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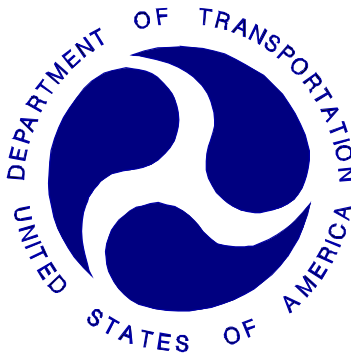
**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
FRONTAL BARRIER 40% OFFSET IMPACT TEST**

FORD MOTOR CO.
2000 NISSAN QUEST
MPV

NHTSA NUMBER: RY5214

VERIDIAN TEST NUMBER: 8413-71

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



November 27, 2001

FINAL REPORT

PREPARED FOR:

U.S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Research and Development
Crashworthiness Research Division
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12. Sponsoring Agency Name and Address U.S. DEPARTMENT OF TRANSPORTATION National Highway Traffic Safety Administration Research and Development Crashworthiness Research Division Mail Code: NRD-11 400 Seventh Street, SW, Room No. 6226 Washington, DC 20590				13. Type of Report and Period Covered Final Report January 2002	
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16. Abstract This test is to evaluate the use of the Thor Advanced Lower Extremity (Thor-Lx) in the frontal 40% offset deformable barrier test. A frontal 40% offset barrier impact test of a 2000 Nissan Quest MPV was performed at Veridian Engineering crash test facility in Buffalo, New York, on November 27, 2001. The impact velocity was 59.5 kph and the temperature at the barrier face was 21°C. The maximum post-test vehicle crush was 750 mm. The test vehicle was equipped with 3-point restraint systems, knee bolsters, 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 (150)	520.1	28.1	23.3	3491.4	2183.6
Passenger (245)	330.9	33.2	30.7	3001.2	436.2
17. Key Words Frontal 40% Offset Barrier Impact test Thor-Lx/HIIIr				18. Distribution Statement Copies of this report are available from: NHTSA Technical Reference Division National Highway Traffic Safety Admin. 400 Seventh St., SW, Room 5108 Washington, DC 20590	
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SECTION 1

PURPOSE AND SUMMARY OF TEST

PURPOSE

This 59.5 kph frontal 40% offset barrier impact test is part of the Test Procedure Development Program sponsored by the National Highway Traffic Safety Administration (NHTSA). The purpose of this test was to evaluate the performance of a Thor-Lx 50th percentile adult male- Hybrid III retrofit (Thor-Lx/HIIIr) version lower legs and obtain vehicle crashworthiness and occupant and restraint system performance data.

The frontal 40% offset barrier impact test was conducted in accordance with the Office of Crashworthiness Standards Laboratory Indicant Test procedure.

SUMMARY

A deformable honeycomb barrier mounted to a load cell barrier consisting of 30 load cells and a load cell plate above the barrier was impacted by a 2000 Nissan Quest MPV at 40% overlap at a velocity of 59.5 kph. The test was performed at Veridian Engineering on November 27, 2001. Pre- and post-test photographs of the vehicle and dummies can be found in Appendix A.

One real-time camera and 16 high-speed cameras documented the offset 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 9axis head array accelerometers, head, chest, and pelvis triaxial accelerometers, chest displacement potentiometers, upper neck transducers, right/left femur load cells, knee sliders and Thor-Lx/HIIIr lower leg instrumentation. The driver (position 1) ATD (Serial No. 150) and the right-front passenger (position 2) ATD (Serial No. 245) were calibrated previous to this test. Certification details, along with instrumentation calibration data, are found in Appendix C.

The 216 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.

The driver's HIC was 520.1. The maximum chest deceleration over 3 milliseconds was 28.1 g's and maximum chest deflection was 23.3 mm. Compressive femur loads were 3491.4 Newtons on the left and 2183.6 Newtons on the right.

The right front passenger's HIC was 330.9. Maximum chest deceleration over 3 milliseconds was 33.2 g's and maximum chest deflection was 30.7 mm. Compressive femur loads were 3001.2 Newtons on the left and 436.2 Newtons on the right.

SECTION 2

GENERAL TEST AND VEHICLE PARAMETER DATA

DATA SHEET NO. 1 CRASH TEST SUMMARY

Vehicle NHTSA No.:	RY5214	Test Mode:	60.3 kph Offset Frontal Barrier
Test Date:	November 27, 2001	Time:	13:45
		Temperature:	21 °C
Vehicle Make/Model/Body Style:	2000 Nissan Quest MPV		
Vehicle Test Weight:	2070.0	kg	
Vehicle/Barrier Impact Angle:	0	°	
Impact Velocity:	59.5	kph	
Maximum Static Crush:	750	mm	
Actual Vehicle Offset:	0.0	%	

<u>DUMMIES:</u>	<u>DRIVER</u>	<u>PASSENGER</u>
Type:	572E	572E
Restraint System:	Seatbelt/Airbag	Seatbelt/Airbag
Lower Leg:	Thor-Lx/HIIIr	Thor-Lx/HIIIr

Number of Data Channels:	216	
Number of Cameras:	1	Real Time
	16	High Speed

<u>DOOR OPENING DATA:</u>	Closed/Inoperable	- Left Front
	Closed/Operable	- Right Front

Front Seat(s) Data:	<u>DRIVER</u>	<u>PASSENGER</u>
Seat Track Failure:(mm of shift)	0	0
Seat Back Failure:	None	None

<u>VISIBLE DUMMY CONTACT POINTS:</u>	<u>DRIVER</u>	<u>PASSENGER</u>
Head:	The face to the top center of the airbag; the back of the head to the left of center of the headrest	The face to the left center of the airbag; the back of the head to the center of the headrest
Abdomen:	None	None
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: 2000 Nissan Quest MPV

NHTSA No. : RY5214 ; VIN: 4N2XN11T2YD824078 ; Color: Silver

Engine Data: 6 cylinders; - CID; 3.3 Liters; - cc

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

Transmission Data: 4 speeds; - Manual; X Automatic; X Overdrive

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

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

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

Date Received: 5/22/01 ; Odometer Reading 17052 km

Selling Dealer: -

& Address: -

DATA FROM TIRE VEHICLE'S CERTIFICATION LABEL:

Vehicle Manufactured by: Ford Motor Co.

Date of Manufacture 3/00

GVWR: 2469 kg; GAWR: 1231 kg FRONT; 1290 kg REAR

DATA FROM TIRE PLACARD:

Tire Pressure with Maximum Capacity Vehicle Load: 300 kpa FRONT

300 kpa REAR

Recommended Tire Size: P215/70R15

* Recommended Cold Tire Pressure: 240 kpa FRONT; 240 kpa REAR

Size of Tires on Test Vehicle: P215/70R15 ; Manufacturer: General

Vehicle Capacity Data:

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

Number of Occupants: 2 Front; 5 Rear; 7 Total

Vehicle Capacity Weight (VCW) = 585 kg

No. of Occupants x 68.04 kg = 476.28 kg

Rated Cargo/Luggage Weight (RCLW) = 108.72 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>511.5</u>	kg	Right Rear =	<u>383.0</u>	kg
Left Front =	<u>533.0</u>	kg	Left Rear =	<u>385.0</u>	kg
TOTAL FRONT =	<u>1044.5</u>	kg	TOTAL REAR =	<u>768</u>	kg
TOTAL DELIVERED WEIGHT =	<u>1812.5</u>	kg			
% of Total Front of Vehicle Weight =	<u>57.6%</u>		% of Total Rear Weight =	<u>42.4%</u>	%

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Delivered Weight (UDW) =	<u>1812.5</u>	kg
Rated Cargo/Luggage Weight (RCLW) =	<u>108.72</u>	kg
Weight of 2 p.572 Dummies @ 76 each =	<u>152</u>	kg
TARGET TEST WEIGHT =	<u>2073.22</u>	kg

WEIGHT OF TEST VEHICLE WITH TWO DUMMIES AND 105.5 KG OF CARGO WEIGHT:

Right Front =	<u>536.0</u>	kg	Right Rear =	<u>478.5</u>	kg
Left Front =	<u>567.0</u>	kg	Left Rear =	<u>488.5</u>	kg
TOTAL FRONT =	<u>1103</u>	kg	TOTAL REAR =	<u>967</u>	kg
TOTAL TEST WEIGHT =	<u>2070</u>	kg			
% of Total Front Weight =	<u>53.3%</u>	%	% of Total Rear Weight =	<u>46.7%</u>	%
Weight of Ballast Secured in Vehicle Trunk Area =	<u>45</u>	kg			
Vehicle Components Removed for Weight Reduction:	<u>None</u>				

VEHICLE ATTITUDE (all dimension in millimeters):

AS DELIVERED:	RF	<u>769</u>	LF	<u>760</u>	RR	<u>783</u>	LR	<u>784</u>
FULLY LOADED:	RF	<u>764</u>	LF	<u>757</u>	RR	<u>758</u>	LR	<u>752</u>
AS TESTED:	RF	<u>765</u>	LF	<u>759</u>	RR	<u>760</u>	LR	<u>753</u>
Vehicle's Wheel Base:	<u>2854</u>	mm						
Location of Vehicle's C.G.:	<u>1333.25</u>	mm rearward of front wheel center.						

FUEL SYSTEM DATA:

Fuel System Capacity From Owner's Manual =	<u>74</u>	liters
Usable Capacity Figure Furnished by COTR =	<u>74</u>	liters
Test Volume Range (92 to 94% of Usable Capacity) =	<u>68.08</u>	to <u>69.56</u> liters
ACTUAL TEST VOLUME=	<u>68.1</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: Filler – left above rear axle; Tank – left of center ahead of axle; Lines – left frame		
<u>Stiffener.</u>		

DATA SHEET NO. 3 POST IMPACT DATA

TYPE OF TEST:

Type of Test: Offset Frontal Barrier Impact Angle: 0°
Test Date: November 27, 2001 Time: 13:45 Temperature: 21 °C
Vehicle NHTSA No.: RY5214
Required Impact Velocity Range: 59.8 to 60.8 kph

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

Trap No. 1 = 59.5 kph; Trap No. 2 = 59.5 kph
Distance from vehicle to barrier: (1) entering trap = 813 mm
(2) exiting trap = 305 mm

VEHICLE STATIC CRUSH: (mm)

Vehicle Length:

Pre-Test	Left =	<u>4884</u>	; C/L =	<u>4946</u>	; Right =	<u>4882</u>
Post-Test	Left =	<u>4154</u>	; C/L =	<u>4321</u>	; Right =	<u>4706</u>
Crush	Left =	<u>730</u>	; C/L =	<u>625</u>	; Right =	<u>176</u>
AVERAGE	=	<u>510.3</u>	mm			

VEHICLE OFFSET DATA: (mm)

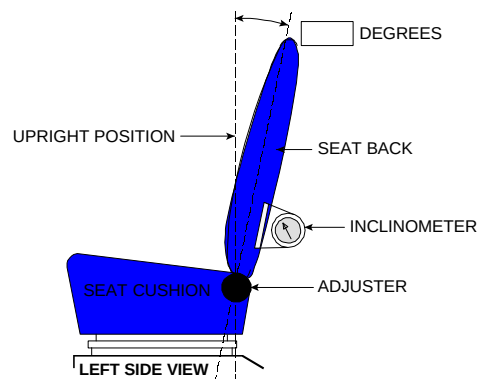
Vehicle Width	=	<u>1890</u>	mm
Desired Vehicle Offset	=	<u>756</u>	mm
Actual Vehicle Offset	=	<u>759</u>	mm (from film analysis)
Offset Difference	=	<u>-3</u>	mm
Actual Percent Offset	=	<u>40.2</u>	%

DATA SHEET NO. 4 TEST VEHICLE INFORMATION

VEHICLE IDENTIFICATION:

Model Year: 2000 Vehicle Model: Nissan Quest 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.



Seat back angle for driver's seat: 20

Measurement instructions: Place seat in twelfth detent from full upright position 0.

Seat back angle for passenger's seat: 20

Measurement instructions: Same as the driver's seat.

2. Seat Fore and Aft Positioning

Positioning of the driver's seat: Place seat in mid-position to the 8th detent with forward most position
Labeled as detent 0.

Positioning of the passenger's seat: Same as the driver's seat.

3. Fuel Tank Capacity Data

- 3.1 A. "Usable Capacity" of the standard equipment fuel tank is 74 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 = 74 liters
- 3.2 Amount of Stoddard solvent added to vehicle(s) used for certification test(s) = 68.1 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.

For 5 seconds after the engine is switched on and while engine is running and for 1.5 seconds after engine is
switched off.

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

4. STEERING COLUMN ADJUSTMENTS:

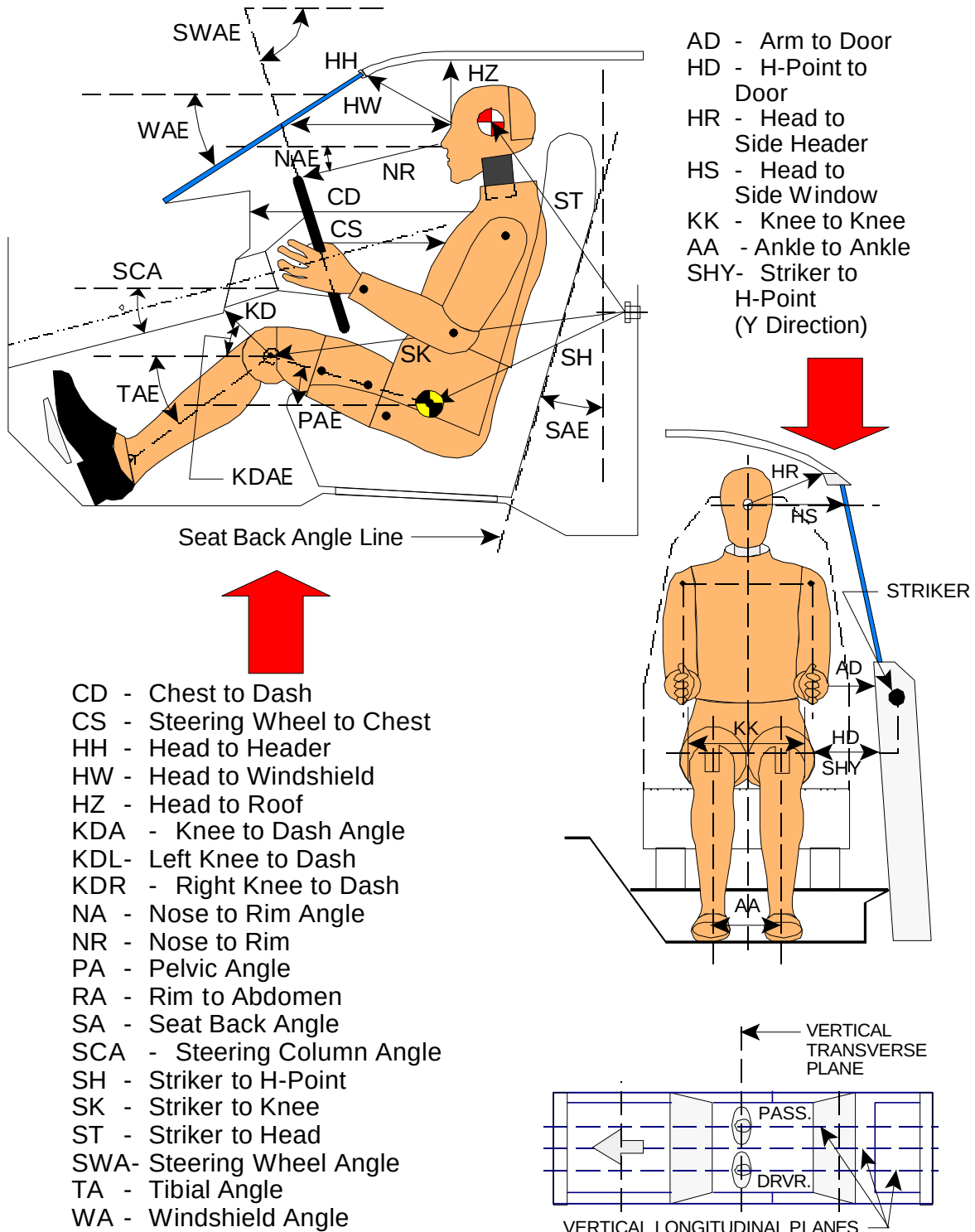
Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when it is moved through its full range of driving positions. If the tested vehicle has any of these adjustments, does your company use any specific procedures to determine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

Operational Instructions: Adjust to mid position 27°

5. SEAT BELT UPPER ANCHORAGE

Nominal design riding position: Mid Position

DUMMY MEASUREMENT FOR FRONT SEAT PASSENGERS

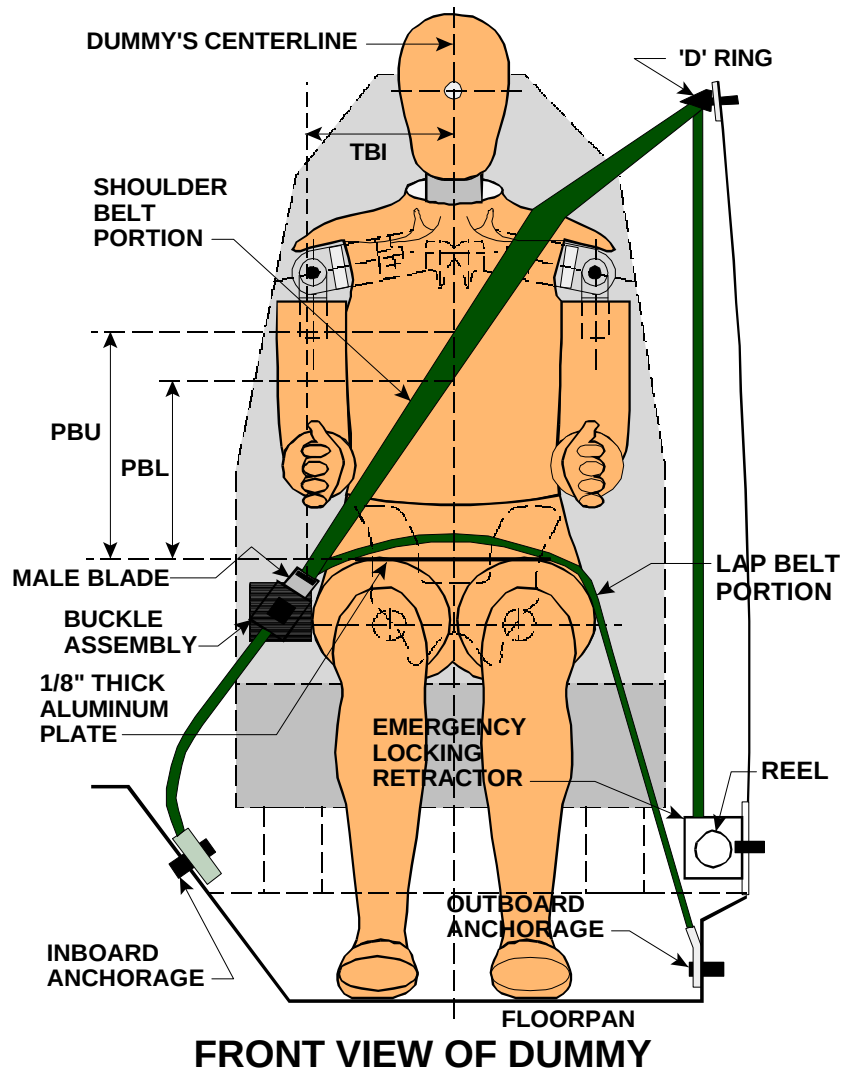


DATA SHEET NO. 5 FRONT SEAT DUMMY POSITIONING MEASUREMENTS IN VEHICLE (cont.)

	DRIVER (Serial #150)			PASS. (Serial #245)		
WA ^o	32.0 deg.			N/A		
SWA ^o	64.2 deg.			N/A		
SCA ^o	25.8 deg.			N/A		
SA ^o	12.5 deg.			12.0	deg.	
HZ	222			218		
HH	423			423		
HW	670			670		
HR	204			210		
NR	401	Angle	11 deg.	N/A		
CD	557			552		
CS	290			N/A		
RA	182			N/A		
KDL	140	Angle (KDA)	50 deg.	172		
KDR	138			170	Angle (KDA)	28 deg.
PA ^o	23.3 deg.			25.0 deg.		
TA ^o	50.3 deg.			51.6 deg.		
KK	267			200		
AA	307			202		
ST	610	Angle	14 deg.	598	Angle	14 deg.
SK	679	Angle	86 deg.	677	Angle	86 deg.
SH	275	Angle	110 deg.	269	Angle	97 deg.
SHY	275			267		
HS	338			342		
HD	165			166		
AD	129			134		

Dimensions in millimeters

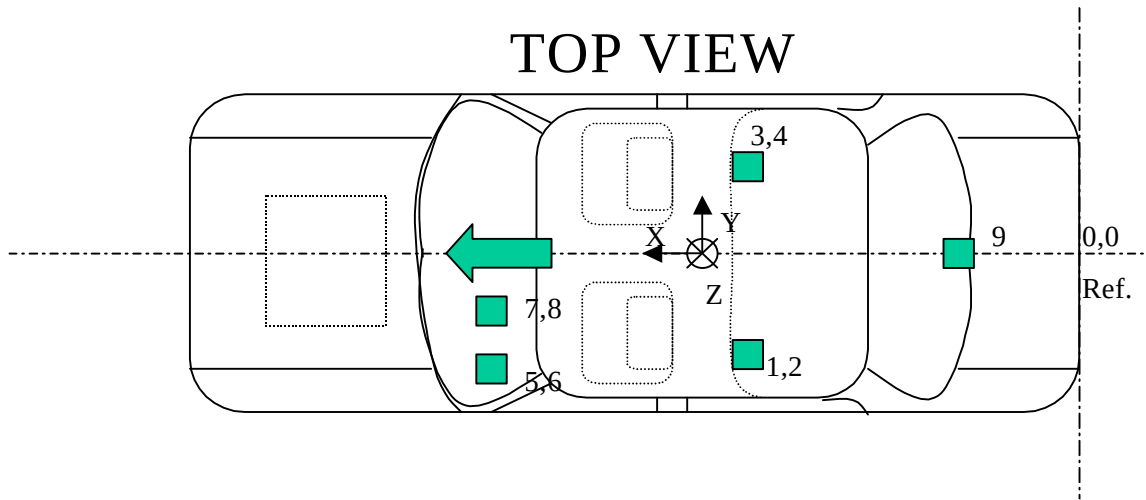
SEAT BELT POSITIONING DATA



FRONT VIEW OF DUMMY

	DRIVER DUMMY (mm)	PASSENGER DUMMY (mm)
PBU -- Top surface of alum. plate to upper edge	375	360
PBL-- Top surface of alum. plate to belt lower edge	295	275
<u>LAP BELT TENSION</u>	10 N	10 N
<u>SHOULDER BELT TENSION</u>	Retractor	Retractor

DATA SHEET NO. 7 VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY



Accelerometer	X-Direction (mm)	Y-Direction (mm)	Z-Direction (mm)
Left Rear Seat Crossmember	1643	-658	-469
Right Rear Seat Crossmember	1630	661	-470
Driver Left Side Toe Pan	3641	-421	-465
Driver Right Side Toe Pan	3648	-306	-449

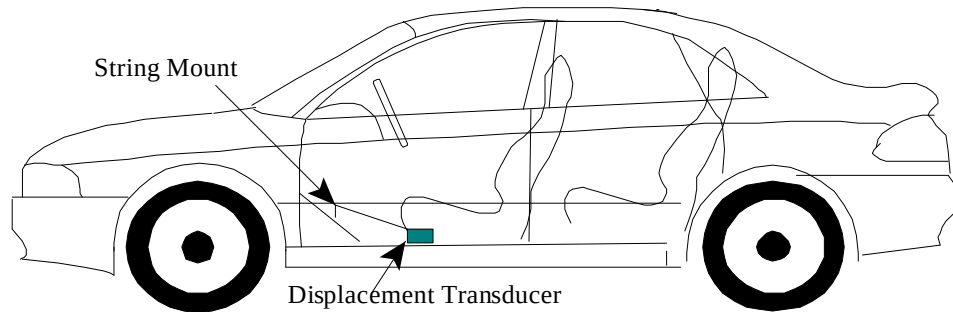
X-Direction is referenced from vehicle rear bumper (positive forward)

Y-Direction is referenced from vehicle centerline (positive to right)

Z-Direction is referenced from ground plane (positive down)

LOCATION NUMBER	DESCRIPTION	MAXIMUM VALUE (g's)			
		Pos.	msec.	Neg.	msec.
1	Rear Seat X-Member @ Left Side X	1.7	499.9	-20.9	53.9
2	Rear Seat X-Member @ Left Side Y	13.0	81.8	-4.9	117.2
3	Rear Seat X-Member @ Right Side X	0.7	499.9	-22.0	88.1
4	Rear Seat X-Member @ Right Side Y	13.3	82.4	-4.5	128.7
6	Driver Toe Pan @ Left Side Z	45.5	82.4	-40.4	100.7
7	Driver Toe Pan @ Right Side X	3.8	135.4	-78.1	78.6
8	Driver Toe Pan @ Right Side Z	65.2	78.5	-11.7	94.9

SIDE VIEW



Driver Toe Pan Displacement

P1 Toe Pan Spoolout**	X-Direction (mm)	Y-Direction (mm)	Z-Direction (mm)	Vertical Angle* (Deg)
Pre-Test	745.82	257.79	-87.07	6.66
Post-Test	495.59	268.51	-287.65	30.13
Difference	250.23	-10.72	-200.58	23.47

** Measurements taken from string pot mounting base.

*Referenced from horizontal (0 degrees)

SENSOR NAME	MAXIMUM VALUE (mm)			
	Pos.	msec.	Neg.	msec.
P1 Toe Pan Movement	0.0	-79.6	-140.0	99.9

DATA SHEET NO. 8 DUMMY INJURY CRITERIA VALUES

Vehicle Year/Make/Model/Body Style:

2000 Nissan Quest MPV

NHTSA Test No.:

RY5214

Test Date:

November 27, 2001

		MAXIMUM VALUE							
		Driver				Passenger			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Head 9 Array X Arm Y	g	11.8	197.0	-10.3	84.1	8.7	122.8	-15.2	79.1
Head 9 Array X Arm Z	g	26.9	124.0	-3.7	162.3	40.8	97.5	-7.3	104.1
Head 9 Array Y Arm X	g	11.3	197.3	-53.6	91.3	5.2	282.9	-49.4	111.3
Head 9 Array Y Arm Z	g	22.5	87.5	-5.9	144.1	31.5	97.6	-1.9	166.5
Head 9 Array Z Arm X	g	15.4	144.6	-68.1	99.7	7.1	286.0	-66.9	111.5
Head 9 Array Z Arm Y	g	13.0	186.1	-11.5	87.8	8.8	79.1	-5.9	86.9
Head X	g	9.9	168.7	-52.8	92.7	4.6	286.6	-50.0	111.6
Head Y	g	9.5	192.7	-7.6	91.3	5.4	133.0	-8.1	78.9
Head Z	g	20.4	92.5	-5.5	145.8	30.8	96.5	-1.2	179.6
Head Resultant	g	56.9	92.7	0.0	-59.0	52.2	111.6	0.0	-42.5
Redundant Head X	g	9.6	168.7	-53.8	92.7	4.3	292.2	-49.9	111.6
Redundant Head Y	g	9.6	192.4	-6.9	91.3	5.2	84.8	-8.1	78.9
Redundant Head Z	g	21.3	123.9	-5.4	146.1	31.2	97.6	-1.2	156.0
Redundant Head Resultant	g	57.8	92.7	0.0	-56.6	52.1	111.9	0.0	-46.2
Upper Neck Fx	N	302.9	107.4	-411.1	79.7	83.9	281.4	-518.2	84.9
Upper Neck Fy	N	371.8	111.7	-119.1	277.5	173.9	79.2	-104.6	279.1
Upper Neck Fz	N	1723.8	88.5	-207.5	143.4	1121.7	81.6	-63.2	176.8
Upper Neck F Resultant	N	1734.6	88.5	0.6	-57.3	1223.5	81.6	0.2	-43.6
Upper Neck Mx	N-m	23.4	186.6	-32.4	113.3	8.6	163.7	-7.0	83.2
Upper Neck My	N-m	33.2	101.6	-32.7	138.6	37.9	102.7	-17.6	85.7
Upper Neck Mz	N-m	16.8	101.3	-9.1	268.5	6.0	214.6	-8.5	151.4
Upper Neck M Resultant	N-m	48.0	102.5	0.0	-54.6	38.1	102.6	0.0	-40.6
Chest X	g	3.1	166.9	-28.7	86.3	2.1	220.4	-33.4	97.3
Chest Y	g	14.2	125.3	-3.0	198.9	8.2	94.1	-4.0	120.0
Chest Z	g	9.5	167.4	-8.0	110.9	7.3	119.5	-4.6	69.0
Chest Resultant	g	29.1	86.3	0.0	-63.9	34.5	97.4	0.0	-63.0

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

Vehicle Year/Make/Model/Body Style: 2000 Nissan Quest MPV

NHTSA Test No.: RY5214 Test Date: November 27, 2001

		MAXIMUM VALUE							
		Driver				Passenger			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Redundant Chest X	g	3.0	166.7	-28.7	86.4	1.9	220.4	-34.1	97.5
Redundant Chest Y	g	14.4	125.2	-3.0	199.4	8.8	93.3	-4.0	119.8
Redundant Chest Z	g	9.5	167.9	-16.0	137.0	7.4	118.8	-4.5	69.0
Redundant Chest Resultant	g	29.0	86.4	0.0	-56.2	35.3	97.5	0.0	-47.8
Chest Displacement	mm	0.0	12.9	-23.3	96.9	0.0	29.5	-30.7	104.2
Pelvic X	g	5.7	181.8	-28.9	69.5	2.4	175.9	-35.4	89.2
Pelvic Y	g	11.2	128.7	-5.0	178.1	12.3	106.4	-6.6	158.6
Pelvic Z	g	2.3	287.8	-17.5	136.8	1.7	315.6	-15.0	95.7
Pelvic Resultant	g	29.7	69.5	0.0	-7.2	37.8	90.7	0.0	-59.3
Left Femur Fx	N	1281.2	110.7	-391.9	142.1	127.2	205.5	-431.2	123.0
Left Femur Fy	N	721.3	131.3	-285.4	174.4	195.5	117.6	-296.5	91.8
Left Femur Fz	N	79.5	19.3	-3491.4	109.8	502.7	75.7	-3001.2	99.3
Left Femur Force Resultant	N	3740.5	109.8	0.2	-19.0	3024.1	99.3	0.1	-87.7
Left Femur Mx	N-m	31.2	207.3	-105.5	113.3	22.5	86.9	-62.1	146.1
Left Femur My	N-m	Clipped	Clipped	Clipped	Clipped	27.1	94.1	-29.2	109.4
Left Femur Mz	N-m	39.4	94.8	-25.7	137.0	30.3	141.0	-18.6	326.1
Left Femur Moment Res.	N-m	343.6	128.0	0.1	-71.4	69.9	145.1	0.2	-60.0
Right Femur Fx	N	1122.0	93.8	-53.5	39.4	35.5	257.1	-449.7	105.6
Right Femur Fy	N	579.3	136.1	-43.8	334.2	245.8	202.3	-151.1	83.9
Right Femur Fz	N	861.6	101.7	-2183.6	71.5	770.1	79.8	-436.2	125.3
Right Femur Force Resultant	N	2240.6	71.5	0.3	-58.5	800.0	79.8	0.2	-6.8
Right Femur Mx	N-m	10.0	158.0	-115.7	112.9	72.3	90.6	-9.0	45.8
Right Femur My	N-m	109.9	93.9	-46.2	72.5	85.3	123.6	-1.6	-100.0
Right Femur Mz	N-m	13.6	219.3	-56.8	126.1	41.8	140.9	-15.0	271.0
Right Femur Moment Res.	N-m	125.9	112.9	0.1	-1.1	110.2	121.1	0.2	-62.5

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

Vehicle Year/Make/Model/Body Style: 2000 Nissan Quest MPV

NHTSA Test No.: RY5214 Test Date: November 27, 2001

		MAXIMUM VALUE							
		Driver				Passenger			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Left Knee Shear Dx	mm	0.3	77.7	-0.9	53.6	0.3	106.3	-0.5	139.1
Right Knee Shear Dx	mm	0.6	88.8	-2.6	117.3	0.7	105.5	-0.3	137.1
Left Upper Tibia Fx	N	531.8	138.5	-263.3	109.1	315.2	89.2	-83.6	108.0
Left Upper Tibia Fz	N	2469.2	136.4	-991.8	90.4	64.8	310.0	-1442.3	100.1
Left Upper Tibia Mx	N-m	38.3	91.7	-44.1	137.1	NR	NR	NR	NR
Left Upper Tibia My	N-m	11.1	307.2	-485.6	137.9	14.4	177.3	-57.8	90.2
Left Lower Tibia Fx	N	2.9	-46.0	-2445.7	139.6	52.3	177.0	-398.6	89.9
Left Lower Tibia Fy	N	106.8	98.7	-261.4	92.1	298.0	95.4	-95.7	146.9
Left Lower Tibia Fz	N	6.1	-14.9	-2438.7	160.2	Spikes	Spikes	Spikes	Spikes
Left Lower Tibia FR	N	2796.7	158.9	1.0	-8.6	3110.5	105.4	0.2	-20.7
Left Lower Tibia Mx	N-m	17.3	90.1	-71.0	97.5	15.5	148.1	-37.4	94.6
Left Lower Tibia My	N-m	9.1	53.4	-167.6	137.9	7.2	178.5	-45.2	89.9
Right Upper Tibia Fx	N	545.6	79.8	-411.2	93.5	295.6	91.9	-108.0	136.1
Right Upper Tibia Fz	N	57.2	40.0	-2778.2	93.1	23.2	261.0	-716.6	65.5
Right Upper Tibia Mx	N-m	31.4	127.8	-46.4	93.9	37.8	143.0	-19.2	90.4
Right Upper Tibia My	N-m	15.8	167.2	-86.6	86.5	11.6	281.5	-58.5	91.6
Right Lower Tibia Fx	N	8.5	497.4	-745.5	85.9	24.2	302.6	-416.3	93.5
Right Lower Tibia Fy	N	283.9	93.6	-138.1	129.7	59.4	91.0	-166.6	144.1
Right Lower Tibia Fz	N	6.9	-11.9	-3920.1	92.1	20.8	294.0	-980.0	64.7
Right Lower Tibia FR	N	3926.5	92.1	0.2	-75.3	998.6	64.7	0.7	-25.1
Right Lower Tibia Mx	N-m	14.6	130.3	-43.4	93.9	11.5	145.4	-32.8	109.7
Right Lower Tibia My	N-m	25.8	93.3	-75.3	85.4	4.3	220.8	-43.6	93.9

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

Vehicle Year/Make/Model/Body Style: 2000 Nissan Quest MPV

NHTSA Test No.: RY5214 Test Date: November 27, 2001

		MAXIMUM VALUE							
		Driver				Passenger			
DESCRIPTION	Unit	Pos	msec	Neg	msec	Pos	msec	Neg	msec
Left Tibia Ax	g	9.1	53.0	-41.3	89.5	2.0	179.3	-39.2	90.0
Left Tibia Ay	g	37.2	98.9	-12.7	134.0	21.4	90.8	-9.5	161.8
Right Tibia Ax	g	23.1	93.2	-64.3	85.9	3.1	136.0	-35.3	93.1
Right Tibia Ay	g	26.1	94.3	-9.5	140.4	12.5	108.1	-5.7	187.6
Left Ankle Rotation X	Deg	14.1	64.6	-31.3	100.4	25.7	170.3	1.5	363.6
Left Ankle Rotation Y	Deg	38.4	164.2	-14.1	7.0	9.8	224.4	-14.8	58.9
Left Ankle Rotation Z	Deg	2.6	115.3	-10.3	499.9	-1.4	364.9	-9.1	169.1
Right Ankle Rotation X	Deg	21.5	164.3	-13.4	96.6	-0.3	-71.1	-30.0	113.6
Right Ankle Rotation Y	Deg	15.0	96.1	-15.7	44.1	2.6	110.2	-17.1	37.4
Right Ankle Rotation Z	Deg	15.5	95.2	-8.3	208.0	10.2	102.6	-12.3	209.1
Left Foot Ax	g	16.7	114.0	-51.8	83.5	1.4	175.6	-47.2	68.6
Left Foot Ay	g	33.6	84.5	-25.9	78.9	19.0	86.3	-8.4	165.6
Left Foot Az	g	23.9	117.4	-85.1	87.8	24.5	96.2	-9.2	117.8
Left Foot A Resultant	g	89.8	87.1	0.0	-68.3	47.3	68.6	0.0	-81.4
Right Foot Ax	g	27.2	94.1	-83.9	84.2	8.1	113.1	-35.3	95.6
Right Foot Ay	g	47.0	82.4	-24.0	146.2	12.0	111.5	-16.5	63.9
Right Foot Az	g	62.1	94.8	-65.9	93.7	13.2	96.1	-4.7	153.9
Right Foot A Resultant	g	102.1	84.3	0.0	-83.2	38.4	95.6	0.0	-83.9

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

Vehicle Year/Make/Model/Body Style: 2000 Nissan Quest MPV

NHTSA Test No.: RY5214 Test Date: November 27, 2001

HEAD INJURY CRITERIA (HIC)				
	HIC**	t ₁ (msec)	t ₂ (msec)	Average Acceleration t ₁ to t ₂
Position #1 - Driver	520.1	80.4	116.4	46.1
Position #2 - Passenger	330.9	90.0	125.9	38.5

** 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	28.1	84.8	87.8	224.4
Position #2 - Passenger	33.2	95.7	98.7	194.8

* 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: 2000 Nissan Quest MPV

NHTSA Test No.: RY5214 Test Date: November 27, 2001

HEAD INJURY CRITERIA (HIC) REDUNDANT				
	HIC**	t ₁ (msec)	t ₂ (msec)	Average Acceleration t ₁ to t ₂
Position #1 - Driver	553.6	80.6	116.6	47.3
Position #2 - Passenger	339.2	90.0	125.9	38.9

** 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	28.1	85.0	88.0	226.1
Position #2 - Passenger	33.9	95.8	98.8	199.9

* 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:

	<u>Driver</u>	<u>Passenger</u>
Belt length from trim panel exit to bolt hole anchor point for continuous webbing systems.	<u>N/A</u>	<u>N/A</u>
Shoulder belt length as measured on Part 572 Dummy.	<u>N/A</u>	<u>N/A</u>
Lap belt length as measured on Part 572 Dummy.	<u>N/A</u>	<u>N/A</u>

SHOULDER BELT SPOOL-OFF DATA:

As determined by film analysis.	<u>N/A</u>	<u>N/A</u>
As determined mechanically.	<u>N/A</u>	<u>N/A</u>
As determined electronically.	<u>N/A</u>	<u>N/A</u>

BELT STRETCH DATA:

Measured electronically between shoulder belt load cell and the "D" ring.	<u>N/A</u>	<u>N/A</u>
Measured mechanically.	<u>N/A</u>	<u>N/A</u>

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.:

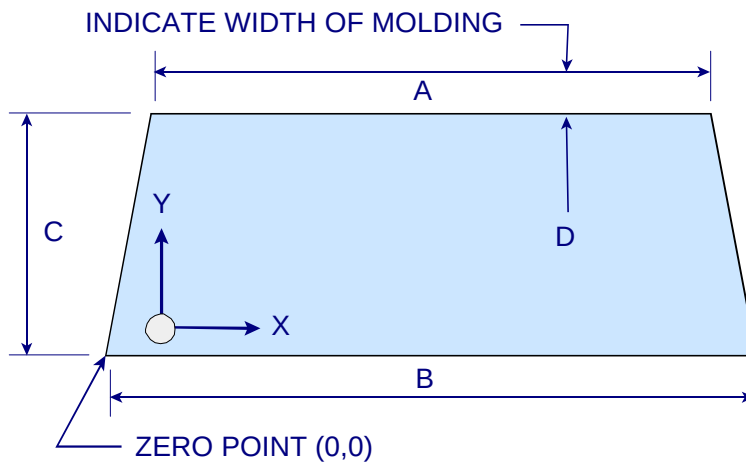
Windshield is bonded in place and covered with a 15 mm molding.

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			
	PRE-TEST (mm)	POST-TEST (mm)	% OF RETENTION
RIGHT SIDE	2252.5	2252.5	100.0%
LEFT SIDE	2252.5	2252.5	100.0%
TOTAL	4505	4505	100.0%

AREA OF RETENTION FAILURE:



DIMENSIONS (mm)	
A	1305
B	1700
C	750
D	15

FRONT VIEW OF WINDSHIELD

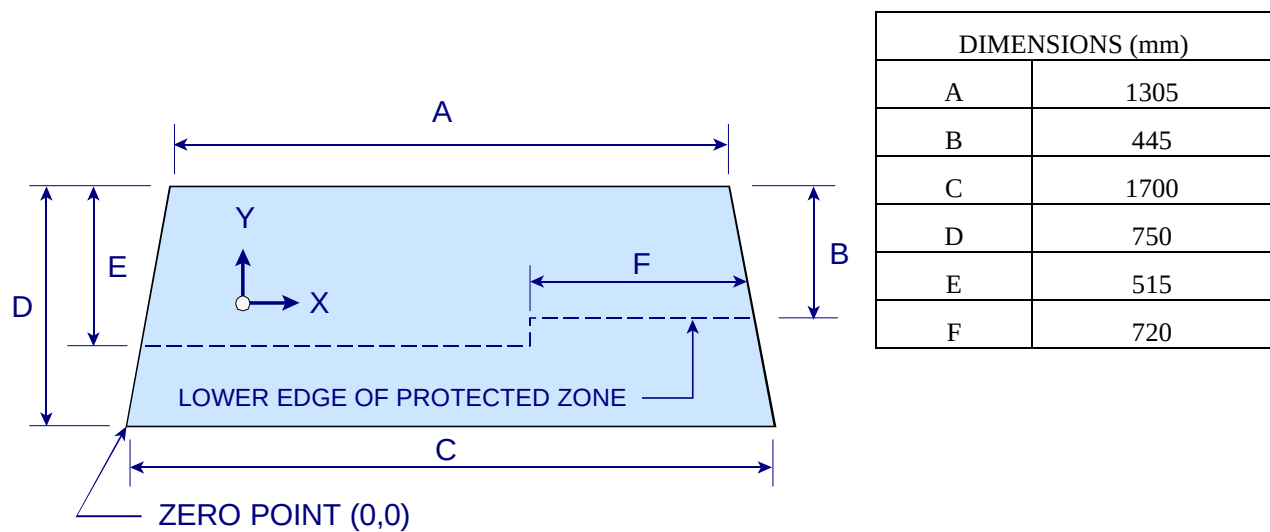
FAILURE DETAILS: None

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

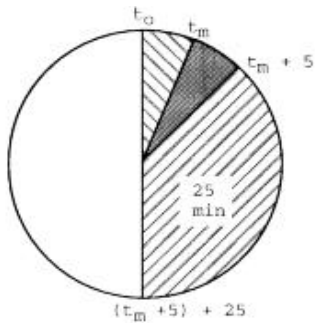
NHTSA TEST No.: RY5214 TEST DATE: November 27, 2001
VEHICLE MAKE/MODEL: 2000 Nissan Quest MPV

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 Offset Frontal (60.3 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

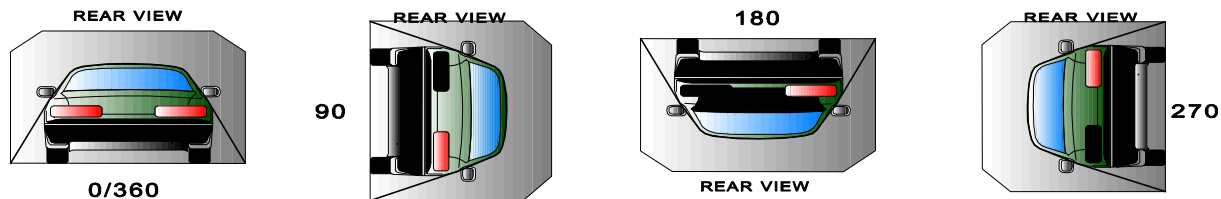
ACTUAL	MAX ALLOWED
0	28 g
0	141 g
0	28 g/min.

SOLVENT SPILLAGE DETAILS: None

DATA SHEET NO. 13 - ROLLOVER DATA

Vehicle: 2000 Nissan Quest MPV

NHTSA No.: RY5214



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	14	seconds	5	minutes	6	minutes	14	seconds	7	minutes
90° - 180°	1	minutes	04	seconds	5	minutes	6	minutes	4	seconds	7	minutes
180°-270°	1	minutes	05	seconds	5	minutes	6	minutes	5	seconds	7	minutes
270°-360°	1	minutes	06	seconds	5	minutes	6	minutes	6	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:

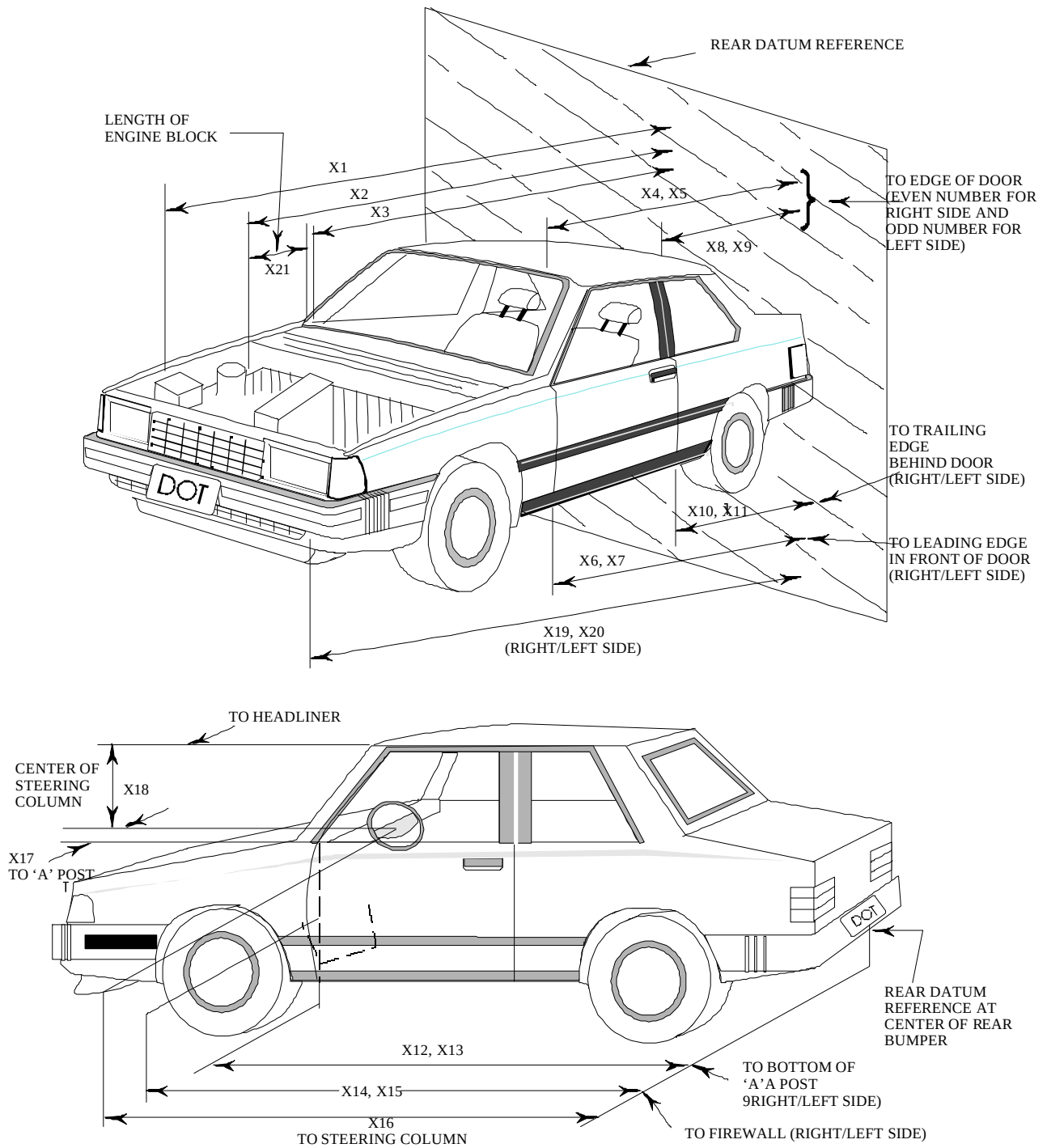
Rollover Stage	First 5 minutes from onset of rotation (g)	6th min. (g)	7th min. (g)	8th min. (if required) (g)
0° - 90°	0	0	0	N/A
90° - 180°	0	0	0	N/A
180°-270°	0	0	0	N/A
270°-360°	0	0	0	N/A

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



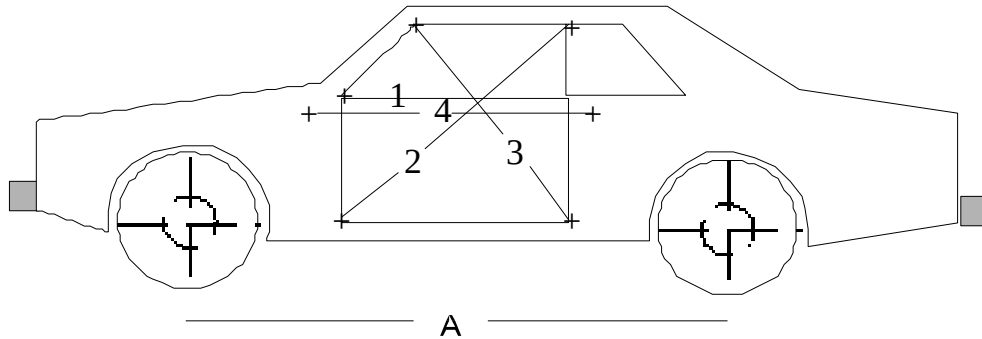
DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)

No.		Pre-Test	Post-Test	Difference
X1	Total Length of Vehicle at Centerline	4946	4321	625
X2	Rear Surface of Vehicle to Front of Engine	4398	4218	180
X3	Rear Surface of Vehicle to Firewall	4010	3825	185
X4	Rear Surface of Vehicle to Upper Leading Edge of Right Door	3513	3515	-2
X5	Rear Surface of Vehicle to Upper Leading Edge of Left Door	3519	3348	171
X6	Rear Surface of Vehicle to Lower Leading Edge of Right Door	3425	3407	18
X7	Rear Surface of Vehicle to Lower Leading Edge of Left Door	3429	3302	127
X8	Rear Surface of Vehicle to Upper Trailing Edge of Right Door	2361	2360	1
X9	Rear Surface of Vehicle to Upper Trailing Edge of Left Door	2367	2300	67
X10	Rear Surface of Vehicle to Lower Trailing Edge of Right Door	2385	2378	7
X11	Rear Surface of Vehicle to Lower Trailing Edge of Left Door	2395	2332	63
X12	Rear Surface of Vehicle to Bottom of "A" Post of Right Side	3536	3489	47
X13	Rear Surface of Vehicle to Bottom of "A" Post of Left Side	3541	3266	275
X14	Rear Surface of Vehicle to Firewall, Right Side	3922	3856	66
X15	Rear Surface of Vehicle to Firewall, Left Side	3917	3644	273
X16	Rear Surface of Vehicle to Steering Column	3036	2879	157
X17	Center of Steering Column to "A" Post	327	354	-27
X18	Center of Steering Column to Headliner	429	412	17
X19	Rear Surface of Vehicle to Right Side of Front Bumper	4882	4706	176
X20	Rear Surface of Vehicle to Left Side of Front Bumper	4884	4154	730
X21	Length of Engine Block	336	336	0
RD	Rear Surface of Vehicle to Right Side of Dash Panel	3233	3228	5
CD	Rear Surface of Vehicle to Center of Dash Panel	3220	3108	112
LD	Rear Surface of Vehicle to Left Side of Dash Panel	3215	3026	189

All Dimensions in mm

All measurements taken forward from a lateral plane located at the rearmost point of the vehicle.

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

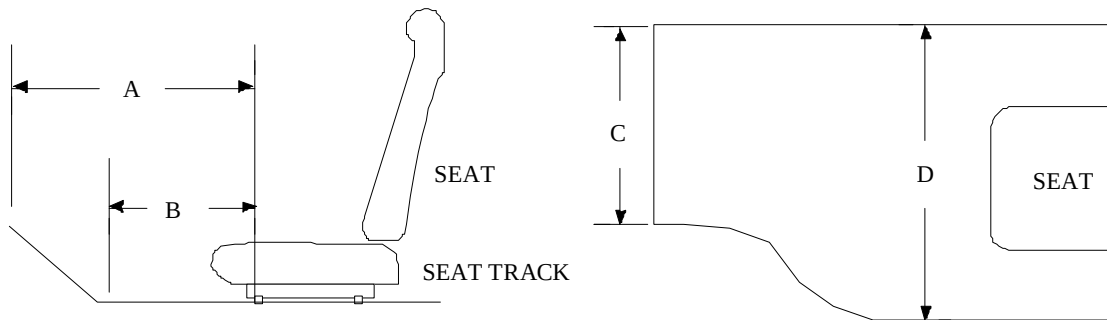


UNITS (mm)	LEFT				RIGHT		
MEASUREMENT	1	2	3	4*	1	2	3
BEFORE TEST	1073	1504	1157	1130	1092	1509	1117
AFTER TEST	910	1342	1270	996	1075	1491	1148
DIFFERENCE	163	162	-113	134	17	18	-31

* Insurance Institute for Highway Safety (IIHS) measurement for driver's side only

UNITS (mm)	A = WHEELBASE LEFT	A = WHEELBASE RIGHT
BEFORE TEST	2854	2858
AFTER TEST	2486	2981
DIFFERENCE	368	-123

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



DRIVER

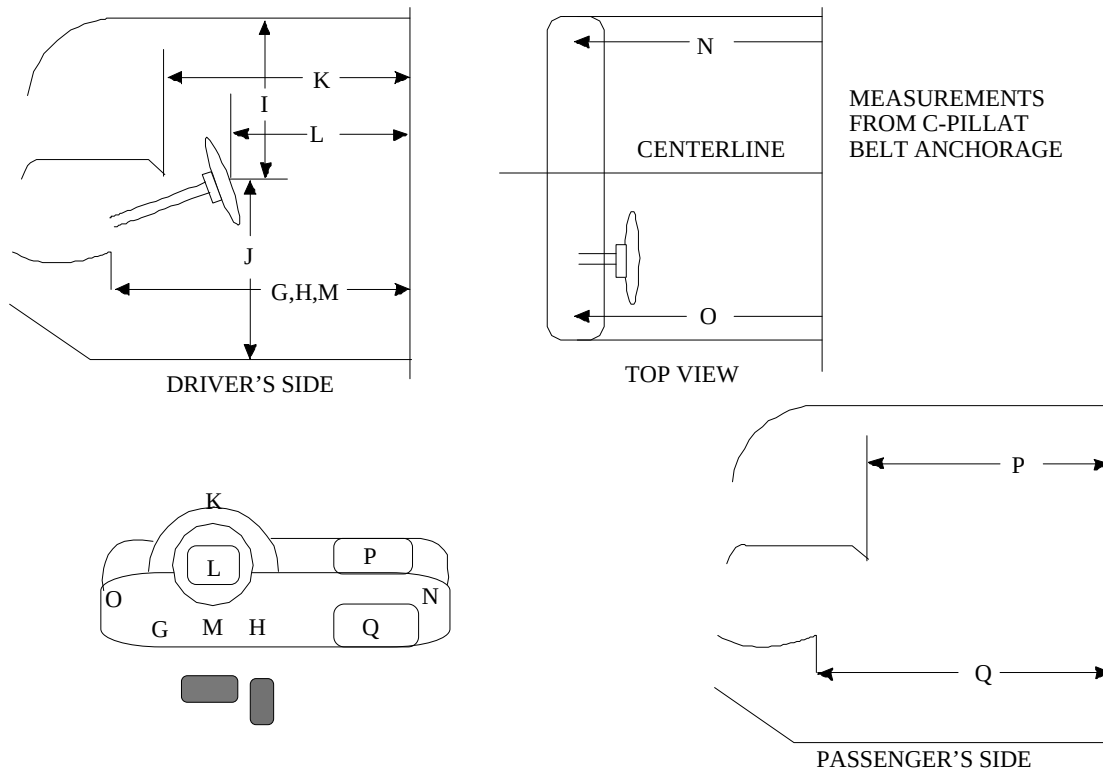
Measurement	Pre-Test	Post-Test	Difference
A	815	555	260
B	691	472	219
C	529	496	33
D	540	531	9

PASSENGER

Measurement	Pre-Test	Post-Test	Difference
A	825	669	156
B	730	626	104
C	529	494	35
D	499	508	-9

Units = mm

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

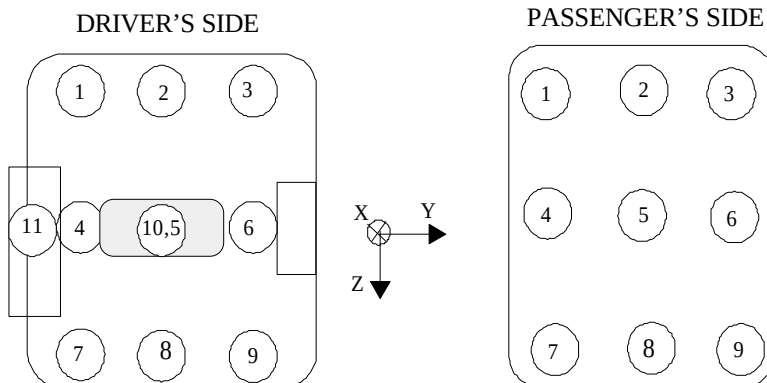


Measurement	Pre-Test	Post-Test	Difference
G*	1897	1717	180
H*	1886	1747	139
I	429	412	17
J	707	847	-140
K	1903	1747	156
L	1659	1516	143
M	1899	1734	165
N	878	879	-1
O	1839	1662	177
P = K (PASS.)	946	900	46
Q = M (PASS.)	931	894	37

* IHS measurement locations; 15 cm left and right of steering wheel center 45 cm from floor.

Units = mm

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



Driver Side Toe-pan Measurements

Toe-pan Location	X Deformation (mm)			Y Deformation (mm)			Z Deformation (mm)		
	Pre	Post	?	Pre	Post	?	Pre	Post	?
1	3704	3336	368	-495	-550	55	-518	-626	108
2	3710	3379	331	-350	-435	85	-524	-582	58
3	3688	3449	239	-203	-317	114	-528	-557	29
4*	3614	3266	348	-502	-598	96	-474	-553	79
5* ^A	3656	3325	331	-351	-441	90	-450	-546	96
6*	3623	3367	256	-214	-325	111	-466	-485	19
7	3581	3297	284	-506	-614	108	-389	-477	88
8	3587	3296	291	-353	-455	102	-379	-454	75
9	3580	3339	241	-197	-310	113	-384	-407	23
10	3479	3113	366	-389	-482	93	-532	-630	98
11*	3582	3288	294	-585	-694	109	-506	-575	69

Passenger Side Toe-pan Measurements

Toe-pan Location	X Deformation (mm)			Y Deformation (mm)			Z Deformation (mm)		
	Pre	Post	?	Pre	Post	?	Pre	Post	?
1	3689	3478	211	133	74	59	-521	-501	-20
2	3676	3534	142	285	204	81	-524	-494	-30
3	3689	3625	64	445	379	66	-522	-518	-4
4	3572	3512	60	150	115	35	-445	-455	10
5	3650	3560	90	302	263	39	-465	-439	-26
6	3643	3597	46	447	404	43	-455	-434	-21
7	3561	3452	109	151	118	33	-402	-415	13
8	3580	3491	89	302	266	36	-393	-378	-15
9	3578	3538	40	454	405	49	-388	-376	-12

Reference: (SAE) X = Rear Bumper (pos: forward); Y = Vehicle Centerline (pos: right); Z = Ground (pos: down)

* IIHS measurement locations

*^A IIHS measurement located directly behind 10 (brake pedal center) on the vehicle floorpan in same vertical plane.

DATA SHEET NO.14 VEHICLE MEASUREMENTS (cont.)
INSURANCE INSTITUTE MEASUREMENT LOCATION AND FLOOR PAN DEFORMATION DATA

IIHS Measurement Location Data

Meas. Loc*	X Measurement (mm)			Y Measurement (mm)			Z Measurement (mm)		
	Pre	Post	?	Pre	Post	?	Pre	Post	?
1	3036	2879	157	-410	-476	66	-1086	-1174	88
2	3274	3081	193	-561	-635	74	-828	-909	81
3	3263	3110	153	-262	-343	81	-814	-857	43
4	3479	3113	366	-389	-482	93	-532	-630	98
5	3614	3266	348	-502	-598	96	-474	-553	79
6	3656	3325	331	-351	-441	90	-450	-546	96
7	3623	3367	256	-214	-325	111	-466	-485	19
8	3582	3288	294	-585	-694	109	-506	-575	69
17	3509	3339	170	-821	-913	92	-1086	-1119	33
18	2380	2345	35	-881	-926	45	-1080	-1055	-25

Floor Pan Deformation Measurement Data

Meas. Loc**	X Measurement (mm)			Y Measurement (mm)			Z Measurement (mm)		
	Pre	Post	?	Pre	Post	?	Pre	Post	?
P0	2895	2824	71	-679	-795	116	-378	-263	-115
P1	3502	3295	207	-521	-638	117	-368	-430	62
P2	3501	3194	307	-375	-432	57	-367	-395	28
P3	3437	3276	161	-183	-299	116	-361	-397	36
P4	3352	3152	200	-509	-621	112	-366	-463	97
P5	3343	3165	178	-363	-472	109	-363	-458	95
P6	3341	3188	153	-206	-328	122	-367	-450	83
P7	3199	3030	169	-506	-601	95	-368	-421	53
P8	3189	3049	140	-363	-465	102	-364	-400	36
P9	3199	3055	144	-214	-310	96	-373	-406	33

Reference: (SAE) X = Rear Bumper (pos: forward); Y = Vehicle Centerline (pos: right); Z = Ground (pos: down)

Measurement Location Descriptions*

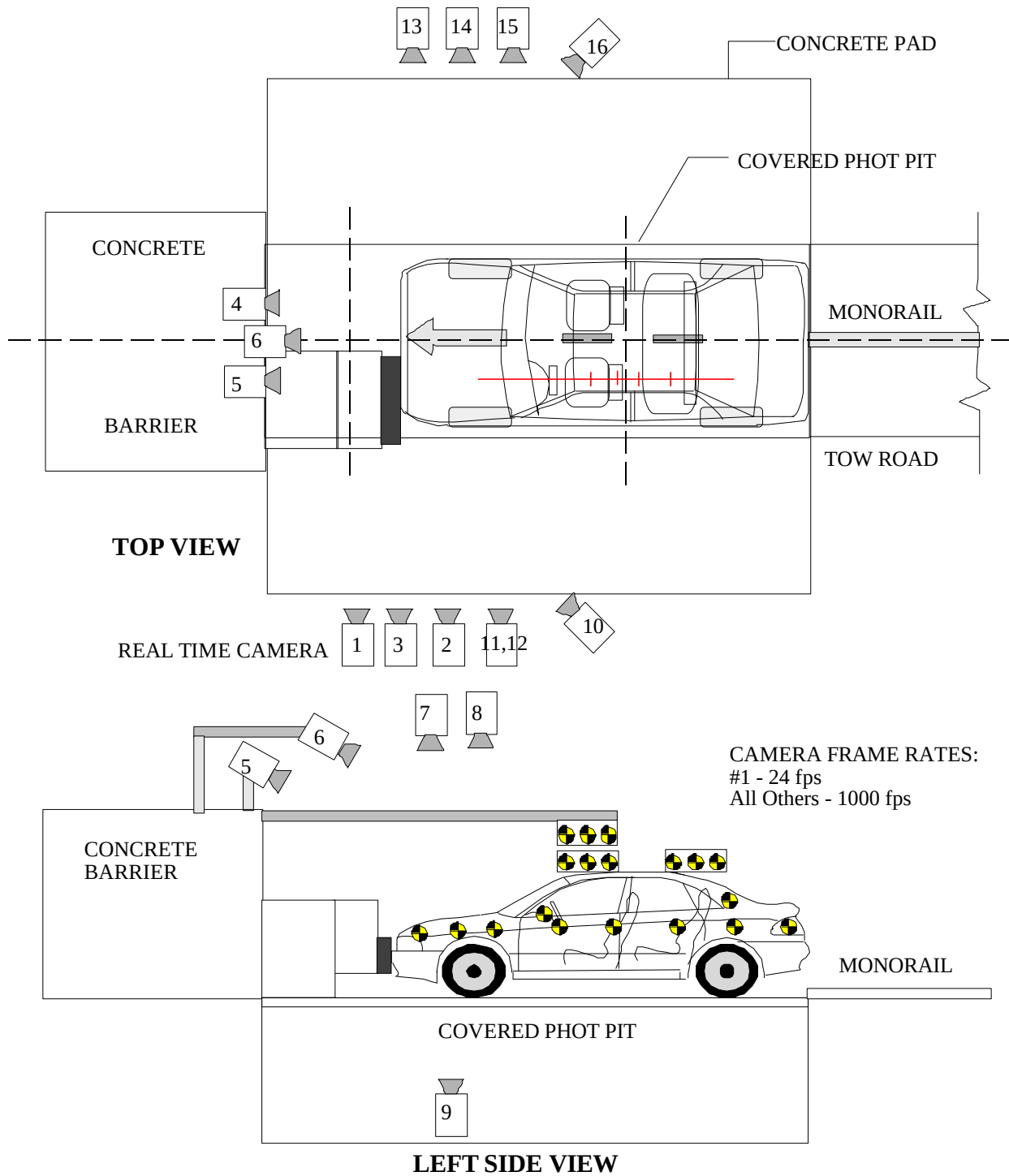
P0. Front Outside Seat Anchor Bolt

1. Steering Column - Geometric center of the steering wheel on airbag door.
2. Lower Instrument Panel Left - Taken 45 cm above floorpan and 15 cm to the left of the steering wheel center.
3. Lower Instrument Panel Right - Taken 45 cm above floorpan and 15 cm to the right of the steering wheel center.
4. Brake Pedal - Geometric center of the brake pedal.
5. Toepan Left - Taken 15 cm to the left of the brake pedal center on the same vertical plane on the vehicle toepan.
6. Toepan Center - Taken directly behind the brake pedal center on the same vertical plane on the vehicle toepan.
7. Toepan Right - Taken 15 cm to the right of the brake pedal center on the same vertical plane on the vehicle toepan.
8. Left Footrest - Taken 25 cm to the left of the brake pedal center on the same vertical plane on the vehicle toepan.
17. A-pillar - Taken on the vehicle exterior at the same vertical coordinate as the base on the left front window.
18. B-pillar - Taken on the vehicle exterior at the same vertical coordinate as the lower A-pillar mark.

** There is an equal spaced 3 x 3 floor pan matrix. Position 1 if floor pan left side forwardmost position; Position 9 is located on the right side rearmost position of the 3 x 3 grid.

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.:

RY5214

Vehicle:

2000 Nissan Quest 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	7258	810	1070	-2	6946	12.5	1005
3	Left Side View	8947	210	1220	-2	8635	25	1000
4	Passenger Front View	-520	-2050	1987	-29	-	13	1005
5	Driver Front View	-520	-2050	3488	-37	-	13	1005
6	Windshield View	0	-2050	3048	-40	-	13	1000
7	Overhead Overall View	0	156	4880	-90	-	13	1000
8	Overhead Close-Up View	0	323	4880	-90	-	13	1005
9	Pit View of Engine	0	1325	-3048	90	-	13	1030
10	Driver and Interior View	6728	1400	2000	-8	-	25	1005
11	Steering Column (Bottom)	8521	300	1177	-4	8209	25	1005
12	Steering Column (Top)	8521	300	1777	-8	8209	25	1000
13	Overall Right Side View	7670	800	1135	-1	7980	12.5	1000
14	Right Side View	9868	120	1120	-4	10178	25	1050
15	Right Passenger View	9144	1305	1426	-4	9454	35	1000
16	Passenger and Interior View	8689	1815	1985	-9	-	25	1005

*X = film plane to monorail centerline

** = referenced to horizontal plane

Y = film plane to impact location

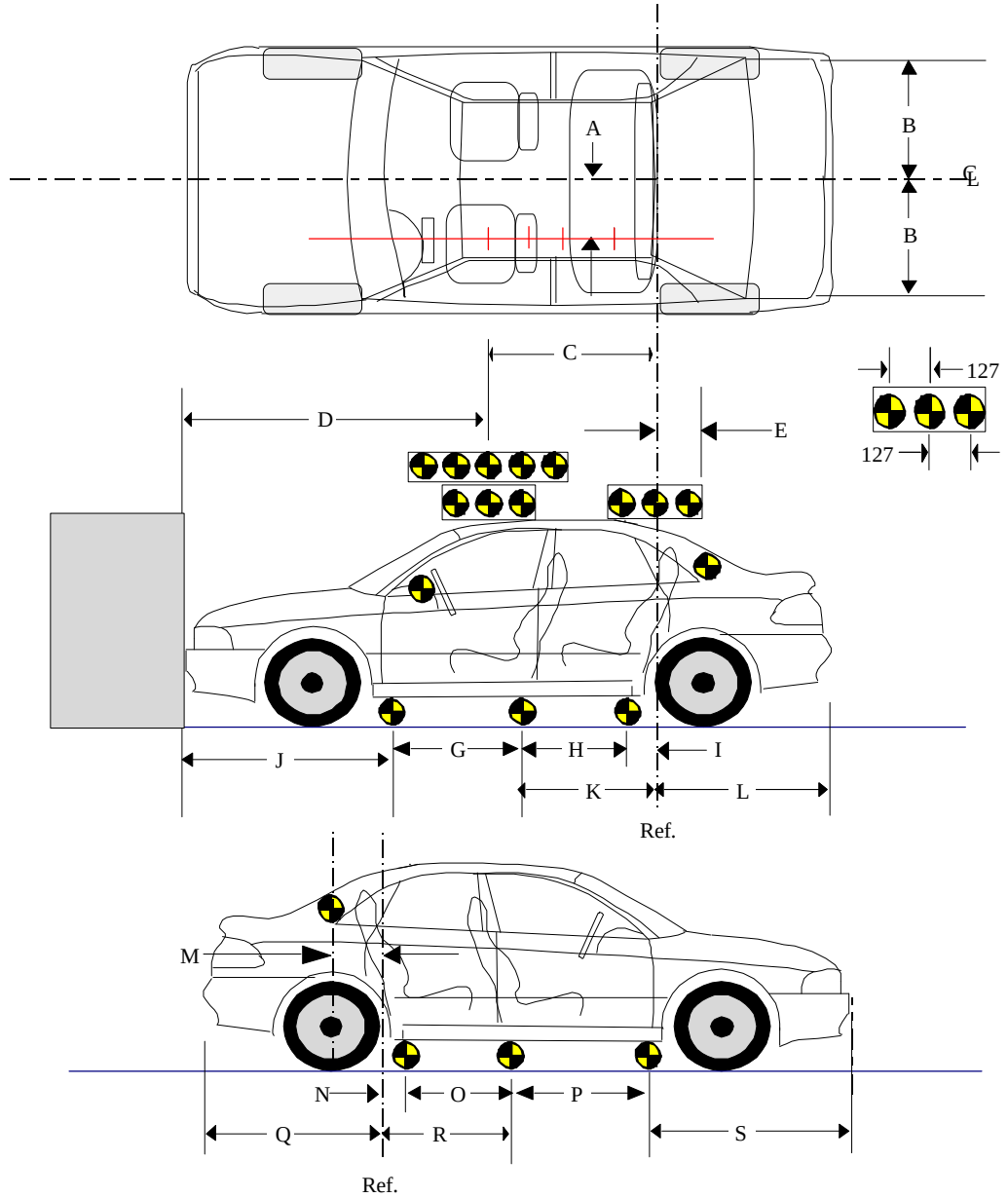
N.T. indicates No Timing

Z = film plane to ground

DATA SHEET NO. 16 VEHICLE REFERENCE PHOTO TARGET LOCATIONS

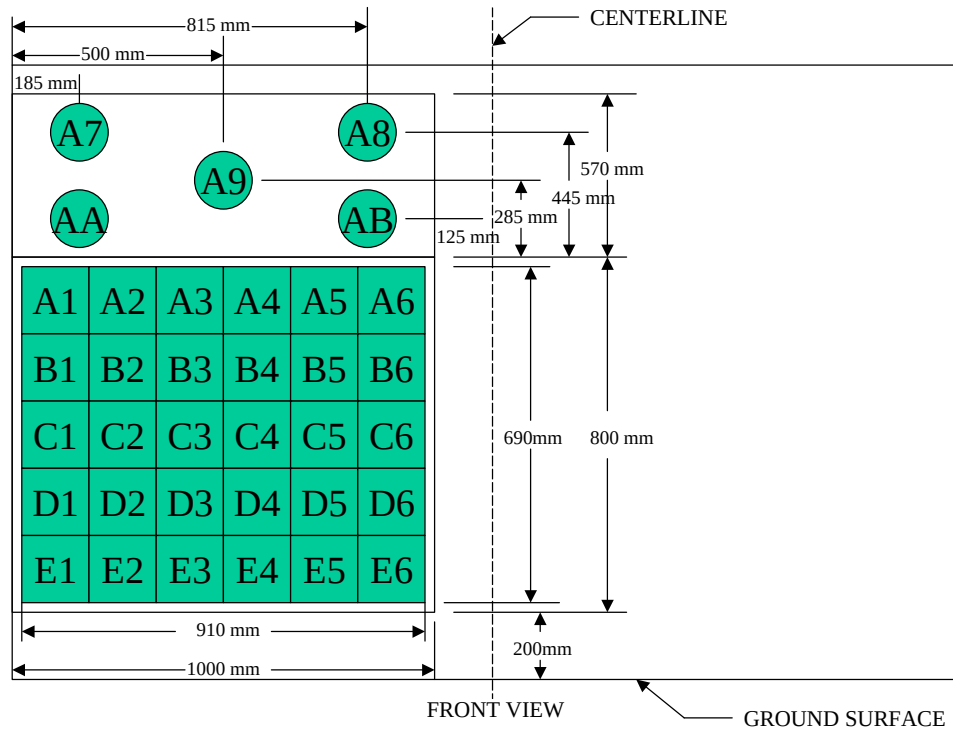
(Dimensions in millimeters)

A	386
B	622
C	1216
D	2304
E	291
F	1742
G	946
H	954
I	134
J	1474
K	1088
L	1437
M	319
N	147
O	954
P	946
Q	1421
R	1101
S	1364



DATA SHEET NO. 17 LOAD CELL LOCATIONS RELATIVE TO FIXED BARRIER AND
DEFORMABLE BARRIER FACE

35 Load Cells



Load cell width	146 mm
Load cell height	133 mm
Vertical gap between load cells	6 mm
Horizontal gap between load cells	6 mm
Vertical filler block width	55 mm

The following data is presented in Appendix B:

- (1)X Direction Data from load cells A1 through A6
- (2)X and Y Direction Data from load cells B1 through E6

DATA SHEET NO. 18 POST TEST AIR BAG DATA

NHTSA No.: RY5214; Test Date: November 27, 2001; Technician: Patrick G. MacDiarmid

Vehicle Model Year/Make/Model: 2000 Nissan Quest MPV

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

B. Size of vent holes: (mm²) 491 -Driver 1257 -Passenger

C. Total vent area: (mm²) 982 -Driver 2514 -Passenger

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

Driver: 490 -Height; 570 -Width; 260 -Depth

Passenger: 700 -Height; 580 -Width; 670 -Depth

E. Is the air bag tethered?

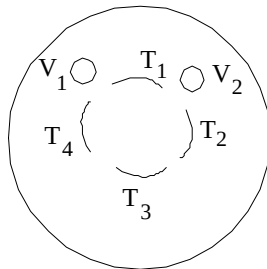
Driver: X -Yes; - -No; If yes, record length of tether- 250

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

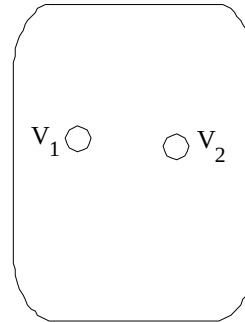
Sketch the air bag showing the location of the vent holes, how the bag is tethered, and where the bag is tethered. Also describe how the tethers are attached to the bag and the steering wheel.

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

Driver



Passenger



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

Driver: Air bag: T3LI048N20013 30318367A

Generator: XL2A78042B12ABJAF0 DP 4AFQ056N30255

Passenger: Air bag: P500542800AA03 JHWL4MSPAUA

Generator: LQV L59 42 AKH APP2005250293 DP

DATA SHEET NO. 19 ACCIDENT INVESTIGATION DIVISION DATA

FOR 56.3 KPH OFFSET FRONTAL BARRIER IMPACT

Vehicle Make/Model/Body Style: Nissan Quest MPV

NHTSA Test No.: RY5214 VIN: 4N2XN11T2YD824078

Model Year: 2000 Build Date: 3/00 Test Date: November 27, 2001

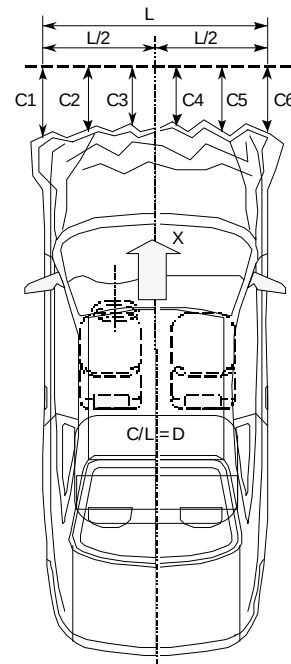
Vehicle Size Category: _____ Test Weight: 2070.0 kg

Vehicle Wheelbase: 2854 mm; Front Overhang: 1001 mm; Overall Width: 1890 mm

Collision Deformation Classification (CDC) Code: 12FDEW5

Crush Depth Dimensions

	PRE	POST	DIFF	
C1 =	4781	4047	734	mm
C2 =	4890	4167	723	mm
C3 =	4937	4187	750	mm
C4 =	4939	4450	489	mm
C5 =	4895	4679	216	mm
C6 =	4785	4852	-67	mm



Midpoint of Damage: D = Vehicle Centerline (Longitudinal)

Length of Damaged Region:

L1=	<u>1446</u>	mm
L2=	<u>723</u>	mm
L5=	<u>289.2</u>	mm

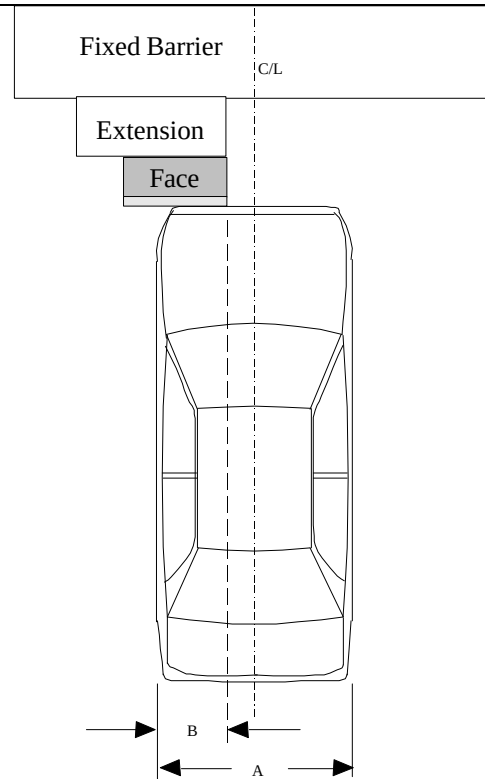
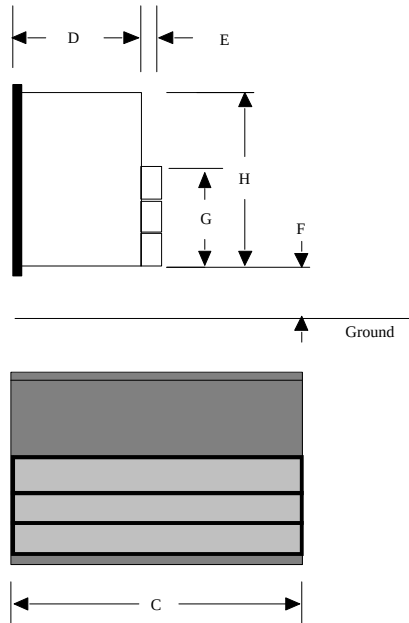
DATA SHEET NO. 20 OFFSET BARRIER AND VEHICLE ORIENTATION

NHTSA Test No.: RY5214

Vehicle: 2000 Nissan Quest MPV

Barrier Manufacturer and Serial Number:

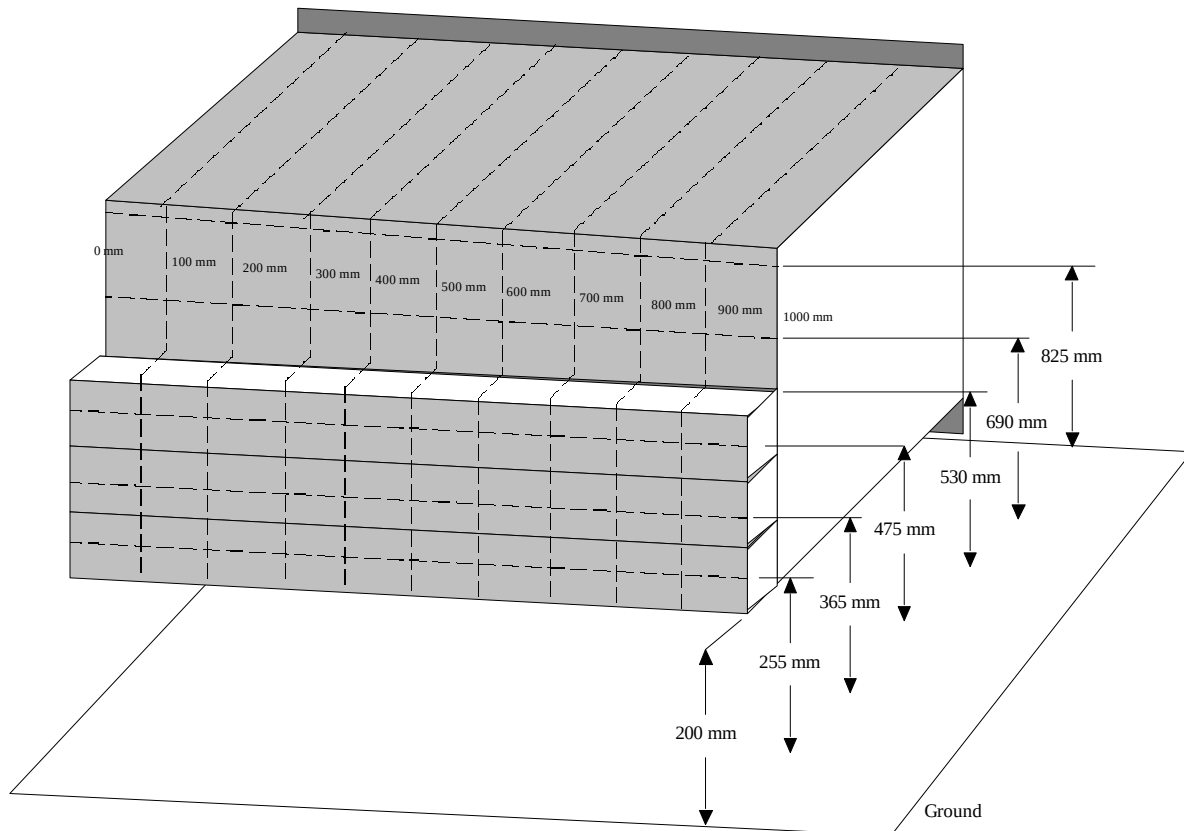
Cellbond



A	Total Vehicle Width	1890	mm
B	40% Overlap Distance	756.0	mm
C	Deformable Face Width	1000	mm
D	Single Stage Honeycomb Depth	450	mm
E	Bumper Element Depth	90	mm
F	Lower Edge Height From Ground	200	mm
G*	Bumper Element Height	330	mm
H	Deformable Barrier Honeycomb Height	650	mm

* The bumper element consists of three 110 mm height blocks of 1.723 MPa honeycomb

Offset Barrier Measurement Locations



DATA SHEET NO. 21 OFFSET BARRIER DEFORMATION (continued)

EXTERIOR STATIC CRUSH FOR BARRIER FACE
(Grid as looking at barrier from front)

Vehicle: _ 2000 Nissan Quest MPV

NHTSA No. RY5214

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

LEVEL	HEIGHT AT CL (mm)*		DISTANCE RIGHT OF CENTER (mm)					0	DISTANCE LEFT OF CENTER (mm)				
			500	400	300	200	100		100	200	300	400	500
LEVEL 6 TOP STACK	825	PRE	546	546	546	546	546	546	546	546	546	546	546
		POST	527	555	595	655	726	776	773	822	835	879	942
		CRUSH	-19	9	49	109	180	230	227	276	289	333	396
LEVEL 5 MID STACK	687	PRE	546	546	546	546	546	546	546	546	546	546	546
		POST	536	551	615	689	759	803	849	880	897	929	956
		CRUSH	-10	5	69	143	213	257	303	334	351	383	410
LEVEL 4 TOP BUMPER	530	PRE	546	546	546	546	546	546	546	546	546	546	546
		POST	551	578	647	736	792	880	905	944	950	946	962
		CRUSH	5	32	101	190	246	334	359	398	404	400	416
LEVEL 3 BUMPER TOP	475	PRE	456	456	456	456	456	456	456	456	456	456	456
		POST	434	537	614	664	733	808	879	926	934	938	963
		CRUSH	-22	81	158	208	277	352	423	470	478	482	507
LEVEL 2 BUMPER MID	365	PRE	456	456	456	456	456	456	456	456	456	456	456
		POST	448	533	568	624	687	764	851	911	934	945	969
		CRUSH	-8	77	112	168	231	308	395	455	478	489	513
LEVEL 1 BUMPER LOW	255	PRE	456	456	456	456	456	456	456	456	456	456	456
		POST	471	515	556	593	640	695	764	792	828	874	917
		CRUSH	15	59	100	137	184	239	308	336	372	418	461

*Heights measured above ground level.

APPENDIX A
PHOTOGRAPHS

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Figure A-1 PRE-TEST FRONT VIEW



Figure A-2 POST-TEST FRONT VIEW



Figure A-3 PRE-TEST LEFT SIDE VIEW



Figure A-4 POST-TEST LEFT SIDE VIEW



Figure A-5 PRE-TEST RIGHT SIDE VIEW



Figure A-6 POST-TEST RIGHT SIDE VIEW



Figure A-7 PRE-TEST RIGHT FRONT THREE-QUARTER VIEW



Figure A-8 POST-TEST RIGHT FRONT THREE-QUARTER VIEW



Figure A-9 PRE-TEST LEFT REAR THREE-QUARTER VIEW



Figure A-10 POST-TEST LEFT REAR THREE-QUARTER VIEW



Figure A-11 PRE-TEST WINDSHIELD VIEW



Figure A-12 POST-TEST WINDSHIELD VIEW



Figure A-13 PRE-TEST ENGINE COMPARTMENT VIEW



Figure A-14 FUEL CAP VIEW

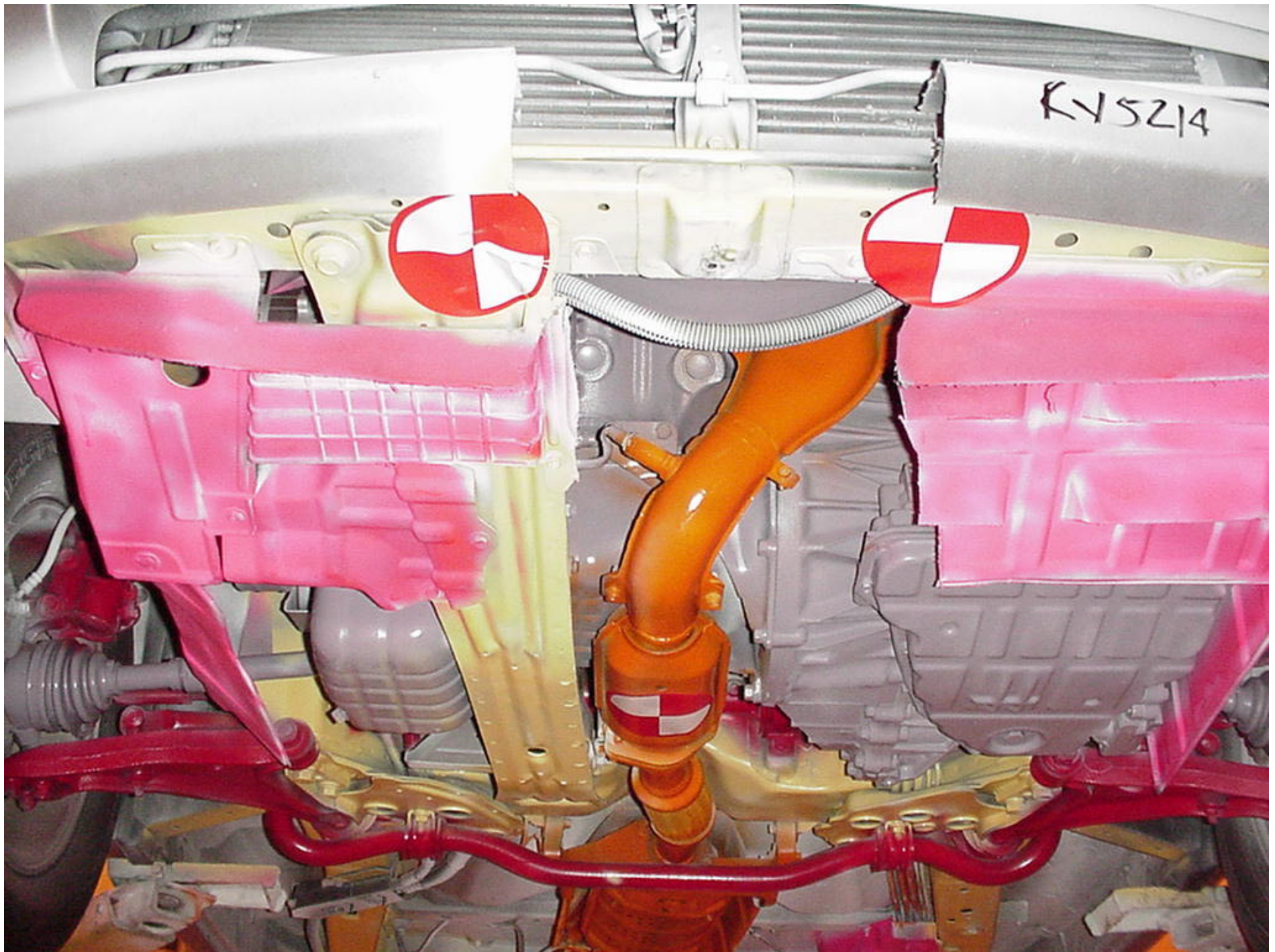


Figure A-15 PRE-TEST FRONT UNDERBODY VIEW

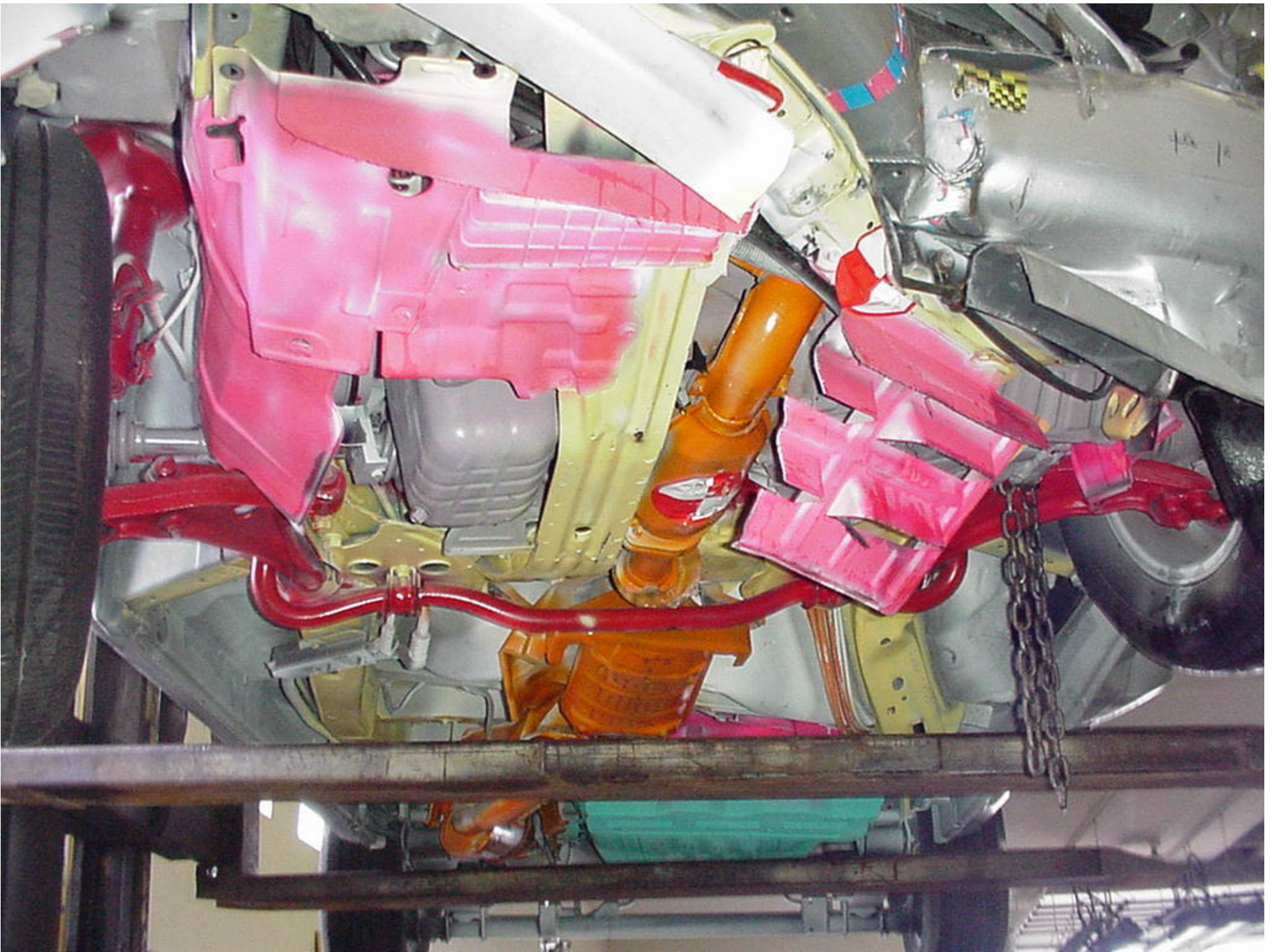


Figure A-16 POST-TEST FRONT UNDERBODY VIEW



Figure A-17 PRE-TEST FRONT SIDE UNDERBODY VIEW

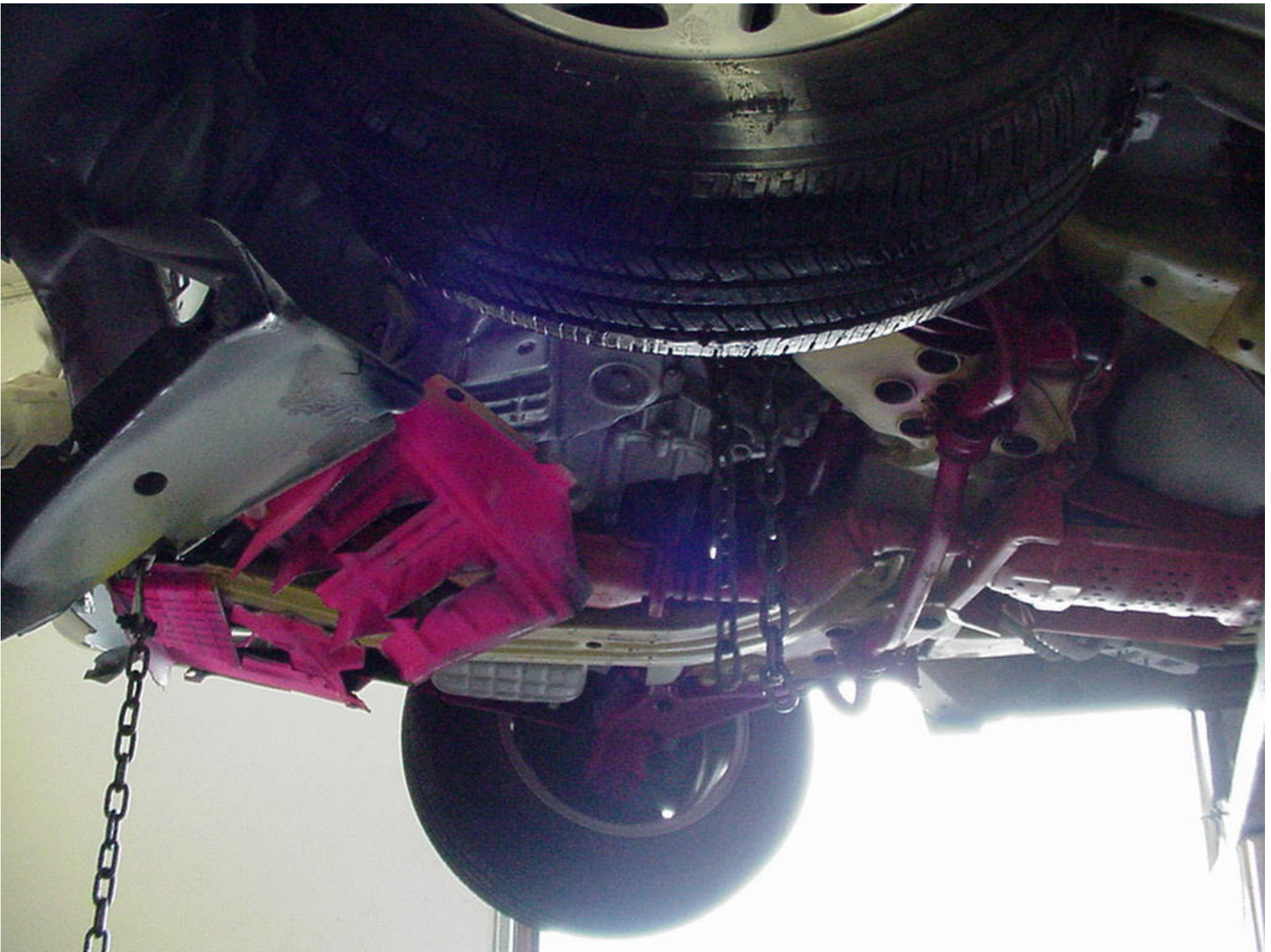


Figure A-18 POST-TEST FRONT SIDE UNDERBODY VIEW



Figure A-19 PRE-TEST REAR UNDERBODY VIEW

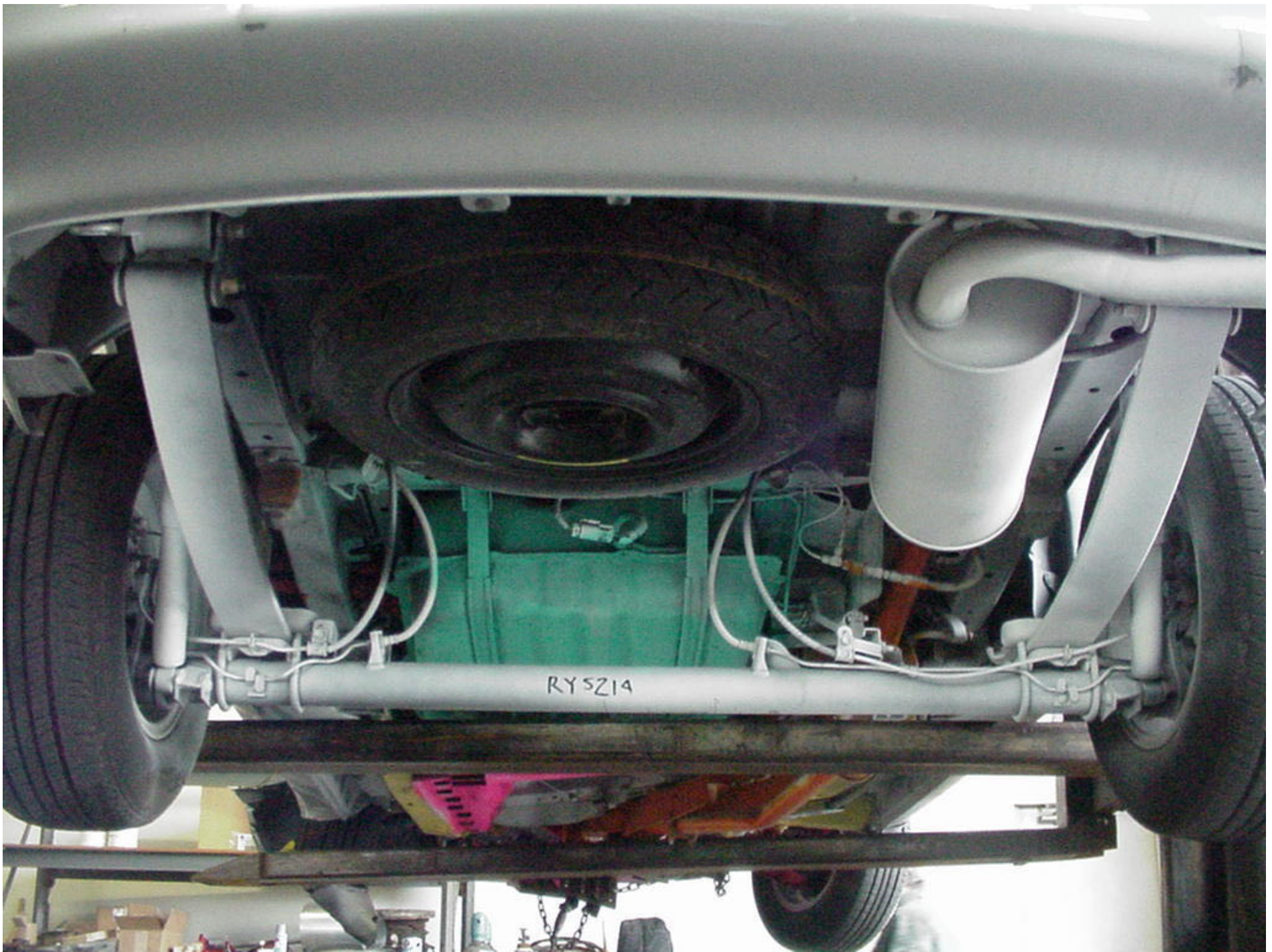


Figure A-20 POST-TEST REAR UNDERBODY VIEW



Figure A-21 PRE-TEST DRIVER POSITION VIEW



Figure A-22 POST-TEST DRIVER POSITION VIEW



Figure A-23 PRE-TEST PASSENGER POSITION VIEW



Figure A-24 POST-TEST PASSENGER POSITION VIEW



Figure A-25 PRE-TEST DRIVER AND INTERIOR VIEW



Figure A-26 POST-TEST DRIVER AND INTERIOR VIEW



Figure A-27 PRE-TEST PASSENGER AND INTERIOR VIEW



Figure A-28 POST-TEST PASSENGER AND INTERIOR VIEW



Figure A-29 PRE-TEST DRIVER HEAD LOCATION



Figure A-30 POST-TEST DRIVER HEAD LOCATION



Figure A-31 PRE-TEST PASSENGER HEAD LOCATION



Figure A-32 POST-TEST PASSENGER HEAD LOCATION



Figure A-33 PRE-TEST DRIVER FLOOR PAN VIEW



Figure A-34 POST-TEST DRIVER FLOOR PAN VIEW

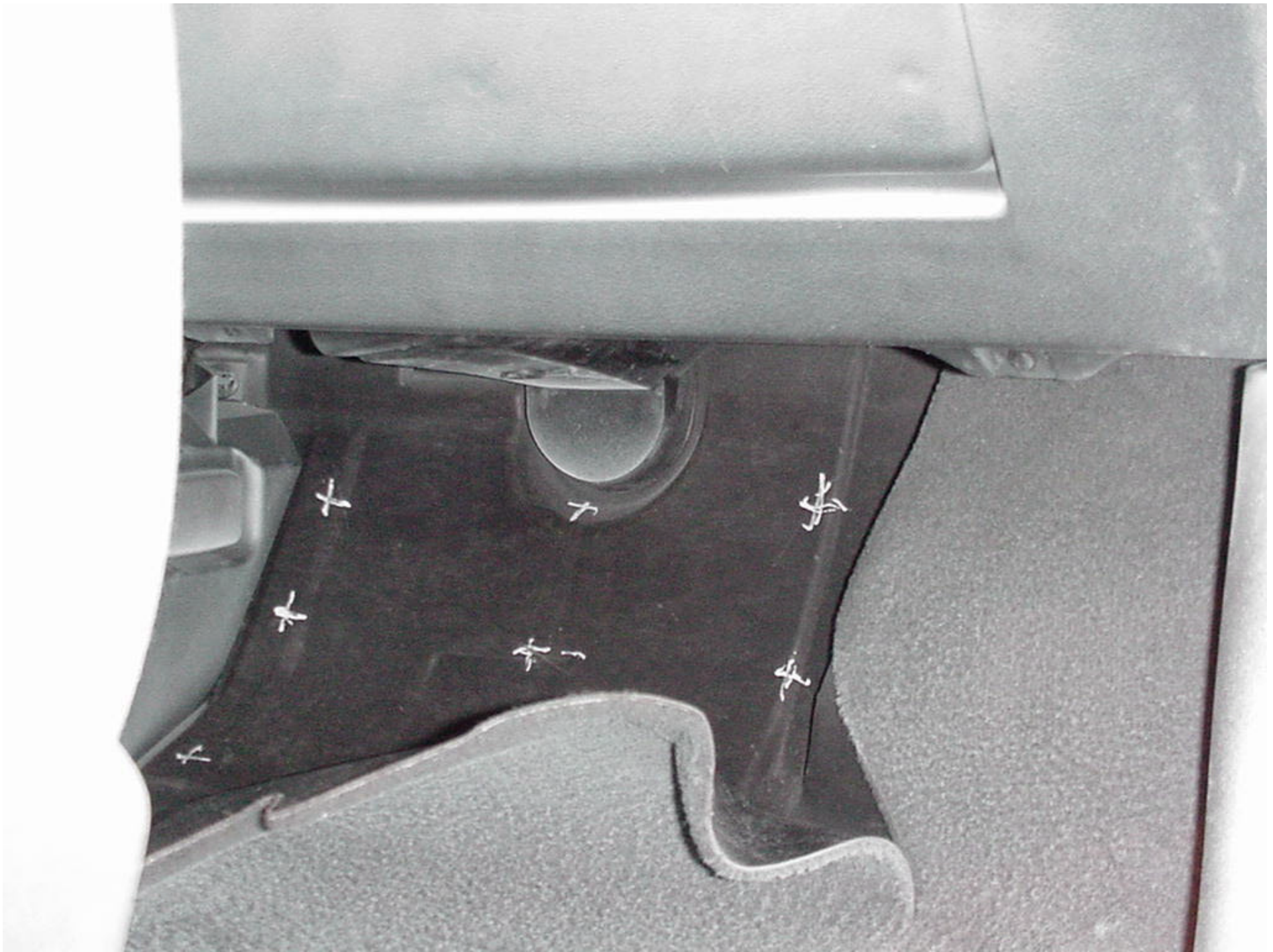


Figure A-35 PRE-TEST PASSENGER FLOOR PAN VIEW

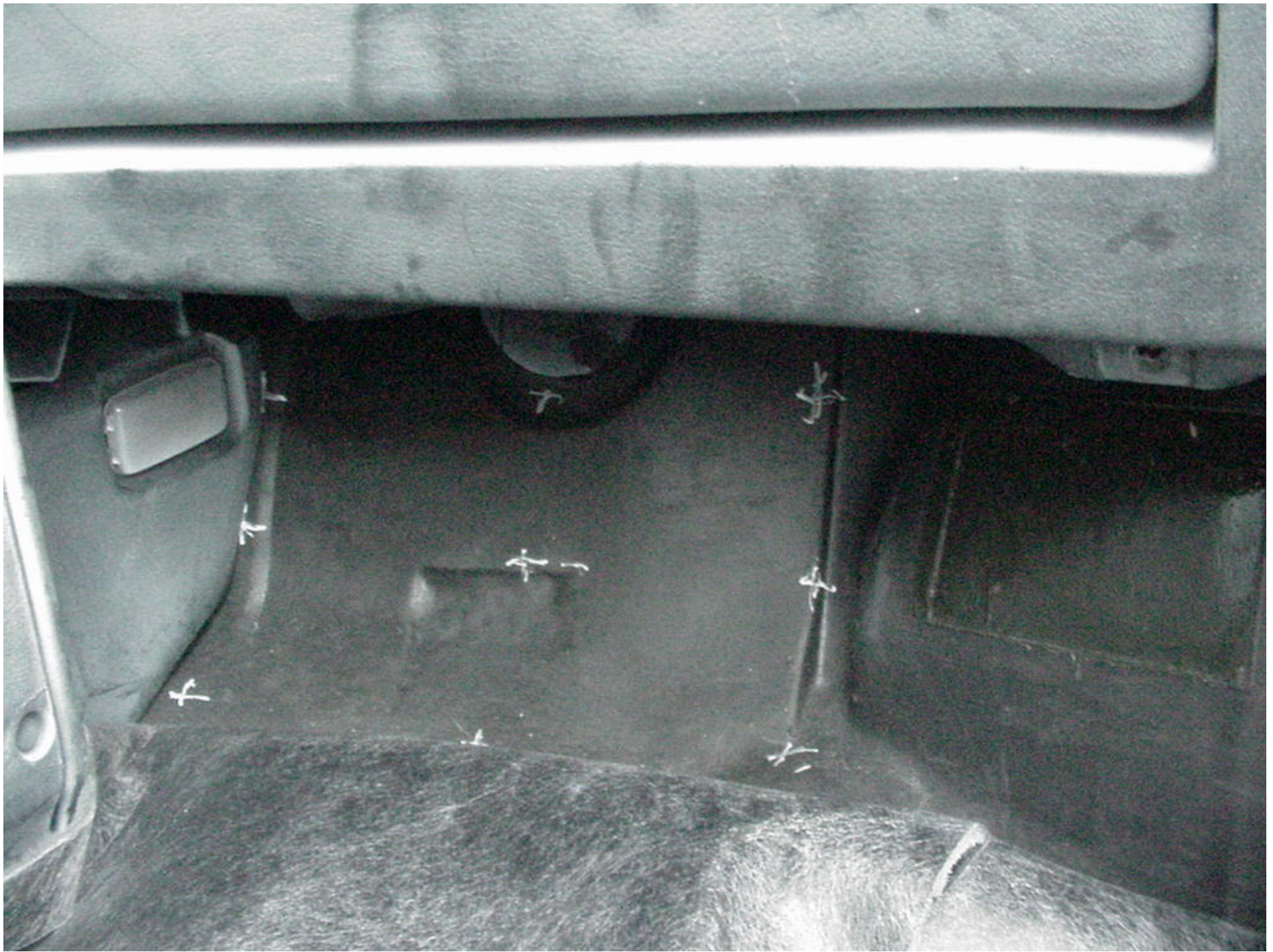


Figure A-36 POST-TEST PASSENGER FLOOR PAN VIEW



Figure A-37 PRE-TEST BARRIER FRONT VIEW



Figure A-38 POST-TEST BARRIER FRONT VIEW



Figure A-39 PRE-TEST BARRIER LEFT SIDE VIEW

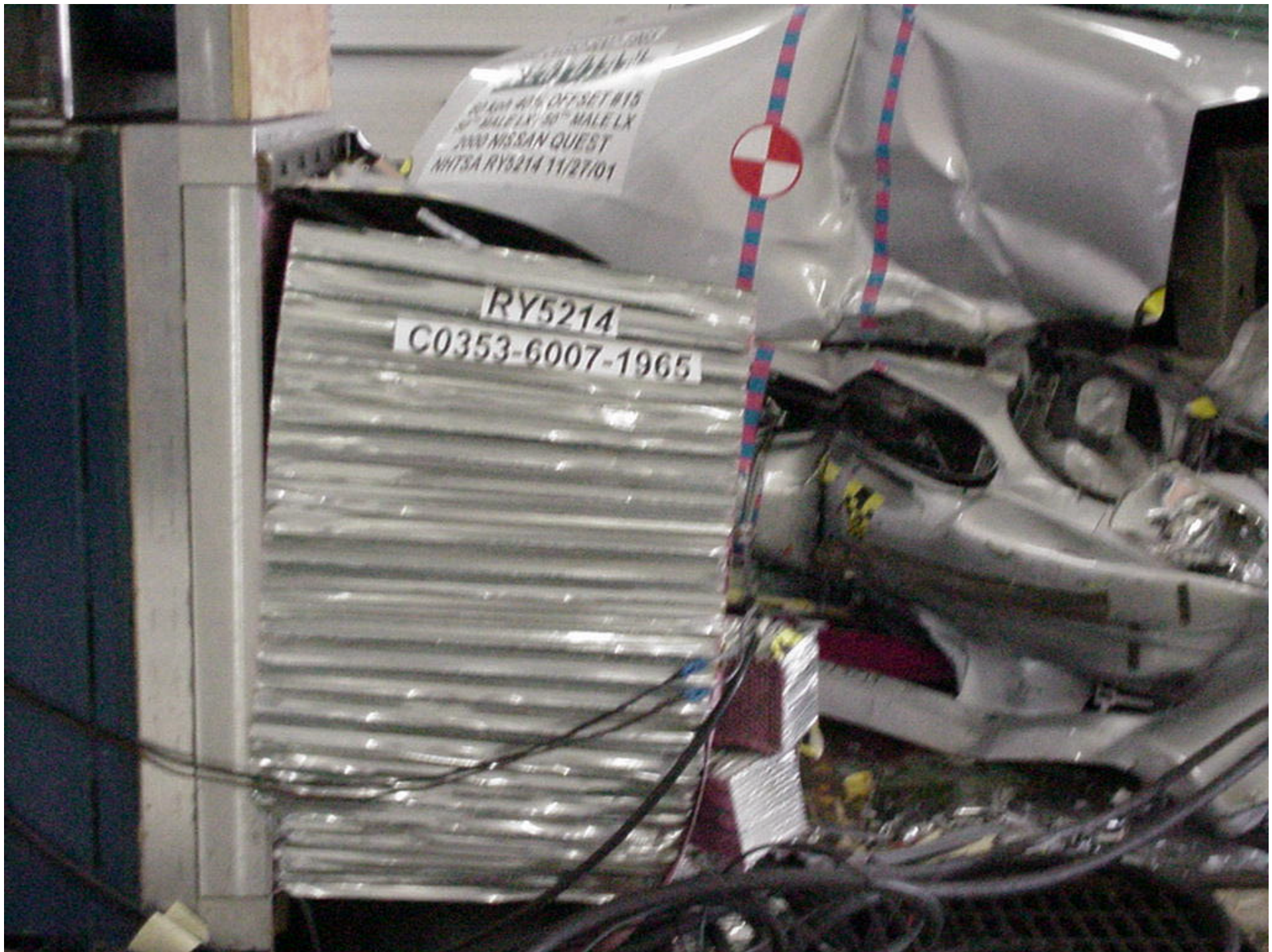


Figure A-40 POST-TEST BARRIER LEFTSIDE VIEW

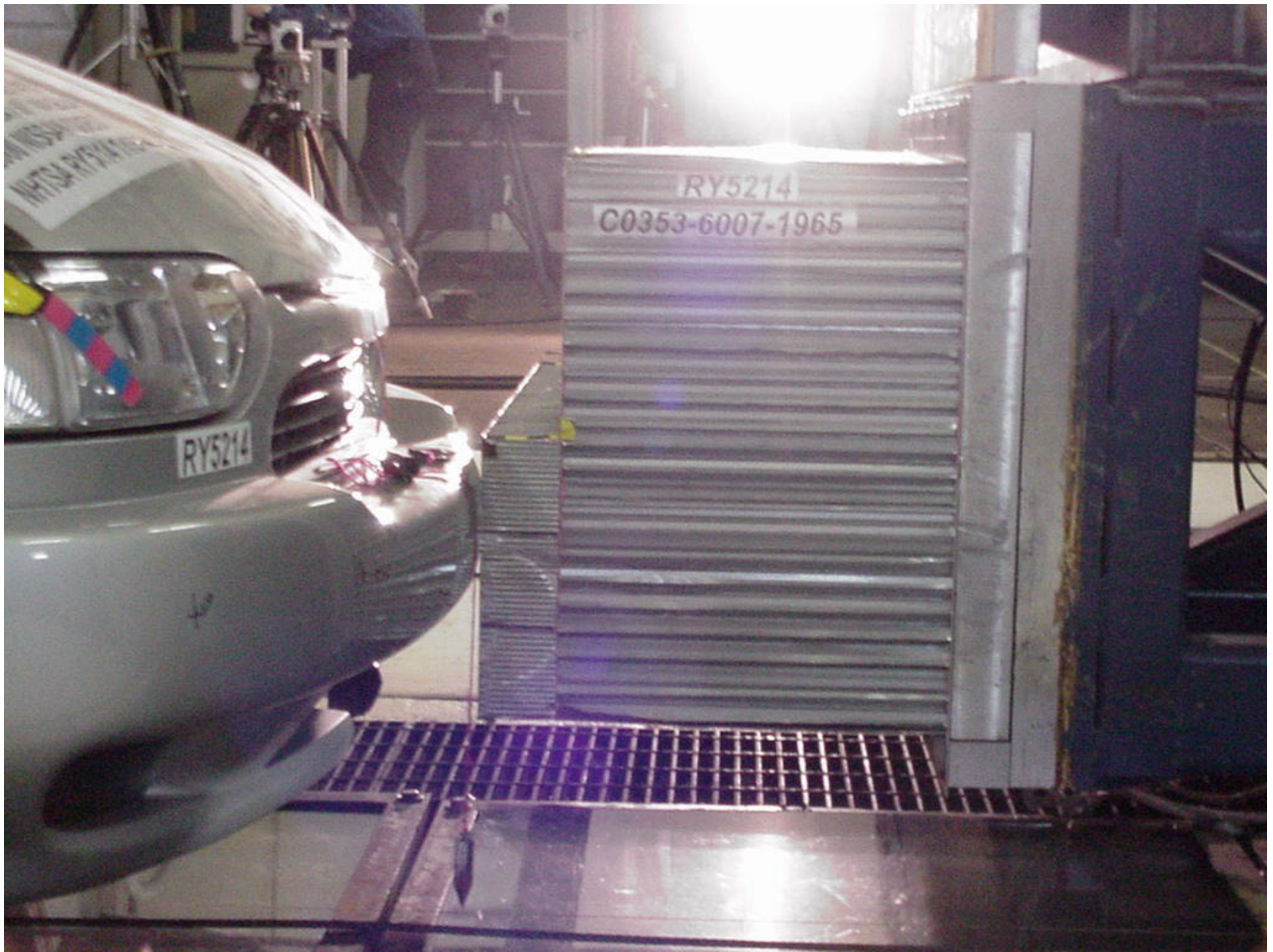


Figure A-41 PRE-TEST BARRIER RIGHT SIDE VIEW

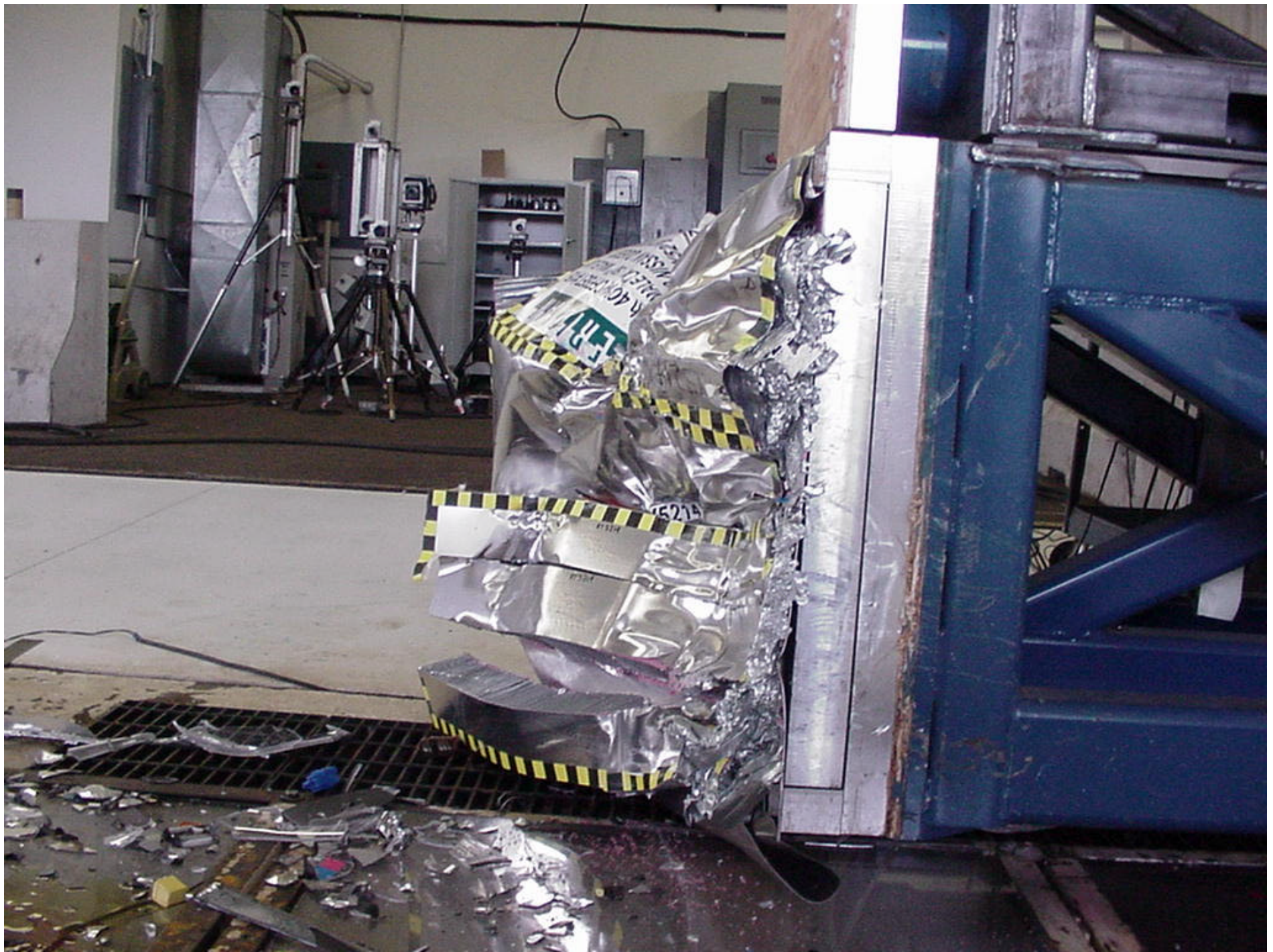


Figure A-42 POST-TEST BARRIER RIGHT SIDE VIEW



Figure A-43 PRE-TEST BARRIER TOP VIEW

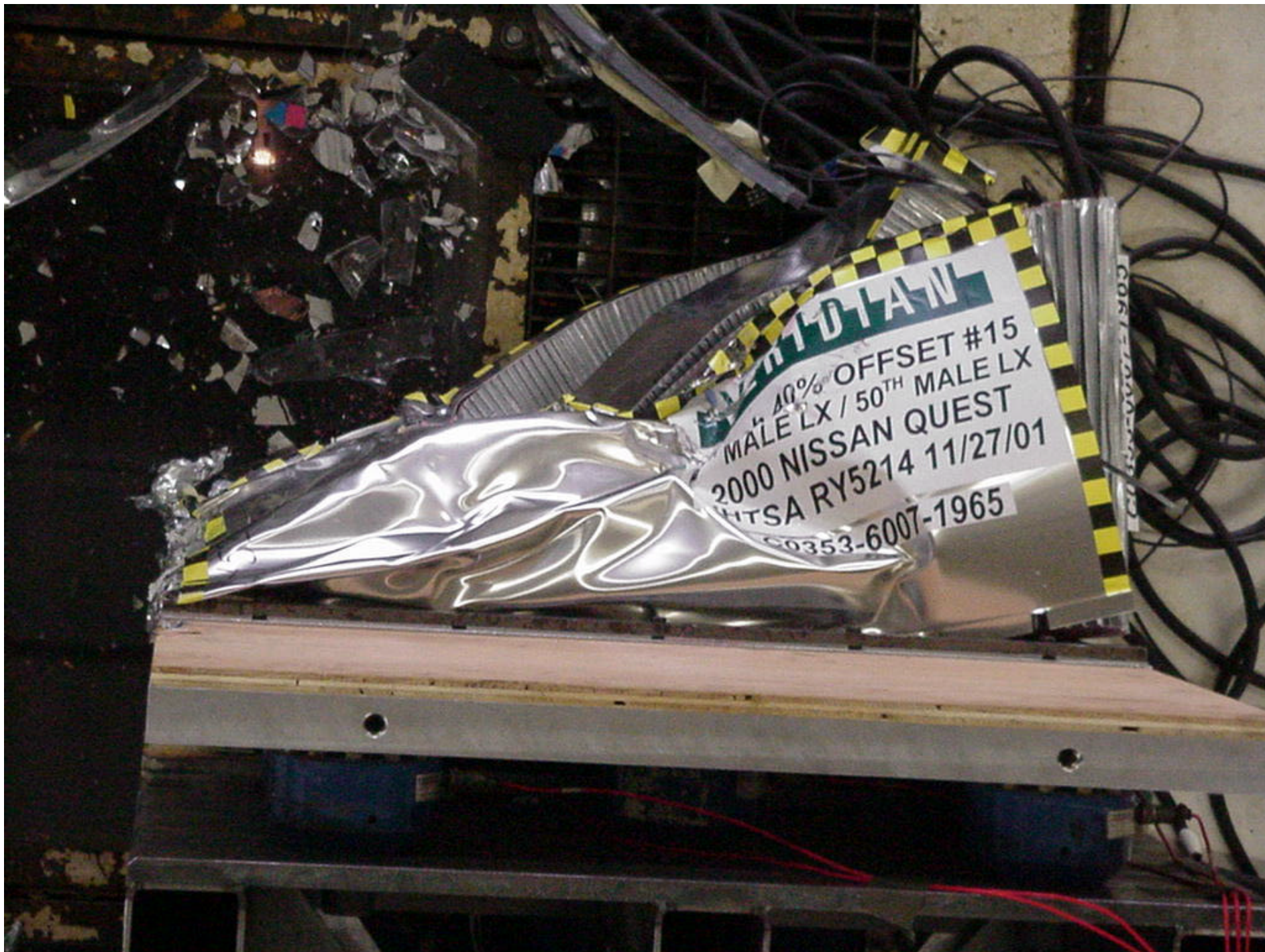


Figure A-44 POST-TEST BARRIER TOP VIEW



Figure A-46 ROLLOVER VIEW



Figure A-47 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, Chest Forward Fy Head leftward, Chest rightward Fz Head Upward, Chest Downward Mx Left ear toward left shoulder My Chin toward sternum (flexion) Mz Chin toward 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 (right and left leg)	Fx Knee Upward, Upper Femur Downward Fy Knee Rightward, Upper Femur Leftward Fz Knee Forward, Pelvis Rearward Mx Knee Leftward, Hold Upper Femur in Place My Knee Upward, Hold Upper Femur in Place Mz Tibia Leftward, Hold Pelvis in Place
Upper Tibia Load Cell (right and left leg)	Fx Ankle Forward, Knee Rearward Fy Ankle Rightward, Knee Leftward Fz Tibia Downward, Femur Upward Mx Ankle Leftward, Hold Knee in Place My Ankle Forward, Bottom of Knee Clevis Rearward
Lower Tibia Load Cell (right and left leg)	Fx Ankle Forward, Knee Rearward Fy Ankle Rightward, Knee Leftward Fz Tibia Downward, Femur Upward Mx Ankle Leftward, Hold Knee in Place My Ankle Forward, Bottom of Knee Clevis Rearward
Knee Shear Displacement	X Hold Femur Move Tibia Forward
Tibia Mid-Shaft Accelerometer	X Forward Y To the Right
Foot Rotations (left foot)	X Eversion Y Dorsi Flexion Z Internal Rotation
Foot Rotations (right foot)	X Inversion Y Dorsi Flexion Z External Rotation
Foot Accelerometer (right and left foot)	X Forward Y To the Right Z Down

DATA CHANNEL FILTER CLASS SUMMARY

NHTSA TEST NO. RY5214

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

PLOT	PLOT NAME[UNITS, CHANNEL FILTER CLASS]	PAGE
1	P1 Head 9 Array X Arm Ay [g, CFC_1000]	B-10
2	P1 Head 9 Array X Arm Az [g, CFC_1000]	B-11
3	P1 Head 9 Array Y Arm Ax [g, CFC_1000]	B-12
4	P1 Head 9 Array Y Arm Az [g, CFC_1000]	B-13
5	P1 Head 9 Array Z Arm Ax [g, CFC_1000]	B-14
6	P1 Head 9 Array Z Arm Ay [g, CFC_1000]	B-15
7	P1 Head CG x [g, CFC_1000]	B-16
8	P1 Head CG y [g, CFC_1000]	B-17
9	P1 Head CG z [g, CFC_1000]	B-18
10	P1 Head CG Resultant [g, CFC_1000]	B-19
11	P1 Head CG Red x [g, CFC_1000]	B-20
12	P1 Head CG Red y [g, CFC_1000]	B-21
13	P1 Head CG Red z [g, CFC_1000]	B-22
14	P1 Head CG Red Resultant [g, CFC_1000]	B-23
15	P1 Upper Neck Fx [N, CFC_1000]	B-24
16	P1 Upper Neck Fy [N, CFC_1000]	B-25
17	P1 Upper Neck Fz [N, CFC_1000]	B-26
18	P1 Upper Neck F Resultant [N, CFC_1000]	B-27
19	P1 Upper Neck Mx [N-m, CFC_600]	B-28
20	P1 Upper Neck My [N-m, CFC_600]	B-29
21	P1 Upper Neck Mz [N-m, CFC_600]	B-30
22	P1 Upper Neck M Resultant [N-m, CFC_600]	B-31
23	P1 Chest x [g, CFC_180]	B-32
24	P1 Chest y [g, CFC_180]	B-33
25	P1 Chest z [g, CFC_180]	B-34
26	P1 Chest Resultant [g, CFC_180]	B-35
27	P1 Chest Red x [g, CFC_180]	B-36
28	P1 Chest Red y [g, CFC_180]	B-37
29	P1 Chest Red z [g, CFC_180]	B-38
30	P1 Chest Red Resultant [g, CFC_180]	B-39
31	P1 Chest Compression [mm, CFC_600]	B-40
32	P1 Pelvic x [g, CFC_1000]	B-41
33	P1 Pelvic y [g, CFC_1000]	B-42
34	P1 Pelvic z [g, CFC_1000]	B-43
35	P1 Pelvic Resultant [g, CFC_1000]	B-44
36	P1 Left Femur Fx [N, CFC_600]	B-45
37	P1 Left Femur Fy [N, CFC_600]	B-46
38	P1 Left Femur Fz [N, CFC_600]	B-47
39	P1 Left Femur F Resultant [N, CFC_600]	B-48
40	P1 Left Femur Mx [Nm, CFC_600]	B-49
41	P1 Left Femur My [Nm, CFC_600]	B-50
42	P1 Left Femur Mz [Nm, CFC_600]	B-51
43	P1 Left Femur M Resultant [Nm, CFC_600]	B-52
44	P1 Right Femur Fx [N, CFC_600]	B-53
45	P1 Right Femur Fy [N, CFC_600]	B-54
46	P1 Right Femur Fz [N, CFC_600]	B-55

47	P1 Right Femur F Resultant [N, CFC_600]	B-56
48	P1 Right Femur Mx [Nm, CFC_600]	B-57
49	P1 Right Femur My [Nm, CFC_600]	B-58
50	P1 Right Femur Mz [Nm, CFC_600]	B-59
51	P1 Right Femur M Resultant [Nm, CFC_600]	B-60
52	P1 Left Knee Shear Dx [mm, CFC_180]	B-61
53	P1 Right Knee Shear Dx [mm, CFC_180]	B-62
54	P1 Left Upper Tibia Fx [N, CFC_600]	B-63
55	P1 Left Upper Tibia Fz [N, CFC_600]	B-64
56	P1 Left Upper Tibia Mx [Nm, CFC_600]	B-65
57	P1 Left Upper Tibia My [Nm, CFC_600]	B-66
58	P1 Left Lower Tibia Fx [N, CFC_600]	B-67
59	P1 Left Lower Tibia Fy [N, CFC_600]	B-68
60	P1 Left Lower Tibia Fz [N, CFC_600]	B-69
61	P1 Left Lower Tibia F Resultant [N, CFC_600]	B-70
62	P1 Left Lower Tibia Mx [Nm, CFC_600]	B-71
63	P1 Left Lower Tibia My [Nm, CFC_600]	B-72
64	P1 Right Upper Tibia Fx [N, CFC_600]	B-73
65	P1 Right Upper Tibia Fz [N, CFC_600]	B-74
66	P1 Right Upper Tibia Mx [Nm, CFC_600]	B-75
67	P1 Right Upper Tibia My [Nm, CFC_600]	B-76
68	P1 Right Lower Tibia Fx [N, CFC_600]	B-77
69	P1 Right Lower Tibia Fy [N, CFC_600]	B-78
70	P1 Right Lower Tibia Fz [N, CFC_600]	B-79
71	P1 Right Lower Tibia F Resultant [N, CFC_600]	B-80
72	P1 Right Lower Tibia Mx [Nm, CFC_600]	B-81
73	P1 Right Lower Tibia My [Nm, CFC_600]	B-82
74	P1 Left Tibia Ax [g, CFC_600]	B-83
75	P1 Left Tibia Ay [g, CFC_600]	B-84
76	P1 Right Tibia Ax [g, CFC_600]	B-85
77	P1 Right Tibia Ay [g, CFC_600]	B-86
78	P1 Left Ankle Rotation x [Deg, CFC_180]	B-87
79	P1 Left Ankle Rotation y [Deg, CFC_180]	B-88
80	P1 Left Ankle Rotation z [Deg, CFC_180]	B-89
81	P1 Right Ankle Rotation x [Deg, CFC_180]	B-90
82	P1 Right Ankle Rotation y [Deg, CFC_180]	B-91
83	P1 Right Ankle Rotation z [Deg, CFC_180]	B-92
84	P1 Left Foot Ax [g, CFC_600]	B-93
85	P1 Left Foot Ay [g, CFC_600]	B-94
86	P1 Left Foot Az [g, CFC_600]	B-95
87	P1 Left Foot A Resultant [g, CFC_600]	B-96
88	P1 Right Foot Ax [g, CFC_600]	B-97
89	P1 Right Foot Ay [g, CFC_600]	B-98
90	P1 Right Foot Az [g, CFC_600]	B-99
91	P1 Right Foot A Resultant [g, CFC_600]	B-100
92	P2 Head 9 Array X Arm Ay [g, CFC_1000]	B-101
93	P2 Head 9 Array X Arm Az [g, CFC_1000]	B-102

94	P2 Head 9 Array Y Arm Ax [g, CFC_1000]	B-103
95	P2 Head 9 Array Y Arm Az [g, CFC_1000]	B-104
96	P2 Head 9 Array Z Arm Ax [g, CFC_1000]	B-105
97	P2 Head 9 Array Z Arm Ay [g, CFC_1000]	B-106
98	P2 Head CG x [g, CFC_1000]	B-107
99	P2 Head CG y [g, CFC_1000]	B-108
100	P2 Head CG z [g, CFC_1000]	B-109
101	P2 Head CG Resultant [g, CFC_1000]	B-110
102	P2 Head CG Red x [g, CFC_1000]	B-111
103	P2 Head CG Red y [g, CFC_1000]	B-112
104	P2 Head CG Red z [g, CFC_1000]	B-113
105	P2 Head CG Red Resultant [g, CFC_1000]	B-114
106	P2 Upper Neck Fx [N, CFC_1000]	B-115
107	P2 Upper Neck Fy [N, CFC_1000]	B-116
108	P2 Upper Neck Fz [N, CFC_1000]	B-117
109	P2 Upper Neck F Resultant [N, CFC_1000]	B-118
110	P2 Upper Neck Mx [N-m, CFC_600]	B-119
111	P2 Upper Neck My [N-m, CFC_600]	B-120
112	P2 Upper Neck Mz [N-m, CFC_600]	B-121
113	P2 Upper Neck M Resultant [N-m, CFC_600]	B-122
114	P2 Chest x [g, CFC_180]	B-123
115	P2 Chest y [g, CFC_180]	B-124
116	P2 Chest z [g, CFC_180]	B-125
117	P2 Chest Resultant [g, CFC_180]	B-126
118	P2 Chest Red x [g, CFC_180]	B-127
119	P2 Chest Red y [g, CFC_180]	B-128
120	P2 Chest Red z [g, CFC_180]	B-129
121	P2 Chest Red Resultant [g, CFC_180]	B-130
122	P2 Chest Compression [mm, CFC_600]	B-131
123	P2 Pelvic x [g, CFC_1000]	B-132
124	P2 Pelvic y [g, CFC_1000]	B-133
125	P2 Pelvic z [g, CFC_1000]	B-134
126	P2 Pelvic Resultant [g, CFC_1000]	B-135
127	P2 Left Femur Fx [N, CFC_600]	B-136
128	P2 Left Femur Fy [N, CFC_600]	B-137
129	P2 Left Femur Fz [N, CFC_600]	B-138
130	P2 Left Femur F Resultant [N, CFC_600]	B-139
131	P2 Left Femur Mx [Nm, CFC_600]	B-140
132	P2 Left Femur My [Nm, CFC_600]	B-141
133	P2 Left Femur Mz [Nm, CFC_600]	B-142
134	P2 Left Femur M Resultant [Nm, CFC_600]	B-143
135	P2 Right Femur Fx [N, CFC_600]	B-144
136	P2 Right Femur Fy [N, CFC_600]	B-145
137	P2 Right Femur Fz [N, CFC_600]	B-146
138	P2 Right Femur F Resultant [N, CFC_600]	B-147
139	P2 Right Femur Mx [Nm, CFC_600]	B-148
140	P2 Right Femur My [Nm, CFC_600]	B-149

141	P2 Right Femur Mz [Nm, CFC_600]	B-150
142	P2 Right Femur M Resultant [Nm, CFC_600]	B-151
143	P2 Left Knee Shear Dx [mm, CFC_180]	B-152
144	P2 Right Knee Shear Dx [mm, CFC_180]	B-153
145	P2 Left Upper Tibia Fx [N, CFC_600]	B-154
146	P2 Left Upper tibia Fz [N, CFC_600]	B-155
147	P2 Left Upper Tibia Mx [Nm, CFC_600]	B-156
148	P2 Left Upper tibia My [Nm, CFC_600]	B-157
149	P2 Left Lower Tibia Fx [N, CFC_600]	B-158
150	P2 Left Lower Tibia Fy [N, CFC_600]	B-159
151	P2 Left Lower Tibia Fz [N, CFC_600]	B-160
152	P2 Left Lower Tibia F Resultant [N, CFC_600]	B-161
153	P2 Left Lower Tibia Mx [Nm, CFC_600]	B-162
154	P2 Left Lower Tibia My [Nm, CFC_600]	B-163
155	P2 Right Upper Tibia Fx [N, CFC_600]	B-164
156	P2 Right Upper Tibia Fz [N, CFC_600]	B-165
157	P2 Right Upper Tibia Mx [Nm, CFC_600]	B-166
158	P2 Right Upper Tibia My [Nm, CFC_600]	B-167
159	P2 Right Lower Tibia Fx [N, CFC_600]	B-168
160	P2 Right Lower Tibia Fy [N, CFC_600]	B-169
161	P2 Right Lower Tibia Fz [N, CFC_600]	B-170
162	P2 Right Lower Tibia F Resultant [N, CFC_600]	B-171
163	P2 Right Lower Tibia Mx [Nm, CFC_600]	B-172
164	P2 Right Lower Tibia My [Nm, CFC_600]	B-173
165	P2 Left Tibia Ax [g, CFC_600]	B-174
166	P2 Left Tibia Ay [g, CFC_600]	B-175
167	P2 Right Tibia Ax [g, CFC_600]	B-176
168	P2 Right Tibia Ay [g, CFC_600]	B-177
169	P2 Left Ankle Rotation x [Deg, CFC_180]	B-178
170	P2 Left Ankle Rotation y [Deg, CFC_180]	B-179
171	P2 Left Ankle Rotation z [Deg, CFC_180]	B-180
172	P2 Right Ankle Rotation x [Deg, CFC_180]	B-181
173	P2 Right Ankle Rotation y [Deg, CFC_180]	B-182
174	P2 Right Ankle Rotation z [Deg, CFC_180]	B-183
175	P2 Left Foot Ax [g, CFC_600]	B-184
176	P2 Left Foot Ay [g, CFC_600]	B-185
177	P2 Left Foot Az [g, CFC_600]	B-186
178	P2 Left Foot A Resultant [g, CFC_600]	B-187
179	P2 Right Foot Ax [g, CFC_600]	B-188
180	P2 Right Foot Ay [g, CFC_600]	B-189
181	P2 Right Foot Az [g, CFC_600]	B-190
182	P2 Right Foot A Resultant [g, CFC_600]	B-191
183	Acc 1 Rear XMBR Left X [g, CFC_60]	B-192
184	Acc 1 Rear XMBR Left X Velocity [kph, CFC_180]	B-193
185	Acc 1 Rear XMBR Left X Displacement [mm, CFC_180]	B-194
186	Acc 2 Rear XMBR Left Y [g, CFC_60]	B-195
187	Acc 2 Rear XMBR Left Y Velocity [kph, CFC_180]	B-196

188	Acc 2 Rear XMBR Left Y Displacement [mm, CFC_180]	B-197
189	Acc 3 Rear XMBR Right X [g, CFC_60]	B-198
190	Acc 3 Rear XMBR Right X Velocity [kph, CFC_180]	B-199
191	Acc 3 Rear XMBR Right X Displacement [mm, CFC_180]	B-200
192	Acc 4 Rear XMBR Right Y [g, CFC_60]	B-201
193	Acc 4 Rear XMBR Right Y Velocity [kph, CFC_180]	B-202
194	Acc 4 Rear XMBR Right Y Displacement [mm, CFC_180]	B-203
195	Acc 6 P1 Toepan Left Z [g, CFC_60]	B-204
196	Acc 6 P1 Toepan Left Z Velocity [kph, CFC_180]	B-205
197	Acc 6 P1 Toepan Left Z Displacement [mm, CFC_180]	B-206
198	Acc 7 P1 Toepan Right X [g, CFC_60]	B-207
199	Acc 7 P1 Toepan Right X Velocity [kph, CFC_180]	B-208
200	Acc 7 P1 Toepan Right X Displacement [mm, CFC_180]	B-209
201	Acc 8 P1 Toepan Right Z [g, CFC_60]	B-210
202	Acc 8 P1 Toepan Right Z Velocity [kph, CFC_180]	B-211
203	Acc 8 P1 Toepan Right Z Displacement [mm, CFC_180]	B-212
204	Toe Pan Movement [mm, CFC_60]	B-213
205	Barrier Load Cell E2 FY [N, CFC_60]	B-214
206	Barrier Load Cell E3 FY [N, CFC_60]	B-215
207	Barrier Load Cell E4 FY [N, CFC_60]	B-216
208	Barrier Load Cell E5 FY [N, CFC_60]	B-217
209	Barrier Load Cell E6 FY [N, CFC_60]	B-218
210	Barrier Load Cell E1 FX [N, CFC_60]	B-219
211	Barrier Load Cell E2 FX [N, CFC_60]	B-220
212	Barrier Load Cell E3 FX [N, CFC_60]	B-221
213	Barrier Load Cell E4 FX [N, CFC_60]	B-222
214	Barrier Load Cell E5 FX [N, CFC_60]	B-223
215	Barrier Load Cell E6 FX [N, CFC_60]	B-224
216	Barrier Load Cell D2 FY [N, CFC_60]	B-225
217	Barrier Load Cell D3 FY [N, CFC_60]	B-226
218	Barrier Load Cell D4 FY [N, CFC_60]	B-227
219	Barrier Load Cell D5 FY [N, CFC_60]	B-228
220	Barrier Load Cell D6 FY [N, CFC_60]	B-229
221	Barrier Load Cell D1 FX [N, CFC_60]	B-230
222	Barrier Load Cell D2 FX [N, CFC_60]	B-231
223	Barrier Load Cell D3 FX [N, CFC_60]	B-232
224	Barrier Load Cell D4 FX [N, CFC_60]	B-233
225	Barrier Load Cell D5 FX [N, CFC_60]	B-234
226	Barrier Load Cell D6 FX [N, CFC_60]	B-235
227	Barrier Load Cell C2 FY [N, CFC_60]	B-236
228	Barrier Load Cell C3 FY [N, CFC_60]	B-237
229	Barrier Load Cell C4 FY [N, CFC_60]	B-238
230	Barrier Load Cell C5 FY [N, CFC_60]	B-239
231	Barrier Load Cell C6 FY [N, CFC_60]	B-240
232	Barrier Load Cell C1 FX [N, CFC_60]	B-241
233	Barrier Load Cell C2 FX [N, CFC_60]	B-242
234	Barrier Load Cell C3 FX [N, CFC_60]	B-243

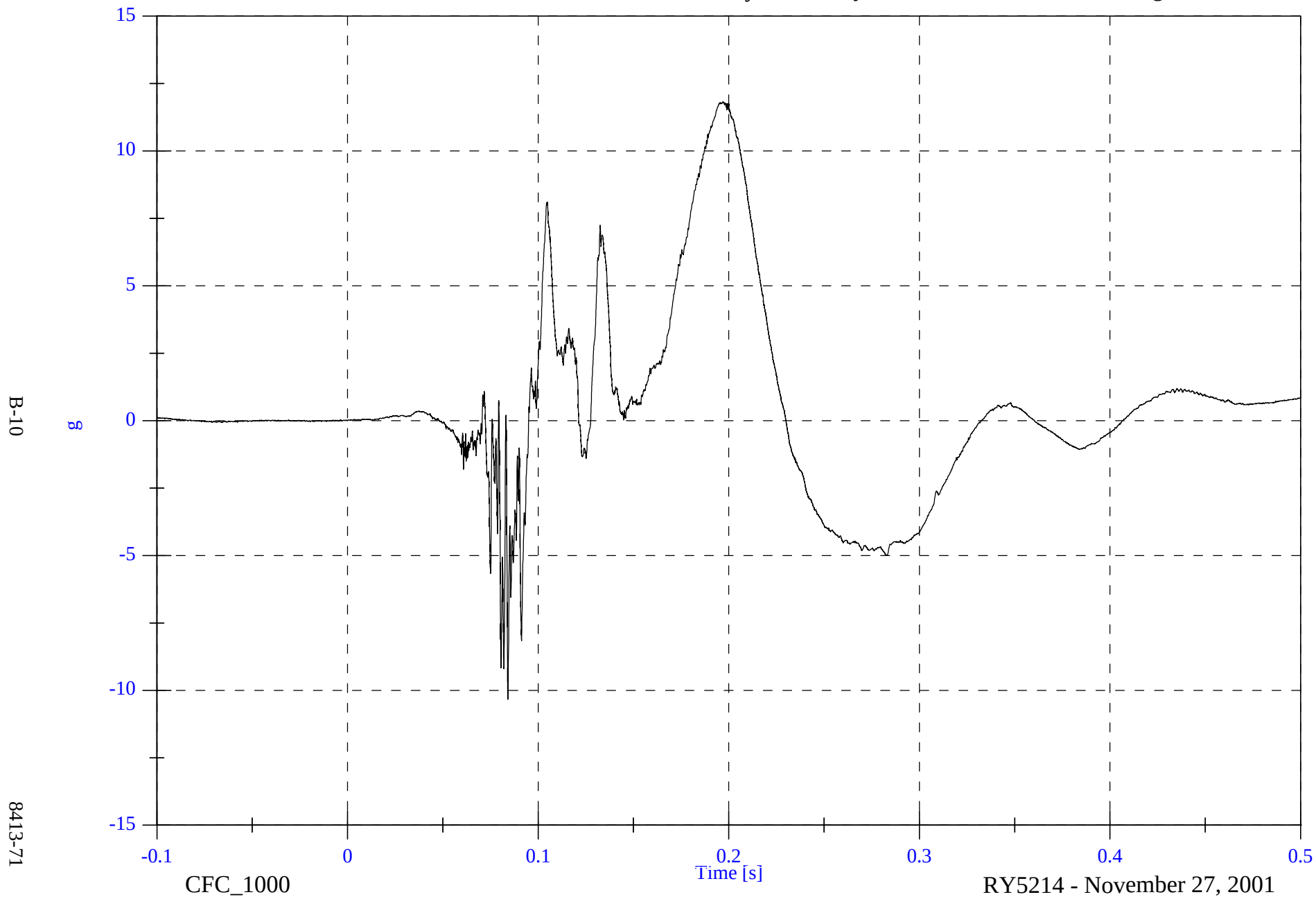
235	Barrier Load Cell C4 FX [N, CFC_60]	B-244
236	Barrier Load Cell C5 FX [N, CFC_60]	B-245
237	Barrier Load Cell C6 FX [N, CFC_60]	B-246
238	Barrier Load Cell B3 FY [N, CFC_60]	B-247
239	Barrier Load Cell B4 FY [N, CFC_60]	B-248
240	Barrier Load Cell B5 FY [N, CFC_60]	B-249
241	Barrier Load Cell B6 FY [N, CFC_60]	B-250
242	Barrier Load Cell B1 FX [N, CFC_60]	B-251
243	Barrier Load Cell B2 FX [N, CFC_60]	B-252
244	Barrier Load Cell B3 FX [N, CFC_60]	B-253
245	Barrier Load Cell B4 FX [N, CFC_60]	B-254
246	Barrier Load Cell B5 FX [N, CFC_60]	B-255
247	Barrier Load Cell B6 FX [N, CFC_60]	B-256
248	Barrier Load Cell A1 FX [N, CFC_60]	B-257
249	Barrier Load Cell A2 FX [N, CFC_60]	B-258
250	Barrier Load Cell A3 FX [N, CFC_60]	B-259
251	Barrier Load Cell A4 FX [N, CFC_60]	B-260
252	Barrier Load Cell A5 FX [N, CFC_60]	B-261
253	Barrier Load Cell A6 FX [N, CFC_60]	B-262
254	Barrier Load Cell A7 FX [N, CFC_60]	B-263
255	Barrier Load Cell A8 FX [N, CFC_60]	B-264
256	Barrier Load Cell A9 FX [N, CFC_60]	B-265
257	Barrier Load Cell AA FX [N, CFC_60]	B-266
258	Barrier Load Cell AB FX [N, CFC_60]	B-267

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head 9 Array X Arm Ay

Max: 11.8 [g] at 0.197 [s]

Min: -10.3 [g] at 0.084 [s]



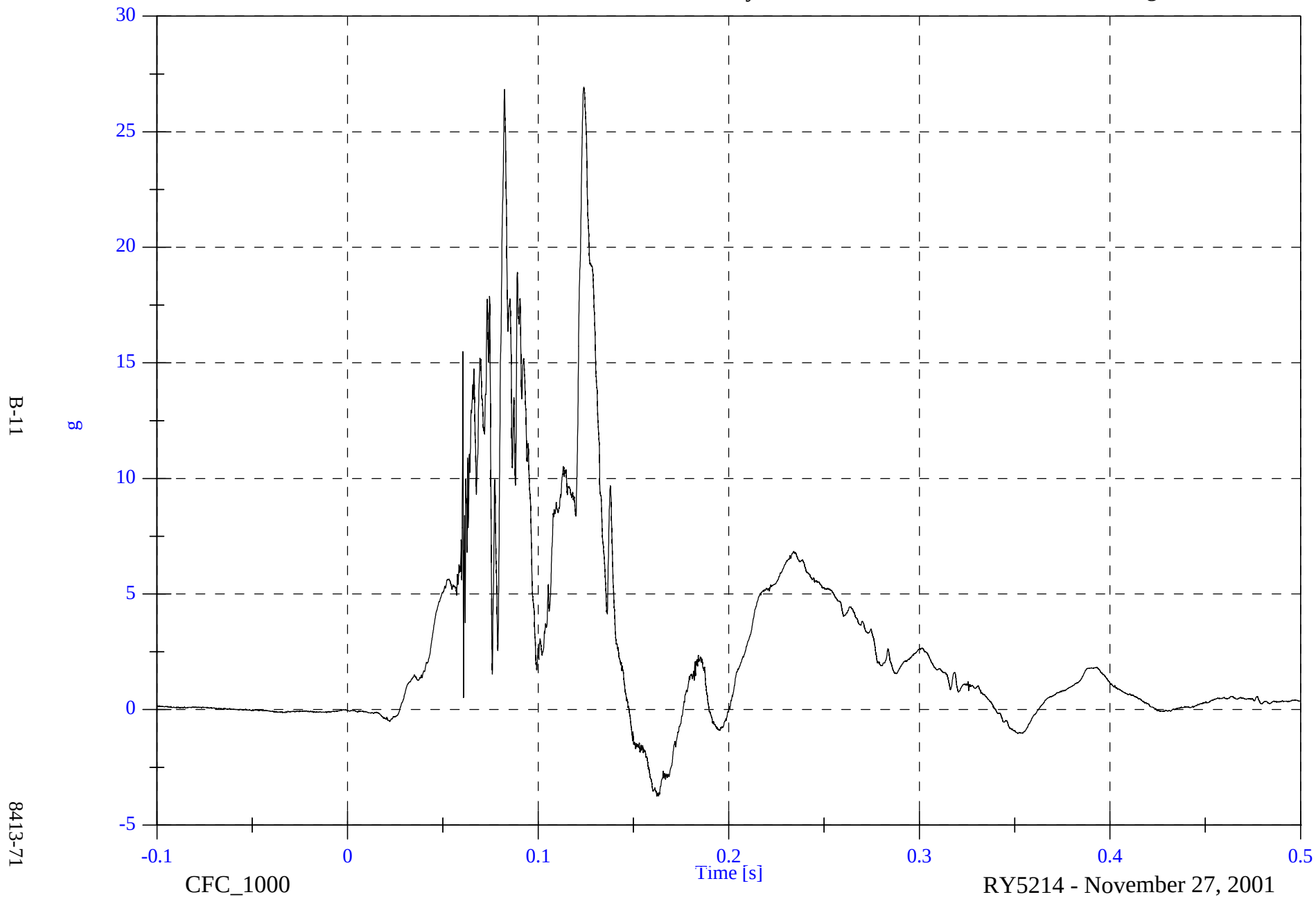
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head 9 Array X Arm Az

Max: 26.9 [g] at 0.124 [s]

Min: -3.7 [g] at 0.162 [s]

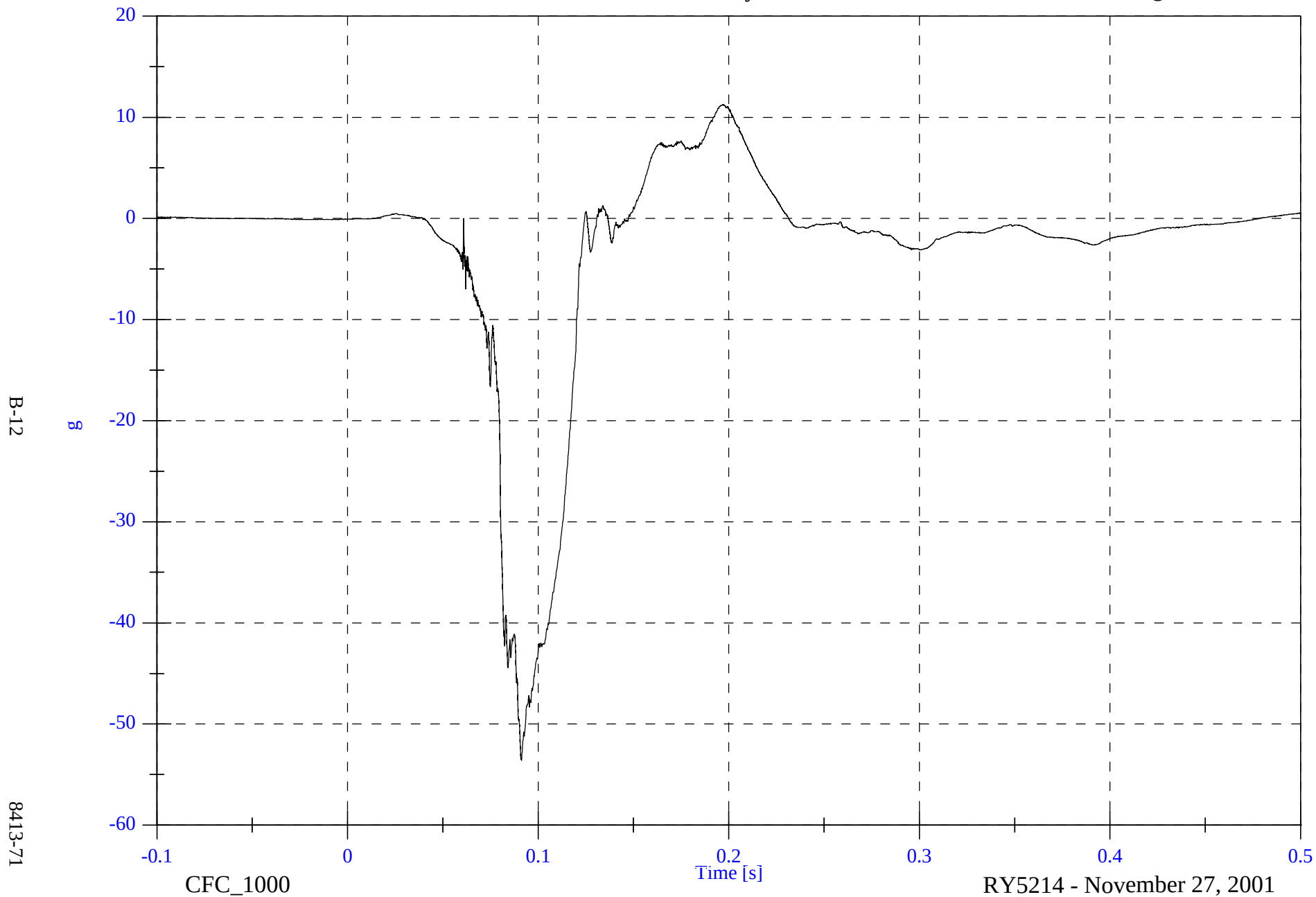


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head 9 Array Y Arm Ax

Max: 11.3 [g] at 0.197 [s]

Min: -53.6 [g] at 0.091 [s]

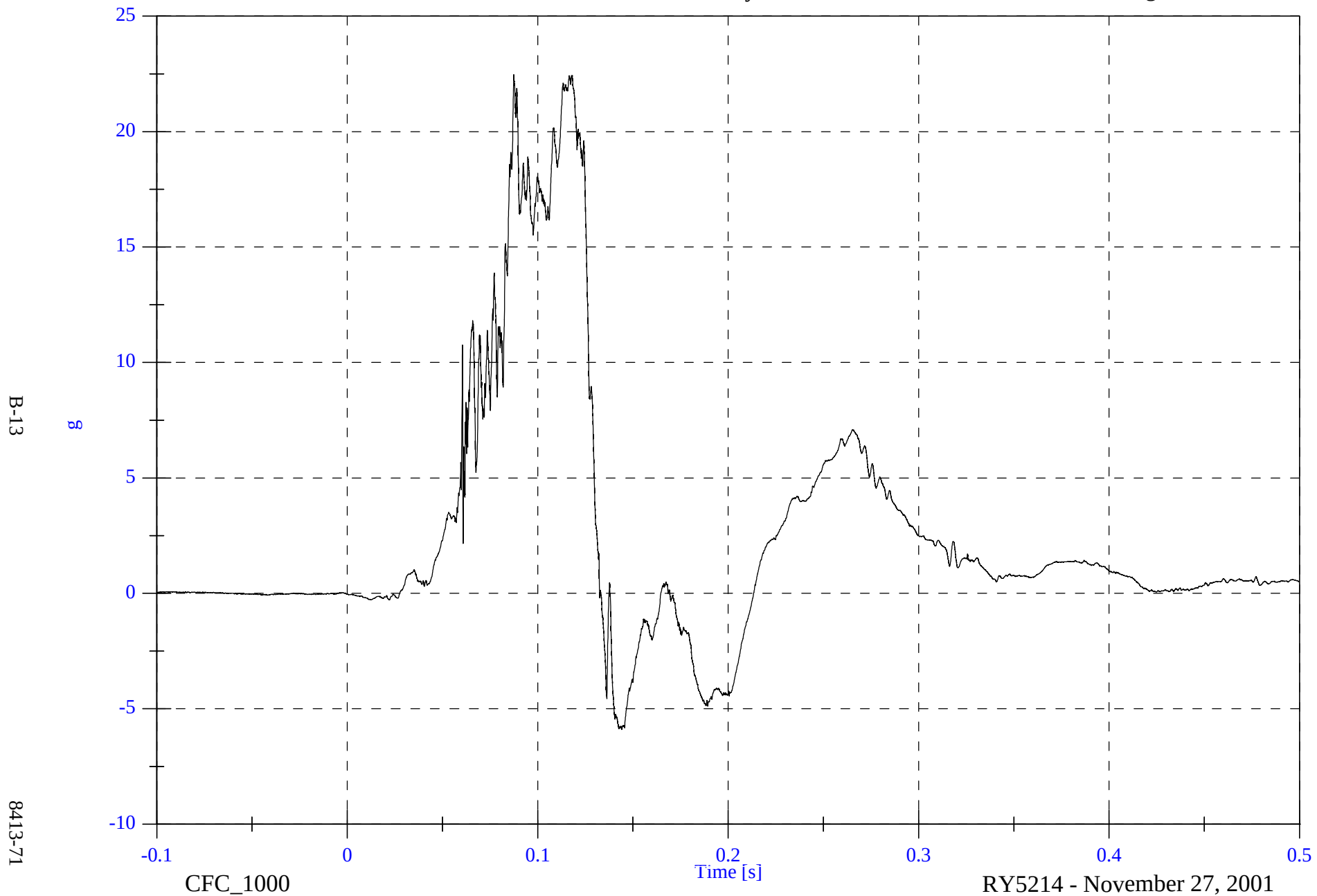


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head 9 Array Y Arm Az

Max: 22.5 [g] at 0.087 [s]

Min: -5.9 [g] at 0.144 [s]

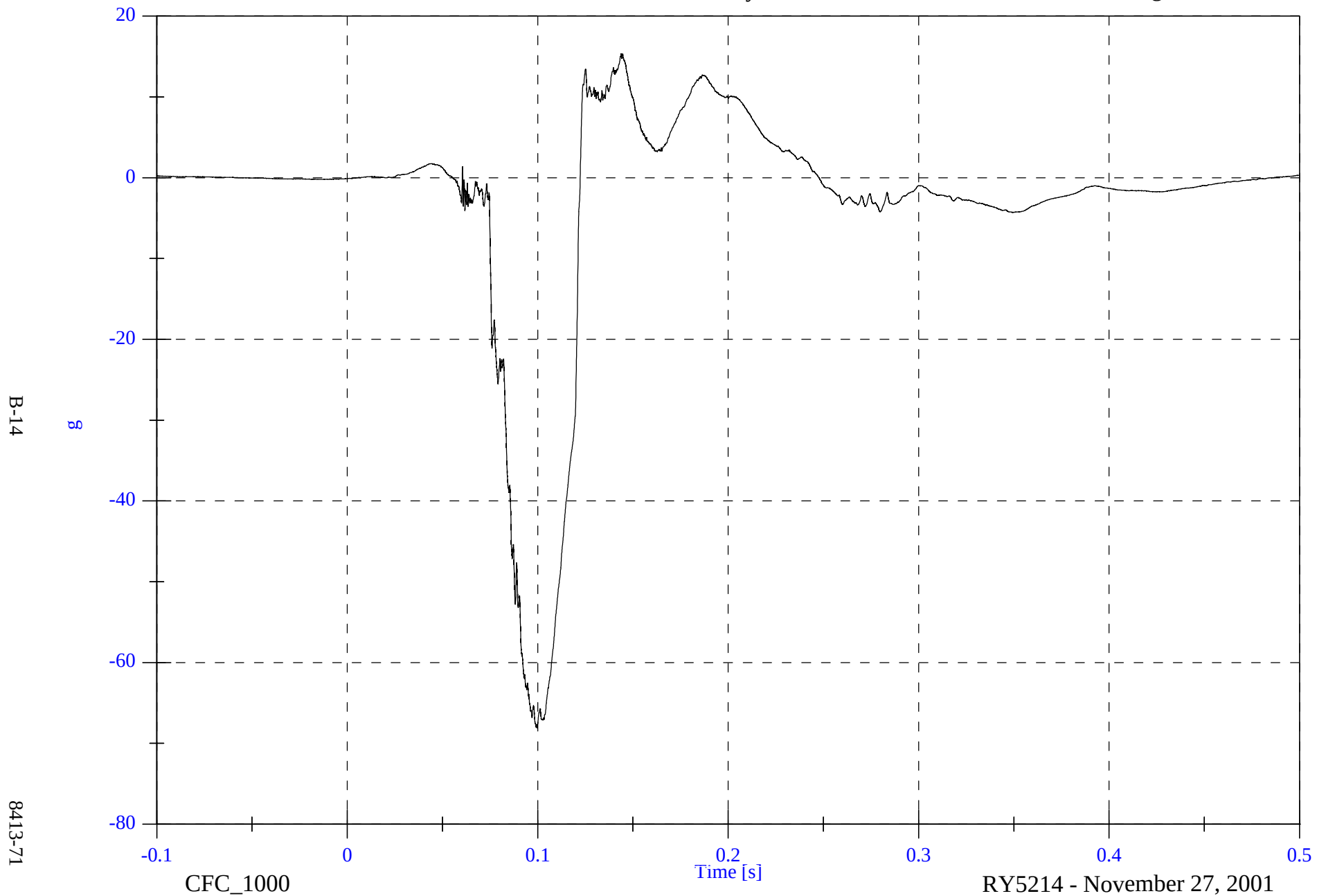


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head 9 Array Z Arm Ax

Max: 15.4 [g] at 0.145 [s]

Min: -68.1 [g] at 0.100 [s]

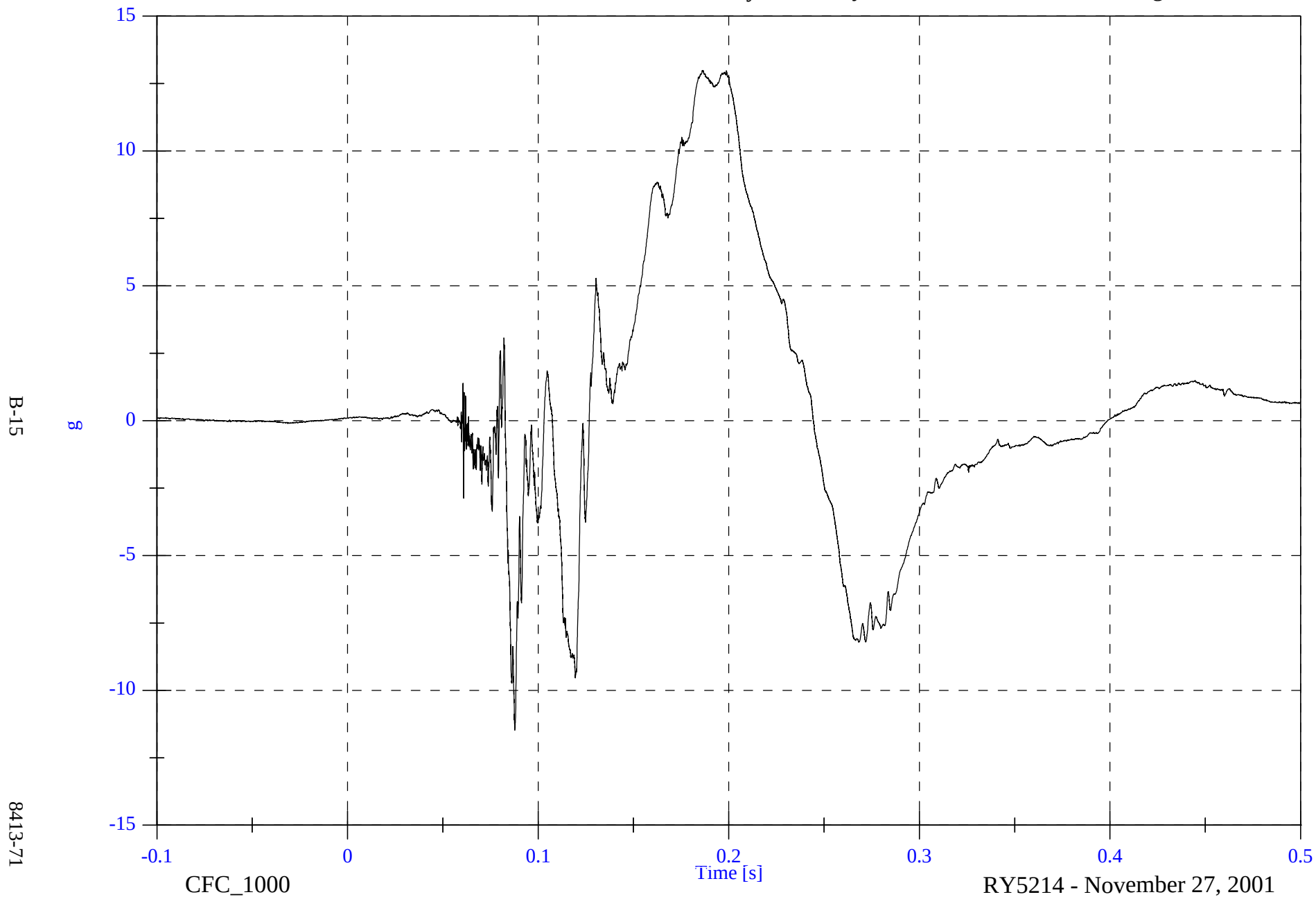


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head 9 Array Z Arm Ay

Max: 13.0 [g] at 0.186 [s]

Min: -11.5 [g] at 0.088 [s]

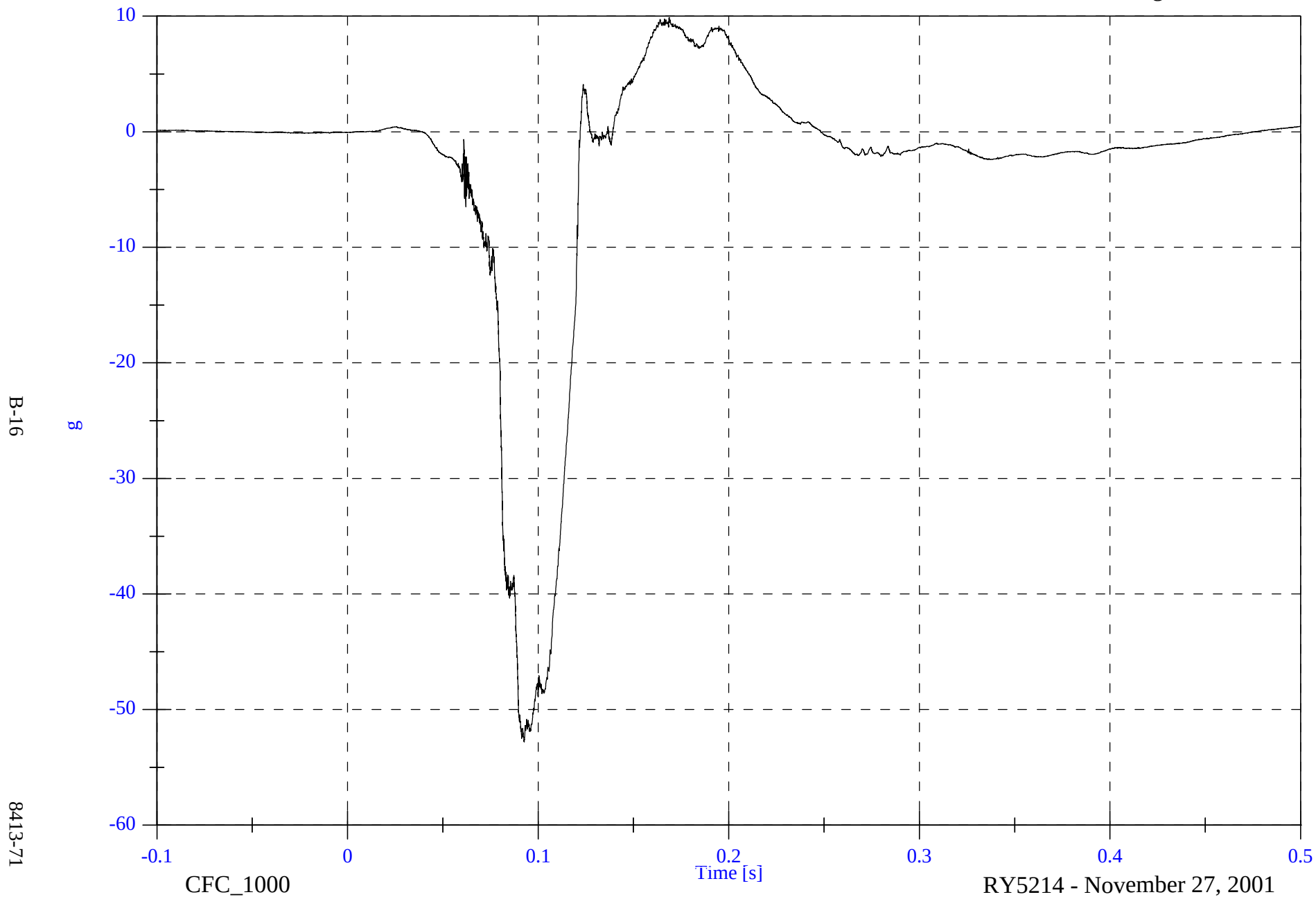


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 9.9 [g] at 0.169 [s]

Min: -52.8 [g] at 0.093 [s]

P1 Head CG x

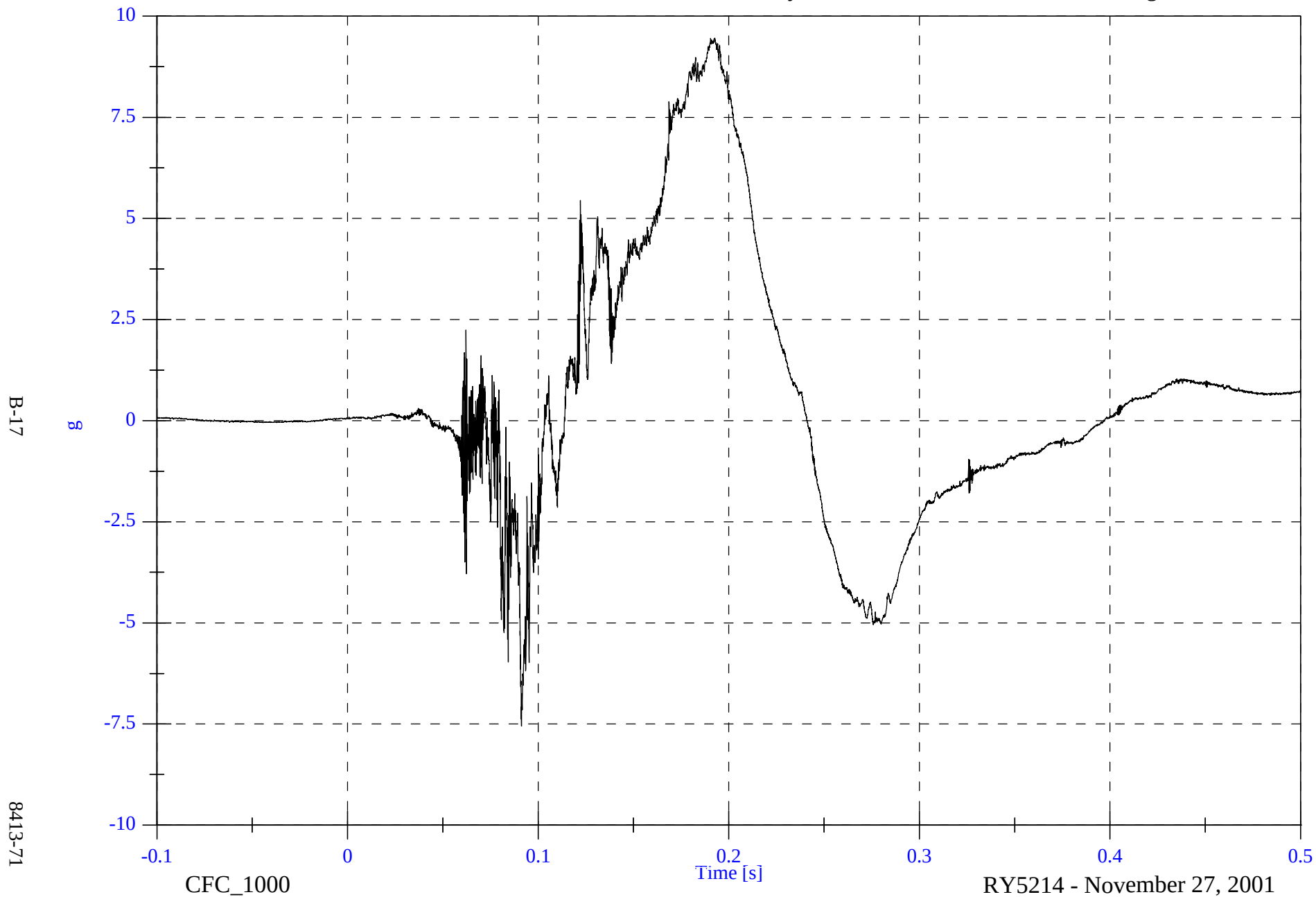


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head CG y

Max: 9.5 [g] at 0.193 [s]

Min: -7.6 [g] at 0.091 [s]

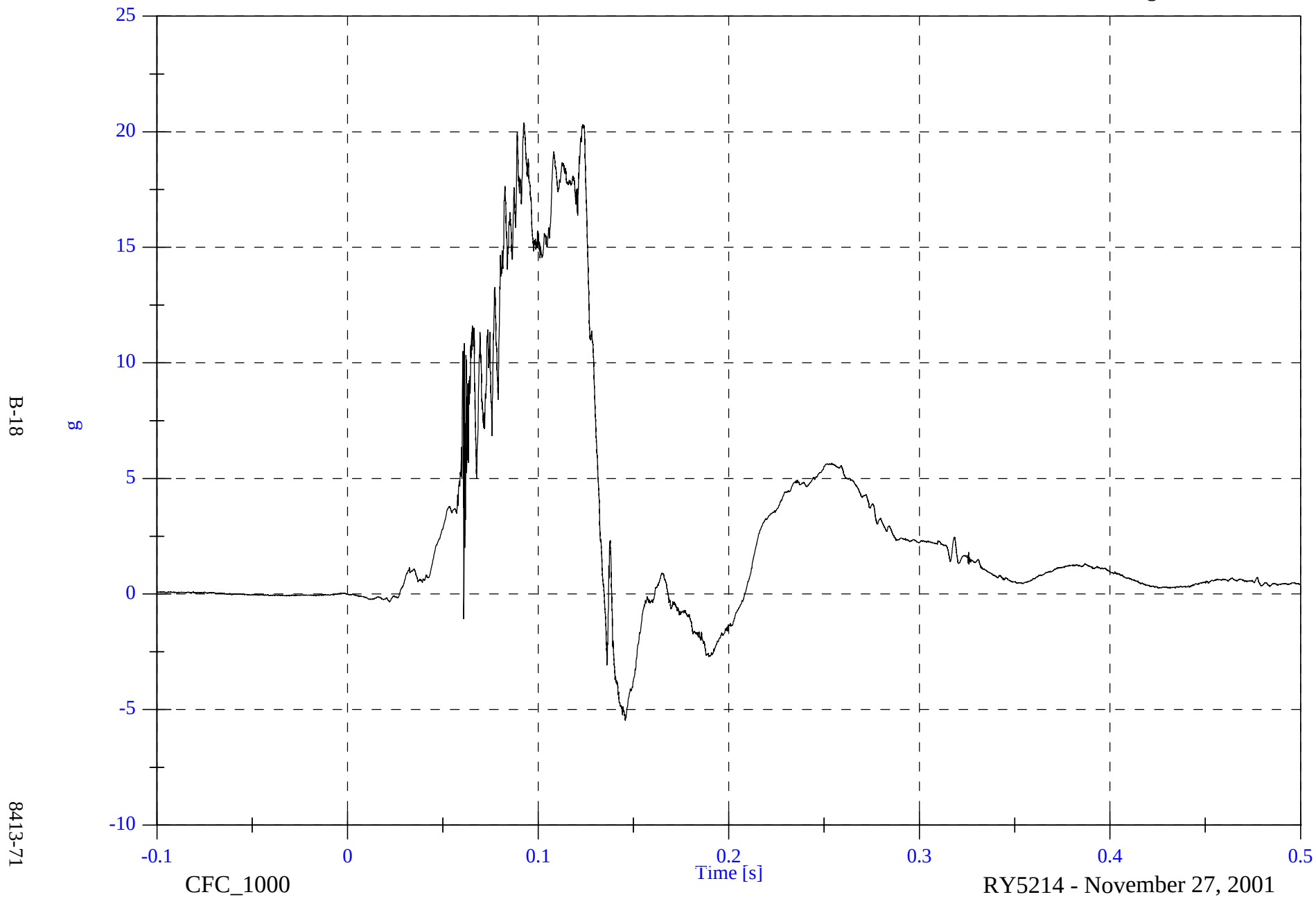


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head CG z

Max: 20.4 [g] at 0.093 [s]

Min: -5.5 [g] at 0.146 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

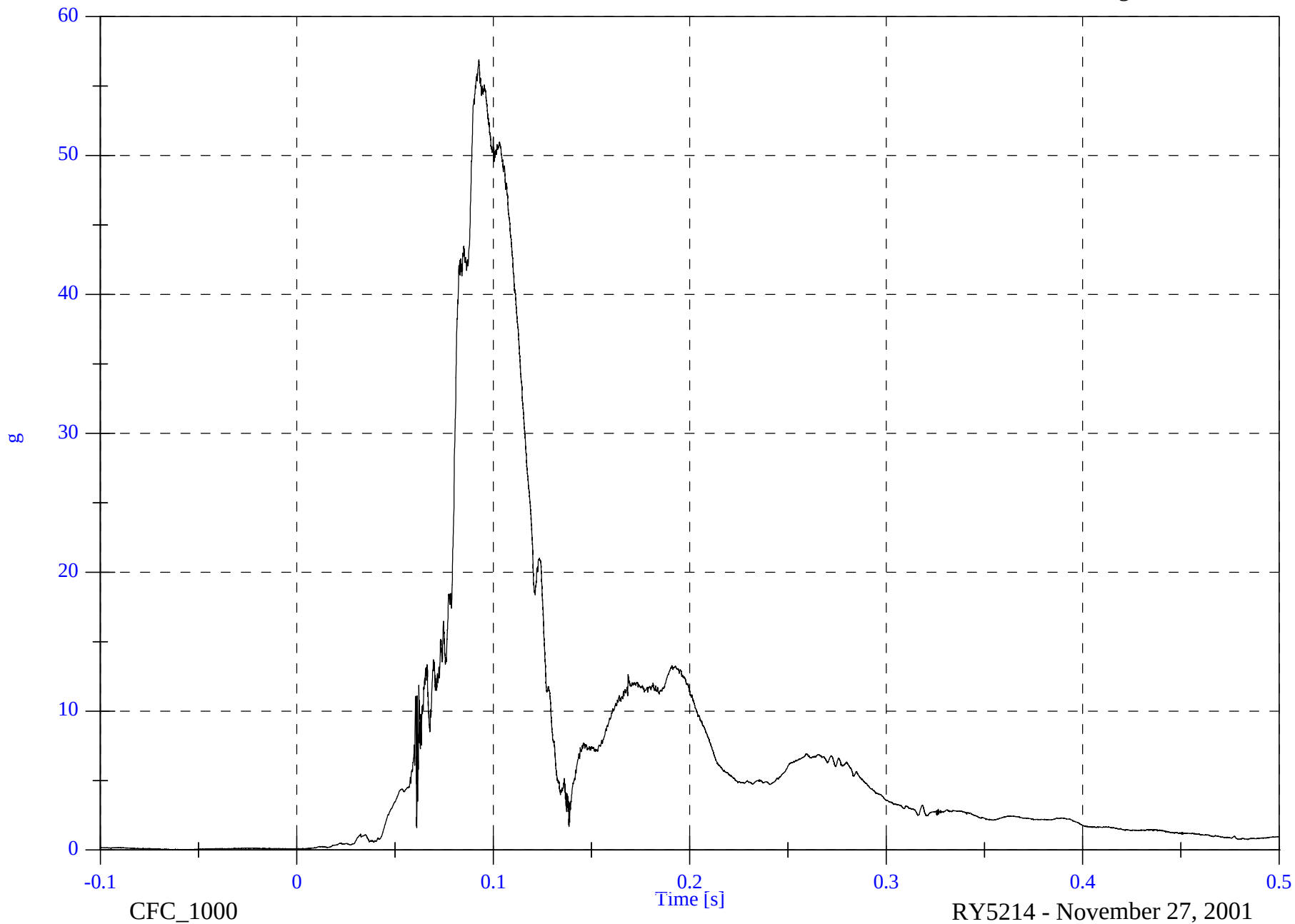
P1 Head CG Resultant

Max: 56.9 [g] at 0.093 [s]

Min: 0.0 [g] at -0.059 [s]

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8413-71

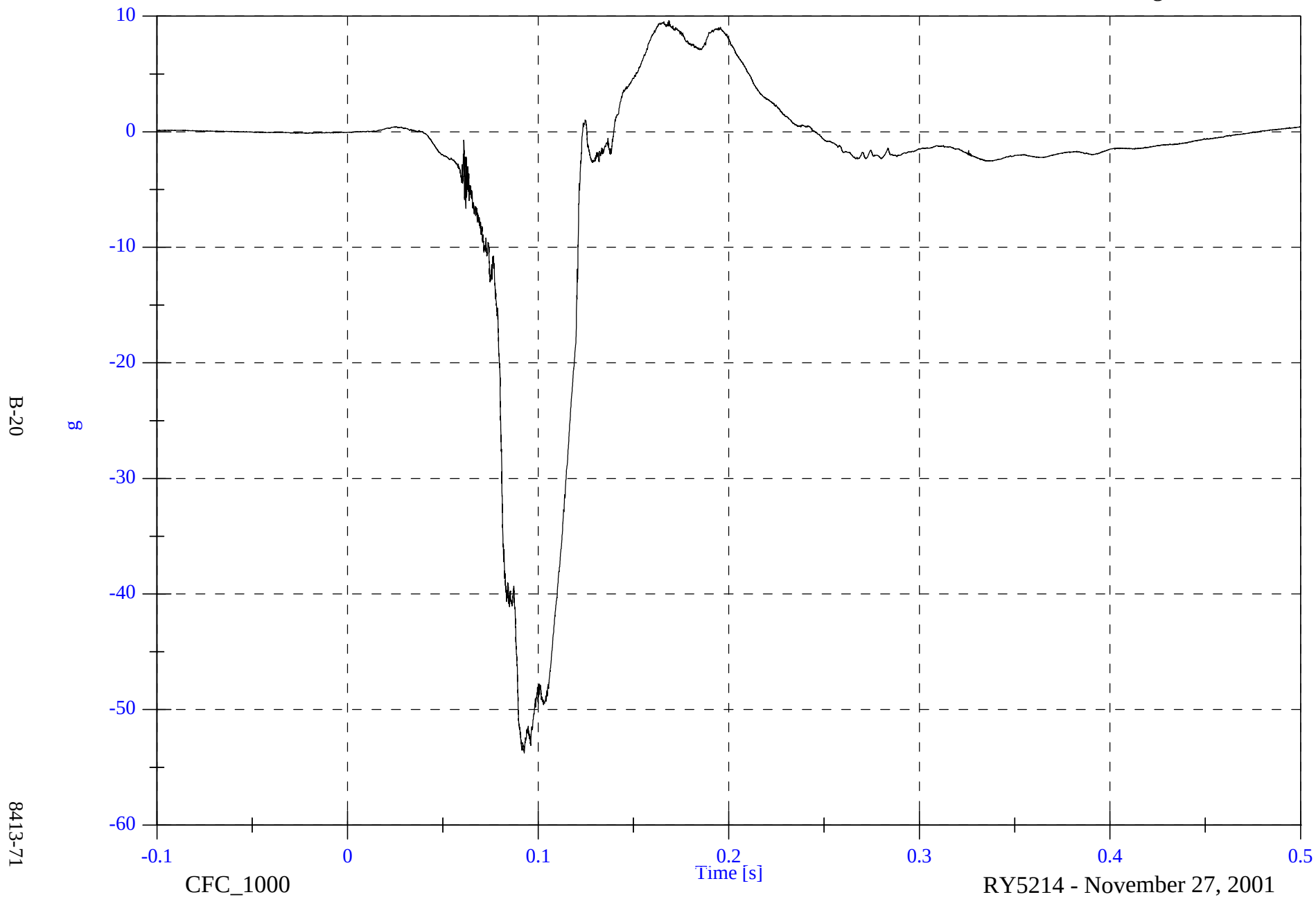


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head CG Red x

Max: 9.6 [g] at 0.169 [s]

Min: -53.8 [g] at 0.093 [s]

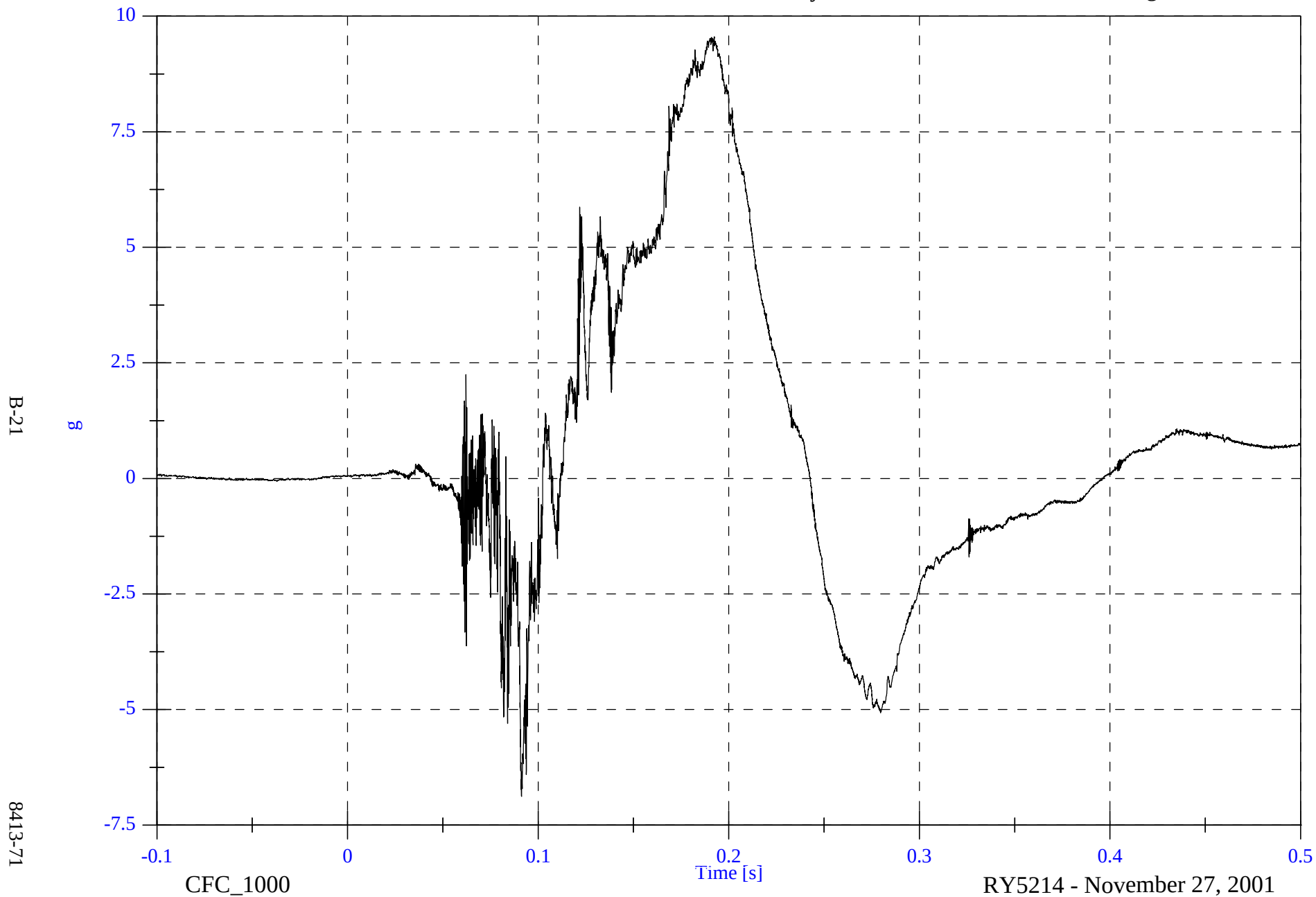


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head CG Red y

Max: 9.6 [g] at 0.192 [s]

Min: -6.9 [g] at 0.091 [s]

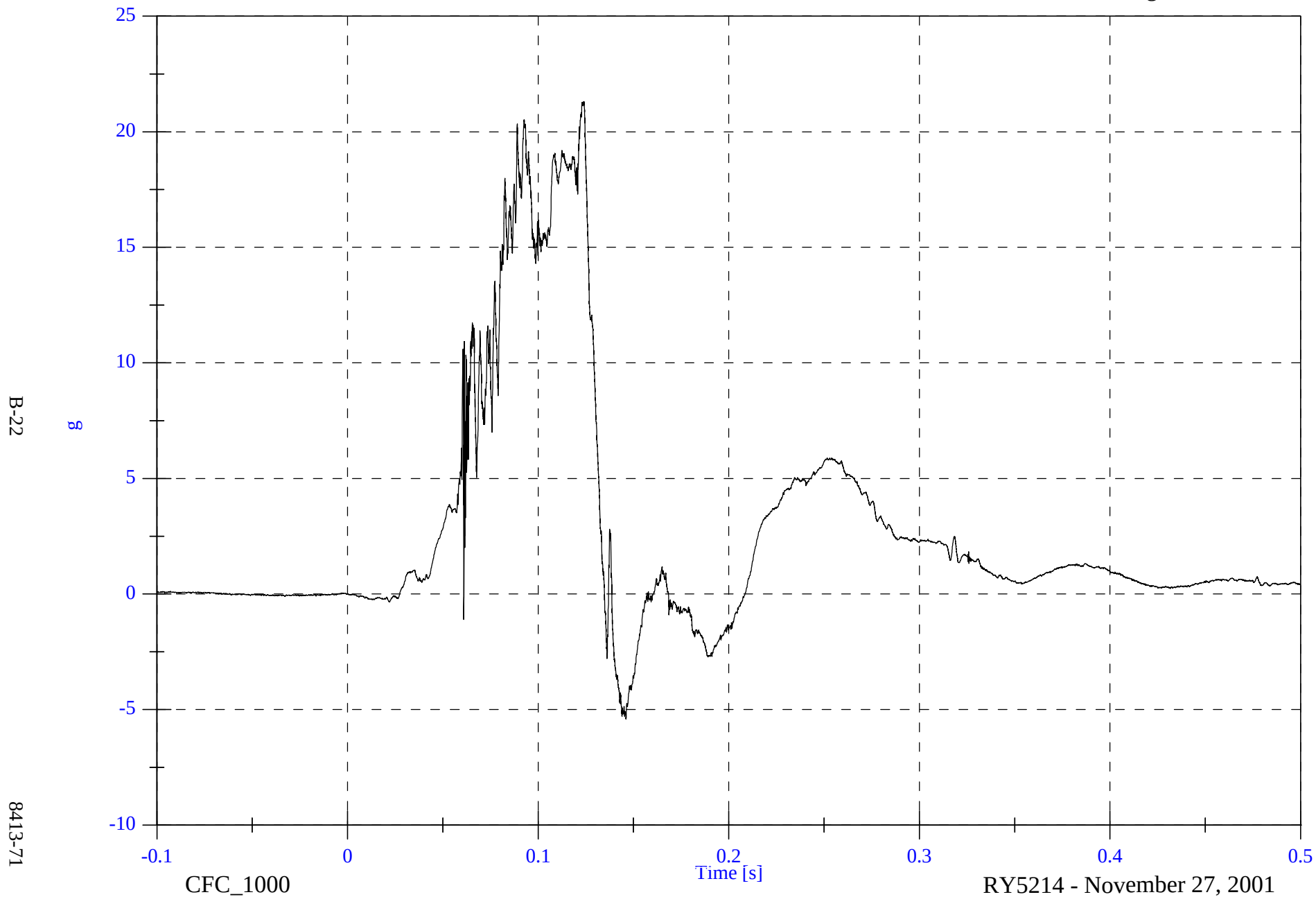


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head CG Red z

Max: 21.3 [g] at 0.124 [s]

Min: -5.4 [g] at 0.146 [s]

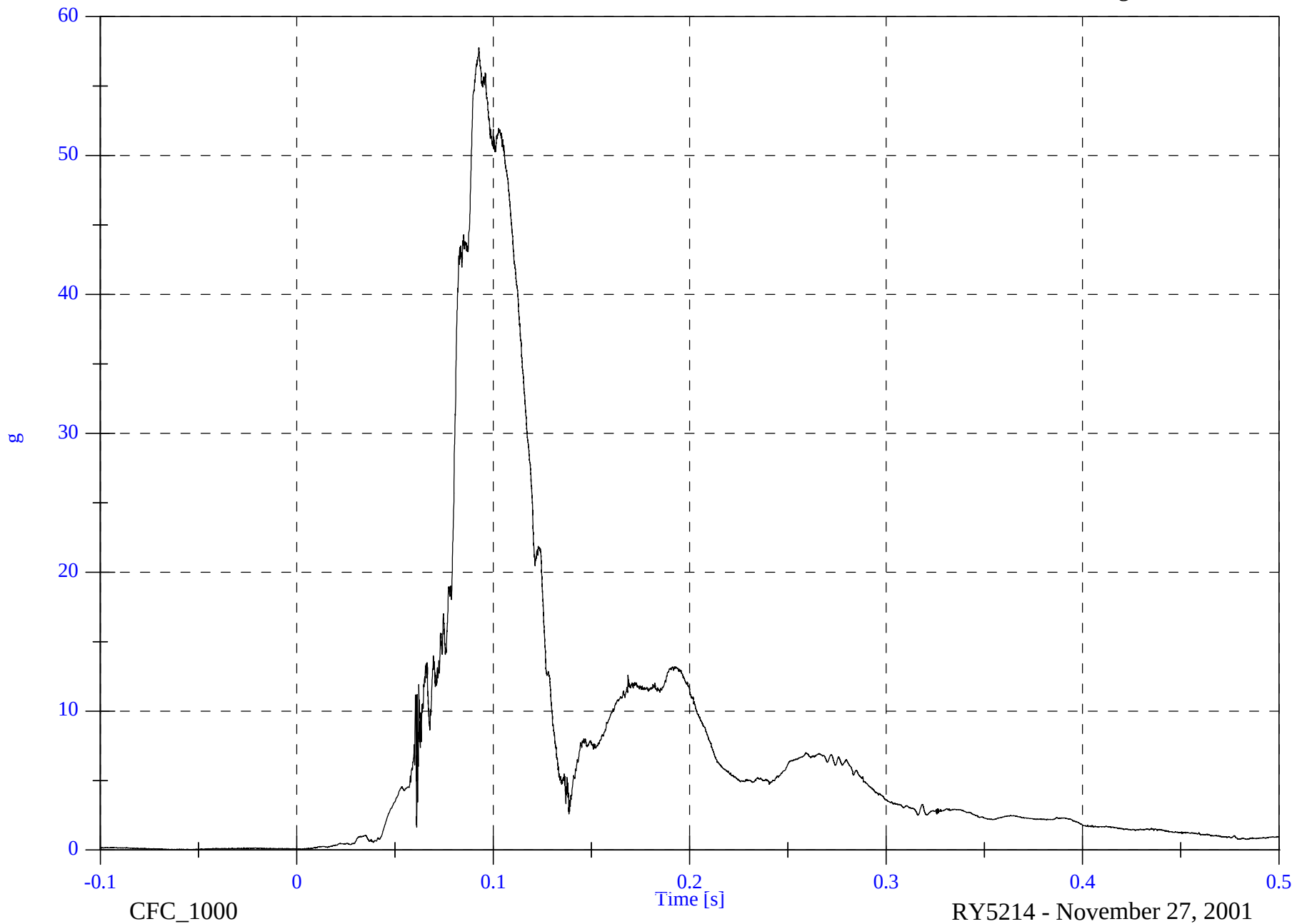


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Head CG Red Resultant

Max: 57.8 [g] at 0.093 [s]

Min: 0.0 [g] at -0.057 [s]



B-23

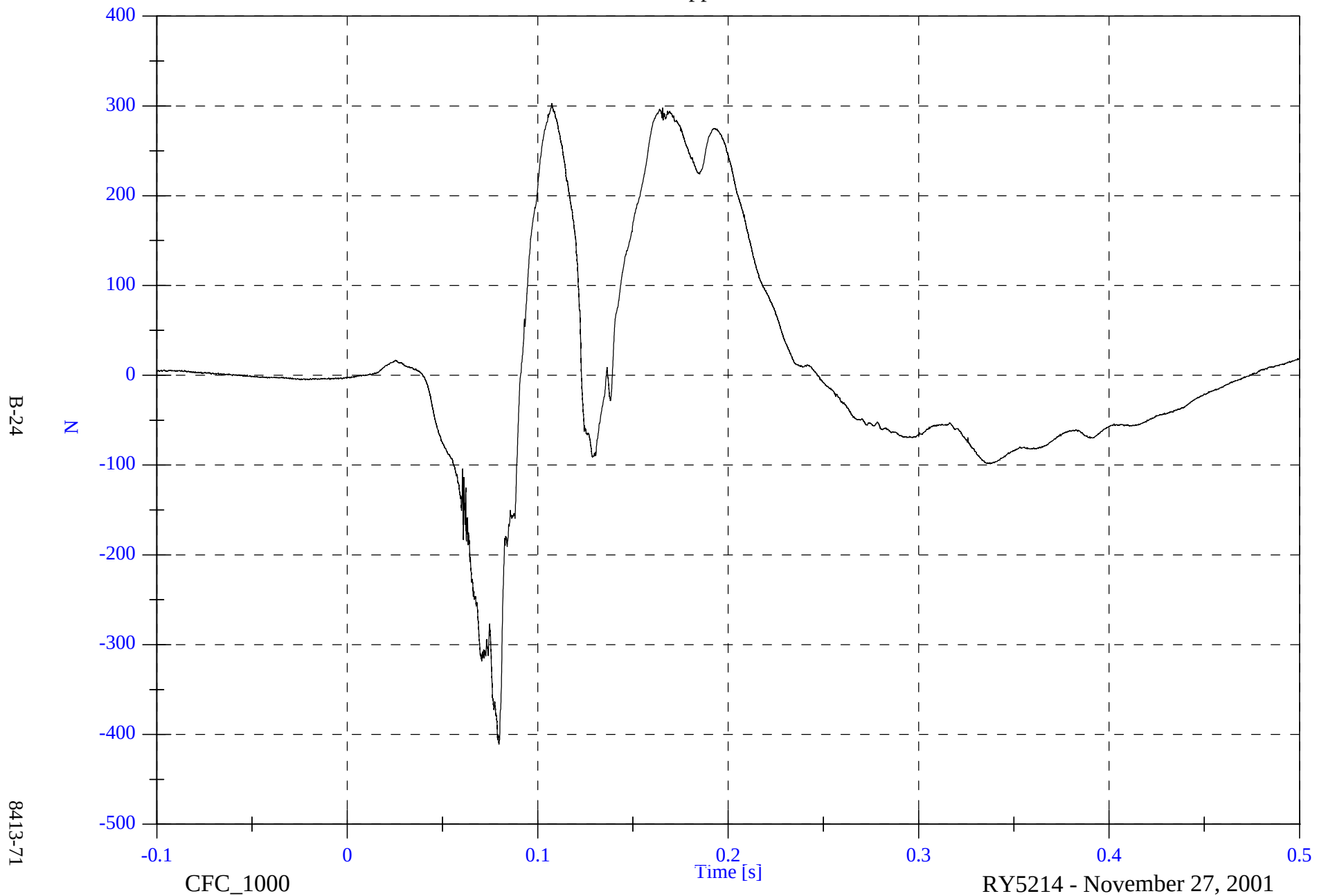
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 302.9 [N] at 0.107 [s]

P1 Upper Neck Fx

Min: -411.1 [N] at 0.080 [s]

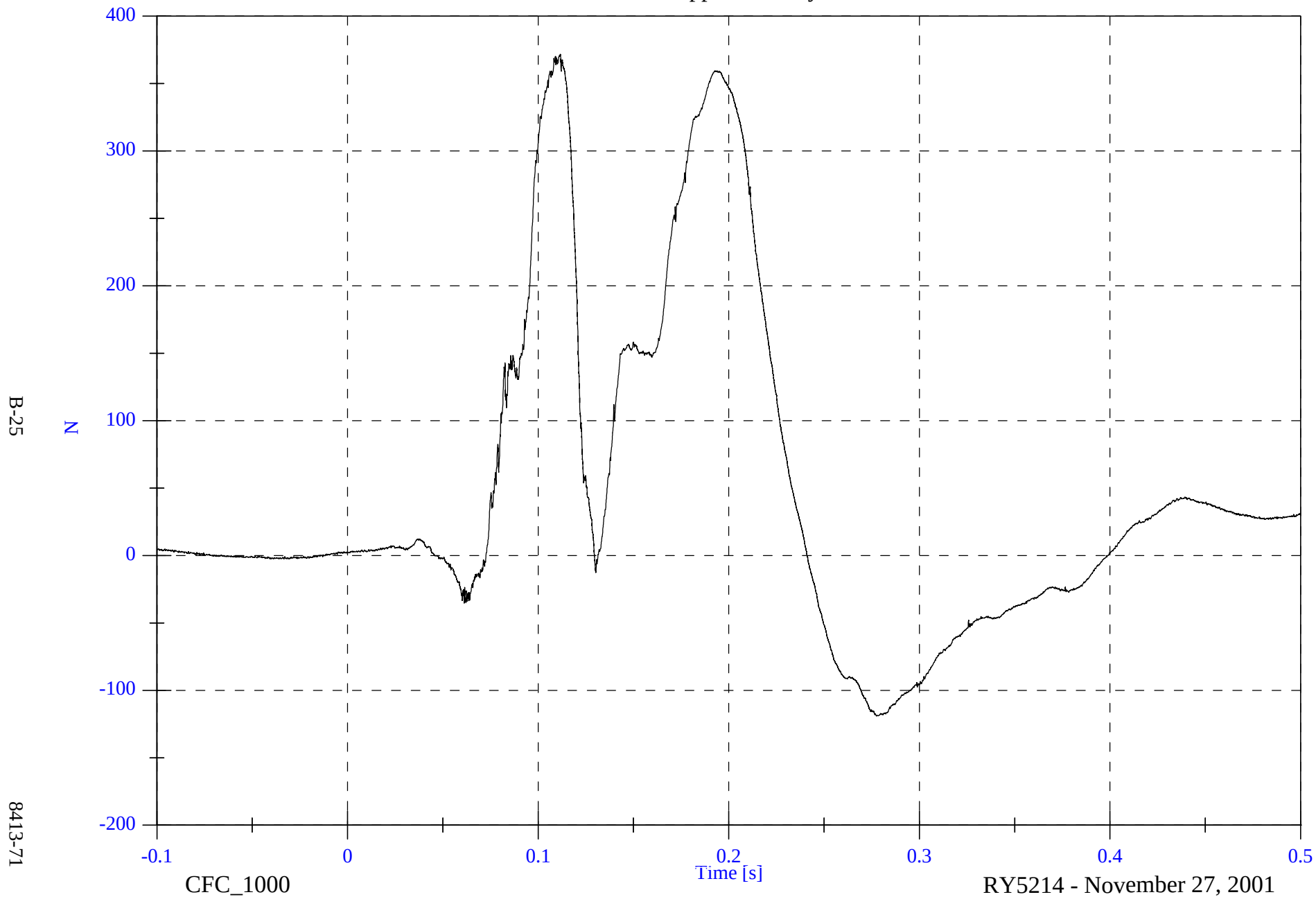


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Upper Neck Fy

Max: 371.8 [N] at 0.112 [s]

Min: -119.1 [N] at 0.277 [s]

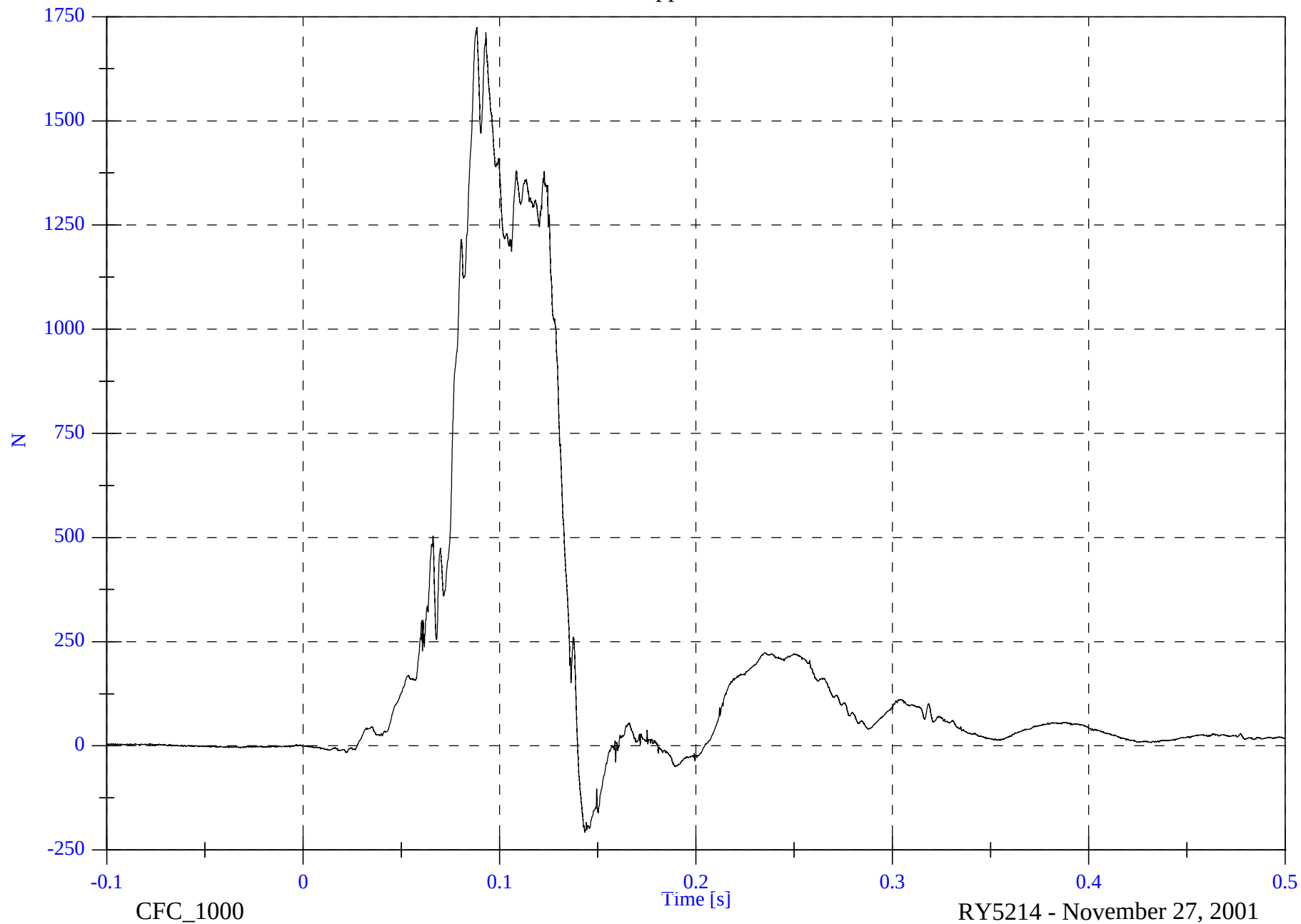


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 1723.8 [N] at 0.088 [s]

P1 Upper Neck Fz

Min: -207.5 [N] at 0.143 [s]



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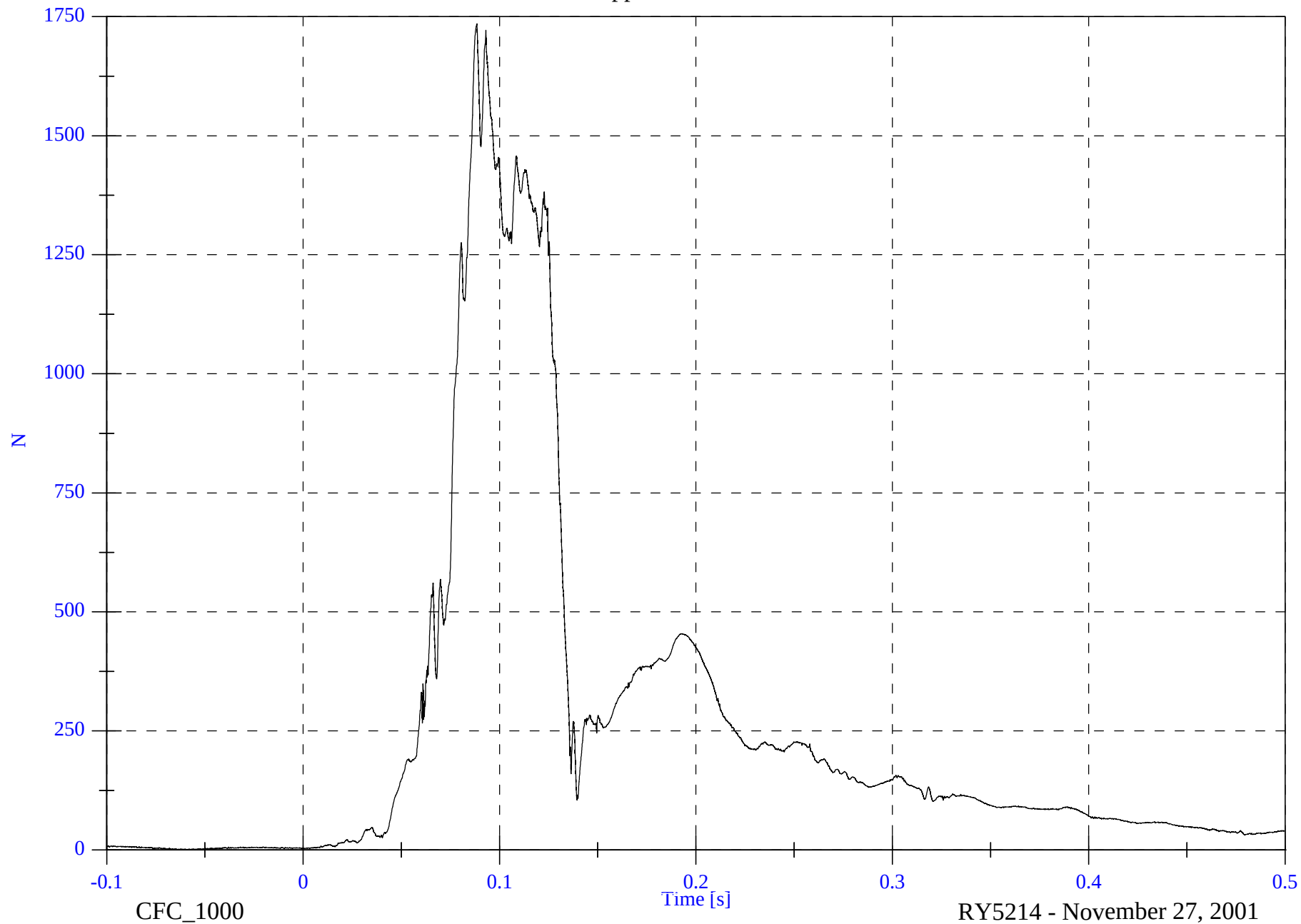
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Upper Neck F Resultant

Max: 1734.6 [N] at 0.088 [s]

Min: 0.6 [N] at -0.057 [s]

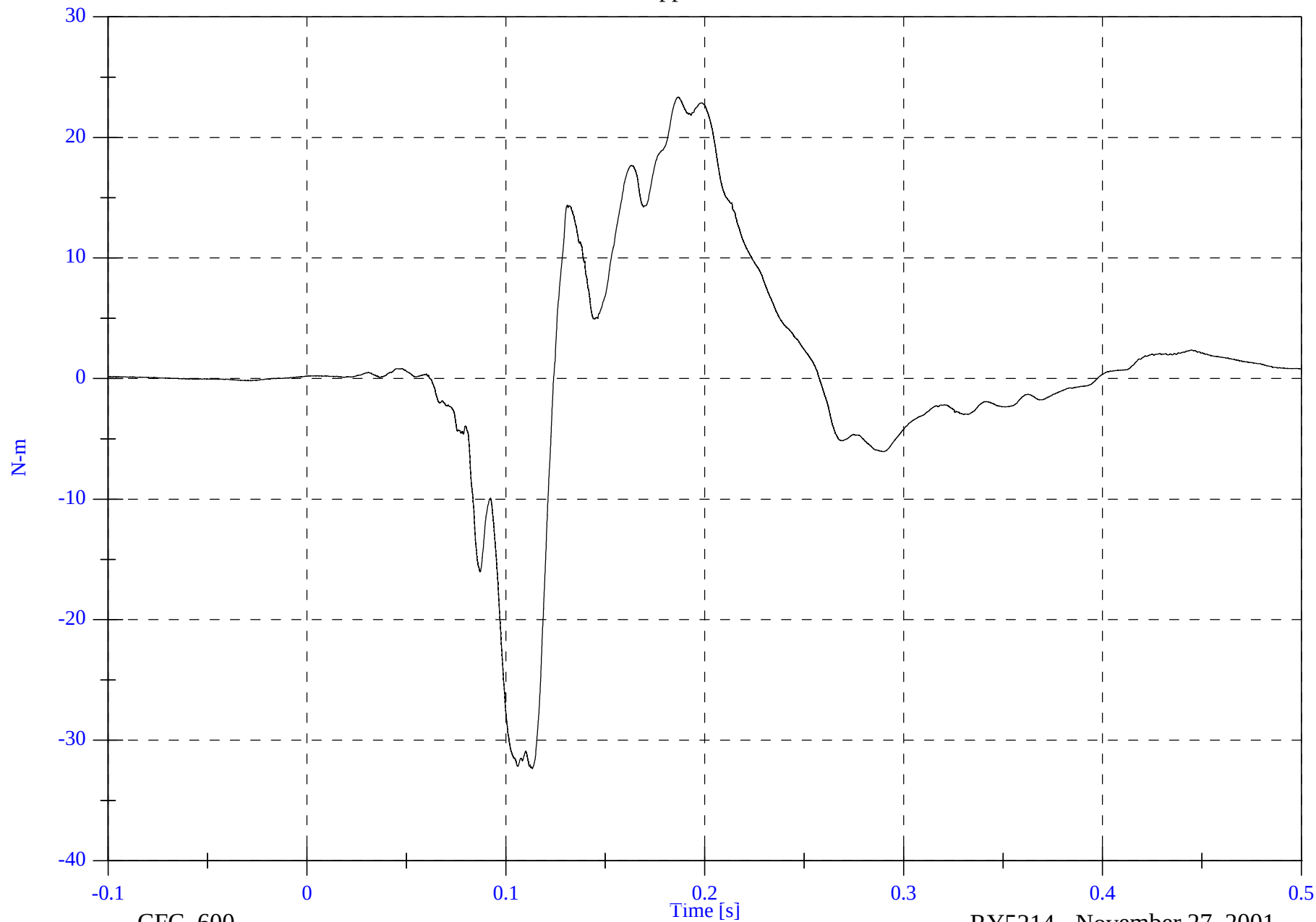


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Upper Neck Mx

Max: 23.4 [N-m] at 0.187 [s]

Min: -32.4 [N-m] at 0.113 [s]



B-28

8413-71

CFC_600

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Upper Neck My

Max: 33.2 [N-m] at 0.102 [s]

Min: -32.7 [N-m] at 0.139 [s]



B-29

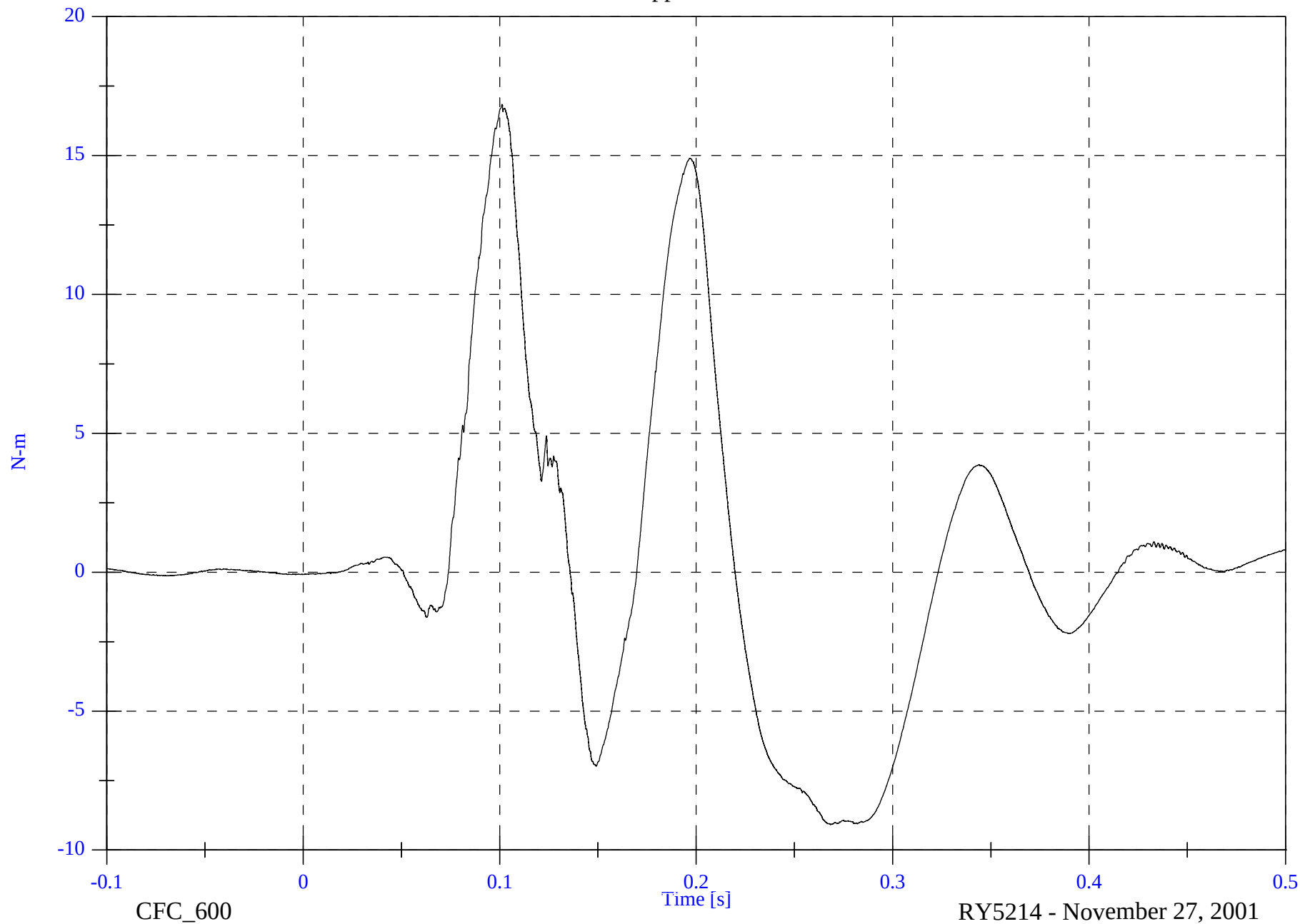
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Upper Neck Mz

Max: 16.8 [N-m] at 0.101 [s]

Min: -9.1 [N-m] at 0.269 [s]



B-30

8413-71

CFC_600

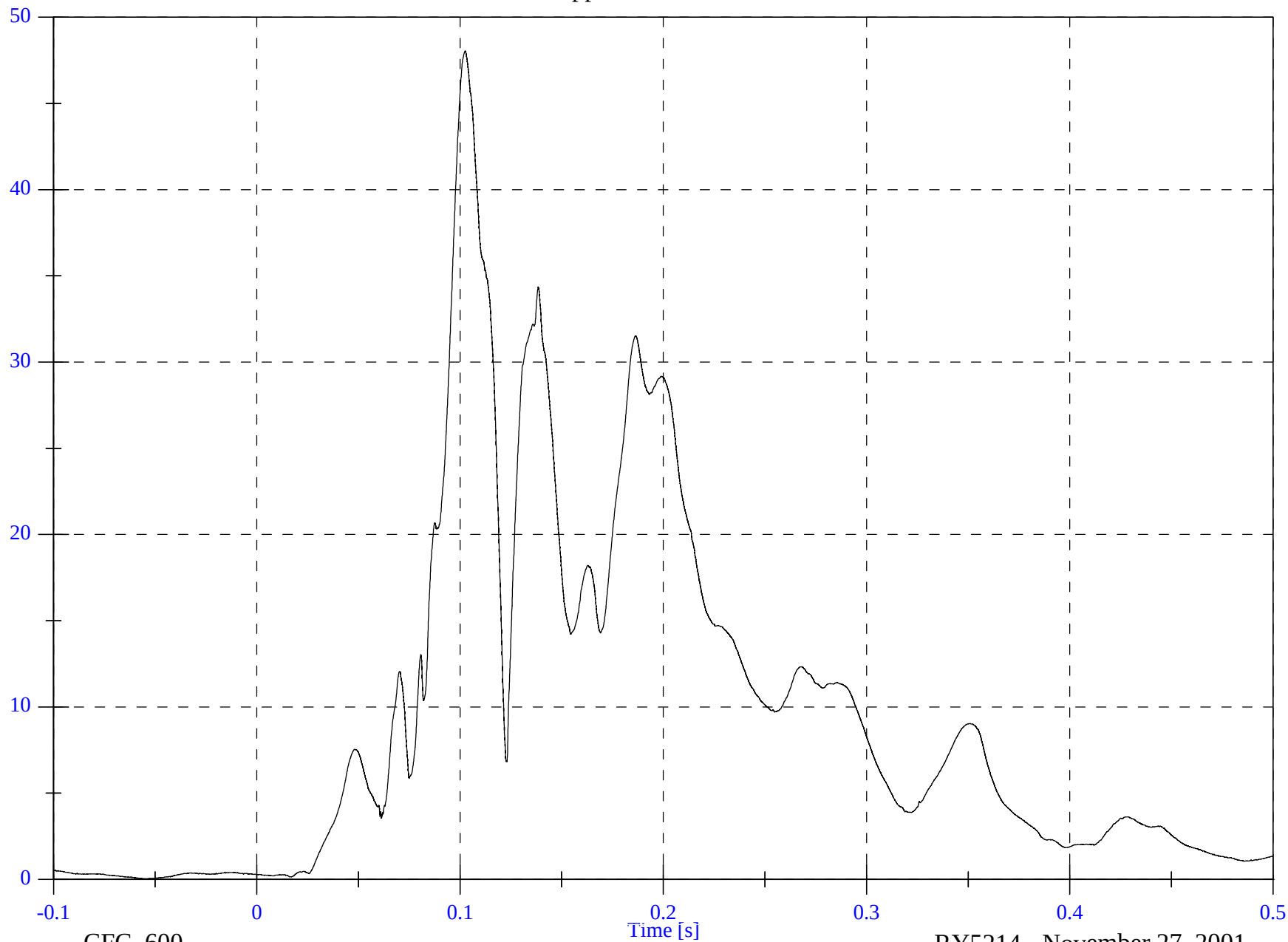
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Upper Neck M Resultant

Max: 48.0 [N-m] at 0.102 [s]

Min: 0.0 [N-m] at -0.055 [s]



B-31

8413-71

CFC_600

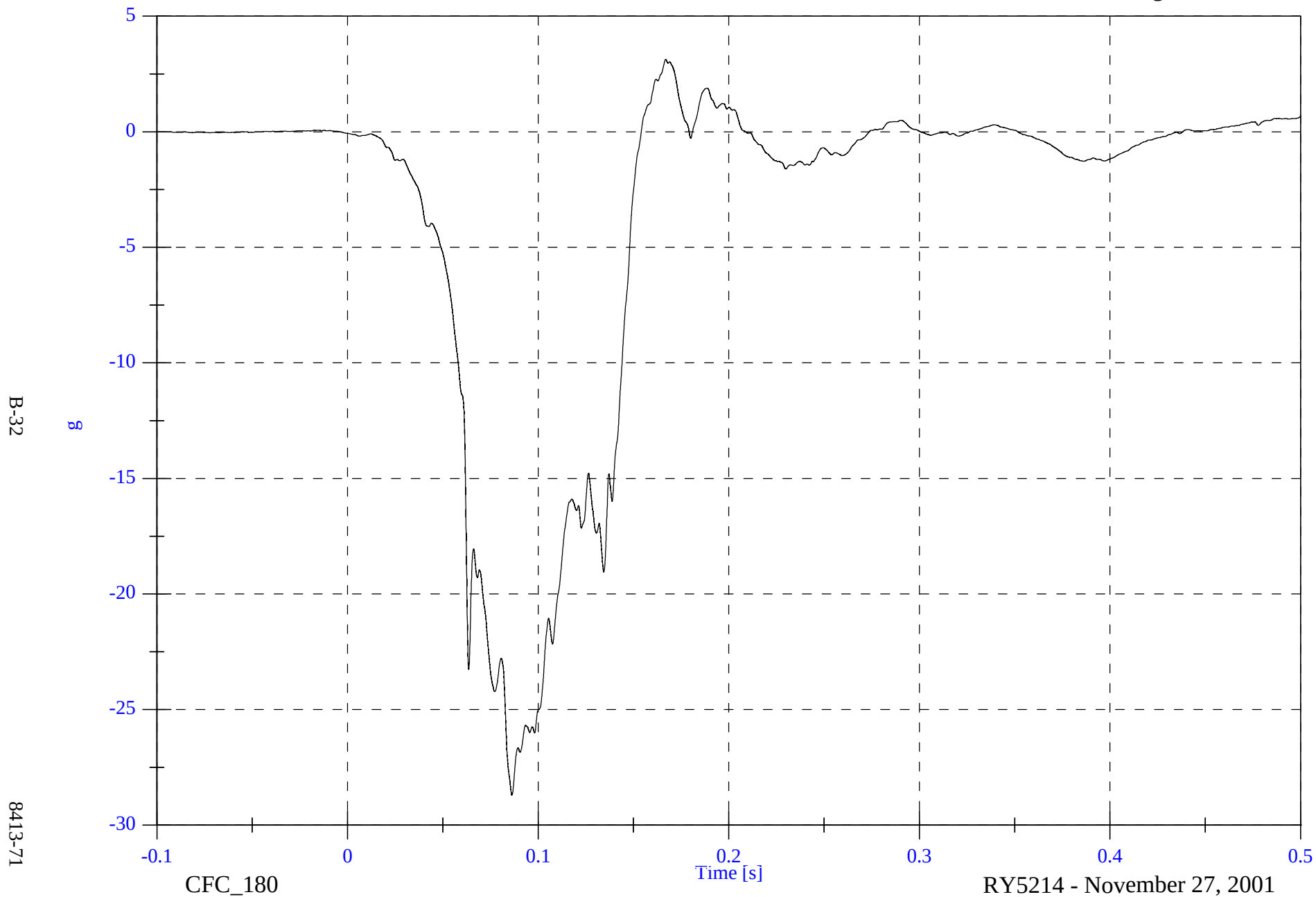
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 3.1 [g] at 0.167 [s]

Min: -28.7 [g] at 0.086 [s]

P1 Chest x



40% Frontal Offset Test #15 - 2000 Nissan Quest

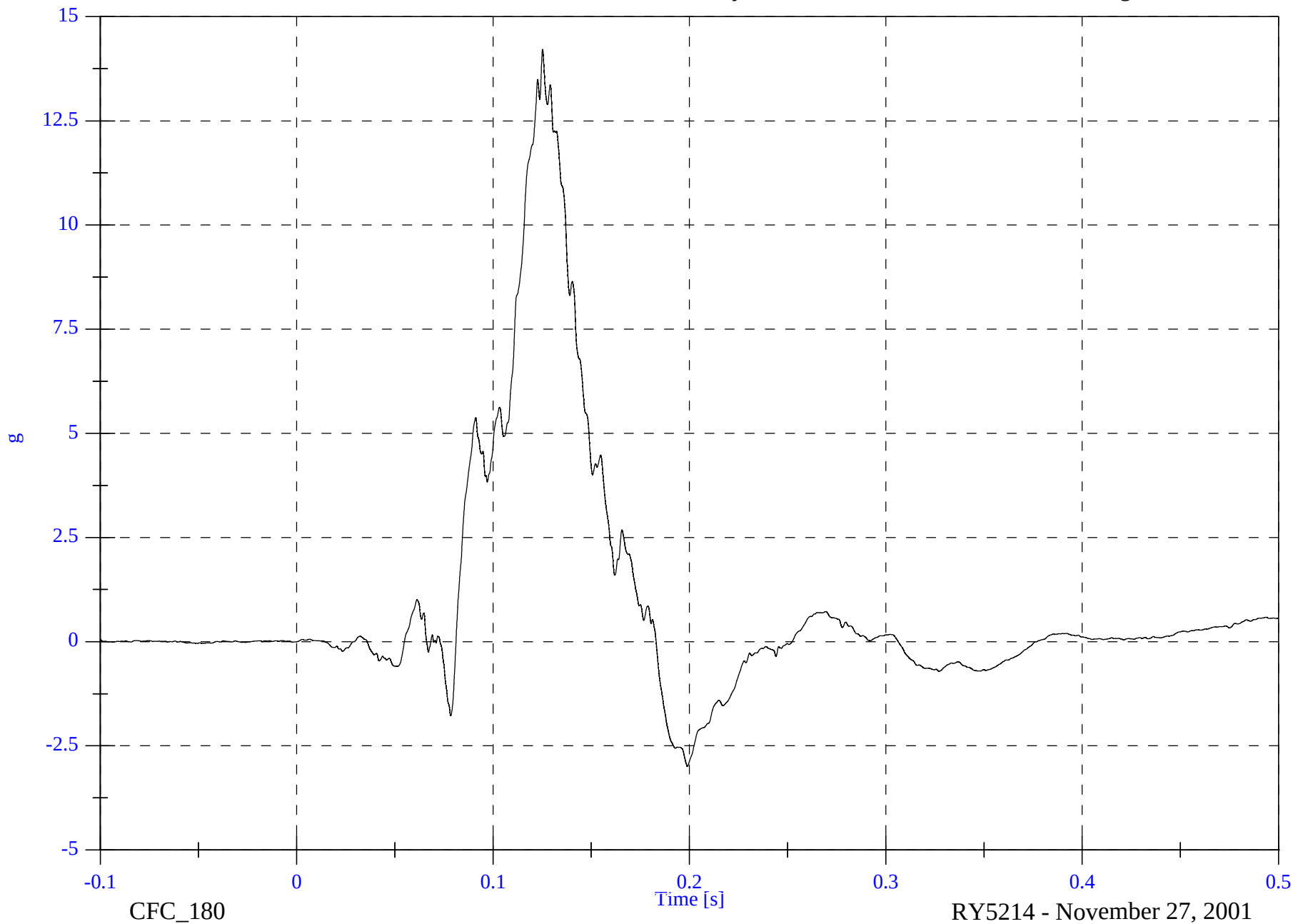
P1 Chest y

Max: 14.2 [g] at 0.125 [s]

Min: -3.0 [g] at 0.199 [s]

B-33

8413-71

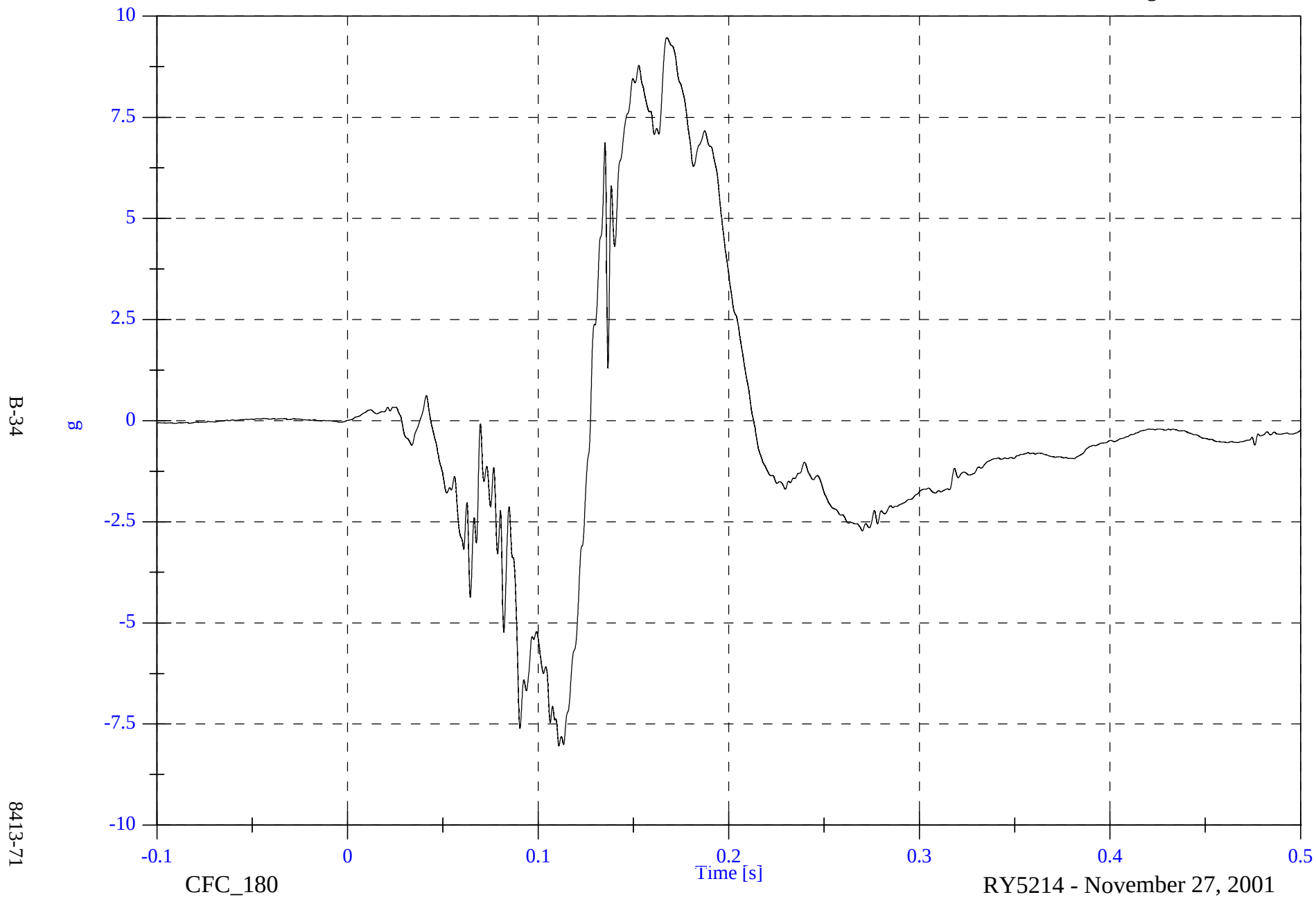


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 9.5 [g] at 0.167 [s]

Min: -8.0 [g] at 0.111 [s]

P1 Chest z



40% Frontal Offset Test #15 - 2000 Nissan Quest

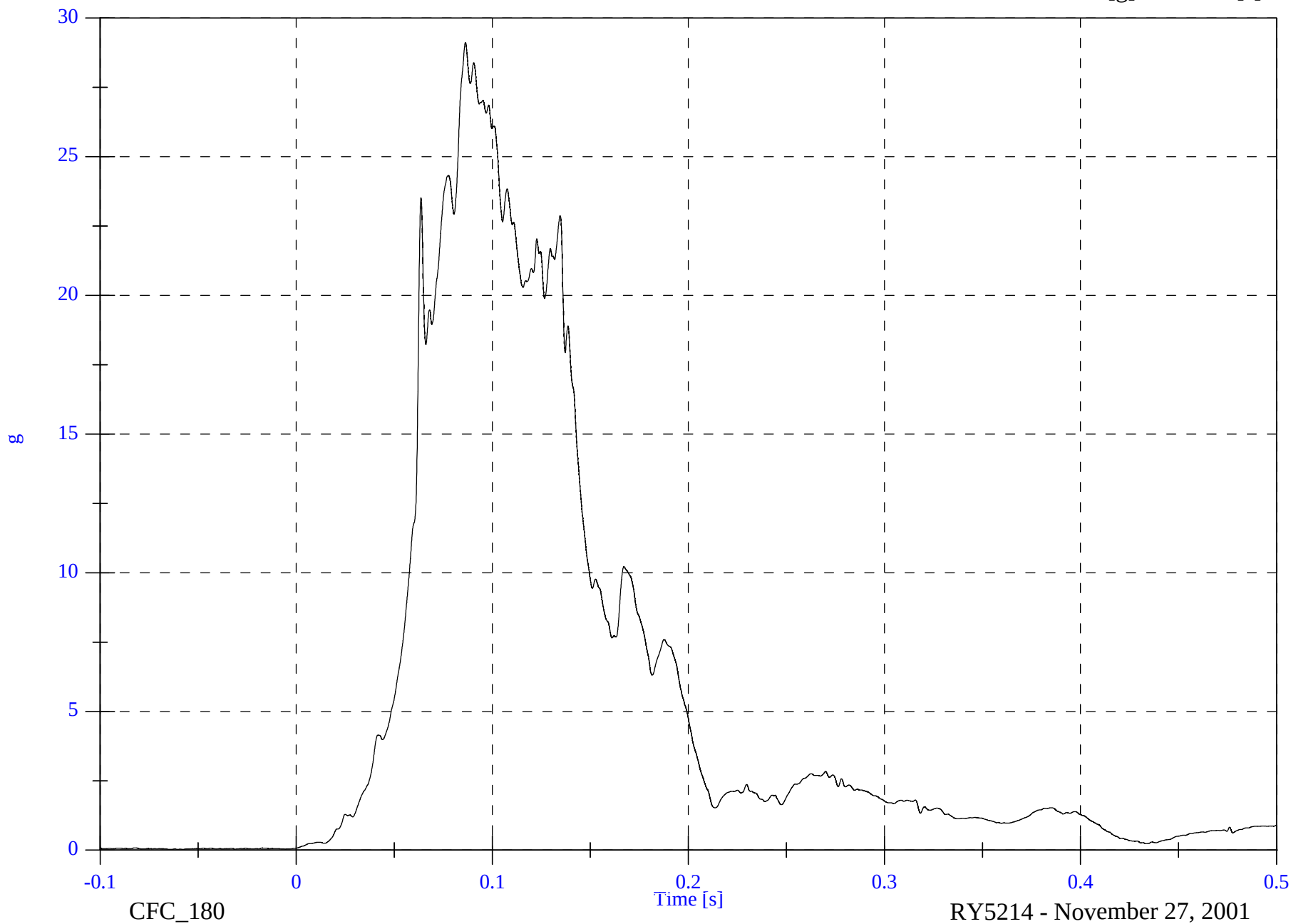
P1 Chest Resultant

Max: 29.1 [g] at 0.086 [s]

Min: 0.0 [g] at -0.064 [s]

B-35

8413-71

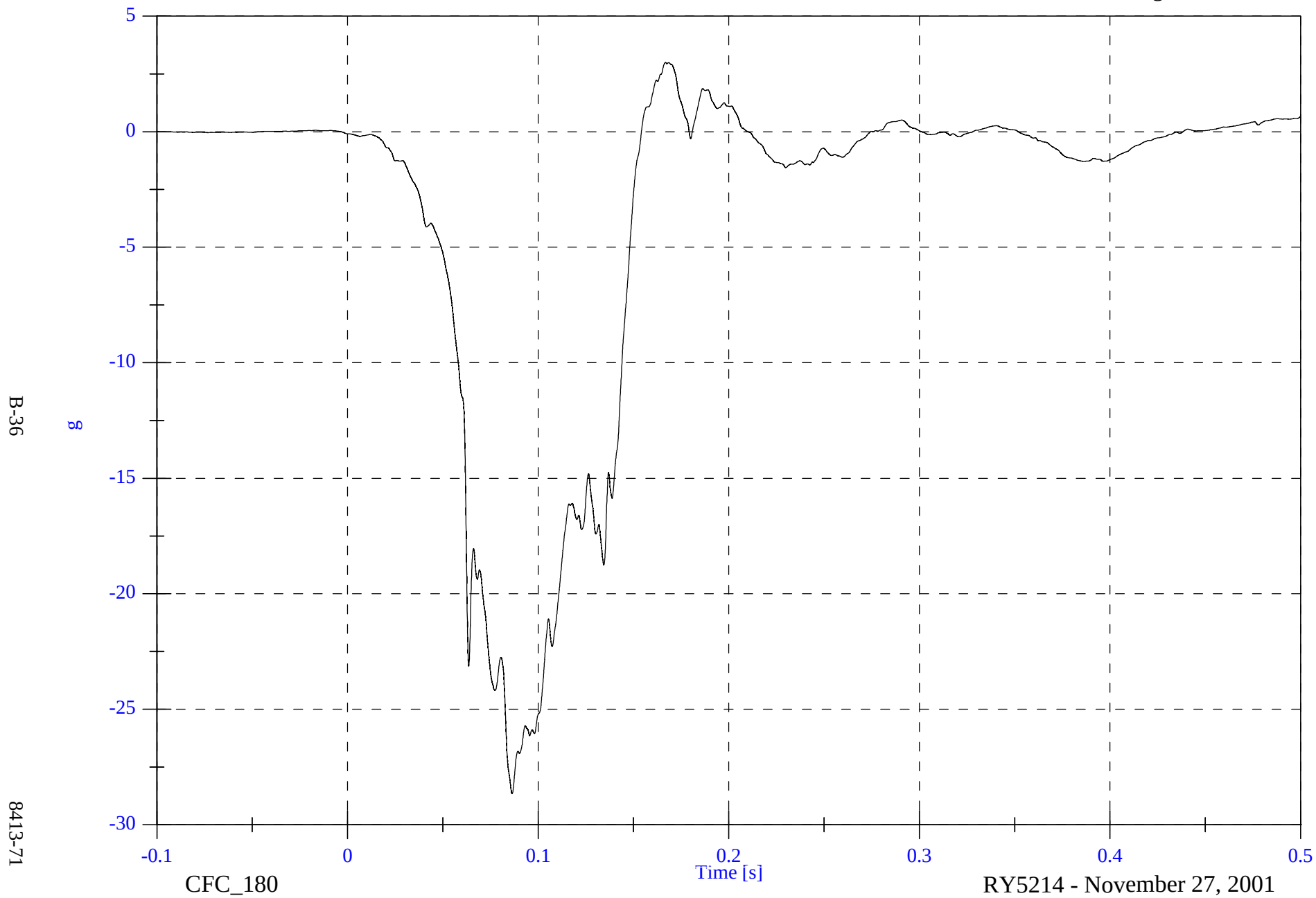


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Chest Red x

Max: 3.0 [g] at 0.167 [s]

Min: -28.7 [g] at 0.086 [s]

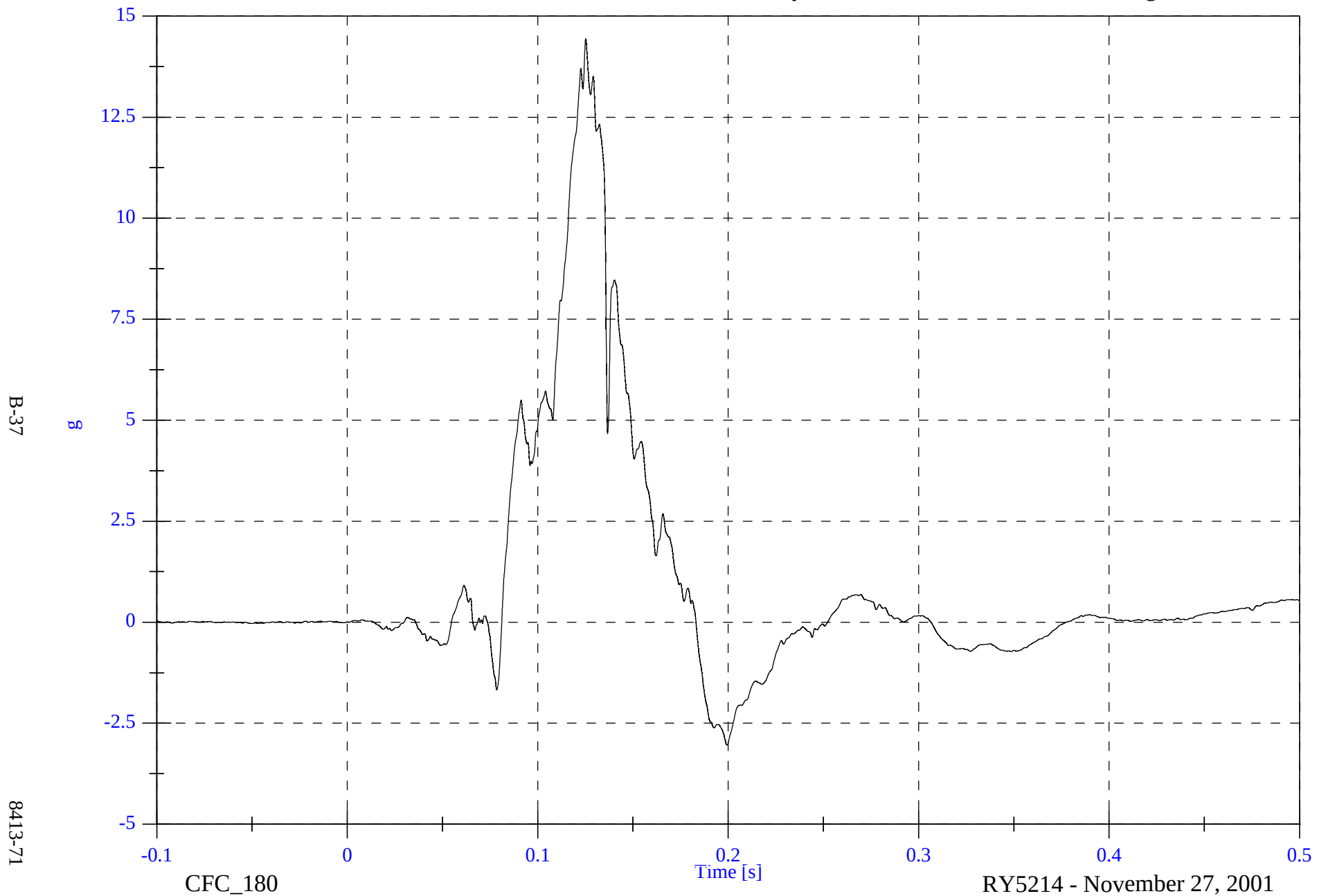


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Chest Red y

Max: 14.4 [g] at 0.125 [s]

Min: -3.0 [g] at 0.199 [s]

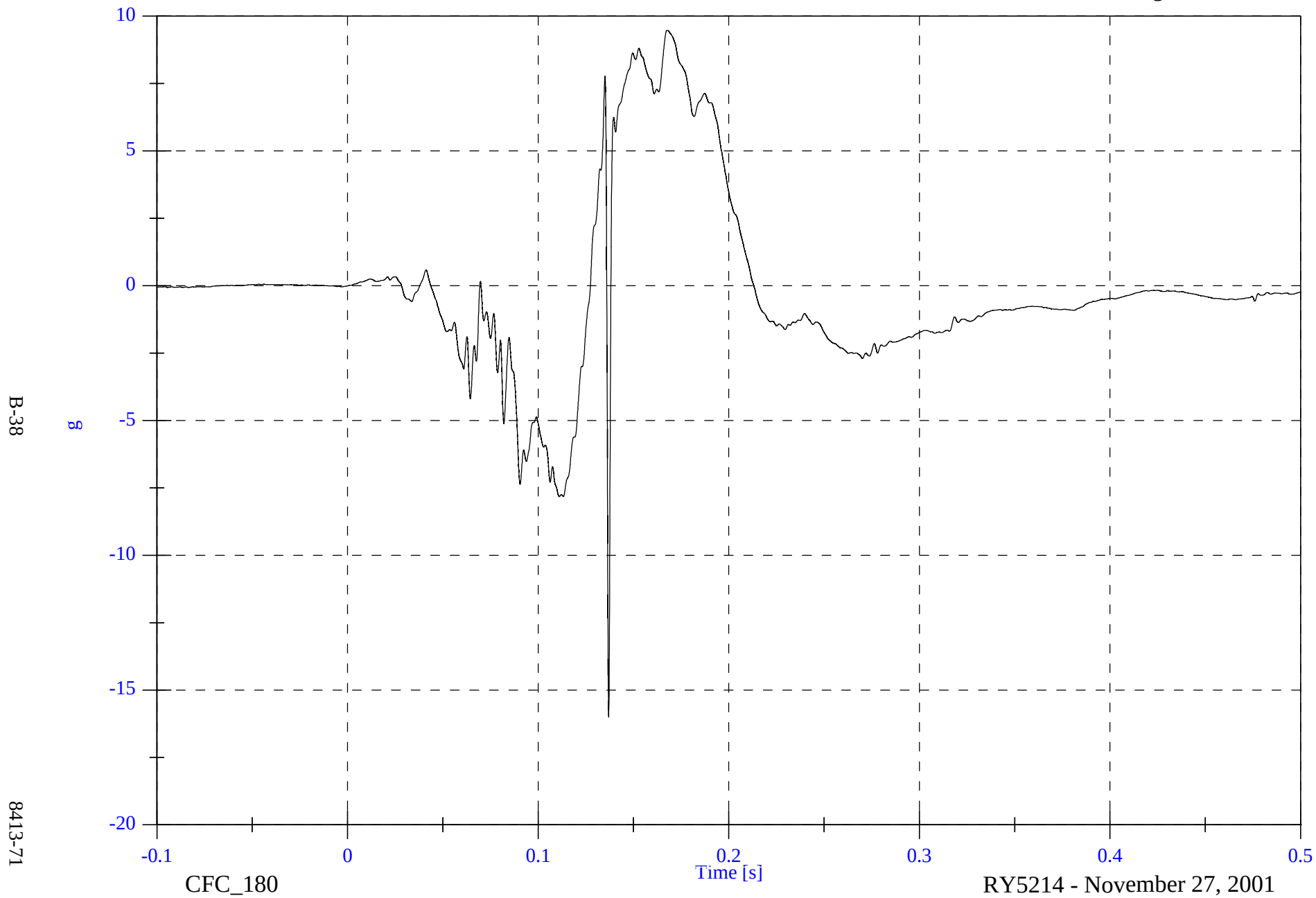


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 9.5 [g] at 0.168 [s]

Min: -16.0 [g] at 0.137 [s]

P1 Chest Red z



40% Frontal Offset Test #15 - 2000 Nissan Quest

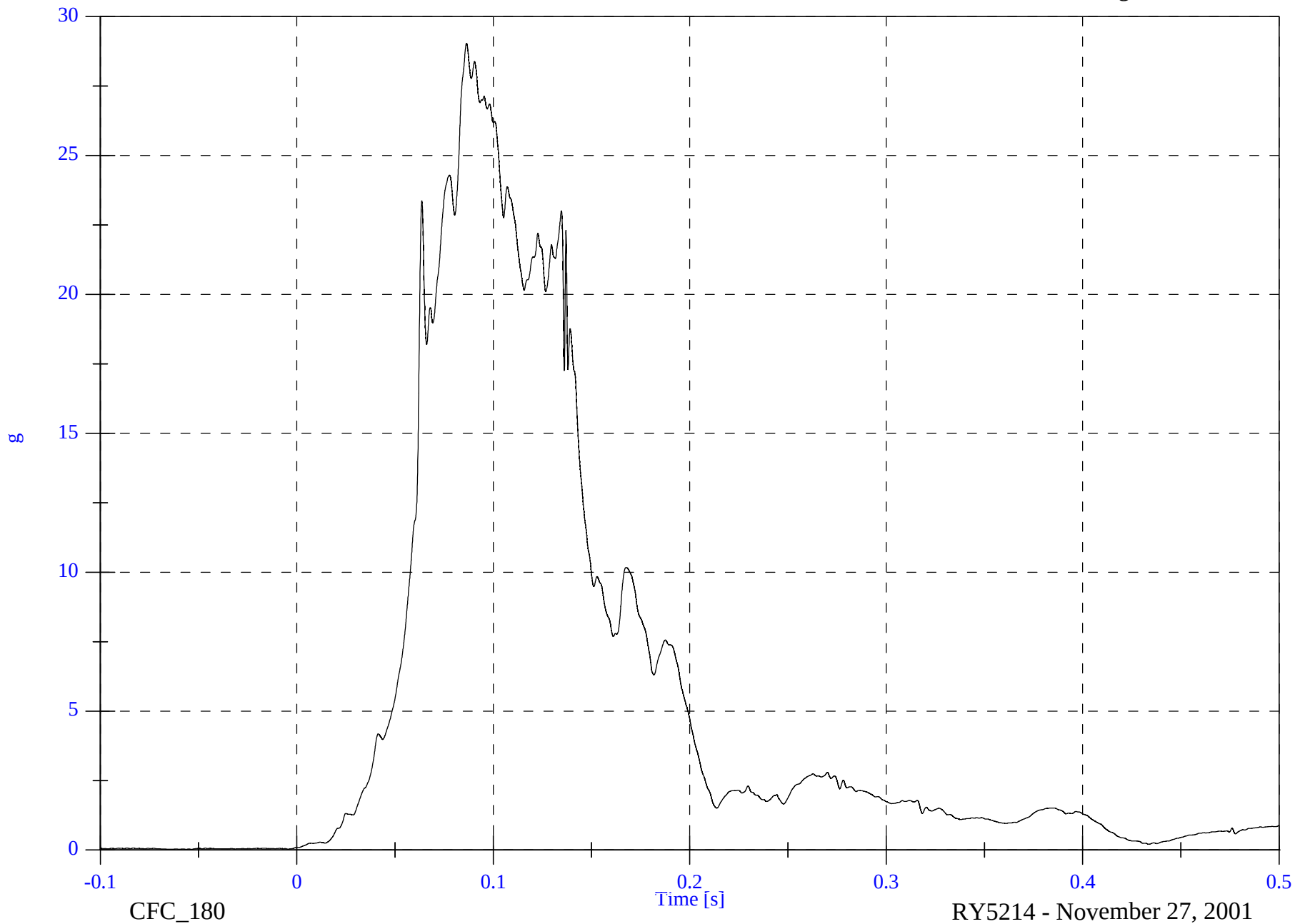
P1 Chest Red Resultant

Max: 29.0 [g] at 0.086 [s]

Min: 0.0 [g] at -0.056 [s]

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8413-71

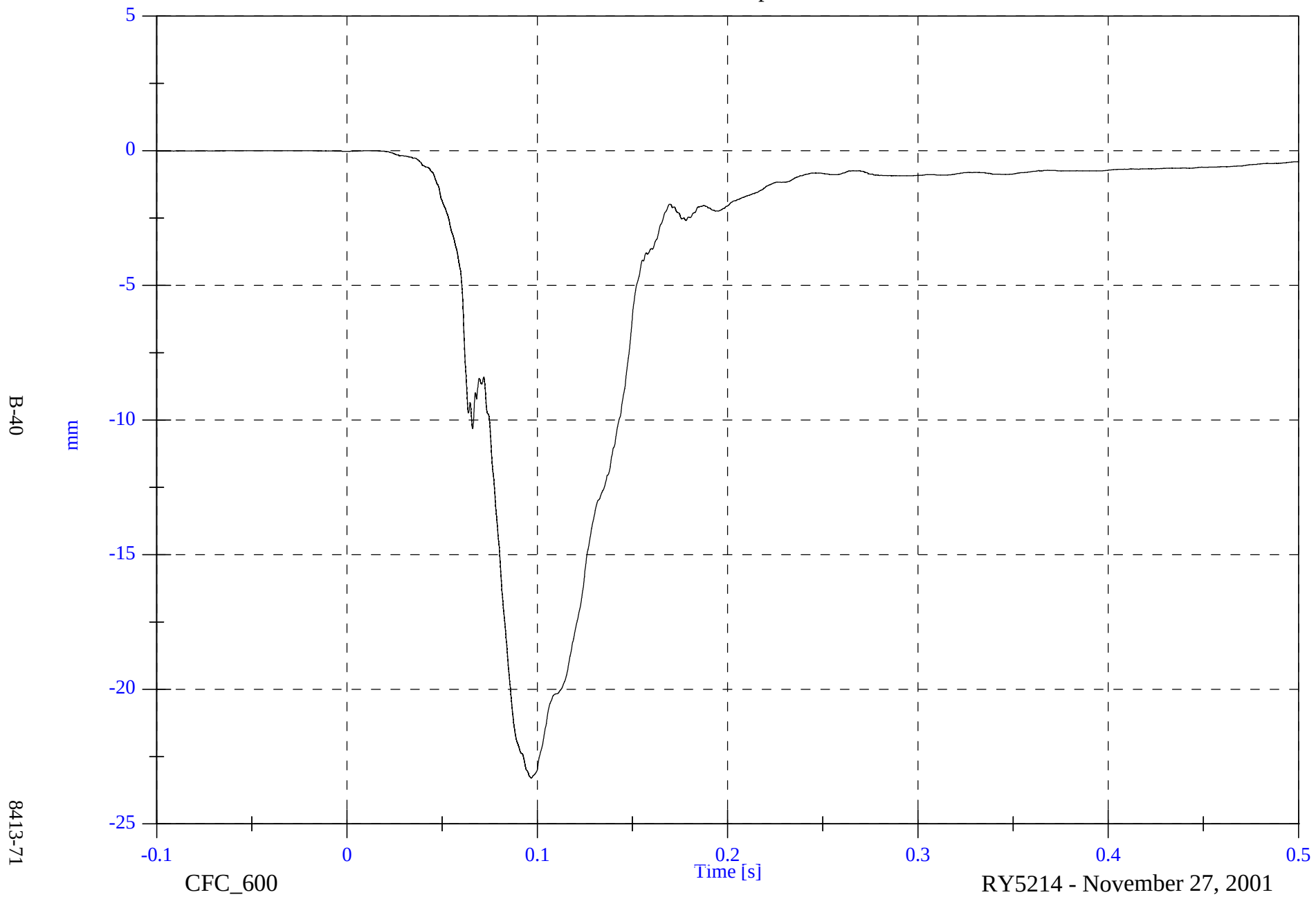


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Chest Compression

Max: 0.0 [mm] at 0.013 [s]

Min: -23.3 [mm] at 0.097 [s]

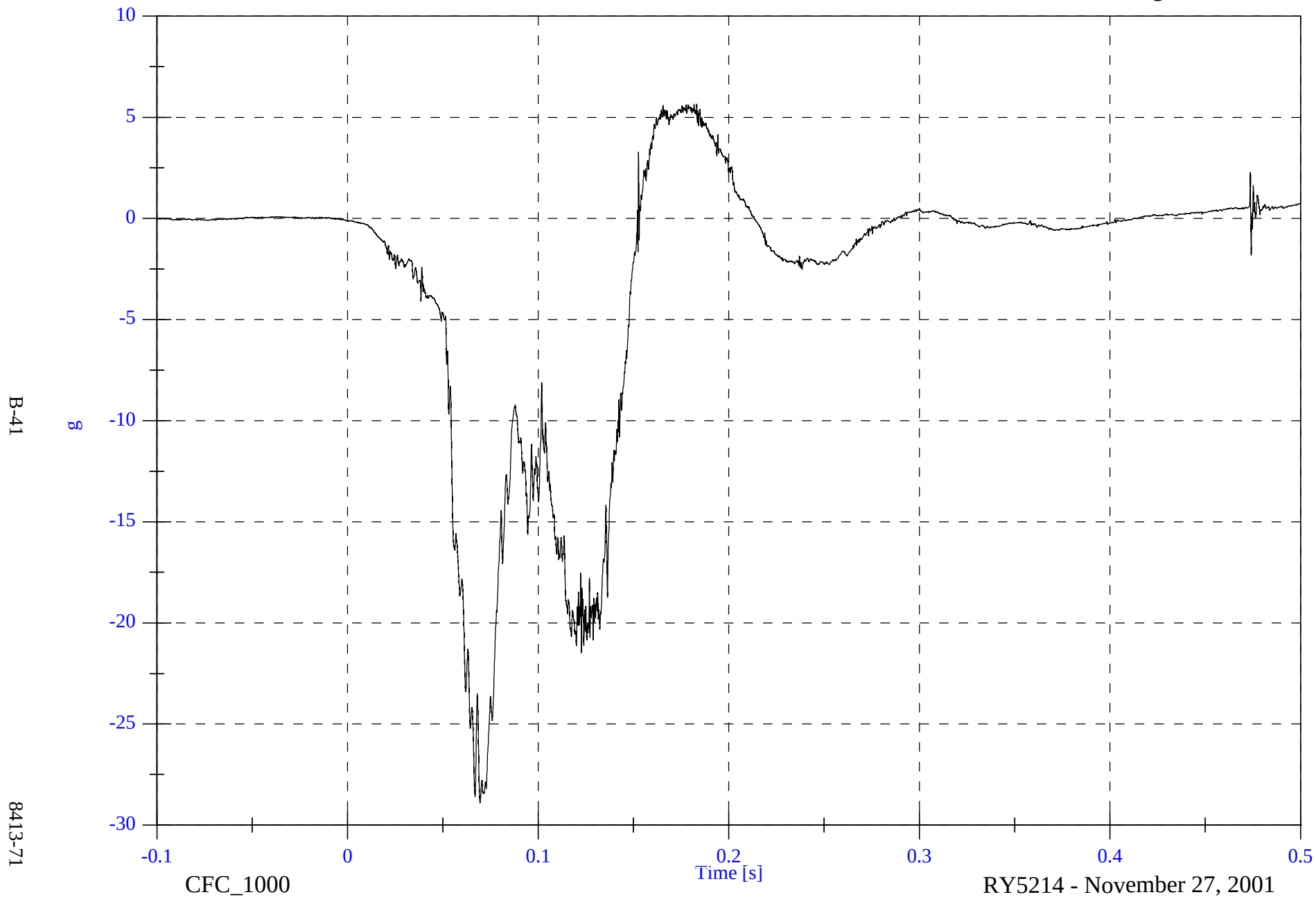


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 5.7 [g] at 0.182 [s]

Min: -28.9 [g] at 0.070 [s]

P1 Pelvic x



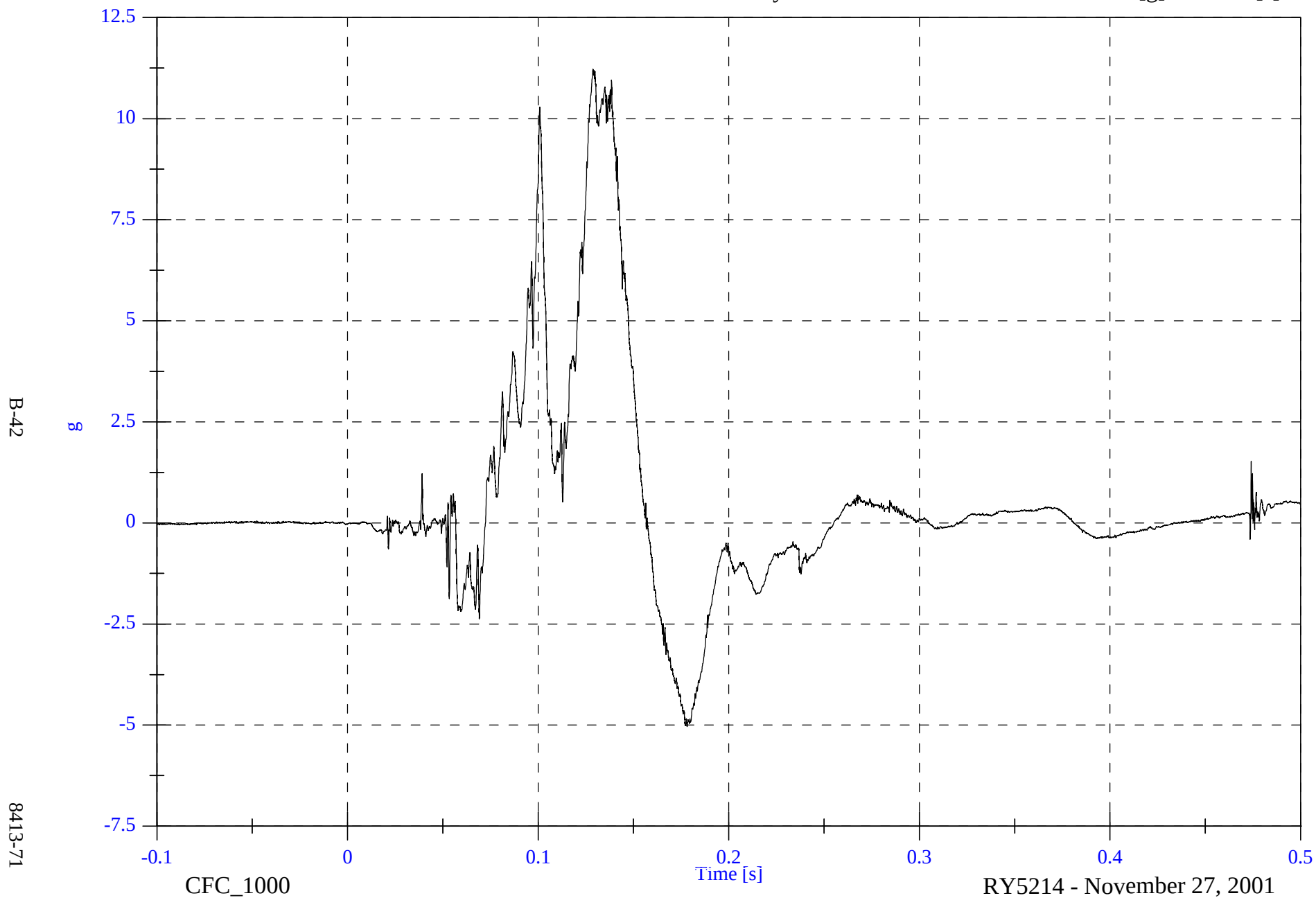
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 11.2 [g] at 0.129 [s]

Min: -5.0 [g] at 0.178 [s]

P1 Pelvic y

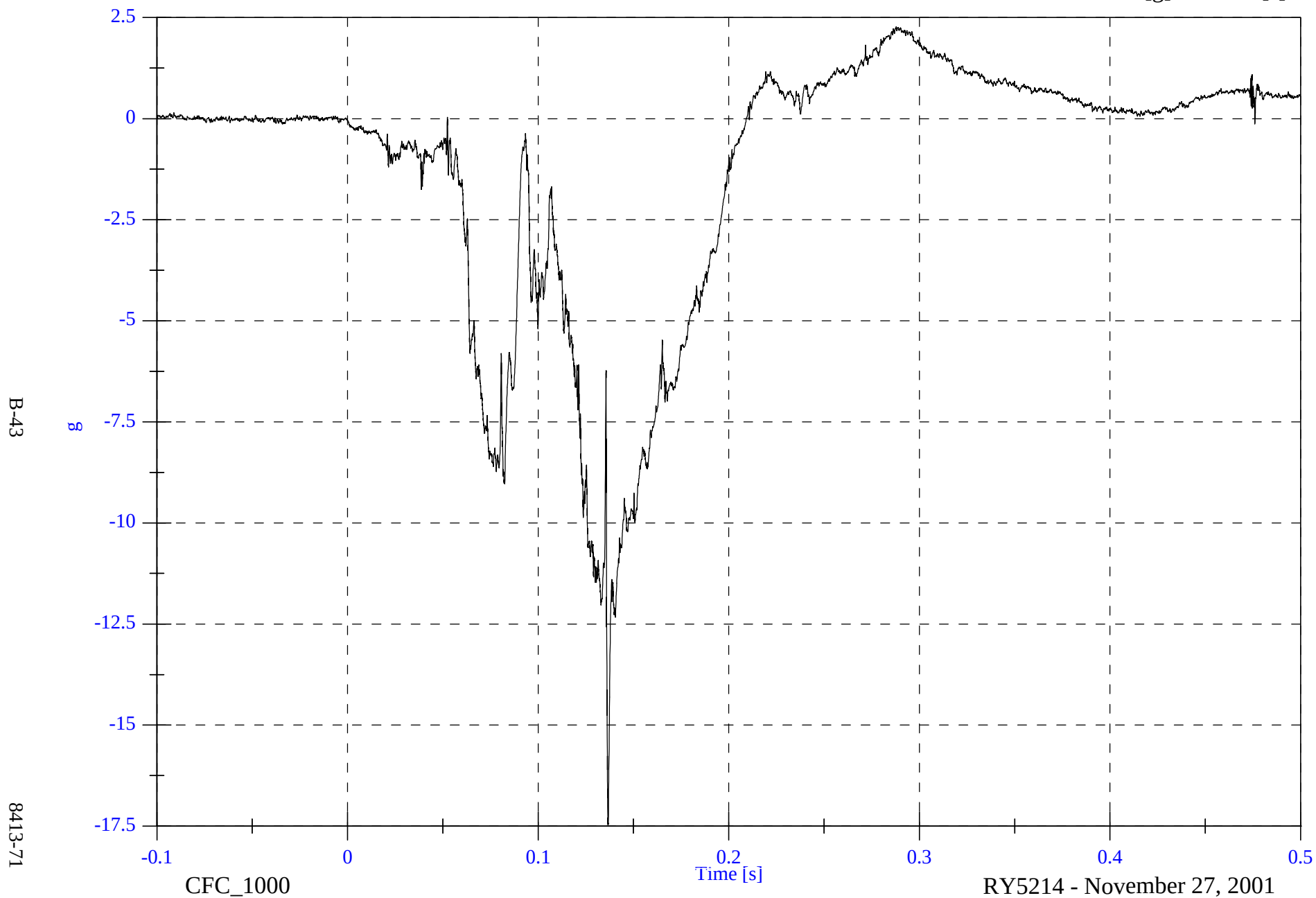


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 2.3 [g] at 0.288 [s]

Min: -17.5 [g] at 0.137 [s]

P1 Pelvic z



40% Frontal Offset Test #15 - 2000 Nissan Quest

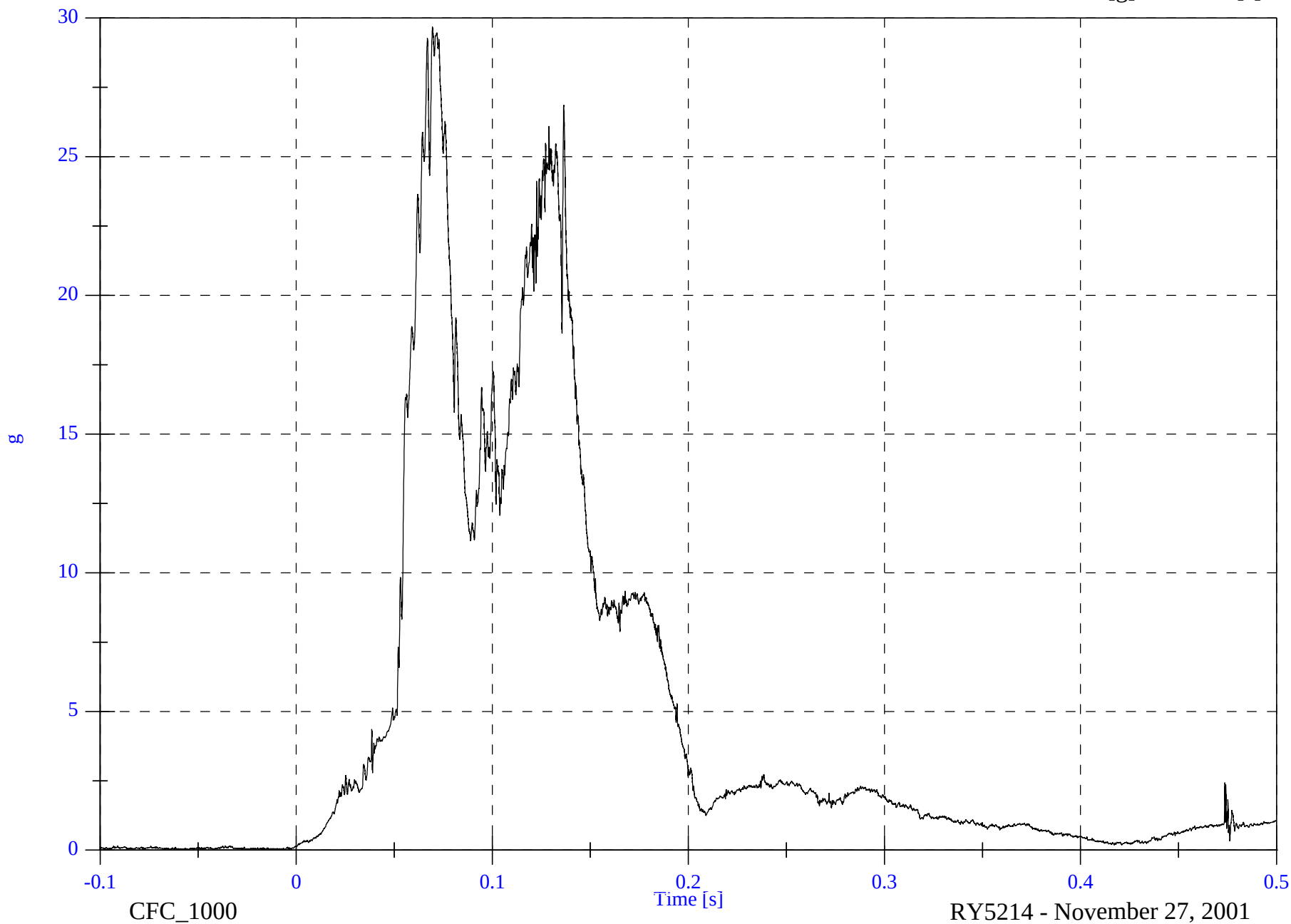
P1 Pelvic Resultant

Max: 29.7 [g] at 0.070 [s]

Min: 0.0 [g] at -0.007 [s]

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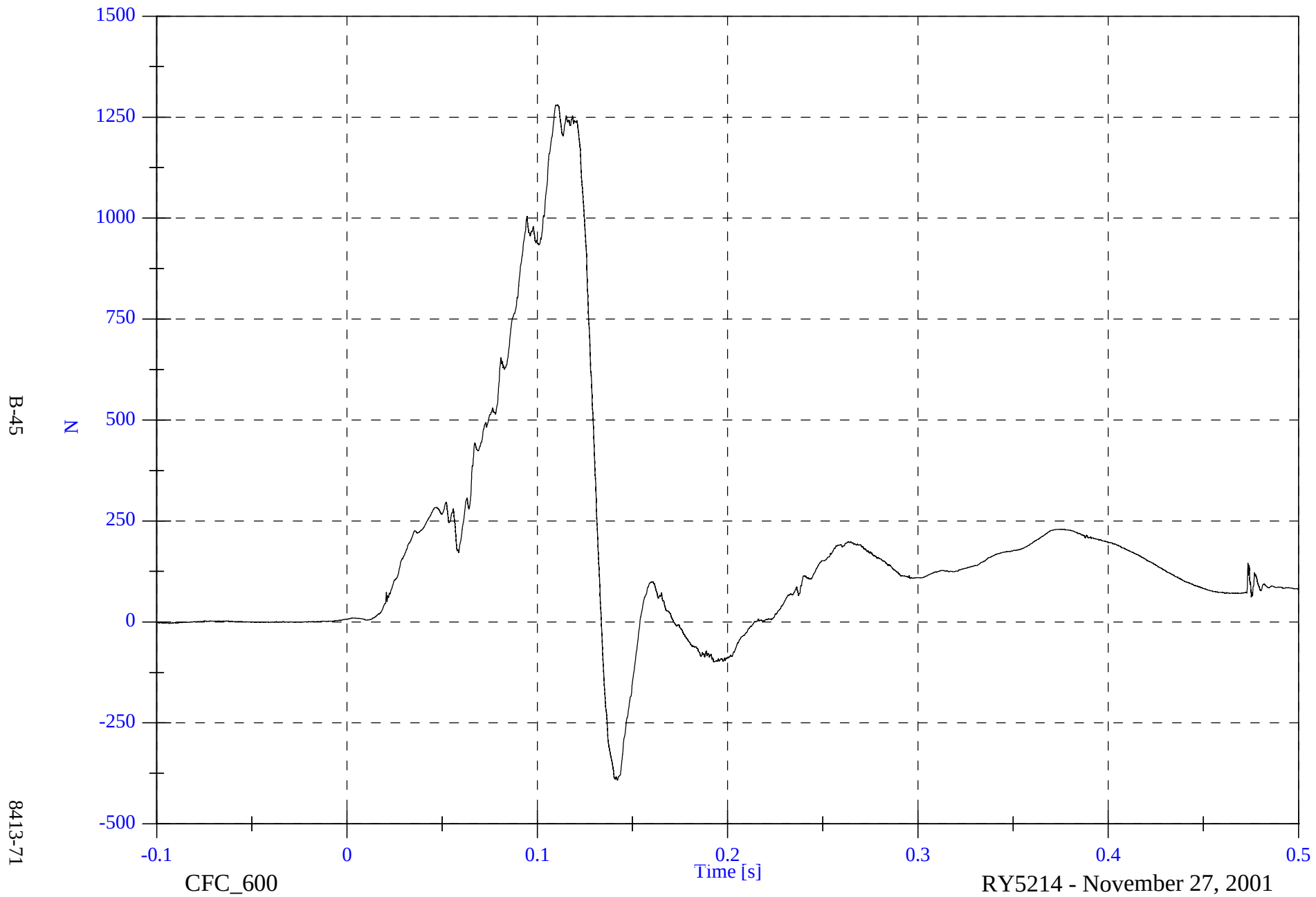


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur Fx

Max: 1281.2 [N] at 0.111 [s]

Min: -391.9 [N] at 0.142 [s]

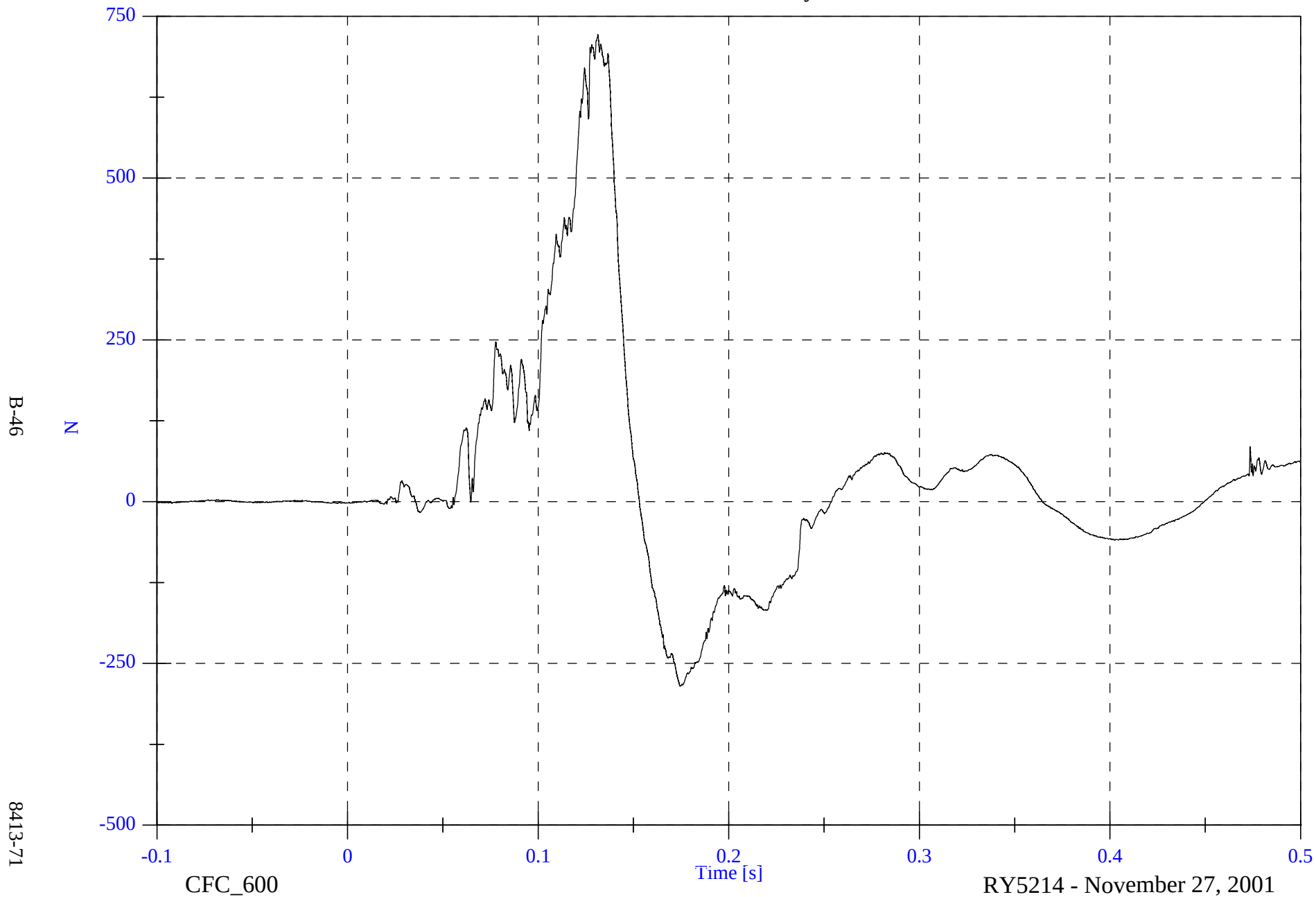


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 721.3 [N] at 0.131 [s]

P1 Left Femur Fy

Min: -285.4 [N] at 0.174 [s]

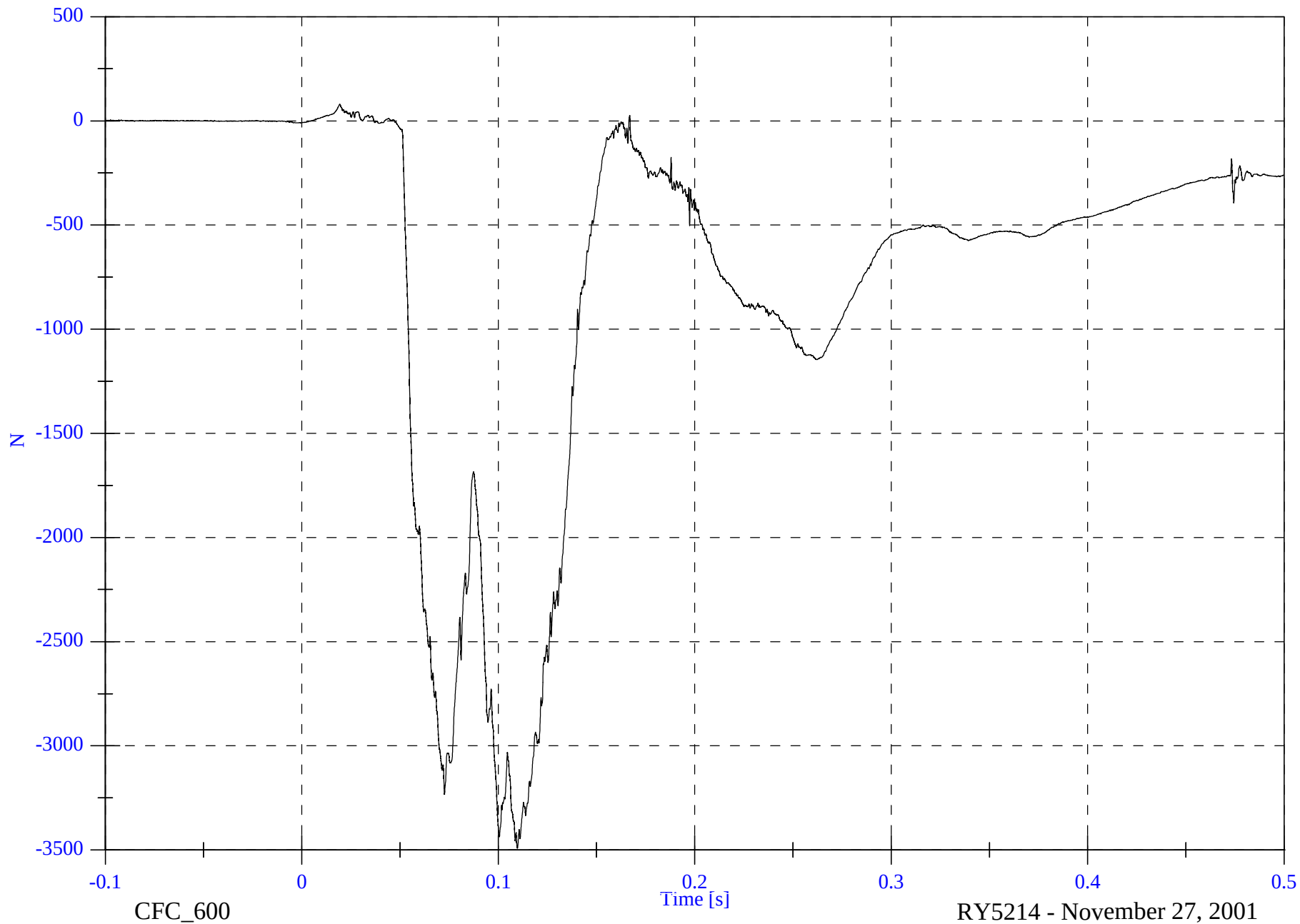


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur Fz

Max: 79.5 [N] at 0.019 [s]

Min: -3491.4 [N] at 0.110 [s]



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8413-71

CFC_600

Time [s]

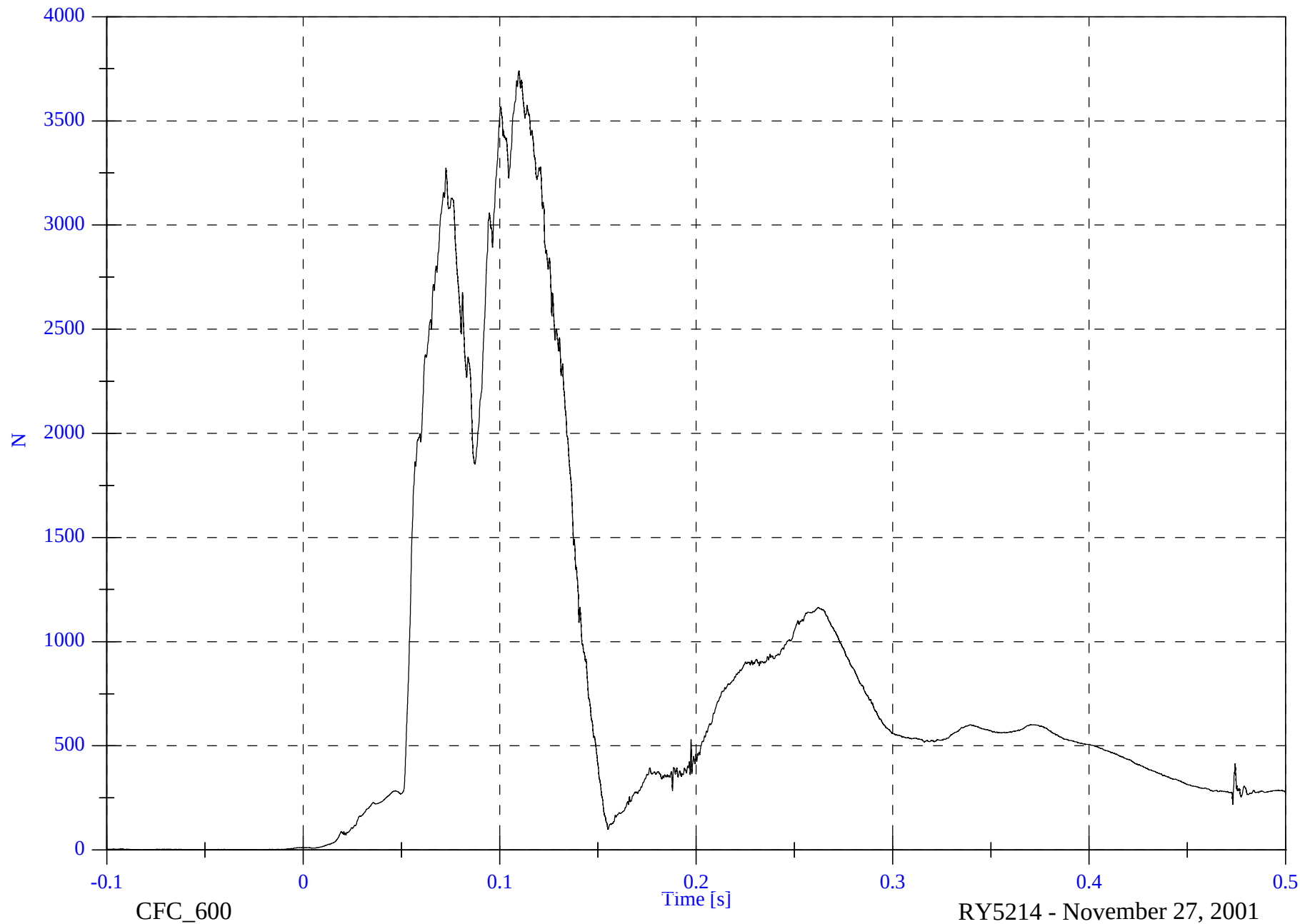
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur F Resultant

Max: 3740.5 [N] at 0.110 [s]

Min: 0.2 [N] at -0.019 [s]



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8413-71

CFC_600

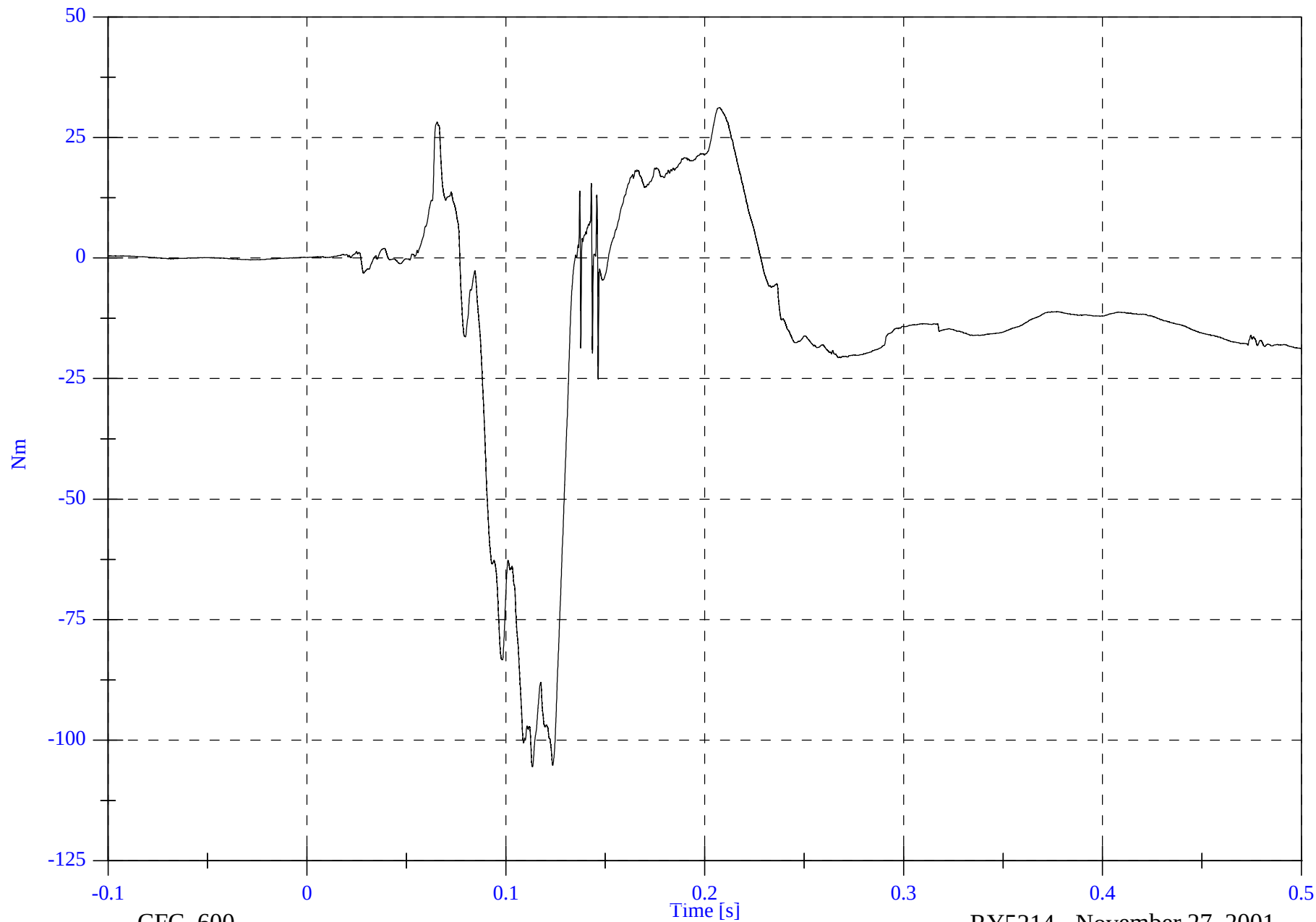
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur Mx

Max: 31.2 [Nm] at 0.207 [s]

Min: -105.5 [Nm] at 0.113 [s]



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8413-71

CFC_600

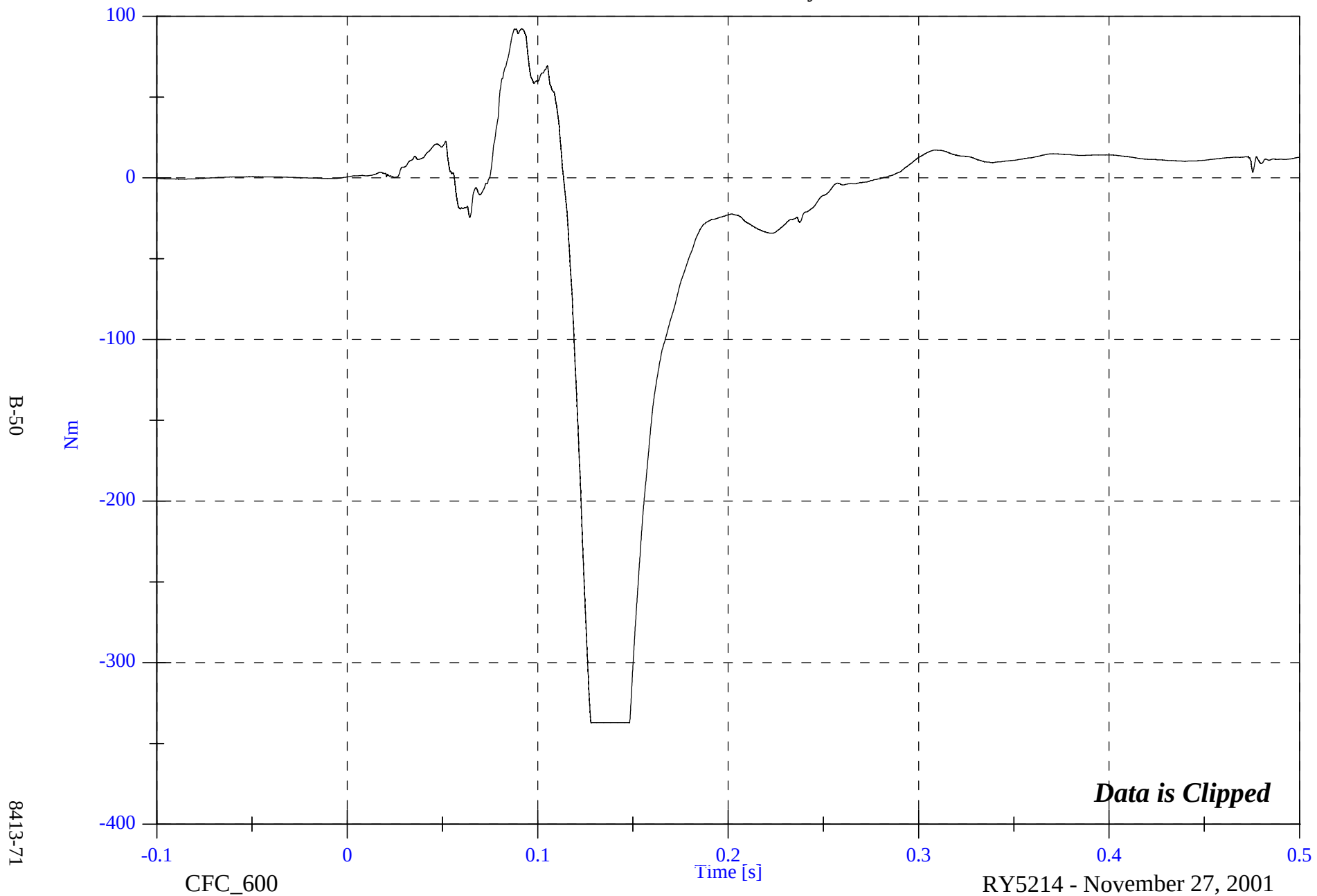
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur My

Max: 92.3 [Nm] at 0.092 [s]

Min: -337.3 [Nm] at 0.148 [s]

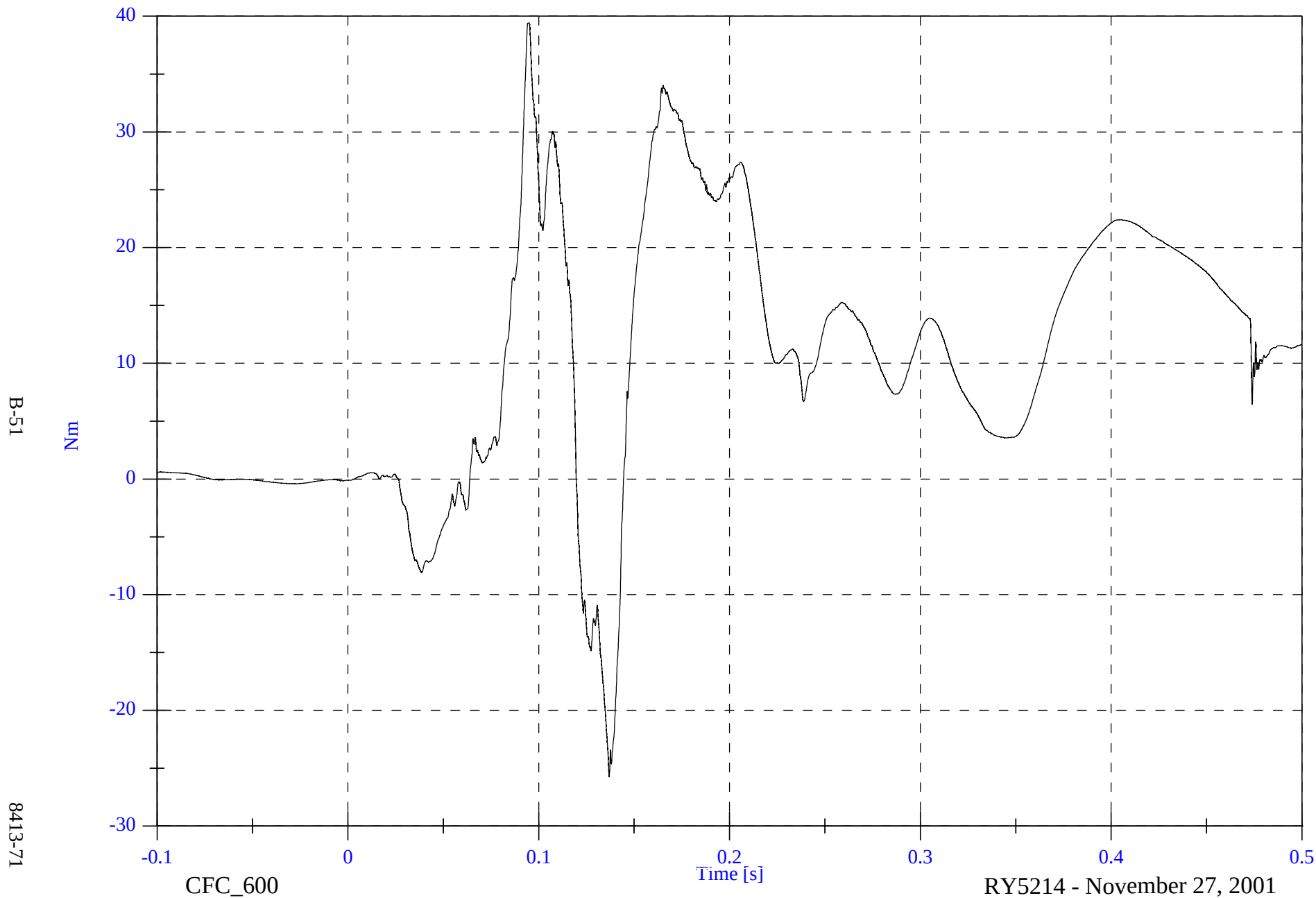


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur Mz

Max: 39.4 [Nm] at 0.095 [s]

Min: -25.7 [Nm] at 0.137 [s]

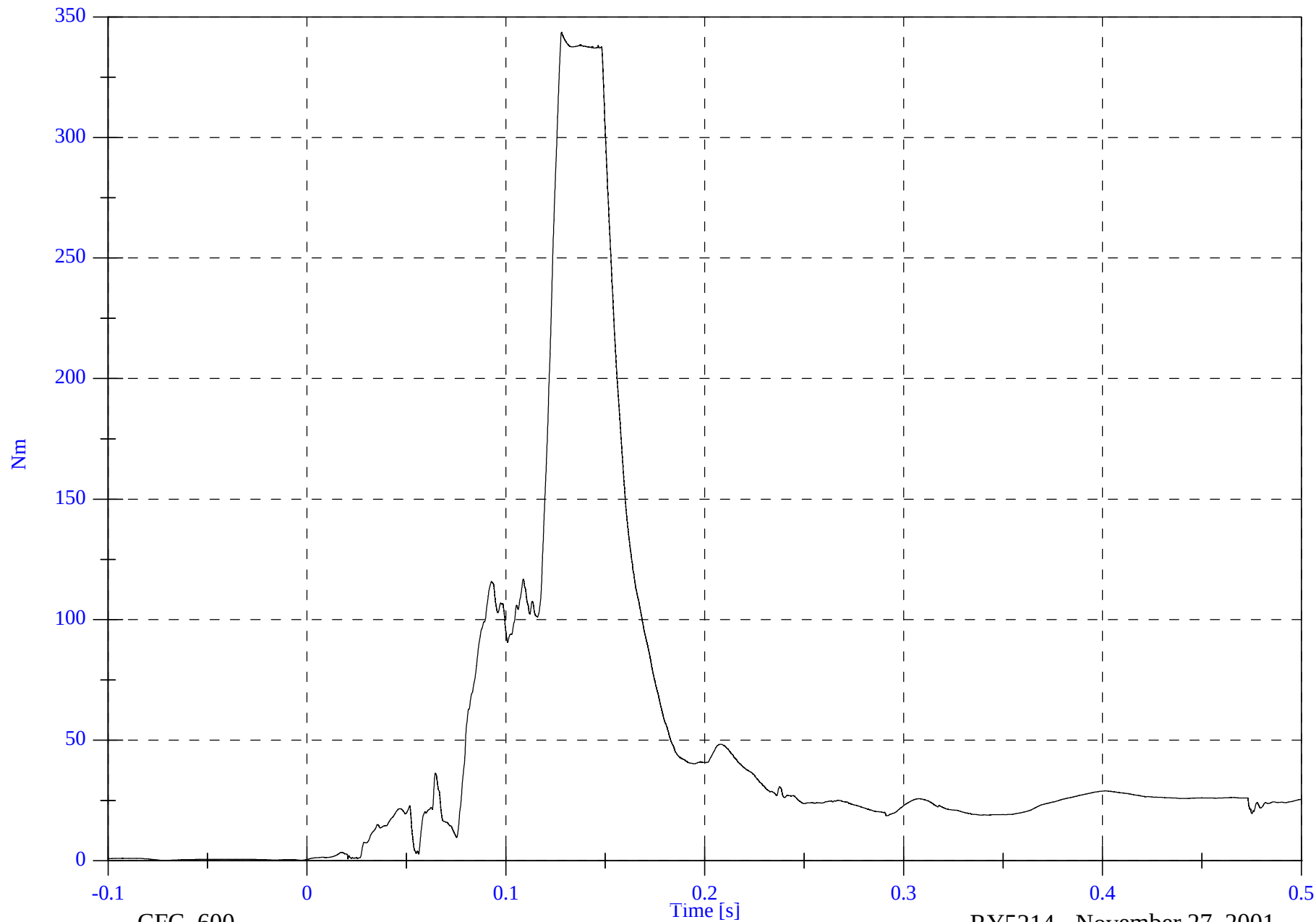


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Femur M Resultant

Max: 343.6 [Nm] at 0.128 [s]

Min: 0.1 [Nm] at -0.071 [s]



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8413-71

CFC_600

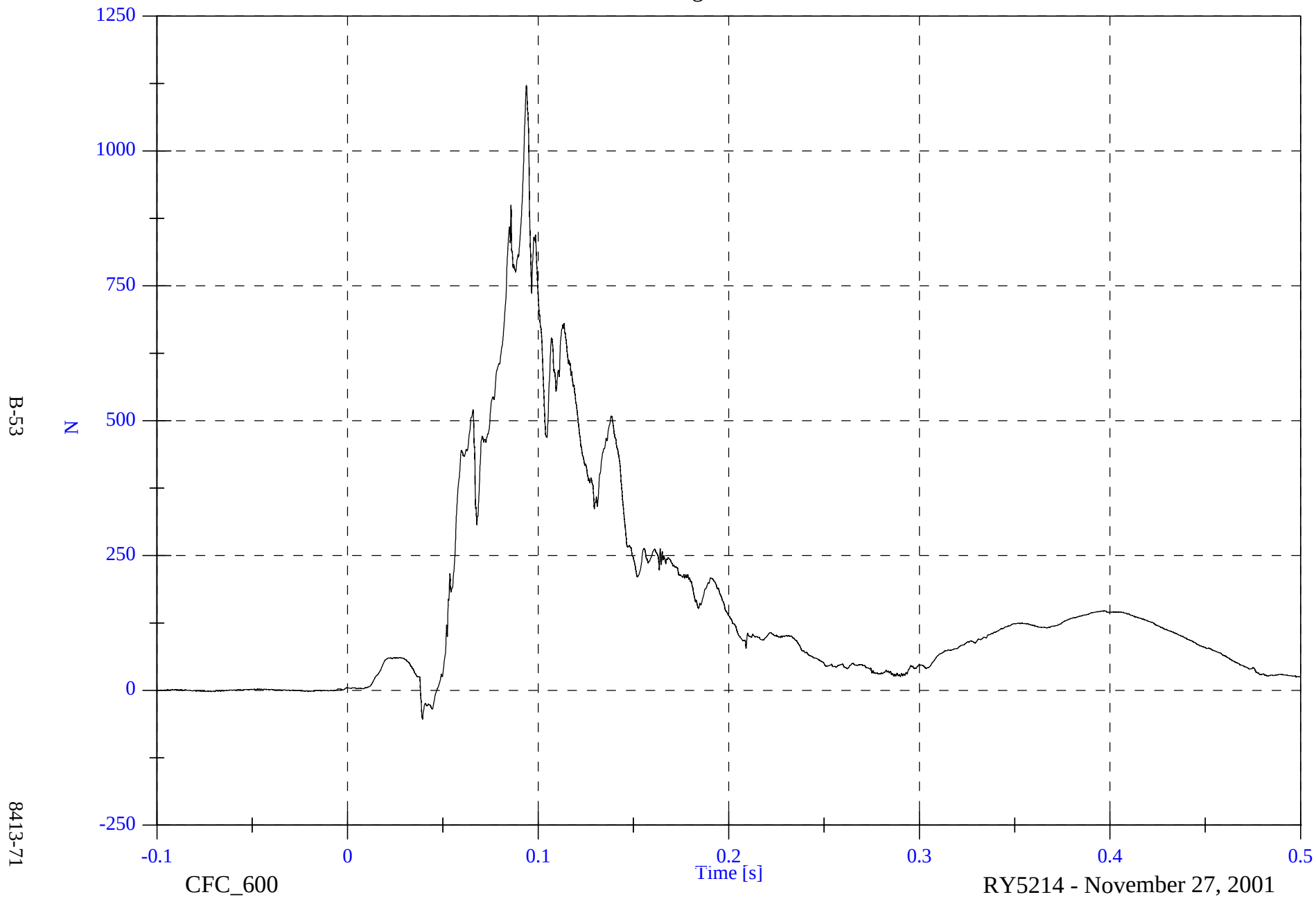
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur Fx

Max: 1122.0 [N] at 0.094 [s]

Min: -53.5 [N] at 0.039 [s]

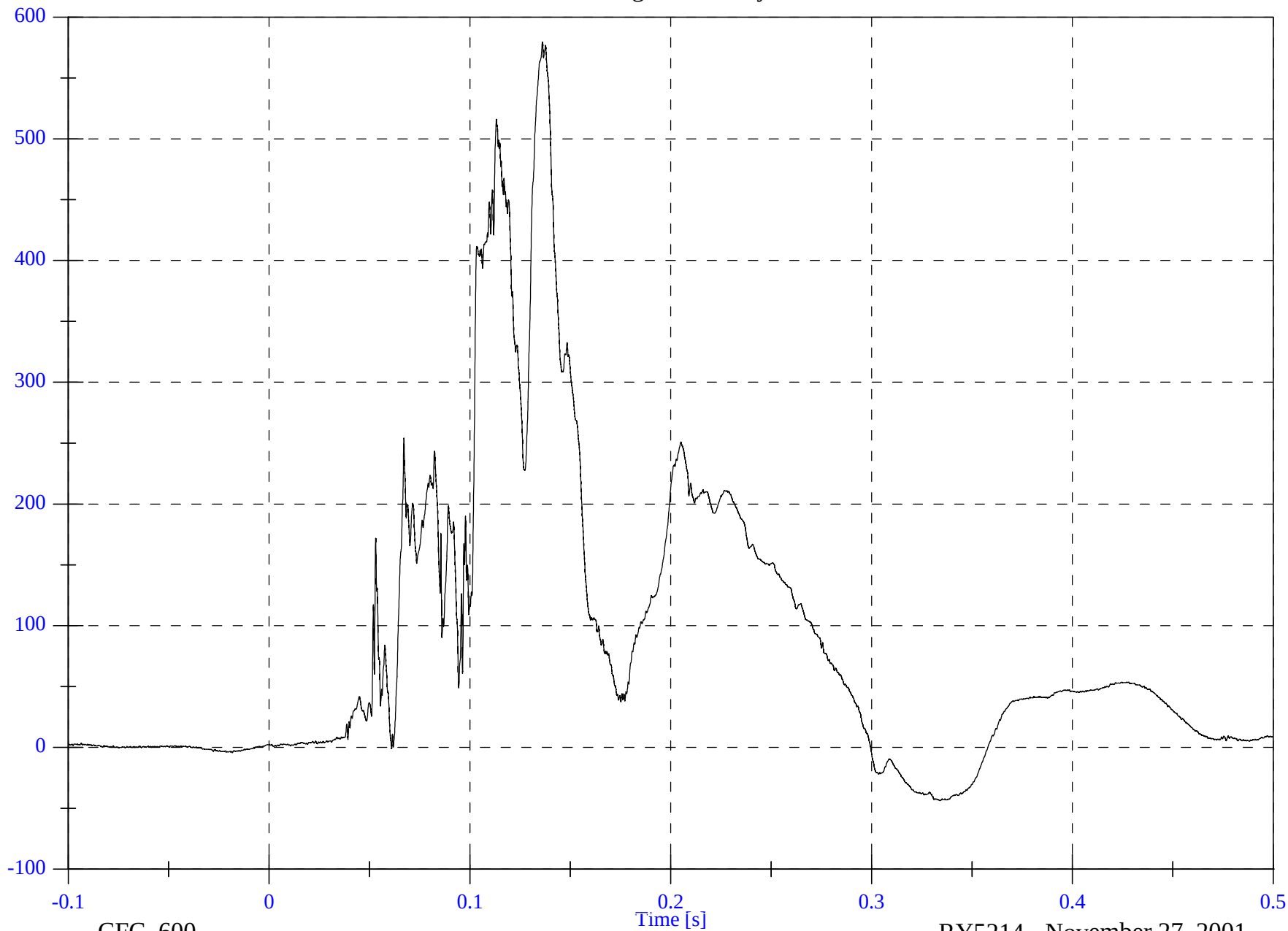


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur Fy

Max: 579.3 [N] at 0.136 [s]

Min: -43.8 [N] at 0.334 [s]



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8413-71

CFC_600

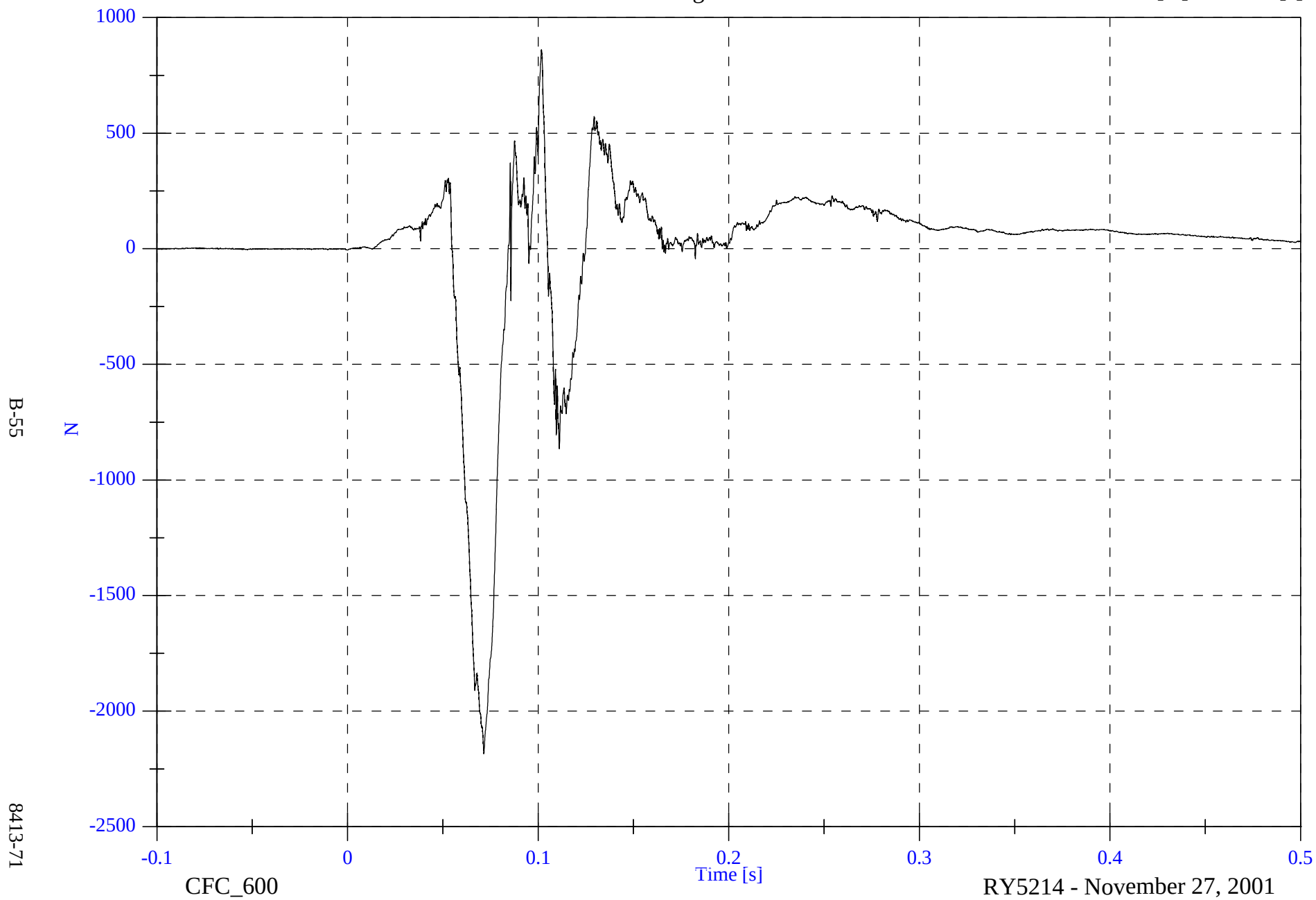
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur Fz

Max: 861.6 [N] at 0.102 [s]

Min: -2183.6 [N] at 0.072 [s]

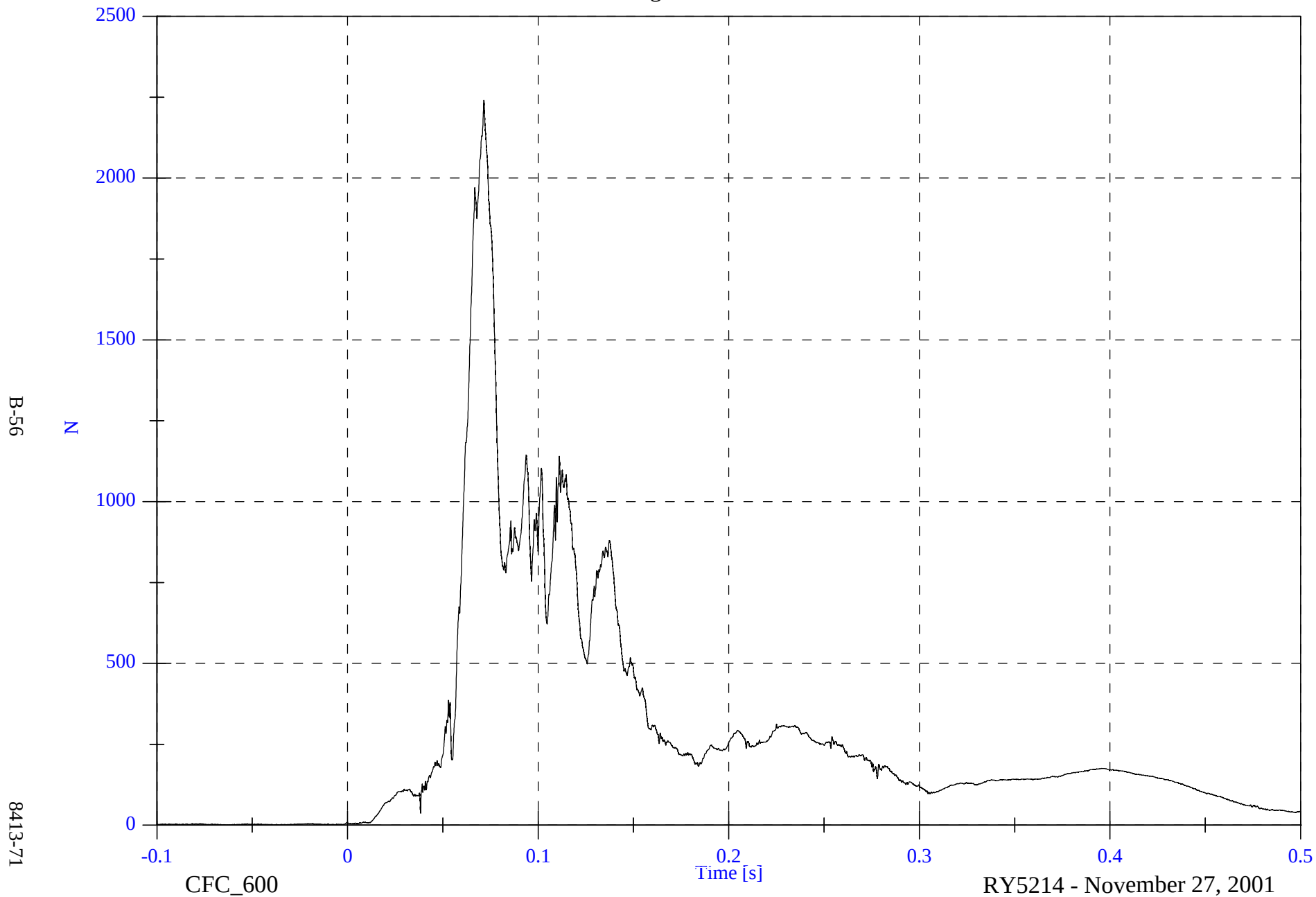


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur F Resultant

Max: 2240.6 [N] at 0.072 [s]

Min: 0.3 [N] at -0.059 [s]

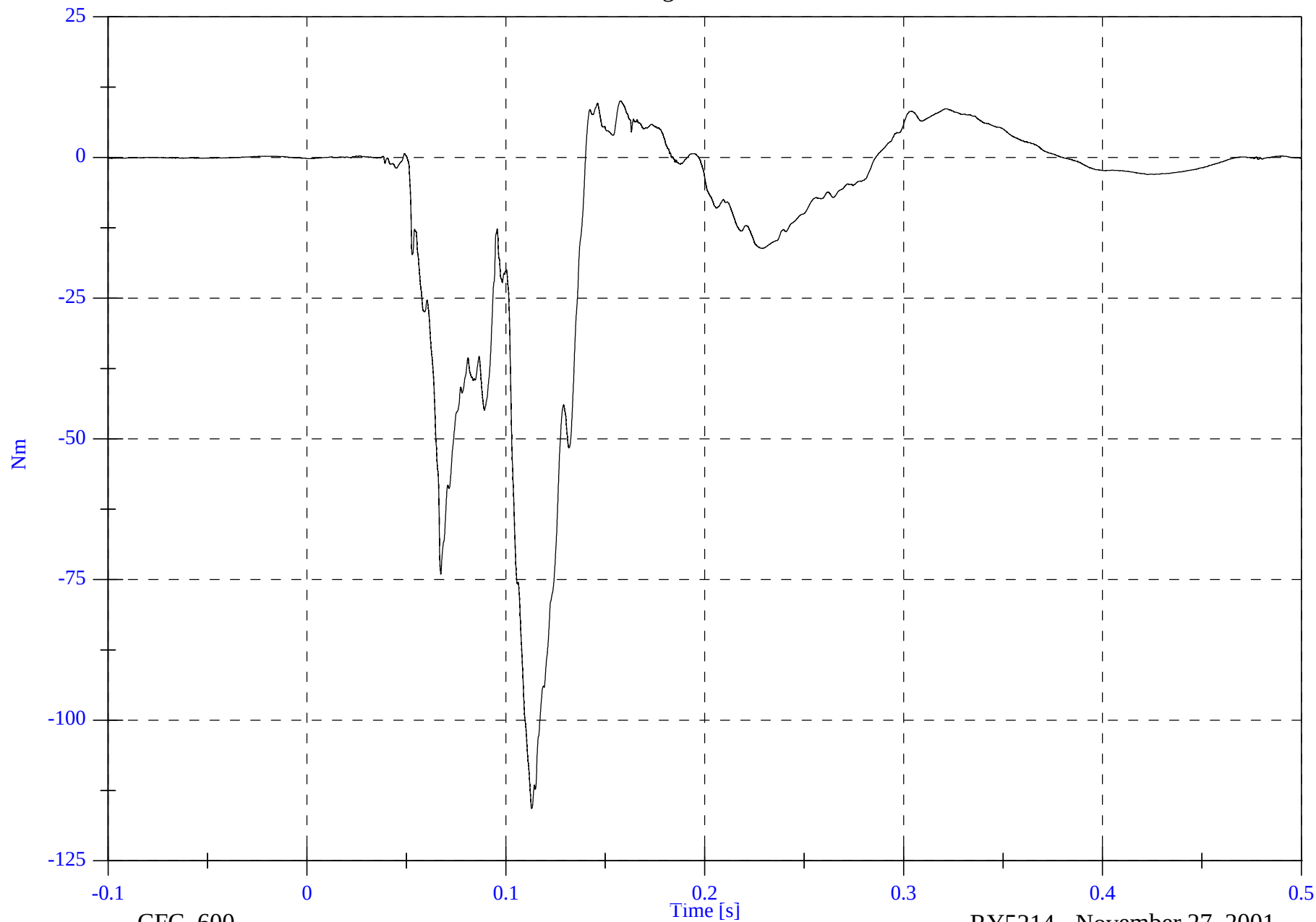


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur Mx

Max: 10.0 [Nm] at 0.158 [s]

Min: -115.7 [Nm] at 0.113 [s]



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8413-71

CFC_600

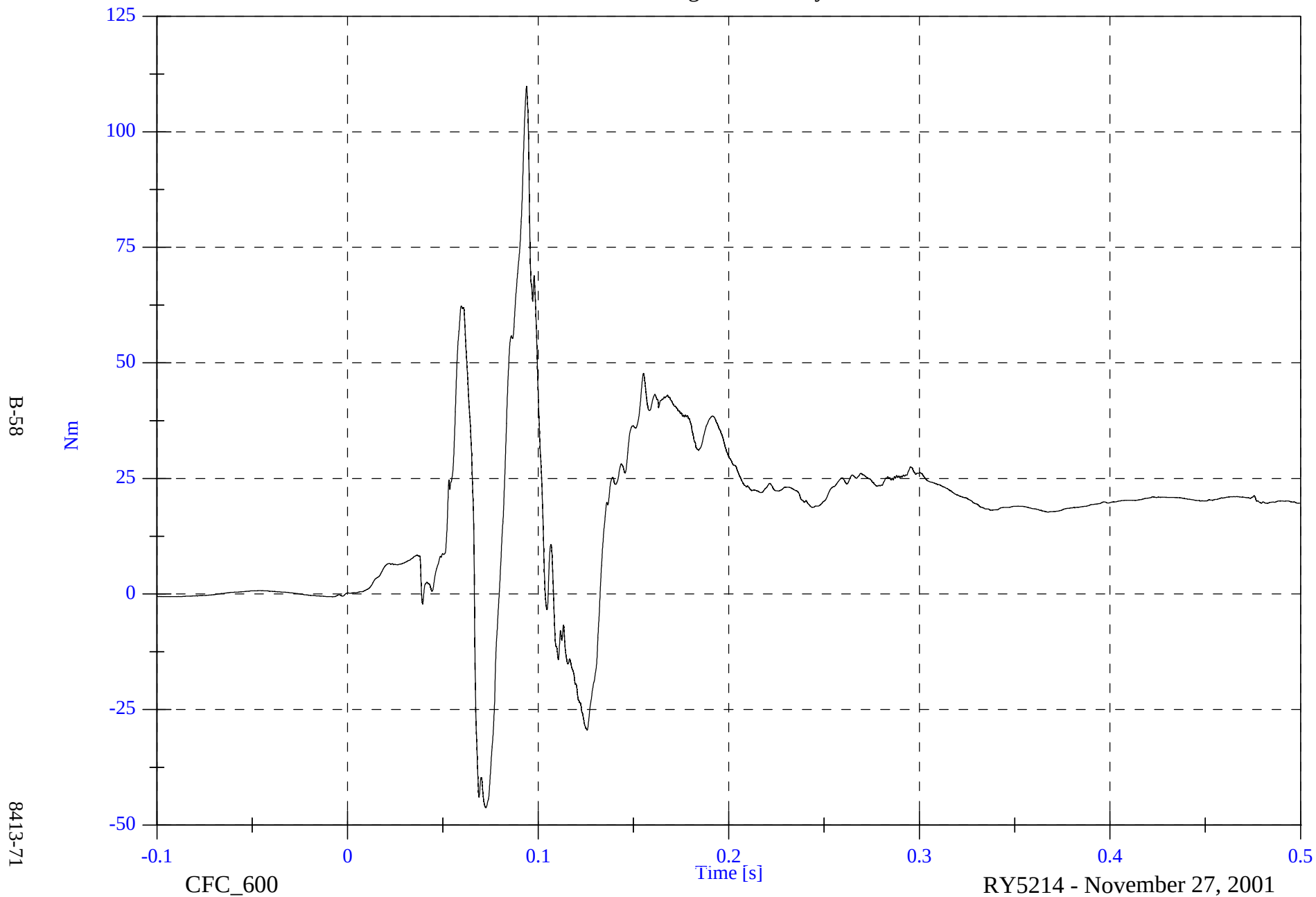
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur My

Max: 109.9 [Nm] at 0.094 [s]

Min: -46.2 [Nm] at 0.072 [s]

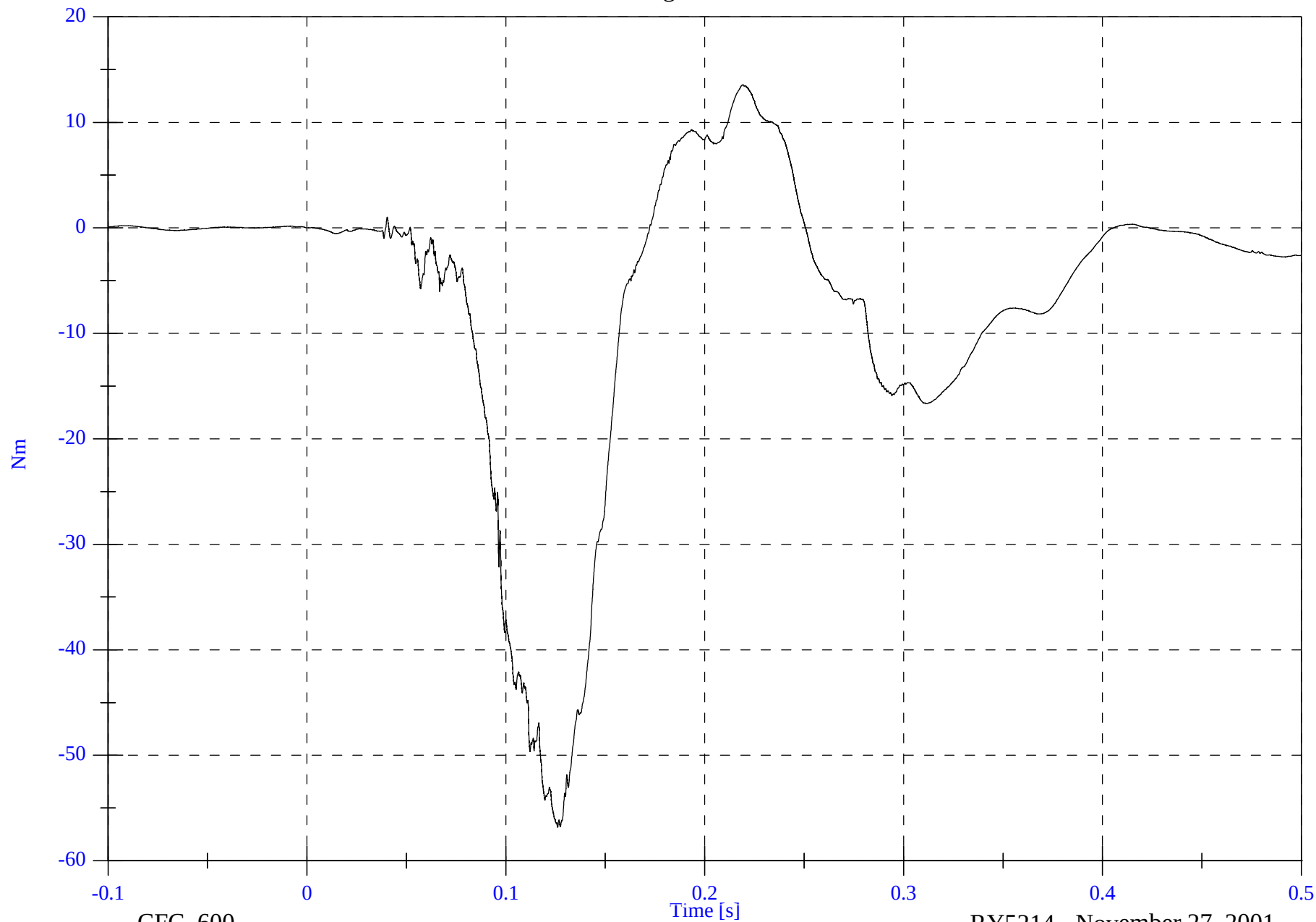


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 13.6 [Nm] at 0.219 [s]

P1 Right Femur Mz

Min: -56.8 [Nm] at 0.126 [s]



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8413-71

CFC_600

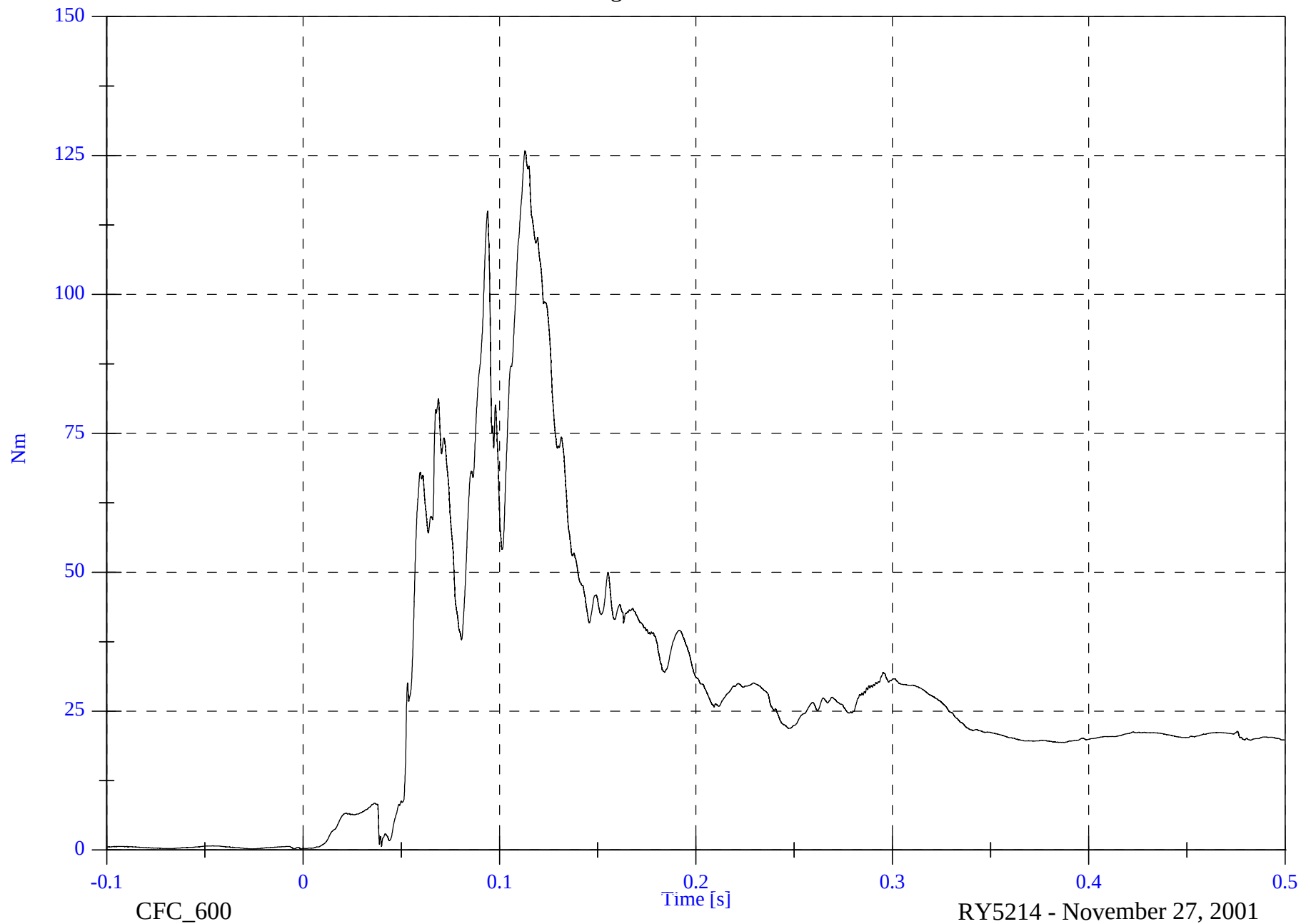
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Femur M Resultant

Max: 125.9 [Nm] at 0.113 [s]

Min: 0.1 [Nm] at -0.001 [s]



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8413-71

CFC_600

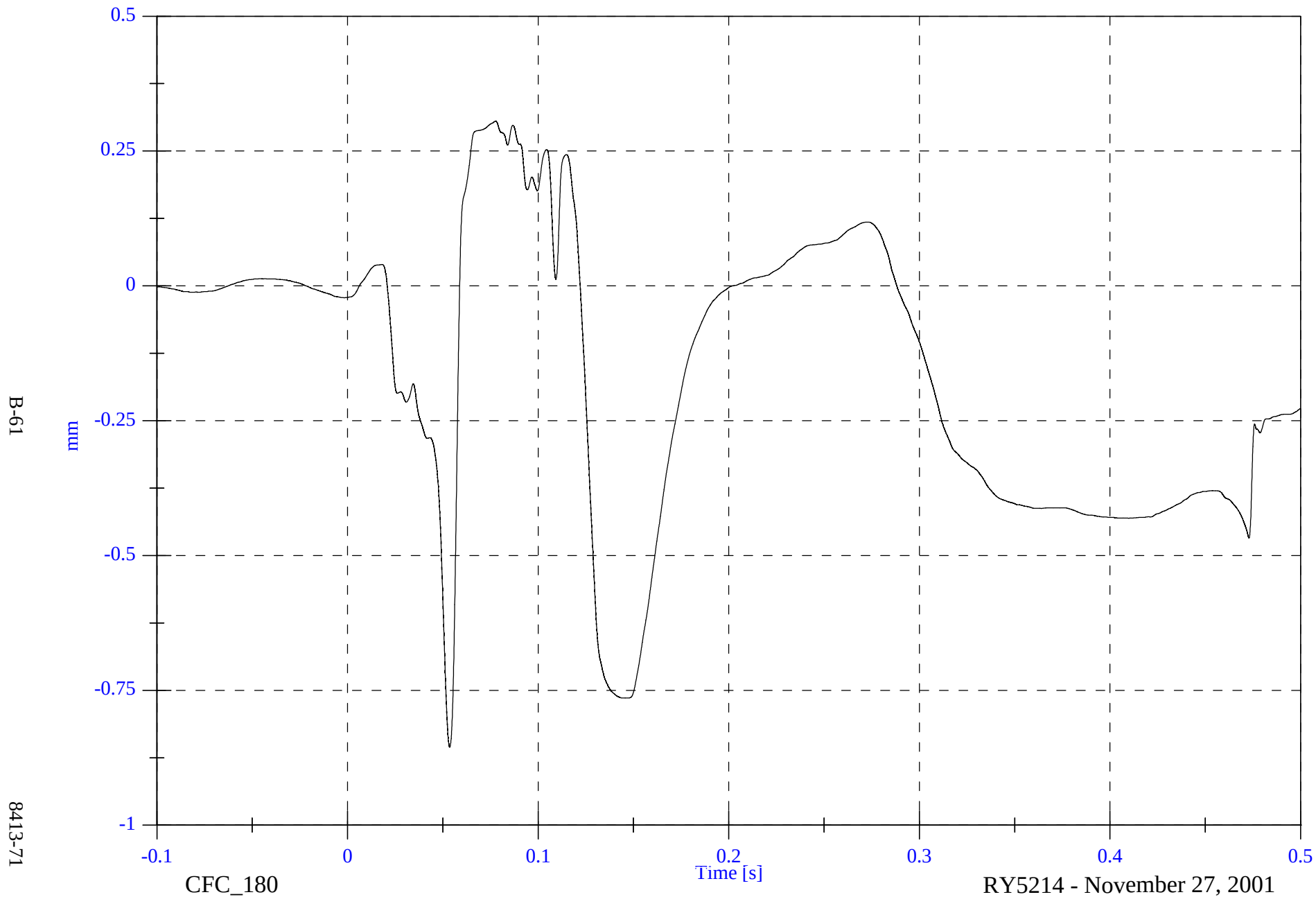
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Knee Shear Dx

Max: 0.3 [mm] at 0.078 [s]

Min: -0.9 [mm] at 0.054 [s]

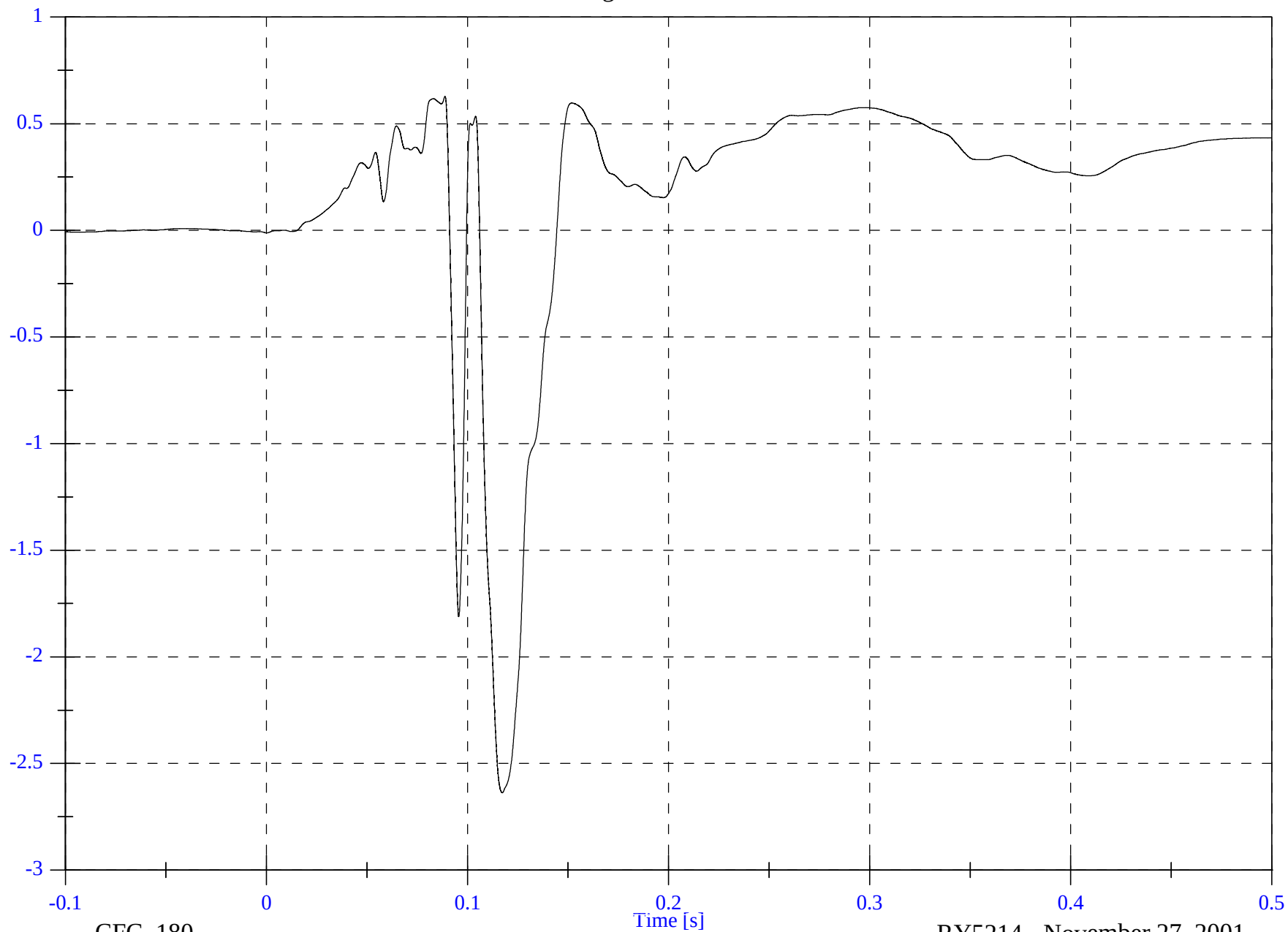


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Knee Shear Dx

Max: 0.6 [mm] at 0.089 [s]

Min: -2.6 [mm] at 0.117 [s]



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8413-71

CFC_180

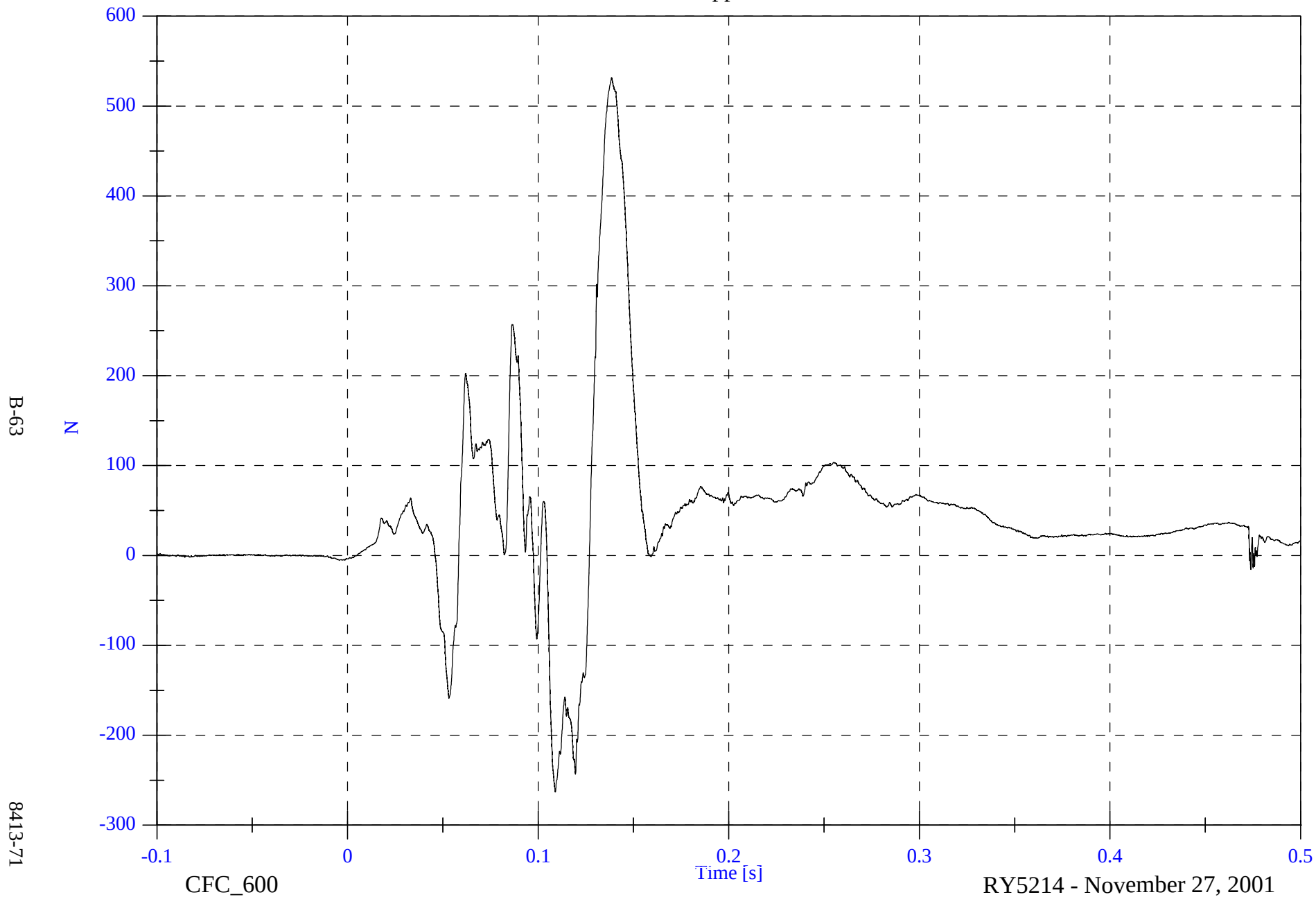
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 531.8 [N] at 0.138 [s]

P1 Left Upper Tibia Fx

Min: -263.3 [N] at 0.109 [s]

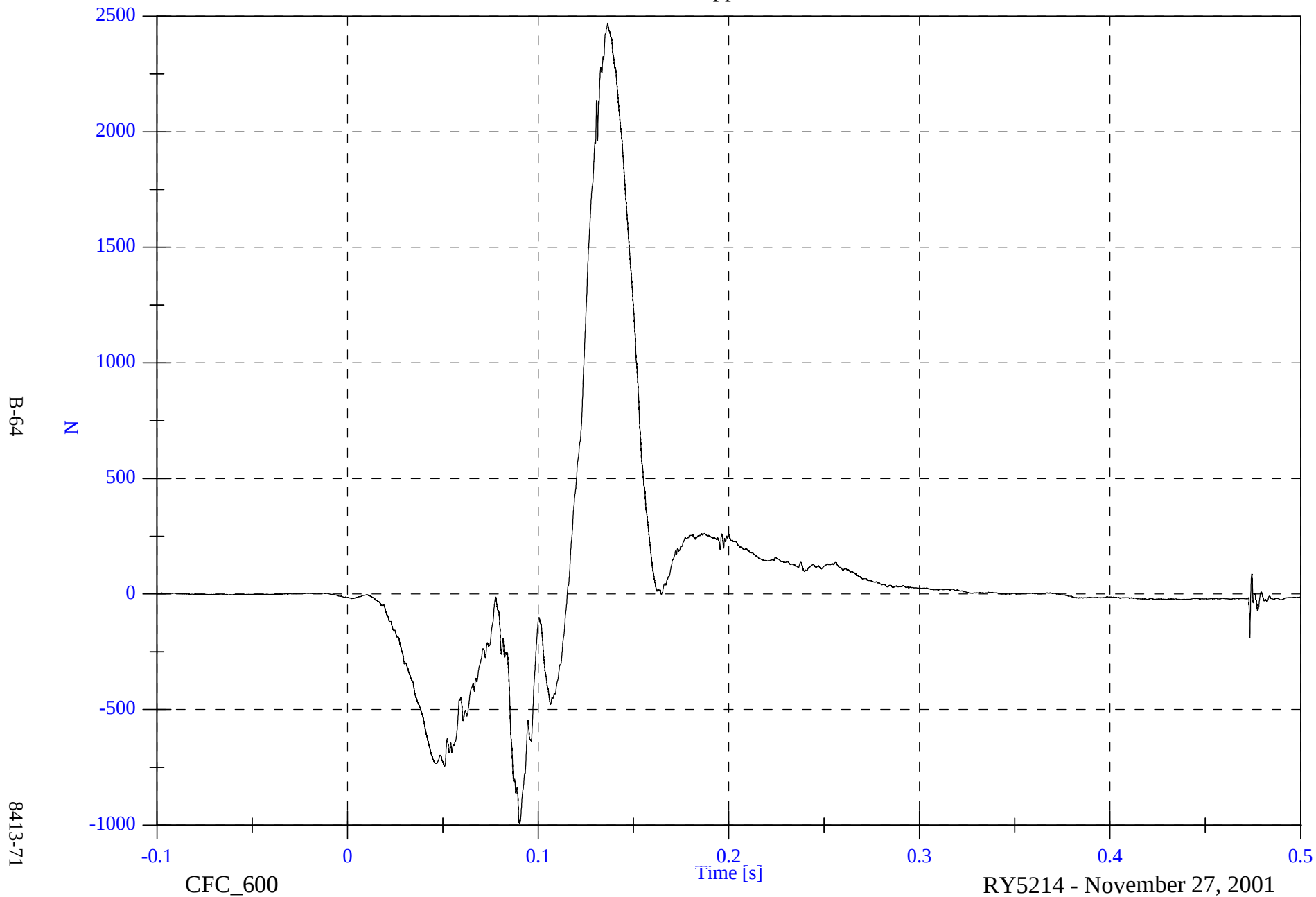


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 2469.2 [N] at 0.136 [s]

Min: -991.8 [N] at 0.090 [s]

P1 Left Upper Tibia Fz

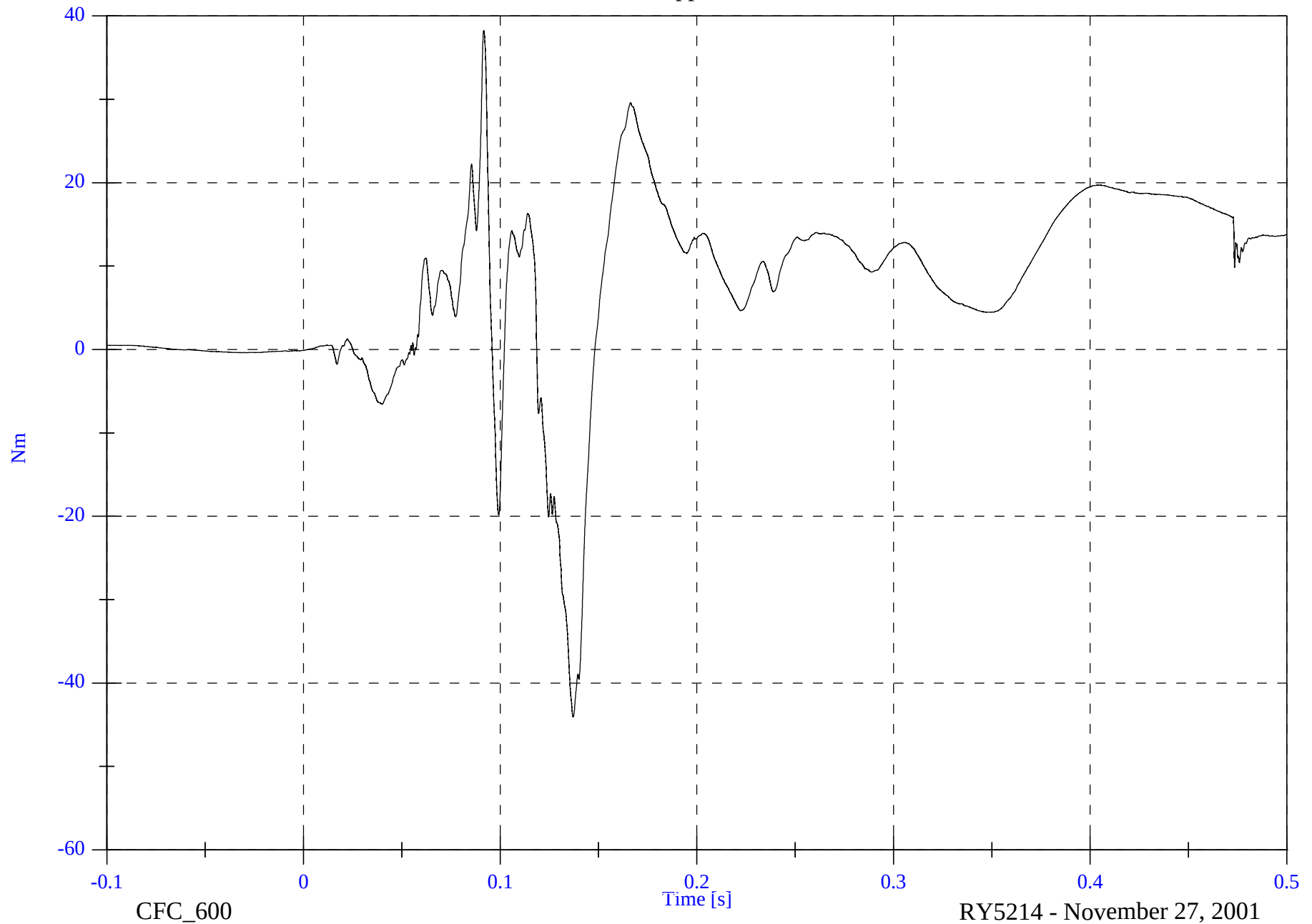


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Upper Tibia Mx

Max: 38.3 [Nm] at 0.092 [s]

Min: -44.1 [Nm] at 0.137 [s]



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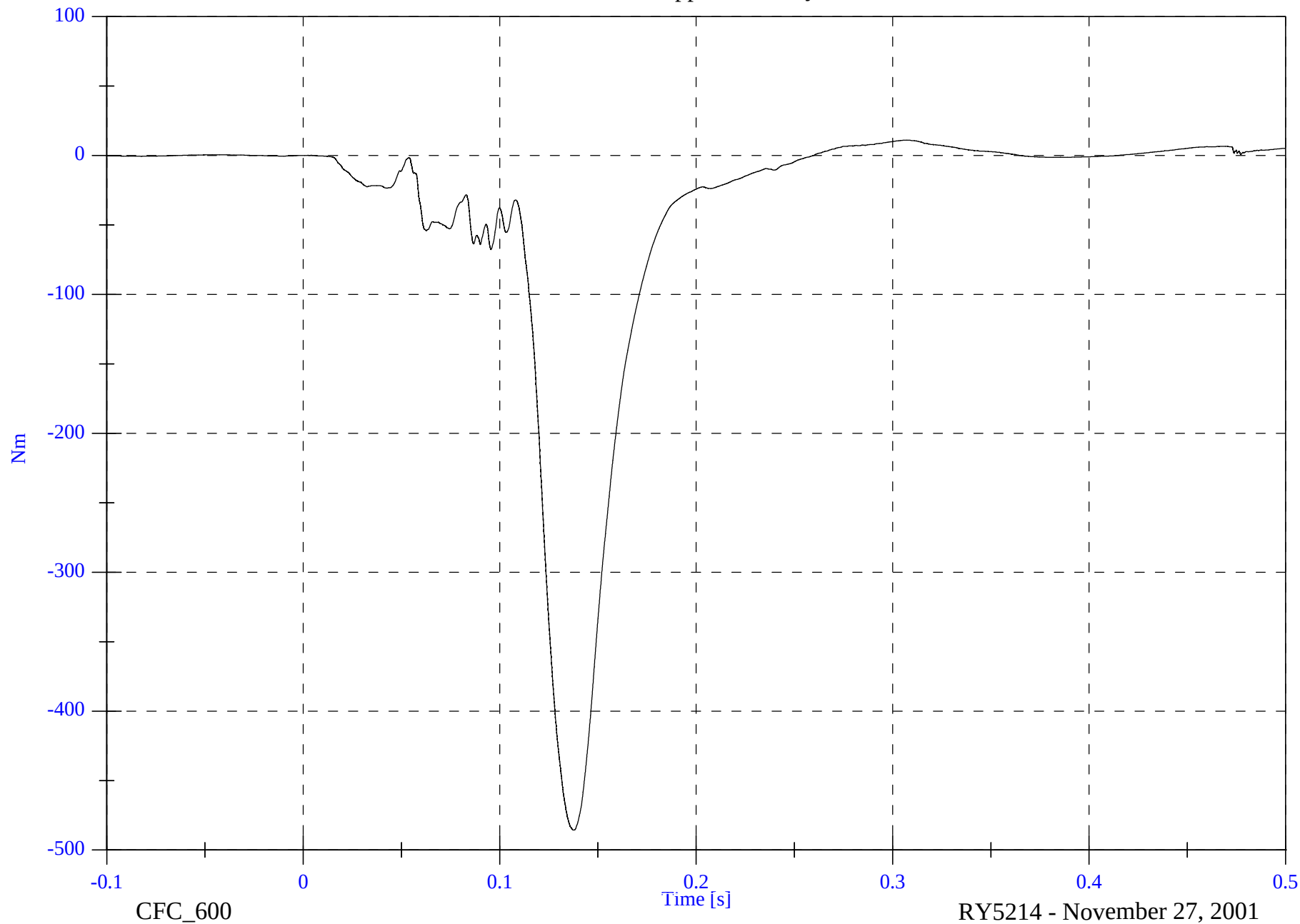
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Upper Tibia My

Max: 11.1 [Nm] at 0.307 [s]

Min: -485.6 [Nm] at 0.138 [s]



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8413-71

CFC_600

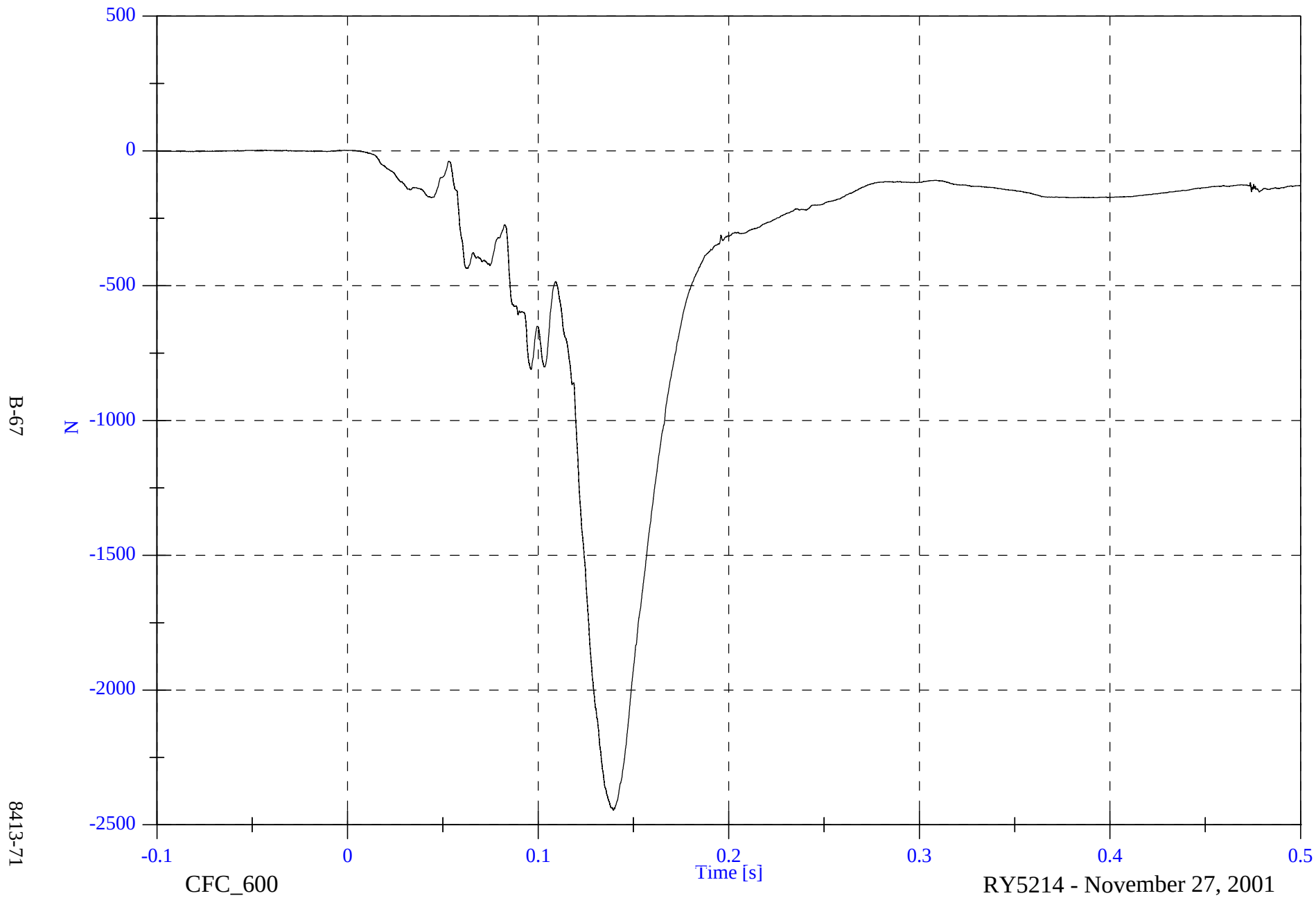
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 2.9 [N] at -0.046 [s]

P1 Left Lower Tibia Fx

Min: -2445.7 [N] at 0.140 [s]

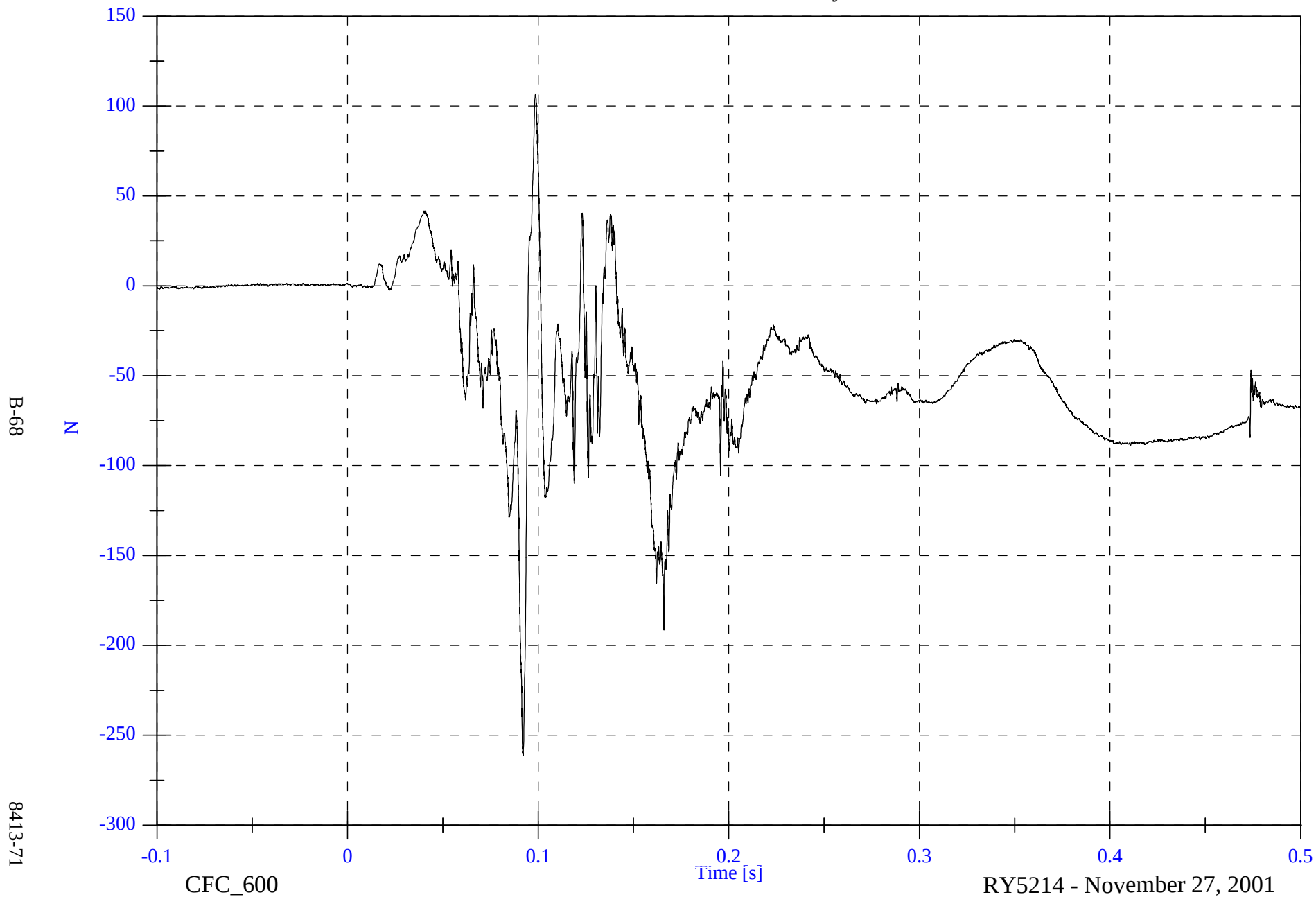


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Lower Tibia Fy

Max: 106.8 [N] at 0.099 [s]

Min: -261.4 [N] at 0.092 [s]

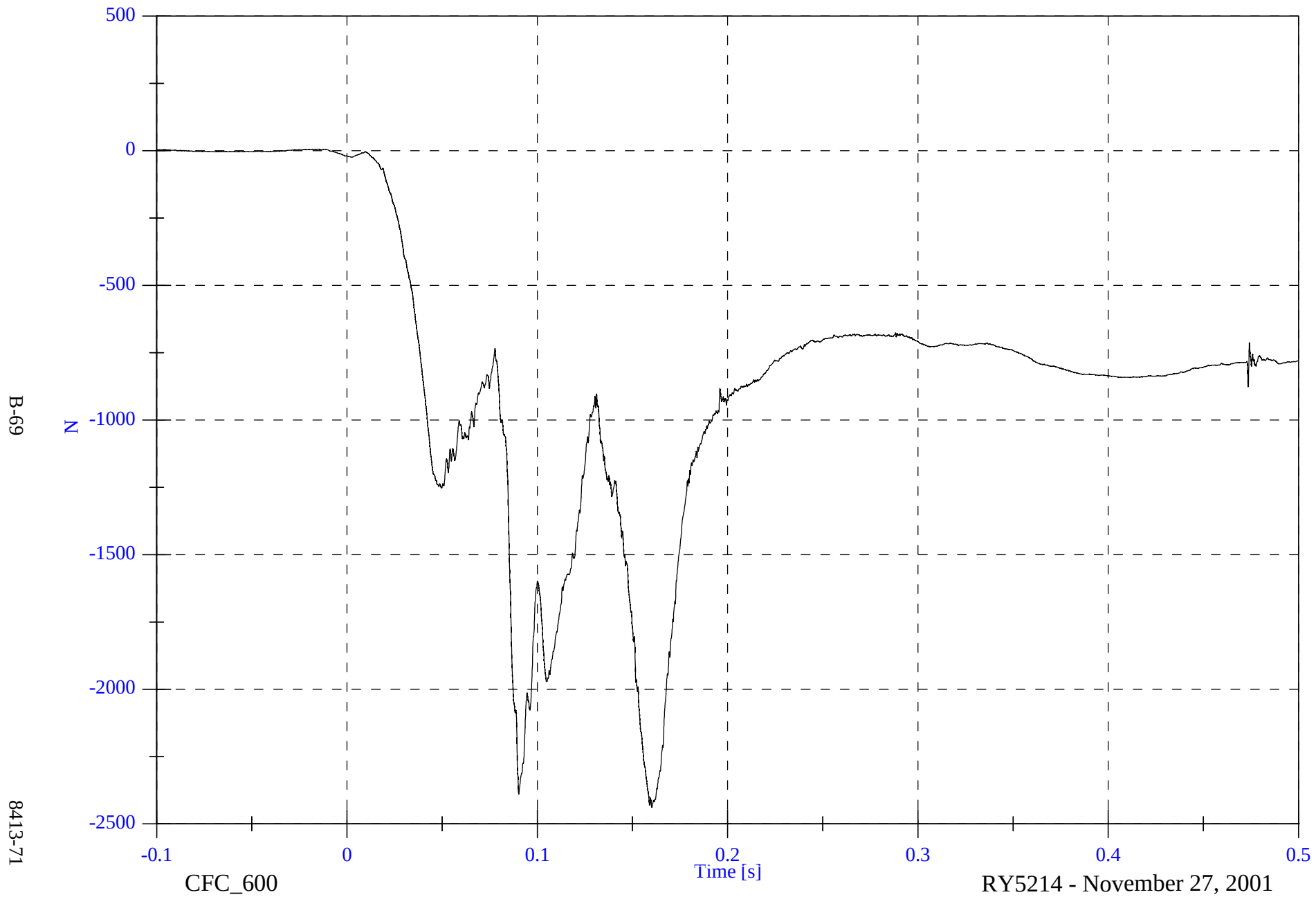


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 6.1 [N] at -0.015 [s]

P1 Left Lower Tibia Fz

Min: -2438.7 [N] at 0.160 [s]

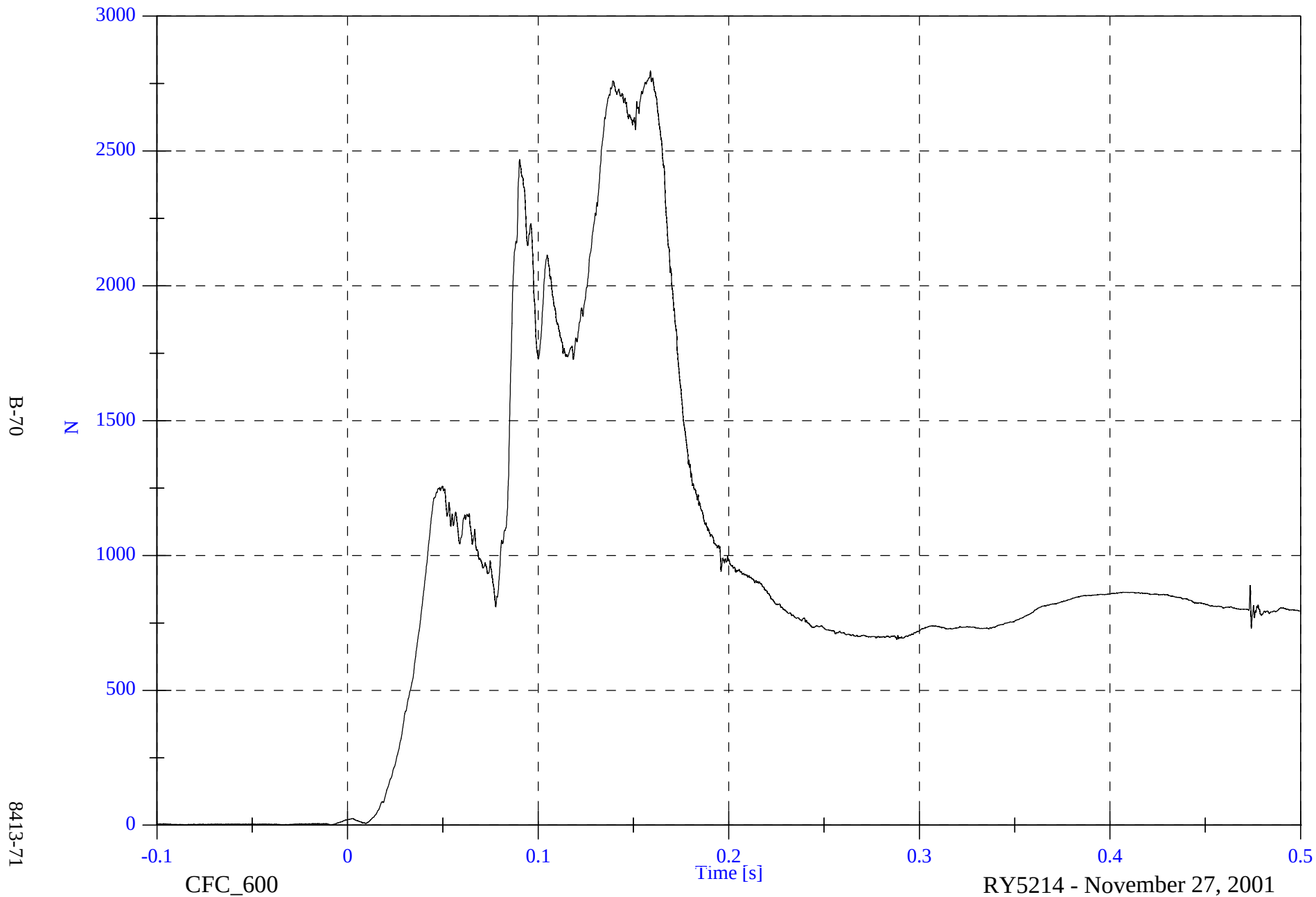


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Lower Tibia F Resultant

Max: 2796.7 [N] at 0.159 [s]

Min: 1.0 [N] at -0.009 [s]

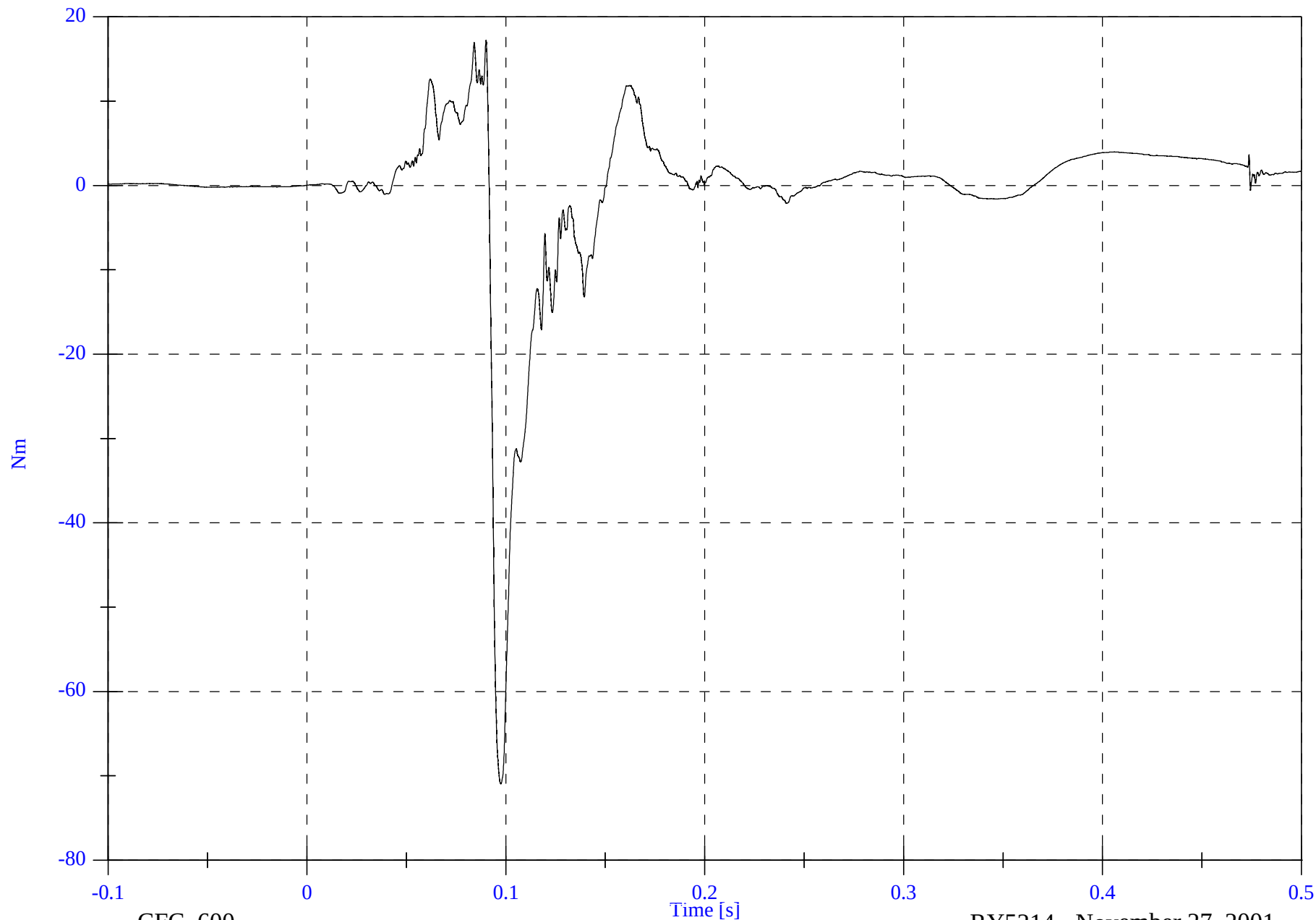


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Lower Tibia Mx

Max: 17.3 [Nm] at 0.090 [s]

Min: -71.0 [Nm] at 0.097 [s]



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8413-71

CFC_600

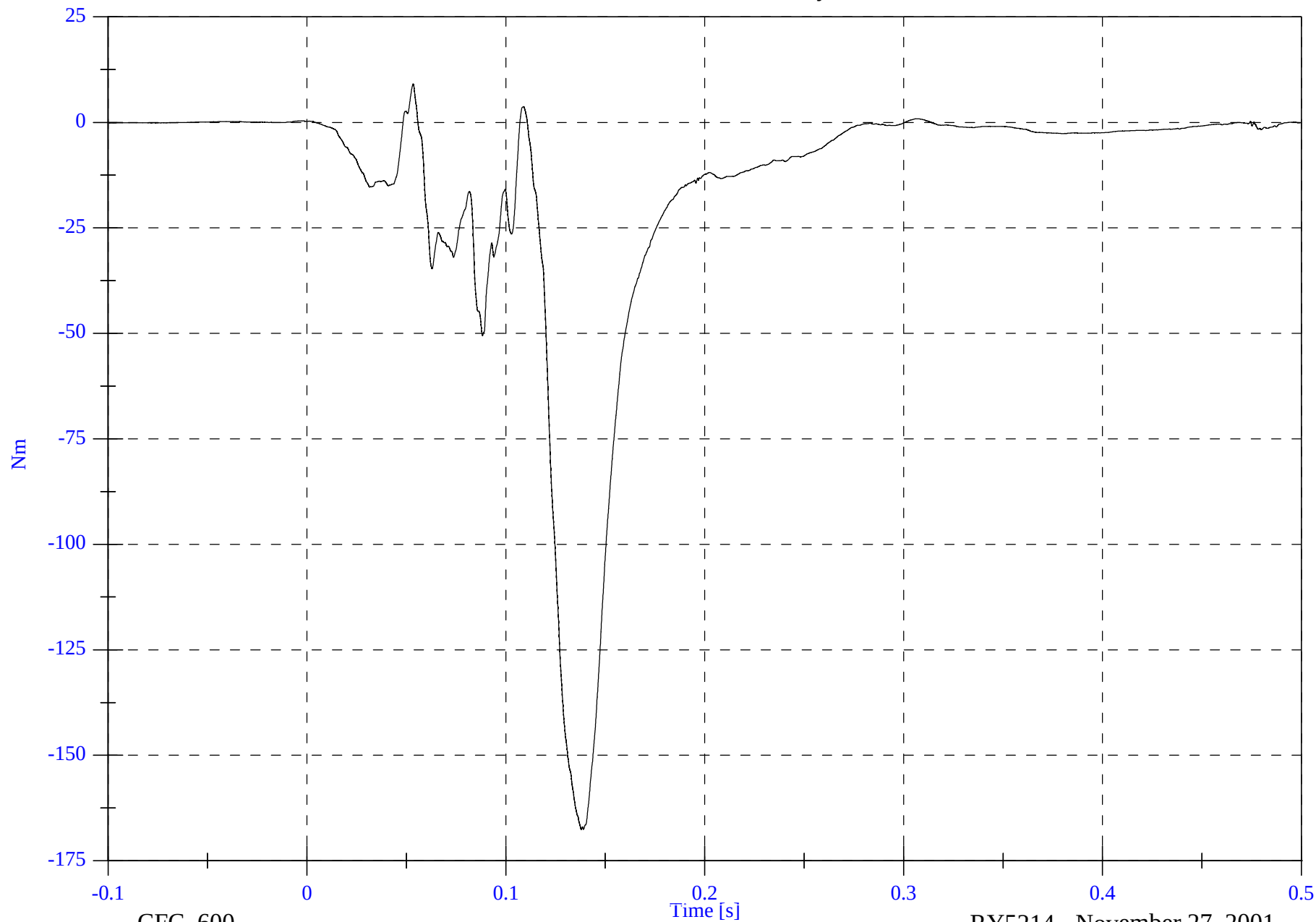
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Lower Tibia My

Max: 9.1 [Nm] at 0.053 [s]

Min: -167.6 [Nm] at 0.138 [s]



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8413-71

CFC_600

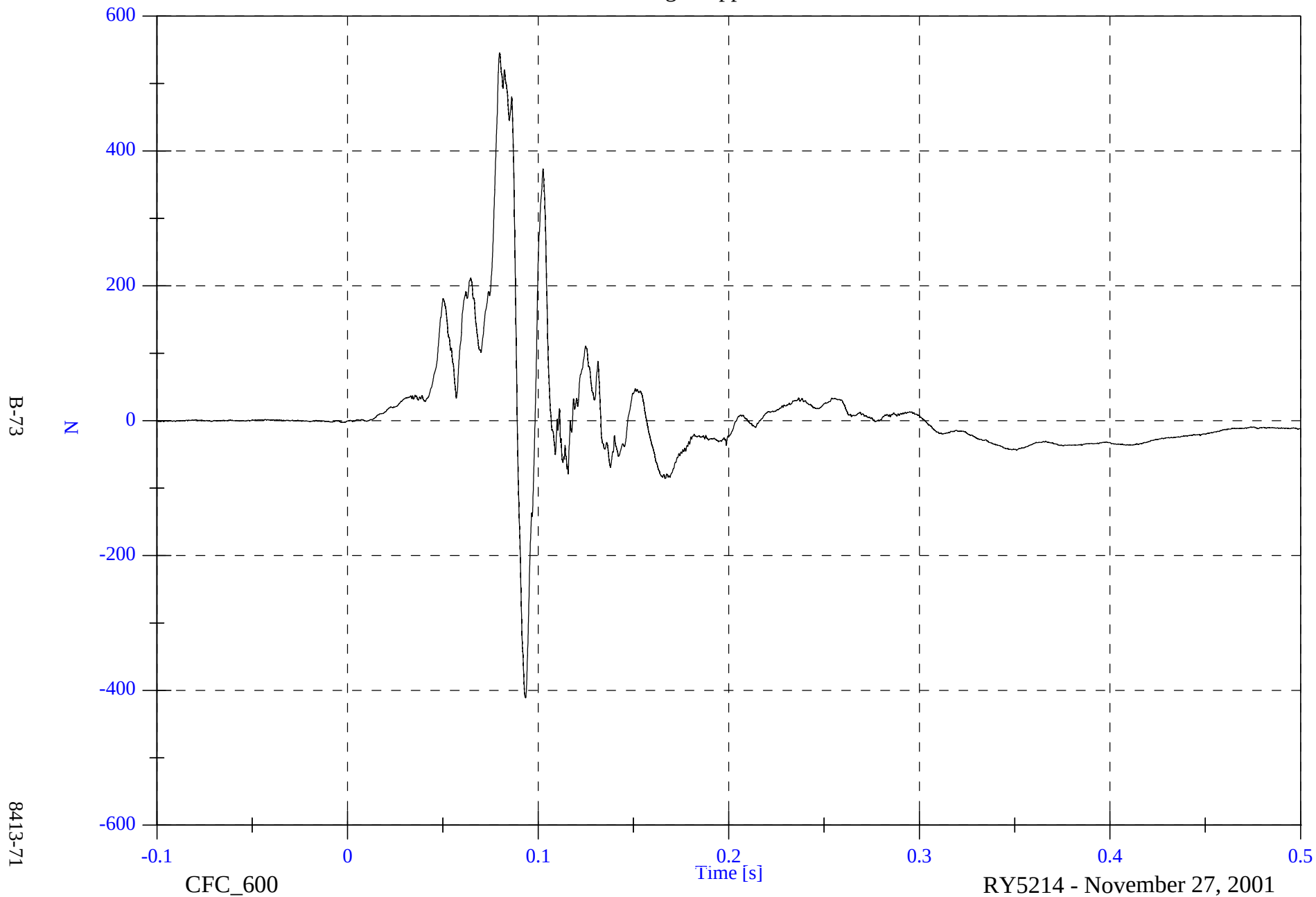
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 545.6 [N] at 0.080 [s]

P1 Right Upper Tibia Fx

Min: -411.2 [N] at 0.093 [s]

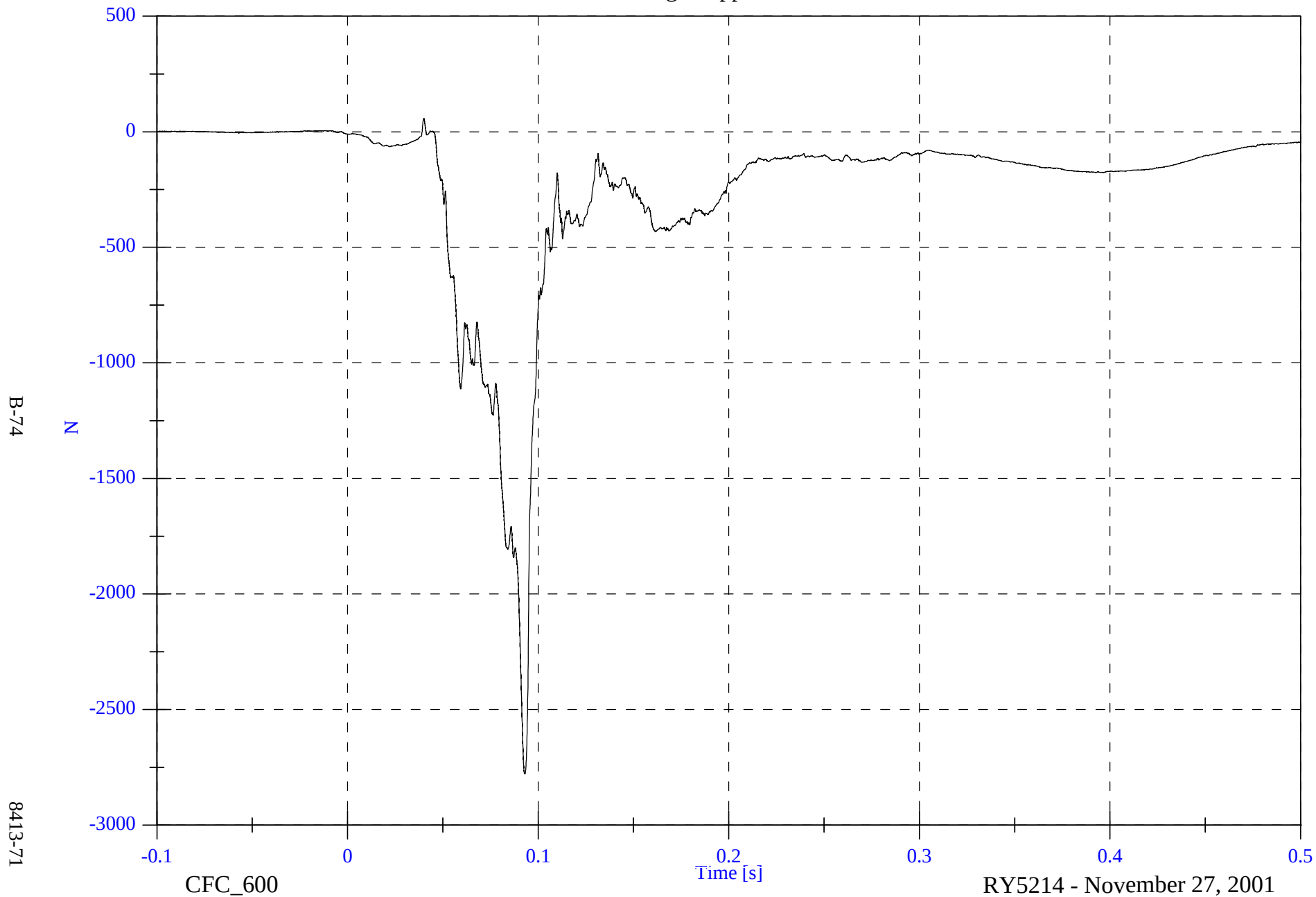


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Upper Tibia Fz

Max: 57.2 [N] at 0.040 [s]

Min: -2778.2 [N] at 0.093 [s]

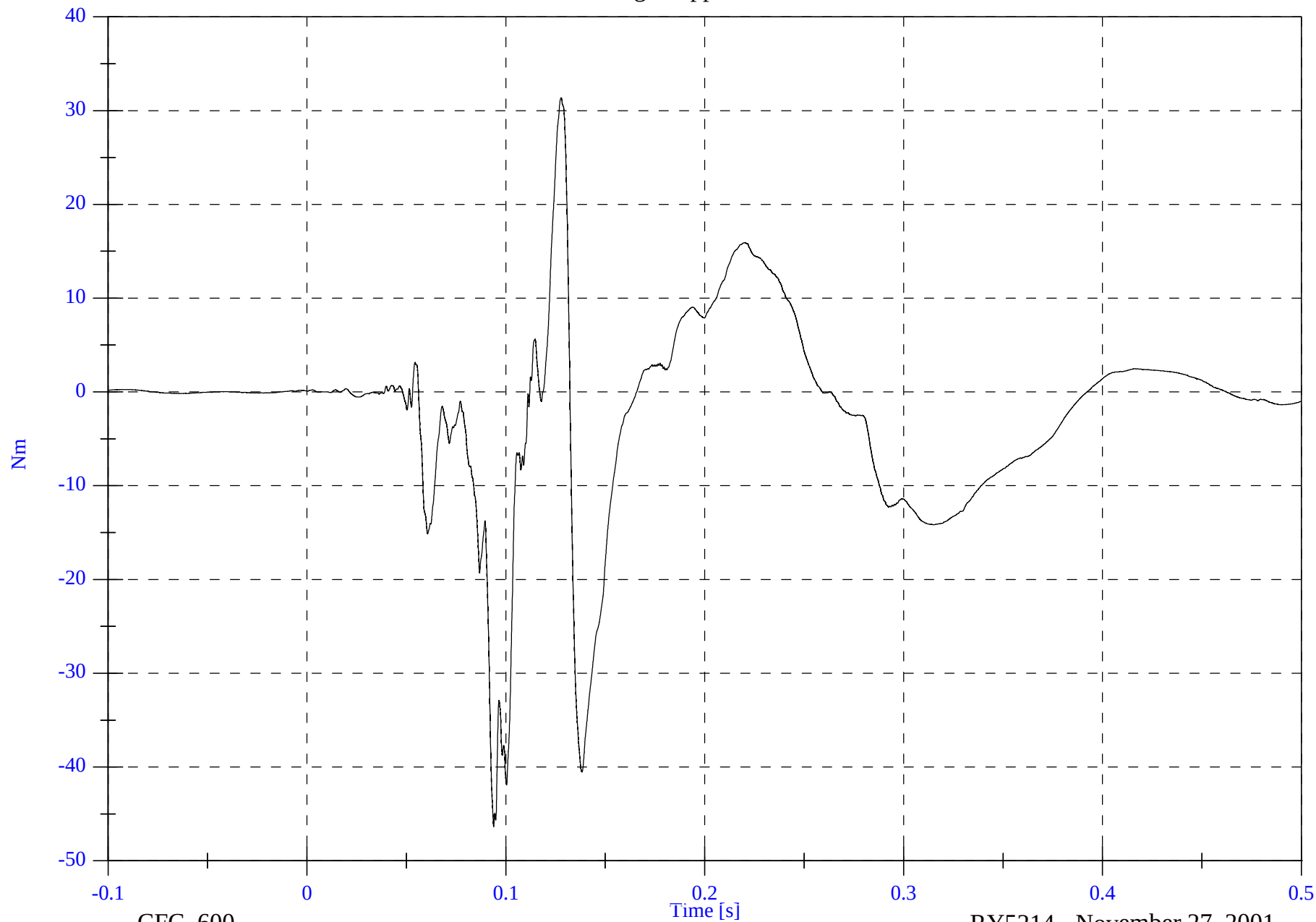


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Upper Tibia Mx

Max: 31.4 [Nm] at 0.128 [s]

Min: -46.4 [Nm] at 0.094 [s]



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8413-71

CFC_600

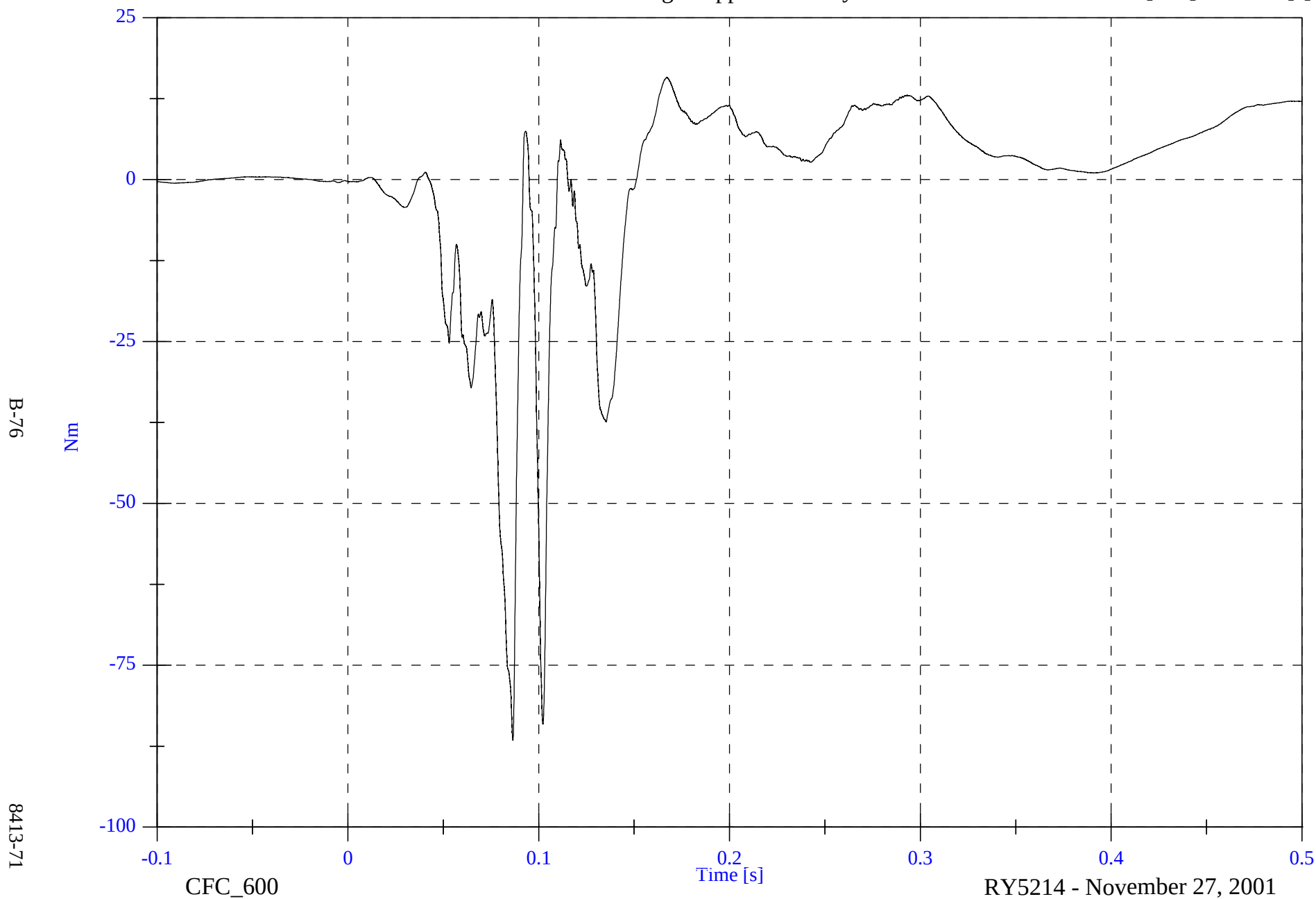
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Upper Tibia My

Max: 15.8 [Nm] at 0.167 [s]

Min: -86.6 [Nm] at 0.087 [s]

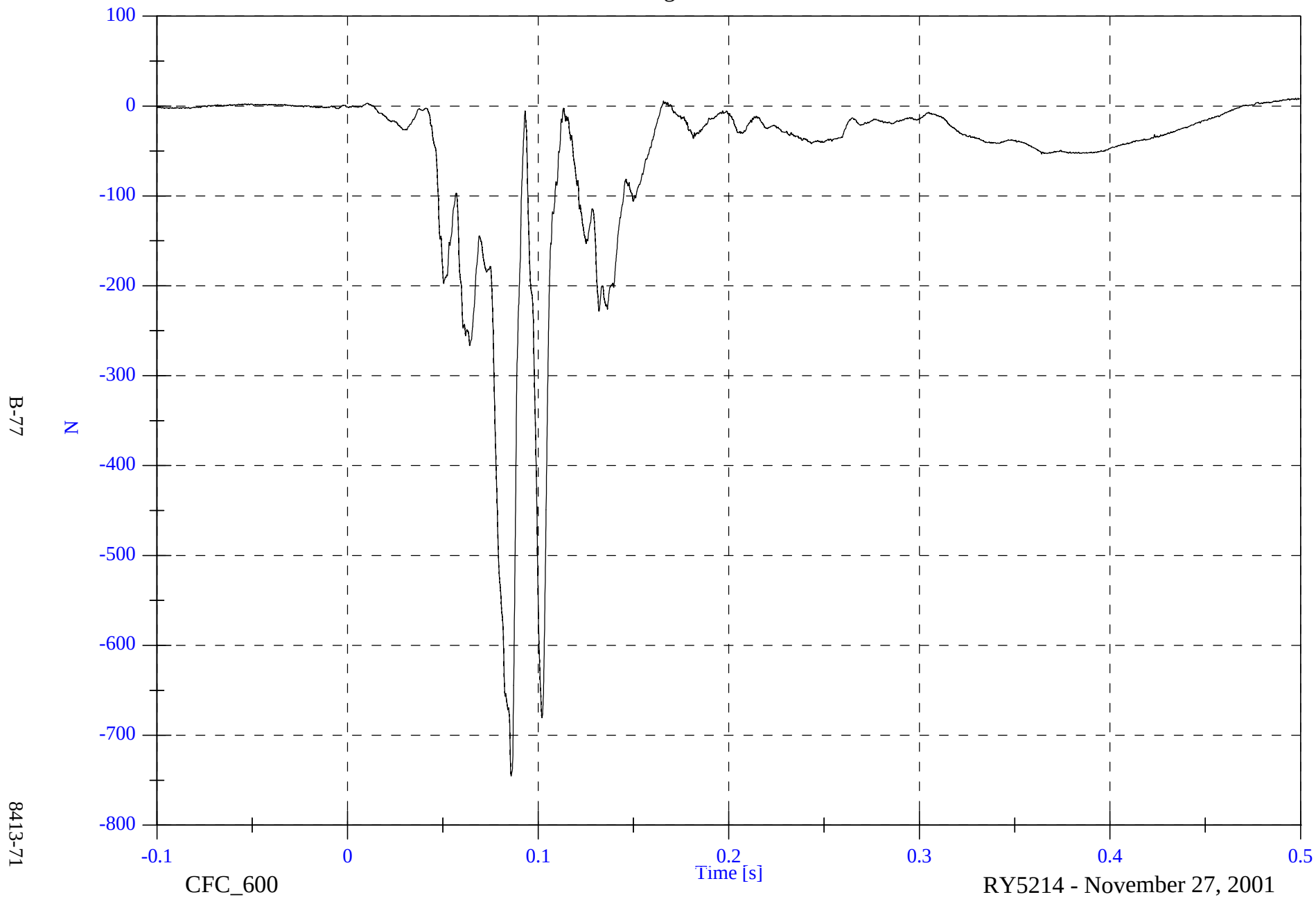


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Lower Tibia Fx

Max: 8.5 [N] at 0.497 [s]

Min: -745.5 [N] at 0.086 [s]

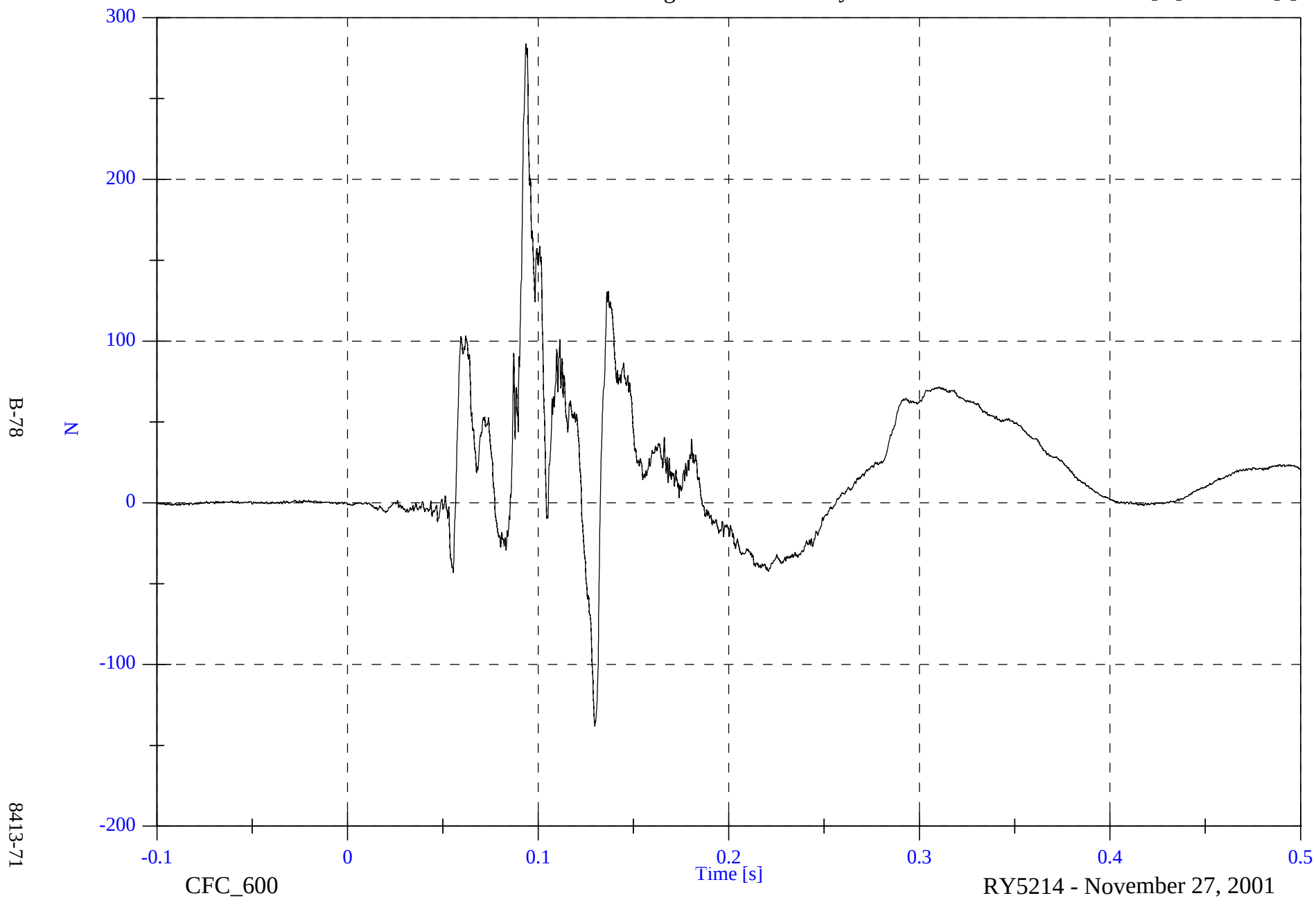


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 283.9 [N] at 0.094 [s]

P1 Right Lower Tibia Fy

Min: -138.1 [N] at 0.130 [s]

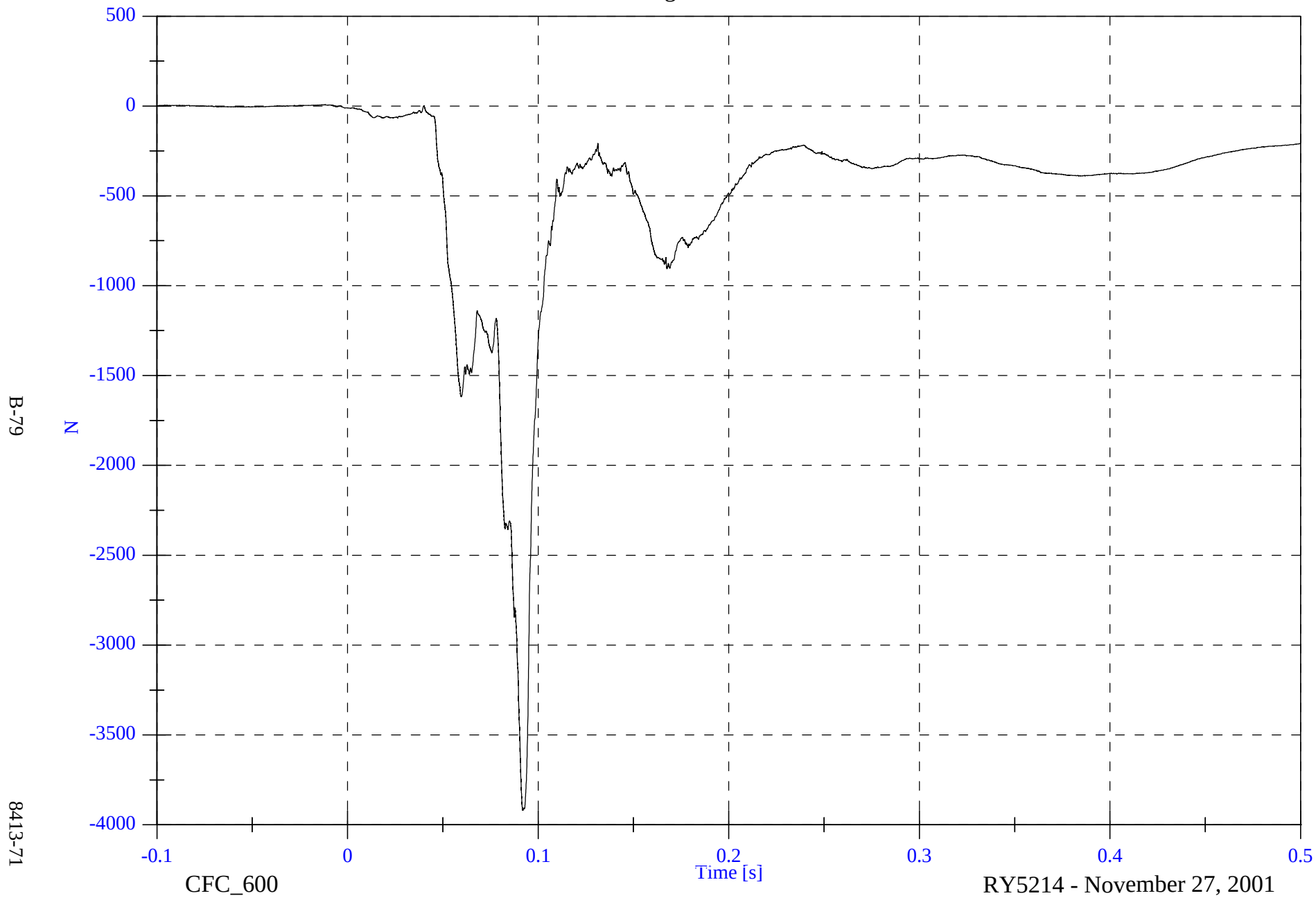


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 6.9 [N] at -0.012 [s]

P1 Right Lower Tibia Fz

Min: -3920.1 [N] at 0.092 [s]

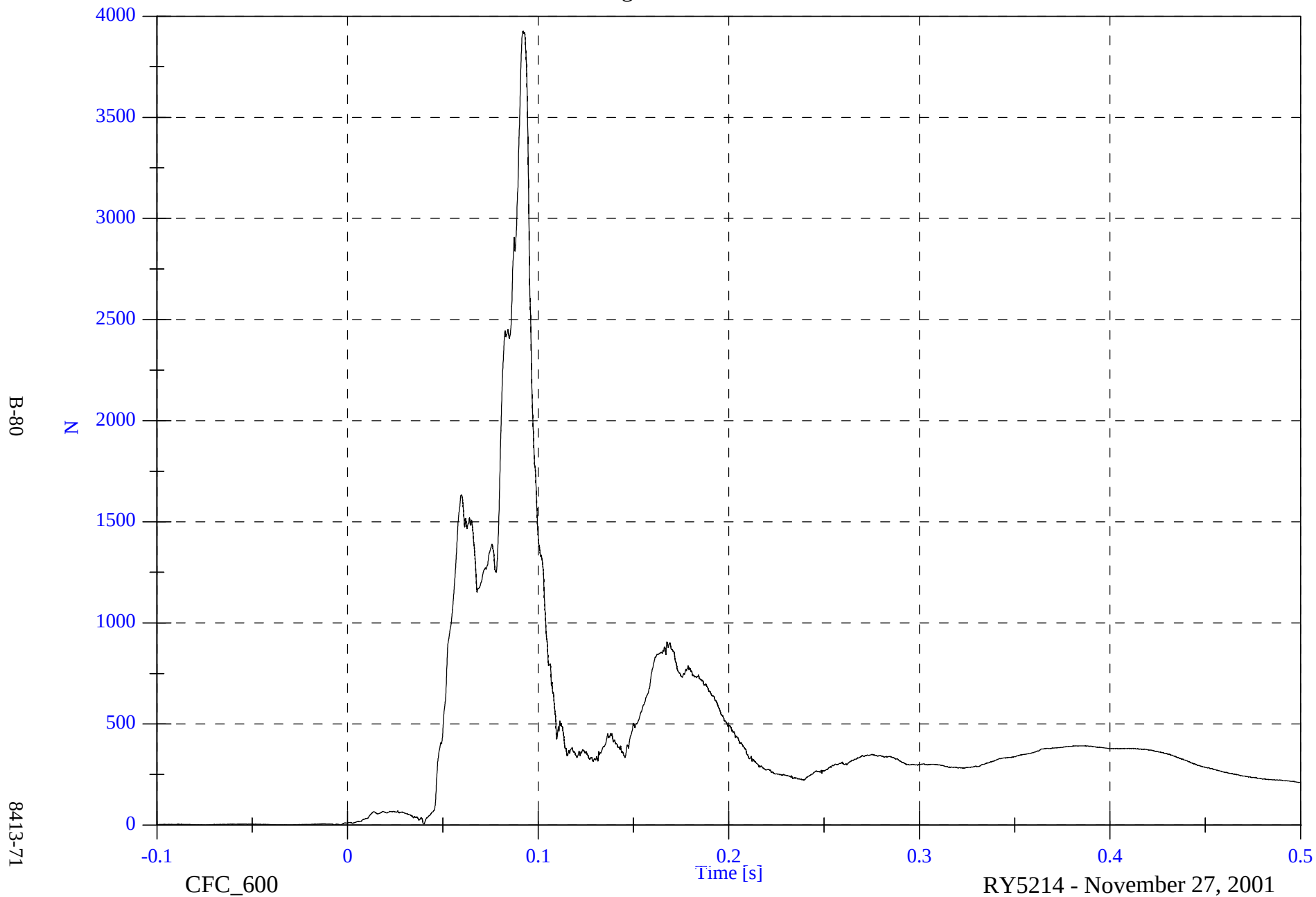


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Lower Tibia F Resultant

Max: 3926.5 [N] at 0.092 [s]

Min: 0.2 [N] at -0.075 [s]

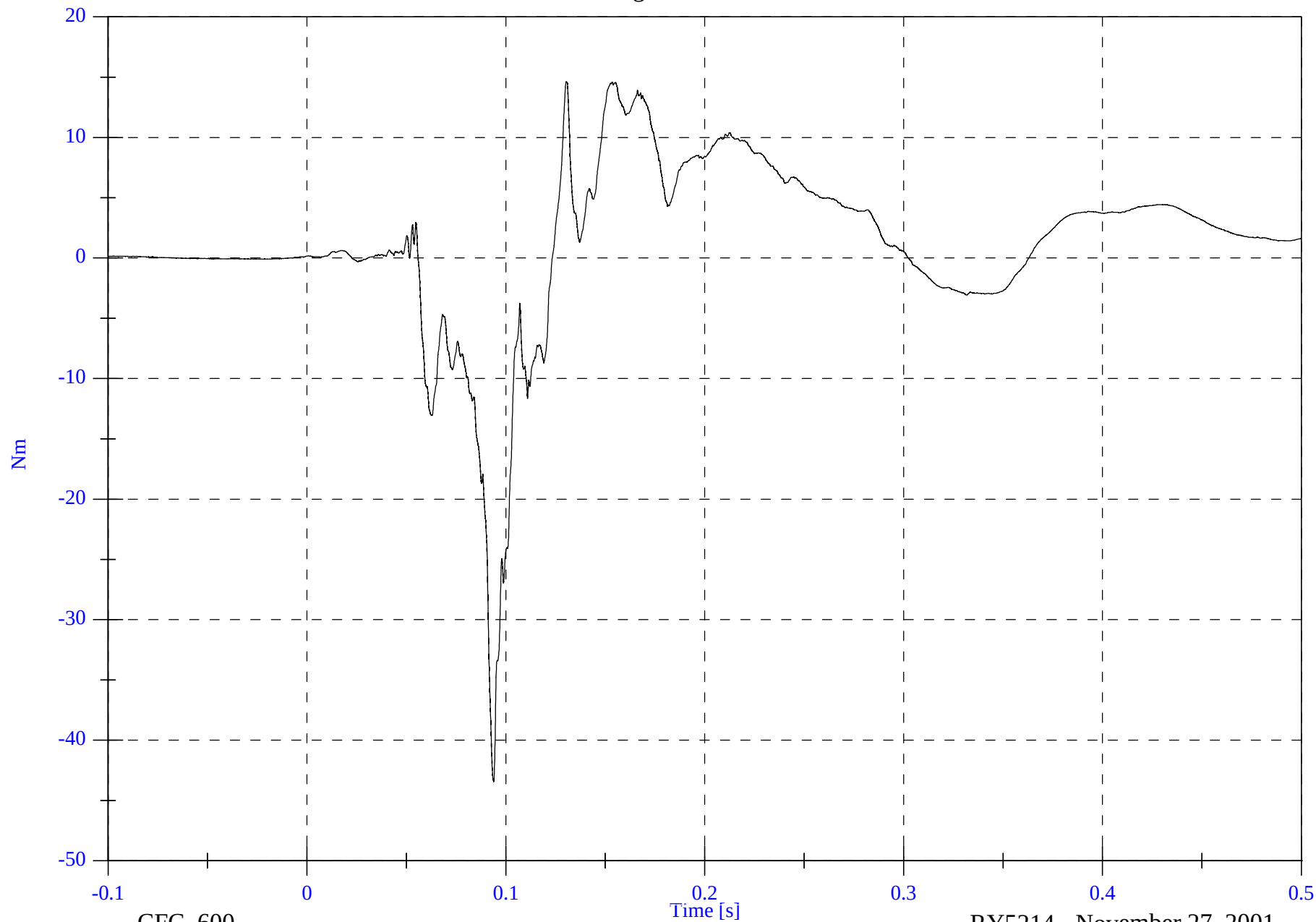


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Lower Tibia Mx

Max: 14.6 [Nm] at 0.130 [s]

Min: -43.4 [Nm] at 0.094 [s]



B-81

8413-71

CFC_600

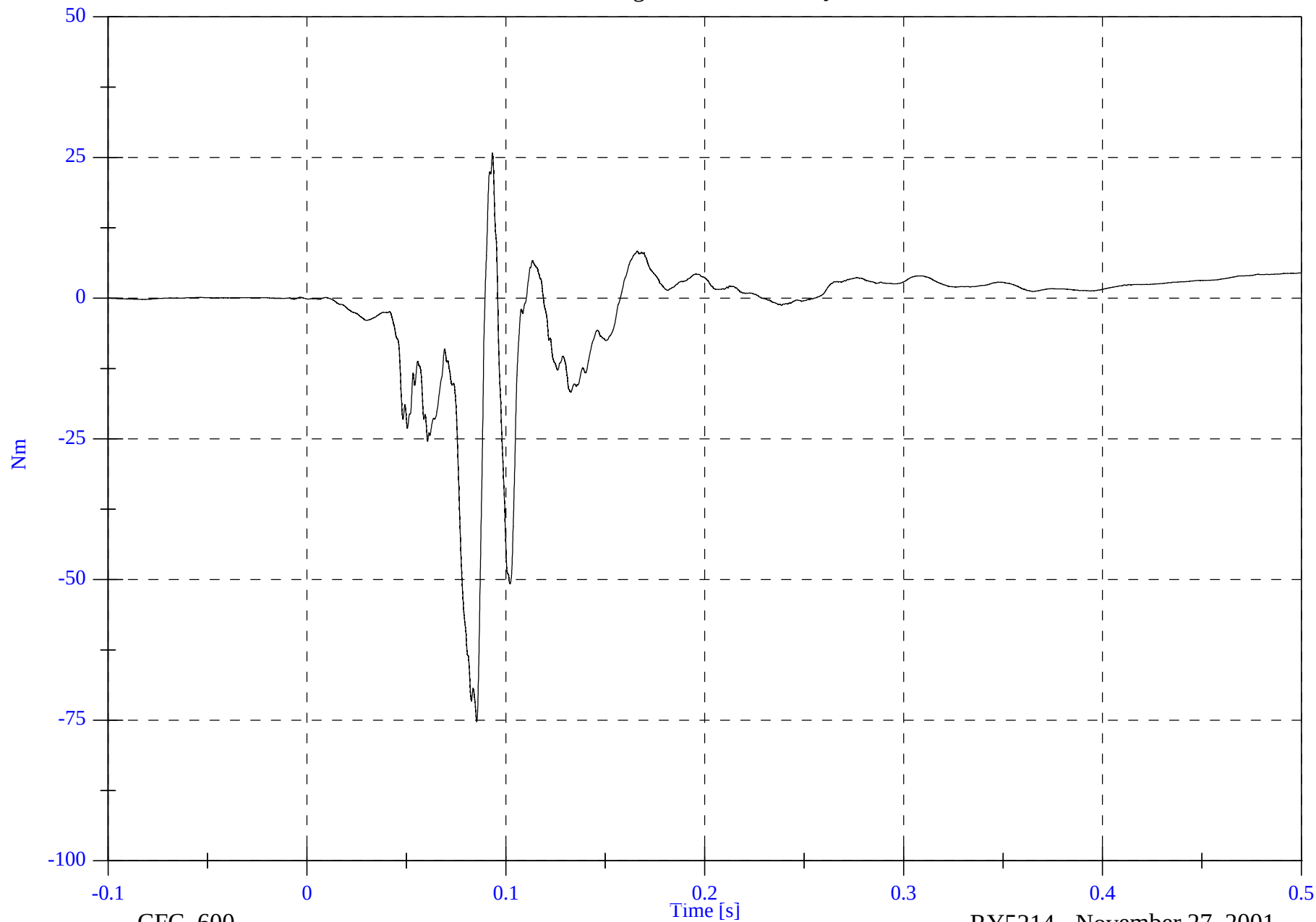
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Lower Tibia My

Max: 25.8 [Nm] at 0.093 [s]

Min: -75.3 [Nm] at 0.085 [s]



B-82

8413-71

CFC_600

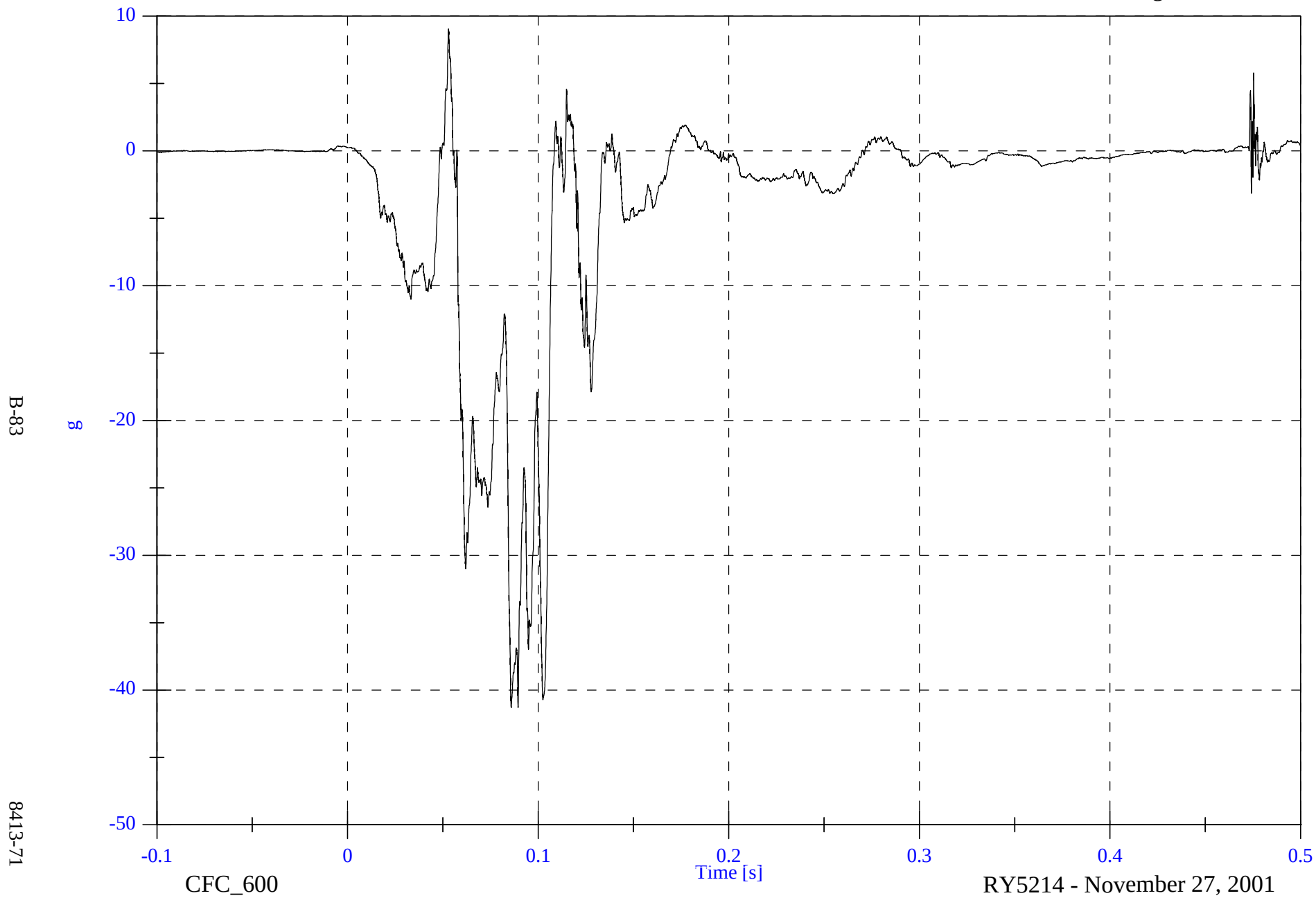
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Tibia Ax

Max: 9.1 [g] at 0.053 [s]

Min: -41.3 [g] at 0.089 [s]

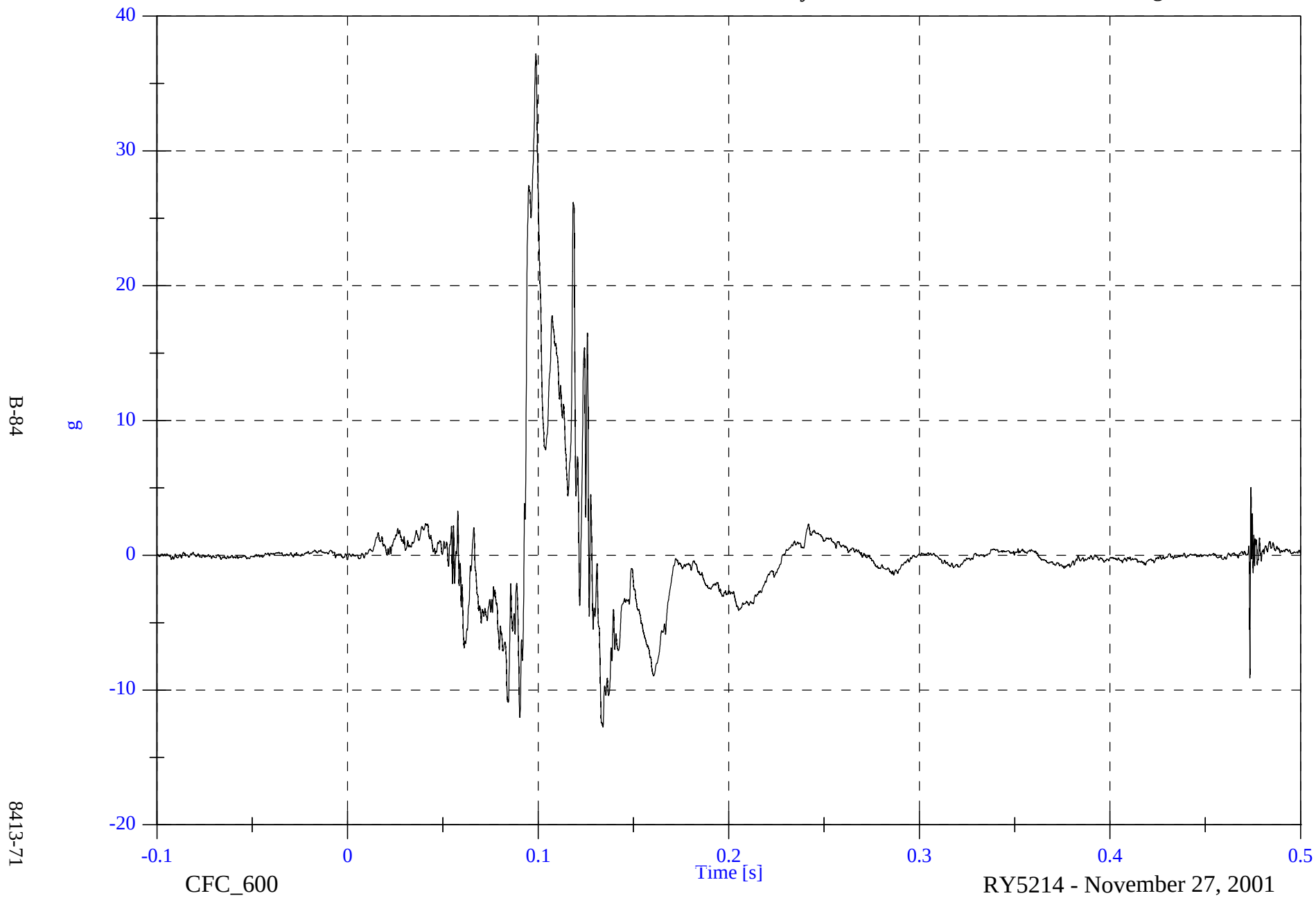


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Tibia Ay

Max: 37.2 [g] at 0.099 [s]

Min: -12.7 [g] at 0.134 [s]

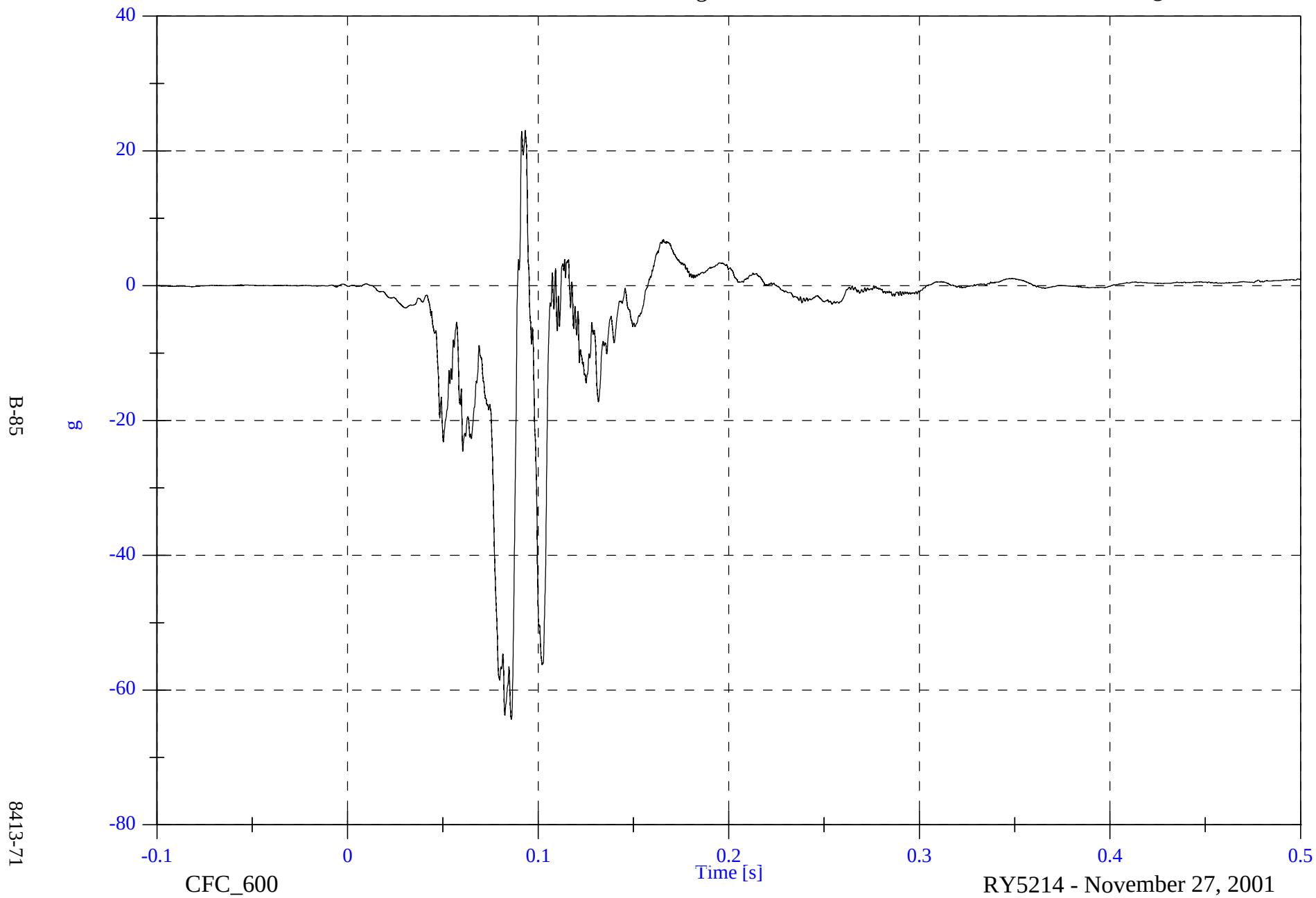


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Tibia Ax

Max: 23.1 [g] at 0.093 [s]

Min: -64.3 [g] at 0.086 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

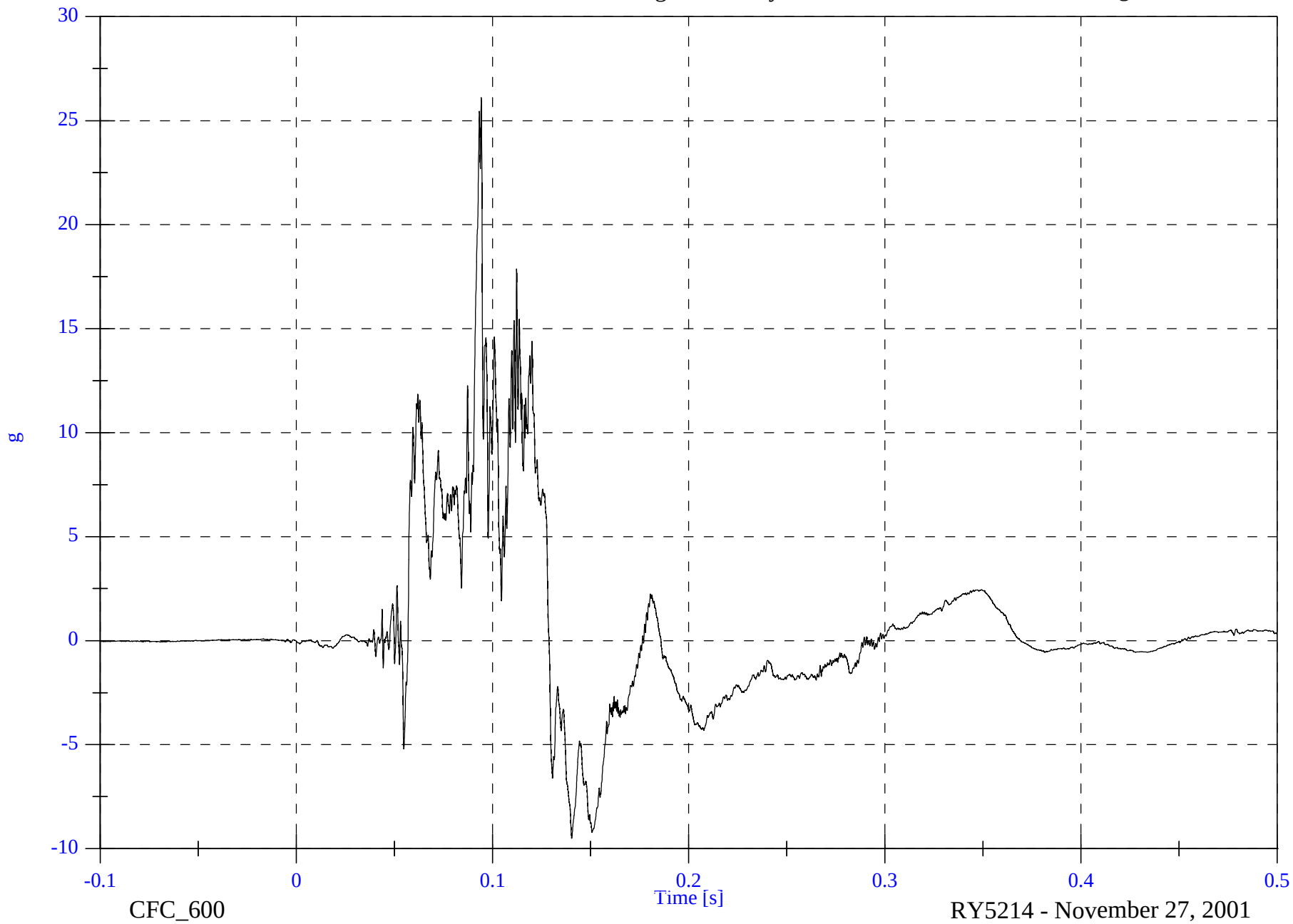
P1 Right Tibia Ay

Max: 26.1 [g] at 0.094 [s]

Min: -9.5 [g] at 0.140 [s]

B-86

8413-71

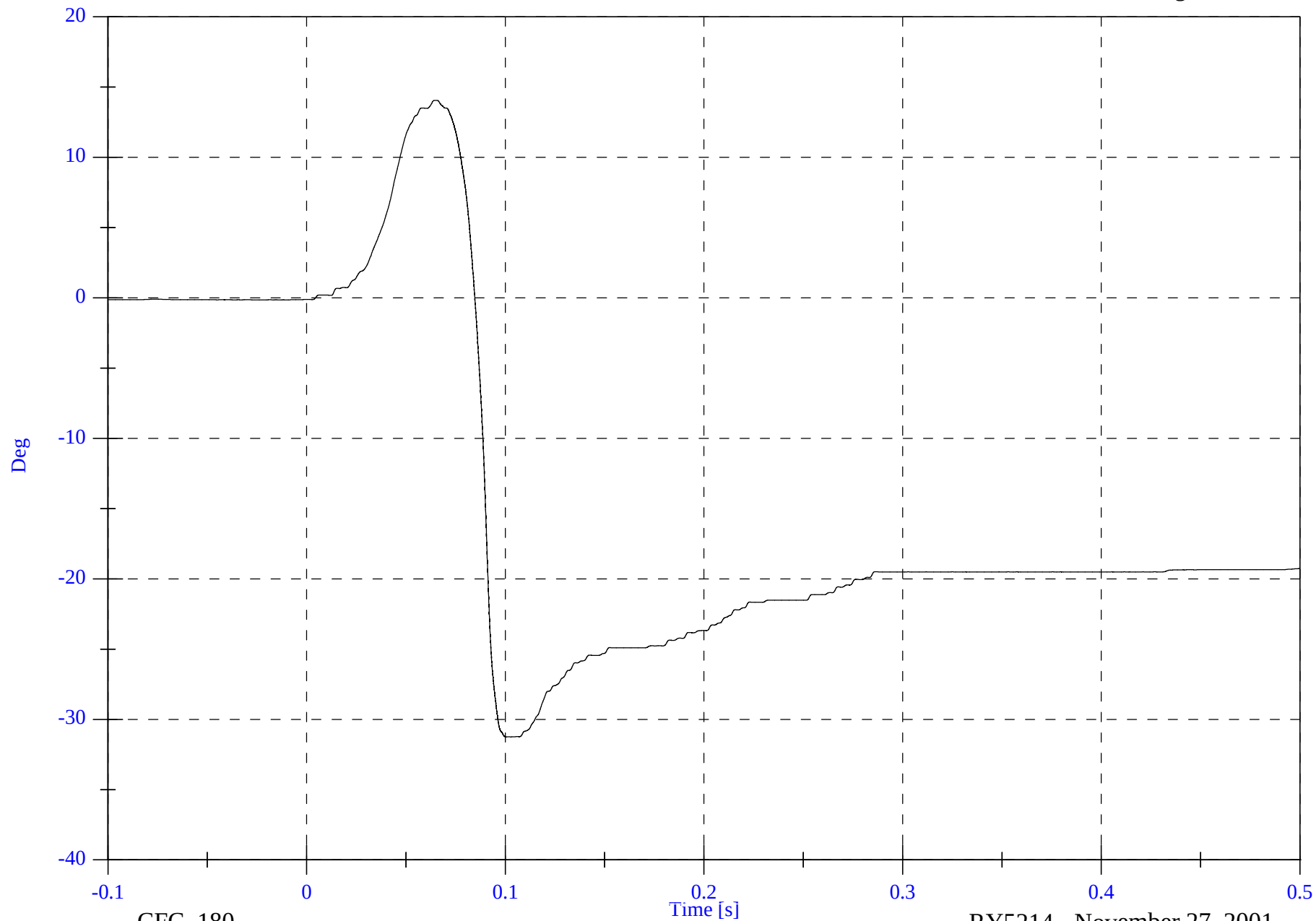


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 14.1 [Deg] at 0.065 [s]

P1 Left Ankle Rotation x

Min: -31.3 [Deg] at 0.100 [s]



B-87

8413-71

CFC_180

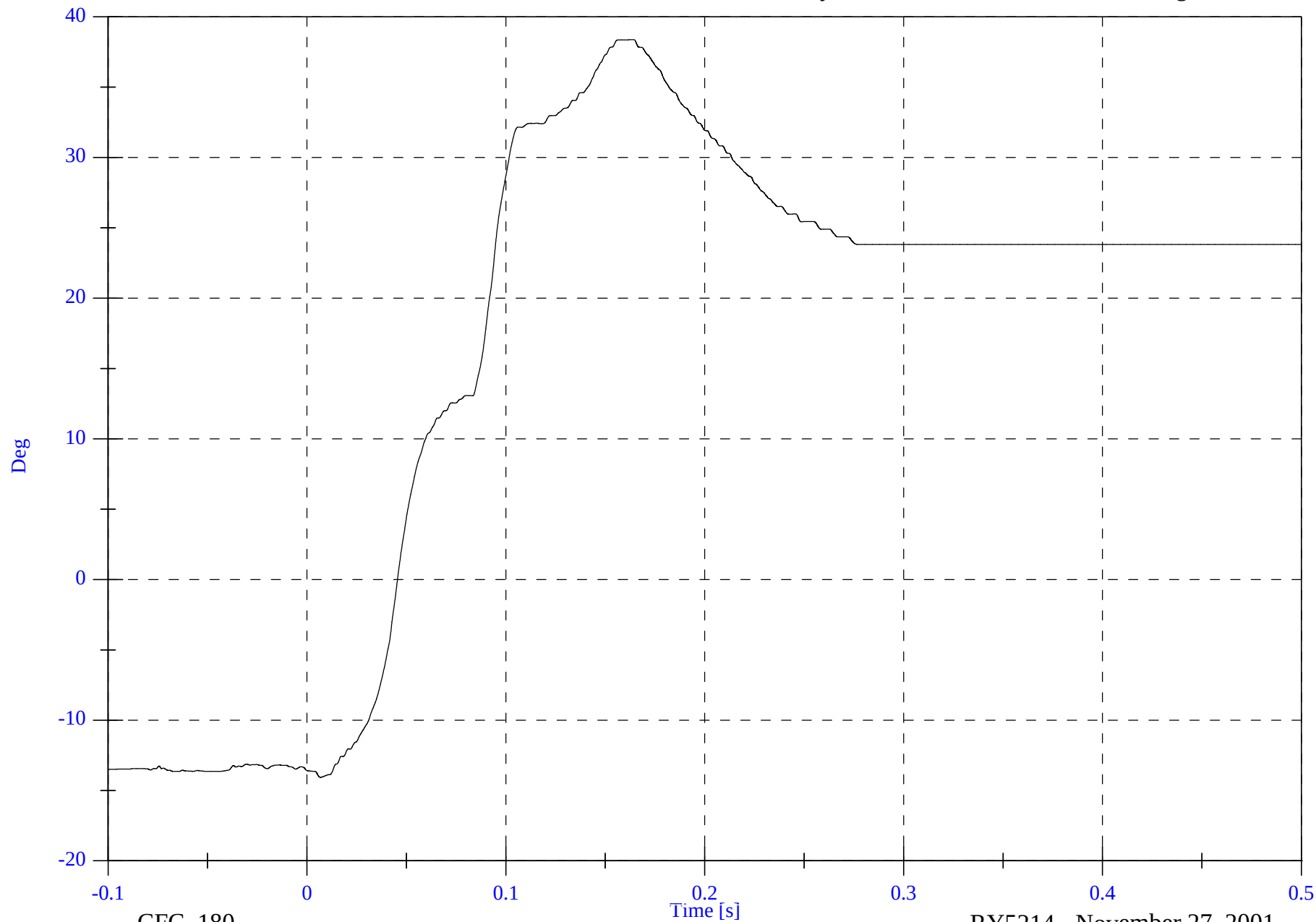
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 38.4 [Deg] at 0.164 [s]

P1 Left Ankle Rotation y

Min: -14.1 [Deg] at 0.007 [s]



B-88

8413-71

CFC_180

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 2.6 [Deg] at 0.115 [s]

P1 Left Ankle Rotation z

Min: -10.3 [Deg] at 0.500 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

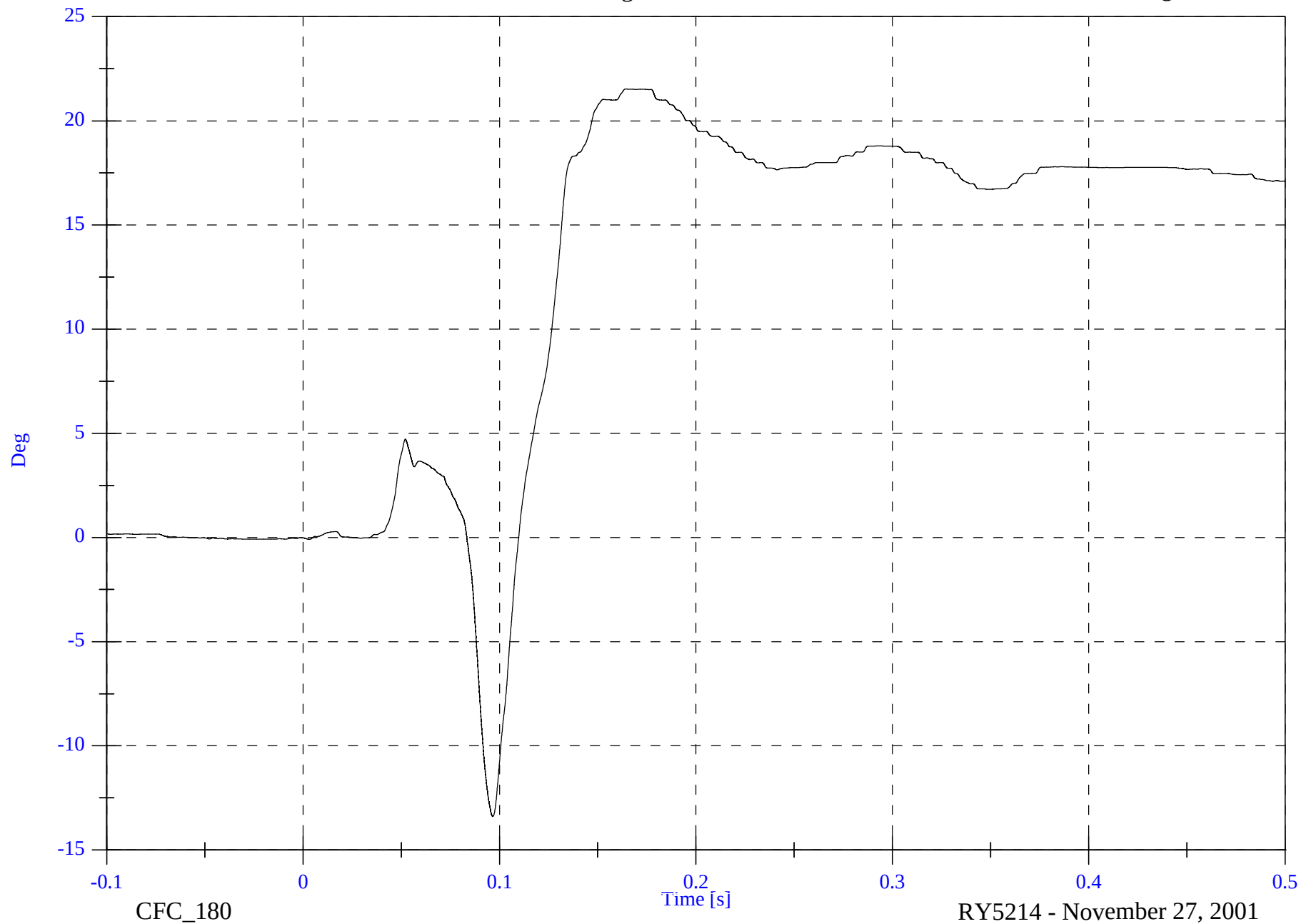
P1 Right Ankle Rotation x

Max: 21.5 [Deg] at 0.164 [s]

Min: -13.4 [Deg] at 0.097 [s]

B-90

8413-71

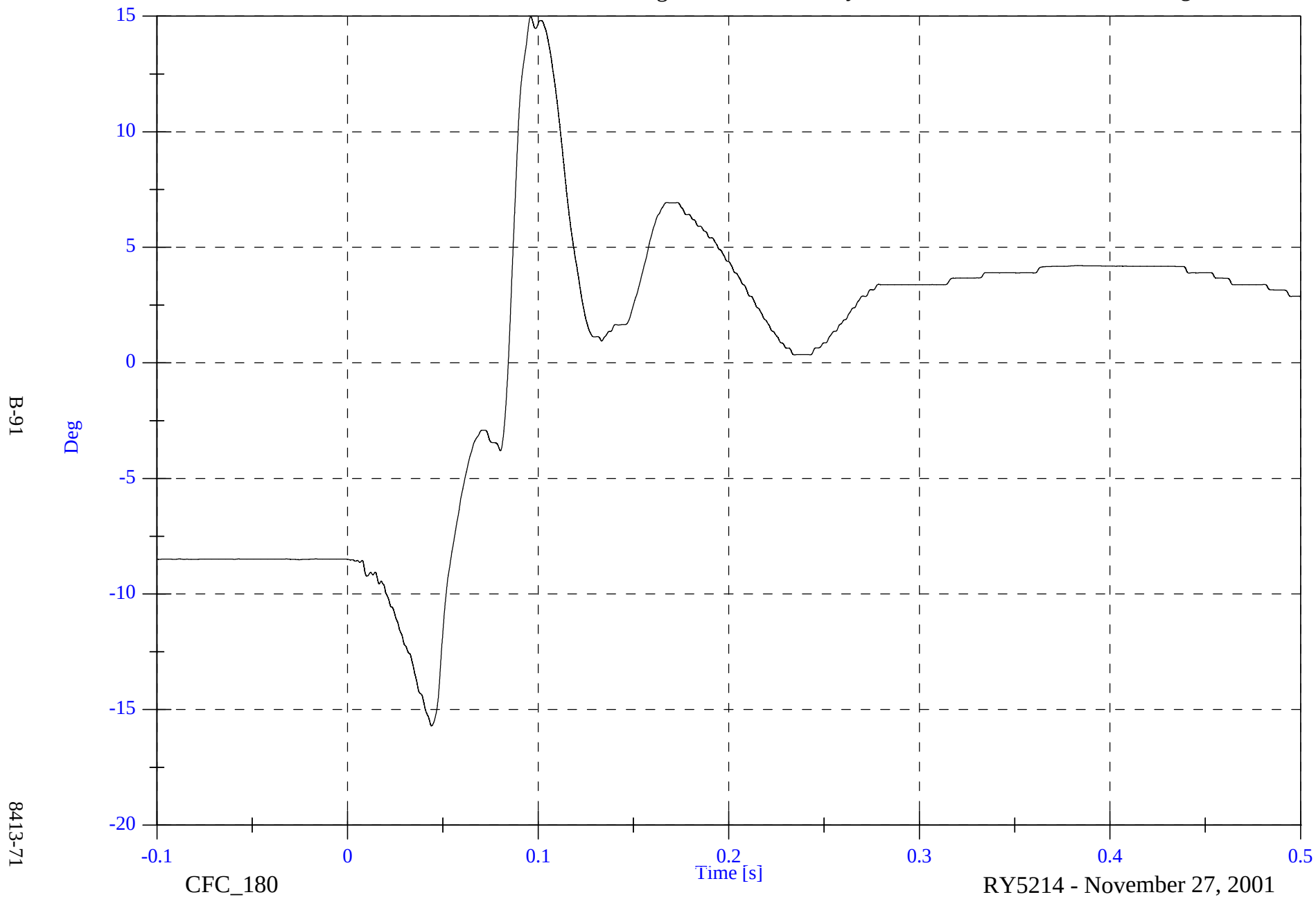


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Ankle Rotation y

Max: 15.0 [Deg] at 0.096 [s]

Min: -15.7 [Deg] at 0.044 [s]

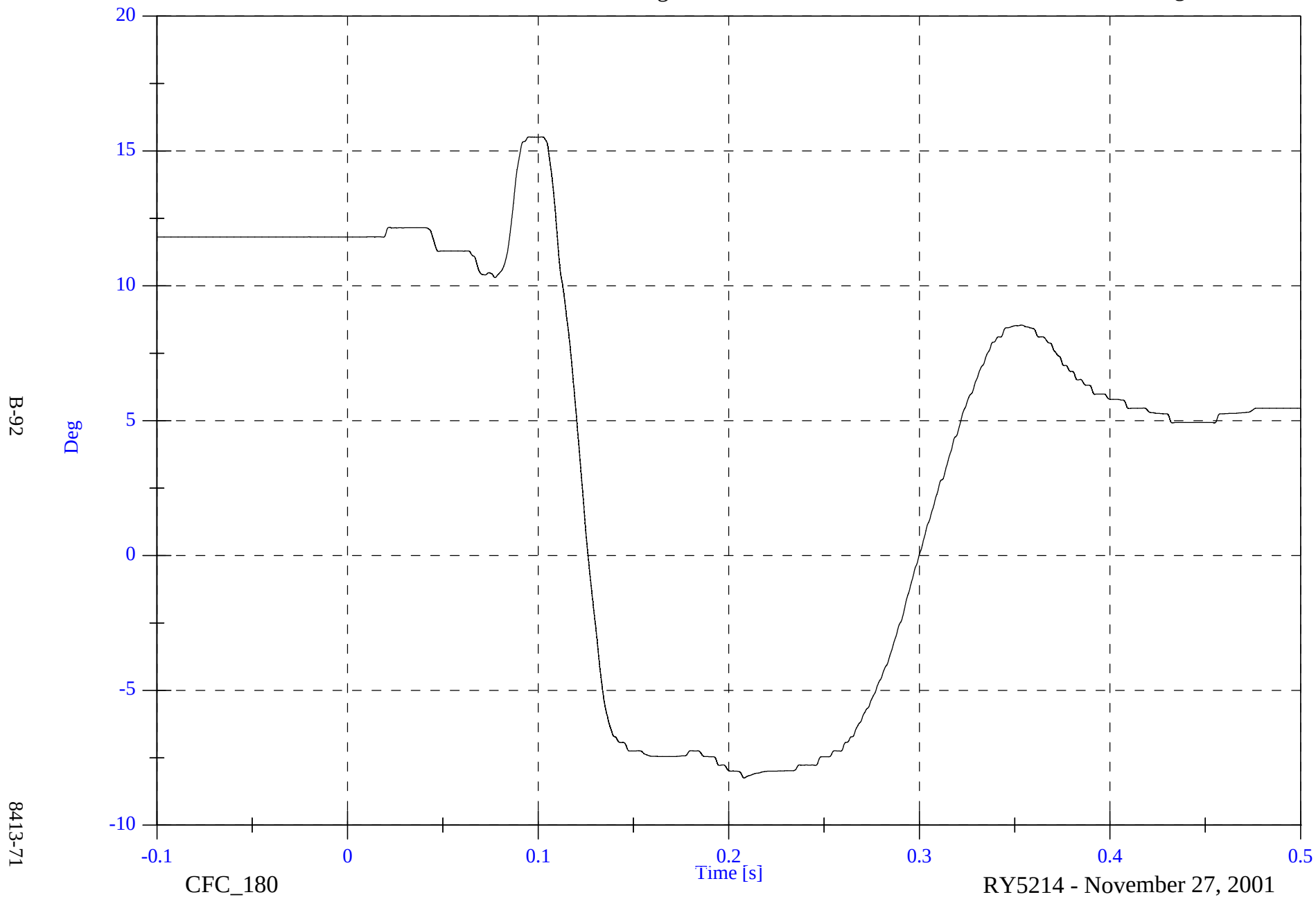


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Ankle Rotation z

Max: 15.5 [Deg] at 0.095 [s]

Min: -8.3 [Deg] at 0.208 [s]

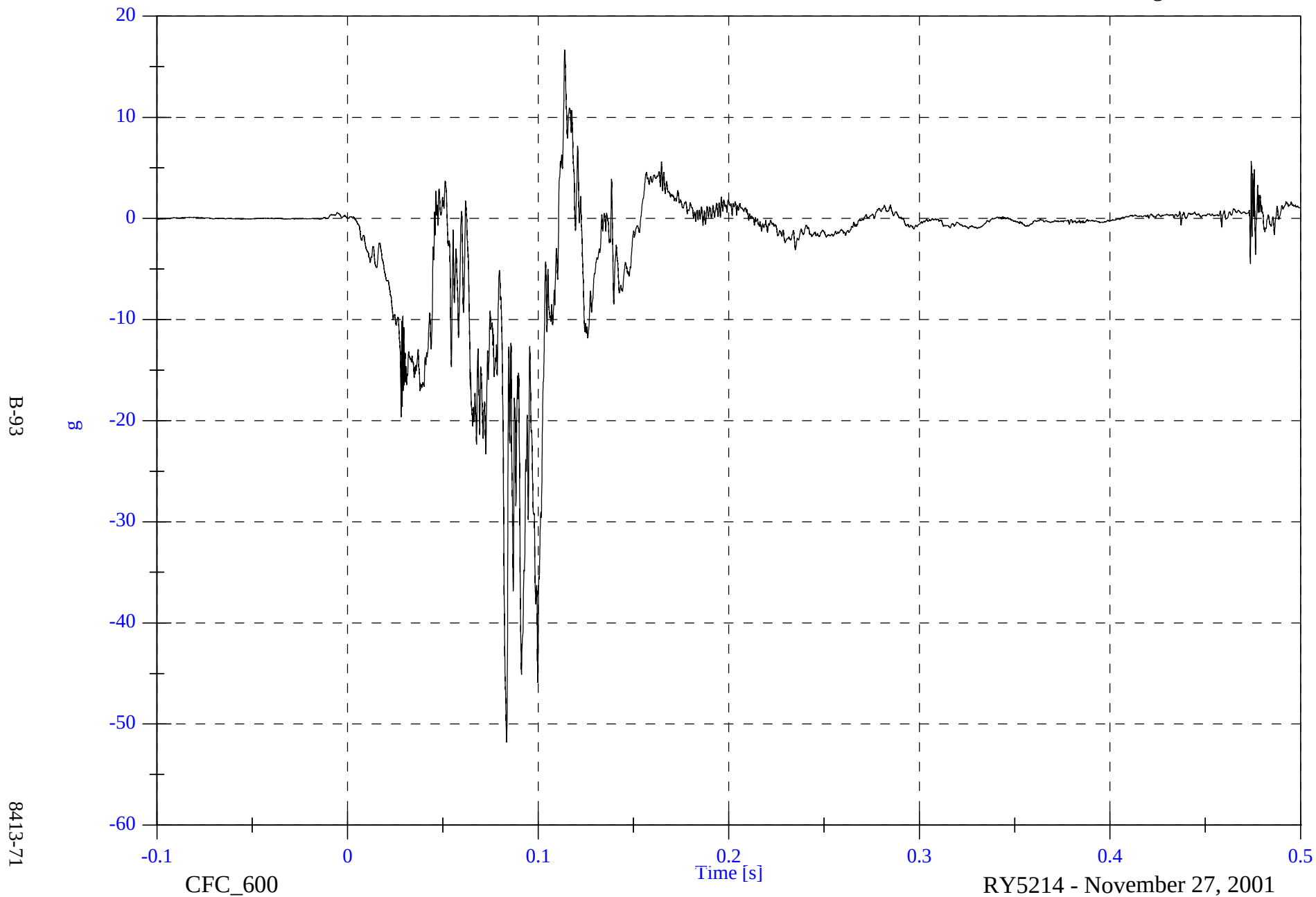


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Foot Ax

Max: 16.7 [g] at 0.114 [s]

Min: -51.8 [g] at 0.083 [s]

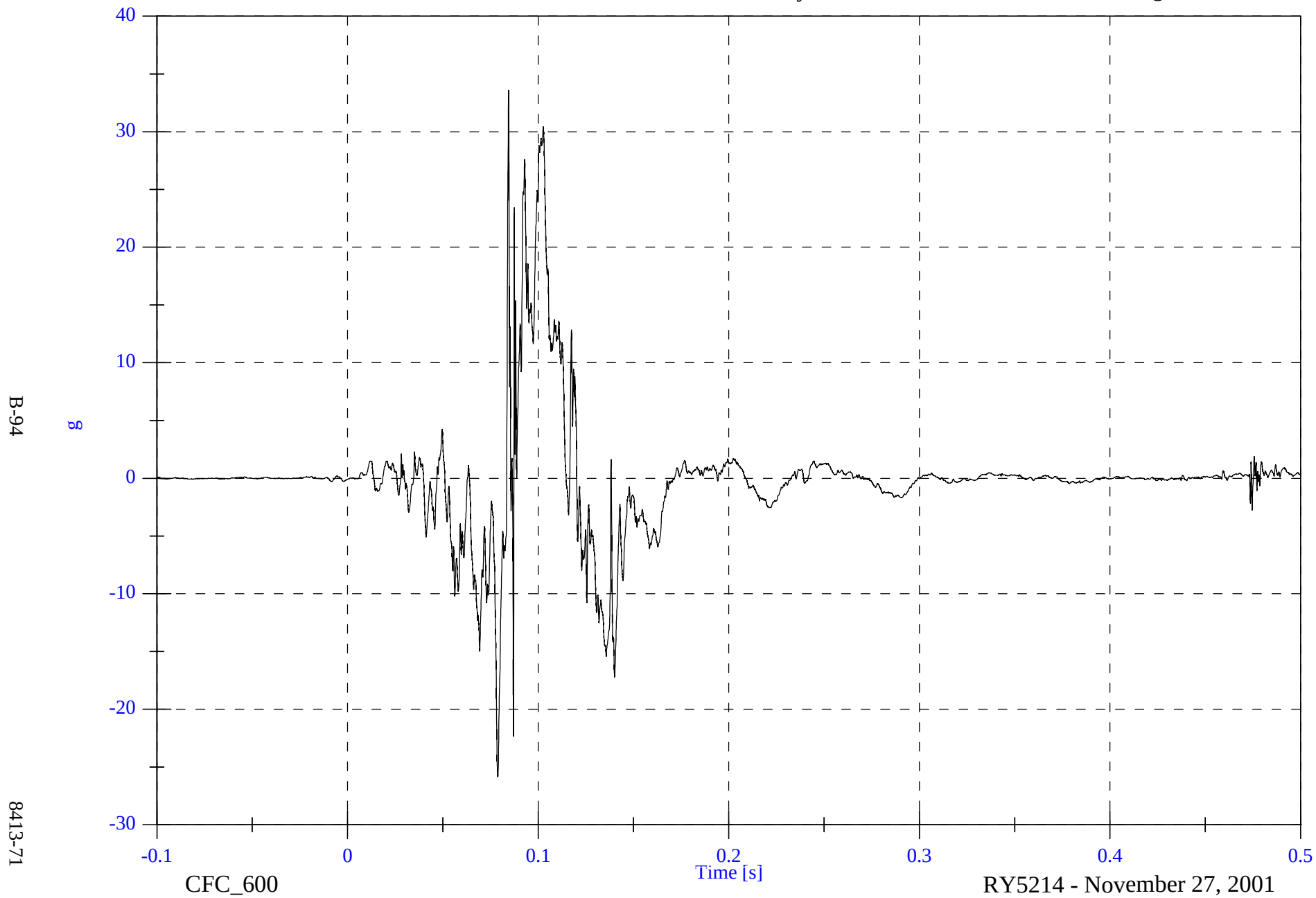


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Foot Ay

Max: 33.6 [g] at 0.085 [s]

Min: -25.9 [g] at 0.079 [s]

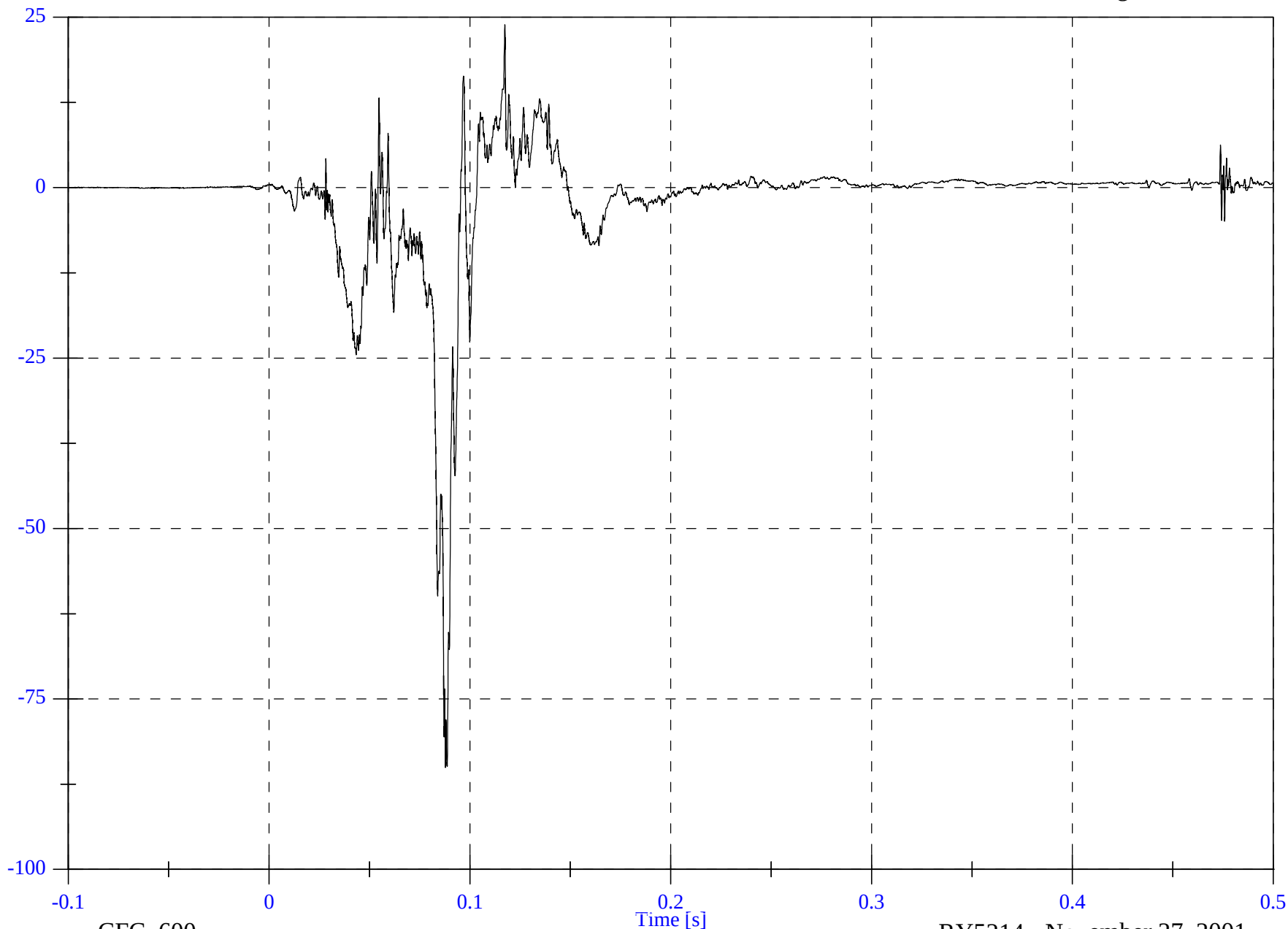


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Foot Az

Max: 23.9 [g] at 0.117 [s]

Min: -85.1 [g] at 0.088 [s]



B-95

8413-71

CFC_600

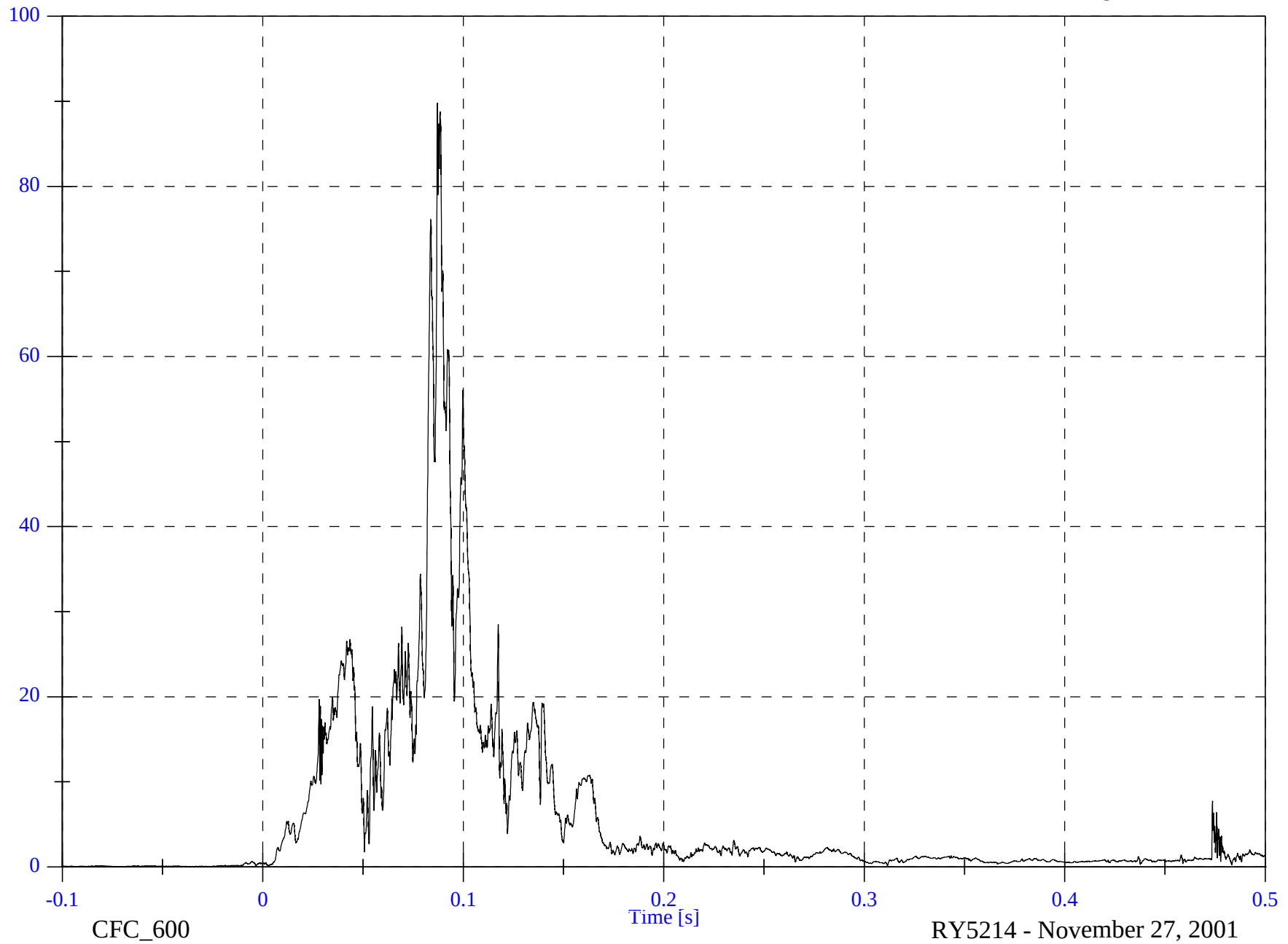
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Left Foot A Resultant

Max: 89.8 [g] at 0.087 [s]

Min: 0.0 [g] at -0.068 [s]



B-96

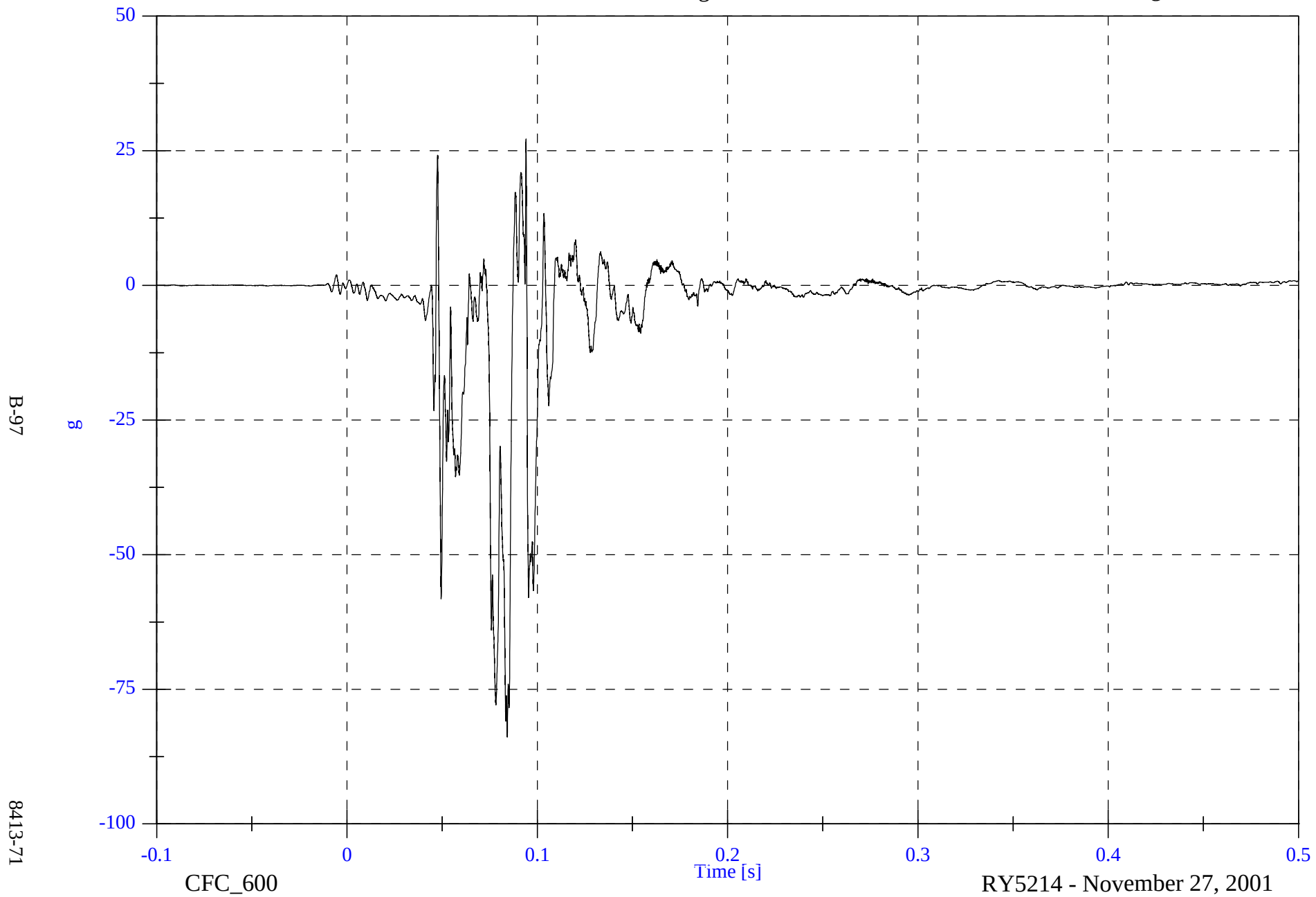
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Foot Ax

Max: 27.2 [g] at 0.094 [s]

Min: -83.9 [g] at 0.084 [s]

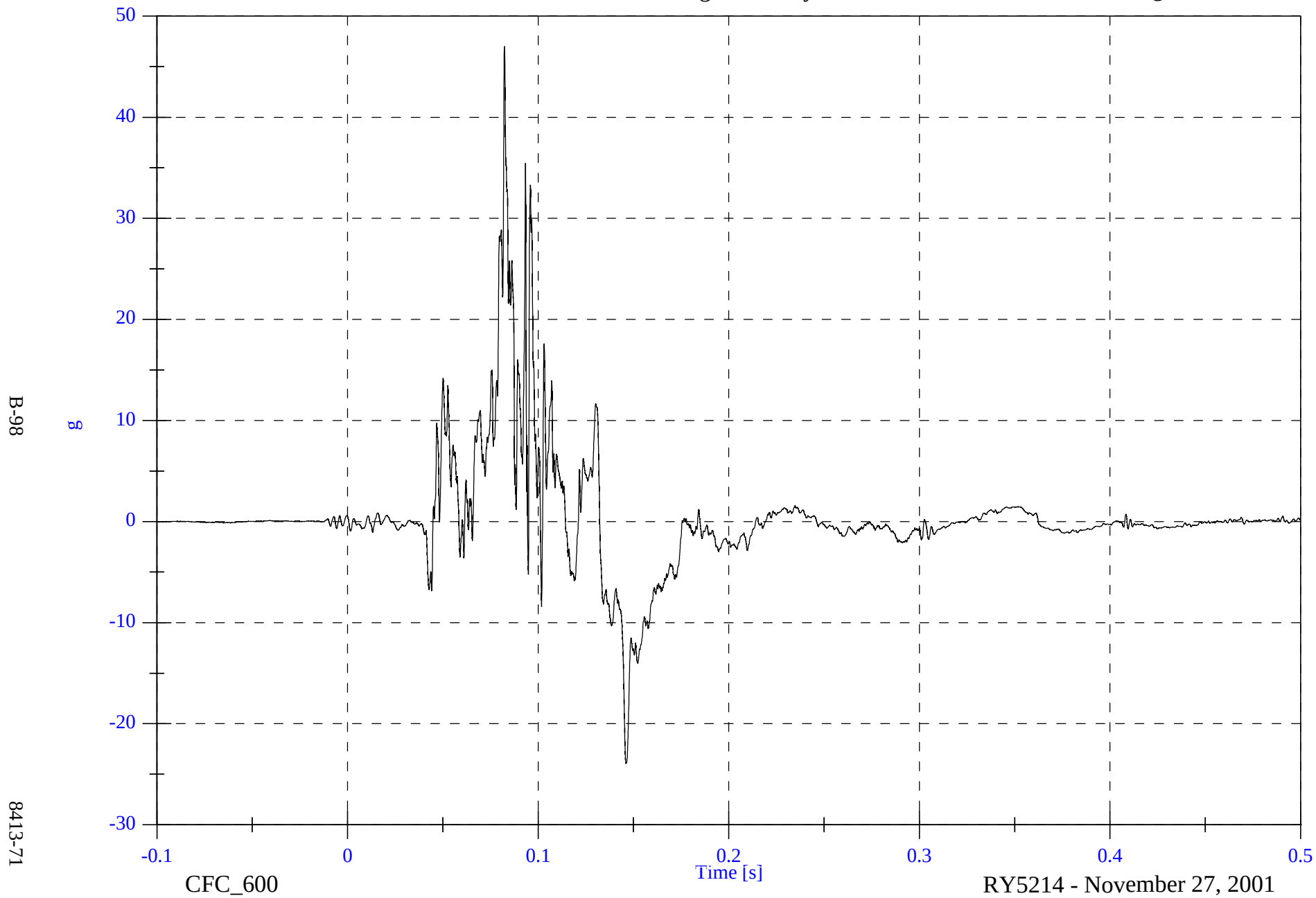


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Foot Ay

Max: 47.0 [g] at 0.082 [s]

Min: -24.0 [g] at 0.146 [s]

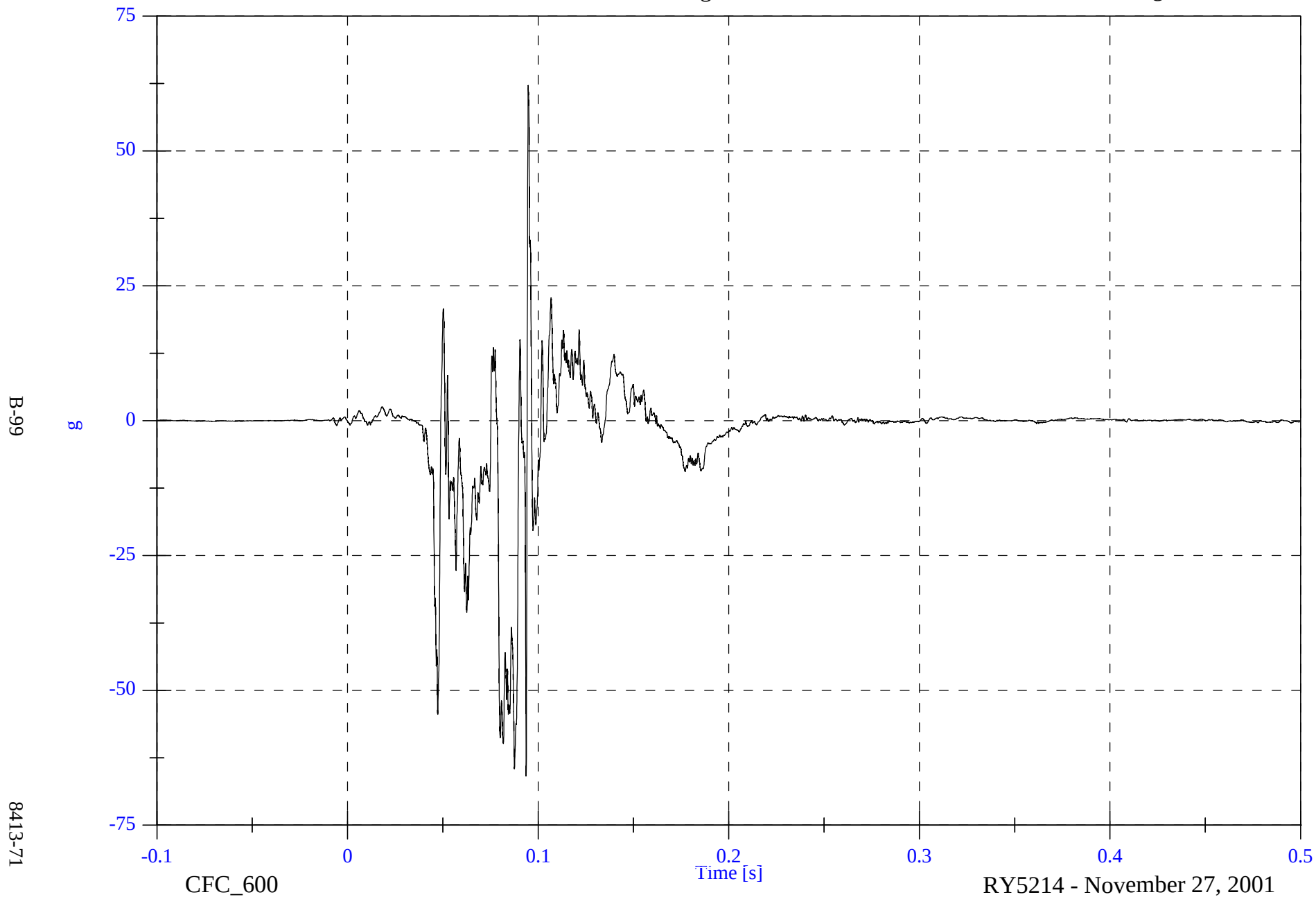


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Foot Az

Max: 62.1 [g] at 0.095 [s]

Min: -65.9 [g] at 0.094 [s]

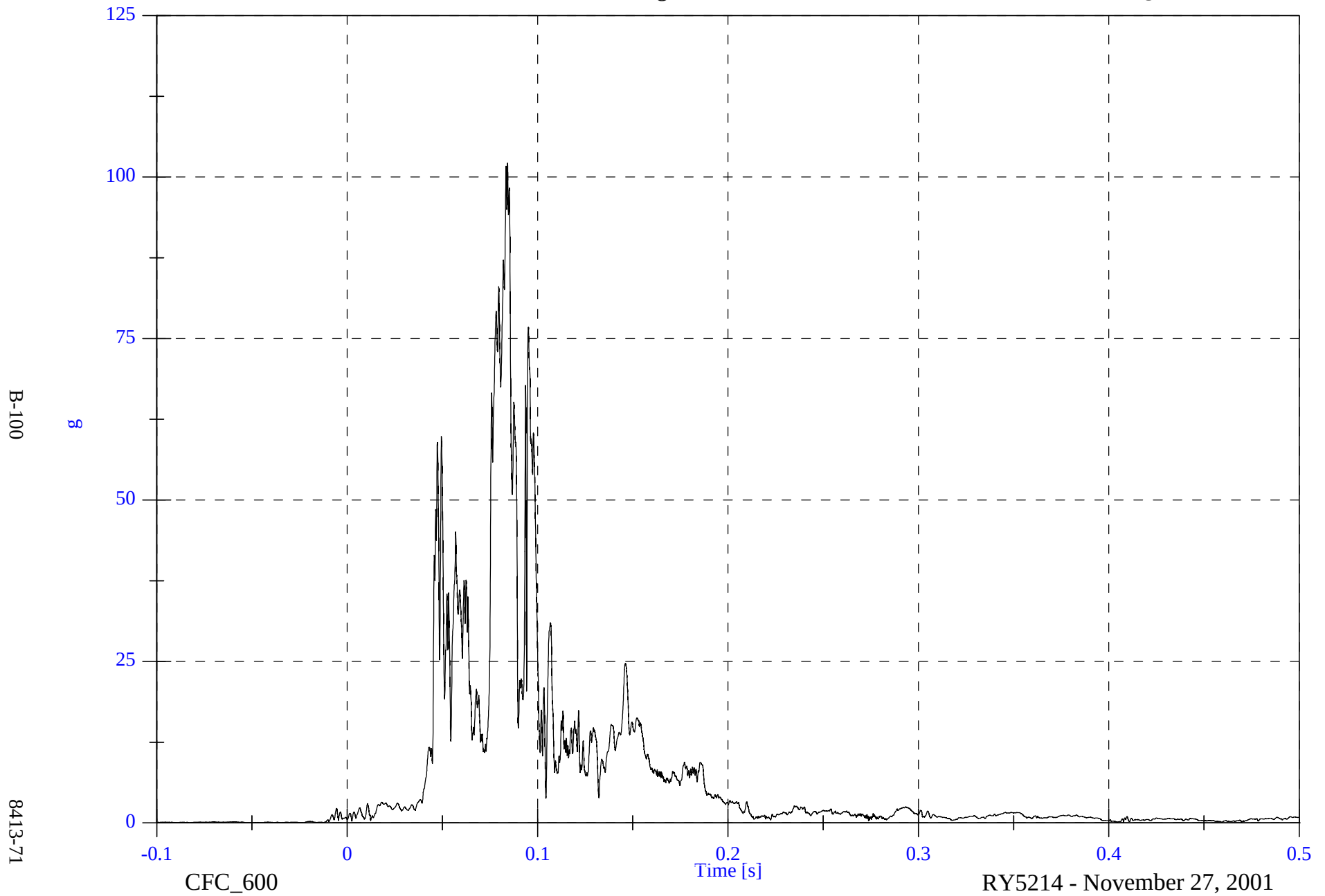


40% Frontal Offset Test #15 - 2000 Nissan Quest

P1 Right Foot A Resultant

Max: 102.1 [g] at 0.084 [s]

Min: 0.0 [g] at -0.083 [s]

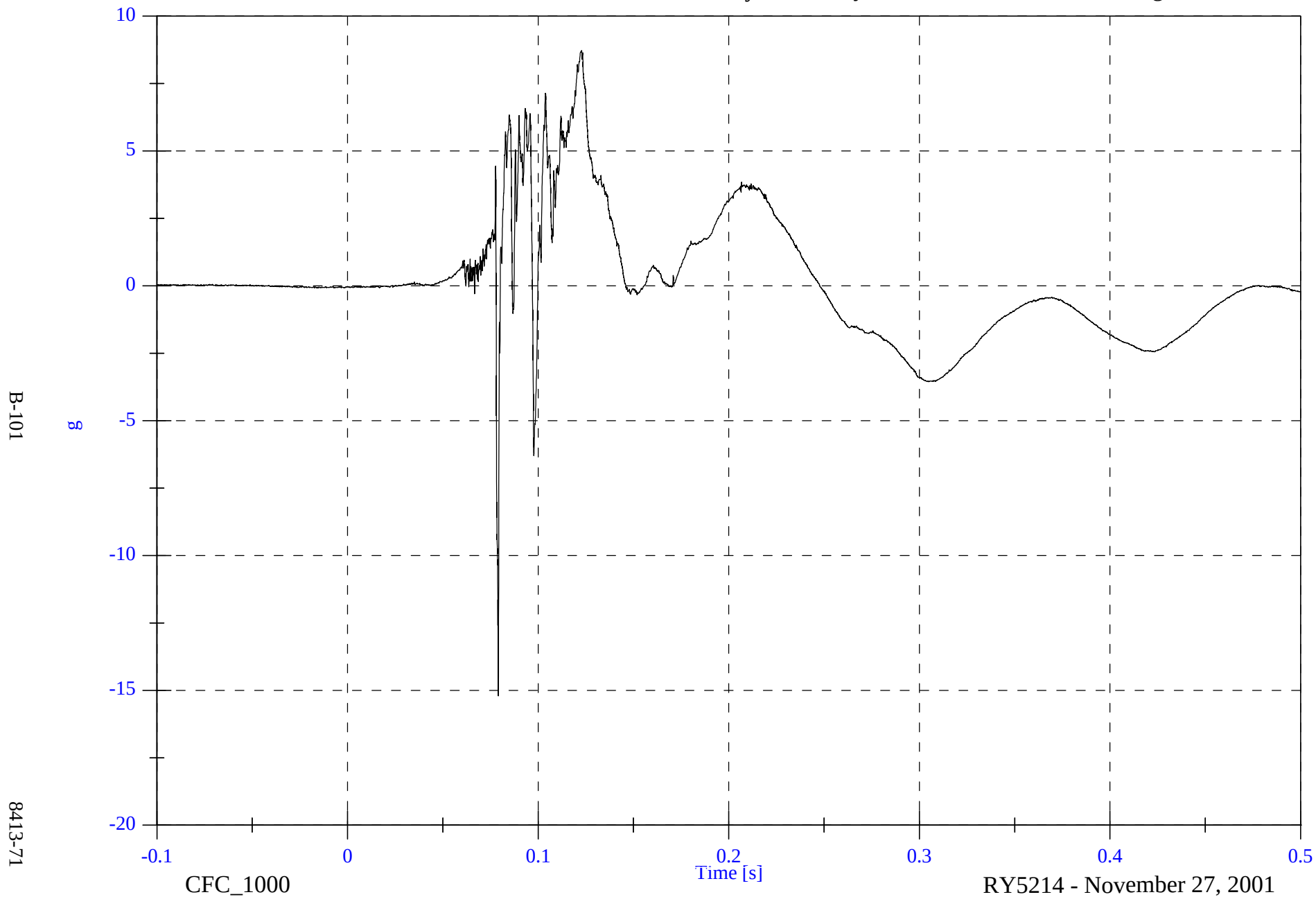


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head 9 Array X Arm Ay

Max: 8.7 [g] at 0.123 [s]

Min: -15.2 [g] at 0.079 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

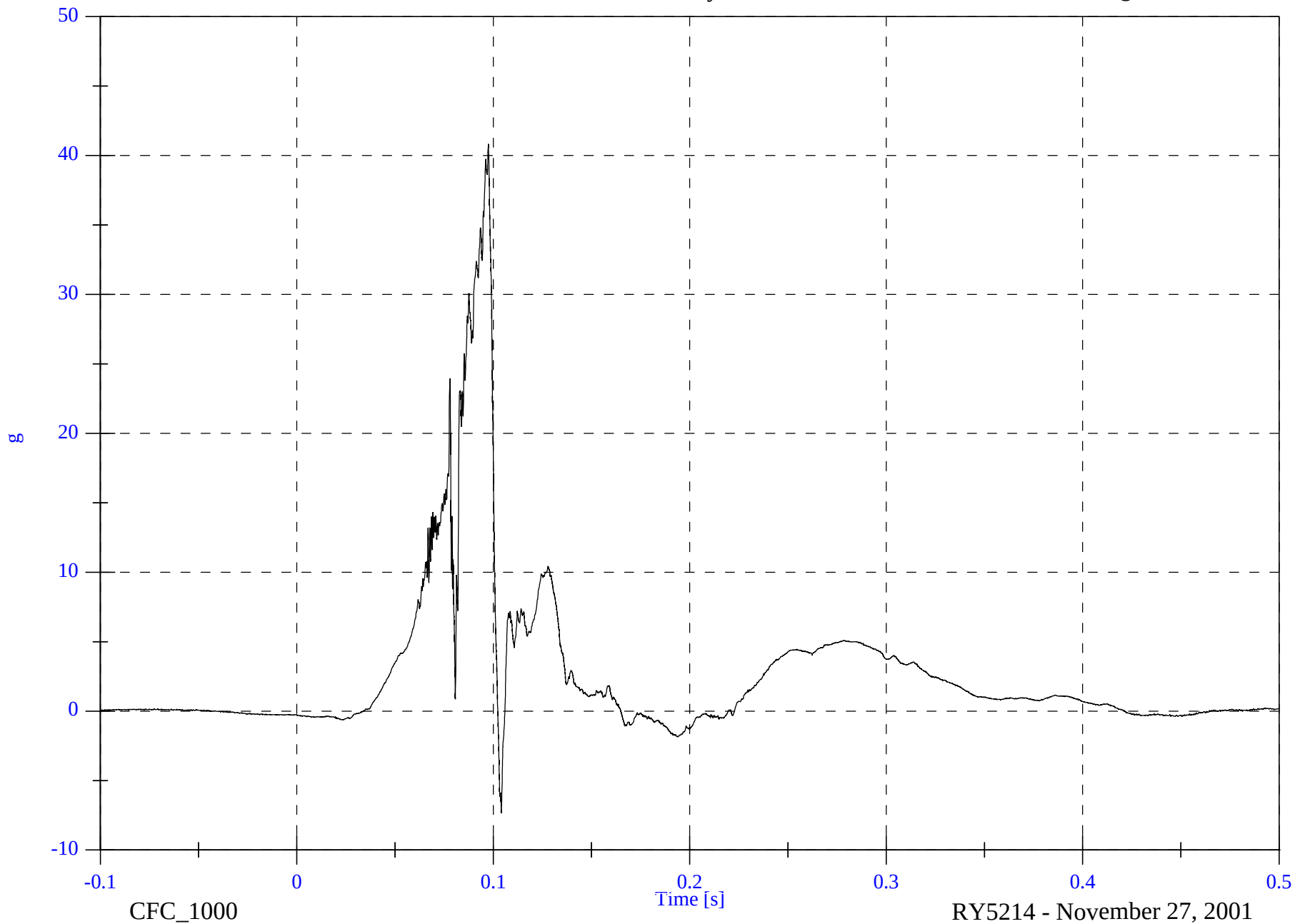
P2 Head 9 Array X Arm Az

Max: 40.8 [g] at 0.098 [s]

Min: -7.3 [g] at 0.104 [s]

B-102

8413-71

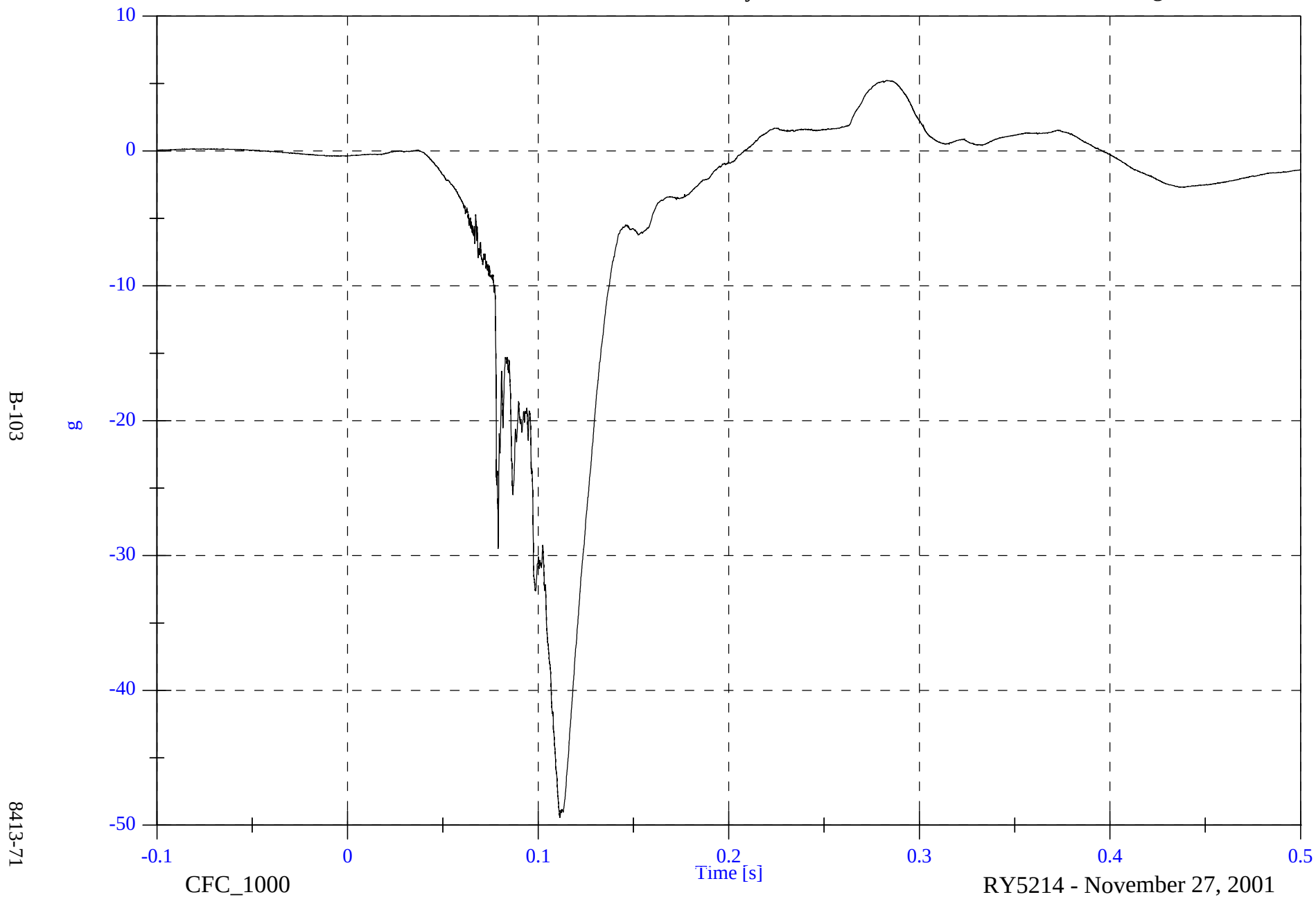


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head 9 Array Y Arm Ax

Max: 5.2 [g] at 0.283 [s]

Min: -49.4 [g] at 0.111 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

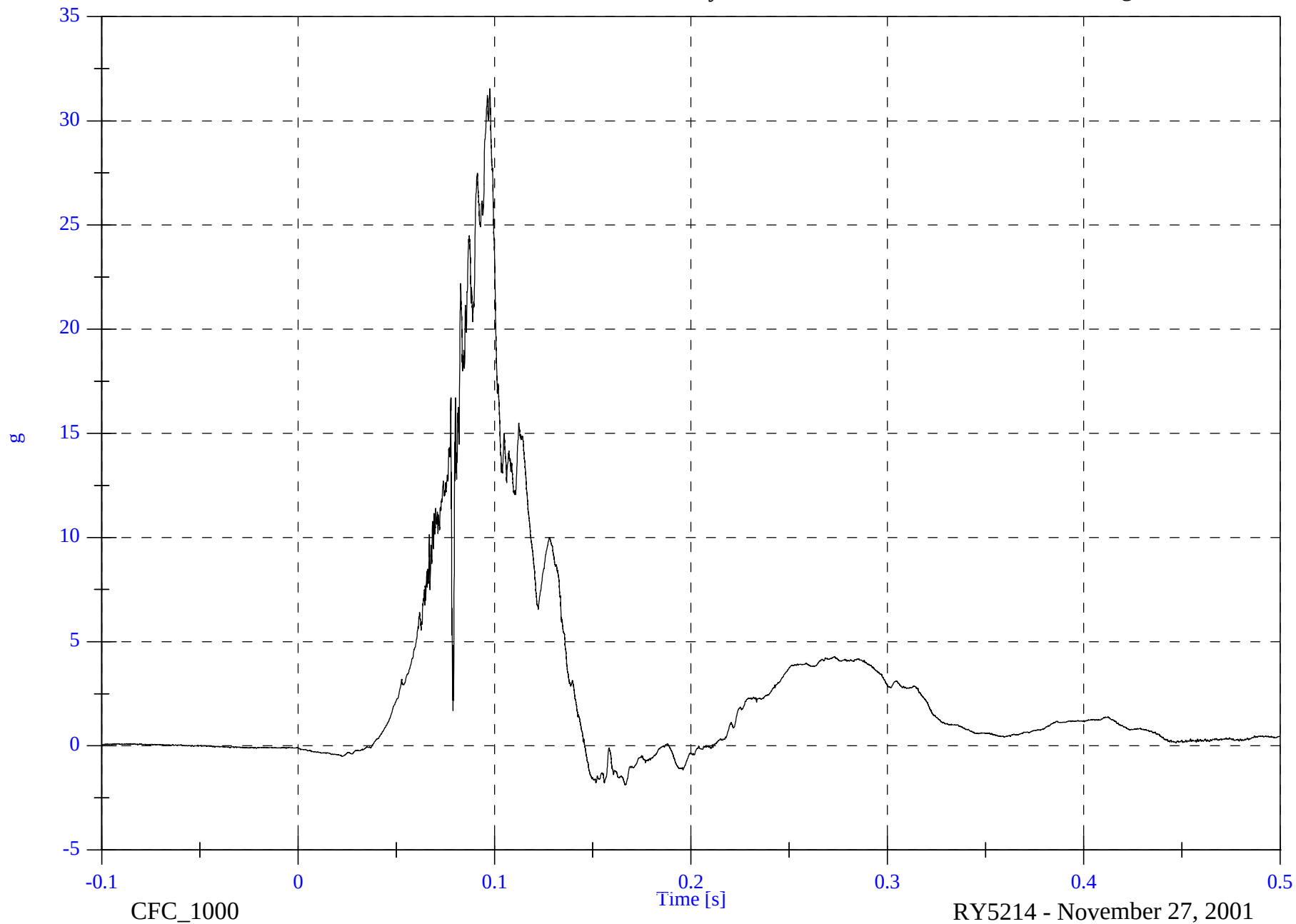
P2 Head 9 Array Y Arm Az

Max: 31.5 [g] at 0.098 [s]

Min: -1.9 [g] at 0.167 [s]

B-104

8413-71

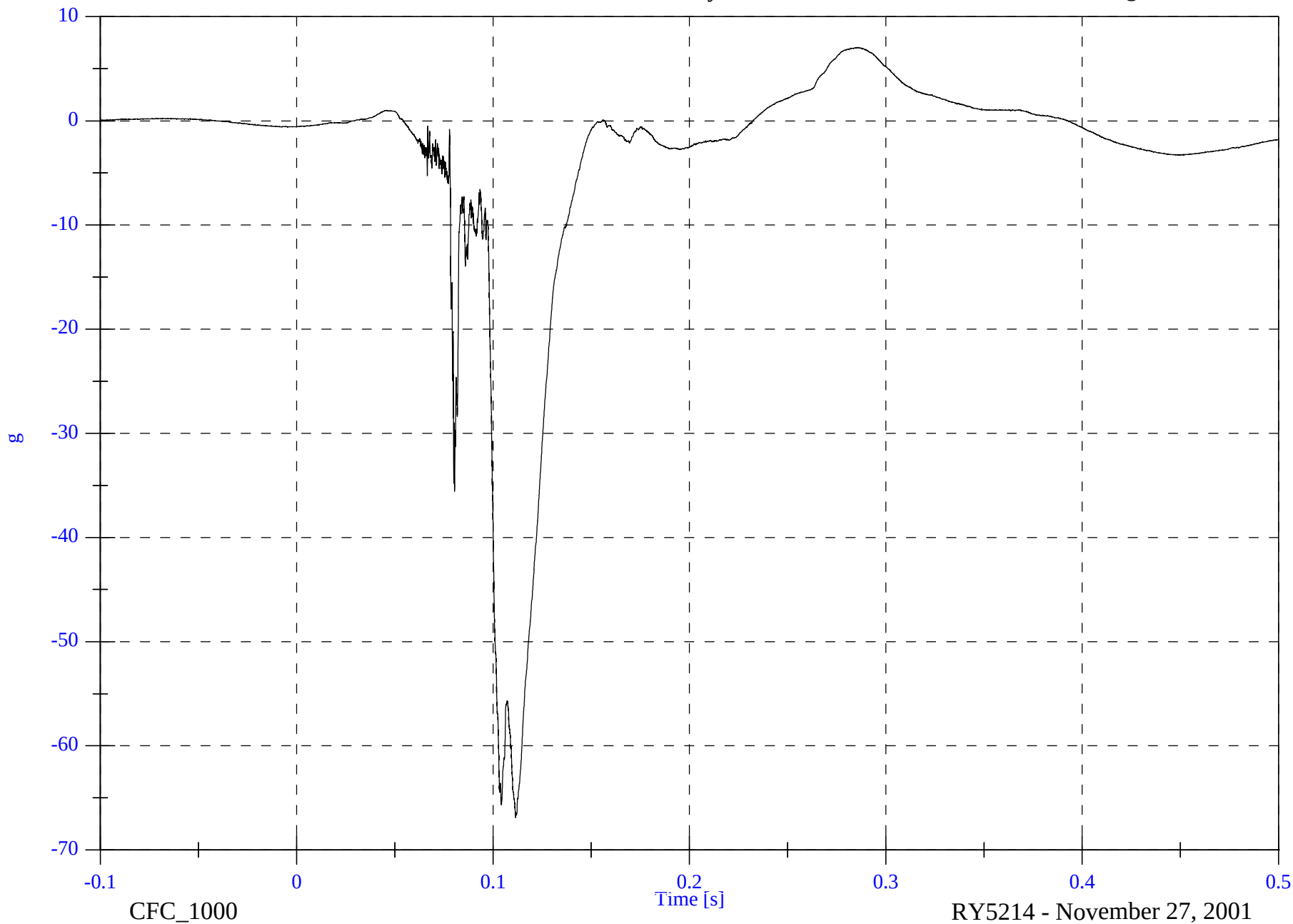


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head 9 Array Z Arm Ax

Max: 7.1 [g] at 0.286 [s]

Min: -66.9 [g] at 0.111 [s]



B-105

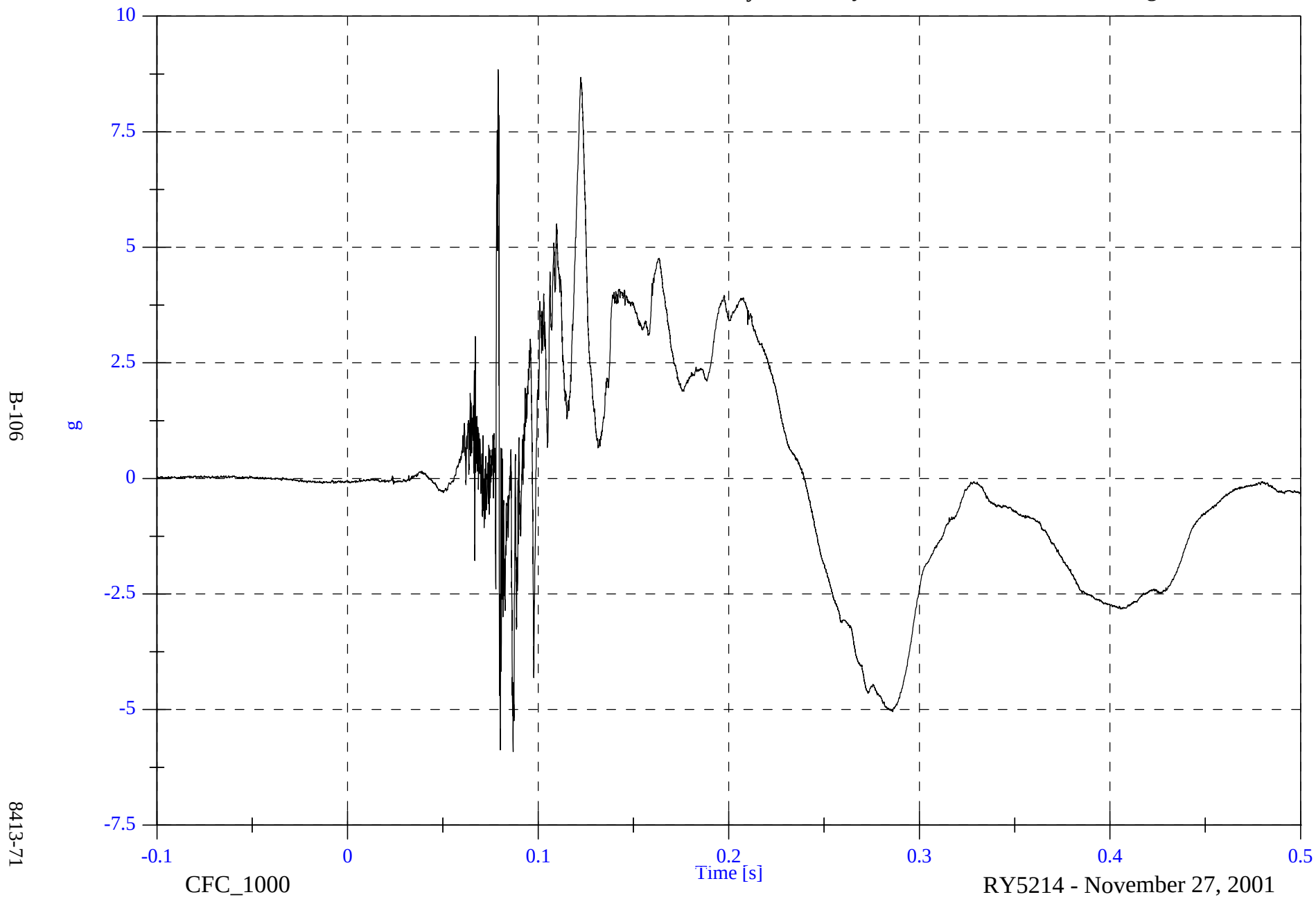
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head 9 Array Z Arm Ay

Max: 8.8 [g] at 0.079 [s]

Min: -5.9 [g] at 0.087 [s]

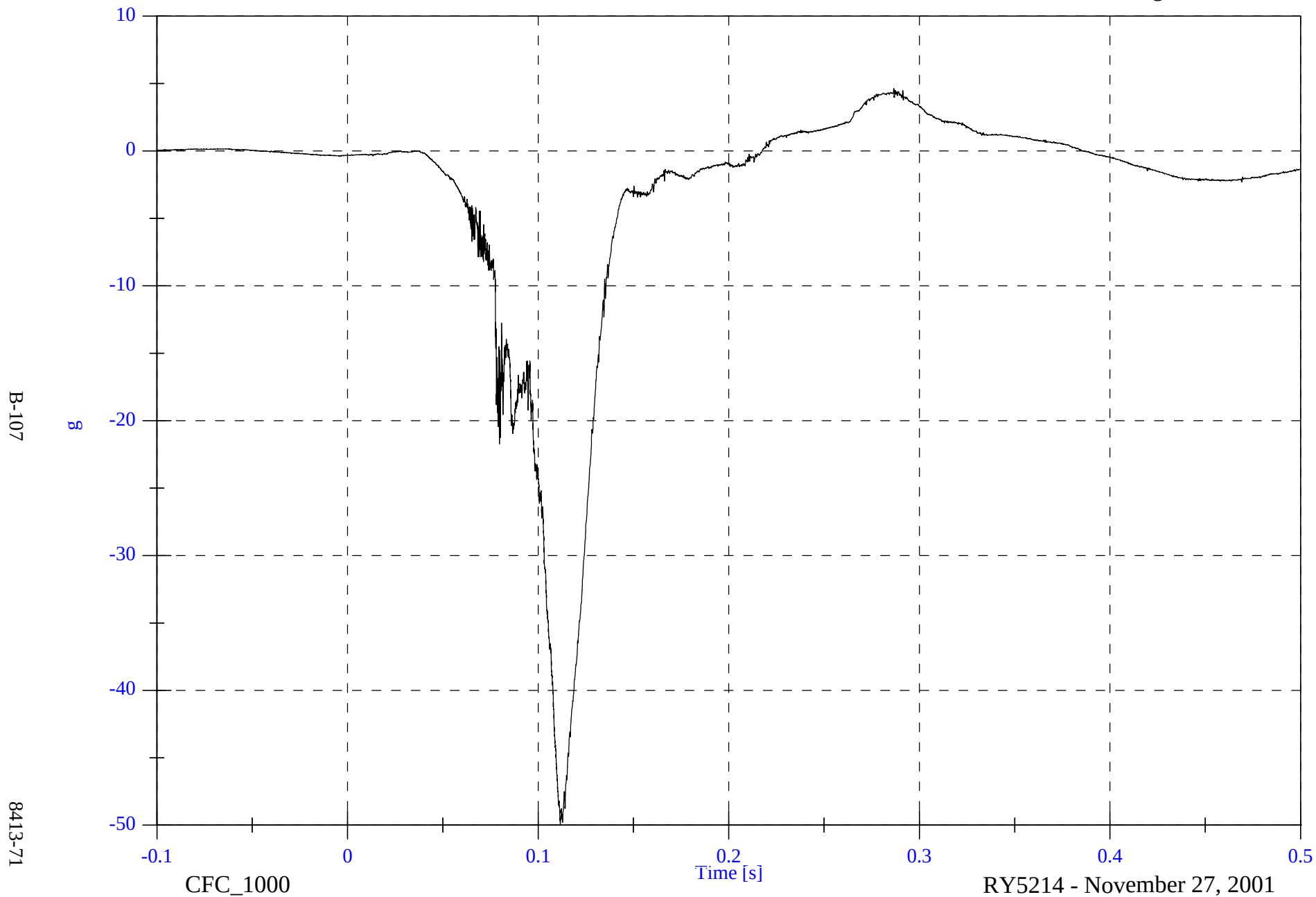


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head CG x

Max: 4.6 [g] at 0.287 [s]

Min: -50.0 [g] at 0.112 [s]

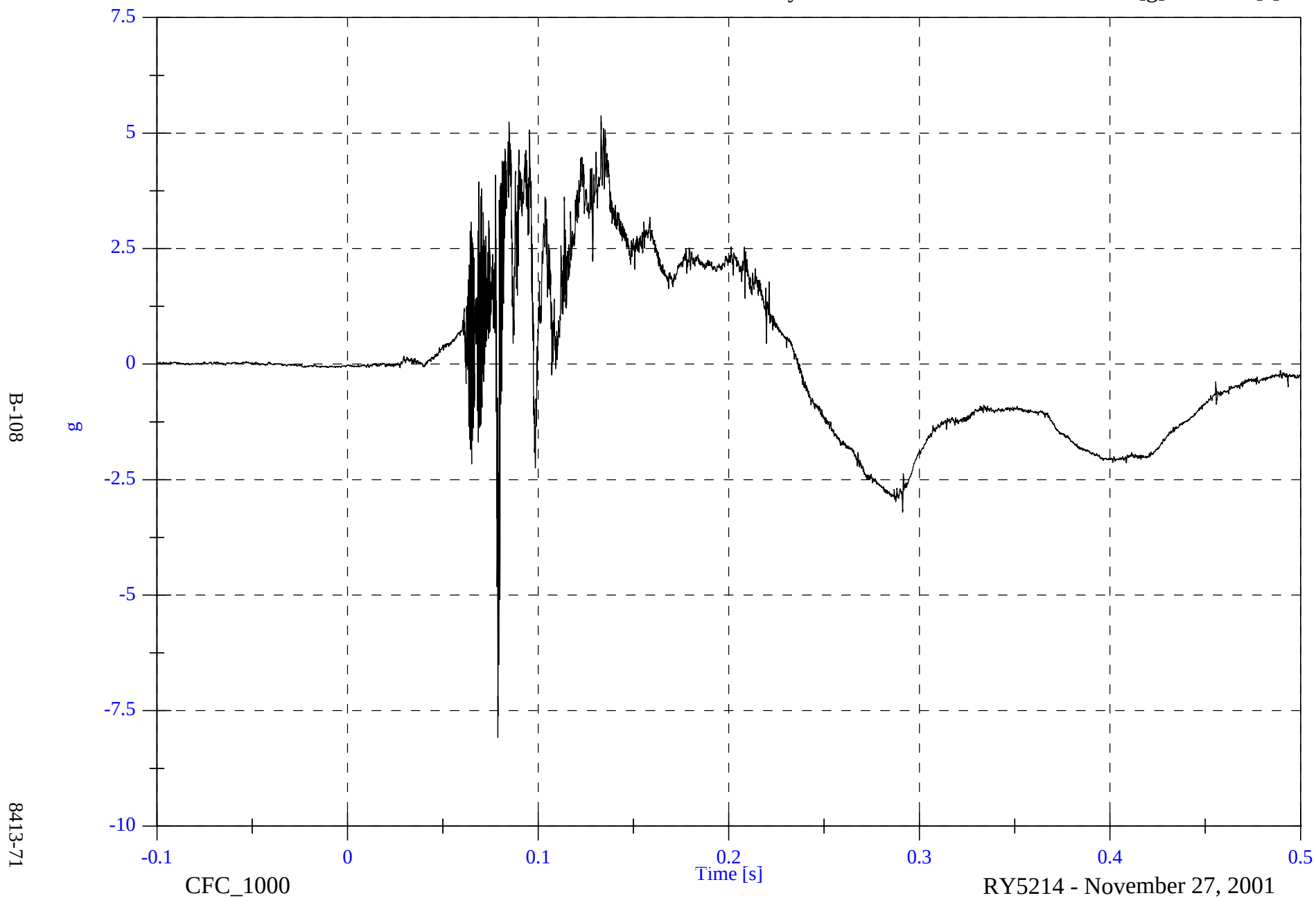


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head CG y

Max: 5.4 [g] at 0.133 [s]

Min: -8.1 [g] at 0.079 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

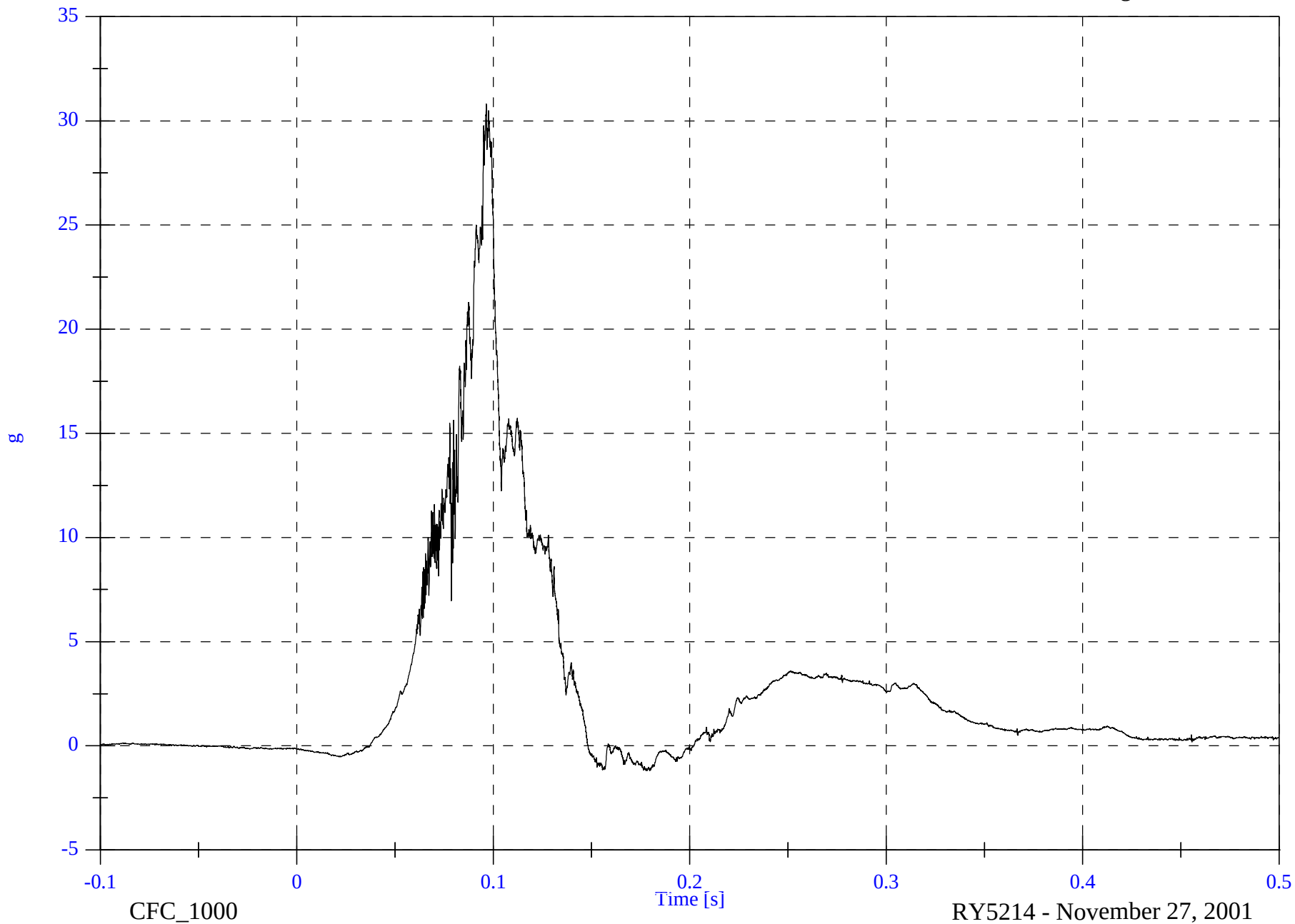
P2 Head CG z

Max: 30.8 [g] at 0.097 [s]

Min: -1.2 [g] at 0.180 [s]

B-109

8413-71



40% Frontal Offset Test #15 - 2000 Nissan Quest

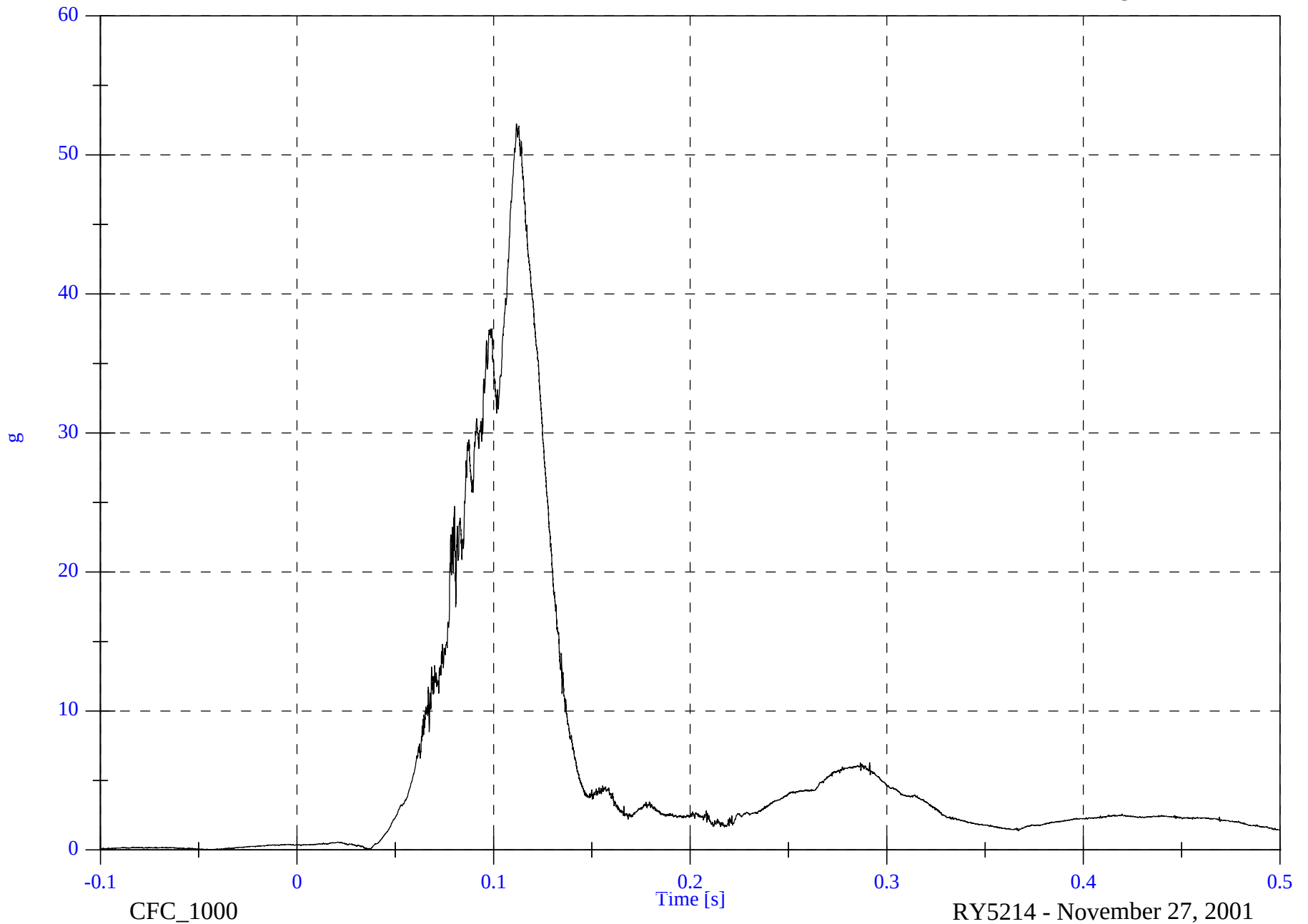
P2 Head CG Resultant

Max: 52.2 [g] at 0.112 [s]

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

B-110

8413-71

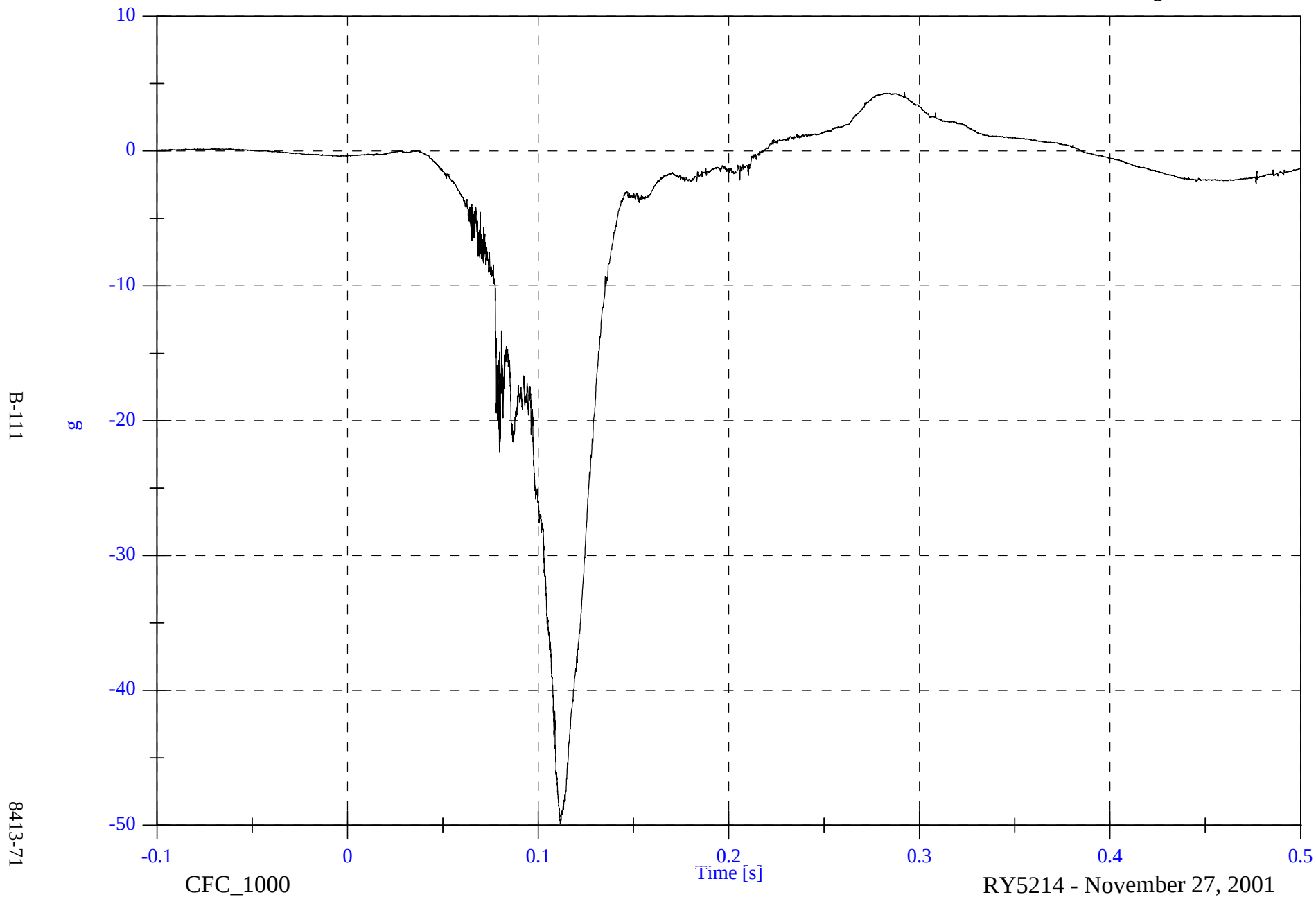


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head CG Red x

Max: 4.3 [g] at 0.292 [s]

Min: -49.9 [g] at 0.112 [s]

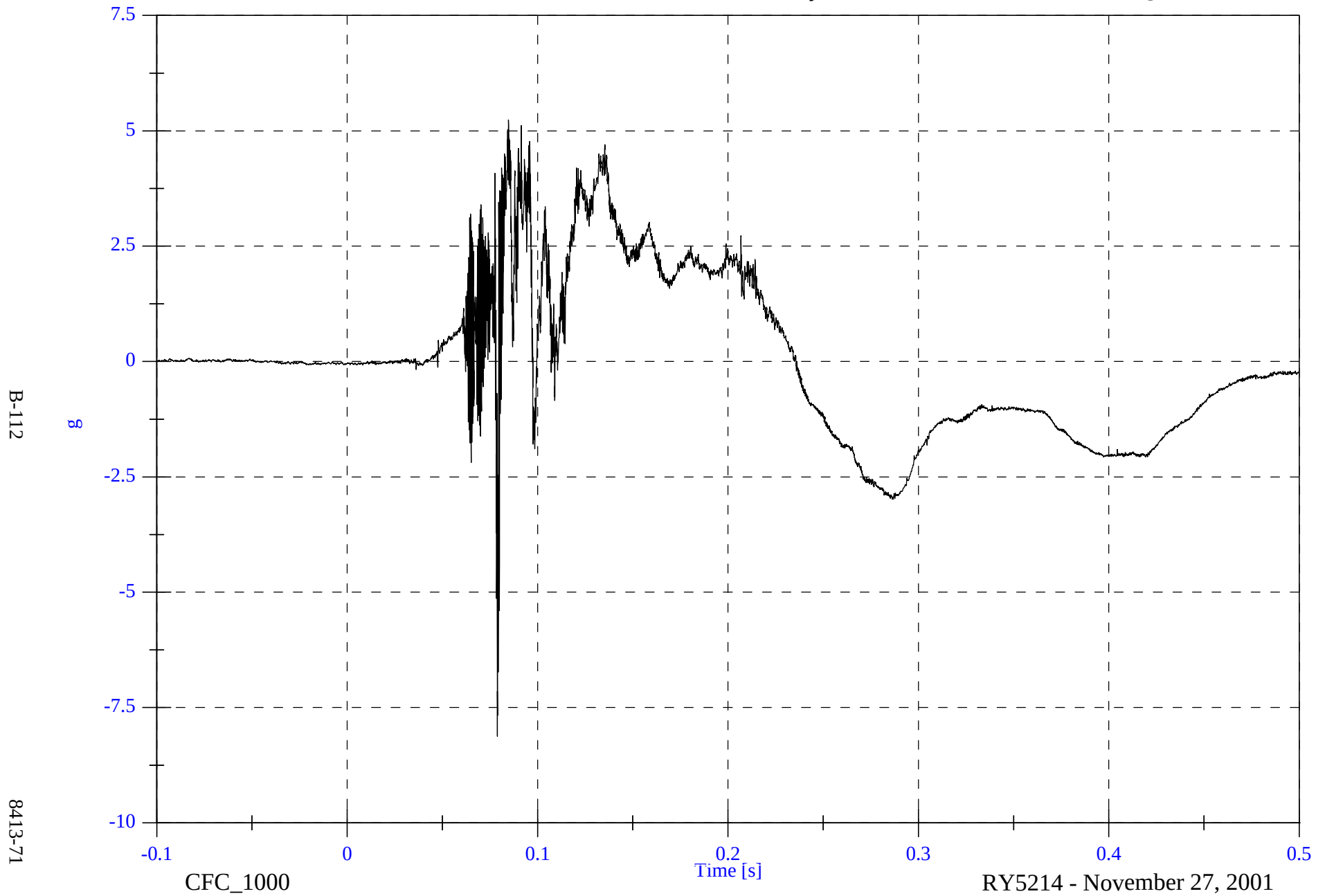


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Head CG Red y

Max: 5.2 [g] at 0.085 [s]

Min: -8.1 [g] at 0.079 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

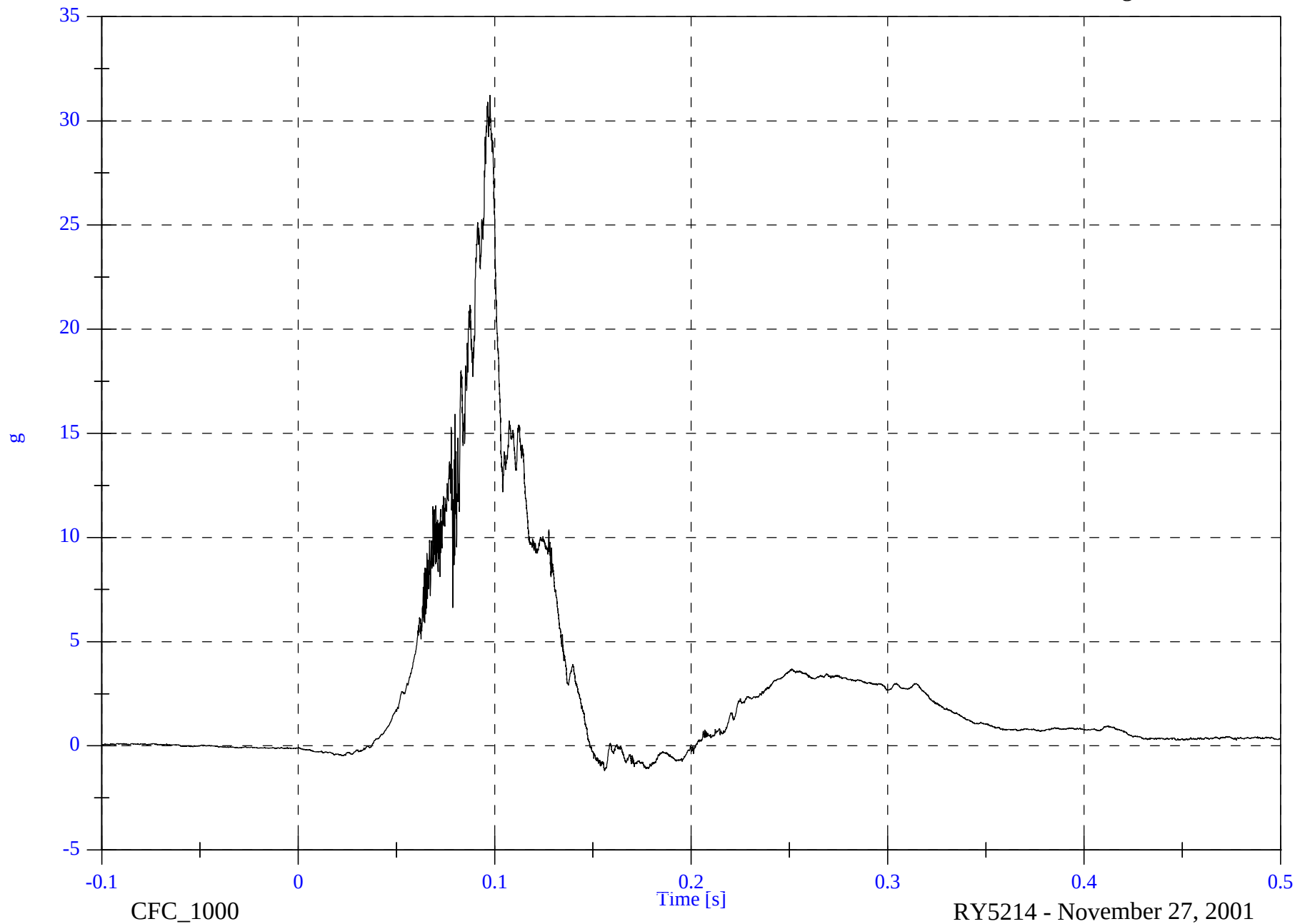
P2 Head CG Red z

Max: 31.2 [g] at 0.098 [s]

Min: -1.2 [g] at 0.156 [s]

B-113

8413-71



40% Frontal Offset Test #15 - 2000 Nissan Quest

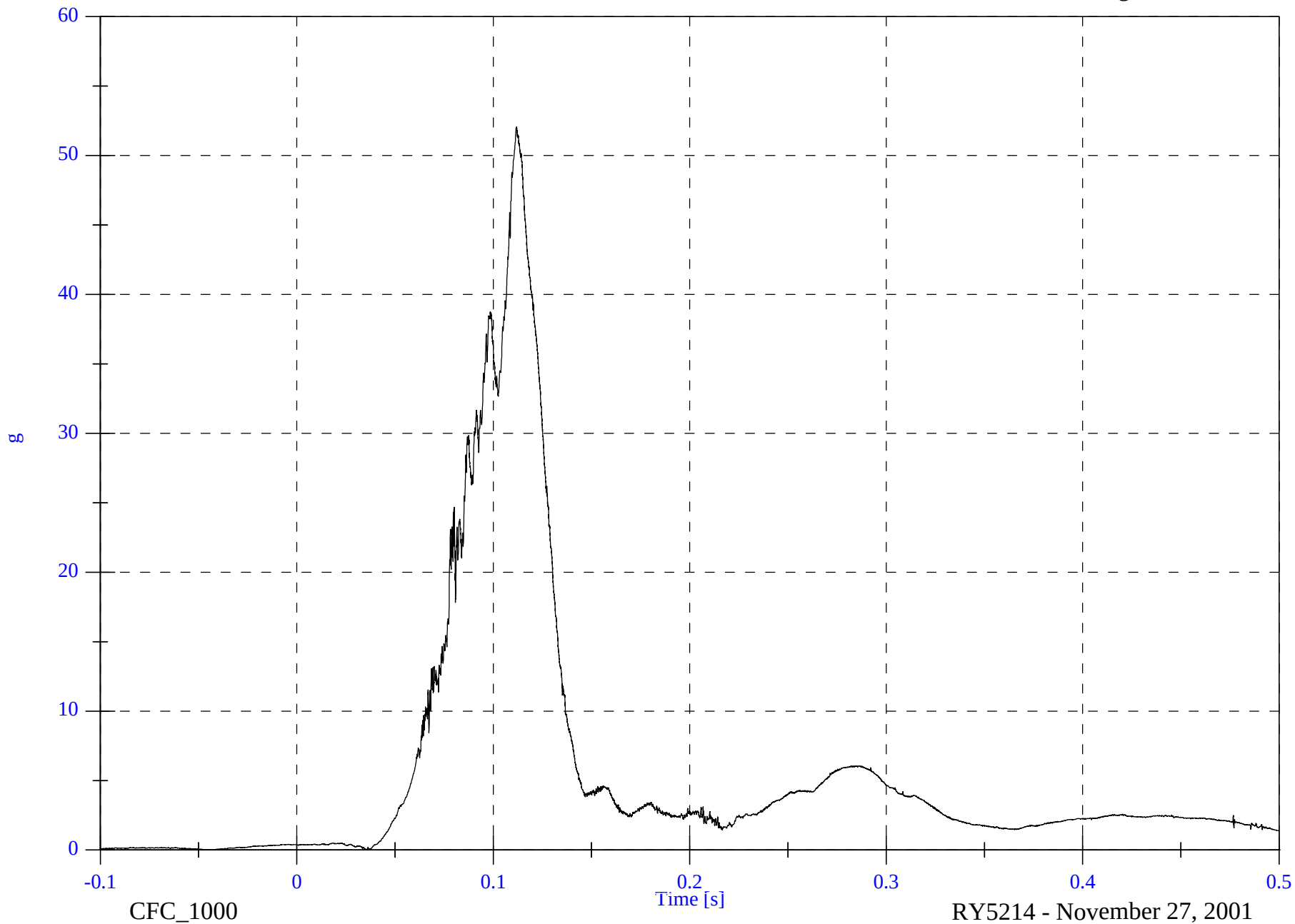
P2 Head CG Red Resultant

Max: 52.1 [g] at 0.112 [s]

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

B-114

8413-71

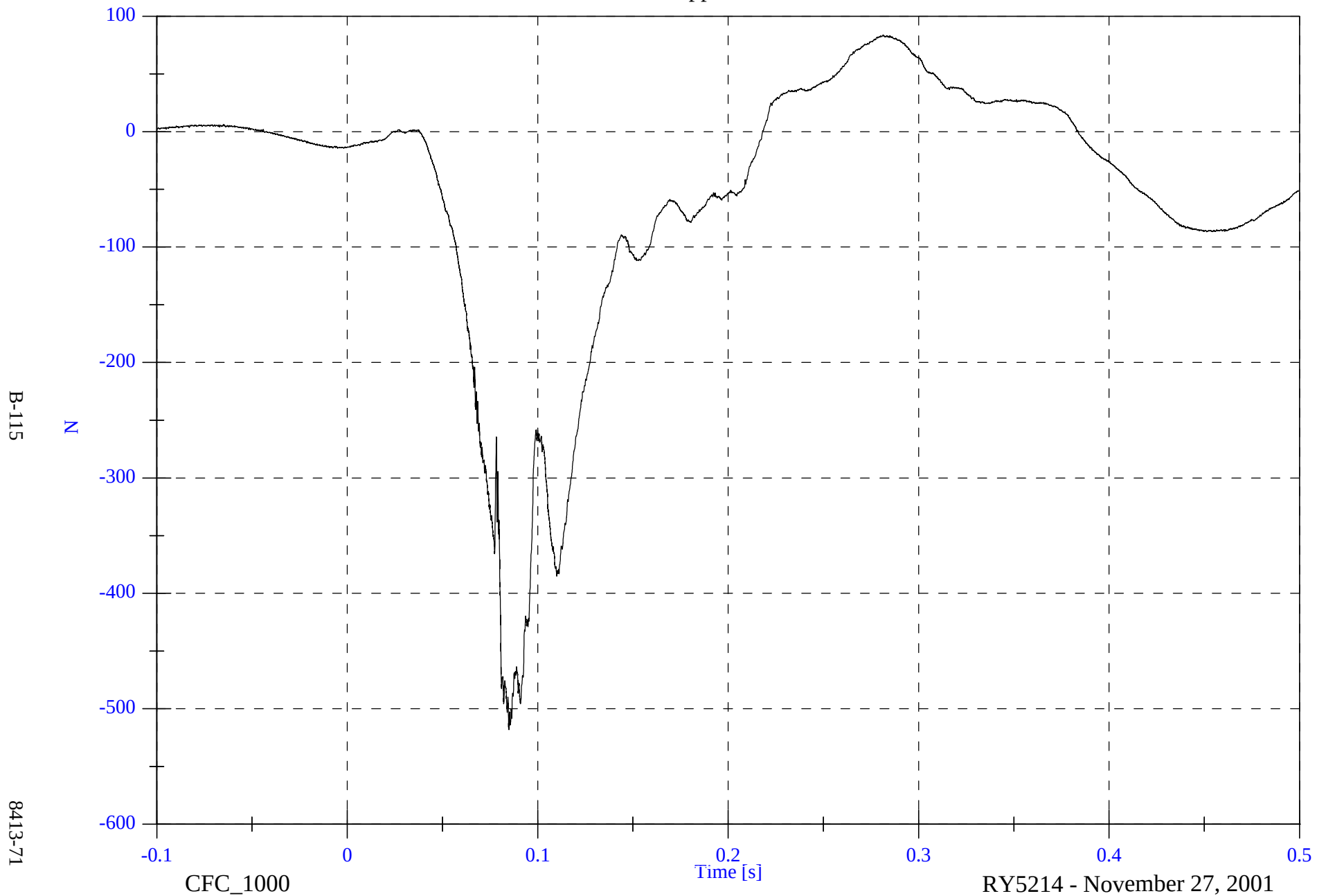


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Upper Neck Fx

Max: 83.9 [N] at 0.281 [s]

Min: -518.2 [N] at 0.085 [s]

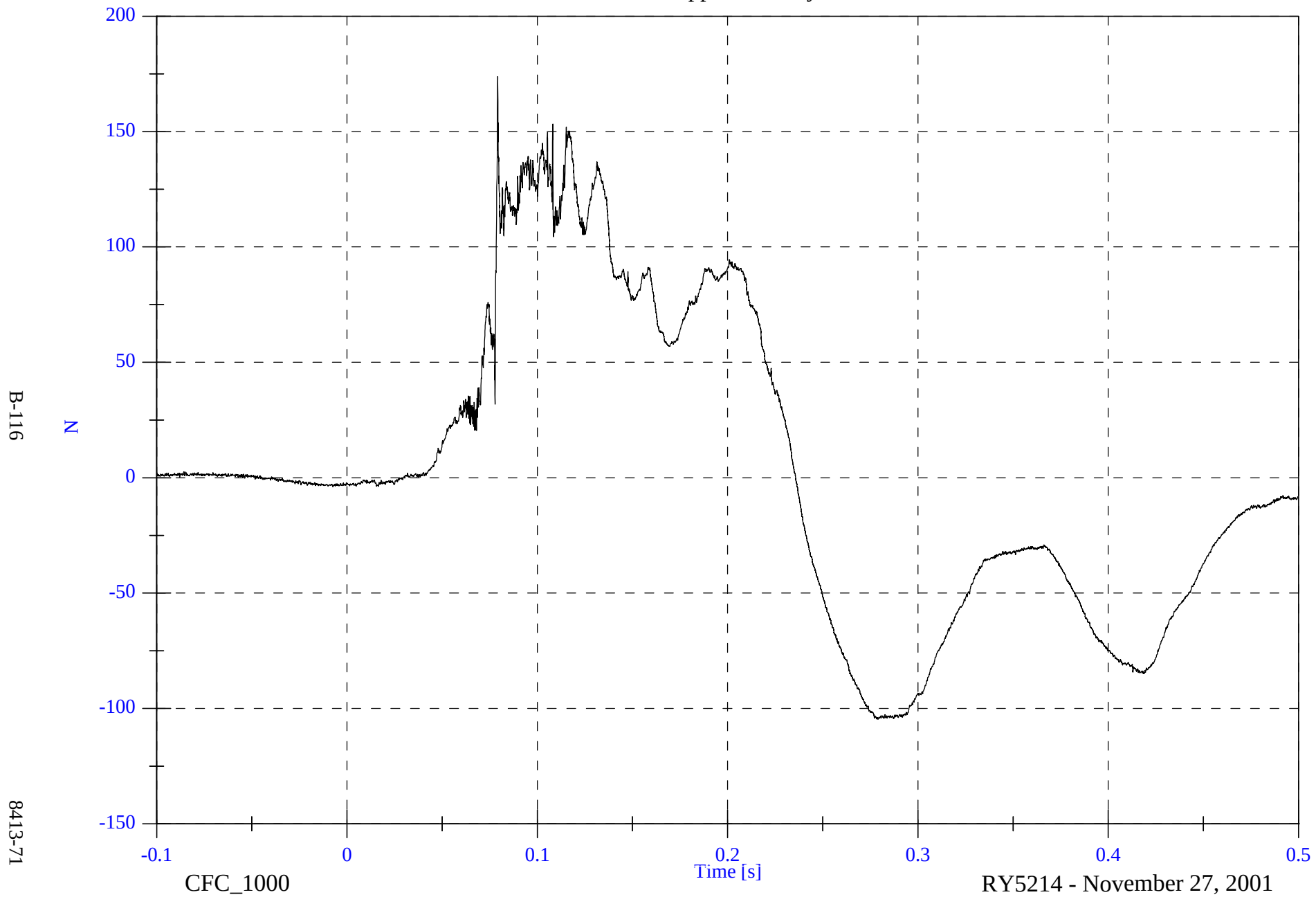


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Upper Neck Fy

Max: 173.9 [N] at 0.079 [s]

Min: -104.6 [N] at 0.279 [s]

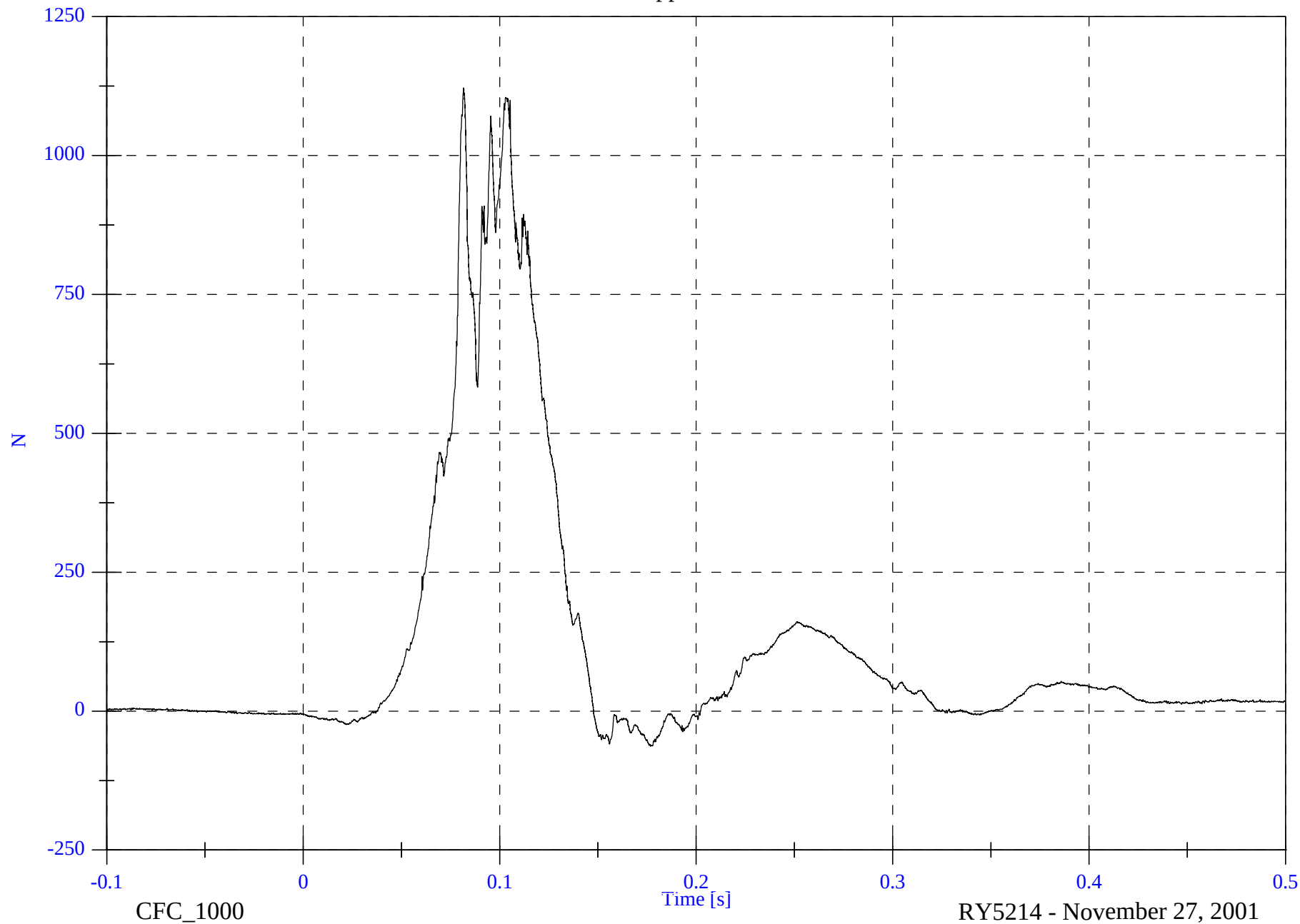


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 1121.7 [N] at 0.082 [s]

P2 Upper Neck Fz

Min: -63.2 [N] at 0.177 [s]



B-117

8413-71

CFC_1000

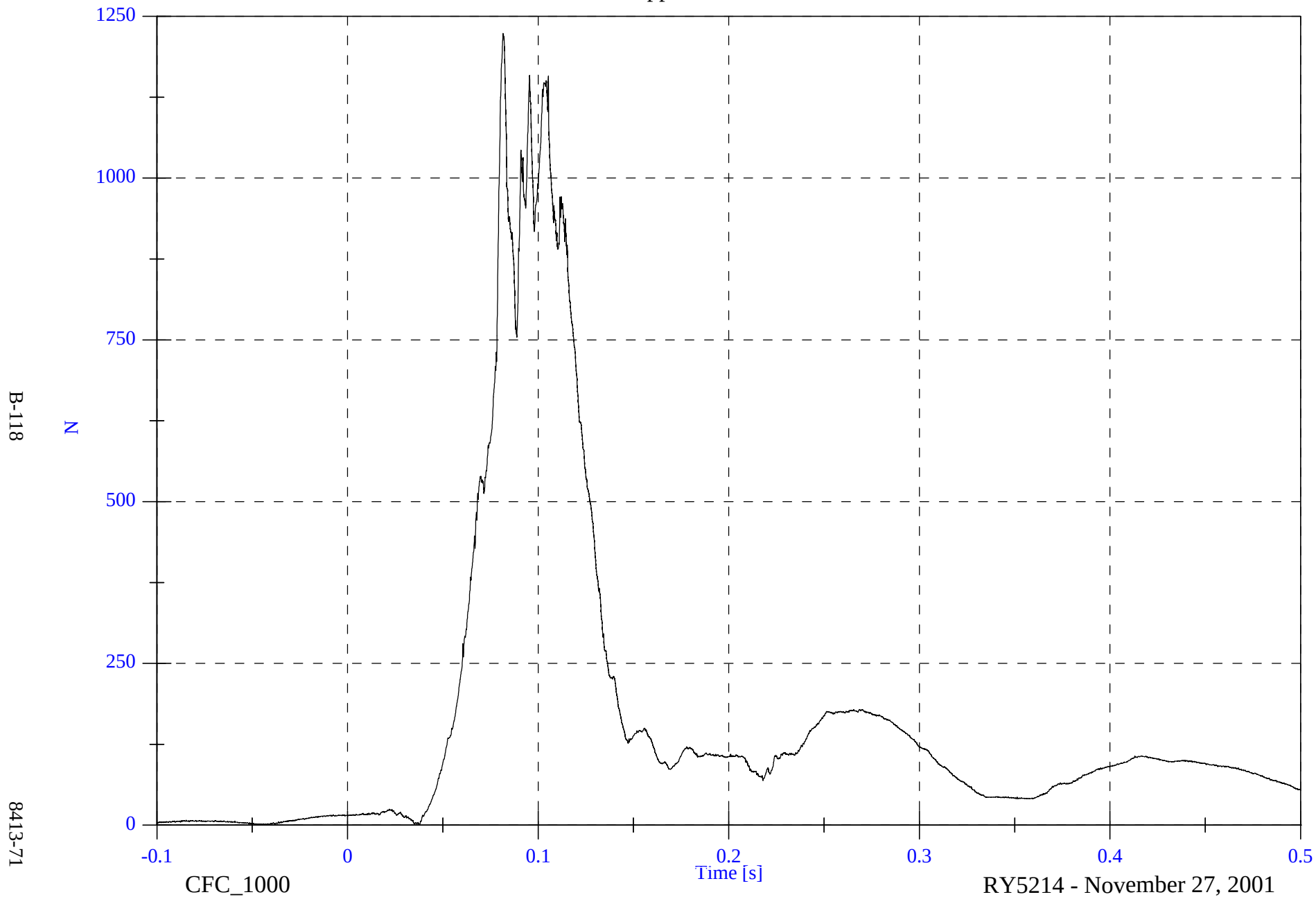
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Upper Neck F Resultant

Max: 1223.5 [N] at 0.082 [s]

Min: 0.2 [N] at -0.044 [s]

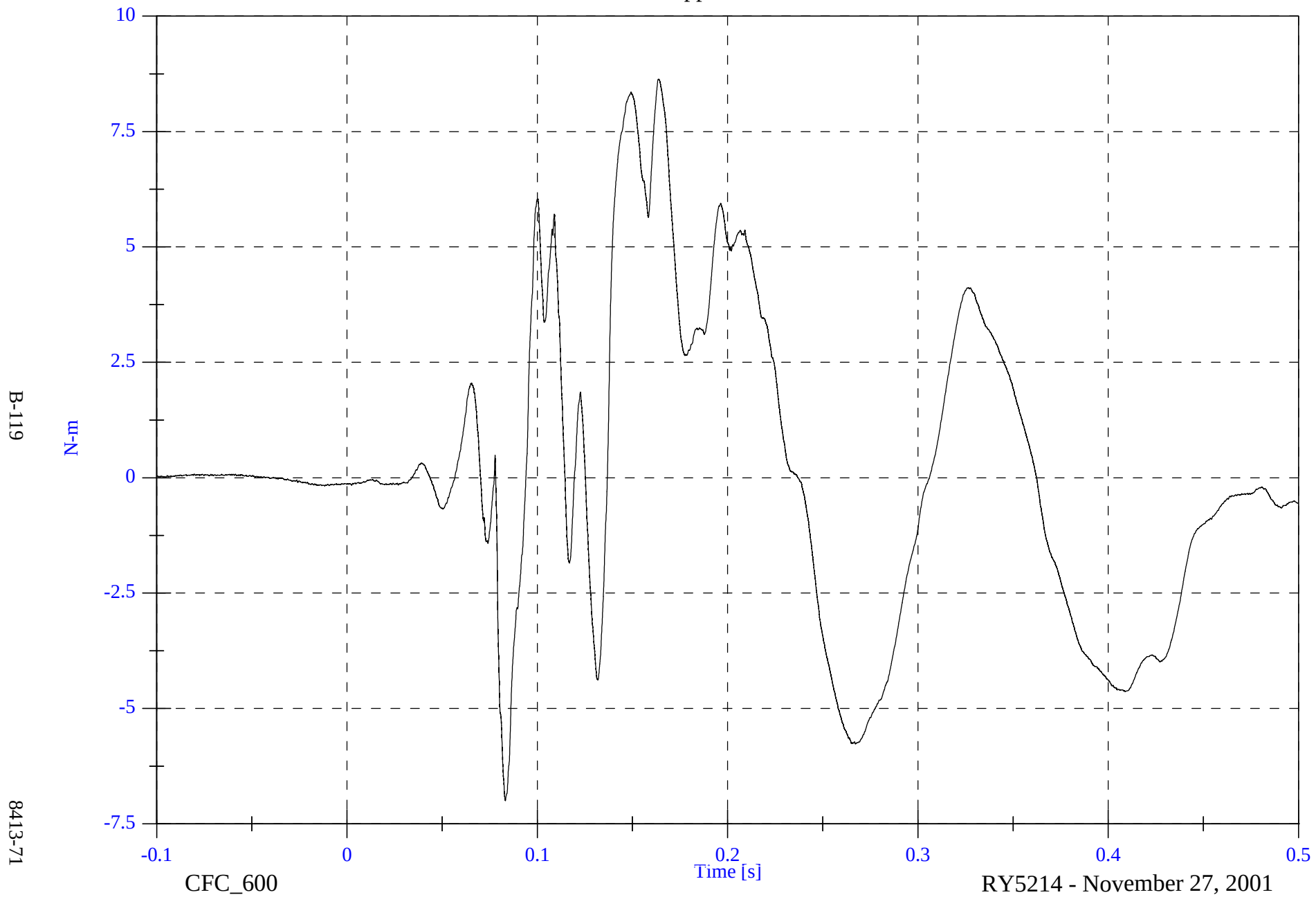


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Upper Neck Mx

Max: 8.6 [N-m] at 0.164 [s]

Min: -7.0 [N-m] at 0.083 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

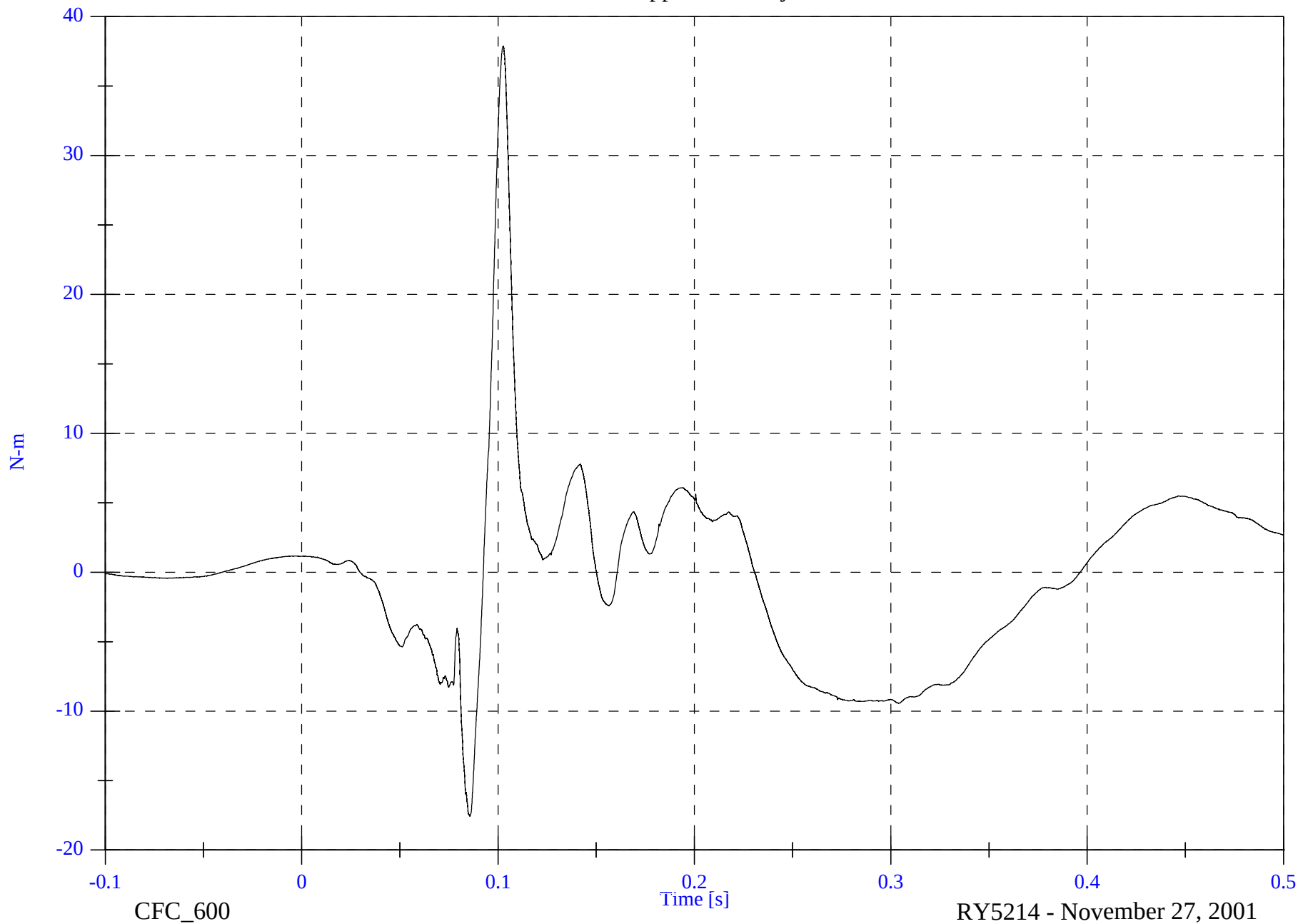
P2 Upper Neck My

Max: 37.9 [N-m] at 0.103 [s]

Min: -17.6 [N-m] at 0.086 [s]

B-120

8413-71

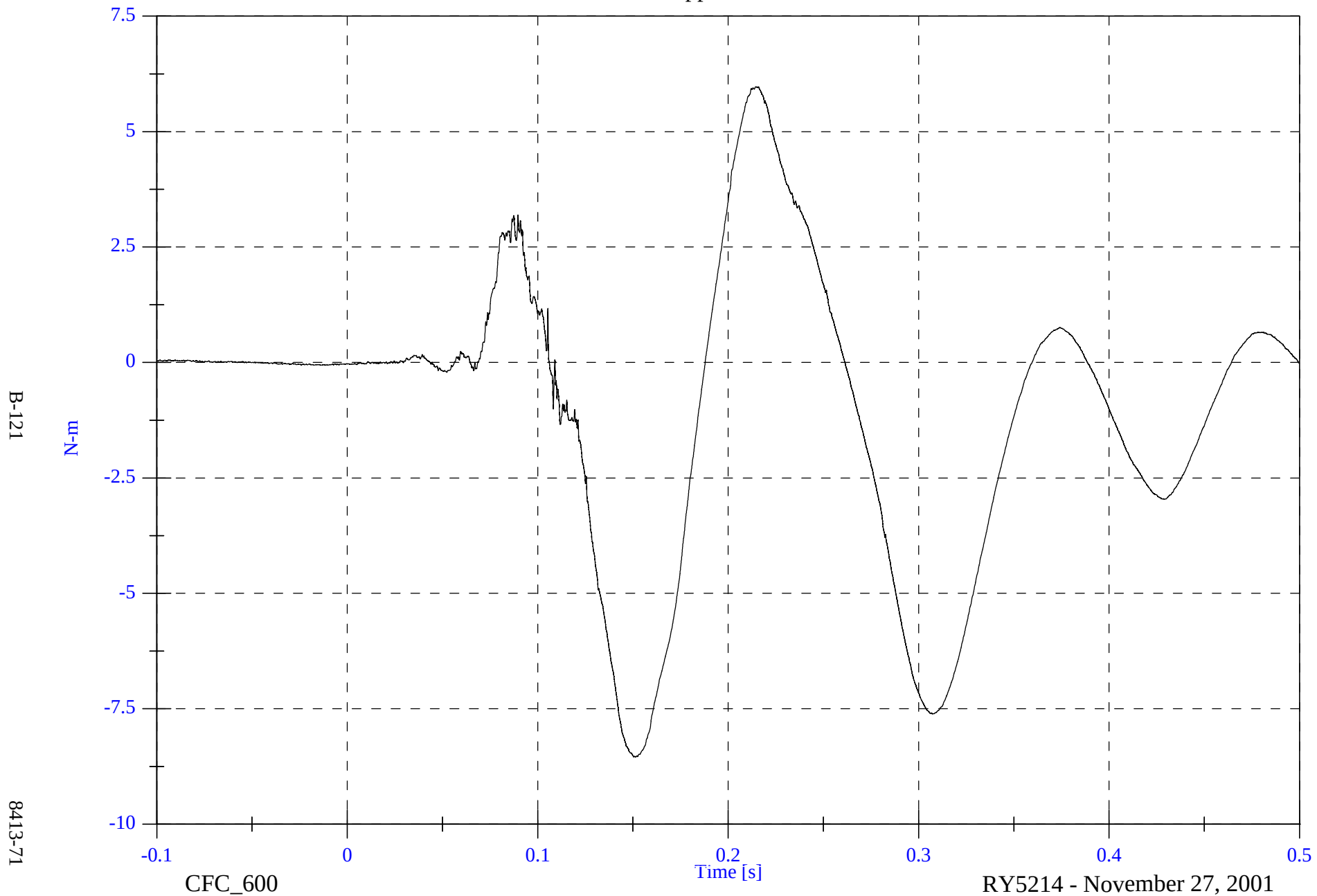


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Upper Neck Mz

Max: 6.0 [N-m] at 0.215 [s]

Min: -8.5 [N-m] at 0.151 [s]

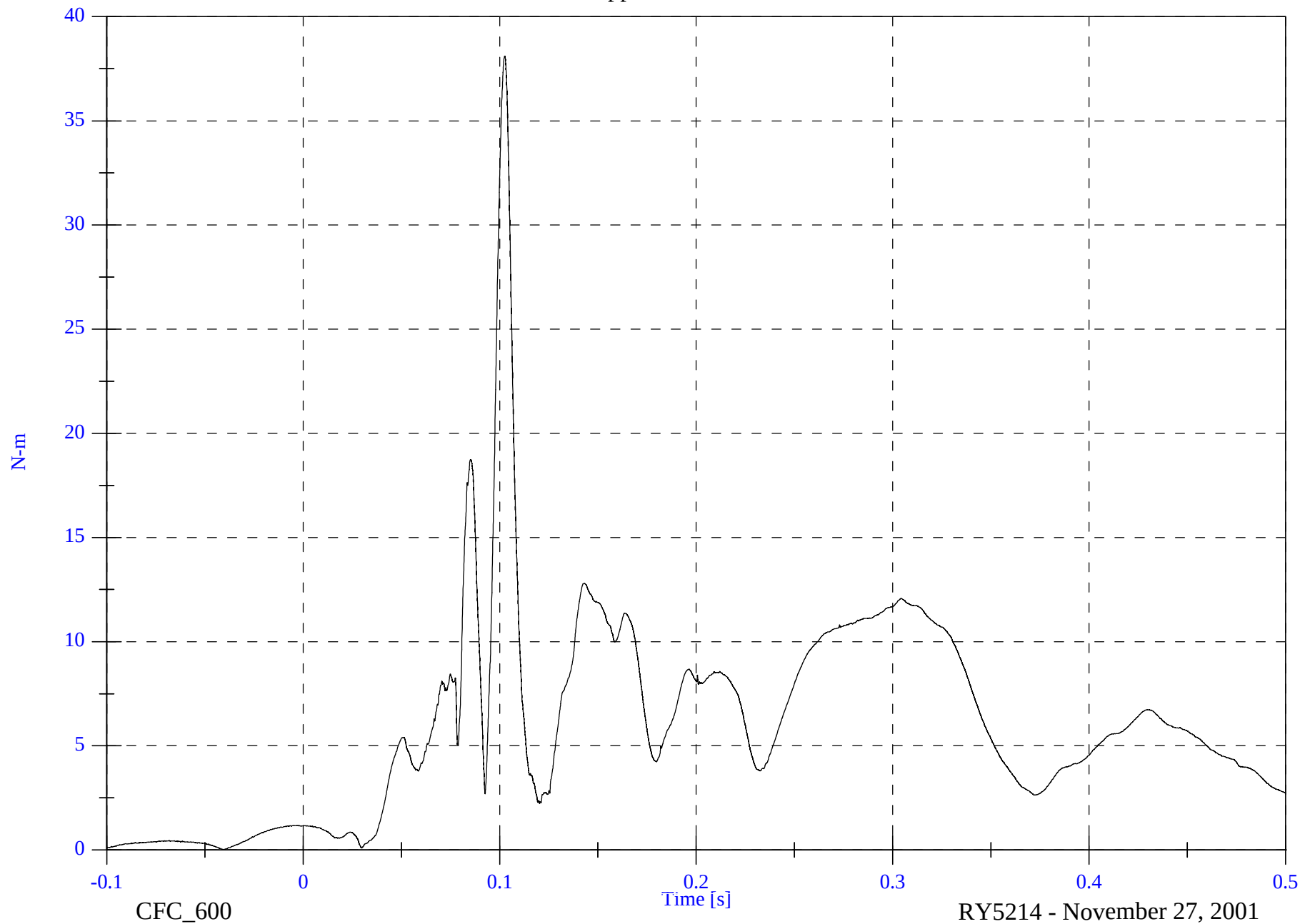


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Upper Neck M Resultant

Max: 38.1 [N-m] at 0.103 [s]

Min: 0.0 [N-m] at -0.041 [s]



B-122

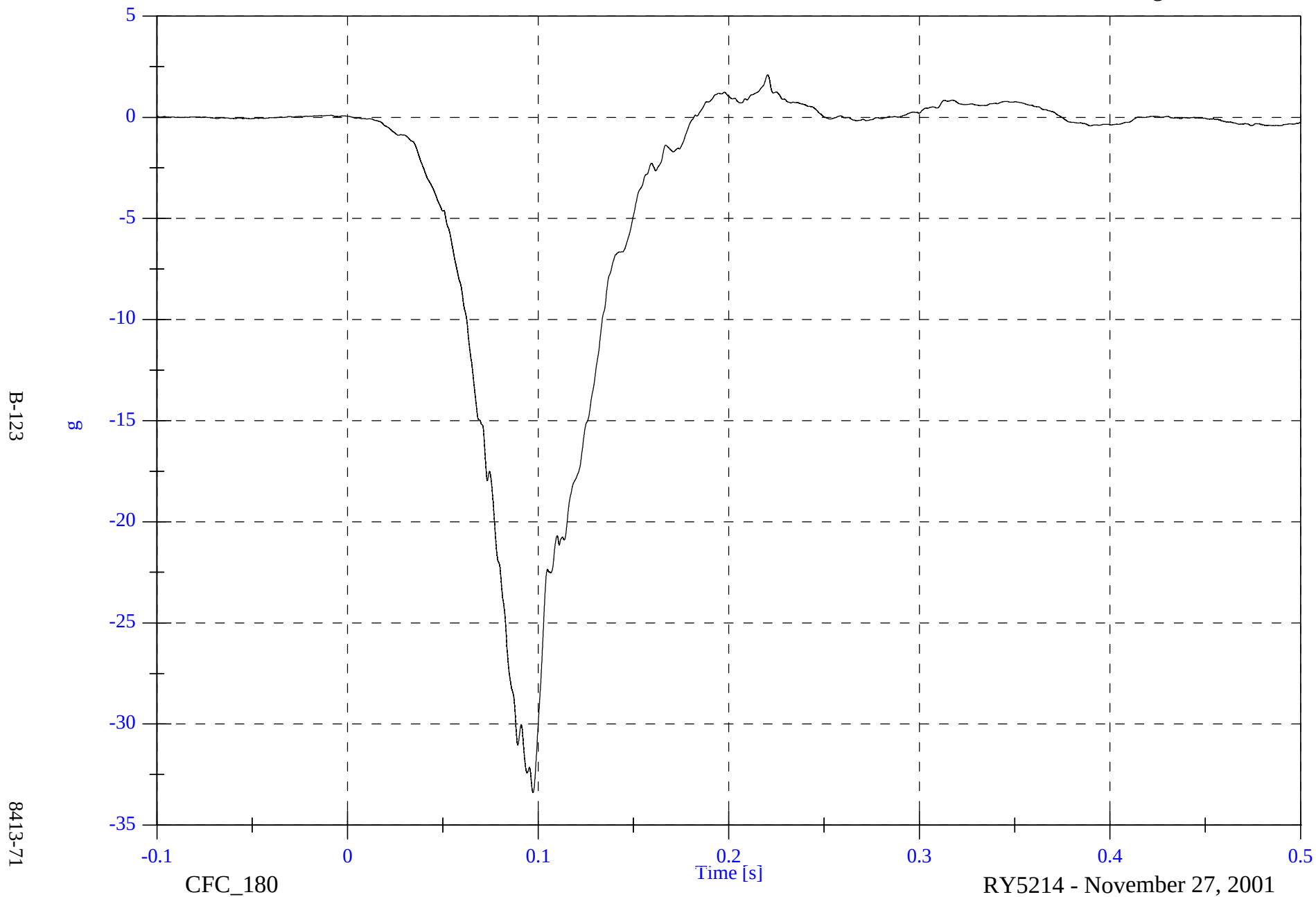
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 2.1 [g] at 0.220 [s]

Min: -33.4 [g] at 0.097 [s]

P2 Chest x

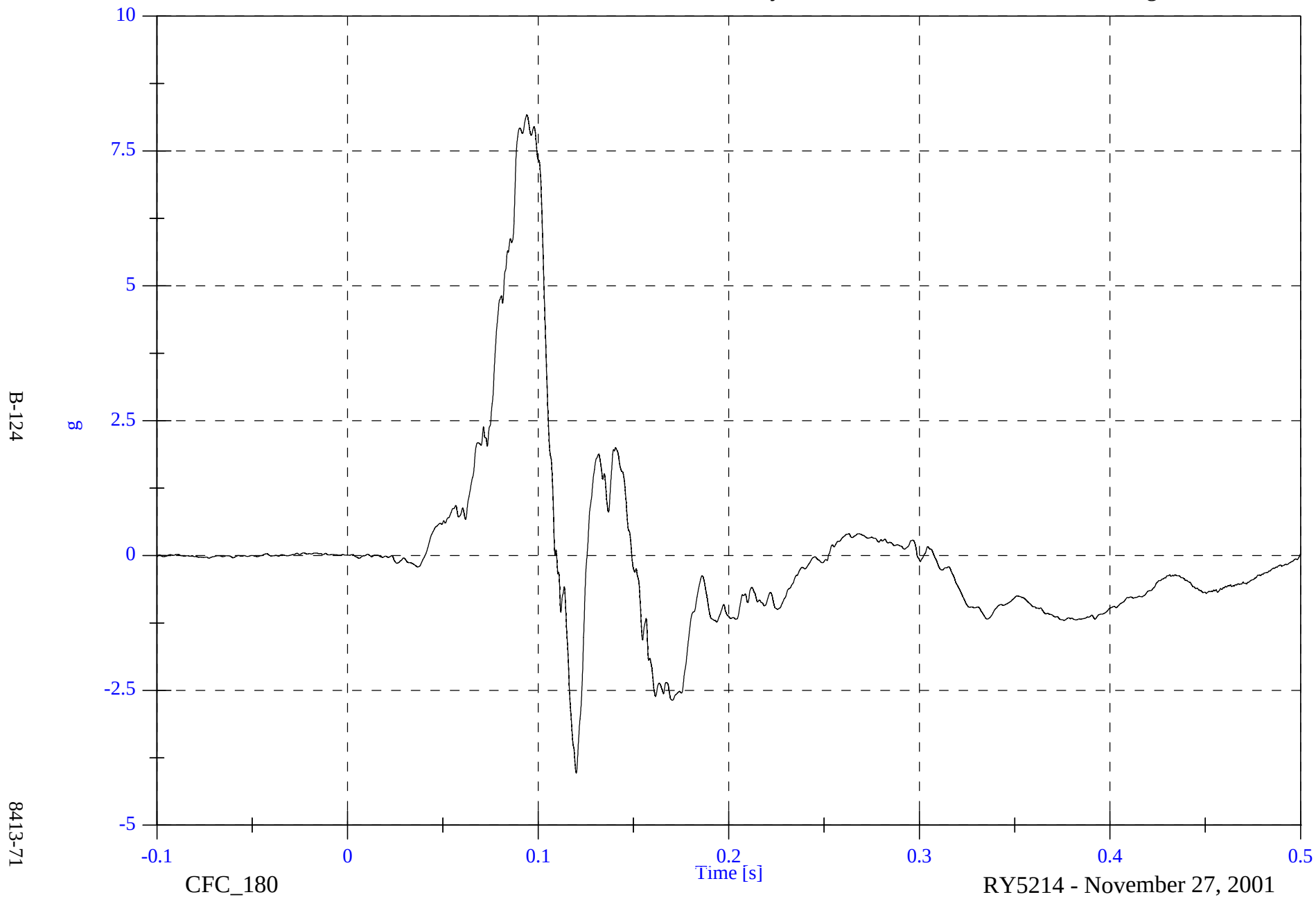


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 8.2 [g] at 0.094 [s]

Min: -4.0 [g] at 0.120 [s]

P2 Chest y

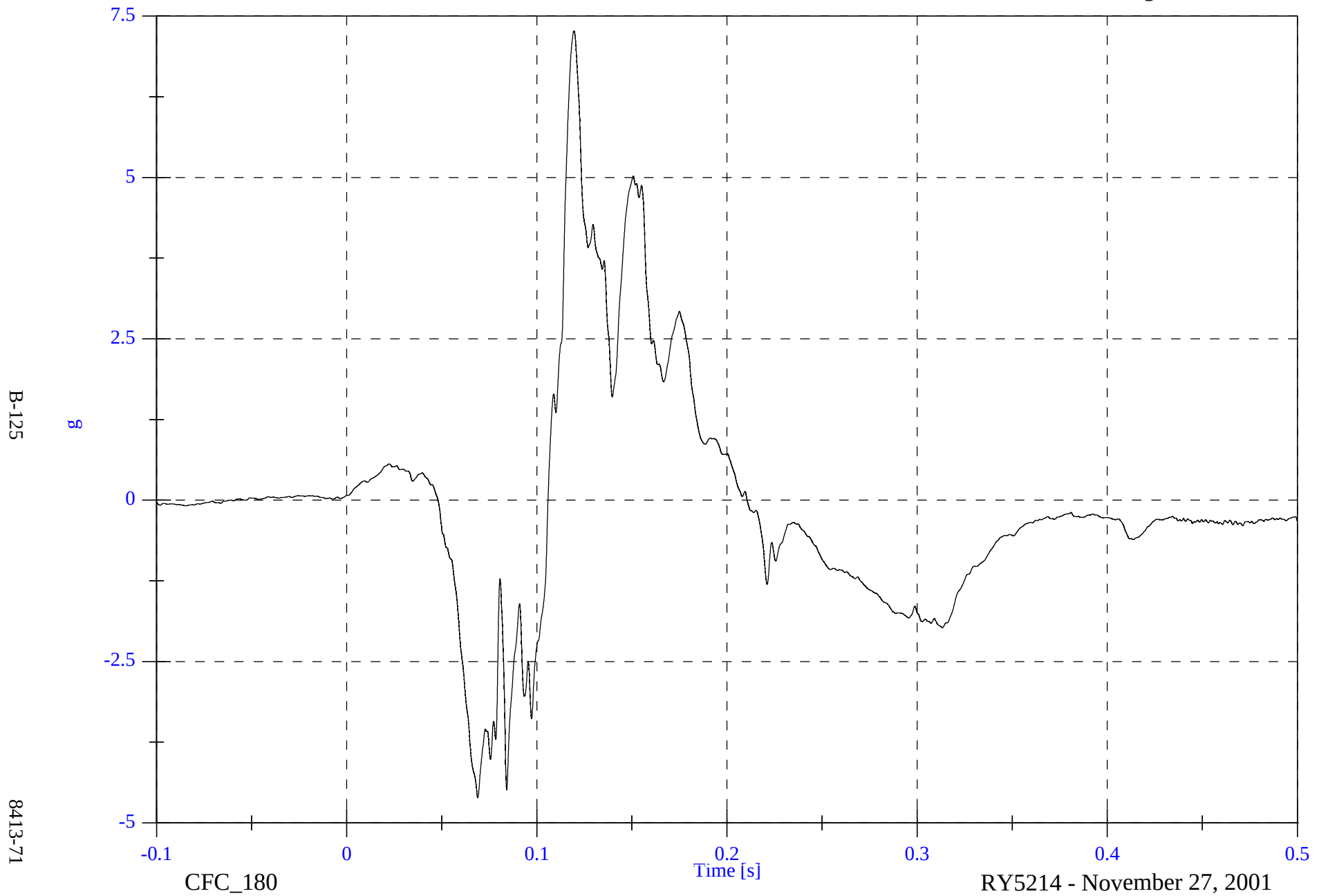


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 7.3 [g] at 0.120 [s]

Min: -4.6 [g] at 0.069 [s]

P2 Chest z

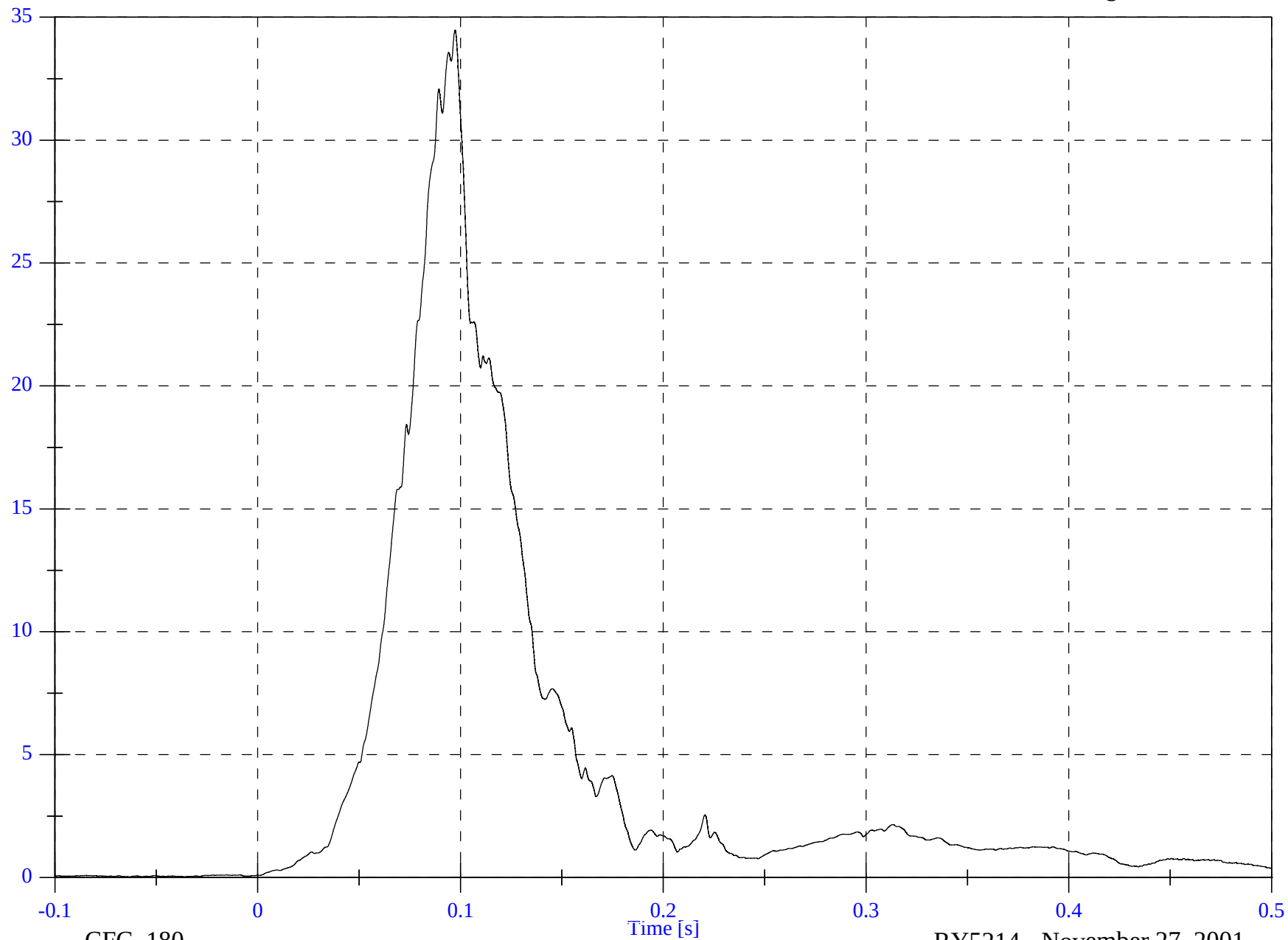


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Chest Resultant

Max: 34.5 [g] at 0.097 [s]

Min: 0.0 [g] at -0.063 [s]



B-126

8413-71

CFC_180

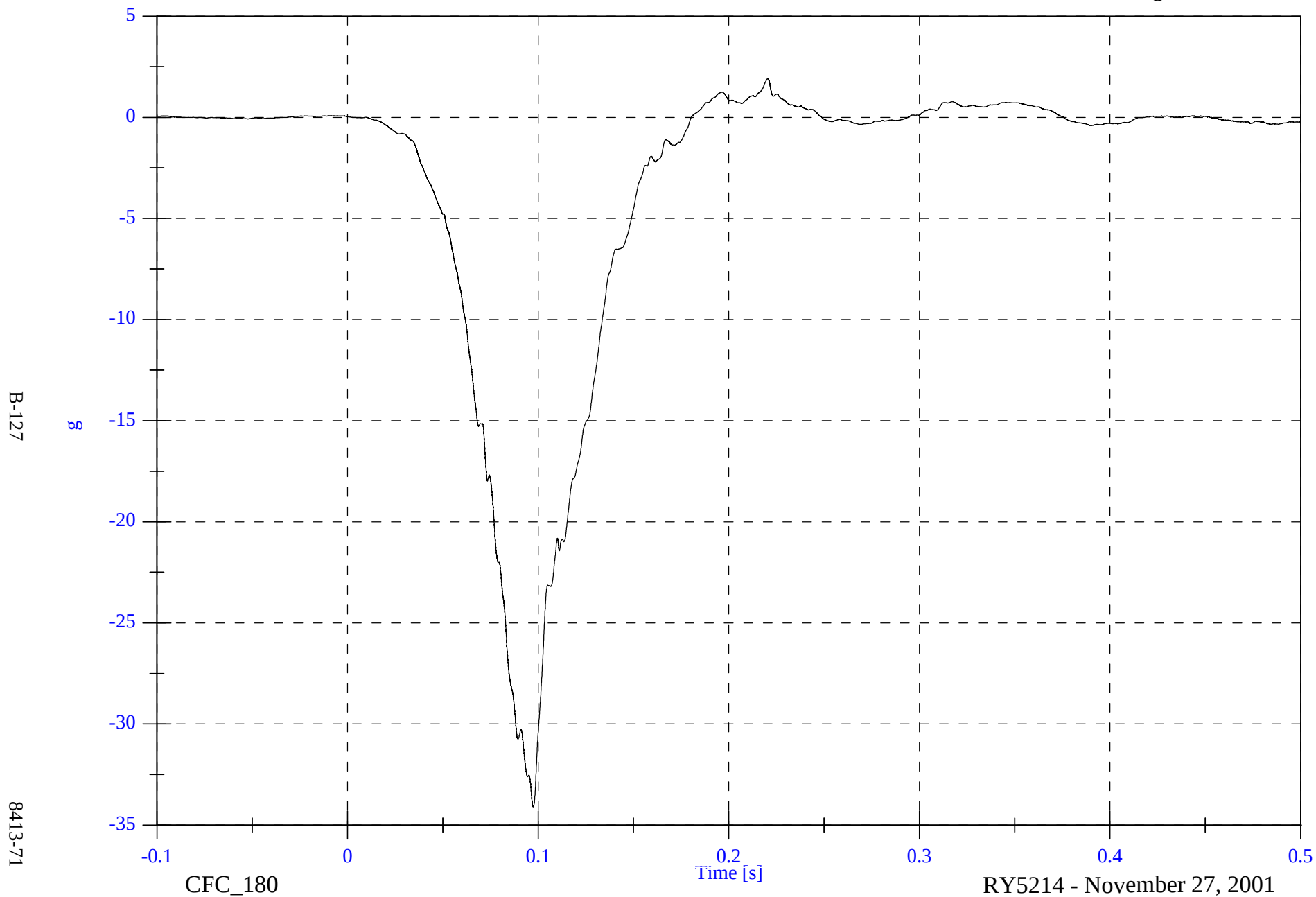
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Chest Red x

Max: 1.9 [g] at 0.220 [s]

Min: -34.1 [g] at 0.097 [s]

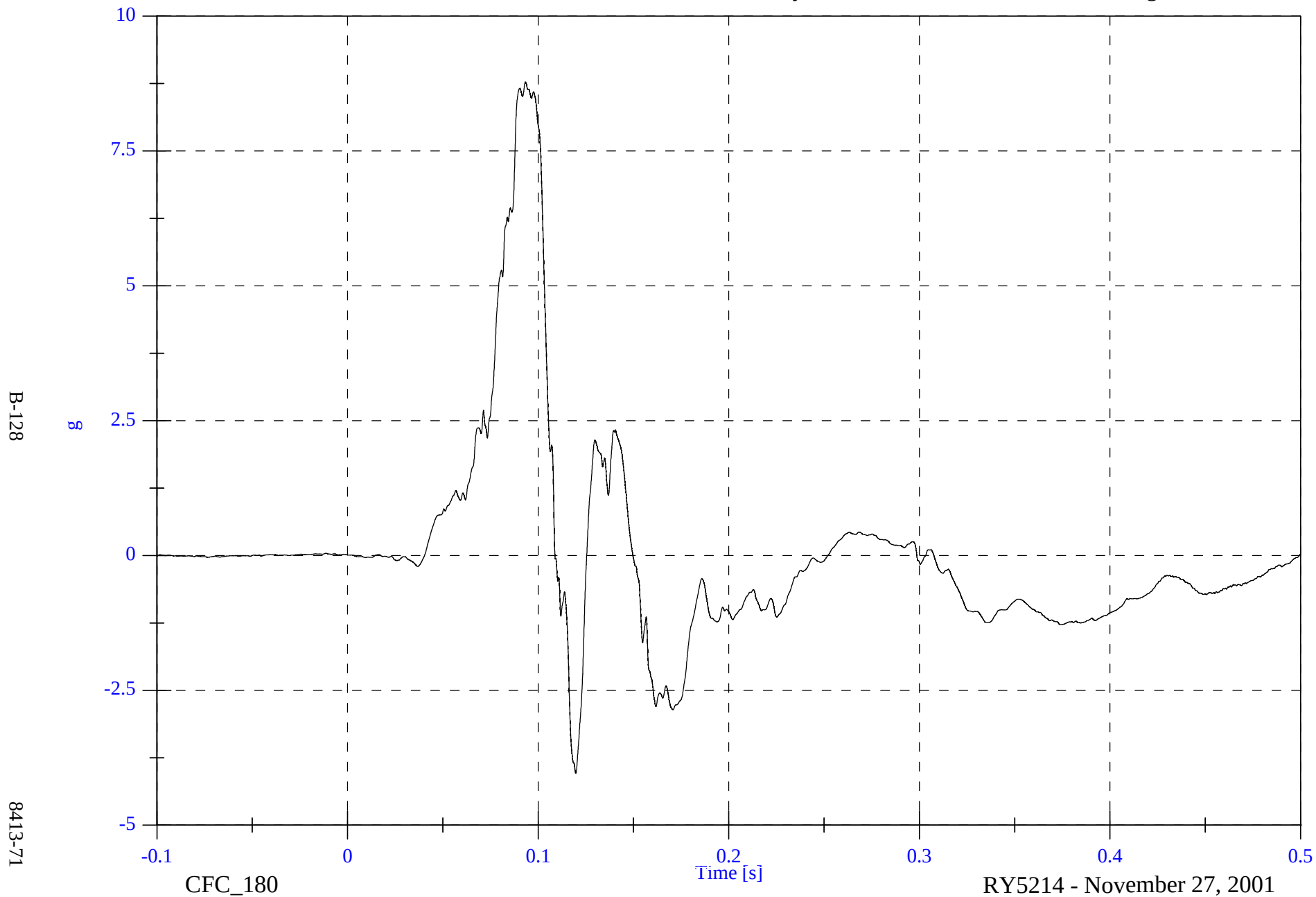


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Chest Red y

Max: 8.8 [g] at 0.093 [s]

Min: -4.0 [g] at 0.120 [s]

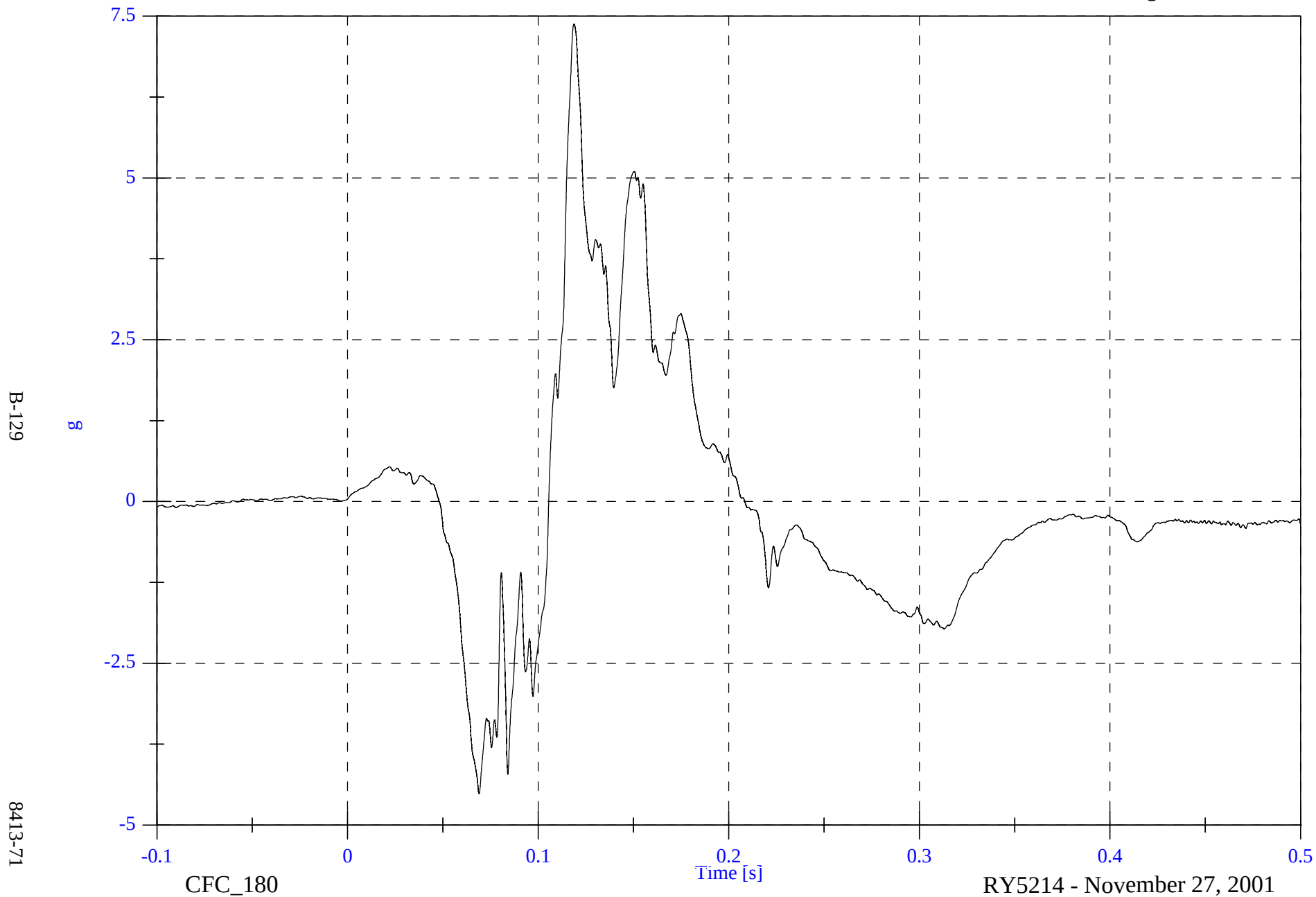


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Chest Red z

Max: 7.4 [g] at 0.119 [s]

Min: -4.5 [g] at 0.069 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

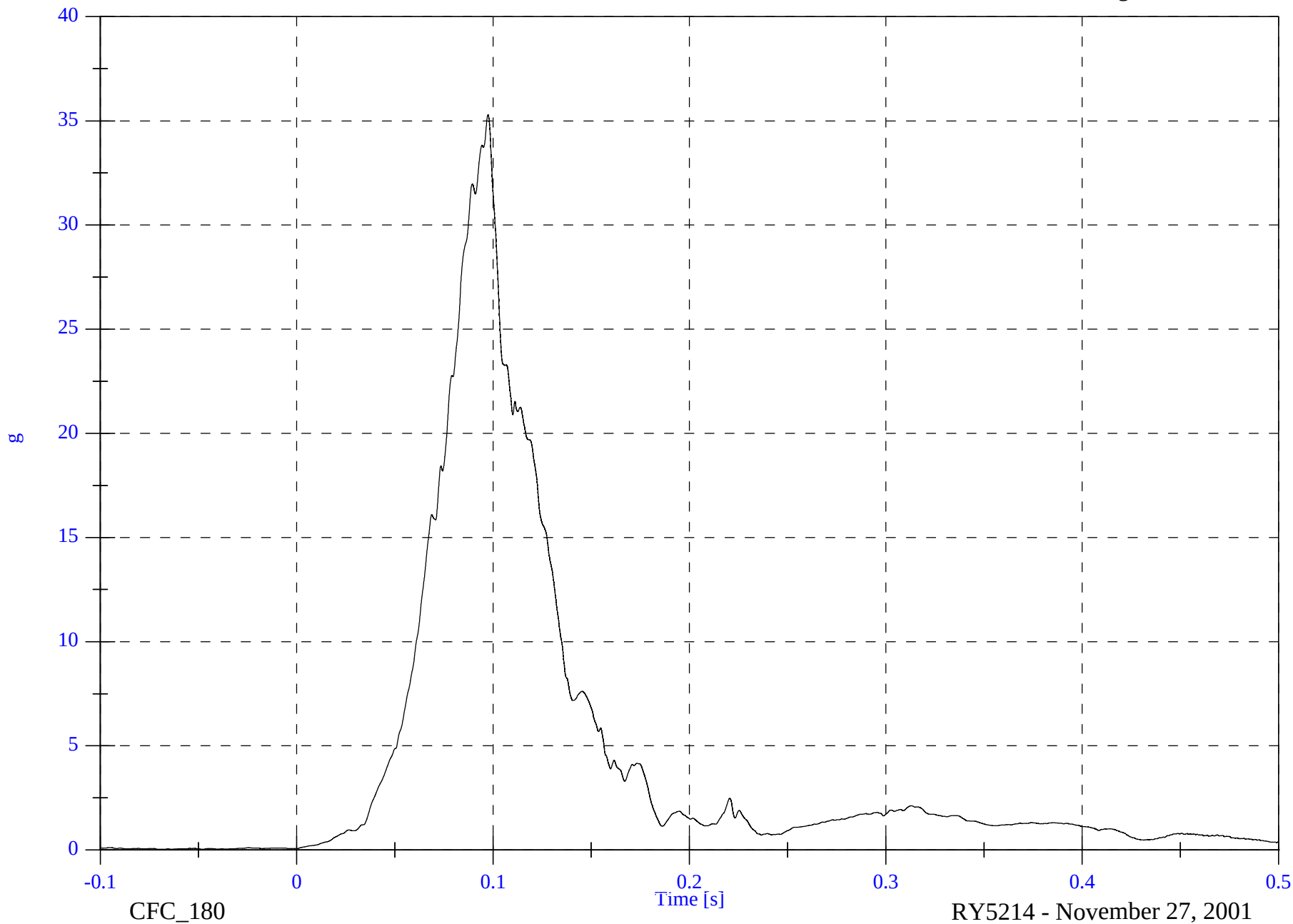
P2 Chest Red Resultant

Max: 35.3 [g] at 0.097 [s]

Min: 0.0 [g] at -0.048 [s]

B-130

8413-71

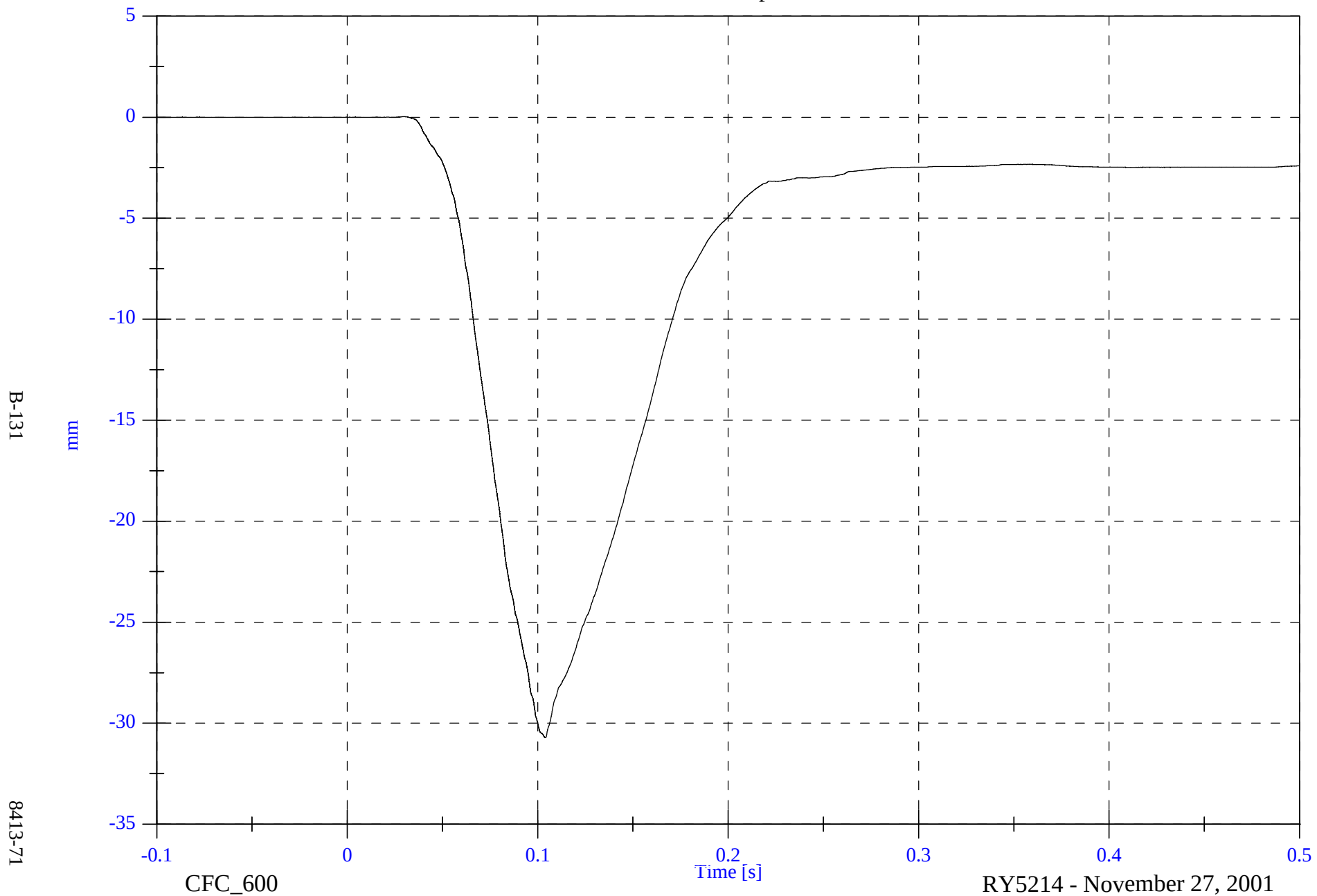


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Chest Compression

Max: 0.0 [mm] at 0.030 [s]

Min: -30.7 [mm] at 0.104 [s]

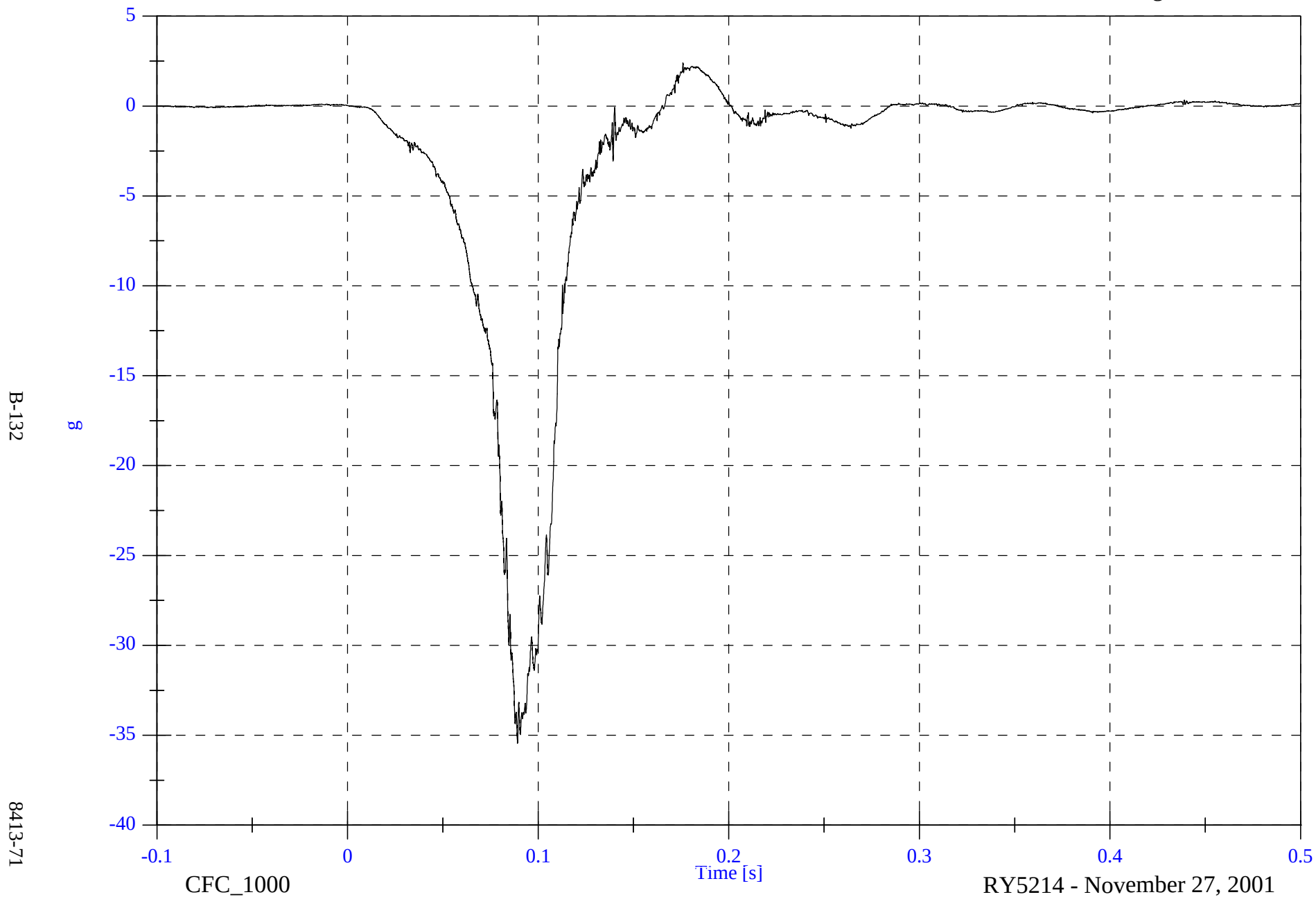


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 2.4 [g] at 0.176 [s]

Min: -35.4 [g] at 0.089 [s]

P2 Pelvic x

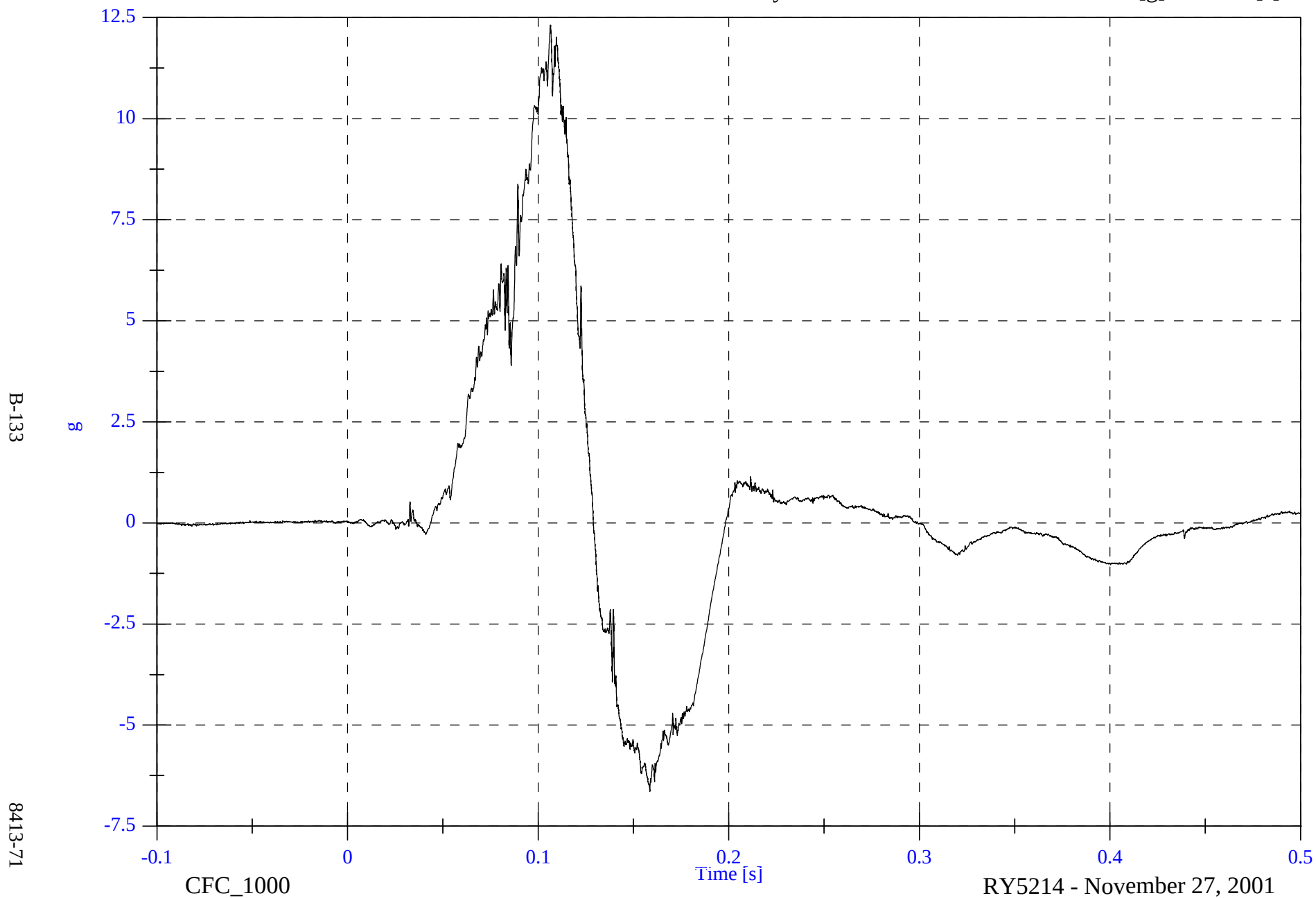


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 12.3 [g] at 0.106 [s]

Min: -6.6 [g] at 0.159 [s]

P2 Pelvic y

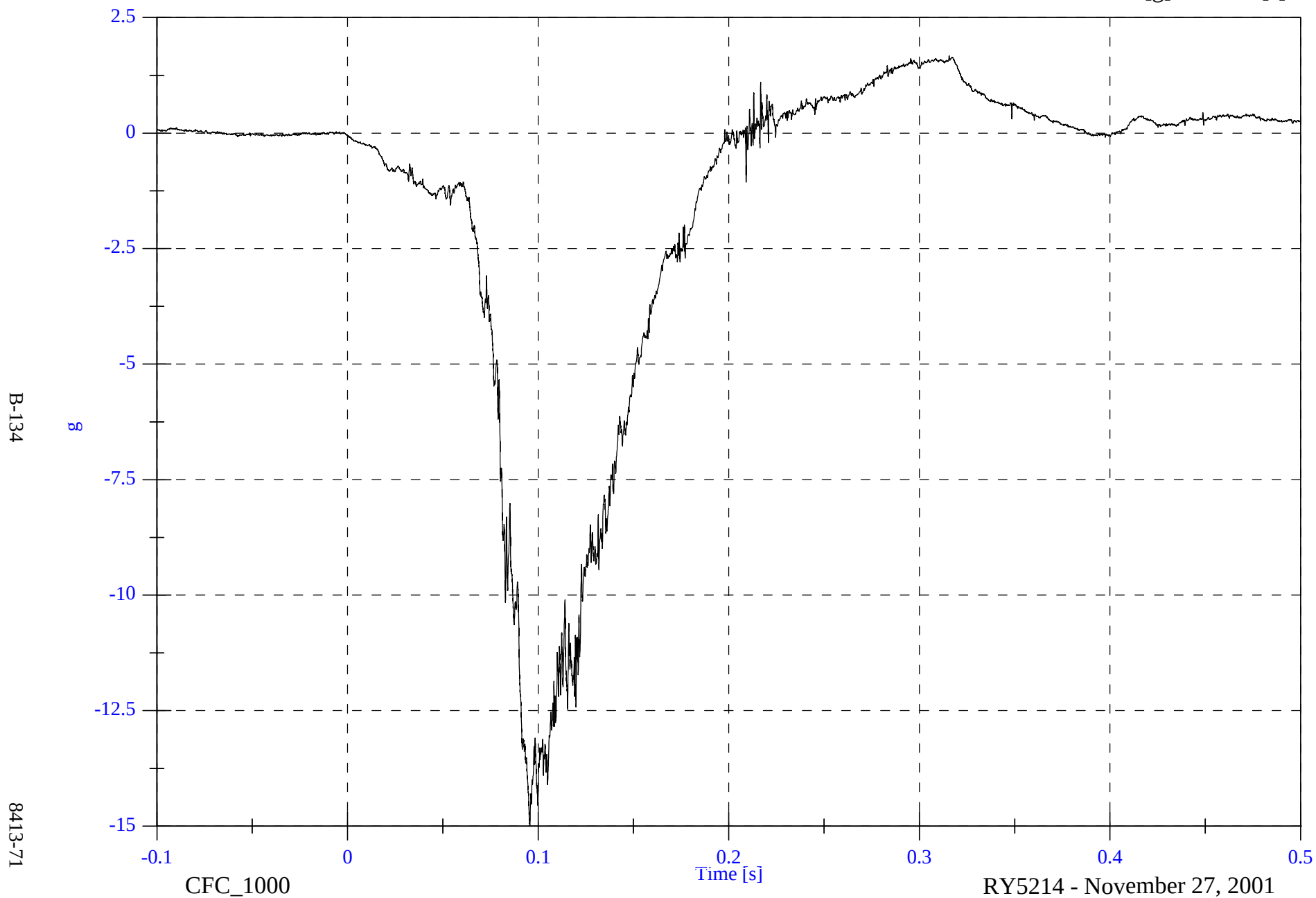


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 1.7 [g] at 0.316 [s]

Min: -15.0 [g] at 0.096 [s]

P2 Pelvic z

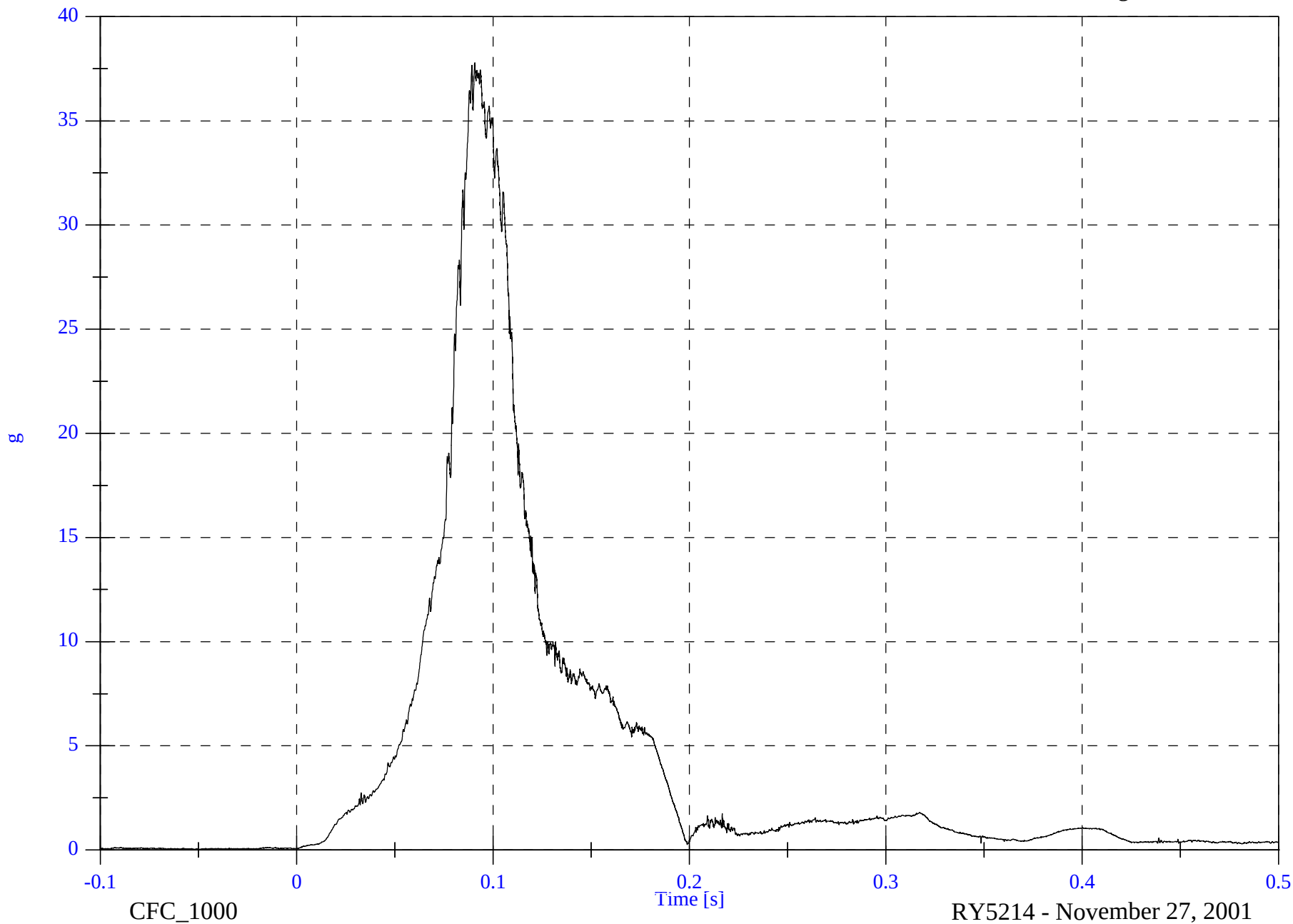


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Pelvic Resultant

Max: 37.8 [g] at 0.091 [s]

Min: 0.0 [g] at -0.059 [s]



B-135

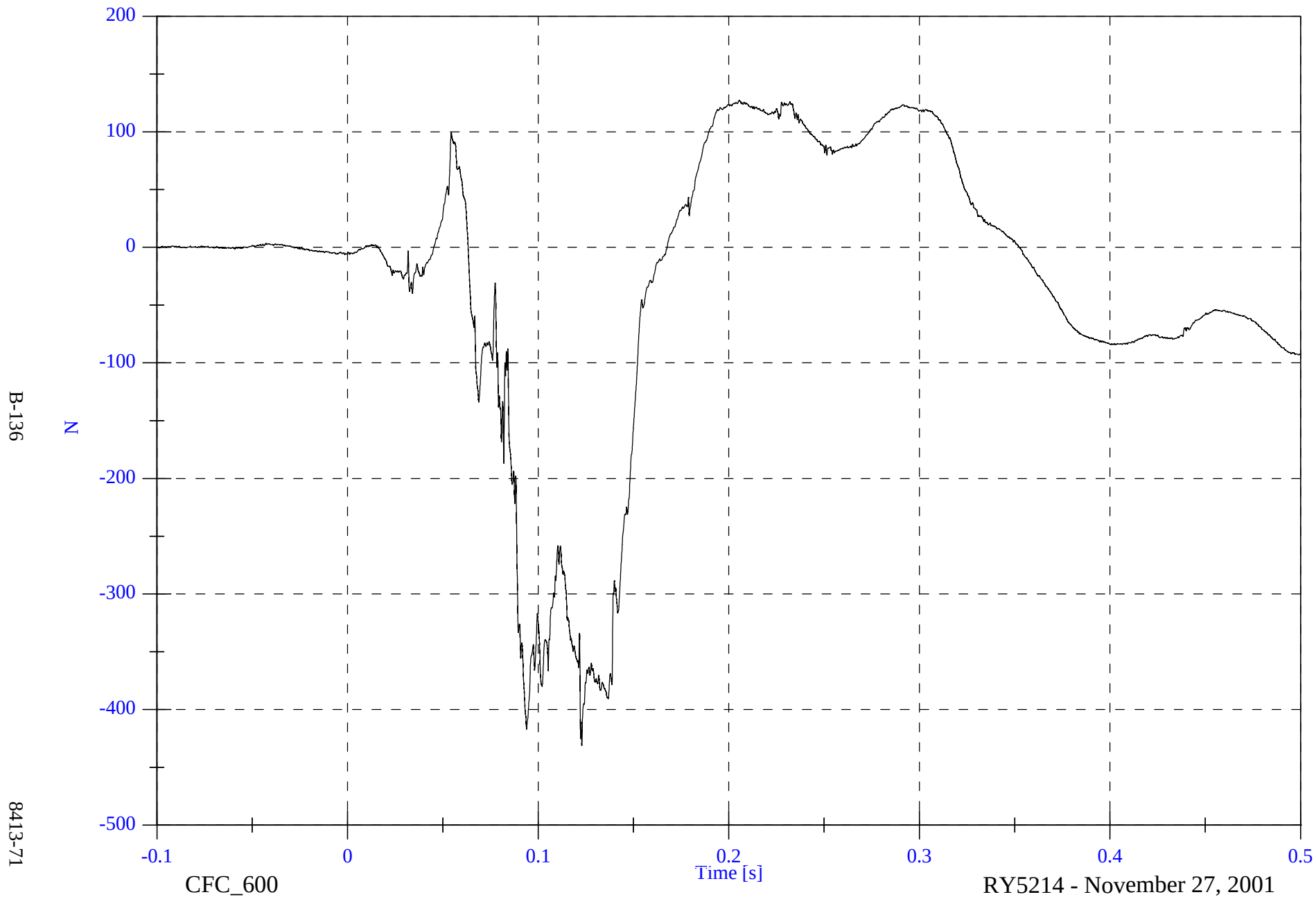
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur Fx

Max: 127.2 [N] at 0.205 [s]

Min: -431.2 [N] at 0.123 [s]

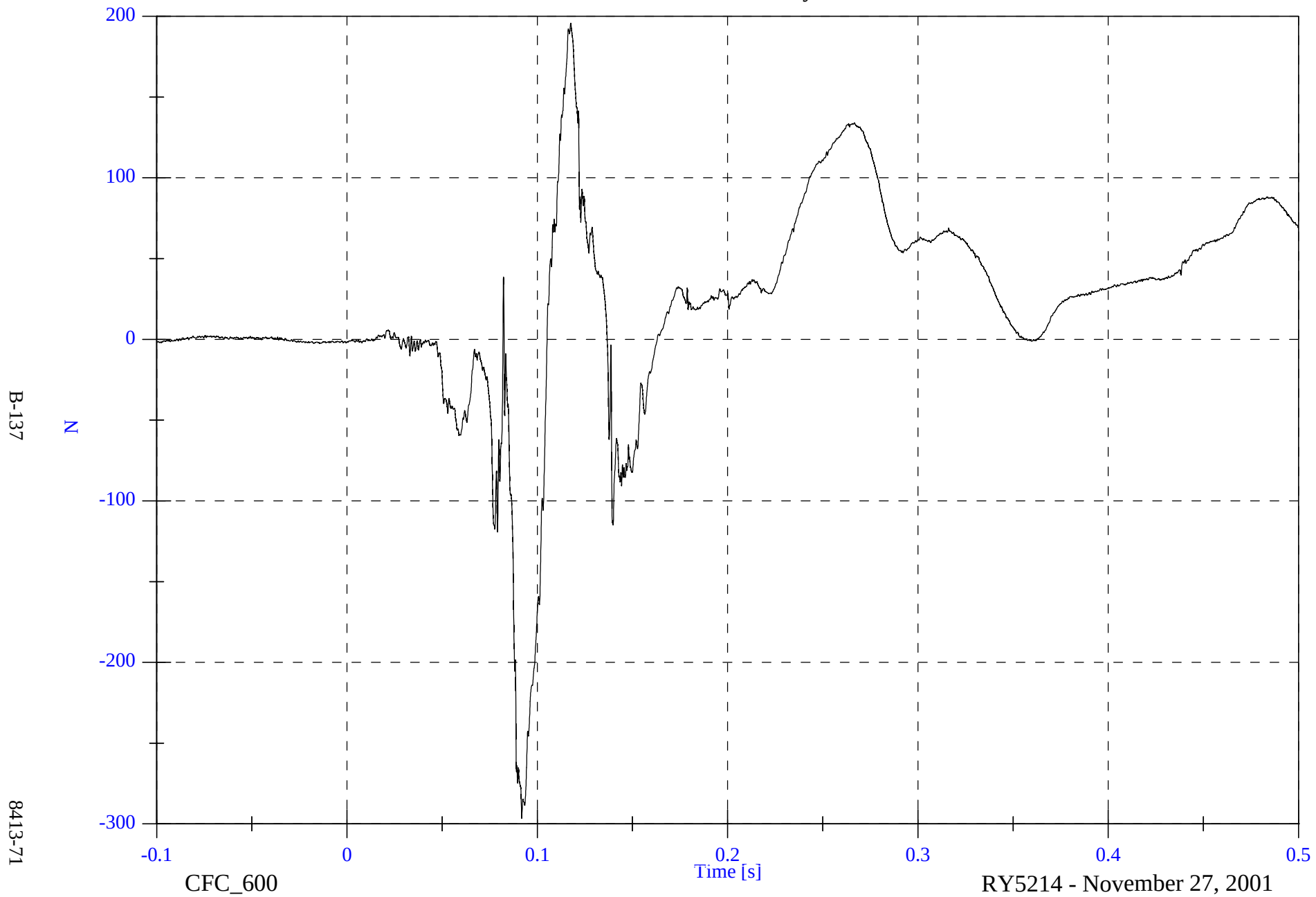


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 195.5 [N] at 0.118 [s]

P2 Left Femur Fy

Min: -296.5 [N] at 0.092 [s]

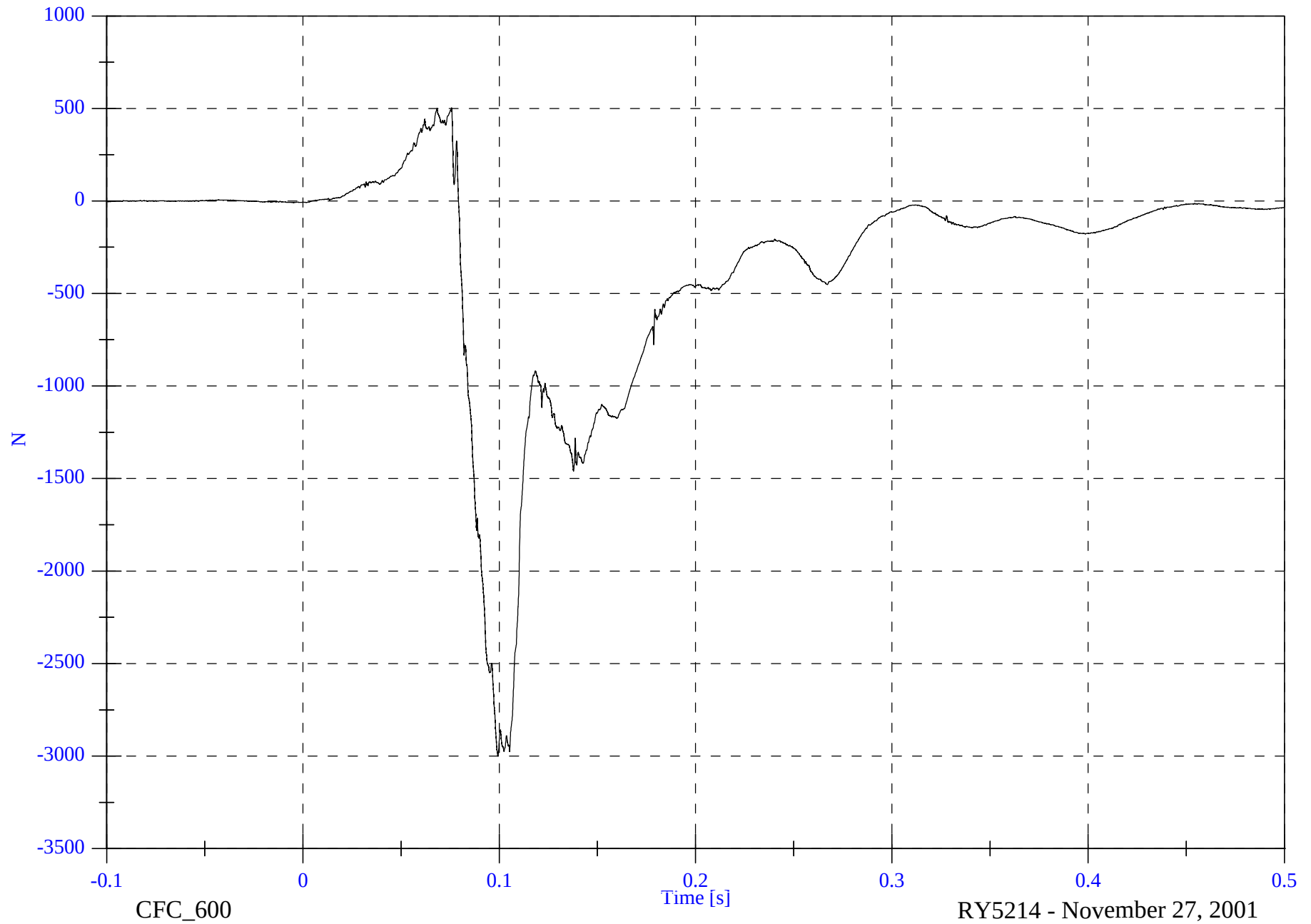


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur Fz

Max: 502.7 [N] at 0.076 [s]

Min: -3001.2 [N] at 0.099 [s]



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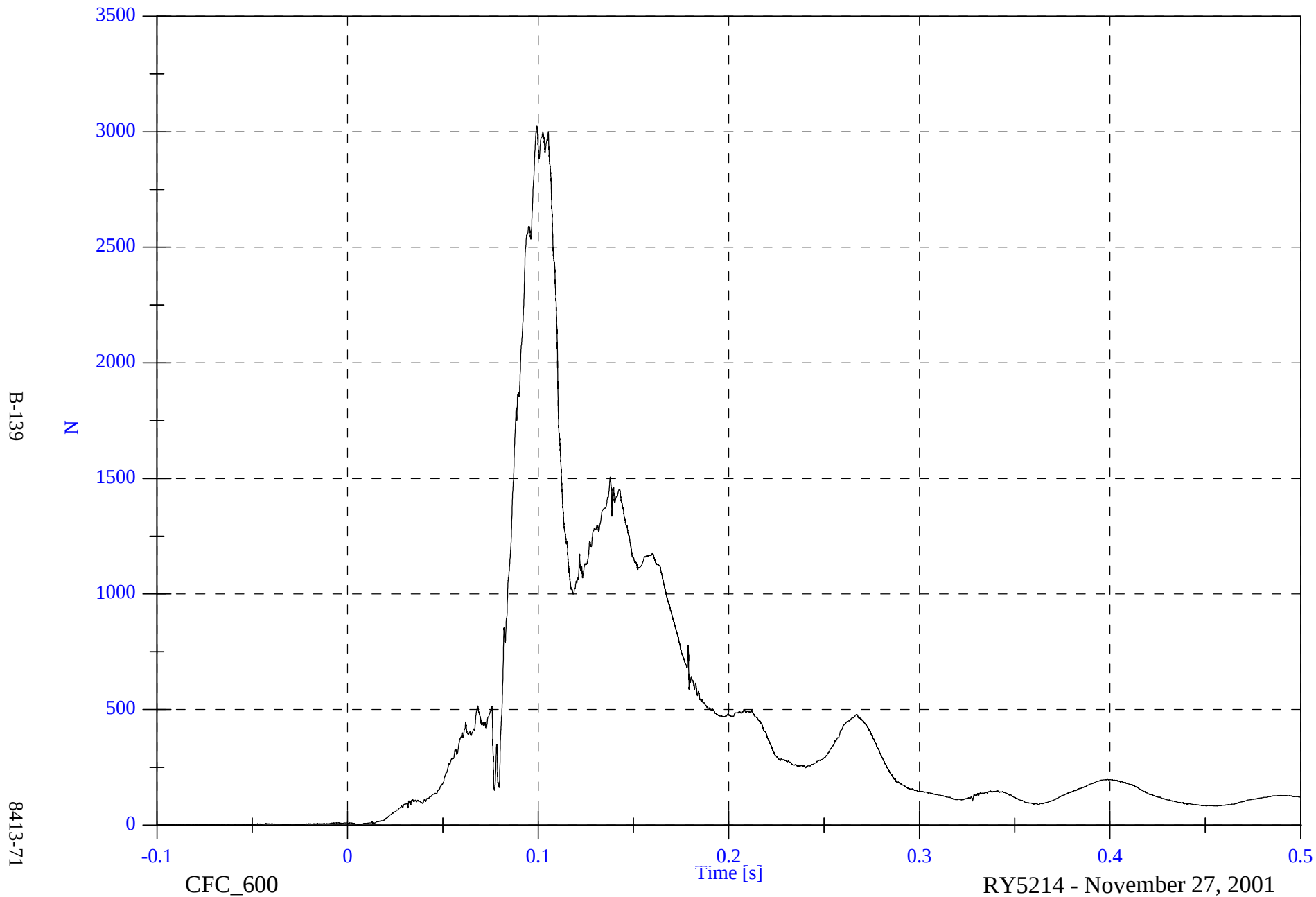
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur F Resultant

Max: 3024.1 [N] at 0.099 [s]

Min: 0.1 [N] at -0.088 [s]

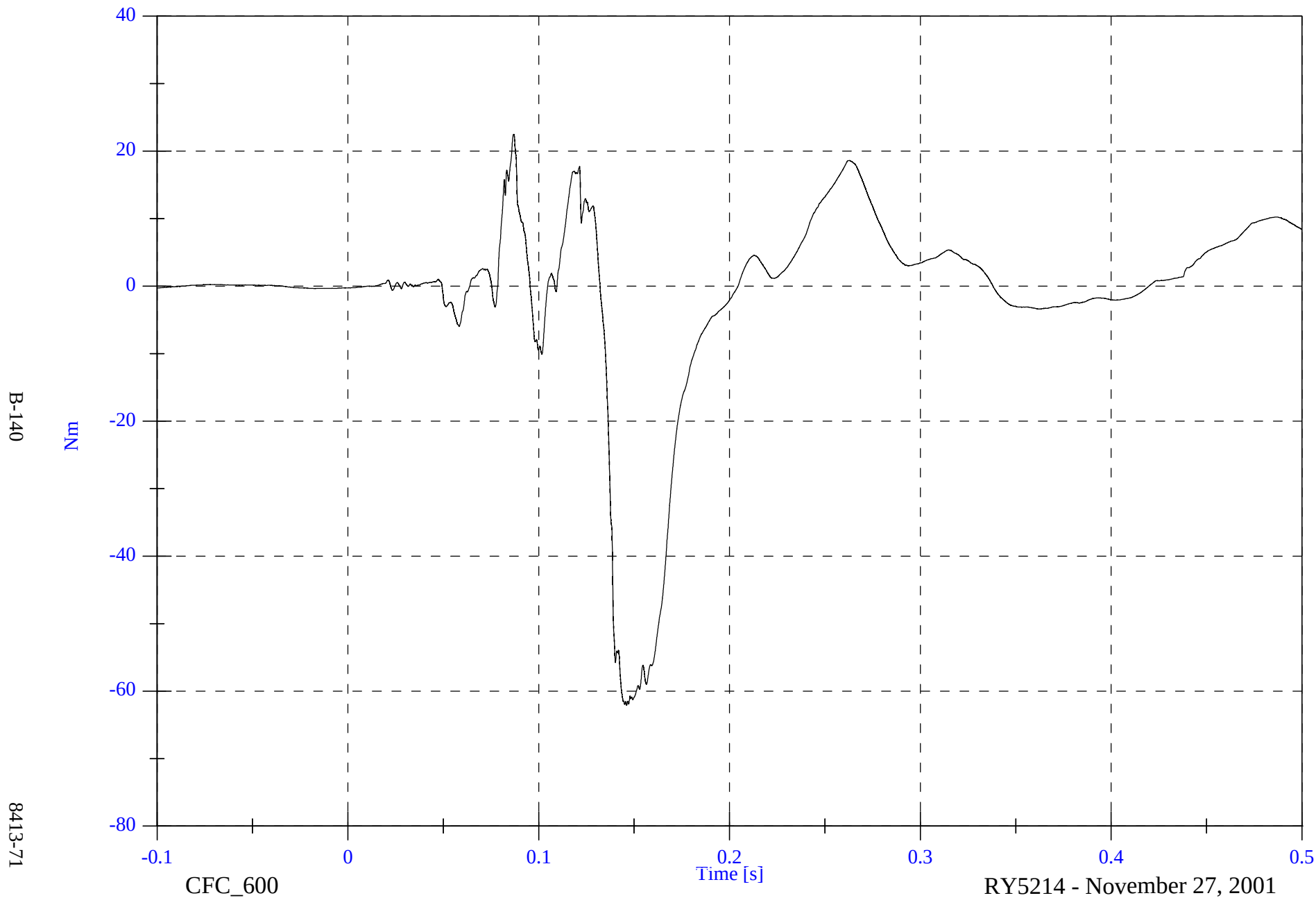


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur Mx

Max: 22.5 [Nm] at 0.087 [s]

Min: -62.1 [Nm] at 0.146 [s]

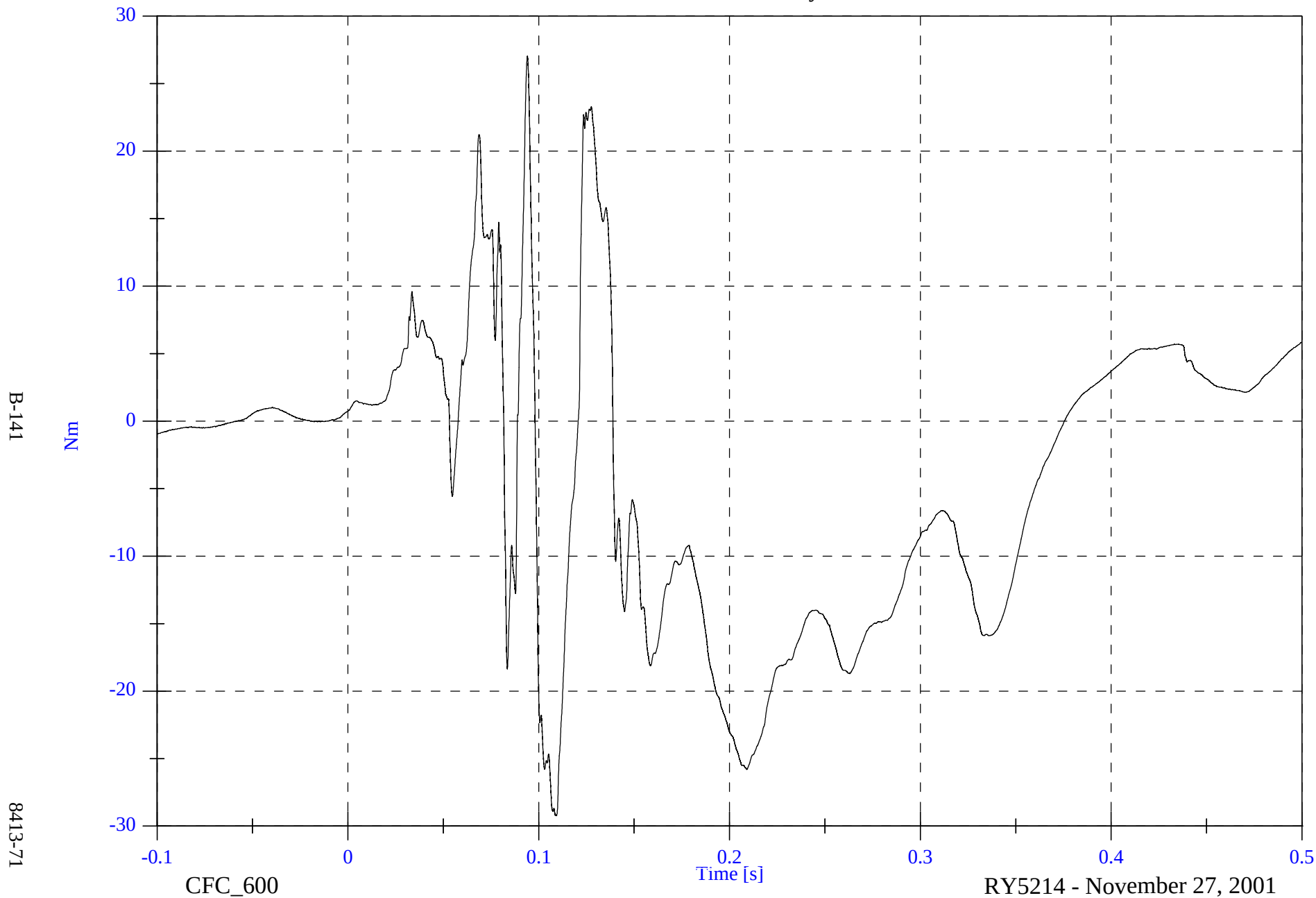


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur My

Max: 27.1 [Nm] at 0.094 [s]

Min: -29.2 [Nm] at 0.109 [s]

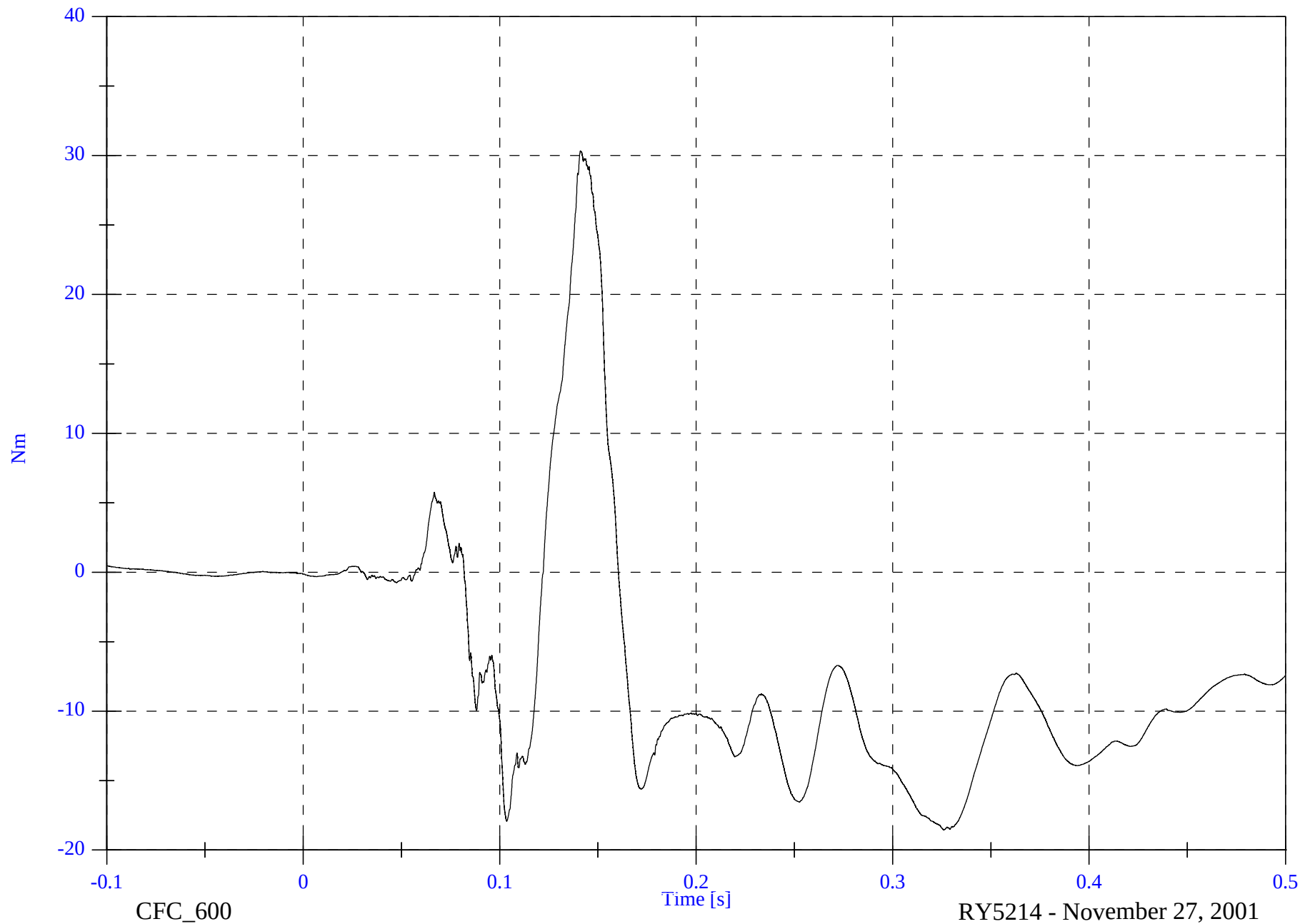


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur Mz

Max: 30.3 [Nm] at 0.141 [s]

Min: -18.6 [Nm] at 0.326 [s]



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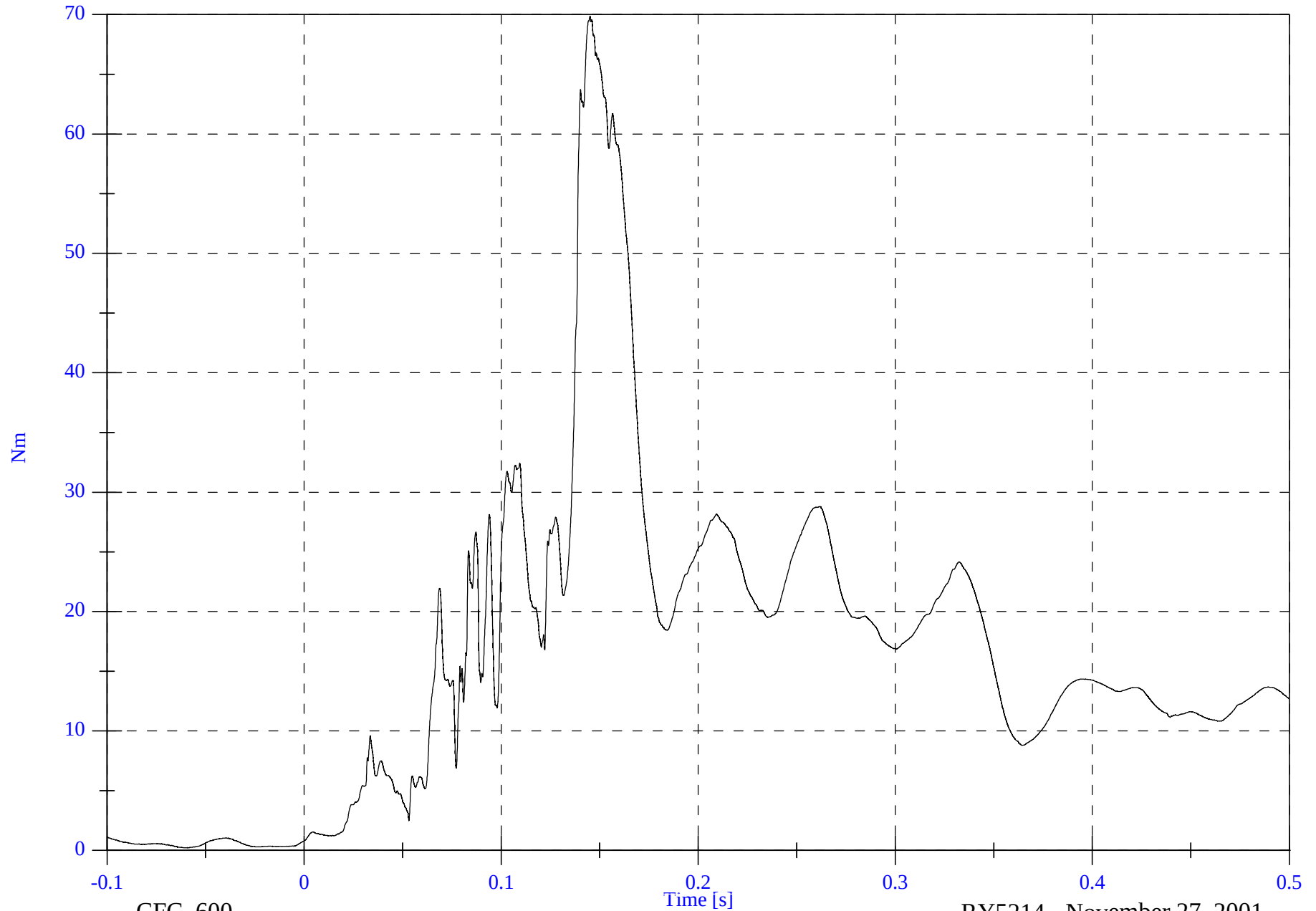
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Femur M Resultant

Max: 69.9 [Nm] at 0.145 [s]

Min: 0.2 [Nm] at -0.060 [s]



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CFC_600

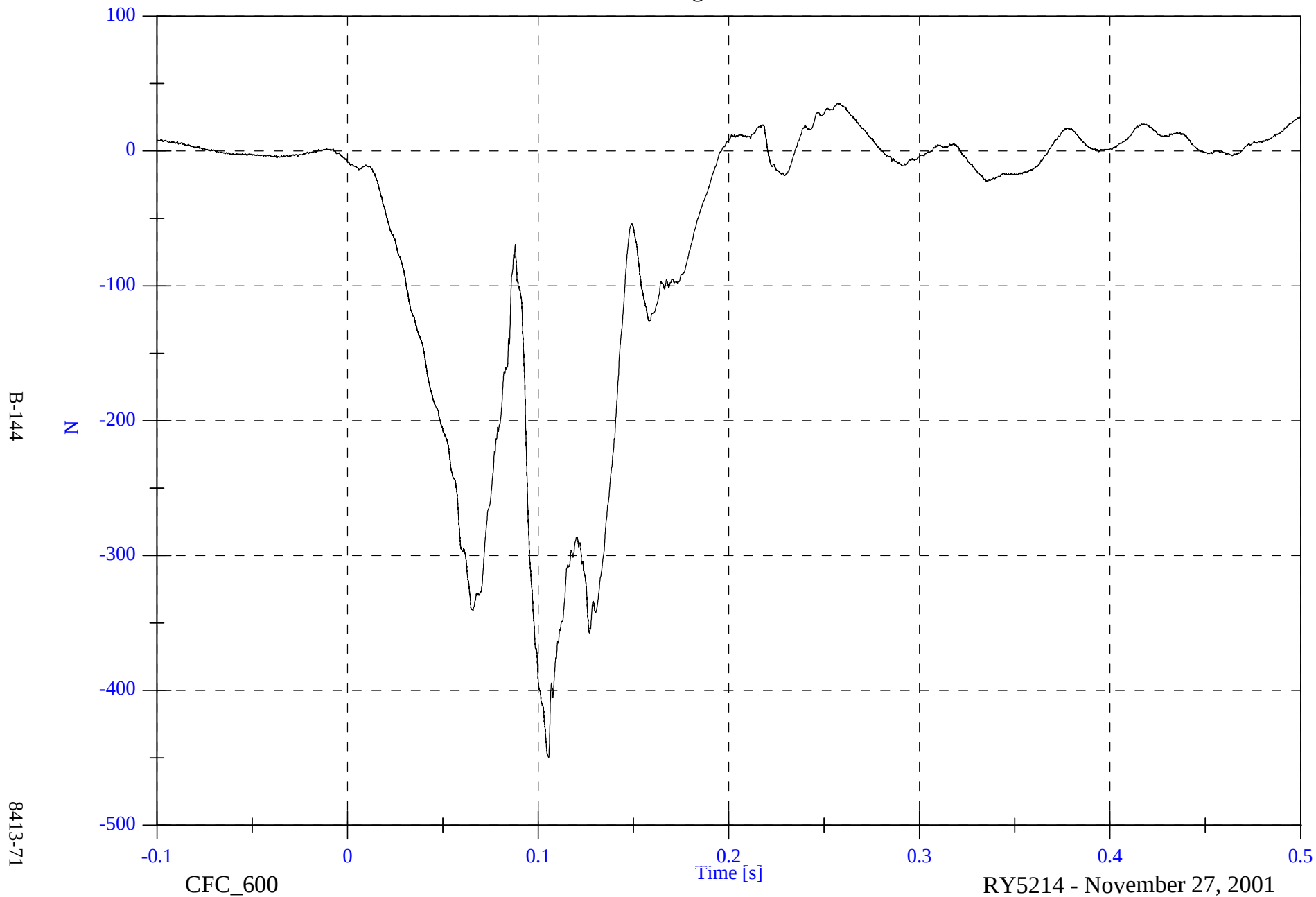
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur Fx

Max: 35.5 [N] at 0.257 [s]

Min: -449.7 [N] at 0.106 [s]

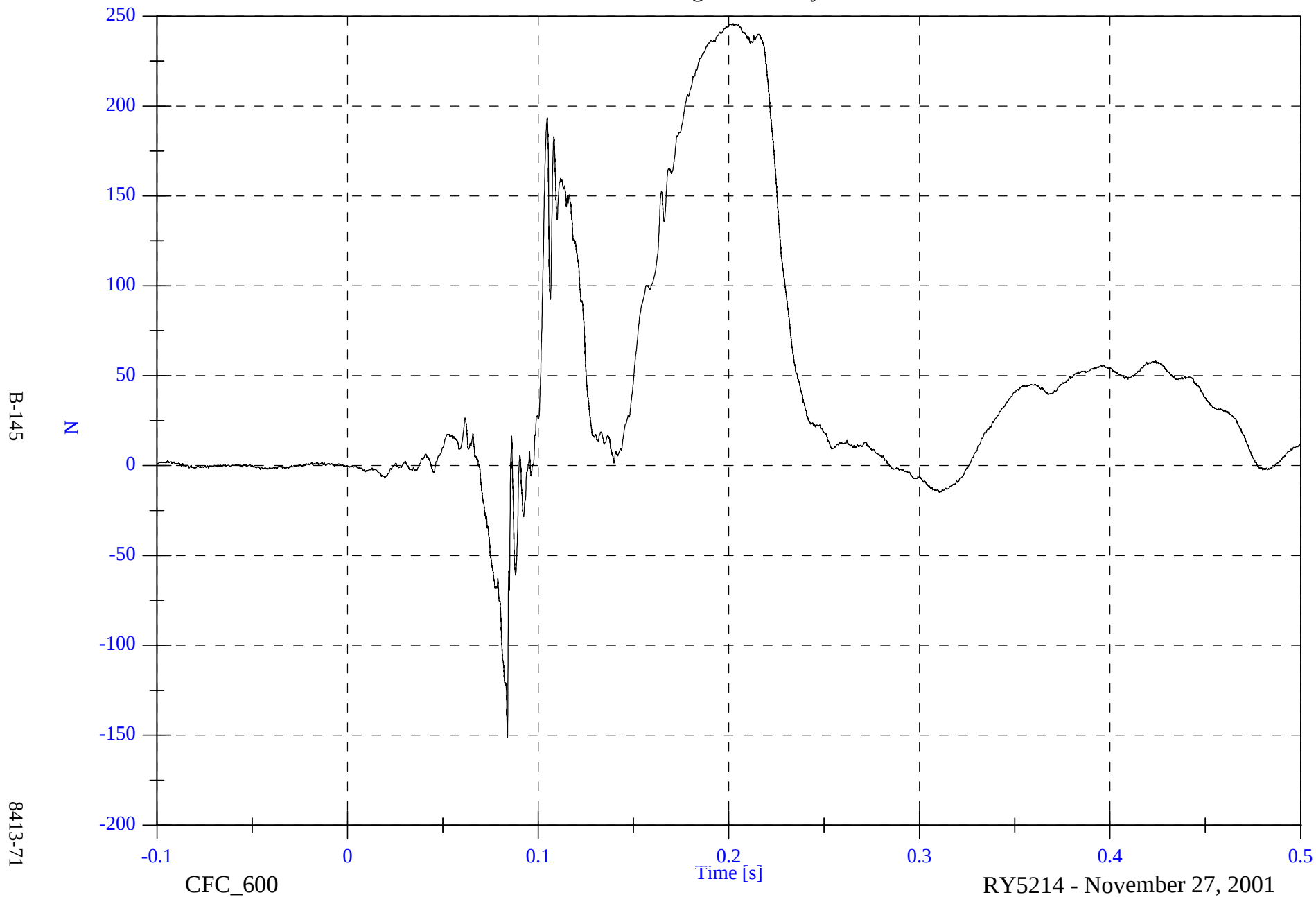


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur Fy

Max: 245.8 [N] at 0.202 [s]

Min: -151.1 [N] at 0.084 [s]

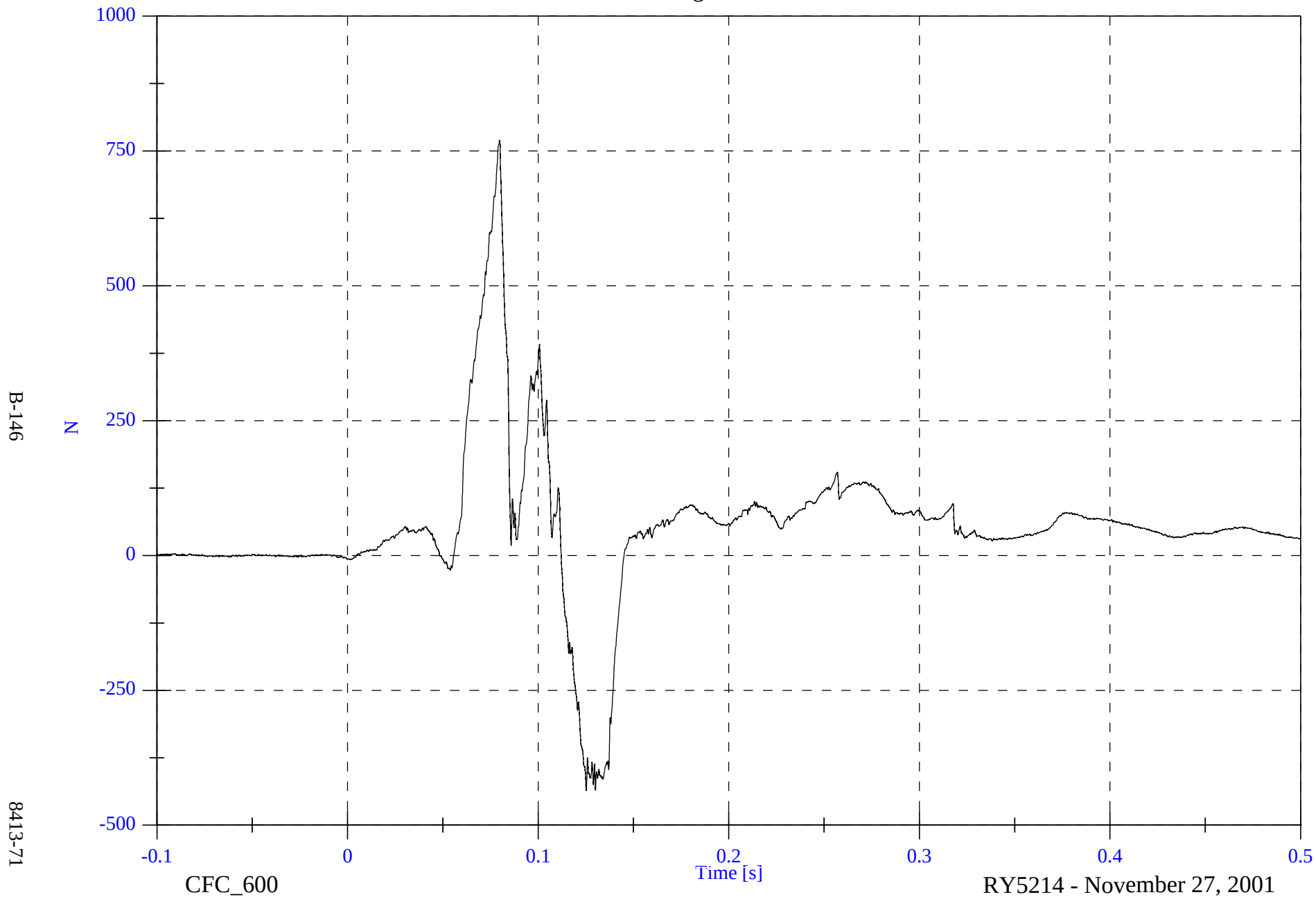


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur Fz

Max: 770.1 [N] at 0.080 [s]

Min: -436.2 [N] at 0.125 [s]

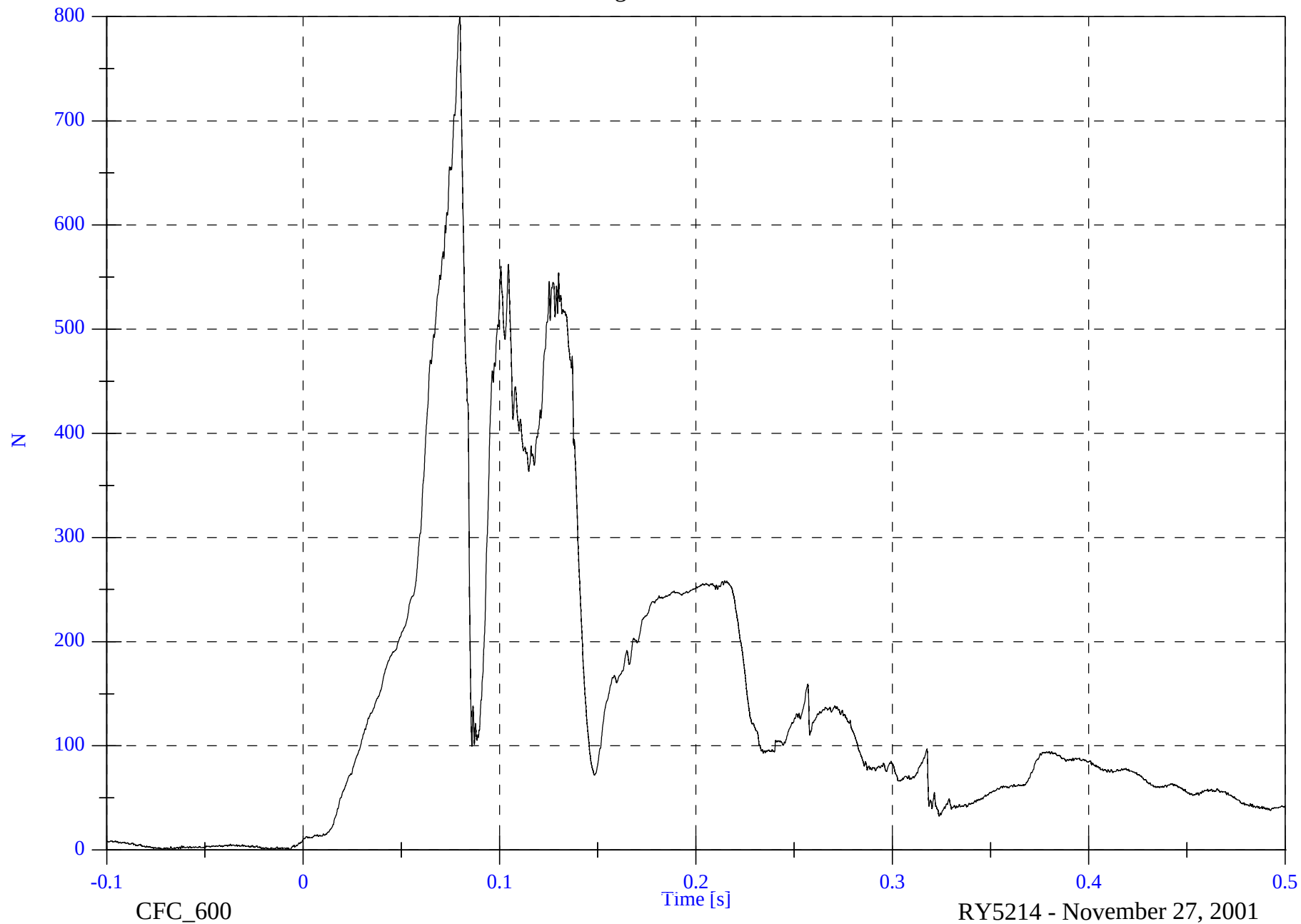


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur F Resultant

Max: 800.0 [N] at 0.080 [s]

Min: 0.2 [N] at -0.007 [s]



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CFC_600

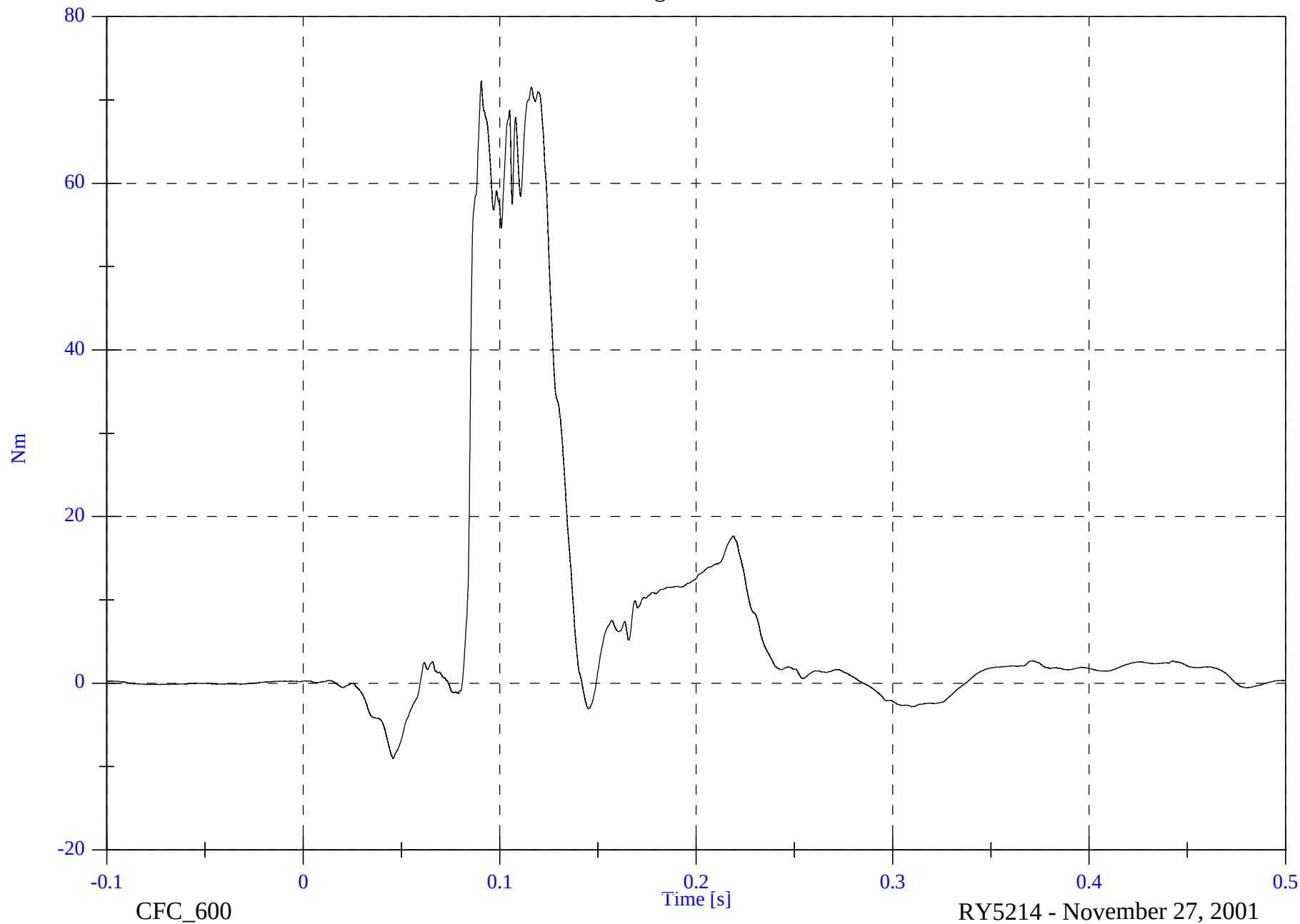
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur Mx

Max: 72.3 [Nm] at 0.091 [s]

Min: -9.0 [Nm] at 0.046 [s]



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CFC_600

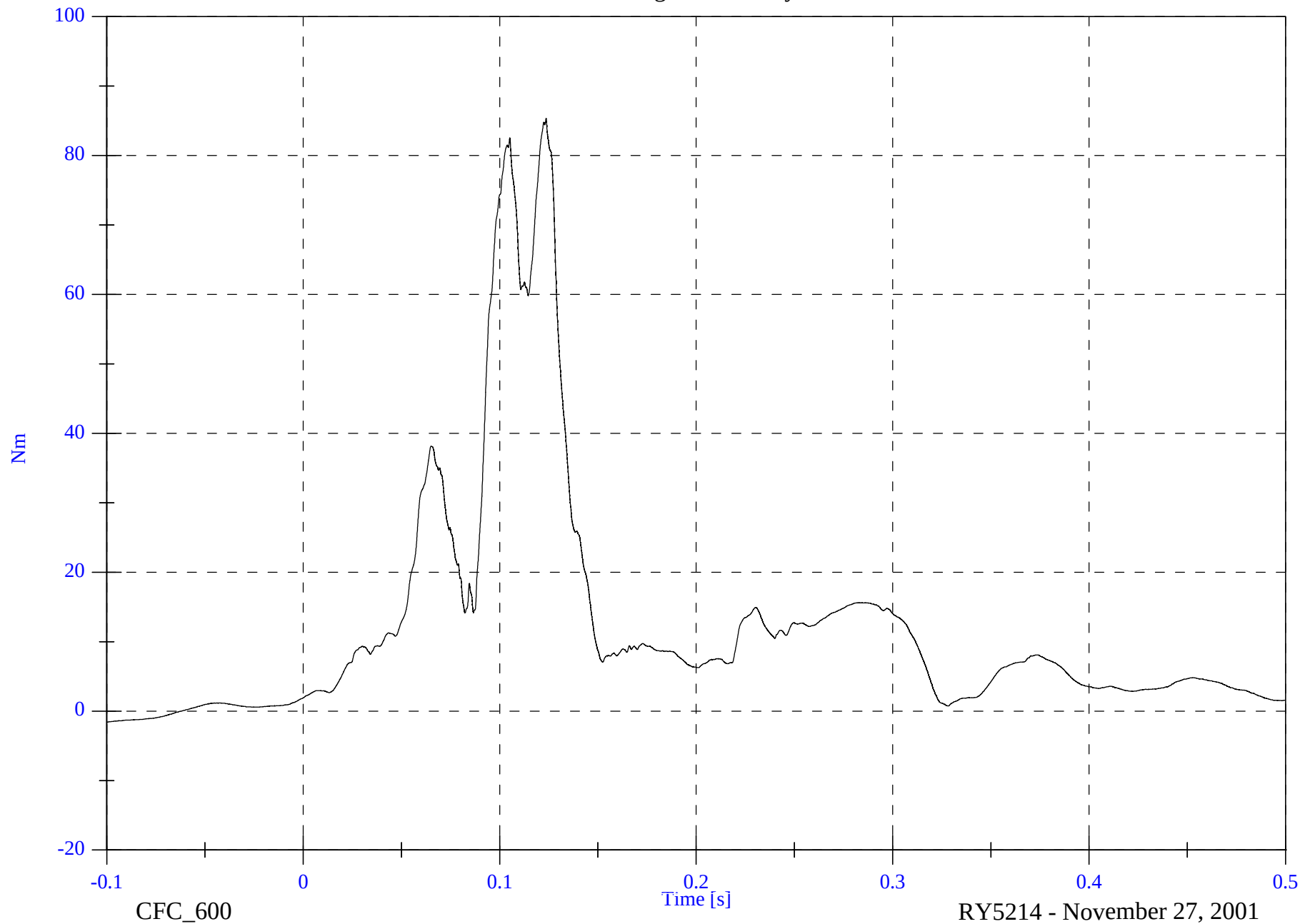
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur My

Max: 85.3 [Nm] at 0.124 [s]

Min: -1.6 [Nm] at -0.100 [s]



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CFC_600

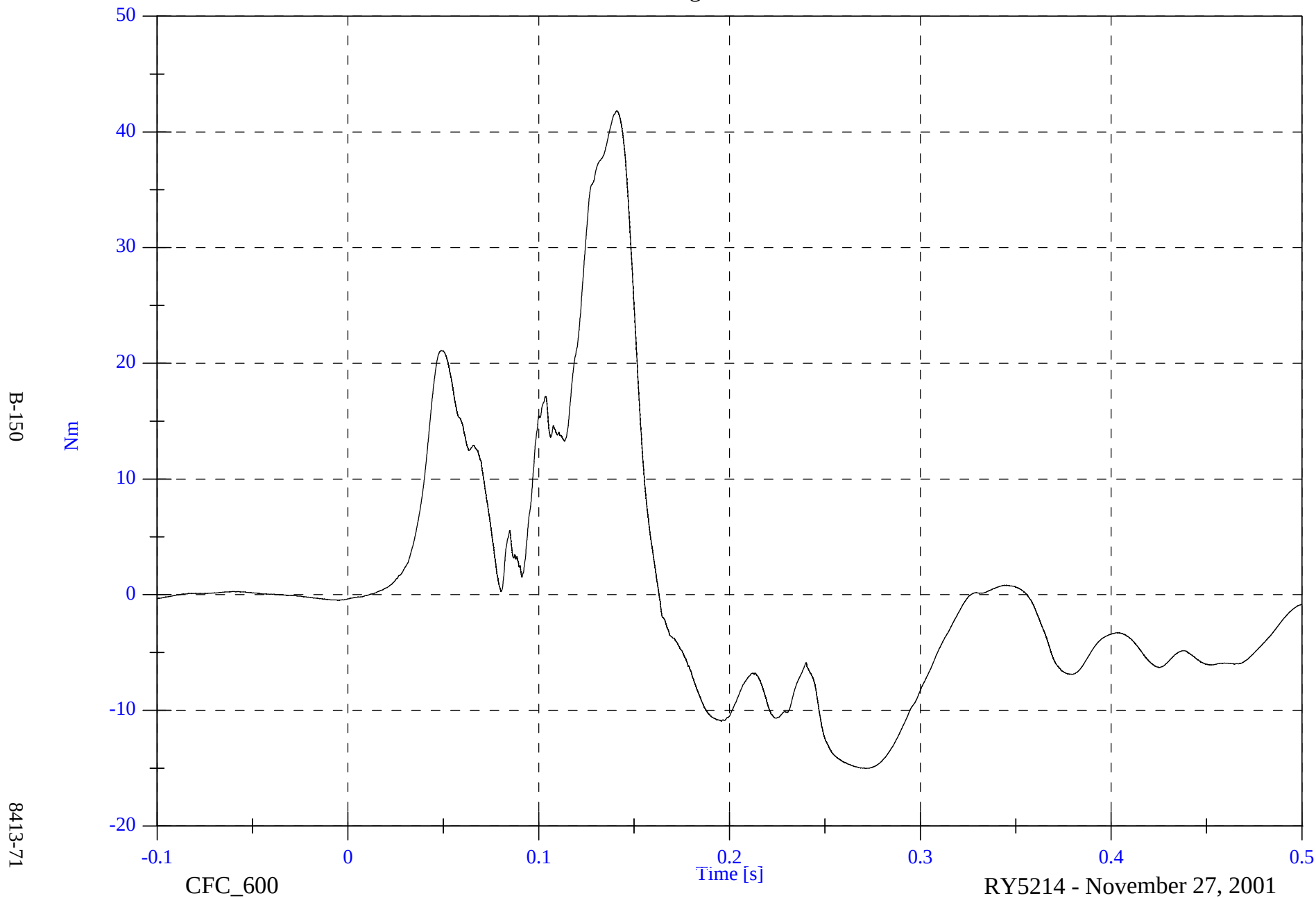
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur Mz

Max: 41.8 [Nm] at 0.141 [s]

Min: -15.0 [Nm] at 0.271 [s]

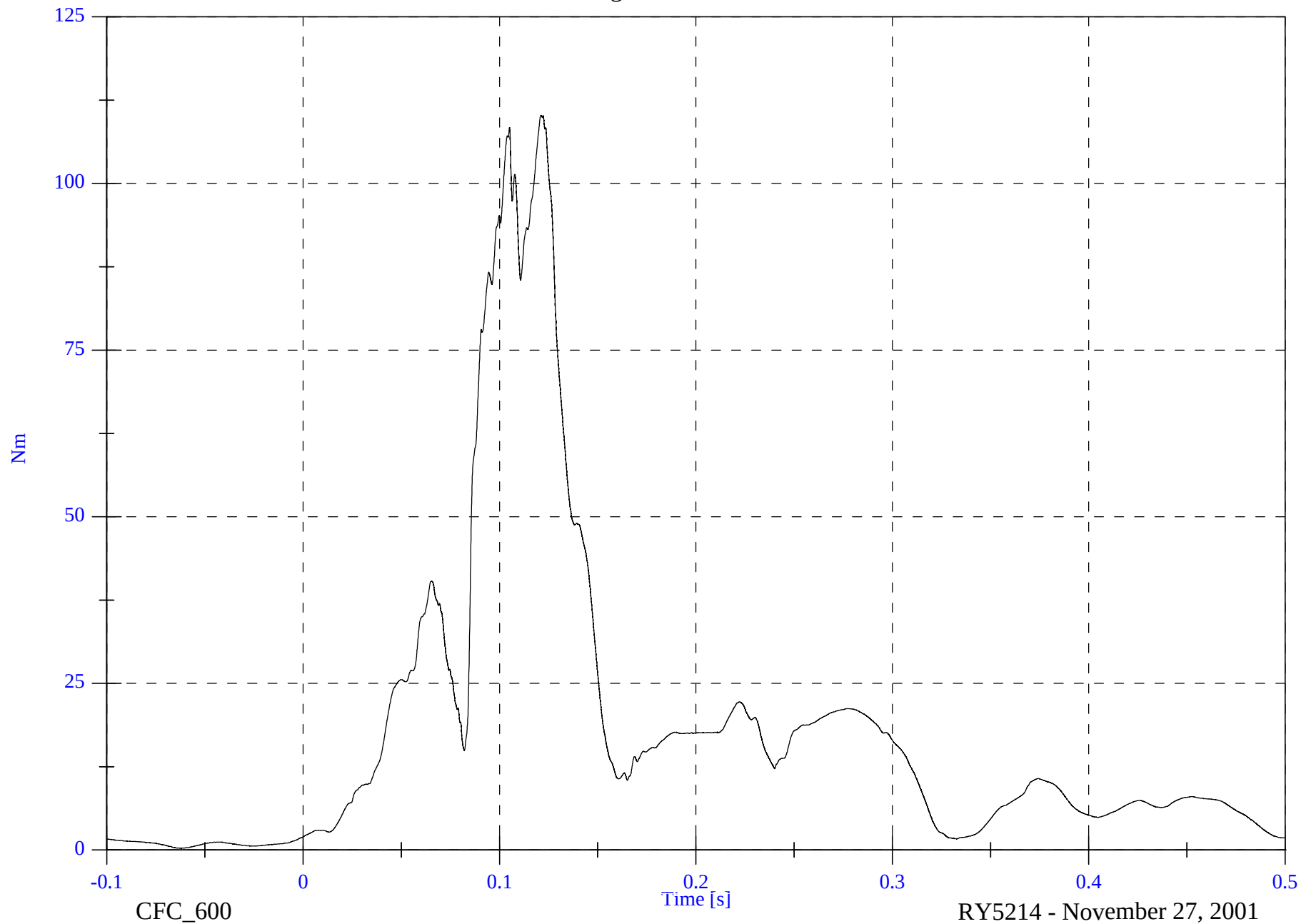


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Femur M Resultant

Max: 110.2 [Nm] at 0.121 [s]

Min: 0.2 [Nm] at -0.063 [s]



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CFC_600

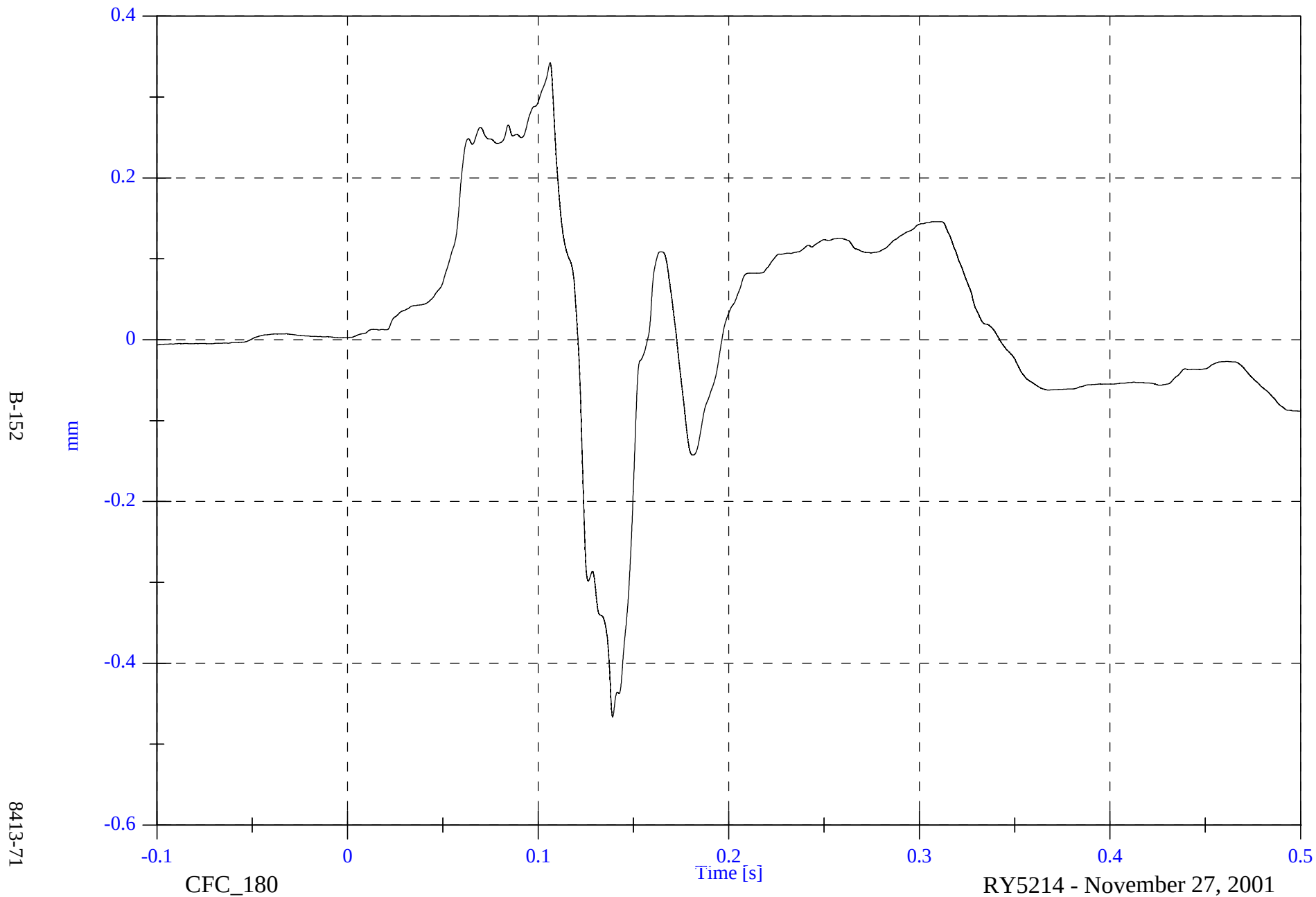
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Knee Shear Dx

Max: 0.3 [mm] at 0.106 [s]

Min: -0.5 [mm] at 0.139 [s]

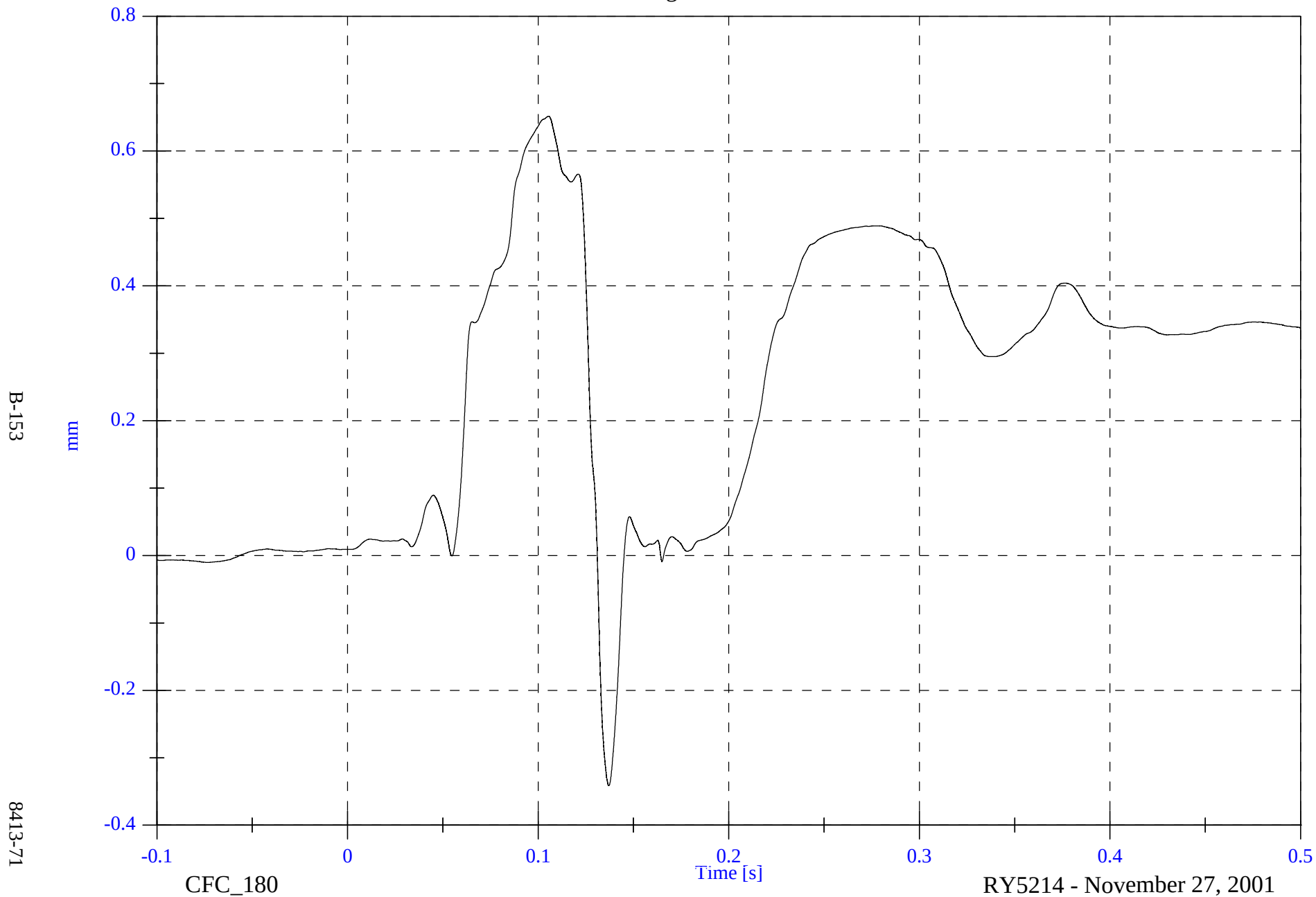


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Knee Shear Dx

Max: 0.7 [mm] at 0.105 [s]

Min: -0.3 [mm] at 0.137 [s]

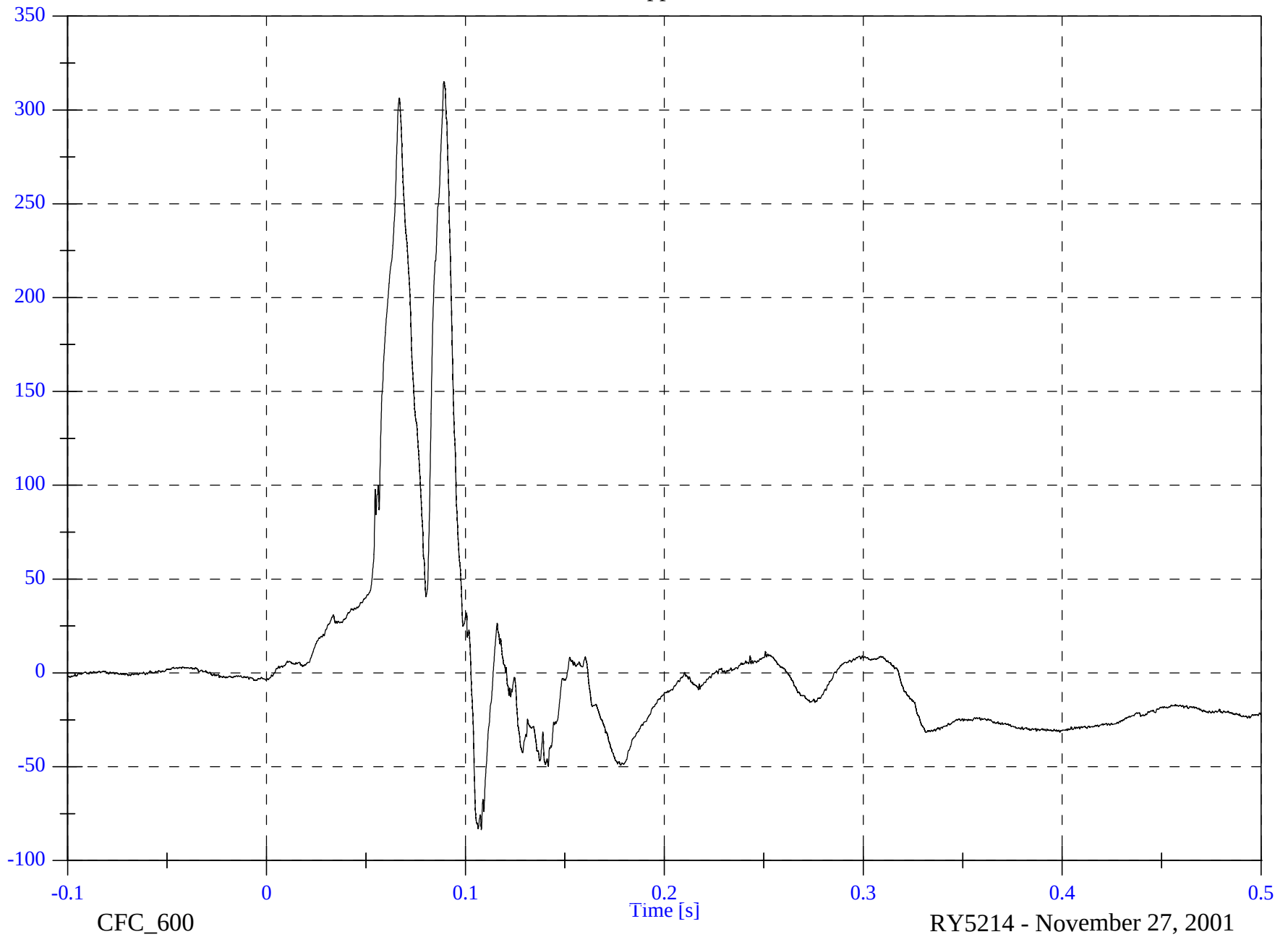


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Upper Tibia Fx

Max: 315.2 [N] at 0.089 [s]

Min: -83.6 [N] at 0.108 [s]



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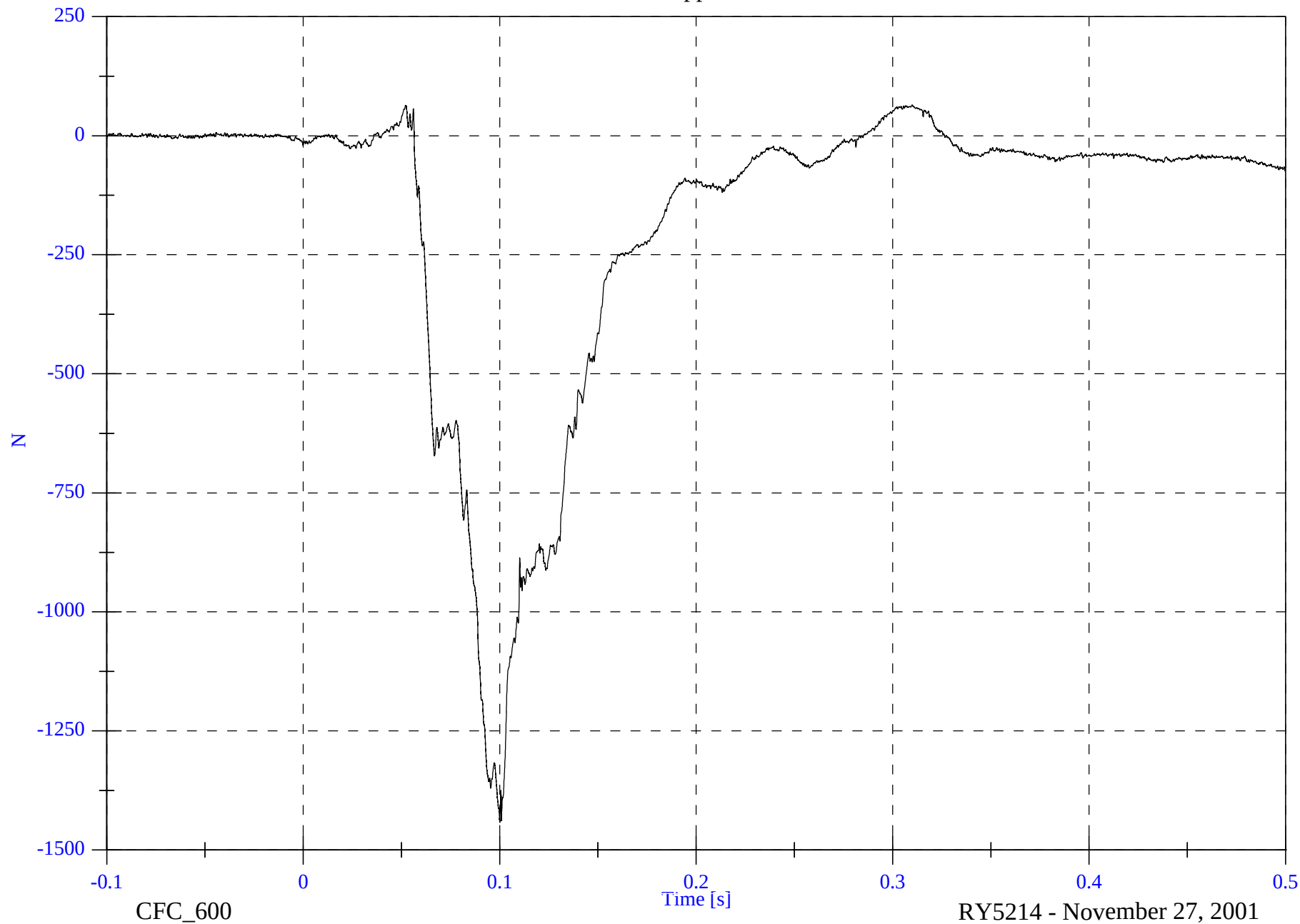
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Upper tibia Fz

Max: 64.8 [N] at 0.310 [s]

Min: -1442.3 [N] at 0.100 [s]



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CFC_600

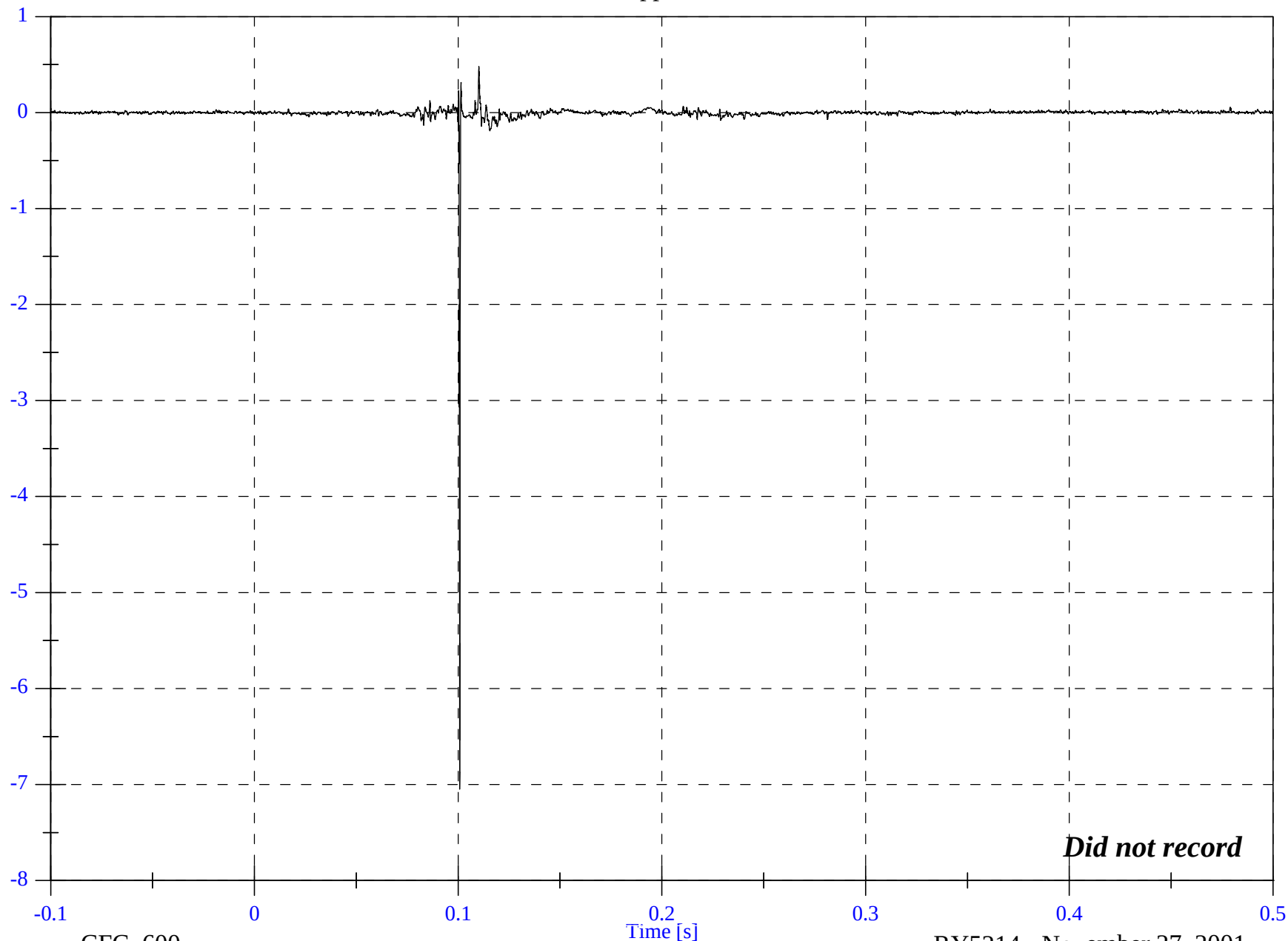
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Upper Tibia Mx

Max: 0.5 [Nm] at 0.110 [s]

Min: -7.0 [Nm] at 0.101 [s]



Did not record

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CFC_600

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Upper tibia My

Max: 14.4 [Nm] at 0.177 [s]

Min: -57.8 [Nm] at 0.090 [s]



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CFC_600

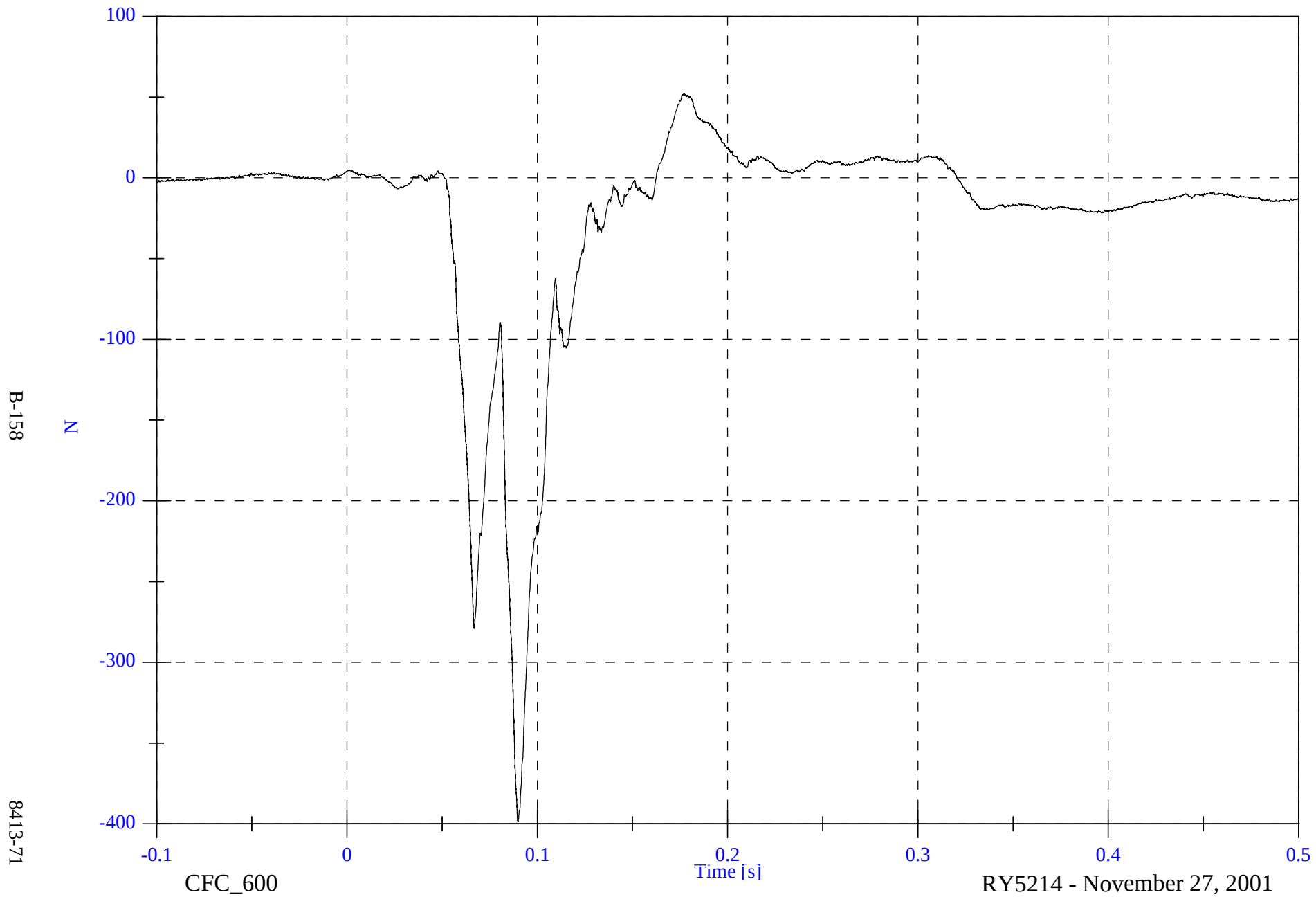
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Lower Tibia Fx

Max: 52.3 [N] at 0.177 [s]

Min: -398.6 [N] at 0.090 [s]

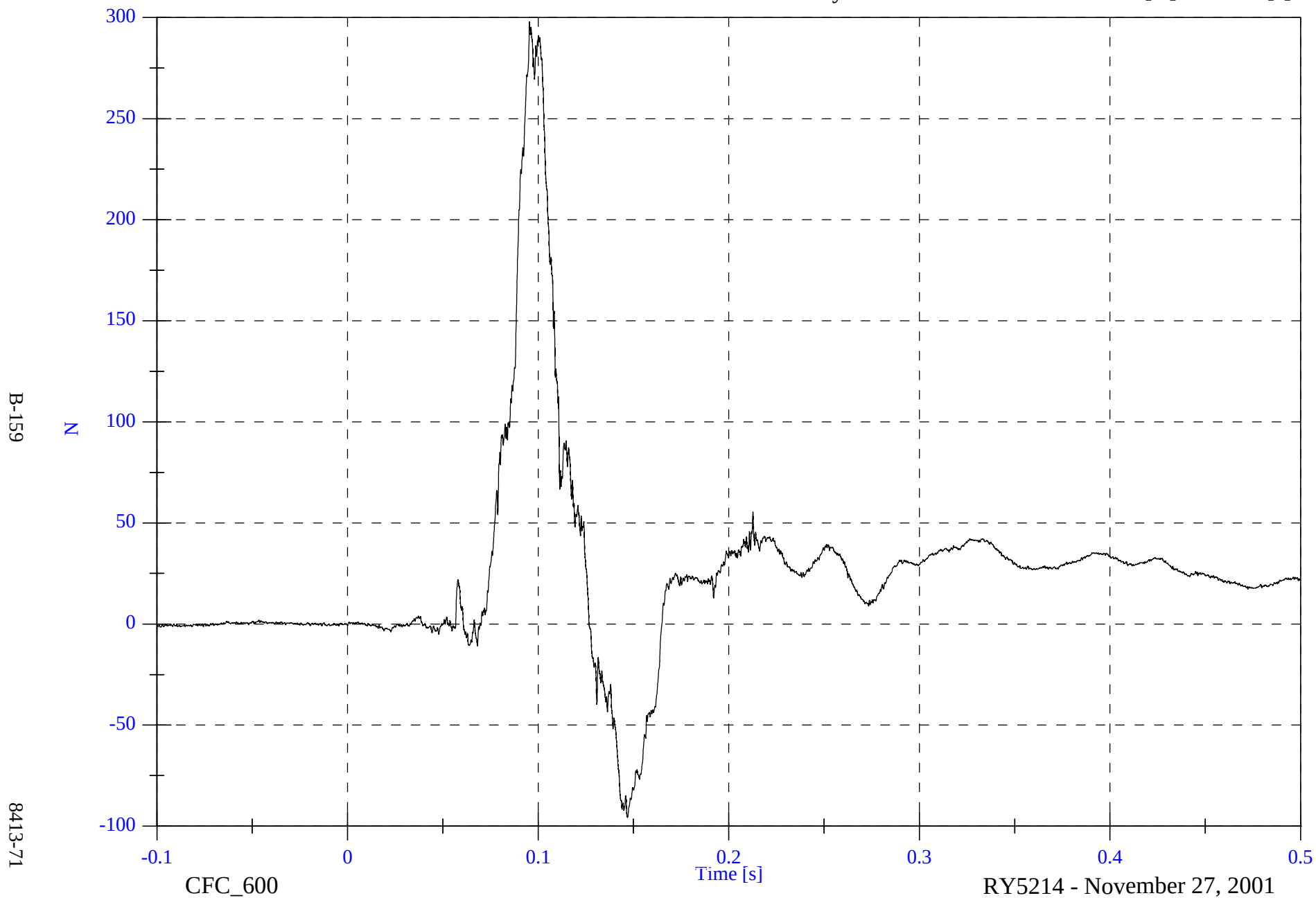


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 298.0 [N] at 0.095 [s]

P2 Left Lower Tibia Fy

Min: -95.7 [N] at 0.147 [s]

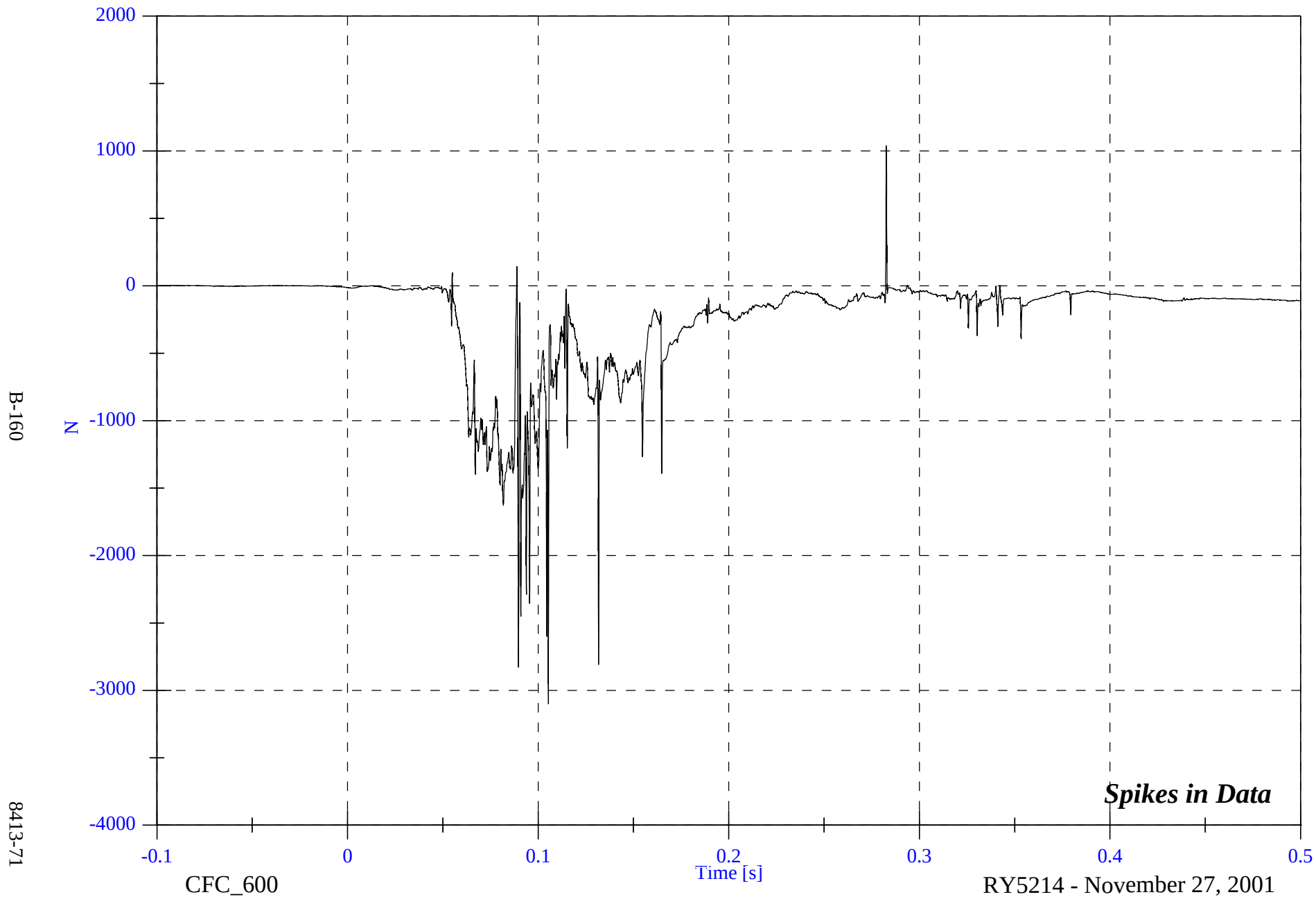


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 1039.7 [N] at 0.283 [s]

P2 Left Lower Tibia Fz

Min: -3101.6 [N] at 0.105 [s]

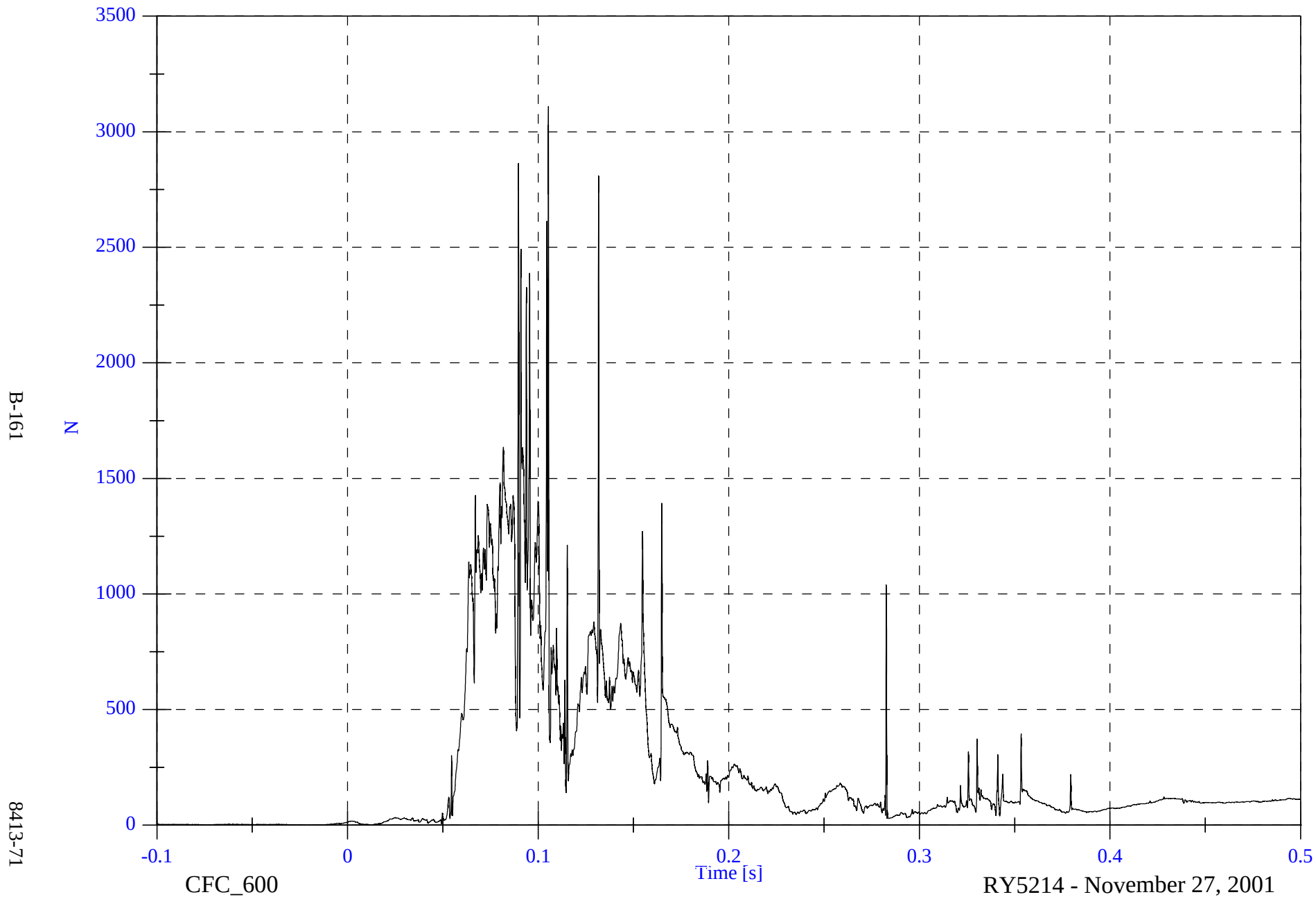


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Lower Tibia F Resultant

Max: 3110.5 [N] at 0.105 [s]

Min: 0.2 [N] at -0.021 [s]

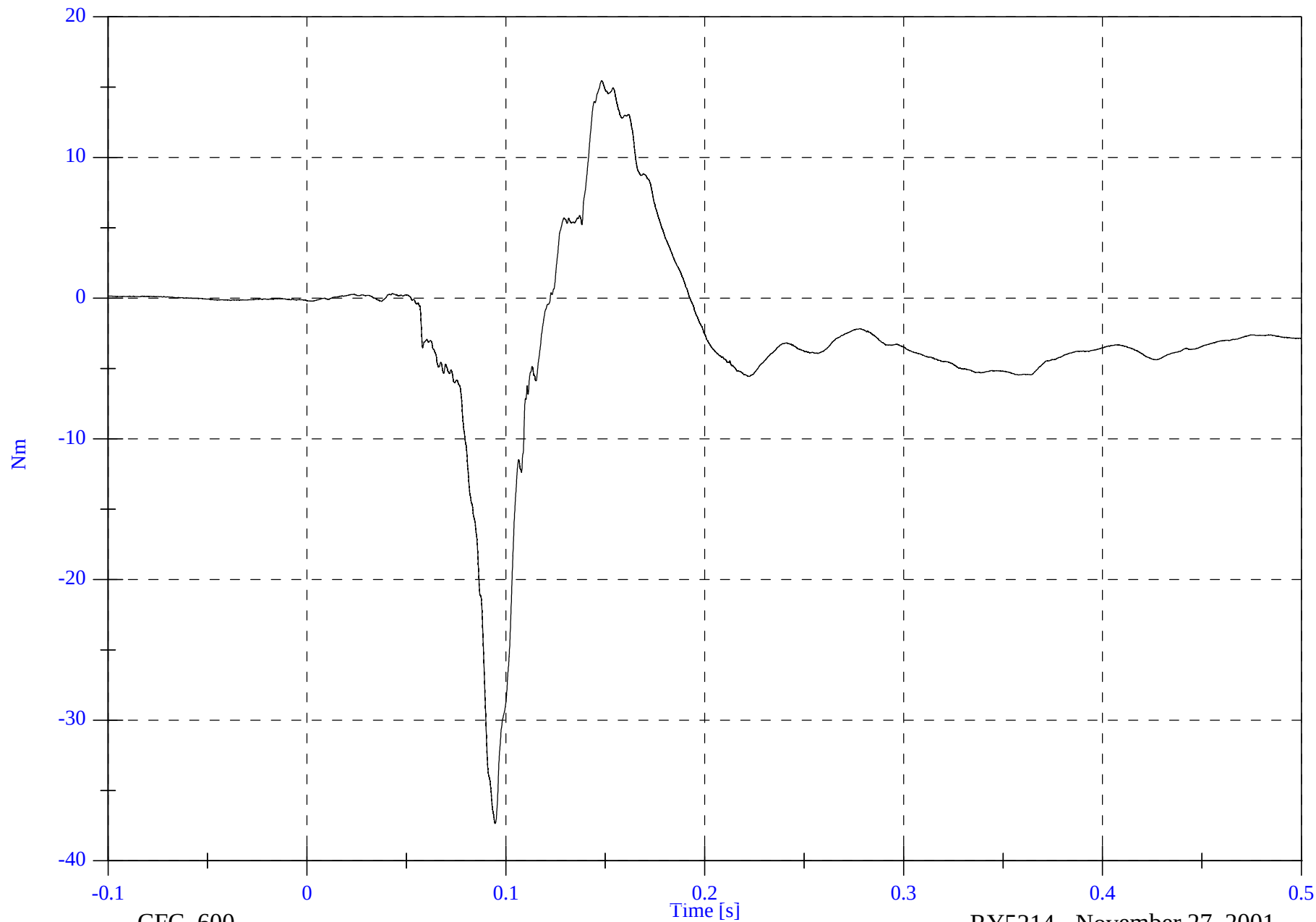


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Lower Tibia Mx

Max: 15.5 [Nm] at 0.148 [s]

Min: -37.4 [Nm] at 0.095 [s]



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CFC_600

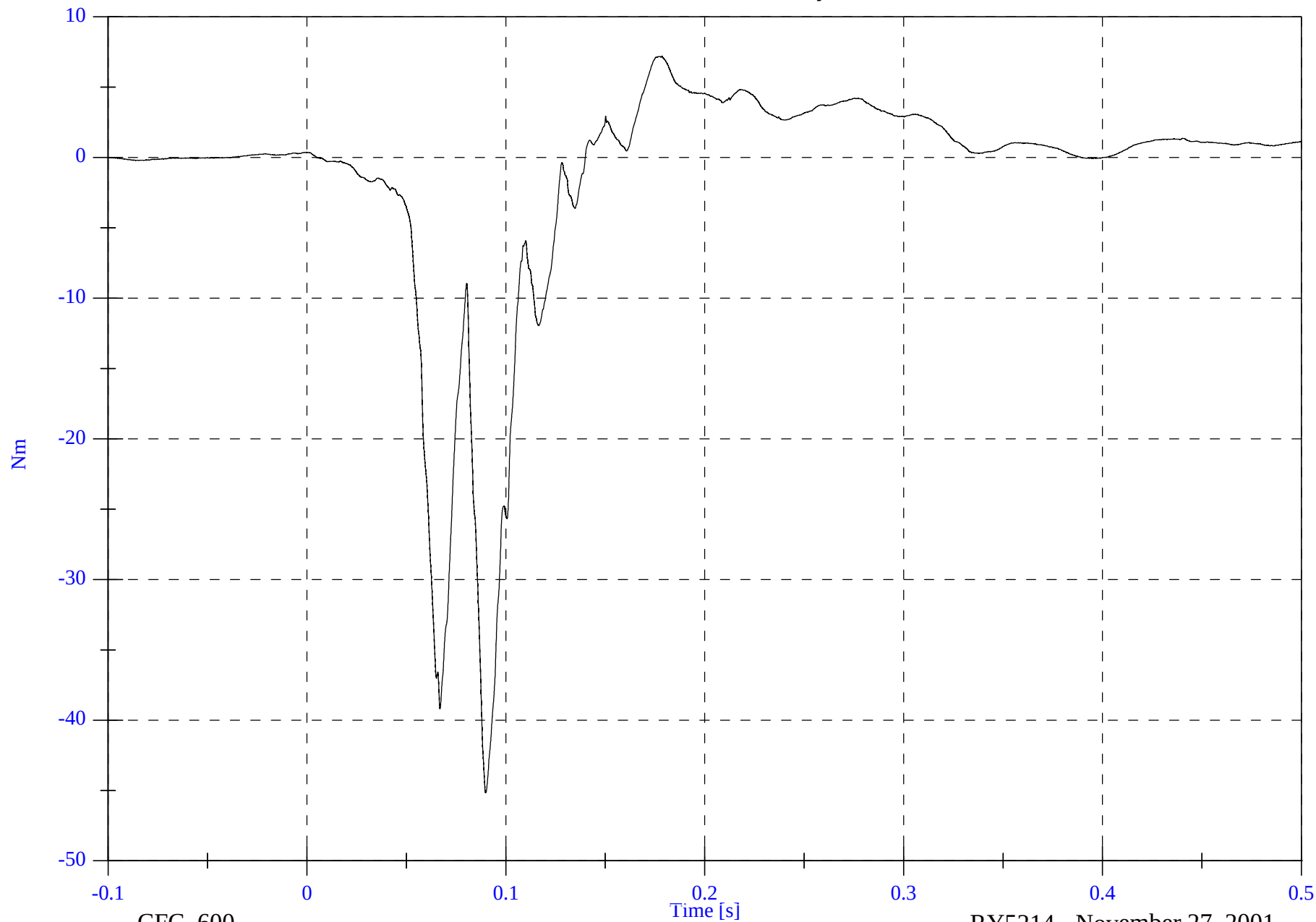
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Lower Tibia My

Max: 7.2 [Nm] at 0.178 [s]

Min: -45.2 [Nm] at 0.090 [s]



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CFC_600

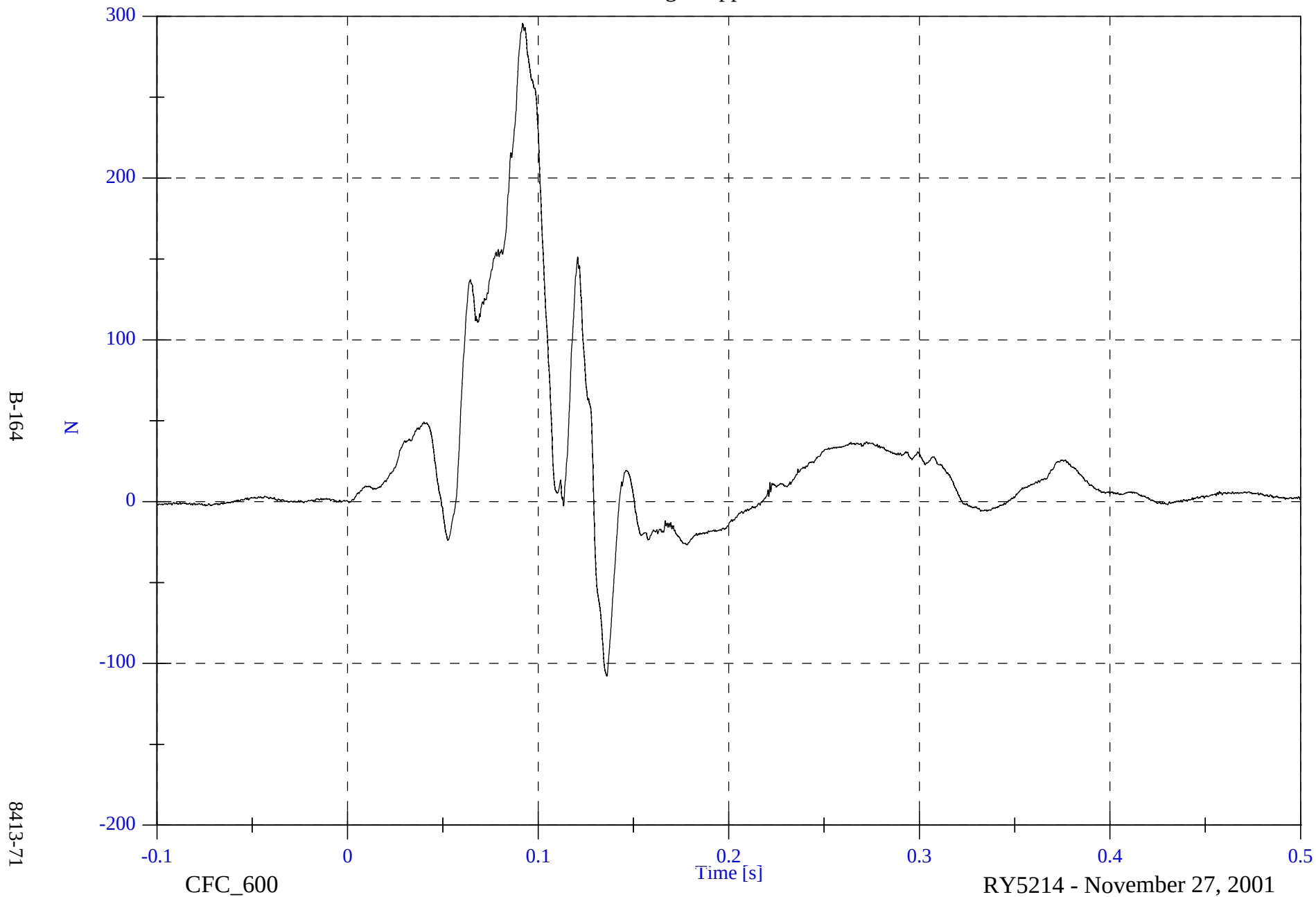
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Upper Tibia Fx

Max: 295.6 [N] at 0.092 [s]

Min: -108.0 [N] at 0.136 [s]

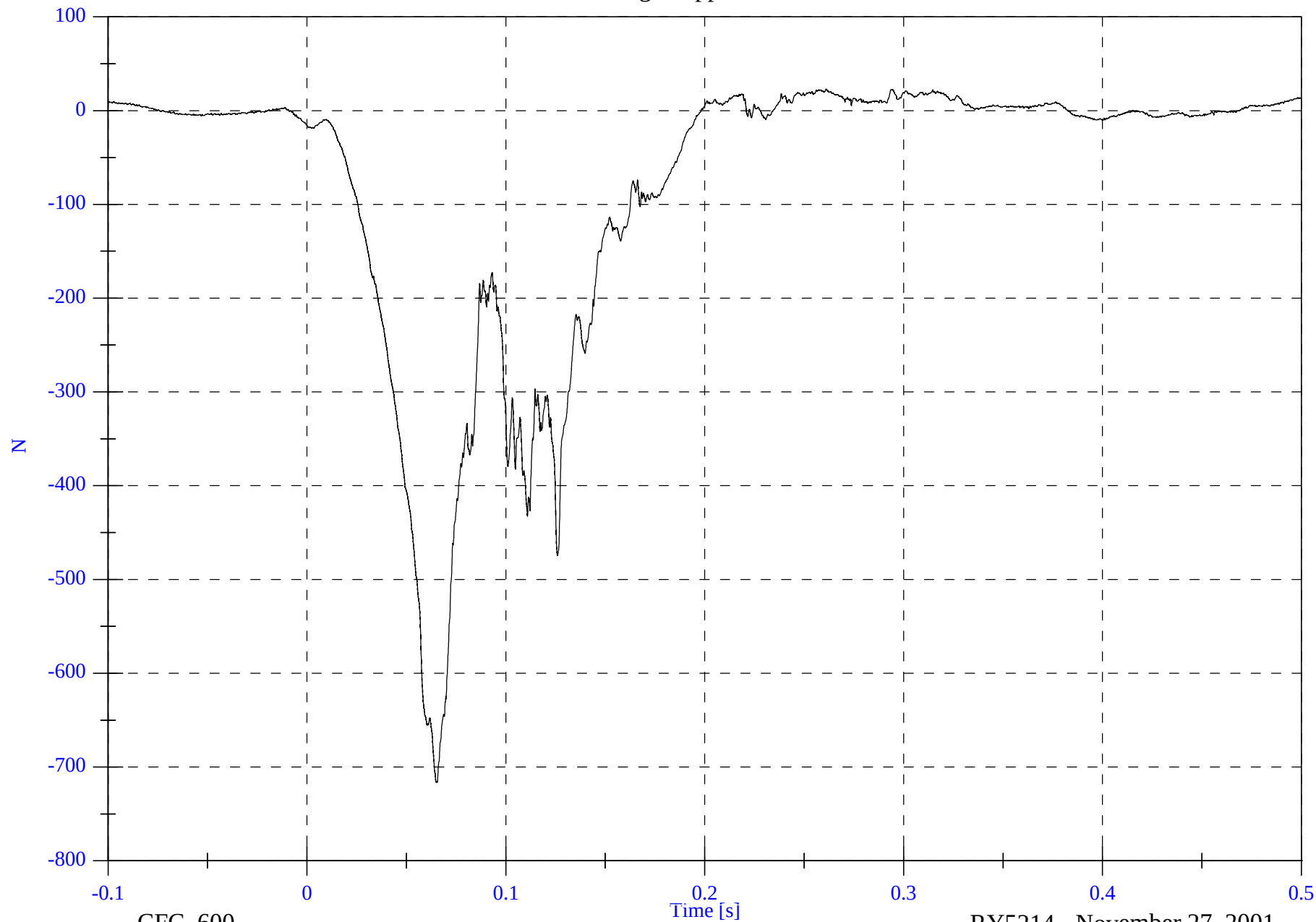


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Upper Tibia Fz

Max: 23.2 [N] at 0.261 [s]

Min: -716.6 [N] at 0.066 [s]



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CFC_600

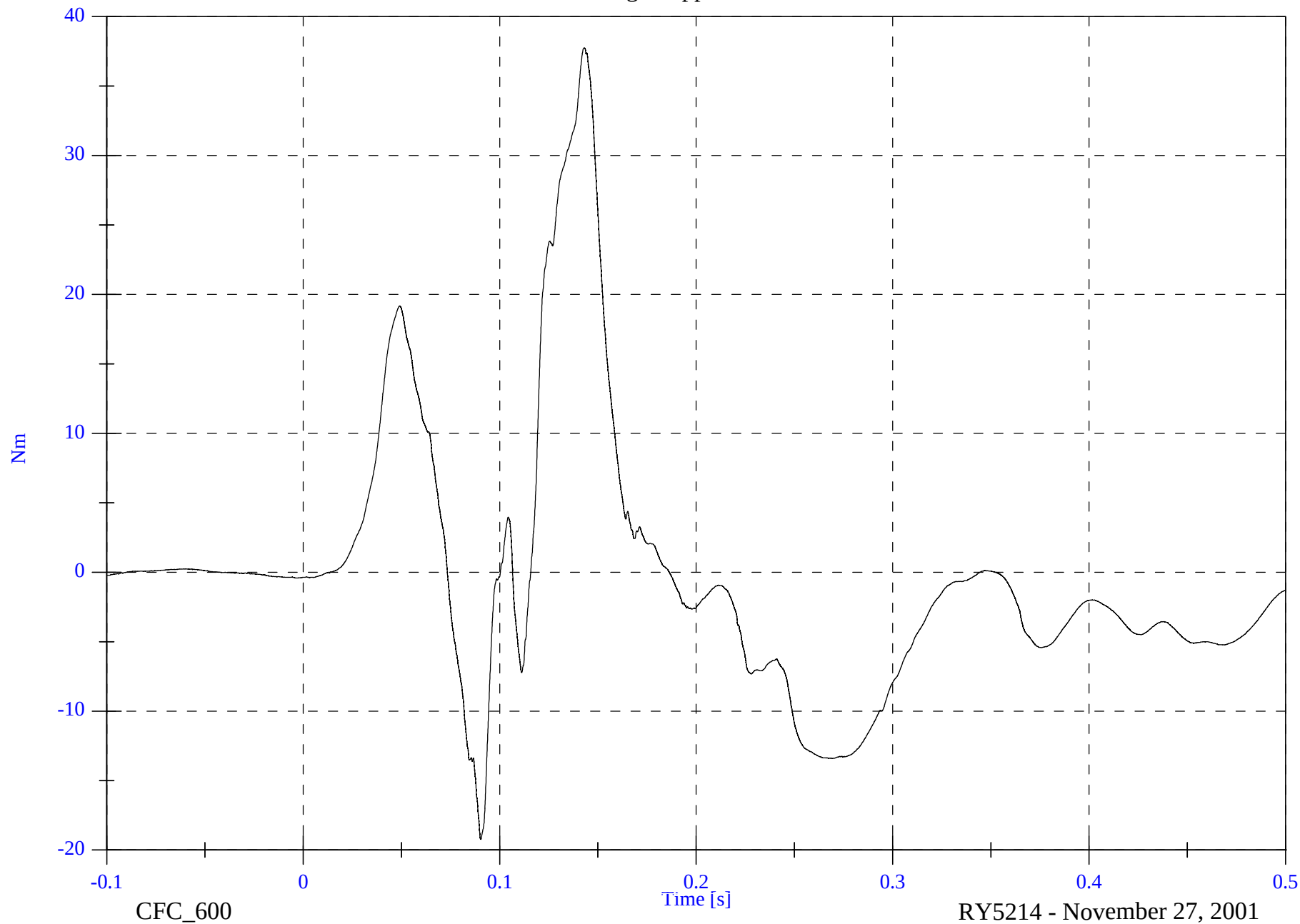
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Upper Tibia Mx

Max: 37.8 [Nm] at 0.143 [s]

Min: -19.2 [Nm] at 0.090 [s]



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40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Upper Tibia My

Max: 11.6 [Nm] at 0.282 [s]

Min: -58.5 [Nm] at 0.092 [s]



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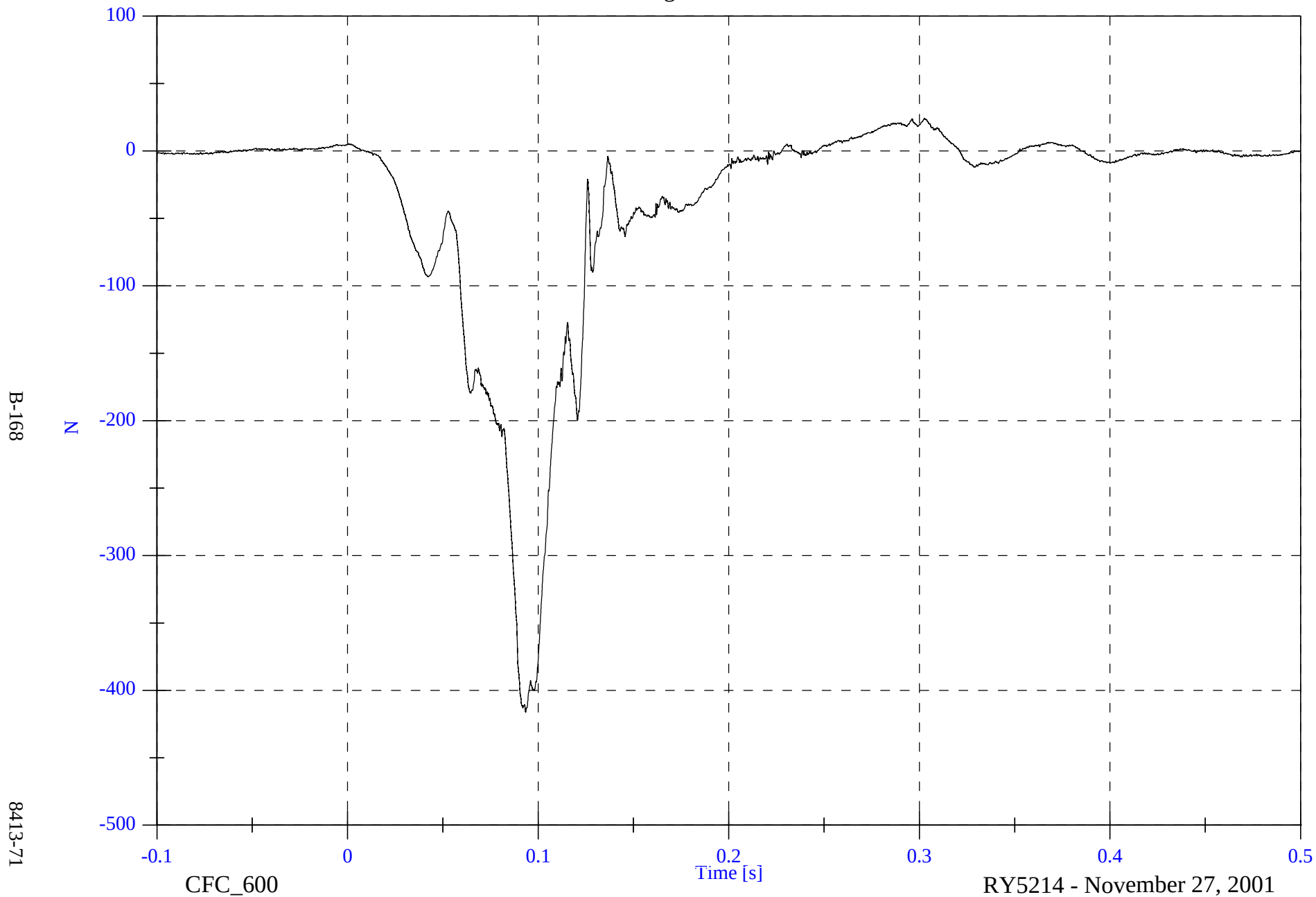
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40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Lower Tibia Fx

Max: 24.2 [N] at 0.303 [s]

Min: -416.3 [N] at 0.094 [s]

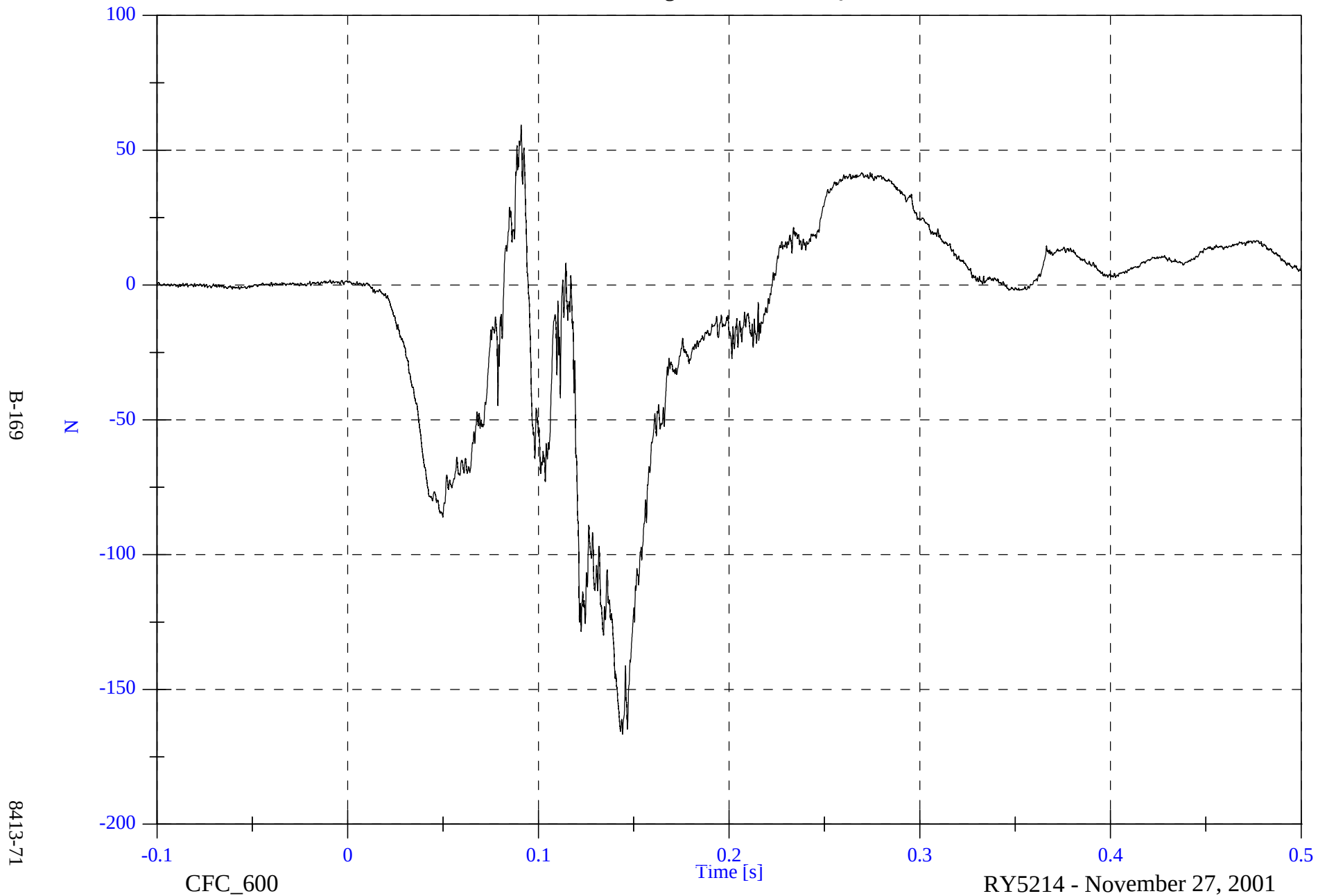


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Lower Tibia Fy

Max: 59.4 [N] at 0.091 [s]

Min: -166.6 [N] at 0.144 [s]

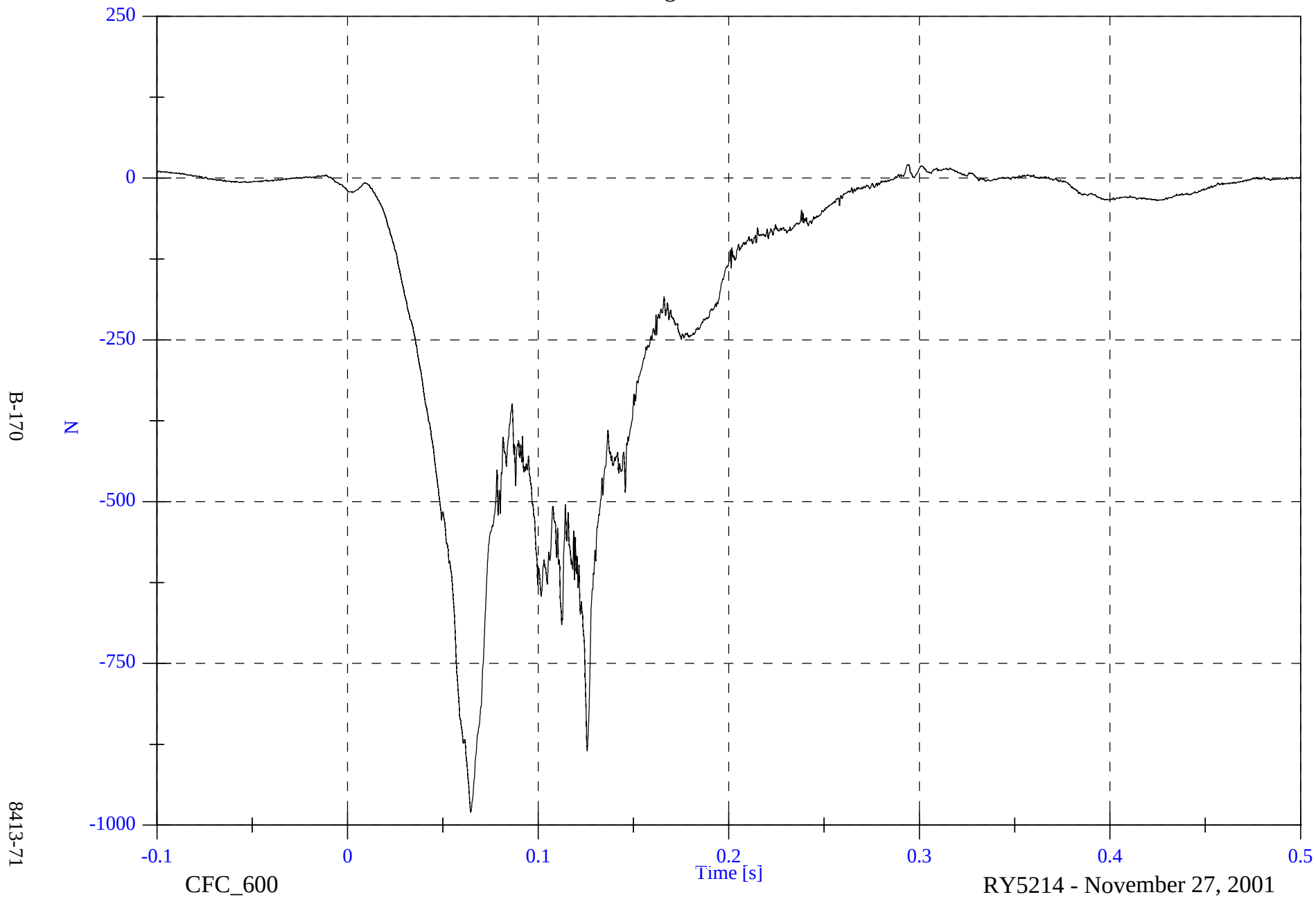


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 20.8 [N] at 0.294 [s]

P2 Right Lower Tibia Fz

Min: -980.0 [N] at 0.065 [s]

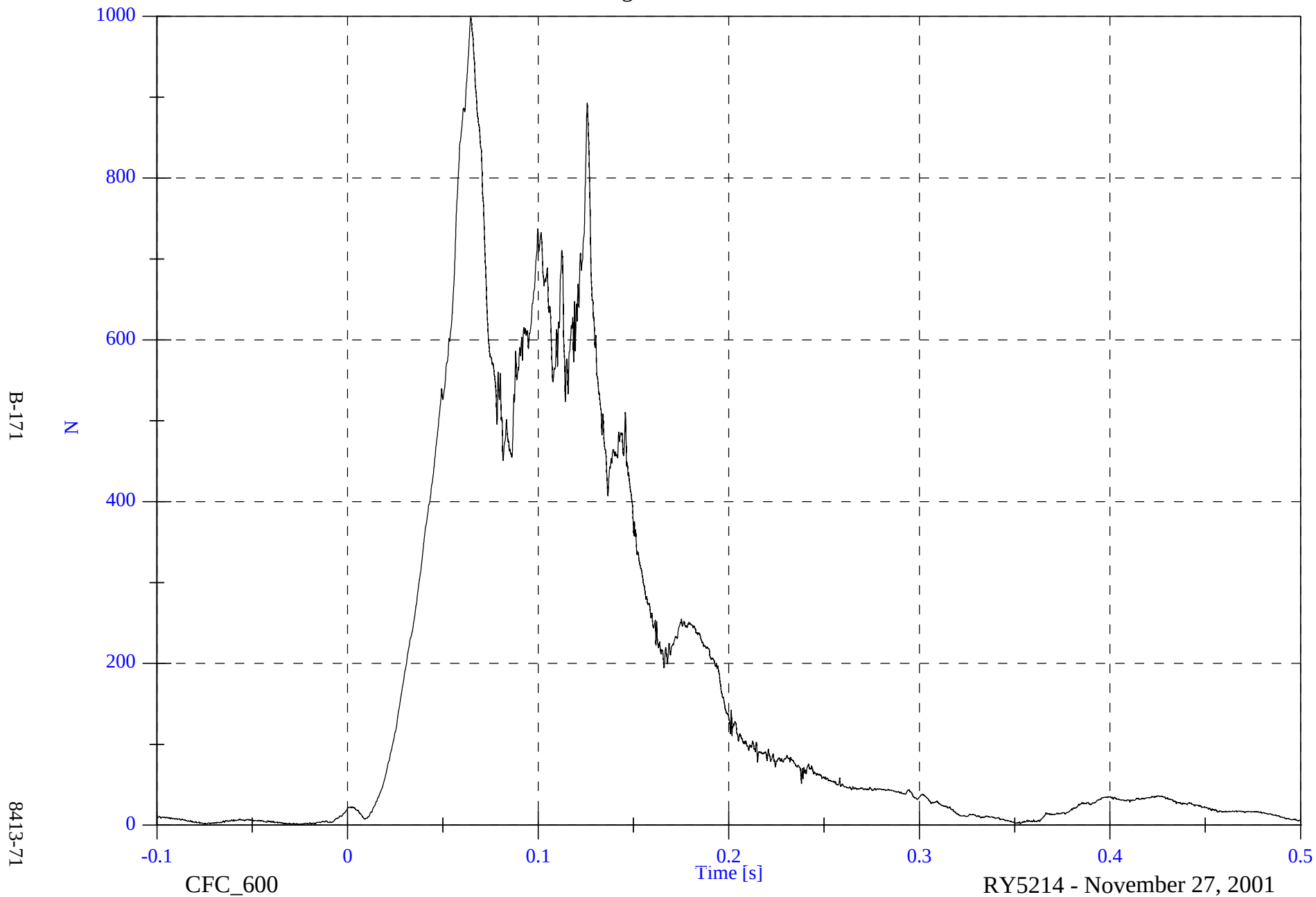


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Lower Tibia F Resultant

Max: 998.6 [N] at 0.065 [s]

Min: 0.7 [N] at -0.025 [s]

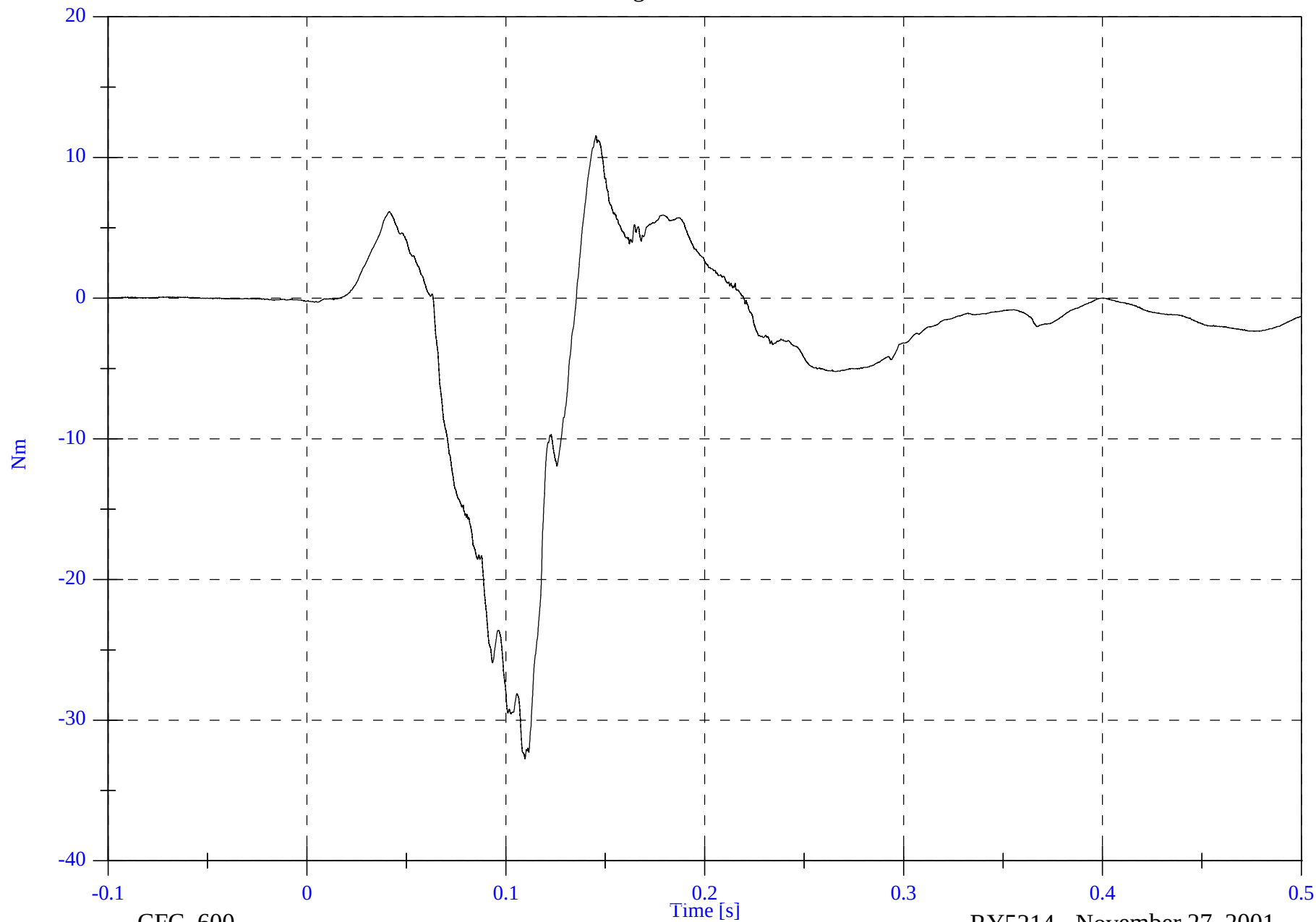


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Lower Tibia Mx

Max: 11.5 [Nm] at 0.145 [s]

Min: -32.8 [Nm] at 0.110 [s]



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CFC_600

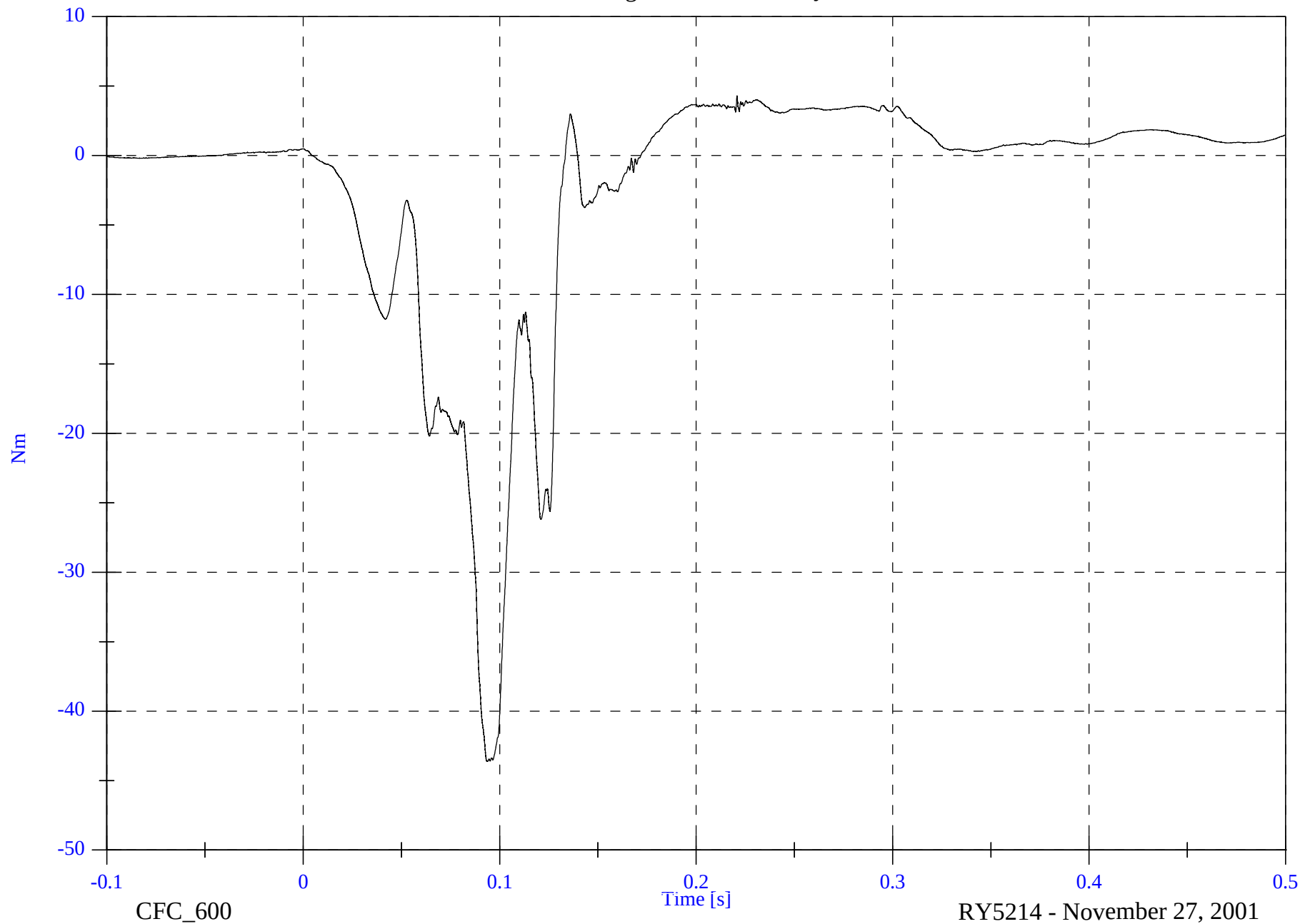
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Lower Tibia My

Max: 4.3 [Nm] at 0.221 [s]

Min: -43.6 [Nm] at 0.094 [s]



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CFC_600

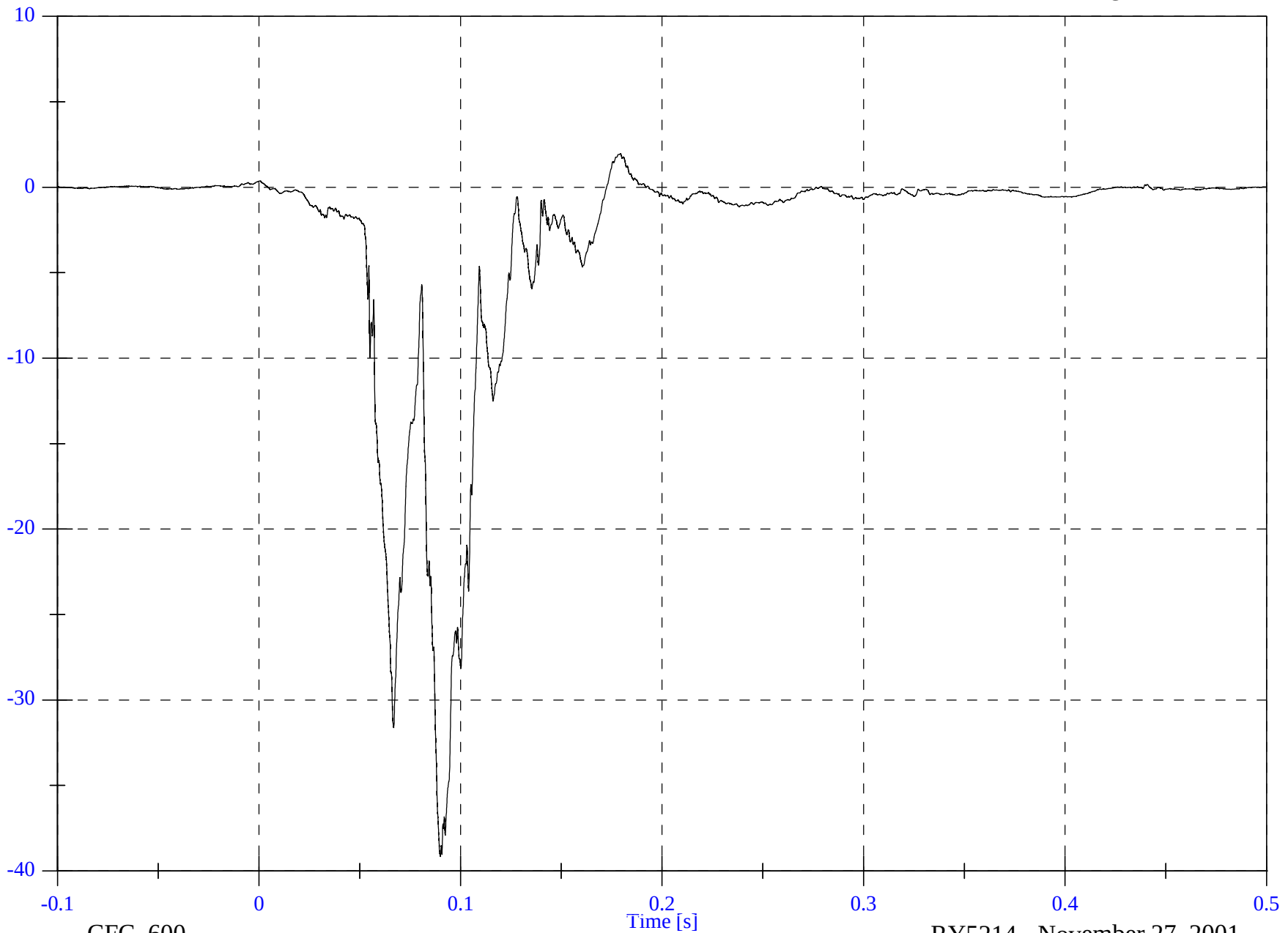
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Tibia Ax

Max: 2.0 [g] at 0.179 [s]

Min: -39.2 [g] at 0.090 [s]



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CFC_600

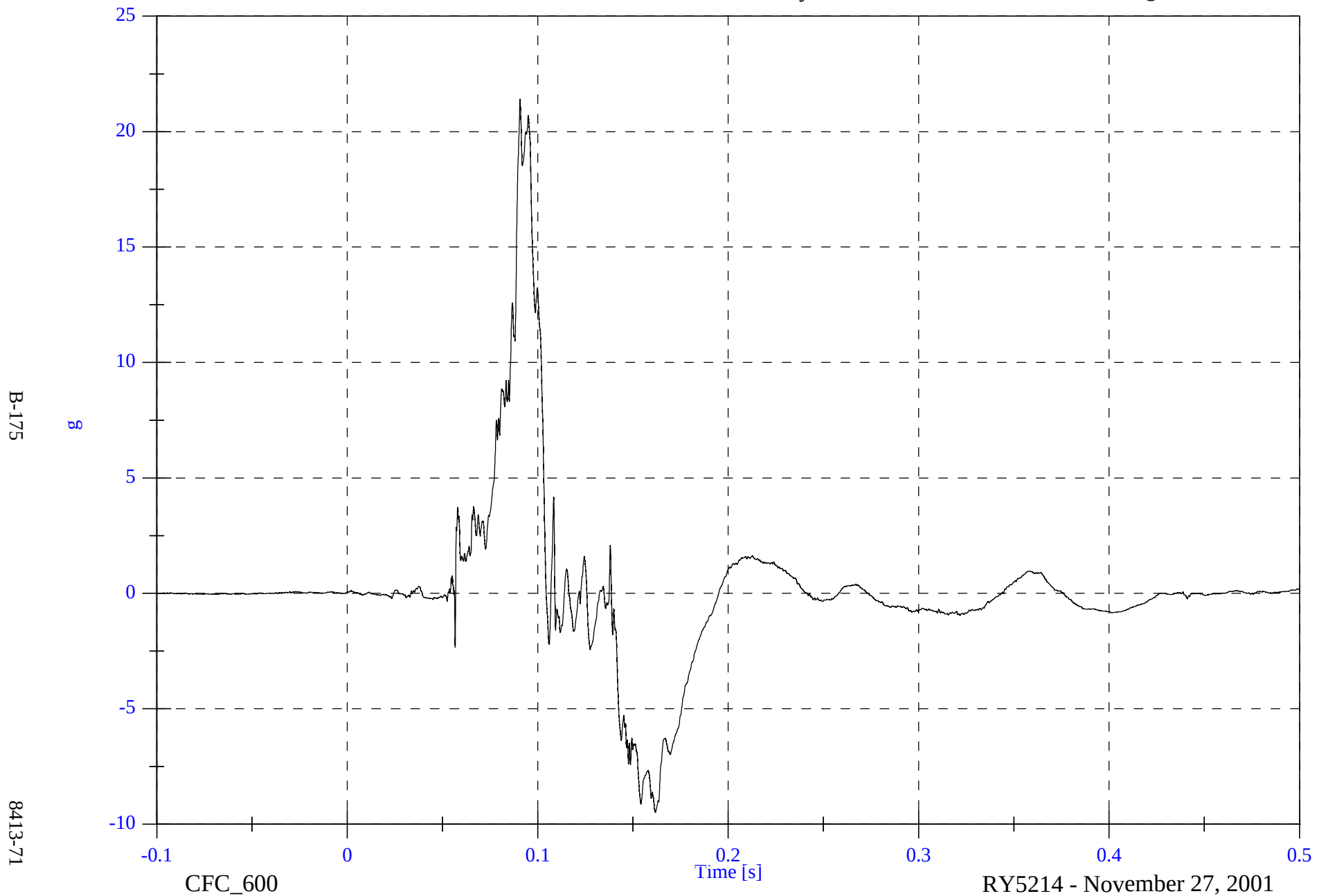
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Tibia Ay

Max: 21.4 [g] at 0.091 [s]

Min: -9.5 [g] at 0.162 [s]

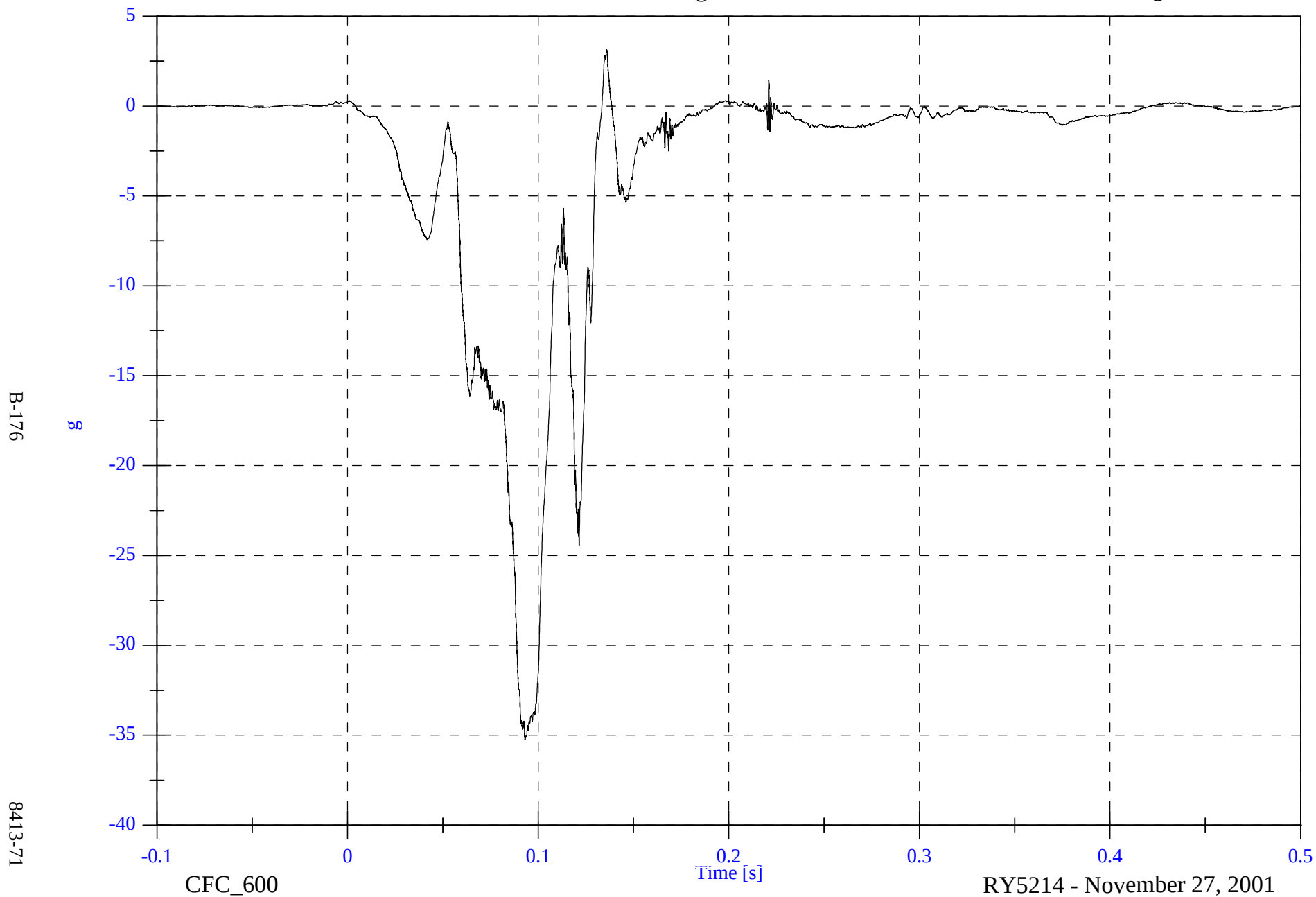


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Tibia Ax

Max: 3.1 [g] at 0.136 [s]

Min: -35.3 [g] at 0.093 [s]

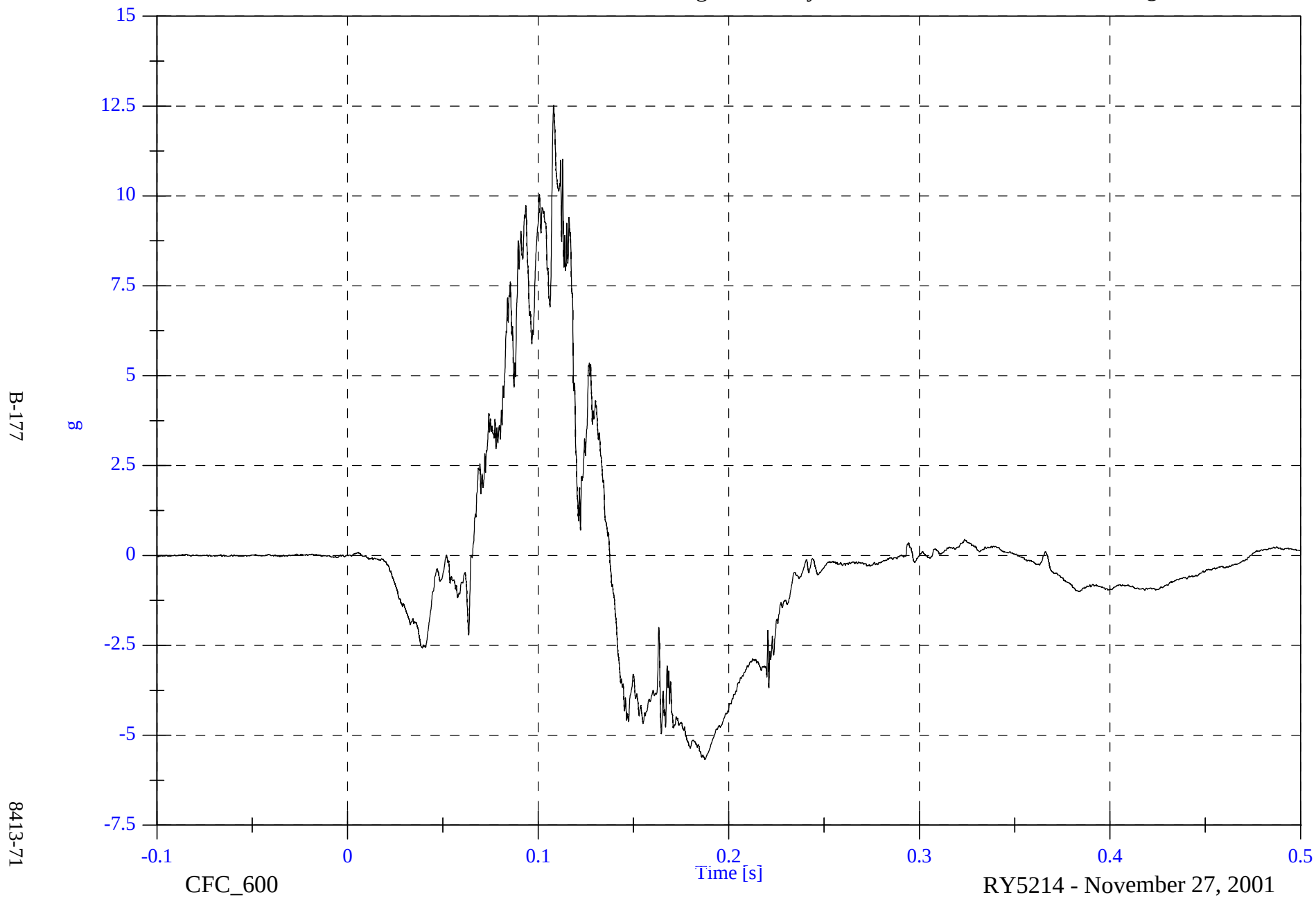


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Tibia Ay

Max: 12.5 [g] at 0.108 [s]

Min: -5.7 [g] at 0.188 [s]

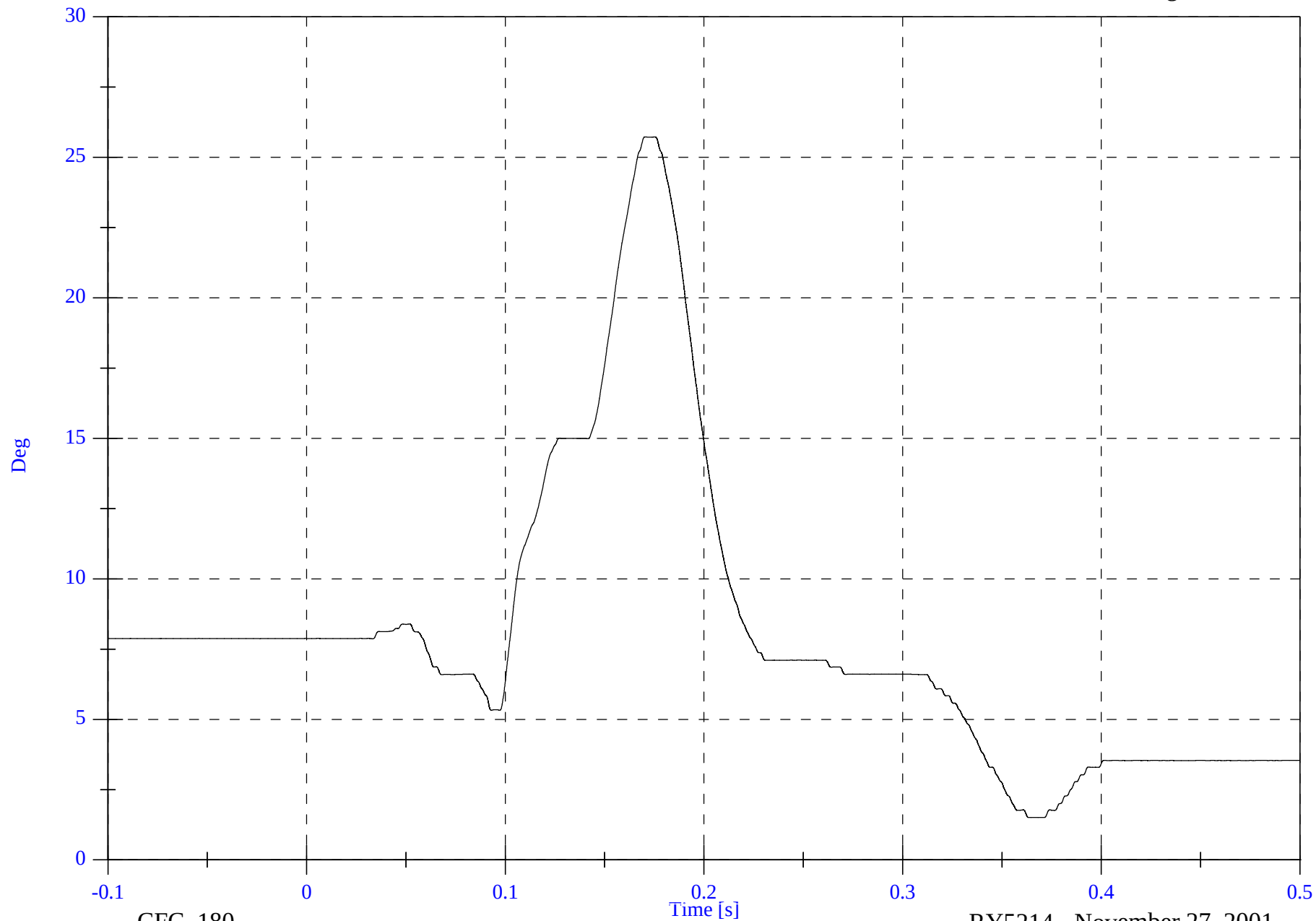


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Ankle Rotation x

Max: 25.7 [Deg] at 0.170 [s]

Min: 1.5 [Deg] at 0.364 [s]



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CFC_180

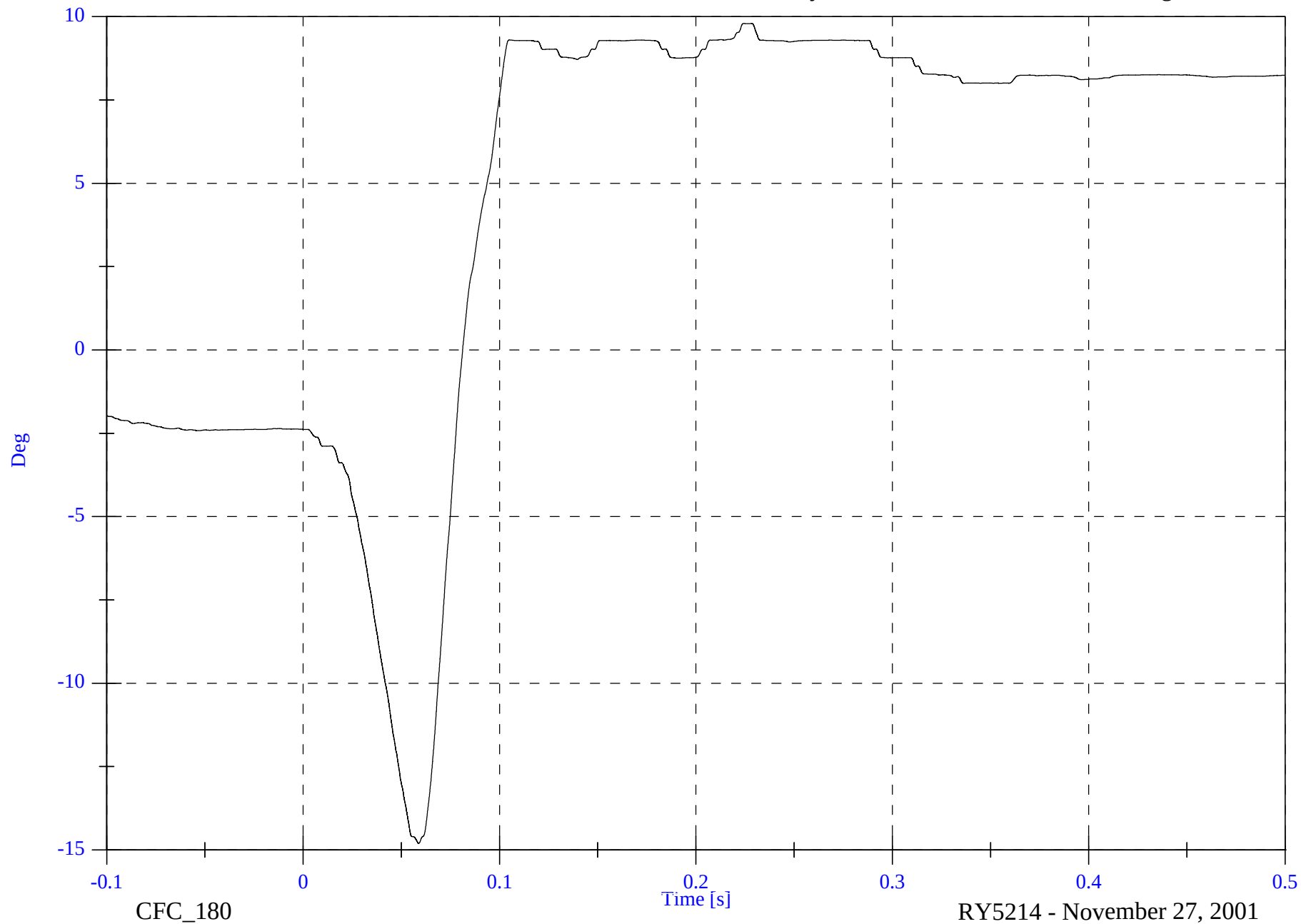
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 9.8 [Deg] at 0.224 [s]

P2 Left Ankle Rotation y

Min: -14.8 [Deg] at 0.059 [s]



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CFC_180

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Ankle Rotation z

Max: -1.4 [Deg] at 0.365 [s]

Min: -9.1 [Deg] at 0.169 [s]

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Deg

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CFC_180

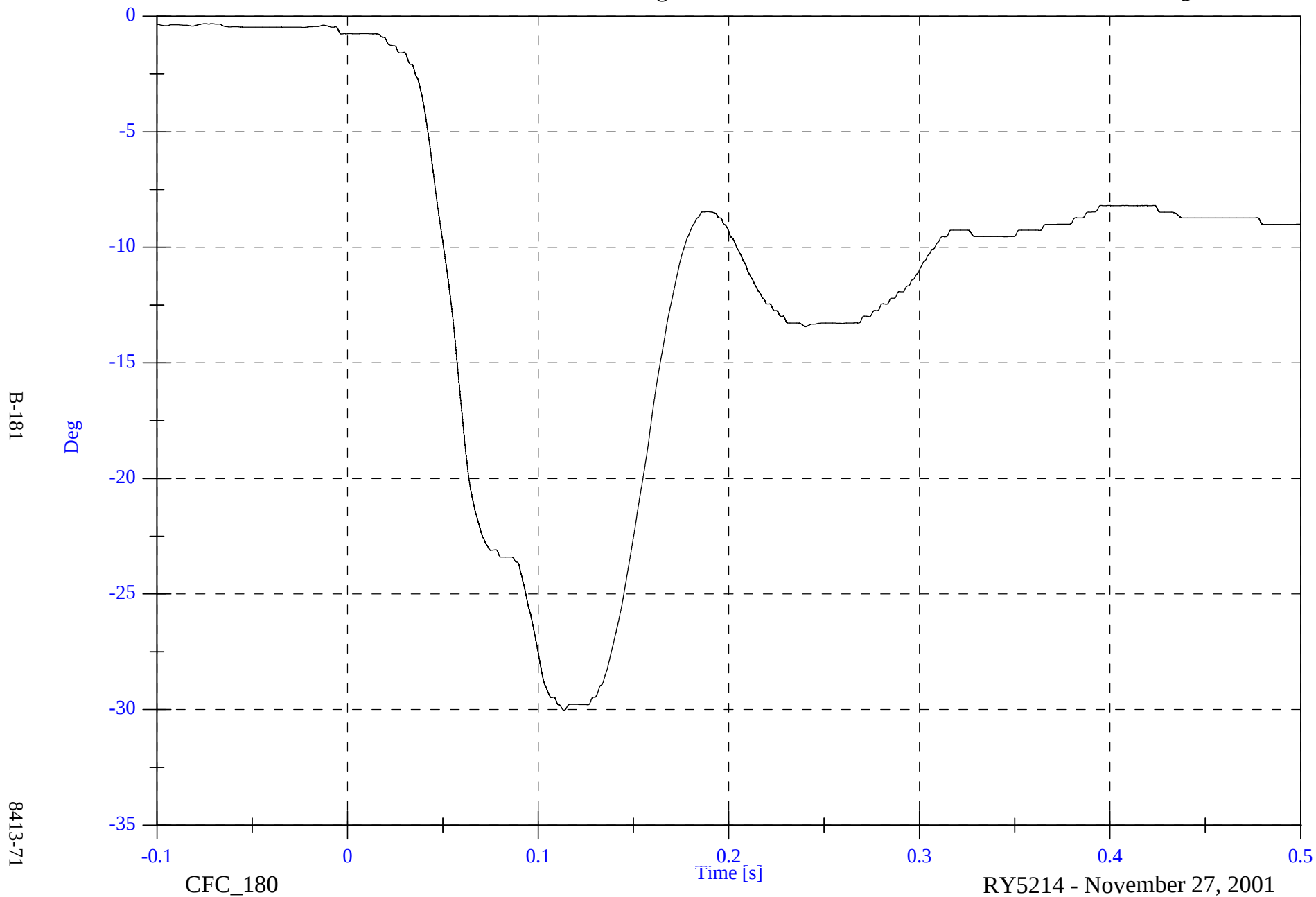
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Ankle Rotation x

Max: -0.3 [Deg] at -0.071 [s]

Min: -30.0 [Deg] at 0.114 [s]

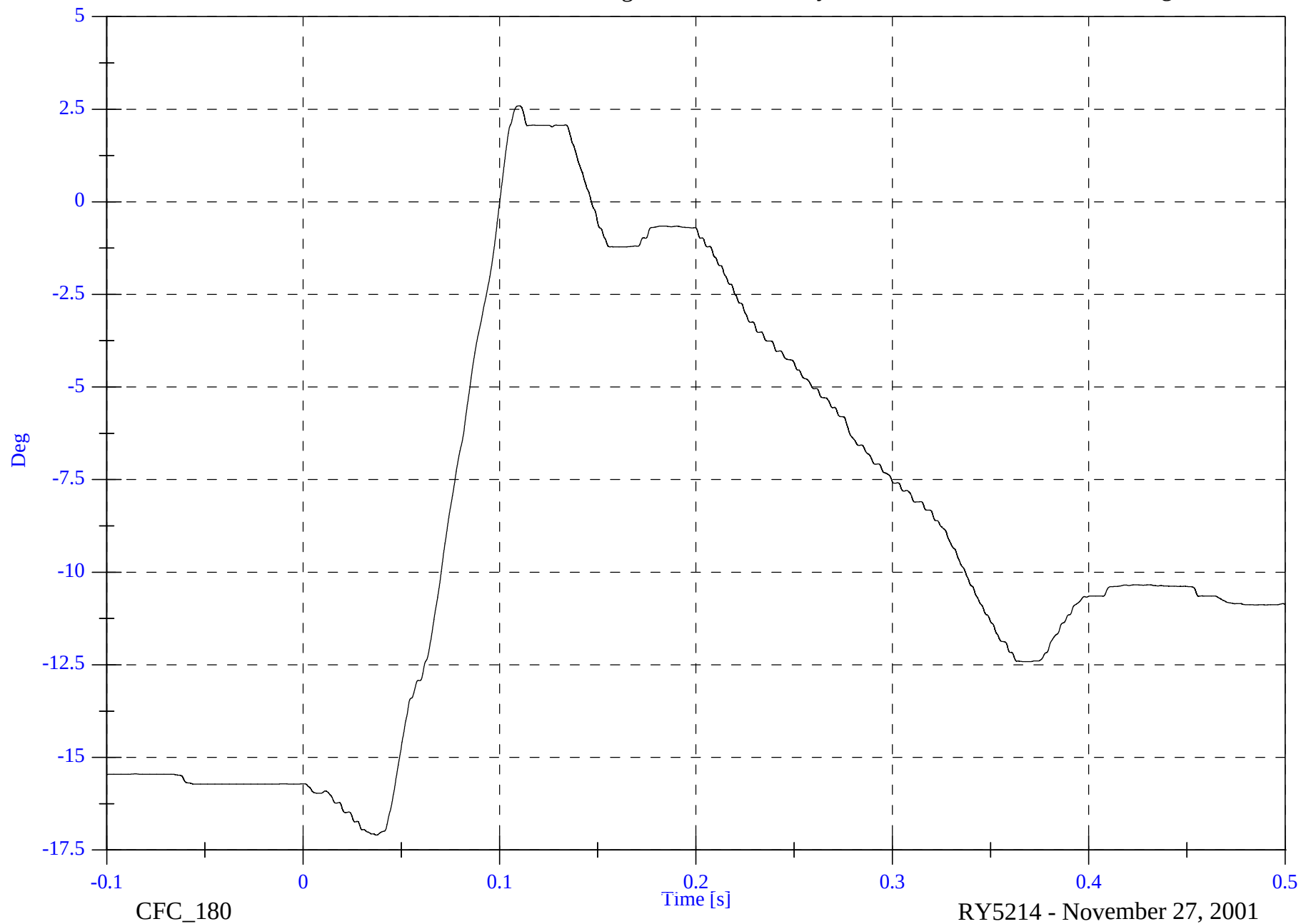


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Ankle Rotation y

Max: 2.6 [Deg] at 0.110 [s]

Min: -17.1 [Deg] at 0.037 [s]



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CFC_180

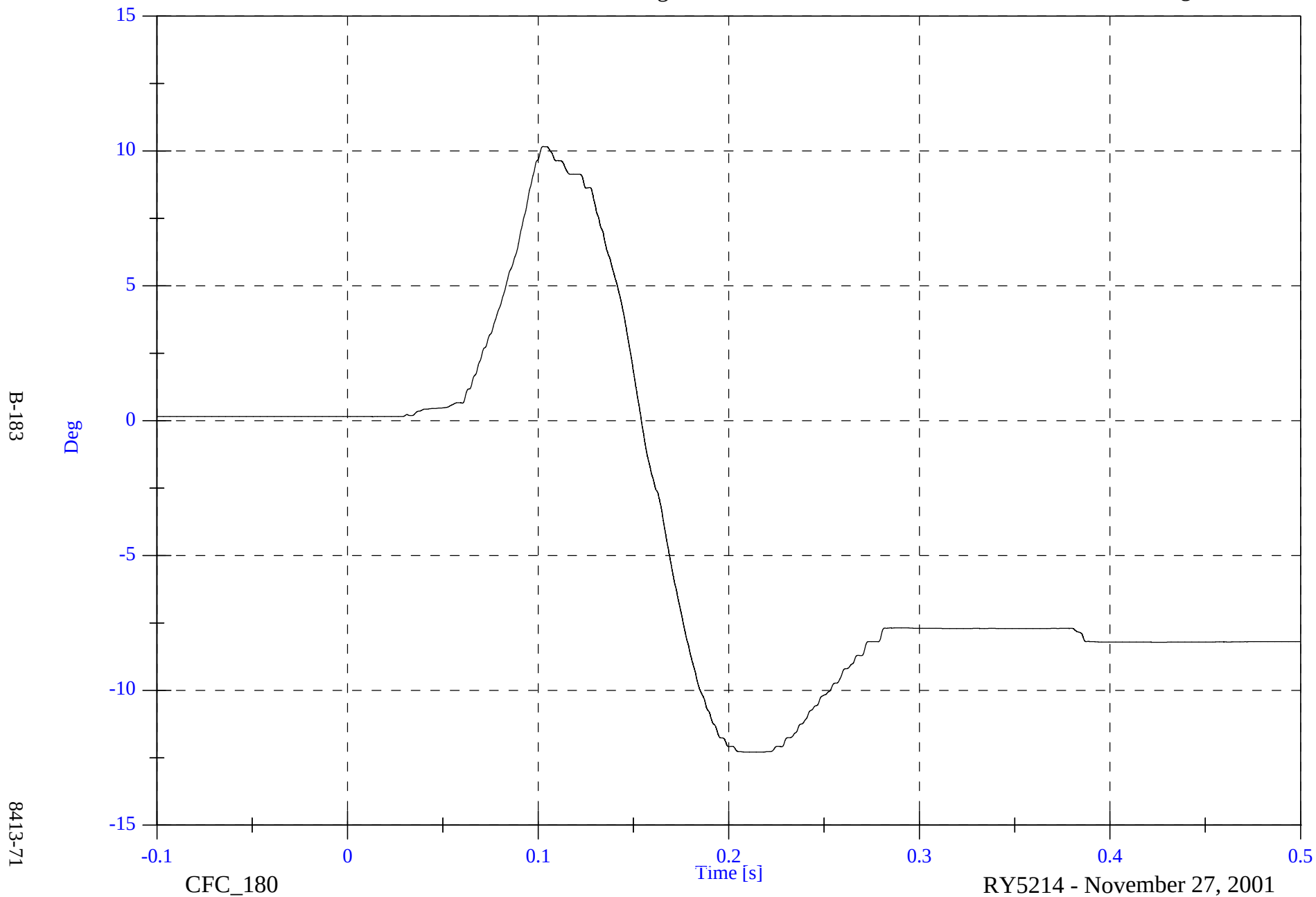
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Ankle Rotation z

Max: 10.2 [Deg] at 0.103 [s]

Min: -12.3 [Deg] at 0.209 [s]

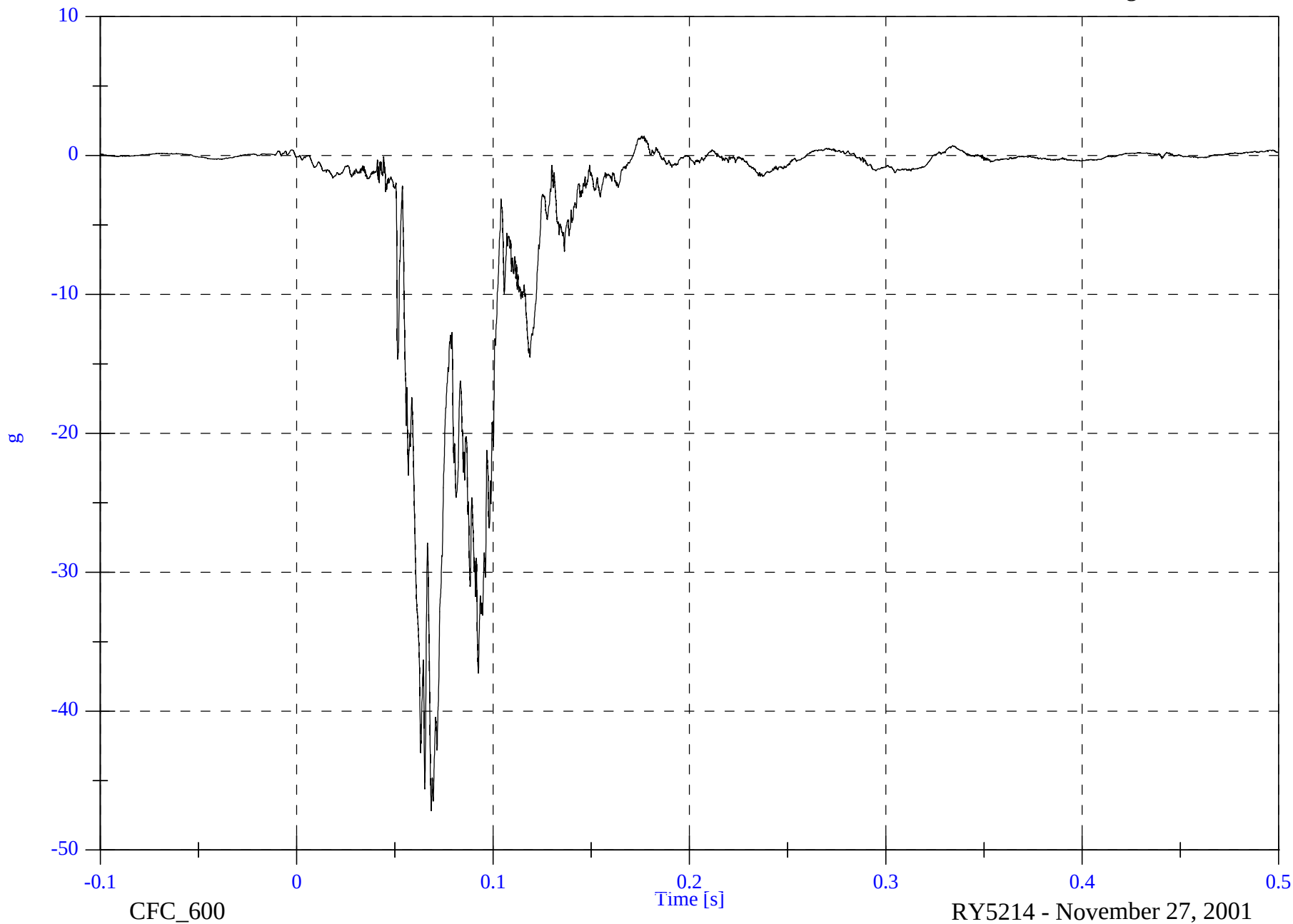


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Foot Ax

Max: 1.4 [g] at 0.176 [s]

Min: -47.2 [g] at 0.069 [s]



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40% Frontal Offset Test #15 - 2000 Nissan Quest

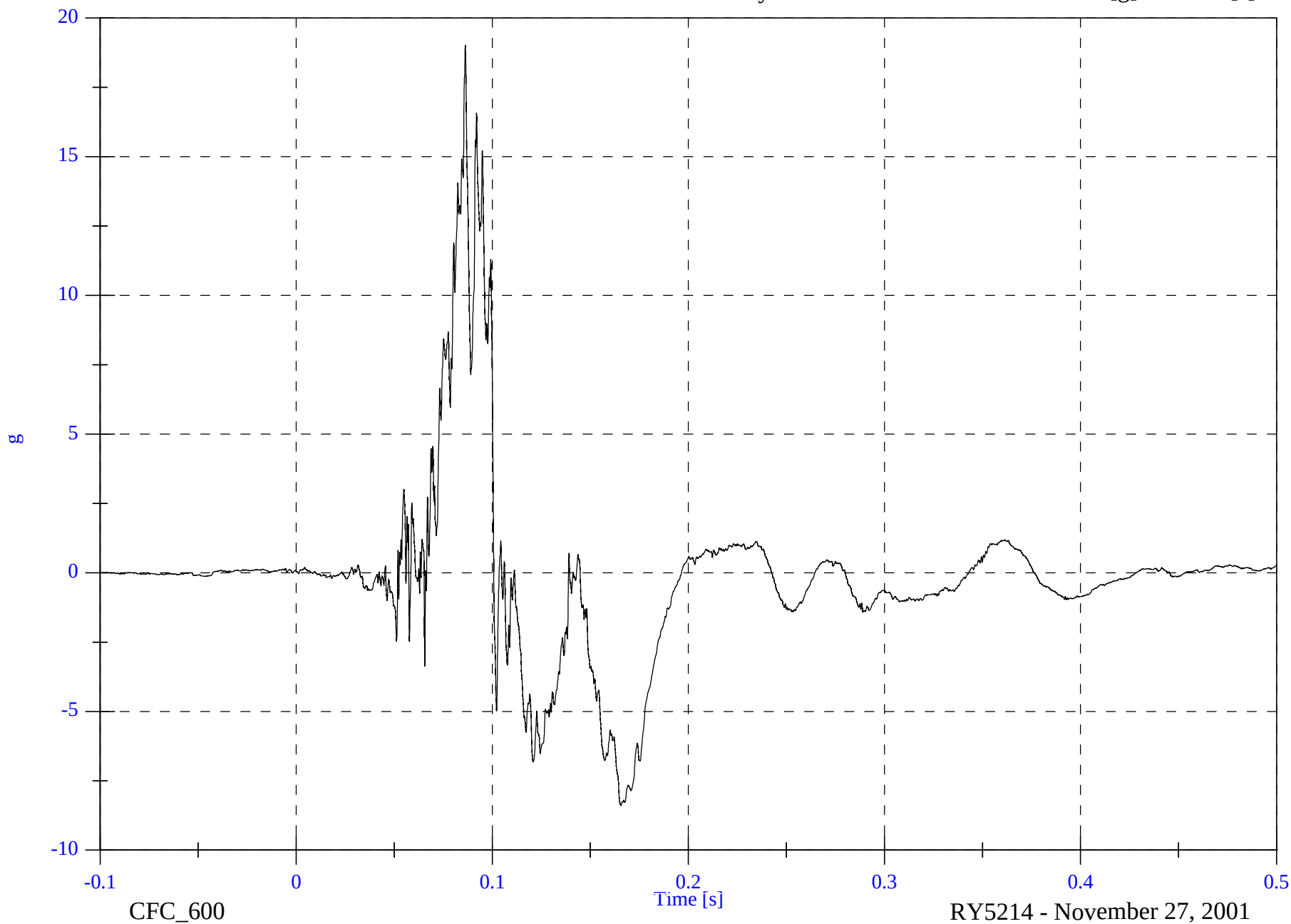
P2 Left Foot Ay

Max: 19.0 [g] at 0.086 [s]

Min: -8.4 [g] at 0.166 [s]

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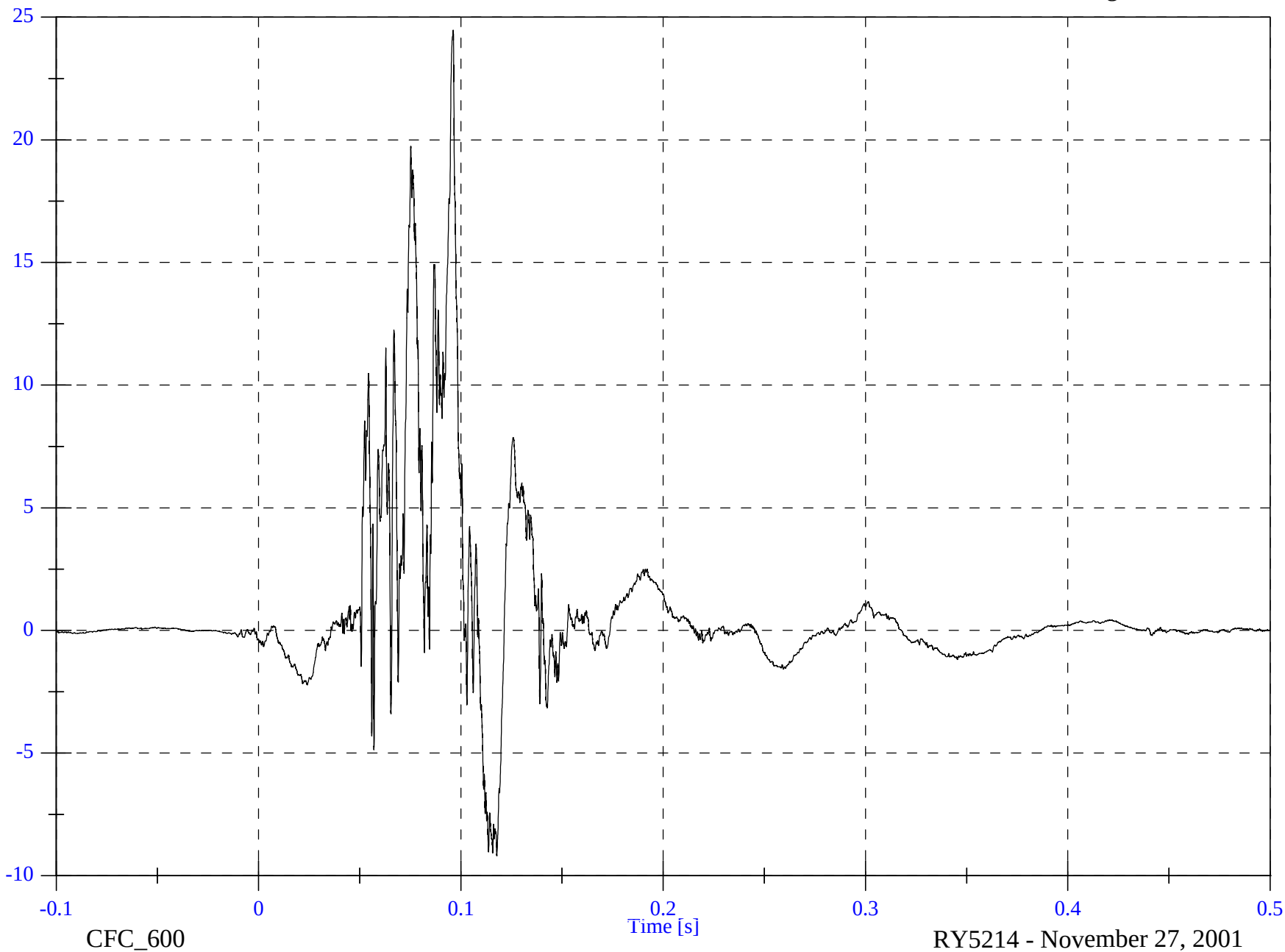


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Foot Az

Max: 24.5 [g] at 0.096 [s]

Min: -9.2 [g] at 0.118 [s]



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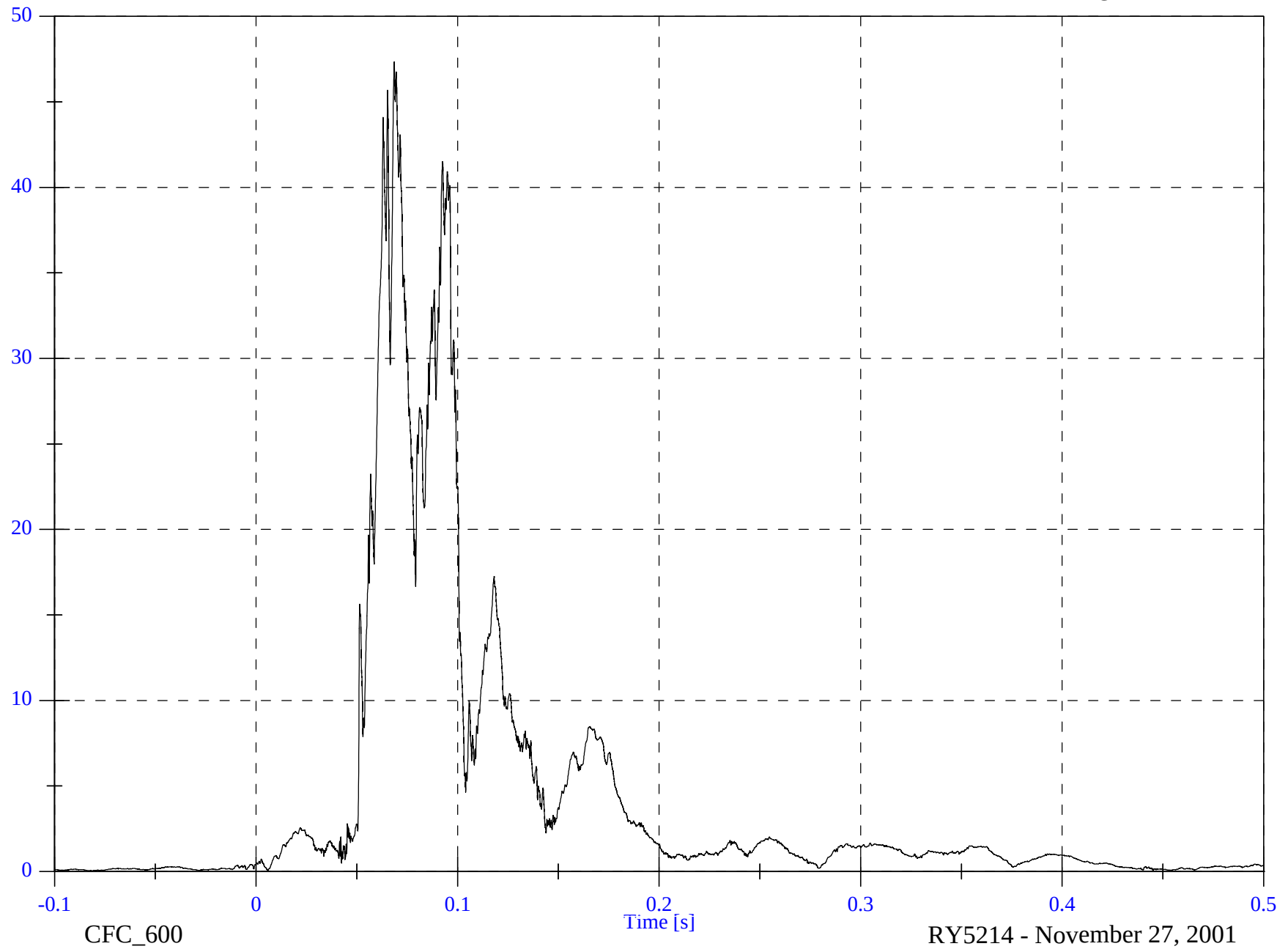
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40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Left Foot A Resultant

Max: 47.3 [g] at 0.069 [s]

Min: 0.0 [g] at -0.081 [s]

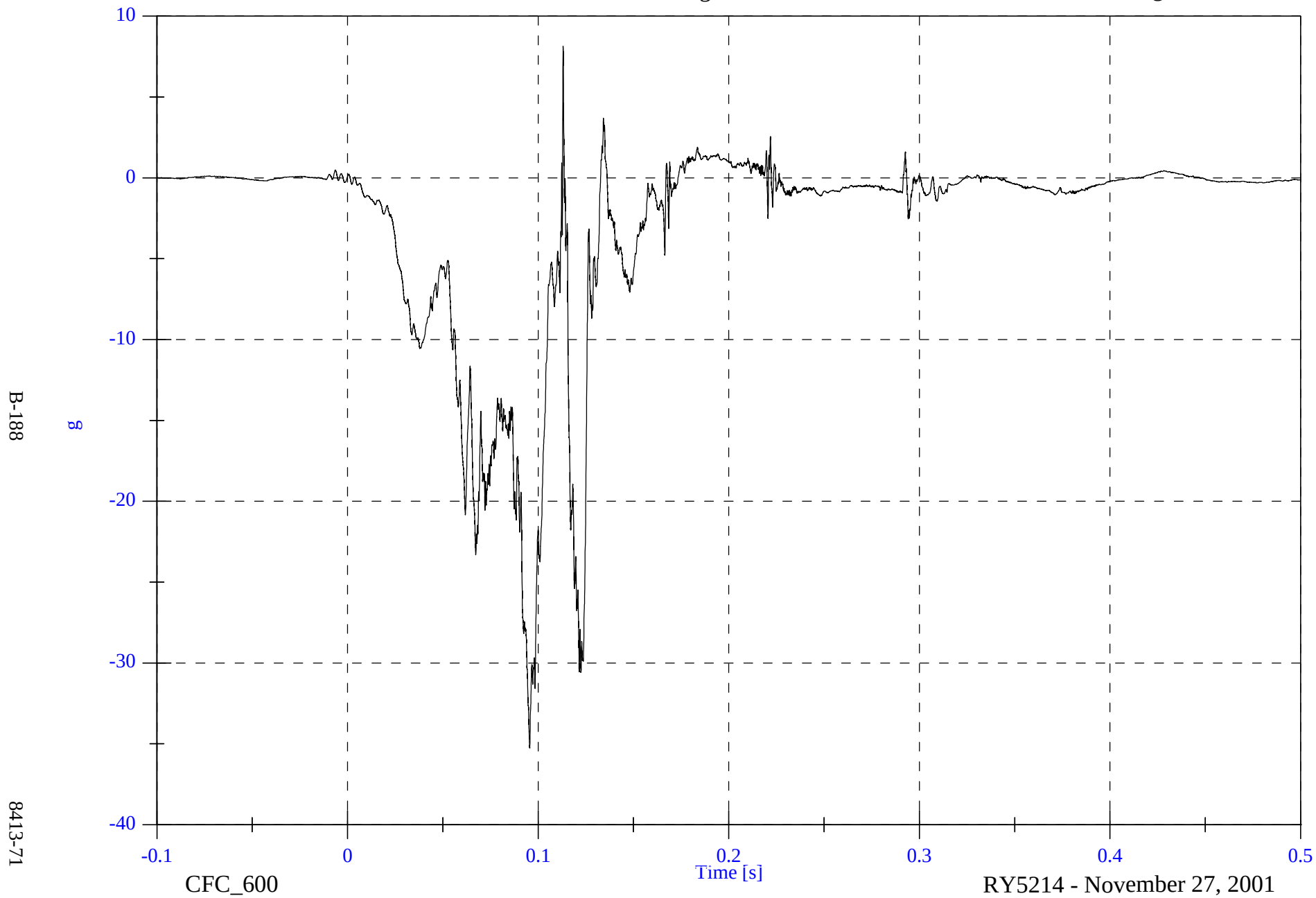


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Foot Ax

Max: 8.1 [g] at 0.113 [s]

Min: -35.3 [g] at 0.096 [s]

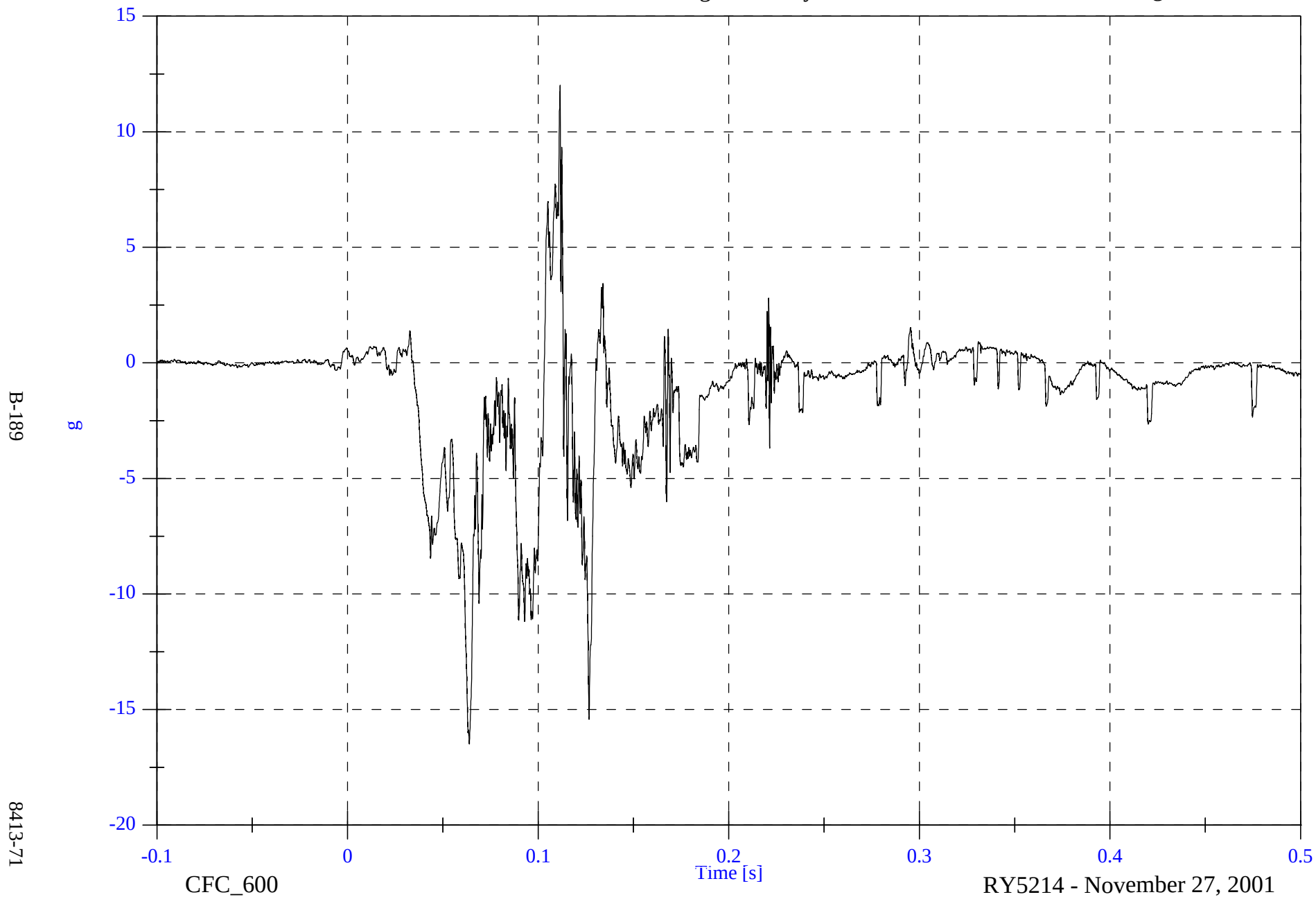


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Foot Ay

Max: 12.0 [g] at 0.111 [s]

Min: -16.5 [g] at 0.064 [s]

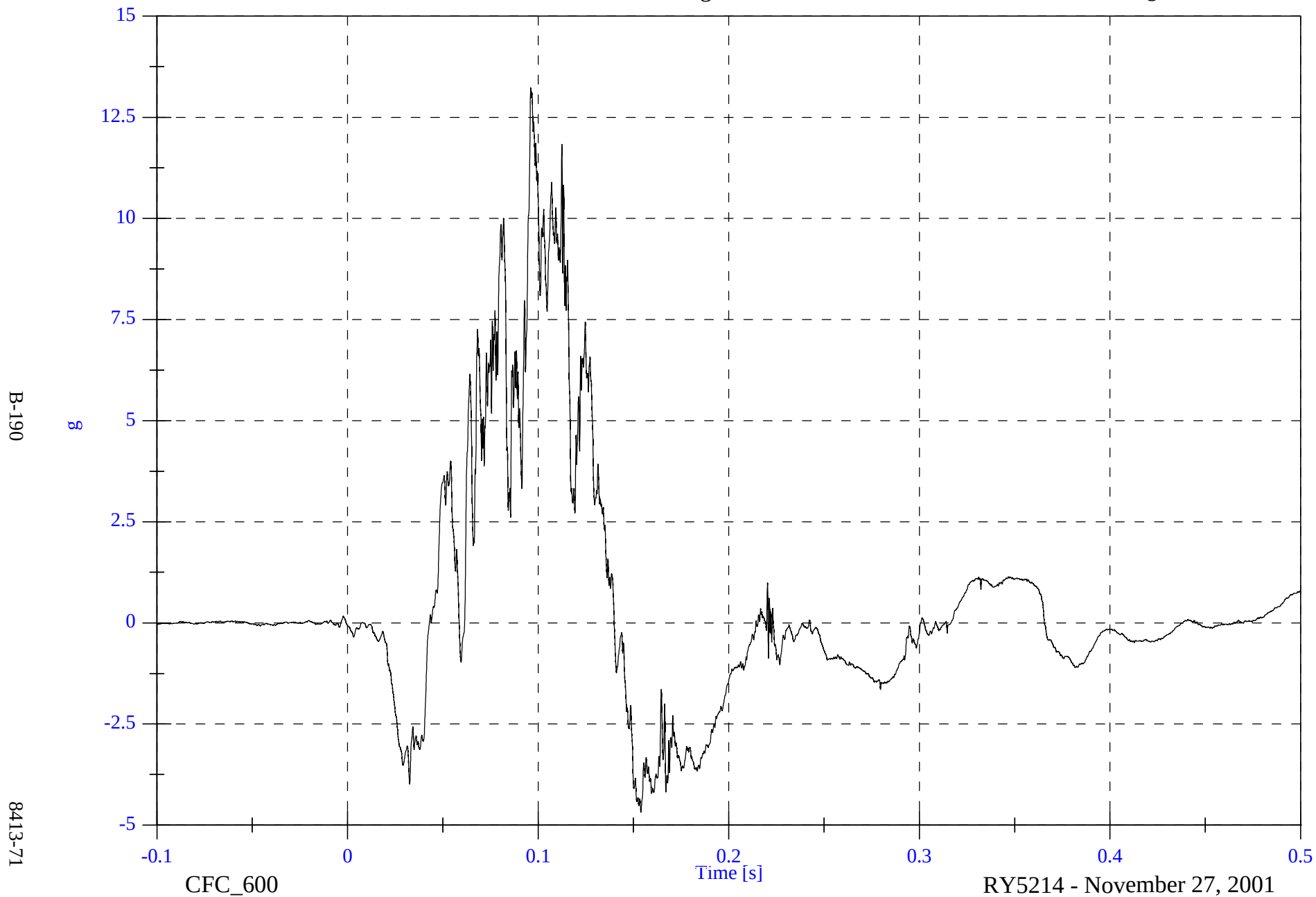


40% Frontal Offset Test #15 - 2000 Nissan Quest

P2 Right Foot Az

Max: 13.2 [g] at 0.096 [s]

Min: -4.7 [g] at 0.154 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

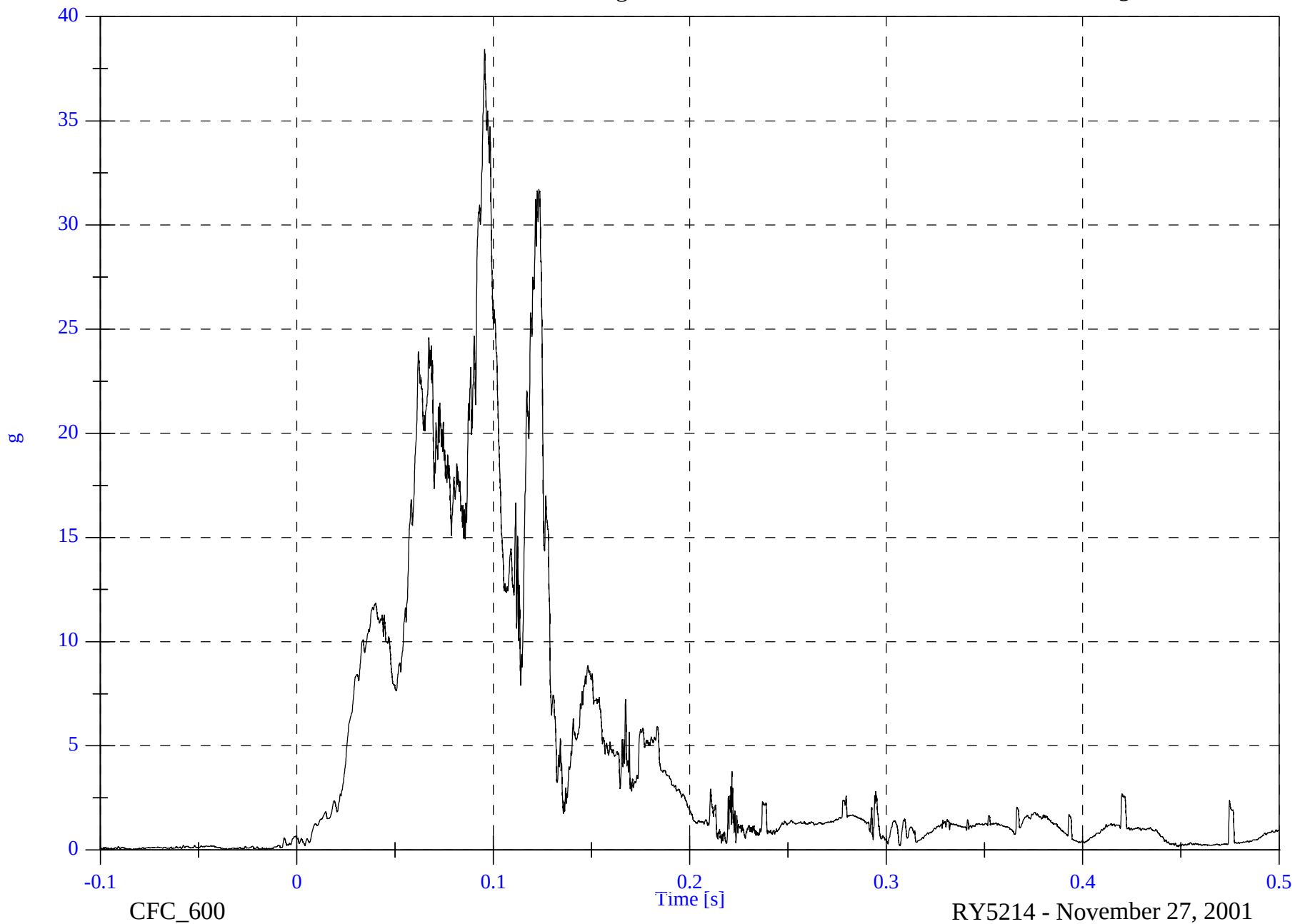
P2 Right Foot A Resultant

Max: 38.4 [g] at 0.096 [s]

Min: 0.0 [g] at -0.084 [s]

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40% Frontal Offset Test #15 - 2000 Nissan Quest

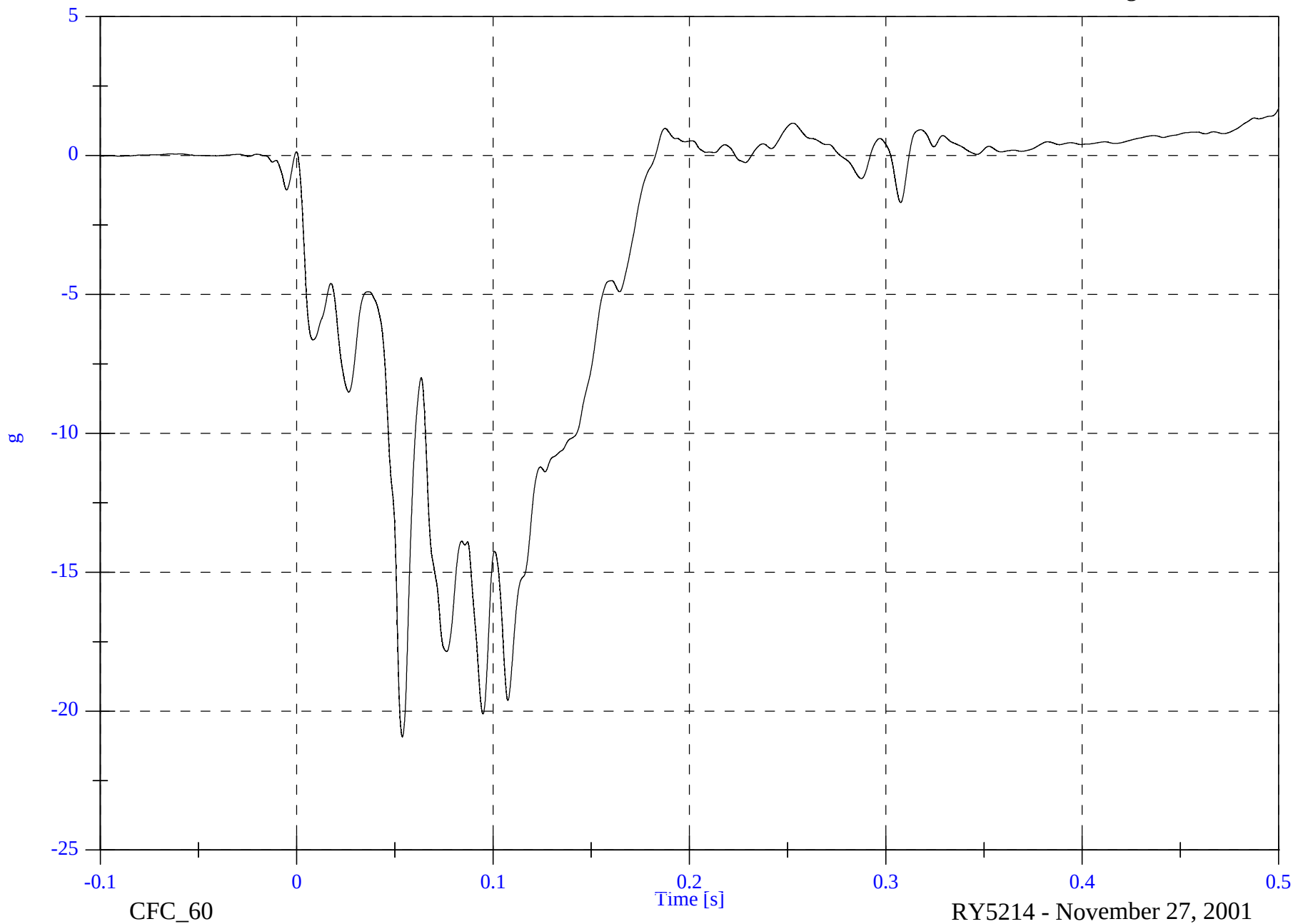
Acc 1 Rear XMBR Left X

Max: 1.7 [g] at 0.500 [s]

Min: -20.9 [g] at 0.054 [s]

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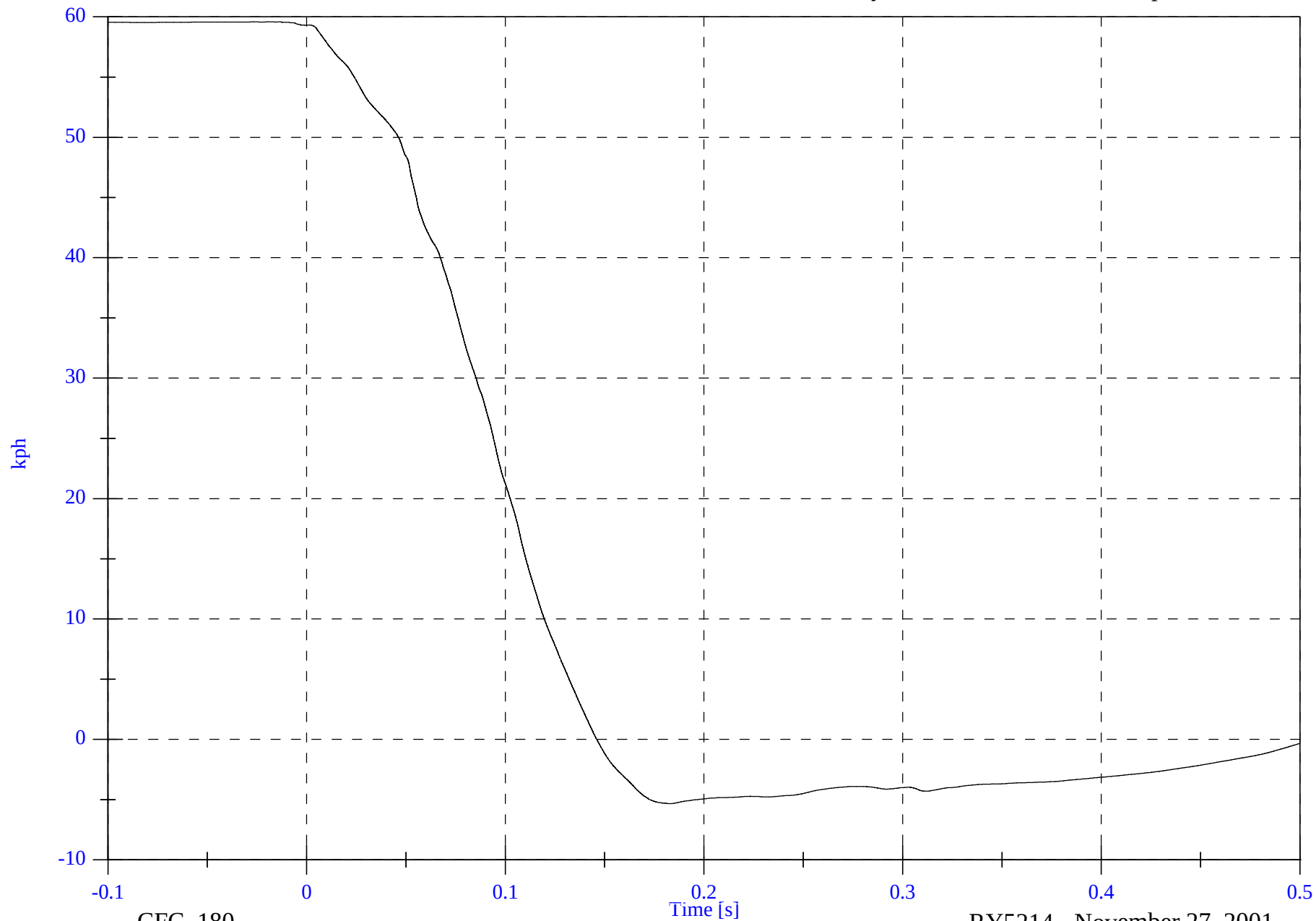


40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 1 Rear XMBR Left X Velocity

Max: 59.6 [kph] at -0.014 [s]

Min: -5.3 [kph] at 0.183 [s]



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8413-71

CFC_180

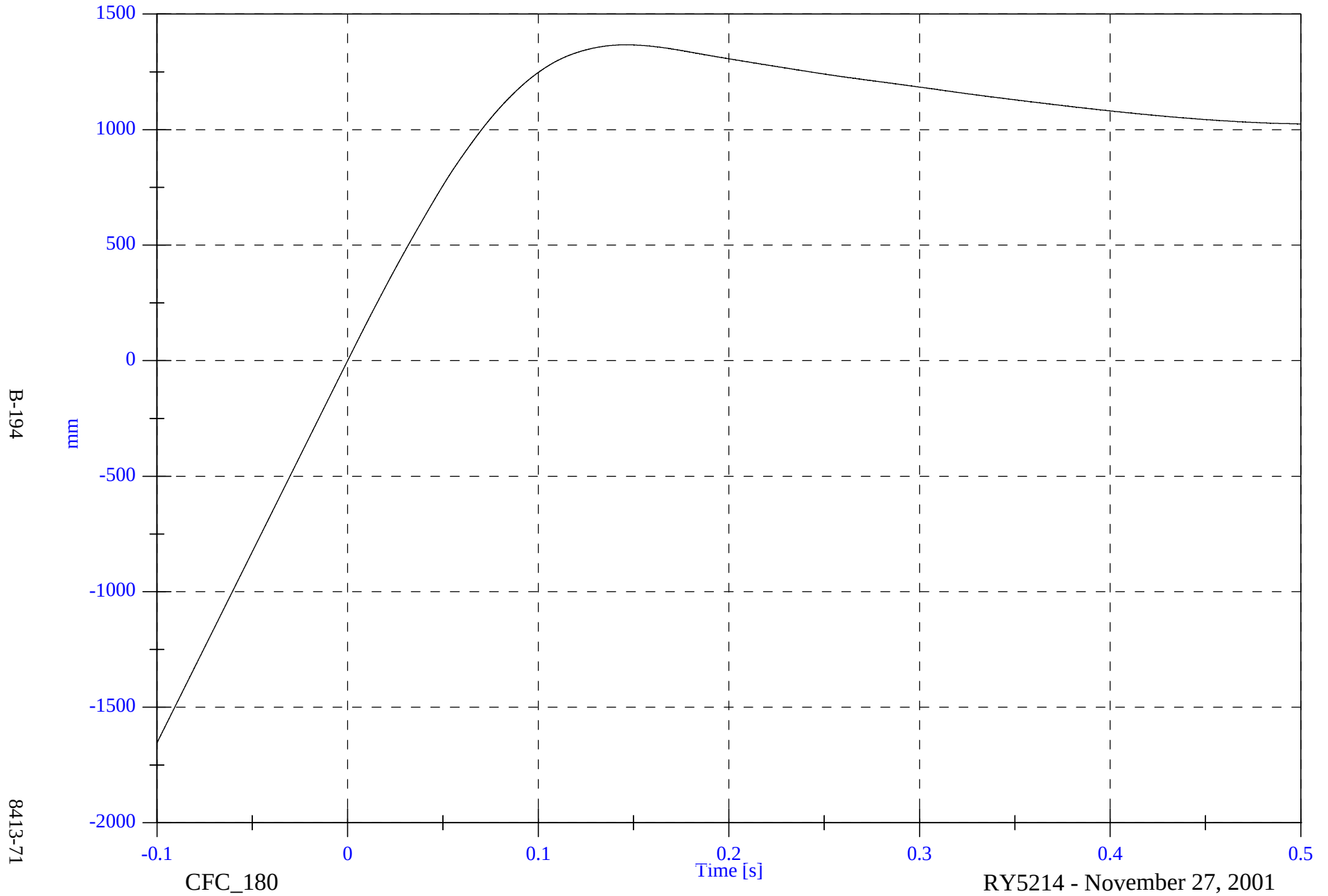
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 1 Rear XMBR Left X Displacement

Max: 1367.3 [mm] at 0.146 [s]

Min: -1654.0 [mm] at -0.100 [s]

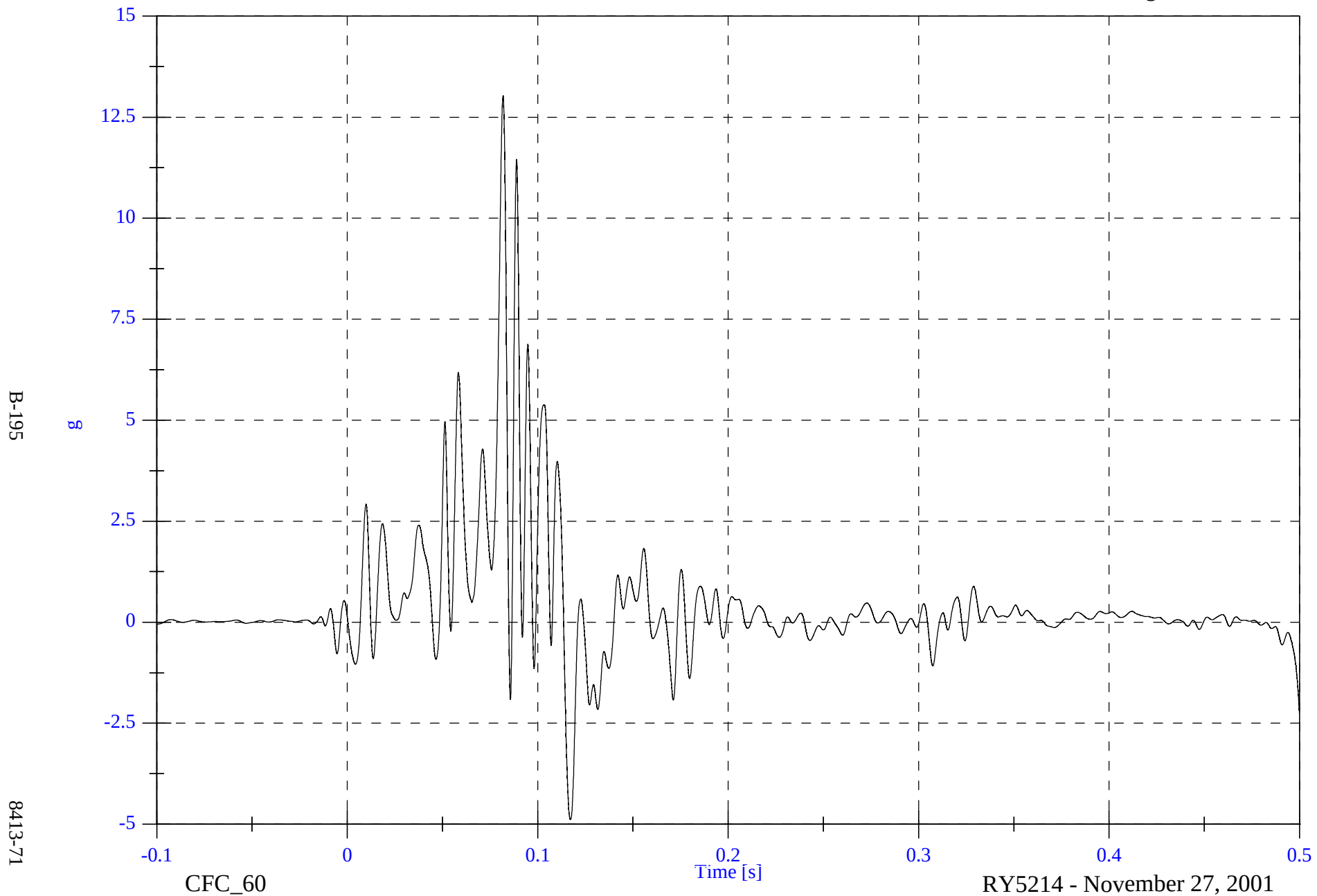


40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 2 Rear XMBR Left Y

Max: 13.0 [g] at 0.082 [s]

Min: -4.9 [g] at 0.117 [s]

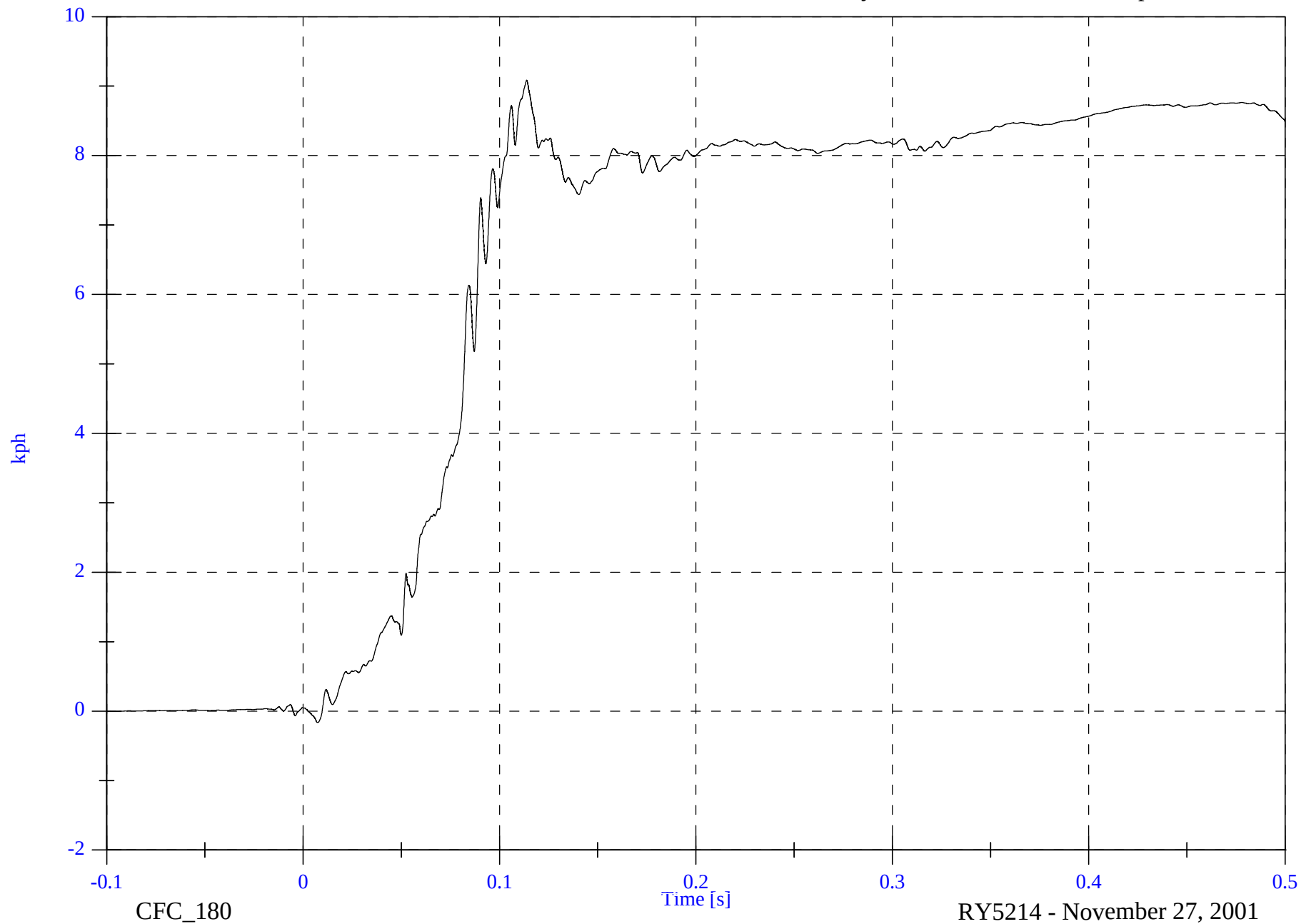


40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 2 Rear XMBR Left Y Velocity

Max: 9.1 [kph] at 0.114 [s]

Min: -0.2 [kph] at 0.007 [s]



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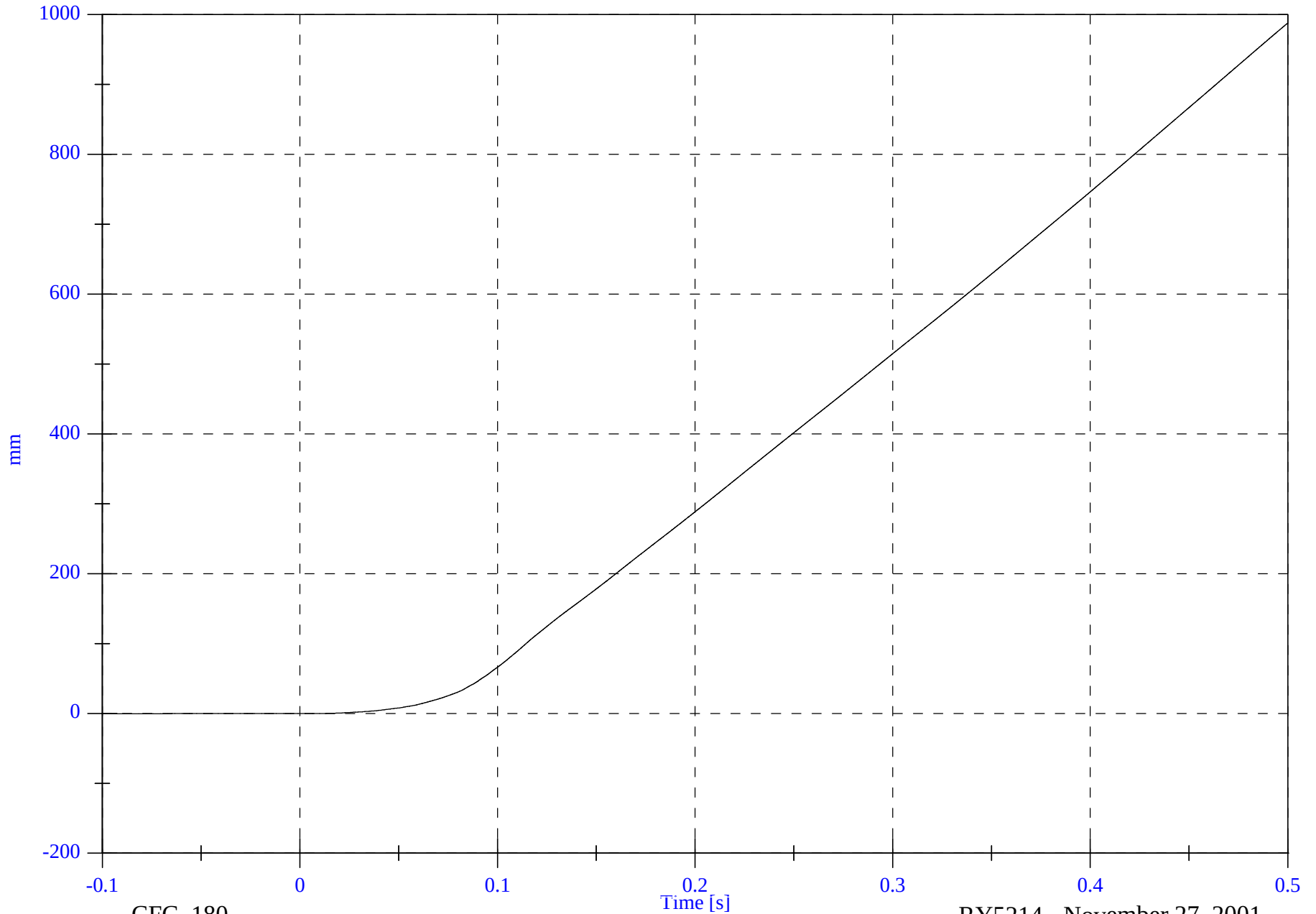
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 2 Rear XMBR Left Y Displacement

Max: 987.9 [mm] at 0.500 [s]

Min: -0.4 [mm] at -0.092 [s]



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8413-71

CFC_180

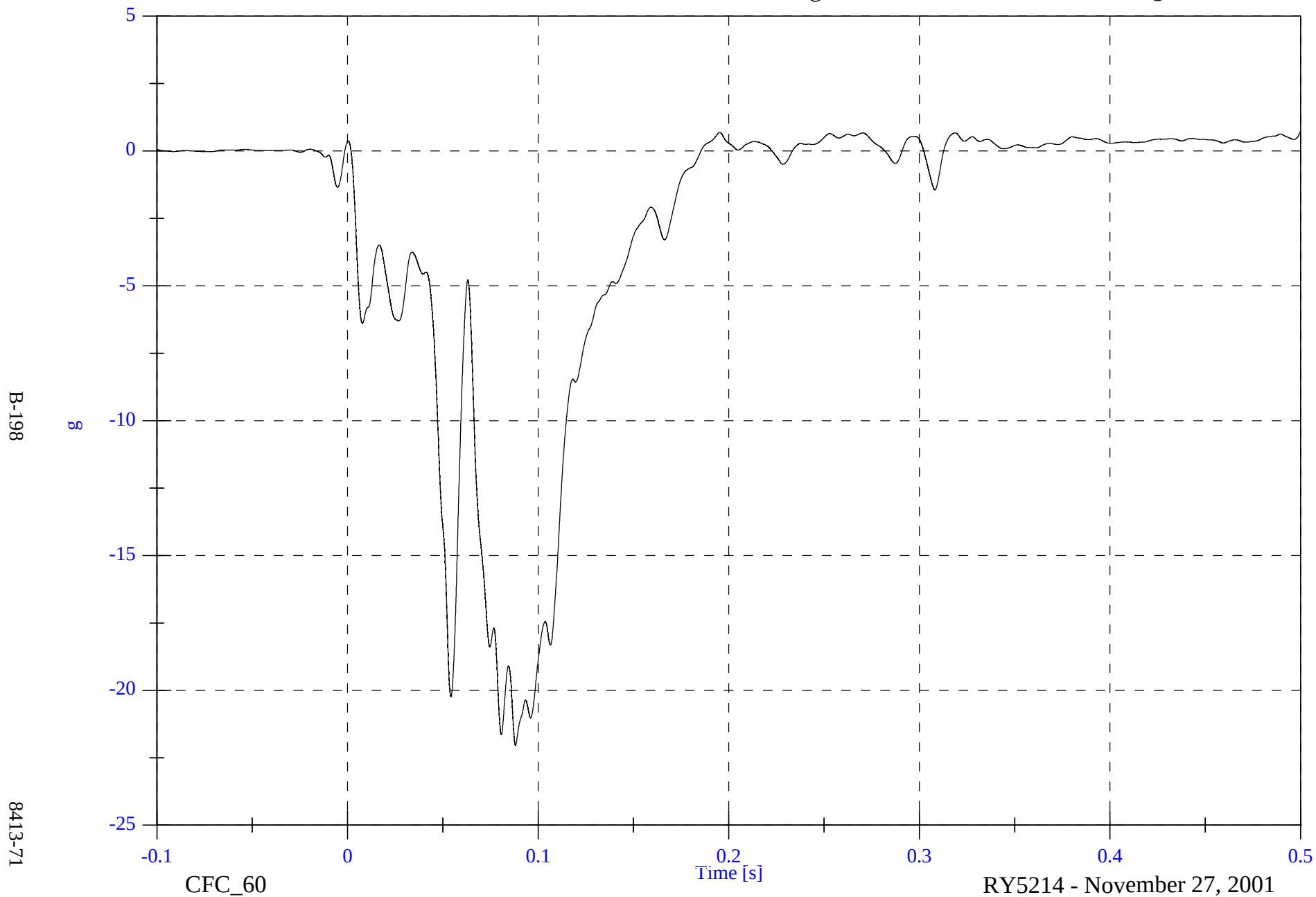
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 3 Rear XMBR Right X

Max: 0.7 [g] at 0.500 [s]

Min: -22.0 [g] at 0.088 [s]

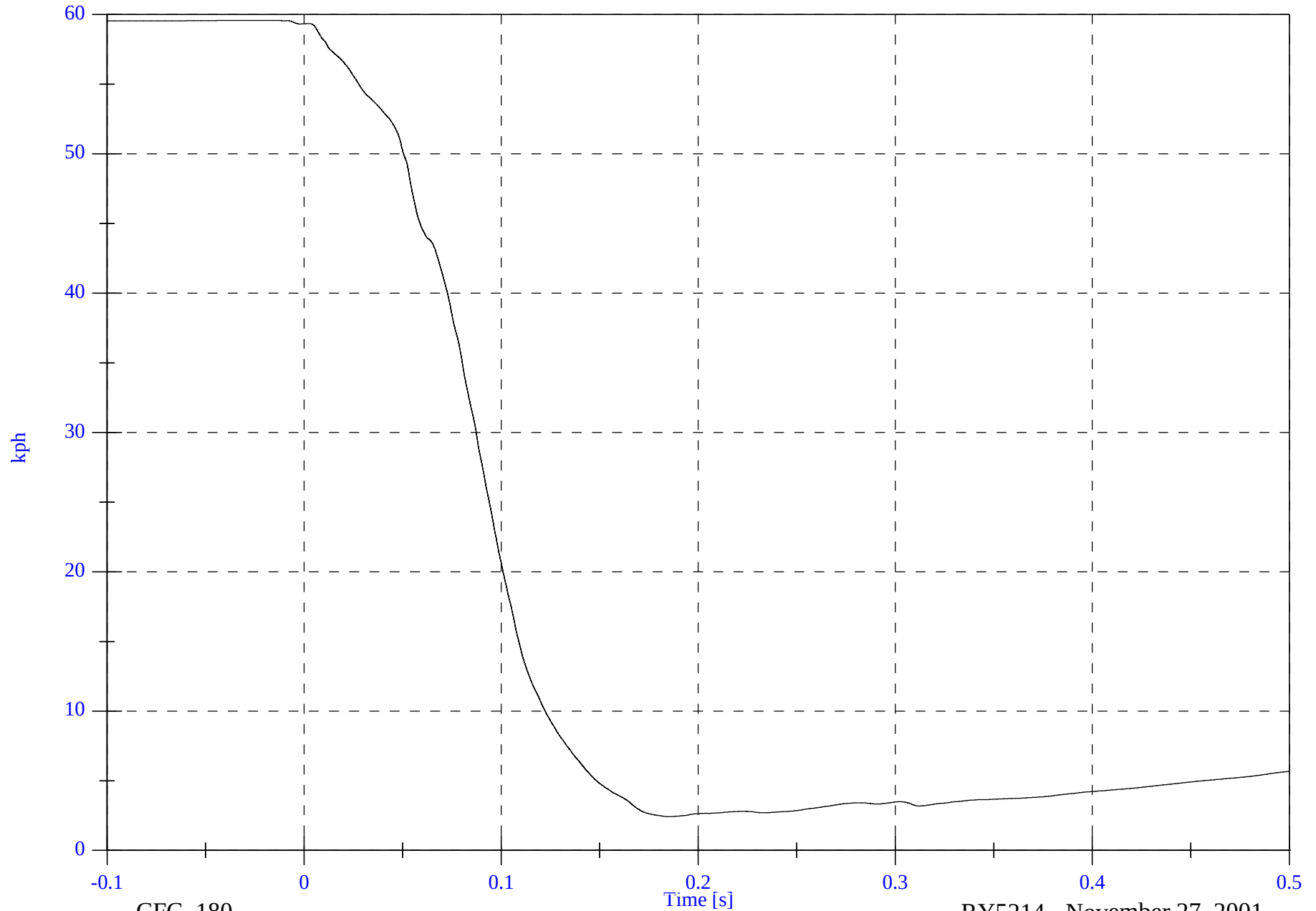


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 59.6 [kph] at -0.013 [s]

Acc 3 Rear XMBR Right X Velocity

Min: 2.4 [kph] at 0.185 [s]



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8413-71

CFC_180

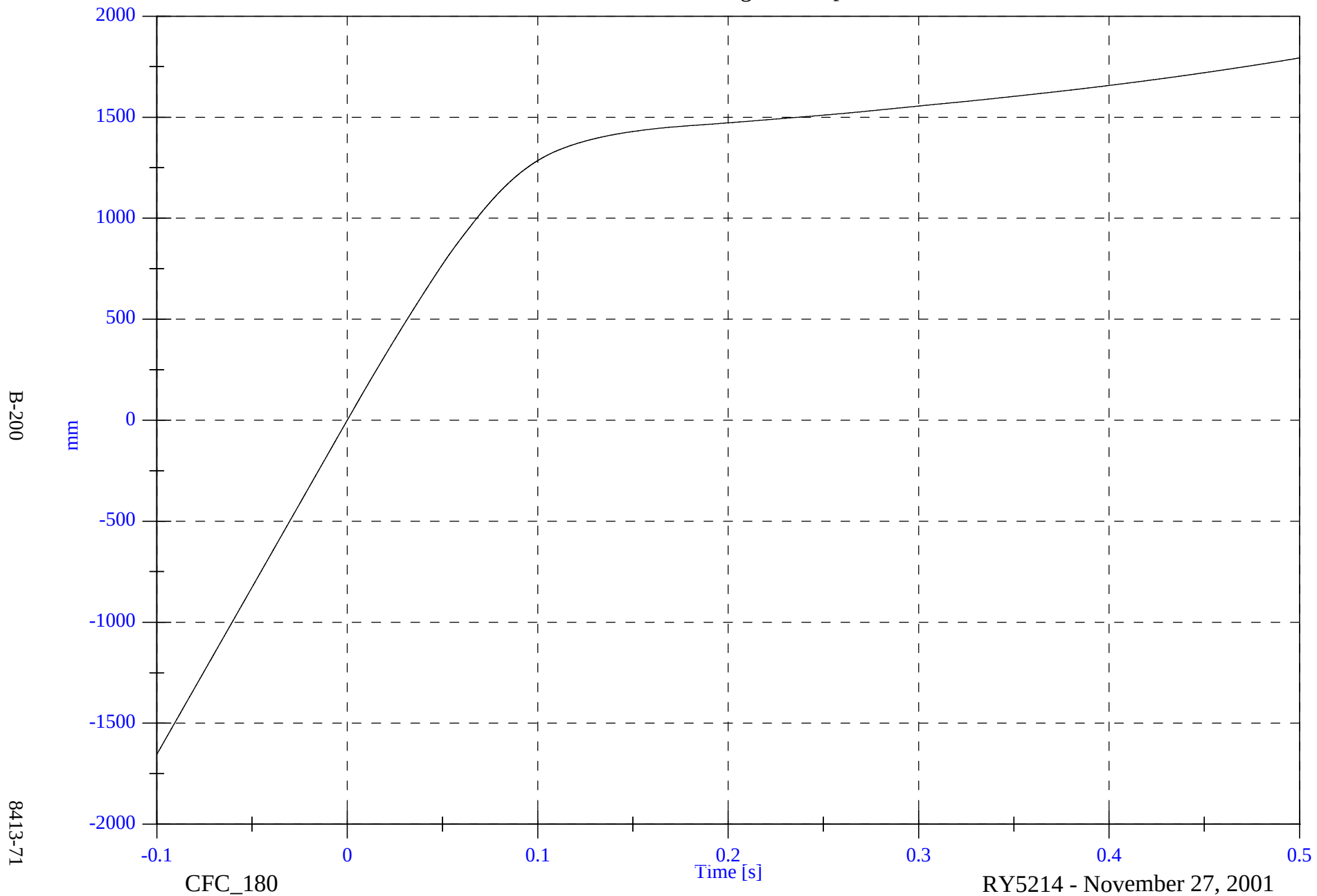
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 3 Rear XMBR Right X Displacement

Max: 1793.2 [mm] at 0.500 [s]

Min: -1654.2 [mm] at -0.100 [s]



40% Frontal Offset Test #15 - 2000 Nissan Quest

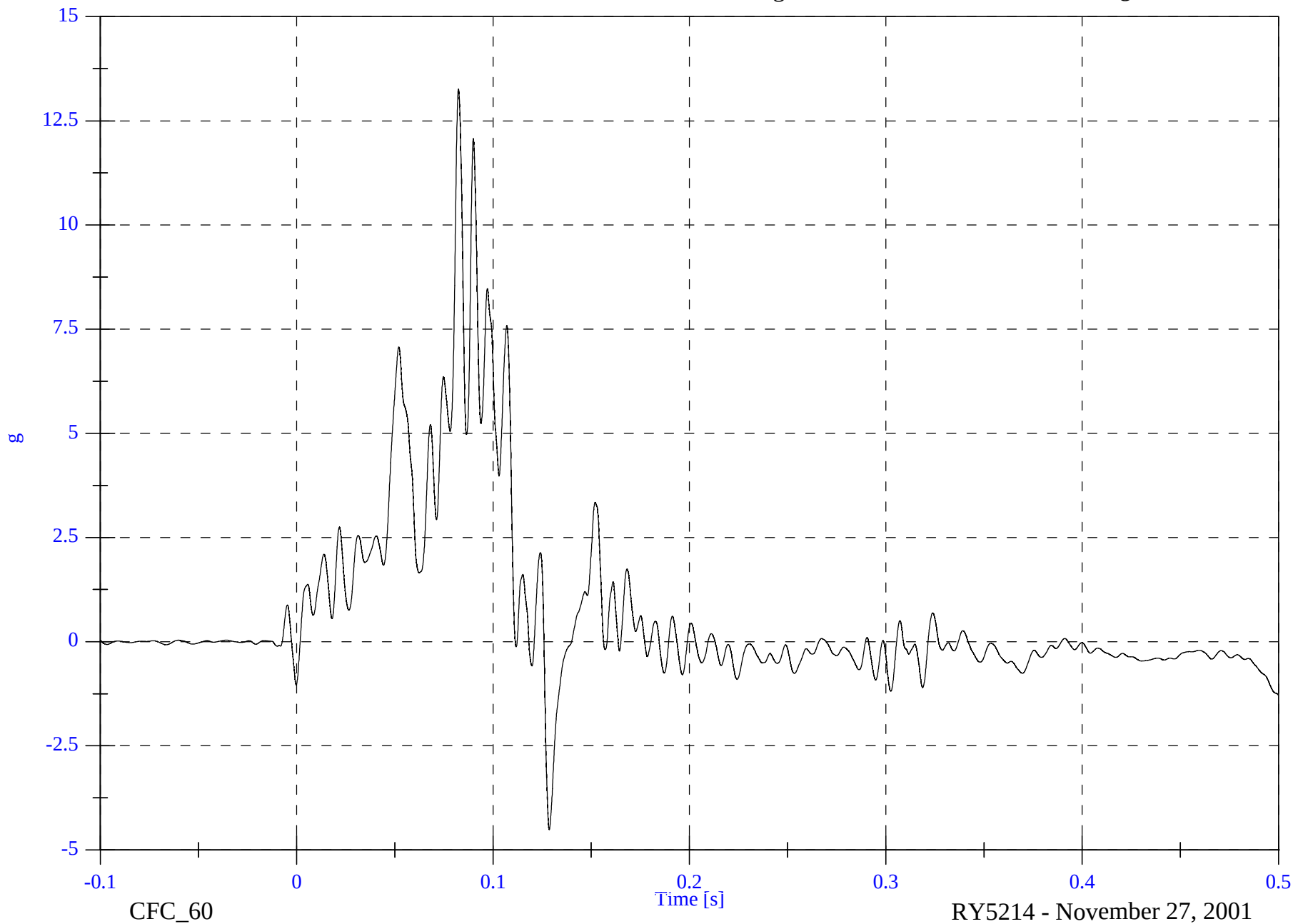
Acc 4 Rear XMBR Right Y

Max: 13.3 [g] at 0.082 [s]

Min: -4.5 [g] at 0.129 [s]

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8413-71

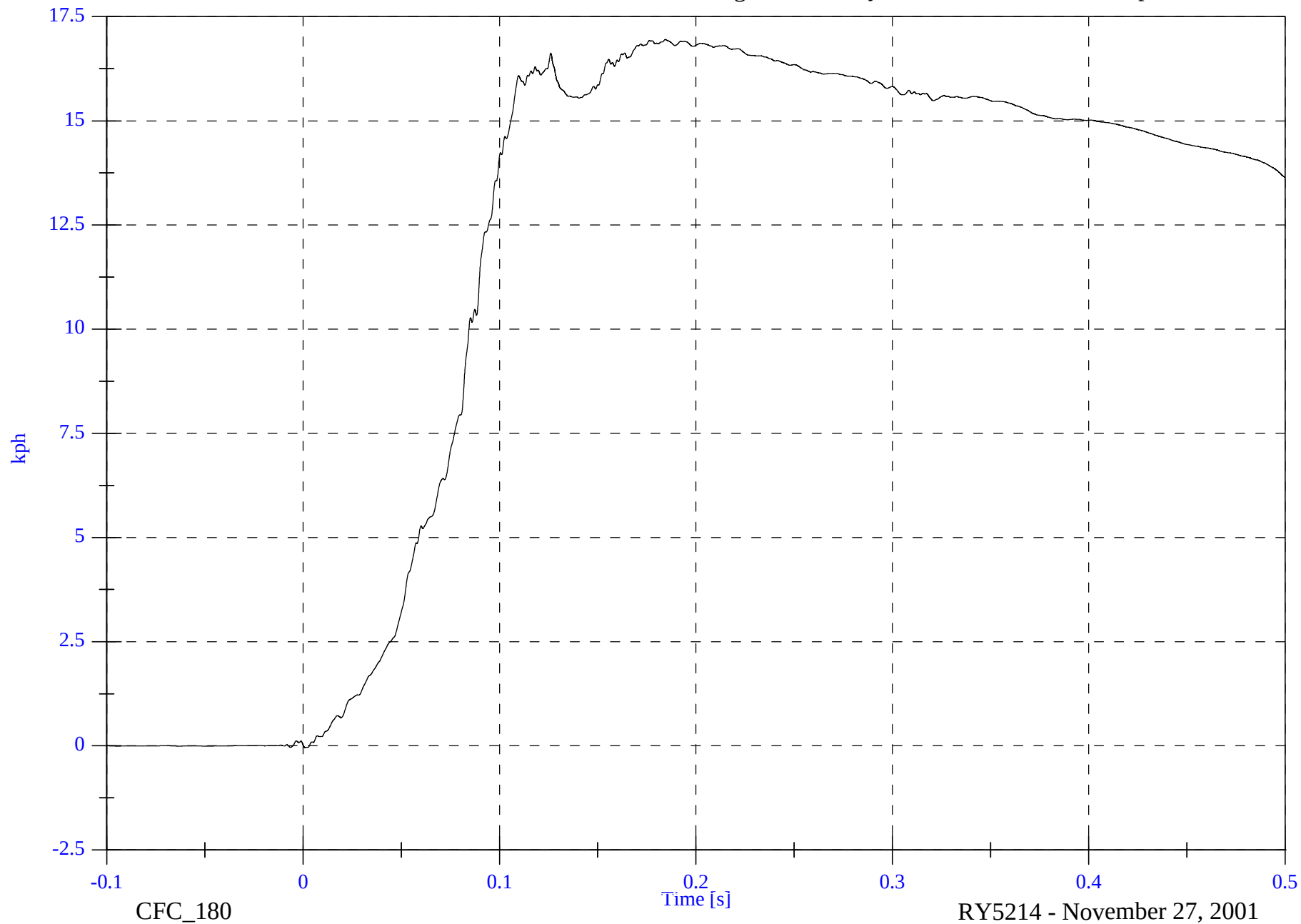


40% Frontal Offset Test #15 - 2000 Nissan Quest

Max: 17.0 [kph] at 0.184 [s]

Acc 4 Rear XMBR Right Y Velocity

Min: -0.0 [kph] at 0.001 [s]



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8413-71

CFC_180

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

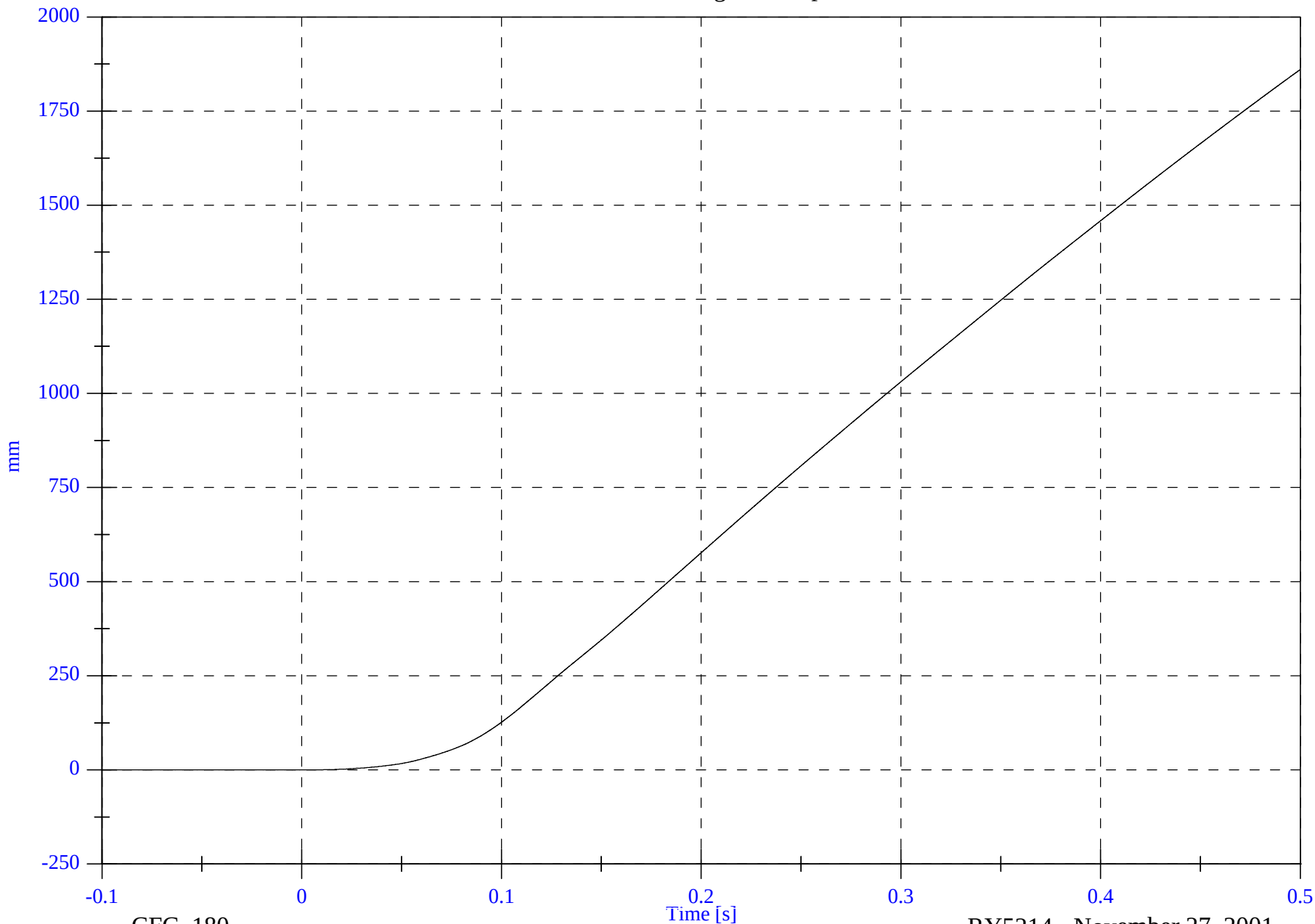
Acc 4 Rear XMBR Right Y Displacement

Max: 1860.1 [mm] at 0.500 [s]

Min: -0.1 [mm] at -0.035 [s]

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8413-71



CFC_180

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

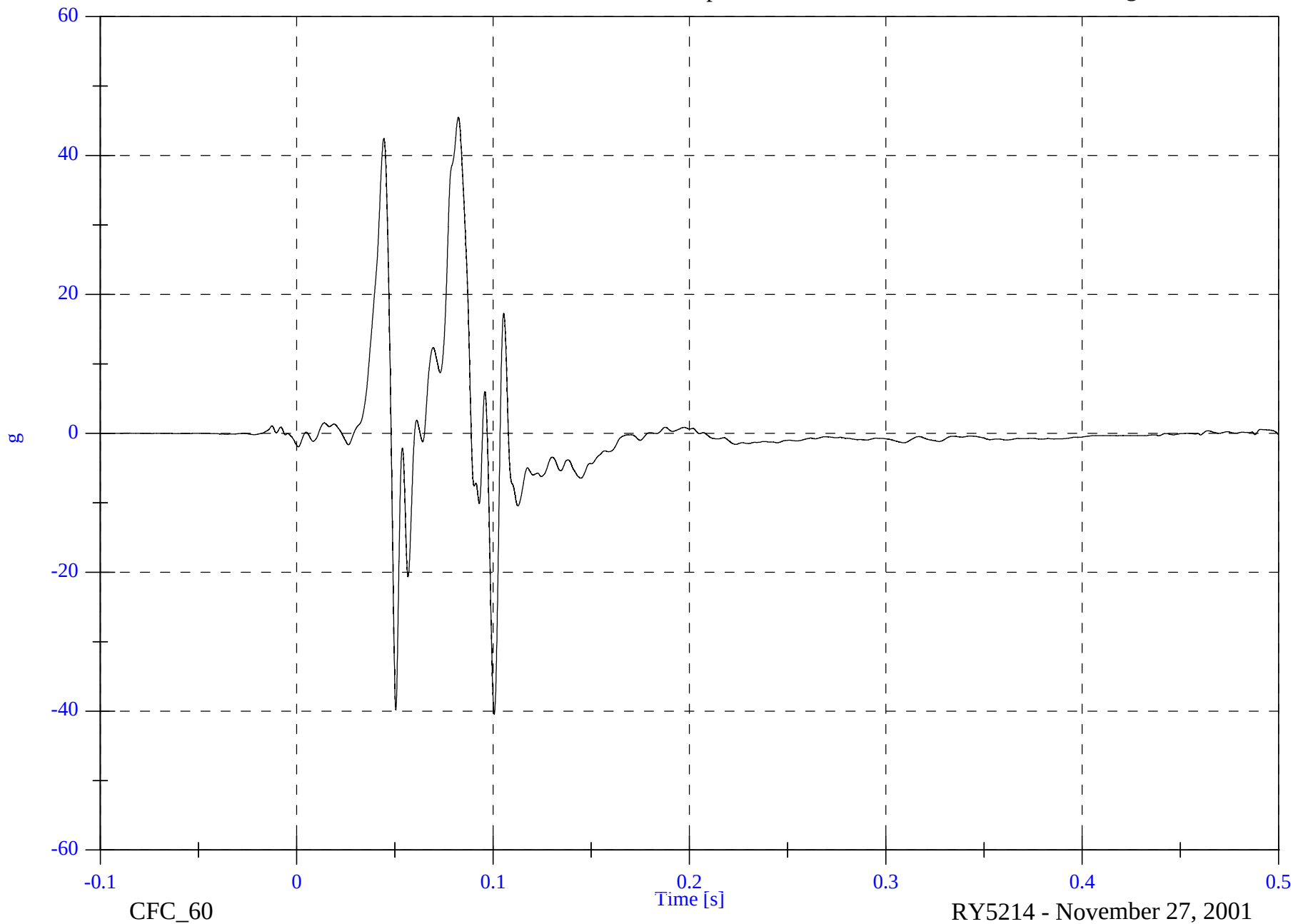
Acc 6 P1 Toeplan Left Z

Max: 45.5 [g] at 0.082 [s]

Min: -40.4 [g] at 0.101 [s]

B-204

8413-71

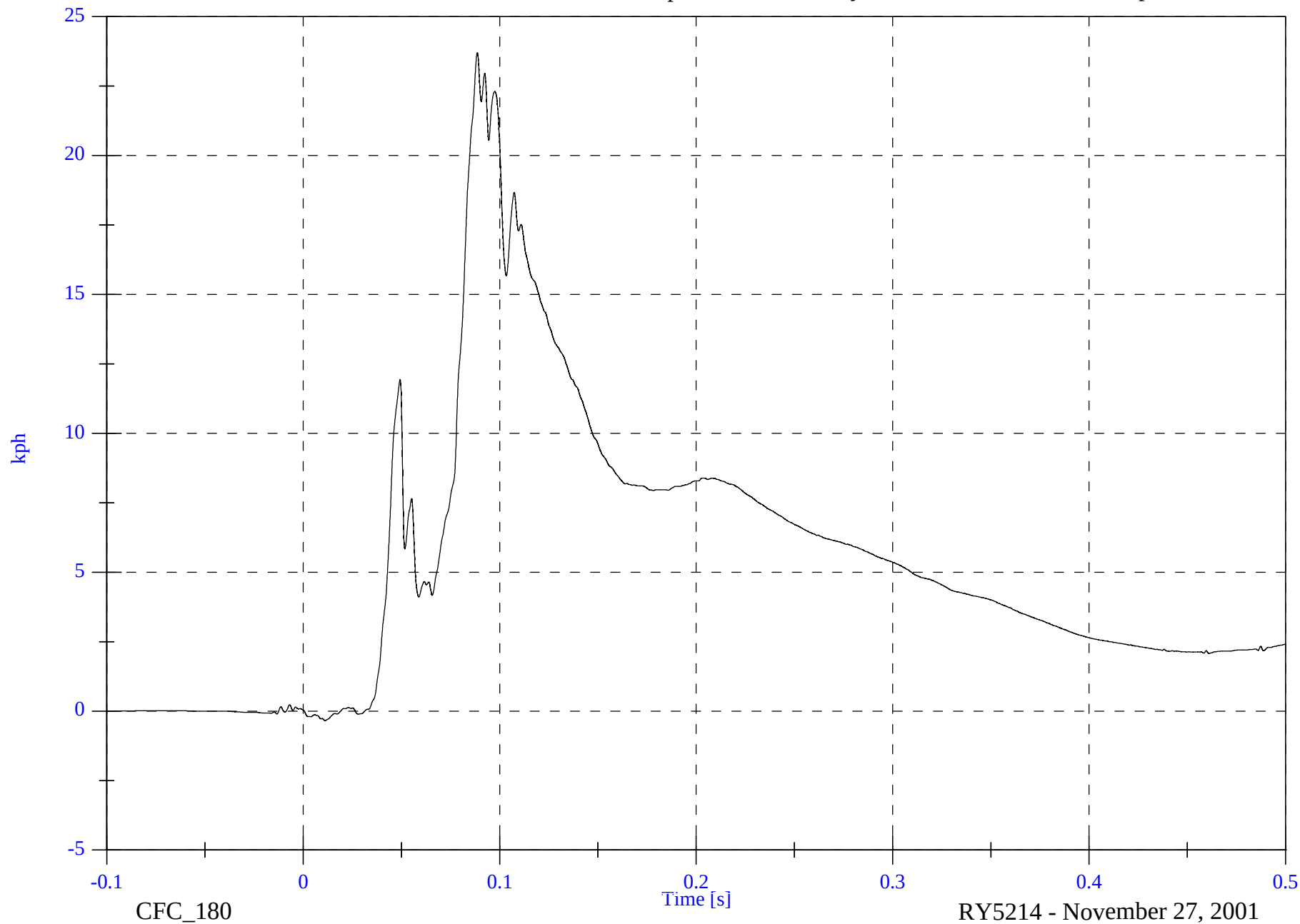


40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 6 P1 Toe pan Left Z Velocity

Max: 23.7 [kph] at 0.089 [s]

Min: -0.3 [kph] at 0.011 [s]



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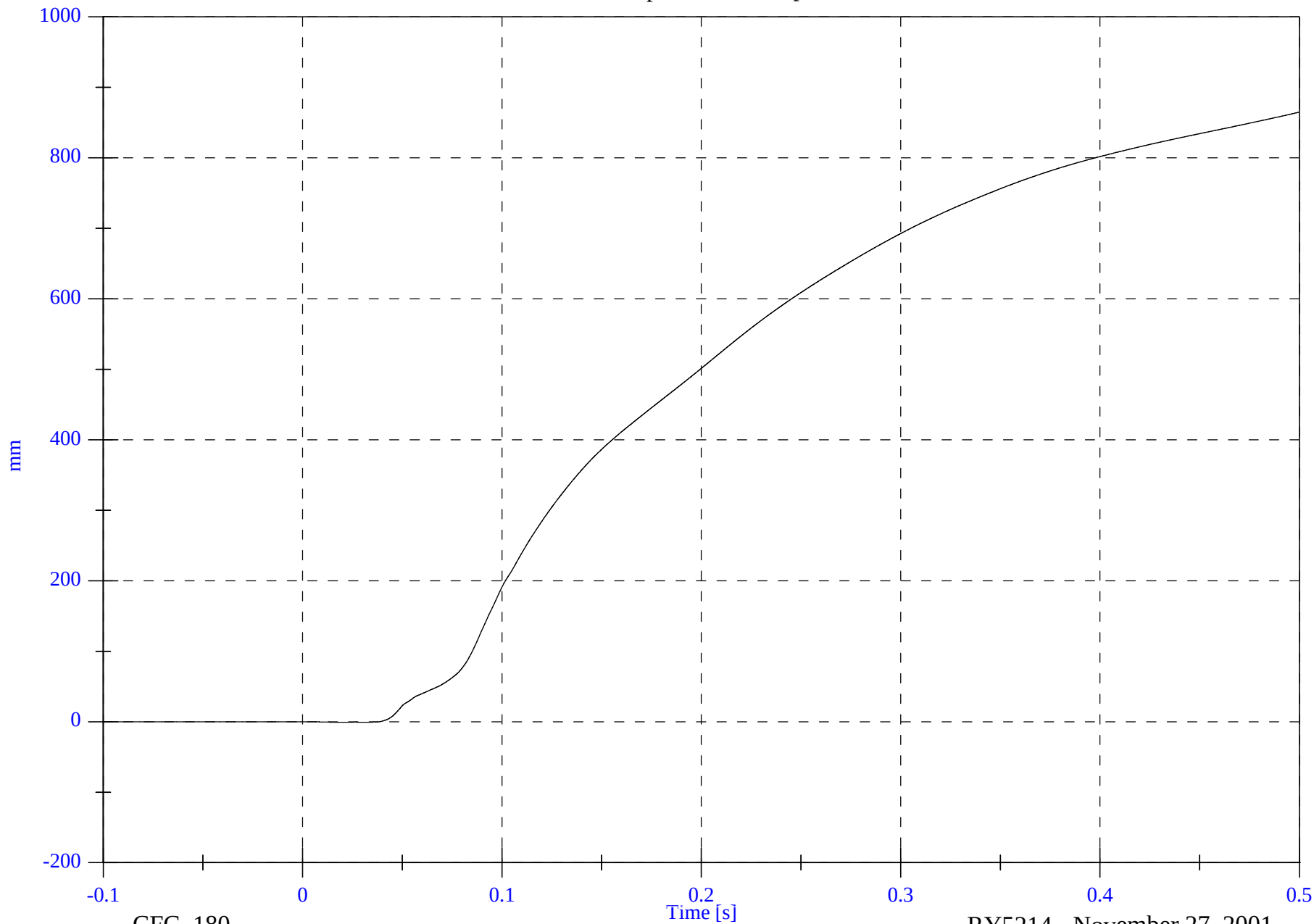
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 6 P1 Toe pan Left Z Displacement

Max: 864.9 [mm] at 0.500 [s]

Min: -0.9 [mm] at 0.019 [s]



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8413-71

CFC_180

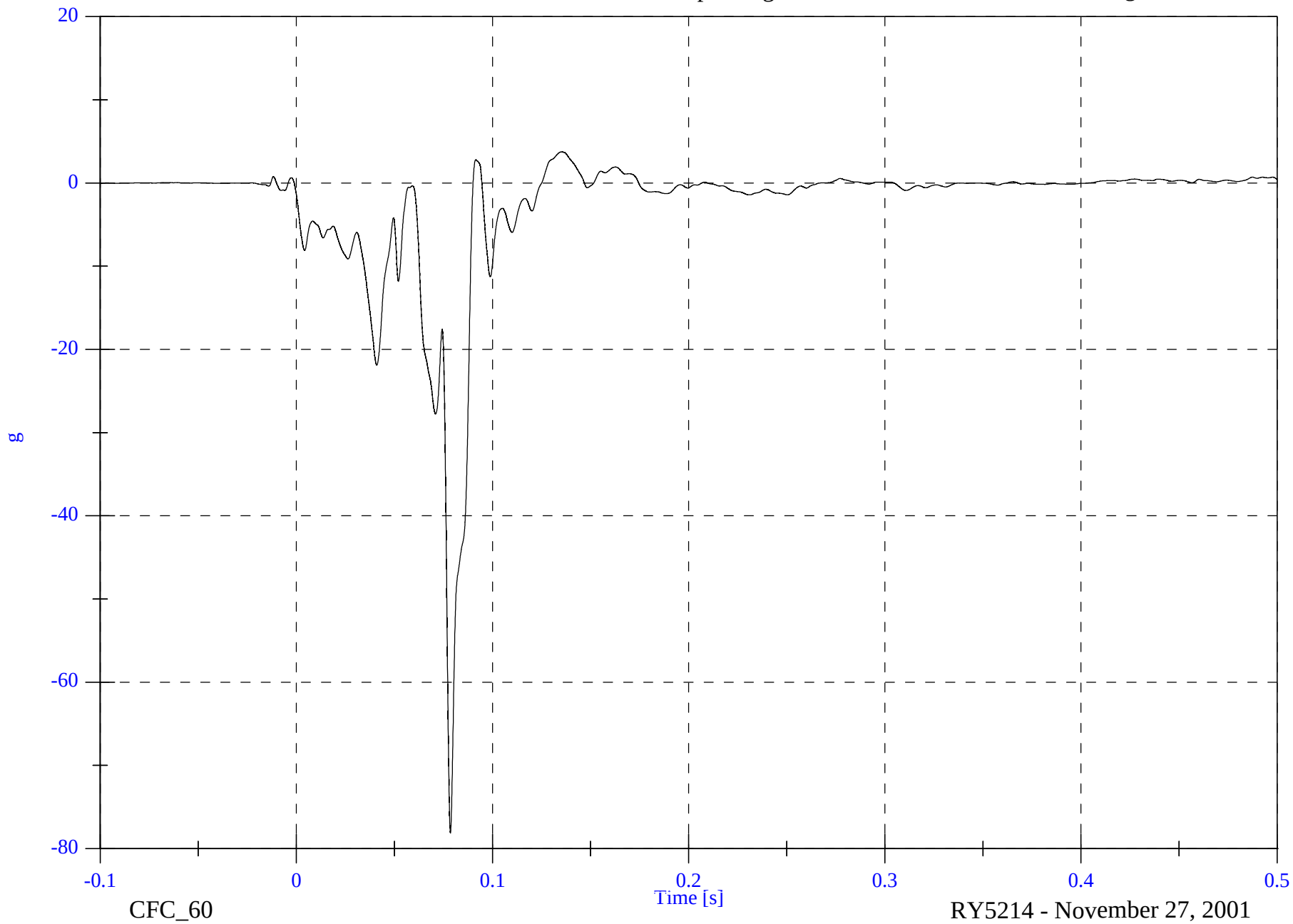
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 7 P1 Toeplan Right X

Max: 3.8 [g] at 0.135 [s]

Min: -78.1 [g] at 0.079 [s]

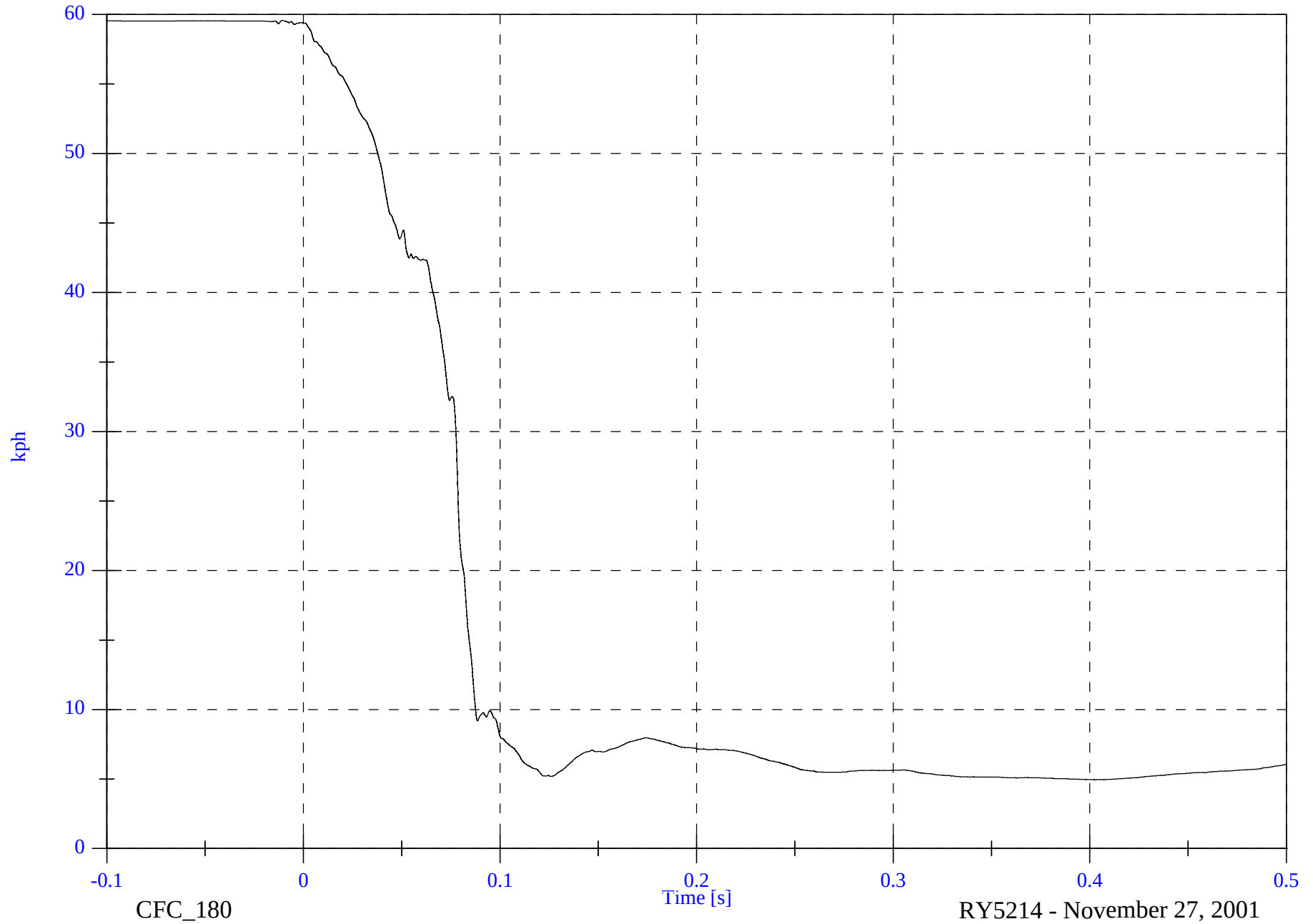


40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 7 P1 Toe pan Right X Velocity

Max: 59.6 [kph] at -0.011 [s]

Min: 4.9 [kph] at 0.407 [s]



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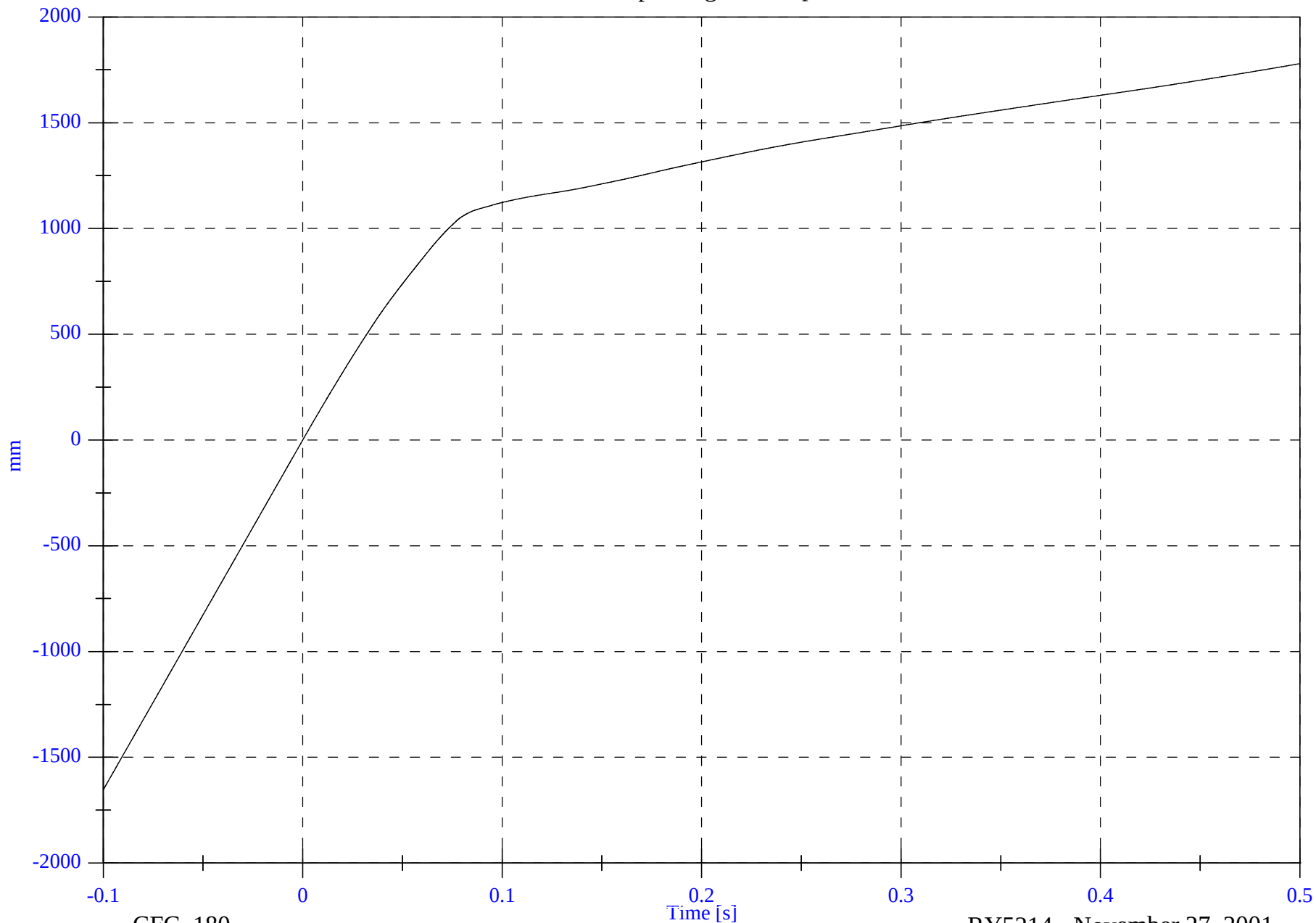
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 7 P1 Toepan Right X Displacement

Max: 1779.4 [mm] at 0.500 [s]

Min: -1653.4 [mm] at -0.100 [s]



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8413-71

CFC_180

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

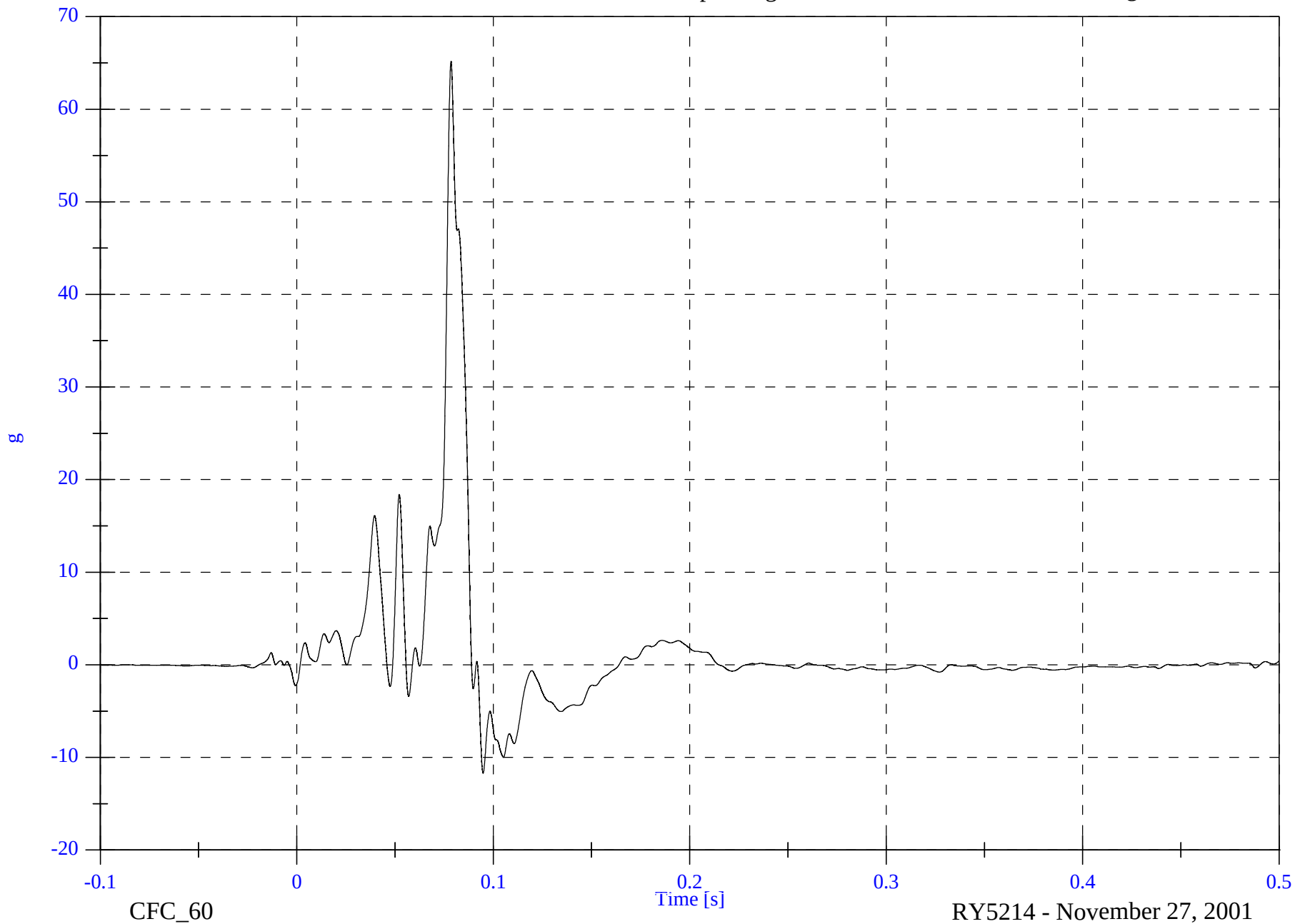
Acc 8 P1 Toeplan Right Z

Max: 65.2 [g] at 0.079 [s]

Min: -11.7 [g] at 0.095 [s]

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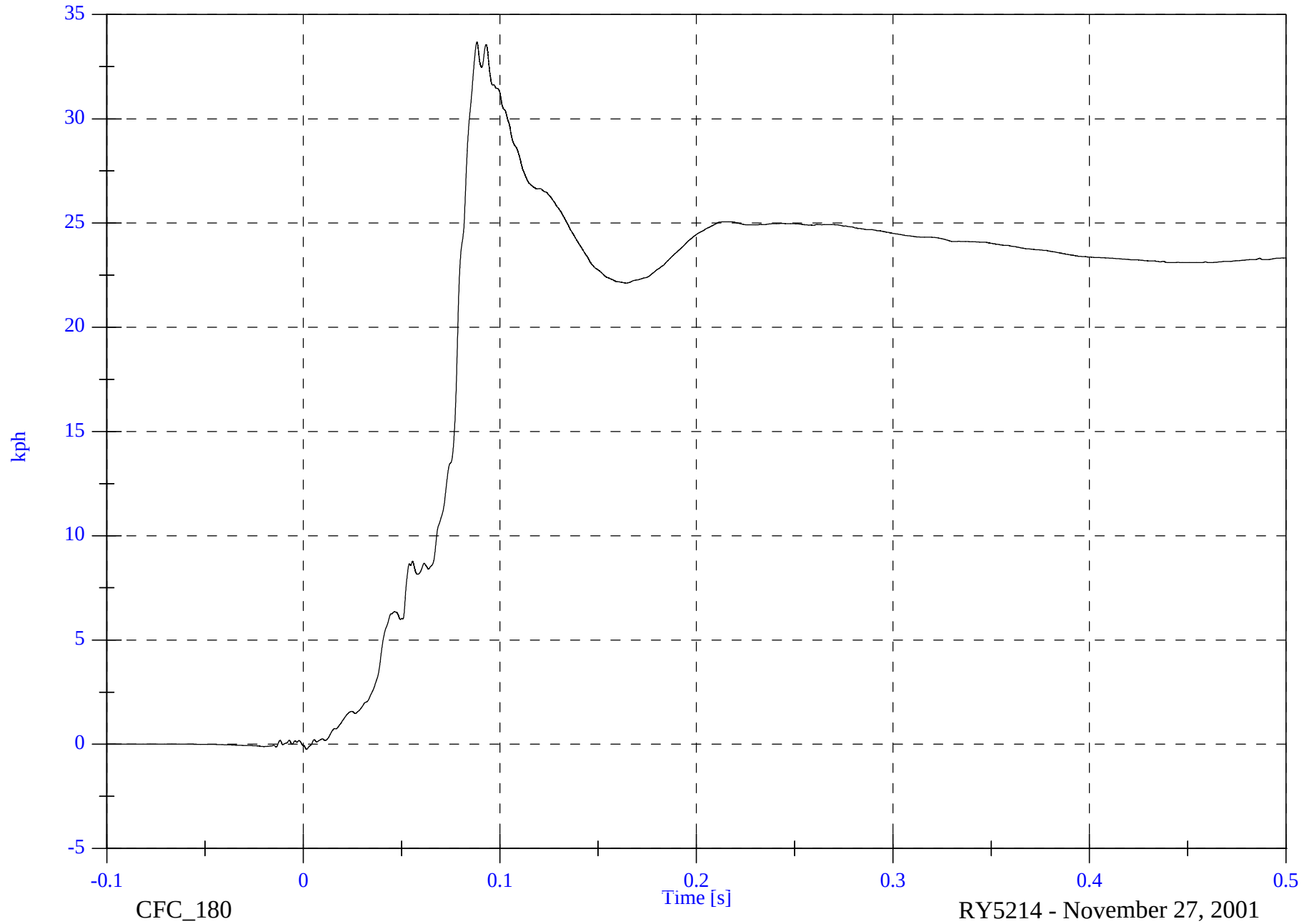


40% Frontal Offset Test #15 - 2000 Nissan Quest

Acc 8 P1 Toepan Right Z Velocity

Max: 33.7 [kph] at 0.088 [s]

Min: -0.2 [kph] at 0.002 [s]



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8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

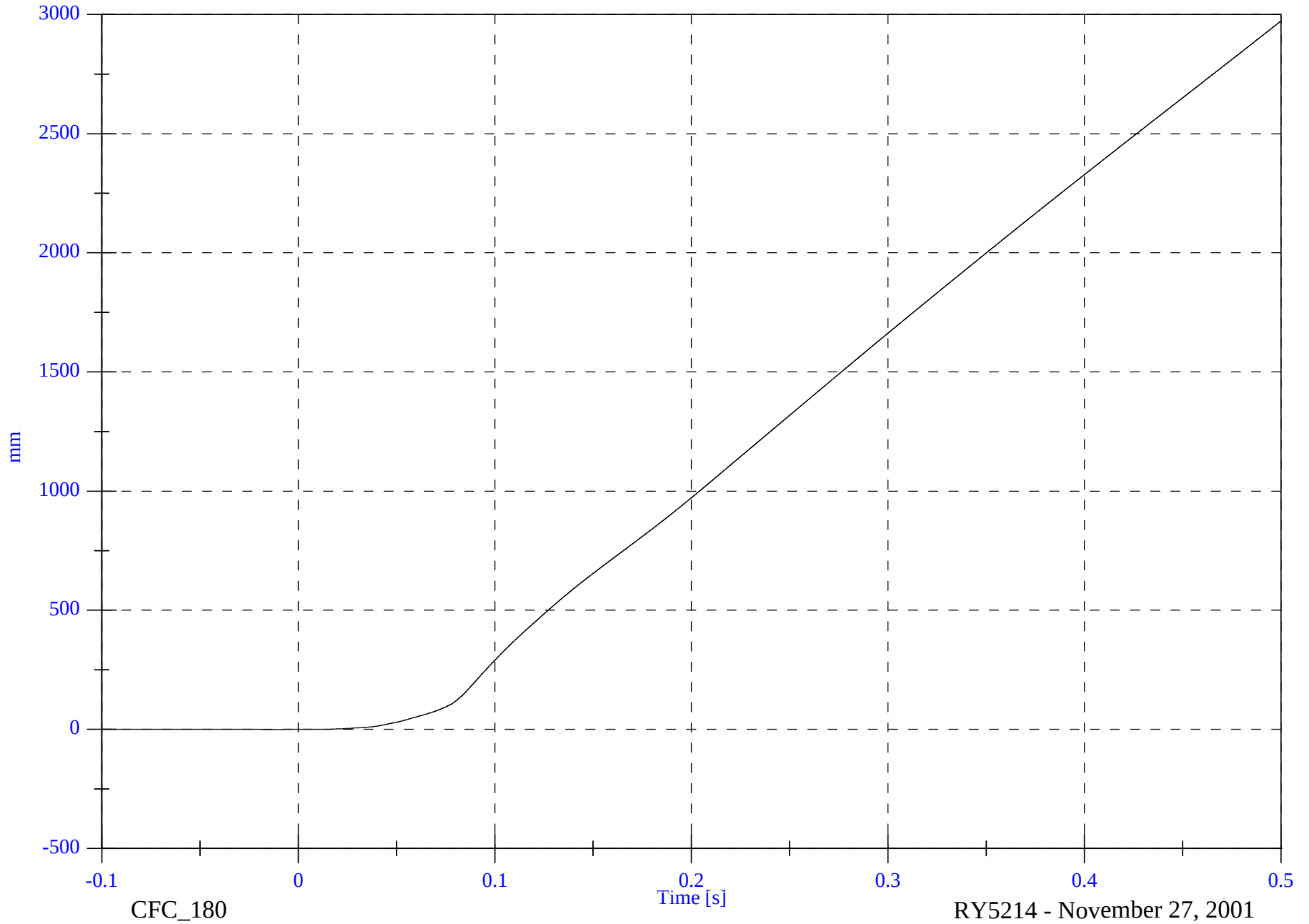
Acc 8 P1 Toe pan Right Z Displacement

Max: 2972.5 [mm] at 0.500 [s]

Min: -0.3 [mm] at -0.013 [s]

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40% Frontal Offset Test #15 - 2000 Nissan Quest

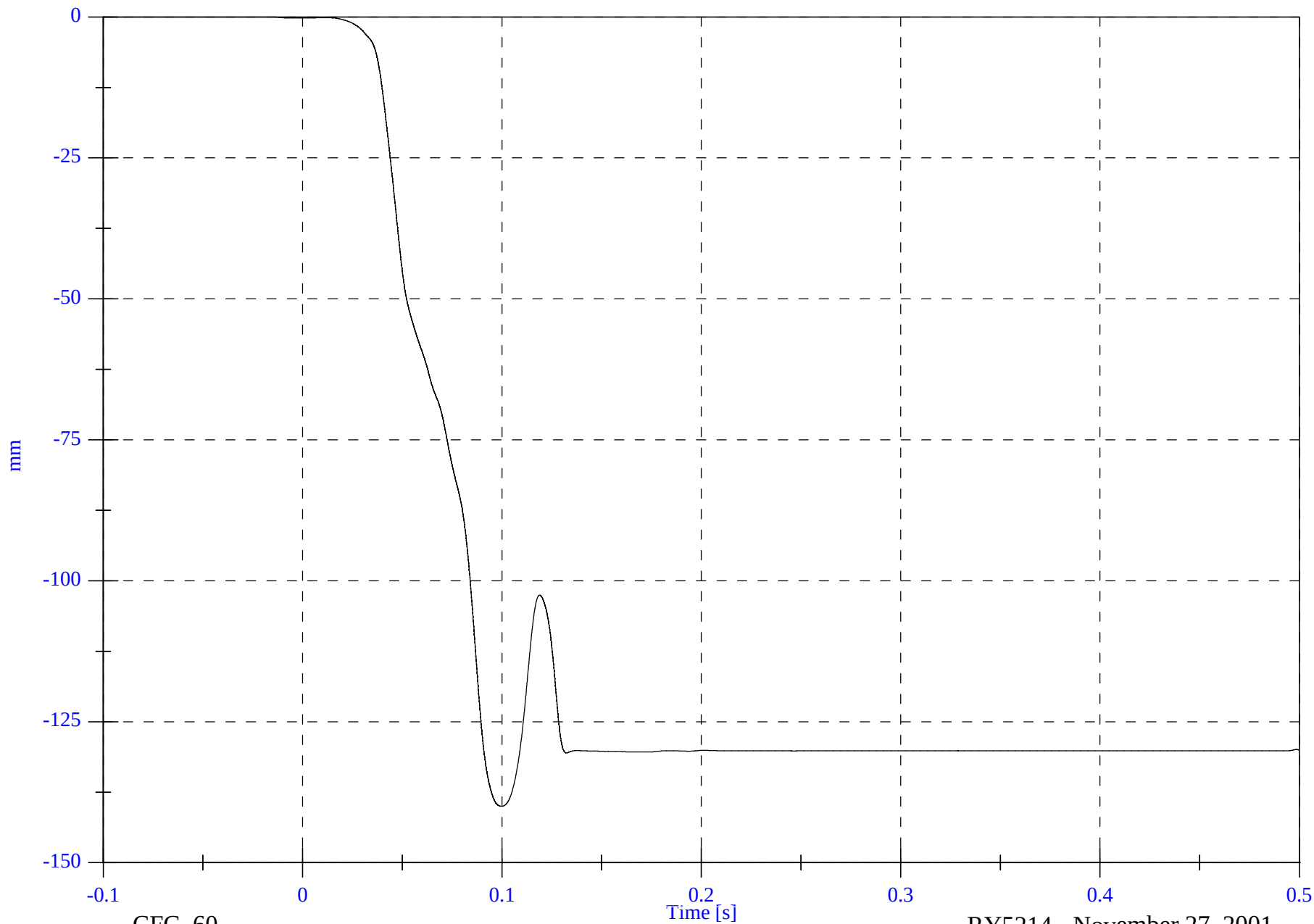
Toe Pan Movement

Max: 0.0 [mm] at -0.080 [s]

Min: -140.0 [mm] at 0.100 [s]

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8413-71



CFC_60

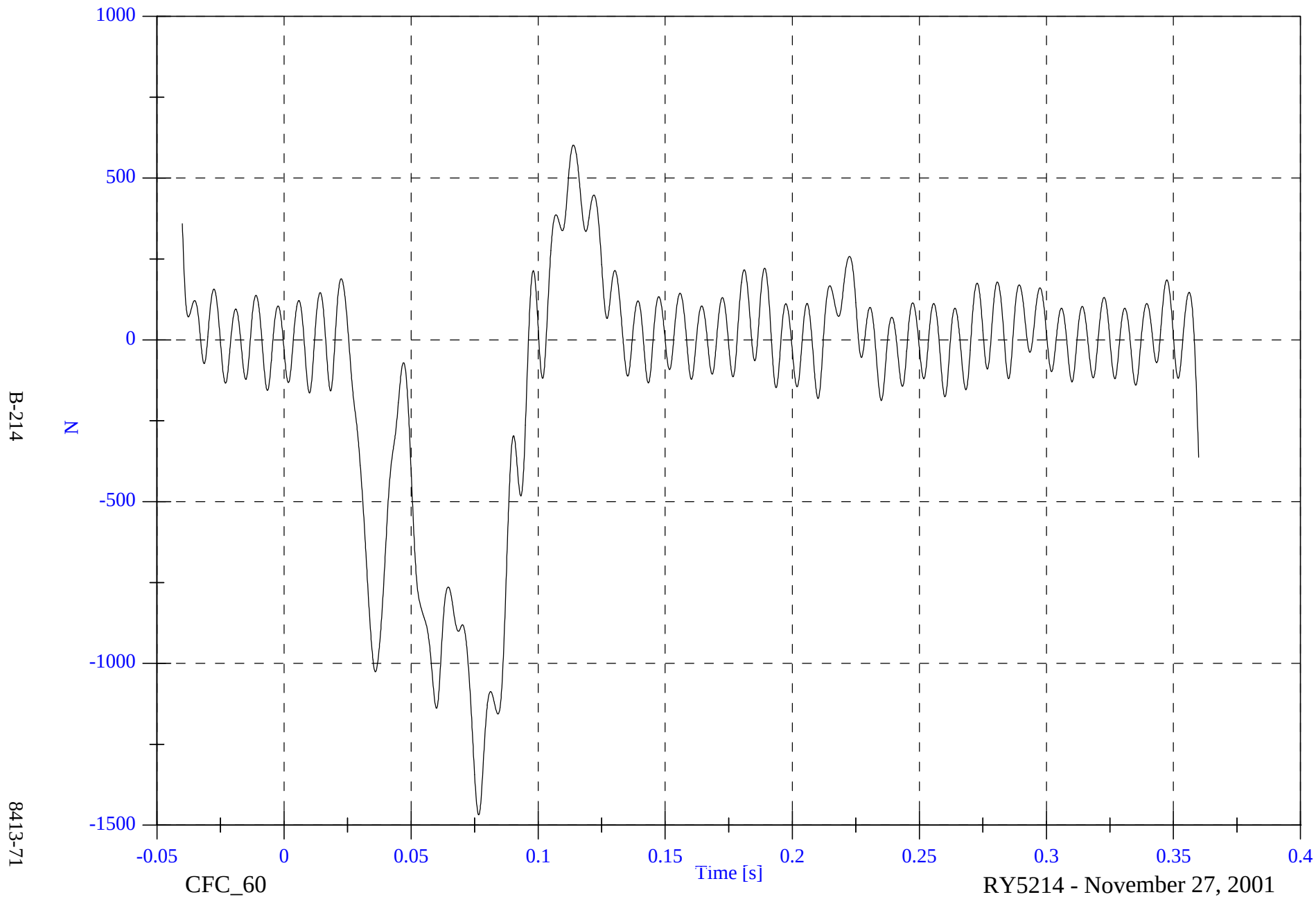
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E2 FY

Max: 601.6 [N] at 0.114 [s]

Min: -1468.3 [N] at 0.077 [s]

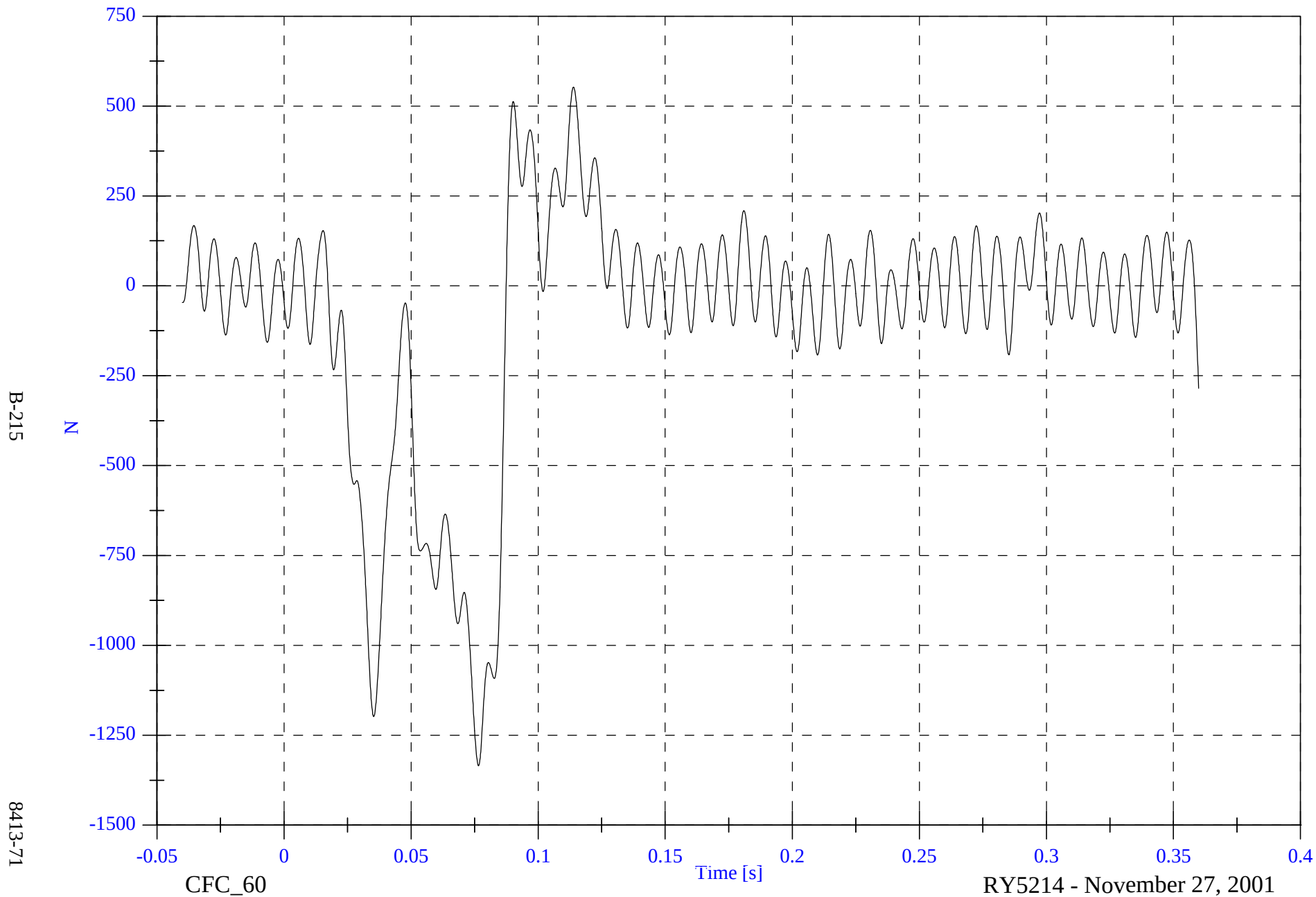


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E3 FY

Max: 552.7 [N] at 0.114 [s]

Min: -1334.7 [N] at 0.076 [s]

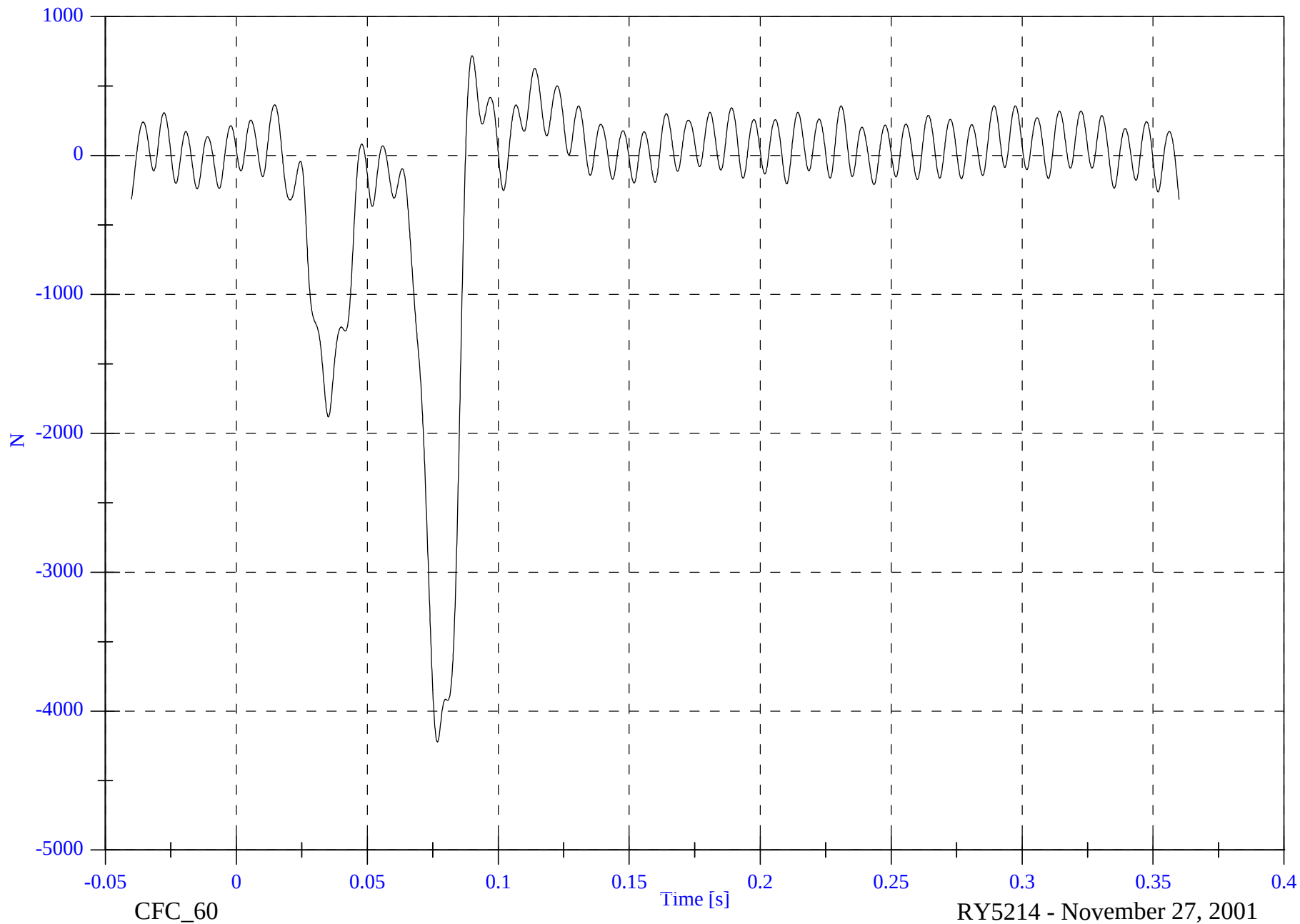


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E4 FY

Max: 719.2 [N] at 0.090 [s]

Min: -4222.3 [N] at 0.077 [s]



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8413-71

CFC_60

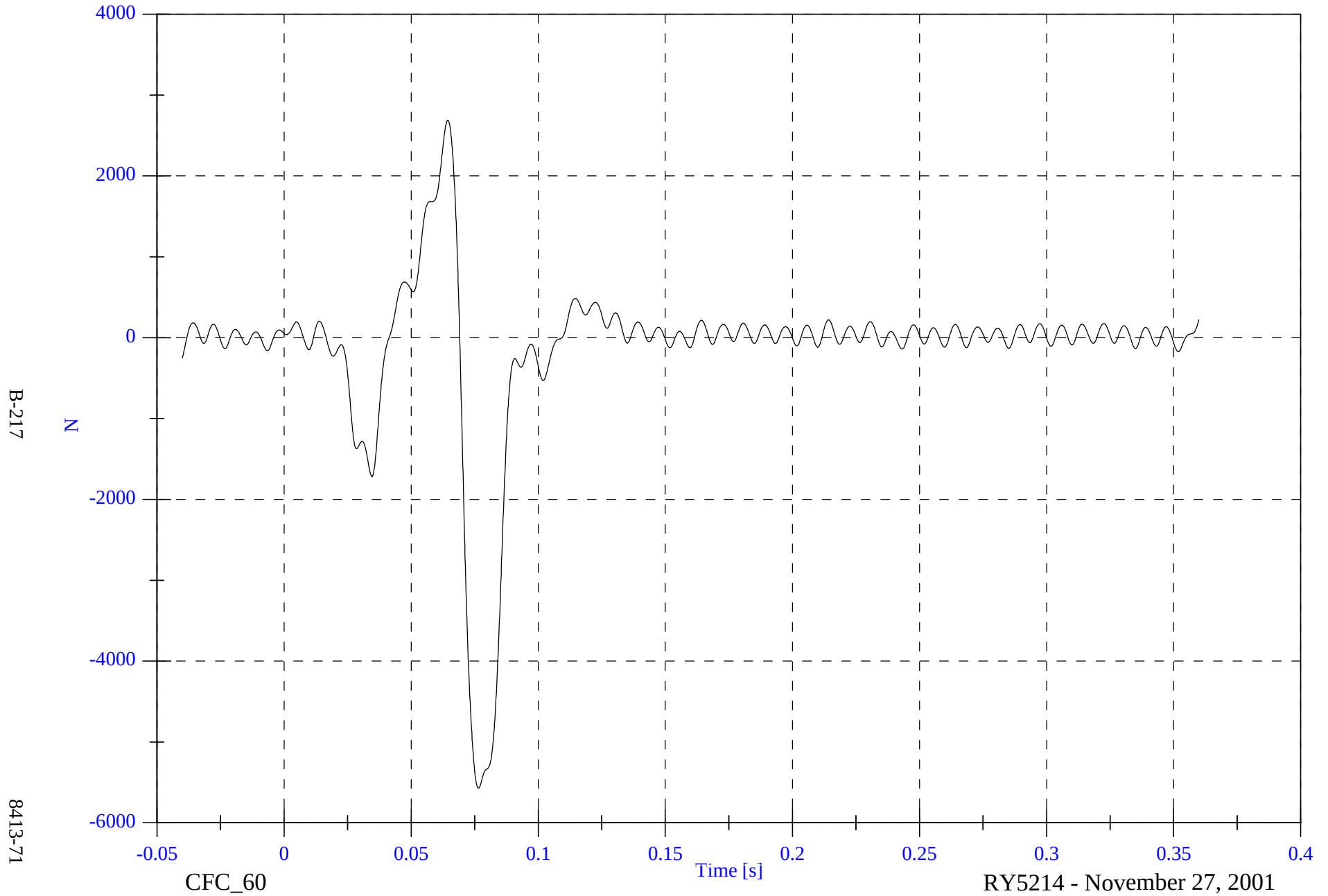
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E5 FY

Max: 2688.3 [N] at 0.064 [s]

Min: -5572.9 [N] at 0.076 [s]

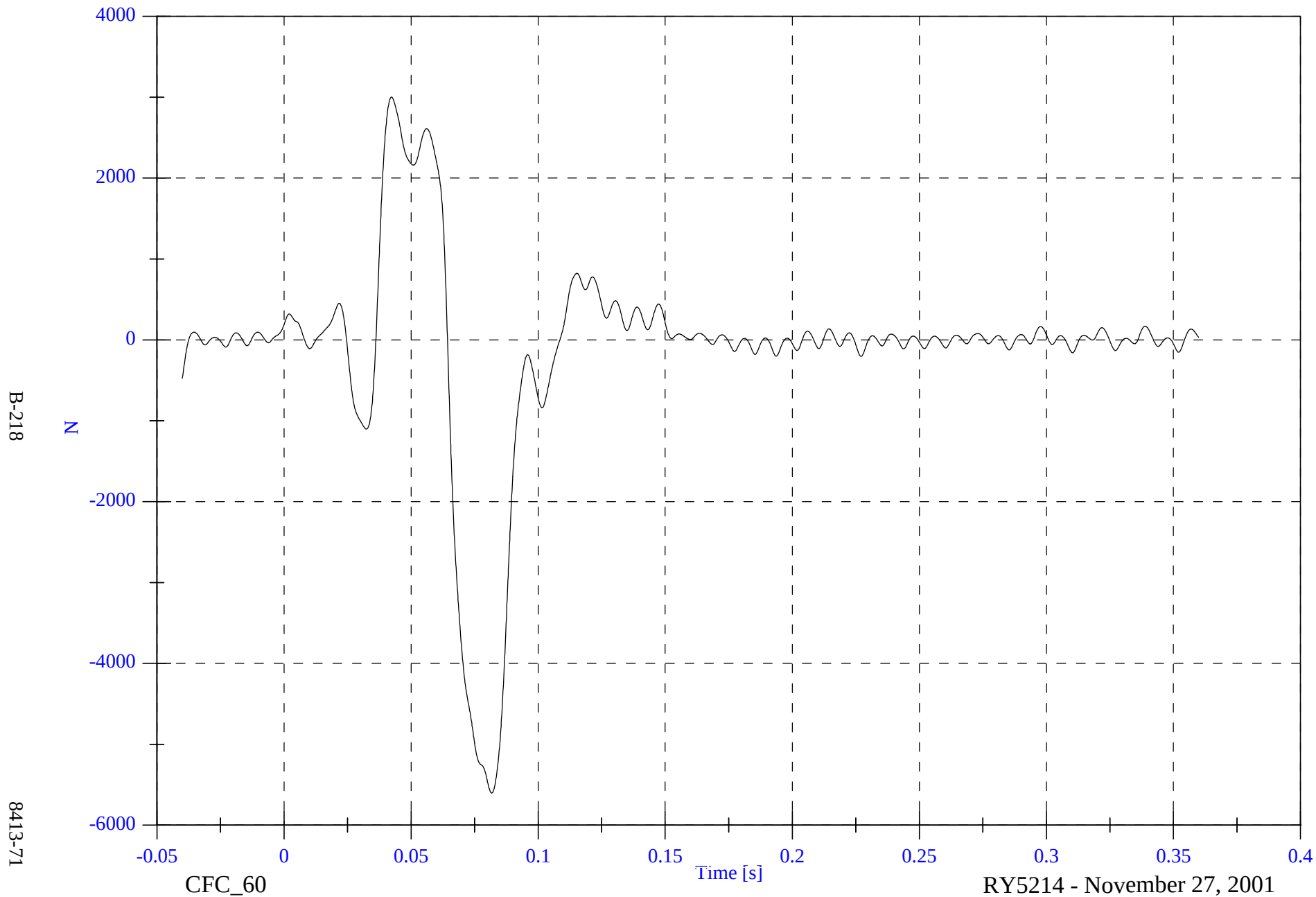


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E6 FY

Max: 3000.8 [N] at 0.042 [s]

Min: -5604.3 [N] at 0.082 [s]

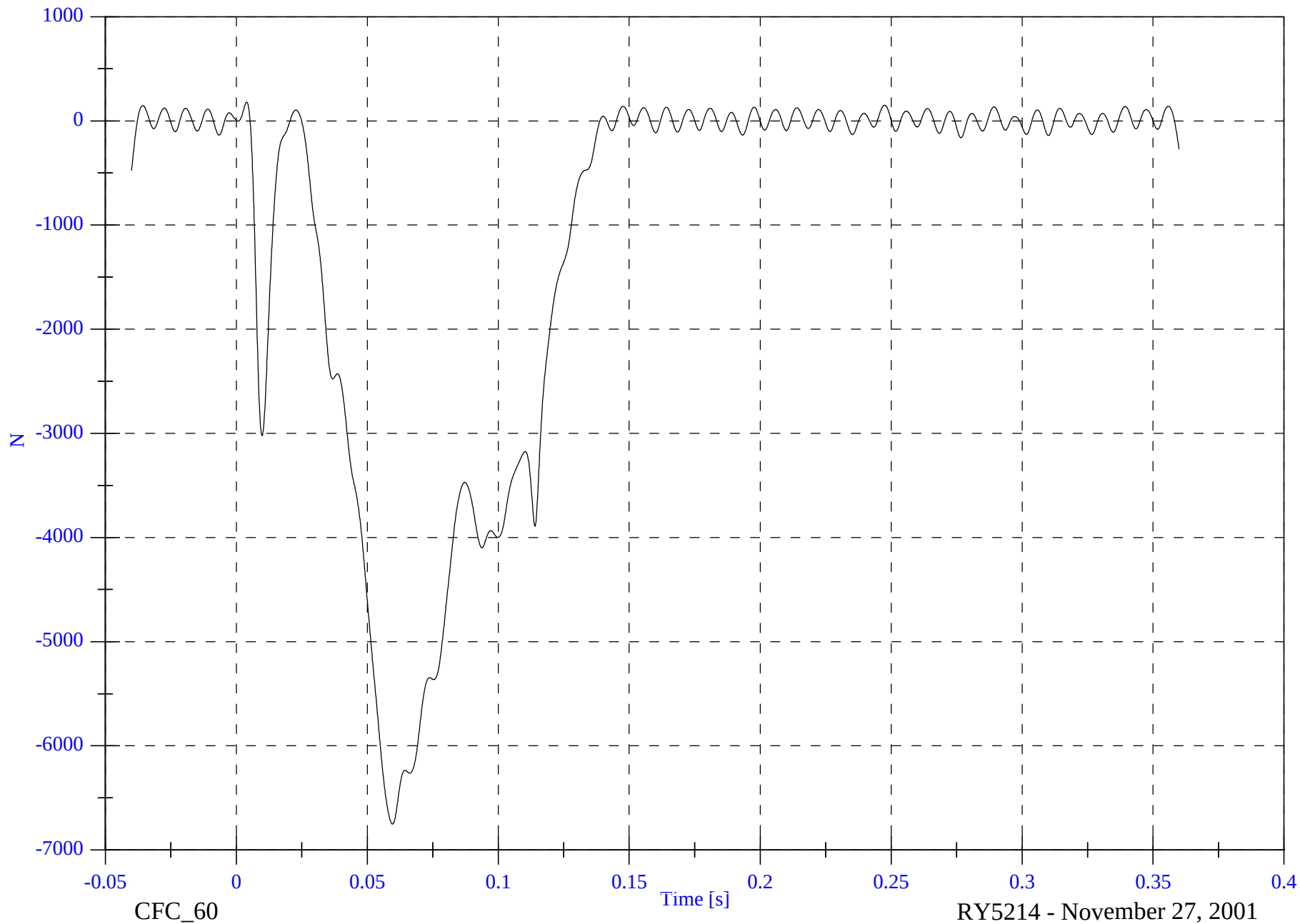


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E1 FX

Max: 179.7 [N] at 0.004 [s]

Min: -6751.4 [N] at 0.060 [s]



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CFC_60

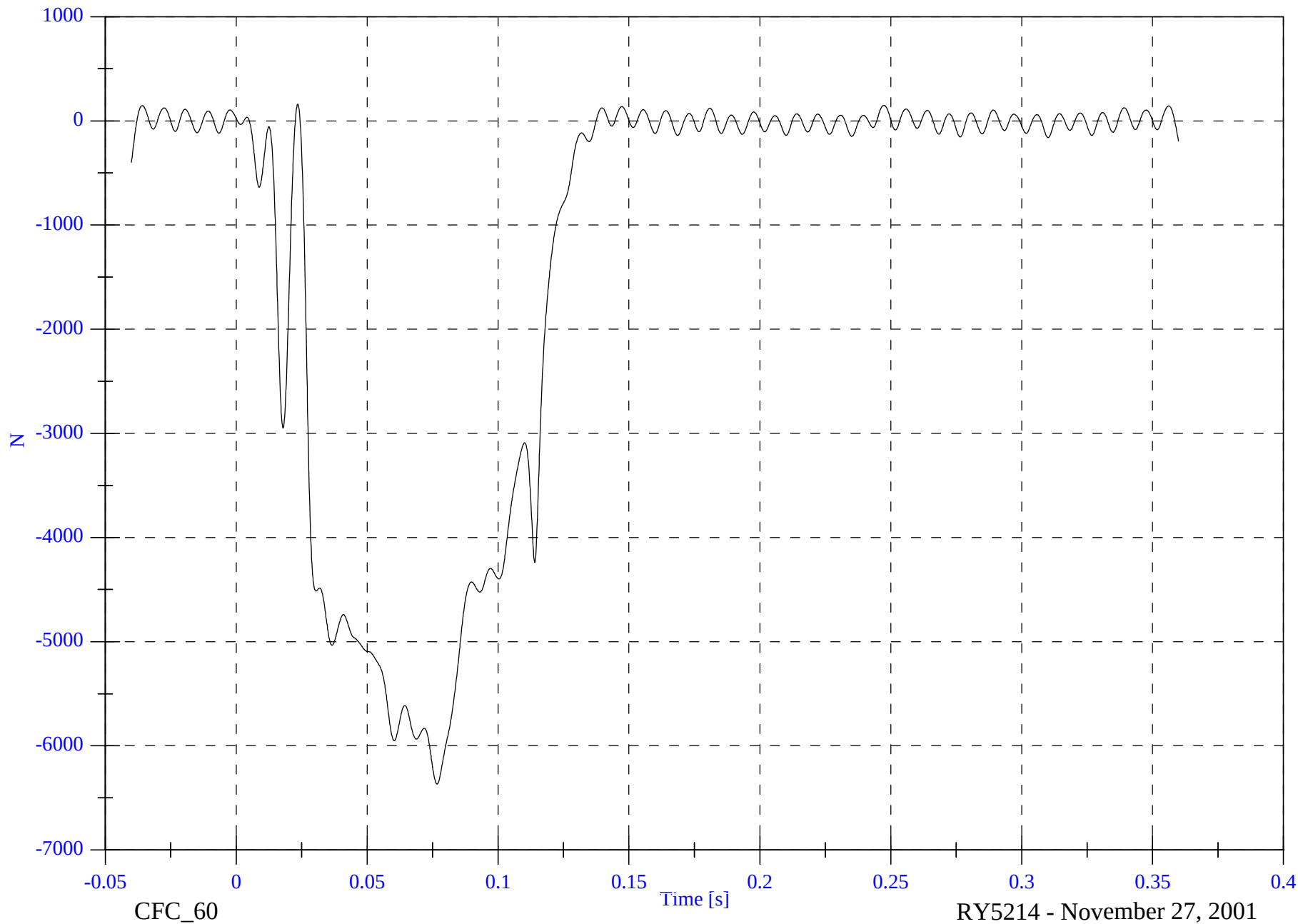
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E2 FX

Max: 161.6 [N] at 0.023 [s]

Min: -6366.8 [N] at 0.077 [s]



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8413-71

CFC_60

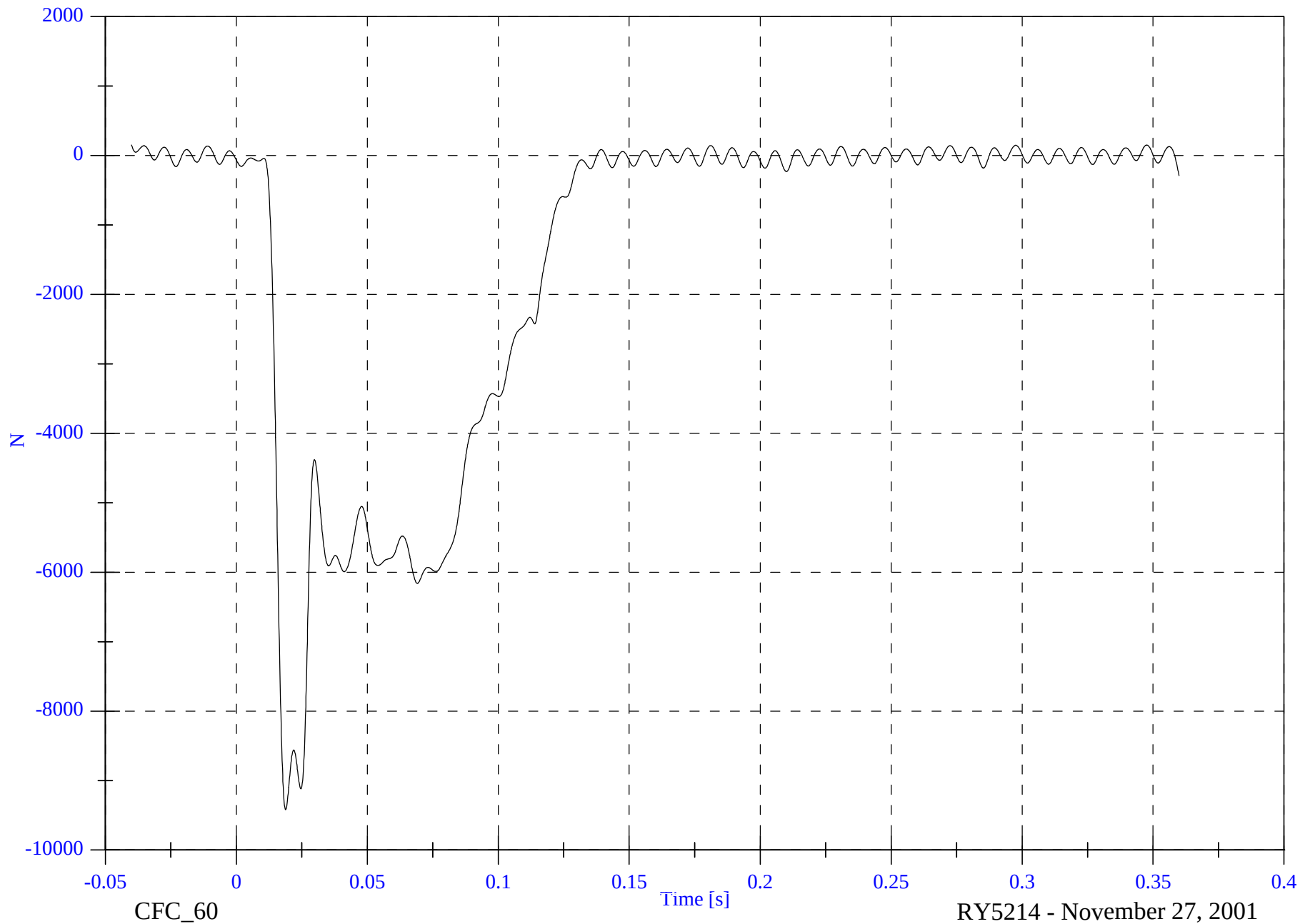
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E3 FX

Max: 152.9 [N] at -0.040 [s]

Min: -9420.9 [N] at 0.019 [s]



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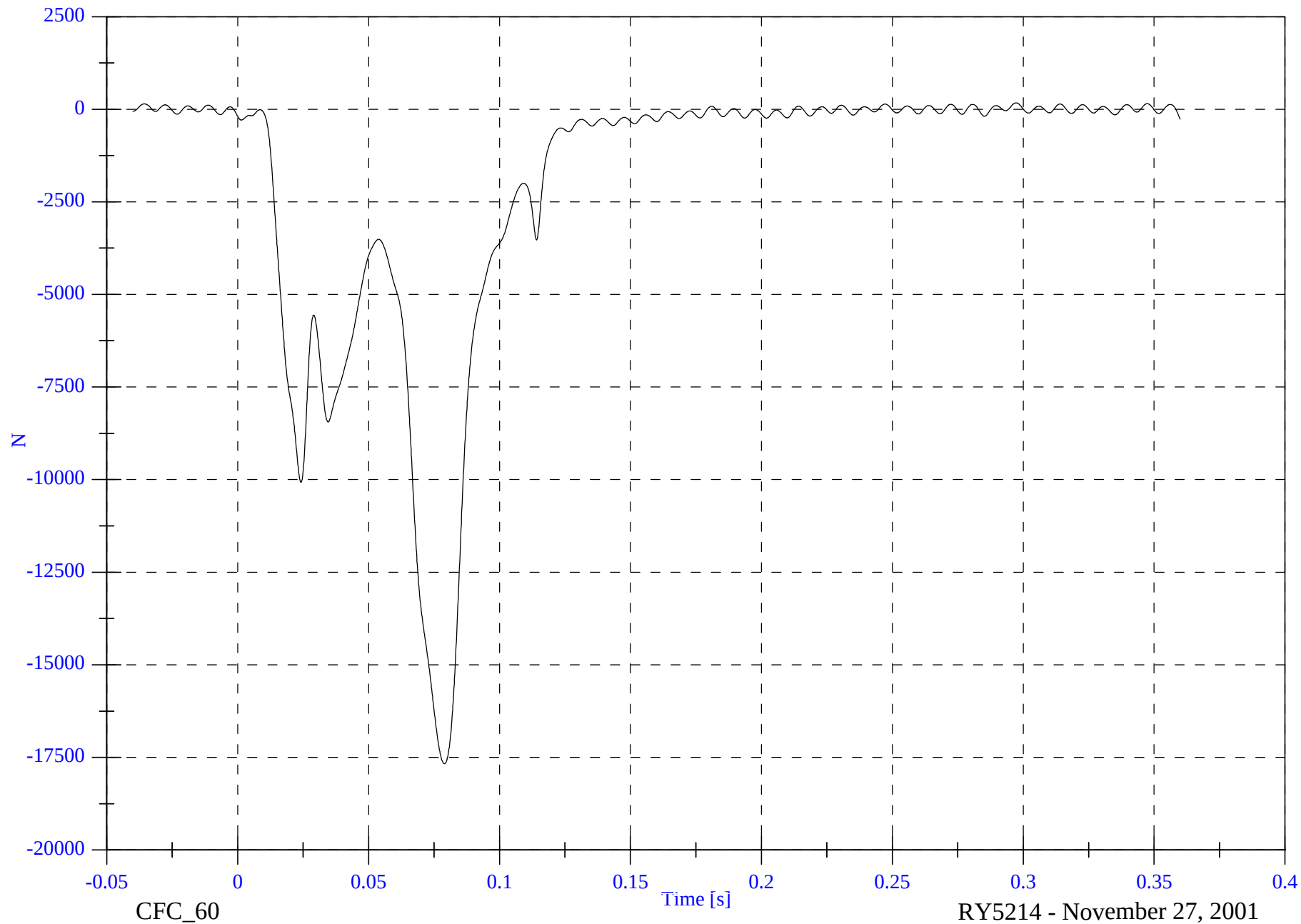
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E4 FX

Max: 174.4 [N] at 0.297 [s]

Min: -17672.7 [N] at 0.079 [s]



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CFC_60

RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E5 FX

Max: 180.4 [N] at -0.027 [s]

Min: -25809.5 [N] at 0.078 [s]

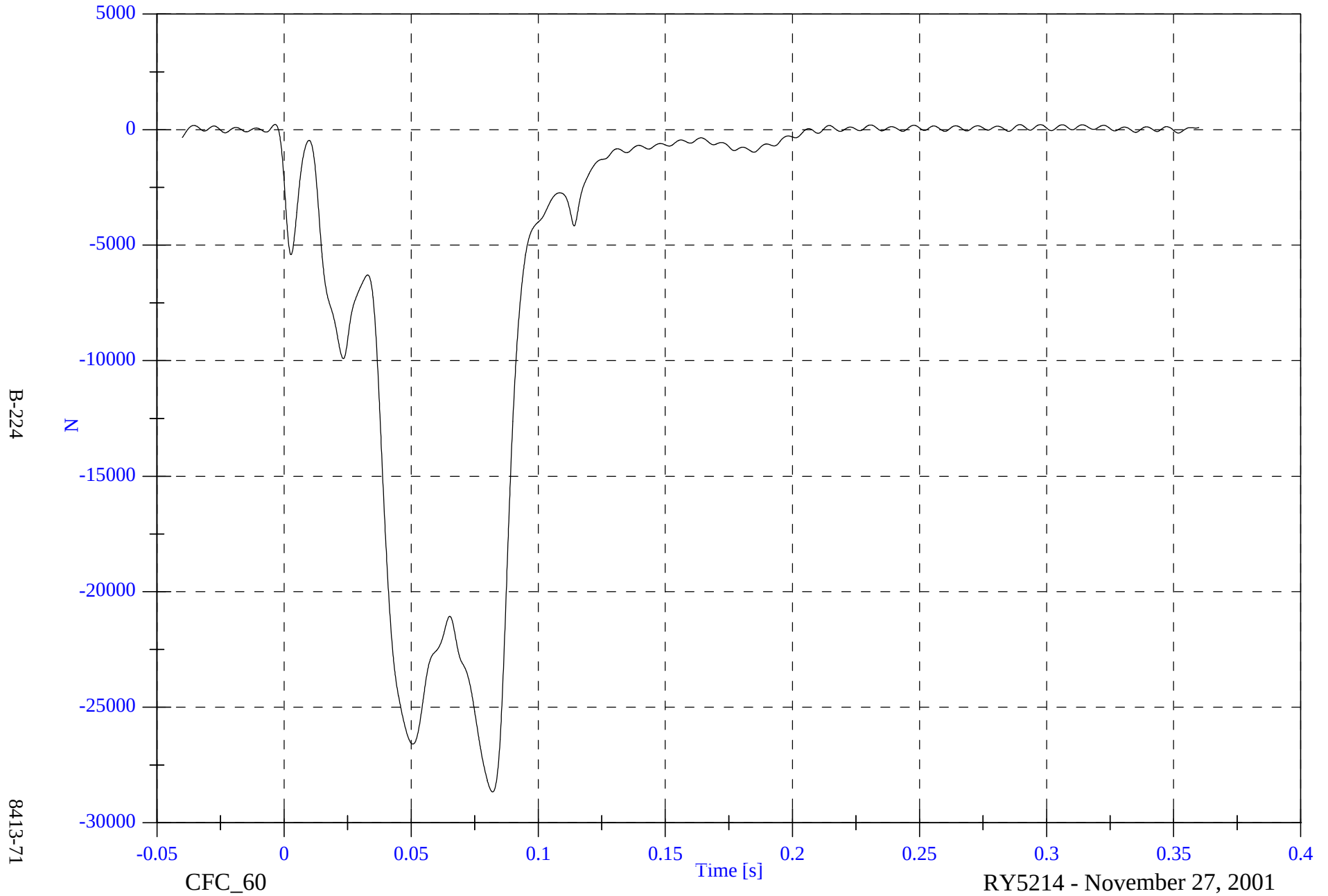


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell E6 FX

Max: 225.6 [N] at -0.004 [s]

Min: -28668.1 [N] at 0.082 [s]

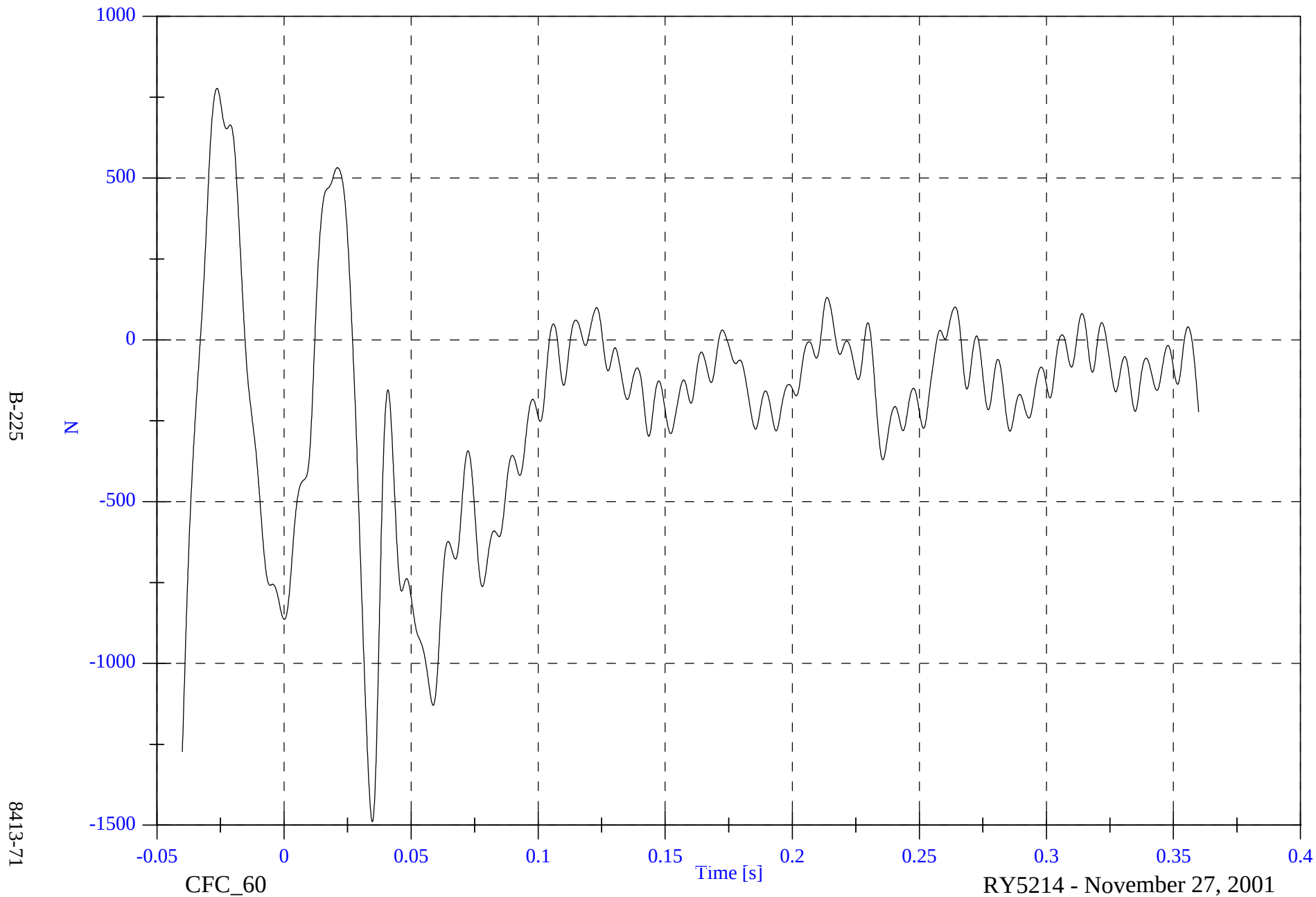


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D2 FY

Max: 777.2 [N] at -0.026 [s]

Min: -1489.7 [N] at 0.035 [s]

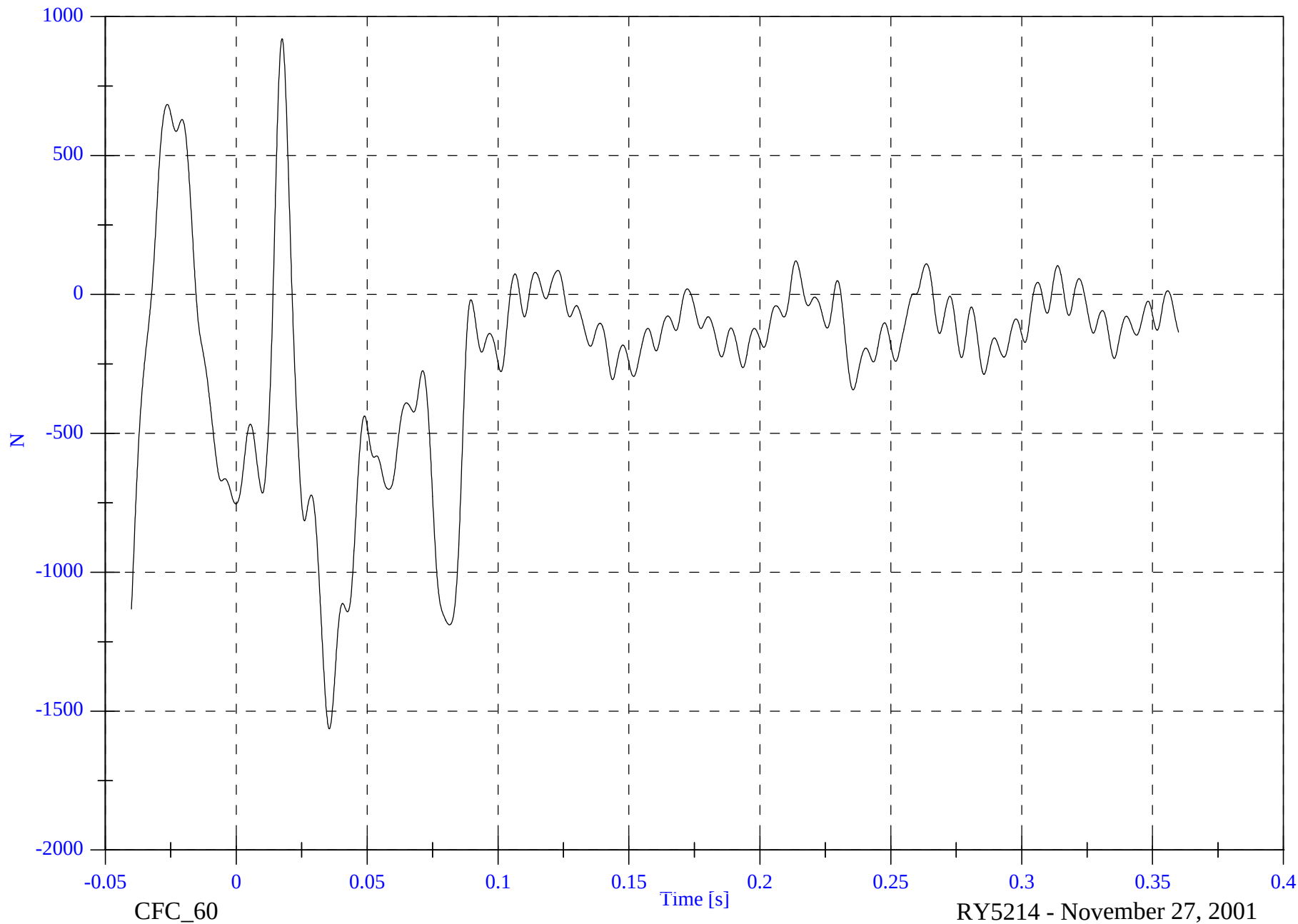


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D3 FY

Max: 920.7 [N] at 0.017 [s]

Min: -1563.9 [N] at 0.035 [s]



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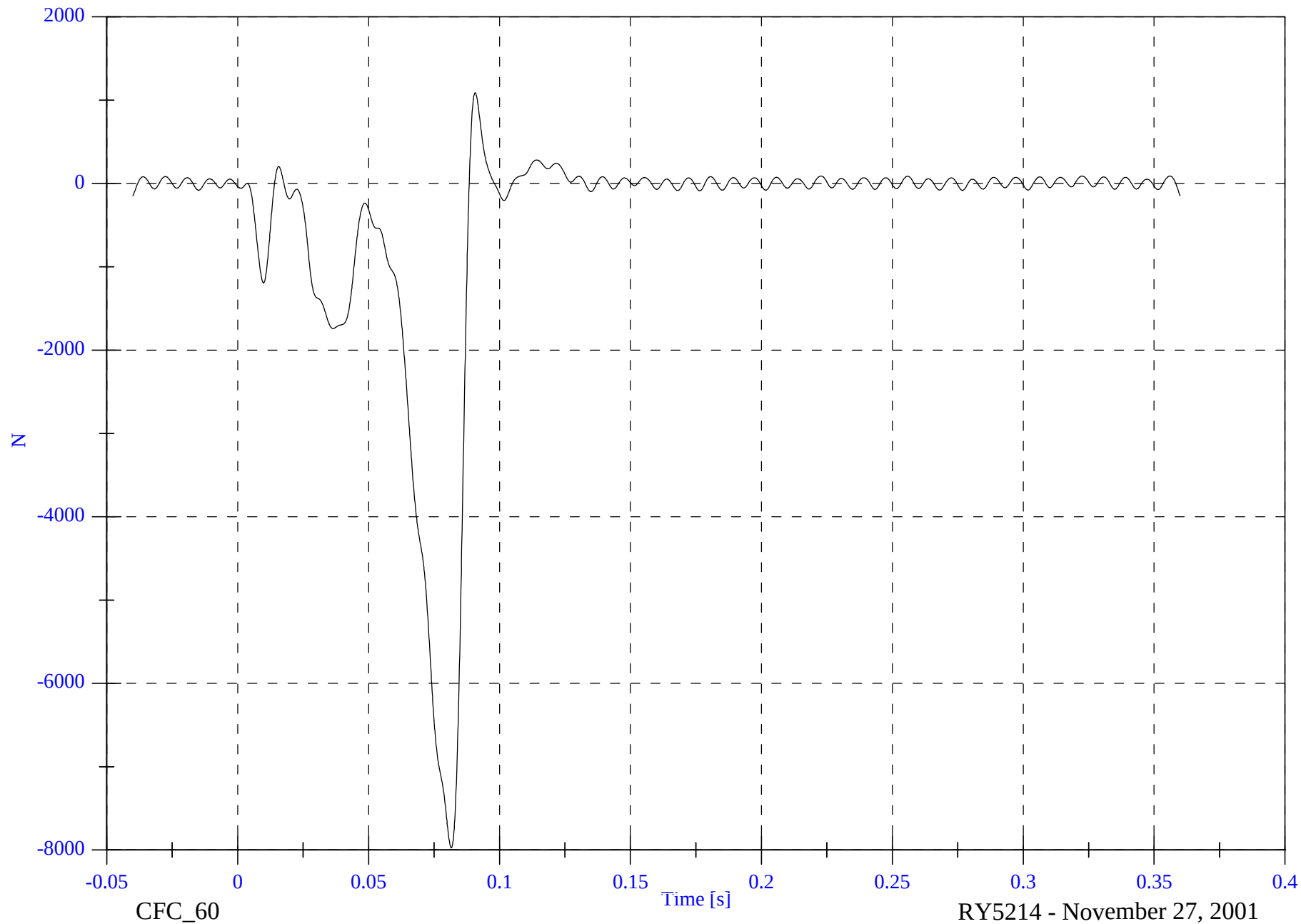
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D4 FY

Max: 1087.5 [N] at 0.091 [s]

Min: -7974.5 [N] at 0.082 [s]



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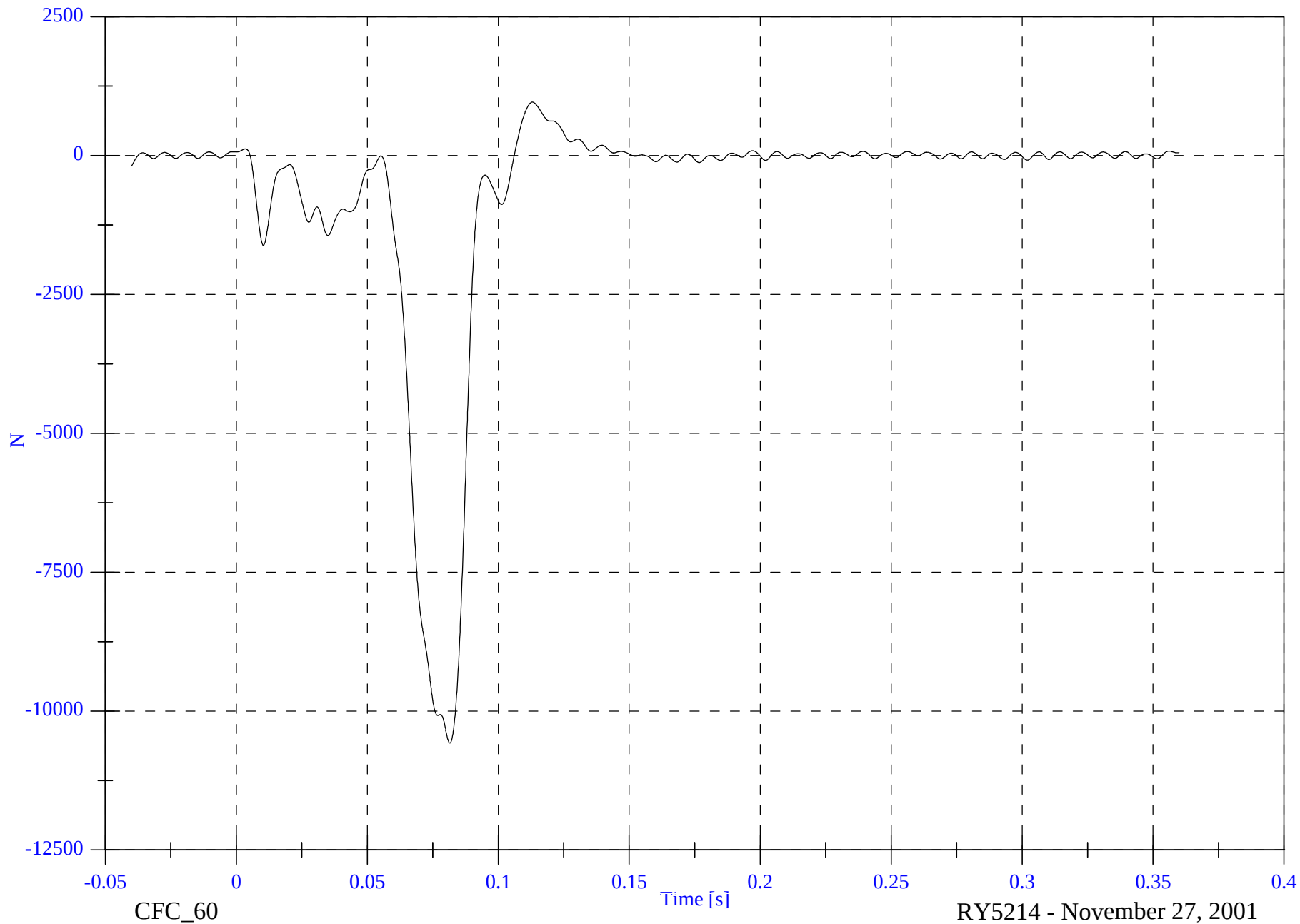
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D5 FY

Max: 962.3 [N] at 0.113 [s]

Min: -10577.9 [N] at 0.081 [s]



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CFC_60

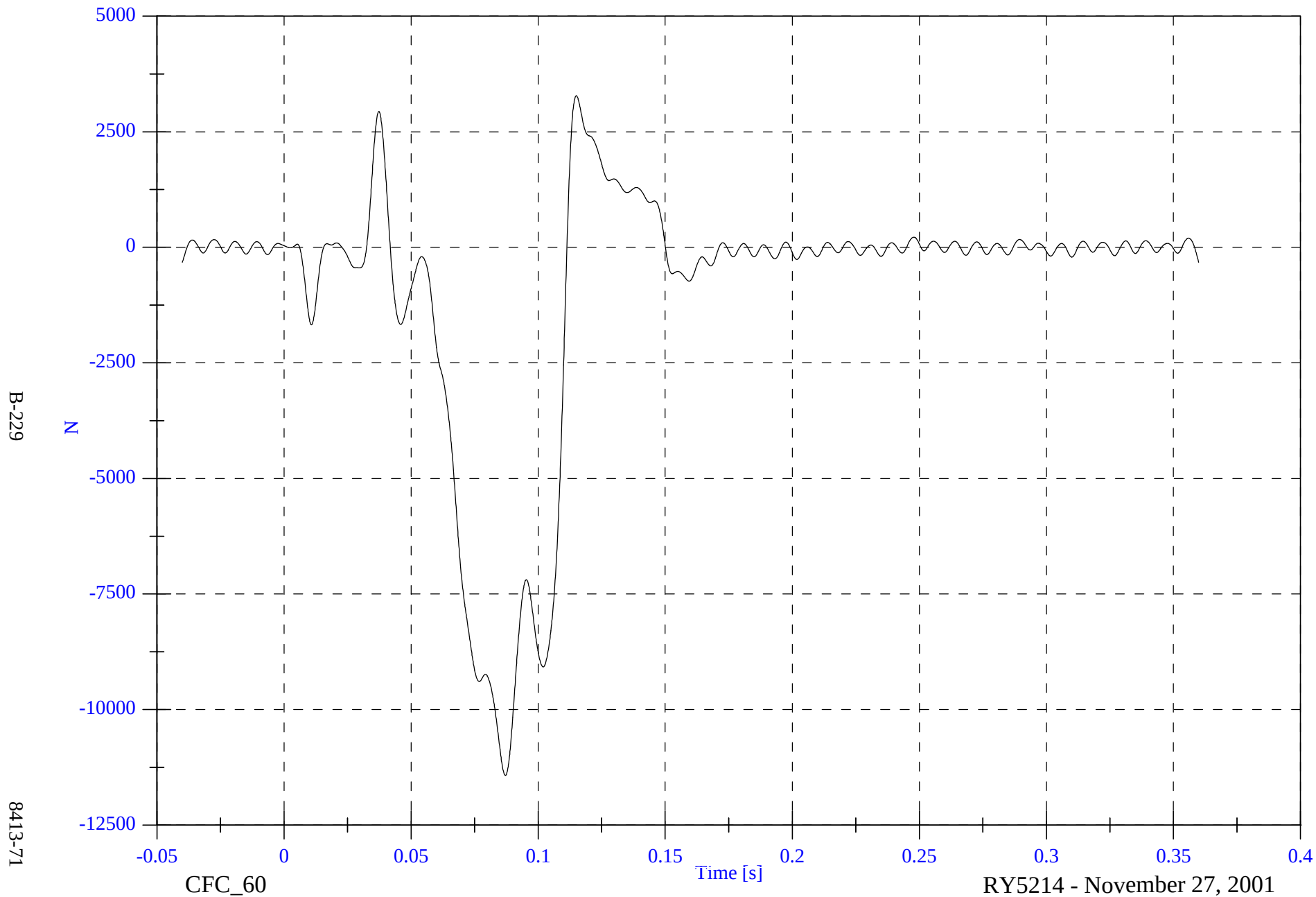
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D6 FY

Max: 3278.5 [N] at 0.115 [s]

Min: -11425.7 [N] at 0.087 [s]

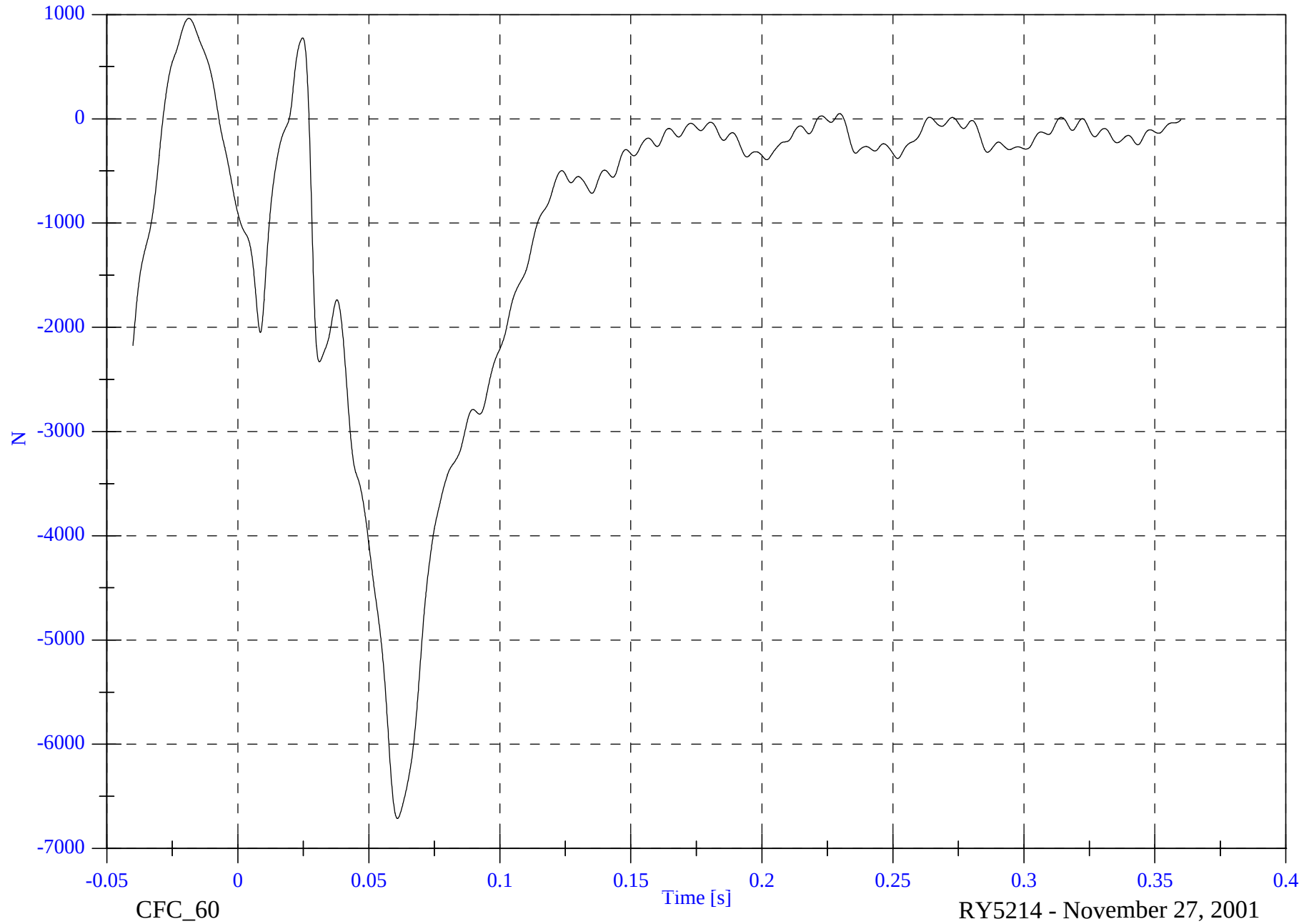


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D1 FX

Max: 963.8 [N] at -0.019 [s]

Min: -6713.0 [N] at 0.061 [s]



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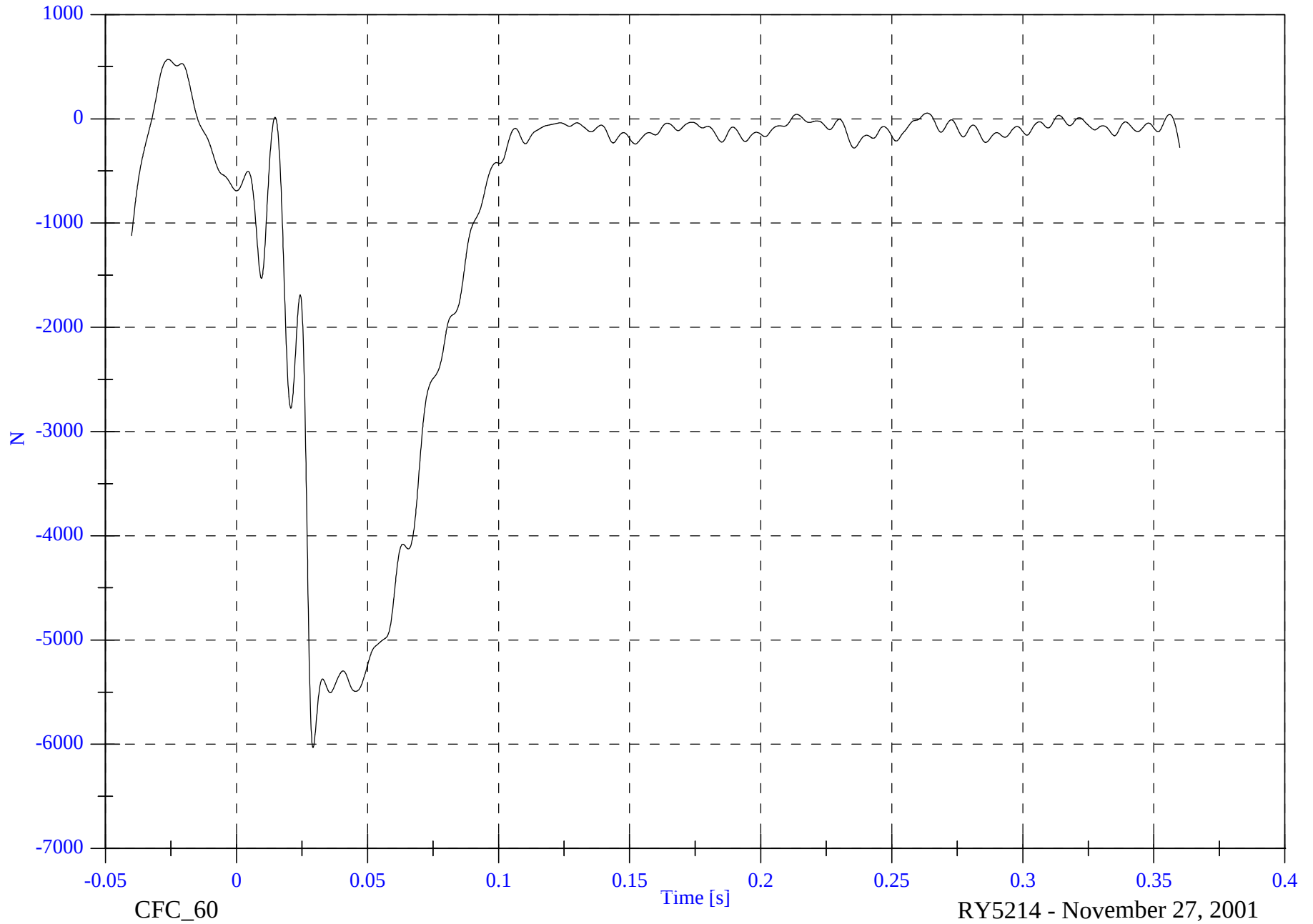
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D2 FX

Max: 570.2 [N] at -0.026 [s]

Min: -6032.7 [N] at 0.029 [s]



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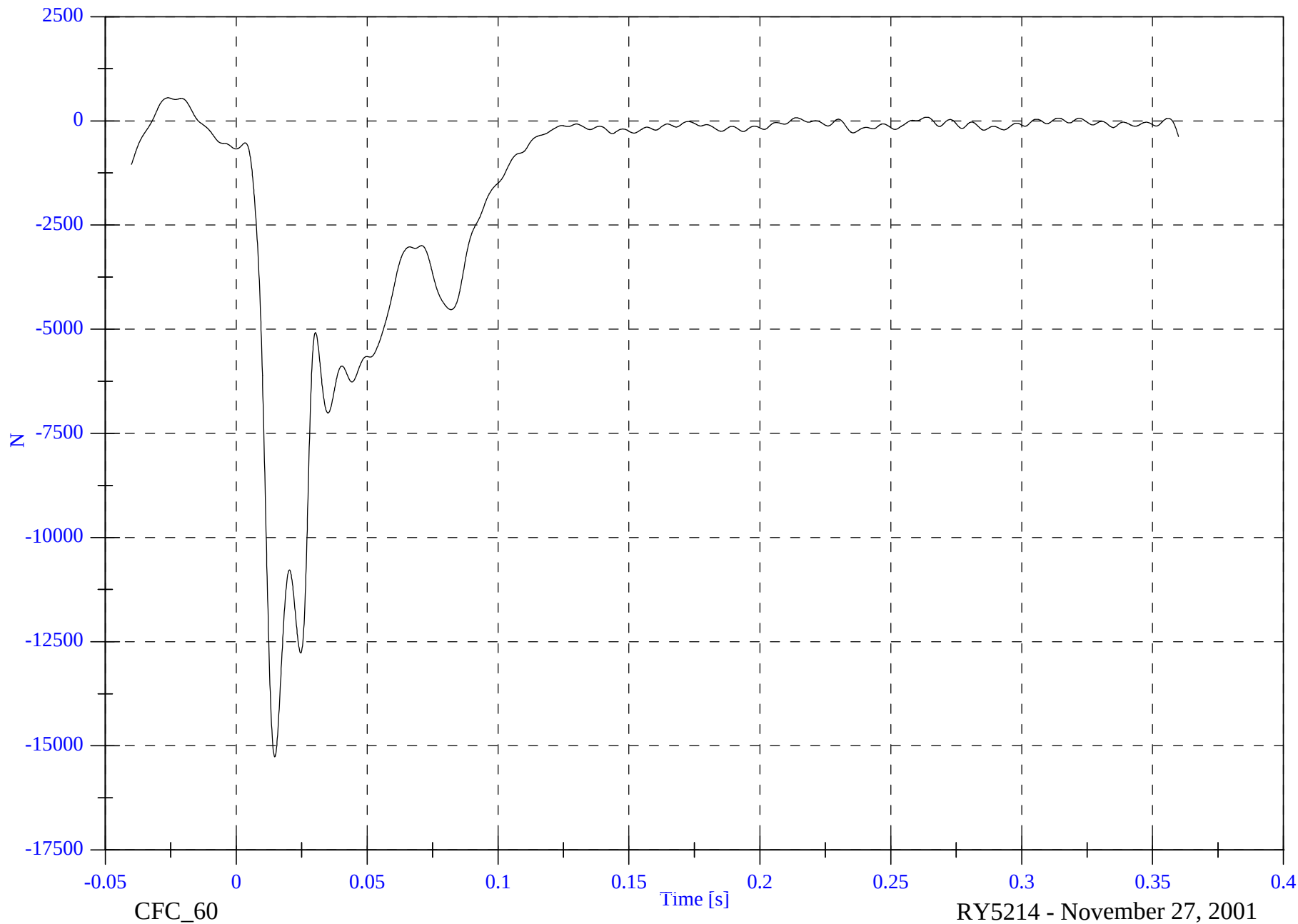
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D3 FX

Max: 552.9 [N] at -0.026 [s]

Min: -15264.4 [N] at 0.015 [s]



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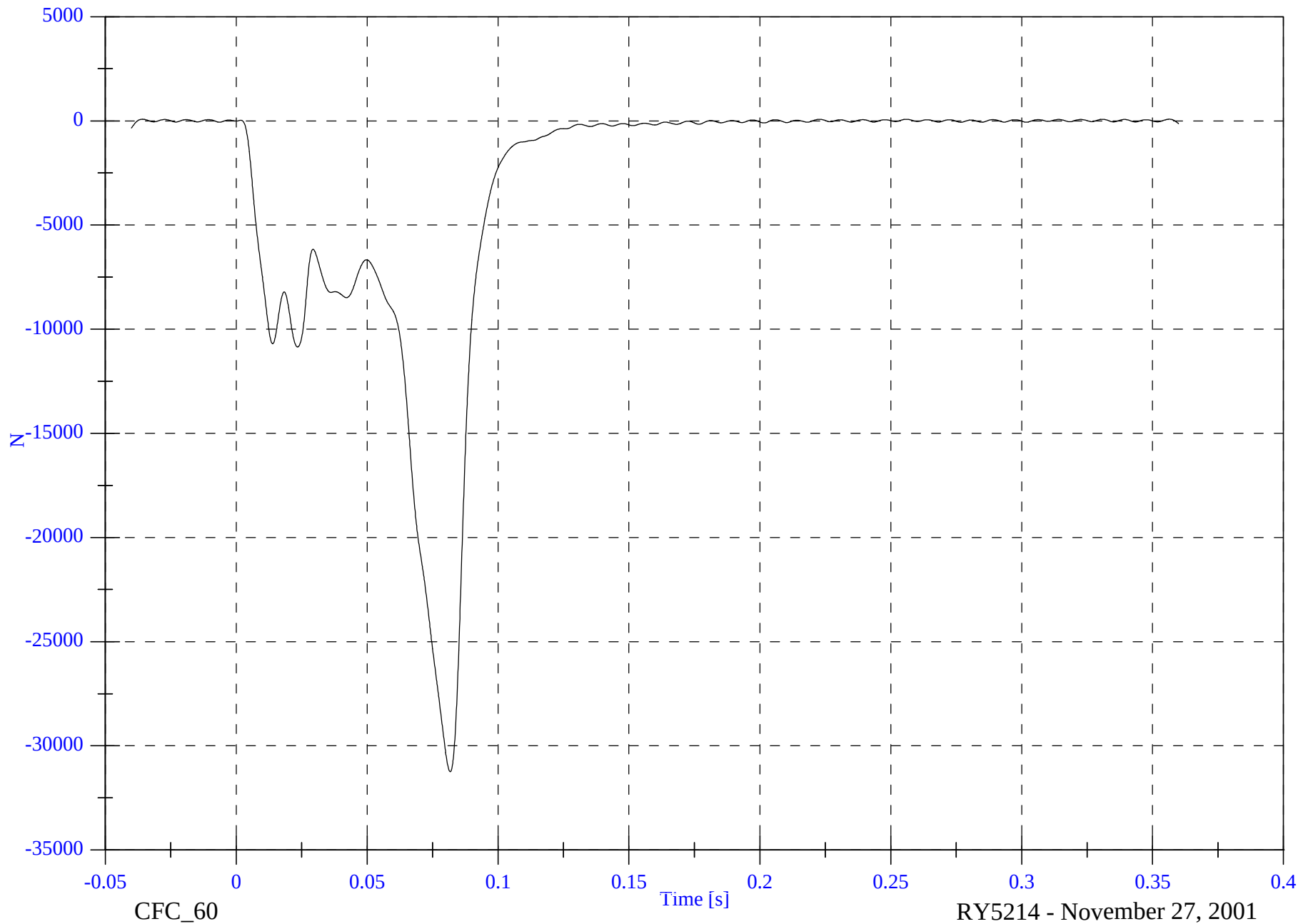
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D4 FX

Max: 81.0 [N] at 0.356 [s]

Min: -31249.2 [N] at 0.082 [s]



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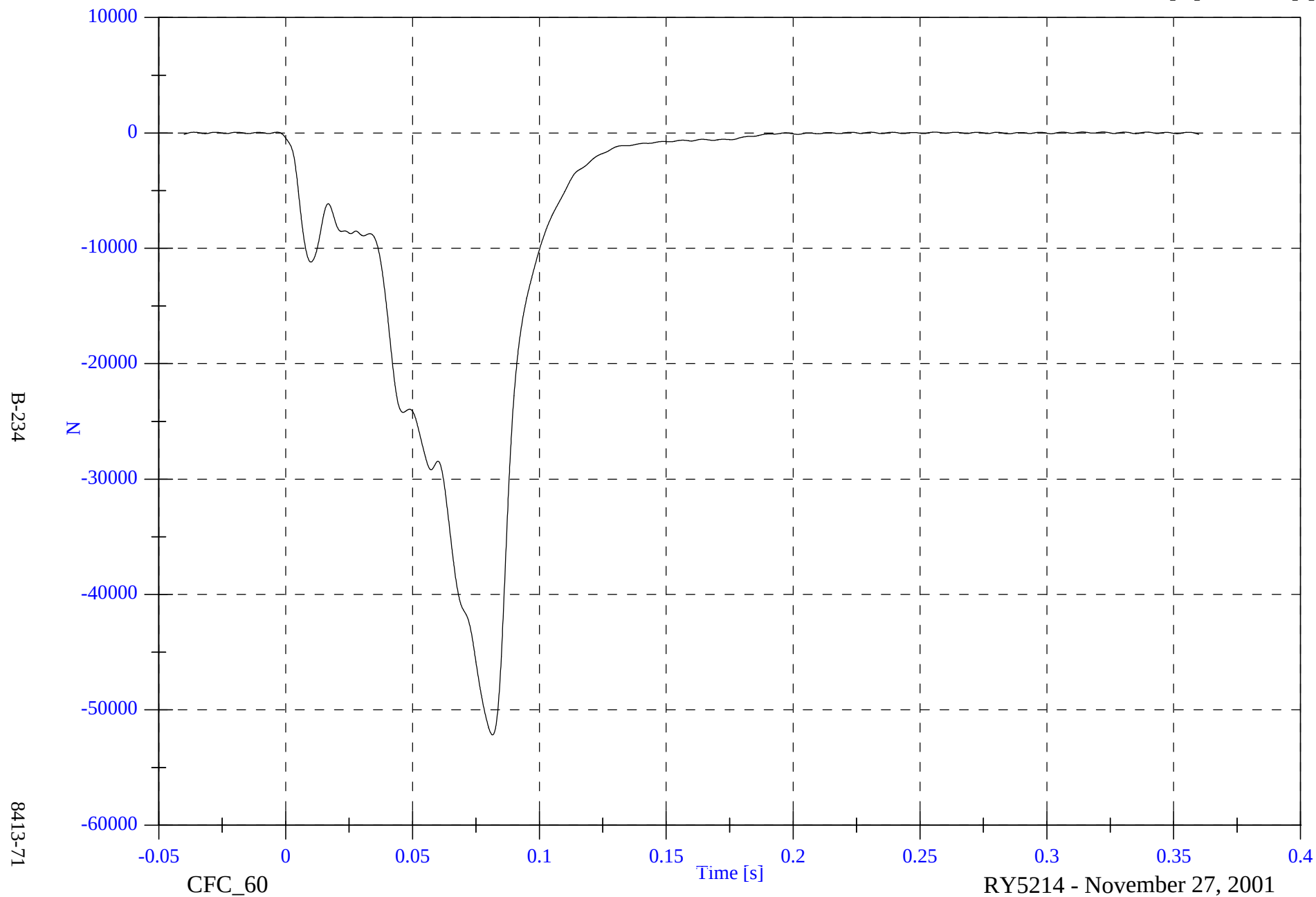
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D5 FX

Max: 81.5 [N] at 0.322 [s]

Min: -52173.1 [N] at 0.081 [s]

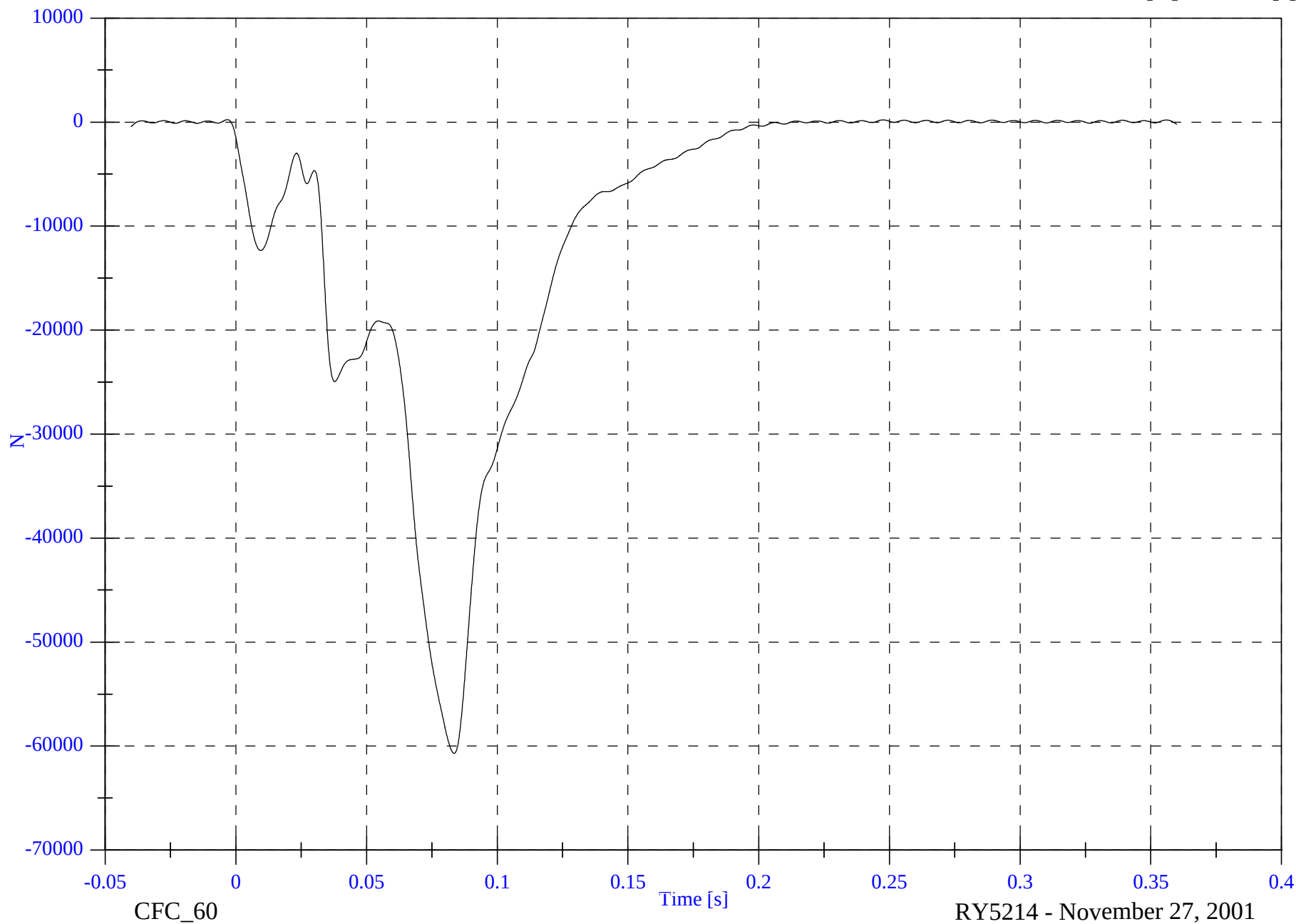


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell D6 FX

Max: 237.5 [N] at -0.003 [s]

Min: -60707.0 [N] at 0.083 [s]



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CFC_60

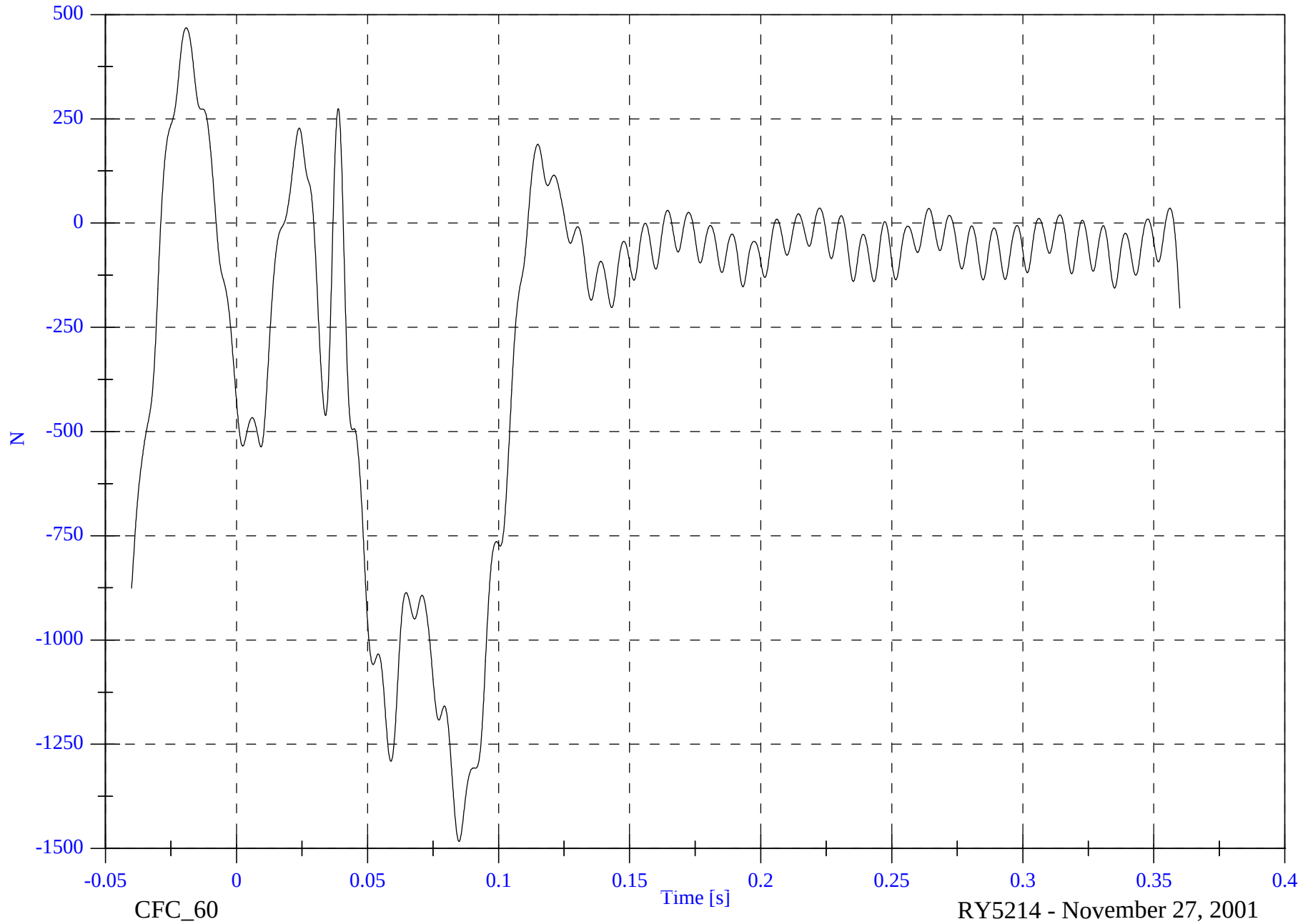
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C2 FY

Max: 468.2 [N] at -0.019 [s]

Min: -1483.1 [N] at 0.085 [s]



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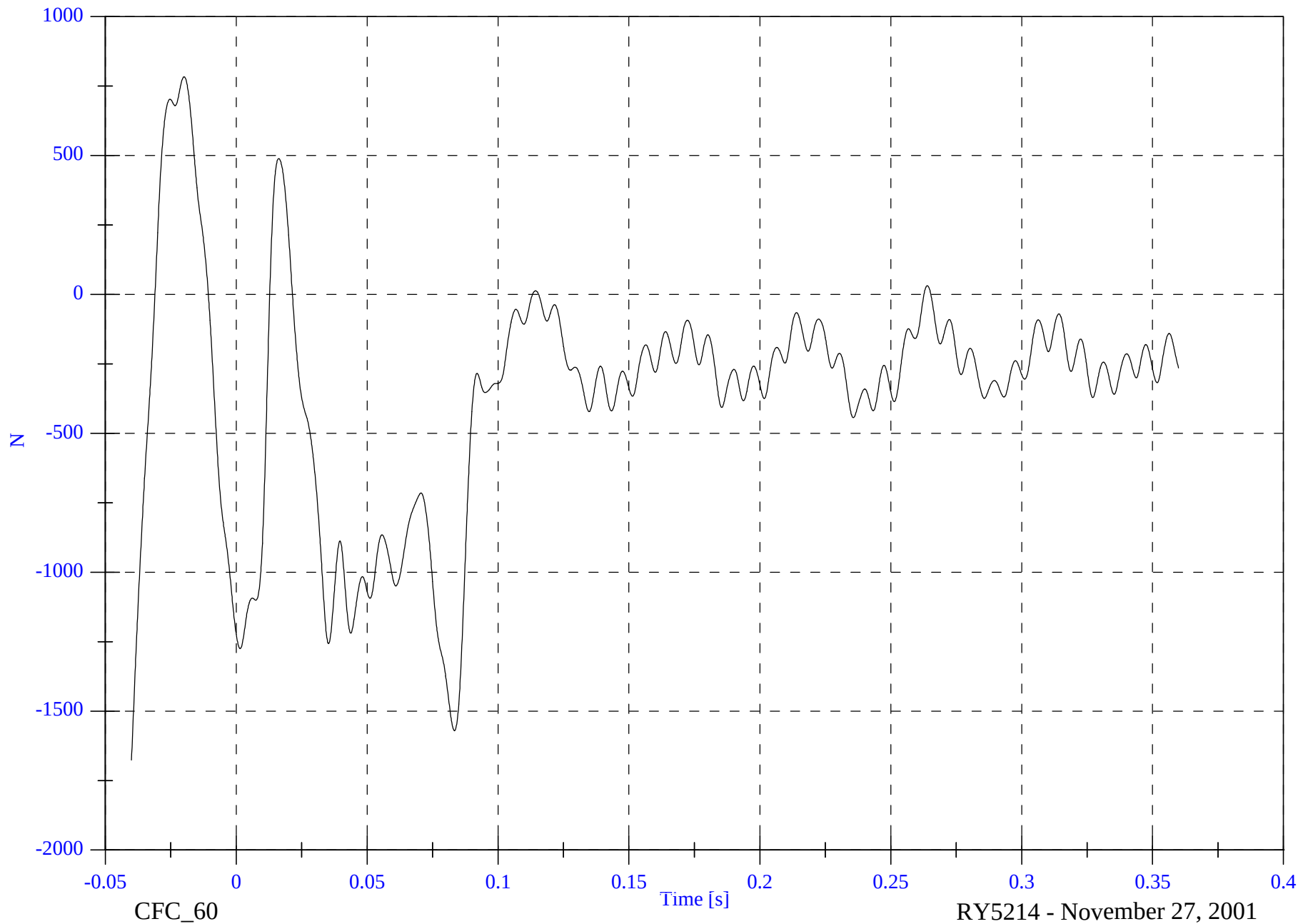
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C3 FY

Max: 783.6 [N] at -0.020 [s]

Min: -1676.2 [N] at -0.040 [s]



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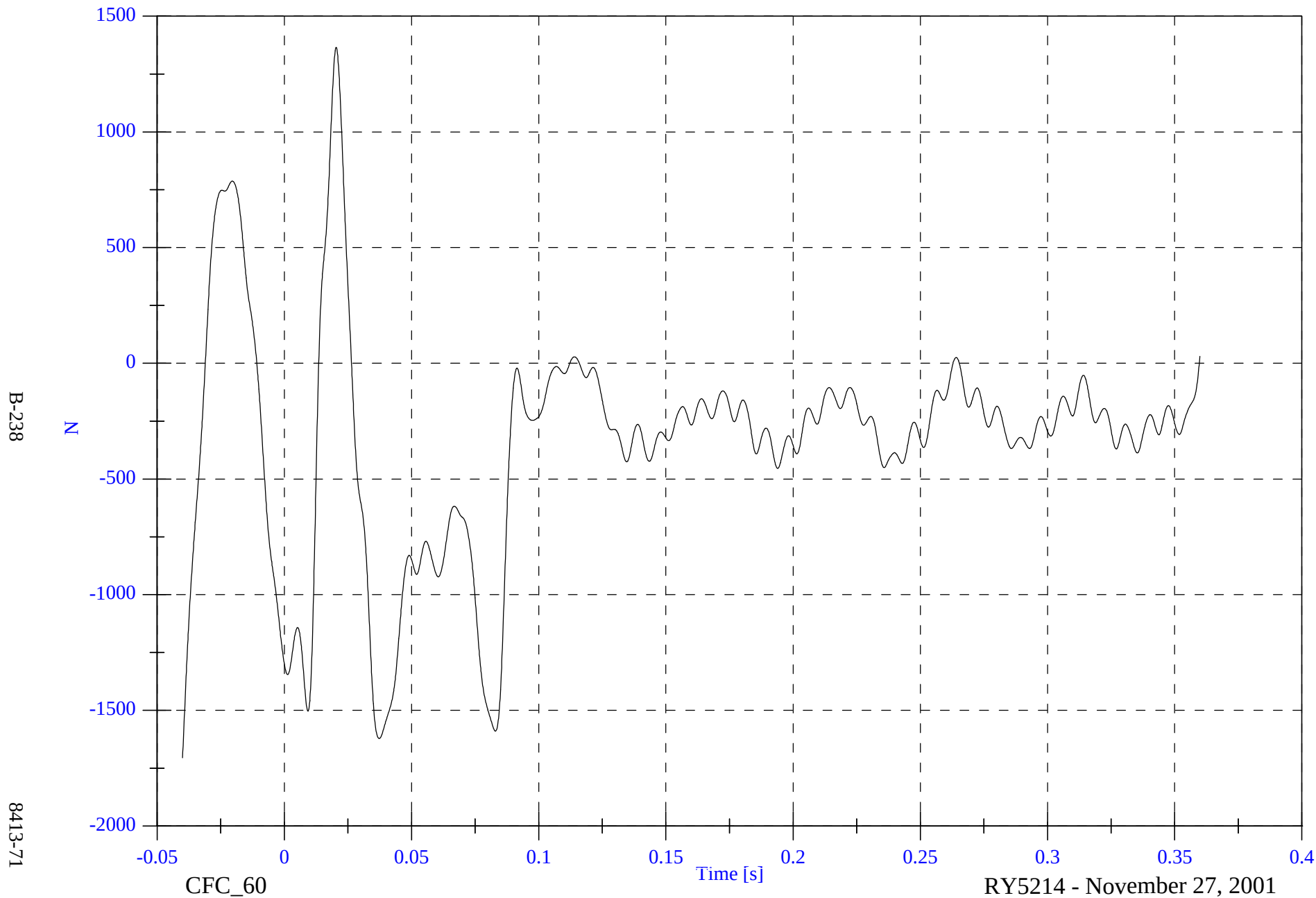
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C4 FY

Max: 1365.8 [N] at 0.020 [s]

Min: -1705.0 [N] at -0.040 [s]

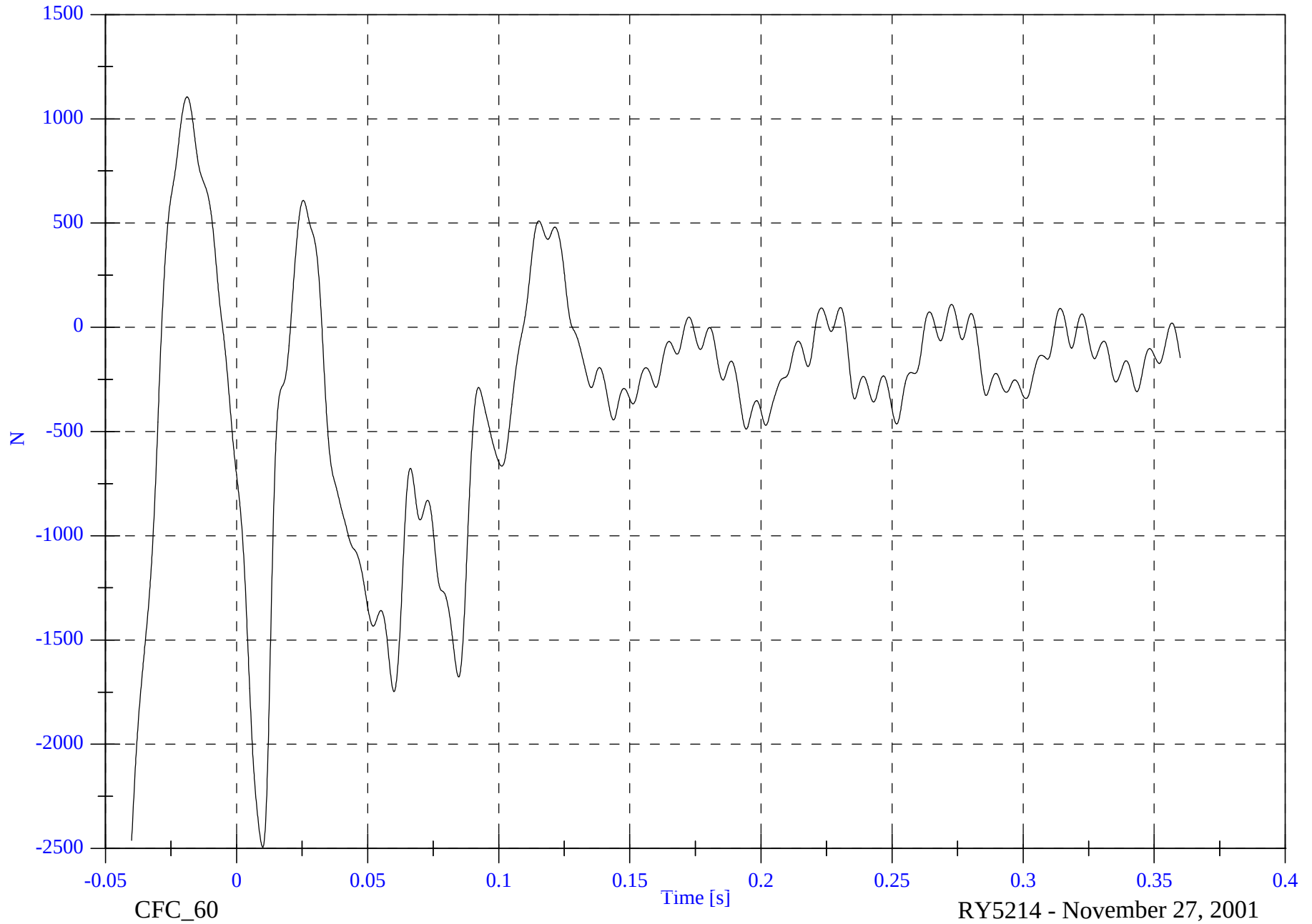


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C5 FY

Max: 1105.6 [N] at -0.019 [s]

Min: -2493.9 [N] at 0.010 [s]



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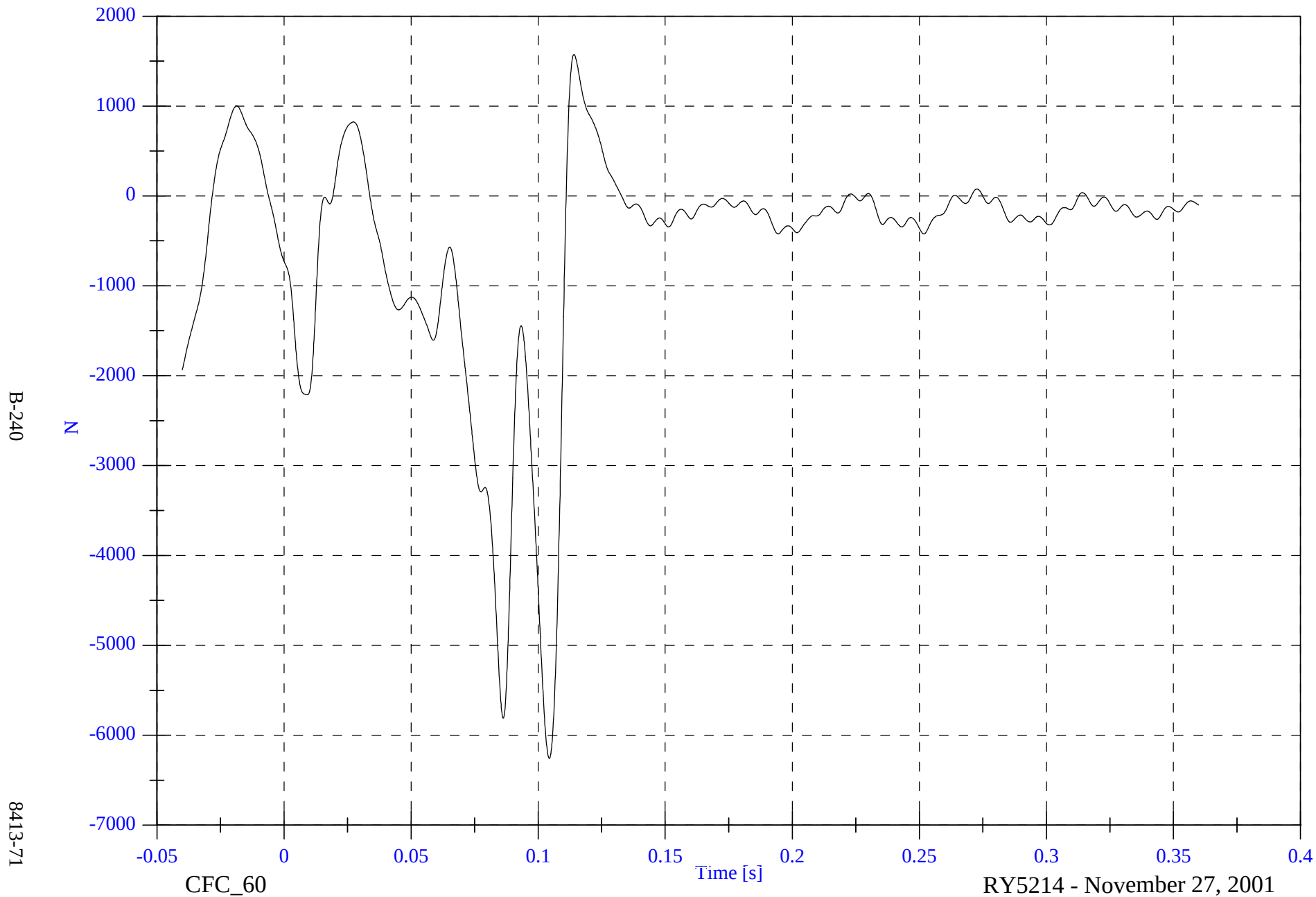
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C6 FY

Max: 1573.4 [N] at 0.114 [s]

Min: -6258.5 [N] at 0.104 [s]

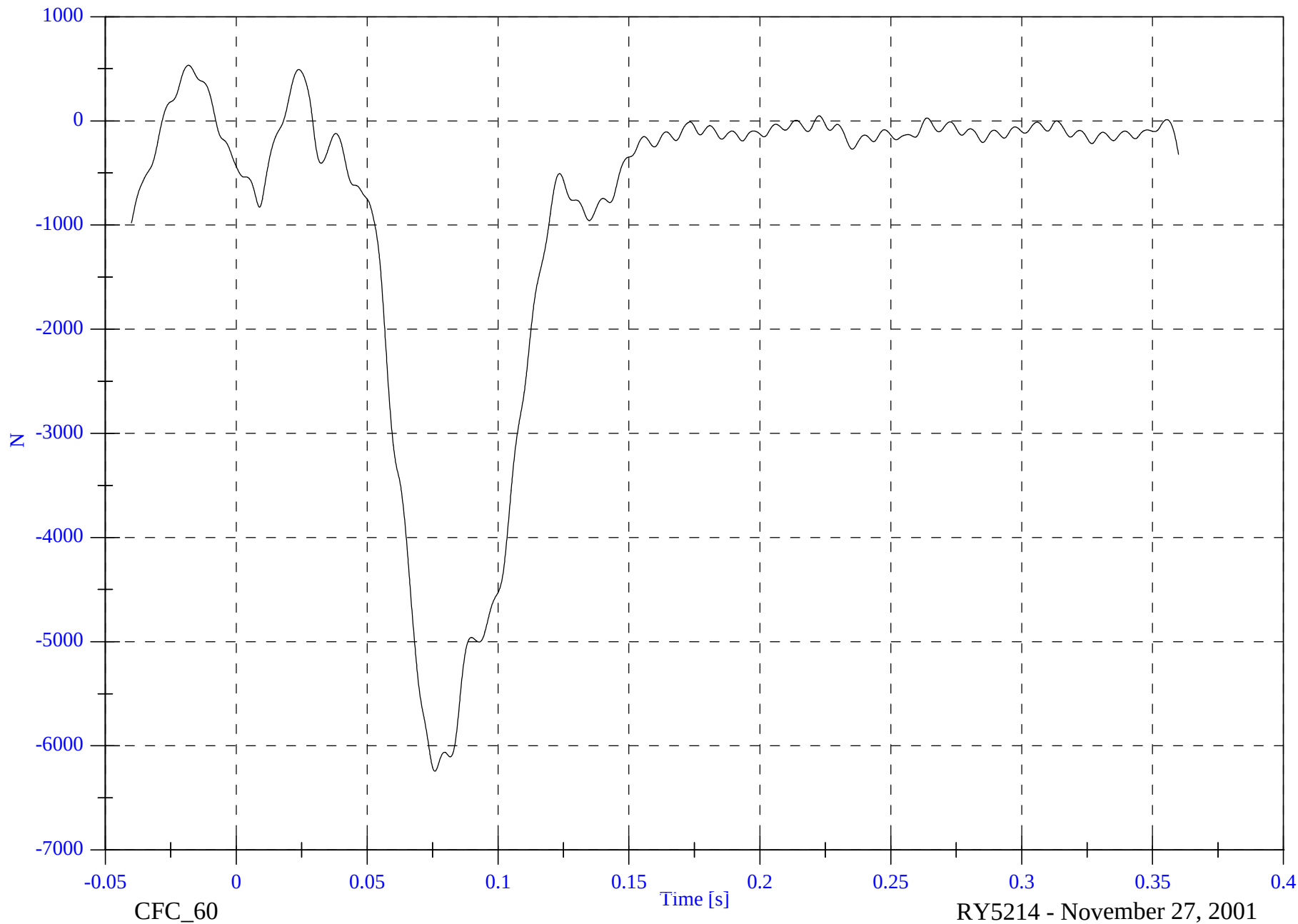


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C1 FX

Max: 533.5 [N] at -0.018 [s]

Min: -6244.3 [N] at 0.076 [s]

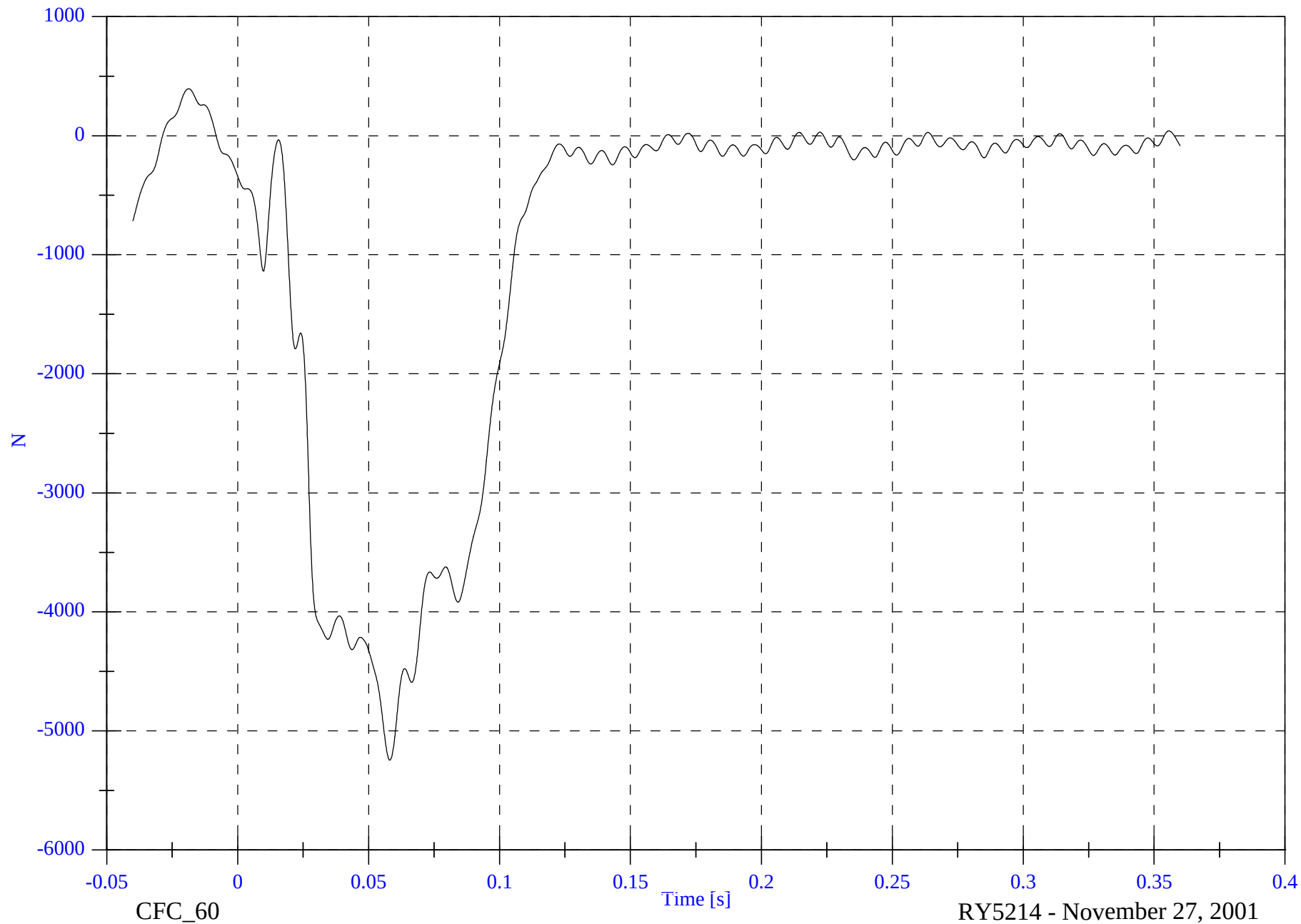


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C2 FX

Max: 394.4 [N] at -0.019 [s]

Min: -5245.9 [N] at 0.058 [s]



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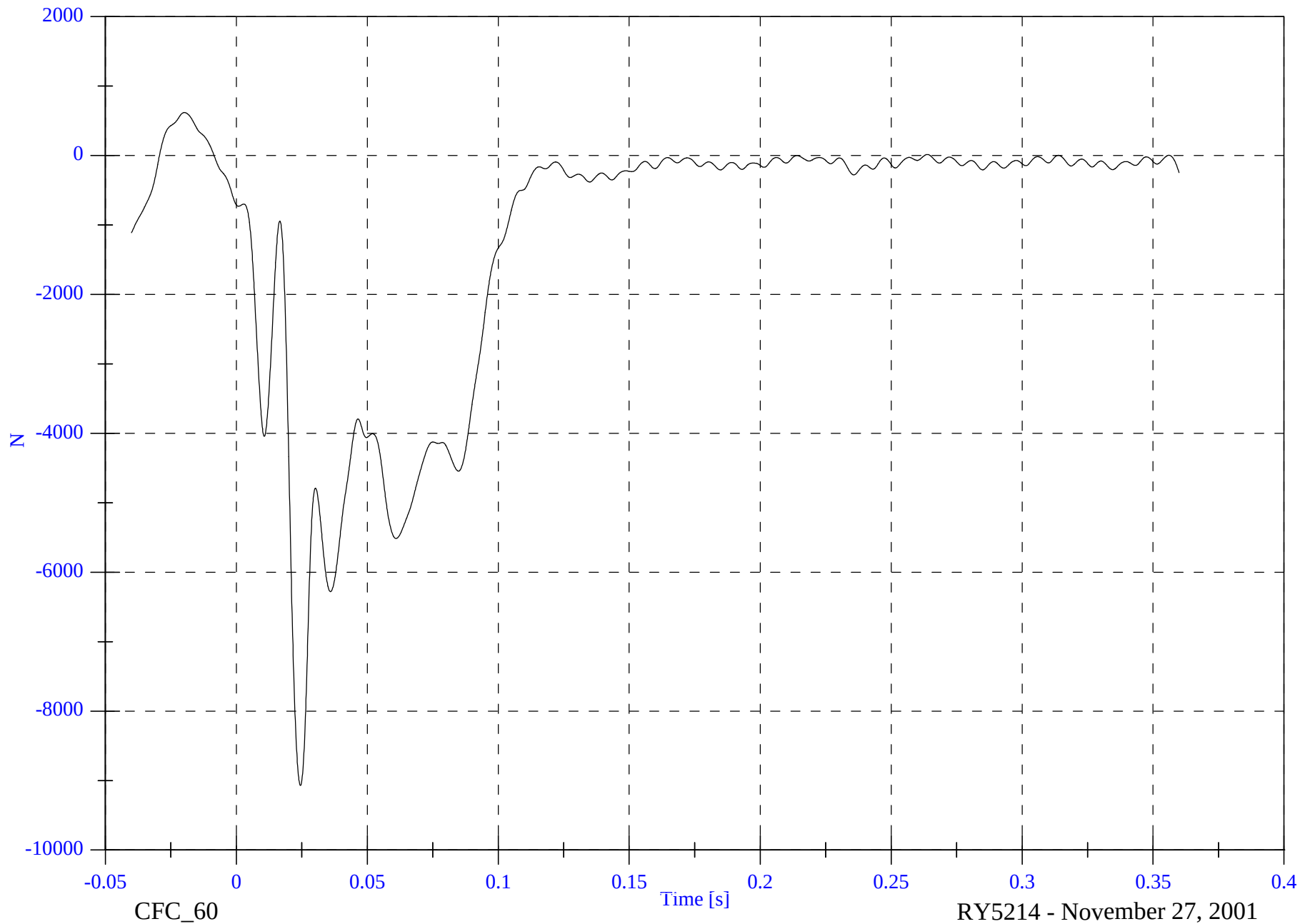
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C3 FX

Max: 620.3 [N] at -0.020 [s]

Min: -9070.9 [N] at 0.024 [s]



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8413-71

CFC_60

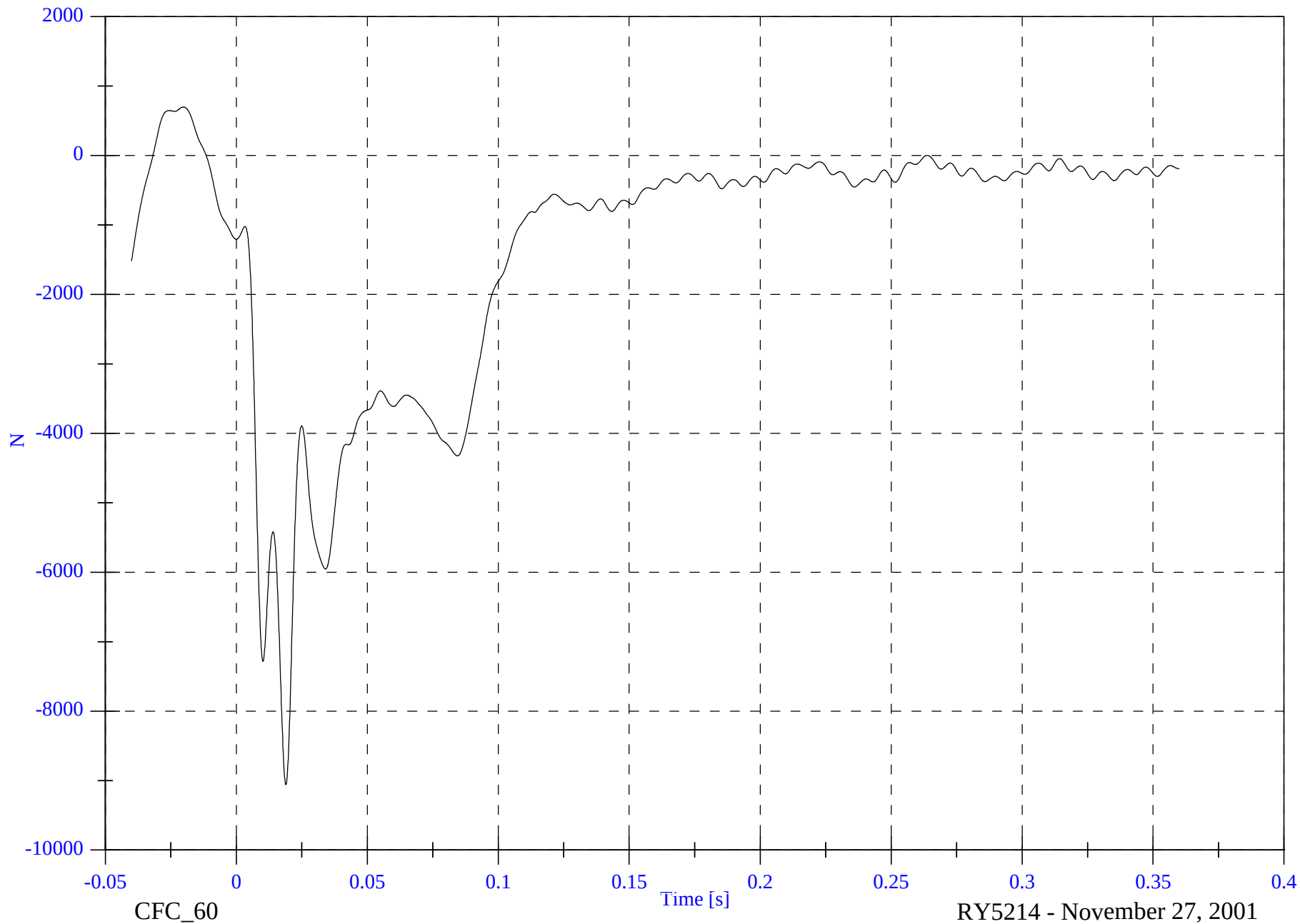
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C4 FX

Max: 699.5 [N] at -0.020 [s]

Min: -9060.7 [N] at 0.019 [s]



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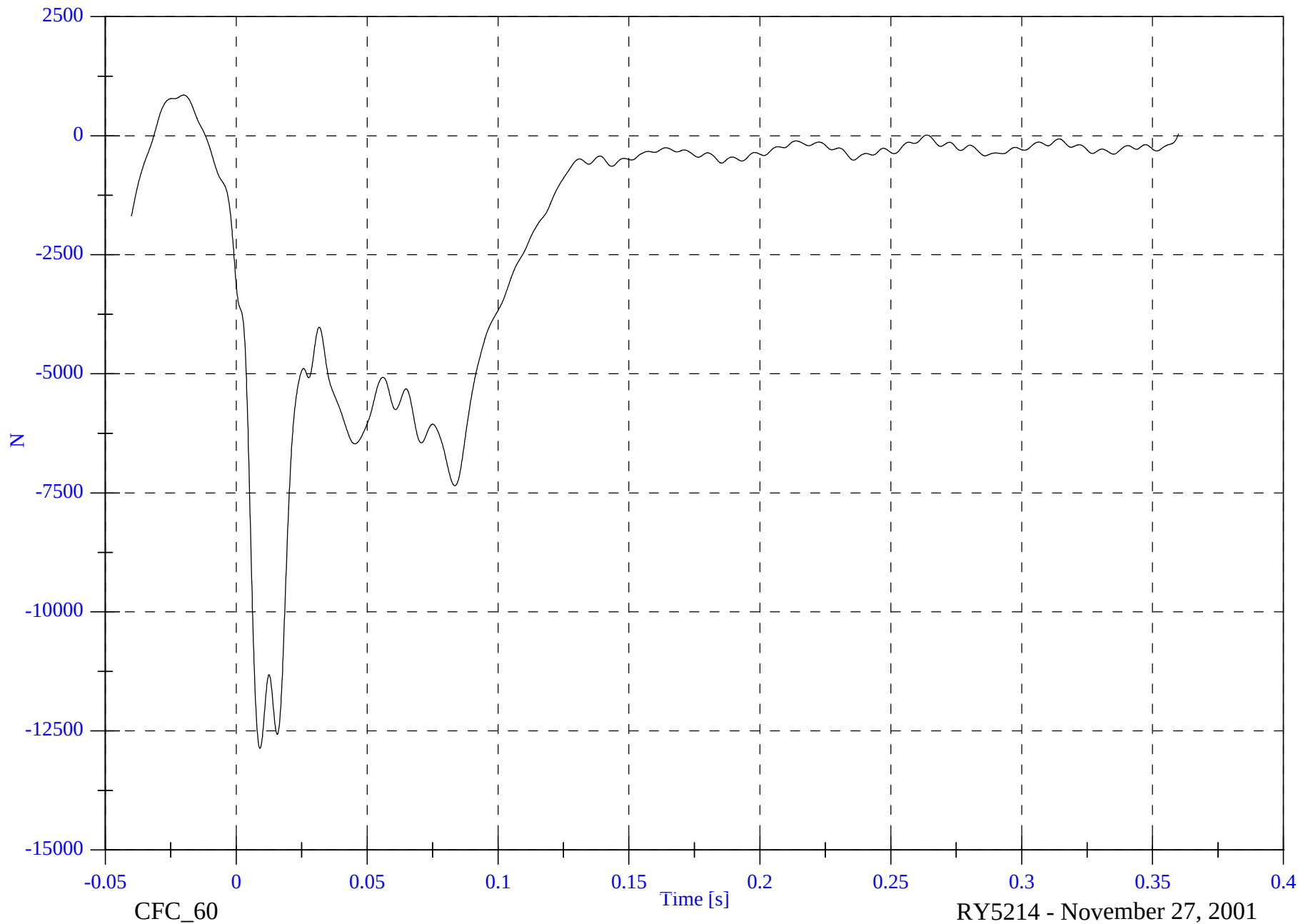
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C5 FX

Max: 853.4 [N] at -0.020 [s]

Min: -12867.2 [N] at 0.009 [s]



B-245

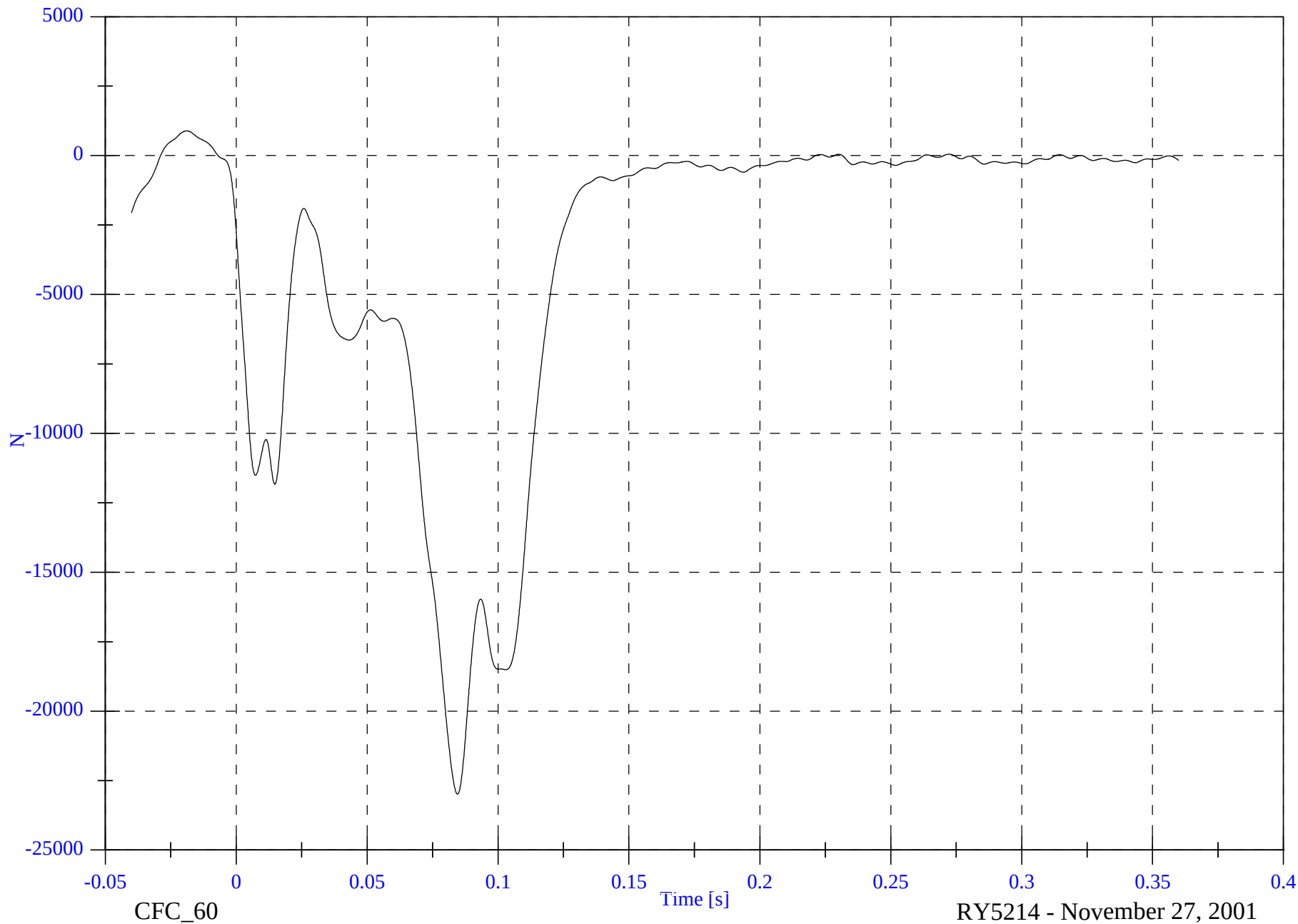
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell C6 FX

Max: 888.4 [N] at -0.019 [s]

Min: -22989.0 [N] at 0.084 [s]



B-246

8413-71

CFC_60

Time [s]

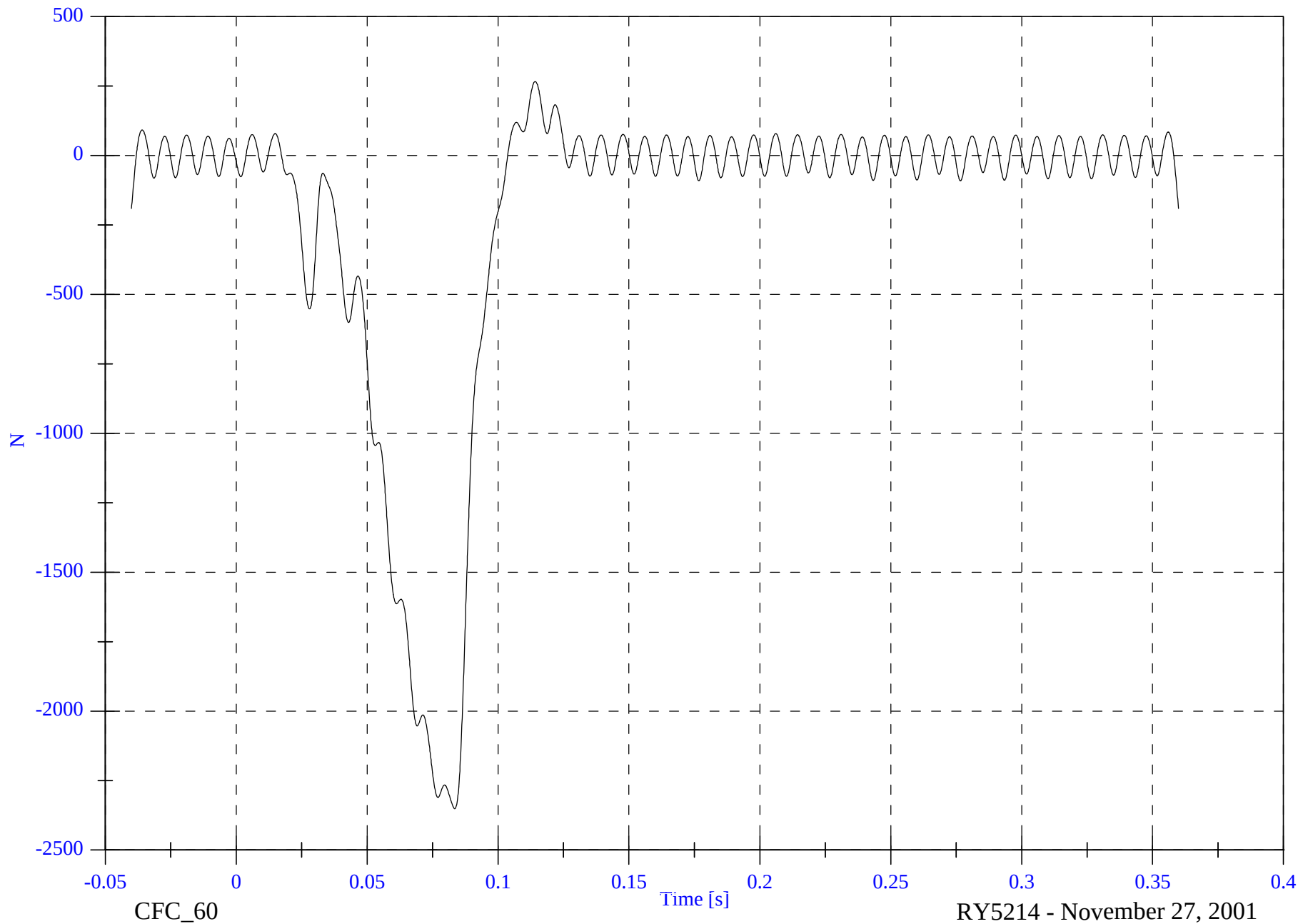
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B3 FY

Max: 266.5 [N] at 0.114 [s]

Min: -2351.5 [N] at 0.083 [s]



B-247

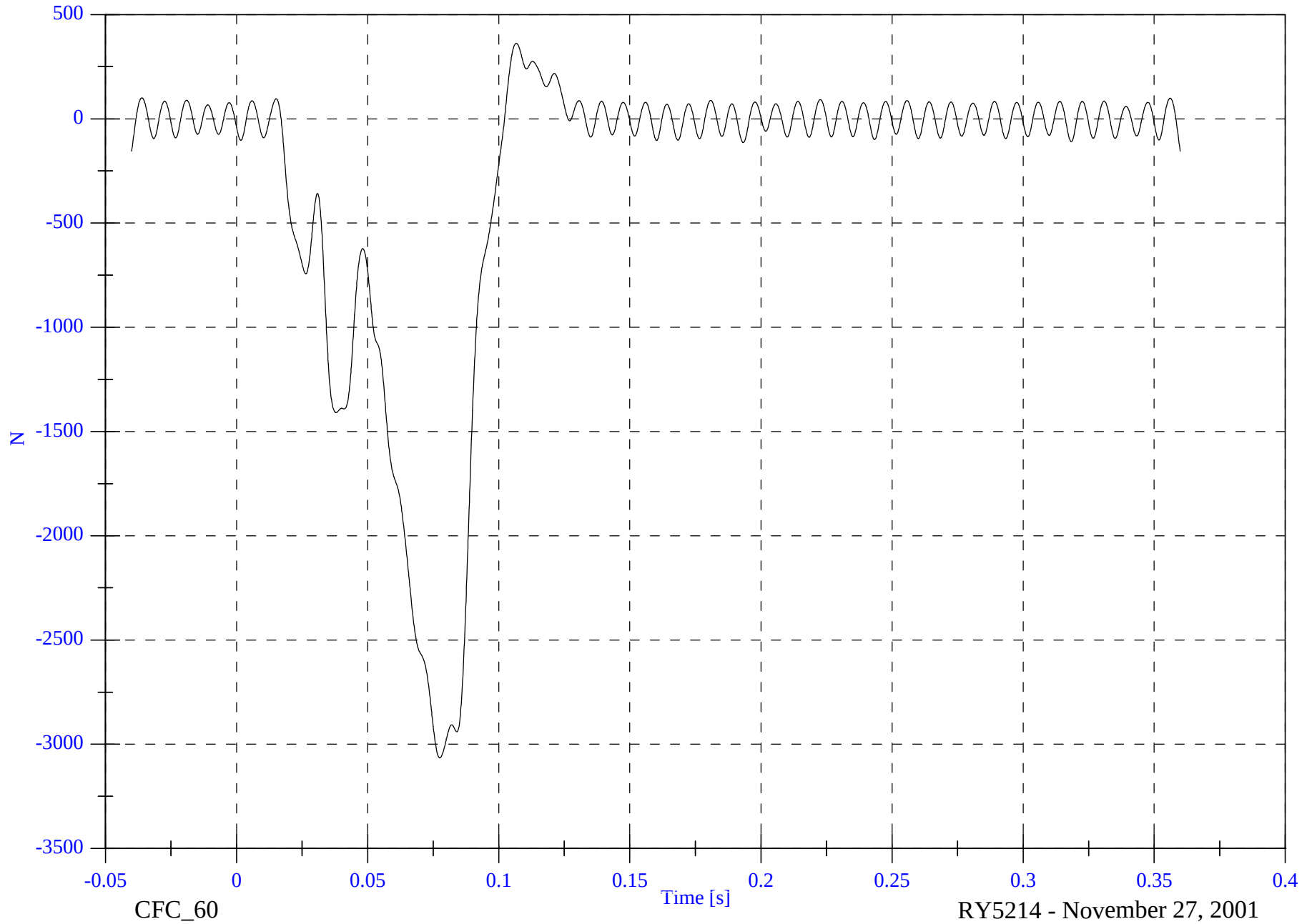
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B4 FY

Max: 362.1 [N] at 0.107 [s]

Min: -3065.5 [N] at 0.077 [s]



B-248

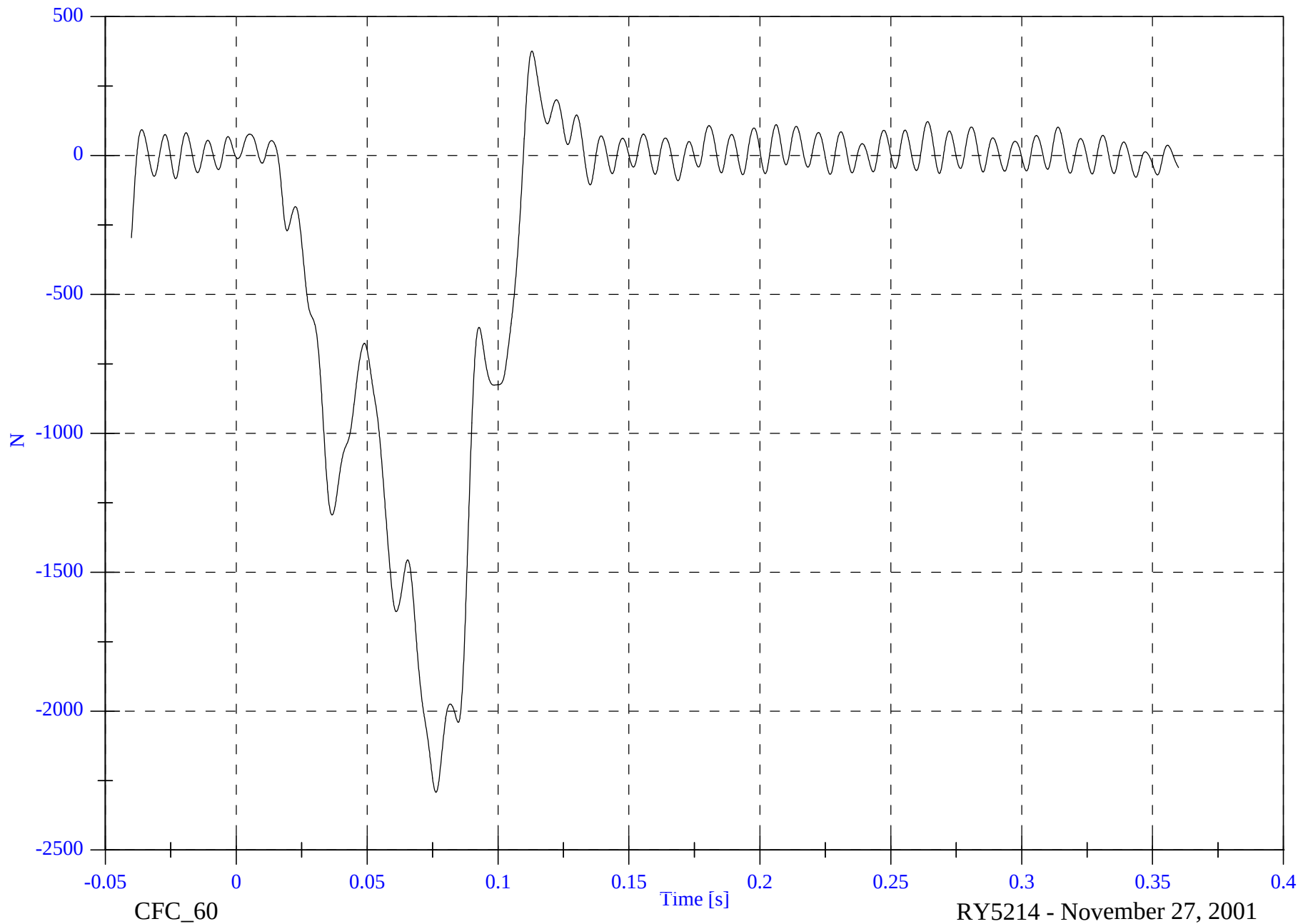
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B5 FY

Max: 376.1 [N] at 0.113 [s]

Min: -2292.5 [N] at 0.076 [s]



B-249

8413-71

CFC_60

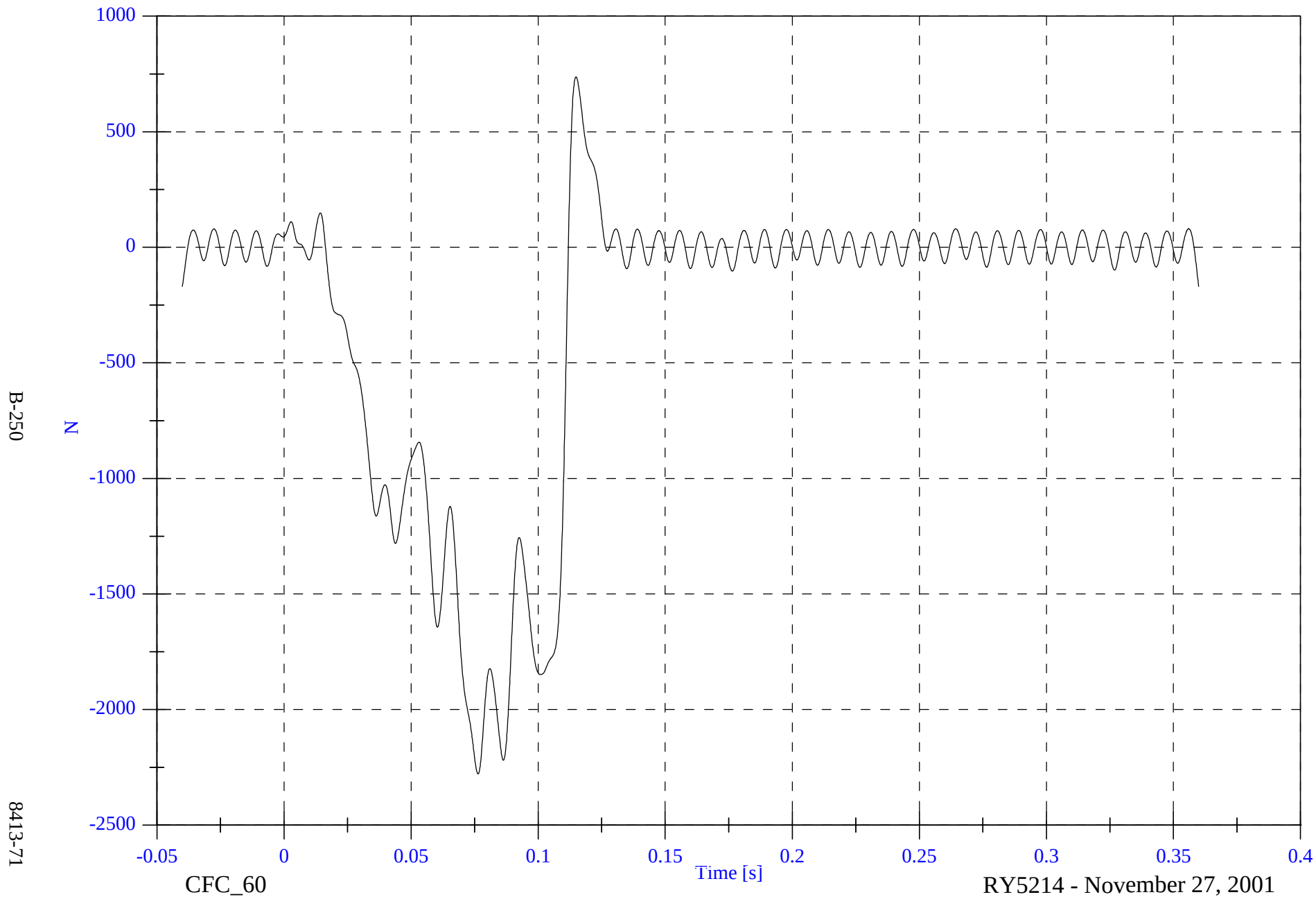
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B6 FY

Max: 737.5 [N] at 0.115 [s]

Min: -2278.6 [N] at 0.076 [s]

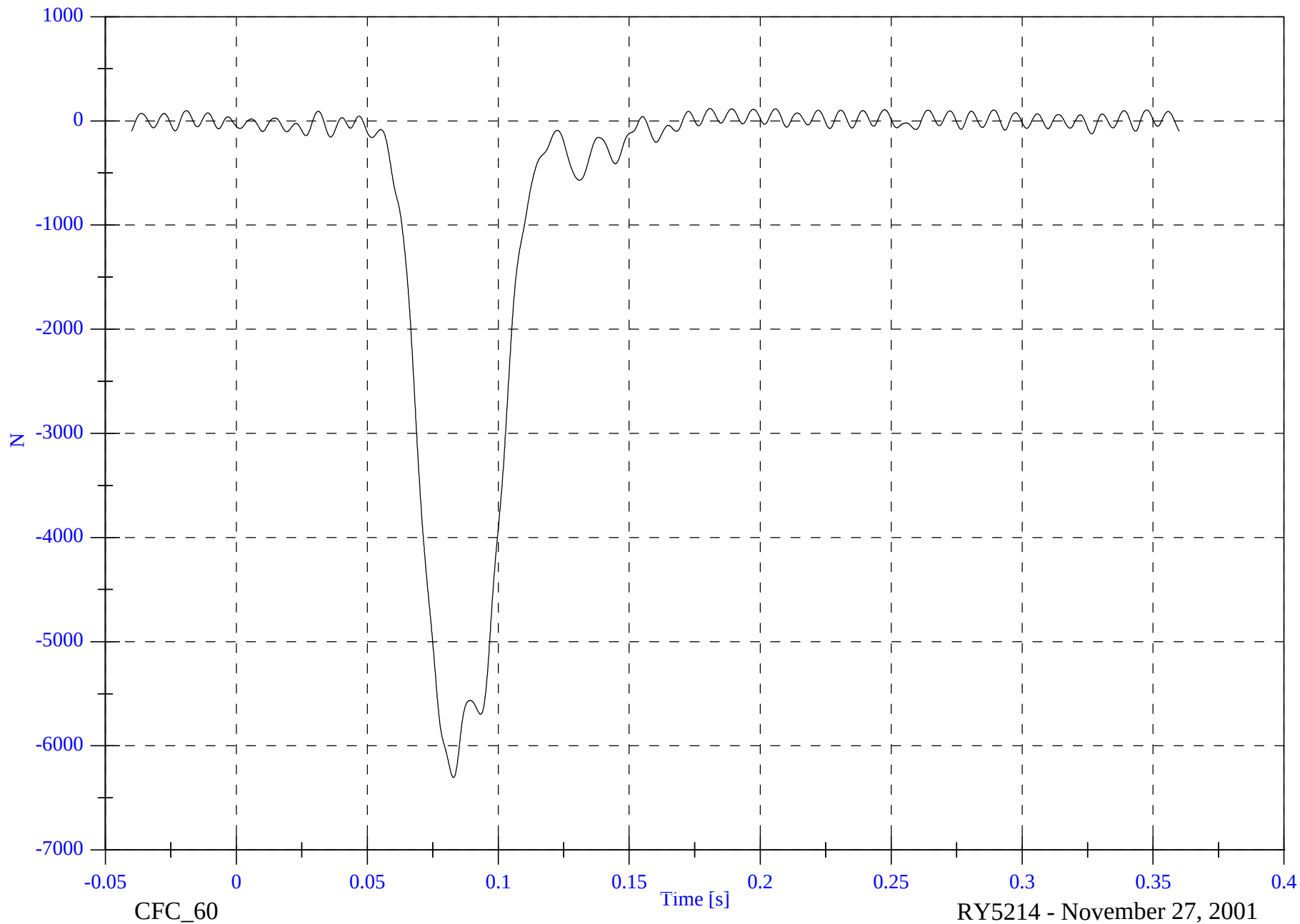


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B1 FX

Max: 117.7 [N] at 0.181 [s]

Min: -6304.2 [N] at 0.083 [s]



B-251

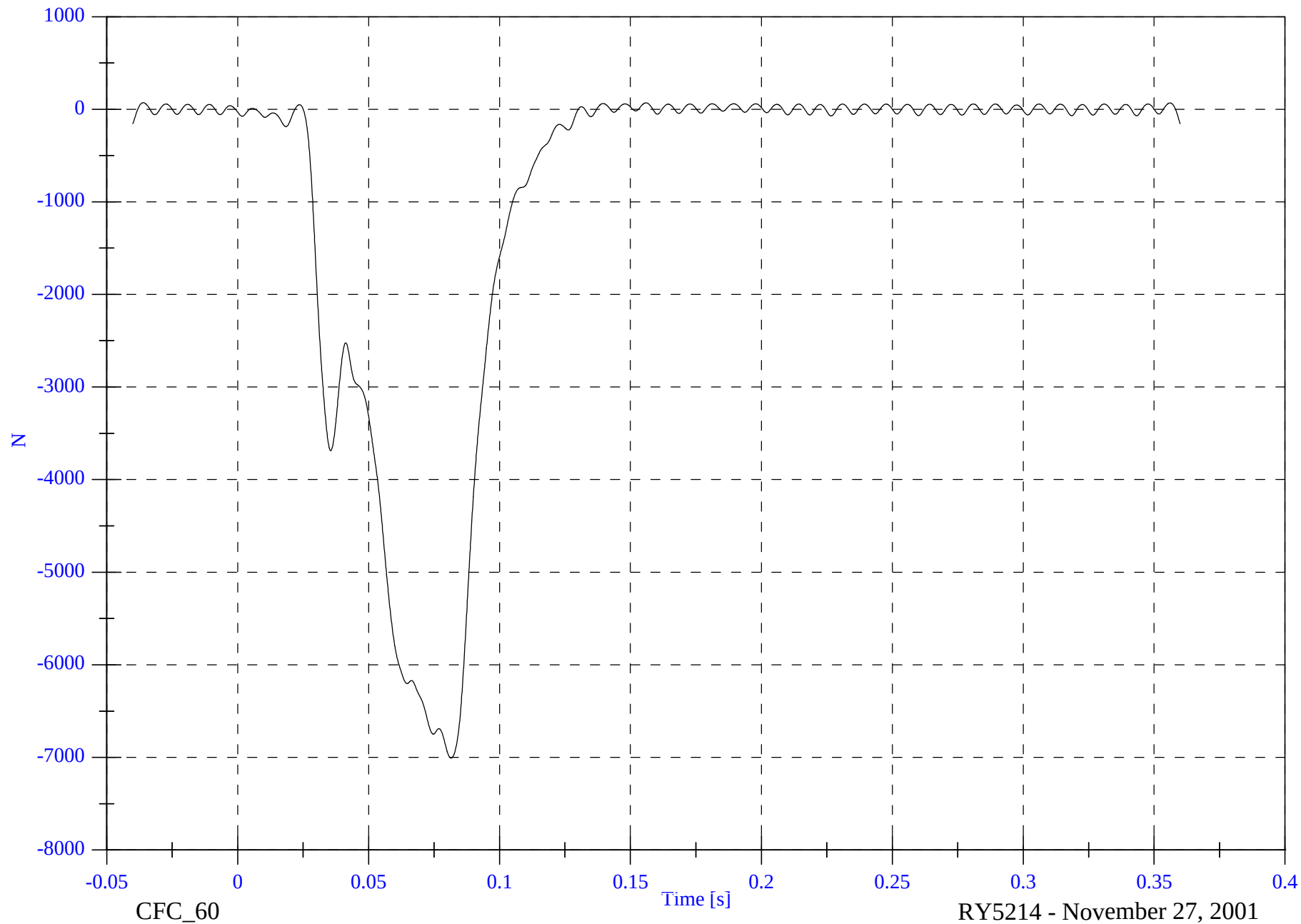
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B2 FX

Max: 71.3 [N] at -0.036 [s]

Min: -7007.8 [N] at 0.081 [s]



B-252

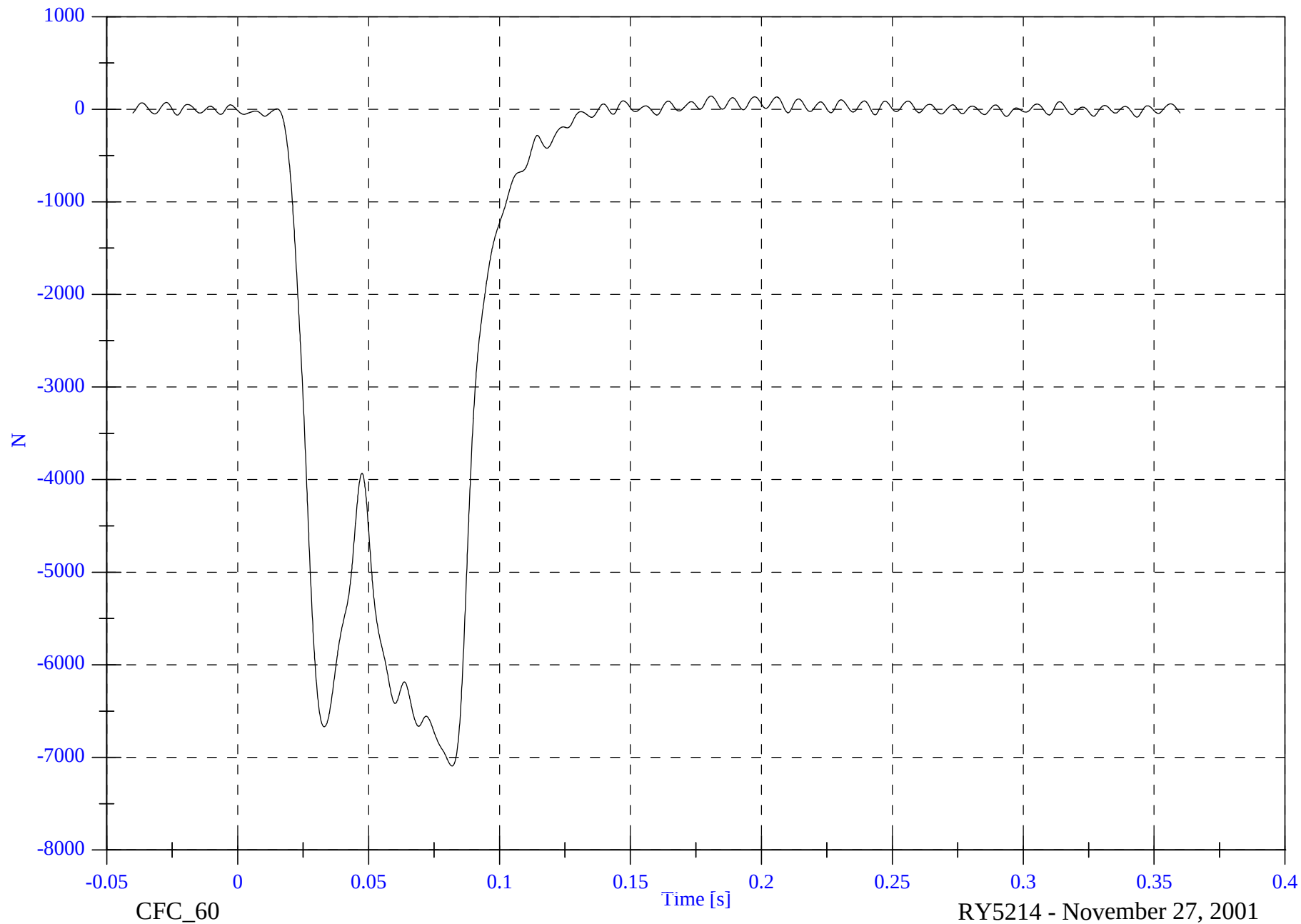
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B3 FX

Max: 142.1 [N] at 0.181 [s]

Min: -7092.8 [N] at 0.082 [s]



B-253

8413-71

CFC_60

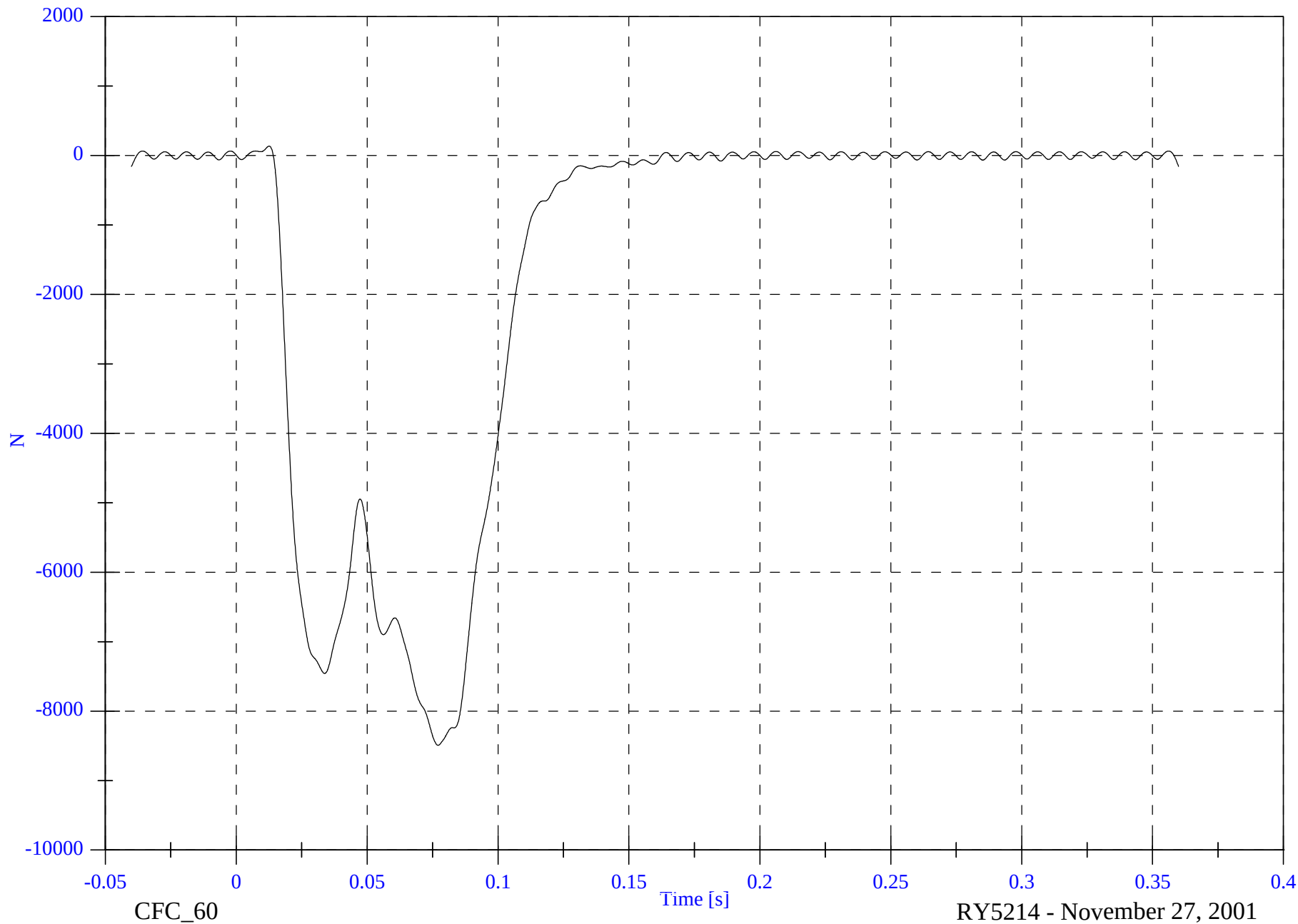
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B4 FX

Max: 136.0 [N] at 0.013 [s]

Min: -8492.8 [N] at 0.077 [s]



B-254

8413-71

CFC_60

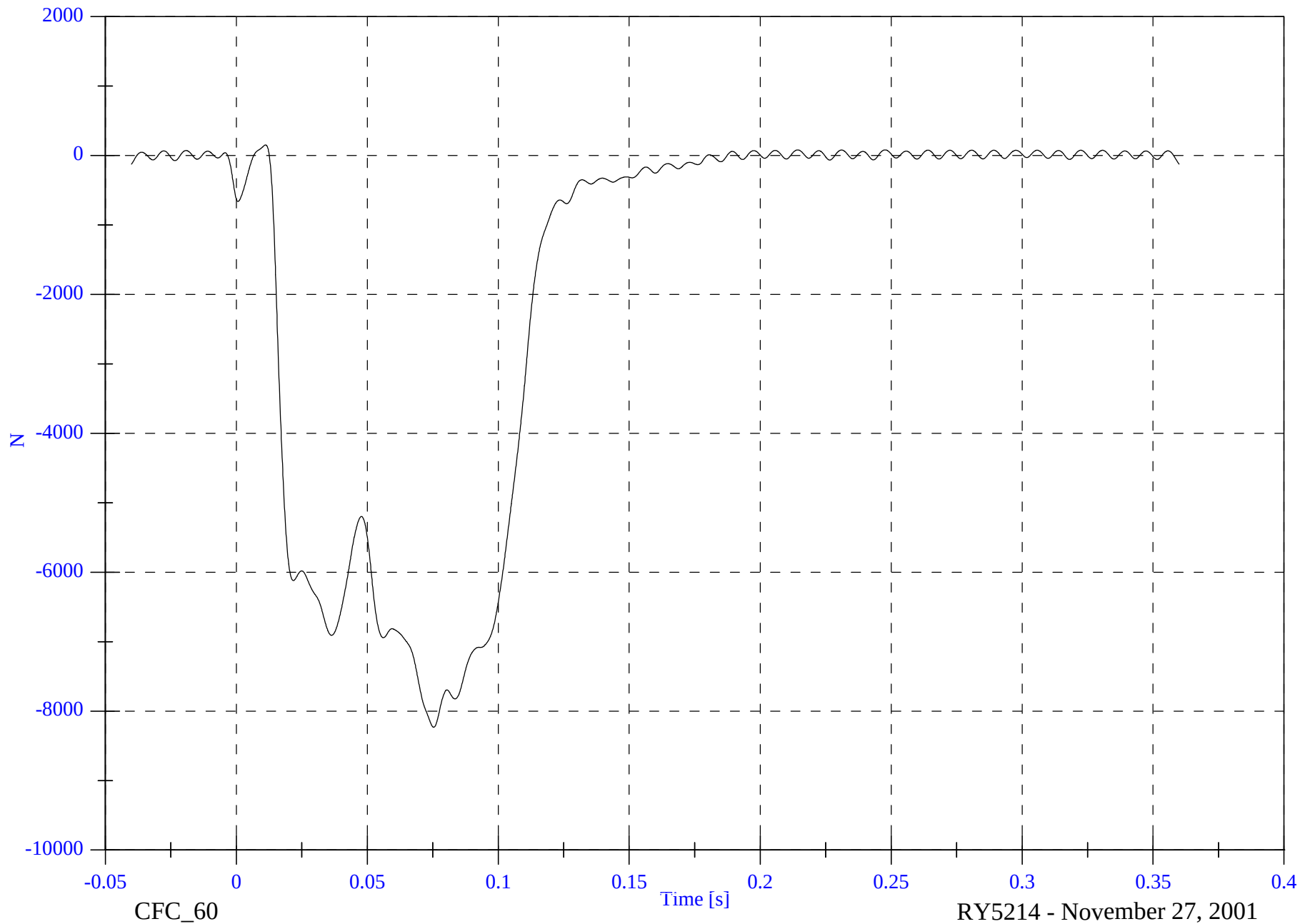
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B5 FX

Max: 152.9 [N] at 0.011 [s]

Min: -8233.2 [N] at 0.075 [s]



B-255

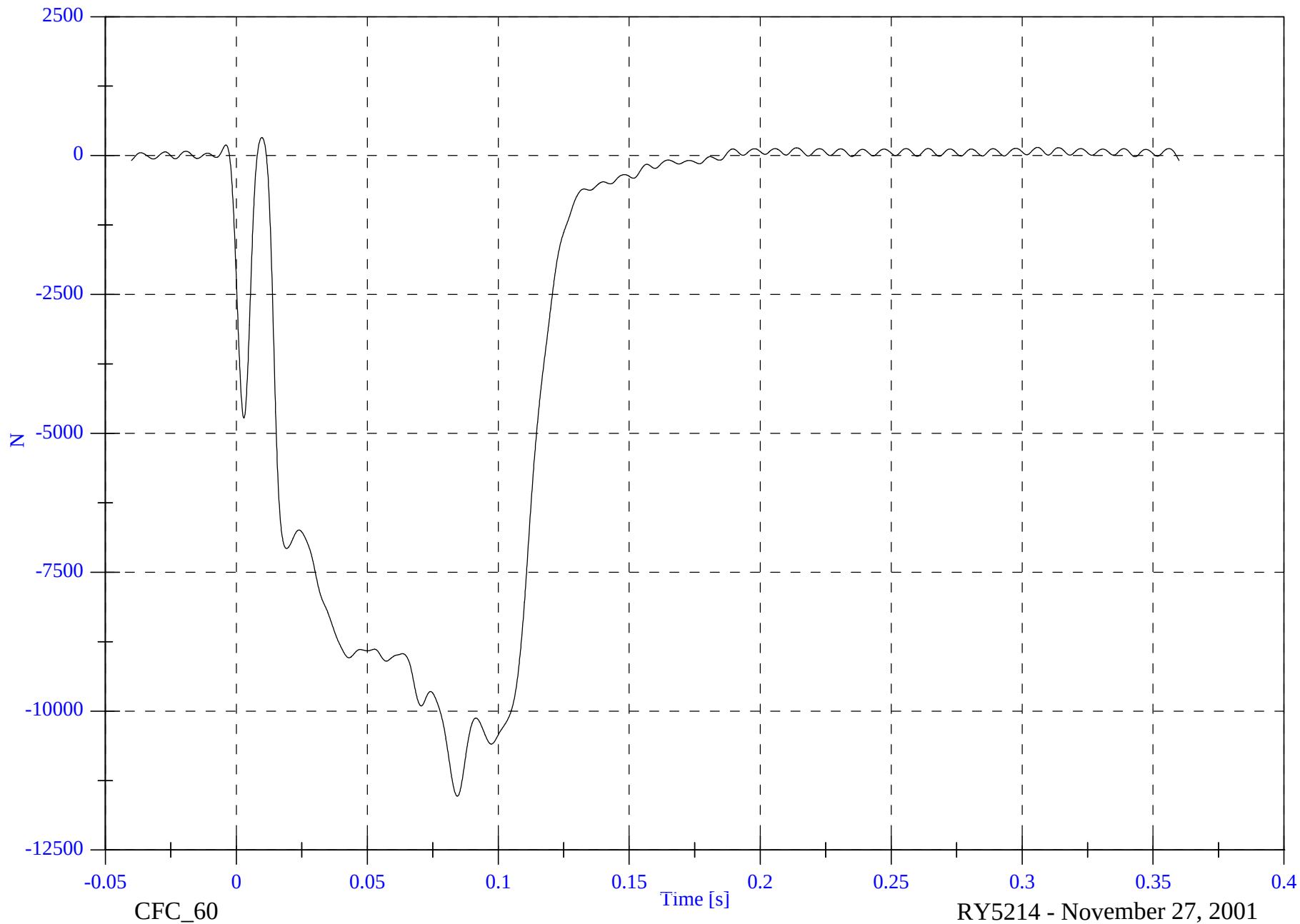
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell B6 FX

Max: 325.0 [N] at 0.010 [s]

Min: -11531.3 [N] at 0.084 [s]



B-256

8413-71

CFC_60

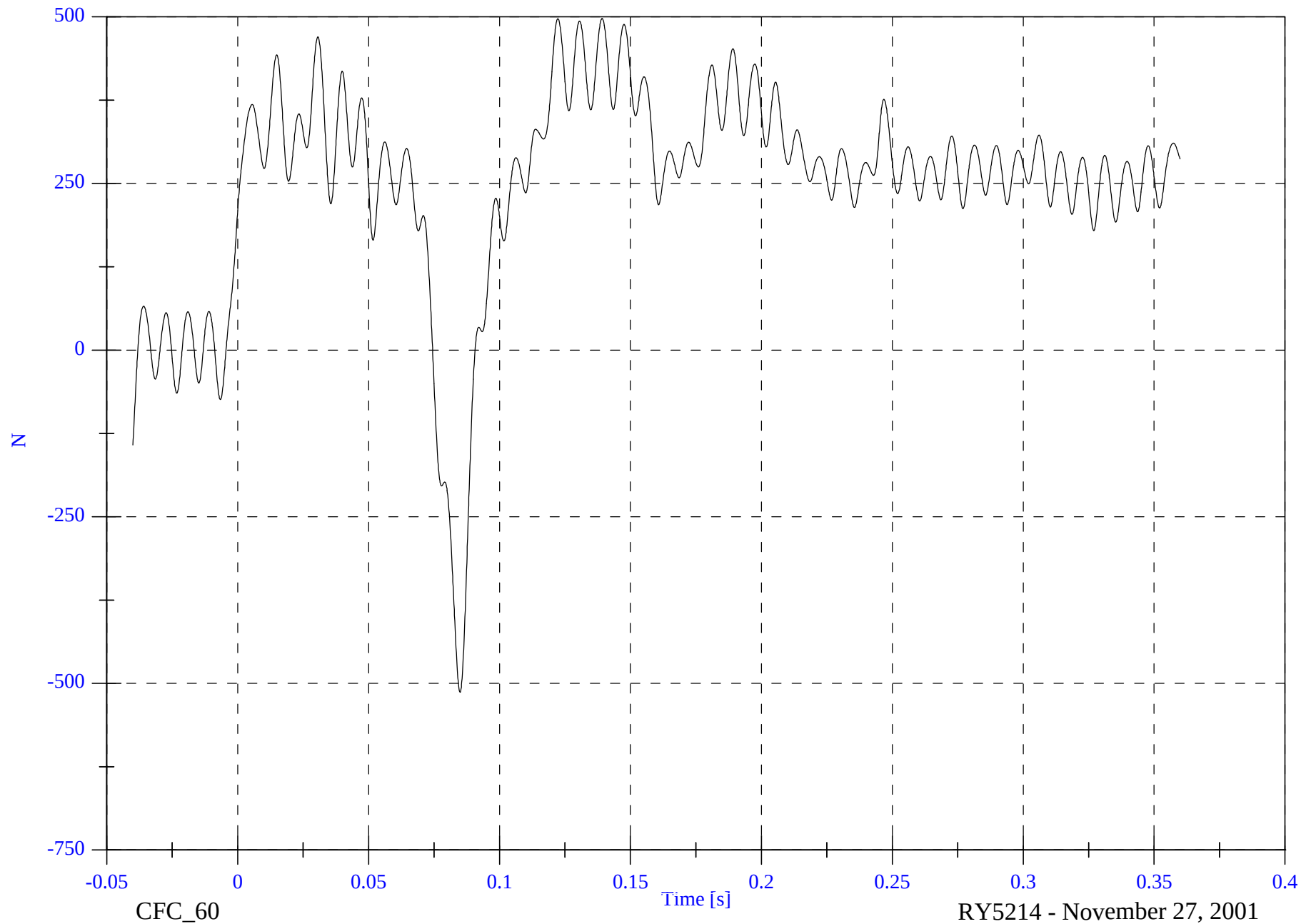
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A1 FX

Max: 497.4 [N] at 0.139 [s]

Min: -513.5 [N] at 0.085 [s]



B-257

8413-71

CFC_60

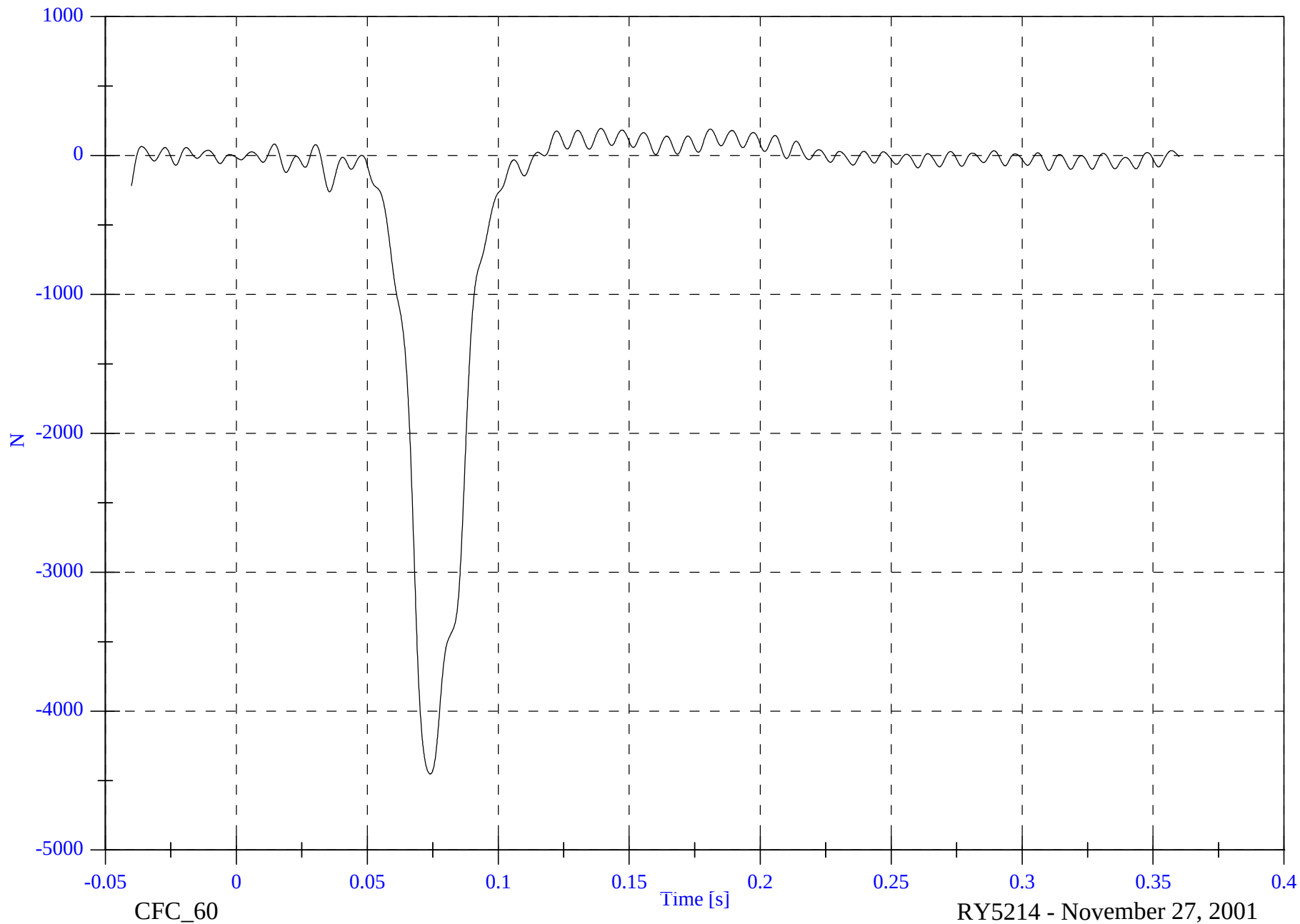
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A2 FX

Max: 194.9 [N] at 0.139 [s]

Min: -4453.4 [N] at 0.074 [s]



B-258

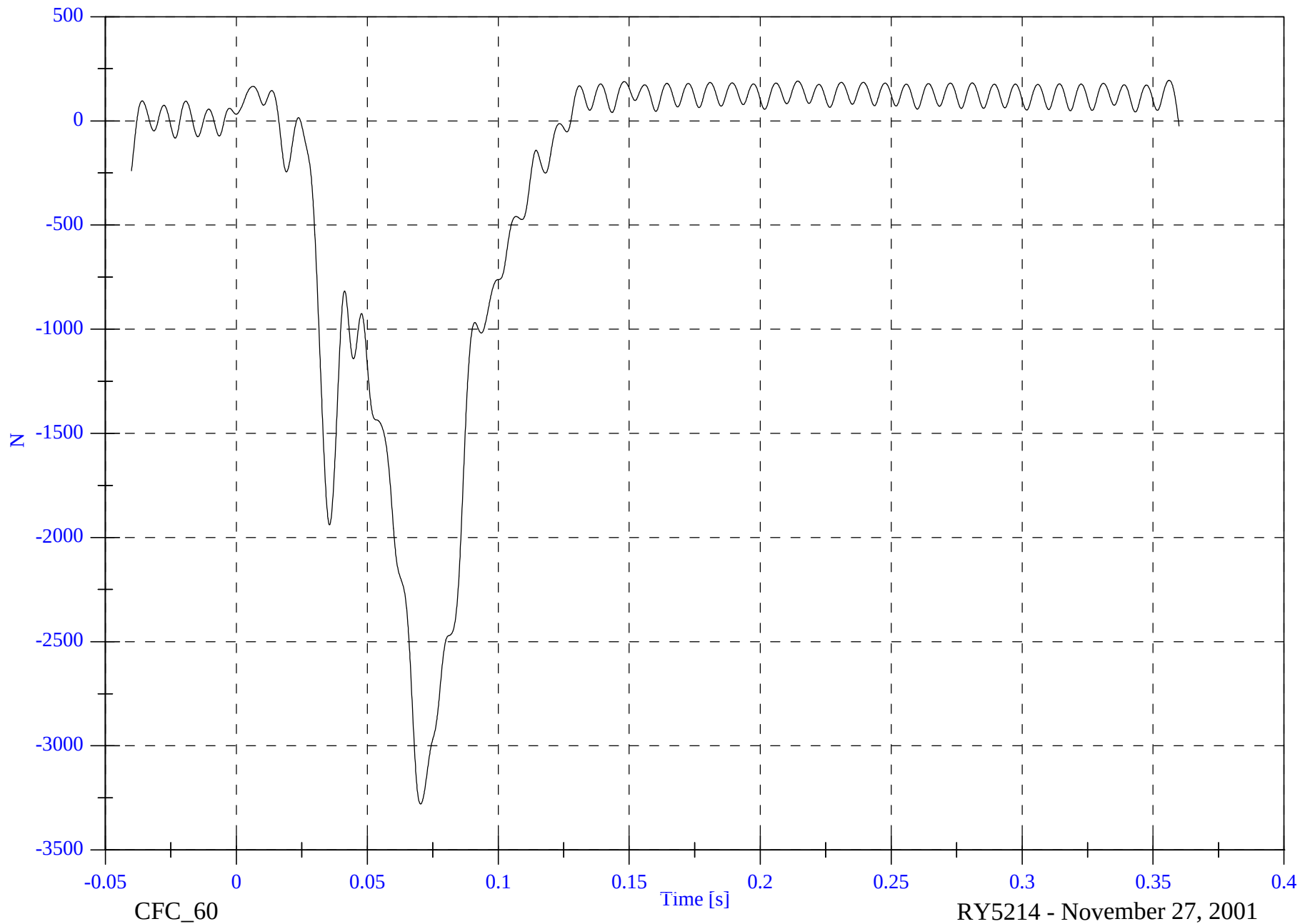
8413-71

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A3 FX

Max: 194.5 [N] at 0.356 [s]

Min: -3279.5 [N] at 0.070 [s]



B-259

8413-71

CFC_60

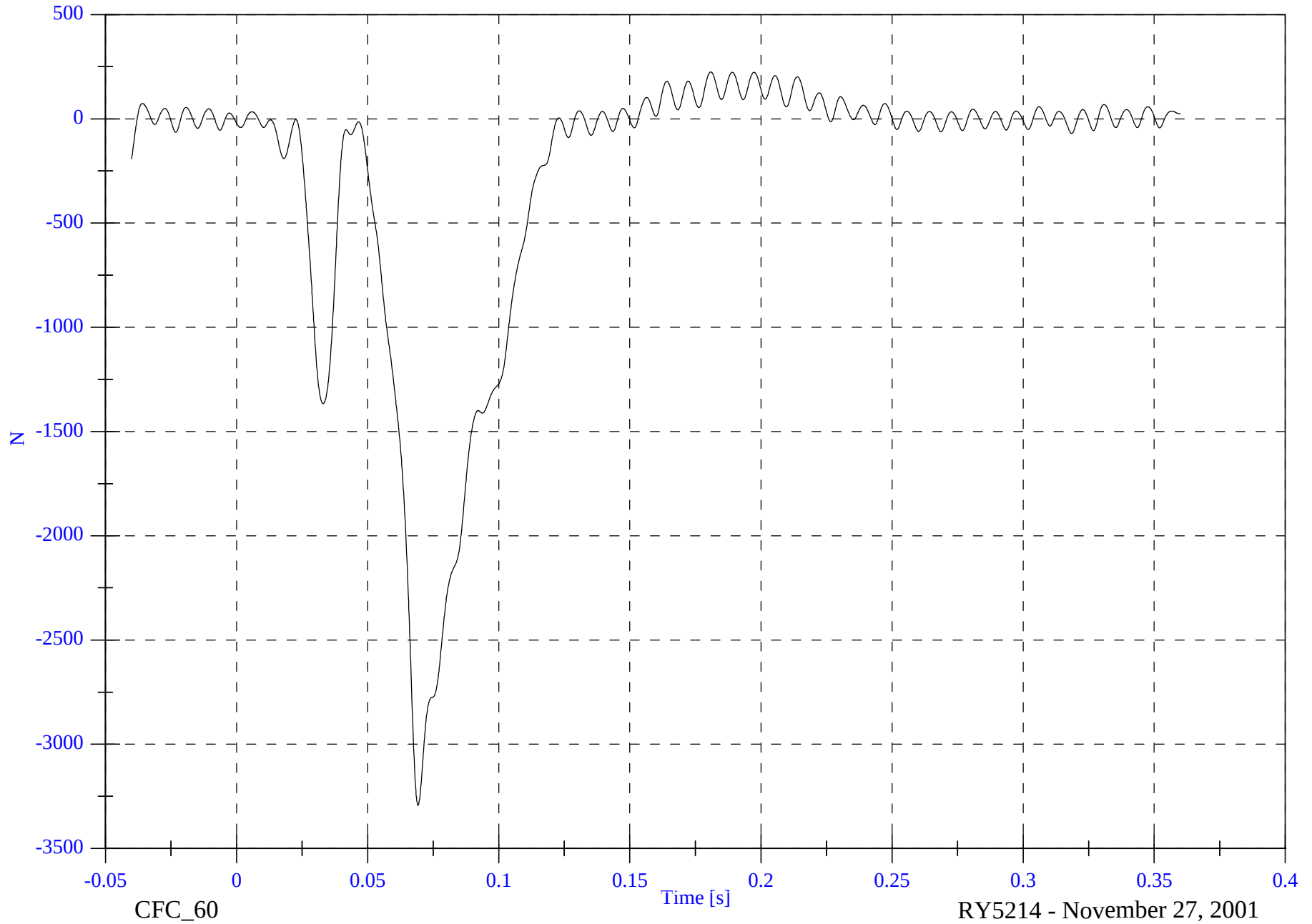
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A4 FX

Max: 224.7 [N] at 0.181 [s]

Min: -3293.0 [N] at 0.069 [s]



B-260

8413-71

CFC_60

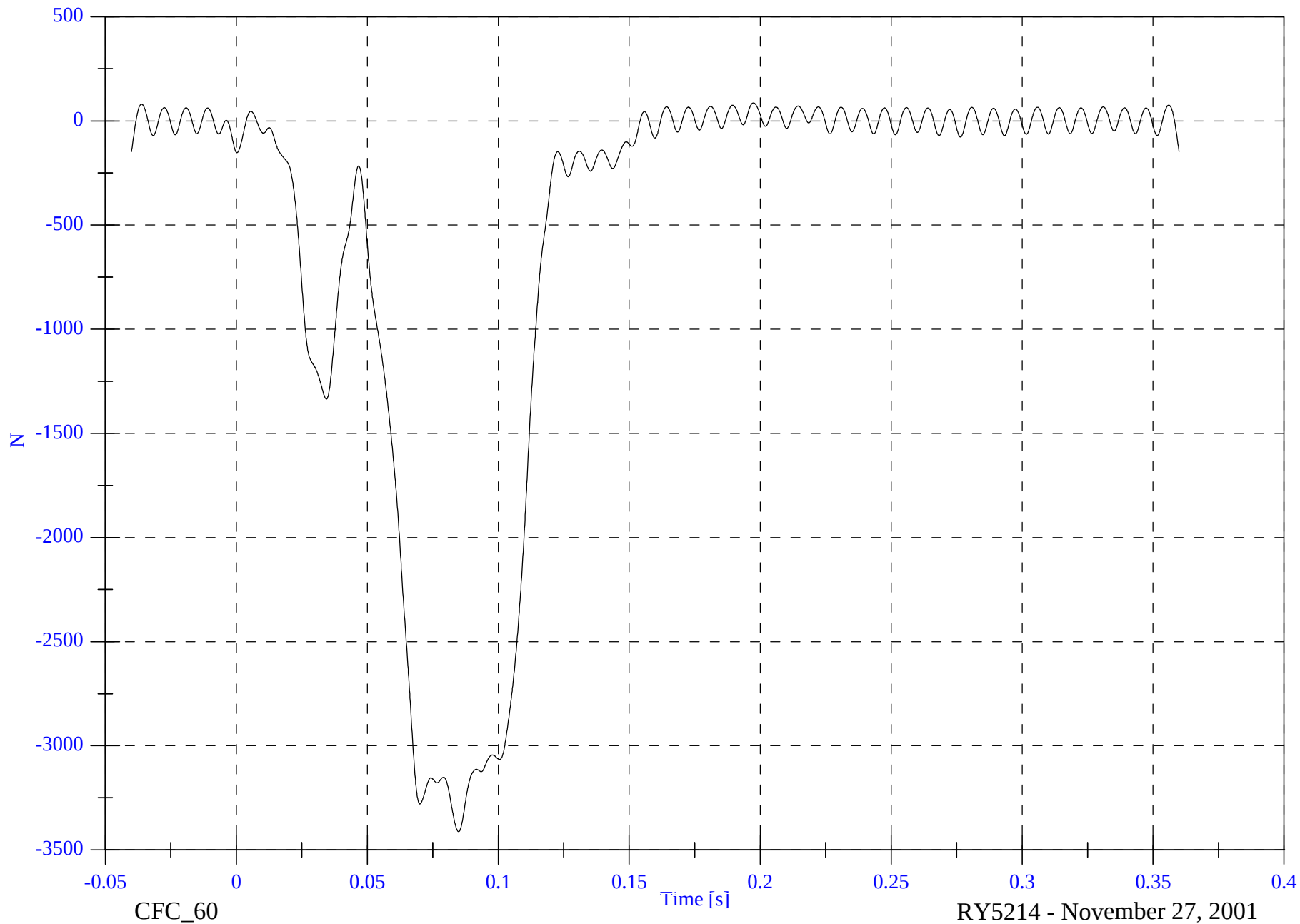
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A5 FX

Max: 85.9 [N] at 0.197 [s]

Min: -3412.6 [N] at 0.085 [s]



B-261

8413-71

CFC_60

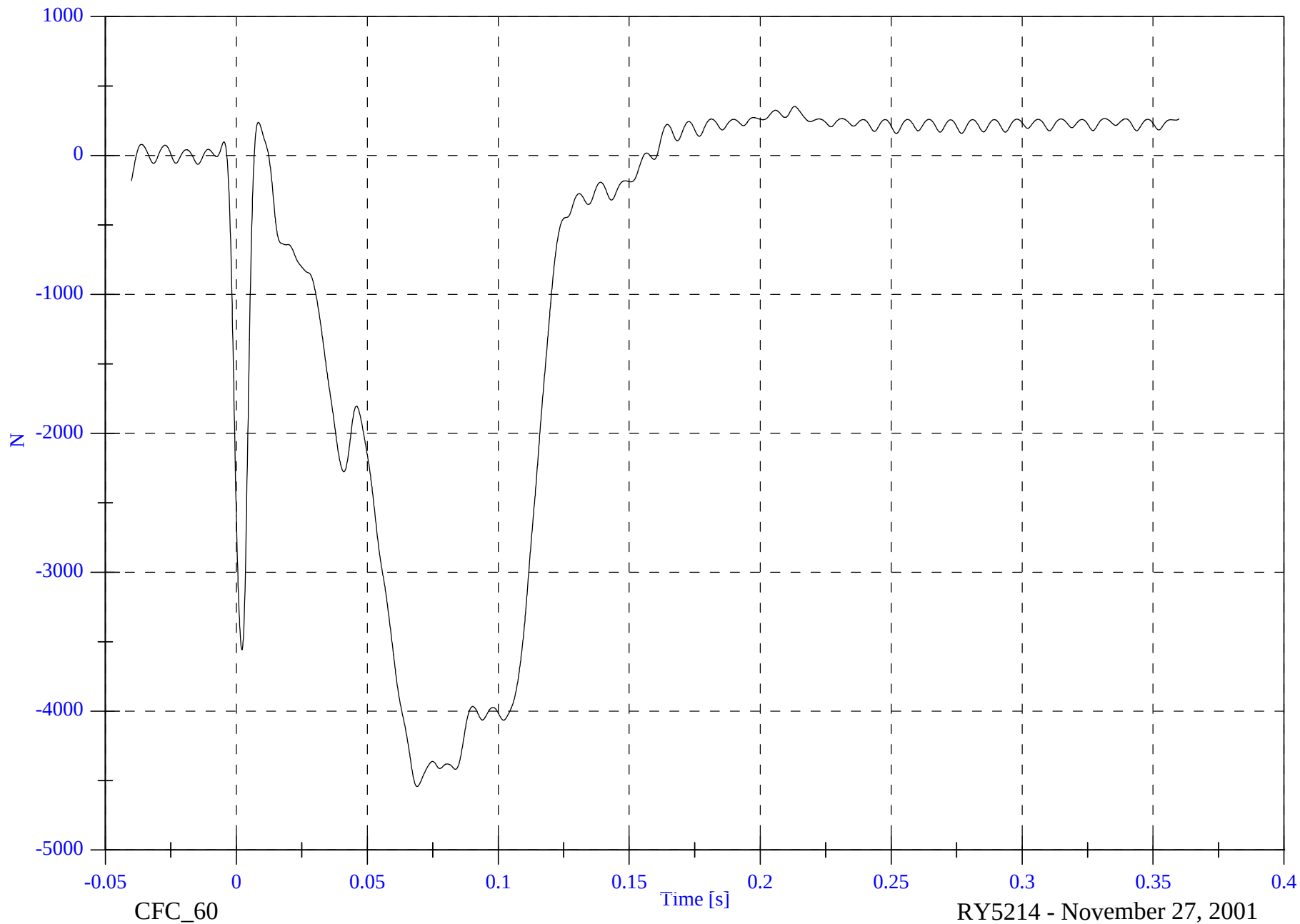
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A6 FX

Max: 353.7 [N] at 0.213 [s]

Min: -4543.6 [N] at 0.069 [s]



B-262

8413-71

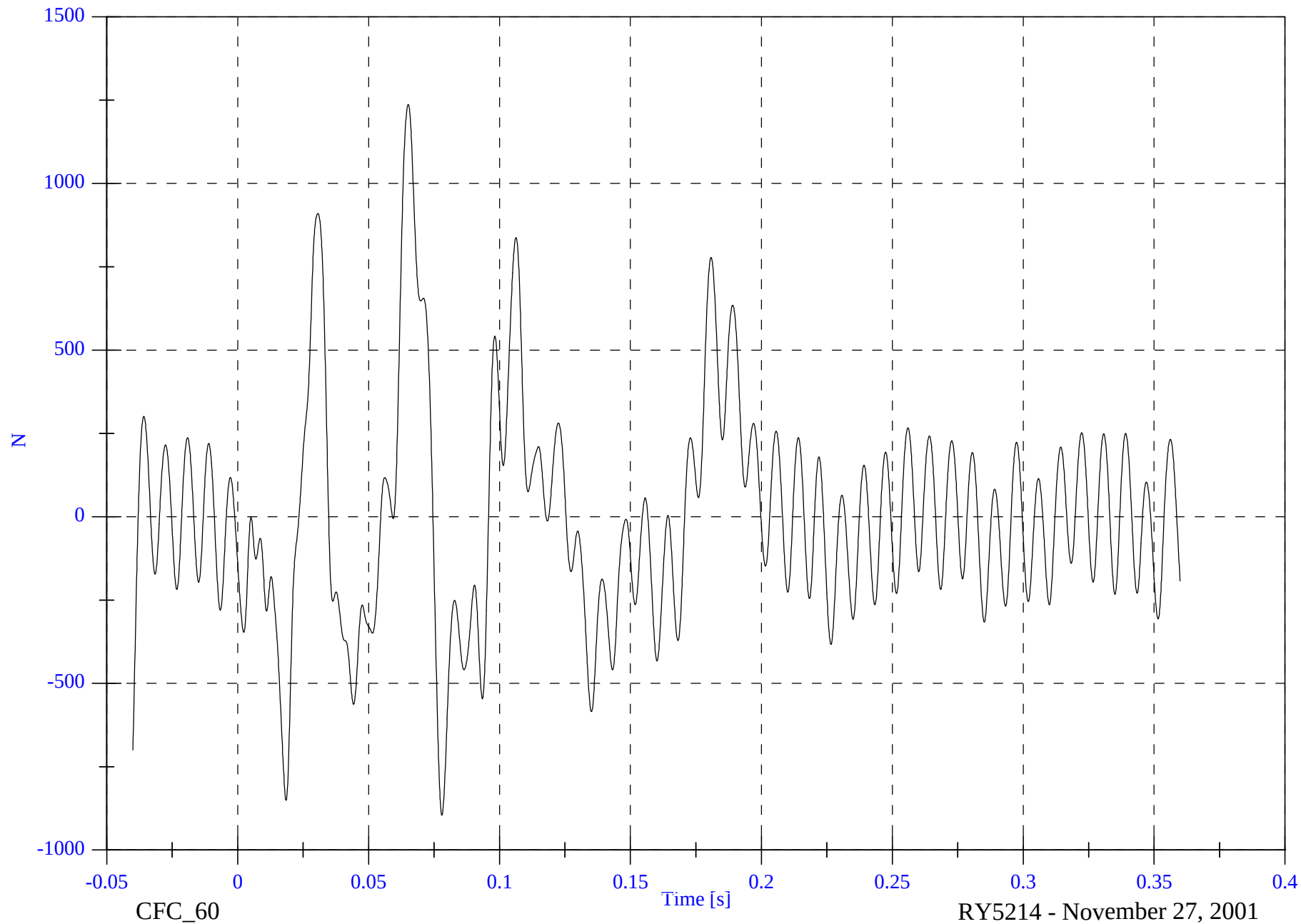
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A7 FX

Max: 1236.6 [N] at 0.065 [s]

Min: -896.0 [N] at 0.078 [s]



B-263

8413-71

CFC_60

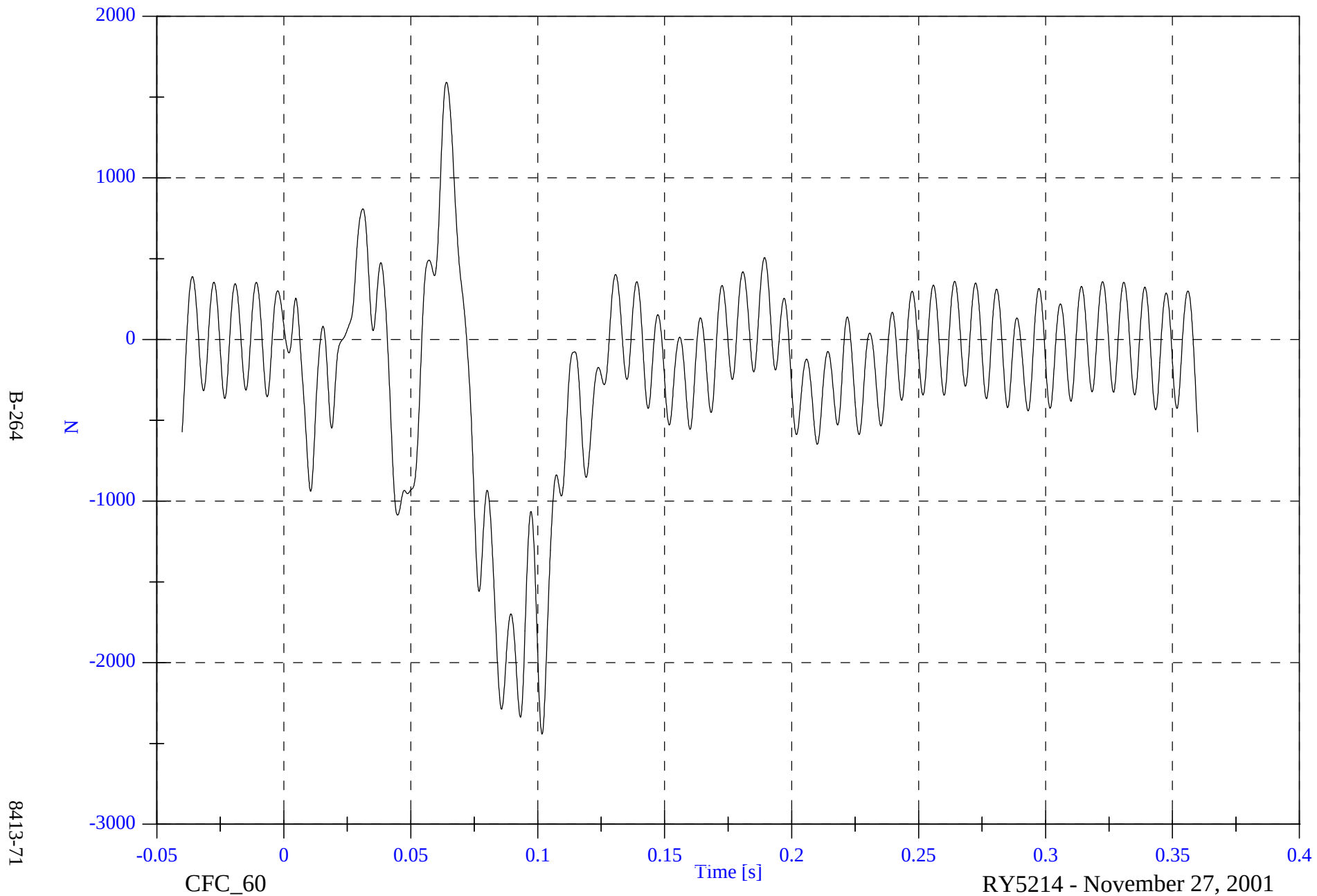
RY5214 - November 27, 2001

40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A8 FX

Max: 1591.2 [N] at 0.064 [s]

Min: -2443.0 [N] at 0.102 [s]

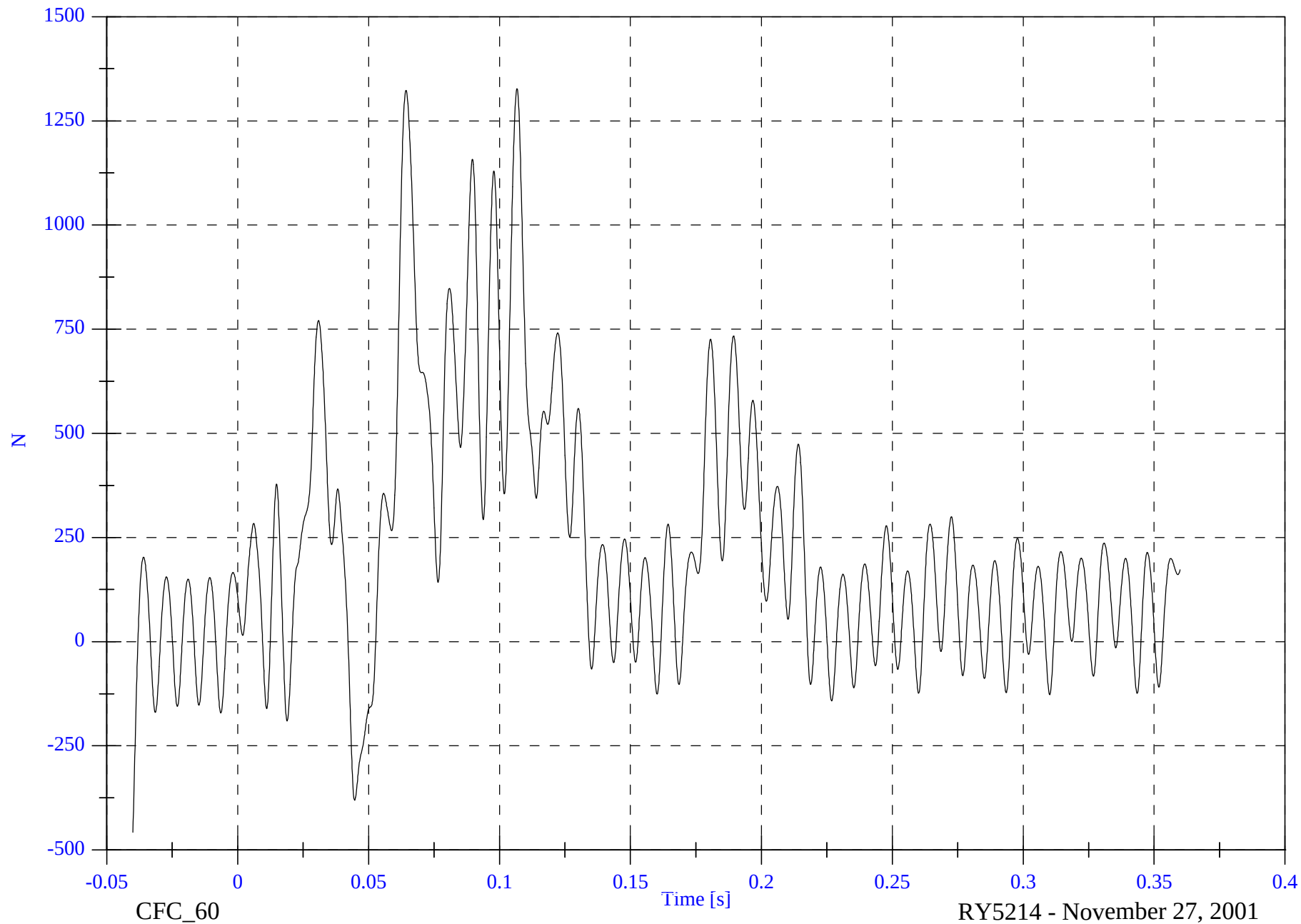


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell A9 FX

Max: 1327.3 [N] at 0.107 [s]

Min: -457.8 [N] at -0.040 [s]

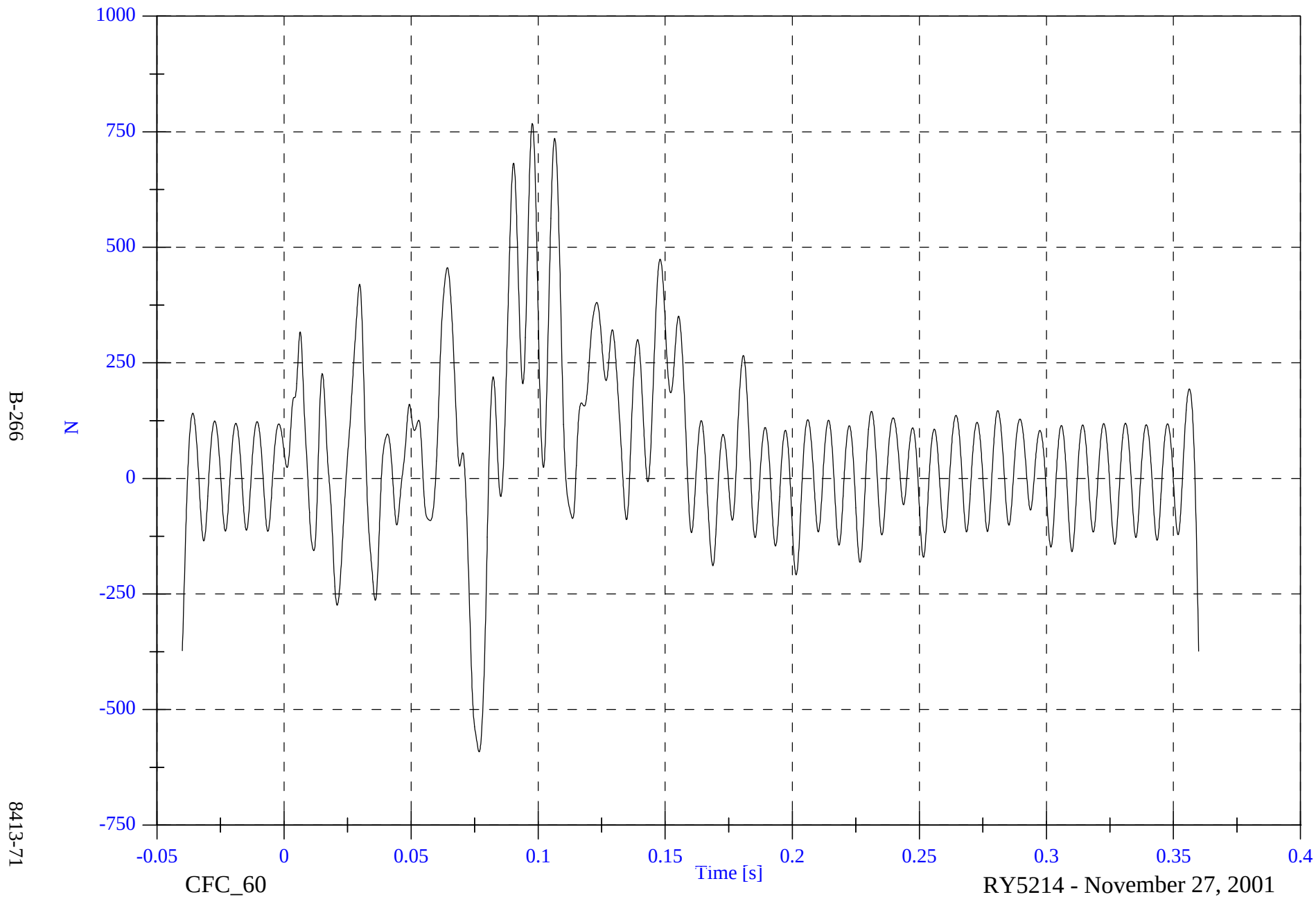


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell AA FX

Max: 767.7 [N] at 0.098 [s]

Min: -591.4 [N] at 0.077 [s]

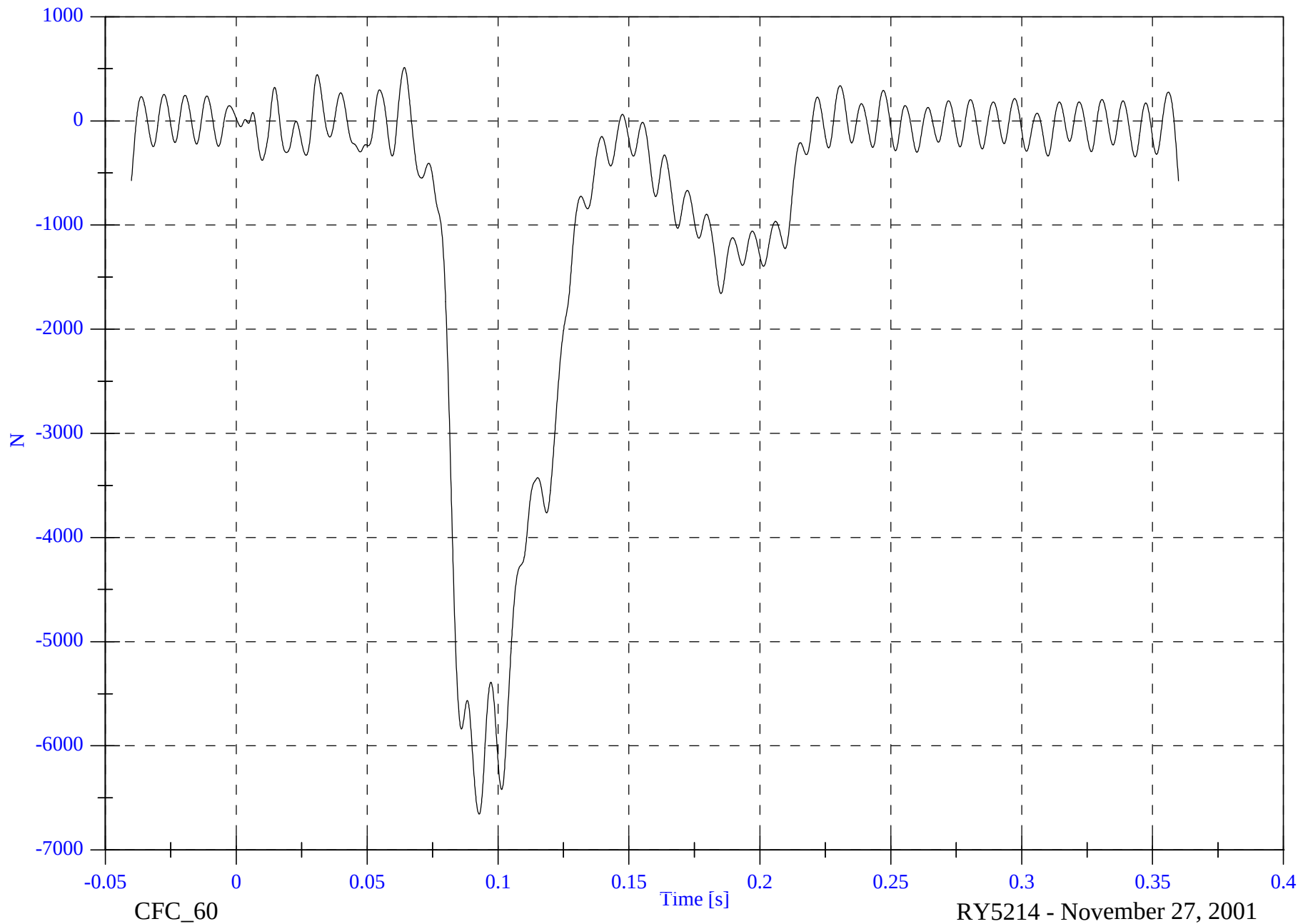


40% Frontal Offset Test #15 - 2000 Nissan Quest

Barrier Load Cell AB FX

Max: 511.3 [N] at 0.064 [s]

Min: -6656.1 [N] at 0.093 [s]



B-267

8413-71

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 Veridian Engineering. A summary of the test results, and Part 572 specifications are included in this Appendix.

Dummy serial numbers and certification dates are:

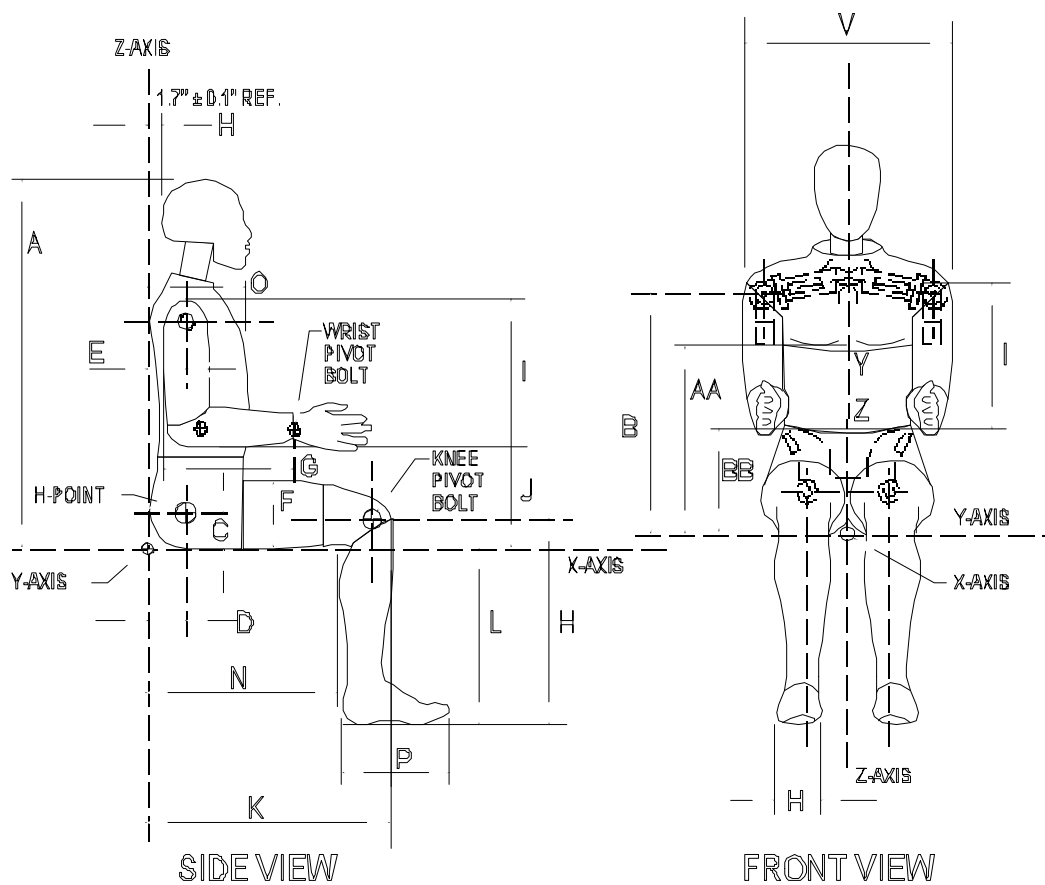
<u>Position No./Location</u>	<u>Serial No.</u>	<u>Completion Date</u>
#1/Driver	150	September 20, 2001
#2/Right Front Passenger	245	September 20, 2001

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 Inducant 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 150
Sequential Test Number 3
Date August 30, 2001
Workfile 150301.hdp

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	66-78 Deg F	71.0
Relative Humidity	10% - 70%	30.0
Peak Resultant Acceleration	225-275 G's	263.99
Peak Lateral Acceleration	15 G's Max	12.34
Is Acceleration Curve Unimodal?	YES	YES

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
NECK FLEXION TEST

Dummy Serial Number	150	
Sequential Test Number	3	
Date	September 4, 2001	6 Axis Neck Transducer
Workfile	150301.nfl	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	71.0
Relative Humidity		10% - 70%	31.0
Impact Velocity		22.60 - 23.40 Ft/s	23.24
Pendulum Deceleration	10 ms	22.50 - 27.50 G's	24.45
	20 ms	17.60 - 22.60 G's	21.15
	30 ms	12.50 - 18.50 G's	15.05
Max Pendulum G's Above 30 ms		29 G's Max	15.05
Deceleration - Time Curve Decay Time to 5 G's		34 - 42 ms	40.25
D Plane Rotation	Max	64 - 78 Deg	77.38
	Time	57 - 64 ms	59.25
Moment About Occipital Condyle	Max	65 - 80 Ft-Lbs	78.92
	Time	47 - 58 ms	52.12
Rotation Angle - Time Curve Decay Time to Zero		113 - 128 ms	117.75
Positive Moment - Time Curve Decay Time to Zero		97 - 107 ms	99.50

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
NECK EXTENSION TEST

Dummy Serial Number	150	
Sequential Test Number	3	
Date	September 1, 2001	6 Axis Neck Transducer
Workfile	150301.nex	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	71.0
Relative Humidity		10% - 70%	30.0
Impact Velocity		19.50 - 20.30 Ft/s	19.75
Pendulum Deceleration	10 ms	17.20 - 21.20 G's	18.25
	20 ms	14.00 - 19.00 G's	16.48
	30 ms	11.00 - 16.00 G's	13.04
Max Pendulum G's Above 30 ms		22 G's Max	13.04
Deceleration - Time Curve Decay Time to 5 G's		38 - 46 ms	44.75
D Plane Rotation	Max	81 - 106 Deg	101.40
	Time	72 - 82 ms	78.00
Moment About Occipital Condyle	Max	-59.0 - -39.0 Ft-Lbs	-52.13
	Time	65 - 79 ms	74.12
Rotation Angle - Time Curve Decay Time to Zero		147 - 174 ms	159.38
Positive Moment - Time Curve Decay Time to Zero		120 - 148 ms	137.12

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
THORAX IMPACT TEST

Dummy Serial Number 150
Sequential Test Number 3
Date September 5, 2001
Workfile 150301.th3

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	69-72 Deg F	70.0
Relative Humidity	10% - 70%	32.0
Pendulum Velocity	21.6 - 22.4 Ft/s	21.9
Maximum Deflection	2.50 - 2.86 in	2.52
Maximum Resistive Force	1160 - 1325 Lbs	1191.24
Internal Hysteresis	69 - 85 %	71.95

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
KNEE IMPACT TEST

Dummy Serial Number 150
Sequential Test Number 3
Date September 5, 2001
Workfile 150301.lf/150301.rf

TEST PARAMETER	SPECIFICATION	TEST RESULTS
LEFT KNEE		
Temperature	66 - 78 Deg F	71.0
Relative Humidity	10% - 70%	32.0
Probe Velocity	6.8 - 7.0 Ft/s	7.0
Peak Knee Impact Force	1060 - 1300 Lbs	1091.95
RIGHT KNEE		
Temperature	66 - 78 Deg F	71.0
Relative Humidity	10% - 70%	32.0
Probe Velocity	6.8 - 7.0 Ft/s	7.0
Peak Knee Impact Force	1060 - 1300 Lbs	1065.72

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
EXTERNAL DIMENSIONS

Dummy Serial Number 150
Sequential Test Number 3
Date September 20, 2001

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature			70
Relative Humidity			31
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	39.1
Waist Circumference	Z	32.9 - 34.1 in	34.0
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	5.7
Buttock Knee Length	K	22.8 - 23.8 in	23.4
Buttock Popliteal Length	N	17.8 - 18.8 in	18.4
Popliteal Height	L	16.9 - 17.9 in	17.8
Knee Pivot Height	M	19.1 - 19.7 in	19.6
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	3.7
Shoulder Breadth	V	16.6 - 17.2 in	16.9
Shoulder Pivot Height	B	19.9 - 20.5 in	20.2
Elbow Rest Height	J	7.5 - 8.3 in	8.1
Shoulder - Elbow Length	I	13.0 - 13.6 in	13.2
Back of Elbow to Wrist Pivot	G	11.4 - 12.0 in	11.5

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
HEAD DROP TEST

Dummy Serial Number 245
Sequential Test Number 3
Date August 30, 2001
Workfile 245301.hdp

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	66-78 Deg F	71.0
Relative Humidity	10% - 70%	30.0
Peak Resultant Acceleration	225-275 G's	230.24
Peak Lateral Acceleration	15 G's Max	5.17
Is Acceleration Curve Unimodal?	YES	YES

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
NECK FLEXION TEST

Dummy Serial Number	245	
Sequential Test Number	3	
Date	August 31, 2001	6 Axis Neck Transducer
Workfile	245301.nfl	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	71.0
Relative Humidity		10% - 70%	30.0
Impact Velocity		22.60 - 23.40 Ft/s	23.23
Pendulum Deceleration	10 ms	22.50 - 27.50 G's	23.72
	20 ms	17.60 - 22.60 G's	20.14
	30 ms	12.50 - 18.50 G's	15.64
Max Pendulum G's Above 30 ms		29 G's Max	15.99
Deceleration - Time Curve Decay Time to 5 G's		34 - 42 ms	40.25
D Plane Rotation	Max	64 - 78 Deg	73.17
	Time	57 - 64 ms	62.50
Moment About Occipital Condyle	Max	65 - 80 Ft-Lbs	75.27
	Time	47 - 58 ms	53.50
Rotation Angle - Time Curve Decay Time to Zero		113 - 128 ms	116.75
Positive Moment - Time Curve Decay Time to Zero		97 - 107 ms	101.50

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
NECK EXTENSION TEST

Dummy Serial Number	245	
Sequential Test Number	3	
Date	September 1, 2001	6 Axis Neck Transducer
Workfile	245301.nex	

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature		69-72 Deg F	71.0
Relative Humidity		10% - 70%	30.0
Impact Velocity		19.50 - 20.30 Ft/s	19.52
Pendulum Deceleration	10 ms	17.20 - 21.20 G's	18.13
	20 ms	14.00 - 19.00 G's	16.28
	30 ms	11.00 - 16.00 G's	12.69
Max Pendulum G's Above 30 ms		22 G's Max	12.69
Deceleration - Time Curve Decay Time to 5 G's		38 - 46 ms	44.88
D Plane Rotation	Max	81 - 106 Deg	96.21
	Time	72 - 82 ms	77.75
Moment About Occipital Condyle	Max	-59.0 - -39.0 Ft-Lbs	-49.68
	Time	65 - 79 ms	74.38
Rotation Angle - Time Curve Decay Time to Zero		147 - 174 ms	157.50
Positive Moment - Time Curve Decay Time to Zero		120 - 148 ms	144.75

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
THORAX IMPACT TEST

Dummy Serial Number 245
Sequential Test Number 3
Date September 4, 2001
Workfile 245301.th3

TEST PARAMETER	SPECIFICATION	TEST RESULTS
Temperature	69-72 Deg F	71.0
Relative Humidity	10% - 70%	31.0
Pendulum Velocity	21.6 - 22.4 Ft/s	22.0
Maximum Deflection	2.50 - 2.86 in	2.70
Maximum Resistive Force	1160 - 1325 Lbs	1202.54
Internal Hysteresis	69 - 85 %	69.36

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
KNEE IMPACT TEST

Dummy Serial Number 245
Sequential Test Number 3
Date September 5, 2001
Workfile 245301.lf/245301.rf

TEST PARAMETER	SPECIFICATION	TEST RESULTS
LEFT KNEE		
Temperature	66 - 78 Deg F	71.0
Relative Humidity	10% - 70%	32.0
Probe Velocity	6.8 - 7.0 Ft/s	7.0
Peak Knee Impact Force	1060 - 1300 Lbs	1065.62
RIGHT KNEE		
Temperature	66 - 78 Deg F	71.0
Relative Humidity	10% - 70%	32.0
Probe Velocity	6.8 - 7.0 Ft/s	7.0
Peak Knee Impact Force	1060 - 1300 Lbs	1069.31

Remarks:

Laboratory Technician:

B. Swiecicki

PART 572E
EXTERNAL DIMENSIONS

Dummy Serial Number 245
Sequential Test Number 3
Date September 20, 2001

TEST PARAMETER		SPECIFICATION	TEST RESULTS
Temperature			70
Relative Humidity			31
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	39.1
Waist Circumference	Z	32.9 - 34.1 in	33.7
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	23.4
Buttock Popliteal Length	N	17.8 - 18.8 in	18.3
Popliteal Height	L	16.9 - 17.9 in	17.5
Knee Pivot Height	M	19.1 - 19.7 in	19.2
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	20.2
Elbow Rest Height	J	7.5 - 8.3 in	8.0
Shoulder - Elbow Length	I	13.0 - 13.6 in	13.2
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 PASSENGER DUMMY
(6 Month Calibration Minimum)

DRIVER DUMMY (S/N 150)		Manufacturer	Serial #	Calibration	
				Last	Next
Head X Arm	Y	ENDEVCO	AC-P17531	29-Aug-01	01-Mar-02
	Z	ENDEVCO	AC-P14965	29-Aug-01	01-Mar-02
Head Y Arm	X	ENDEVCO	AC-P17563	29-Aug-01	01-Mar-02
	Z	ENDEVCO	AC-P18551	29-Aug-01	01-Mar-02
Head Z Arm	X	ENDEVCO	AC-P17539	29-Aug-01	01-Mar-02
	Y	ENDEVCO	AC-P18718	29-Aug-01	01-Mar-02
Head CG	X	ENDEVCO	AC-P16832	23-Aug-01	23-Feb-02
	Y	ENDEVCO	AC-P16591	23-Aug-01	23-Feb-02
	Z	ENDEVCO	AC-P16286	04-Sep-01	04-Mar-02
Head CG	X (R)	ENDEVCO	AC-P17141	23-Aug-01	23-Feb-02
	Y (R)	ENDEVCO	AC-P17242	23-Aug-01	23-Feb-02
	Z (R)	ENDEVCO	AC-P17265	23-Aug-01	23-Feb-02
Neck Load Cell	X	DENTON	LC-269Fx	12-Jul-01	12-Jan-02
	Y	DENTON	LC-269Fy	12-Jul-01	12-Jan-02
	Z	DENTON	LC-269Fz	12-Jul-01	12-Jan-02
Neck Moment	X	DENTON	LC-269Mx	12-Jul-01	12-Jan-02
	Y	DENTON	LC-269My	12-Jul-01	12-Jan-02
	Z	DENTON	LC-269Mz	12-Jul-01	12-Jan-02
Chest	X	ENDEVCO	AC-P17235	23-Aug-01	23-Feb-02
	Y	ENDEVCO	AC-P14393	23-Aug-01	23-Feb-02
	Z	ENDEVCO	AC-P17285	23-Aug-01	23-Feb-02
Chest	X (R)	ENDEVCO	AC-P16863	23-Aug-01	23-Feb-02
	Y (R)	ENDEVCO	AC-P17248	23-Aug-01	23-Feb-02
	Z (R)	ENDEVCO	AC-P17283	23-Aug-01	23-Feb-02
Chest Deflection Gauge		SERVO	DS-150	23-Aug-01	23-Feb-02
Pelvic	X	ENDEVCO	AC-J30041	23-Aug-01	23-Feb-02
	Y	ENDEVCO	AC-P13355	23-Aug-01	23-Feb-02
	Z	ENDEVCO	AC-P13329	23-Aug-01	23-Feb-02

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(6 Month Calibration Minimum)

DRIVER DUMMY (S/N 150)		Manufacturer	Serial #	Calibration	
				Last	Next
Left Femur Load	X	DENTON	LC-260Fx	12-Oct-01	12-Jun-02
	Y	DENTON	LC-260Fy	12-Oct-01	12-Jun-02
	Z	DENTON	LC-260Fz	12-Oct-01	12-Jun-02
Left Femur Moment	X	DENTON	LC-260Mx	12-Oct-01	12-Jun-02
	Y	DENTON	LC-260My	12-Oct-01	12-Jun-02
	Z	DENTON	LC-260Mz	12-Oct-01	12-Jun-02
Right Femur Load	X	DENTON	LC-261Fx	12-Oct-01	12-Jun-02
	Y	DENTON	LC-261Fy	12-Oct-01	12-Jun-02
	Z	DENTON	LC-261Fz	12-Oct-01	12-Jun-02
Right Femur Moment	X	DENTON	LC-261Mx	12-Oct-01	12-Jun-02
	Y	DENTON	LC-261My	12-Oct-01	12-Jun-02
	Z	DENTON	LC-261Mz	12-Oct-01	12-Jun-02
Left Knee Shear Dx		SpaceAge Control	DS-825	02-Nov-01	02-May-02
Right Knee Shear Dx		SpaceAge Control	DS-833	02-Nov-01	02-May-02
Left Upper Tibia	Fx	DENTON	LX-104-UTLFX	26-Sep-00	26-Mar-01
	Fz	DENTON	LX-104-UTLFZ	26-Sep-00	26-Mar-01
	Mx	DENTON	LX-104-UTLMX	26-Sep-00	26-Mar-01
	My	DENTON	LX-104-UTLMY	26-Sep-00	26-Mar-01
Left Lower Tibia	Fx	DENTON	LX-104-LTLFX	26-Sep-00	26-Mar-01
	Fy	DENTON	LX-104-LTLFY	26-Sep-00	26-Mar-01
	Fz	DENTON	LX-104-LTLFZ	26-Sep-00	26-Mar-01
	Mx	DENTON	LX-104-LTLMX	26-Sep-00	26-Mar-01
	My	DENTON	LX-104-LTLMY	26-Sep-00	26-Mar-01
Right Upper Tibia	Fx	DENTON	LX-103-UTRFX	26-Sep-00	26-Mar-01
	Fz	DENTON	LX-103-UTRFZ	26-Sep-00	26-Mar-01
	Mx	DENTON	LX-103-UTRMX	26-Sep-00	26-Mar-01
	My	DENTON	LX-103-UTRMY	26-Sep-00	26-Mar-01

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(6 Month Calibration Minimum)

DRIVER DUMMY (S/N 150)		Manufacturer	Serial #	Calibration	
				Last	Next
Right Lower Tibia	Fx	DENTON	LX-103-LTRFX	26-Sep-00	26-Mar-01
	Fy	DENTON	LX-103-LTRFY	26-Sep-00	26-Mar-01
	Fz	DENTON	LX-103-LTRFZ	26-Sep-00	26-Mar-01
	Mx	DENTON	LX-103-LTRMX	26-Sep-00	26-Mar-01
	My	DENTON	LX-103-LTRMY	26-Sep-00	26-Mar-01
Left Tibia	X	ENTRAN	AC-01G18-F15	19-Oct-01	19-Apr-02
	Y	ENTRAN	AC-01J02-F11	19-Oct-01	19-Apr-02
Right Tibia	X	ENTRAN	AC-01J02-F18	22-Oct-01	22-Jun-02
	Y	ENTRAN	AC-01G18-F11	22-Oct-01	22-Jun-02
Left Ankle	Rx	Contelec	LX-104-AXLRP	26-Sep-00	26-Mar-01
	Ry	Contelec	LX-104-AYLRP	26-Sep-00	26-Mar-01
	Rz	Contelec	LX-104-AZLRP	26-Sep-00	26-Mar-01
Right Ankle	Rx	Contelec	LX-103-AXRRP	26-Sep-00	26-Mar-01
	Ry	Contelec	LX-103-AYRRP	26-Sep-00	26-Mar-01
	Rz	Contelec	LX-103-AZRRP	26-Sep-00	26-Mar-01
Left Foot	Ax	ENTRAN	AC-01G18-F13	19-Oct-01	19-Apr-02
	Ay	ENTRAN	AC-01G18-F05	19-Oct-01	19-Apr-02
	Az	ENTRAN	AC-01J02-F04	19-Oct-01	19-Apr-02
Right Foot	Ax	ENTRAN	AC-01G18-F17	22-Oct-01	22-Jun-02
	Ay	ENTRAN	AC-01G18-F16	22-Oct-01	22-Jun-02
	Az	ENTRAN	AC-01G18-F09	22-Oct-01	22-Jun-02

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(6 Month Calibration Minimum)

PASSENGER DUMMY (S/N 245)		Manufacturer	Serial #	Calibration	
				Last	Next
Head X Arm	Y	ENDEVCO	AC-P18558	28-Aug-01	28-Feb-02
	Z	ENDEVCO	AC-P19212	28-Aug-01	28-Feb-02
Head Y Arm	X	ENDEVCO	AC-P19197	28-Aug-01	28-Feb-02
	Z	ENDEVCO	AC-P18738	29-Aug-01	01-Mar-02
Head Z Arm	X	ENDEVCO	AC-P19217	28-Aug-01	28-Feb-02
	Y	ENDEVCO	AC-P18739	29-Aug-01	01-Mar-02
Head CG	X	ENDEVCO	AC-J32184	22-Aug-01	22-Feb-02
	Y	ENDEVCO	AC-J32185	22-Aug-01	22-Feb-02
	Z	ENDEVCO	AC-J31011	22-Aug-01	22-Feb-02
Head CG	X (R)	ENDEVCO	AC-J31020	24-Aug-01	24-Feb-02
	Y (R)	ENDEVCO	AC-J31101	22-Aug-01	22-Feb-02
	Z (R)	ENDEVCO	AC-J31059	22-Aug-01	22-Feb-02
Neck Load Cell	X	DENTON	LC-076Fx	12-Jul-01	12-Jan-02
	Y	DENTON	LC-076Fy	12-Jul-01	12-Jan-02
	Z	DENTON	LC-076Fz	12-Jul-01	12-Jan-02
Neck Moment	X	DENTON	LC-076Mx	12-Jul-01	12-Jan-02
	Y	DENTON	LC-076My	12-Jul-01	12-Jan-02
	Z	DENTON	LC-076Mz	12-Jul-01	12-Jan-02
Chest	X	ENDEVCO	AC-J34019	22-Aug-01	22-Feb-02
	Y	ENDEVCO	AC-J33018	22-Aug-01	22-Feb-02
	Z	ENDEVCO	AC-J32783	22-Aug-01	22-Feb-02
Chest	X (R)	ENDEVCO	AC-J31066	22-Aug-01	22-Feb-02
	Y (R)	ENDEVCO	AC-P16979	22-Aug-01	22-Feb-02
	Z (R)	ENDEVCO	AC-J31022	22-Aug-01	22-Feb-02
Chest Deflection Gauge		SERVO	DS-245	22-Aug-01	22-Feb-02
Pelvic	X	ENDEVCO	AC-J31034	22-Aug-01	22-Feb-02
	Y	ENDEVCO	AC-P17258	22-Aug-01	22-Feb-02
	Z	ENDEVCO	AC-J31010	22-Aug-01	22-Feb-02

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(6 Month Calibration Minimum)

PASSENGER DUMMY (S/N 245)		Manufacturer	Serial #	Calibration	
				Last	Next
Left Femur Load	X	DENTON	LC-362FX	01-Sep-00	01-Mar-01
	Y	DENTON	LC-362FY	01-Sep-00	01-Mar-01
	Z	DENTON	LC-362FZ	01-Sep-00	01-Mar-01
L. Femur Moment	X	DENTON	LC-362MX	01-Sep-00	01-Mar-01
	Y	DENTON	LC-362MY	01-Sep-00	01-Mar-01
	Z	DENTON	LC-362MZ	01-Sep-00	01-Mar-01
Right Femur Load	X	DENTON	LC-363FX	01-Sep-00	01-Mar-01
	Y	DENTON	LC-363FY	01-Sep-00	01-Mar-01
	Z	DENTON	LC-363FZ	01-Sep-00	01-Mar-01
R. Femur Moment	X	DENTON	LC-363Mx	12-Oct-01	12-Jun-02
	Y	DENTON	LC-363My	12-Oct-01	12-Jun-02
	Z	DENTON	LC-363Mz	12-Oct-01	12-Jun-02
Left Knee Shear Dx		SpaceAge Control	DS-823	02-Nov-01	02-May-02
Right Knee Shear Dx		SpaceAge Control	DS-837	02-Nov-01	02-May-02
Left Upper Tibia	Fx	DENTON	LX-106-UTLFX	05-Sep-00	05-Mar-01
	Fz	DENTON	LX-106-UTLFZ	25-Jul-00	25-Jan-01
	Mx	DENTON	LX-106-UTLMX	25-Jul-00	25-Jan-01
	My	DENTON	LX-106-UTLMY	25-Jul-00	25-Jan-01
Left Lower Tibia	Fx	DENTON	LX-106-LTLFX	30-Aug-00	01-Mar-01
	Fy	DENTON	LX-106-LTLFY	30-Aug-00	01-Mar-01
	Fz	DENTON	LX-106-LTLFZ	30-Aug-00	01-Mar-01
	Mx	DENTON	LX-106-LTLMX	30-Aug-00	01-Mar-01
	My	DENTON	LX-106-LTLMY	30-Aug-00	01-Mar-01
Right Upper Tibia	Fx	DENTON	LX-105-UTRFX	05-Sep-00	05-Mar-01
	Fz	DENTON	LX-105-UTRFZ	05-Sep-00	05-Mar-01
	Mx	DENTON	LX-105-UTRMX	05-Sep-00	05-Mar-01
	My	DENTON	LX-105-UTRMY	05-Sep-00	05-Mar-01

INSTRUMENT CALIBRATION FOR PASSENGER DUMMY
(6 Month Calibration Minimum)

PASSENGER DUMMY (S/N 245)		Manufacturer	Serial #	Calibration	
				Last	Next
Right Lower Tibia	Fx	DENTON	LX-105-LTRFX	05-Sep-00	05-Mar-01
	Fy	DENTON	LX-105-LTRFY	05-Sep-00	05-Mar-01
	Fz	DENTON	LX-105-LTRFZ	05-Sep-00	05-Mar-01
	Mx	DENTON	LX-105-LTRMX	05-Sep-00	05-Mar-01
	My	DENTON	LX-105-LTRMY	05-Sep-00	05-Mar-01
Left Tibia	X	ENTRAN	AC-01G18-F10	22-Oct-01	22-Jun-02
	Y	ENTRAN	AC-01G18-F02	19-Oct-01	19-Apr-02
Right Tibia	X	ENTRAN	AC-01G18-F12	19-Oct-01	19-Apr-02
	Y	ENTRAN	AC-01J02-F09	19-Oct-01	19-Apr-02
Left Ankle	Rx	Contelec	LX-106-AXLR	30-Aug-00	01-Mar-01
	Ry	Contelec	LX-106-AYLR	30-Aug-00	01-Mar-01
	Rz	Contelec	LX-106-AZLR	30-Aug-00	01-Mar-01
Right Ankle	Rx	Contelec	LX-105-AXRR	30-Aug-00	01-Mar-01
	Ry	Contelec	LX-105-AYRR	30-Aug-00	01-Mar-01
	Rz	Contelec	LX-105-AZRR	30-Aug-00	01-Mar-01
Left Foot	Ax	ENTRAN	AC-01G18-F18	22-Oct-01	22-Jun-02
	Ay	ENTRAN	AC-01G18-F06	22-Oct-01	22-Jun-02
	Az	ENTRAN	AC-01G18-F07	19-Oct-01	19-Apr-02
Right Foot	Ax	ENTRAN	AC-01G18-F14	19-Oct-01	19-Apr-02
	Ay	ENTRAN	AC-01J02-F08	19-Oct-01	19-Apr-02
	Az	ENTRAN	AC-01G18-F08	22-Oct-01	22-Jun-02

INSTRUMENT CALIBRATION FOR VEHICLE ACCELEROMETERS

(6 Month Calibration Minimum)

	Manufacturer	Serial #	Calibration	
			Last	Next
Left Seat Rear Crossmember X	ICS	AC-D86	30-Oct-01	30-Apr-02
Left Seat Rear Crossmember Y	ICS	AC-D61	30-Oct-01	30-Apr-02
Right Seat Rear Crossmember X	ICS	AC-Y05	30-Oct-01	30-Apr-02
Right Rear Seat Crossmember Y	ICS	AC-D30	30-Oct-01	30-Apr-02
Driver Left Side Toepan Z	ENDEVCO	AC-J32176	21-Sep-01	21-Mar-02
Driver Right Side Toepan X	ENDEVCO	AC-P16597	29-Aug-01	01-Mar-02
Driver Right Side Toepan Z	ENDEVCO	AC-A13513	29-Aug-01	01-Mar-02
Driver Toepan X	PATRIOT	DS-M97	22-Jun-01	22-Dec-01