

REPORT NUMBER: 201UI-CAL-07-04

**SAFETY COMPLIANCE TESTING FOR FMVSS 201  
OCCUPANT PROTECTION IN INTERIOR IMPACT  
UPPER INTERIOR HEAD IMPACT PROTECTION**

**NISSAN MOTOR COMPANY  
2007 NISSAN VERSA**

NHTSA NUMBER: C75203

CALSPAN TEST NUMBER: 8826-FMH-04

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



Test Date: July 3, 2007

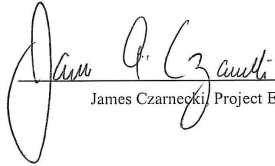
FINAL REPORT

PREPARED FOR:

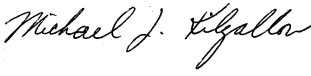
U. S. DEPARTMENT OF TRANSPORTATION  
National Highway Traffic Safety Administration  
Enforcement  
Office of Vehicle Safety Compliance  
Mail Code: NVS-220, West Building 4<sup>th</sup> Floor  
1200 New Jersey Ave., SE  
Washington, DC 20590

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FINAL REPORT ACCEPTANCE BY:

\_\_\_\_\_  
NHTSA, Office of Vehicle Safety Compliance

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**TECHNICAL REPORT STANDARD TITLE PAGE**

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4. <i>Title and Subtitle</i> Final Report of FMVSS 201 Compliance Testing of a 2007 Nissan Versa NHTSA No. C75203				5. <i>Report Date</i> July 3, 2007																			
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15. <i>Supplementary Notes</i>																							
16. <i>Abstract</i>  Compliance tests were conducted on the subject vehicle, a 2007 Nissan Versa, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure TP-201U-01 for determination of FMVSS 201 compliance. Test failures identified were as follows in the table below:																							
<table border="1"> <thead> <tr> <th>Target Point</th> <th>Horizontal</th> <th>Vertical</th> <th>Velocity</th> <th>HIC</th> <th>HICd</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>None</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>						Target Point	Horizontal	Vertical	Velocity	HIC	HICd	None	-	-	-	-	-	None	-	-	-	-	-
Target Point	Horizontal	Vertical	Velocity	HIC	HICd																		
None	-	-	-	-	-																		
None	-	-	-	-	-																		
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## **SECTION 1**

### **PURPOSE AND TEST PROCEDURE**

This head impact compliance test is part of the FMVSS 201 Upper Interior Head Impact Protection Test Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-04-C-01027. The purpose of this head impact compliance test was to determine whether the subject vehicle, a 2007 Nissan Versa, NHTSA No. C75203, meets the performance requirements of FMVSS 201, Occupant Protection in Interior Impact. The compliance test was conducted in accordance with the OVSC Laboratory Test Procedure No. TP-201U-01 dated April\_03, 1998.

## SECTION 2

### SUMMARY OF UPPER INTERIOR HEAD IMPACTS

A 2007 Nissan Versa , NHTSA No.C75203 , was tested at various upper interior locations by a 4.54 kg 50<sup>th</sup> percentile headform. A total of twelve (12) impacts were performed in this test series. The target area impacts were chosen by the NHTSA Contracting Officers Technical Representative (COTR). A summary of test results can be found on Data Sheet 2-1, Summary of Upper Interior Head Impact Tests. The twelve (12) area chosen for testing were:

RP1	URRP	BP4	BP3	BP1
AP3	AP1	RP2	BP2	URBP
SR2B	AP2			

The selected impact areas on the test vehicle appeared to comply with the performance requirements of FMVSS 201.

Five Free Motion Headforms (FMH) were used in this test series. All five FMH's were calibrated prior to and after the test series. Calibration information are included in Appendix B. Each FMH weighed  $4.54 \pm 0.5$  kg and had an orthogonal tri-axis accelerometer pack mounted at the headform's center of gravity (c.g.).

A total of three (3) channels of data for each test were recorded on a Keyser-Threde data acquisition system. Data plots, along with still images, can be found in Section 3, Summary of Test Results and Data Plots.

To document each target area impact test, a Weinberger high-speed video camera was placed at an appropriate location to record the headform contact with the selected target area.

**DATA SHEET 2-1**

**SUMMARY OF UPPER INTERIOR HEAD IMPACT TESTS**

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

TARGET CODE	Target Coordinates						Approach Angles (degrees)		Velocity (kph)	FMH HIC	HIC(d)*
	Driver Side			Passenger Side			Horizontal	Vertical			
	X(mm)	Y(mm)	Z(mm)	X(mm)	Y(mm)	Z(mm)					
AP1	1006.080	-522.989	1203.183	1000.225	527.542	1198.726	Relocated 1 circle		-	-	-
AP1 R1	1017.917	-531.846	1183.910	1016.692	536.218	1183.305	121°	22°	18.52	220.5	332.8
AP2	898.607	-557.226	1115.012	901.601	565.910	1110.843	223°	44°	18.68	290.6	385.7
AP3	720.975	-585.102	1033.262	722.115	589.442	1029.176	145°	42°	18.75	619	633.4
BP1	1574.865	-466.379	1254.503	1567.372	470.276	1255.793	90°	22°	18.58	462.3	515.2
BP2	1539.783	-572.611	992.527	1537.956	576.889	990.306	270°	0°	23.56	718.7	708.6
BP3	1498.057	-589.764	1032.732	1494.981	593.534	1031.749	90°	-10°	23.62	629	640.9
BP4	1616.381	-626.570	919.742	1614.079	626.202	920.220	137°	-9°	23.67	560.3	589.1
FH1	926.095	-406.492	1206.117	922.508	411.067	1201.237	-	-	-	-	-
FH2	907.098	-258.646	1211.291	902.467	261.950	1206.374	Relocated 1 circle		-	-	-
FH2 R1	907.087	-279.798	1210.330	902.872	285.792	1205.529	-	-	-	-	-
RH	2634.031	-334.205	1169.931	2628.717	333.571	1181.100	-	-	-	-	-
RP1	2590.122	-481.321	1118.776	2587.320	480.338	1132.125	65°	11°	23.57	943.1	877.9
RP2	2539.768	-566.450	1002.610	2541.442	567.020	1011.108	Relocated 2 circles		-	-	-
RP2 R2	2536.843	-547.431	1047.413	2544.133	545.985	1056.752	289°	0°	23.49	720.2	709.8
SR1	1158.942	-494.472	1215.386	1150.142	499.439	1214.036	Relocated 2 circles		-	-	-
SR1 R2	-	-	-	1128.081	534.132	1189.219	-	-	-	-	-
SR2A	1307.178	-477.216	1242.725	1300.058	497.943	1240.471	Relocated 1 circle		-	-	-
SR2A R1	-	-	-	1310.287	476.559	1227.418	-	-	-	-	-
SR2B	1275.356	-479.391	1238.300	1264.711	501.467	1235.507	Relocated 1 circle		-	-	-
SR2B R1	-	-	-	1264.082	477.740	1223.362	270°	29°	18.5	144.7	275.6
SR3F	2131.314	-474.268	1204.379	2131.585	476.892	1209.238	-	-	-	-	-
SR3R	2301.472	-473.785	1187.379	2297.572	475.971	1195.292	-	-	-	-	-
URAP	1165.547	-374.489	1241.035	1168.988	382.397	1240.429	-	-	-	-	-



URBP	1572.270	-360.377	1299.777	1564.225	362.125	1301.379	<b>270°</b>	<b>45°</b>	<b>23.83</b>	<b>797.1</b>	<b>767.8</b>
URRP	2426.520	-364.689	1245.245	2424.315	362.833	1254.280	<b>47°</b>	<b>50°</b>	<b>23.6</b>	<b>386.6</b>	<b>458</b>
URSR	2212.314	-359.909	1270.161	2184.738	363.333	1279.282	-	-	-	-	-

\*HIC(d)=0.75446(Free Motion Headform HIC)+166.4

**DATA SHEET 2-2**

**GENERAL TEST AND VEHICLE PARAMETER DATA**

<b>TEST VEHICLE INFORMATION:</b>									
Year/Make/Model/Body Style:				2007 Nissan Versa					
VIN:3N1BC13E27L403345				3N1BC13E27L403345					
Month & Year of Manufacture:				01/07(SEE CERTIFICATION LABEL)					
Vehicle Body Color:				Black					
Engine Data:	4	Cylinders;	110	CID;	1.8	Liters;	-	cc	
Engine Placement:		x	Longitudinal;	or		-	Lateral		
Transmission:	6	Speed;	x	Manual;	-	Automatic;	-	Overdrive	
Final Drive:	-	Rear Wheel Drive;	x	Front Wheel Drive;	-	Four Wheel Drive			
Odometer Reading:		188	km						
Options:	x	A/C;	x	Power Steering;	x	Pwr.Brakes;	x	Pwr. Windows	
Interior Trim Information :									
1. Side rail grab handles on front passenger side and both rear outboard seating positions									
2. Normal roof									
3. Adjustable seat belt anchorages on B-pillars and non-adjustable anchorages on the Rear Pillar.									

<b>DATA FROM TIRE PLACARD:</b>									
Tire Pressure (at capacity);				230		kPa FRONT			
				230		kPa REAR			
Recommended Tire Size:				P185/65R15					
Tires on Test Vehicle:		P185/65R15		Manufacturer:		Continental			
Vehicle Capacity Data:									
Number of Occupants:	2	Front;	3	Rear;	-	3rd Seat;	5	Total	
Type of Front Seats:	x	Bucket;	-	Bench;	-	Split Bench			
Type of Front Seat Back:	-	Fixed;	x	Adjustable with	x	Lever or	-	Knob	
Vehicle Capacity Weight (VCW)=				390		kg (A)			
No. of Occupants x 68 kg. =				340		kg (B)			
Rated Cargo/Luggage Weight (RCLW) =				50		kg (A-B) Max. RCLW = 136 kg.			

**DATA SHEET 2-2**

**GENERAL TEST AND VEHICLE PARAMETER DATA (cont.)**

<b>TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:</b>					
Left Front =	361.5	kg	Left Rear =	247.5	kg
Right Front =	373.5	kg	Right Rear =	242.5	kg
TOTAL FRONT =	735	kg	TOTAL REAR =	490	kg
% of Total Weight =	60.0	%	% of Total Weight =	40.0	%
TOTAL WEIGHT =	1225		kg		

<b>CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:</b>		
Total Test Vehicle Delivered Weight=	1225	kg (A)
+ Rated Cargo/Luggage Weight =	50	kg (B)
TEST VEHICLE TARGET WEIGHT =	1275	kg (A+B)

<b>WEIGHT OF TEST VEHICLE (FULLY LOADED):</b>					
Left Front =	361.5	kg	Left Rear =	269.5	kg
Right Front =	372.5	kg	Right Rear =	265.0	kg
TOTAL FRONT =	734	kg	TOTAL REAR =	534.5	kg
% of Total Weight =	57.9	%	% of Total Weight =	42.1	%
TOTAL TEST WEIGHT =	1268.5				
Weight of vehicle secured in test vehicles cargo area =	43.5		kg		

<b>TEST VEHICLE ATTITUDE (all dimensions in millimeters):</b>				
AS DELIVERED:	Left Front	710	Left Rear	697
	Right Front	708	Right Rear	699
FULLY LOADED:	Left Front	710	Left Rear	685
	Right Front	708	Right Rear	687
Test Vehicle Wheelbase:	2601		millimeters	

<b>TEST VEHICLE PITCH AND ROLL ANGLES:</b>				
AS DELIVERED:	PITCH ANGLES		ROLL ANGLES	
	Left Door Sill	↑0.9↓	Front Bumper	↑0.1↓
	Right Door Sill	↓0.7↑	Rear Bumper	↓0.5↑
FULLY LOADED:	PITCH ANGLES		ROLL ANGLES	
	Left Door Sill	↑0.6↓	Front Bumper	0.0
	Right Door Sill	↓0.5↑	Rear Bumper	↓0.5↑
AS TESTED:	PITCH ANGLES		ROLL ANGLES	
	Left Door Sill	↑0.8↓	Front Bumper	0.0
	Right Door Sill	↓0.7↑	Rear Bumper	↓0.5↑

DATA SHEET 2-3

APPROACH ANGLE LIMITS

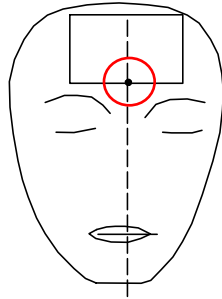
Target Code	Left Side				Target Code	Right Side			
	Horizontal Angles (deg.)		Vertical Angles (deg.)			Horizontal Angles (deg.)		Vertical Angles (deg.)	
	Minimum	Maximum	Minimum	Maximum		Minimum	Maximum	Minimum	Maximum
AP1	203	255	-5	22	AP1	105	157	-5	22
AP2	203	255	-5	44	AP2	105	157	-5	42
AP3	203	255	-5	42	AP3	105	157	-5	42
BP1	201	274	-10	22	BP1	86	159	-10	22
BP2	ANY		0	0	BP2	ANY		0	0
BP3	201	274	-10	-10	BP3	86	159	-10	-10
BP4	201	274	-10	-9	BP4	86	159	-10	-9
OP1	270		-10	-	OP1	90		-10	-
OP2	270		-10	-	OP2	90		-10	-
RP1	270	345	-10	11	RP1	15	90	-10	11
RP2	270	345	-10	0	RP2	15	90	-10	0
FH1	180		0	50	FH1	180		0	50
FH2	180		0	50	FH2	180		0	50
RH	360		0	50	RH	0		0	50
SR1	270		0	38	SR1	90		0	38
SR2A	270		0	29	SR2A	90		0	29
SR2B	270		0	29	SR2B	90		0	29
SR3F	270		0	22	SR3F	90		0	22
SR3R	270		0	22	SR3R	90		0	22
URAP	ANY		0	50	URAP	ANY		0	50
URBP	ANY		0	45	URBP	ANY		0	45
URRP	ANY		0	50	URRP	ANY		0	50

Note : BP2 and RP2 target location – Seat belt anchorages

**DATA SHEET 2-4**

**SUMMARY TARGET IMPACT LOCATION ON FMH**

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black



ã RIGHT SIDE OF FACE

TARGET	Distance Above Point 0 (mm)	Distance Over From Pt. O (mm)
RP1	29	0
URRP	47	5R
BP4	8	8L
BP3	8	20R
BP1	22	0
AP3	9	8L
AP1	18	32R
RP2	25	4L
BP2	2	5L
URBP	49	6L
SR2B	20	6L
AP2	22	4R

**SECTION 3**

**SUMMARY OF TEST RESULTS AND DATA PLOTS**

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	01
Test Date:	07/02/07
Target Location:	REAR PILLAR
Target Code:	RP1
Horizontal Impact Angle:	65°
Vertical Impact Angle:	11°
Ambient Temperature:	21.9 C°
Relative Humidity:	39
Time of Impact:	9:45
Headform Number:	0062

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	0	<input type="checkbox"/>	mm right <input type="checkbox"/> mm left
On Centerline	29		mm up



POST-IMPACT RP1 HEADFORM

Free Motion HIC	943.1
HIC(d)	877.9
Impact Velocity (kph)	23.57
HIC T1 (msec)	6.9
HIC T2 (msec)	11.6

# FMVSS 201U 2007 Nissan Versa C75203 - RP1

FMH Headform 0062

Location: RP1

Test Date: July 02, 2007

Work File: RP1

## -----TEST RESULTS-----

Lab Temperature: 21.9 C

HICd: 877.9

Lab Humidity: 39.0 %

HIC (36ms): 943.1

Velocity at Impact: 23.57 KPH

t1: 6.9 msec

t2: 11.6 msec

Free Flight Distance: 223.15 mm

Duration: 4.7 msec

Maximum: 154.5 g

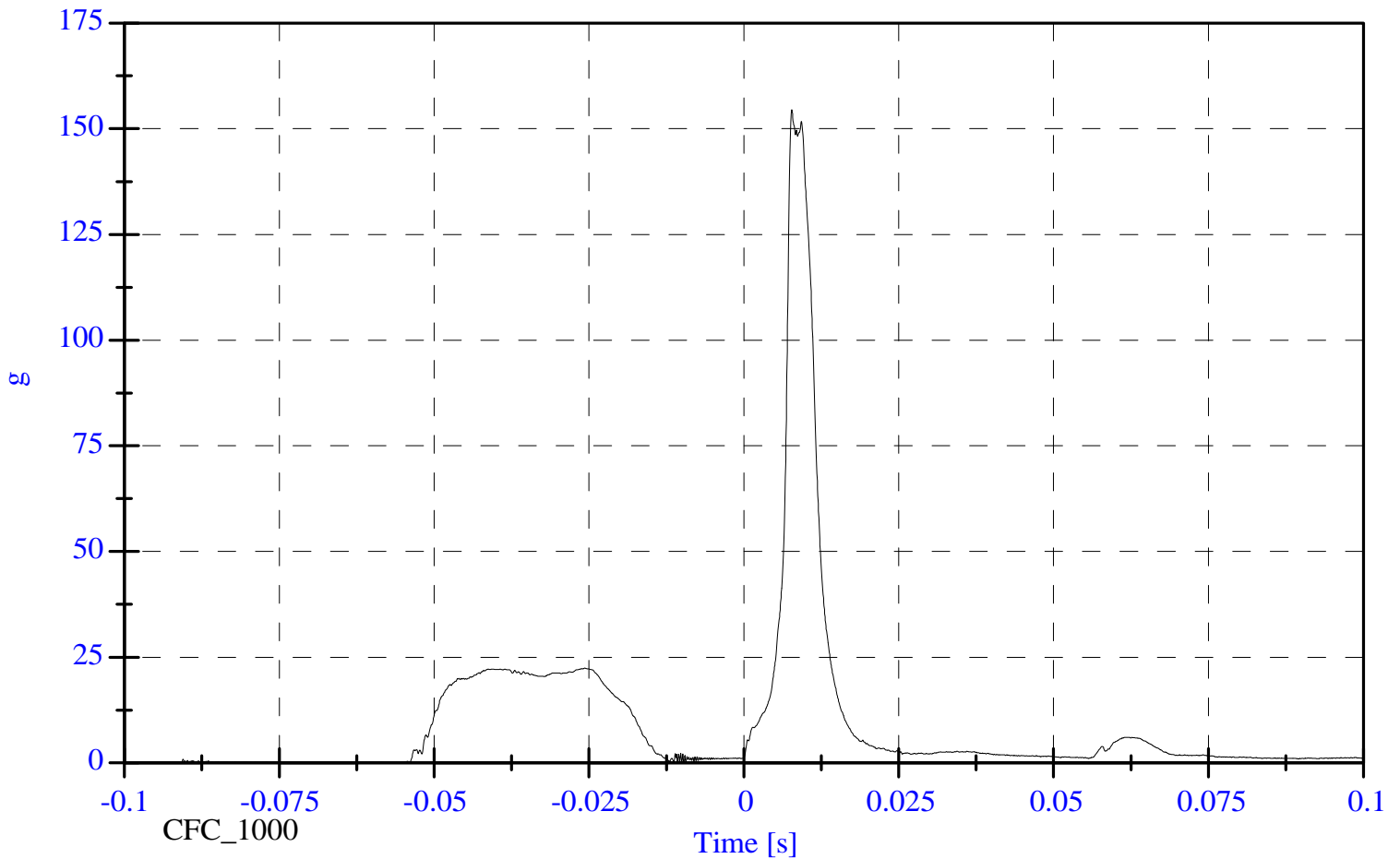
Average Acceleration: 9.0 g

FMVSS 201U 2007 Nissan Versa

Max: 154.5 [g] at 0.008 [s]

Headform Resultant

Min: 0.0 [g] at -0.074 [s]





FMVSS 201U 2007 Nissan Versa

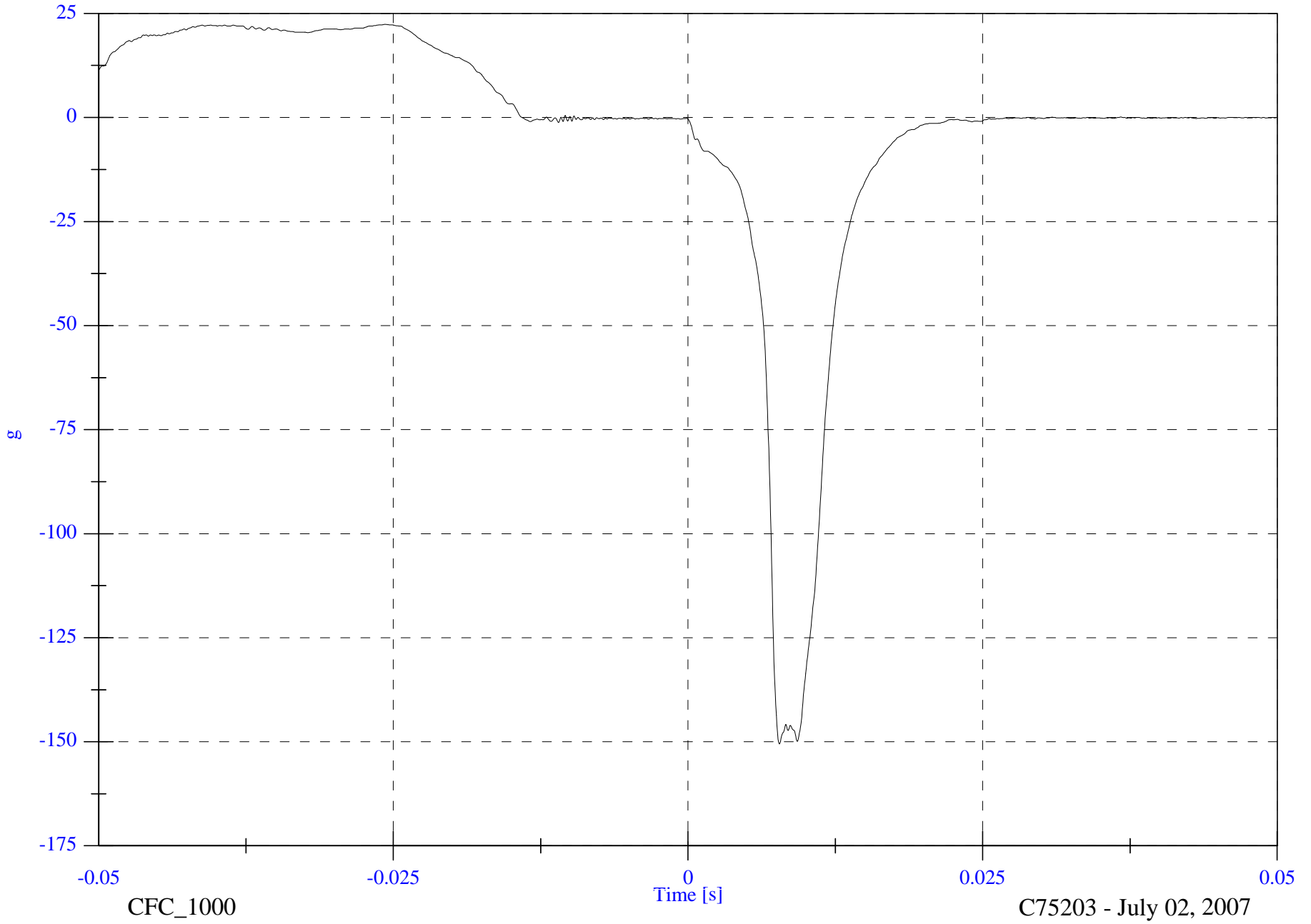
Headform X Acceleration

Max: 22.4 [g] at -0.026 [s]

Min: -150.5 [g] at 0.008 [s]

C75203 PASSENGER SIDE RP1 IMPACT PLOT #1

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

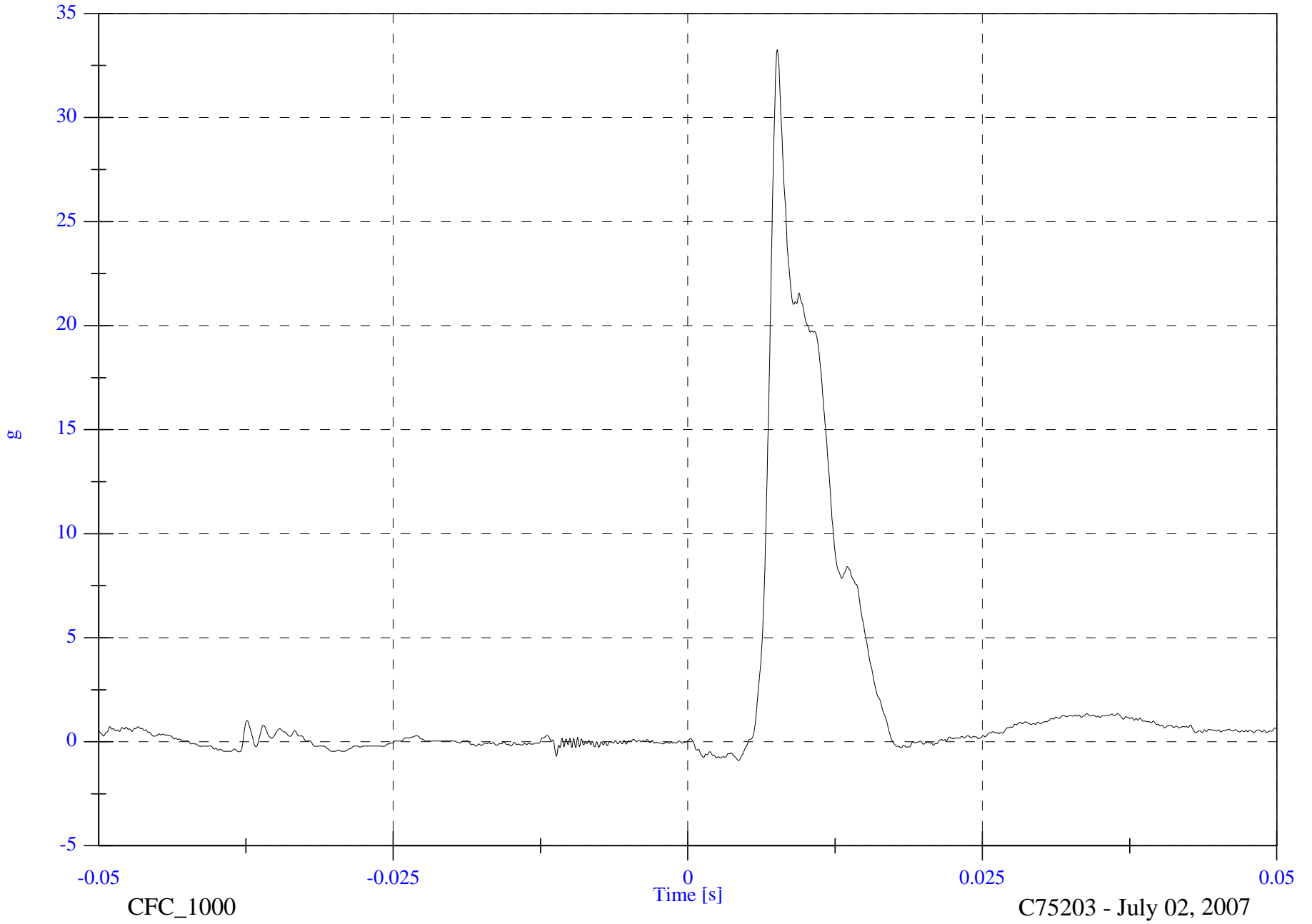
Headform Y Acceleration

Max: 33.3 [g] at 0.008 [s]

Min: -0.9 [g] at 0.004 [s]

C75203 PASSENGER SIDE RP1 IMPACT PLOT #2

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

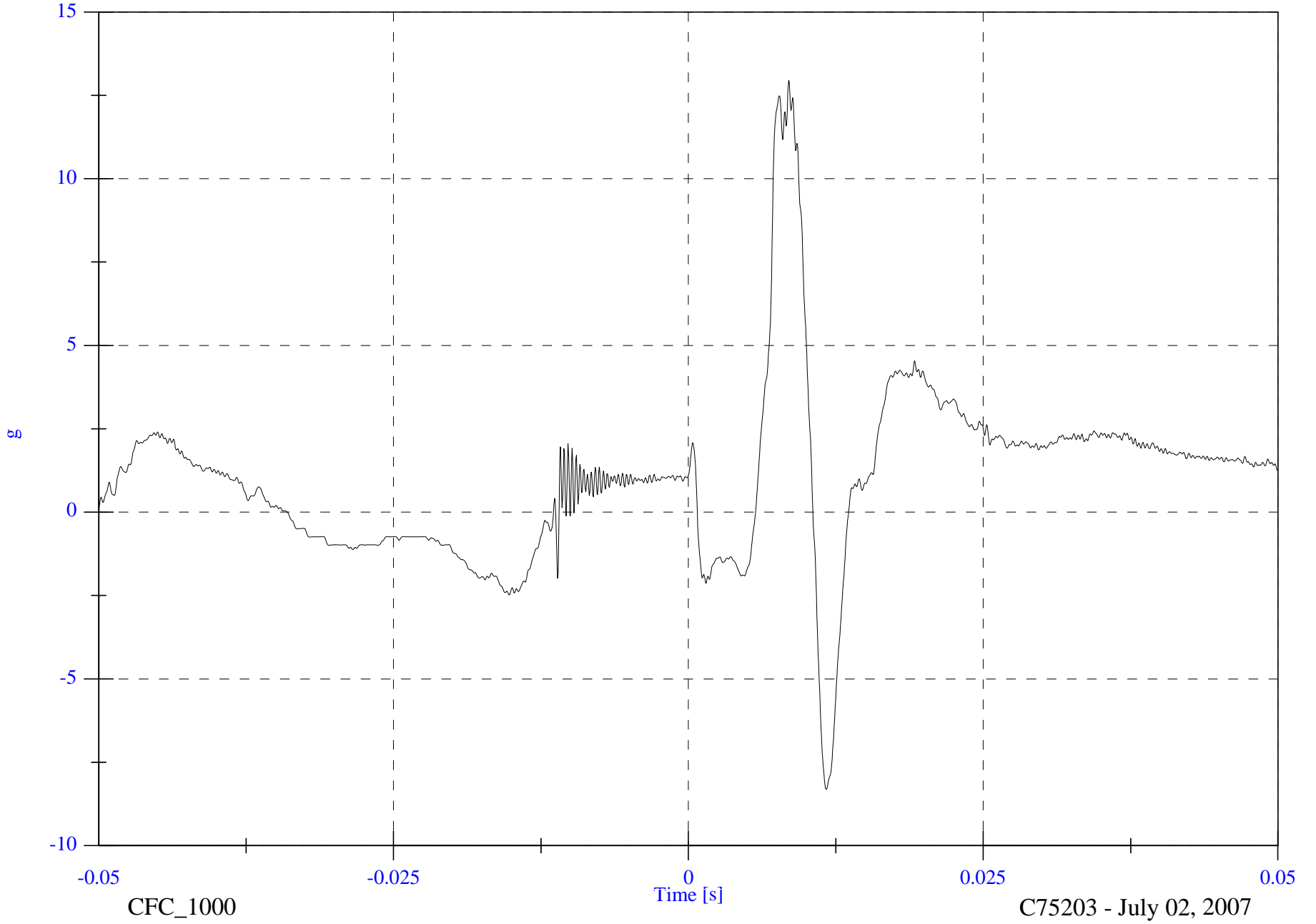
Headform Z Acceleration

Max: 13.0 [g] at 0.009 [s]

Min: -8.3 [g] at 0.012 [s]

C75203 PASSENGER SIDE RP1 IMPACT PLOT #3

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

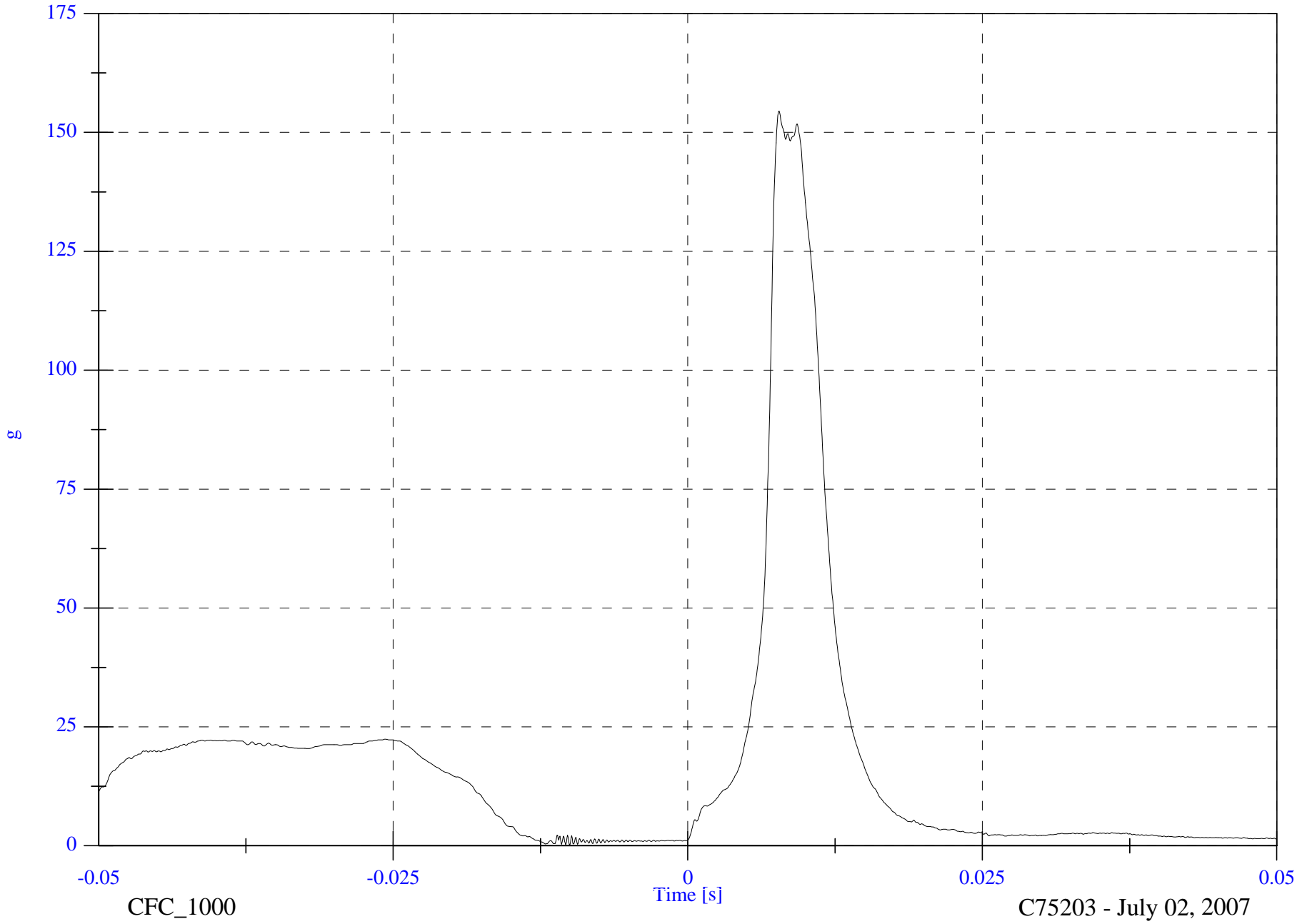
Headform Resultant

Max: 154.5 [g] at 0.008 [s]

Min: 0.2 [g] at -0.010 [s]

C75203 PASSENGER SIDE RP1 IMPACT PLOT #4

8826-FMH-04



CFC\_1000

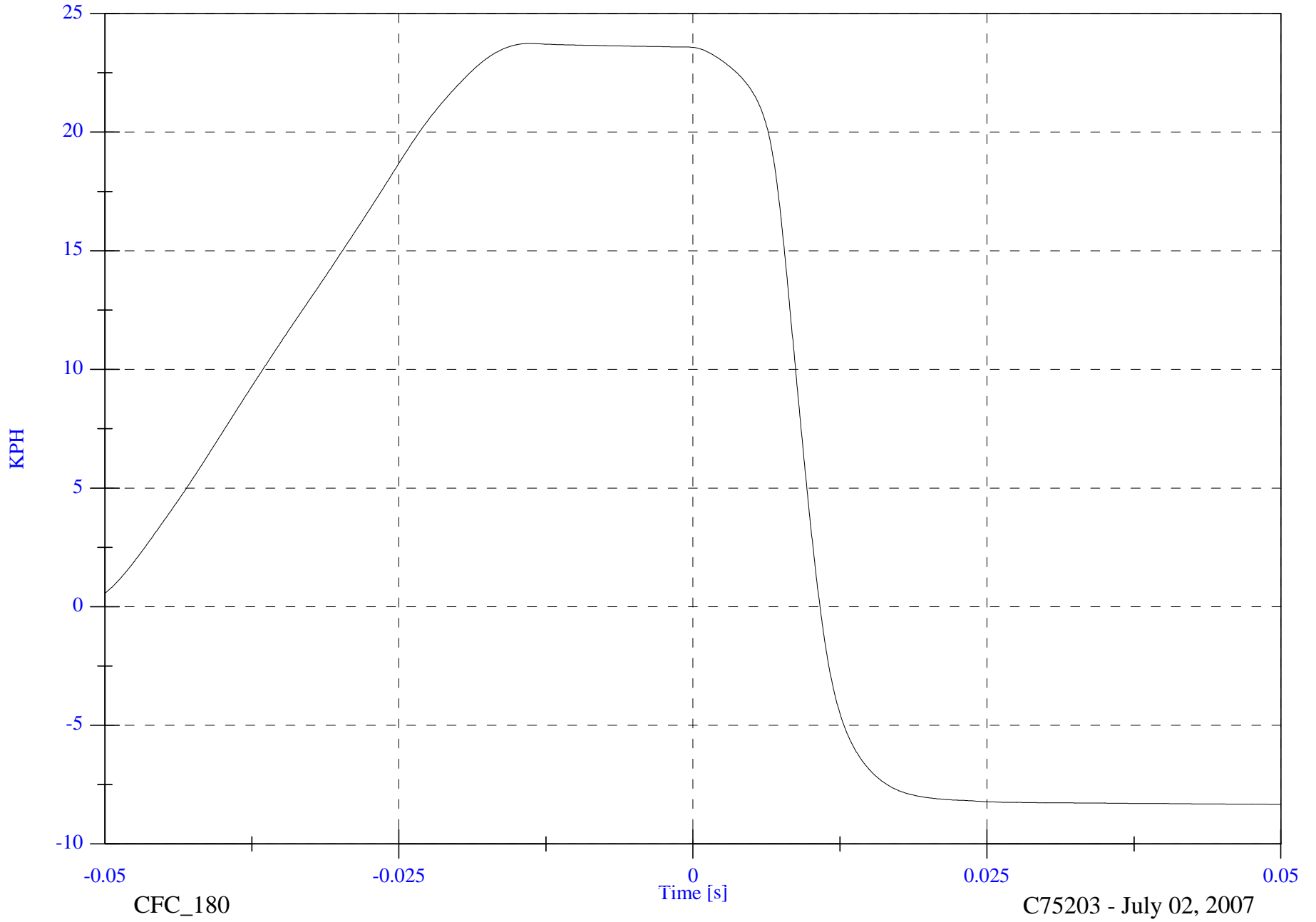
C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

Max: 23.7 [KPH] at -0.014 [s]

Min: -8.3 [KPH] at 0.050 [s]

### Headform Velocity



C75203 PASSENGER SIDE RP1 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 02, 2007



PRE-IMPACT RP1



POST-IMPACT RPI

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	02
Test Date:	07/02/07
Target Location:	UPPER ROOF R-PILLAR
Target Code:	URRP
Horizontal Impact Angle:	47°
Vertical Impact Angle:	50°
Ambient Temperature:	21.7 C°
Relative Humidity:	37.3
Time of Impact:	10:30
Headform Number:	0355

Impact Point Description (from lower midpoint on midsagittal line)				
On Centerline	5	x	mm right	mm left
On Centerline	47		mm up	



POST-IMPACT URRP HEADFORM

Free Motion HIC	386.6
HIC(d)	458.0
Impact Velocity (kph)	23.6
HIC T1 (msec)	8.8
HIC T2 (msec)	15.5



# FMVSS 201U 2007 Nissan Versa C75203 - URRP

FMH Headform 0355

Location: URRP

Test Date: July 02, 2007

Work File: URRP

## -----TEST RESULTS-----

Lab Temperature: 21.7 C

HICd: 458.0

Lab Humidity: 37.3 %

HIC (36ms): 386.6

Velocity at Impact: 23.60 KPH

t1: 8.8 msec

t2: 15.5 msec

Free Flight Distance: 226.91 mm

Duration: 6.7 msec

Maximum: 110.1 g

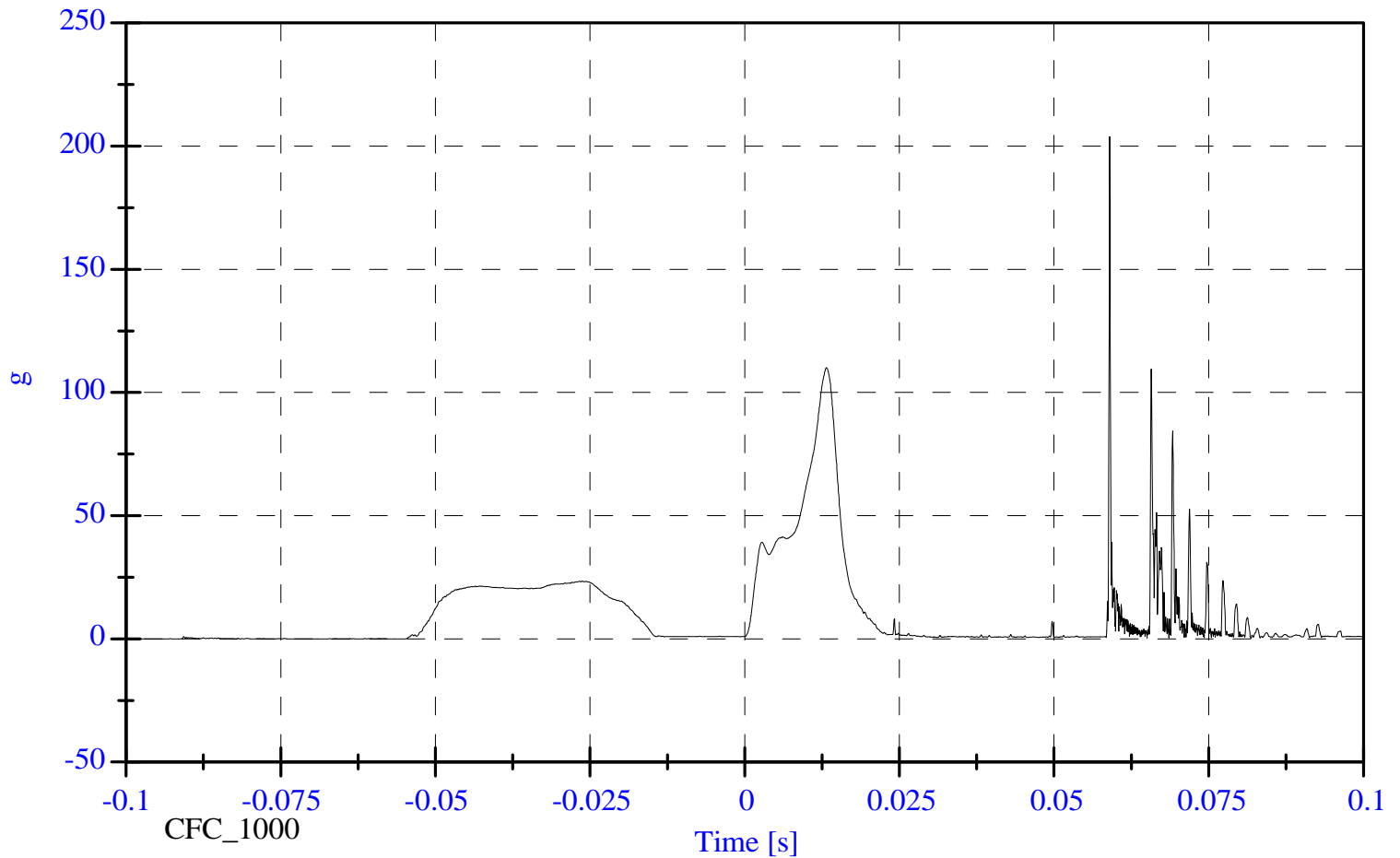
Average Acceleration: 10.1 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 110.1 [g] at 0.013 [s]

Min: -0.0 [g] at -0.099 [s]

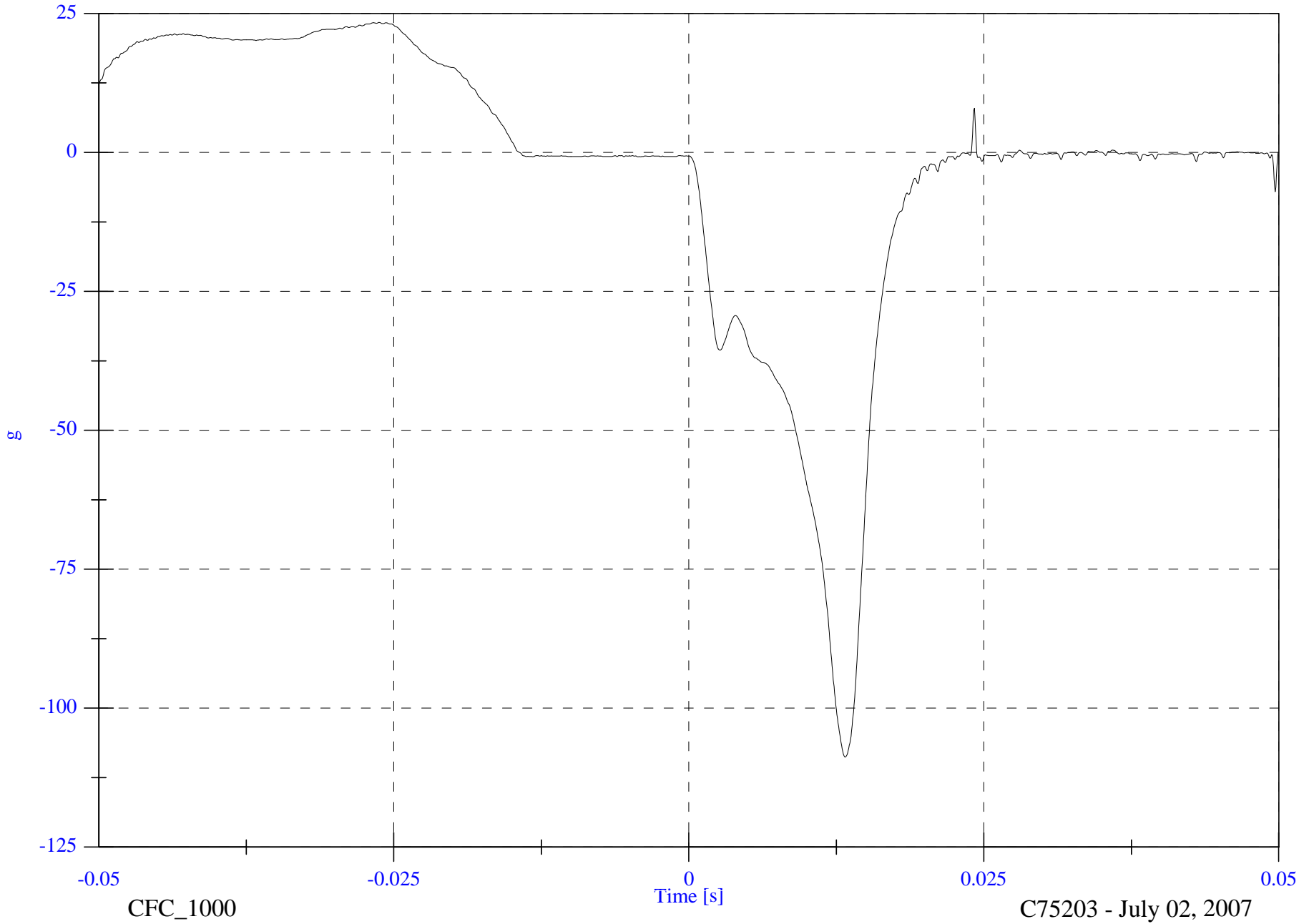


FMVSS 201U 2007 Nissan Versa

### Headform X Acceleration

Max: 23.4 [g] at -0.026 [s]

Min: -108.8 [g] at 0.013 [s]



C75203 PASSENGER SIDE URRP IMPACT PLOT #1

8826-FMH-04

CFC\_1000

Time [s]

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

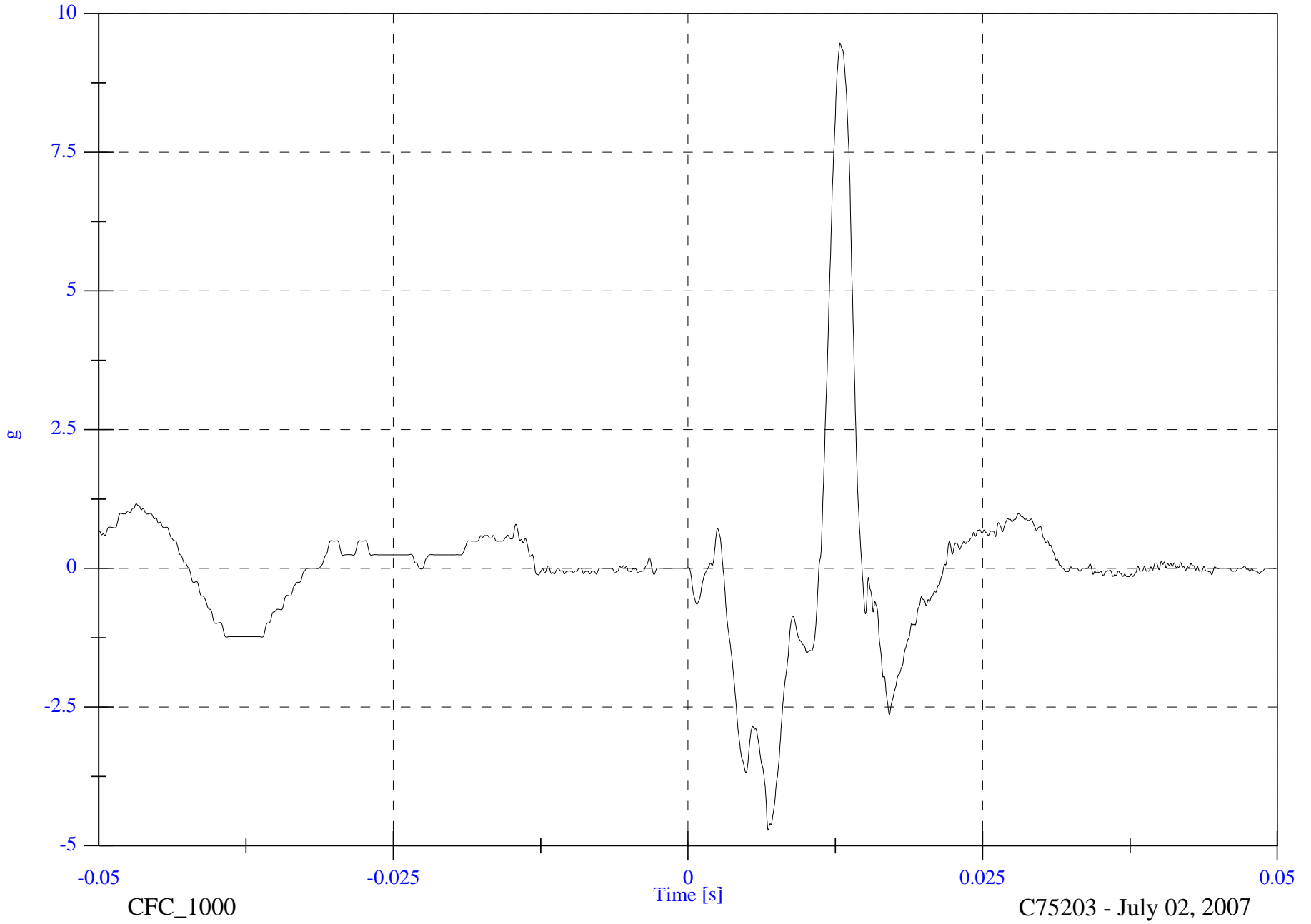
Headform Y Acceleration

Max: 9.5 [g] at 0.013 [s]

Min: -4.7 [g] at 0.007 [s]

C75203 PASSENGER SIDE URRP IMPACT PLOT #2

8826-FMH-04



CFC\_1000

Time [s]

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

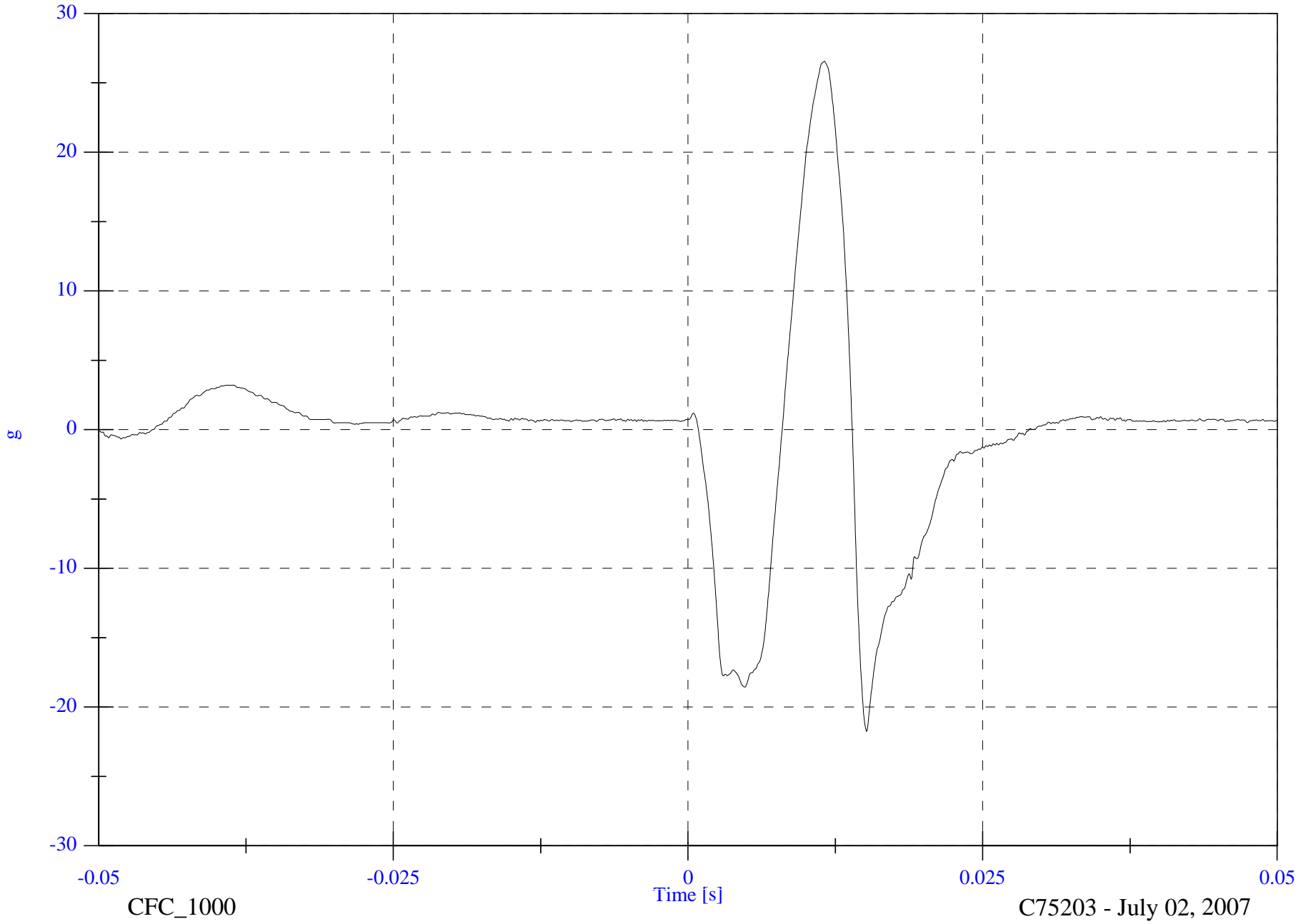
### Headform Z Acceleration

Max: 26.6 [g] at 0.012 [s]

Min: -21.7 [g] at 0.015 [s]

C75203 PASSENGER SIDE URRP IMPACT PLOT #3

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

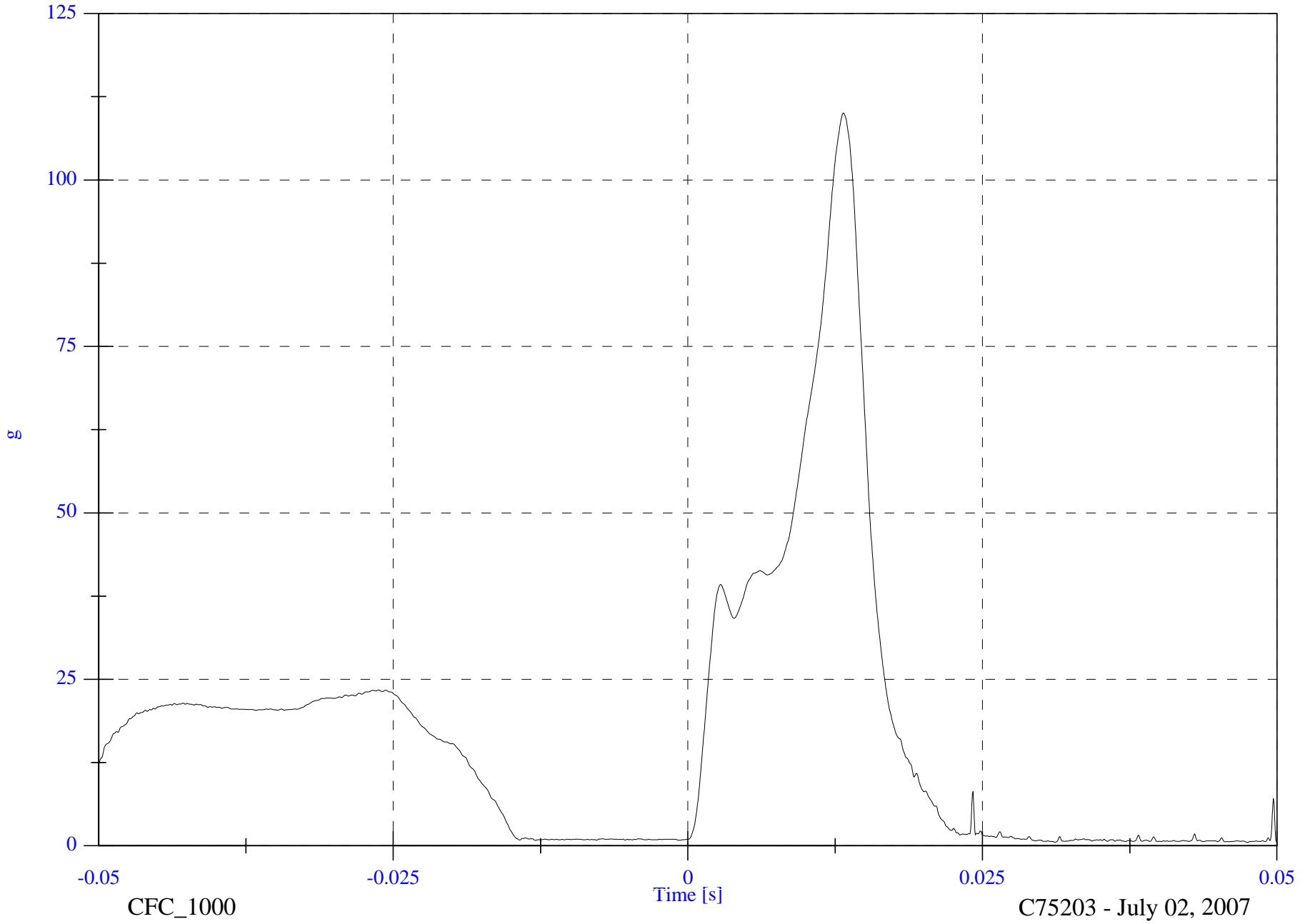
Headform Resultant

Max: 110.1 [g] at 0.013 [s]

Min: 0.5 [g] at 0.047 [s]

C75203 PASSENGER SIDE URRP IMPACT PLOT #4

8826-FMH-04



CFC\_1000

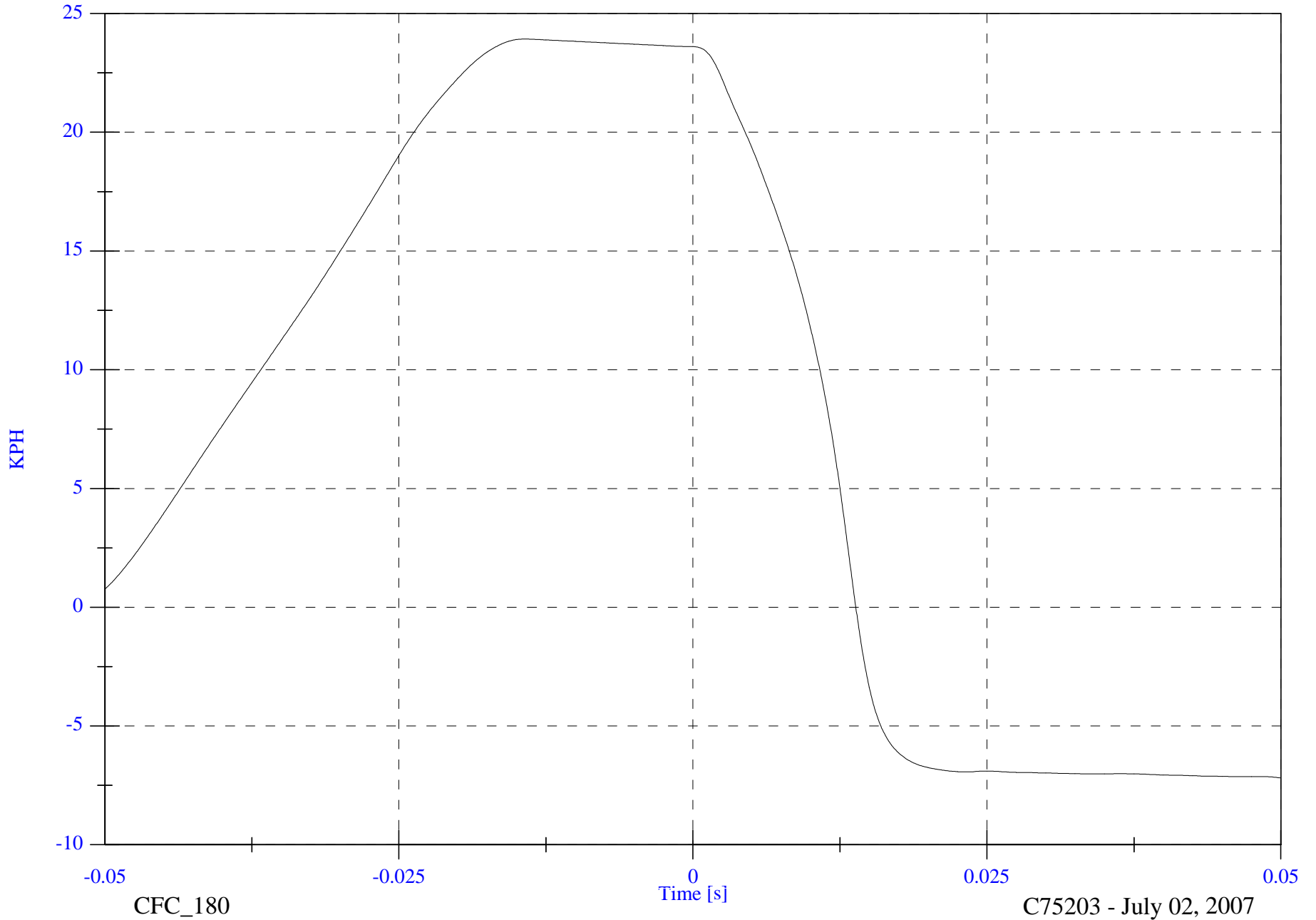
C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

Max: 23.9 [KPH] at -0.014 [s]

Min: -7.2 [KPH] at 0.050 [s]

### Headform Velocity



C75203 PASSENGER SIDE URRP IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 02, 2007



PRE-IMPACT URRP



POST-IMPACT URRP



VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	03
Test Date:	07/02/07
Target Location:	B-PILLAR
Target Code:	BP4
Horizontal Impact Angle:	137°
Vertical Impact Angle:	(-9)°
Ambient Temperature:	21.7 C°
Relative Humidity:	37.9
Time of Impact:	10:55
Headform Number:	0642

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	8	mm right	x mm left
On Centerline	8	mm up	



POST-IMPACT BP4 HEADFORM

Free Motion HIC	560.3
HIC(d)	589.1
Impact Velocity (kph)	23.67
HIC T1 (msec)	2.3
HIC T2 (msec)	12.7

# FMVSS 201U 2007 Nissan Versa C75203 - BP4

FMH Headform 0642

Location: BP4

Test Date: July 02, 2007

Work File: BP4

## -----TEST RESULTS-----

Lab Temperature: 21.7 C

HICd: 589.1

Lab Humidity: 37.9 %

HIC (36ms): 560.3

Velocity at Impact: 23.67 KPH

t1: 2.3 msec

t2: 12.7 msec

Free Flight Distance: 217.19 mm

Duration: 10.4 msec

Maximum: 109.7 g

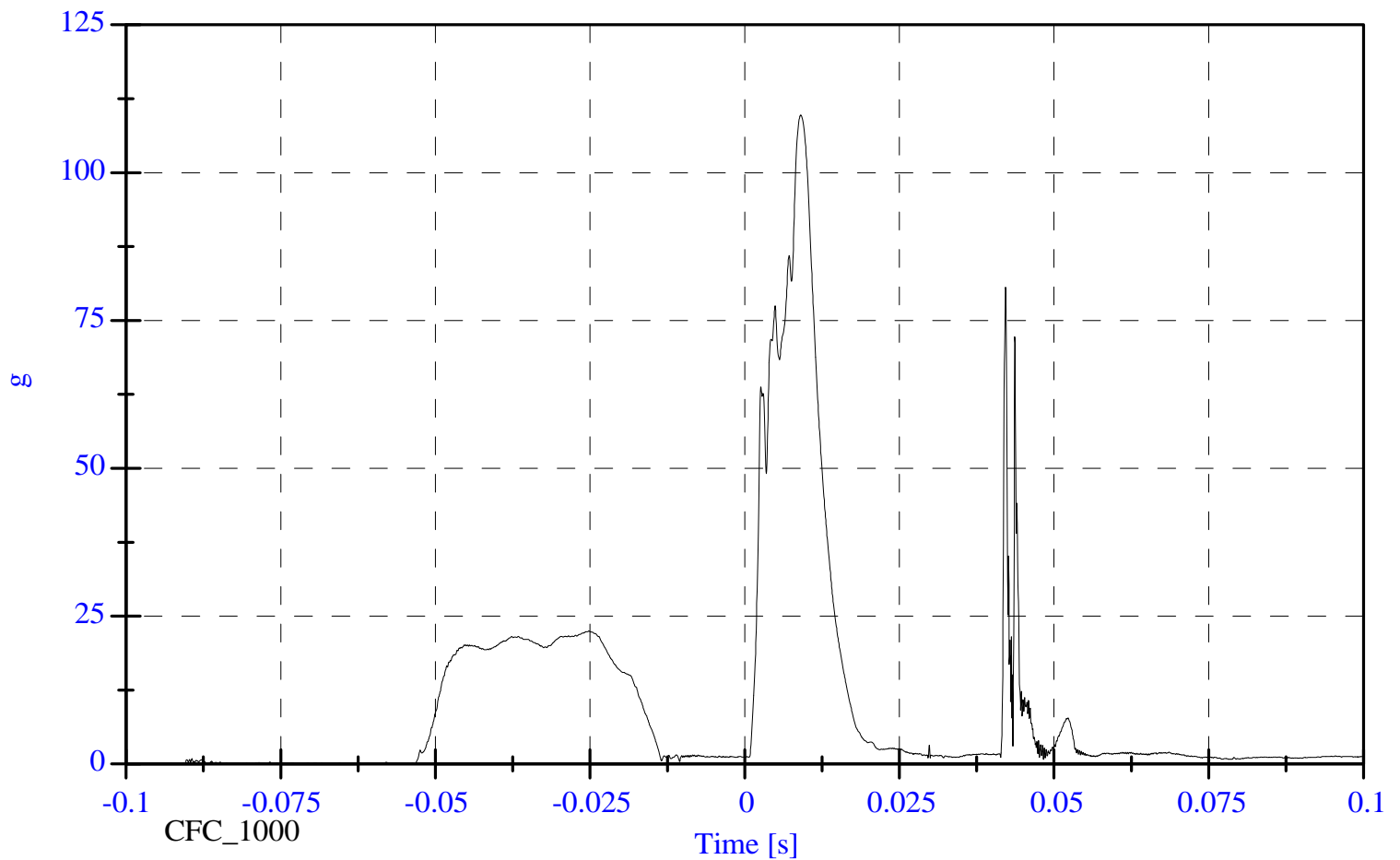
Average Acceleration: 9.6 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 109.7 [g] at 0.009 [s]

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



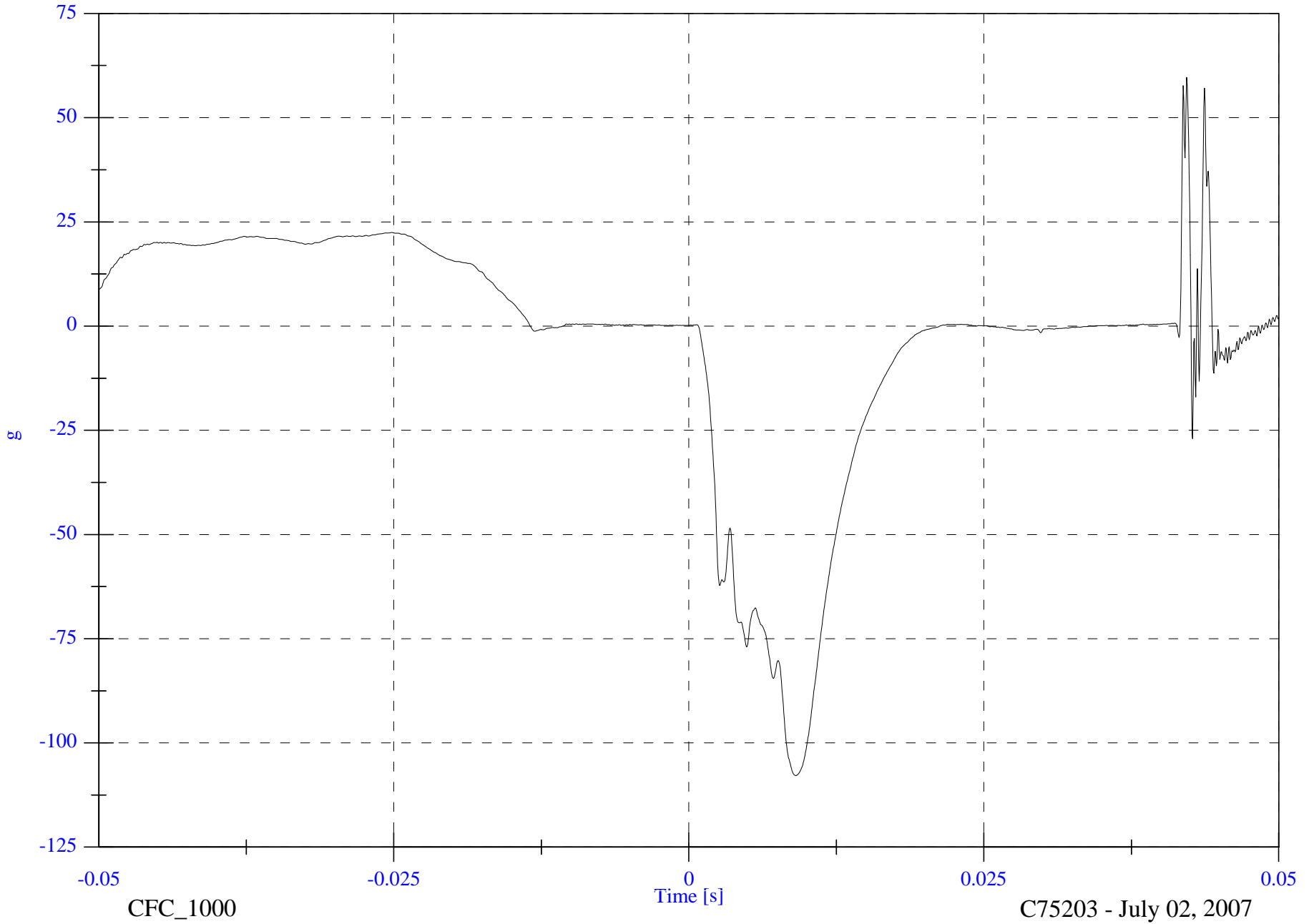
FMVSS 201U 2007 Nissan Versa

Headform X Acceleration

Max: 59.7 [g] at 0.042 [s]  
Min: -107.8 [g] at 0.009 [s]

C75203 PASSENGER SIDE BP4 IMPACT PLOT #1

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

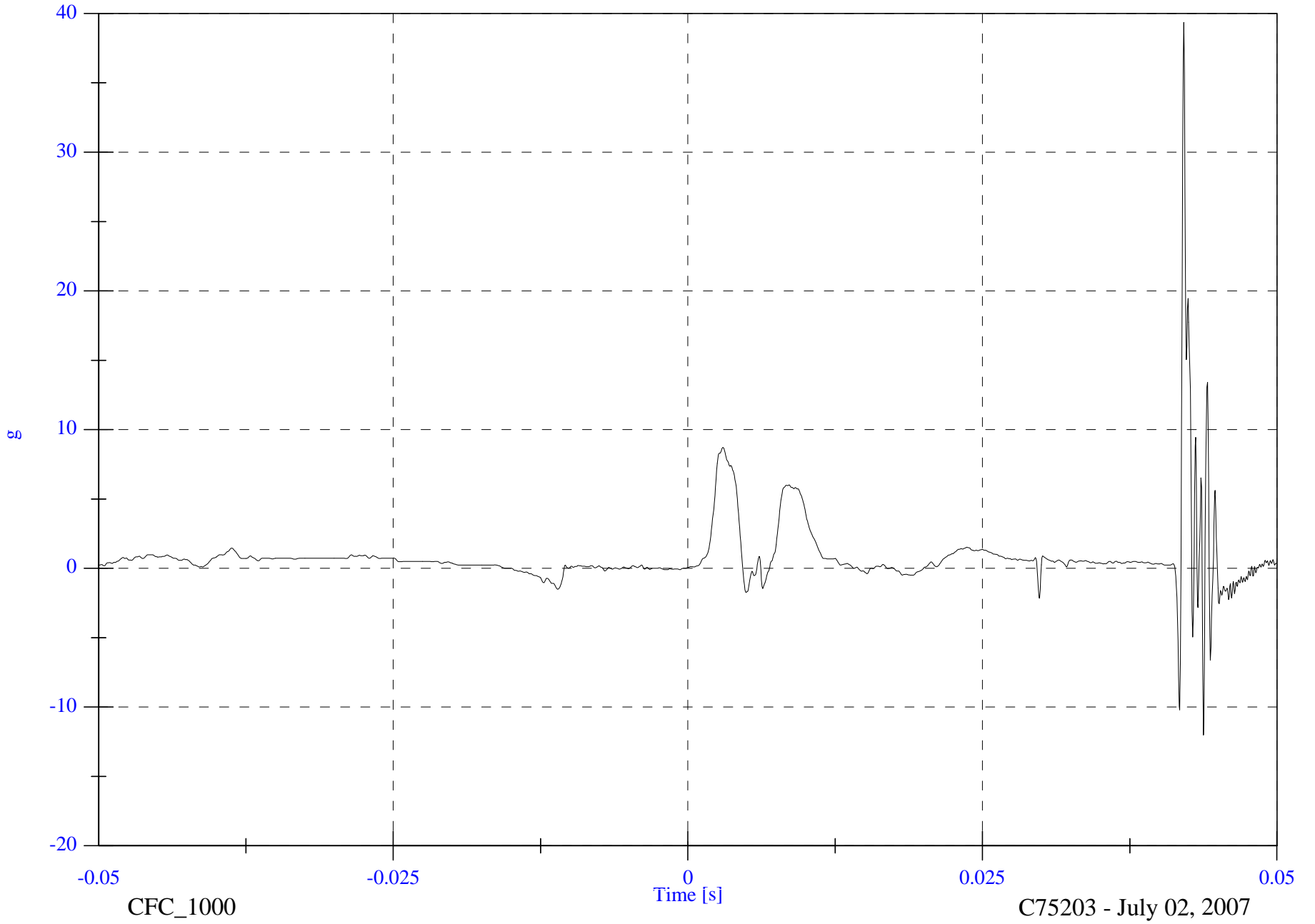
### Headform Y Acceleration

Max: 39.4 [g] at 0.042 [s]

Min: -12.0 [g] at 0.044 [s]

C75203 PASSENGER SIDE BP4 IMPACT PLOT #2

8826-FMH-04



FMVSS 201U 2007 Nissan Versa

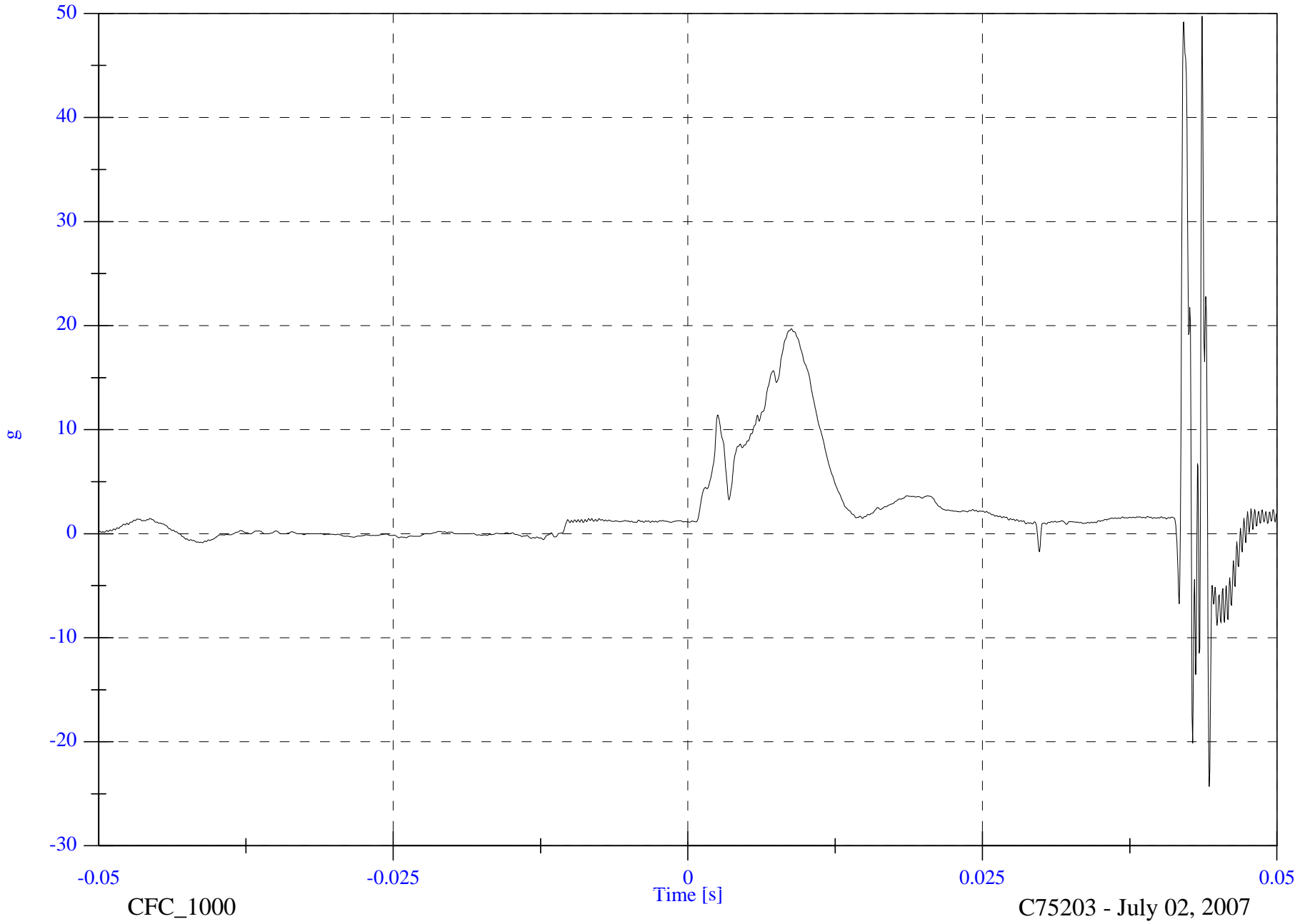
Headform Z Acceleration

Max: 49.7 [g] at 0.044 [s]

Min: -24.3 [g] at 0.044 [s]

C75203 PASSENGER SIDE BP4 IMPACT PLOT #3

8826-FMH-04



CFC\_1000

Time [s]

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

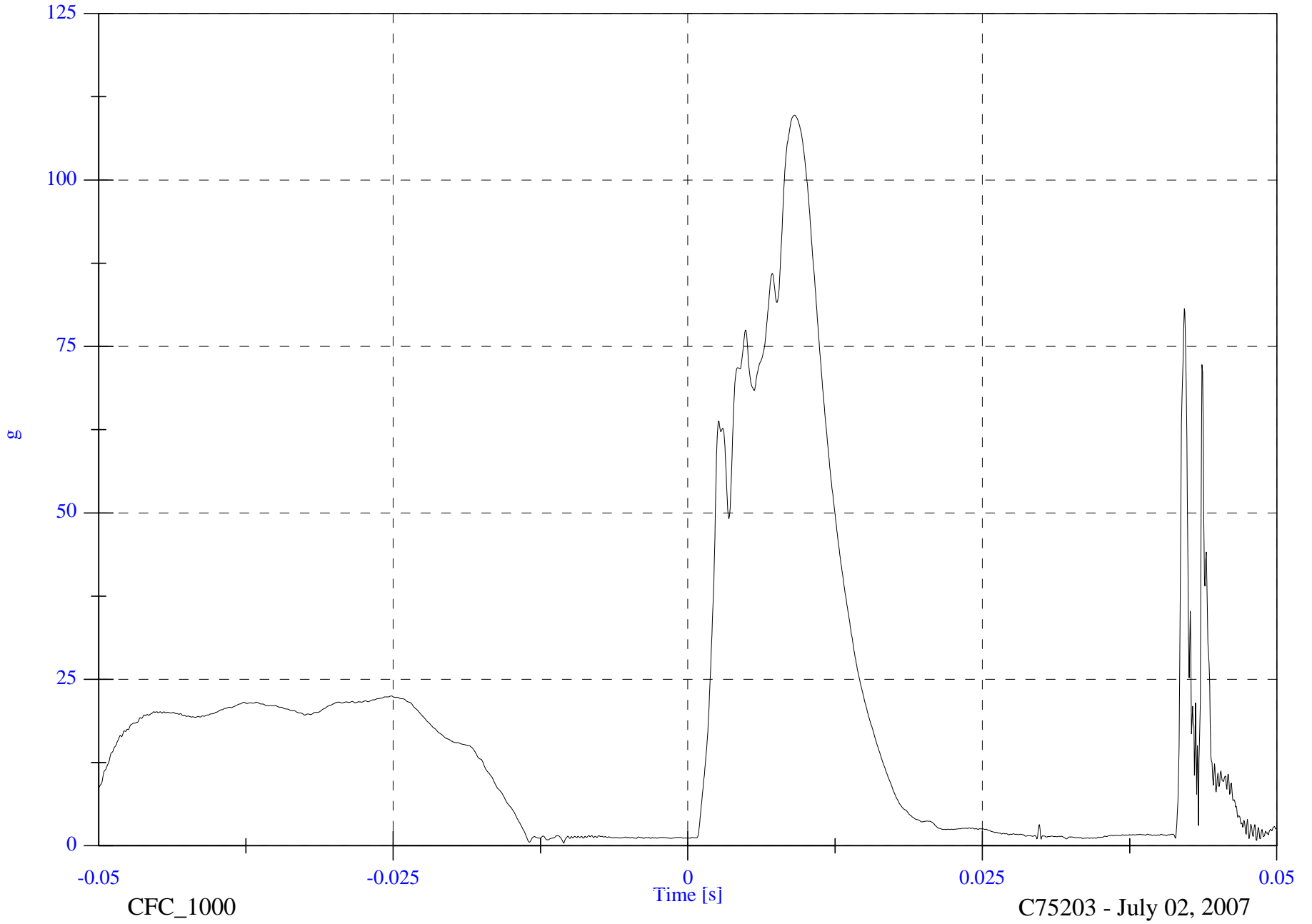
Headform Resultant

Max: 109.7 [g] at 0.009 [s]

Min: 0.4 [g] at -0.011 [s]

C75203 PASSENGER SIDE BP4 IMPACT PLOT #4

8826-FMH-04

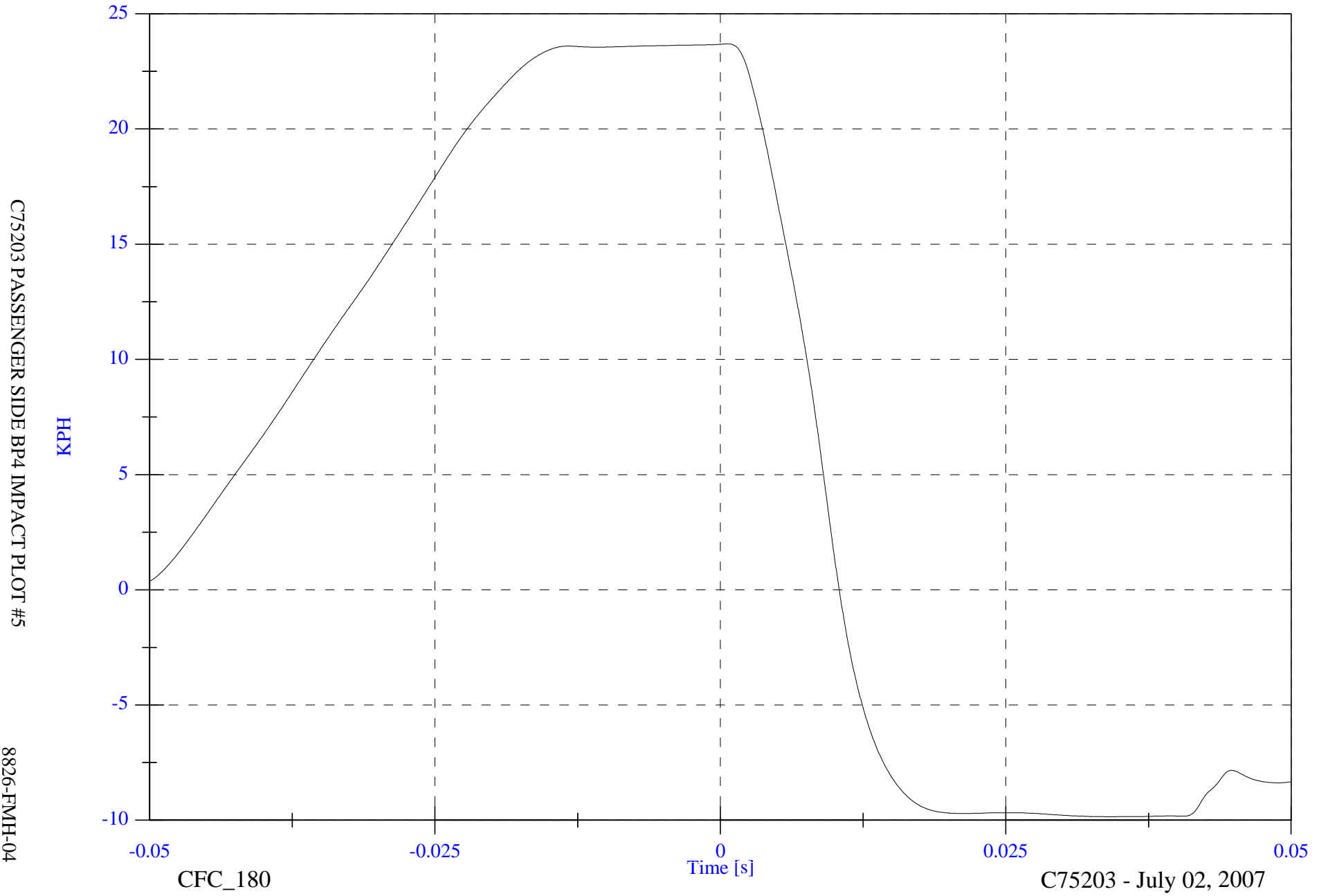


FMVSS 201U 2007 Nissan Versa

Max: 23.7 [KPH] at 0.001 [s]

Min: -9.8 [KPH] at 0.034 [s]

### Headform Velocity

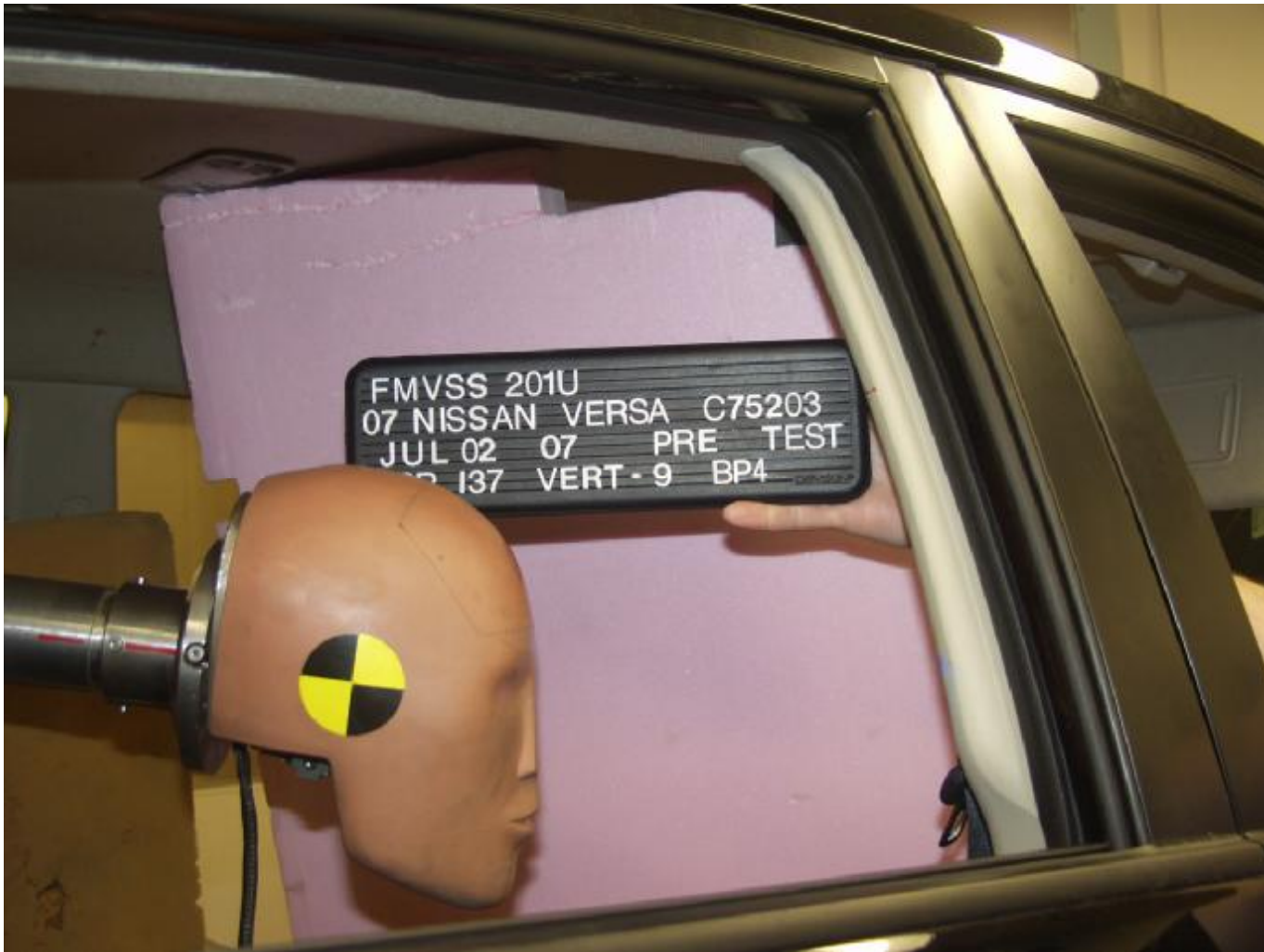


C75203 PASSENGER SIDE BP4 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 02, 2007



PRE-IMPACT BP4





POST-IMPACT BP4

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	04
Test Date:	07/02/07
Target Location:	B-PILLAR
Target Code:	BP3
Horizontal Impact Angle:	90°
Vertical Impact Angle:	(-10)°
Ambient Temperature:	22.0 C°
Relative Humidity:	37.7
Time of Impact:	11:50
Headform Number:	0805

Impact Point Description (from lower midpoint on midsagittal line)					
On Centerline	20	x	mm right		mm left
On Centerline	8				mm up



POST-IMPACT BP3 HEADFORM

Free Motion HIC	629.0
HIC(d)	640.9
Impact Velocity (kph)	23.62
HIC T1 (msec)	1.8
HIC T2 (msec)	9.0

# FMVSS 201U 2007 Nissan Versa C75203 - BP3

FMH Headform 0805

Location: BP3

Test Date: July 02, 2007

Work File: BP3

## -----TEST RESULTS-----

Lab Temperature: 22.0 C

HICd: 640.9

Lab Humidity: 37.7 %

HIC (36ms): 629.0

Velocity at Impact: 23.62 KPH

t1: 1.8 msec

t2: 9.0 msec

Free Flight Distance: 221.26 mm

Duration: 7.3 msec

Maximum: 127.0 g

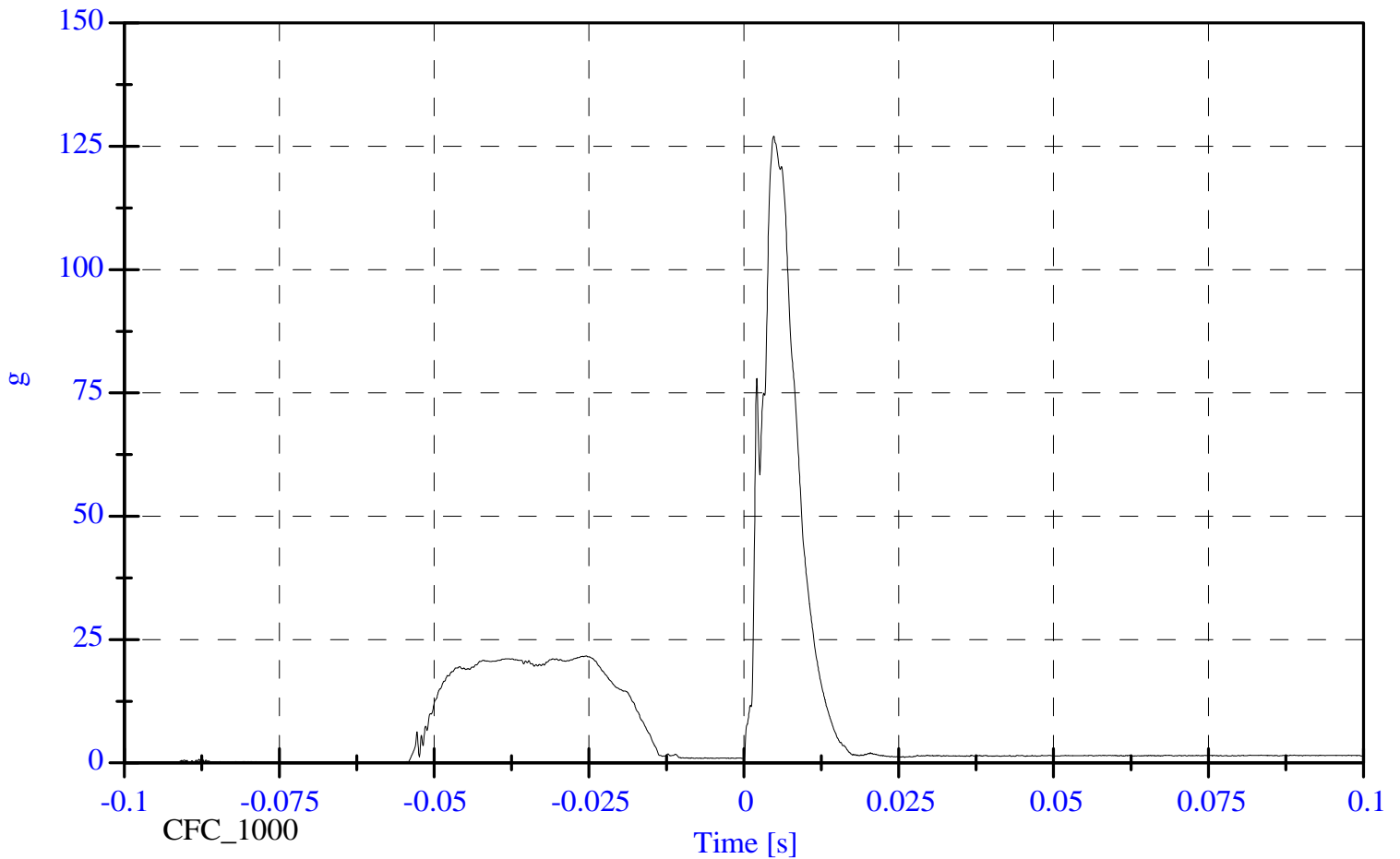
Average Acceleration: 8.3 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 127.0 [g] at 0.005 [s]

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

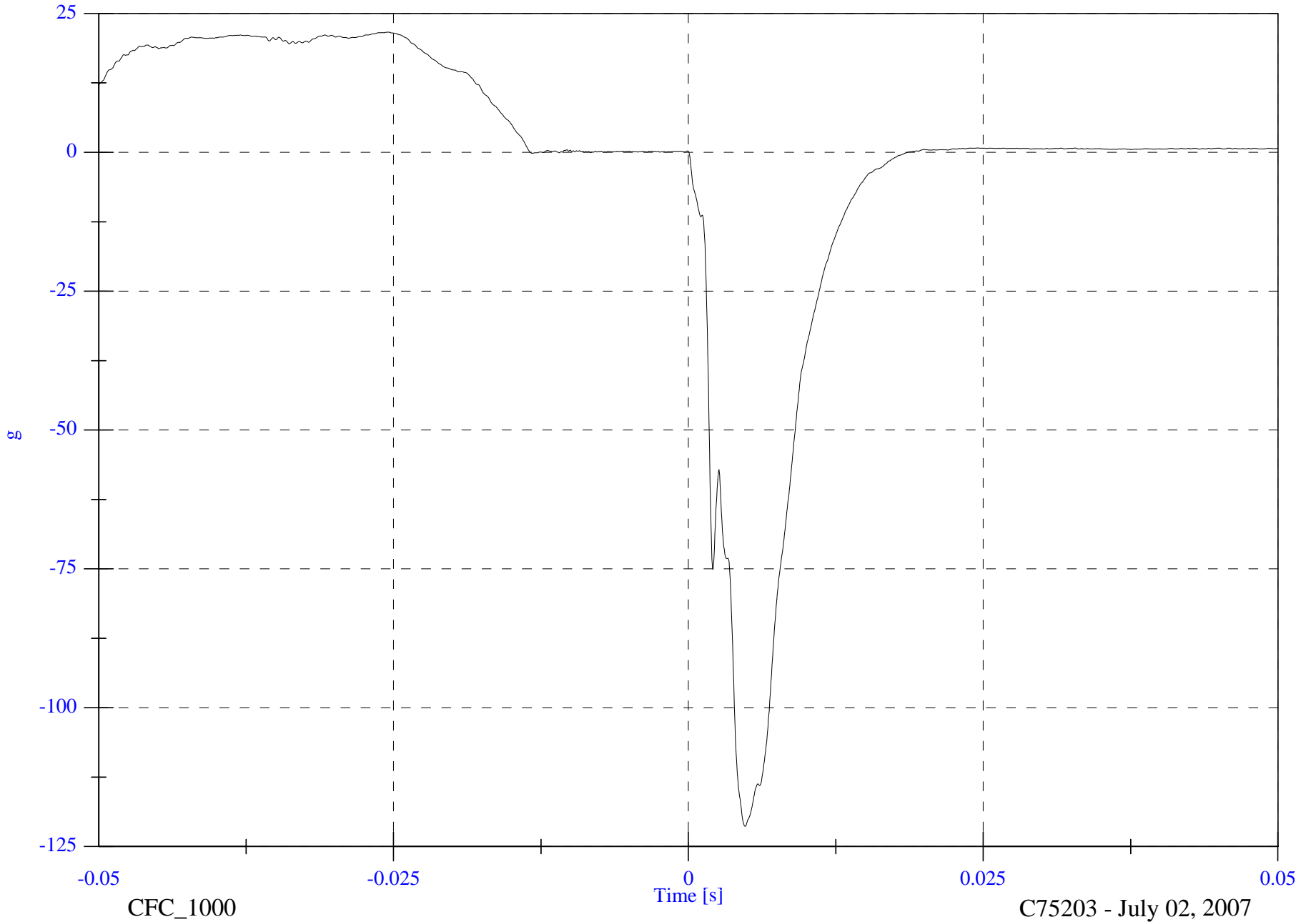


FMVSS 201U 2007 Nissan Versa

Max: 21.7 [g] at -0.025 [s]

Min: -121.4 [g] at 0.005 [s]

### Headform X Acceleration



C75203 PASSENGER SIDE BP3 IMPACT PLOT #1

8826-FMH-04

CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

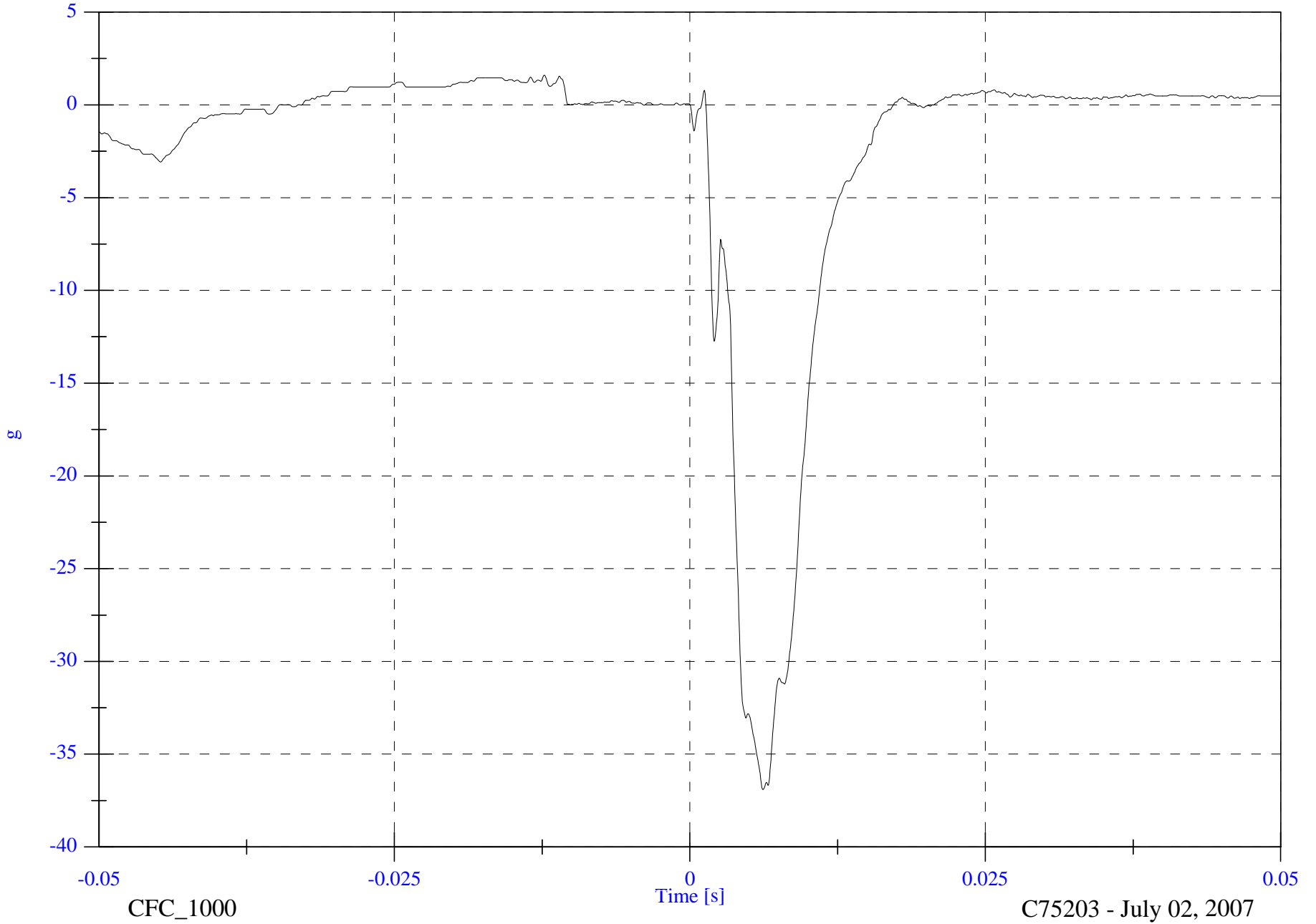
Headform Y Acceleration

Max: 1.6 [g] at -0.012 [s]

Min: -36.9 [g] at 0.006 [s]

C75203 PASSENGER SIDE BP3 IMPACT PLOT #2

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

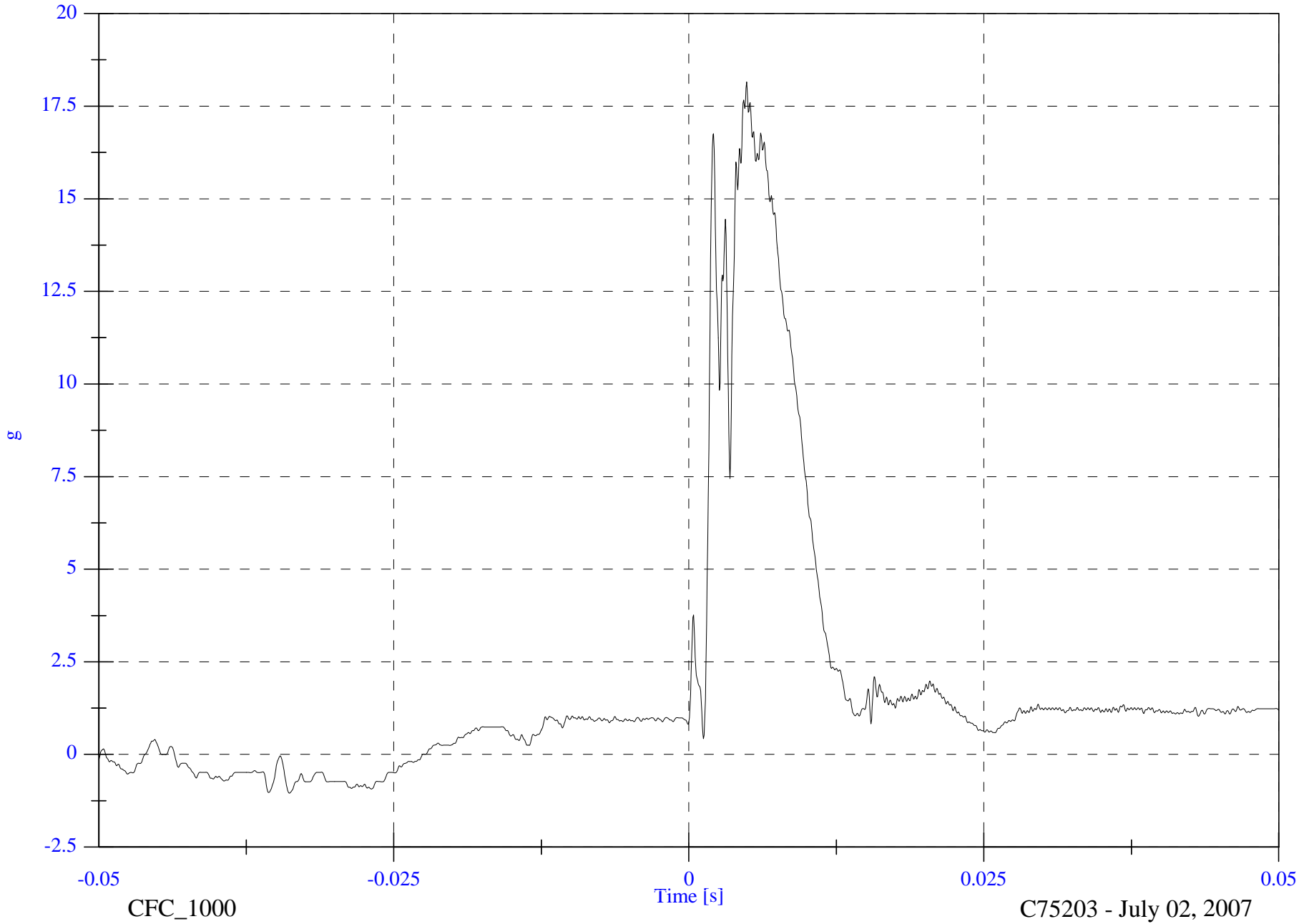
Max: 18.2 [g] at 0.005 [s]

Headform Z Acceleration

Min: -1.0 [g] at -0.034 [s]

C75203 PASSENGER SIDE BP3 IMPACT PLOT #3

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

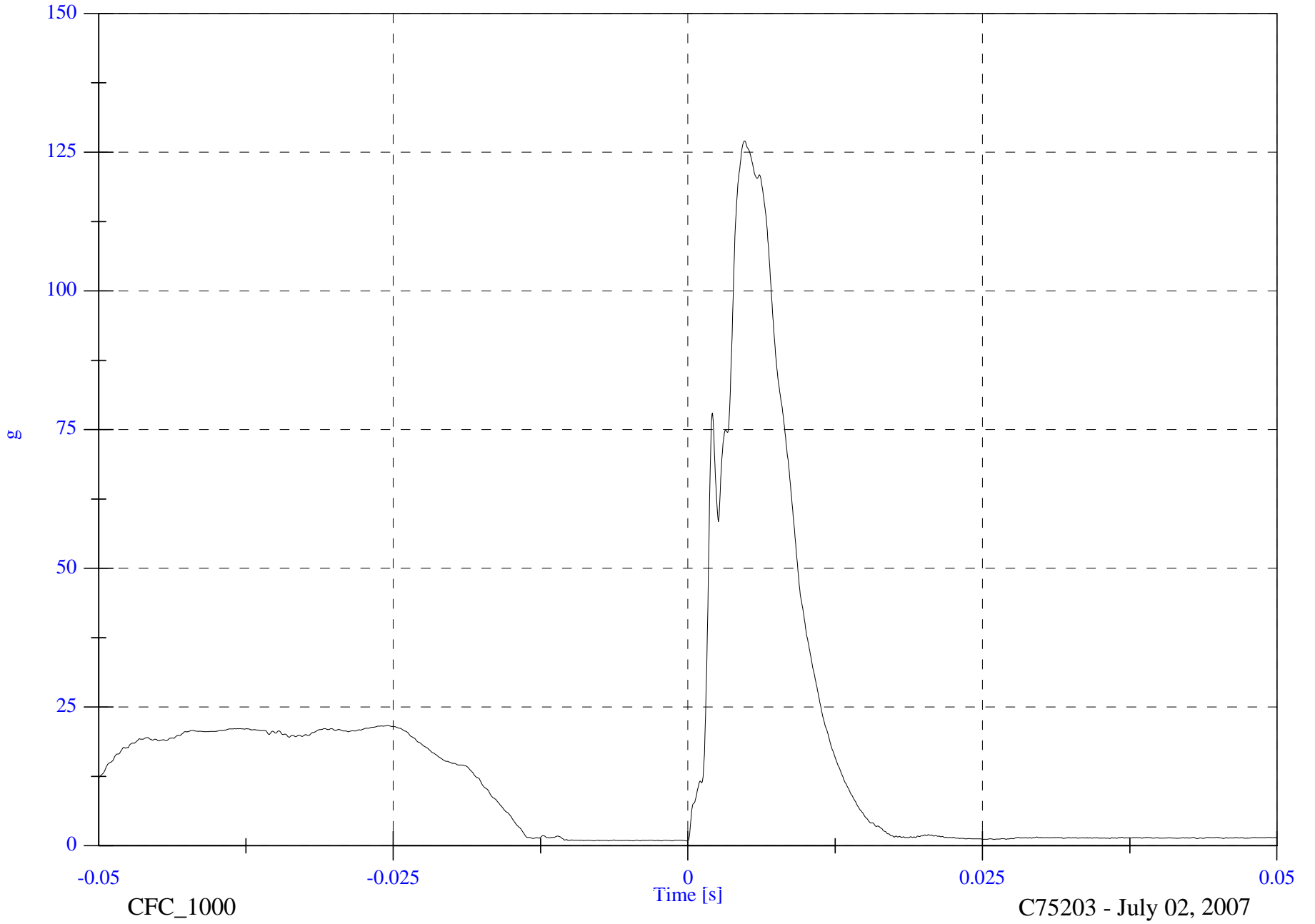
Headform Resultant

Max: 127.0 [g] at 0.005 [s]

Min: 0.9 [g] at -0.000 [s]

C75203 PASSENGER SIDE BP3 IMPACT PLOT #4

8826-FMH-04



CFC\_1000

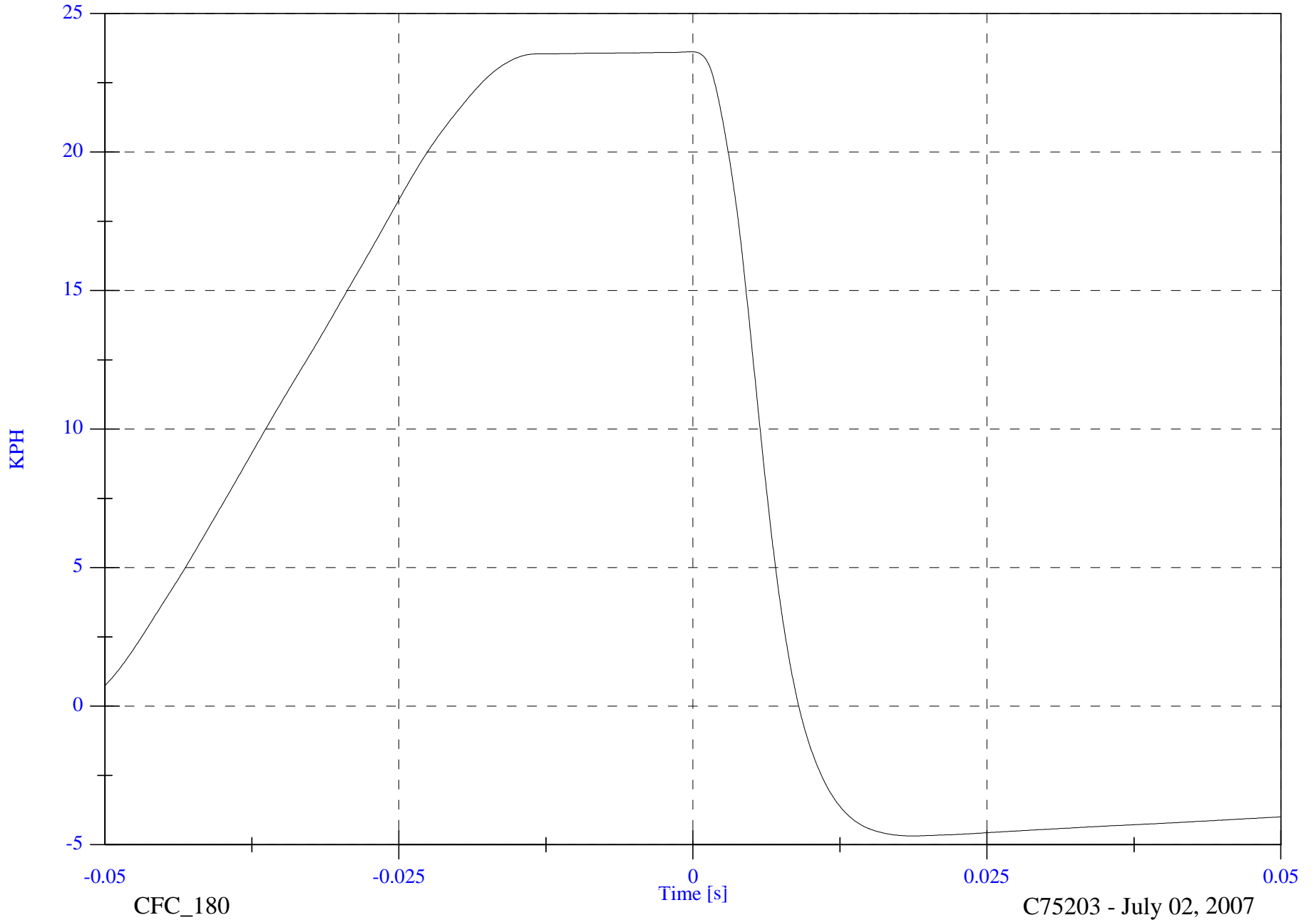
C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

Max: 23.6 [KPH] at -0.000 [s]

Min: -4.7 [KPH] at 0.019 [s]

### Headform Velocity



C75203 PASSENGER SIDE BP3 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 02, 2007





PRE-IMPACT BP3



POST-IMPACT BP3

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	05
Test Date:	07/02/07
Target Location:	B-PILLAR
Target Code:	BP1
Horizontal Impact Angle:	90°
Vertical Impact Angle:	22°
Ambient Temperature:	21.9 C°
Relative Humidity:	37
Time of Impact:	13:30
Headform Number:	1255

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	0	<input type="checkbox"/>	mm right <input type="checkbox"/> mm left
On Centerline	22		mm up



POST-IMPACT BP1 HEADFORM

Free Motion HIC	462.3
HIC(d)	515.2
Impact Velocity (kph)	18.58
HIC T1 (msec)	5.6
HIC T2 (msec)	11.8

# FMVSS 201U 2007 Nissan Versa C75203 C75203 - BP1

FMH Headform 1255

Location: BP1

Test Date: July 02, 2007

Work File: BP1

## -----TEST RESULTS-----

Lab Temperature: 21.9 C

HICd: 515.2

Lab Humidity: 37.0 %

HIC (36ms): 462.3

Velocity at Impact: 18.58 KPH

t1: 5.6 msec

t2: 11.8 msec

Free Flight Distance: 215.61 mm

Duration: 6.2 msec

Maximum: 115.7 g

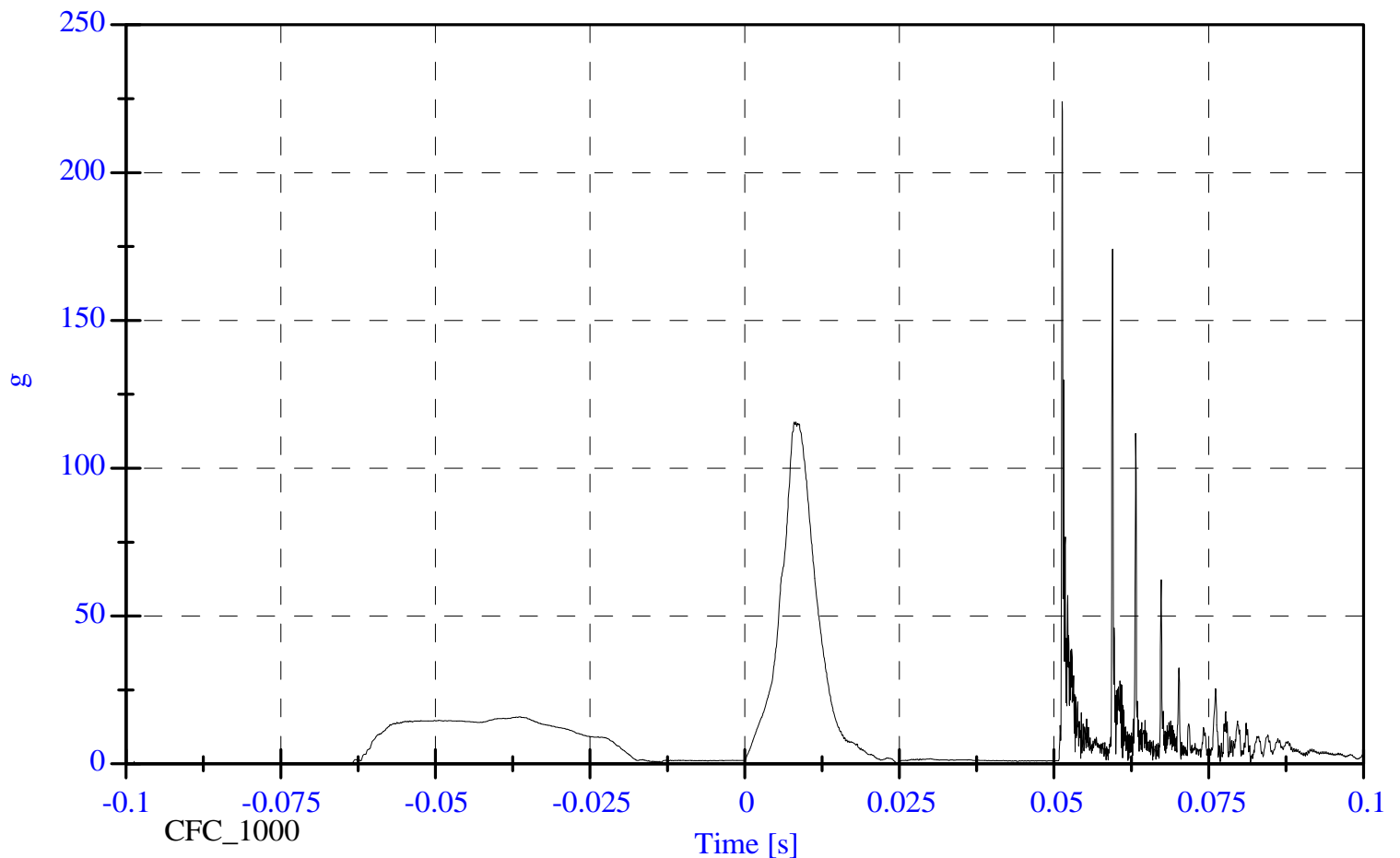
Average Acceleration: 9.6 g

FMVSS 201U 2007 Nissan Versa C75203

Max: 115.7 [g] at 0.008 [s]

Headform Resultant

Min: 0.0 [g] at -0.092 [s]

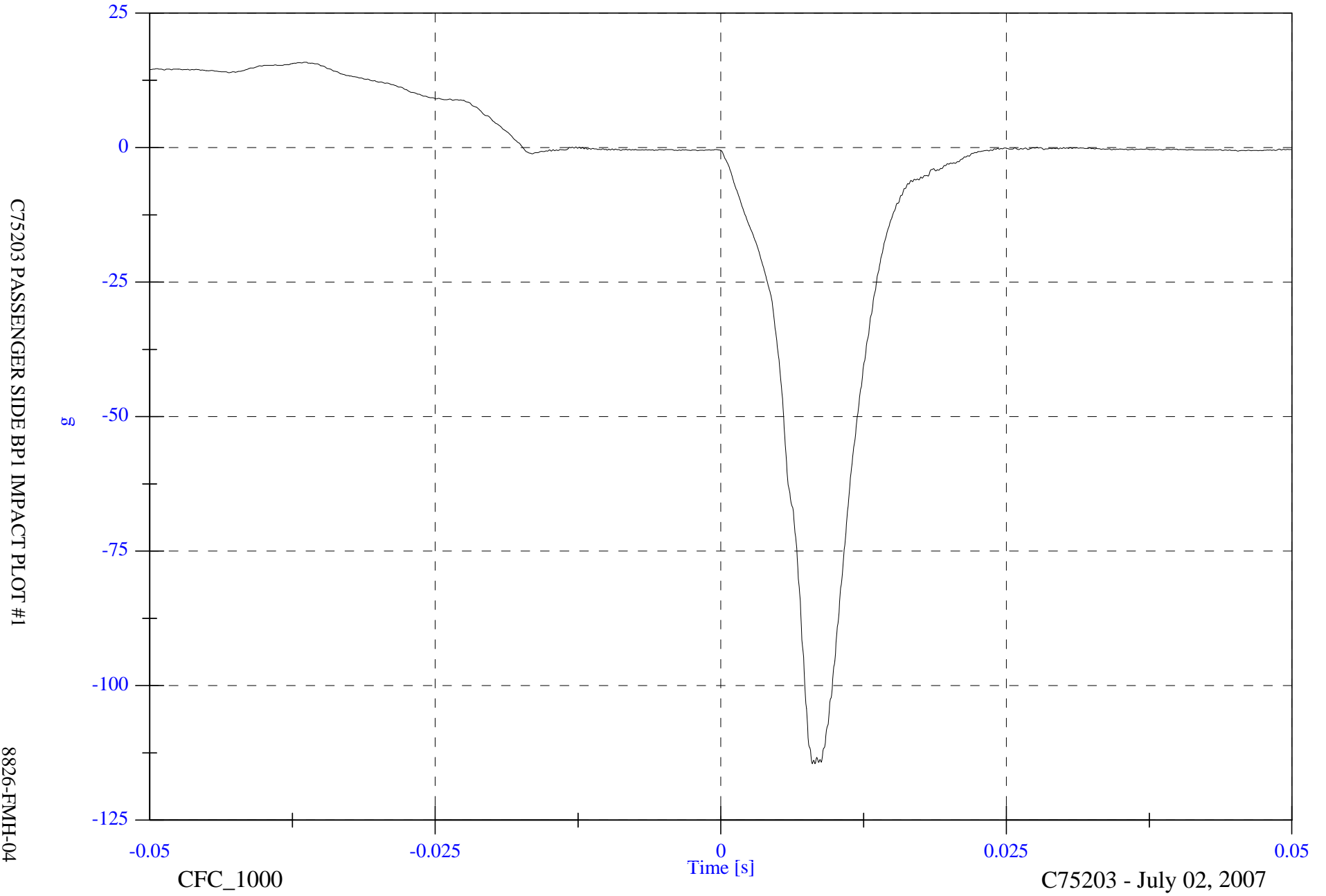


FMVSS 201U 2007 Nissan Versa C75203

Max: 15.9 [g] at -0.036 [s]

### Headform X Acceleration

Min: -114.5 [g] at 0.008 [s]



C75203 PASSENGER SIDE BP1 IMPACT PLOT #1

8826-FMH-04

CFC\_1000

C75203 - July 02, 2007

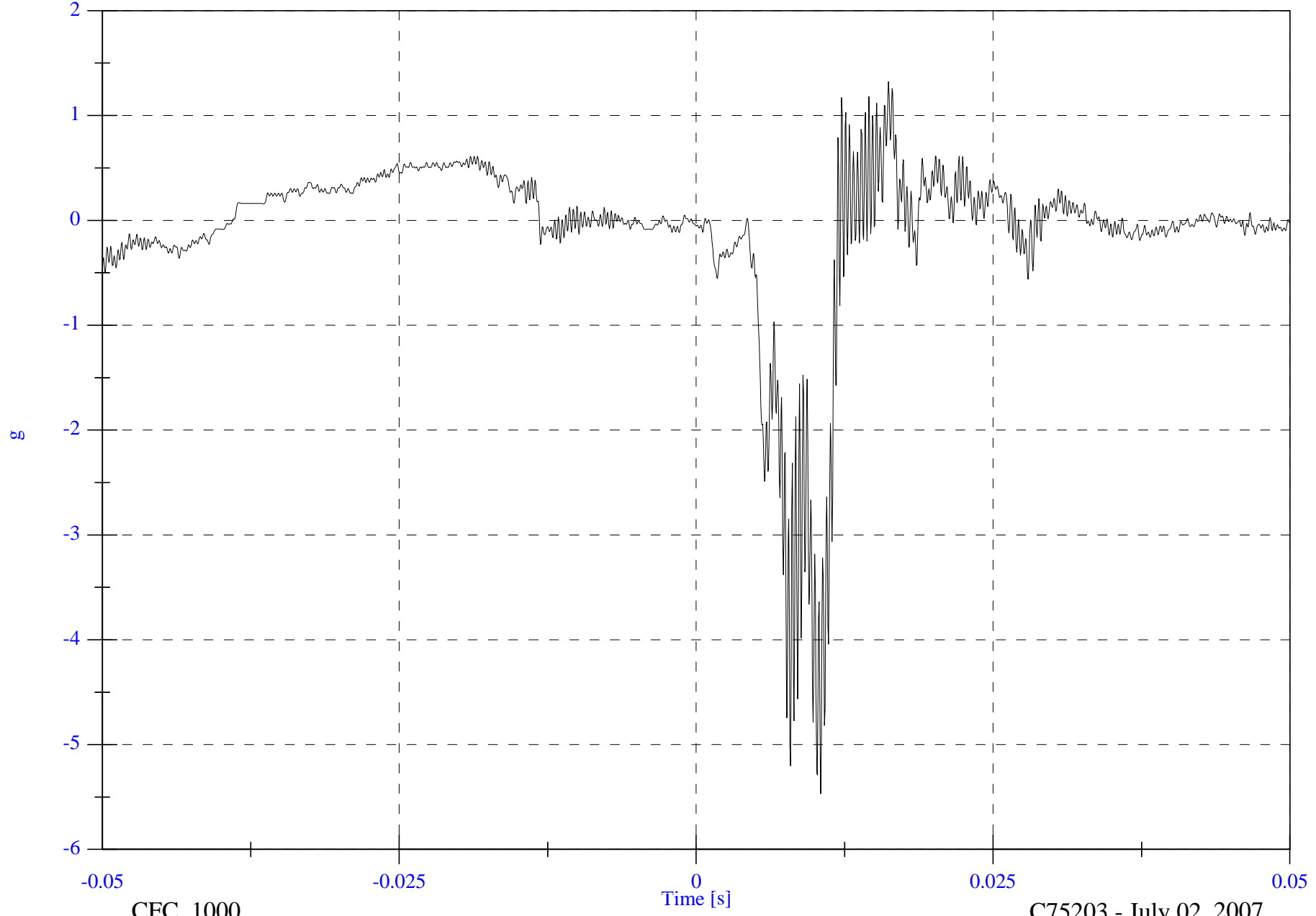
FMVSS 201U 2007 Nissan Versa C75203

Max: 1.3 [g] at 0.016 [s]

### Headform Y Acceleration

Min: -5.5 [g] at 0.011 [s]

C75203 PASSENGER SIDE BP1 IMPACT PLOT #2



8826-FMH-04

CFC\_1000

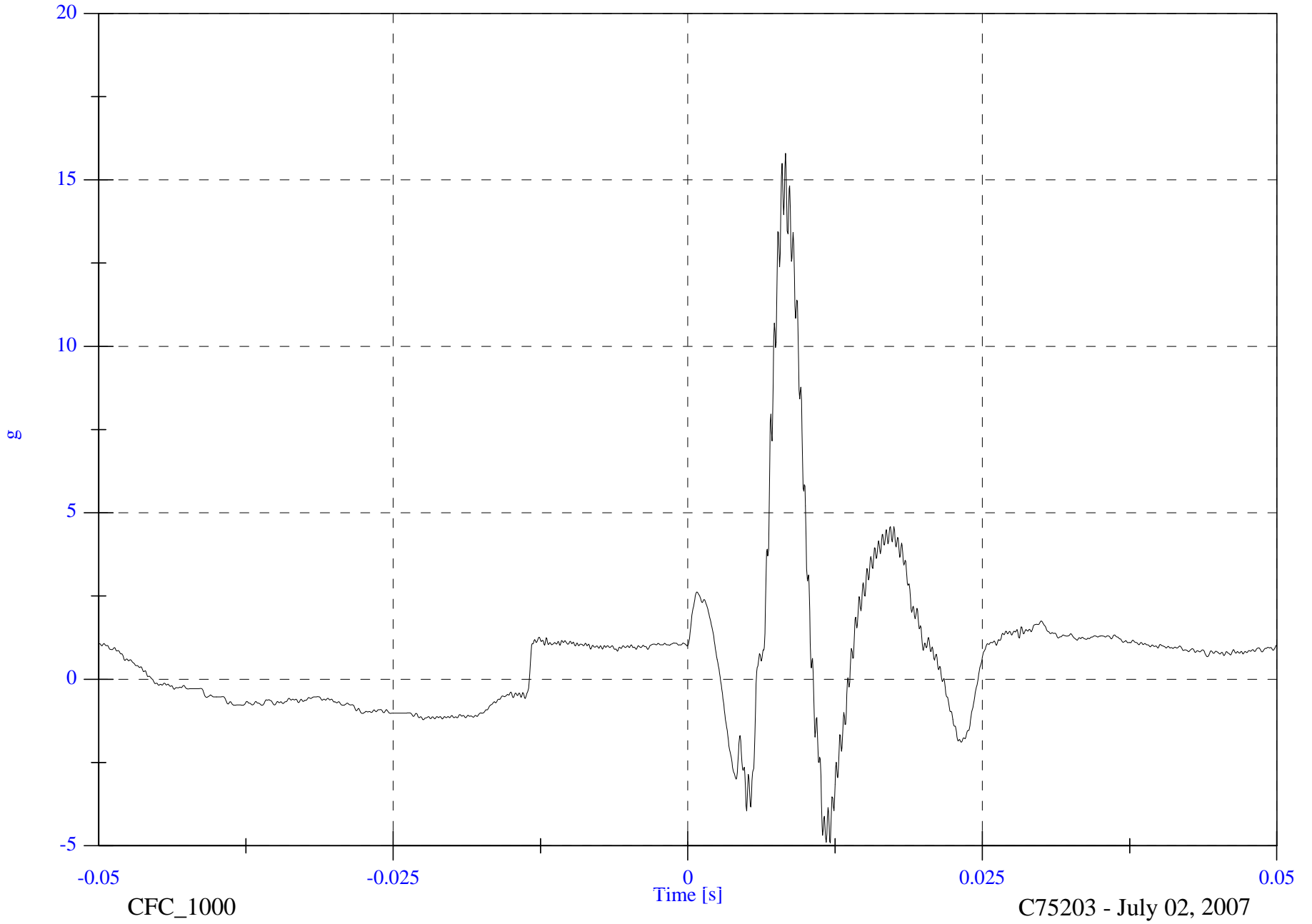
C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa C75203

Max: 15.8 [g] at 0.008 [s]

Min: -4.9 [g] at 0.012 [s]

### Headform Z Acceleration



C75203 PASSENGER SIDE BP1 IMPACT PLOT #3

8826-FMH-04

CFC\_1000

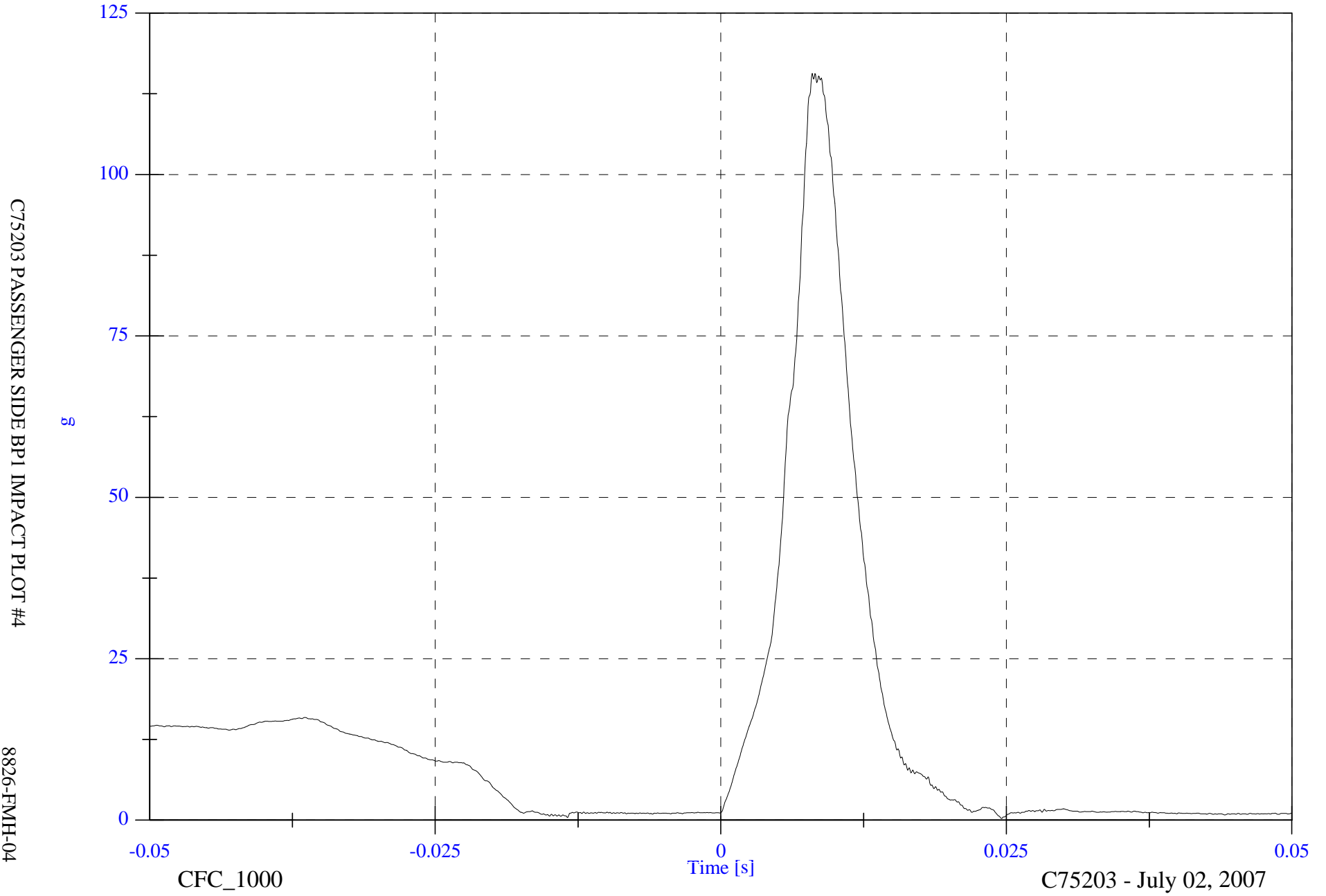
C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa C75203

Max: 115.7 [g] at 0.008 [s]

Min: 0.3 [g] at 0.025 [s]

### Headform Resultant



C75203 PASSENGER SIDE BP1 IMPACT PLOT #4

8826-FMH-04

CFC\_1000

C75203 - July 02, 2007

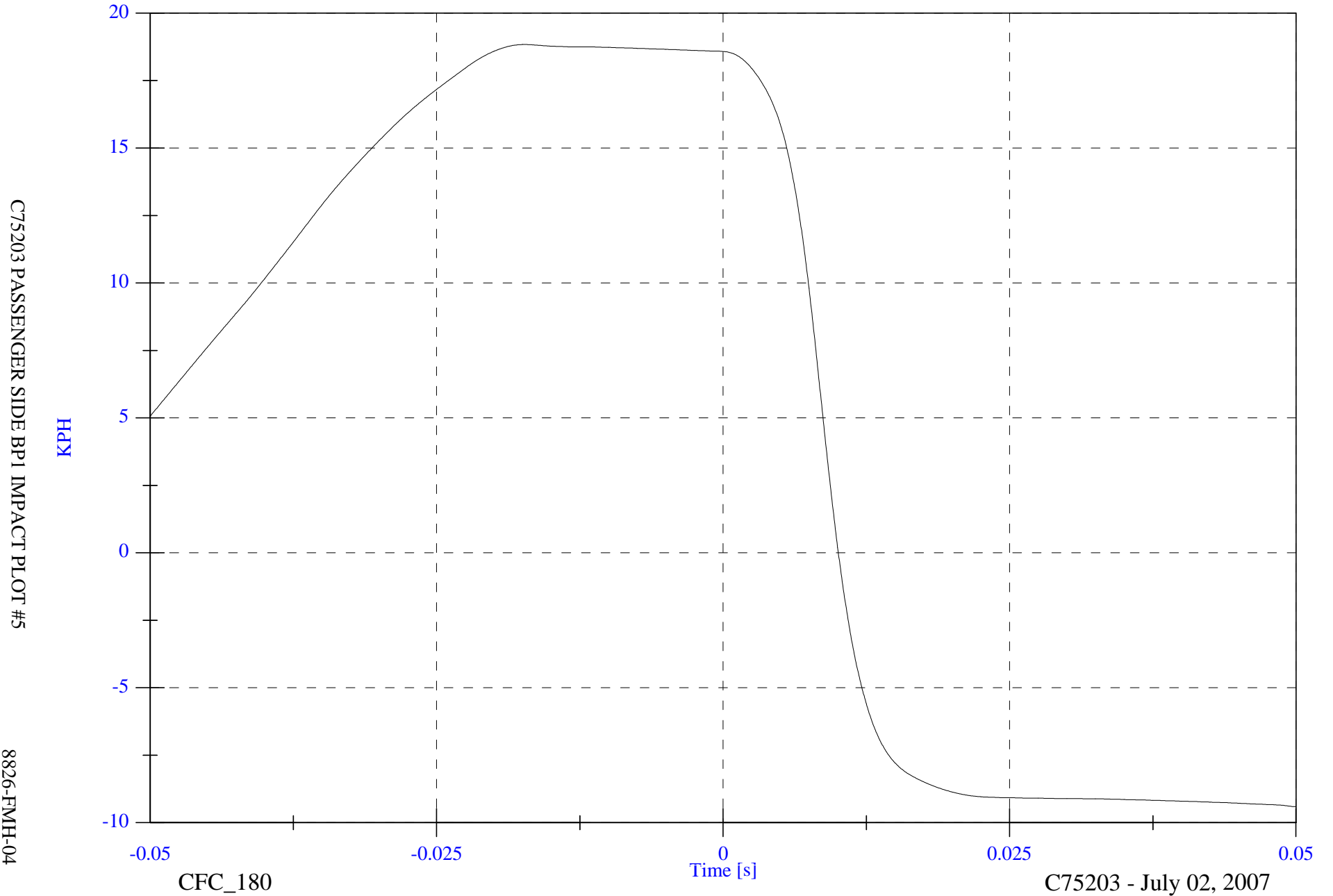


FMVSS 201U 2007 Nissan Versa C75203

Max: 18.8 [KPH] at -0.017 [s]

Min: -9.4 [KPH] at 0.050 [s]

### Headform Velocity



C75203 PASSENGER SIDE BP1 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 02, 2007



PRE-IMPACT BPI



POST-IMPACT BPI

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	06
Test Date:	07/02/07
Target Location:	A-PILLAR
Target Code:	AP3
Horizontal Impact Angle:	145°
Vertical Impact Angle:	42°
Ambient Temperature:	22.1 C°
Relative Humidity:	36.7
Time of Impact:	14:25
Headform Number:	0062

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	8	mm right	x mm left
On Centerline	9	mm up	



POST-IMPACT AP3 HEADFORM

Free Motion HIC	619.0
HIC(d)	633.4
Impact Velocity (kph)	18.75
HIC T1 (msec)	2.1
HIC T2 (msec)	7.1

# FMVSS 201U 2007 Nissan Versa C75203 - AP3

FMH Headform 0062

Location: AP3

Test Date: July 02, 2007

Work File: AP3

## -----TEST RESULTS-----

Lab Temperature: 22.1 C

HICd: 633.4

Lab Humidity: 36.7 %

HIC (36ms): 619.0

Velocity at Impact: 18.75 KPH

t1: 2.1 msec

t2: 7.1 msec

Free Flight Distance: 215.19 mm

Duration: 5.1 msec

Maximum: 135.5 g

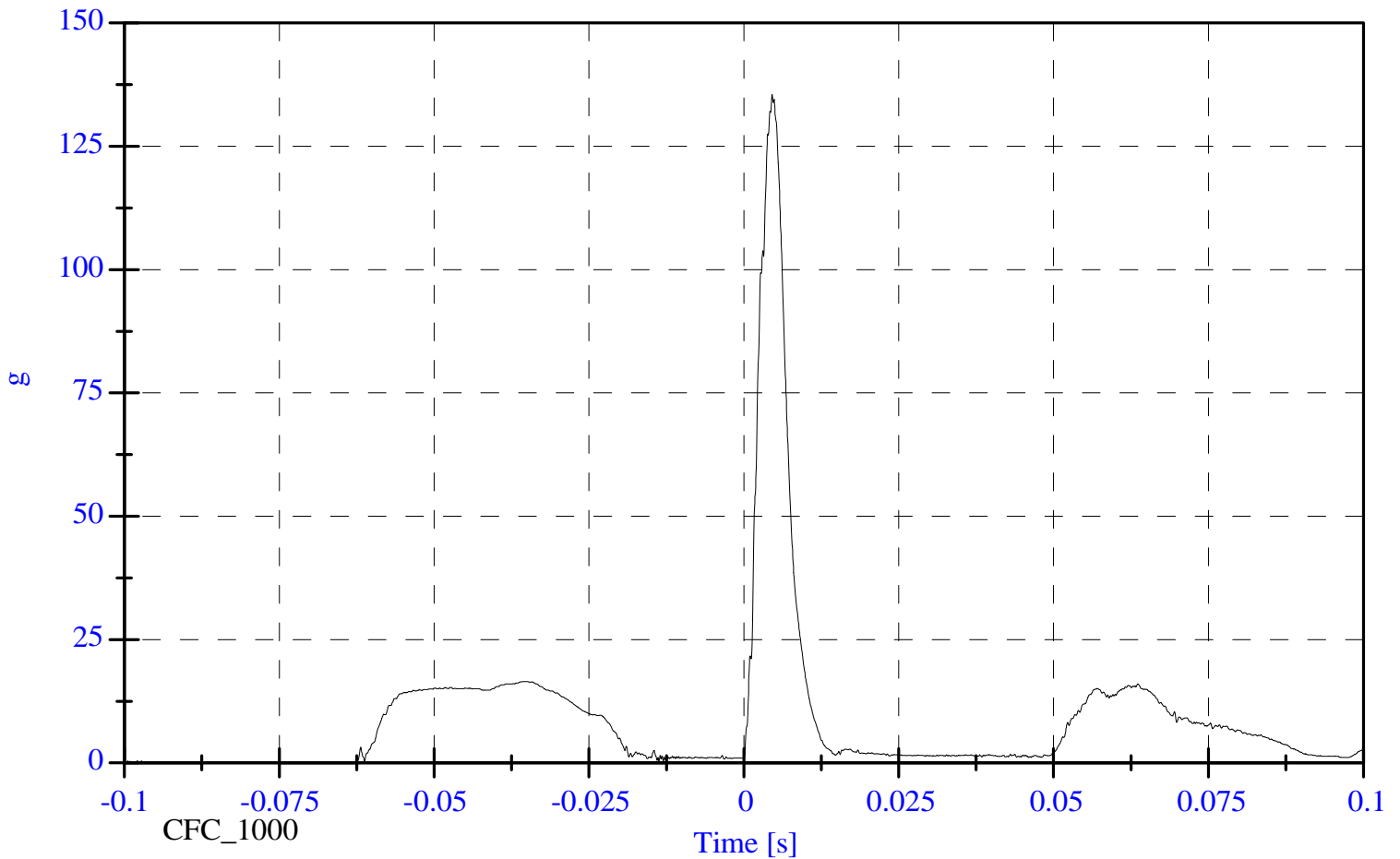
Average Acceleration: 8.7 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 135.5 [g] at 0.005 [s]

Min: 0.0 [g] at -0.092 [s]



FMVSS 201U 2007 Nissan Versa

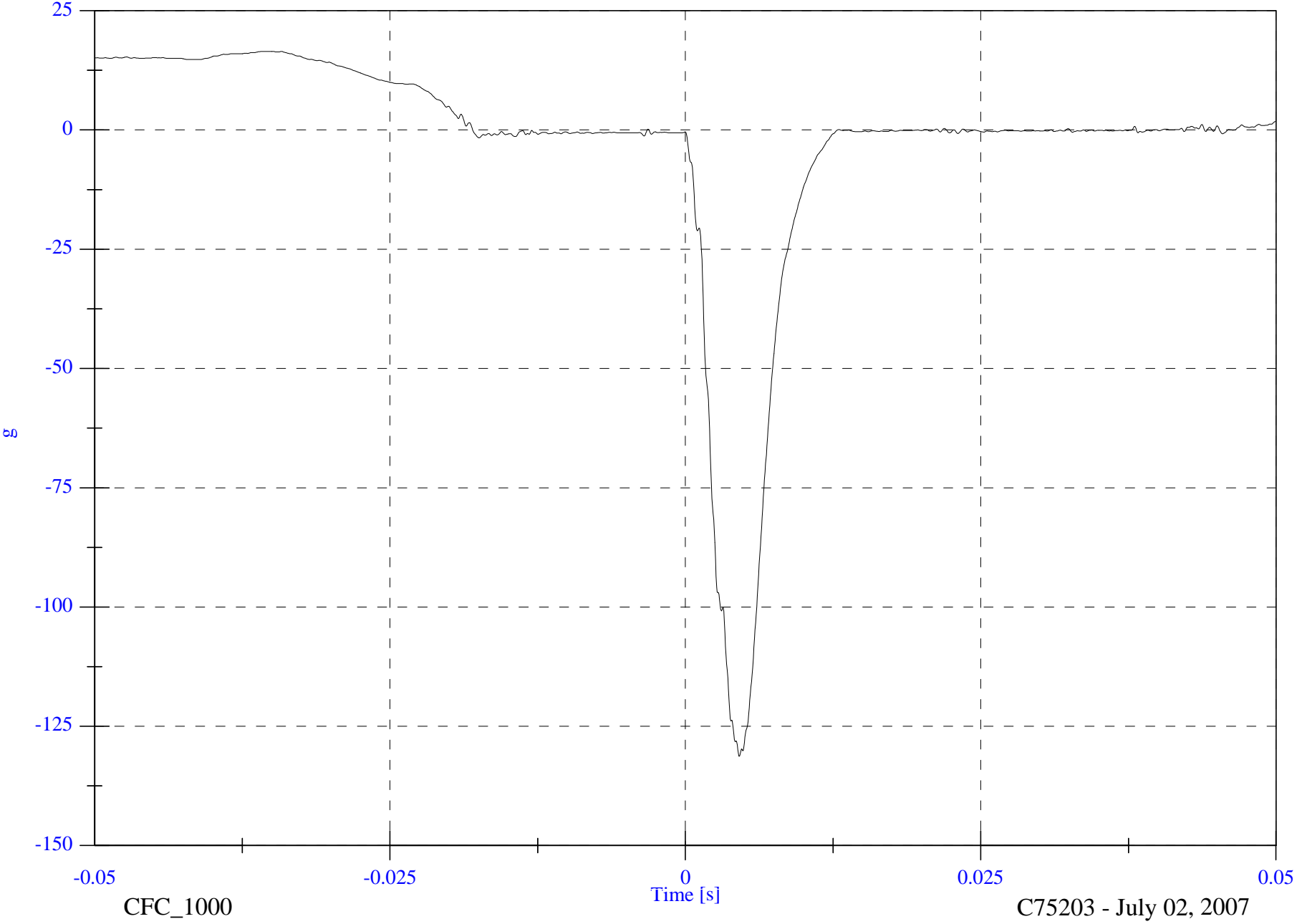
### Headform X Acceleration

Max: 16.5 [g] at -0.035 [s]

Min: -131.3 [g] at 0.005 [s]

C75203 PASSENGER SIDE AP3 IMPACT PLOT #1

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

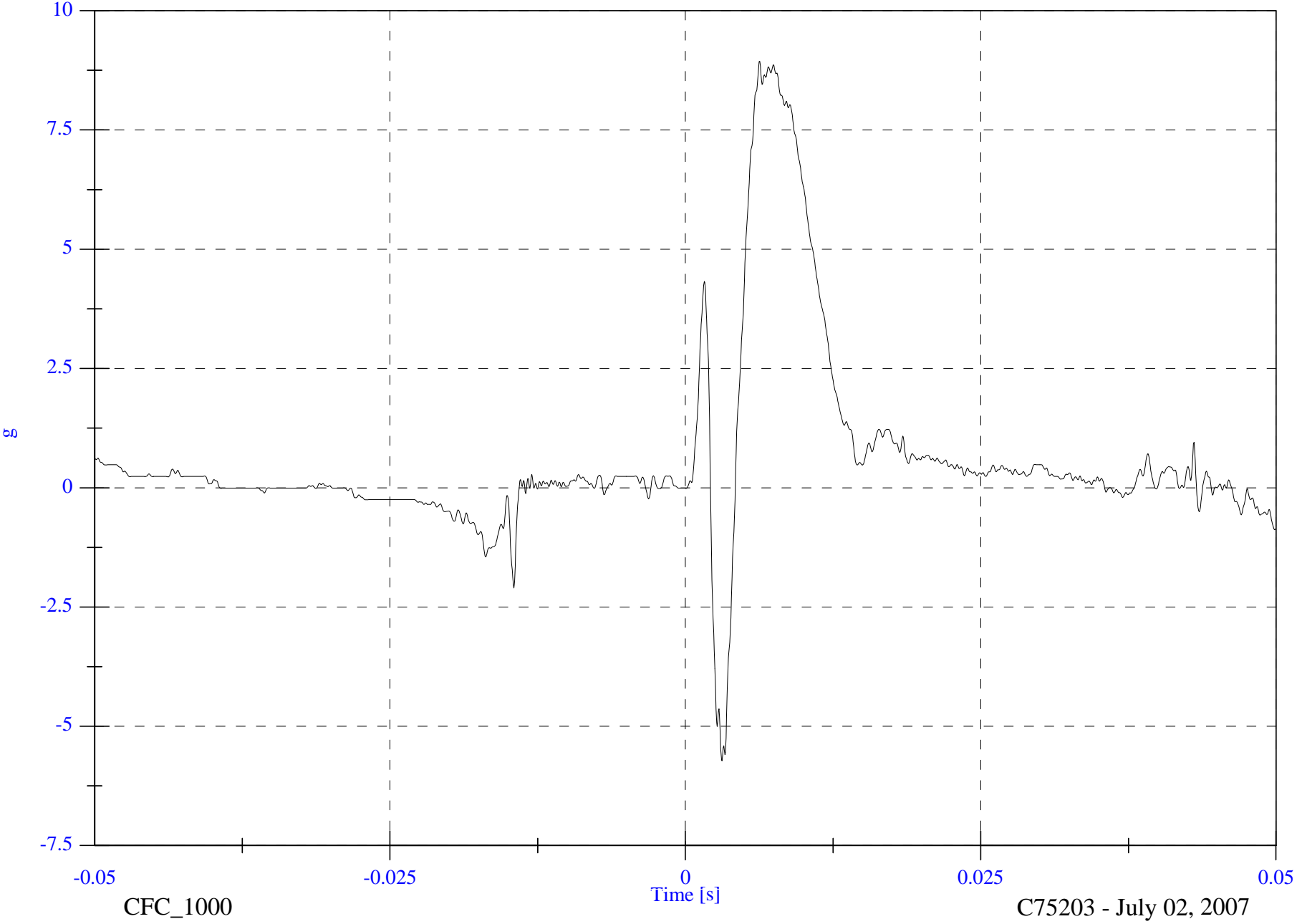
### Headform Y Acceleration

Max: 8.9 [g] at 0.006 [s]

Min: -5.7 [g] at 0.003 [s]

C75203 PASSENGER SIDE AP3 IMPACT PLOT #2

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

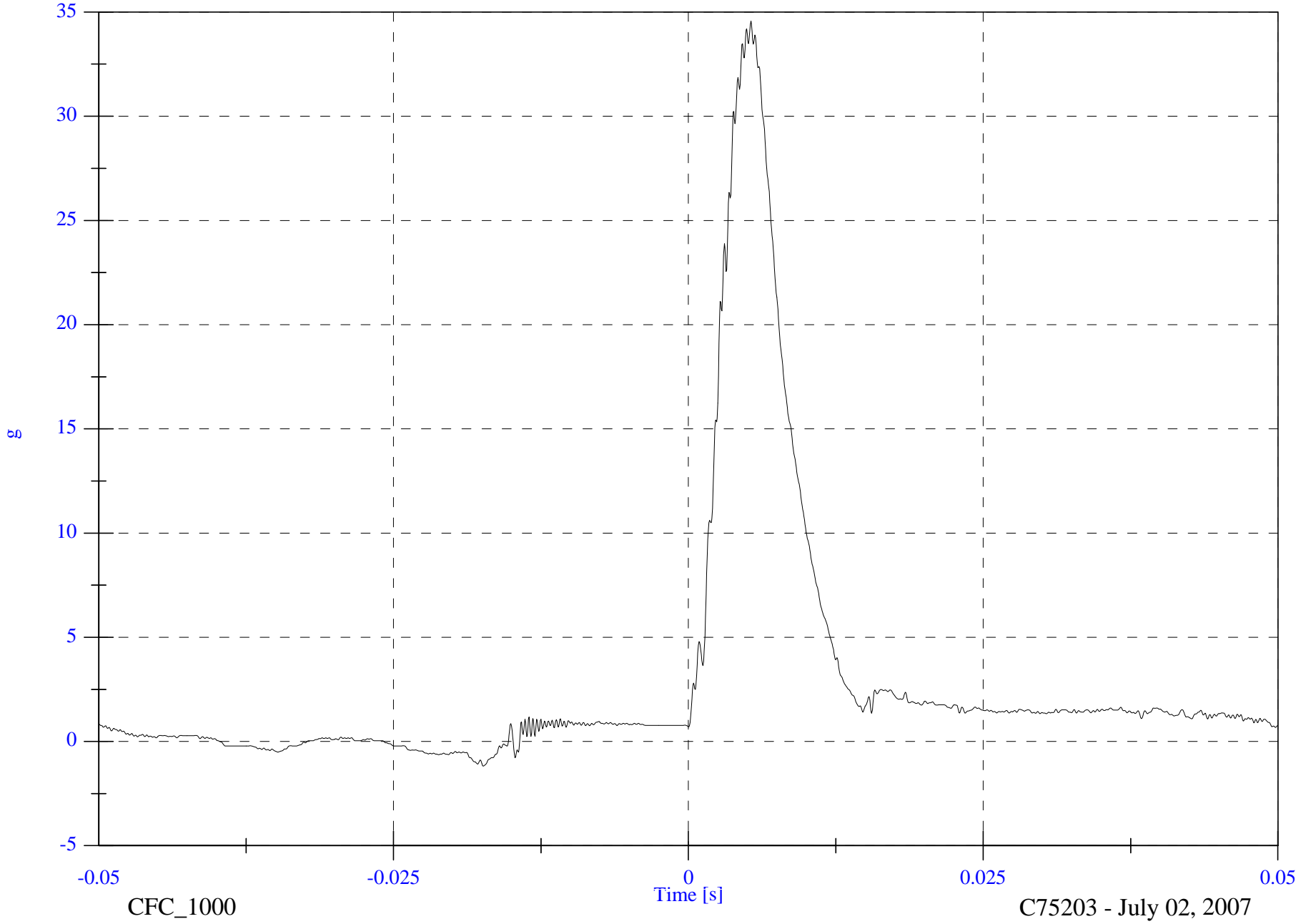
FMVSS 201U 2007 Nissan Versa

### Headform Z Acceleration

Max: 34.6 [g] at 0.005 [s]  
Min: -1.2 [g] at -0.017 [s]

C75203 PASSENGER SIDE AP3 IMPACT PLOT #3

8826-FMH-04





FMVSS 201U 2007 Nissan Versa

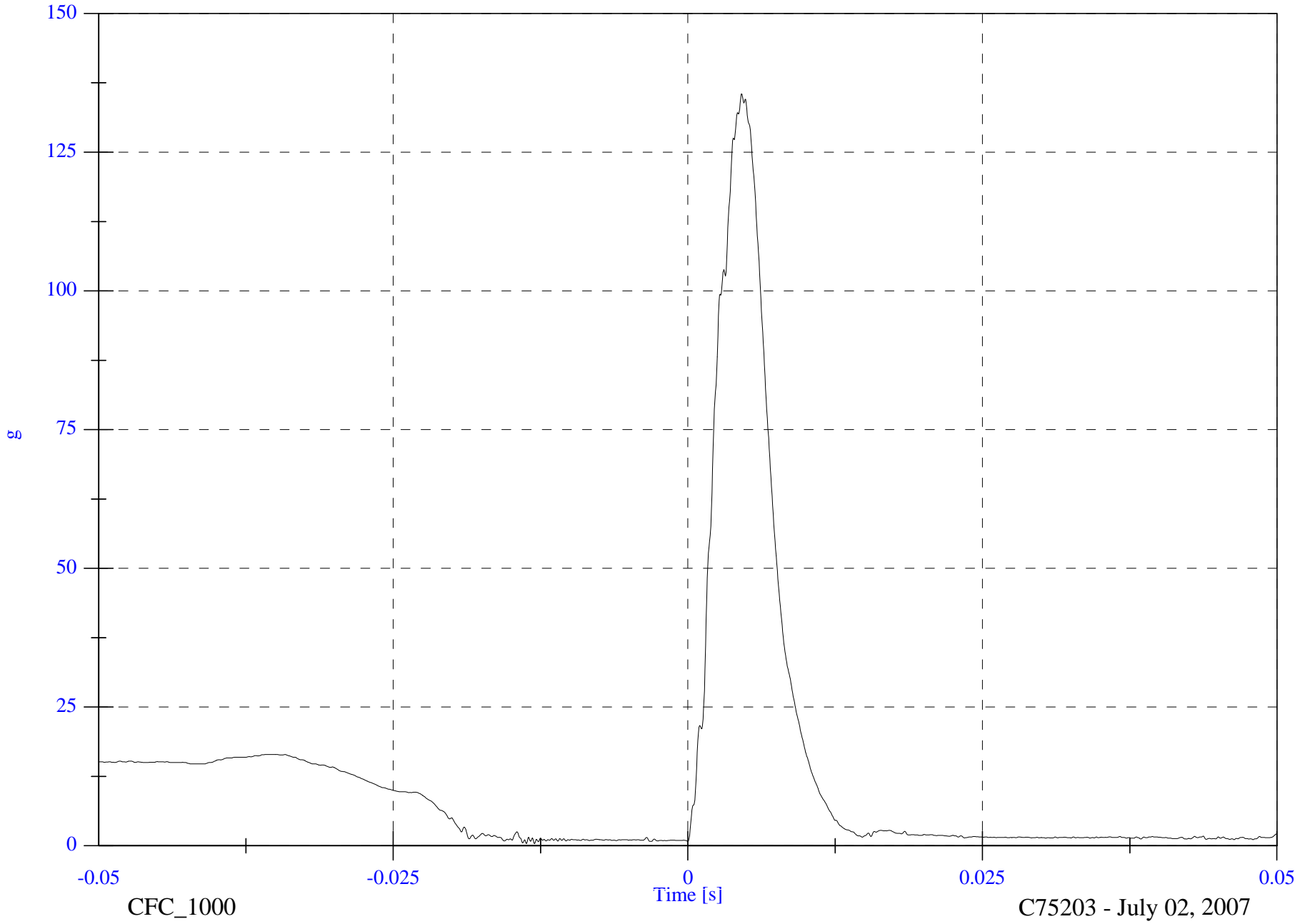
### Headform Resultant

Max: 135.5 [g] at 0.005 [s]

Min: 0.4 [g] at -0.014 [s]

C75203 PASSENGER SIDE AP3 IMPACT PLOT #4

8826-FMH-04

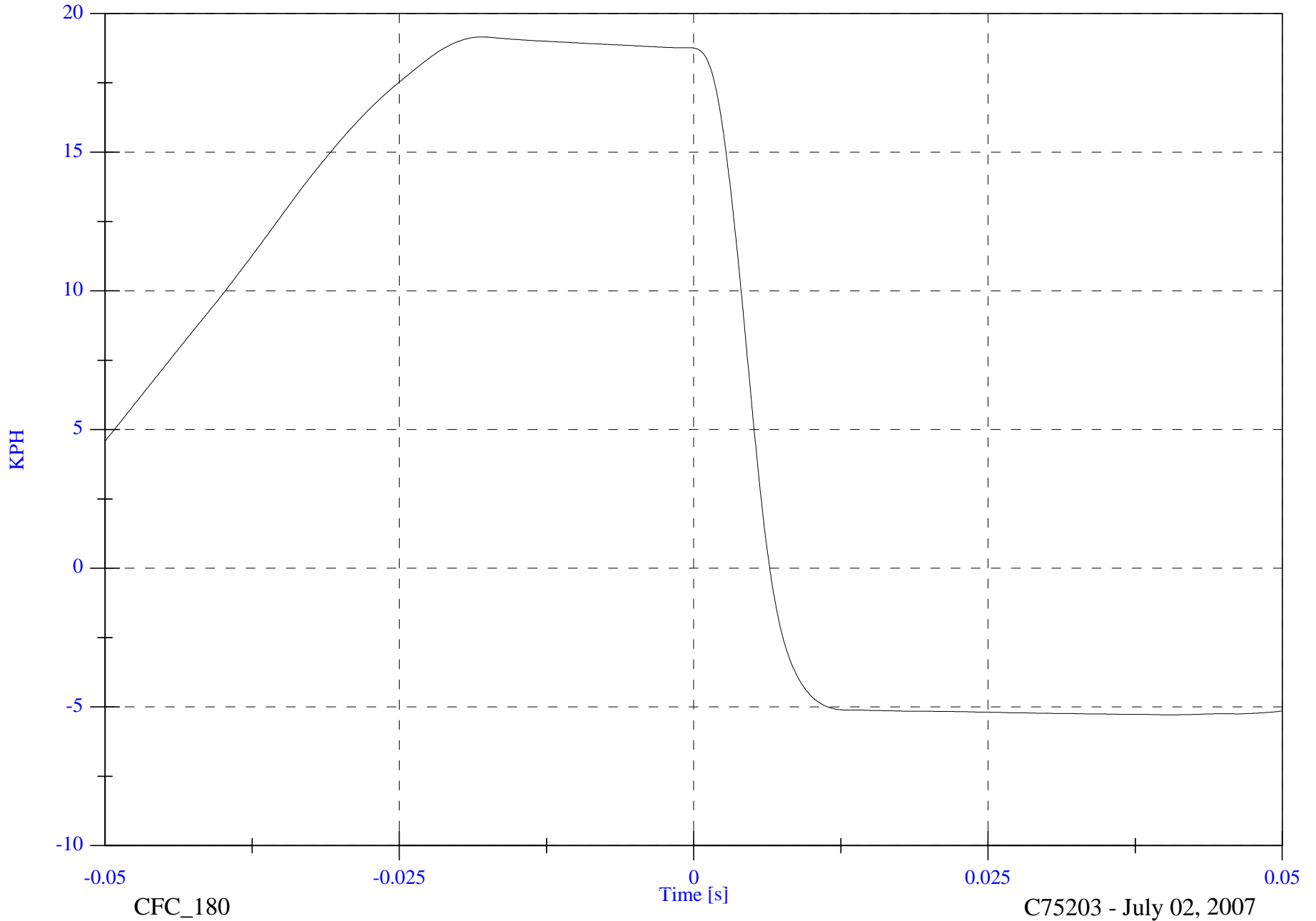


FMVSS 201U 2007 Nissan Versa

Max: 19.2 [KPH] at -0.018 [s]

Min: -5.3 [KPH] at 0.040 [s]

### Headform Velocity



C75203 PASSENGER SIDE AP3 IMPACT PLOT #5

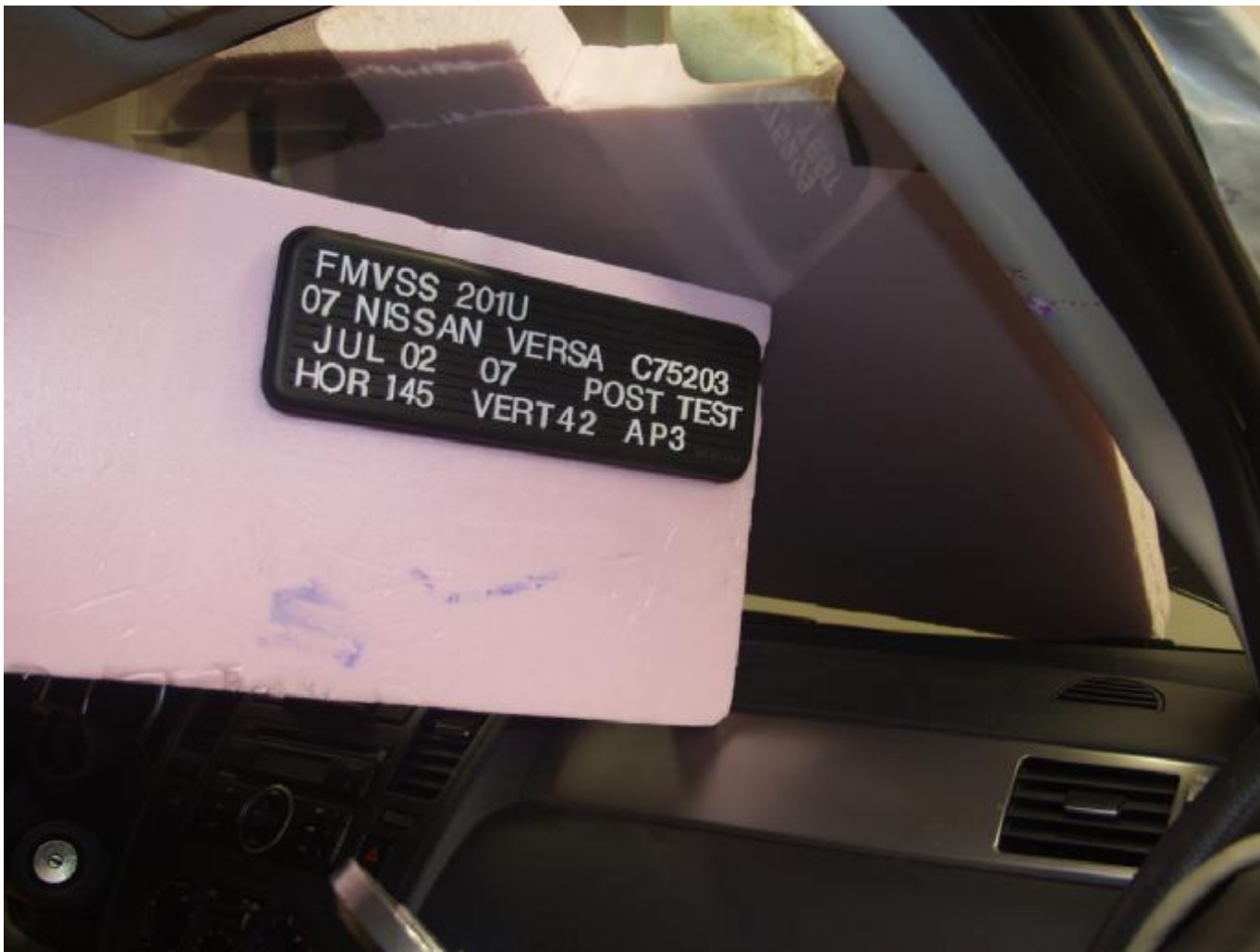
8826-FMH-04

CFC\_180

C75203 - July 02, 2007



PRE-IMPACT AP3



POST-IMPACT AP3

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	07
Test Date:	07/02/07
Target Location:	A-PILLAR
Target Code:	AP1
Horizontal Impact Angle:	121°
Vertical Impact Angle:	22°
Ambient Temperature:	22.1C°
Relative Humidity:	36.7
Time of Impact:	15:10
Headform Number:	0355

Impact Point Description (from lower midpoint on midsagittal line)				
On Centerline	32	x	mm right	mm left
On Centerline	18		mm up	



POST-IMPACT AP1 HEADFORM

Free Motion HIC	220.5
HIC(d)	332.8
Impact Velocity (kph)	18.52
HIC T1 (msec)	3.7
HIC T2 (msec)	11.1

# FMVSS 201U 2007 Nissan Versa C75203 - AP1

FMH Headform 0355

Location: AP1

Test Date: July 02, 2007

Work File: AP1

## -----TEST RESULTS-----

Lab Temperature: 22.1 C

HICd: 332.8

Lab Humidity: 36.7 %

HIC (36ms): 220.5

Velocity at Impact: 18.52 KPH

t1: 3.7 msec

t2: 11.1 msec

Free Flight Distance: 217.84 mm

Duration: 7.4 msec

Maximum: 77.6 g

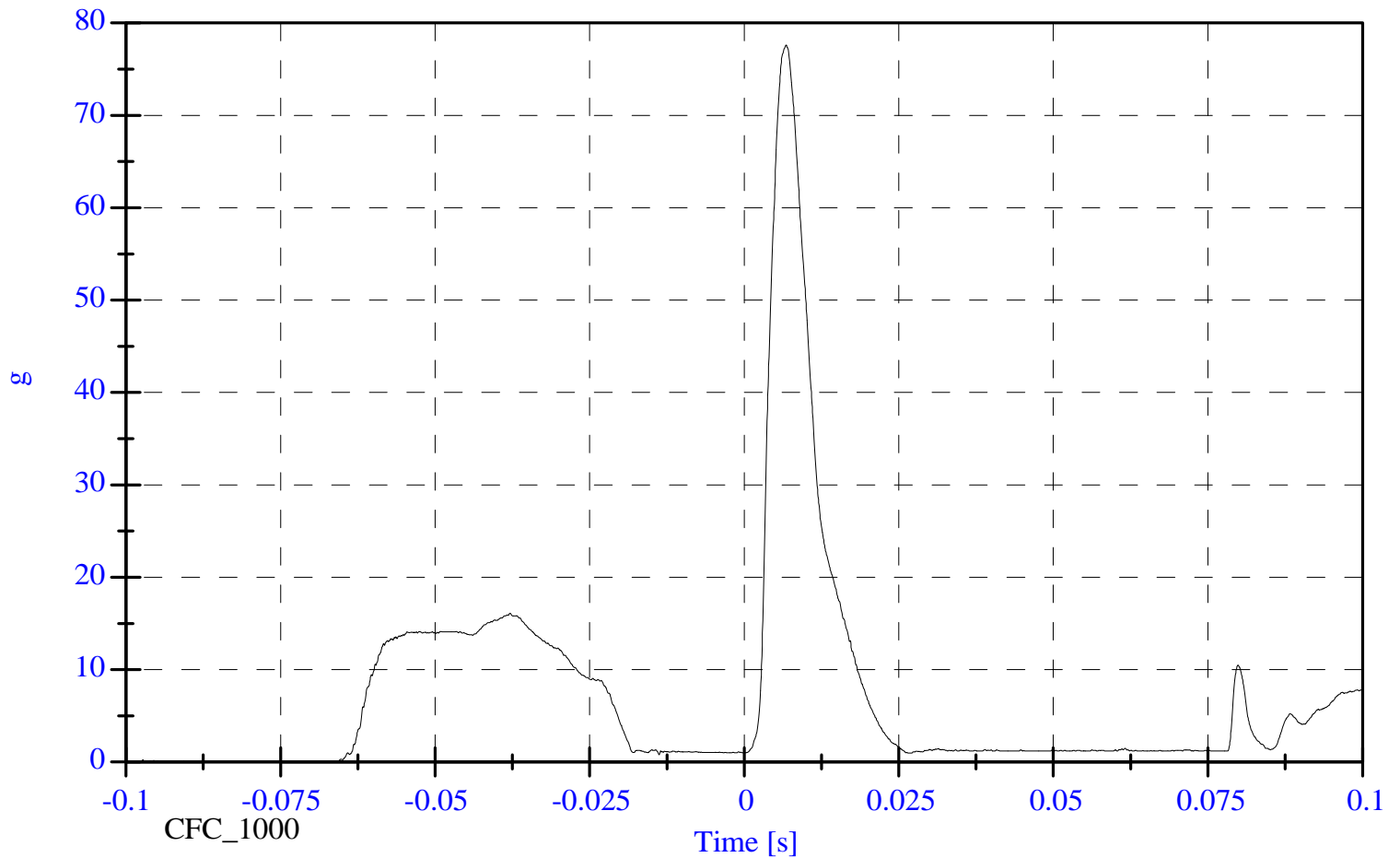
Average Acceleration: 7.1 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 77.6 [g] at 0.007 [s]

Min: 0.0 [g] at -0.077 [s]



FMVSS 201U 2007 Nissan Versa

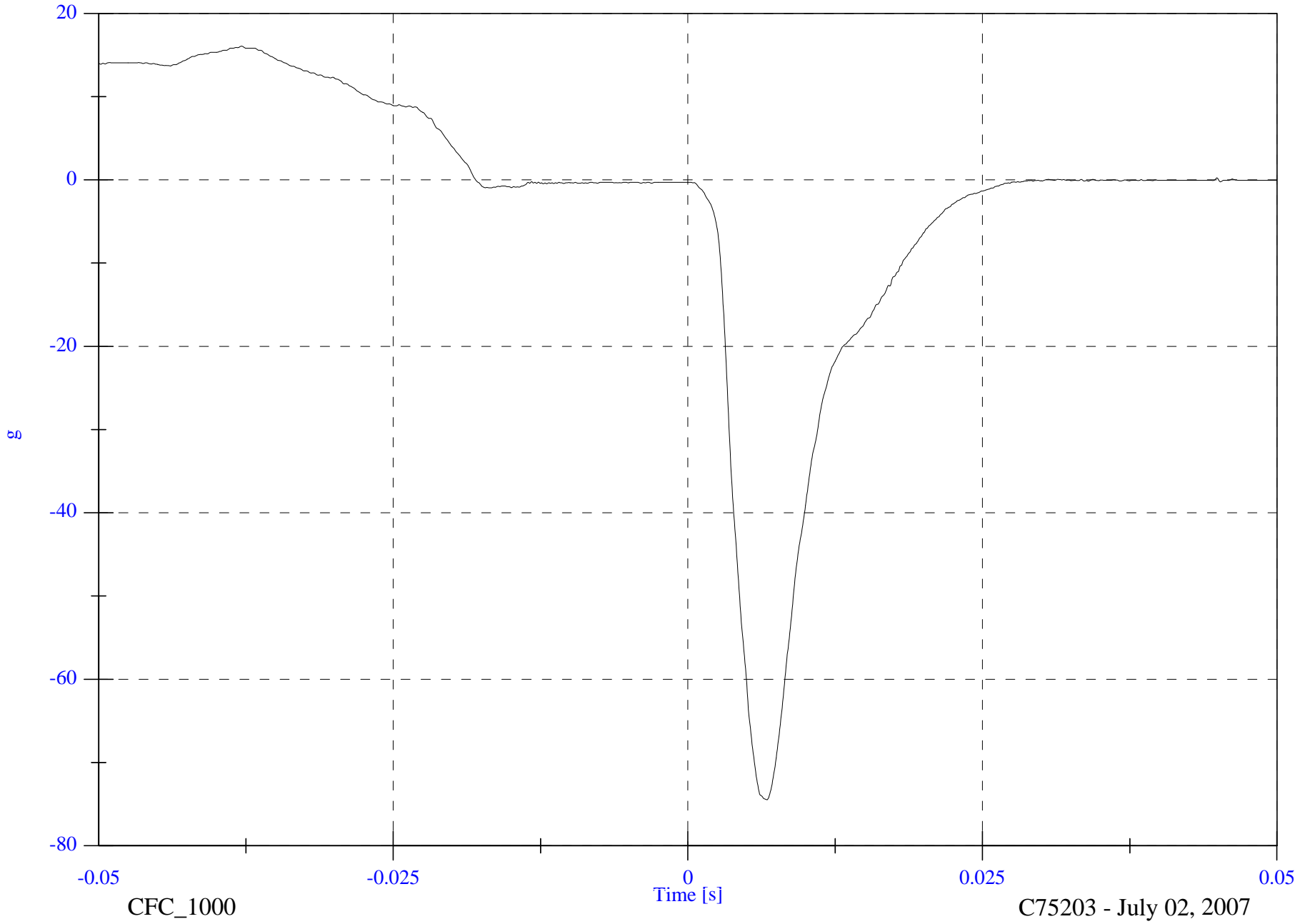
### Headform X Acceleration

Max: 16.1 [g] at -0.038 [s]

Min: -74.5 [g] at 0.007 [s]

C75203 PASSENGER SIDE AP1 IMPACT PLOT #1

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

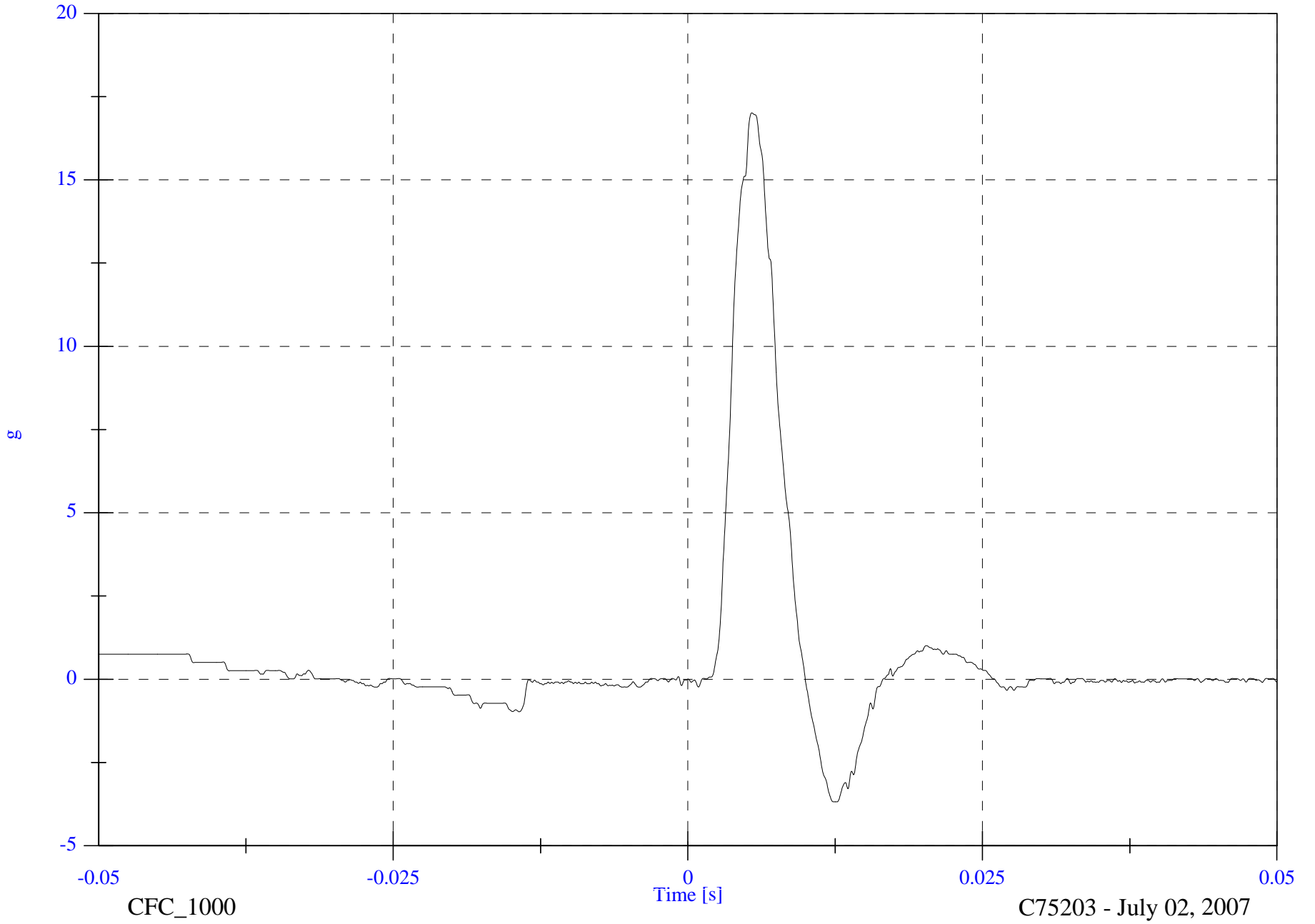
Headform Y Acceleration

Max: 17.0 [g] at 0.005 [s]

Min: -3.7 [g] at 0.013 [s]

C75203 PASSENGER SIDE AP1 IMPACT PLOT #2

8826-FMH-04



CFC\_1000

C75203 - July 02, 2007



FMVSS 201U 2007 Nissan Versa

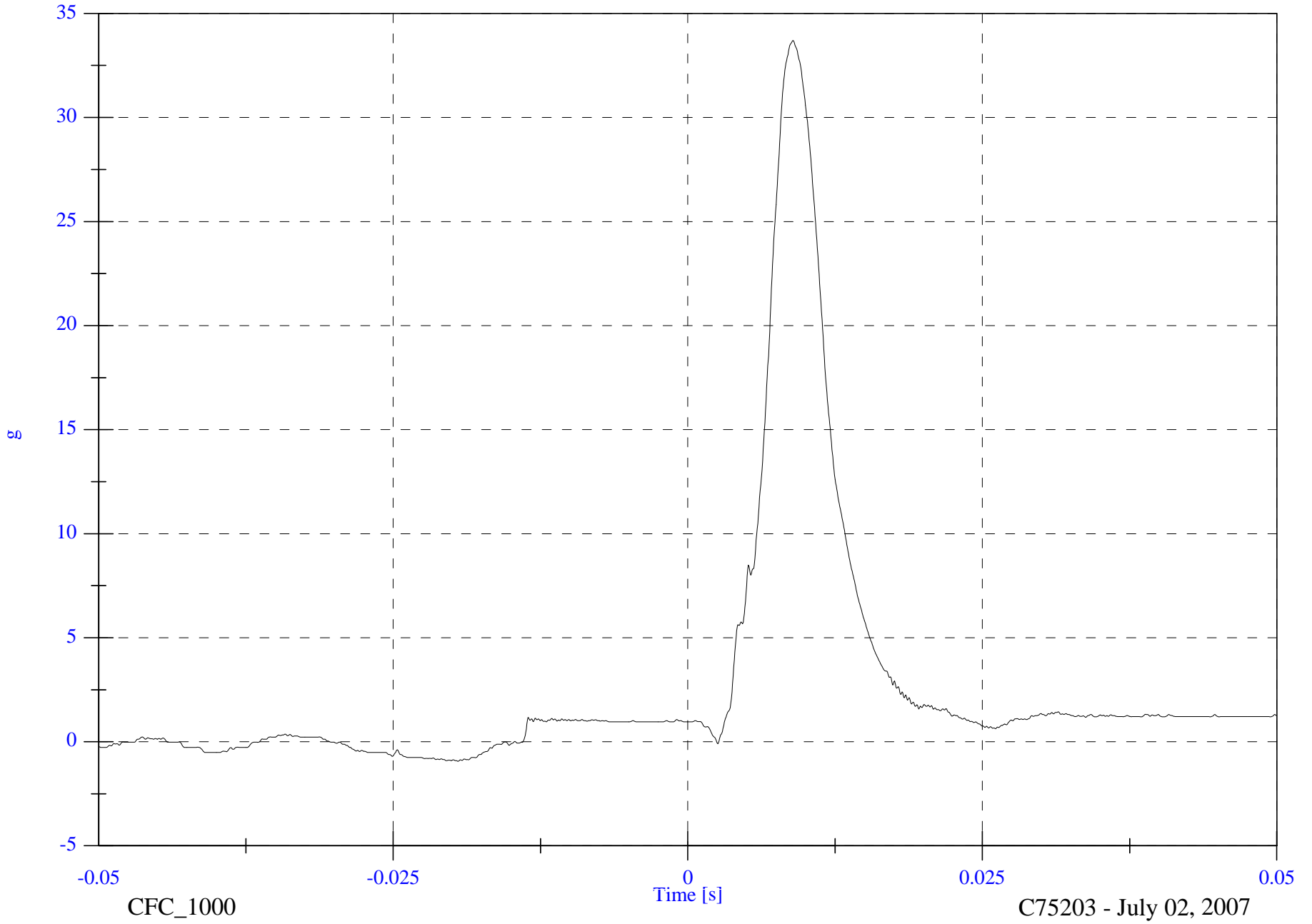
Headform Z Acceleration

Max: 33.7 [g] at 0.009 [s]

Min: -0.9 [g] at -0.020 [s]

C75203 PASSENGER SIDE AP1 IMPACT PLOT #3

8826-FMH-04



FMVSS 201U 2007 Nissan Versa

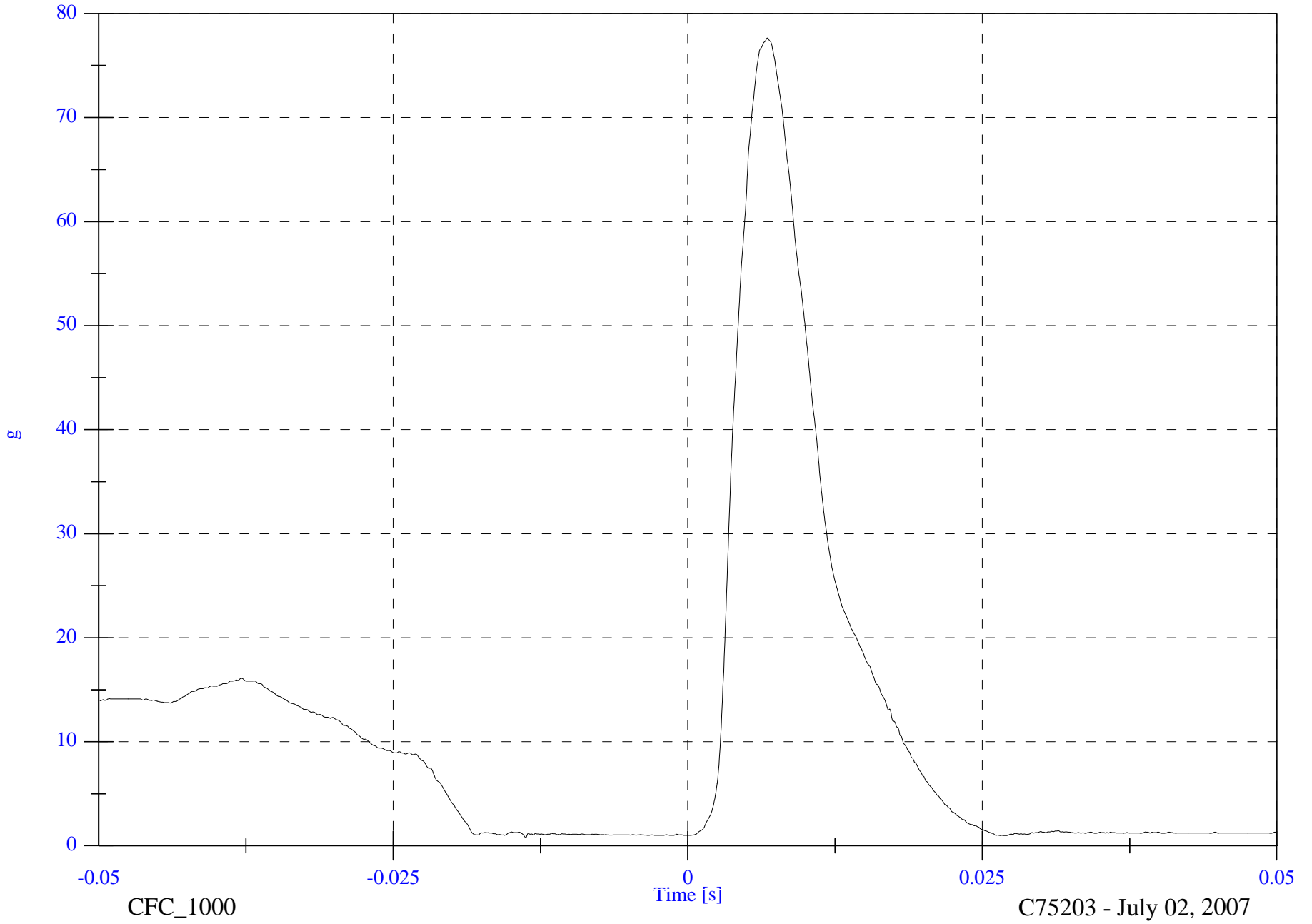
Headform Resultant

Max: 77.6 [g] at 0.007 [s]

Min: 0.8 [g] at -0.014 [s]

C75203 PASSENGER SIDE AP1 IMPACT PLOT #4

8826-FMH-04



CFC\_1000

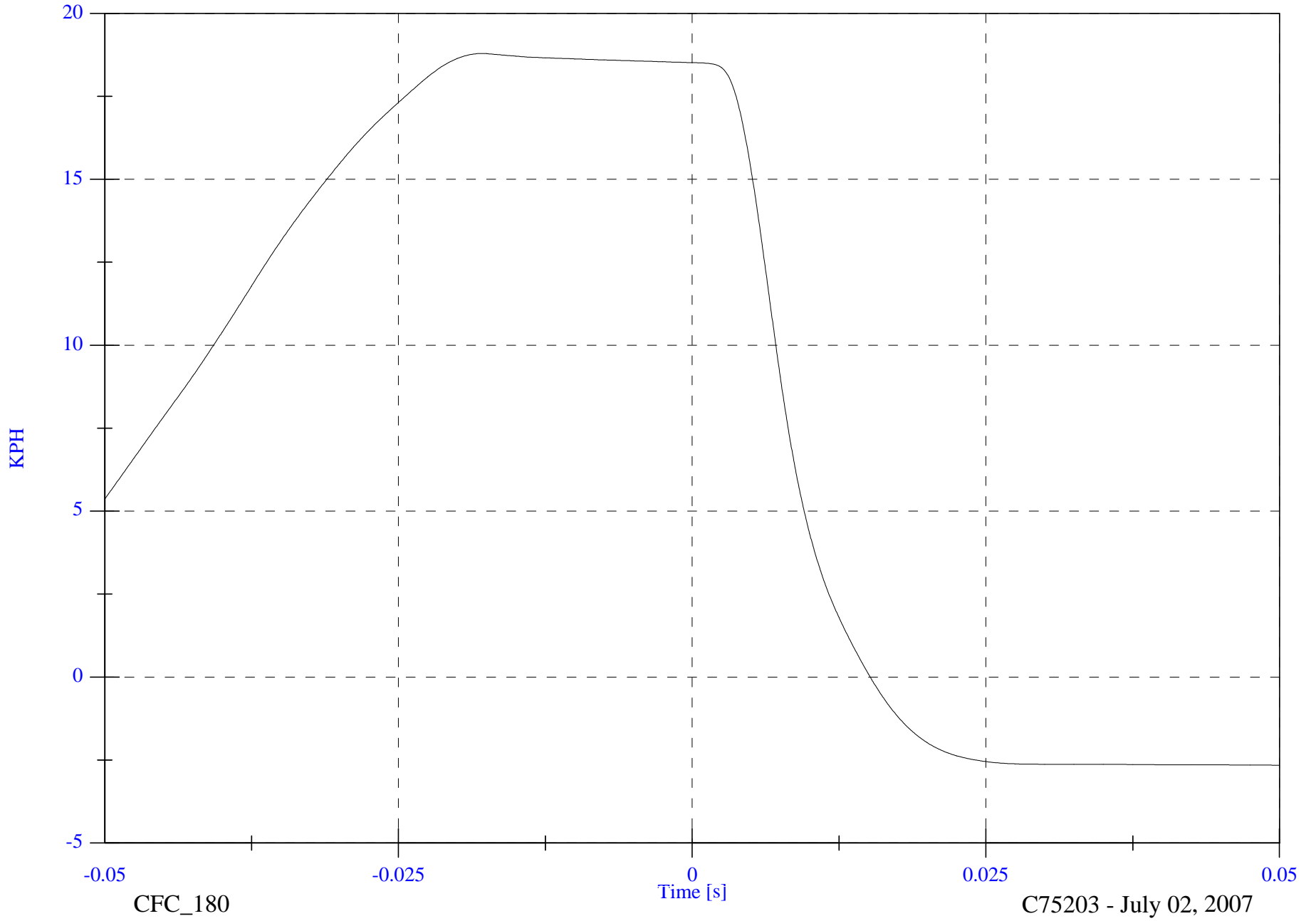
C75203 - July 02, 2007

FMVSS 201U 2007 Nissan Versa

Max: 18.8 [KPH] at -0.018 [s]

Min: -2.7 [KPH] at 0.050 [s]

### Headform Velocity



C75203 PASSENGER SIDE AP1 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 02, 2007



PRE-IMPACT AP1



POST-IMPACT API

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	08
Test Date:	07/03/07
Target Location:	REAR PILLAR
Target Code:	RP2
Horizontal Impact Angle:	289°
Vertical Impact Angle:	0°
Ambient Temperature:	22.4C°
Relative Humidity:	40.4
Time of Impact:	9:30
Headform Number:	0355

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	4	mm right	x mm left
On Centerline	25	mm up	



POST-IMPACT RP2 HEADFORM

Free Motion HIC	720.2
HIC(d)	709.8
Impact Velocity (kph)	23.49
HIC T1 (msec)	3.9
HIC T2 (msec)	9.0

# FMVSS 201U 2007 Nissan Versa C75203 - RP2

FMH Headform 0355

Location: RP2

Test Date: July 03, 2007

Work File: RP2

## -----TEST RESULTS-----

Lab Temperature: 22.4 C

HICd: 709.8

Lab Humidity: 40.4 %

HIC (36ms): 720.2

Velocity at Impact: 23.49 KPH

t1: 3.8 msec

t2: 9.0 msec

Free Flight Distance: 223.92 mm

Duration: 5.2 msec

Maximum: 146.2 g

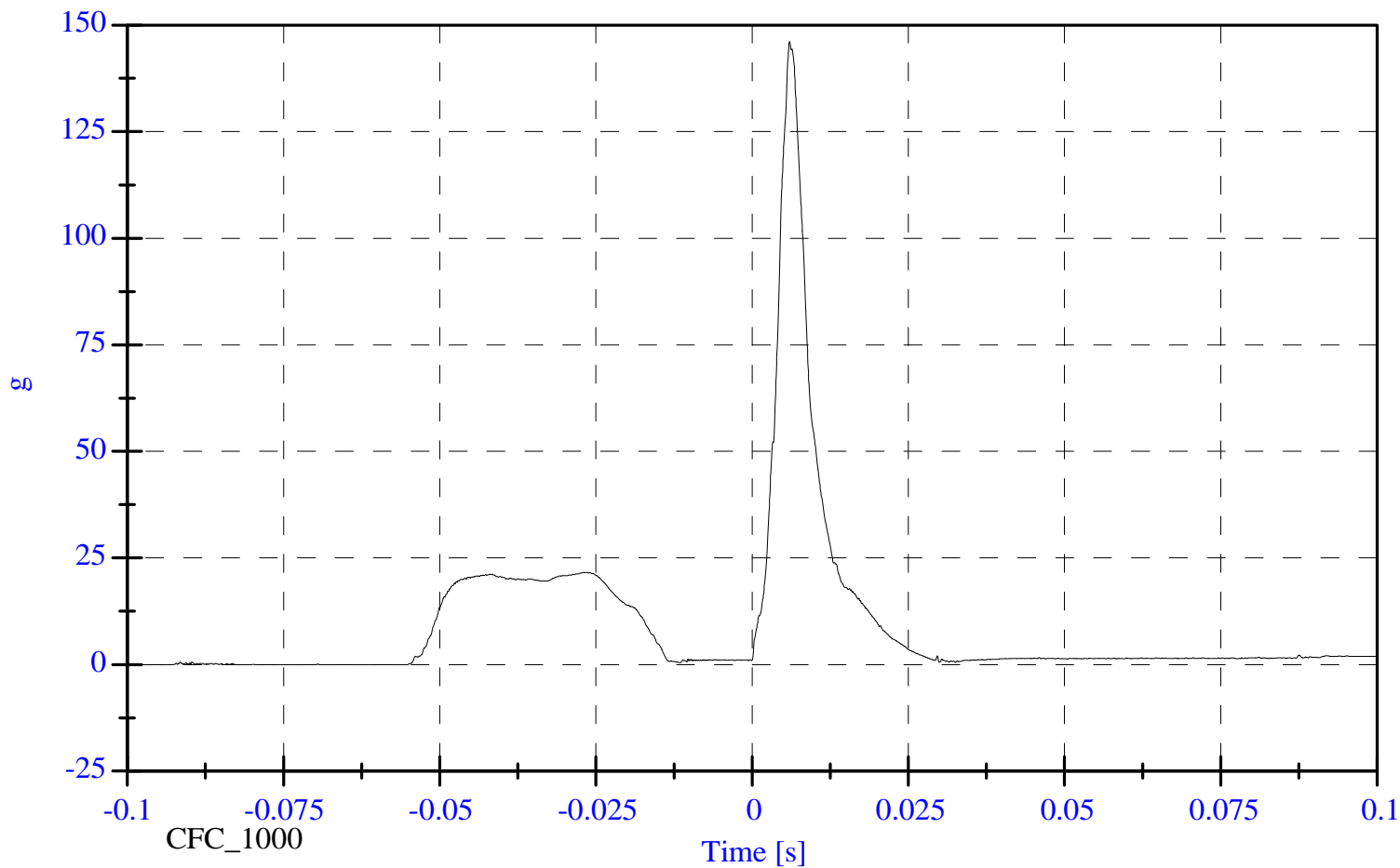
Average Acceleration: 9.0 g

FMVSS 201U 2007 Nissan Versa

Max: 146.2 [g] at 0.006 [s]

Headform Resultant

Min: -0.0 [g] at -0.099 [s]

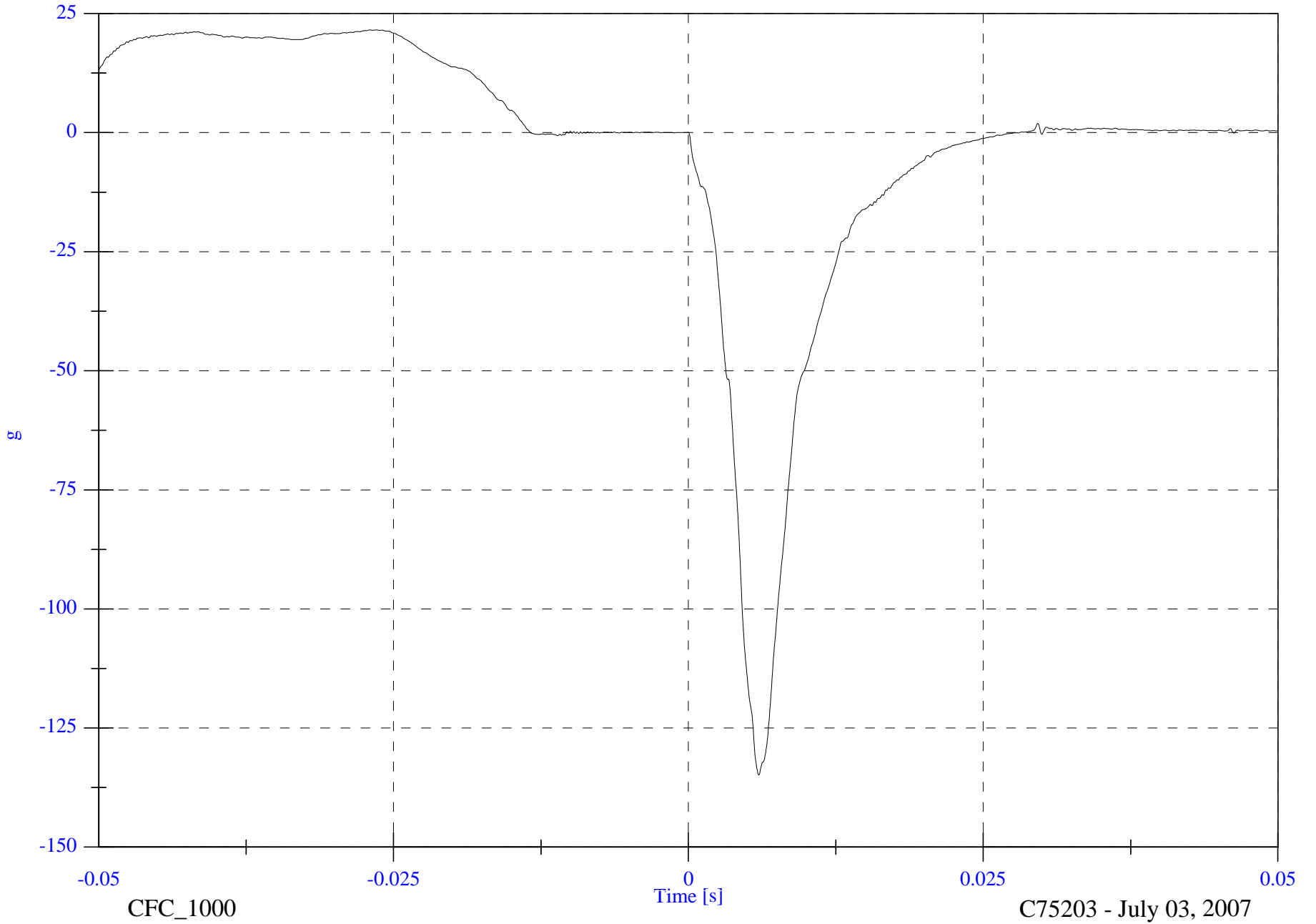


FMVSS 201U 2007 Nissan Versa

### Headform X Acceleration

Max: 21.5 [g] at -0.027 [s]

Min: -134.8 [g] at 0.006 [s]



C75203 DRIVER SIDE RP2 IMPACT PLOT #1

8826-FMH-04

CFC\_1000

C75203 - July 03, 2007



FMVSS 201U 2007 Nissan Versa

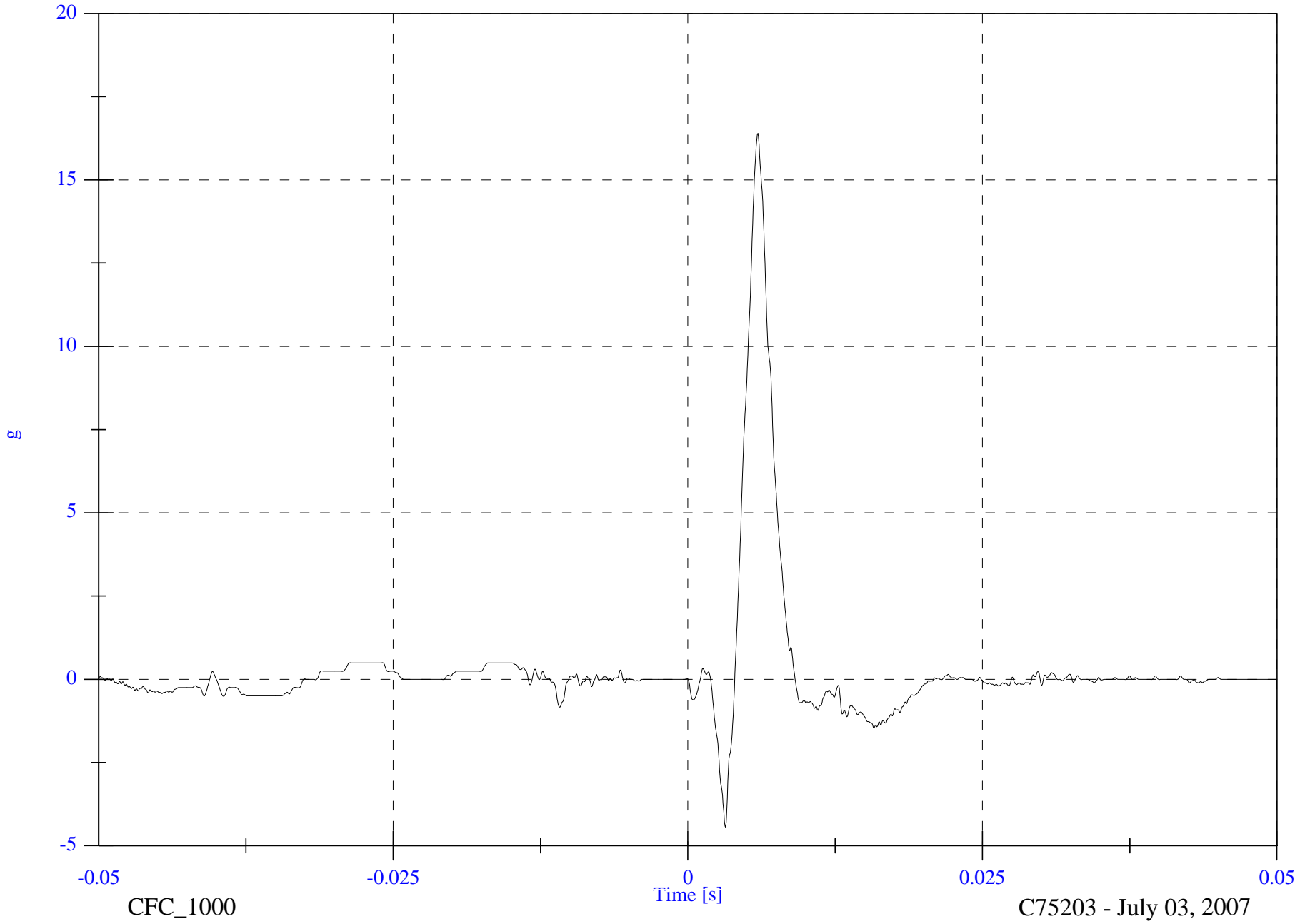
Headform Y Acceleration

Max: 16.4 [g] at 0.006 [s]

Min: -4.4 [g] at 0.003 [s]

C75203 DRIVER SIDE RP2 IMPACT PLOT #2

8826-FMH-04



CFC\_1000

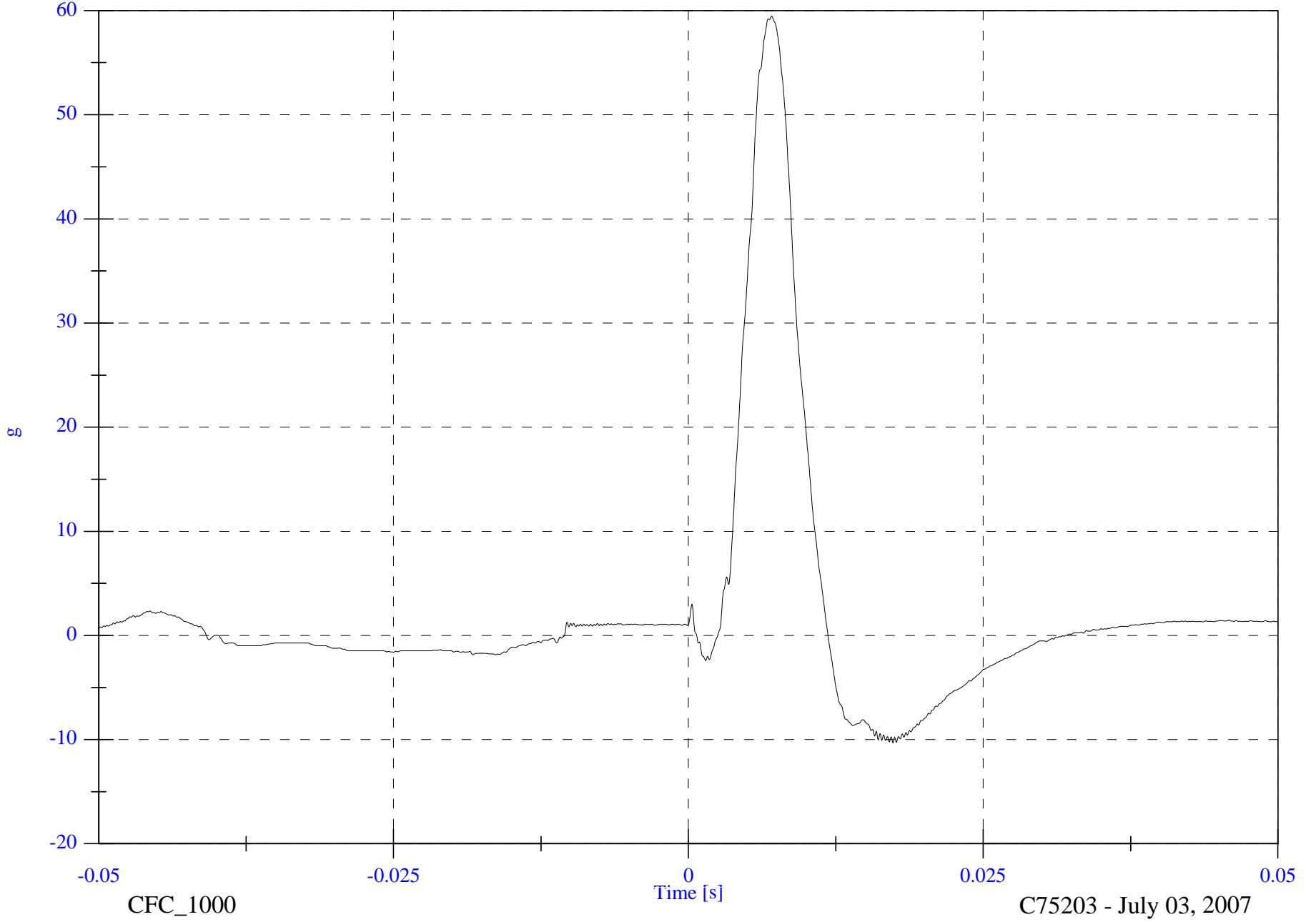
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Z Acceleration

Max: 59.5 [g] at 0.007 [s]

Min: -10.3 [g] at 0.017 [s]



C75203 DRIVER SIDE RP2 IMPACT PLOT #3

8826-FMH-04

CFC\_1000

C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

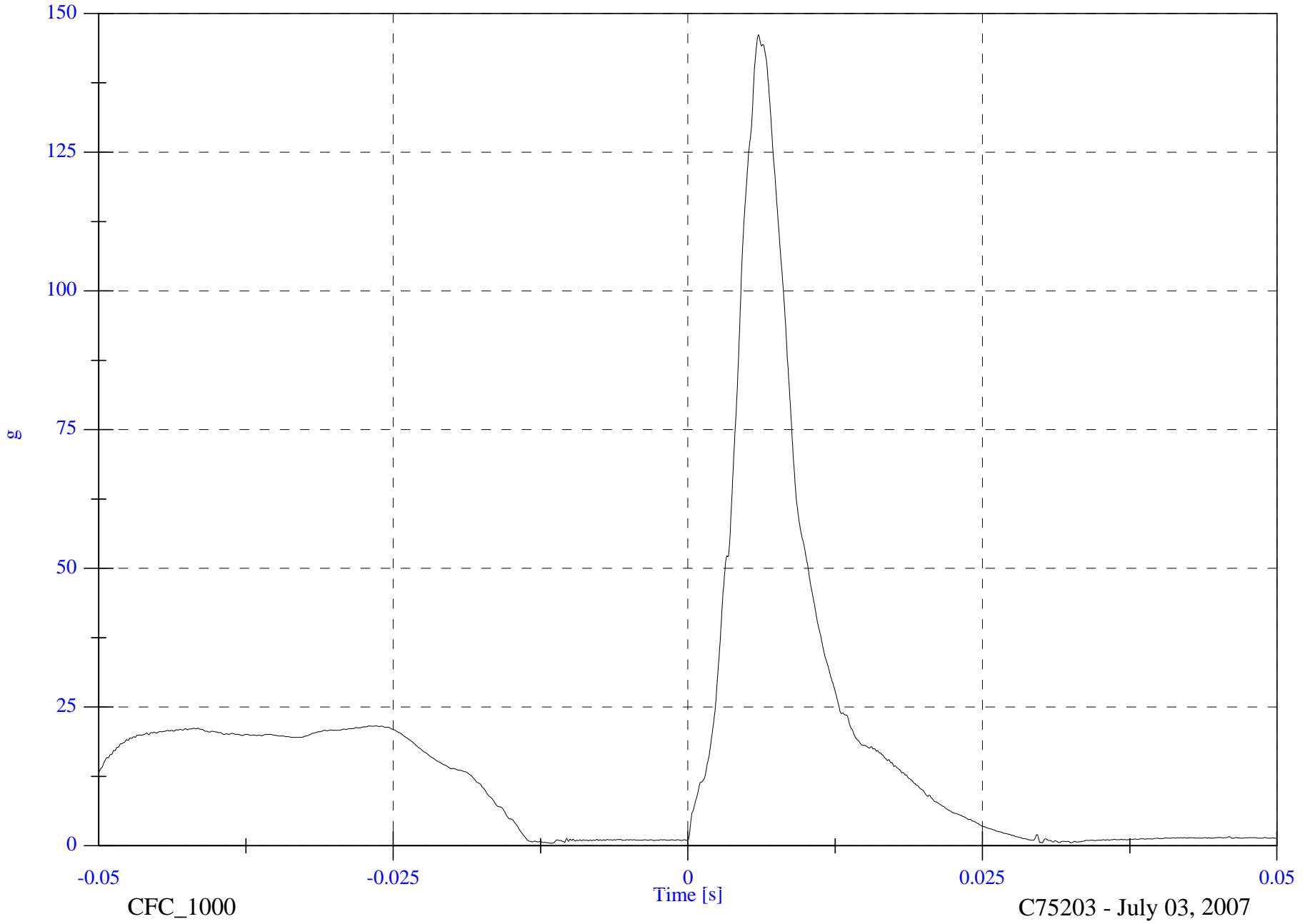
### Headform Resultant

Max: 146.2 [g] at 0.006 [s]

Min: 0.4 [g] at -0.012 [s]

C75203 DRIVER SIDE RP2 IMPACT PLOT #4

8826-FMH-04



CFC\_1000

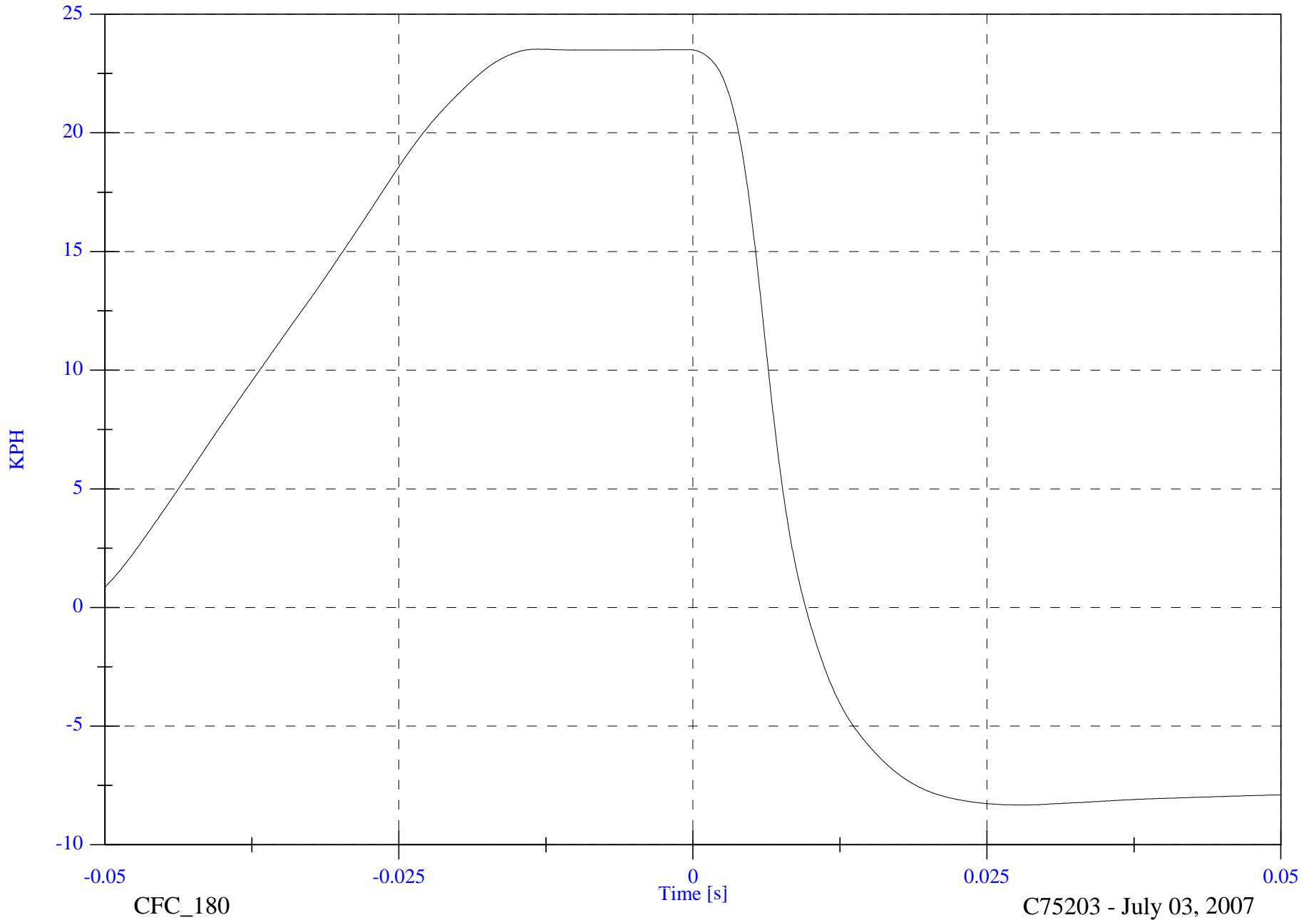
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Max: 23.5 [KPH] at -0.013 [s]

Min: -8.3 [KPH] at 0.028 [s]

### Headform Velocity



C75203 DRIVER SIDE RP2 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 03, 2007



PRE-IMPACT RP2



POST-IMPACT RP2

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	09
Test Date:	07/03/07
Target Location:	B-PILLAR
Target Code:	BP2
Horizontal Impact Angle:	270°
Vertical Impact Angle:	0°
Ambient Temperature:	22.8C°
Relative Humidity:	40.8
Time of Impact:	10:15
Headform Number:	0642

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	5	mm right	x mm left
On Centerline	2	mm up	



POST-IMPACT BP2 HEADFORM

Free Motion HIC	718.7
HIC(d)	708.6
Impact Velocity (kph)	23.56
HIC T1 (msec)	1.4
HIC T2 (msec)	9.6

# FMVSS 201U 2007 Nissan Versa C75203 - BP2

FMH Headform 0642

Location: BP2

Test Date: July 03, 2007

Work File: BP2

## -----TEST RESULTS-----

Lab Temperature: 22.8 C

HICd: 708.6

Lab Humidity: 40.8 %

HIC (36ms): 718.7

Velocity at Impact: 23.56 KPH

t1: 1.4 msec

t2: 9.6 msec

Free Flight Distance: 221.49 mm

Duration: 8.2 msec

Maximum: 120.0 g

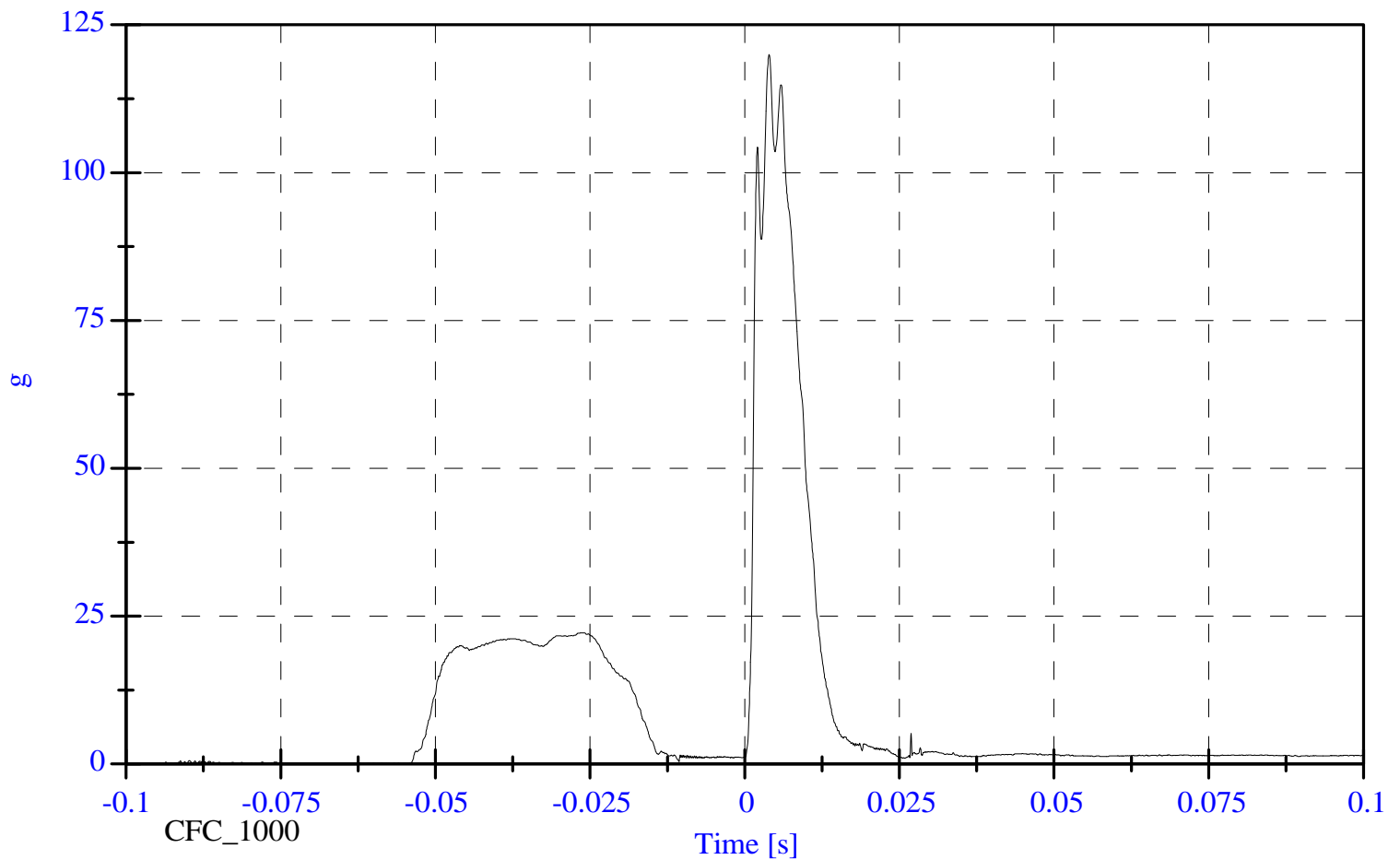
Average Acceleration: 8.9 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 120.0 [g] at 0.004 [s]

Min: 0.0 [g] at -0.074 [s]



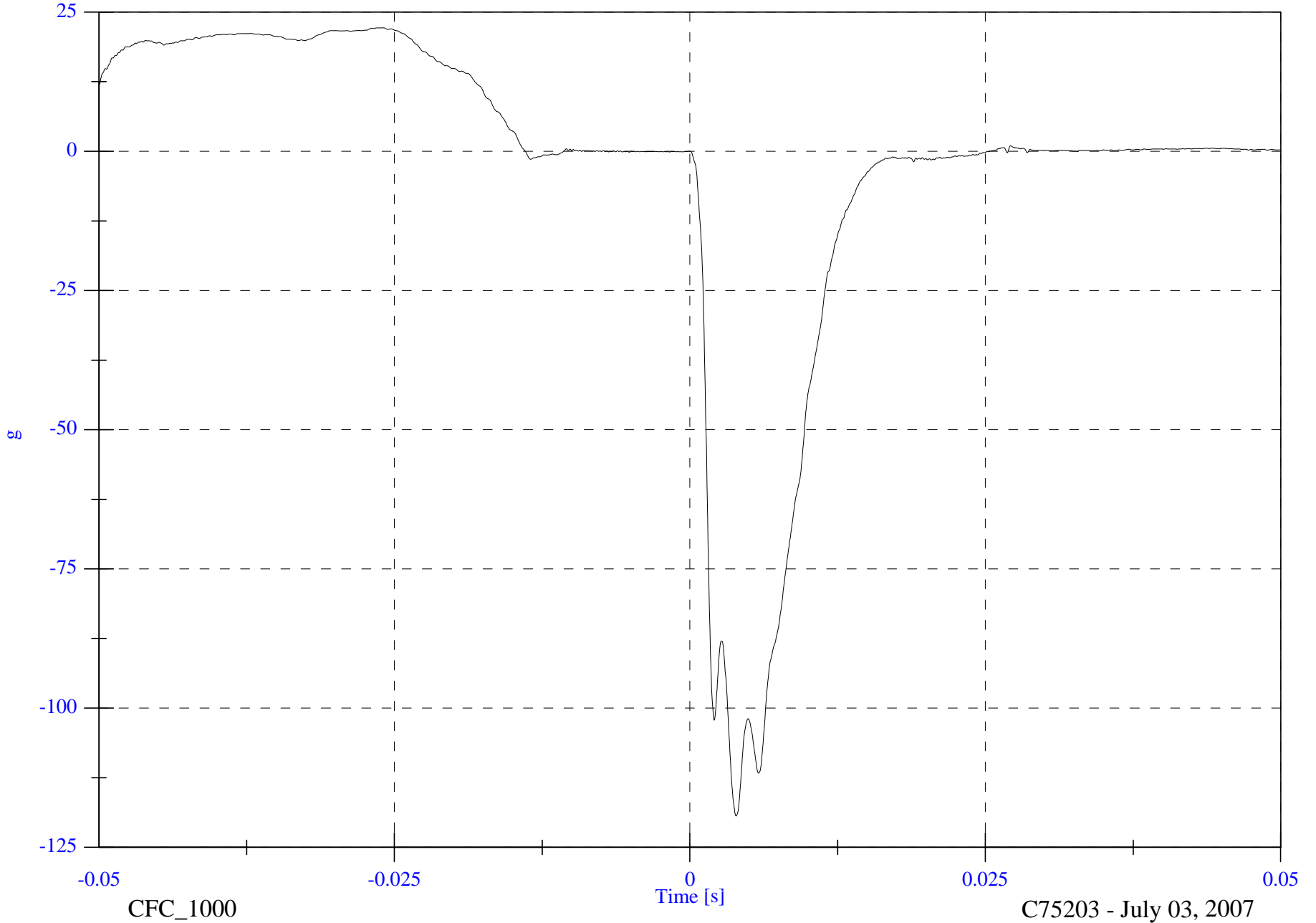


FMVSS 201U 2007 Nissan Versa

### Headform X Acceleration

Max: 22.2 [g] at -0.026 [s]

Min: -119.4 [g] at 0.004 [s]



C75203 DRIVER SIDE BP2 IMPACT PLOT #1

8826-FMH-04

CFC\_1000

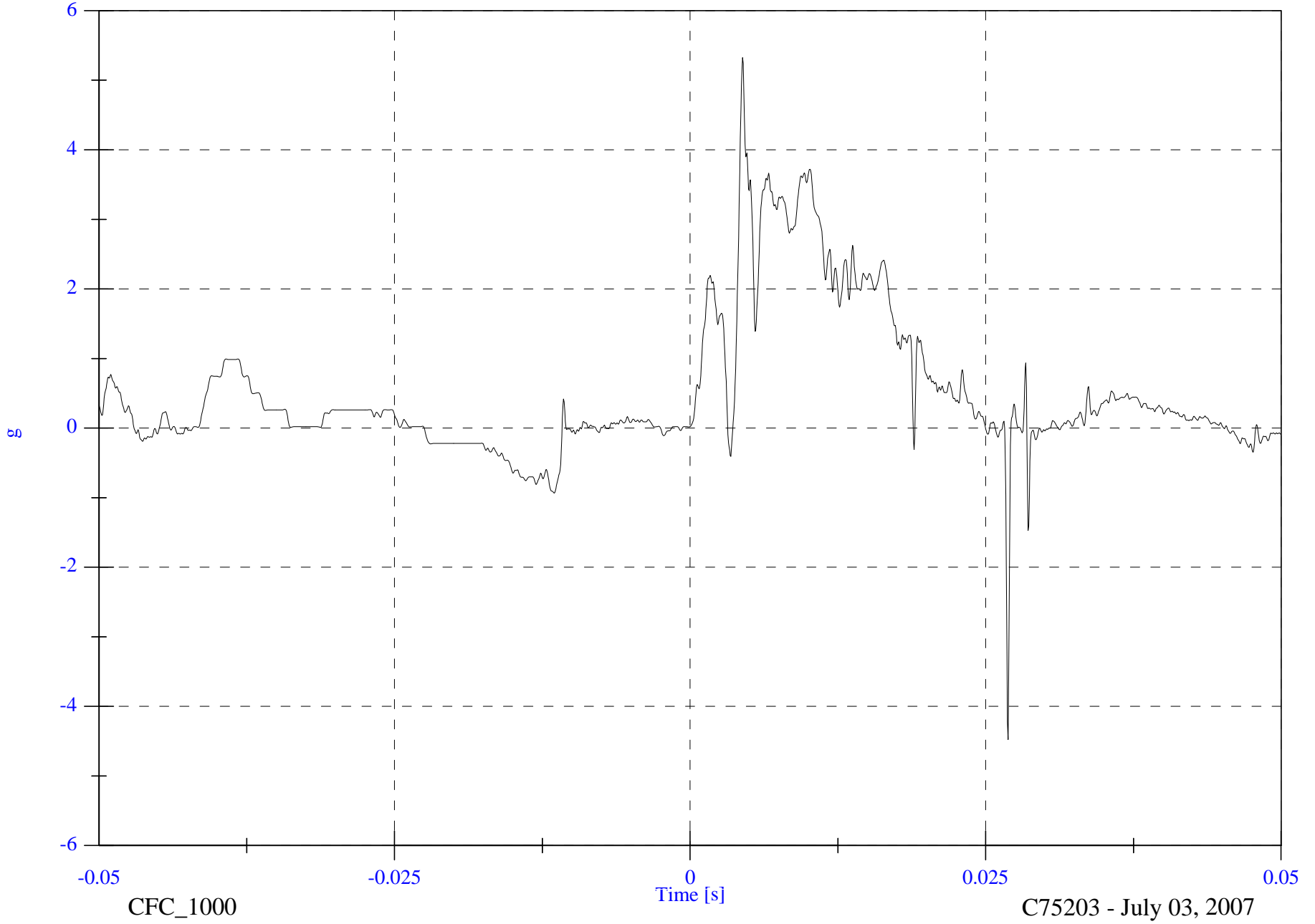
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Y Acceleration

Max: 5.3 [g] at 0.004 [s]

Min: -4.5 [g] at 0.027 [s]



C75203 DRIVER SIDE BP2 IMPACT PLOT #2

8826-FMH-04

CFC\_1000

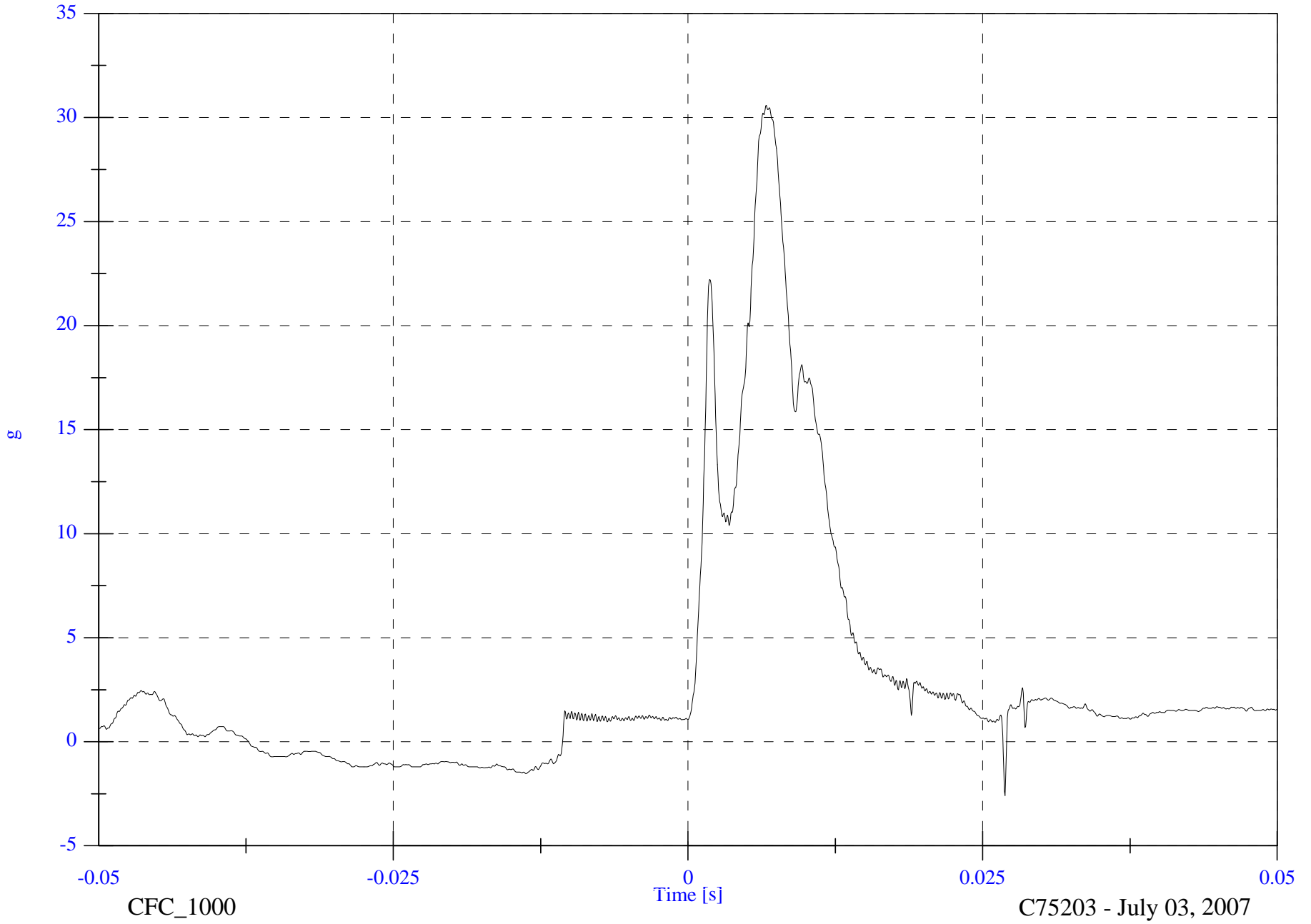
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Z Acceleration

Max: 30.6 [g] at 0.007 [s]

Min: -2.6 [g] at 0.027 [s]



C75203 DRIVER SIDE BP2 IMPACT PLOT #3

8826-FMH-04

CFC\_1000

C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

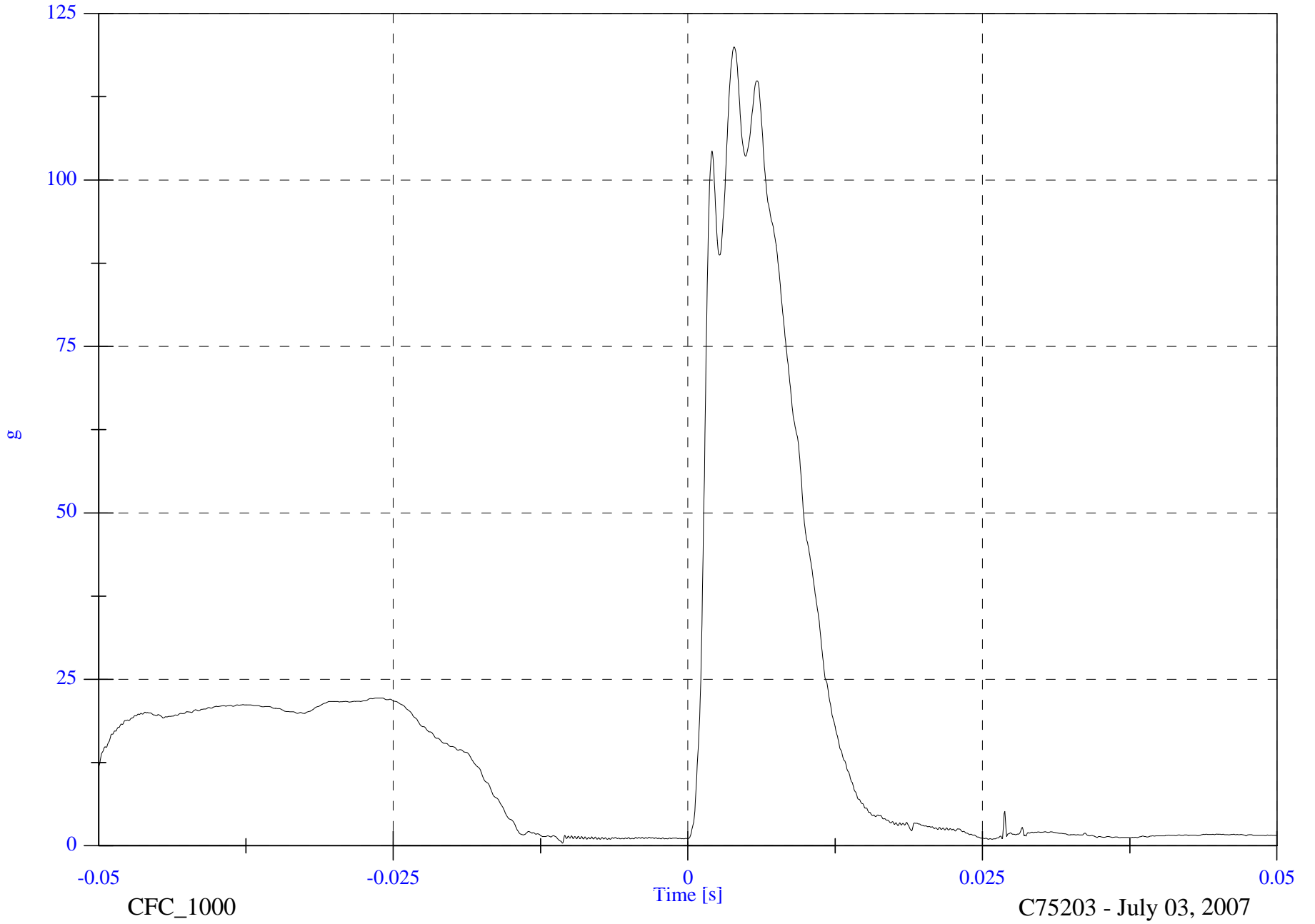
Headform Resultant

Max: 120.0 [g] at 0.004 [s]

Min: 0.4 [g] at -0.011 [s]

C75203 DRIVER SIDE BP2 IMPACT PLOT #4

8826-FMH-04



CFC\_1000

Time [s]

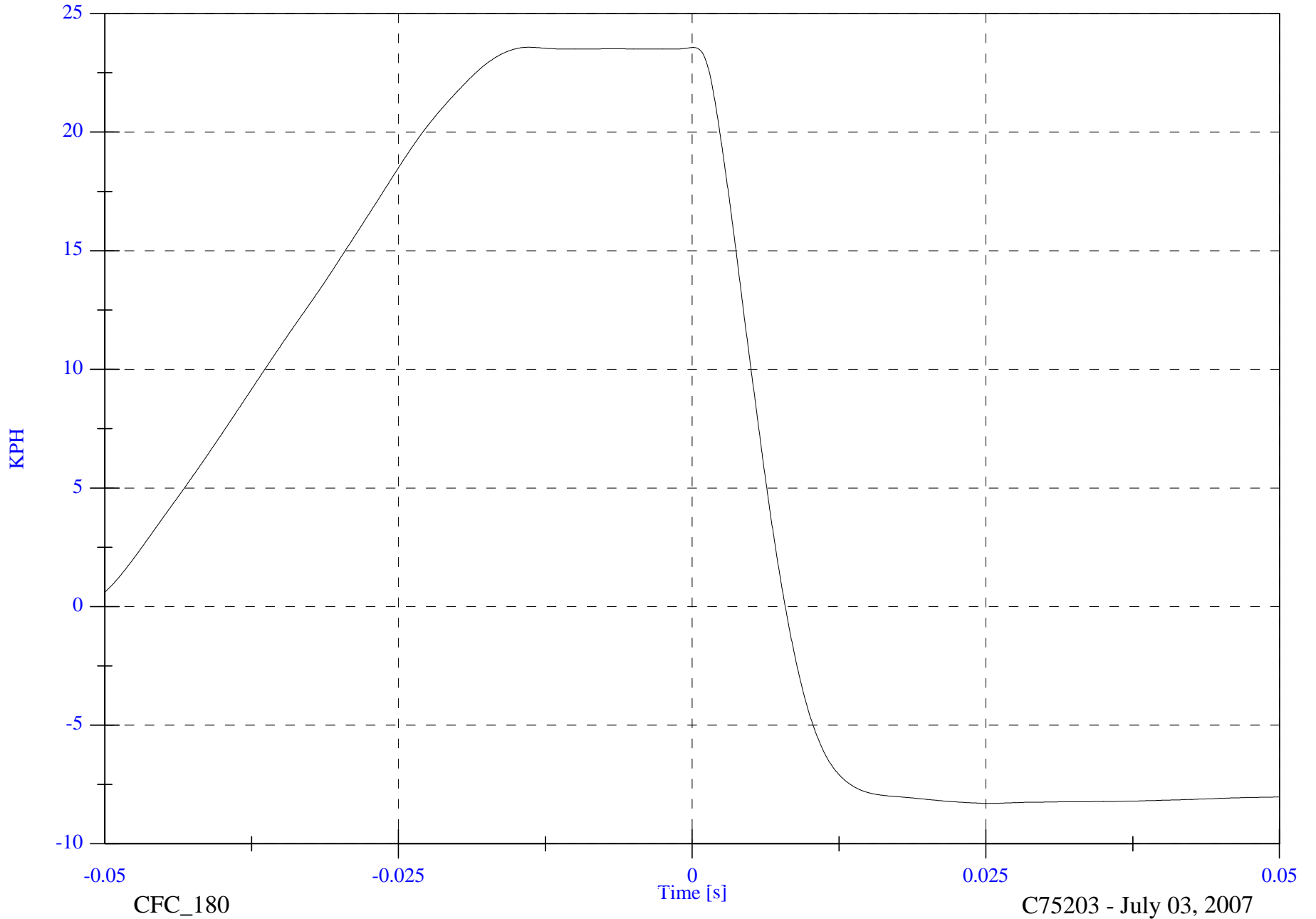
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Max: 23.6 [KPH] at -0.014 [s]

Min: -8.3 [KPH] at 0.025 [s]

### Headform Velocity



C75203 DRIVER SIDE BP2 IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 03, 2007



PRE-IMPACT BP2



POST-IMPACT BP2

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	10
Test Date:	07/03/07
Target Location:	UPPER ROOF B-PILLAR
Target Code:	URBP
Horizontal Impact Angle:	270°
Vertical Impact Angle:	45°
Ambient Temperature:	23.1C°
Relative Humidity:	40.8
Time of Impact:	10:40
Headform Number:	0805

Impact Point Description (from lower midpoint on midsagittal line)			
On Centerline	6	mm right	x mm left
On Centerline	49	mm up	



POST-IMPACT URBP HEADFORM

Free Motion HIC	797.1
HIC(d)	767.8
Impact Velocity (kph)	23.83
HIC T1 (msec)	2.3
HIC T2 (msec)	10.2



# FMVSS 201U 2007 Nissan Versa C75302 - URBP

FMH Headform 0805

Location: URBP

Test Date: July 03, 2007

Work File: URBP

## -----TEST RESULTS-----

Lab Temperature: 23.1 C

HICd: 767.8

Lab Humidity: 40.8 %

HIC (36ms): 797.1

Velocity at Impact: 23.83 KPH

t1: 2.2 msec

t2: 10.1 msec

Free Flight Distance: 228.37 mm

Duration: 7.9 msec

Maximum: 126.4 g

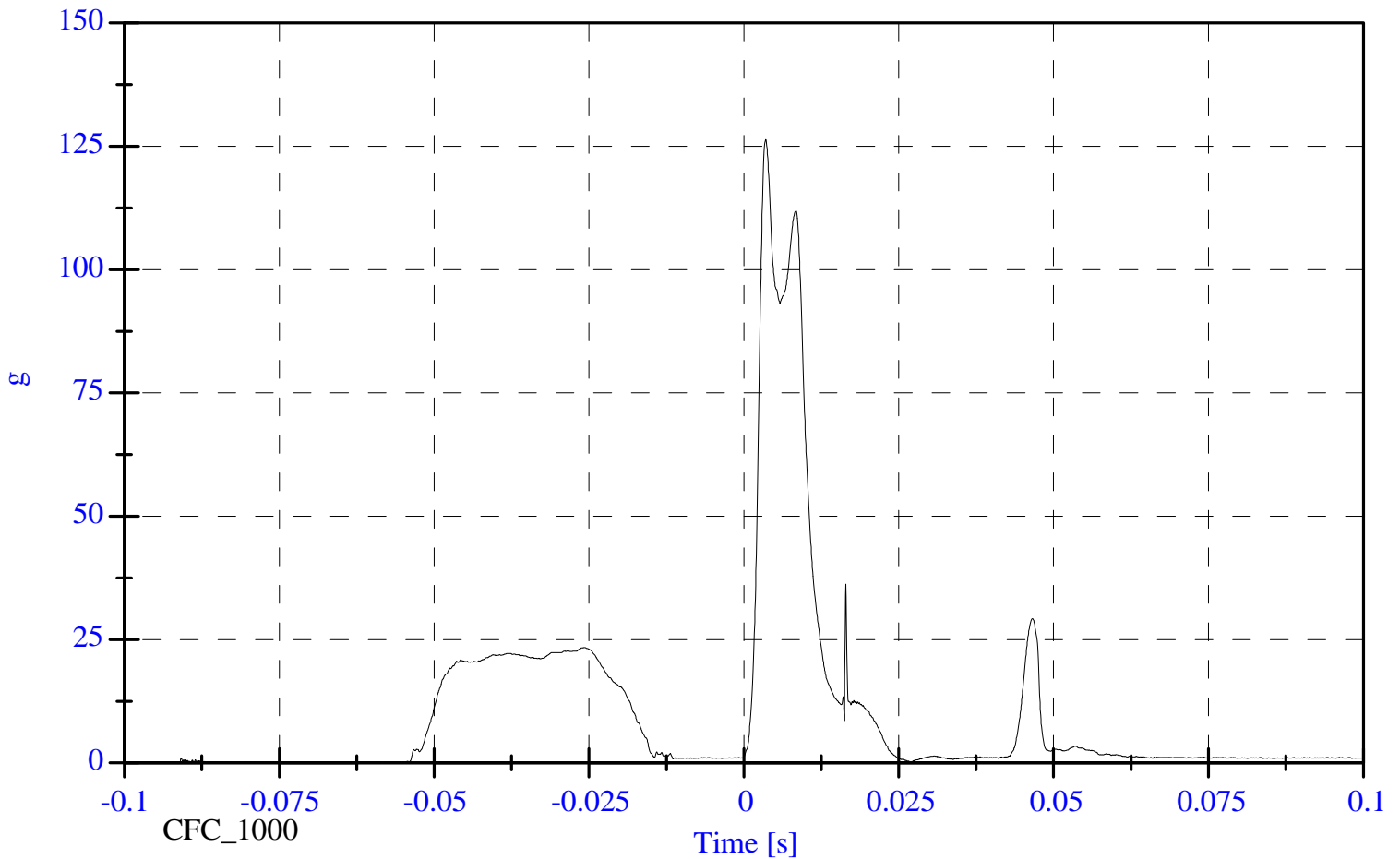
Average Acceleration: 9.7 g

FMVSS 201U 2007 Nissan Versa

Max: 126.4 [g] at 0.004 [s]

Headform Resultant

Min: 0.0 [g] at -0.094 [s]

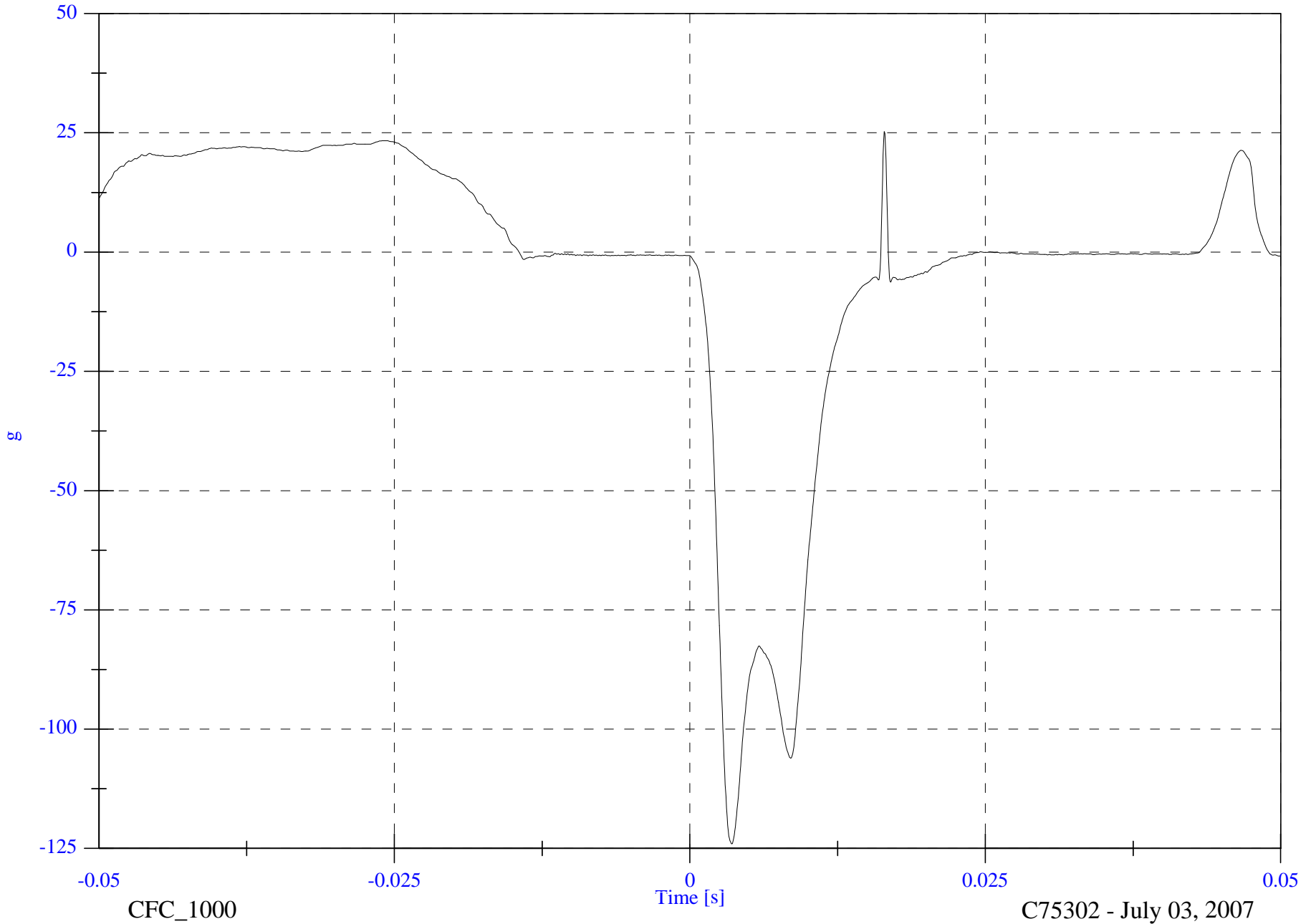


FMVSS 201U 2007 Nissan Versa

### Headform X Acceleration

Max: 25.2 [g] at 0.016 [s]

Min: -124.1 [g] at 0.004 [s]



C75203 DRIVER SIDE URBP IMPACT PLOT #1

8826-FMH-04

CFC\_1000

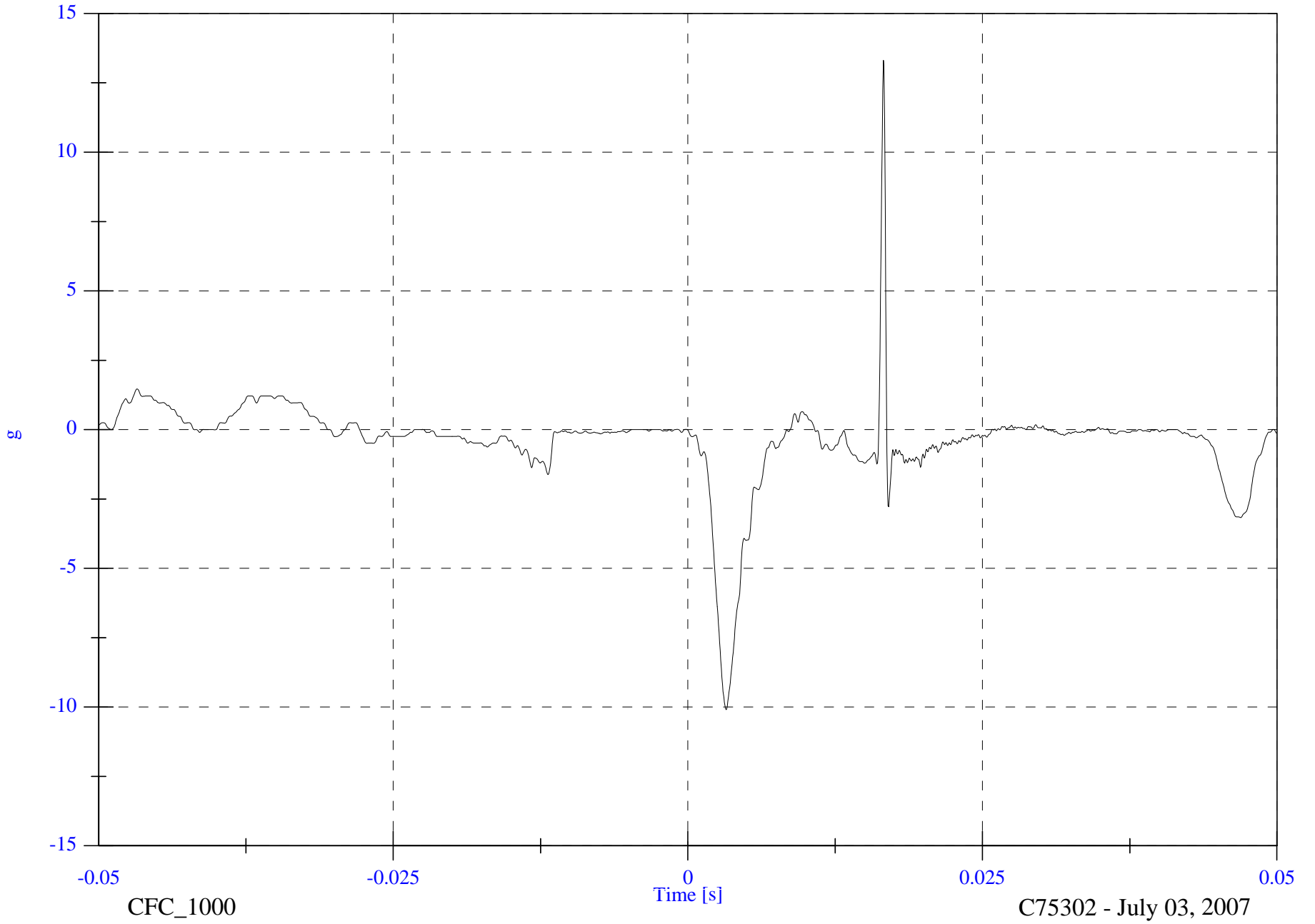
C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Y Acceleration

Max: 13.3 [g] at 0.017 [s]

Min: -10.1 [g] at 0.003 [s]



C75203 DRIVER SIDE URBP IMPACT PLOT #2

8826-FMH-04

CFC\_1000

C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

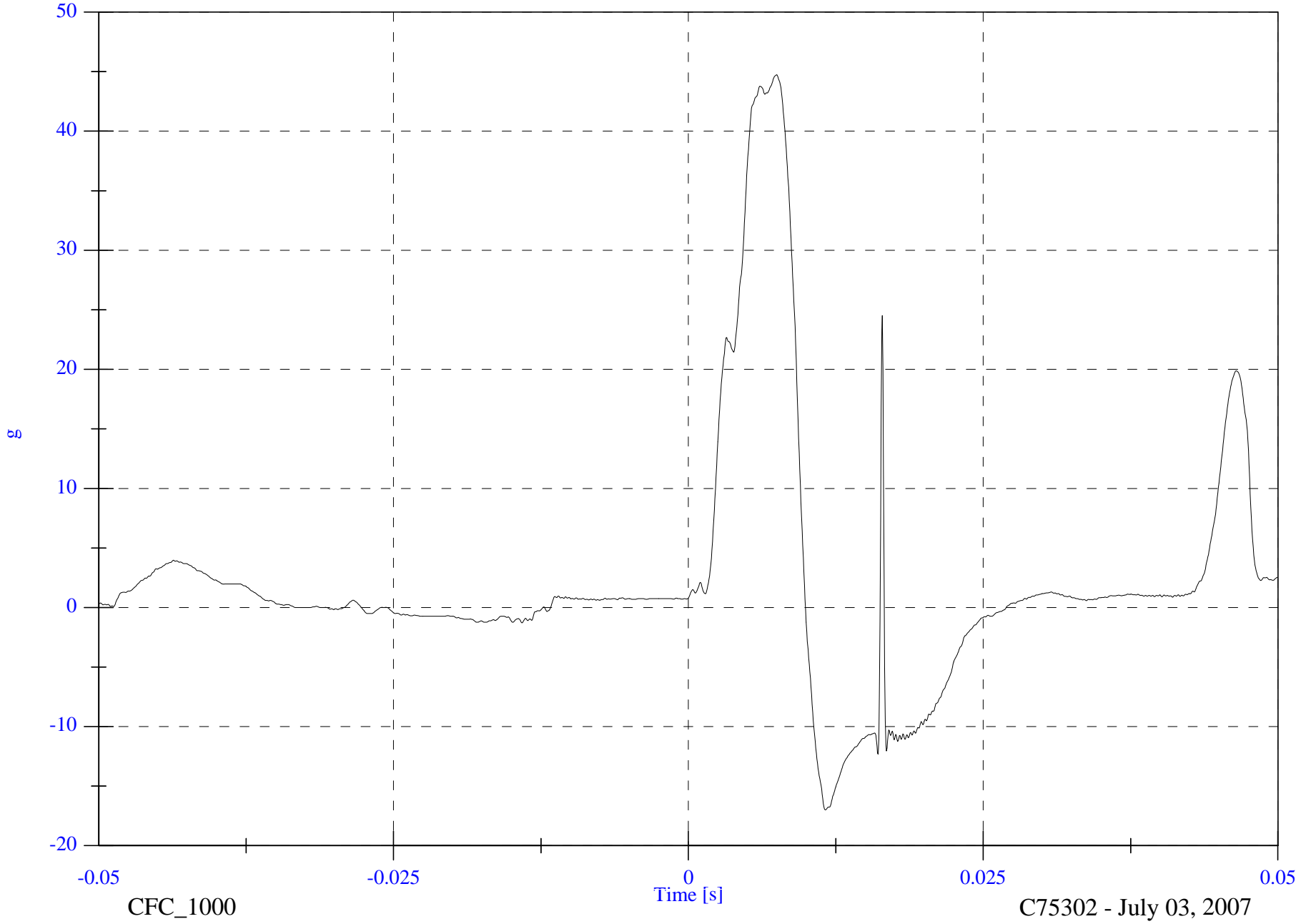
Headform Z Acceleration

Max: 44.7 [g] at 0.007 [s]

Min: -17.0 [g] at 0.012 [s]

C75203 DRIVER SIDE URBP IMPACT PLOT #3

8826-FMH-04



CFC\_1000

C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

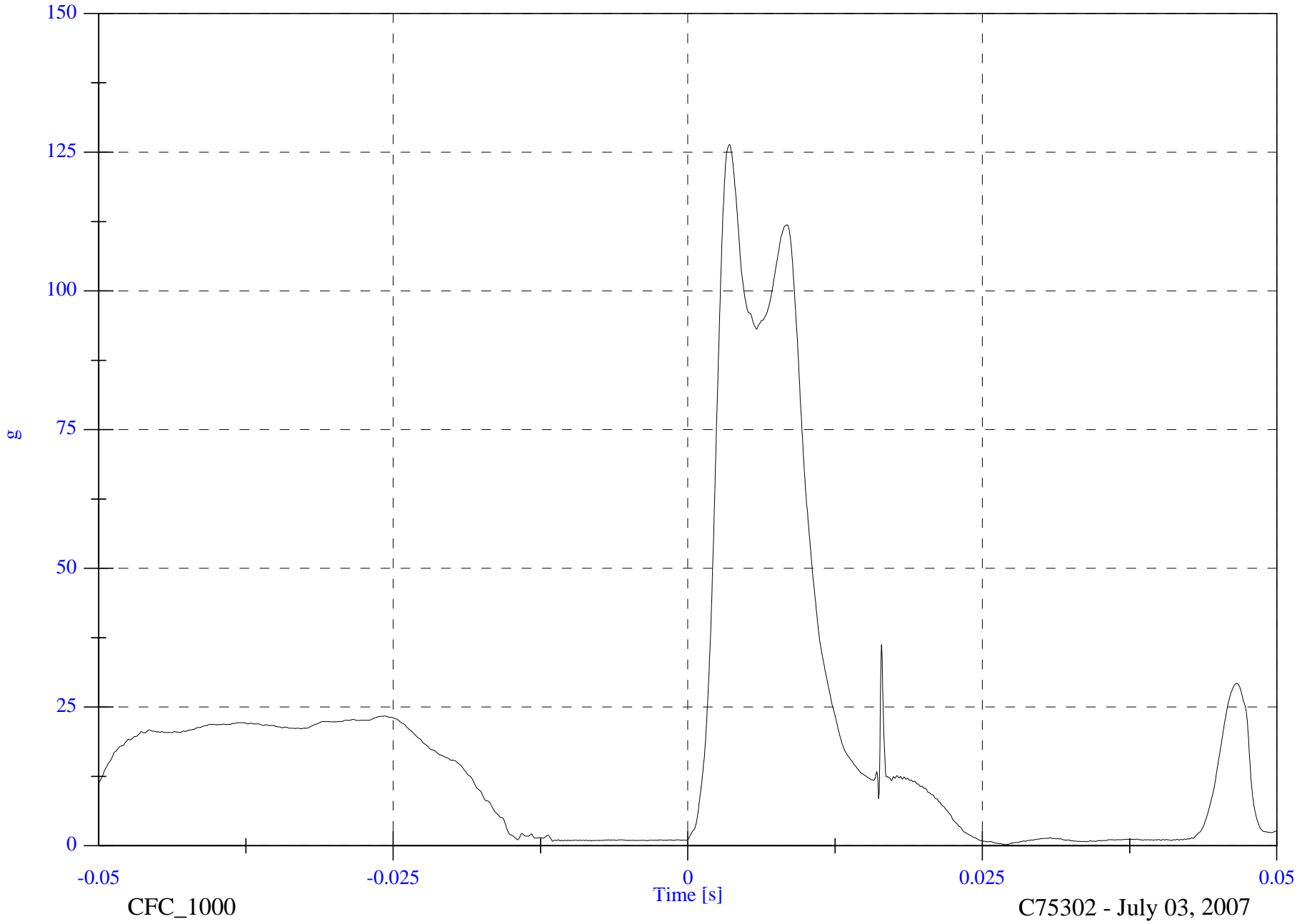
Headform Resultant

Max: 126.4 [g] at 0.004 [s]

Min: 0.2 [g] at 0.027 [s]

C75203 DRIVER SIDE URBP IMPACT PLOT #4

8826-FMH-04

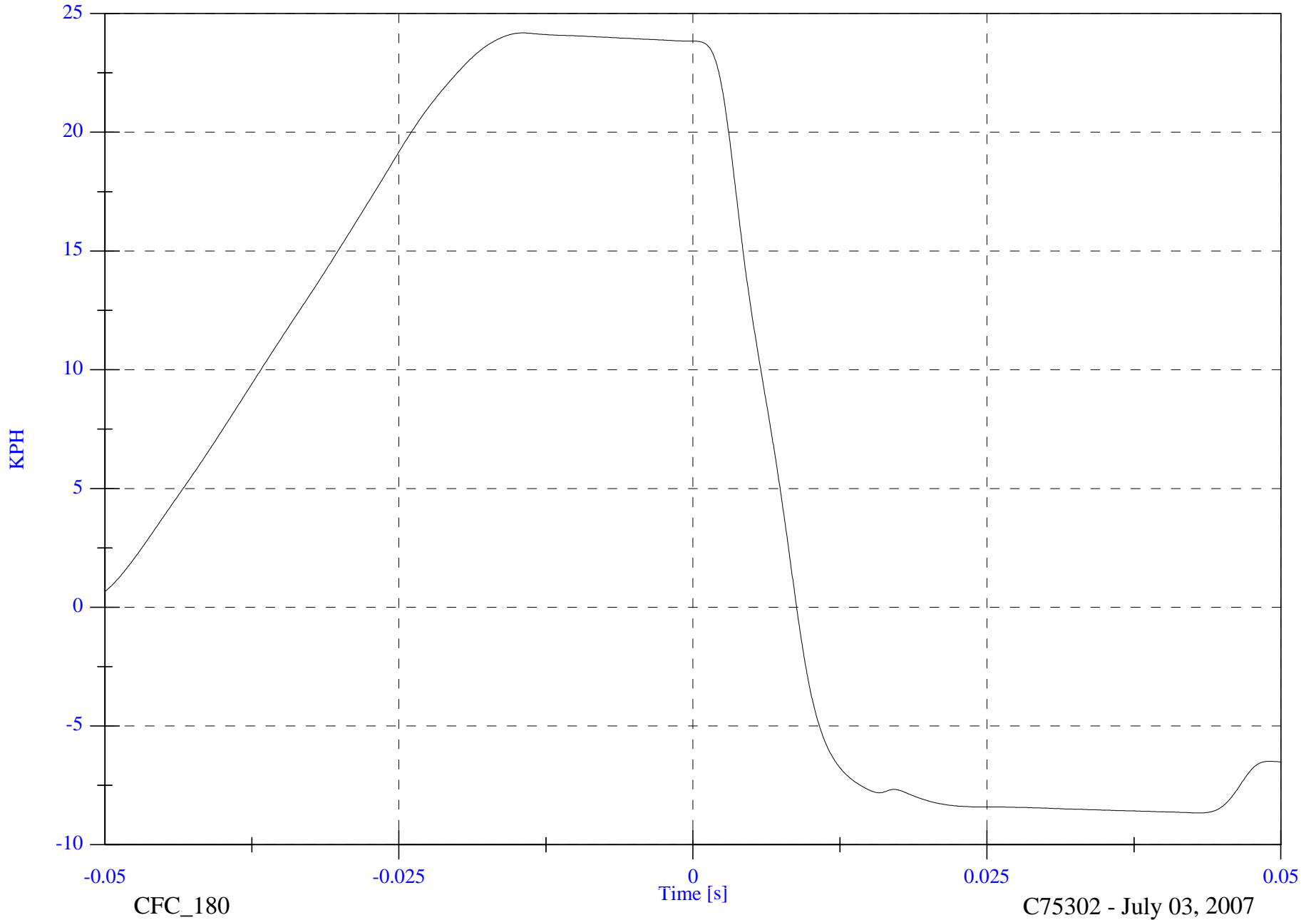


FMVSS 201U 2007 Nissan Versa

Max: 24.2 [KPH] at -0.014 [s]

Min: -8.7 [KPH] at 0.043 [s]

### Headform Velocity



C75203 DRIVER SIDE URBP IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75302 - July 03, 2007



PRE-IMPACT URBP



POST-IMPACT URBP



VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	11
Test Date:	07/03/07
Target Location:	SIDE RAIL
Target Code:	SR2B
Horizontal Impact Angle:	270°
Vertical Impact Angle:	29°
Ambient Temperature:	22.8C°
Relative Humidity:	39.4
Time of Impact:	11:25
Headform Number:	1255

Impact Point Description (from lower midpoint on midsagittal line)					
On Centerline	6	<input type="checkbox"/>	mm right	<input checked="" type="checkbox"/>	mm left
On Centerline	20				mm up



POST-IMPACT SR2BHEADFORM

Free Motion HIC	144.7
HIC(d)	275.6
Impact Velocity (kph)	18.5
HIC T1 (msec)	3.6
HIC T2 (msec)	19.6

# FMVSS 201U 2007 Nissan Versa C75203 - SR2B

FMH Headform 1255

Location: SR2B

Test Date: July 03, 2007

Work File: SR2B

## -----TEST RESULTS-----

Lab Temperature: 22.8 C

HICd: 275.6

Lab Humidity: 39.4 %

HIC (36ms): 144.7

Velocity at Impact: 18.50 KPH

t1: 3.6 msec

t2: 19.5 msec

Free Flight Distance: 218.32 mm

Duration: 15.9 msec

Maximum: 53.6 g

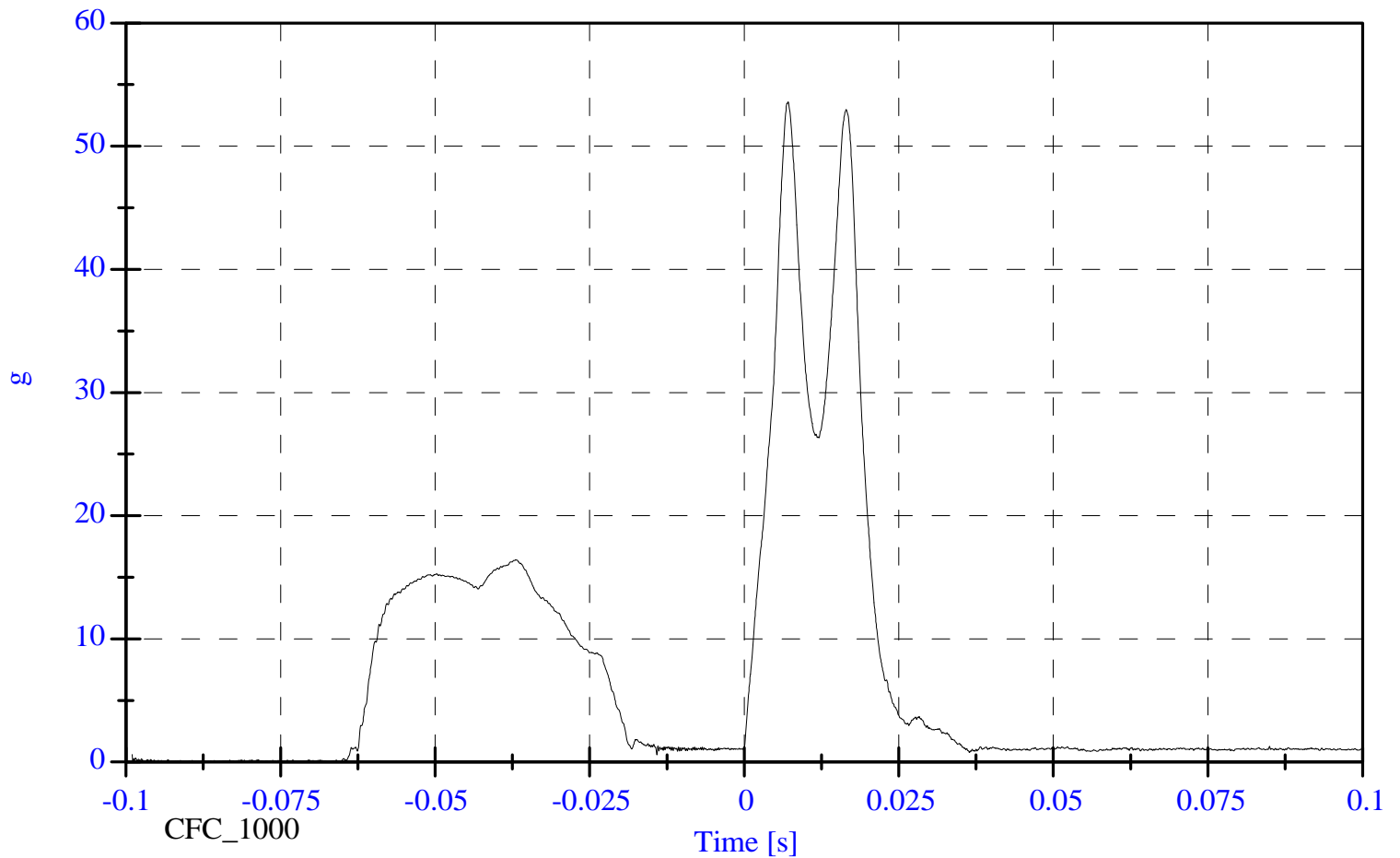
Average Acceleration: 6.8 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 53.6 [g] at 0.007 [s]

Min: 0.0 [g] at -0.092 [s]

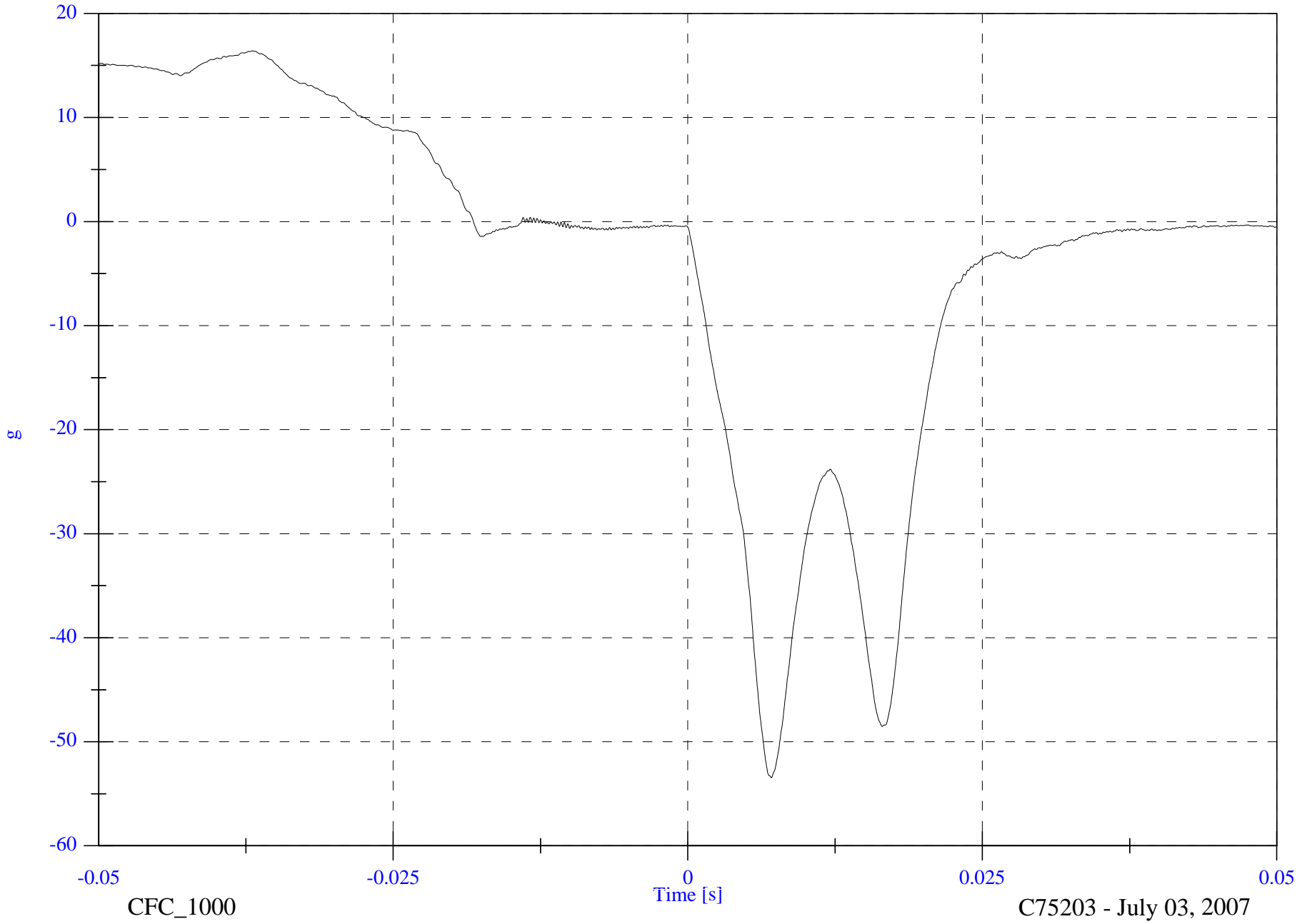


FMVSS 201U 2007 Nissan Versa

Headform X Acceleration

Max: 16.4 [g] at -0.037 [s]

Min: -53.5 [g] at 0.007 [s]



C75203 DRIVER SIDE SR2B IMPACT PLOT #1

8826-FMH-04

CFC\_1000

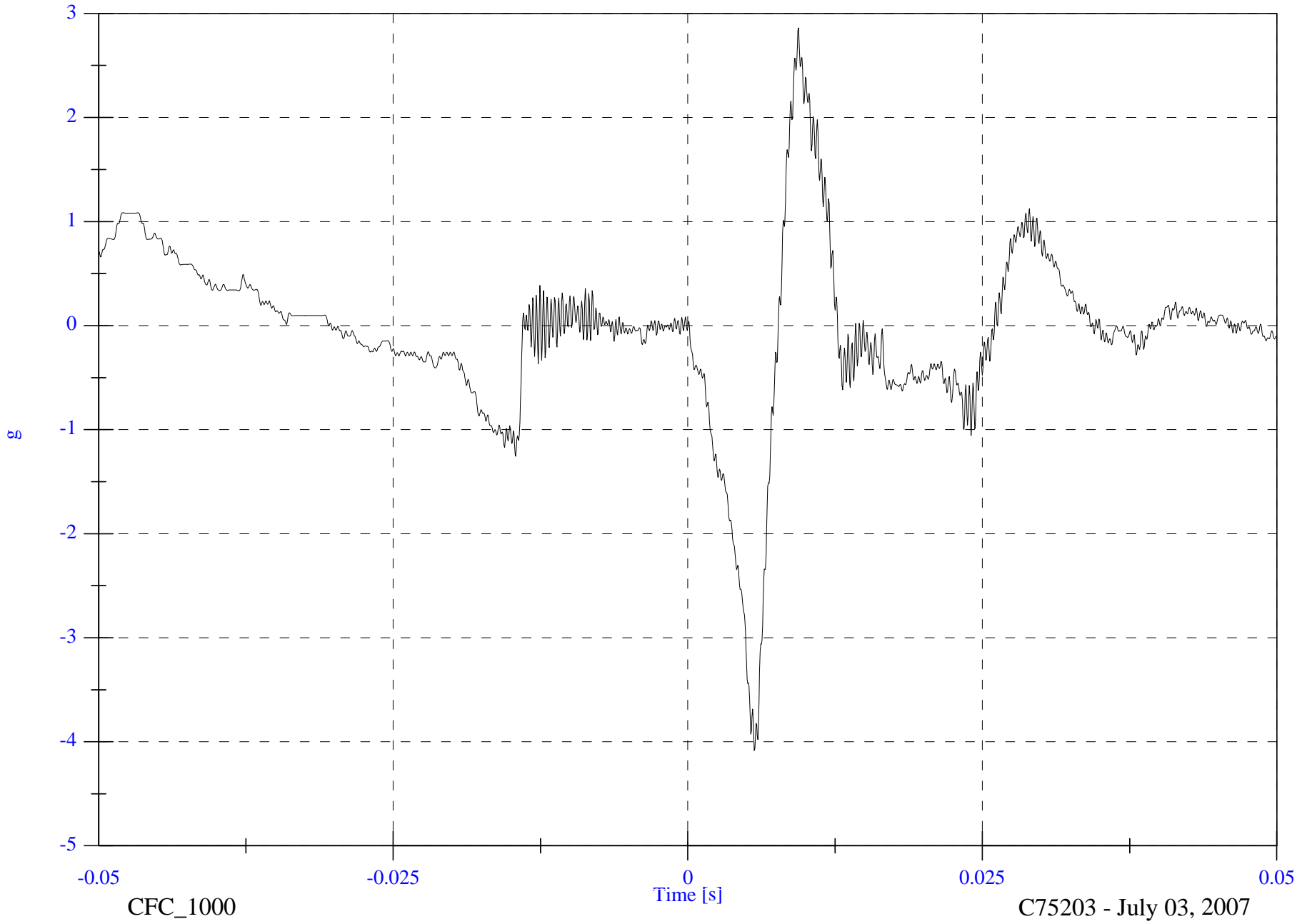
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Max: 2.9 [g] at 0.009 [s]

### Headform Y Acceleration

Min: -4.1 [g] at 0.006 [s]



C75203 DRIVER SIDE SR2B IMPACT PLOT #2

8826-FMH-04

CFC\_1000

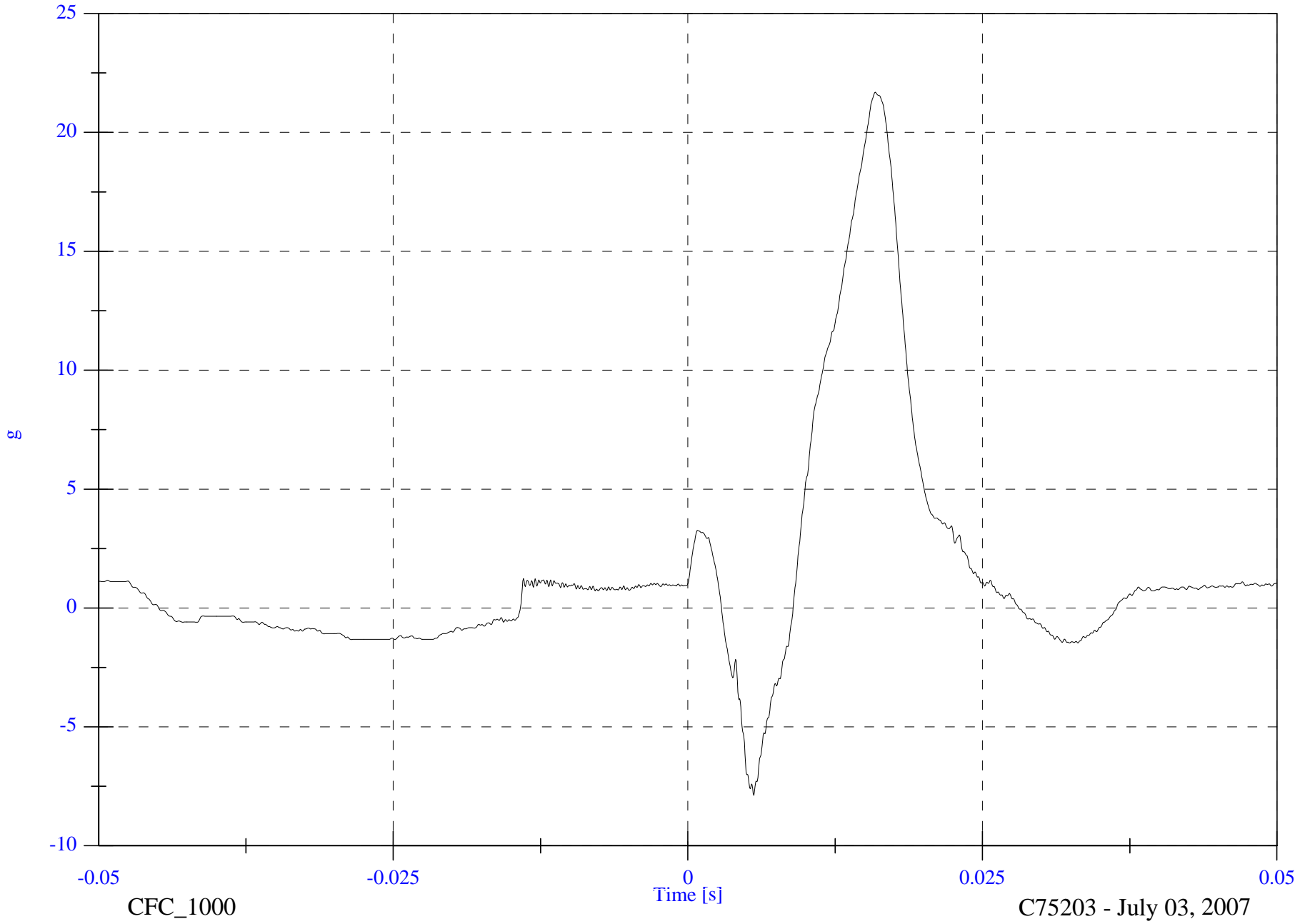
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Z Acceleration

Max: 21.7 [g] at 0.016 [s]

Min: -7.9 [g] at 0.006 [s]



C75203 DRIVER SIDE SR2B IMPACT PLOT #3

8826-FMH-04

CFC\_1000

C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

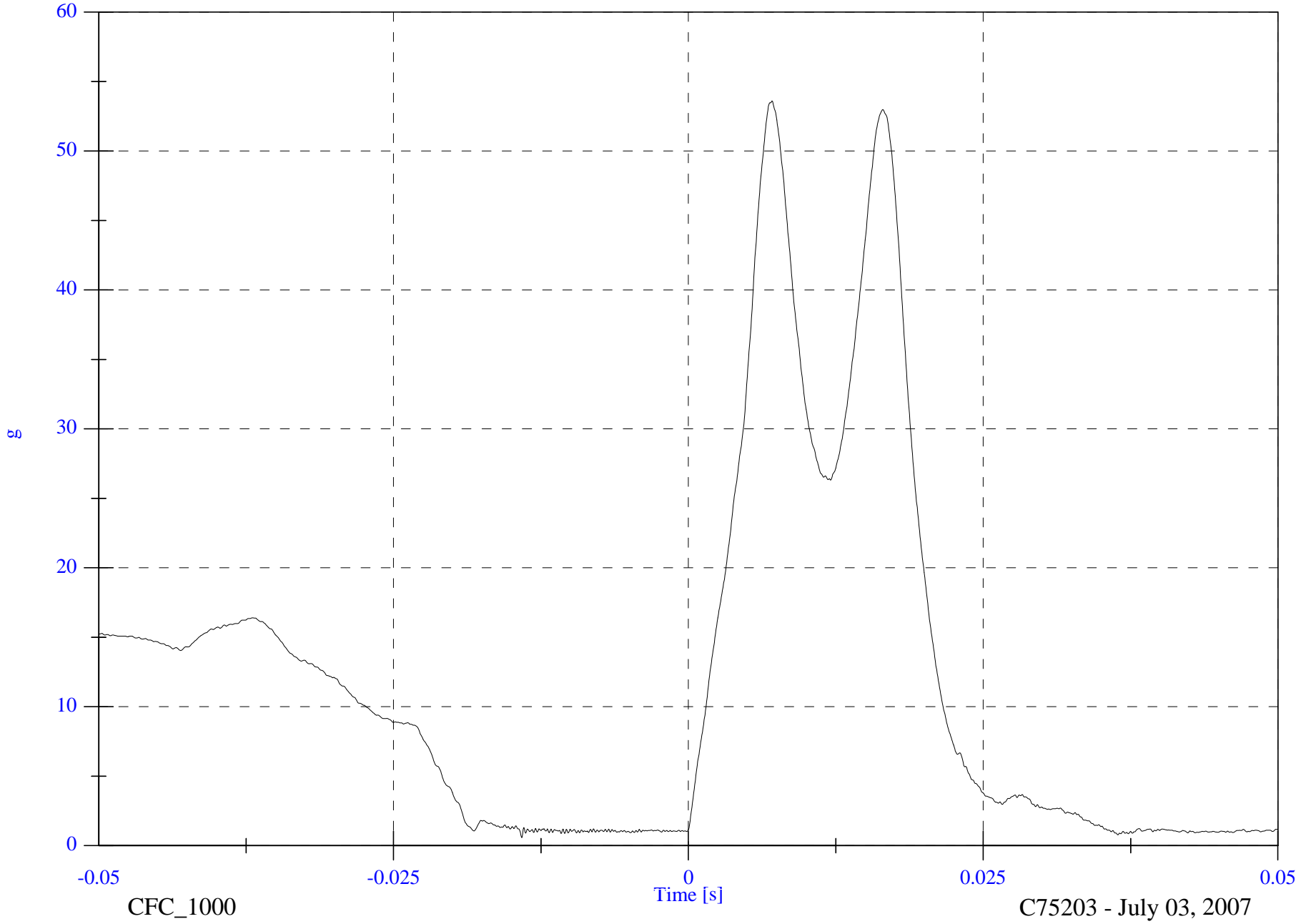
Headform Resultant

Max: 53.6 [g] at 0.007 [s]

Min: 0.6 [g] at -0.014 [s]

C75203 DRIVER SIDE SR2B IMPACT PLOT #4

8826-FMH-04



CFC\_1000

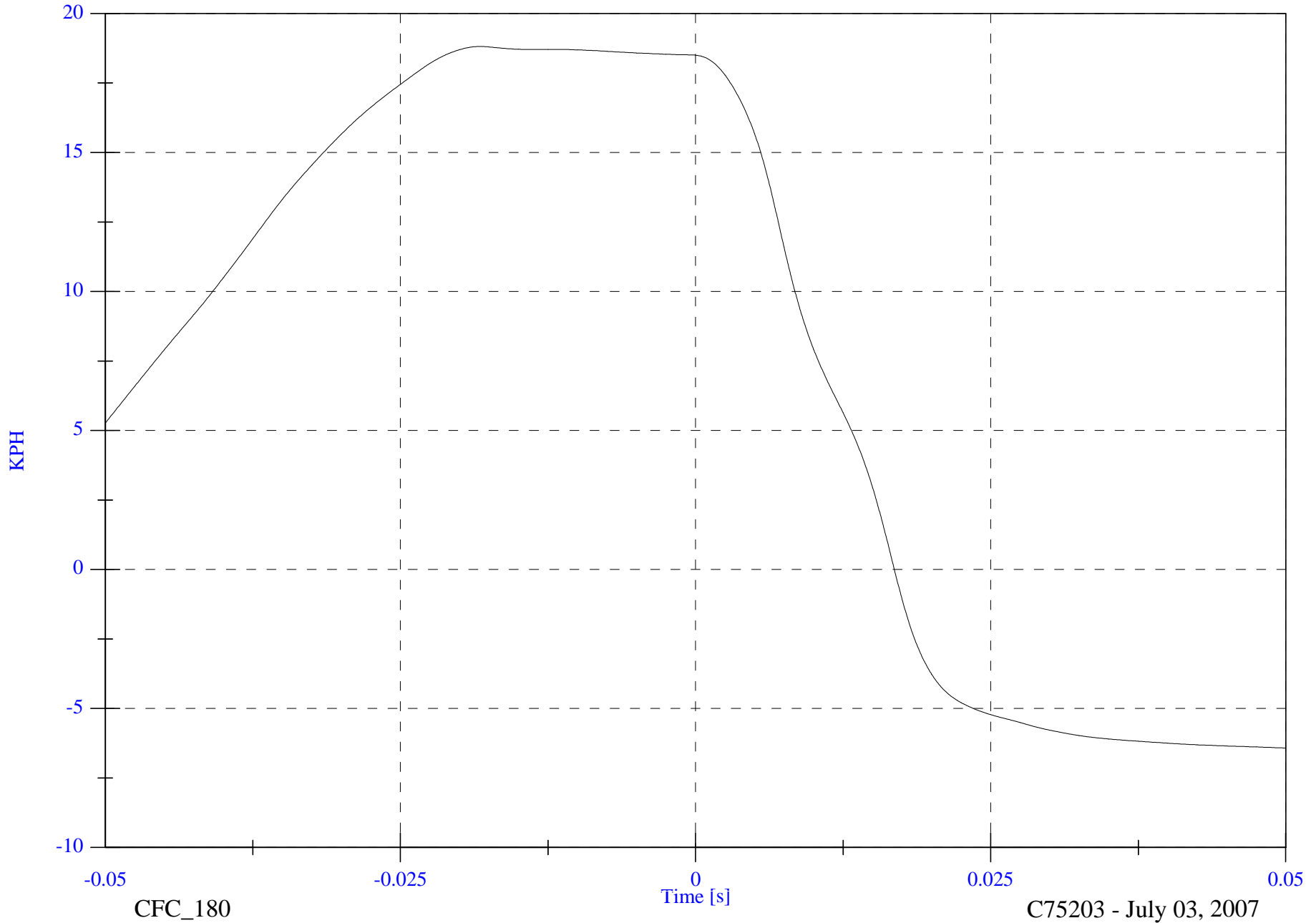
C75203 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Max: 18.8 [KPH] at -0.018 [s]

Min: -6.4 [KPH] at 0.050 [s]

### Headform Velocity



C75203 DRIVER SIDE SR2B IMPACT PLOT #5

8826-FMH-04

CFC\_180

C75203 - July 03, 2007



PRE-IMPACT SR2B





POST-IMPACT SR2B

VEHICLE YEAR/MAKE/MODEL/STYLE:	2007 Nissan Versa
VIN:	3N1BC13E27L403345
DATE OF MANUFACTURE:	01/07(SEE CERTIFICATION LABEL)
COLOR:	Black

Test Number:	12
Test Date:	07/03/07
Target Location:	A-PILLAR
Target Code:	AP2
Horizontal Impact Angle:	223°
Vertical Impact Angle:	44°
Ambient Temperature:	22.0C°
Relative Humidity:	35.8
Time of Impact:	13:15
Headform Number:	0062

Impact Point Description (from lower midpoint on midsagittal line)					
On Centerline	4	x	mm right		mm left
On Centerline	22				mm up



POST-IMPACT AP2 HEADFORM

Free Motion HIC	290.6
HIC(d)	385.7
Impact Velocity (kph)	18.68
HIC T1 (msec)	2.2
HIC T2 (msec)	11.8

# FMVSS 201U 2007 Nissan Versa C75302 - AP2

FMH Headform 0062

Location: AP2

Test Date: July 03, 2007

Work File: AP2

## -----TEST RESULTS-----

Lab Temperature: 22.0 C

HICd: 385.7

Lab Humidity: 35.8 %

HIC (36ms): 290.6

Velocity at Impact: 18.68 KPH

t1: 2.2 msec

t2: 11.8 msec

Free Flight Distance: 217.39 mm

Duration: 9.6 msec

Maximum: 90.0 g

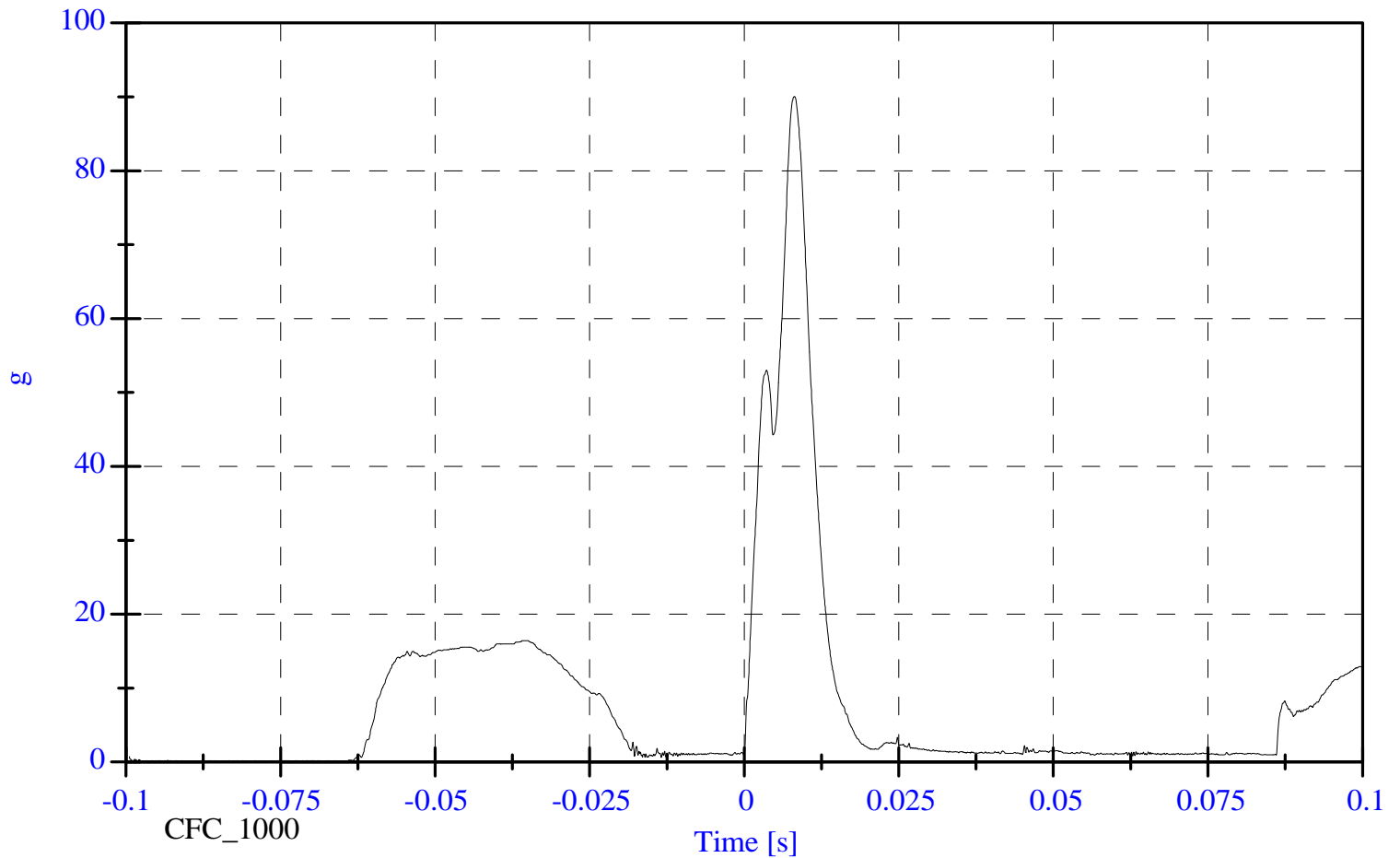
Average Acceleration: 7.6 g

FMVSS 201U 2007 Nissan Versa

Headform Resultant

Max: 90.0 [g] at 0.008 [s]

Min: 0.0 [g] at -0.097 [s]



FMVSS 201U 2007 Nissan Versa

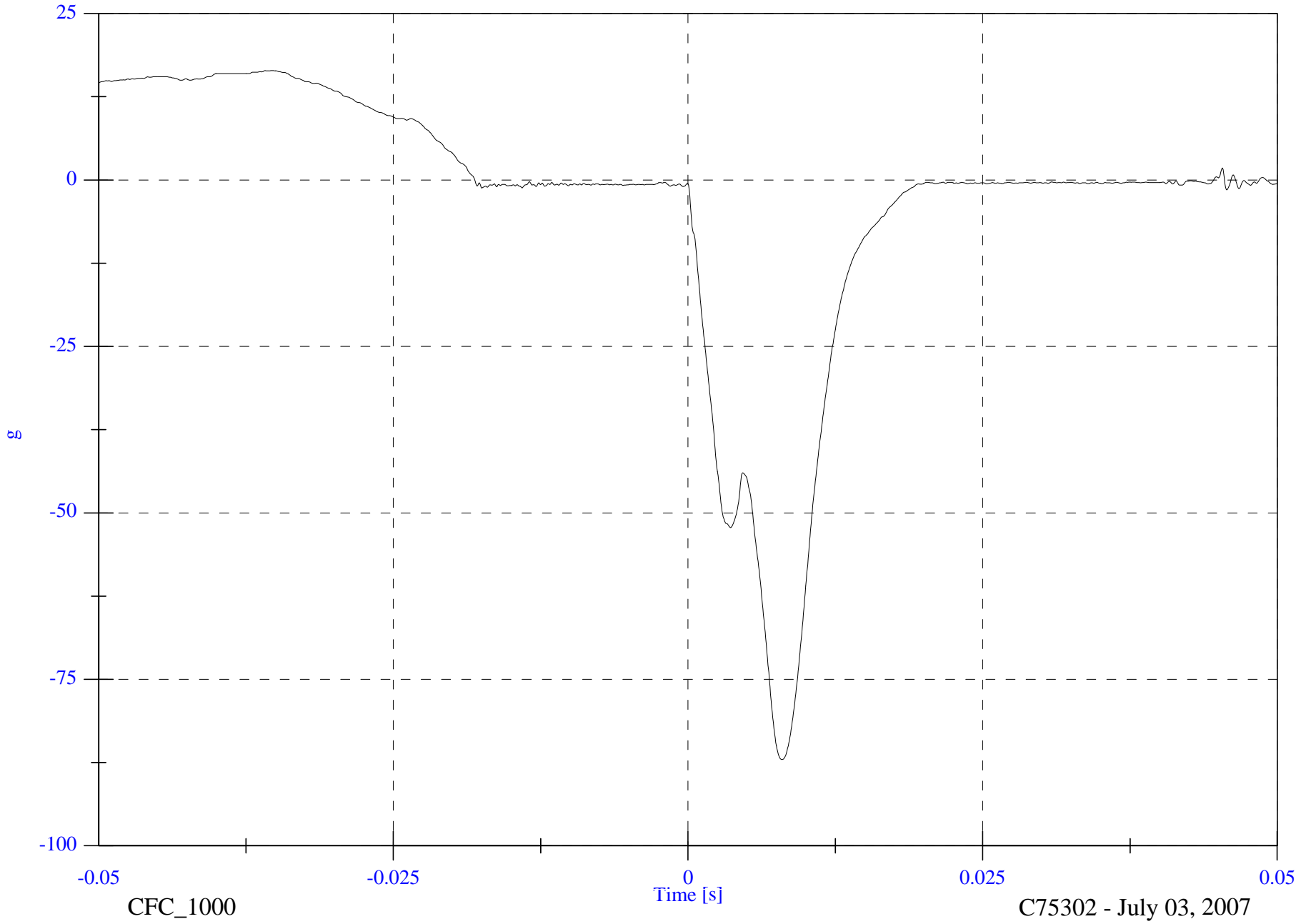
Headform X Acceleration

Max: 16.4 [g] at -0.035 [s]

Min: -87.0 [g] at 0.008 [s]

C75203 DRIVER SIDE AP2 IMPACT PLOT #1

8826-FMH-04



CFC\_1000

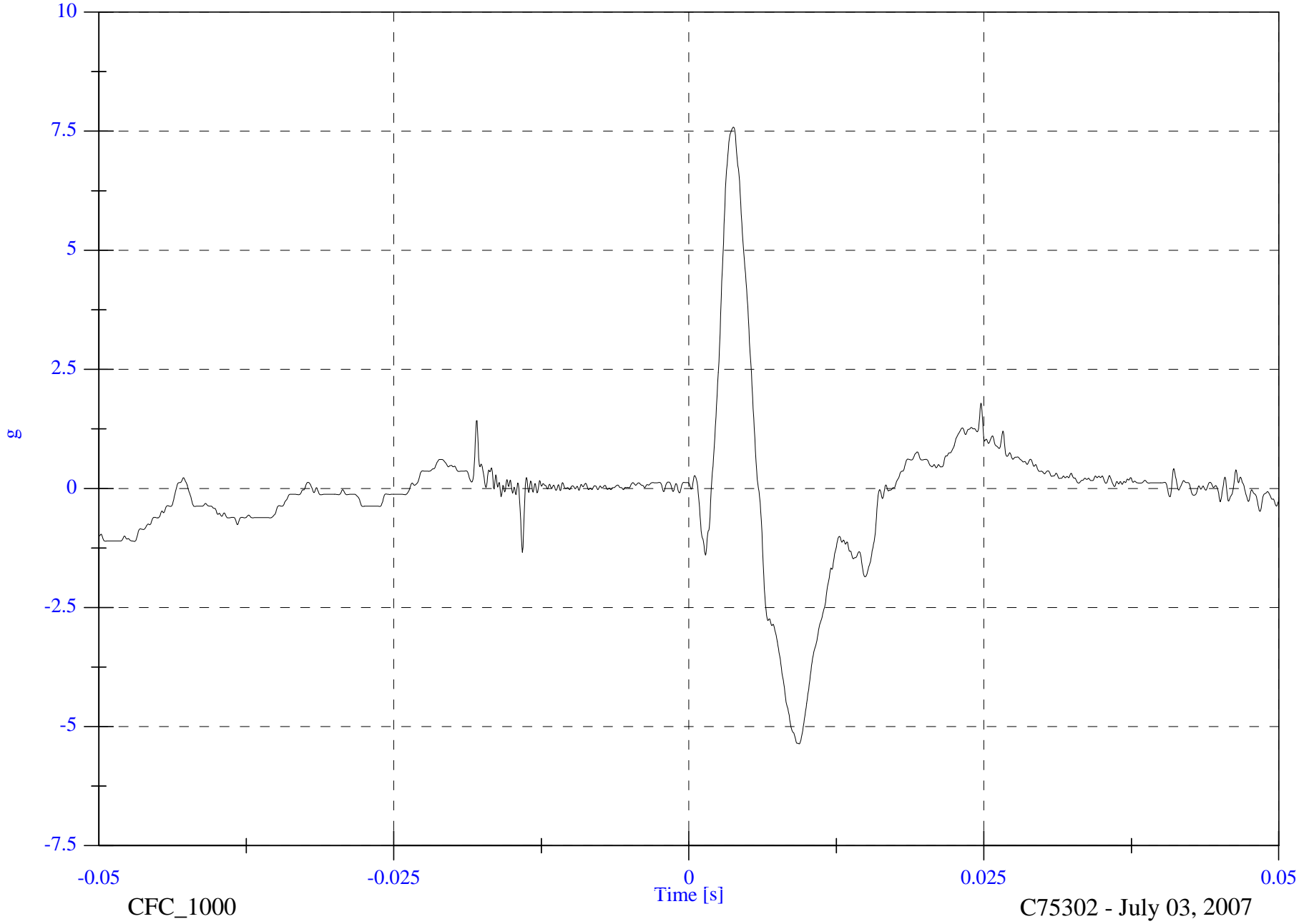
C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Y Acceleration

Max: 7.6 [g] at 0.004 [s]

Min: -5.4 [g] at 0.009 [s]



C75203 DRIVER SIDE AP2 IMPACT PLOT #2

8826-FMH-04

CFC\_1000

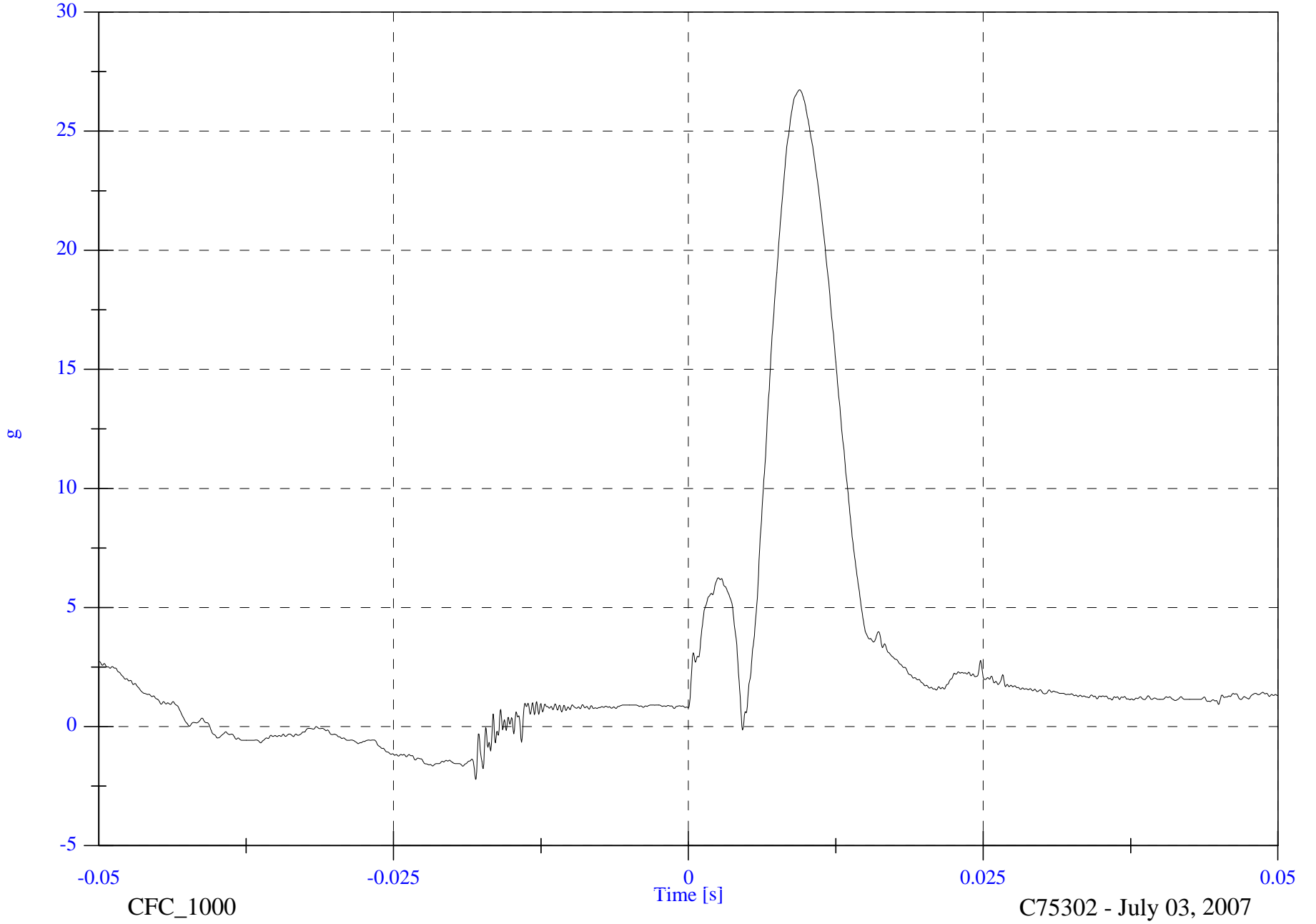
C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Headform Z Acceleration

Max: 26.7 [g] at 0.009 [s]

Min: -2.2 [g] at -0.018 [s]



C75203 DRIVER SIDE AP2 IMPACT PLOT #3

8826-FMH-04

CFC\_1000

C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

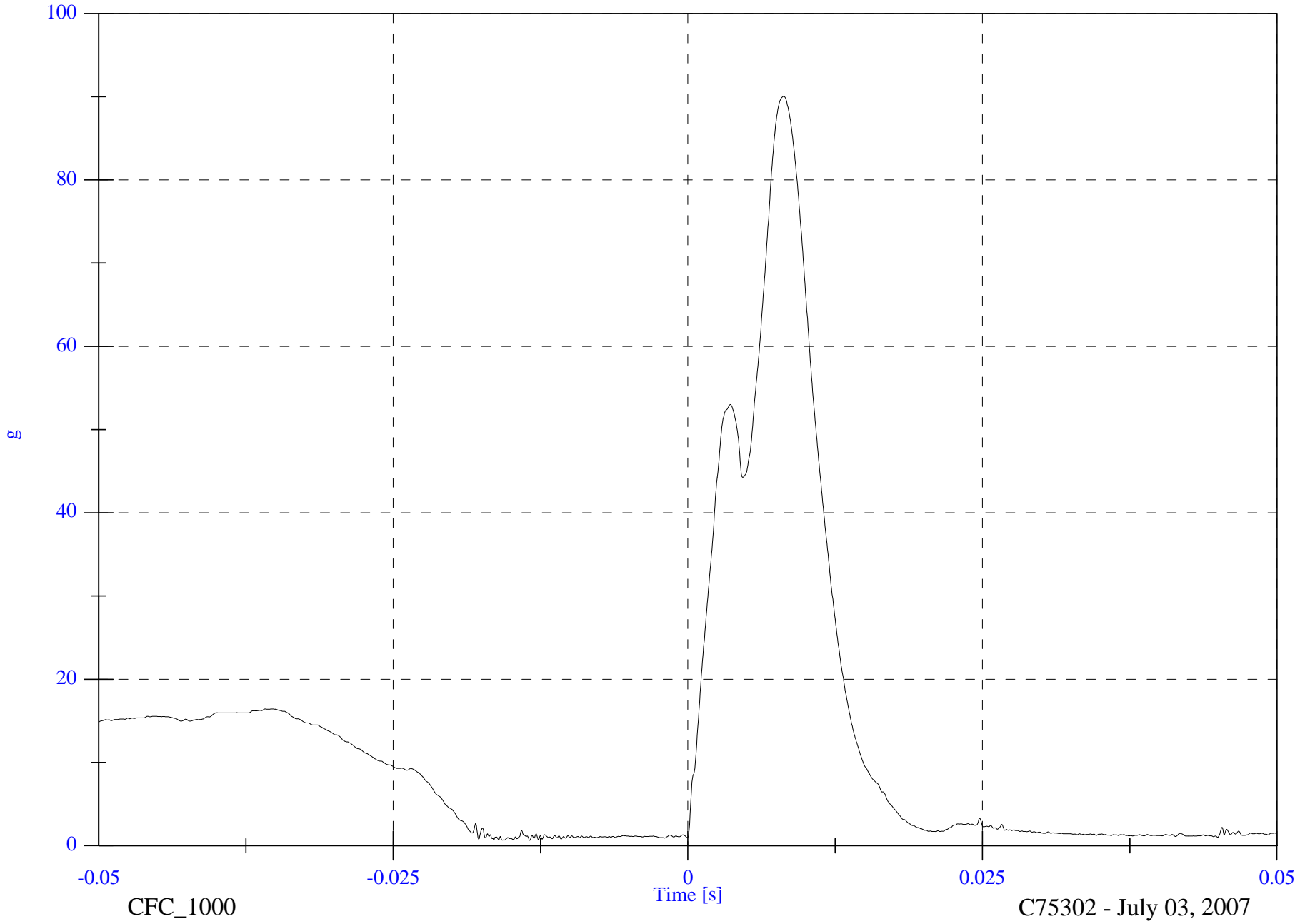
Headform Resultant

Max: 90.0 [g] at 0.008 [s]

Min: 0.6 [g] at -0.013 [s]

C75203 DRIVER SIDE AP2 IMPACT PLOT #4

8826-FMH-04



CFC\_1000

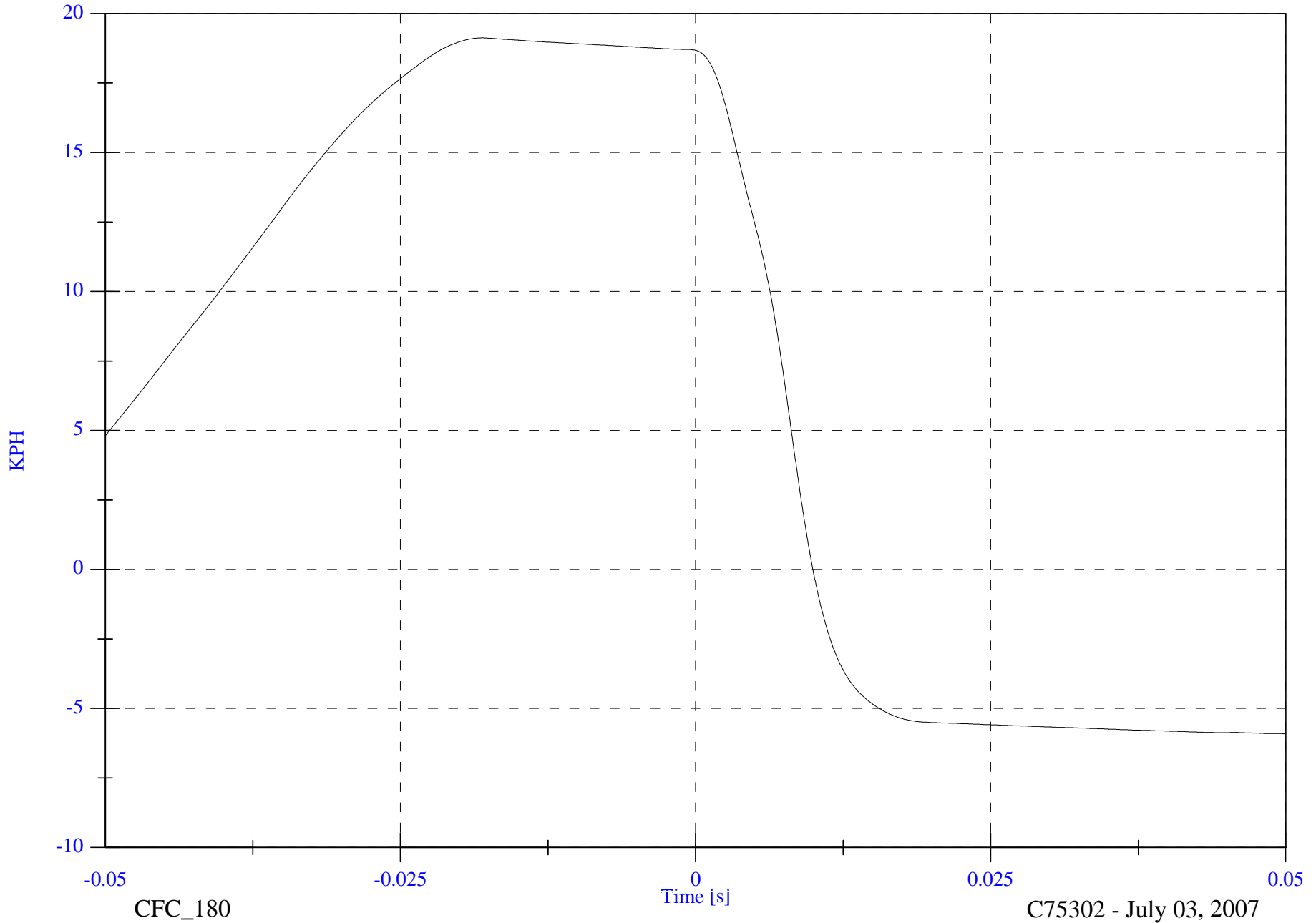
C75302 - July 03, 2007

FMVSS 201U 2007 Nissan Versa

Max: 19.1 [KPH] at -0.018 [s]

Min: -5.9 [KPH] at 0.050 [s]

### Headform Velocity



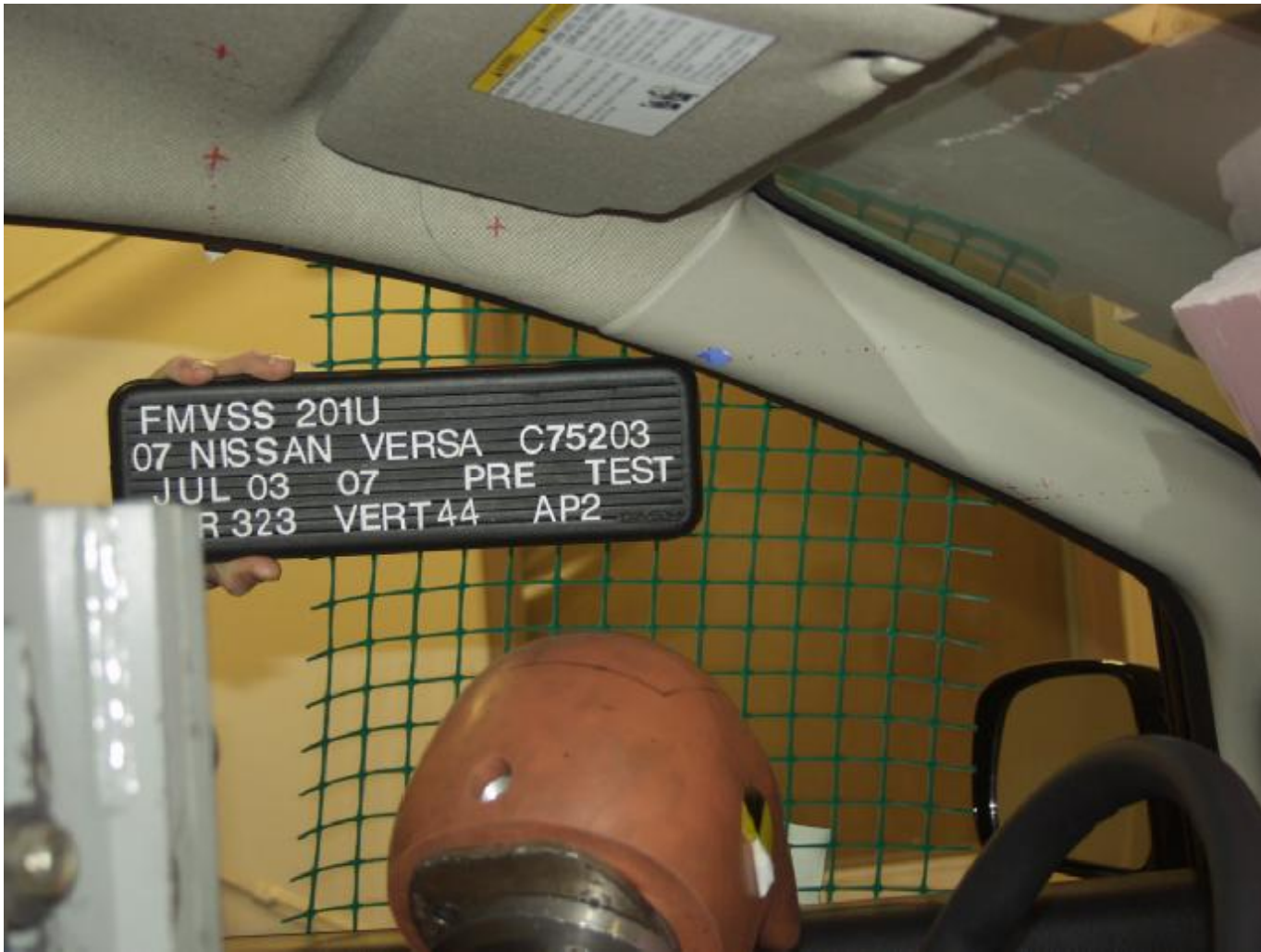
C75203 DRIVER SIDE AP2 IMPACT PLOT #5

8826-FMH-04

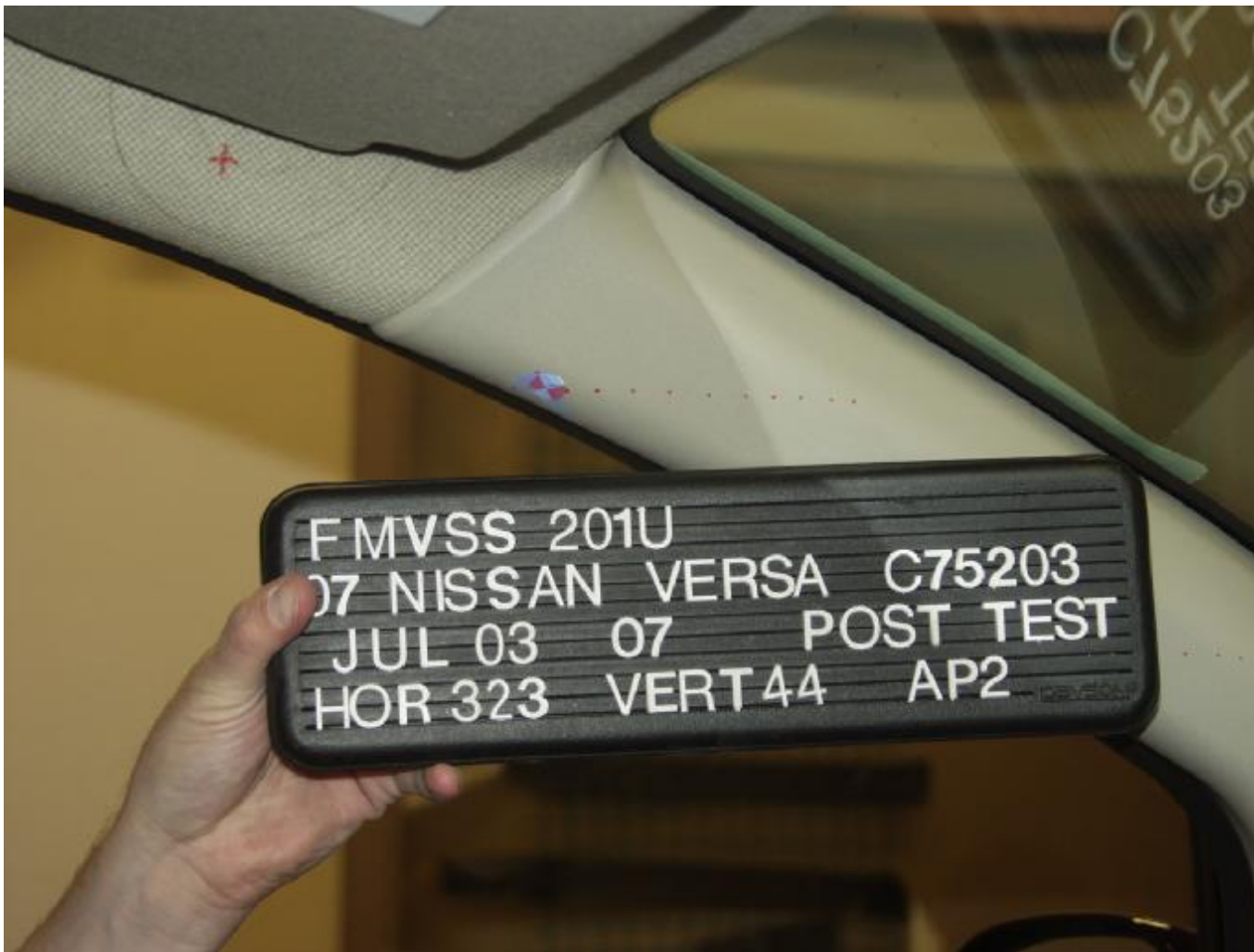
CFC\_180

C75302 - July 03, 2007





PRE-IMPACT AP2



POST-IMPACT AP2

**APPENDIX A**

**PHOTOGRAPHS**

**PHOTOGRAPHS**

<b>FIGURE</b>	<b>VIEW</b>
A-1	LEFT SIDE VIEW OF VEHICLE
A-2	RIGHT SIDE VIEW OF VEHICLE
A-3	3/4 FRONTAL VIEW FROM LEFT SIDE OF VEHICLE
A-4	3/4 REAR VIEW FROM RIGHT SIDE OF VEHICLE
A-5	VEHICLE'S CERTIFICATION LABEL
A-6	VEHICLE'S TIRE INFORMATION LABEL
A-7	PRE-TEST DRIVER SIDE A-PILLAR
A-8	PRE-TEST DRIVER SIDE FRONT HEADER
A-9	PRE-TEST DRIVER SIDE SIDE RAIL
A-10	PRE-TEST DRIVER SIDE B-PILLAR
A-11	PRE-TEST DRIVER SIDE REAR PILLAR
A-12	PRE-TEST PASSENGER SIDE A-PILLAR
A-13	PRE-TEST PASSENGER SIDE FRONT HEADER
A-14	PRE-TEST PASSENGER SIDE SIDE RAIL
A-15	PRE-TEST PASSENGER SIDE B-PILLAR
A-16	PRE-TEST PASSENGER SIDE REAR PILLAR
A-17	POST-TEST DRIVER SIDE A-PILLAR
A-18	POST-TEST DRIVER FRONT HEADER
A-19	POST-TEST DRIVER SIDE SIDE RAIL
A-20	POST-TEST DRIVER SIDE B-PILLAR
A-21	POST-TEST DRIVER SIDE REAR PILLAR
A-22	POST-TEST PASSENGER SIDE A-PILLAR
A-23	POST-TEST PASSENGER FRONT HEADER
A-24	POST-TEST PASSENGER SIDE SIDE RAIL
A-25	POST-TEST PASSENGER SIDE B-PILLAR
A-26	POST-TEST PASSENGER SIDE REAR PILLAR



Figure A-1 : LEFT SIDE VIEW OF VEHICLE



A-4

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Figure A-2 : RIGHT SIDE VIEW OF VEHICLE





Figure A-3 : 3/4 FRONTAL VIEW FROM LEFT SIDE OF VEHICLE



Figure A-4 : 3/4 REAR VIEW FROM RIGHT SIDE OF VEHICLE





Figure A-5 : VEHICLE'S CERTIFICATION LABEL



Figure A-6 : VEHICLE'S TIRE INFORMATION LABEL



Figure A-7 : PRE-TEST DRIVER SIDE A-PILLAR

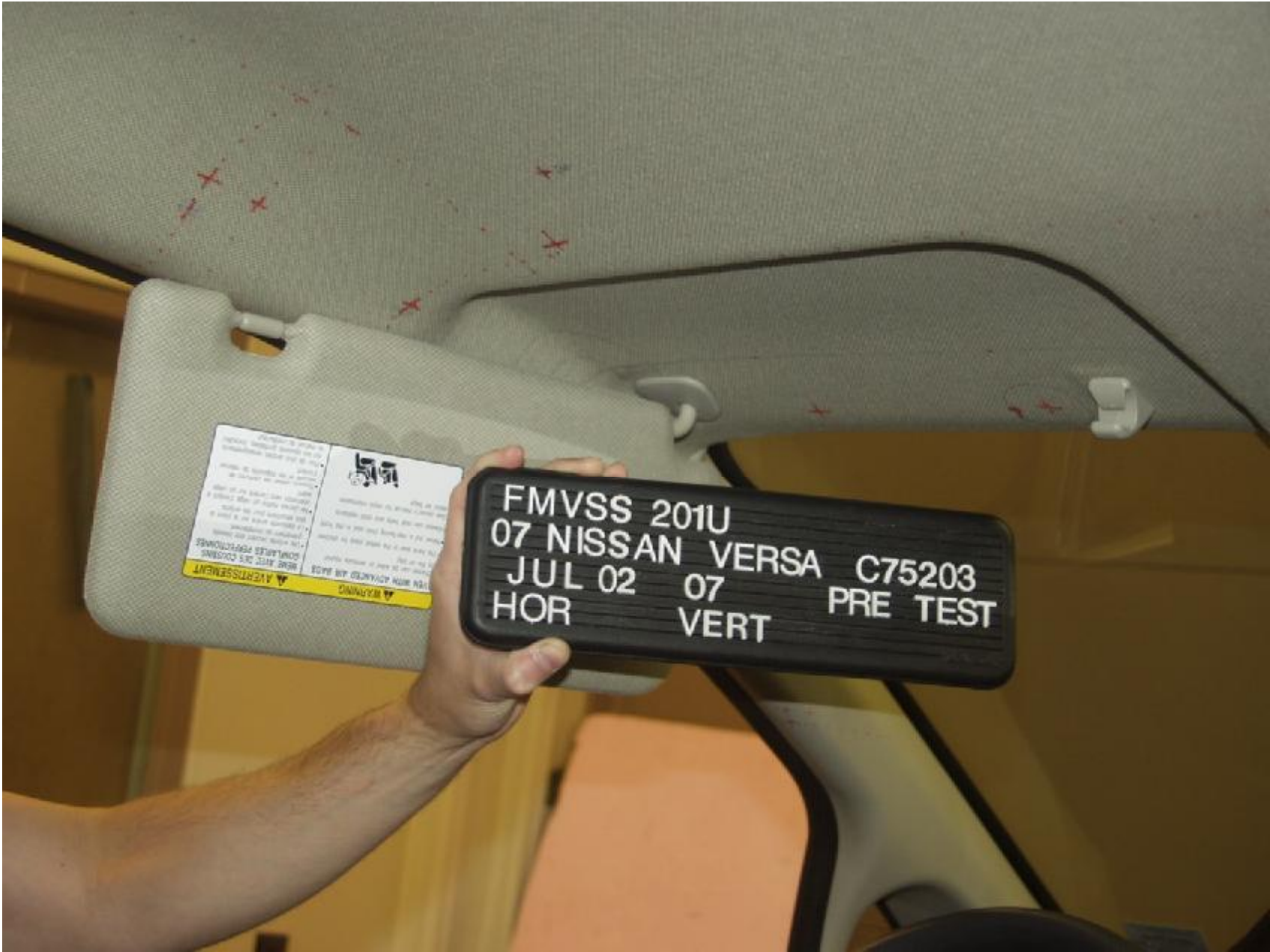


Figure A-8 : PRE-TEST DRIVER SIDE FRONT HEADER





Figure A-9 : PRE-TEST DRIVER SIDE SIDE RAIL



Figure A-10 : PRE-TEST DRIVER SIDE B-PILLAR



Figure A-11 : PRE-TEST DRIVER SIDE REAR PILLAR



Figure A-12 : PRE-TEST PASSENGER SIDE A-PILLAR





Figure A-13 : PRE-TEST PASSENGER SIDE FRONT HEADER



Figure A-14 : PRE-TEST PASSENGER SIDE SIDE RAIL



Figure A-15 : PRE-TEST PASSENGER SIDE B-PILLAR





Figure A-16 : PRE-TEST PASSENGER SIDE REAR PILLAR



Figure A-17 : POST-TEST DRIVER SIDE A-PILLAR



Figure A-18 : POST-TEST DRIVER SIDE FRONT HEADER





Figure A-19 : POST-TEST DRIVER SIDE SIDE RAIL



Figure A-20 : POST-TEST DRIVER SIDE B-PILLAR





Figure A-21 : POST-TEST DRIVER SIDE REAR PILLAR



Figure A-22 : POST-TEST PASSENGER SIDE A-PILLAR



Figure A-23 : POST-TEST PASSENGER SIDE FRONT HEADER



Figure A-24 : POST-TEST PASSENGER SIDE SIDE RAIL



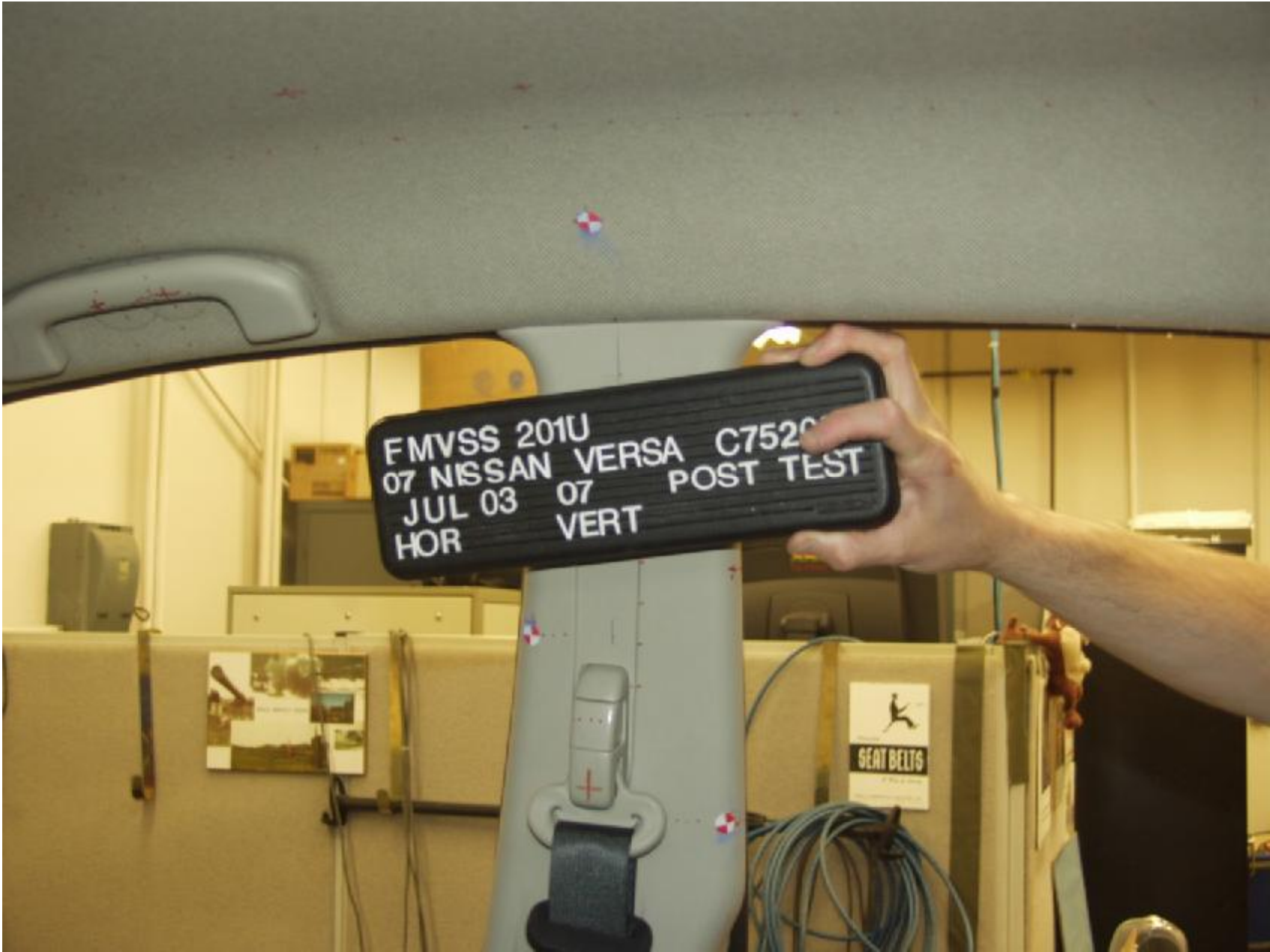


Figure A-25 : POST-TEST PASSENGER SIDE B-PILLAR



Figure A-26 : POST-TEST PASSENGER SIDE REAR PILLAR

## **APPENDIX B**

### **PART 572L PERFORMANCE CALIBRATION IN SUPPORT OF VEHICLE SAFETY COMPLIANCE TESTING FOR OCCUPANT PROTECTION IN INTERIOR IMPACT**

Appendix B contains the results from certification tests performed on the Free Motion Headforms utilized in this test program. The results indicate that the headforms meet all of the performance specifications given in 49 CFR Part 572 Subpart L.

The tests were conducted at the Dummy Certification Test Facility of Calspan Corporation. A summary of the test results are included in this Appendix.

**PART 572L  
HEAD DROP PRE-TEST**

<b>MANUFACTURER:</b>		<b>FIRST TECHNOLOGY SAFETY SYSTEMS</b>	
<b>SERIAL NUMBER:</b>		<b>0642</b>	
<b>CALIBRATION DATE:</b>		<b>June 1, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>23.3</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>274.3</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>5.7</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

**HEAD ACCELEROMETER CALIBRATION INFORMATION**

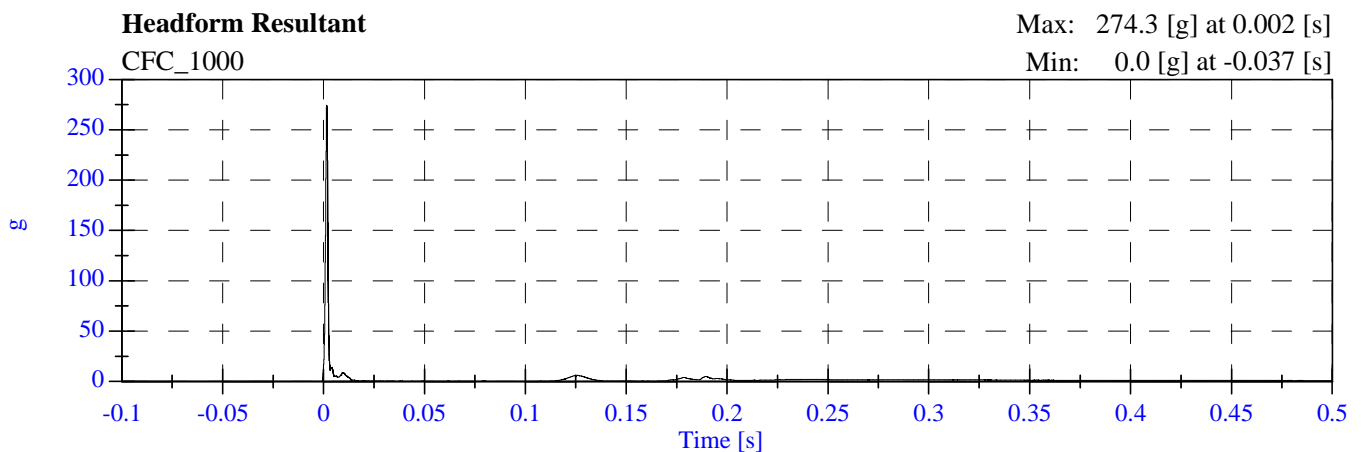
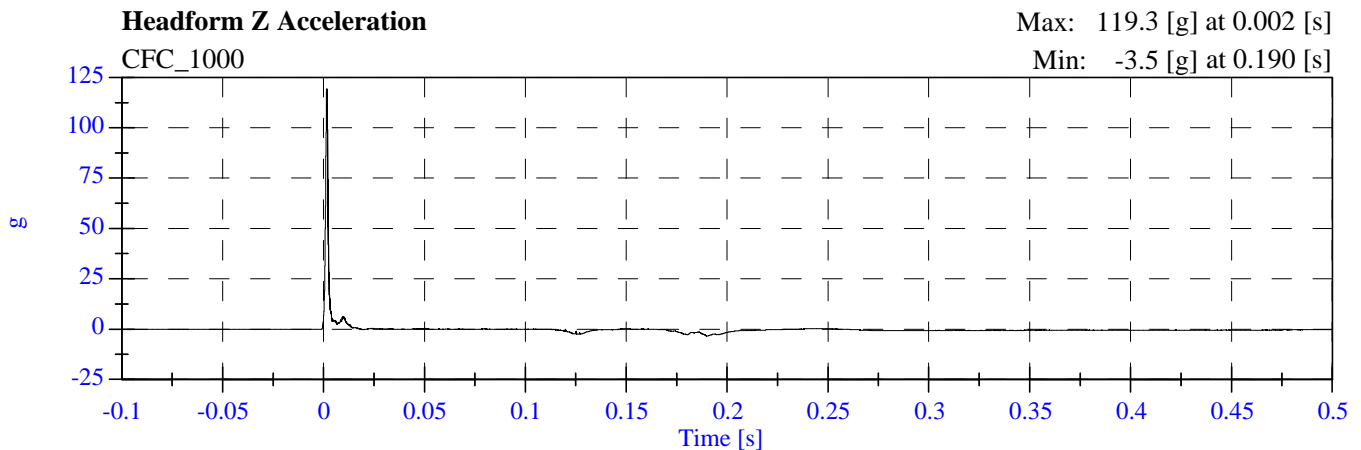
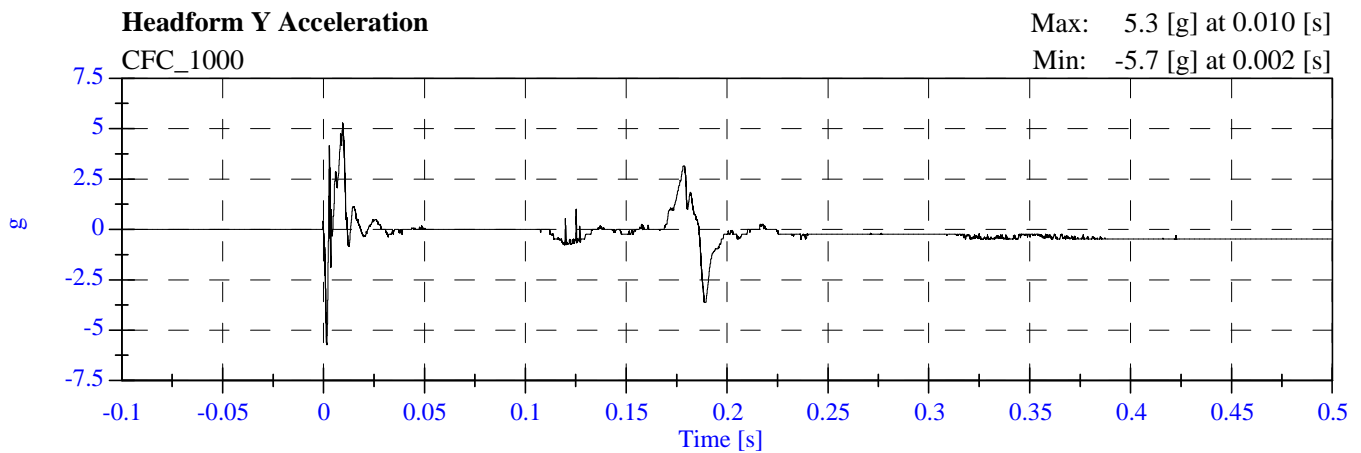
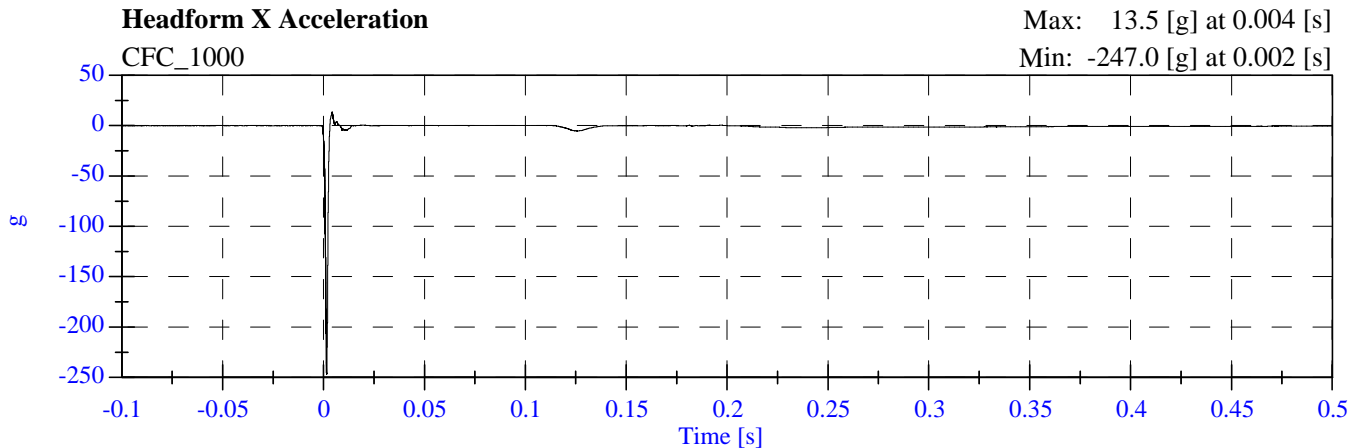
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<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J24876</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J33030</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J31009</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**



# FMVSS 201U - Headform Calibration Drops

## C75203 - June 01, 2007



**PART 572L  
HEAD DROP PRE-TEST**

<b>MANUFACTURER:</b>		<b>DENTON ATD INC.</b>	
<b>SERIAL NUMBER:</b>		<b>0062</b>	
<b>CALIBRATION DATE:</b>		<b>June 1, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>23.3</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>227.1</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>5.0</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

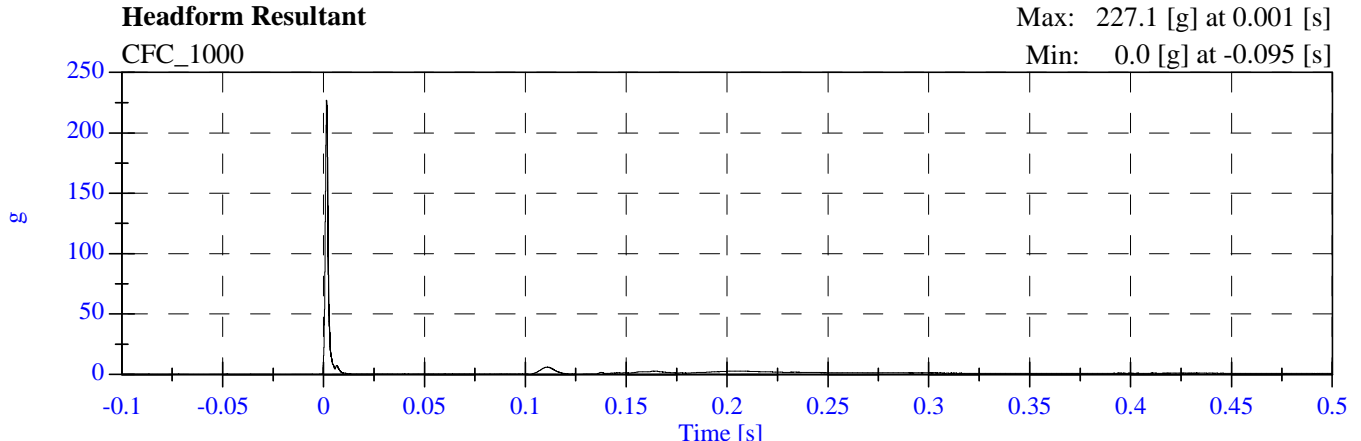
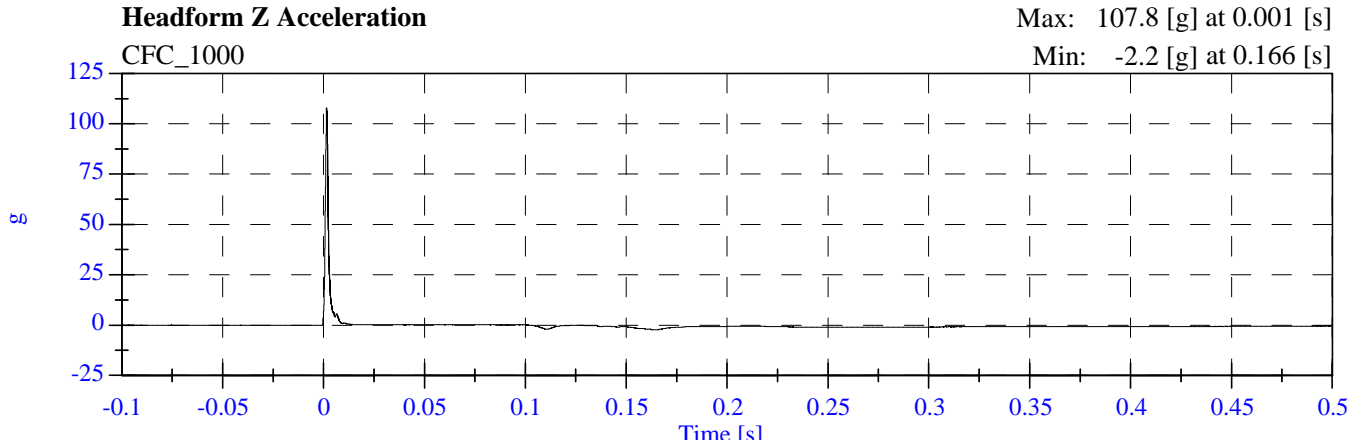
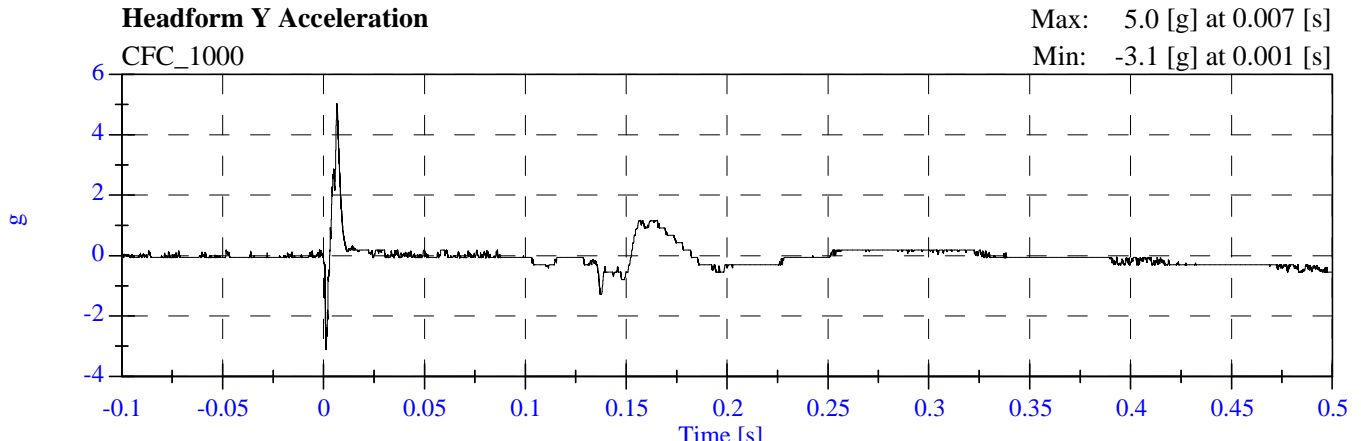
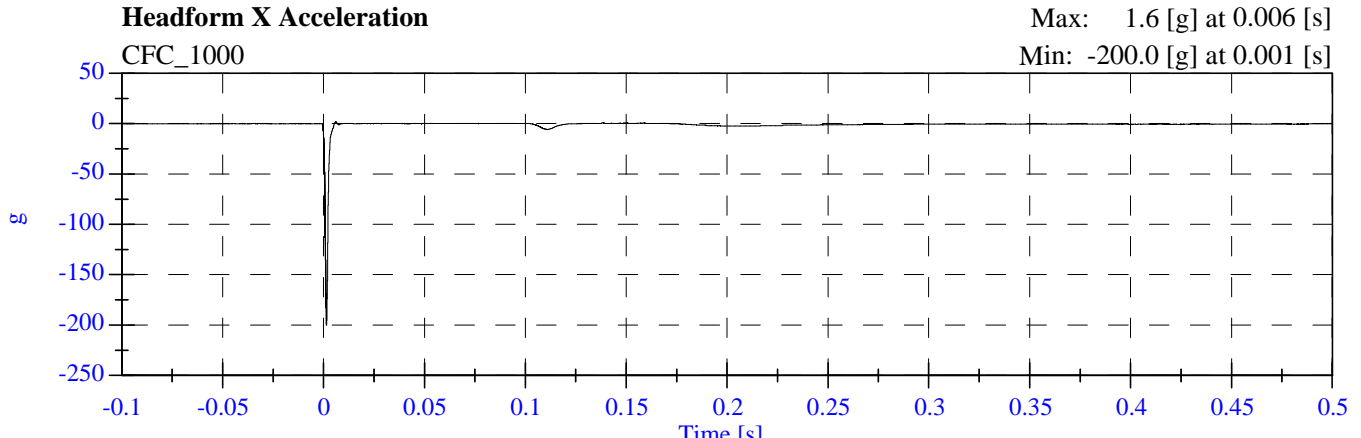
**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J33127</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J33019</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J32782</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - June 01, 2007



**PART 572L  
HEAD DROP PRE-TEST**

<b>MANUFACTURER:</b>		<b>FIRST TECHNOLOGY SAFETY SYSTEMS</b>	
<b>SERIAL NUMBER:</b>		<b>805</b>	
<b>CALIBRATION DATE:</b>		<b>June 1, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>23.3</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>238.0</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>12.5</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

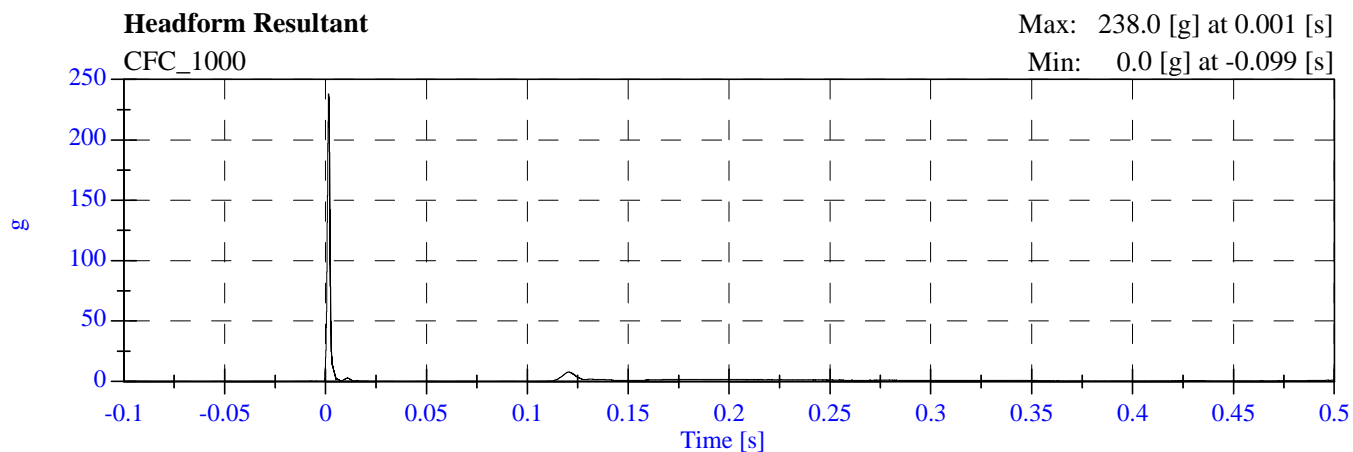
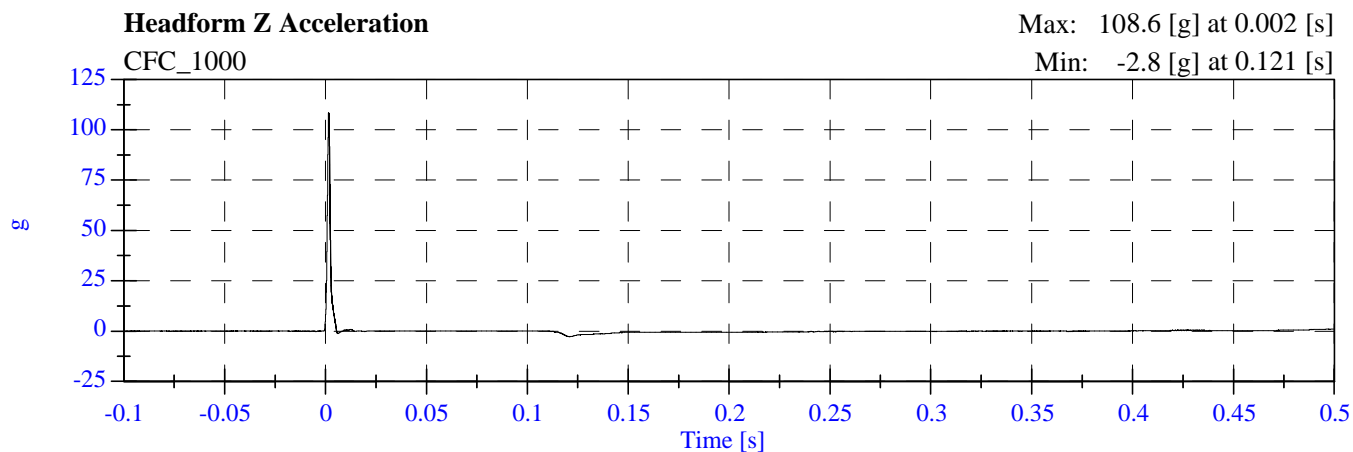
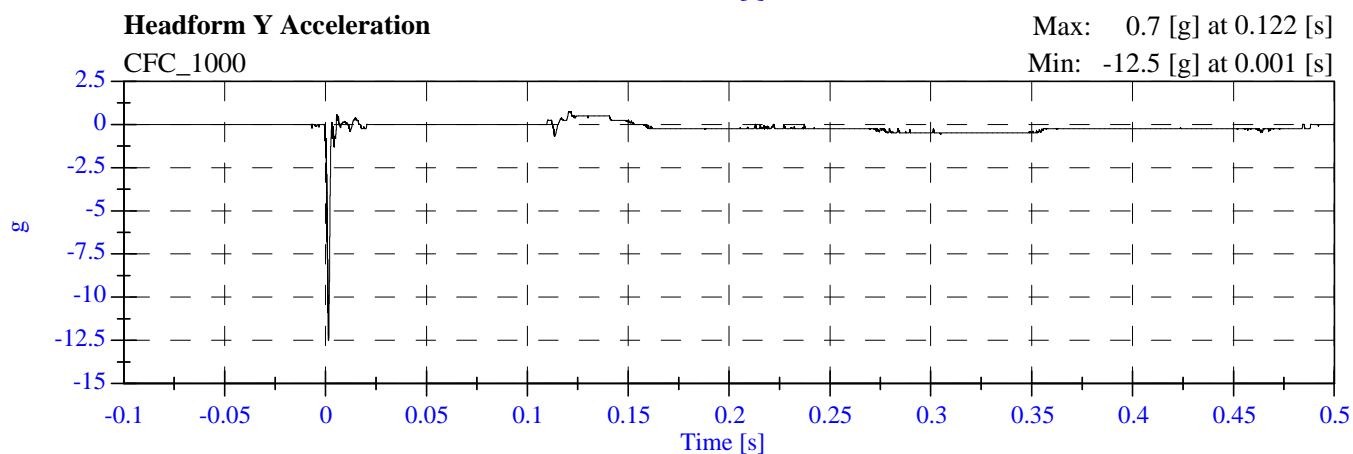
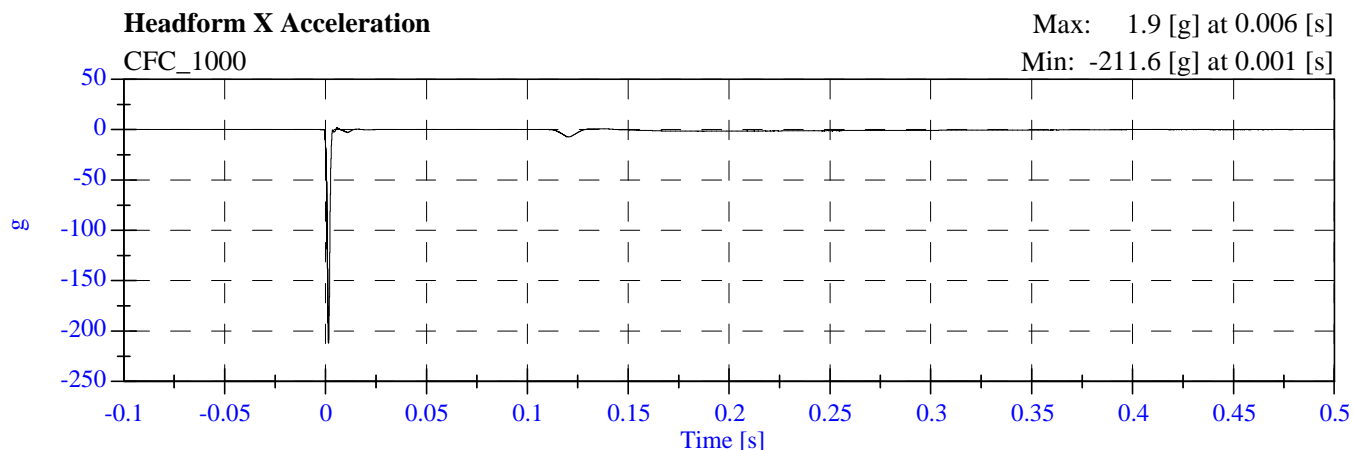
**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J38127</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J37980</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J37854</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - June 01, 2007



**PART 572L  
HEAD DROP PRE-TEST**

<b>MANUFACTURER:</b>		<b>DENTON ATD INC.</b>	
<b>SERIAL NUMBER:</b>		<b>0355</b>	
<b>CALIBRATION DATE:</b>		<b>June 1, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>23.3</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>240.8</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>5.6</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

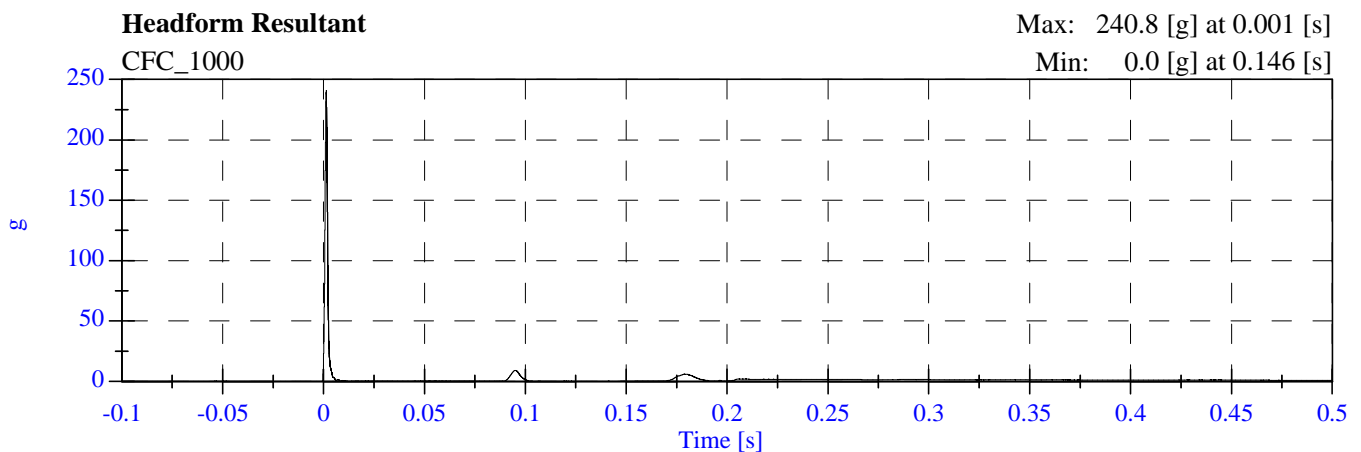
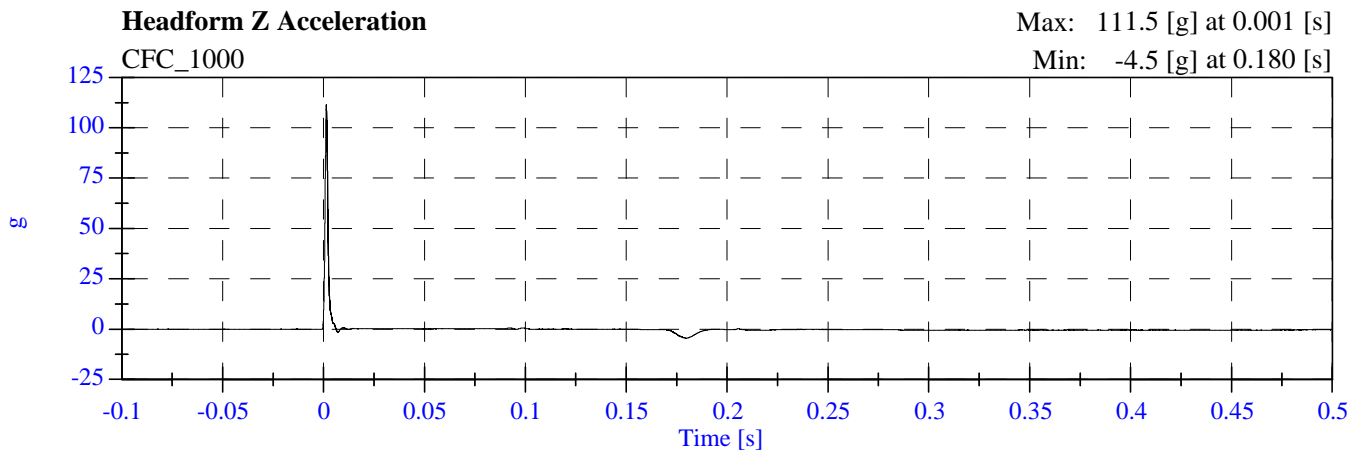
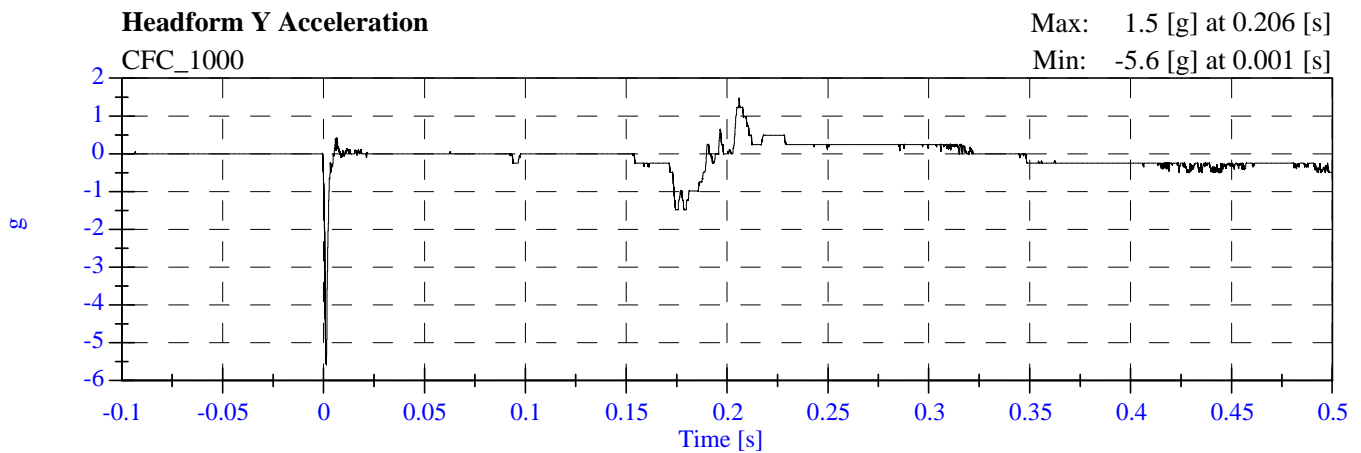
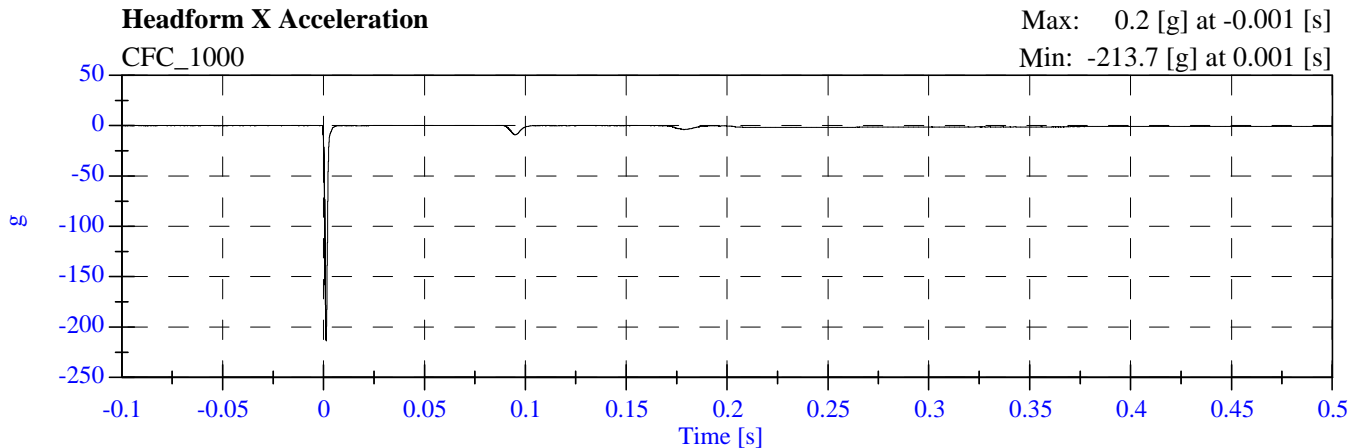
**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J28671</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J32779</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J25854</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - June 01, 2007



**PART 572L  
HEAD DROP PRE-TEST**

<b>MANUFACTURER:</b>		<b>FIRST TECHNOLOGY SAFETY SYSTEMS</b>	
<b>SERIAL NUMBER:</b>		1255	
<b>CALIBRATION DATE:</b>		June 1, 2007	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	19°C to 26°C	23.3	
<b>RELATIVE HUMIDITY</b>	10% to 70%	52	
<b>PEAK RESULTANT ACCELERATION</b>	225 Gs to 275 Gs	251.6	
<b>PEAK LATERAL ACCELERATION</b>	15 Gs Maximum	13.4	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	YES	YES	

**HEAD ACCELEROMETER CALIBRATION INFORMATION**

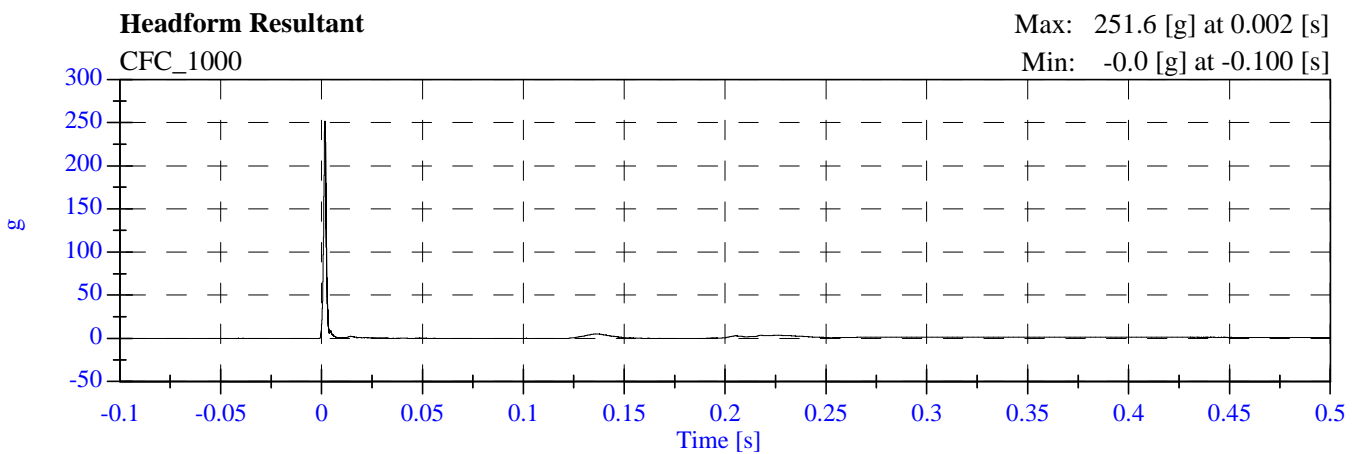
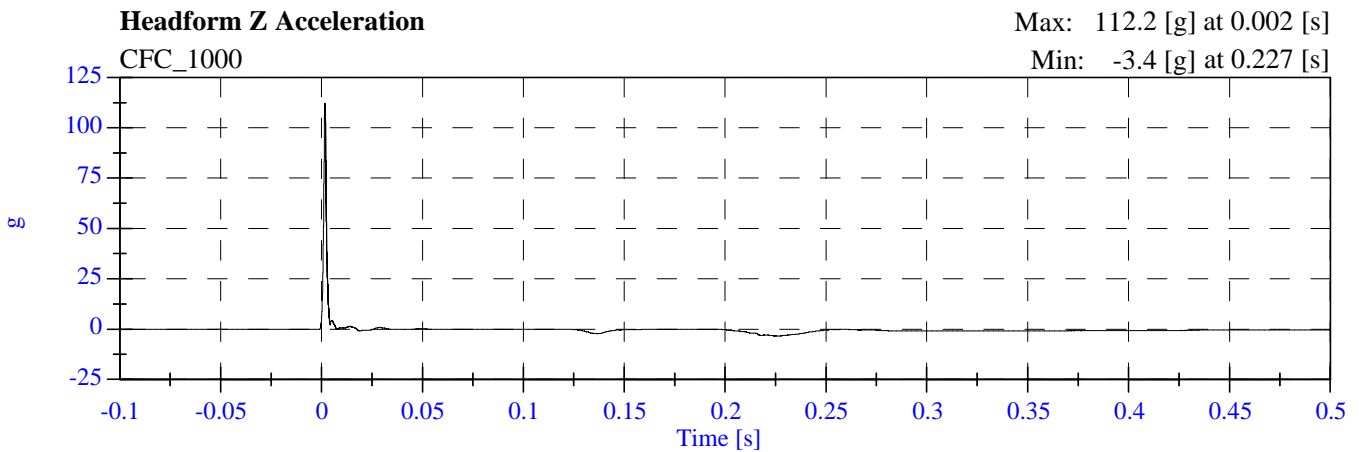
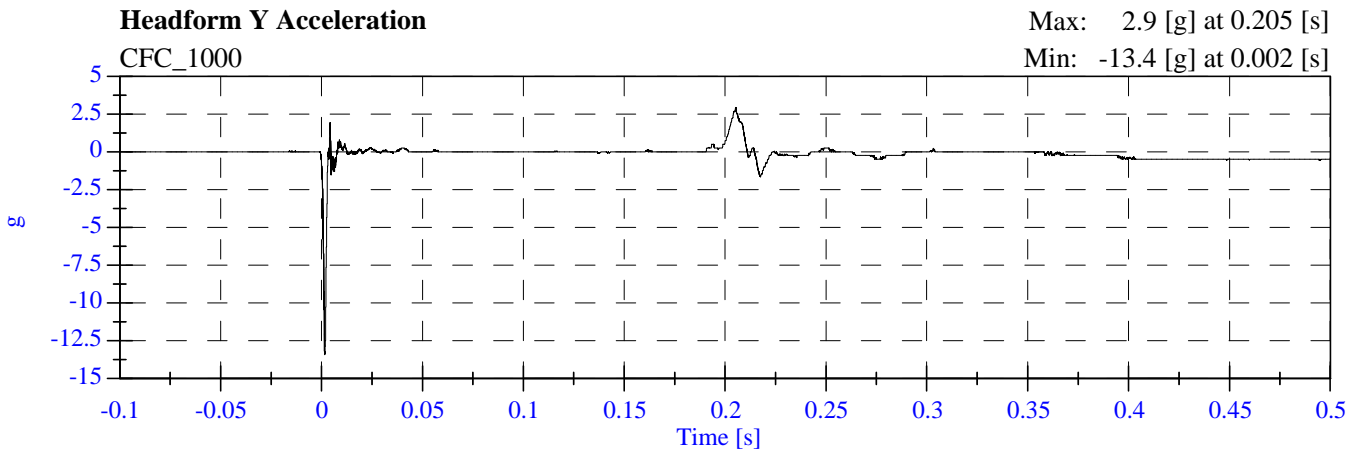
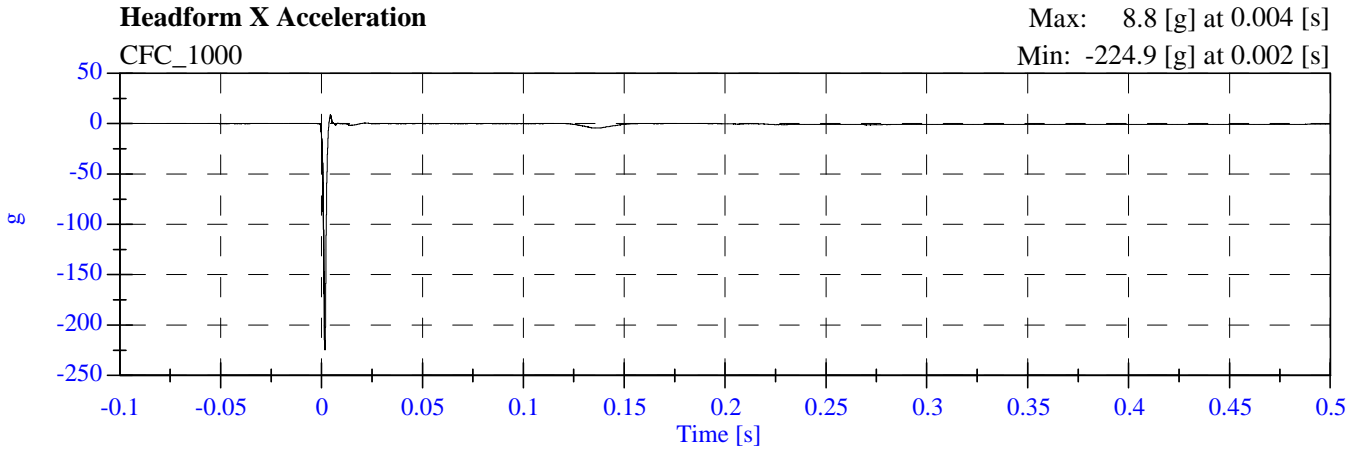
<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J41006</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J40994</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J41007</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**



# FMVSS 201U - Headform Calibration Drops

## C75203 - June 01, 2007



**PART 572L  
HEAD DROP POST-TEST**

<b>MANUFACTURER:</b>		<b>FIRST TECHNOLOGY SAFETY SYSTEMS</b>	
<b>SERIAL NUMBER:</b>		<b>0642</b>	
<b>CALIBRATION DATE:</b>		<b>July 10, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>22.8</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>266.3</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>5.7</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

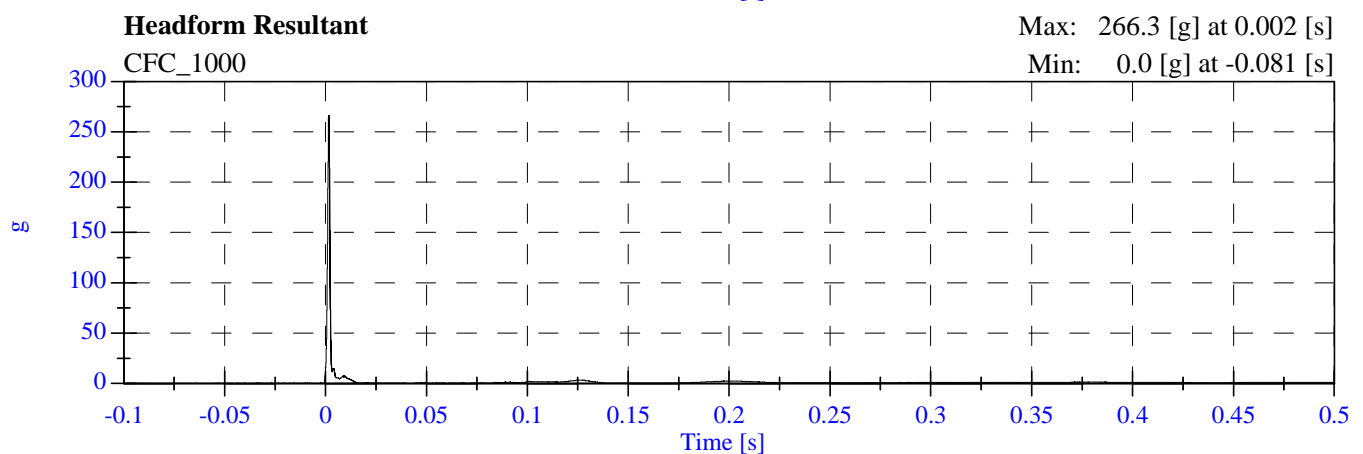
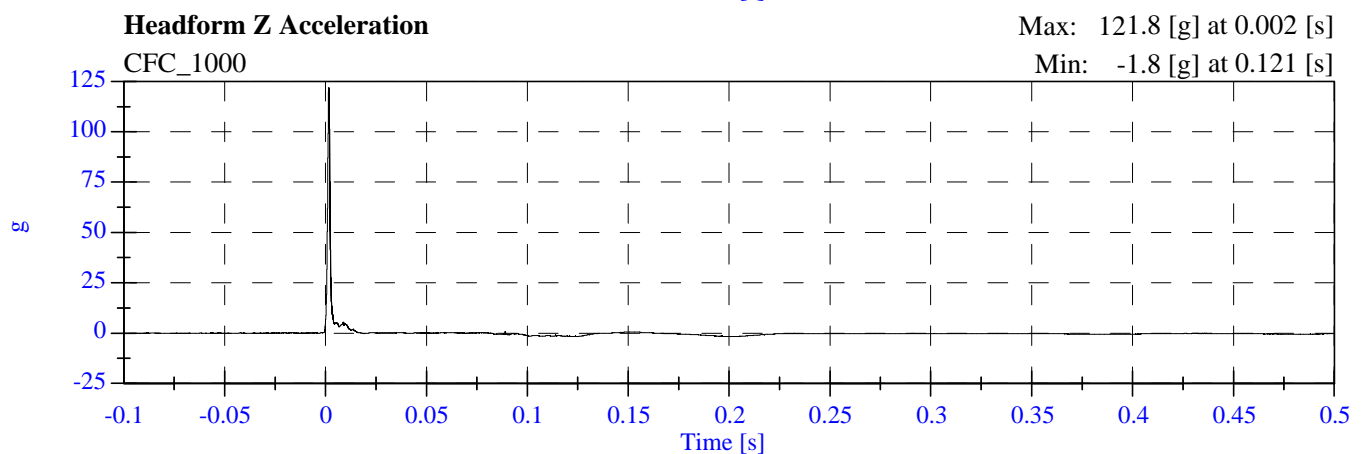
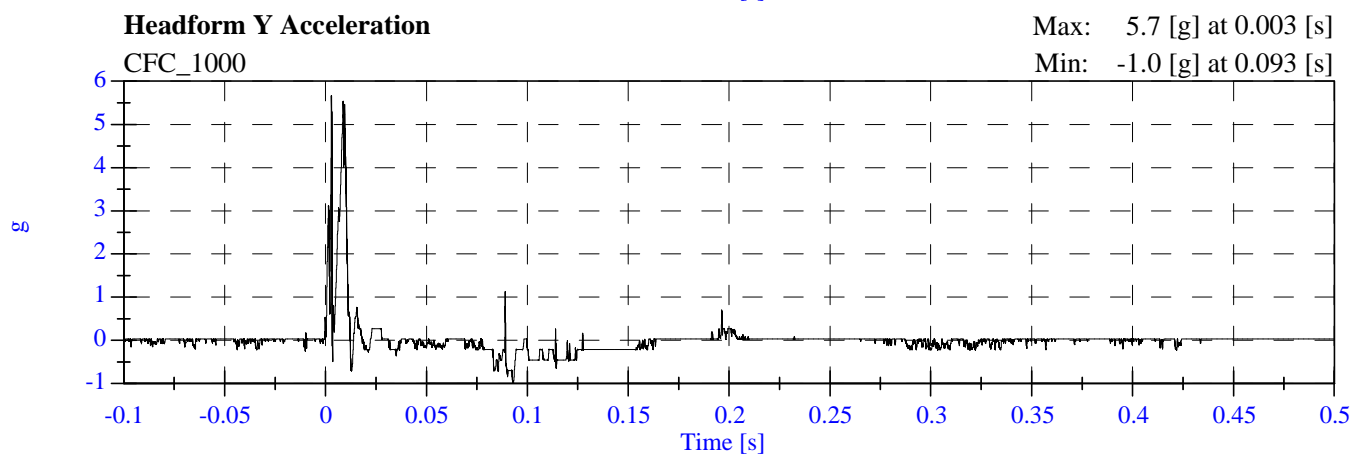
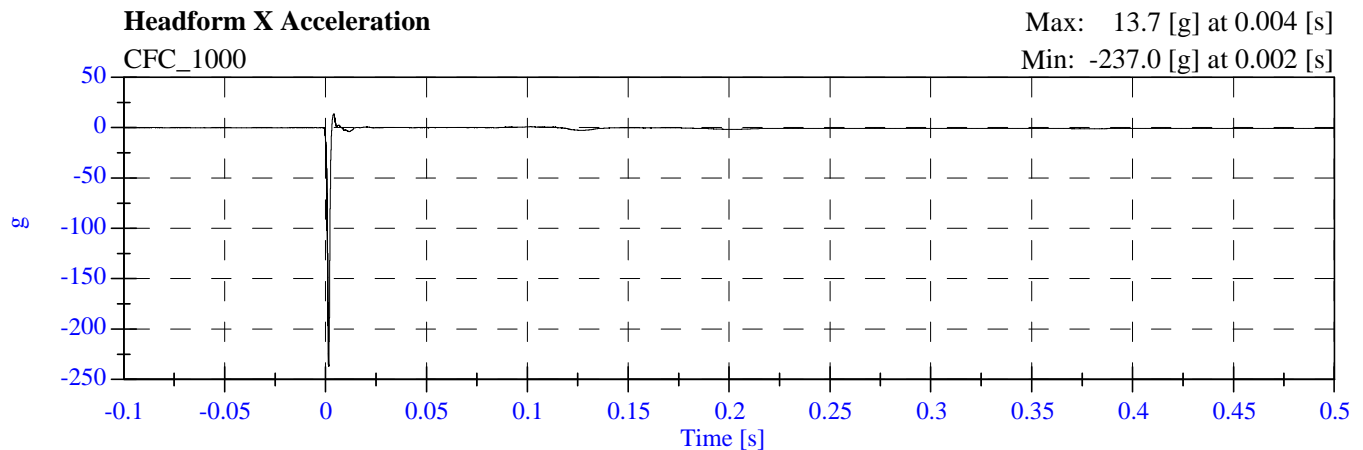
**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J24876</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J33030</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J31009</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - July 10, 2007



**PART 572L  
HEAD DROP POST-TEST**

<b>MANUFACTURER:</b>		<b>DENTON ATD INC.</b>	
<b>SERIAL NUMBER:</b>		<b>0062</b>	
<b>CALIBRATION DATE:</b>		<b>July 10, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>22.8</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>254.4</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>8.3</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

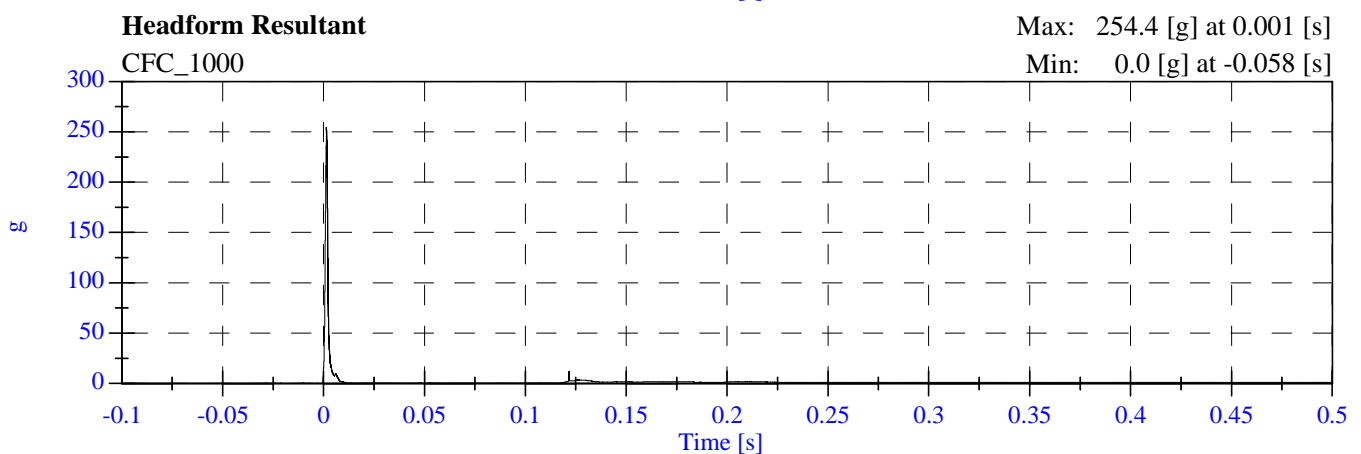
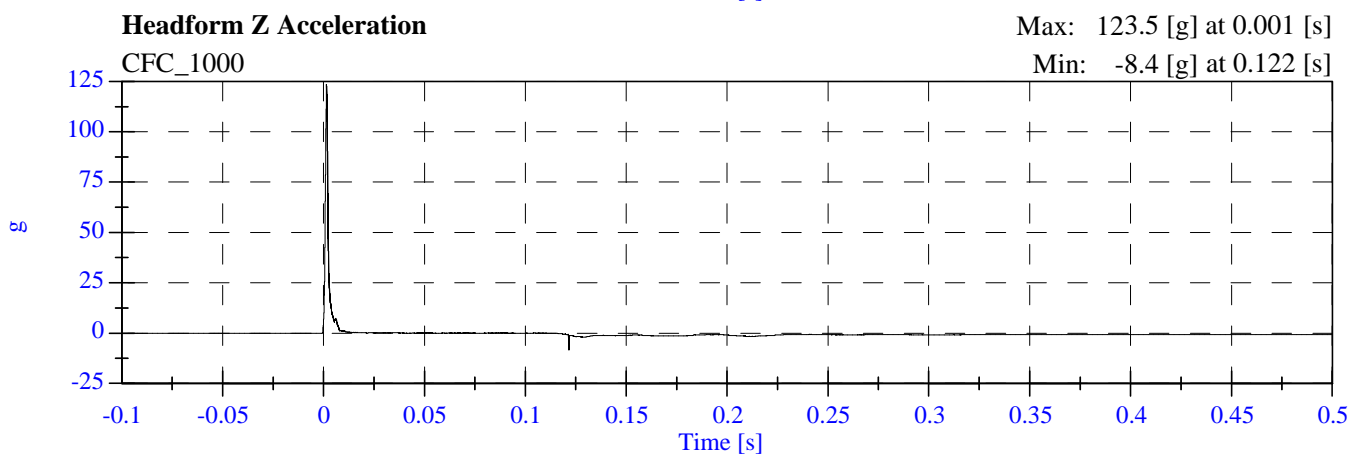
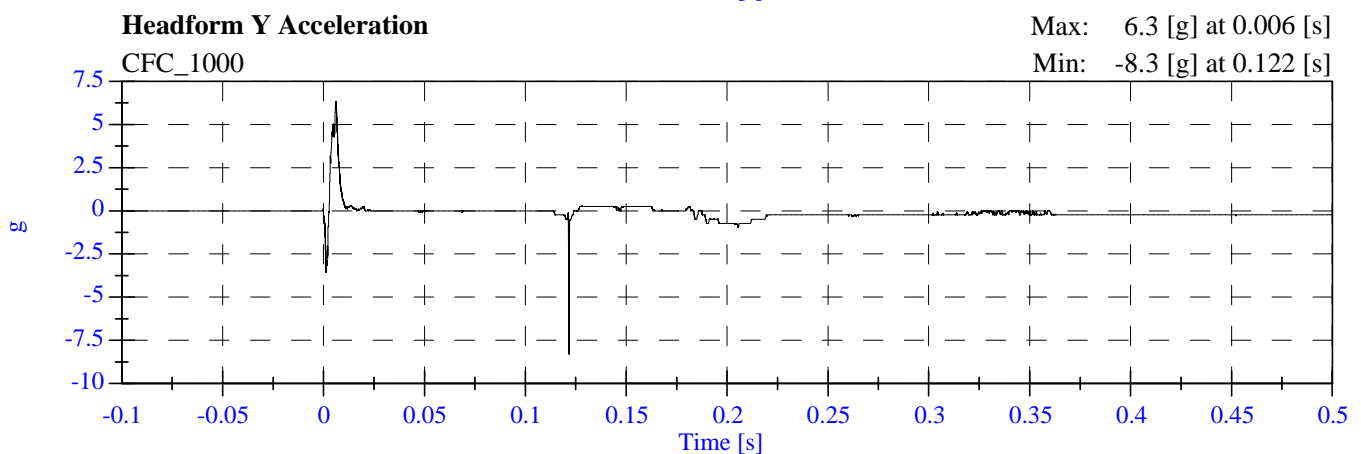
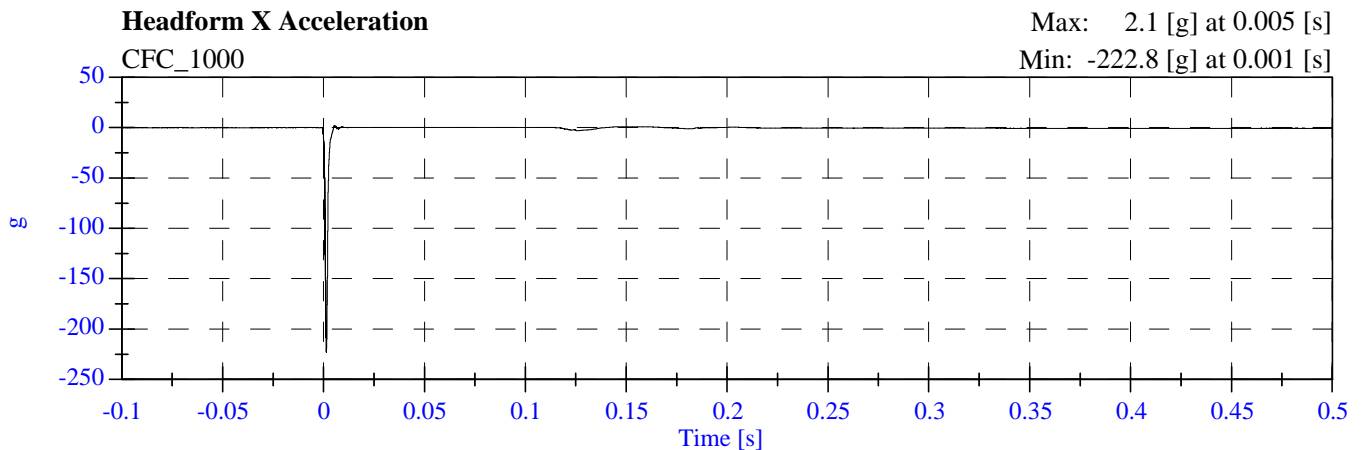
**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J33127</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J33019</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J32782</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - July 10, 2007



**PART 572L  
HEAD DROP POST-TEST**

<b>MANUFACTURER:</b>		<b>FIRST TECHNOLOGY SAFETY SYSTEMS</b>	
<b>SERIAL NUMBER:</b>		<b>805</b>	
<b>CALIBRATION DATE:</b>		<b>July 10, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>22.8</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>262.9</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>13.3</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

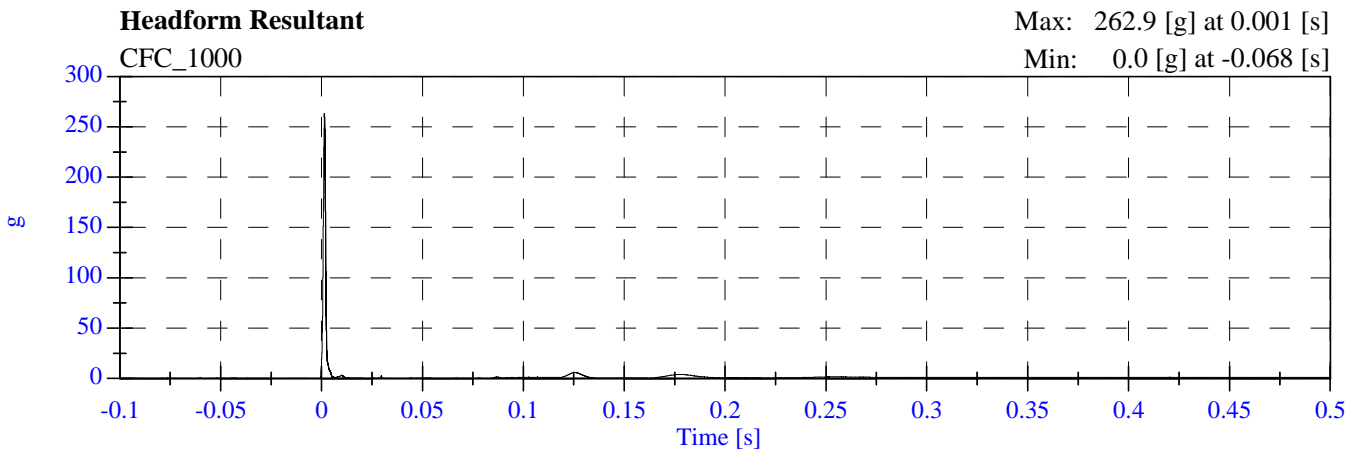
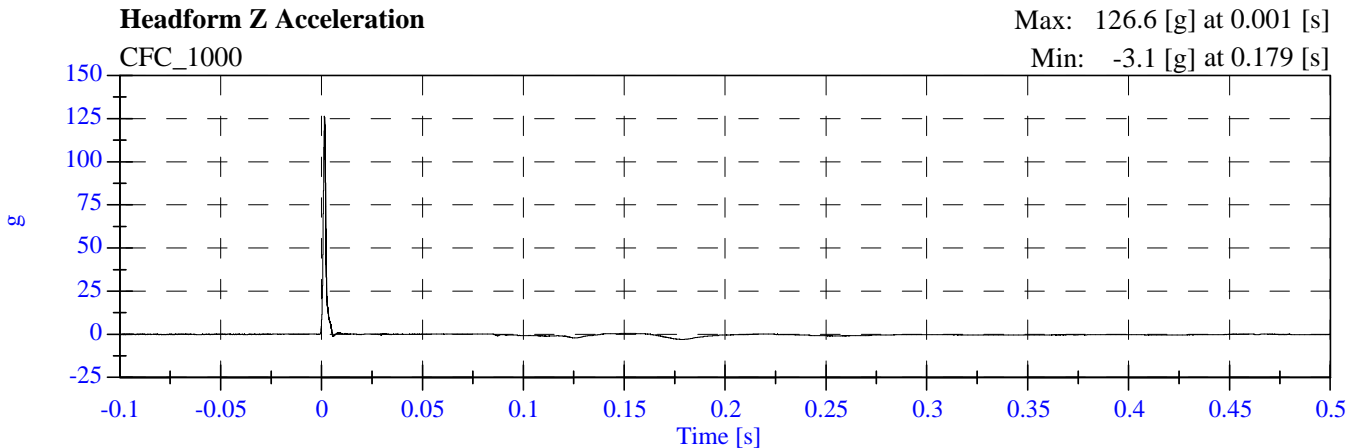
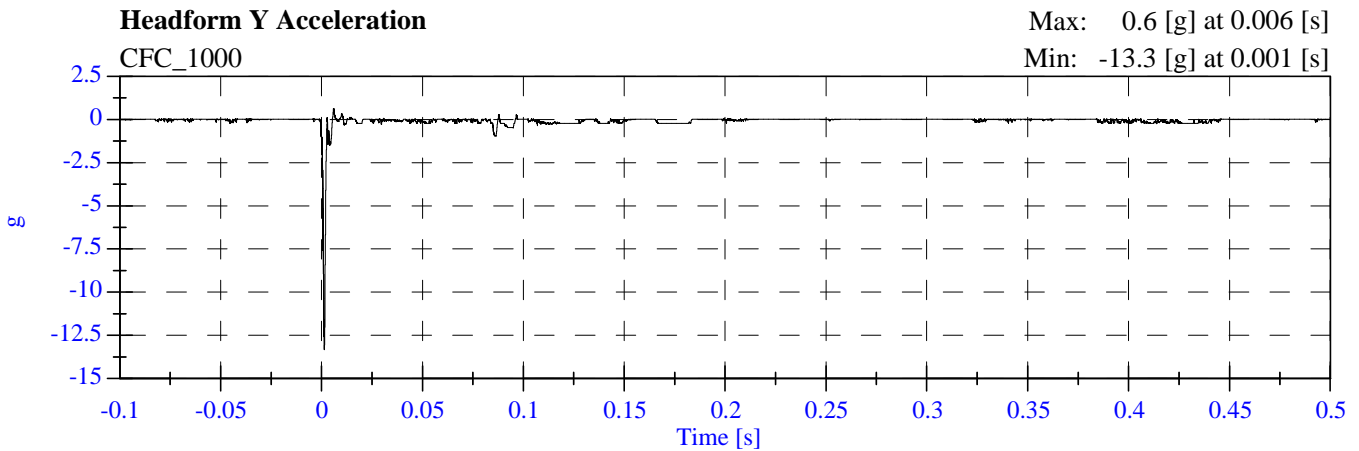
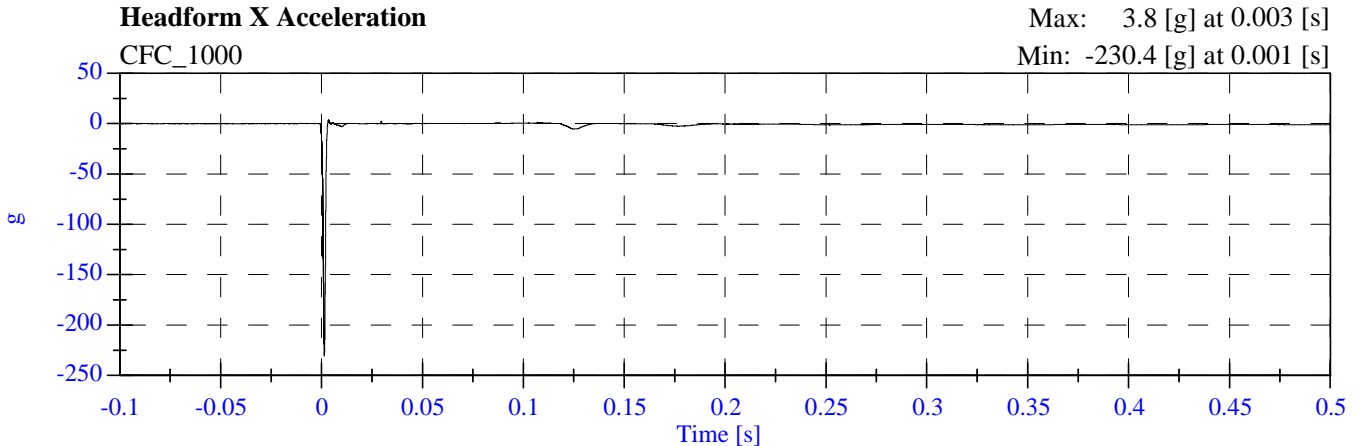
**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J38127</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J37980</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J37854</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - July 10, 2007



**PART 572L  
HEAD DROP POST-TEST**

<b>MANUFACTURER:</b>		<b>DENTON ATD INC.</b>	
<b>SERIAL NUMBER:</b>		<b>0355</b>	
<b>CALIBRATION DATE:</b>		<b>July 10, 2007</b>	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	<b>19°C to 26°C</b>	<b>22.8</b>	
<b>RELATIVE HUMIDITY</b>	<b>10% to 70%</b>	<b>52</b>	
<b>PEAK RESULTANT ACCELERATION</b>	<b>225 Gs to 275 Gs</b>	<b>250.4</b>	
<b>PEAK LATERAL ACCELERATION</b>	<b>15 Gs Maximum</b>	<b>2.3</b>	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	<b>YES</b>	<b>YES</b>	

**HEAD ACCELEROMETER CALIBRATION INFORMATION**

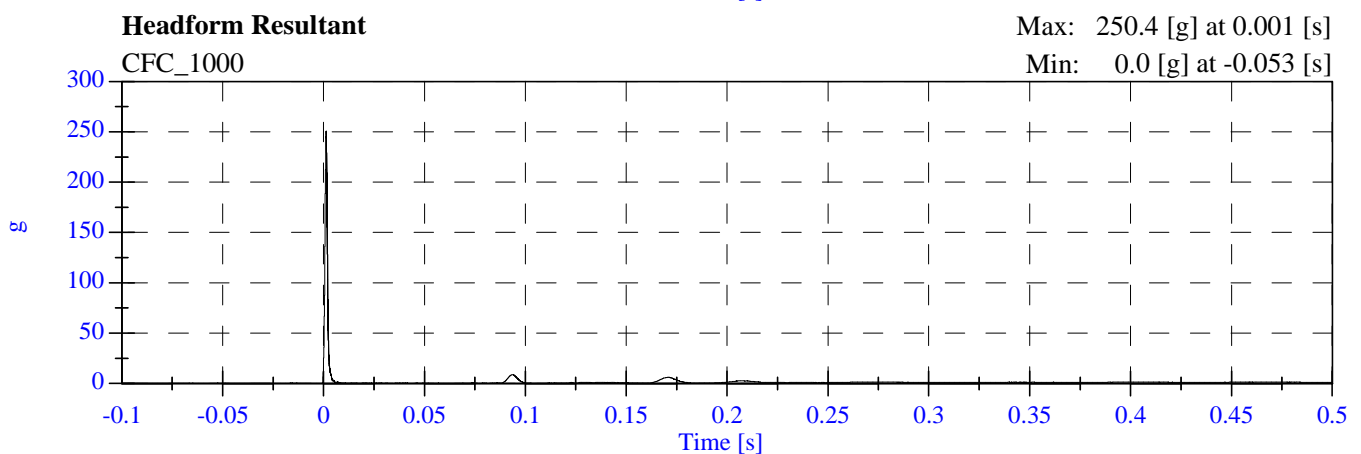
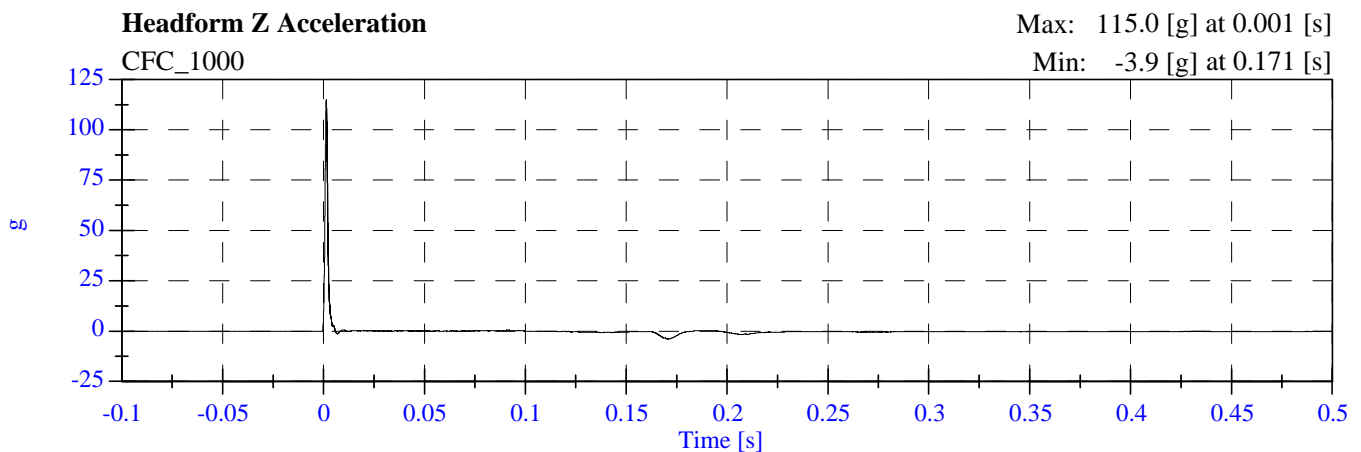
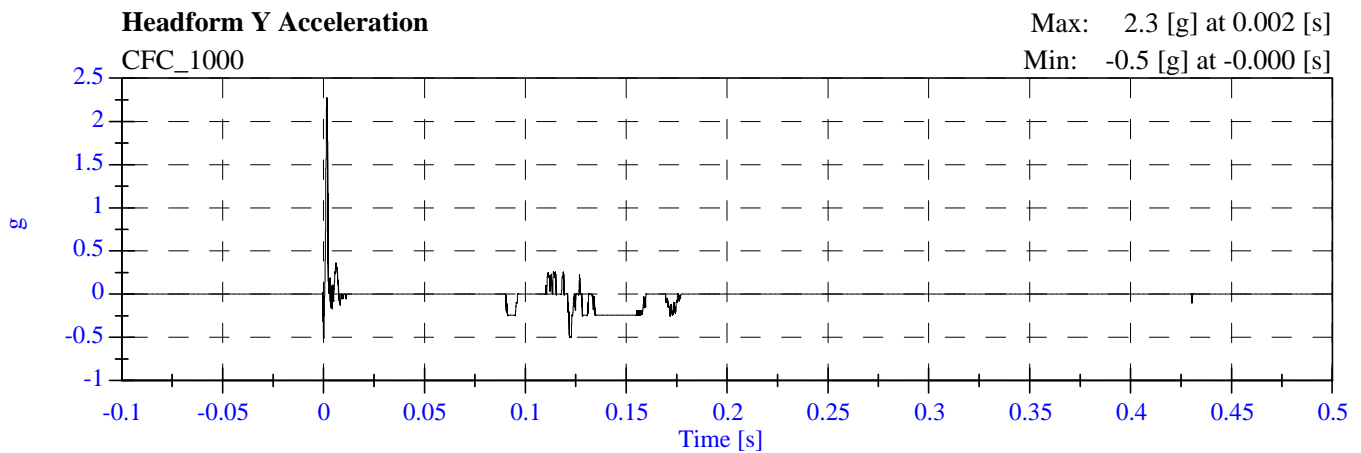
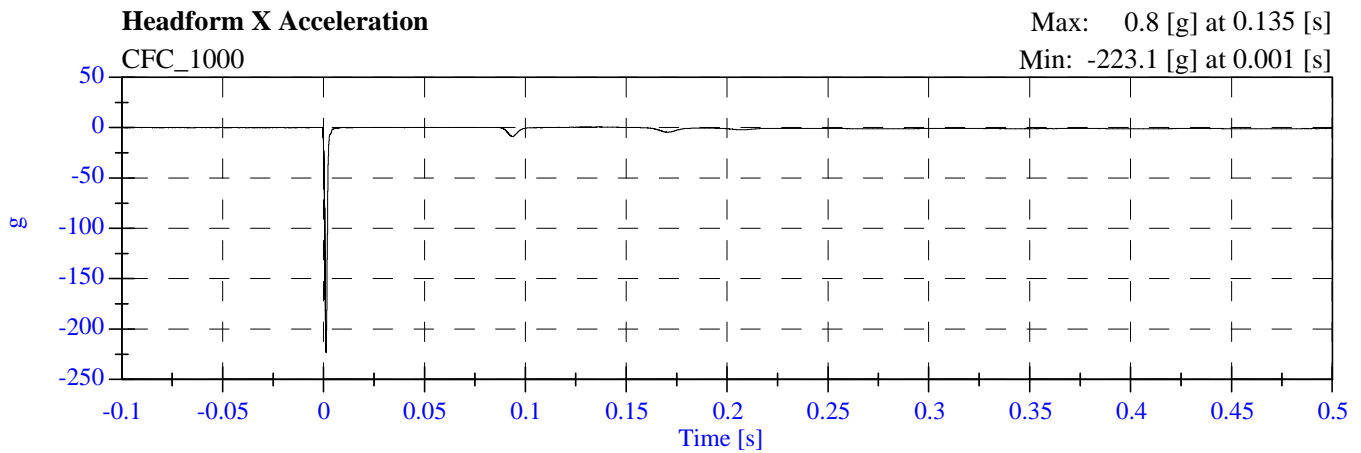
<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
<b>1 - LONGITUDINAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J28671</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>2 - LATERAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J32779</b>	<b>3/12/07</b>	<b>9/13/07</b>
<b>3 - VERTICAL</b>	<b>ENDEVCO</b>	<b>7264-2000T</b>	<b>J25854</b>	<b>3/12/07</b>	<b>9/13/07</b>

**REMARKS:**



# FMVSS 201U - Headform Calibration Drops

## C75203 - July 10, 2007



**PART 572L  
HEAD DROP POST-TEST**

<b>MANUFACTURER:</b>		<b>FIRST TECHNOLOGY SAFETY SYSTEMS</b>	
<b>SERIAL NUMBER:</b>		1255	
<b>CALIBRATION DATE:</b>		July 10, 2007	
<b>TEST PARAMETER</b>	<b>SPECIFICATION</b>	<b>TEST RESULTS</b>	
<b>TEMPERATURE</b>	19°C to 26°C	22.8	
<b>RELATIVE HUMIDITY</b>	10% to 70%	52	
<b>PEAK RESULTANT ACCELERATION</b>	225 Gs to 275 Gs	266.2	
<b>PEAK LATERAL ACCELERATION</b>	15 Gs Maximum	3.8	
<b>IS ACCELERATION CURVE UNIMODAL?</b>	YES	YES	

**HEAD ACCELEROMETER CALIBRATION INFORMATION**

<b>I.D. NUMBER</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>DATE OF LAST CALIBRATION</b>	<b>DATE OF NEXT CALIBRATION</b>
1 - LONGITUDINAL	ENDEVCO	7264-2000T	J41006	3/12/07	9/13/07
2 - LATERAL	ENDEVCO	7264-2000T	J40994	3/12/07	9/13/07
3 - VERTICAL	ENDEVCO	7264-2000T	J41007	3/12/07	9/13/07

**REMARKS:**

# FMVSS 201U - Headform Calibration Drops

## C75203 - July 10, 2007

