

**RAPPORT D'ESSAI - TEST REPORT
COLLISION FRONTALE DE RECHERCHE
RESEARCH FRONTAL IMPACT**

VÉHICULE D'ESSAI / TEST VEHICLE CHRYSLER TOWN AND COUNTRY 2005 TC # 05-205

**ESSAIS DE RECHERCHE CONJOINTS TC/NHTSA SUR LES
SACS GONFLABLES FRONTAUX
JOINT TC/NHTSA FRONTAL AIRBAGS RESEARCH TESTS**

Préparé par :
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N° de contrat : **06-6008**
Rapport N°: **RR06-130**

Pour :
TRANSPORTS CANADA
SÉCURITÉ ET SÛRETÉ
Programmes de sécurité routière
Recherche et essais de véhicules
Ottawa (Ontario)

Prepared by :
PMG TECHNOLOGIES
TEST AND RESEARCH CENTRE
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For :
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SAFETY AND SECURITY
Research Engineering and
Vehicle Testing
Ottawa (Ontario)

Les résultats des essais figurant dans ce compte-rendu ne représentent pas une décision officielle du Ministère des Transports quant à l'acceptation de la performance sécuritaire, de la consommation de carburant ou de la conformité d'un véhicule ou des composantes d'un véhicule aux normes de sécurité et d'antipollution. Le Ministère des Transports ne certifie, n'approuve ou n'endosse aucun produit de véhicule automobile.

The test results presented herein do not, in themselves, represent an official determination by the Department of Transport with fuel consumption or compliance with safety and emission standards of any motor vehicle or motor vehicle component. The Department of Transport does not certify, approve or endorse any motor vehicle product.

Date de collision Crash date	2004-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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VÉHICULE D'ESSAI - TEST VEHICLE

Fabricant - Manufacturer DAIMLERCHRYSLER CANADA INC.	Type de carrosserie - Body Style Fourgonnette / Minivan	Marque, modèle, Année - Make, model, Year CHRYSLER TOWN AND COUNTRY 2005
Classe de véhicule - Class of vehicle MPV / VTUM	Boîte de vitesse - Transmission Type Auto. avant / Auto. Front wheel	Moteur - Engine V6 trans. avant / V6 trans. front
Date de fabrication - Date of Manufacture 1-05	Cylindres - Cylinders 3.8 Lit.	N° d'ident. du véhicule - Vehicle Ident. No. 2C8GP54L65R421857
Lecture de l'odomètre - Odometer Reading 62 km	Nombre de places assises désignées Number of Designated Seating Positions 7	Numéro d'ident. PMG - PMG Ident. Number UN6-146
PNBV - GVWR 2586 kg	PNBE (Avant) - GAWR (Front) 1293 kg	PNBE (Arrière) - GAWR (Rear) 1339 kg

CONFIGURATION D'ESSAI - TEST CONFIGURATION

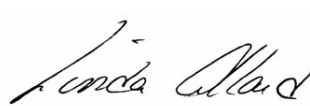
Type d'essai - Test type	Vitesse d'impact- Impact velocity		Angle d'impact Impact angle	Masse du véhicule d'essai Test vehicle mass
Véh. vs barrière - Veh. vs barrier	Prévu / Intended : 56.0 km/h	Obtenu / Obtained : 56.2 km/h	0 °	2202.6 kg
Description et position du mannequin (conducteur) Dummy description and position (driver) Description Hybrid III (5 %)	Position ** 0 mm	Description et position du mannequin (passager avant) Dummy description and position (front passenger) Description Hybrid III (5 %)	Position ** 0 mm	
Description et position du mannequin (passager arrière gauche) Dummy description and position (left rear passenger) Description Hybrid III (5 %)	Position ** N/A	Description et position du mannequin (passager arrière droit) Dummy description and position (right rear passenger) Description Hybrid III (5 %)	Position ** N/A	

RÉSULTATS GÉNÉRAUX - GENERAL RESULTS

Déploiement des sacs gonflables - Airbags deployment Coussins frontaux - Frontal airbags		Déploiement des sacs gonflables - Airbags deployment Coussins latéraux - Lateral airbags	
Conducteur / Driver	Passager / Passenger	Conducteur / Driver	Passager / Passenger
Déployé / Deployed 18.4ms	Déployé / Deployed 23.4ms	N/A	N/A
Rétrotracteurs de ceintures-prétensionneurs Seat belts retractors-pretensioners		Limiteur de charge des ceintures de sécurité Seat belts load limiter	
Conducteur / Driver	Passager / Passenger	Conducteur / Driver	Passager / Passenger
Déployé / Deployed	Déployé / Deployed	Non-équipé / Not equipped	Non-équipé / Not equipped

Essai réalisé selon la procédure de PMG : Collision frontale de recherche, version 3, révision 10 avril 2000.

Test performed according to PMG procedure: Research frontal impact, version 3, revised april 10, 2000.

Préparé par : Prepared by : 	Digitally signed by Pierre Beauchamp Date: 2005.11.29	Approuvé par : Approved by :	
Vérifié par : Verified by : 	Digitally signed by Linda Allard Date: 2005.11.29	Accepté par : Accepted by :	

* Tel qu'observé avec l'application d'une charge de 12V après l'essai.

* As observed by a 12V application after the test.

** Référence : 0 est la position la plus avancée. / ** Reference : 0 is the foremost position.

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DONNÉES DU VÉHICULE D'ESSAI / TEST VEHICLE DATA

Capacité du véhicule - Vehicle Capacity		Masse des bagages - Cargo Load		Type de sièges – Type of seats			Types de dossiers - Type of seat back		
521 kg					Avt - Frt	Arr - Rr		Avt - Frt	Arr - Rr
Nombre d'occupants (places assises désignées) Number of Occupants (Designated Seating Positions)				Banquette Bench			Dossier ajustable Adjustable Seat Back	X	
Avant – Front 2 Arrière – Rear 2+3 Total 7				Baquet Bucket	X	X	Dossier non-ajustable Non-adjustable Seat Back		X
Volume de carburant pour l'essai Fuel system test volume				Pression à froid - Cold Tire Pressure			Dimension - Size		
68.25 l				Avant - Front 250 kPa	Arrière - Rear 250 kPa	Secours - Spare 420 kPa	P215/65R16		

PREMIÈRE PESÉE : VÉHICULE TEL QUE LIVRÉ (AVEC LIQUIDES AU MAXIMUM)

FIRST WEIGHT : VEHICLE AS RECEIVED (WITH MAXIMUM FLUIDS)

Avant gauche - Left front	Avant droit - Right front	Masse avant totale - Total front weight
572.0 kg	543.2 kg	1115.2 kg
Arrière gauche - Left rear	Arrière droit - Right rear	Masse arrière totale - Total rear weight
452.2 kg	441.4 kg	893.6 kg
Masse totale côté gauche - Total left side weight	Masse totale côté droit - Total right side weight	Masse totale - Total weight
1024.2 kg	984.6 kg	2008.8 kg

TROISIÈME PESÉE : VÉHICULE PRÊT POUR L'ESSAI

THIRD WEIGHT : VEHICLE READY FOR TEST

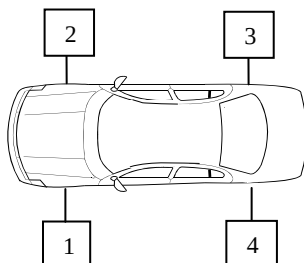
Avant gauche - Left front	Avant droit - Right front	Masse avant totale - Total front weight
597.4 kg	573.2 kg	1170.6 kg
Arrière gauche - Left rear	Arrière droit - Right rear	Masse arrière totale - Total rear weight
518.6 kg	513.4 kg	1032.0 kg
Masse totale côté gauche - Total left side weight	Masse totale côté droit - Total right side weight	Masse totale - Total weight
1116.0 kg	1086.6 kg	2202.6 kg

ATTITUDE DU VÉHICULE / VEHICLE ATTITUDE

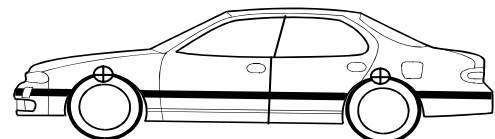
		Attitude tel que livré Attitude on delivery	Attitude tel que testé Attitude as tested
1	Roue avant gauche* Left front wheel*	778 mm	760 mm
2	Roue avant droite* Front right wheel*	776 mm	760 mm
3	Roue arrière droite* Rear right wheel*	781 mm	755 mm
4	Roue arrière gauche* Rear left wheel*	781 mm	755 mm

* Mesures prises aux puits de roues. // *Measurements taken at wheel openings.

Vue de plan / Plan view



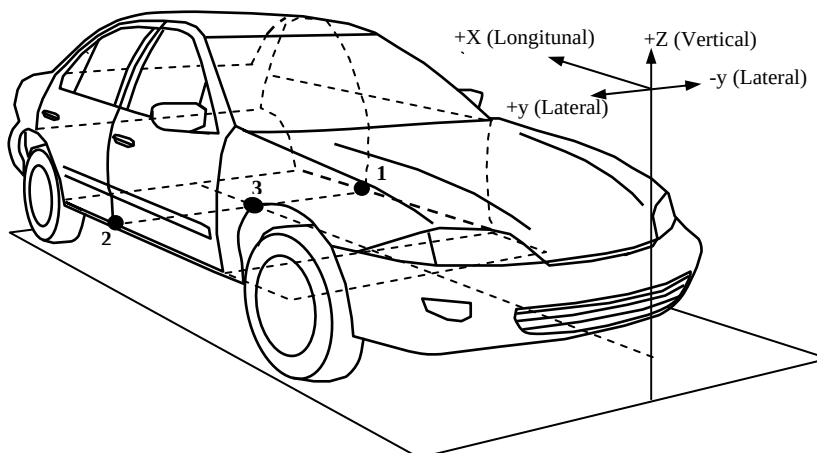
Vue de côté / Side view



⊕ Points de mesure / Measurement points

Date de collision Crash date	2004-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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EMPLACEMENT DES ACCÉLÉROMÈTRES
ACCELEROMETER LOCATIONS

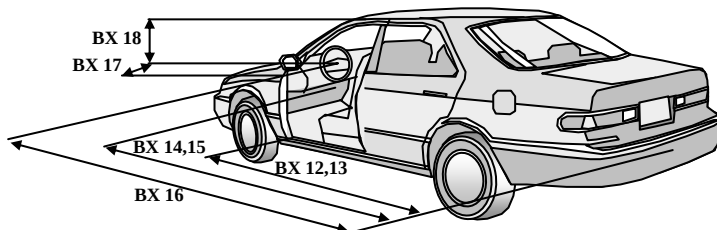
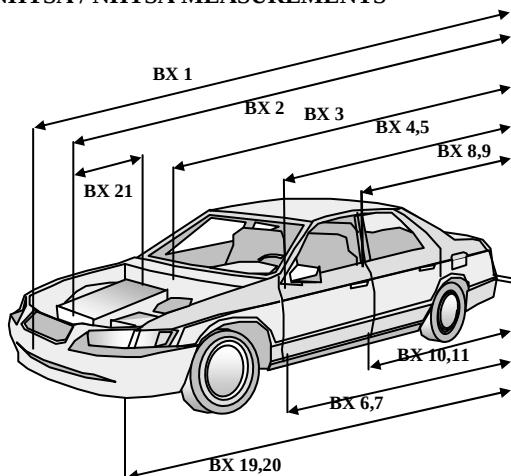


Point de référence : Centre transversal du véhicule, au point le plus avancé, au niveau du sol. Selon SAE J182a.
Reference point : Transversal center of the vehicle, at the foremost point and at ground level. As per SAE J182a.

EMPLACEMENT LOCATION	DESCRIPTIONS	COORDONNÉES / COORDINATES (mm)		
		X	Y	Z
#1	Seuil de la porte gauche @ pilier "B" Left door sill @ pillar "B"	2594	-690	434
#2	Seuil de la porte droite @ pilier "B" Right door sill @ pillar "B"	2598	691	437
#3	Centre de gravité Centre of gravity	2027	1	396

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MESURES NHTSA / NHTSA MEASUREMENTS



- 1 - Longueur totale du véhicule
Total length of vehicle
- 2 - Surface arrière à l'avant du bloc moteur
Rear surface at front of engine block
- 3 - Surface arrière à la cloison pare-feu
Rear surface at fire-wall
- 4 - Surface arrière à la partie supérieure avant porte avant droite
Rear surface of front superior part of right front door
- 5 - Surface arrière à la partie supérieure avant porte avant gauche
Rear surface of front superior part of left front door
- 6 - Surface arrière à la partie inférieure avant porte avant droite
Rear surface of front inferior part of right front door
- 7 - Surface arrière à la partie inférieure avant porte avant gauche
Rear surface of front inferior part of left front door
- 8 - Surface arrière à la partie supérieure arrière porte avant droite
Rear surface of rear superior part of right rear door
- 9 - Surface arrière à la partie supérieure arrière porte avant gauche
Rear surface of rear superior part of left rear door
- 10 - Surface arrière à la partie inférieure arrière porte avant droite
Rear surface of rear inferior part of right rear door
- 11 - Surface arrière à la partie inférieure arrière porte avant gauche
Rear surface of rear inferior part of left rear door
- 12 - Surface arrière à la partie inférieure du pilier "A" droit
Rear surface of rear inferior part of right pillar "A"
- 13 - Surface arrière à la partie inférieure du pilier "A" gauche
Rear surface of rear inferior part of left pillar "A"
- 14 - Surface arrière à la cloison pare-feu côté droit
Rear surface of right side of fire-wall
- 15 - Surface arrière à la cloison pare-feu côté gauche
Rear surface of left side of fire-wall
- 16 - Surface arrière à la colonne de direction
Rear surface of steering column
- 17 - Centre de la colonne de direction au pilier "A"
Centre of steering column to pillar "A"
- 18 - Centre de la colonne de direction au toit
Centre of steering column to roof
- 19 - Surface arrière du véhicule au coin droit du pare-choc avant
Rear surface of vehicle to right corner of front bumper
- 20 - Surface arrière du véhicule au coin gauche du pare-choc avant
Rear surface of vehicle to left corner of front bumper
- 21 - Longueur du bloc moteur
Length of engine block

	BX*	AX**	Δx		BX*	AX**	Δx
1	4803	4215	588	12	3313	3298	15
2	4230	-	-	13	3314	3297	17
3	4018	-	-	14	3496	3365	131
4	3358	3351	7	15	3517	3421	96
5	3358	3343	15	16	2927	2934	-7
6	3385	3377	8	17	439	418	21
7	3392	3387	5	18	506	480	26
8	2353	2345	8	19	4758	4239	519
9	2355	2342	13	20	4753	4189	564
10	2360	2352	8	21	232	-	-
11	2353	2349	4				

Mesures en mm / Measurements in mm

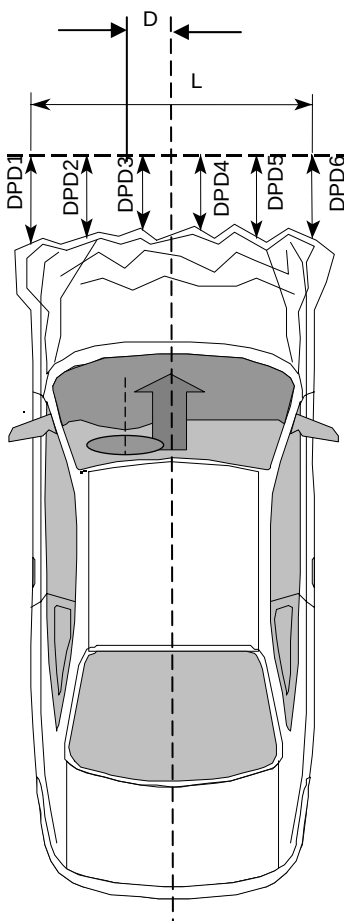
* BX : Mesures du véhicule avant-essai. / Pre-test vehicle measurements data.

** AX : Mesures du véhicule après-essai. / Post-test vehicle measurements data.

REMARQUES / COMMENTS : Aucune / None

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MESURES DES DPD / DPD'S MEASUREMENTS



DPD 1:
DPD 2:
DPD 3:
DPD 4:
DPD 5:
DPD 6:
MESURE L:
MEASUREMENT L:
MESURE D:
MEASUREMENT D:

AVANT ESSAI PRE-TEST	APRÈS ESSAI POST-TEST	Δx
225	604	-379
63	606	-543
12	589	-577
11	572	-561
63	576	-513
229	641	-412
	1501	
	0	

Mesures en mm / Measurements in mm

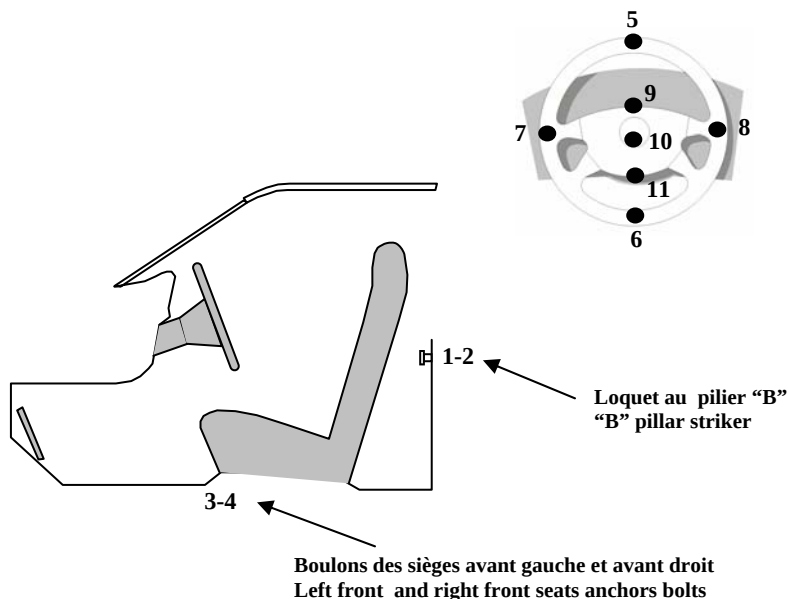
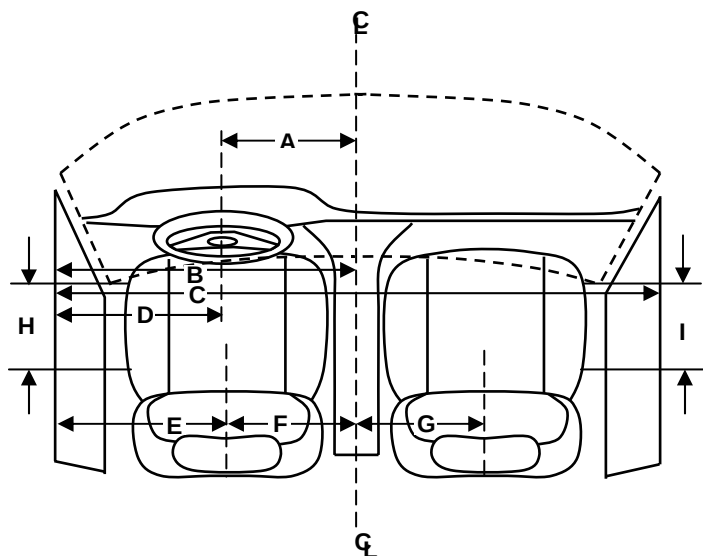
L : Longueur de la région endommagée
Length of damaged region

D : Distance du centre de déformation à la ligne de centre du véhicule
Midpoint of damage to Vehicle Longitudinal Centerline

REMARQUES / COMMENTS : Aucune / None

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MESURES DE VÉHICULE
VEHICLE MEASUREMENTS



Code	Description	mm
A	Centre du volant à la ligne de centre du véhicule Steering wheel center to center line of vehicle	393
B	Seuil de fenêtre à la ligne de centre du véhicule Window edge to center line of the vehicle	919
C	Fenêtre à fenêtre Window to window	1837
D	Centre du volant au seuil de la fenêtre Steering wheel center to window edge	526
E	Seuil de la fenêtre au centre du siège (conducteur) Window edge to seat midline (driver)	504
F	Centre du siège à la ligne de centre du véhicule (conducteur) Seat midline to center line of vehicle (driver)	415
G	Centre du siège à la ligne de centre du véhicule (passager) Seat midline to center line of vehicle (passenger)	416
H	Course du siège (conducteur) Seat travel (driver)	218
I	Course du siège (passager) Seat travel (passenger)	217
J	Ajustement du volant Steering wheel adjustment	60
K	Ajustement de la ceinture baudrier Upper torso belt adjustment	91

Code	Description	X(mm)	Y(mm)	Z(mm)
1	Loquet au pilier "B" (conducteur) "B" pillar striker (driver)	2394	-847	711
2	Loquet au pilier "B" (passager) "B" pillar striker (passenger)	2394	846	716
3	Boulon siège avant, extérieur (conducteur) Front seat bolt, outboard (driver)	1941	-606	377
4	Boulon siège avant, extérieur (passager) Front seat bolt, outboard (passenger)	1946	616	377
5	Jante du volant, centre haut Steering wheel rim, top centre	1784	-393	1249
6	Jante du volant, centre bas Steering wheel rim, bottom centre	1941	-393	892
7	Jante du volant, centre gauche Steering wheel rim, left centre	1862	-586	1072
8	Jante du volant, centre droit Steering wheel rim, right centre	1872	-200	1071
9	Moyeu du volant, centre haut Steering wheel hub, top centre	1842	-393	1108
10	Moyeu du volant, centre Steering wheel hub, centre	1888	-394	1053
11	Moyeu du volant, centre bas Steering wheel hub, bottom centre	1905	-394	998
12	Centre du volant Center of steering wheel	1876	-393	1068

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Remarques - Comments: Aucune / None

Date de collision Crash date	2004-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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POSITIONNEMENT DES MANNEQUINS / MEASUREMENTS OF DUMMY POSITIONS

		<u>MESURES / MEASUREMENTS :</u>					
Conducteur/Driver :							

Remarques – Comments : Tableau de bord du côté conducteur muni d'une protection des genoux
Driver's dash board is equipped with a knee protection airbag.

* Référence : 0 est la position la plus avancée.

* Reference : 0 is the foremost position.

Selon la procédure de positionnement de mannequin 5^e percentile Hybrid III, conformément à la sous-section O, TP208-12, 14 janvier 2003.

As per procedure for placement of a 5th percentile Hybrid III, conforming to subpart O, TP208-12, January 14th 2003.

Point de référence : Centre transversal du véhicule, au point le plus avancé, au niveau du sol. Selon SAE J182a.

Reference point : Transversal center of the vehicle, at the foremost point and at ground level. As per SAE J182a.

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POSITIONNEMENT DES MANNEQUINS / MEASUREMENTS OF DUMMY POSITIONS

2 ^{ème} Rangée / 2 nd row		MESURES / MEASUREMENTS :					
Passager gauche/Left Passenger: Hybrid III (5 %) #111		Toutes les mesures sont en mm / All measurements are in mm					
Angle du pelvis - Pelvic angle :							

Remarques – Comments : Aucune / None

* Référence : 0 est la position la plus avancée.

* Reference : 0 is the foremost position.

Selon la procédure de positionnement de mannequin 5^e percentile Hybrid III, conformément à la sous-section O, TP208-12, 14 janvier 2003.

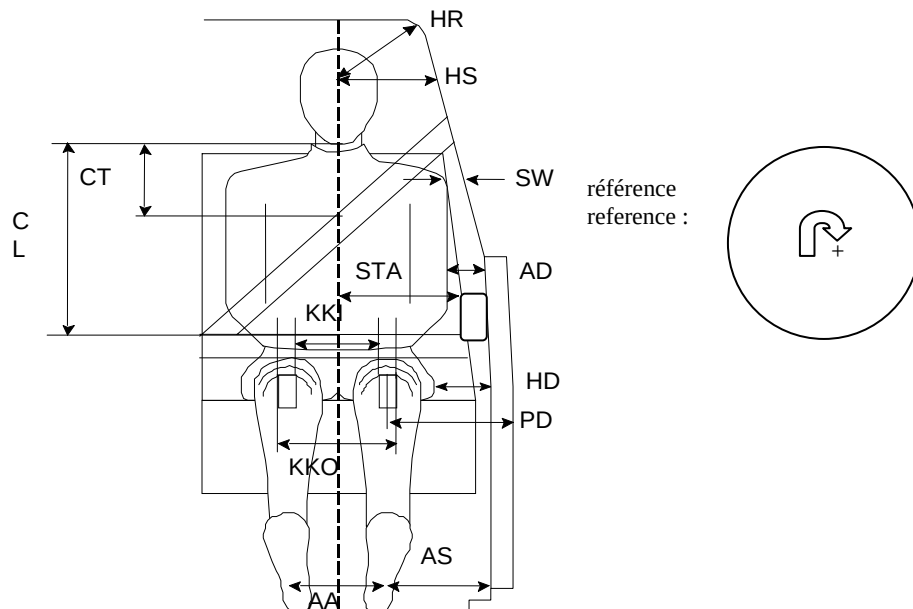
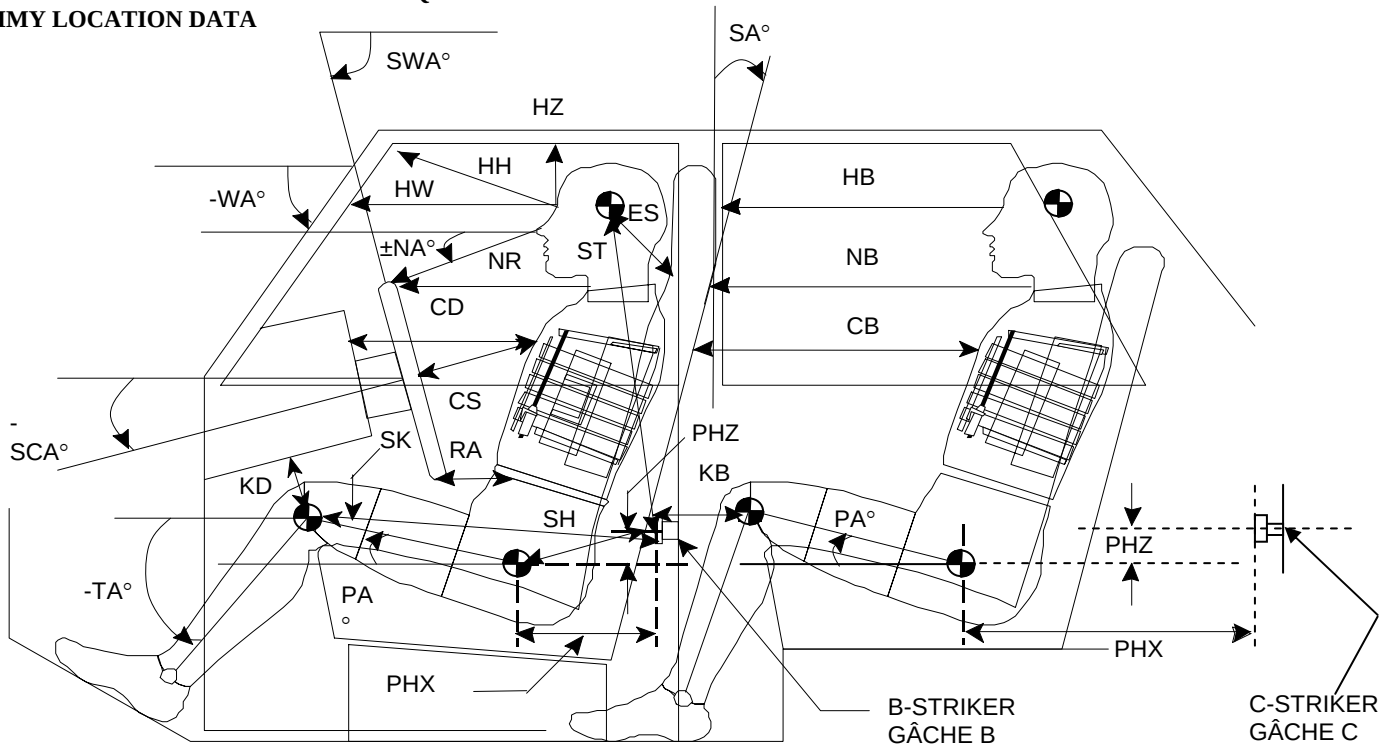
As per procedure for placement of a 5th percentile Hybrid III, conforming to subpart O, TP208-12, January 14th 2003.

Point de référence : Centre transversal du véhicule, au point le plus avancé, au niveau du sol. Selon SAE J182a.

Reference point : Transversal center of the vehicle, at the foremost point and at ground level. As per SAE J182a.

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COTES DE LOCALISATION DES MANNEQUINS
DUMMY LOCATION DATA



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**COTES DE LOCALISATION DES MANNEQUINS (suite)
DUMMY LOCATION DATA (continued)**

(Mesures prises en mm / Measurements taken in mm)

DESCRIPTION	CODE	CONDUCTEUR DRIVER	PASSAGER Av. F. PASSENGER	PASSAGER Arr.G. L.R. PASSENGER	PASSAGER Arr.D. R.R. PASSENGER
De cheville à cheville (boulon extérieur) Ankle to ankle (exterior bolt)	AA	360	290		
Genou à genou (plaque) Intérieur / Interior Centre / Center Knee to knee (plate) Extérieur / Extérieur	KKI	190	100		
	KKC	260	170		
	KKO	330	240		
De la cheville jusqu'au seuil de porte (horizontalement) Ankle to door sill (horizontal)	AS	150	145		
Centre du genou au tableau de bord ou siège horizontalement (minimum) Knees centre to dash or seat back horizontal (minimum)	KDL	40	170		
	KDR	85	170		
Sternum au tableau de bord (horizontalement) Chest to dash (horizontal)	CD		549		
Milieu du sternum au centre du moyeu du volant ou siège avant Mid sternum to steering hub center or front seat	CS/CB	203			
Milieu du front jusqu'au pare-brise (horizontalement) Mid forehead to windshield (horizontal)	HW	649	730		
Milieu du front jusqu'au haut du pare-brise Mid forehead to windshield header	HH	317	389		
Nez à la jante du volant de direction (haut) ou siège avant Nose to steering wheel rim (top) or front seat	NR/HB	295			
Milieu du front jusqu'au début du toit Mid forehead to edge roof	HR	265	272		
Haut de l'oreille au haut du siège avant Ear top to front seat top	ES	229	234		
Menton au haut de la ceinture sous-abdominale (verticalement) Chin to lap belt upper edge (vertical)	CL	335	345		
Menton au haut de la ceinture baudrier (verticalement) Chin to thorax belt upper edge (vertical)	CT	125	110		
Milieu du front à la fenêtre latérale (horizontalement) Mid forehead to side window (horizontal)	HS	355	340		
La rotule à la porte (horizontalement) Patella to door (horizontal)	PD	130	157		
Du point-H à la porte (horizontalement) H-point to door (horizontal)	HD	174	170		
Du milieu du bras à la porte (horizontalement) Mid upper arm to door (horizontal)	AD	164	160		
Cou jusqu'au volant ou tableau de bord (horizontalement) ou siège avant Neck to steering wheel or dash board (horizontal) or front seat	NB	387	680		
Épaule à la fenêtre de côté Shoulder to side window	SW	260	285		
Abdomen à l'appui-bras Abdomen to armrest	STA	175	180		
Milieu du front au toit (verticalement) Mid forehead to roof (vertical)	HZ	230	300		
Tête au loquet (plan (x,z)) Striker to head ((x,z) plan)	ST	640	600		
Abdomen à la jante du volant de direction (bas) Steering wheel rim to abdomen (bottom)	RA	80			
Genou au loquet (plan (x,z)) Striker to knee ((x,z) plan)	SK	684	586		
Point-H au loquet (plan (x,z)) Striker to H-Point ((x,z) plan)	SH	352	244		
Point-H au loquet en X (horizontalement) Striker to H-Point in X (horizontal)	PHX	349	242		
Point-H au loquet en Z (verticalement) Striker to H-Point in Z (vertical)	PHZ	-43	-32		

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COTES DE LOCALISATION DES MANNEQUINS (suite)

DUMMY LOCATION DATA (continued)

(Mesures prises en deg. / Measurements taken in deg.)

DESCRIPTION	CODE	CONDUCTEUR DRIVER	PASSAGER Av. F. PASSENGER	PASSAGER Arr.G. L.R. PASSENGER	PASSAGER Arr.D. R.R. PASSENGER
Angle du volant Steering wheel angle	+SWA	64.7°			
Angle du pare-brise Windshield angle	-WA	-28.0°			
Angle de la colonne de direction Steering column angle	-SCA	-23.2°			
Angle du tibia gauche Left tibial angle	-TA	-18.3°	-15.2°		
Angle du tibia droit Right tibial angle	-TA	-18.2°	-16.7°		
Angle pelvis Pelvic angle	+PA	21.4°	21.9°		
Angle du nez à la jante de direction (haut) Nose to steering wheel rim (top) angle	±NA	-7.5°			
Angle du dossier (Tige d'Appuie-tête) Seat back angle (Headrest Pole)	+SA	12.2°	12.2°		
Angle ST (horizontalement) ST angle (horizontal)	+ST-A	71.8°	80.9°		
Angle SK (horizontalement) SK angle (horizontal)	±SK-A	12.1°	11.0°		
Angle SH (horizontalement) SH angle (horizontal)	-SH-A	7.0°	7.5°		

Date de collision Crash date	2004-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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**MESURES DE MANNEQUIN DAE
TEST DUMMY MEASUREMENTS**

CONDUCTEUR / DRIVER

Description et emplacement du Mannequin
ATD description and location :

DESCRIPTION	X(mm)	Y(mm)	Z(mm)
Centre de gravité de la tête, extérieur - Head CG, outboard	2194	-487	1319
Base du nez - Glabella (root of nose)	2110	-411	1327
Menton - Chin (bottom)	2106	-416	1218
Jonction menton et cou - Chin / neck junction	2175	-415	1232
Thorax au niveau des côtes supérieures - Chest at upper rib level	2078	-416	1052
Thorax au niveau des côtes inférieures - Chest at lower rib level	2049	-411	943
Boulon supérieur avant de l'épaule, ext. - Shoulder bolt, top front outboard	2223	-576	1088
Boulon supérieur avant de l'épaule, int. - Shoulder bolt, top front inboard	2232	-257	1088
Boulon du coude, extérieur - Elbow bolt, outboard	2061	-644	958
Boulon du coude, intérieur - Elbow bolt, inboard	2073	-140	982
Boulon du poignet, extérieur - Wrist bolt, outboard	1897	-621	1097
Boulon du poignet, intérieur - Wrist bolt, inboard	1893	-151	1106
Point d'articulation de la hanche, extérieur - Hip point, outboard	2136	-537	791
Boulon du genou gauche, extérieur - Knee bolt, left leg, outboard	1725	-581	854
Boulon de la cheville gauche, extérieur - Ankle bolt, left leg , outboard	1573	-559	545
Point du talon gauche - Heel point, left leg	1653	-552	452
Plante du pied gauche vs plancher - Ball of foot at toeboard contact, left leg	1513	-599	460
Boulon du genou droit, intérieur - Knee bolt, right leg , inboard	1711	-315	846
Boulon de la cheville droite, intérieur - Ankle bolt, right leg , inboard	1562	-268	544
Point du talon droit - Heel point, right leg	1623	-271	427
Plante du pied droit vs plancher - Ball of foot at toeboard contact, right leg	1451	-282	482
Potentiomètre de déflexion du sternum – Sternum deflection potentiometer	2058	-412	978

Remarques – Comments : **Aucune / None**

Date de collision Crash date	2004-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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**MESURES DE MANNEQUIN DAE
TEST DUMMY MEASUREMENTS**

PASSAGER / PASSENGER

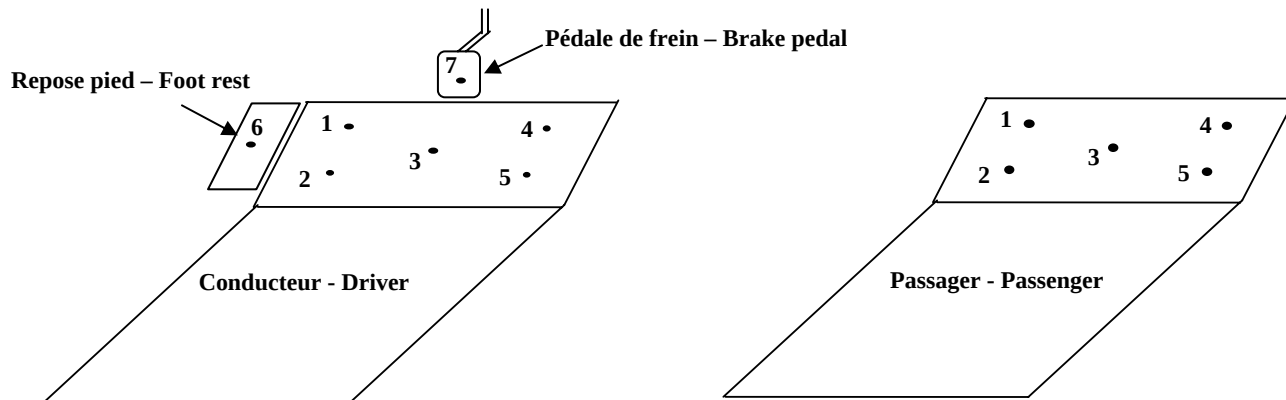
Description et emplacement du Mannequin
ATD description and location:

DESCRIPTION	X(mm)	Y(mm)	Z(mm)
Centre de gravité de la tête, extérieur - Head CG, outboard	2299	488	1308
Base du nez - Glabella (root of nose)	2209	421	1320
Menton - Chin (bottom)	2206	420	1214
Jonction menton et cou - Chin / neck junction	2280	419	1236
Thorax au niveau des côtes supérieures - Chest at upper rib level	2187	415	1045
Thorax au niveau des côtes inférieures - Chest at lower rib level	2160	420	938
Boulon supérieur avant de l'épaule, ext. - Shoulder bolt, top front outboard	2319	569	1073
Boulon supérieur avant de l'épaule, int. - Shoulder bolt, top front inboard	2312	257	1078
Boulon du coude, extérieur - Elbow bolt, outboard	2247	626	870
Boulon du coude, intérieur - Elbow bolt, inboard	2227	220	880
Boulon du poignet, extérieur - Wrist bolt, outboard	2039	563	837
Boulon du poignet, intérieur - Wrist bolt, inboard	2013	232	842
Point d'articulation de la hanche, extérieur - Hip point, outboard	2240	536	785
Boulon du genou gauche, intérieur - Knee bolt, left leg, inboard	1815	371	820
Boulon de la cheville gauche, intérieur - Ankle bolt, left leg, inboard	1689	318	505
Point du talon gauche - Heel point, left leg	1756	309	405
Plante du pied gauche vs plancher - Ball of foot at toeboard contact, left leg	1613	351	417
Boulon du genou droit, extérieur - Knee bolt, right leg, outboard	1820	548	829
Boulon de la cheville droite, extérieur - Ankle bolt, right leg, outboard	1684	534	514
Point du talon droit - Heel point, right leg	1758	544	415
Plante du pied droit vs plancher - Ball of foot at toeboard contact, right leg	1619	579	434
Potentiomètre de déflexion du sternum – Sternum deflection potentiometer	2168	417	973

Remarques – Comments : **Aucune / None**

Date de collision Crash date	2004-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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MESURES PLANCHER / FOOTWELL MEASUREMENTS



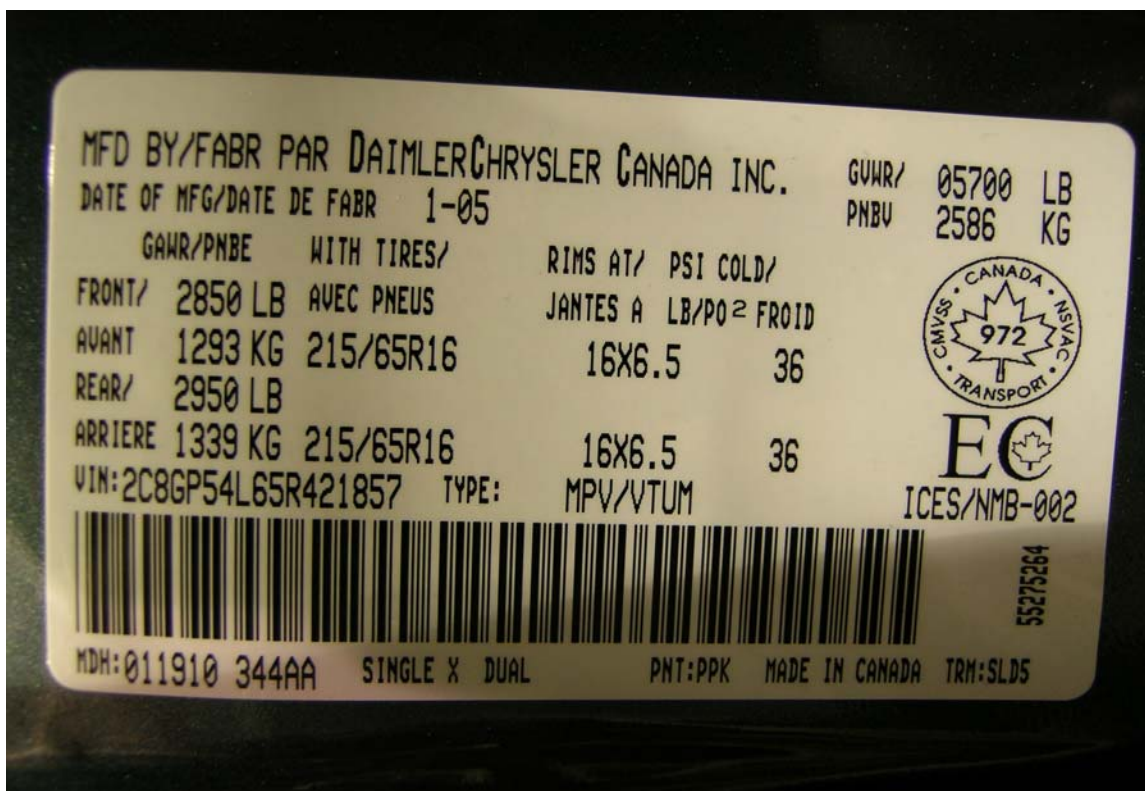
N° Cible	AVANT ESSAI	APRÈS ESSAI	
Target No.	PRE-TEST	POST-TEST	Δ mm
1	x	1243	1394
	y	-458	-449
	z	534	588
2	x	1341	1455
	y	-482	-479
	z	409	439
3	x	1287	1454
	y	-392	-389
	z	461	523
4	x	1255	1445
	y	-257	-265
	z	491	579
5	x	1319	1453
	y	-312	-309
	z	417	472
6	x	1356	1421
	y	-623	-631
	z	513	517
7	x	1424	1472
	y	-388	-388
	z	547	546

N° Cible	AVANT ESSAI	APRÈS ESSAI	
Target No.	PRE-TEST	POST-TEST	Δ mm
1	x	1262	1438
	y		
	z		
2	x	1356	1445
	y		
	z		
3	x	1304	1443
	y		
	z		
4	x	1265	1468
	y	467	462
	z	501	596
5	x	1349	1446
	y	498	495
	z	402	469

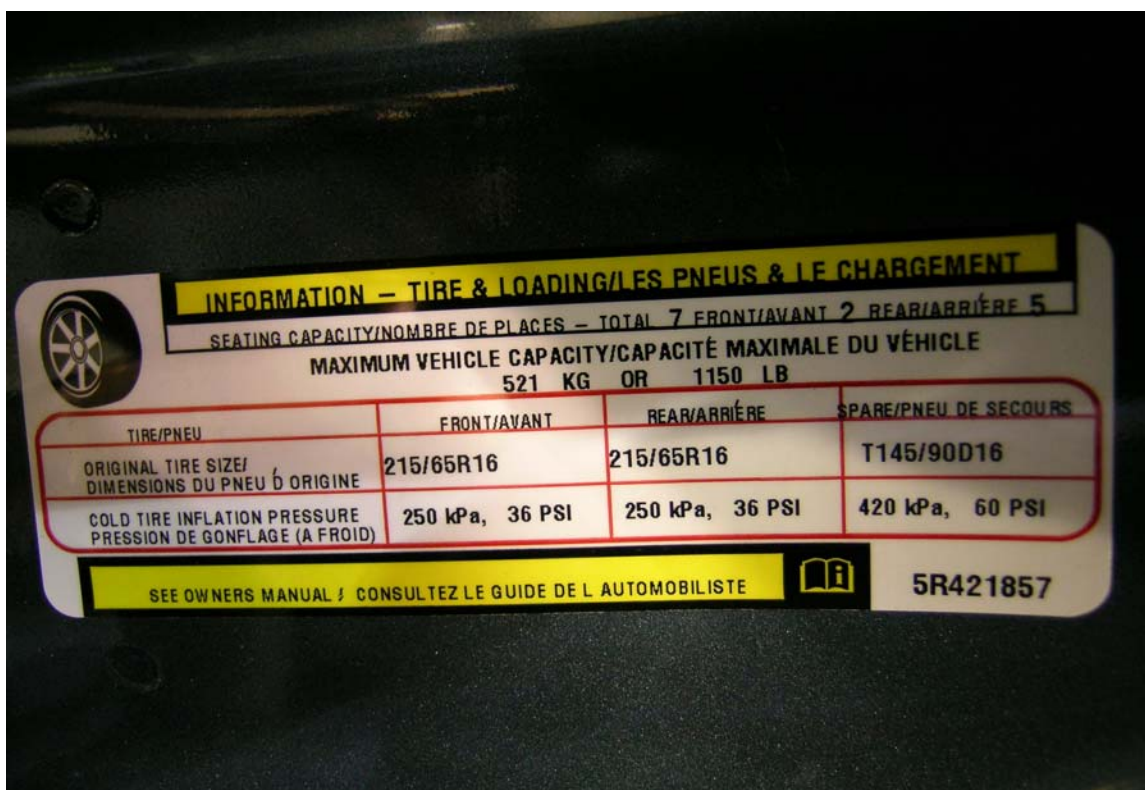
APPENDICE / APPENDIX A

**PHOTOGRAPHIES DE L'ESSAI
TEST PHOTOGRAPHS**

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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1. Étiquette de déclaration de conformité du véhicule d'essai.
Statement of compliance label of the test vehicle.



2. Étiquette d'information des pneus.
Tire information label.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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**3. Vue $\frac{3}{4}$ avant du véhicule d'essai.
 $\frac{3}{4}$ front view of the test vehicle.**



**4. Vue $\frac{3}{4}$ arrière du véhicule d'essai.
 $\frac{3}{4}$ rear view of the test vehicle.**

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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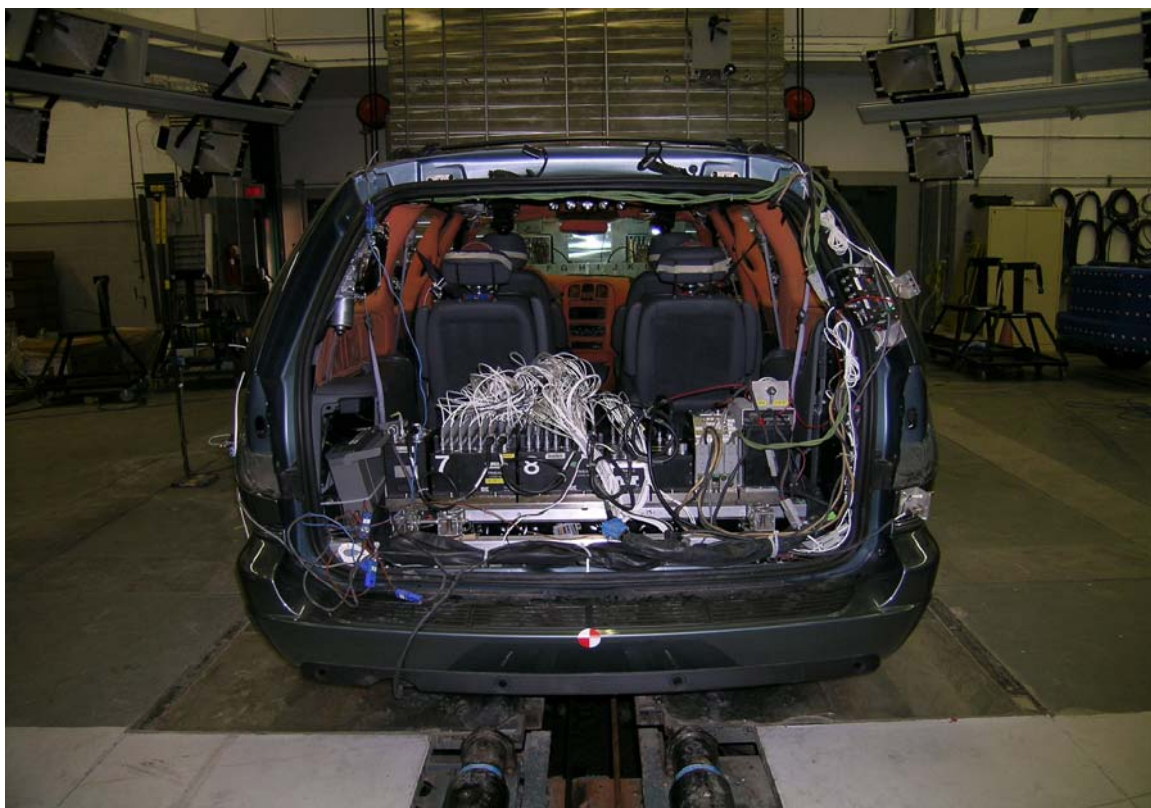


5. Vue générale côté gauche du véhicule d'essai, avant essai.
Left side view of the test vehicle, pre-test.



6. Vue générale côté gauche du véhicule d'essai, après essai.
Left side view of the test vehicle, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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7. Vue arrière du véhicule d'essai, avant essai.
Rear view of the test vehicle, pre-test.



8. Vue arrière du véhicule d'essai, après essai.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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Rear view of the test vehicle, post-test.



9. Vue générale côté droit du véhicule d'essai, avant essai.
General right side view of the test vehicle, pre-test.

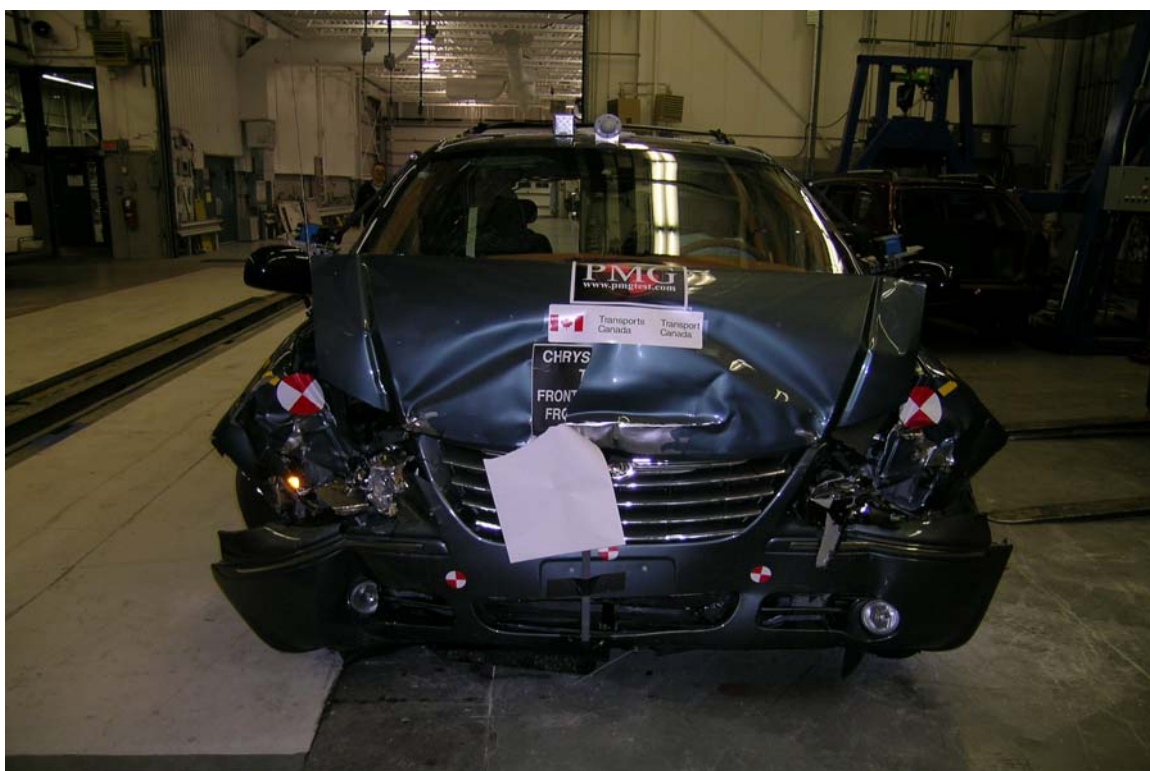


Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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10. Vue générale côté droit du véhicule d'essai, après essai.
General right side view of the test vehicle, post-test.



11. Vue avant du véhicule d'essai, avant essai.
Front view of the test vehicle, pre-test.

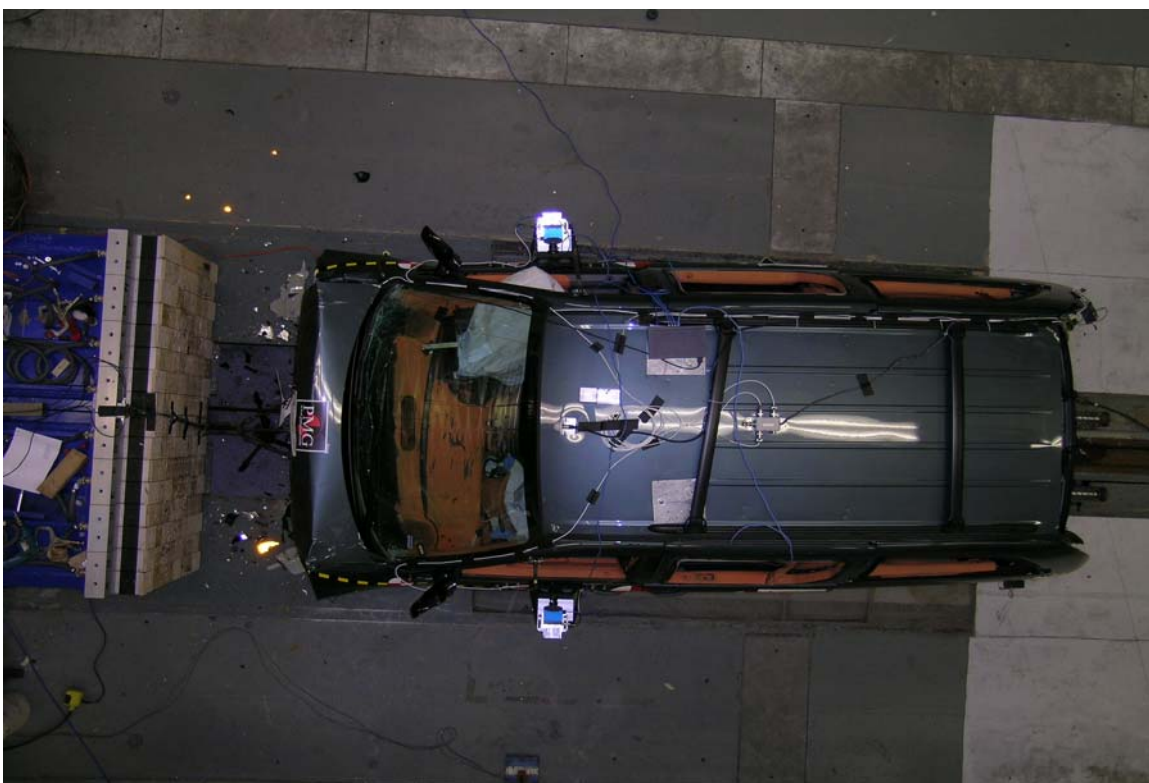


Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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12. Vue avant du véhicule d'essai, après essai.
Front view of the test vehicle, post-test.



13. Vue de plan du véhicule d'essai, avant essai.
Over view of the test vehicle, pre-test.



Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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14. Vue de plan du véhicule d'essai, après essai.
Over view of the test vehicle, post-test.



15. Vue de plan du devant du véhicule d'essai, avant essai.
Over view of the front part of the test vehicle, pre-test.



Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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16. Vue de plan du devant du véhicule d'essai, après essai.
Over view of the front part of the test vehicle, post-test.



17. Vue côté gauche de l'avant du véhicule d'essai, avant essai.
Left side view of front of test vehicle, pre-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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18. Vue côté gauche de l'avant du véhicule d'essai, après essai.
Left side view of front of test vehicle, post-test.



Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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19. Vue côté droit de l'avant du véhicule d'essai, avant essai.
Right side view of front of test vehicle, pre-test.

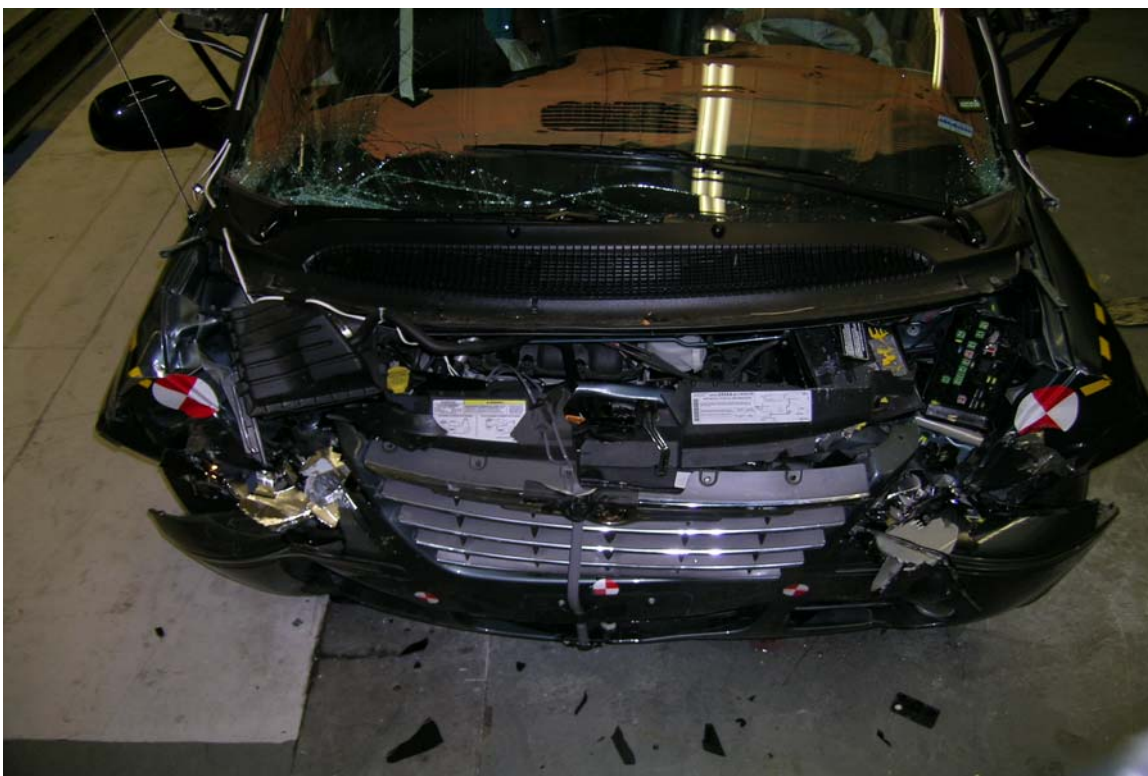


20. Vue côté droit de l'avant du véhicule d'essai, après essai.
Right side view of front of test vehicle, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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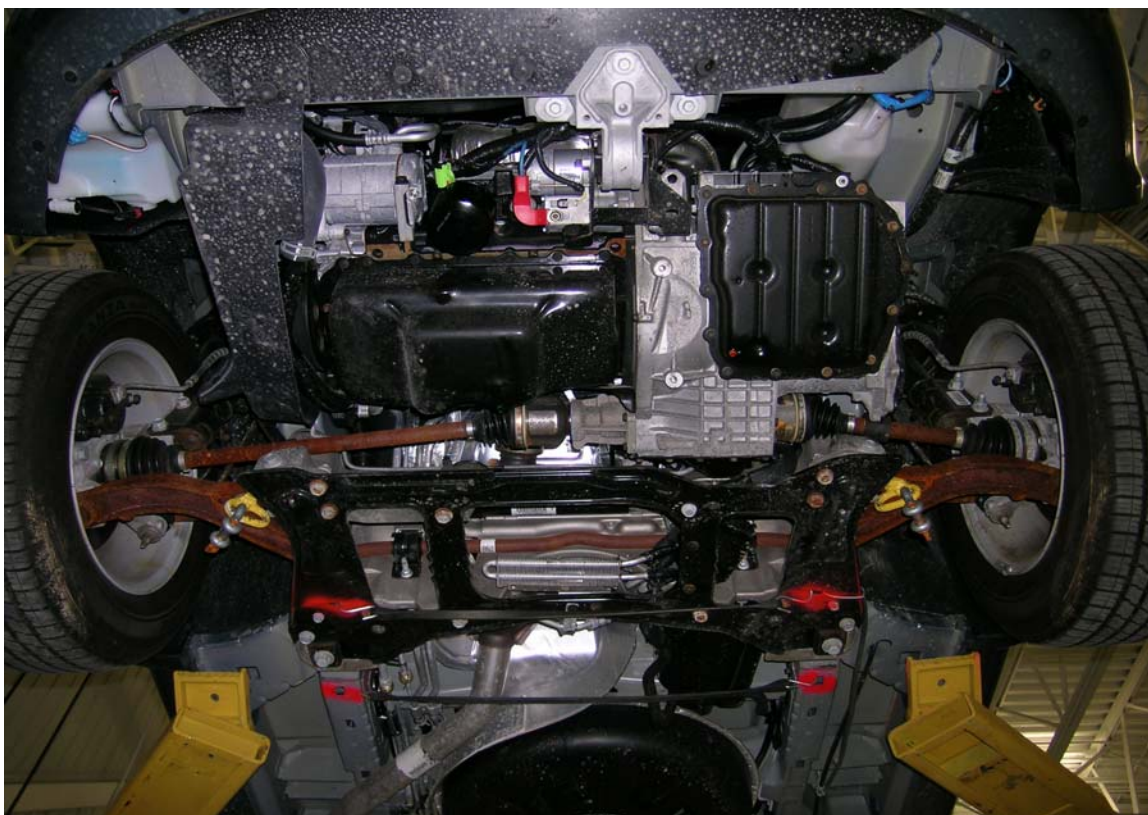


21. Vue du compartiment moteur du véhicule d'essai, avant essai.
Engine compartment view of the vehicle, pre-test.

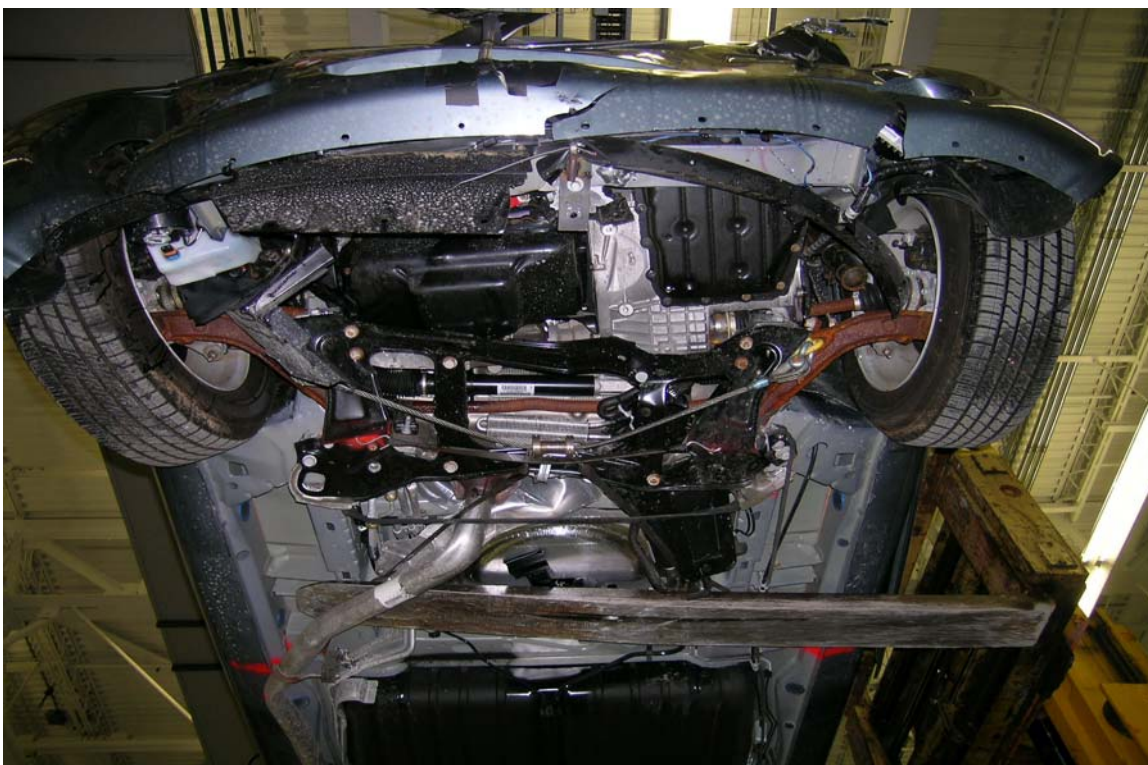


22. Vue du compartiment moteur du véhicule d'essai, après essai.
Engine compartment view of the vehicle, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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23. Vue du dessous du compartiment moteur, avant essai.
Under view of the engine compartment , pre-test.



24. Vue du dessous du compartiment moteur, après essai.
Under view of the engine compartment , post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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25. Position du conducteur, avant essai.
Driver's position, pre-test.



26. Position du conducteur, après essai.
Driver's position, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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27. Point de contact de tête du conducteur, après essai.
Driver's head contact point, post-test.



28. Point de contact de tête du conducteur, après essai.
Driver's head contact point, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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29. Point de contact des genoux du conducteur, après essai.
Driver's knees contact point, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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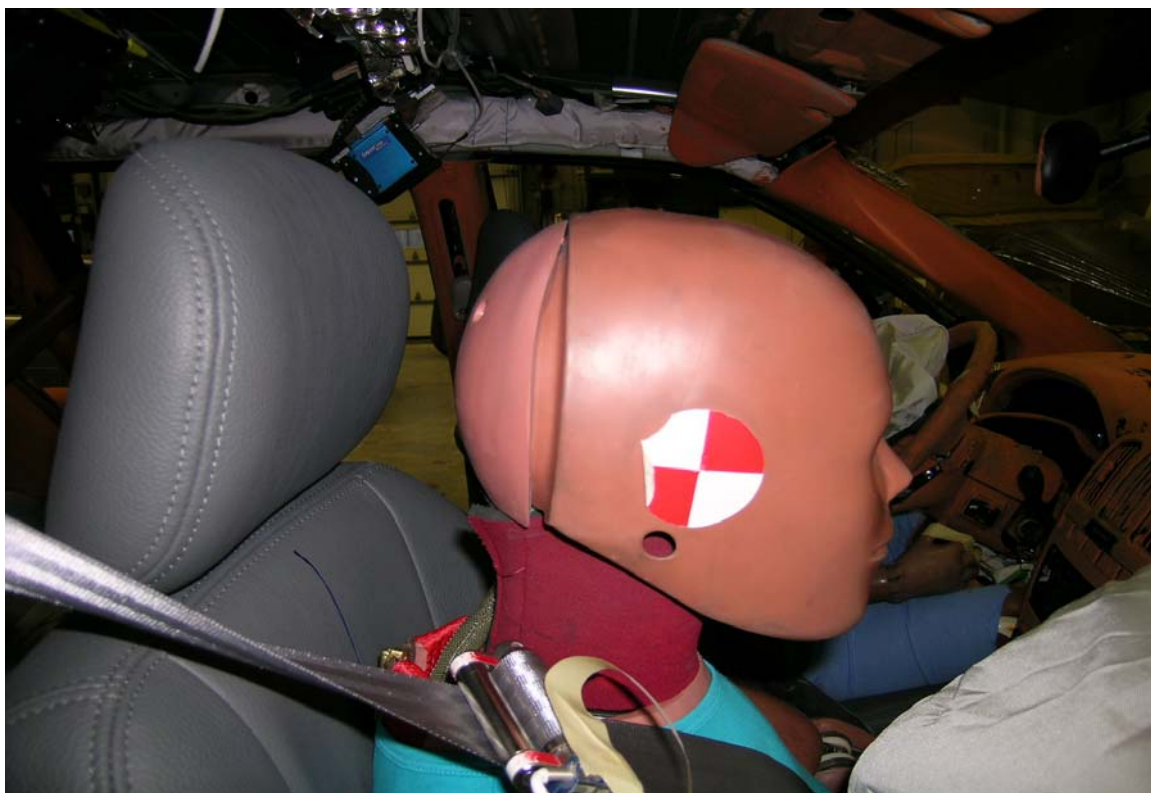


30. Position du passager, avant essai.
Passenger's position, pre-test.



31. Position du passager, après essai.
Passenger's position, post-test.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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**32. Point de contact de tête du passager, après essai.
Passenger's head contact point, post-test.**



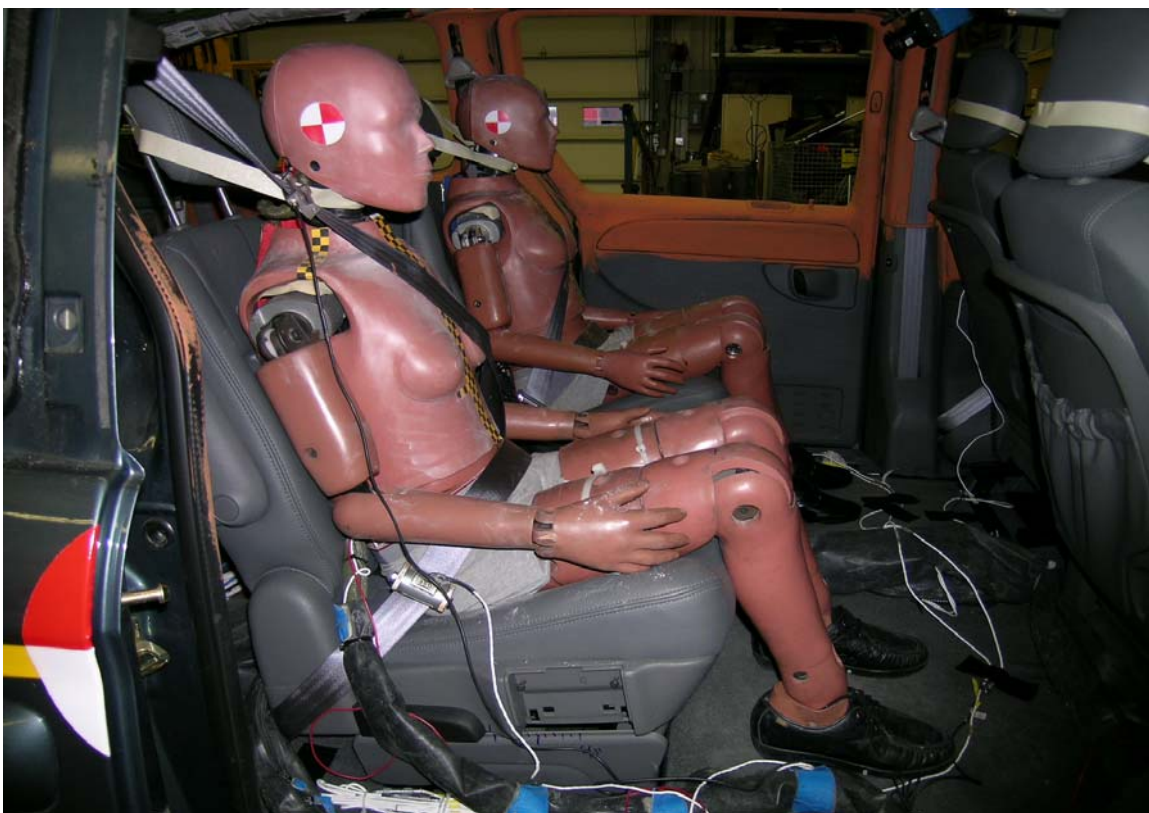
**33. Point de contact de tête du passager, après essai.
Passenger's head contact point, post-test.**

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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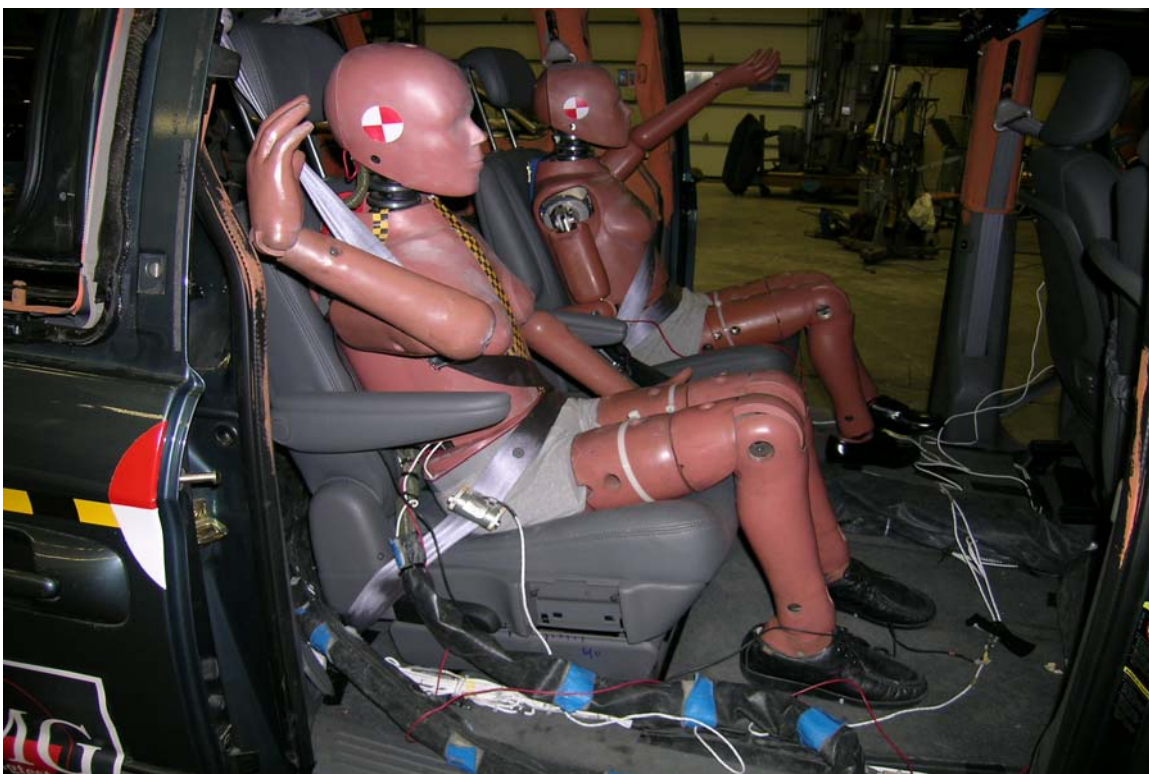


**34. Point de contact des genoux du passager, après essai.
Passenger's knees contact point, post-test.**

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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35. Position du passager arrière droit, avant essai.
Rear right passenger's position, pre-test.



36. Position du passager arrière droit, après essai.

Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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Rear right passenger's position, post-test.



37. Position du passager arrière gauche, avant essai.
Rear left passenger's position, pre-test.



Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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38. Position du passager arrière gauche, après essai.
Rear left passenger's position, post-test.



39. Affichage du lecteur de vitesse.
Speed trap reading.



Date de collision Crash date	2005-11-14	Véhicule Vehicle	CHRYSLER TOWN & COUNTRY 2005	T.C. N° T.C.No	05-205
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APPENDICE / APPENDIX B

**DONNÉES GRAPHIQUES
GRAPHICAL DATA**



Nom du client
Client Name **TRANSPORTS CANADA**

Type de véhicule
Type of Vehicle **CHRYSLER T&C 2005**

Numéro de TC
Tc Number **TC05-205**

Vitesse
Speed **56.24 km/h**

Numéro de contrat
Contract No **06-6008**

Acquisition de données selon
Data Acquisition according to **SAE J211/1 MAR 95**

Date de l'essai
Test date **2005-11-14**

Titre du projet
COLLISION DE RECHERCHE
COLLISION FRONTALE

Project Title
RESEARCH COLLISION TEST
FRONTAL CRASH

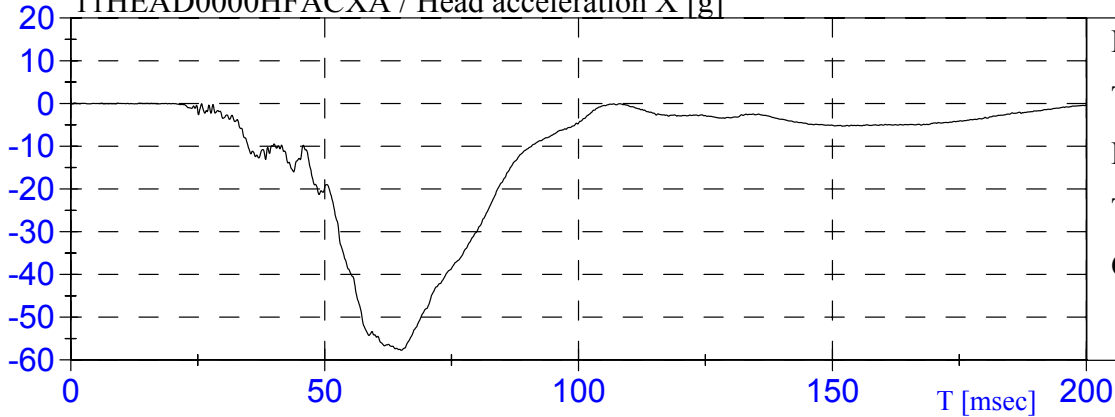
MANNEQUIN / DUMMY

Position 1	Position 2	Position 3
HF		HF

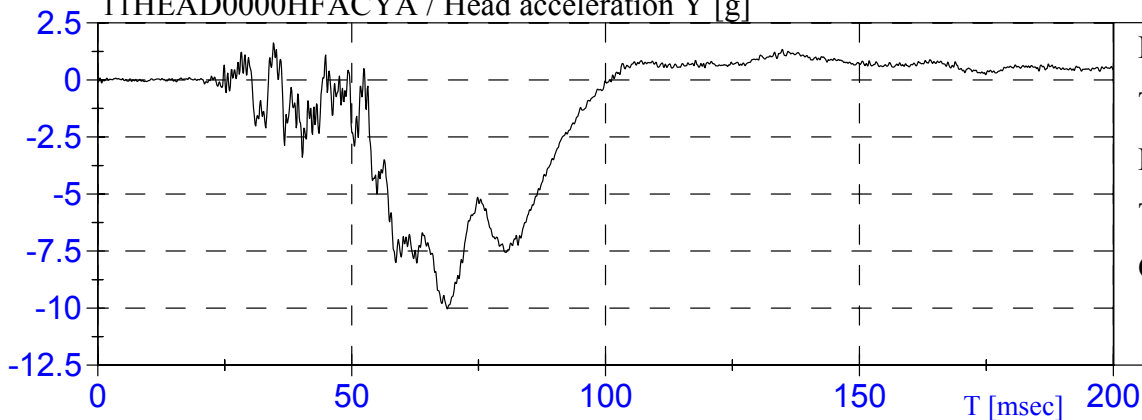
Position 4	Position 5	Position 6
HF		HF

Position 7	Position 8	Position 9
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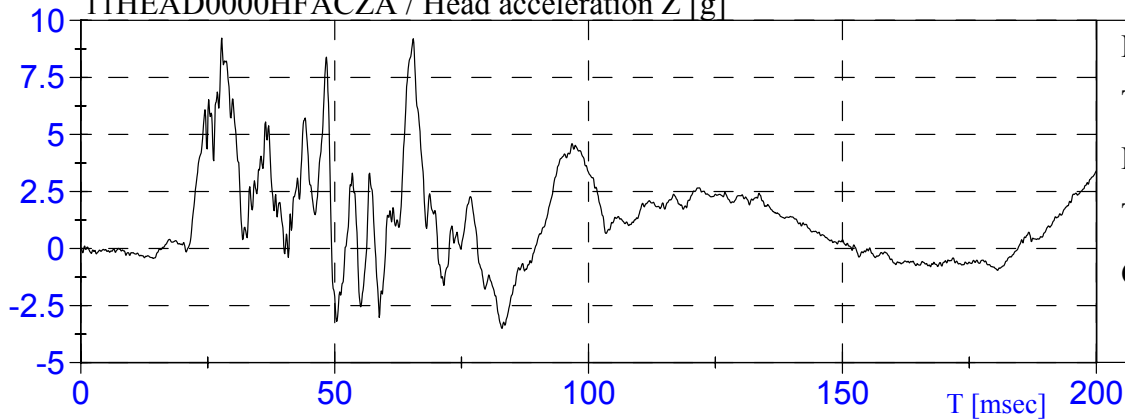
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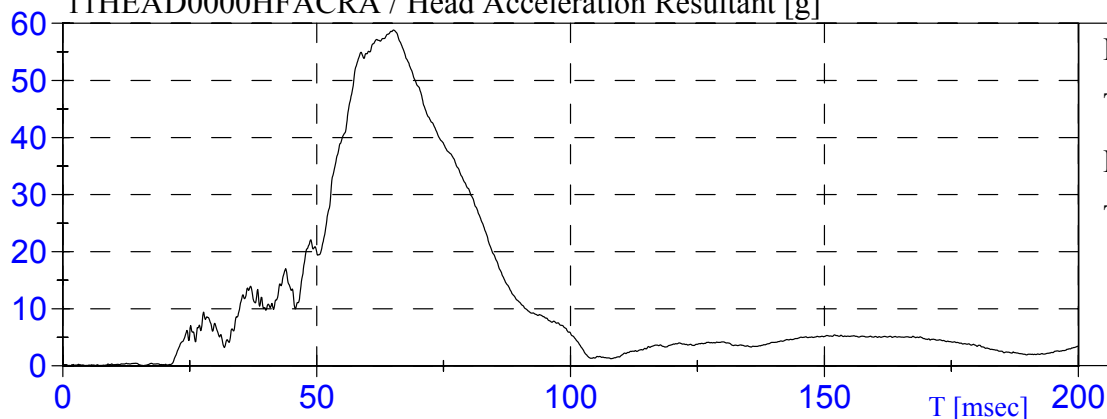
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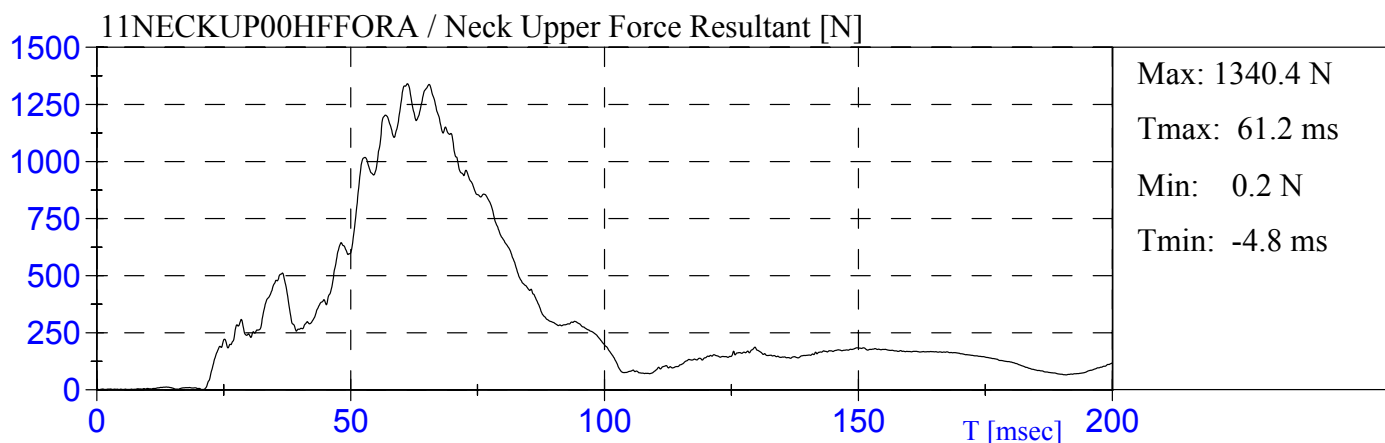
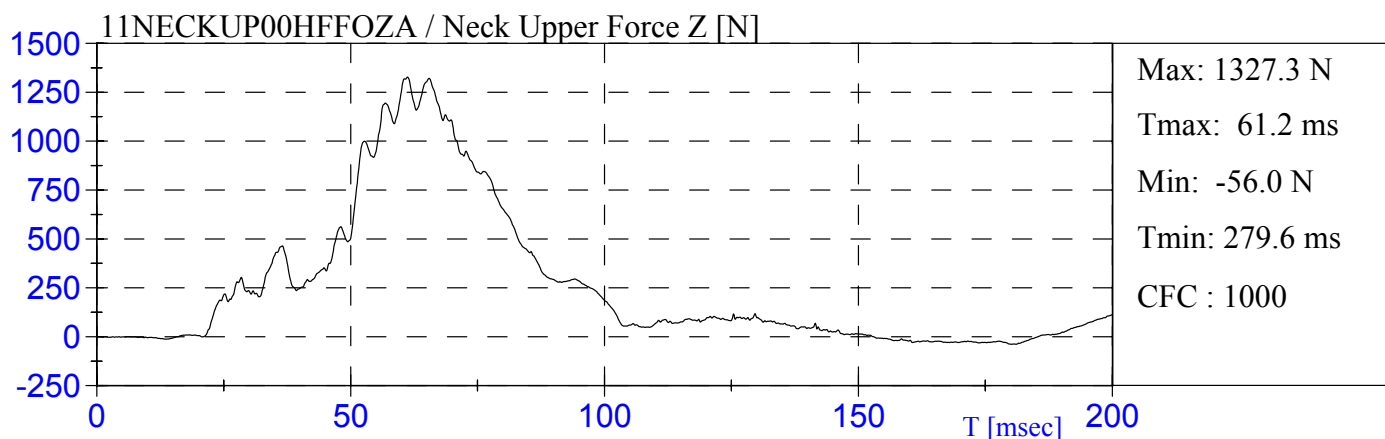
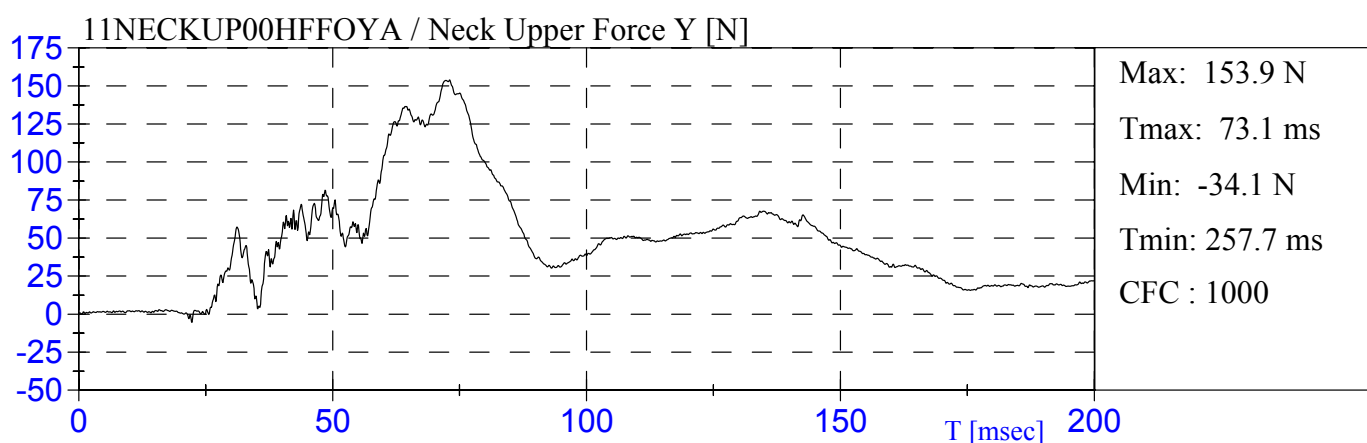
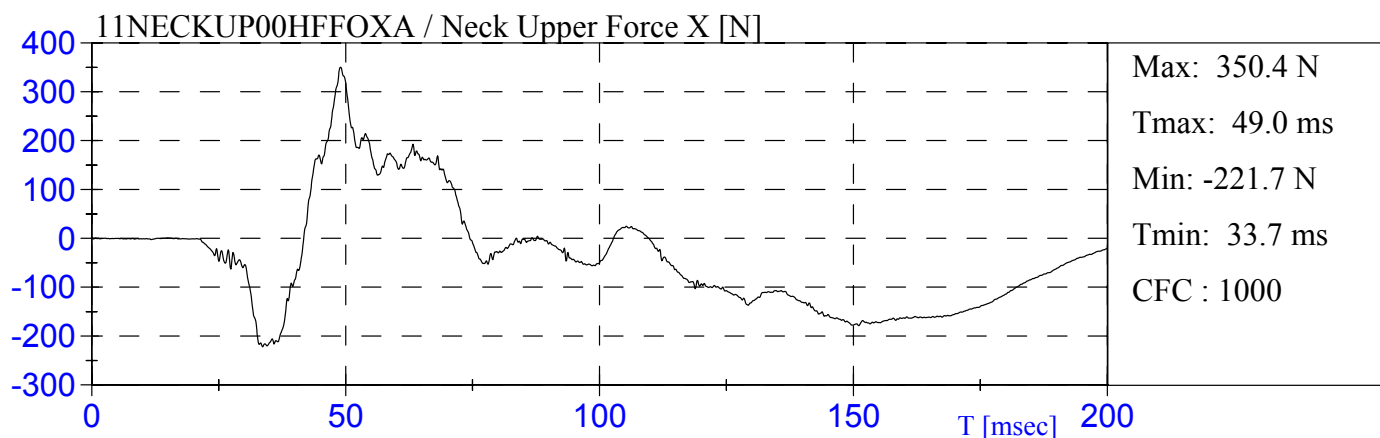


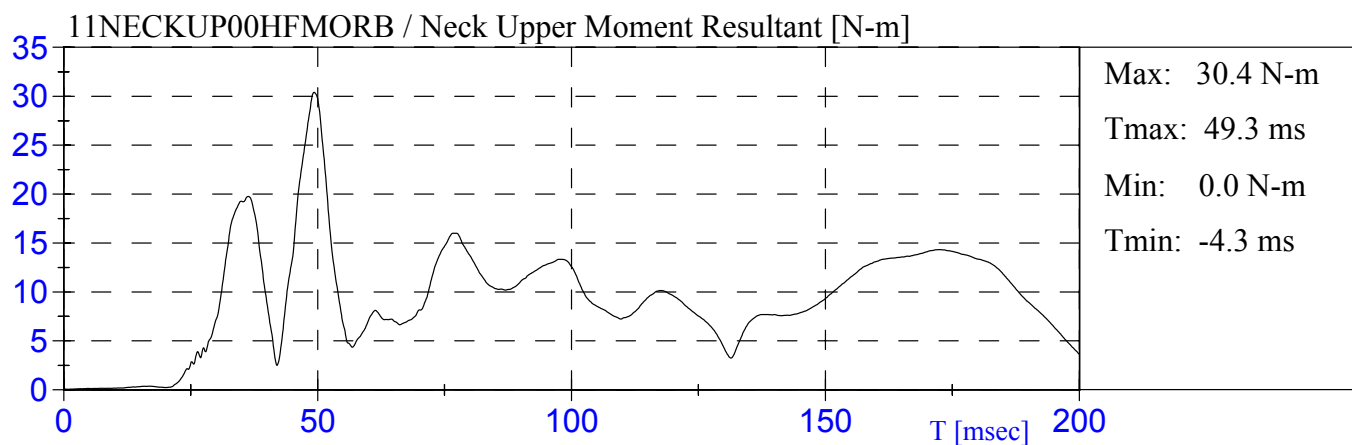
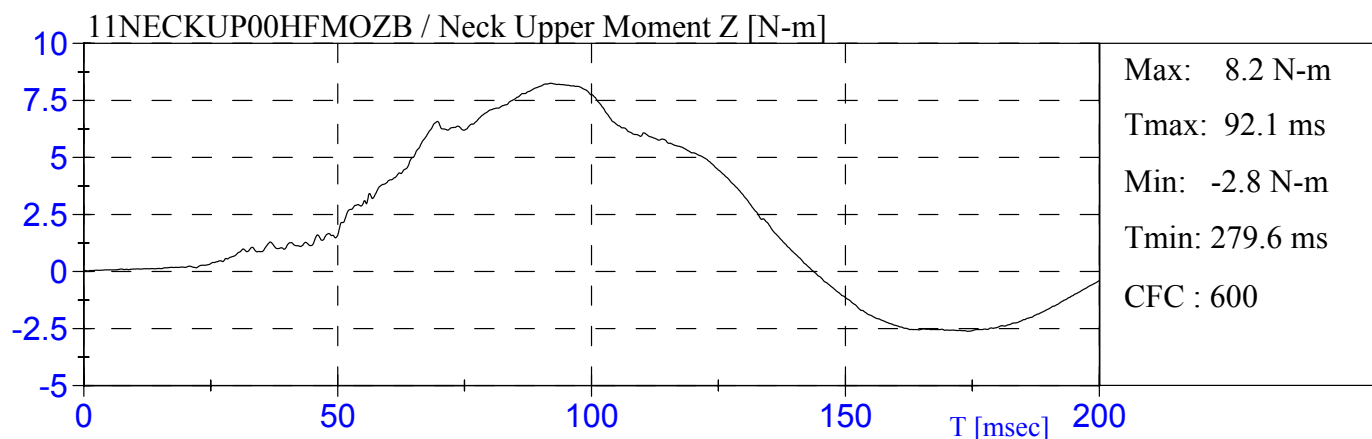
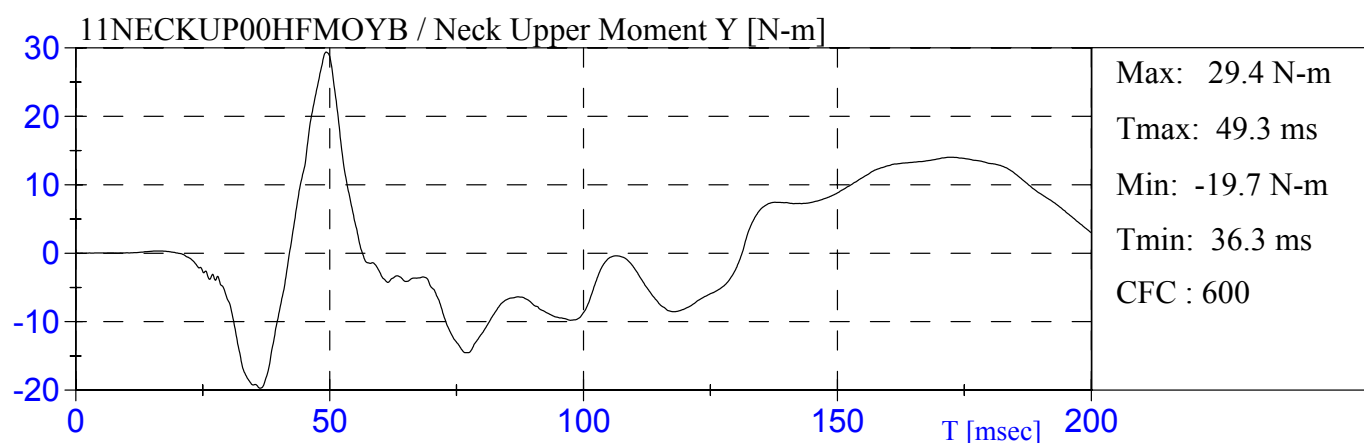
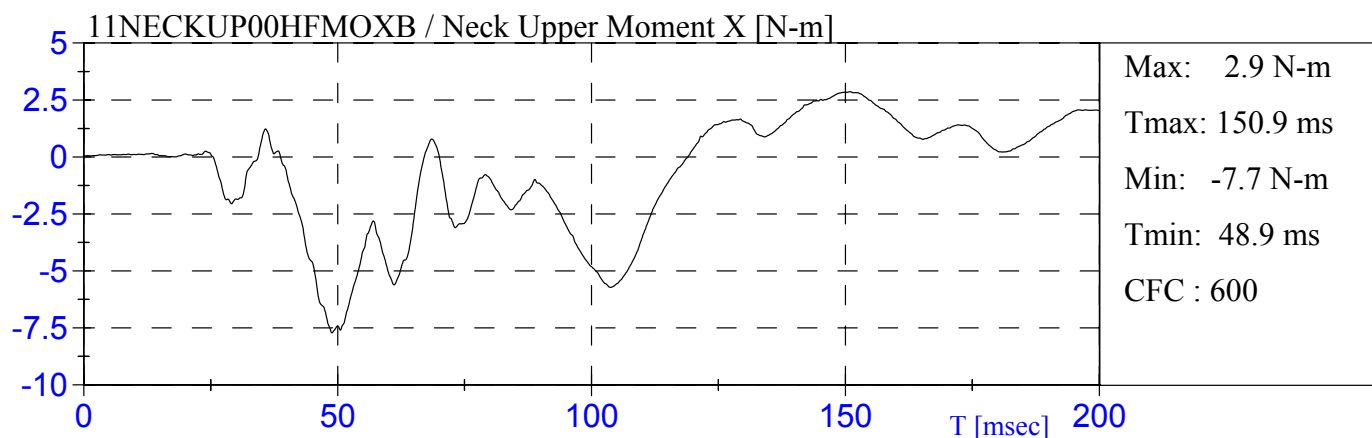
11HEAD0000HFACZA / Head acceleration Z [g]

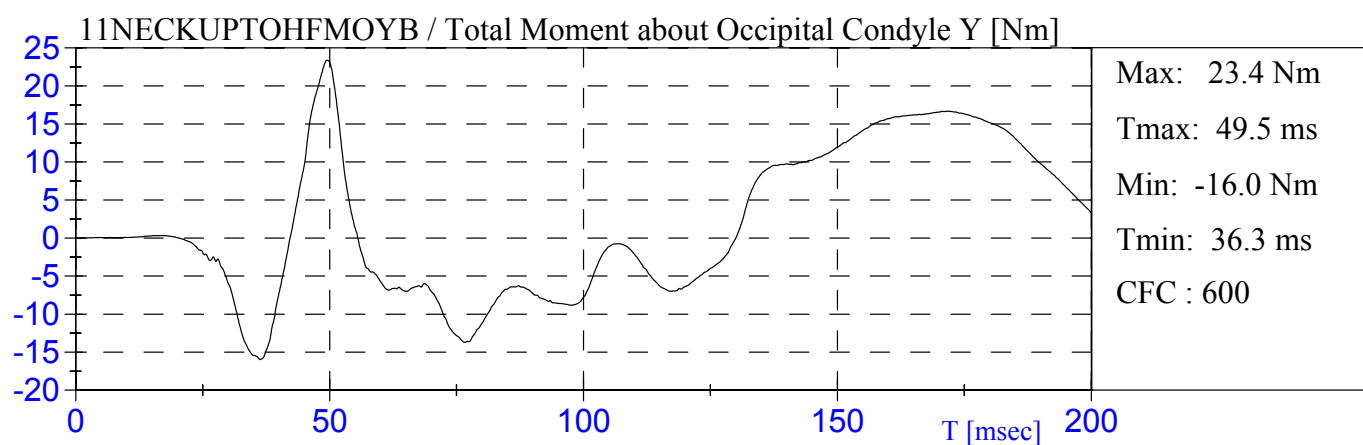
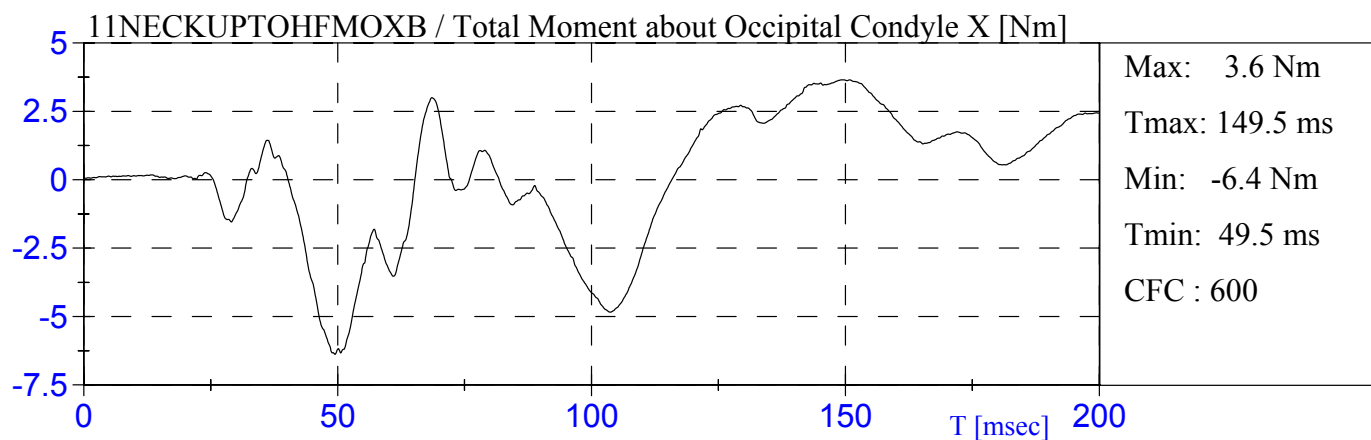


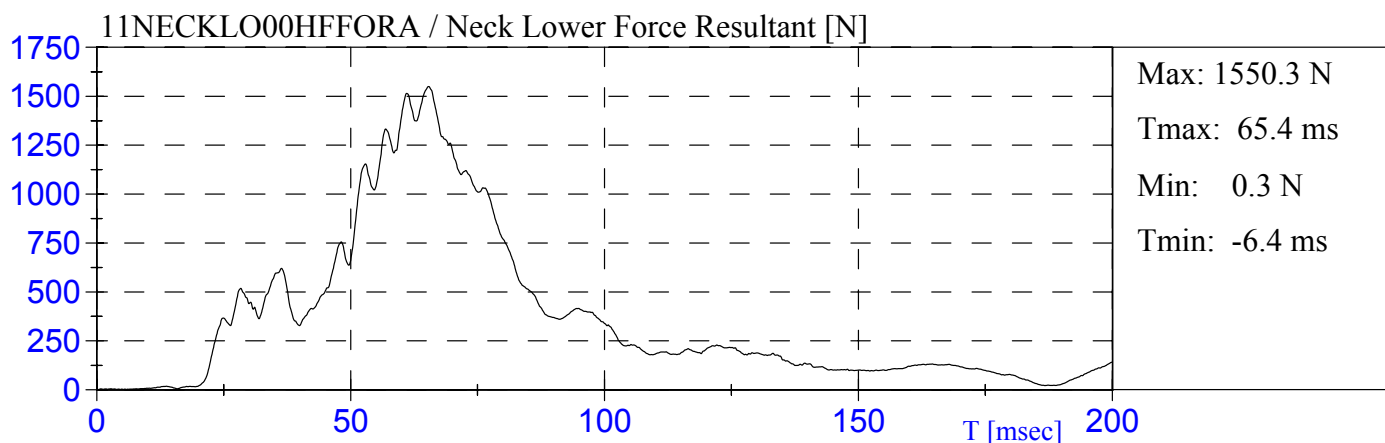
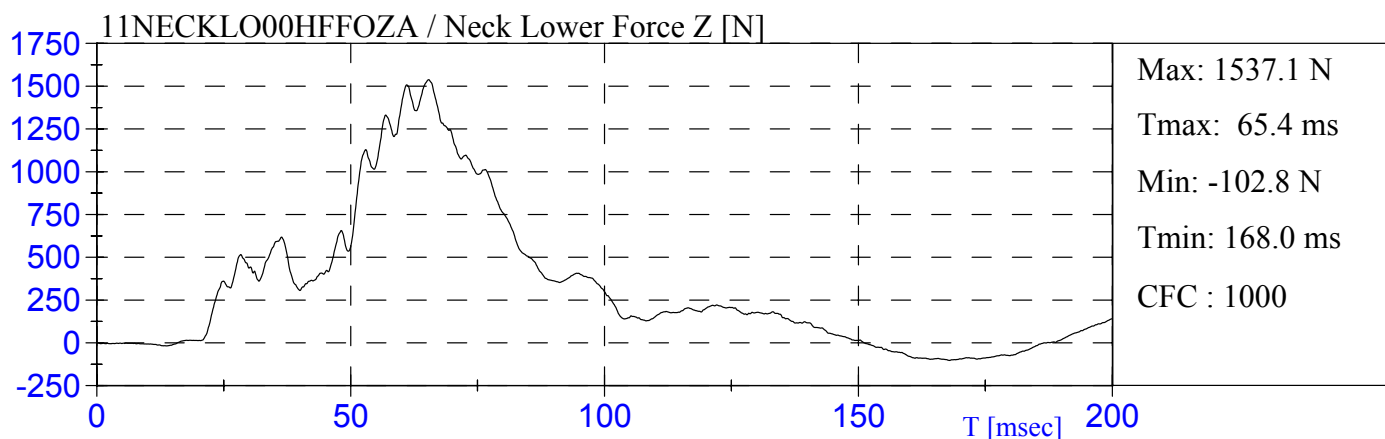
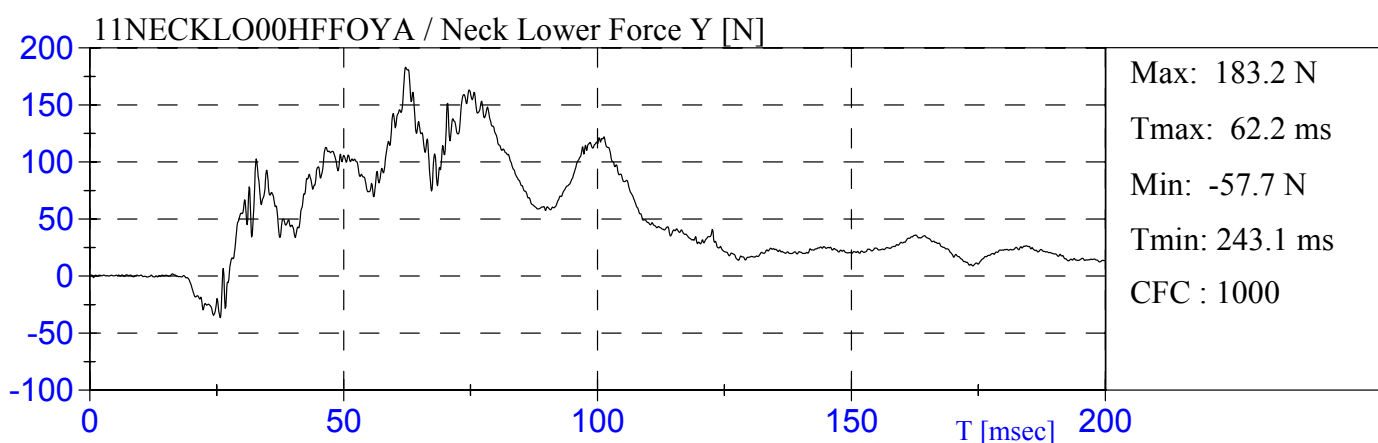
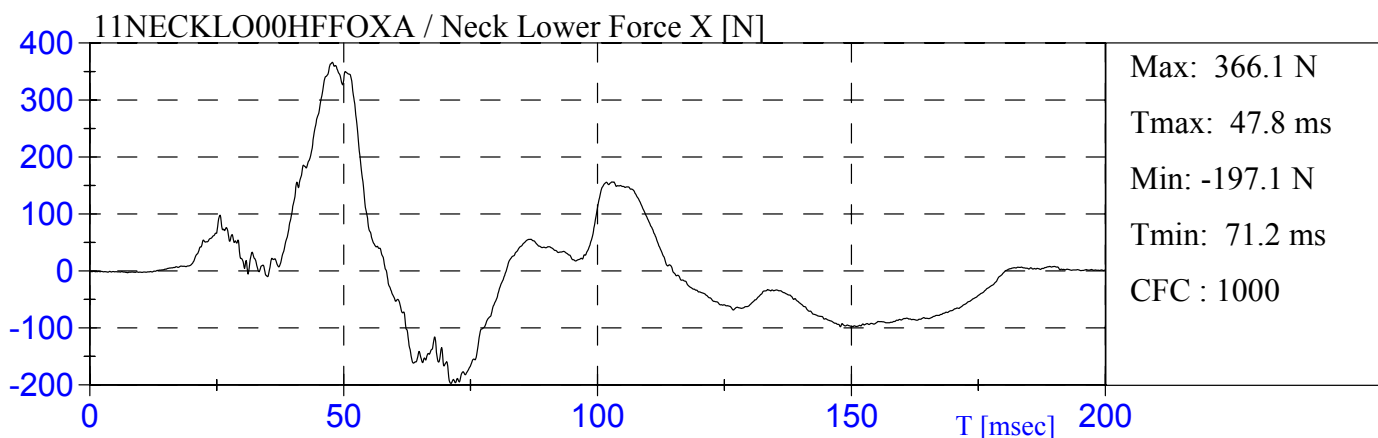
11HEAD0000HFACRA / Head Acceleration Resultant [g]

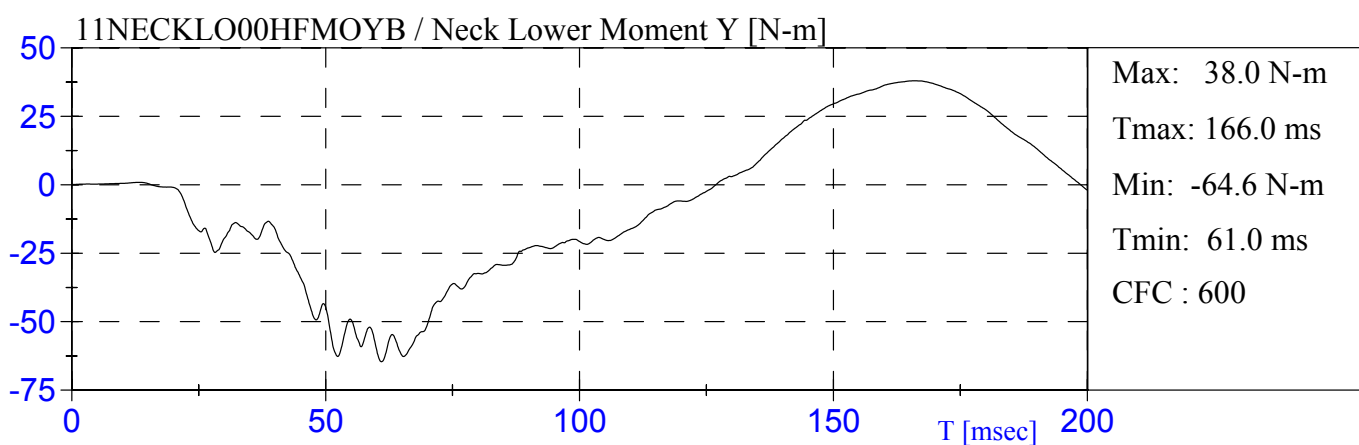
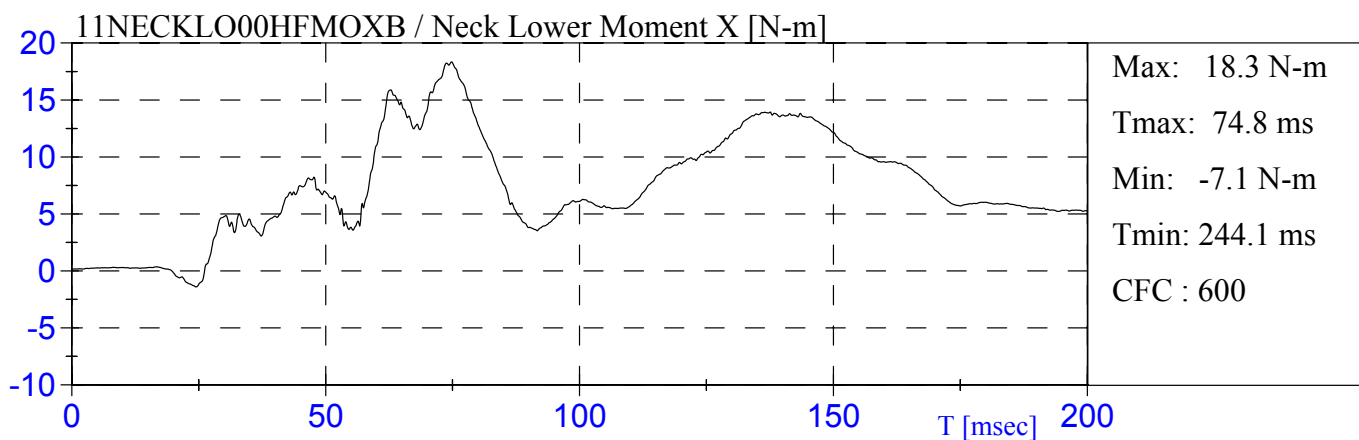


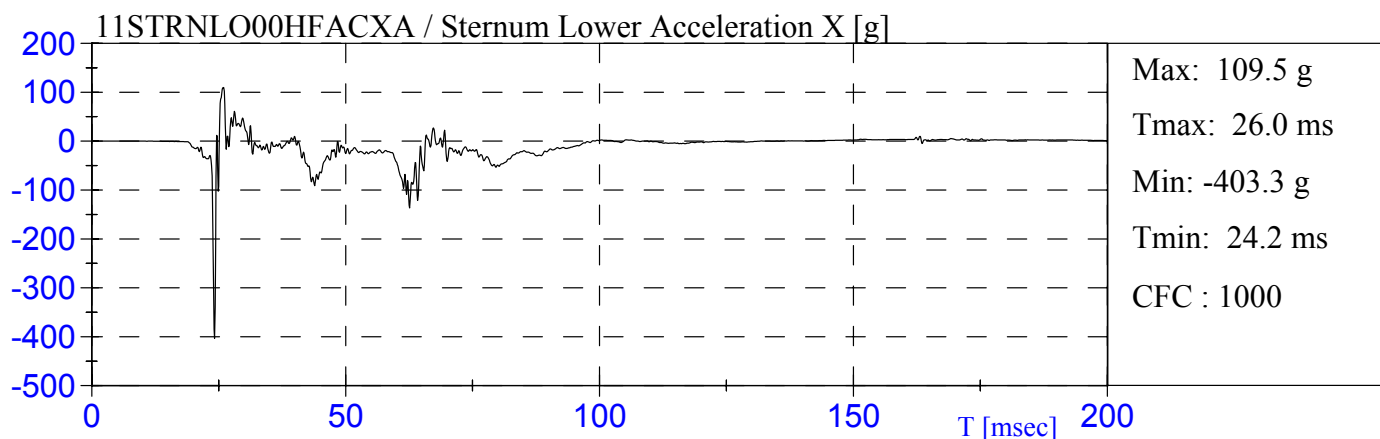
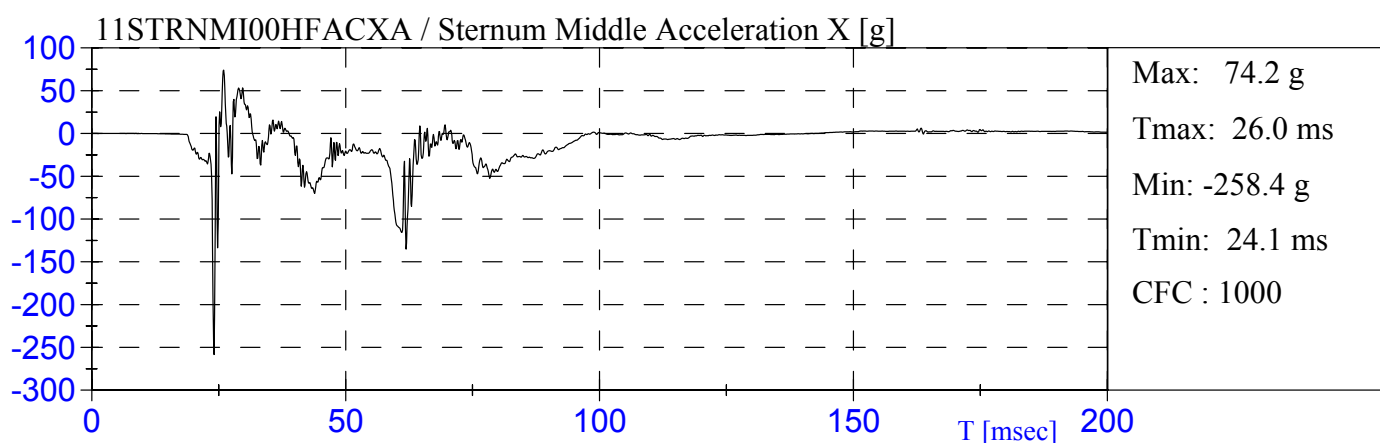
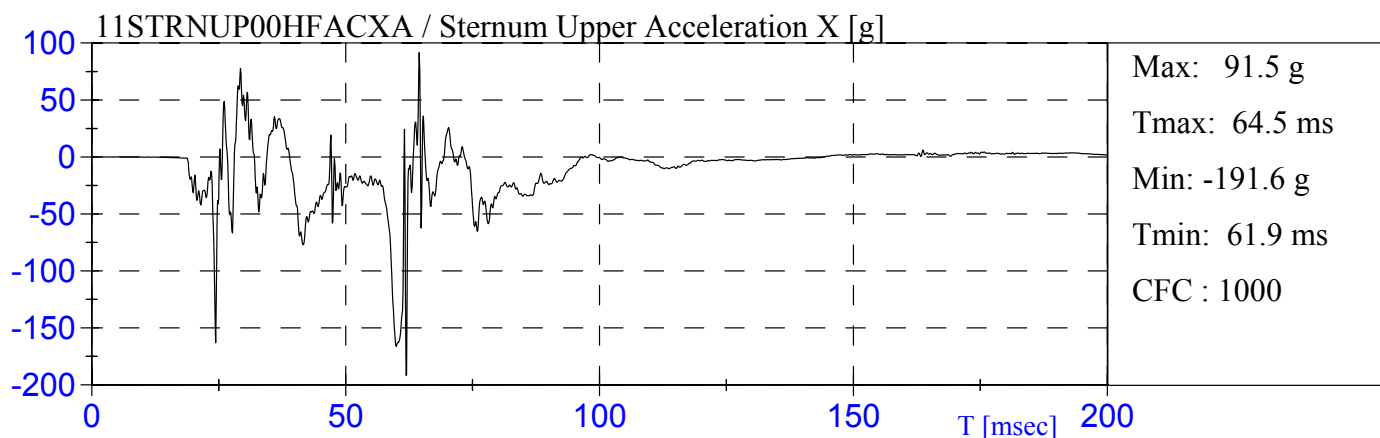


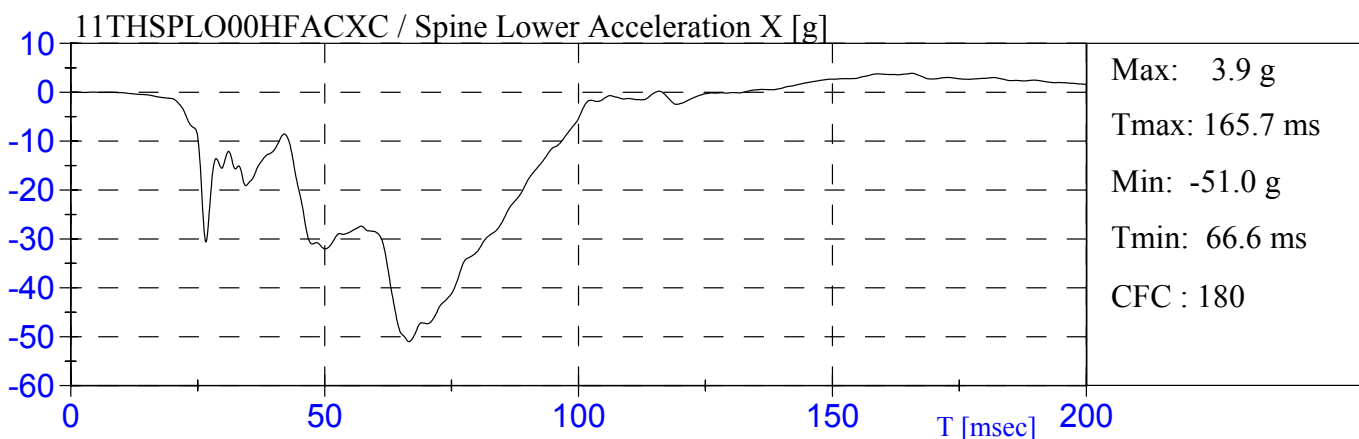
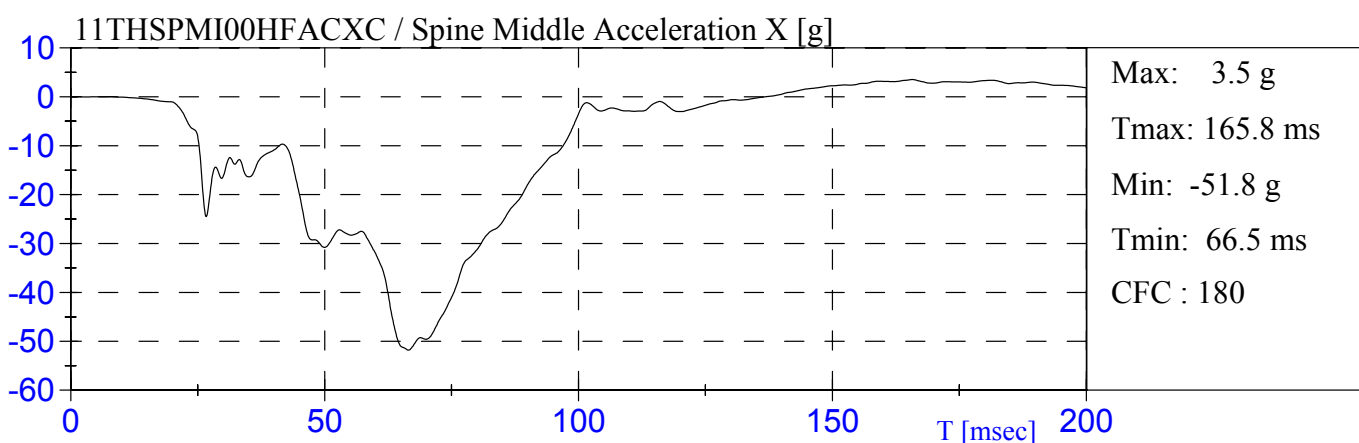
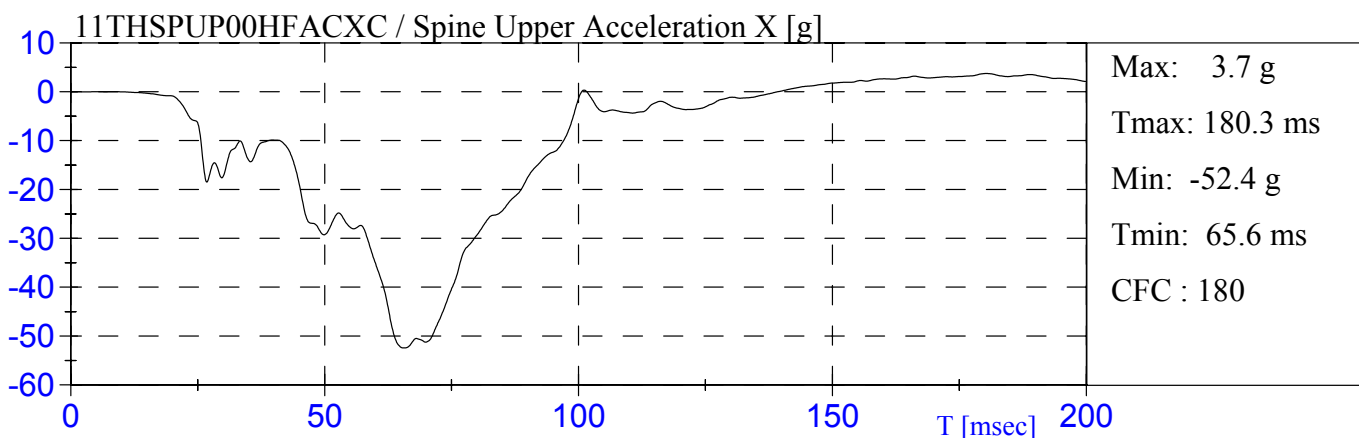


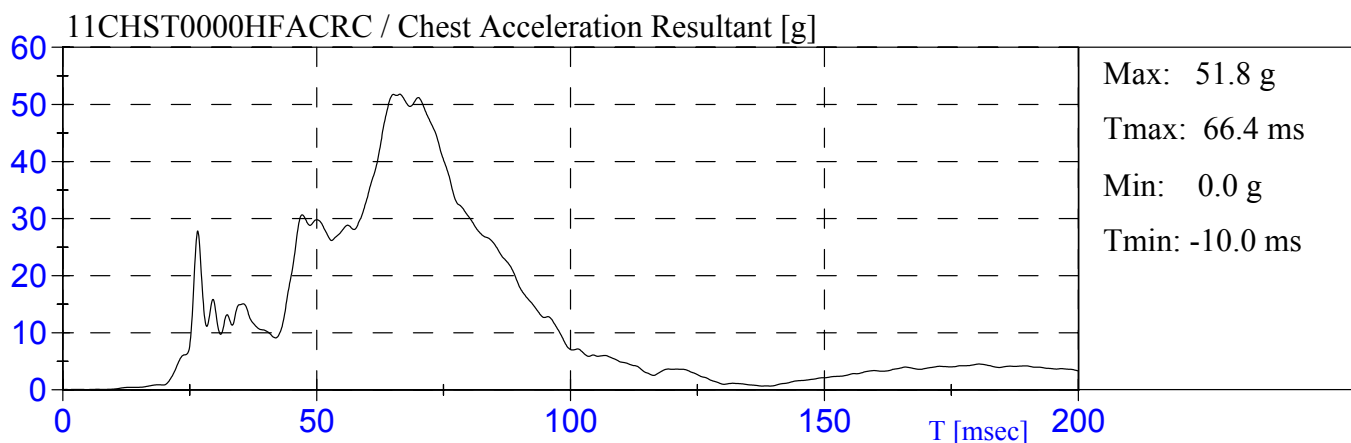
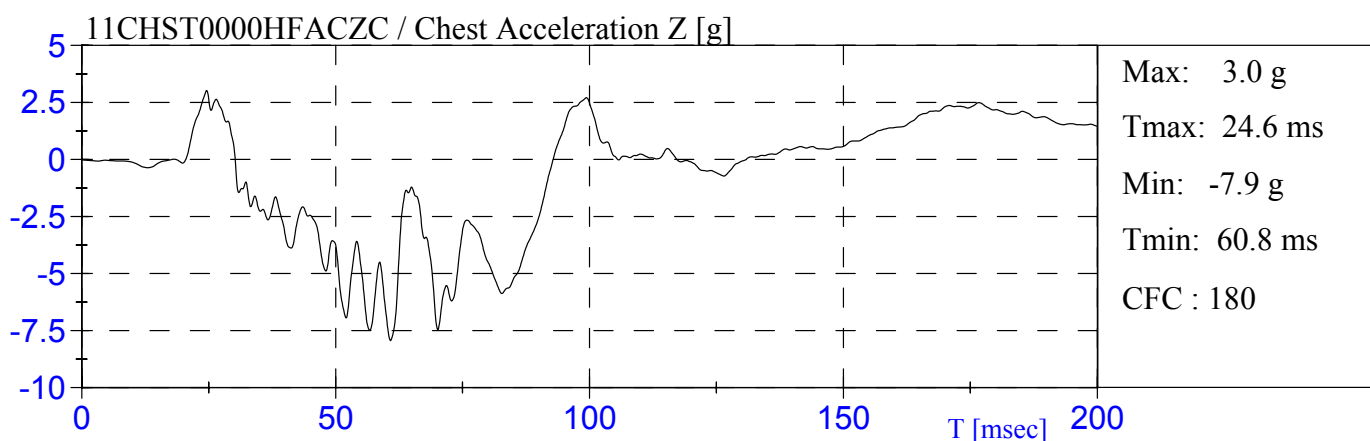
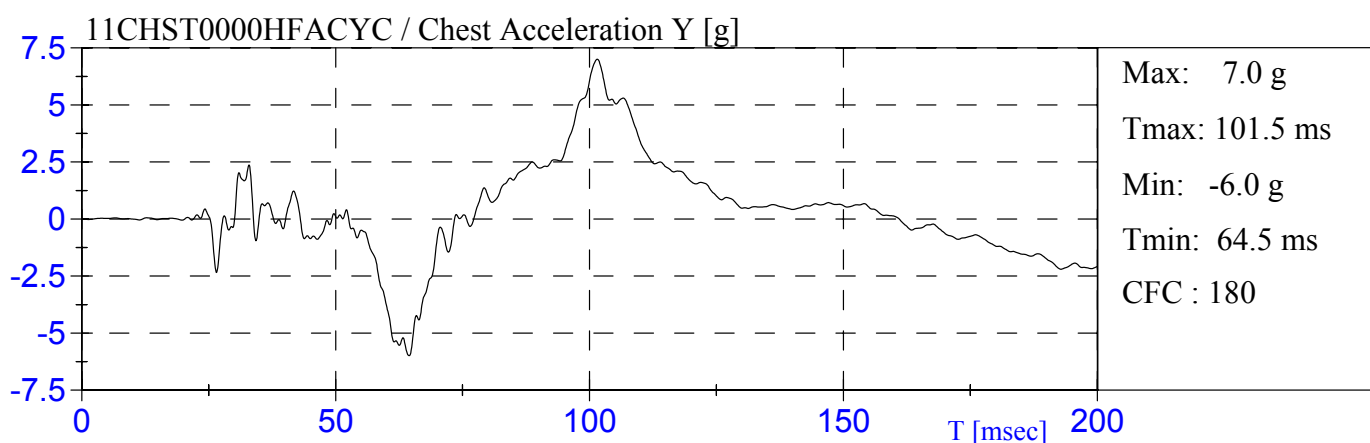
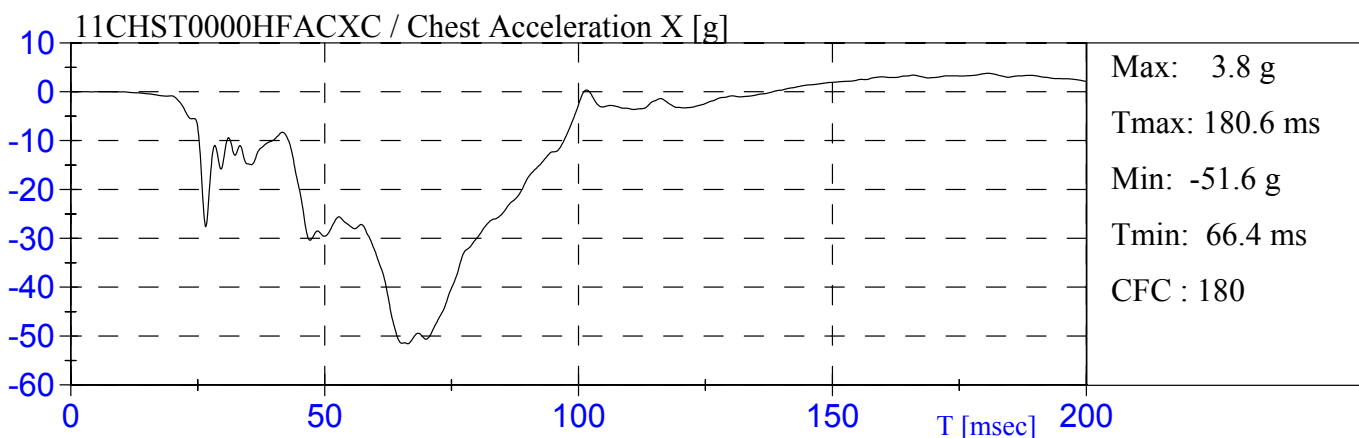


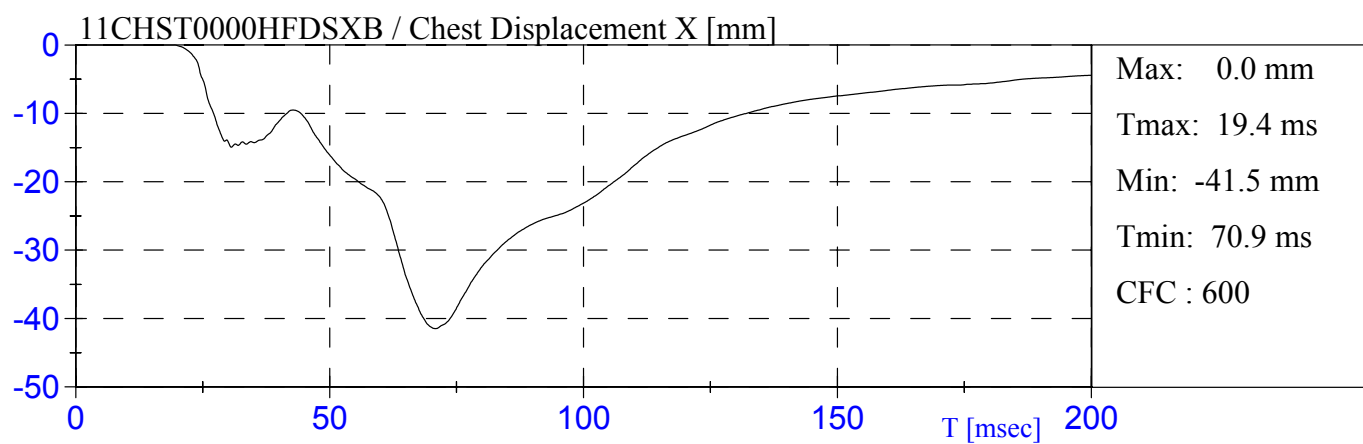


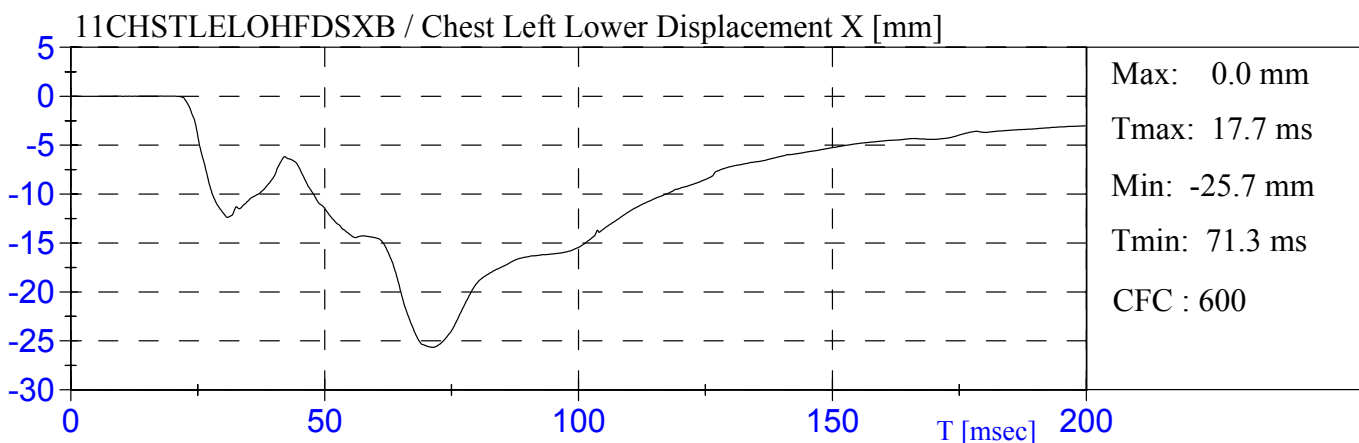
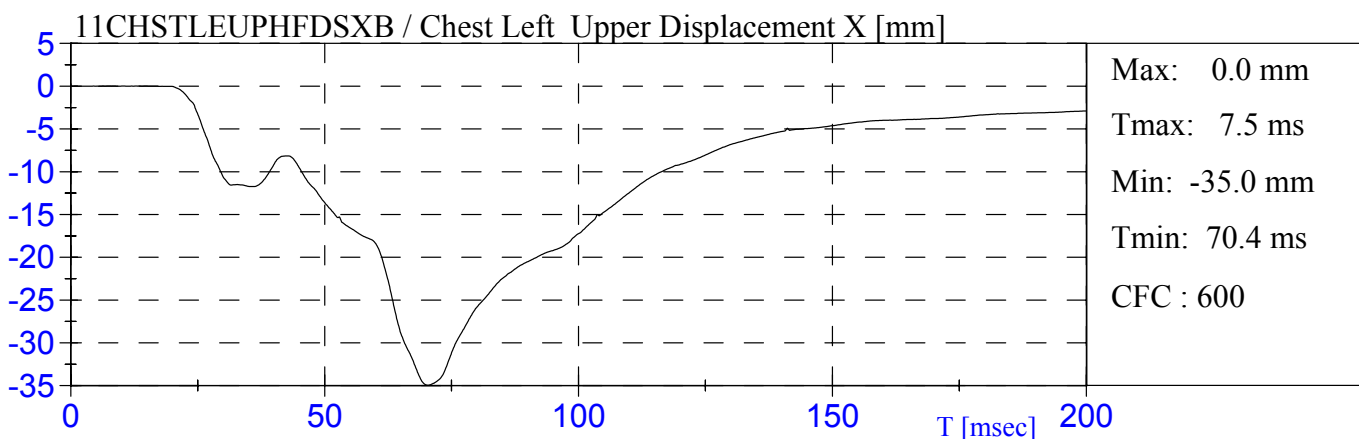
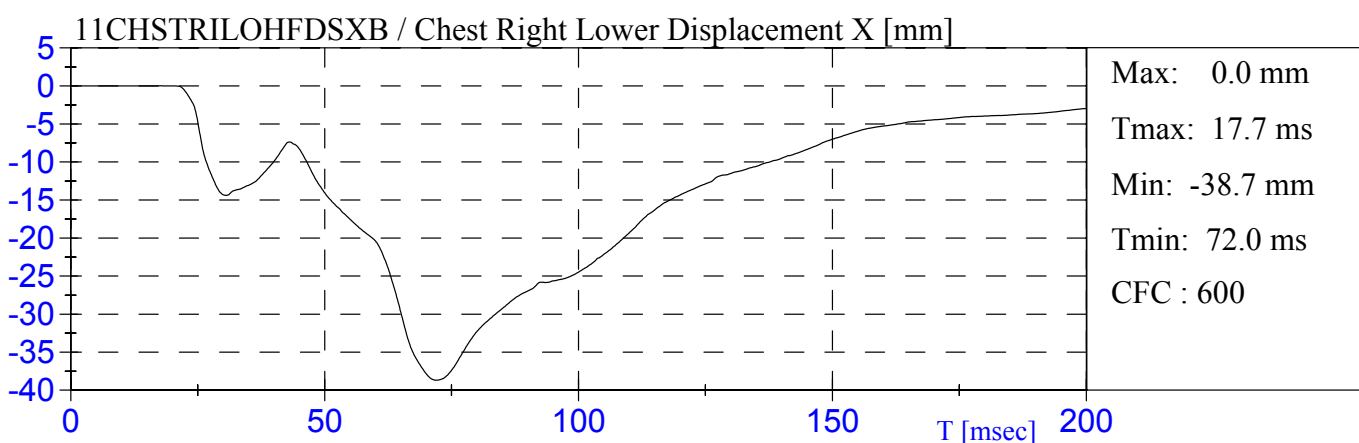
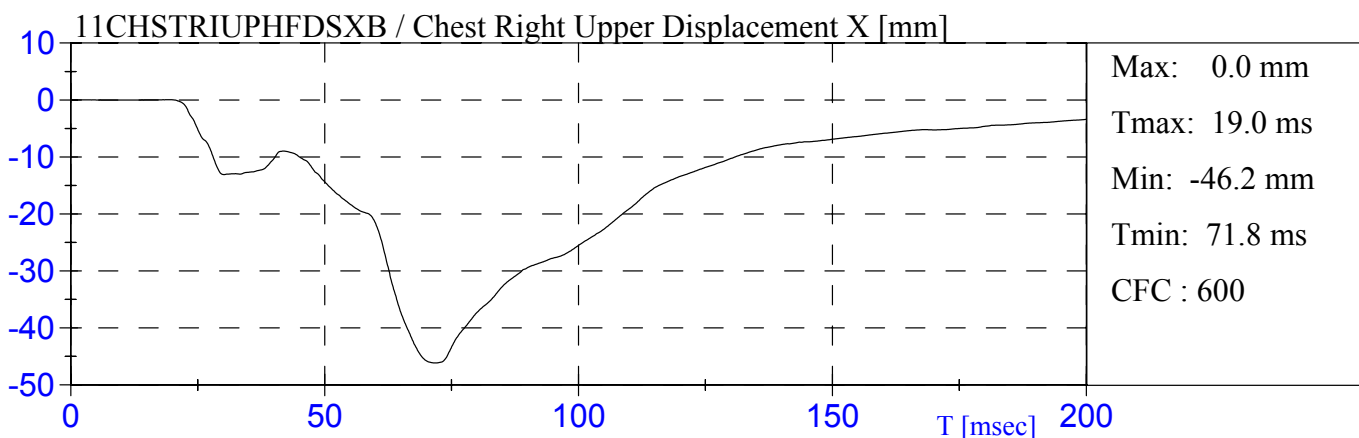


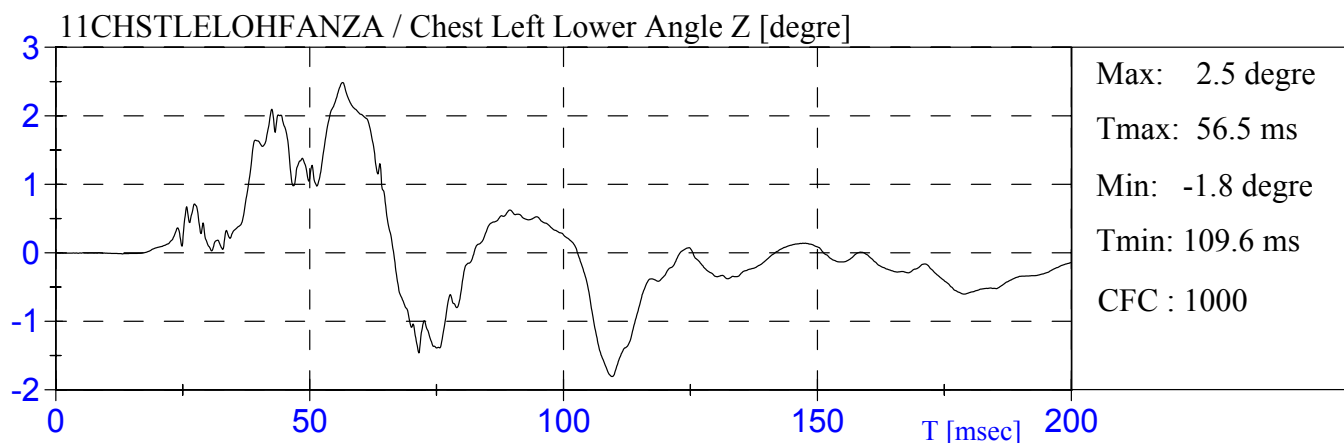
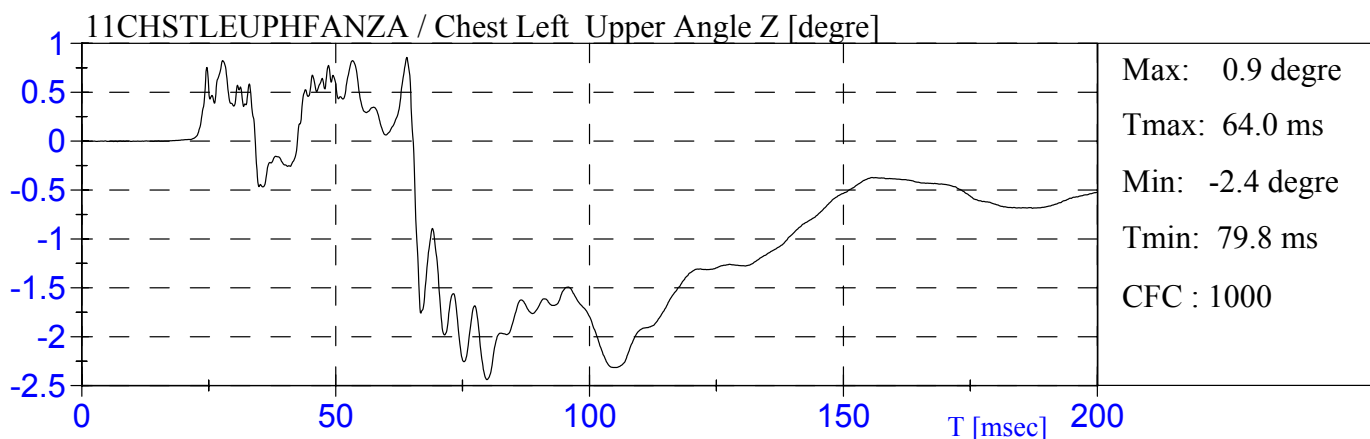
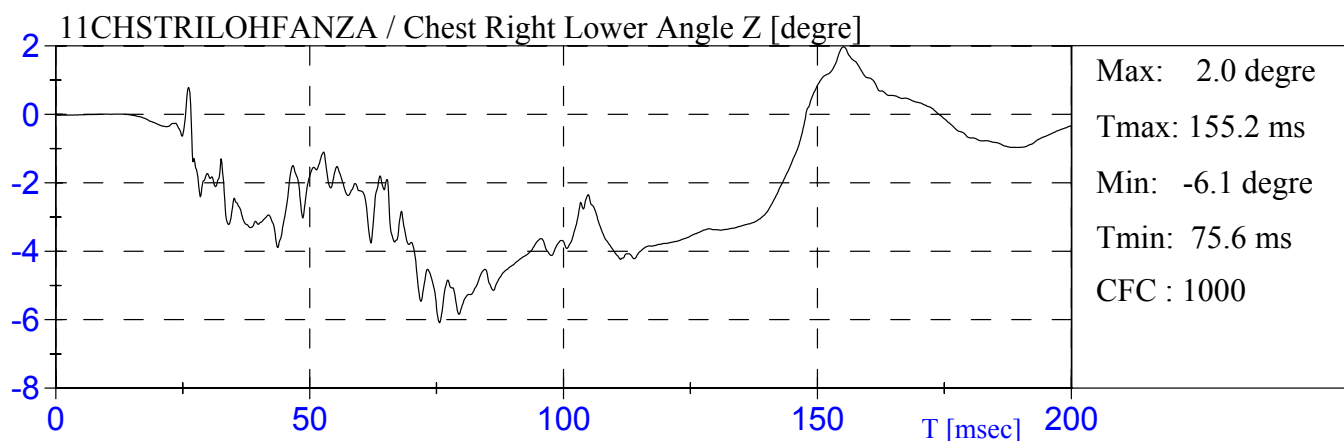
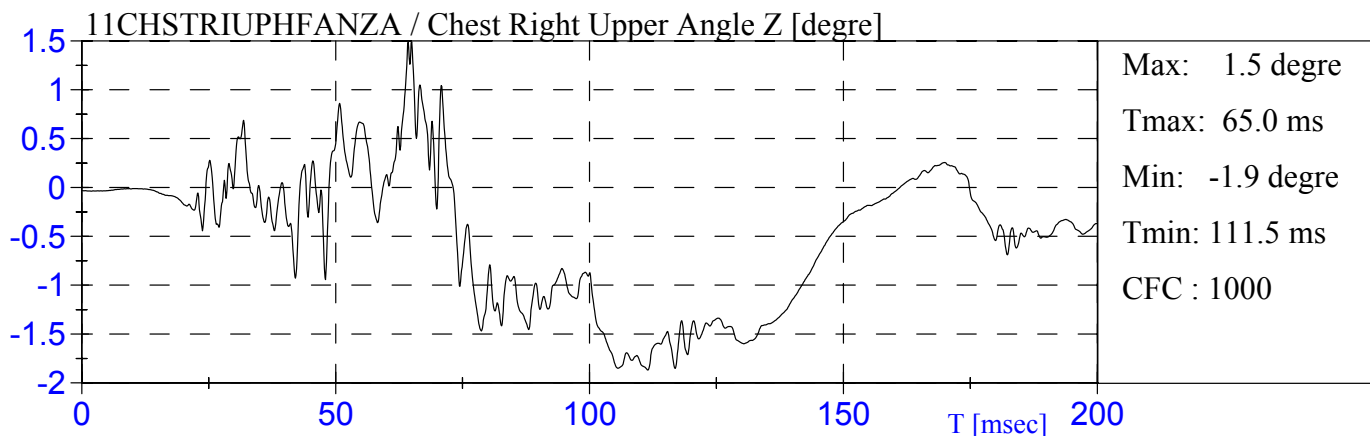


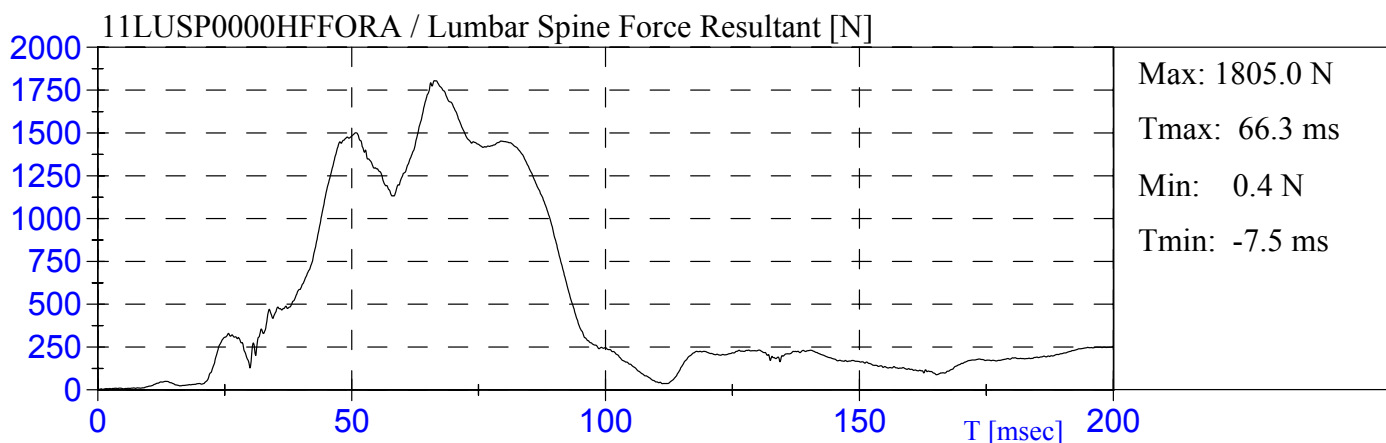
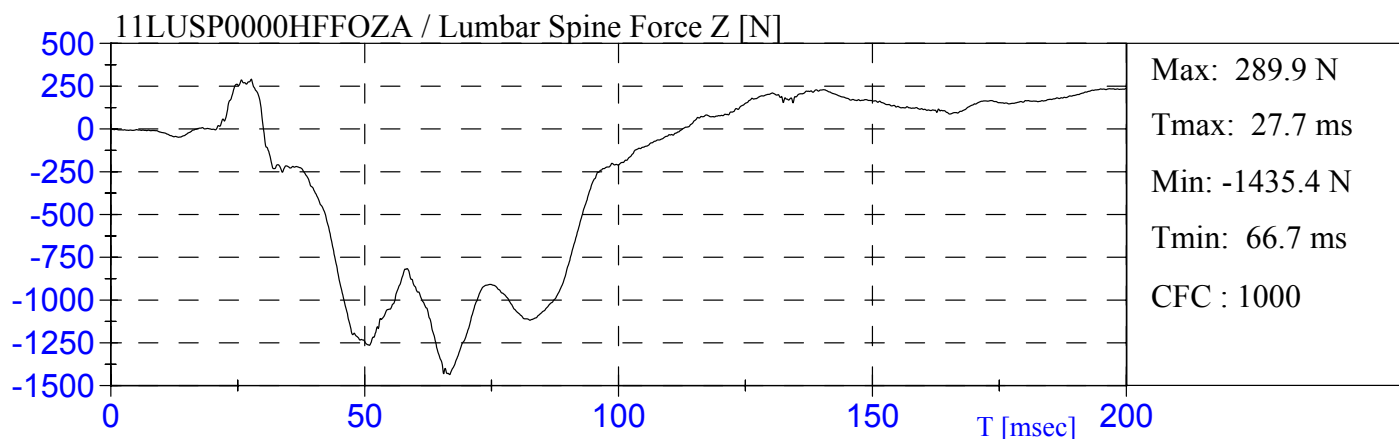
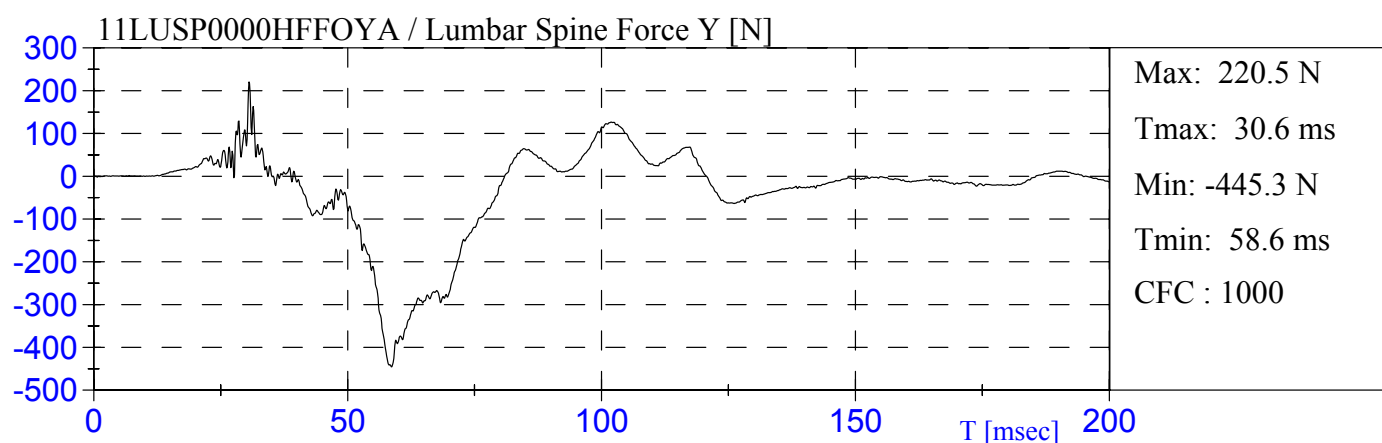
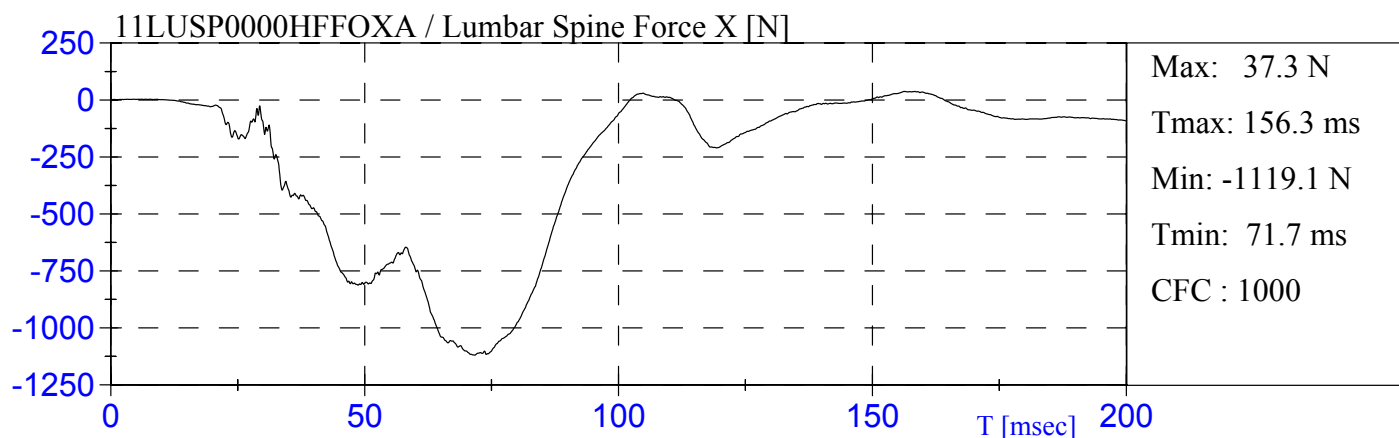


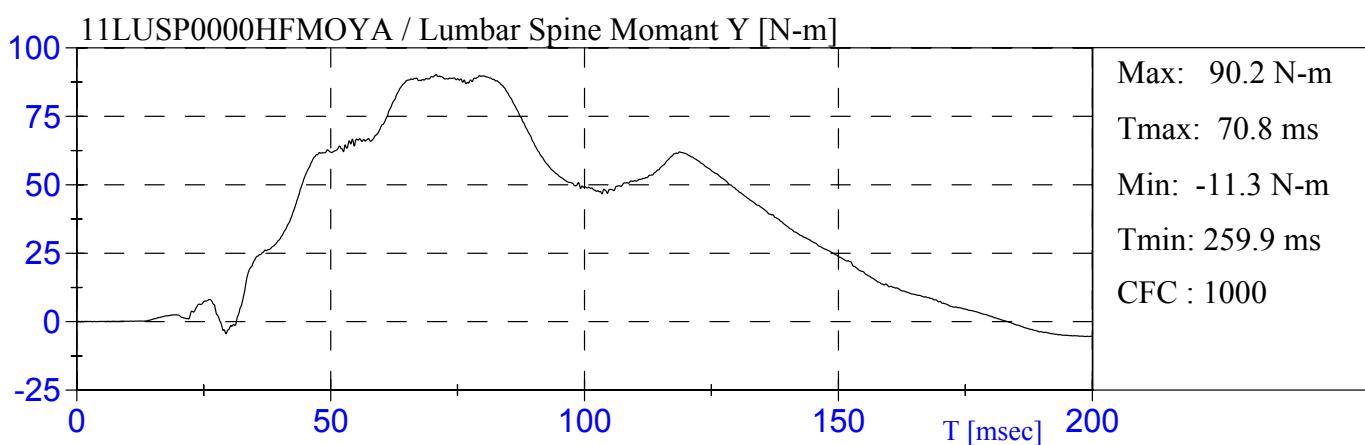
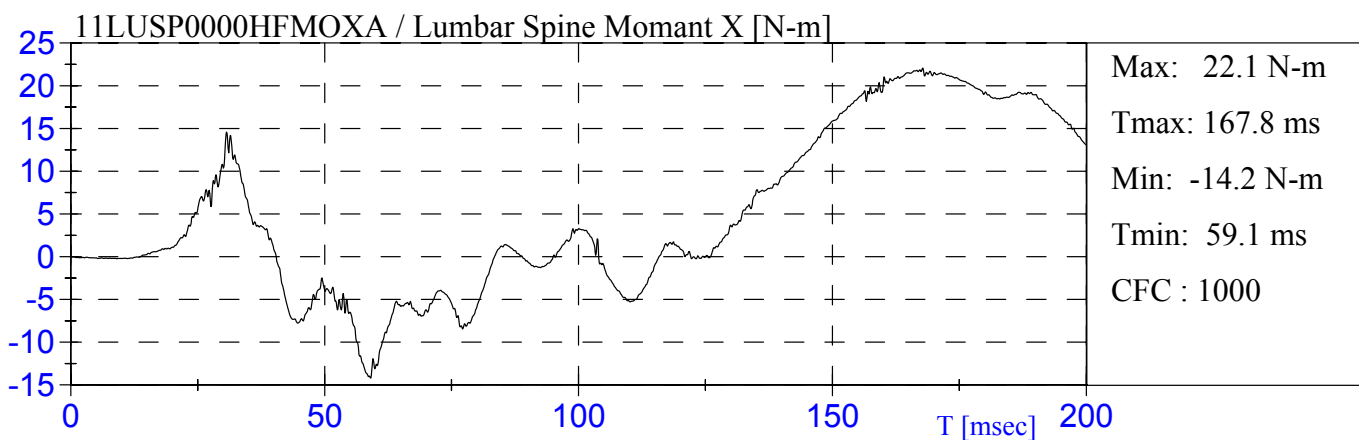


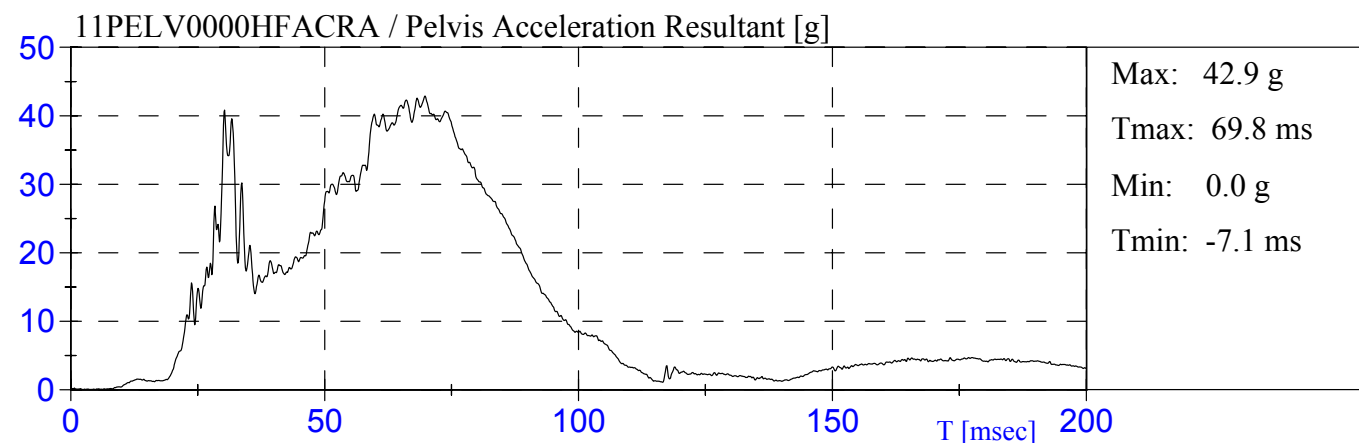
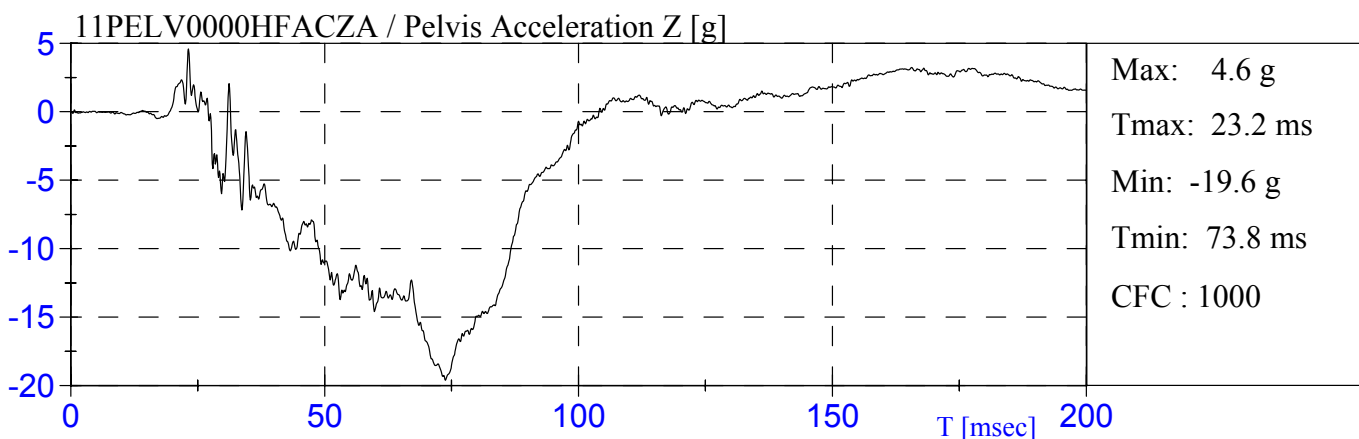
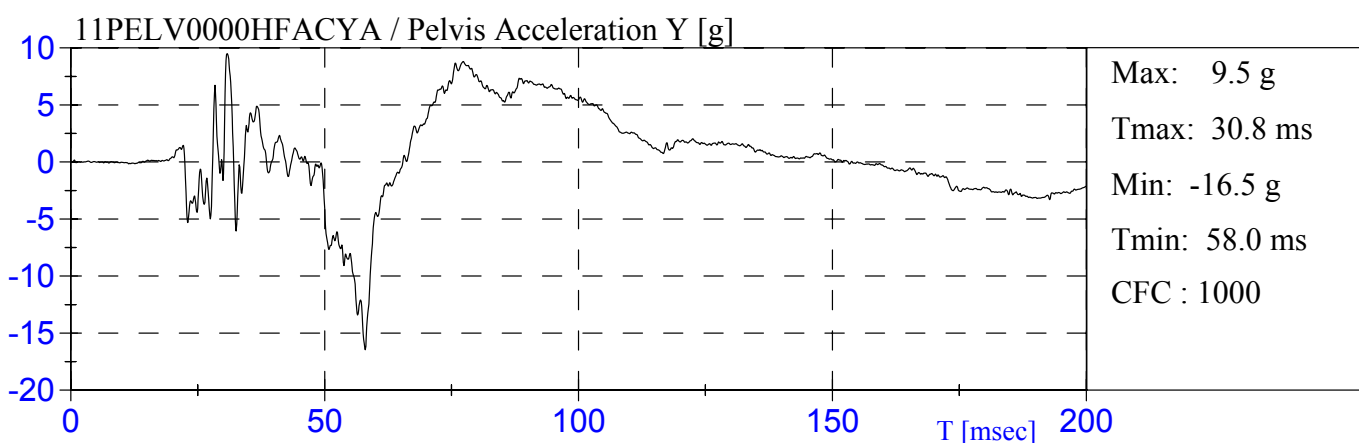
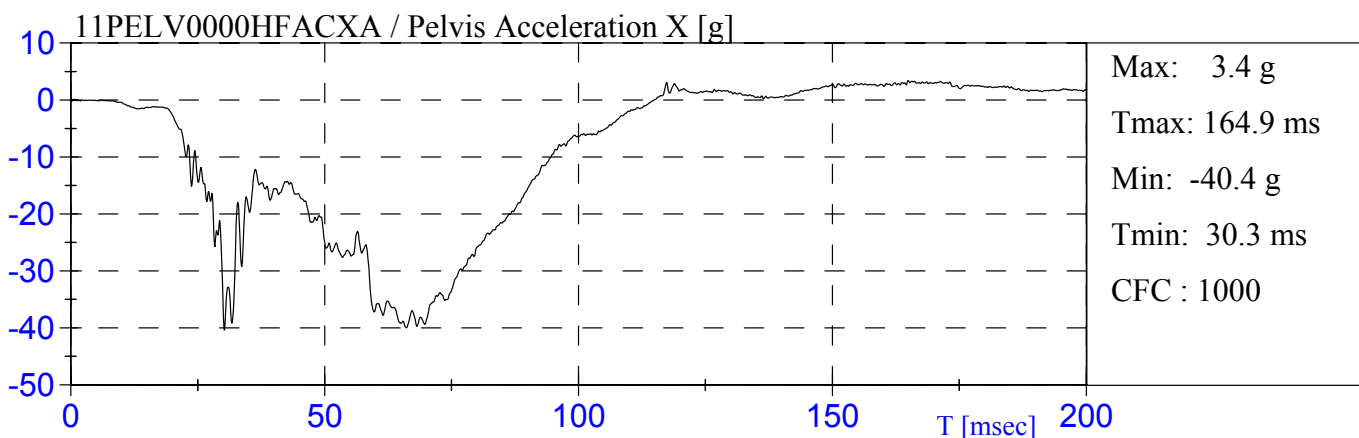


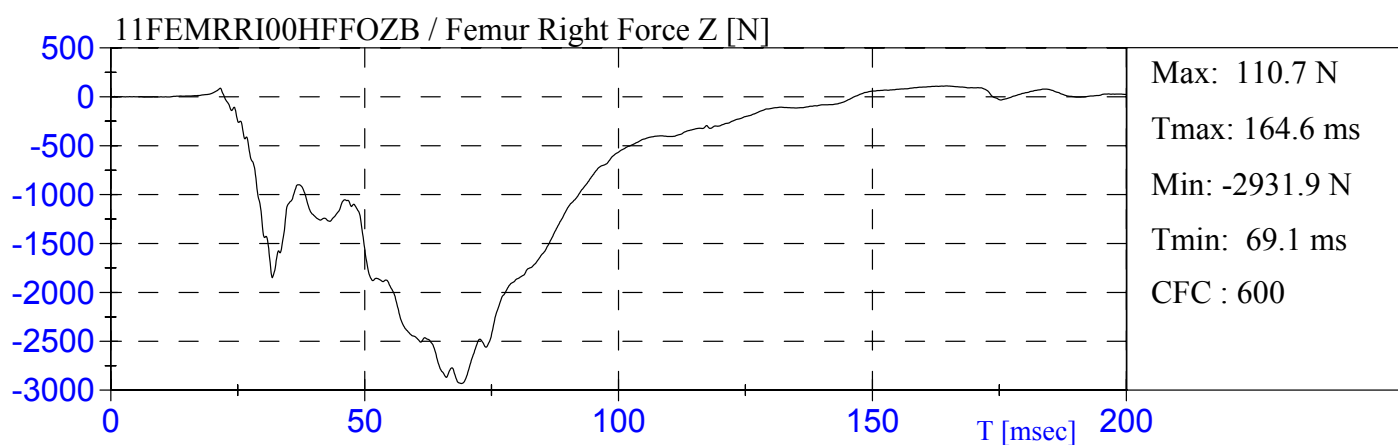
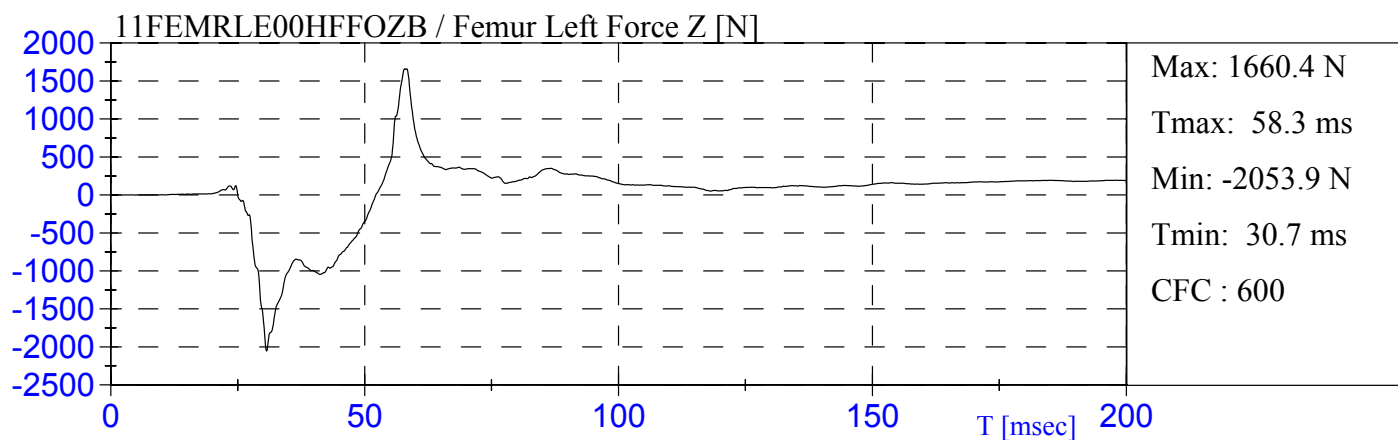


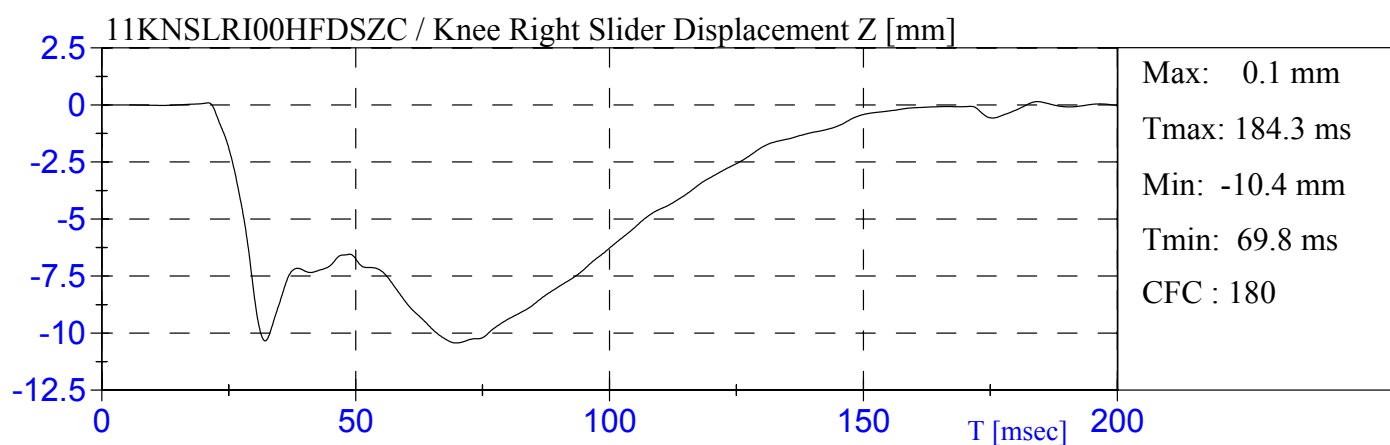
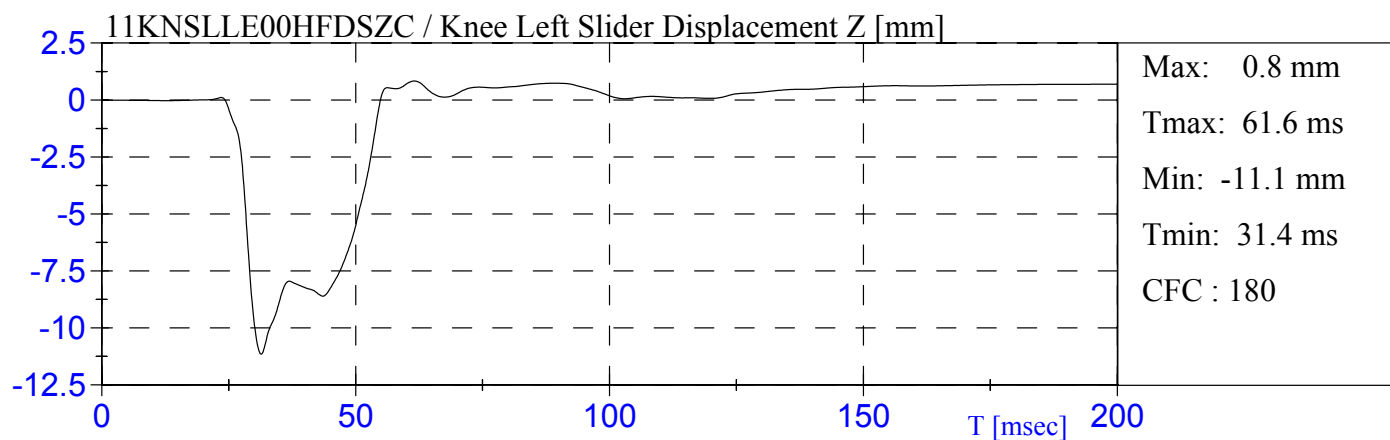


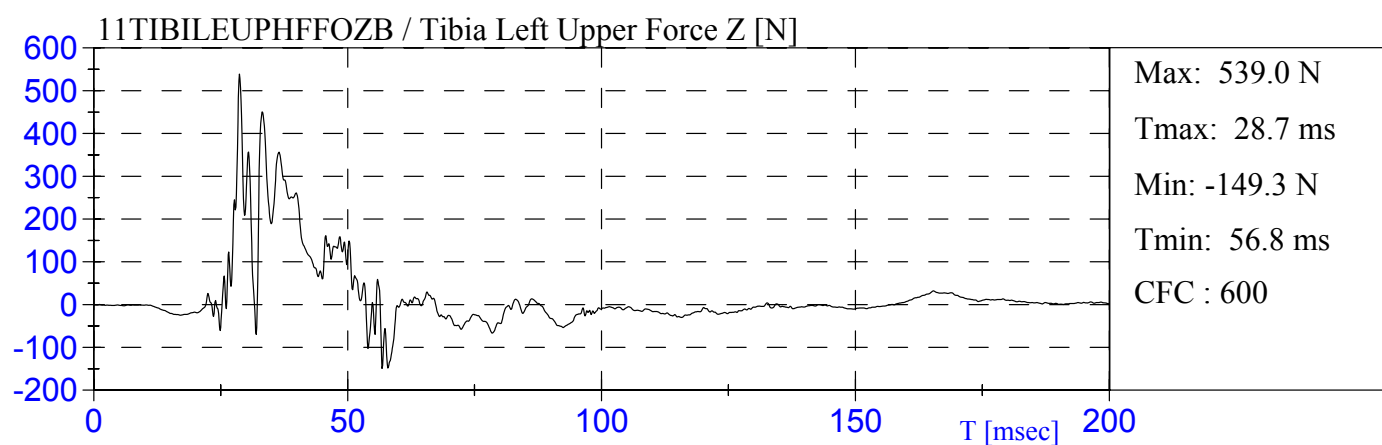
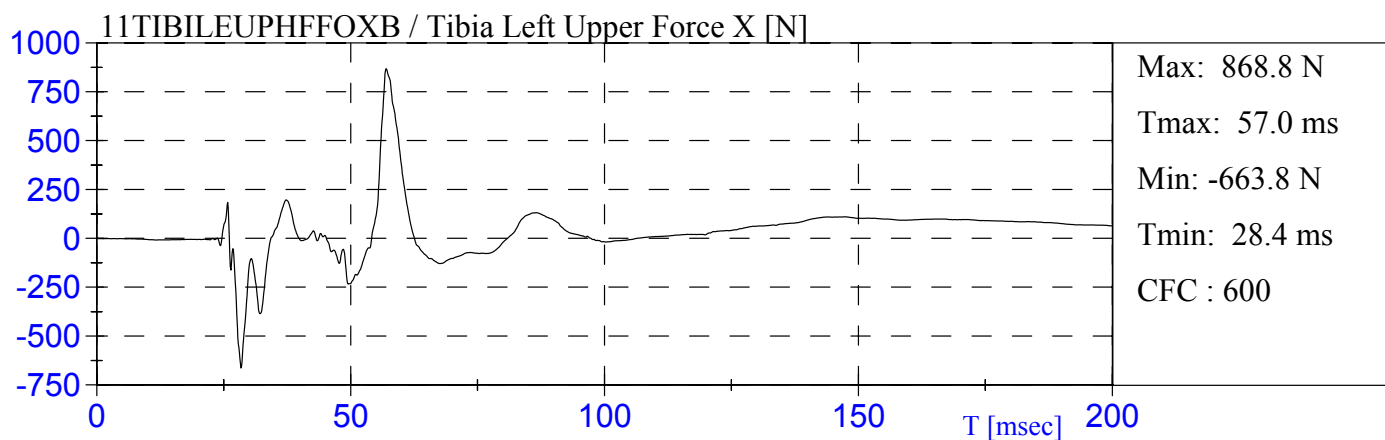


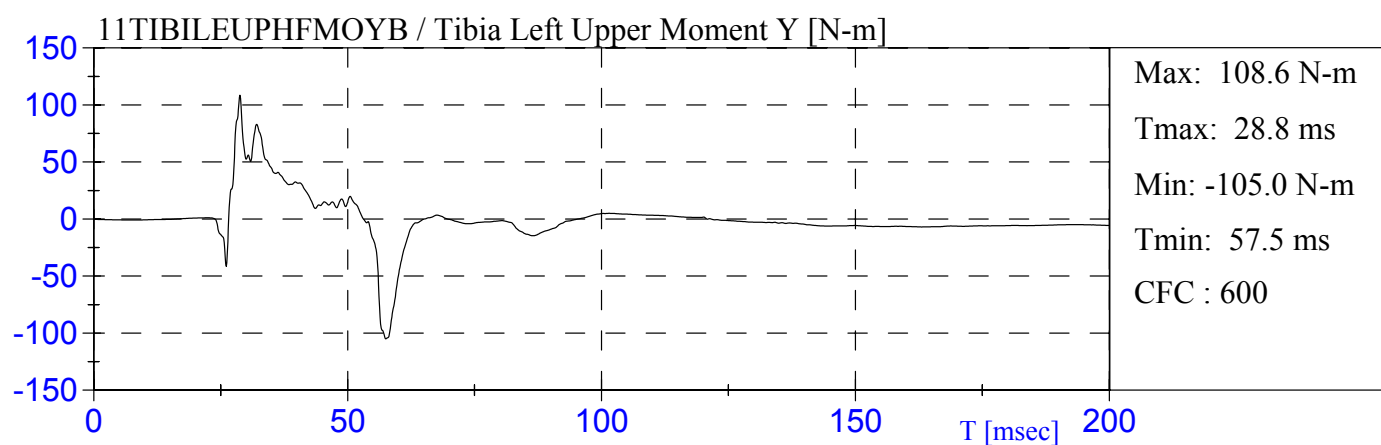
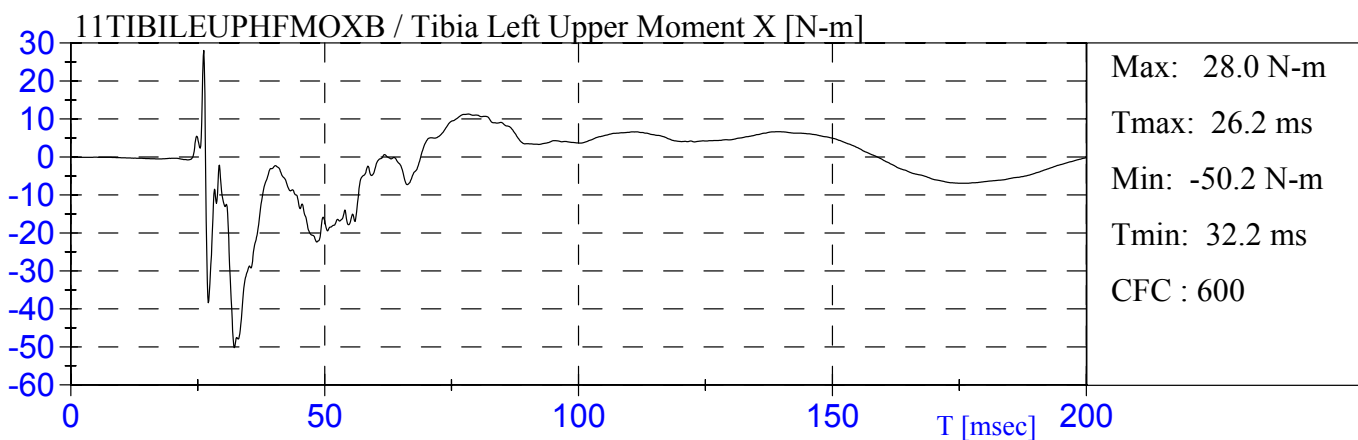


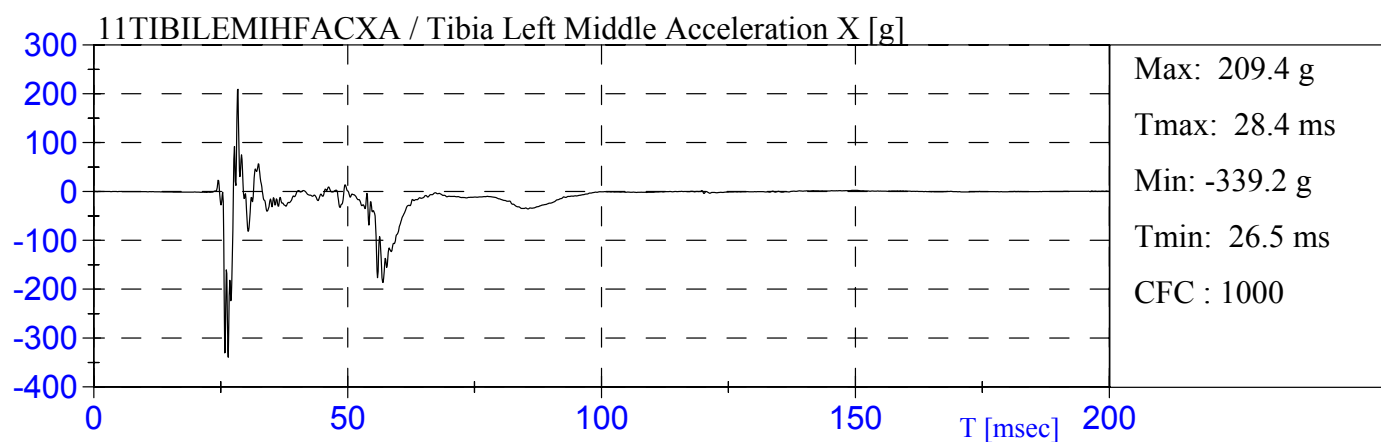


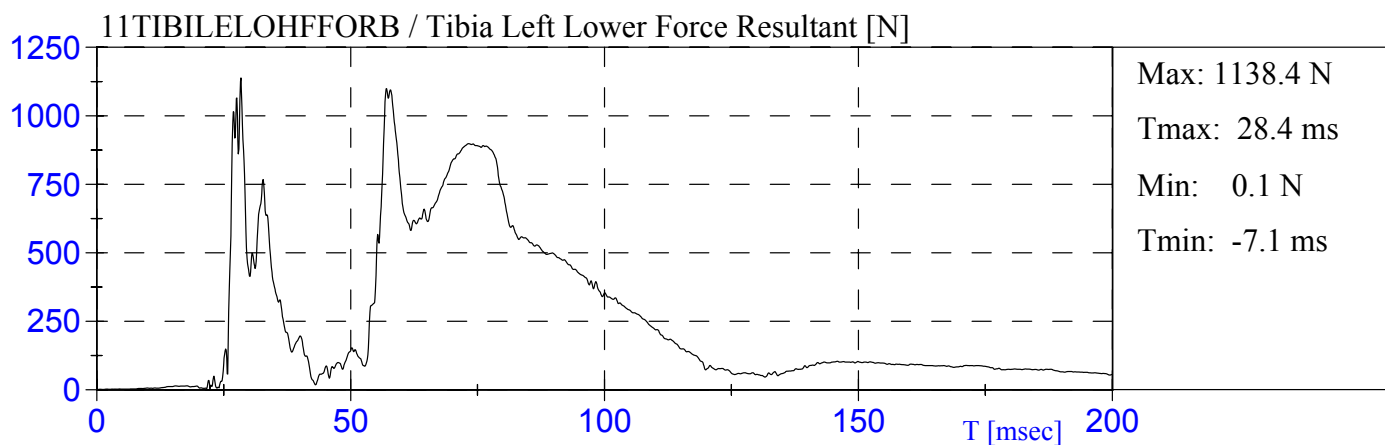
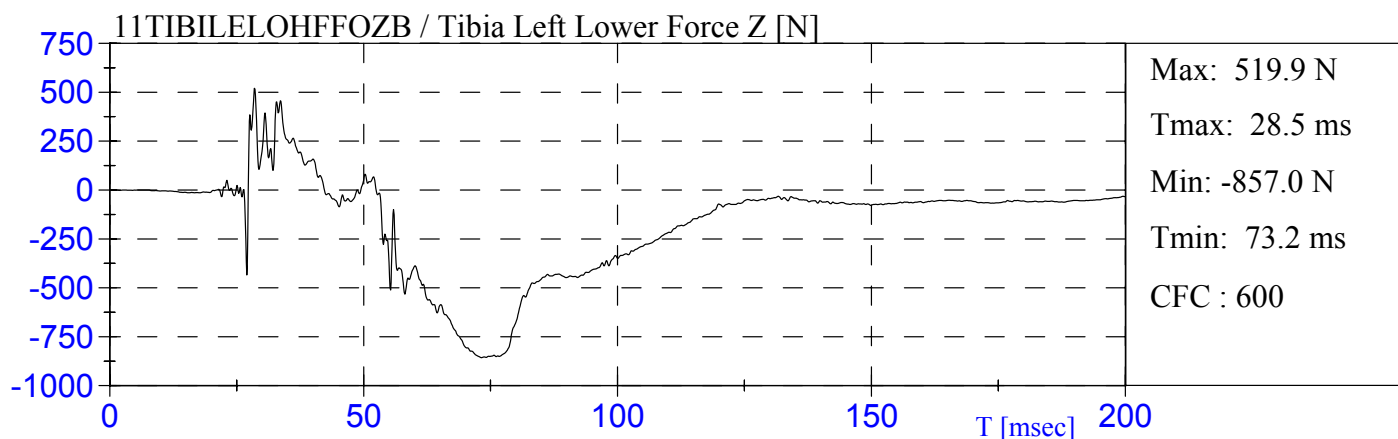
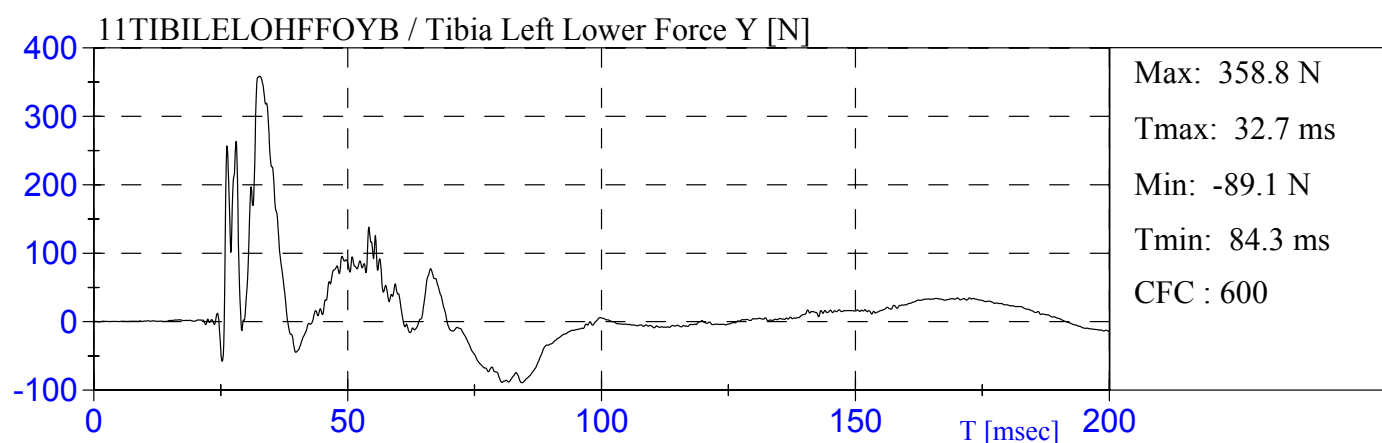
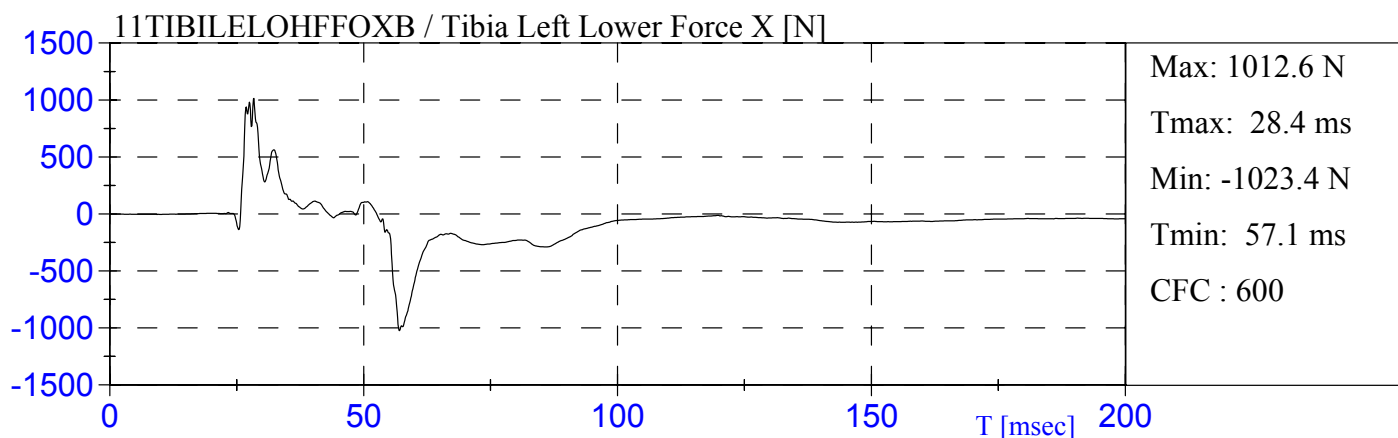


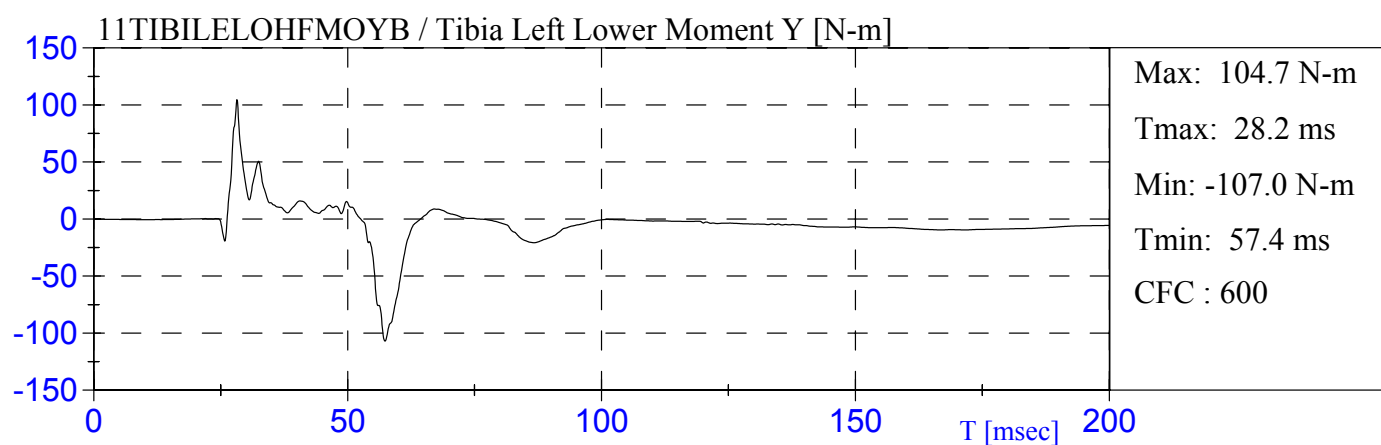
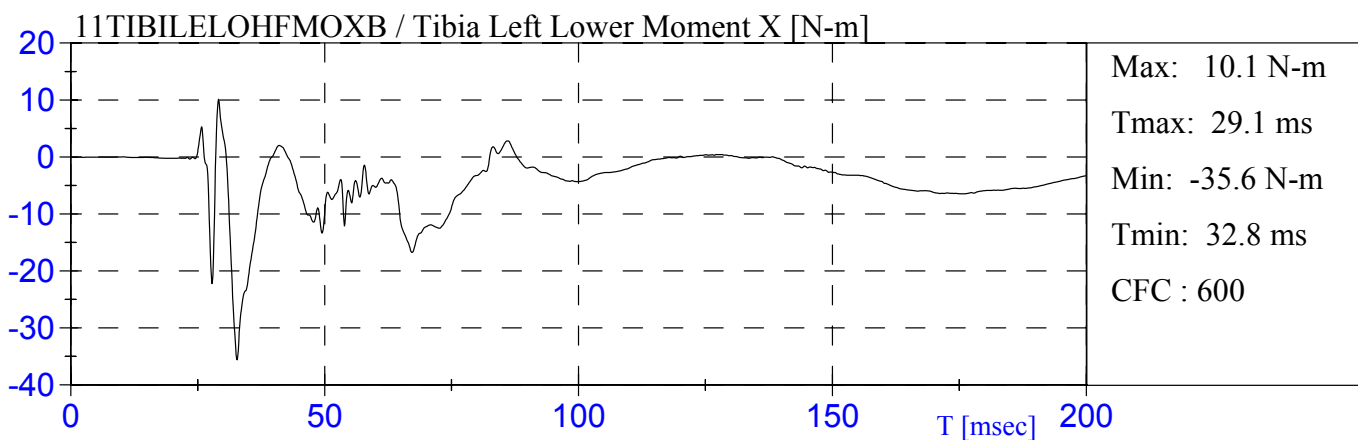


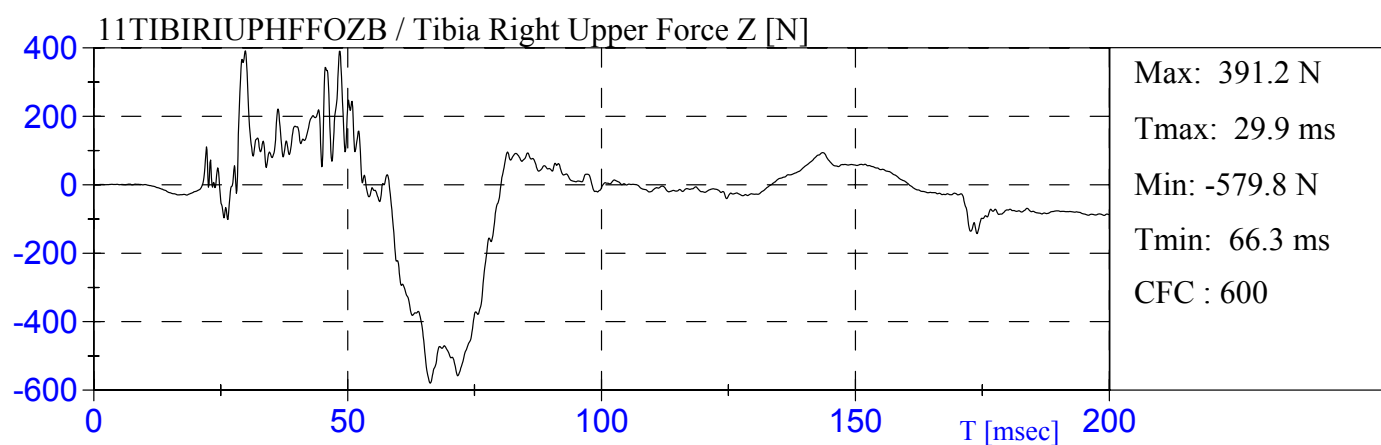
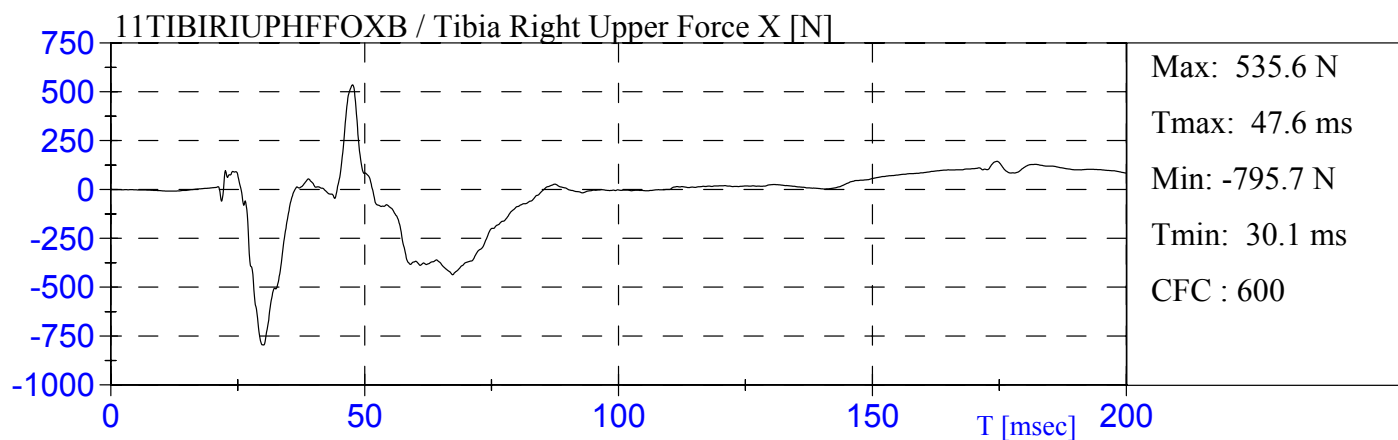


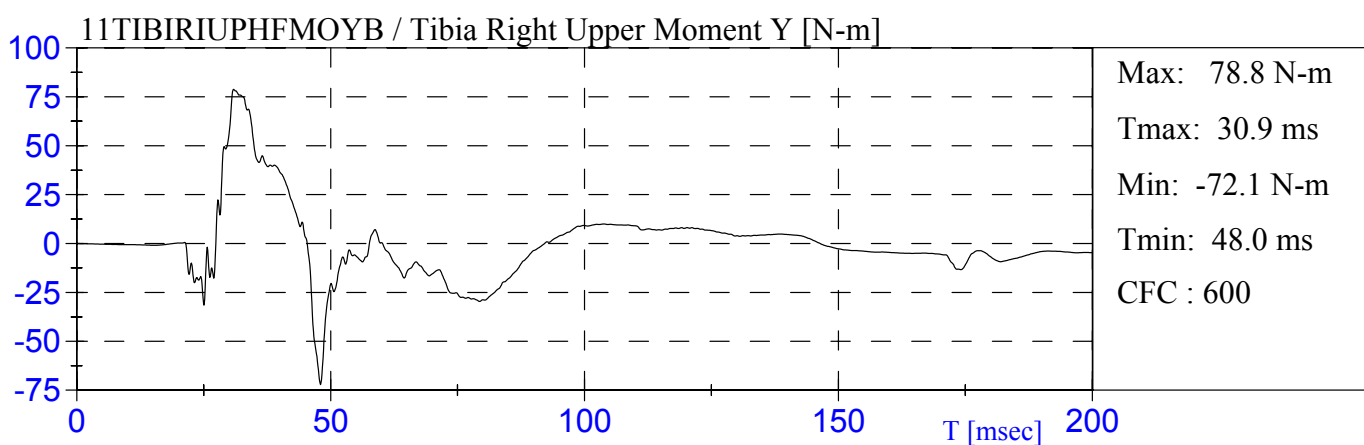
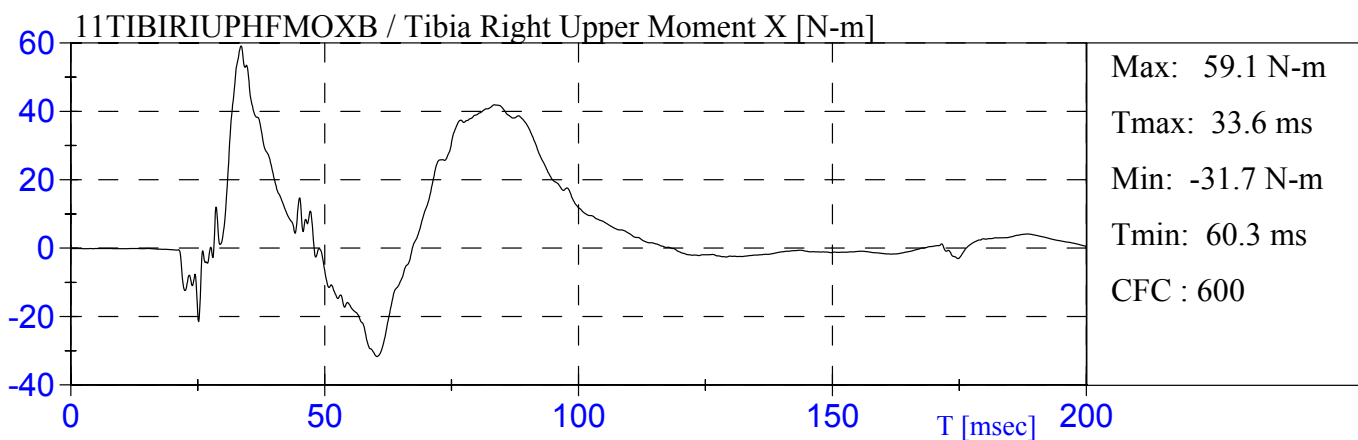


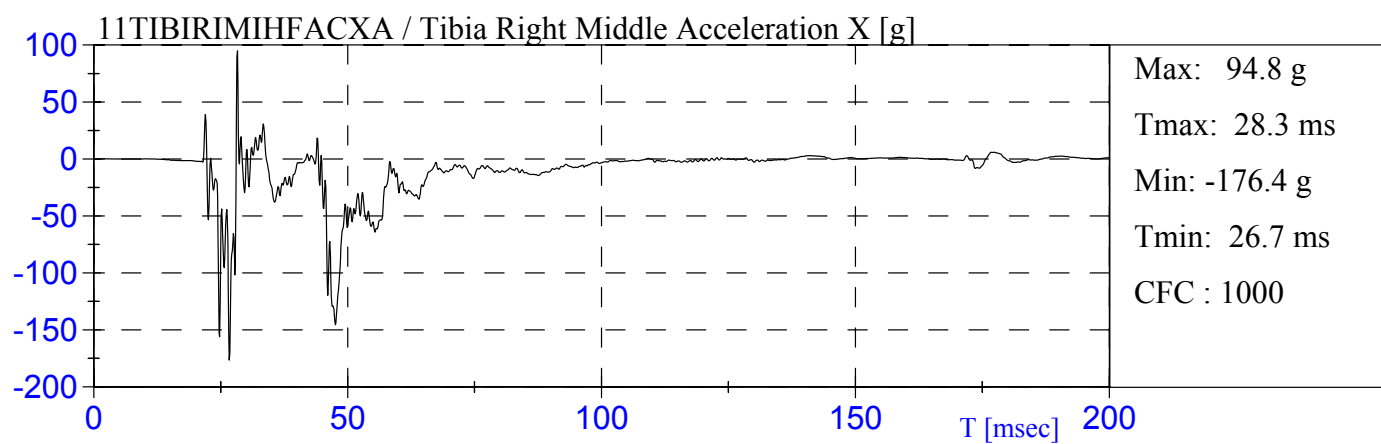


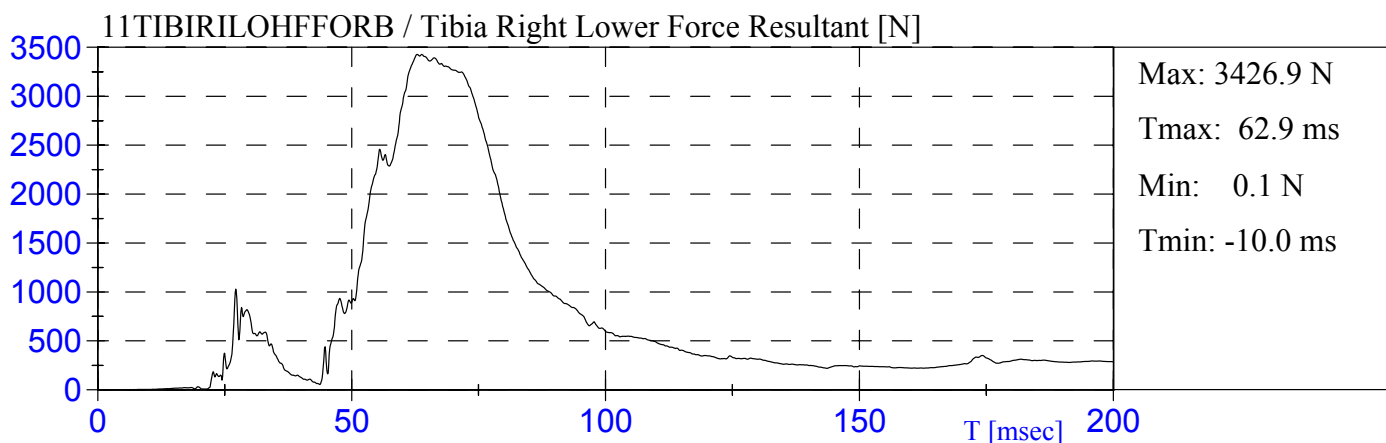
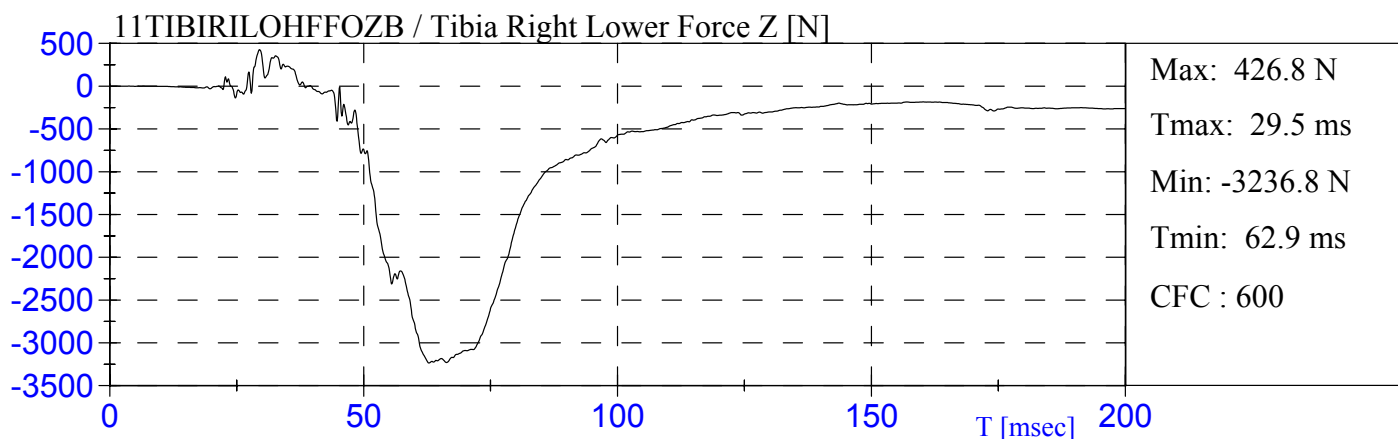
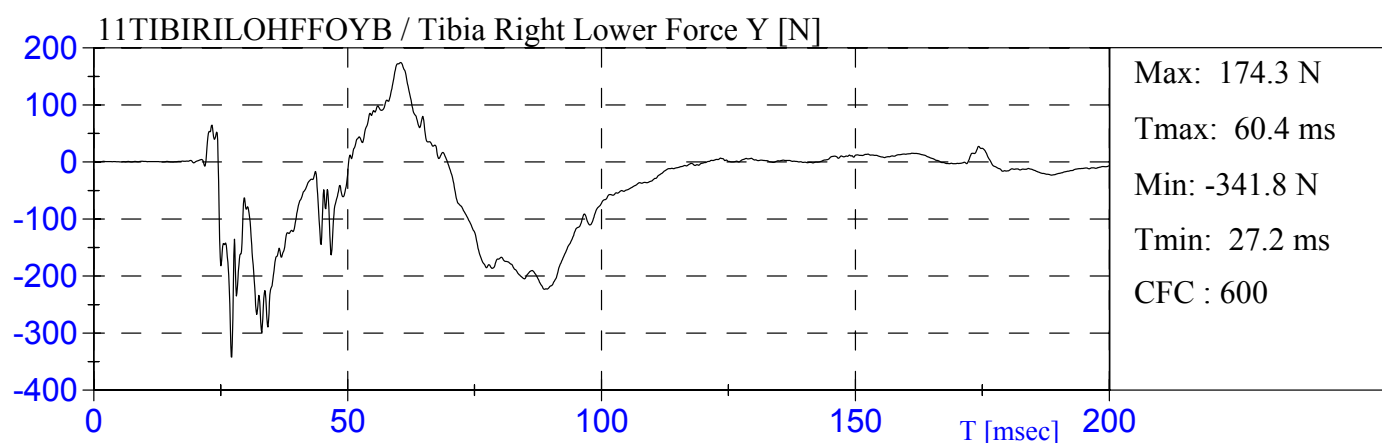
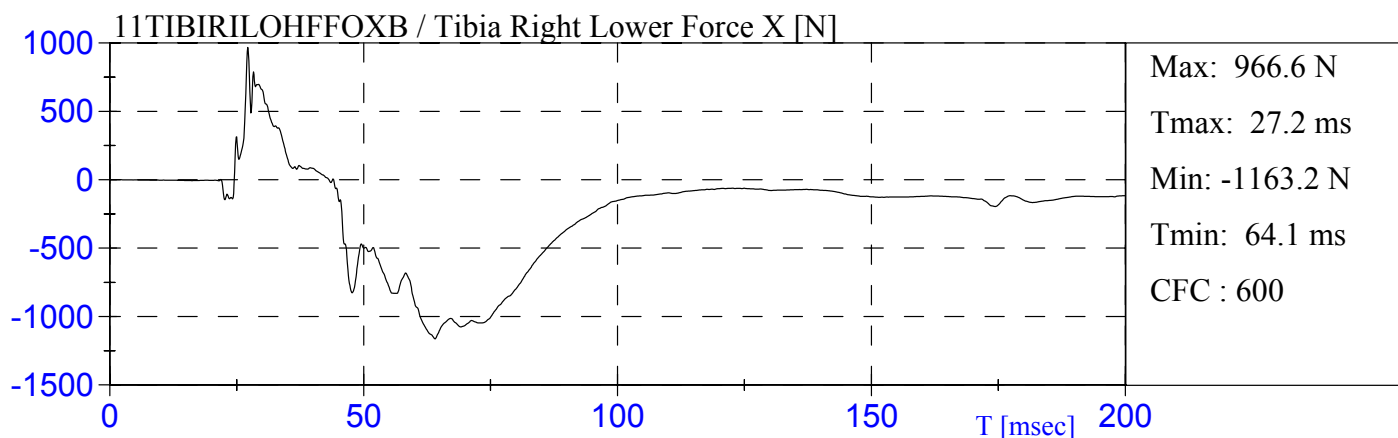


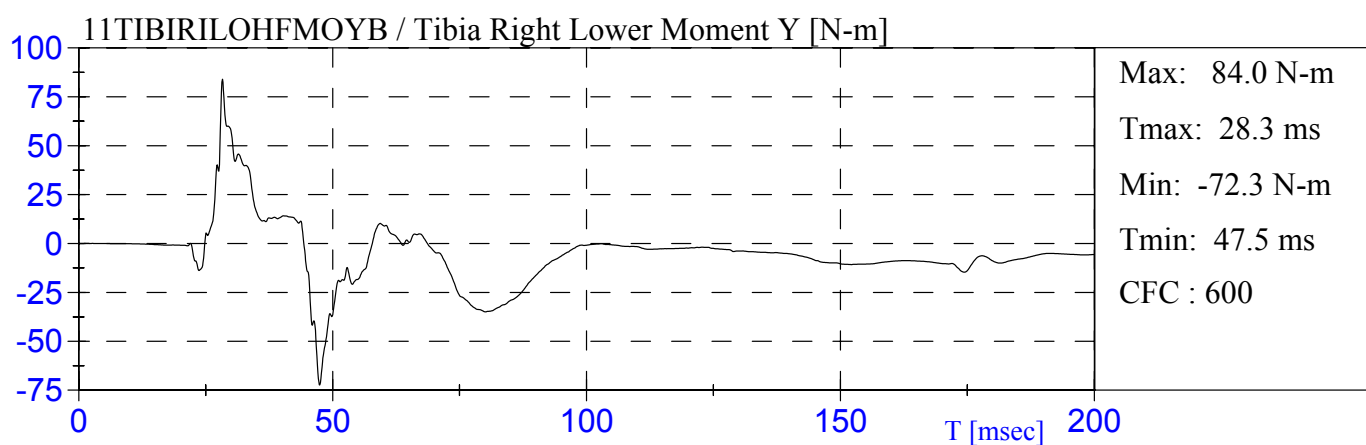
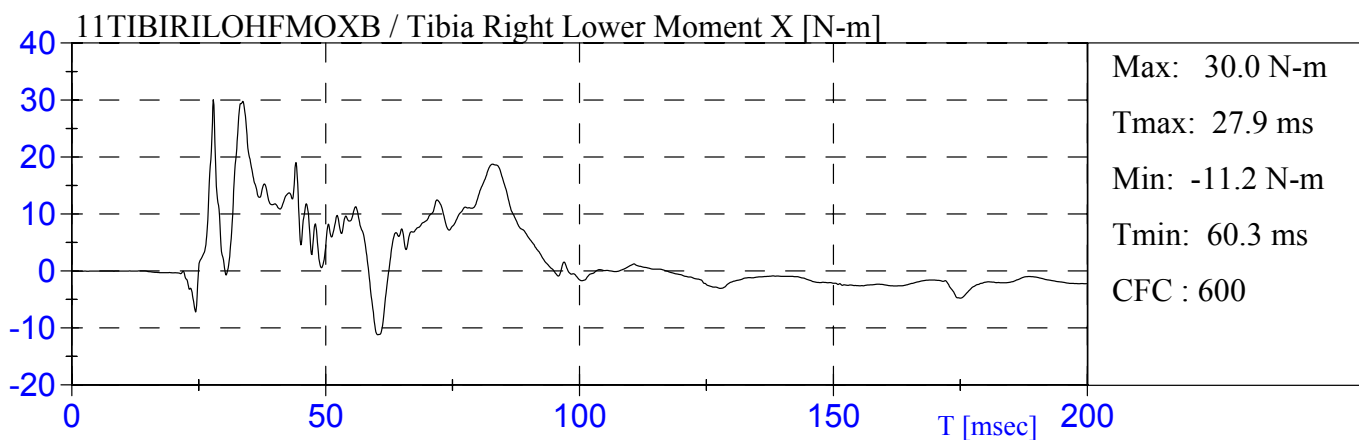


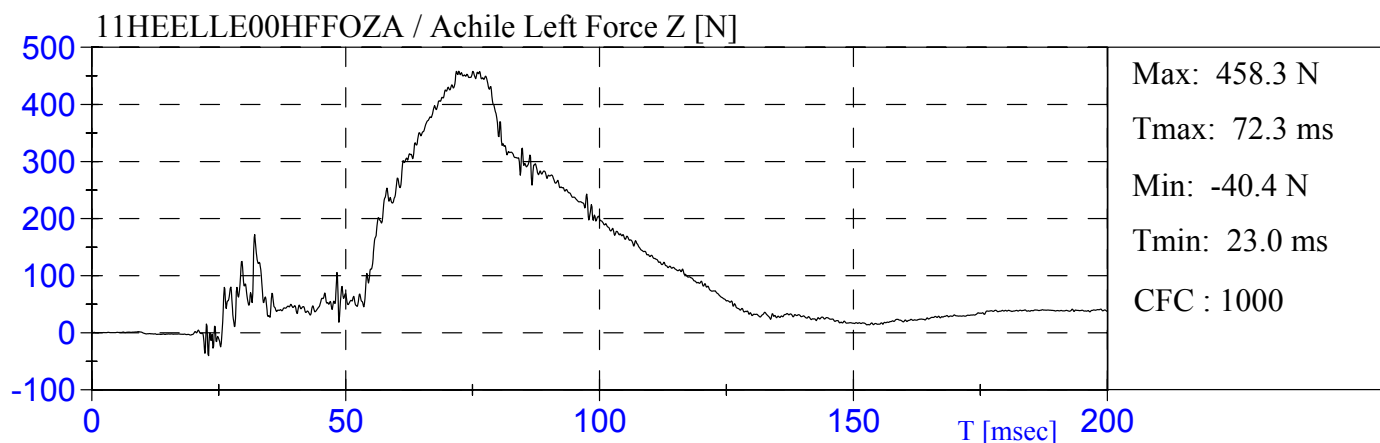
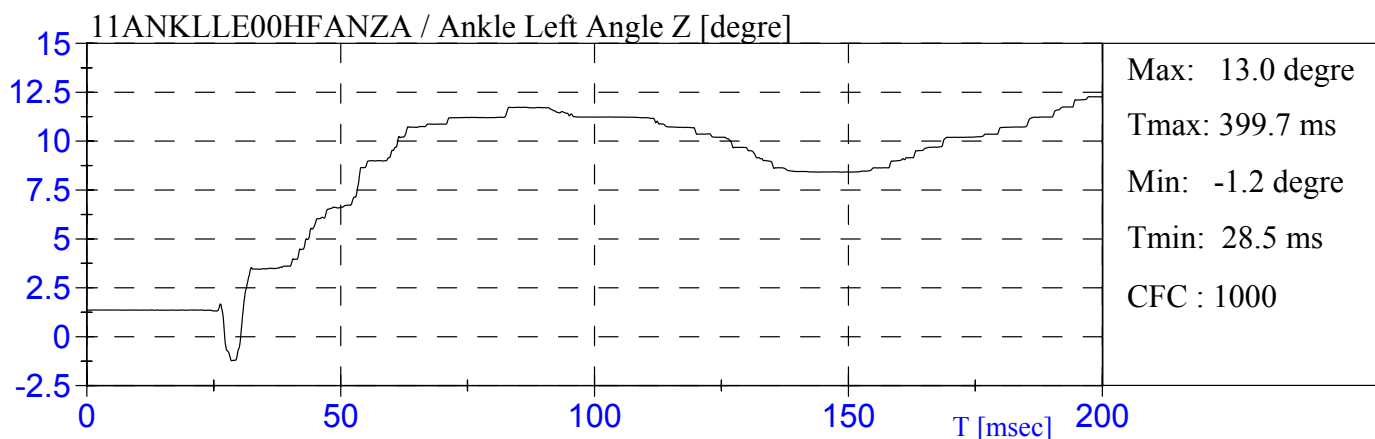
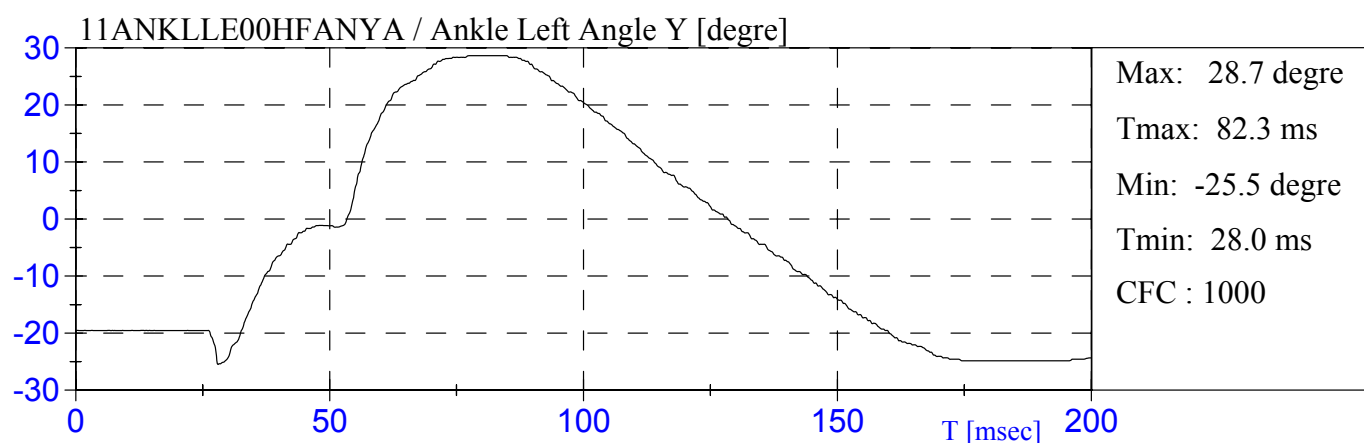
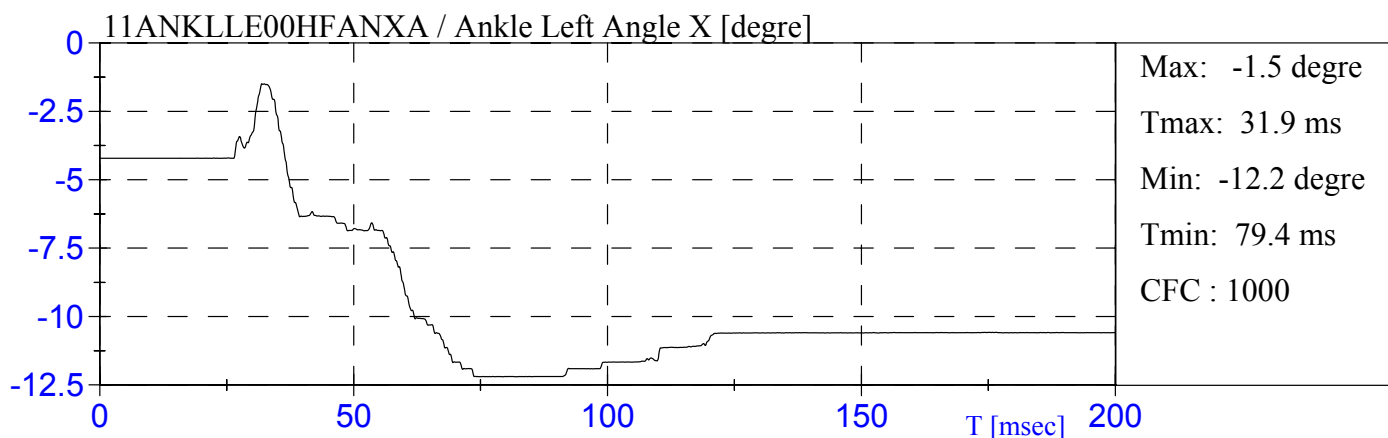


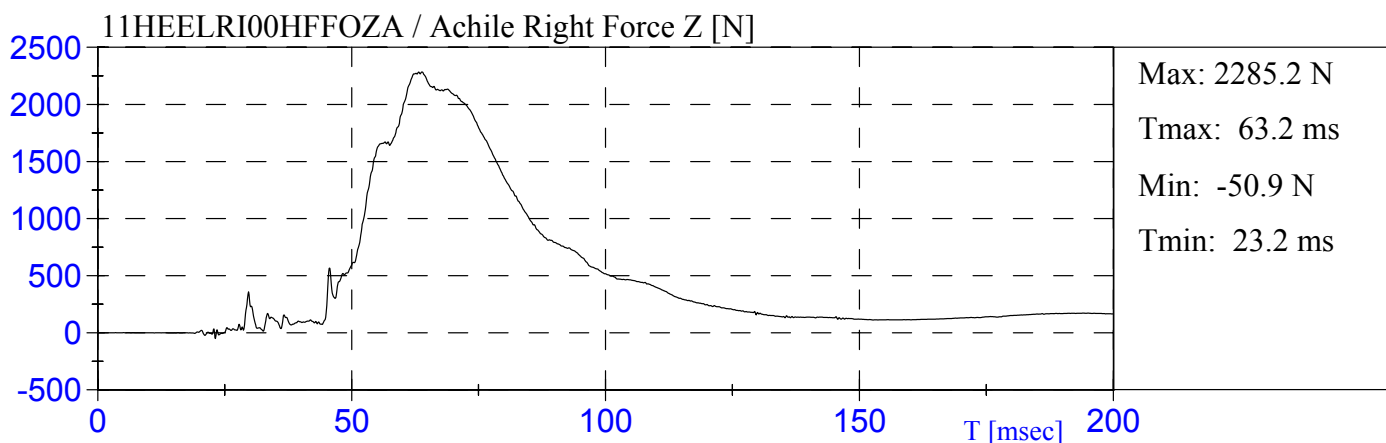
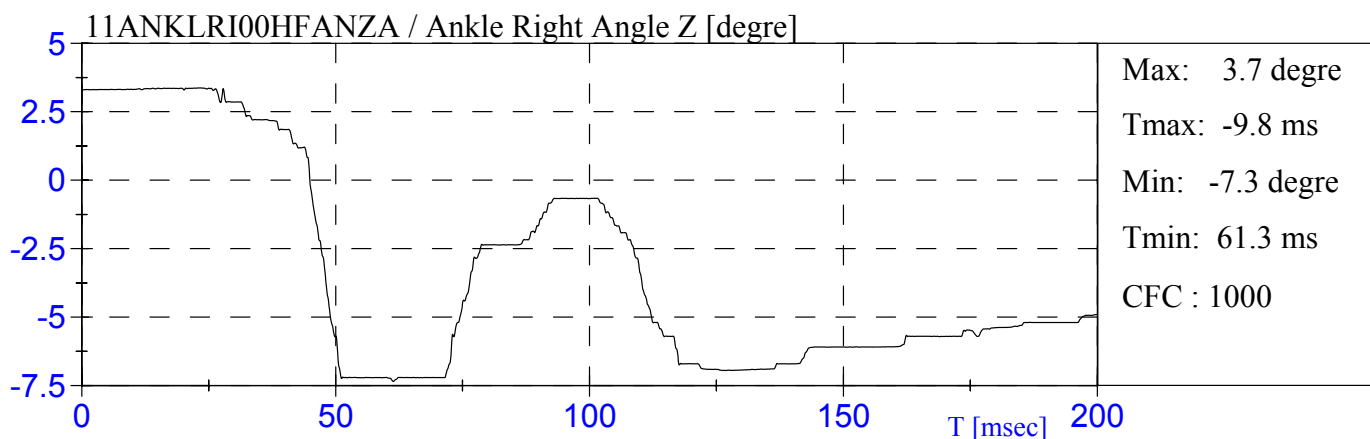
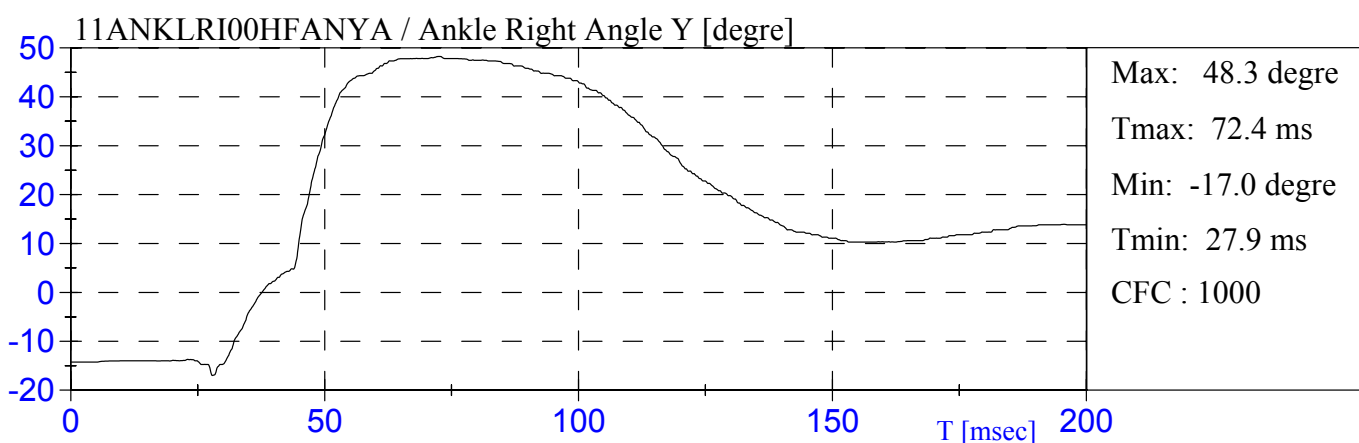
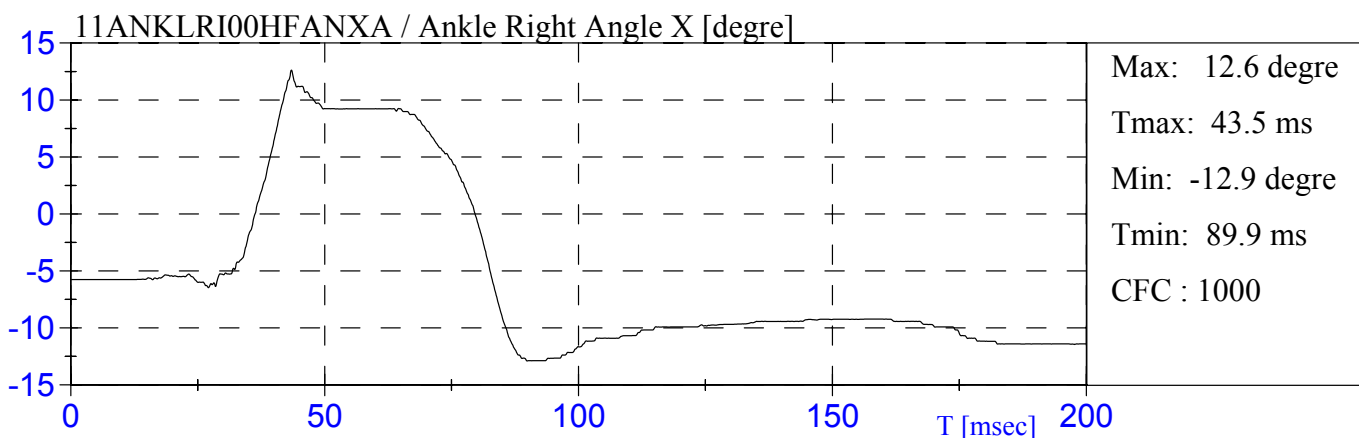


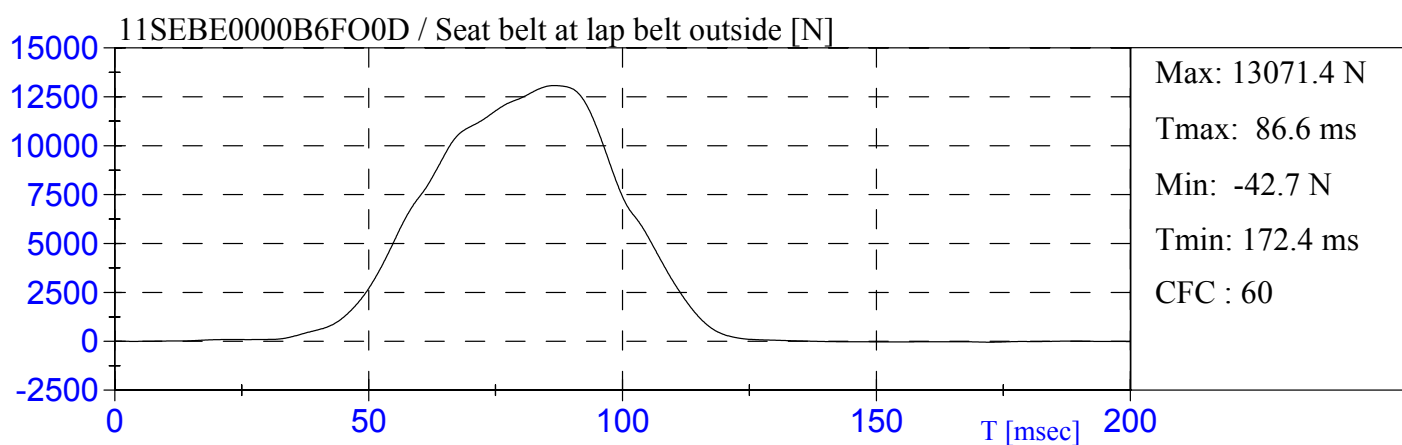
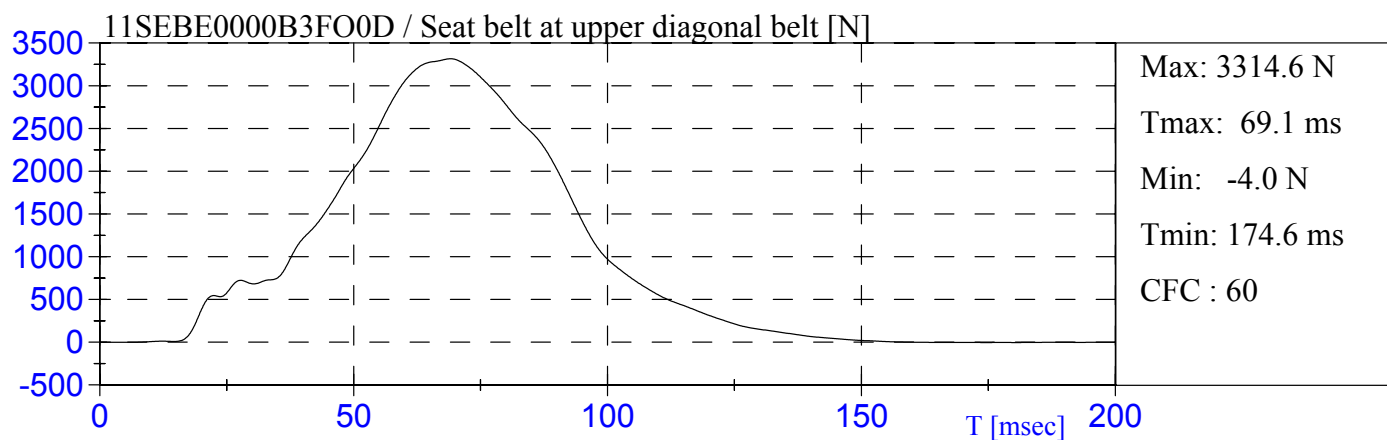


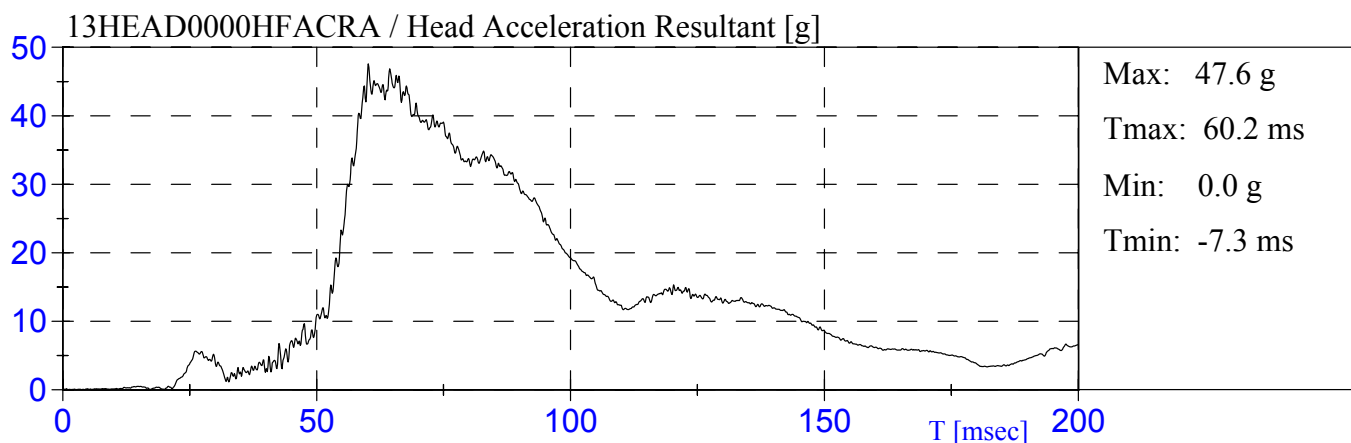
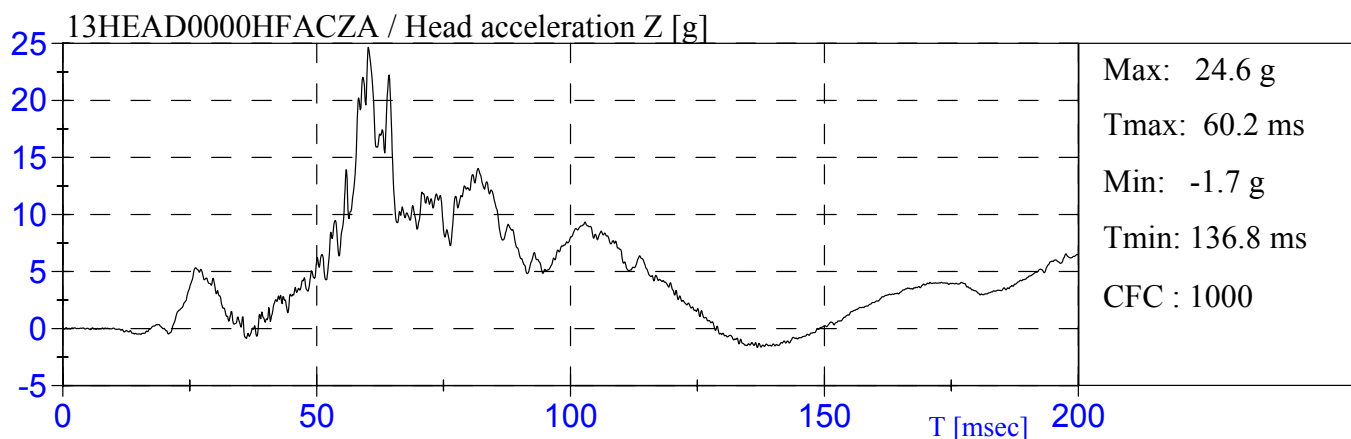
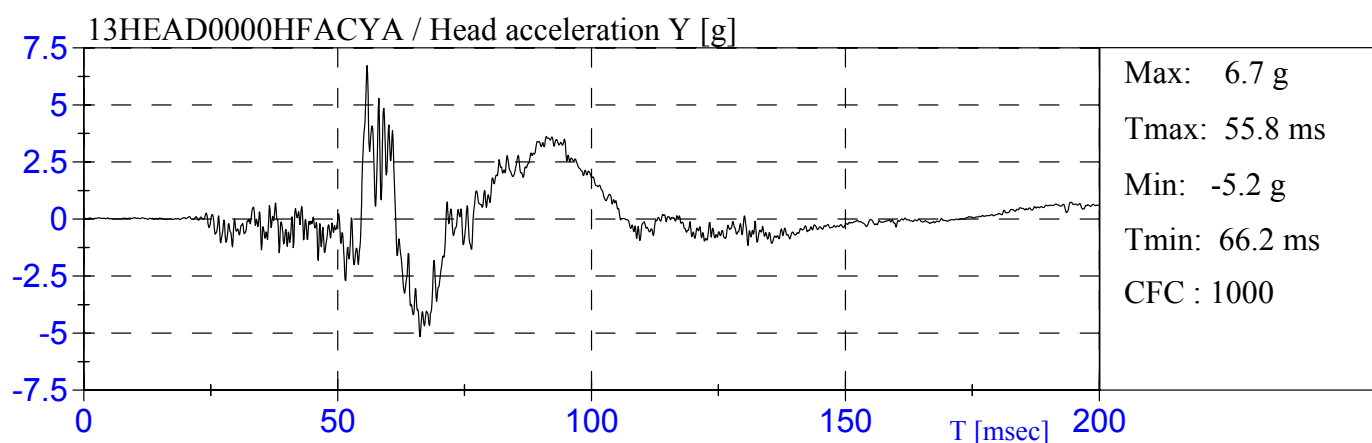
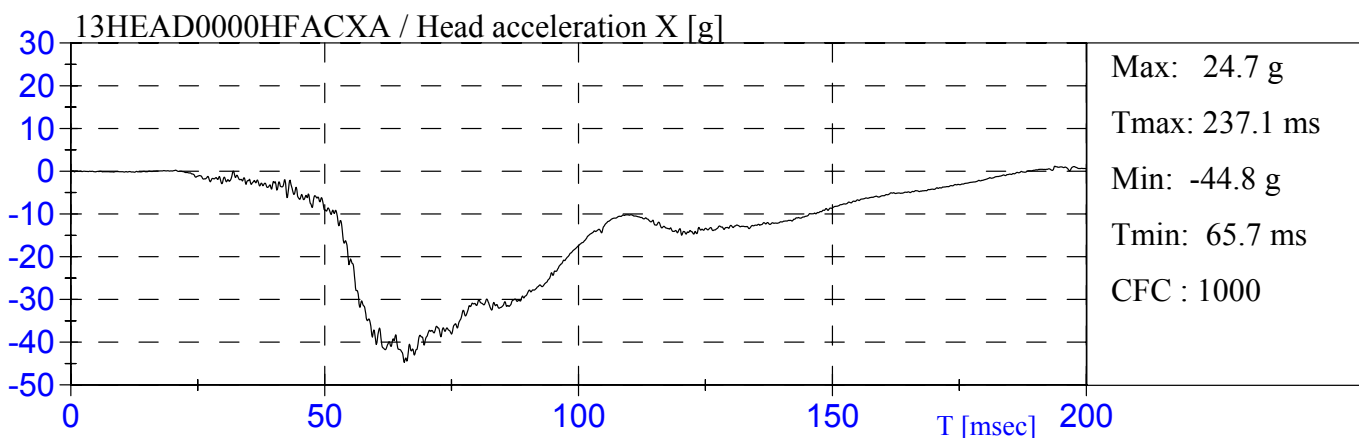


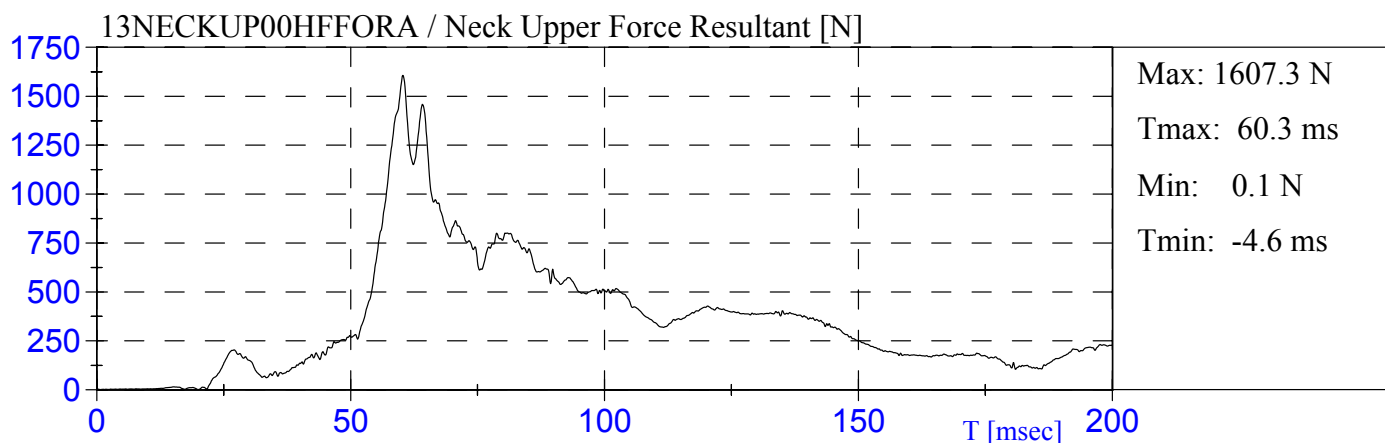
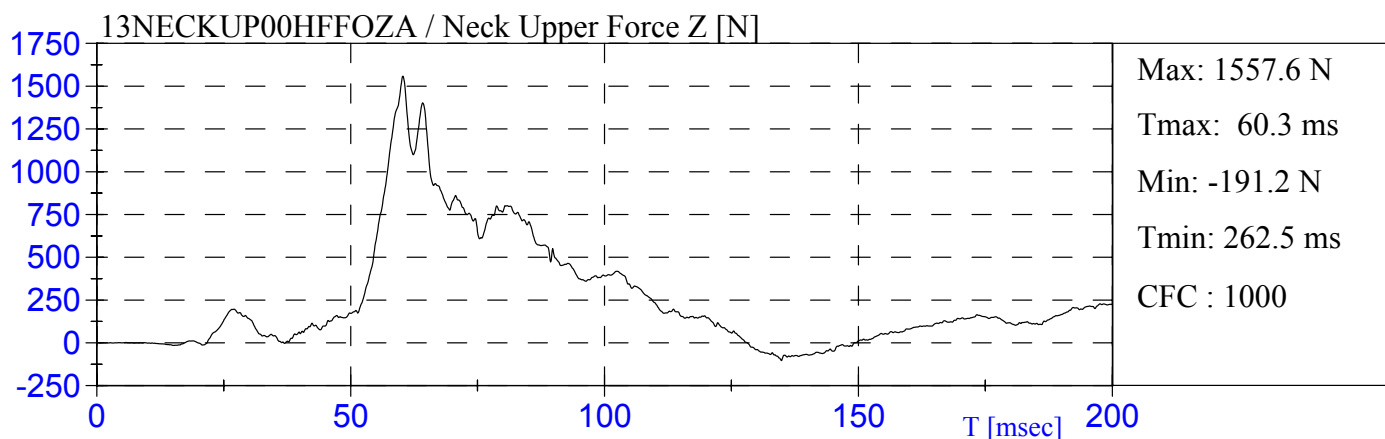
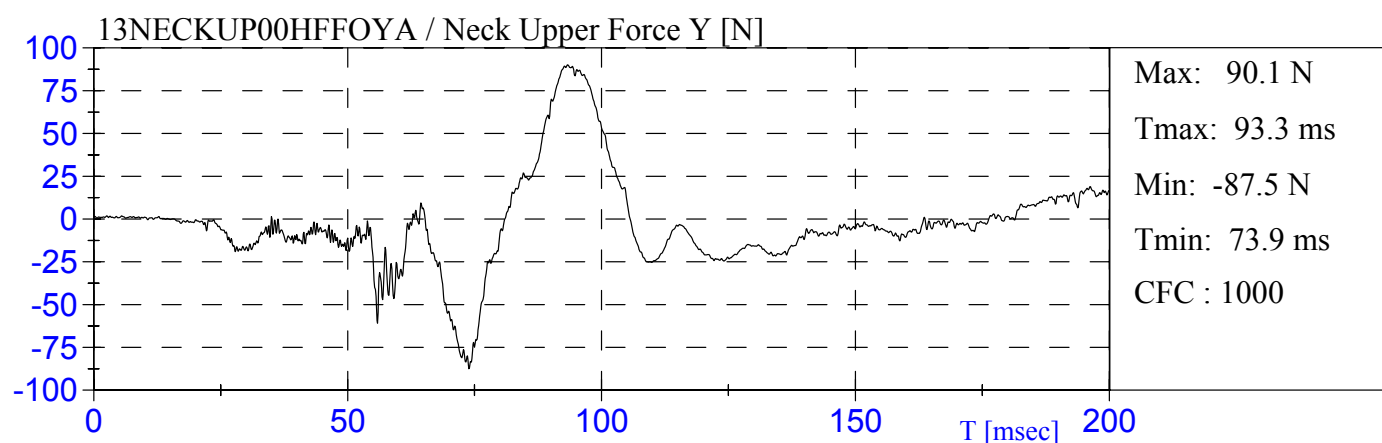
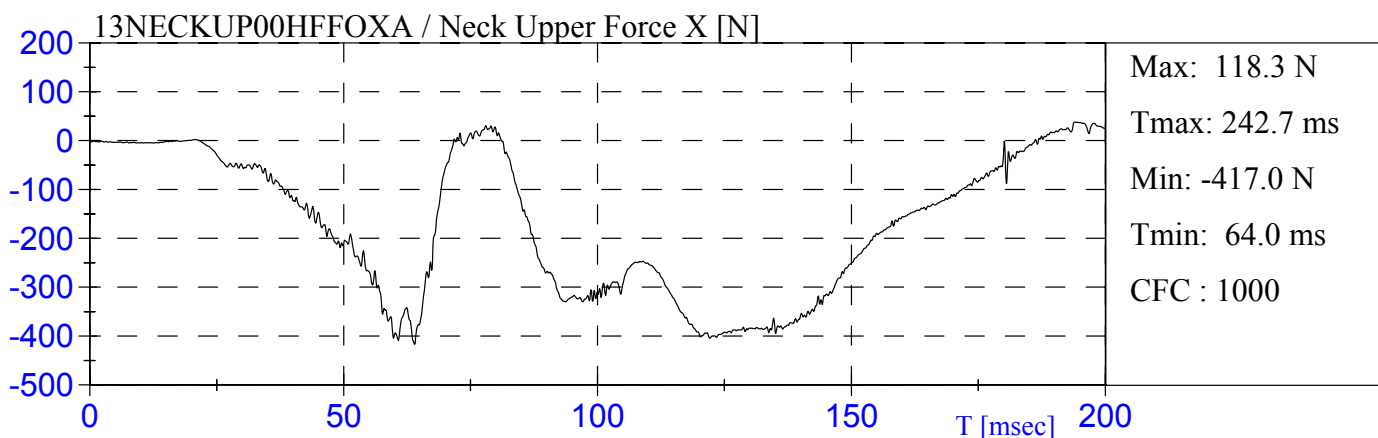


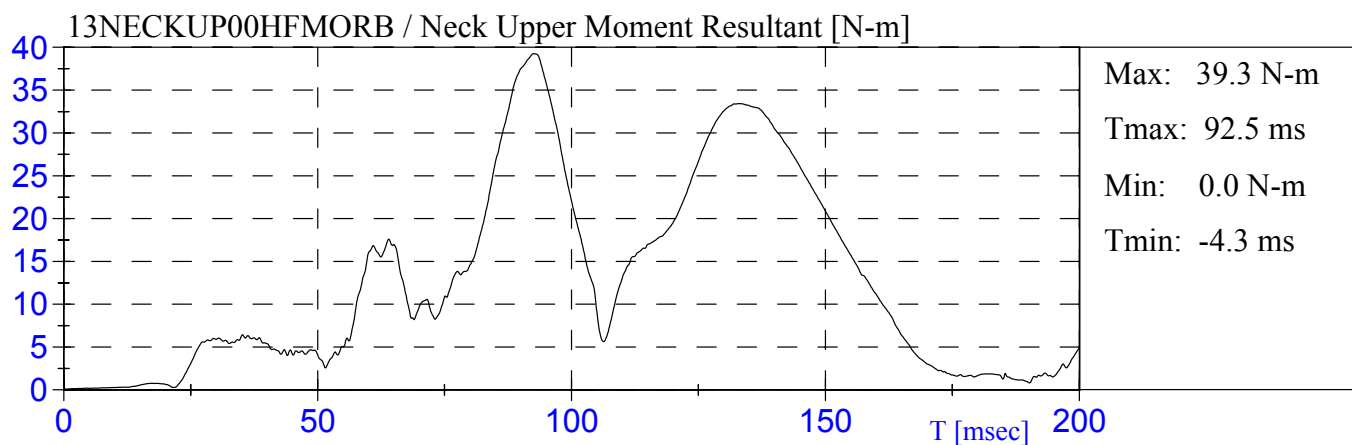
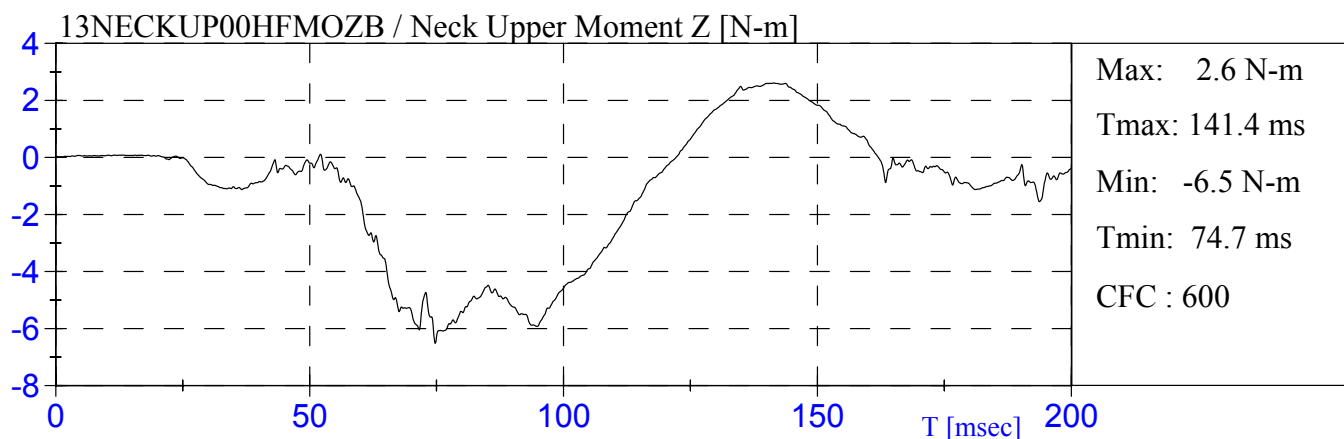
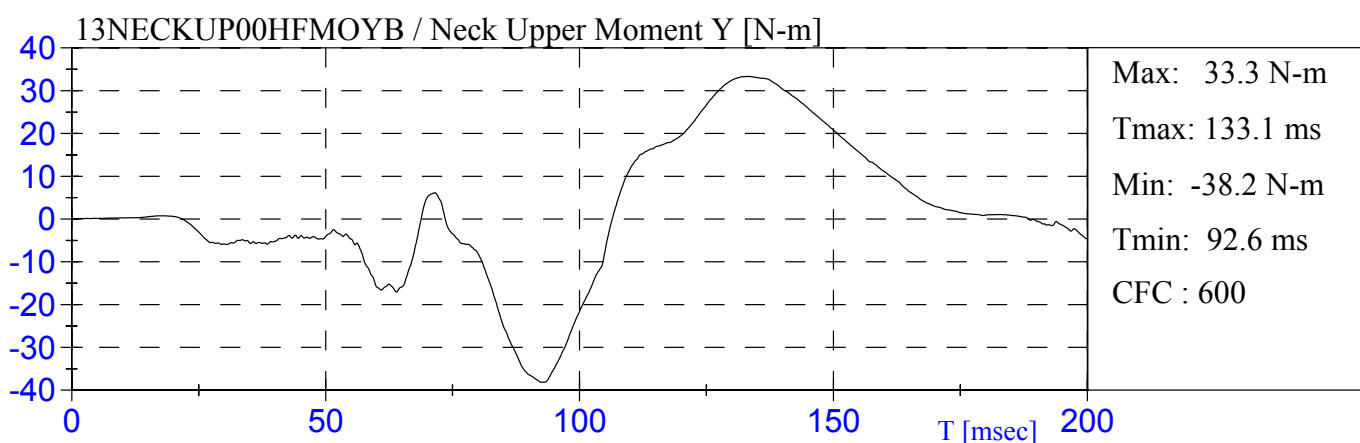
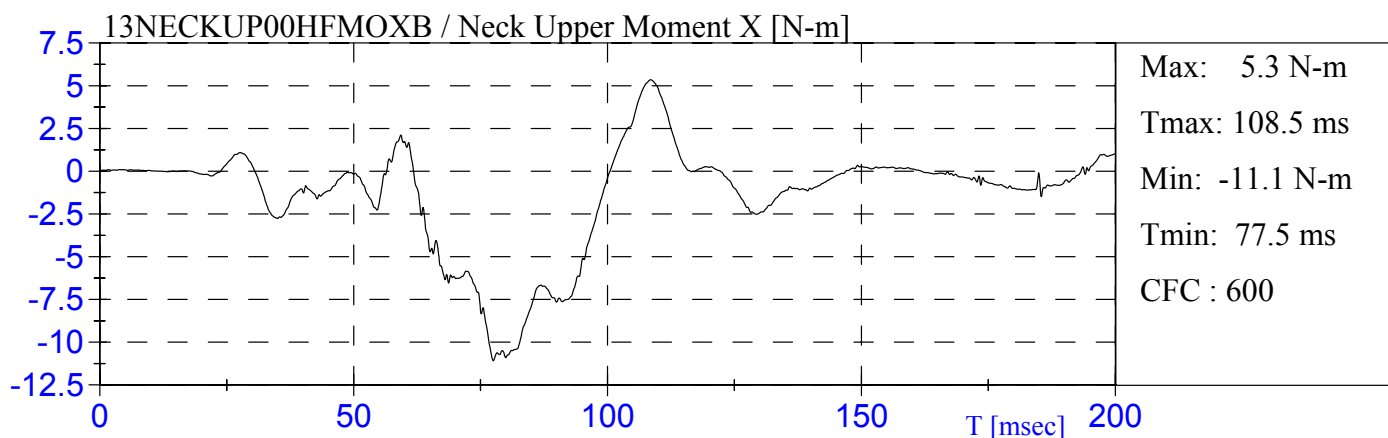


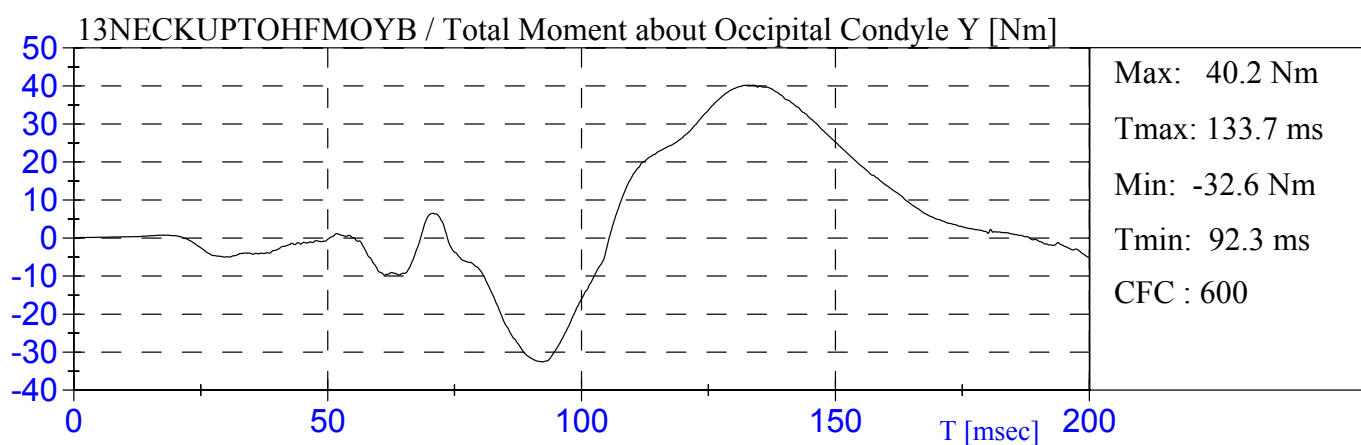
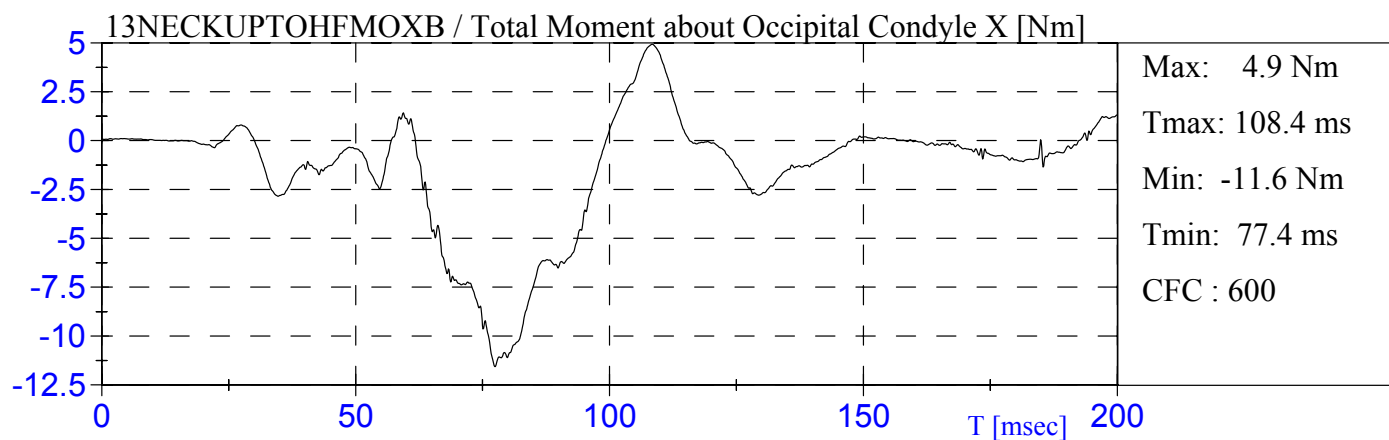


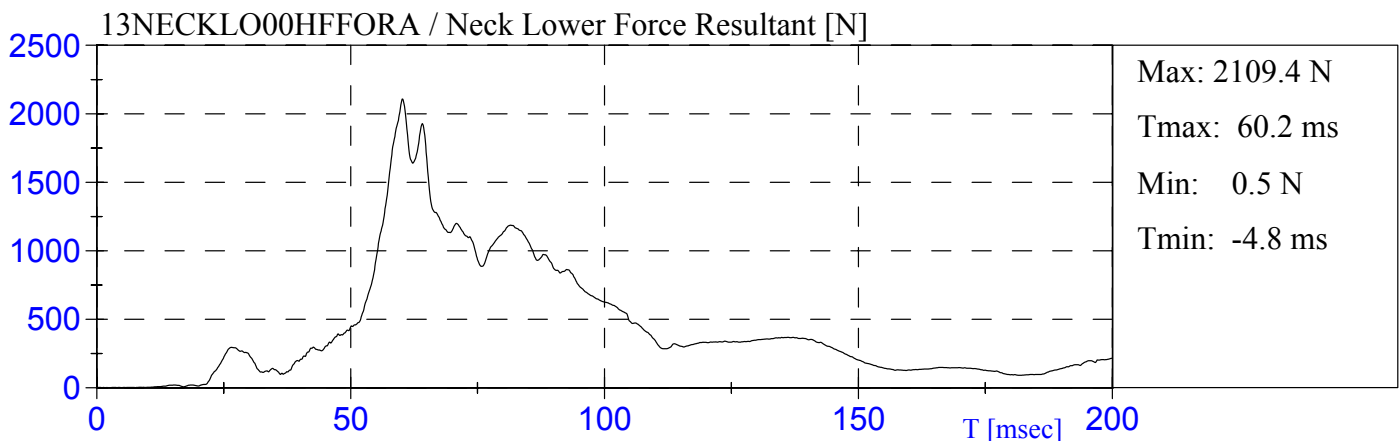
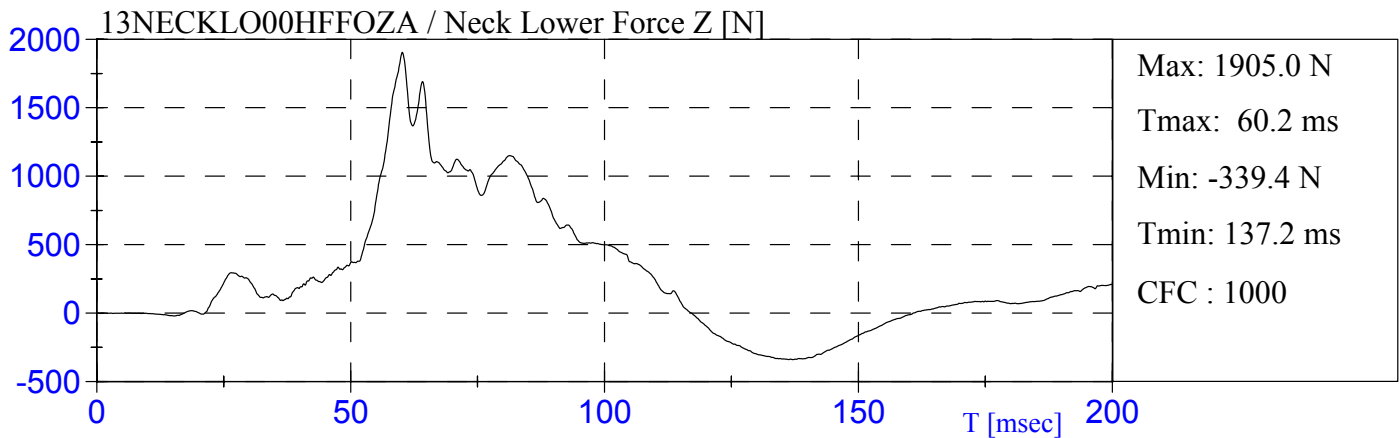
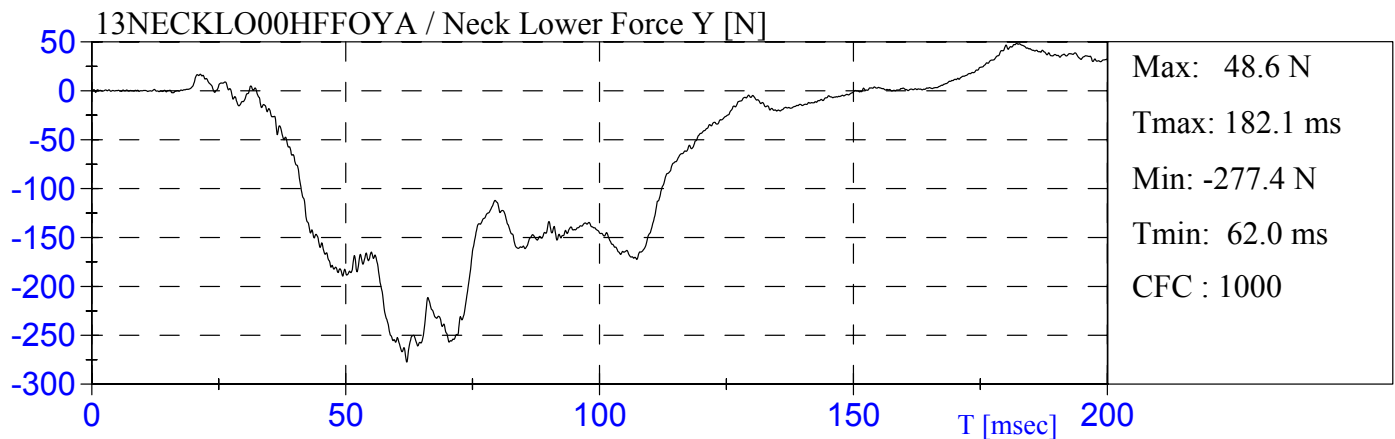
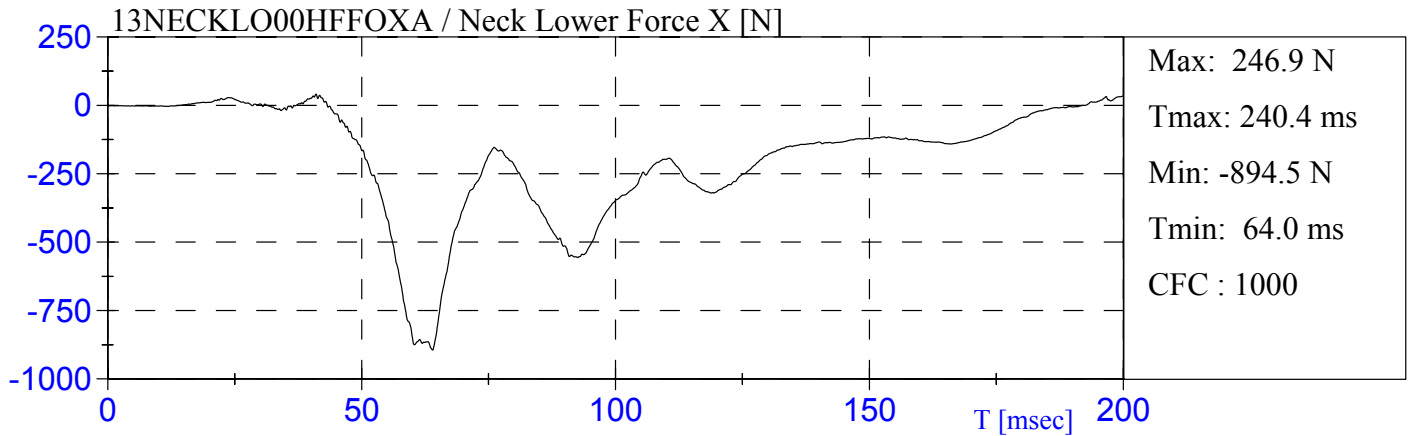


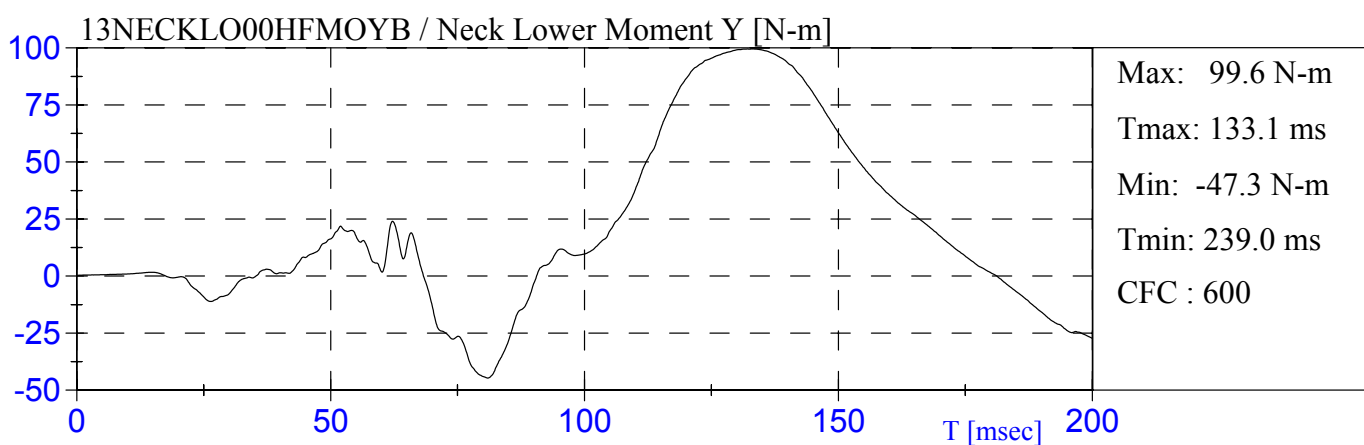
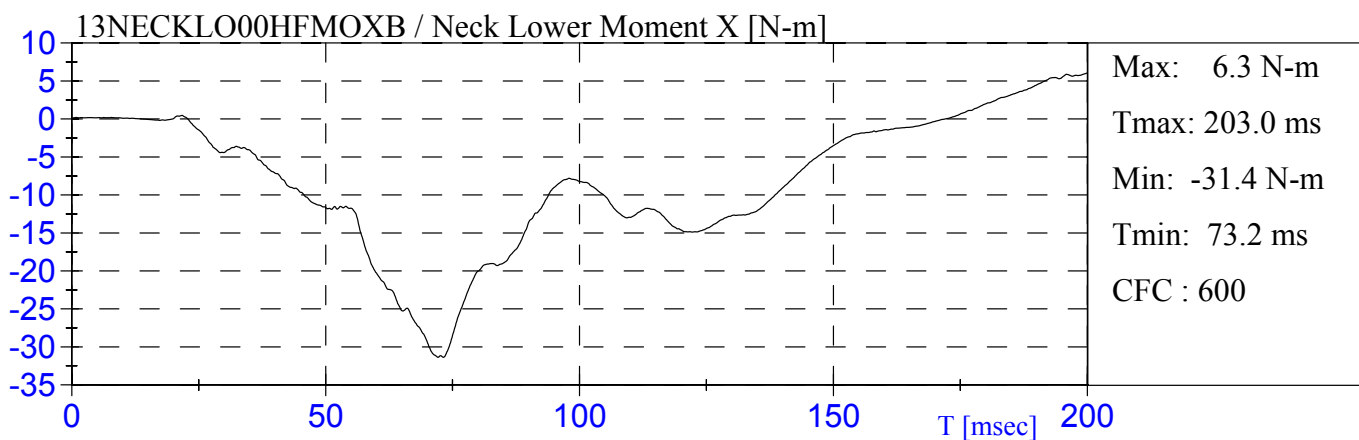


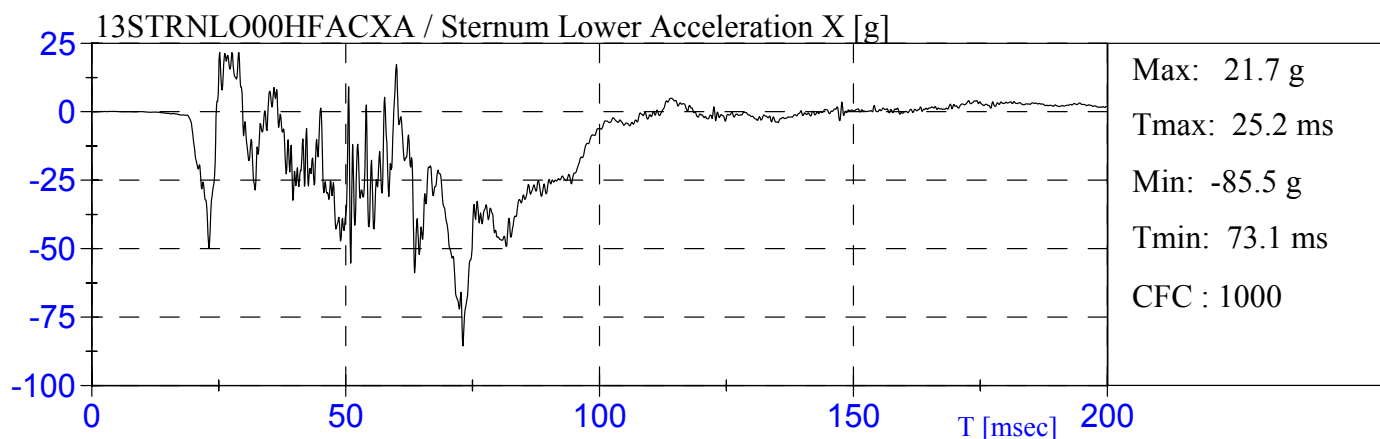
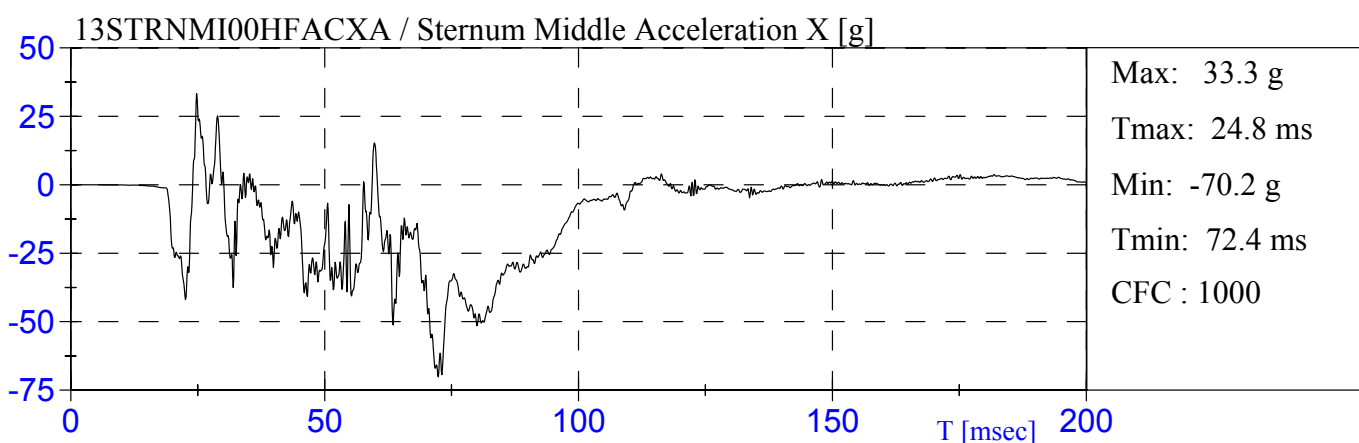
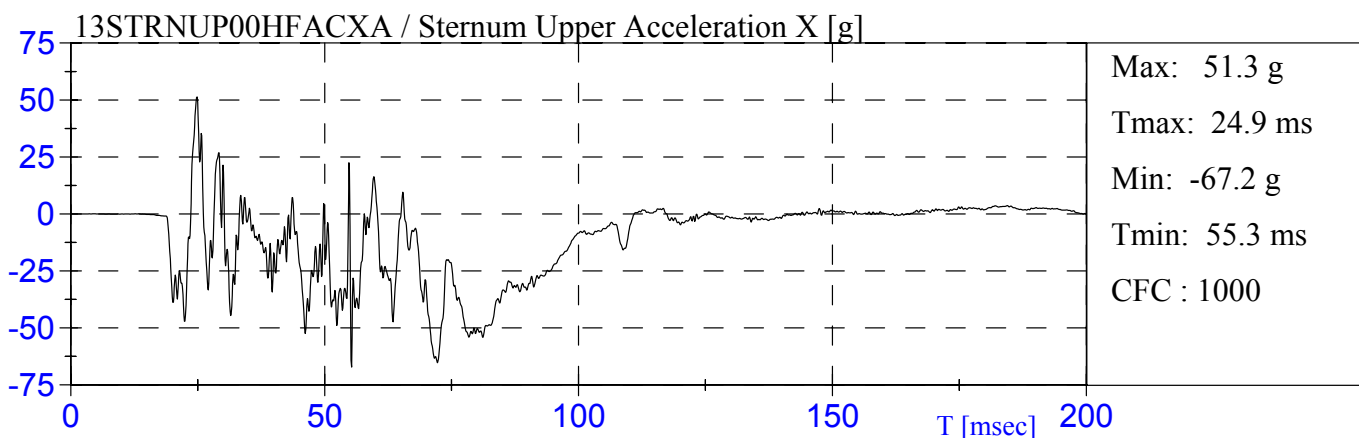


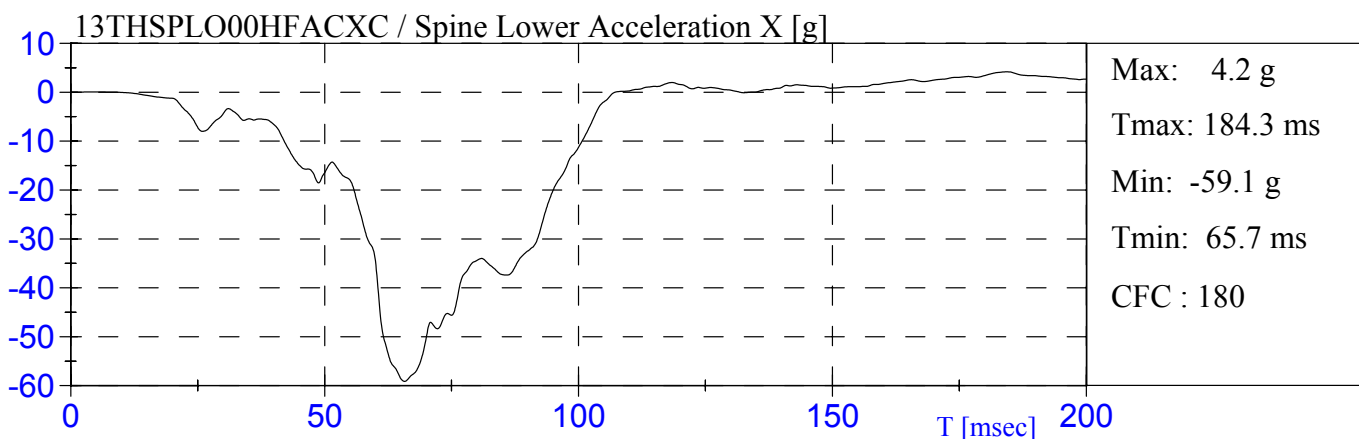
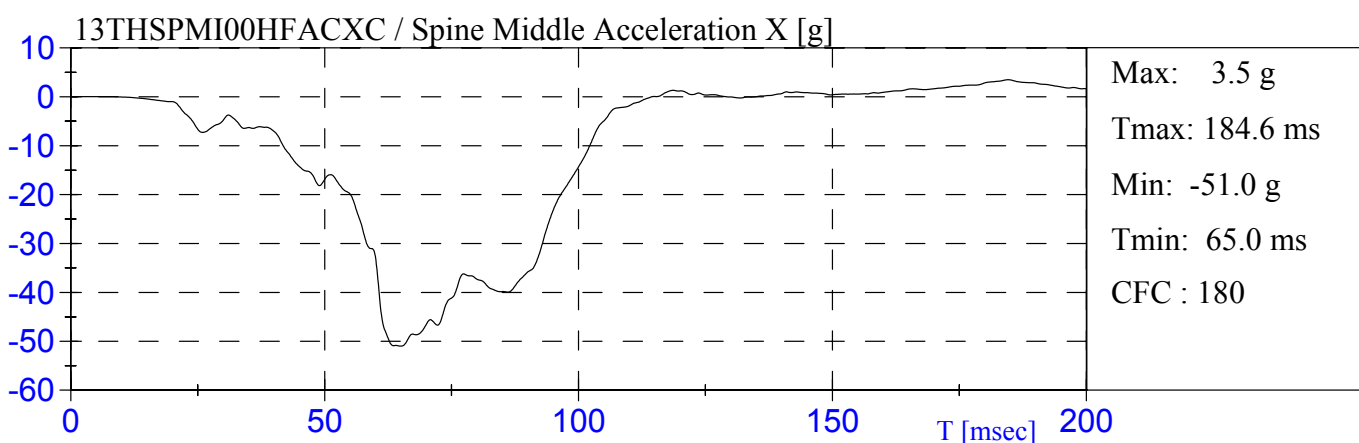
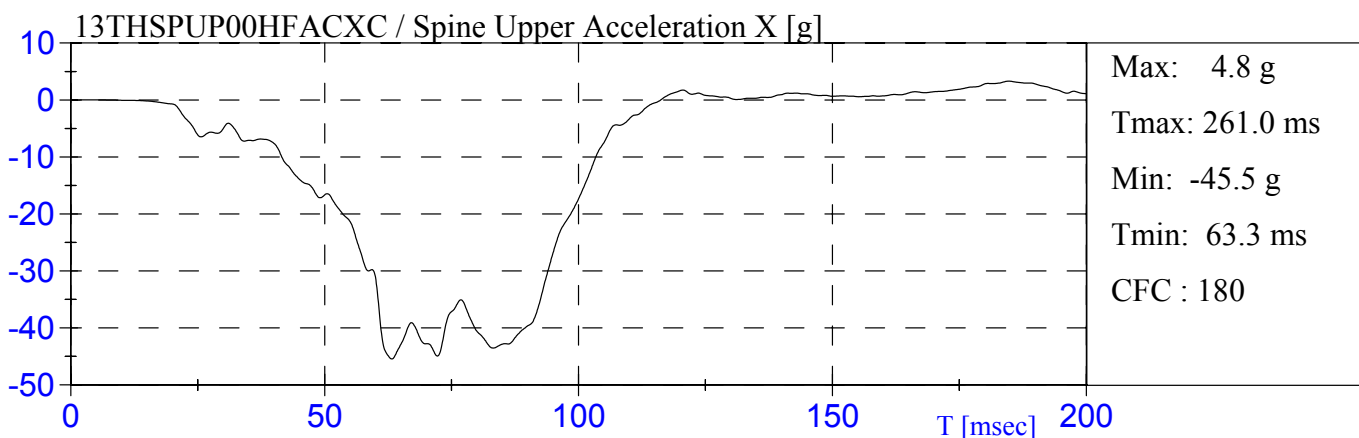


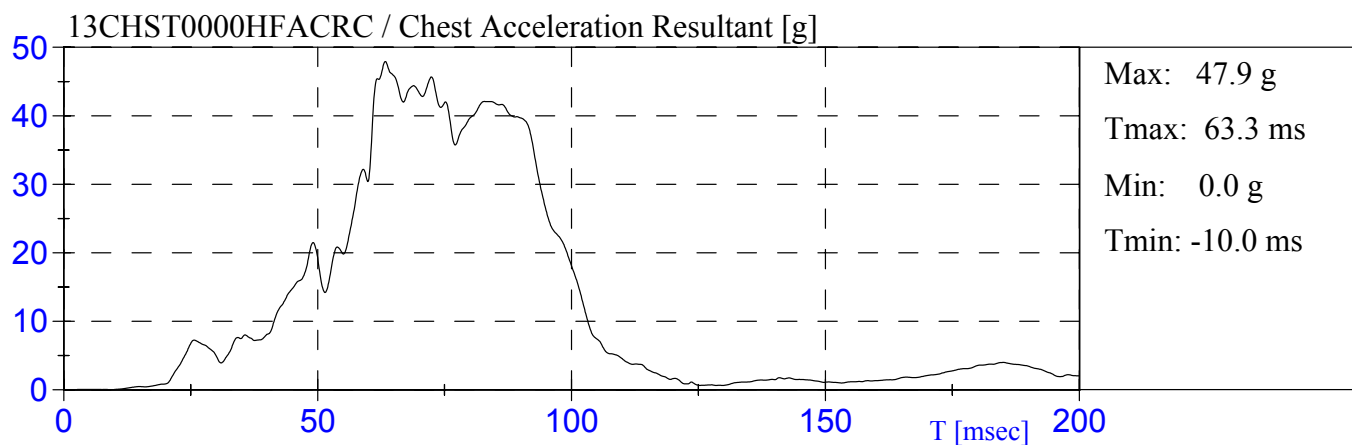
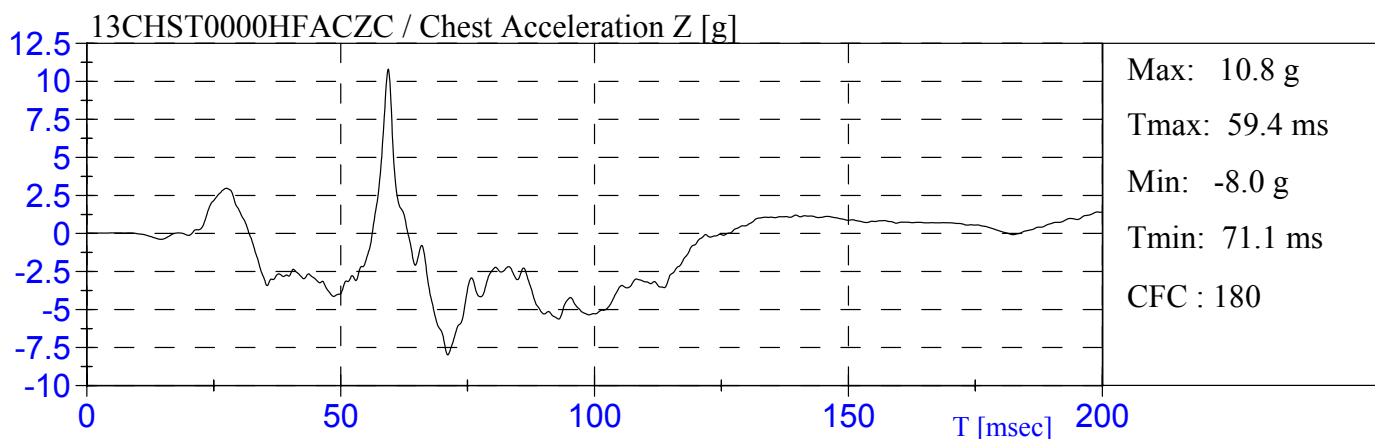
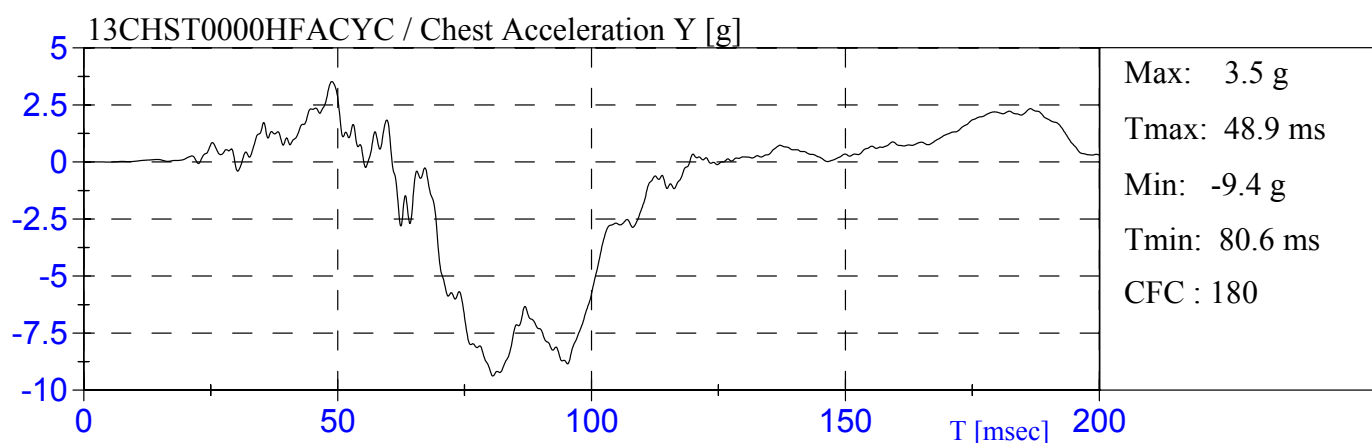
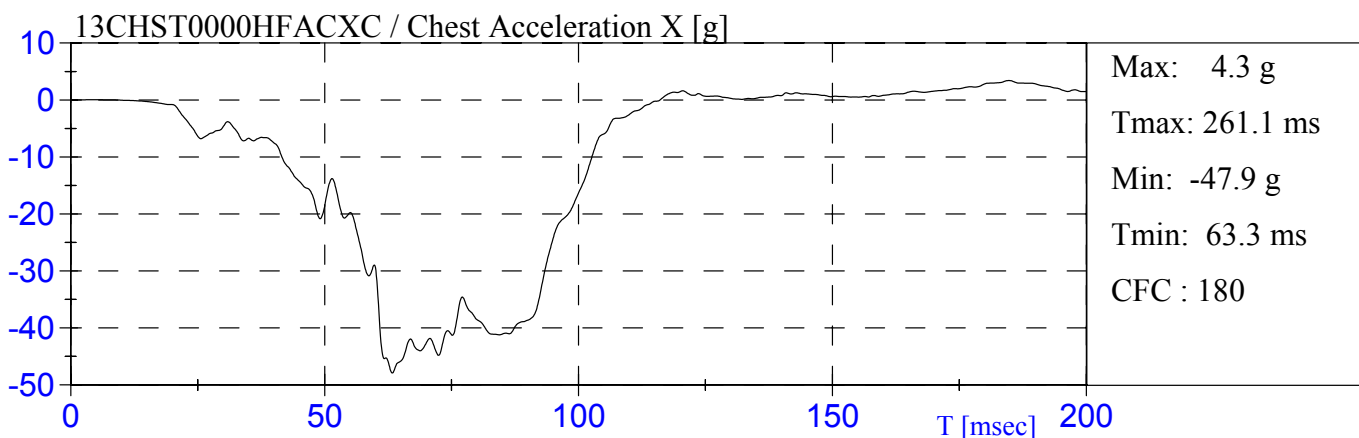


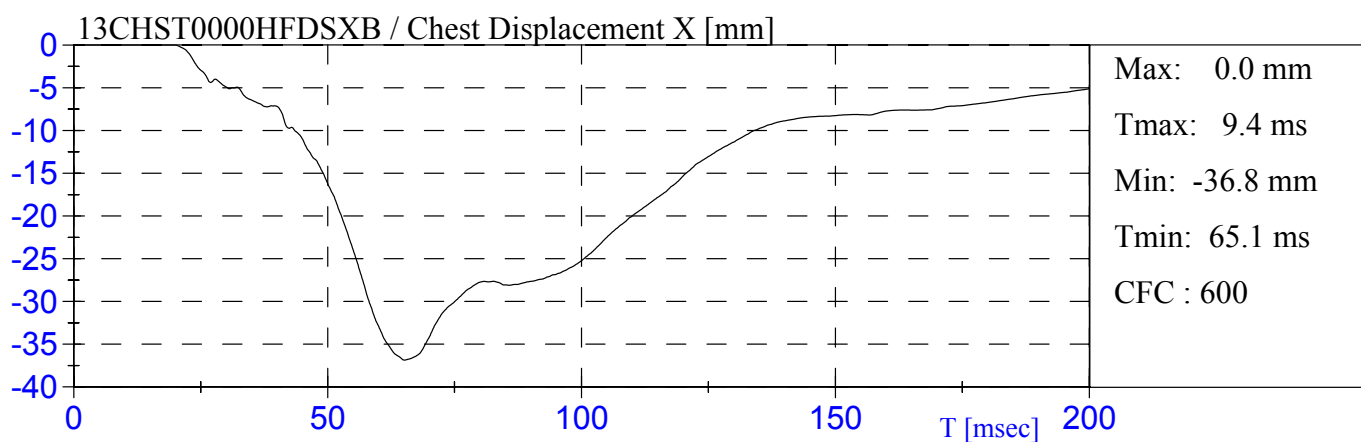


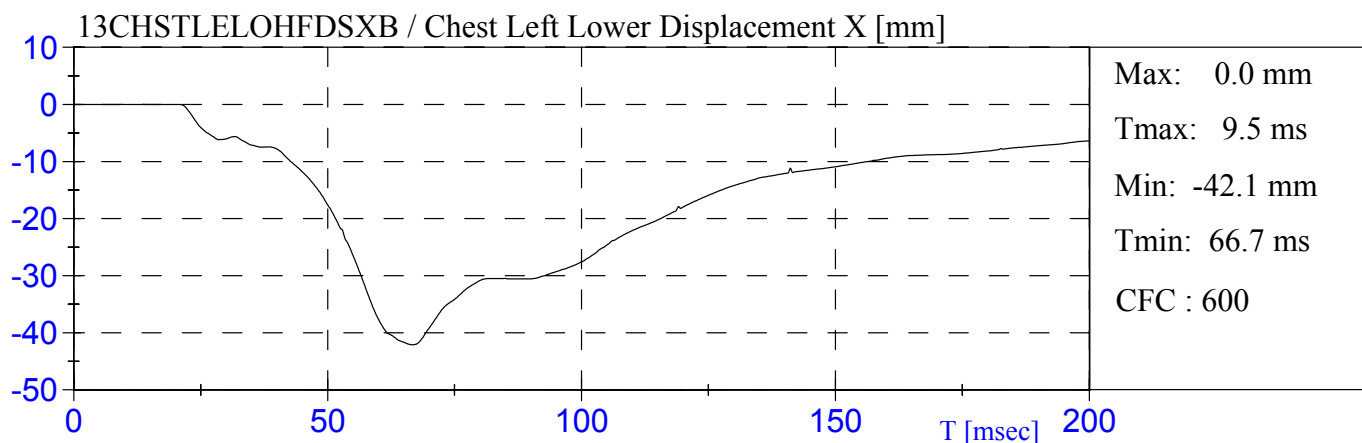
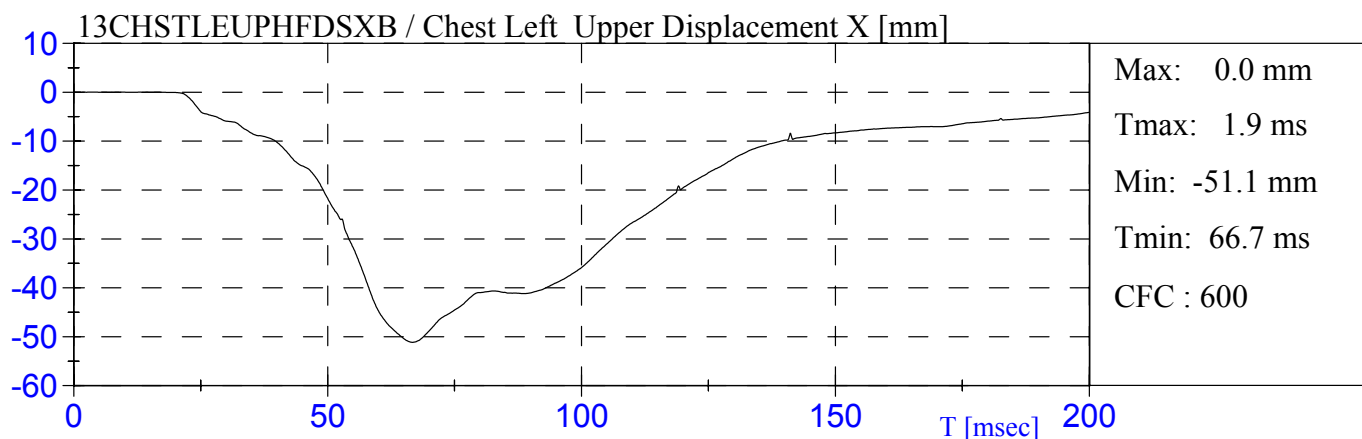
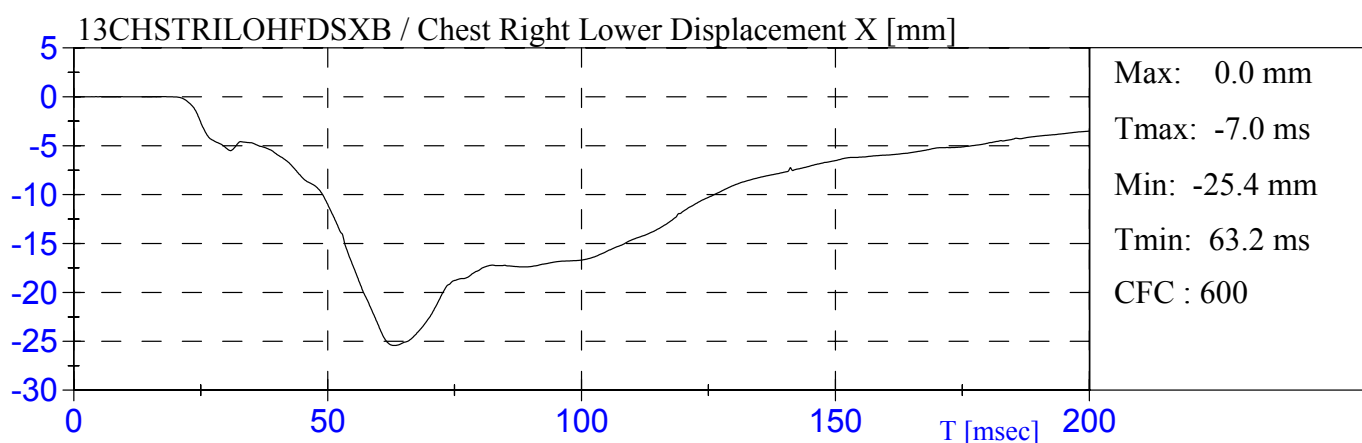
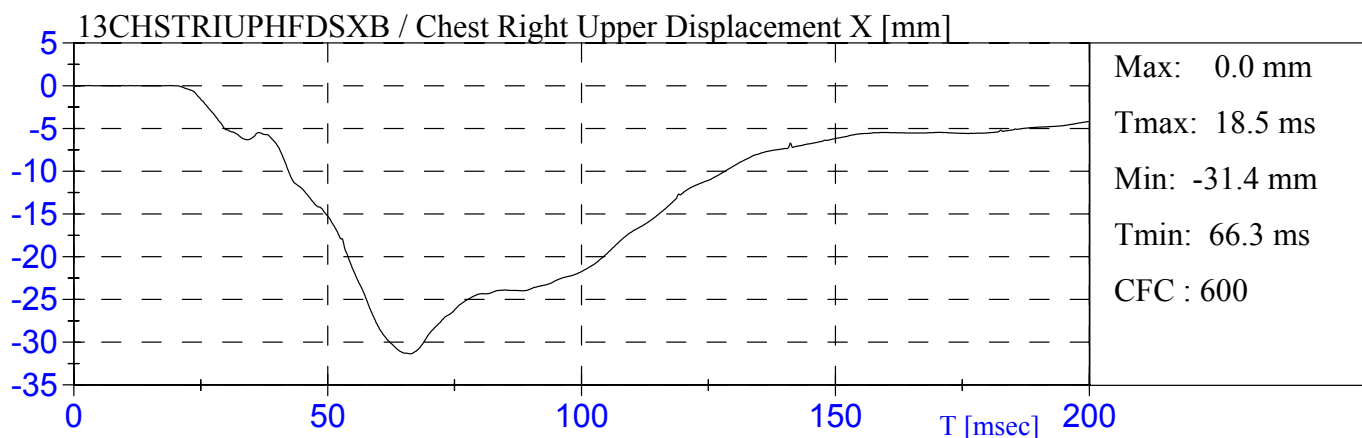


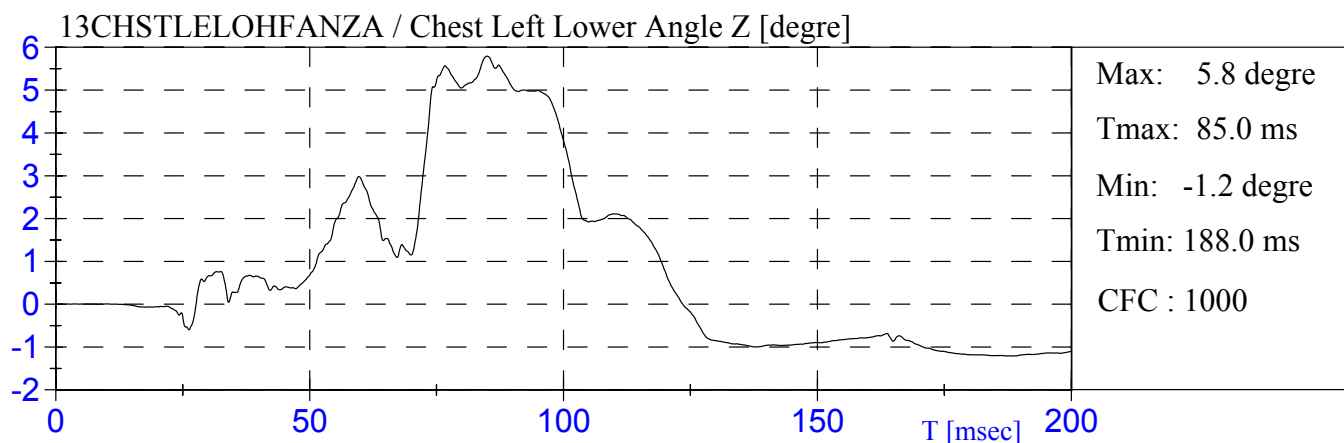
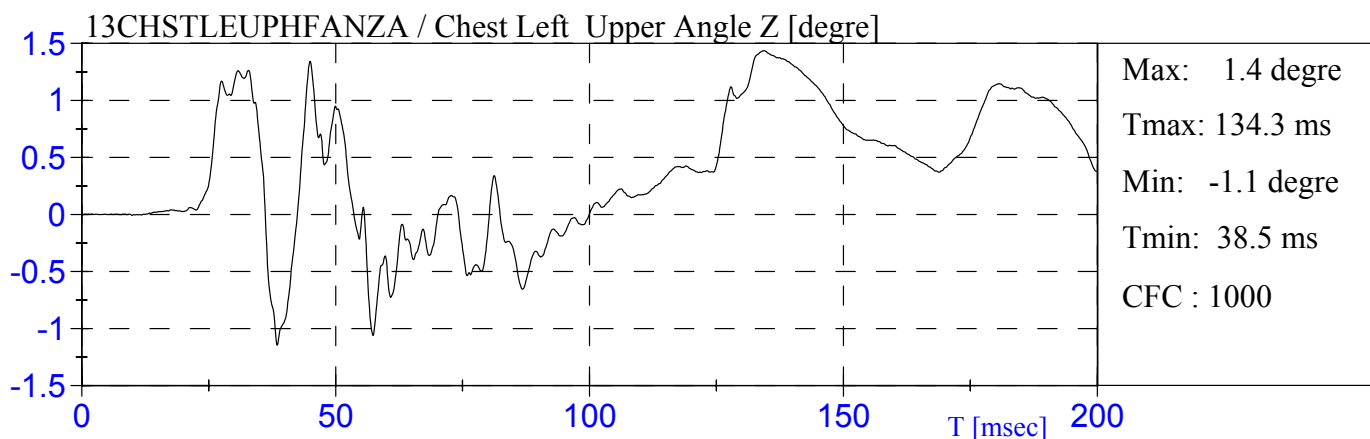
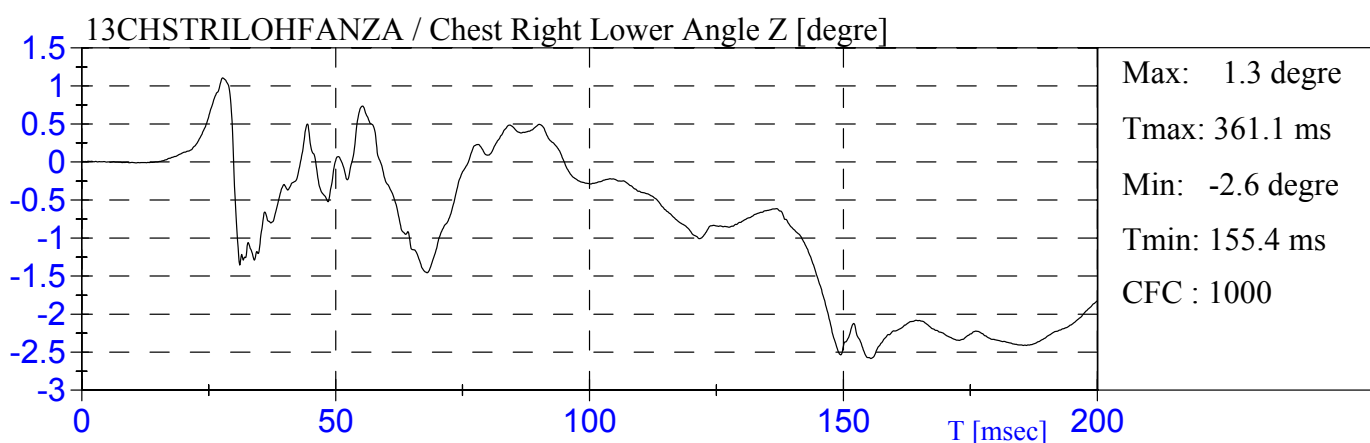
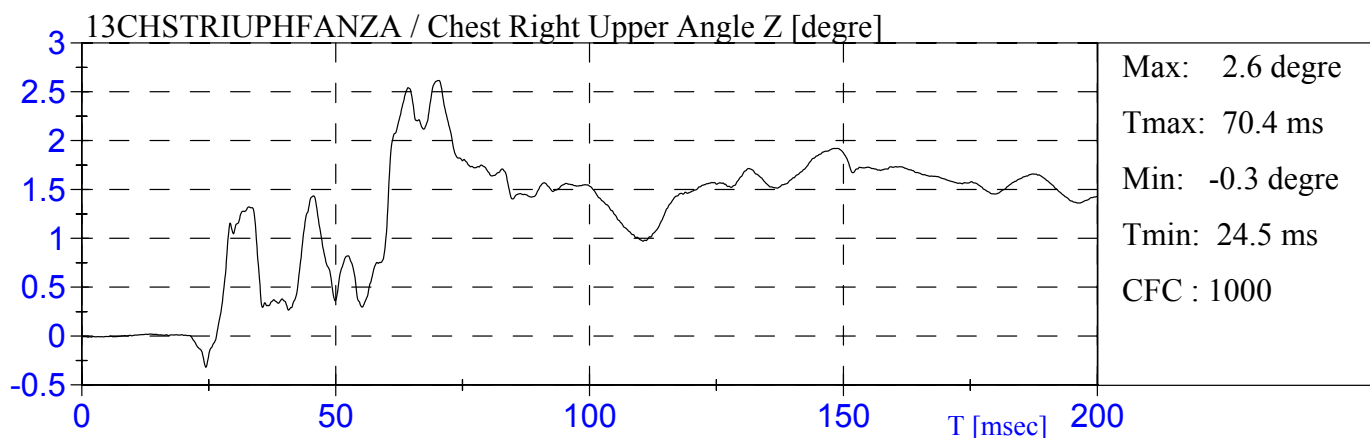


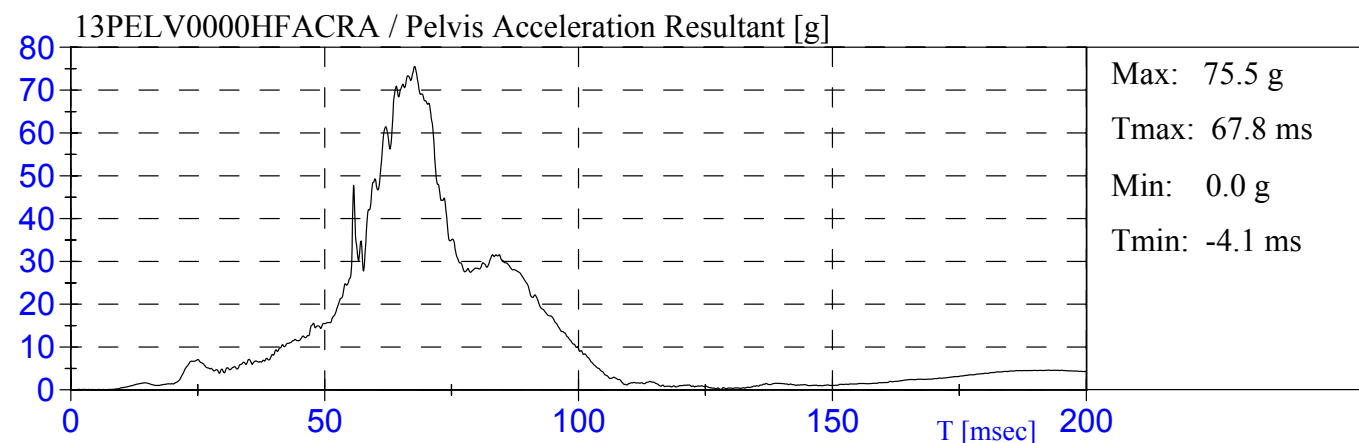
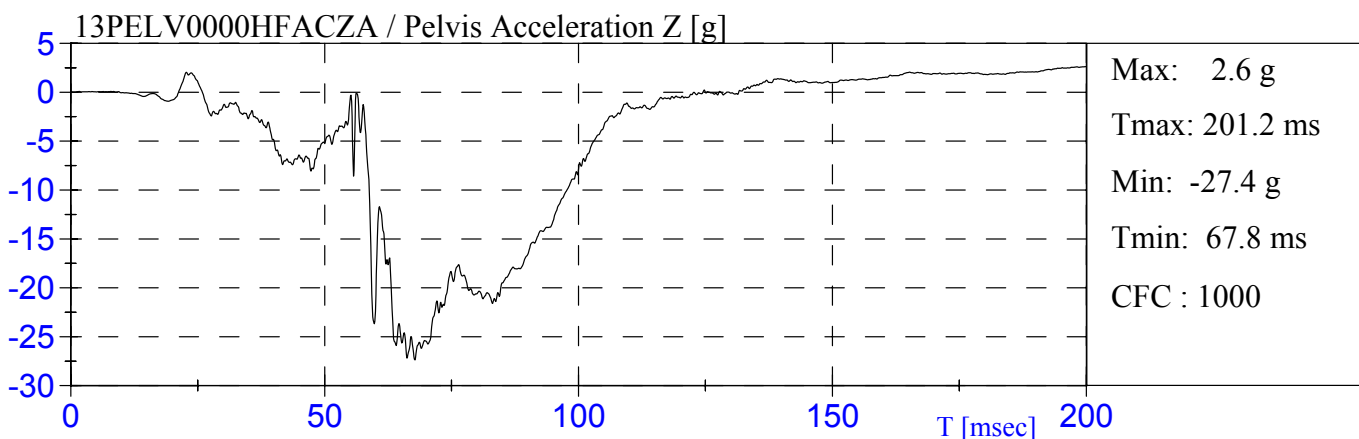
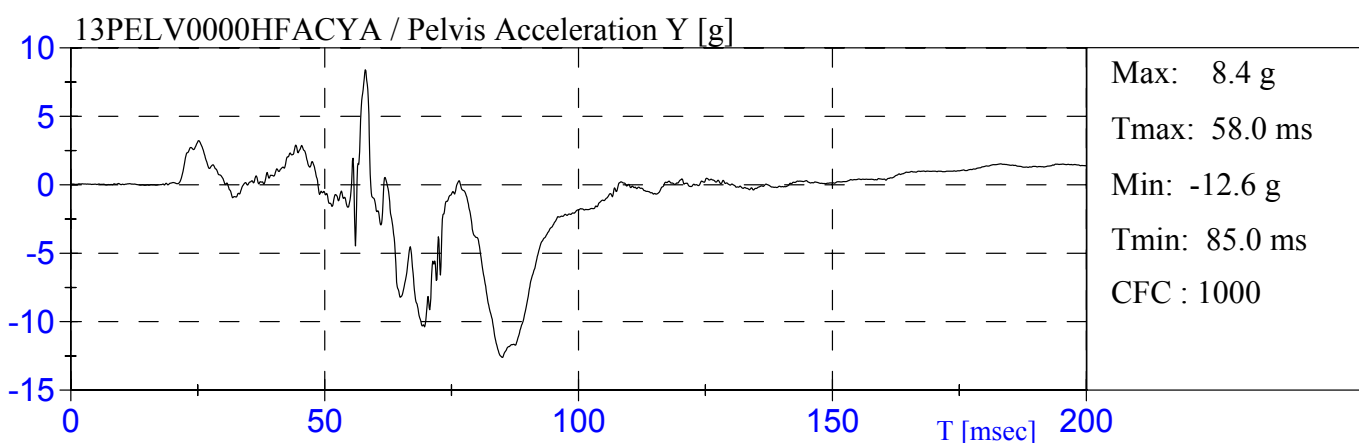
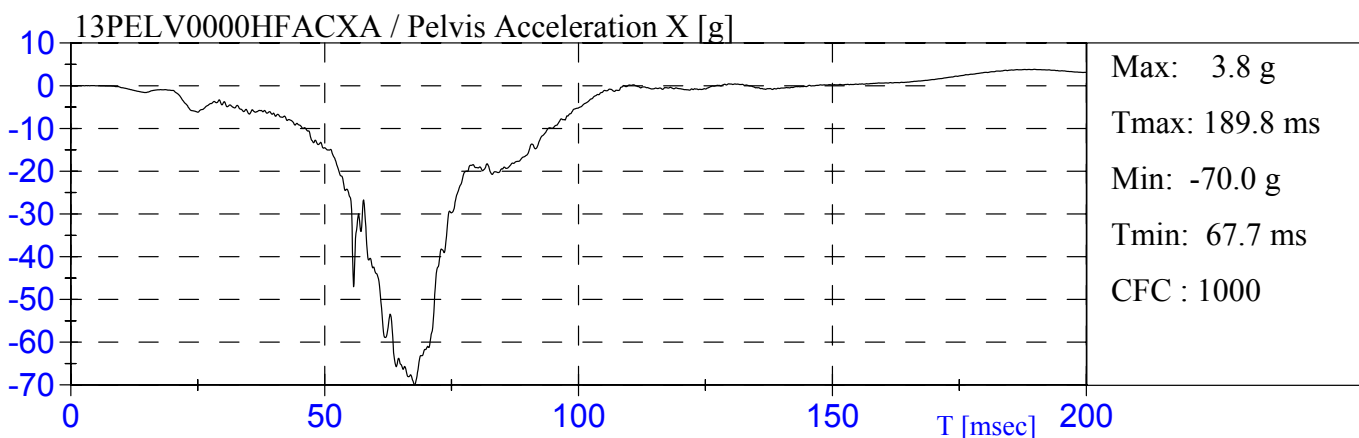


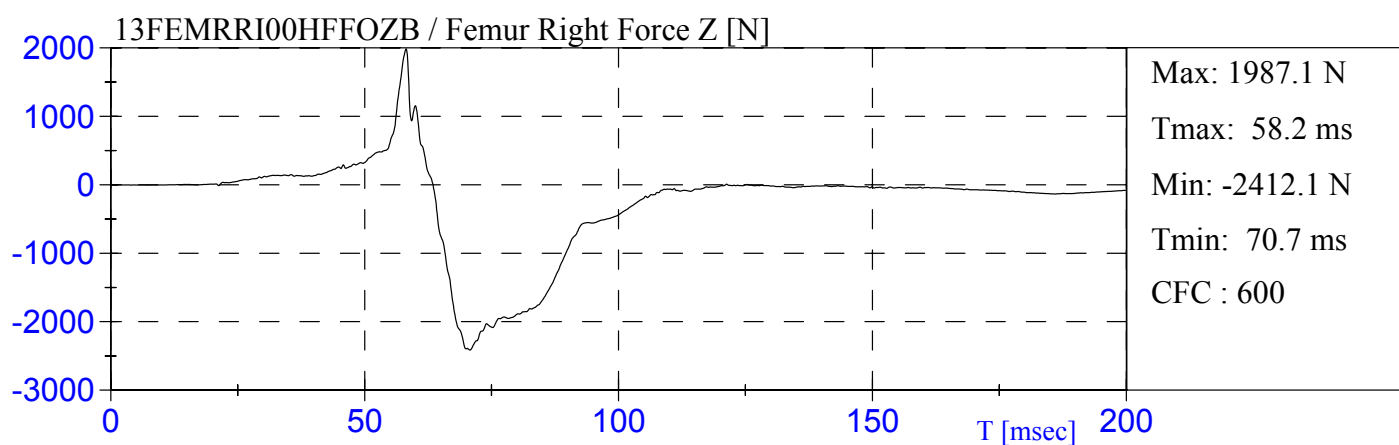
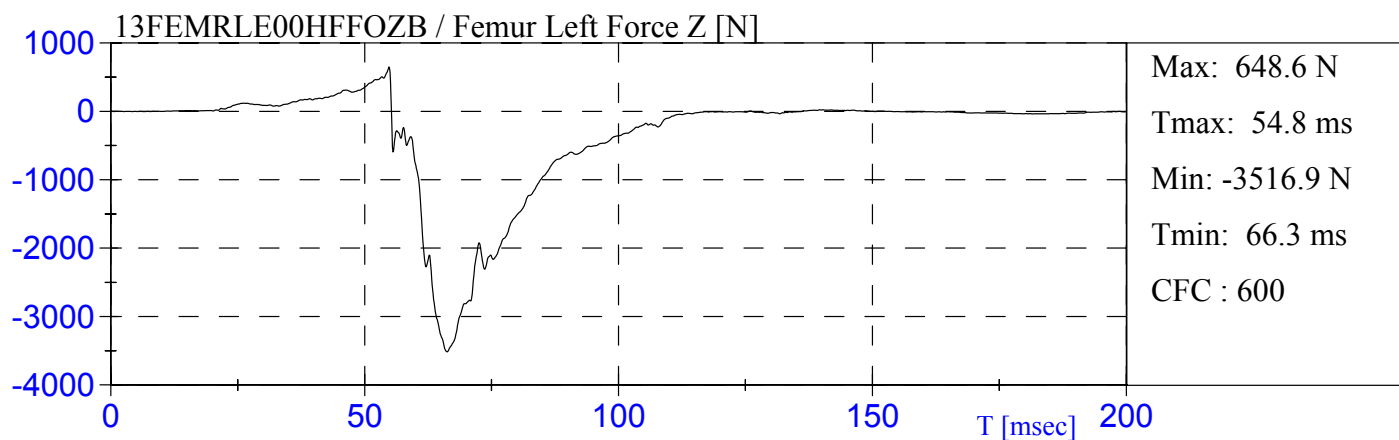


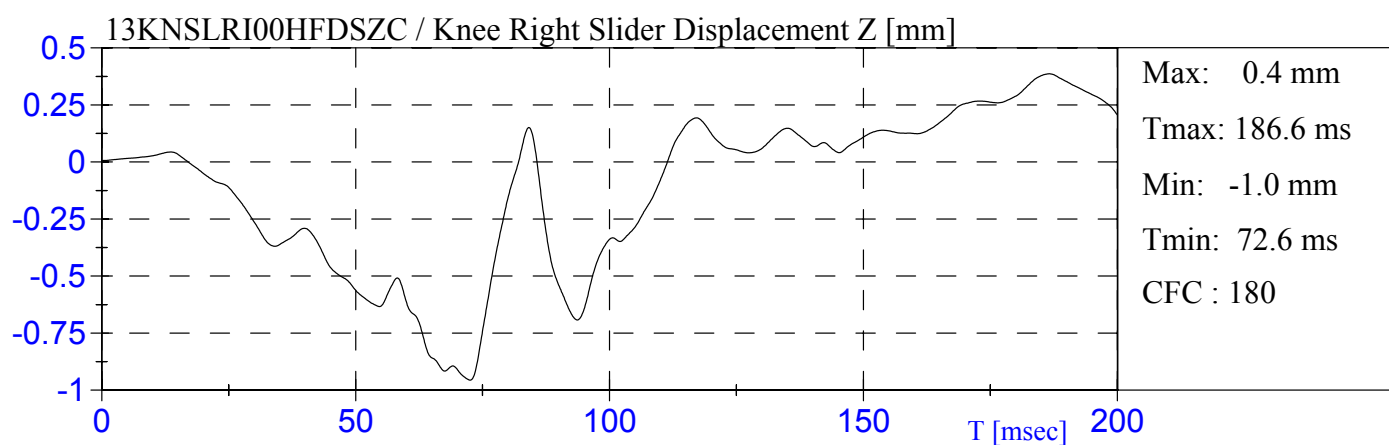
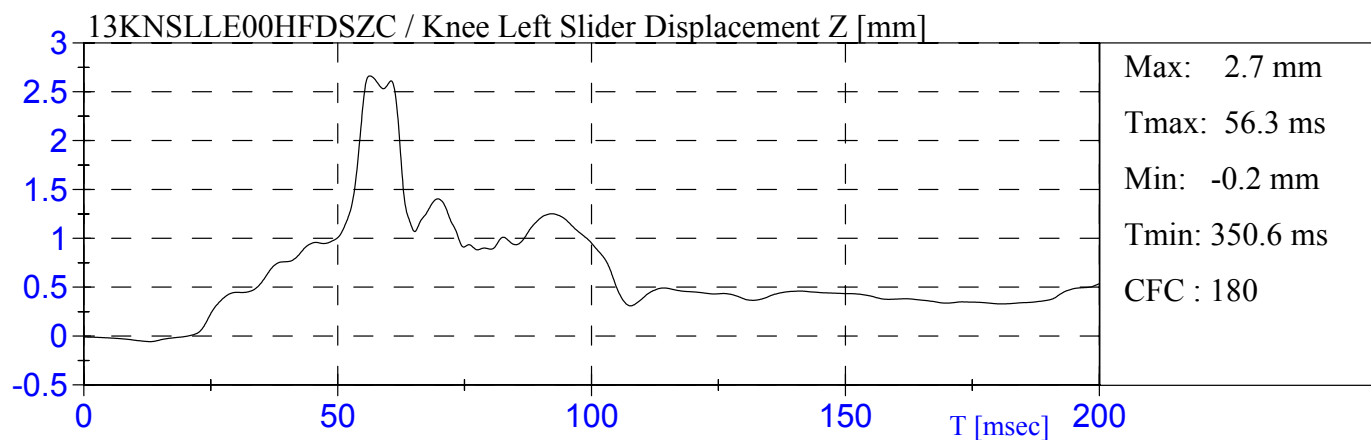


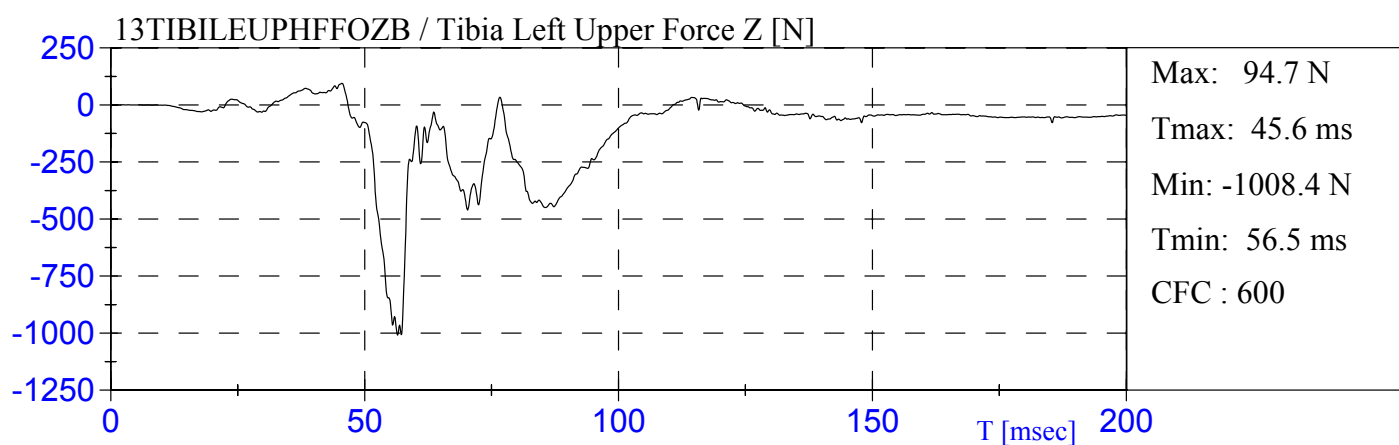
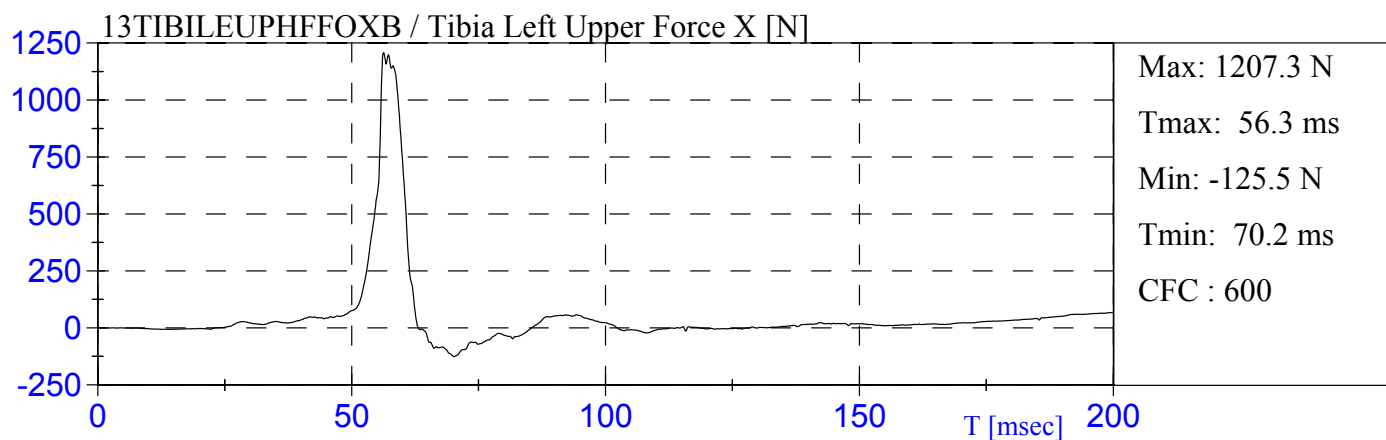


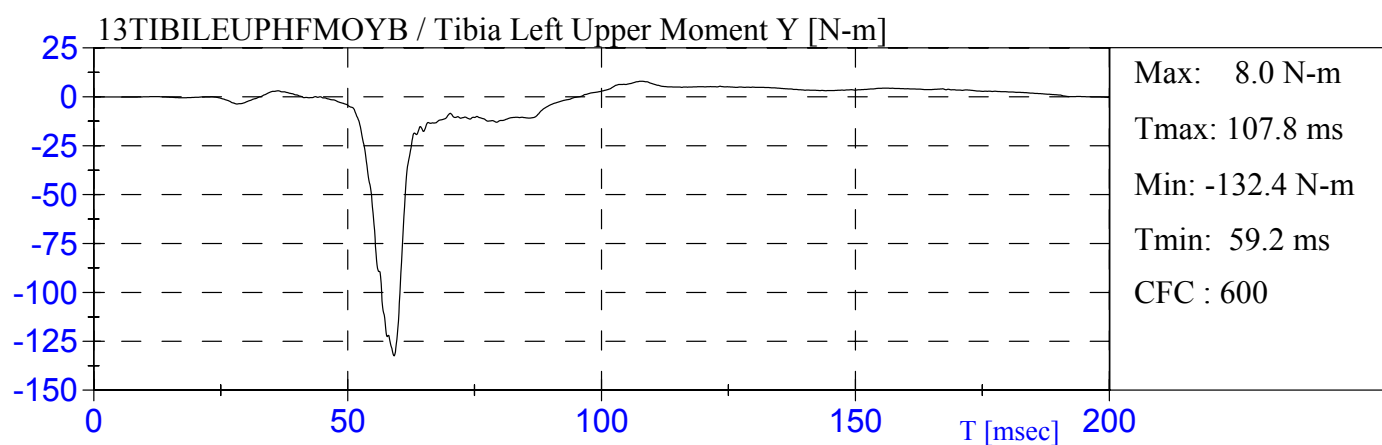
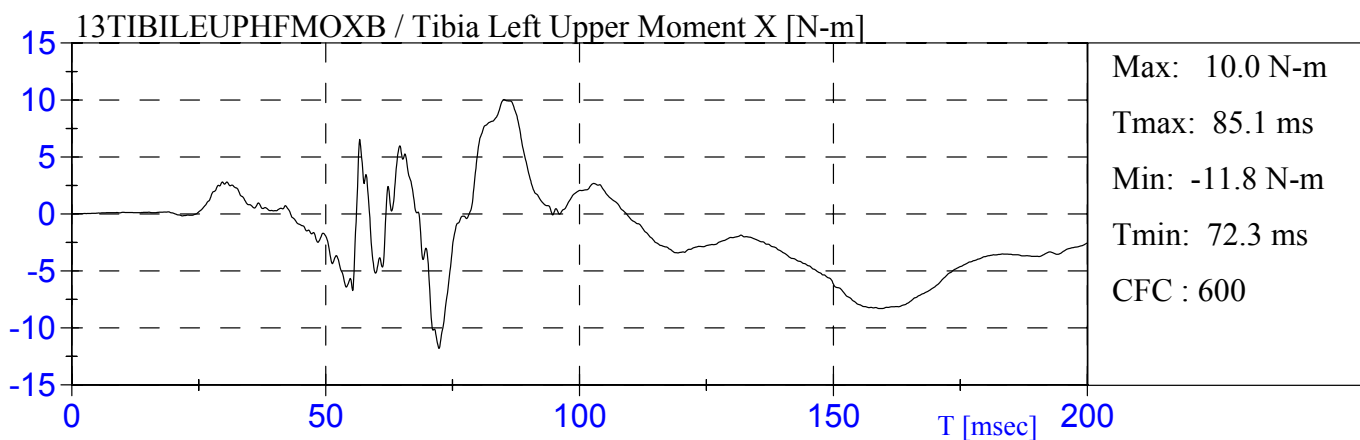


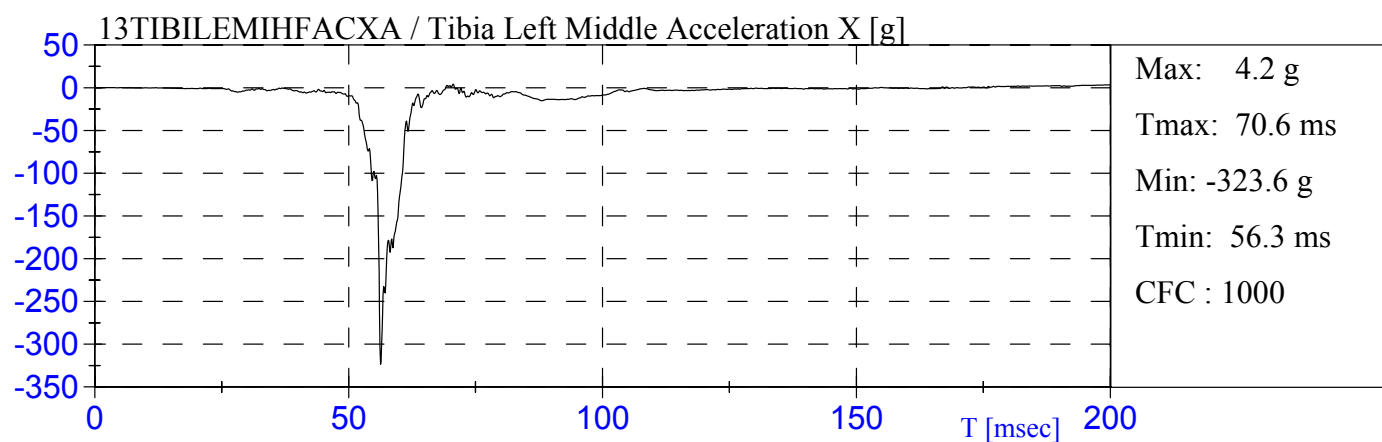


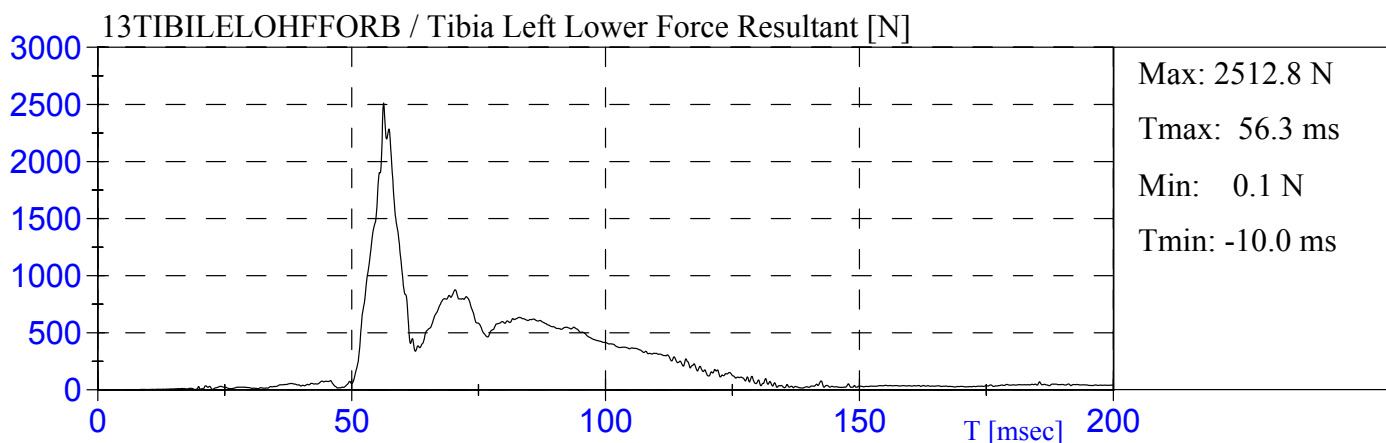
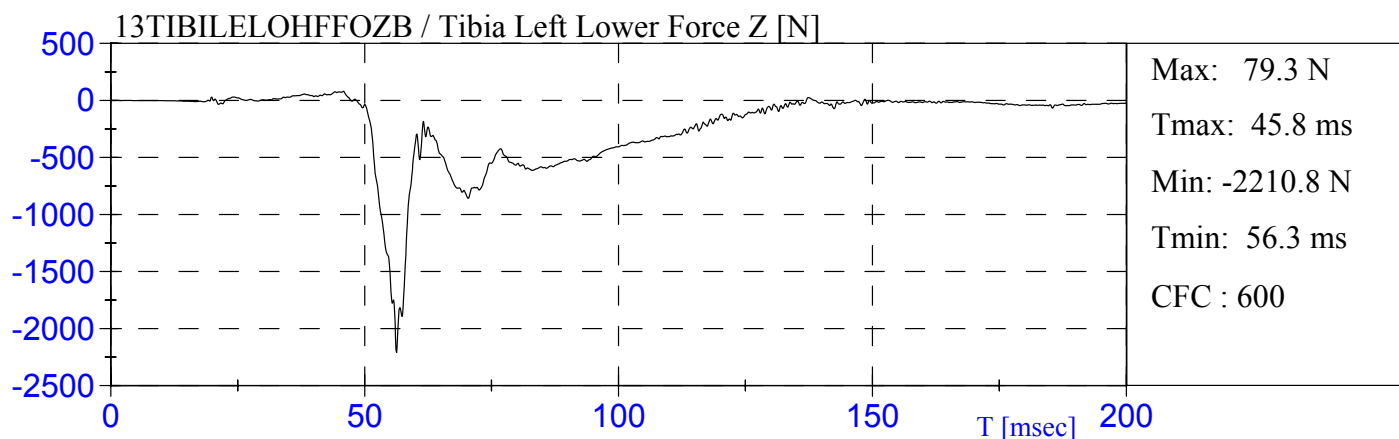
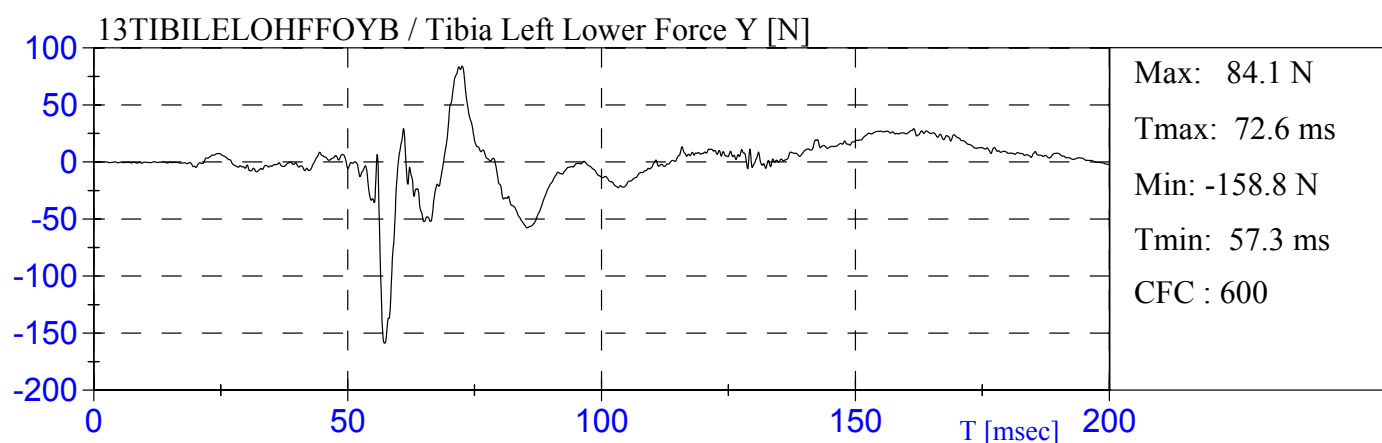
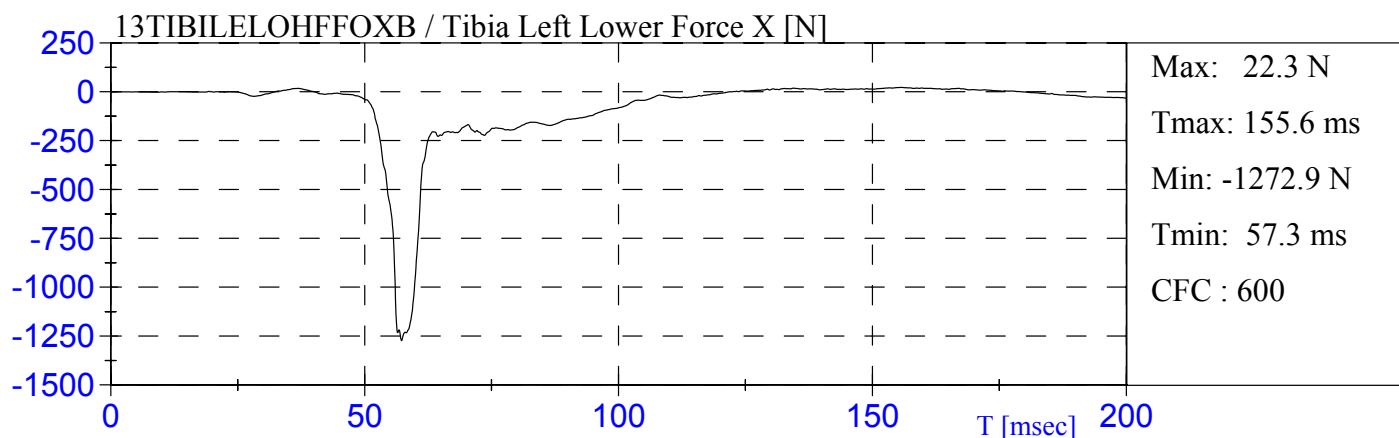


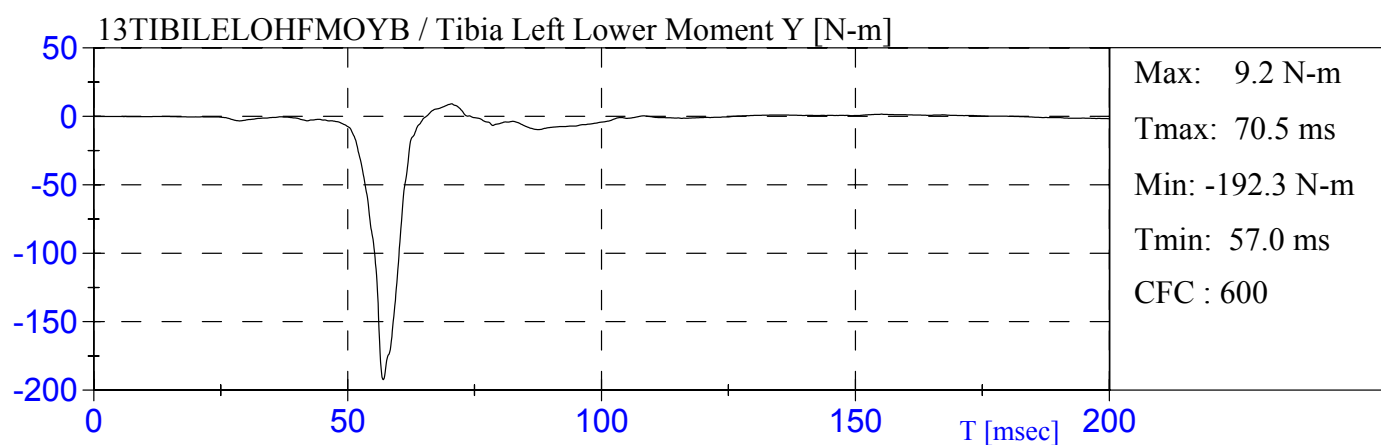
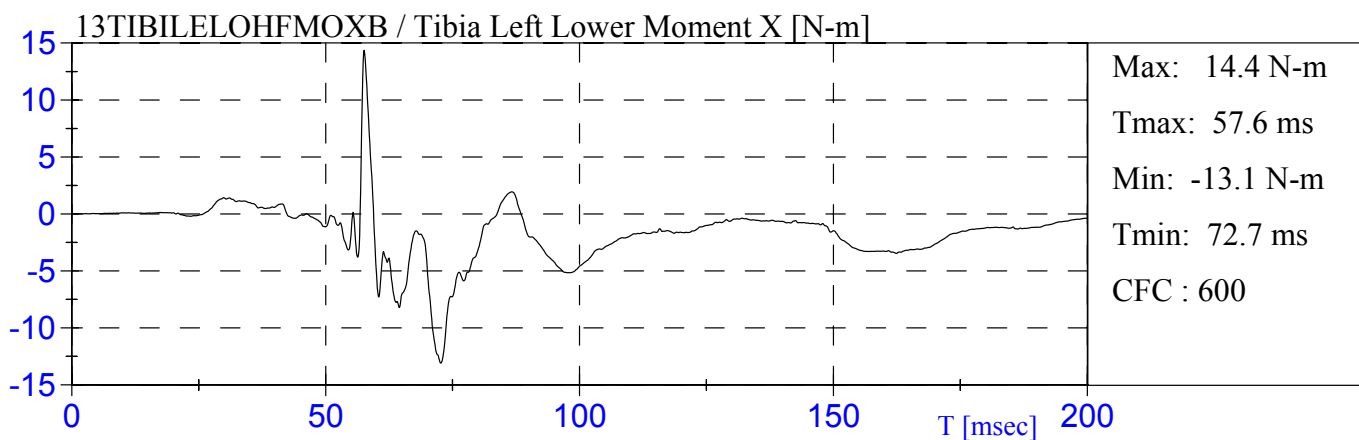


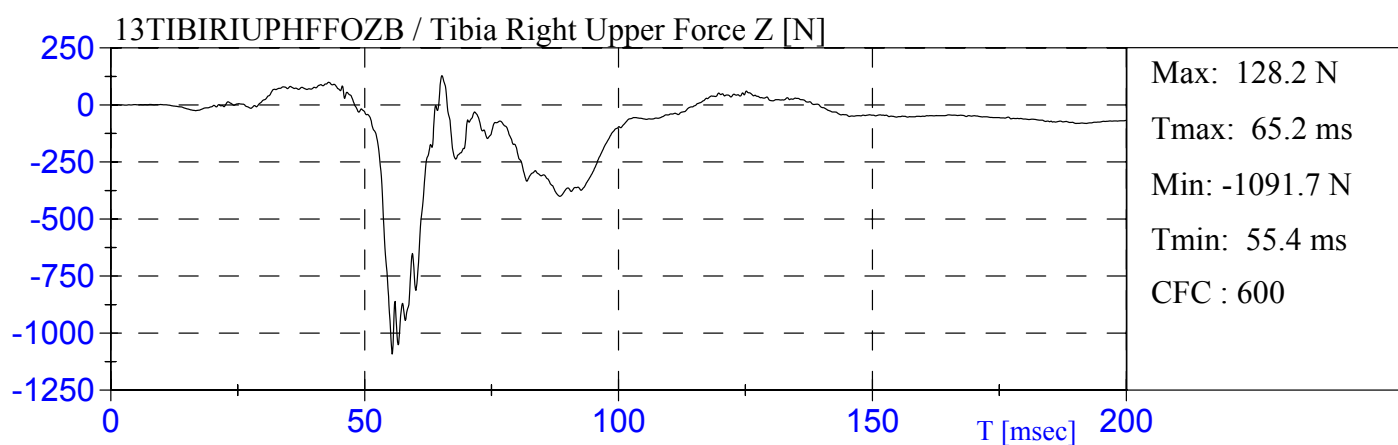
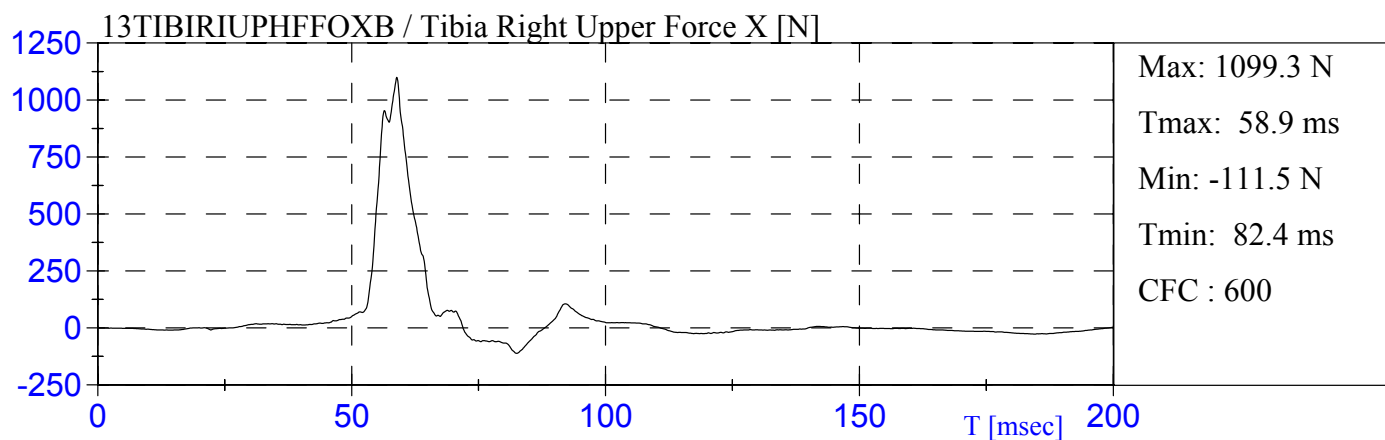


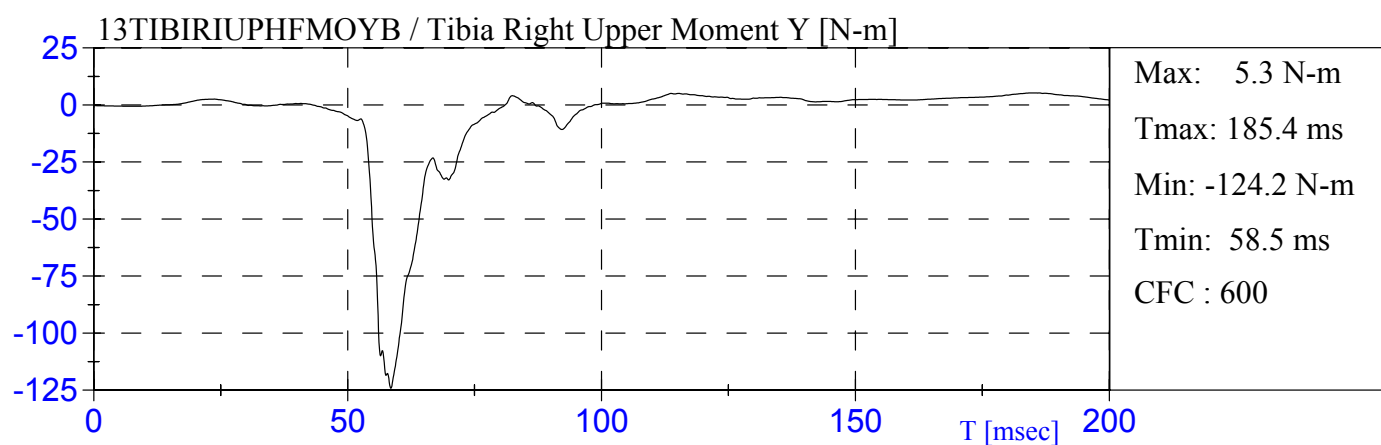
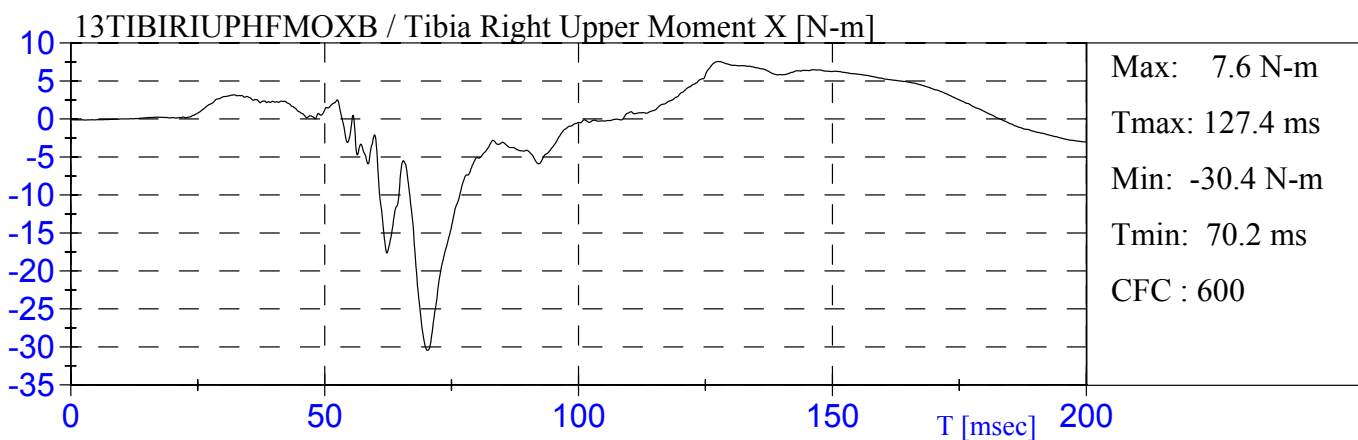


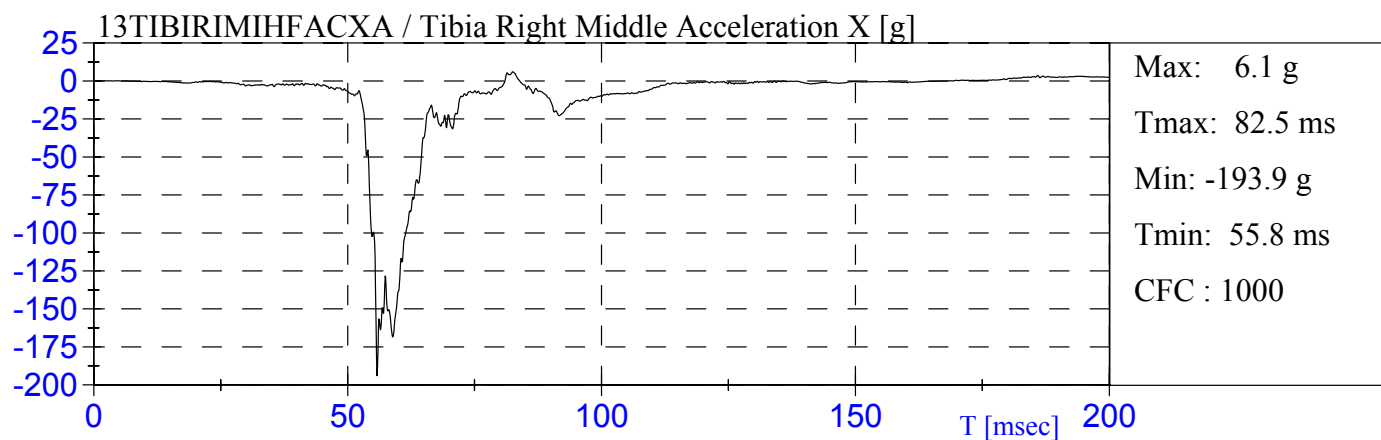


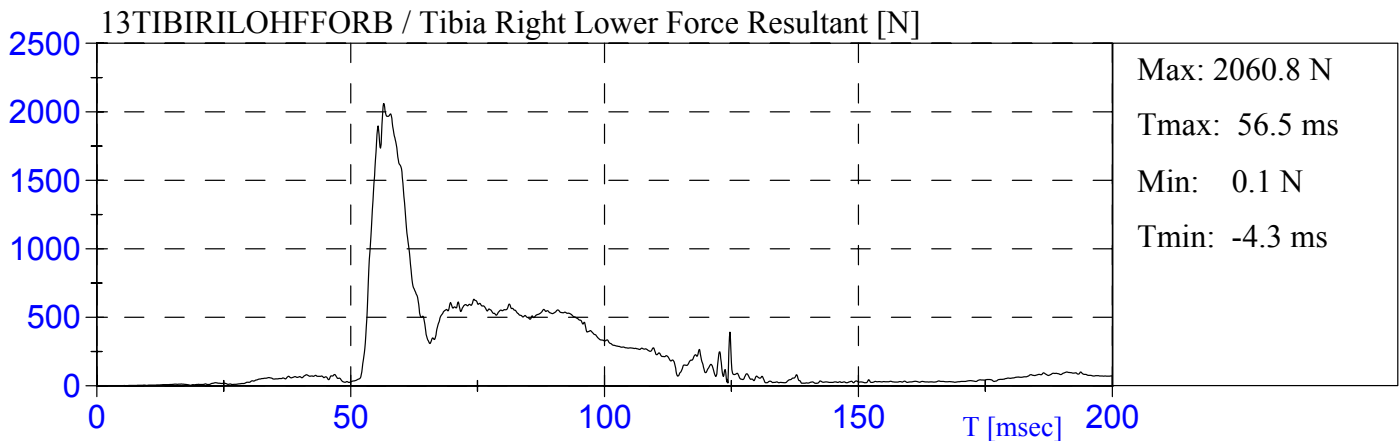
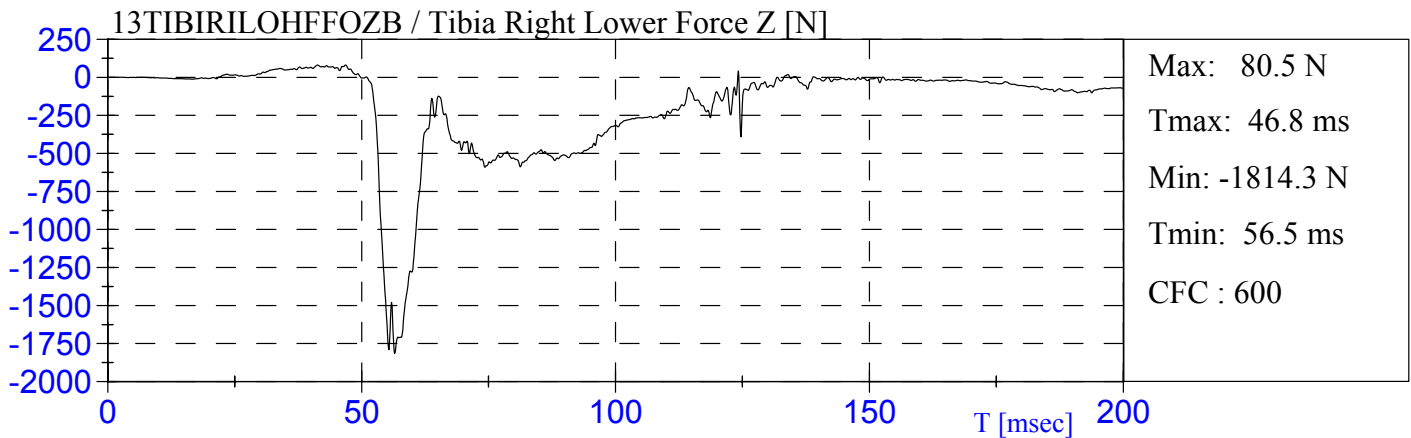
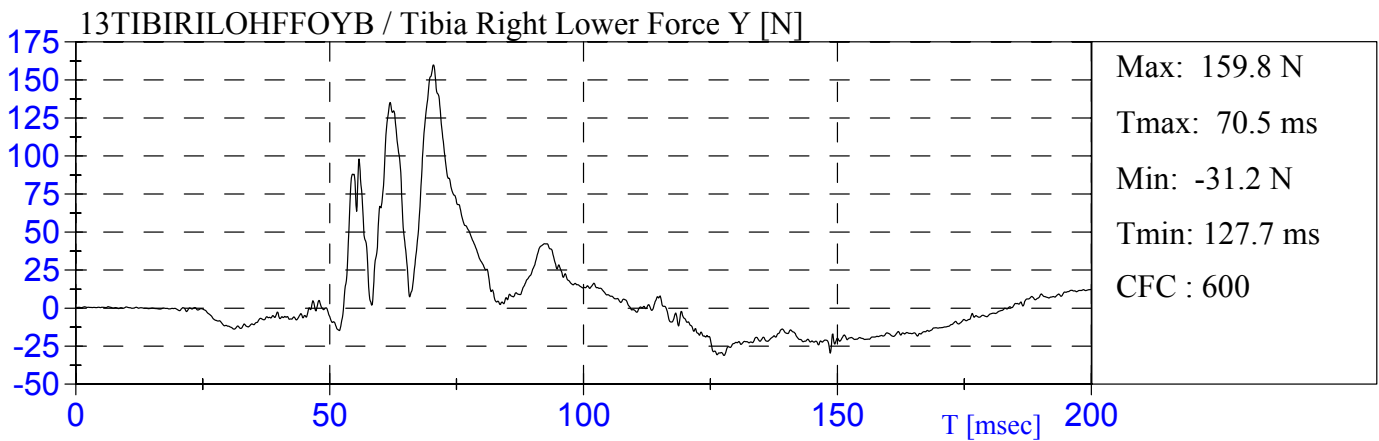
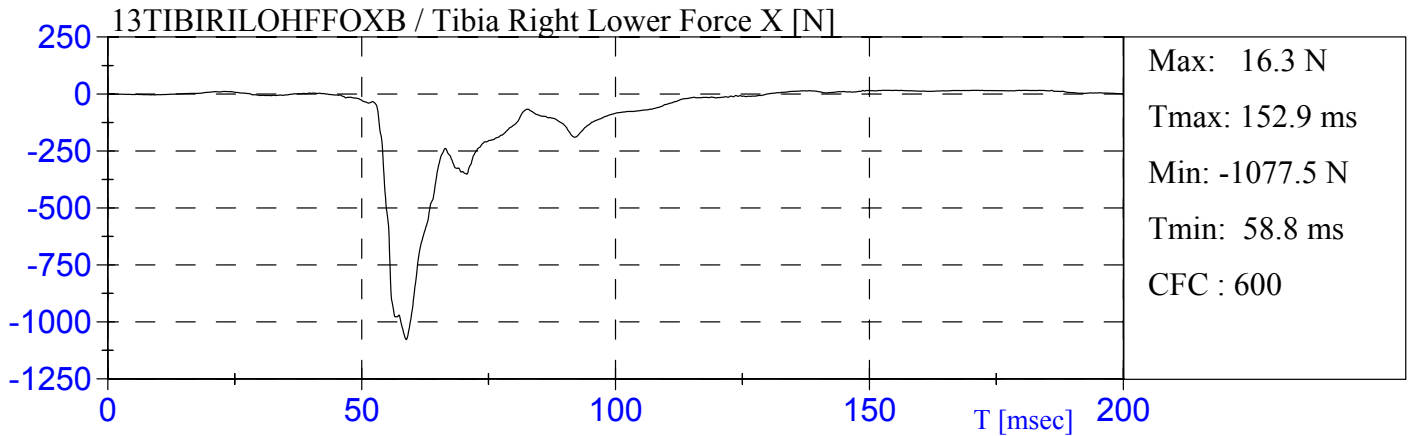


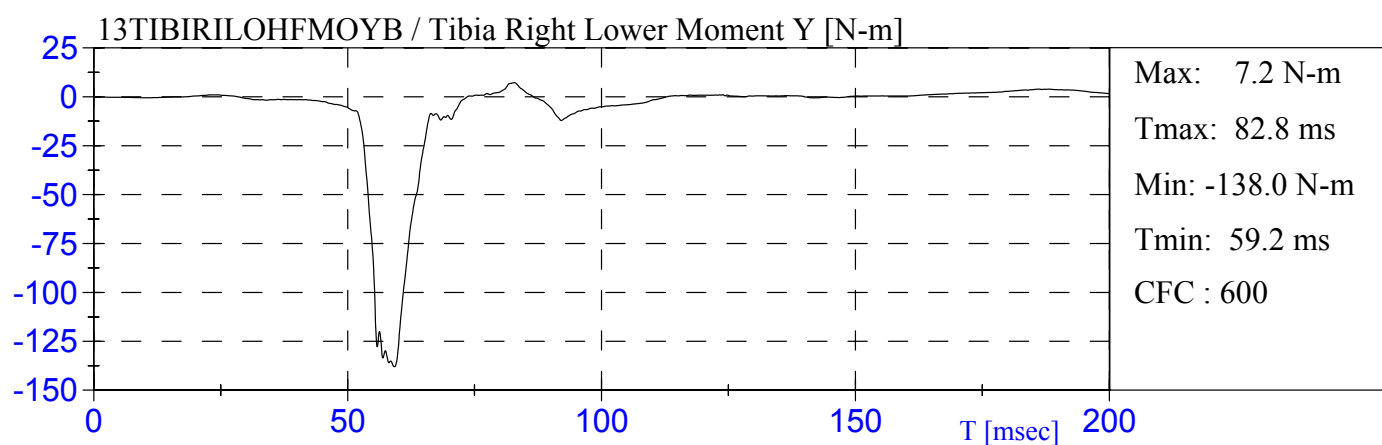
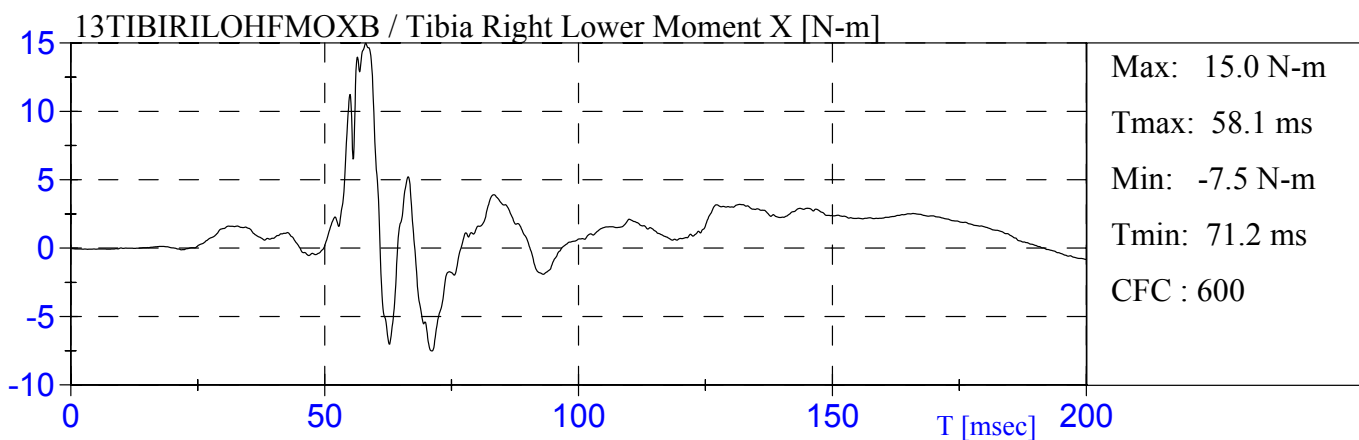


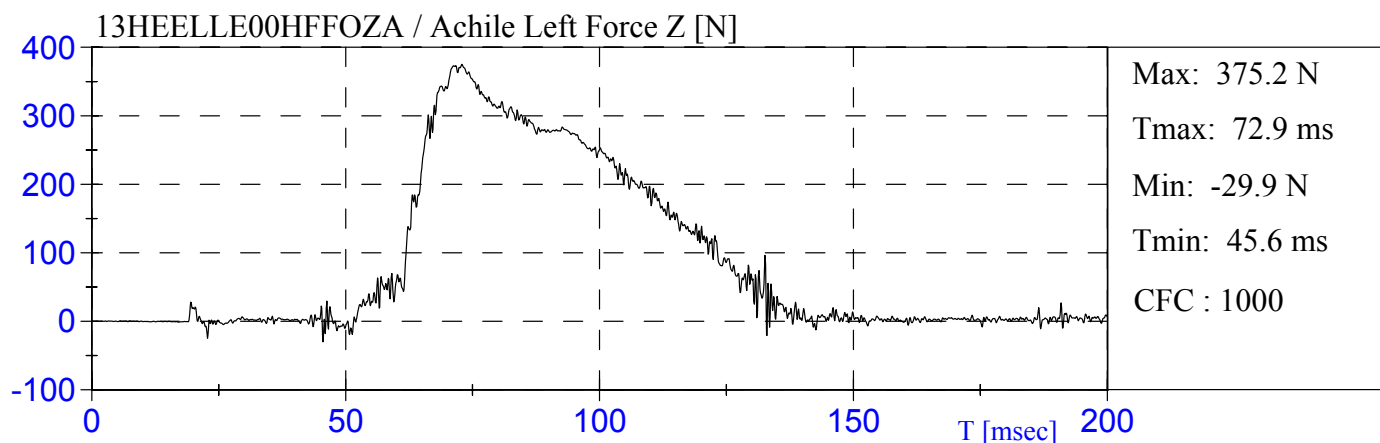
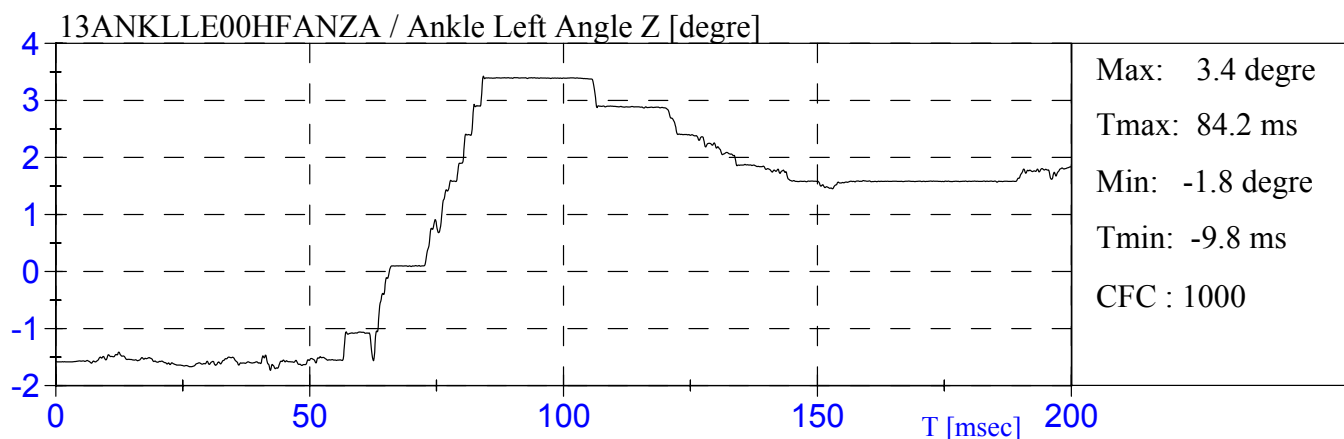
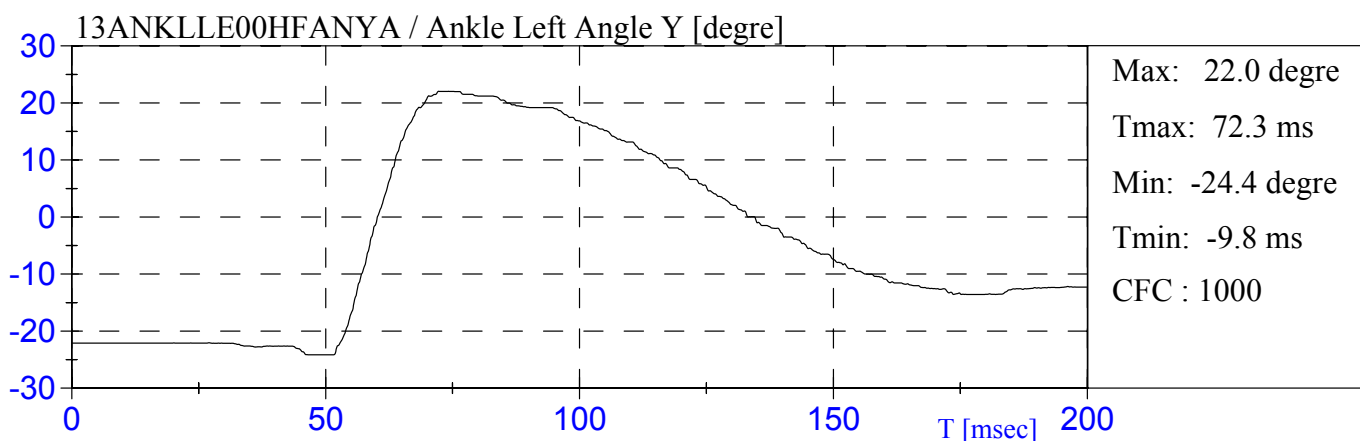
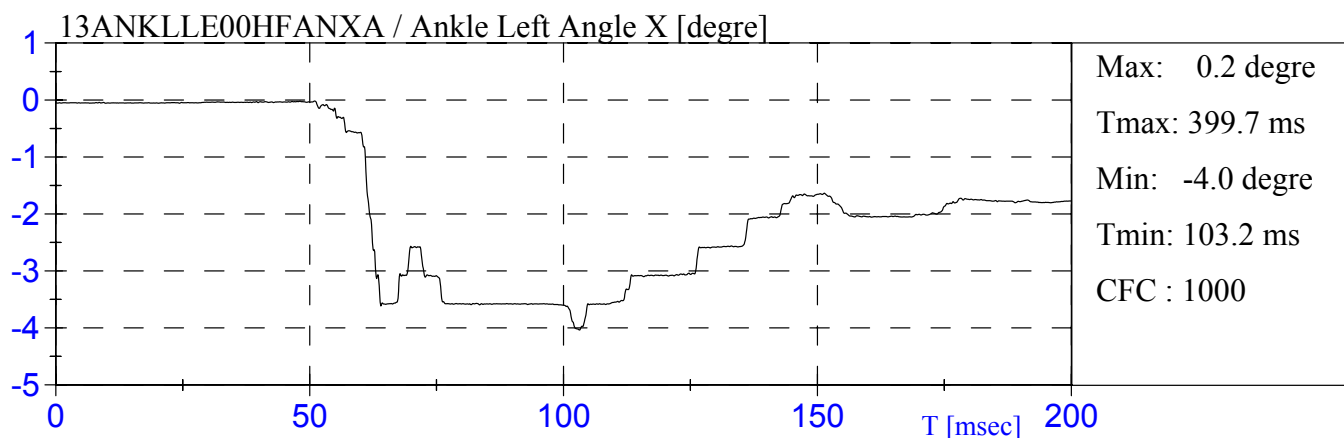


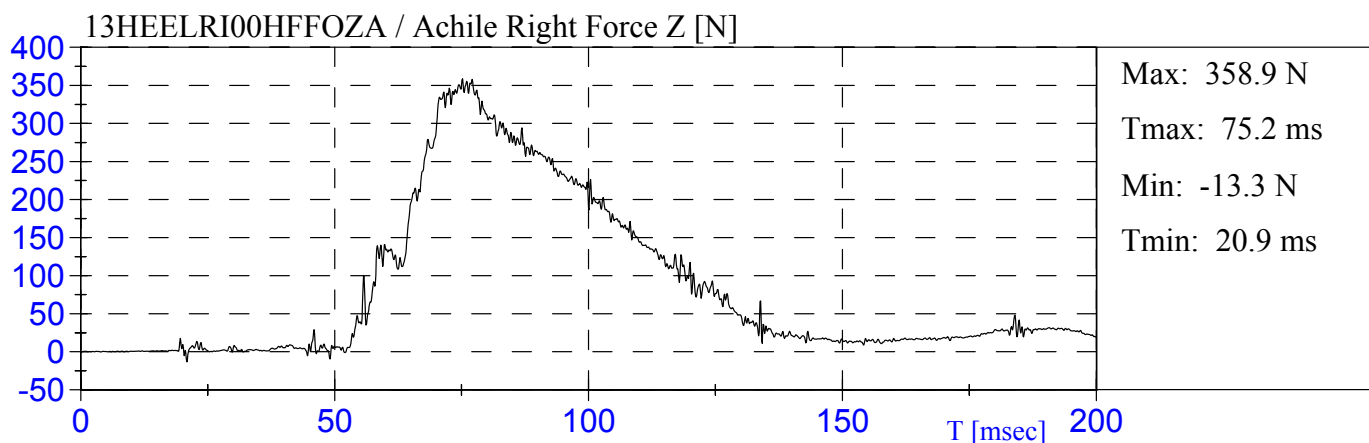
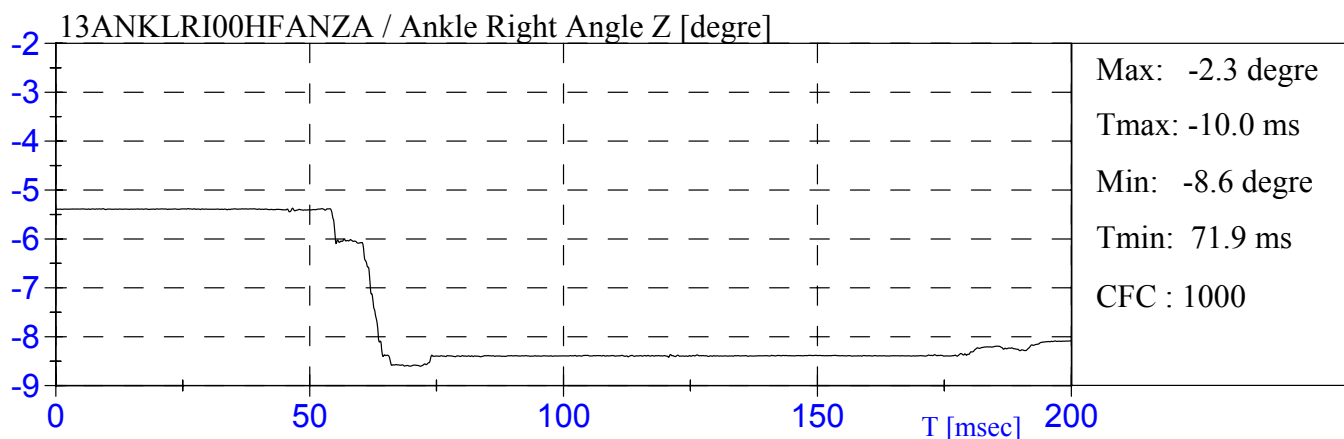
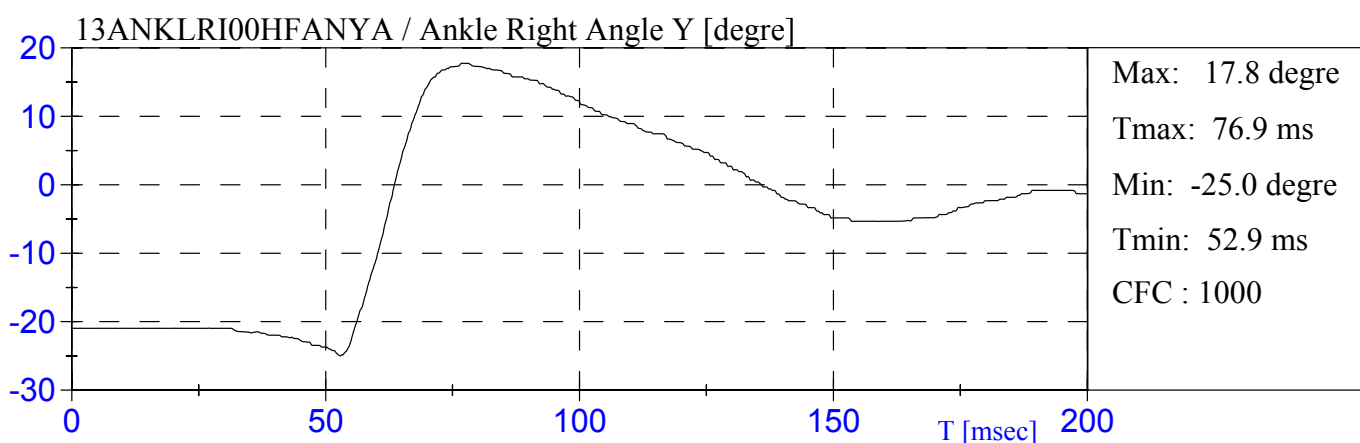
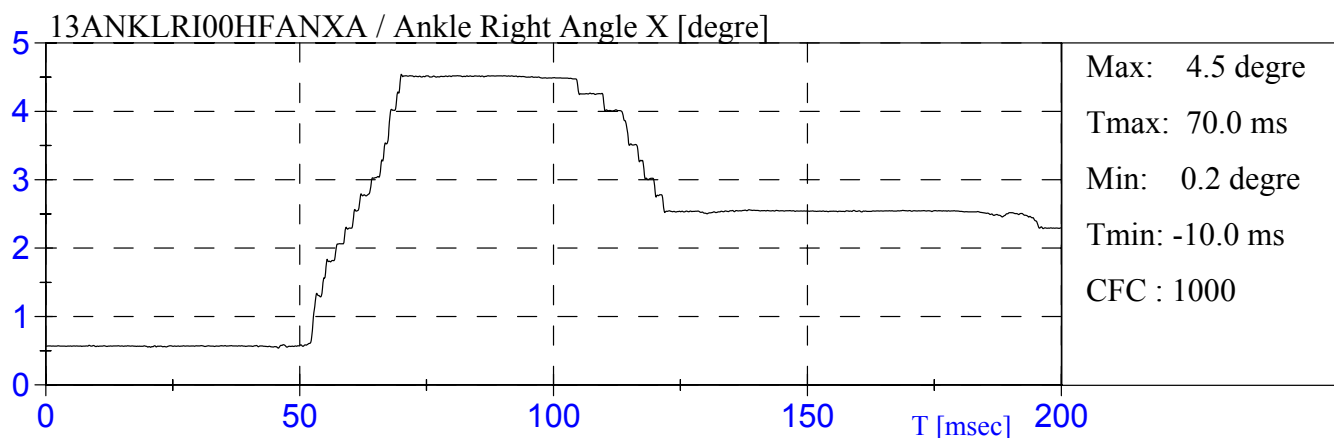


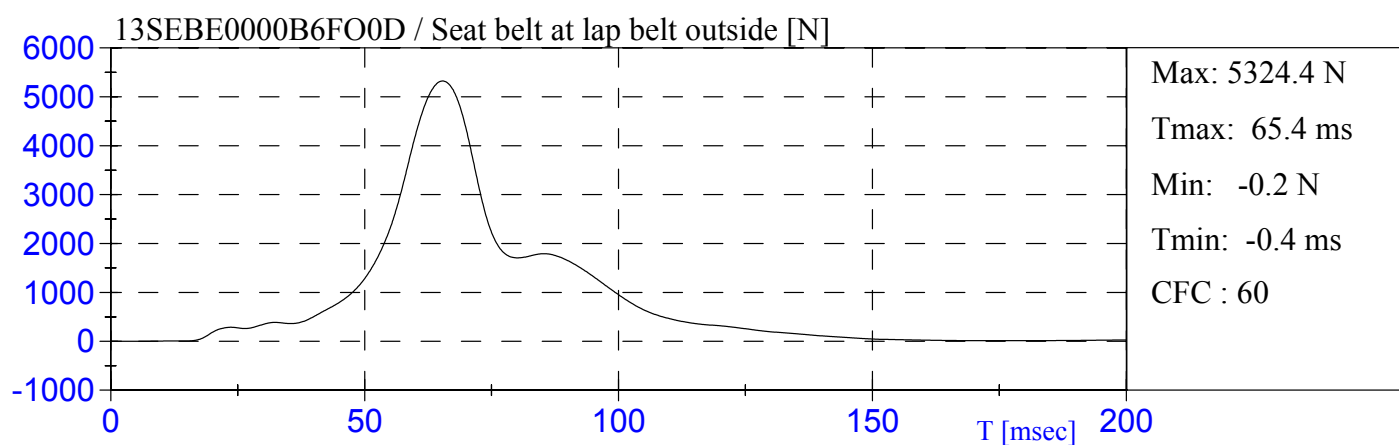
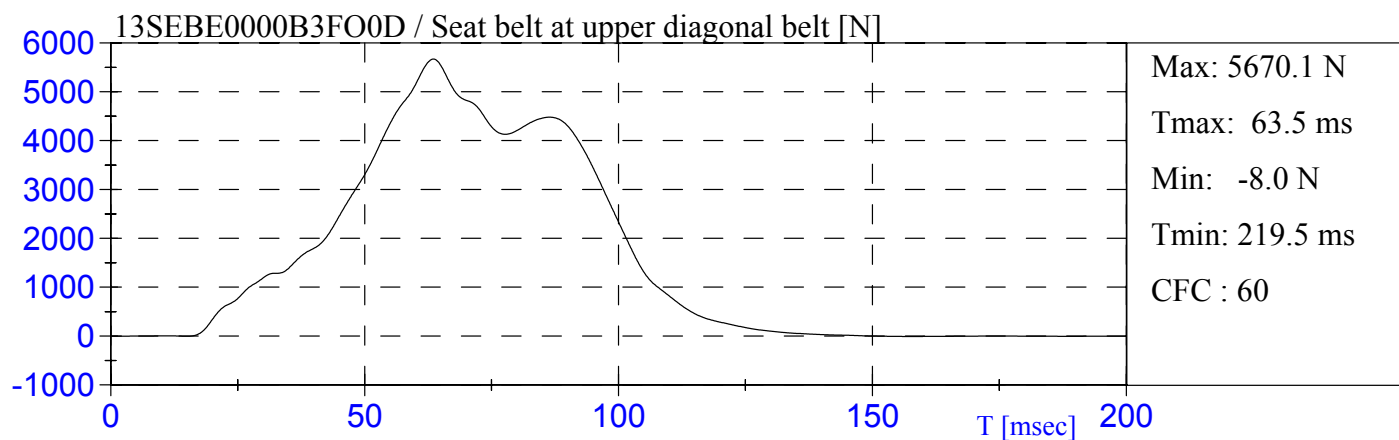


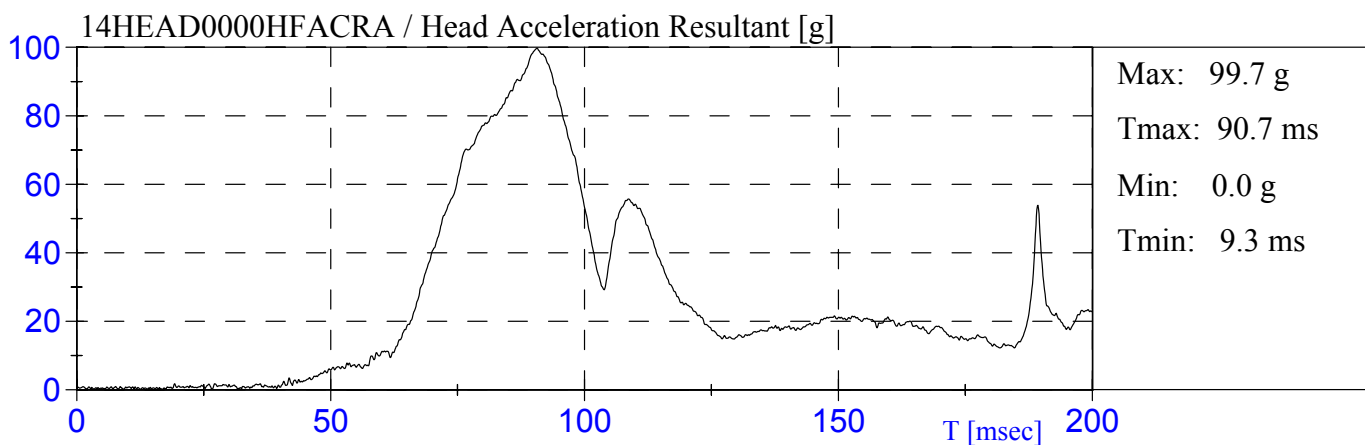
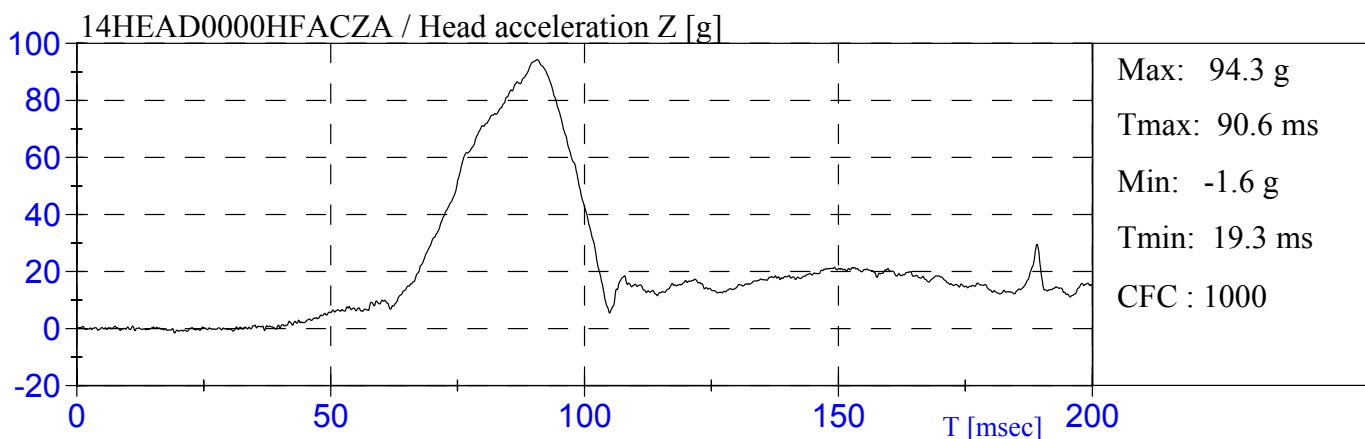
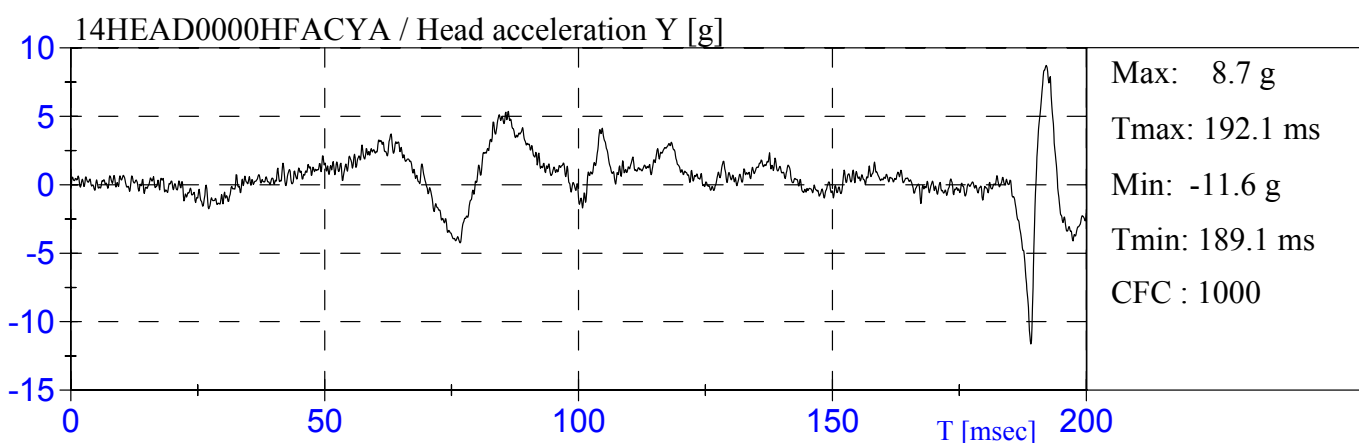
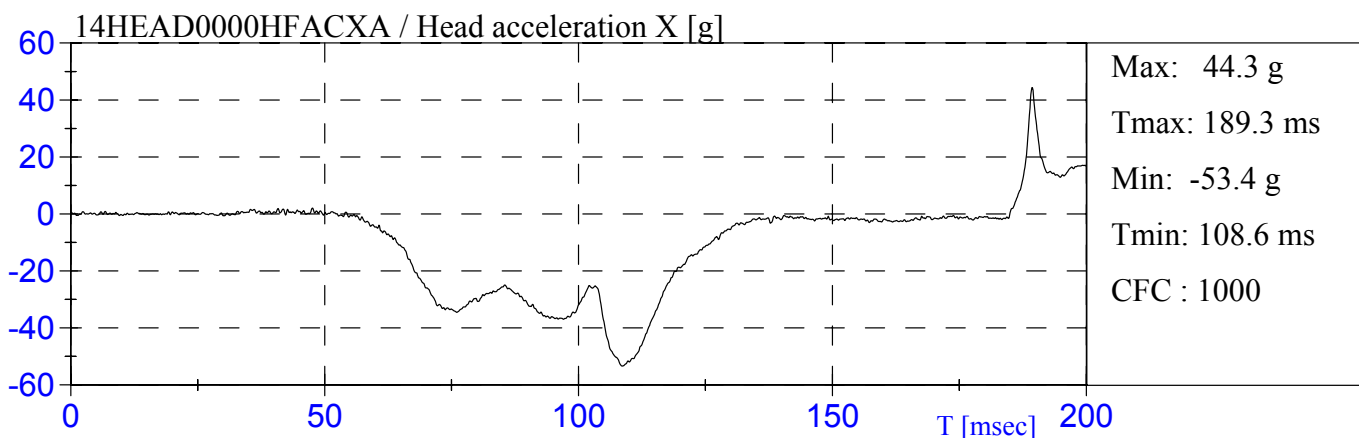


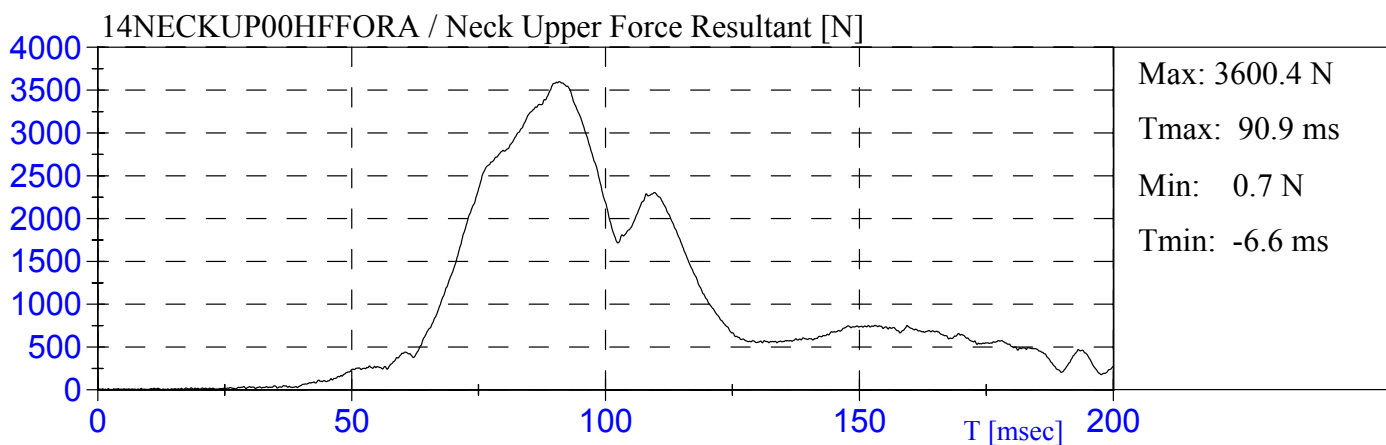
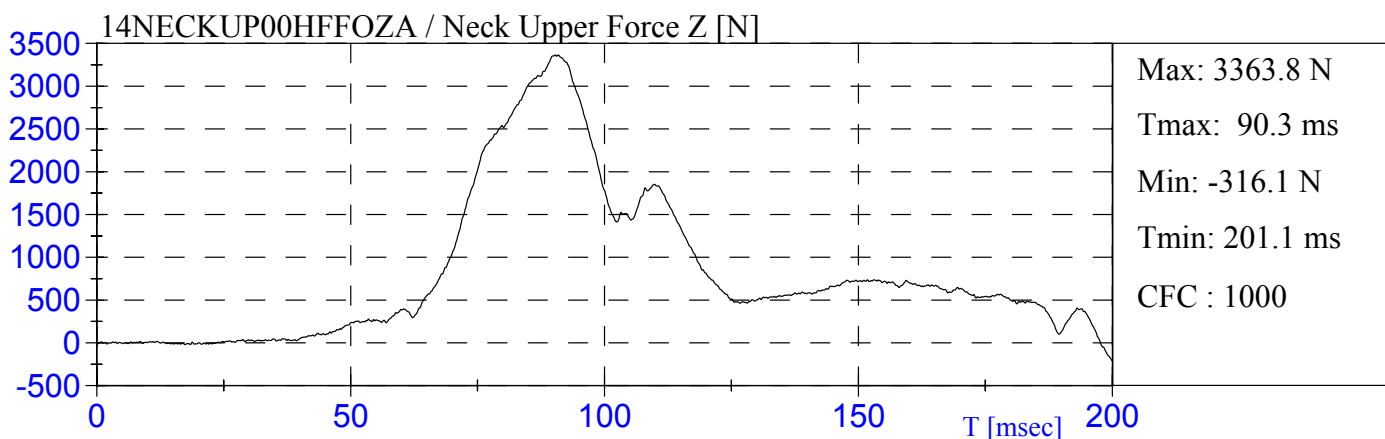
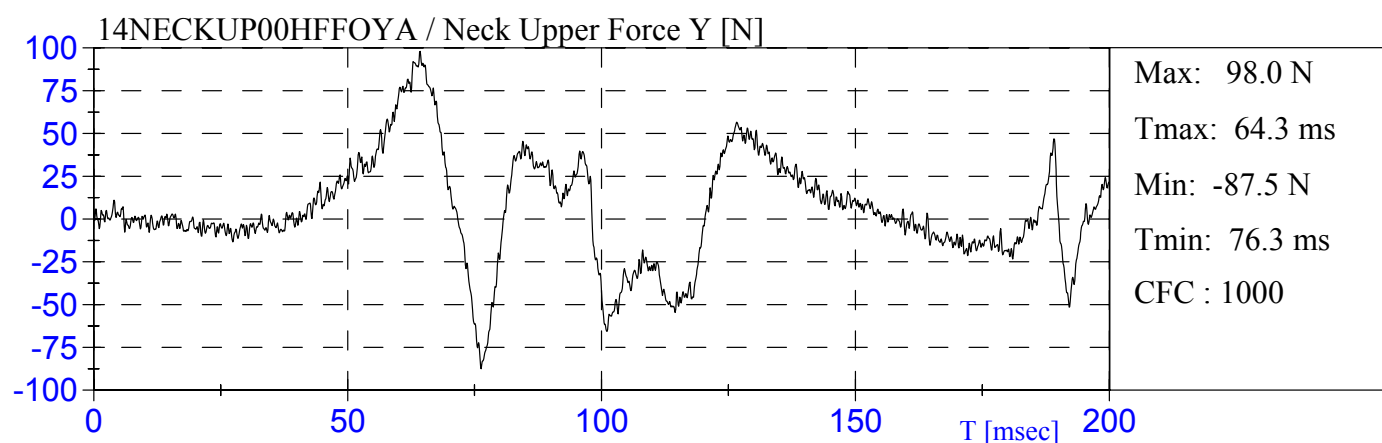
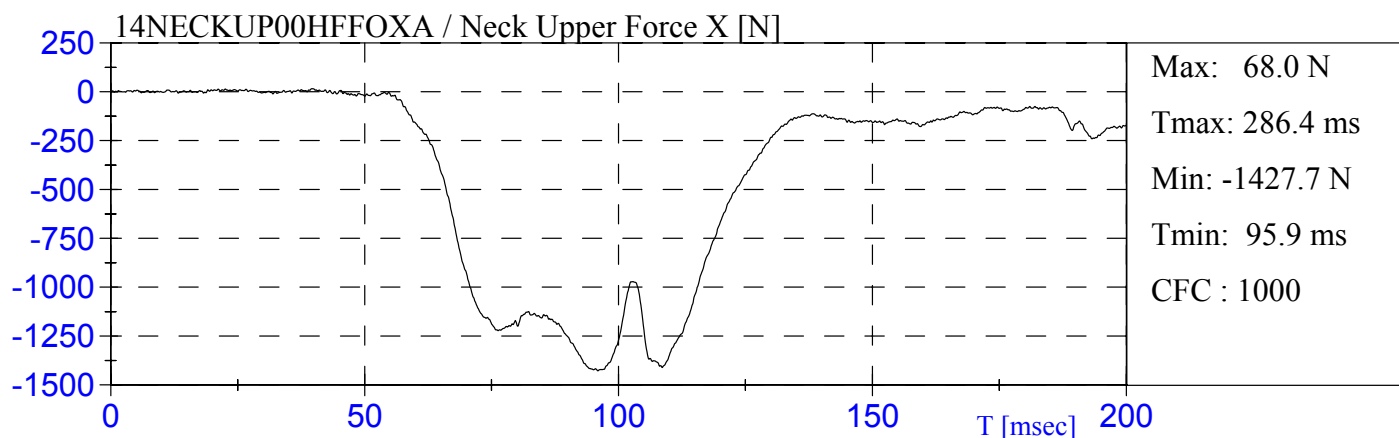


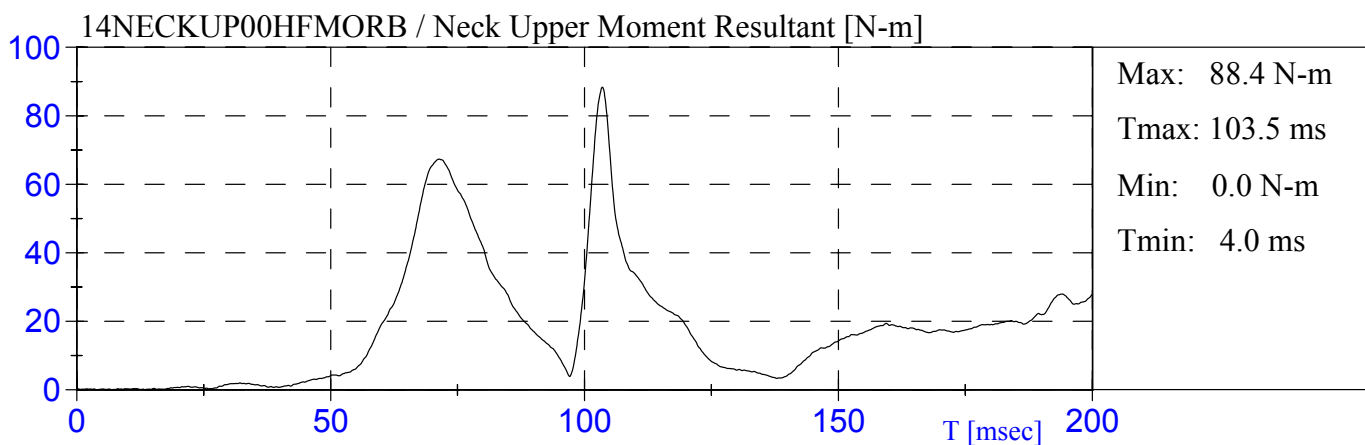
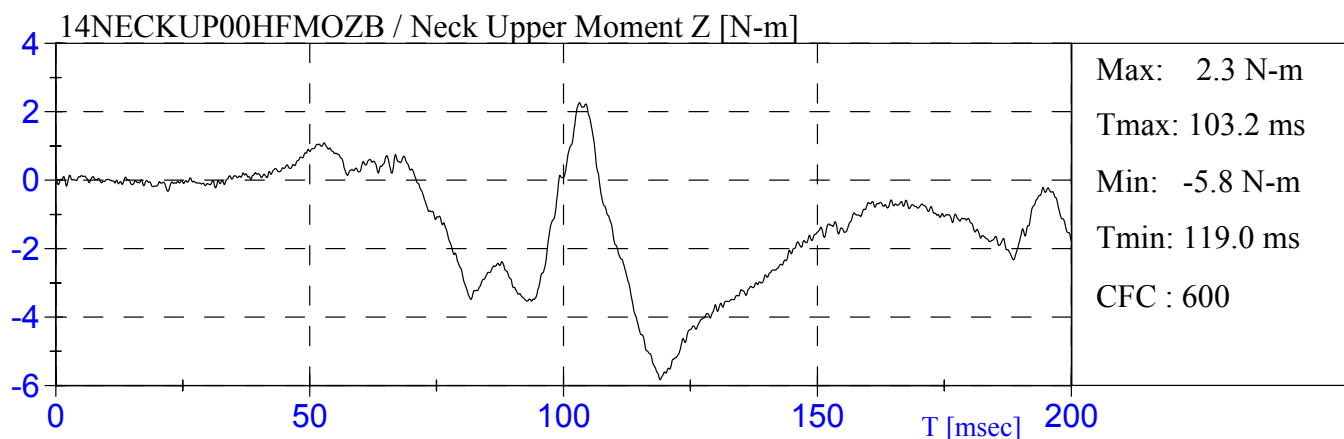
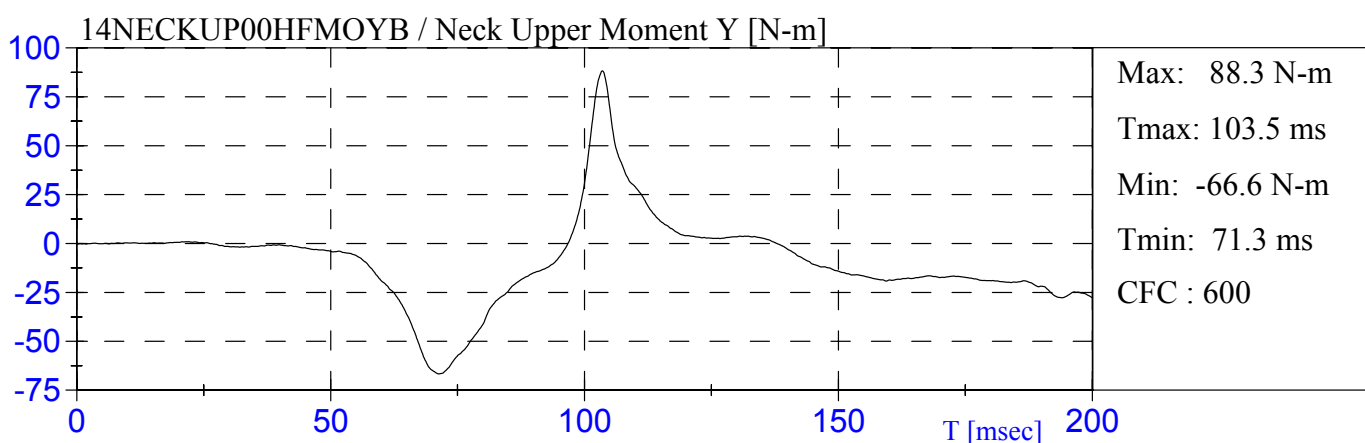
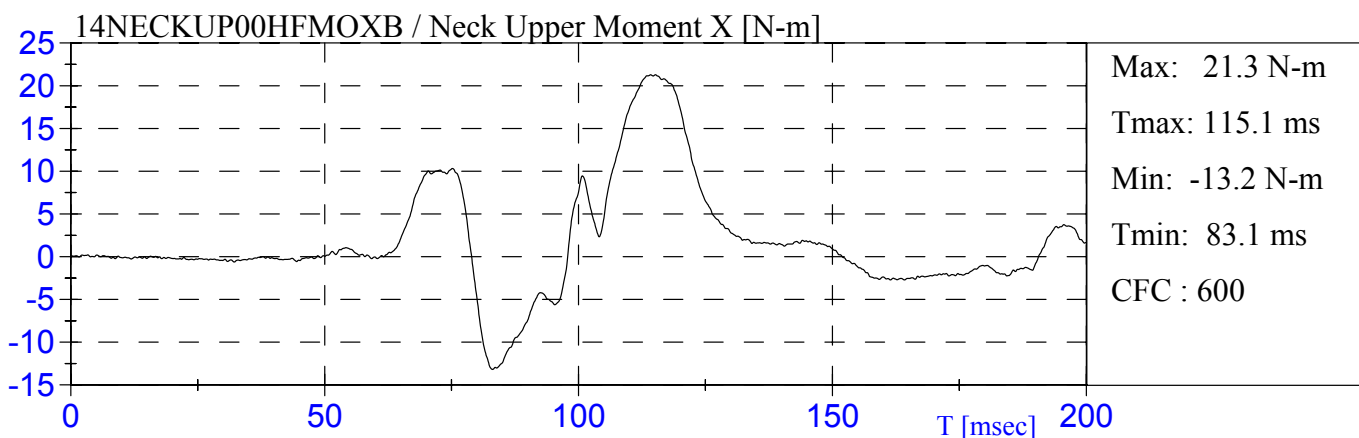


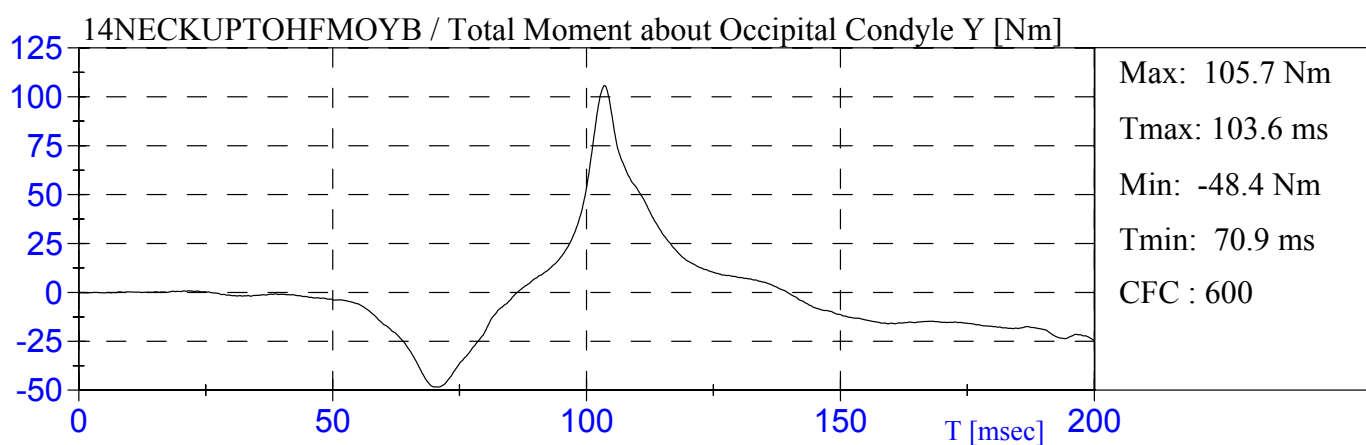
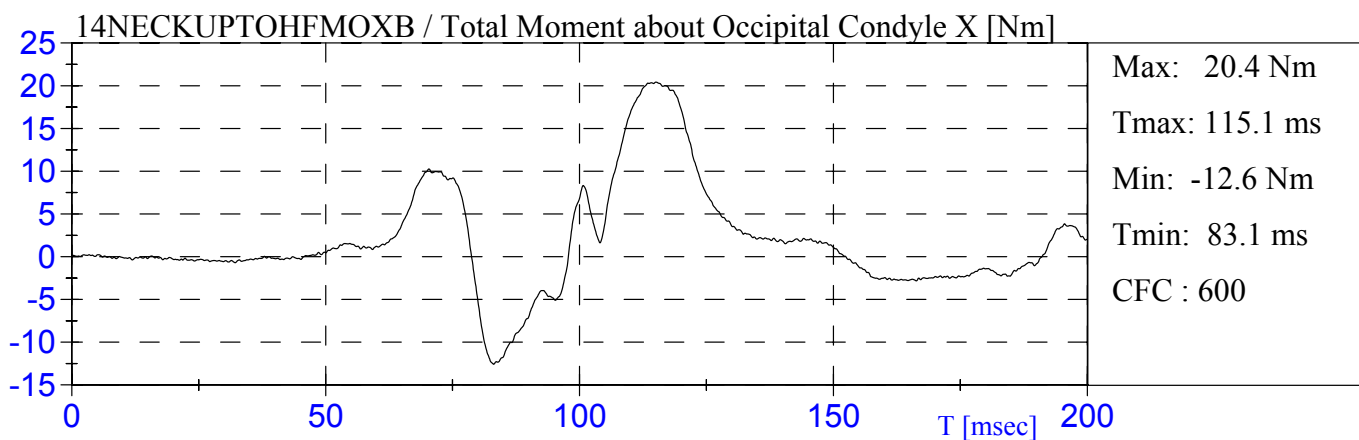


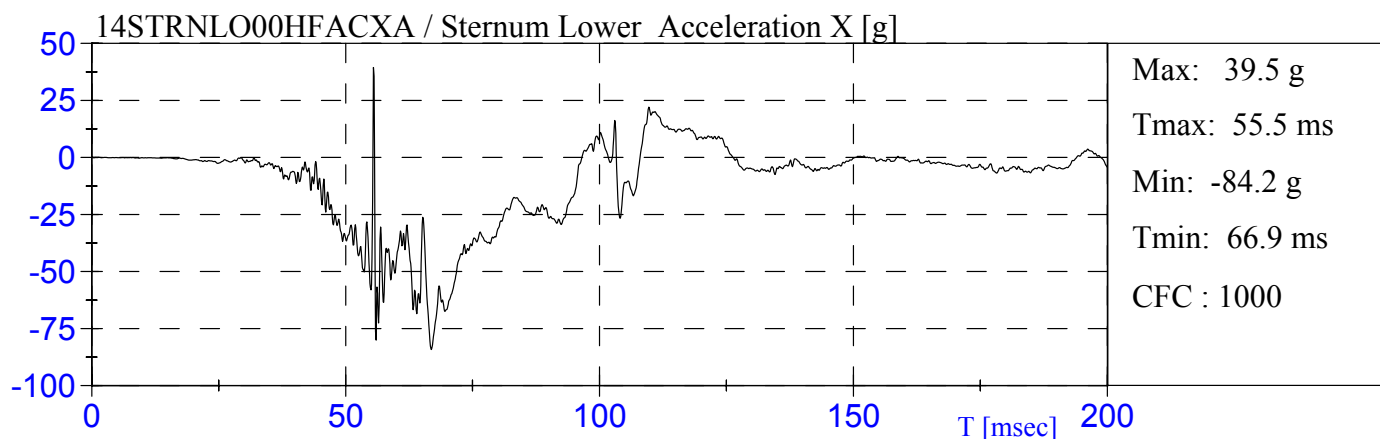
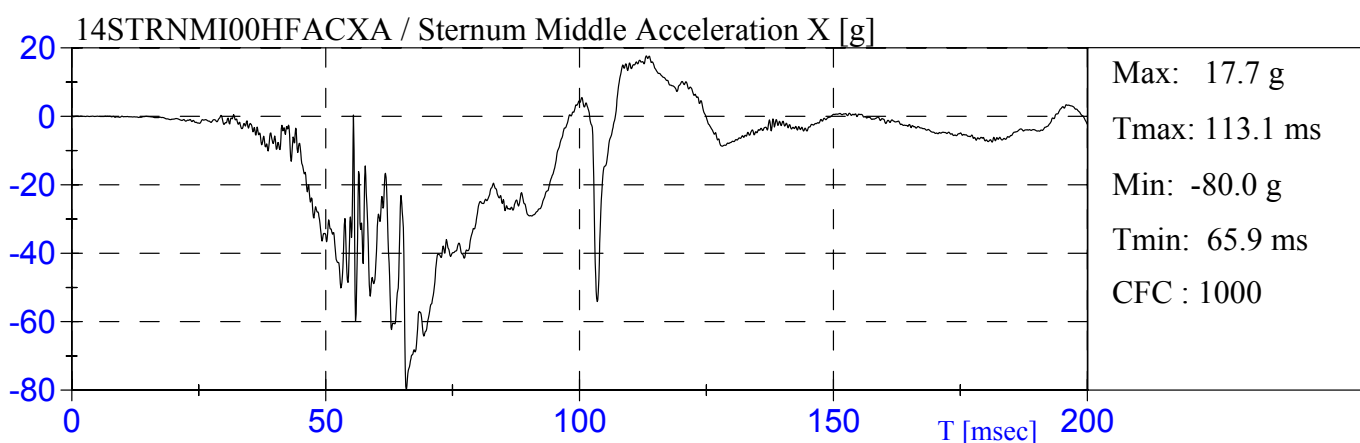
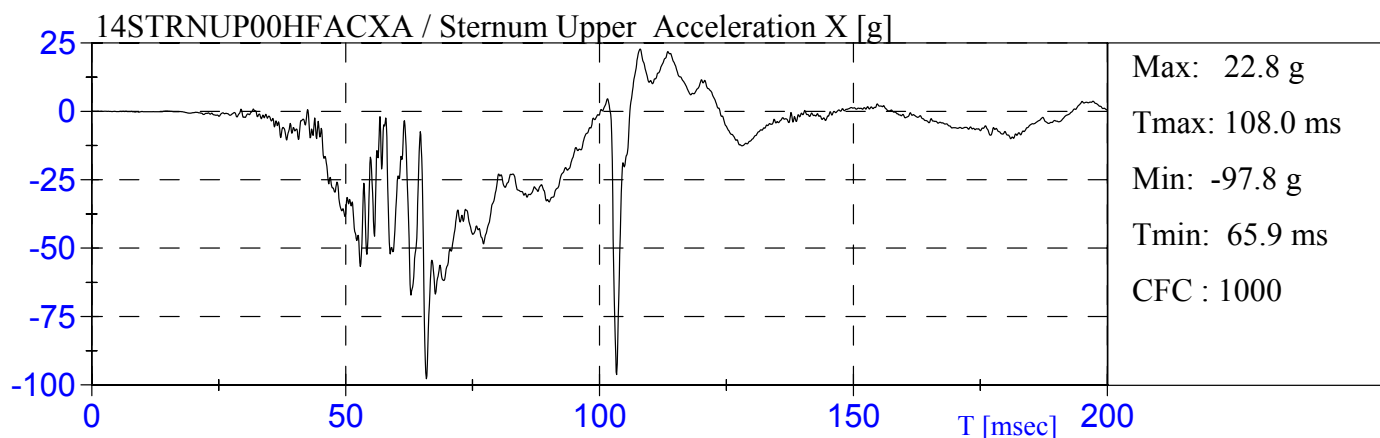


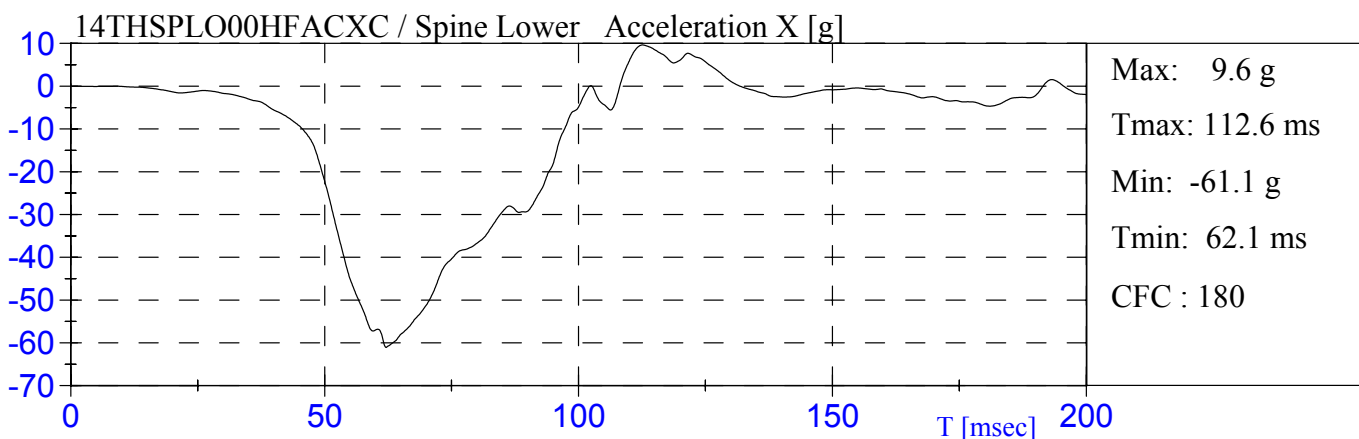
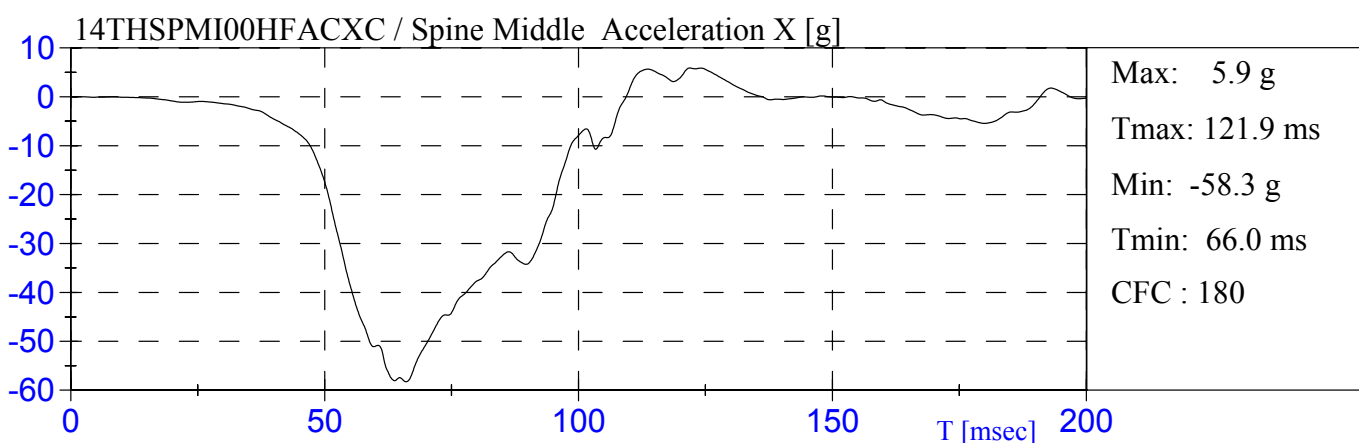
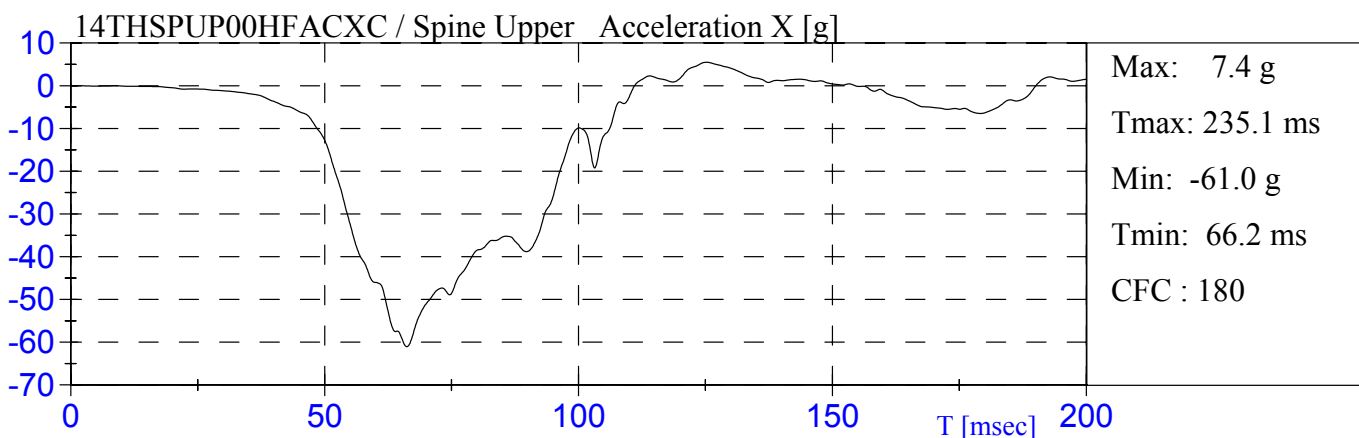


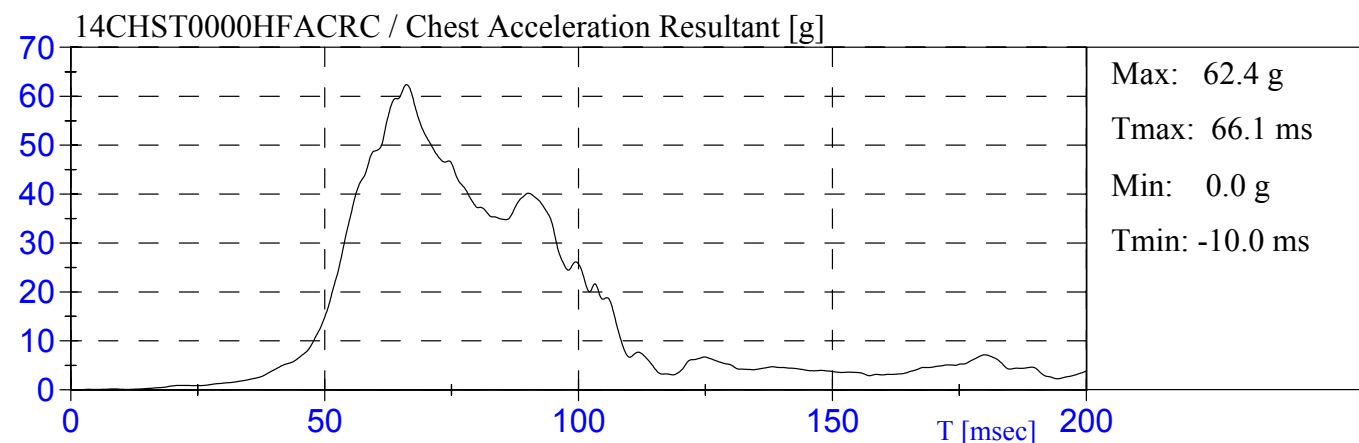
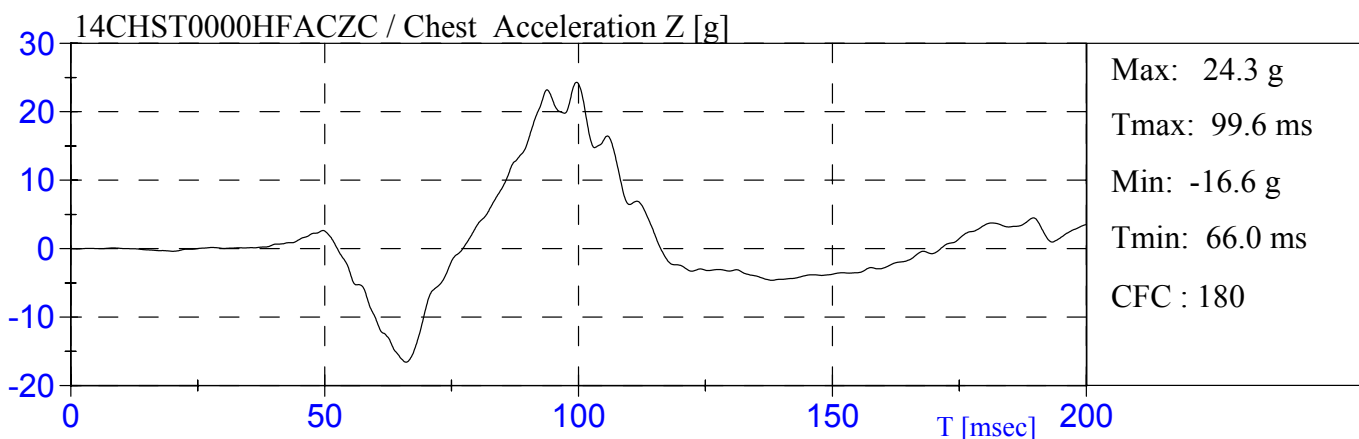
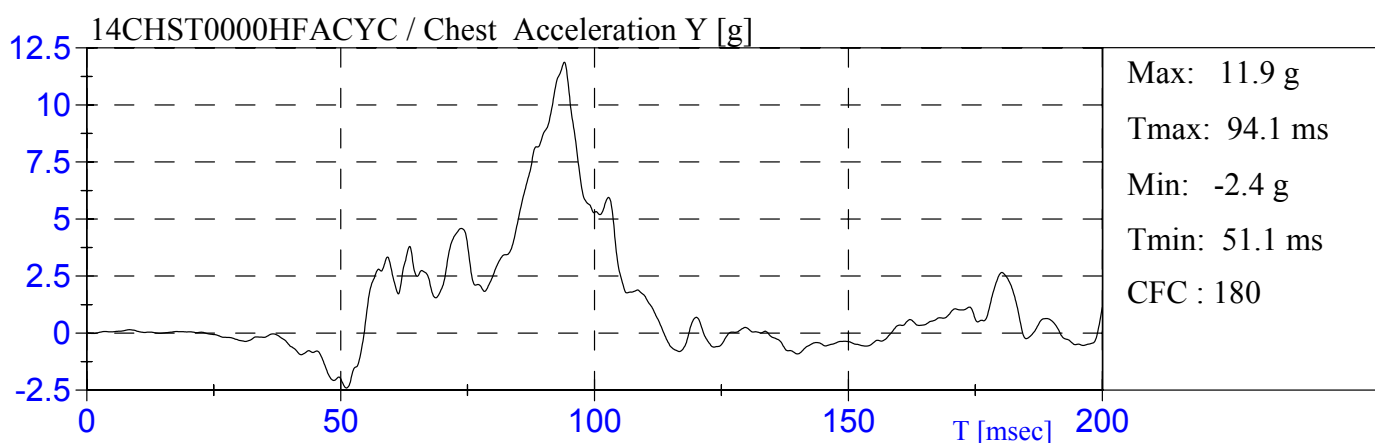
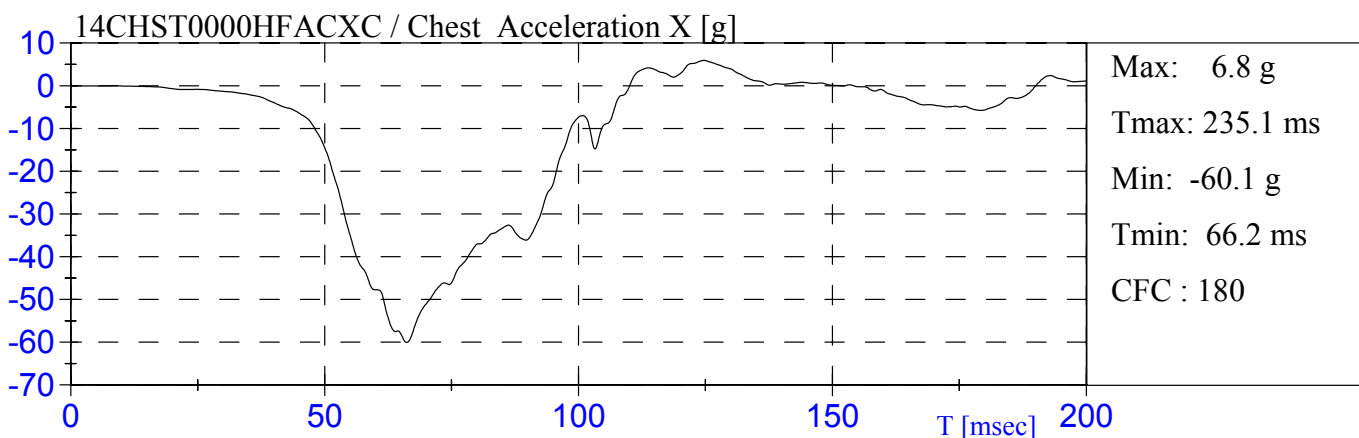


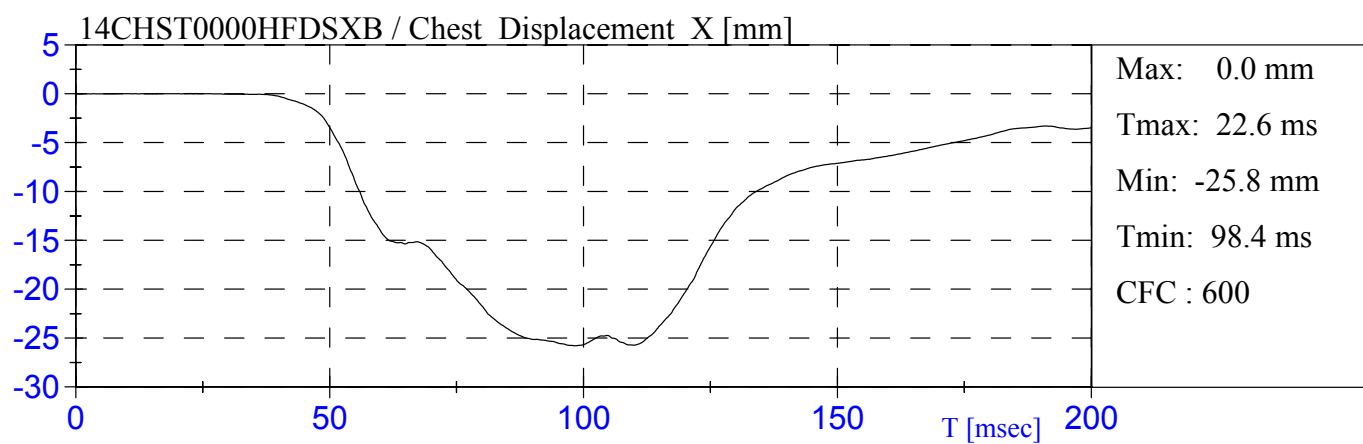


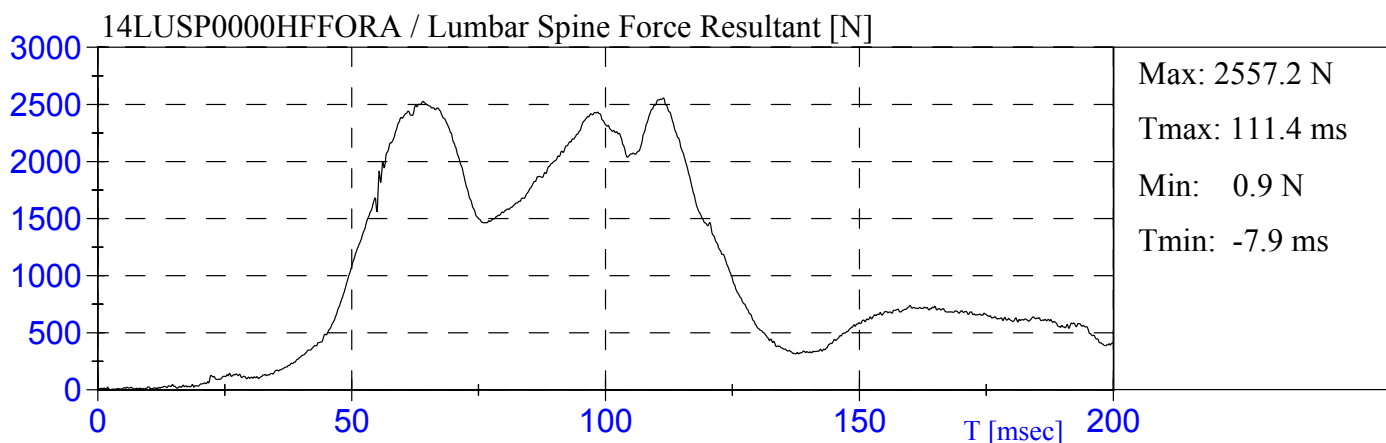
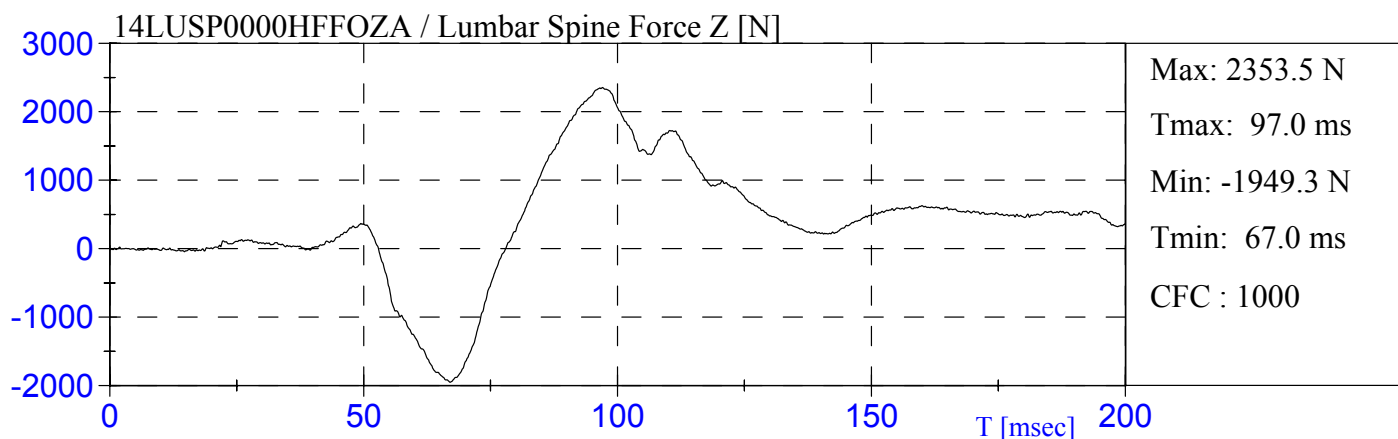
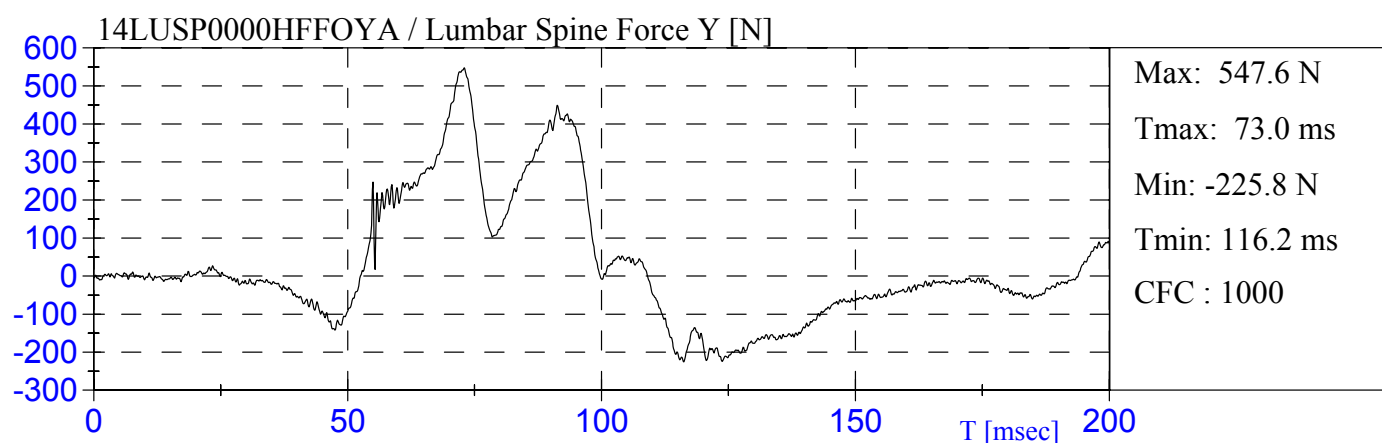
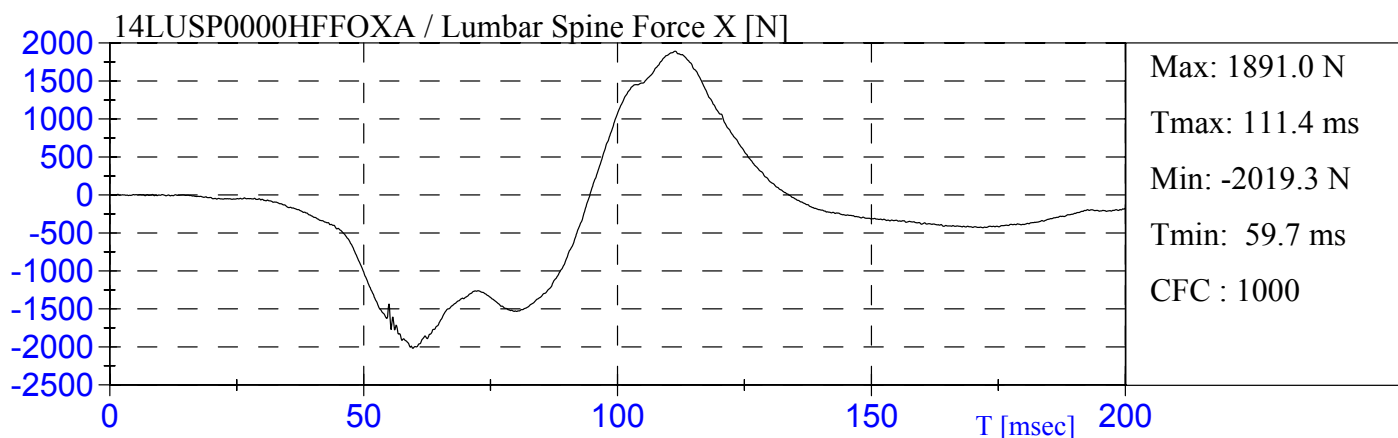


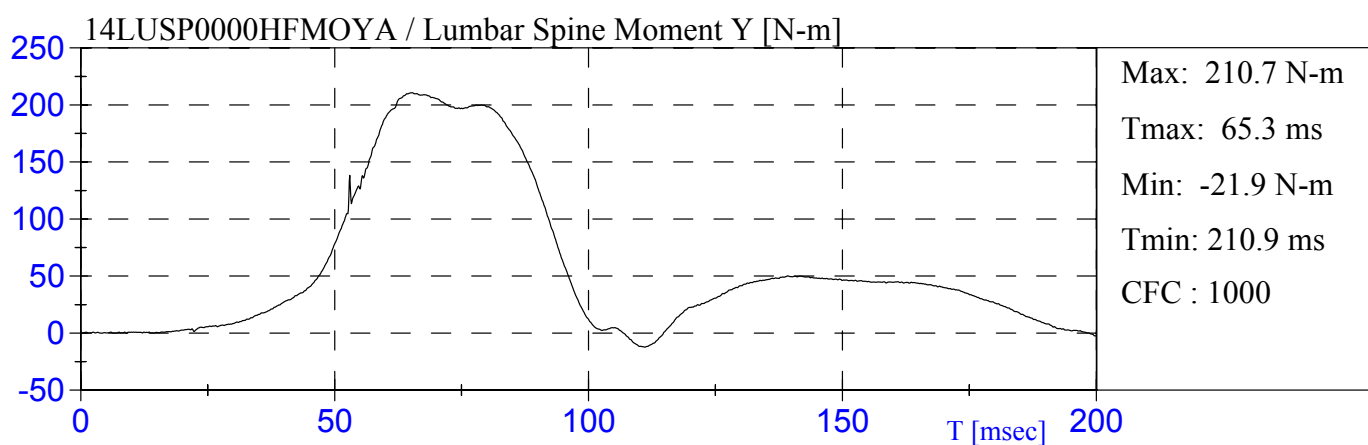
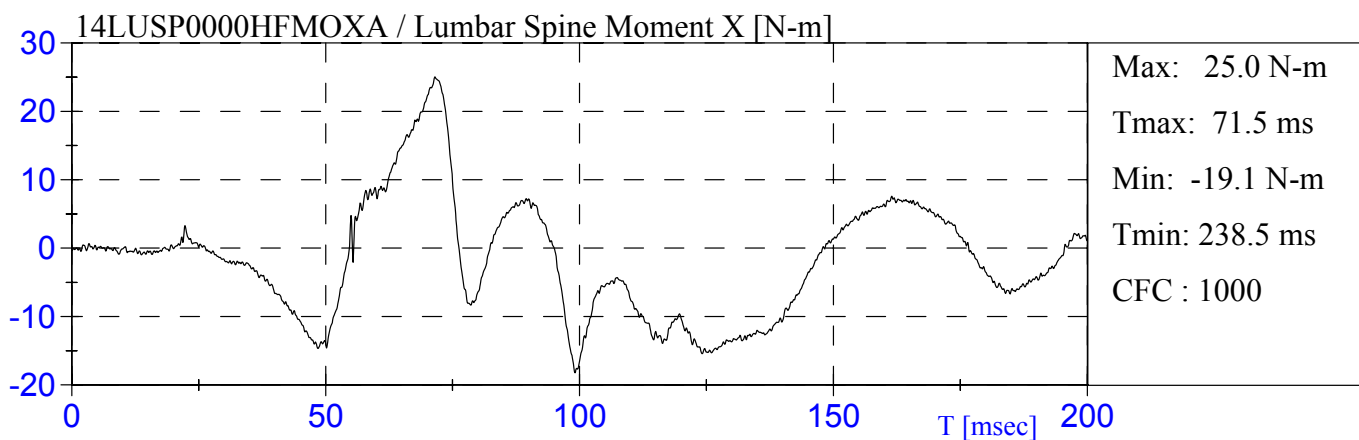


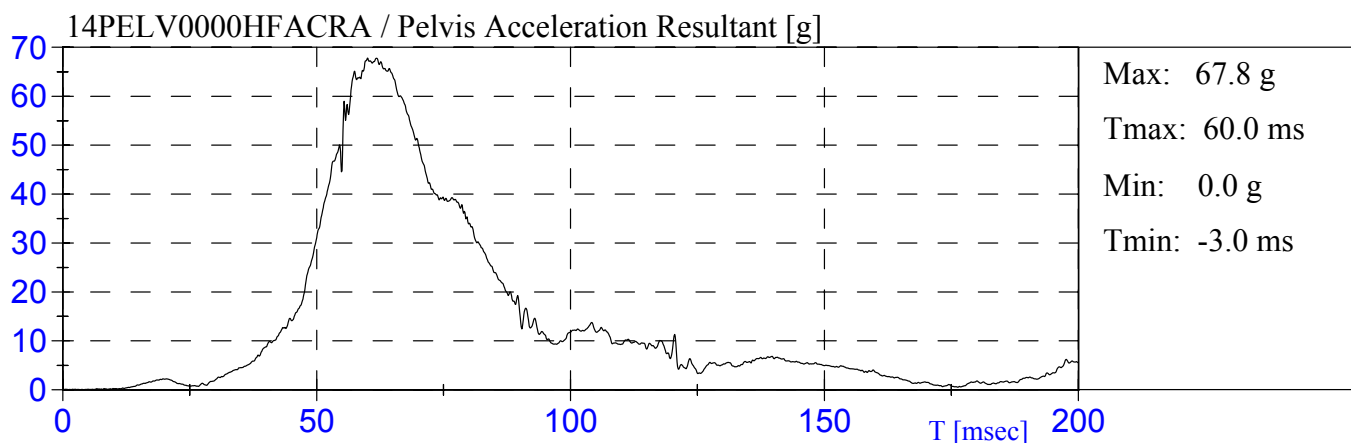
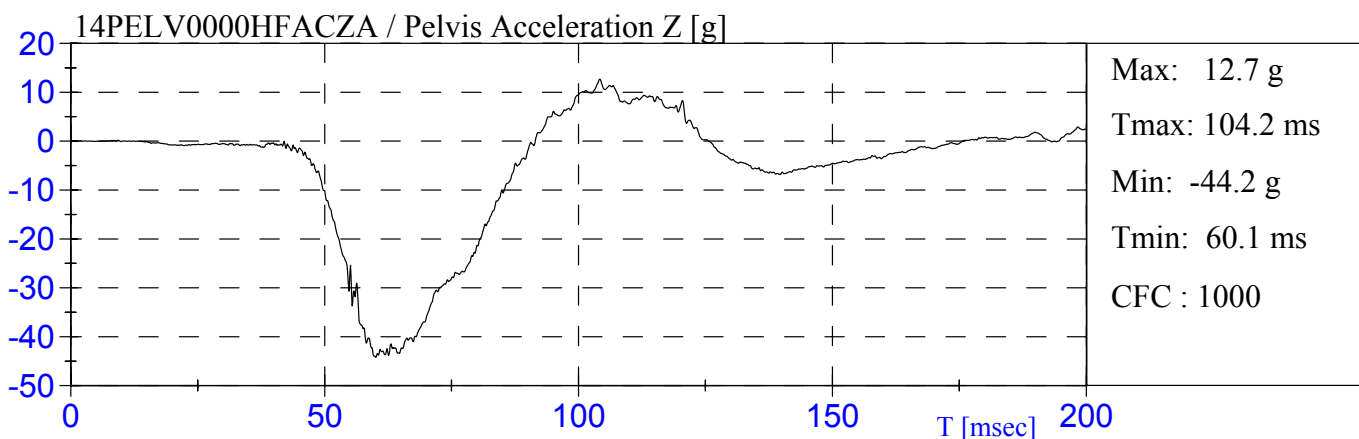
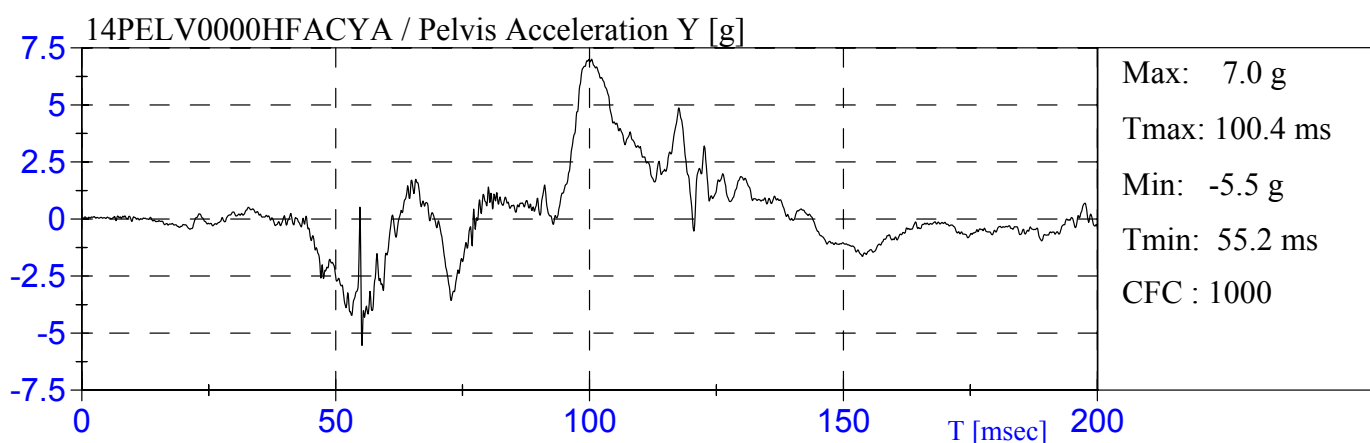
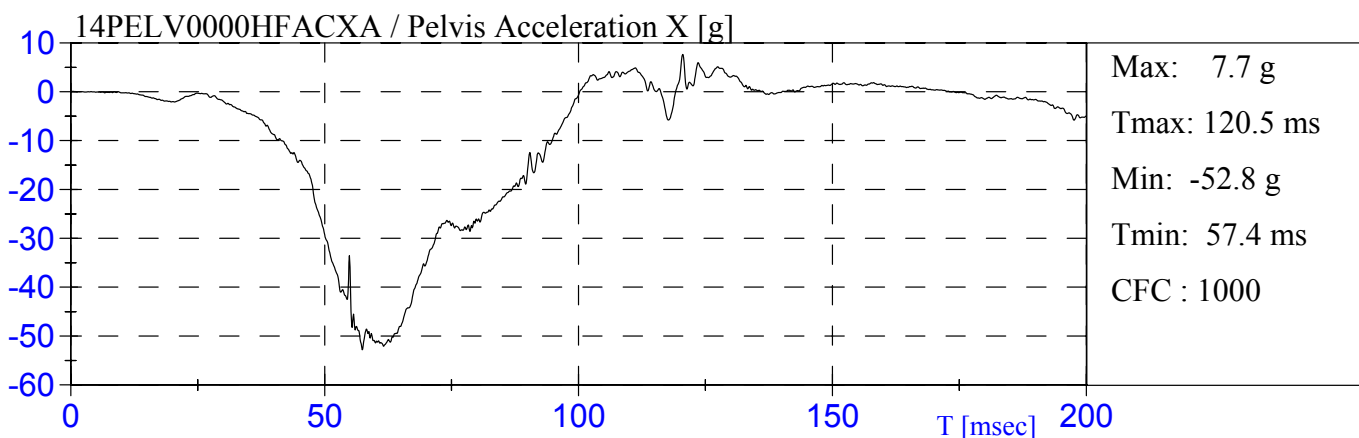


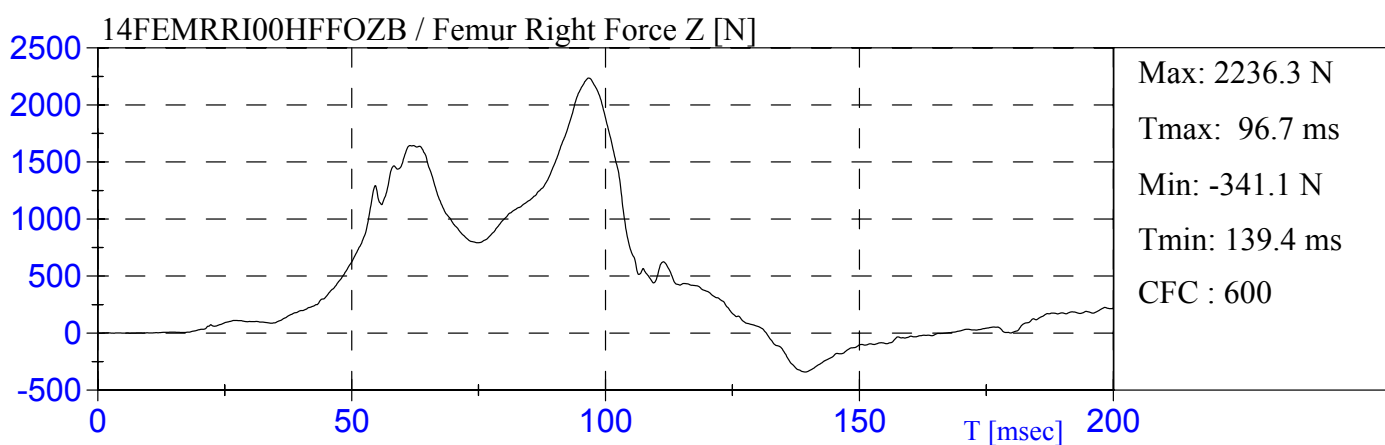
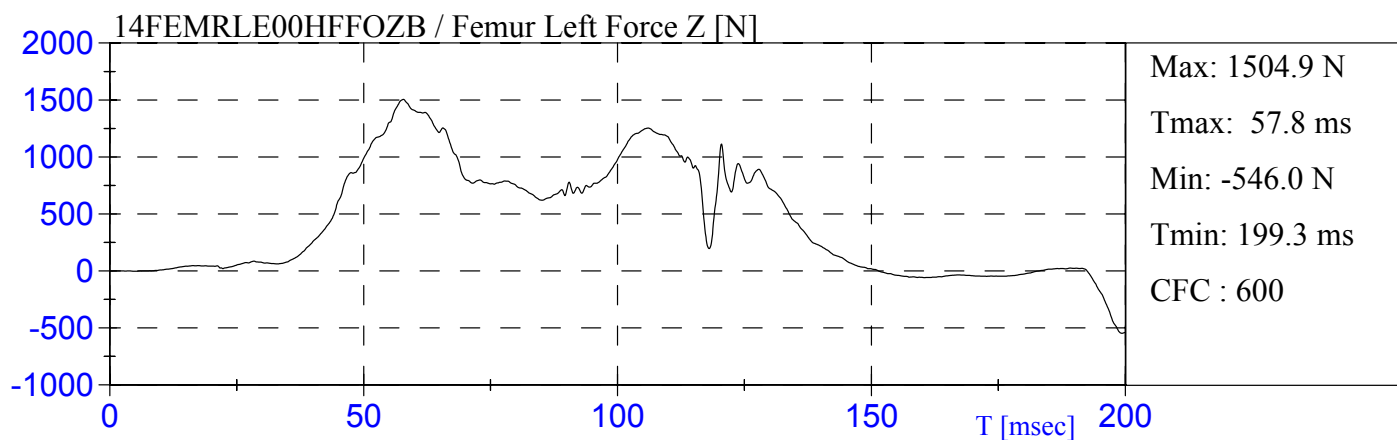


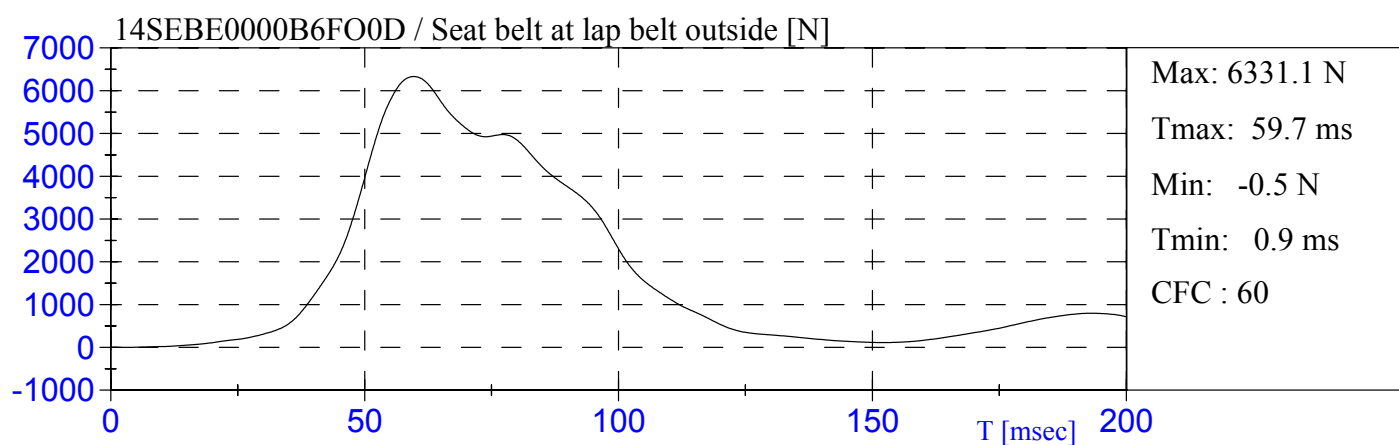
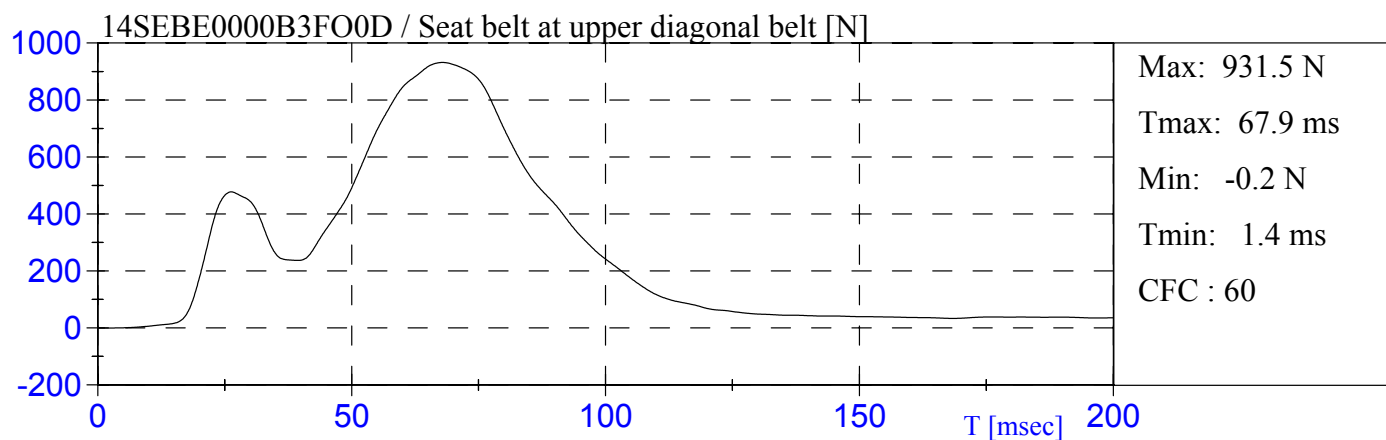


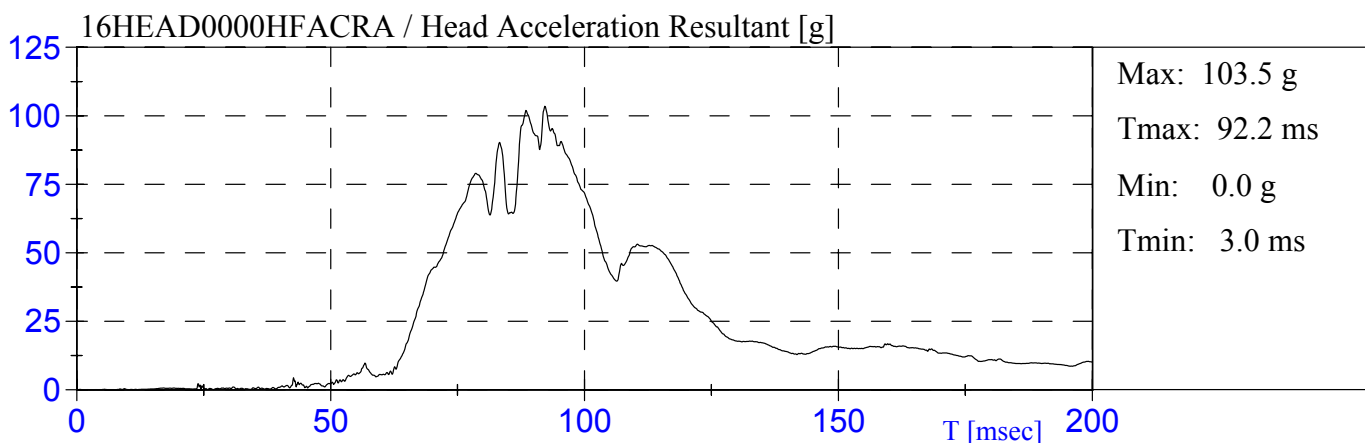
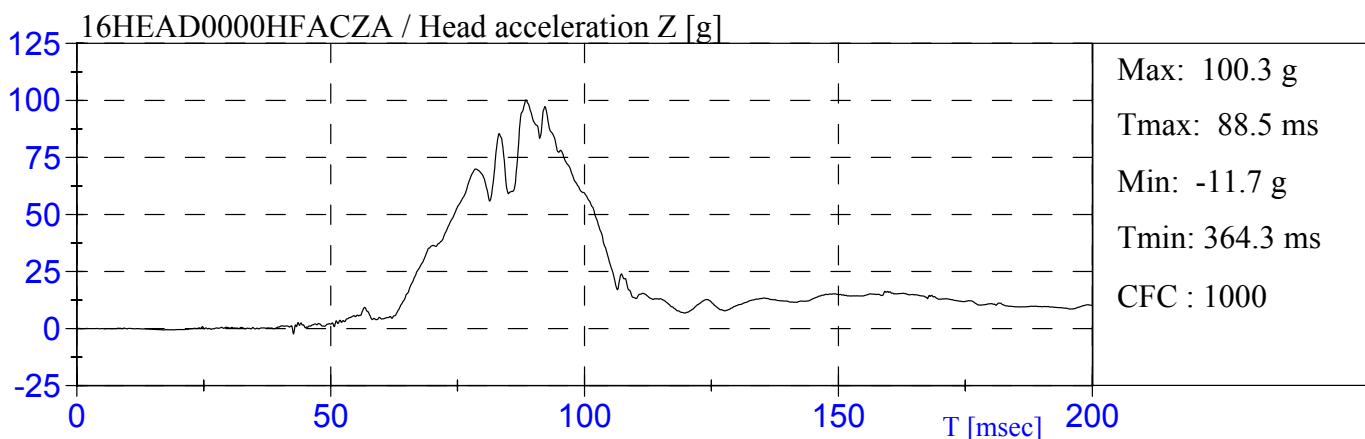
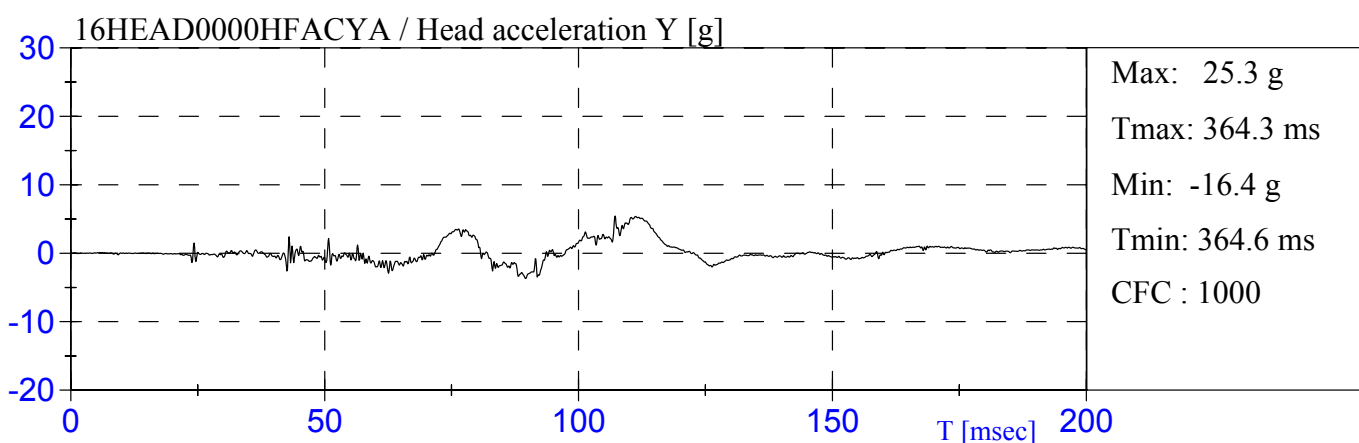
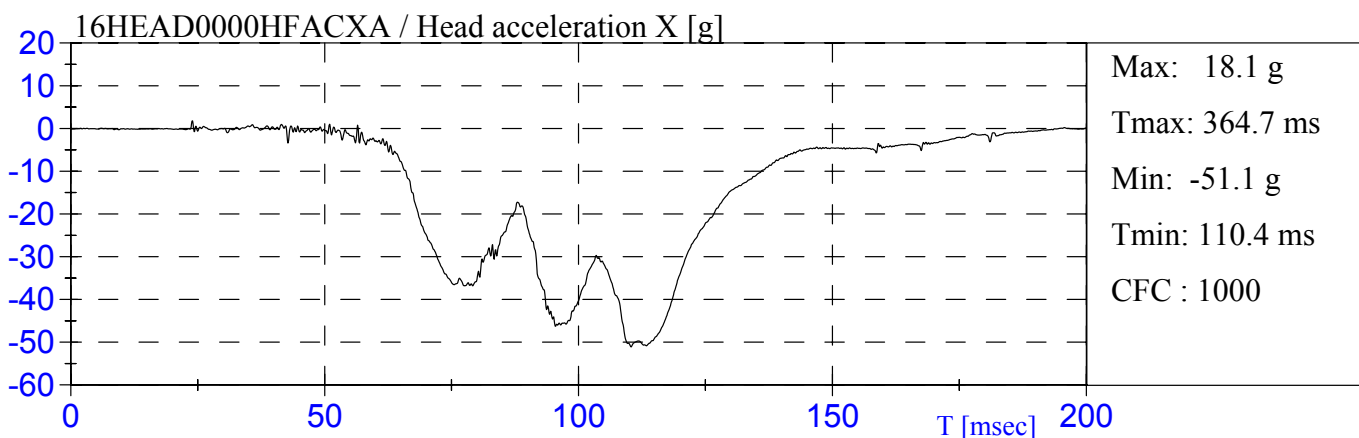


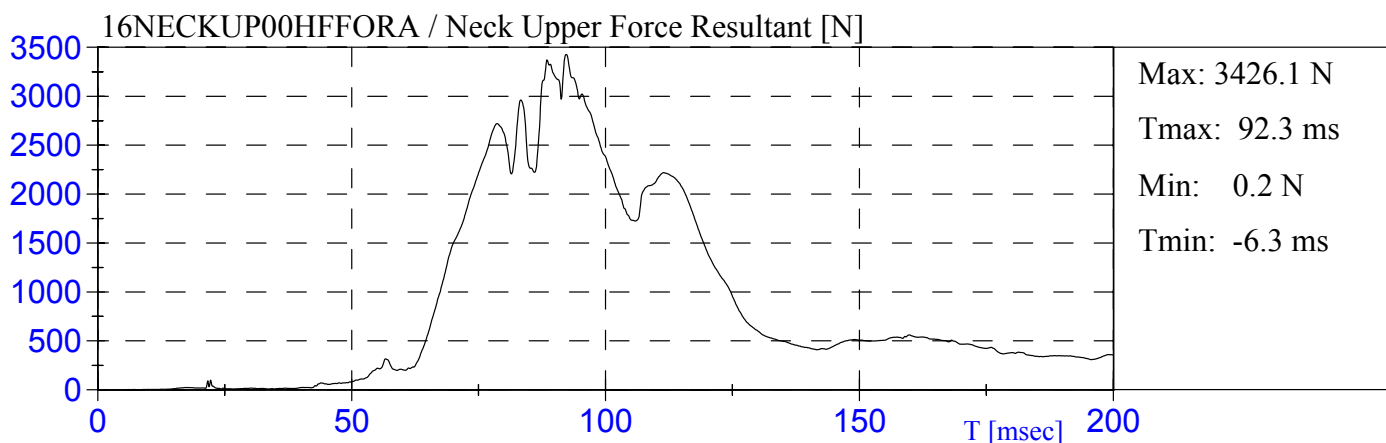
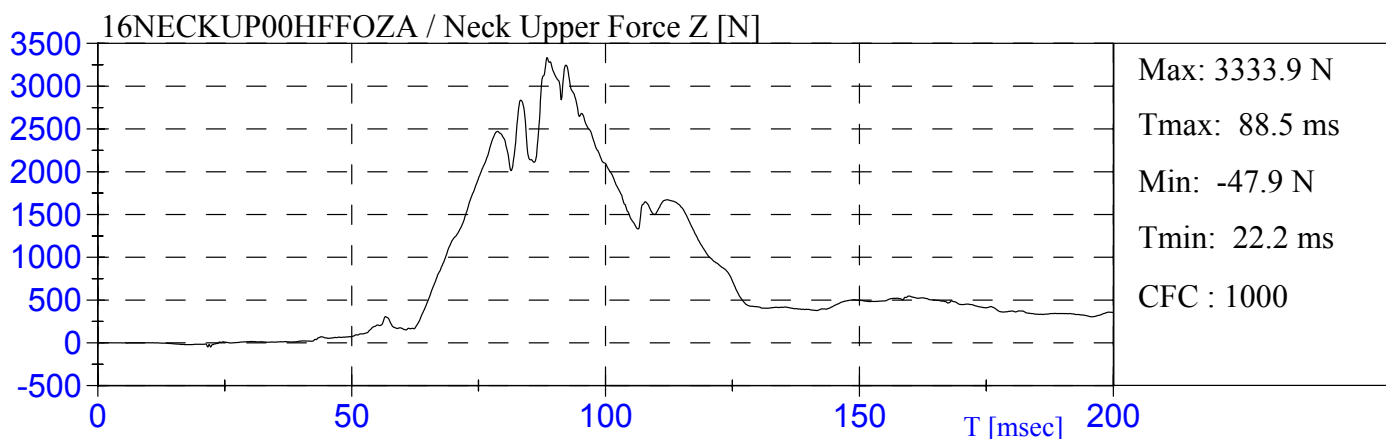
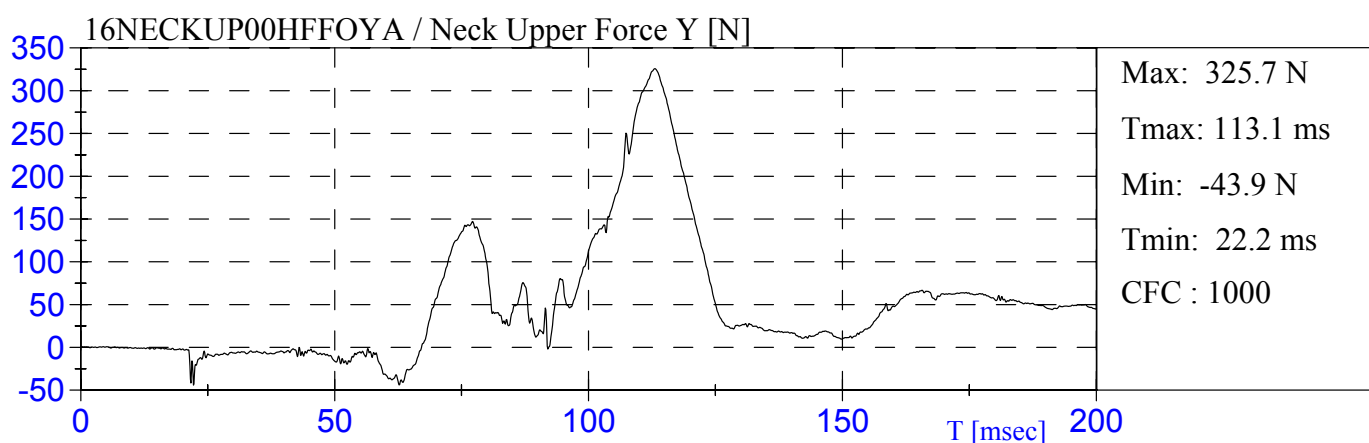
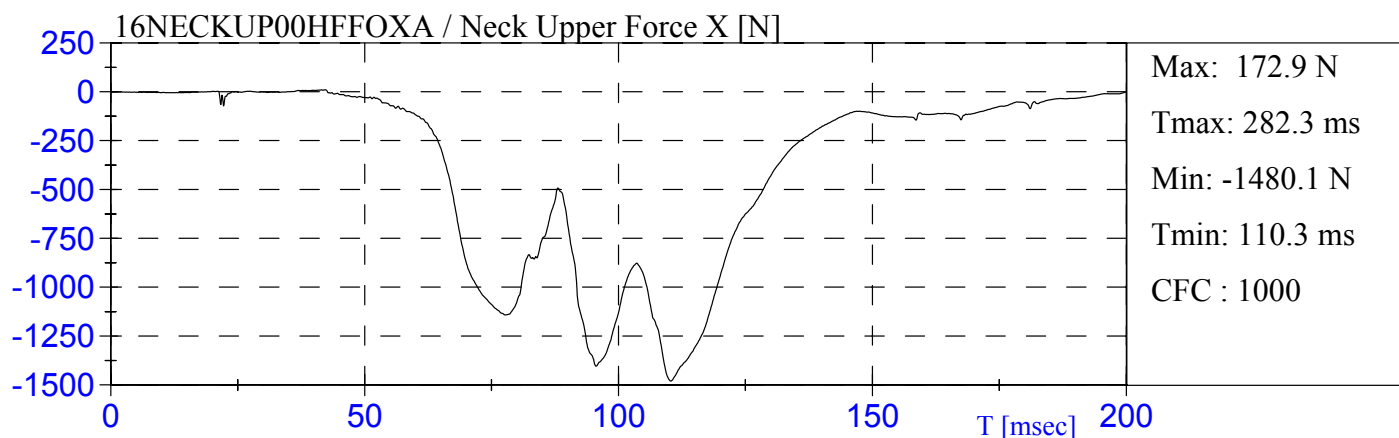


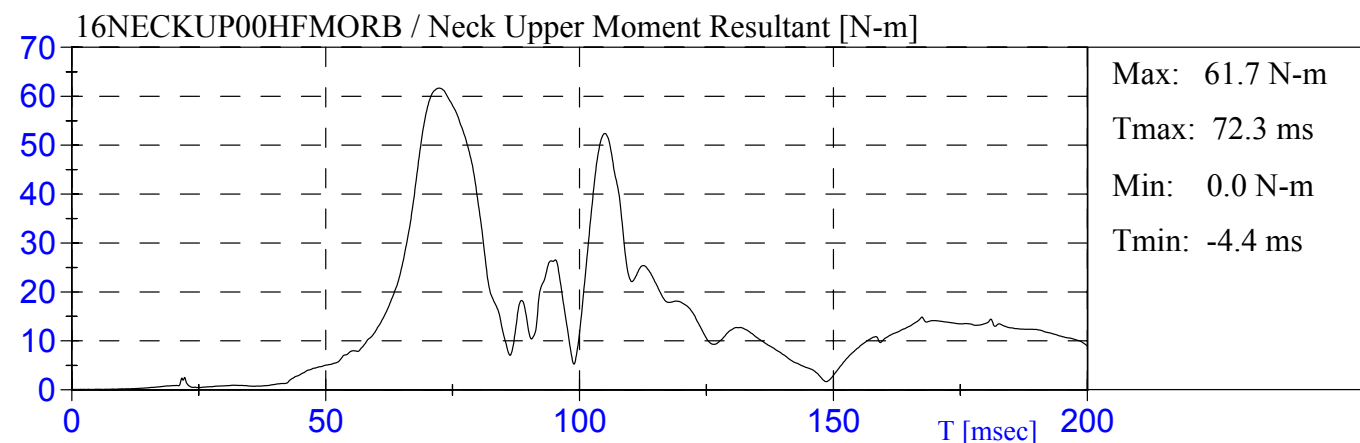
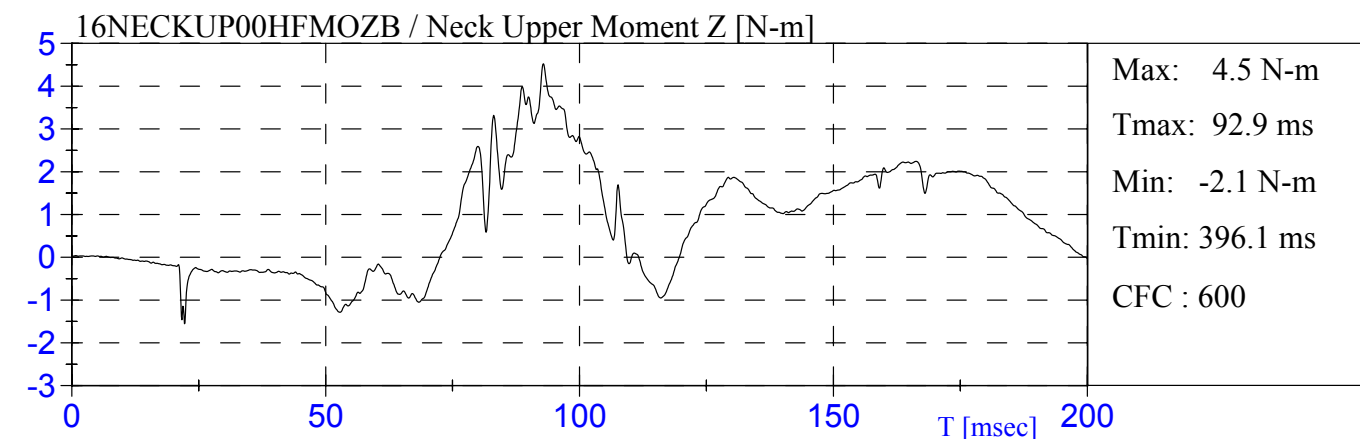
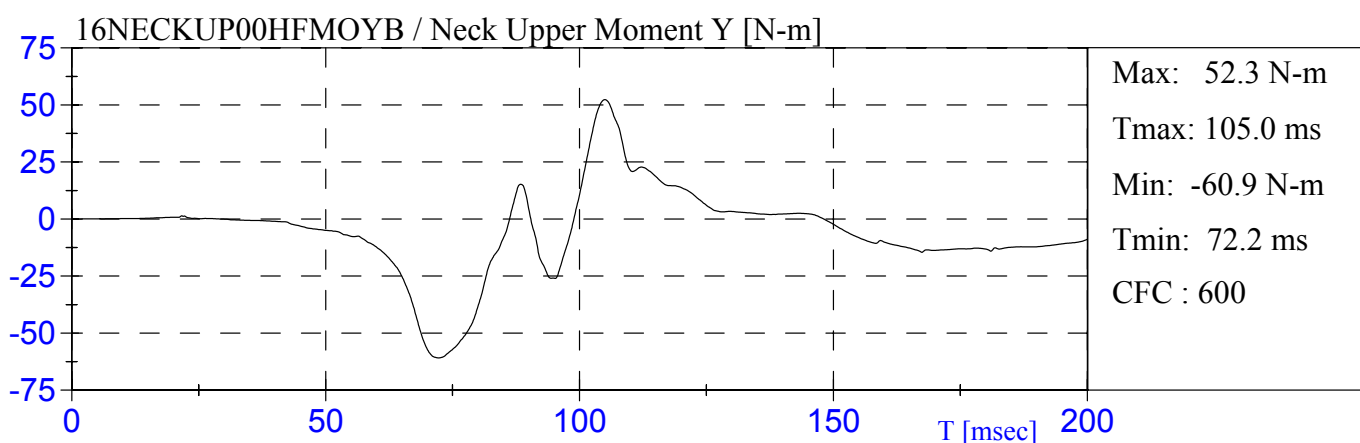
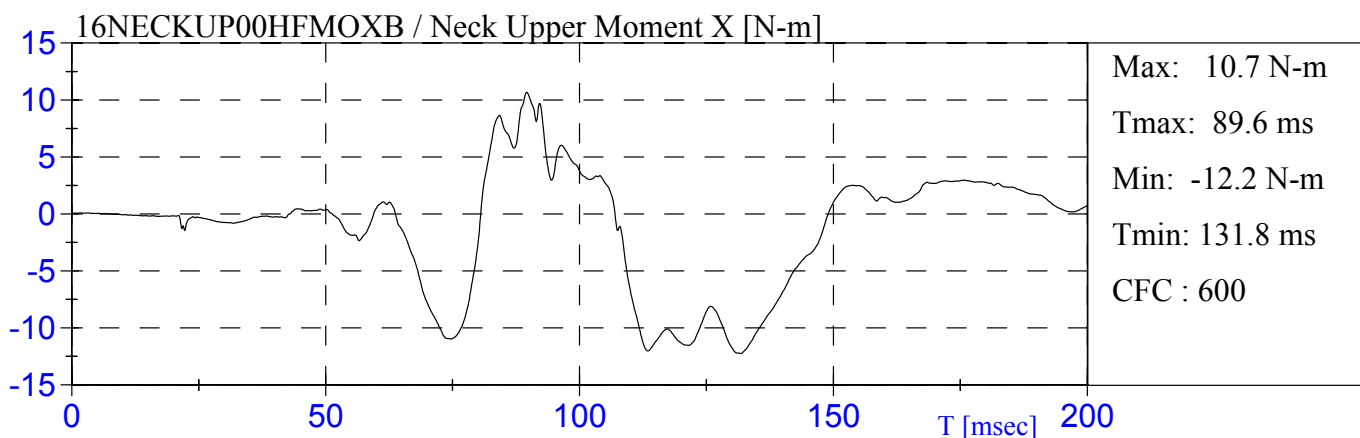


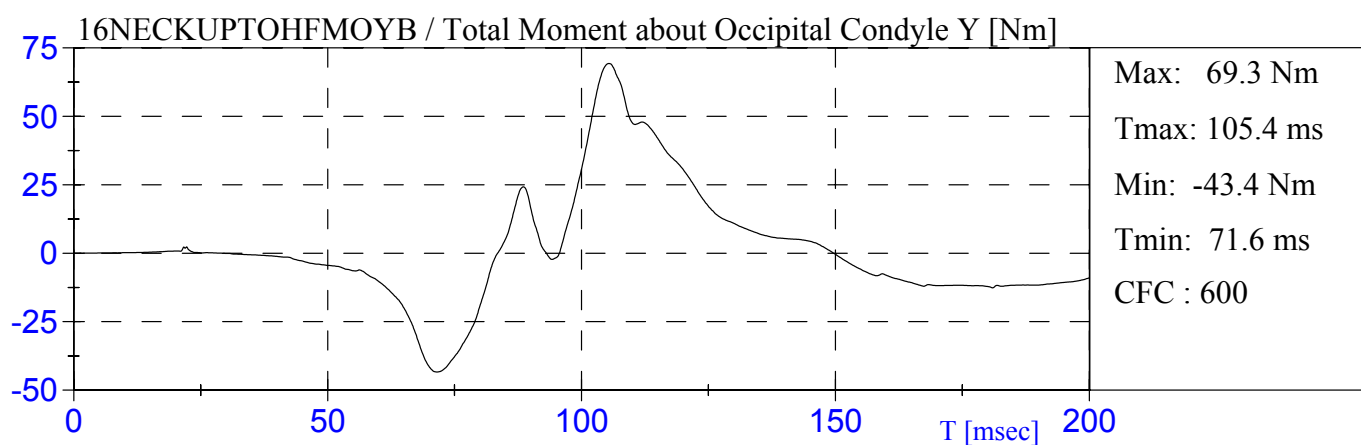
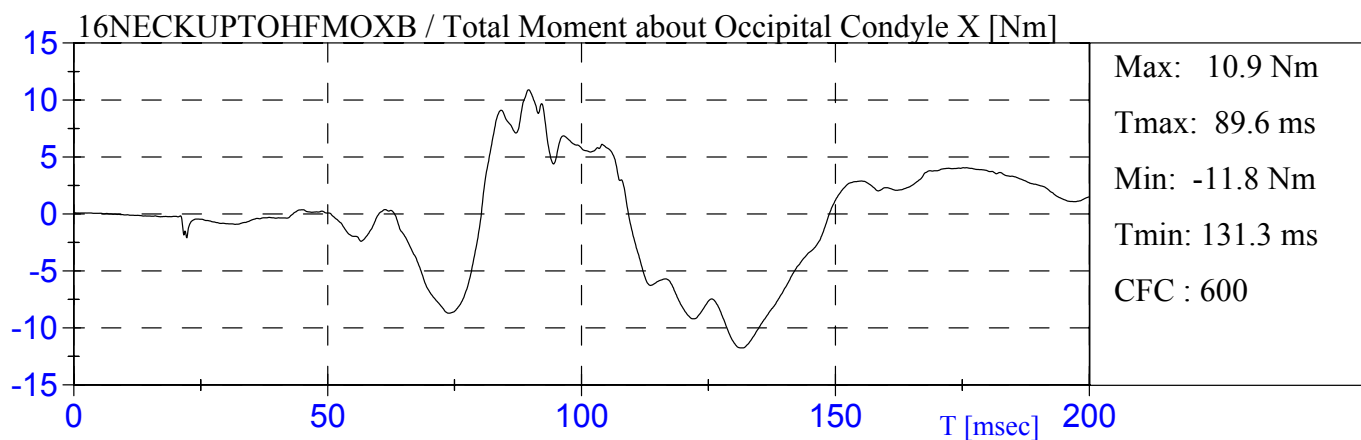


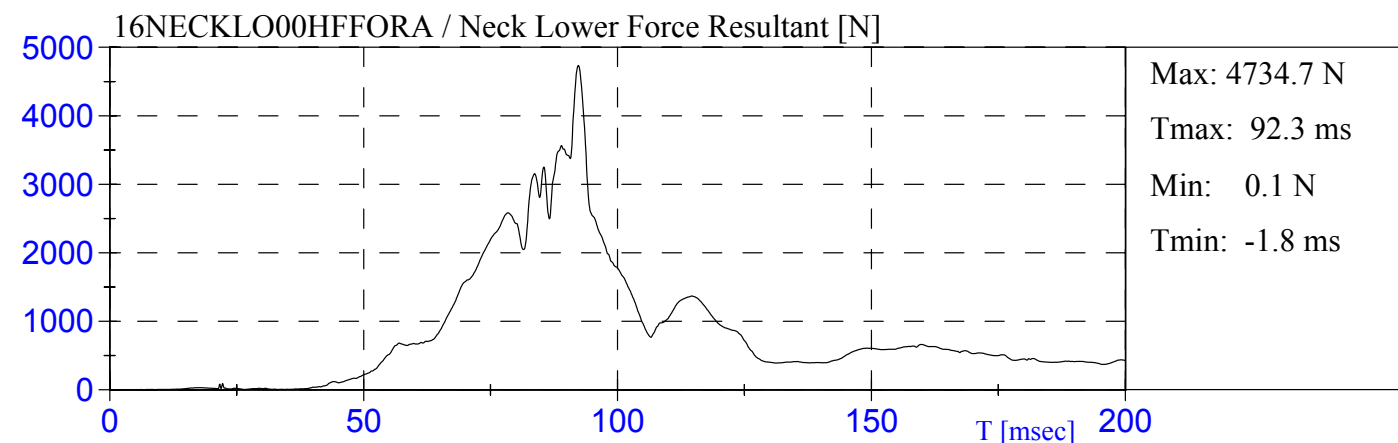
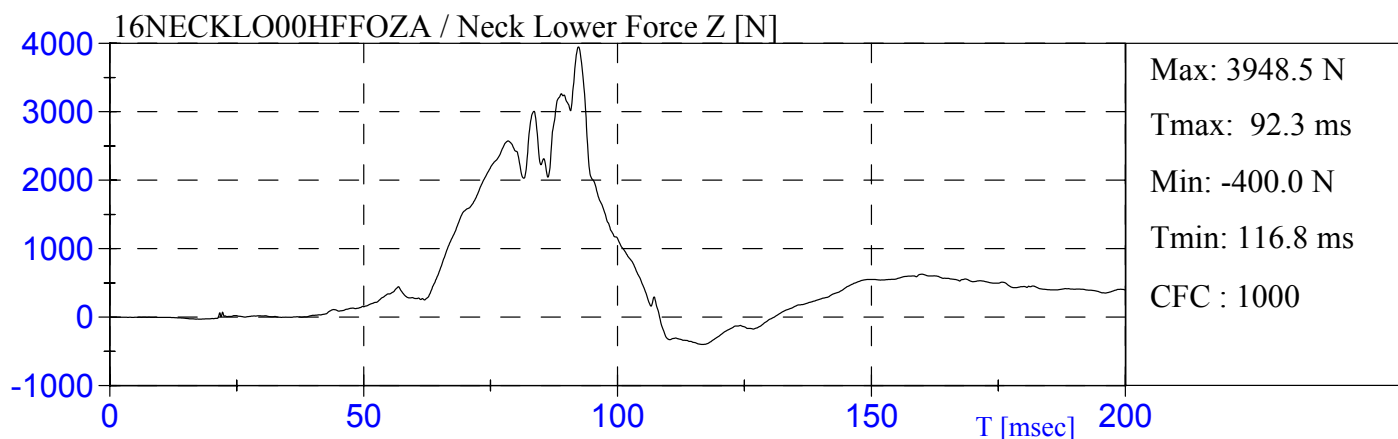
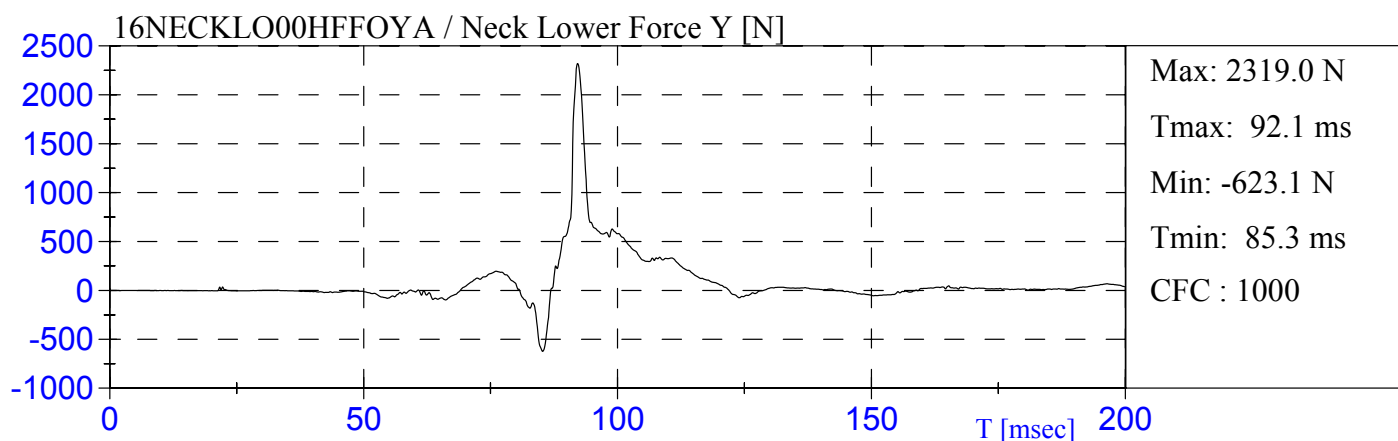
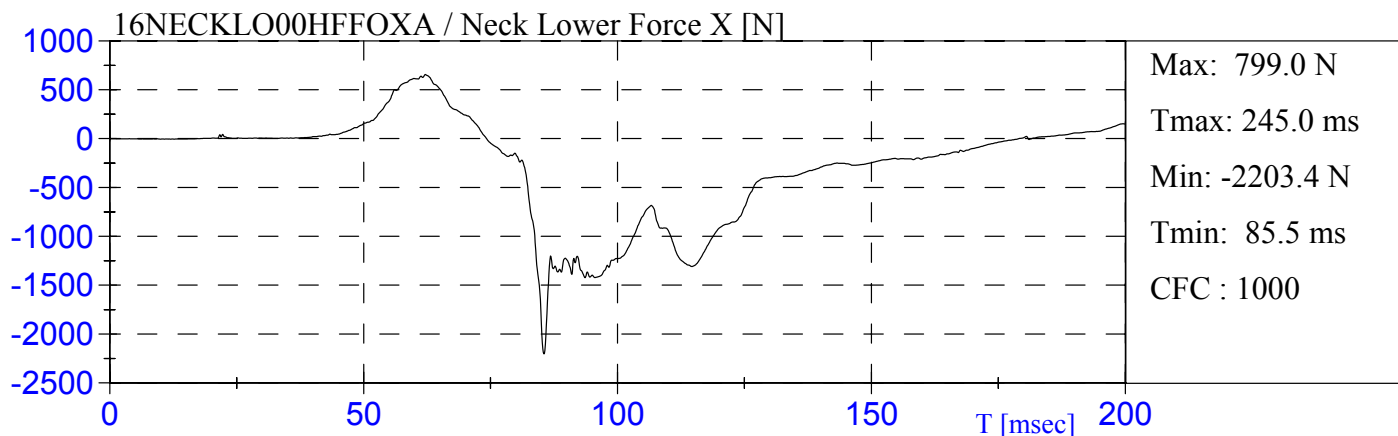


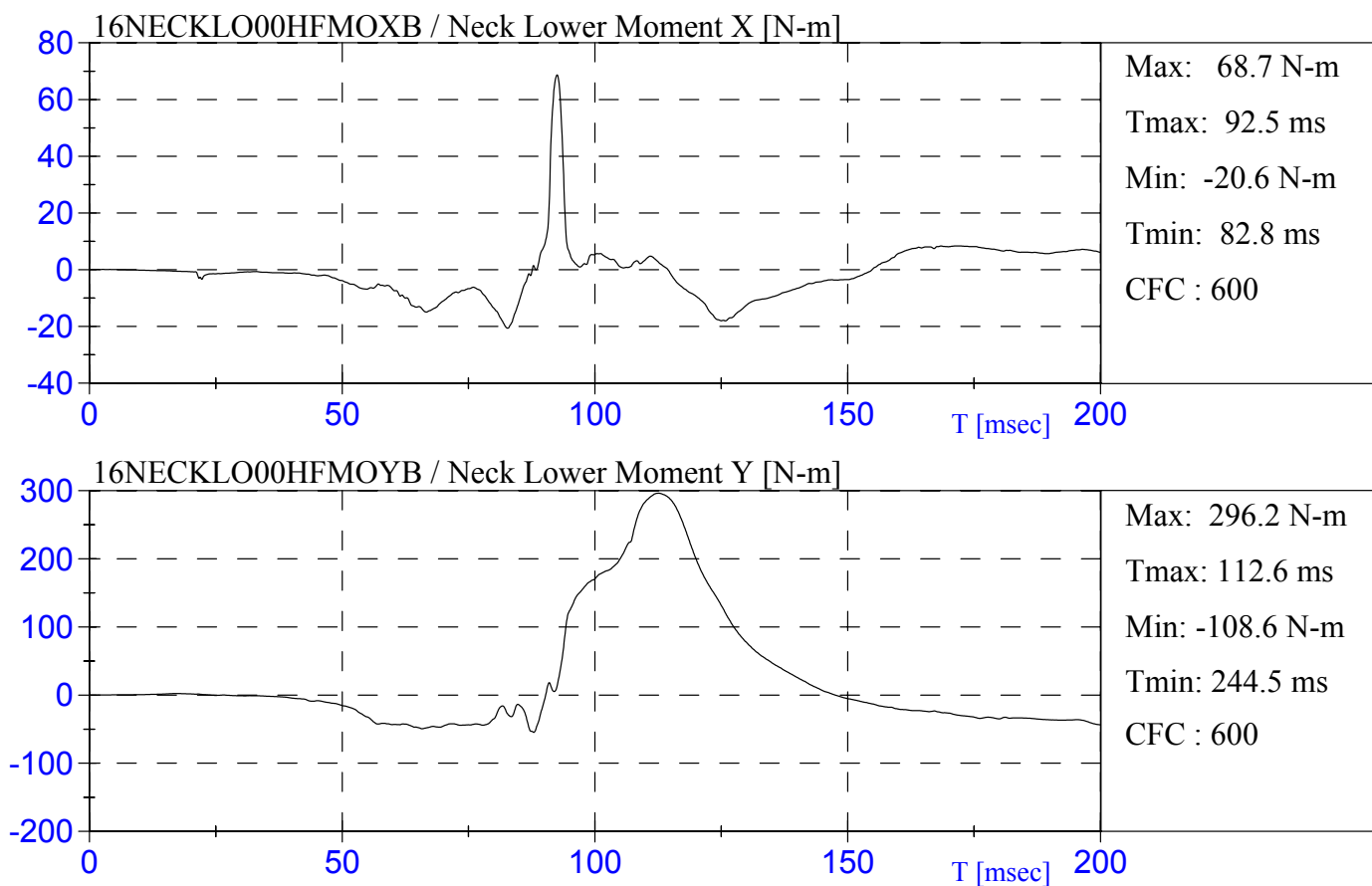


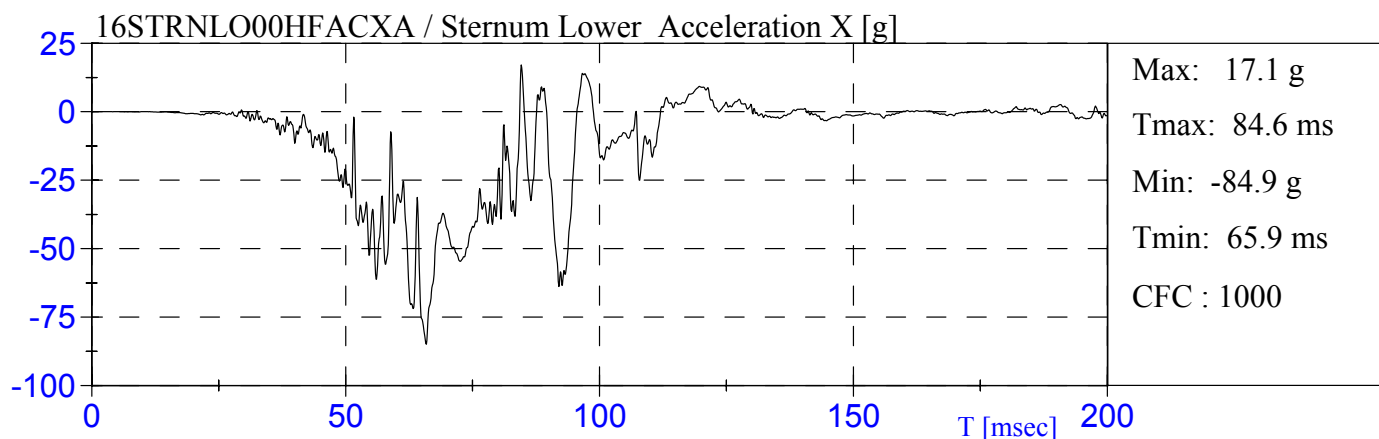
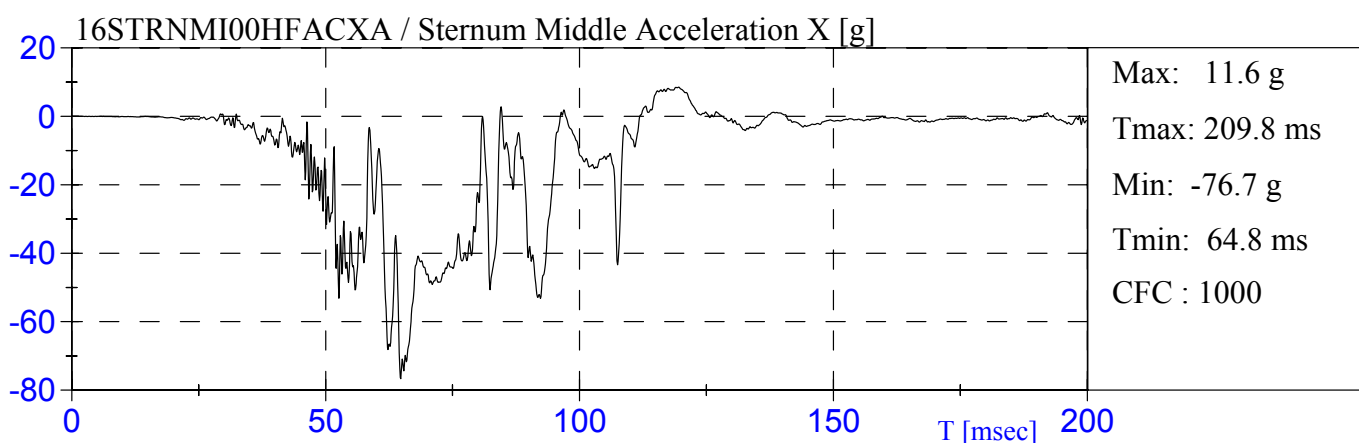
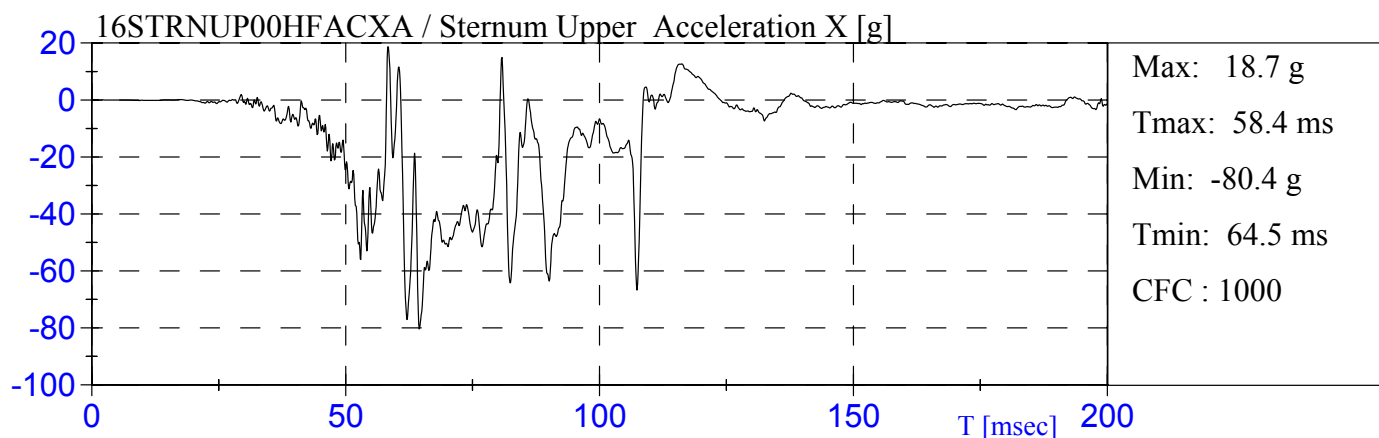


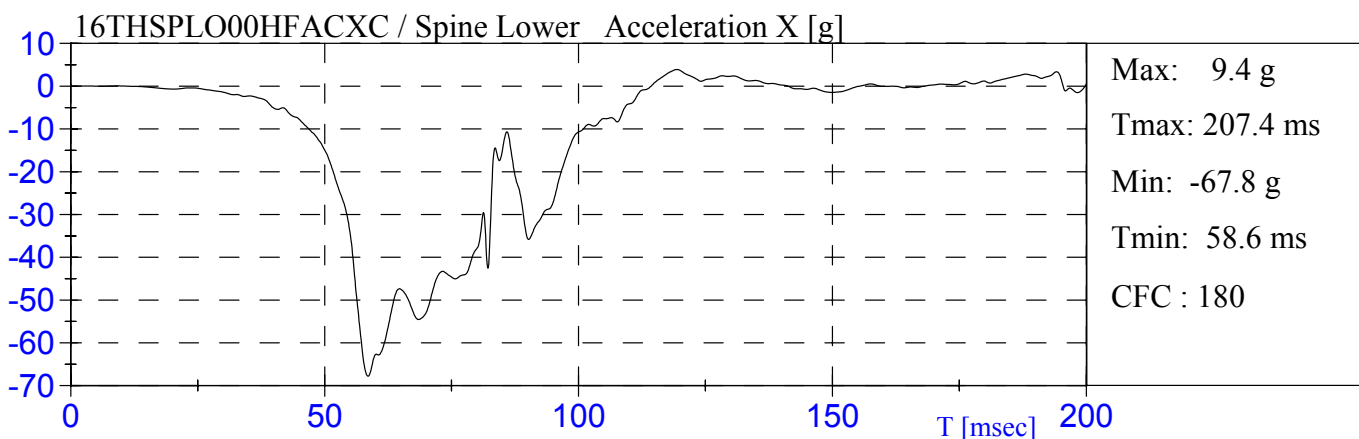
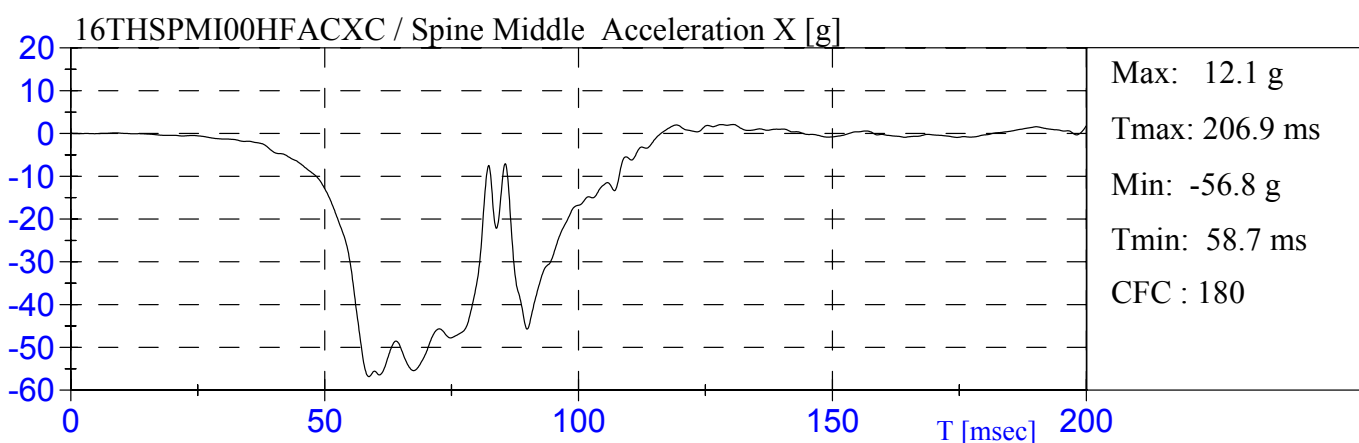
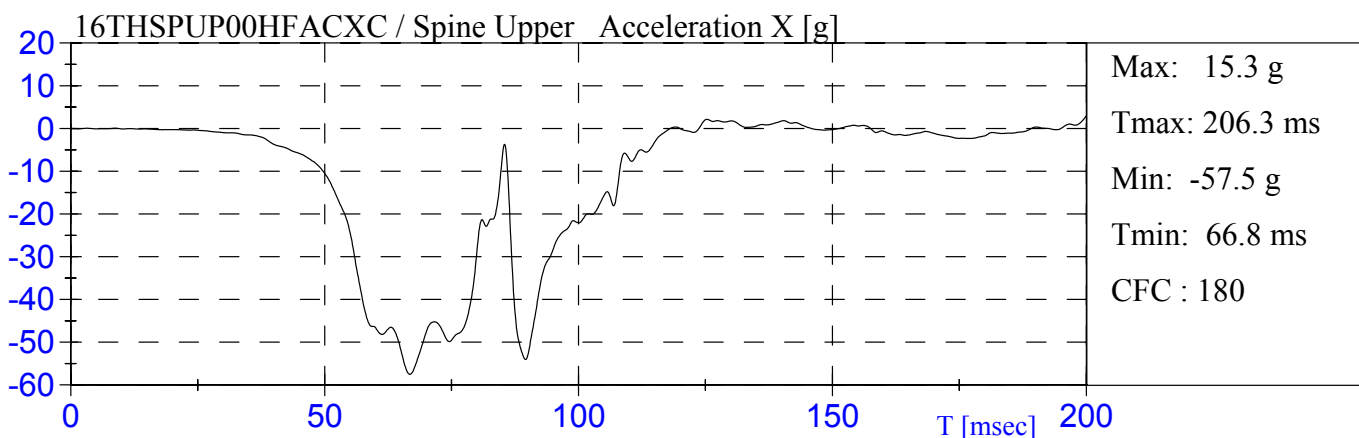


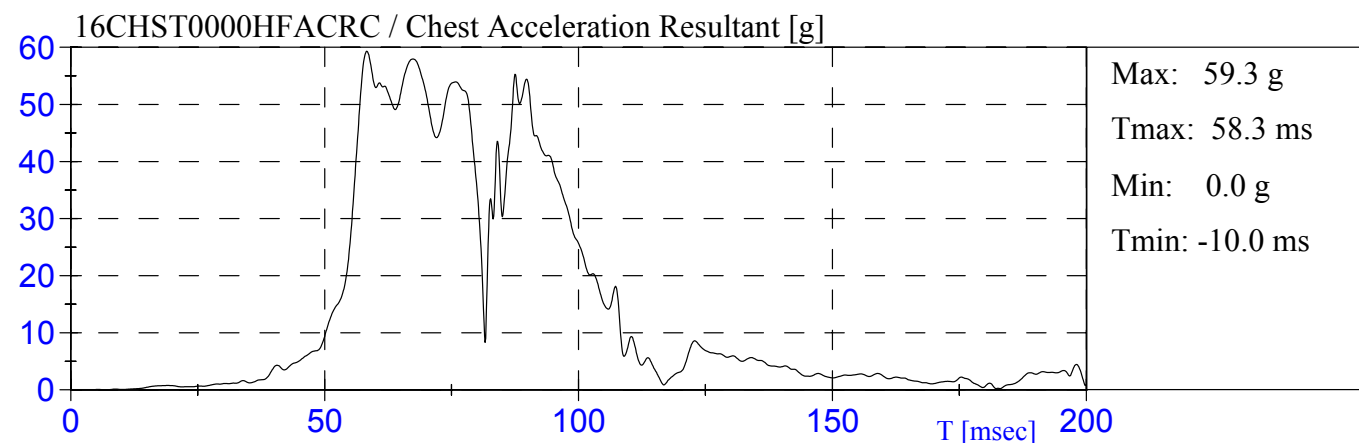
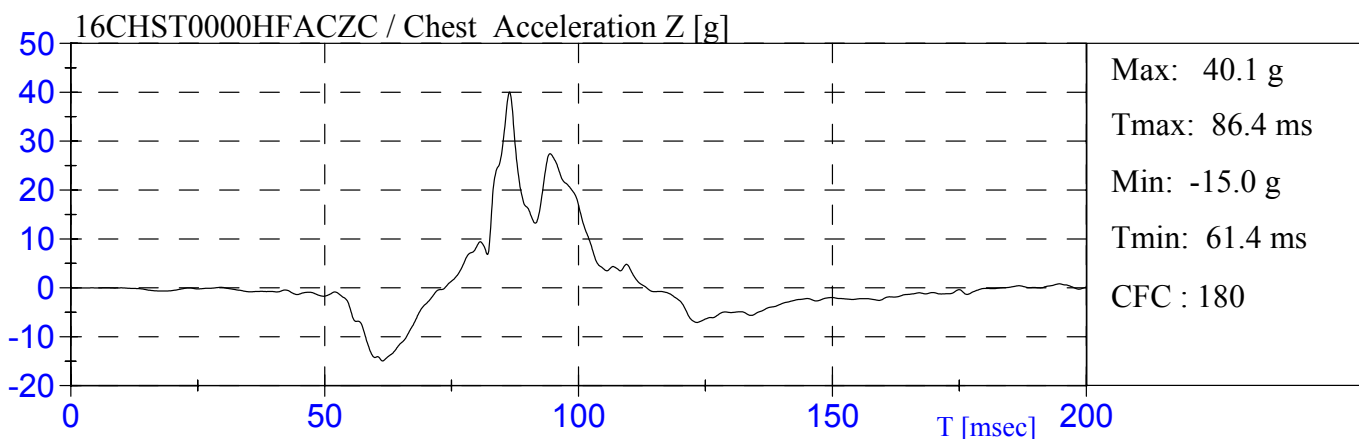
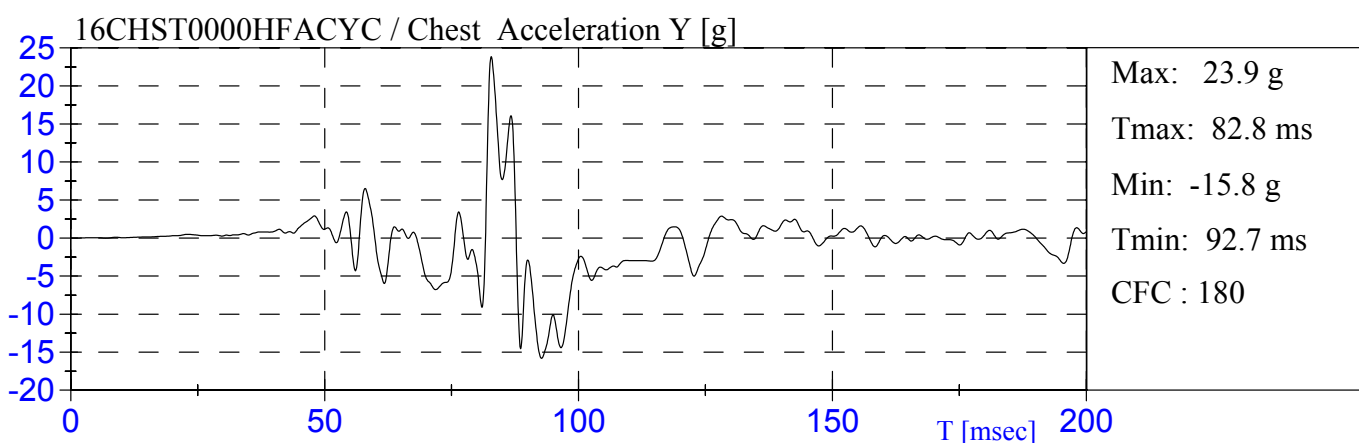
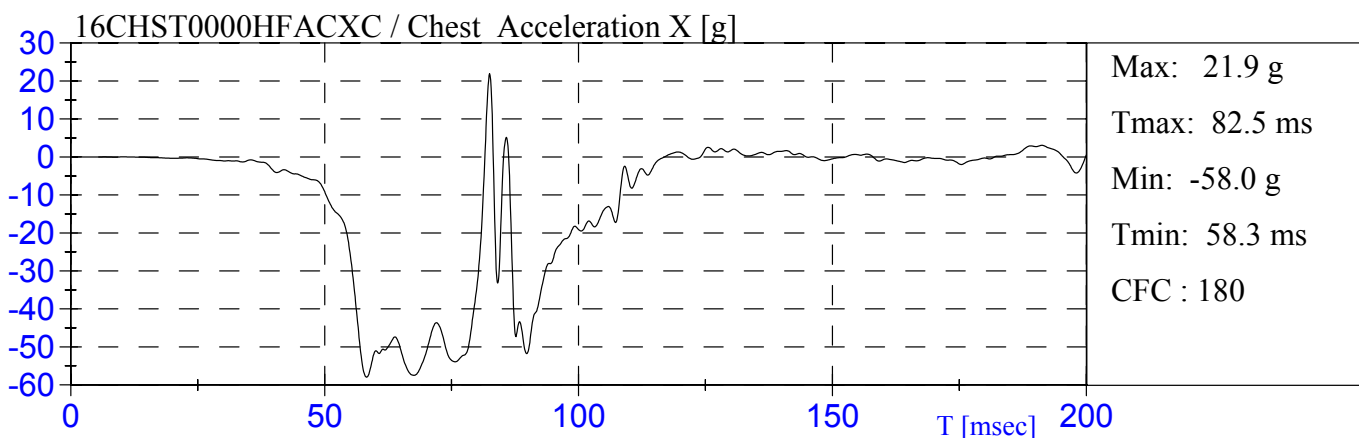


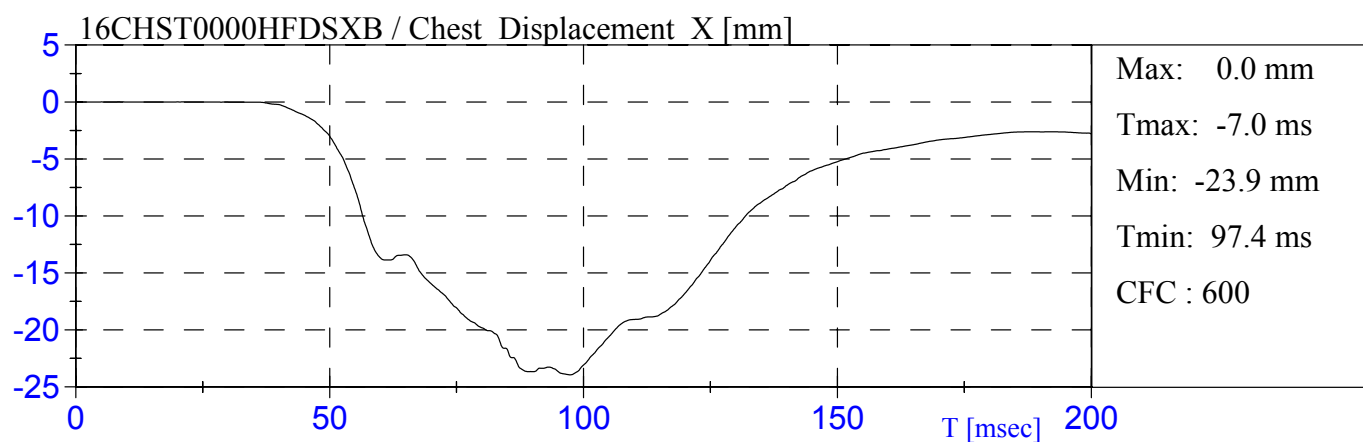


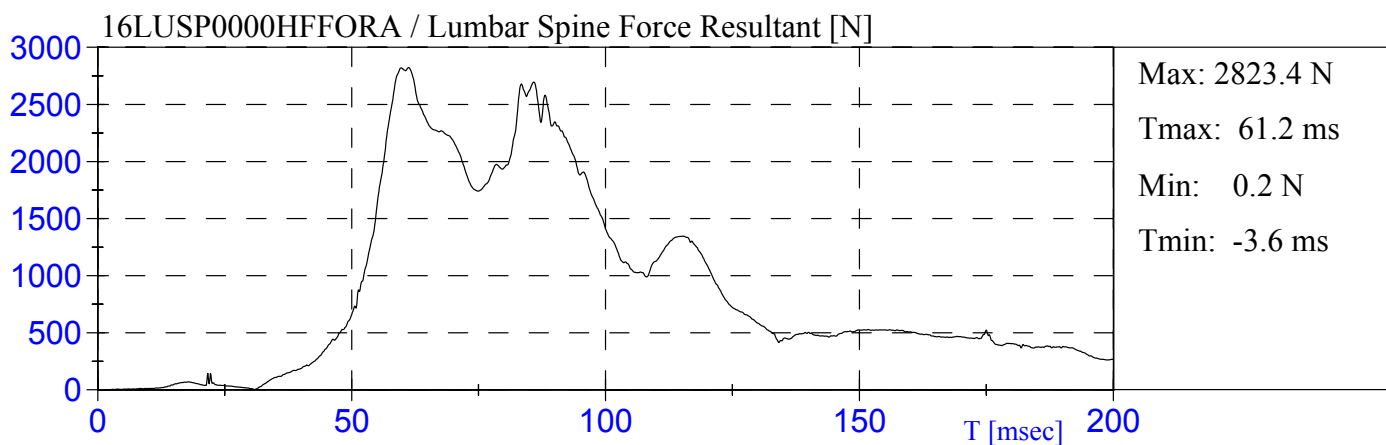
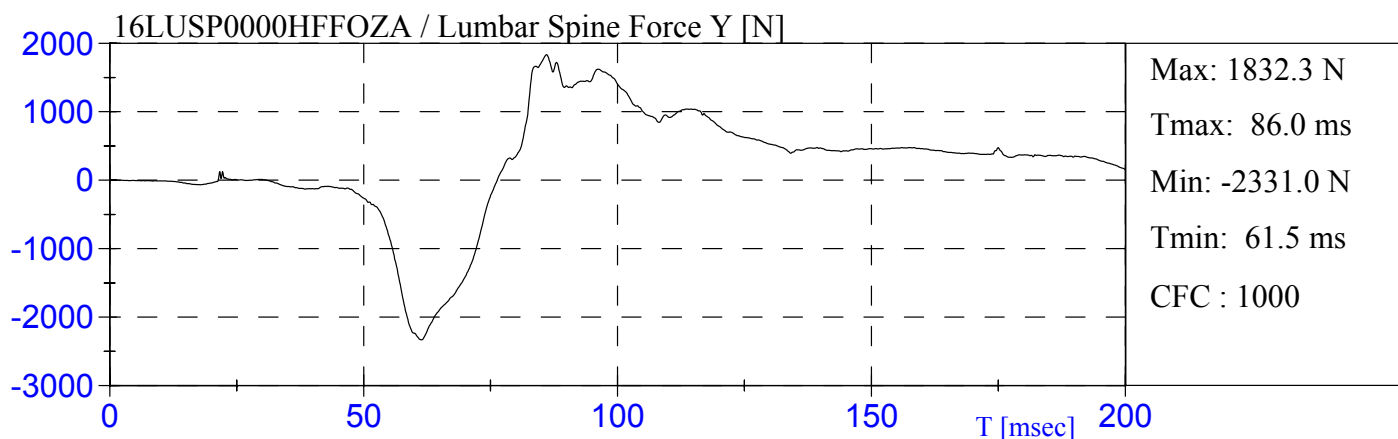
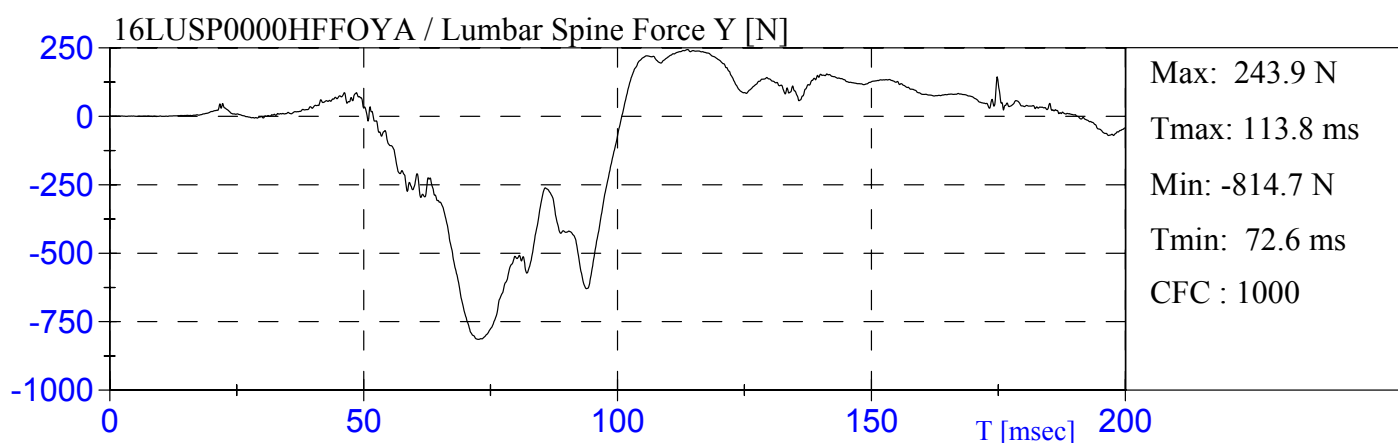
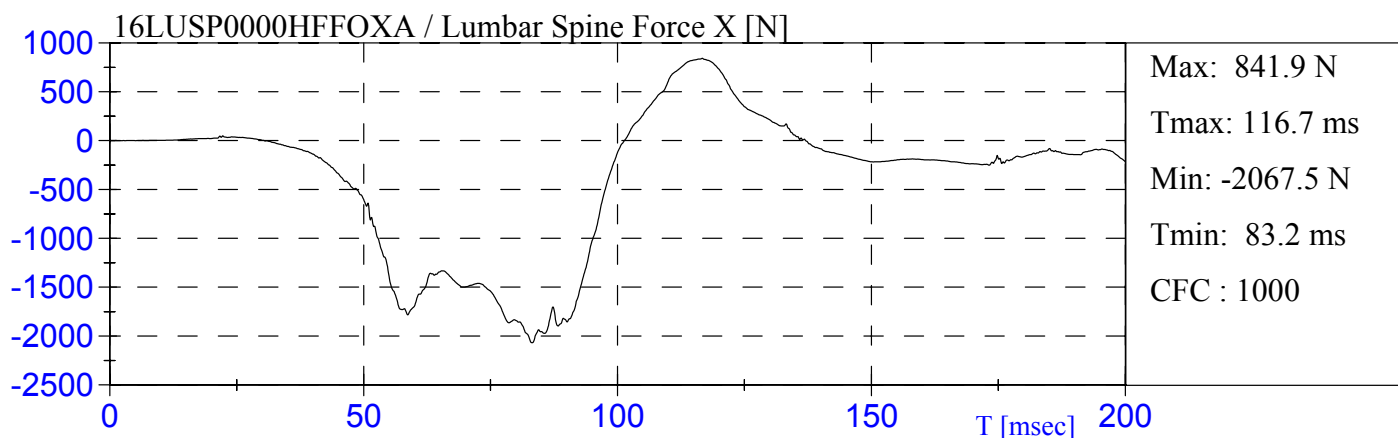


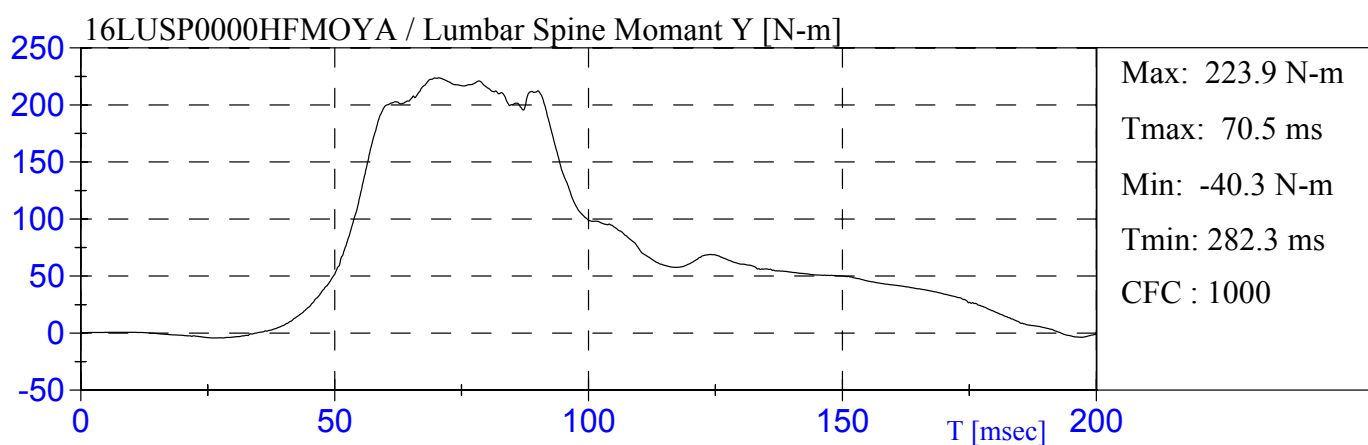
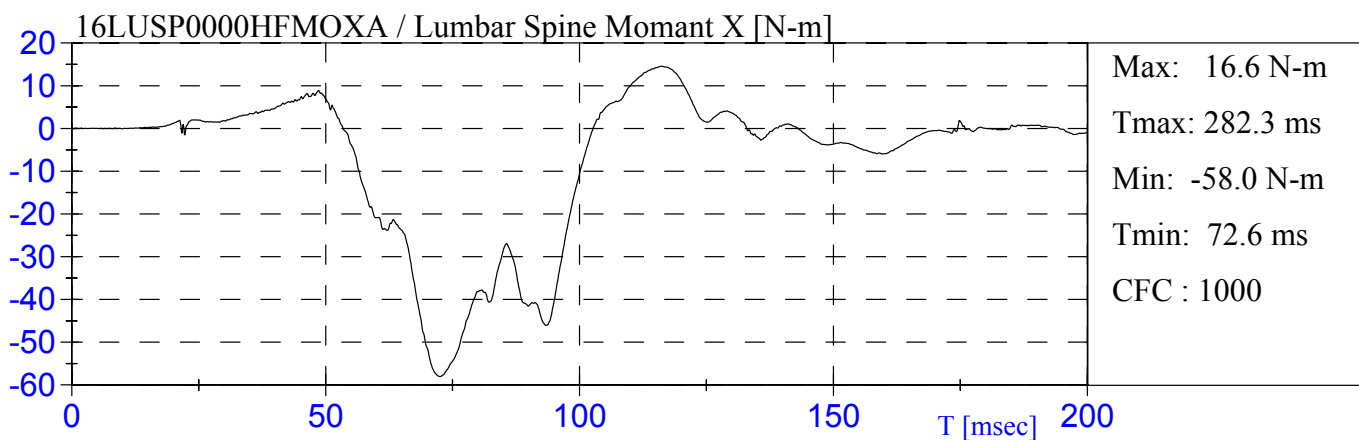


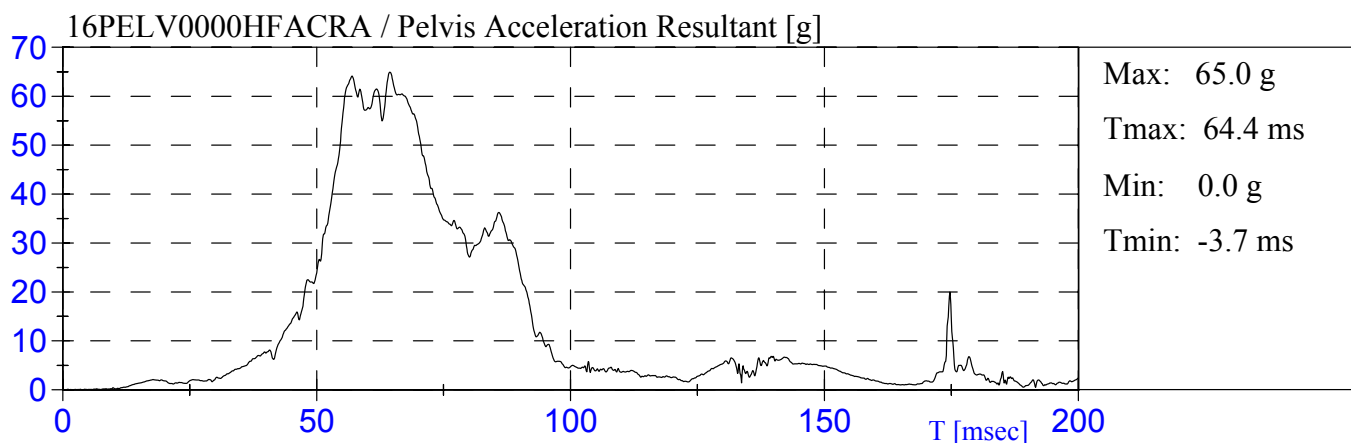
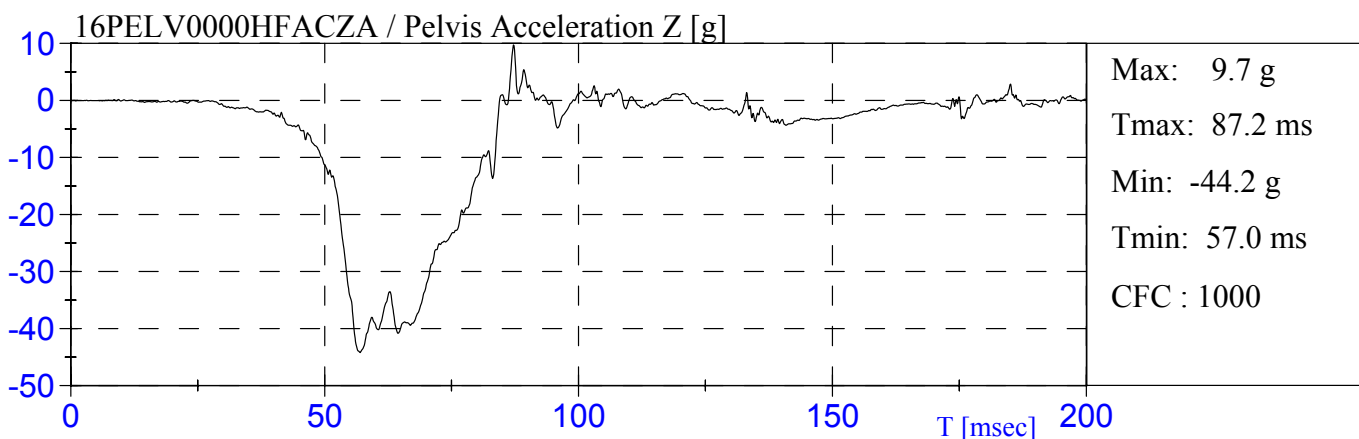
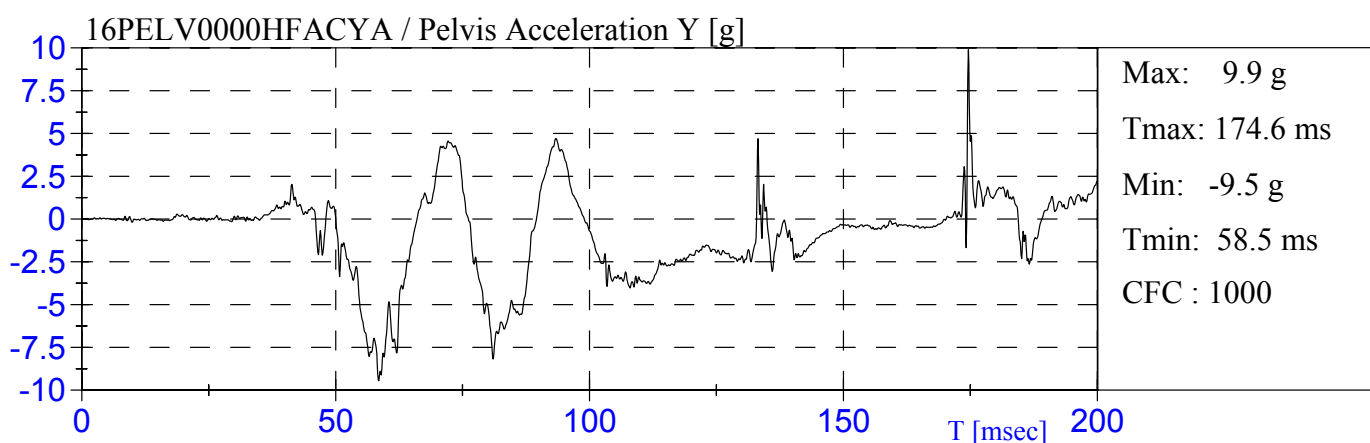
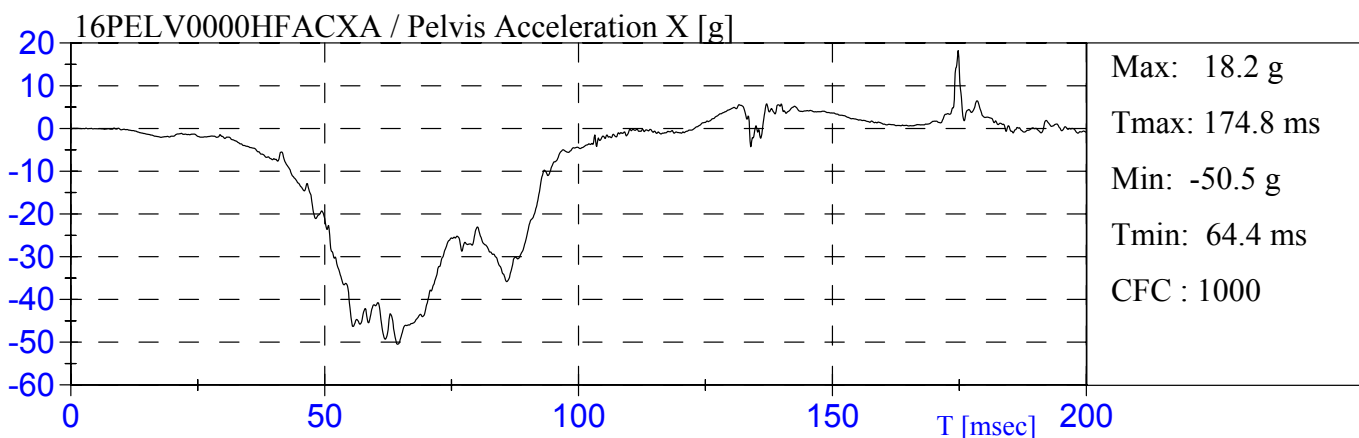


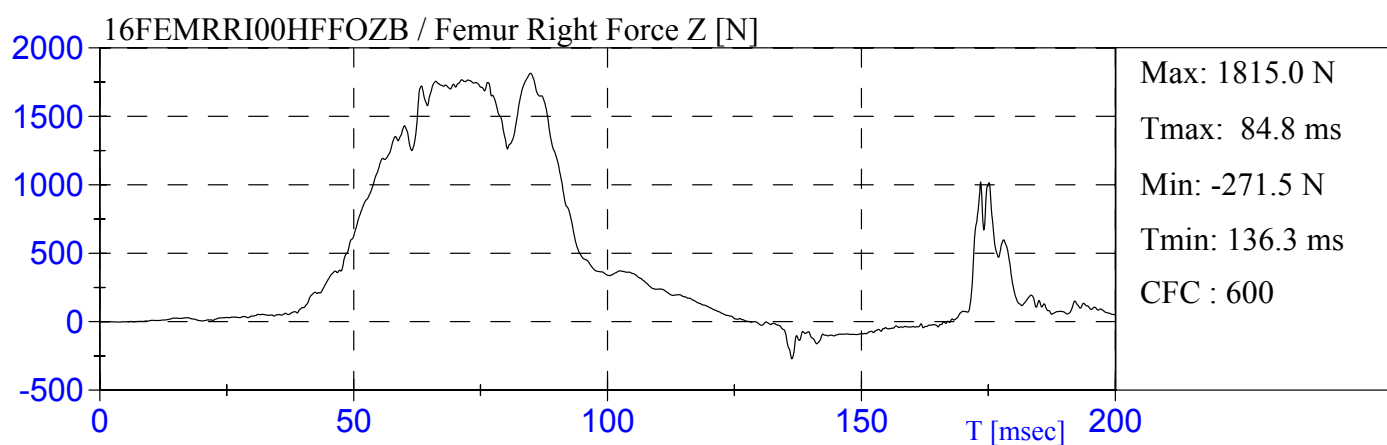
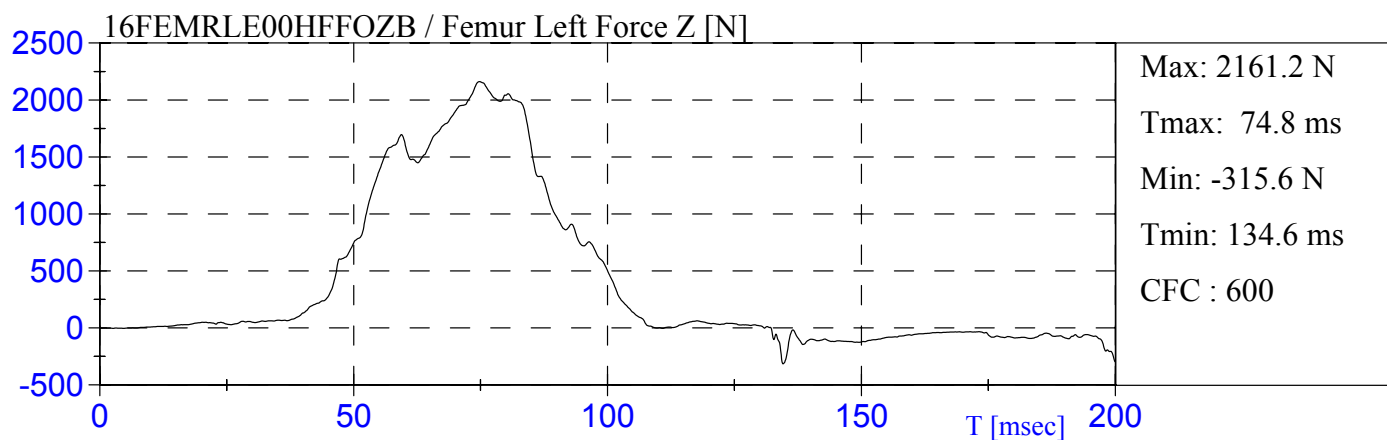


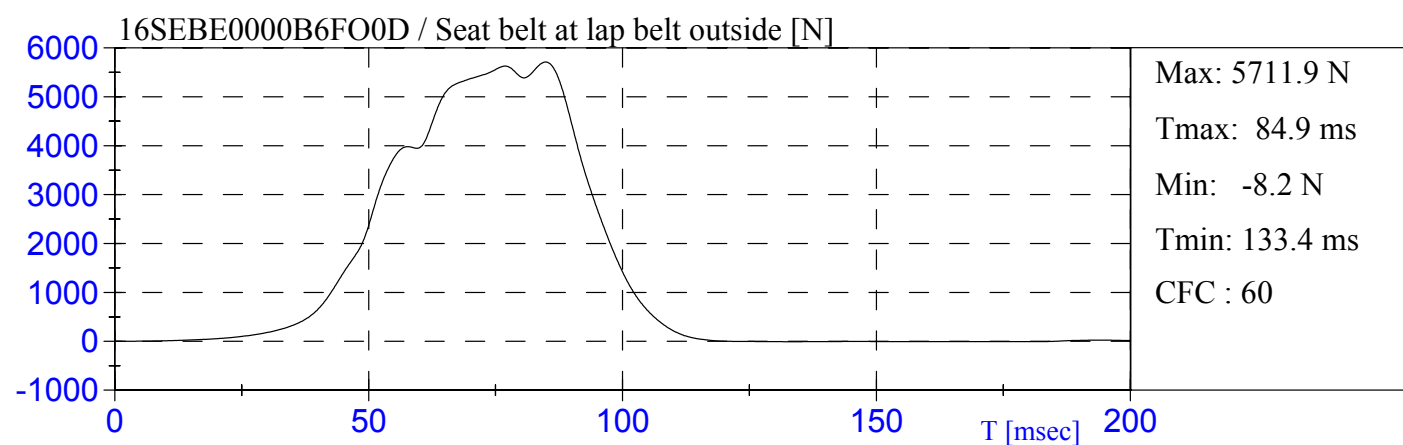
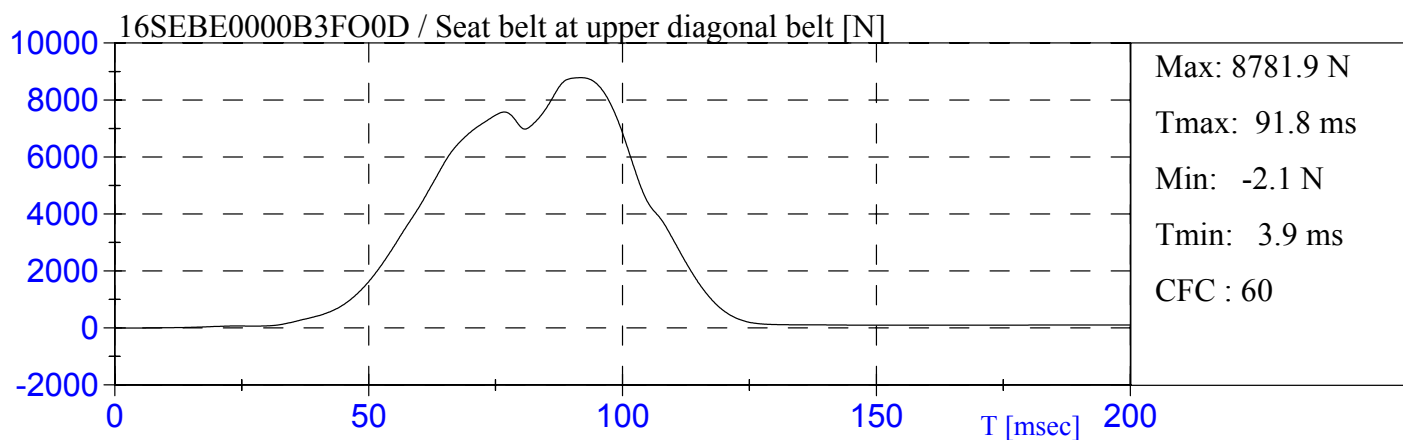


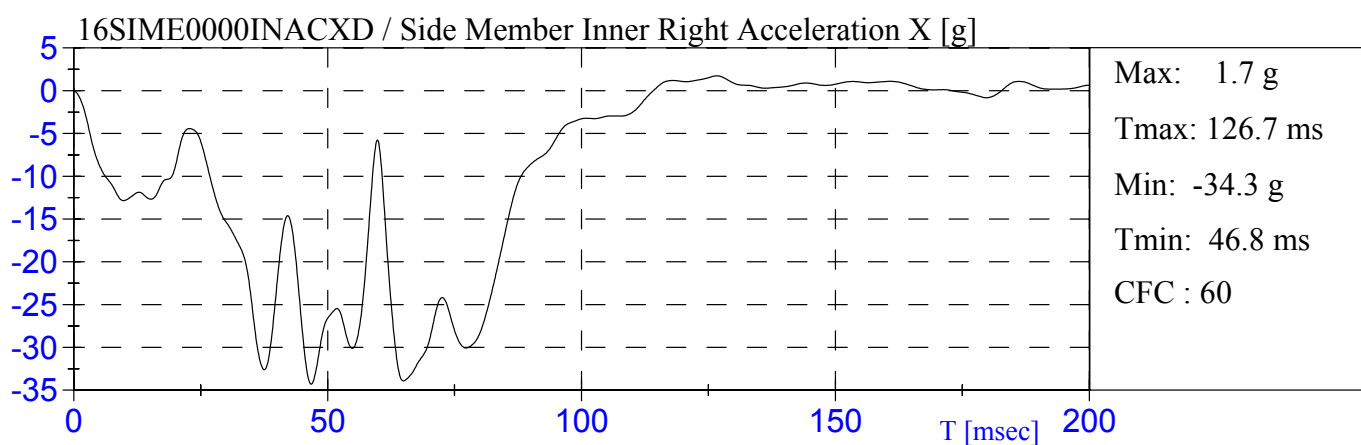
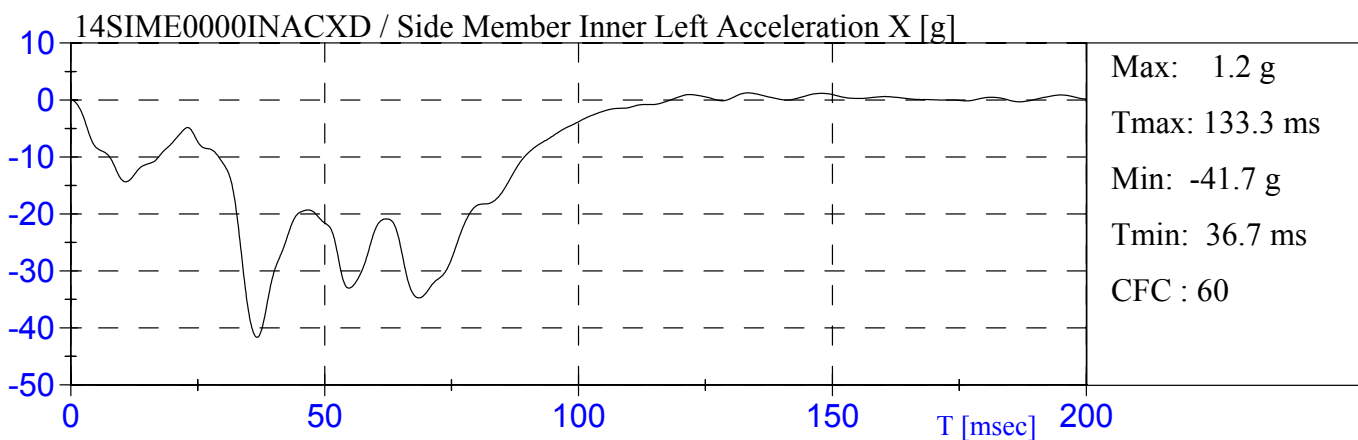


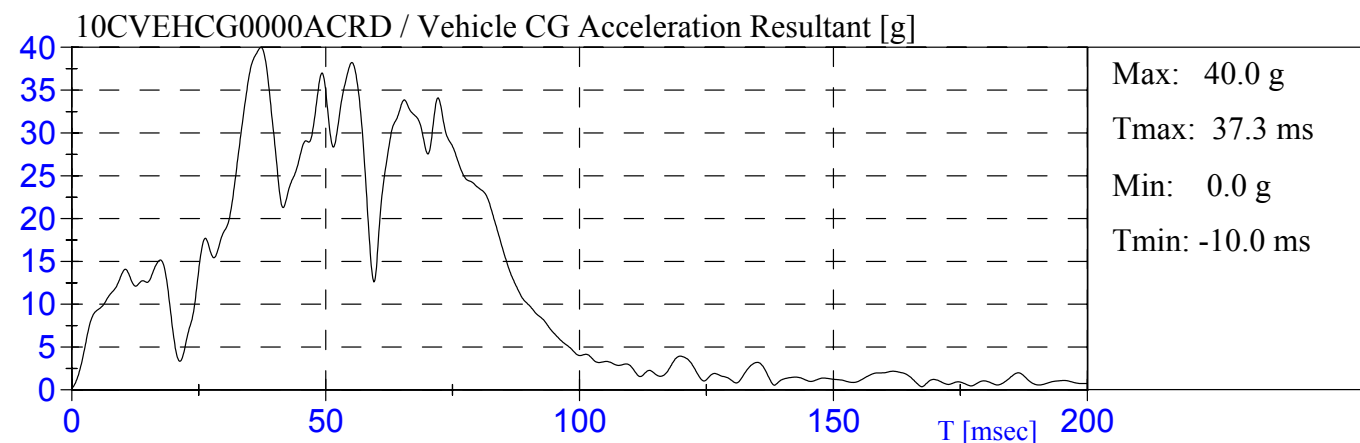
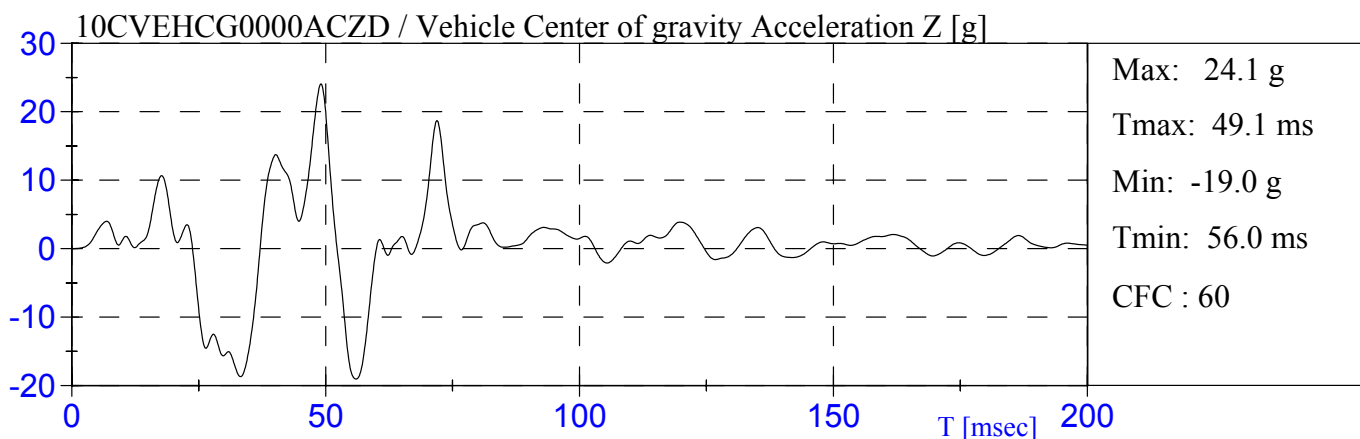
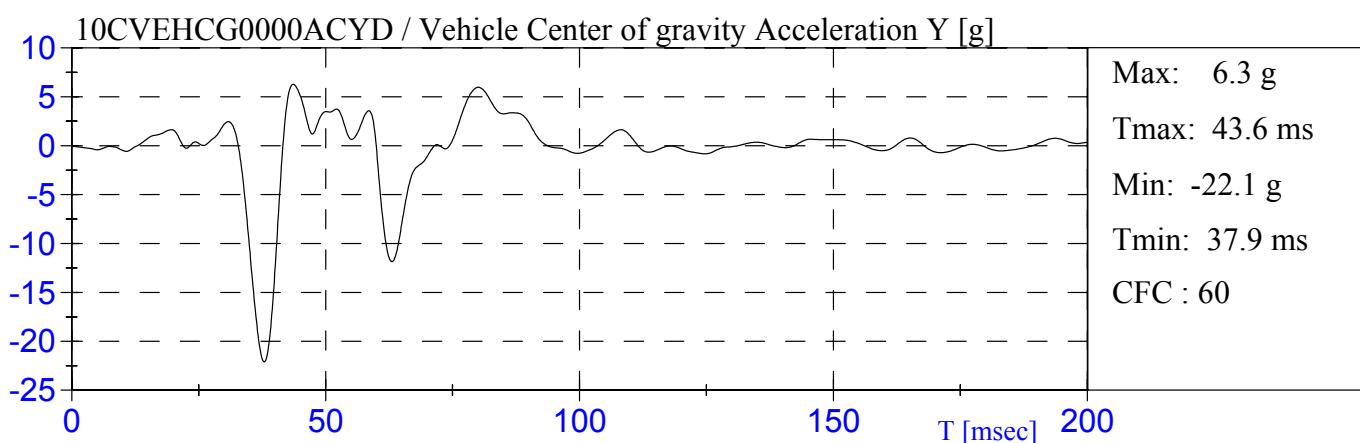
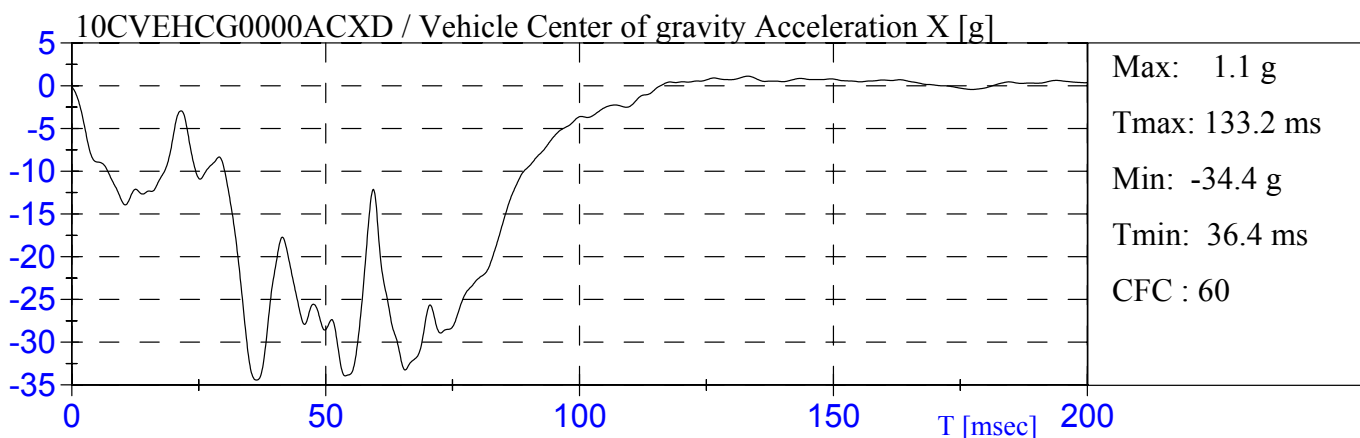


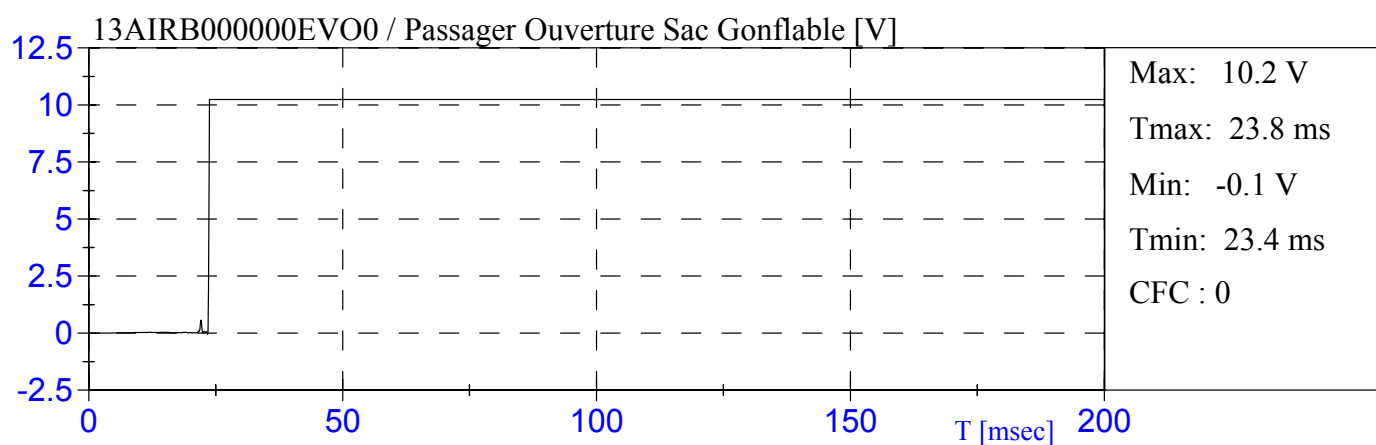
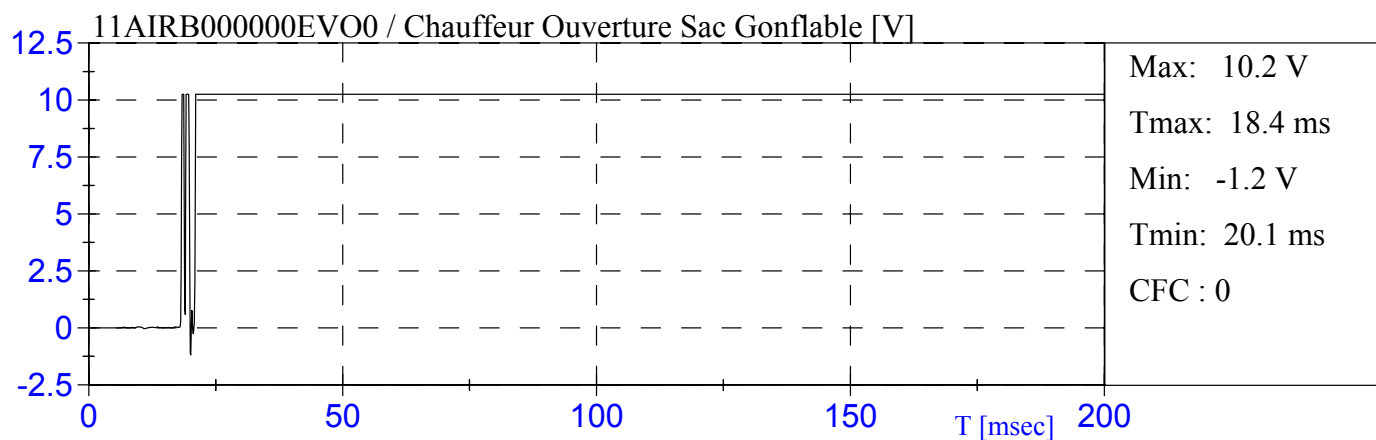


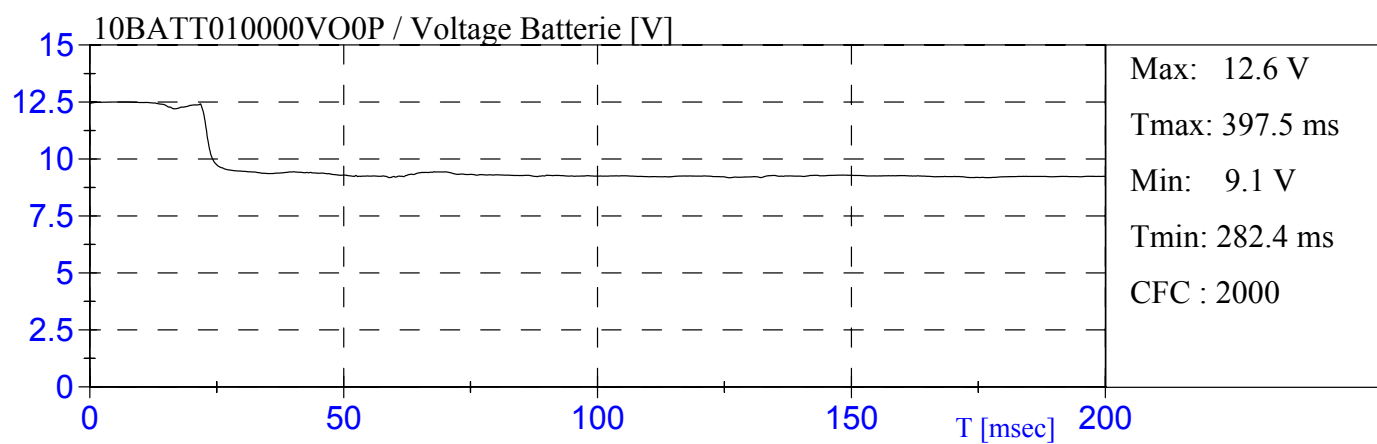


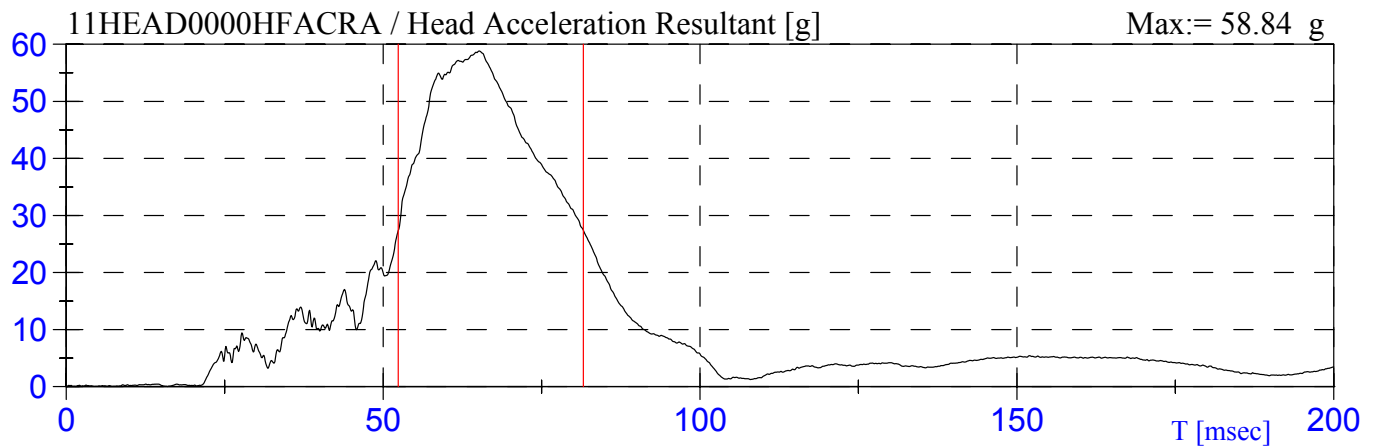










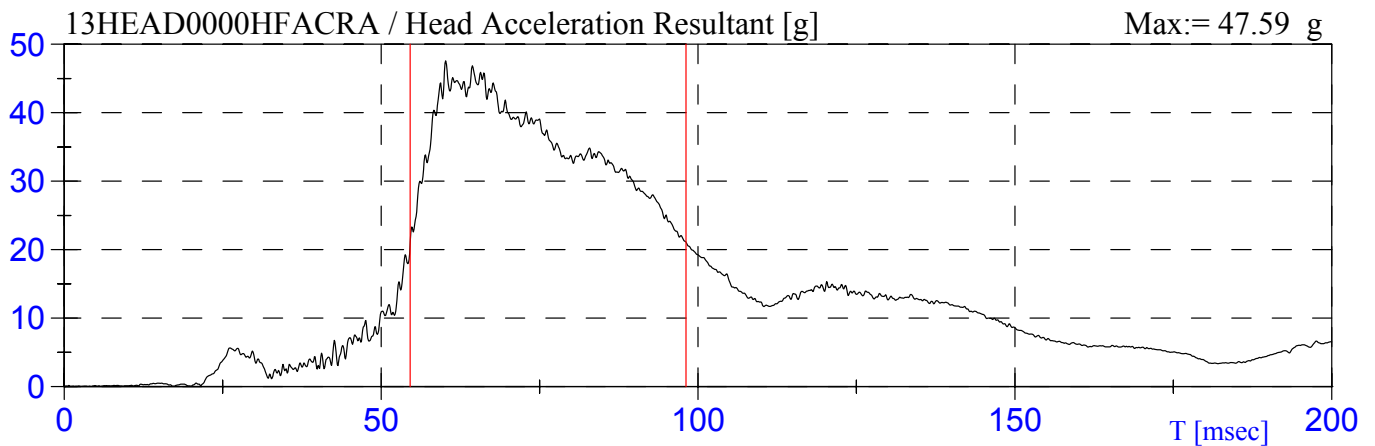


HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 410	HIC(36ms):= 410	HIC(15ms):= 322
T1:= 52.4 ms	T1:= 52.4 ms	T1:= 56.3 ms
T2:= 81.6 ms	T2:= 81.6 ms	T2:= 71.3 ms

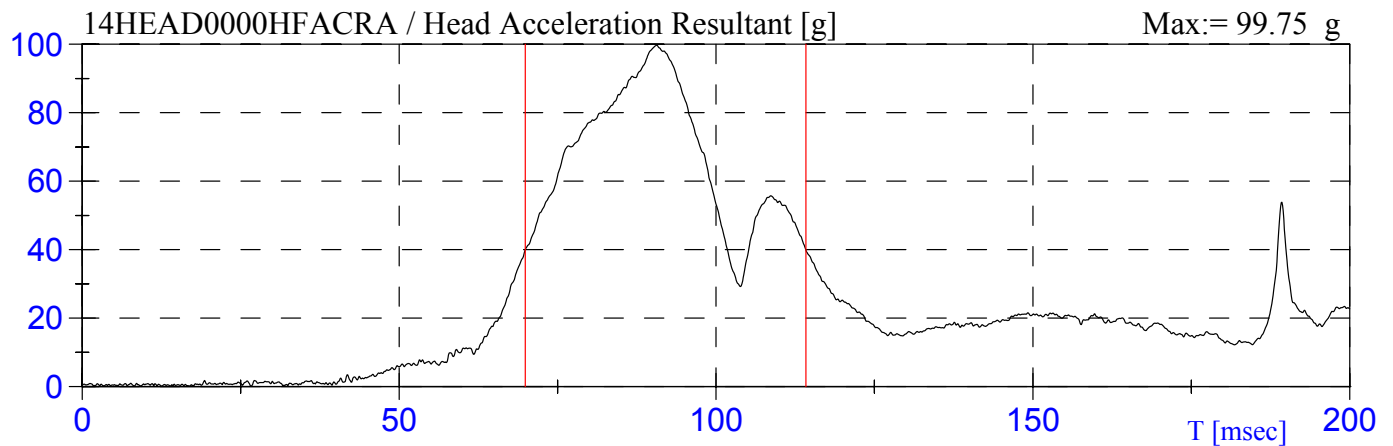
* Selon / According To: SAE J1727 96-08



HEAD INJURY CRITERIA (HIC) *
CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 317	HIC(36ms):= 305	HIC(15ms):= 177
T1:= 54.6 ms	T1:= 55.8 ms	T1:= 58.1 ms
T2:= 98.1 ms	T2:= 91.8 ms	T2:= 73.1 ms

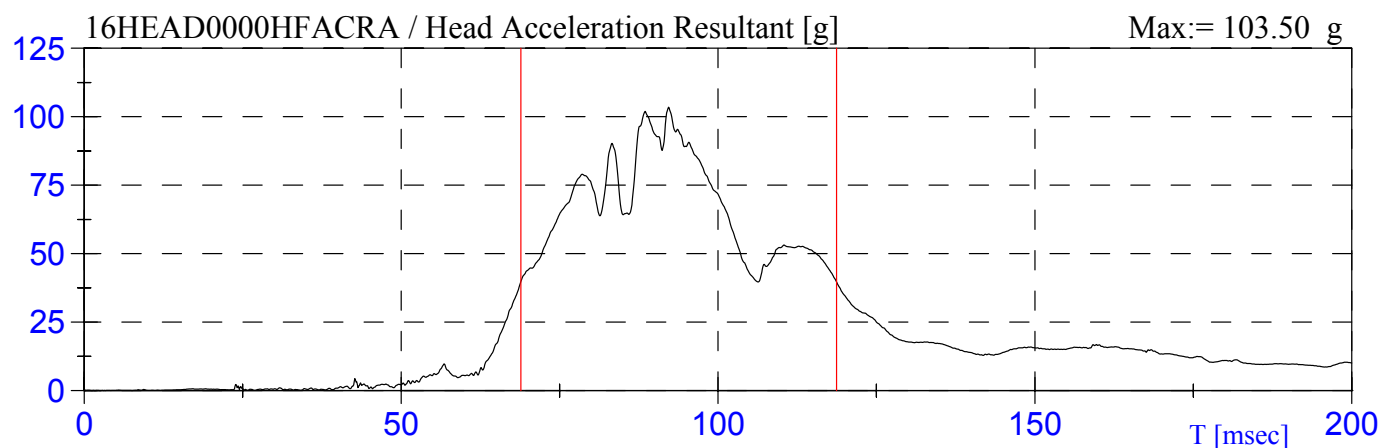
* Selon / According To: SAE J1727 96-08



HEAD INJURY CRITERIA (HIC) *
CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 1599	HIC(36ms):= 1546	HIC(15ms):= 1131
T1:= 69.9 ms	T1:= 71.5 ms	T1:= 81.0 ms
T2:= 114.2 ms	T2:= 100.9 ms	T2:= 96.0 ms

* Selon / According To: SAE J1727 96-08



HEAD INJURY CRITERIA (HIC) *
CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 1788	HIC(36ms):= 1665	HIC(15ms):= 1087
T1:= 68.9 ms	T1:= 71.0 ms	T1:= 82.6 ms
T2:= 118.7 ms	T2:= 104.4 ms	T2:= 97.6 ms

* Selon / According To: SAE J1727 96-08

Neck Injury Criteria: 11NIJCIP000000YX

$N_{ij}^* = 0.41$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	Tc	4287
				Cc	3880
0.31	0.41	0.11	0.07	Fc	155
				Ec	67

* Selon / According To: Federal Register 5/2000

Neck Injury Criteria: 13NIJCIP000000YX

$N_{ij}^* = 0.59$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	Tc	4287
				Cc	3880
0.24	0.59	0.28	0.24	Fc	155
				Ec	67

* Selon / According To: Federal Register 5/2000

Neck Injury Criteria: 14NIJCIP000000YX

$N_{ij}^* = 1.04$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	Tc	4287
				Cc	3880
1.03	1.04	0.01	0.52	Fc	155
				Ec	67

* Selon / According To: Federal Register 5/2000

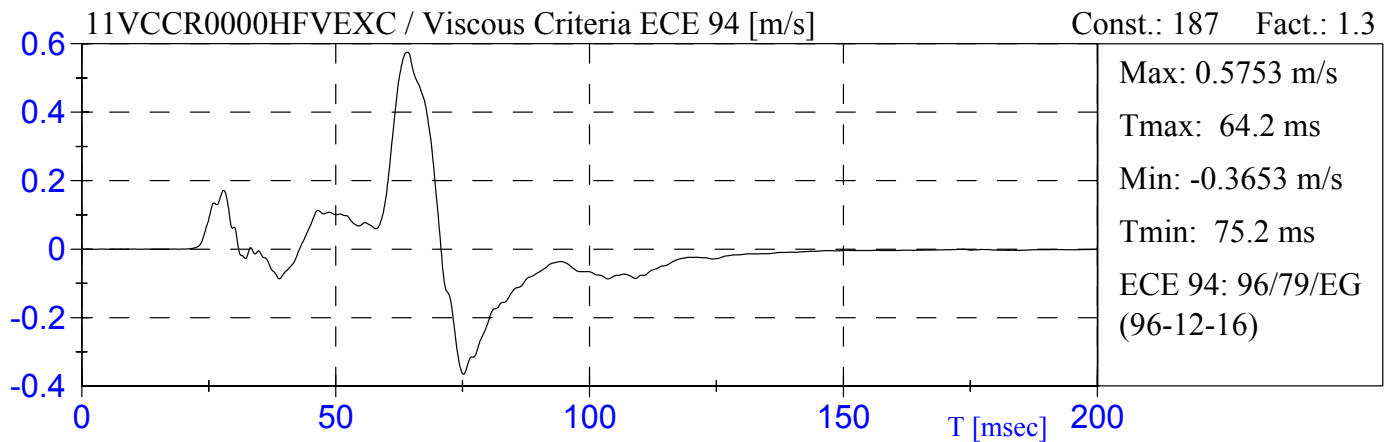
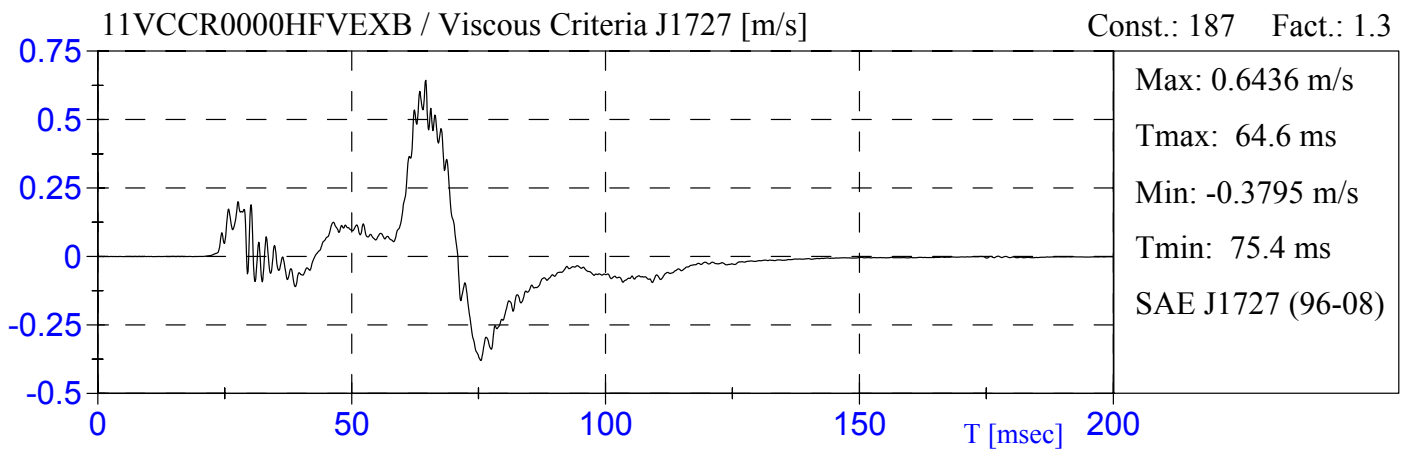
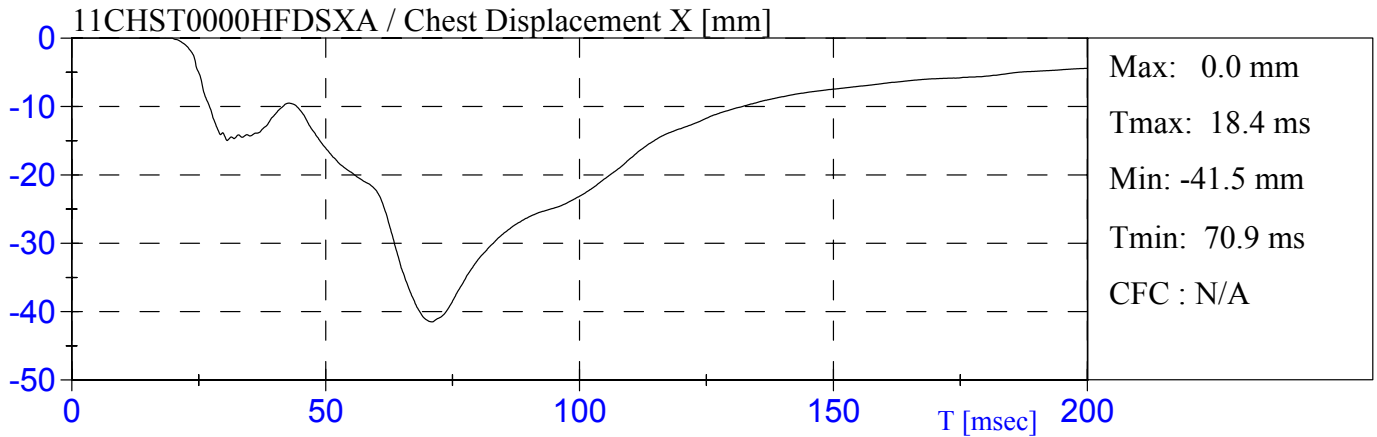
Neck Injury Criteria: 16NIJCIP000000YX

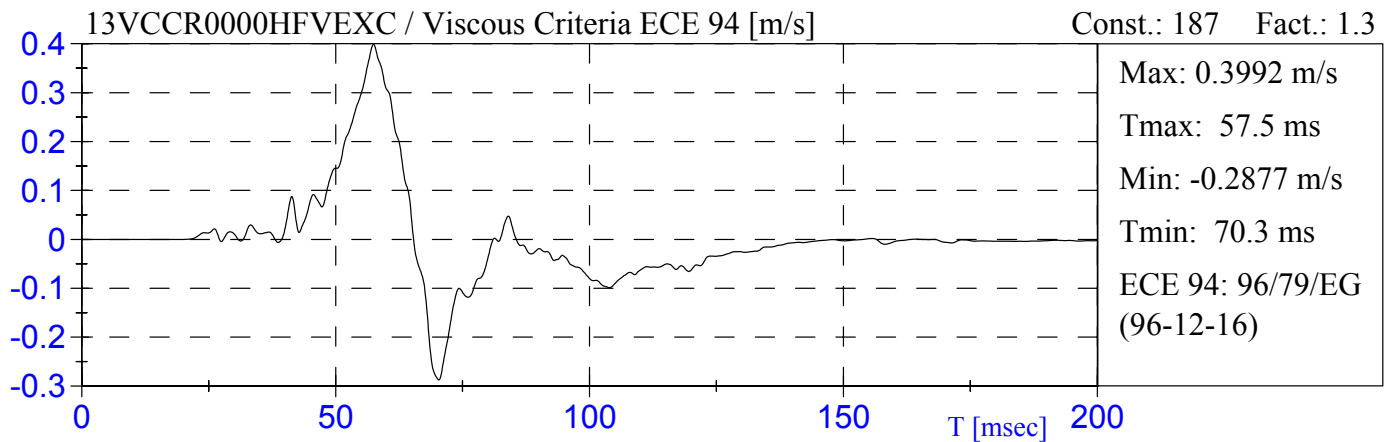
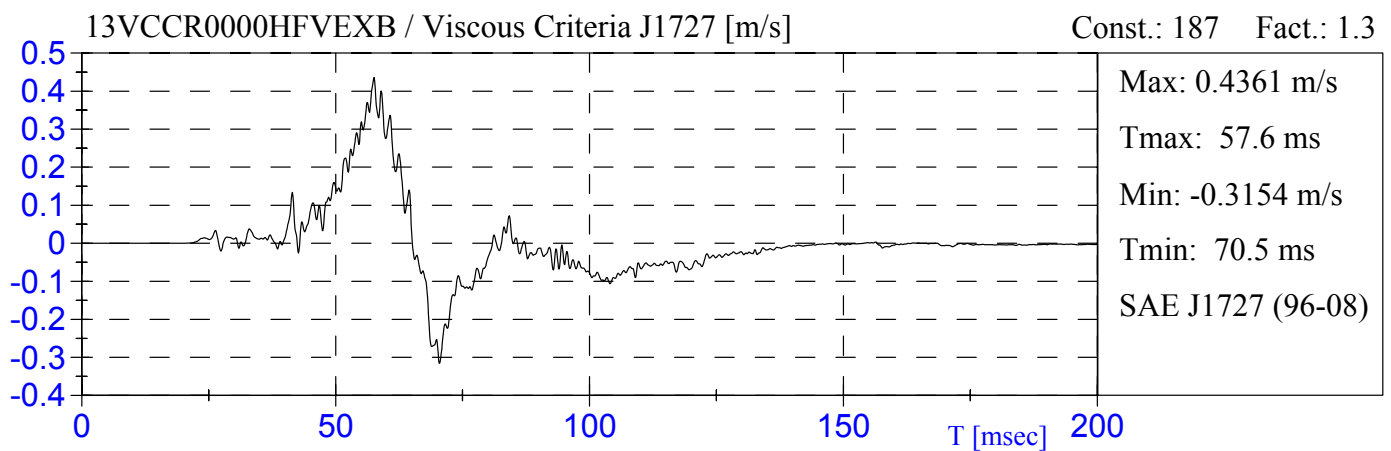
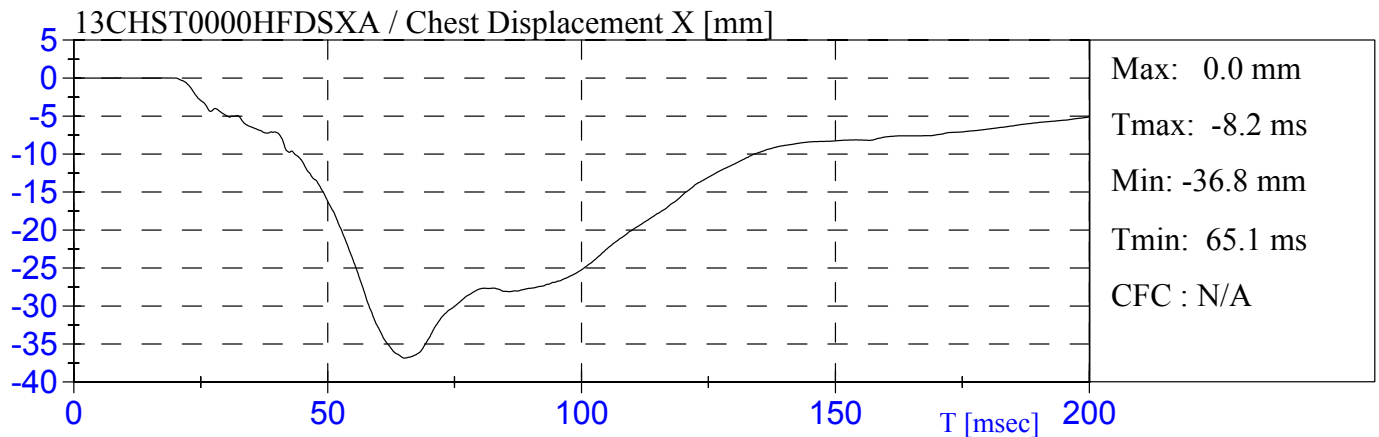
$N_{ij}^* = 1.01$

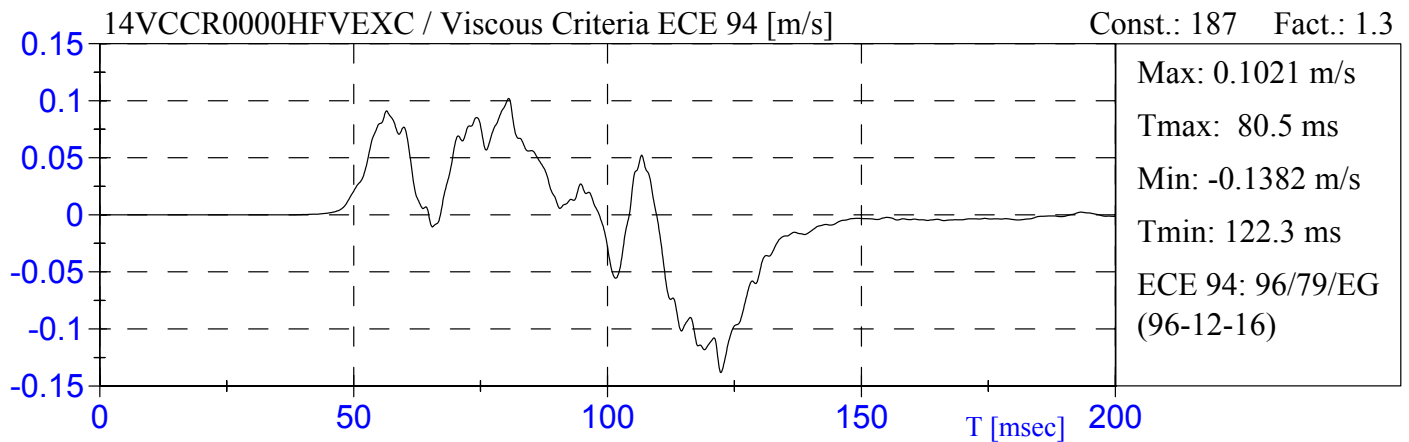
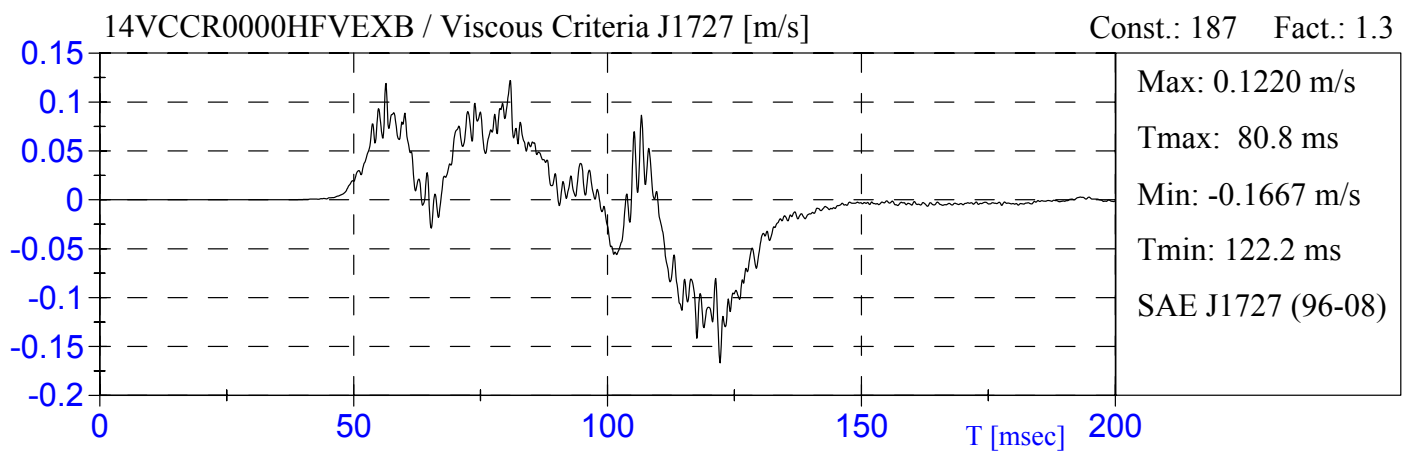
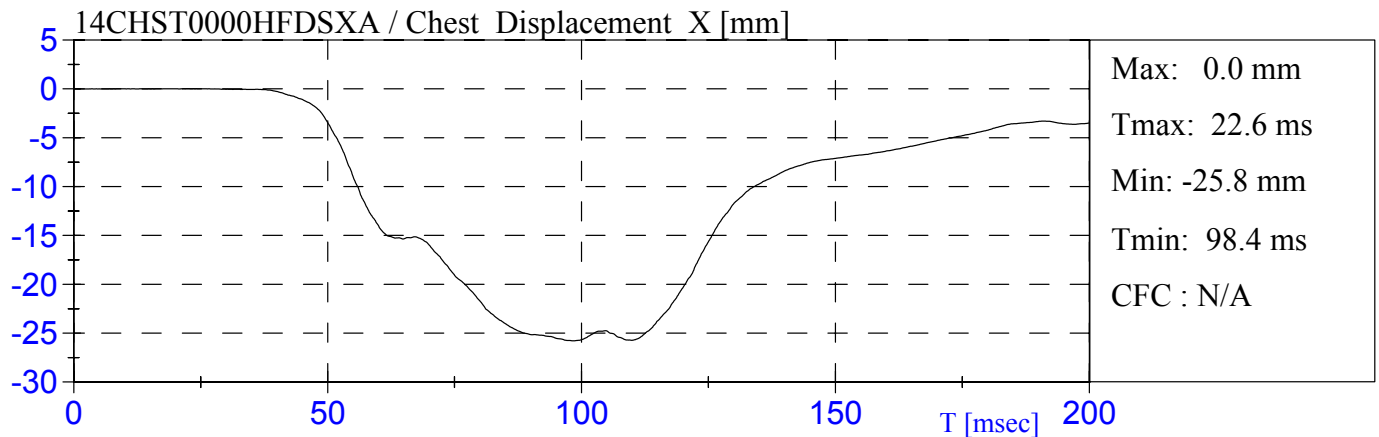
Valeurs critiques
Criticals Values

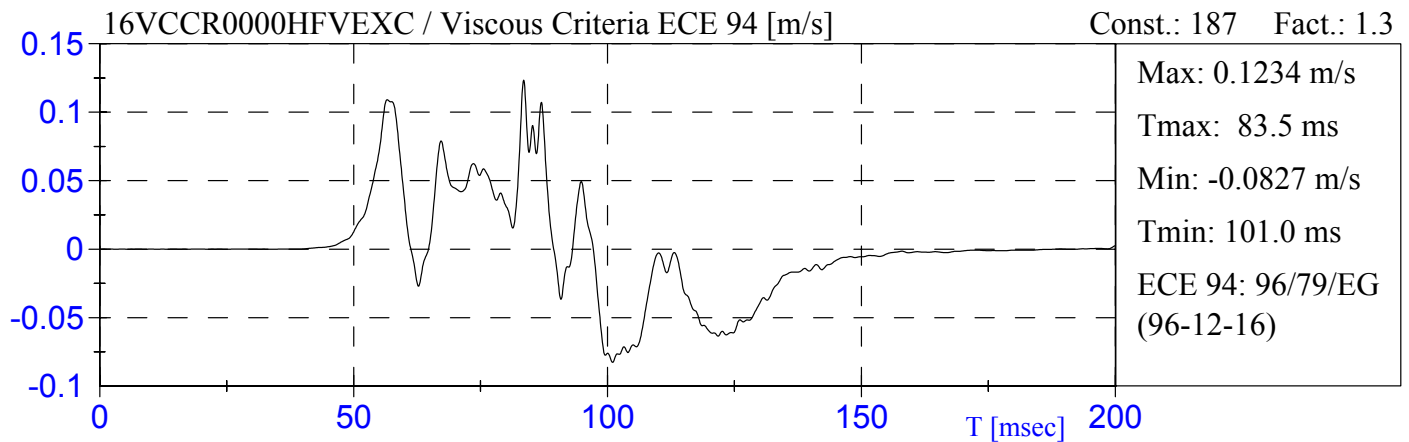
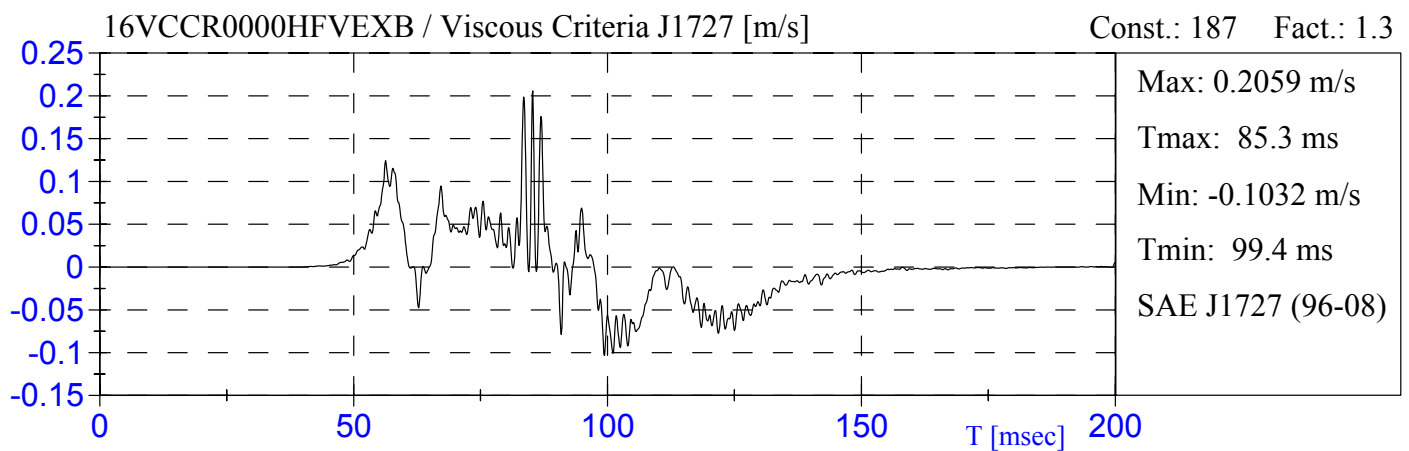
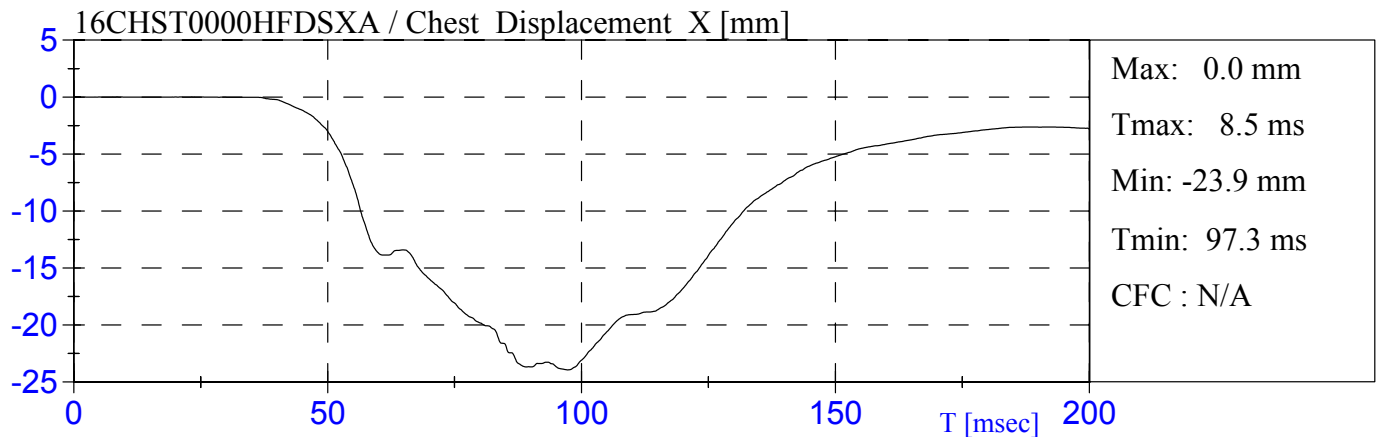
N tf	N te	Ncf	N ce	Tc	4287
				Cc	3880
0.93	1.01	0.03	0.00	Fc	155
				Ec	67

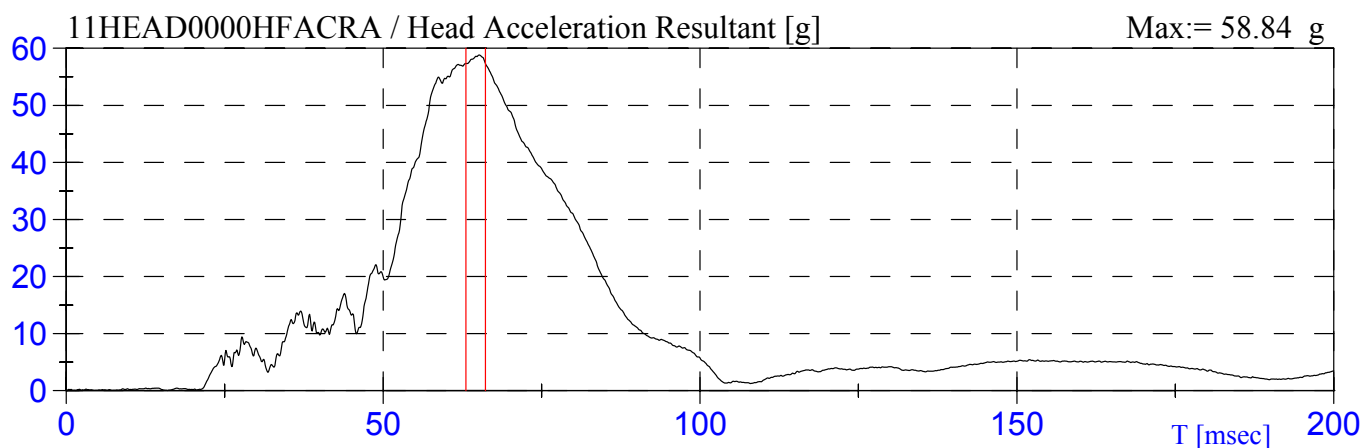
* Selon / According To: Federal Register 5/2000





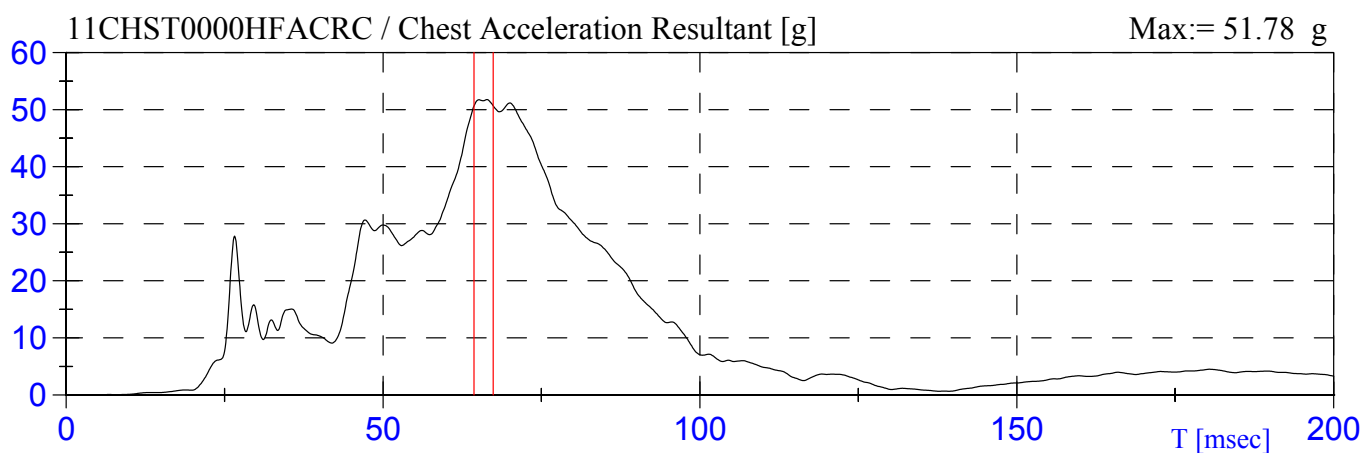






CLIP 3ms *

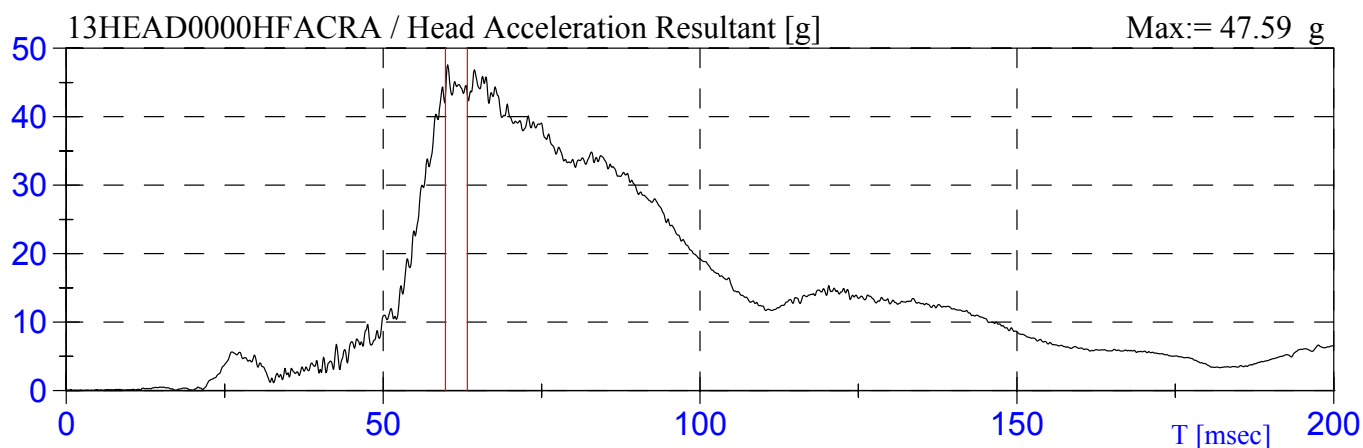
Acc. := 57.33 g	T1:= 63.1 ms	T2:= 66.1 ms
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CLIP 3ms *

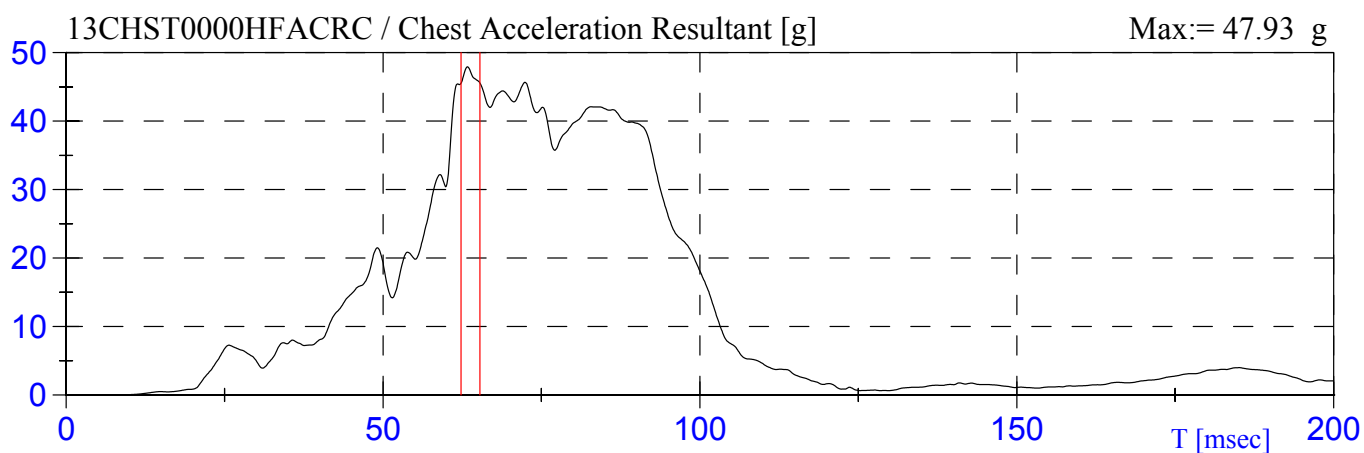
Acc. := 50.70 g	T1:= 64.4 ms	T2:= 67.4 ms
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* Selon / According To: NHTSA CLIP VERSION 2.1 5/95



CLIP 3ms *

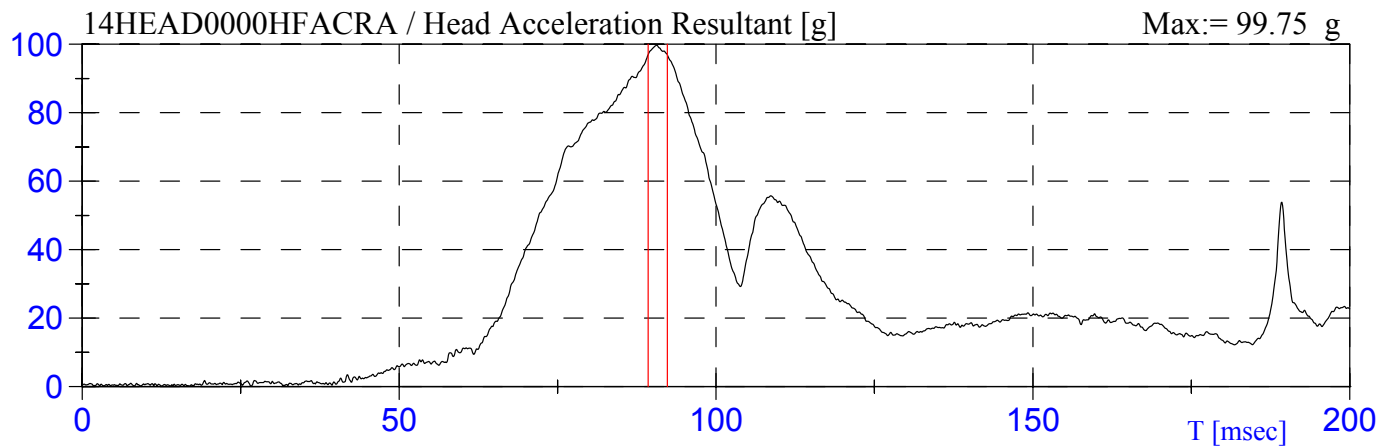
Acc. := 43.16 g	T1:= 59.8 ms	T2:= 63.3 ms
-----------------	--------------	--------------



CLIP 3ms *

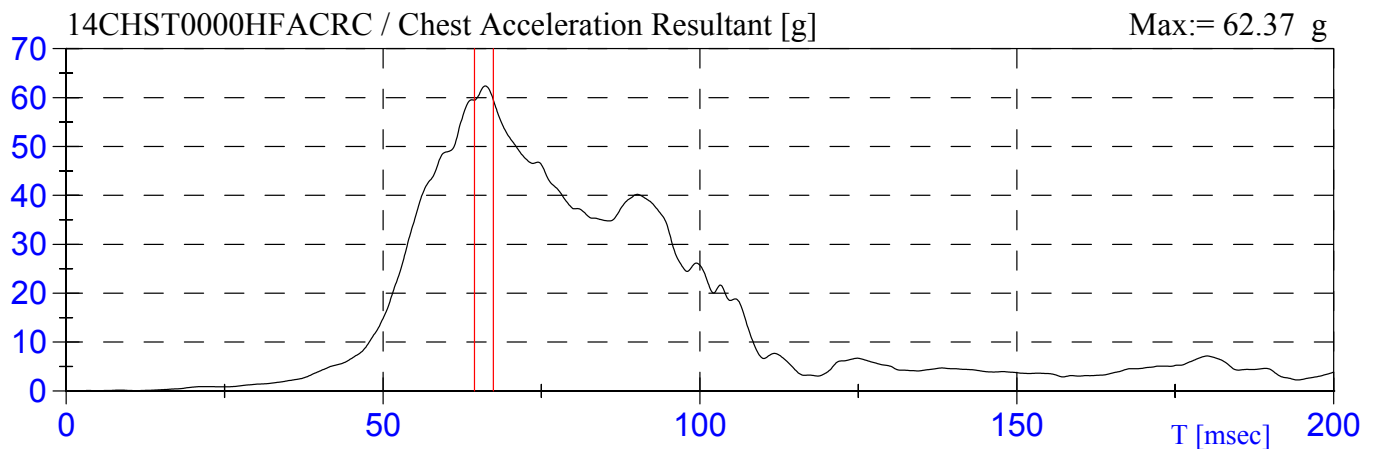
Acc. := 45.54 g	T1:= 62.3 ms	T2:= 65.3 ms
-----------------	--------------	--------------

* Selon / According To: NHTSA CLIP VERSION 2.1 5/95



CLIP 3ms *

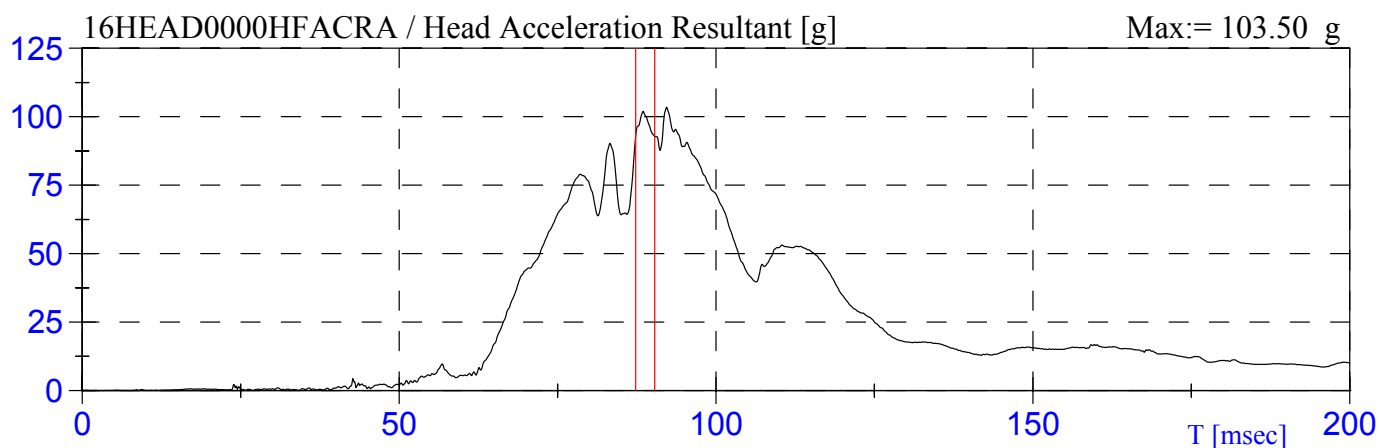
Acc. := 97.03 g	T1:= 89.3 ms	T2:= 92.3 ms
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CLIP 3ms *

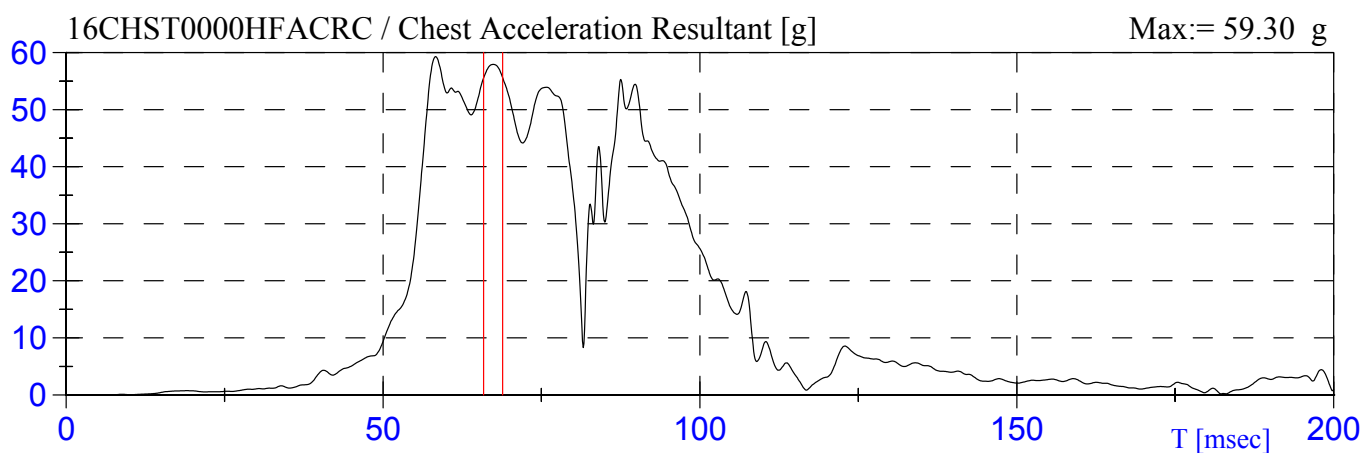
Acc. := 59.48 g	T1:= 64.4 ms	T2:= 67.4 ms
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* Selon / According To: NHTSA CLIP VERSION 2.1 5/95



CLIP 3ms *

Acc. := 92.87 g	T1:= 87.3 ms	T2:= 90.3 ms
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CLIP 3ms *

Acc. := 55.60 g	T1:= 65.9 ms	T2:= 68.9 ms
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* Selon / According To: NHTSA CLIP VERSION 2.1 5/95

COMMENTAIRES / COMMENTS

16CHST0000HFACYC: Transitoire réparé de 107.9 à 115.3 ms.
Glitch removed from 107.9 to 115.3 ms.

APPENDICE /APPENDIX C

**DONNÉES DES TEMPÉRATURES
TEMPERATURE DATA**

Temperature TC05-205

