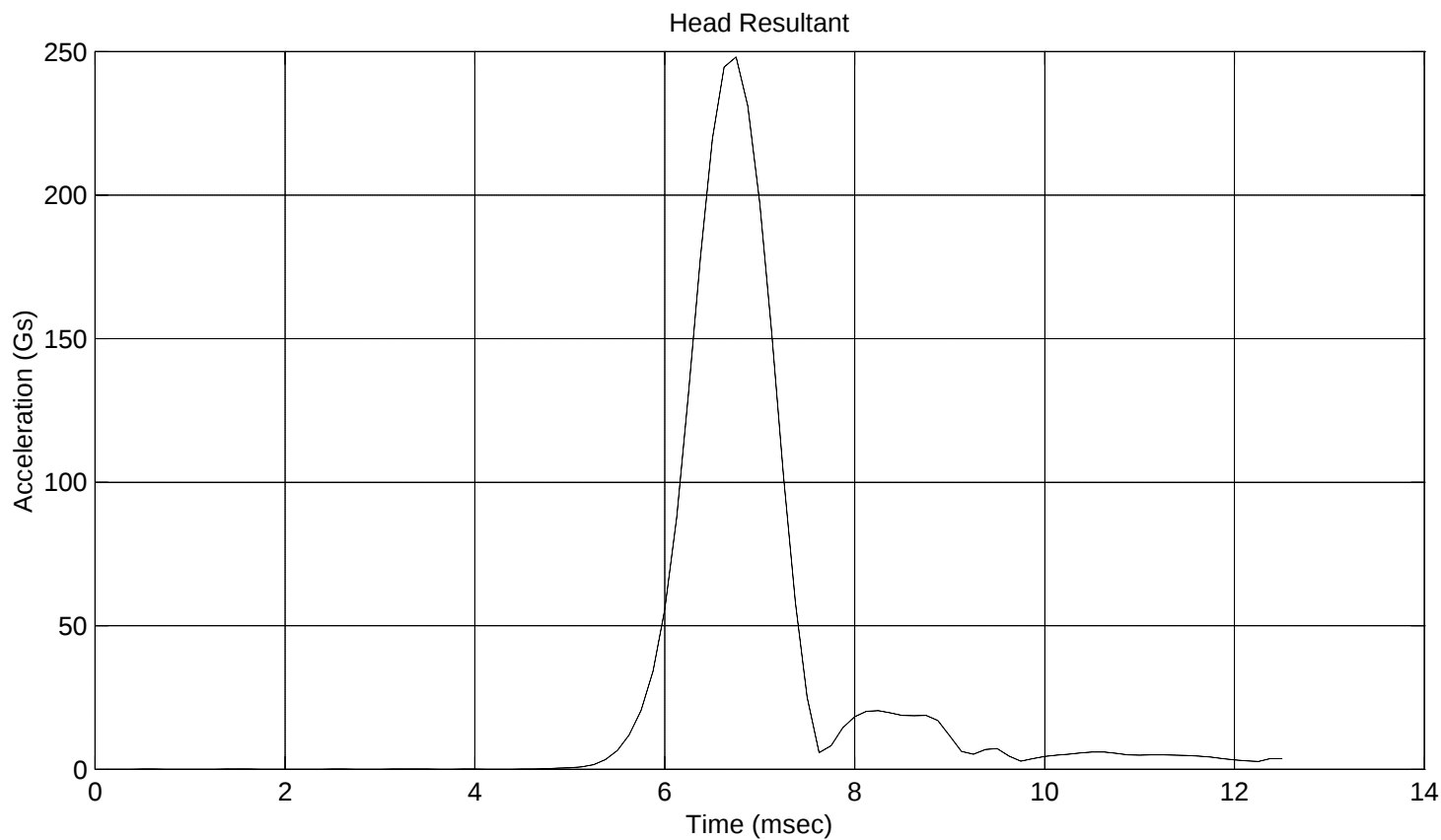
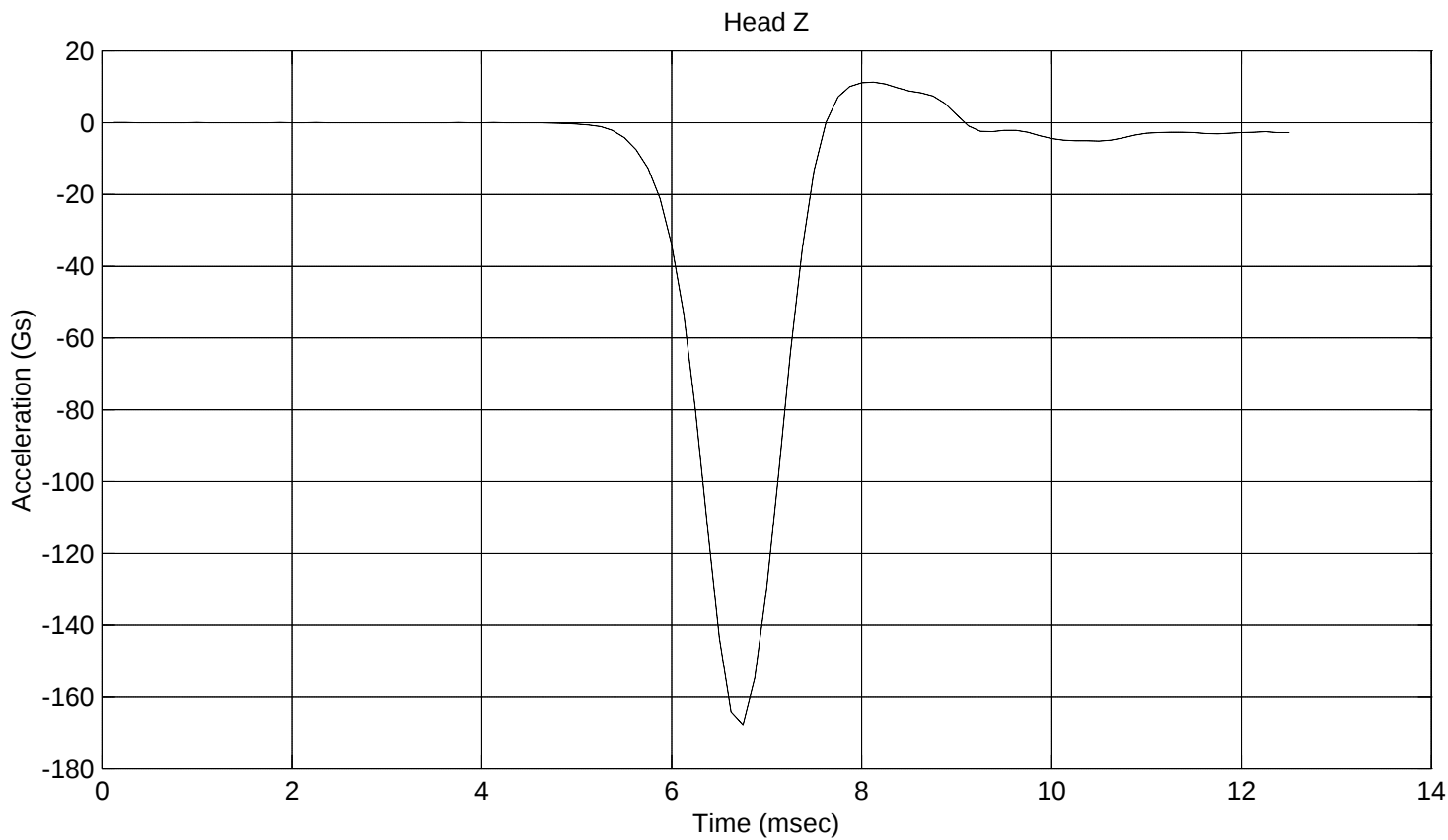
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 5
Date: January 25, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	32
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	248.2
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	4.5
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.1

REMARKS: None





ABDOMINAL COMPRESSION TEST**PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACTSID Serial No.: 027

Sequential Test Number:

5Date: January 26, 2001

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 13 mm (N)	104 - 162	114
FORCE @ 19 mm (N)	163 - 221	182
FORCE @ 25 mm (N)	222 - 280	265
FORCE @ 33 mm (N)	325 - 391	385

REMARKS: None

ORIGINAL

Dummy S/N 027

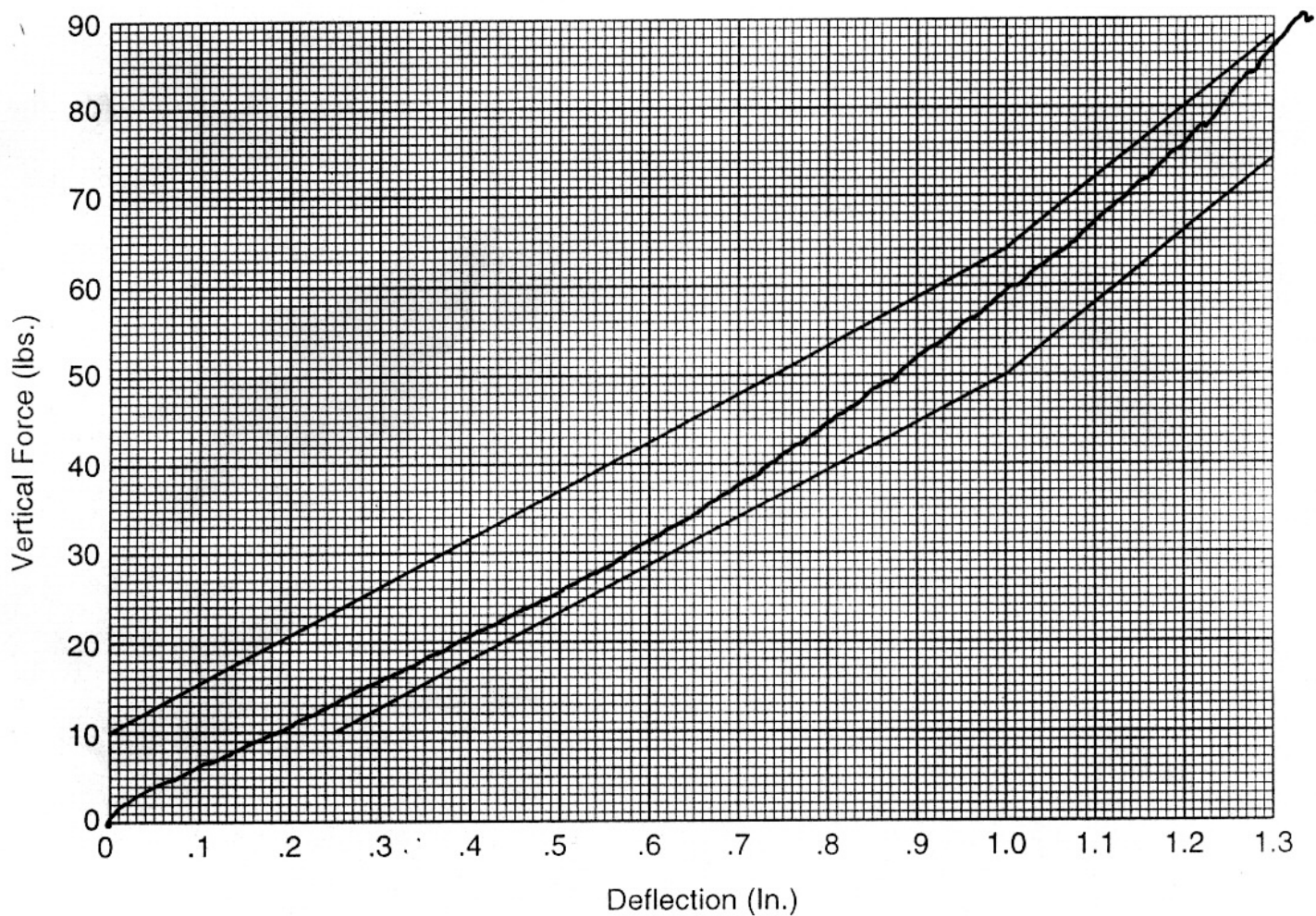
W/A _____

Date 1-25-2001

Performed By RS

Temp. 70°

Humidity 31%



Hybrid II
Abdomen Static Press

LUMBAR FLEXION TEST
PRE-TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

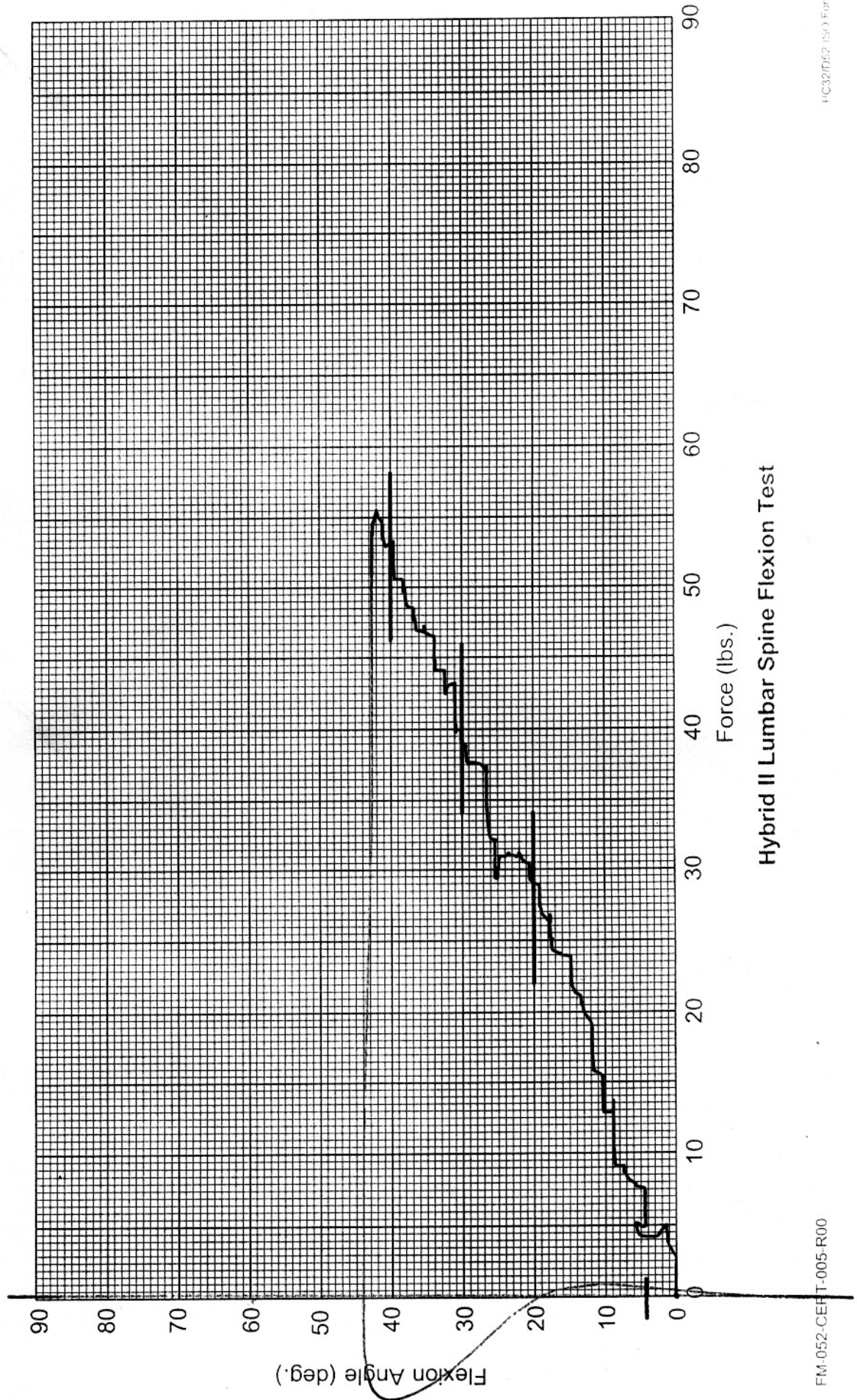
SID Serial No.: 027 Sequential Test Number: 5
Date: January 26, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	129
FORCE @ 30° (N)	151.2 - 204.6	176
FORCE @ 40° (N)	204.6 - 258	236
RETURN ANGLE	12° max.	4.2°

REMARKS: None

ORIGINAL

Dummy S/N 027
W/A _____
Date 1-25-2001
Performed By [Signature]
Temp. 70°
Humidity 31%



Hybrid II Lumbar Spine Flexion Test

PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 5
Date: January 26, 2001 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

**CALIBRATION TEST RESULTS
POST TEST**

SID NO.: 013

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	900
RH- Rib Height (mm)	502 - 520	511
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

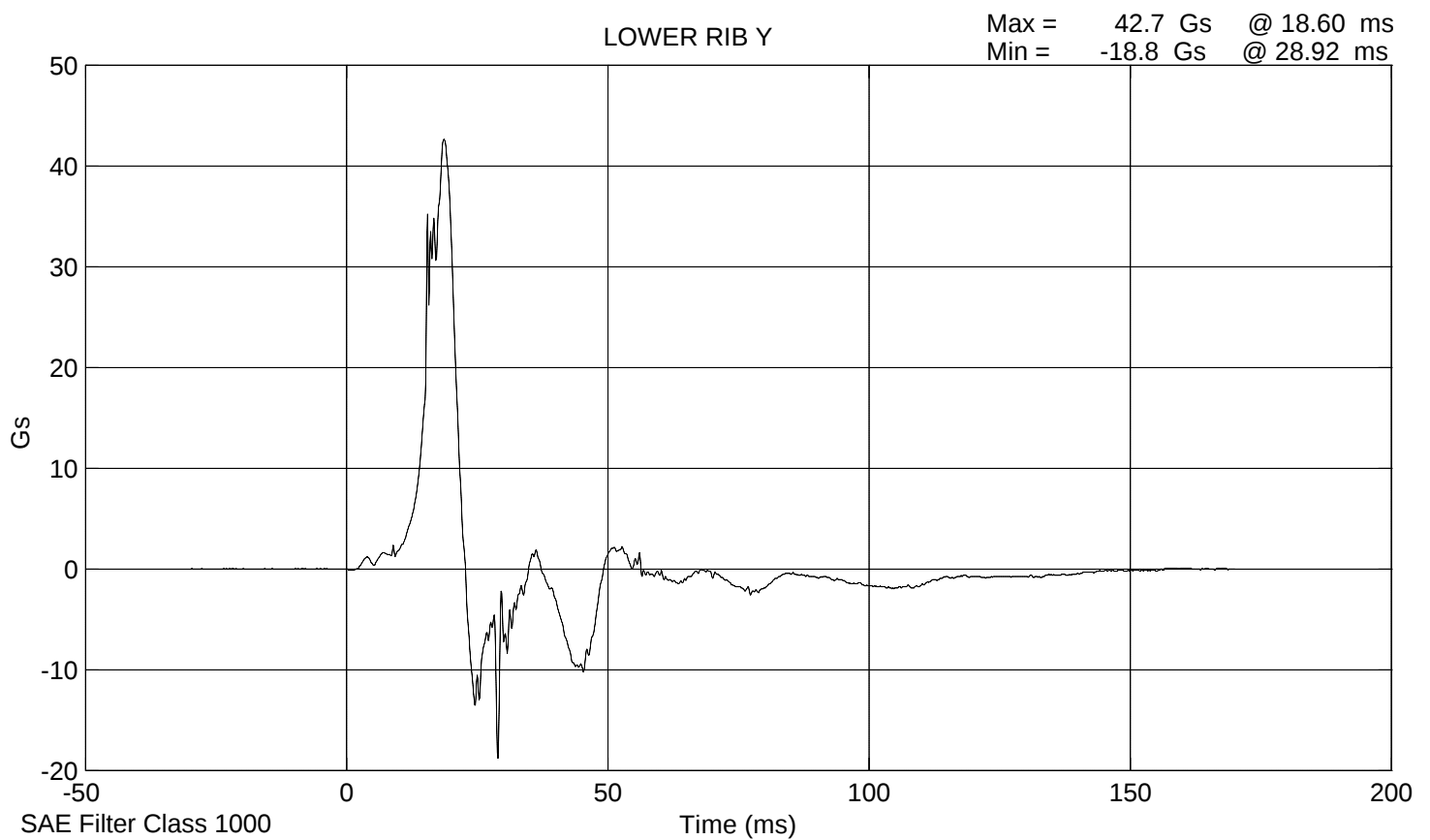
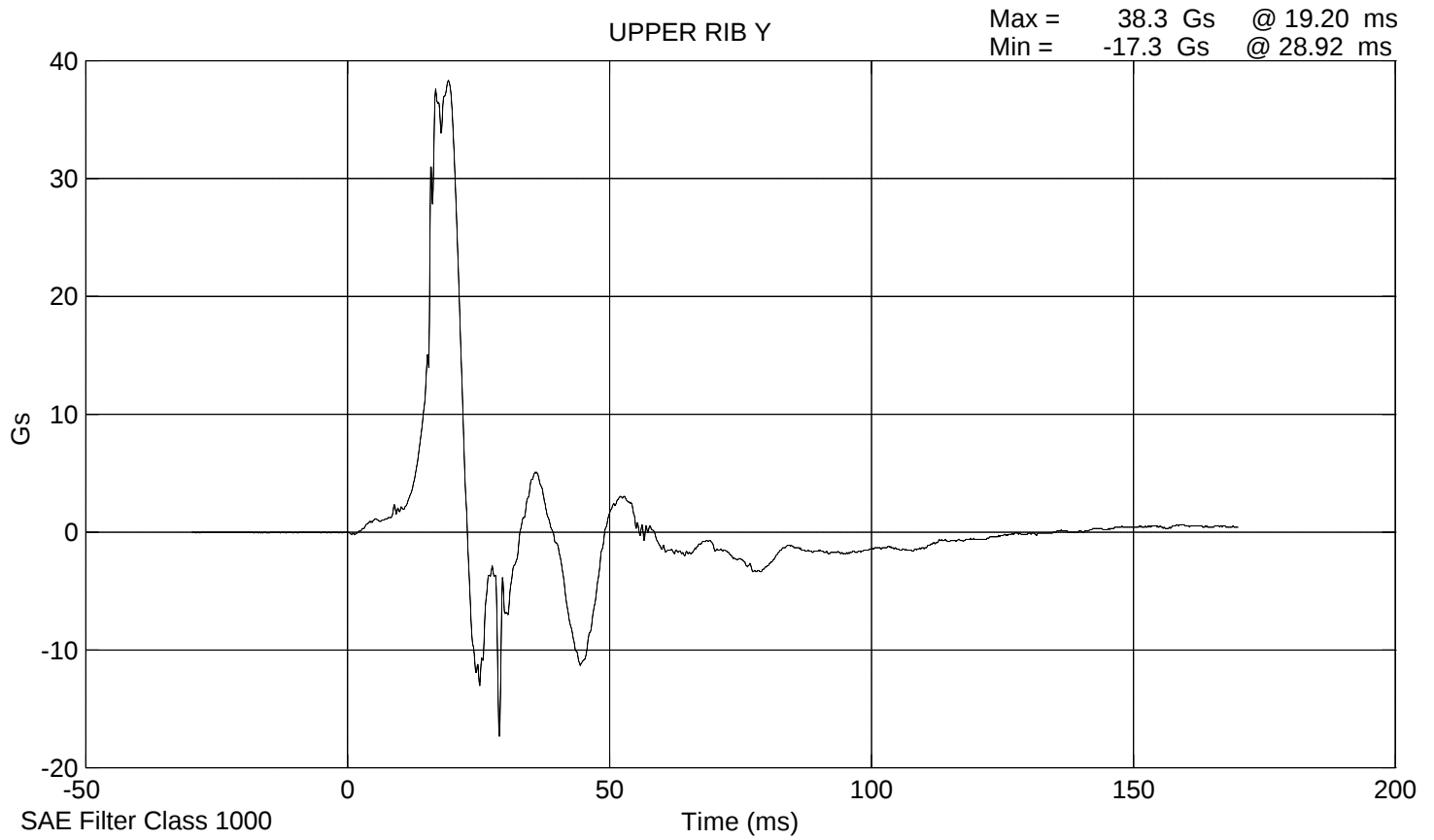
**LATERAL THORAX IMPACT TEST
POST TEST**

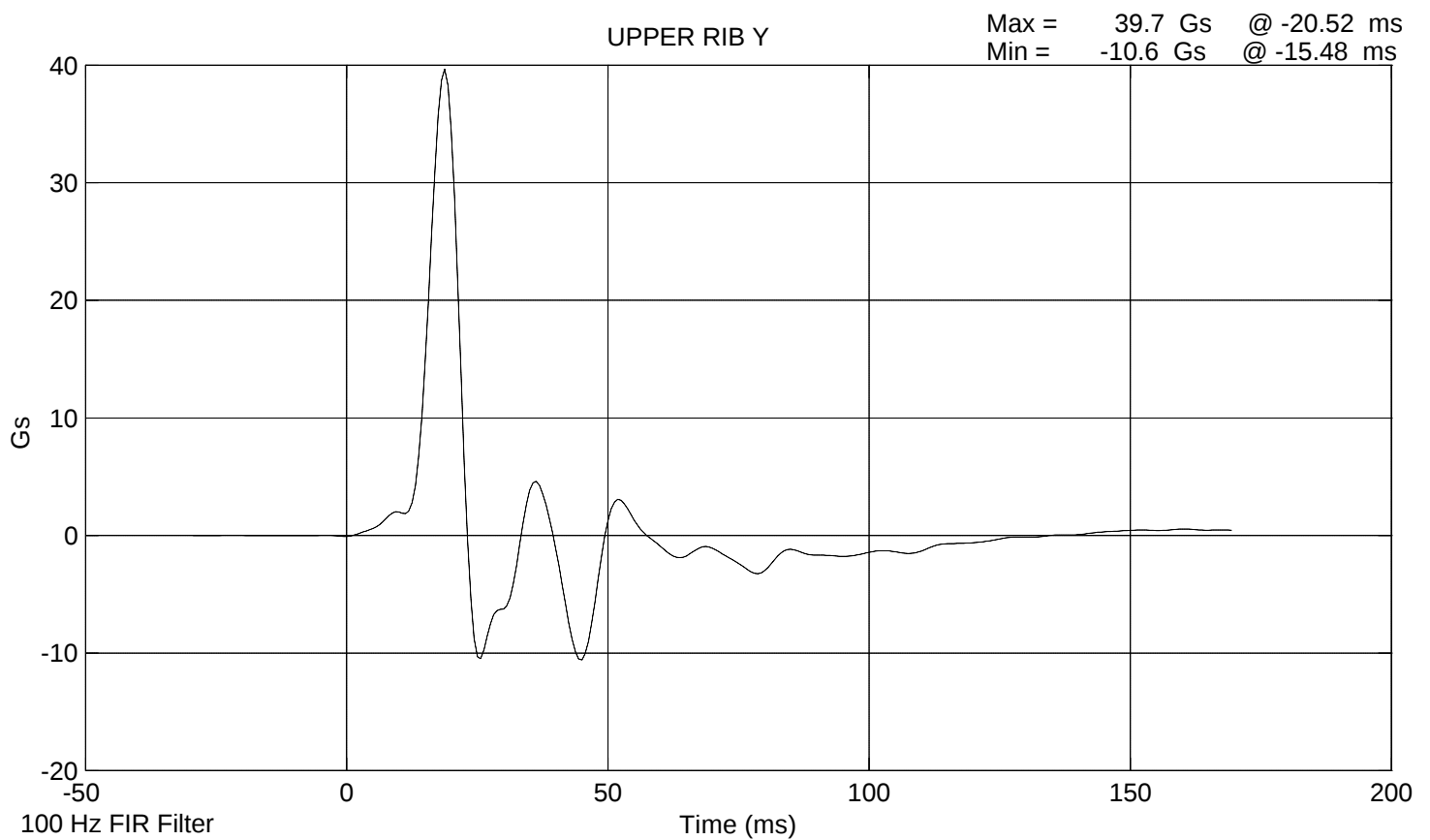
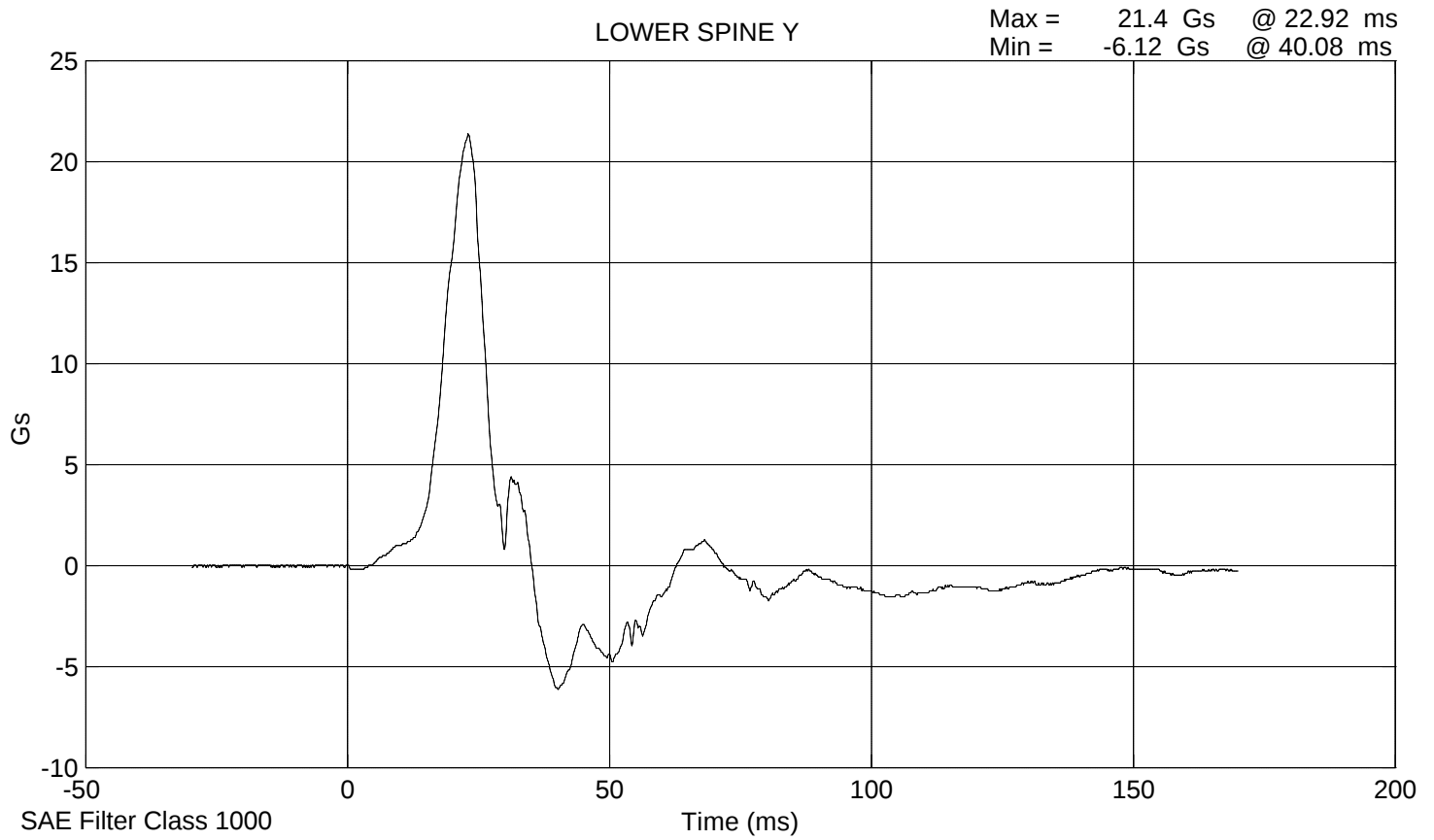
CONFIGURED FOR LEFT SIDE IMPACT

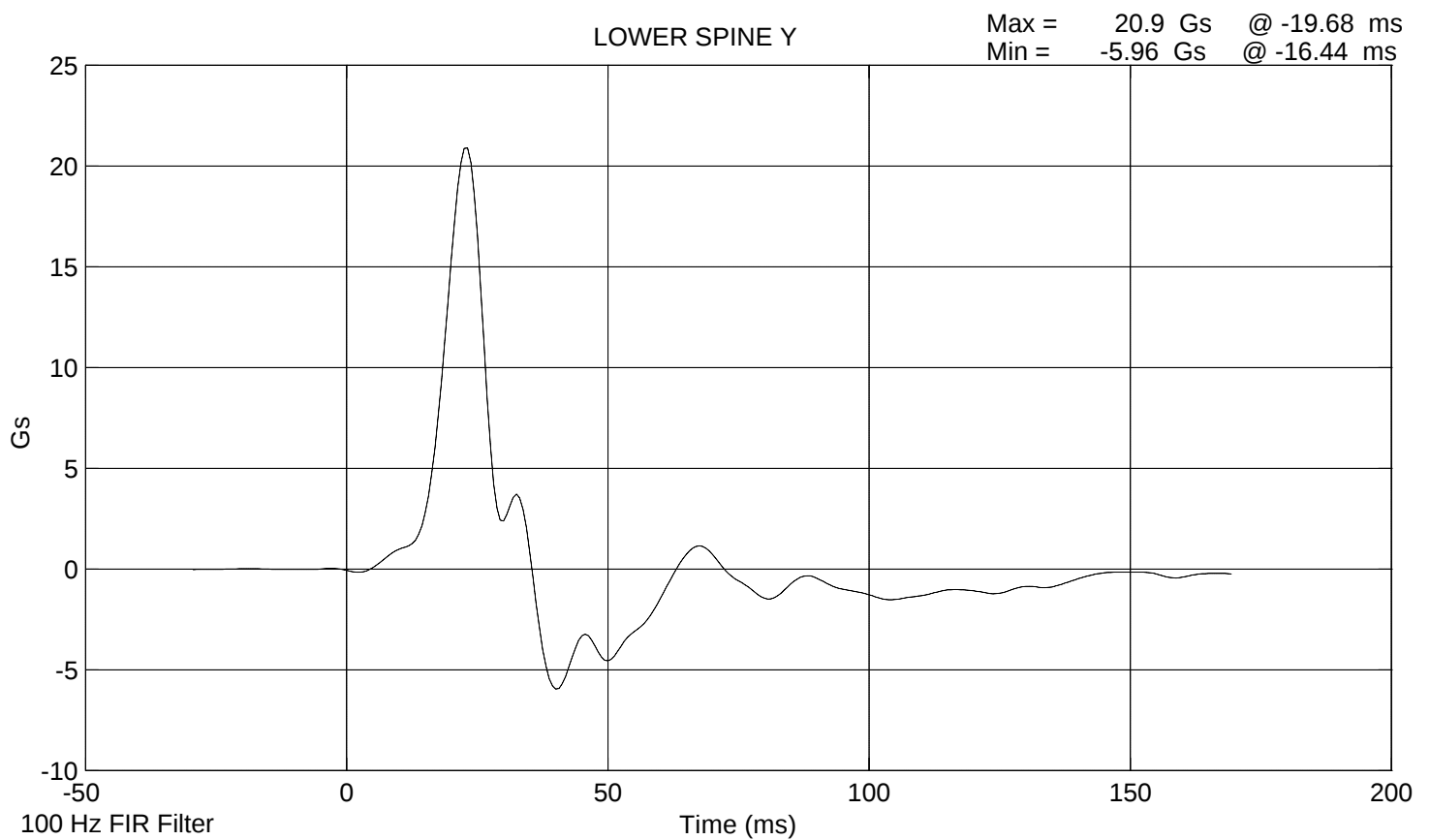
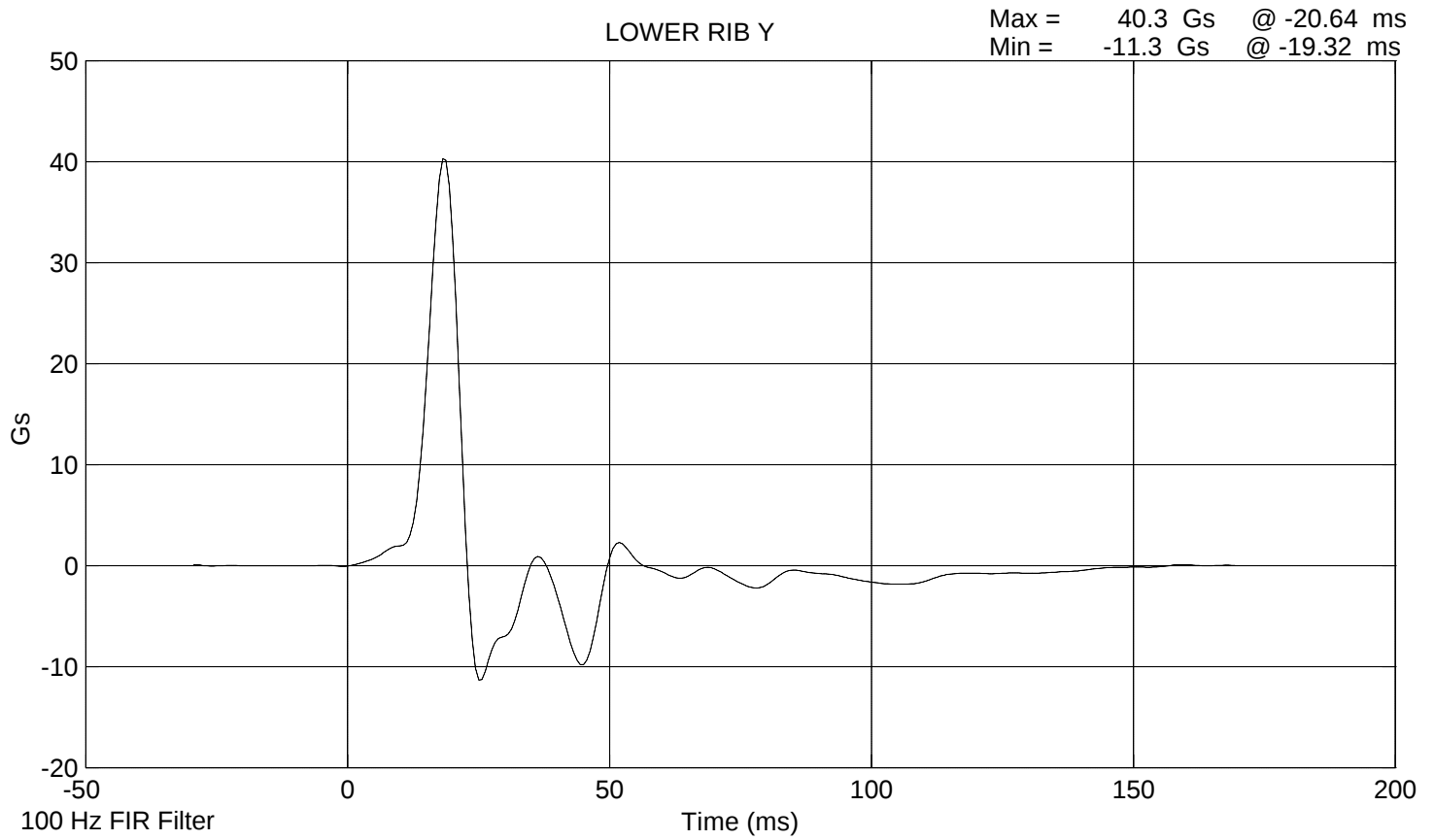
SID Serial No.: 013 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
PROBE SPEED (m/s)	4.27 - 4.33	4.29
UPPER RIB (g's)	37 - 46	39.67
LOWER RIB (g's)	37 - 46	40.31
LOWER SPINE (g's)	15 - 22	20.89

REMARKS: None







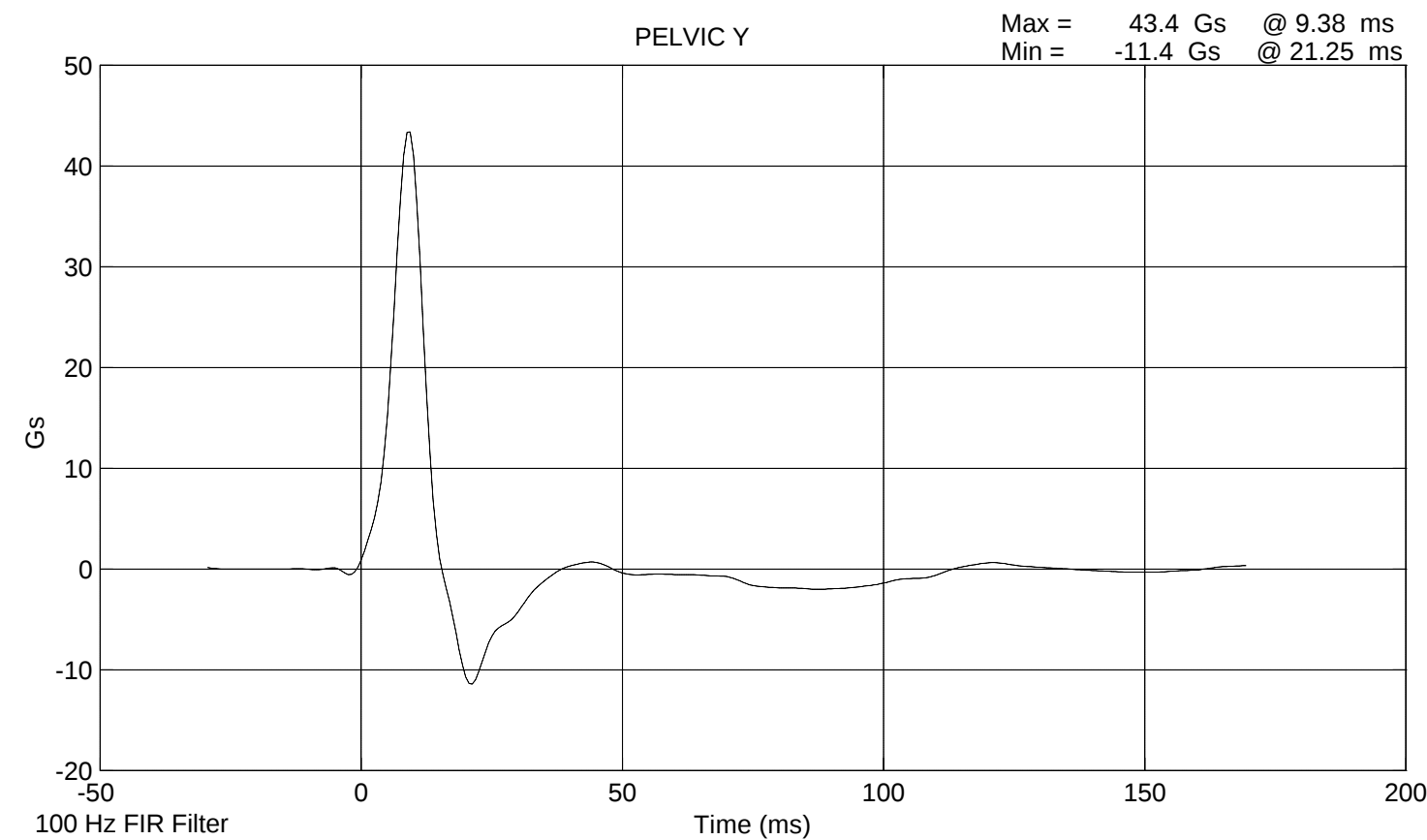
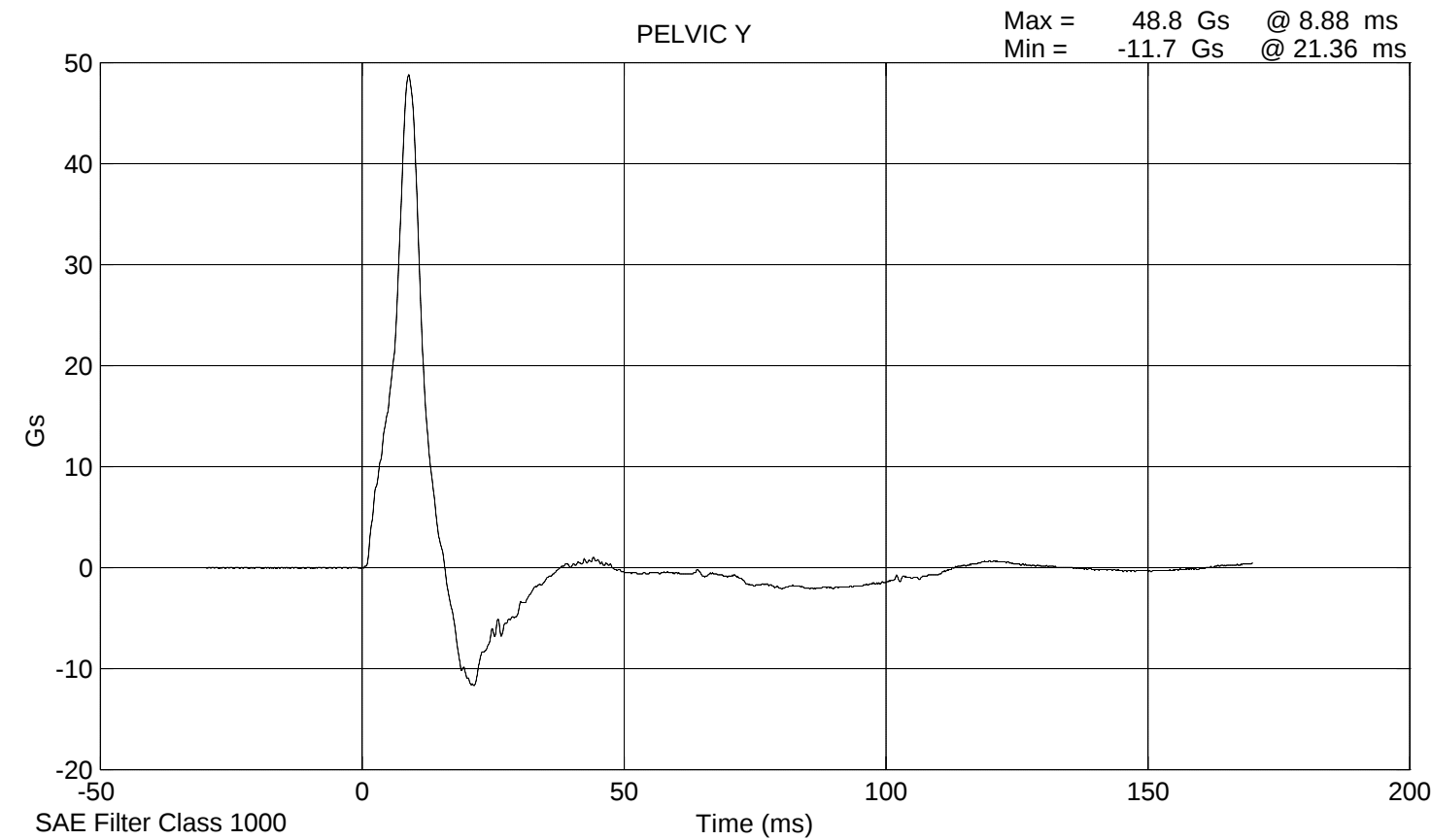
**LATERAL PELVIS IMPACT TEST
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	32.0
PROBE SPEED (m/s)	4.27 - 4.33	4.28
PELVIS ACCELERATION (g's)	40 - 60	43.38

REMARKS: None



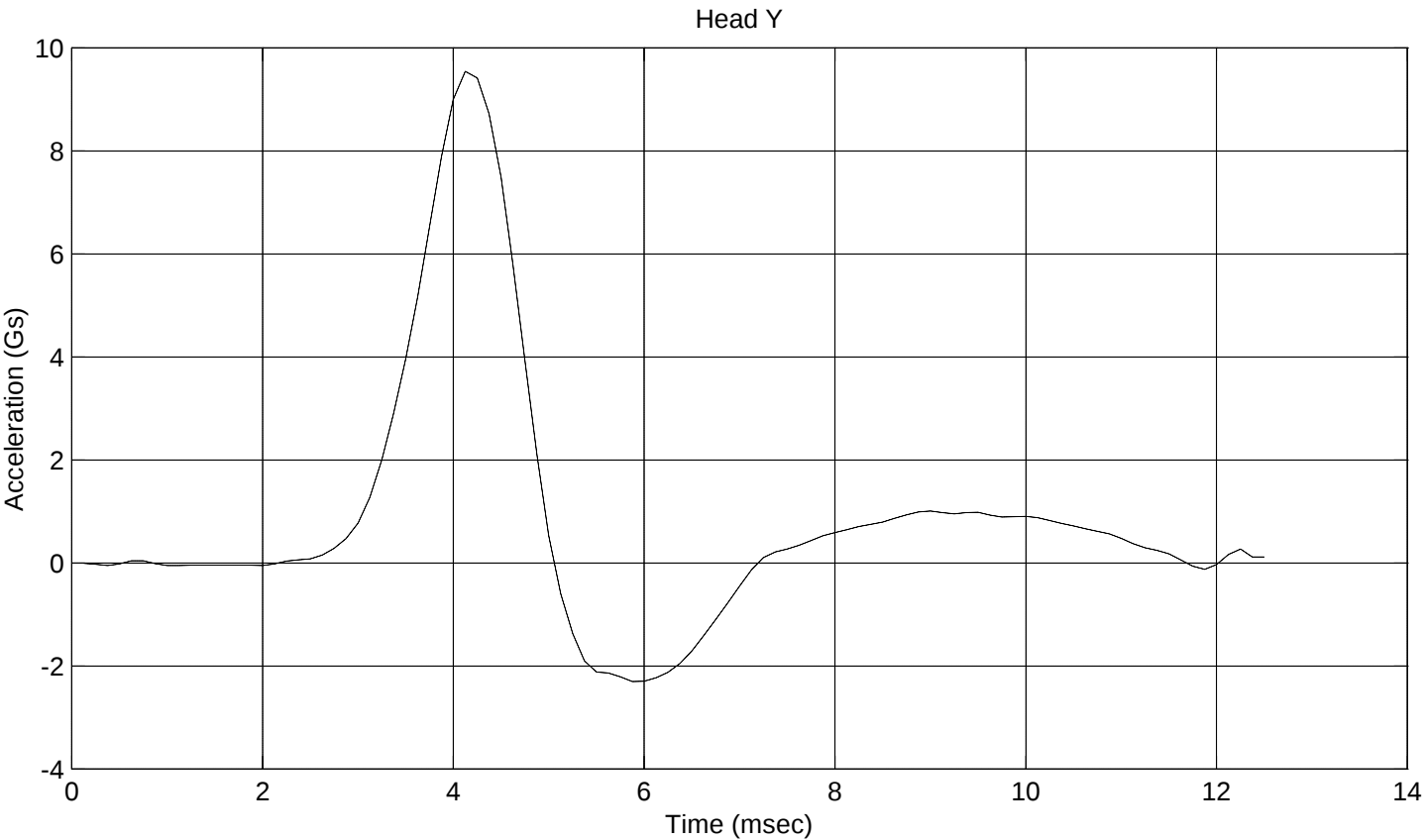
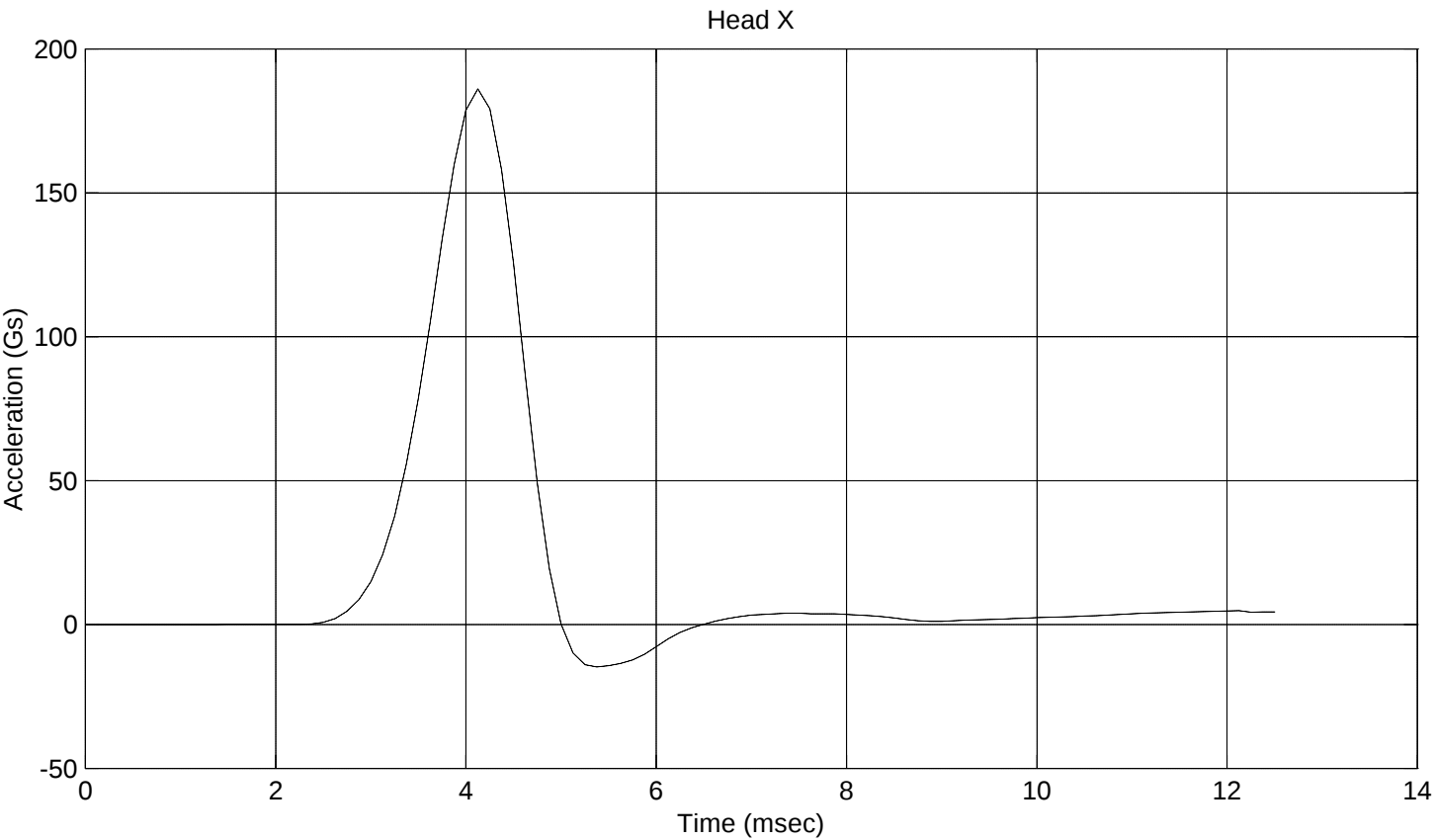
HEAD DROP TEST
POST-TEST
(Test not required for SID certification)

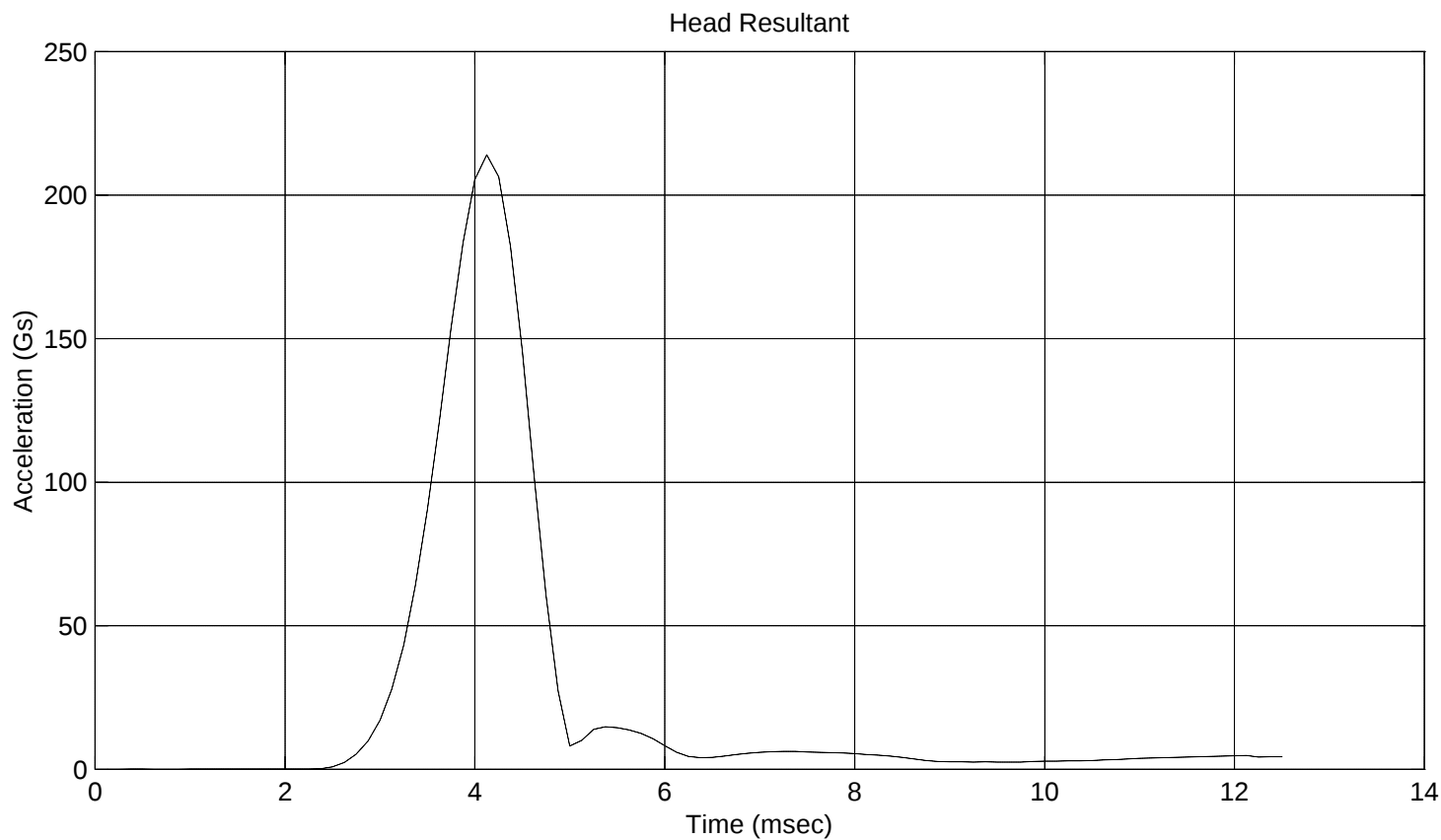
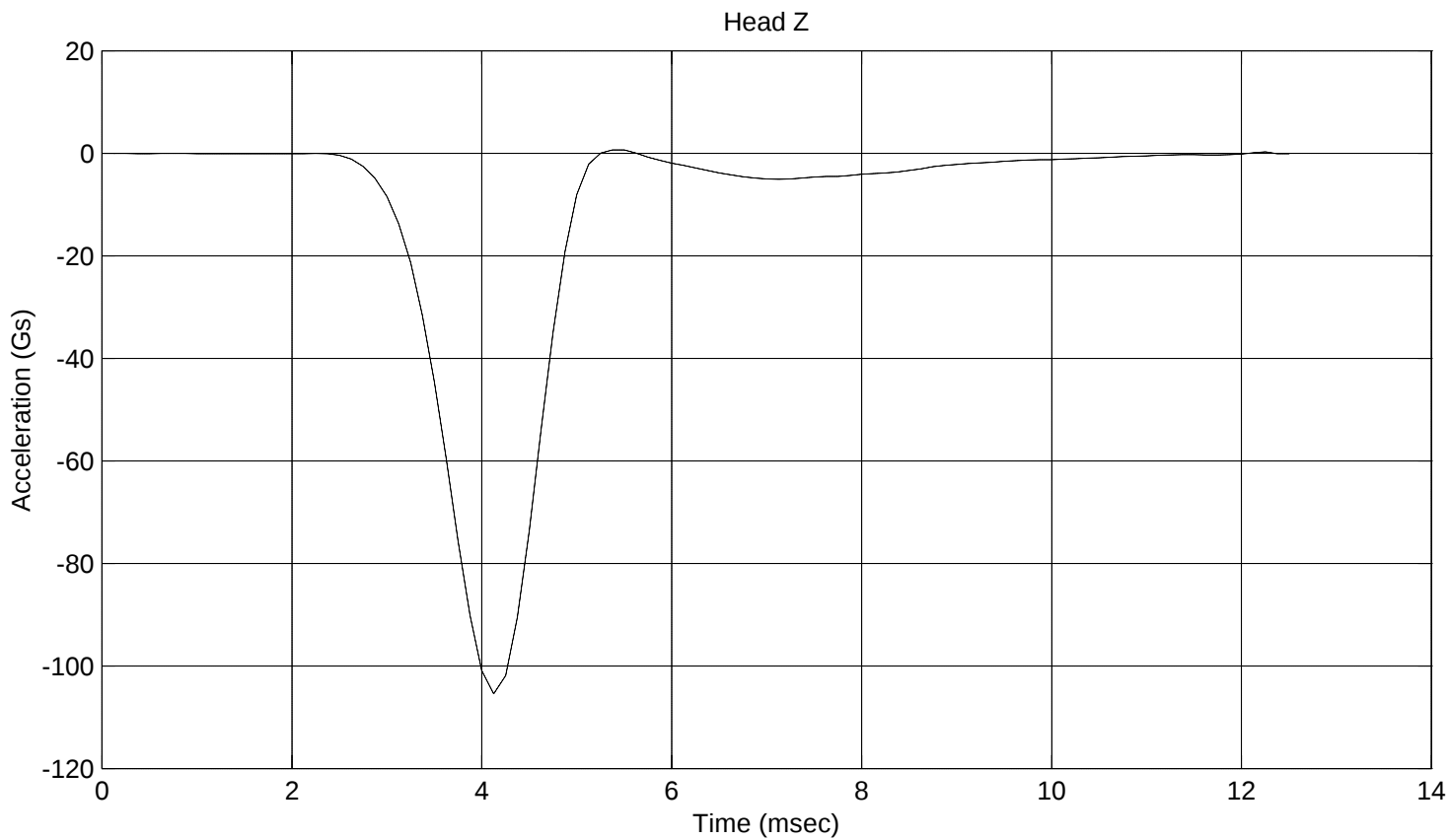
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: February 14, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	214.10
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	9.54
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.12

REMARKS: None





ABDOMINAL COMPRESSION TEST**POST TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACTSID Serial No.: 013

Sequential Test Number:

1Date: February 15, 2001

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 13 mm (N)	104 - 162	115.7
FORCE @ 19 mm (N)	163 - 221	173.5
FORCE @ 25 mm (N)	222 - 280	249.1
FORCE @ 33 mm (N)	325 - 391	360.3

REMARKS: None

Dummy S/N 013

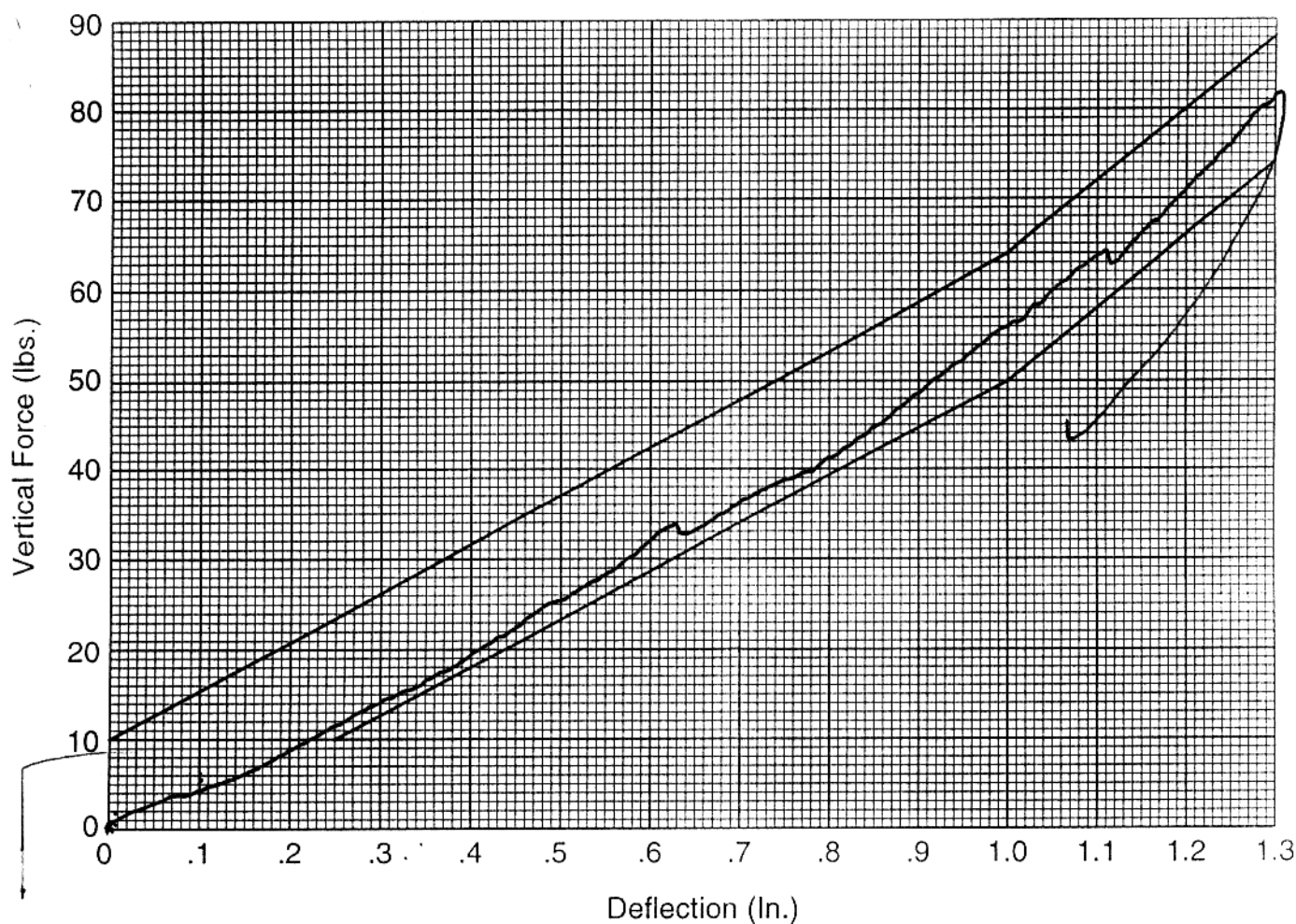
W/A _____

Date 2-15-2001

Performed By [Signature]

Temp. 71°

Humidity 31%



**Hybrid II
Abdomen Static Press**

LUMBAR FLEXION TEST
POST TEST
(Test not required for SID certification)

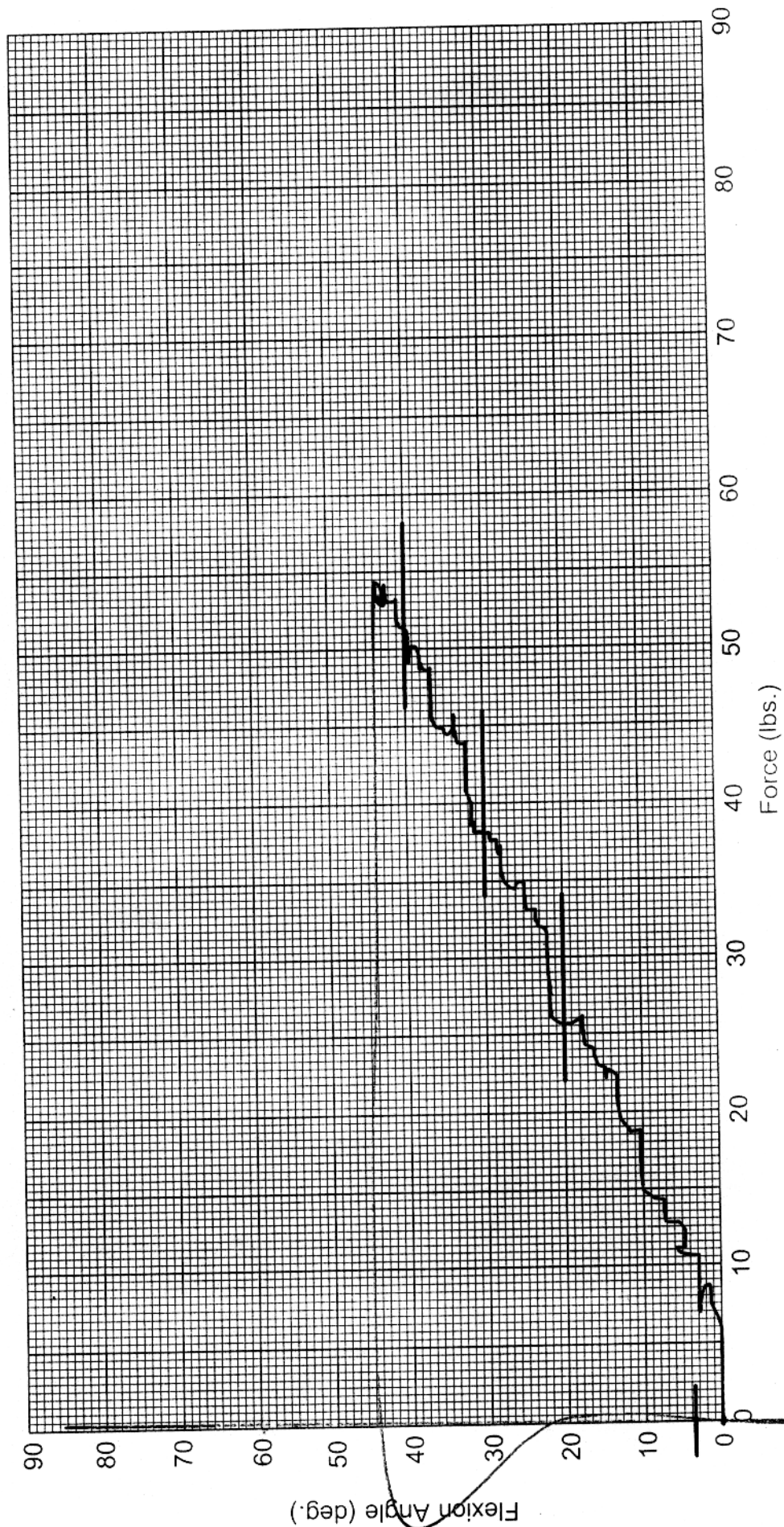
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	113.4
FORCE @ 30° (N)	151.2 - 204.6	169.0
FORCE @ 40° (N)	204.6 - 258	229.1
RETURN ANGLE	12° max.	3.5°

REMARKS: None

Dummy S/N 013
 W/A _____
 Date 2-15-2001
 Performed By [Signature]
 Temp. 71°
 Humidity 31%



Hybrid II Lumbar Spine Flexion Test

POST TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

**CALIBRATION TEST RESULTS
POST TEST**

SID NO.: 027

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 1
Date: February 16, 2001 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 1
Date: February 16, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	907
RH- Rib Height (mm)	502 - 520	518
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	368

REMARKS: None

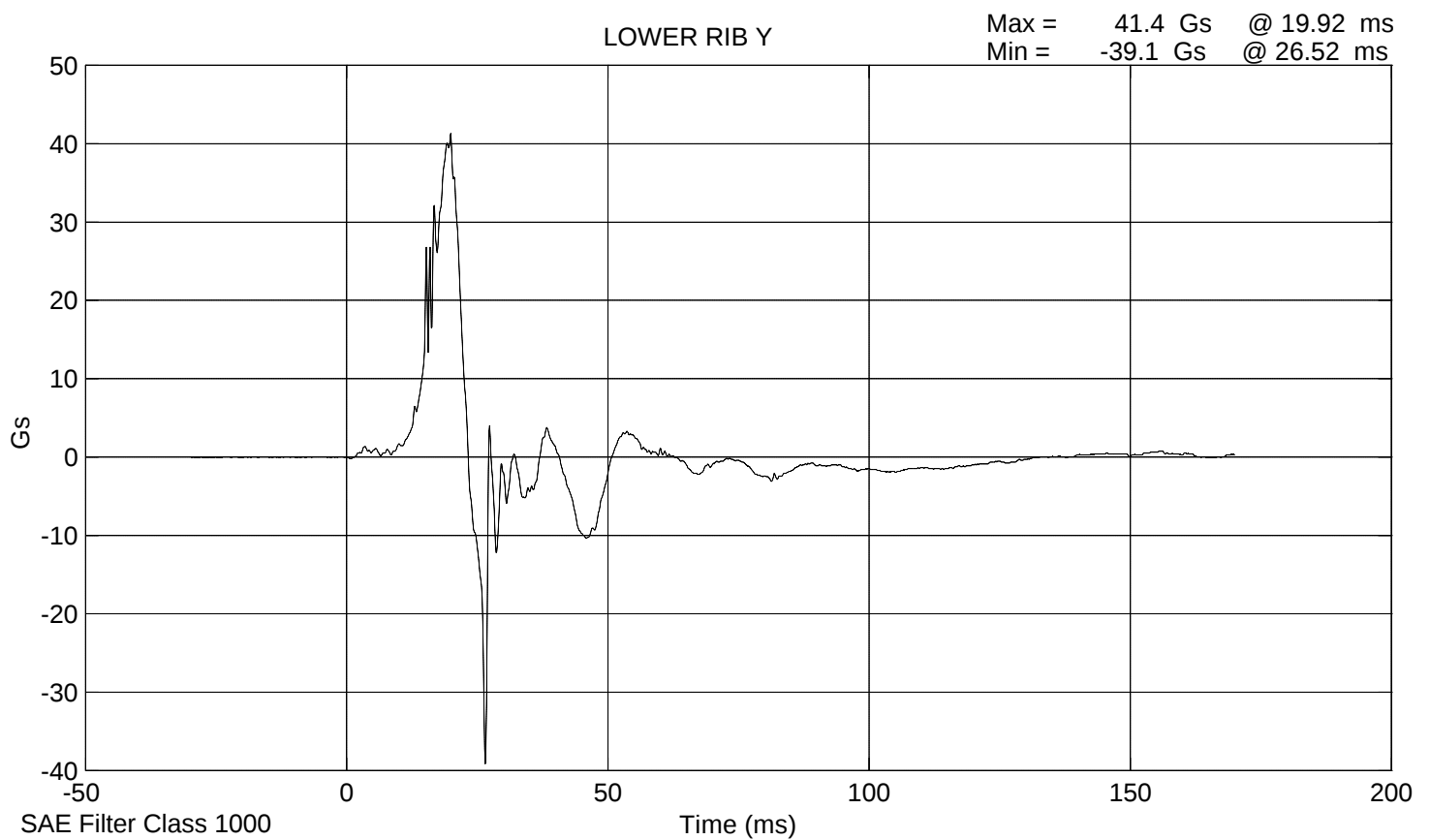
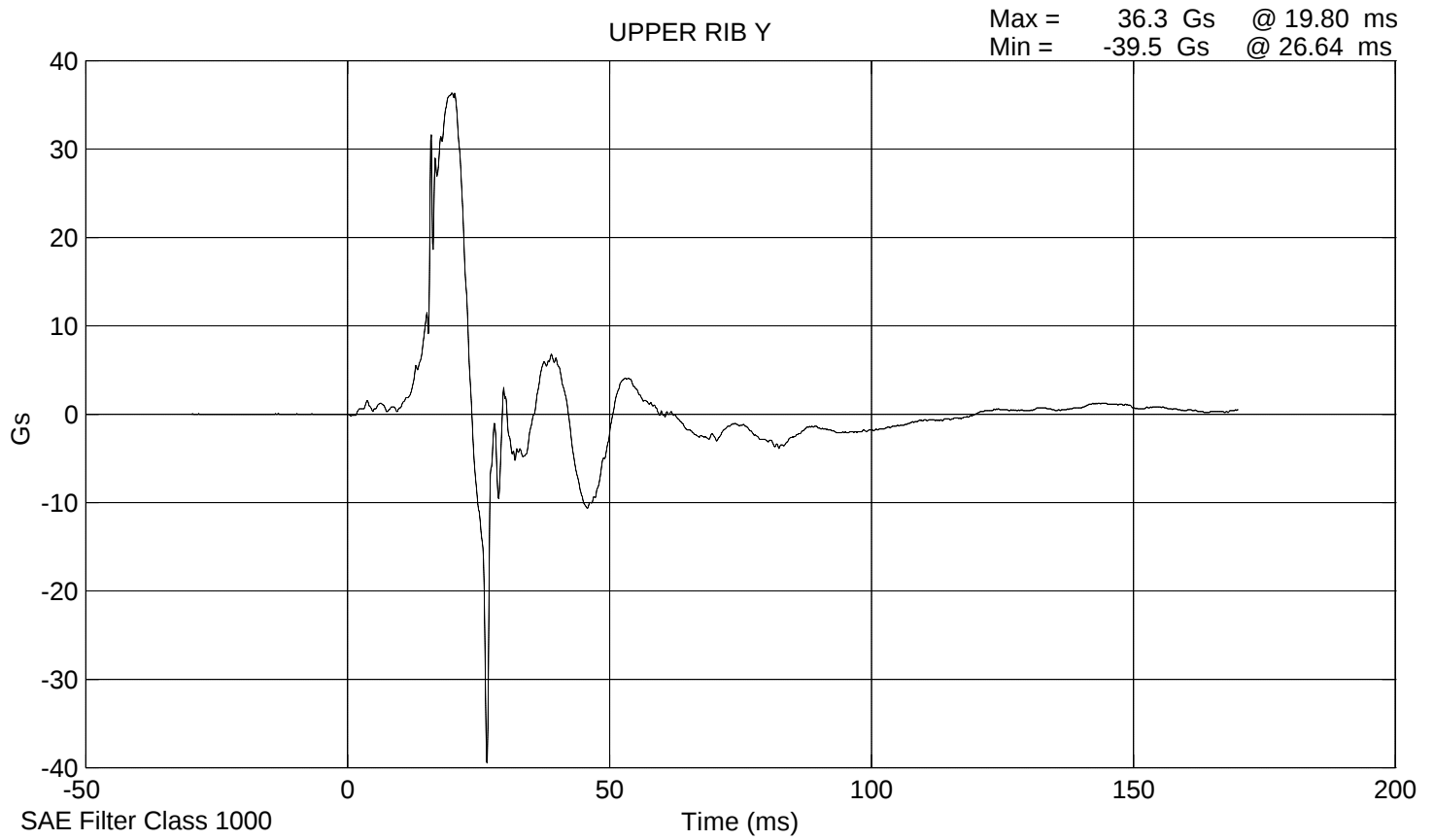
**LATERAL THORAX IMPACT TEST
POST TEST**

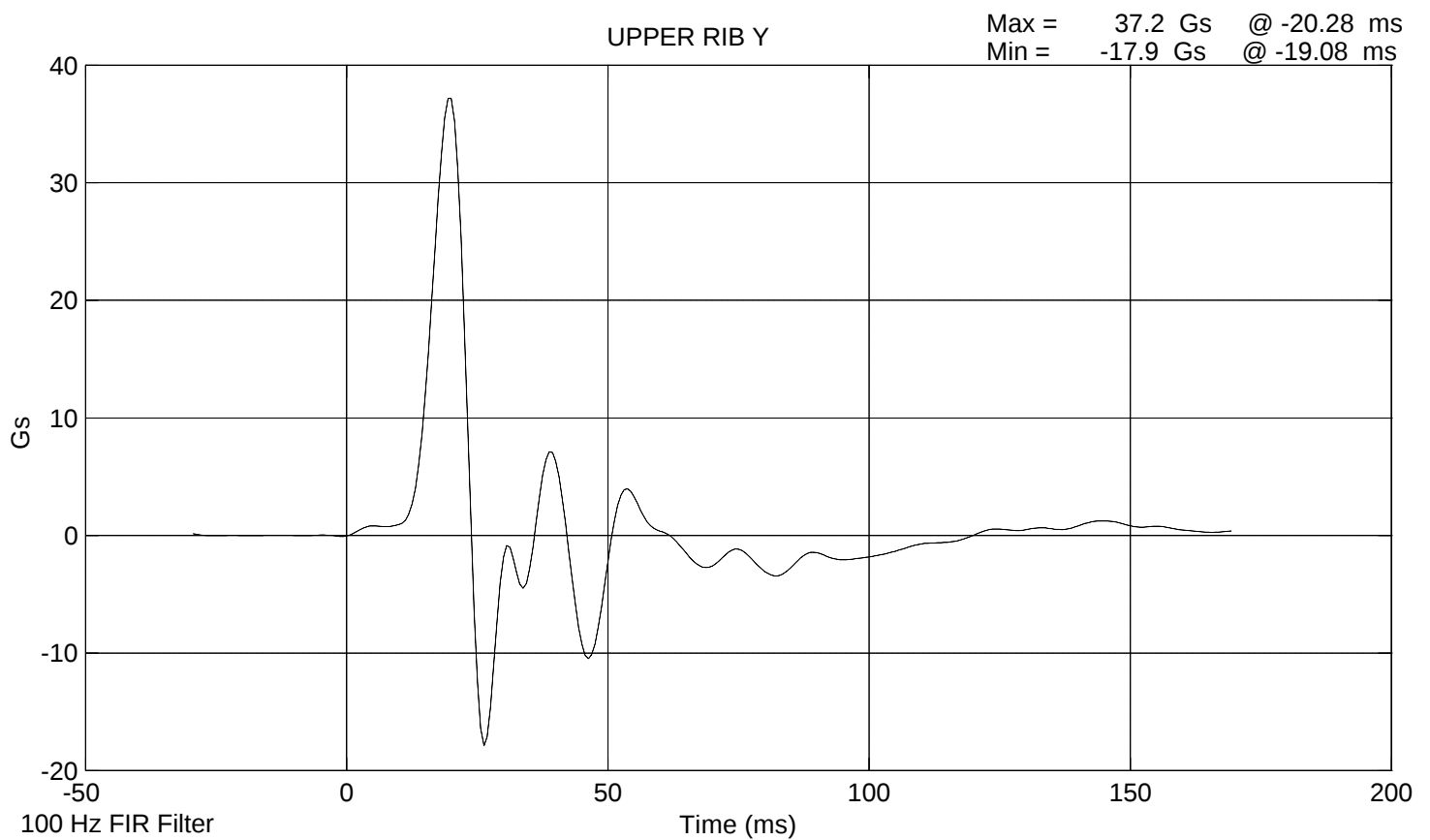
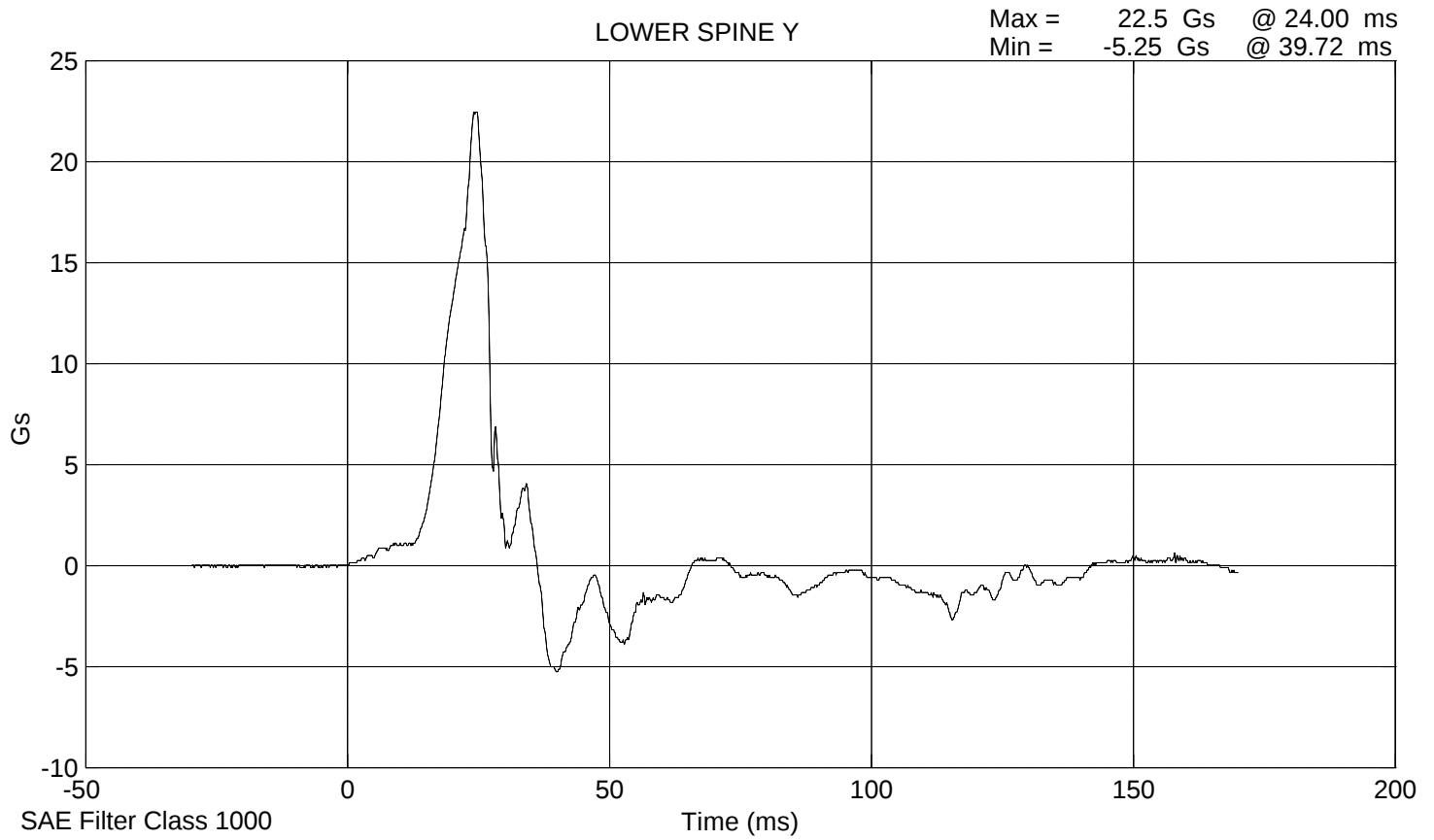
CONFIGURED FOR LEFT SIDE IMPACT

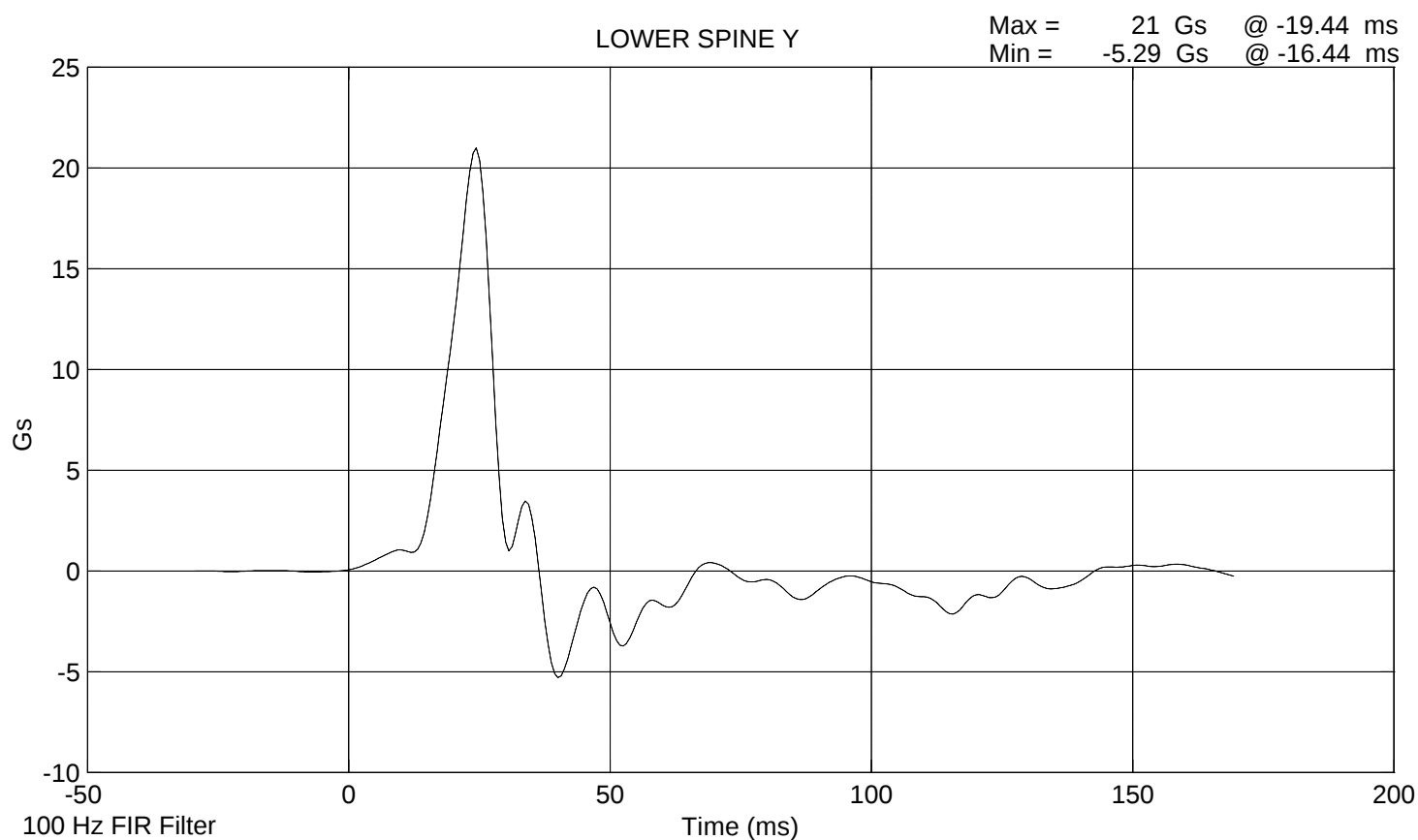
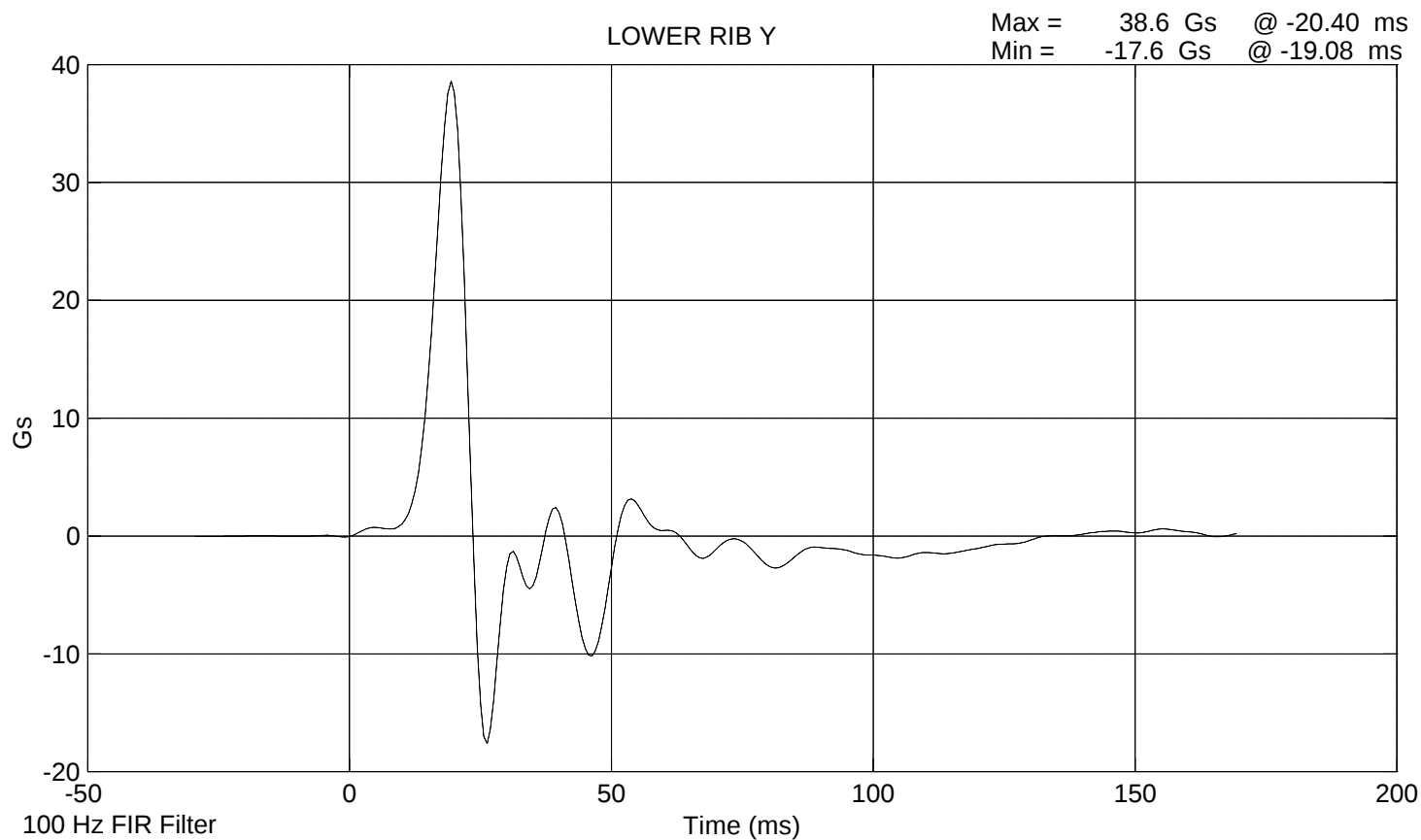
SID Serial No.: 027 Sequential Test Number: 1
Date: February 16, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	20.1
RELATIVE HUMIDITY (%)	10 - 70	31
PROBE SPEED (m/s)	4.27 - 4.33	4.33
UPPER RIB (g's)	37 - 46	37.2
LOWER RIB (g's)	37 - 46	38.6
LOWER SPINE (g's)	15 - 22	21.0

REMARKS: None







**LATERAL PELVIS IMPACT TEST
POST TEST**

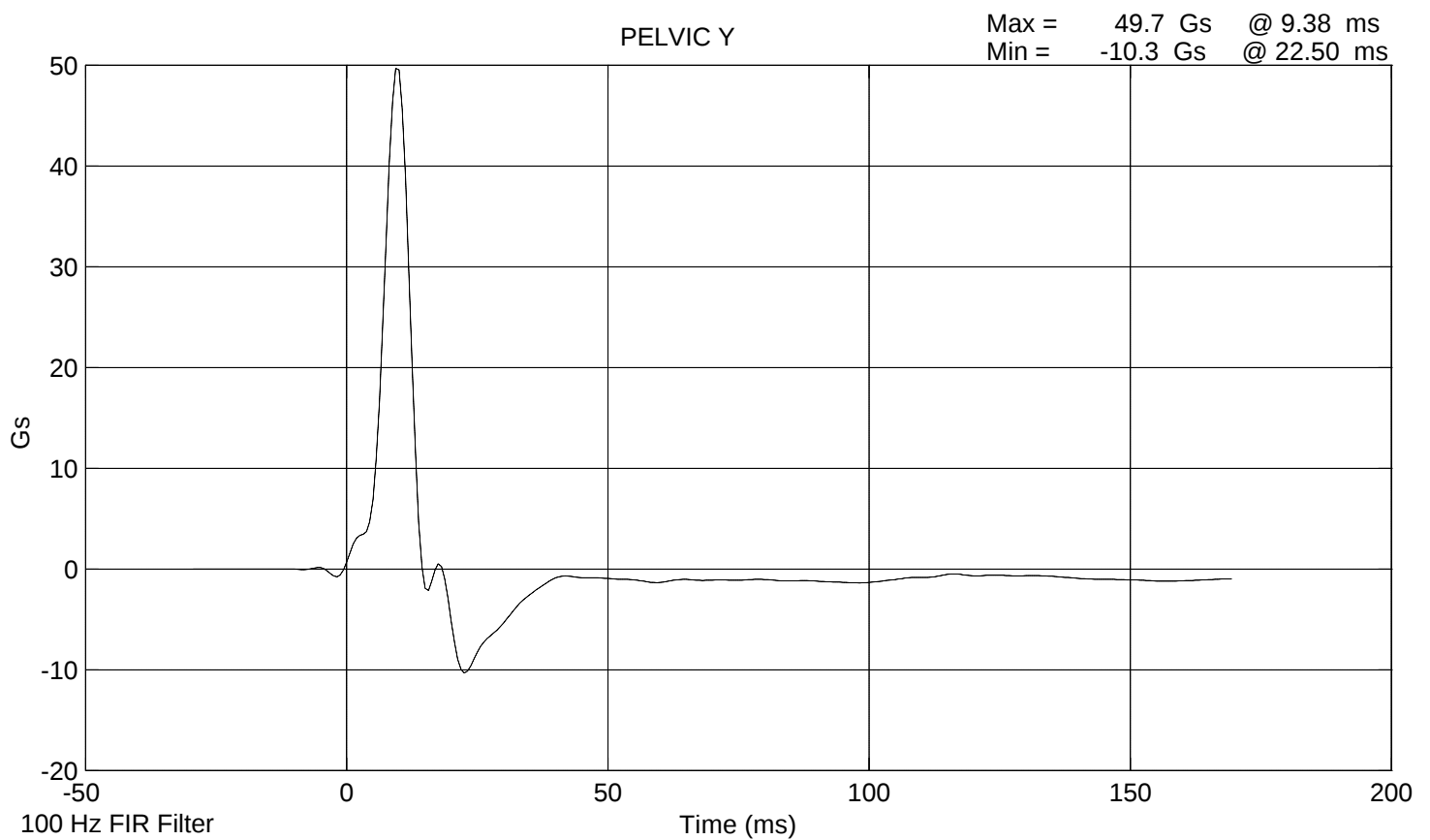
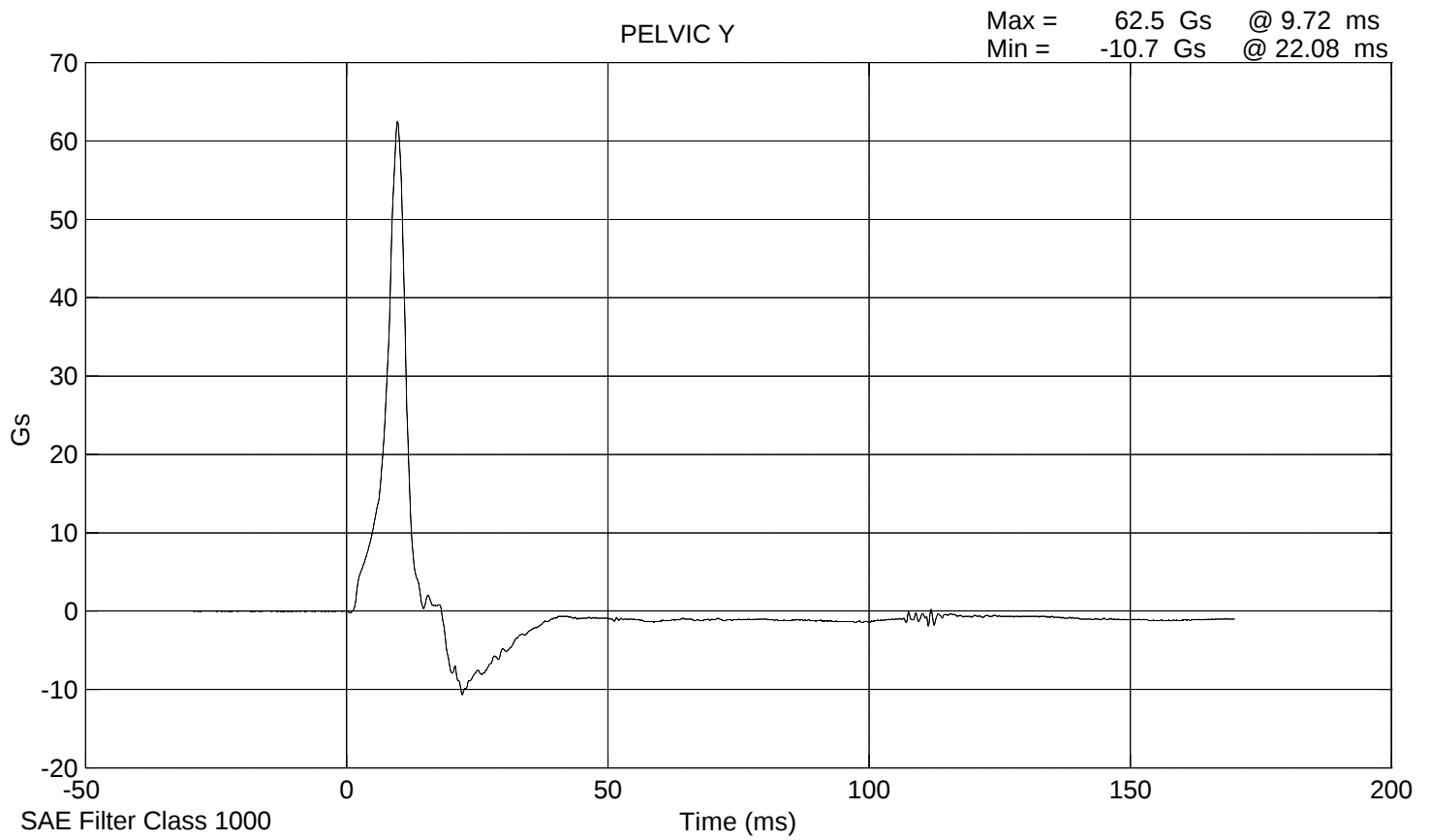
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 1
Date: February 16, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	20.1
RELATIVE HUMIDITY (%)	10 - 70	31
PROBE SPEED (m/s)	4.27 - 4.33	4.27
PELVIS ACCELERATION (g's)	40 - 60	49.7

REMARKS: None

sid 027 pelvic impact test @ 4.2733 m/s



HEAD DROP TEST
POST-TEST
(Test not required for SID certification)

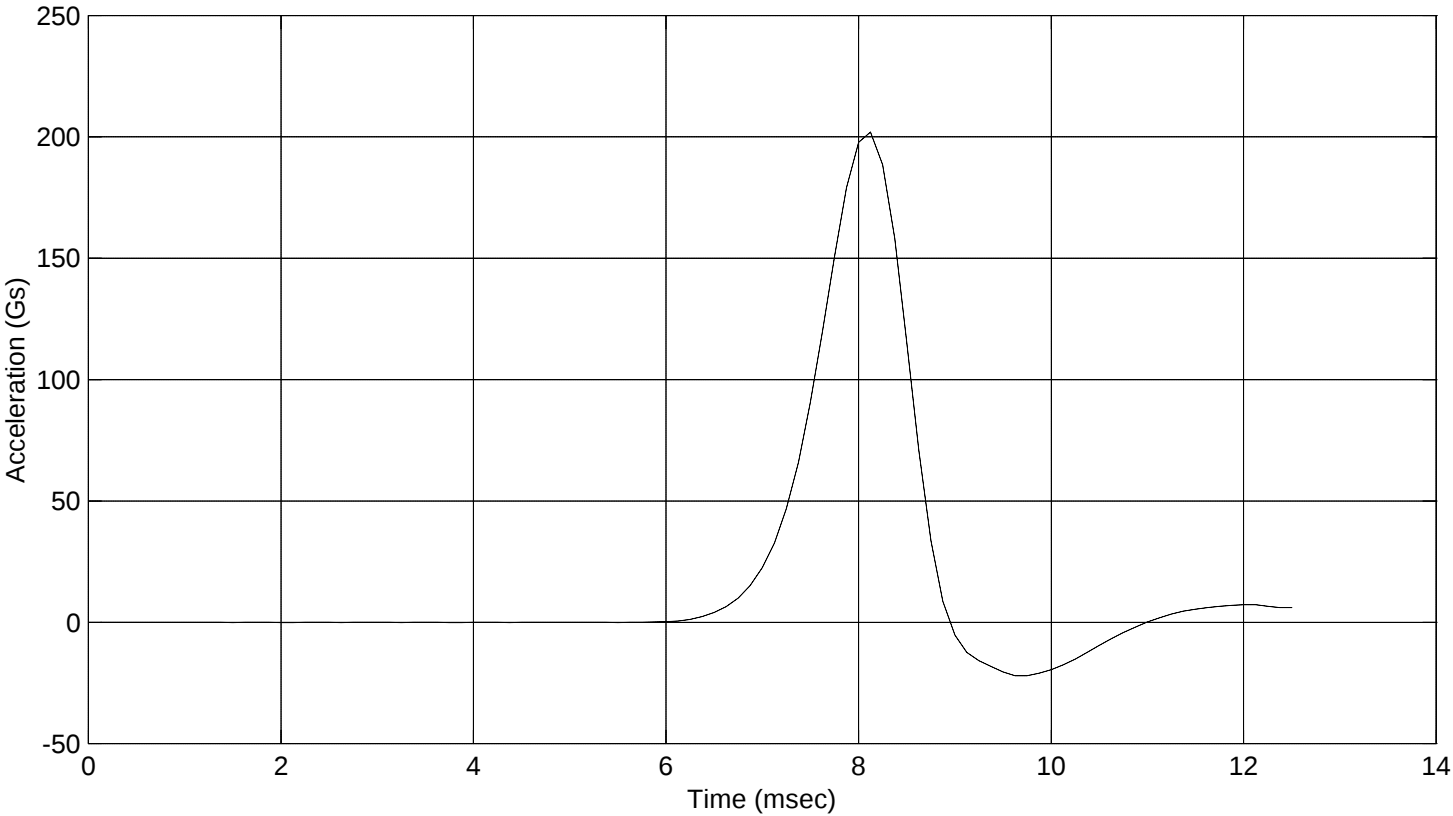
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 1
Date: February 15, 2001 Laboratory Technician: B. Swiecicki

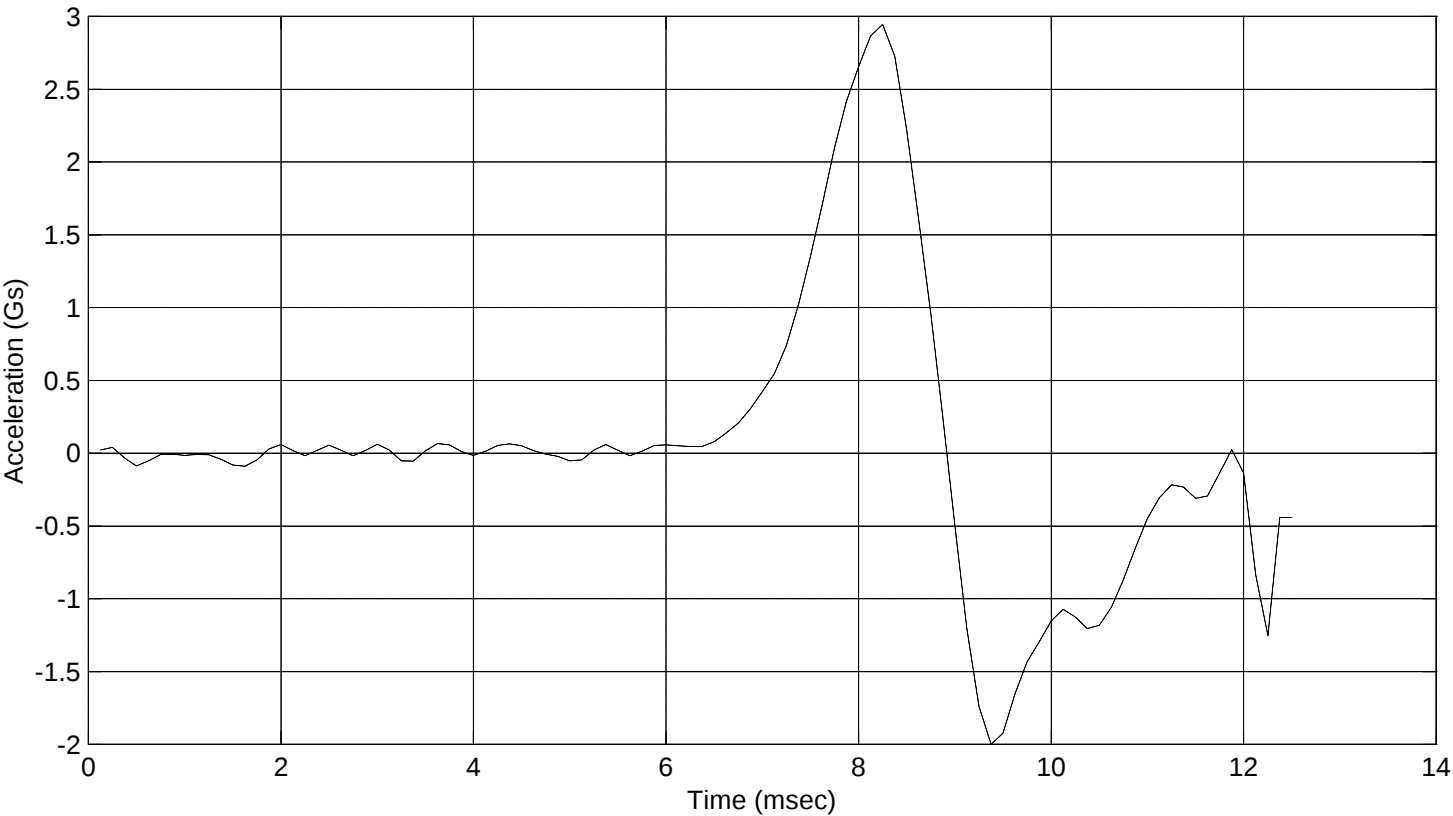
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	30.0
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	252.07
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	2.94
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.12

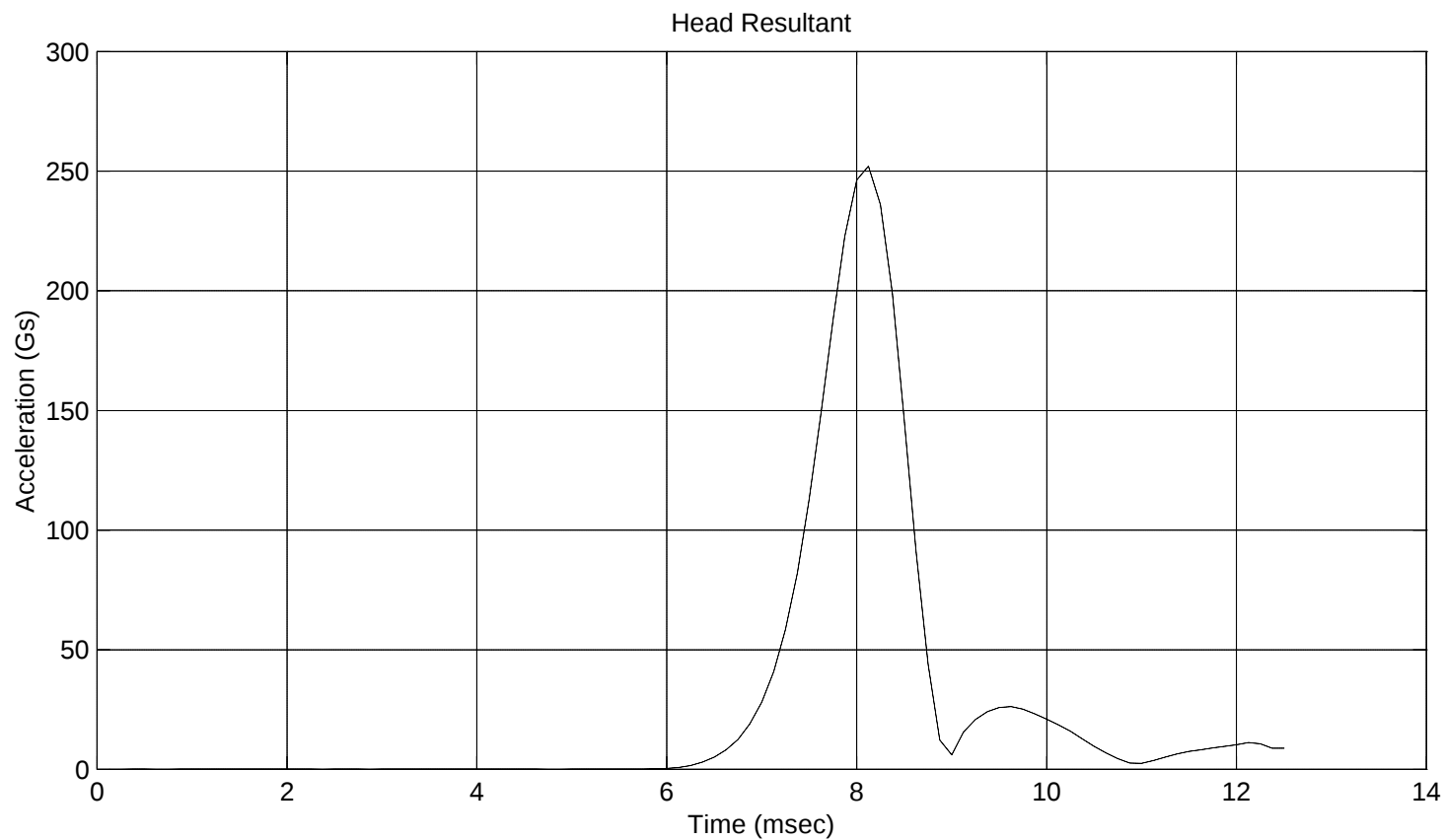
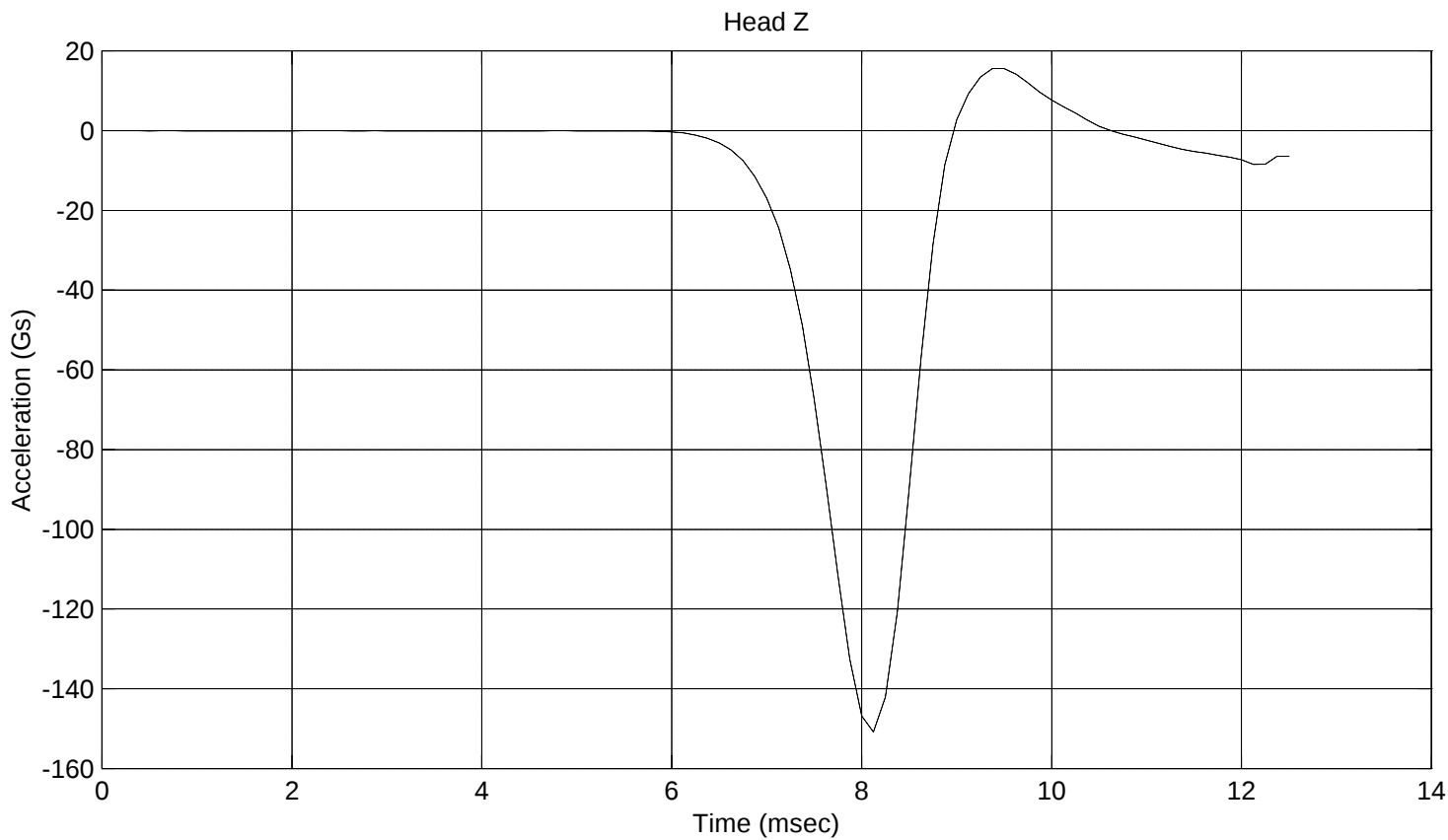
REMARKS: None

Head X



Head Y





**ABDOMINAL COMPRESSION TEST
POST TEST**

(Test not required for SID certification)

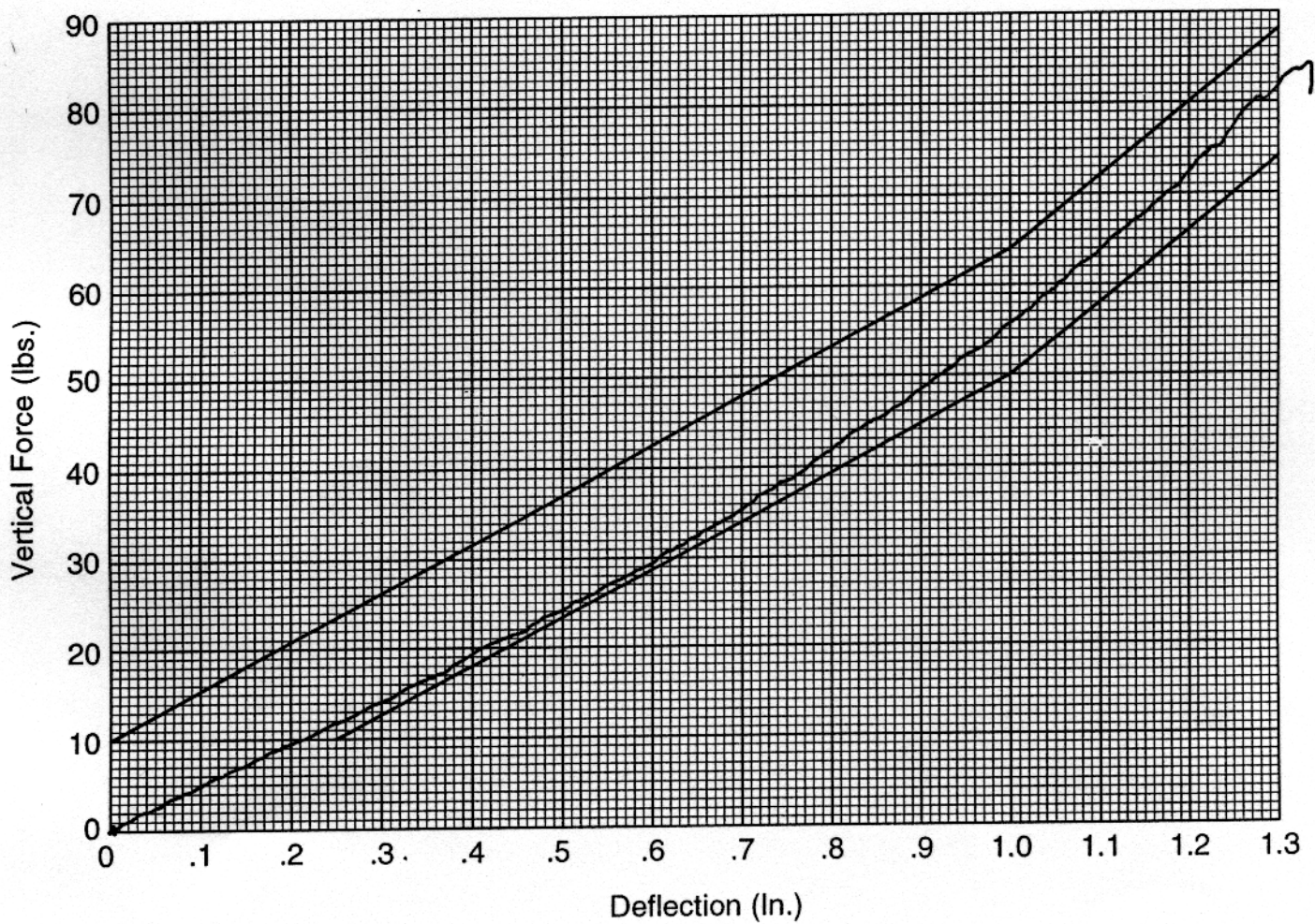
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 1
Date: February 16, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	20.1
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 13 mm (N)	104 - 162	111.2
FORCE @ 19 mm (N)	163 - 221	171.3
FORCE @ 25 mm (N)	222 - 280	249.1
FORCE @ 33 mm (N)	325 - 391	364.8

REMARKS: None

Dummy S/N 027
W/A _____
Date 2-16-2009
Performed By [Signature]
Temp. 70°
Humidity 31%



Hybrid II
Abdomen Static Press

ORIGINAL

LUMBAR FLEXION TEST
POST TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

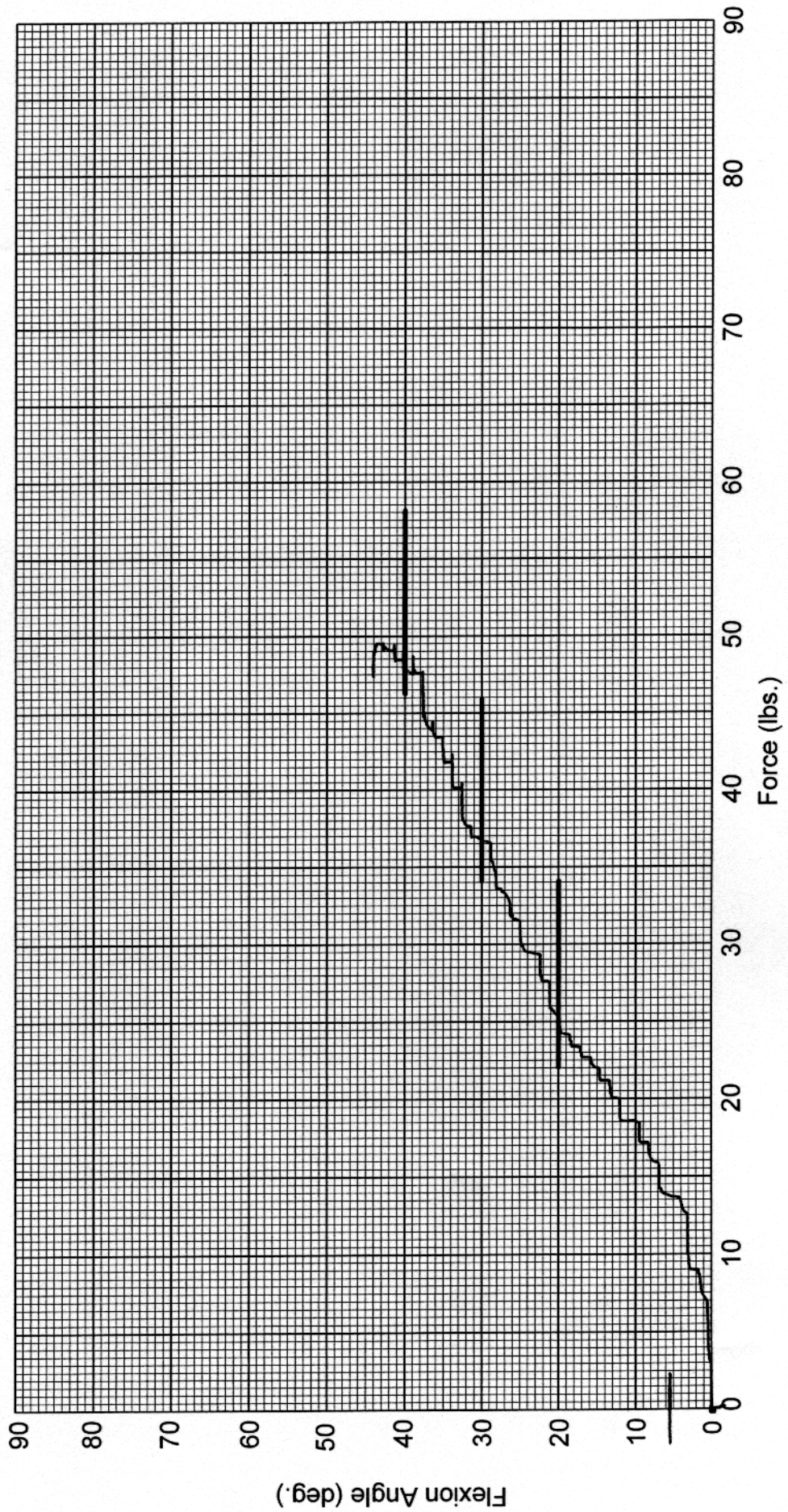
SID Serial No.: 027 Sequential Test Number: 1
Date: February 16, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	20.1
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	108.9
FORCE @ 30° (N)	151.2 - 204.6	162.8
FORCE @ 40° (N)	204.6 - 258	215.7
RETURN ANGLE	12° max.	5.5°

REMARKS: None

ORIGINAL

Dummy S/N 027
W/A _____
Date 2-16-2001
Performed By [Signature]
Temp. 70°
Humidity 31%



Hybrid II Lumbar Spine Flexion Test

POST TEST DUMMY INSPECTION LIST

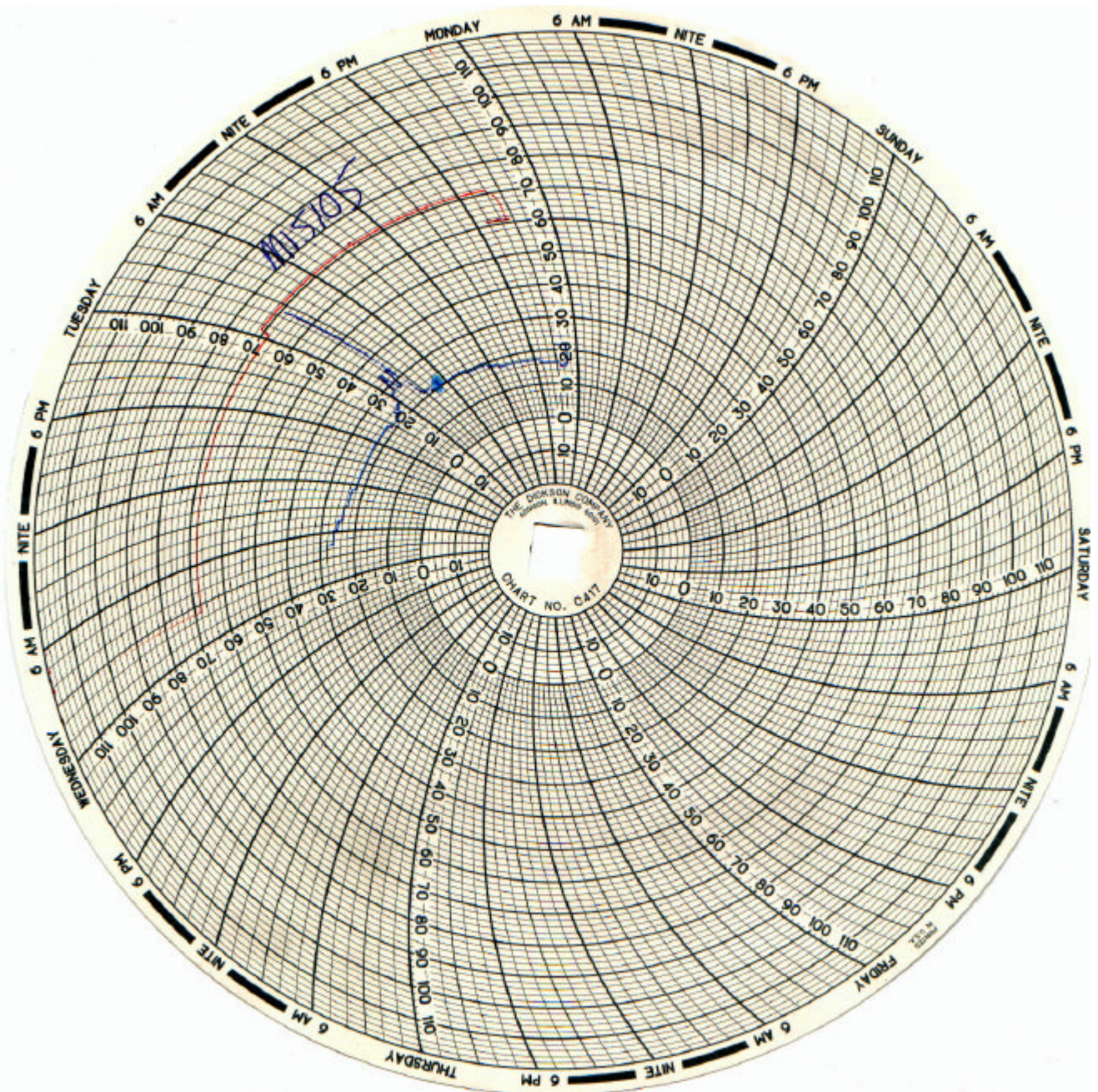
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 027 Sequential Test Number: 1
 Date: February 16, 2001 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

TEMPERATURE TRACE



APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

	FRONT SID NO.: 013		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	ENDEVCO	AC-P16813	13-Sep-00
HEAD AY	ENDEVCO	AC-P17255	14-Sep-00
HEAD AZ	ENDEVCO	AC-P17145	14-Sep-00
UPPER RIB	ENDEVCO	AC-P16761	14-Sep-00
LOWER RIB	ENDEVCO	AC-P17131	14-Sep-00
LOWER SPINE	ENDEVCO	AC-P15736	14-Sep-00
PELVIS	ENDEVCO	AC-P16628	14-Sep-00
UPPER RIB REDUNDANT	ENDEVCO	AC-P17247	14-Sep-00
LOWER RIB REDUNDANT	ENDEVCO	AC-P16616	13-Sep-00
LOWER SPINE REDUNDANT	ENDEVCO	AC-P17288	14-Sep-00
PELVIS REDUNDANT	ENDEVCO	AC-P16575	14-Sep-00

	REAR SID NO.: 027		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	ENDEVCO	AC-P17237	16-Jan-01
HEAD AY	ENDEVCO	AC-P15747	16-Jan-01
HEAD AZ	ENDEVCO	AC-P14438	16-Jan-01
UPPER RIB	ENDEVCO	AC-P18545	06-Jan-01
LOWER RIB	ENDEVCO	AC-P18532	09-Jan-01
LOWER SPINE	ENDEVCO	AC-P18525	06-Jan-01
PELVIS	ENDEVCO	AC-P18531	06-Jan-01
UPPER RIB REDUNDANT	ENDEVCO	AC-P18536	06-Jan-01
LOWER RIB REDUNDANT	ENDEVCO	AC-P18792	06-Jan-01
LOWER SPINE REDUNDANT	ENDEVCO	AC-P18682	06-Jan-01
PELVIS REDUNDANT	ENDEVCO	AC-P18519	06-Jan-01

REMARKS: None

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

VEHICLE AND MDB INSTRUMENTATION

	VEHICLE AND MDB INSTRUMENTS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
RIGHT FRONT SILL (X)	ENDEVCO	AC-AP064	18-Sep-00
RIGHT FRONT SILL (Y)	ENDEVCO	AC-BB14	18-Sep-00
RIGHT FRONT SILL (Z)	ENDEVCO	AC-B10955	18-Sep-00
RIGHT REAR SILL (X)	ENDEVCO	AC-B11073	07-Sep-00
RIGHT REAR SILL (Y)	ENDEVCO	AC-J27941	31-Aug-00
RIGHT REAR SILL (Z)	ENDEVCO	AC-B10954	07-Sep-00
REAR FLOORPAN ABOVE AXLE (X)	ENDEVCO	AC-B10827	07-Aug-00
REAR FLOORPAN ABOVE AXLE (Y)	ENDEVCO	AC-B11407	07-Aug-00
REAR FLOORPAN ABOVE AXLE (Z)	ENDEVCO	AC-B11408	07-Aug-00
LEFT REAR SILL (Y)	ENDEVCO	AC-X93	10-Aug-00
LEFT FRONT SILL (Y)	ICS	AC-D88	14-Aug-00
LEFT FRONT DOOR CENTERLINE (Y)	ENDEVCO	AC-A14126	27-Nov-00
RIGHT REAR SEAT OCCUPANT COMP. (Y)	ICS	AC-D61	14-Aug-00
MID REAR OF LEFT FRONT DOOR (Y)	ENTRAN	AC-D03	31-Aug-00
LEFT FRONT DOOR UPPER CL (Y)	ENDEVCO	AC-P16964	13-Sep-00
MID REAR OF LEFT REAR DOOR (Y)	ENDEVCO	AC-AP1A2	10-Dec-00
LEFT REAR DOOR UPPER CL (Y)	ENDEVCO	AC-A13883	27-Nov-00
LOWER LEFT B- PILLAR (Y)	ENDEVCO	AC-A14312	12-Jan-01
MIDDLE LEFT B-PILLAR (Y)	ENDEVCO	AC-A14481	12-Jan-01
LOWER LEFT A-PILLAR (Y)	ENDEVCO	AC-A13513	12-Jan-01
UPPER LEFT A-PILLAR (Y)	ENDEVCO	AC-A14433	05-Sep-00
FRONT SEAT TRACK (Y)	ENDEVCO	AC-J32143	30-Nov-00
REAR SEAT TRACK (Y)	ICS	AC-D82	17-Aug-00
VEHICLE CG (X)	ENDEVCO	AC-B11351	08-Sep-00
VEHICLE CG (Y)	ENDEVCO	AC-ACC06	08-Sep-00
VEHICLE CG (Z)	ENDEVCO	AC-B10481	08-Sep-00
MDB CG (X)	ENDEVCO	AC-CL60	31-Aug-00
MDB CG (Y)	ENDEVCO	AC-CJ54	31-Aug-00
MDB CG (Z)	ENDEVCO	AC-GK12	31-Aug-00
MDB REAR FRAME MEMBER (X)	ENDEVCO	AC-CX05	31-Aug-00
MDB REAR FRAME MEMBER (Y)	ENDEVCO	AC-A27F	31-Aug-00

REMARKS: None