

REPORT NUMBER: CAL-04-11

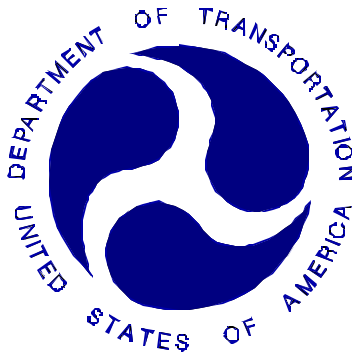
**NEW CAR ASSESSMENT PROGRAM (NCAP)
FRONTAL BARRIER IMPACT TEST**

NISSAN MOTOR COMPANY, LTD.
2004 INFINITI FX35
MPV

NHTSA NUMBER: M45202

GENERAL DYNAMICS TEST NUMBER: 8642-NCAP-47

GENERAL DYNAMICS
ADVANCED INFORMATION ENGINEERING SERVICES
TRANSPORTATION SCIENCES CENTER
P.O. BOX 400
BUFFALO, NEW YORK 14225



March 10, 2004

FINAL REPORT

PREPARED FOR:

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Rulemaking
Office of Crashworthiness Standards
Mail Code: NVS-111
400 Seventh Street, SW, Room No. 5313
Washington, DC 20590

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Prepared by:

Patrick G. MacDiarmid, Jr., Project Engineer

Approved by:

David J. Travale, Program Manager
Transportation Science Center

Approval Date:

FINAL REPORT ACCEPTANCE BY OCS:

Manager, New Car Assessment Program (NCAP)
NHTSA, Office of Crashworthiness Standards

Date of Report Acceptance

COTR, New Car Assessment Program (NCAP)
NHTSA, Office of Crashworthiness Standards

Date of Report Acceptance

TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No. CAL-04-11		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Final Report of NEW CAR ASSESSMENT PROGRAM (NCAP) Testing of a 2004 Infiniti FX35 MPV NHTSA No. M45202				5. Report Date March 10, 2004	
				6. Performing Organization Code CAL	
7. Author(s) David J. Travale, Program Manager Patrick G. MacDiarmid, Jr., Project Engineer				8. Performing Organization Report No. 8642-NCAP-47	
9. Performing Organization Name and Address General Dynamics Advanced Information Engineering Services 4455 Genesee Street Buffalo, New York 14225				10. Work Unit No.	
				11. Contract or Grant No. DTNH22-01-D-32005	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Office of Crashworthiness Standards Mail Code: NVS-111 400 Seventh, SW, Room 5313 Washington, D.C. 20590				13. Type of Report and Period Covered Final Report March 2004	
				14. Sponsoring Agency Code NVS-111	
15. Supplementary Notes					
16. Abstract A frontal load cell barrier test of a 2004 Infiniti FX35 MPV was performed at General Dynamics crash test facility in Buffalo, New York, on March 10, 2004. The impact velocity was 56.65 kph and the temperature at the barrier face was 20°C. The maximum post-test vehicle crush was 409 mm. The test vehicle was equipped with 3-point restraint systems with torso belt pretensioners and load limiters, knee bolsters, head restraints and airbags at both the driver and right outboard passenger seating positions. With respect to FMVSS 208 "Occupant Crash Protection - Injury Criteria" both the driver and passenger appeared to comply with head, chest, and femur requirements.					
ATD Position	HIC	Clip (g's)	Chest Disp (mm)	Left Femur (N)	Right Femur (N)
Driver (061)	398.1	37.2	-22.8	-2891.7	-4253.7
Passenger (064)	300.8	43.9	-30.7	-3988.8	-3935.3
17. Key Words 56 kph Frontal Barrier Impact test New Car Assessment Program (NCAP)			18. Distribution Statement <u>Copies of this report are available from:</u> NHTSA Technical Reference Division National Highway Traffic Safety Admin. 400 Seventh St., SW, Room 5108 Washington, DC 20590		
19. Security Classif. (of this report) UNCLASSIFIED		20. Security Classif. (of this page) UNCLASSIFIED		21. No. of Pages 455	22. Price

Form DOT F1700.7 (8-69)

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SECTION 1

PURPOSE AND SUMMARY OF TEST

1.1 PURPOSE

This 56.65 kph frontal barrier impact test is part of the Vehicle Barrier Impact Testing Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-01-D-32005. The purpose of this test was to obtain vehicle crashworthiness and occupant restraint system performance data for an impact speed in excess of the current 48.3 kph requirements.

The 56.65 kph frontal barrier impact test was conducted in accordance with the Office of Crashworthiness Standards Laboratory Indicant Test procedure.

1.2 TEST PROCEDURE

This 56.65 kph frontal barrier impact test was conducted in accordance with the Office of Crashworthiness Standards (OCS) New Car Assessment Program (NCAP) Laboratory Indicant Test Procedure, dated December 1999. Data was obtained indicant of FMVSS 208, "Occupant Crash Protection"; FMVSS 212, "Windshield Retention"; FMVSS 219, "Windshield Zone Intrusion (Partial)"; and FMVSS 301 "Fuel System Integrity" performance. Procedures for receiving, inspection testing and reporting of test results are described in the test procedures and are not repeated in this report.

One real-time camera and 16 high-speed cameras were used to document the frontal barrier impact event. Camera locations and other pertinent camera information can be found in this report.

Two Part 572E, 50th percentile male anthropomorphic test devices (ATDs), were placed in the driver and right-front passenger seating positions according to dummy placement instructions specified in the Laboratory Indicant Test Procedure.

Both ATDs were fully instrumented with nine accelerometer array head, chest and pelvis triaxial accelerometers, chest displacement potentiometers, upper neck transducers, right/left femur load cells, and lower leg instrumentation. Seat belt load cells were also on the driver's and passenger's lap and shoulder belts to measure dummy torso and pelvic section loading. The driver (position 1) ATD (Serial No. 061) and the right-front passenger (position 2) ATD (Serial No.064) were used in two tests (M45107 and M45800) previous to this test where they did not exceed FMVSS 208 head, chest or femur criteria. Certification details, along with instrumentation calibration data, are found in Appendix C.

The vehicle, occupant, camera and measurement data are presented in Section 2. Appendix A contains the still photograph prints. The 195 channels of data were recorded on an on-board data acquisition system. Appendix B contains the vehicle, load cell barrier and dummy response data traces. Appendix C contains the dummy calibration data and Appendix D contains the transducer calibration dates.

1.3 SUMMARY OF FRONTAL BARRIER IMPACT TEST

A load cell barrier consisting of 36 load cells was impacted by a 2004 Infiniti FX35 MPV at a velocity of 56.65 kph. The test was performed at General Dynamics on March 10, 2004. Pre- and post-test photographs of the vehicle and dummies can be found in Appendix A.

The occupant data is summarized below.

	HIC	Clip (g)	Chest Disp. (mm)	Left Femur (N)	Right Femur (N)	Belt Spool (mm)	Belt Stretch (mm/50 mm)
Driver ATD	398.1	37.2	-22.8	-2891.7	-4253.7	*	*
Passenger ATD	300.8	43.9	-30.7	-3988.8	-3935.3	*	*

* Not used due to vehicle being equipped with torso belt pretensioners

There was 100 percent windshield retention and no intrusion into the protected zone of the windshield during the event. There was no Stoddard solvent leakage after the event or during any phase of the static rollover.

The maximum vehicle static crush was 409 mm and both the driver and passenger side doors remained closed during the impact event and were operable after the impact.

The driver's visible contact points were as follows: The face to the center of the airbag, the back of the head to the head restraint, the chest to the airbag and the left and right knees to the knee bolster. The passenger's visible contact points were as follows: The face to the center of the airbag, the back of the head to the head restraint, the chest to the airbag and the left and right knees to the knee bolster.

The 2004 Infiniti FX35 MPV did not exceed the requirements of FMVSS 208, FMVSS 212, FMVSS 219, and FMVSS 301. Data pertaining to these standards are presented in the data sheets.

SECTION 2

GENERAL TEST AND VEHICLE PARAMETER DATA

DATA SHEET NO. 1 CRASH TEST SUMMARY

Vehicle NHTSA No.: M45202 Test Mode: 56.3 kph Frontal Barrier
Test Date: March 10, 2004 Time: 13:52 Temperature: 20 °C
Vehicle Make/Model/Body Style: 2004 Infiniti FX35 MPV

Vehicle Test Weight: 2198.5 kg

Vehicle/Barrier Impact Angle: 0 °

Impact Velocity: 56.65 kph

Maximum Static Crush: 409 mm

Vehicle Rebound: 841 mm

DUMMIES:

DRIVER

PASSENGER

Type:

572E

572E

Restraint System:

Three-point safety belt with
torso belt pretensioners and
force limiters, Head Restraints,
Airbag, Knee Bolster

Three-point safety belt with
torso belt pretensioners and
force limiters, Head Restraints,
Airbag, Knee Bolster

Number of Data Channels: 195

Number of Cameras: 1 Real Time

16 High Speed

DOOR OPENING DATA:

Closed, Latched and Operable without Tools - Left Front

Closed, Latched and Operable without Tools - Right Front

Front Seat(s) Data:

DRIVER

PASSENGER

Seat Track Failure: (mm of shift)

0

0

Seat Back Failure:

None

None

VISIBLE DUMMY CONTACT POINTS:

DRIVER

PASSENGER

Head:

The face to the center of the
airbag, the back of the head to
the head restraint

The face to the center of the
airbag, the back of the head to
the head restraint

Abdomen:

-

-

Chest:

Airbag

Airbag

Knees:

knee bolster

knee bolster

DATA SHEET NO. 2 GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2004 Infiniti FX35 MPV

NHTSA No. : M45202 ; VIN: JNRAS08W24X214718 ; Color: Silver

Engine Data: 6 cylinders; - CID; 3.5 Liters; - cc

Placement: X Longitudinal or In-Line; - Transverse or Lateral

Transmission Data: 5 speeds; - Manual; - Automatic; X Overdrive

Final Drive: - Rear Wheel Drive; - Front Wheel Drive; X Four Wheel Drive

Safety Belt Features – Driver X Pretensioner (Shoulder); X Load Limiter; X Adj. Anchorage

Safety Belt Features - Passenger X Pretensioner (Shoulder); X Load Limiter; X Adj. Anchorage

Major Options: X A/C; X Pwr.Strg.; X Pwr. Brakes

X Pwr. Windows; X Pwr. Door Locks; X Tilt Wheel

Date Received: 2-25-2004 ; Odometer Reading 118 km

Selling Dealer: Dorschel Infiniti

& Address: 3855 W. Henrietta Road Rochester, NY 14623

DATA FROM TIRE VEHICLE'S CERTIFICATION LABEL:

Vehicle Manufactured by: Nissan Motor Company, Ltd.

Date of Manufacture 12/03

GVWR: 2509 kg; GAWR: 1158 kg FRONT; 1281 kg REAR

DATA FROM TIRE PLACARD:

Recommended Tire Size: P265/60R18

* Recommended Cold Tire Pressure: 220 kpa FRONT; 220 kpa REAR

DATA FROM TIRE SIDEWALL:

Size of Tires on Test Vehicle: P265/60R18 109 V ; Manufacturer: Bridgestone

Tire Pressure with Maximum Capacity Vehicle Load: Front: 350 kPa; Rear: 350 kPa

Treadwear: 260 ; Traction: A ; Temperature: A

VEHICLE CAPACITY DATA:

Type of Front Seats: - Bench; X Bucket; - Split Bench

Number of Occupants: 2 Front; 3 Rear; 5 Total

Vehicle Capacity Weight (VCW) = 431.0 kg

No. of Occupants x 68.04 kg = 340.2 kg

Rated Cargo/Luggage Weight (RCLW) = 90.8 kg

*Tire pressure used for test

DATA SHEET NO. 2 GENERAL TEST AND VEHICLE PARAMETER DATA (cont.)

WEIGHT OF TEST VEHICLE AS RECEIVED FROM DEALER (with maximum fluids)= UDW:

Right Front	=	<u>516.0</u>	kg	Right Rear	=	<u>463.0</u>	kg
Left Front	=	<u>514.0</u>	kg	Left Rear	=	<u>468.0</u>	kg
TOTAL FRONT	=	<u>1030.0</u>	kg	TOTAL REAR	=	<u>931.0</u>	kg
TOTAL DELIVERED WEIGHT	=	<u>1961.0</u>	kg				
% of Total Front of Vehicle Weight	=	<u>52.5%</u>		% of Total Rear Weight	=	<u>47.5%</u>	%

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Delivered Weight (UDW)	=	<u>1961.0</u>	kg
Rated Cargo/Luggage Weight (RCLW)	=	<u>90.8</u>	kg
Weight of 2 p.572 Dummies @ 76 each	=	<u>152</u>	kg
TARGET TEST WEIGHT	=	<u>2203.8</u>	kg

WEIGHT OF TEST VEHICLE WITH TWO DUMMIES AND 85.5 KG OF CARGO WEIGHT:

Right Front	=	<u>543.0</u>	kg	Right Rear	=	<u>553.0</u>	kg
Left Front	=	<u>555.0</u>	kg	Left Rear	=	<u>547.5</u>	kg
TOTAL FRONT	=	<u>1098.0</u>	kg	TOTAL REAR	=	<u>1100.5</u>	kg
TOTAL TEST WEIGHT	=	<u>2198.5</u>	kg				
% of Total Front Weight	=	<u>49.9%</u>	%	% of Total Rear Weight	=	<u>50.1%</u>	%
Weight of Ballast Secured in Vehicle Trunk Area	=	<u>0</u>	kg				
Vehicle Components Removed for Weight Reduction:		<u>26 L of Stoddard</u>					

VEHICLE ATTITUDE (all dimension in millimeters):

AS DELIVERED:	RF	<u>884</u>	LF	<u>883</u>	RR	<u>877</u>	LR	<u>877</u>
FULLY LOADED:	RF	<u>875</u>	LF	<u>872</u>	RR	<u>854</u>	LR	<u>854</u>
AS TESTED:	RF	<u>875</u>	LF	<u>875</u>	RR	<u>856</u>	LR	<u>857</u>
Vehicle's Wheel Base:		<u>2850</u>	mm					
Location of Vehicle's C.G.:		<u>1427</u>	mm rearward of front wheel center.					

FUEL SYSTEM DATA:

Fuel System Capacity From Owner's Manual	=	<u>90</u>	liters
Usable Capacity Figure Furnished by COTR	=	<u>90</u>	liters
Test Volume Range (92 to 94% of Usable Capacity)	=	<u>82.8</u>	to <u>84.6</u> liters
ACTUAL TEST VOLUME=	<u>57*</u>	liters (with entire fuel system filled)	
Test Fluid Type:	<u>Stoddard Solution</u>	Spec. Grav. =	<u>0.764</u>
Kinematic Viscosity	=	<u>0.96</u>	centistokes; Color = <u>Orange</u>
Type of Fuel Pump: Electric-	<u>X</u>	Mechanical-	<u>-</u>
Does Electric Pump operate with ignition switch "ON" & engine "OFF"	Yes- <u>X</u>	No- <u>-</u>	
Details of Fuel System:	<u>The tank is centered ahead of the rear axle; the fuel lines are located to the left of center of the vehicle; the fuel filler is located on the right side of the vehicle behind the rear axle.</u>		

* At the request of the COTR – Stoddard was removed to maintain vehicle test weight.

DATA SHEET NO. 3 POST IMPACT DATA

TYPE OF TEST:

Type of Test: Frontal Barrier Impact Angle: 0°
Test Date: March 10, 2004 Time: 13:52 Temperature: 20 °C
Vehicle NHTSA No.: M45202
Required Impact Velocity Range: 55.5 to 57.1 kph

BARRIER IMPACT VELOCITY: (Speed traps within 5 feet of impact plane.)

Trap No. 1 = 56.65 kph; Trap No. 2 = 56.65 kph
Distance from vehicle to barrier: (1) entering trap = 813 mm
(2) exiting trap = 305 mm

VEHICLE STATIC CRUSH: (mm) (For frontal and rear impacts only.)

Vehicle Length:

Pre-Test	Left = <u>4741</u> ; C/L = <u>4790</u> ; Right = <u>4742</u>
Post-Test	Left = <u>4332</u> ; C/L = <u>4463</u> ; Right = <u>4382</u>
Crush	Left = <u>409</u> ; C/L = <u>327</u> ; Right = <u>360</u>
AVERAGE	= <u>365.33</u> mm

VEHICLE REBOUND: (From rigid barrier only.)

Distance from front of test vehicle to impact point:

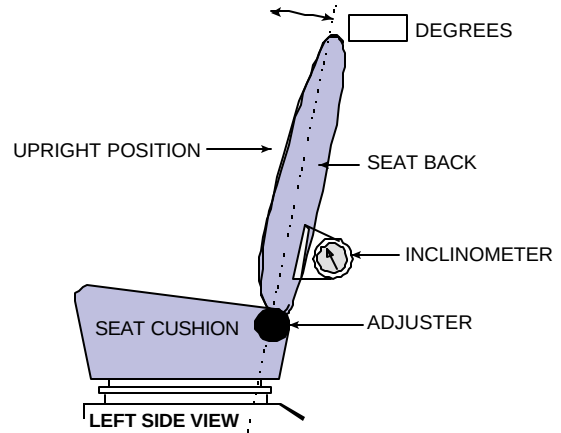
	Left = <u>851</u> ; C/L = <u>828</u> ; Right = <u>845</u>
AVERAGE	= <u>841</u> mm

DATA SHEET NO. 4 TEST VEHICLE INFORMATION

VEHICLE IDENTIFICATION:

Model Year : 2004 Vehicle Model: Infiniti FX35 Body Style : MPV

1. 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 ASSEMBLY

Seat back angle for driver's seat: 21°

Measurement instructions: Set seat in lowermost position and mid-seat travel. Adjust seatback until the inclinometer measures 18.6° on the outboard head restraint post.

Seat back angle for passenger's seat: 21°

Measurement instructions: Same as the driver's seat

2. Seat Fore and Aft Positioning

Positioning of the driver's seat: There is 234 mm of total travel. The seat track were set at mid-position (117 mm)

Positioning of the passenger's seat: The same as the driver's seat.

3. Fuel Tank Capacity Data

3.1 A. "Usable Capacity" of the standard equipment fuel tank is 90 liters

B. "Usable Capacity" of the optional equipment fuel tank is - liters

C. "Usable Capacity" of the vehicle(s) used for certification testing to requirements of FMVSS 301 = 90 liters

3.2 Amount of Stoddard solvent added to vehicle(s) used for certification test(s) = 84 liters

3.3 Is vehicle equipped with electric fuel pump? Yes- X ; No- -

If YES, explain the vehicle operating conditions under which the fuel pump will pump fuel.

When the ignition is turned to the 'ON' position and while the engine is running.

DATA SHEET NO. 4 TEST VEHICLE INFORMATION (cont.)

4. STEERING COLUMN ADJUSTMENTS:

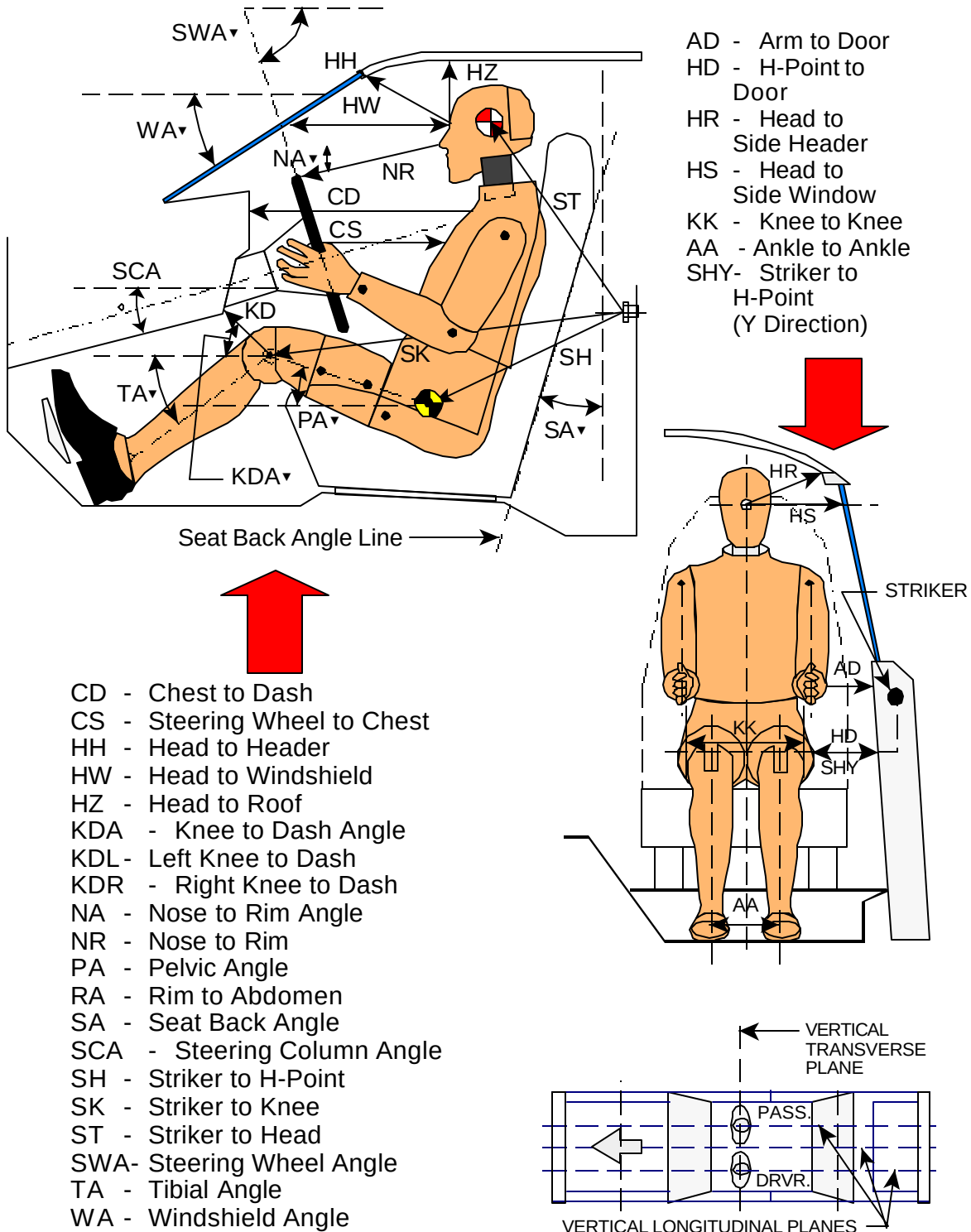
Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when it is moved through its full range of driving positions. If the tested vehicle has any of these adjustments, does your company use any specific procedures to determine the geometric center.

Operational Instructions: The steering column was adjusted to mid tilt (26.6°) and mid-telescope
(11 mm) position)

5. SEAT BELT UPPER ANCHORAGE

Nominal design riding position: There are 4 detents. The anchorages are placed in the uppermost position.

DATA SHEET NO. 5 FRONT SEAT DUMMY POSITIONING MEASUREMENTS IN VEHICLE
DUMMY MEASUREMENT FOR FRONT SEAT PASSENGERS



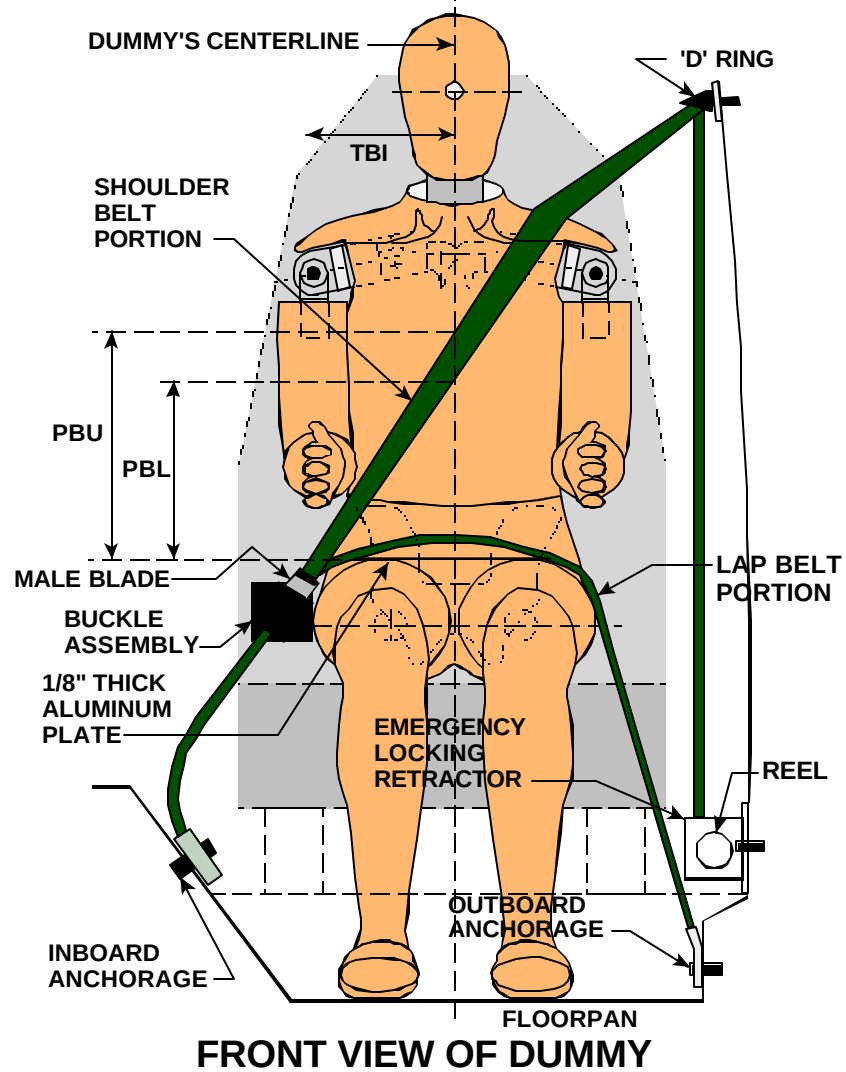
DATA SHEET NO. 5 FRONT SEAT DUMMY POSITIONING MEASUREMENTS IN VEHICLE (cont.)

	DRIVER (Serial #061)			PASS. (Serial #064)		
WA ⁰	26.9 deg.			N/A		
SWA ⁰	63.4 deg.			N/A		
SCA ⁰	26.6 deg.			N/A		
SA ⁰	21 deg.			21 deg.		
HZ	203			192		
HH	364			341		
HW	626			605		
HR	223			225		
NR	421	Angle	-15 deg.	N/A		
CD	525			543		
CS	321			N/A		
RA	204			N/A		
KDL	170	Angle (KDA)	43 deg.	122		
KDR	126			150	Angle (KDA)	35 deg.
PA ⁰	22.5 deg.			24.9 deg.		
TA ⁰	42.7 deg.			43.7 deg.		
KK	320			256		
AA	314			185		
ST	469	Angle	12 deg.	495	Angle	17 deg.
SK	703	Angle	100 deg.	703	Angle	100 deg.
SH	335	Angle	125 deg.	345	Angle	128 deg.
SHY	255			255		
HS	343			349		
HD	125			131		
AD	111			106		

Dimensions in millimeters

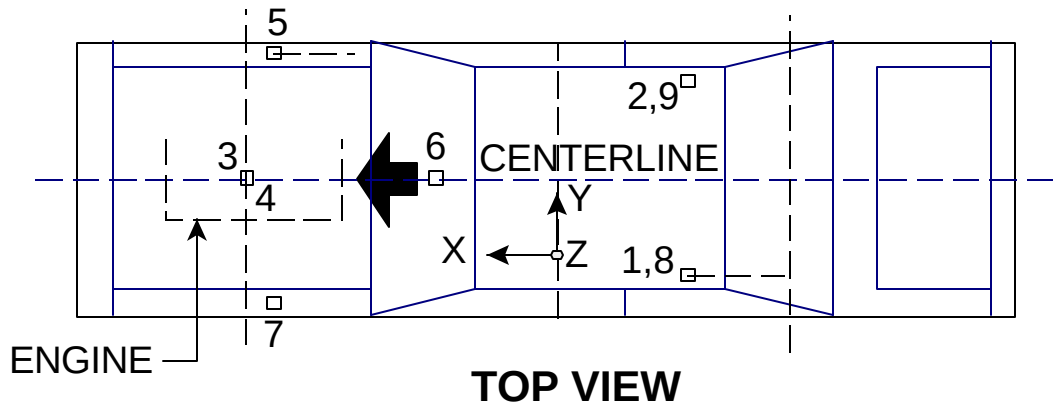
DATA SHEET NO. 6 SEAT BELT POSITIONING DATA

SEAT BELT POSITIONING DATA

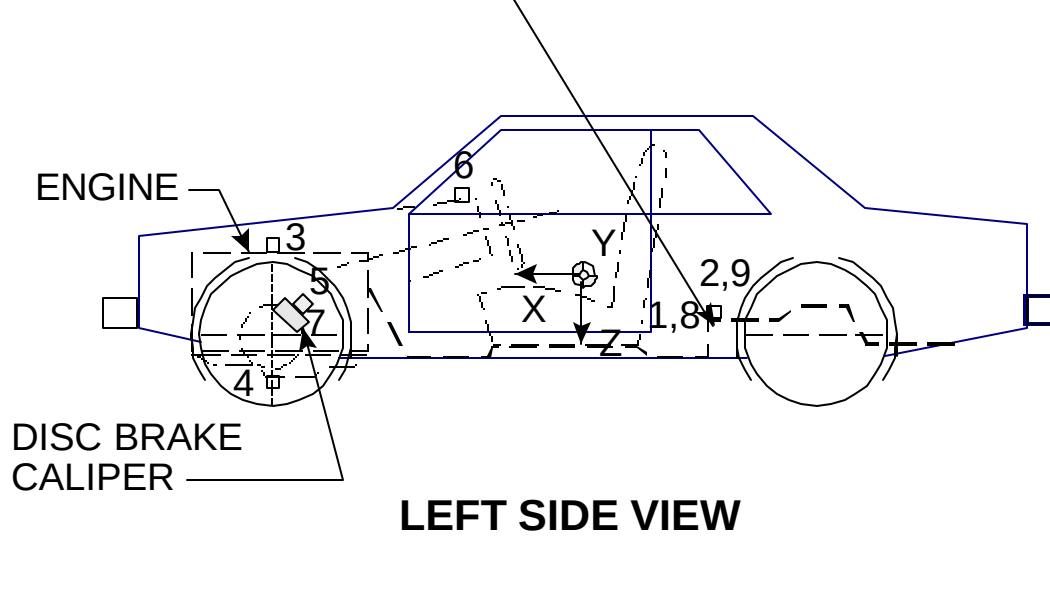


	DRIVER DUMMY (mm)	PASSENGER DUMMY (mm)
PBU -- Top surface of alum. plate to upper edge	370	350
PBL-- Top surface of alum. plate to belt lower edge	290	270
LAP BELT TENSION	10 N	10 N
SHOULDER BELT TENSION	Retractor	Retractor

VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY



REAR SEAT CUSHION
ASSY. FRONT ATTACHMENT
BRACKET SUPPORT



Note: Vehicle accelerometer location and data summary shown in DATA SHEET NO. 7

DATA SHEET NO. 7 VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY (cont.)

LOCATION		PRE-TEST LENGTH (mm)		
		X	Y	Z
1	Left Rear Seat Cross Member X	1864	-746	-503
2	Right Rear Seat Cross Member X	1868	772	-505
3	Top of Engine Block	4098	242	-803
4	Bottom of Engine	3488	-14	-285
5	Disc Brake Caliper @ Right Side	3835	755	-518
6	Instrument Panel	2891	77	-870
7	Disc Brake Caliper @Left Side	3878	-770	-540
8	Left Rear Seat Cross Member Z	1864	-746	-503
9	Right Rear Seat Cross Member Z	1868	772	-505

LOCATION NUMBER	DESCRIPTION	MAXIMUM VALUE (g's)			
		Pos.	msec.	Neg.	msec.
1	Left Rear Seat Cross Member X	2.1	134.3	-47.0	50.8
2	Right Rear Seat Cross Member X	5.2	129.9	-51.3	51.8
3	Top of Engine Block	‡	‡	‡	‡
4	Bottom of Engine	32.4	53.5	-116.1	45.1
5	Disc Brake Caliper @ Right Side	77.0	60.9	-117.5	50.7
6	Instrument Panel	†	†	†	†
7	Disc Brake Caliper @Left Side	40.8	62.4	-118.3	50.1
8	Left Rear Seat Cross Member Z	11.4	24.0	-15.1	55.9
9	Right Rear Seat Cross Member Z	11.2	47.7	-15.8	55.6

‡ Wire Cut at 74 ms.

† Wire Cut at 60 ms.

DATA SHEET NO. 8 DUMMY INJURY CRITERIA VALUES

Vehicle Year/Make/Model/Body Style: 2004 Infiniti FX35 MPV

NHTSA Test No.: M45202 Test Date: March 10, 2004

		MAXIMUM VALUE							
		Driver				Passenger			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Head 9 Array X Arm Y	g	13.4	102.6	-5.0	52.1	10.7	61.1	-14.8	34.4
Head 9 Array X Arm Z	g	24.9	78.2	-16.5	105.6	32.6	78.9	-9.5	106.0
Head 9 Array Y Arm X	g	1.6	182.7	-50.5	88.0	0.2	-12.5	-47.4	78.4
Head 9 Array Y Arm Z	g	27.8	73.4	-21.2	105.6	26.3	78.9	-14.1	106.3
Head 9 Array Z Arm X	g	3.9	190.5	-57.4	91.5	2.2	52.5	-50.1	90.0
Head 9 Array Z Arm Y	g	17.3	102.5	-5.7	75.7	5.6	60.3	-5.8	77.4
Head X	g	2.5	182.8	-47.1	89.4	0.4	28.8	-43.4	79.1
Head Y	g	13.1	101.3	-3.7	26.6	6.9	36.8	-10.2	34.6
Head Z	g	23.3	54.2	-18.0	105.8	25.8	78.7	-11.8	115.3
Head Resultant	g	48.1	88.1	0.0	-49.4	50.2	79.1	0.0	-50.0
Redundant Head X	g	3.5	182.7	-46.4	88.1	*	*	-43.8	79.1
Redundant Head Y	g	12.8	99.7	-3.6	26.6	7.7	36.8	-9.3	34.6
Redundant Head Z	g	23.1	54.0	-18.0	105.8	25.3	79.1	-12.1	112.0
Redundant Head Resultant	g	47.7	88.1	0.0	-48.9	50.6	79.1	0.0	-46.3
Upper Neck Fx	N	53.0	105.9	-489.6	81.8	252.7	90.7	-505.5	143.5
Upper Neck Fy	N	243.2	111.6	-147.7	89.1	67.5	35.0	-130.7	61.9
Upper Neck Fz	N	1427.2	81.5	-496.2	110.6	1313.4	68.6	-536.3	106.6
Upper Neck F Resultant	N	1512.9	81.5	1.7	-48.6	1315.7	68.6	1.3	-49.3
Upper Neck Mx	N-m	29.4	92.1	-6.9	72.9	9.6	61.6	-7.9	87.3
Upper Neck My	N-m	49.3	137.2	-38.4	81.5	40.9	135.1	-19.0	77.3
Upper Neck Mz	N-m	6.4	147.3	-10.8	70.6	6.5	102.9	-5.5	62.0
Upper Neck M Resultant	N-m	50.0	137.2	0.1	14.7	40.9	135.1	0.1	-49.3
Chest X	g	2.5	143.8	-37.2	62.0	2.0	148.0	-46.5	74.0
Chest Y	g	7.3	75.2	-3.4	45.1	3.0	48.5	-7.6	72.8
Chest Z	g	23.6	108.5	-11.6	47.4	12.2	80.7	-22.4	113.8
Chest Resultant	g	37.7	55.7	0.0	-43.0	47.0	74.0	0.0	-22.3

* - Data spike at 116 ms.

DATA SHEET NO. 8 DUMMY INJURY CRITERIA VALUES (cont.)

Vehicle Year/Make/Model/Body Style: 2004 Infiniti FX35 MPV

NHTSA Test No.: M45202 Test Date: March 10, 2004

		MAXIMUM VALUE							
		Driver				Passenger			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Redundant Chest X	g	2.5	143.9	-37.0	70.3	1.9	148.0	-45.2	74.1
Redundant Chest Y	g	7.8	74.6	-3.4	45.0	3.4	46.1	-7.7	72.4
Redundant Chest Z	g	23.9	108.5	-11.8	47.7	12.3	80.6	-22.6	115.4
Redundant Chest Resultant	g	37.6	55.8	0.0	-48.9	45.6	74.0	0.0	-22.3
Chest Displacement	mm	0.0	6.1	-22.8	79.0	0.0	-19.6	-30.7	75.0
Pelvic X	g	5.4	100.1	-59.9	68.1	§	§	§	§
Pelvic Y	g	6.3	110.5	-7.4	51.5	4.3	53.0	-5.9	70.8
Pelvic Z	g	3.0	195.2	-27.2	101.8	3.6	37.2	-25.3	106.0
Pelvic Resultant	g	61.9	68.1	0.0	-44.0	§	§	§	§
Left Femur	N	509.6	46.5	-2891.7	65.9	632.9	36.9	-3988.8	62.5
Right Femur	N	558.8	37.7	-4253.7	68.6	627.9	36.9	-3935.3	72.9
Left Upper Tibia Mx	N-m	14.3	147.1	-44.1	103.4	34.8	79.3	-23.2	55.3
Left Upper Tibia My	N-m	59.4	62.8	-52.4	45.2	36.2	51.8	-55.8	41.1
Left Lower Tibia Fz	N	‡	‡	‡	‡	67.2	29.2	-3663.2	92.5
Left Lower Tibia Mx	N-m	60.1	57.9	-16.7	51.2	33.5	86.6	-8.5	53.2
Left Lower Tibia My	N-m	71.3	94.0	-52.5	51.2	92.9	91.9	-36.1	49.9
Right Upper Tibia Mx	N-m	13.5	175.8	-89.0	60.5	28.3	106.4	-38.0	50.6
Right Upper Tibia My	N-m	57.4	53.2	-46.0	80.0	29.2	53.0	-60.1	42.9
Right Lower Tibia Fz	N	229.9	46.6	-1900.7	85.2	205.0	73.0	-2840.9	94.3
Right Lower Tibia Mx	N-m	19.1	97.8	-32.2	58.0	14.5	49.9	-33.2	97.8
Right Lower Tibia My	N-m	44.2	89.8	-36.9	49.3	71.5	94.2	-38.2	37.3
Left Foot Aft Ax	g	24.5	97.8	-127.8	50.1	46.6	66.6	-103.4	52.6
Left Foot Aft Az	g	43.2	57.5	-73.4	51.0	22.8	29.9	-49.6	48.4
Left Foot Fore Az	g	103.9	42.8	-154.7	51.9	104.7	66.6	-219.3	48.3
Right Foot Aft Ax	g	29.2	83.2	-110.9	55.1	31.4	95.5	-126.6	45.6
Right Foot Aft Az	g	4.4	68.4	-93.4	55.4	17.7	35.8	-38.2	49.7
Right Foot Fore Az	g	66.4	46.9	-117.2	50.9	110.1	33.8	-116.7	49.7
Lap Belt Load	N	8187.2	60.0	0.4	-25.8	6979.7	54.9	-105.1	120.5
Torso Belt	N	7142.6	54.2	-12.8	11.6	5123.4	48.4	-7.6	11.5

§ - Data is questionable from 75-85 ms.

‡ - Questionable Data – Data spikes present

DATA SHEET NO. 8 DUMMY INJURY CRITERIA VALUES (cont.)

Vehicle Year/Make/Model/Body Style: 2004 Infiniti FX35 MPV

NHTSA Test No.: M45202 Test Date: March 10, 2004

HEAD INJURY CRITERIA (HIC)				
	HIC**	t ₁ (msec)	t ₂ (msec)	Average Acceleration t ₁ to t ₂
Position #1 - Driver	398.1	71.8	107.8	41.4 g
Position #2 - Passenger	300.8	66.6	102.6	37.1 g

** HIC is as defined in FMVSS 208. The maximum time interval from t₁ to t₂ is 36 milliseconds.

CLIP SUMMARY*				
	CLIP (g's)	t ₁ (msec)	t ₂ (msec)	CSI
Position #1 - Driver	37.2 g	59.8	62.8	425.2
Position #2 - Passenger	43.9 g	72.5	75.5	432.9

* The maximum chest resultant acceleration is defined as the maximum acceleration which exceeds 0.003 seconds in duration.

DATA SHEET NO. 8 DUMMY INJURY CRITERIA VALUES (cont.)
REDUNDANT DATA

Vehicle Year/Make/Model/Body Style: 2004 Infiniti FX35 MPV
 NHTSA Test No.: M45202 Test Date: March 10, 2004

HEAD INJURY CRITERIA (HIC) REDUNDANT				
	HIC**	t ₁ (msec)	t ₂ (msec)	Average Acceleration t ₁ to t ₂
Position #1 - Driver	383.7	71.9	107.9	40.8 g
Position #2 - Passenger	299.9	66.6	102.6	37.0 g

** HIC is as defined in FMVSS 208. The maximum time interval from t₁ to t₂ is 36 milliseconds.

CLIP SUMMARY* REDUNDANT				
	CLIP (g's)	t ₁ (msec)	t ₂ (msec)	CSI
Position #1 - Driver	37.0 g	55.1	58.1	423.9
Position #2 - Passenger	42.6 g	72.5	75.5	404.0

* The maximum chest resultant acceleration is defined as the maximum acceleration which exceeds 0.003 seconds in duration.

DATA SHEET NO. 9 SEAT BELT PERFORMANCE ASSESSMENT TEST DATA

BELT LENGTH DATA:

Belt length from trim panel exit
to bolt hole anchor point for
continuous webbing systems.

Driver

Passenger

1930

1800

Shoulder belt length as measured
on Part 572 Dummy.

860

900

Lap belt length as measured
on Part 572 Dummy.

870

700

Dimensions in millimeters

DATA SHEET NO.10 SUMMARY OF FMVSS 212 DATA

FMVSS NO. 212 - "WINDSHIELD MOUNTING" DATA

DETAILS OF WINDSHIELD MOUNTING SUCH AS RETENTION METHOD, TRIM TYPE, ETC.:

Windshield is bonded in place and covered with a 15 mm molding.

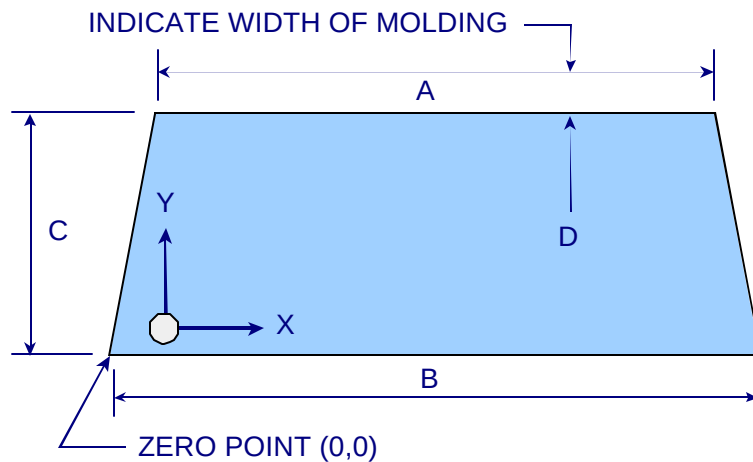
FMVSS 212 REQUIREMENTS:

The Post-Test periphery retention amount must be at least 75% of the Pre-Test periphery measurement for vehicles NOT equipped with automatic restraints, and 50% for each side of the windshield for vehicles equipped with automatic restraint systems for front occupants,

FMVSS 212 TEST DATA

	WINDSHIELD PERIPHERY		% OF RETENTION
	PRE-TEST (mm)	POST-TEST (mm)	
RIGHT SIDE	2165	2165	100.0%
LEFT SIDE	2165	2165	100.0%
TOTAL	4330	4330	100.0%

AREA OF RETENTION FAILURE: None



DIMENSIONS (mm)	
A	1250
B	1700
C	690
D	15

FRONT VIEW OF WINDSHIELD

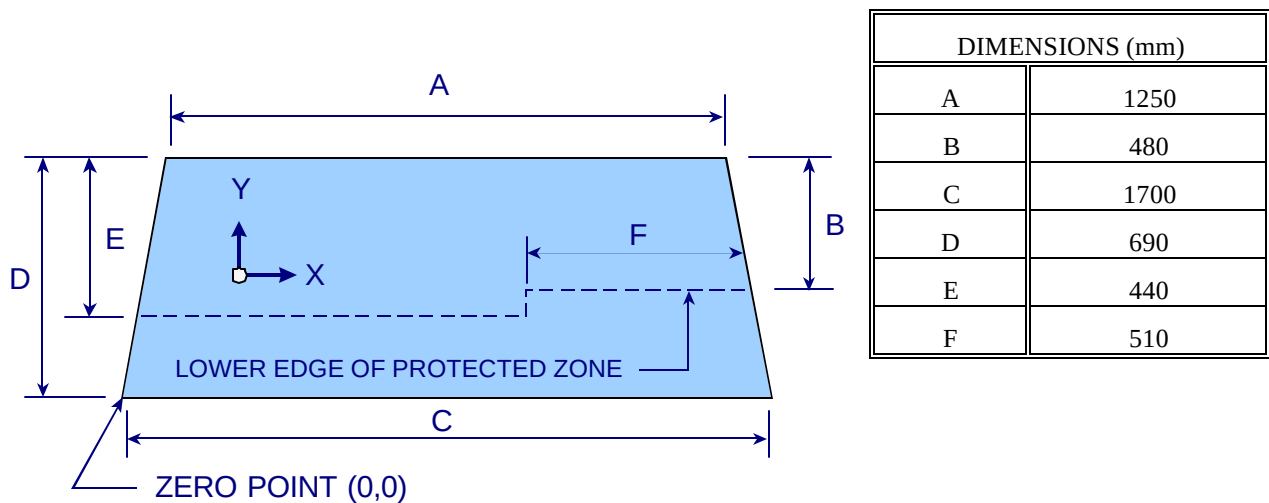
FAILURE DETAILS: None

DATA SHEET NO. 11 FMVSS NO. 219 (PARTIAL) - "WINDSHIELD ZONE INTRUSION" DATA

PROTECTED ZONE LOWER EDGE REQUIREMENT:

The lower edge of the protected zone is determined by placing a 165 mm diameter rigid sphere weighing 6.8 kg in a position such that it simultaneously contacts the inner surface of the windshield and the top surface of the instrument panel including padding. The locus of points is drawn on the inner surface of the windshield contacted by the sphere across the width of the instrument panel. From the outermost contactable points extend the locus line horizontally to the edges of the windshield, then draw a line on the inner surface of the windshield below and 13 mm distant from the locus line. The LOWER EDGE OF THE PROTECTED ZONE is the longitudinal projection of this line onto the outer surface of the windshield.

FMVSS 219 TEST DATA:



FRONT VIEW OF WINDSHIELD

DETAILS OF WINDSHIELD GLASS PENETRATION GREATER THAN 6 mm: None

(Show location of penetration on the above sketch)

COORDINATES		
	X	Y
1.	-	-
2.	-	-
3.	-	-
4.	-	-

DATA SHEET NO. 12 FMVSS NO. 301-75 "FUEL SYSTEM INTEGRITY" POST IMPACT TEST DATA

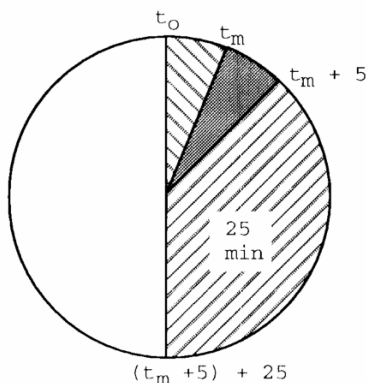
NHTSA TEST No.: M45202 TEST DATE: March 10, 2004
VEHICLE MAKE/MODEL: 2004 Infiniti FX35 MPV

The test vehicle was filled from 92% to 94% of the manufacture's "usable" capacity. The electric fuel pump was operating if it will operate without engine operation. Two Part 572 anthropomorphic test devices were located at each of the front designated seating positions.

=====

TEST VEHICLE IMPACT TYPE: X Frontal (56 kph)
- Oblique (48 kph) with _____ deg. barrier face first
 contacting _____
- (driver/passenger) side
- Rear Moving Barrier (48 kph)
- Lateral Moving Barrier (32 kph)

FUEL SPILLAGE MEASUREMENT:



1. From impact until vehicle motion ceases
2. For 5 minute period after vehicle motion ceases
3. For next 25 minutes

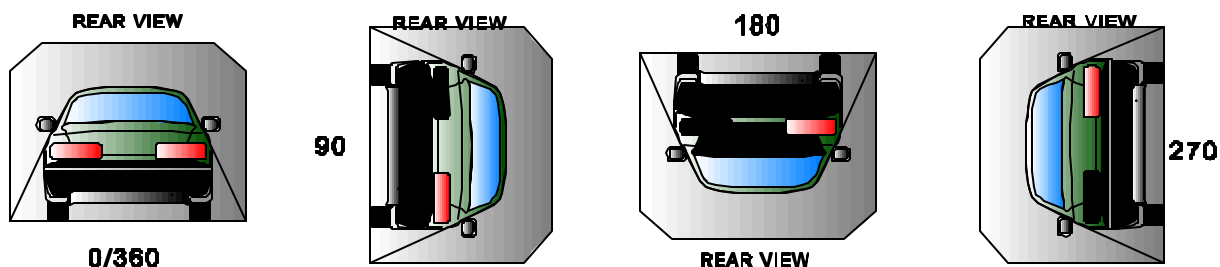
ACTUAL	MAX ALLOWED
0	28 g
0	141 g
0	28 g/min.

SOLVENT SPILLAGE DETAILS: None

DATA SHEET NO. 13 - ROLLOVER DATA

Vehicle: 2004 Infiniti FX35 MPV

NHTSA No.: M45202



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Stage	Rotation Time (spec. 1 -3 min)				FMVSS 301 Hold Time		Total Time				Next Whole Minute Interval	
0° - 90°	1	minutes	11	seconds	5	minutes	6	minutes	11	seconds	7	minutes
90° - 180°	1	minutes	05	seconds	5	minutes	6	minutes	5	seconds	7	minutes
180°-270°	1	minutes	01	seconds	5	minutes	6	minutes	1	seconds	7	minutes
270°-360°	1	minutes	13	seconds	5	minutes	6	minutes	13	seconds	7	minutes

II. FMVSS 301 REQUIREMENTS: (Maximum allowable solvent spillage):

First 5 minutes from onset of rotation	6th min.	7th min.	8th min. (if required)
142 g	28 g	28 g	28 g

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

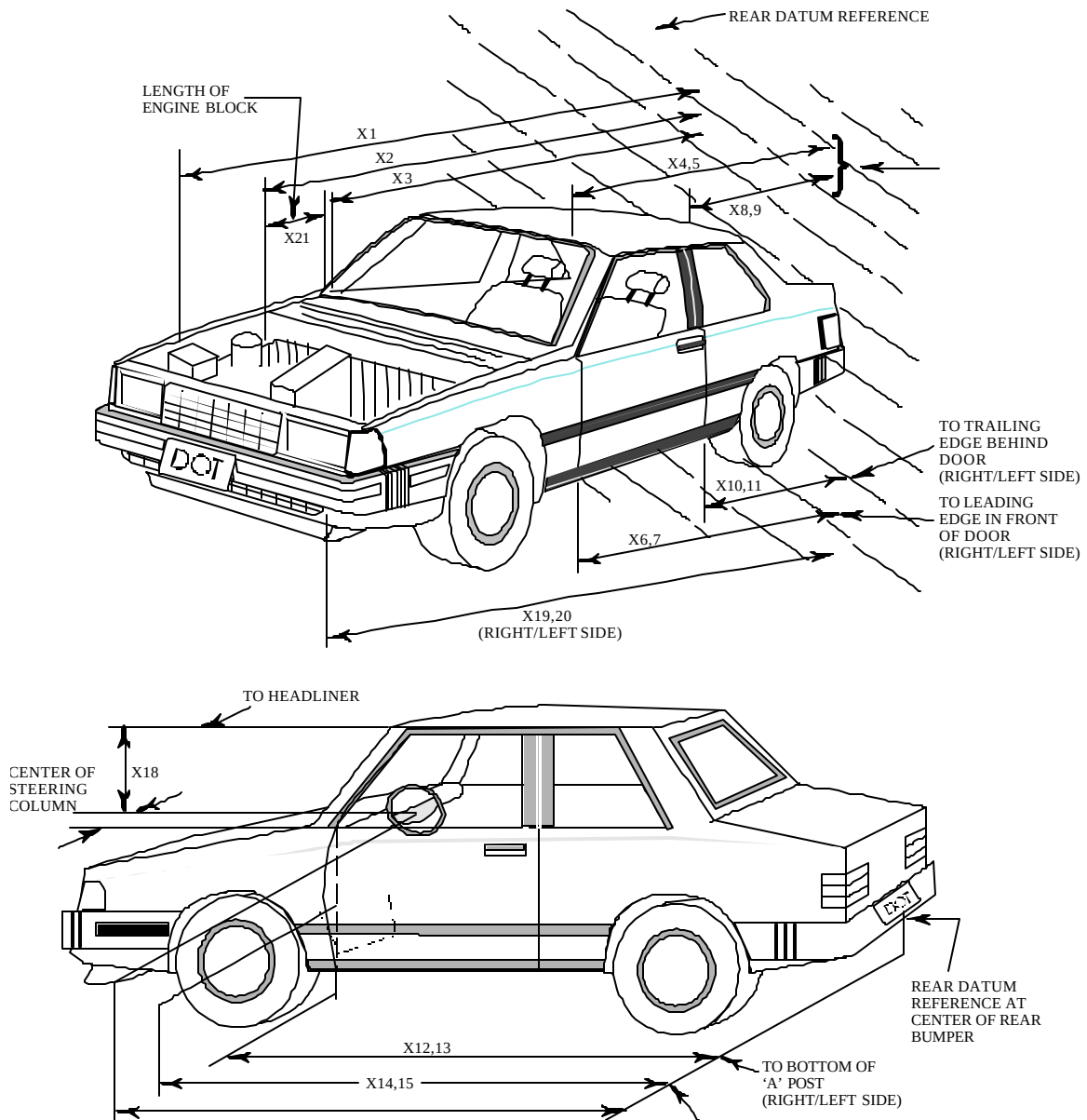
Rollover Stage	First 5 minutes from onset of rotation (g)	6th min. (g)	7th min. (g)	8th min. (if required) (g)
0° - 90°	0	0	0	N/A
90° - 180°	0	0	0	N/A
180°-270°	0	0	0	N/A
270°-360°	0	0	0	N/A

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

IV. SOLVENT SPILLAGE LOCATION(S):

Rollover Stage	Spillage Location
0° - 90°	None
90° - 180°	None
180°-270°	None
270°-360°	None

DATA SHEET NO. 14 TEST VEHICLE MEASUREMENTS

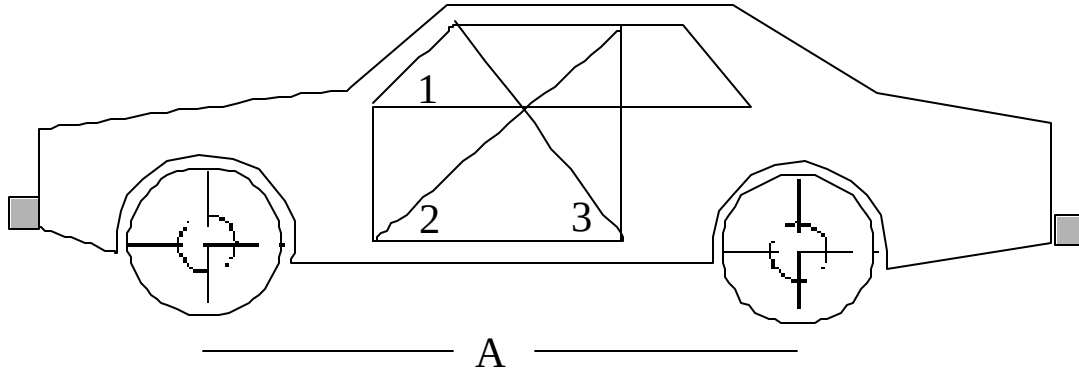


DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)

No.		Pre-Test	Post-Test	Difference
X1	Total Length of Vehicle at Centerline	4790	4463	327
X2	Rear Surface of Vehicle to Front of Engine	4173	3948	225
X3	Rear Surface of Vehicle to Firewall	3595	3433	162
X4	Rear Surface of Vehicle to Upper Leading Edge of Right Door	3160	3158	2
X5	Rear Surface of Vehicle to Upper Leading Edge of Left Door	3156	3156	0
X6	Rear Surface of Vehicle to Lower Leading Edge of Right Door	3288	3281	7
X7	Rear Surface of Vehicle to Lower Leading Edge of Left Door	3283	3281	2
X8	Rear Surface of Vehicle to Upper Trailing Edge of Right Door	2082	2079	3
X9	Rear Surface of Vehicle to Upper Trailing Edge of Left Door	2079	2076	3
X10	Rear Surface of Vehicle to Lower Trailing Edge of Right Door	2111	2112	-1
X11	Rear Surface of Vehicle to Lower Trailing Edge of Left Door	2112	2111	1
X12	Rear Surface of Vehicle to Bottom of "A" Post of Right Side	3207	3201	6
X13	Rear Surface of Vehicle to Bottom of "A" Post of Left Side	3207	3201	6
X14	Rear Surface of Vehicle to Firewall, Right Side	3886	3698	188
X15	Rear Surface of Vehicle to Firewall, Left Side	3887	3677	210
X16	Rear Surface of Vehicle to Steering Column	2768	2770	-2
X17	Center of Steering Column to "A" Post	334	286	48
X18	Center of Steering Column to Headliner	429	406	23
X19	Rear Surface of Vehicle to Right Side of Front Bumper	4742	4382	360
X20	Rear Surface of Vehicle to Left Side of Front Bumper	4741	4332	409
X21	Length of Engine Block	525	525	0
RD	Rear Surface of Vehicle to Right Side of Dash Panel	2938	2937	1
CD	Rear Surface of Vehicle to Center of Dash Panel	3023	3023	0
LD	Rear Surface of Vehicle to Left Side of Dash Panel	2946	2945	1

All Dimensions in mm

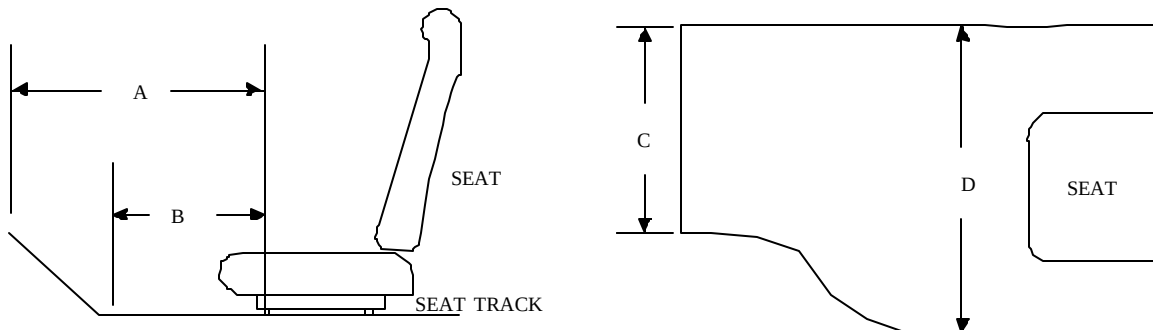
DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)
 VEHICLE INTRUSION MEASUREMENTS
 DOOR OPENING WIDTH



UNITS (mm)	LEFT			RIGHT		
MEASUREMENT	1	2	3	1	2	3
BEFORE TEST	1057	1540	1030	1064	1553	1025
AFTER TEST	1065	1552	1037	1068	1559	1036
DIFFERENCE	-8	-12	-7	-4	-6	-11

UNITS (mm)	A = WHEELBASE LEFT	A = WHEELBASE RIGHT
BEFORE TEST	2850	2850
AFTER TEST	2786	2763
DIFFERENCE	64	87

DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)
 VEHICLE INTRUSION MEASUREMENTS
 STATIC FOOTWELL DEFORMATION



DRIVER

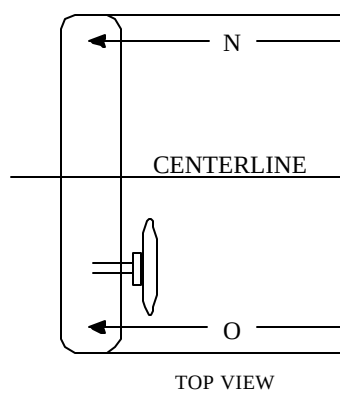
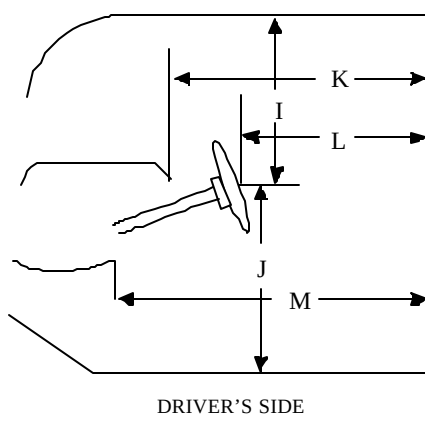
Measurement	Pre-Test	Post-Test	Difference
A	732	663	69
B	545	525	20
C	480	463	17
D	481	493	-12

PASSENGER

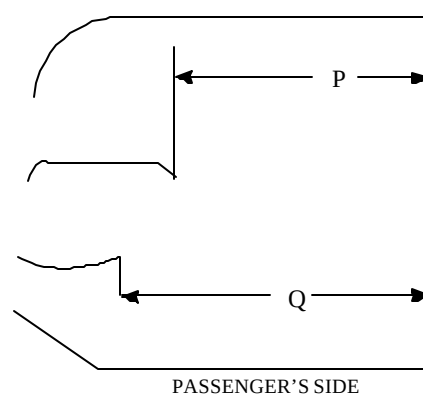
Measurement	Pre-Test	Post-Test	Difference
A	722	648	74
B	542	527	15
C	401	395	6
D	361	409	-48

Units = mm

DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)
 VEHICLE INTRUSION MEASUREMENTS
 STATIC PASSENGER COMPARTMENT INTRUSION



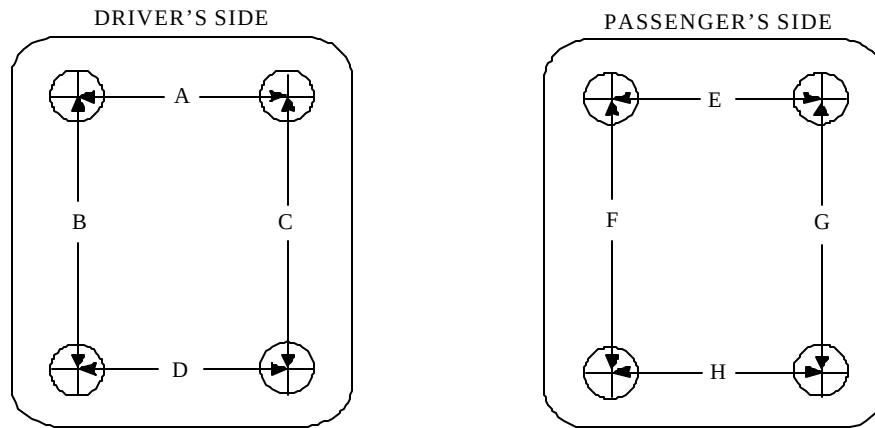
MEASUREMENTS
FROM C-PILLAR
BELT ANCHORAGE



Measurement	Pre-Test	Post-Test	Difference
I	429	406	23
J	677	738	-61
K	1778	1748	30
L	1583	1574	9
M	1830	1833	-3
N	1756	1736	20
O	1761	1749	12
P = K (PASS.)	1843	1798	45
Q = M (PASS.)	1876	1864	12

Units = mm

DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)
FLOORBOARD DEFORMATION

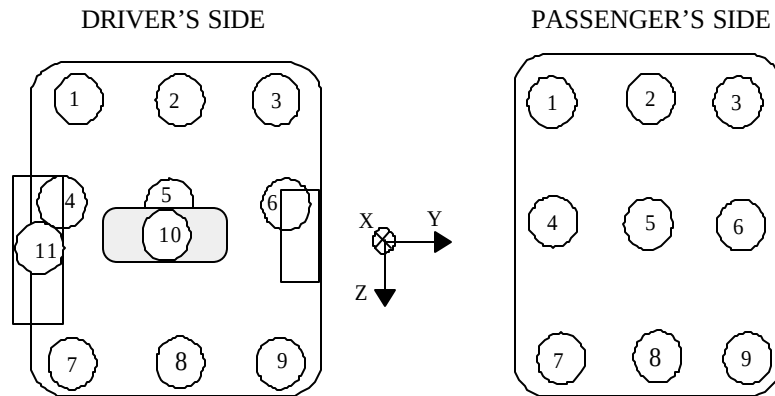


TOP VIEW THROUGH FLOOR PAN

Measurement	Pre-Test	Post-Test	Difference
A	480	463	17
B	270	276	-5
C	291	275	15
D	481	493	-11
E	401	395	6
F	401	402	0
G	320	297	23
H	361	409	-48

Units = mm

DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)
TOE-PAN INTRUSION



Driver Side Toe-pan Measurements

Toe-pan Location	X Deformation (mm)			Z Deformation (mm)		
	Pre-Test	Post-Test	Difference	Pre-Test	Post-Test	Difference
1	3460	3428	32	-512	-554	42
2	3473	3425	48	-496	-554	58
3	3461	3417	44	-532	-545	13
4	3368	3360	8	-448	-460	12
5	3363	3281	82	-445	-435	-10
6	3357	3321	36	-461	-461	0
7	3290	3290	0	-381	-362	-19
8	3286	3287	-1	-389	-382	-7
9	3281	3268	13	-397	-386	-11
10	3287	3284	3	-561	-533	-28
11	3367	3330	37	-521	-519	-2

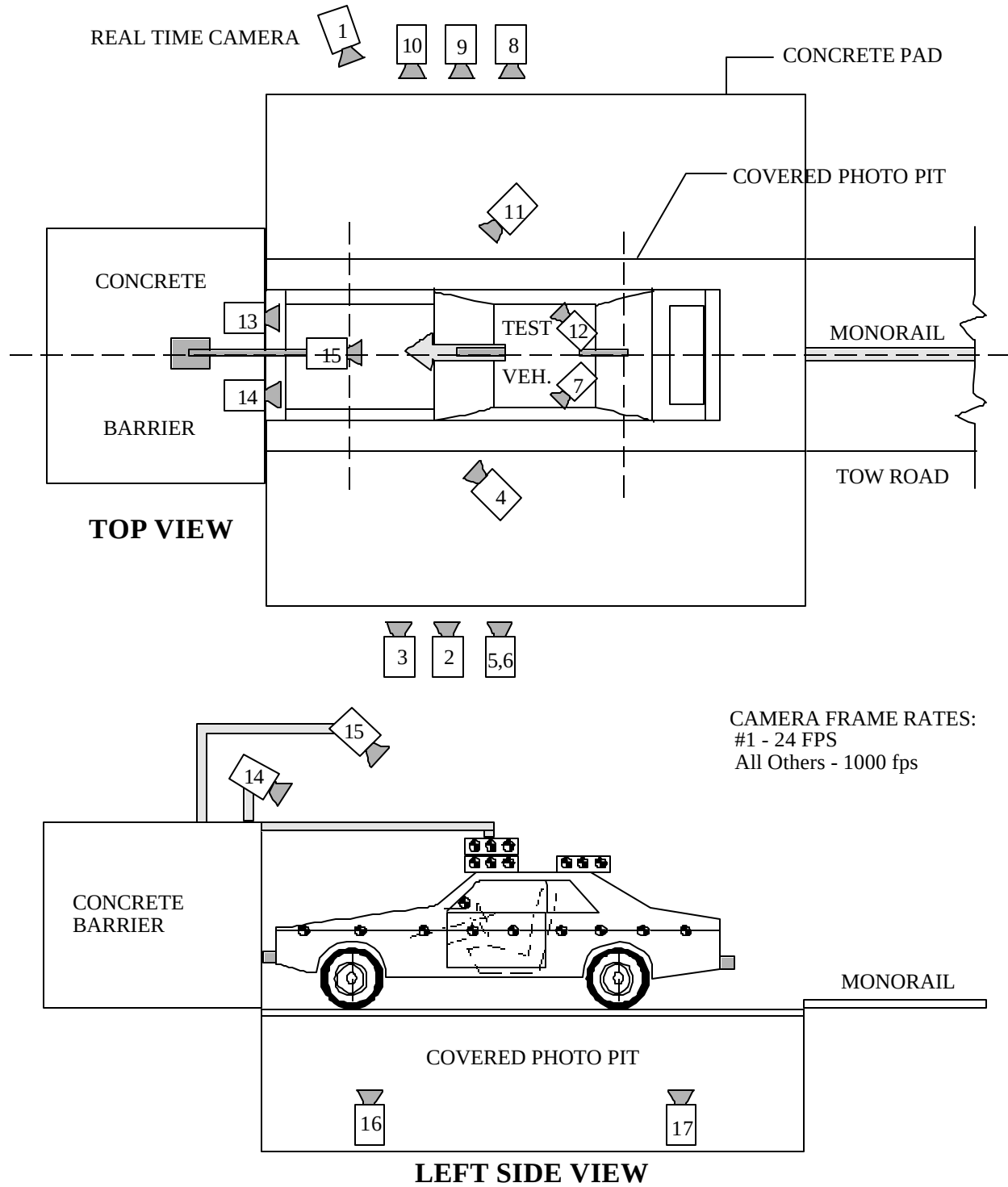
Passenger Side Toe-pan Measurements

Toe-pan Location	X Deformation (mm)			Z Deformation (mm)		
	Pre-Test	Post-Test	Difference	Pre-Test	Post-Test	Difference
1	3435	3384	51	-553	-559	6
2	3459	3400	59	-552	-564	12
3	3446	3424	22	-568	-573	5
4	3360	3309	51	-457	-471	14
5	3370	3330	40	-460	-476	16
6	3373	3363	10	-463	-476	13
7	3219	3270	-51	-367	-369	2
8	3279	3280	-1	-383	-367	-16
9	3286	3301	-15	-378	-372	-6

Reference: SAE: X = Rear Bumper (Positive: forward); Z = Ground (Positive: down)

DATA SHEET NO.15 HIGH-SPEED CAMERA LOCATIONS

NOTE: Camera information shown in DATA SHEET NO. 15.



DATA SHEET NO.15 HIGH-SPEED CAMERA LOCATIONS (cont.)

NHTSA Test No.: M45202 Vehicle: 2004 Infiniti FX35 MPV

CAMERA NO.	VIEW	CAMERA POSITIONS (mm)*			ANGLE (deg)**	FILM PLANE TO HEAD TARGET	LENS (mm)	SPEED (fps)
		X	Y	Z				
1	Real-Time Camera	-	-	-	-	-	-	24
2	Overall Left Side	7225	1630	1052	-2	6819	12.5	N.T.
3	Left Side View	8380	1030	1082	-3	7974	25	1000
4	Driver and Interior View	7720	2433	1099	-8	-	25	1055
5	Steering Column (Bottom)	7620	1904	1177	-2	7214	25	1025
6	Steering Column (Top)	7620	1904	1777	-7	7214	25	1020
7	Left side CRS lateral view	3658	2833	2572	-37	-	24-70	1000
8	Overall Right Side	7037	3013	1110	-2	7315	12.5	1020
9	Right Side View	8636	2643	1095	-1	8914	25	1040
10	Right Passenger View	8352	3013	1455	-2	8630	35	1025
11	Passenger and Interior View	7620	2578	1990	-9	-	25	1010
12	Right side CRS lateral view	3665	2843	2613	-36	-	24-70	1000
13	Passenger Front View	620	-92	1987	-30	-	13	C.F.
14	Driver Front View	620	-92	1987	-29	-	13	1015
15	Windshield View	0	-530	3374	-59	-	13	1015
16	Pit View of Engine	0	615	-3048	90	-	13	1005
17	Pit View of Fuel Tank	0	3076	-3048	90	-	13	1005

*X = film plane to monorail centerline ** = referenced to horizontal plane

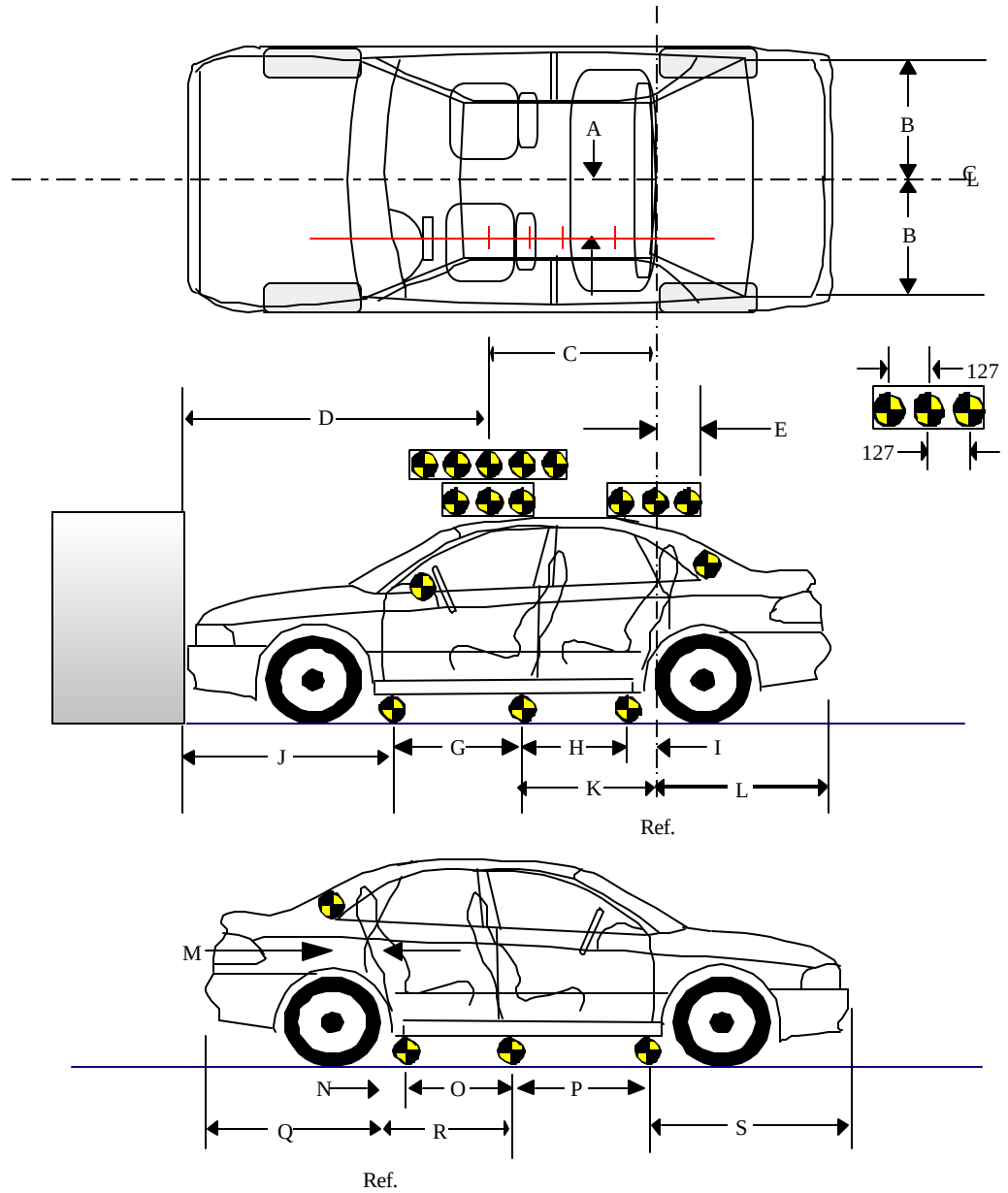
Y = film plane to impact location N.T. indicates No Timing

Z = film plane to ground C.F. Camera Failed

DATA SHEET NO. 16 VEHICLE REFERENCE PHOTO TARGET LOCATIONS

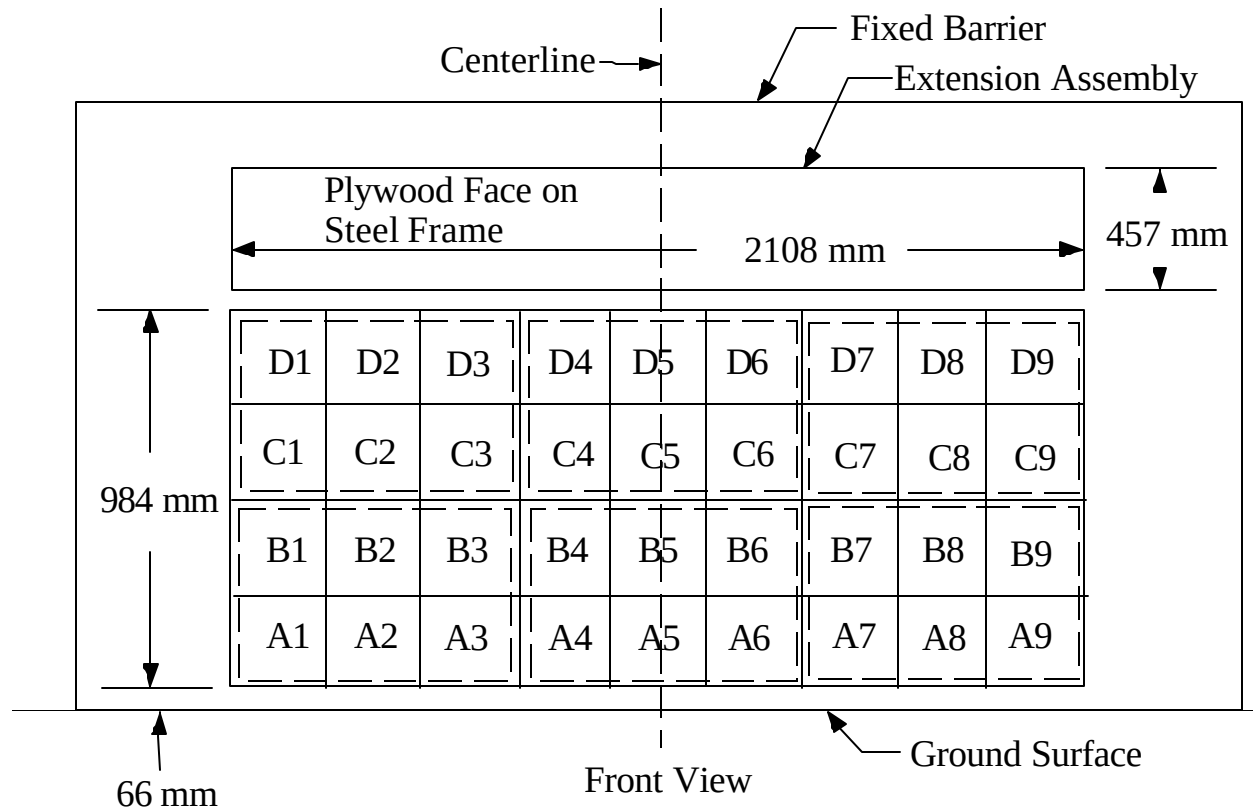
(Dimensions in millimeters)

A	354
B	684
C	1227
D	2139
E	399
F	1495
G	887
H	872
I	178
J	1430
K	1050
L	1422
M	369
N	174
O	881
P	896
Q	1425
R	1055
S	1414



DATA SHEET NO. 17 LOAD CELL LOCATIONS ON FIXED BARRIER

36 Load Cells
 4 Rows
 9 Columns
 6 Groupings (6 cells/group)



6 GROUPS OF 6 LOAD CELLS EACH

Group 4 C1 thru D3	Group 5 C4 thru D6	Group 6 C7 thru D9
Group 1 A1 thru B3	Group 2 A4 thru B6	Group 3 A7 thru B9

The following data is presented in Appendix B:

- (1)Data from 36 individual load cells
- (2)Total or Sum of 36 individual load cells
- (3)Data from 6 Groupings shown above (6 cells/group)

DATA SHEET NO. 18 POST TEST AIR BAG DATA

NHTSA No.: M45202; Test Date: March 10, 2004; Technician: P. MacDiarmid

Vehicle Model Year/Make/Model: 2004 Infiniti FX35 MPV

A. No. of vent holes: 2 -Driver 2 -Passenger

B. Size of vent holes: (mm²) 314 -Driver 1963.5 -Passenger

C. Total vent area: (mm²) 628 -Driver 3927 -Passenger

D. Deflated air bag length and width dimensions or, if round, diameter. (mm)

Driver: 450 -Height; 600 -Width; 500 -Depth

Passenger: 500 -Height; 600 -Width; 800 -Depth

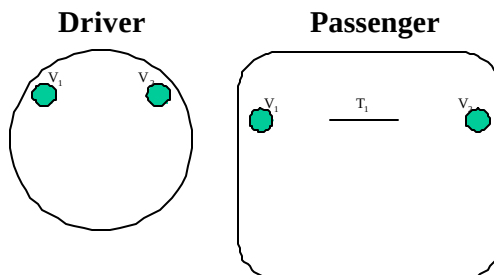
E. Is the air bag tethered?

Driver: - -Yes; X -No; If yes, record length of tether- -

Passenger: X -Yes; - -No; If yes, record length of tether- 400

Sketch the air bag showing the location of the vent holes, how the bag is tethered, and where the bag is tethered. Also describe how the tethers are attached to the bag and the steering wheel.

(Note: Not to scale; V_n = Vent hole_n, T_n = Tether_n).



F. Record part numbers and manufacturer name of the air bag and gas generator.

Driver: Air bag: -

Generator: -

Passenger: Air bag: 043461S 1818666 PH03X1F035 281003-P

Generator: -

DATA SHEET NO. 19 ACCIDENT INVESTIGATION DIVISION DATA

FOR FRONTAL BARRIER IMPACT

Vehicle Make/Model/Body Style: Infiniti FX35 MPV

NHTSA Test No.: M45202 VIN: JNRAS08W24X214718

Model Year: 2004 Build Date: 12/03 Test Date: March 10, 2004

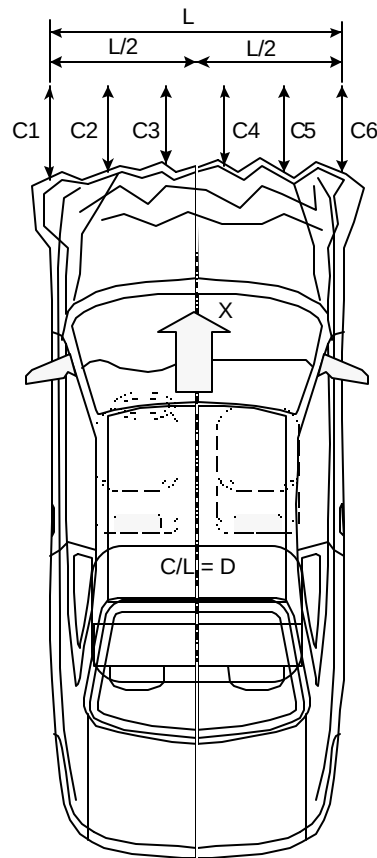
Vehicle Size Category: MPV Test Weight: 2198.5 kg

Vehicle Wheelbase: 2850 mm; Front Overhang: 887 mm; Overall Width: 1925 mm

Collision Deformation Classification (CDC) Code: 12FDEW

Crush Depth Dimensions

	PRE (mm)	POST (mm)	DIFF (mm)
C1 =	4638	4269	369
C2 =	4760	4364	396
C3 =	4789	4446	343
C4 =	4789	4457	332
C5 =	4760	4407	353
C6 =	4637	4296	341



Midpoint of Damage: D = Vehicle Centerline (Longitudinal)

Length of Damaged Region:

L1=	<u>1450</u>	mm
L2=	<u>725.0</u>	mm
L5=	<u>290</u>	mm

APPENDIX A
PHOTOGRAPHS

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Figure A-1 LOAD CELL LOCATIONS

MANUFACTURED BY
NISSAN MOTOR CO.,LTD.

DATE 12/03
GVWR/PNBV 5351 LBS.
GAWR/PNBE FR. 2554 LBS.
WITH P265/60R18 TIRES,
18X8JJ RIMS.AT 32 PSI
COLD SINGLE.
GAWR/PNBE RR. 2824 LBS.
WITH P265/60R18 TIRES,
18X8JJ RIMS.AT 32 PSI
COLD SINGLE.

THIS VEHICLE CONFORMS
TO ALL APPLICABLE FED-
ERAL MOTOR VEHICLE SA-
FETY AND THEFT PREVEN-
TION STANDARDS IN EFF-
ECT ON THE DATE OF MA-
NUFACTURE SHOWN ABOVE.

JNRAS08W24X214718
MPV



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TIRE AND LOADING INFORMATION
PNEU ET INFORMATION DE CHARGEMENT

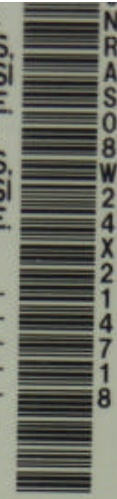
SEATING CAPACITY NOMBRE DE PLACES	TOTAL TOTAL	5	FRONT AVANT	2	REAR ARRIÈRE	3
--------------------------------------	----------------	---	----------------	---	-----------------	---

The combined weight of occupants and cargo should never exceed **431 kg or 950 lbs.**
Le poids combiné d'occupants et de cargaison ne devrait jamais excéder **431 kg ou 950 lbs.**

ORIGINAL TIRE SIZE	COLD TIRE INFLATION PRESSURE	SEE OWNER'S MANUAL
--------------------	------------------------------	--------------------

Figure A-2 VEHICLE CERTIFICATION PLACARD

GAWR/PNBE FR. 2554 LBS.
 WITH P265/60R18 TIRES,
 18X8JJ RIMS, AT 32 PSI
 COLD SINGLE.
 GAWR/PNBE RR. 2824 LBS.
 WITH P265/60R18 TIRES,
 18X8JJ RIMS, AT 32 PSI
 COLD SINGLE.
 THIS VEHICLE CONFORMS
 TO ALL APPLICABLE FED-
 ERAL MOTOR VEHICLE SA-
 FETY AND THEFT PREVEN-
 TION STANDARDS IN EFF-
 ECT ON THE DATE OF MA-
 NUFACTURE SHOWN ABOVE.
JNRAS08W24X214718
MPV





TIRE AND LOADING INFORMATION
PNEU ET INFORMATION DE CHARGEMENT

SEATING CAPACITY NOMBRE DE PLACES	TOTAL TOTAL	5	FRONT AVANT	2	REAR ARRIÈRE	3
--------------------------------------	----------------	---	----------------	---	-----------------	---

The combined weight of occupants and cargo should never exceed **431 kg or 950 lbs.**
 Le poids combiné d'occupants et de cargaison ne devrait jamais excéder **431 kg ou 950 lbs.**

ORIGINAL TIRE SIZE TAILLE DU PNEU D'ORIGINE	COLD TIRE INFLATION PRESSURE PRESSION DE GONFLAGE DES PNEUS FROIDS		SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION. POUR D'AUTRES DÉ TAILS, SE REPORTER AU MANUEL DU CONDUCTEUR.
P265/60R18 109V	FRONT AVANT	220kPa , 32PSI	
	REAR ARRIÈRE	220kPa , 32PSI	
COMPACT SPARE TIRE ROUE COMPACTE DE SECOURS	COLD TIRE INFLATION PRESSURE PRESSION DE GONFLAGE DES PNEUS FROIDS		
T175/90D18 111M	420kPa , 60PSI		CG005

Figure A-3 VEHICLE TIRE PLACARD



Figure A-4 RIGHT FRONT, AS RECEIVED



Figure A-5 LEFT REAR, AS RECEIVED



Figure A-6 PRE-TEST FRONT VIEW



Figure A-7 POST-TEST FRONT VIEW



Figure A-8 PRE-TEST LEFT SIDE VIEW



Figure A-9 POST-TEST LEFT SIDE VIEW



Figure A-10 PRE-TEST RIGHT SIDE VIEW



Figure A-11 POST-TEST RIGHT SIDE VIEW



Figure A-12 PRE-TEST RIGHT FRONT THREE-QUARTER VIEW



Figure A-13 POST-TEST RIGHT FRONT THREE-QUARTER VIEW



Figure A-14 PRE-TEST LEFT REAR THREE-QUARTER VIEW



Figure A-15 POST-TEST LEFT REAR THREE-QUARTER VIEW



Figure A-16 LEFT REAR THREE-QUARTER VIEW OF DOORS AFTER IMPACT



Figure A-17 RIGHT REAR THREE-QUARTER VIEW OF DOORS AFTER IMPACT



Figure A-18 PRE-TEST WINDSHIELD VIEW



Figure A-19 POST-TEST WINDSHIELD VIEW



Figure A-20 PRE-TEST ENGINE COMPARTMENT VIEW



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Figure A-21 POST-TEST ENGINE COMPARTMENT VIEW



Figure A-22 PRE-TEST FUEL CAP VIEW



Figure A-23 POST-TEST FUEL CAP VIEW



Figure A-24 PRE-TEST FRONT UNDERBODY VIEW

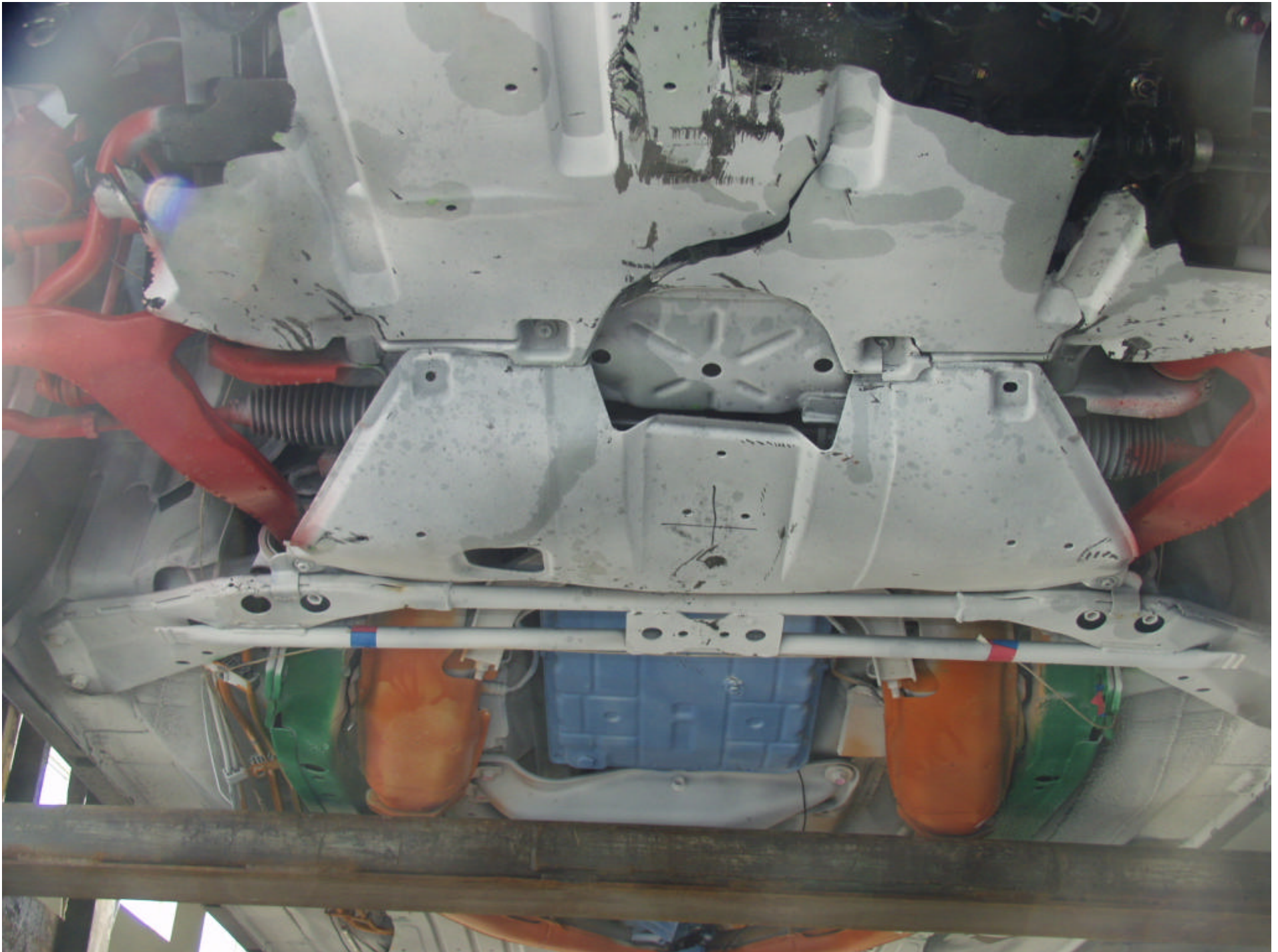


Figure A-25 POST-TEST FRONT UNDERBODY VIEW



Figure A-26 PRE-TEST MID UNDERBODY VIEW



Figure A-27 POST-TEST MID UNDERBODY VIEW



Figure A-28 PRE-TEST REAR UNDERBODY VIEW



Figure A-29 POST-TEST REAR UNDERBODY VIEW



Figure A-30 PRE-TEST DRIVER HEAD LOCATION



Figure A-31 POST-TEST DRIVER HEAD LOCATION



Figure A-32 PRE-TEST DRIVER POSITION VIEW



Figure A-33 POST-TEST DRIVER POSITION VIEW



Figure A-34 PRE-TEST DRIVER AND INTERIOR VIEW



Figure A-35 POST-TEST DRIVER AND INTERIOR VIEW



Figure A-36 PRE-TEST DRIVER FEET VIEW



Figure A-37 POST-TEST DRIVER FEET VIEW



Figure A-38 PRE-TEST DRIVER KNEE BOLSTER VIEW



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8642-NCAP-47

Figure A-39 POST-TEST DRIVER KNEE BOLSTER VIEW



Figure A-40 PRE-TEST DRIVER FLOOR PAN VIEW



Figure A-41 POST-TEST DRIVER FLOOR PAN VIEW



Figure A-42 POST-TEST DRIVER HEAD VIEW



Figure A-43 POST-TEST DRIVER CONTACT TO AIRBAG



Figure A-44 PRE-TEST PASSENGER HEAD LOCATION



Figure A-45 POST-TEST PASSENGER HEAD LOCATION



Figure A-46 PRE-TEST PASSENGER POSITION VIEW



Figure A-47 POST-TEST PASSENGER POSITION VIEW



Figure A-48 PRE-TEST PASSENGER AND INTERIOR VIEW



Figure A-49 POST-TEST PASSENGER AND INTERIOR VIEW



Figure A-50 PRE- TEST PASSENGER FEET VIEW



Figure A-51 POST-TEST PASSENGER FEET VIEW



Figure A-52 PRE-TEST PASSENGER KNEE BOLSTER VIEW



Figure A-53 POST-TEST PASSENGER KNEE BOLSTER VIEW



Figure A-54 PRE-TEST PASSENGER FLOOR PAN VIEW



Figure A-55 POST-TEST PASSENGER FLOOR PAN VIEW



Figure A-56 POST-TEST PASSENGER HEAD VIEW



Figure A-57 POST-TEST PASSENGER CONTACT TO AIRBAG



Figure A-58 ROLLOVER VIEW



Figure A-59 IMPACT VIEW

APPENDIX B

DUMMY, VEHICLE AND LOAD CELL BARRIER RESPONSE DATA

**Hybrid III Dummy Sign Conventions
Load Cells and Special Transducers**

Transducer	SAE Sign Convention (positive unless noted)
Upper Neck Load Cell	Fx Head rearward Fy Head left Fz Neck in tension Mx Left ear to left shoulder My Chin to chest (flexion) Mz Chin to left shoulder (look left)
Chest Displacement Potentiometer	Compression is negative
Pelvic Load Cell (Lower Lumbar)	Fx Chest rearward Fy Chest left Fz Spine in tension
Femur Load Cell	Compression is negative
Upper Tibia Load Cell (right and left leg)	Mx Support tibia at ends, load left side center My Support tibia at ends, load front (shin) center
Lower Tibia Load Cell (right and left leg)	Fz Tibia in tension Mx Support tibia at ends, load left side center My Support tibia at ends, load front (shin) center

DATA CHANNEL FILTER CLASS SUMMARY

NHTSA TEST NO.

DATA TYPE	SAE FILTER CLASS (Hz)
Dummy Head Accelerations	1000
Dummy Chest Accelerations	180
Dummy Chest Displacements	600
Dummy Femur Forces	600
Dummy Belt Loads	60
Dummy Belt Displacements	180
Dummy Neck Forces	1000
Dummy Neck Moments	600
Vehicle Accelerations	60
Vehicle Velocity Integrations	180
Vehicle Displacement Integrations	180
Load Cell Barrier Forces	60

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3	V1P1 Head 9 Array Y Arm Ax [g, CFC_1000]	B-10
4	V1P1 Head 9 Array Y Arm Az [g, CFC_1000]	B-11
5	V1P1 Head 9 Array Z Arm Ax [g, CFC_1000]	B-12
6	V1P1 Head 9 Array Z Arm Ay [g, CFC_1000]	B-13
7	V1P1 Head CG x [g, CFC_1000]	B-14
8	V1P1 Head CG y [g, CFC_1000]	B-15
9	V1P1 Head CG z [g, CFC_1000]	B-16
10	V1P1 Head CG Resultant [g, CFC_1000]	B-17
11	V1P1 Head CG Red x [g, CFC_1000]	B-18
12	V1P1 Head CG Red y [g, CFC_1000]	B-19
13	V1P1 Head CG Red z [g, CFC_1000]	B-20
14	V1P1 Head CG Red Resultant [g, CFC_1000]	B-21
15	V1P1 Upper Neck Fx [N, CFC_1000]	B-22
16	V1P1 Upper Neck Fy [N, CFC_1000]	B-23
17	V1P1 Upper Neck Fz [N, CFC_1000]	B-24
18	V1P1 Upper Neck F Resultant [N, CFC_1000]	B-25
19	V1P1 Upper Neck Mx [N-m, CFC_600]	B-26
20	V1P1 Upper Neck My [N-m, CFC_600]	B-27
21	V1P1 Upper Neck Mz [N-m, CFC_600]	B-28
22	V1P1 Upper Neck M Resultant [N-m, CFC_600]	B-29
23	V1P1 Chest x [g, CFC_180]	B-30
24	V1P1 Chest y [g, CFC_180]	B-31
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26	V1P1 Chest Resultant [g, CFC_180]	B-33
27	V1P1 Chest Red x [g, CFC_180]	B-34
28	V1P1 Chest Red y [g, CFC_180]	B-35
29	V1P1 Chest Red z [g, CFC_180]	B-36
30	V1P1 Chest Red Resultant [g, CFC_180]	B-37
31	V1P1 Chest Compression x [mm, CFC_600]	B-38
32	V1P1 Pelvic x [g, CFC_1000]	B-39
33	V1P1 Pelvic y [g, CFC_1000]	B-40
34	V1P1 Pelvic z [g, CFC_1000]	B-41
35	V1P1 Pelvic Resultant [g, CFC_1000]	B-42
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37	V1P1 Right Femur z [N, CFC_600]	B-44
38	V1P1 Left Upper Tibia Mx [N-m, CFC_600]	B-45
39	V1P1 Left Upper Tibia My [N-m, CFC_600]	B-46
40	V1P1 Left Lower Tibia Fz [N, CFC_600]	B-47
41	V1P1 Left Lower Tibia Mx [N-m, CFC_600]	B-48
42	V1P1 Left Lower Tibia My [N-m, CFC_600]	B-49
43	V1P1 Right Upper Tibia Mx [N-m, CFC_600]	B-50
44	V1P1 Right Upper Tibia My [N-m, CFC_600]	B-51
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49	V1P1 Left Foot Aft z [g, CFC_600]	B-56
50	V1P1 Left Foot Fore z [g, CFC_600]	B-57
51	V1P1 Right Foot Aft x [g, CFC_600]	B-58
52	V1P1 Right Foot Aft z [g, CFC_600]	B-59
53	V1P1 Right Foot Fore z [g, CFC_600]	B-60
54	V1P1 Lap Belt [N, CFC_60]	B-61
55	V1P1 Torso Belt [N, CFC_60]	B-62
56	V1P2 Head 9 Array X Arm Ay [g, CFC_1000]	B-63
57	V1P2 Head 9 Array X Arm Az [g, CFC_1000]	B-64
58	V1P2 Head 9 Array Y Arm Ax [g, CFC_1000]	B-65
59	V1P2 Head 9 Array Y Arm Az [g, CFC_1000]	B-66
60	V1P2 Head 9 Array Z Arm Ax [g, CFC_1000]	B-67
61	V1P2 Head 9 Array Z Arm Ay [g, CFC_1000]	B-68
62	V1P2 Head CG x [g, CFC_1000]	B-69
63	V1P2 Head CG y [g, CFC_1000]	B-70
64	V1P2 Head CG z [g, CFC_1000]	B-71
65	V1P2 Head CG Resultant [g, CFC_1000]	B-72
66	V1P2 Head CG Red x [g, CFC_1000]	B-73
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68	V1P2 Head CG Red z [g, CFC_1000]	B-75
69	V1P2 Head CG Red Resultant [g, CFC_1000]	B-76
70	V1P2 Upper Neck Fx [N, CFC_1000]	B-77
71	V1P2 Upper Neck Fy [N, CFC_1000]	B-78
72	V1P2 Upper Neck Fz [N, CFC_1000]	B-79
73	V1P2 Upper Neck F Resultant [N, CFC_1000]	B-80
74	V1P2 Upper Neck Mx [N-m, CFC_600]	B-81
75	V1P2 Upper Neck My [N-m, CFC_600]	B-82
76	V1P2 Upper Neck Mz [N-m, CFC_600]	B-83
77	V1P2 Upper Neck M Resultant [N-m, CFC_600]	B-84
78	V1P2 Chest x [g, CFC_180]	B-85
79	V1P2 Chest y [g, CFC_180]	B-86
80	V1P2 Chest z [g, CFC_180]	B-87
81	V1P2 Chest Resultant [g, CFC_180]	B-88
82	V1P2 Chest Red x [g, CFC_180]	B-89
83	V1P2 Chest Red y [g, CFC_180]	B-90
84	V1P2 Chest Red z [g, CFC_180]	B-91
85	V1P2 Chest Red Resultant [g, CFC_180]	B-92
86	V1P2 Chest Compression x [mm, CFC_600]	B-93
87	V1P2 Pelvic x [g, CFC_1000]	B-94
88	V1P2 Pelvic y [g, CFC_1000]	B-95
89	V1P2 Pelvic z [g, CFC_1000]	B-96
90	V1P2 Pelvic Resultant [g, CFC_1000]	B-97
91	V1P2 Left Femur z [N, CFC_600]	B-98
92	V1P2 Right Femur z [N, CFC_600]	B-99

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94	V1P2 Left Upper Tibia My [N-m, CFC_600]	B-101
95	V1P2 Left Lower Tibia Fz [N, CFC_600]	B-102
96	V1P2 Left Lower Tibia Mx [N-m, CFC_600]	B-103
97	V1P2 Left Lower Tibia My [N-m, CFC_600]	B-104
98	V1P2 Right Upper Tibia Mx [N-m, CFC_600]	B-105
99	V1P2 Right Upper Tibia My [N-m, CFC_600]	B-106
100	V1P2 Right Lower Tibia Fz [N, CFC_600]	B-107
101	V1P2 Right Lower Tibia Mx [N-m, CFC_600]	B-108
102	V1P2 Right Lower Tibia My [N-m, CFC_600]	B-109
103	V1P2 Left Foot Aft x [g, CFC_600]	B-110
104	V1P2 Left Foot Aft z [g, CFC_600]	B-111
105	V1P2 Left Foot Fore z [g, CFC_600]	B-112
106	V1P2 Right Foot Aft x [g, CFC_600]	B-113
107	V1P2 Right Foot Aft z [g, CFC_600]	B-114
108	V1P2 Right Foot Fore z [g, CFC_600]	B-115
109	V1P2 Lap Belt [N, CFC_60]	B-116
110	V1P2 Torso Belt [N, CFC_60]	B-117
111	V1 Left Rear #1x [g, CFC_60]	B-118
112	V1 Left Rear #1x Velocity [kph, CFC_180]	B-119
113	V1 Left Rear #1x Displacement [mm, CFC_180]	B-120
114	V1 Right Rear #2x [g, CFC_60]	B-121
115	V1 Right Rear #2x Velocity [kph, CFC_180]	B-122
116	V1 Right Rear #2x Displacement [mm, CFC_180]	B-123
117	V1 Engine Top #3x [g, CFC_60]	B-124
118	V1 Engine Top #3x Velocity [kph, CFC_180]	B-125
119	V1 Engine Top #3x Displacement [mm, CFC_180]	B-126
120	V1 Engine Bottom #4x [g, CFC_60]	B-127
121	V1 Engine Bottom #4x Velocity [kph, CFC_180]	B-128
122	V1 Engine Bottom #4x Displacement [mm, CFC_180]	B-129
123	V1 Right Caliper #5x [g, CFC_60]	B-130
124	V1 Right Caliper #5x Velocity [kph, CFC_180]	B-131
125	V1 Right Caliper #5x Displacement [mm, CFC_180]	B-132
126	V1 Instrument Panel #6x [g, CFC_60]	B-133
127	V1 Instrument Panel #6x Velocity [kph, CFC_180]	B-134
128	V1 Instrument Panel #6x Displacement [mm, CFC_180]	B-135
129	V1 Left Caliper #7x [g, CFC_60]	B-136
130	V1 Left Caliper #7x Velocity [kph, CFC_180]	B-137
131	V1 Left Caliper #7x Displacement [mm, CFC_180]	B-138
132	V1 Left Rear #8z [g, CFC_60]	B-139
133	V1 Left Rear #8z Velocity [kph, CFC_180]	B-140
134	V1 Left Rear #8z Displacement [mm, CFC_180]	B-141
135	V1 Right Rear #9z [g, CFC_60]	B-142
136	V1 Right Rear #9z Velocity [kph, CFC_180]	B-143
137	V1 Right Rear #9z Displacement [mm, CFC_180]	B-144
138	Barrier Load Cell A1 Fx [N, CFC_60]	B-145

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PLOT	PLOT NAME[UNITS, CHANNEL FILTER CLASS]	PAGE
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140	Barrier Load Cell A3 Fx [N, CFC_60]	B-147
141	Barrier Load Cell A4 Fx [N, CFC_60]	B-148
142	Barrier Load Cell A5 Fx [N, CFC_60]	B-149
143	Barrier Load Cell A6 Fx [N, CFC_60]	B-150
144	Barrier Load Cell A7 Fx [N, CFC_60]	B-151
145	Barrier Load Cell A8 Fx [N, CFC_60]	B-152
146	Barrier Load Cell A9 Fx [N, CFC_60]	B-153
147	Barrier Load Cell B1 Fx [N, CFC_60]	B-154
148	Barrier Load Cell B2 Fx [N, CFC_60]	B-155
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150	Barrier Load Cell B4 Fx [N, CFC_60]	B-157
151	Barrier Load Cell B5 Fx [N, CFC_60]	B-158
152	Barrier Load Cell B6 Fx [N, CFC_60]	B-159
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169	Barrier Load Cell D5 Fx [N, CFC_60]	B-176
170	Barrier Load Cell D6 Fx [N, CFC_60]	B-177
171	Barrier Load Cell D7 Fx [N, CFC_60]	B-178
172	Barrier Load Cell D8 Fx [N, CFC_60]	B-179
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2004 NCAP Test 11 2004 Infiniti FX35/45

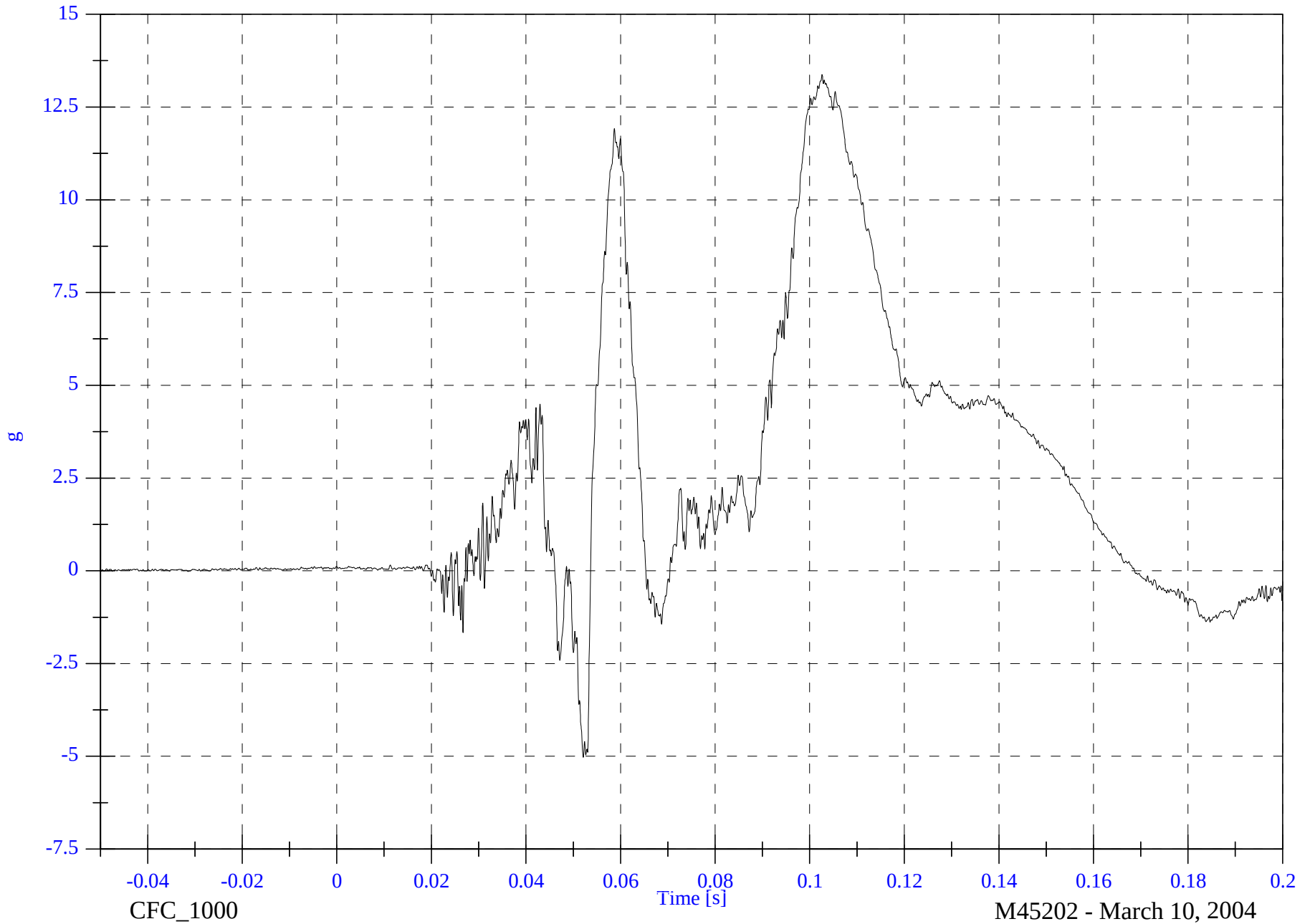
V1P1 Head 9 Array X Arm Ay

Max: 13.4 [g] at 0.103 [s]

Min: -5.0 [g] at 0.052 [s]

B-8

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head 9 Array X Arm Az

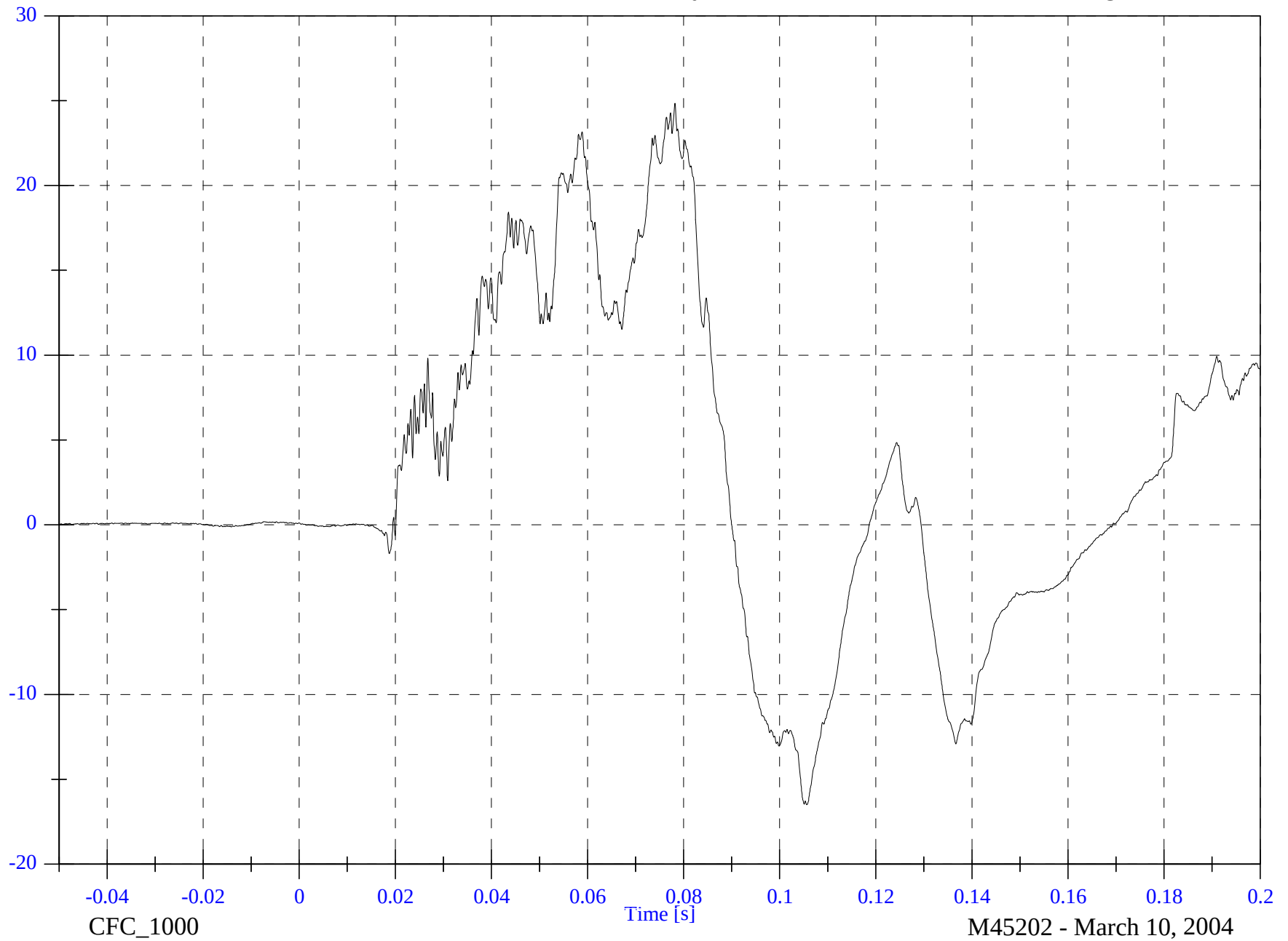
Max: 24.9 [g] at 0.078 [s]

Min: -16.5 [g] at 0.106 [s]

B-9

g

8642-NCAP-47

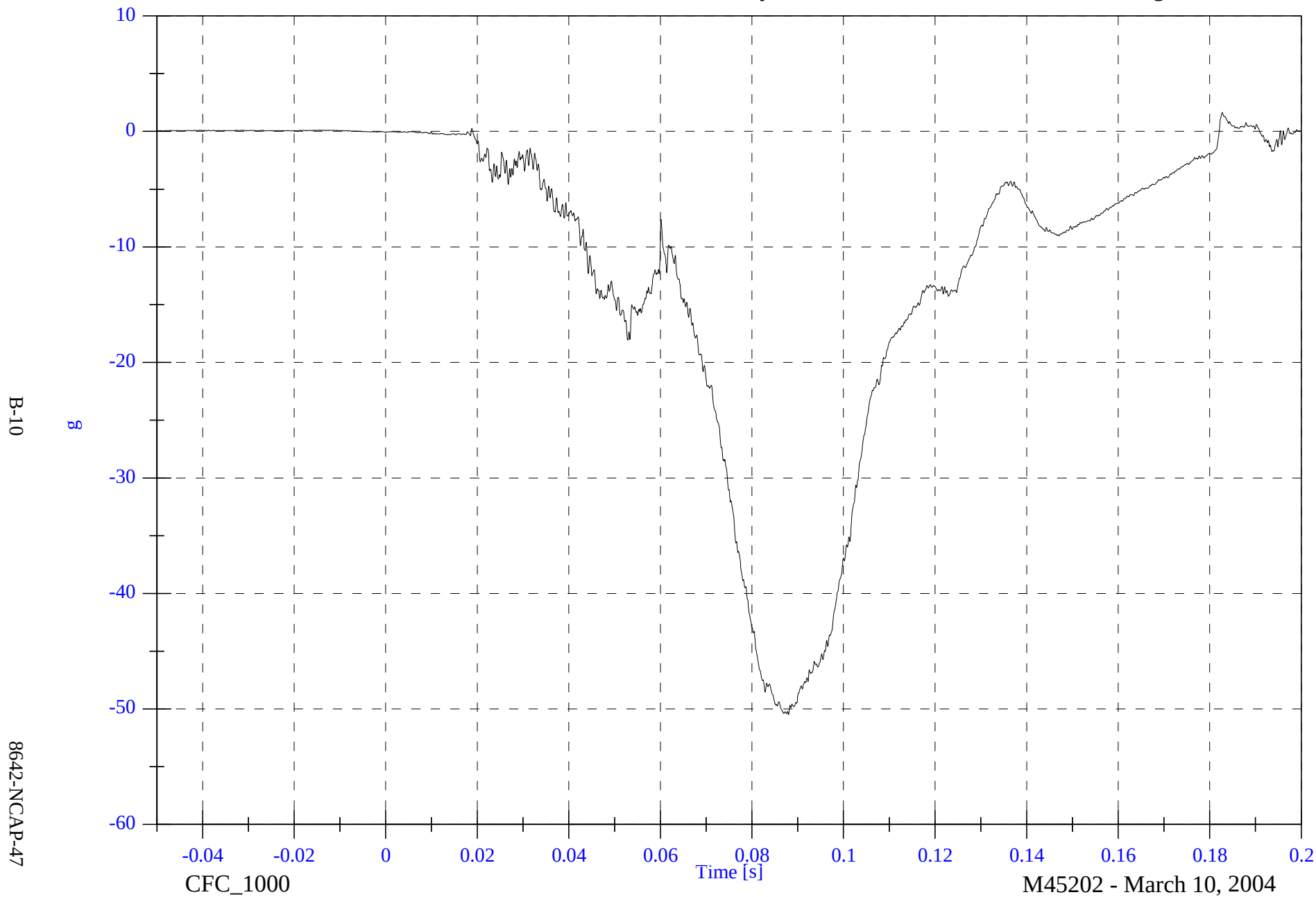


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head 9 Array Y Arm Ax

Max: 1.6 [g] at 0.183 [s]

Min: -50.5 [g] at 0.088 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head 9 Array Y Arm Az

Max: 27.8 [g] at 0.073 [s]

Min: -21.2 [g] at 0.106 [s]

B-11

8642-NCAP-47

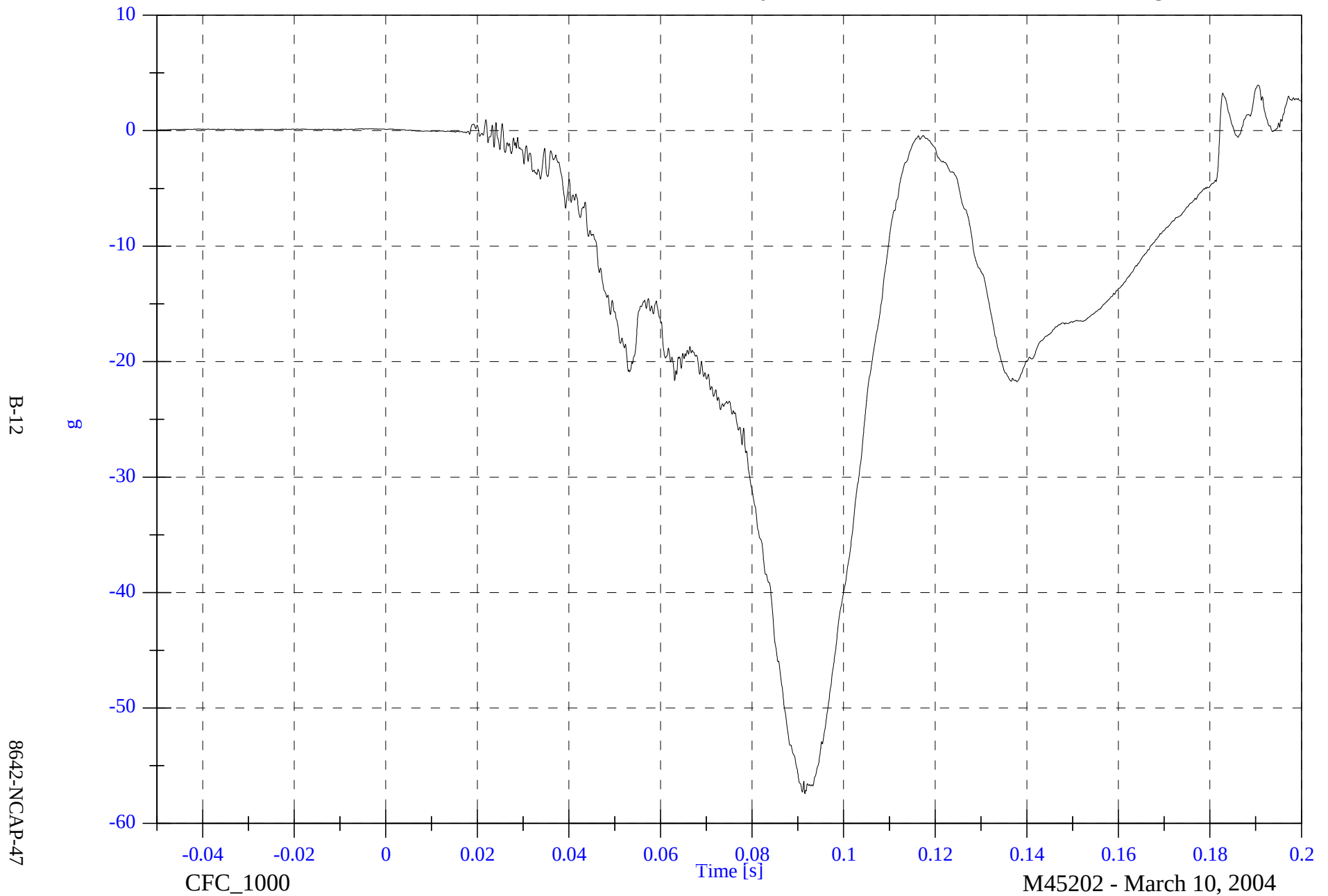


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head 9 Array Z Arm Ax

Max: 3.9 [g] at 0.191 [s]

Min: -57.4 [g] at 0.092 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

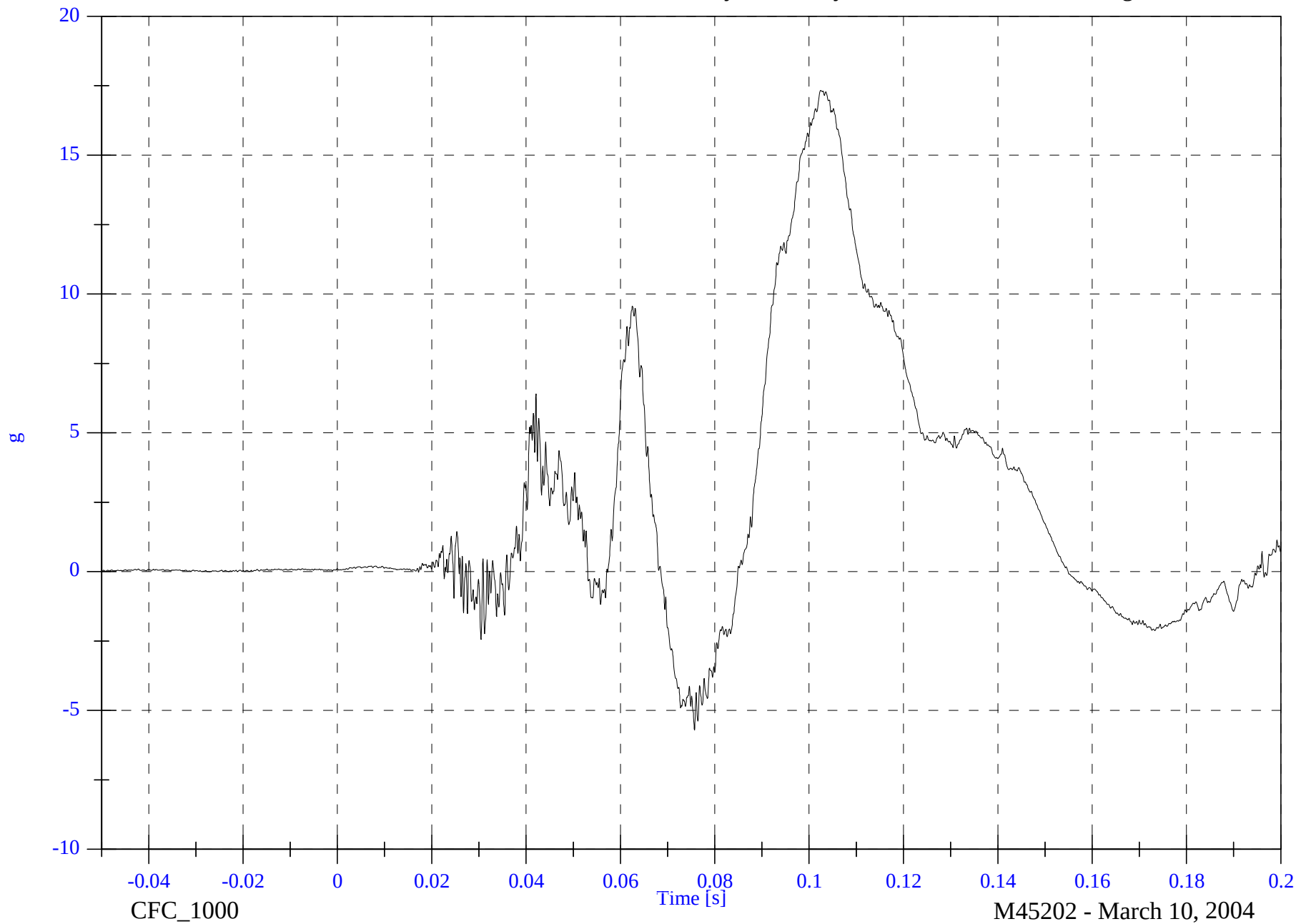
V1P1 Head 9 Array Z Arm Ay

Max: 17.3 [g] at 0.102 [s]

Min: -5.7 [g] at 0.076 [s]

B-13

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

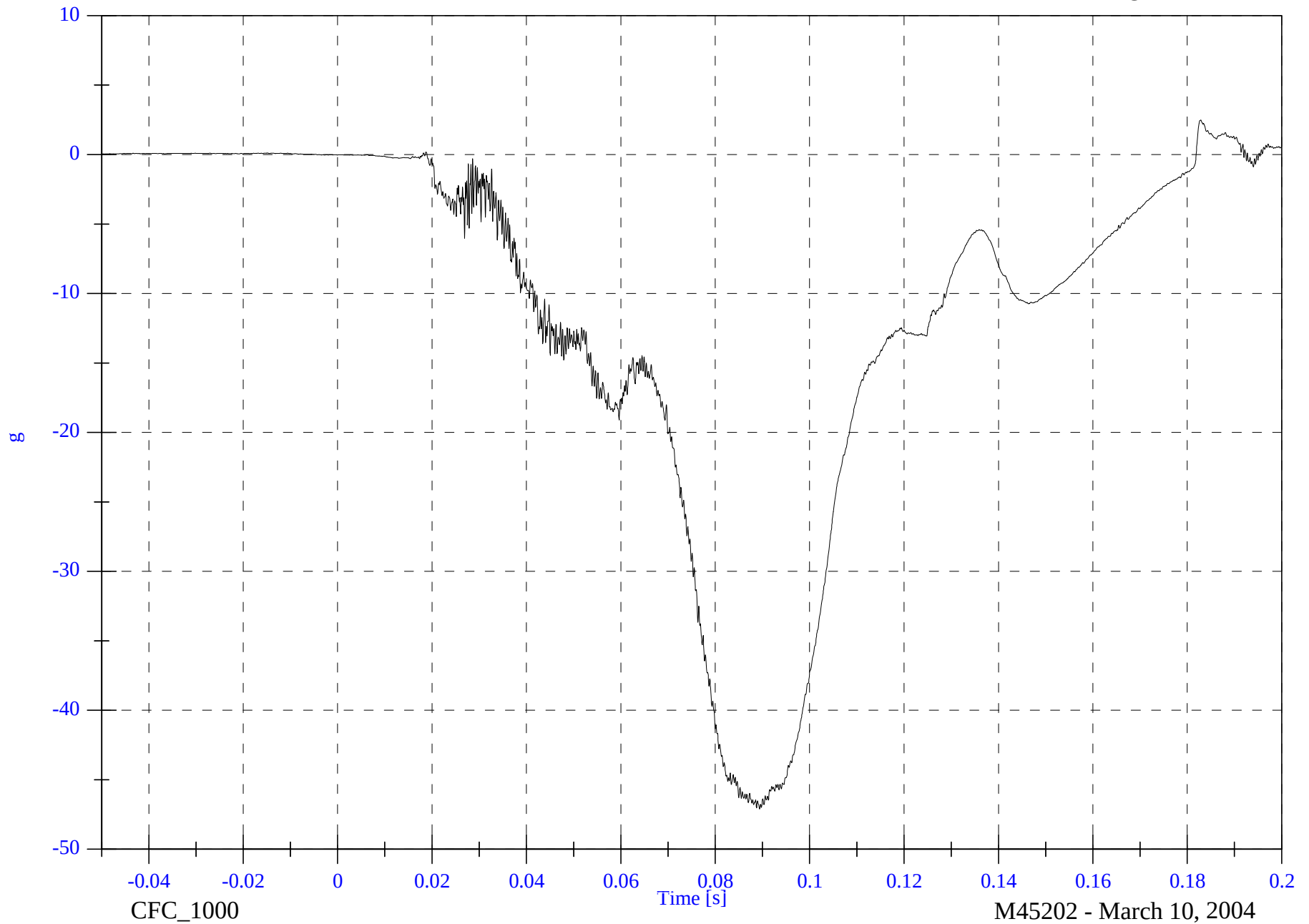
V1P1 Head CG x

Max: 2.5 [g] at 0.183 [s]

Min: -47.1 [g] at 0.089 [s]

B-14

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

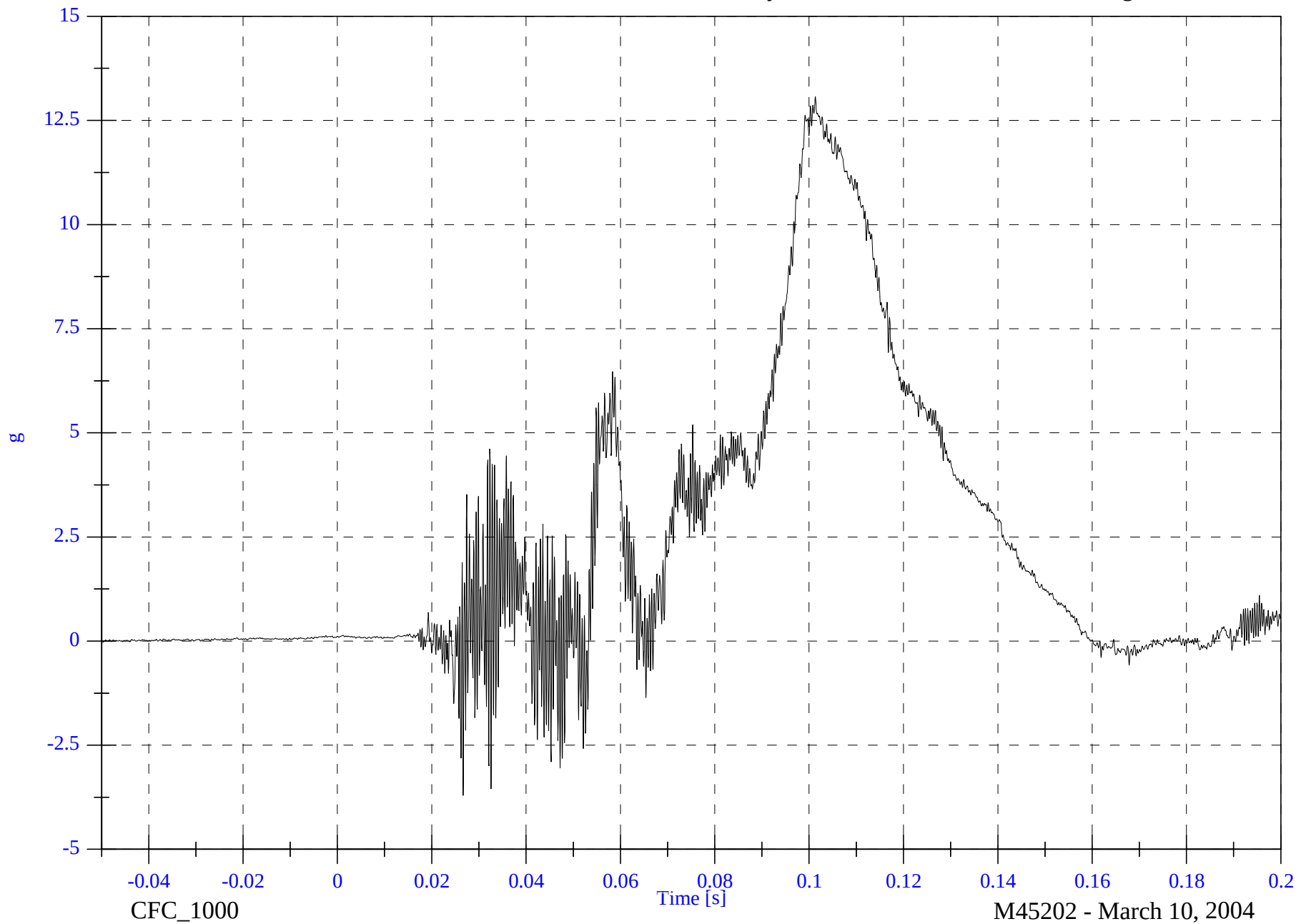
V1P1 Head CG y

Max: 13.1 [g] at 0.101 [s]

Min: -3.7 [g] at 0.027 [s]

B-15

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

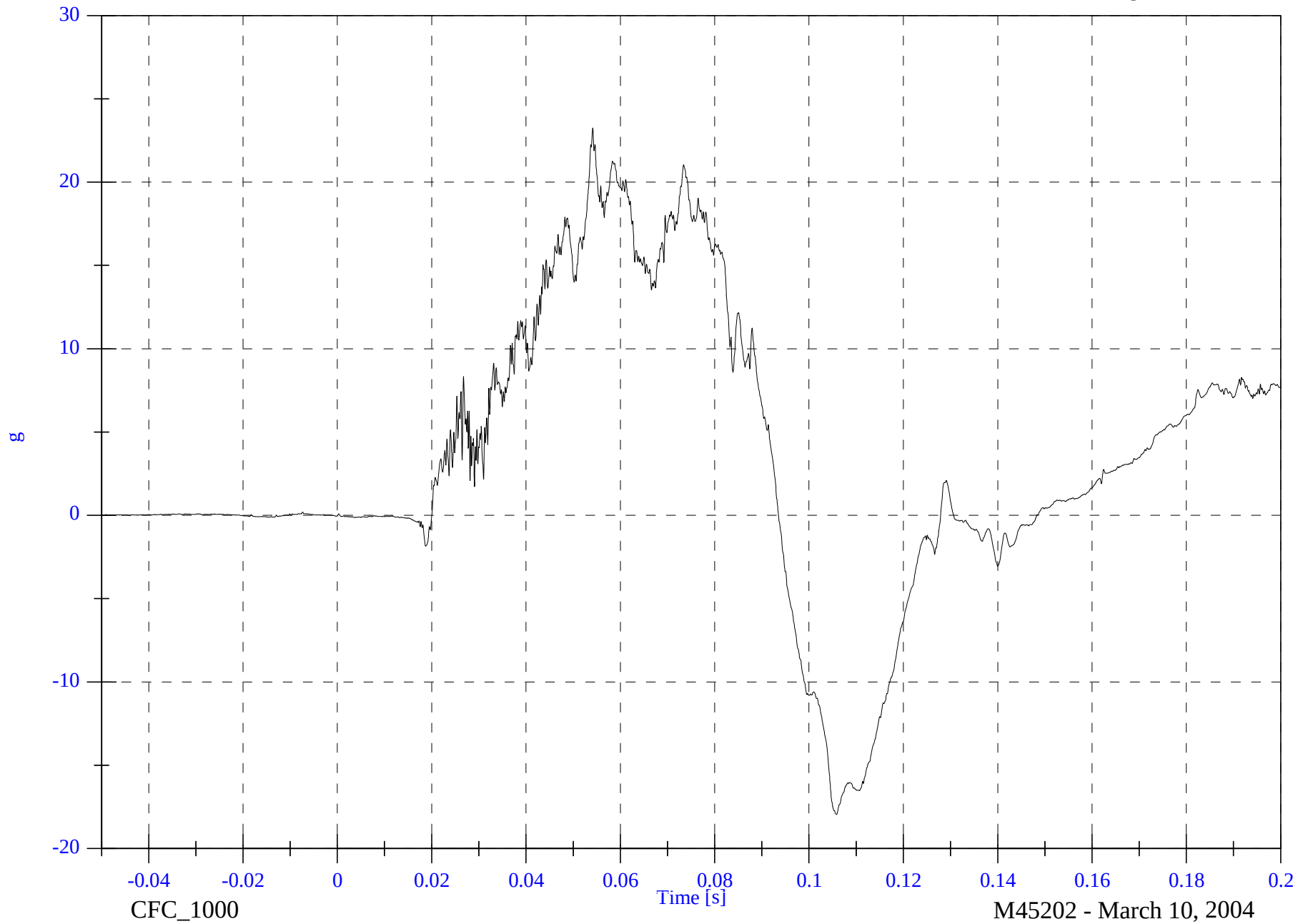
V1P1 Head CG z

Max: 23.3 [g] at 0.054 [s]

Min: -18.0 [g] at 0.106 [s]

B-16

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

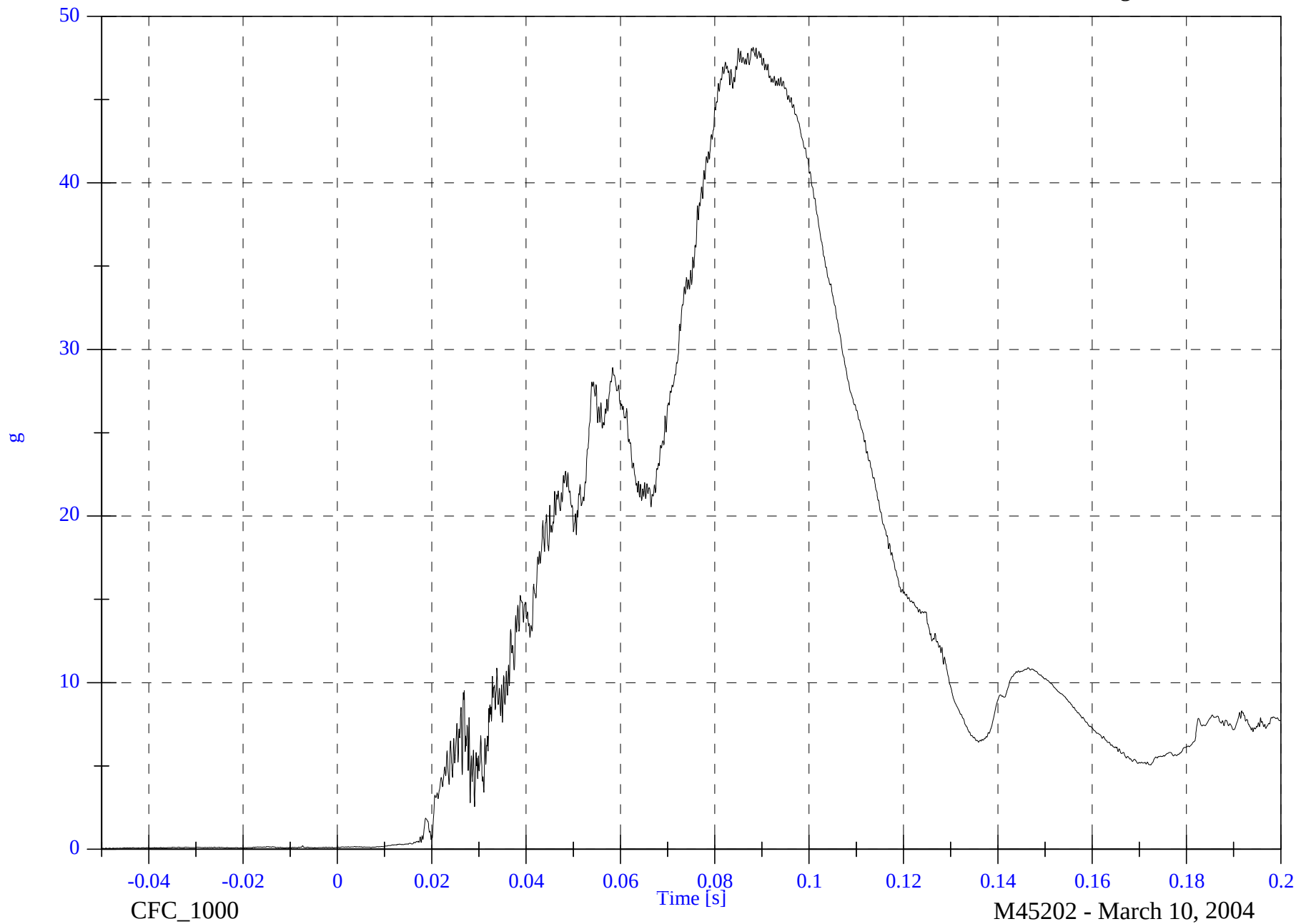
V1P1 Head CG Resultant

Max: 48.1 [g] at 0.088 [s]

Min: 0.0 [g] at -0.049 [s]

B-17

8642-NCAP-47

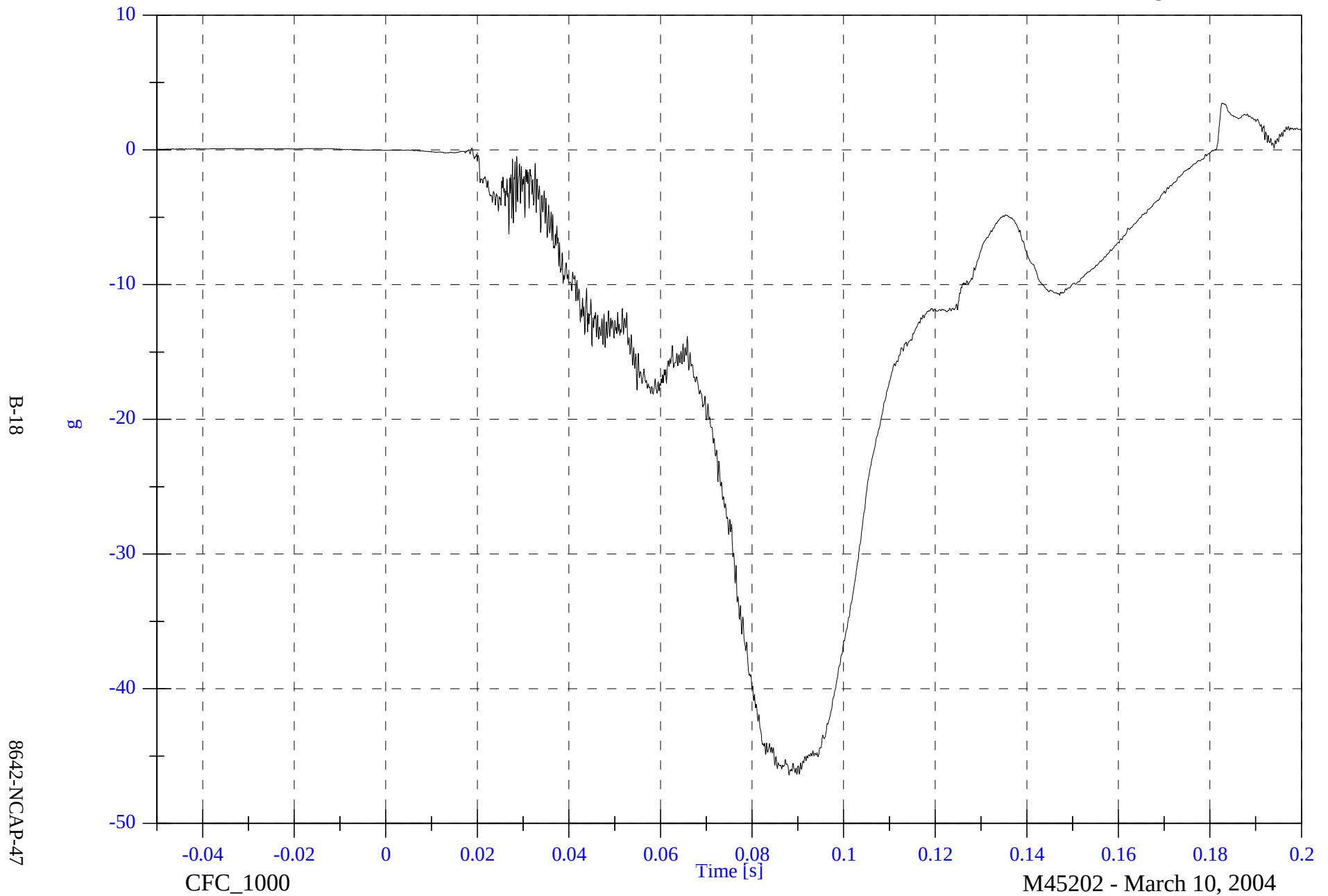


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head CG Red x

Max: 3.5 [g] at 0.183 [s]

Min: -46.4 [g] at 0.088 [s]

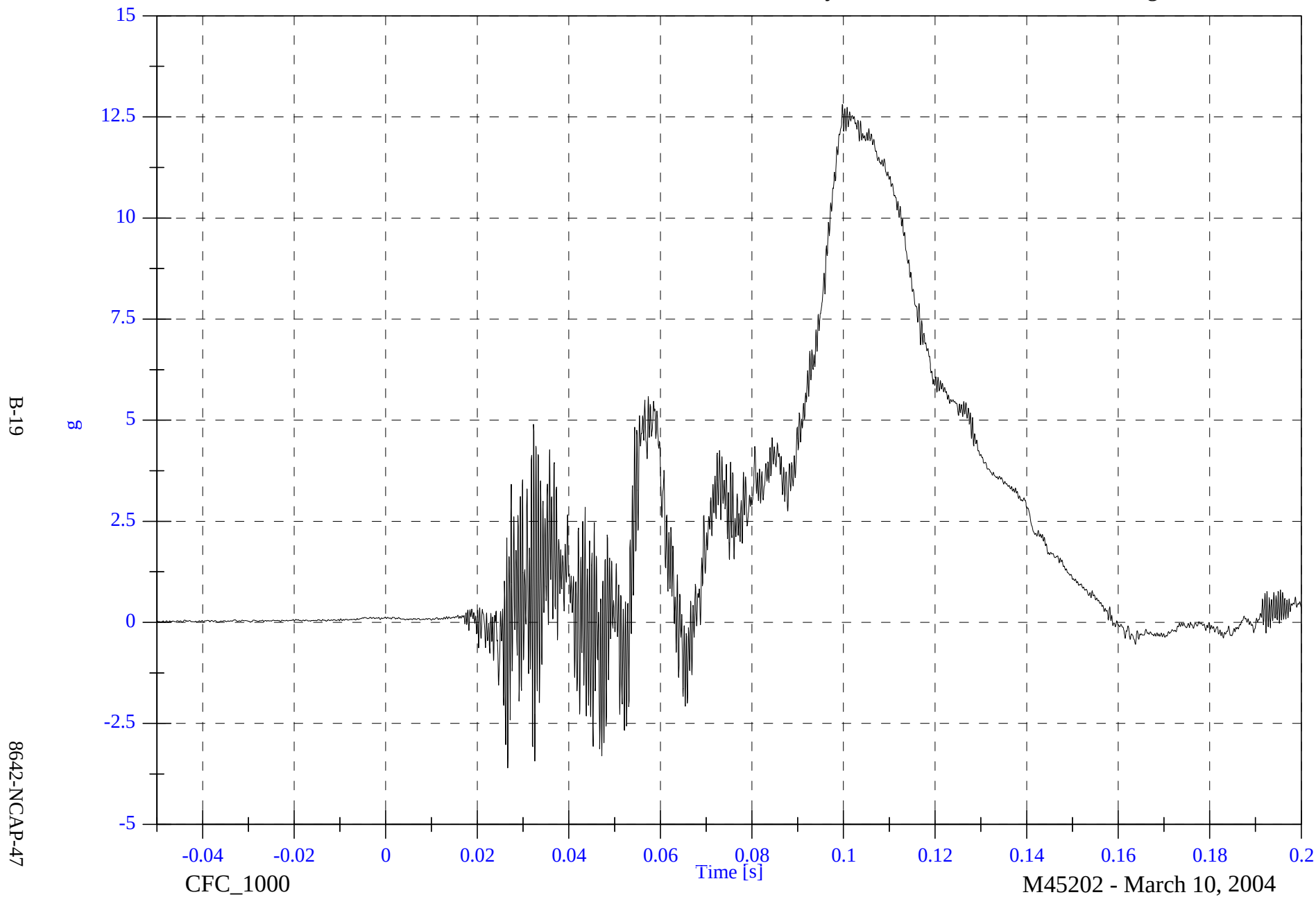


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 12.8 [g] at 0.100 [s]

Min: -3.6 [g] at 0.027 [s]

V1P1 Head CG Red y

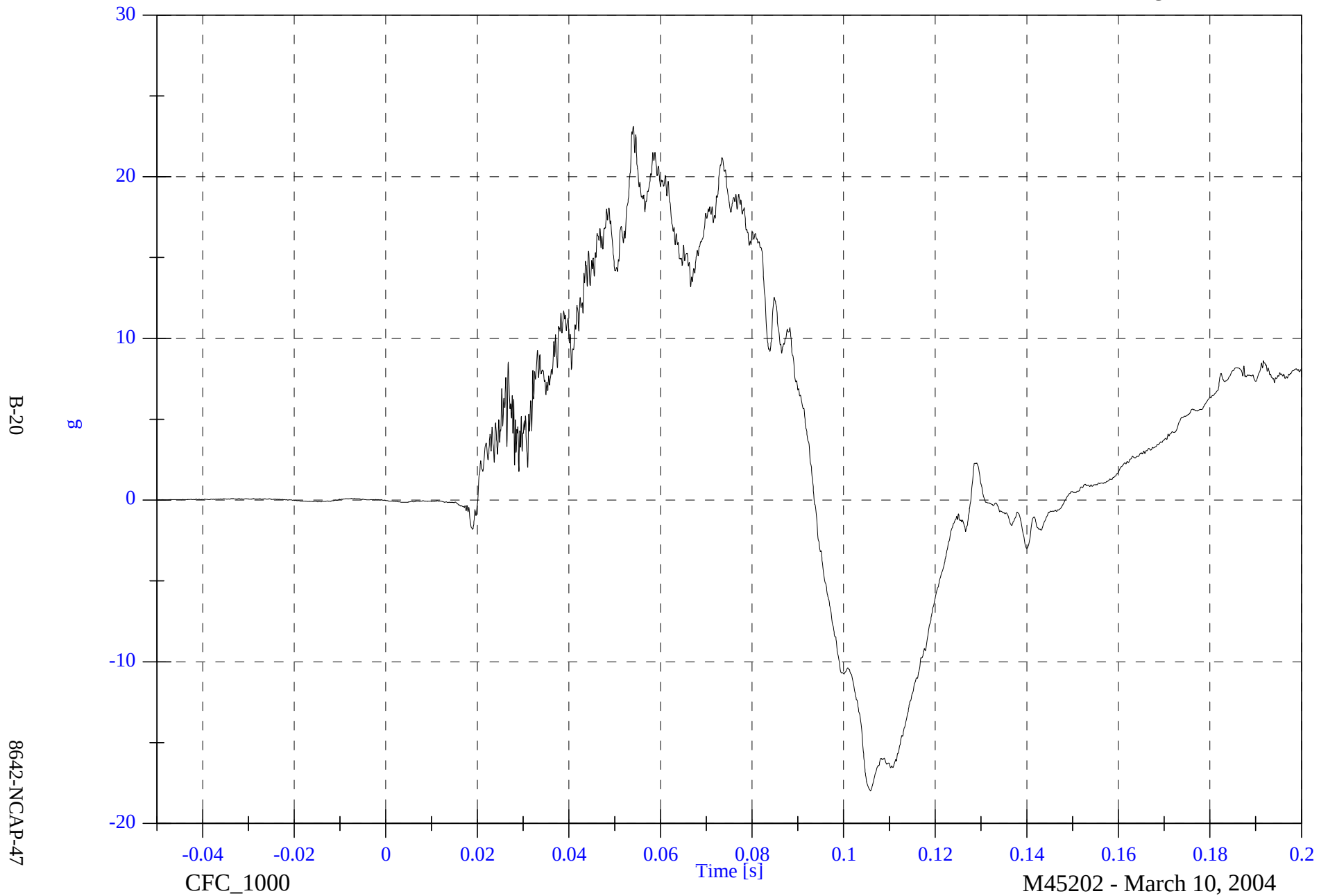


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head CG Red z

Max: 23.1 [g] at 0.054 [s]

Min: -18.0 [g] at 0.106 [s]

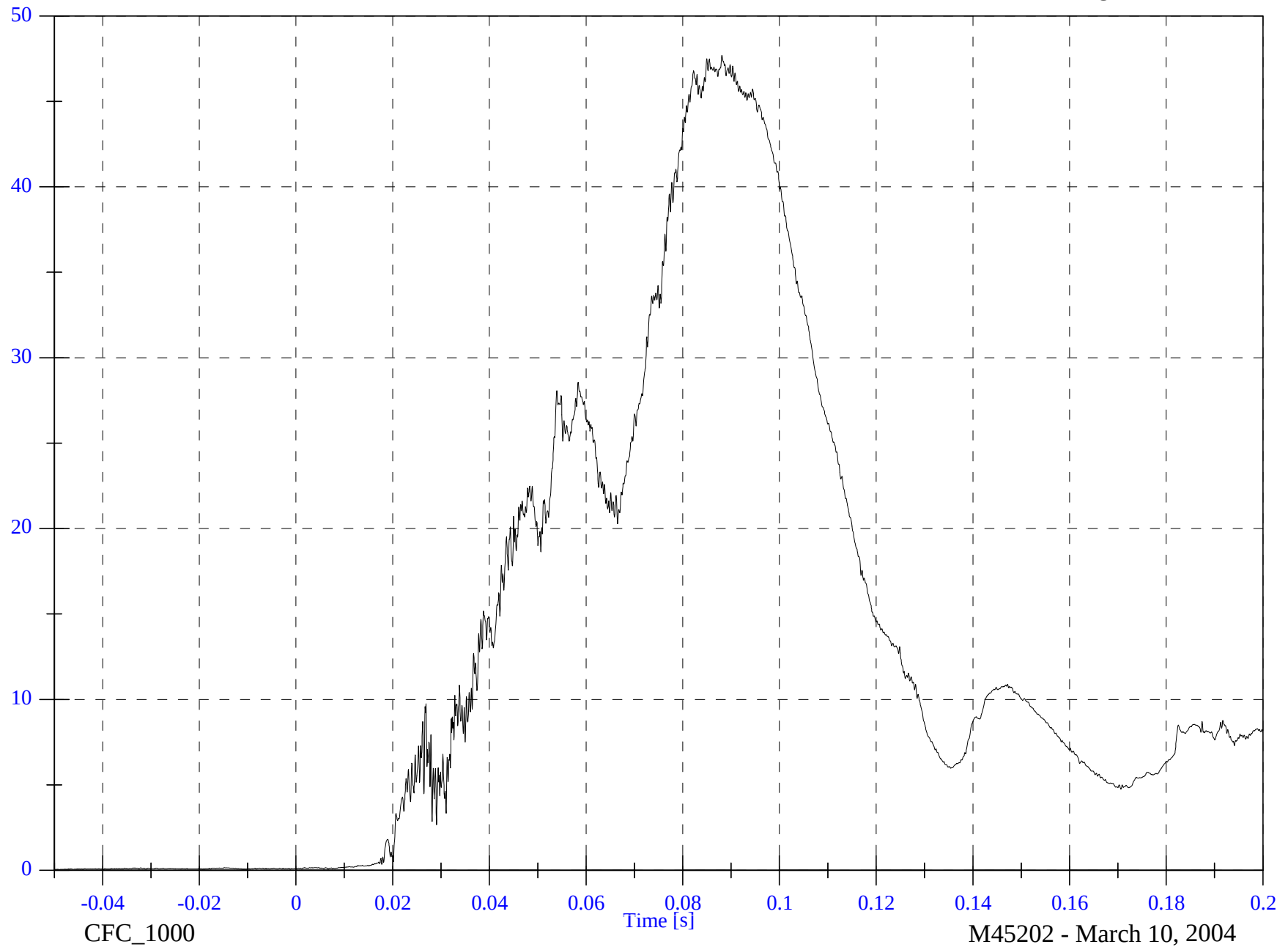


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Head CG Red Resultant

Max: 47.7 [g] at 0.088 [s]

Min: 0.0 [g] at -0.049 [s]



B-21

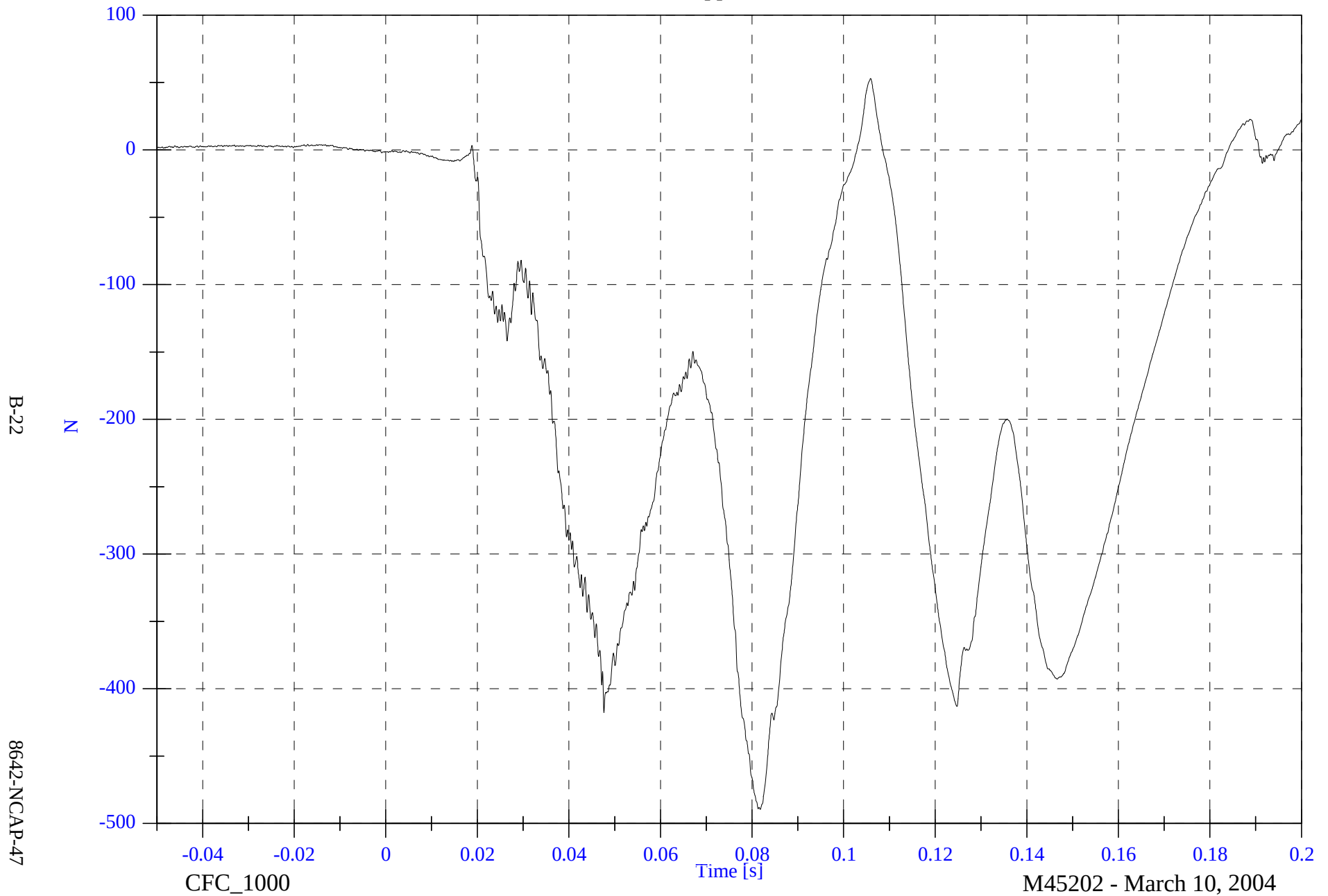
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 53.0 [N] at 0.106 [s]

Min: -489.6 [N] at 0.082 [s]

V1P1 Upper Neck Fx



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Upper Neck Fy

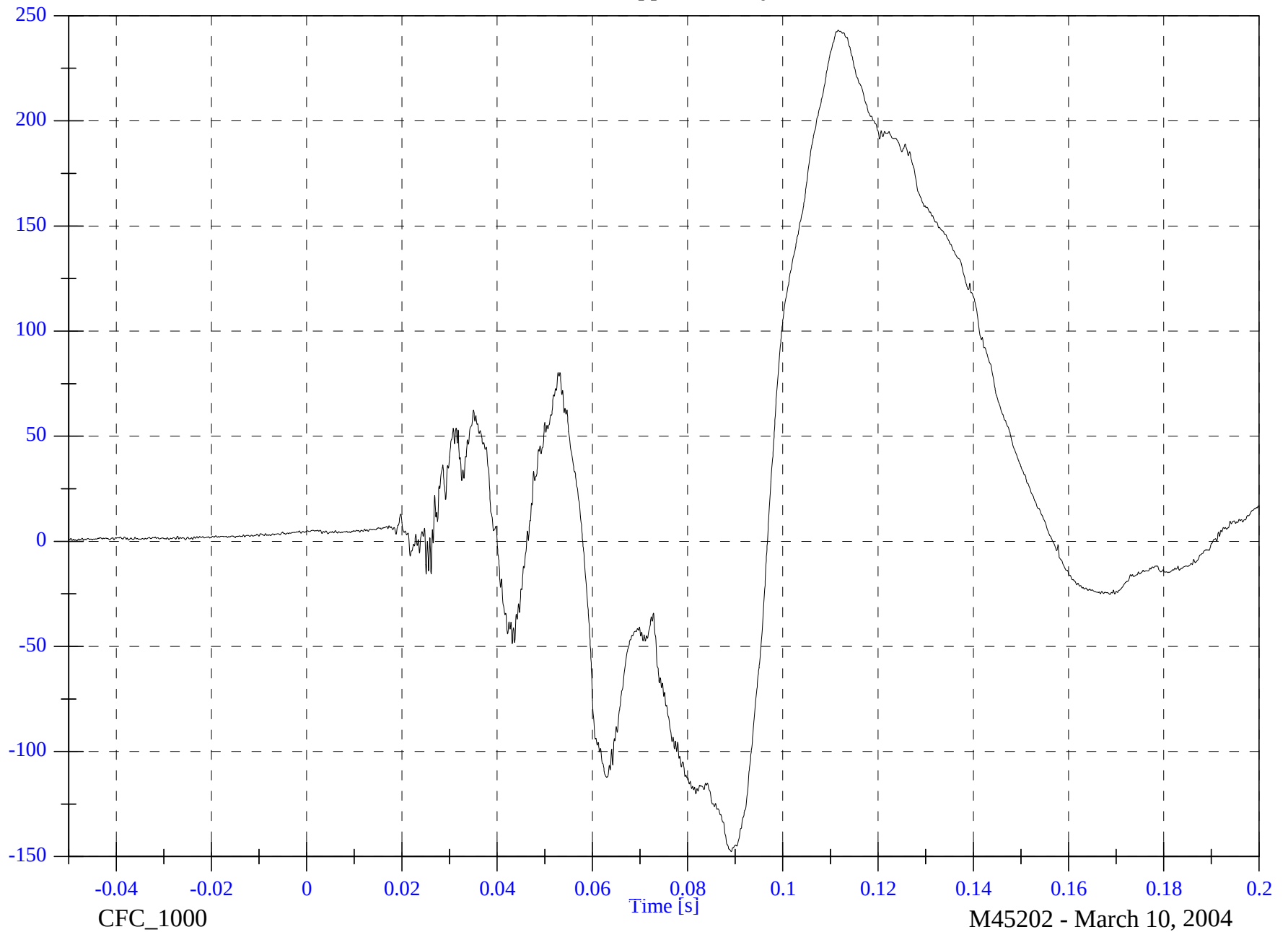
Max: 243.2 [N] at 0.112 [s]

Min: -147.7 [N] at 0.089 [s]

B-23

N

8642-NCAP-47

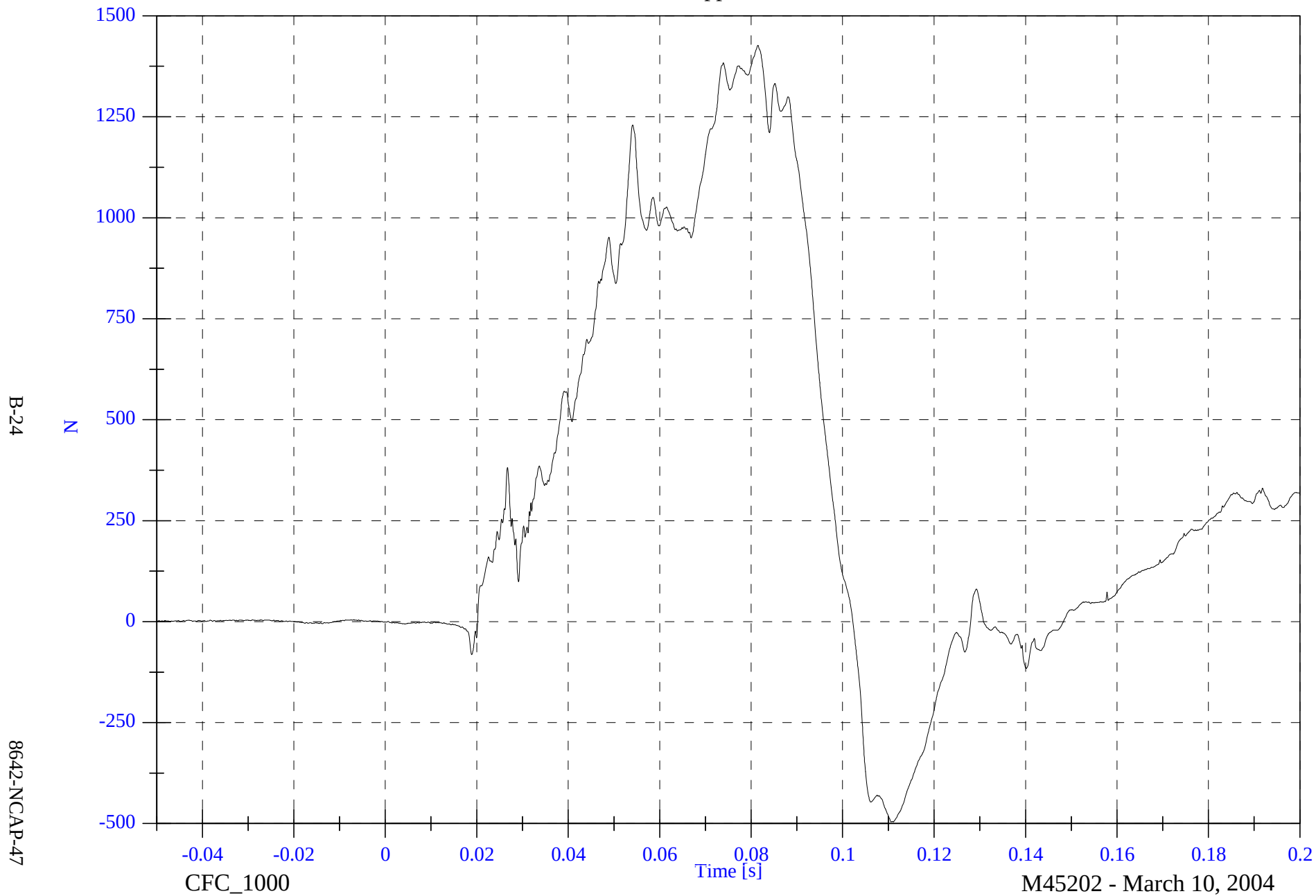


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1427.2 [N] at 0.081 [s]

Min: -496.2 [N] at 0.111 [s]

V1P1 Upper Neck Fz



2004 NCAP Test 11 2004 Infiniti FX35/45

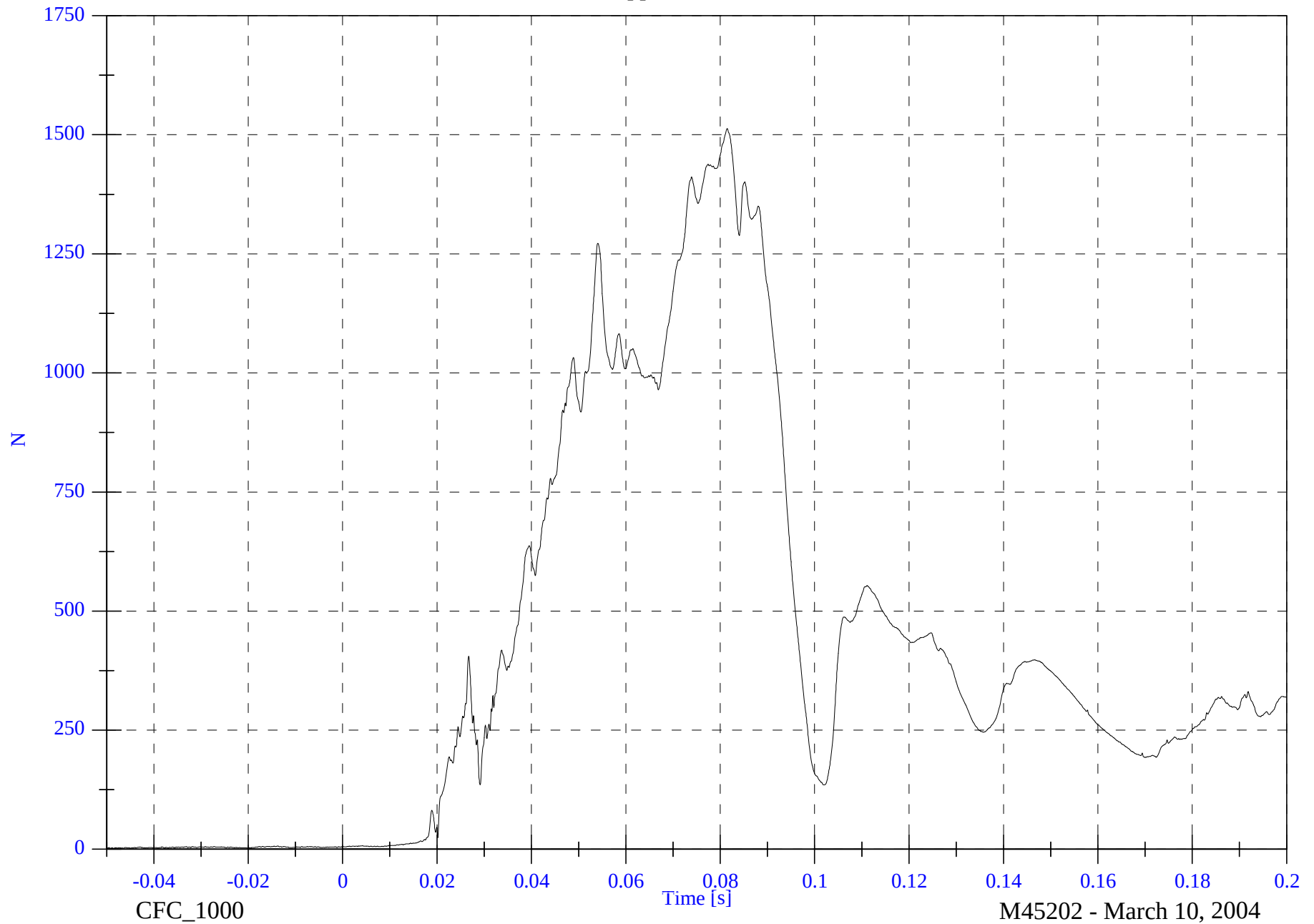
V1P1 Upper Neck F Resultant

Max: 1512.9 [N] at 0.081 [s]

Min: 1.7 [N] at -0.049 [s]

B-25

8642-NCAP-47

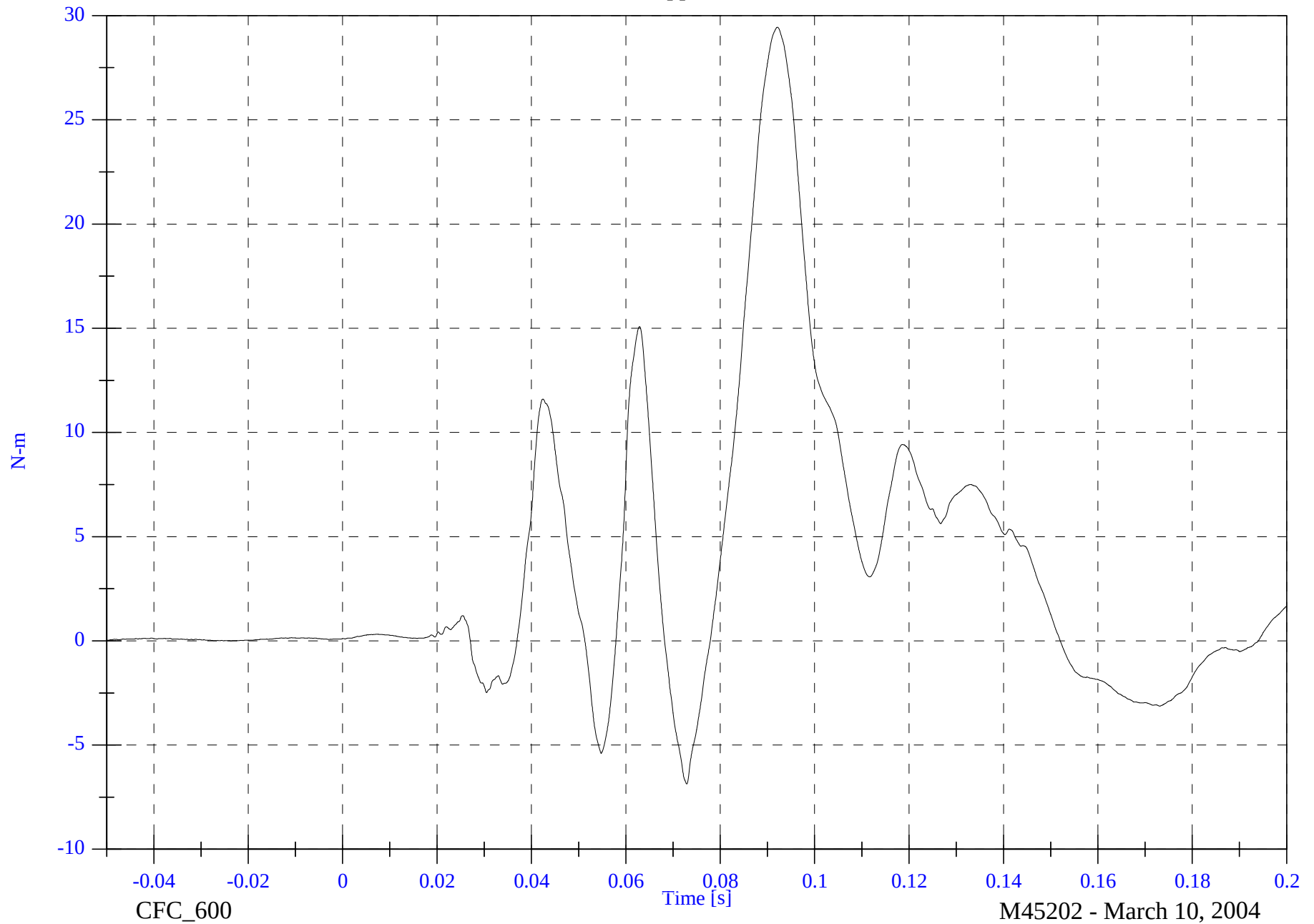


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 29.4 [N-m] at 0.092 [s]

Min: -6.9 [N-m] at 0.073 [s]

V1P1 Upper Neck Mx



B-26

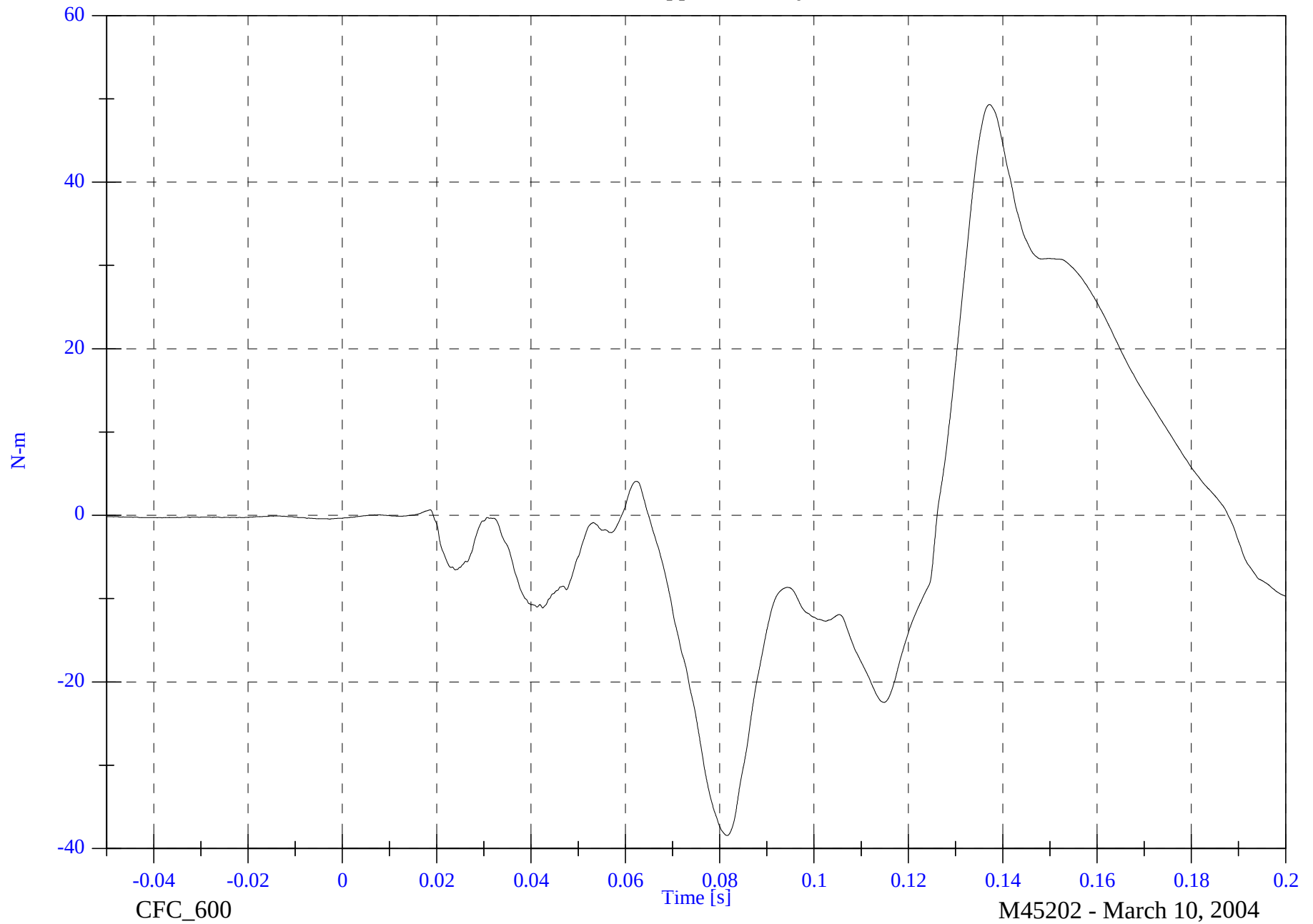
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Upper Neck My

Max: 49.3 [N-m] at 0.137 [s]

Min: -38.4 [N-m] at 0.082 [s]



B-27

8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Upper Neck Mz

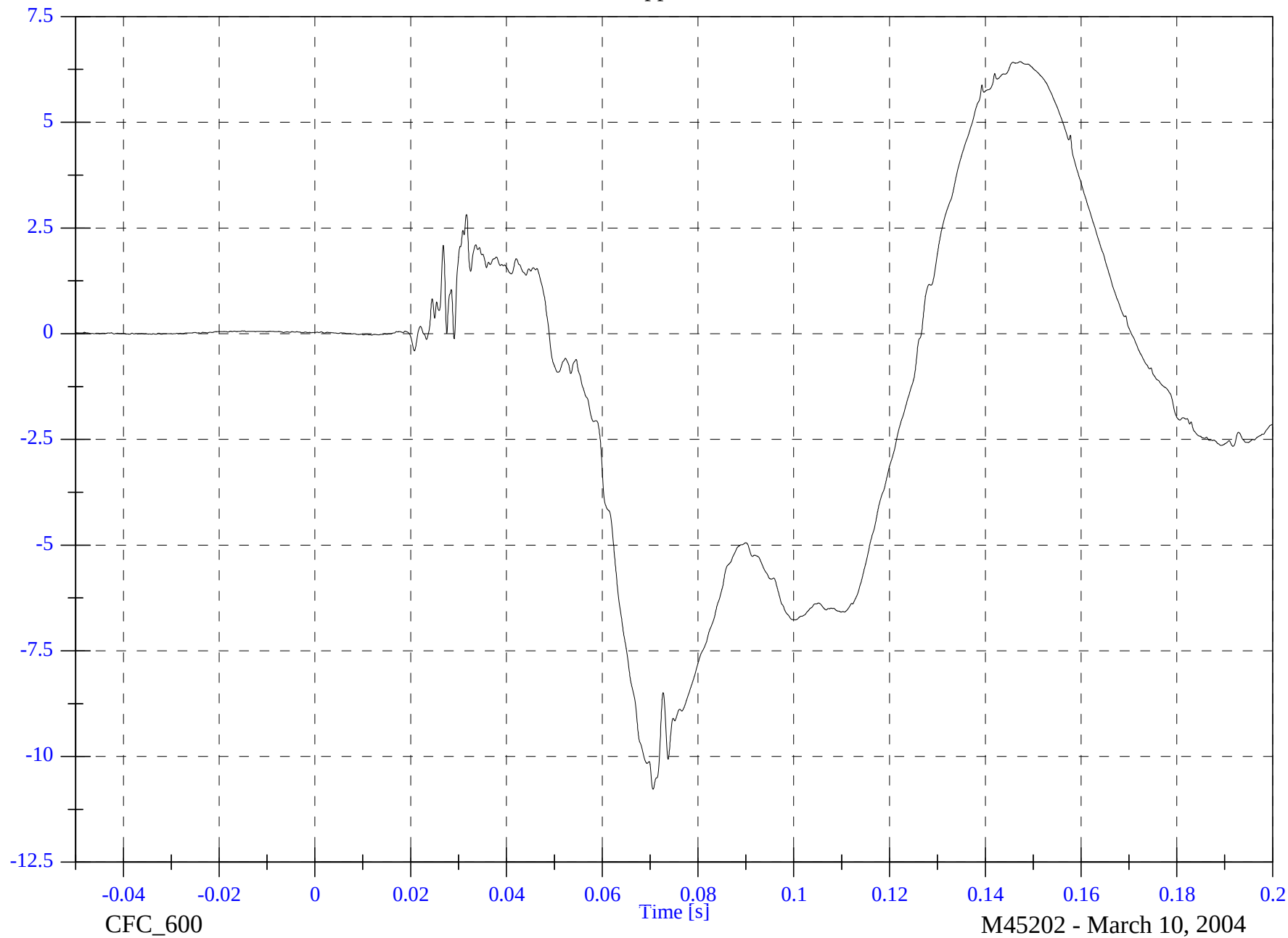
Max: 6.4 [N-m] at 0.147 [s]

Min: -10.8 [N-m] at 0.071 [s]

B-28

m-N

8642-NCAP-47

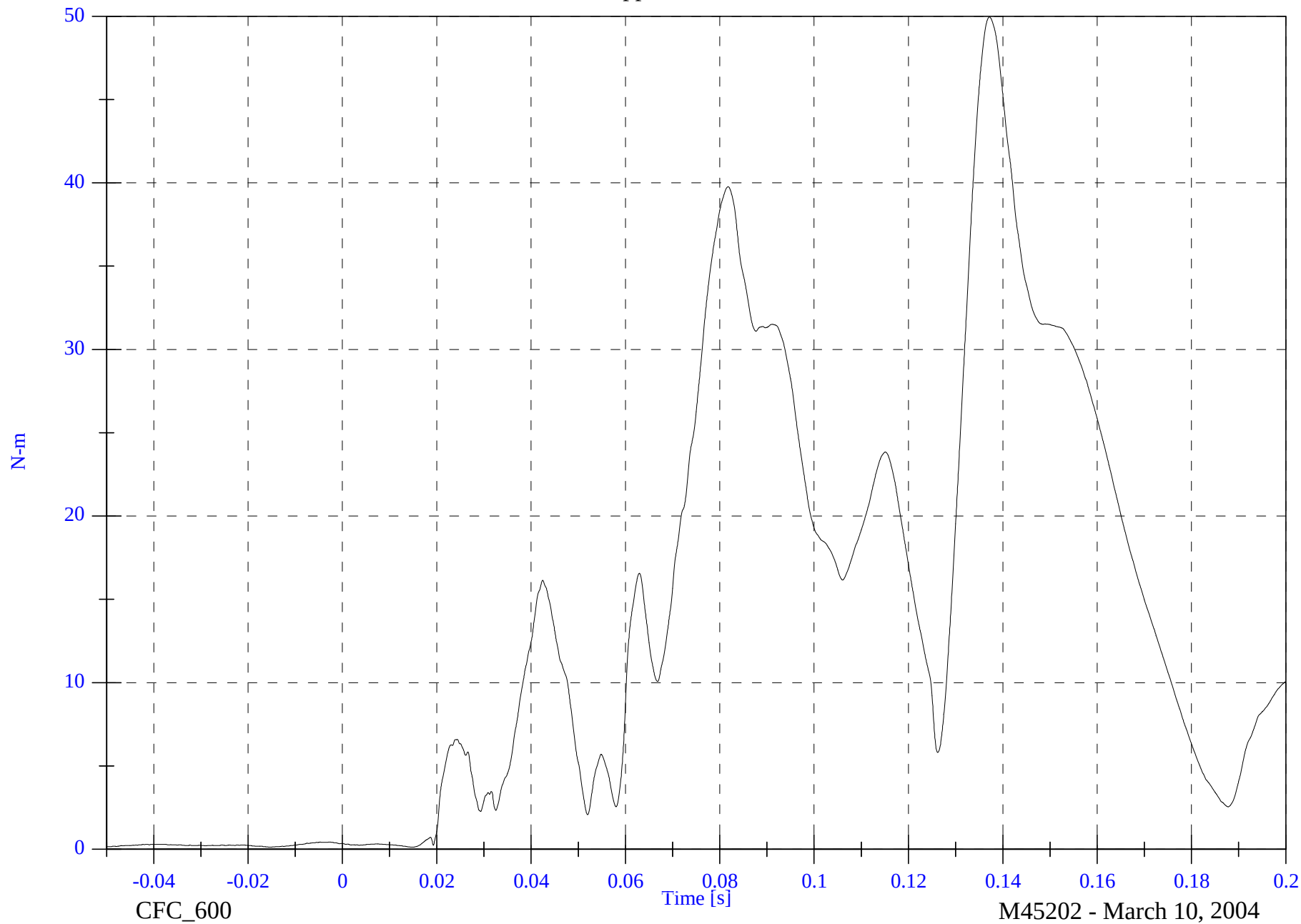


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Upper Neck M Resultant

Max: 50.0 [N-m] at 0.137 [s]

Min: 0.1 [N-m] at 0.015 [s]

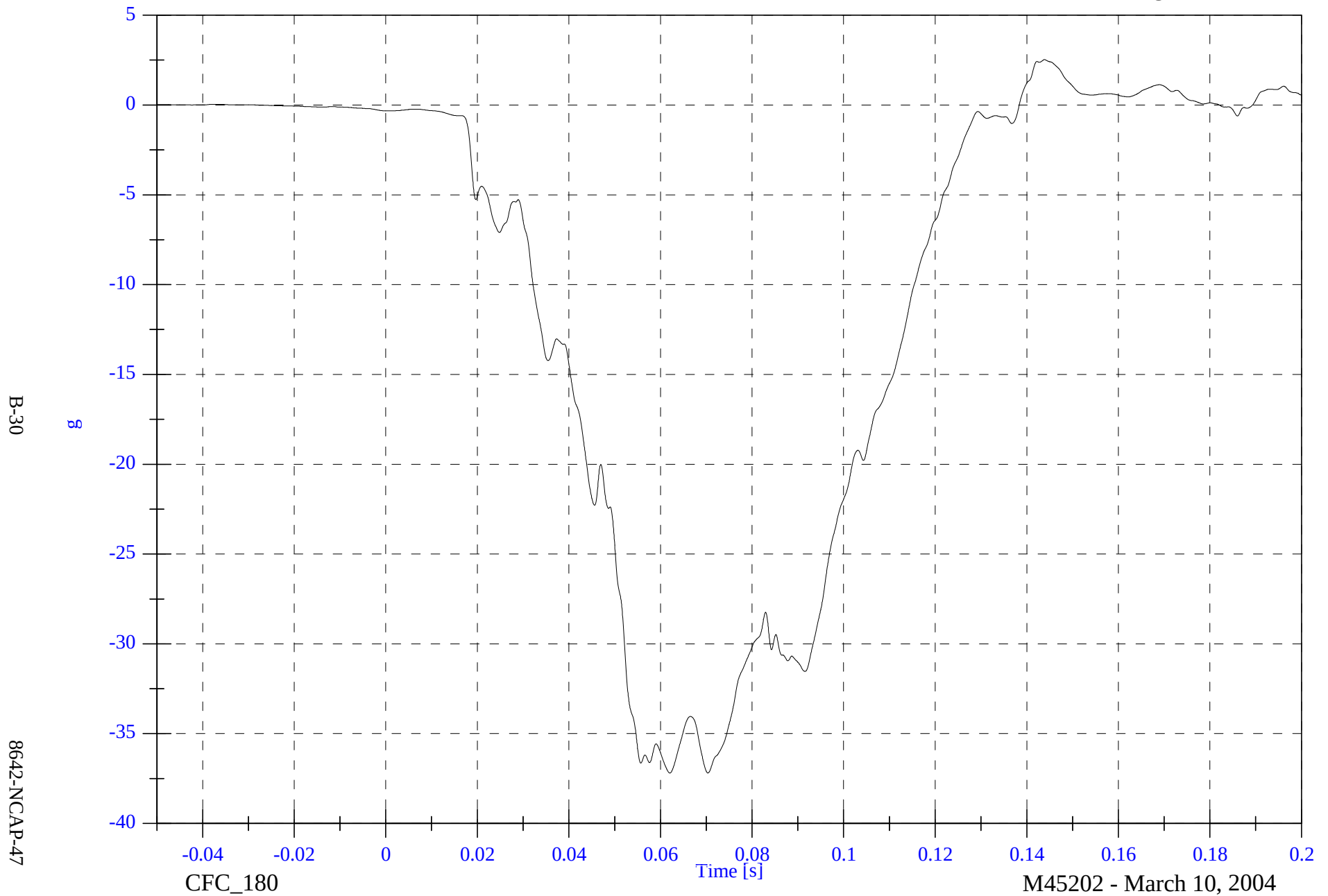


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Chest x

Max: 2.5 [g] at 0.144 [s]

Min: -37.2 [g] at 0.062 [s]

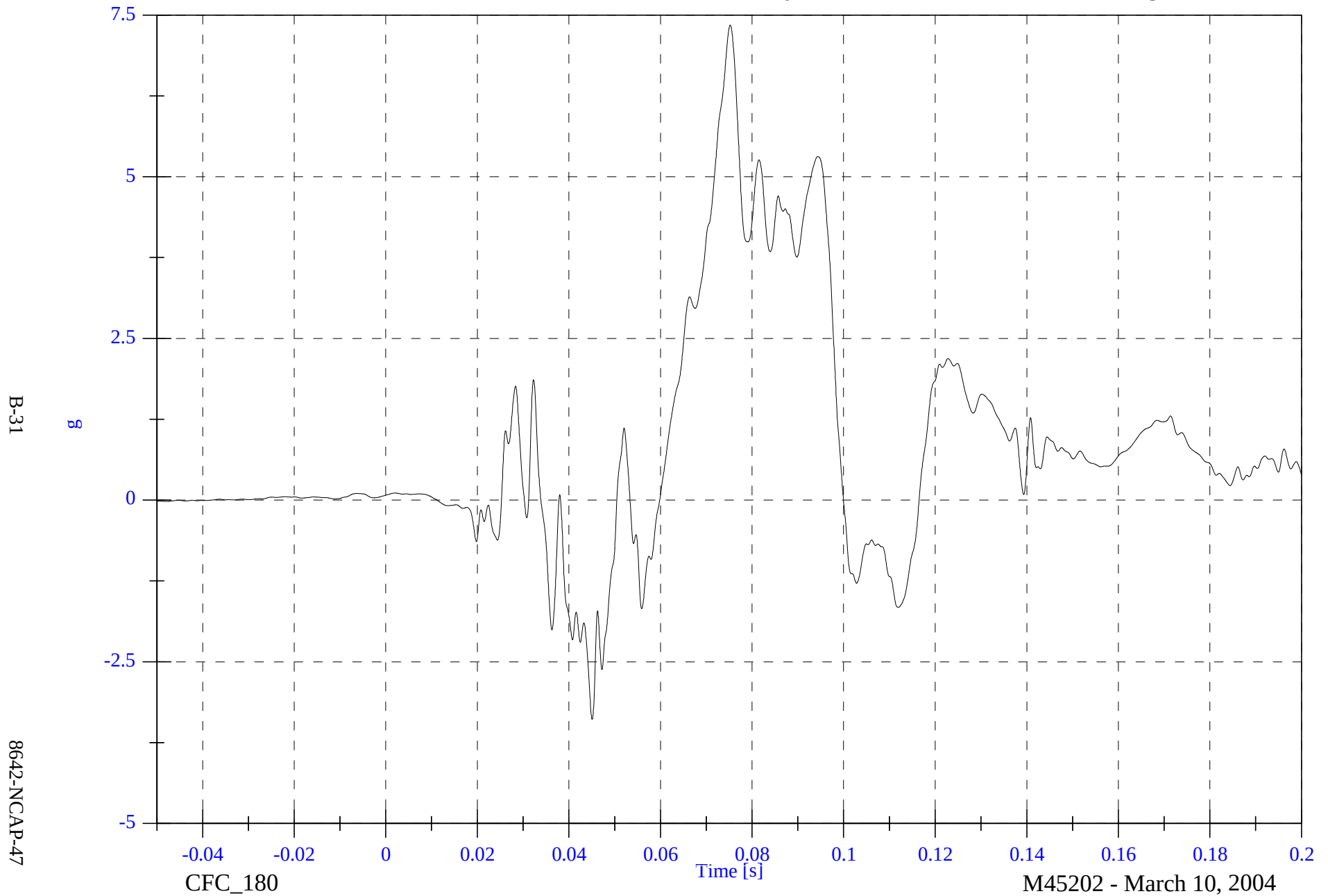


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 7.3 [g] at 0.075 [s]

Min: -3.4 [g] at 0.045 [s]

V1P1 Chest y



2004 NCAP Test 11 2004 Infiniti FX35/45

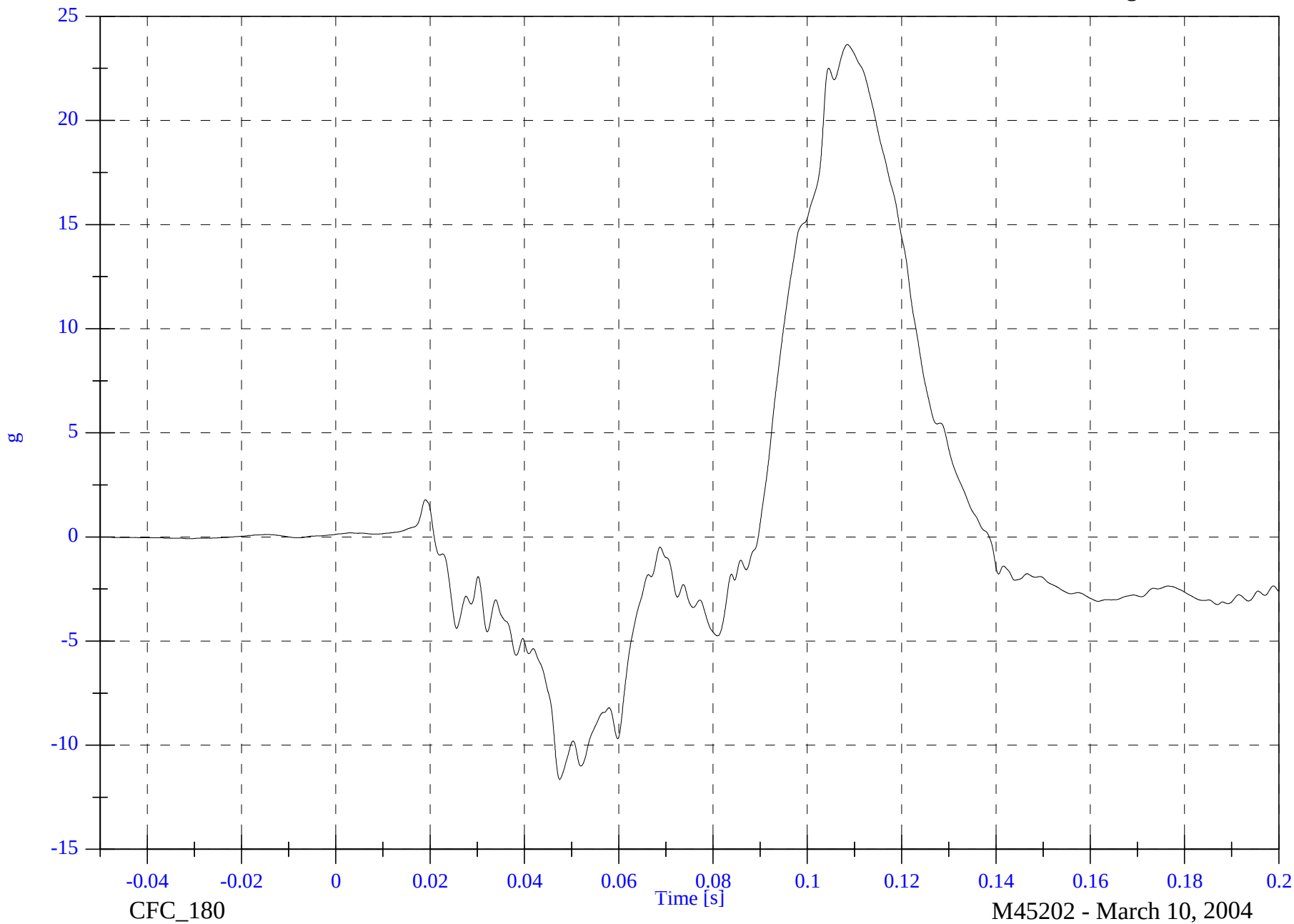
V1P1 Chest z

Max: 23.6 [g] at 0.109 [s]

Min: -11.6 [g] at 0.047 [s]

B-32

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Chest Resultant

Max: 37.7 [g] at 0.056 [s]

Min: 0.0 [g] at -0.043 [s]

B-33

8642-NCAP-47



CFC_180

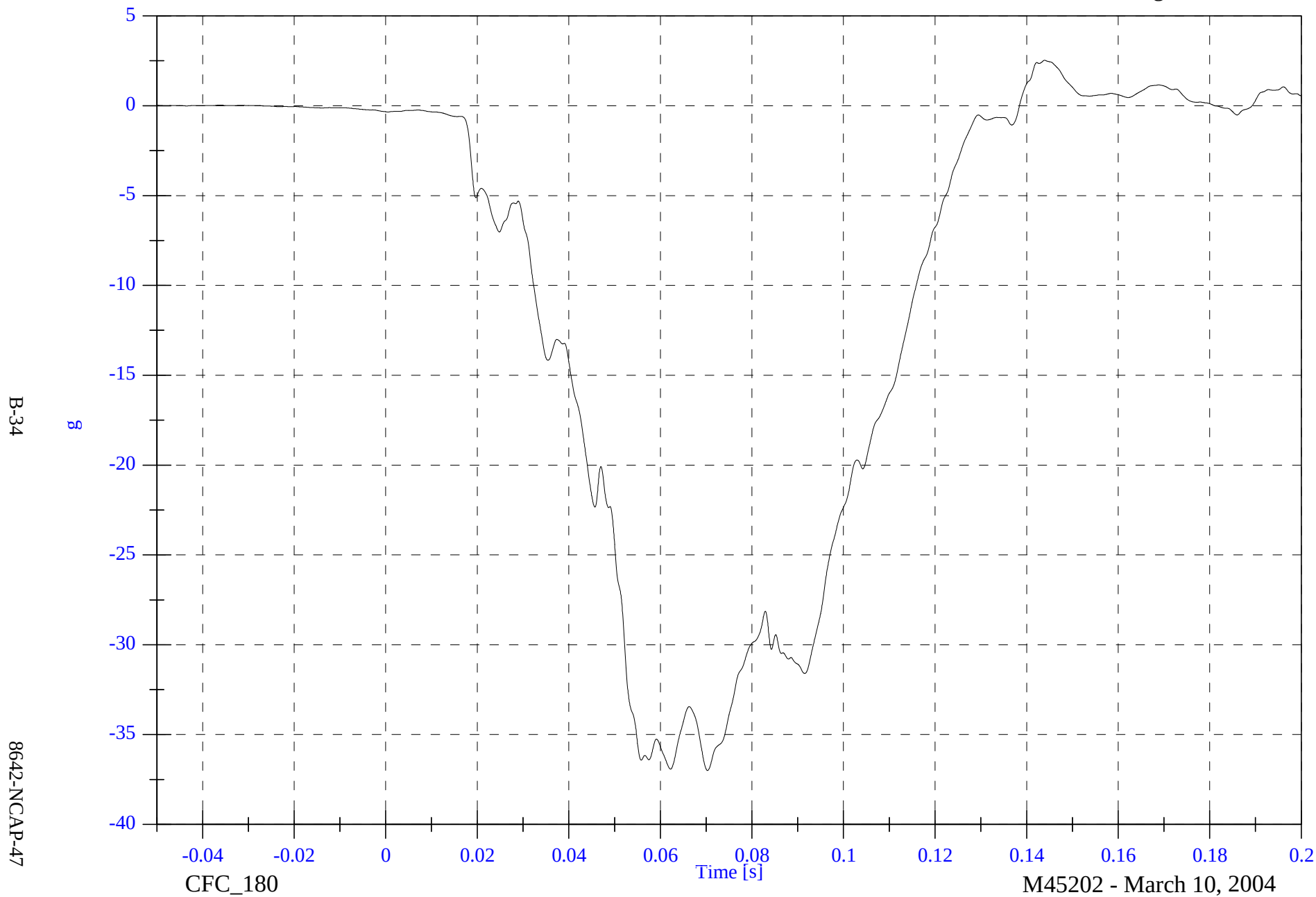
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Chest Red x

Max: 2.5 [g] at 0.144 [s]

Min: -37.0 [g] at 0.070 [s]

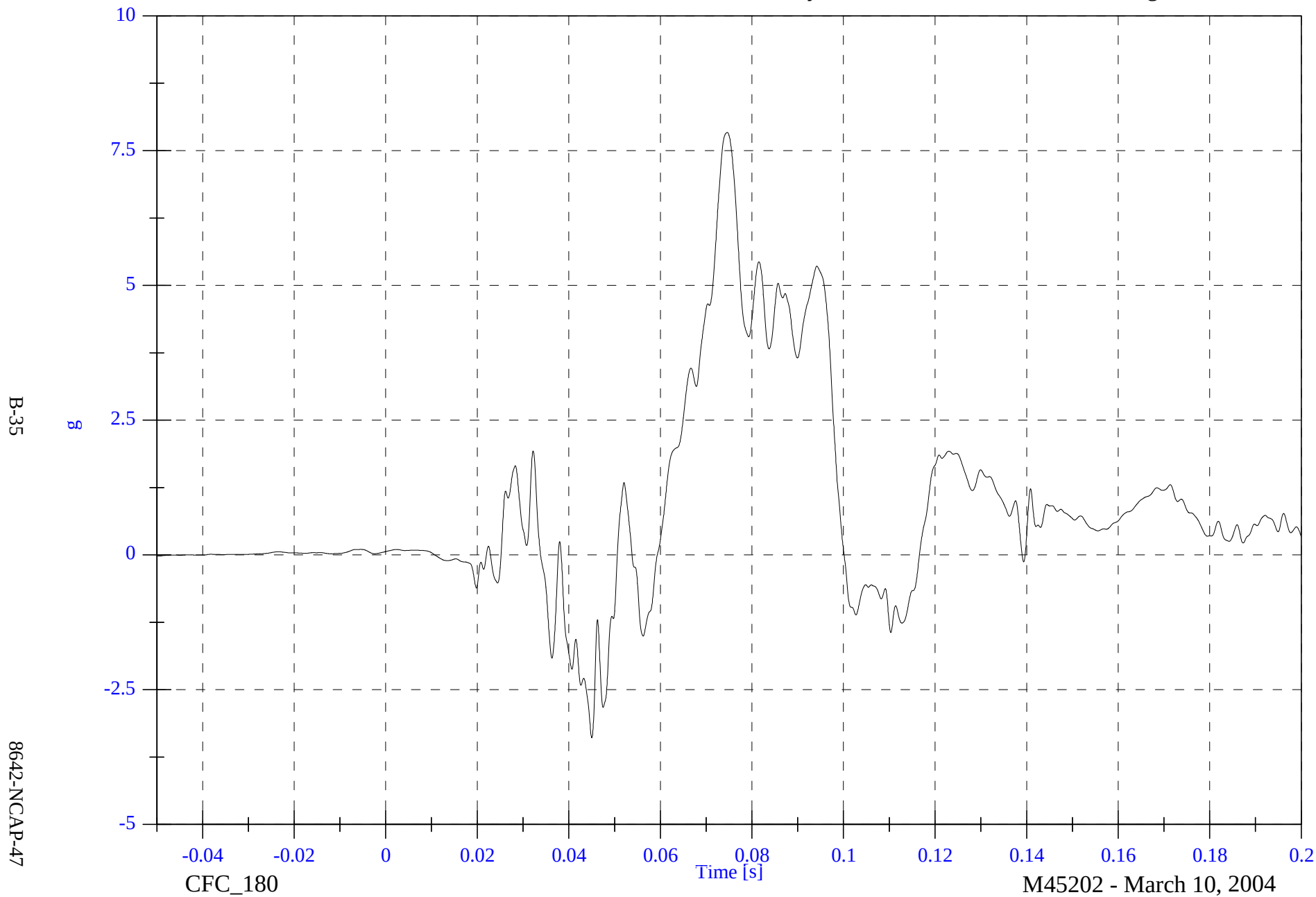


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 7.8 [g] at 0.075 [s]

Min: -3.4 [g] at 0.045 [s]

V1P1 Chest Red y



2004 NCAP Test 11 2004 Infiniti FX35/45

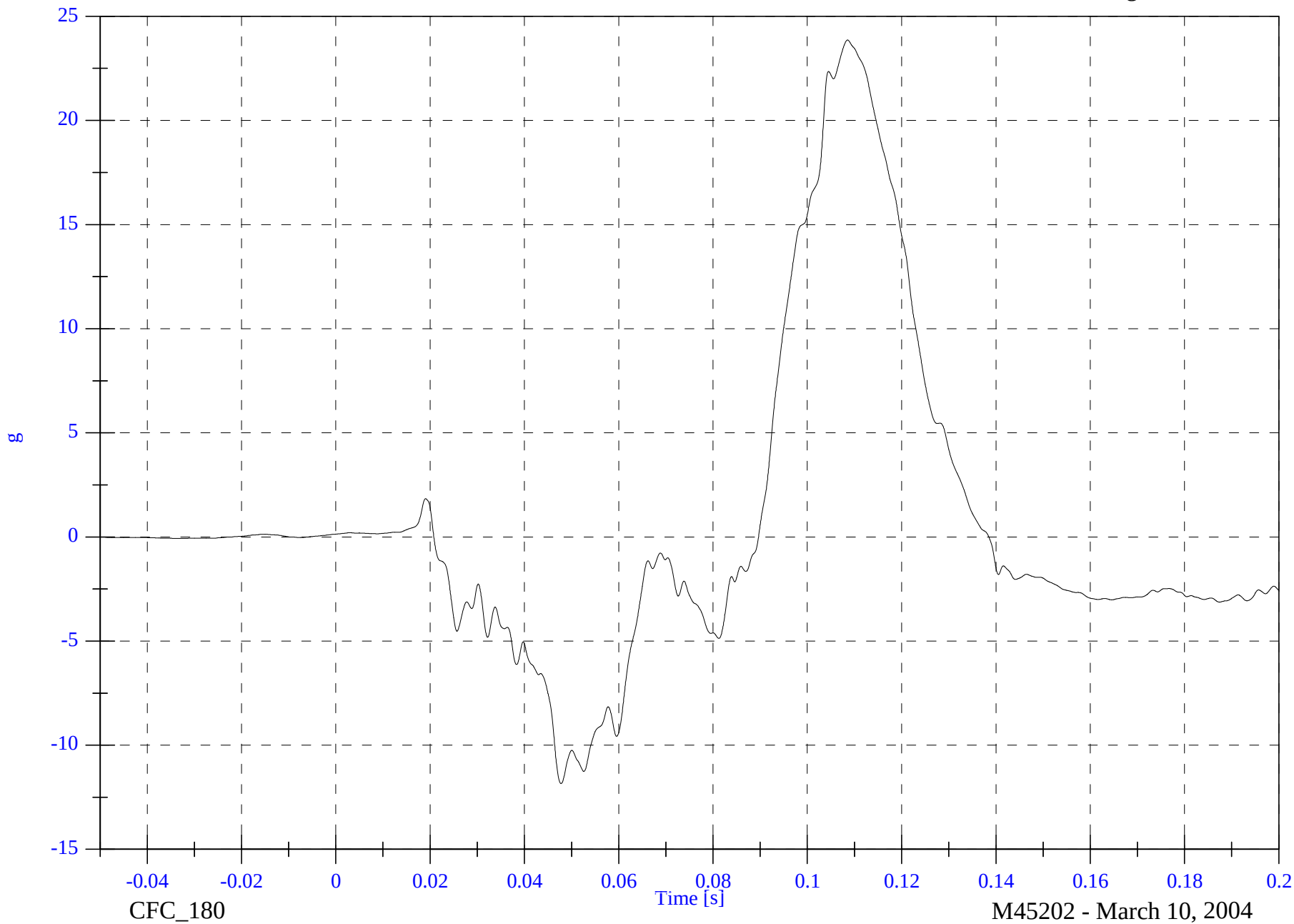
V1P1 Chest Red z

Max: 23.9 [g] at 0.109 [s]

Min: -11.8 [g] at 0.048 [s]

B-36

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Chest Red Resultant

Max: 37.6 [g] at 0.056 [s]

Min: 0.0 [g] at -0.049 [s]



B-37

8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

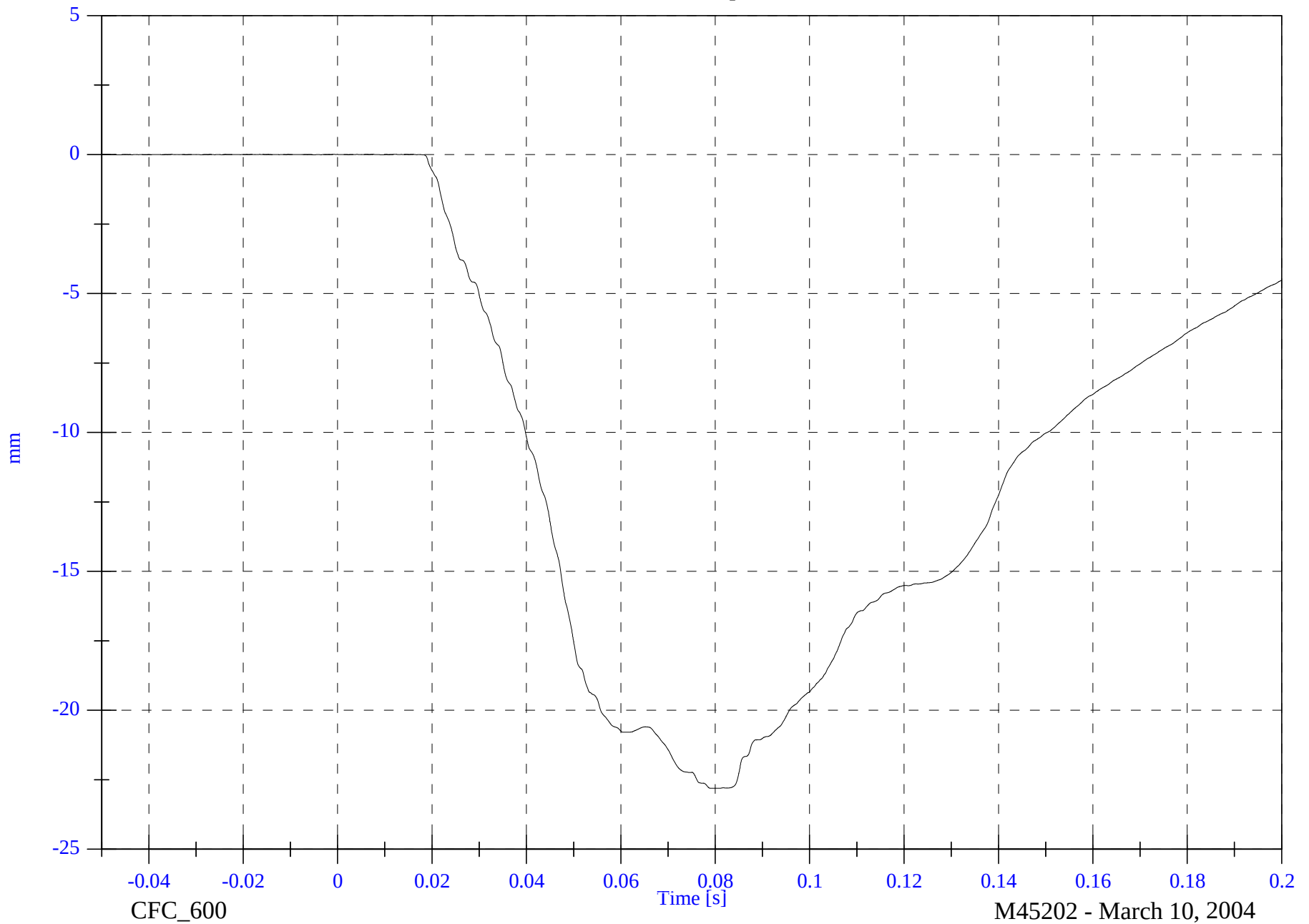
V1P1 Chest Compression x

Max: 0.0 [mm] at 0.006 [s]

Min: -22.8 [mm] at 0.079 [s]

B-38

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

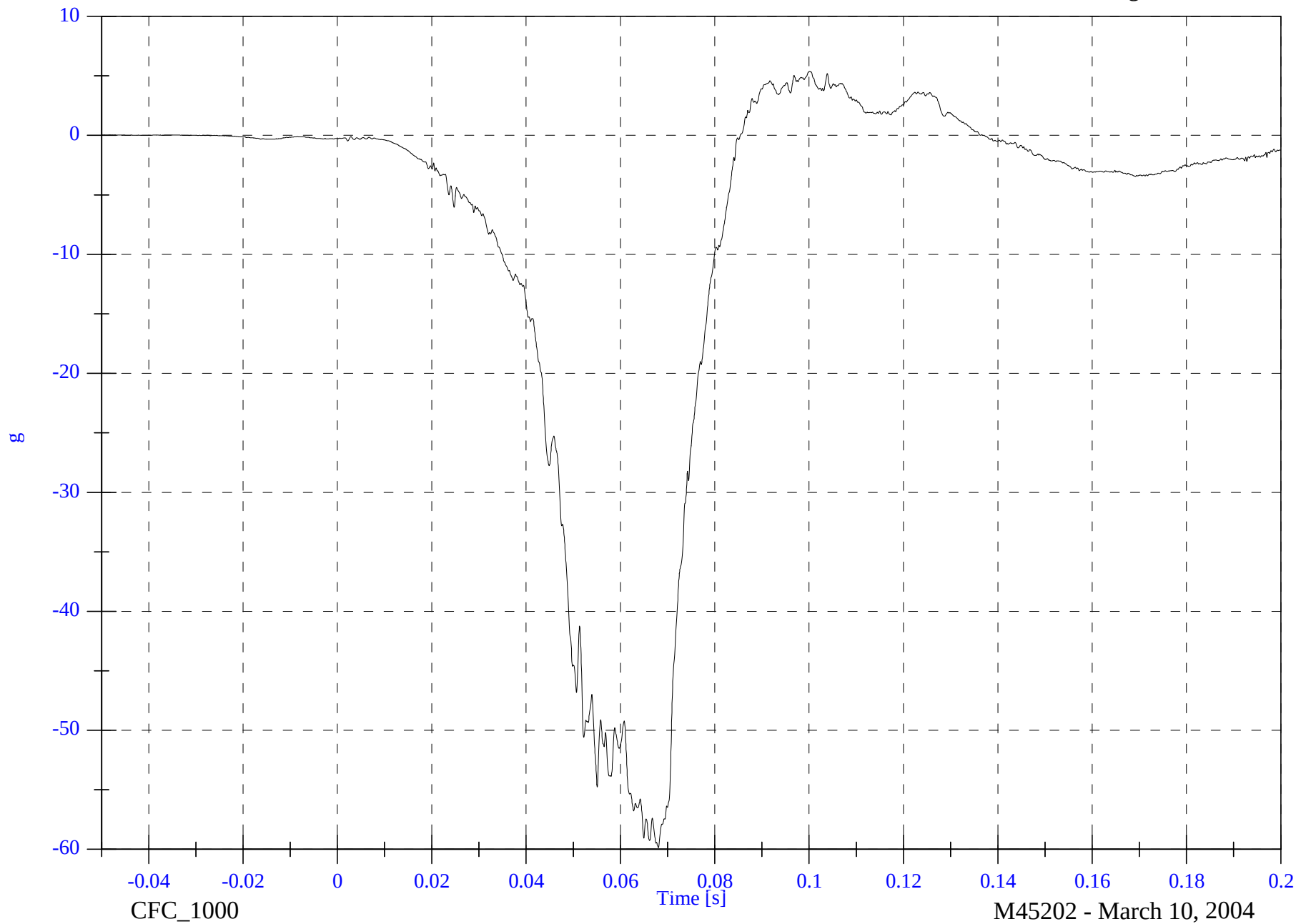
V1P1 Pelvic x

Max: 5.4 [g] at 0.100 [s]

Min: -59.9 [g] at 0.068 [s]

B-39

8642-NCAP-47

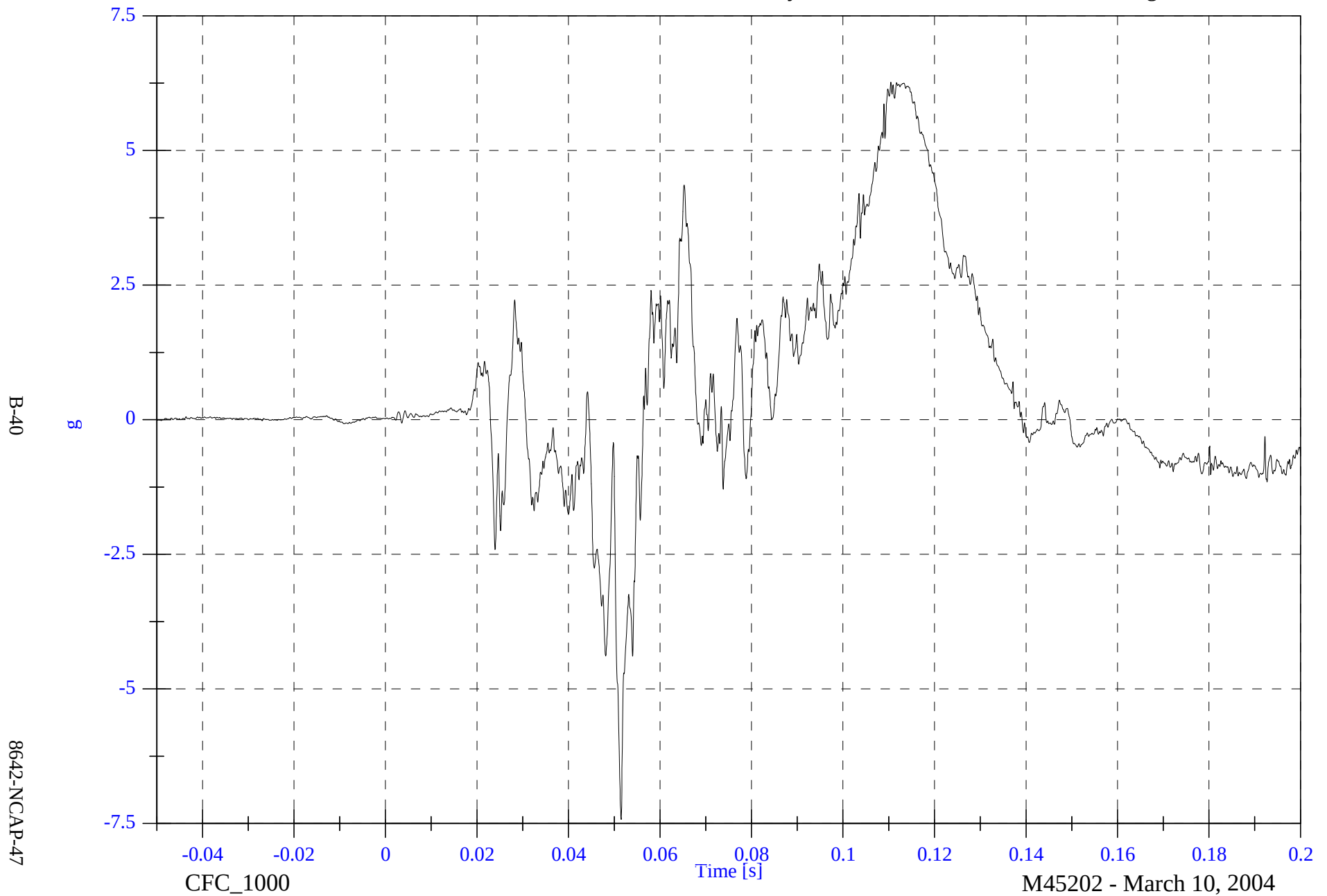


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6.3 [g] at 0.110 [s]

Min: -7.4 [g] at 0.051 [s]

V1P1 Pelvic y



2004 NCAP Test 11 2004 Infiniti FX35/45

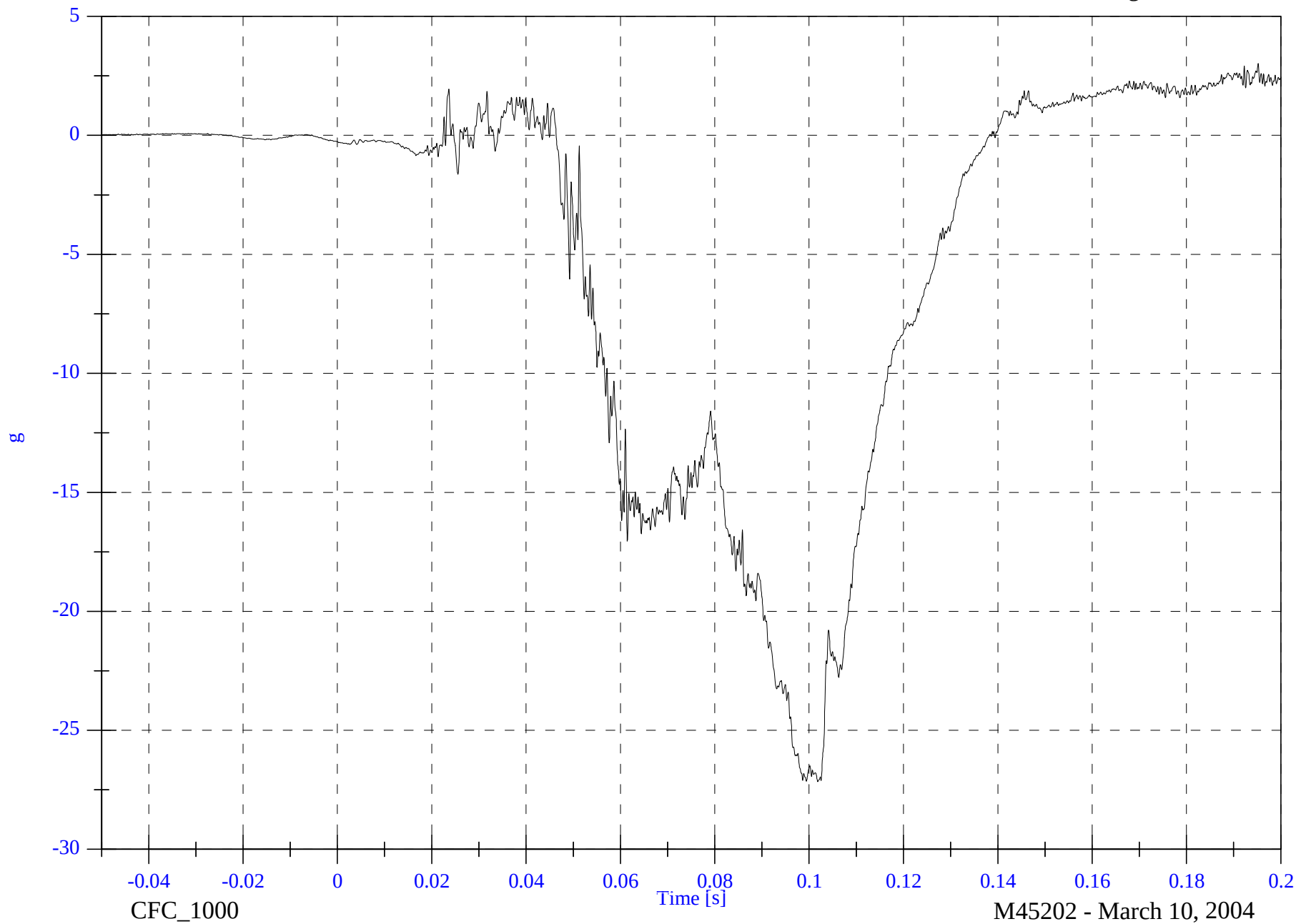
V1P1 Pelvic z

Max: 3.0 [g] at 0.195 [s]

Min: -27.2 [g] at 0.102 [s]

B-41

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

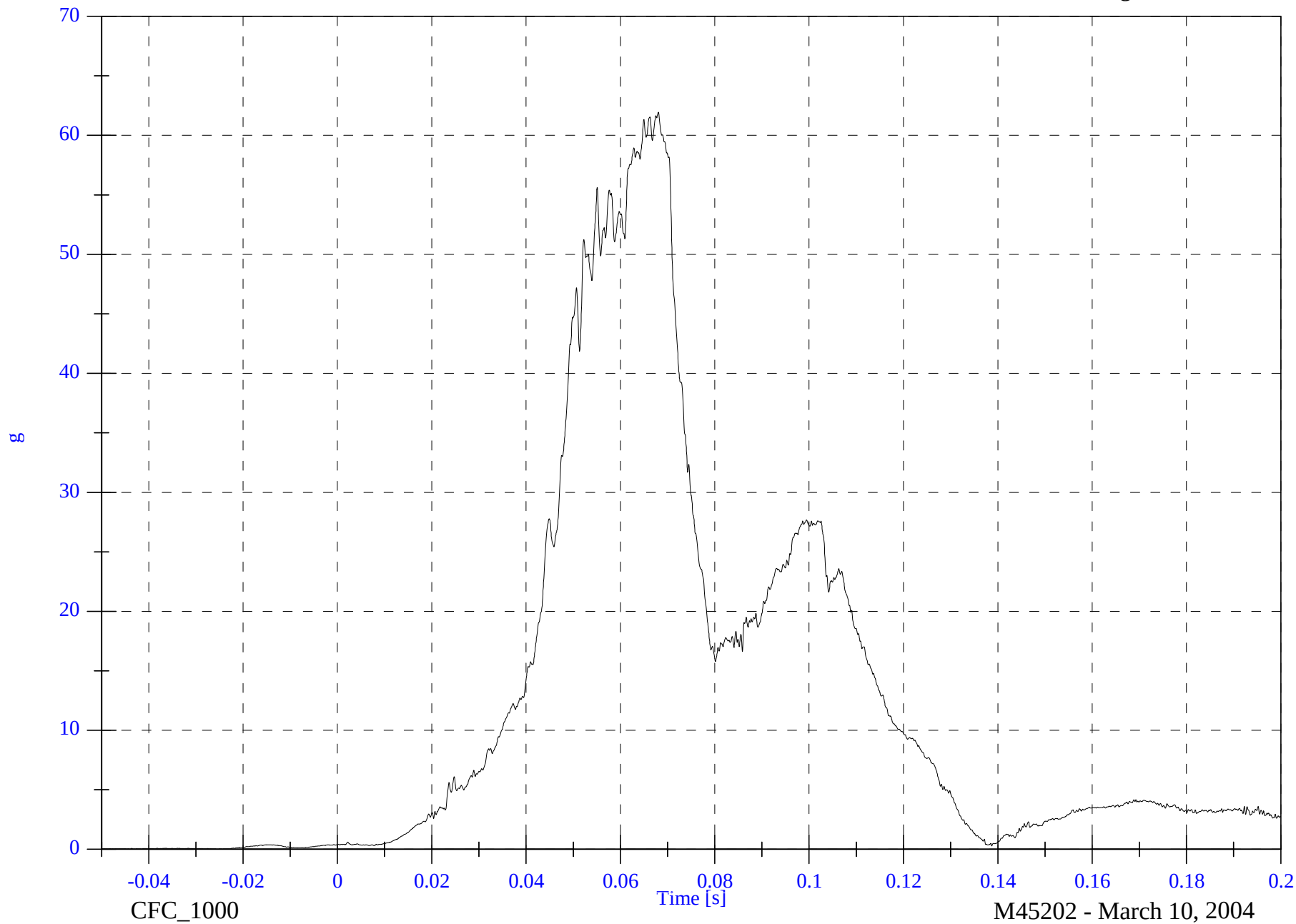
V1P1 Pelvic Resultant

Max: 61.9 [g] at 0.068 [s]

Min: 0.0 [g] at -0.044 [s]

B-42

8642-NCAP-47

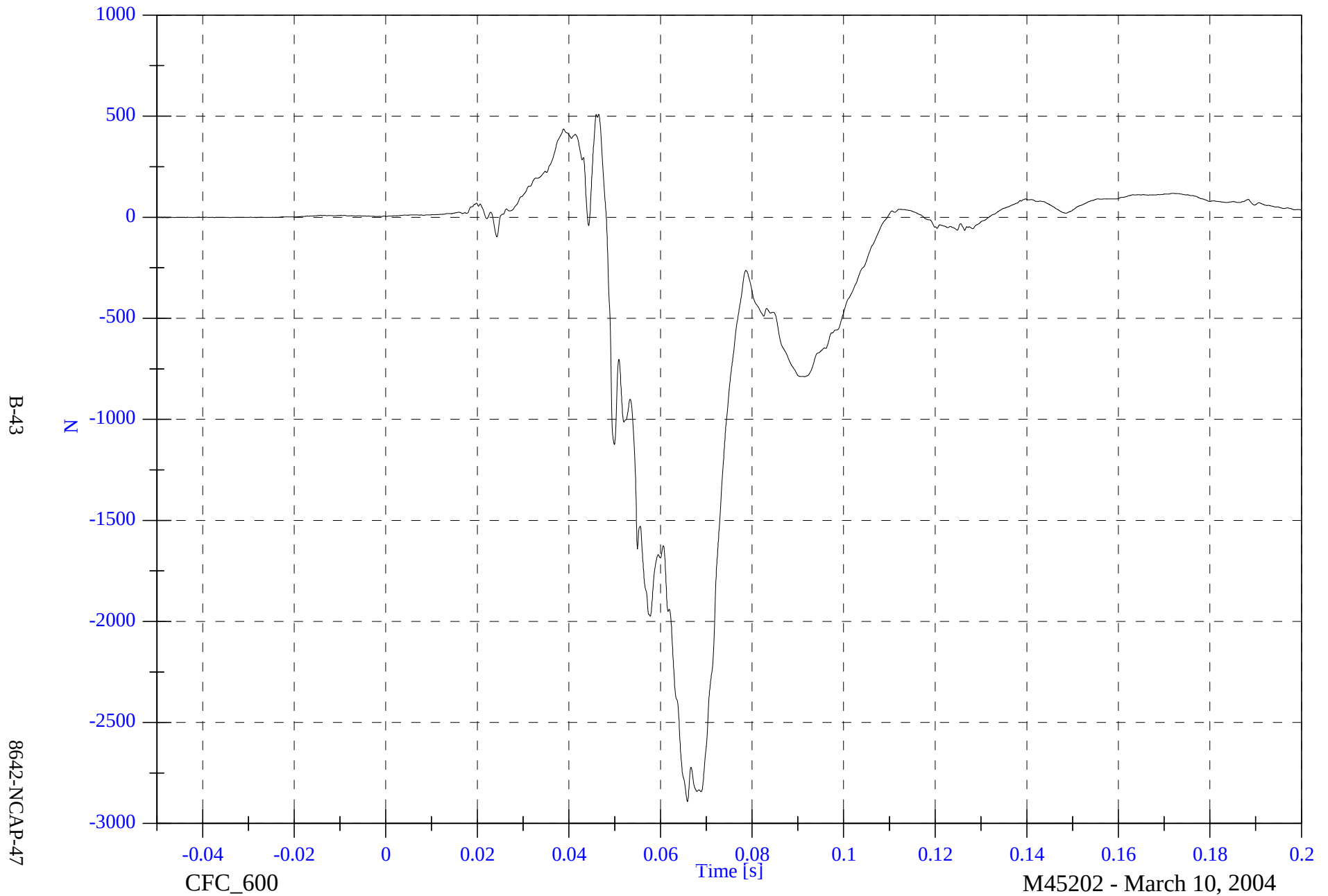


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 509.6 [N] at 0.046 [s]

Min: -2891.7 [N] at 0.066 [s]

V1P1 Left Femur z

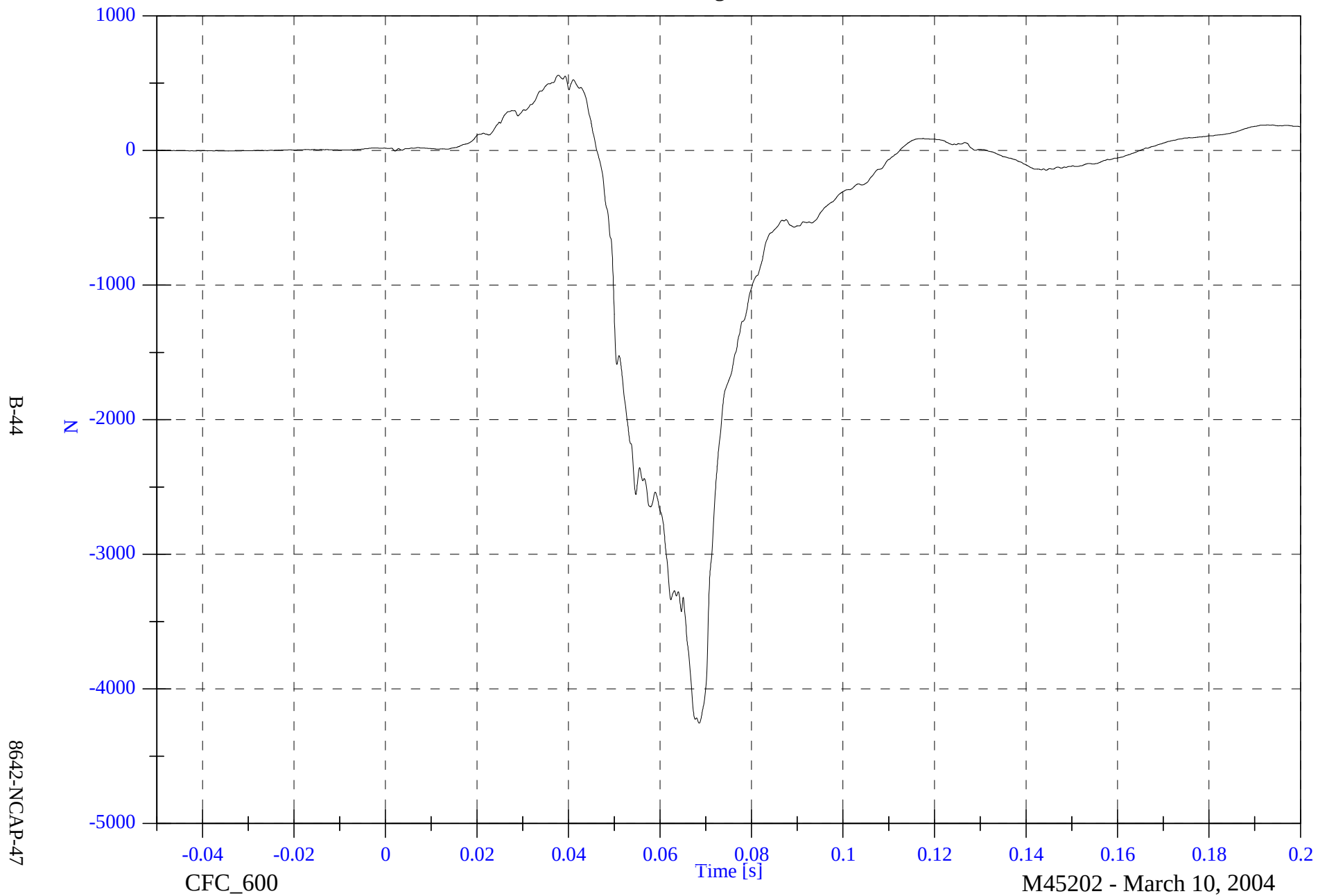


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 558.8 [N] at 0.038 [s]

Min: -4253.7 [N] at 0.069 [s]

V1P1 Right Femur z

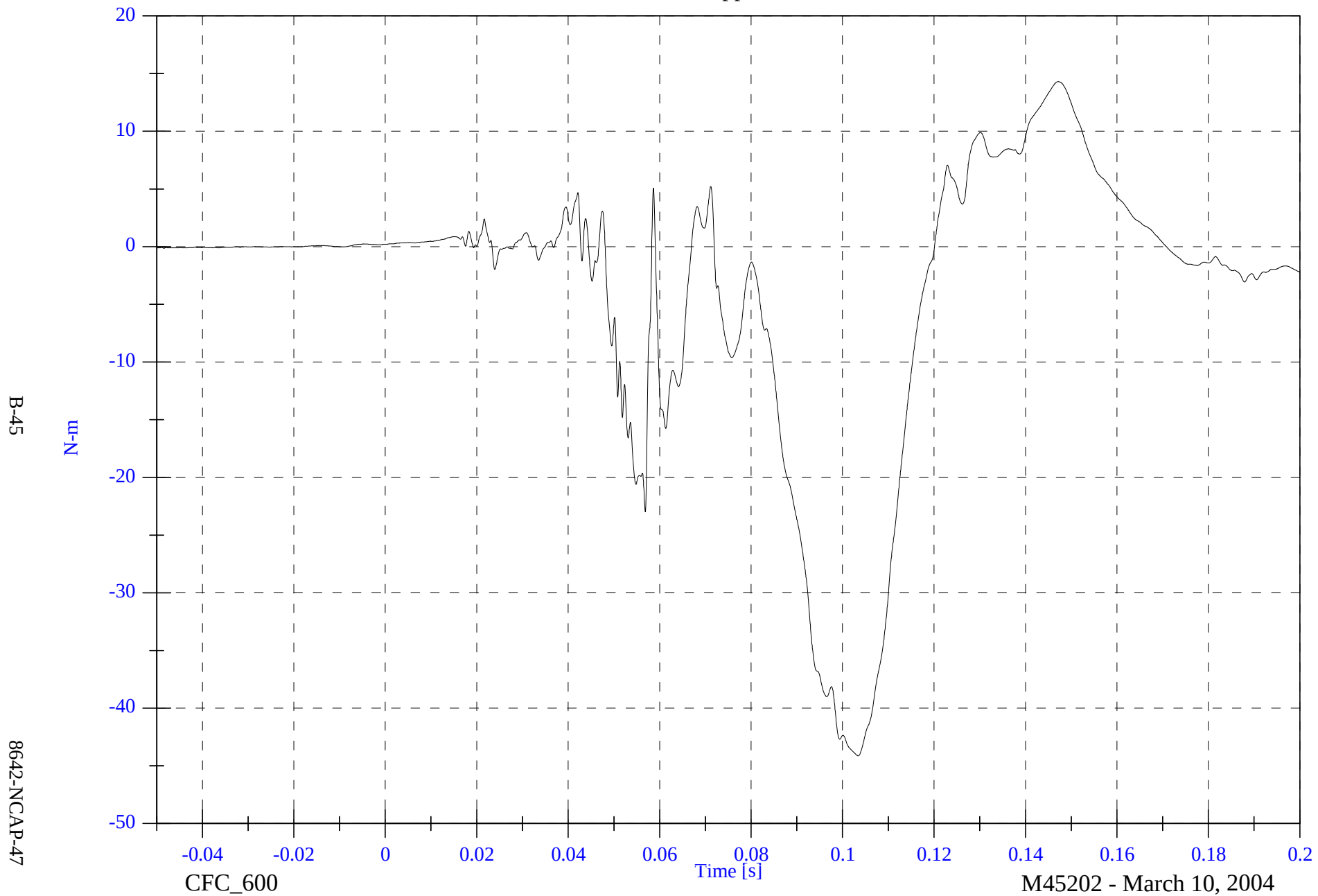


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Left Upper Tibia Mx

Max: 14.3 [N-m] at 0.147 [s]

Min: -44.1 [N-m] at 0.103 [s]

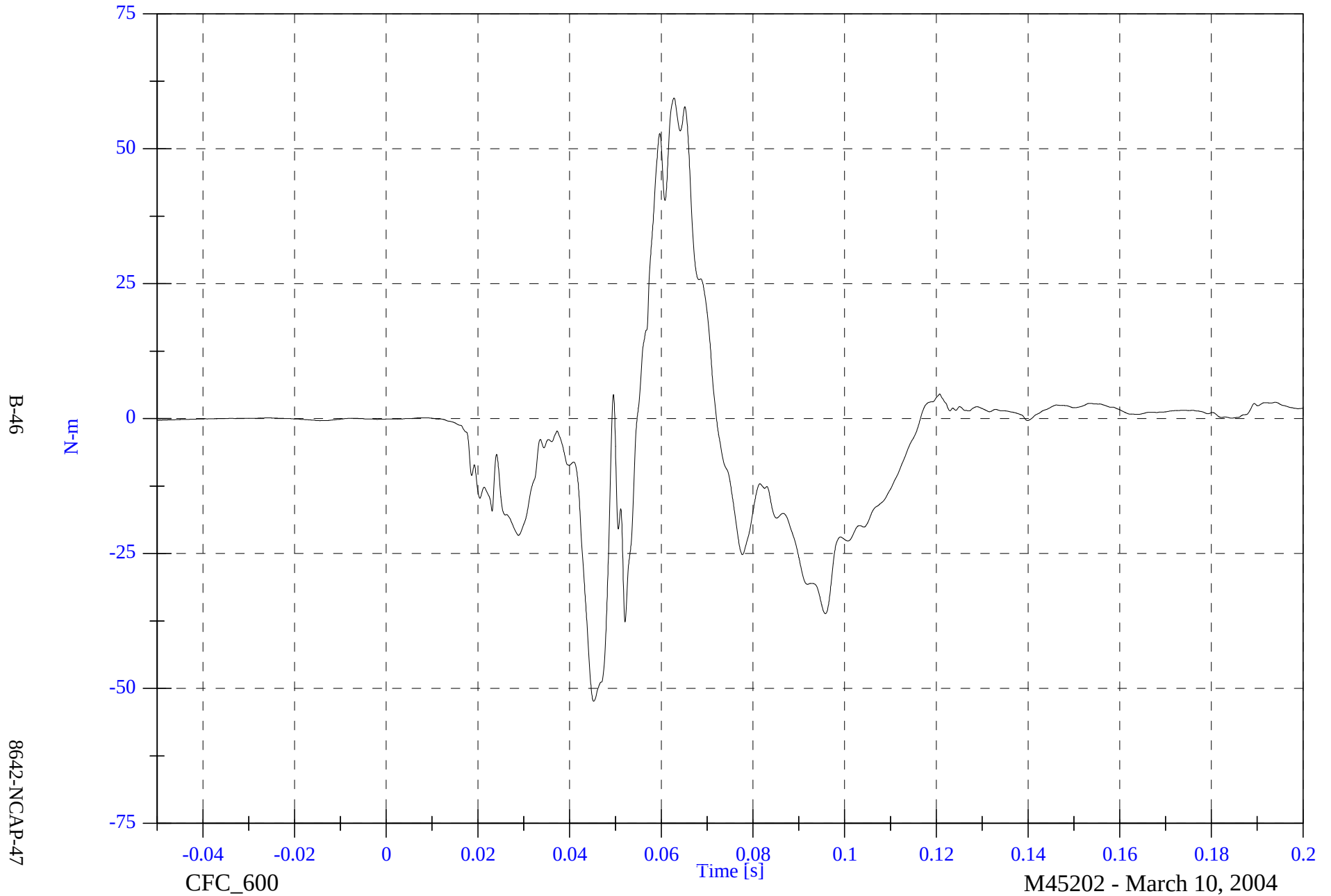


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 59.4 [N-m] at 0.063 [s]

Min: -52.4 [N-m] at 0.045 [s]

V1P1 Left Upper Tibia My

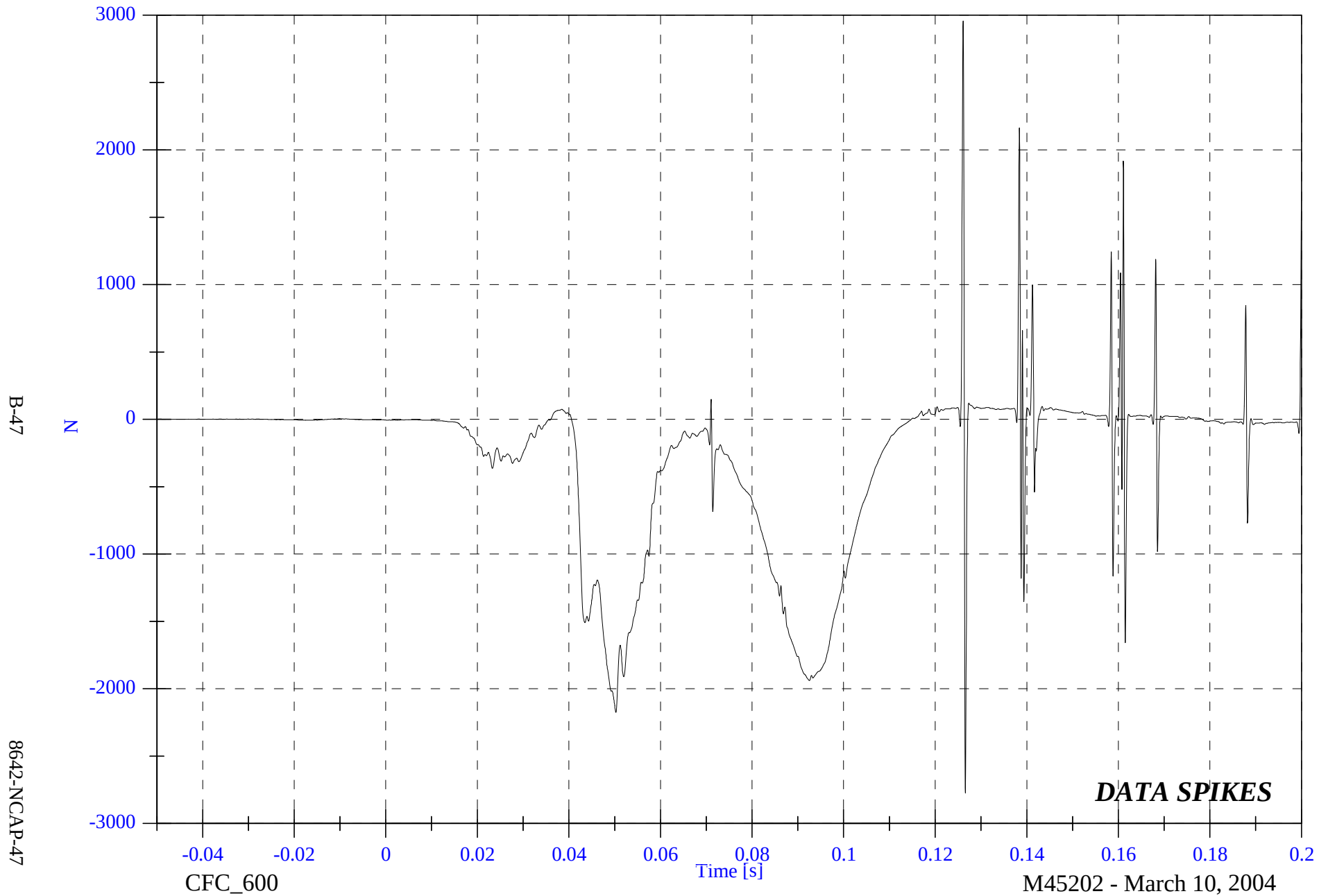


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Left Lower Tibia Fz

Max: 2957.1 [N] at 0.126 [s]

Min: -2773.2 [N] at 0.127 [s]

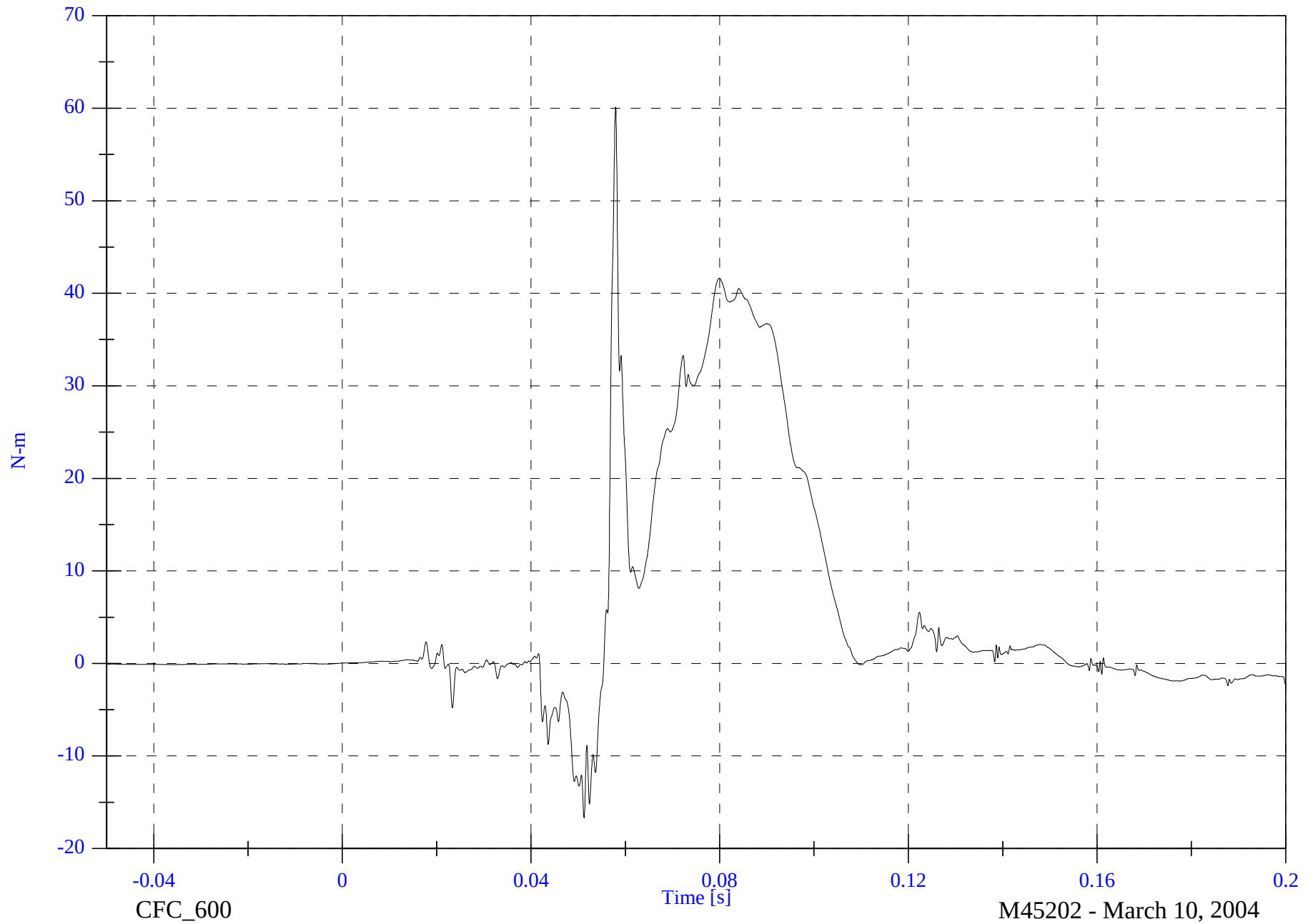


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 60.1 [N-m] at 0.058 [s]

Min: -16.7 [N-m] at 0.051 [s]

V1P1 Left Lower Tibia Mx



B-48

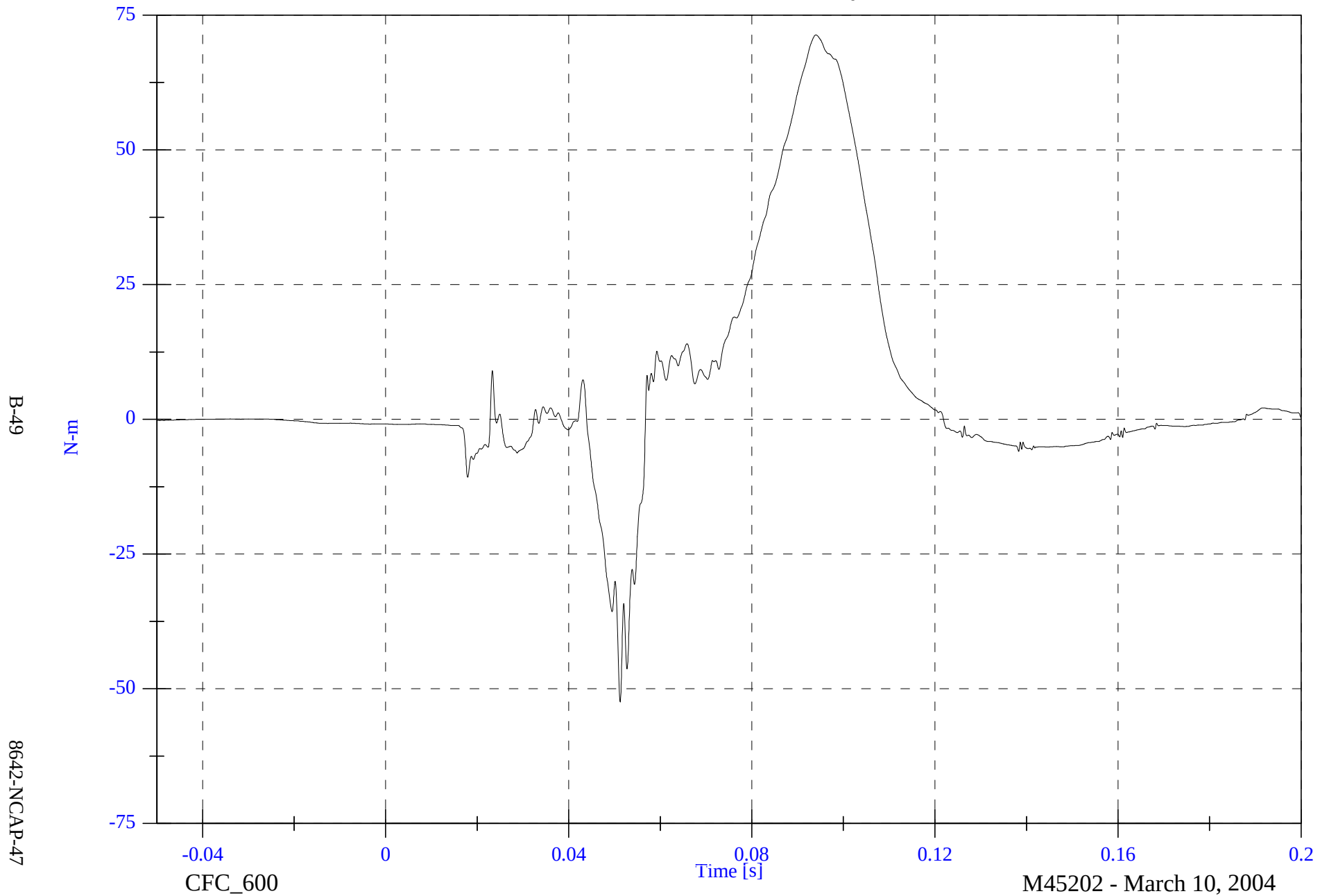
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 71.3 [N-m] at 0.094 [s]

Min: -52.5 [N-m] at 0.051 [s]

V1P1 Left Lower Tibia My

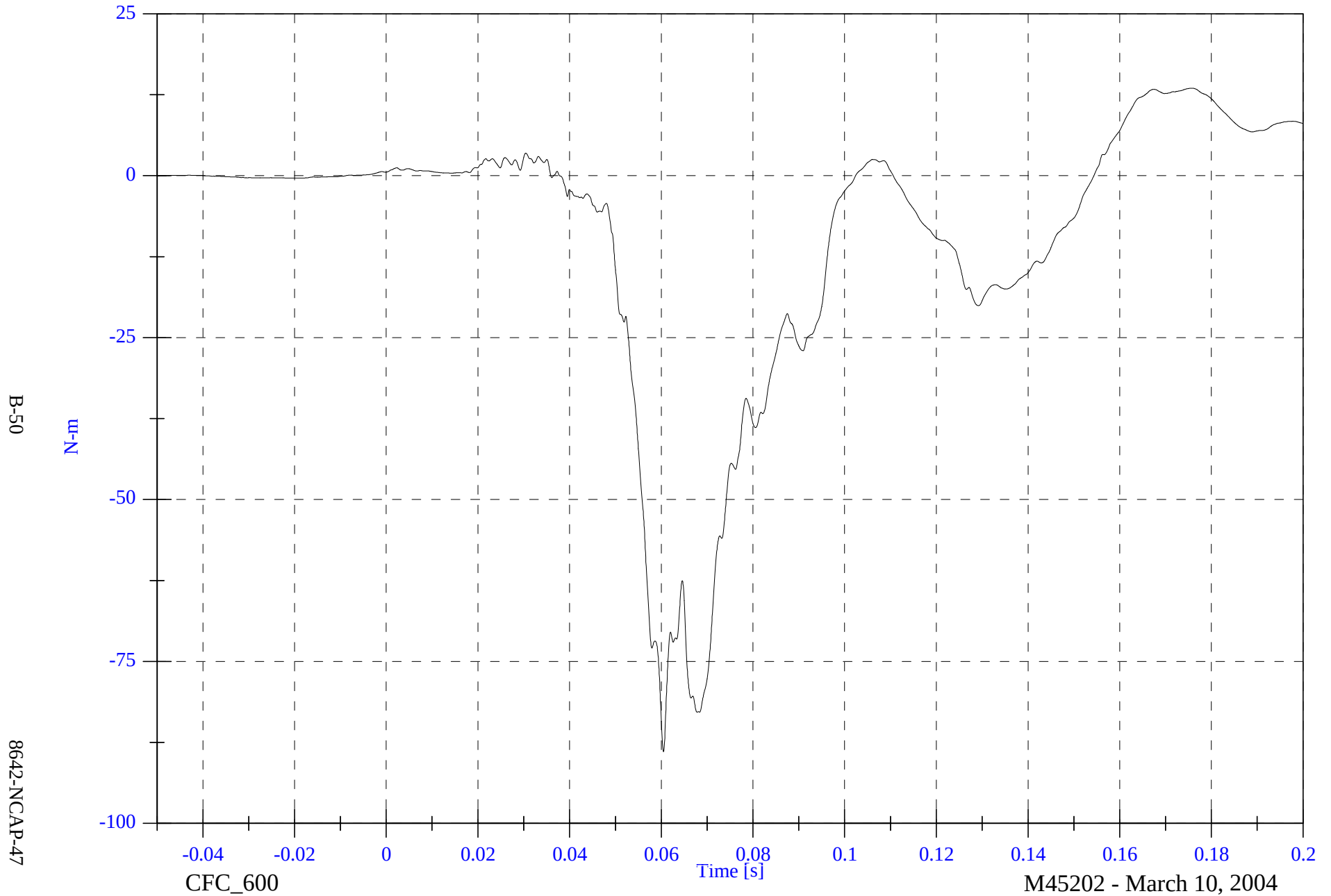


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Right Upper Tibia Mx

Max: 13.5 [N-m] at 0.176 [s]

Min: -89.0 [N-m] at 0.060 [s]

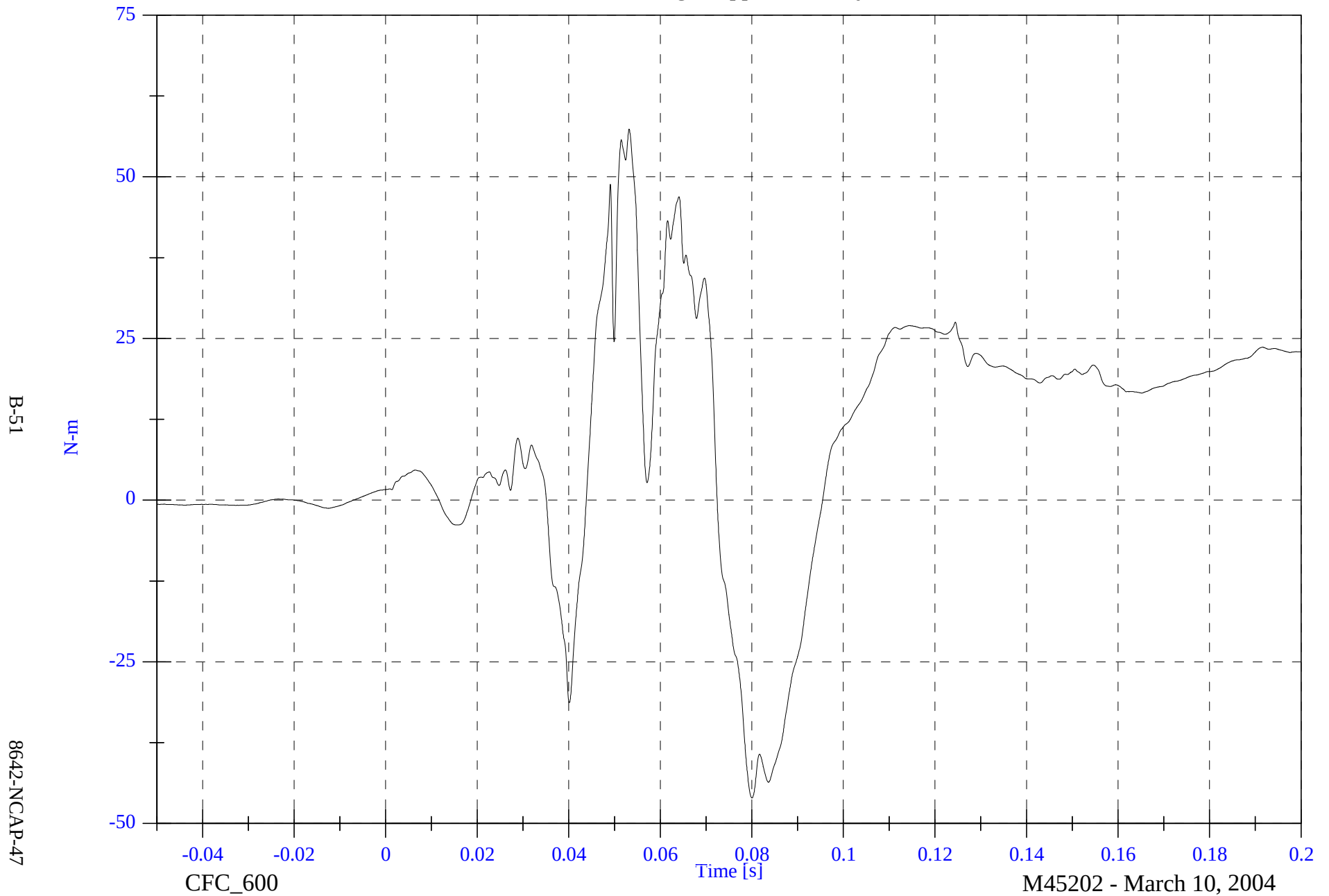


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 57.4 [N-m] at 0.053 [s]

Min: -46.0 [N-m] at 0.080 [s]

V1P1 Right Upper Tibia My

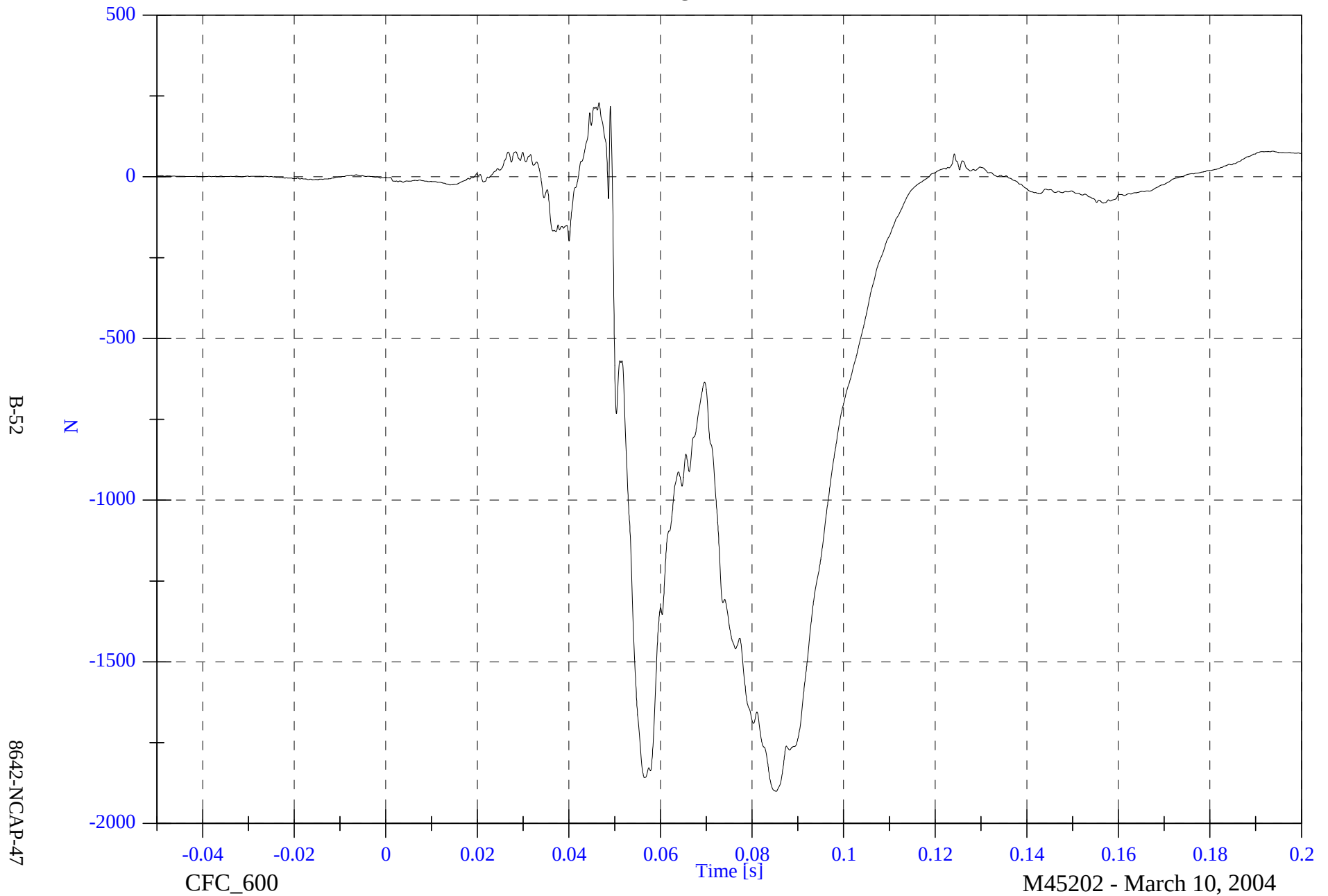


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Right Lower Tibia Fz

Max: 229.9 [N] at 0.047 [s]

Min: -1900.7 [N] at 0.085 [s]

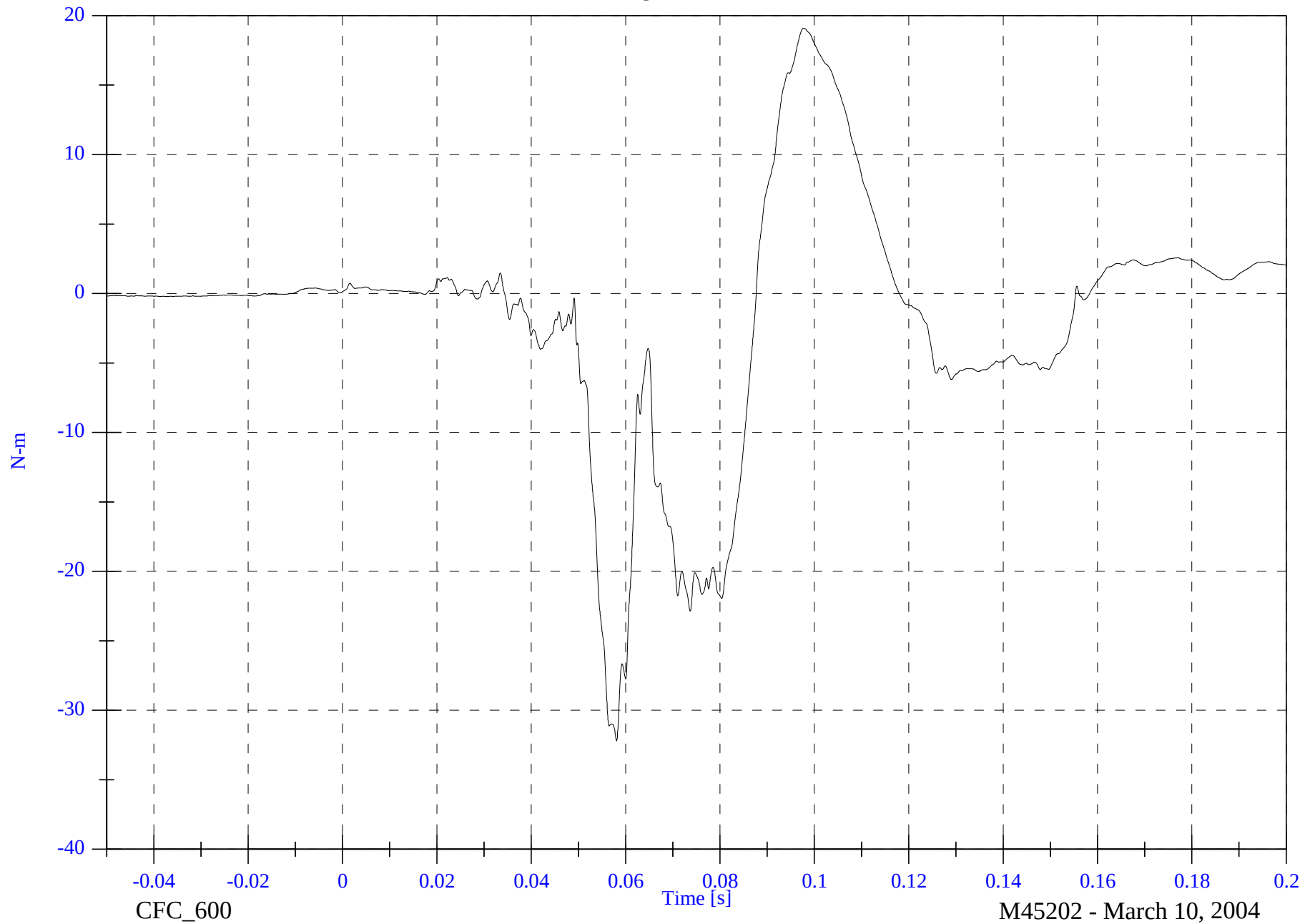


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 19.1 [N-m] at 0.098 [s]

Min: -32.2 [N-m] at 0.058 [s]

V1P1 Right Lower Tibia Mx



B-53

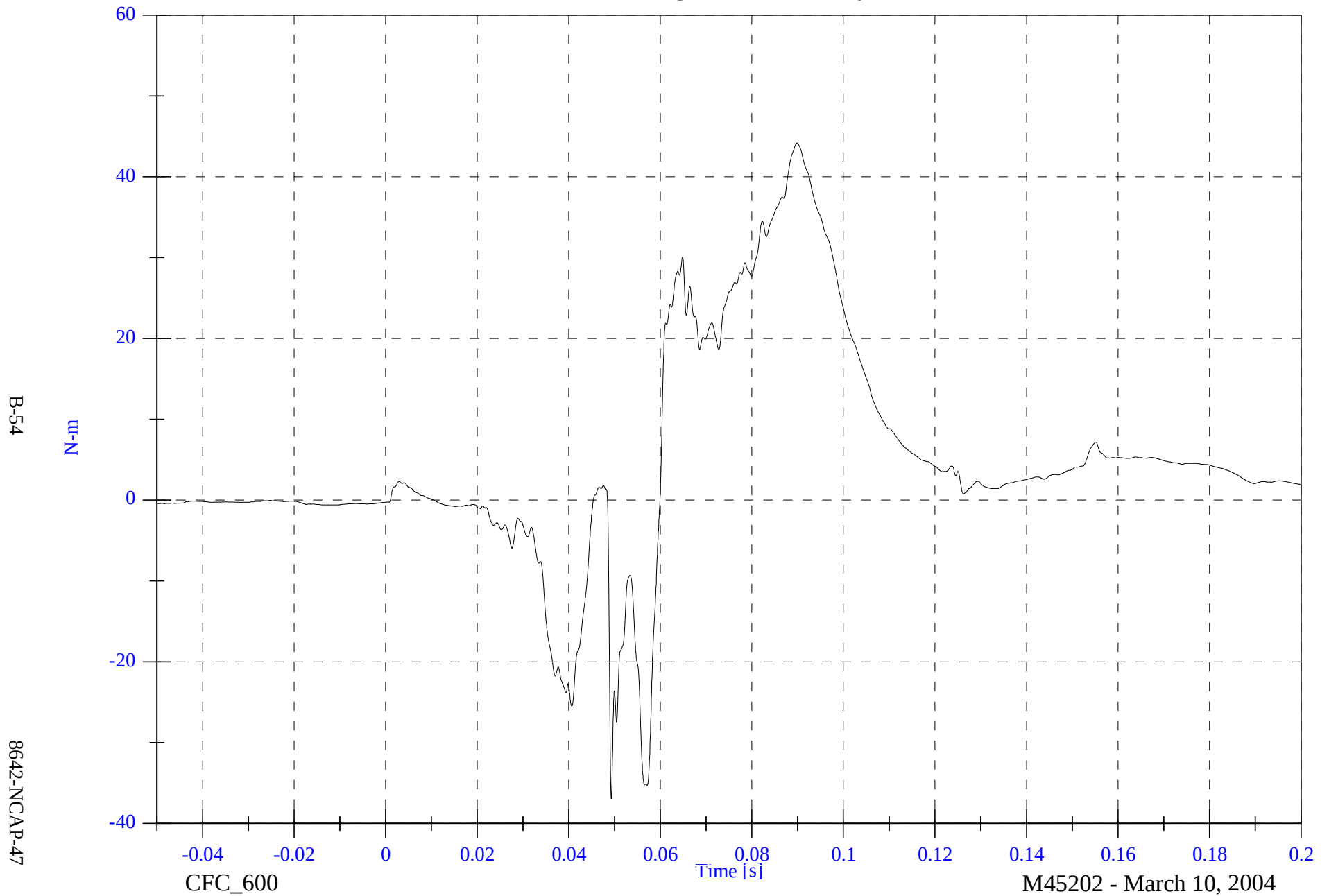
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 44.2 [N-m] at 0.090 [s]

Min: -36.9 [N-m] at 0.049 [s]

V1P1 Right Lower Tibia My

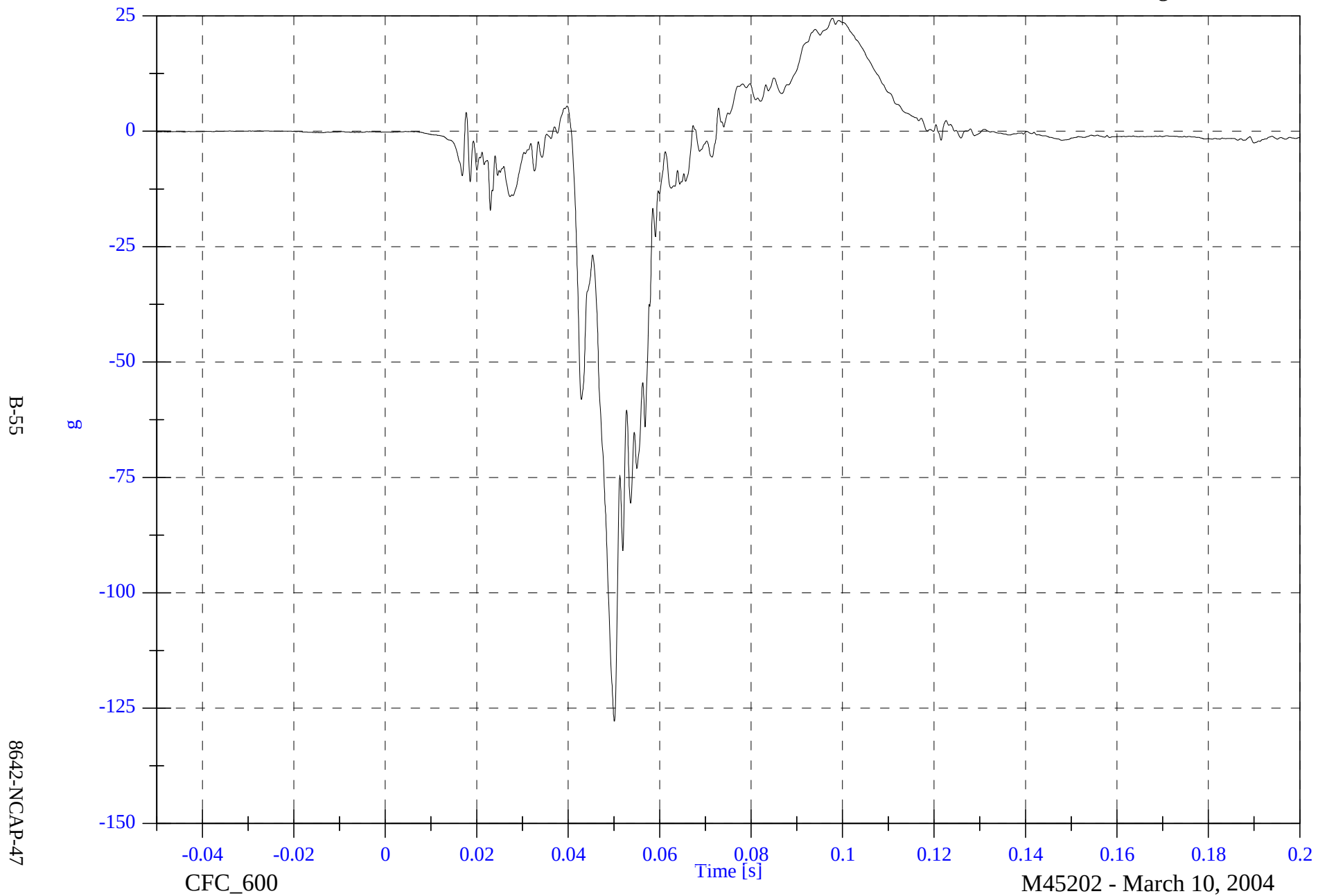


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 24.5 [g] at 0.098 [s]

Min: -127.8 [g] at 0.050 [s]

V1P1 Left Foot Aft x

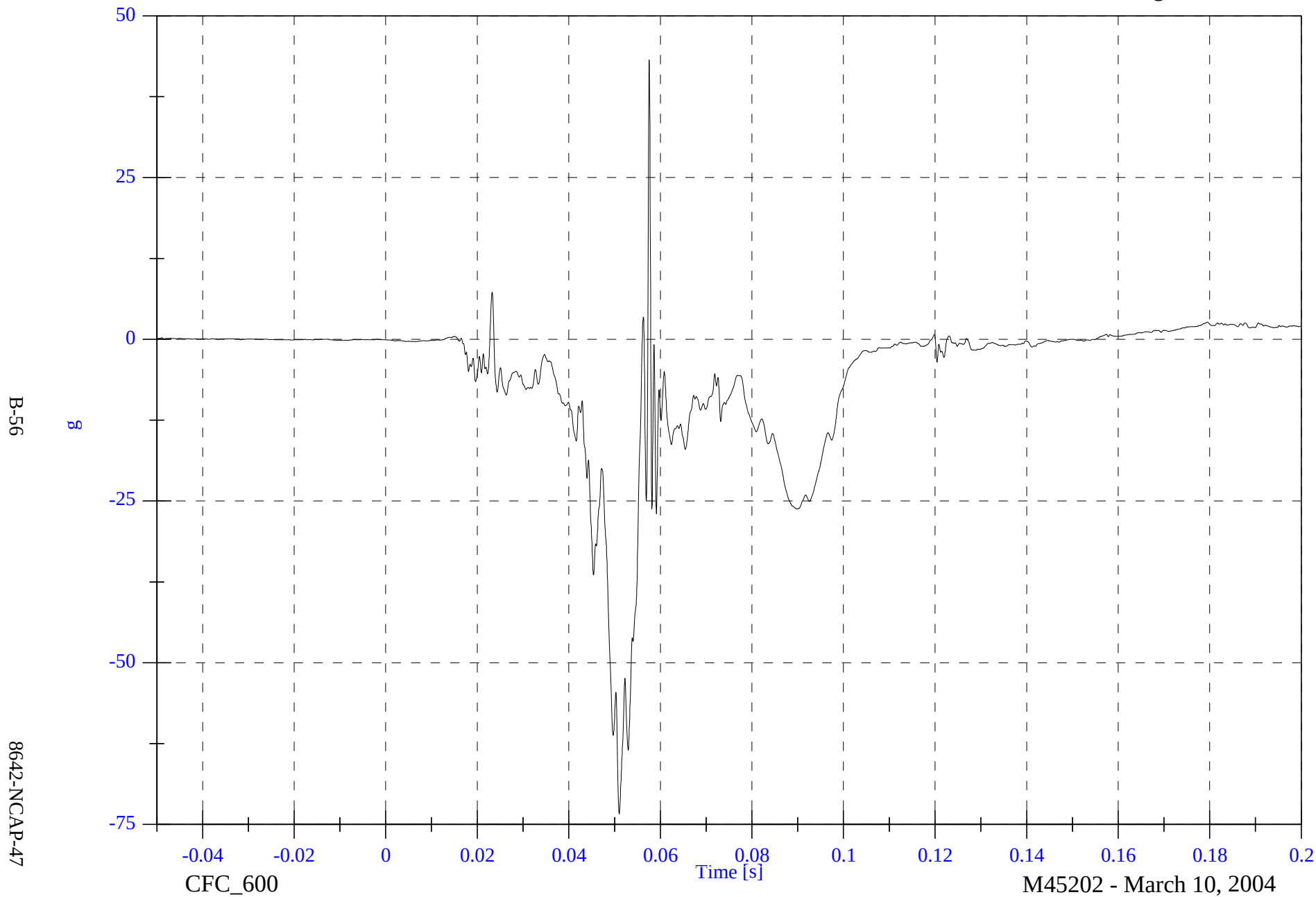


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 43.2 [g] at 0.058 [s]

Min: -73.4 [g] at 0.051 [s]

V1P1 Left Foot Aft z

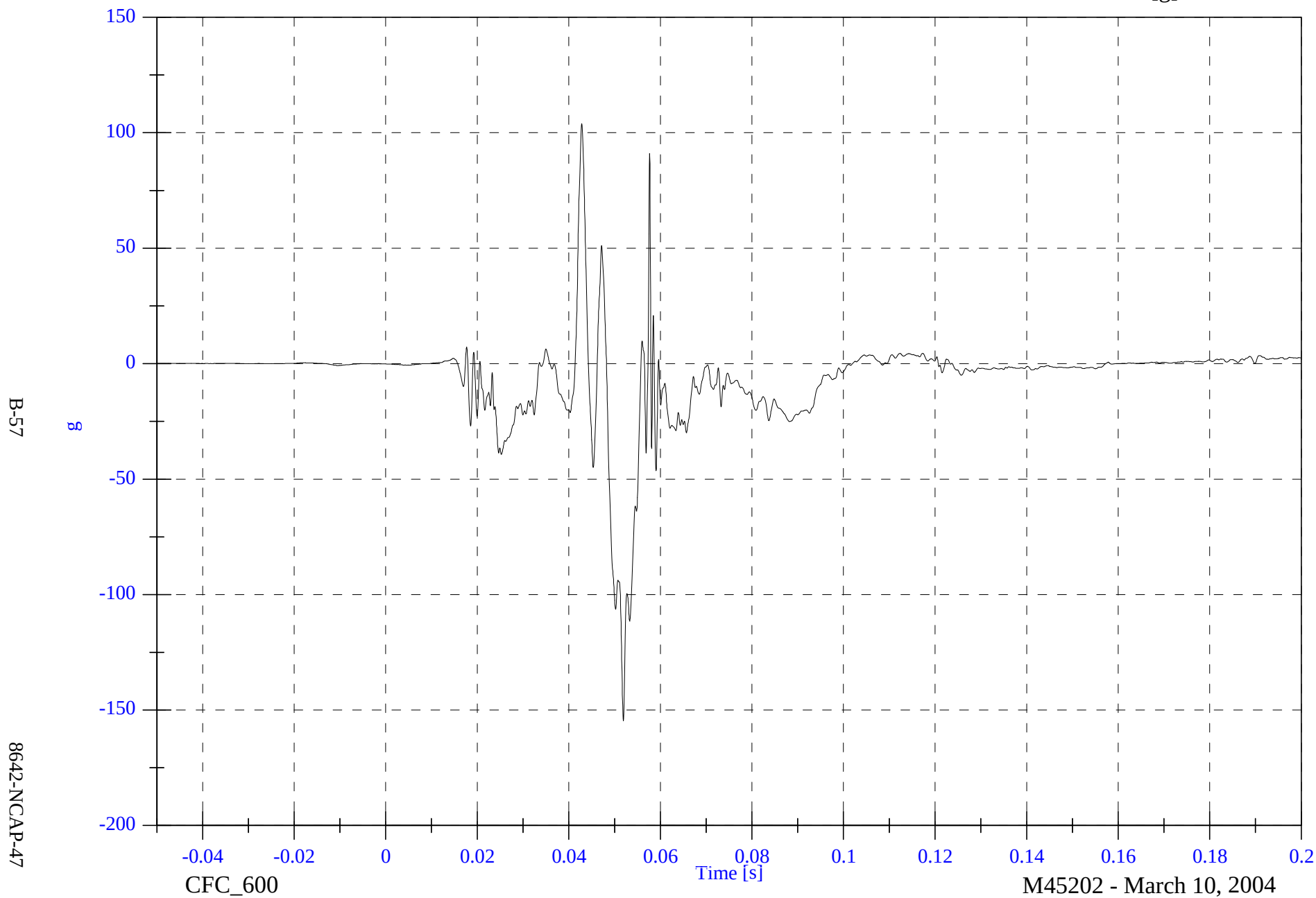


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 103.9 [g] at 0.043 [s]

Min: -154.7 [g] at 0.052 [s]

V1P1 Left Foot Fore z

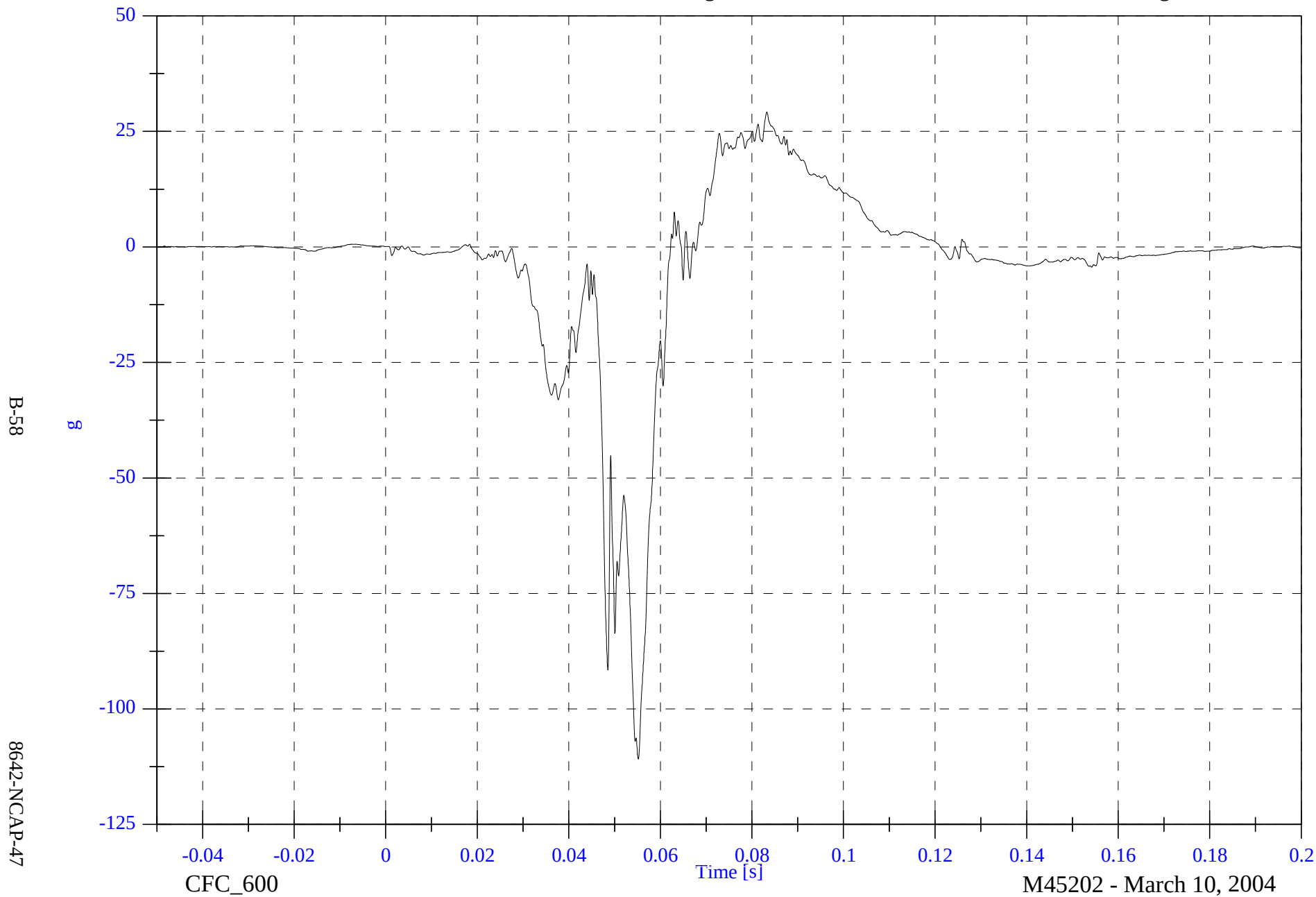


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Right Foot Aft x

Max: 29.2 [g] at 0.083 [s]

Min: -110.9 [g] at 0.055 [s]

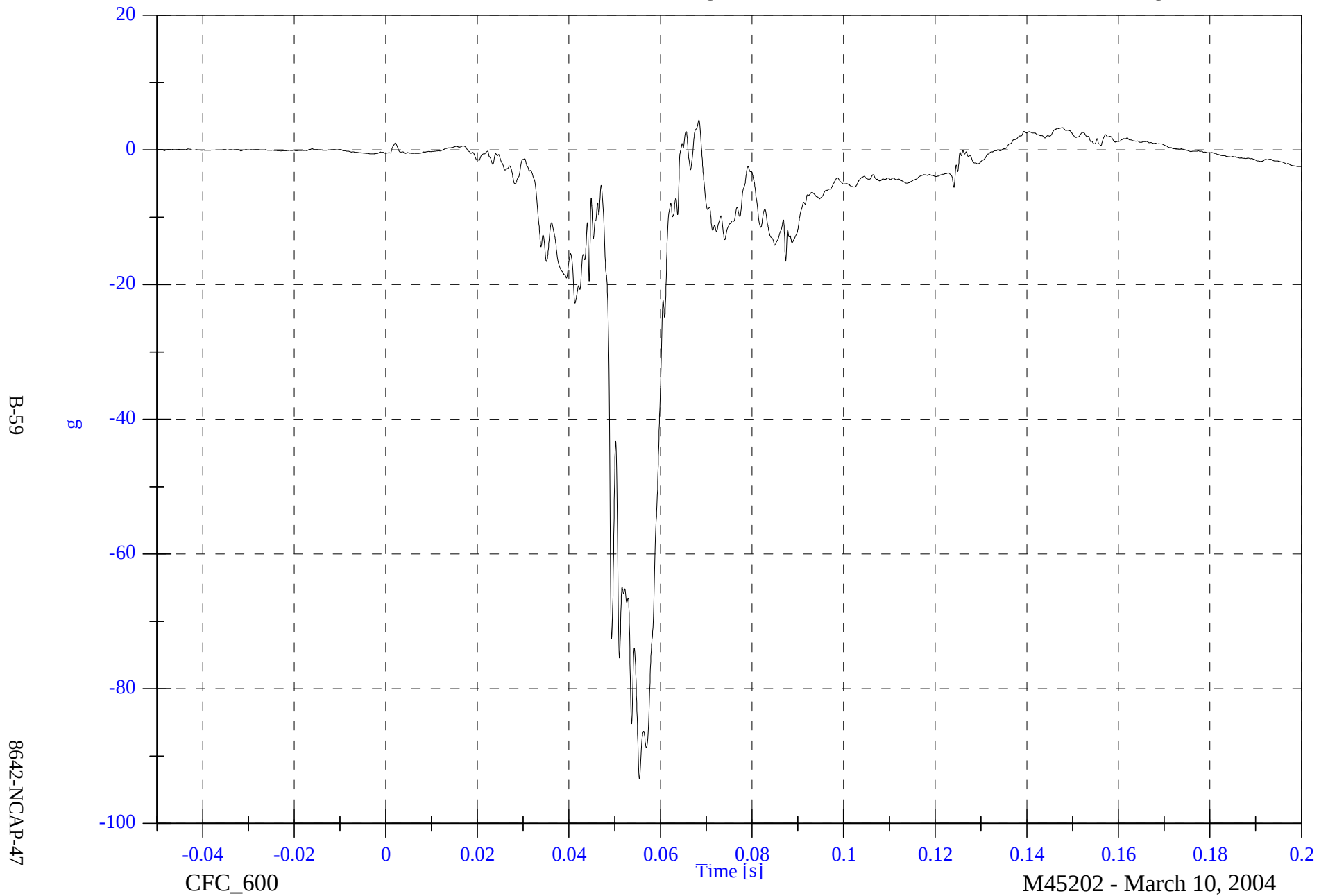


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Right Foot Aft z

Max: 4.4 [g] at 0.068 [s]

Min: -93.4 [g] at 0.055 [s]

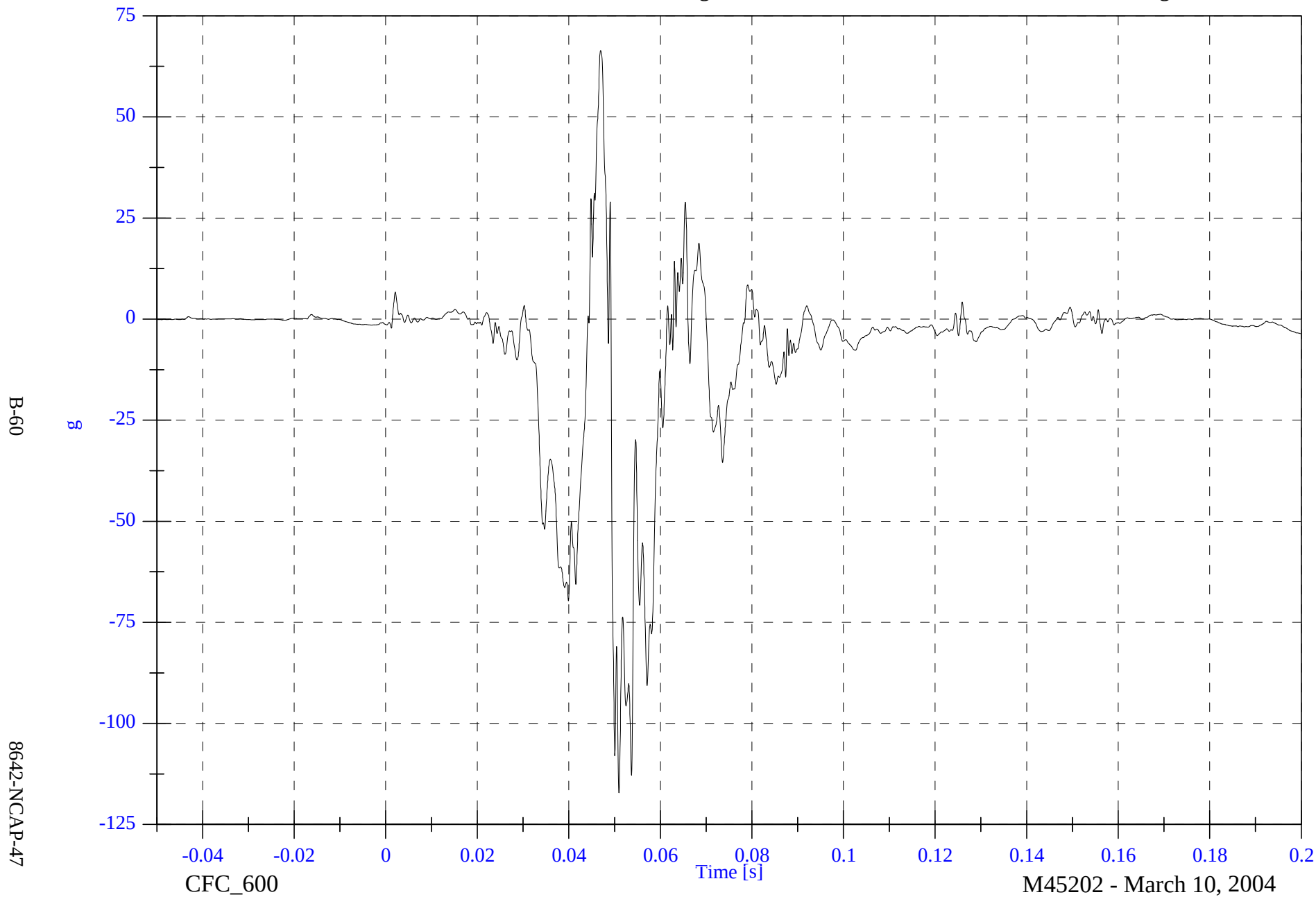


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 66.4 [g] at 0.047 [s]

Min: -117.2 [g] at 0.051 [s]

V1P1 Right Foot Fore z

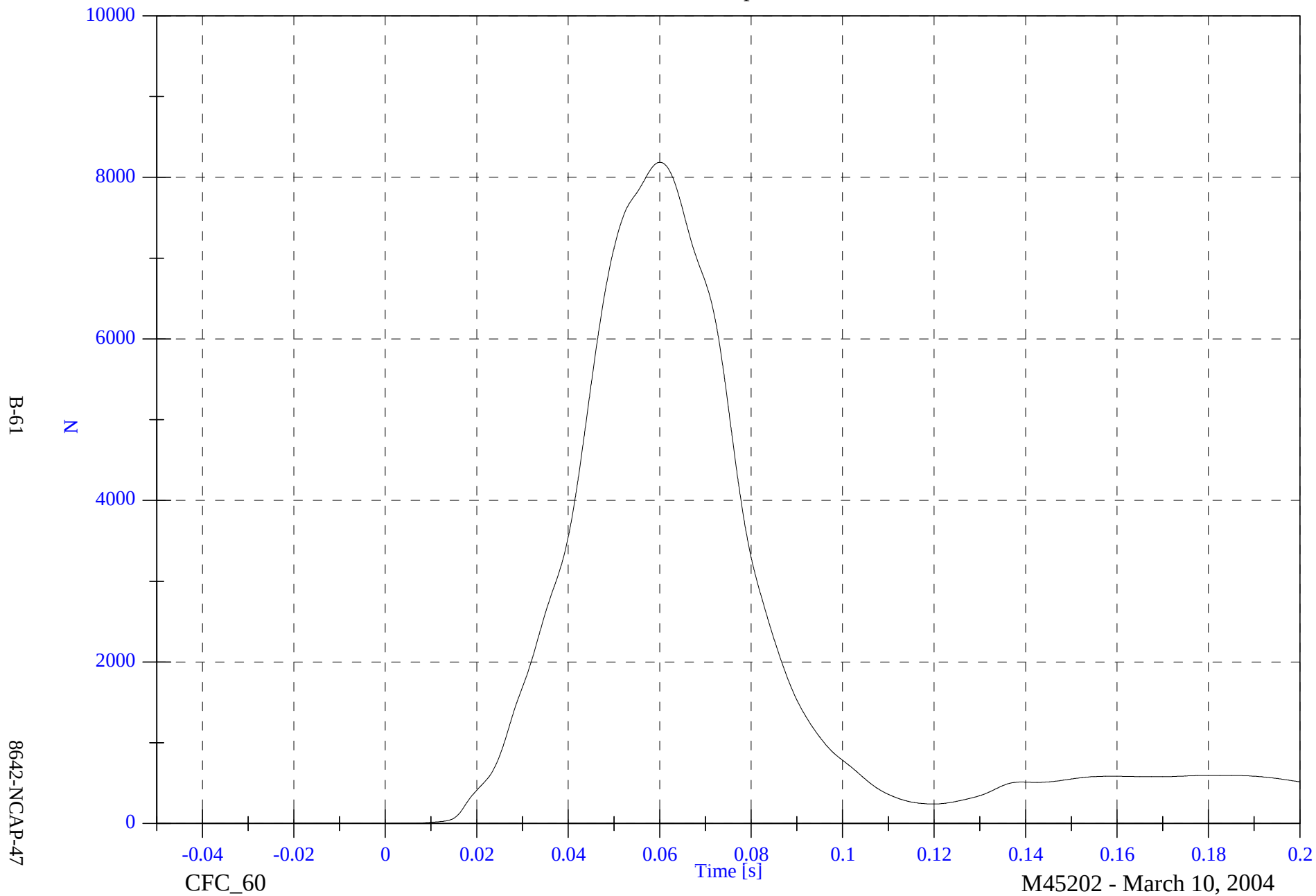


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 8187.2 [N] at 0.060 [s]

Min: 0.4 [N] at -0.026 [s]

V1P1 Lap Belt

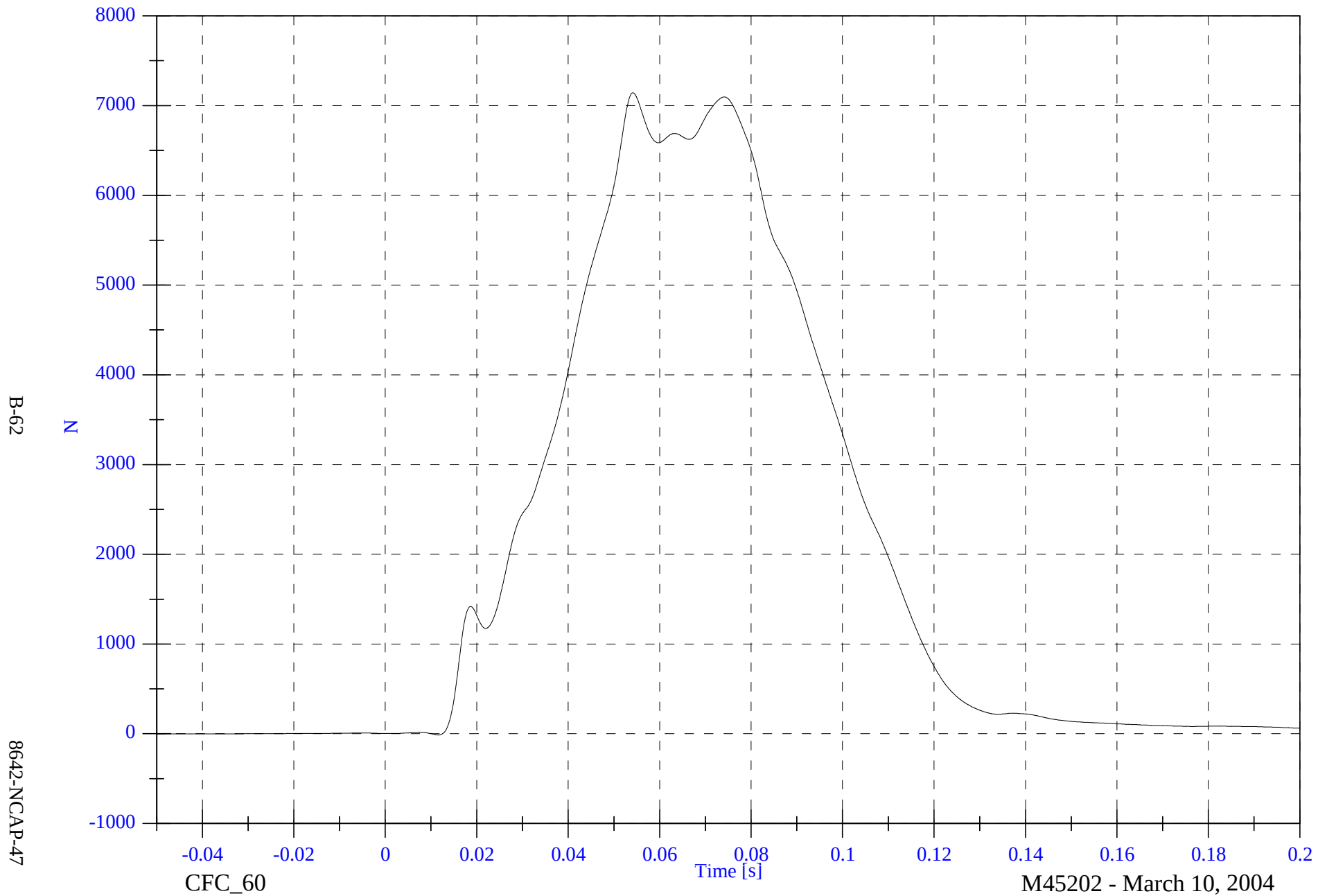


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P1 Torso Belt

Max: 7142.6 [N] at 0.054 [s]

Min: -12.8 [N] at 0.012 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

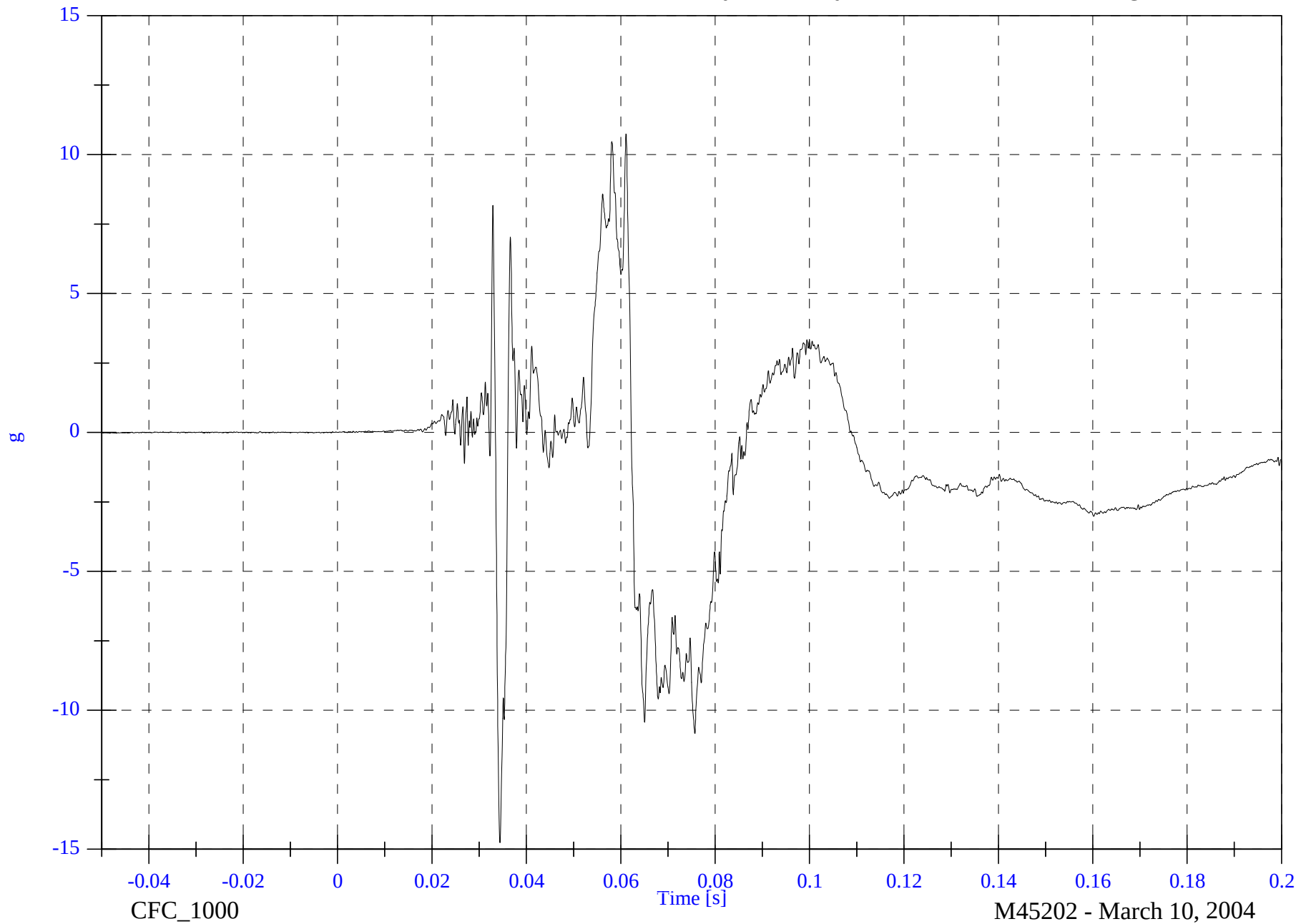
V1P2 Head 9 Array X Arm Ay

Max: 10.7 [g] at 0.061 [s]

Min: -14.8 [g] at 0.034 [s]

B-63

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

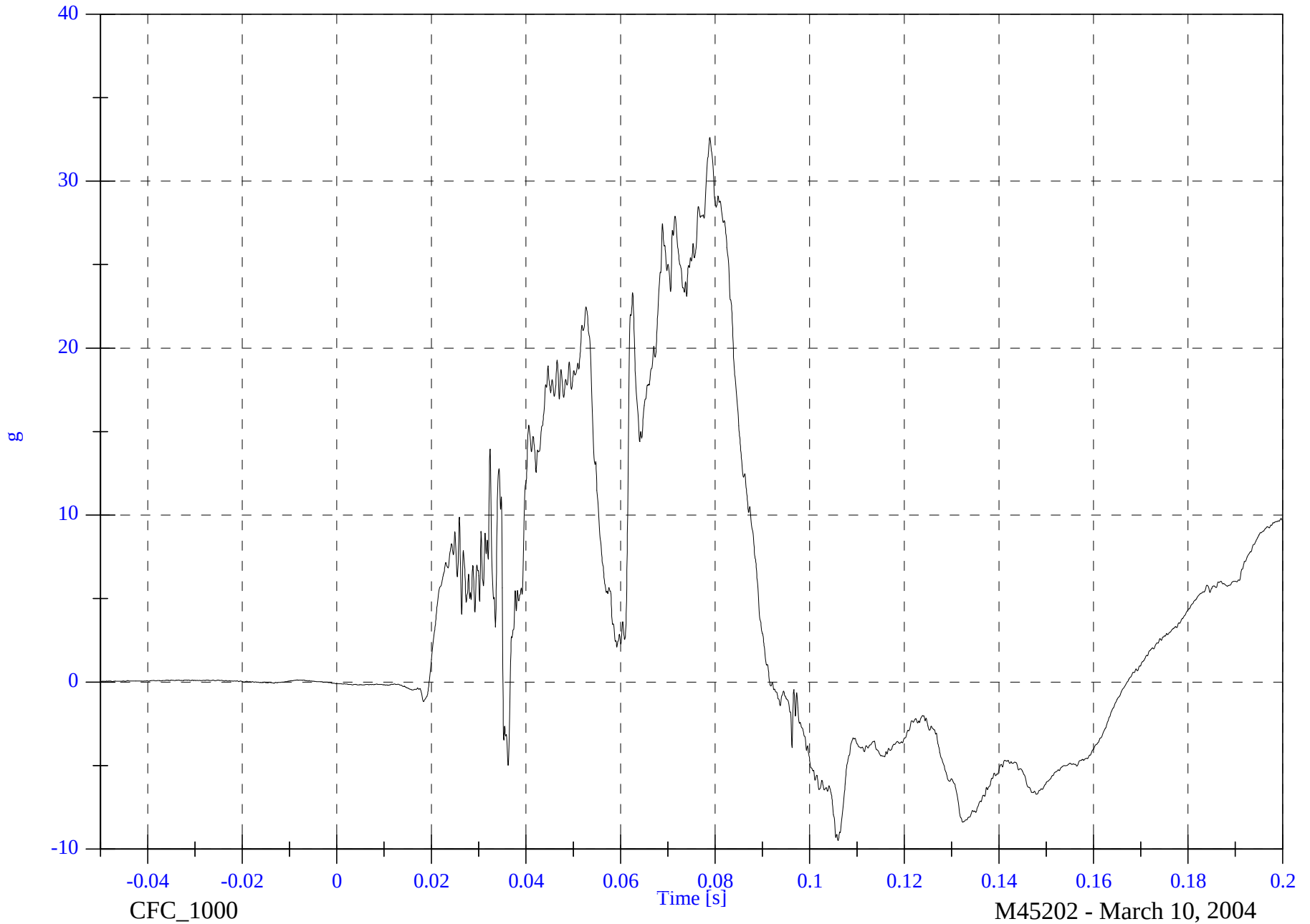
V1P2 Head 9 Array X Arm Az

Max: 32.6 [g] at 0.079 [s]

Min: -9.5 [g] at 0.106 [s]

B-64

8642-NCAP-47

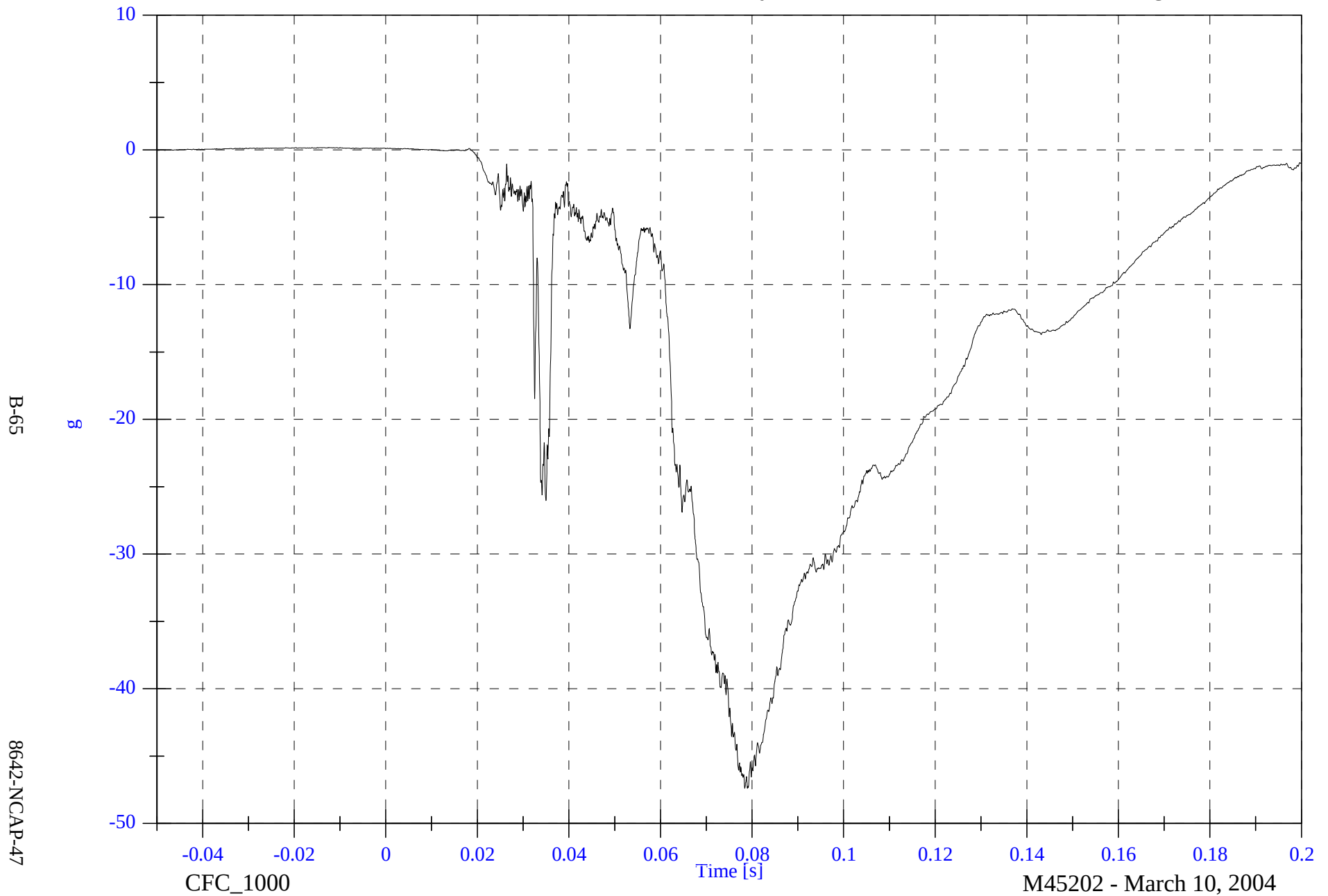


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head 9 Array Y Arm Ax

Max: 0.2 [g] at -0.012 [s]

Min: -47.4 [g] at 0.078 [s]

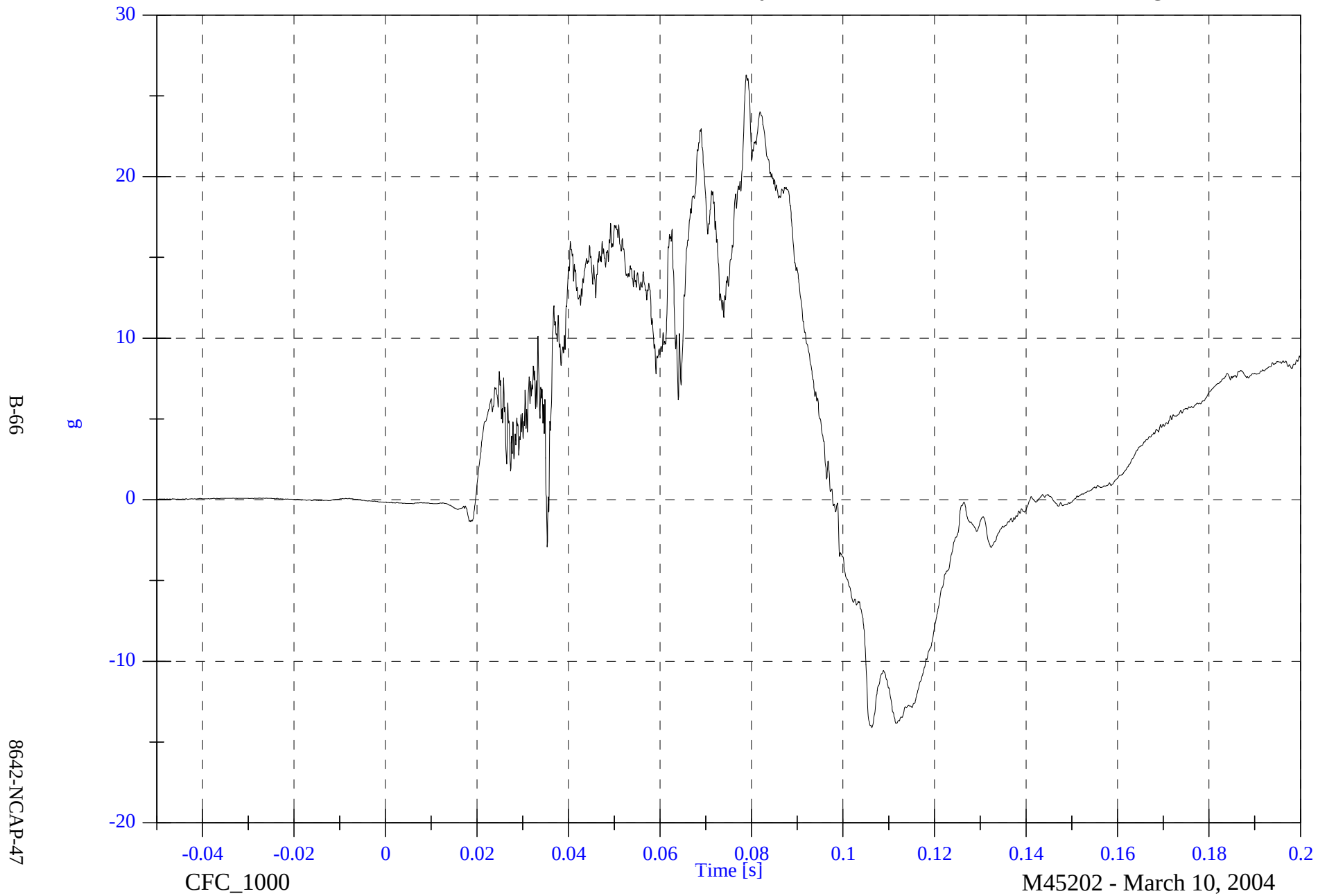


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head 9 Array Y Arm Az

Max: 26.3 [g] at 0.079 [s]

Min: -14.1 [g] at 0.106 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

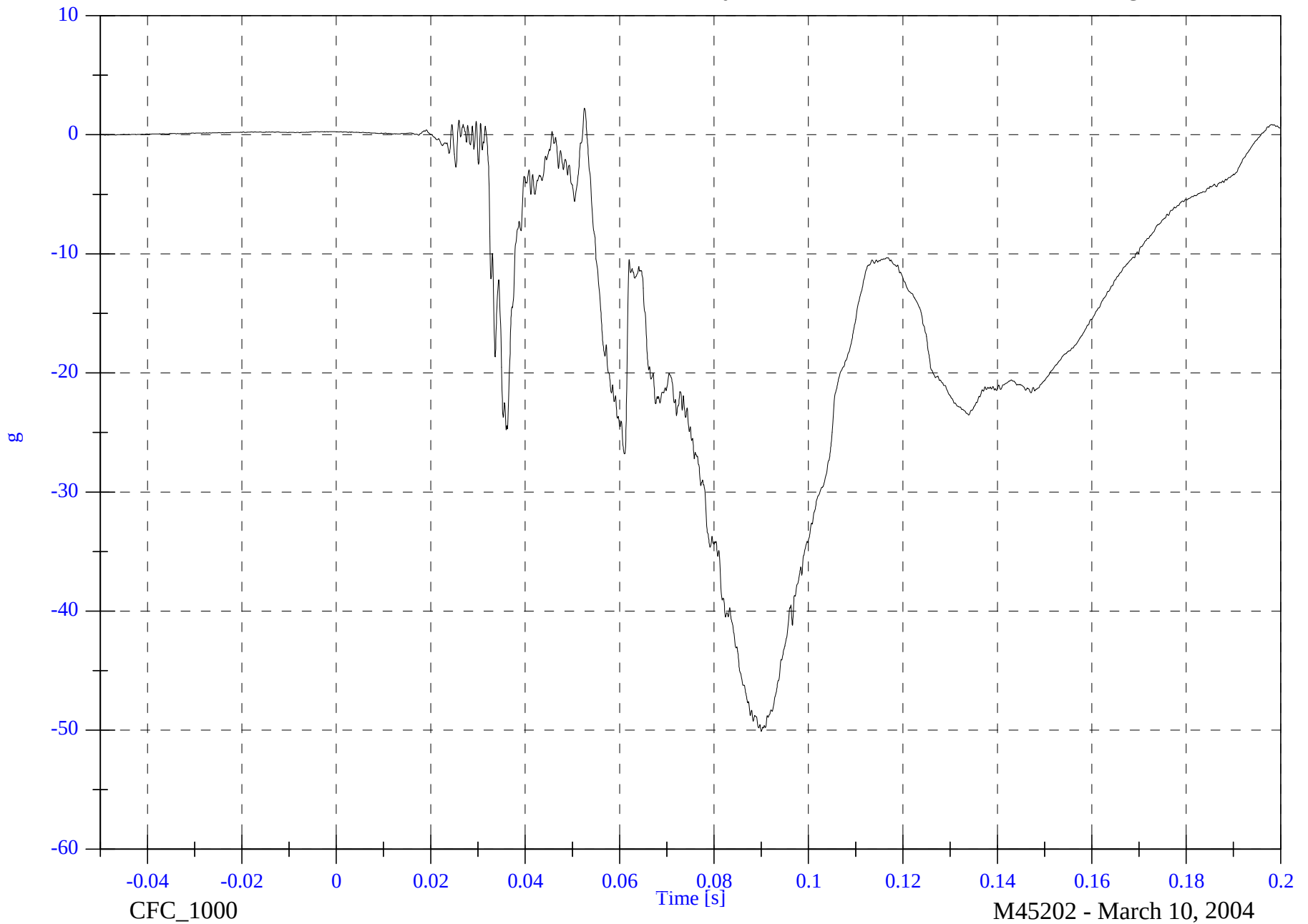
V1P2 Head 9 Array Z Arm Ax

Max: 2.2 [g] at 0.053 [s]

Min: -50.1 [g] at 0.090 [s]

B-67

8642-NCAP-47

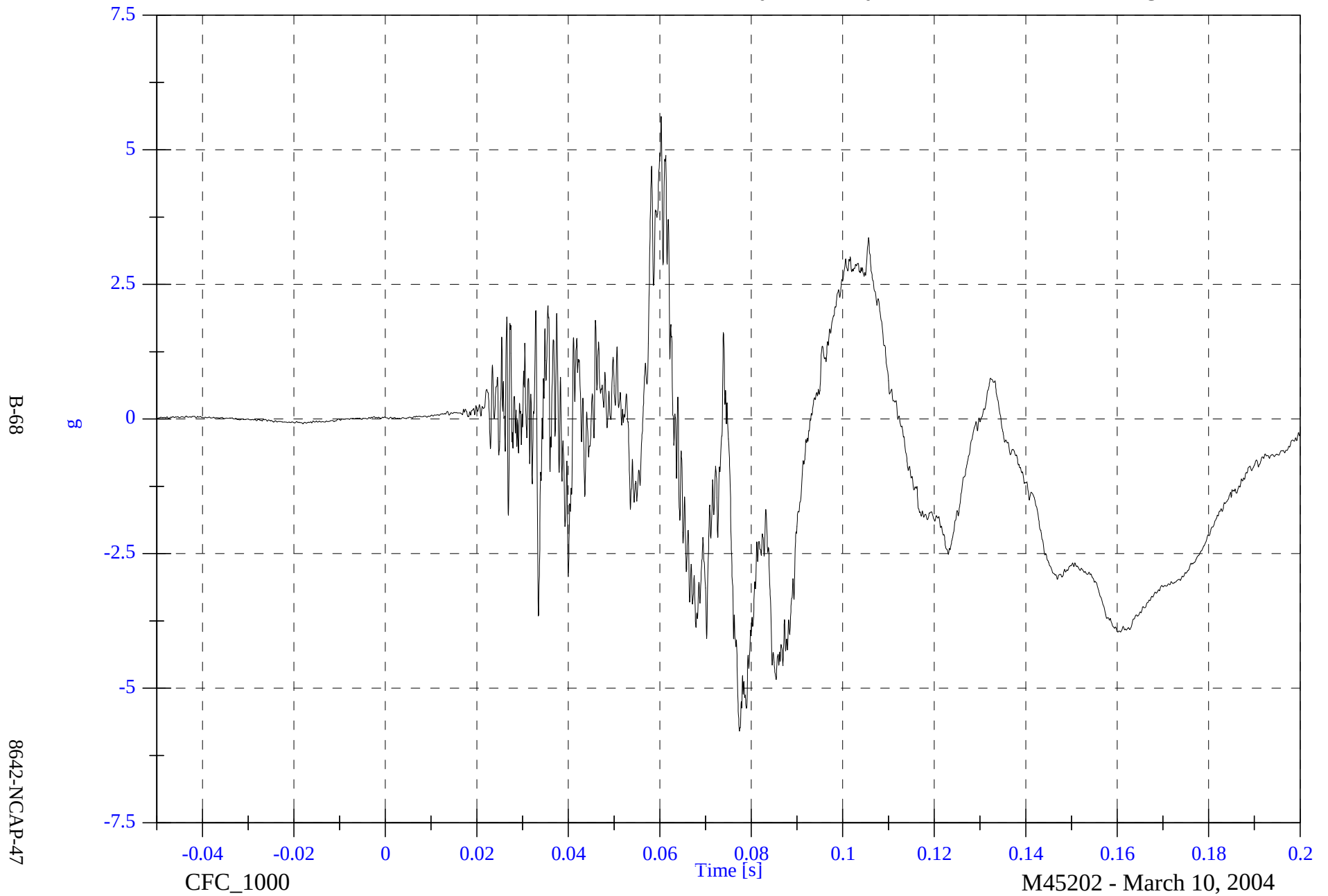


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head 9 Array Z Arm Ay

Max: 5.6 [g] at 0.060 [s]

Min: -5.8 [g] at 0.077 [s]

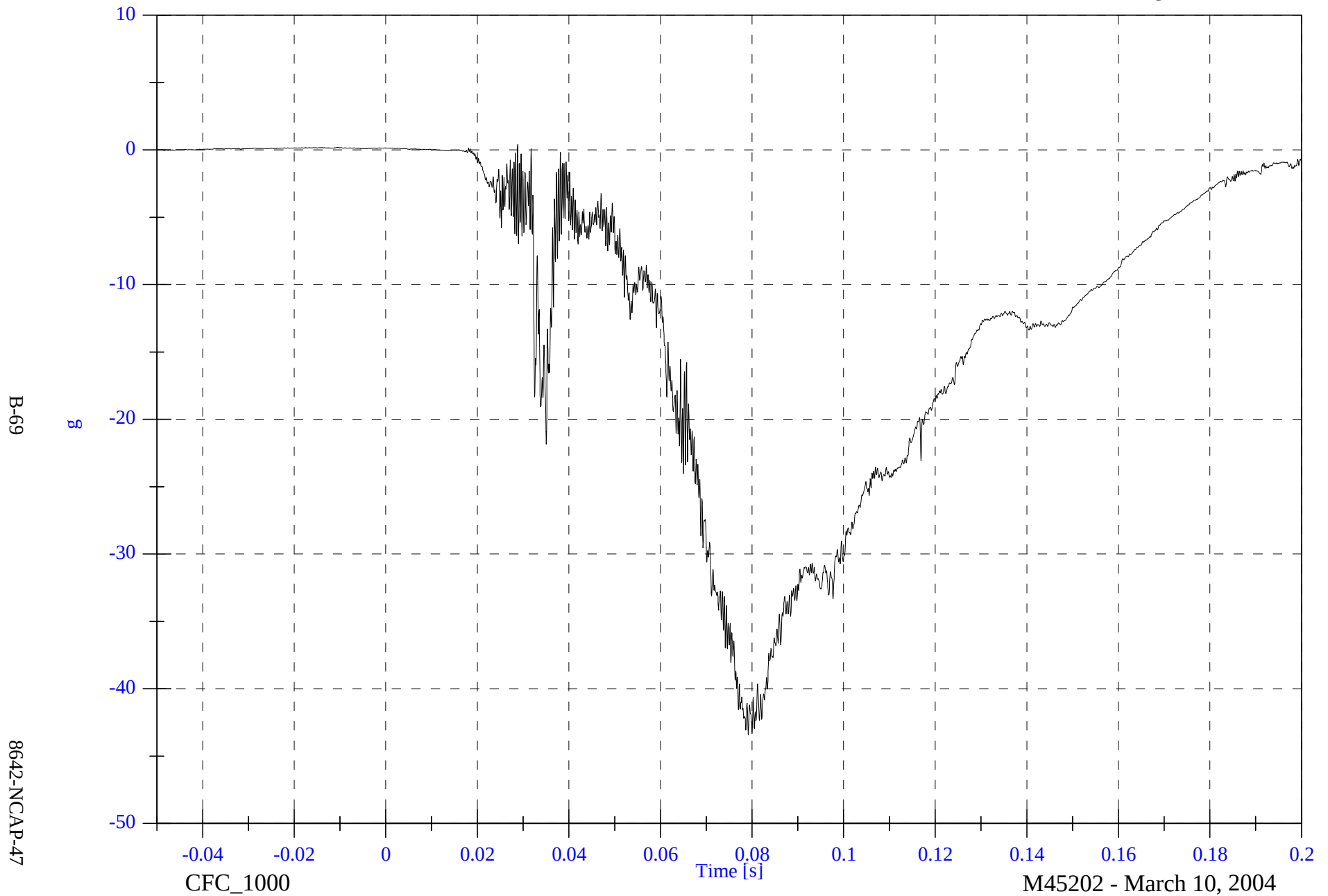


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head CG x

Max: 0.4 [g] at 0.029 [s]

Min: -43.4 [g] at 0.079 [s]

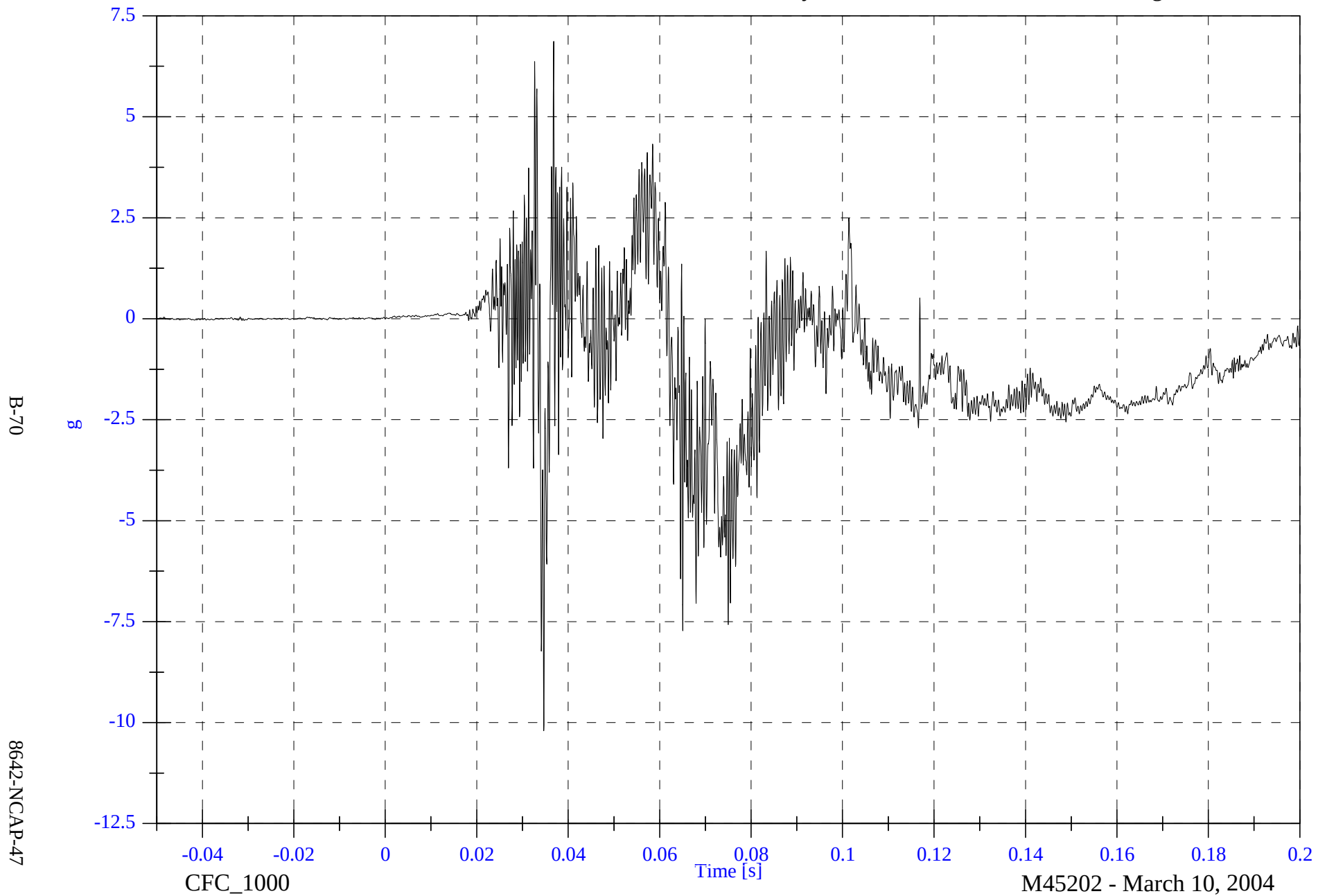


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head CG y

Max: 6.9 [g] at 0.037 [s]

Min: -10.2 [g] at 0.035 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head CG z

Max: 25.8 [g] at 0.079 [s]

Min: -11.8 [g] at 0.115 [s]

B-71

8642-NCAP-47

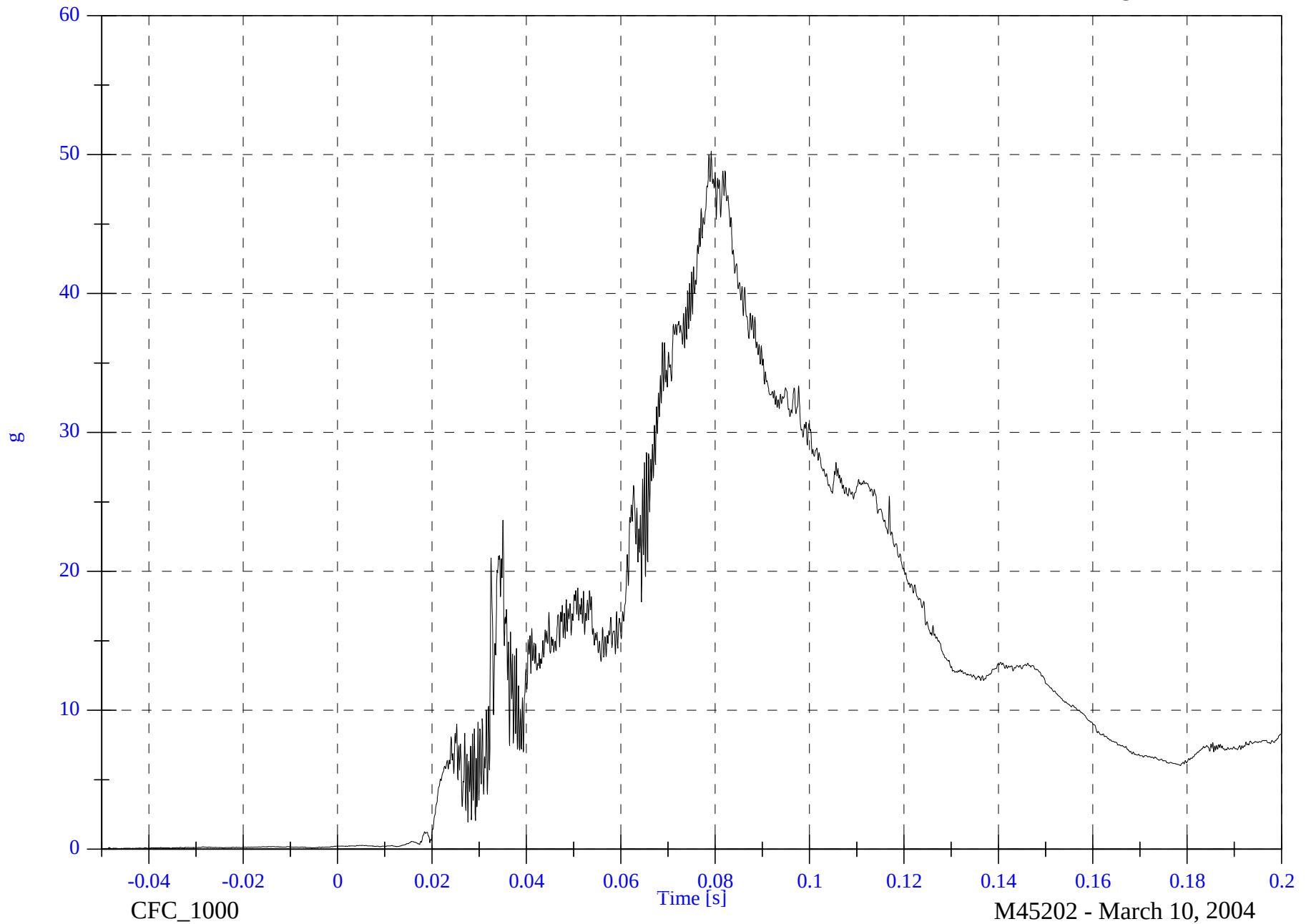


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head CG Resultant

Max: 50.2 [g] at 0.079 [s]

Min: 0.0 [g] at -0.050 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

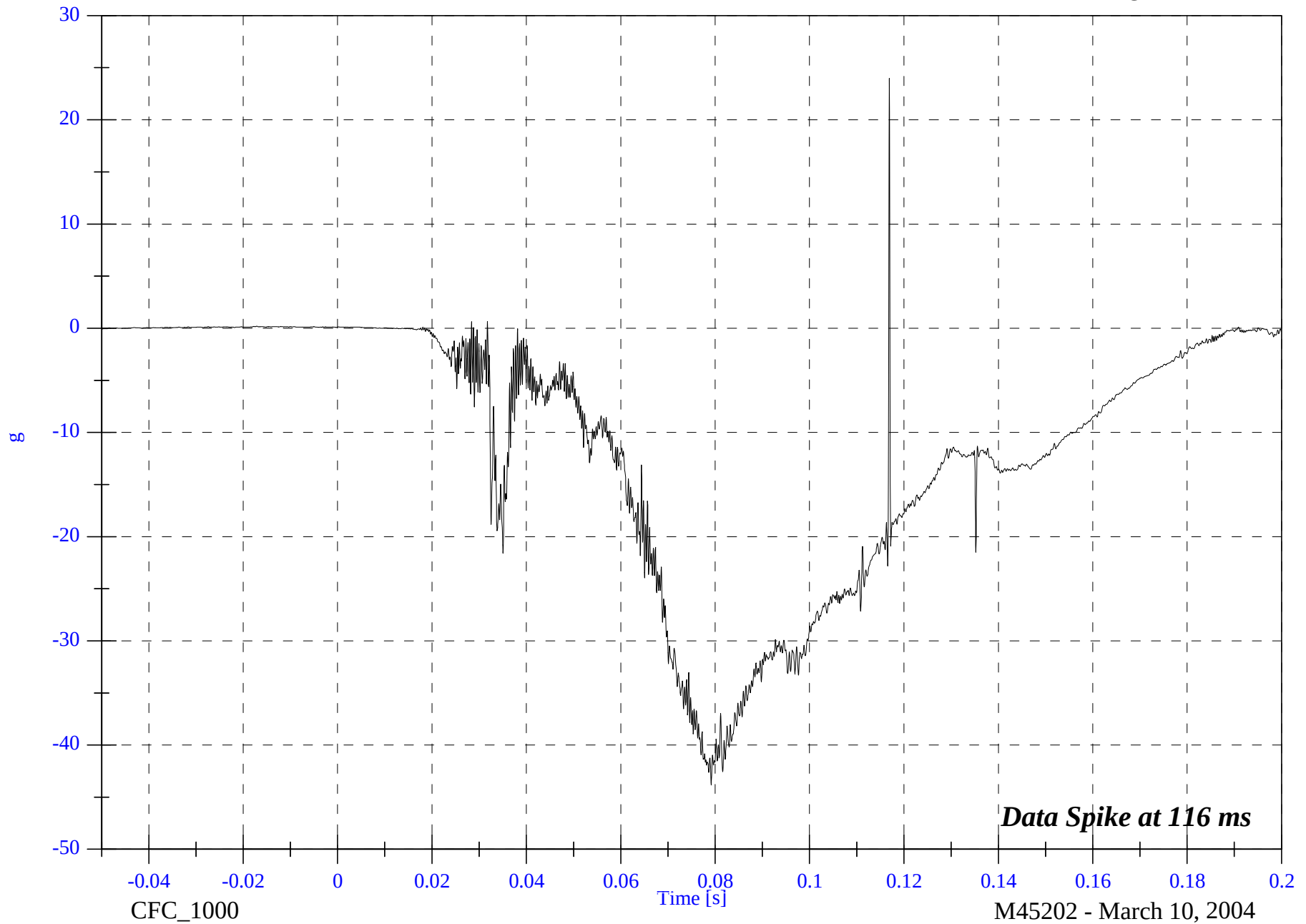
V1P2 Head CG Red x

Max: 24.0 [g] at 0.117 [s]

Min: -43.8 [g] at 0.079 [s]

B-73

8642-NCAP-47

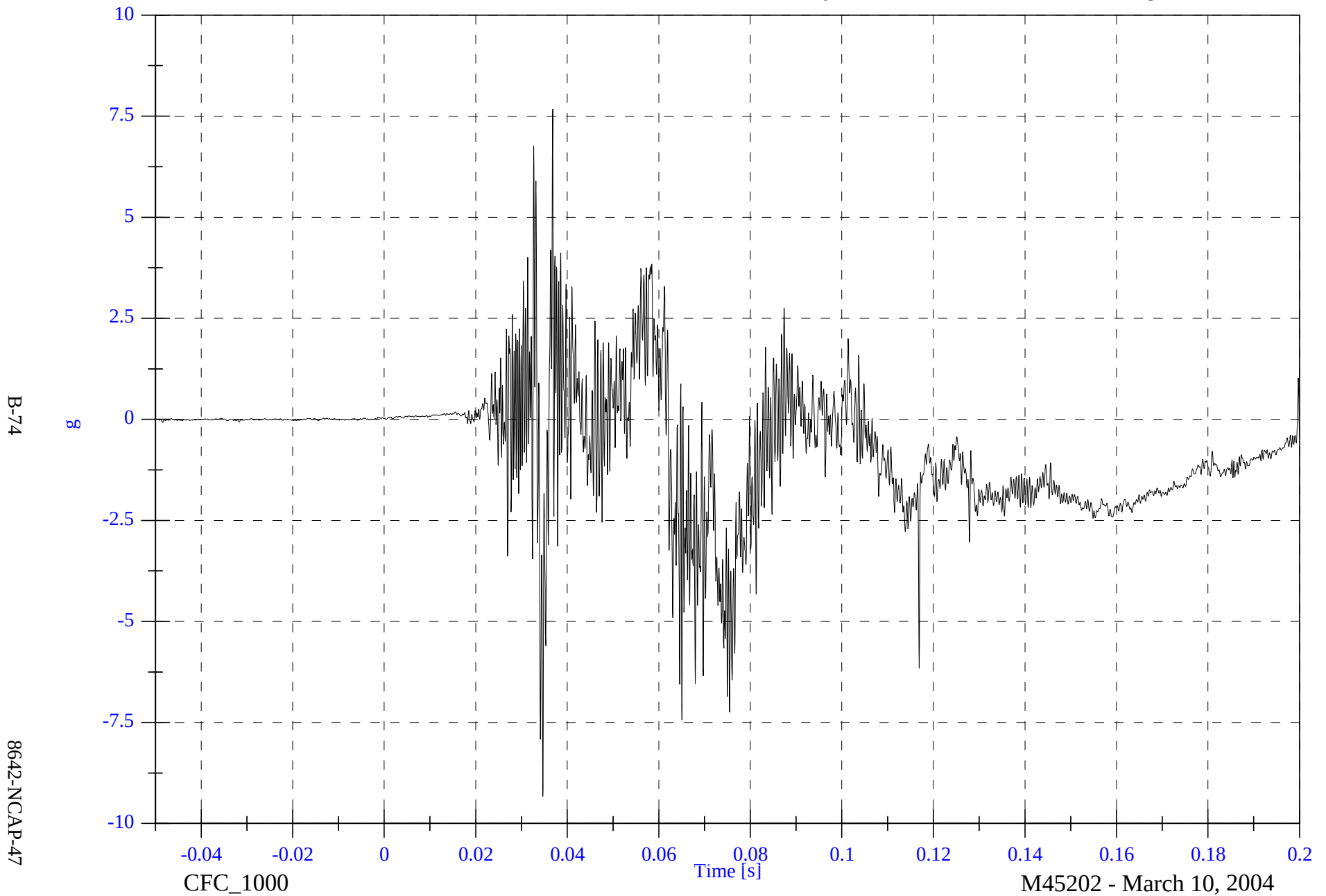


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 7.7 [g] at 0.037 [s]

Min: -9.3 [g] at 0.035 [s]

V1P2 Head CG Red y



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Head CG Red z

Max: 25.3 [g] at 0.079 [s]

Min: -12.1 [g] at 0.112 [s]

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2004 NCAP Test 11 2004 Infiniti FX35/45

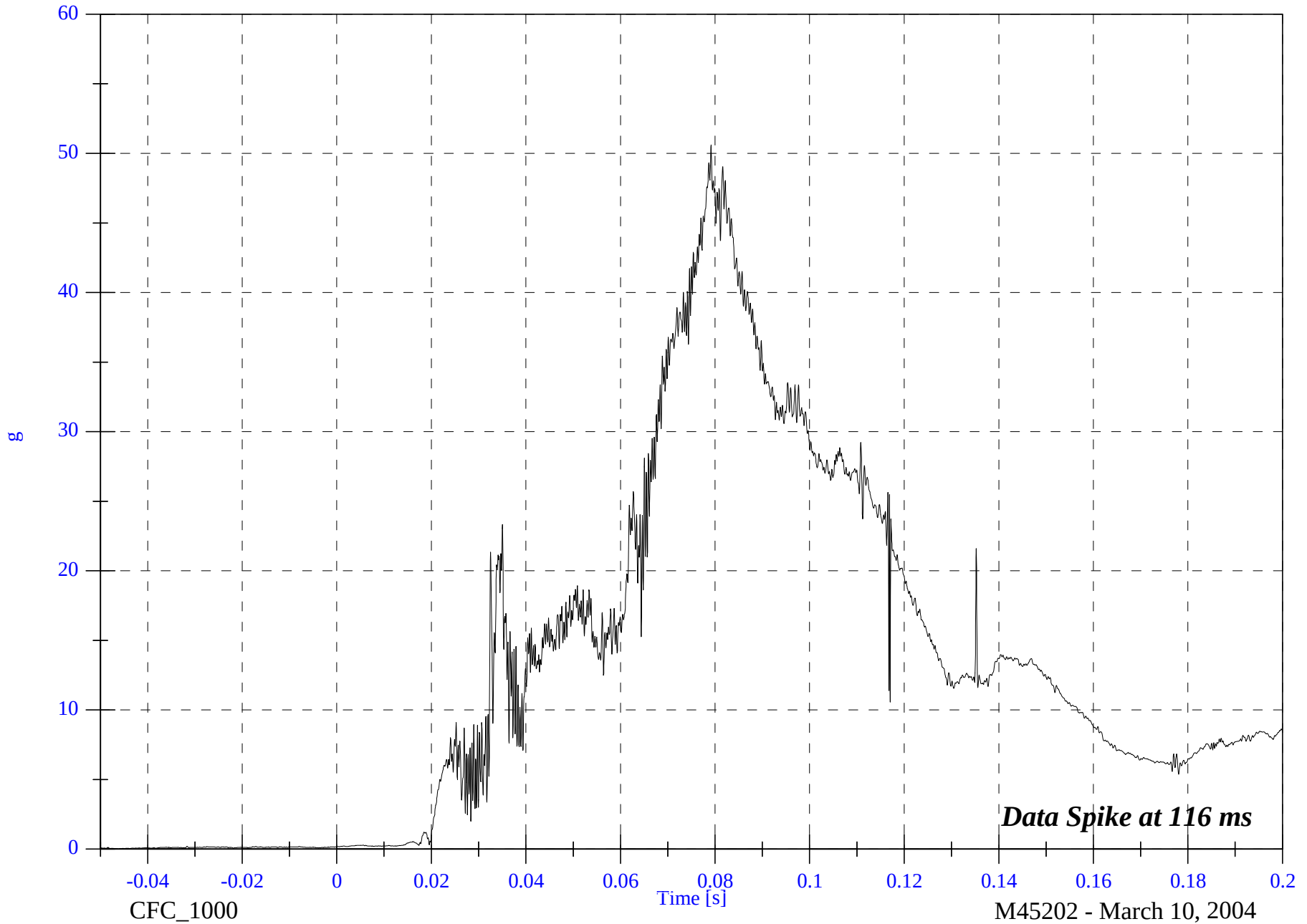
V1P2 Head CG Red Resultant

Max: 50.6 [g] at 0.079 [s]

Min: 0.0 [g] at -0.046 [s]

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8642-NCAP-47

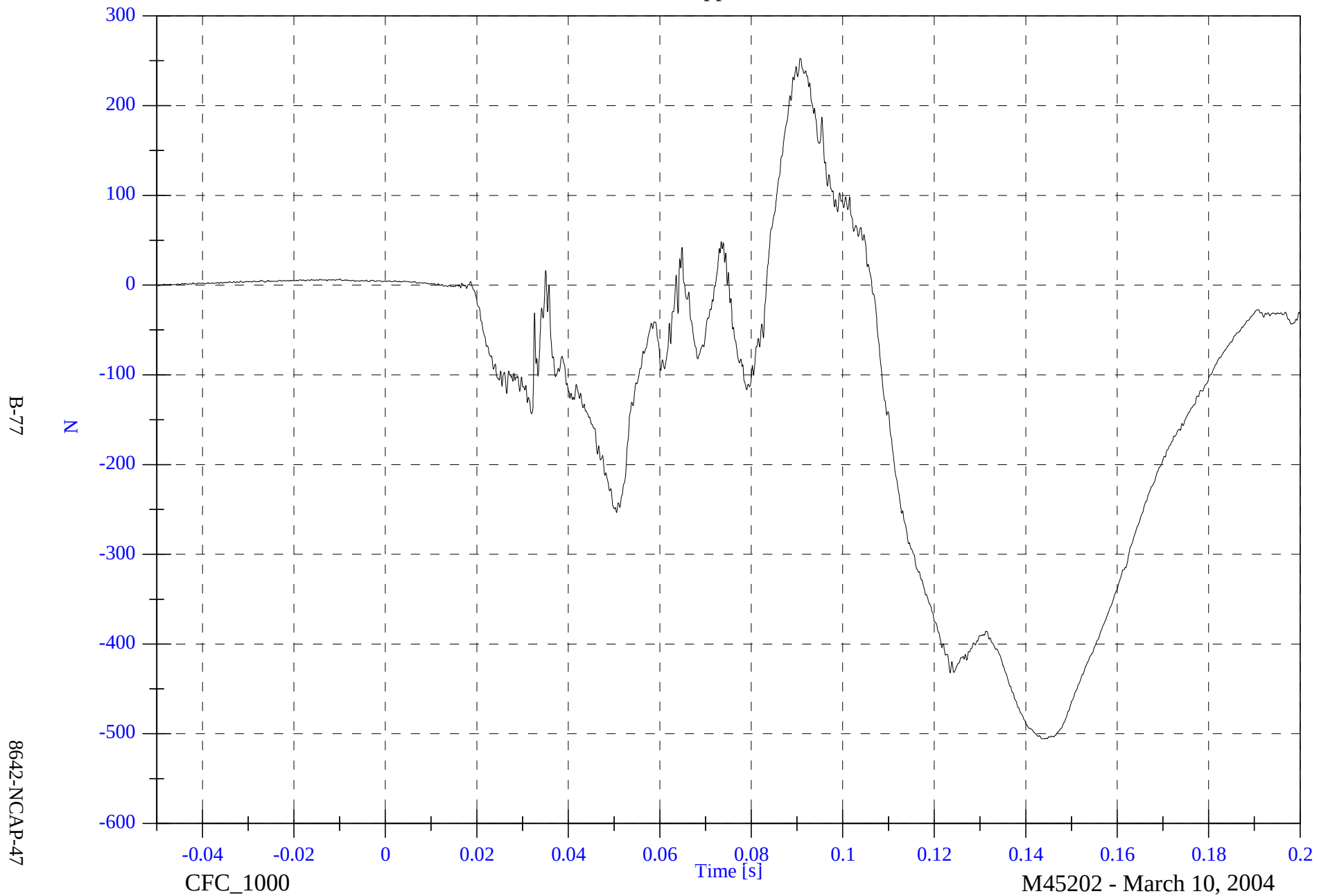


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 252.7 [N] at 0.091 [s]

Min: -505.5 [N] at 0.144 [s]

V1P2 Upper Neck Fx

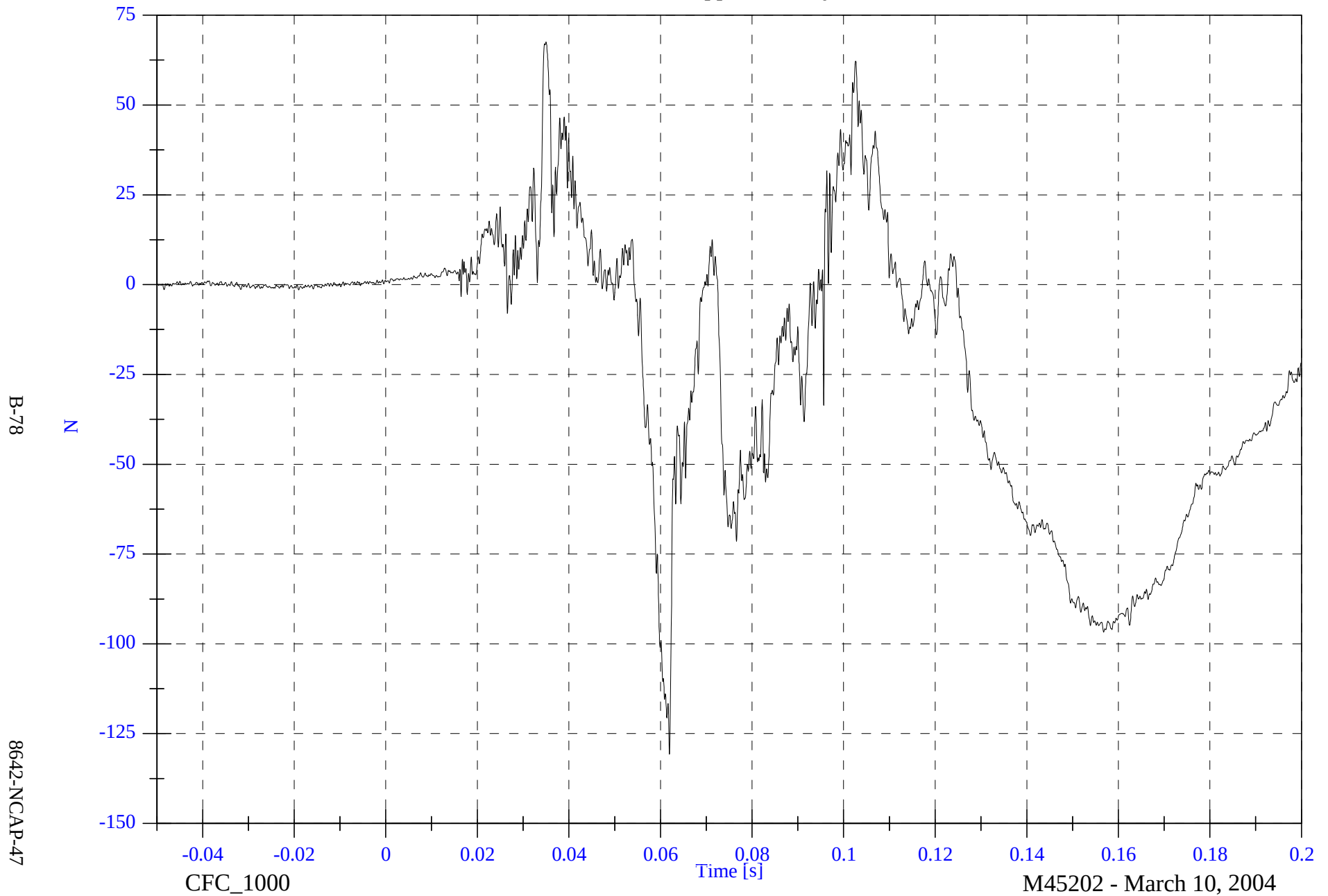


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 67.5 [N] at 0.035 [s]

Min: -130.7 [N] at 0.062 [s]

V1P2 Upper Neck Fy

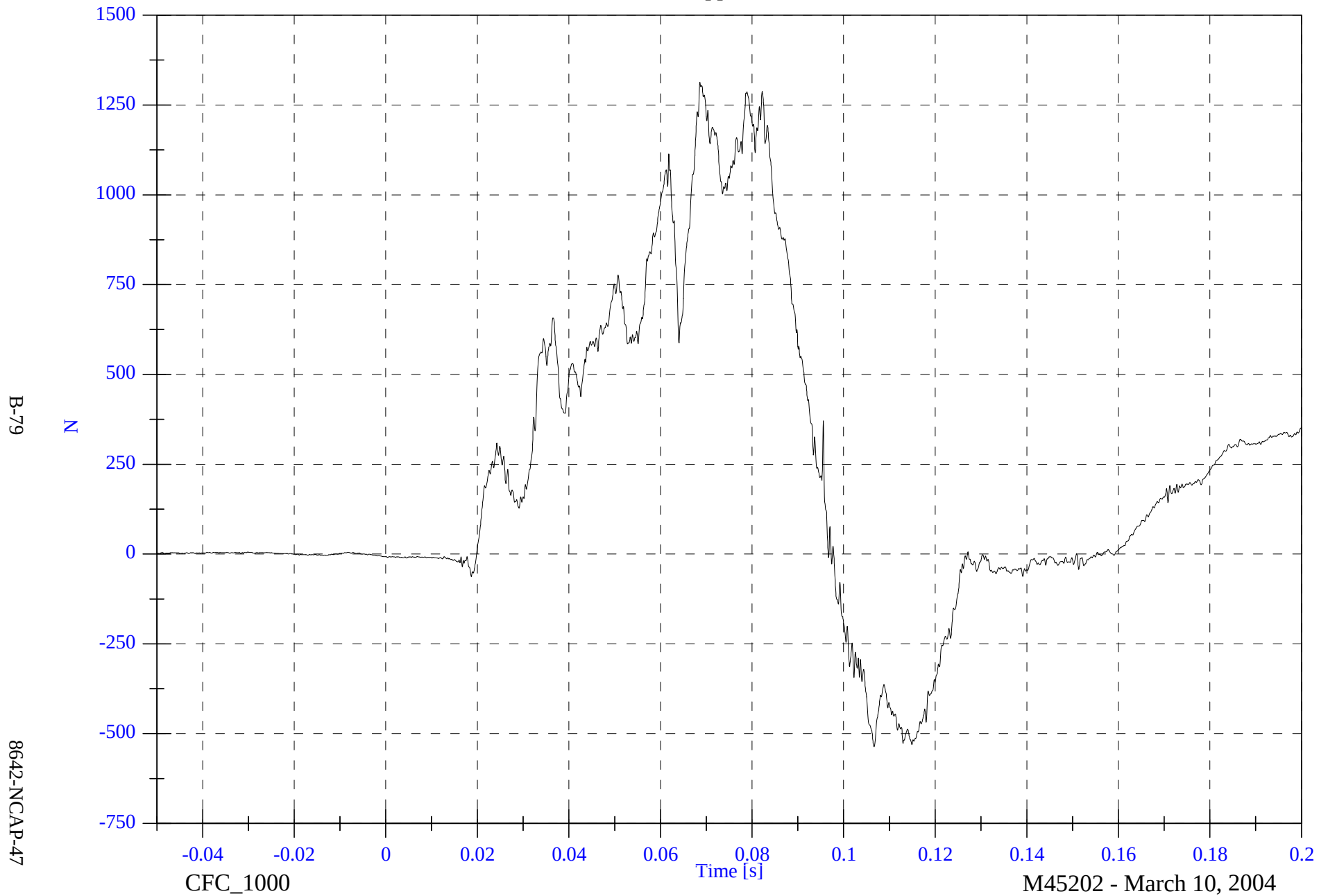


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1313.4 [N] at 0.069 [s]

Min: -536.3 [N] at 0.107 [s]

V1P2 Upper Neck Fz

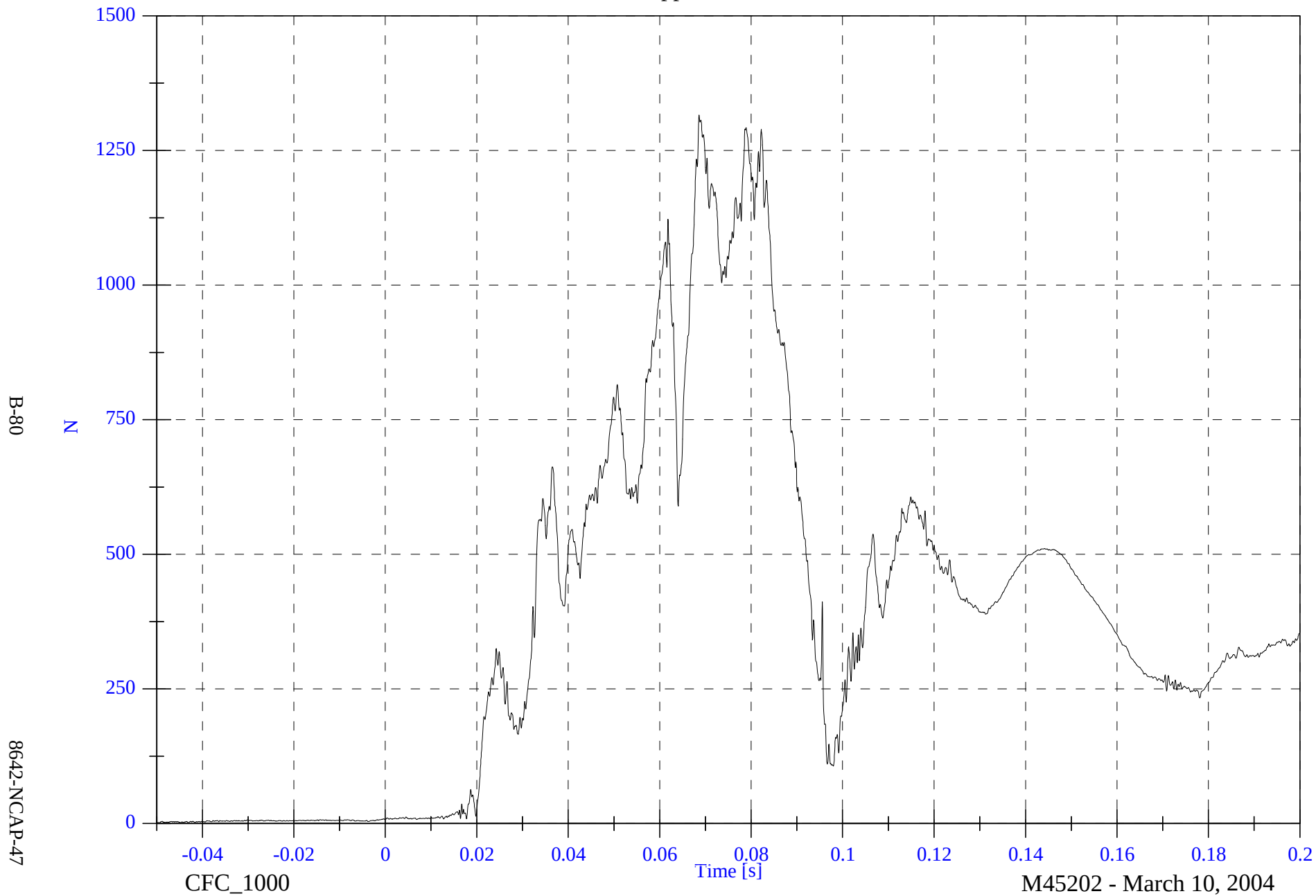


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1315.7 [N] at 0.069 [s]

V1P2 Upper Neck F Resultant

Min: 1.3 [N] at -0.049 [s]

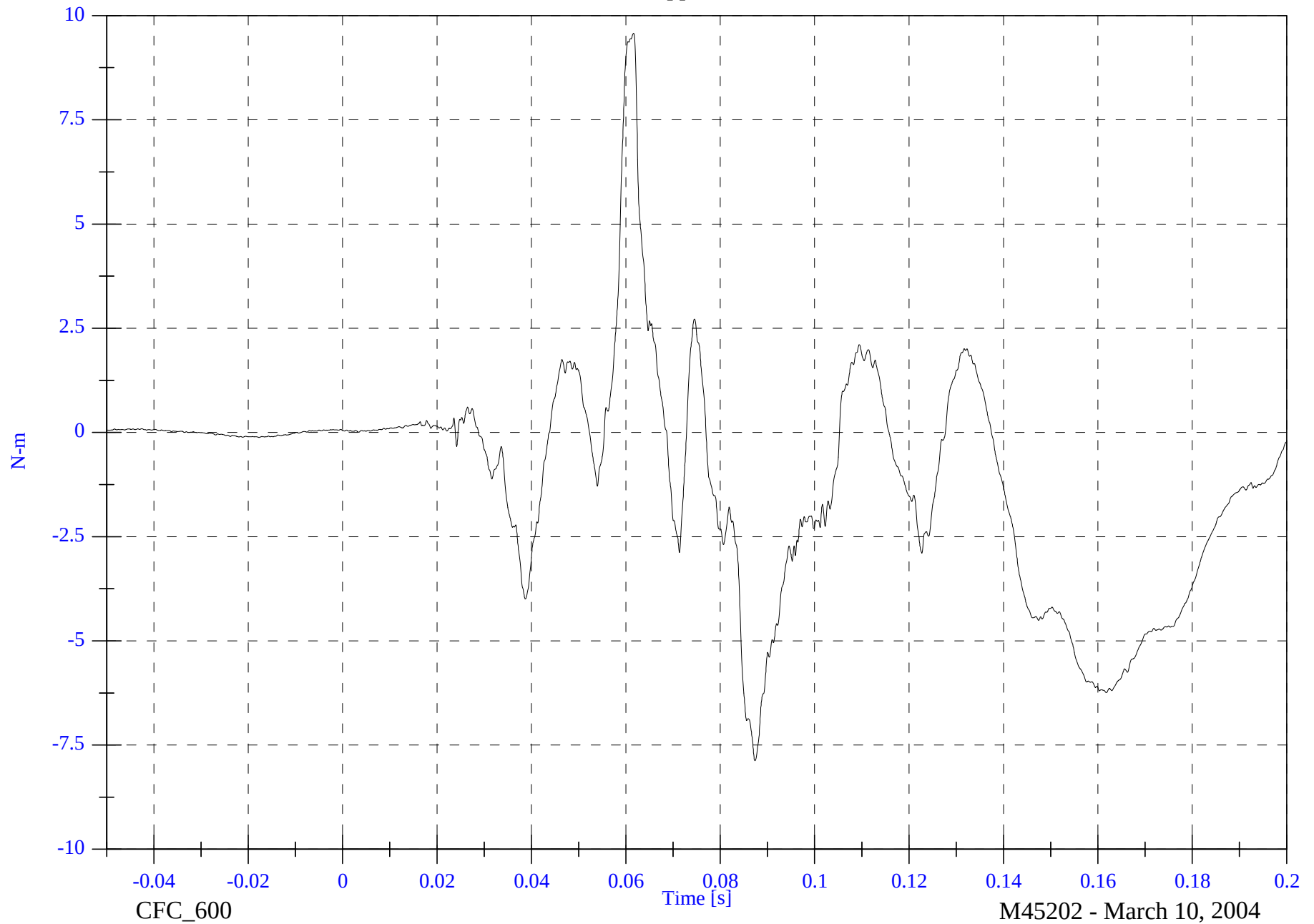


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 9.6 [N-m] at 0.062 [s]

Min: -7.9 [N-m] at 0.087 [s]

V1P2 Upper Neck Mx



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8642-NCAP-47

CFC_600

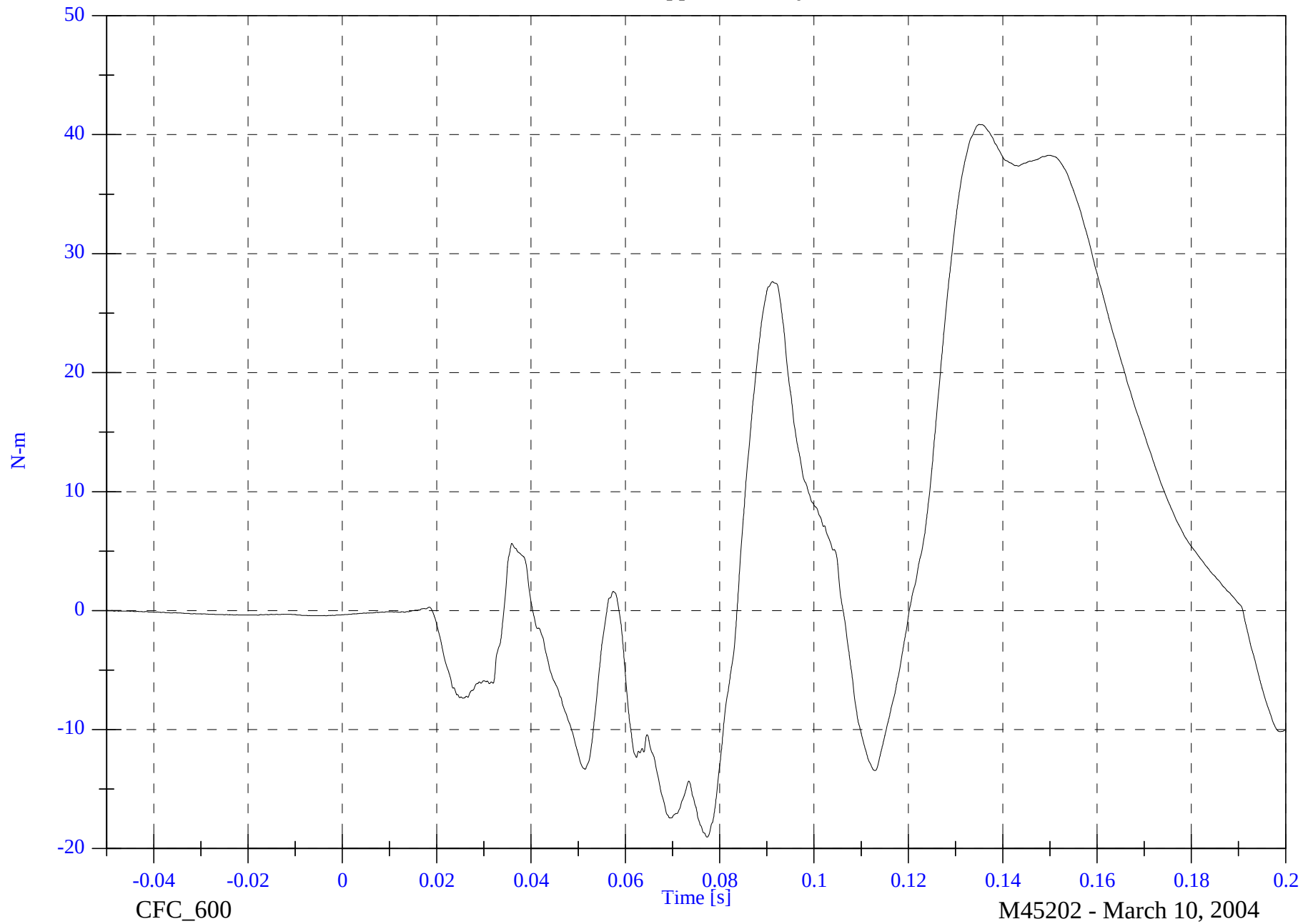
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Upper Neck My

Max: 40.9 [N-m] at 0.135 [s]

Min: -19.0 [N-m] at 0.077 [s]



B-82

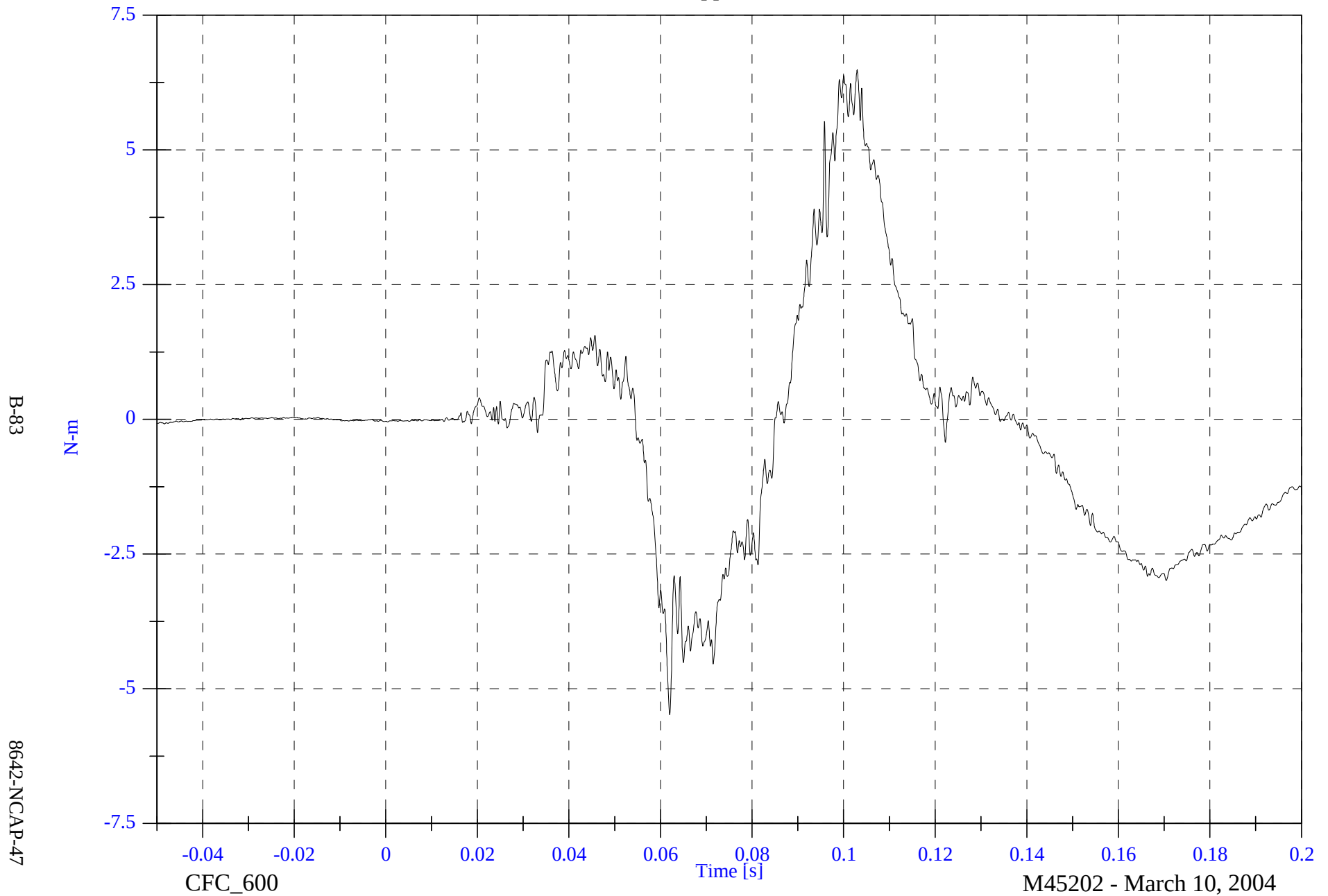
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6.5 [N-m] at 0.103 [s]

Min: -5.5 [N-m] at 0.062 [s]

V1P2 Upper Neck Mz

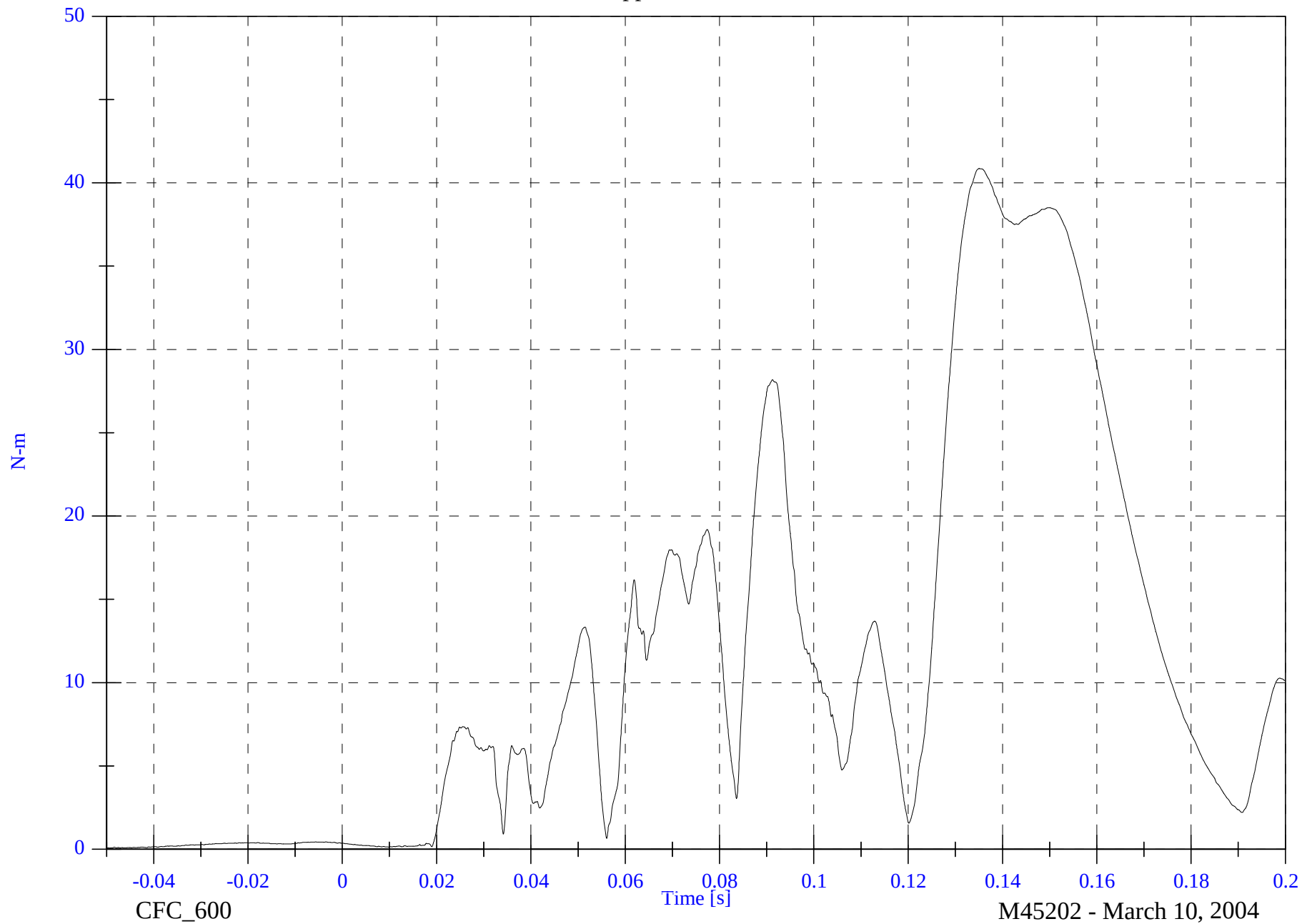


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Upper Neck M Resultant

Max: 40.9 [N-m] at 0.135 [s]

Min: 0.1 [N-m] at -0.049 [s]



B-84

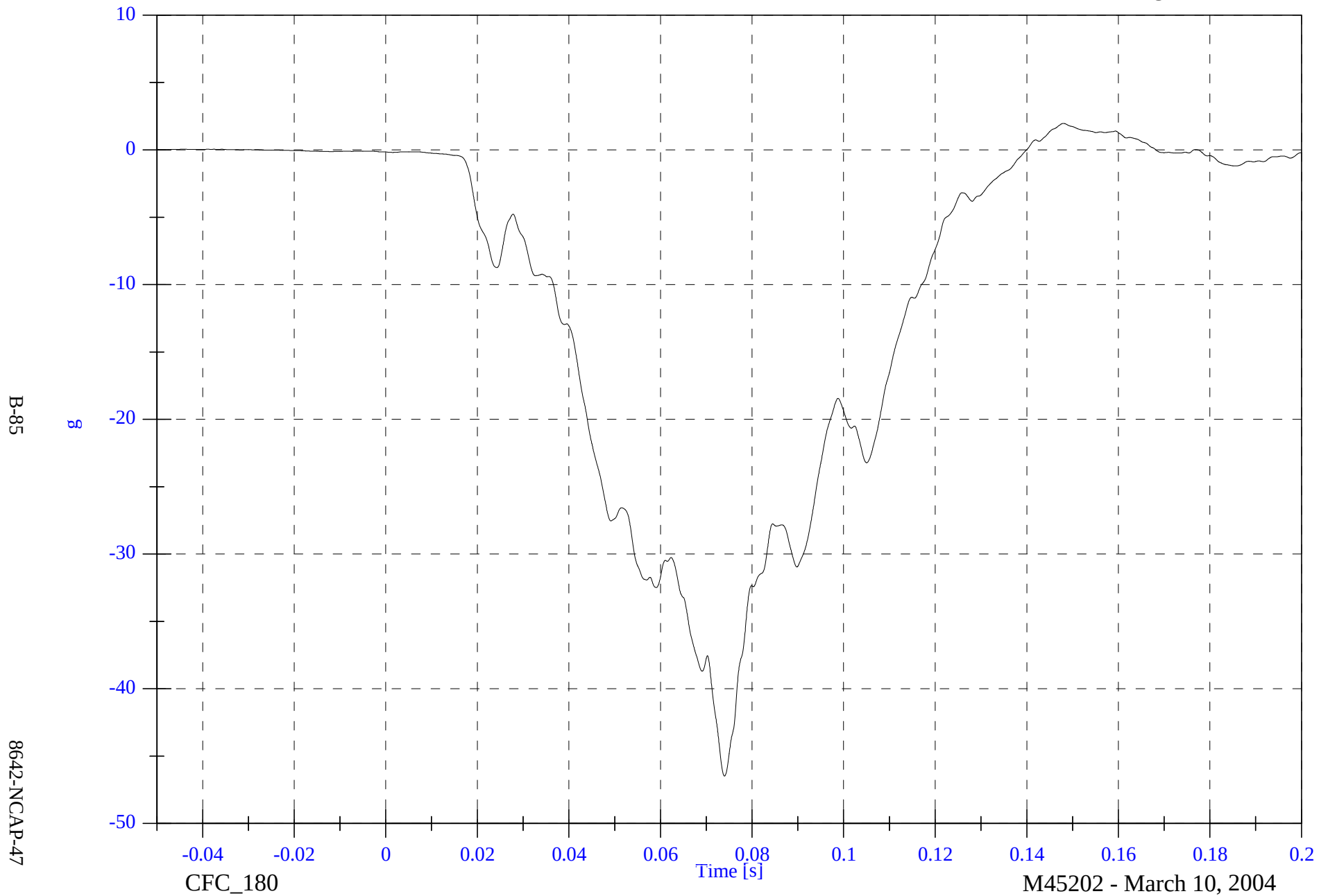
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Chest x

Max: 2.0 [g] at 0.148 [s]

Min: -46.5 [g] at 0.074 [s]

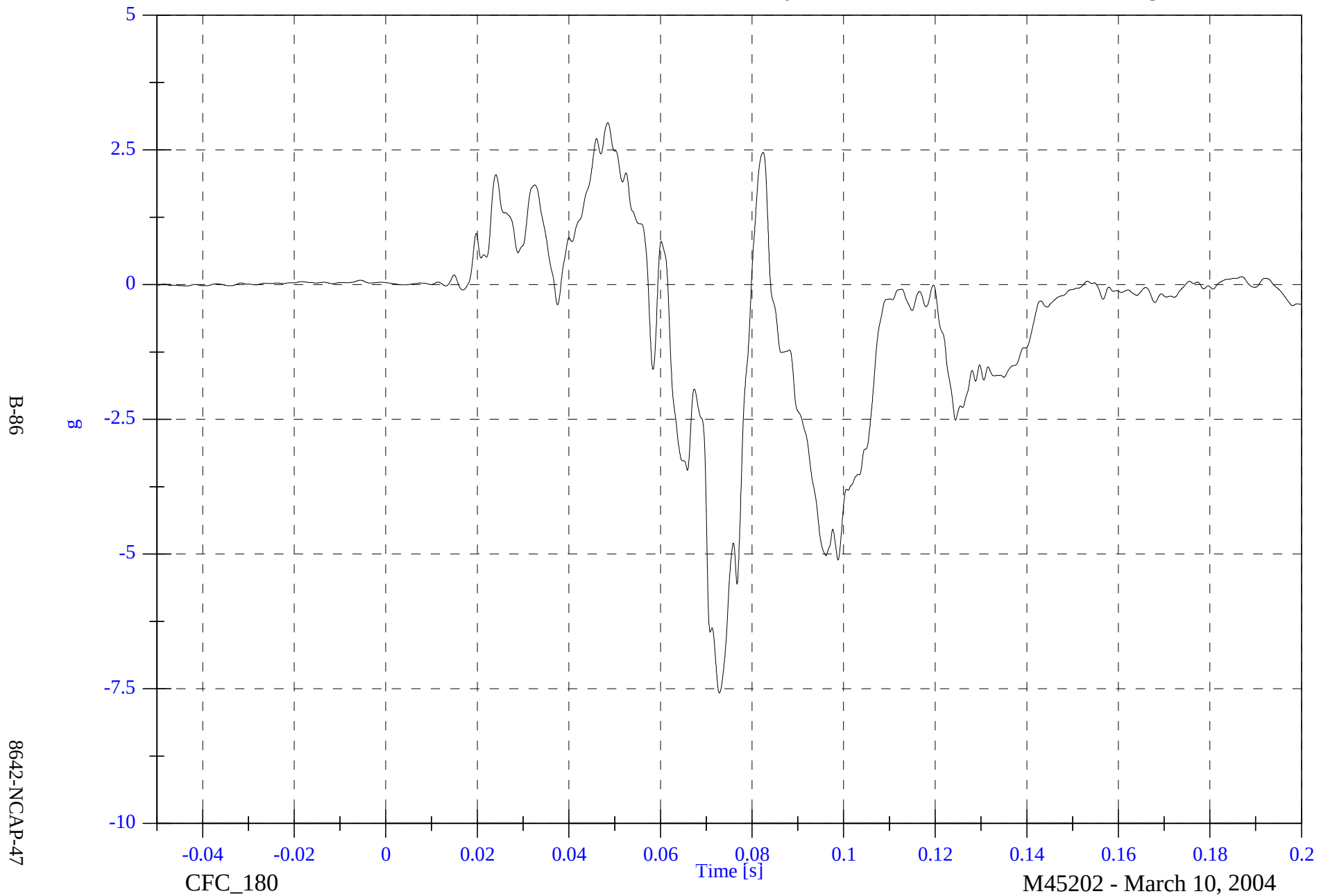


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 3.0 [g] at 0.048 [s]

Min: -7.6 [g] at 0.073 [s]

V1P2 Chest y



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Chest z

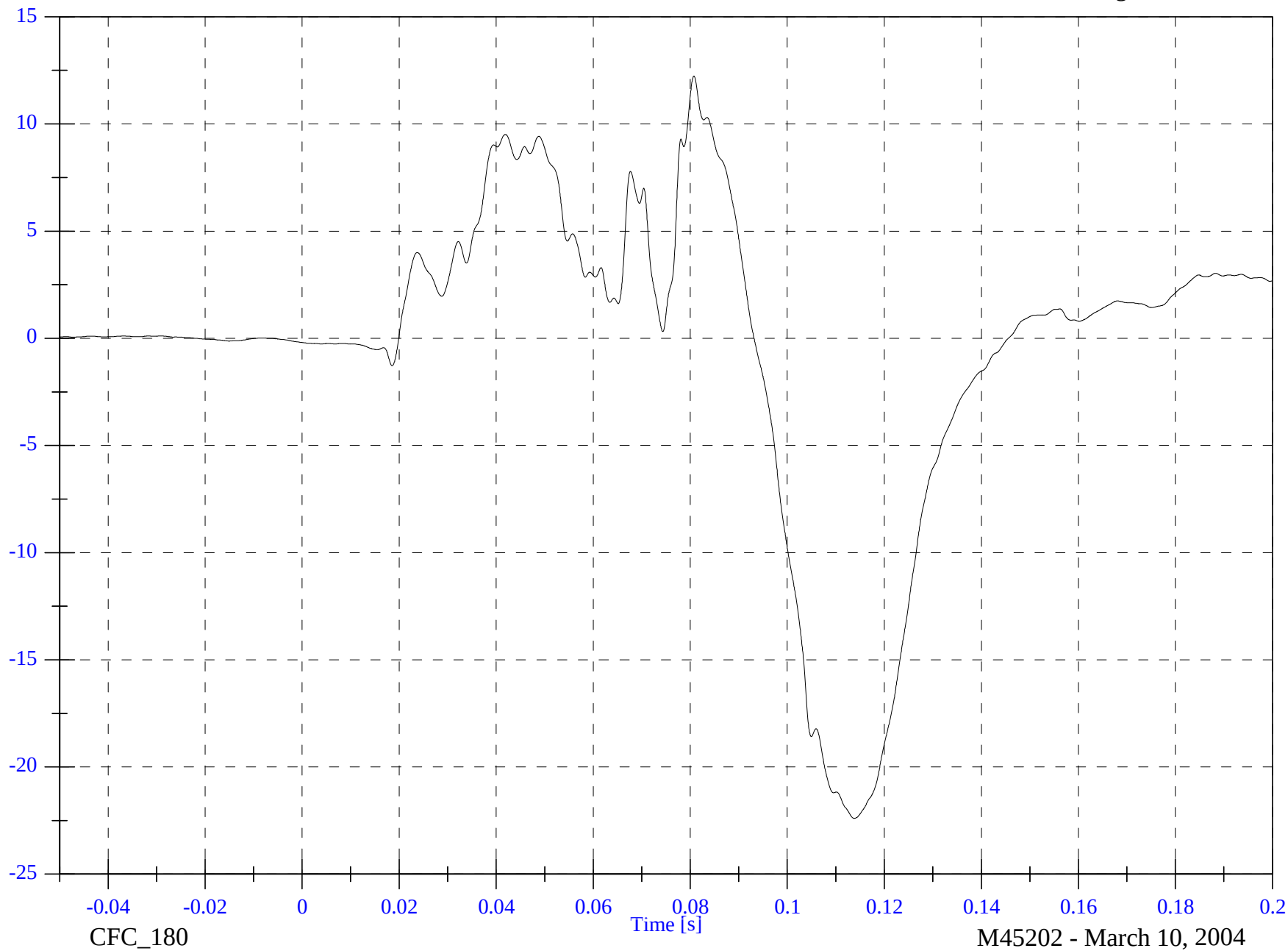
Max: 12.2 [g] at 0.081 [s]

Min: -22.4 [g] at 0.114 [s]

B-87

8642-NCAP-47

g



2004 NCAP Test 11 2004 Infiniti FX35/45

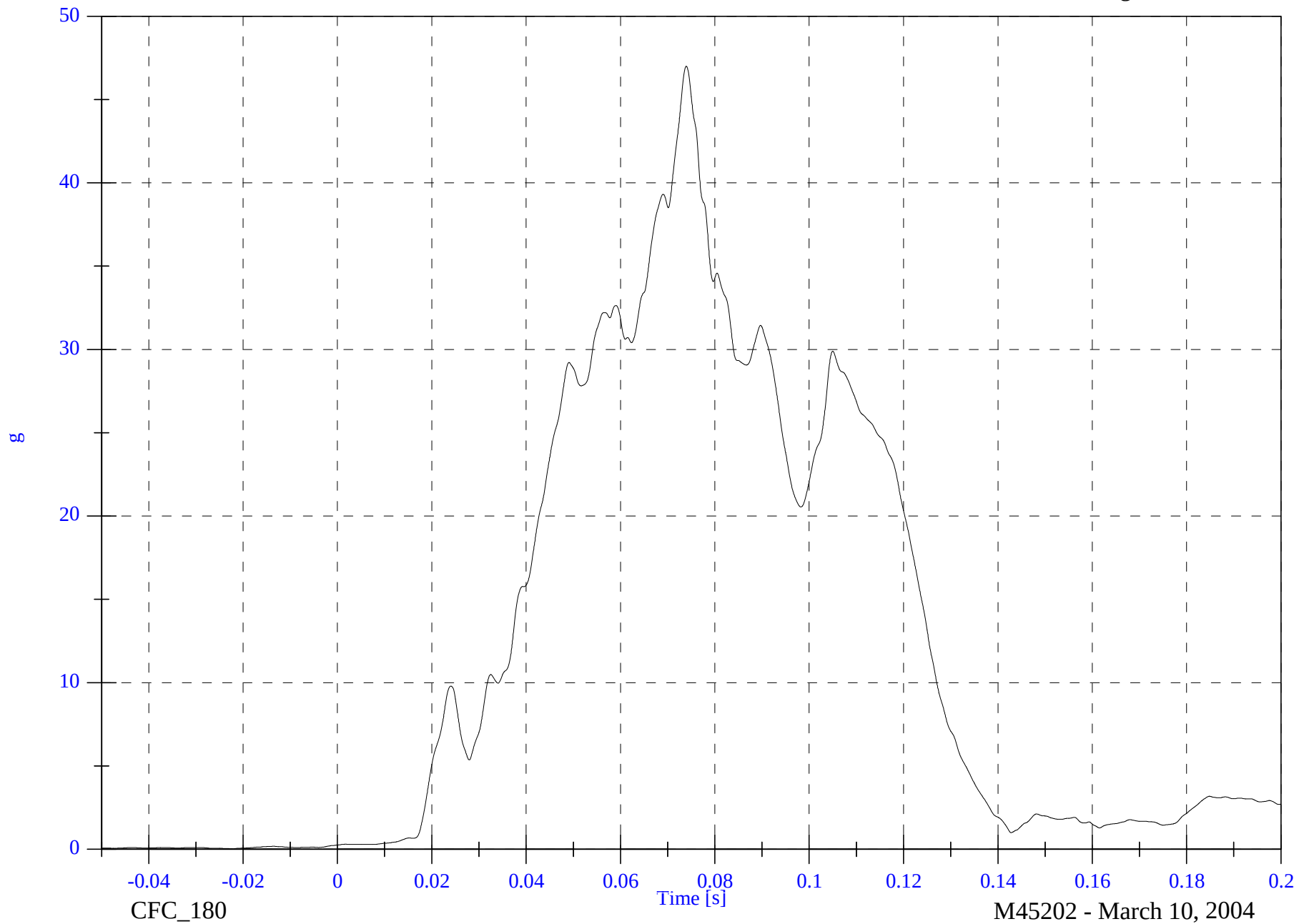
V1P2 Chest Resultant

Max: 47.0 [g] at 0.074 [s]

Min: 0.0 [g] at -0.022 [s]

B-88

8642-NCAP-47

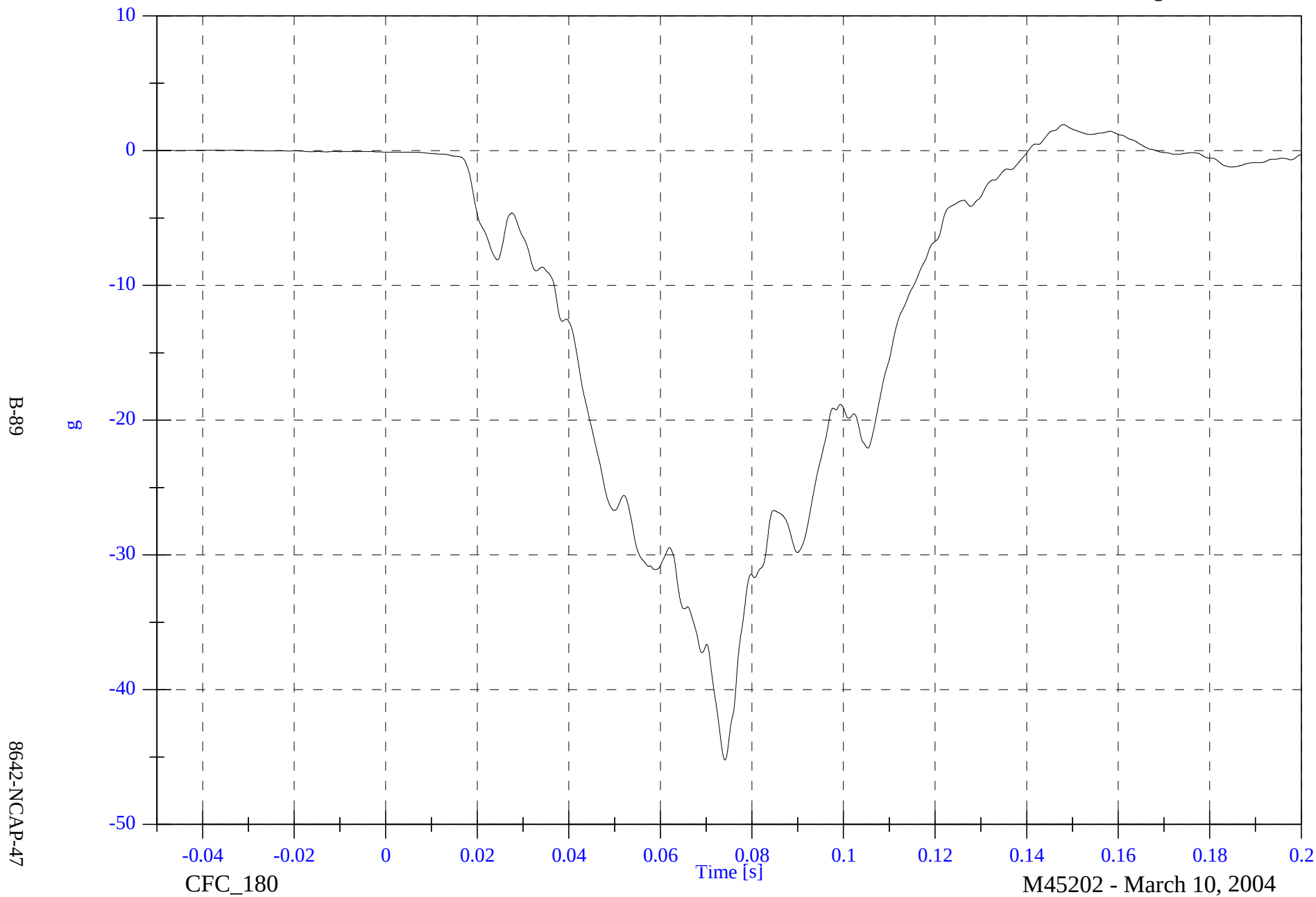


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Chest Red x

Max: 1.9 [g] at 0.148 [s]

Min: -45.2 [g] at 0.074 [s]

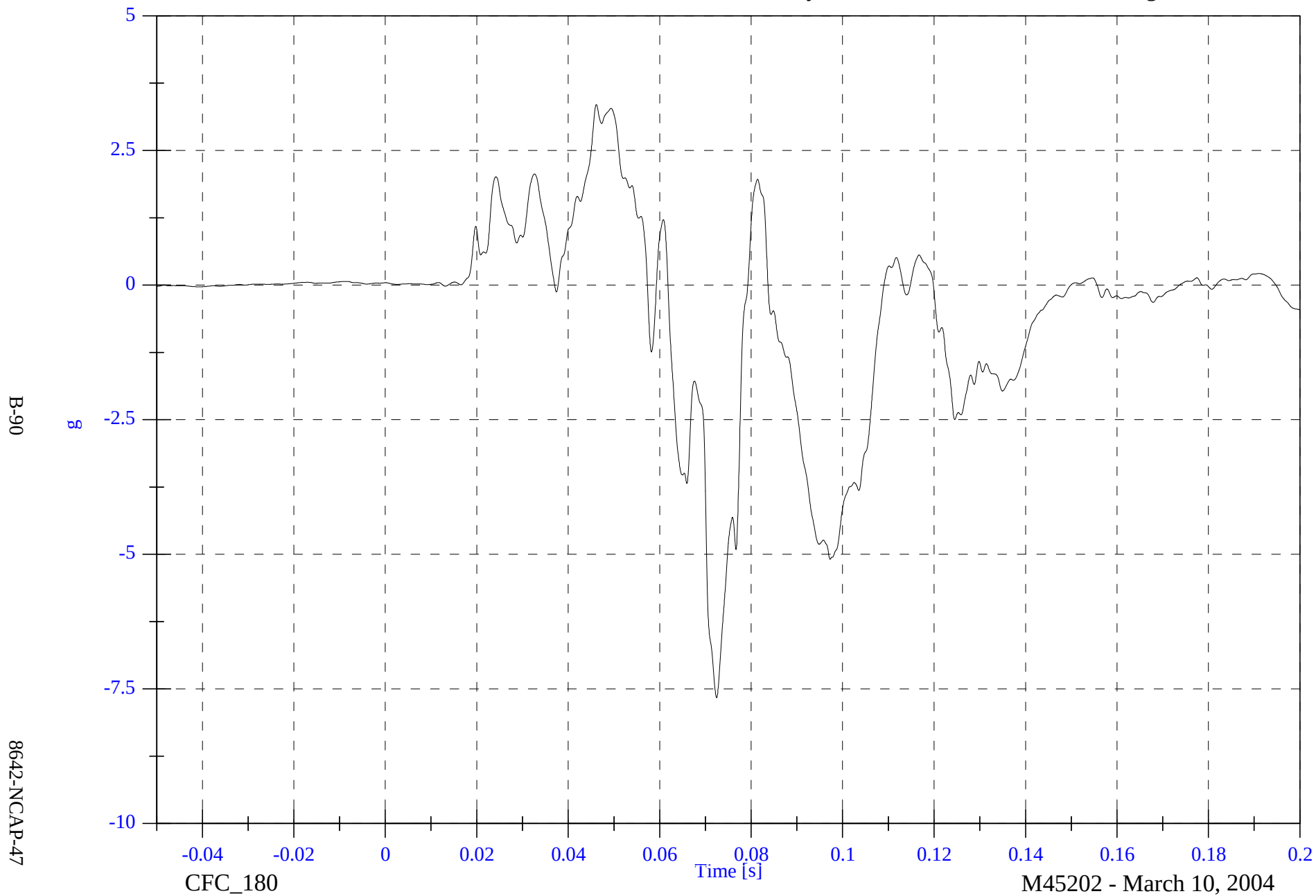


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Chest Red y

Max: 3.4 [g] at 0.046 [s]

Min: -7.7 [g] at 0.072 [s]

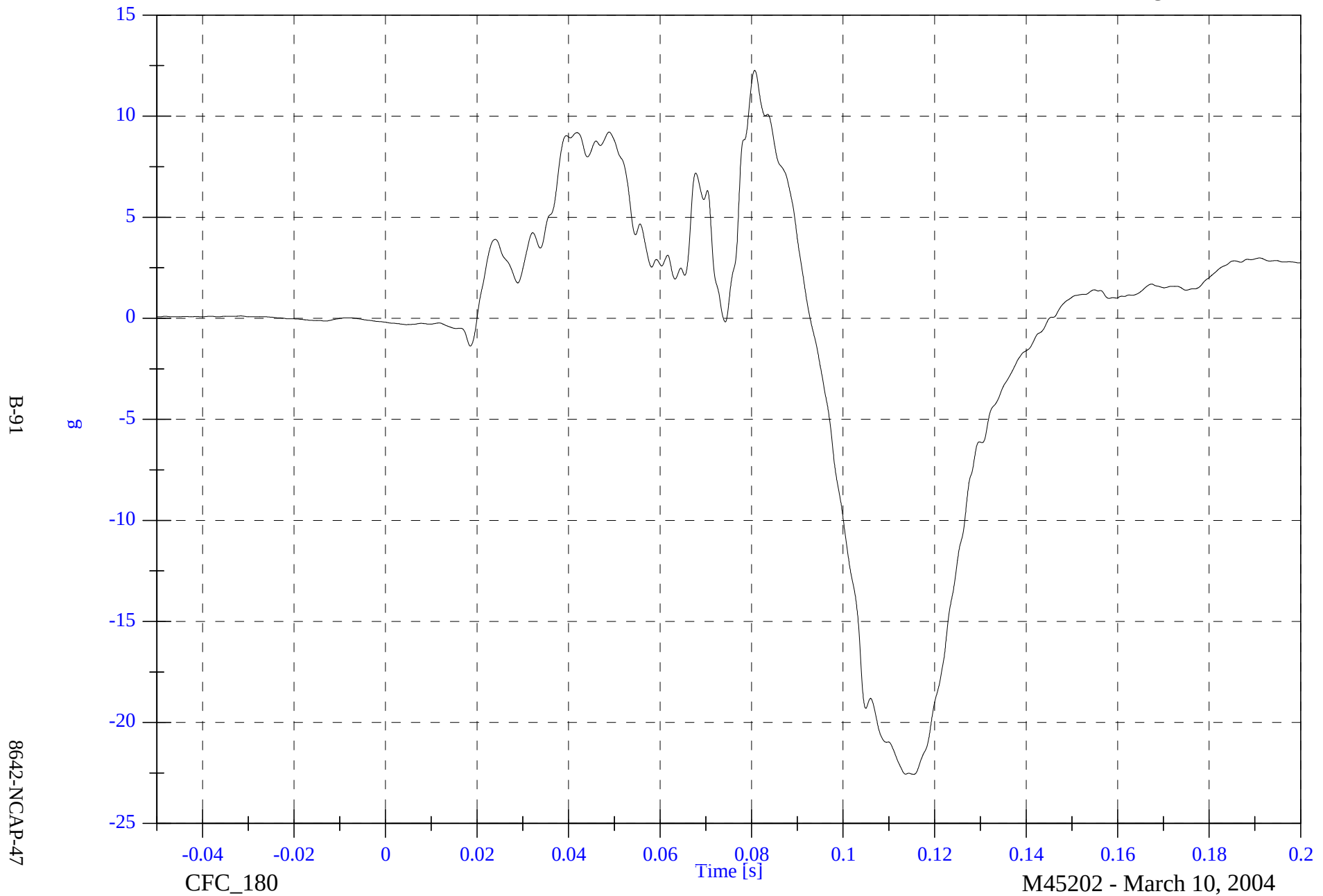


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Chest Red z

Max: 12.3 [g] at 0.081 [s]

Min: -22.6 [g] at 0.115 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

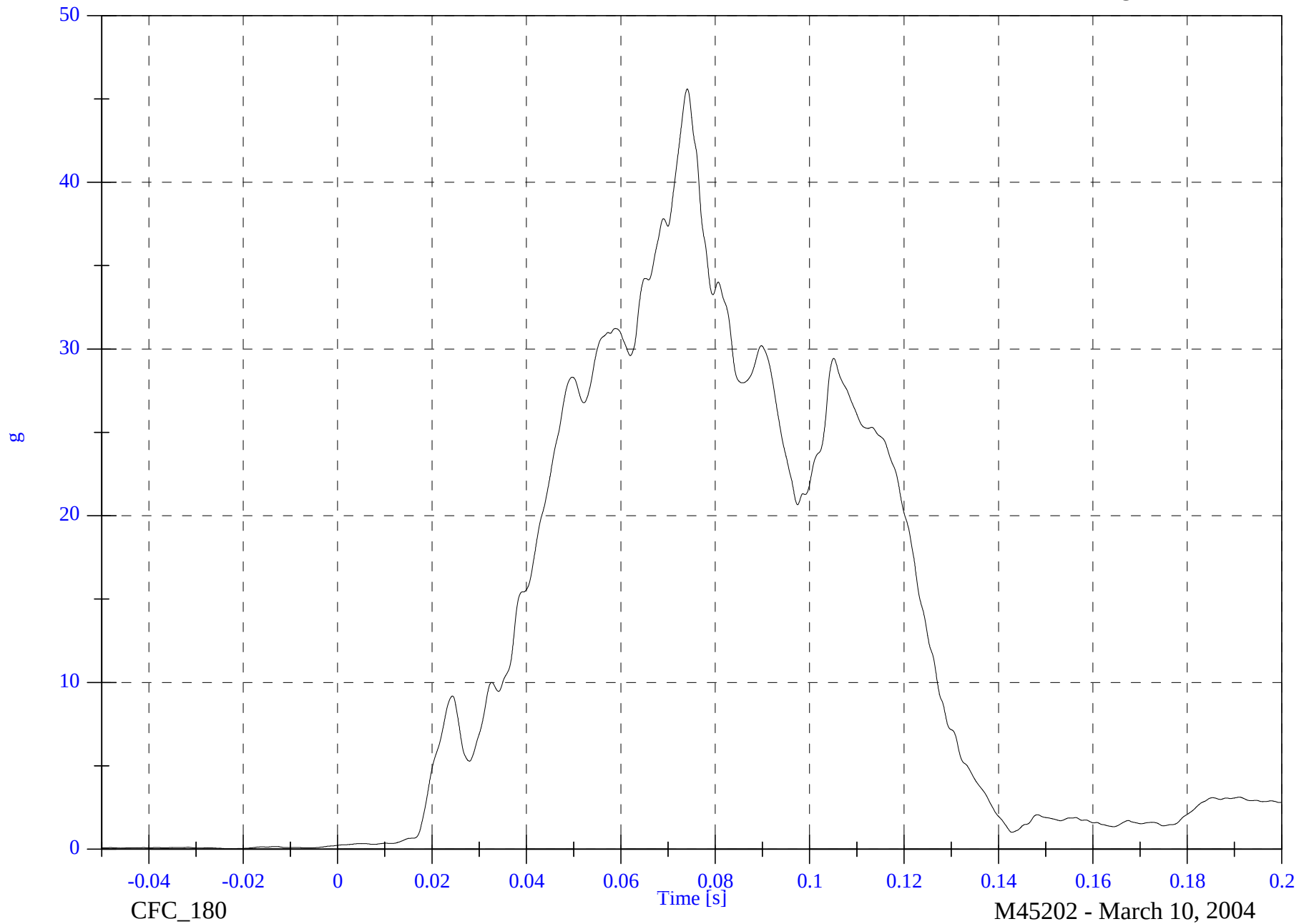
V1P2 Chest Red Resultant

Max: 45.6 [g] at 0.074 [s]

Min: 0.0 [g] at -0.022 [s]

B-92

8642-NCAP-47

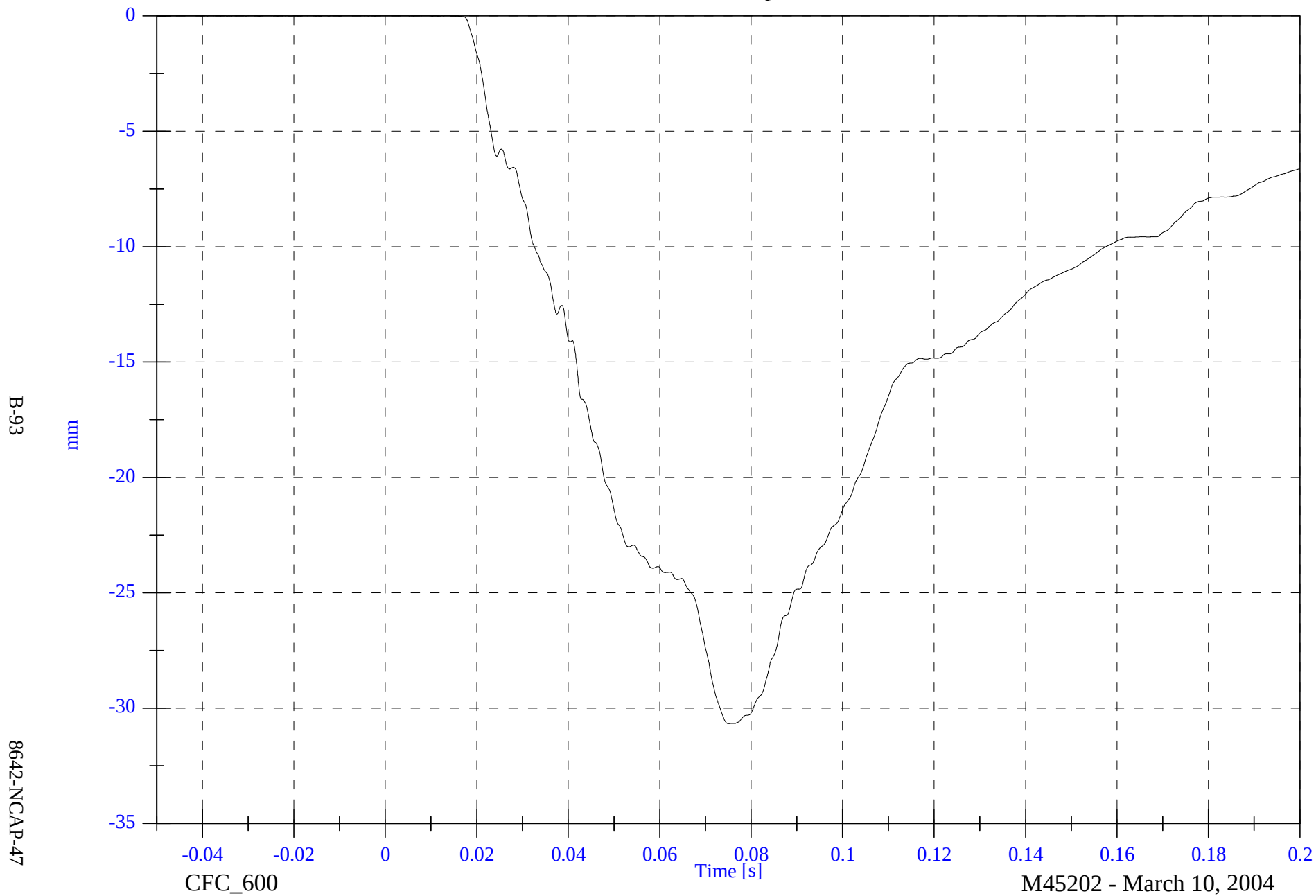


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Chest Compression x

Max: 0.0 [mm] at -0.020 [s]

Min: -30.7 [mm] at 0.075 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

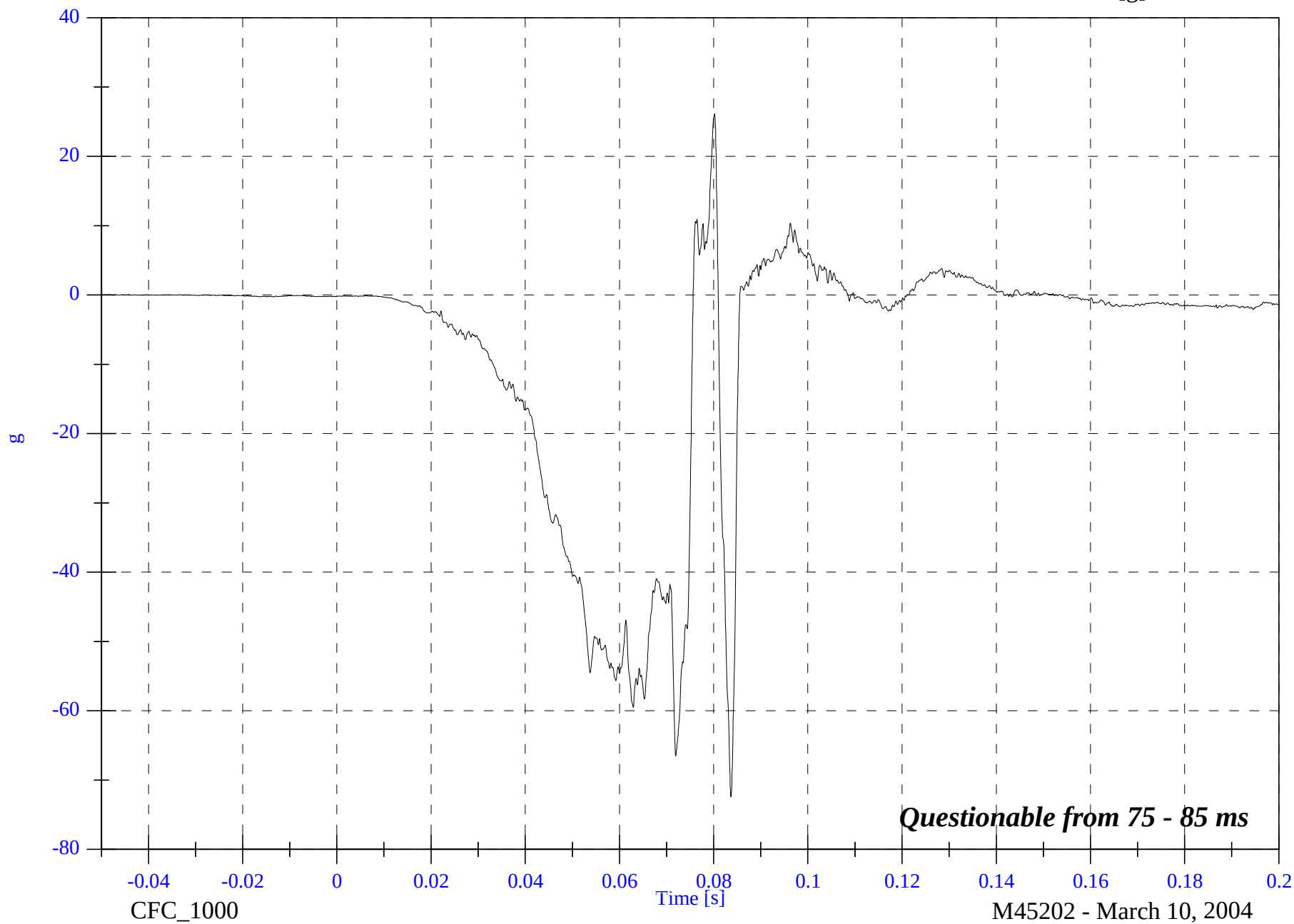
Max: 26.1 [g] at 0.080 [s]

Min: -72.4 [g] at 0.084 [s]

V1P2 Pelvic x

B-94

8642-NCAP-47

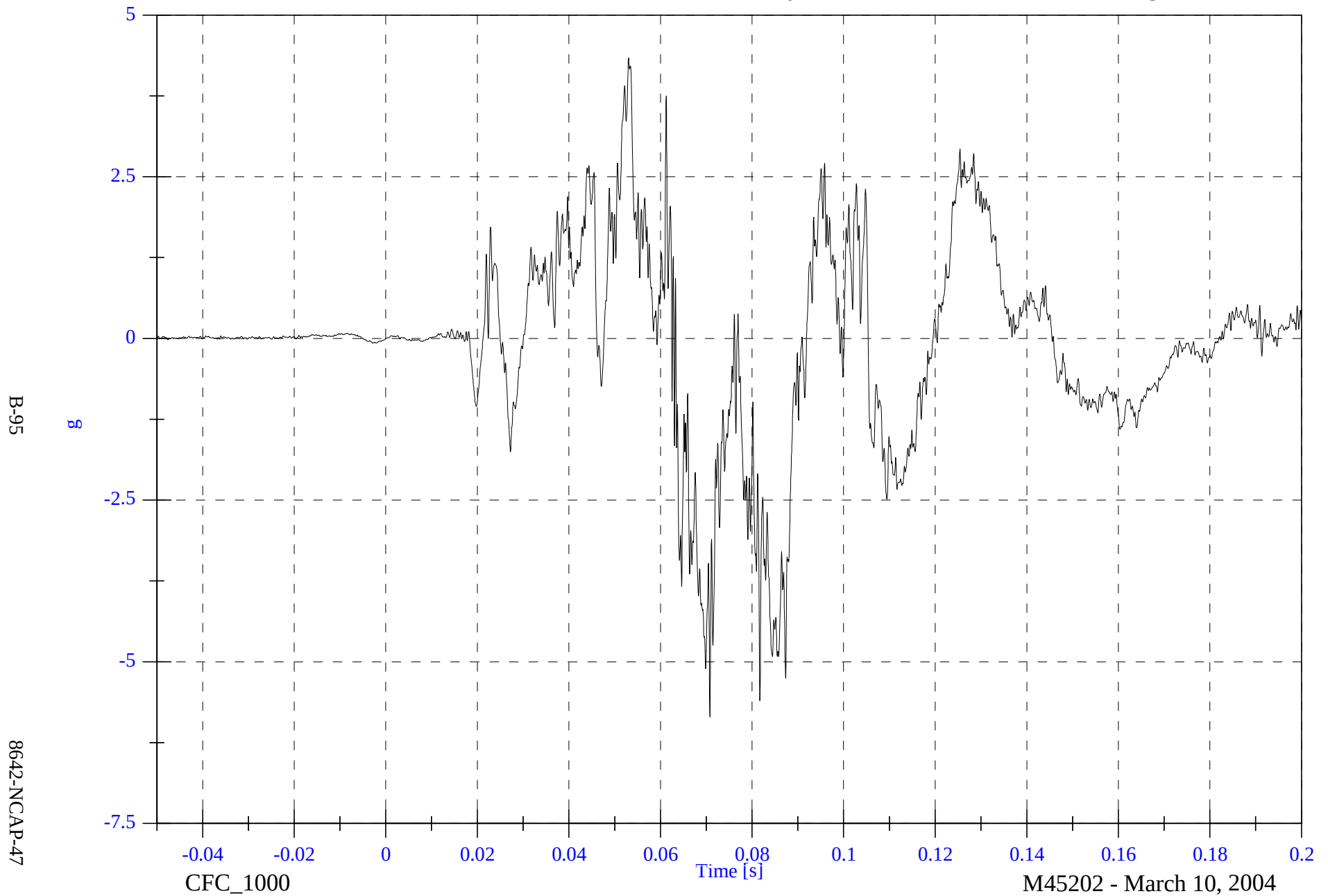


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Pelvic y

Max: 4.3 [g] at 0.053 [s]

Min: -5.9 [g] at 0.071 [s]

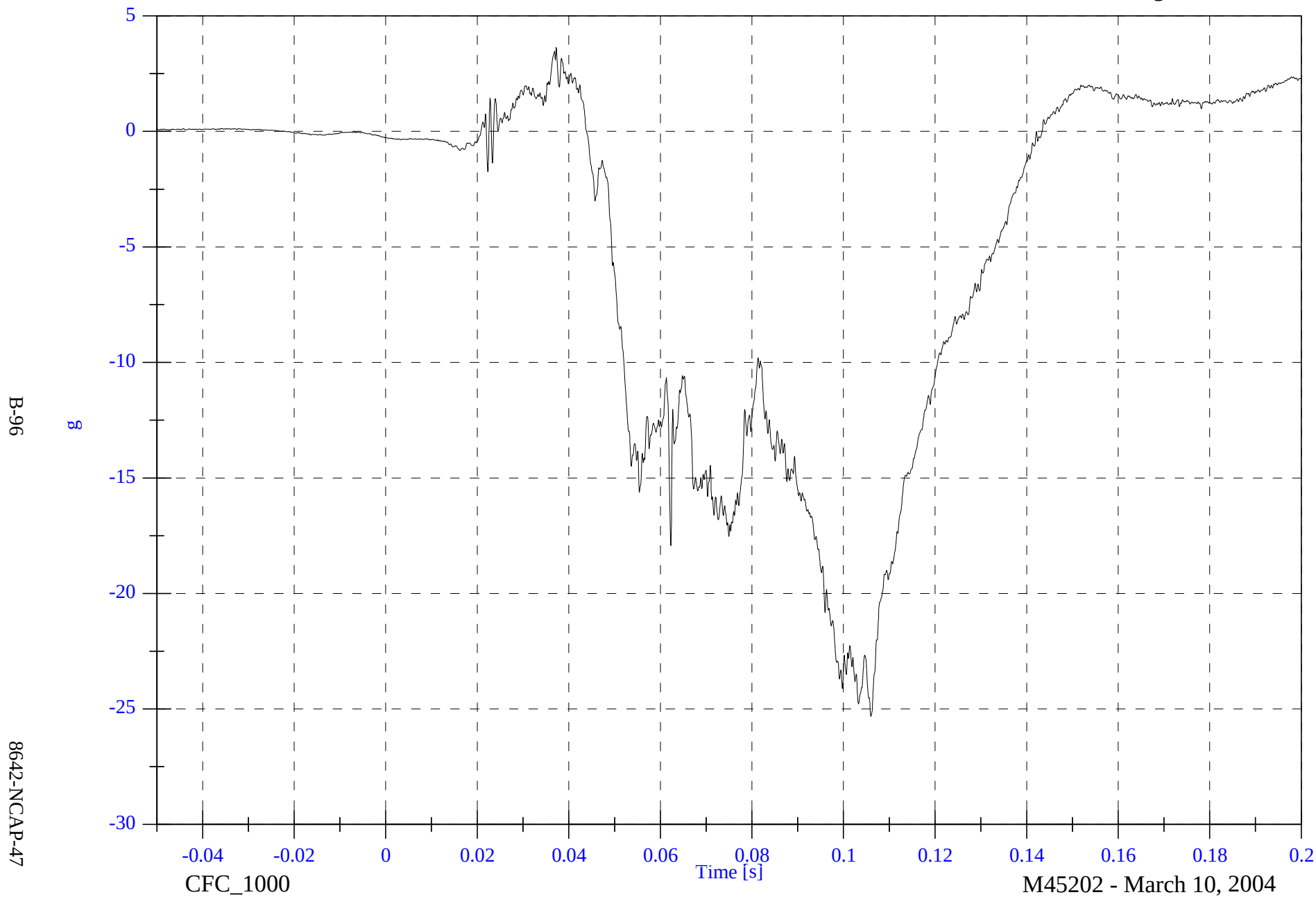


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Pelvic z

Max: 3.6 [g] at 0.037 [s]

Min: -25.3 [g] at 0.106 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

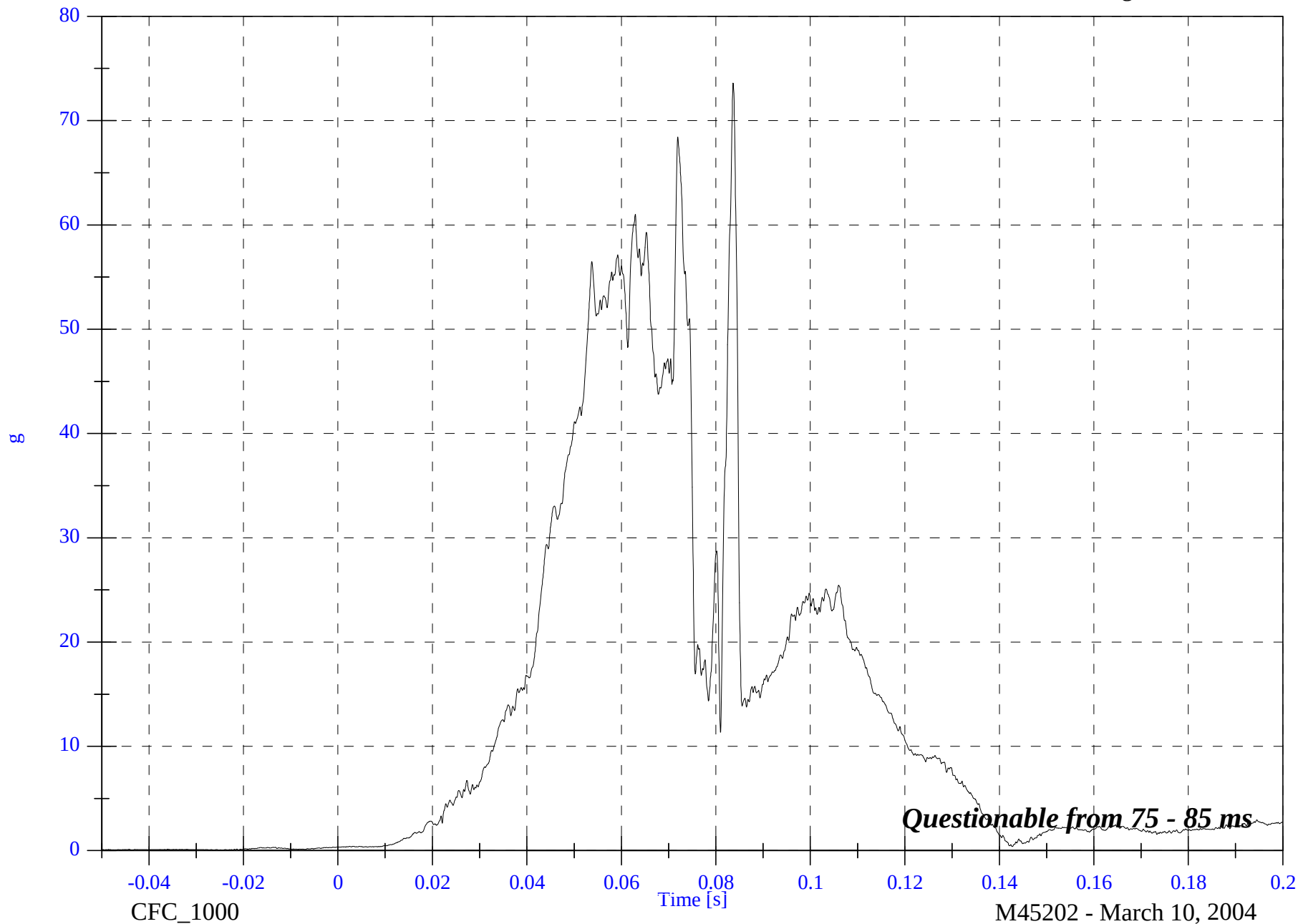
V1P2 Pelvic Resultant

Max: 73.6 [g] at 0.084 [s]

Min: 0.0 [g] at -0.021 [s]

B-97

8642-NCAP-47

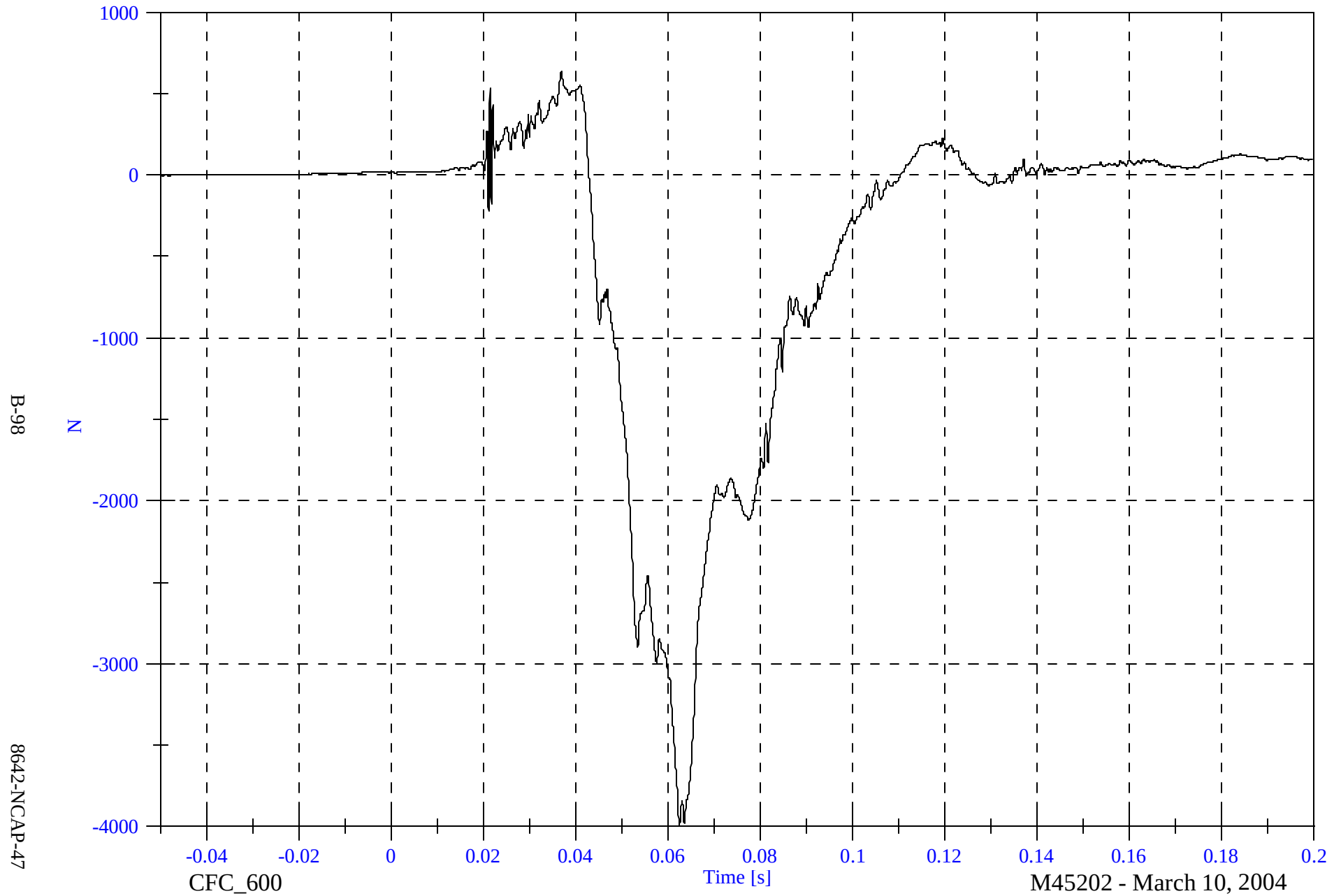


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 632.9 [N] at 0.037 [s]

Min: -3988.8 [N] at 0.063 [s]

V1P2 Left Femur z

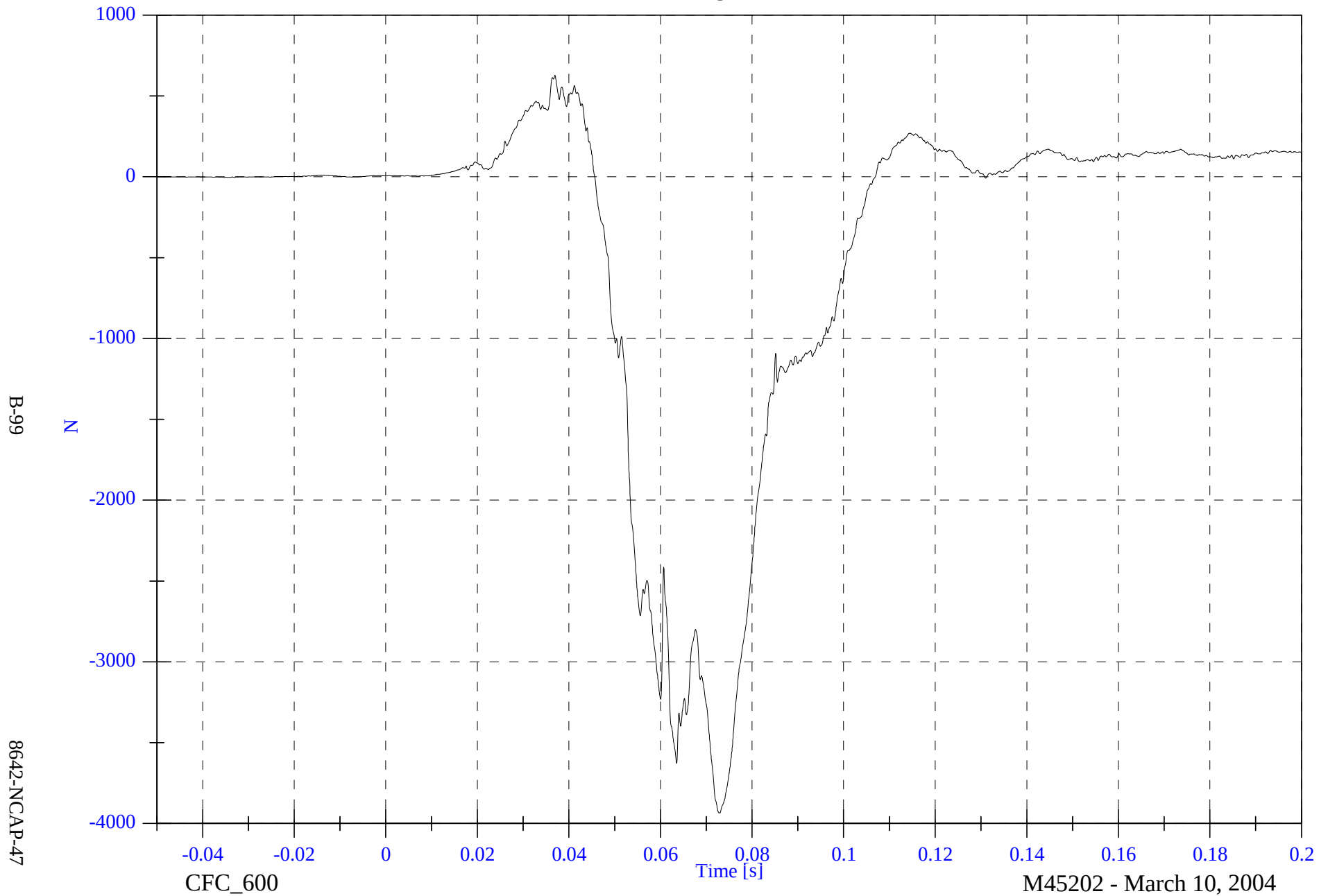


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 627.9 [N] at 0.037 [s]

Min: -3935.3 [N] at 0.073 [s]

V1P2 Right Femur z

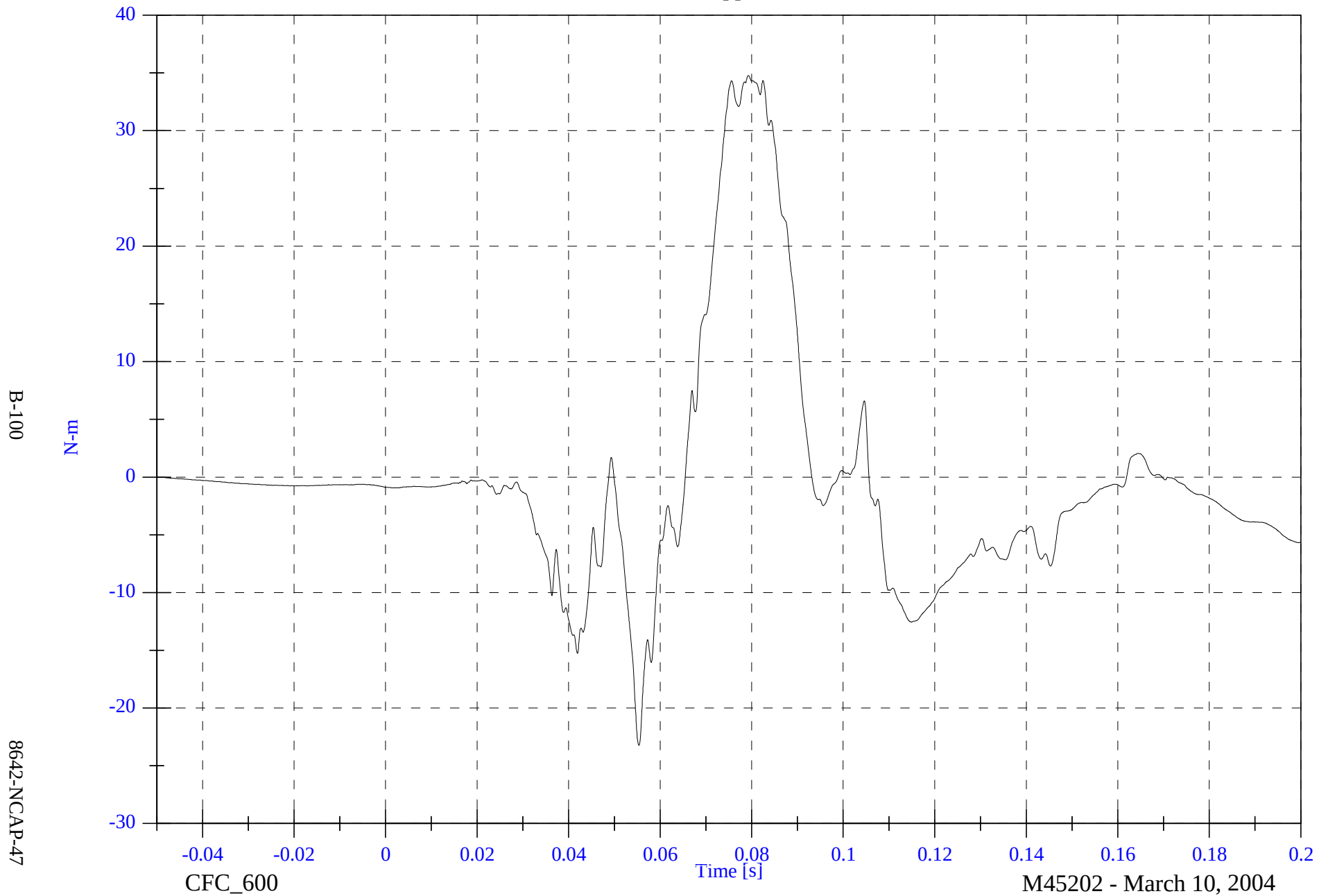


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Left Upper Tibia Mx

Max: 34.8 [N-m] at 0.079 [s]

Min: -23.2 [N-m] at 0.055 [s]

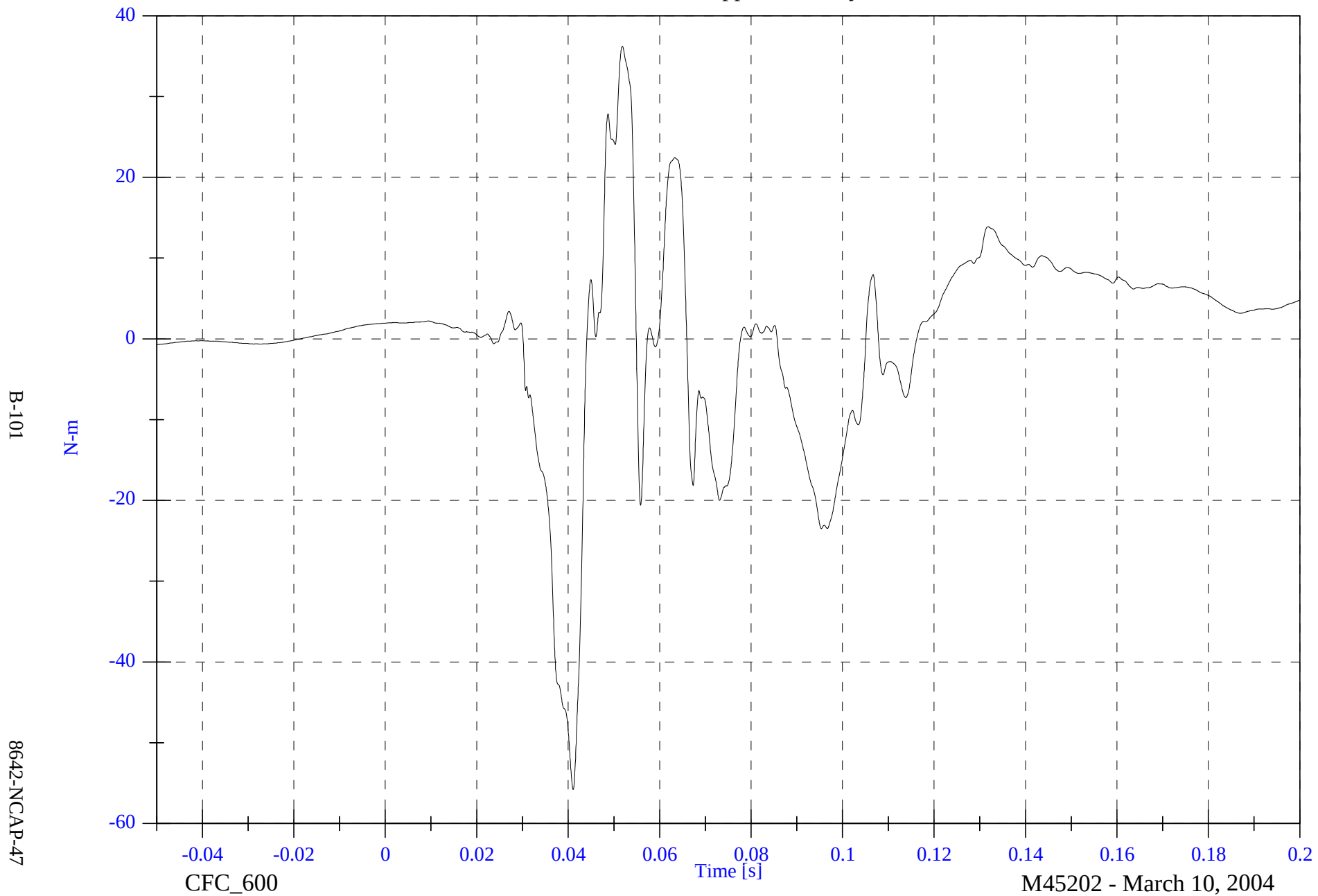


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 36.2 [N-m] at 0.052 [s]

Min: -55.8 [N-m] at 0.041 [s]

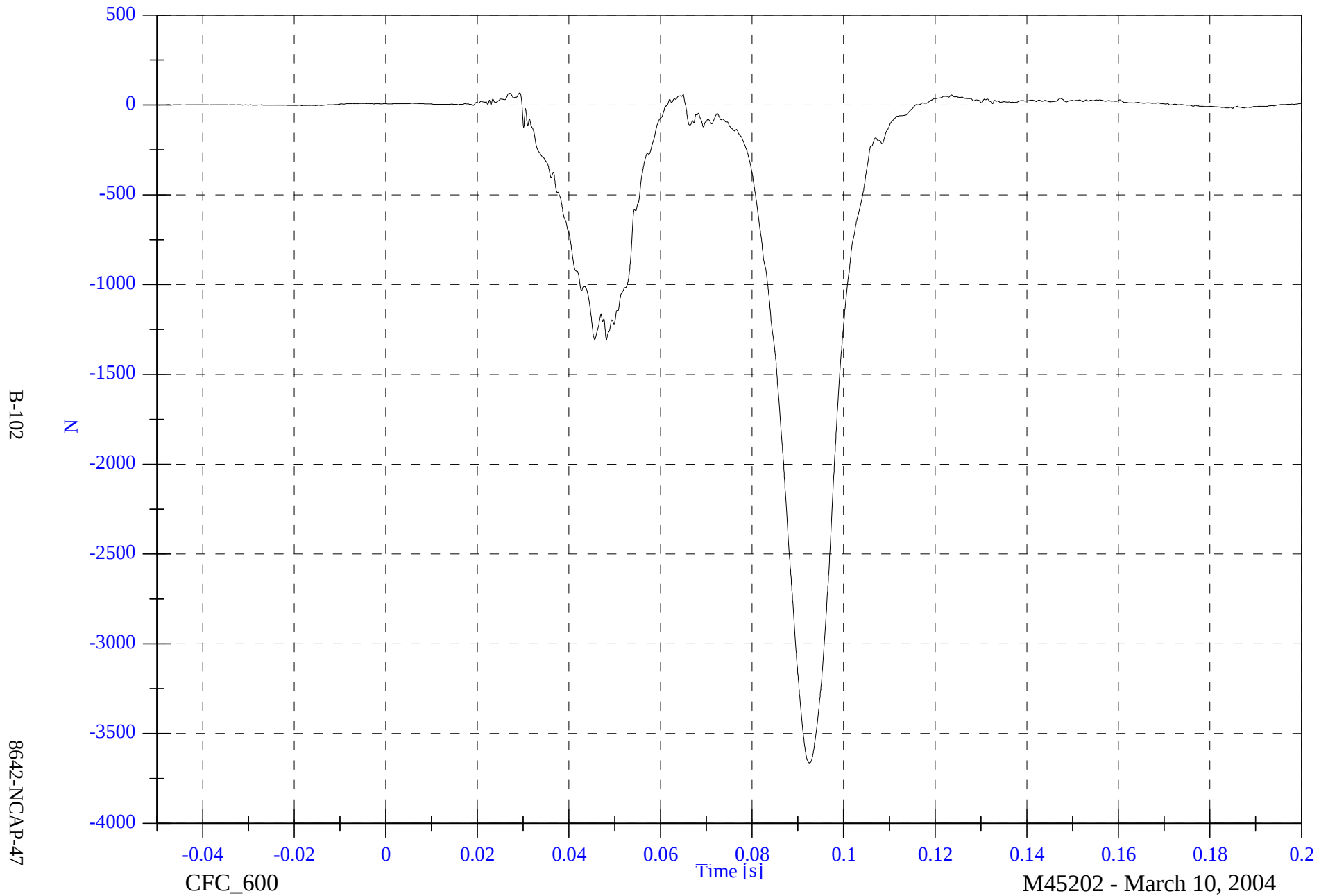
V1P2 Left Upper Tibia My



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Left Lower Tibia Fz

Max: 67.2 [N] at 0.029 [s]
Min: -3663.2 [N] at 0.093 [s]

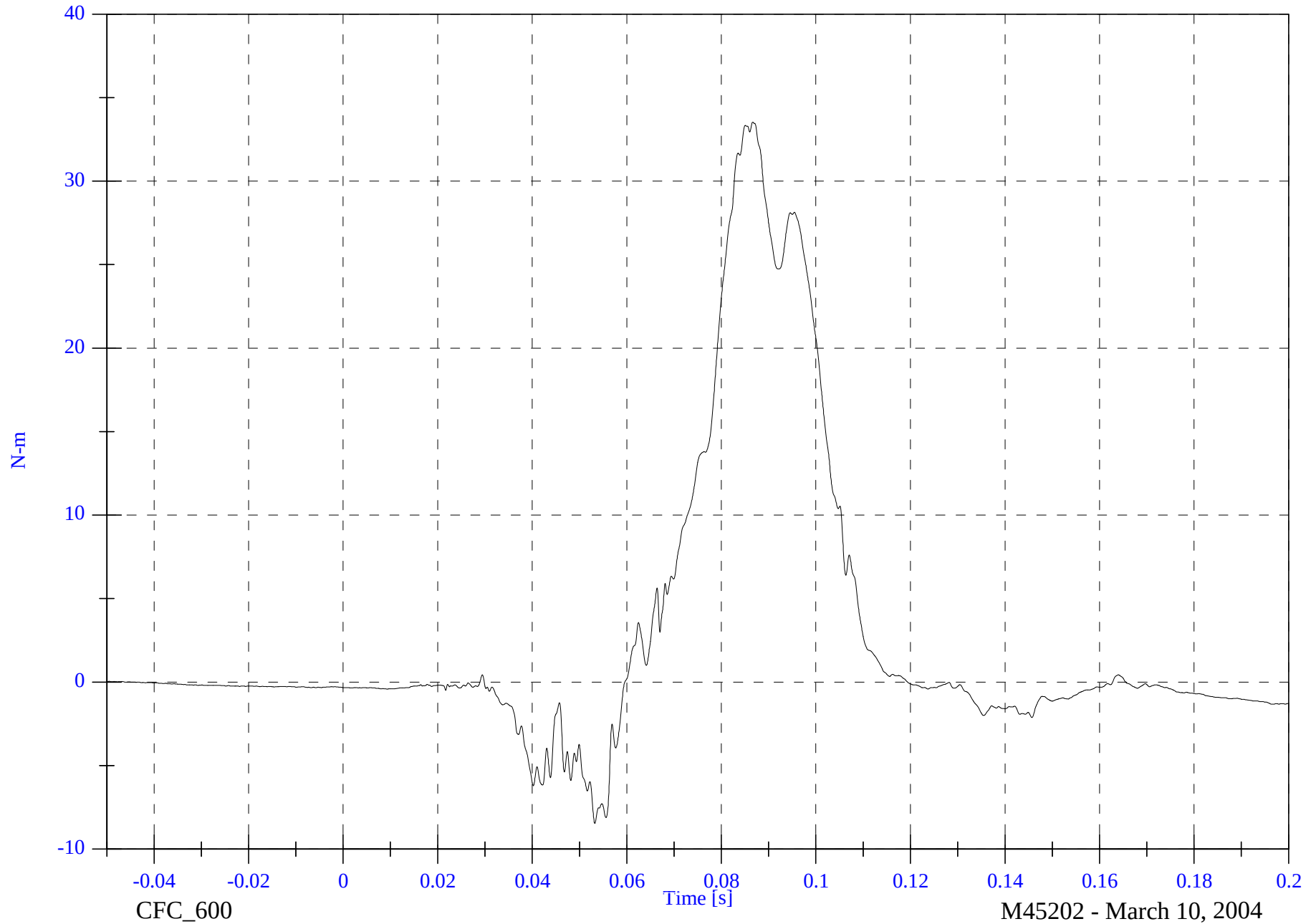


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Left Lower Tibia Mx

Max: 33.5 [N-m] at 0.087 [s]

Min: -8.5 [N-m] at 0.053 [s]



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8642-NCAP-47

CFC_600

M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

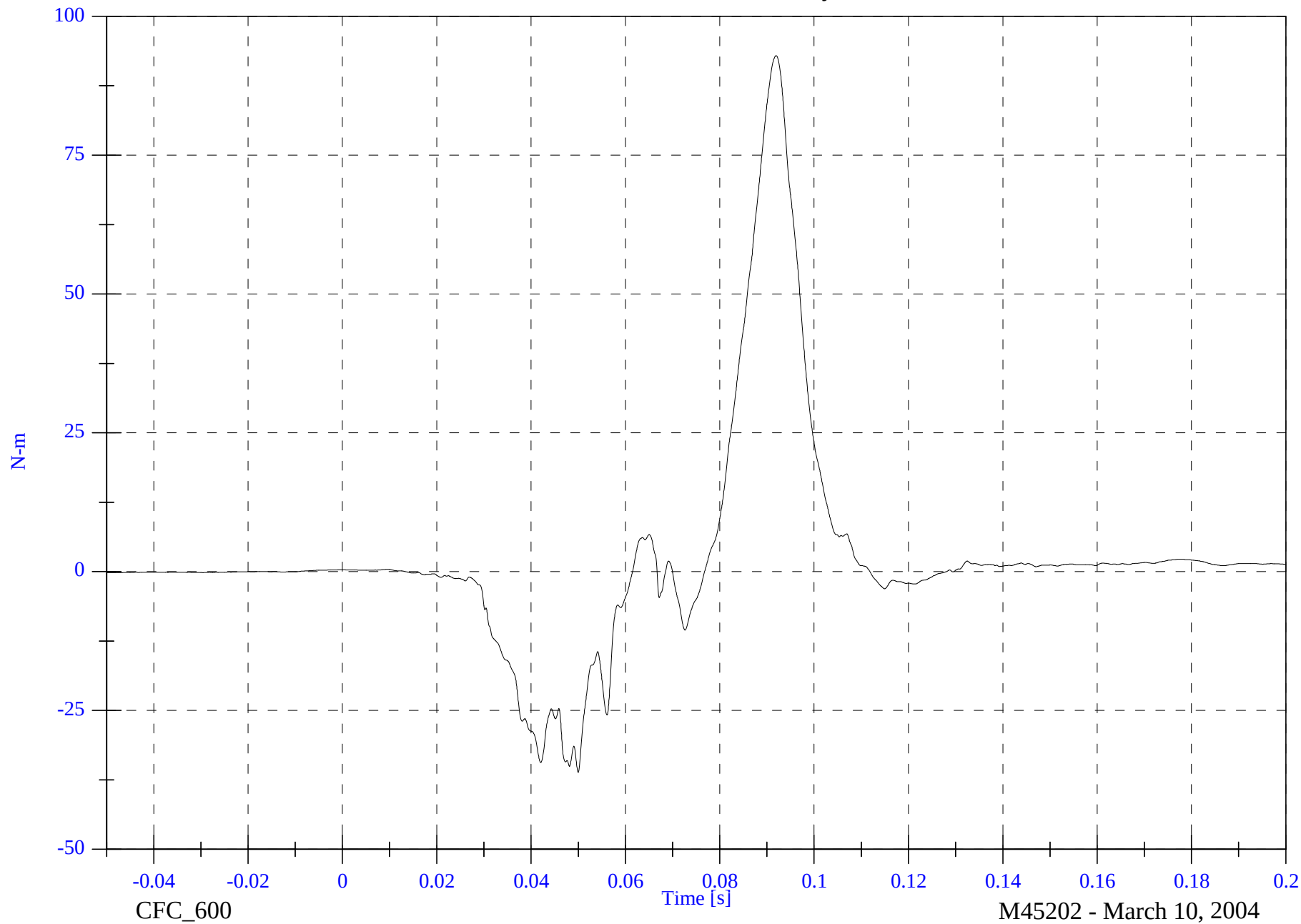
V1P2 Left Lower Tibia My

Max: 92.9 [N-m] at 0.092 [s]

Min: -36.1 [N-m] at 0.050 [s]

B-104

8642-NCAP-47

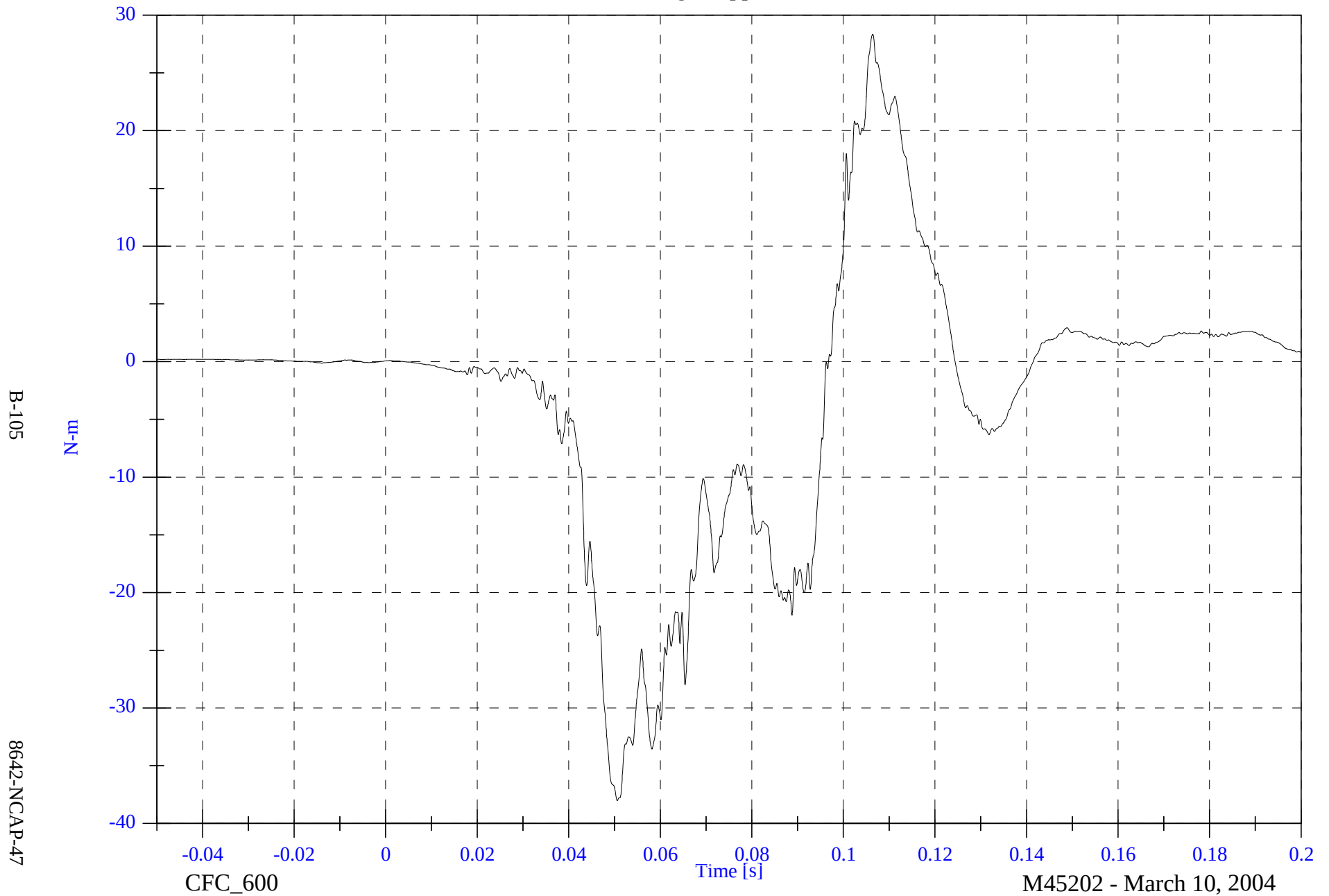


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Right Upper Tibia Mx

Max: 28.3 [N-m] at 0.106 [s]

Min: -38.0 [N-m] at 0.051 [s]

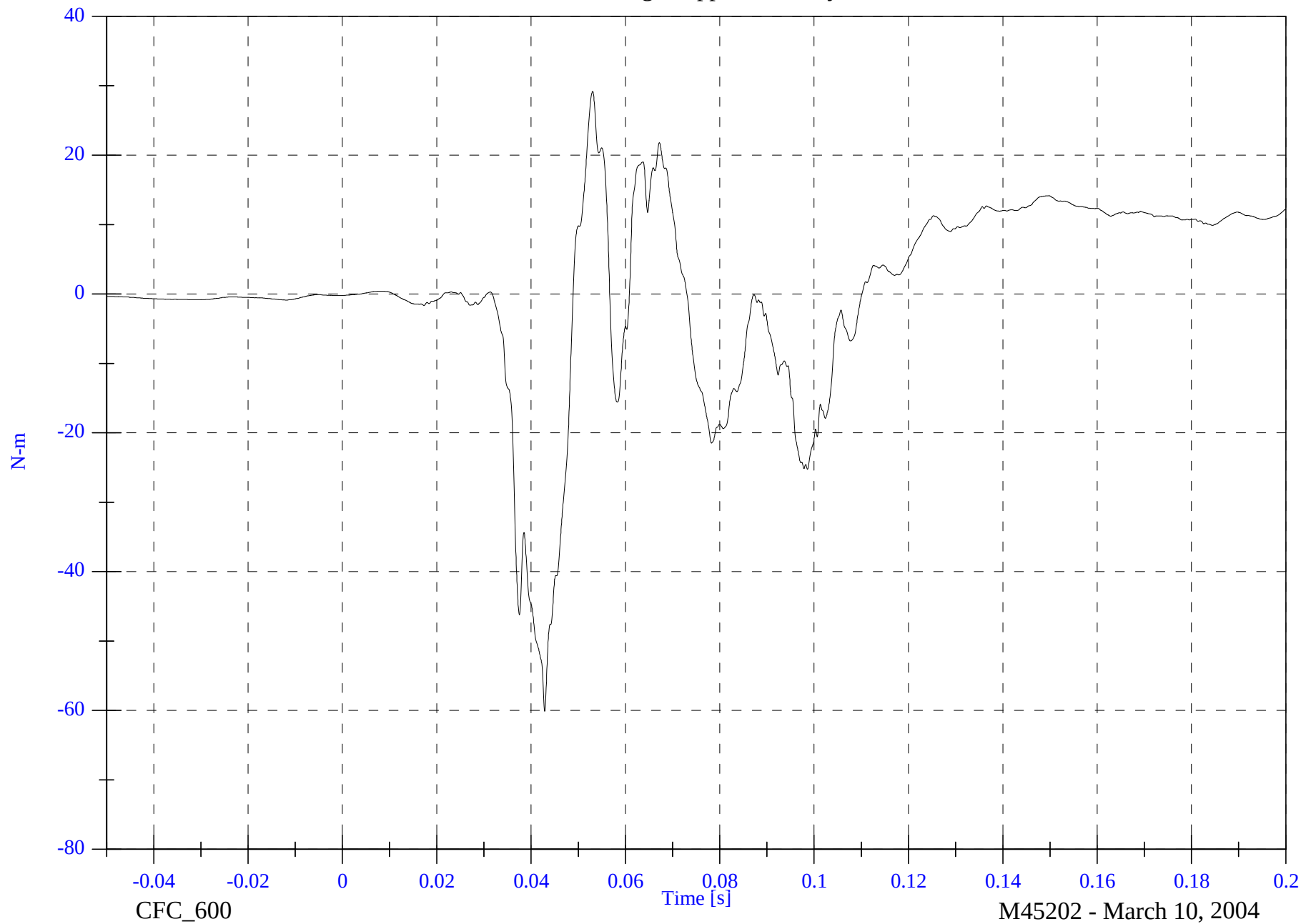


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 29.2 [N-m] at 0.053 [s]

Min: -60.1 [N-m] at 0.043 [s]

V1P2 Right Upper Tibia My



B-106

8642-NCAP-47

CFC_600

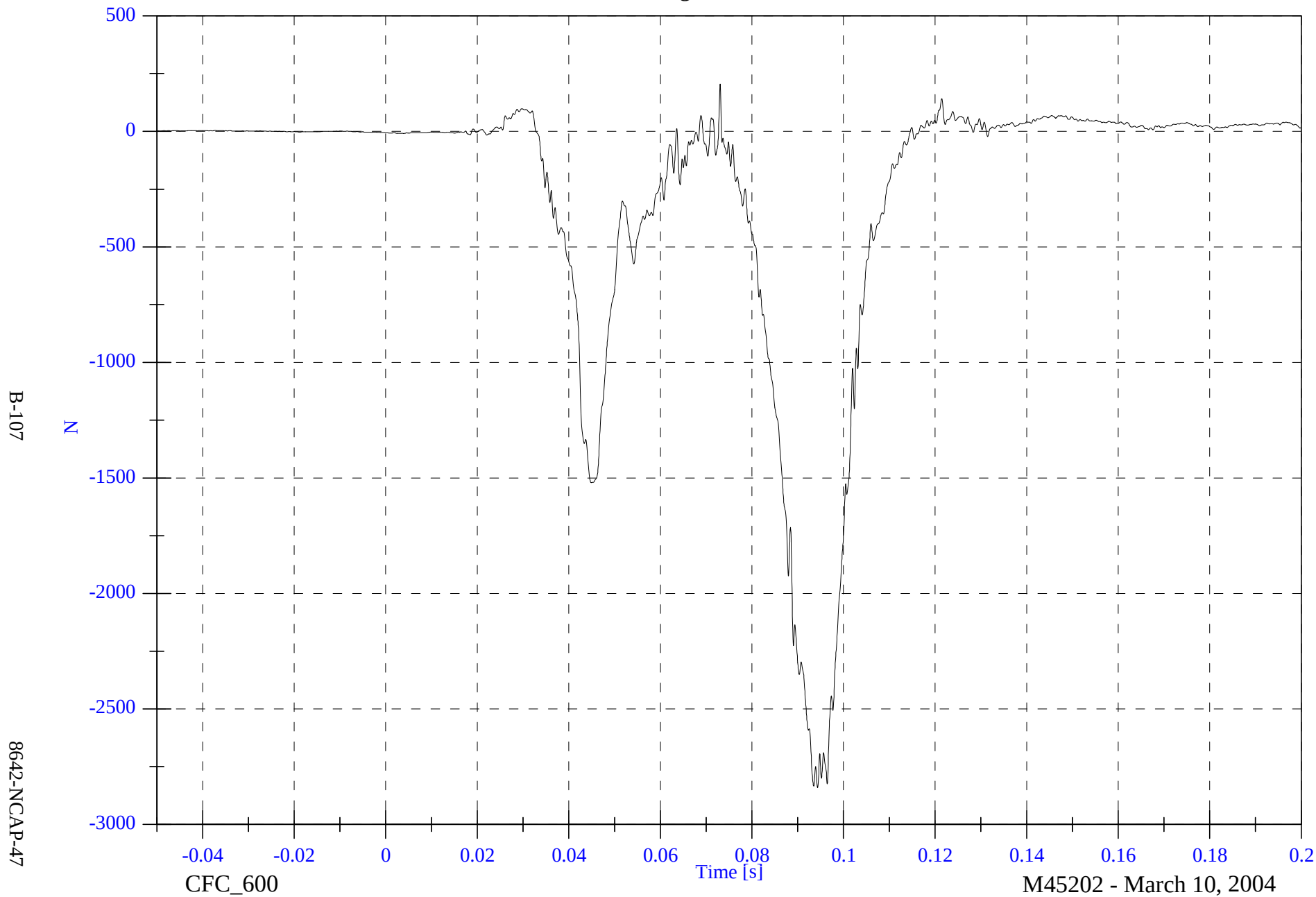
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 205.0 [N] at 0.073 [s]

Min: -2840.9 [N] at 0.094 [s]

V1P2 Right Lower Tibia Fz

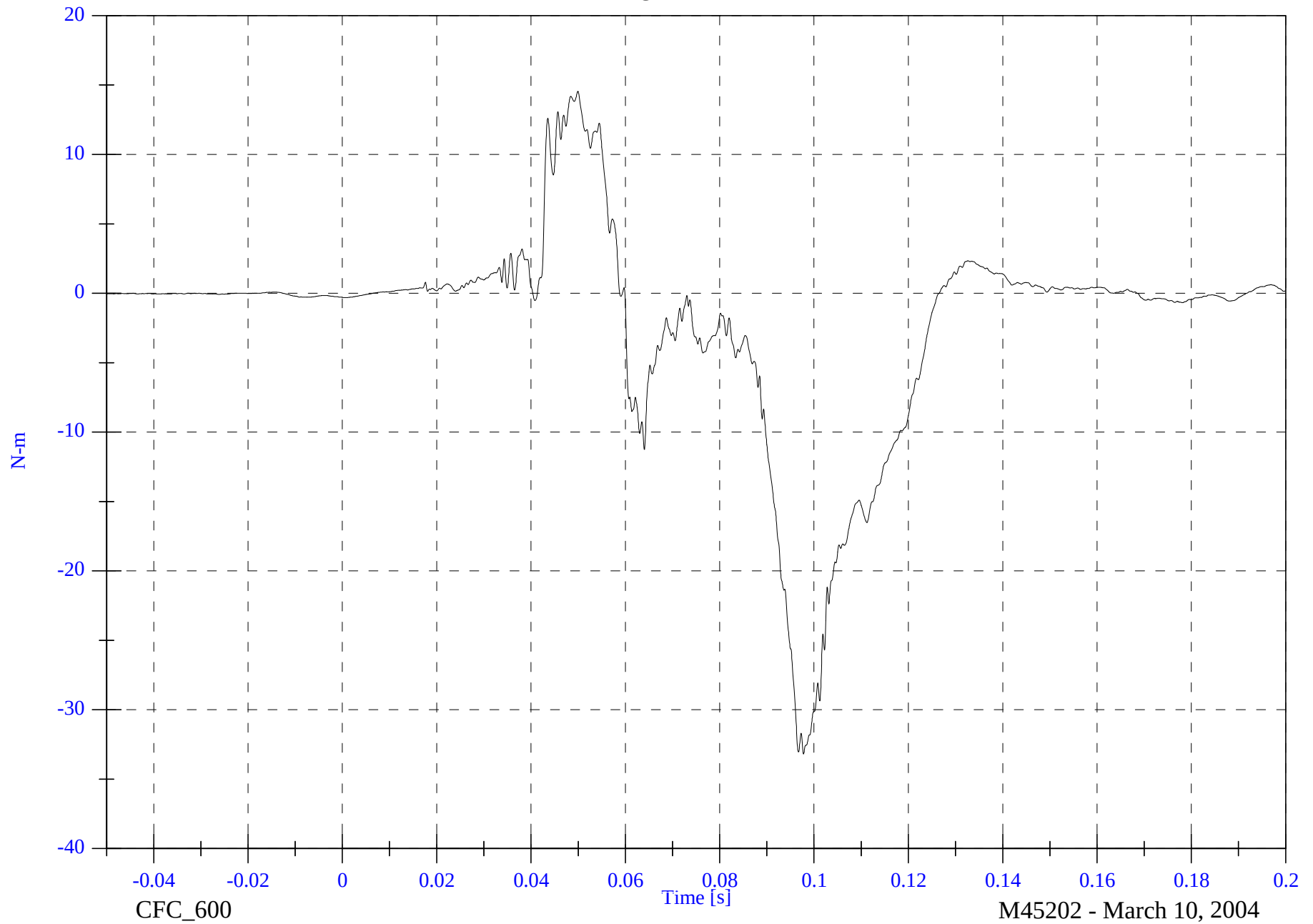


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Right Lower Tibia Mx

Max: 14.5 [N-m] at 0.050 [s]

Min: -33.2 [N-m] at 0.098 [s]



B-108

8642-NCAP-47

CFC_600

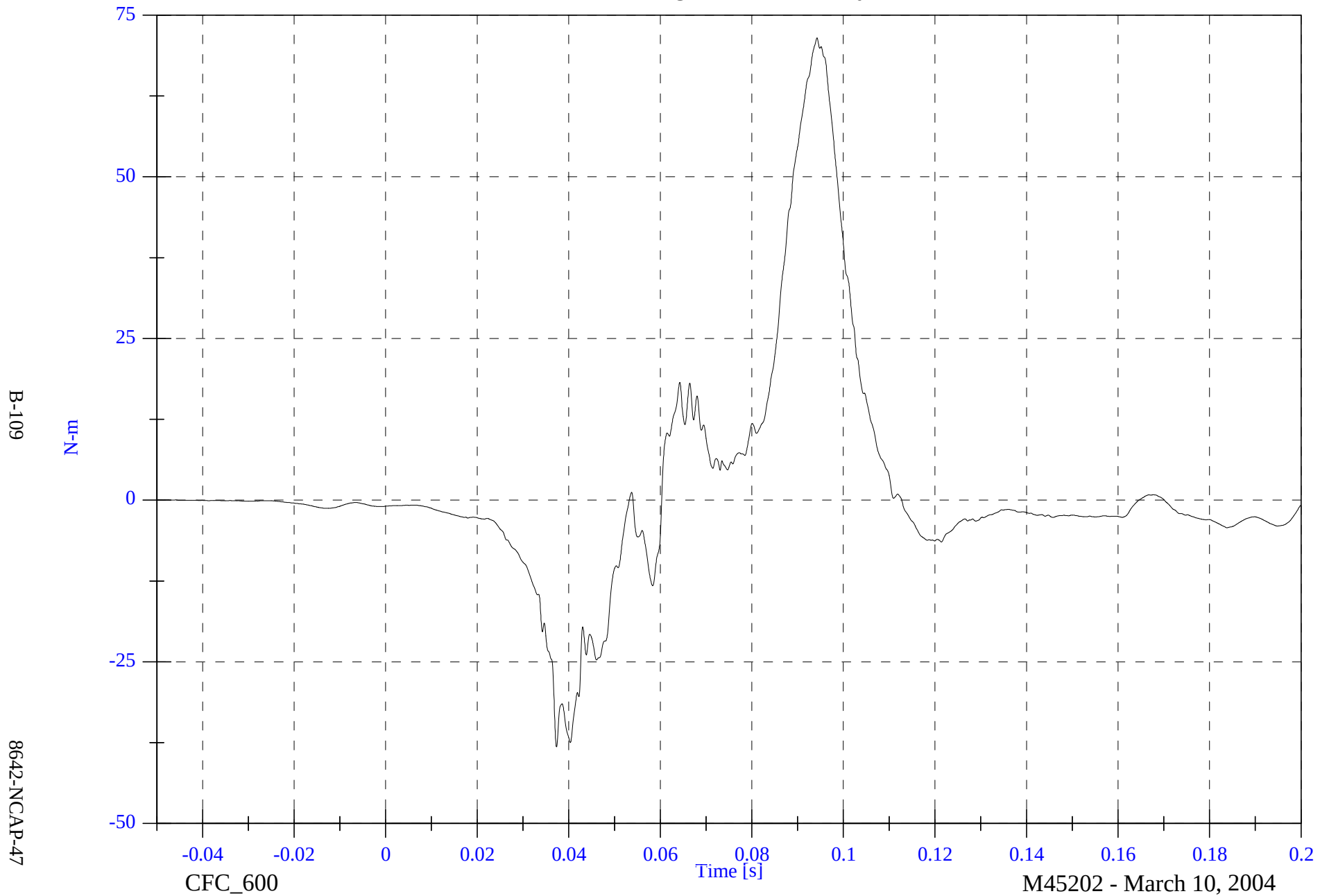
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 71.5 [N-m] at 0.094 [s]

Min: -38.2 [N-m] at 0.037 [s]

V1P2 Right Lower Tibia My

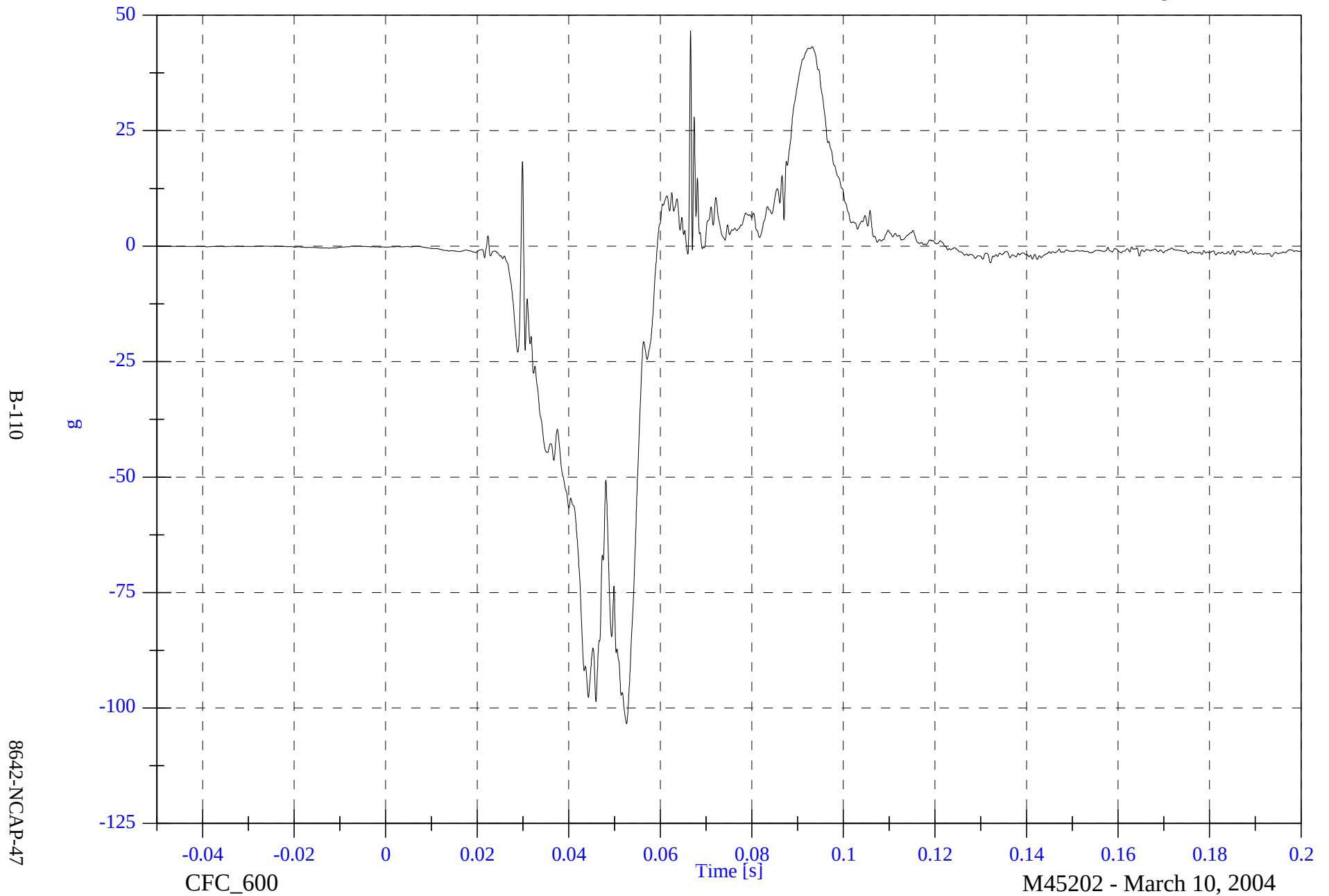


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 46.6 [g] at 0.067 [s]

Min: -103.4 [g] at 0.053 [s]

V1P2 Left Foot Aft x

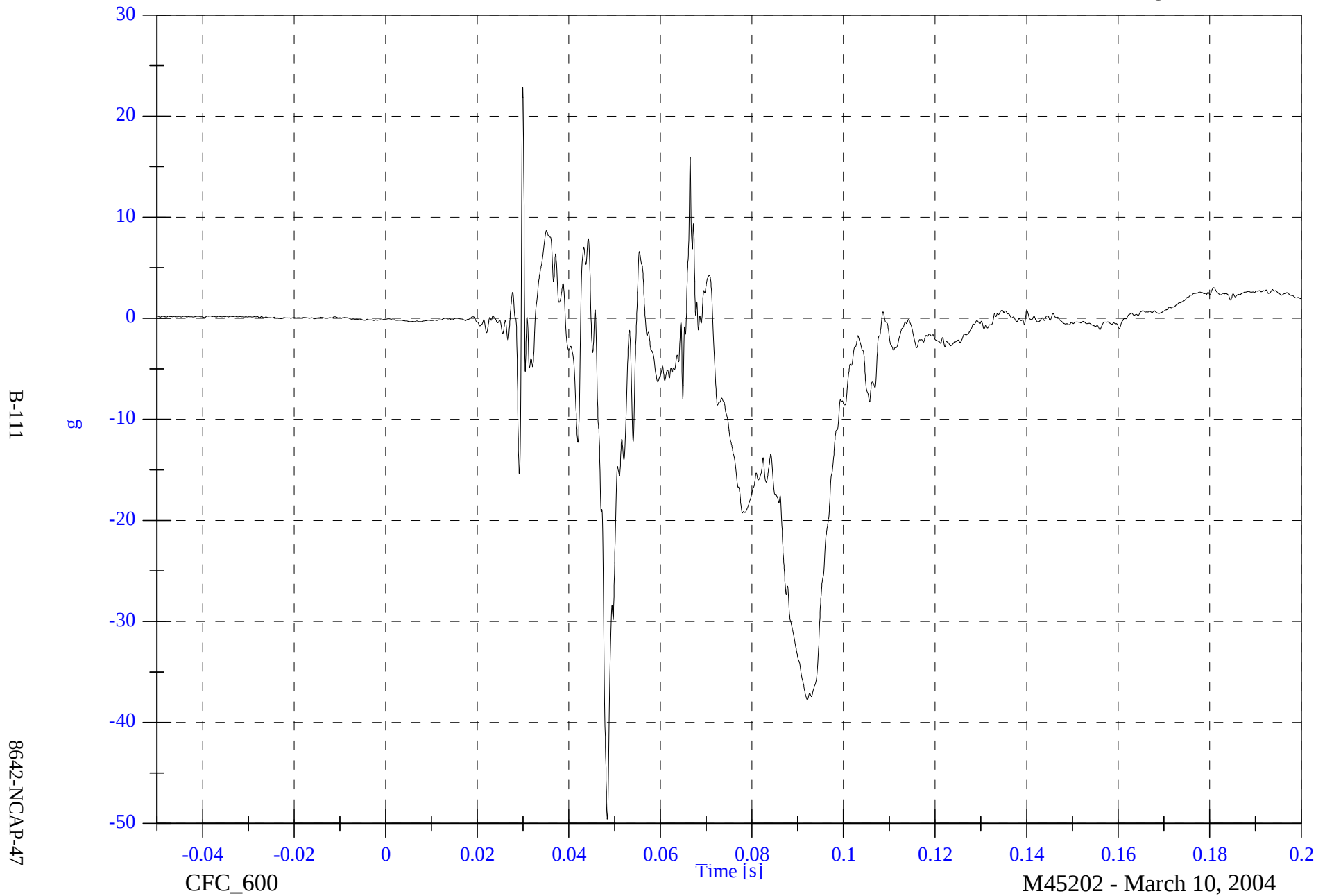


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 22.8 [g] at 0.030 [s]

Min: -49.6 [g] at 0.048 [s]

V1P2 Left Foot Aft z

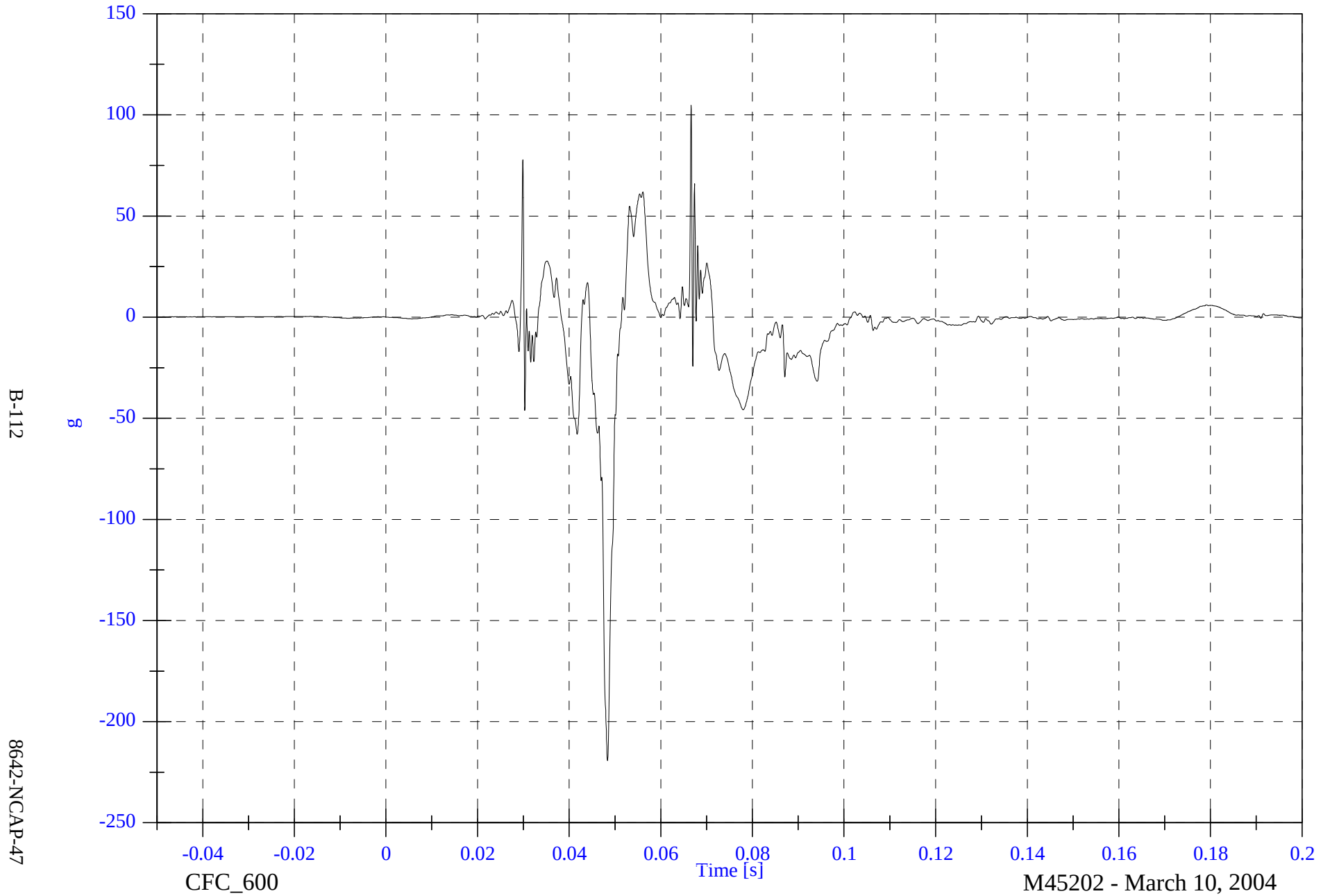


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 104.7 [g] at 0.067 [s]

Min: -219.3 [g] at 0.048 [s]

V1P2 Left Foot Fore z

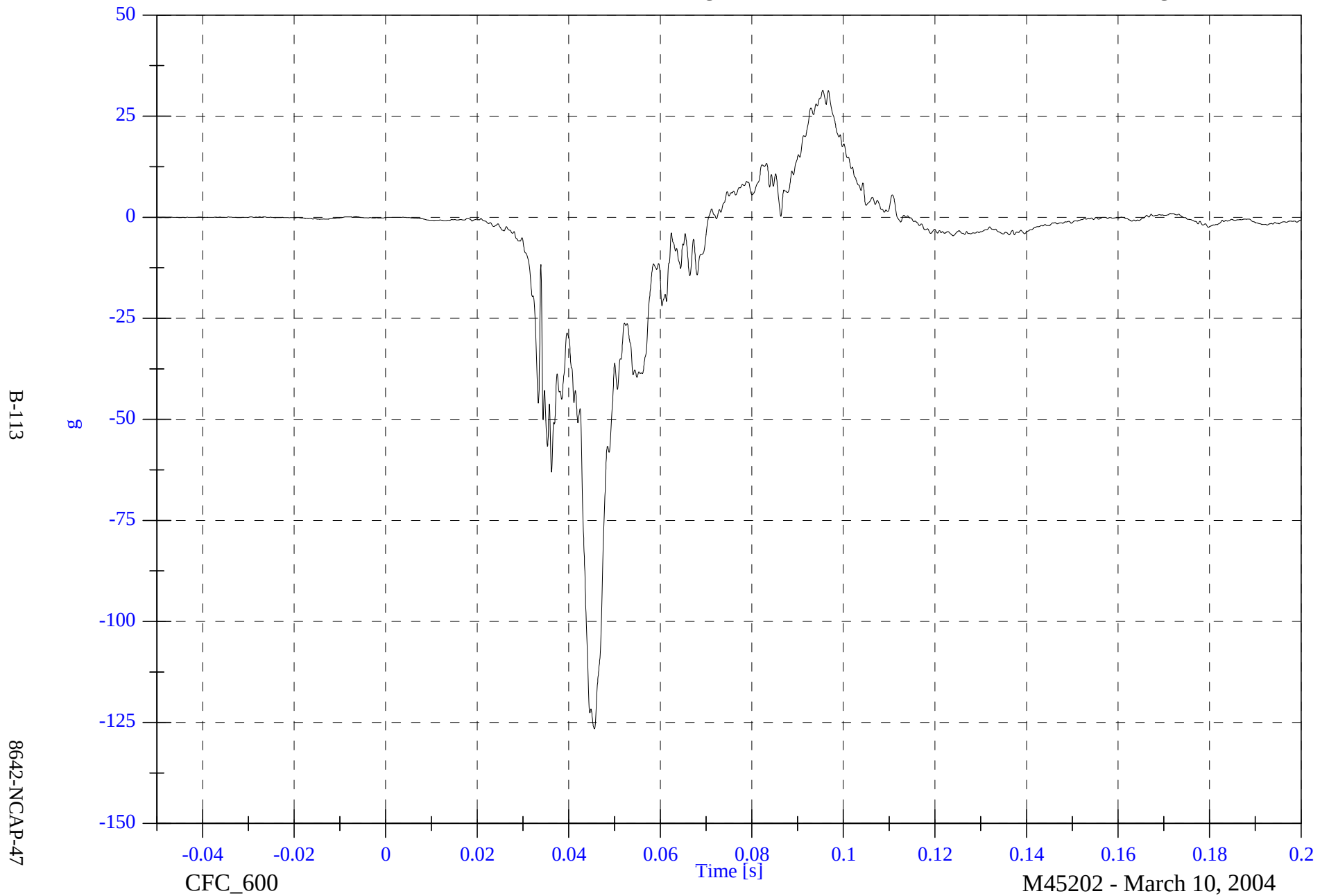


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 31.4 [g] at 0.095 [s]

Min: -126.6 [g] at 0.046 [s]

V1P2 Right Foot Aft x

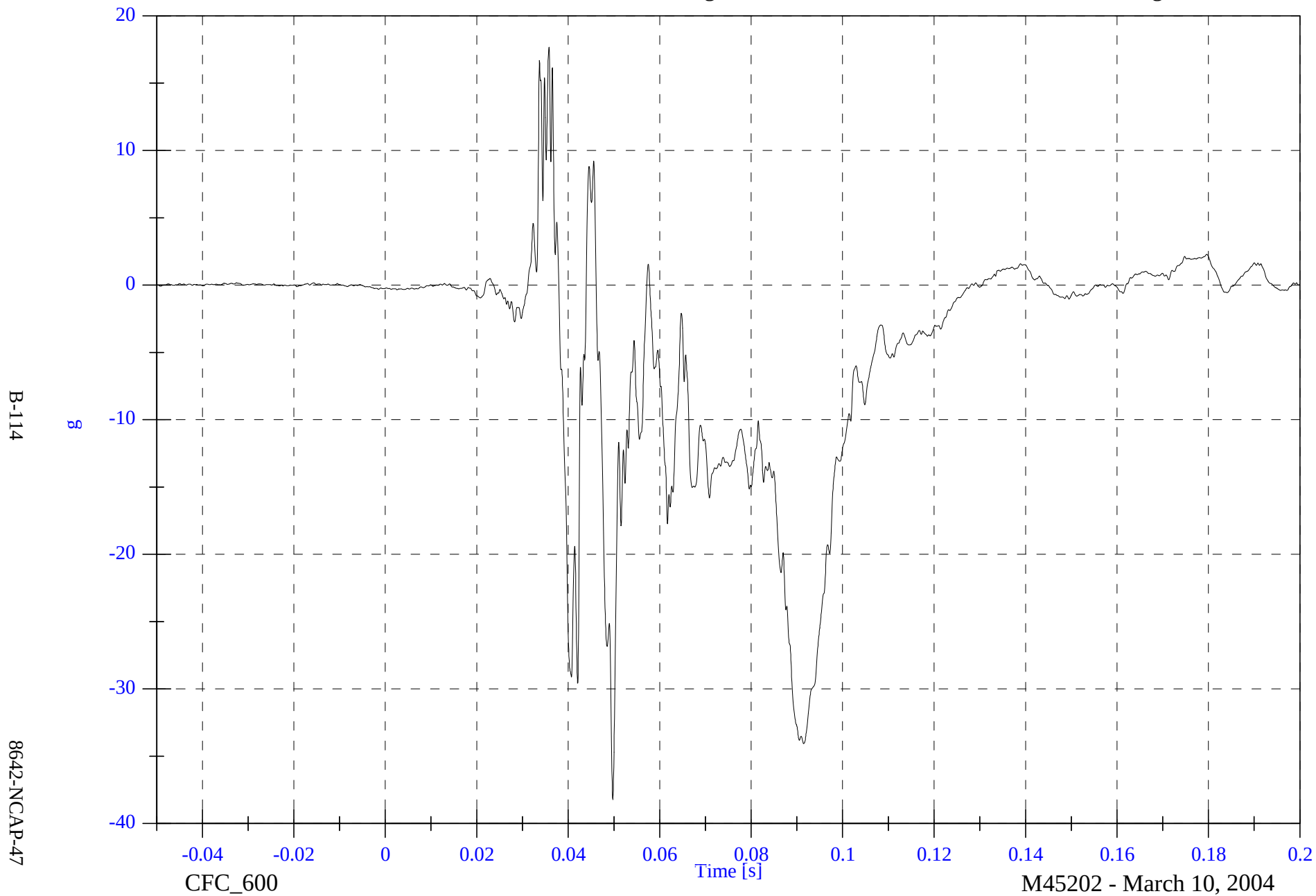


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Right Foot Aft z

Max: 17.7 [g] at 0.036 [s]

Min: -38.2 [g] at 0.050 [s]

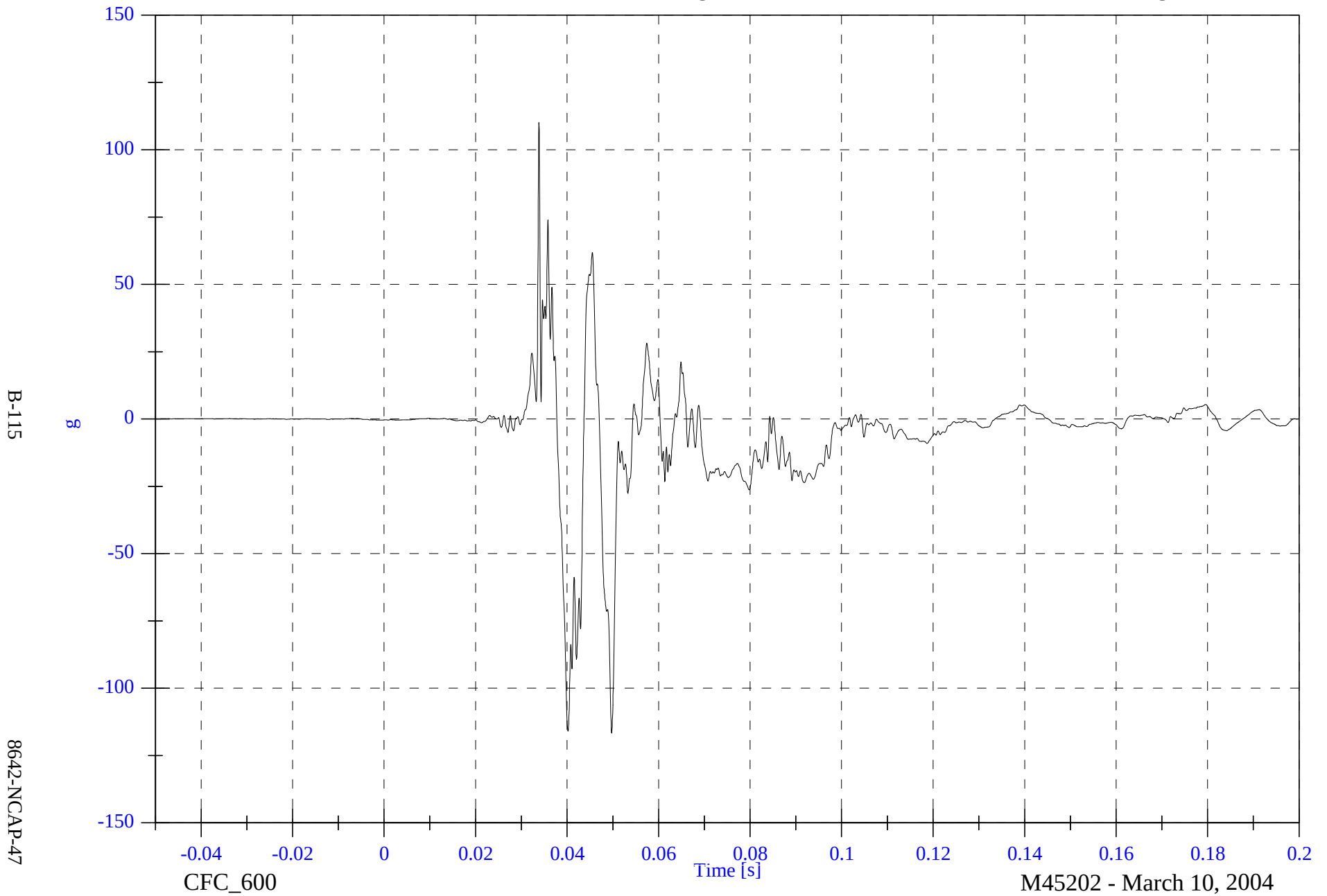


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 110.1 [g] at 0.034 [s]

Min: -116.7 [g] at 0.050 [s]

V1P2 Right Foot Fore z

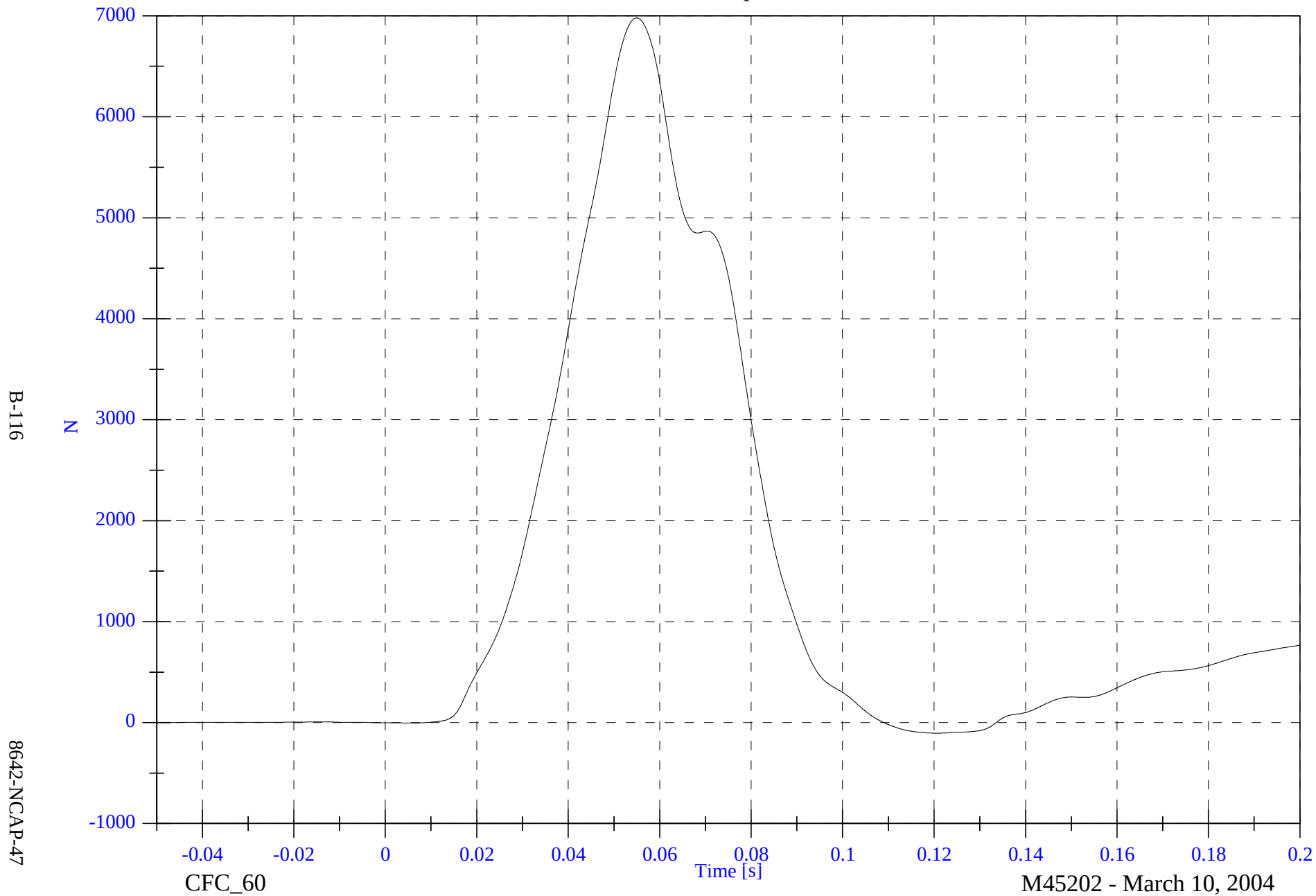


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6979.7 [N] at 0.055 [s]

Min: -105.1 [N] at 0.120 [s]

V1P2 Lap Belt

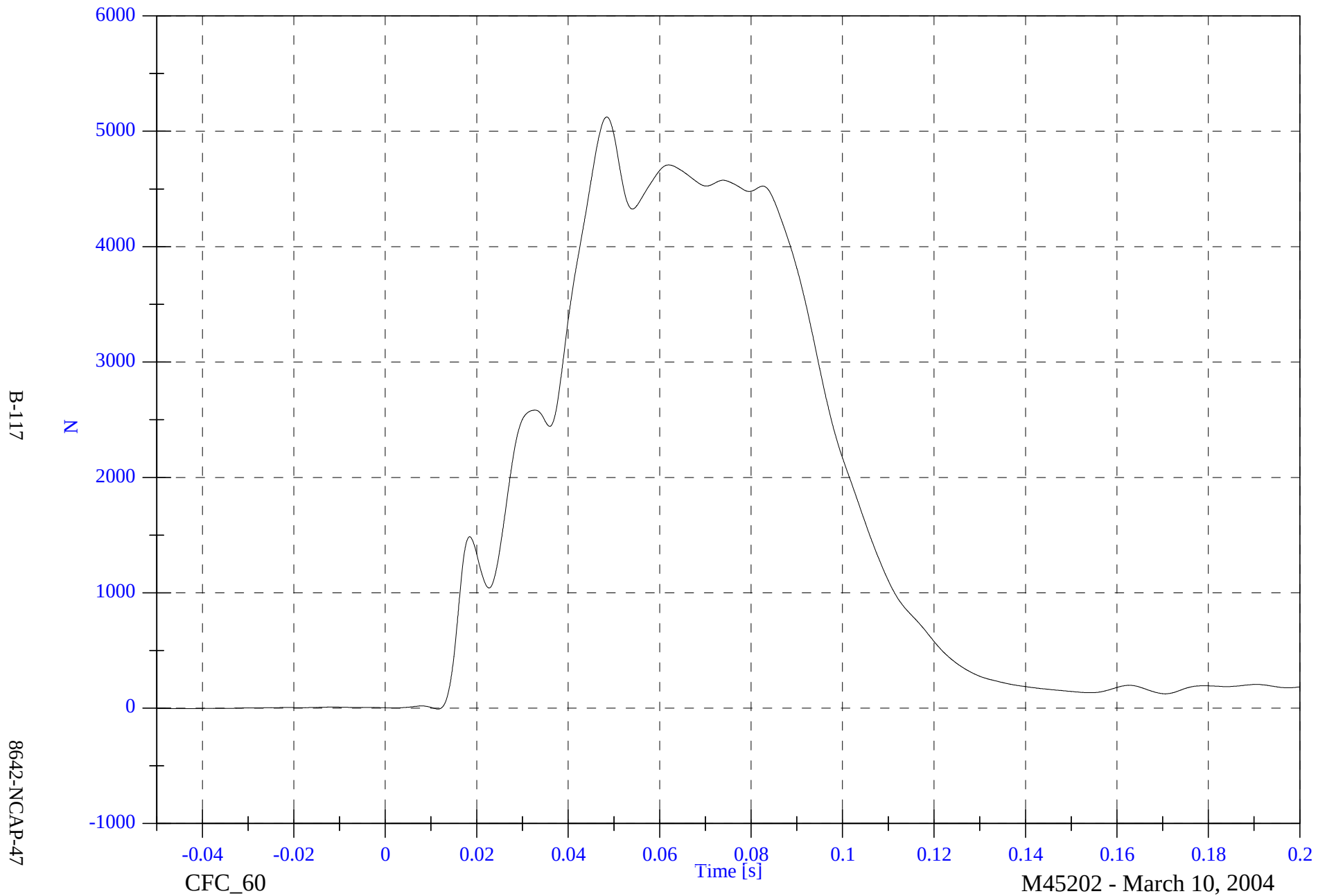


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P2 Torso Belt

Max: 5123.4 [N] at 0.048 [s]

Min: -7.6 [N] at 0.011 [s]

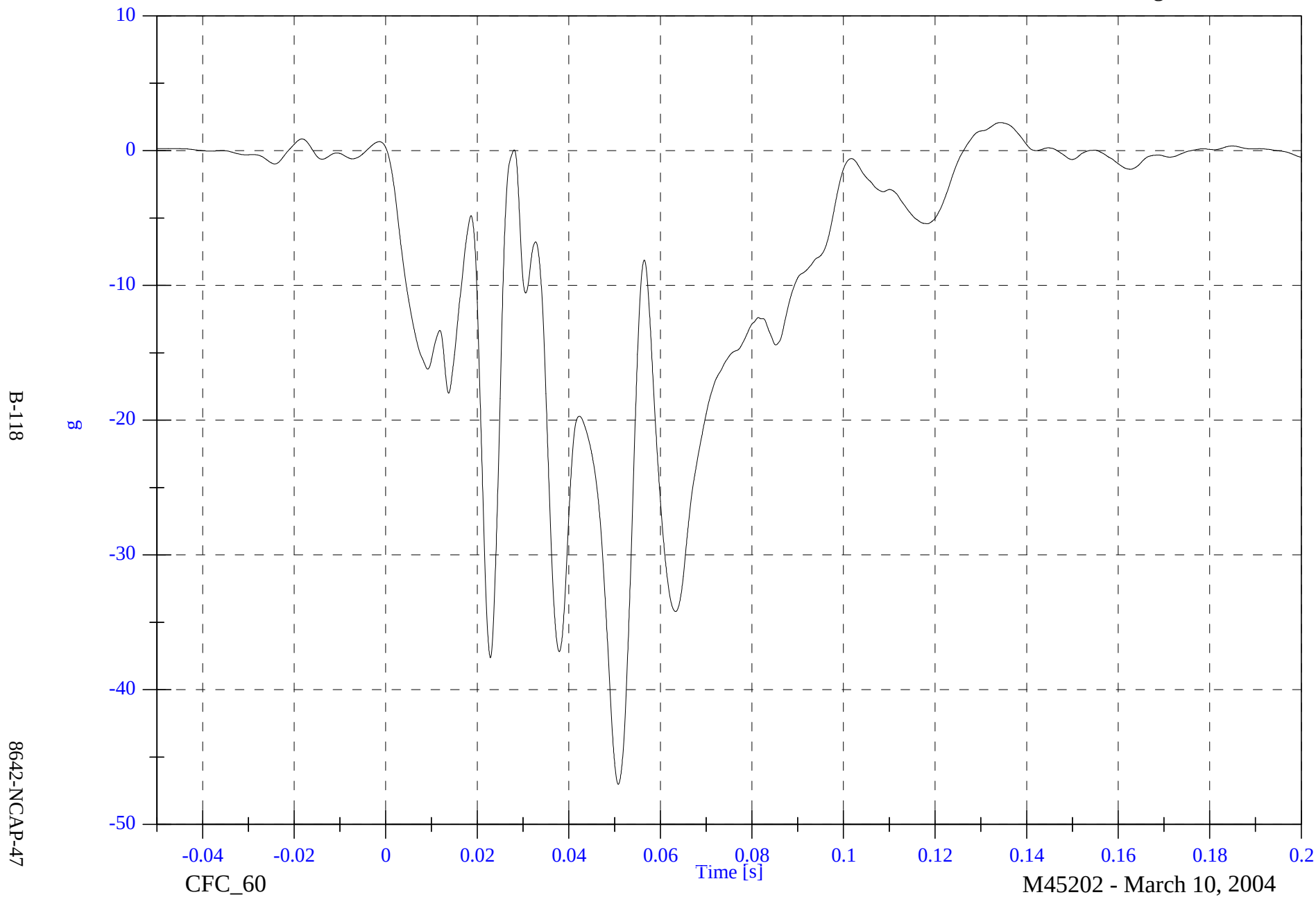


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Left Rear #1x

Max: 2.1 [g] at 0.134 [s]

Min: -47.0 [g] at 0.051 [s]

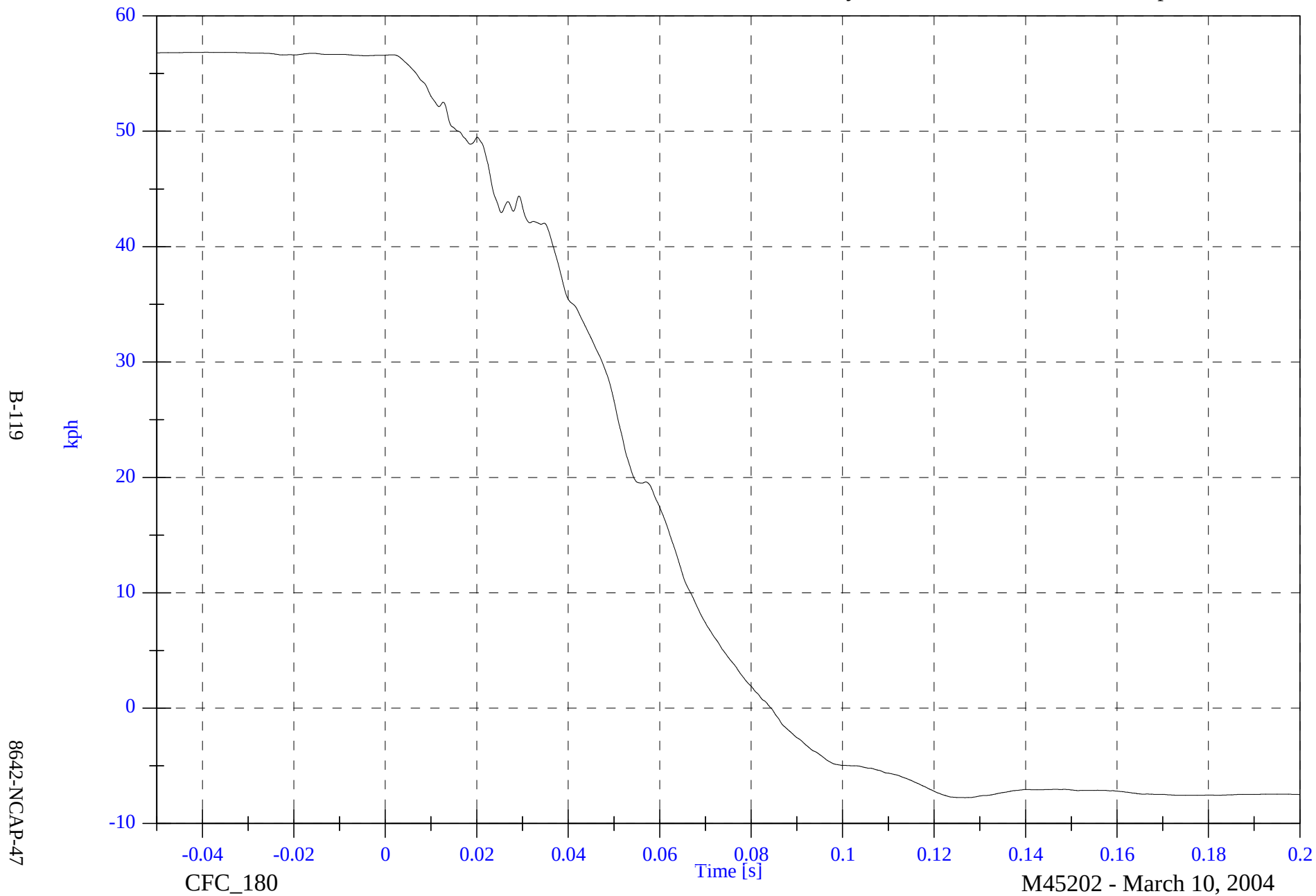


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.8 [kph] at -0.039 [s]

Min: -7.8 [kph] at 0.127 [s]

V1 Left Rear #1x Velocity

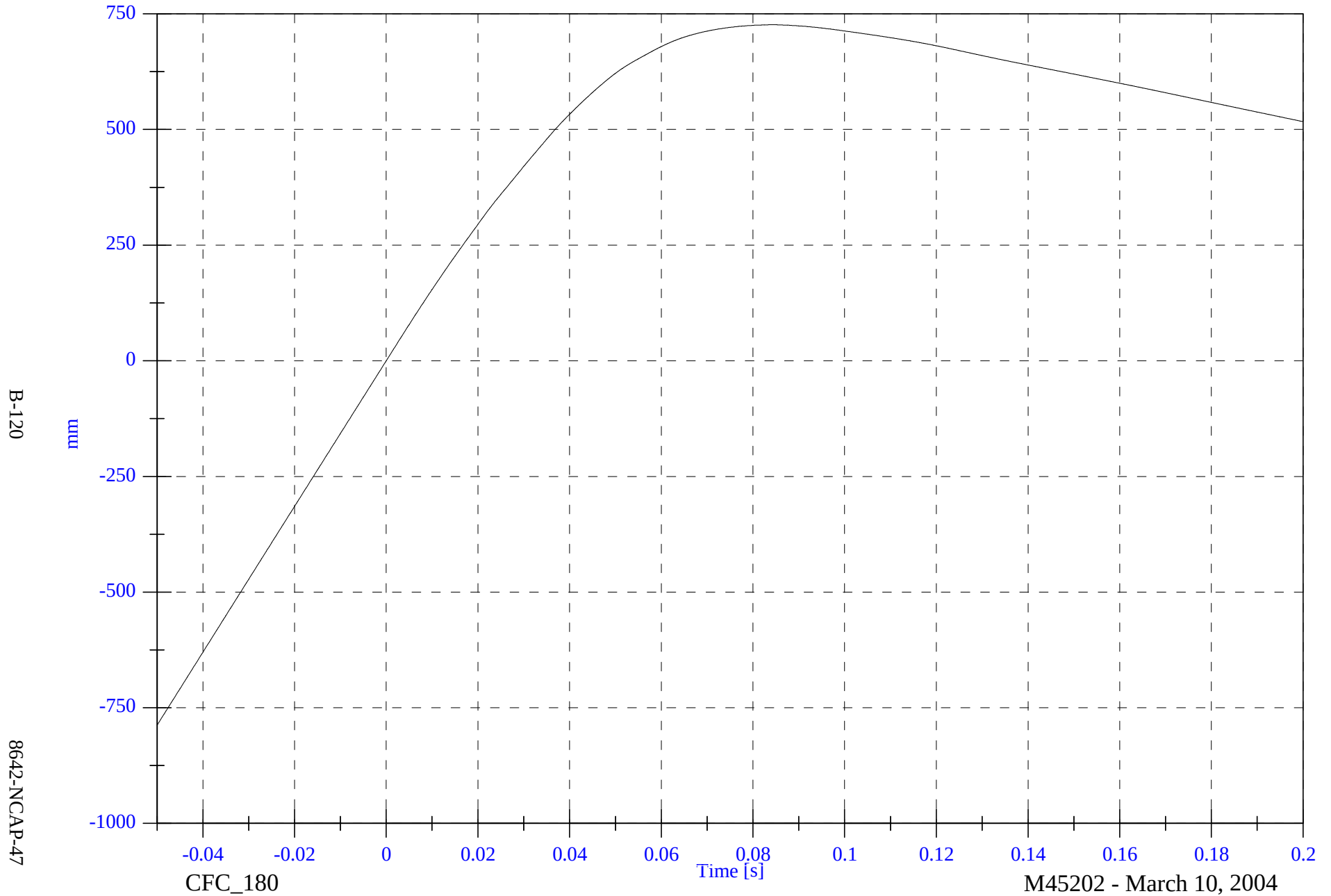


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Left Rear #1x Displacement

Max: 726.1 [mm] at 0.084 [s]

Min: -787.8 [mm] at -0.050 [s]

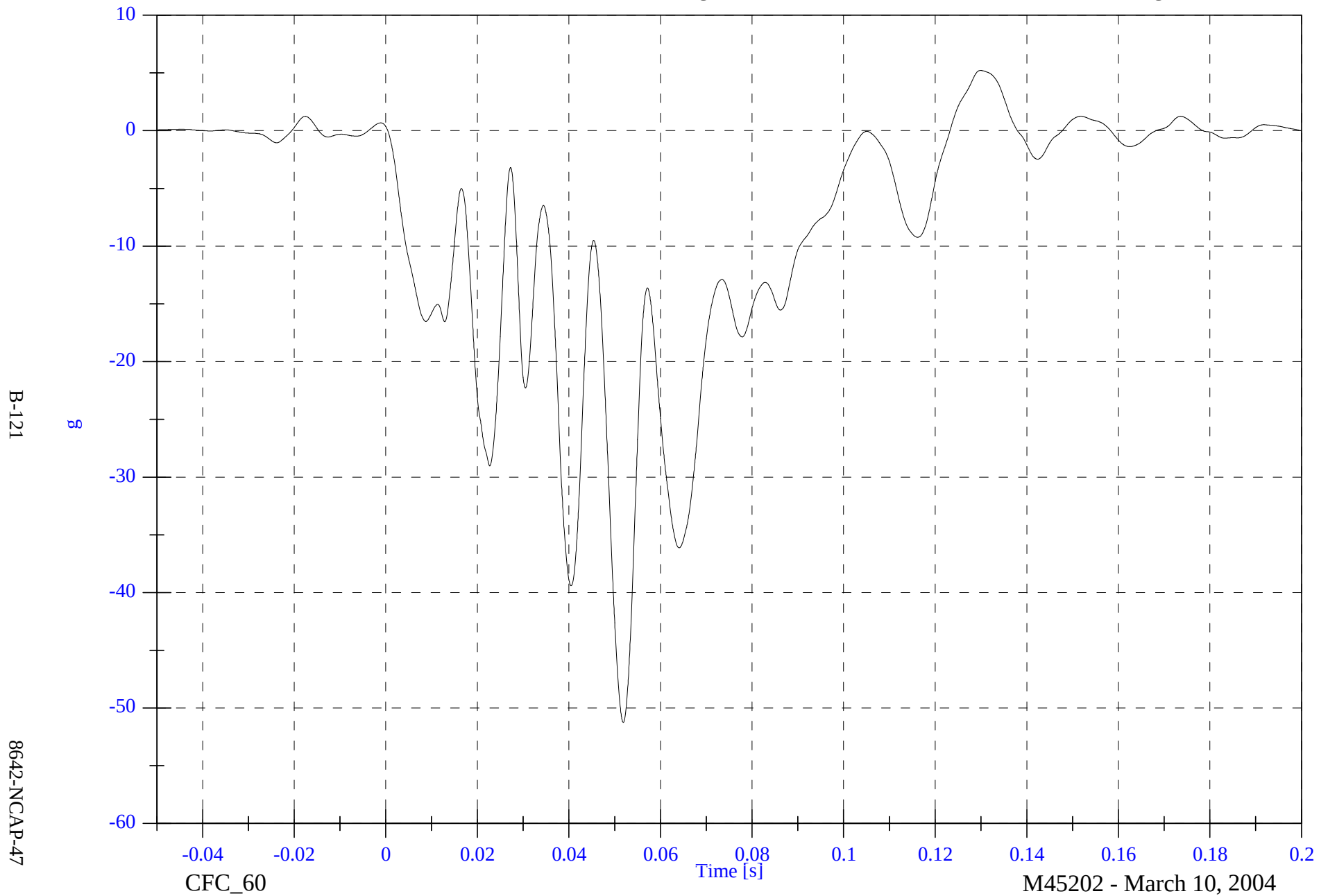


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Right Rear #2x

Max: 5.2 [g] at 0.130 [s]

Min: -51.3 [g] at 0.052 [s]

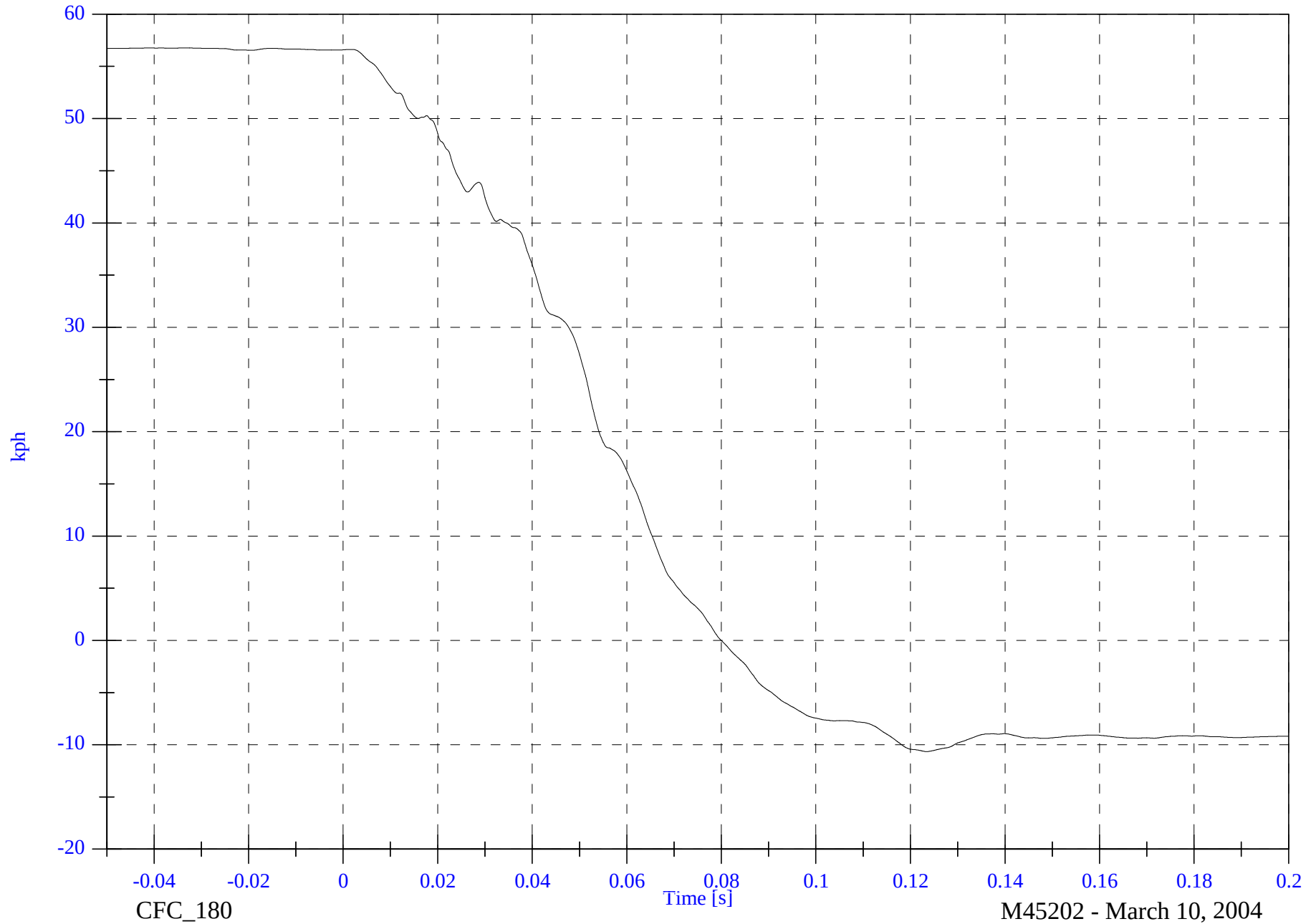


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.8 [kph] at -0.033 [s]

V1 Right Rear #2x Velocity

Min: -10.7 [kph] at 0.123 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

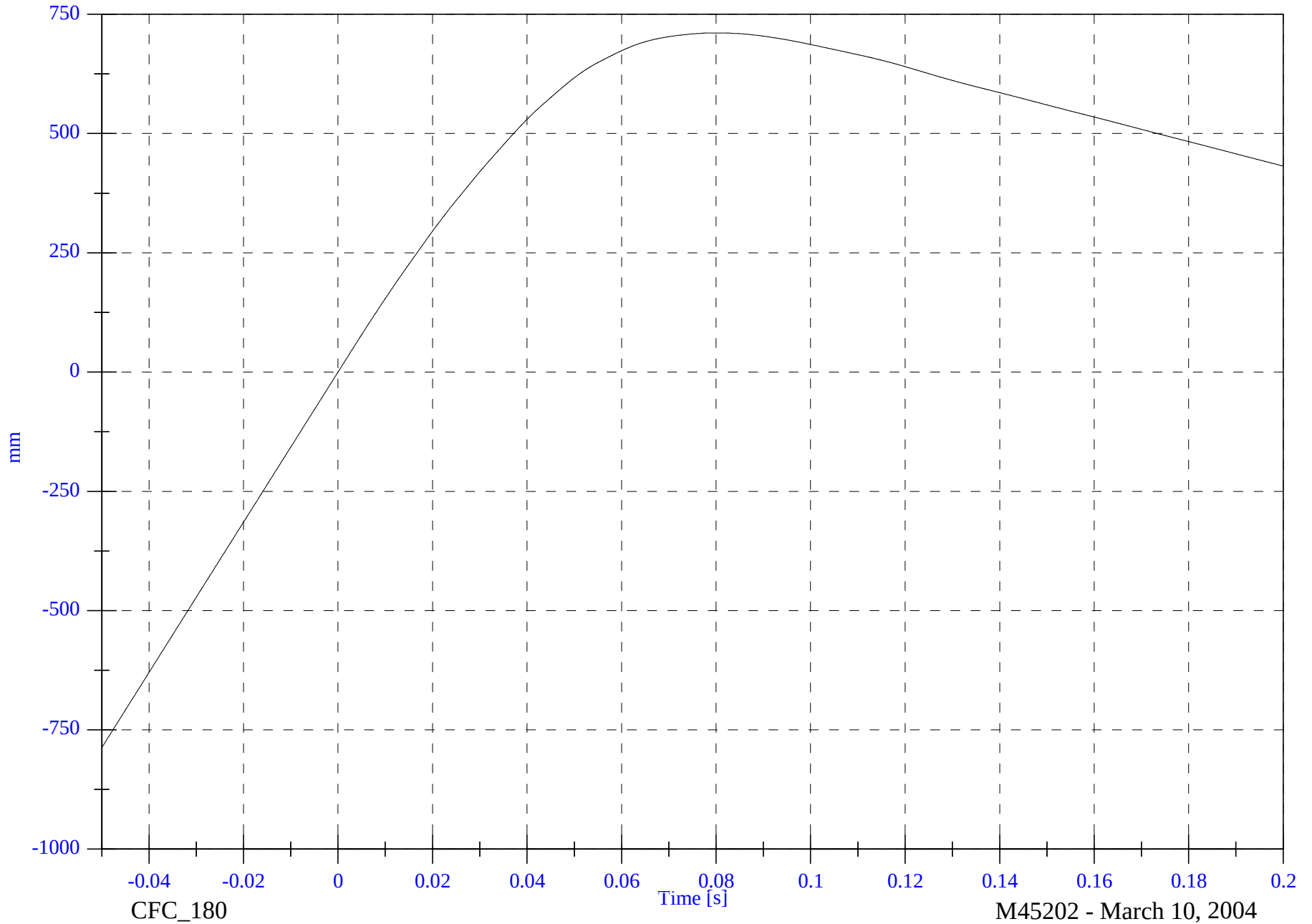
V1 Right Rear #2x Displacement

Max: 710.9 [mm] at 0.080 [s]

Min: -787.3 [mm] at -0.050 [s]

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2004 NCAP Test 11 2004 Infiniti FX35/45

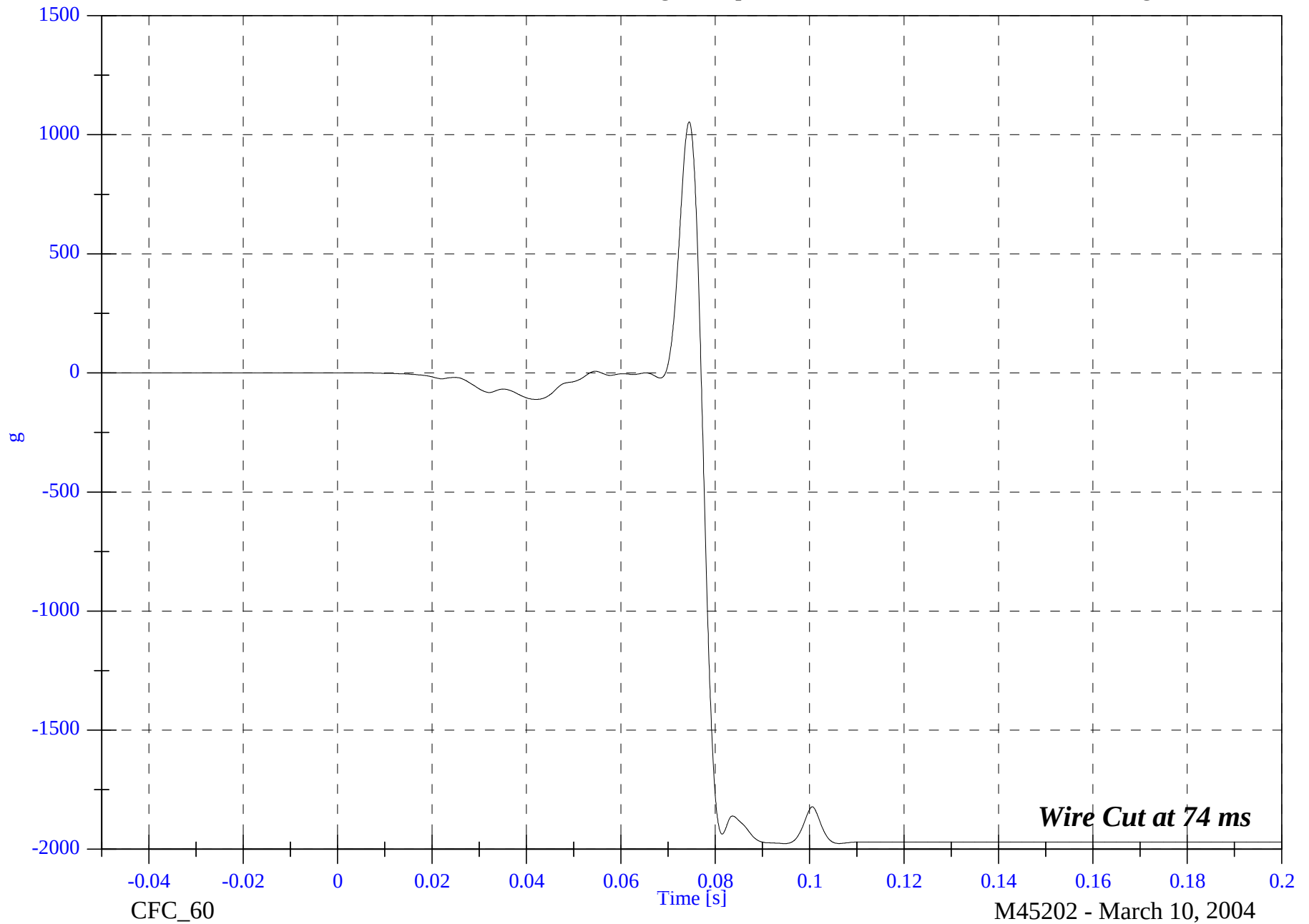
V1 Engine Top #3x

Max: 1053.9 [g] at 0.074 [s]

Min: -1976.0 [g] at 0.095 [s]

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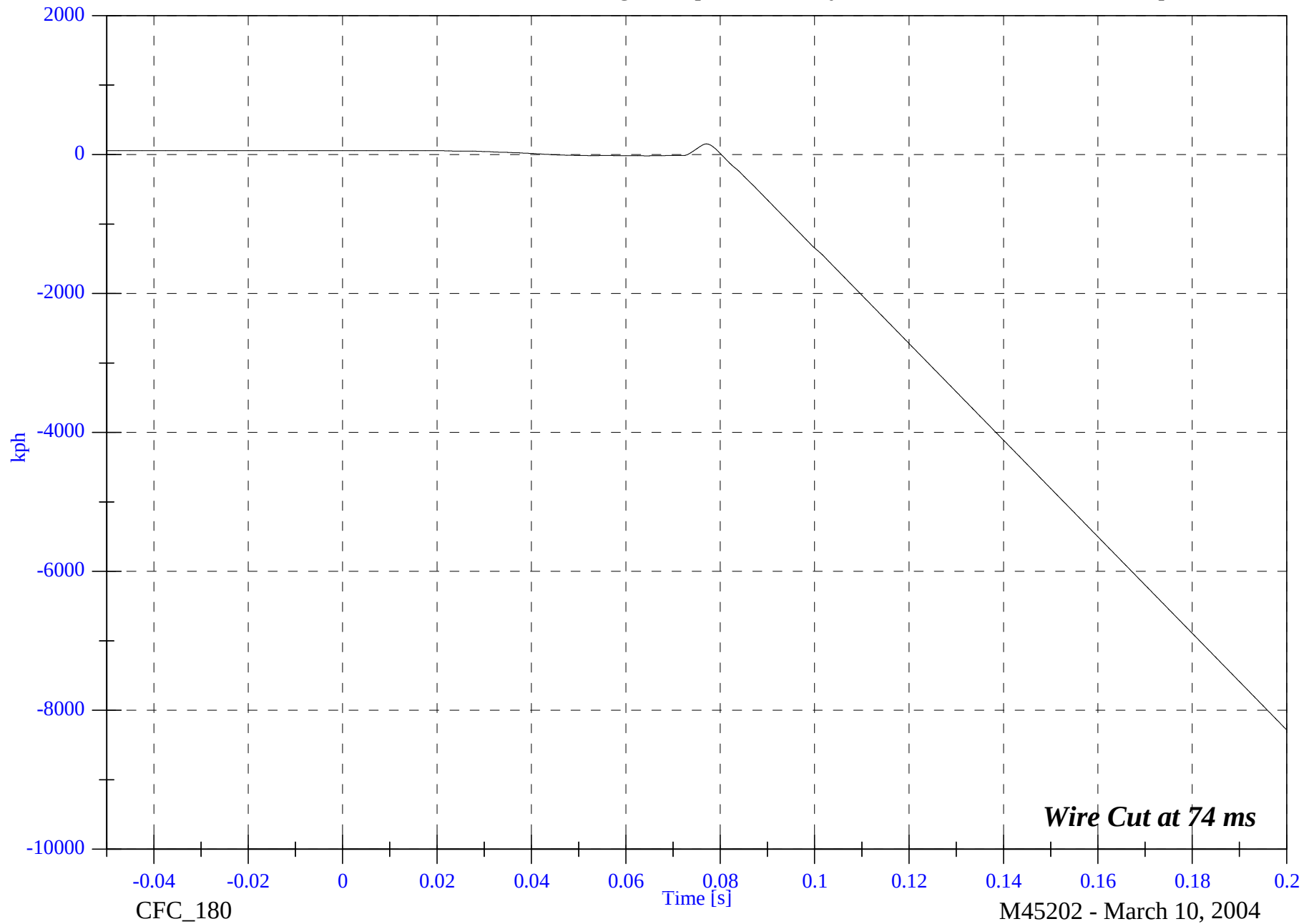


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 153.3 [kph] at 0.077 [s]

Min: -8279.0 [kph] at 0.200 [s]

V1 Engine Top #3x Velocity



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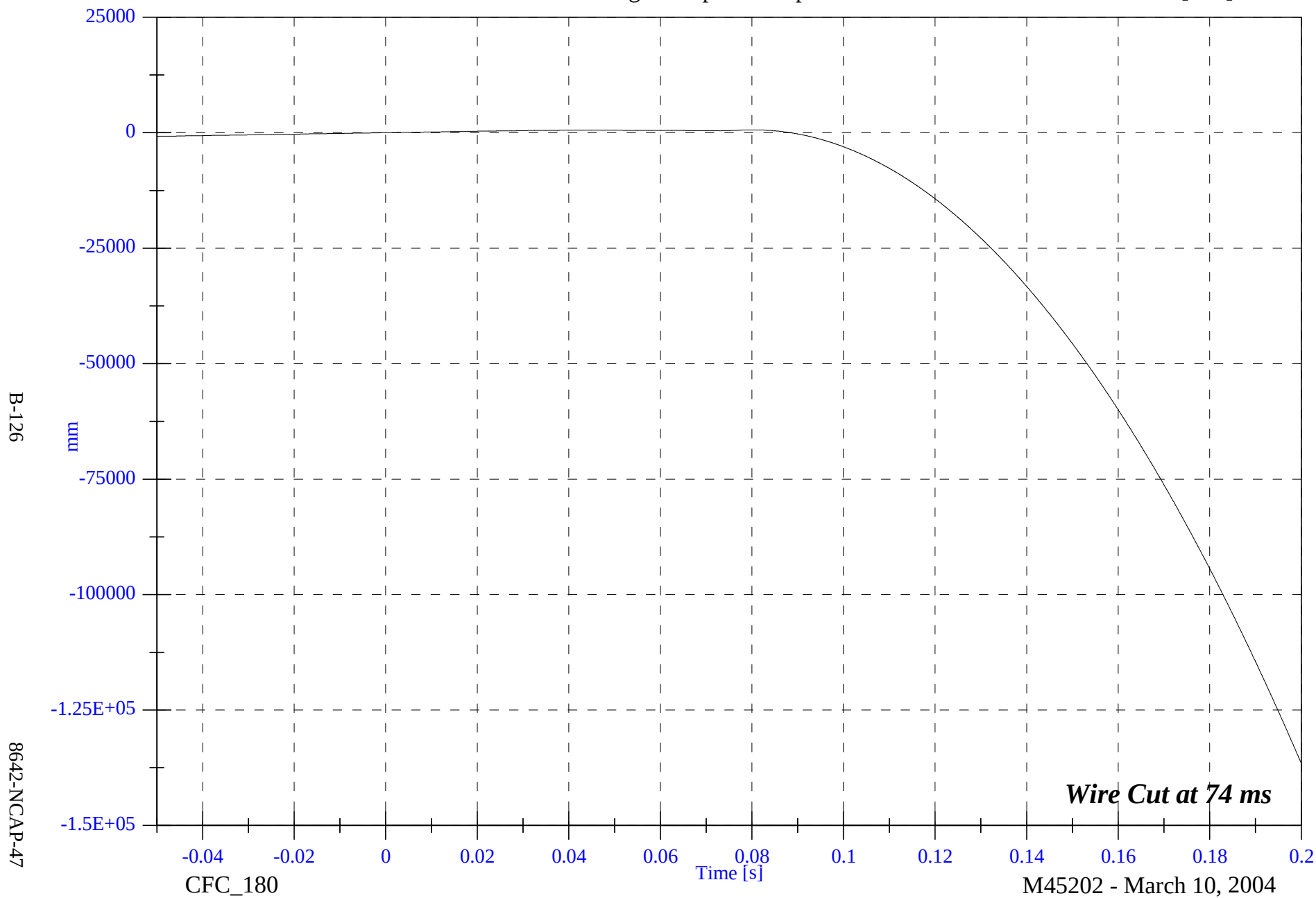
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Engine Top #3x Displacement

Max: 608.6 [mm] at 0.080 [s]

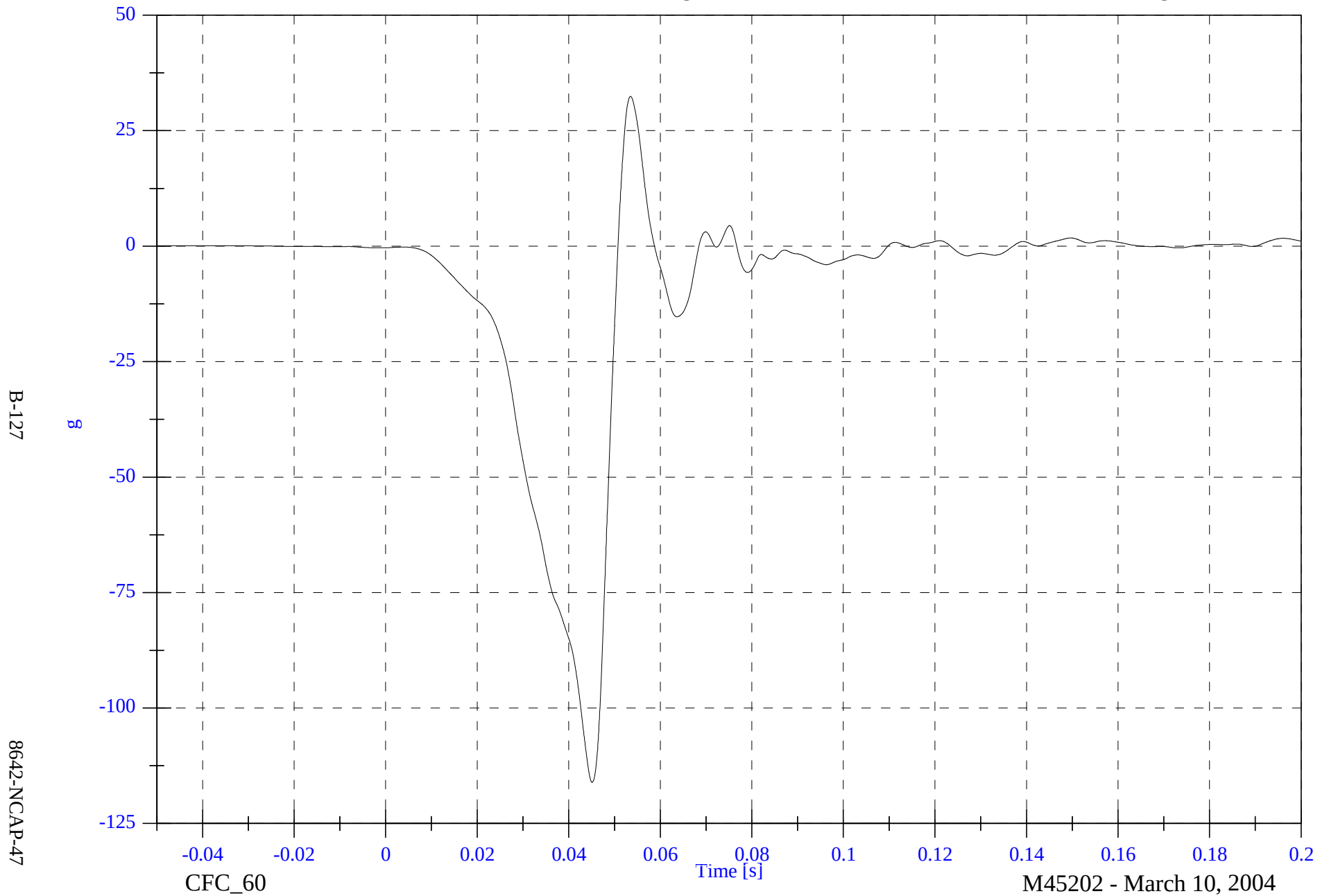
Min: -136438.4 [mm] at 0.200 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Engine Bottom #4x

Max: 32.4 [g] at 0.053 [s]
Min: -116.1 [g] at 0.045 [s]

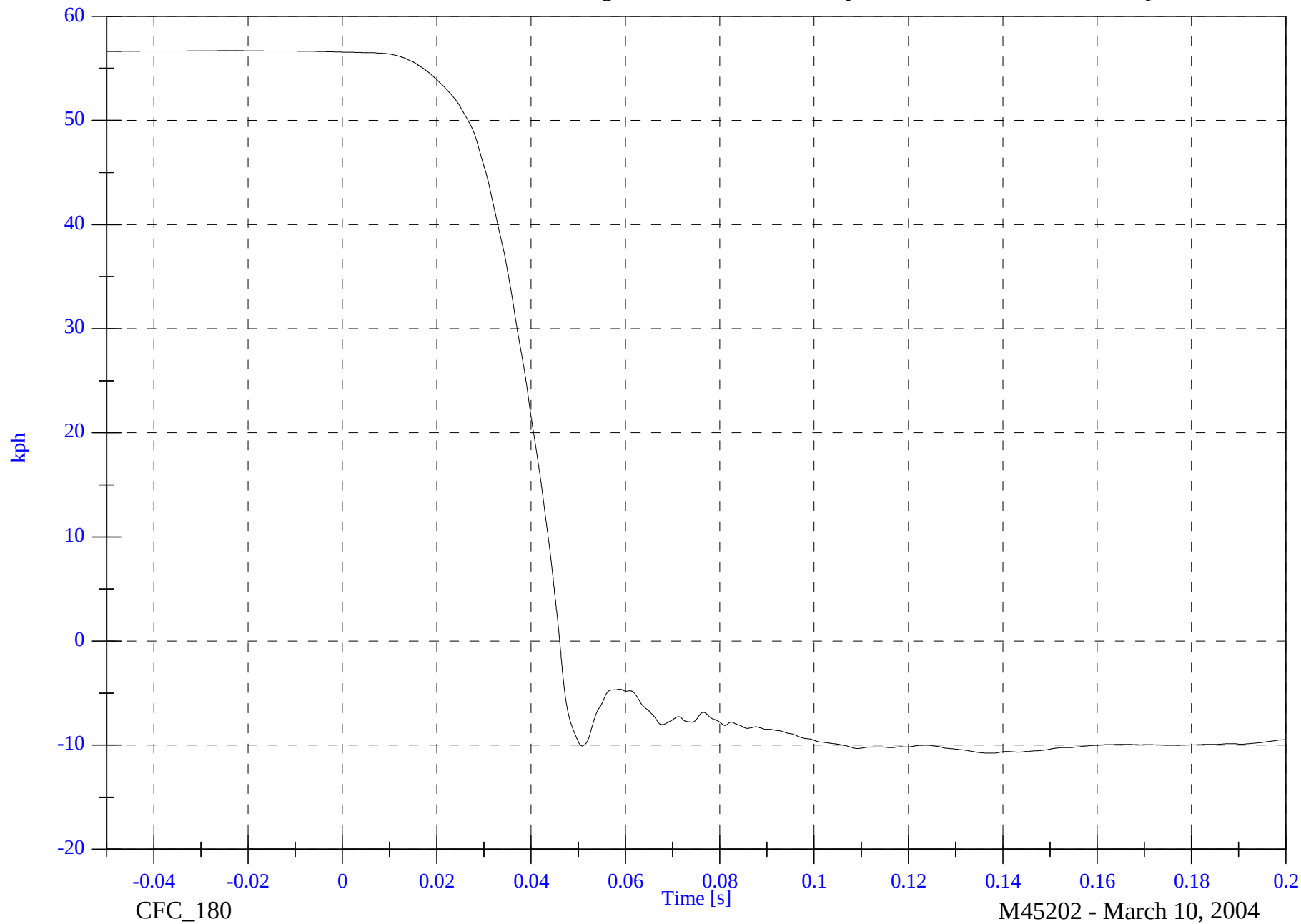


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.7 [kph] at -0.024 [s]

V1 Engine Bottom #4x Velocity

Min: -10.8 [kph] at 0.138 [s]



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CFC_180

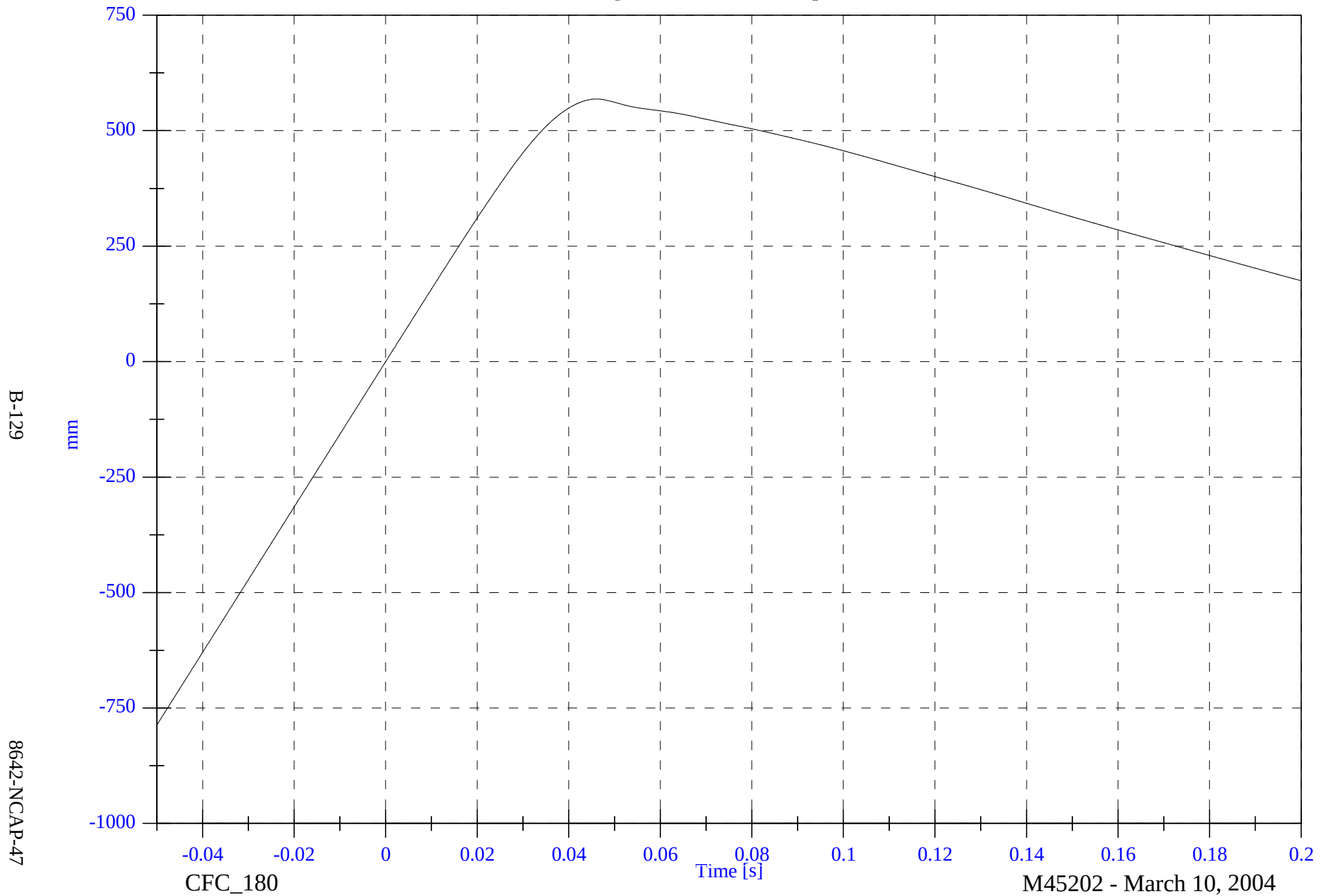
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 568.5 [mm] at 0.046 [s]

V1 Engine Bottom #4x Displacement

Min: -786.9 [mm] at -0.050 [s]

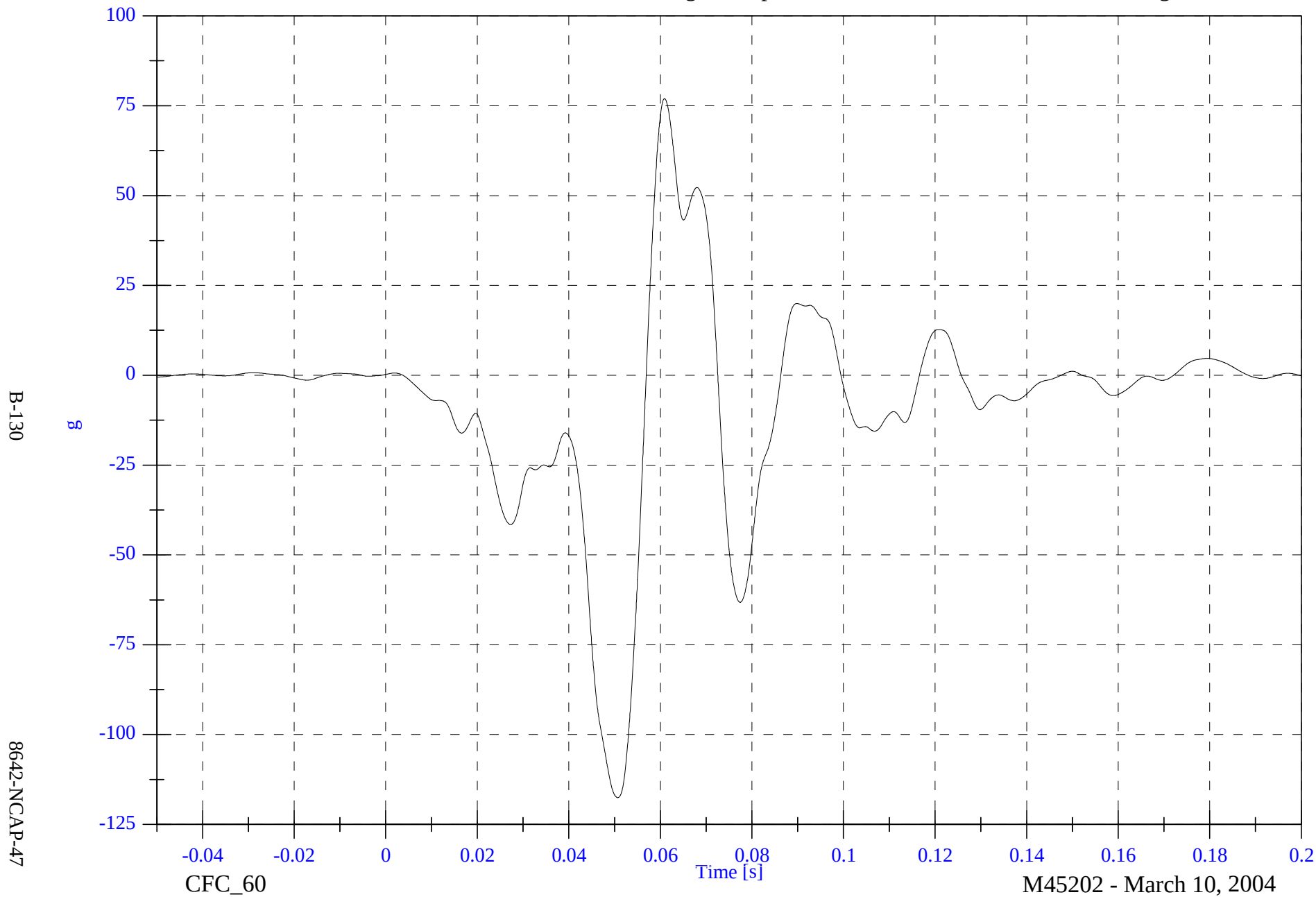


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Right Caliper #5x

Max: 77.0 [g] at 0.061 [s]

Min: -117.5 [g] at 0.051 [s]

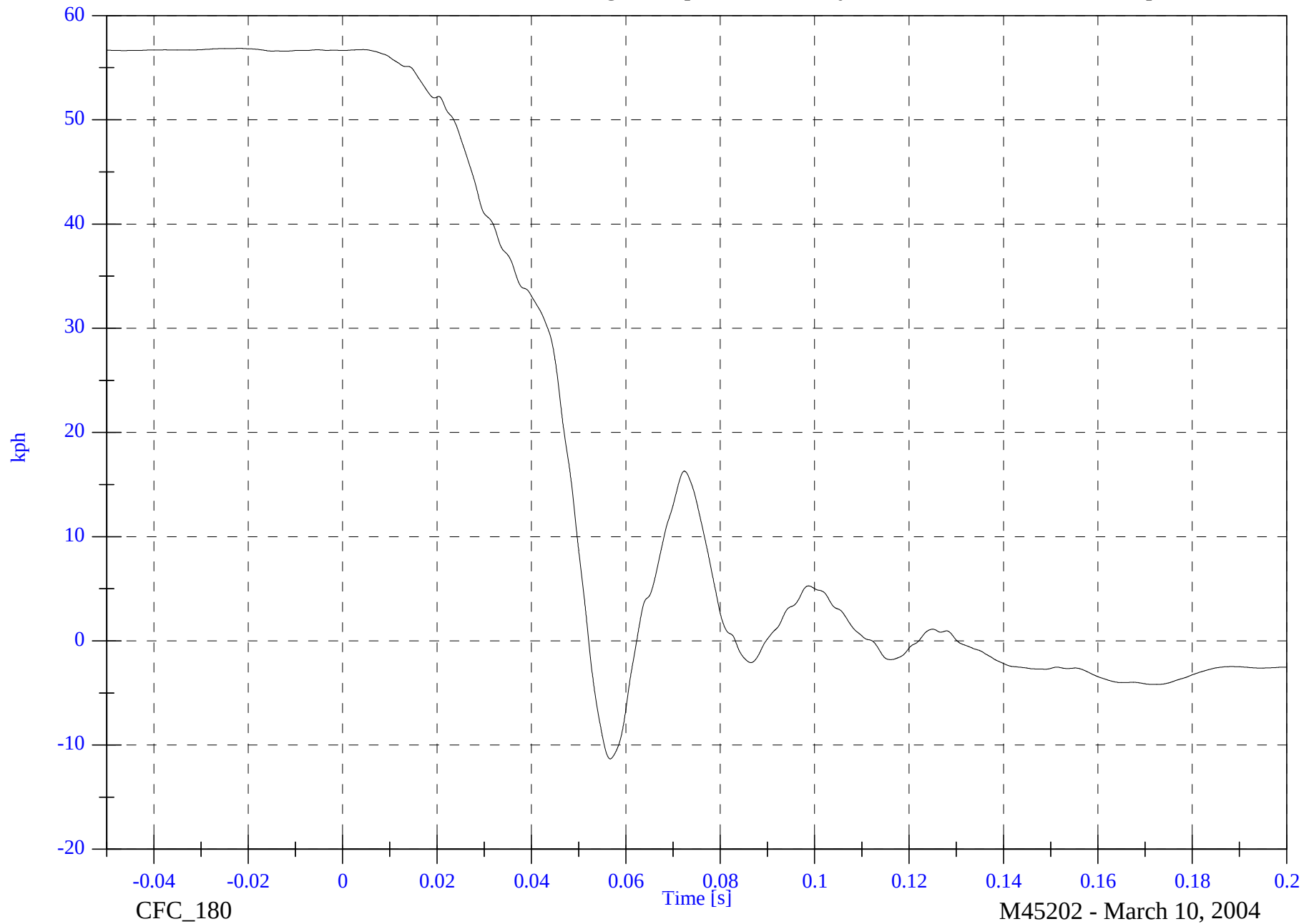


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.9 [kph] at -0.022 [s]

V1 Right Caliper #5x Velocity

Min: -11.3 [kph] at 0.057 [s]



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8642-NCAP-47

CFC_180

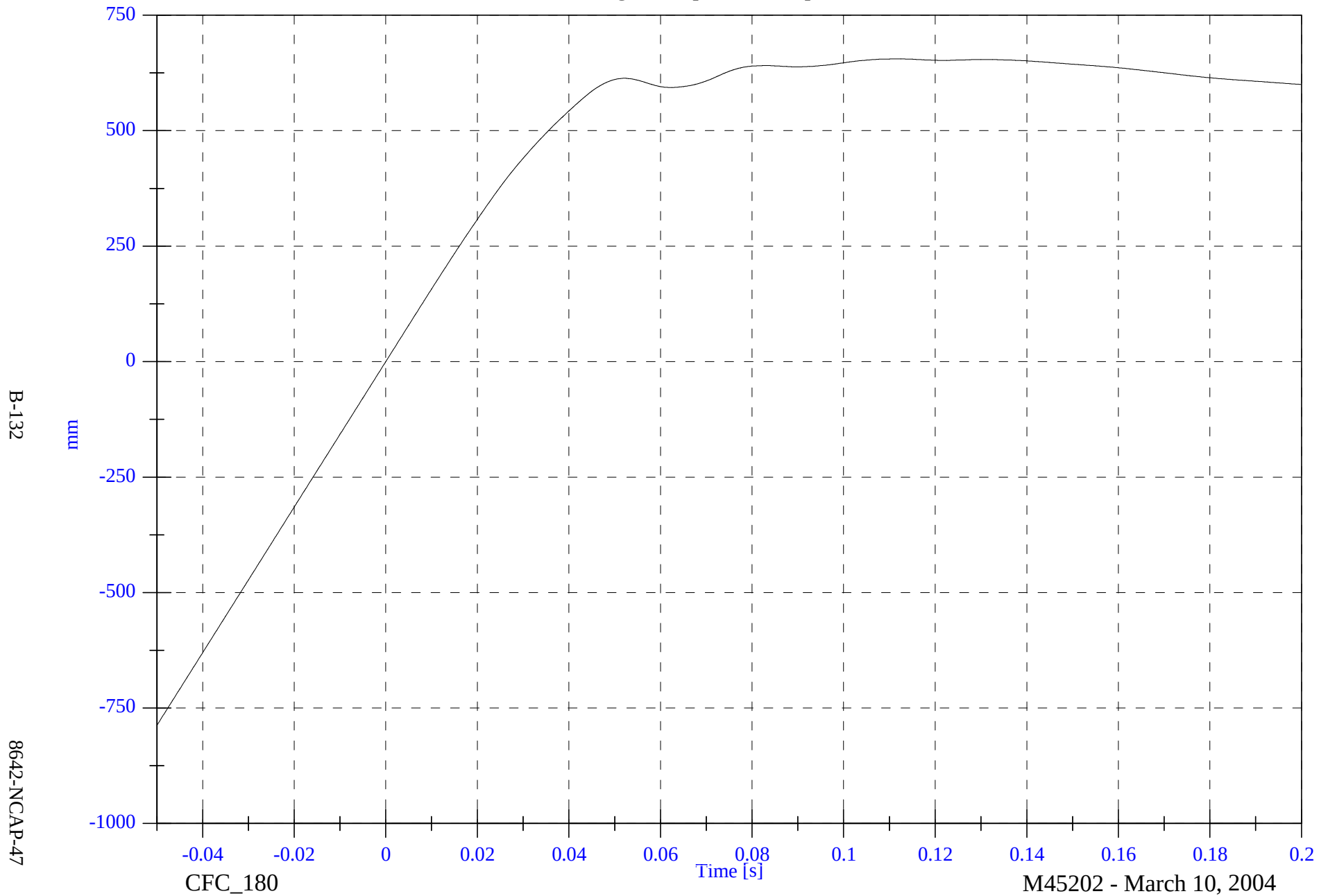
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 655.2 [mm] at 0.112 [s]

V1 Right Caliper #5x Displacement

Min: -787.6 [mm] at -0.050 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

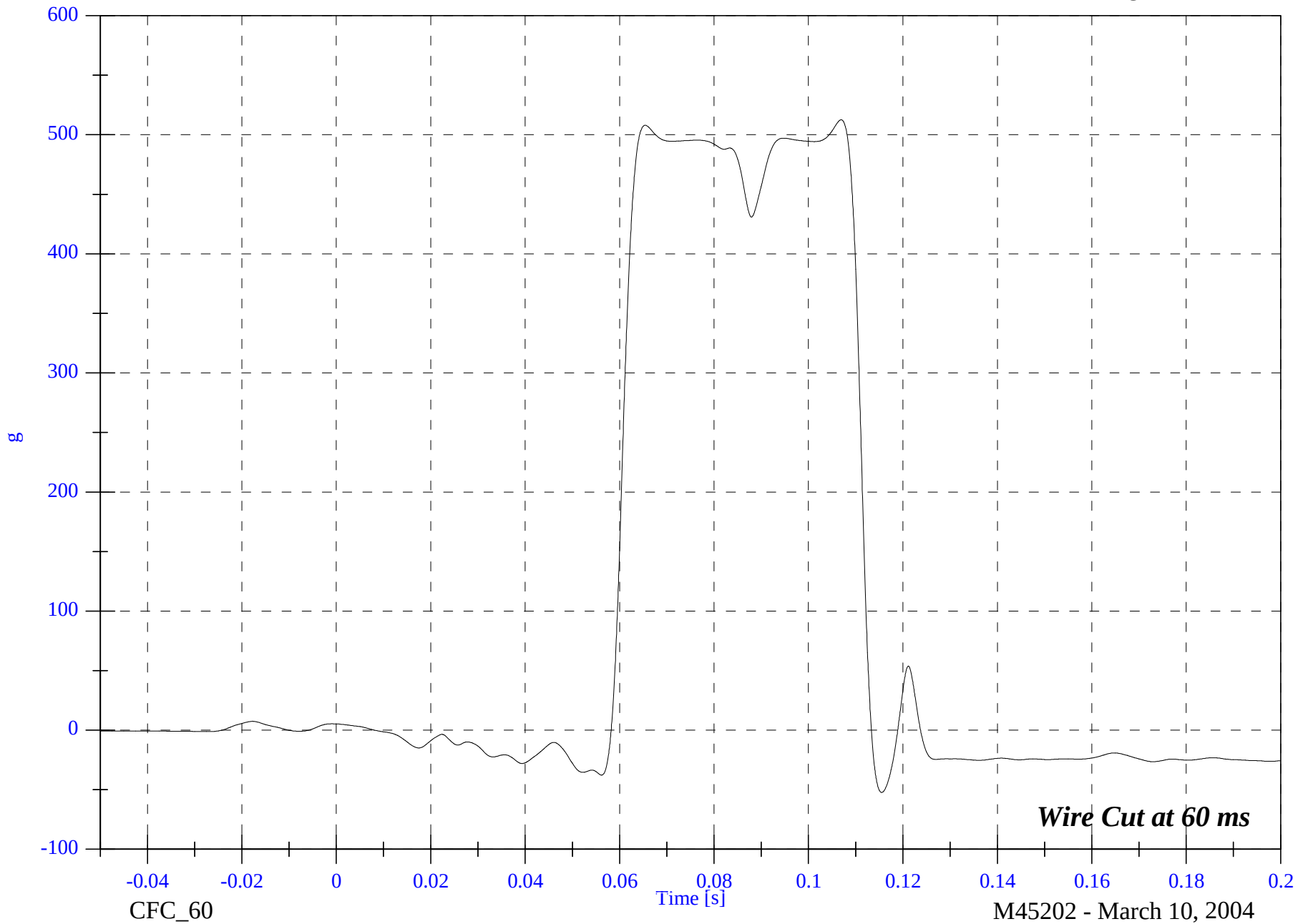
V1 Instrument Panel #6x

Max: 512.5 [g] at 0.107 [s]

Min: -52.3 [g] at 0.115 [s]

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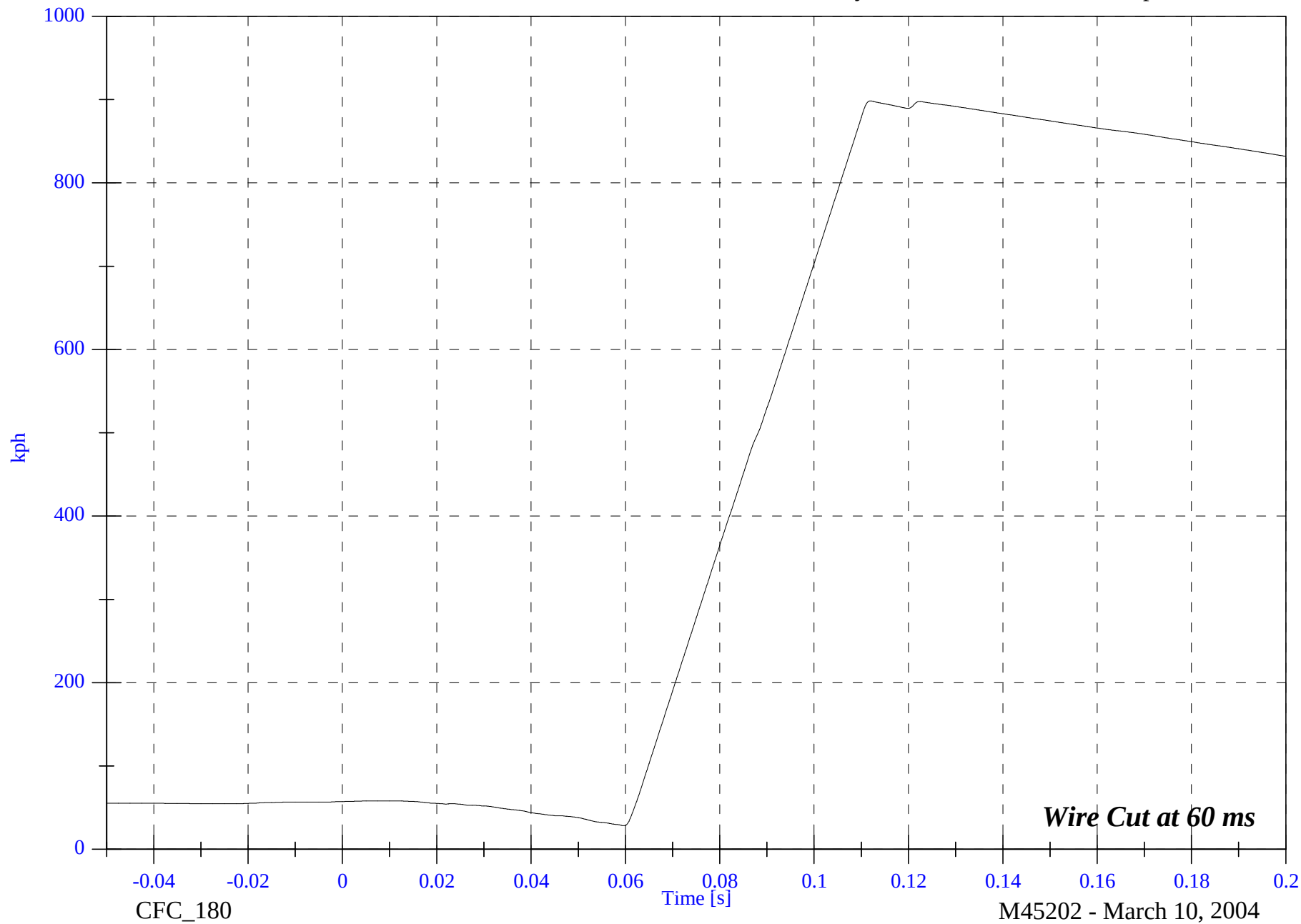


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Instrument Panel #6x Velocity

Max: 898.5 [kph] at 0.112 [s]

Min: 28.3 [kph] at 0.060 [s]



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Wire Cut at 60 ms

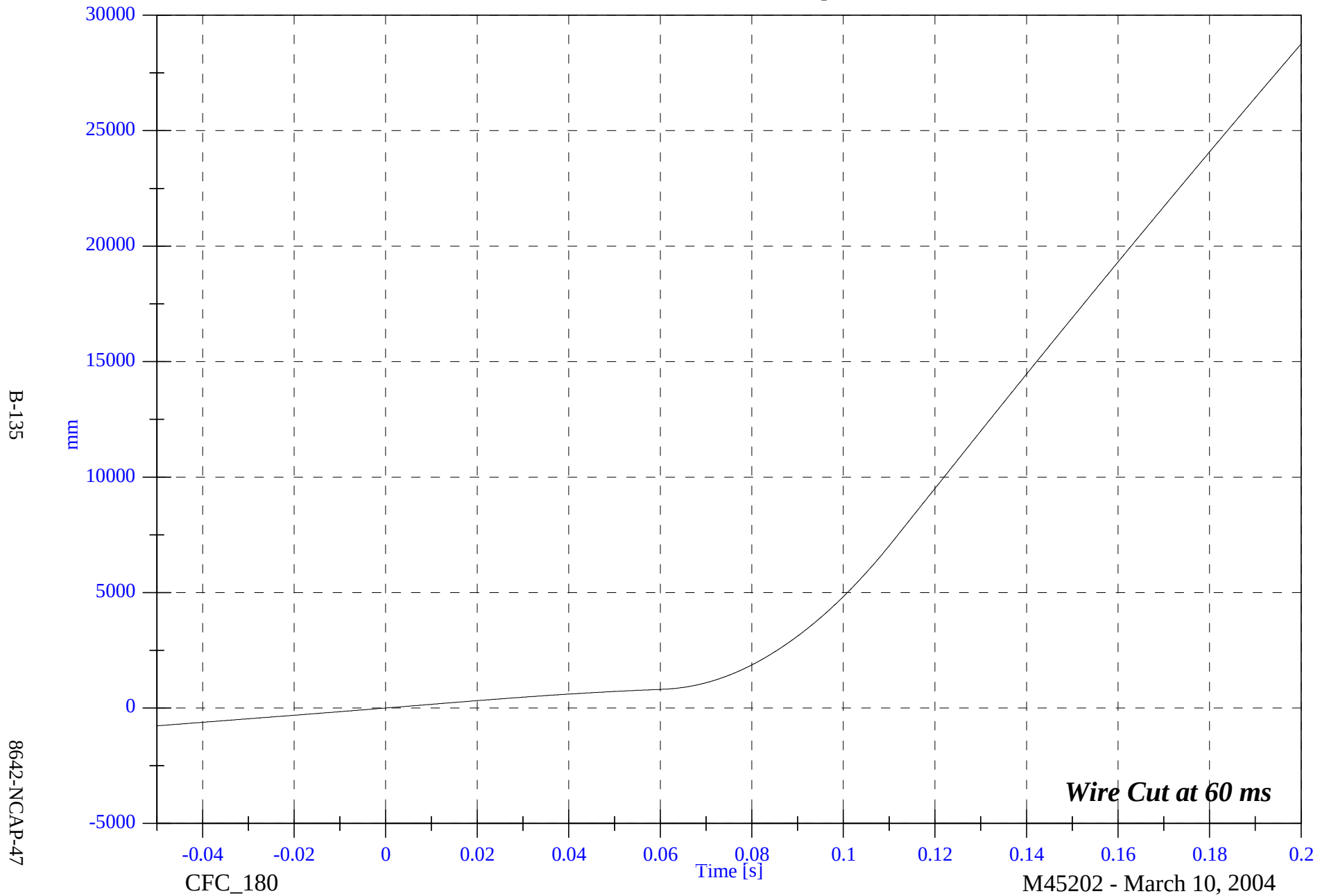
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Instrument Panel #6x Displacement

Max: 28740.2 [mm] at 0.200 [s]

Min: -771.9 [mm] at -0.050 [s]

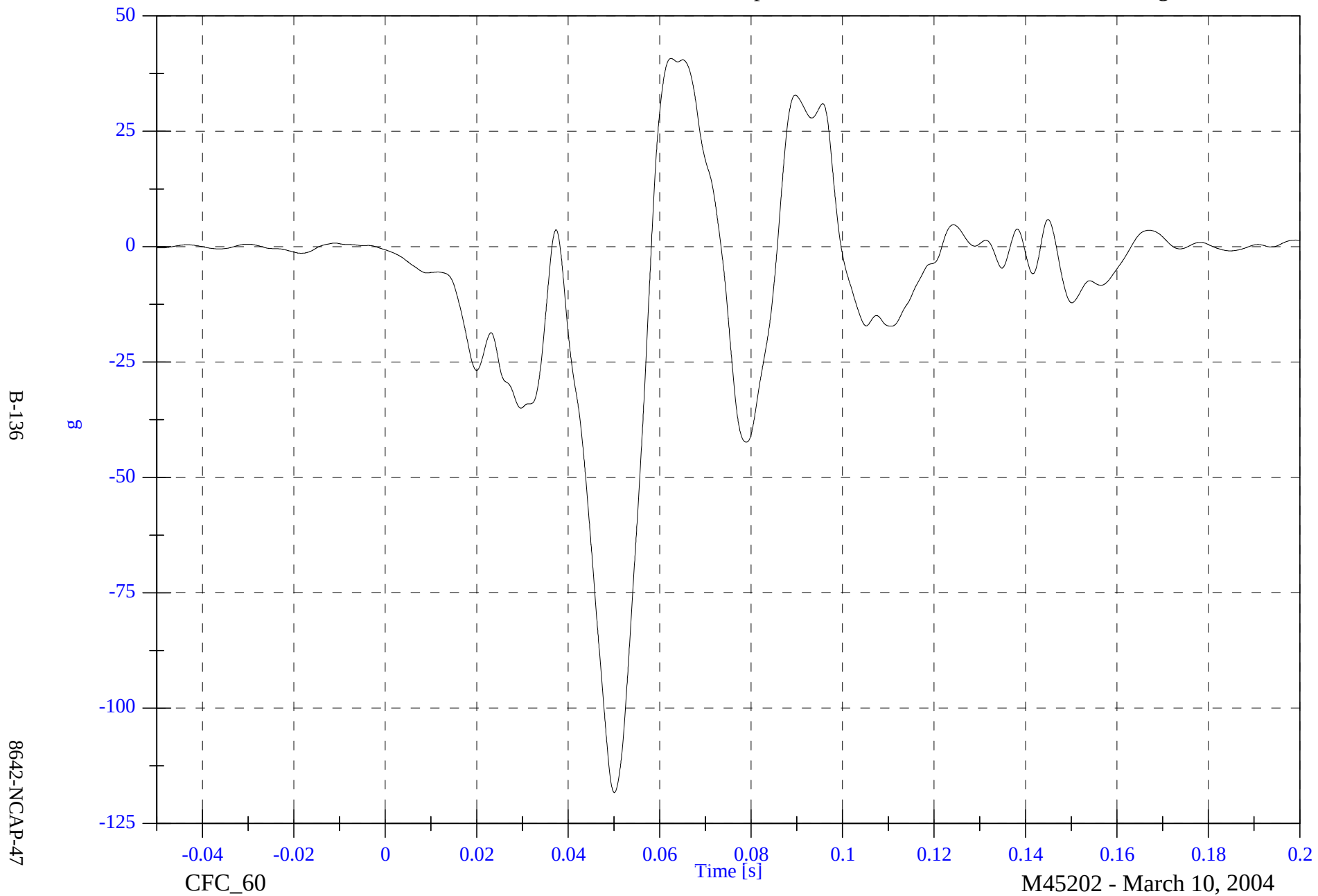


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 40.8 [g] at 0.062 [s]

Min: -118.3 [g] at 0.050 [s]

V1 Left Caliper #7x

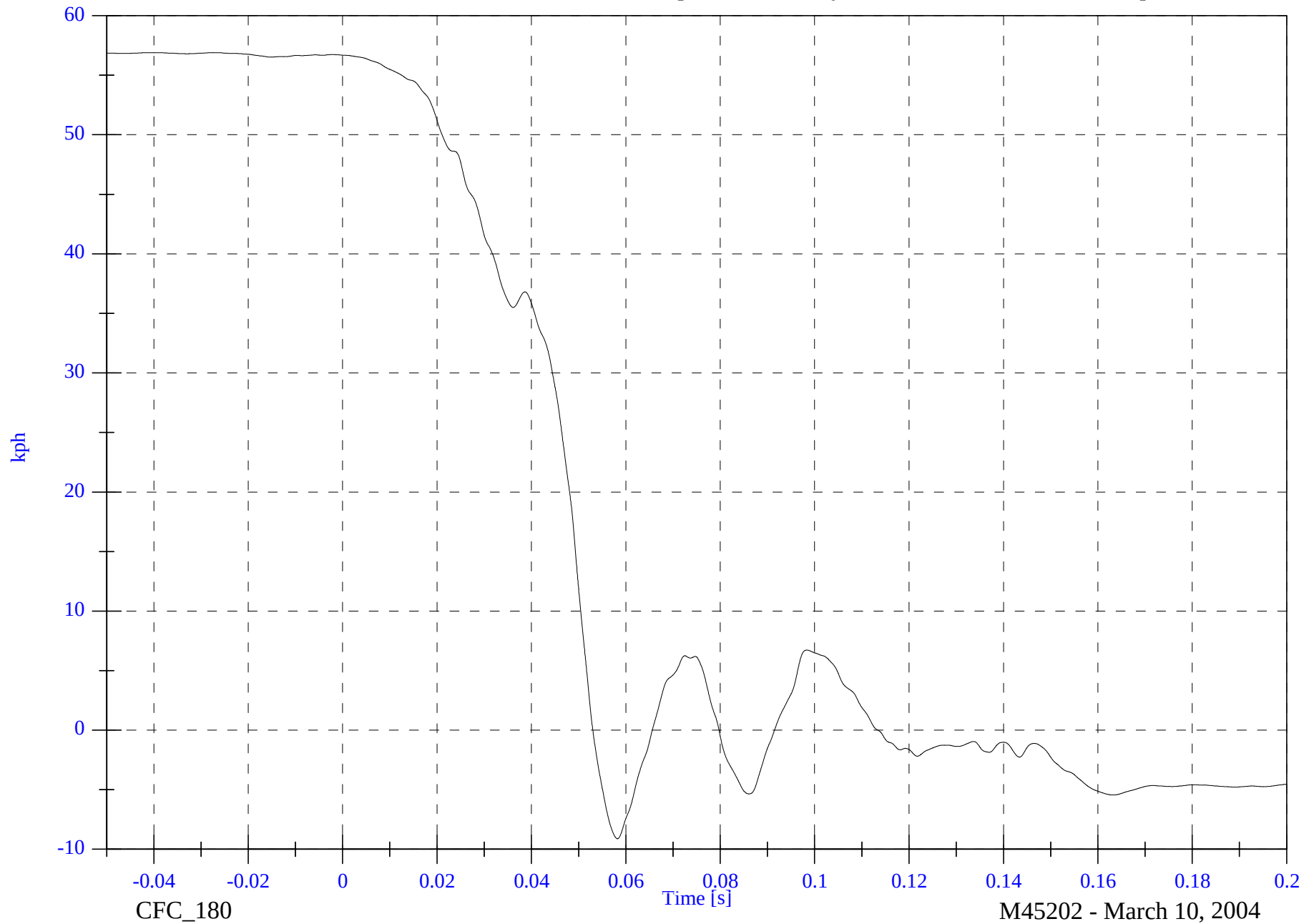


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.9 [kph] at -0.040 [s]

V1 Left Caliper #7x Velocity

Min: -9.1 [kph] at 0.058 [s]



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CFC_180

M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

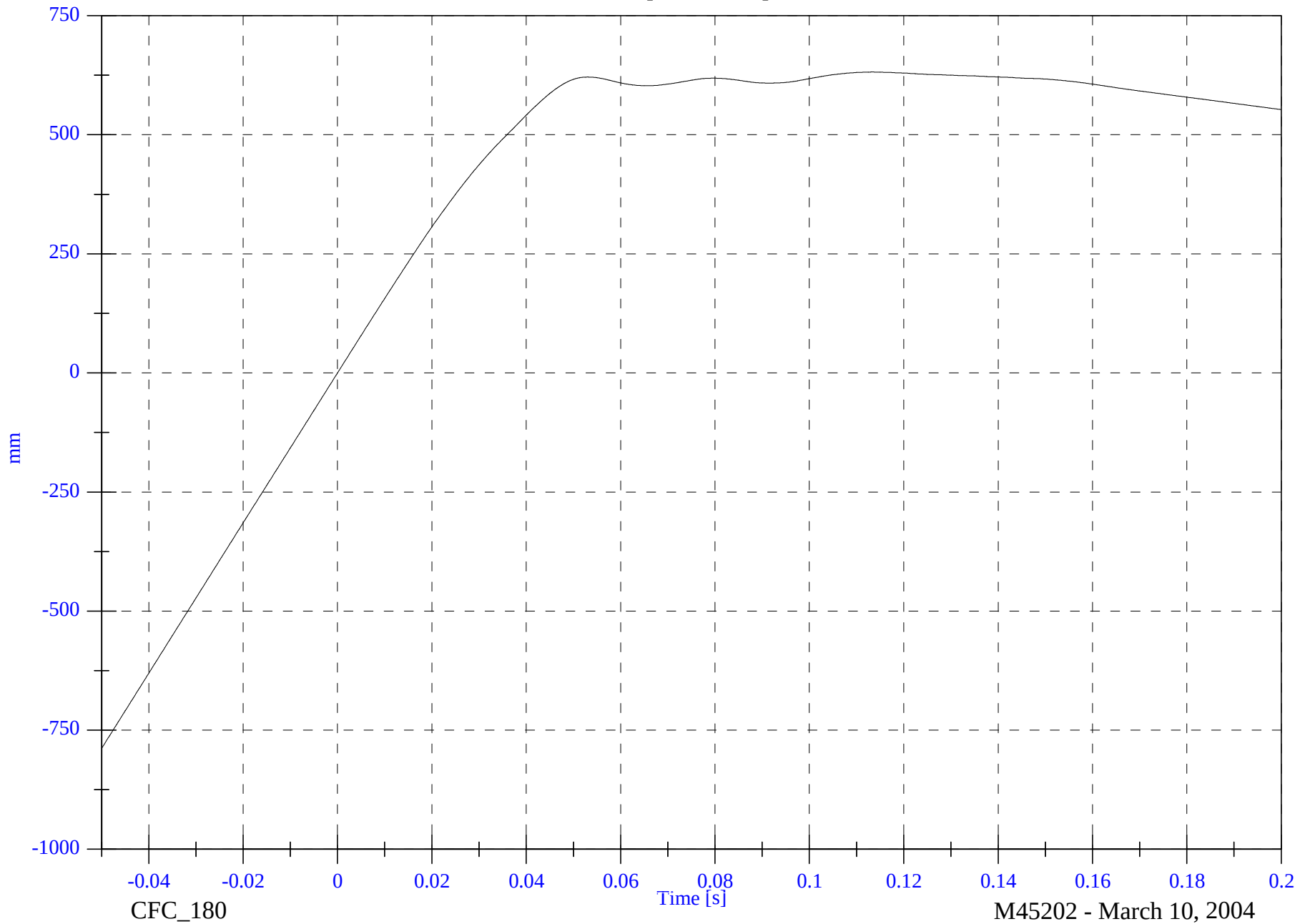
Max: 631.4 [mm] at 0.113 [s]

V1 Left Caliper #7x Displacement

Min: -788.4 [mm] at -0.050 [s]

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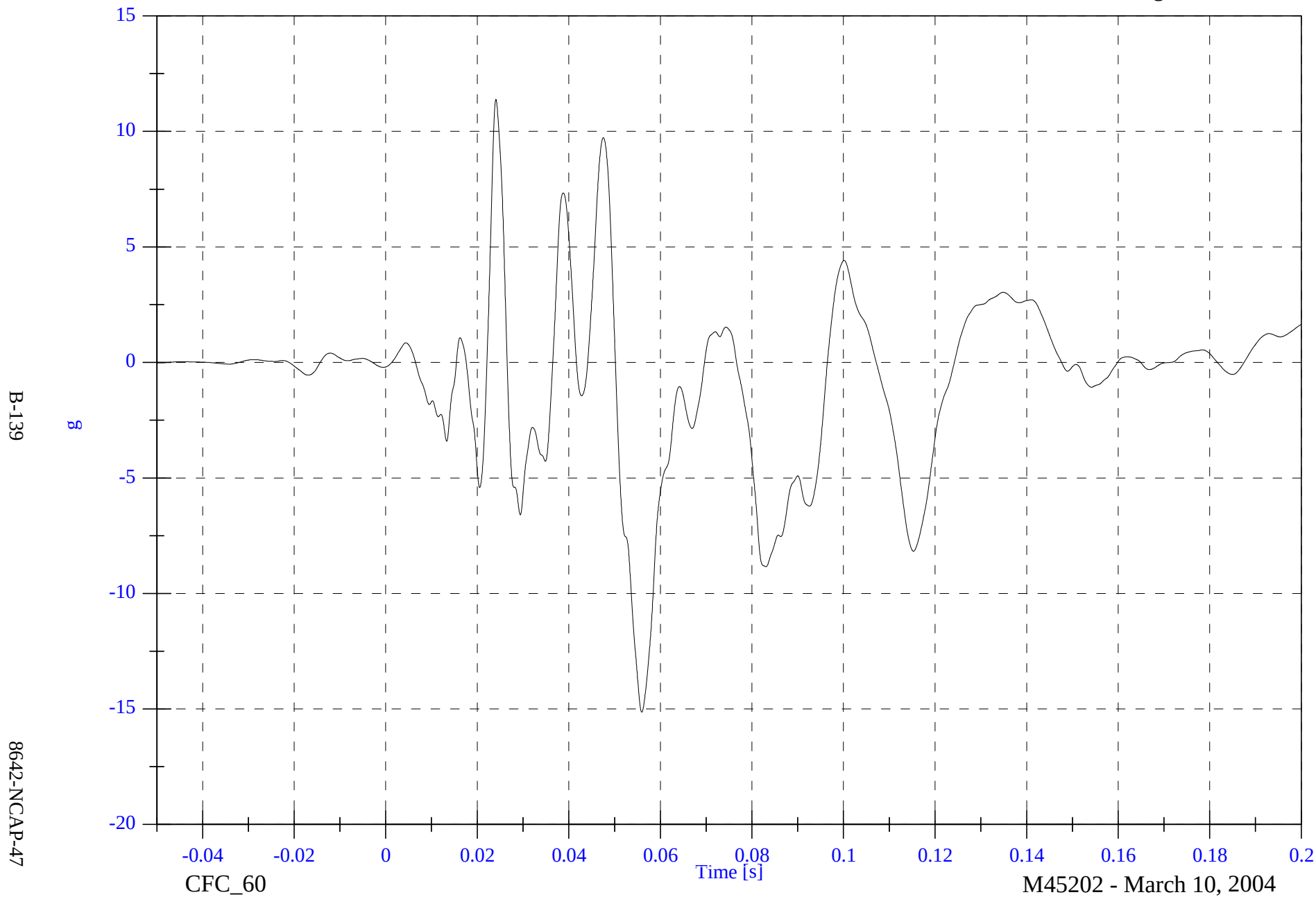
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Left Rear #8z

Max: 11.4 [g] at 0.024 [s]

Min: -15.1 [g] at 0.056 [s]

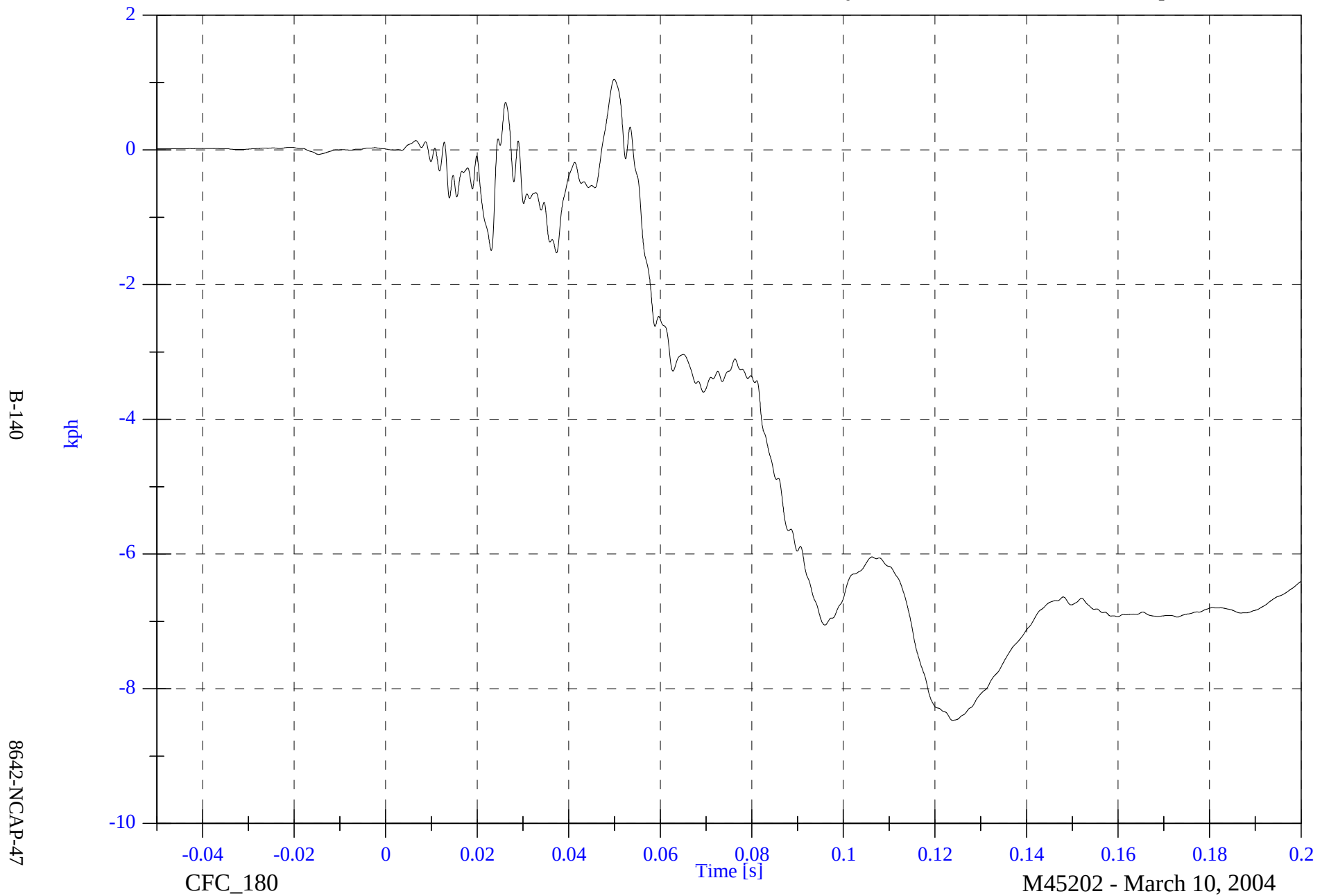


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1.0 [kph] at 0.050 [s]

Min: -8.5 [kph] at 0.124 [s]

V1 Left Rear #8z Velocity

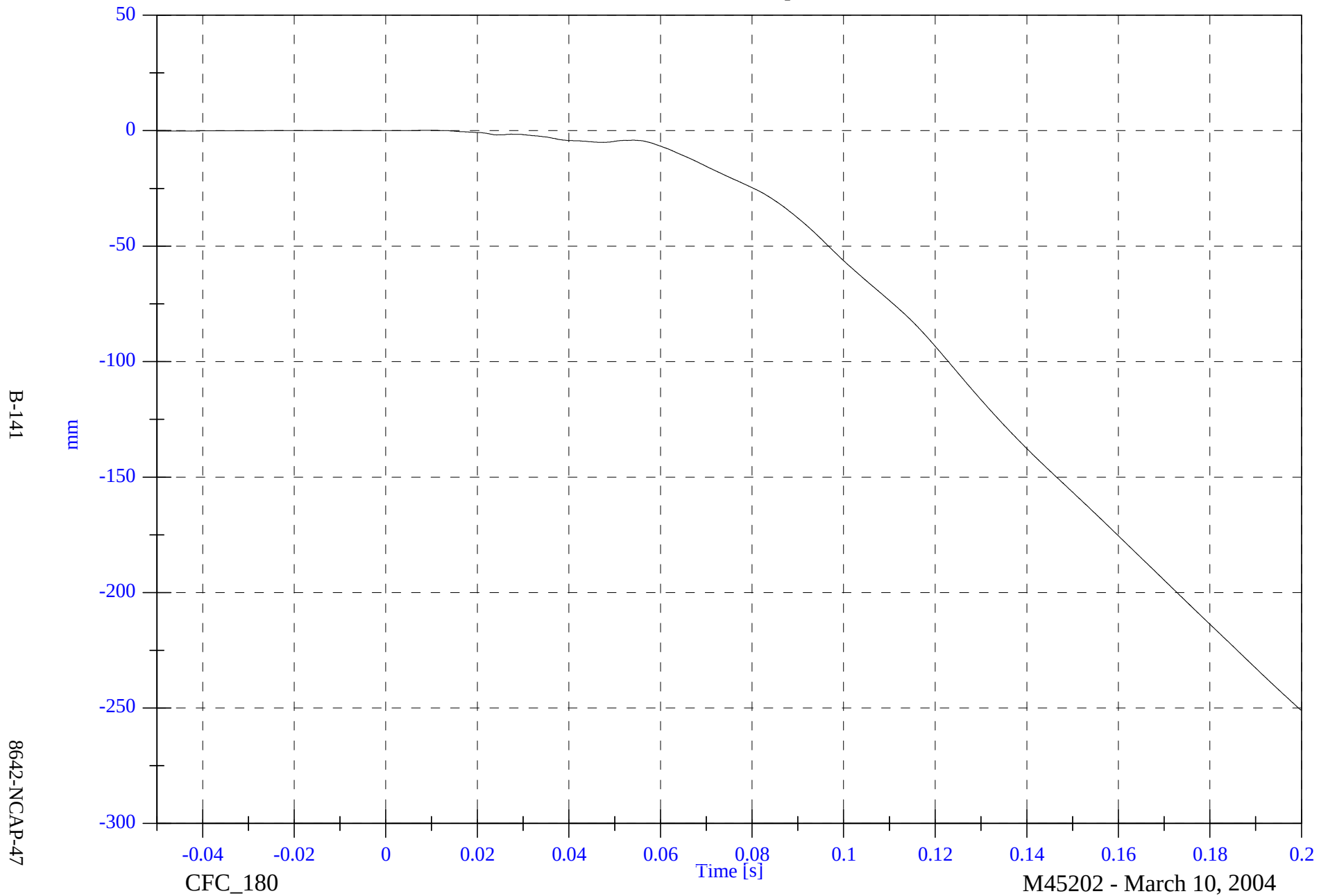


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 0.1 [mm] at 0.009 [s]

V1 Left Rear #8z Displacement

Min: -251.1 [mm] at 0.200 [s]

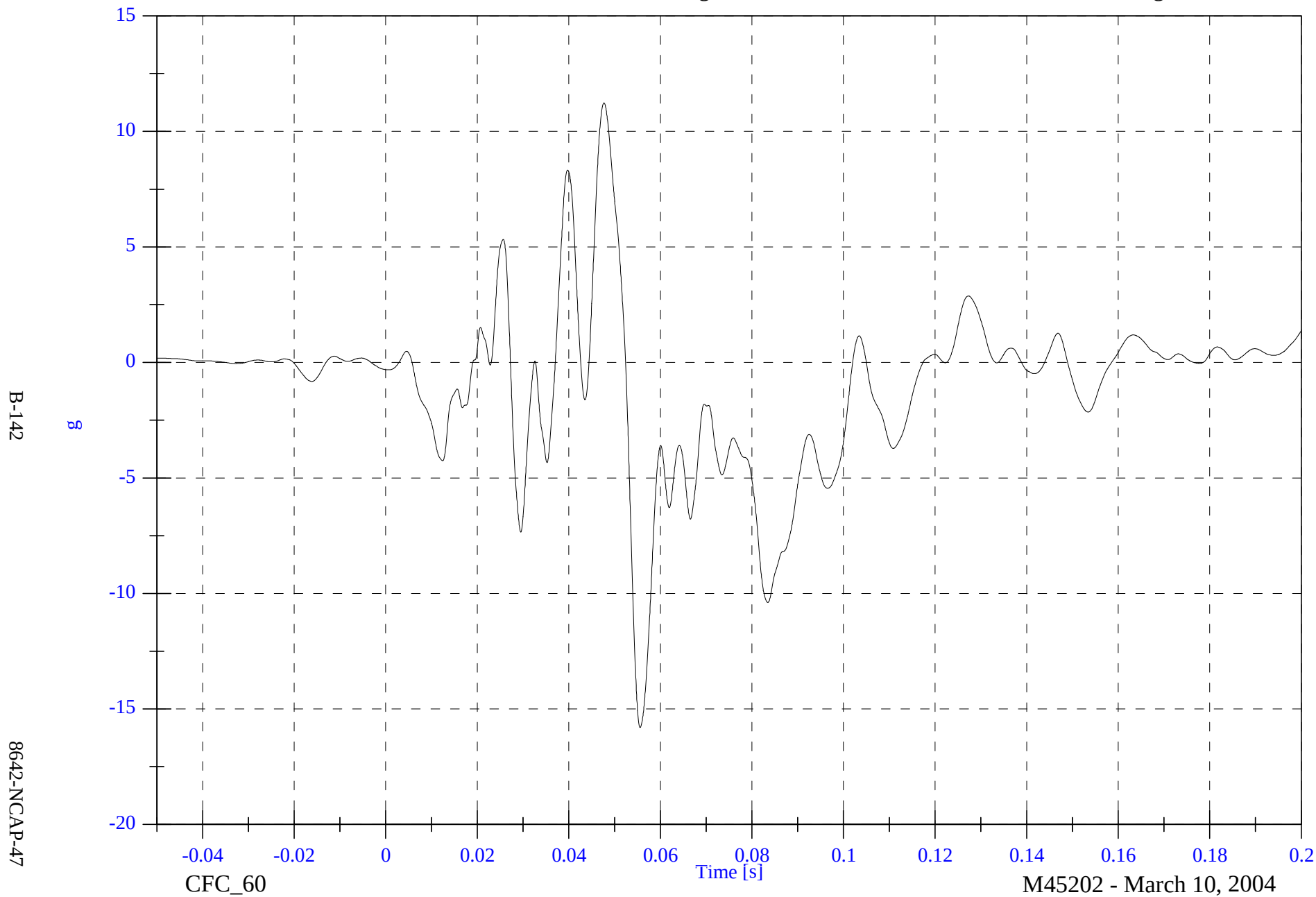


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 Right Rear #9z

Max: 11.2 [g] at 0.048 [s]

Min: -15.8 [g] at 0.056 [s]

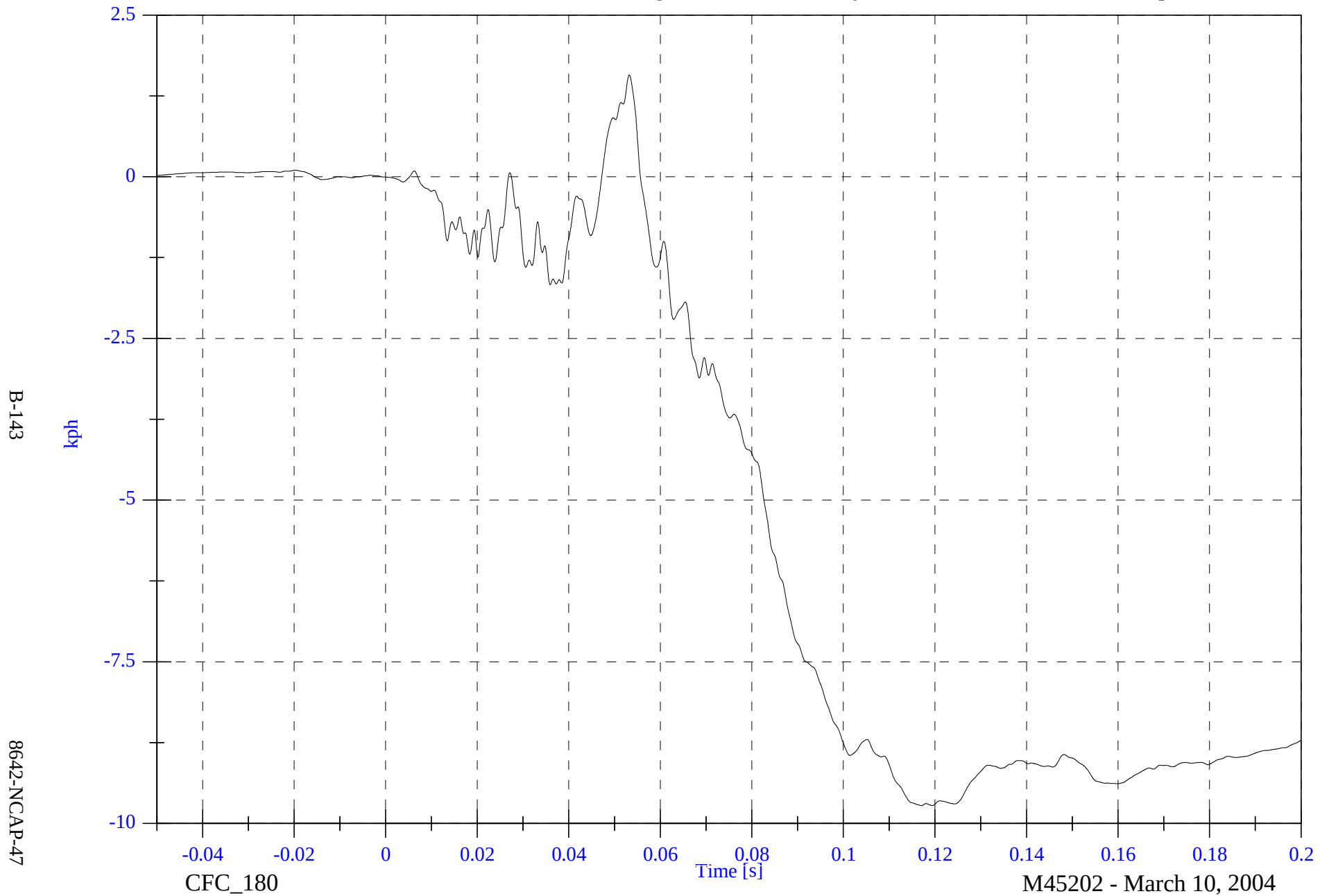


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1.6 [kph] at 0.053 [s]

Min: -9.7 [kph] at 0.117 [s]

V1 Right Rear #9z Velocity



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8642-NCAP-47

CFC_180

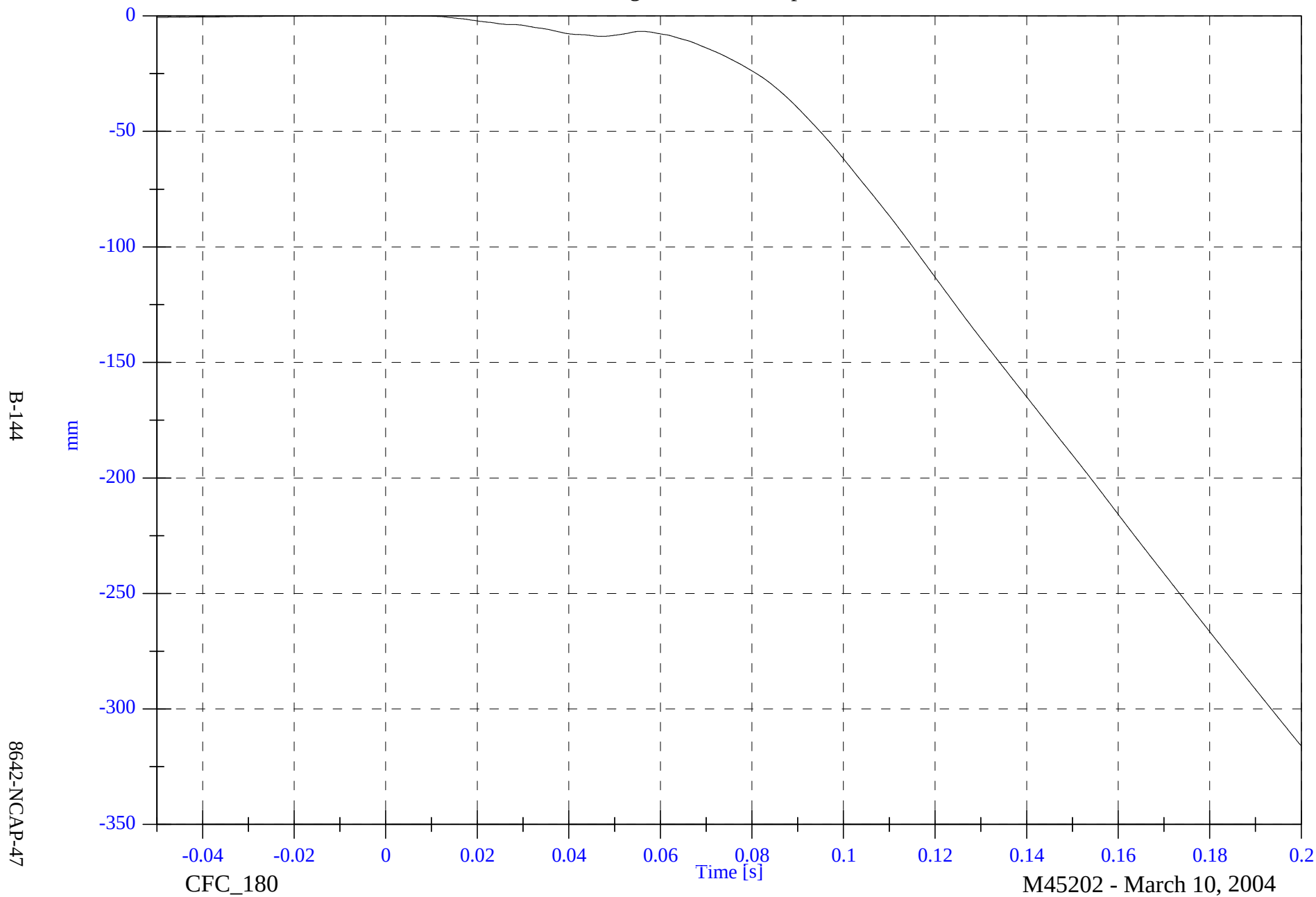
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 0.0 [mm] at -0.015 [s]

V1 Right Rear #9z Displacement

Min: -315.9 [mm] at 0.200 [s]



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8642-NCAP-47

CFC_180

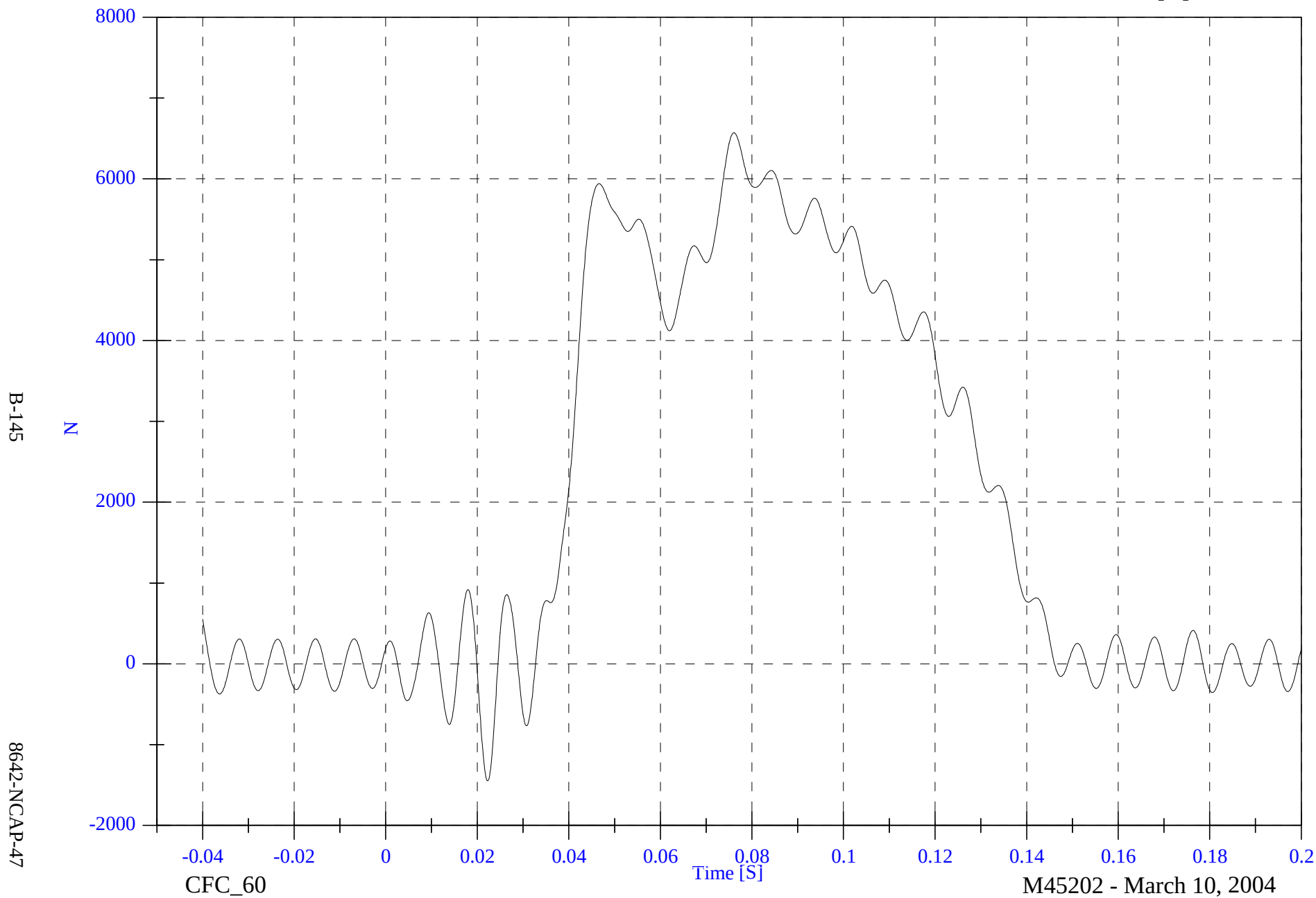
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6570.3 [N] at 0.076 [S]

Min: -1448.3 [N] at 0.022 [S]

Barrier Load Cell A1 Fx

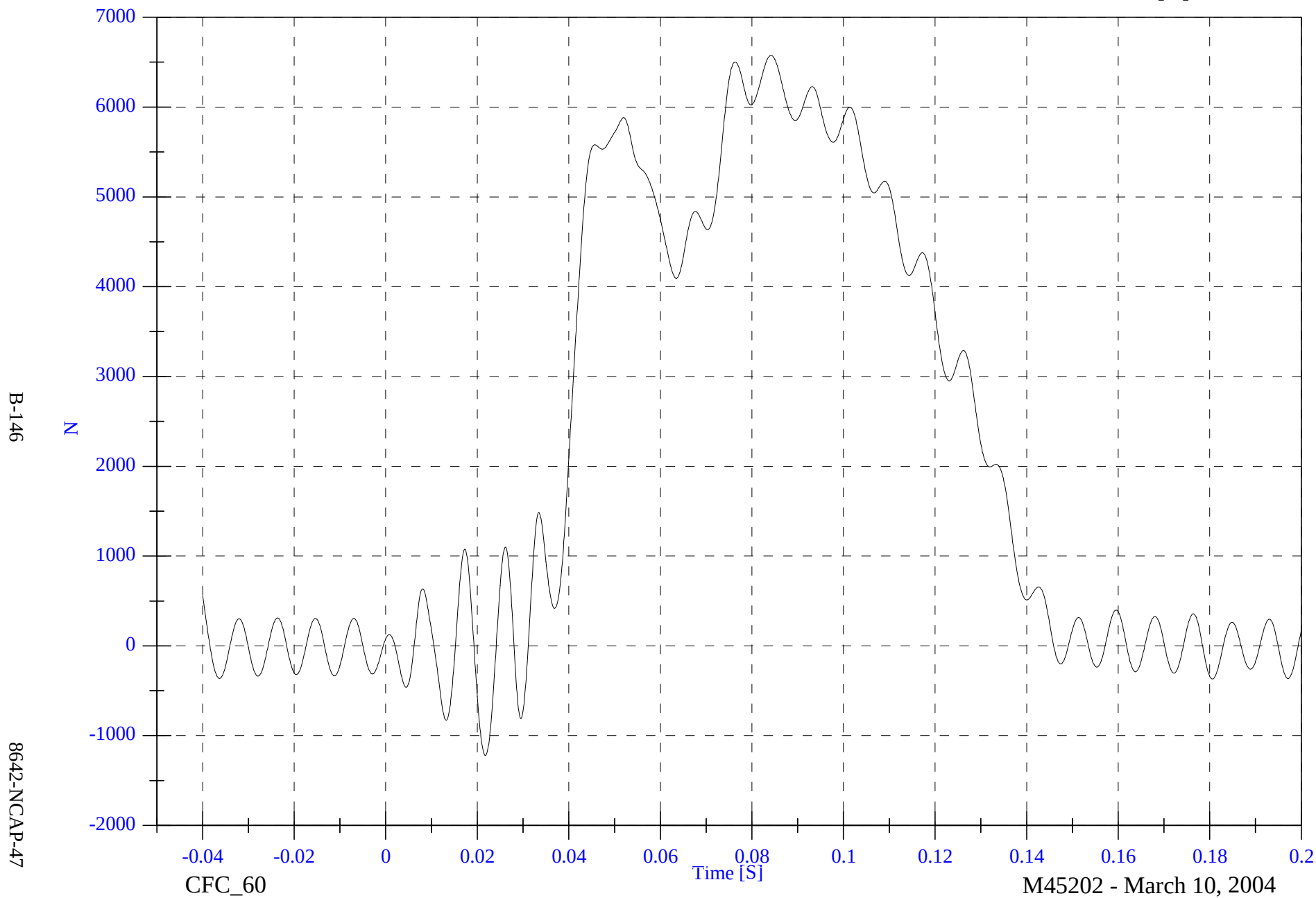


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6574.5 [N] at 0.084 [S]

Min: -1220.6 [N] at 0.022 [S]

Barrier Load Cell A2 Fx

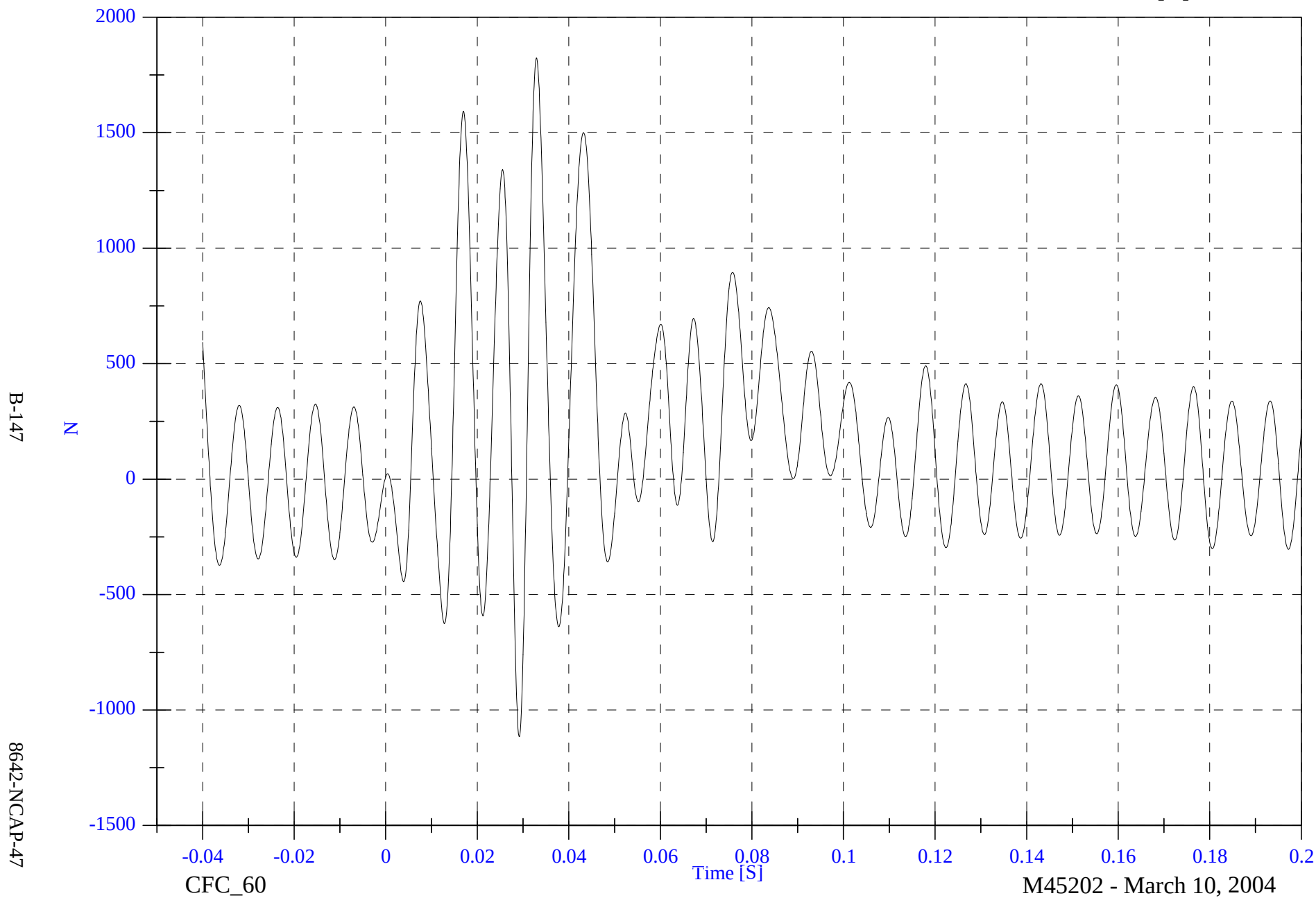


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1824.4 [N] at 0.033 [S]

Min: -1115.6 [N] at 0.029 [S]

Barrier Load Cell A3 Fx

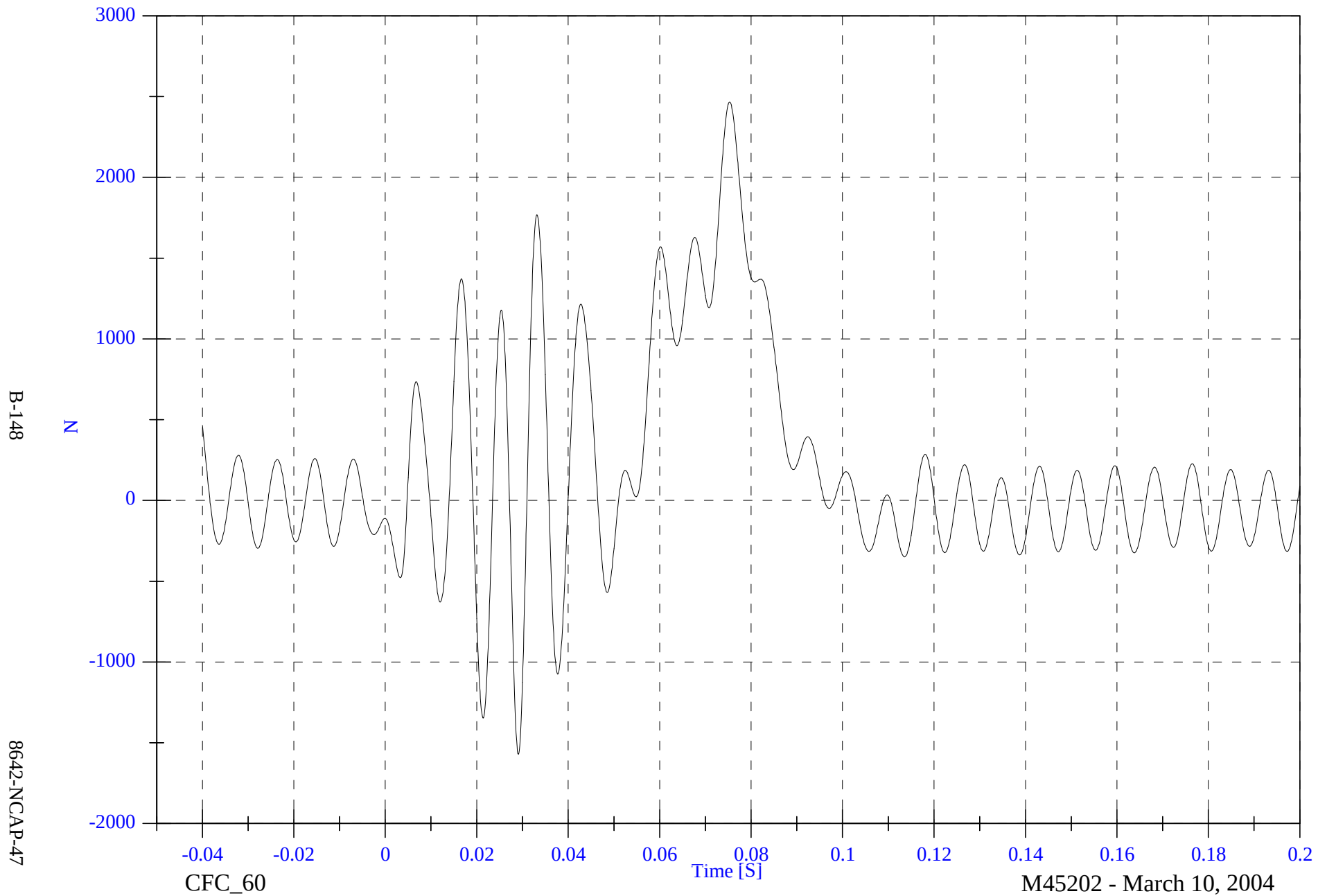


2004 NCAP Test 11 2004 Infiniti FX35/45

Barrier Load Cell A4 Fx

Max: 2467.3 [N] at 0.075 [S]

Min: -1571.8 [N] at 0.029 [S]

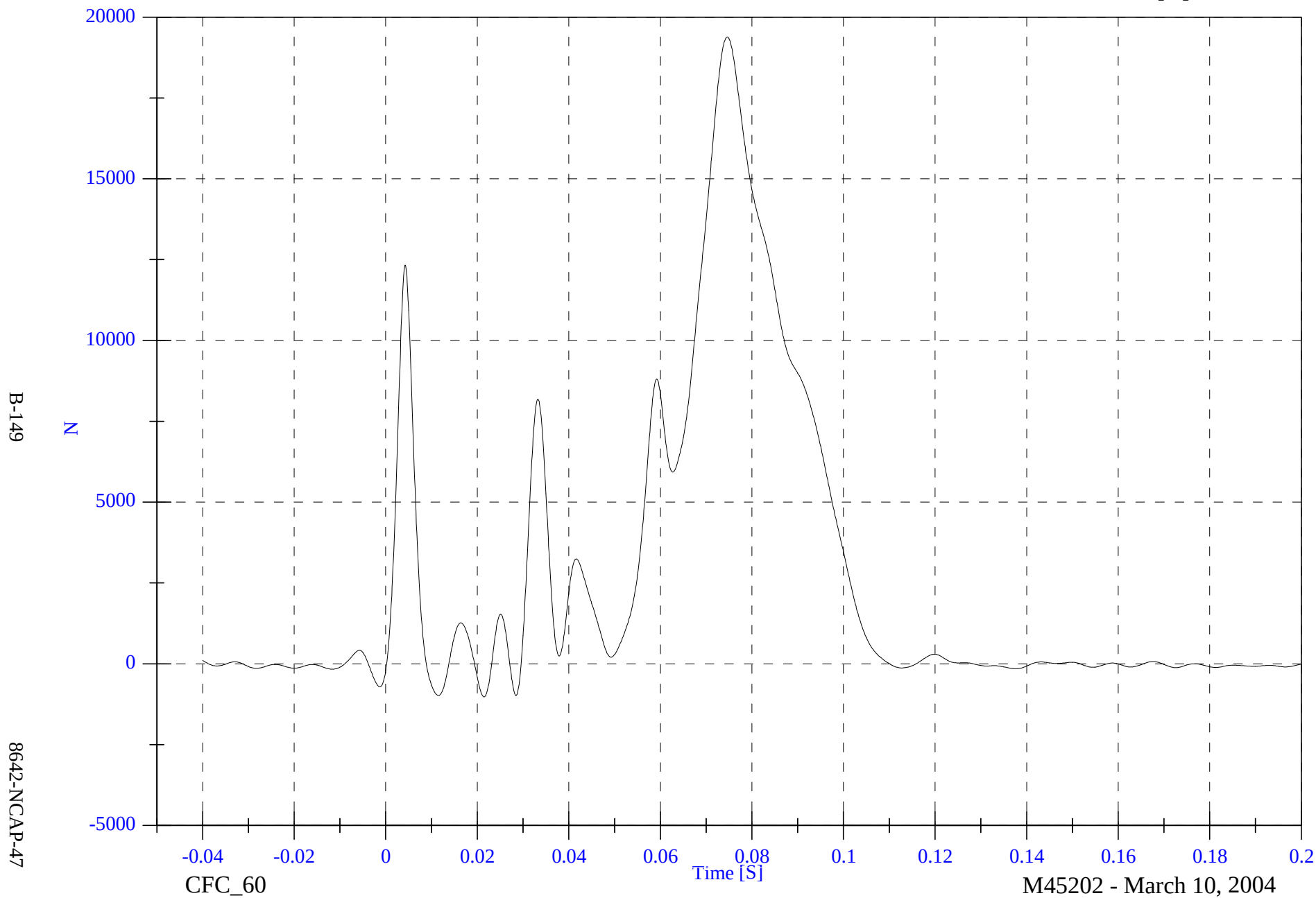


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 19391.4 [N] at 0.075 [S]

Min: -1022.7 [N] at 0.021 [S]

Barrier Load Cell A5 Fx

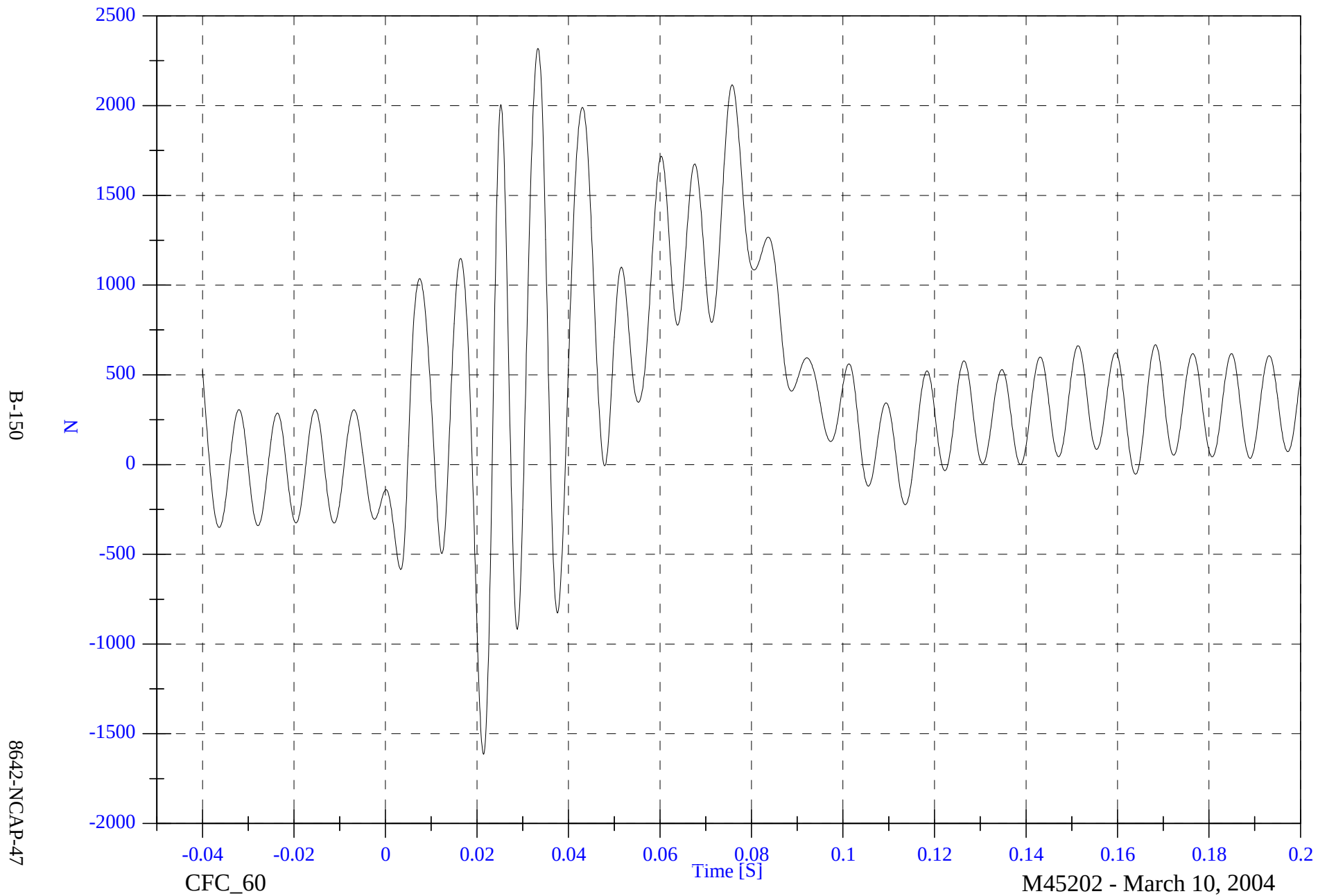


2004 NCAP Test 11 2004 Infiniti FX35/45

Barrier Load Cell A6 Fx

Max: 2319.0 [N] at 0.033 [S]

Min: -1613.8 [N] at 0.021 [S]

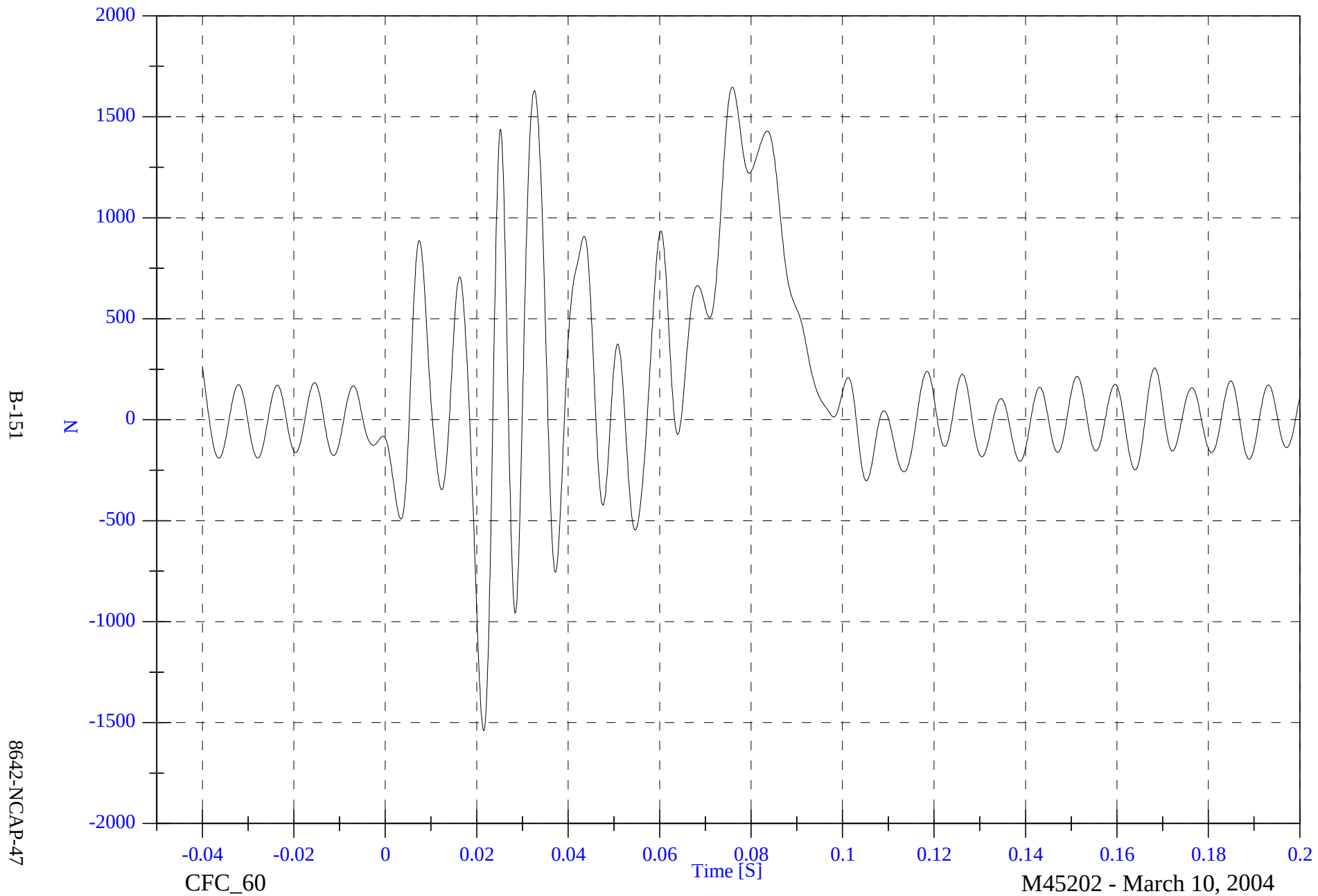


2004 NCAP Test 11 2004 Infiniti FX35/45

Barrier Load Cell A7 Fx

Max: 1646.9 [N] at 0.076 [S]

Min: -1540.2 [N] at 0.021 [S]

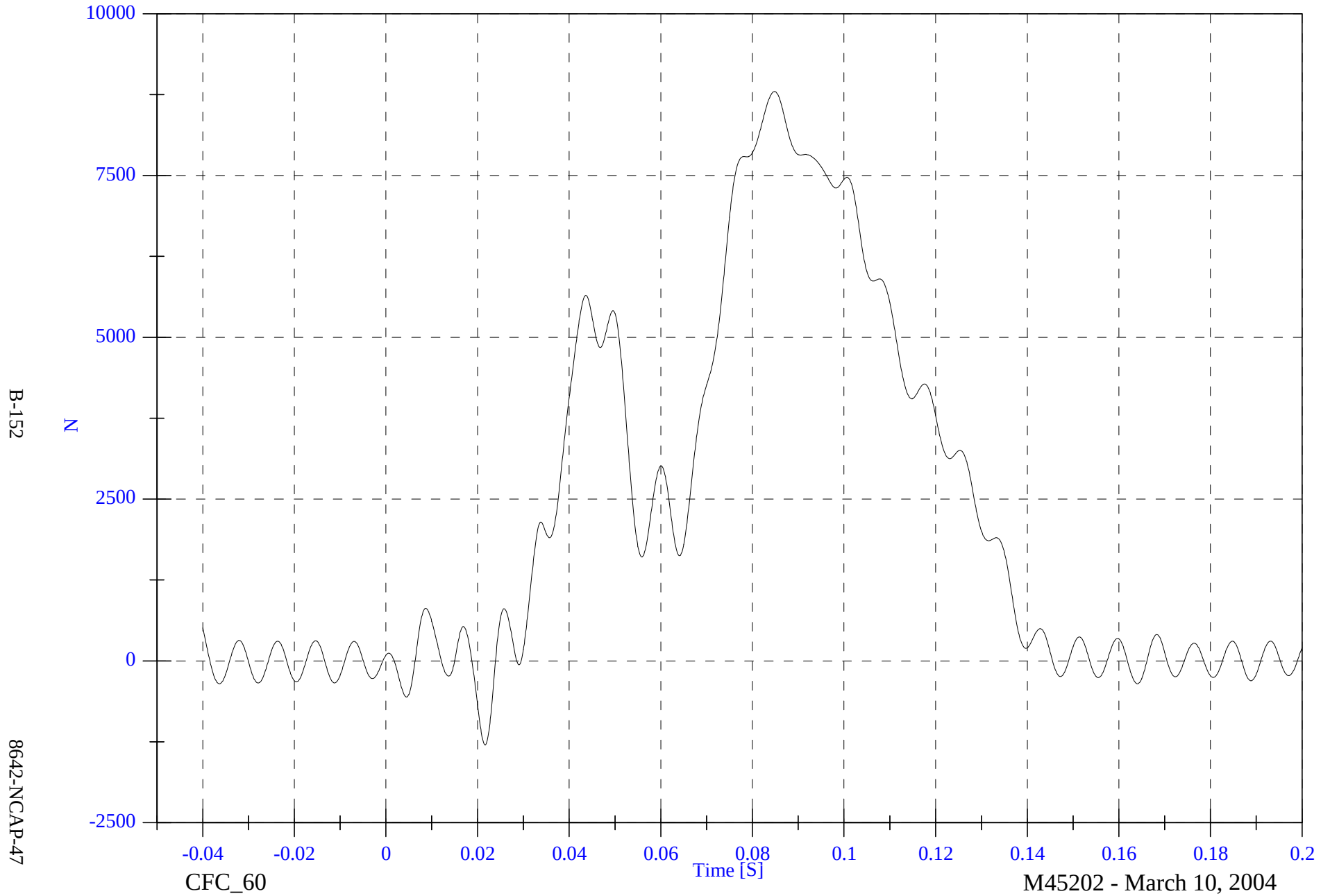


2004 NCAP Test 11 2004 Infiniti FX35/45

Barrier Load Cell A8 Fx

Max: 8798.4 [N] at 0.085 [S]

Min: -1296.5 [N] at 0.022 [S]

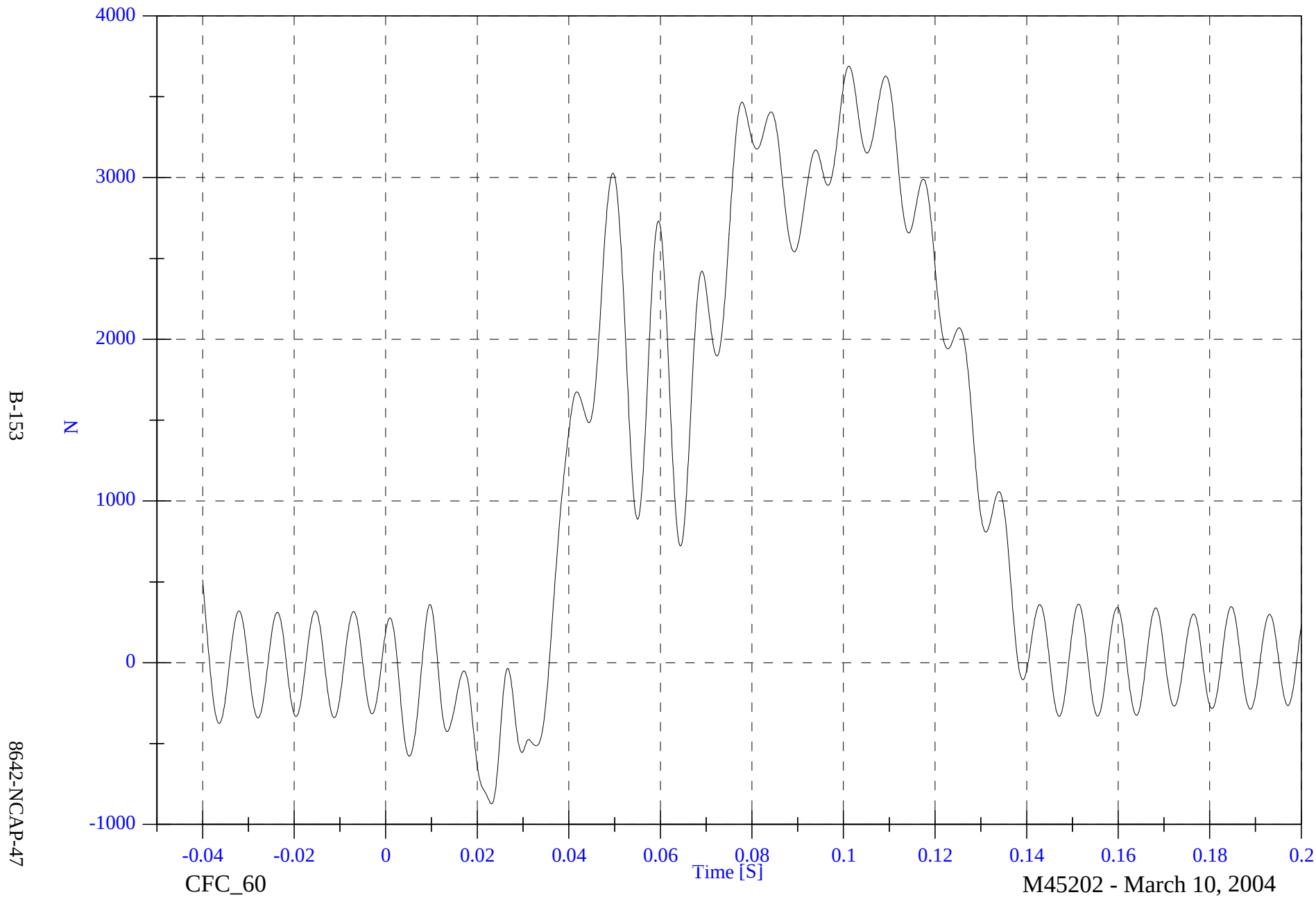


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 3688.7 [N] at 0.101 [S]

Min: -872.5 [N] at 0.023 [S]

Barrier Load Cell A9 Fx

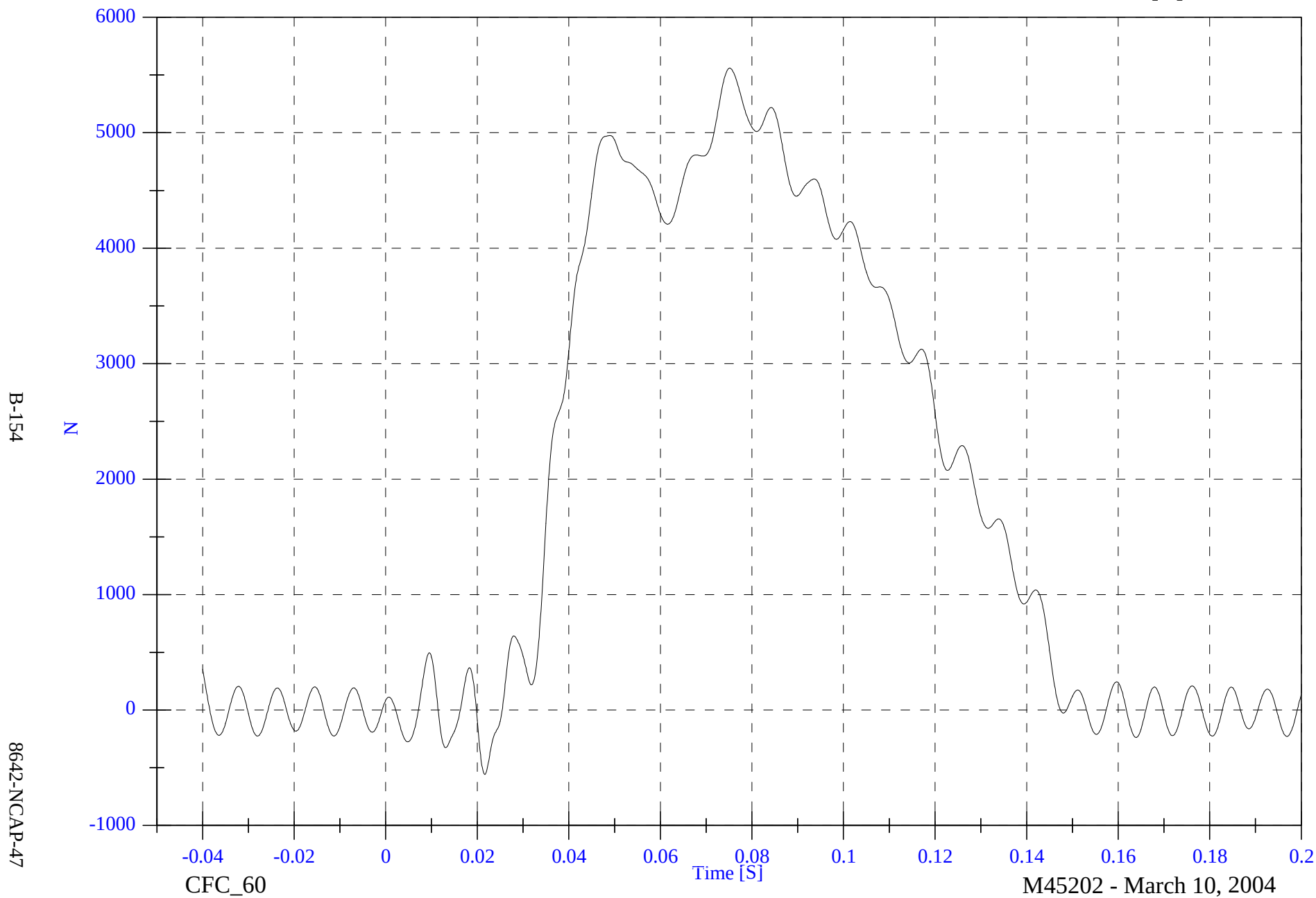


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 5558.7 [N] at 0.075 [S]

Min: -556.9 [N] at 0.022 [S]

Barrier Load Cell B1 Fx

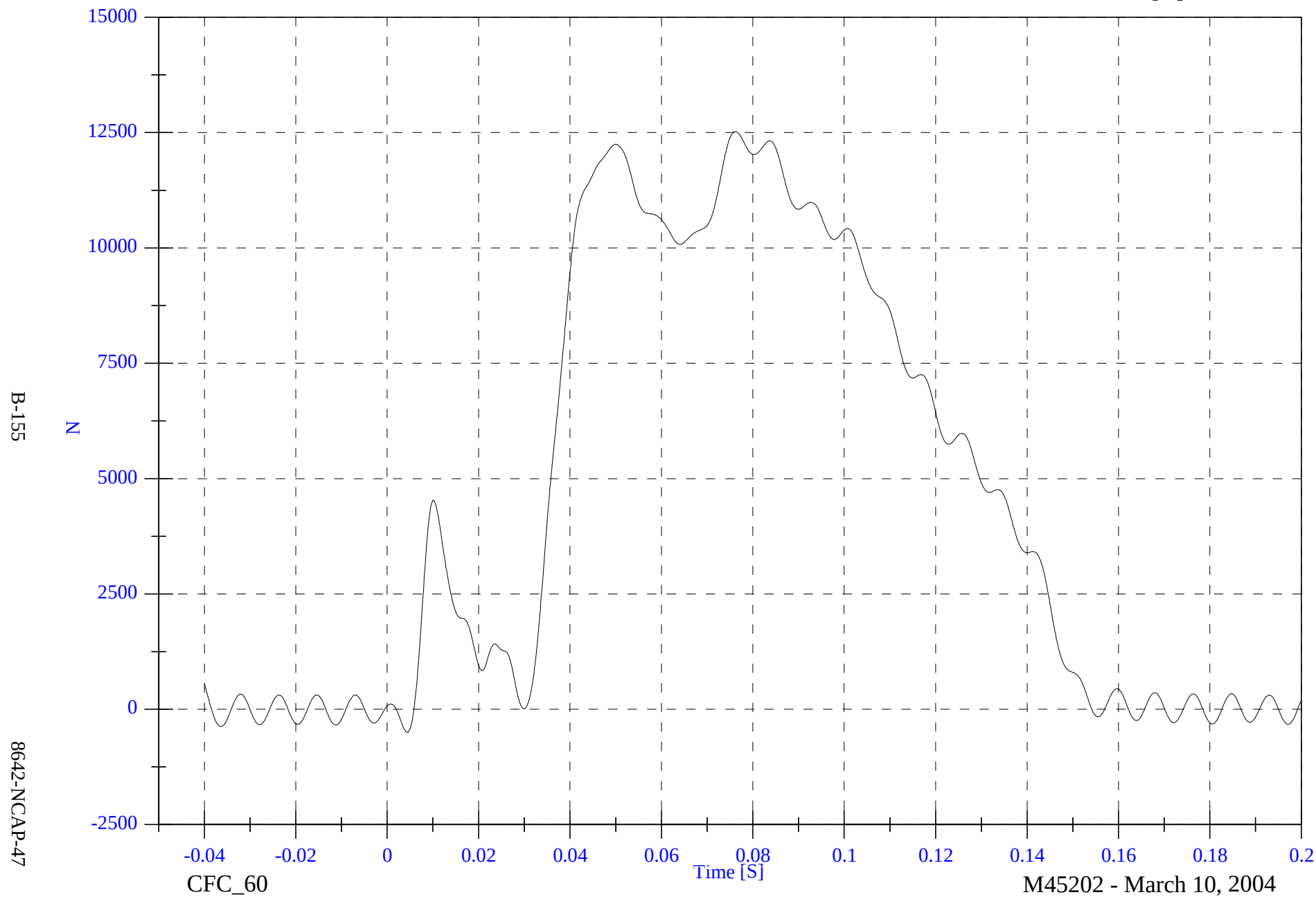


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 12520.1 [N] at 0.076 [S]

Min: -502.2 [N] at 0.004 [S]

Barrier Load Cell B2 Fx

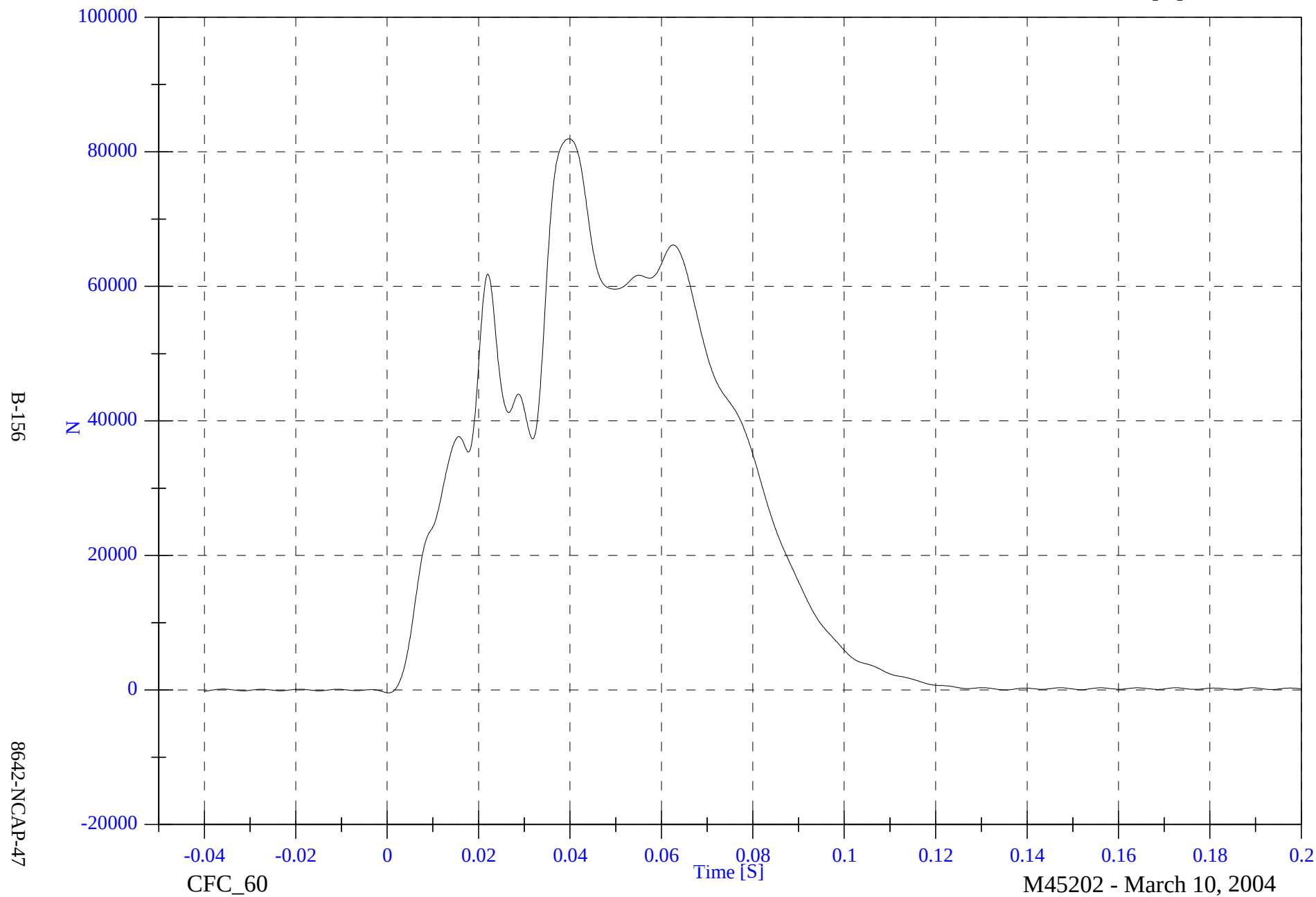


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 81931.4 [N] at 0.040 [S]

Min: -426.3 [N] at 0.000 [S]

Barrier Load Cell B3 Fx

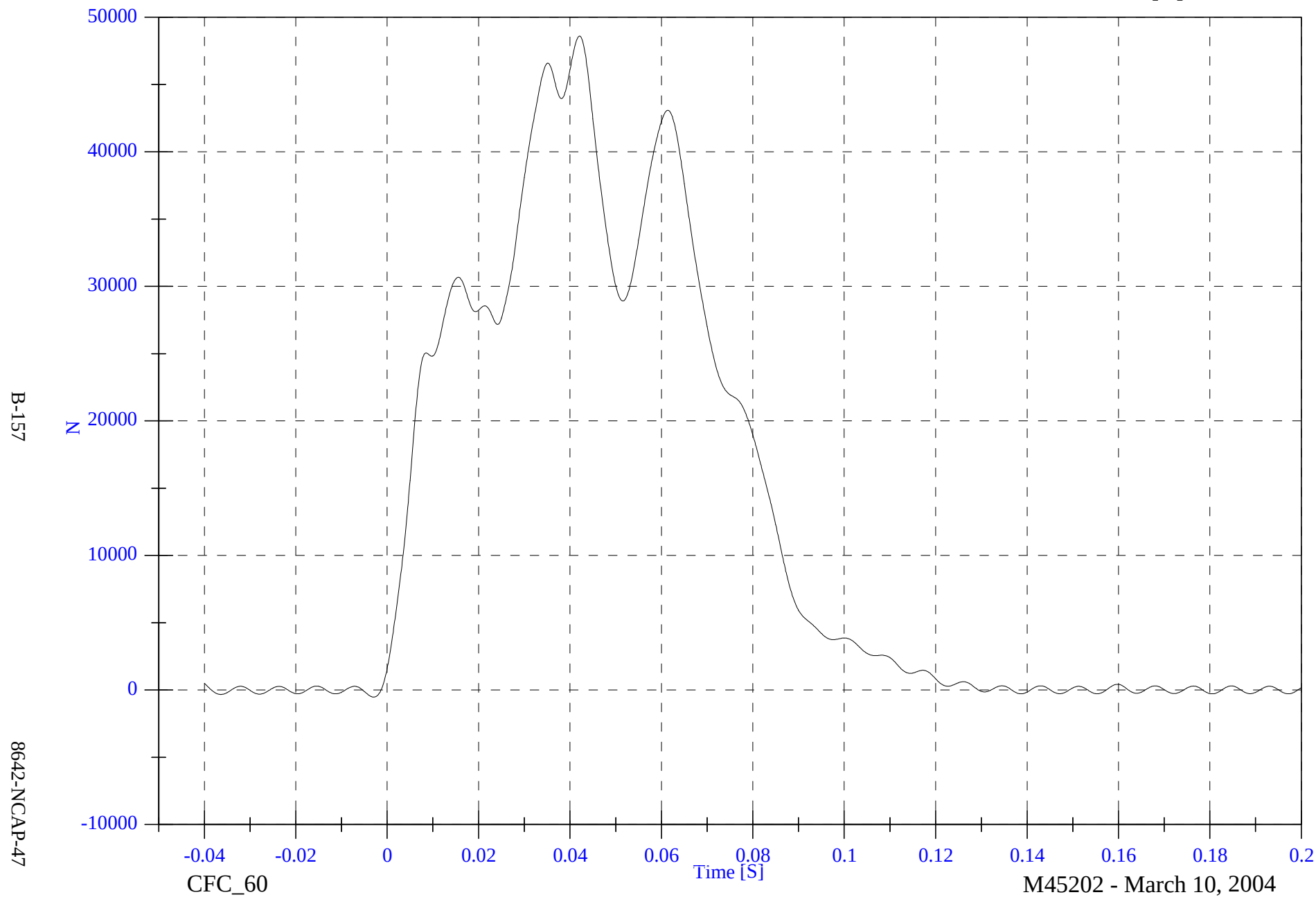


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 48598.7 [N] at 0.042 [S]

Min: -525.2 [N] at -0.003 [S]

Barrier Load Cell B4 Fx

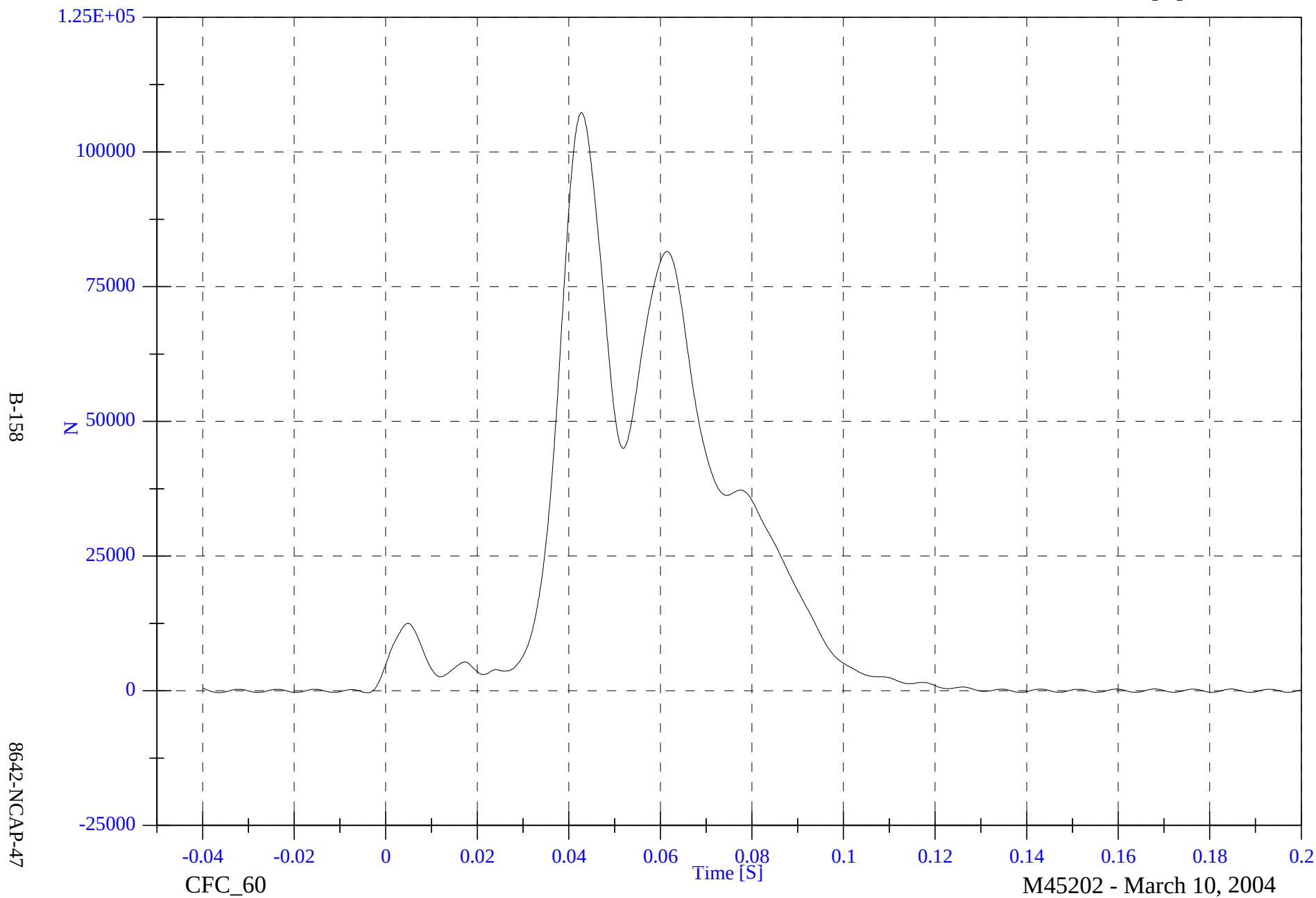


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 107277.5 [N] at 0.043 [S]

Min: -377.6 [N] at -0.004 [S]

Barrier Load Cell B5 Fx

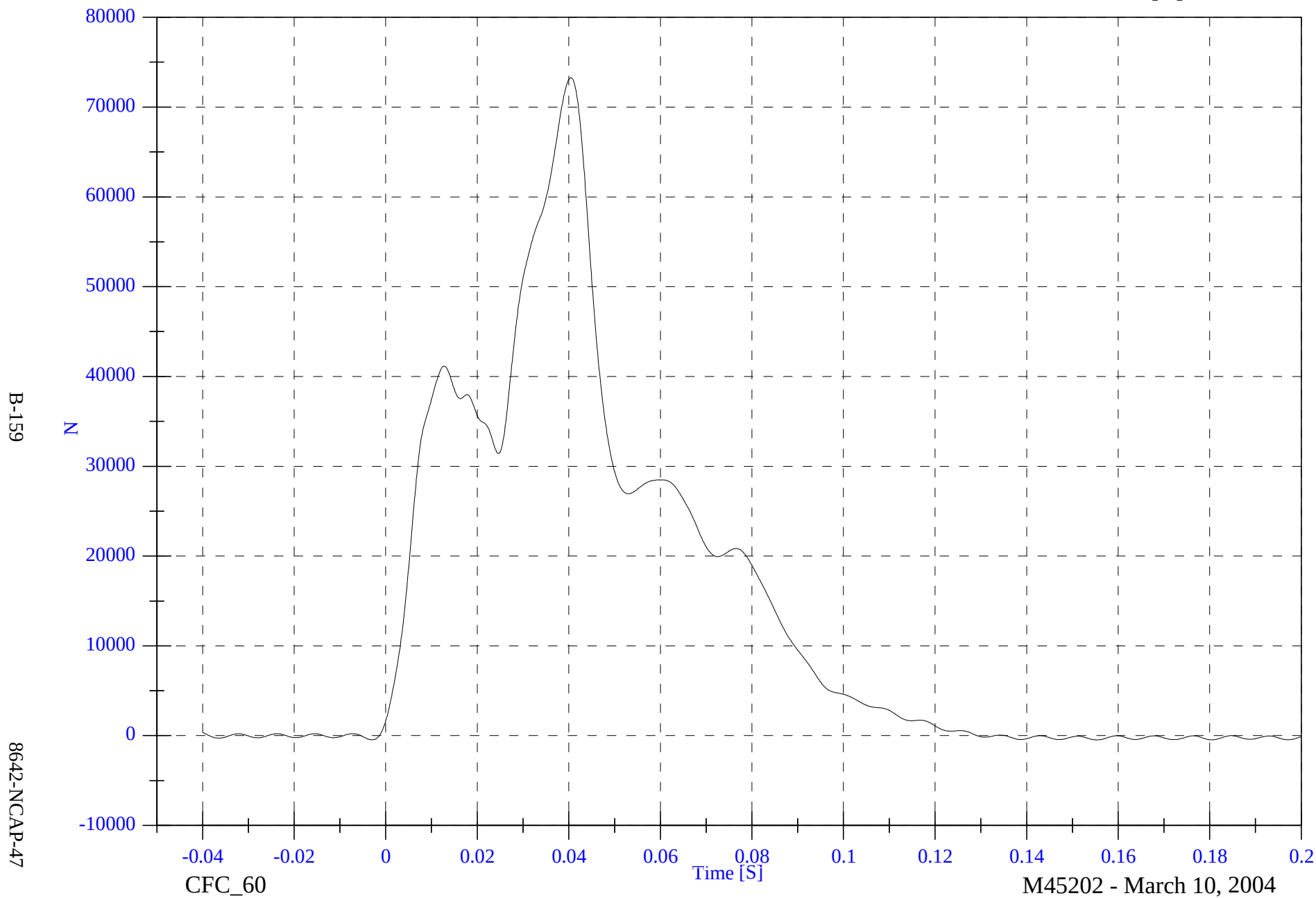


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 73263.9 [N] at 0.040 [S]

Barrier Load Cell B6 Fx

Min: -471.4 [N] at 0.155 [S]

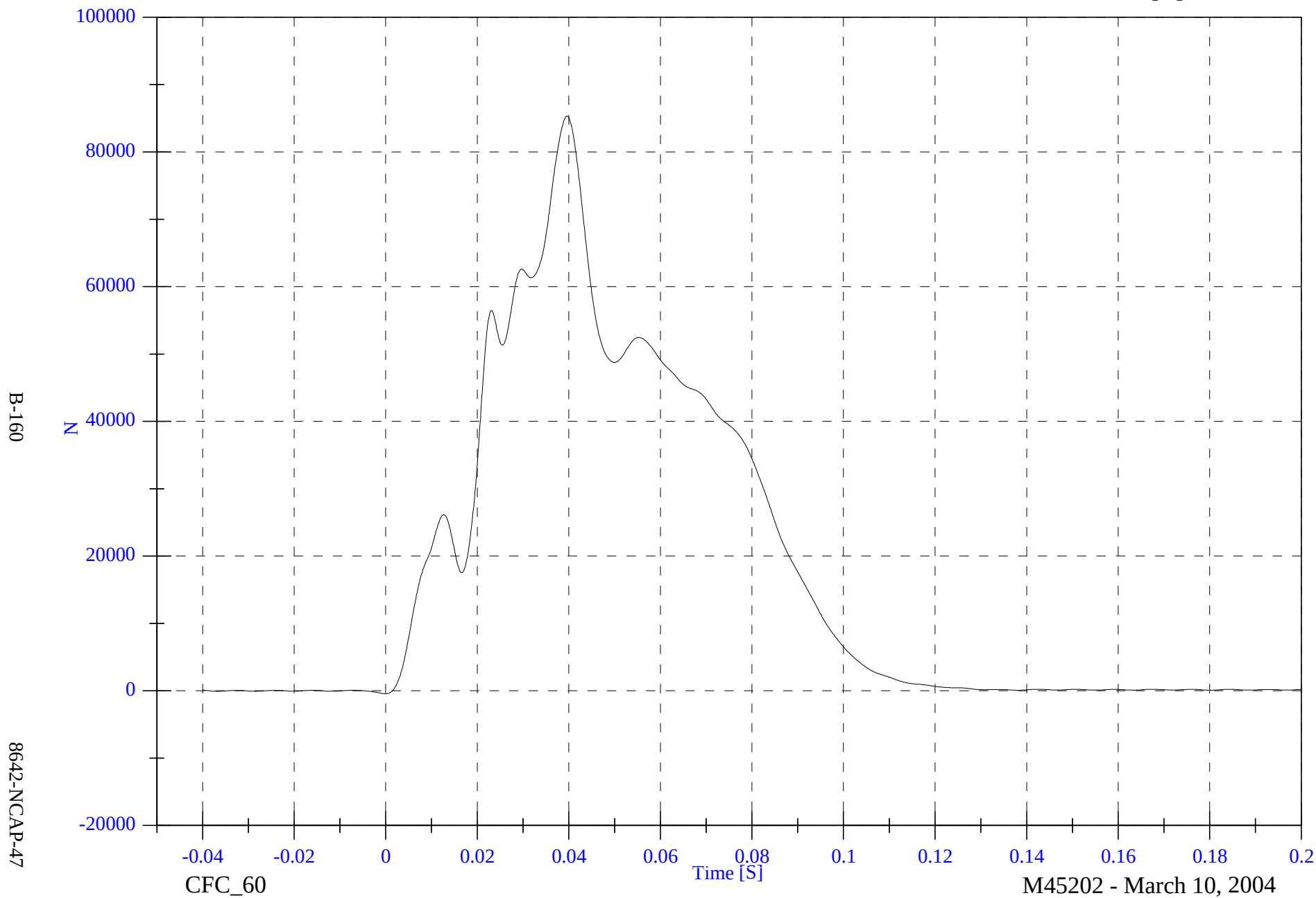


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 85320.5 [N] at 0.040 [S]

Min: -437.2 [N] at -0.000 [S]

Barrier Load Cell B7 Fx

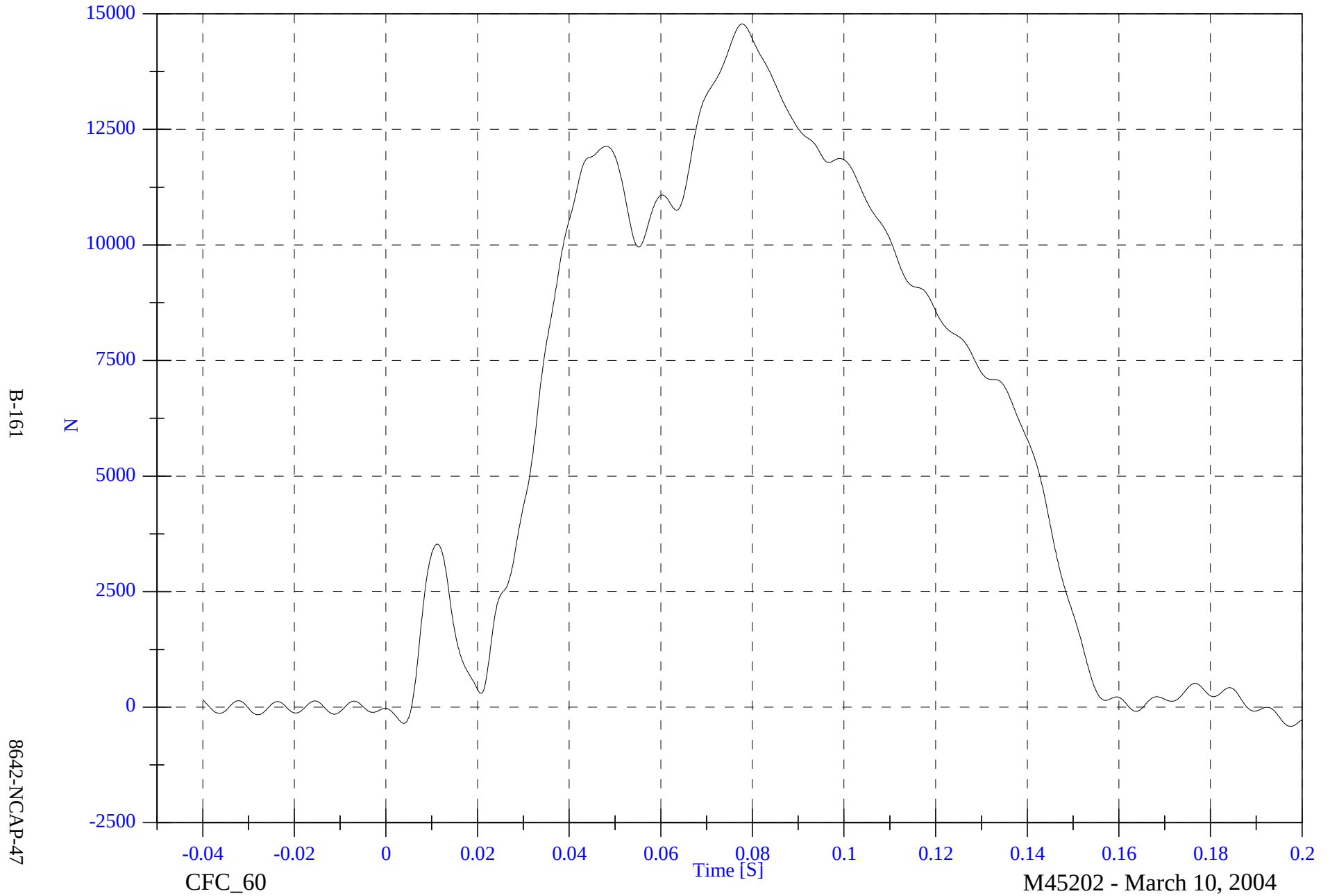


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 14779.2 [N] at 0.078 [S]

Min: -514.4 [N] at 0.205 [S]

Barrier Load Cell B8 Fx

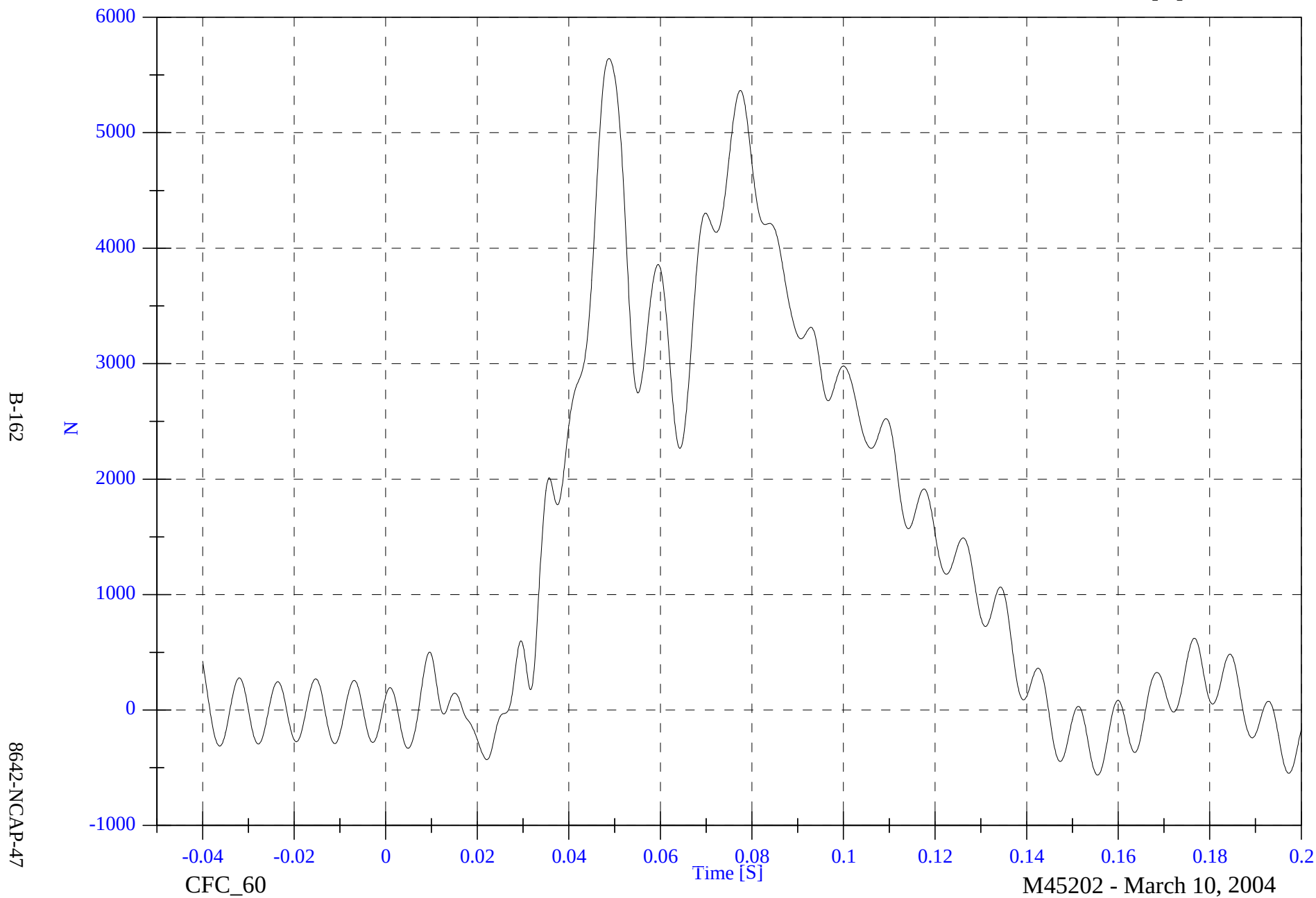


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 5642.3 [N] at 0.049 [S]

Min: -574.0 [N] at 0.205 [S]

Barrier Load Cell B9 Fx

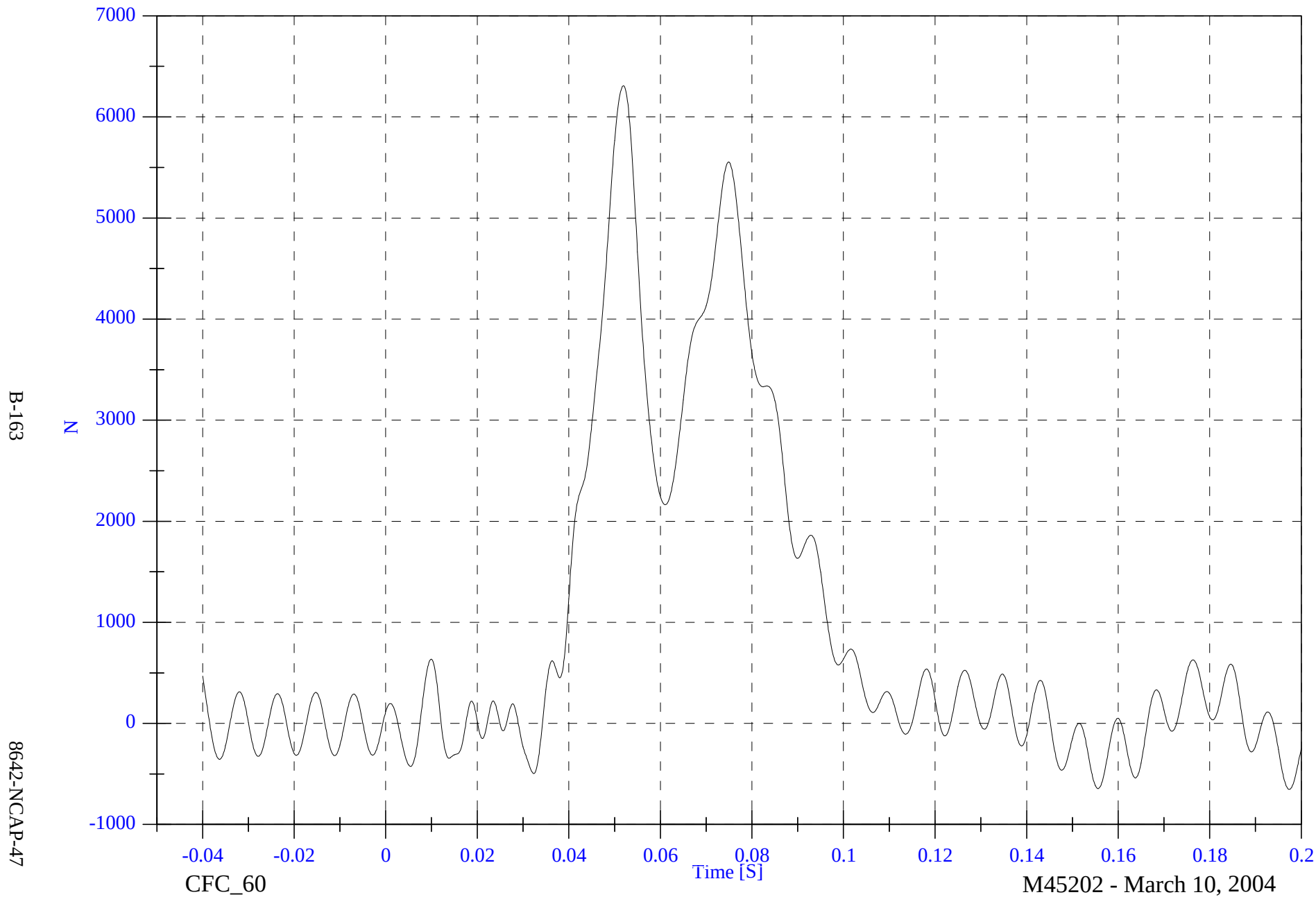


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6308.2 [N] at 0.052 [S]

Min: -683.4 [N] at 0.205 [S]

Barrier Load Cell C1 Fx

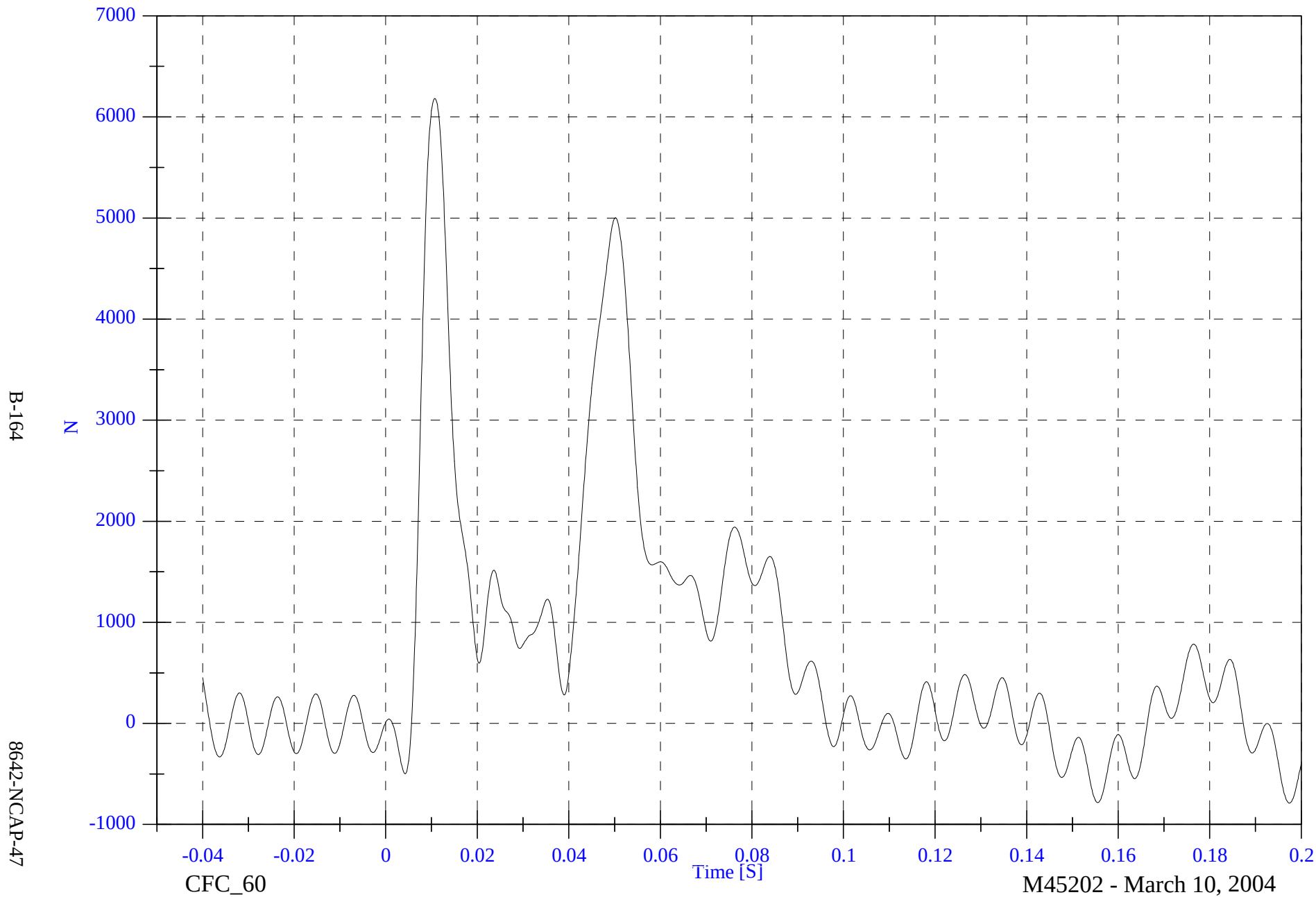


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 6182.4 [N] at 0.011 [S]

Min: -789.0 [N] at 0.197 [S]

Barrier Load Cell C2 Fx

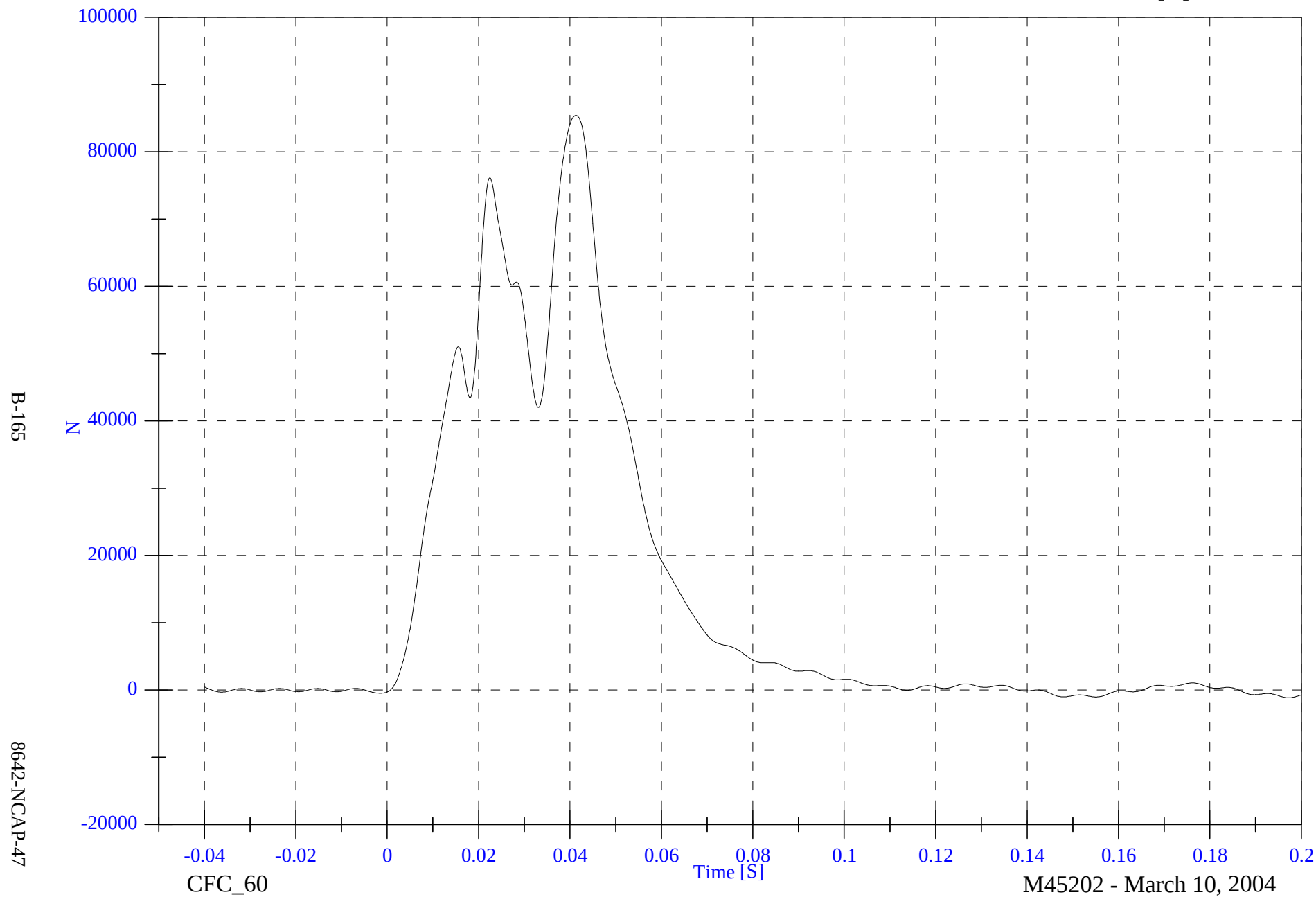


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 85403.4 [N] at 0.041 [S]

Min: -1145.8 [N] at 0.197 [S]

Barrier Load Cell C3 Fx

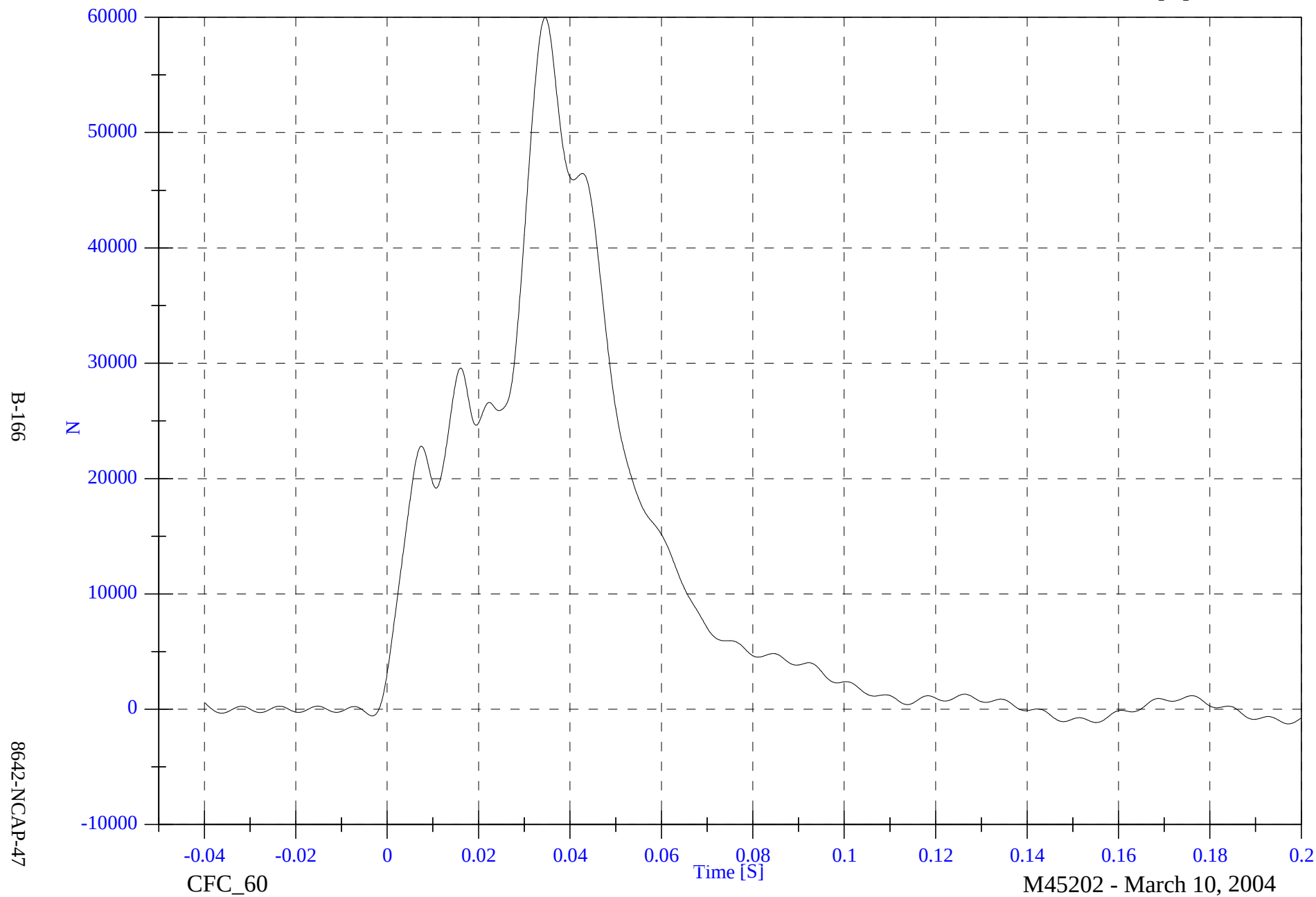


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 59986.0 [N] at 0.035 [S]

Min: -1266.0 [N] at 0.197 [S]

Barrier Load Cell C4 Fx

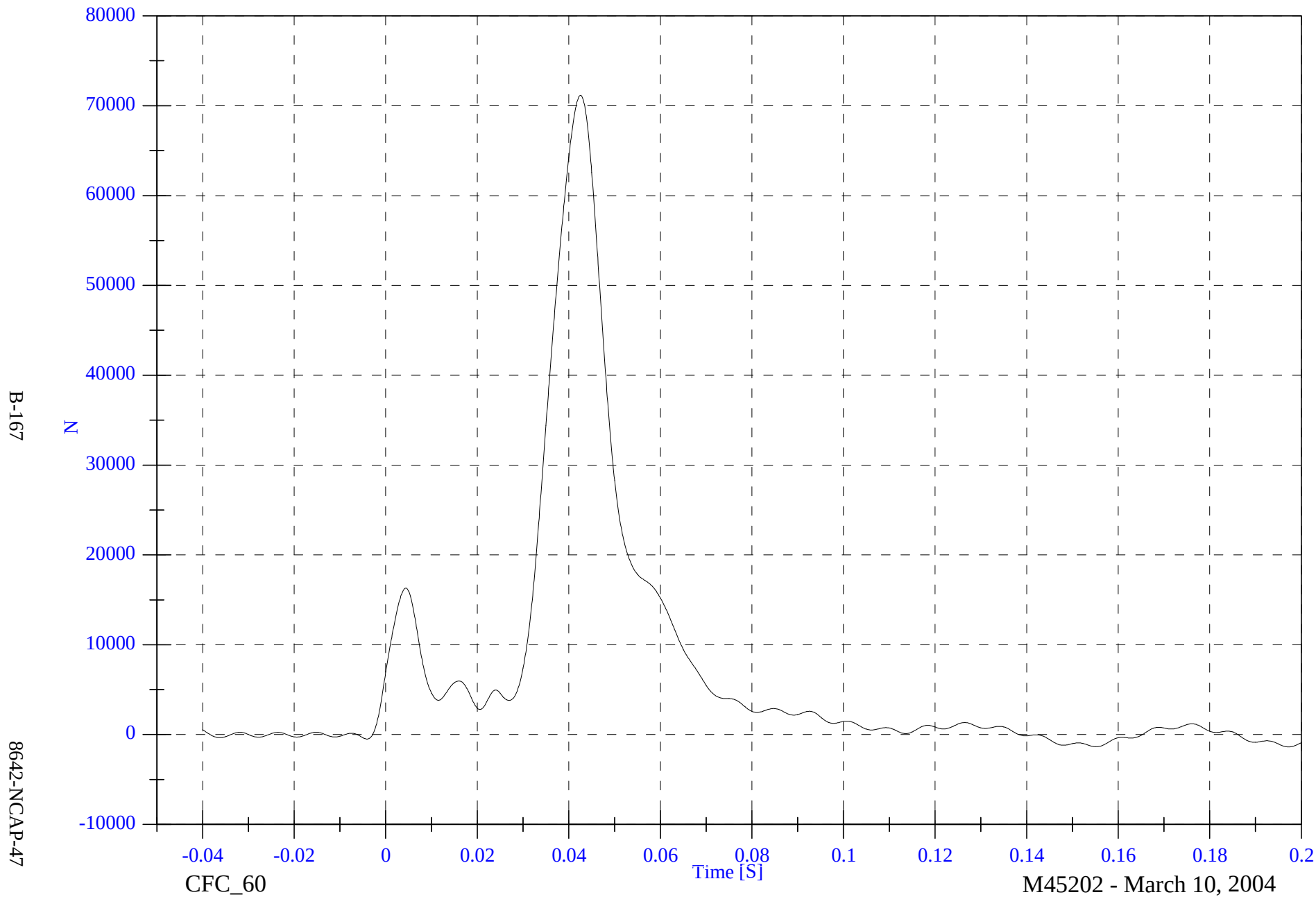


2004 NCAP Test 11 2004 Infiniti FX35/45

Barrier Load Cell C5 Fx

Max: 71158.7 [N] at 0.042 [S]

Min: -1370.8 [N] at 0.197 [S]

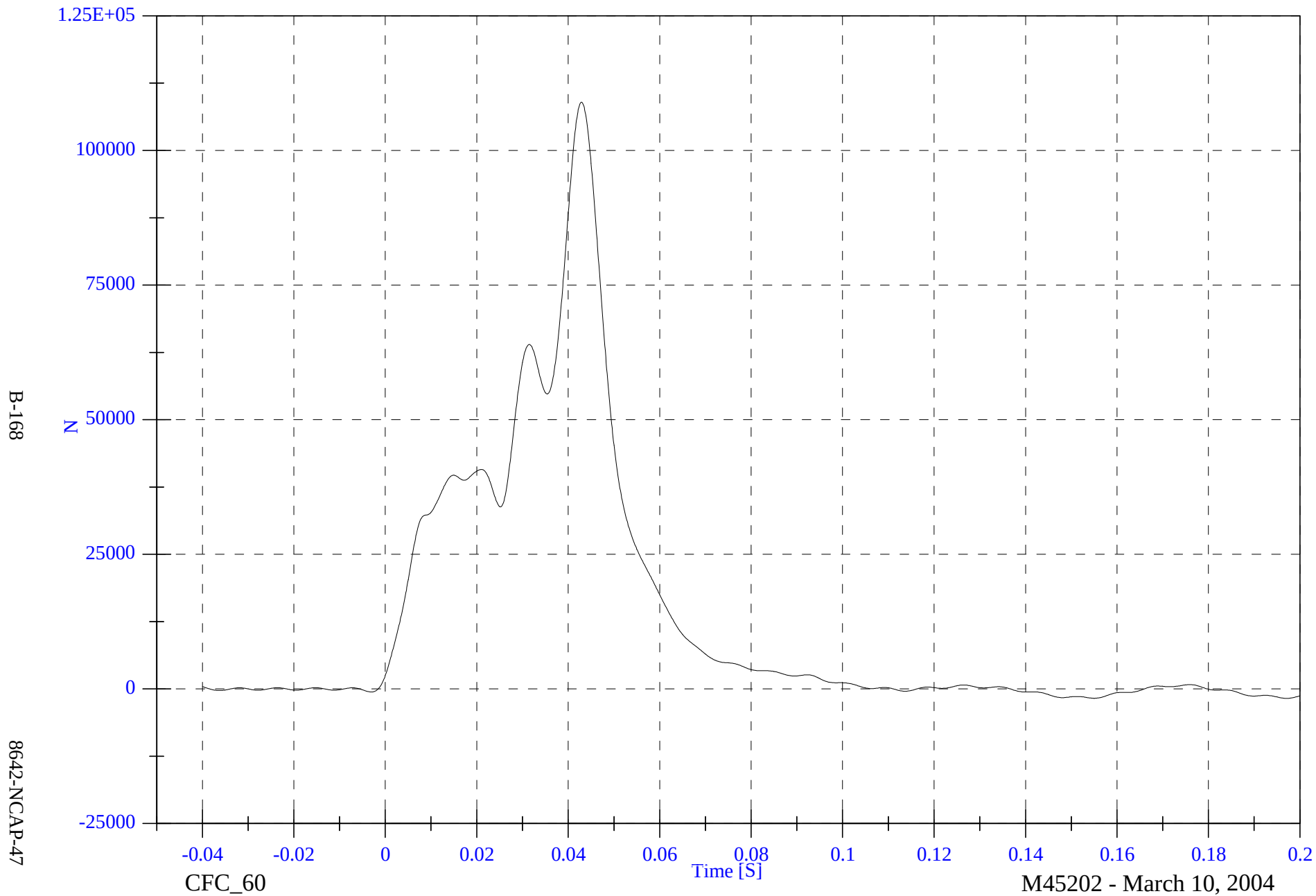


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 108961.5 [N] at 0.043 [S]

Min: -1751.5 [N] at 0.197 [S]

Barrier Load Cell C6 Fx

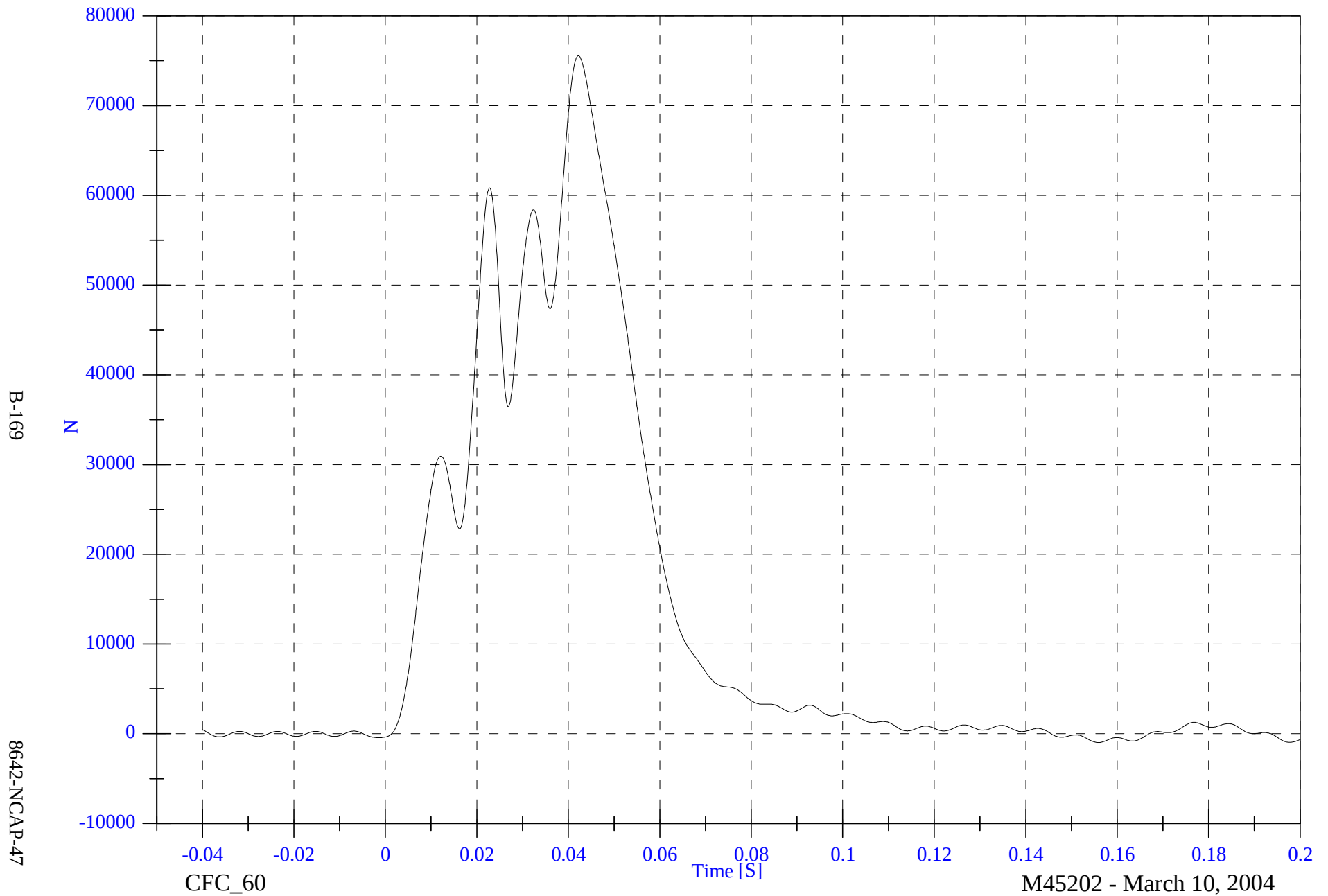


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 75556.6 [N] at 0.042 [S]

Min: -1009.2 [N] at 0.205 [S]

Barrier Load Cell C7 Fx

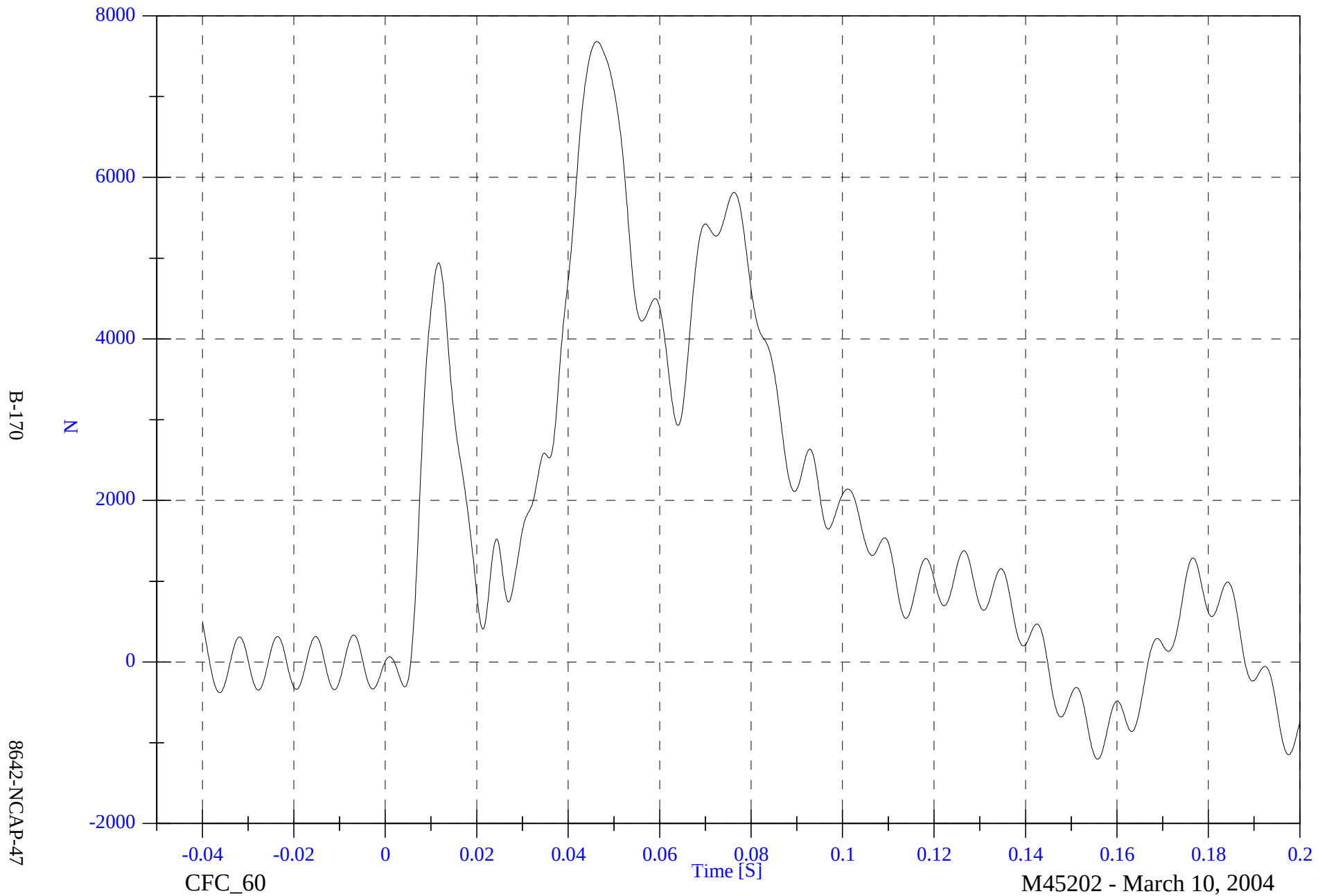


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 7681.9 [N] at 0.046 [S]

Min: -1203.5 [N] at 0.156 [S]

Barrier Load Cell C8 Fx

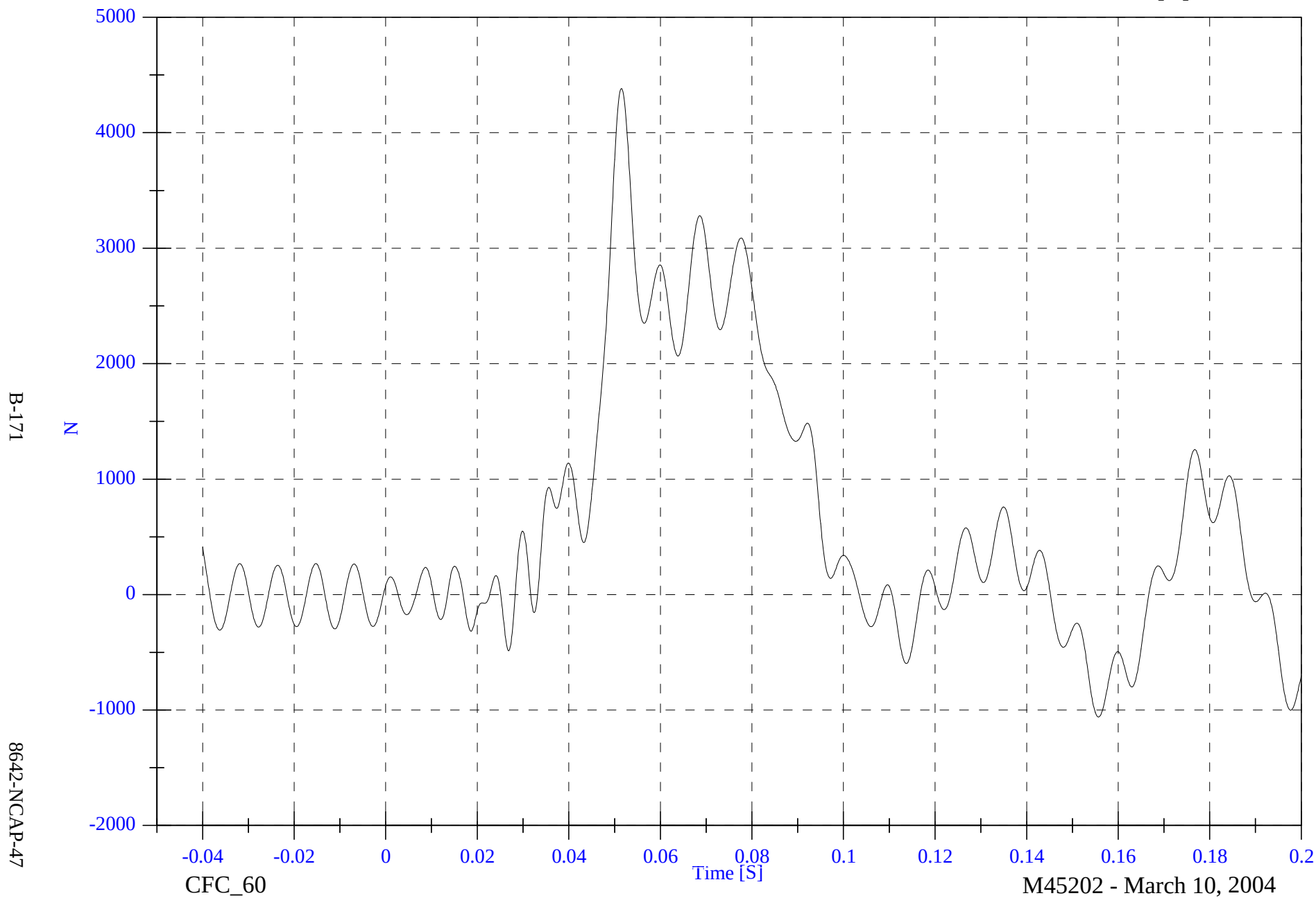


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 4383.1 [N] at 0.051 [S]

Min: -1102.5 [N] at 0.205 [S]

Barrier Load Cell C9 Fx

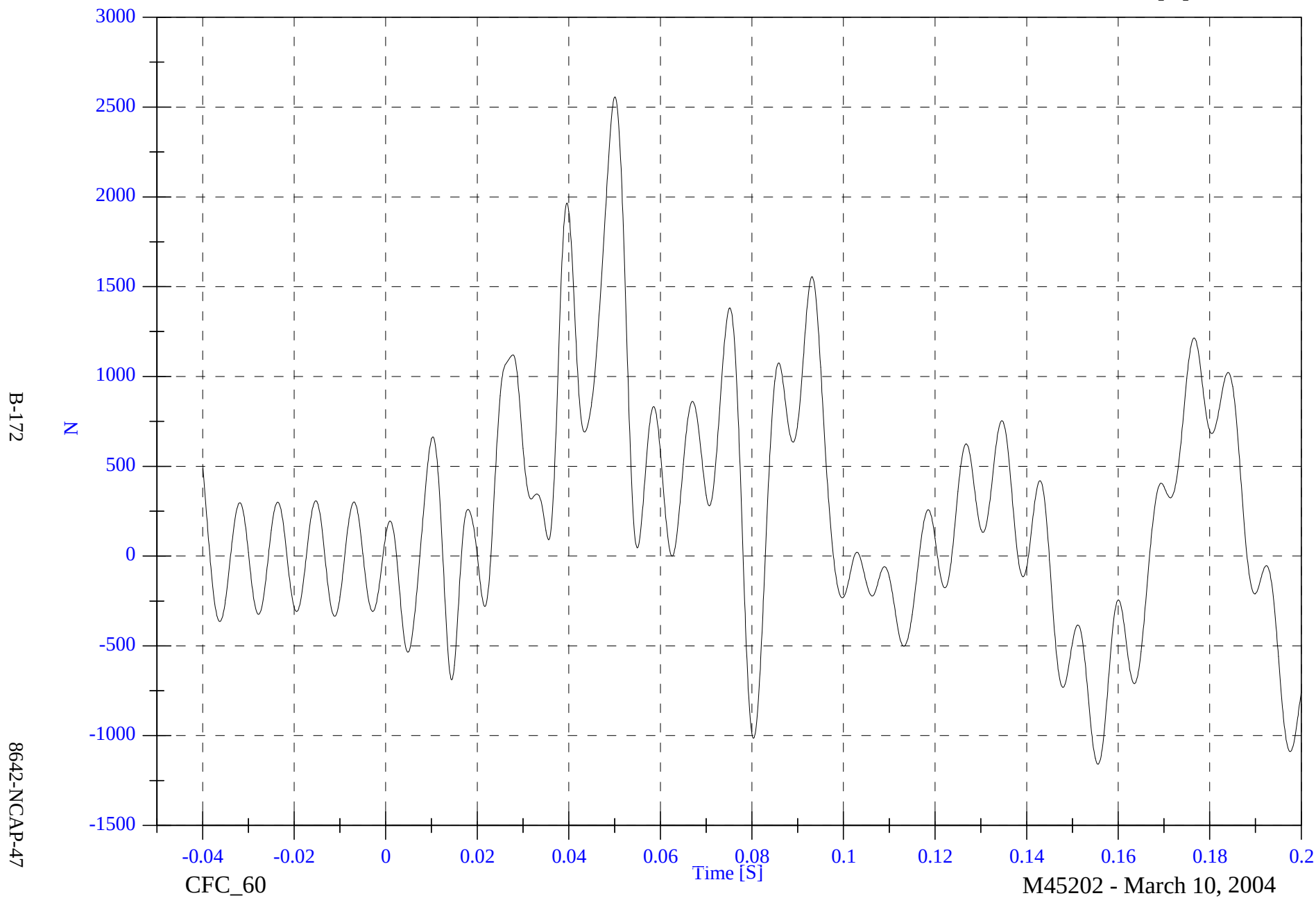


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 2555.5 [N] at 0.050 [S]

Min: -1158.9 [N] at 0.156 [S]

Barrier Load Cell D1 Fx

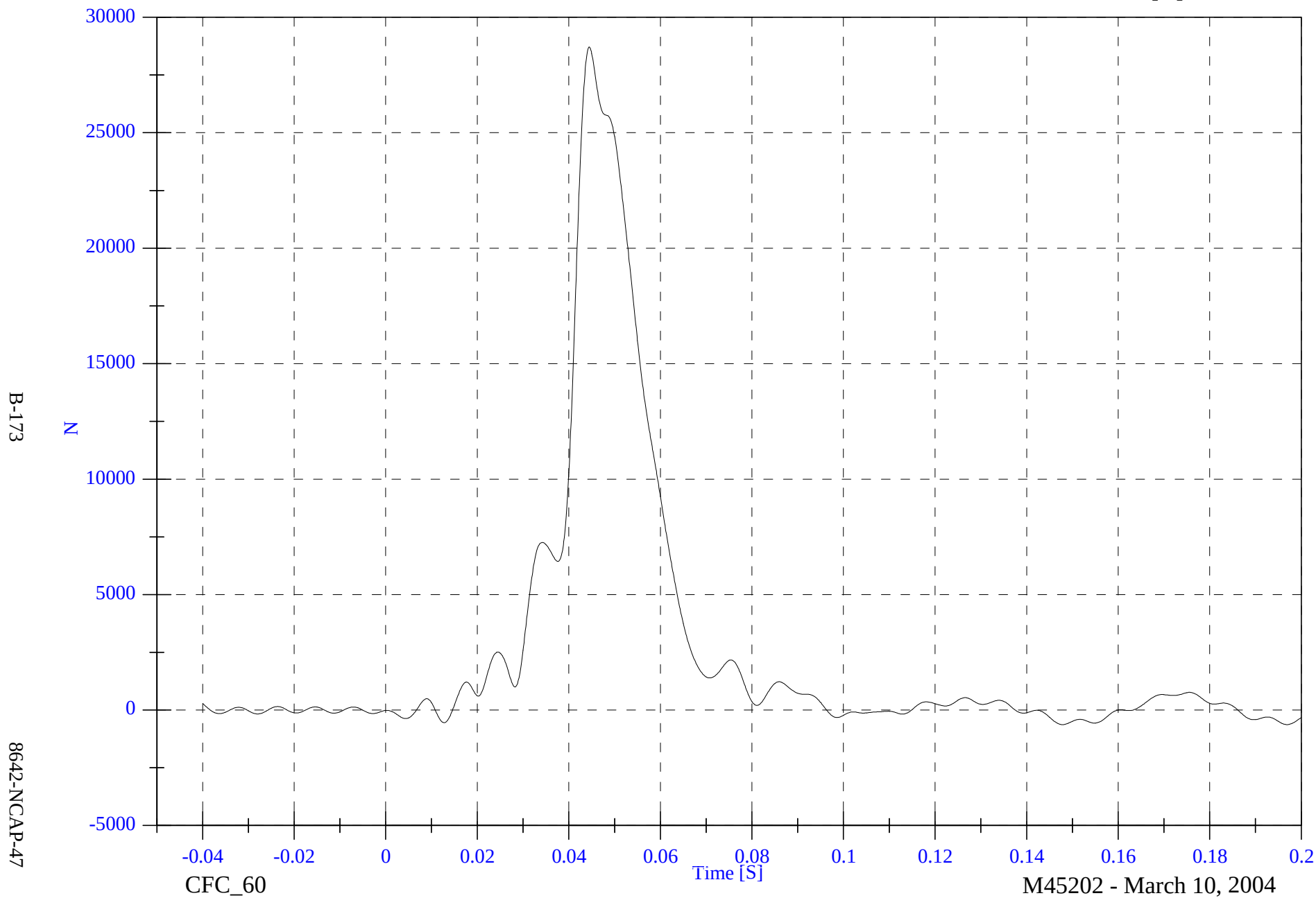


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 28710.1 [N] at 0.044 [S]

Barrier Load Cell D2 Fx

Min: -631.4 [N] at 0.148 [S]

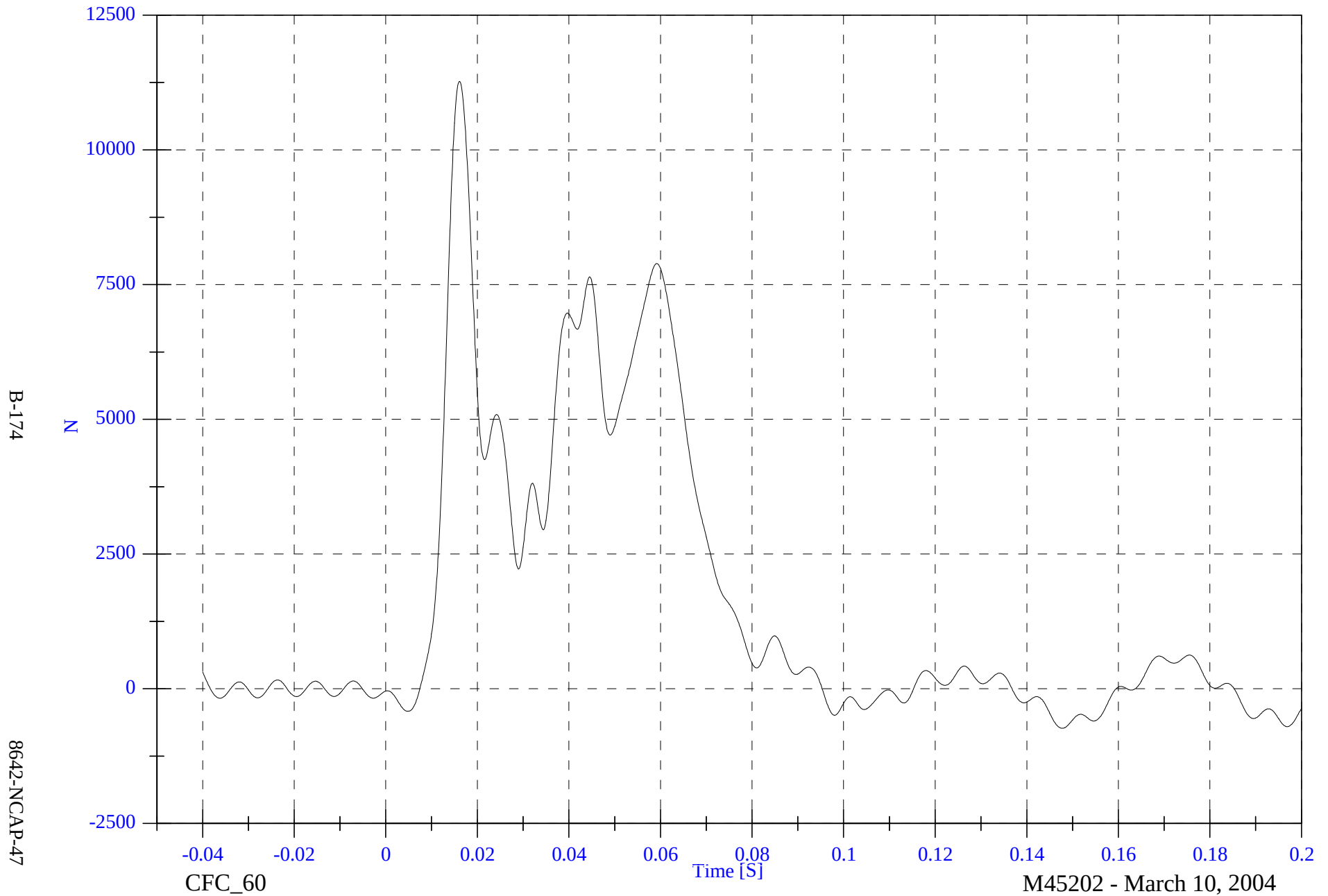


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 11273.6 [N] at 0.016 [S]

Barrier Load Cell D3 Fx

Min: -732.9 [N] at 0.148 [S]

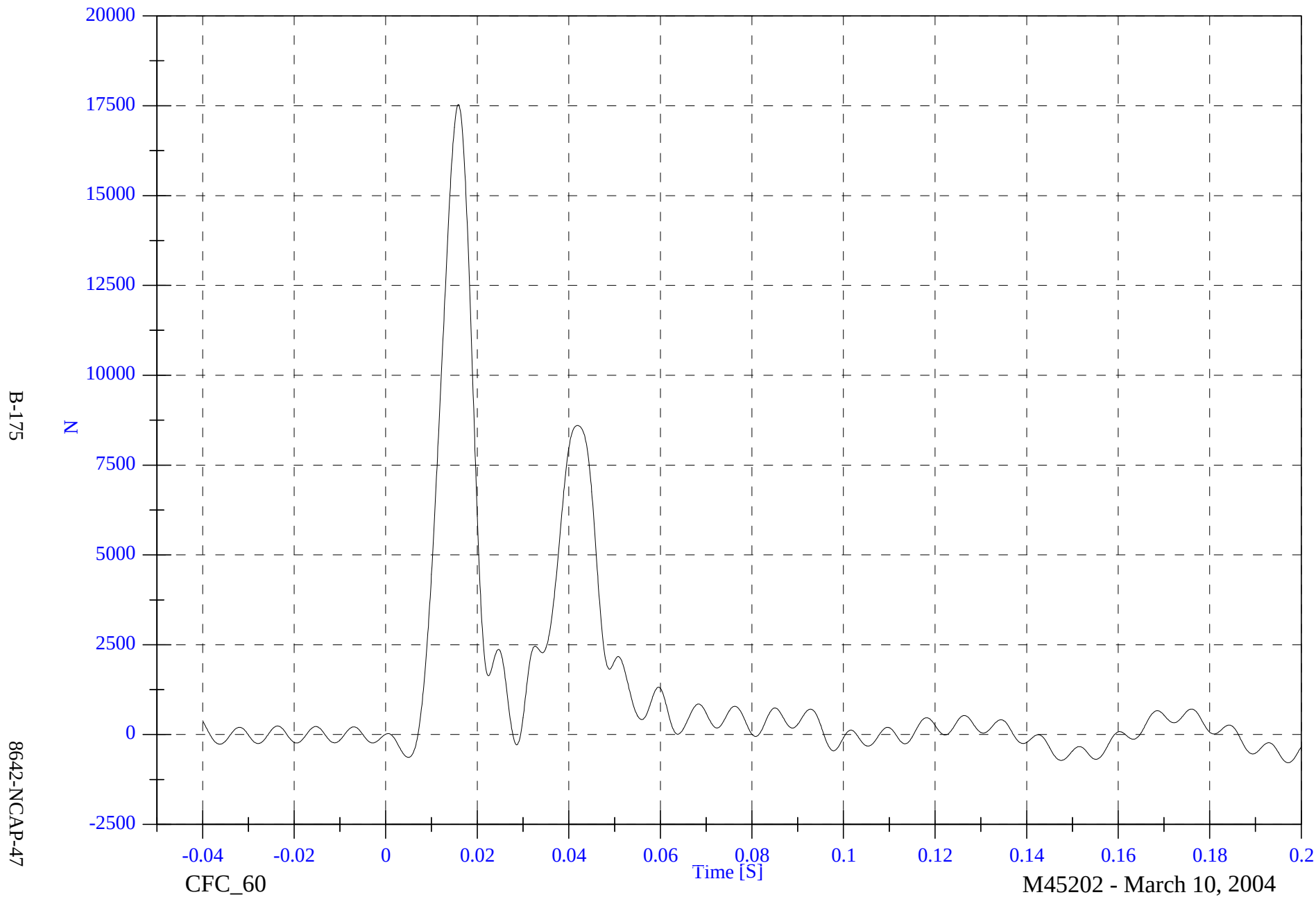


2004 NCAP Test 11 2004 Infiniti FX35/45

Barrier Load Cell D4 Fx

Max: 17533.7 [N] at 0.016 [S]

Min: -783.0 [N] at 0.197 [S]

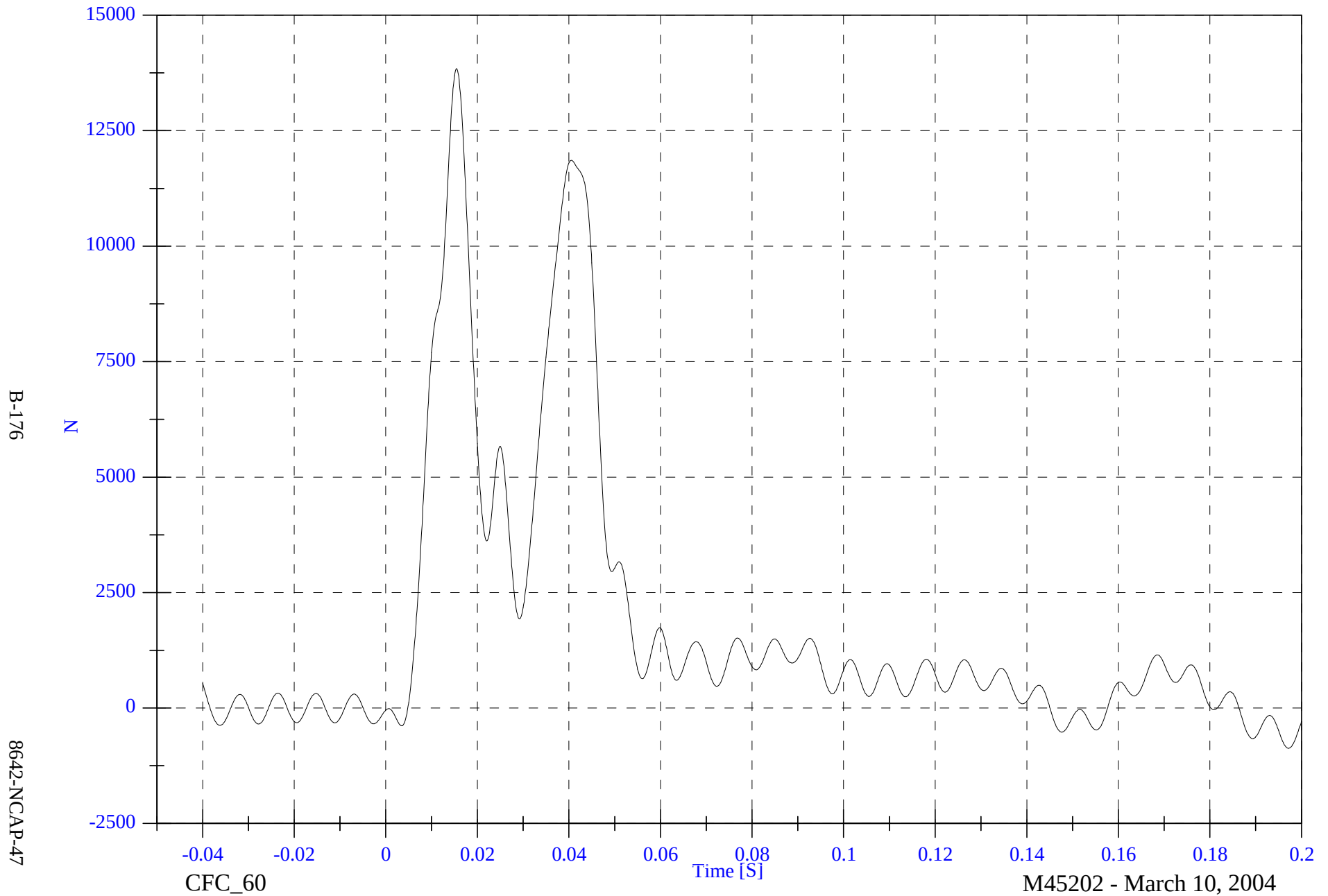


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 13841.3 [N] at 0.015 [S]

Barrier Load Cell D5 Fx

Min: -872.0 [N] at 0.197 [S]

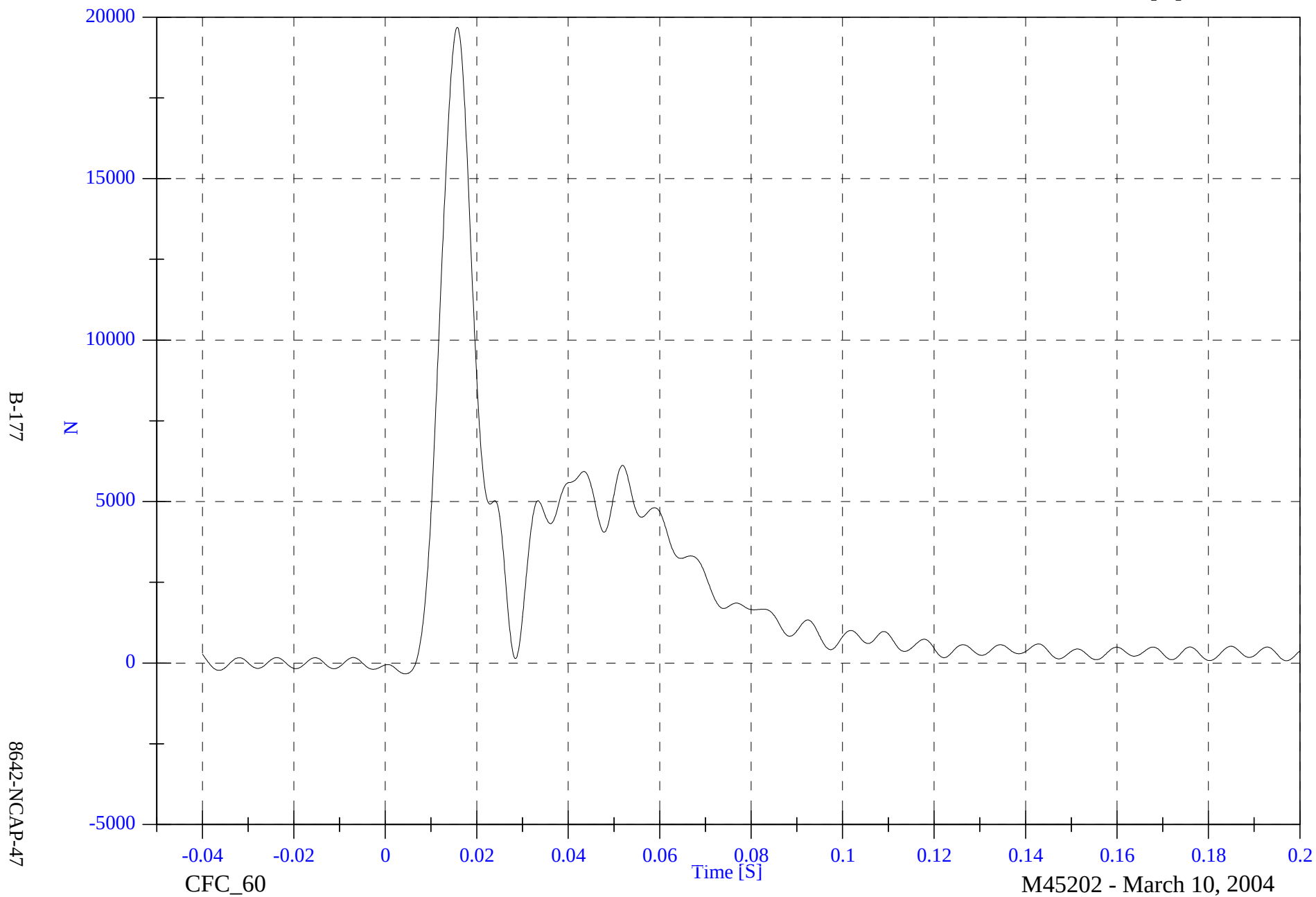


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 19688.0 [N] at 0.016 [S]

Barrier Load Cell D6 Fx

Min: -330.6 [N] at 0.004 [S]

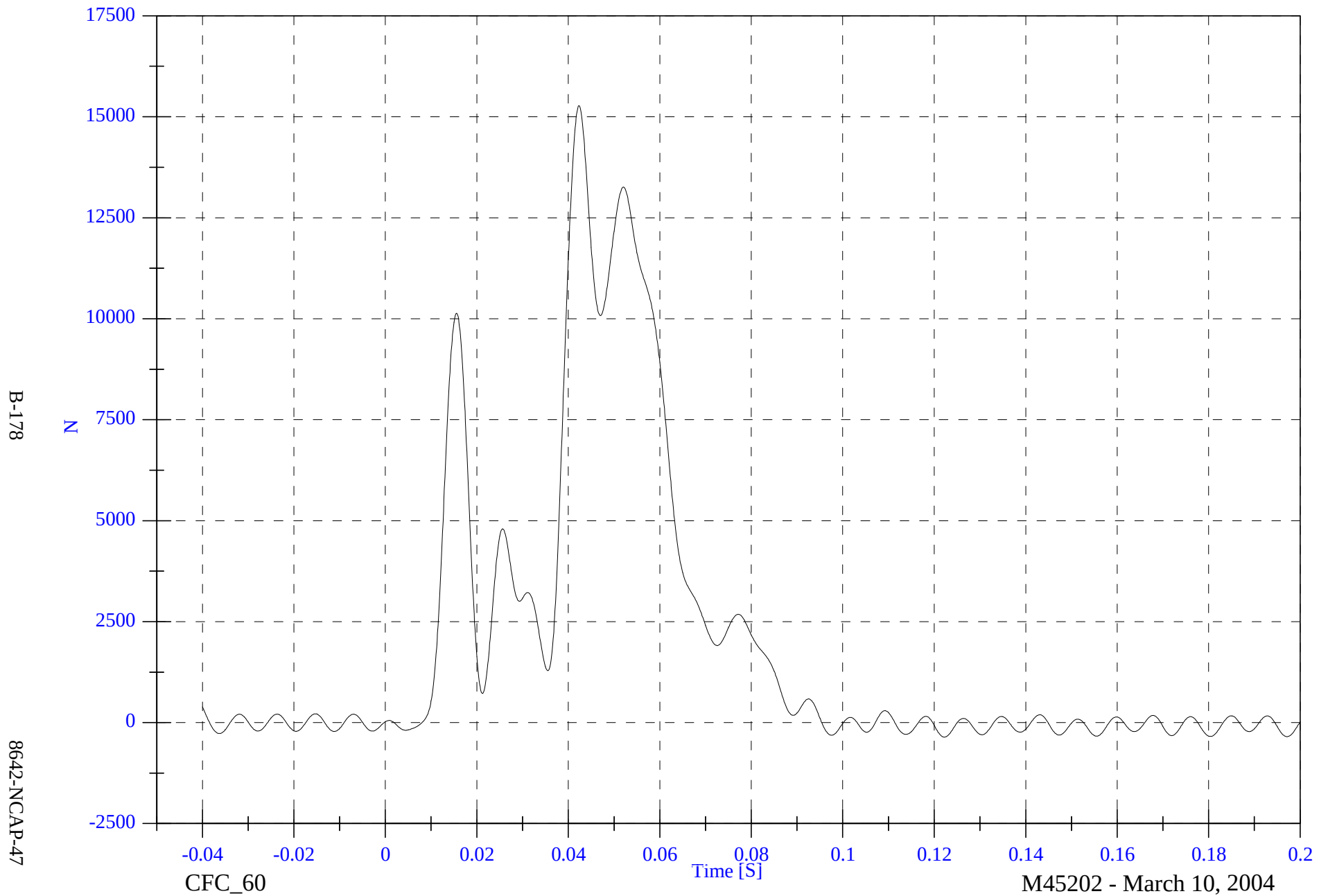


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 15275.1 [N] at 0.042 [S]

Min: -359.4 [N] at 0.122 [S]

Barrier Load Cell D7 Fx

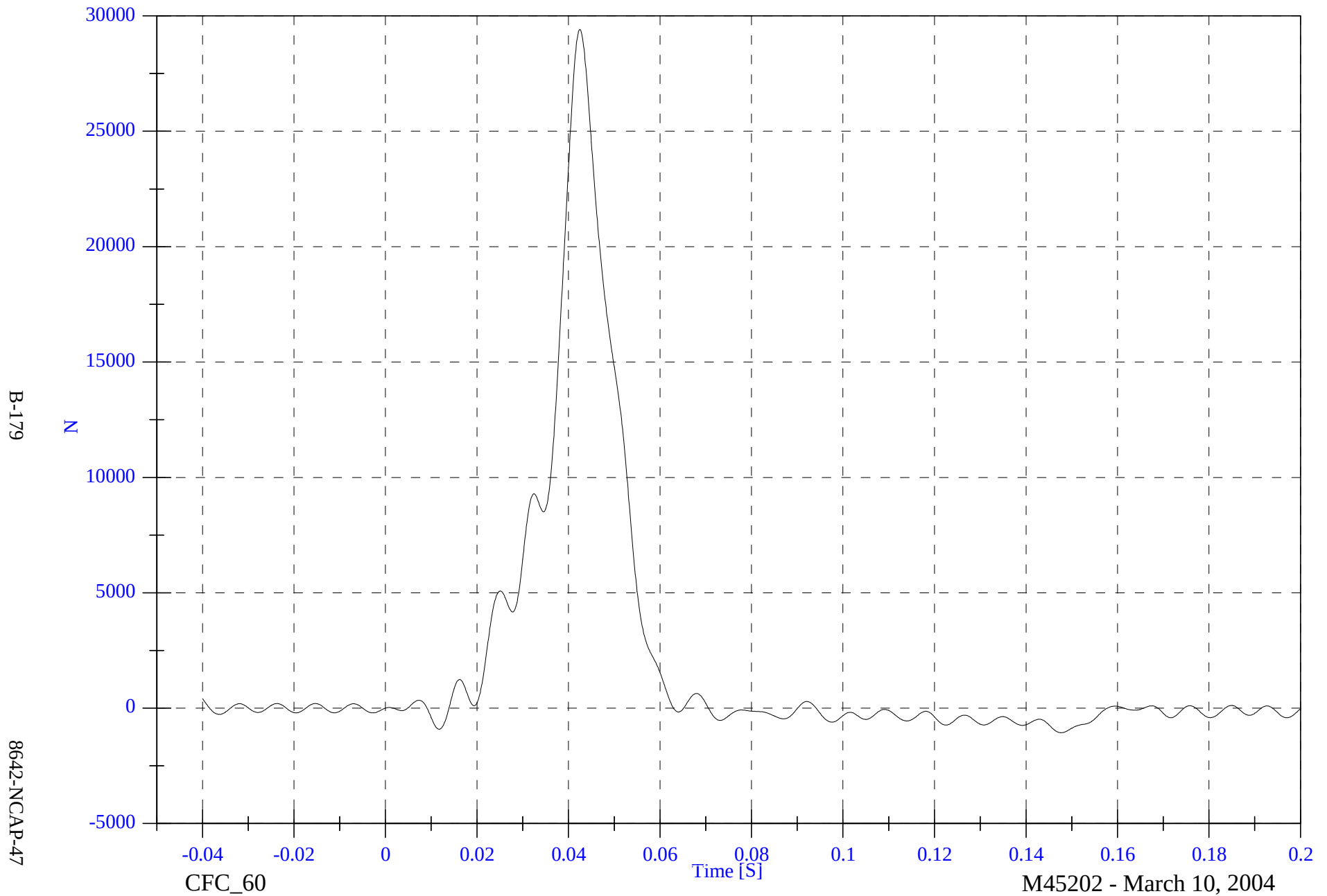


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 29408.4 [N] at 0.042 [S]

Min: -1064.8 [N] at 0.148 [S]

Barrier Load Cell D8 Fx

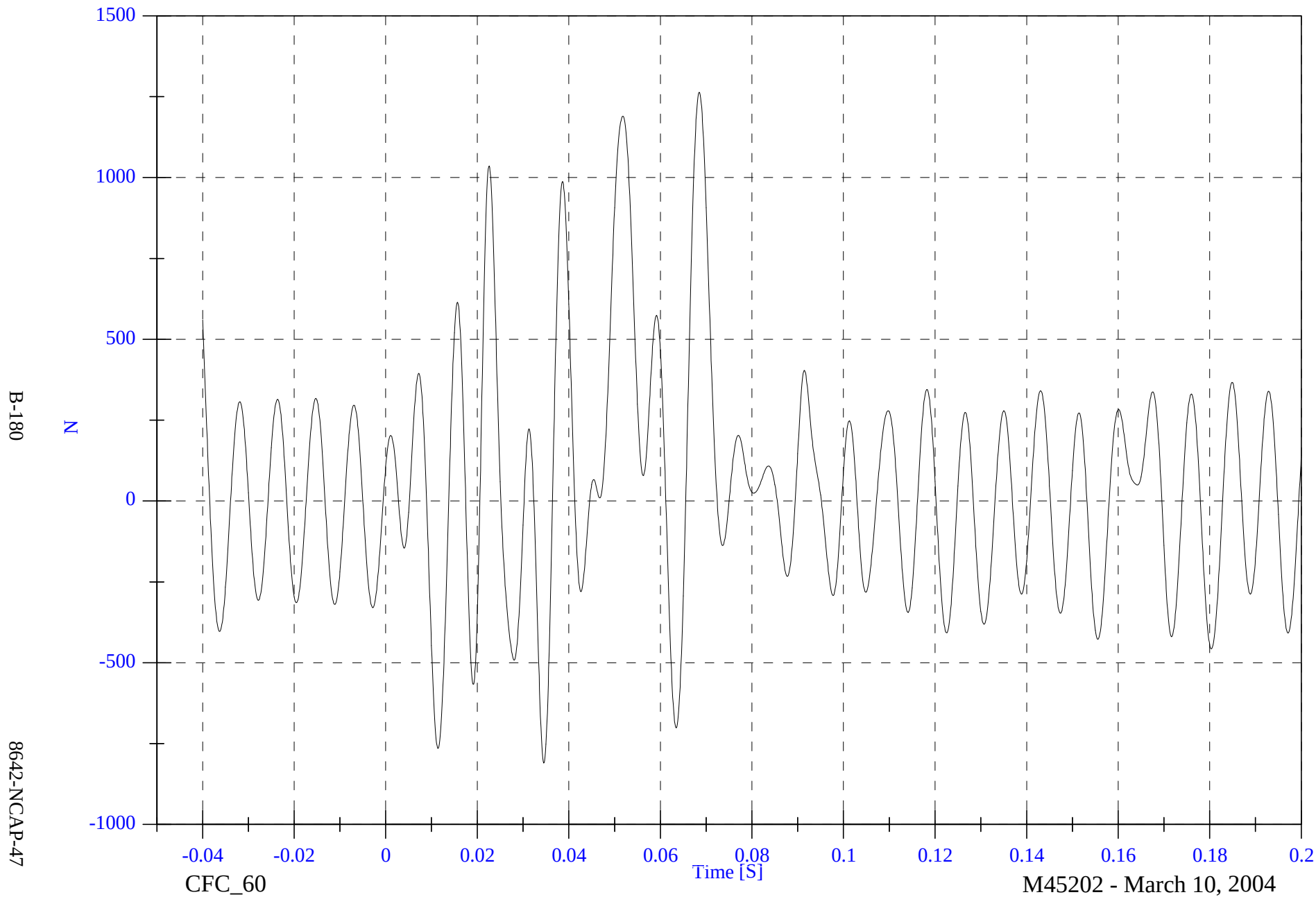


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1264.1 [N] at 0.068 [S]

Min: -810.0 [N] at 0.034 [S]

Barrier Load Cell D9 Fx

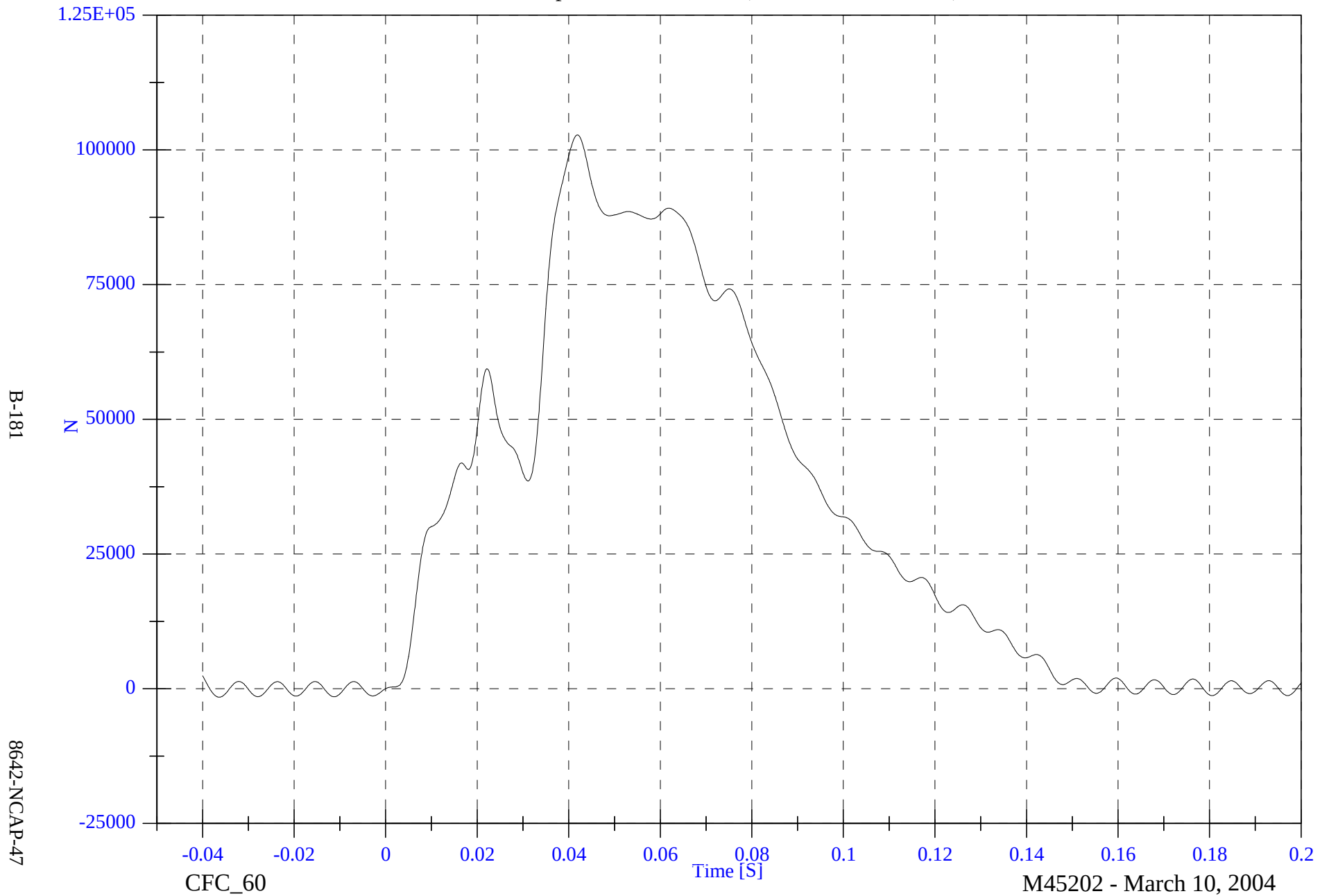


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 102768.1 [N] at 0.042 [S]

Group 1 Load Cell Sum (A1,A2,A3,B1,B2,B3)

Min: -1567.0 [N] at -0.036 [S]

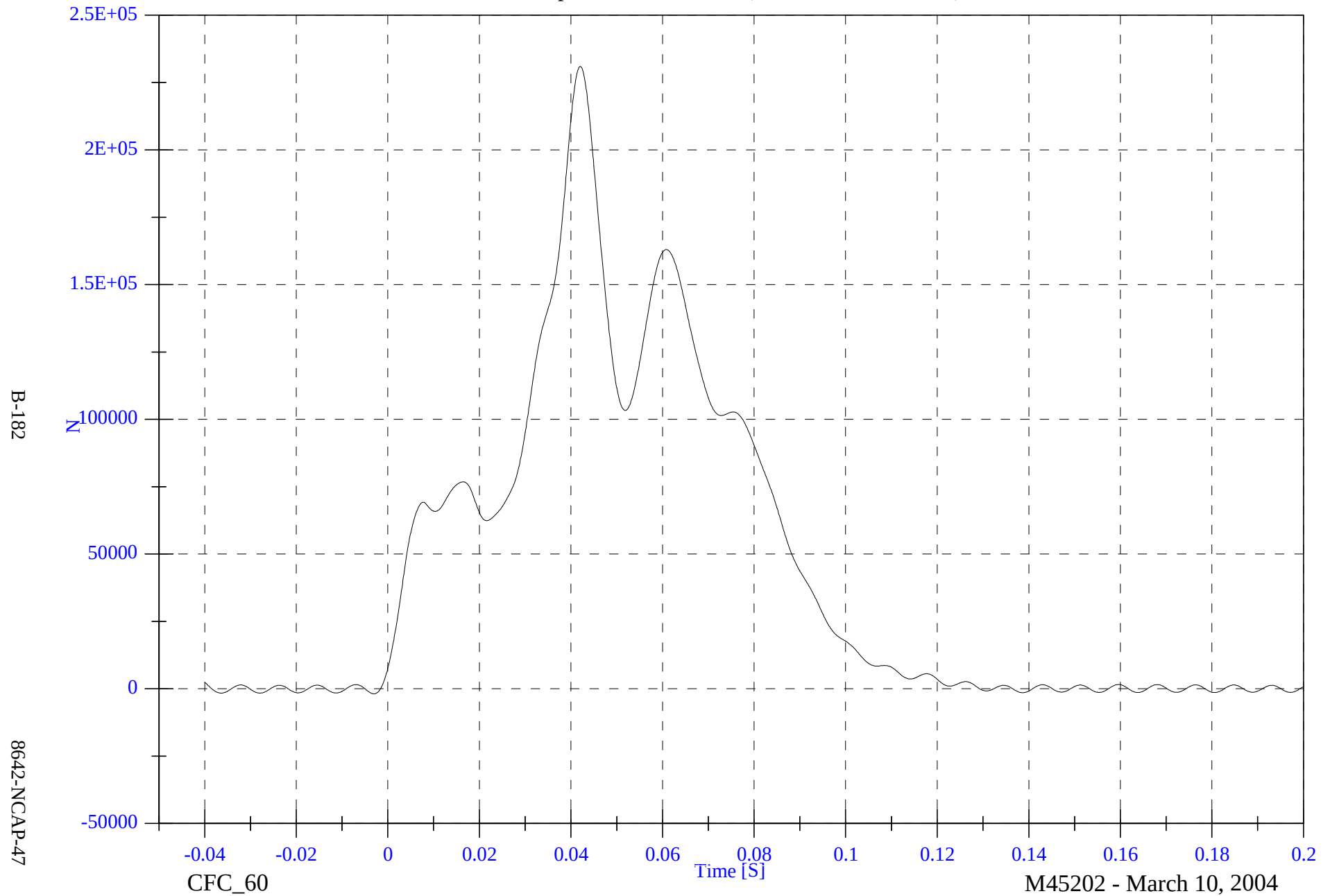


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 230962.7 [N] at 0.042 [S]

Group 2 Load Cell Sum (A4,A5,A6,B4,B5,B6)

Min: -1871.5 [N] at -0.003 [S]



2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 104001.4 [N] at 0.040 [S]

Group 3 Load Cell Sum (A7,A8,A9,B7,B8,B9)

Min: -1745.9 [N] at 0.205 [S]

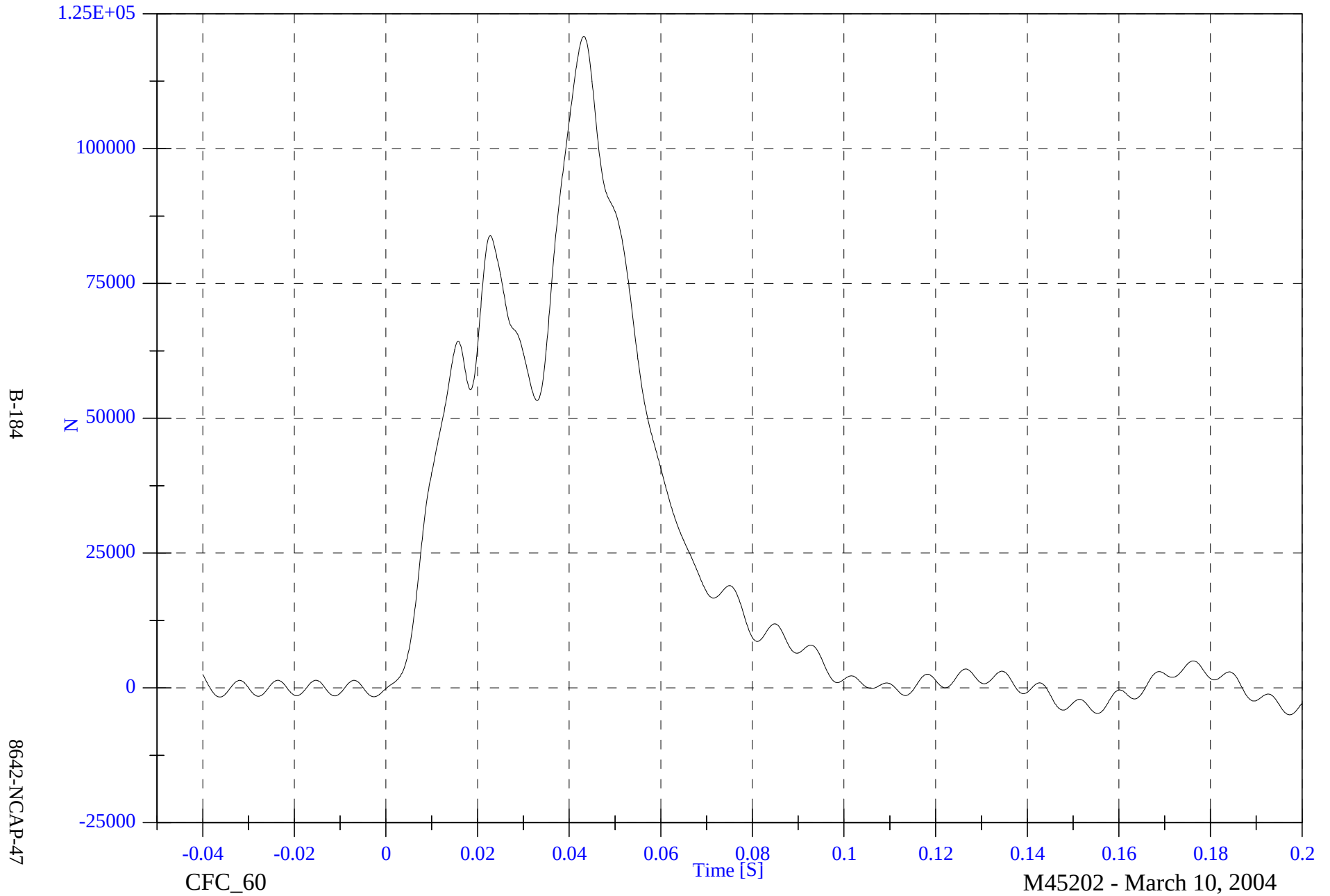


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 120814.3 [N] at 0.043 [S]

Group 4 Load Cell Sum (C1,C2,C3,D1,D2,D3)

Min: -4985.4 [N] at 0.197 [S]

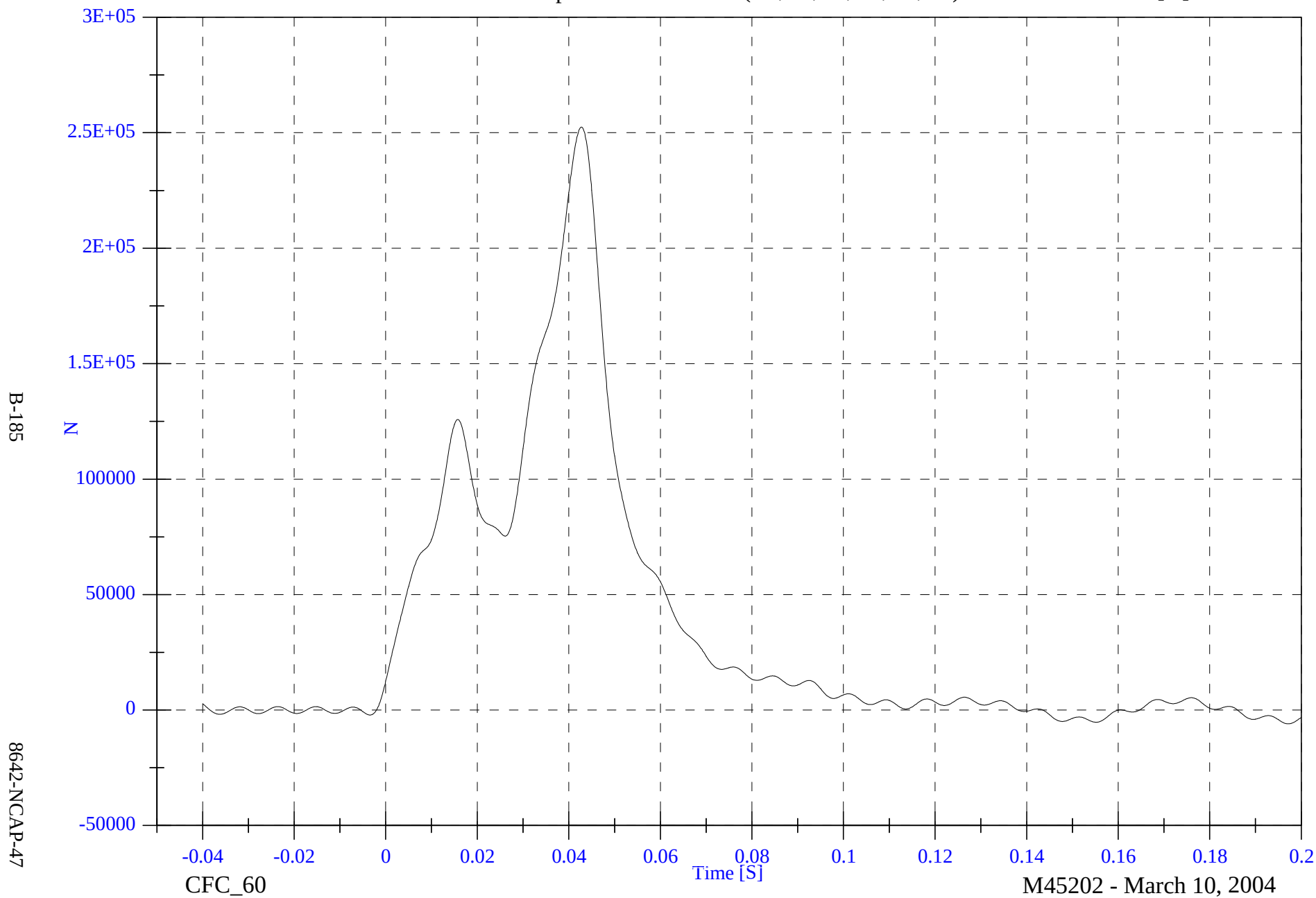


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 252413.6 [N] at 0.043 [S]

Group 5 Load Cell Sum (C4,C5,C6,D4,D5,D6)

Min: -5967.4 [N] at 0.197 [S]

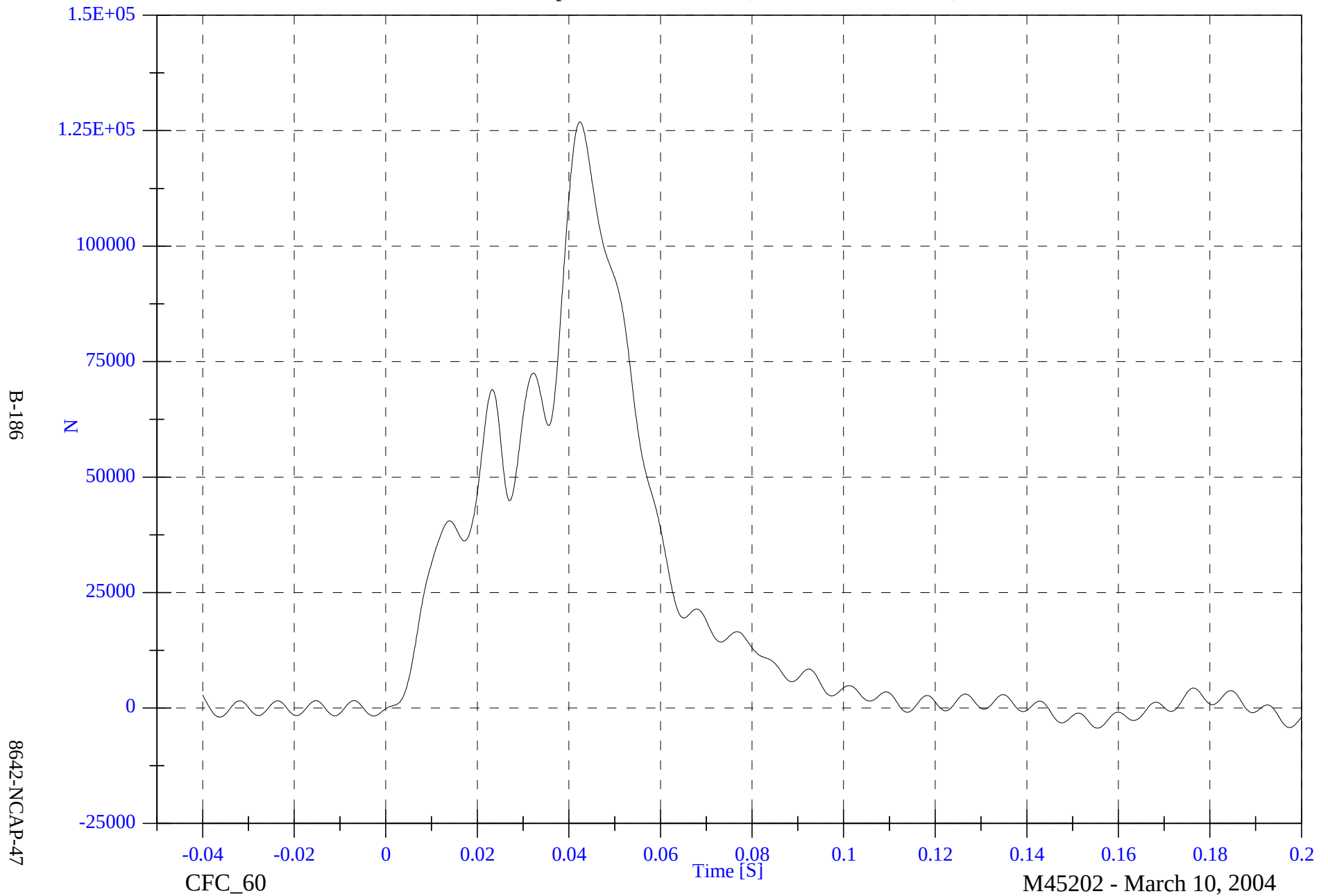


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 126900.5 [N] at 0.042 [S]

Group 6 Load Cell Sum (C7,C8,C9,D7,D8,D9)

Min: -4347.5 [N] at 0.155 [S]

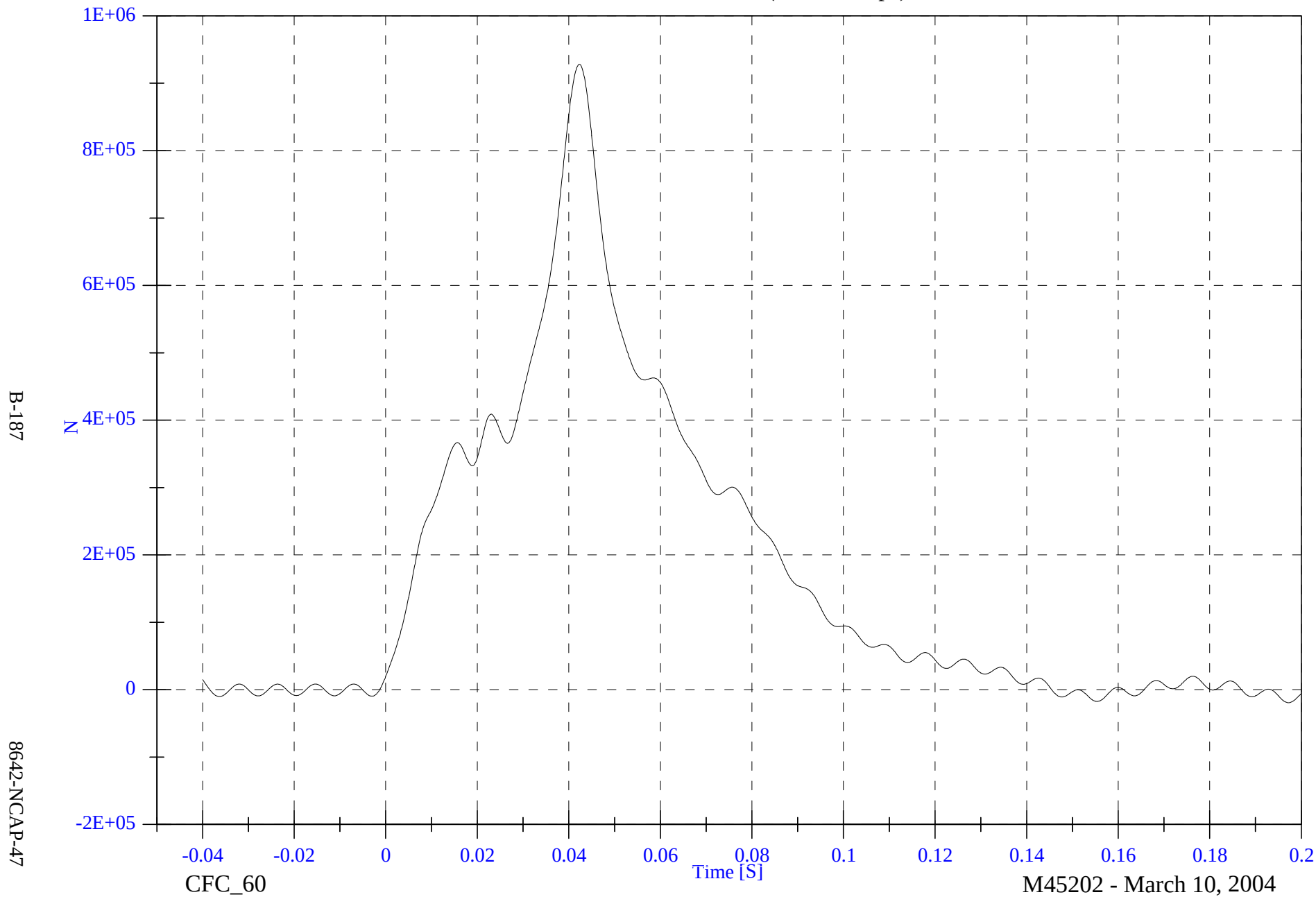


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 928081.0 [N] at 0.042 [S]

Total Load Cell Sum (All 6 Groups)

Min: -19234.7 [N] at 0.197 [S]



APPENDIX C

PART 572B/E DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA SHEETS

Appendix C contains the results from certification tests performed on the 50th percentile male anthropomorphic test devices utilized for this crash test. The results indicate that the dummies meet all of the performance requirements of the six standard tests as specified in 49 CFR Part 572, Federal Register, Volume 42, No. 25, dated February 7, 1977.

The tests were conducted at the Dummy Certification Test Facility of General Dynamics . A summary of the test results, and Part 572 specifications are included in this Appendix.

Dummy serial numbers and certification dates are:

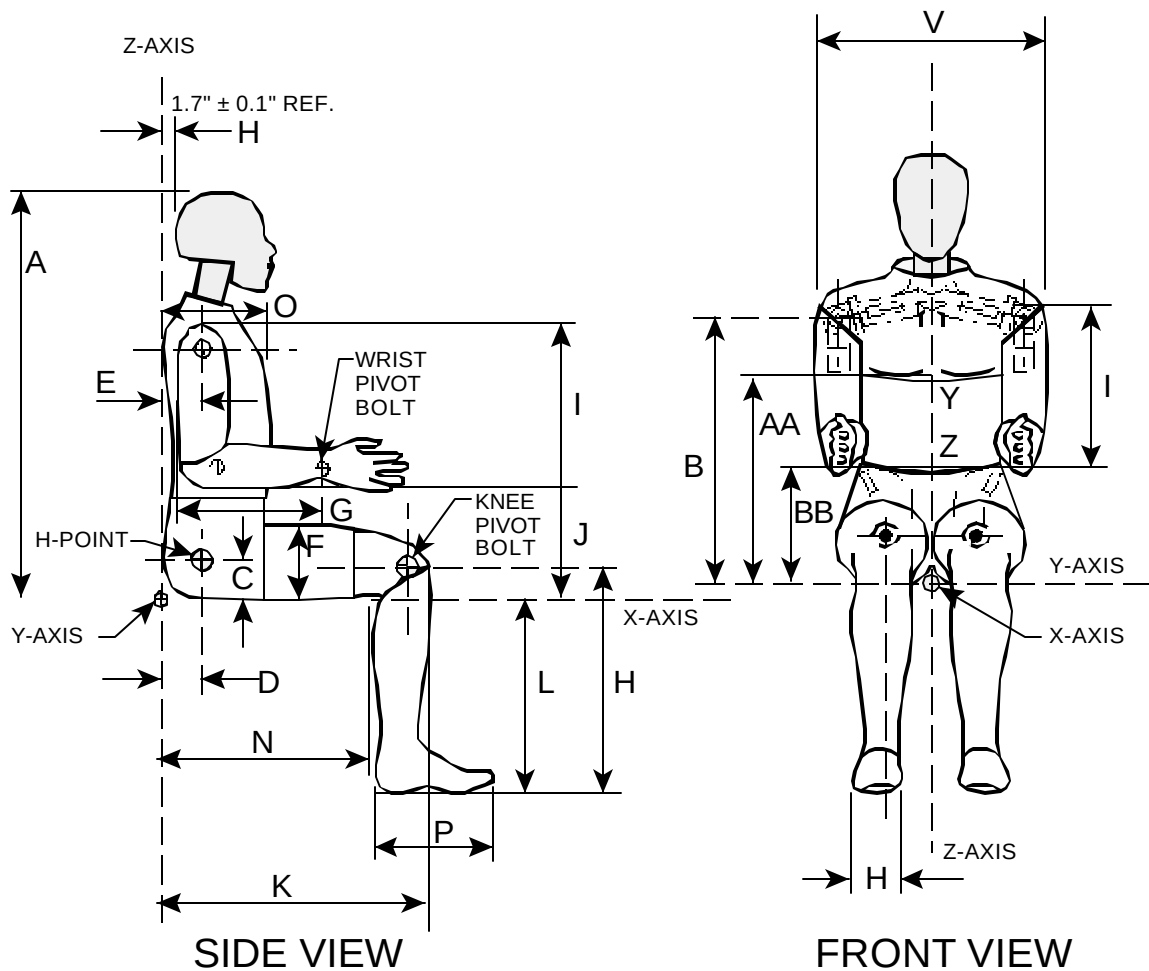
<u>Position No./Location</u>	<u>Serial No.</u>	<u>Completion Date</u>
#1/Driver	061	2/14/2004
#2/Right Front Passenger	064	2/14/2004

Electronic Test Equipment

The complement of signal conditioning, recording and display equipment, in conjunction with dummy certification testing, can be found in New Car Assessment and Standards Indicant Testing Final Report No. 6525-V-1.

DUMMY CONFIGURATION DIMENSIONS

EXTERNAL DIMENSIONS SPECIFICATIONS



NOTE: Figure is referenced to the erect seated position. The curved lumbar does not allow the Hybrid III to be positioned in a perfect erect attitude.
(REF: S572.31(A)(6))

PART 572E
HEAD DROP TEST

Dummy Serial Number 061
Sequential Test Number 1
Date 2-10-2004
Workfile 061H 02-10-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	66-78 Deg F	70.0
Relative Humidity	10% - 70%	36.00
Peak Resultant Acceleration	225-275 G's	254.88
Peak Lateral Acceleration	15 G's Max	10.97
Is Acceleration Curve Unimodal?	YES	YES

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
NECK FLEXION TEST

Dummy Serial Number	061	
Sequential Test Number	1	
Date	02-11-2004	6 Axis Neck Transducer
Workfile	016NF 02-11-04	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	70
Relative Humidity		10% - 70%	33
Impact Velocity		22.60 - 23.40 Ft/s	22.67
Pendulum Deceleration	10 ms	22.50 - 27.50 G's	23.60
	20 ms	17.60 - 22.60 G's	20.92
	30 ms	12.50 - 18.50 G's	13.30
Max Pendulum G's Above 30 ms		29 G's Max	13.30
Deceleration - Time Curve Decay Time to 5 G's		34 - 42 ms	40.40
D Plane Rotation	Max	64 - 78 Deg	66.20
	Time	57 - 64 ms	58.90
Moment About Occipital Condyle	Max	88.13 – 108.47 N-m	104.20
	Time	47 - 58 ms	52.80
Rotation Angle - Time Curve Decay Time to Zero		113 - 128 ms	117.20
Positive Moment - Time Curve Decay Time to Zero		97 - 107 ms	97.80

Remarks:

Laboratory Technician: B. Swiecicki

PART 572E
NECK EXTENSION TEST

Dummy Serial Number	061	
Sequential Test Number	2	
Date	02-11-2004	6 Axis Neck Transducer
Workfile	061NE2 02-11-04	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	70
Relative Humidity		10% - 70%	33
Impact Velocity		19.50 - 20.30 Ft/s	19.65
Pendulum Deceleration	10 ms	17.20 - 21.20 G's	18.20
	20 ms	14.00 - 19.00 G's	16.58
	30 ms	11.00 - 16.00 G's	13.70
Max Pendulum G's Above 30 ms		22 G's Max	14.14
Deceleration - Time Curve Decay Time to 5 G's		38 - 46 ms	40.10
D Plane Rotation	Max	81 - 106 Deg	91.15
	Time	72 - 82 ms	75.90
Moment About Occipital Condyle	Max	-79.99 - -52.88 N-m	-69.34
	Time	65 - 79 ms	71.10
Rotation Angle - Time Curve Decay Time to Zero		147 - 174 ms	151.70
Positive Moment - Time Curve Decay Time to Zero		120 - 148 ms	138.90

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
THORAX IMPACT TEST

Dummy Serial Number 061
Sequential Test Number 1
Date 02-12-2004
Workfile 061T 02-12-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	69-72 Deg F	70
Relative Humidity	10% - 70%	35
Pendulum Velocity	21.6 - 22.4 Ft/s	22.00
Maximum Deflection	2.50 - 2.86 in	2.56
Maximum Resistive Force	1160 - 1325 Lbs	1296.85
Internal Hysteresis	69 - 85 %	76.03

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
KNEE IMPACT TEST

Dummy Serial Number 061
Sequential Test Number 1
Date 02-13-2004
Workfile 061LF 02-13-04/061RF 02-13-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
LEFT KNEE		
Temperature	66 - 78 Deg F	70
Relative Humidity	10% - 70%	33
Probe Velocity	6.8 - 7.0 Ft/s	7.00
Peak Knee Impact Force	1060 - 1300 Lbs	1254.82
RIGHT KNEE		
Temperature	66 - 78 Deg F	70
Relative Humidity	10% - 70%	33
Probe Velocity	6.8 - 7.0 Ft/s	7.00
Peak Knee Impact Force	1060 - 1300 Lbs	1238.75

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
EXTERNAL DIMENSIONS

Dummy Serial Number 061
Sequential Test Number 1
Date 02-14-2004

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature			70
Relative Humidity			35
Location for Chest Circumference	AA	16.9 - 17.1 in	17.0
Location for Waist Circumference	BB	8.9 - 9.1 in	9.0
Chest Circumference (With Jacket)	Y	38.2 - 39.4 in	39.3
Waist Circumference	Z	32.9 - 34.1 in	33.6
Chest Depth	O	8.4 - 9.0 in	8.4
H-Point Height	C	3.3 - 3.5 in	3.4
H-Point from Backline	D	5.3 - 5.5 in	5.4
Skull Cap to Backline	H	1.6 - 1.8 in	1.7
Total Sitting Height	A	34.6 - 35.0 in	34.8
Thigh Clearance	F	5.5 - 6.1 in	6.0
Buttock Knee Length	K	22.8 - 23.8 in	23.6
Buttock Popliteal Length	N	17.8 - 18.8 in	18.4
Popliteal Height	L	16.9 - 17.9 in	17.7
Knee Pivot Height	M	19.1 - 19.7 in	19.4
Foot Length	P	9.9 - 10.5 in	10.1
Foot Breadth	W	3.6 - 4.2 in	3.8
Shoulder Pivot from Backline	E	3.3 - 3.7 in	3.6
Shoulder Breadth	V	16.6 - 17.2 in	16.8
Shoulder Pivot Height	B	19.9 - 20.5 in	20.1
Elbow Rest Height	J	7.5 - 8.3 in	7.8
Shoulder - Elbow Length	I	13.0 - 13.6 in	13.4
Back of Elbow to Wrist Pivot	G	11.4 - 12.0 in	11.6

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
HEAD DROP TEST

Dummy Serial Number 064
Sequential Test Number 1
Date 02-10-2004
Workfile 064H 02-10-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	66-78 Deg F	70.0
Relative Humidity	10% - 70%	36.0
Peak Resultant Acceleration	225-275 G's	259.11
Peak Lateral Acceleration	15 G's Max	5.09
Is Acceleration Curve Unimodal?	YES	YES

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
NECK FLEXION TEST

Dummy Serial Number	064	
Sequential Test Number	1	
Date	02-11-2004	6 Axis Neck Transducer
Workfile	064NF 02-11-04	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	70.0
Relative Humidity		10% - 70%	33.0
Impact Velocity		22.60 - 23.40 Ft/s	22.65
Pendulum Deceleration	10 ms	22.50 - 27.50 G's	23.61
	20 ms	17.60 - 22.60 G's	18.90
	30 ms	12.50 - 18.50 G's	14.73
Max Pendulum G's Above 30 ms		29 G's Max	14.84
Deceleration - Time Curve Decay Time to 5 G's		34 - 42 ms	39.30
D Plane Rotation	Max	64 - 78 Deg	65.70
	Time	57 - 64 ms	59.80
Moment About Occipital Condyle	Max	88.13 – 108.47 N-m	104.17
	Time	47 - 58 ms	51.80
Rotation Angle - Time Curve Decay Time to Zero		113 - 128 ms	118.70
Positive Moment - Time Curve Decay Time to Zero		97 - 107 ms	99.10

Remarks:

Laboratory Technician: B. Swiecicki

PART 572E
NECK EXTENSION TEST

Dummy Serial Number	064	
Sequential Test Number	1	
Date	02-11-2004	6 Axis Neck Transducer
Workfile	064NE 02-11-04	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	70
Relative Humidity		10% - 70%	33
Impact Velocity		19.50 - 20.30 Ft/s	19.79
Pendulum Deceleration	10 ms	17.20 - 21.20 G's	19.88
	20 ms	14.00 - 19.00 G's	17.33
	30 ms	11.00 - 16.00 G's	15.15
Max Pendulum G's Above 30 ms		22 G's Max	15.39
Deceleration - Time Curve Decay Time to 5 G's		38 - 46 ms	38.20
D Plane Rotation	Max	81 - 106 Deg	85.48
	Time	72 - 82 ms	75.90
Moment About Occipital Condyle	Max	-79.99 - -52.88 N-m	-63.94
	Time	65 - 79 ms	69.90
Rotation Angle - Time Curve Decay Time to Zero		147 - 174 ms	154.20
Positive Moment - Time Curve Decay Time to Zero		120 - 148 ms	135.90

Remarks:

Laboratory Technician: B. Swiecicki

PART 572E
THORAX IMPACT TEST

Dummy Serial Number 064
Sequential Test Number 1
Date 02-13-2004
Workfile 064T 02-13-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	69-72 Deg F	70.0
Relative Humidity	10% - 70%	31.0
Pendulum Velocity	21.6 - 22.4 Ft/s	22.30
Maximum Deflection	2.50 - 2.86 in	2.57
Maximum Resistive Force	1160 - 1325 Lbs	1288.35
Internal Hysteresis	69 - 85 %	75.00

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
KNEE IMPACT TEST

Dummy Serial Number 064
Sequential Test Number 1
Date 02-13-2004
Workfile 064LF 02-13-04/064RF 02-13-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
LEFT KNEE		
Temperature	66 - 78 Deg F	70.0
Relative Humidity	10% - 70%	33.0
Probe Velocity	6.8 - 7.0 Ft/s	7.00
Peak Knee Impact Force	1060 - 1300 Lbs	1180.95
RIGHT KNEE		
Temperature	66 - 78 Deg F	70.0
Relative Humidity	10% - 70%	33.0
Probe Velocity	6.8 - 7.0 Ft/s	7.00
Peak Knee Impact Force	1060 - 1300 Lbs	1178.84

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
EXTERNAL DIMENSIONS

Dummy Serial Number 064
Sequential Test Number 1
Date 02-14-2004

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature			70
Relative Humidity			35
Location for Chest Circumference	AA	16.9 - 17.1 in	17.0
Location for Waist Circumference	BB	8.9 - 9.1 in	9.0
Chest Circumference (With Jacket)	Y	38.2 - 39.4 in	39.3
Waist Circumference	Z	32.9 - 34.1 in	34.0
Chest Depth	O	8.4 - 9.0 in	8.5
H-Point Height	C	3.3 - 3.5 in	3.4
H-Point from Backline	D	5.3 - 5.5 in	5.4
Skull Cap to Backline	H	1.6 - 1.8 in	1.7
Total Sitting Height	A	34.6 - 35.0 in	34.8
Thigh Clearance	F	5.5 - 6.1 in	6.0
Buttock Knee Length	K	22.8 - 23.8 in	23.6
Buttock Popliteal Length	N	17.8 - 18.8 in	18.4
Popliteal Height	L	16.9 - 17.9 in	17.4
Knee Pivot Height	M	19.1 - 19.7 in	19.4
Foot Length	P	9.9 - 10.5 in	10.2
Foot Breadth	W	3.6 - 4.2 in	3.8
Shoulder Pivot from Backline	E	3.3 - 3.7 in	3.6
Shoulder Breadth	V	16.6 - 17.2 in	16.8
Shoulder Pivot Height	B	19.9 - 20.5 in	20.4
Elbow Rest Height	J	7.5 - 8.3 in	7.8
Shoulder - Elbow Length	I	13.0 - 13.6 in	13.4
Back of Elbow to Wrist Pivot	G	11.4 - 12.0 in	11.6

Remarks:

Laboratory Technician:

B. Swiecicki

APPENDIX D

DUMMY, VEHICLE AND LABORATORY INSTRUMENT CALIBRATION

INSTRUMENT CALIBRATION FOR DRIVER DUMMY
(Six Month Calibration Minimum)

DRIVER DUMMY (S/N 061)		Manufacturer	Serial #	Calibration	
				Last	Next
Head 9 Array	X Arm Y	ENDEVCO	AC-P21399	06-Nov-03	06-May-04
	X Arm Z	ENDEVCO	AC-P23282	11-Nov-03	11-May-04
	Y Arm X	ENDEVCO	AC-P23155	11-Nov-03	11-May-04
	Y Arm Z	ENDEVCO	AC-P23358	06-Nov-03	06-May-04
	Z Arm X	ENDEVCO	AC-P18731	11-Nov-03	11-May-04
	Z Arm Y	ENDEVCO	AC-P19217	26-Nov-03	26-May-04
Head	X	ENDEVCO	AC-P18516	11-Nov-03	11-May-04
	Y	ENDEVCO	AC-P19222	11-Nov-03	11-May-04
	Z	ENDEVCO	AC-P18558	26-Nov-03	26-May-04
Head	X (R)	ENDEVCO	AC-P18663	11-Nov-03	11-May-04
	Y (R)	ENDEVCO	AC-P18639	11-Nov-03	11-May-04
	Z (R)	ENDEVCO	AC-P18537	11-Nov-03	11-May-04
Neck Load Cell	X	DENTON	LC-076Fx	24-Sep-03	24-Mar-04
	Y	DENTON	LC-076Fy	24-Sep-03	24-Mar-04
	Z	DENTON	LC-076Fz	24-Sep-03	24-Mar-04
Neck Moment	X	DENTON	LC-076Mx	24-Sep-03	24-Mar-04
	Y	DENTON	LC-076My	24-Sep-03	24-Mar-04
	Z	DENTON	LC-076Mz	24-Sep-03	24-Mar-04
Chest	X	ENDEVCO	AC-P21373	30-Oct-03	30-Jun-04
	Y	ENDEVCO	AC-P22639	30-Oct-03	30-Jun-04
	Z	ENDEVCO	AC-P21297	30-Oct-03	30-Jun-04
Chest	X (R)	ENDEVCO	AC-P21171	30-Oct-03	30-Jun-04
	Y (R)	ENDEVCO	AC-P23136	30-Oct-03	30-Jun-04
	Z (R)	ENDEVCO	AC-P23128	30-Oct-03	30-Jun-04
Chest Deflection	X	SERVO	DS-061	11-Nov-03	11-May-04
Pelvic	X	ENDEVCO	AC-P18792	11-Nov-03	11-May-04
	Y	ENDEVCO	AC-P17535	11-Nov-03	11-May-04
	Z	ENDEVCO	AC-P23134	11-Nov-03	11-May-04

INSTRUMENT CALIBRATION FOR DRIVER DUMMY
(Six Month Calibration Minimum)

DRIVER DUMMY (S/N 061)		Manufacturer	Serial #	Calibration	
				Last	Next
Left Femur Load Cell	Fz	DENTON	LC-231	03-Dec-03	03-Jun-04
Right Femur Load Cell	Fz	DENTON	LC-232	03-Dec-03	03-Jun-04
Left Upper Tibia	Mx	DENTON	LC-038Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-038My	26-Sep-03	26-Mar-04
Left Lower Tibia	Fz	DENTON	LC-124Fz	26-Sep-03	26-Mar-04
	Mx	DENTON	LC-124Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-124My	26-Sep-03	26-Mar-04
Right Upper Tibia	Mx	DENTON	LC-023Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-023My	26-Sep-03	26-Mar-04
Right Lower Tibia	Fz	DENTON	LC-111Fz	26-Sep-03	26-Mar-04
	Mx	DENTON	LC-111Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-111My	26-Sep-03	26-Mar-04
Left Foot Rear	X	ENTRAN	AC-00L13-F04	14-Nov-03	14-May-04
	Z	ENTRAN	AC-01G18-F15	14-Nov-03	14-May-04
Left Foot Front	Z	ENTRAN	AC-01G18-F14	14-Nov-03	14-May-04
Right Foot Rear	X	ENTRAN	AC-01G18-F05	14-Nov-03	14-May-04
	Z	ENTRAN	AC-01G18-F03	14-Nov-03	14-May-04
Right Foot Front	Z	ENTRAN	AC-01J02-F09	14-Nov-03	14-May-04
Lap Belt Load Cell		First Technology	LC-170	10-Oct-03	10-Jun-04
Shoulder Belt Load Cell		First Technology	LC-174	10-Oct-03	10-Jun-04

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(Six Month Calibration Minimum)

PASSENGER DUMMY (S/N 064)		Manufacturer	Serial #	Calibration	
				Last	Next
Head 9 Array	X Arm Y	ENDEVCO	AC-P18532	20-Nov-03	20-May-04
	X Arm Z	ENDEVCO	AC-P17237	20-Nov-03	20-May-04
	Y Arm X	ENDEVCO	AC-P16662	20-Nov-03	20-May-04
	Y Arm Z	ENDEVCO	AC-P17299	20-Nov-03	20-May-04
	Z Arm X	ENDEVCO	AC-P21441	20-Nov-03	20-May-04
	Z Arm Y	ENDEVCO	AC-P19197	26-Nov-03	26-May-04
Head	X	ENDEVCO	AC-J32184	03-Nov-03	03-May-04
	Y	ENDEVCO	AC-J32185	30-Oct-03	30-Jun-04
	Z	ENDEVCO	AC-J31011	03-Nov-03	03-May-04
Head	X (R)	ENDEVCO	AC-J31020	03-Nov-03	03-May-04
	Y (R)	ENDEVCO	AC-J31101	03-Nov-03	03-May-04
	Z (R)	ENDEVCO	AC-J31059	03-Nov-03	03-May-04
Neck Load Cell	X	DENTON	LC-441Fx	25-Sep-03	25-Mar-04
	Y	DENTON	LC-441Fy	25-Sep-03	25-Mar-04
	Z	DENTON	LC-441Fz	25-Sep-03	25-Mar-04
Neck Moment	X	DENTON	LC-441Mx	25-Sep-03	25-Mar-04
	Y	DENTON	LC-441My	25-Sep-03	25-Mar-04
	Z	DENTON	LC-441Mz	25-Sep-03	25-Mar-04
Chest	X	ENDEVCO	AC-P18948	21-Nov-03	21-May-04
	Y	ENDEVCO	AC-J33018	03-Nov-03	03-May-04
	Z	ENDEVCO	AC-J32783	03-Nov-03	03-May-04
Chest	X (R)	ENDEVCO	AC-J31066	03-Nov-03	03-May-04
	Y (R)	ENDEVCO	AC-P16979	03-Nov-03	03-May-04
	Z (R)	ENDEVCO	AC-J31022	03-Nov-03	03-May-04
Chest Deflection	X	SERVO	DS-064	20-Nov-03	20-May-04
Pelvic	X	ENDEVCO	AC-P23174	30-Oct-03	30-Apr-04
	Y	ENDEVCO	AC-P23164	30-Oct-03	30-Apr-04
	Z	ENDEVCO	AC-P23137	30-Oct-03	30-Apr-04

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(Six Month Calibration Minimum)

PASSENGER DUMMY (S/N 064)		Manufacturer	Serial #	Calibration	
				Last	Next
Left Femur Load Cell	Fz	GSE	LC-723	03-Dec-03	03-Jun-04
Right Femur Load Cell	Fz	GSE	LC-955	03-Dec-03	03-Jun-04
Left Upper Tibia	Mx	DENTON	LC-045Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-045My	26-Sep-03	26-Mar-04
Left Lower Tibia	Fz	DENTON	LC-125Fz	26-Sep-03	26-Mar-04
	Mx	DENTON	LC-125Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-125My	26-Sep-03	26-Mar-04
Right Upper Tibia	Mx	DENTON	LC-016Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-016My	26-Sep-03	26-Mar-04
Right Lower Tibia	Fz	DENTON	LC-123Fz	26-Sep-03	26-Mar-04
	Mx	DENTON	LC-123Mx	26-Sep-03	26-Mar-04
	My	DENTON	LC-123My	26-Sep-03	26-Mar-04
Left Foot Rear	X	ENDEVCO	AC-J18059	04-Dec-03	04-Jun-04
	Z	ENDEVCO	AC-J36176	04-Dec-03	04-Jun-04
Left Foot Front	Z	ENDEVCO	AC-J18662	04-Dec-03	04-Jun-04
Right Foot Rear	X	ENDEVCO	AC-AJ8C0	04-Dec-03	04-Jun-04
	Z	ENDEVCO	AC-J19868	04-Dec-03	04-Jun-04
Right Foot Front	Z	ENDEVCO	AC-J34378	04-Dec-03	04-Jun-04
Lap Belt Load Cell		First Technology	LC-175	10-Oct-03	10-Jun-04
Shoulder Belt Load Cell		First Technology	LC-180	10-Oct-03	10-Jun-04

INSTRUMENT CALIBRATION FOR VEHICLE ACCELEROMETERS
(Six Month Calibration Minimum)

	Manufacturer	Serial #	Calibration	
			Last	Next
Left Seat Rear Crossmember X	GS SENSORS	AC-9444-038	03-Dec-03	03-Jun-04
Right Rear Seat Crossmember X	GS SENSORS	AC-9440-023	03-Dec-03	03-Jun-04
Top of Engine	ICS	AC-8084-041	11-Dec-03	11-Jun-04
Bottom of Engine	GS SENSORS	AC-9440-024	02-Dec-03	02-Jun-04
Right Disc Brake Caliper	ICS	AC-8083-028	11-Dec-03	11-Jun-04
Instrument Panel	GS SENSORS	AC-9440-011	01-Dec-03	01-Jun-04
Left Disc Brake Caliper	ICS	AC-8084-010	11-Dec-03	11-Jun-04
Left Seat Rear Crossmember Z	GS SENSORS	AC-9440-029	03-Dec-03	03-Jun-04
Right Seat Rear Crossmember Z	GS SENSORS	AC-9440-046	03-Dec-03	03-Jun-04

REPORT NUMBER: CAL-04-11

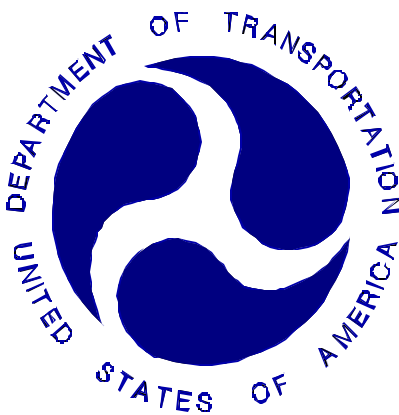
NEW CAR ASSESSMENT PROGRAM (NCAP)
FRONTAL BARRIER IMPACT TEST

EVENFLO VANGUARD 5 WITH LATCH AND TOP TETHER
CENTURY STE 1500 WITH LATCH AND TOP TETHER

NHTSA NUMBER: M45202

GENERAL DYNAMICS REPORT NUMBER: 8642-NCAP-47

GENERAL DYNAMICS
ADVANCED INFORMATION ENGINEERING SERVICES
TRANSPORTATION SCIENCES CENTER
P.O. BOX 400
BUFFALO, NEW YORK 14225



March 10, 2004

FINAL REPORT

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Rulemaking
Office of Crashworthiness Standards
Mail Code: NVS-111
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. DTNH22-01-D-32005. 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:

Patrick G. MacDiarmid, Jr., 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. CAL-04-11		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Final Report of Evenflo Vanguard 5 LATCH and top tether NHTSA No.: M45202				5. Report Date March 10, 2004	
				6. Performing Organization Code CAL	
7. Author(s) Patrick G. MacDiarmid, Jr., Project Engineer David J. Travale, Program Manager				8. Performing Organization Report No. 8642-NCAP-47	
9. Performing Organization Name and Address General Dynamics Advance Information Engineering Services Transportation Sciences Center P.O. Box 400 Buffalo, New York 14225				10. Work Unit No.	
				11. Contract or Grant No. DTNH22-01-D-32005	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Office of Crashworthiness Standards Mail Code: NVS-111 400 Seventh SW, Room 5313 Washington, D.C. 20590				13. Type of Report and Period Covered Final Report March 2004	
				14. Sponsoring Agency Code NVS-111	
15. Supplementary Notes					
16. Abstract This CRS test was performed in conjunction with a New Car Assessment Program (NCAP) load cell barrier test. An Evenflo Vanguard 5 forward facing convertible was secured in Position 3 (P3) with the LATCH system and top tether. A Century STE 1500 forward facing convertible was secured in Position 4 (P4) with the LATCH system and top tether. This test was conducted at the General Dynamics Crash Test Facility in Buffalo, New York, on March 10, 2004.					
ATD Position		HIC 15		HIC 36	
P3 (Right Rear) (044)		414.2		711.5	
P4 (Left Rear) (142)		473.7		917.5	
				Clip (3 ms)	
				42.4	
				49.1	
17. Key Words New Car Assessment Program (NCAP)				18. Distribution Statement	
				Copies of this report are available from: National Highway Traffic Safety Administration Technical Reference Division Room 5111 (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 146	
22. Price					

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SECTION 1

PURPOSE AND SUMMARY OF TEST M45202

The purpose of this test was to obtain CRS performance data in a frontal impact NCAP condition. The 56.65 kph NCAP frontal impact test was conducted in accordance with the Office of Crashworthiness Standards (OCS) NCAP Laboratory Test Procedure.

SUMMARY

A forward facing convertible 5-point belt CRS and a 3 year old child dummy (serial no. 044) was secured in the right rear occupant position (Position 3 or P3). A forward facing convertible 5-point belt CRS and a 3 year old child dummy (serial no. 142) was secured in the left rear occupant position (Position 4 or P4). Both 3 Year Old Hybrid III (P572 P) child dummies were instrumented with head, chest, and pelvic triaxial accelerometers, a chest displacement sensor, and upper and lower six axial neck load cells. In addition, the dummies were equipped with head rear Z-direction accelerometers. The dummies were calibrated previous to this test and the certification information is found in section 5.

The right rear child dummy's HIC (15 ms) was 414.2, the HIC over 36 ms was 711.5 and the maximum chest deceleration over 3 ms was 42.4 g's. The left rear child dummy's HIC (15 ms) was 473.7, the HIC over 36 ms was 917.5 and the maximum chest deceleration over 3 ms was 49.1 g's.

SECTION 2
DATA SHEET NO. 1
CRASH TEST SUMMARY

TEST DUMMY INFORMATION:

DESCRIPTION	Position #3 CRS	Position #4 CRS
ATD Type/Serial No.	Hybrid III 3C/044	Hybrid III 3C/142
Restraint System:	Vanguard 5 with LATCH and top tether	Century 1500 STE with LATCH and top tether

Number of Data Channels 55

Number of Cameras: 1 Real Time

2 High Speed

POST TEST DOOR OPENING

DESCRIPTION	FRONT	REAR
Left Side Doors	Closed, Latched and Operable without tools	Closed, Latched and Operable without tools
Right Side Doors	Closed, Latched and Operable without tools	Closed, Latched and Operable without tools
Hatch/Other Door	N/A	Closed, Latched and Operable without tools

POST TEST SEAT DATA

LOCATION	SEAT MOVEMENT (mm)	SEAT BACK FAILURE
P1 (Left Front)	0	None
P2 (Right Front)	0	None
P3 (Right Rear)	0	None
P4 (Left Rear)	0	None

VISIBLE DUMMY CONTACT POINTS

	Position #3 CRS	Position #4 CRS
Head Contact:	The face and chin to the chest and the back of the head to the child restraint	The face and chin to the chest and the back of the head to the child restraint
Upper Torso Contact:	None	None
Lower Torso Contact:	None	None
Left Knee Contact:	None	None
Right Knee Contact:	None	None

DATA SHEET NO. 2

CRS PARAMETER DATA

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Delivered Weight of Vehicle with Maximum Fluids = 1961.0 kg (A)

AS TESTED WEIGHT OF VEHICLE

(2 P572E + 2 P572Ps w/ CRS +CARGO + EQUIPMENT & INSTRUMENTATION):

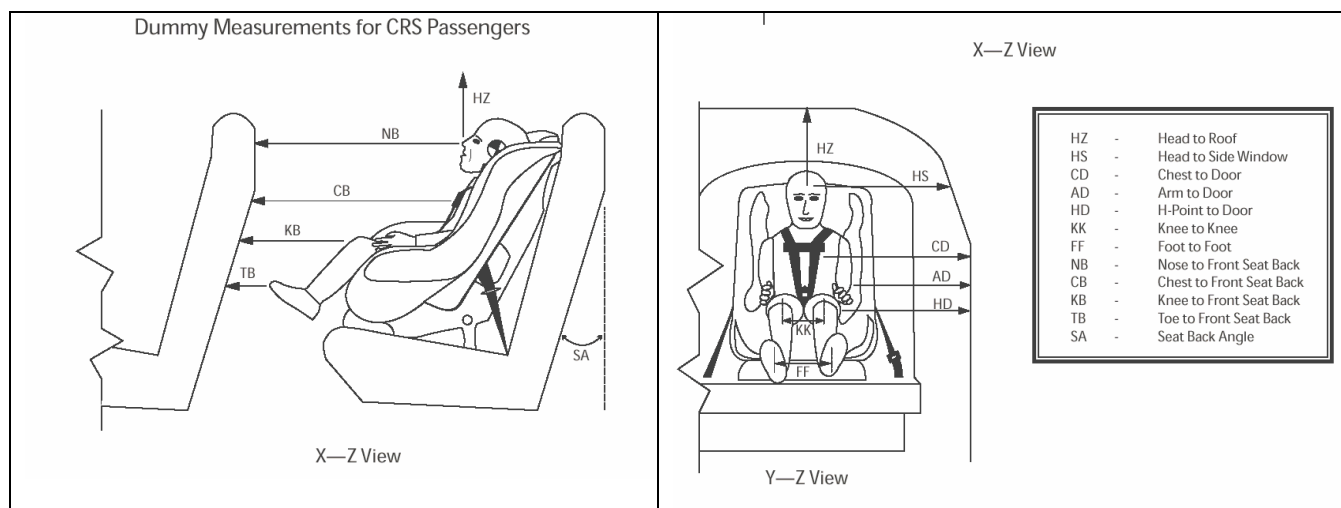
Left Front	=	<u>555.0</u>	kg	Left Rear	=	<u>547.5</u>	kg
Right Front	=	<u>543.0</u>	kg	Right Rear	=	<u>553.0</u>	kg
TOTAL FRONT	=	<u>1098.0</u>	kg	TOTAL REAR	=	<u>1100.5</u>	kg
TOTAL TEST WEIGHT =		<u>2198.5</u>	kg				

DATA SHEET NO. 3

CHILD DUMMY POSITIONING IN VEHICLE

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202



Measurement	P3 CRS (044)	P4 CRS (142)
SA	30	42
HS	440	400
CD	365	375
AD	235	232
HD	290	313
HZ	379	430
NB	582	540
CB	570	527
KK	140	132
FF	140	155
KB – LEFT	385	345
KB – RIGHT	385	352
TB – LEFT	130	52
TB – RIGHT	130	47

All dimensions in mm (unless noted)

P3 – Right Rear Passenger (CRS #1)

P4 – Left Rear Passenger (CRS #2)

DATA SHEET 4

CHILD DUMMY INJURY CRITERIA VALUES

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202

DESCRIPTION	Unit	MAXIMUM VALUE							
		Position #3				Position #4			
		Pos	msec	Neg	msec	Pos	msec	Neg	msec
Head X	g	12.8	161.0	-34.6	100.1	26.4	194.7	-44.2	94.5
Head Y	g	2.4	73.0	-6.1	119.8	9.5	105.4	-4.9	72.1
Head Z	g	59.8	89.7	-9.1	44.0	60.8	81.5	-10.1	39.1
Head Resultant	g	66.5	89.7	0.1	-21.4	66.1	81.6	0.0	-33.5
Head Rear Z	g	66.8	89.8	-15.3	43.8	86.7	86.5	-16.4	39.1
Upper Neck Fx	N	0.9	-7.6	-775.7	100.7	12.0	158.4	-954.0	94.7
Upper Neck Fy	N	66.2	72.5	-47.6	160.5	29.5	148.1	-119.8	70.5
Upper Neck Fz	N	1722.6	93.3	-231.6	43.1	2249.9	92.8	-263.2	40.0
Upper Neck F Resultant	N	1847.5	93.3	1.0	-24.8	2436.0	92.8	0.9	-34.0
Upper Neck Mx	N-m	5.6	77.5	-5.5	105.0	4.6	104.5	-6.2	76.6
Upper Neck My	N-m	3.7	145.9	-12.8	109.0	6.7	144.2	-15.2	199.9
Upper Neck Mz	N-m	7.5	173.7	-0.8	81.3	3.0	78.5	-0.8	137.2
Upper Neck M Resultant	N-m	13.7	101.8	0.0	-21.0	15.3	199.9	0.0	-35.6
Lower Neck Fx	N	61.1	199.9	-1221.5	84.5	119.7	190.3	-2076.7	92.9
Lower Neck Fy	N	79.6	74.4	-193.4	107.3	37.5	62.9	-67.6	92.0
Lower Neck Fz	N	1001.8	89.7	-291.1	43.2	927.4	83.8	-328.0	39.3
Lower Neck F Resultant	N	1498.9	92.1	0.8	-24.2	2175.7	92.9	0.7	-34.7
Lower Neck Mx	N-m	12.6	74.2	-8.8	108.4	4.4	147.3	-19.6	71.6
Lower Neck My	N-m	115.9	98.2	-7.2	199.9	161.6	91.7	-13.3	190.6
Lower Neck Mz	N-m	7.0	74.8	-2.9	105.6	3.7	104.5	-9.6	69.8
Lower Neck M Resultant	N-m	116.0	98.2	0.0	-42.3	161.8	91.7	0.0	-36.3
Chest X	g	1.4	150.8	-37.5	75.4	3.7	134.3	-40.5	64.4
Chest Y	g	3.7	97.8	-4.6	77.0	3.4	118.7	-4.6	96.6
Chest Z	g	5.2	165.1	-23.9	69.5	11.8	92.1	-29.5	67.0
Chest Resultant	g	43.3	69.8	0.1	-49.9	49.9	65.4	0.1	-39.4
Chest Displacement	g	0.0	10.9	-17.8	113.1	0.0	-4.9	-19.3	98.6

DATA SHEET 4

CHILD DUMMY INJURY CRITERIA VALUES (CONTINUED)

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202

		MAXIMUM VALUE							
		Position #3				Position #4			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Pelvic X	g	3.7	145.8	-53.5	65.7	7.0	102.8	-37.7	59.7
Pelvic Y	g	3.9	147.8	-10.8	66.8	4.6	56.6	-5.8	75.1
Pelvic Z	g	4.6	194.2	-24.2	65.3	38.4	65.3	-9.9	199.1
Pelvic Resultant	g	59.2	65.3	0.1	-50.0	52.8	63.6	0.1	-26.7
Tether Belt Load	N	3235.4	75.5	-95.0	191.9	2595.8	69.5	-32.0	186.9

DATA SHEET 4

CHILD DUMMY INJURY CRITERIA VALUES (CONTINUED)

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202

	HEAD INJURY CRITERIA (HIC)							
	HIC15				HIC36			
	HIC	t ₁ (msec)	t ₂ (msec)	Average Acceleration t ₁ to t ₂	HIC	t ₁ (msec)	t ₂ (msec)	Average Acceleration t ₁ to t ₂
Position #3 - Right	414.2	83.1	98.1	59.8 g	711.5	74.3	110.3	52.3 g
Position #4 - Left	473.7	77.5	92.5	63.1 g	917.5	70.6	106.6	57.9 g

	CLIP SUMMARY*			
	CLIP (g's)	t ₁ (msec)	t ₂ (msec)	CSI
Position #3 - Right	42.4 g	68.6	71.6	378.0
Position #4 - Left	49.1 g	63.8	66.8	402.1

* The maximum chest resultant acceleration is defined as the maximum acceleration which exceeds 0.003 seconds in duration.

DATA SHEET NO. 5

CRS PERFORMANCE DATA

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202

		MAXIMUM VALUE			
DESCRIPTION	Unit	Positive	Time (ms)	Negative	Time (ms)
P3 CRS X	g	12.5	187.4	-52.1	60.4
P3 CRS Y	g	3.9	150.8	-4.8	85.1
P3 CRS Z	g	13.0	181.1	-15.0	86.5
P3 CRS Resultant	g	53.3	60.5	0.1	-35.9
P4 CRS X	g	6.8	181.8	-46.9	54.4
P4 CRS Y	g	7.1	40.8	-9.9	65.0
P4 CRS Z	g	12.5	183.6	-15.3	61.5
P4 CRS Resultant	g	47.4	54.4	0.0	-31.5

DATA SHEET NO. 5**CRS PERFORMANCE DATA (CONTINUED)**CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tetherNHTSA No. M45202**POSITION #3 CRS POST-TEST INSPECTION (Serial No. 3691261 P1 22NOV03)**

LOCATION	DAMAGE	REMARKS
Upper Tether Strap	No	None
Upper Tether Buckle	No	None
Upper Tether Hook	No	None
Vehicle Upper Tether Anchor	No	None
Lower Anchor Strap	No	None
Lower Anchor Buckle	No	None
Lower Anchor Hooks	No	None
Vehicle Lower CRS Anchors	No	None
Five Point Harness Connections	No	None
Cracks on CRS	No	None
Fabric Tears on CRS	No	None
Vehicle Seat Structure	No	None
Vehicle Seat Fabric Tears	No	None
Child Dummy	No	None

POSITION #4 CRS POST-TEST INSPECTION (Serial No. 44164ELM 1500STE MG 2002 10 02 M)

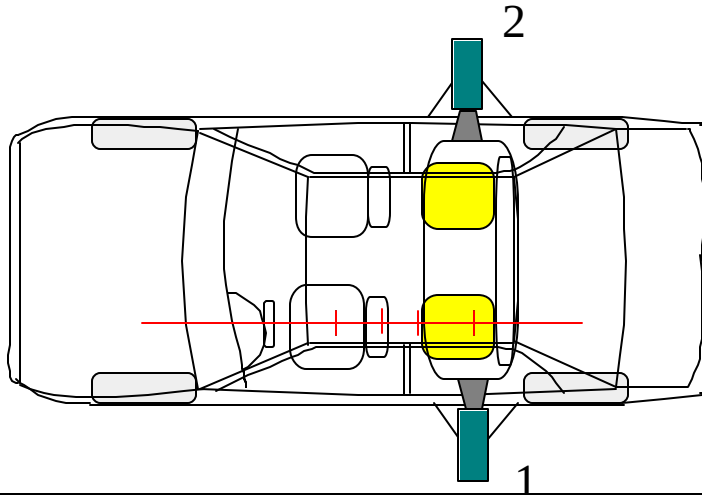
LOCATION	DAMAGE	REMARKS
Upper Tether Strap	No	None
Upper Tether Buckle	No	None
Upper Tether Hook	No	None
Vehicle Upper Tether Anchor	No	None
Lower Anchor Strap	No	None
Lower Anchor Buckle	No	None
Lower Anchor Hooks	No	None
Vehicle Lower CRS Anchors	No	None
Five Point Harness Connections	No	None
Cracks on CRS	No	None
Fabric Tears on CRS	No	None
Vehicle Seat Structure	No	None
Vehicle Seat Fabric Tears	No	None
Child Dummy	No	None

DATA SHEET NO. 6

CRS CAMERA DATA

CRS: Evenflo Vanguard 5 and Century 1500 STE both secured using LATCH and top tether

NHTSA No. M45202



Camera No.	View	Coordinates (millimeters)			Angle** (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Left side CRS lateral view	3658	2833	2572	-37	24-70	1000
2	Right side CRS lateral view	3665	2843	2613	-36	24-70	1000

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

** = referenced to horizontal plane

X = film plane to monorail centerline

Y = film plane to impact location

Z = film plane to ground

SECTION 3

PHOTOGRAPHS

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Figure 3-1 CLOSE-UP VIEW OF POSITION 3 CRS LABEL



Figure 3-2 PRE-TEST FRONTAL VIEW OF POSITION 3 CRS



Figure 3-3 POST-TEST FRONTAL VIEW OF POSITION 3 CRS

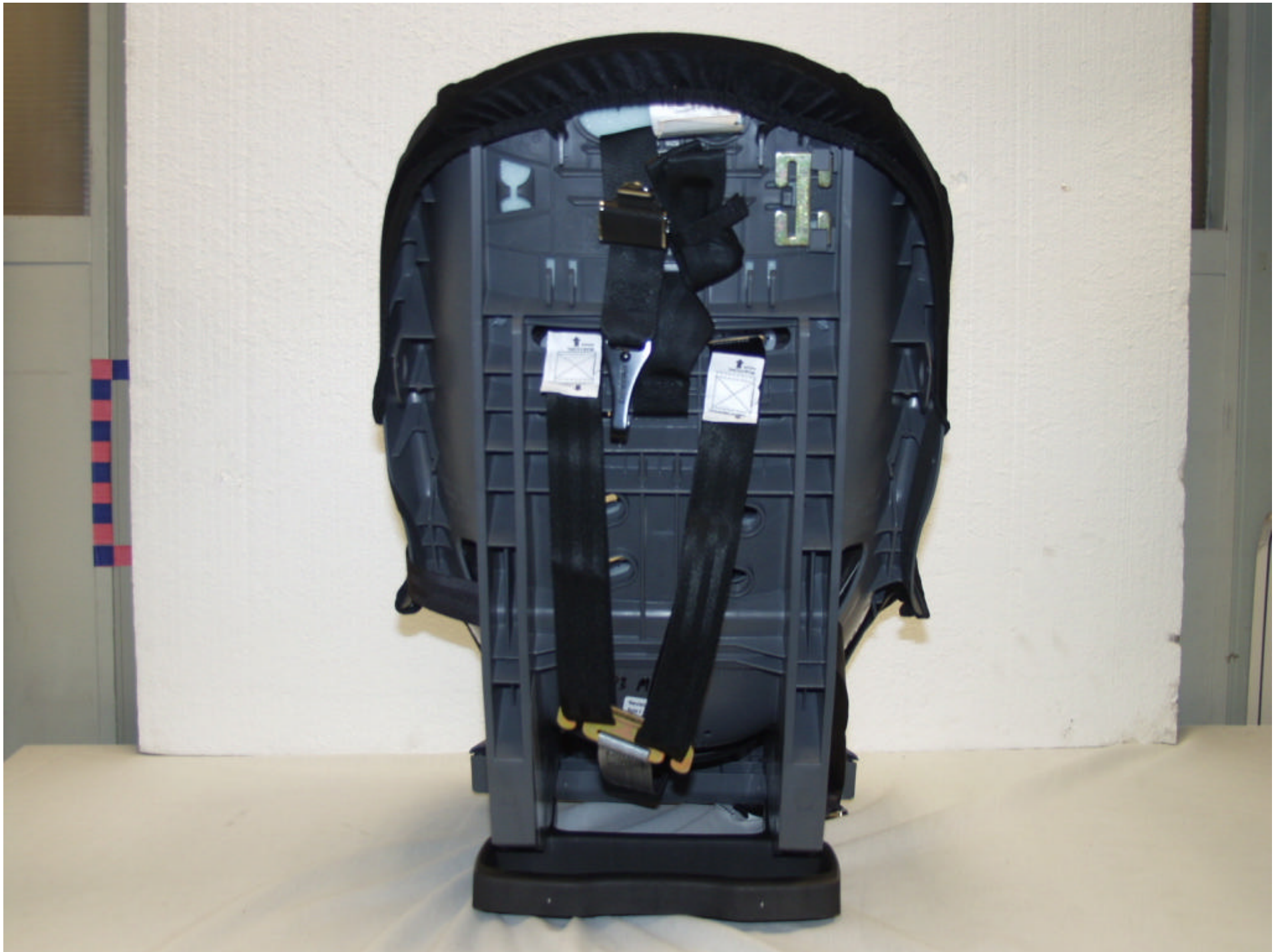


Figure 3-4 PRE-TEST REAR VIEW OF POSITION 3 CRS



Figure 3-5 POST-TEST REAR VIEW OF POSITION 3 CRS



Figure 3-6 PRE-TEST LEFT SIDE VIEW OF POSITION 3 CRS



Figure 3-7 POST-TEST LEFT SIDE VIEW OF POSITION 3 CRS



Figure 3-8 PRE-TEST RIGHT SIDE VIEW OF POSITION 3 CRS



Figure 3-9 POST-TEST RIGHT SIDE VIEW OF POSITION 3 CRS



Figure 3-10 CLOSE-UP VIEW OF POSITION 4 CRS LABEL



Figure 3-11 PRE-TEST FRONTAL VIEW OF POSITION 4 CRS



Figure 3-12 POST-TEST FRONTAL VIEW OF POSITION 4 CRS



Figure 3-13 PRE-TEST REAR VIEW OF POSITION 4 CRS



Figure 3-14 POST-TEST REAR VIEW OF POSITION 4 CRS



Figure 3-15 PRE-TEST LEFT SIDE VIEW OF POSITION 4 CRS



Figure 3-16 POST-TEST LEFT SIDE VIEW OF POSITION 4 CRS



Figure 3-17 PRE-TEST RIGHT SIDE VIEW OF POSITION 4 CRS



Figure 3-18 POST-TEST RIGHT SIDE VIEW OF POSITION 4 CRS



Figure 3-19 PRE-TEST POSITION 3 LEFT SIDE VIEW



Figure 3-20 POST-TEST POSITION 3 LEFT SIDE VIEW



Figure 3-21 PRE-TEST POSITION 4 LEFT SIDE VIEW



Figure 3-22 POST-TEST POSITION 4 LEFT SIDE VIEW



Figure 3-23 PRE-TEST POSITION 3 RIGHT SIDE VIEW



Figure 3-24 POST-TEST POSITION 3 RIGHT SIDE VIEW



Figure 3-25 PRE-TEST POSITION 4 RIGHT SIDE VIEW



Figure 3-26 POST-TEST POSITION 4 RIGHT SIDE VIEW



Figure 3-27 PRE-TEST POSITION 3 FRONT VIEW



Figure 3-28 POST-TEST POSITION 3 FRONT VIEW



Figure 3-29 PRE-TEST POSITION 4 FRONT VIEW



Figure 3-30 POST-TEST POSITION 4 FRONT VIEW

SECTION 4

CHILD DUMMY RESPONSE AND CRS DATA TRACES

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1	V1P3 Head x [g, CFC_1000]	4-4
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3	V1P3 Head z [g, CFC_1000]	4-6
4	V1P3 Head Resultant [g, CFC_1000]	4-7
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6	V1P3 Upper Neck Fx [N, CFC_1000]	4-9
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8	V1P3 Upper Neck Fz [N, CFC_1000]	4-11
9	V1P3 Upper Neck F Resultant [N, CFC_1000]	4-12
10	V1P3 Upper Neck Mx [N-m, CFC_600]	4-13
11	V1P3 Upper Neck My [N-m, CFC_600]	4-14
12	V1P3 Upper Neck Mz [N-m, CFC_600]	4-15
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14	V1P3 Lower Neck Fx [N, CFC_1000]	4-17
15	V1P3 Lower Neck Fy [N, CFC_1000]	4-18
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17	V1P3 Lower Neck F Resultant [N, CFC_1000]	4-20
18	V1P3 Lower Neck Mx [N-m, CFC_600]	4-21
19	V1P3 Lower Neck My [N-m, CFC_600]	4-22
20	V1P3 Lower Neck Mz [N-m, CFC_600]	4-23
21	V1P3 Lower Neck M Resultant [N-m, CFC_600]	4-24
22	V1P3 Chest x [g, CFC_180]	4-25
23	V1P3 Chest y [g, CFC_180]	4-26
24	V1P3 Chest z [g, CFC_180]	4-27
25	V1P3 Chest Resultant [g, CFC_180]	4-28
26	V1P3 Chest Compression [mm, CFC_600]	4-29
27	V1P3 Pelvic x [g, CFC_1000]	4-30
28	V1P3 Pelvic y [g, CFC_1000]	4-31
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30	V1P3 Pelvic Resultant [g, CFC_1000]	4-33
31	V1 P3 Tether Belt [N, CFC_60]	4-34
32	V1P4 Head x [g, CFC_1000]	4-35
33	V1P4 Head y [g, CFC_1000]	4-36
34	V1P4 Head z [g, CFC_1000]	4-37
35	V1P4 Head Resultant [g, CFC_1000]	4-38
36	V1P4 Head Rear z [g, CFC_1000]	4-39
37	V1P4 Upper Neck Fx [N, CFC_1000]	4-40
38	V1P4 Upper Neck Fy [N, CFC_1000]	4-41
39	V1P4 Upper Neck Fz [N, CFC_1000]	4-42
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42	V1P4 Upper Neck My [N-m, CFC_600]	4-45
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44	V1P4 Upper Neck M Resultant [N-m, CFC_600]	4-47
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47	V1P4 Lower Neck Fz [N, CFC_1000]	4-50
48	V1P4 Lower Neck F Resultant [N, CFC_1000]	4-51

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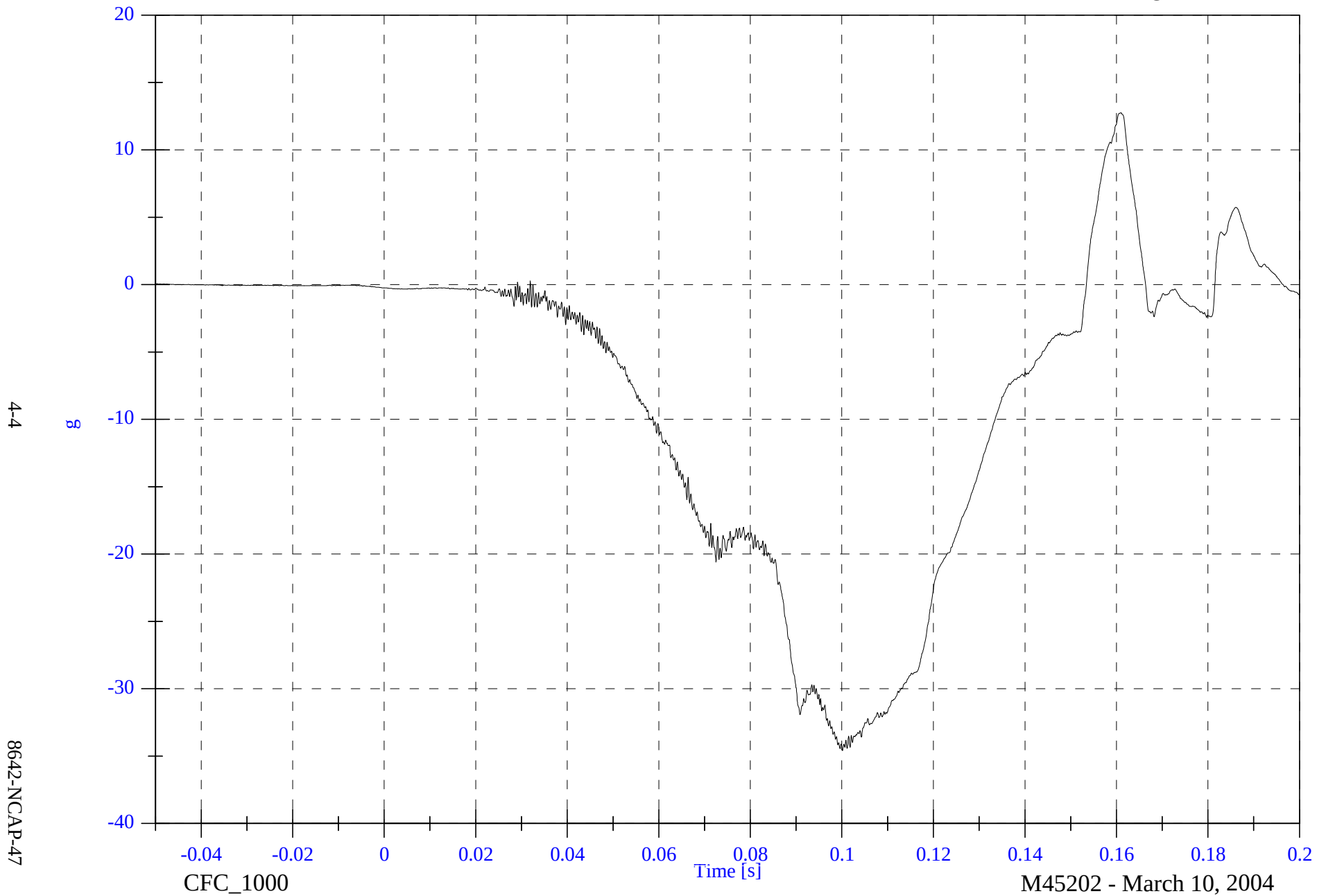
PLOT	PLOT NAME[UNITS, CHANNEL FILTER CLASS]	PAGE
49	V1P4 Lower Neck Mx [N-m, CFC_600]	4-52
50	V1P4 Lower Neck My [N-m, CFC_600]	4-53
51	V1P4 Lower Neck Mz [N-m, CFC_600]	4-54
52	V1P4 Lower Neck M Resultant [N-m, CFC_600]	4-55
53	V1P4 Chest x [g, CFC_180]	4-56
54	V1P4 Chest y [g, CFC_180]	4-57
55	V1P4 Chest z [g, CFC_180]	4-58
56	V1P4 Chest Resultant [g, CFC_180]	4-59
57	V1P4 Chest Compression [mm, CFC_600]	4-60
58	V1P4 Pelvic x [g, CFC_1000]	4-61
59	V1P4 Pelvic y [g, CFC_1000]	4-62
60	V1P4 Pelvic z [g, CFC_1000]	4-63
61	V1P4 Pelvic Resultant [g, CFC_1000]	4-64
62	V1 P4 Tether Belt [N, CFC_60]	4-65
63	V1 P3 CRS x [g, CFC_60]	4-66
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66	V1 P3 CRS Resultant [g, CFC_60]	4-69
67	V1 P3 CRS x Velocity [kph, CFC_180]	4-70
68	V1 P3 CRS y Velocity [kph, CFC_180]	4-71
69	V1 P3 CRS z Velocity [kph, CFC_180]	4-72
70	V1 P3 CRS x Displacement [mm, CFC_180]	4-73
71	V1 P3 CRS y Displacement [mm, CFC_180]	4-74
72	V1 P3 CRS z Displacement [mm, CFC_180]	4-75
73	V1 P4 CRS x [g, CFC_60]	4-76
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75	V1 P4 CRS z [g, CFC_60]	4-78
76	V1 P4 CRS Resultant [g, CFC_60]	4-79
77	V1 P4 CRS x Velocity [kph, CFC_180]	4-80
78	V1 P4 CRS y Velocity [kph, CFC_180]	4-81
79	V1 P4 CRS z Velocity [kph, CFC_180]	4-82
80	V1 P4 CRS x Displacement [mm, CFC_180]	4-83
81	V1 P4 CRS y Displacement [mm, CFC_180]	4-84
82	V1 P4 CRS z Displacement [mm, CFC_180]	4-85

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Head x

Max: 12.8 [g] at 0.161 [s]

Min: -34.6 [g] at 0.100 [s]

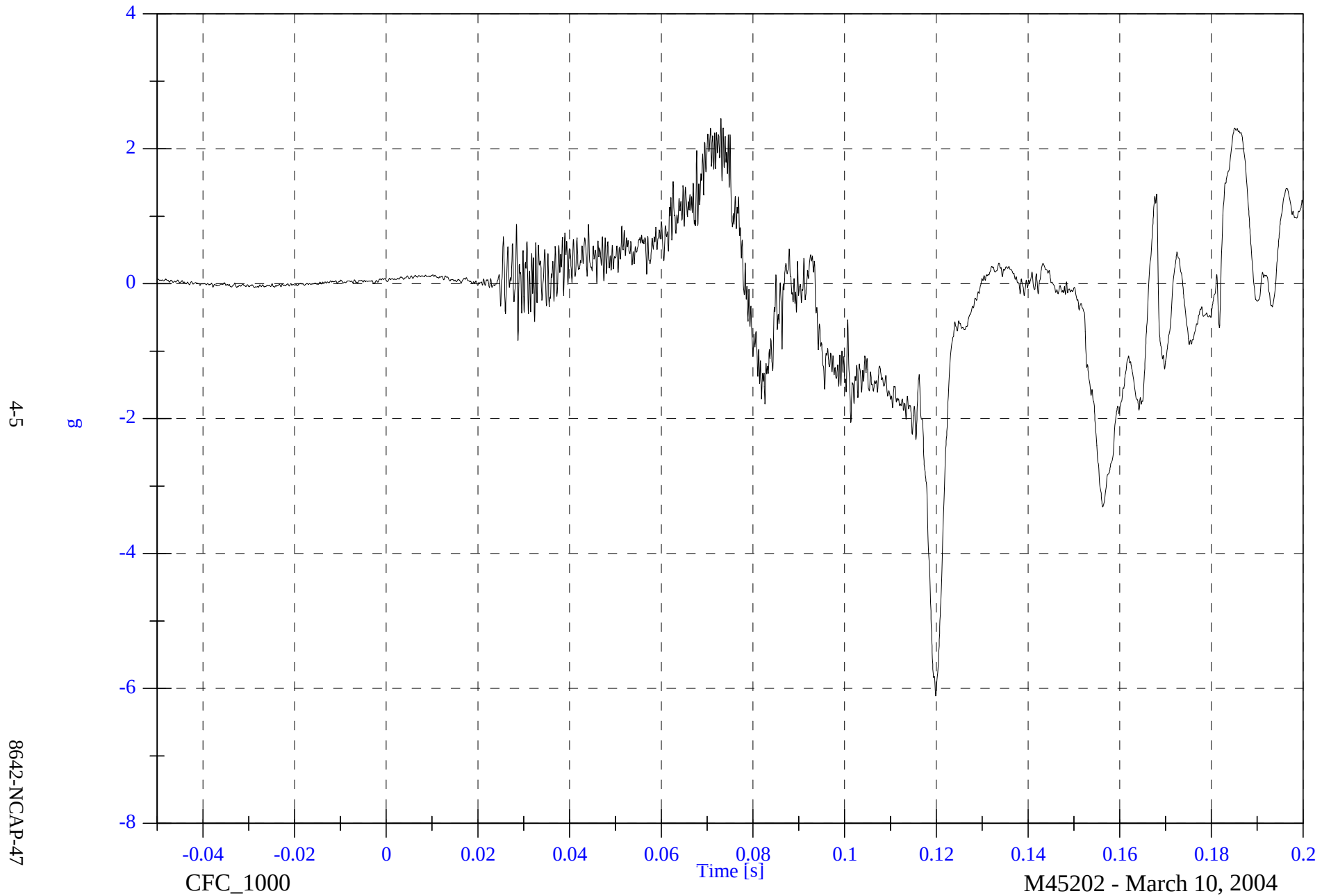


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 2.4 [g] at 0.073 [s]

Min: -6.1 [g] at 0.120 [s]

V1P3 Head y



4-5

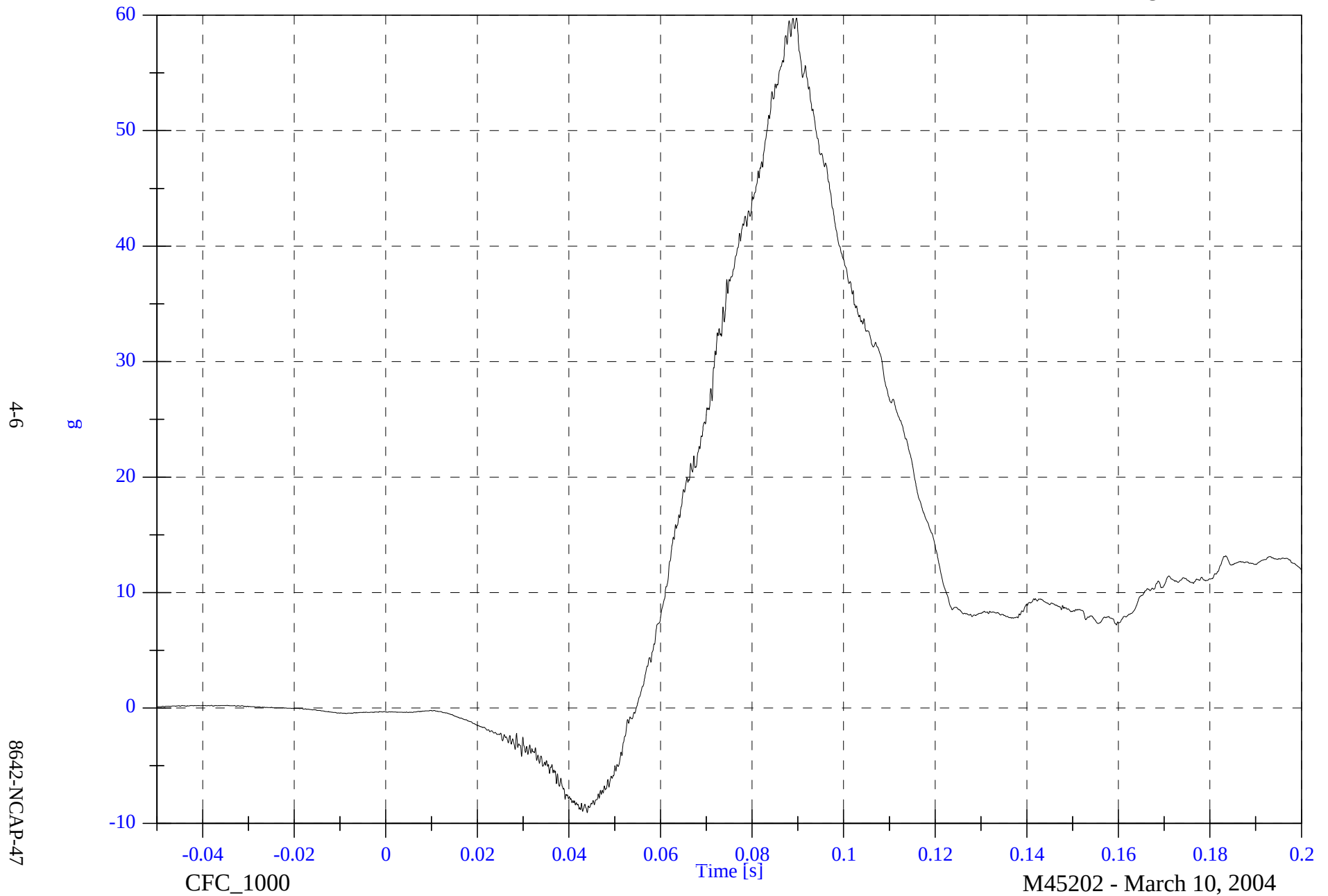
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 59.8 [g] at 0.090 [s]

Min: -9.1 [g] at 0.044 [s]

V1P3 Head z



4-6

8642-NCAP-47

CFC_1000

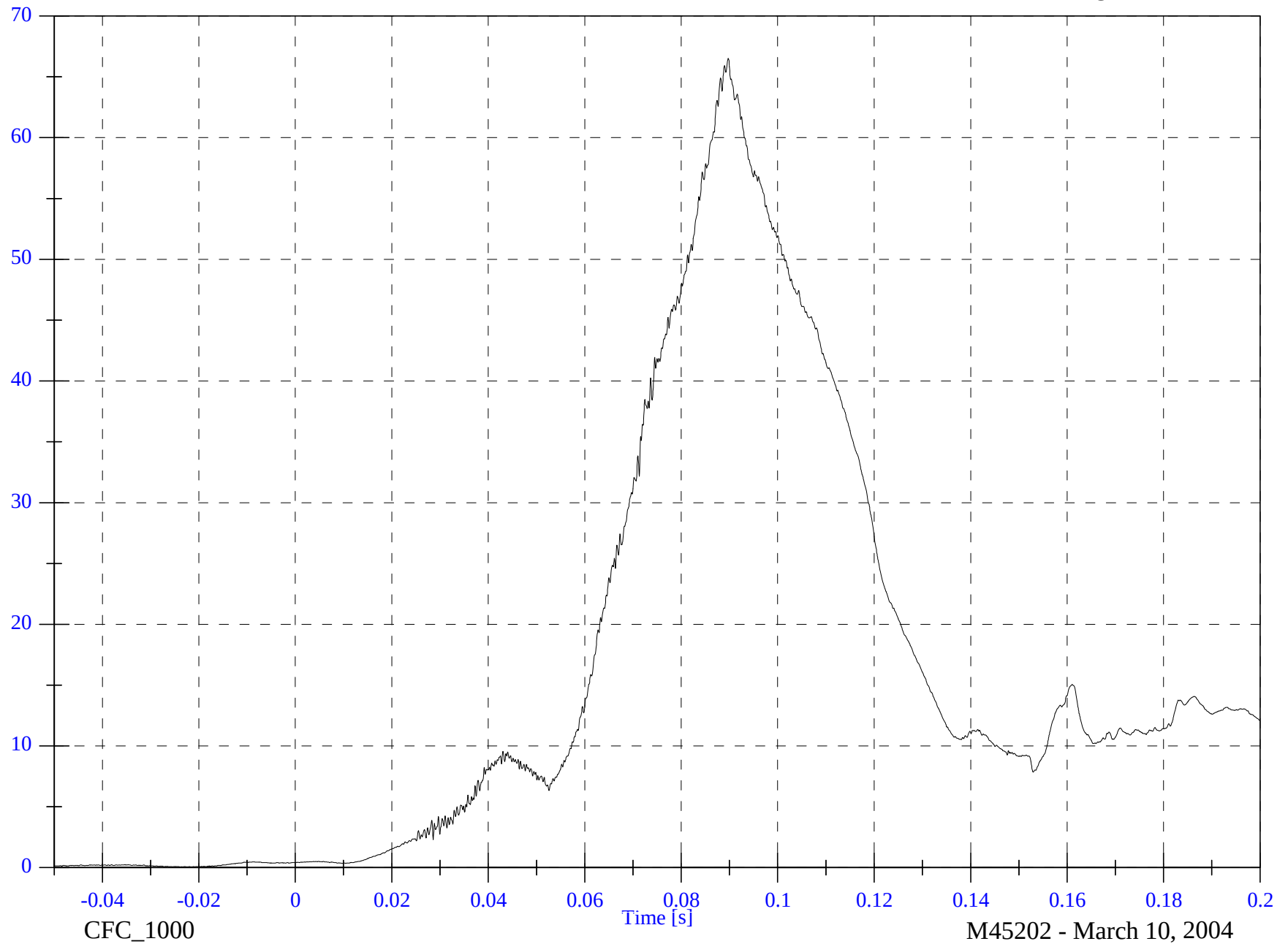
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Head Resultant

Max: 66.5 [g] at 0.090 [s]

Min: 0.1 [g] at -0.021 [s]



4-7

8642-NCAP-47

CFC_1000

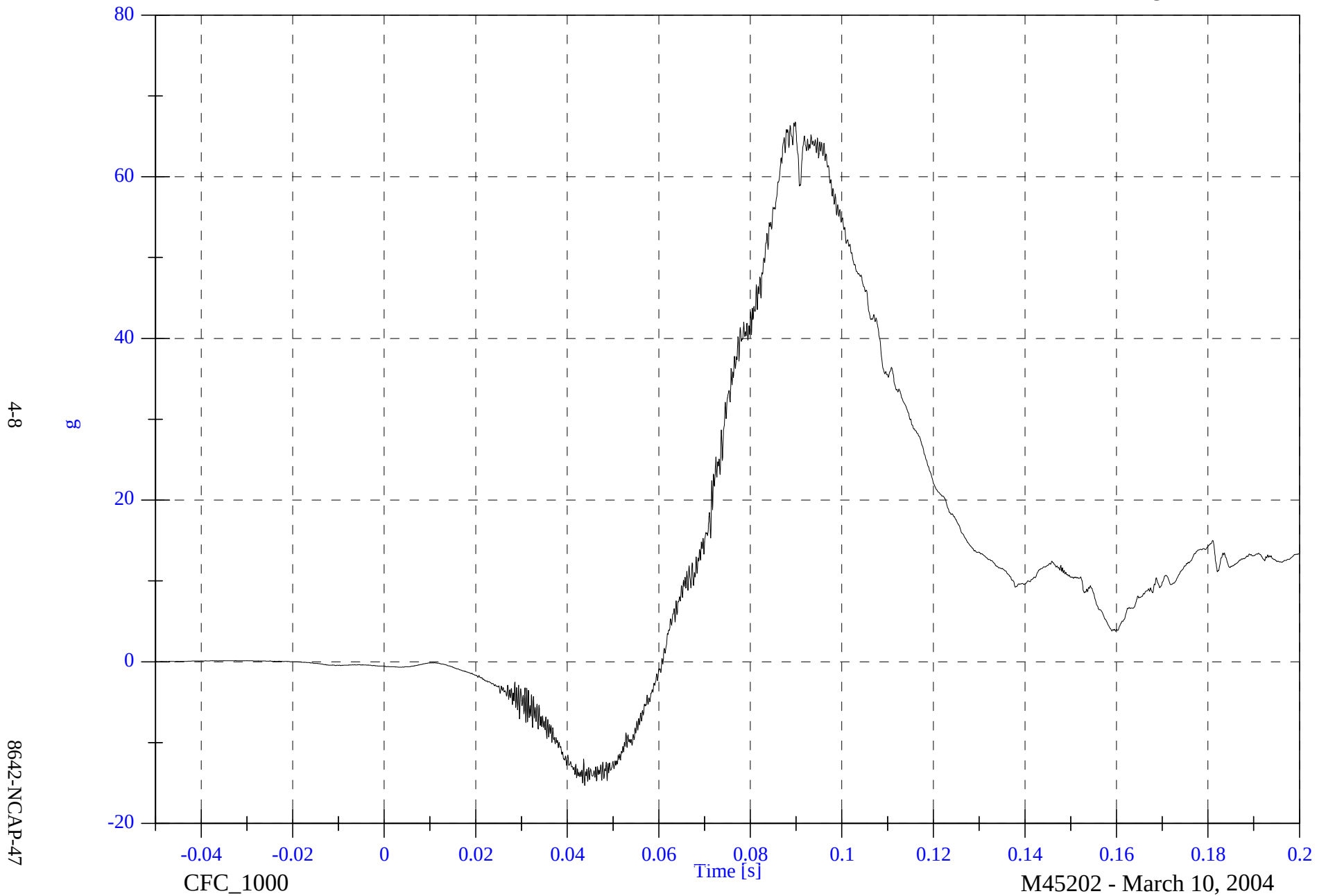
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Head Rear z

Max: 66.8 [g] at 0.090 [s]

Min: -15.3 [g] at 0.044 [s]

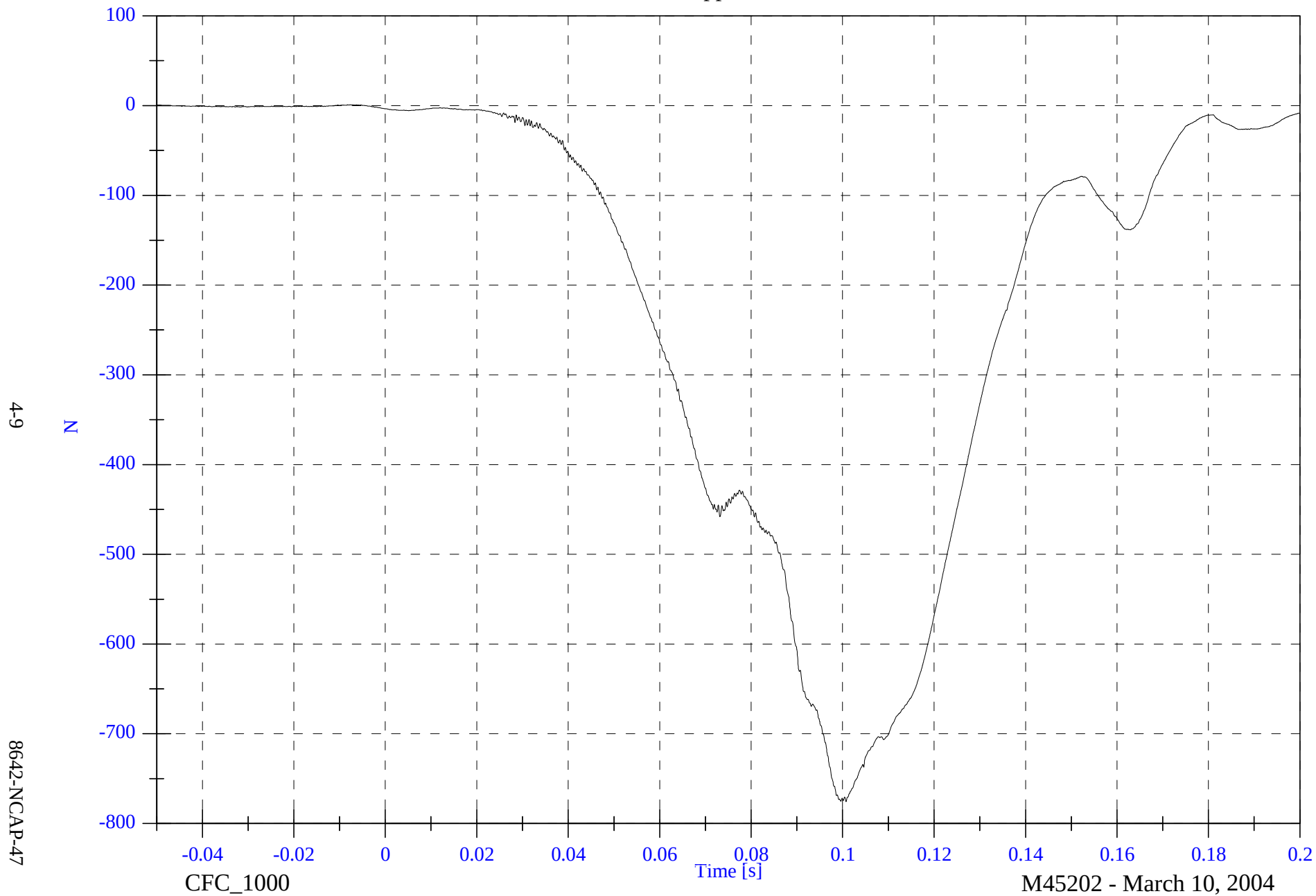


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Upper Neck Fx

Max: 0.9 [N] at -0.008 [s]

Min: -775.7 [N] at 0.101 [s]

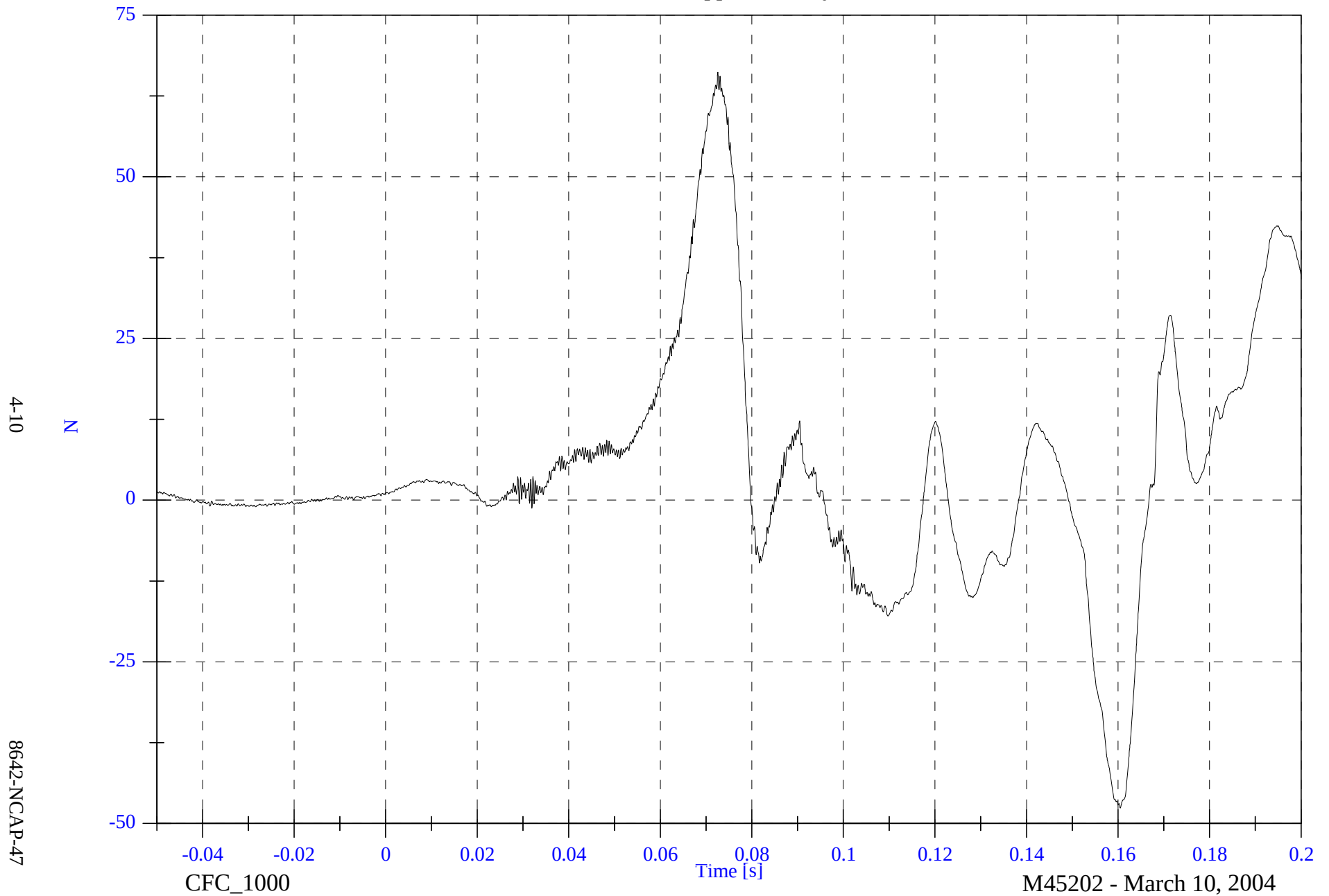


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 66.2 [N] at 0.073 [s]

Min: -47.6 [N] at 0.160 [s]

V1P3 Upper Neck Fy

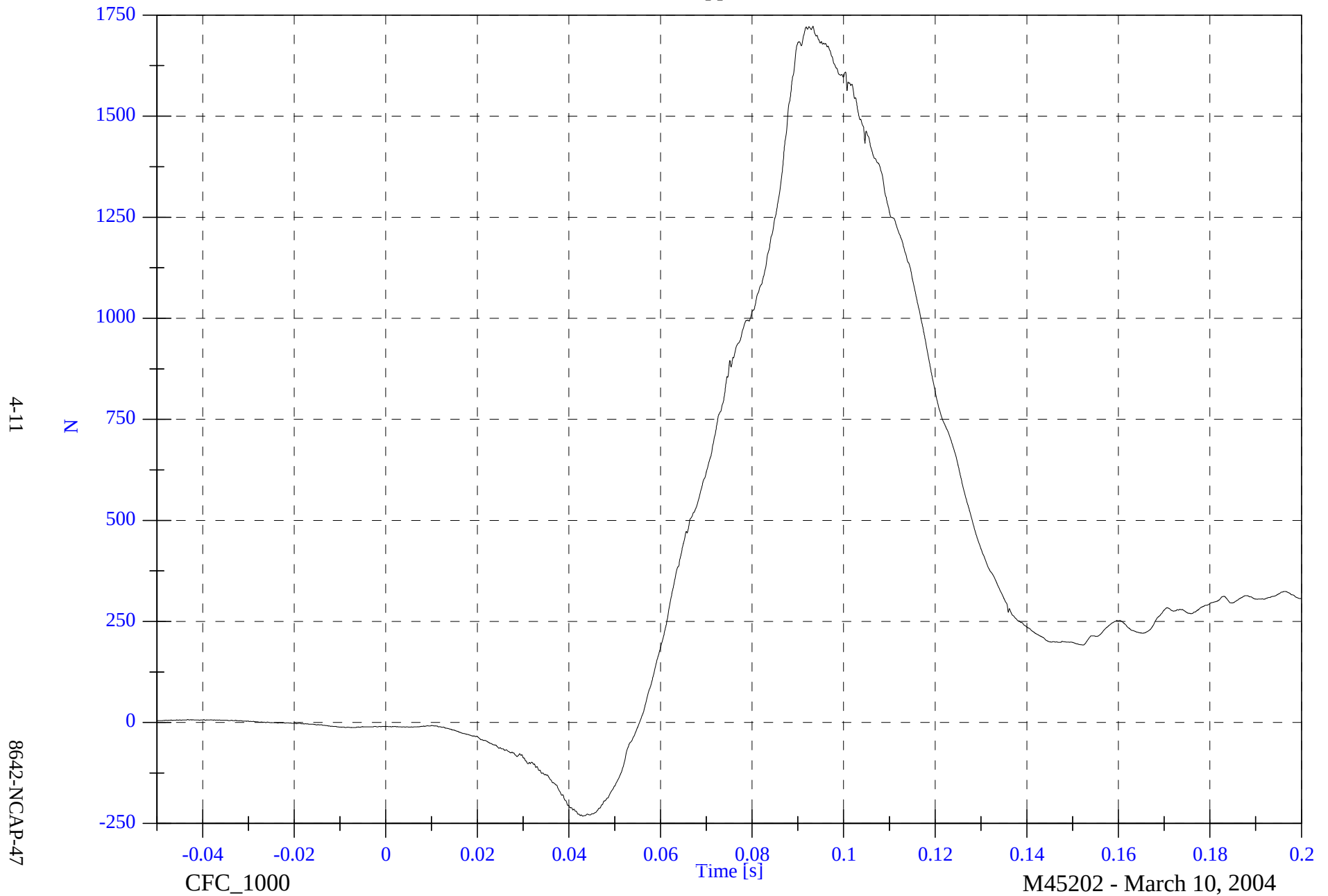


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1722.6 [N] at 0.093 [s]

Min: -231.6 [N] at 0.043 [s]

V1P3 Upper Neck Fz



2004 NCAP Test 11 2004 Infiniti FX35/45

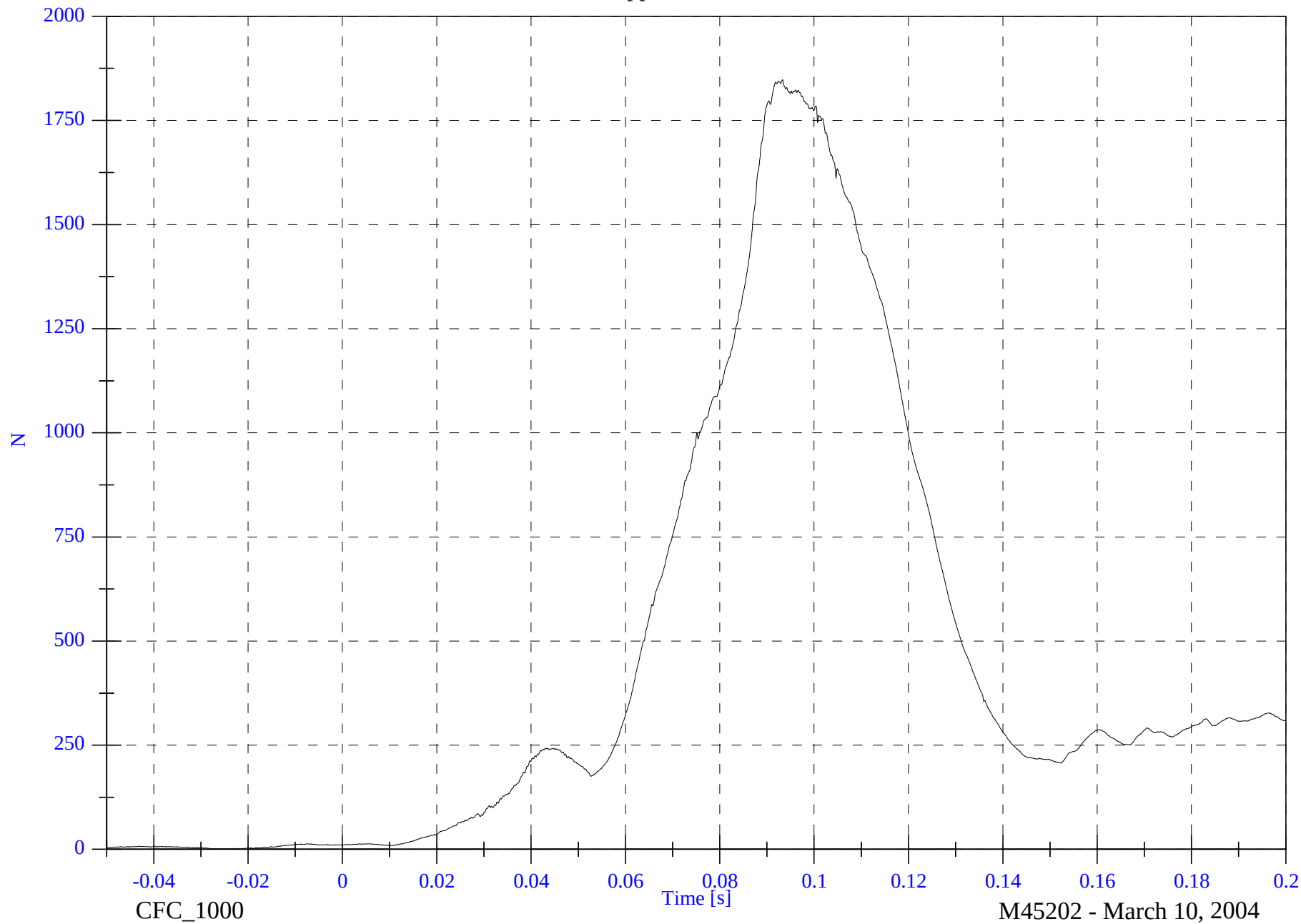
V1P3 Upper Neck F Resultant

Max: 1847.5 [N] at 0.093 [s]

Min: 1.0 [N] at -0.025 [s]

4-12

8642-NCAP-47

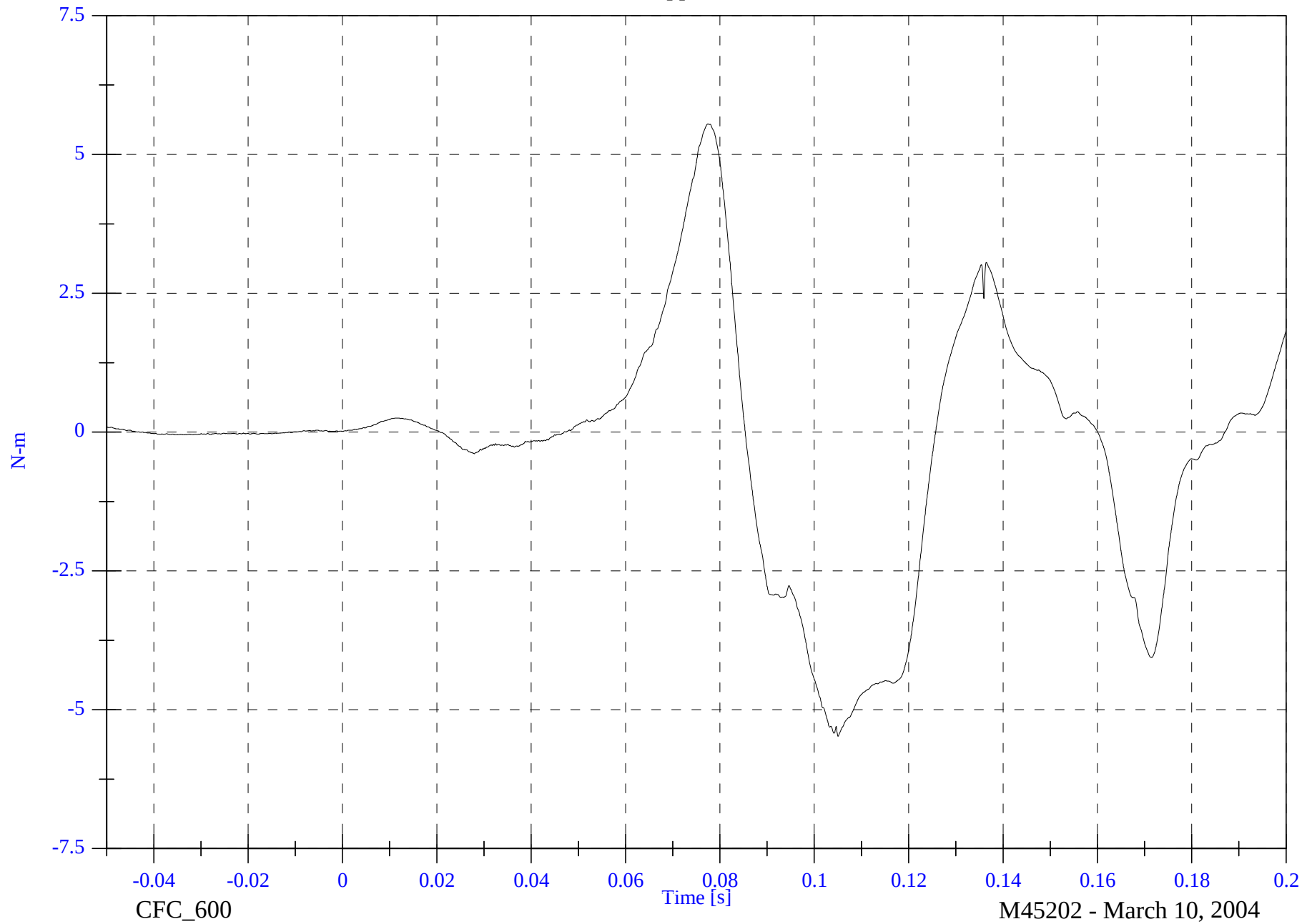


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Upper Neck Mx

Max: 5.6 [N-m] at 0.077 [s]

Min: -5.5 [N-m] at 0.105 [s]



4-13

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2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Upper Neck My

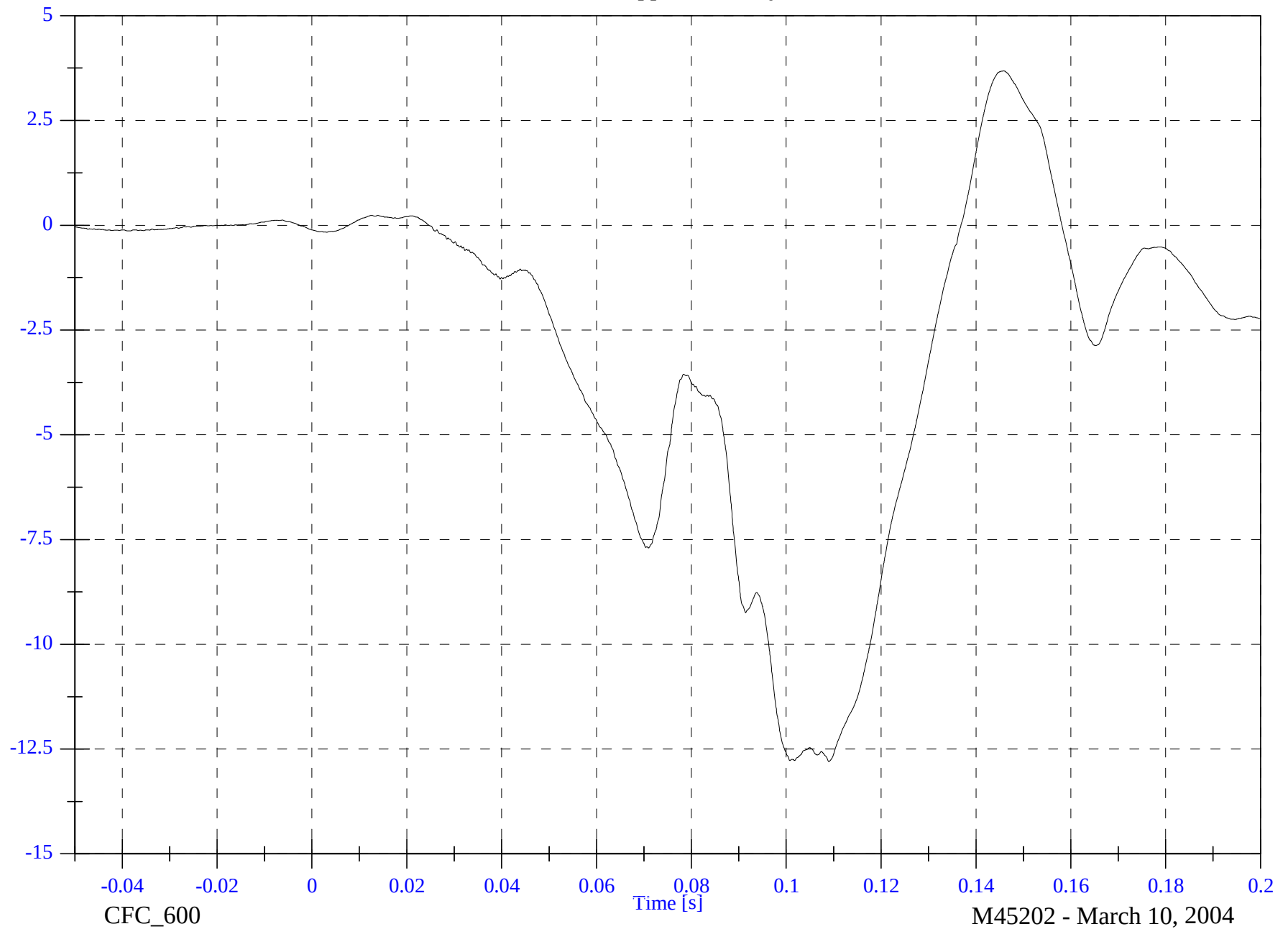
Max: 3.7 [N-m] at 0.146 [s]

Min: -12.8 [N-m] at 0.109 [s]

4-14

N-m

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Upper Neck Mz

Max: 7.5 [N-m] at 0.174 [s]

Min: -0.8 [N-m] at 0.081 [s]



4-15

8642-NCAP-47

CFC_600

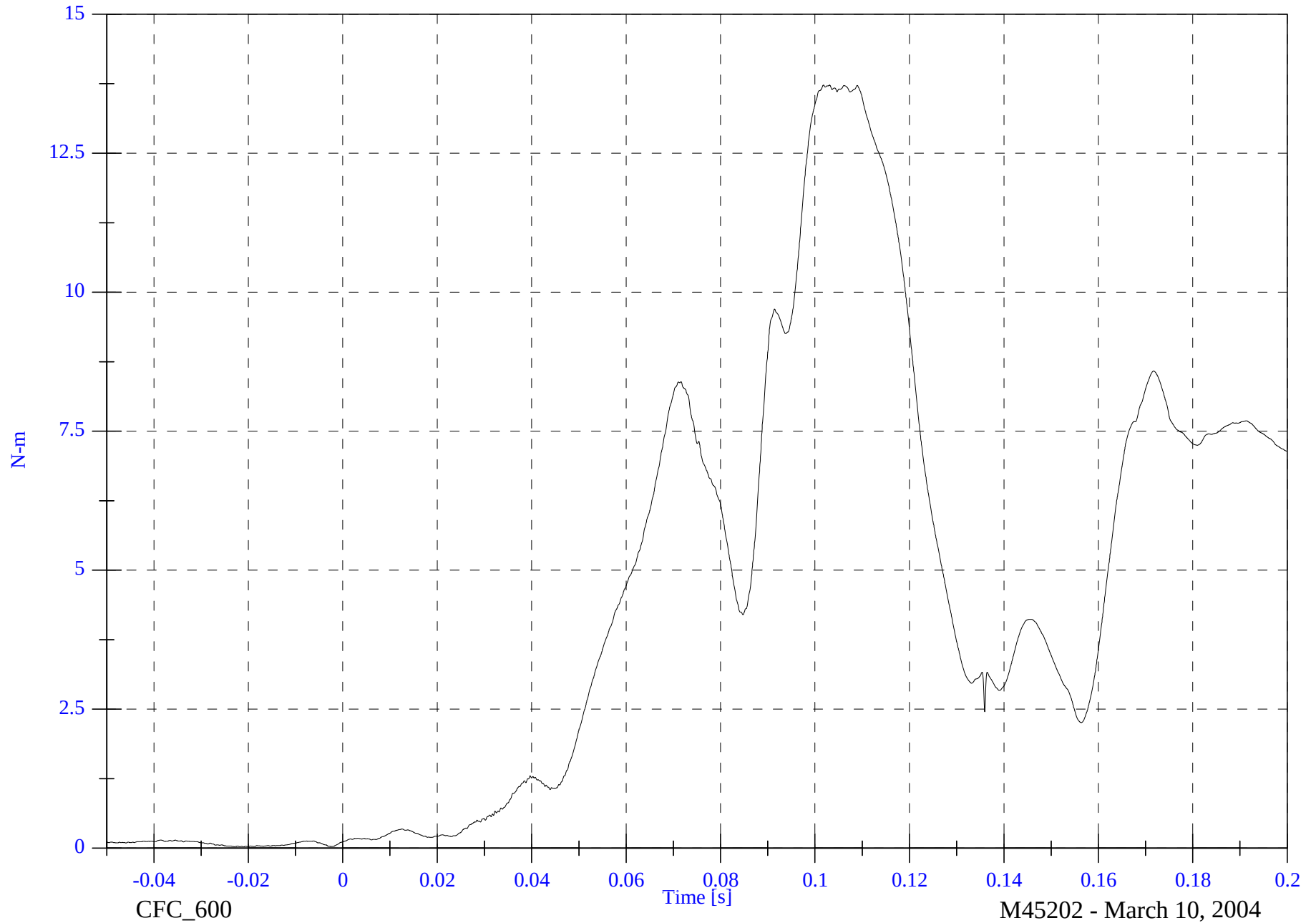
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Upper Neck M Resultant

Max: 13.7 [N-m] at 0.102 [s]

Min: 0.0 [N-m] at -0.021 [s]



4-16

8642-NCAP-47

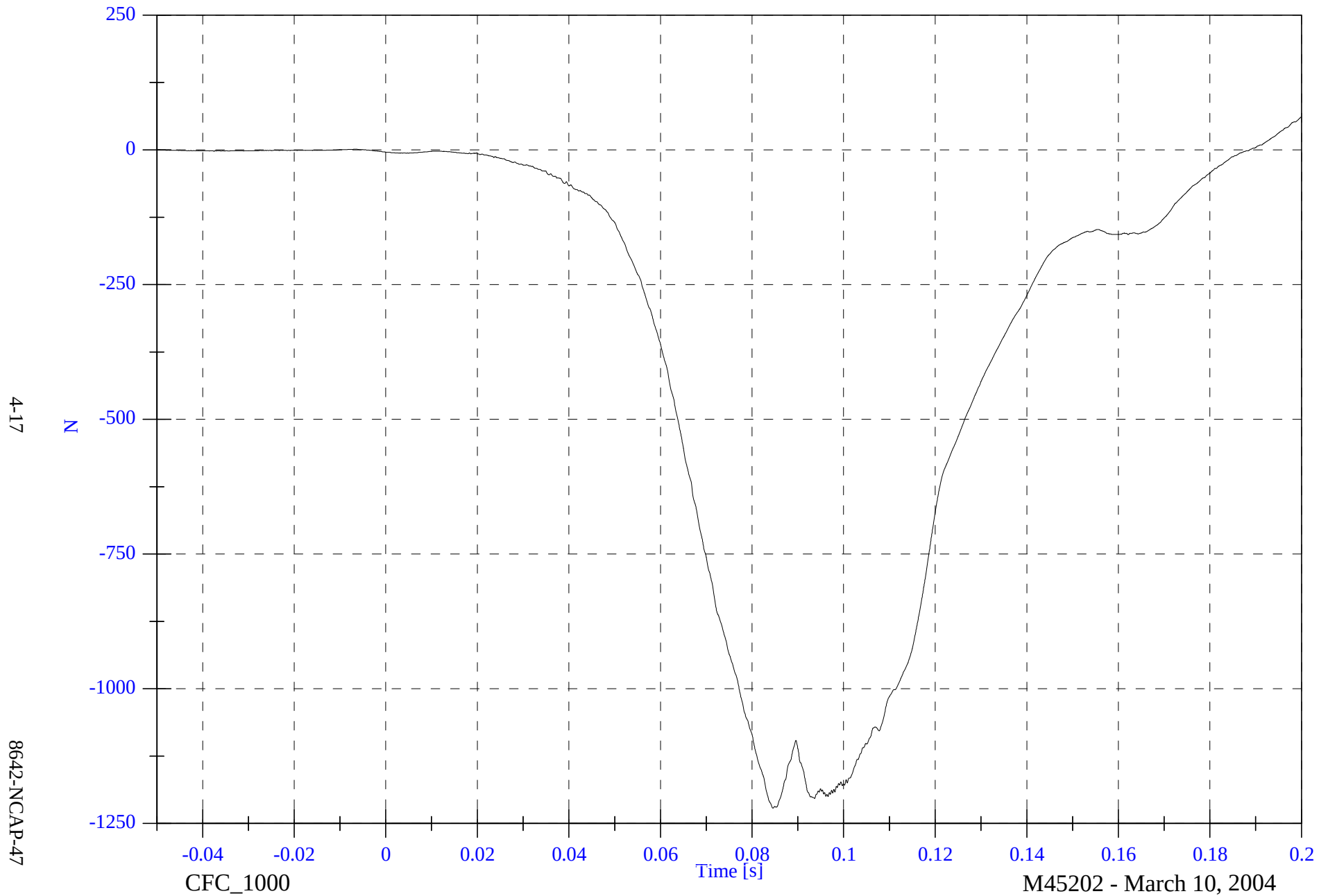
CFC_600

M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Lower Neck Fx

Max: 61.1 [N] at 0.200 [s]
Min: -1221.5 [N] at 0.085 [s]

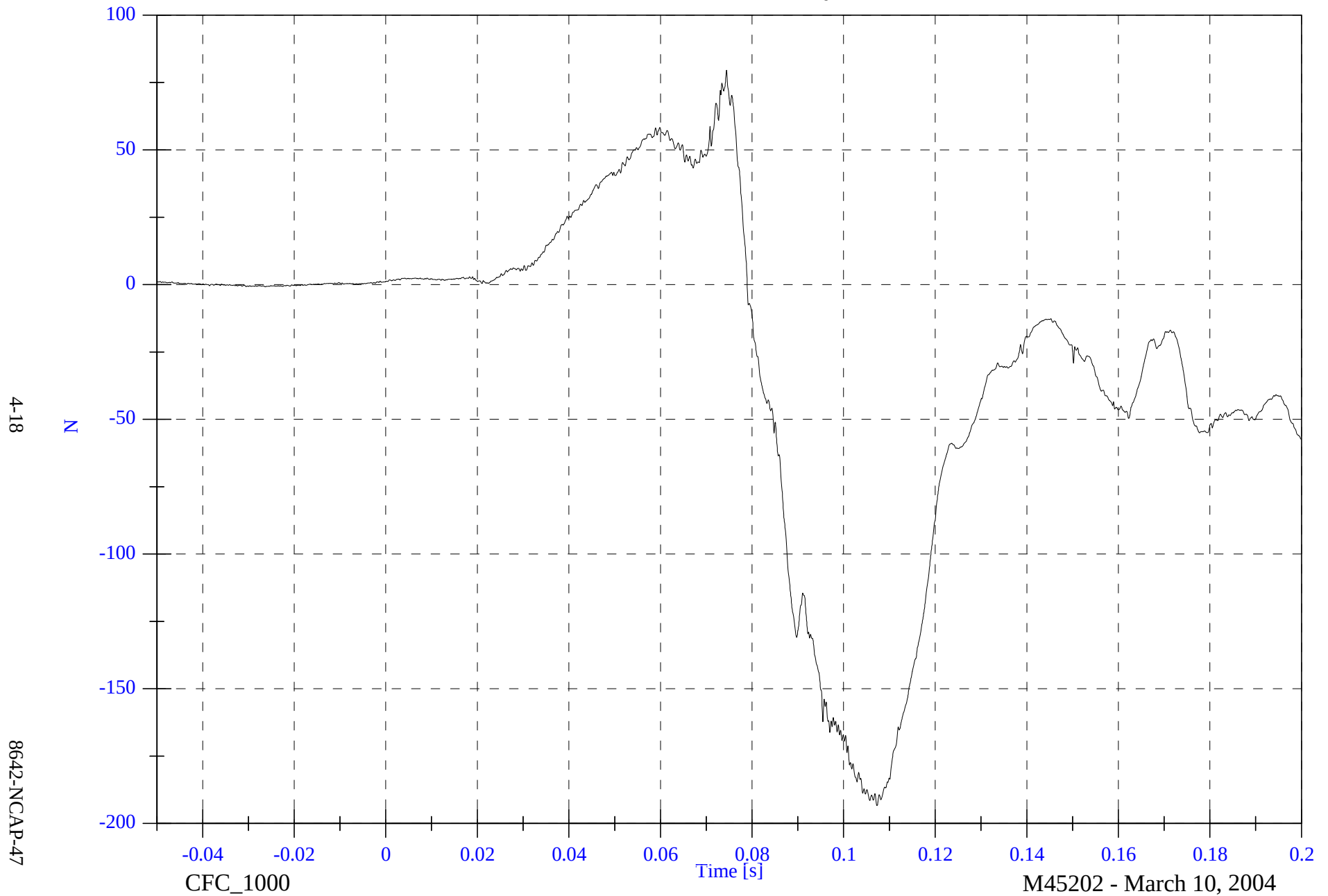


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Lower Neck Fy

Max: 79.6 [N] at 0.074 [s]

Min: -193.4 [N] at 0.107 [s]

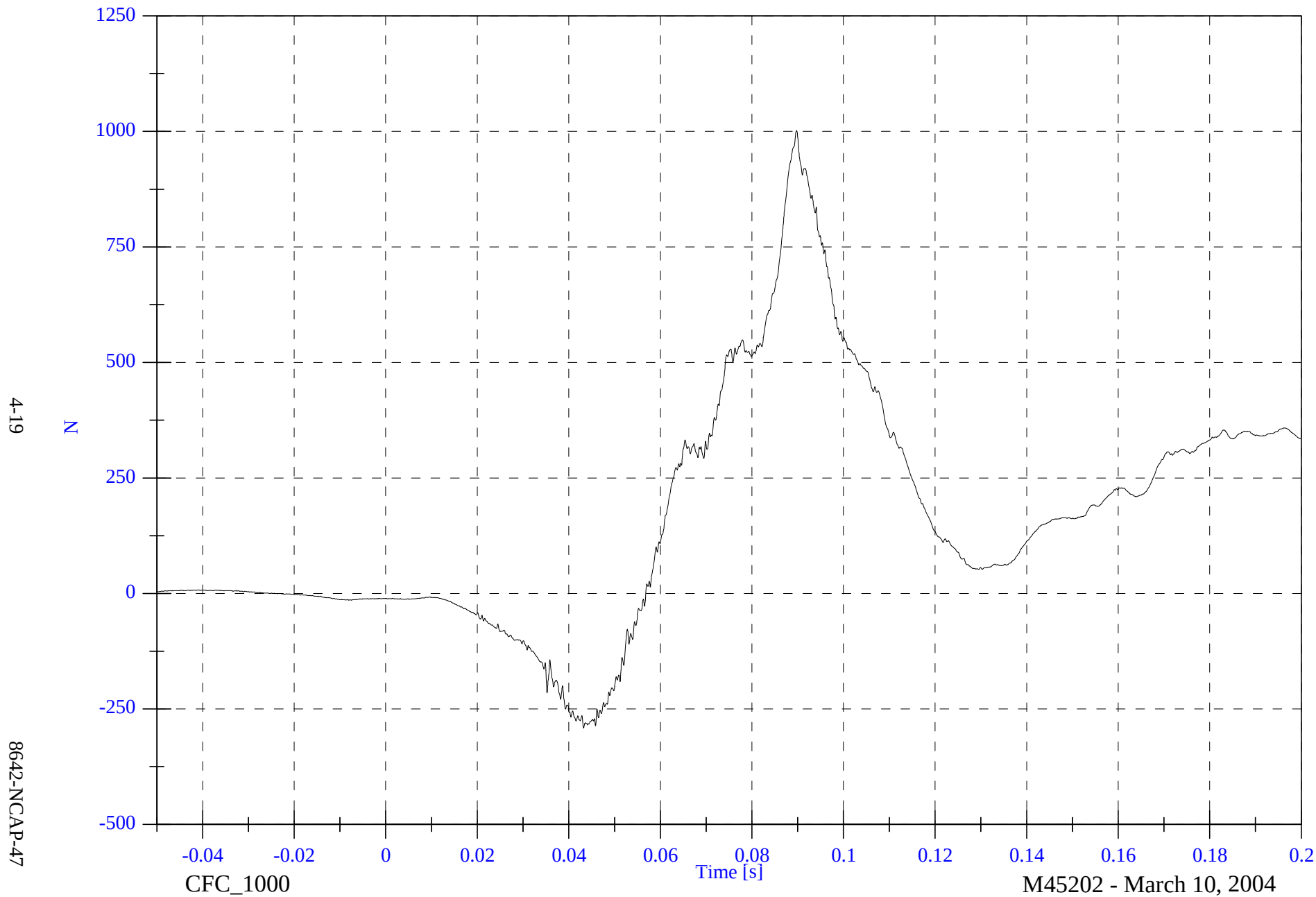


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1001.8 [N] at 0.090 [s]

Min: -291.1 [N] at 0.043 [s]

V1P3 Lower Neck Fz

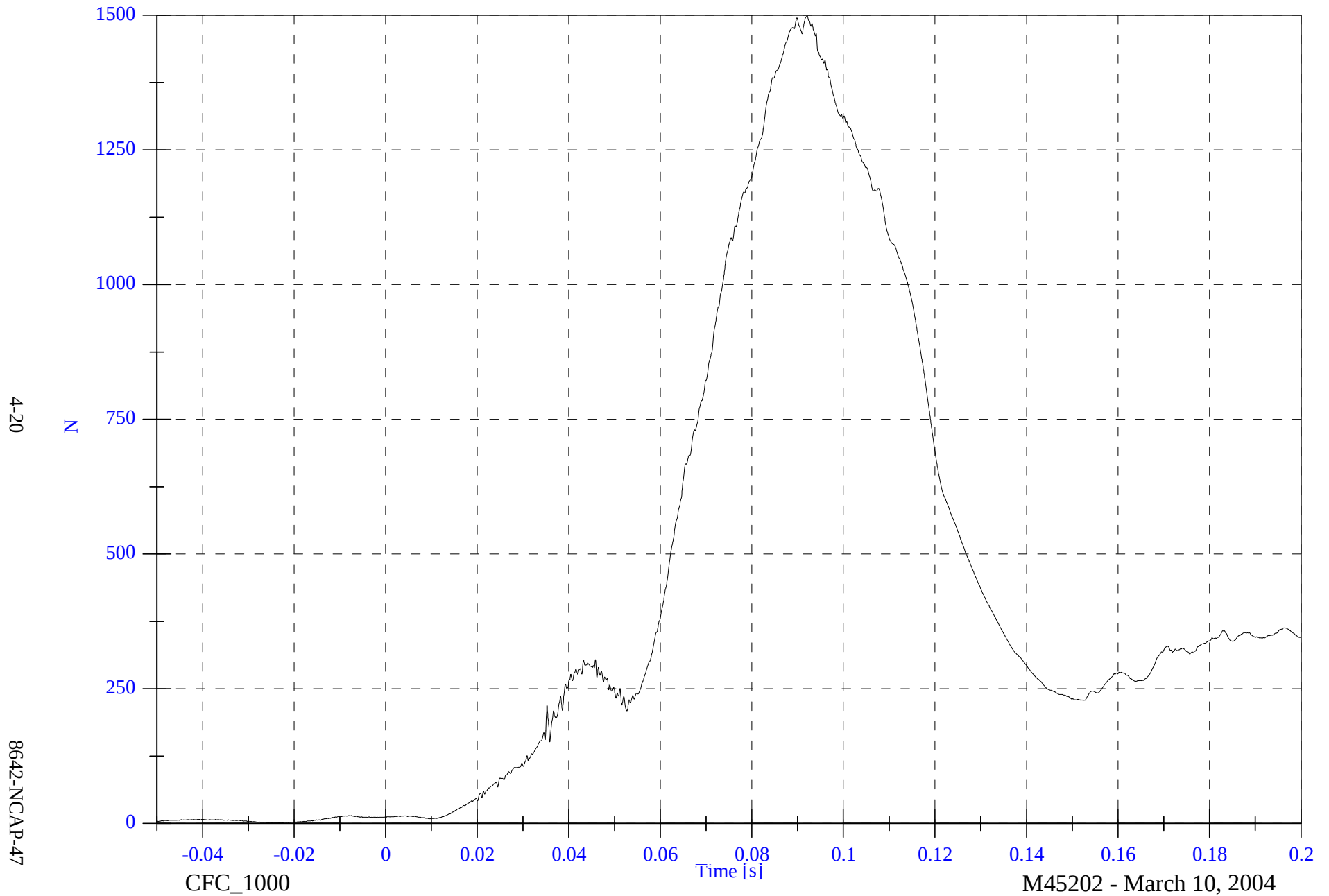


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 1498.9 [N] at 0.092 [s]

V1P3 Lower Neck F Resultant

Min: 0.8 [N] at -0.024 [s]

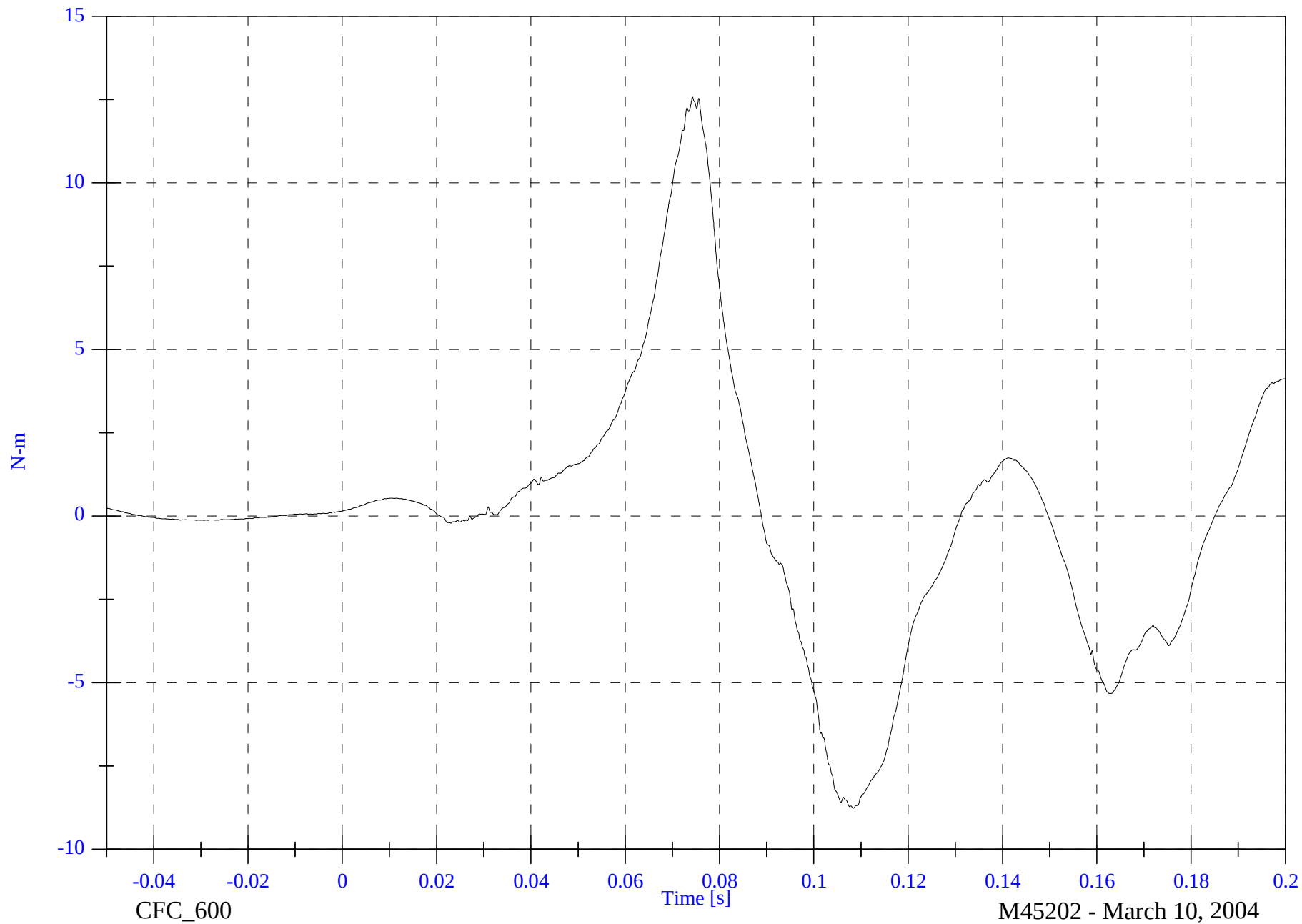


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Lower Neck Mx

Max: 12.6 [N-m] at 0.074 [s]

Min: -8.8 [N-m] at 0.108 [s]



4-21

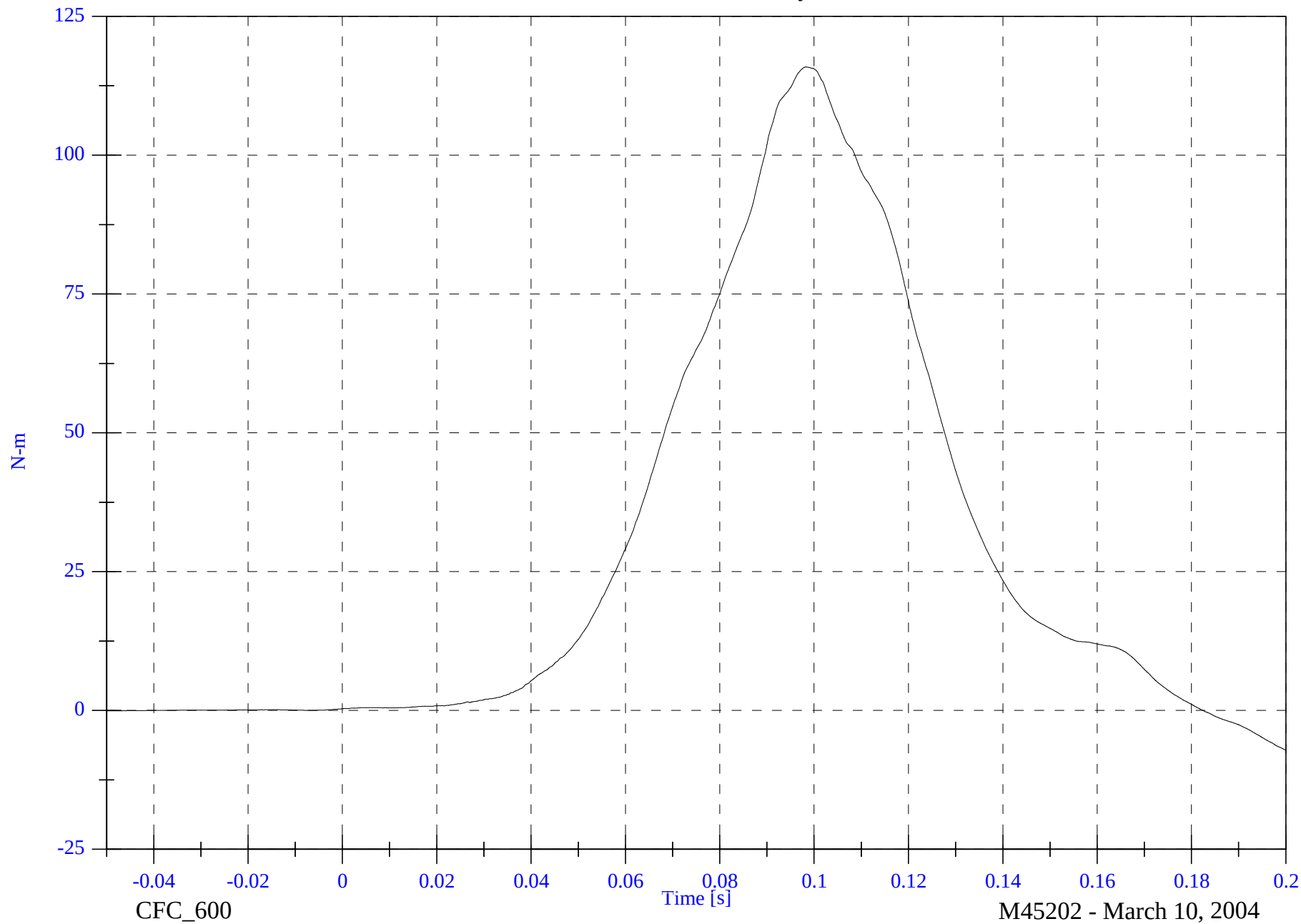
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 115.9 [N-m] at 0.098 [s]

Min: -7.2 [N-m] at 0.200 [s]

V1P3 Lower Neck My



4-22

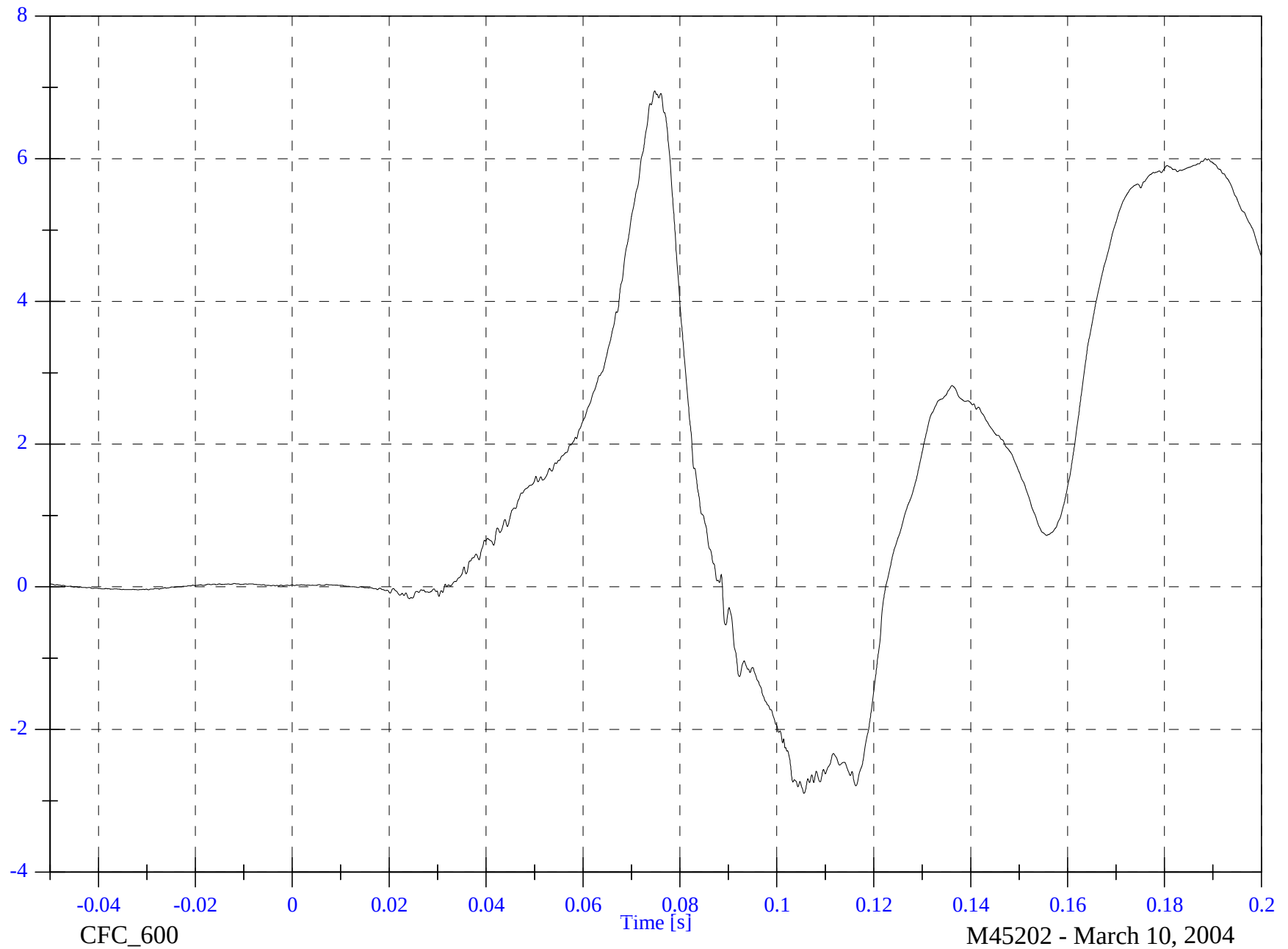
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Lower Neck Mz

Max: 7.0 [N-m] at 0.075 [s]

Min: -2.9 [N-m] at 0.106 [s]



4-23

8642-NCAP-47

CFC_600

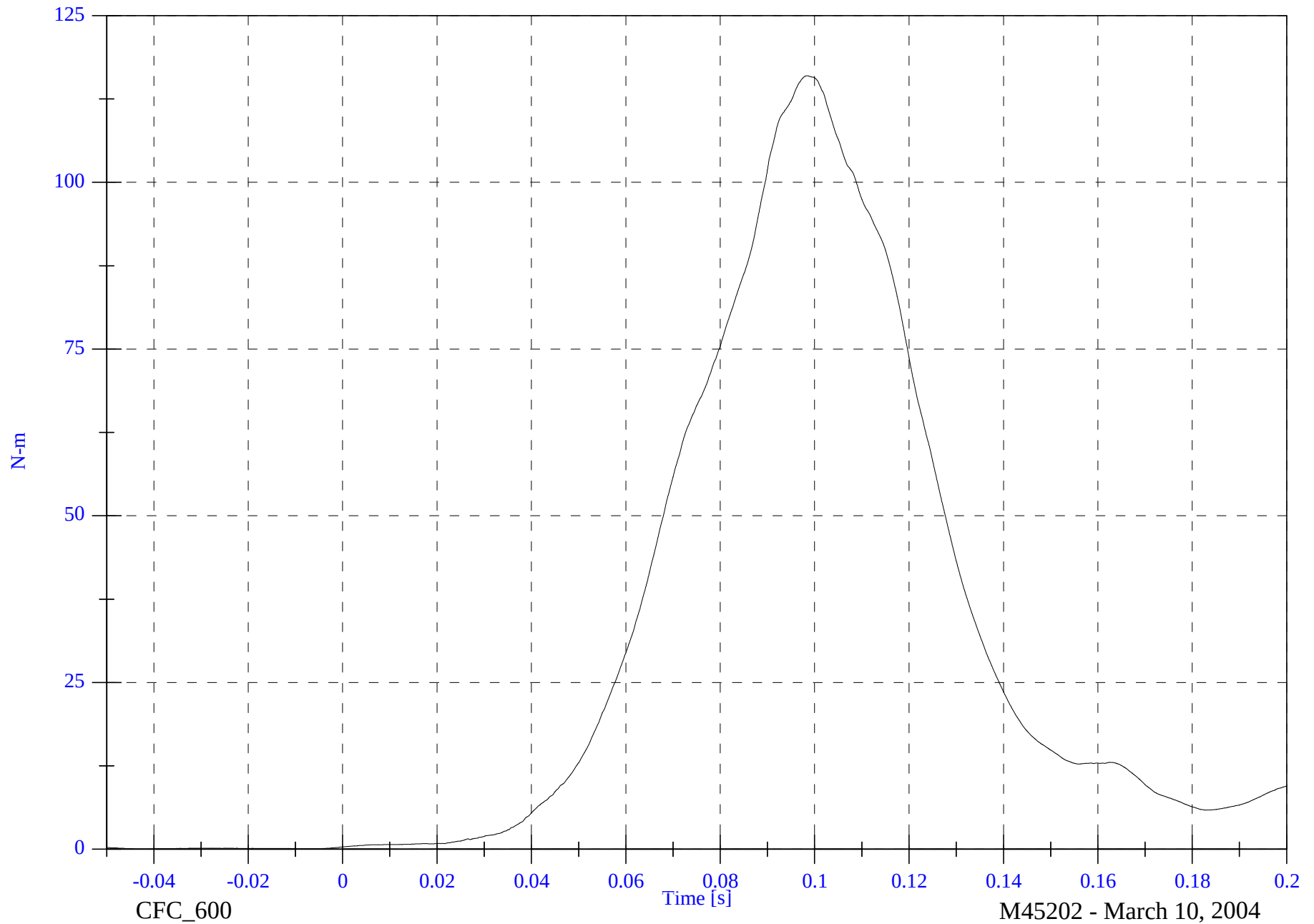
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Lower Neck M Resultant

Max: 116.0 [N-m] at 0.098 [s]

Min: 0.0 [N-m] at -0.042 [s]



4-24

8642-NCAP-47

CFC_600

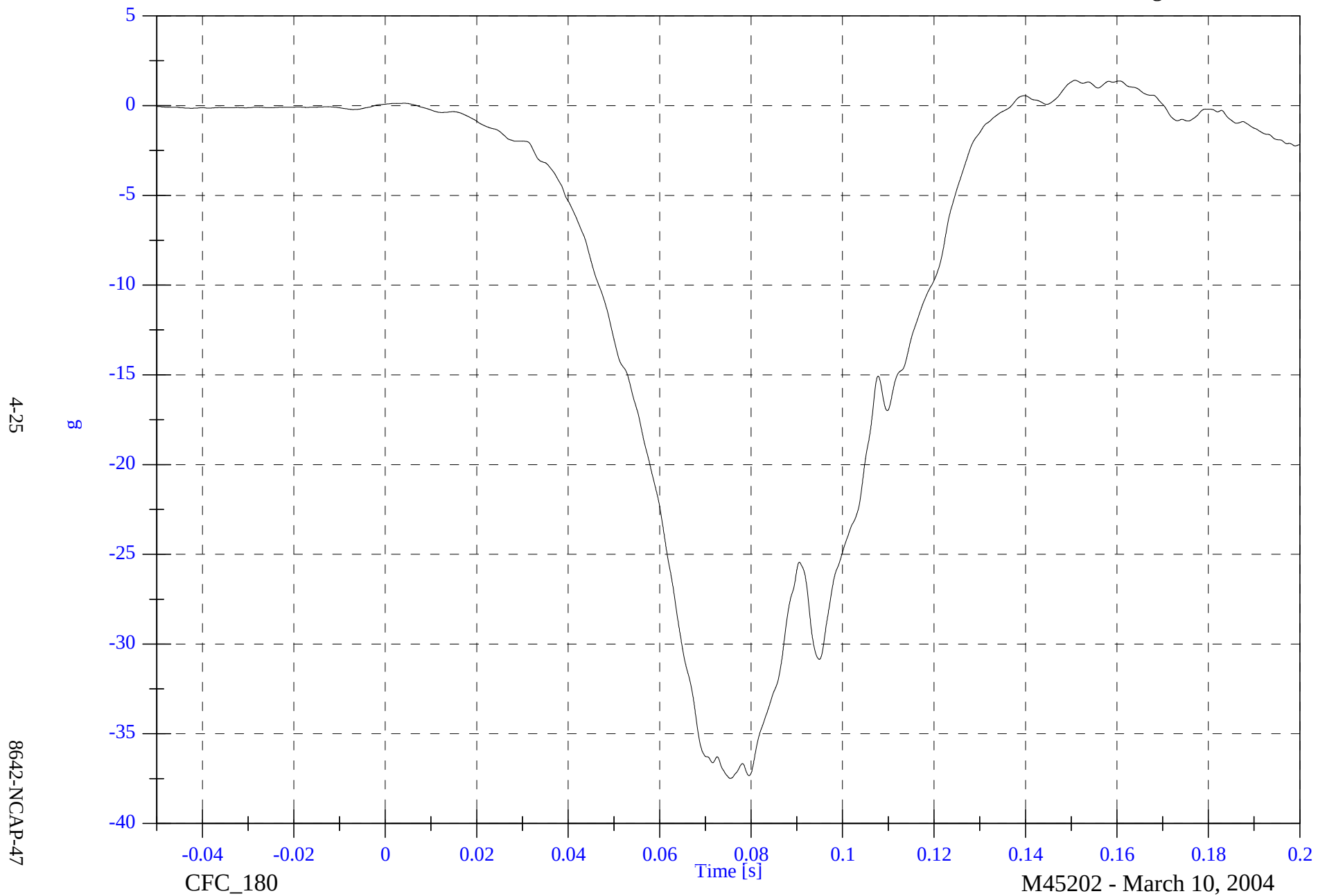
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Chest x

Max: 1.4 [g] at 0.151 [s]

Min: -37.5 [g] at 0.075 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 3.7 [g] at 0.098 [s]

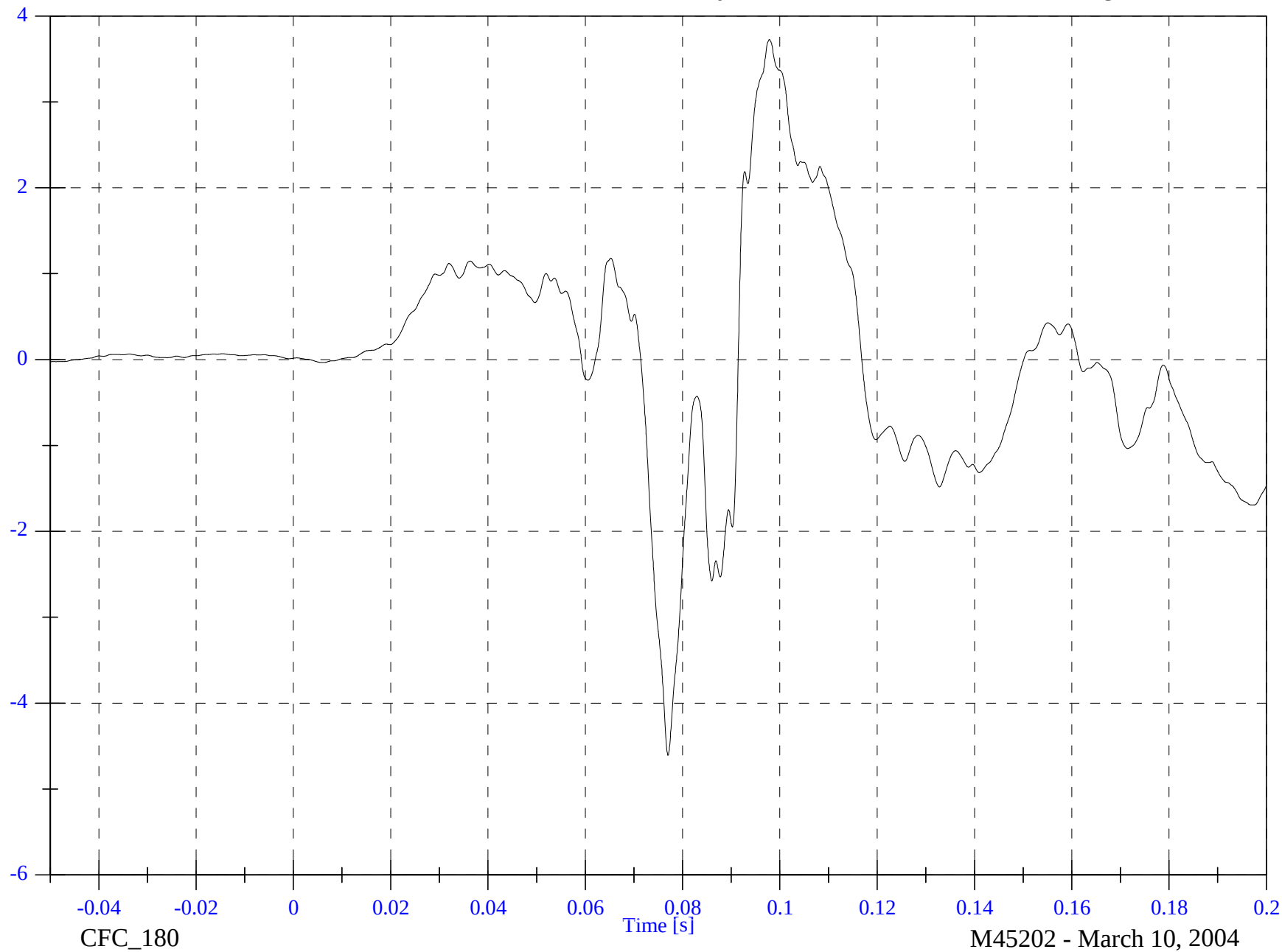
Min: -4.6 [g] at 0.077 [s]

V1P3 Chest y

4-26

g

8642-NCAP-47



CFC_180

M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

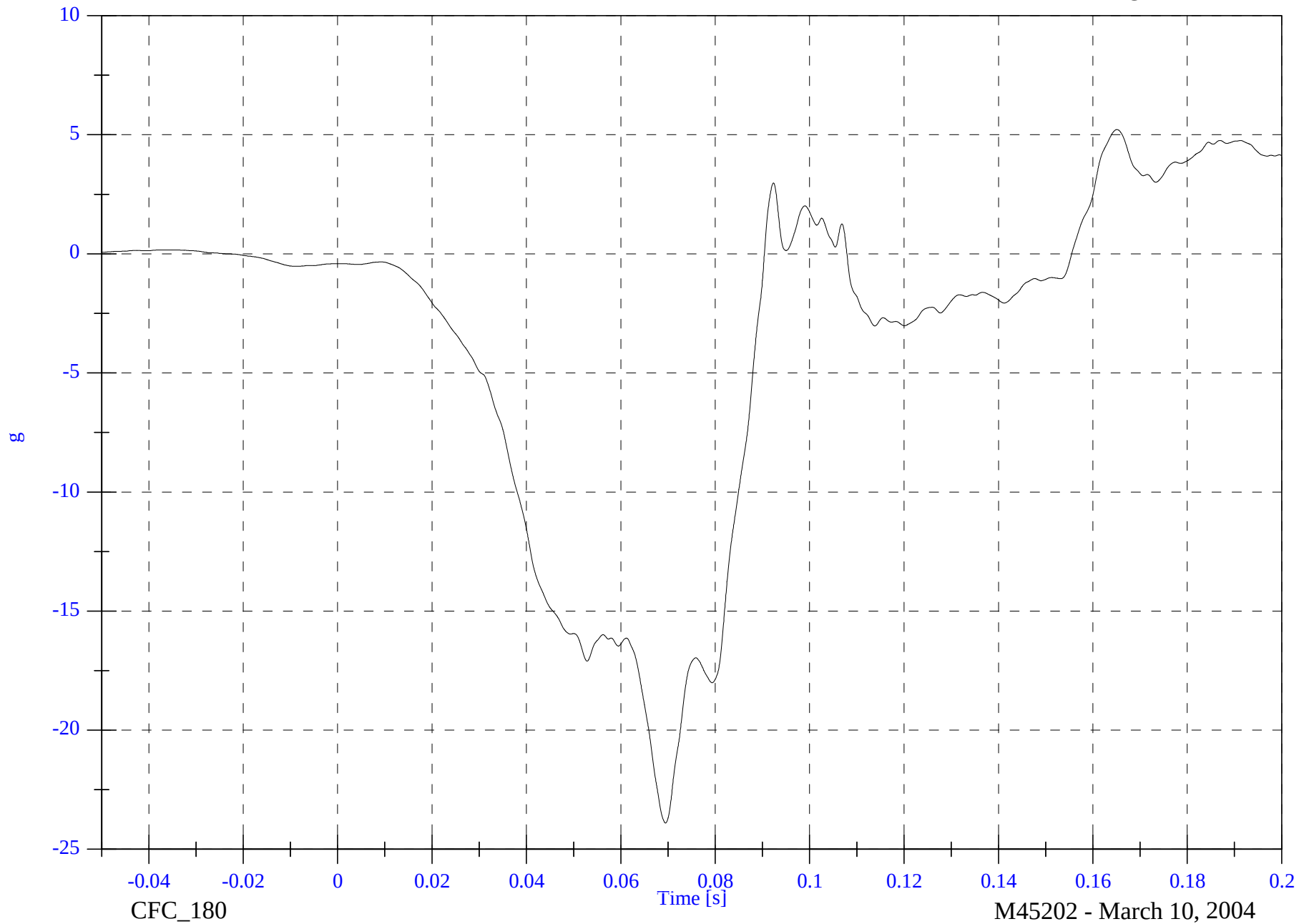
V1P3 Chest z

Max: 5.2 [g] at 0.165 [s]

Min: -23.9 [g] at 0.069 [s]

4-27

8642-NCAP-47

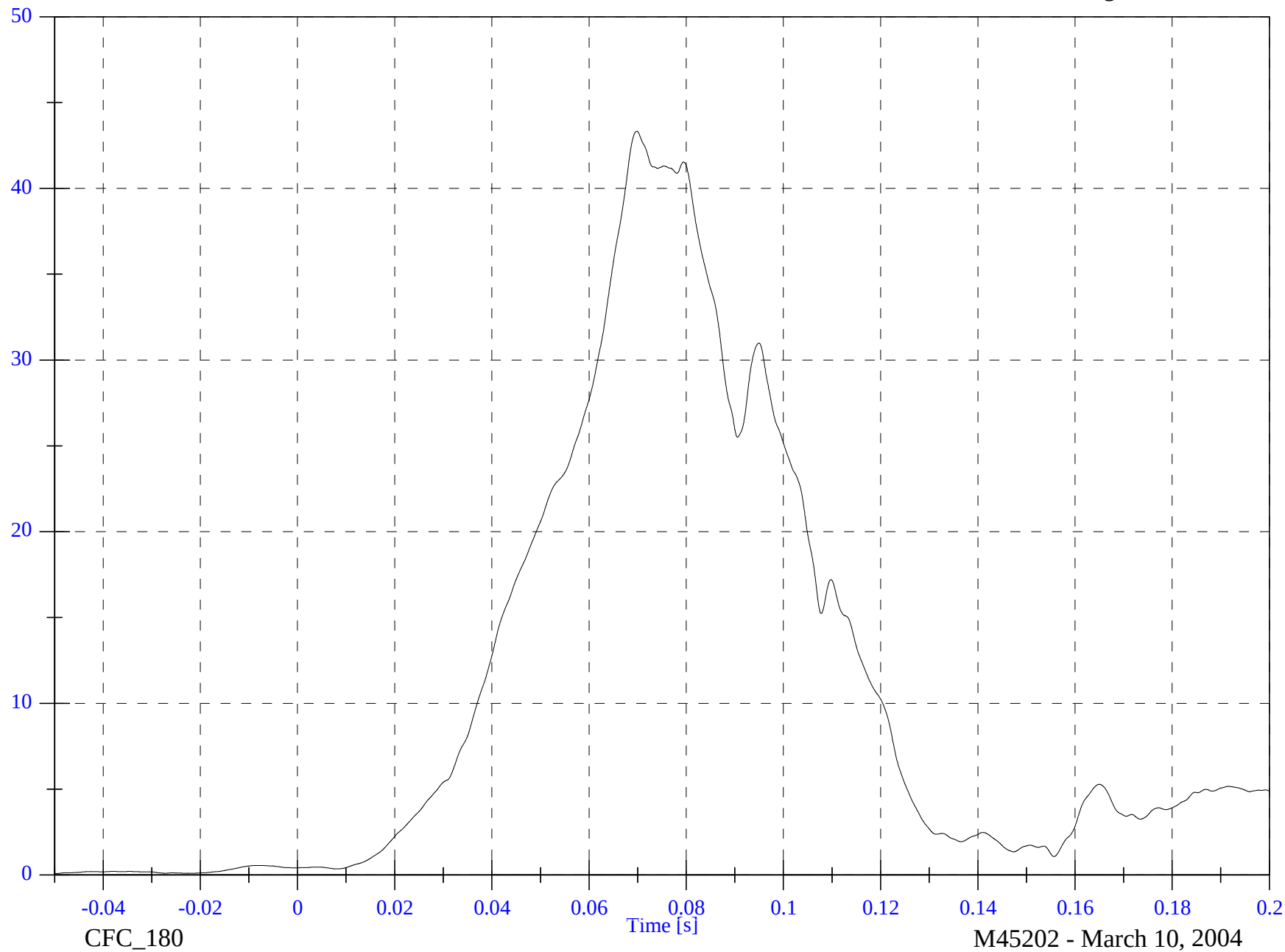


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Chest Resultant

Max: 43.3 [g] at 0.070 [s]

Min: 0.1 [g] at -0.050 [s]



4-28

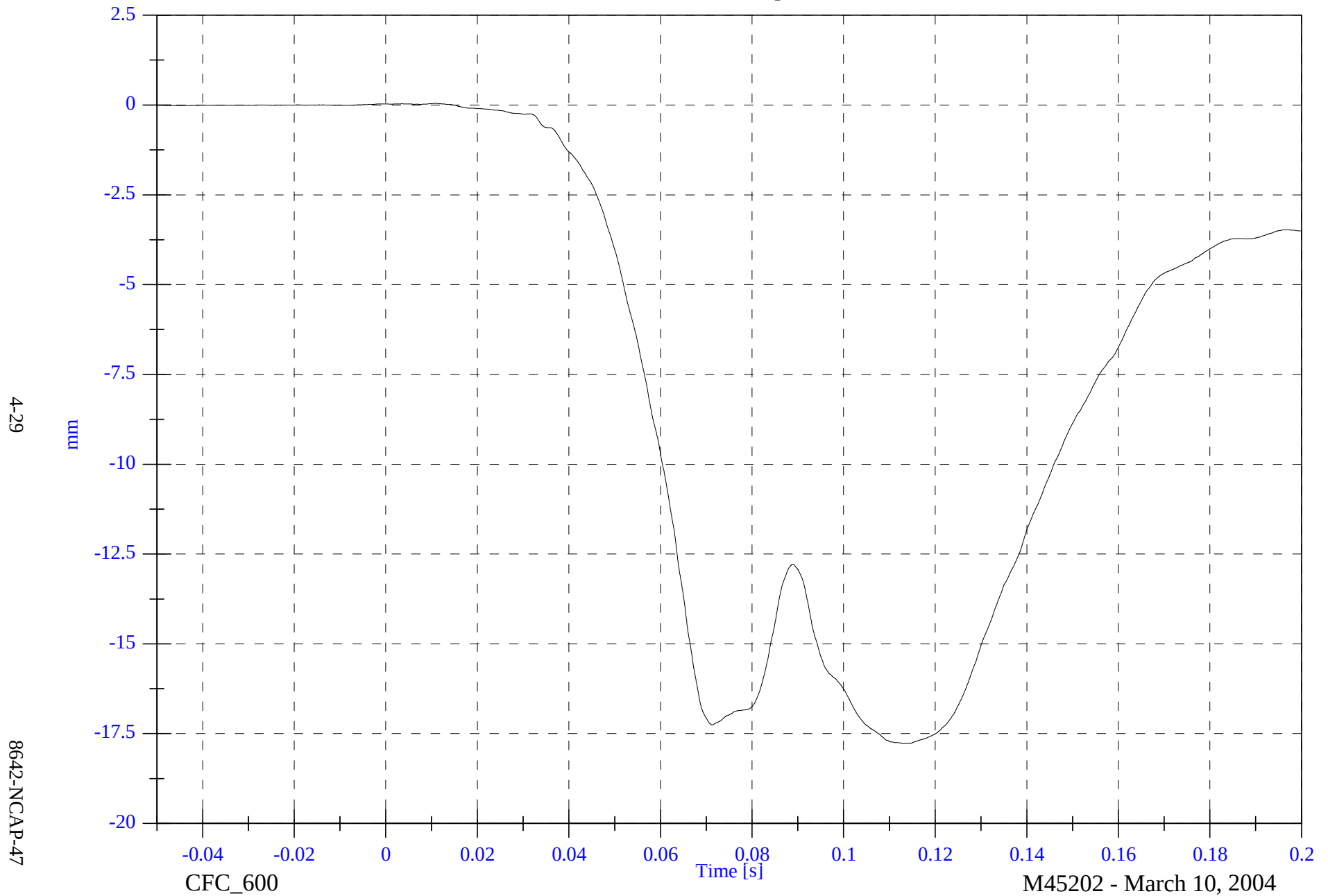
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Chest Compression

Max: 0.0 [mm] at 0.011 [s]

Min: -17.8 [mm] at 0.113 [s]

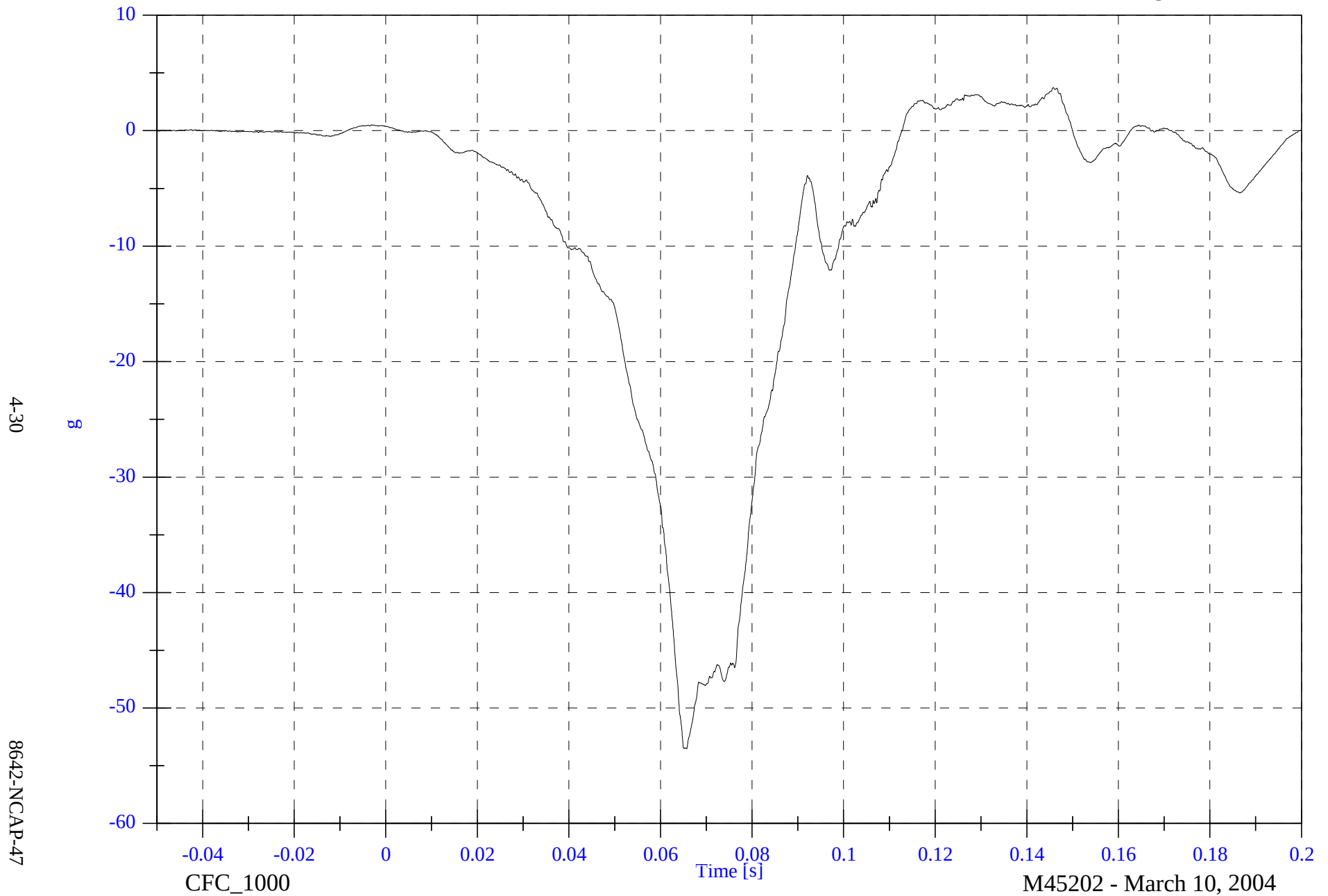


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Pelvic x

Max: 3.7 [g] at 0.146 [s]

Min: -53.5 [g] at 0.066 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

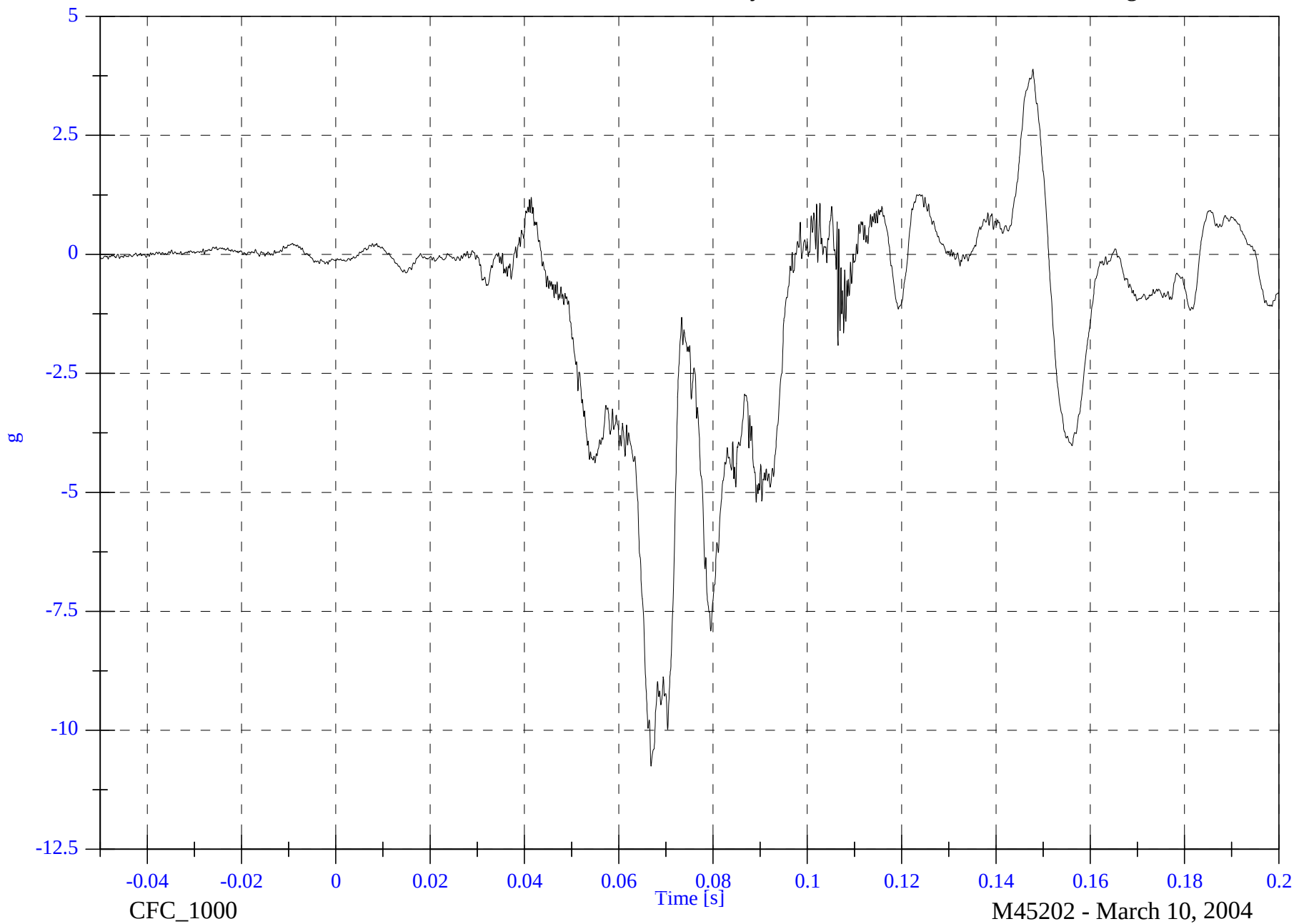
V1P3 Pelvic y

Max: 3.9 [g] at 0.148 [s]

Min: -10.8 [g] at 0.067 [s]

4-31

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2004 NCAP Test 11 2004 Infiniti FX35/45

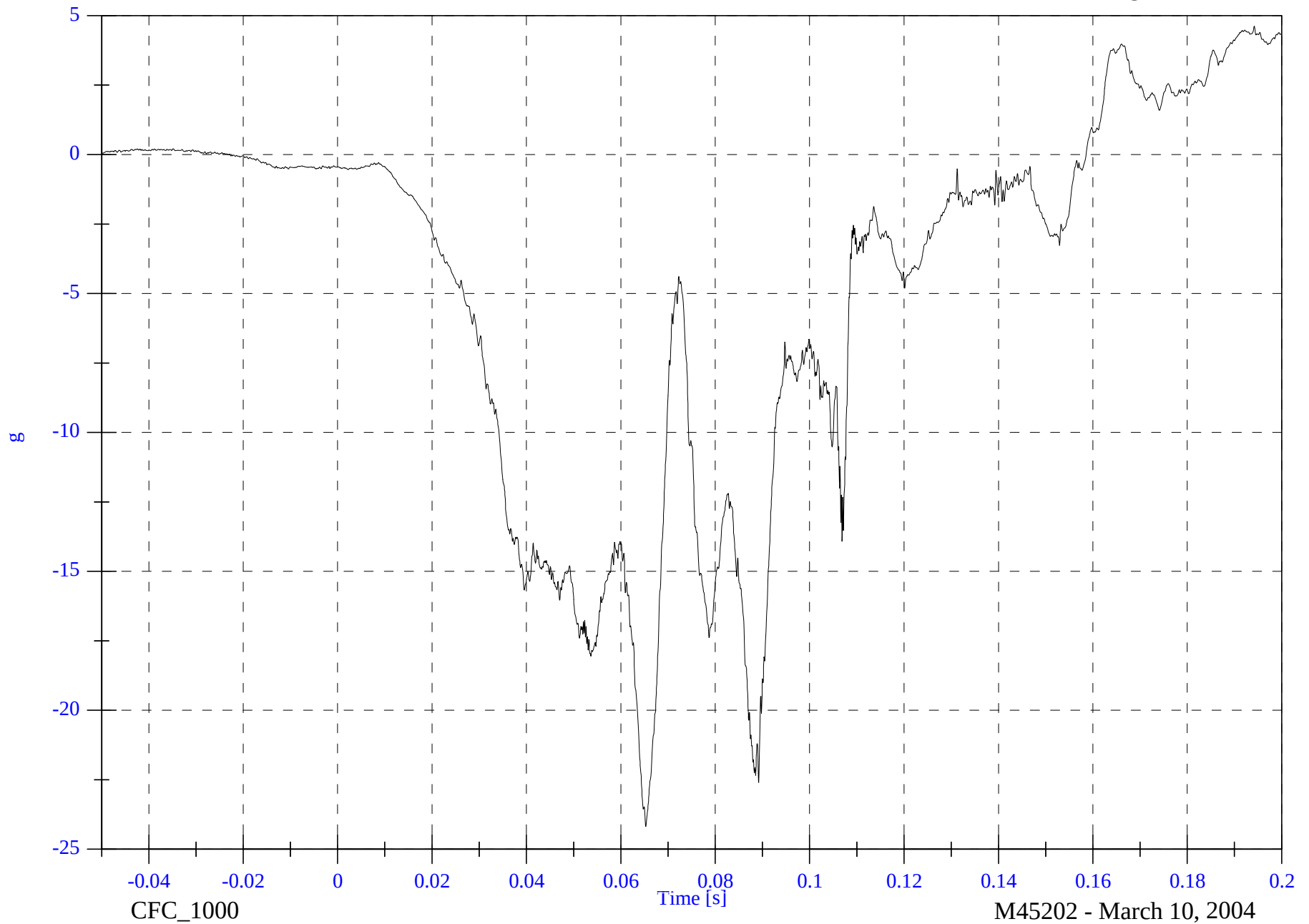
V1P3 Pelvic z

Max: 4.6 [g] at 0.194 [s]

Min: -24.2 [g] at 0.065 [s]

4-32

8642-NCAP-47

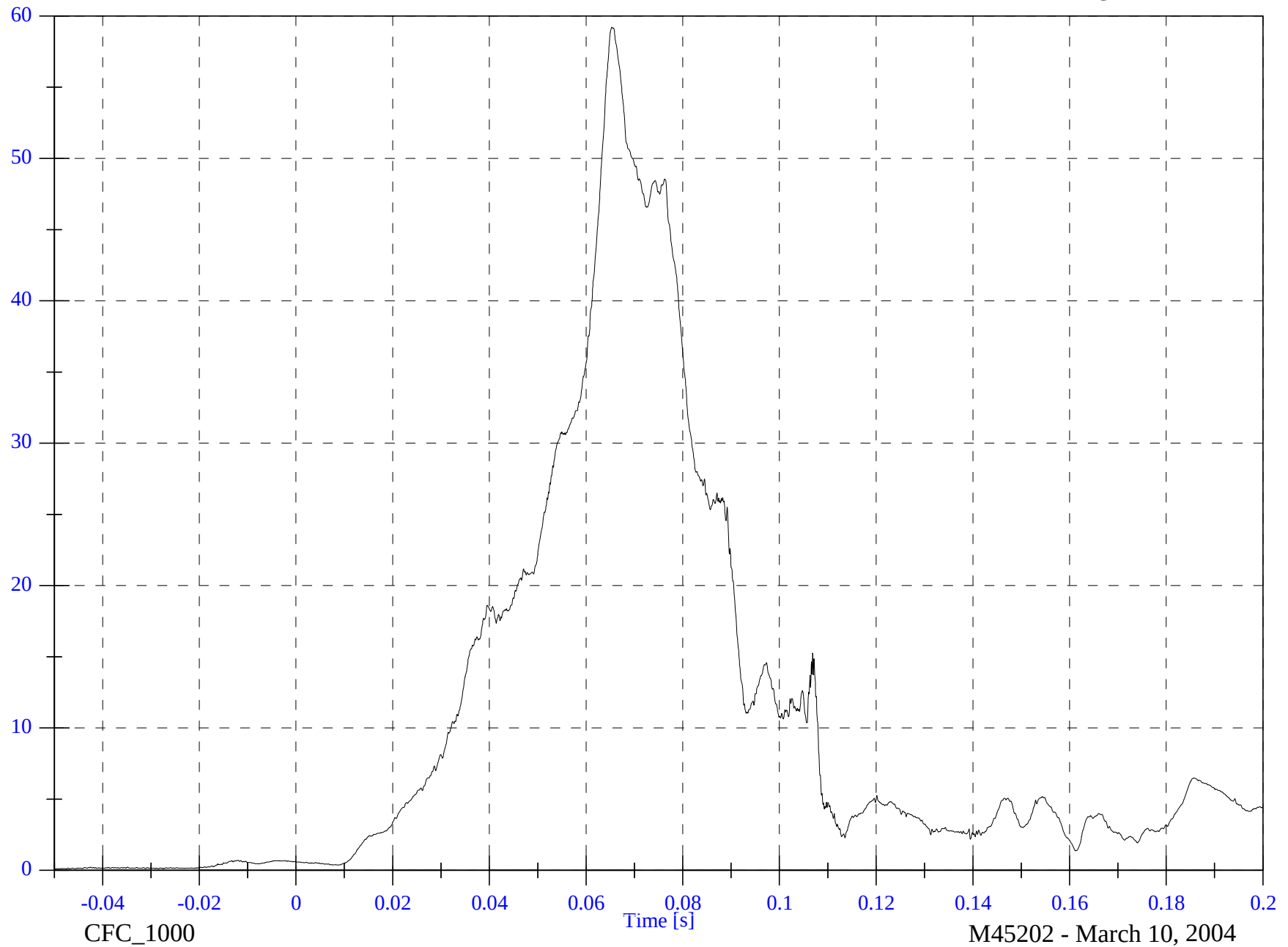


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P3 Pelvic Resultant

Max: 59.2 [g] at 0.065 [s]

Min: 0.1 [g] at -0.050 [s]



4-33

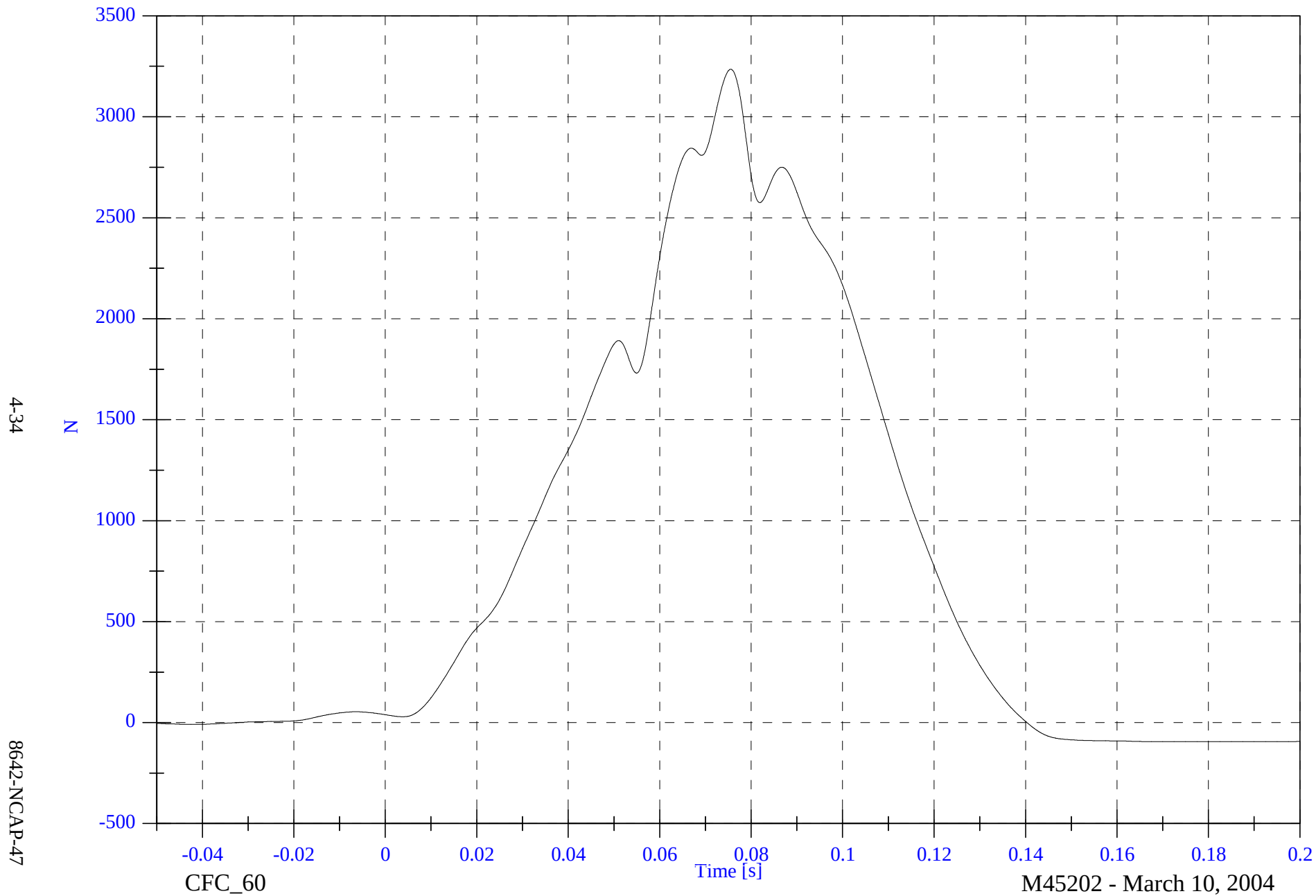
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P3 Tether Belt

Max: 3235.4 [N] at 0.076 [s]

Min: -95.0 [N] at 0.192 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

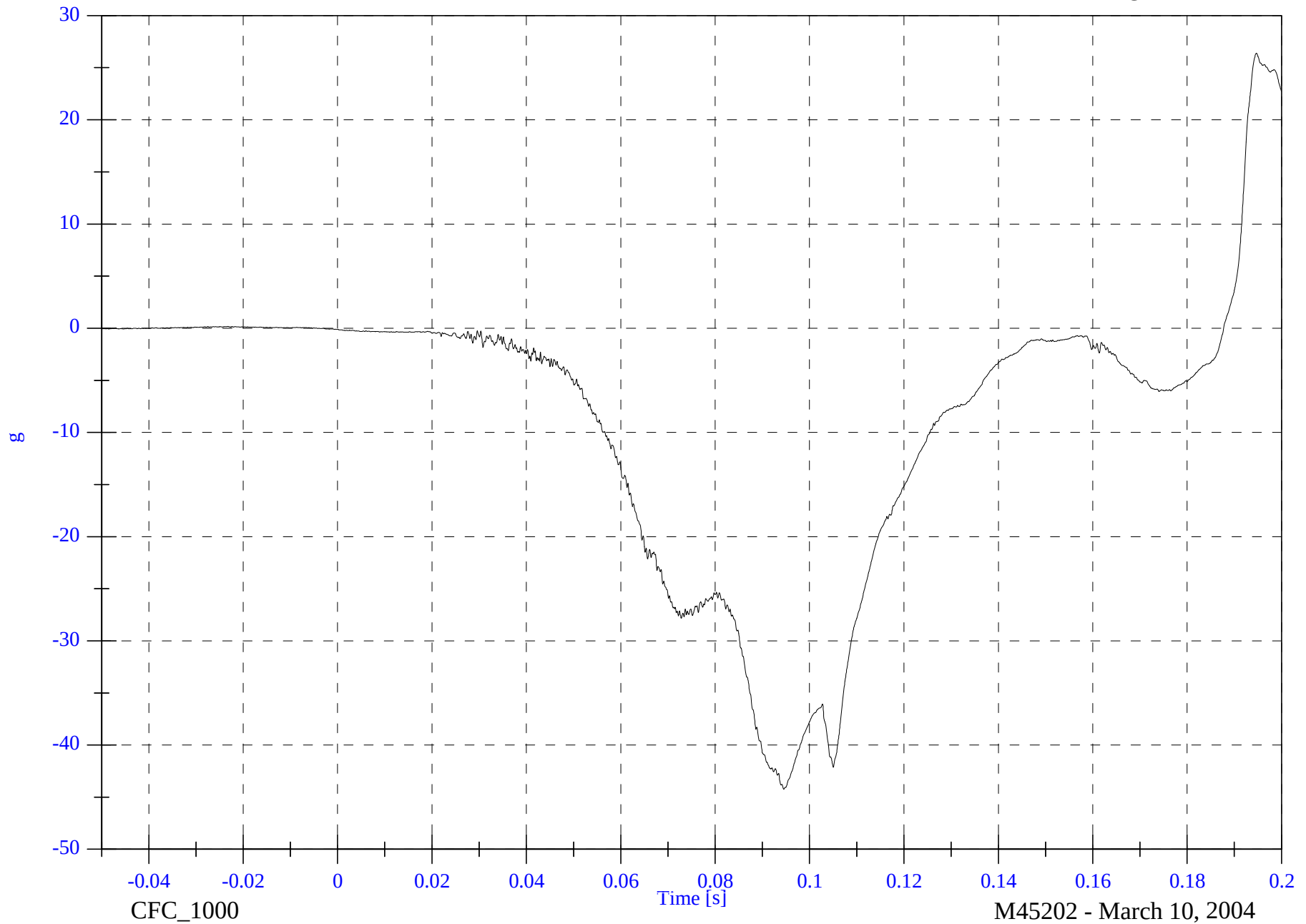
V1P4 Head x

Max: 26.4 [g] at 0.195 [s]

Min: -44.2 [g] at 0.094 [s]

4-35

8642-NCAP-47

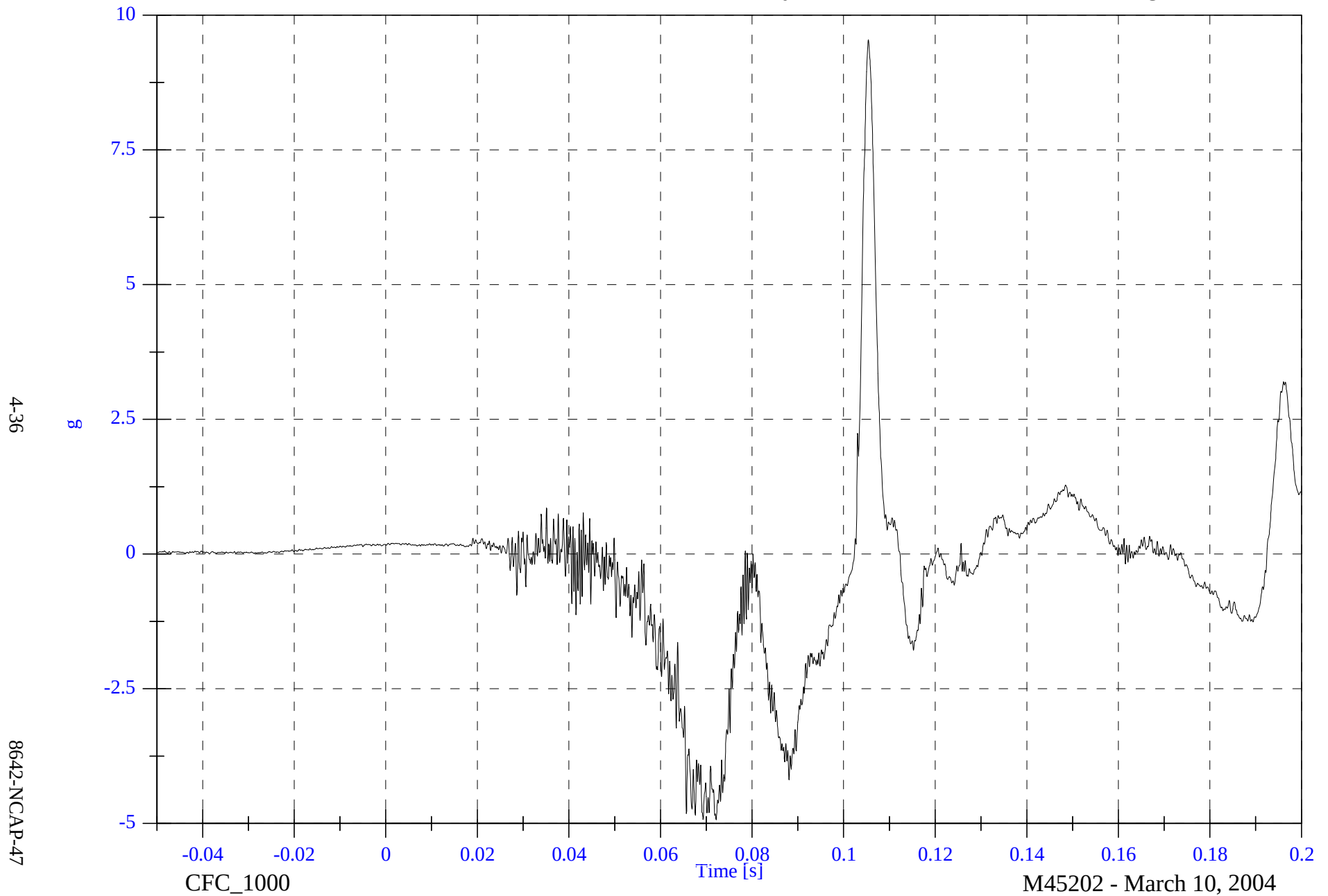


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 9.5 [g] at 0.105 [s]

Min: -4.9 [g] at 0.072 [s]

V1P4 Head y

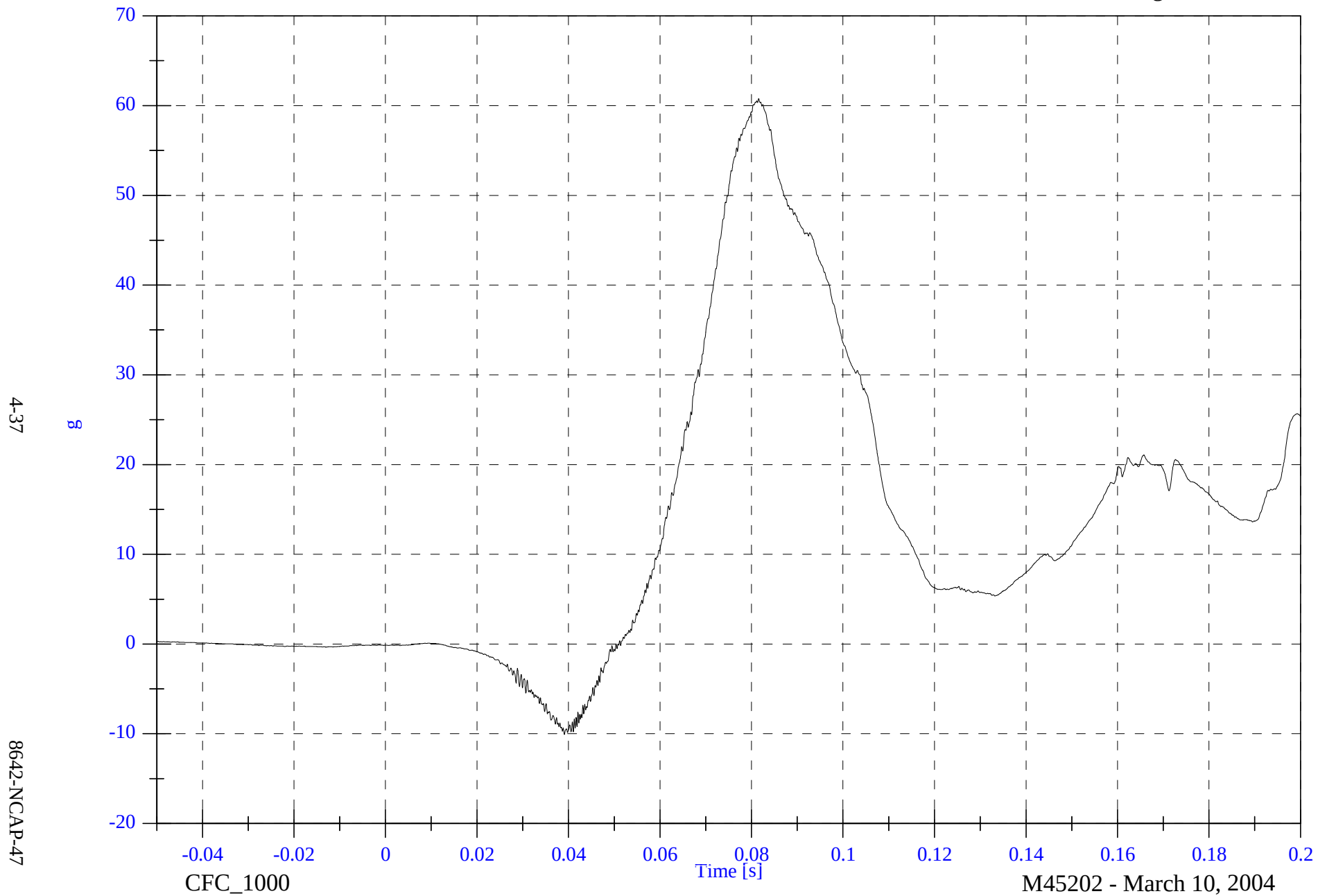


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 60.8 [g] at 0.082 [s]

Min: -10.1 [g] at 0.039 [s]

V1P4 Head z

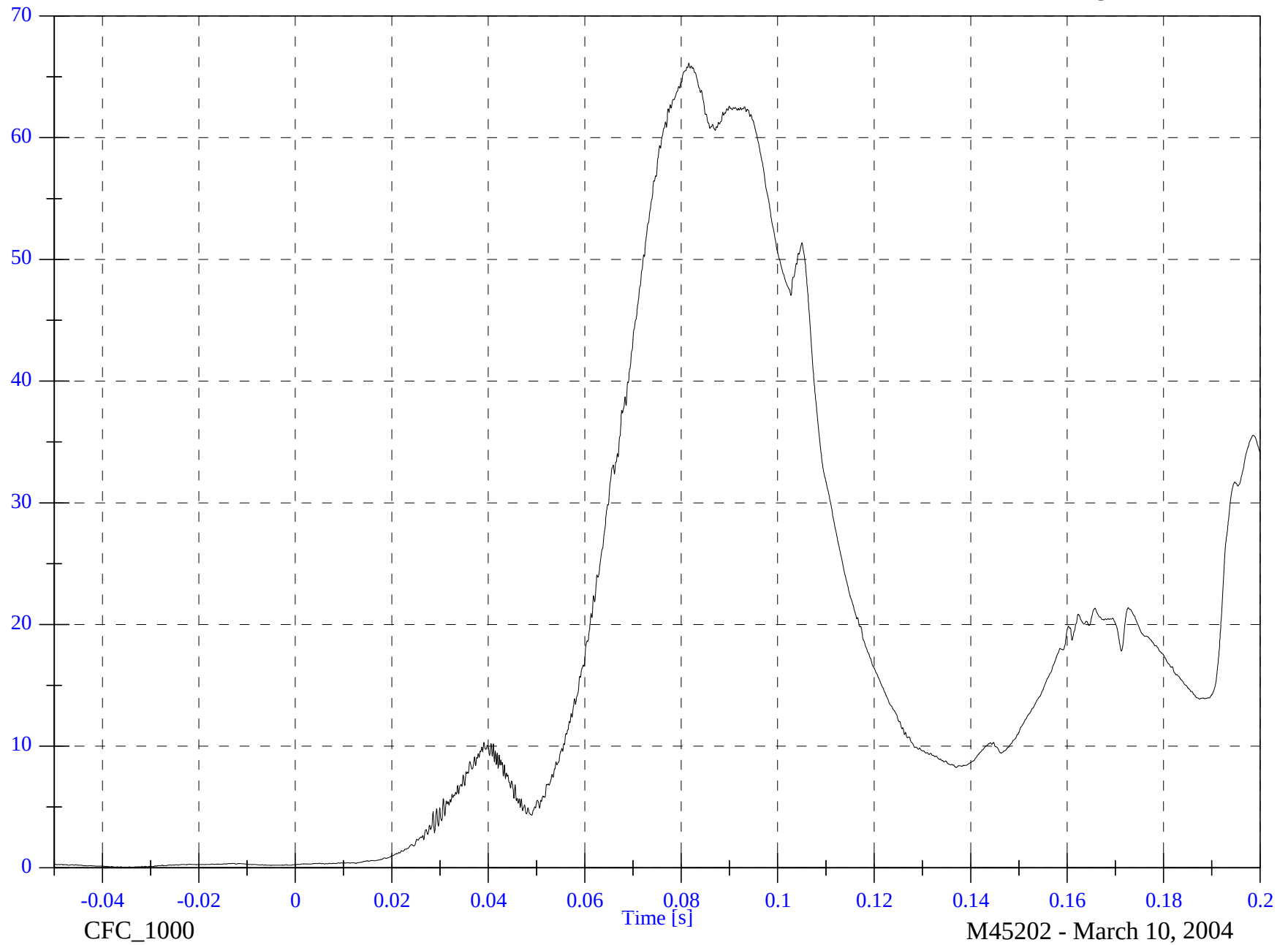


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Head Resultant

Max: 66.1 [g] at 0.082 [s]

Min: 0.0 [g] at -0.033 [s]



4-38

8642-NCAP-47

CFC_1000

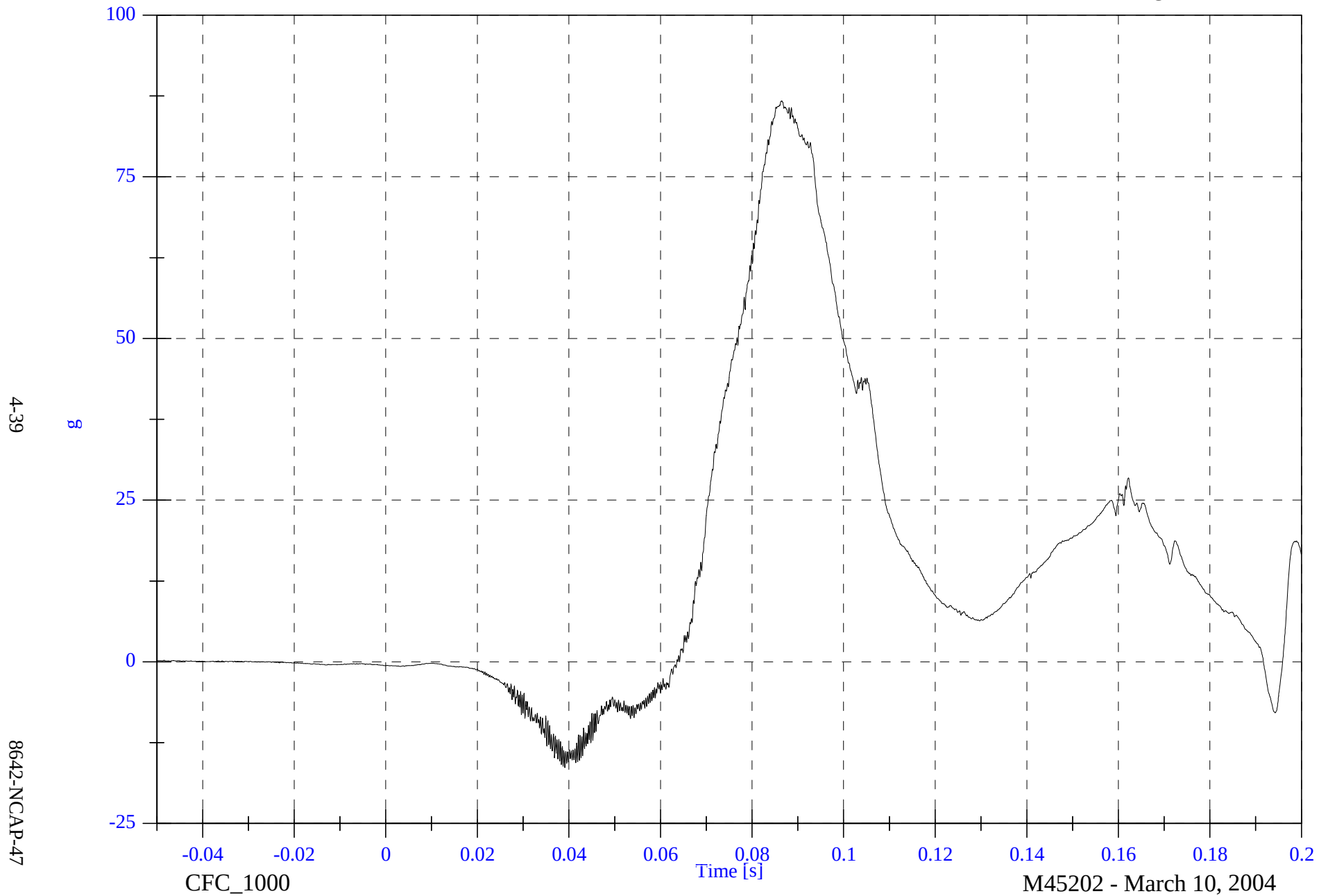
M45202 - March 10, 2004

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Head Rear z

Max: 86.7 [g] at 0.086 [s]

Min: -16.4 [g] at 0.039 [s]

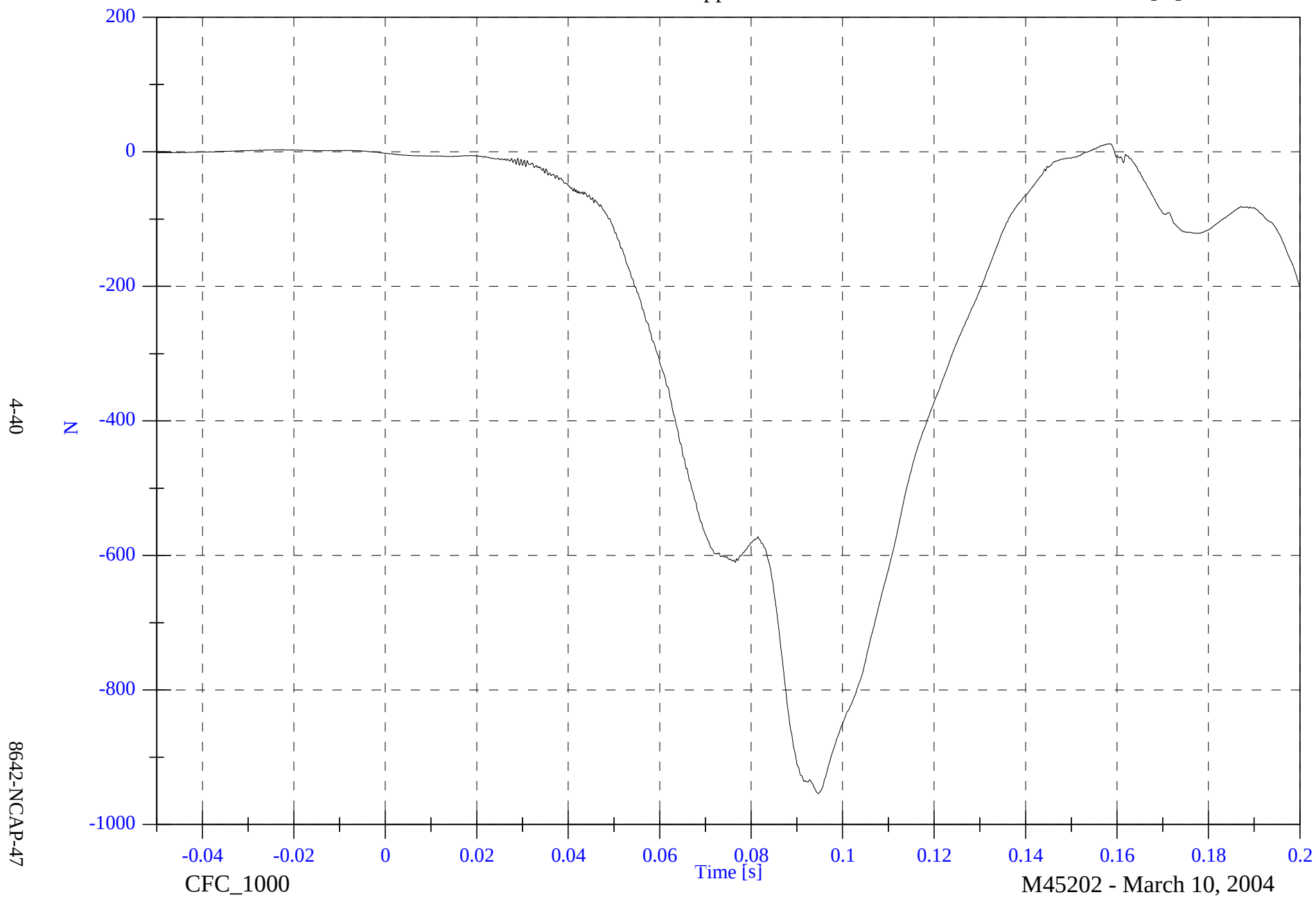


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 12.0 [N] at 0.158 [s]

Min: -954.0 [N] at 0.095 [s]

V1P4 Upper Neck Fx

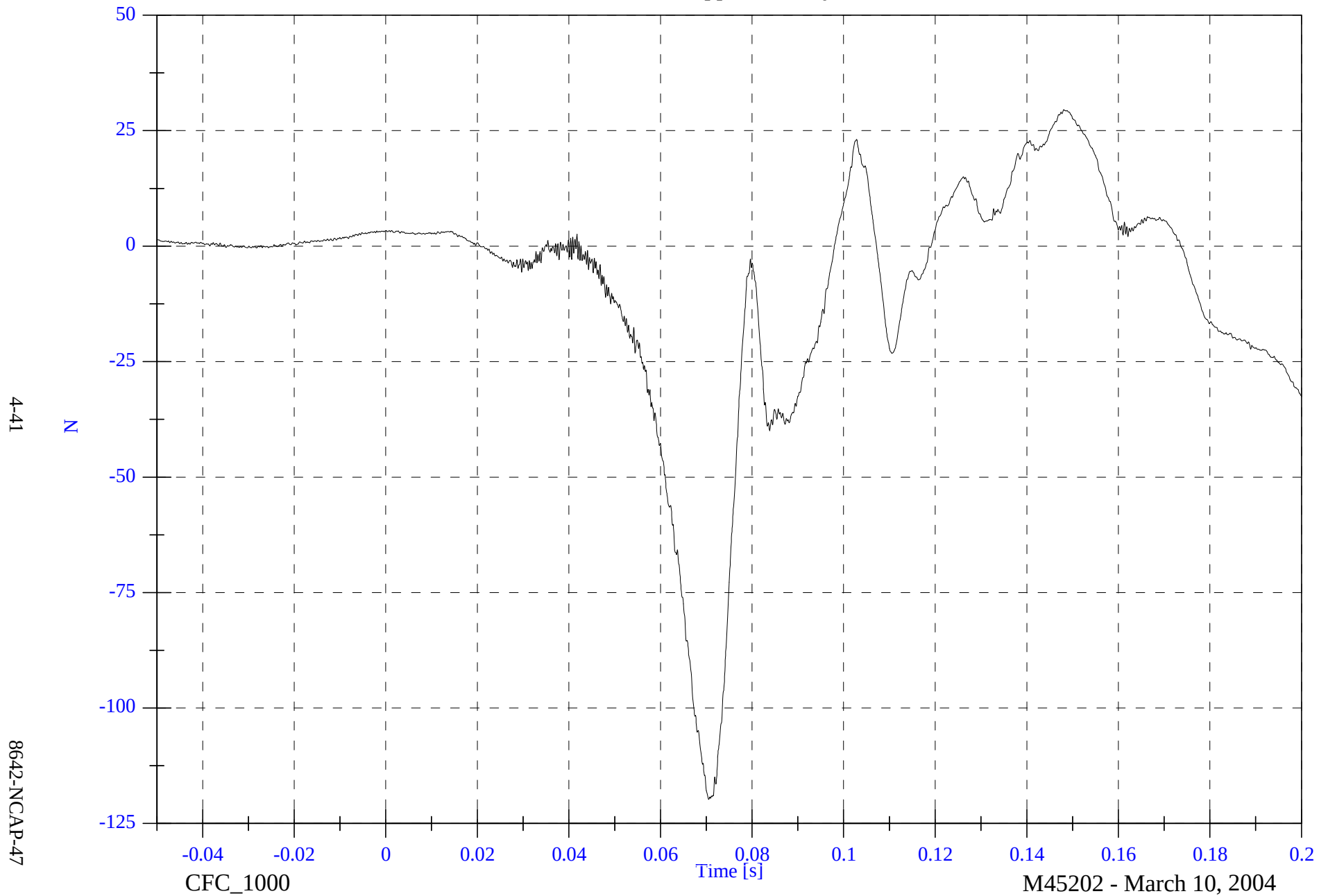


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Upper Neck Fy

Max: 29.5 [N] at 0.148 [s]

Min: -119.8 [N] at 0.071 [s]

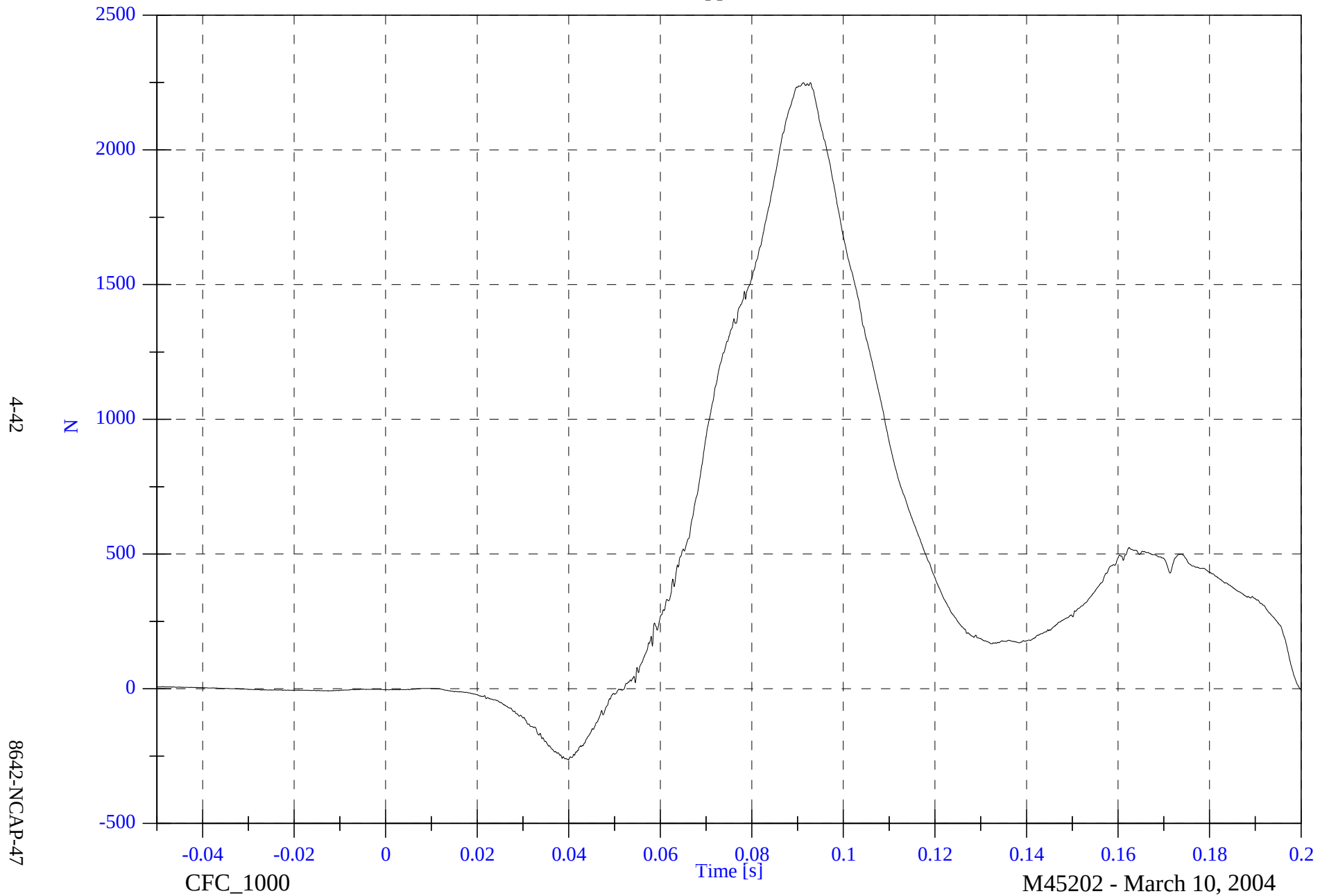


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 2249.9 [N] at 0.093 [s]

Min: -263.2 [N] at 0.040 [s]

V1P4 Upper Neck Fz

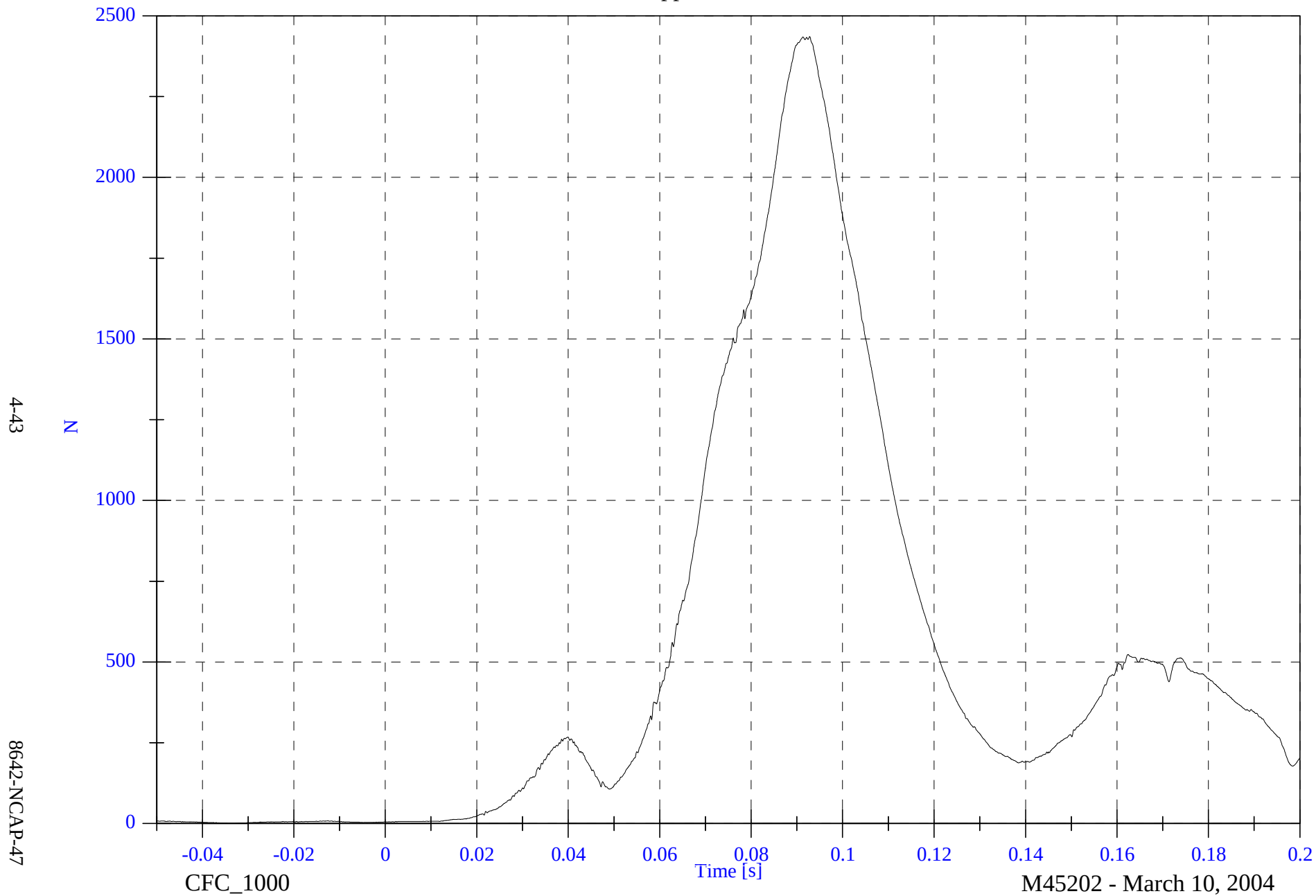


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 2436.0 [N] at 0.093 [s]

V1P4 Upper Neck F Resultant

Min: 0.9 [N] at -0.034 [s]

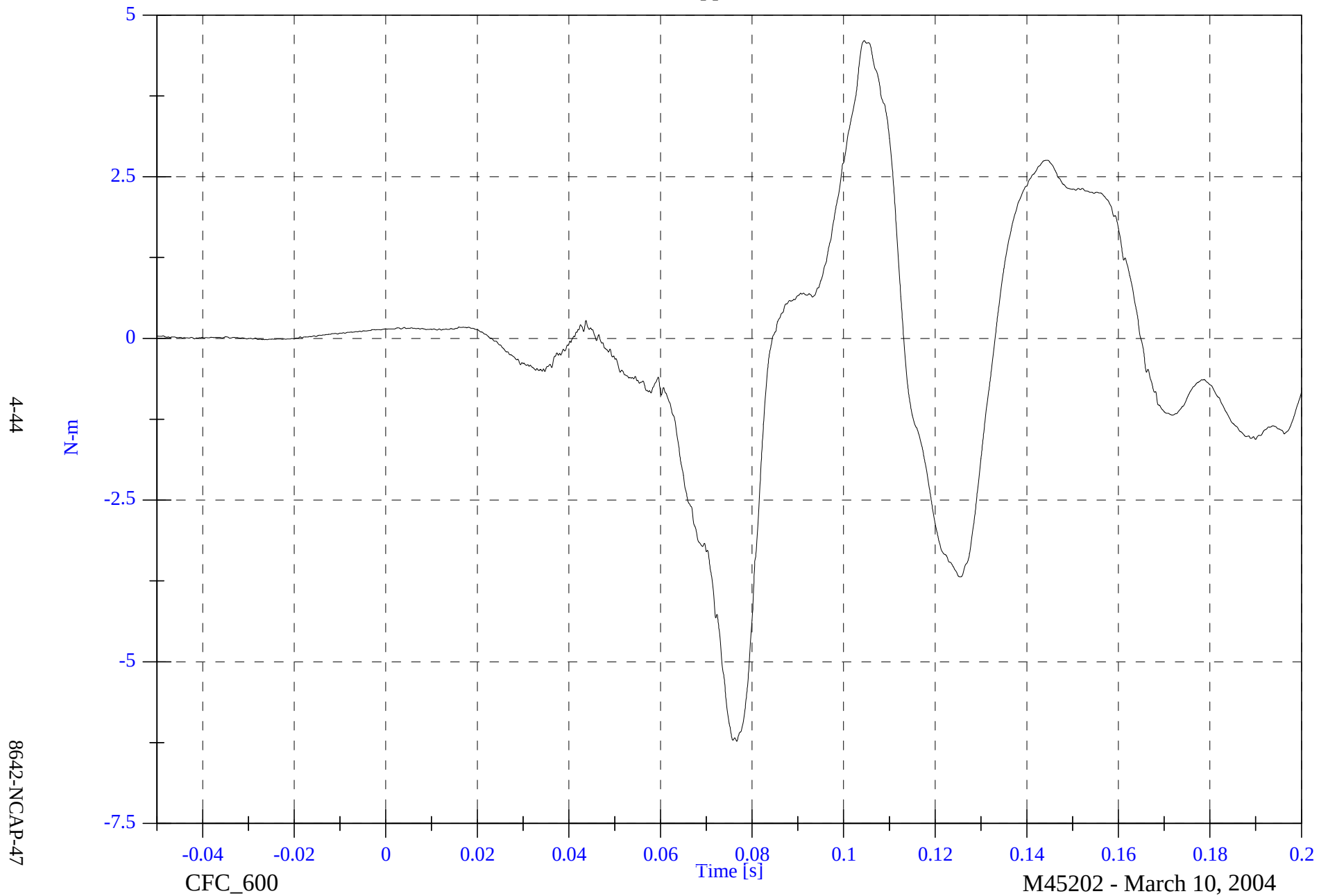


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Upper Neck Mx

Max: 4.6 [N-m] at 0.104 [s]

Min: -6.2 [N-m] at 0.077 [s]

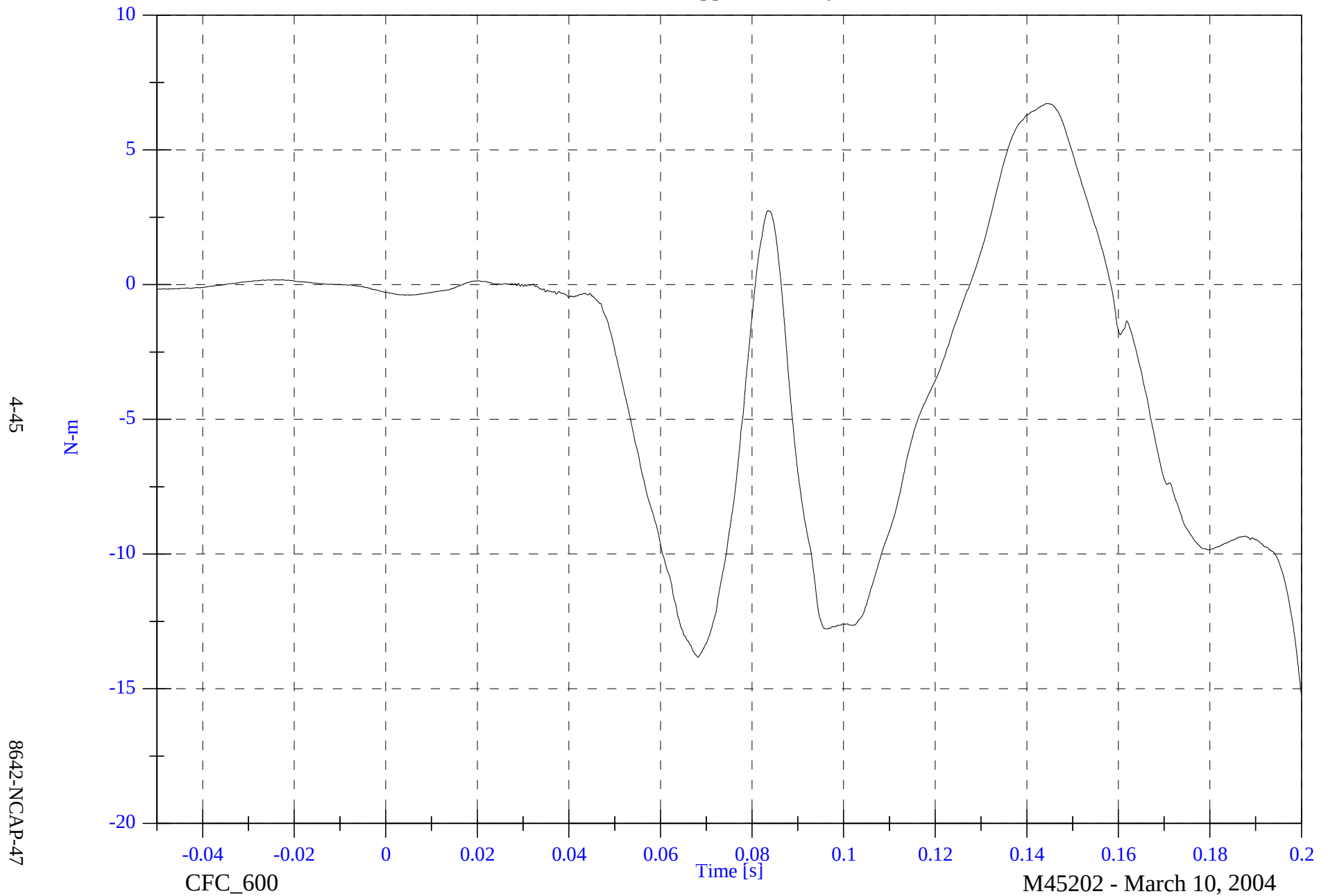


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Upper Neck My

Max: 6.7 [N-m] at 0.144 [s]

Min: -15.2 [N-m] at 0.200 [s]

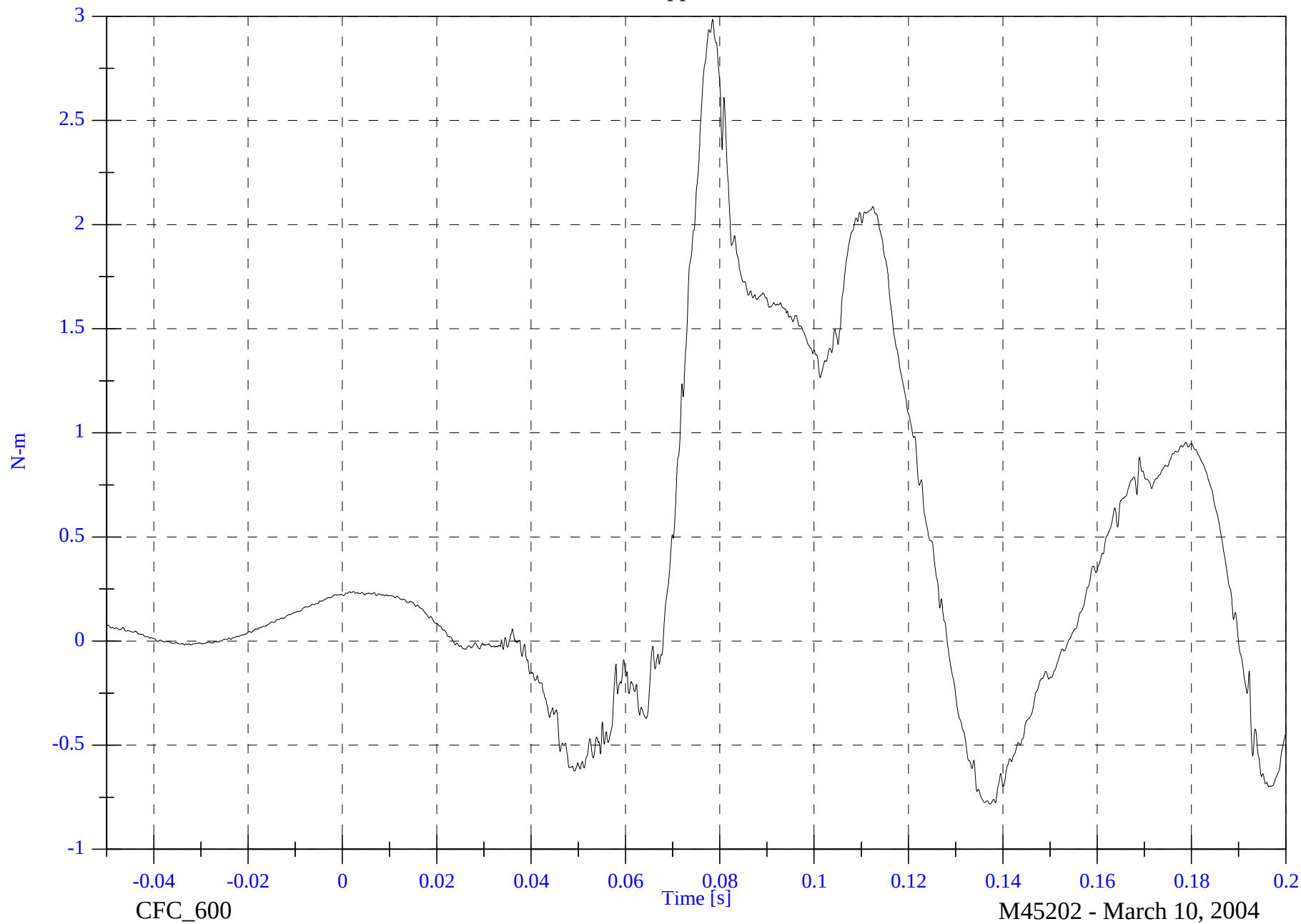


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Upper Neck Mz

Max: 3.0 [N-m] at 0.078 [s]

Min: -0.8 [N-m] at 0.137 [s]



4-46

8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Upper Neck M Resultant

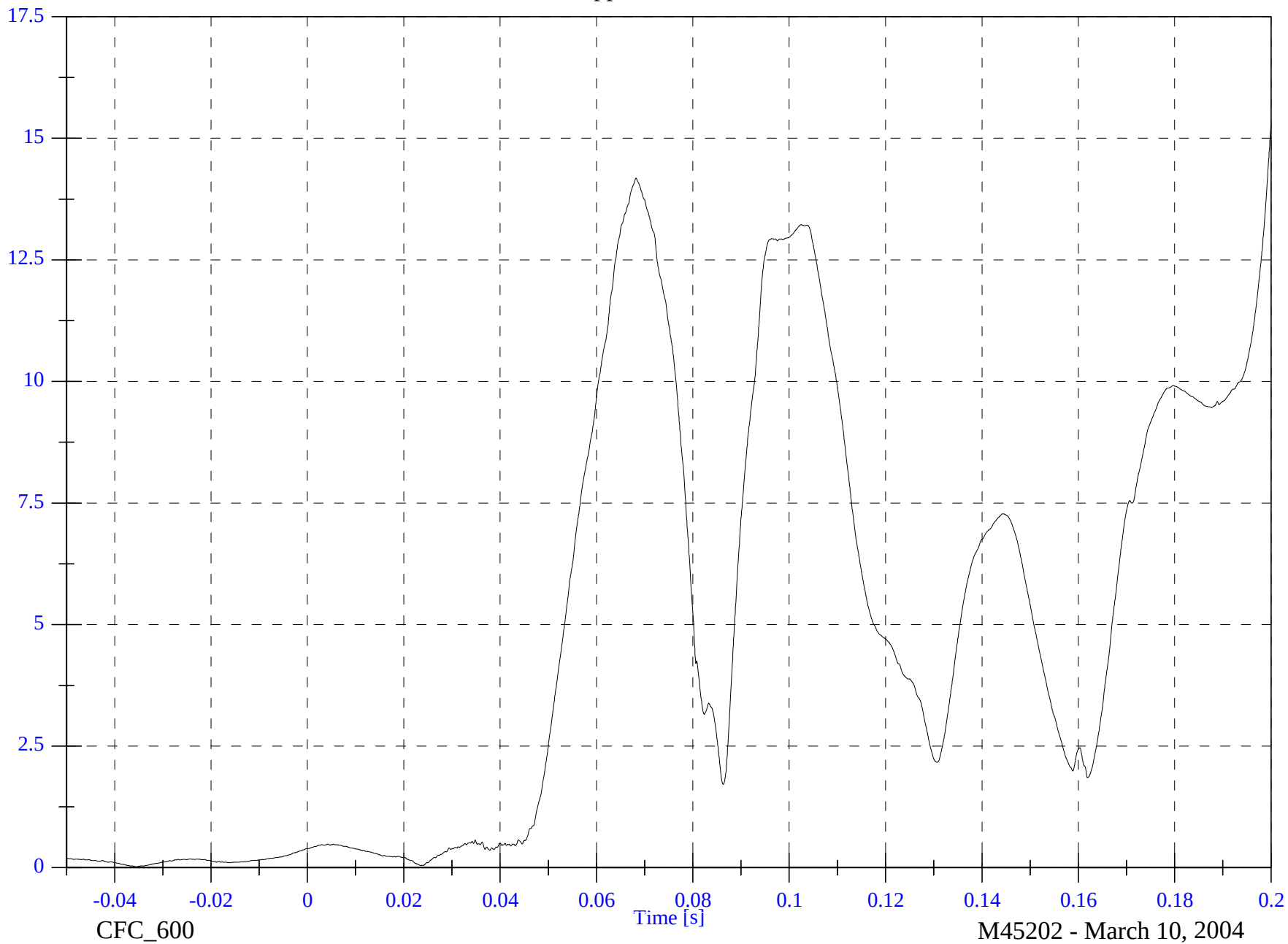
Max: 15.3 [N-m] at 0.200 [s]

Min: 0.0 [N-m] at -0.036 [s]

4-47

N-m

8642-NCAP-47

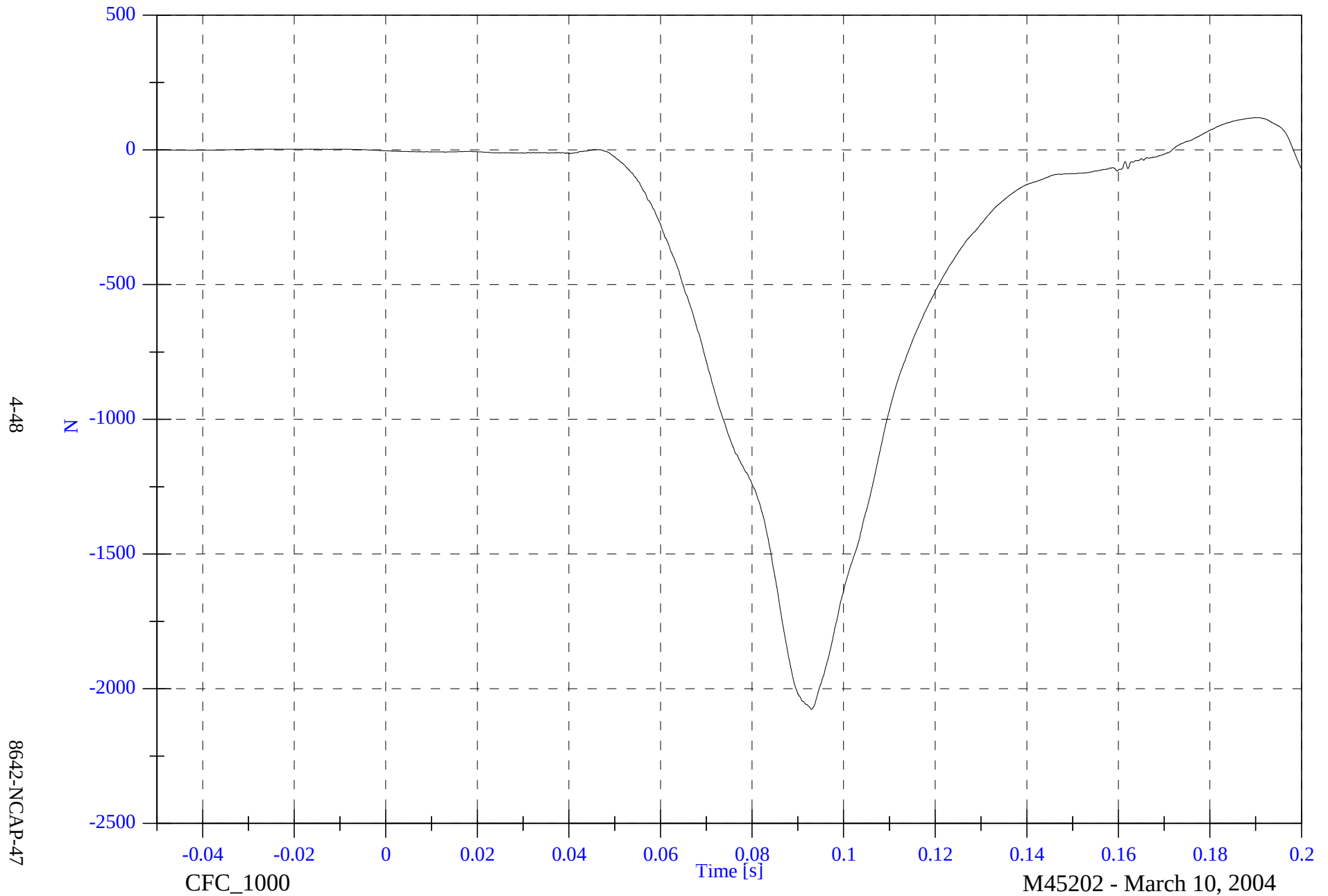


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Lower Neck Fx

Max: 119.7 [N] at 0.190 [s]

Min: -2076.7 [N] at 0.093 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

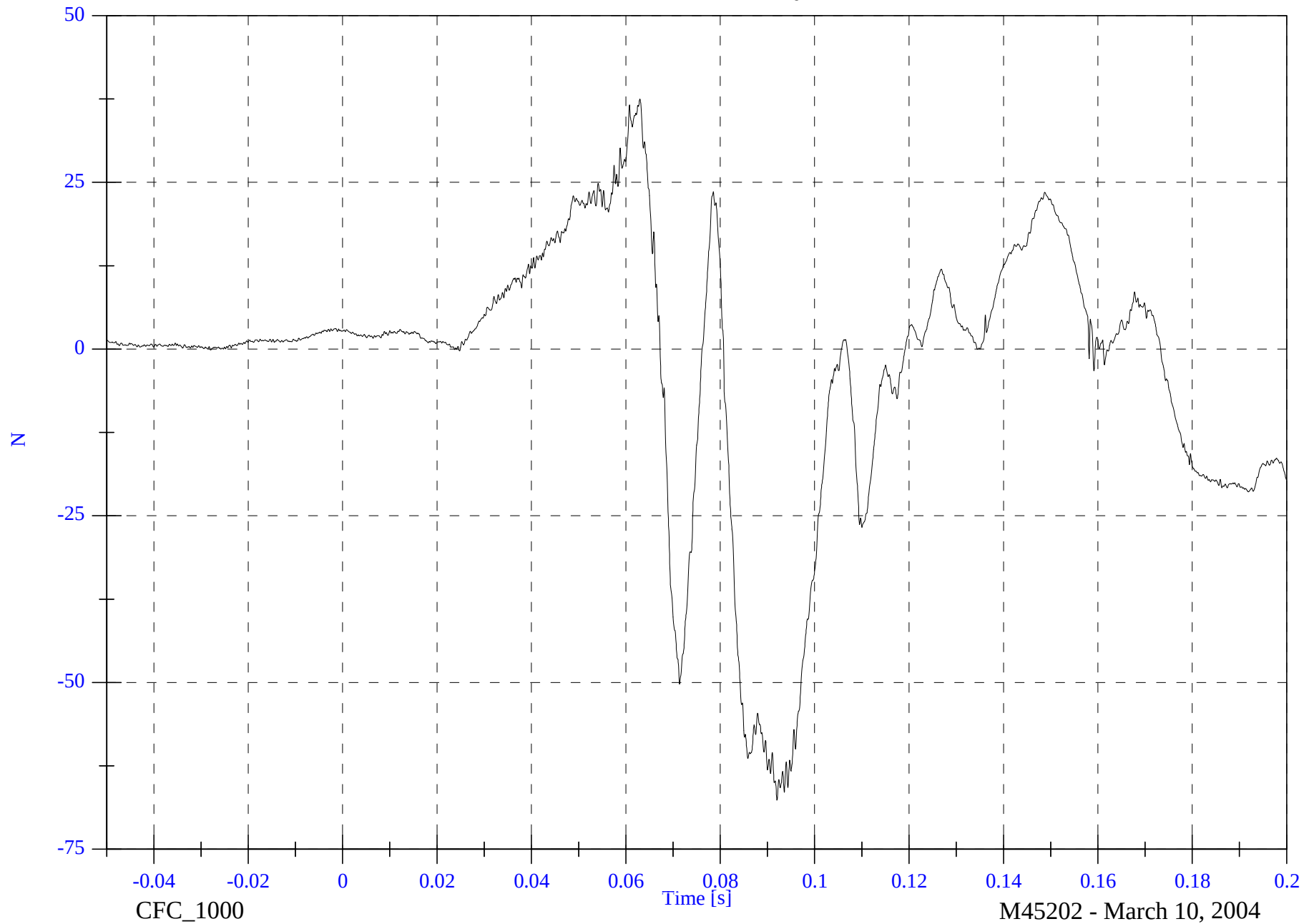
V1P4 Lower Neck Fy

Max: 37.5 [N] at 0.063 [s]

Min: -67.6 [N] at 0.092 [s]

4-49

8642-NCAP-47

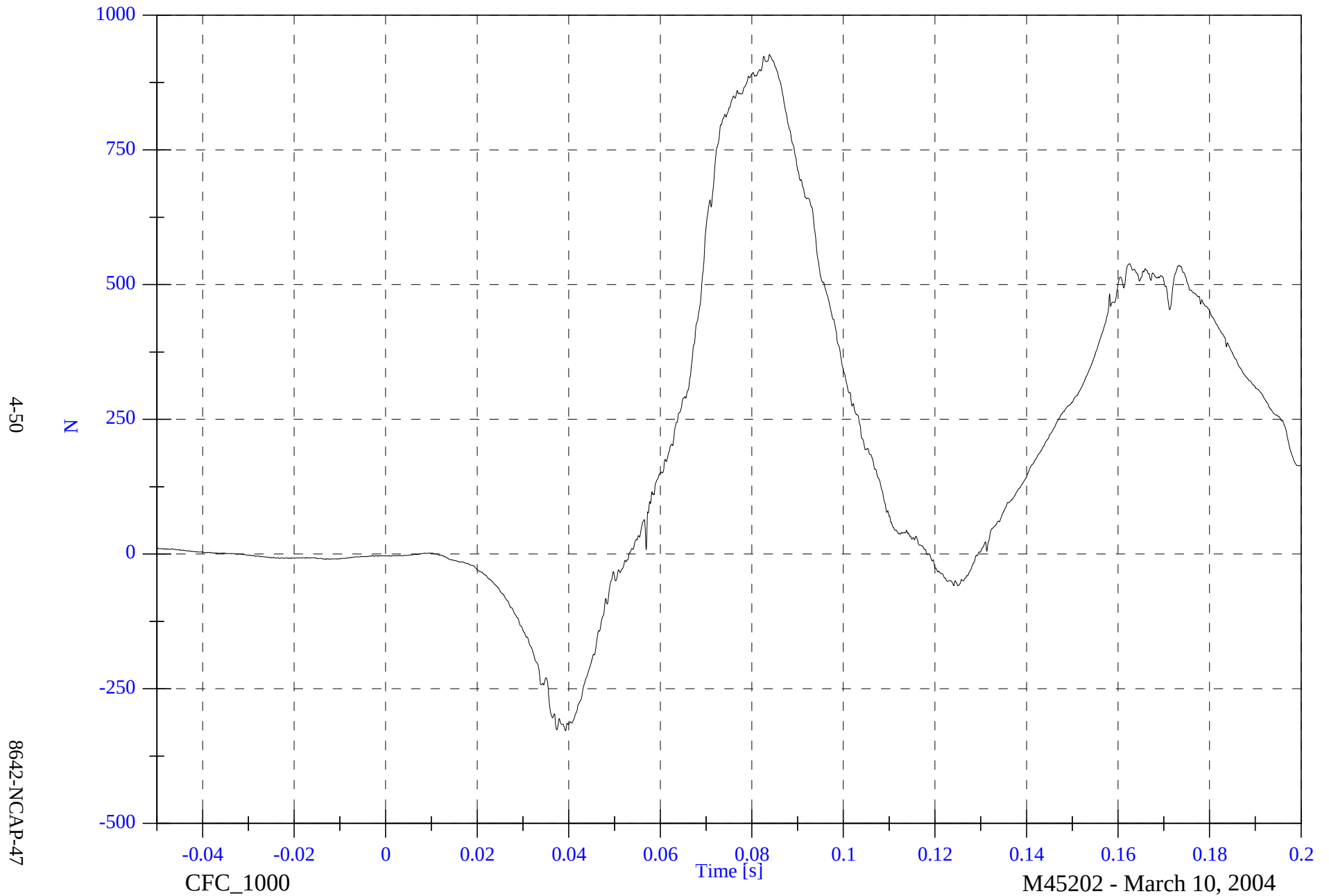


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 927.4 [N] at 0.084 [s]

Min: -328.0 [N] at 0.039 [s]

V1P4 Lower Neck Fz

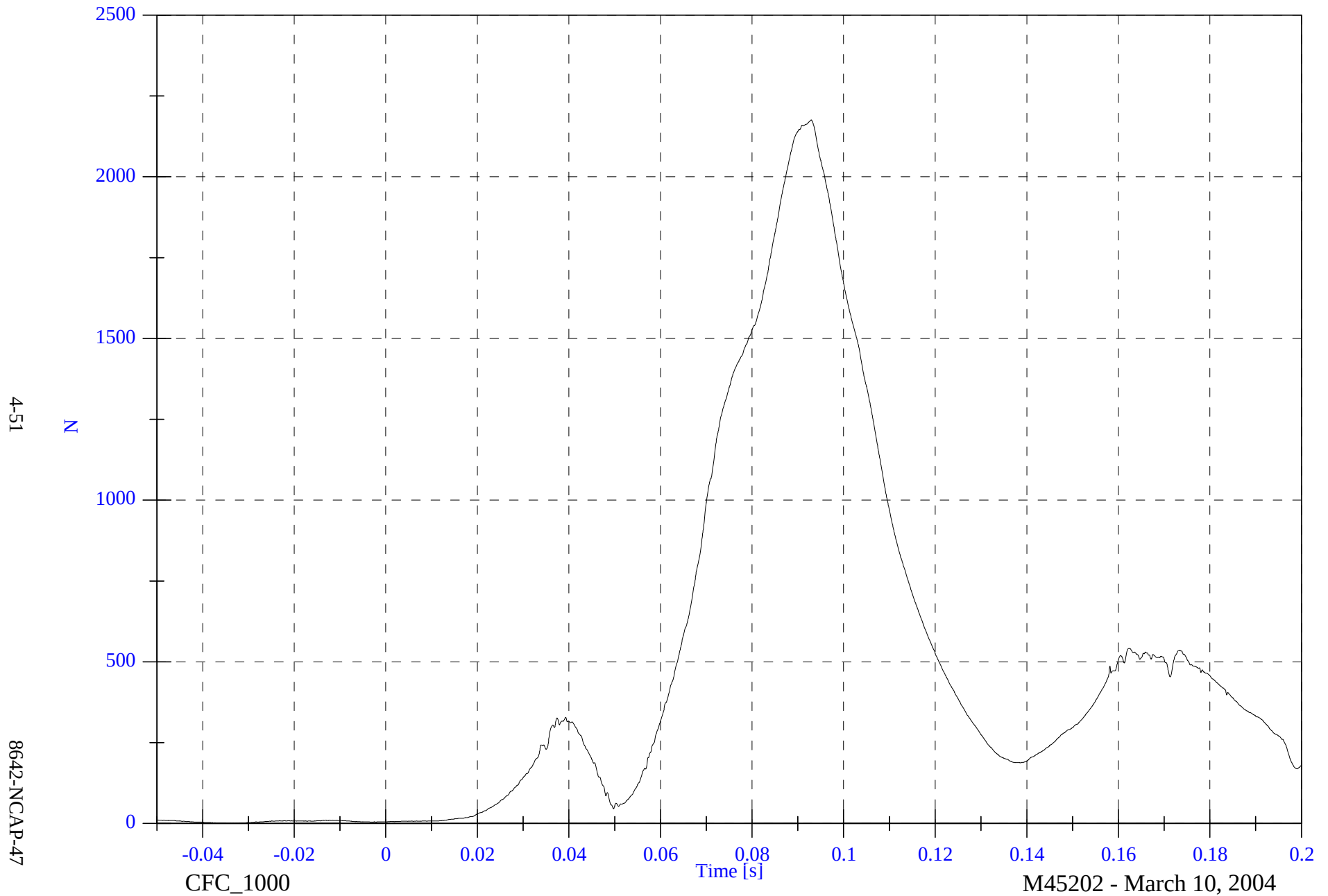


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Lower Neck F Resultant

Max: 2175.7 [N] at 0.093 [s]

Min: 0.7 [N] at -0.035 [s]

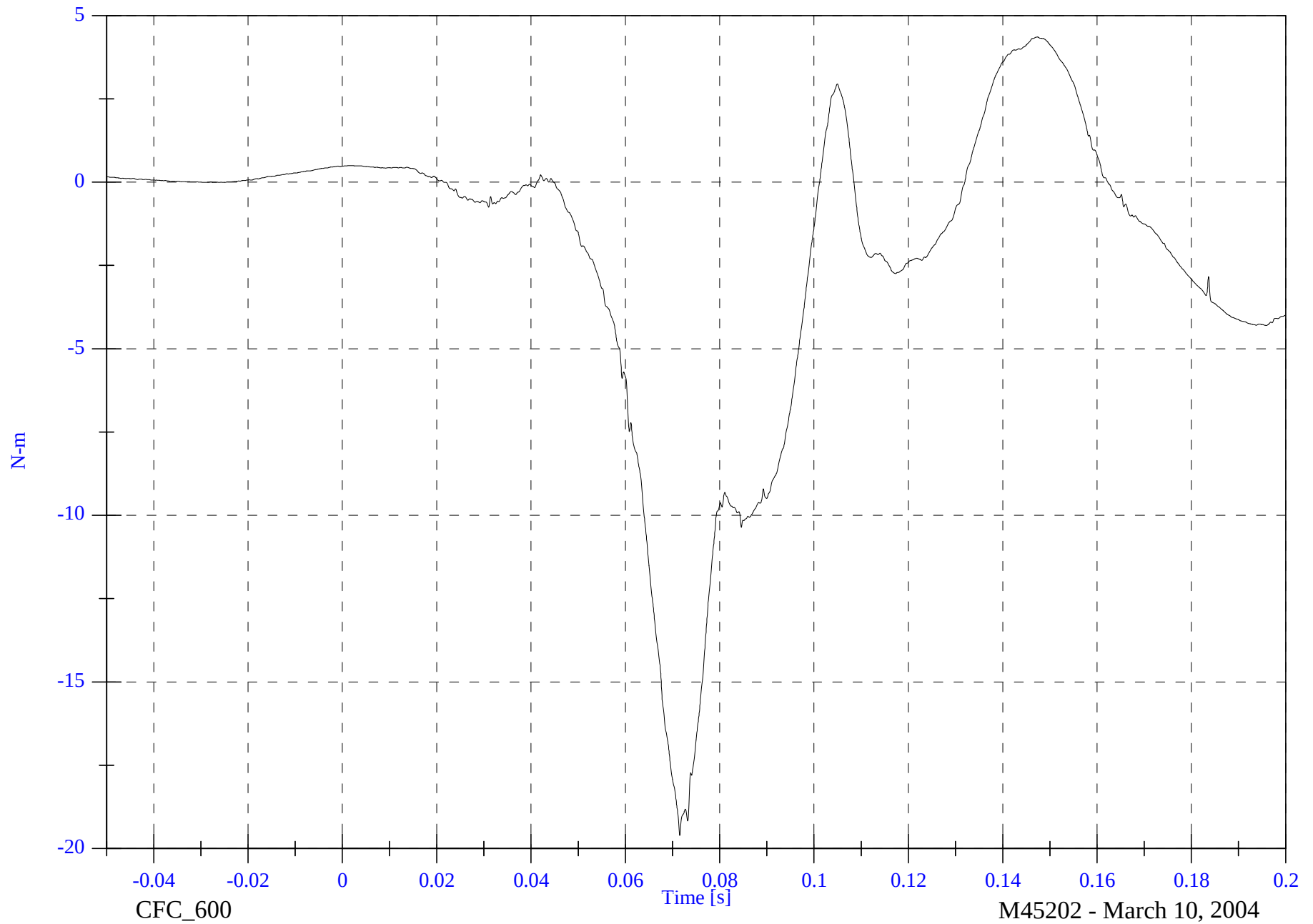


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Lower Neck Mx

Max: 4.4 [N-m] at 0.147 [s]

Min: -19.6 [N-m] at 0.072 [s]



4-52

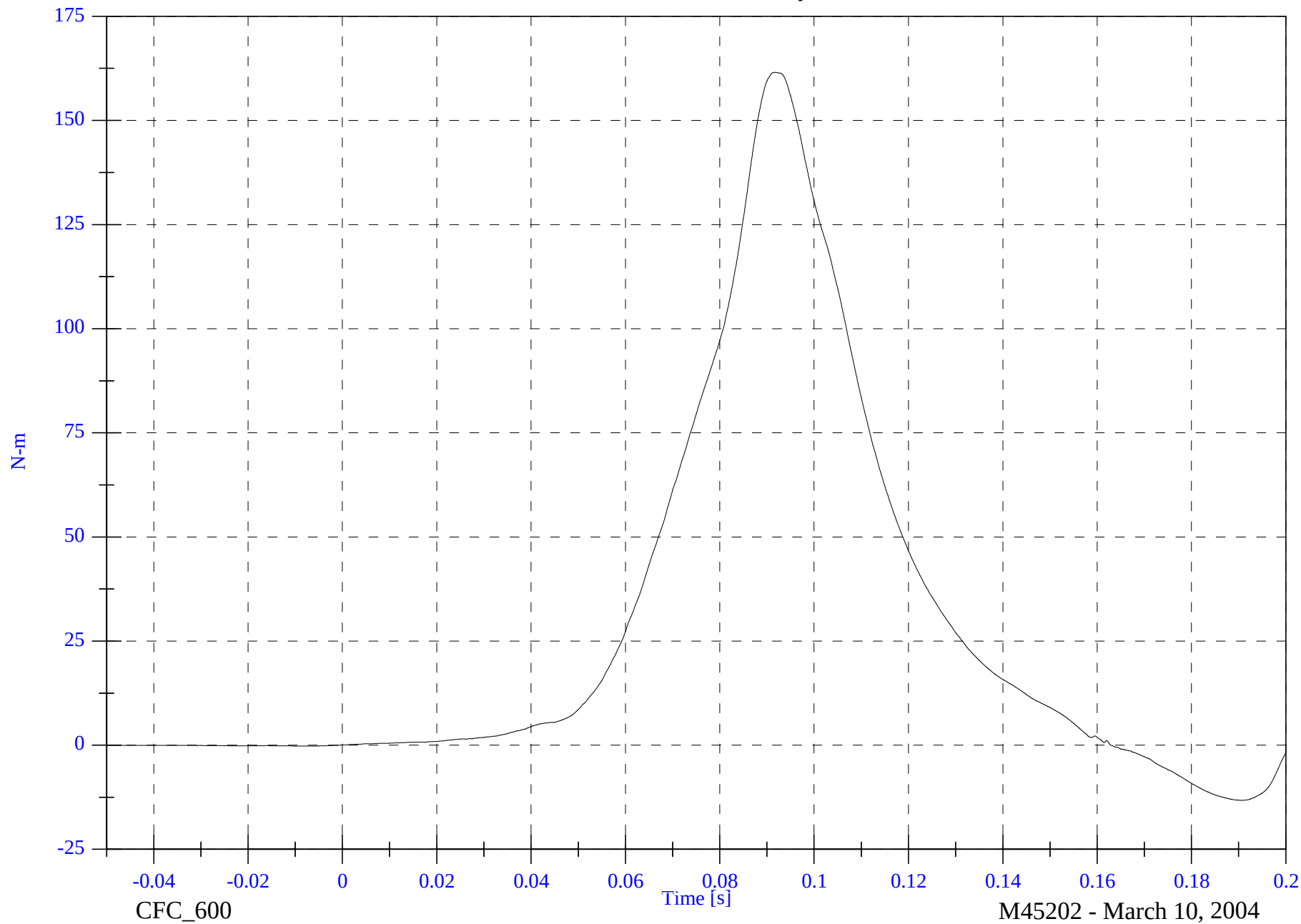
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Lower Neck My

Max: 161.6 [N-m] at 0.092 [s]

Min: -13.3 [N-m] at 0.191 [s]



4-53

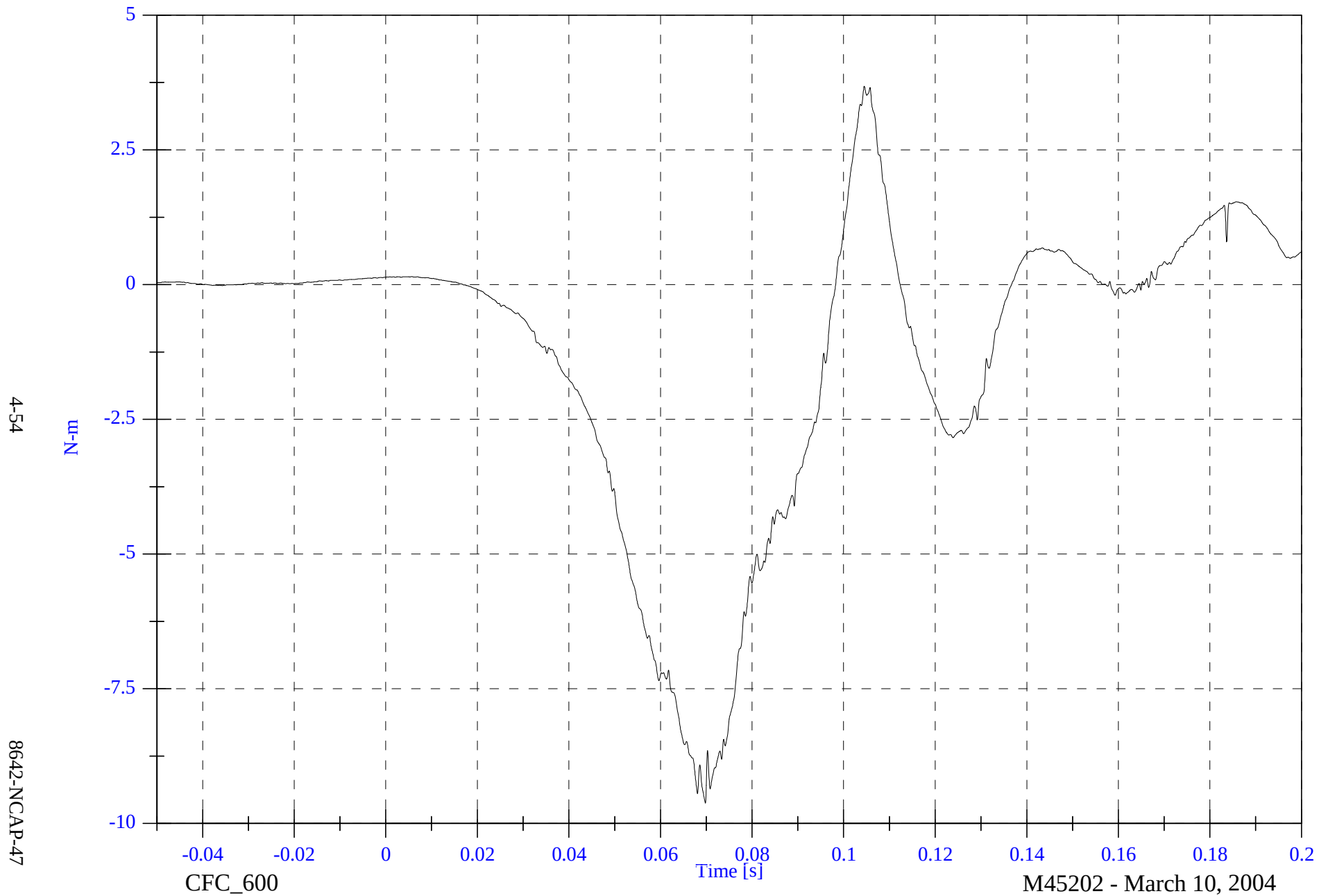
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Lower Neck Mz

Max: 3.7 [N-m] at 0.104 [s]

Min: -9.6 [N-m] at 0.070 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

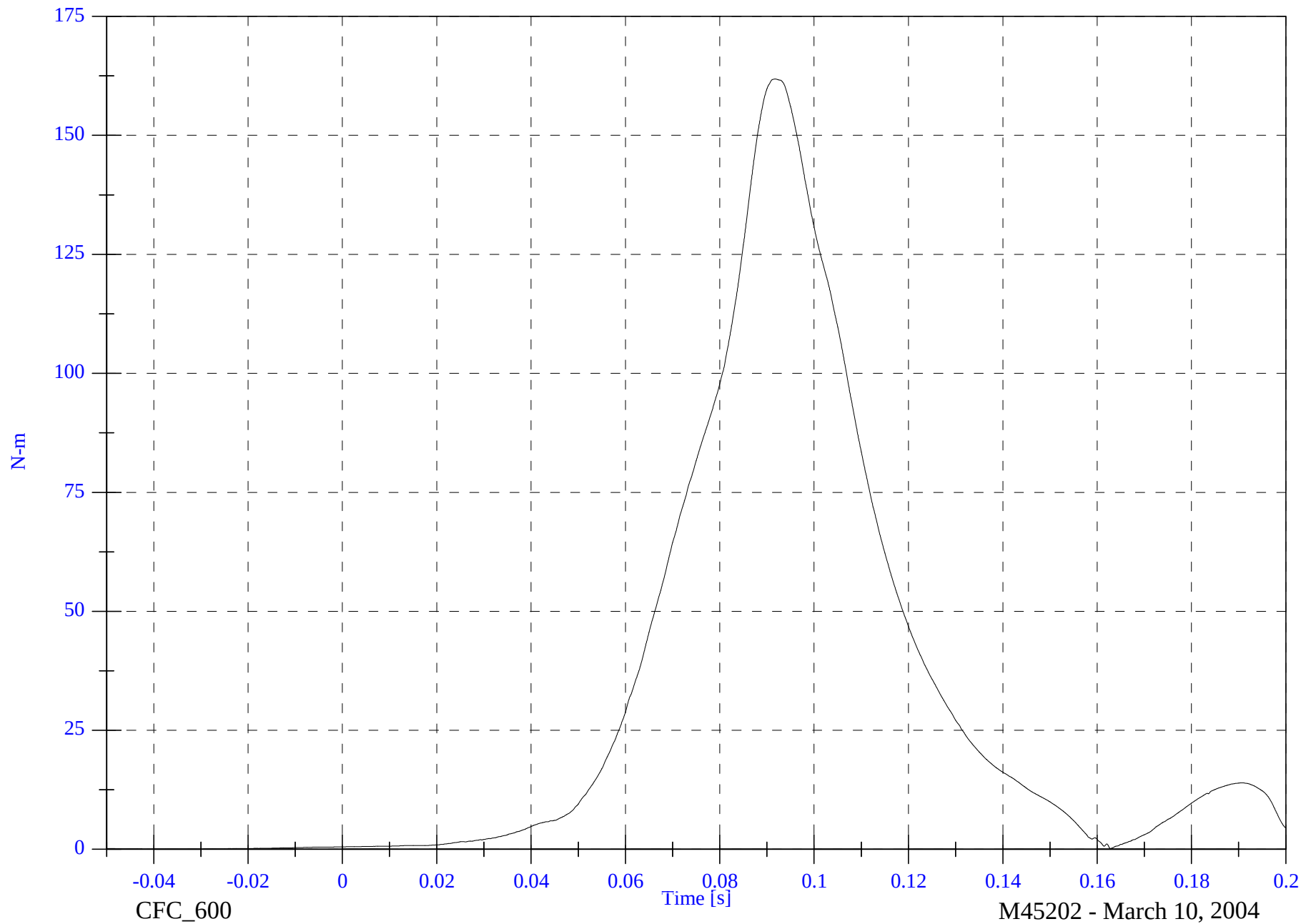
V1P4 Lower Neck M Resultant

Max: 161.8 [N-m] at 0.092 [s]

Min: 0.0 [N-m] at -0.036 [s]

4-55

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

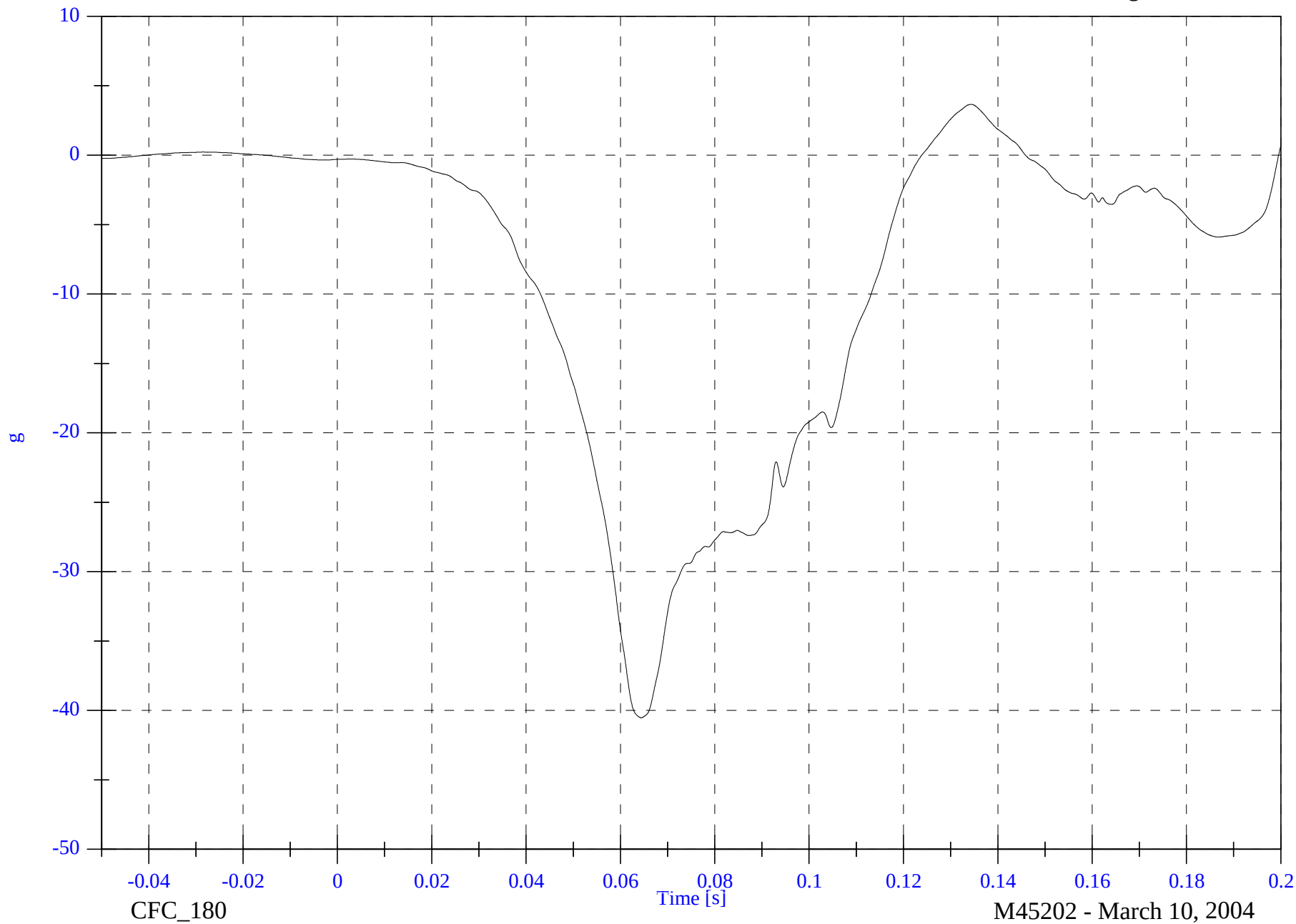
V1P4 Chest x

Max: 3.7 [g] at 0.134 [s]

Min: -40.5 [g] at 0.064 [s]

4-56

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Chest y

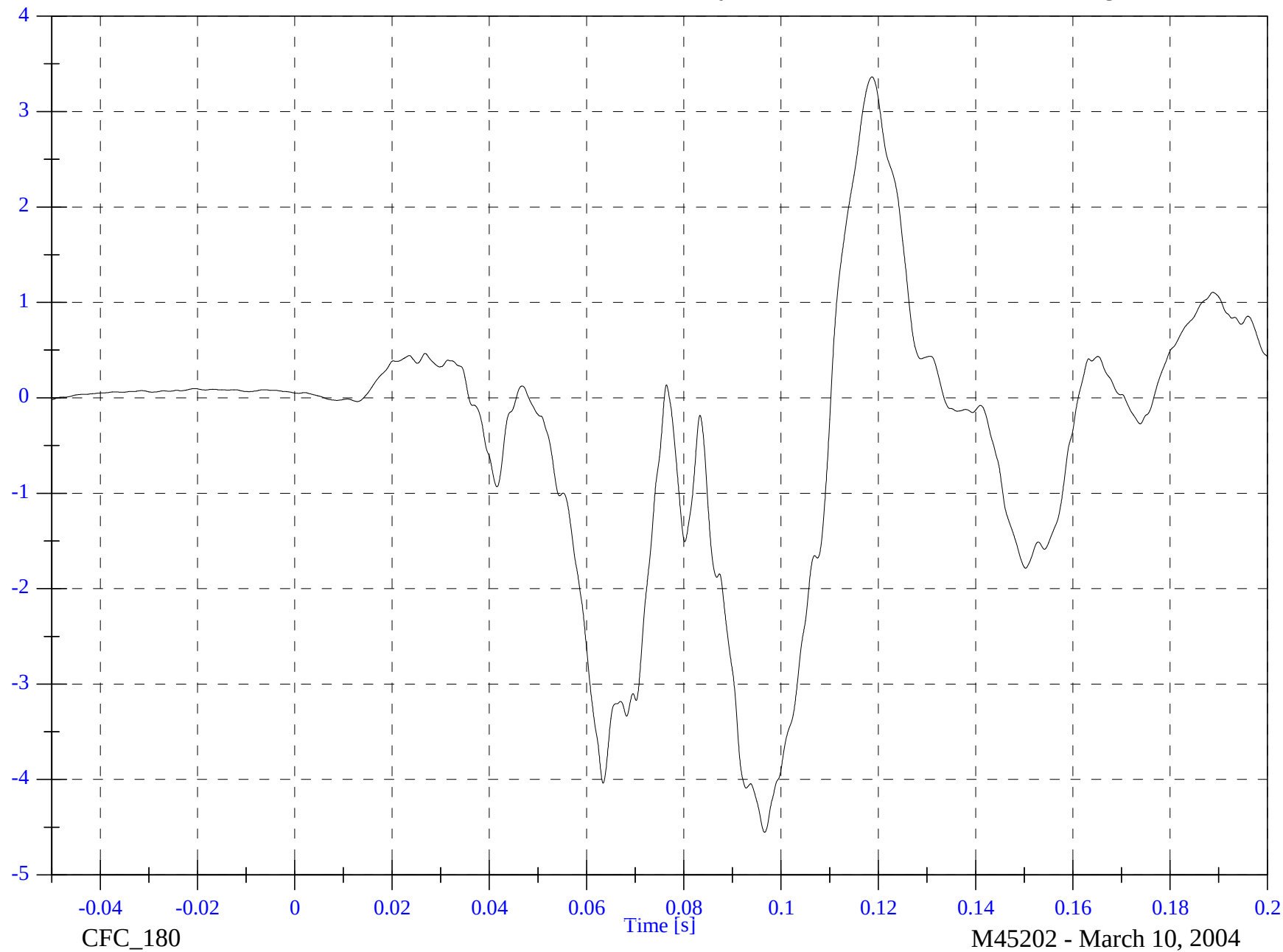
Max: 3.4 [g] at 0.119 [s]

Min: -4.6 [g] at 0.097 [s]

4-57

8642-NCAP-47

g

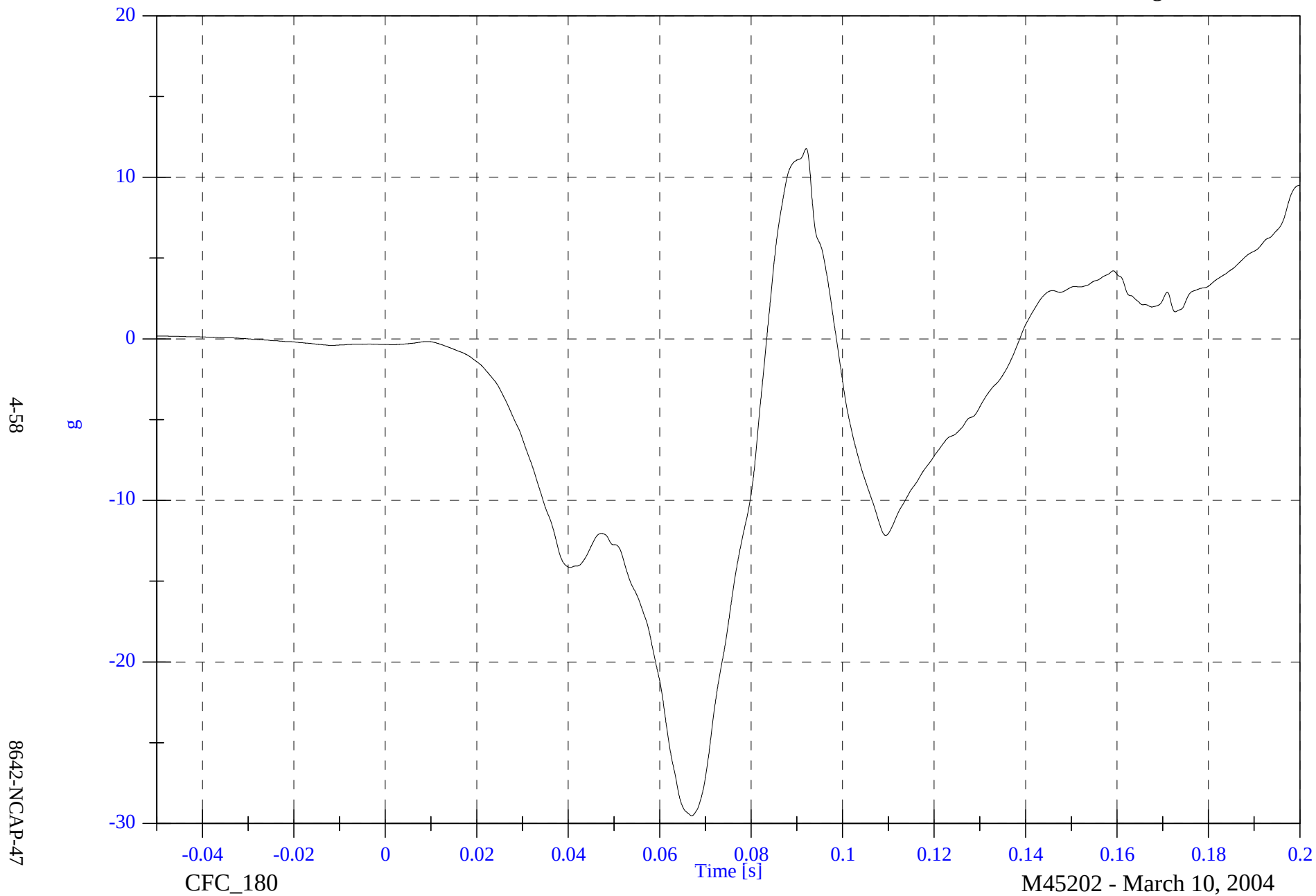


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Chest z

Max: 11.8 [g] at 0.092 [s]

Min: -29.5 [g] at 0.067 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

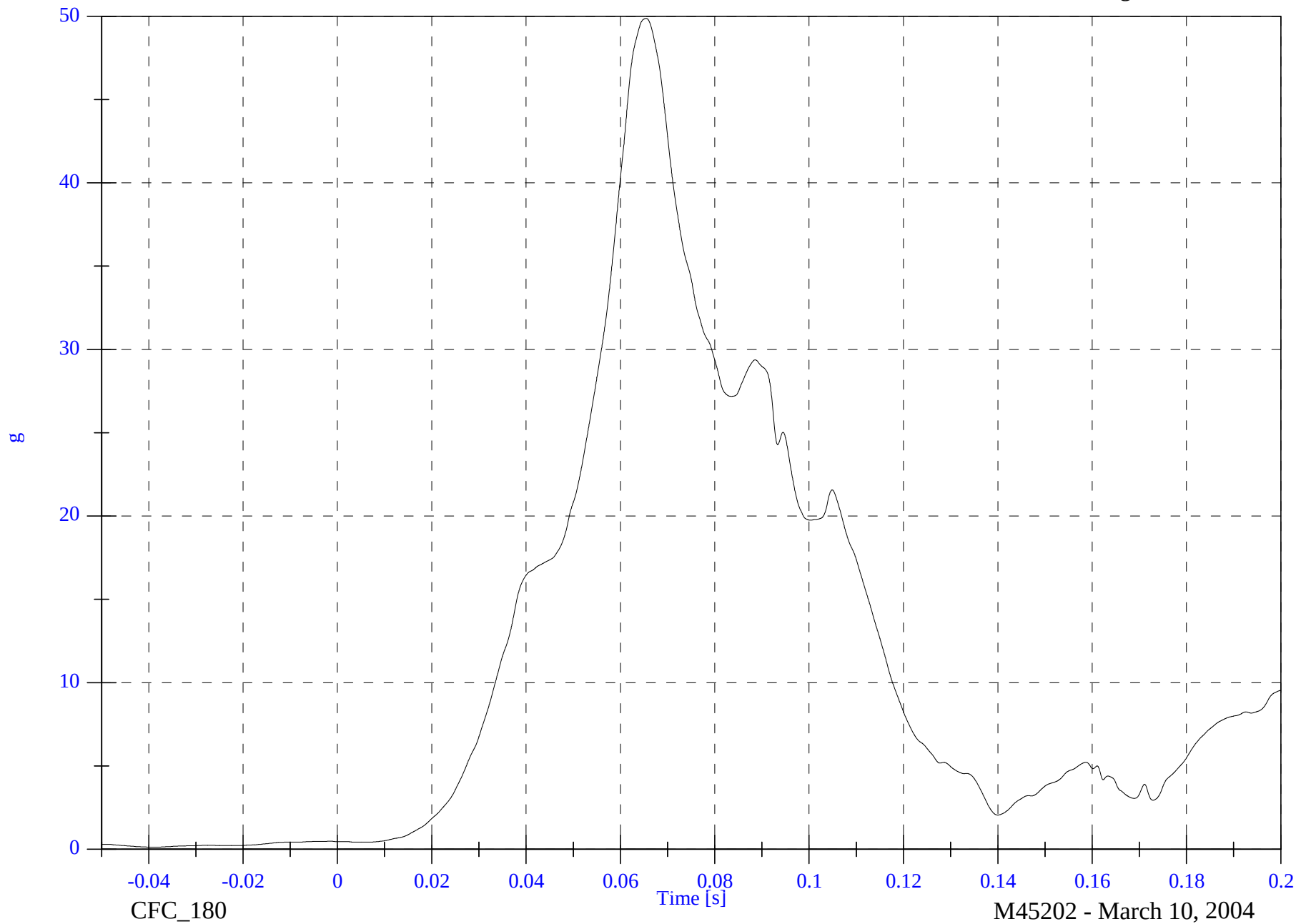
V1P4 Chest Resultant

Max: 49.9 [g] at 0.065 [s]

Min: 0.1 [g] at -0.039 [s]

4-59

8642-NCAP-47

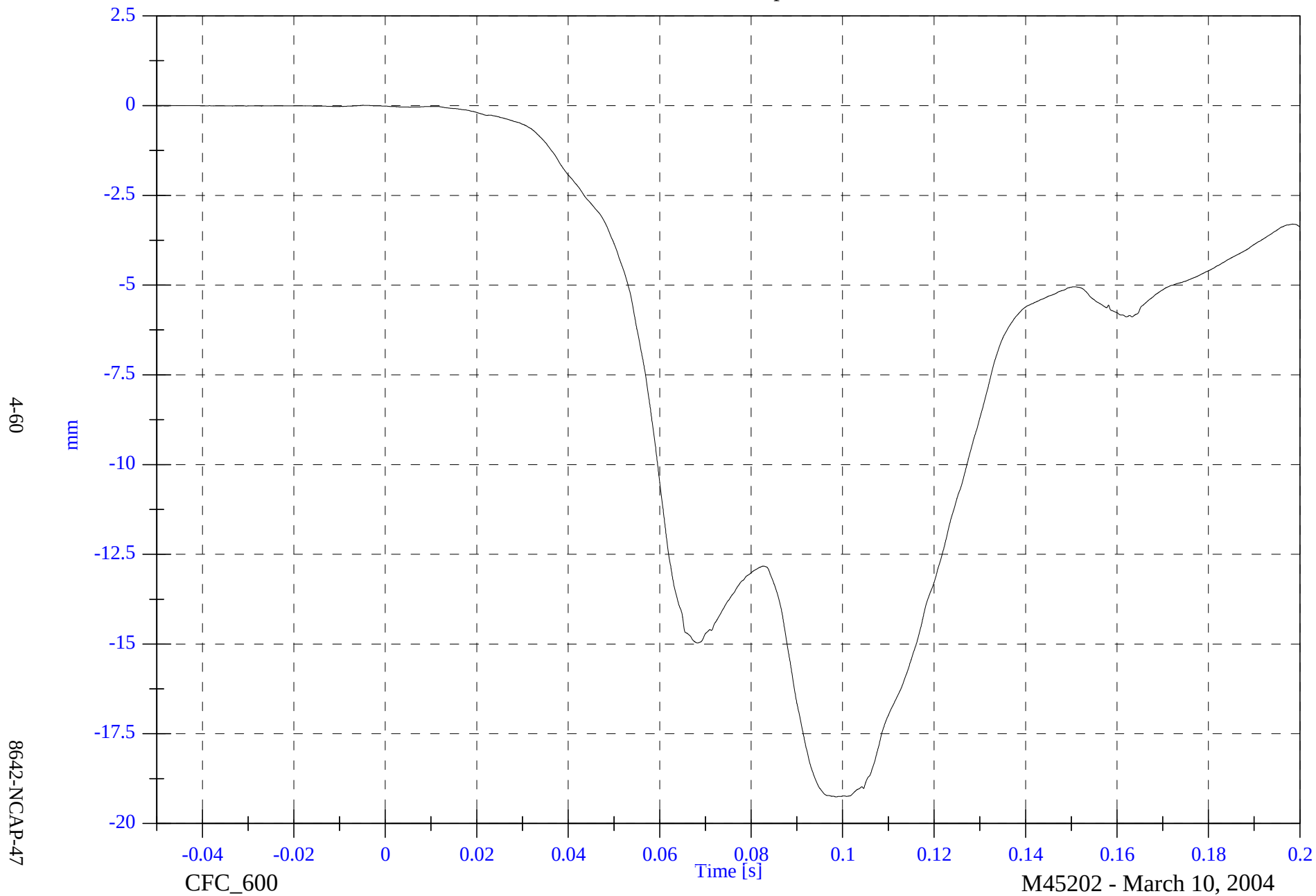


2004 NCAP Test 11 2004 Infiniti FX35/45

V1P4 Chest Compression

Max: 0.0 [mm] at -0.005 [s]

Min: -19.3 [mm] at 0.099 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

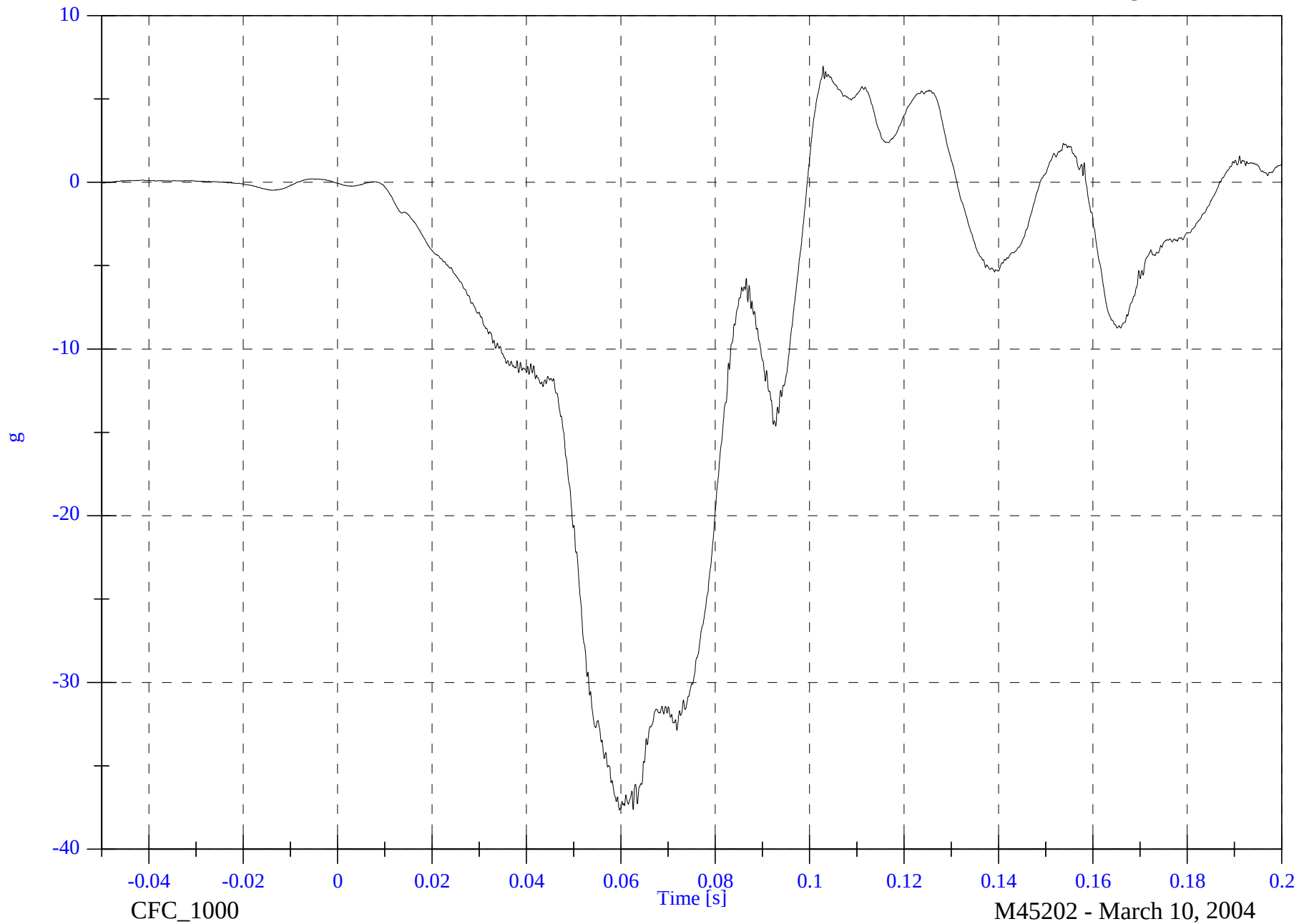
V1P4 Pelvic x

Max: 7.0 [g] at 0.103 [s]

Min: -37.7 [g] at 0.060 [s]

4-61

8642-NCAP-47

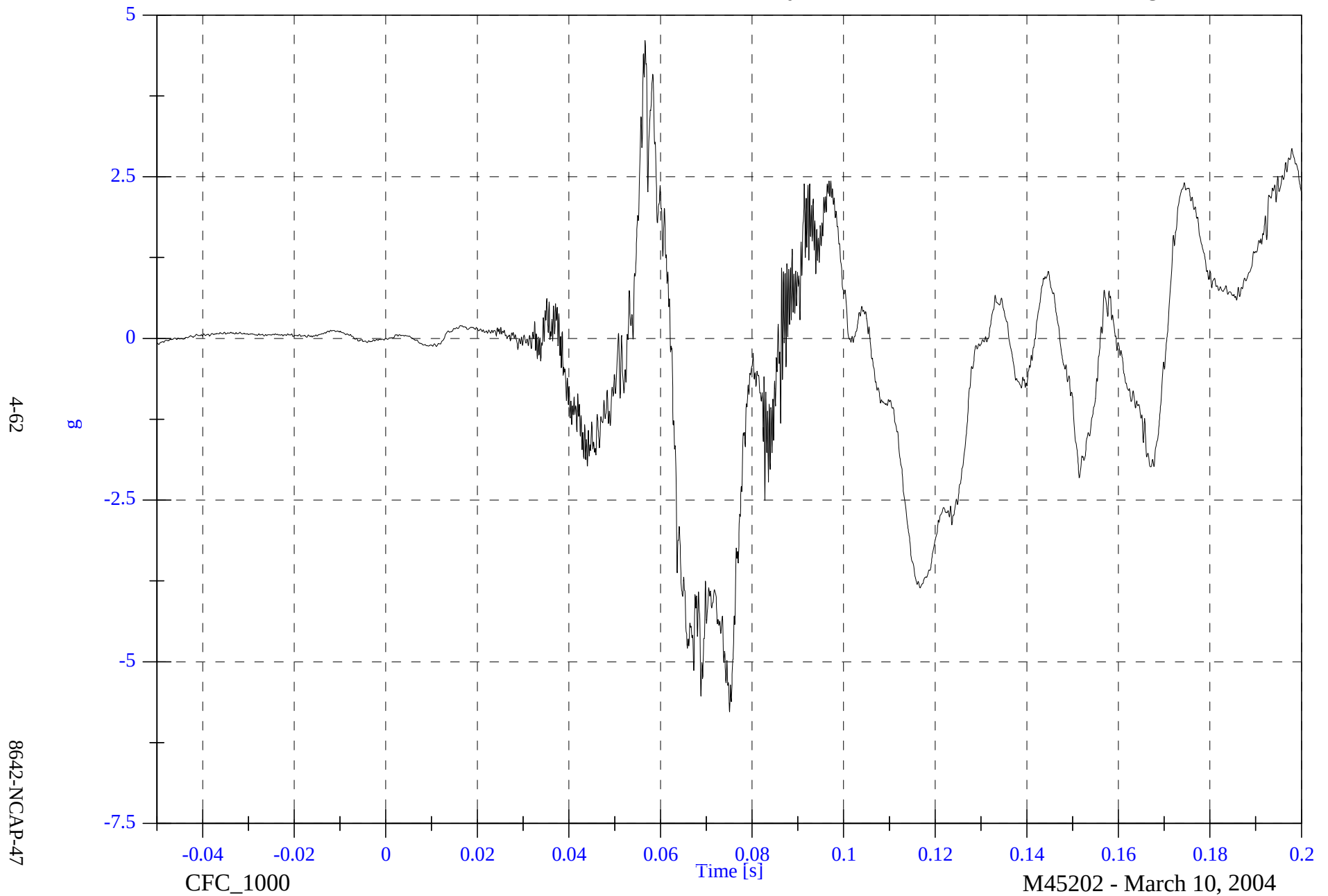


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 4.6 [g] at 0.057 [s]

Min: -5.8 [g] at 0.075 [s]

V1P4 Pelvic y

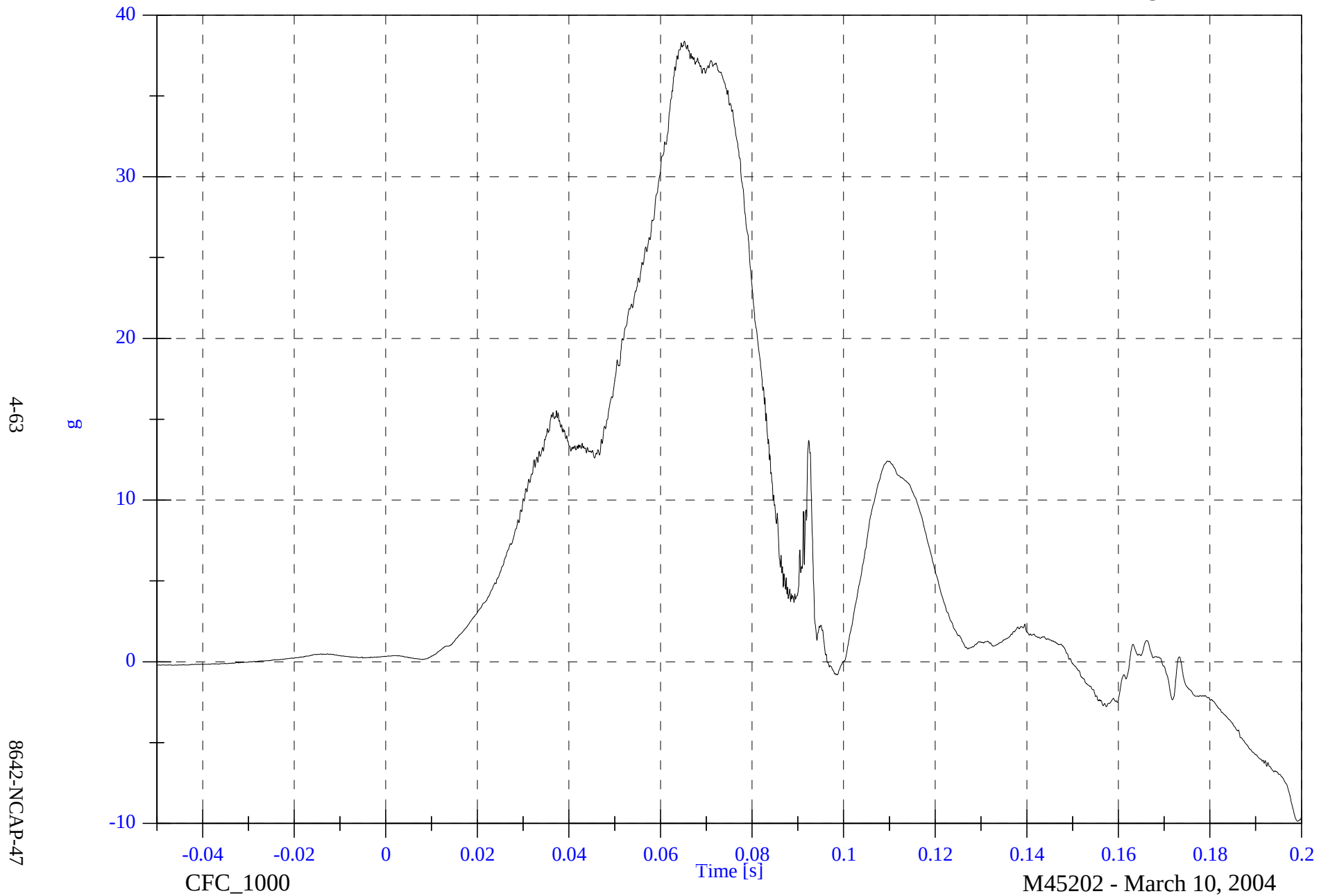


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 38.4 [g] at 0.065 [s]

Min: -9.9 [g] at 0.199 [s]

V1P4 Pelvic z



2004 NCAP Test 11 2004 Infiniti FX35/45

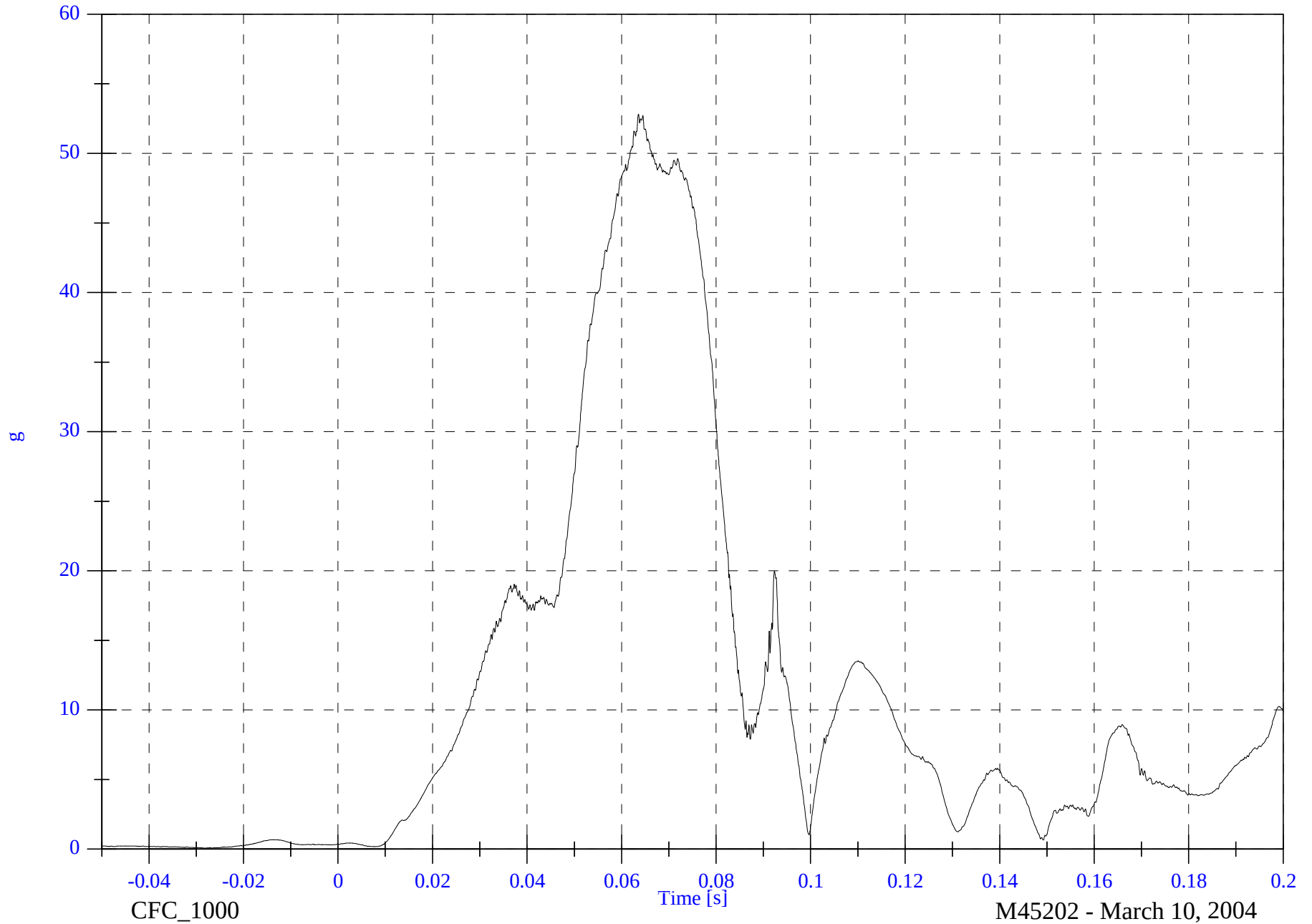
V1P4 Pelvic Resultant

Max: 52.8 [g] at 0.064 [s]

Min: 0.1 [g] at -0.027 [s]

4-64

8642-NCAP-47

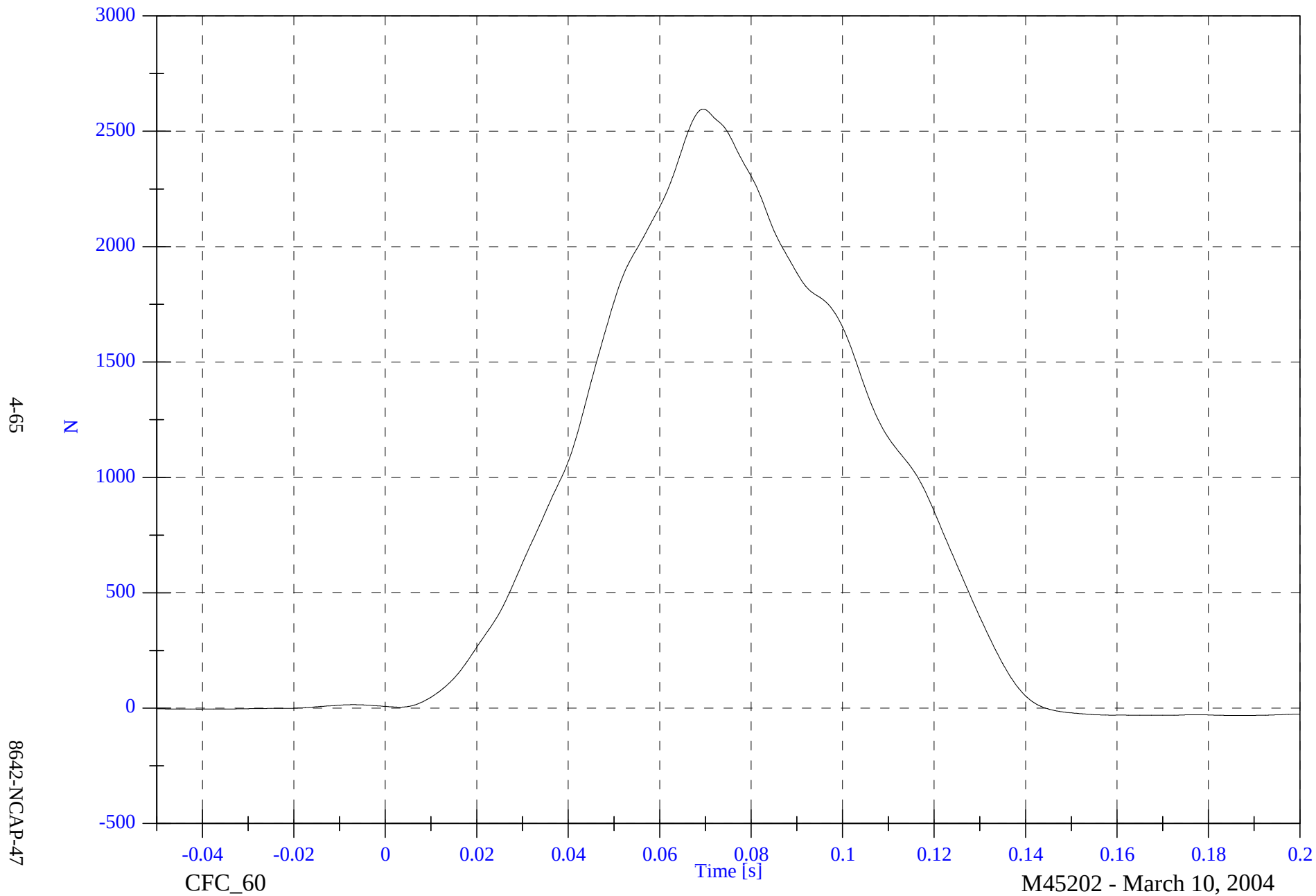


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 Tether Belt

Max: 2595.8 [N] at 0.069 [s]

Min: -32.0 [N] at 0.187 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

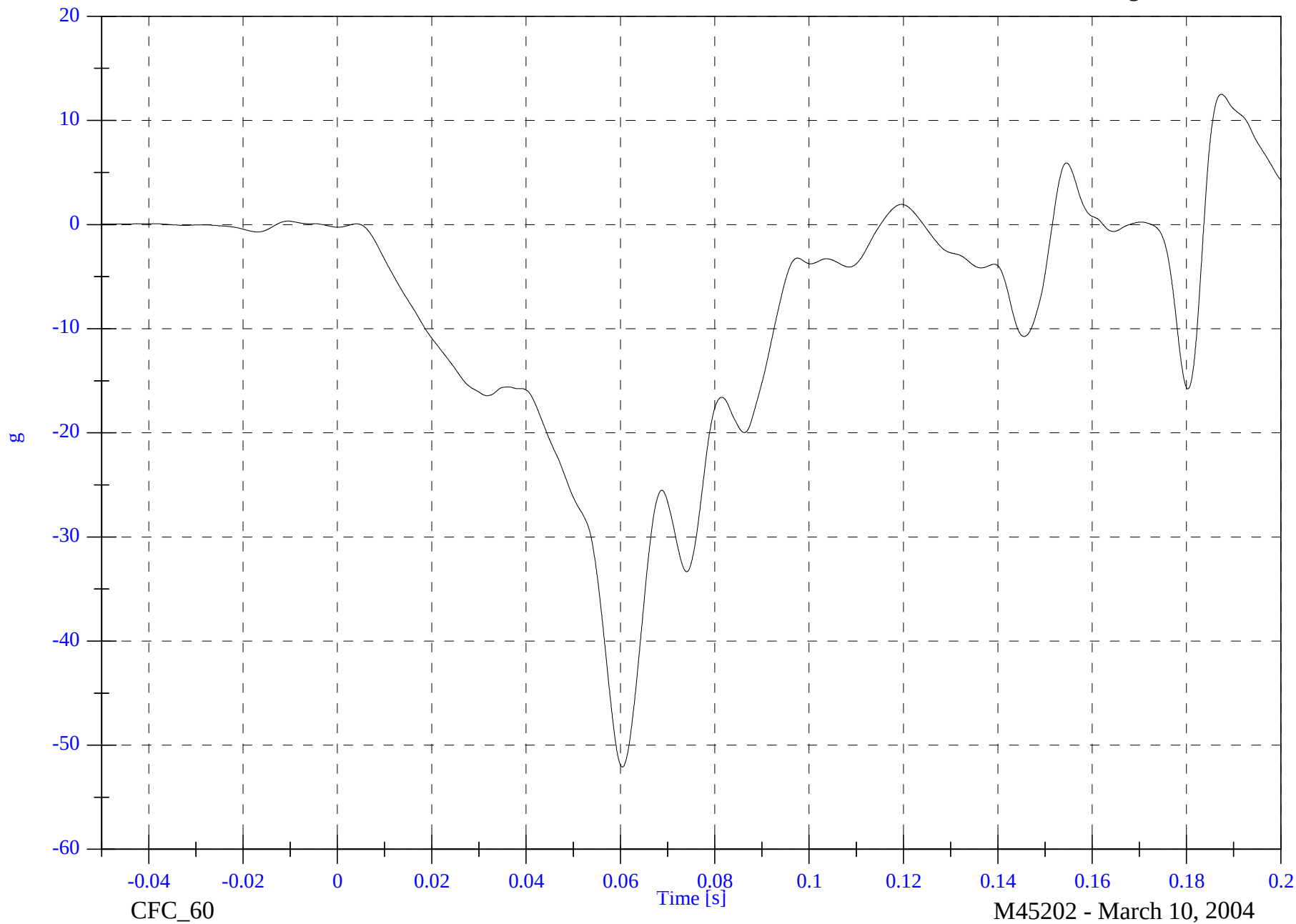
V1 P3 CRS x

Max: 12.5 [g] at 0.187 [s]

Min: -52.1 [g] at 0.060 [s]

4-66

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

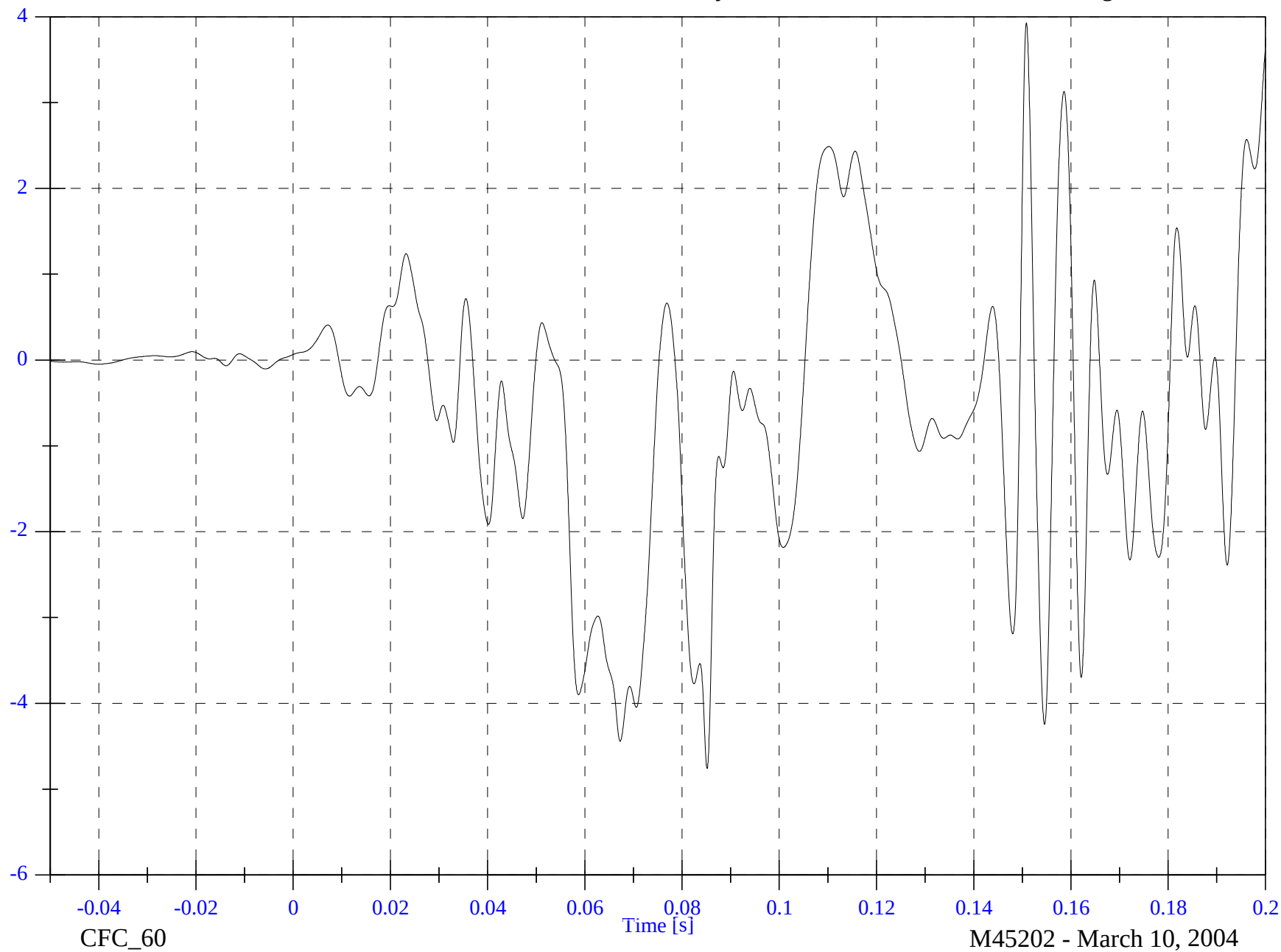
Max: 3.9 [g] at 0.151 [s]

Min: -4.8 [g] at 0.085 [s]

V1 P3 CRS y

4-67

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

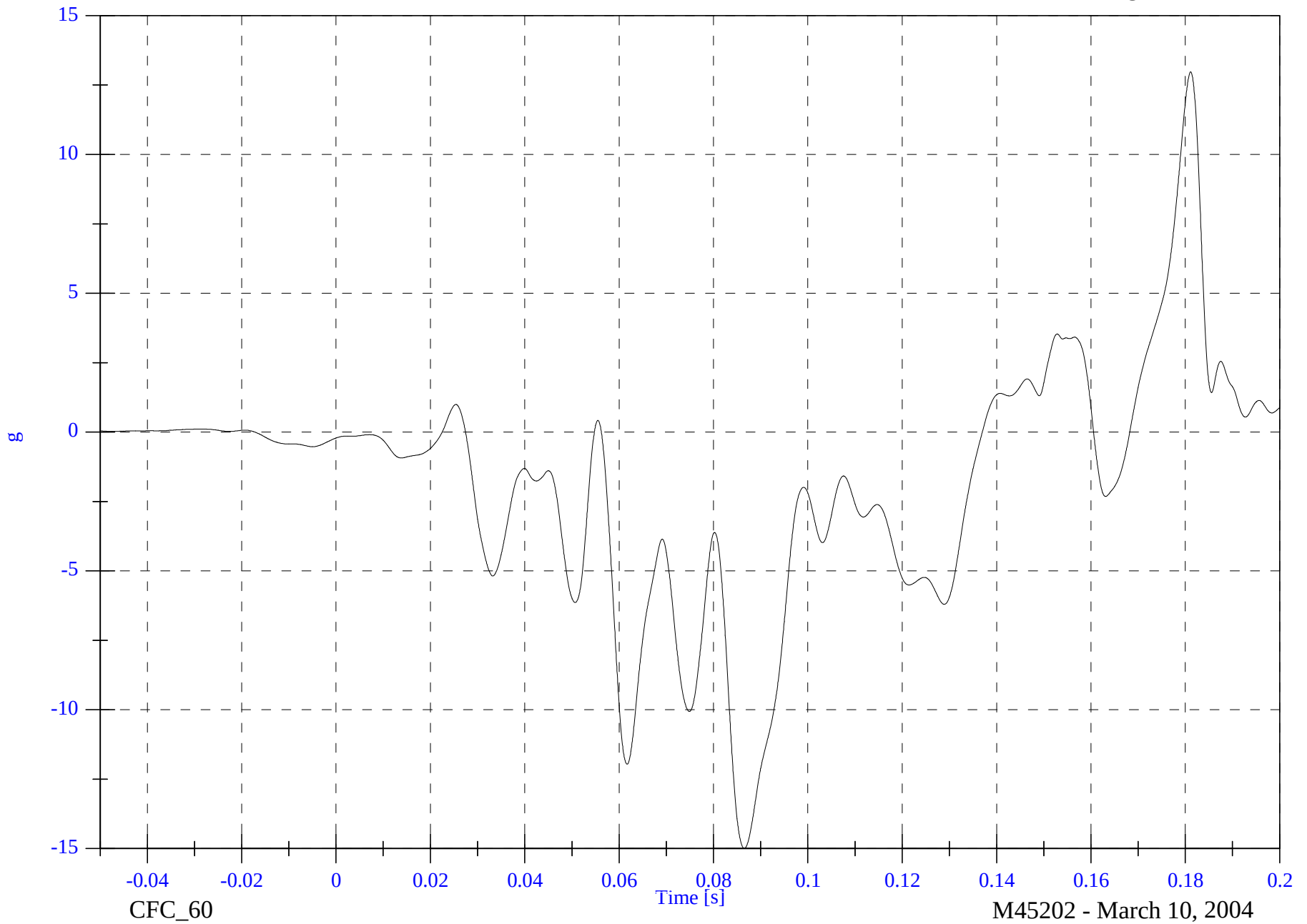
V1 P3 CRS z

Max: 13.0 [g] at 0.181 [s]

Min: -15.0 [g] at 0.087 [s]

4-68

8642-NCAP-47



2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P3 CRS Resultant

Max: 53.3 [g] at 0.061 [s]

Min: 0.1 [g] at -0.036 [s]

4-69

8642-NCAP-47

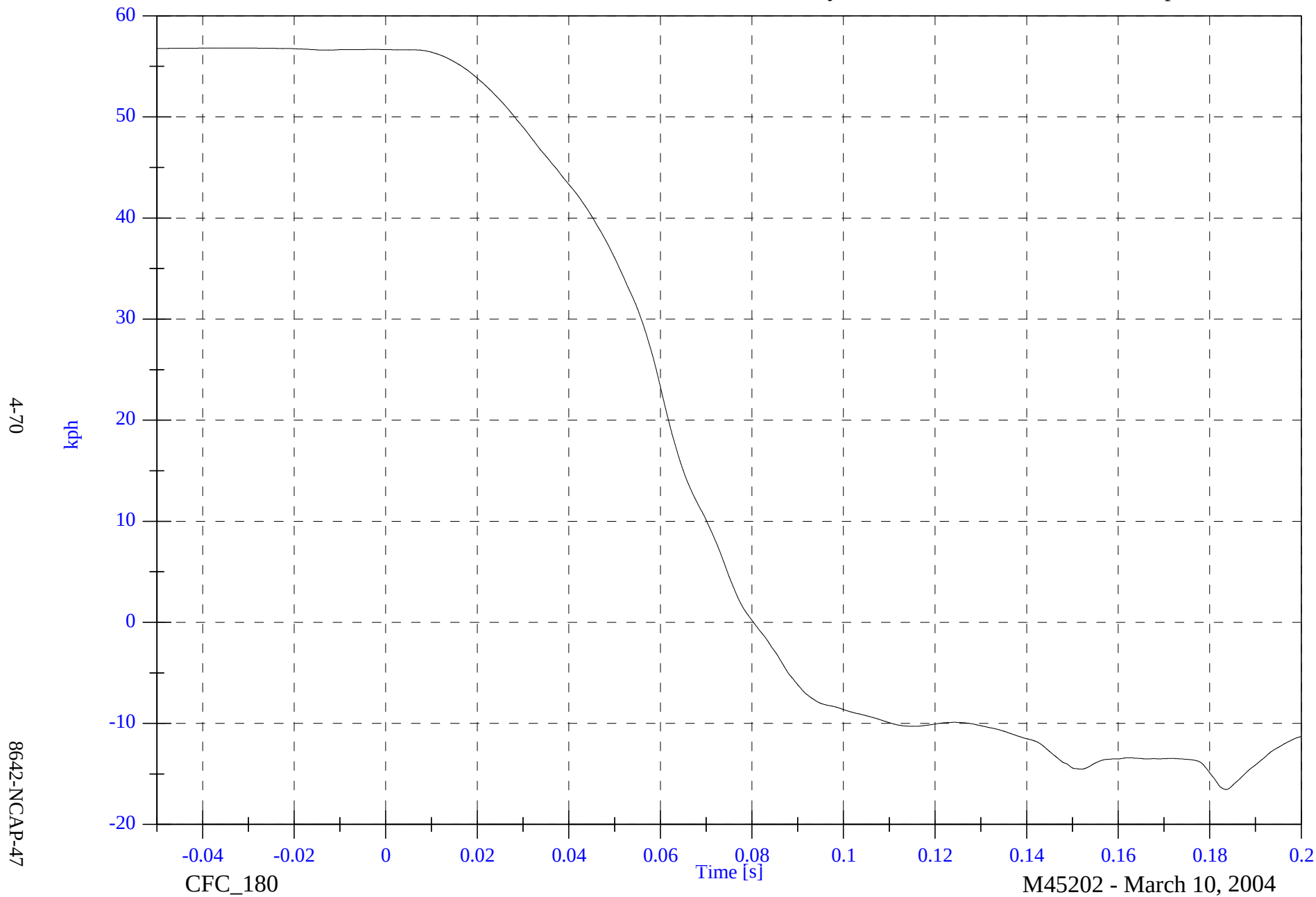


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.8 [kph] at -0.036 [s]

Min: -16.5 [kph] at 0.184 [s]

V1 P3 CRS x Velocity



2004 NCAP Test 11 2004 Infiniti FX35/45

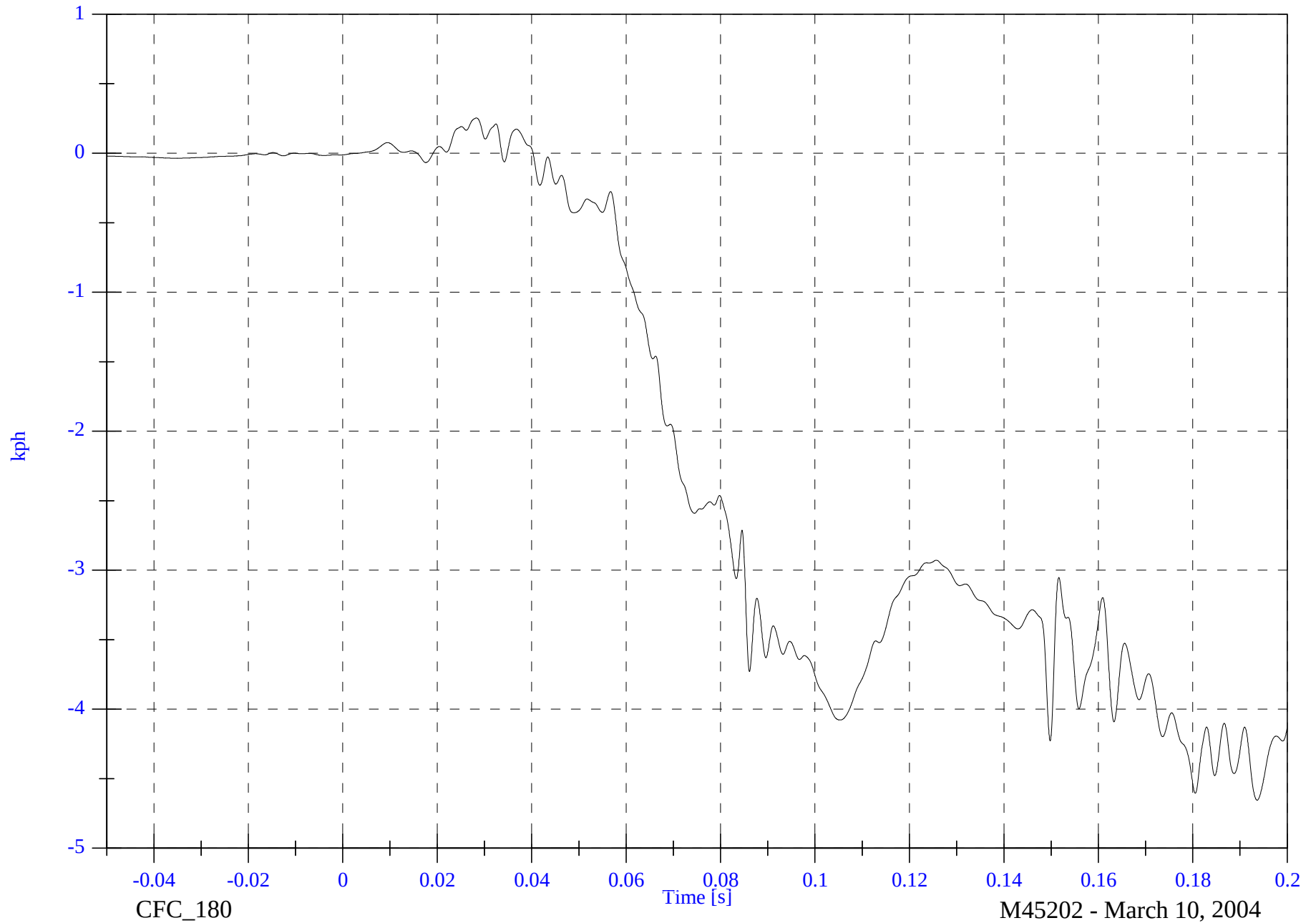
V1 P3 CRS y Velocity

Max: 0.3 [kph] at 0.028 [s]

Min: -4.7 [kph] at 0.194 [s]

4-71

8642-NCAP-47

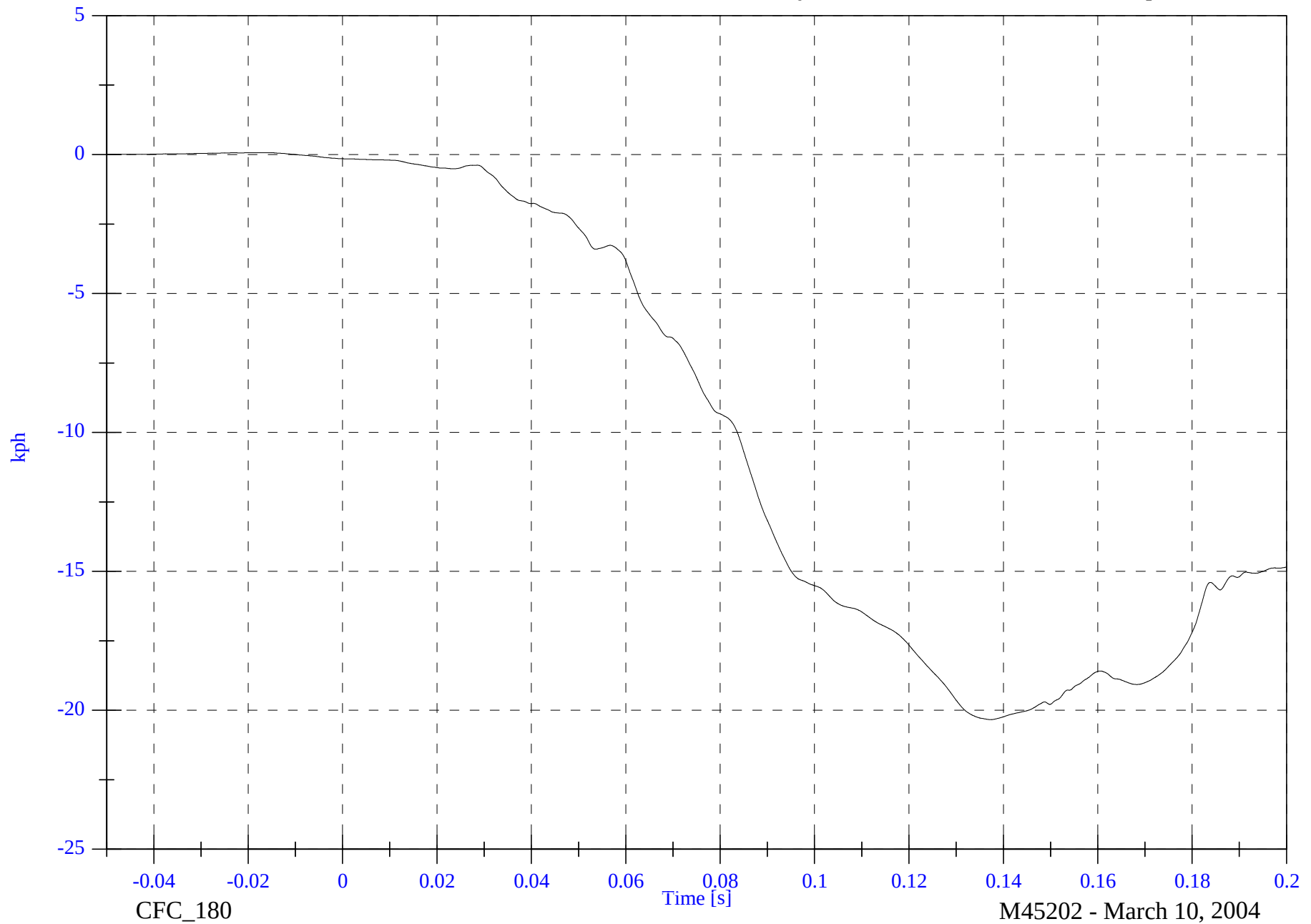


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P3 CRS z Velocity

Max: 0.1 [kph] at -0.018 [s]

Min: -20.3 [kph] at 0.137 [s]



4-72

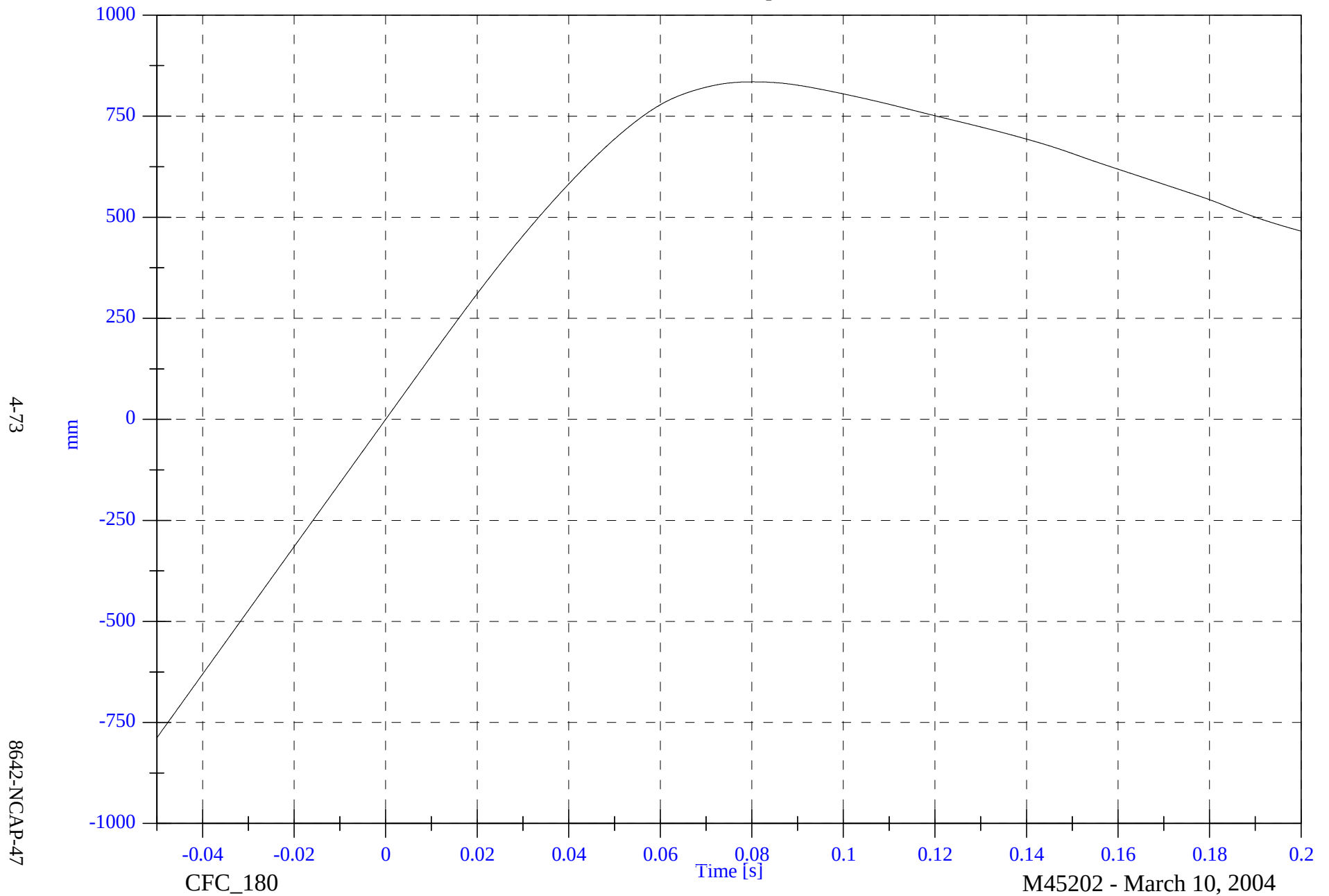
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 835.0 [mm] at 0.080 [s]

Min: -788.1 [mm] at -0.050 [s]

V1 P3 CRS x Displacement



2004 NCAP Test 11 2004 Infiniti FX35/45

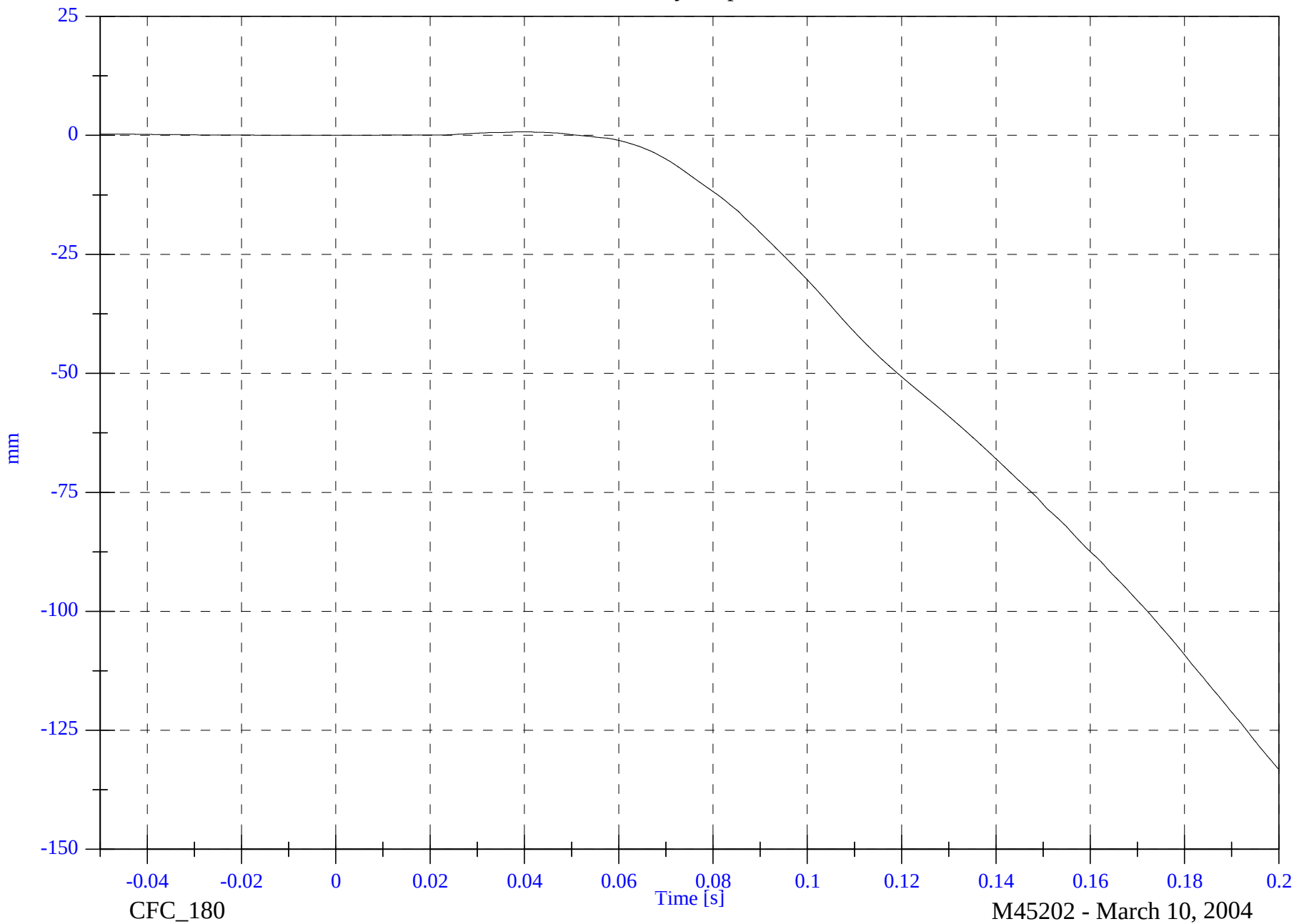
V1 P3 CRS y Displacement

Max: 0.8 [mm] at 0.040 [s]

Min: -133.2 [mm] at 0.200 [s]

4-74

8642-NCAP-47

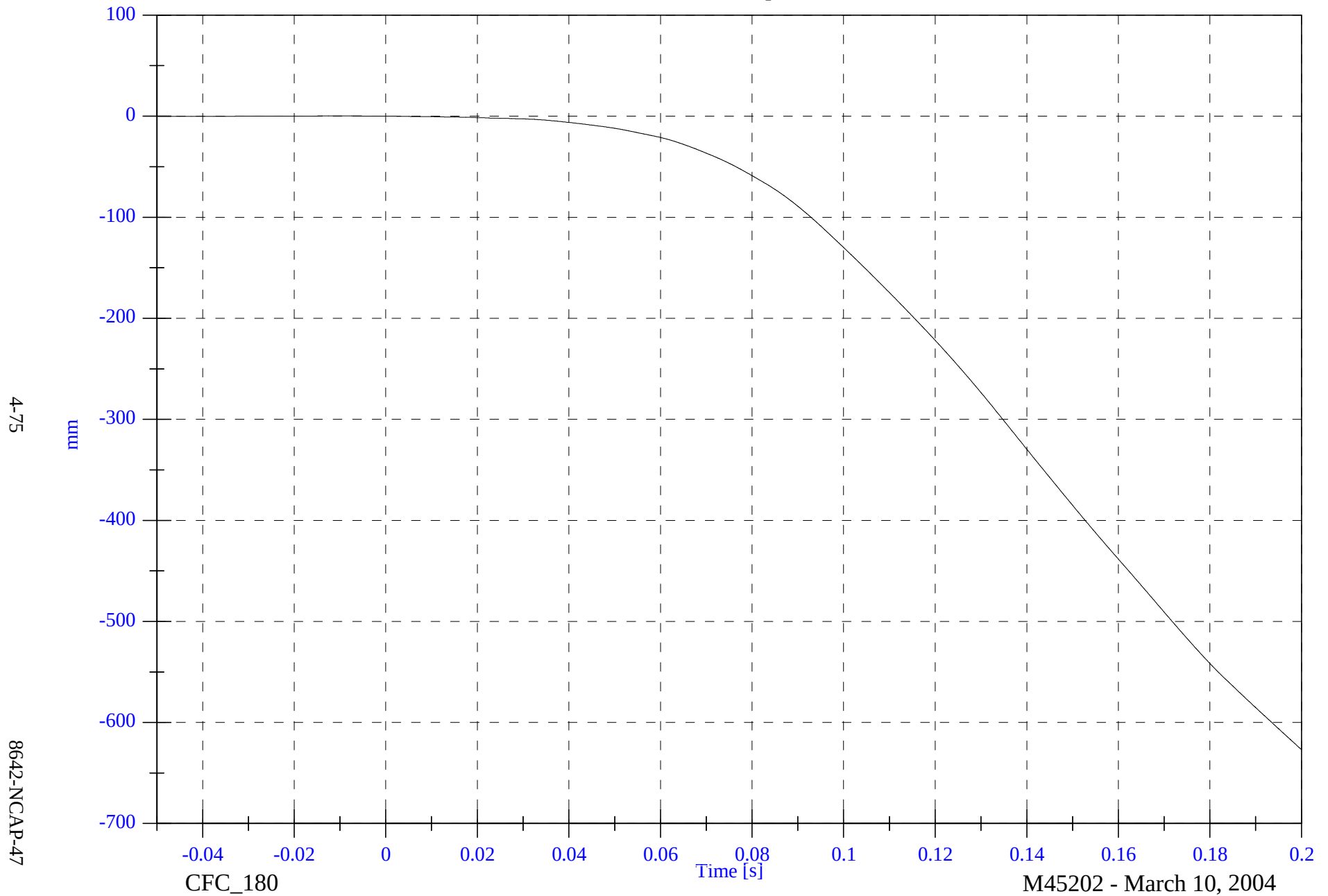


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P3 CRS z Displacement

Max: 0.2 [mm] at -0.010 [s]

Min: -626.7 [mm] at 0.200 [s]

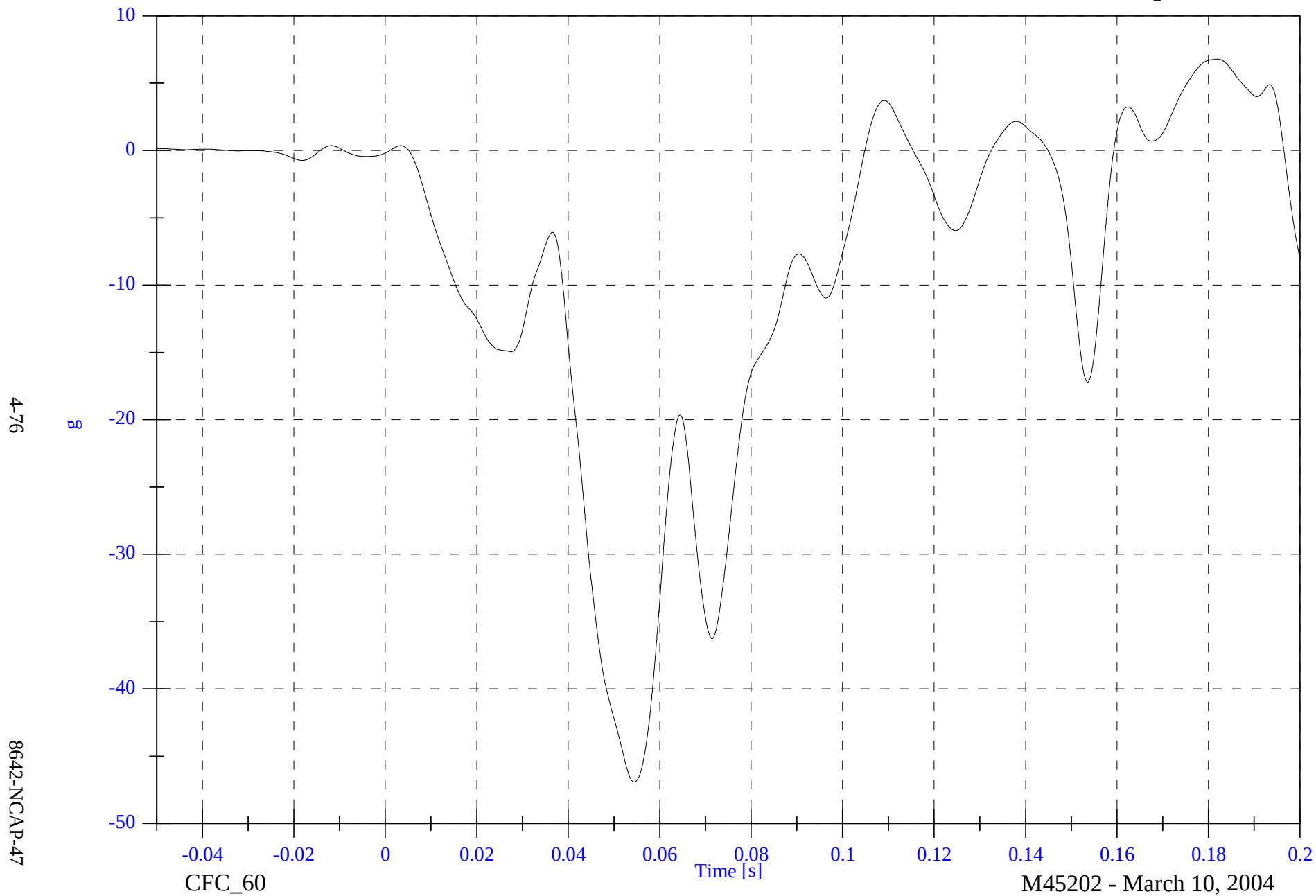


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS x

Max: 6.8 [g] at 0.182 [s]

Min: -46.9 [g] at 0.054 [s]

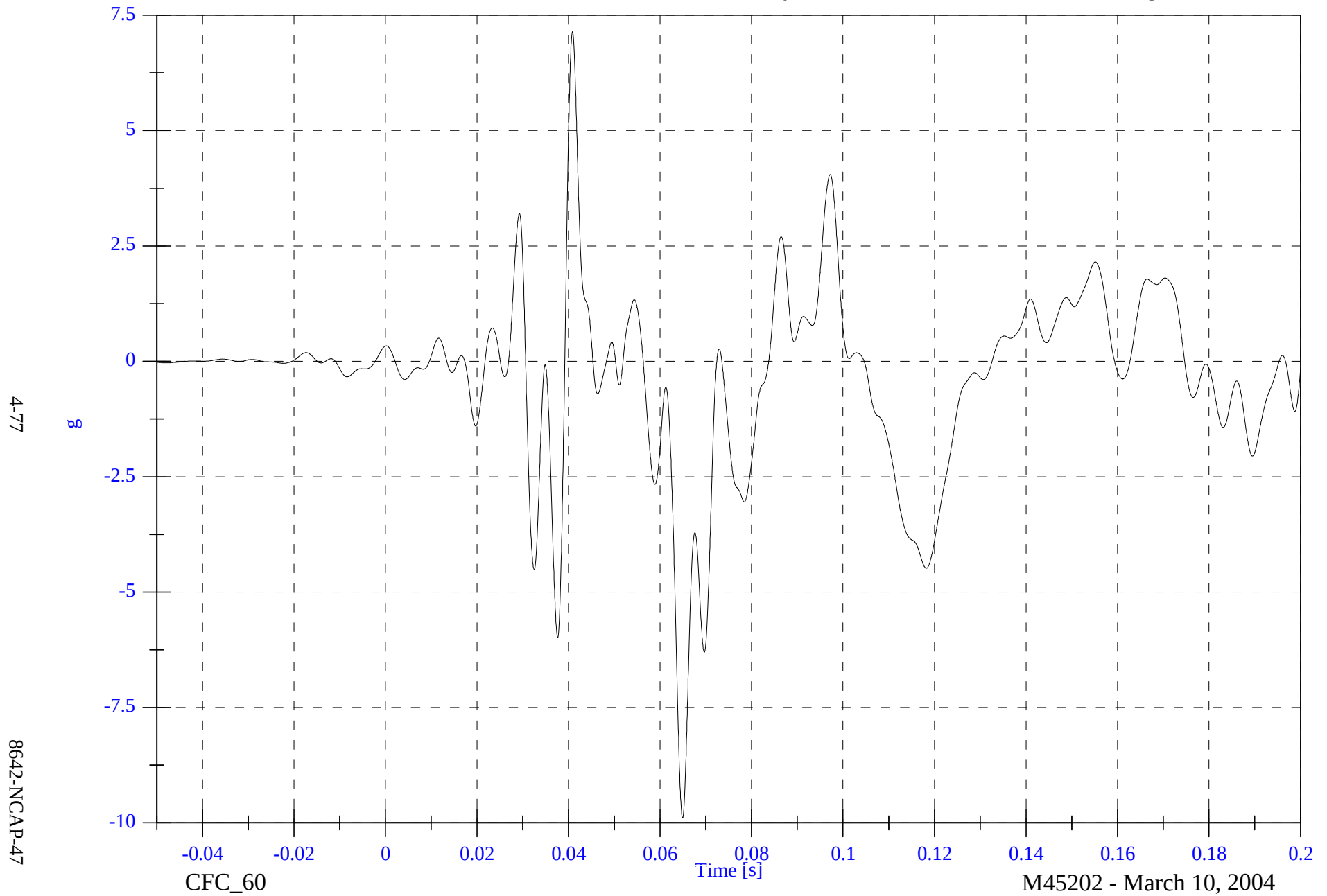


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 7.1 [g] at 0.041 [s]

Min: -9.9 [g] at 0.065 [s]

V1 P4 CRS y



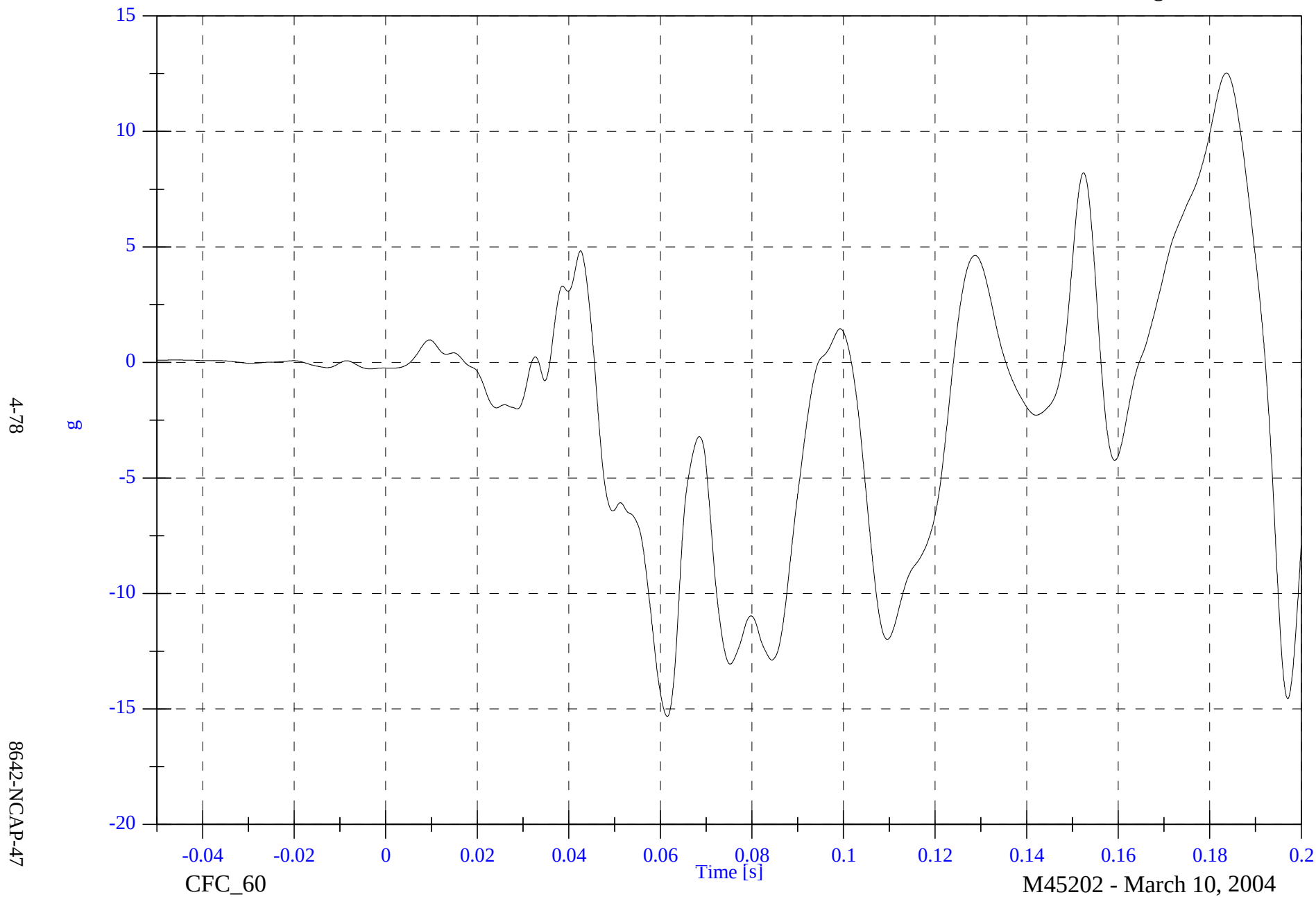
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS z

Max: 12.5 [g] at 0.184 [s]

Min: -15.3 [g] at 0.061 [s]



2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS Resultant

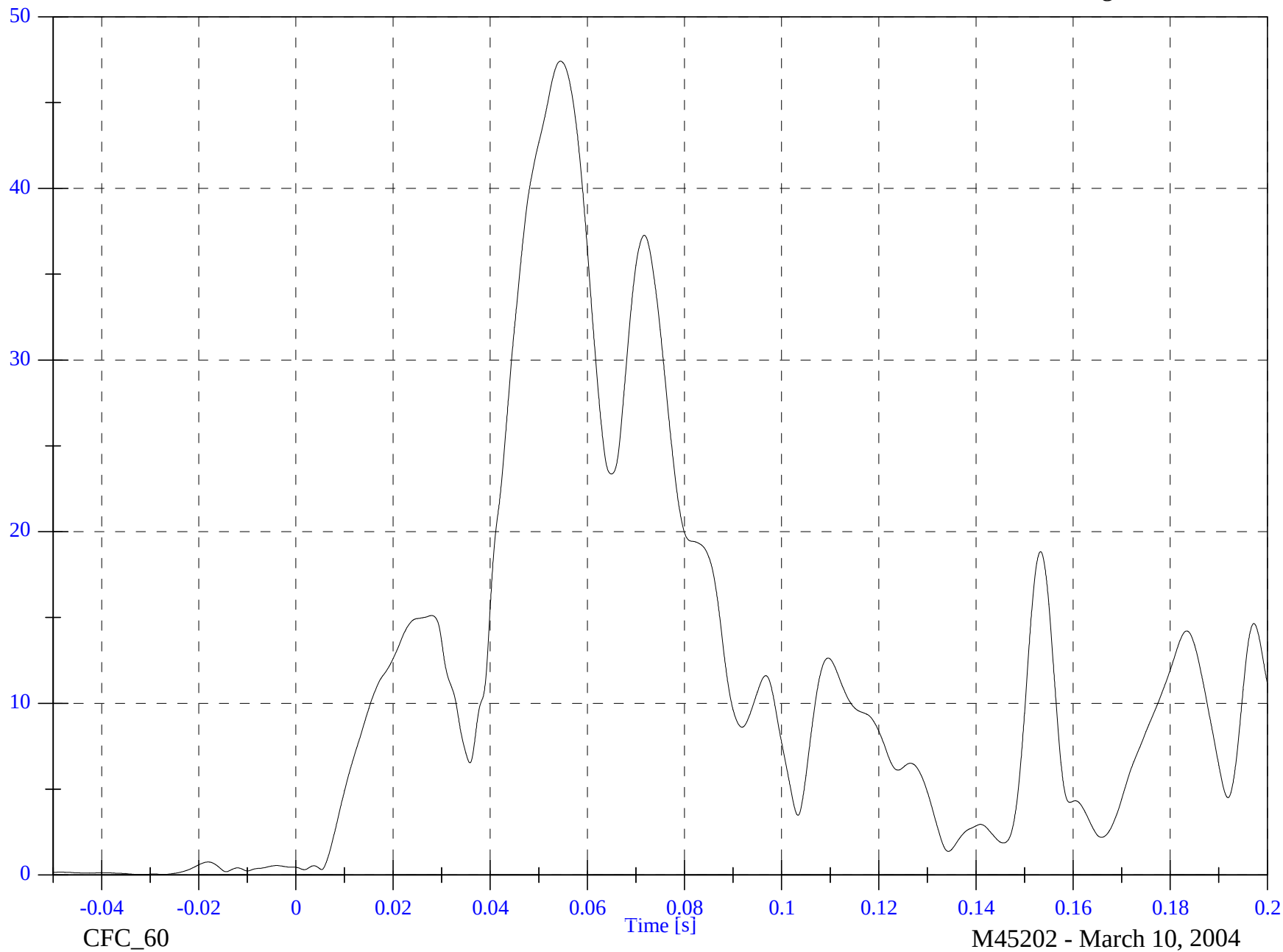
Max: 47.4 [g] at 0.054 [s]

Min: 0.0 [g] at -0.032 [s]

4-79

8642-NCAP-47

g

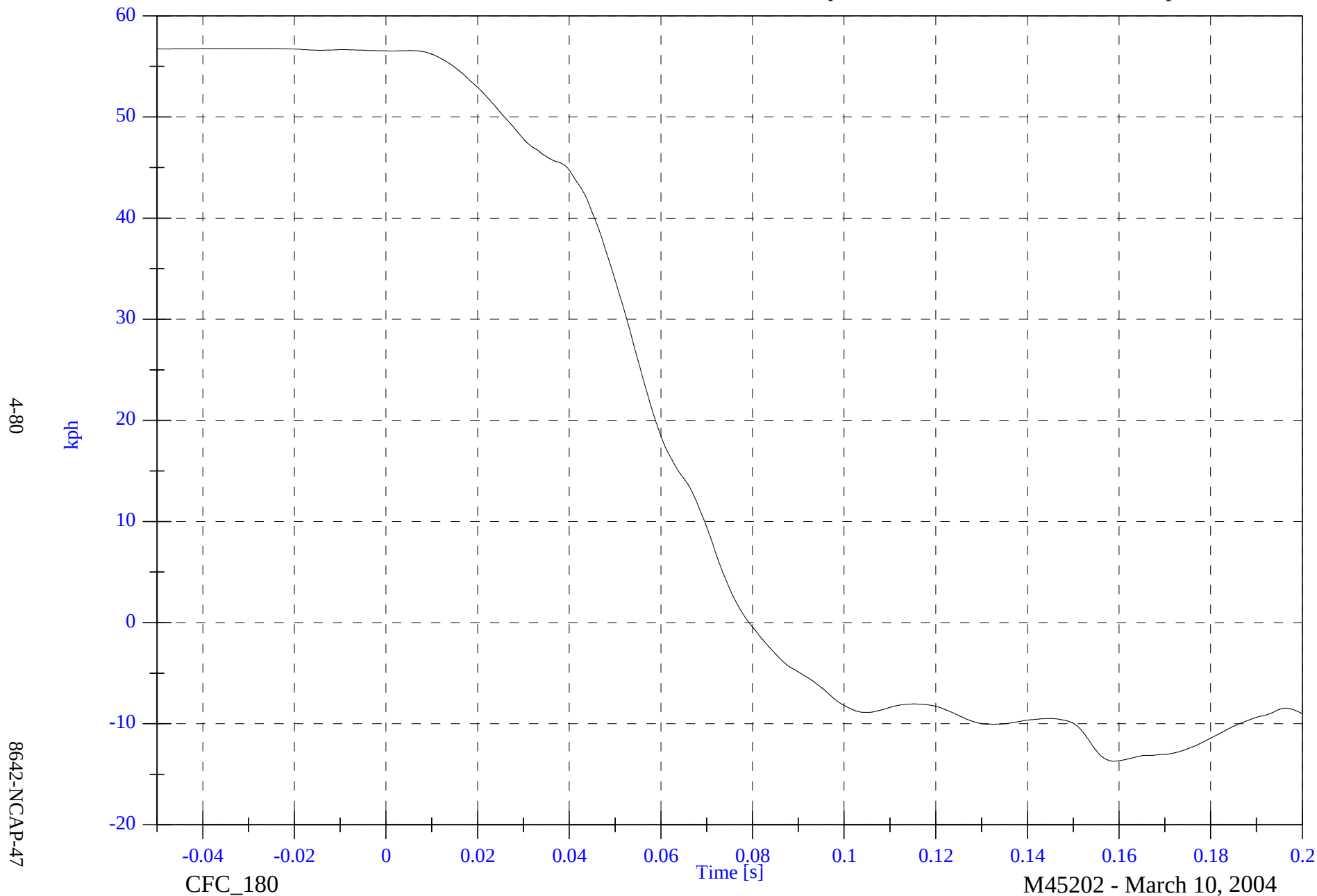


2004 NCAP Test 11 2004 Infiniti FX35/45

Max: 56.8 [kph] at -0.035 [s]

Min: -13.7 [kph] at 0.159 [s]

V1 P4 CRS x Velocity

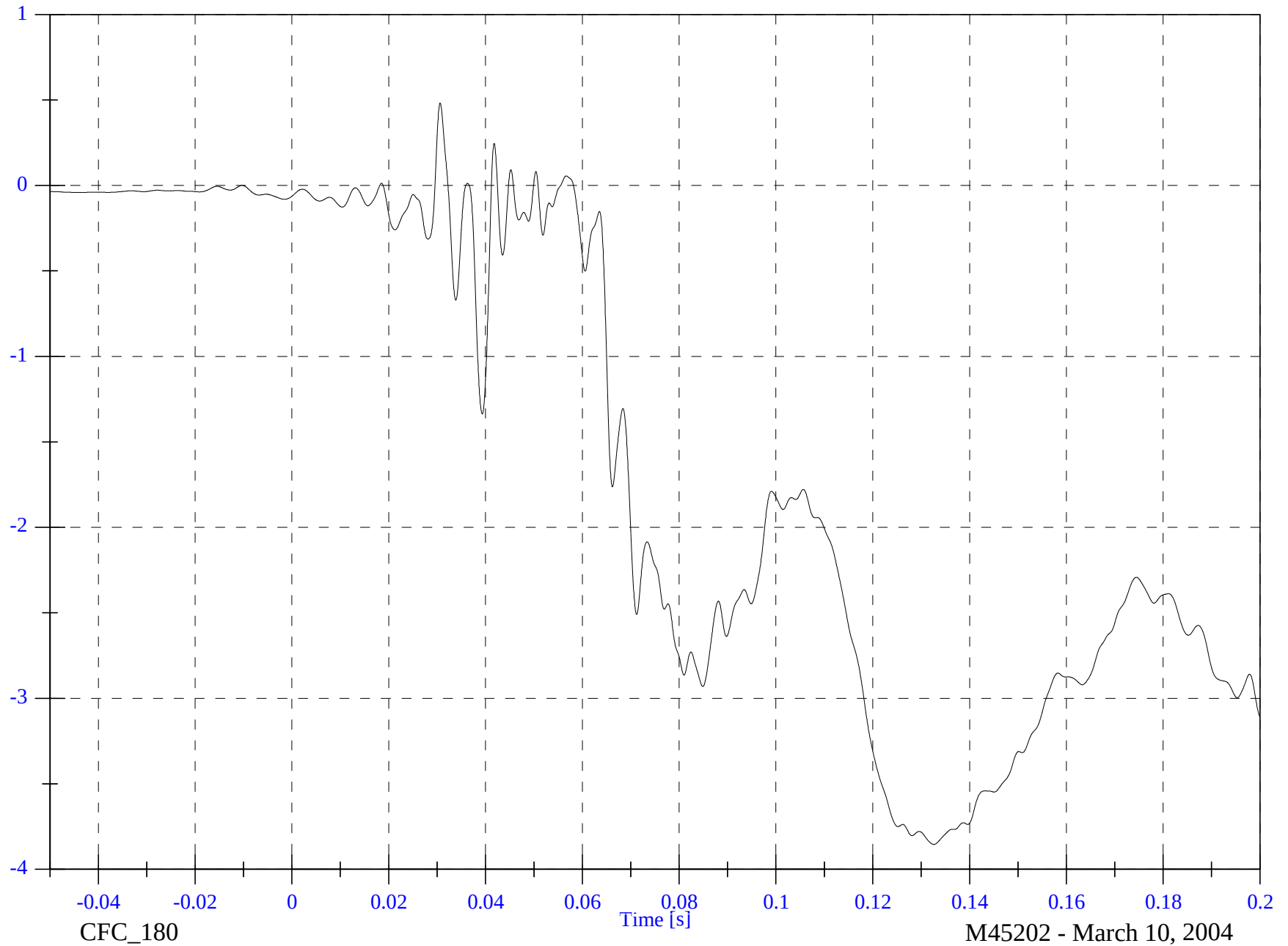


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS y Velocity

Max: 0.5 [kph] at 0.031 [s]

Min: -3.9 [kph] at 0.133 [s]



4-81

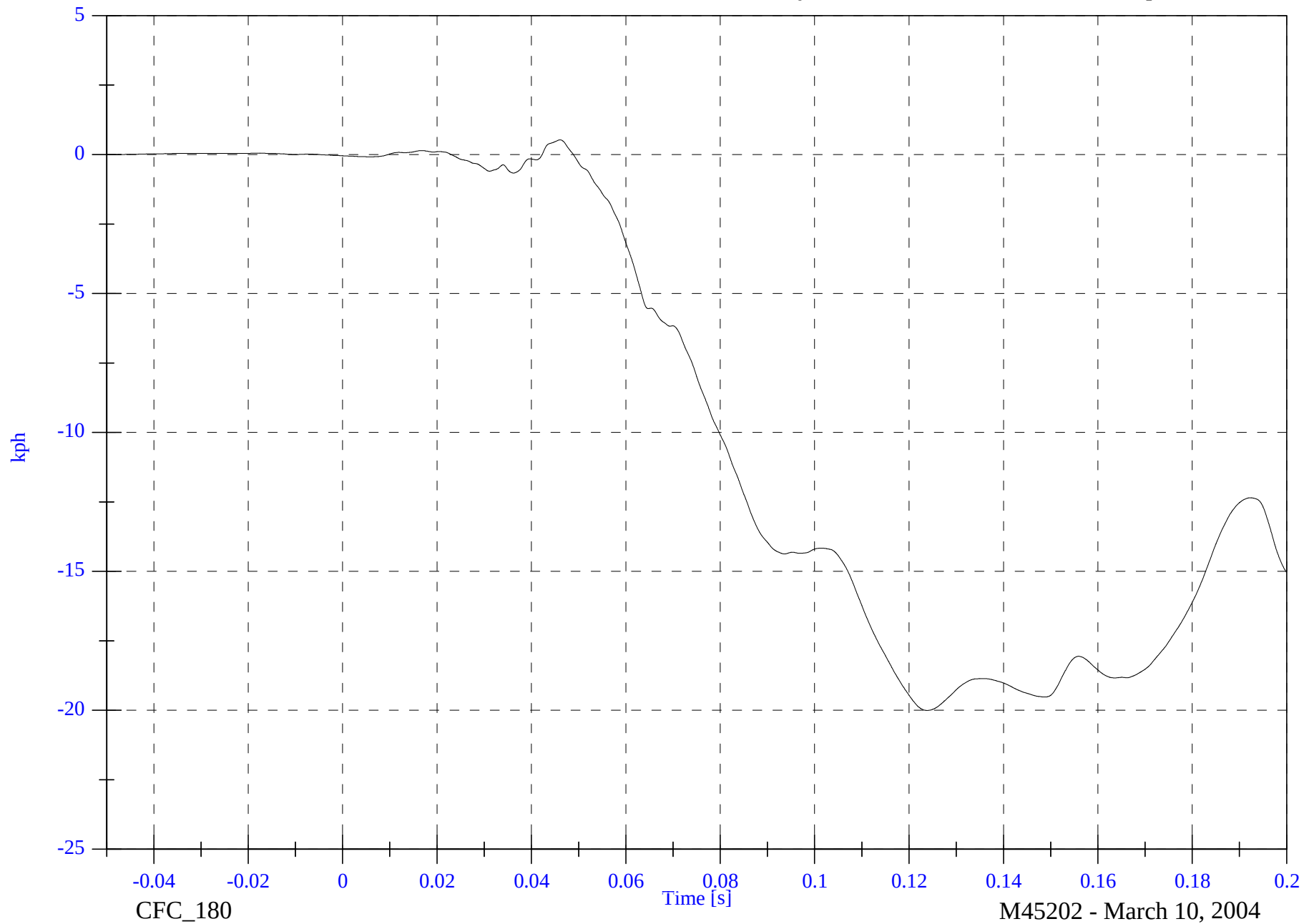
8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS z Velocity

Max: 0.5 [kph] at 0.046 [s]

Min: -20.0 [kph] at 0.124 [s]



4-82

8642-NCAP-47

2004 NCAP Test 11 2004 Infiniti FX35/45

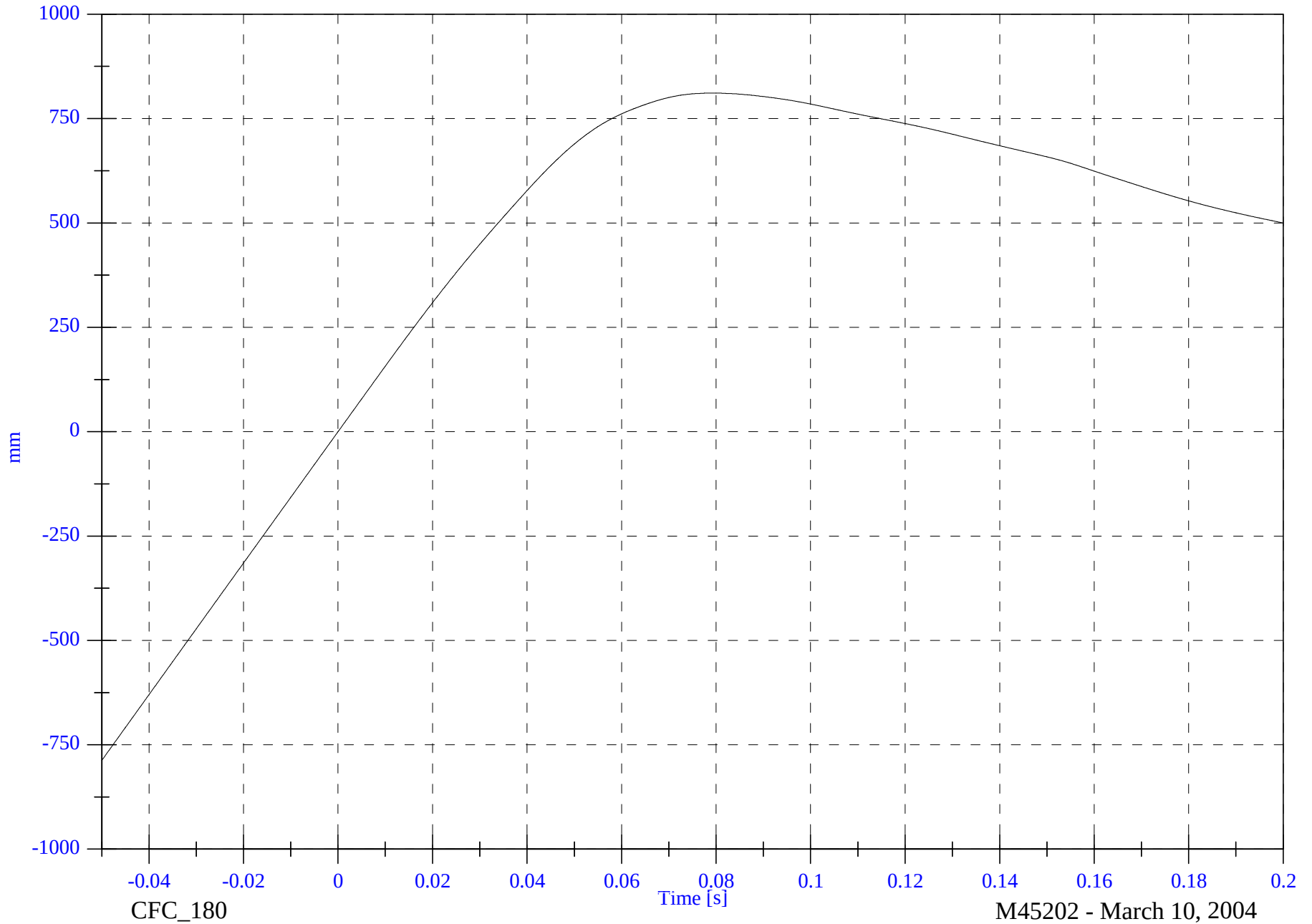
V1 P4 CRS x Displacement

Max: 811.0 [mm] at 0.079 [s]

Min: -787.5 [mm] at -0.050 [s]

4-83

8642-NCAP-47

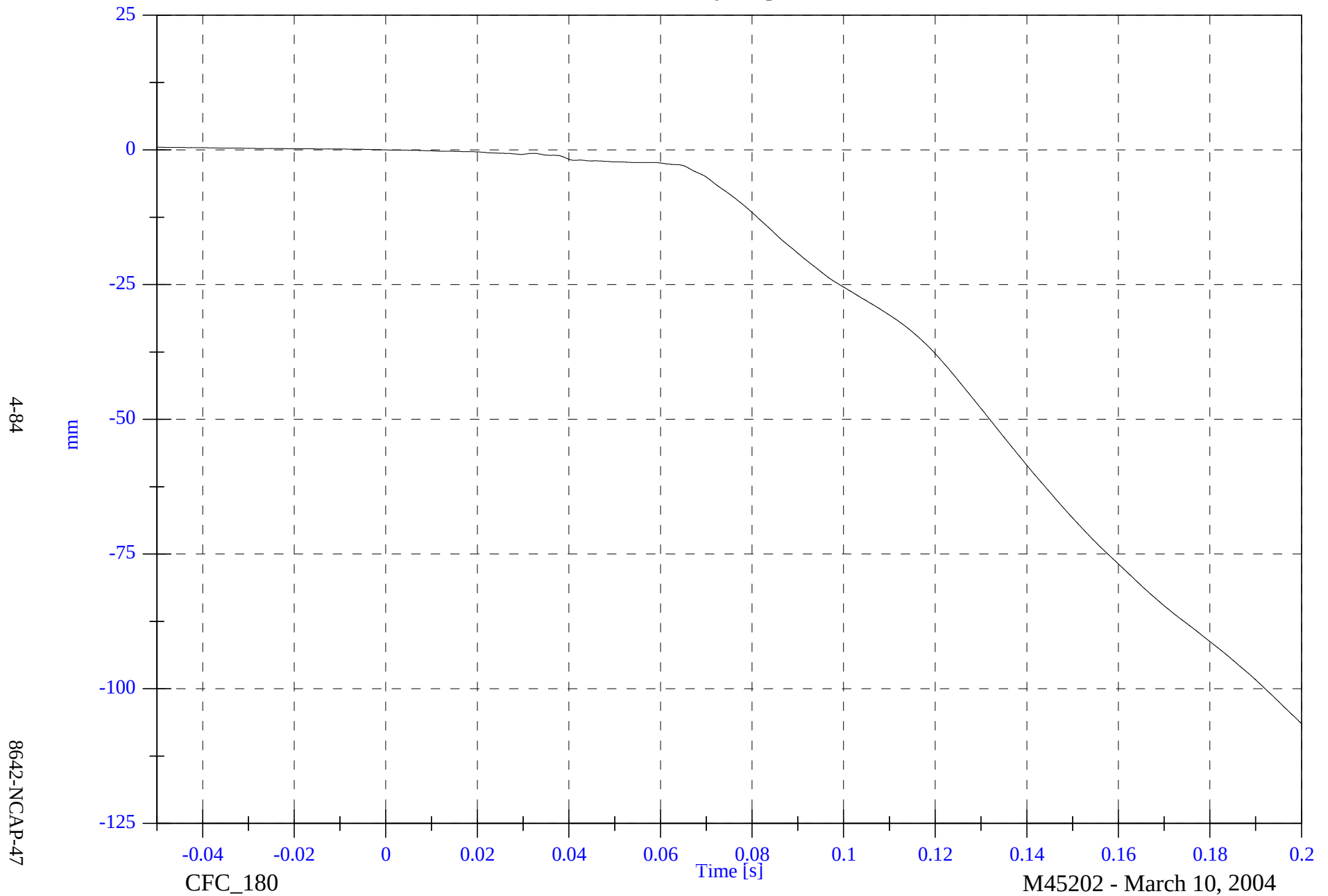


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS y Displacement

Max: 0.5 [mm] at -0.050 [s]

Min: -106.4 [mm] at 0.200 [s]

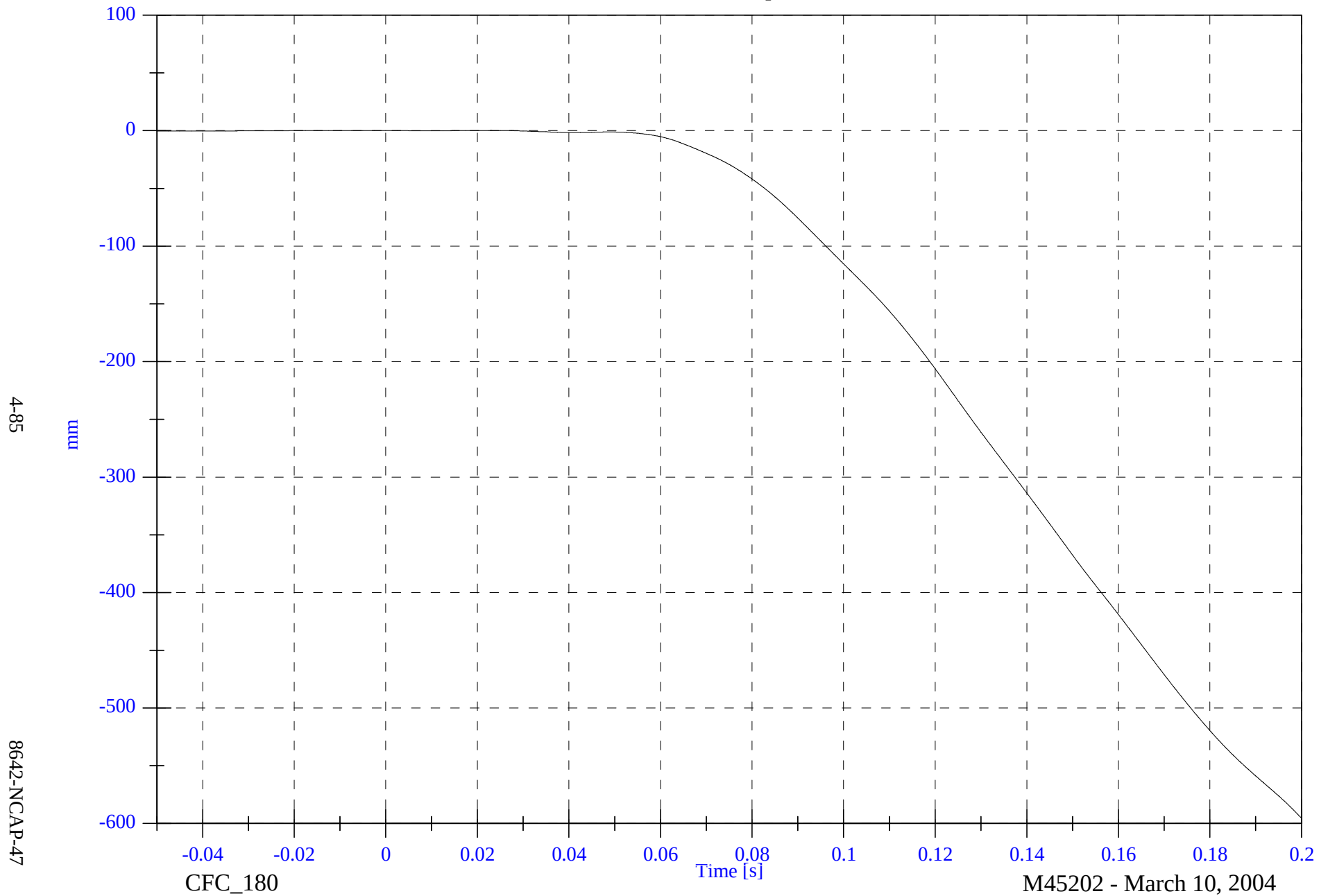


2004 NCAP Test 11 2004 Infiniti FX35/45

V1 P4 CRS z Displacement

Max: 0.2 [mm] at 0.023 [s]

Min: -595.2 [mm] at 0.200 [s]



SECTION 5

CHILD DUMMY CALIBRATION INFORMATION

PART 572P
HEAD DROP TEST

Dummy Serial Number 044
Sequential Test Number 1
Date 01-21-2004
Workfile 044H 01-21-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	66-78 Deg F	70.0 F
Relative Humidity	10% - 70%	35.00 %
Peak Resultant Acceleration	250-280 G's	271.45 Gs
Peak Lateral Acceleration	15 G's Max	6.74 Gs
Is Acceleration Curve Unimodal?	<10%	4.71 %

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
NECK FLEXION TEST

Dummy Serial Number 044
Sequential Test Number 1
Date 10-22-03
Workfile 044NF 10-22-03

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		20.6 – 22.2 Deg C	21.11
Relative Humidity		10% - 70%	38.00
Pendulum Speed		5.40-5.60 m/s	5.46
Pendulum Pulse	10 ms	2.00 – 2.70 m/s	2.14
	15 ms	3.00 – 4.00 m/s	3.13
	20 ms	4.00 – 5.10 m/s	4.30
D Plane Rotation	Max	70.0 – 82.0 Deg	75.72
Maximum Occipital Moment		42.00 - 53.00 N-m	52.40
Occipital Moment Decay		60.0 - 80.0 ms	74.60

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
NECK EXTENSION TEST

Dummy Serial Number 044
 Sequential Test Number 2
 Date 10-22-03
 Workfile 044NE2 10-22-03

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		20.6 – 22.2 Deg C	21.11
Relative Humidity		10% - 70%	38.00
Pendulum Speed		3.55 – 3.75 m/s	3.72
Pendulum Pulse	10 ms	1.00 – 1.40 m/s	1.05
	15 ms	1.90 – 2.50 m/s	1.98
	20 ms	2.80 – 3.50 m/s	2.82
D Plane Rotation	Max	83.0 – 93.0 Deg	85.02
Maximum Occipital Moment		-53.30 - -43.70 N-m	-45.28
Occipital Moment Decay		60.0 - 80.0 ms	67.60

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
THORAX IMPACT TEST

Dummy Serial Number 044
Sequential Test Number 3
Date 01-22-2004
Workfile 044T3 01-22-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	69-72 Deg F	70.0 F
Relative Humidity	10% - 70%	35.00 %
Pendulum Velocity	19.40 – 20.00 Ft/s	19.67 ft/s
Maximum Deflection	1.30 – 1.50 in	1.35 in
Maximum Resistive Force	152.90 – 182.10 Lbs	168.03 lbf
Internal Hysteresis	65 - 85 %	72.89 %
Sternum Force Criteria	193.30 lbf	186.73 lbf

Remarks:

Laboratory Technician:

_____ B. Swiecicki

PART 572P
EXTERNAL DIMENSIONS

Dummy Serial Number 044
Sequential Test Number 1
Date 10-22-2003

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Total Sitting Height	A	21.2 – 21.8 in	21.4
Shoulder Pivot Height	B	12.1 - 12.7 in	12.4
H-Point Height	C	1.35 – 1.75 in	1.57
H-Point from Backline	D	2.24 – 2.64 in	2.76
Shoulder Pivot from Backline	E	2.40 – 2.80 in	2.76
Thigh Clearance	F	3.19 – 3.59 in	3.27
Back of Elbow to Fingertip	G	9.74 – 10.34 in	10.04
Head back from Backline	H	1.9 – 2.3 in	2.17
Shoulder - Elbow Length	I	7.3 – 7.9 in	7.87
Elbow Rest Height	J	5.26 – 5.86 in	5.31
Buttock to Knee Length	K	11.21 – 11.81 in	11.41
Popliteal Height	L	8.60 – 9.20 in	8.86
Knee Pivot Height	M	9.51 – 10.11 in	9.84
Buttock Popliteal Length	N	8.58 - 9.18 in	8.86
Chest Depth with Jacket	O	5.45 - 6.05 in	5.98
Foot Length	P	5.42 – 5.82 in	5.47
Stature	Q	36.7 – 37.7 in	37.01
Buttock to Knee Pivot Length	R	9.9 - 10.3 in	10.04
Head Breadth	S	5.15 – 5.55 in	5.16
Head Depth	T	6.59 -7.19 in	6.81
Hip Breadth	U	7.9 – 8.5 in	8.15
Shoulder Breadth	V	9.31 – 9.91in	9.49
Foot Breadth	W	2.11 – 2.51 in	2.32
Head Circumference	X	19.7 – 20.3 in	20.0
Chest Circumference (With Jacket)	Y	20.75 – 21.75 in	21.65
Waist Circumference	Z	20.75 – 21.75 in	21.66
Location for Chest Circumference	AA	9.8 – 10.2 in	10.04
Location for Waist Circumference	BB	6.3 – 6.7 in	6.50

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
HEAD DROP TEST

Dummy Serial Number 142
Sequential Test Number 1
Date 01-12-2004
Workfile 142H2 01-12-04

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	66-78 Deg F	70.00 F
Relative Humidity	10% - 70%	33.00 %
Peak Resultant Acceleration	250-280 G's	263.52 Gs
Peak Lateral Acceleration	15 G's Max	12.48 Gs
Is Acceleration Curve Unimodal?	<10%	4.38 %

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
NECK FLEXION TEST

Dummy Serial Number 142
Sequential Test Number 1
Date 12-11-03
Workfile 142nf 12-11-03

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		20.6 – 22.2 Deg C	21.11
Relative Humidity		10% - 70%	27.0
Pendulum Speed		5.40-5.60 m/s	5.55
Pendulum Pulse	10 ms	2.00 – 2.70 m/s	2.05
	15 ms	3.00 – 4.00 m/s	3.03
	20 ms	4.00 – 5.10 m/s	4.13
D Plane Rotation	Max	70.0 – 82.0 Deg	80.64
Maximum Occipital Moment		42.00 - 53.00 N-m	42.46
Occipital Moment Decay		60.0 - 80.0 ms	69.60

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
NECK EXTENSION TEST

Dummy Serial Number 142
Sequential Test Number 2
Date 12-11-03
Workfile 142ne2 12-11-03

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		20.6 – 22.2 Deg C	21.11
Relative Humidity		10% - 70%	27.00
Pendulum Speed		3.55 – 3.75 m/s	3.60
Pendulum Pulse	10 ms	1.00 – 1.40 m/s	1.10
	15 ms	1.90 – 2.50 m/s	2.02
	20 ms	2.80 – 3.50 m/s	2.85
D Plane Rotation	Max	83.0 – 93.0 Deg	83.64
Maximum Occipital Moment		-53.30 - -43.70 N-m	-52.76
Occipital Moment Decay		60.0 - 80.0 ms	72.40

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
THORAX IMPACT TEST

Dummy Serial Number 142
Sequential Test Number 1
Date 12-12-03
Workfile 142T 12-12-03

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	69-72 Deg F	70.0
Relative Humidity	10% - 70%	35.0
Pendulum Velocity	19.40 – 20.00 Ft/s	19.70
Maximum Deflection	1.30 – 1.50 in	1.30
Maximum Resistive Force	152.90 – 182.10 Lbs	167.53
Internal Hysteresis	65 - 85 %	76.46
Sternum Force Criteria	193.30 lbf	179.91

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572P
EXTERNAL DIMENSIONS

Dummy Serial Number 142
Sequential Test Number 1
Date 12-11-03

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Total Sitting Height	A	21.2 – 21.8 in	21.2
Shoulder Pivot Height	B	12.1 - 12.7 in	12.4
H-Point Height	C	1.35 – 1.75 in	1.55
H-Point from Backline	D	2.24 – 2.64 in	2.5
Shoulder Pivot from Backline	E	2.40 – 2.80 in	2.6
Thigh Clearance	F	3.19 – 3.59 in	3.5
Back of Elbow to Fingertip	G	9.74 – 10.34 in	10.1
Head back from Backline	H	1.9 – 2.3 in	2.1
Shoulder - Elbow Length	I	7.3 – 7.9 in	7.7
Elbow Rest Height	J	5.26 – 5.86 in	5.5
Buttock to Knee Length	K	11.21 – 11.81 in	11.5
Popliteal Height	L	8.60 – 9.20 in	8.9
Knee Pivot Height	M	9.51 – 10.11 in	9.75
Buttock Popliteal Length	N	8.58 - 9.18 in	9.0
Chest Depth with Jacket	O	5.45 - 6.05 in	5.8
Foot Length	P	5.42 – 5.82 in	5.8
Stature	Q	36.7 – 37.7 in	37.0
Buttock to Knee Pivot Length	R	9.9 - 10.3 in	10.25
Head Breadth	S	5.15 – 5.55 in	5.4
Head Depth	T	6.59 -7.19 in	6.9
Hip Breadth	U	7.9 – 8.5 in	8.1
Shoulder Breadth	V	9.31 – 9.91in	9.9
Foot Breadth	W	2.11 – 2.51 in	2.3
Head Circumference	X	19.7 – 20.3 in	20.3
Chest Circumference (With Jacket)	Y	20.75 – 21.75 in	21.4
Waist Circumference	Z	20.75 – 21.75 in	21.4
Location for Chest Circumference	AA	9.8 – 10.2 in	10.00
Location for Waist Circumference	BB	6.3 – 6.7 in	6.50

Remarks:

Laboratory Technician:

B. Swiecicki

SECTION 6

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

HYBRID III INSTRUMENTATION

	POSITION #3 (RIGHT) SERIAL NO.: 044		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P32218	ENDEVCO	17-Feb-04
HEAD AY	AC-P17743	ENDEVCO	21-Oct-03
HEAD AZ	AC-P15319	ENDEVCO	21-Oct-03
HEAD REAR AZ	AC-02I02I10-N06	ENTRAN	08-Dec-03
UPPER NECK FX	LC-248-FX	Denton	01-Oct-03
UPPER NECK FY	LC-248-FY	Denton	01-Oct-03
UPPER NECK FZ	LC-248-Fz	Denton	01-Oct-03
UPPER NECK MX	LC-248-Mx	Denton	01-Oct-03
UPPER NECK MY	LC-248-My	Denton	01-Oct-03
UPPER NECK MZ	LC-248-Mz	Denton	01-Oct-03
LOWER NECK FX	LC-249Fx	Denton	01-Oct-03
LOWER NECK FY	LC-249Fy	Denton	01-Oct-03
LOWER NECK FZ	LC-249Fz	Denton	01-Oct-03
LOWER NECK MX	LC-249Mx	Denton	01-Oct-03
LOWER NECK MY	LC-249My	Denton	01-Oct-03
LOWER NECK MZ	LC-249Mz	Denton	01-Oct-03
CHEST AX	AC-P15334	ENDEVCO	21-Oct-03
CHEST AY	AC-P15321	ENDEVCO	21-Oct-03
CHEST AZ	AC-P17758	ENDEVCO	21-Oct-03
CHEST DISPLACEMENT X	DS-044	SERVO	22-Nov-03
PELVIS AX	AC-P16755	ENDEVCO	21-Oct-03
PELVIS AY	AC-P15591	ENDEVCO	21-Oct-03
PELVIS AZ	AC-P16155	ENDEVCO	21-Oct-03
TETHER BELT LOAD	LC-155	First Technology	16-Sep-03

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

HYBRID III INSTRUMENTATION

	POSITION #4 (LEFT) SERIAL NO.: 142		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P23804	ENDEVCO	24-Feb-04
HEAD AY	AC-99102-F12	ENTRAN	24-Feb-04
HEAD AZ	AC-00L13-F03	ENDEVCO	24-Feb-04
HEAD REAR AZ	AC-P23926	ENDEVCO	23-Feb-04
UPPER NECK FX	LC-213Fx	Denton	01-Oct-03
UPPER NECK FY	LC-213Fy	Denton	01-Oct-03
UPPER NECK FZ	LC-213Fz	Denton	01-Oct-03
UPPER NECK MX	LC-213Mx	Denton	01-Oct-03
UPPER NECK MY	LC-213My	Denton	01-Oct-03
UPPER NECK MZ	LC-213Mz	Denton	01-Oct-03
LOWER NECK FX	LC-214Fx	Denton	01-Oct-03
LOWER NECK FY	LC-214Fy	Denton	01-Oct-03
LOWER NECK FZ	LC-214Fz	Denton	01-Oct-03
LOWER NECK MX	LC-214Mx	Denton	01-Oct-03
LOWER NECK MY	LC-214My	Denton	01-Oct-03
LOWER NECK MZ	LC-214Mz	Denton	01-Oct-03
CHEST AX	AC-99108-F30	ENTRAN	24-Feb-04
CHEST AY	AC-99108-F28	ENTRAN	24-Feb-04
CHEST AZ	AC-99H30-Z04	ENTRAN	24-Feb-04
CHEST DISPLACEMENT X	DS-142	SERVO	18-Sep-03
PELVIS AX	AC-99102-F06	ENTRAN	23-Feb-04
PELVIS AY	AC-99102-F15	ENTRAN	23-Feb-04
PELVIS AZ	AC-99G29-Q13	ENTRAN	23-Feb-04
TETHER BELT LOAD	LC-156	First Technology	16-Sep-03

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

CRS INSTRUMENTATION

	CRS ACCELEROMETERS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
P3 CRS AX	AC- P18525	ENDEVCO	18-Sep-03
P3 CRS AY	AC-P14438	ENDEVCO	24-Sep-03
P3 CRS AZ	AC-P15747	ENDEVCO	24-Sep-03
P4 CRS AX	AC-J37854	ENDEVCO	22-Sep-03
P4 CRS AY	AC-J38127	ENDEVCO	22-Sep-03
P4 CRS AZ	AC-J37980	ENDEVCO	22-Sep-03