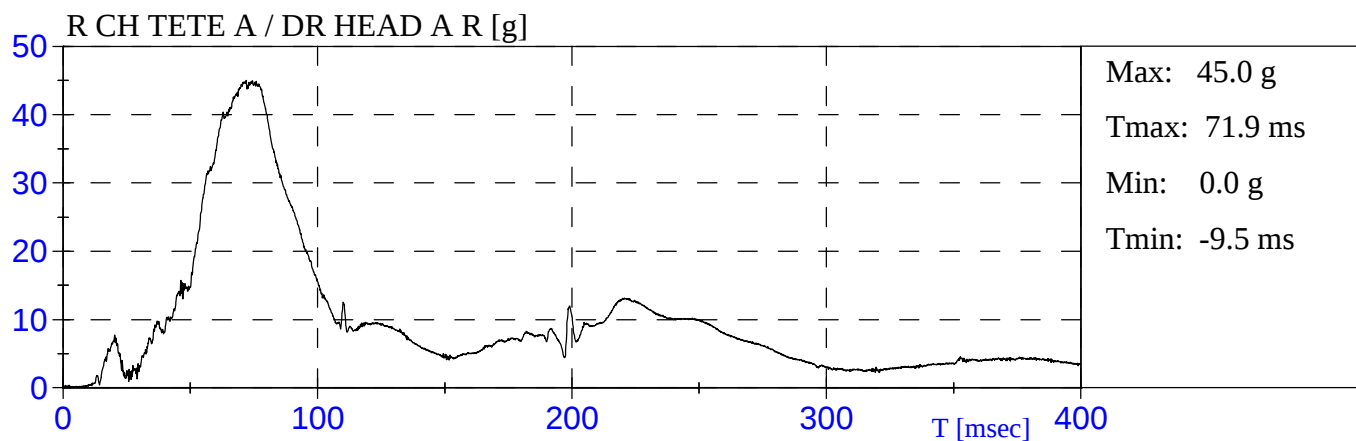
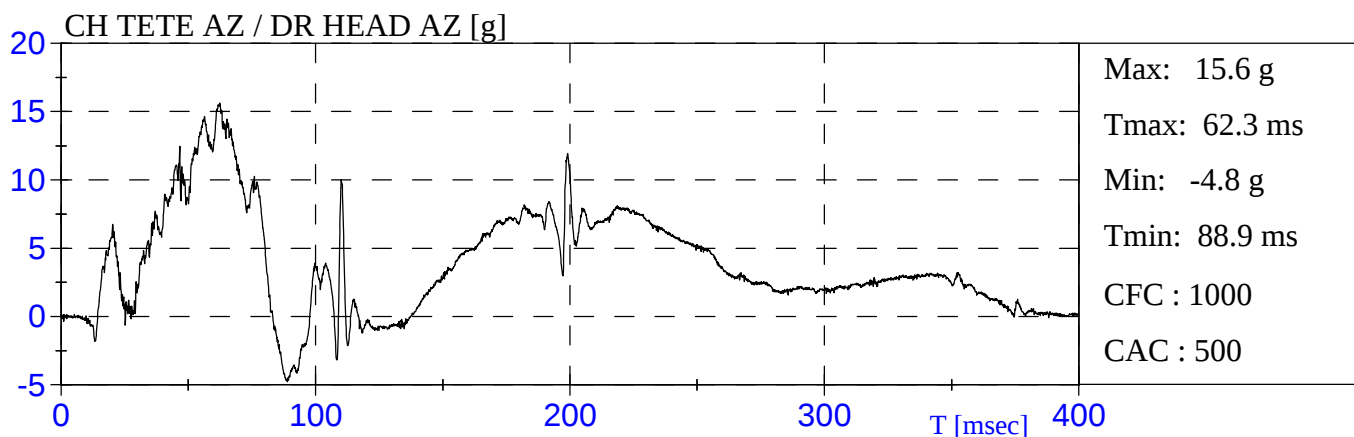
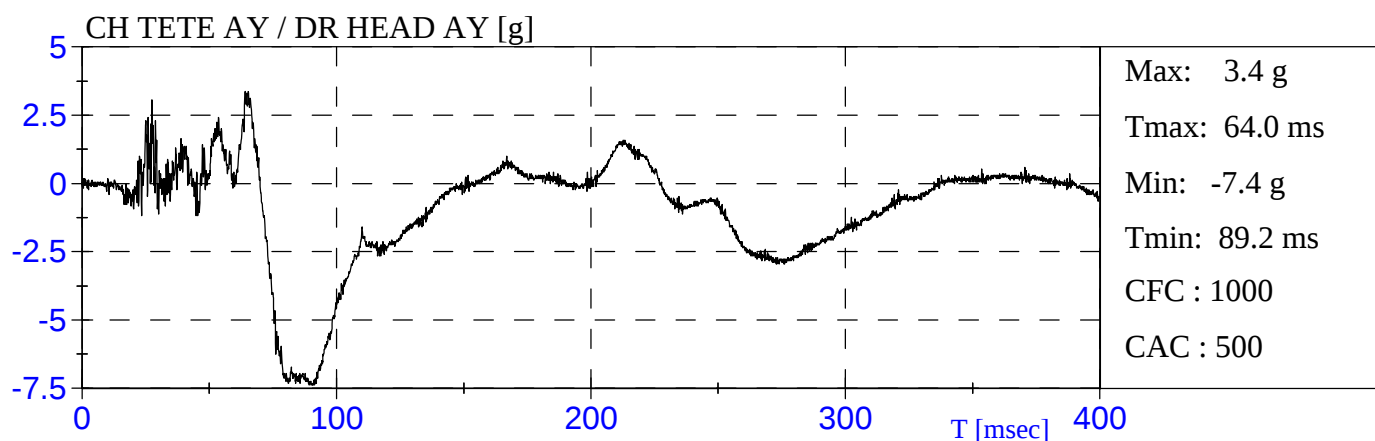
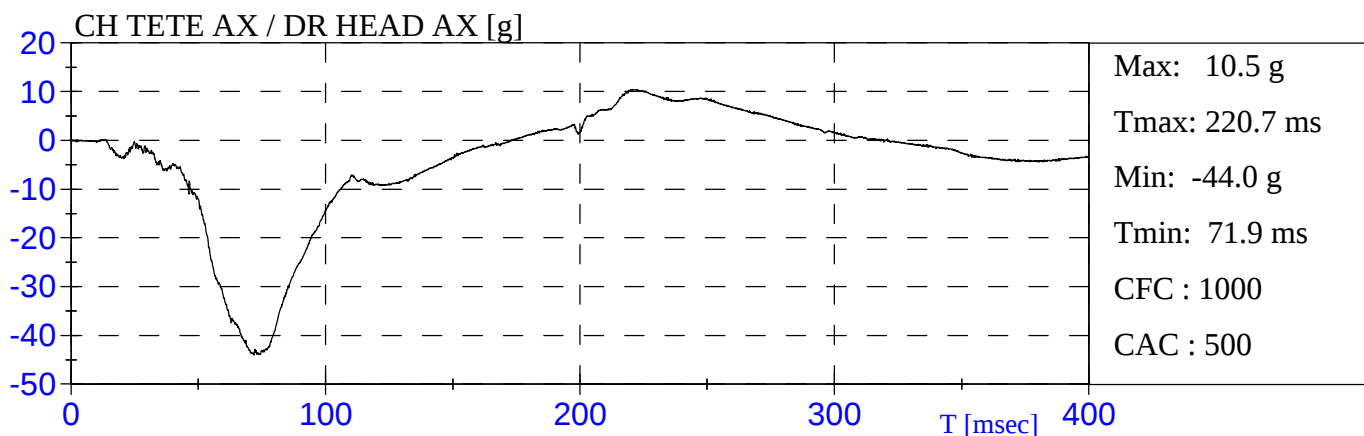
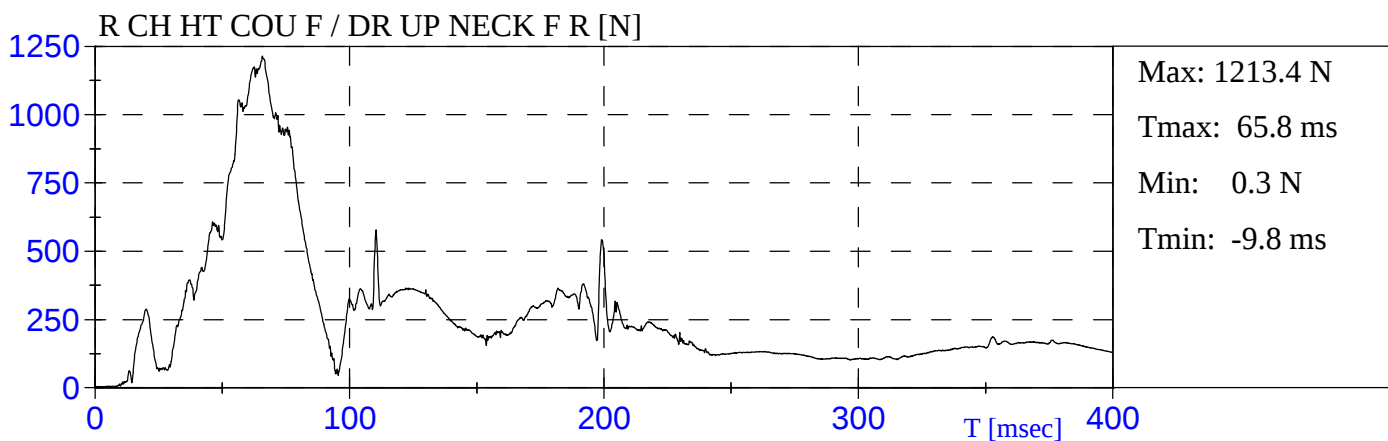
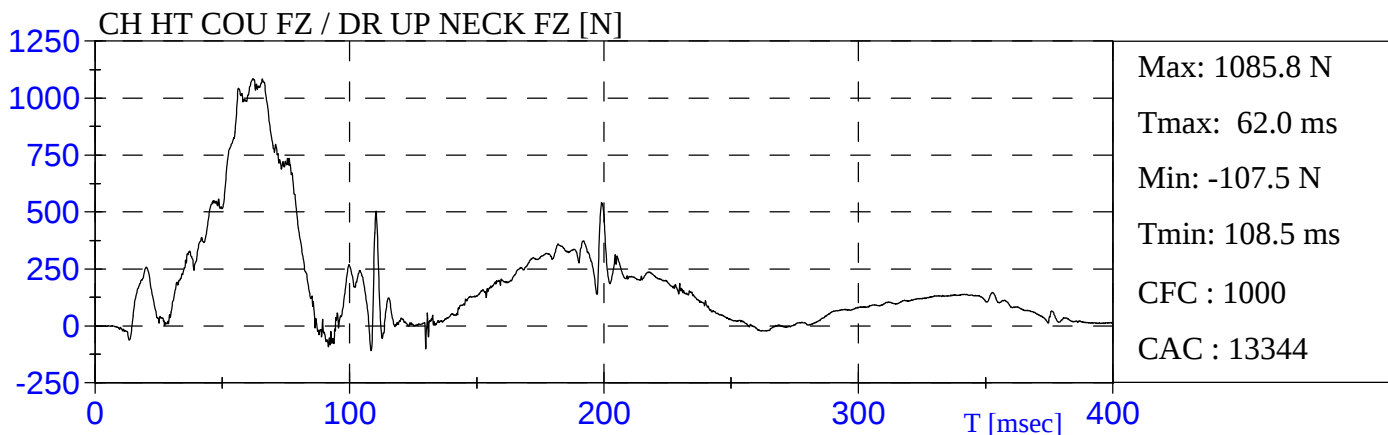
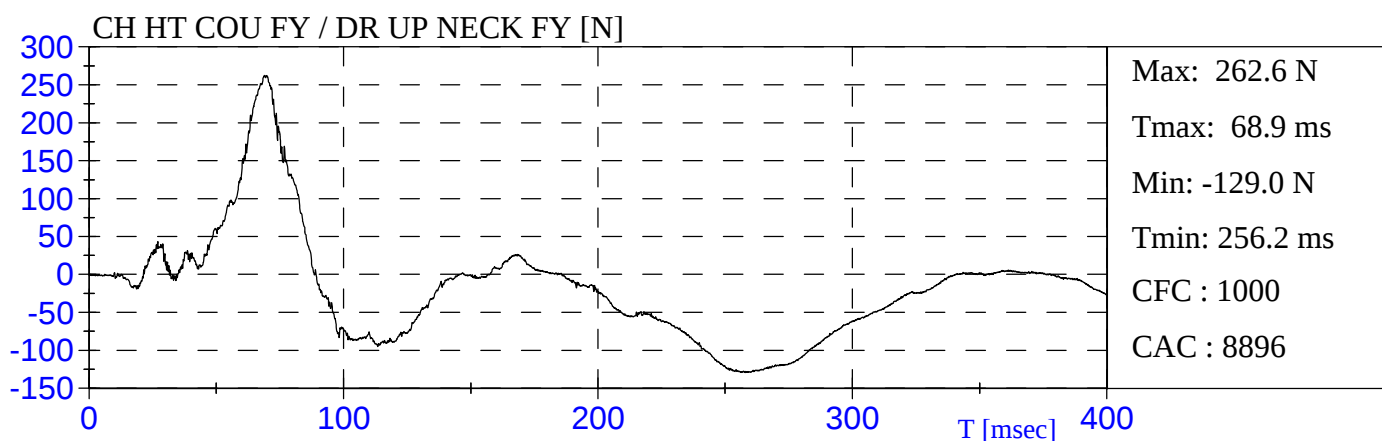
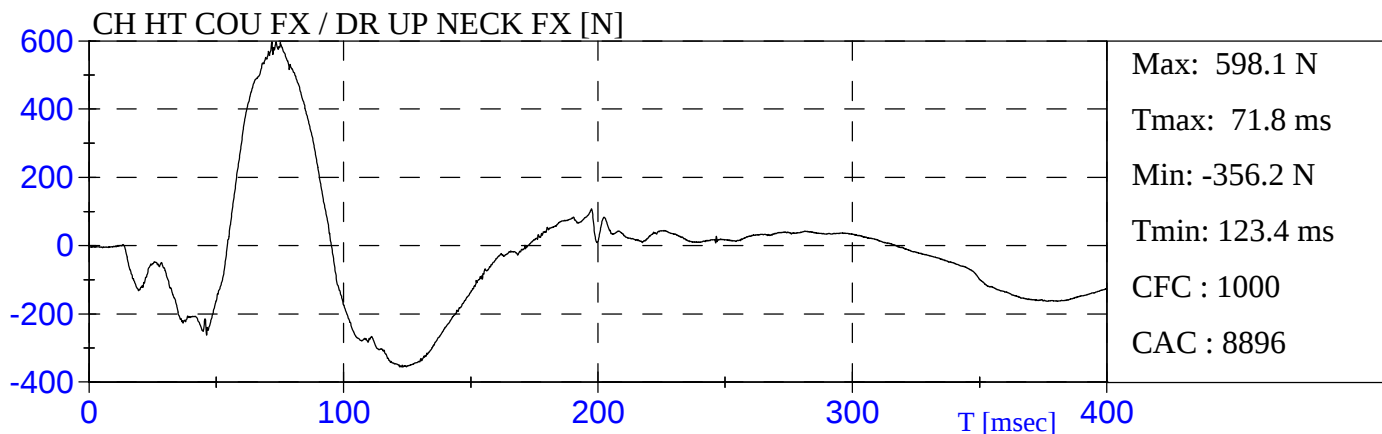
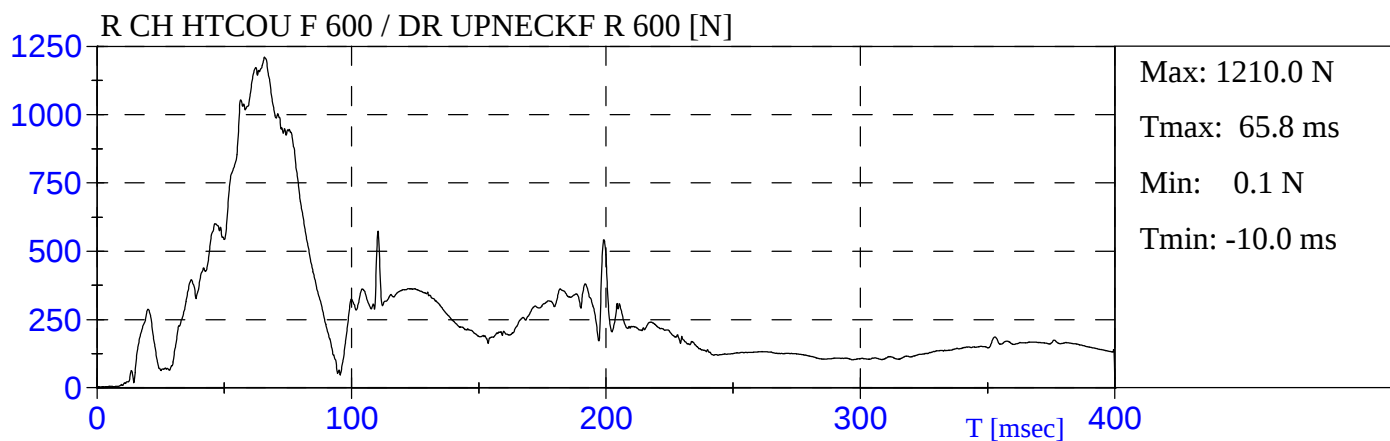
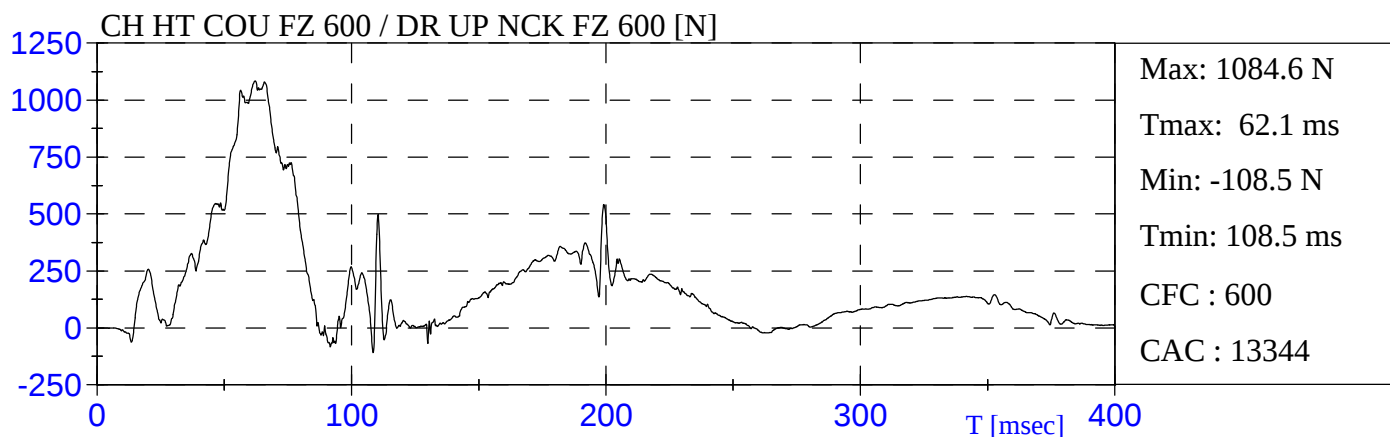
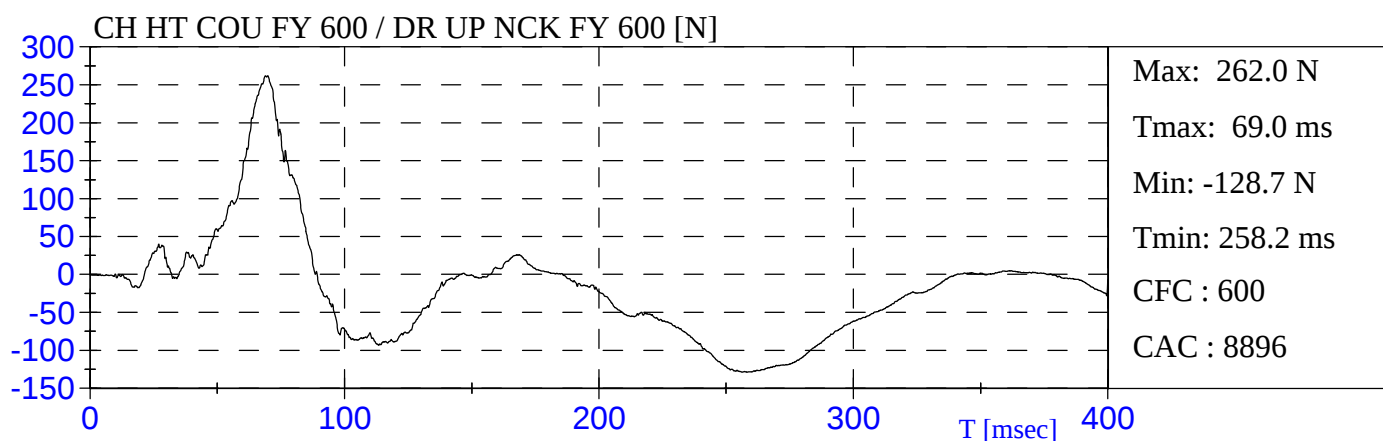
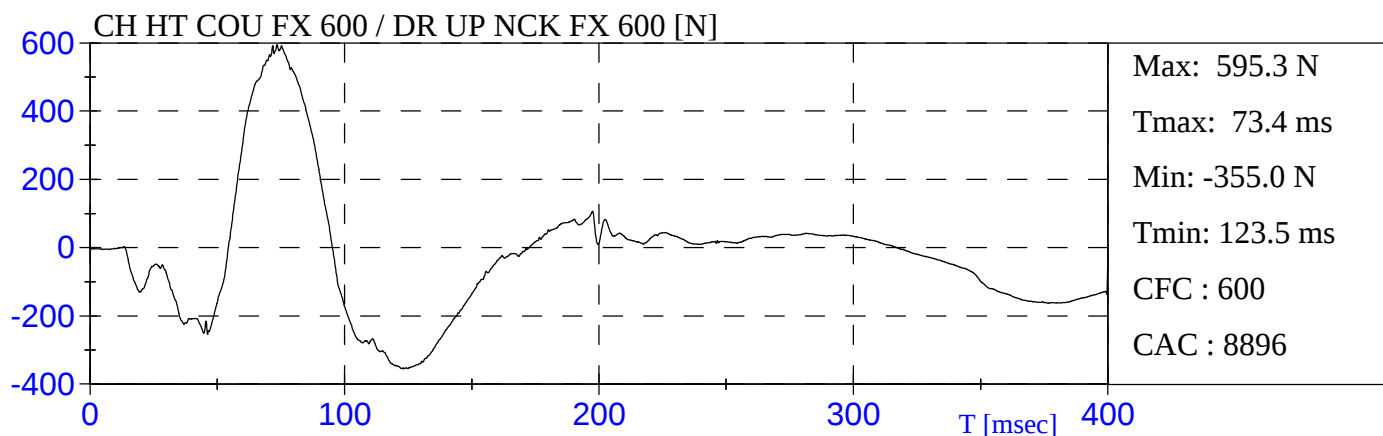


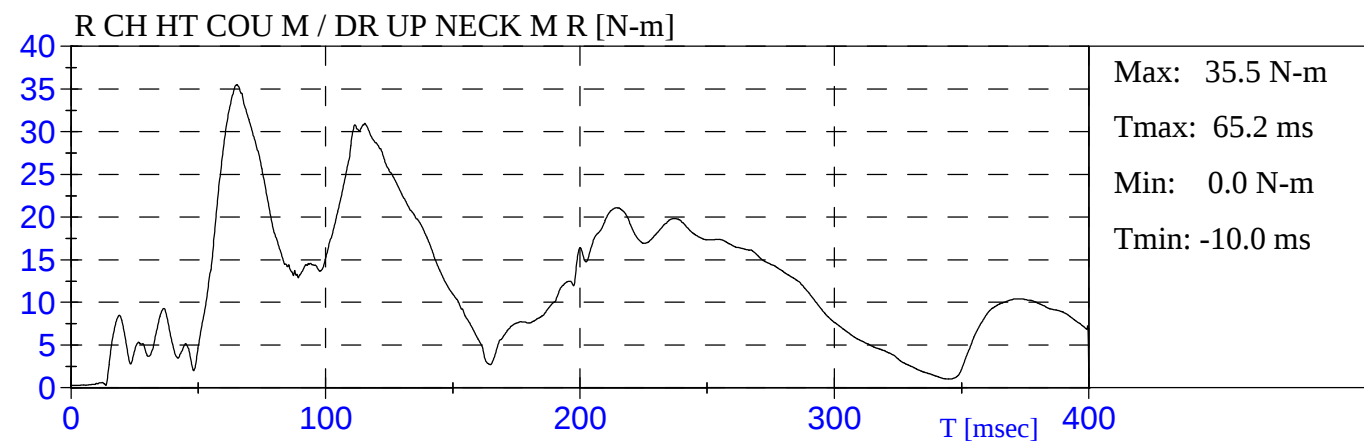
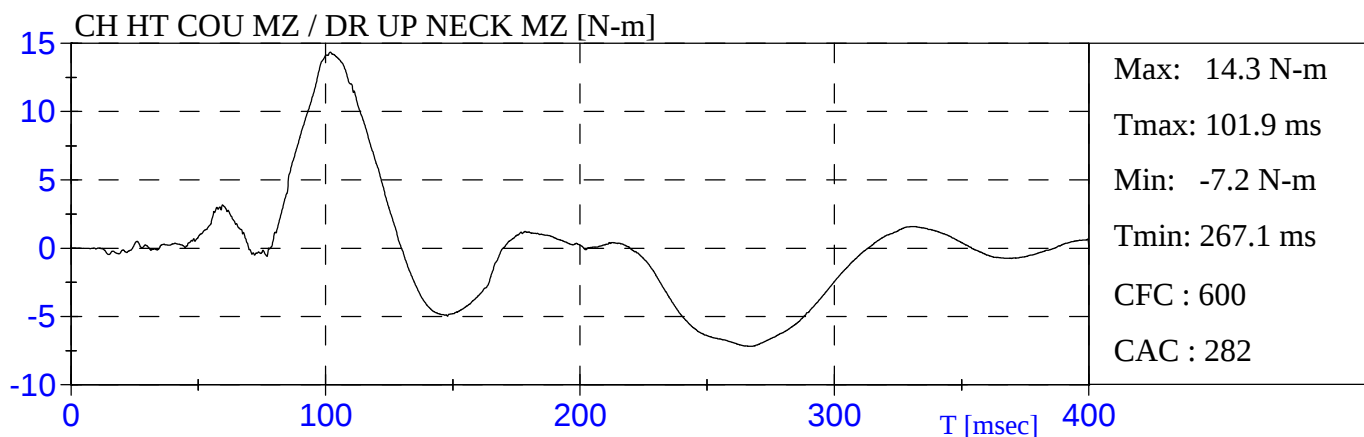
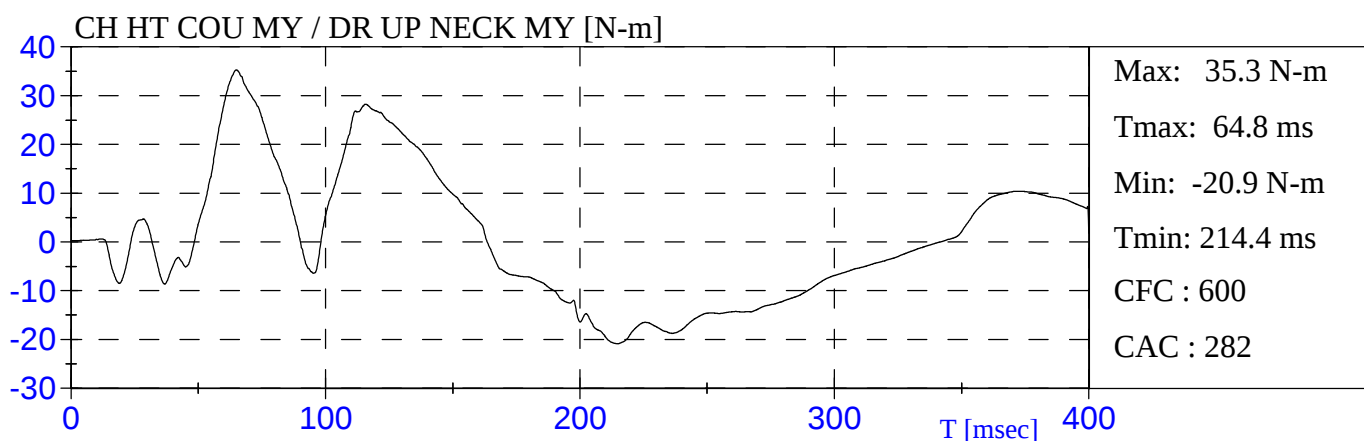
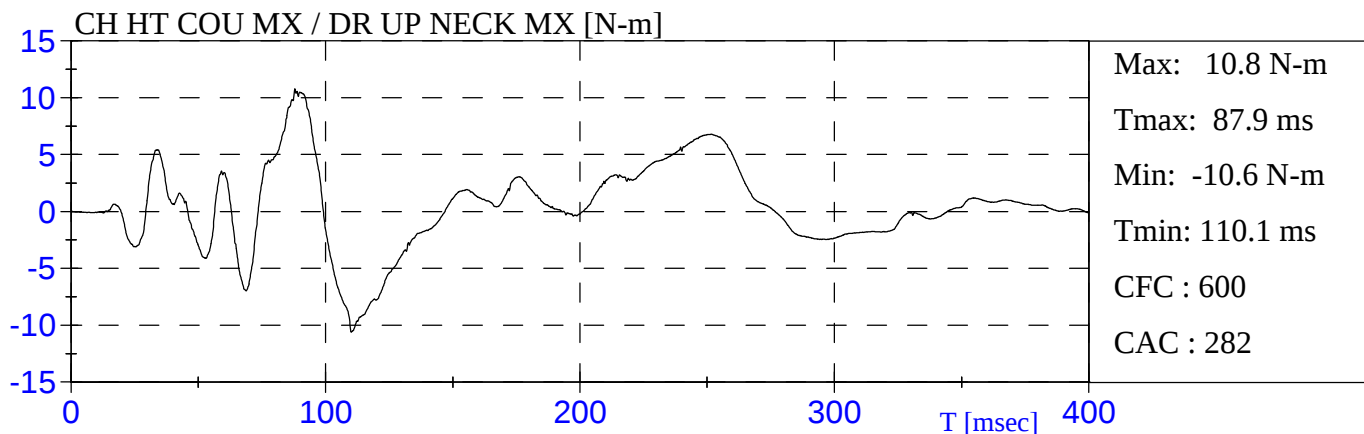


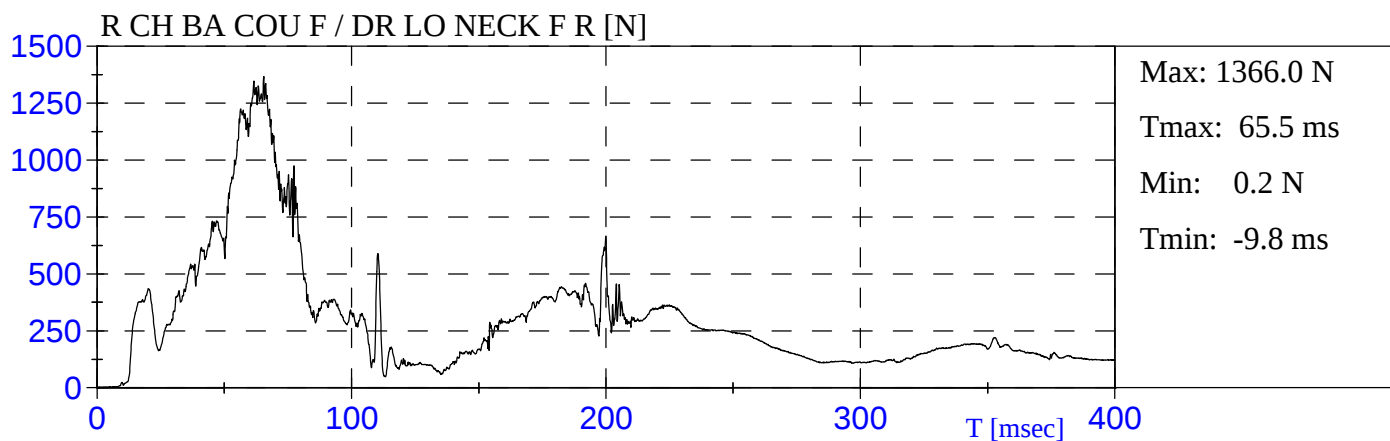
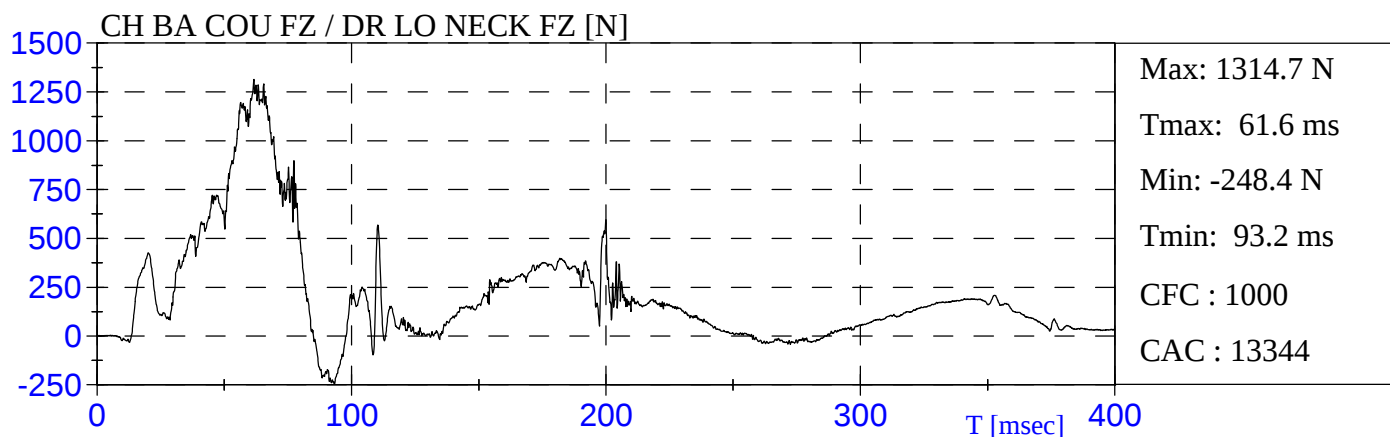
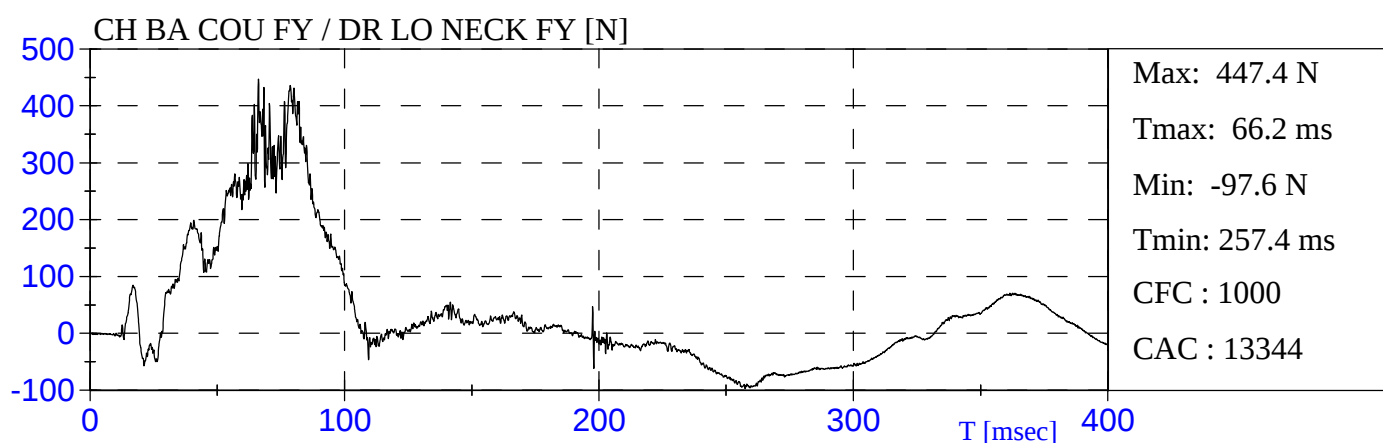
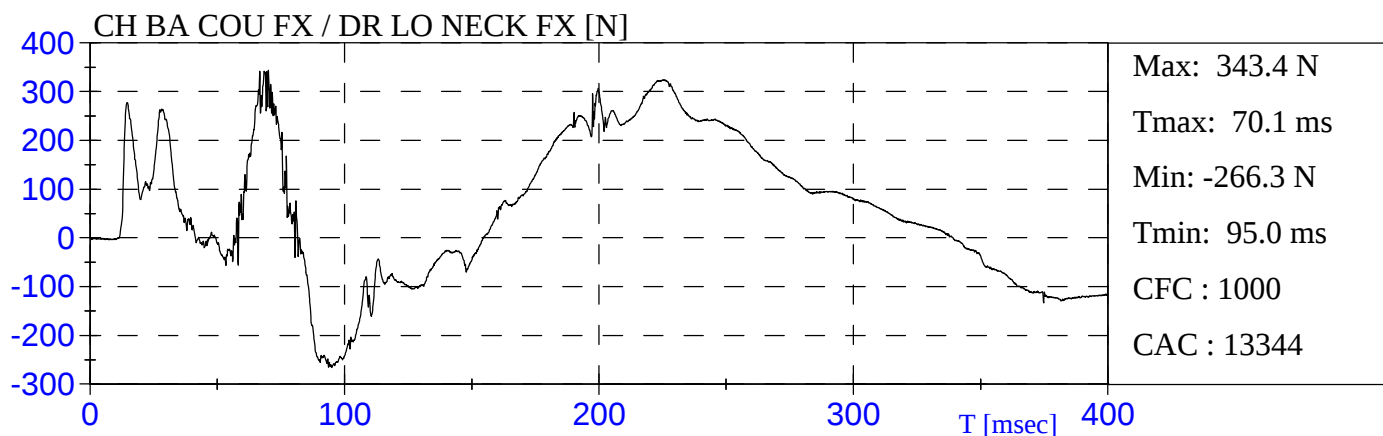
Nom du client Client Name	TRANSPORT CANADA
Type de véhicule Type of Vehicle	MERCEDES C-230 2004
Numéro de TC Tc Number	TC04-137
Numéro de contrat Contract No	04-6008
Acquisition de données selon Data Acquisition according to	SAE J211/1 MAR 95
Date de l'essai Test date	2004-03-18
Titre du projet Project Title	COLLISION DE RECHERCHE COLLISION FRONTALE RESEARCH COLLISION TEST FRONTAL CRASH
MANNEQUIN / DUMMY	
Chauffeur Driver	HYBRID III 50% M
Passager Passenger	HYBRID III 50% M
Passager 1 (arrière gauche) Passenger 1 (rear left)	HYBRID III 5% F IR
Passager 2 (arrière droit) Passenger 2 (rear right)	

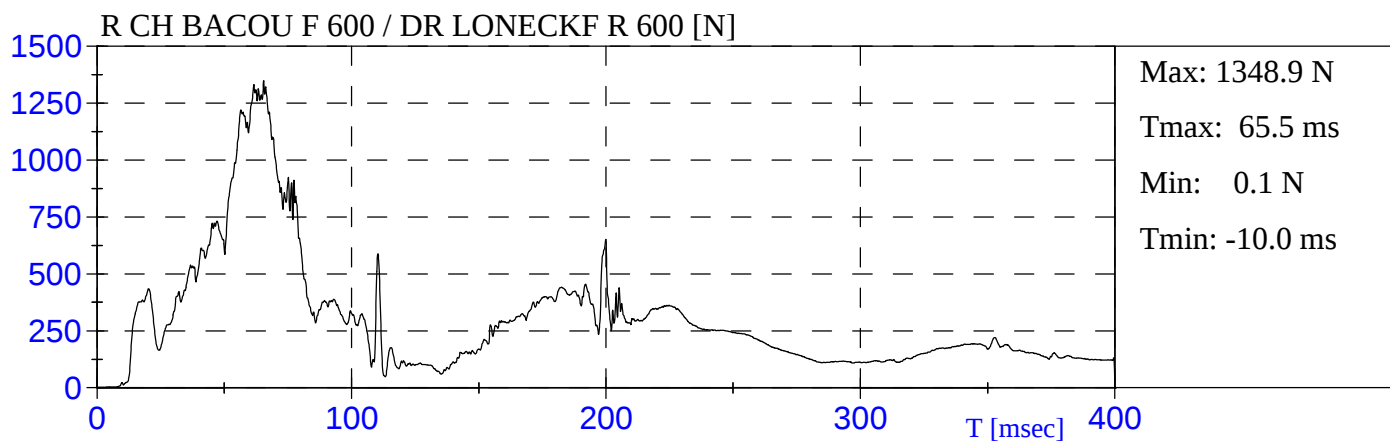
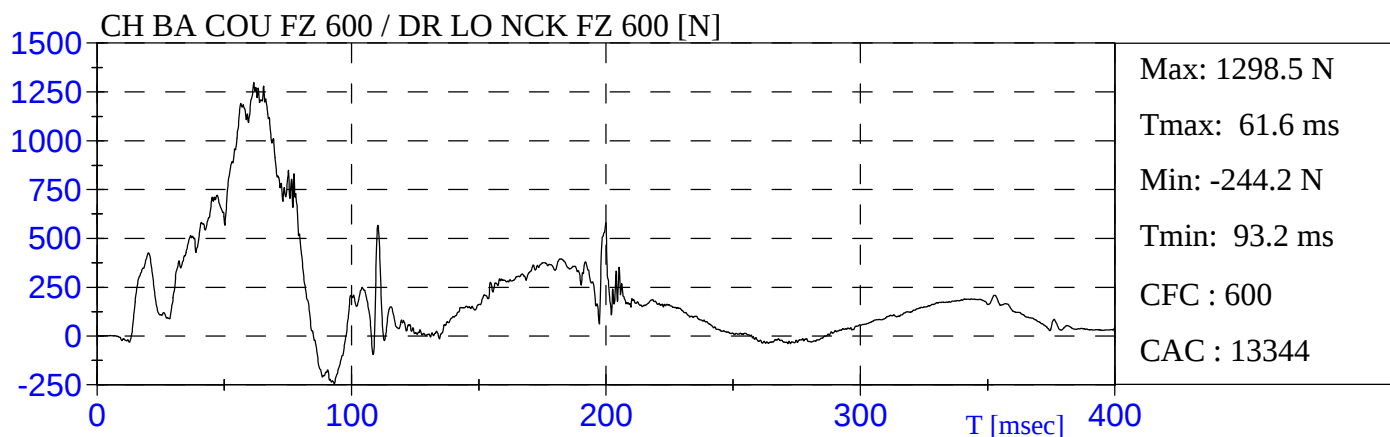
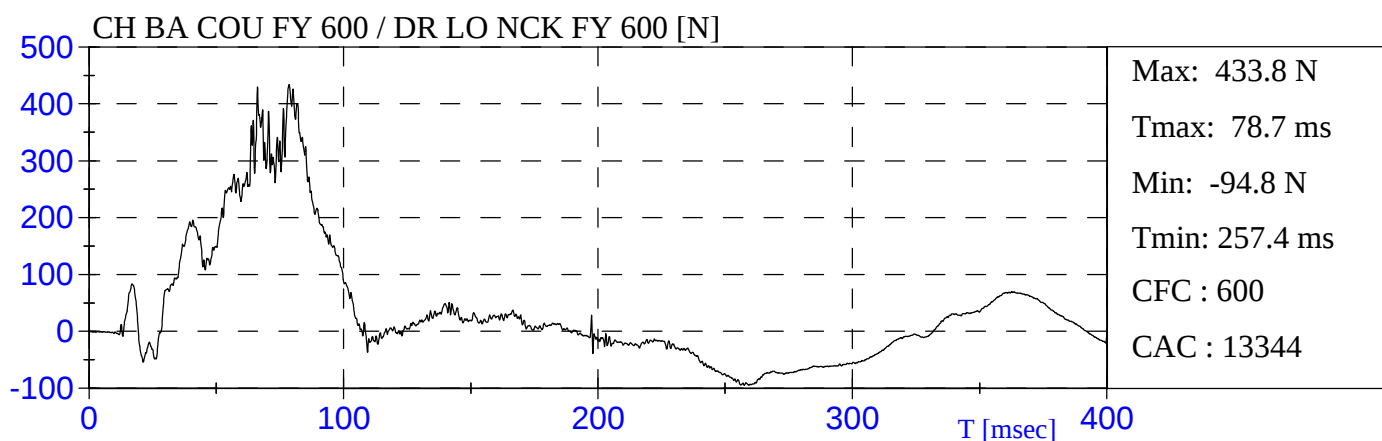
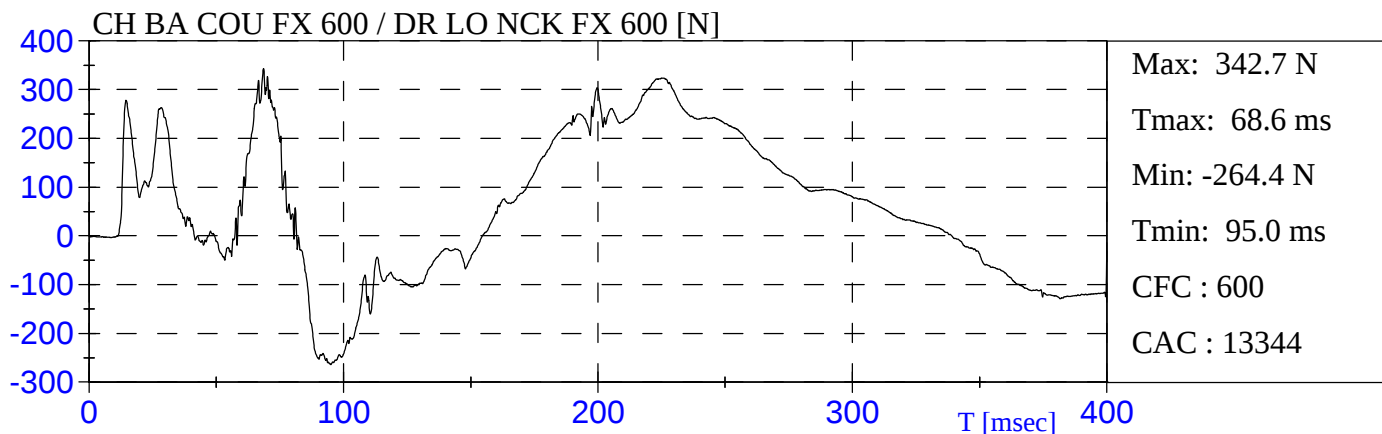


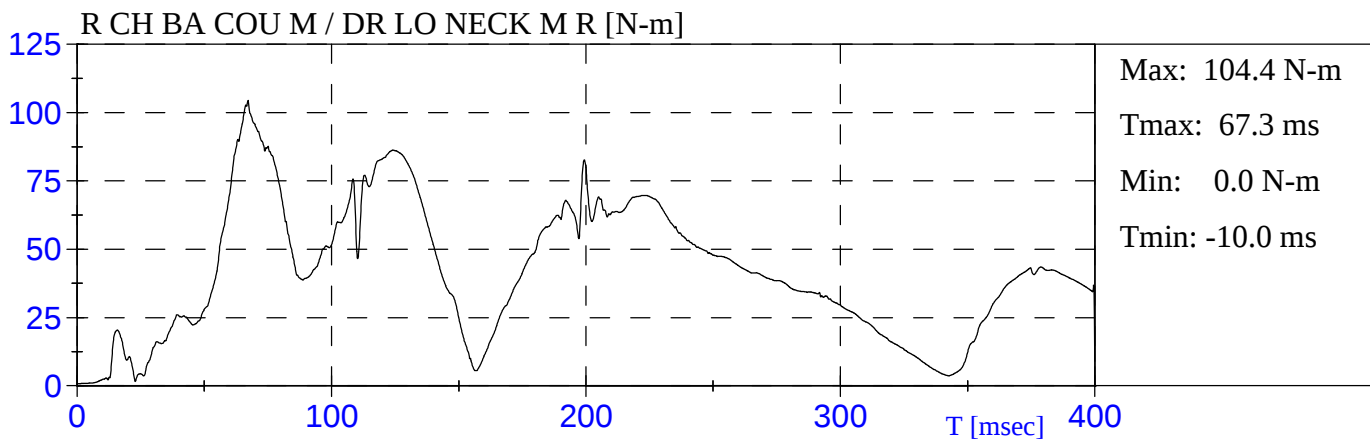
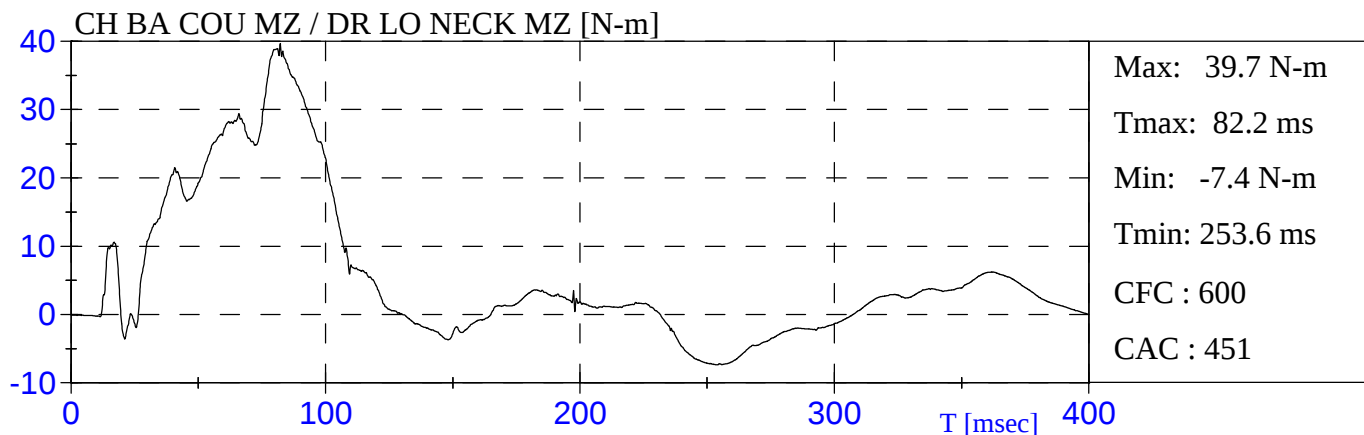
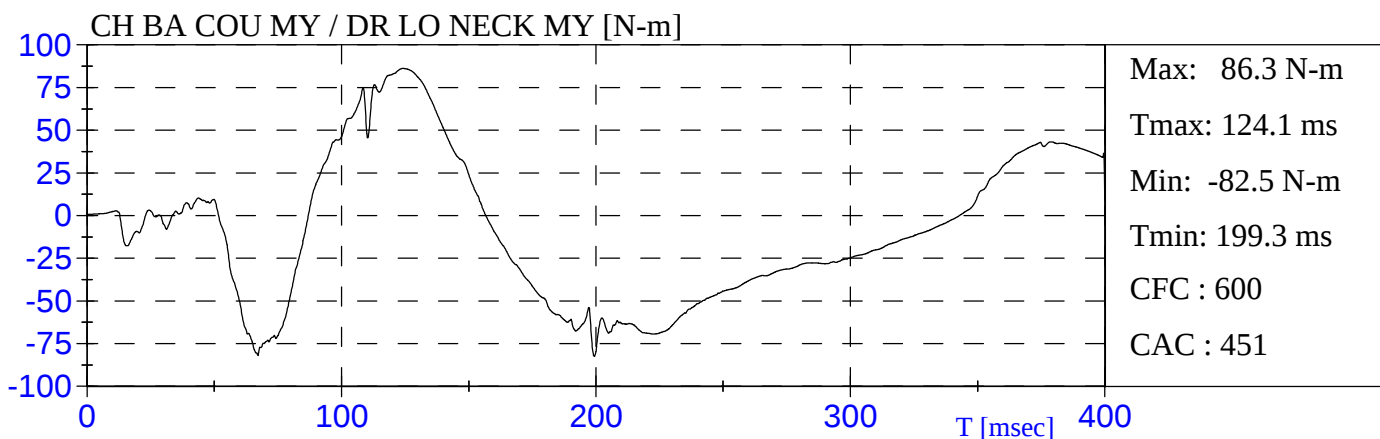
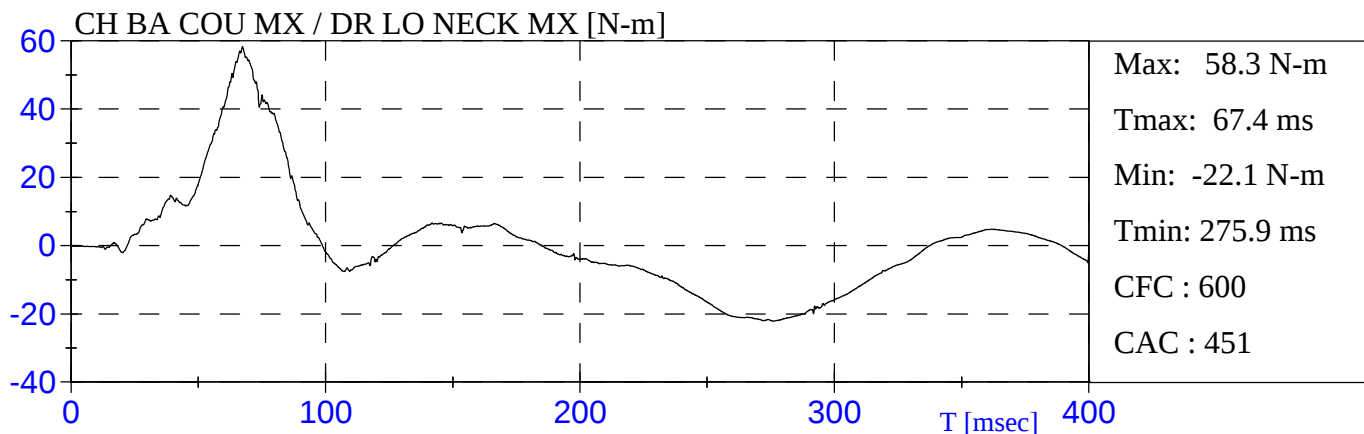


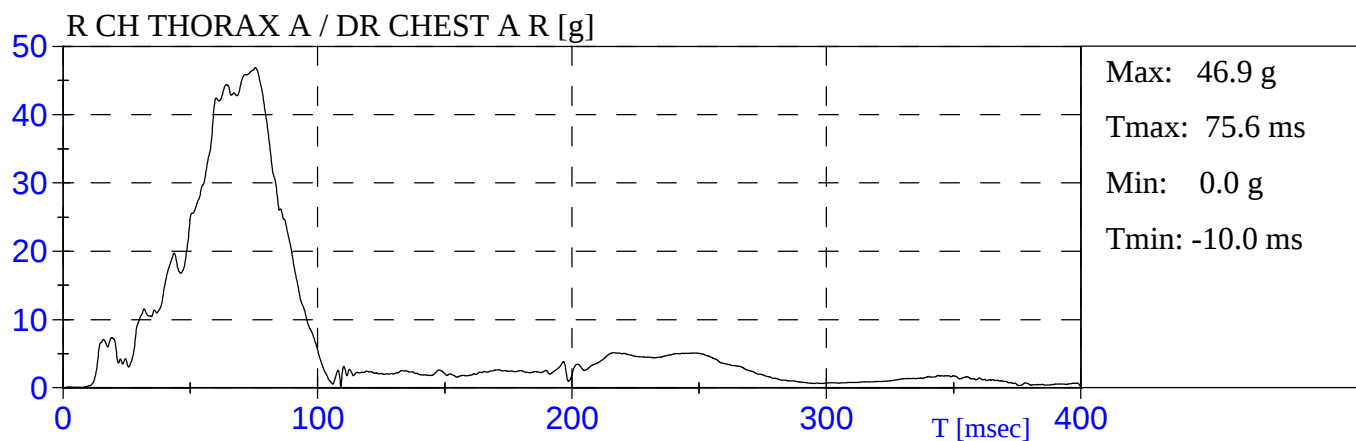
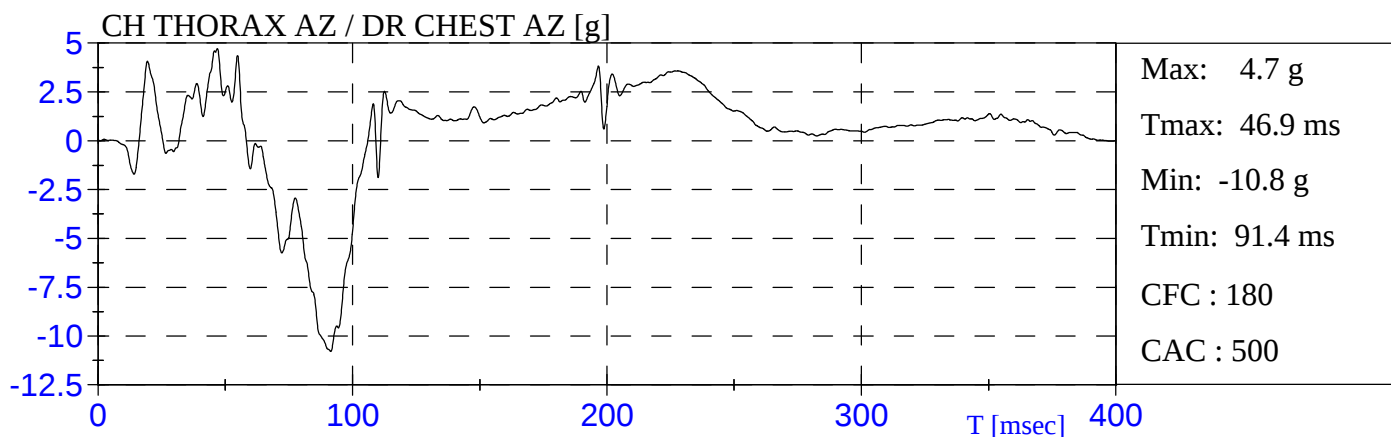
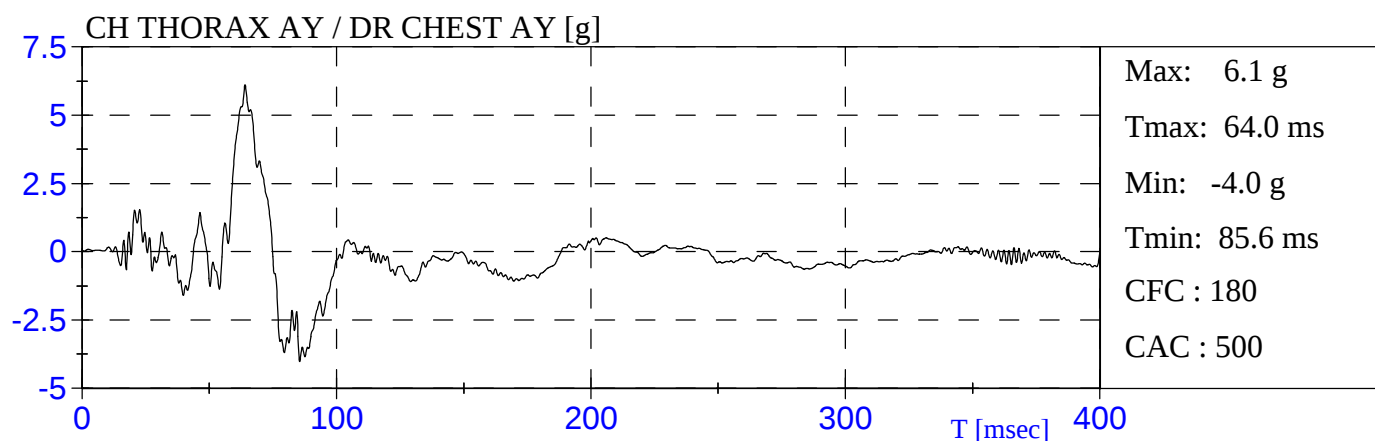
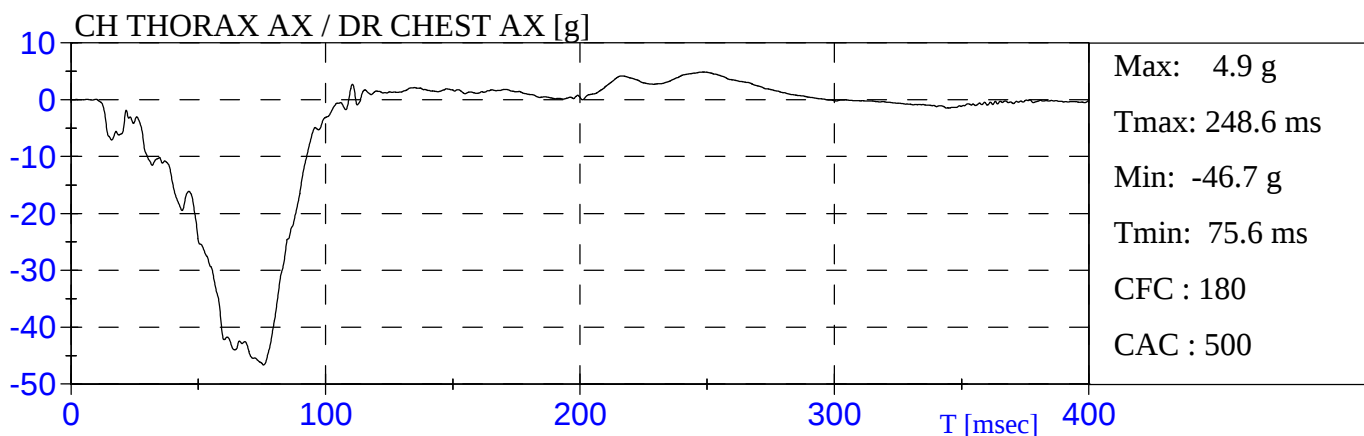


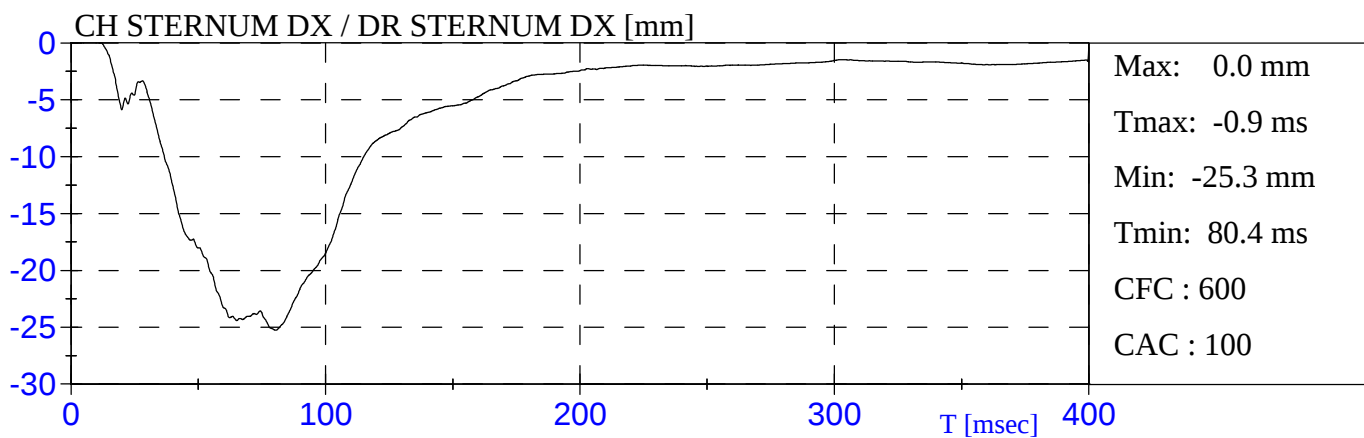


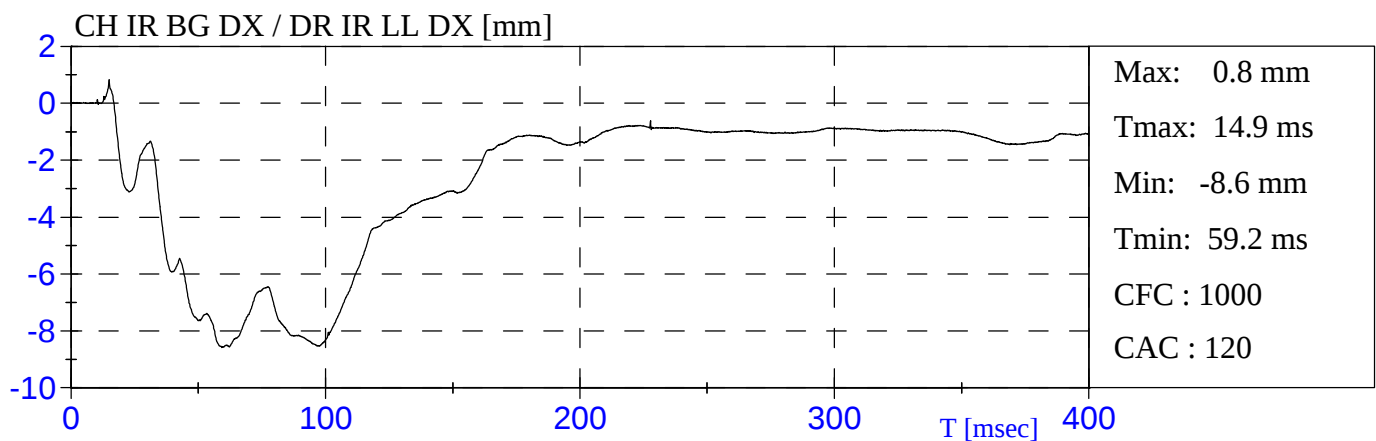
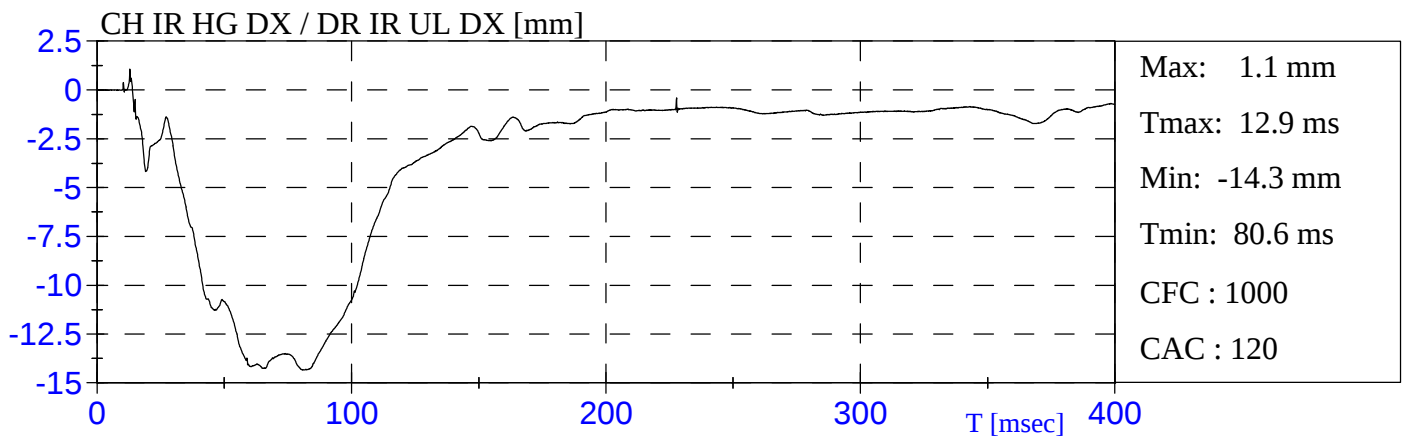
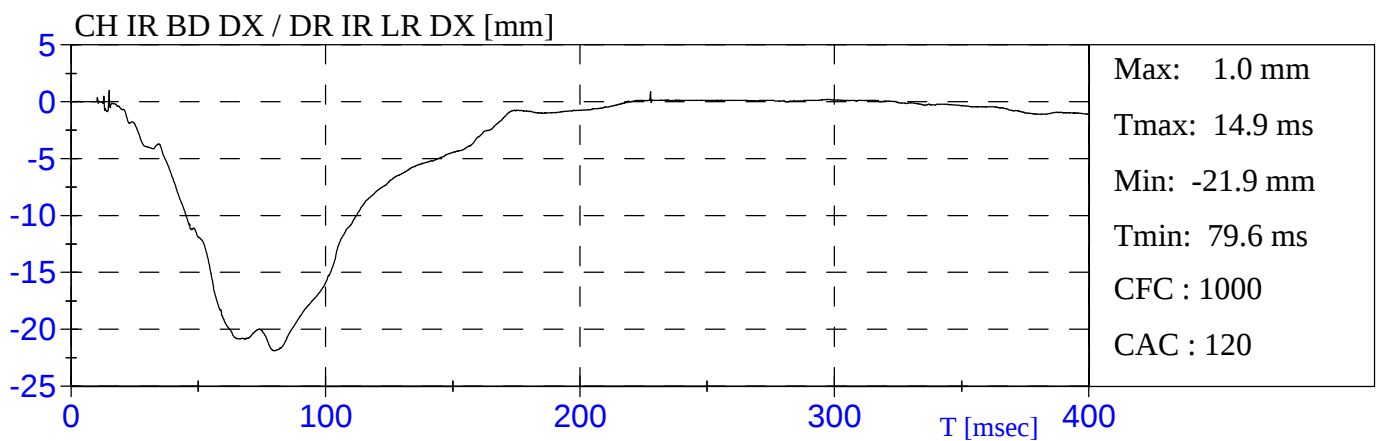
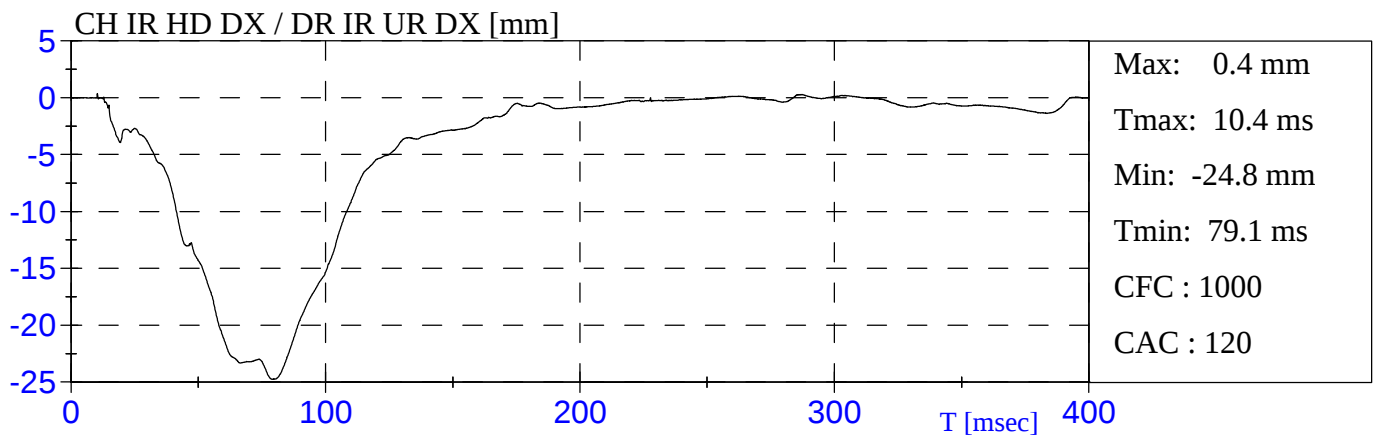


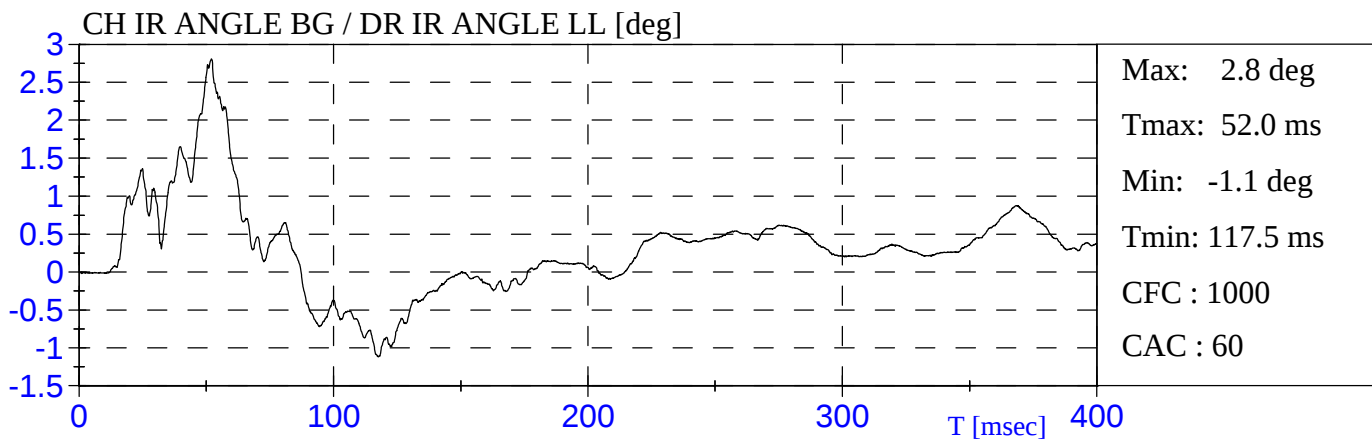
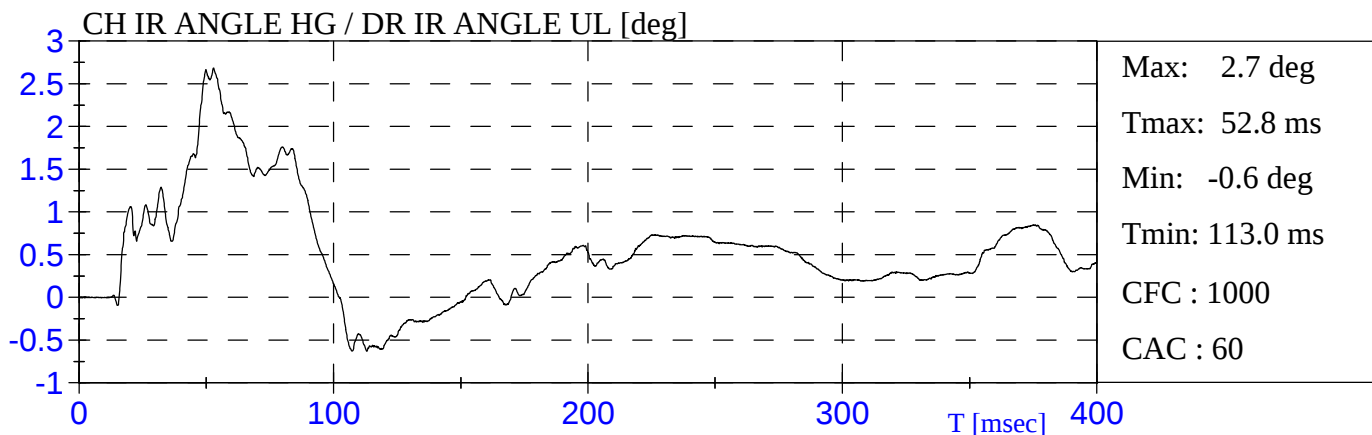
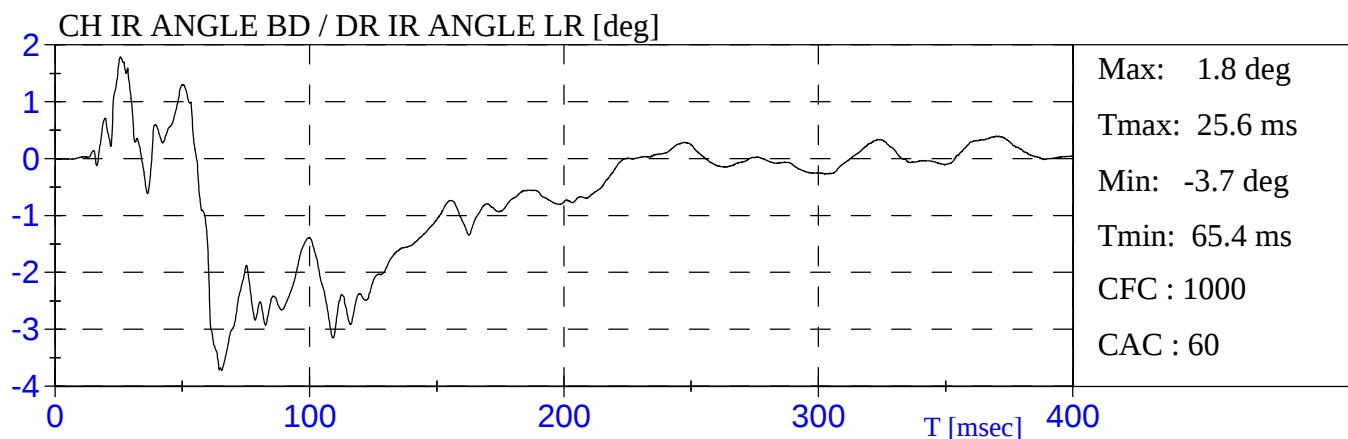
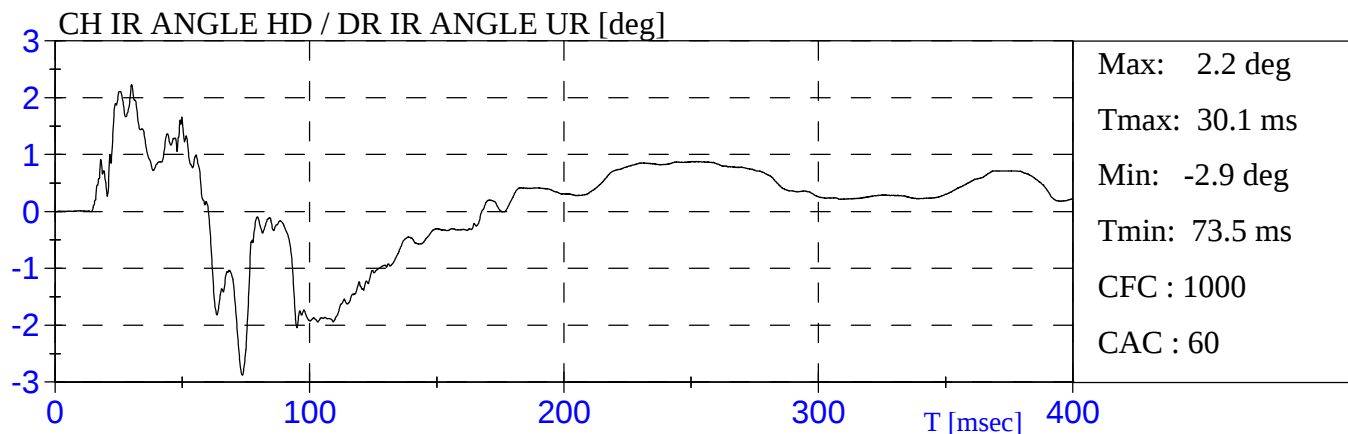


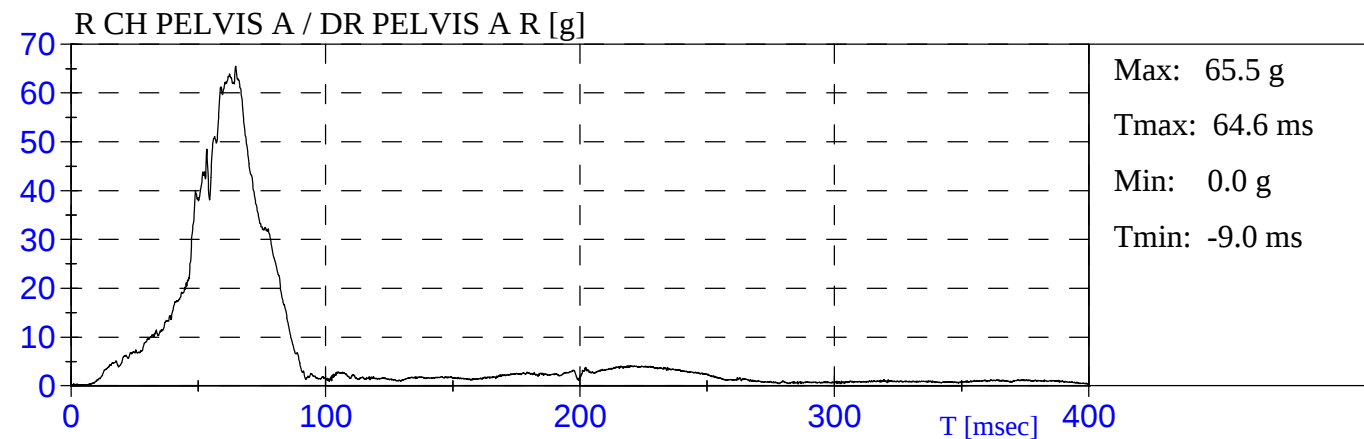
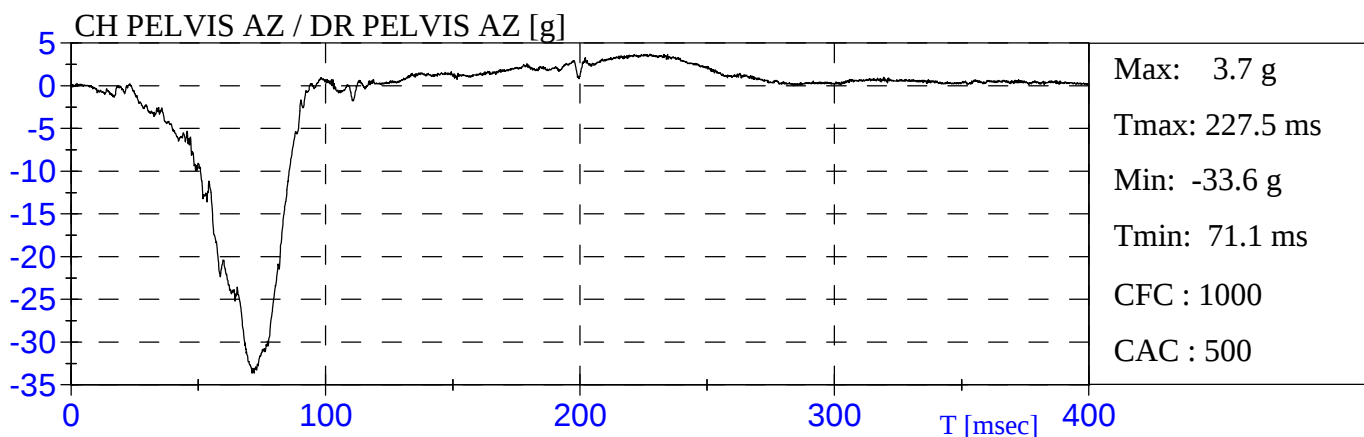
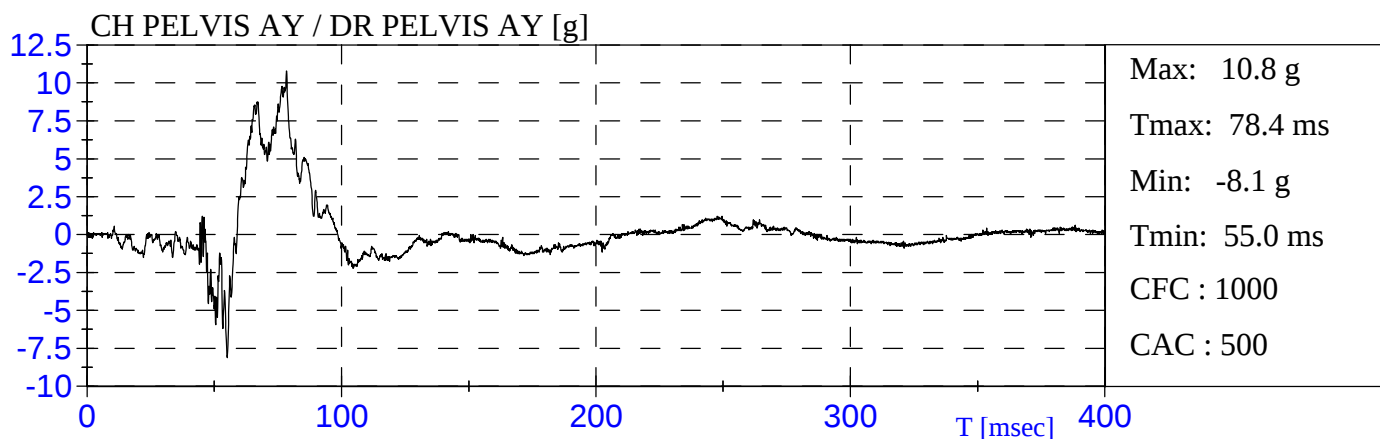
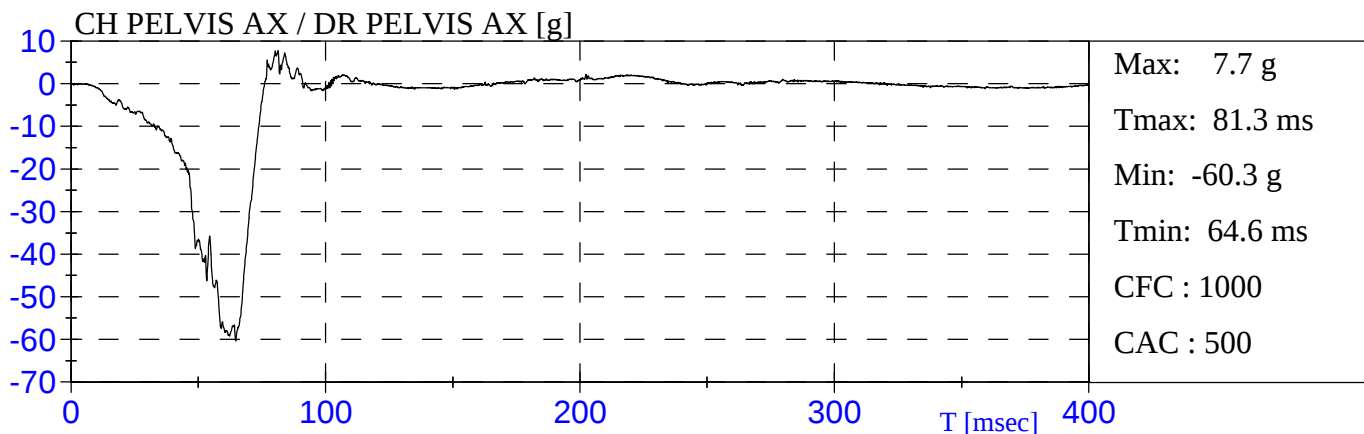


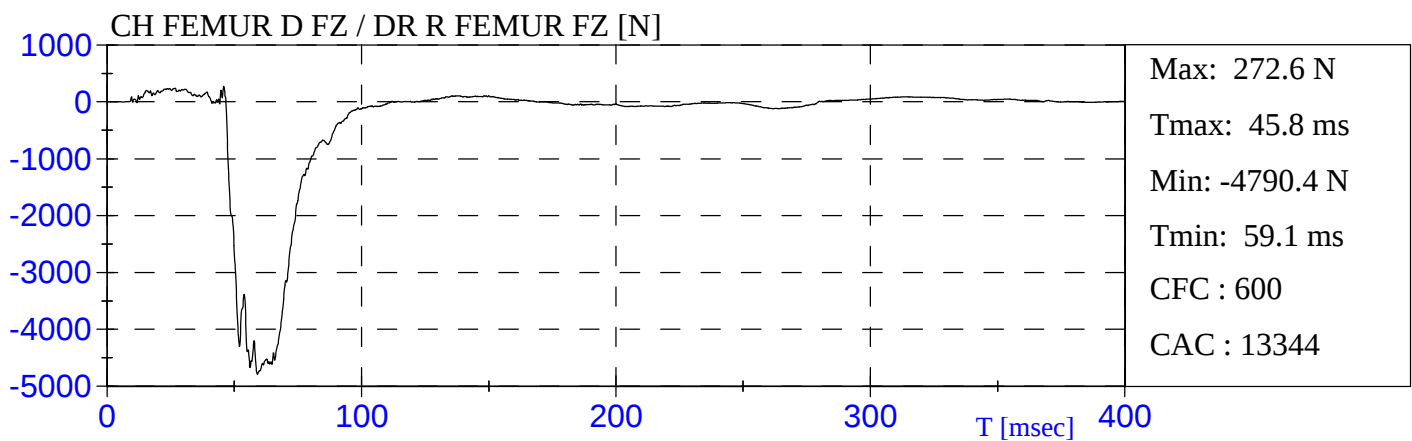
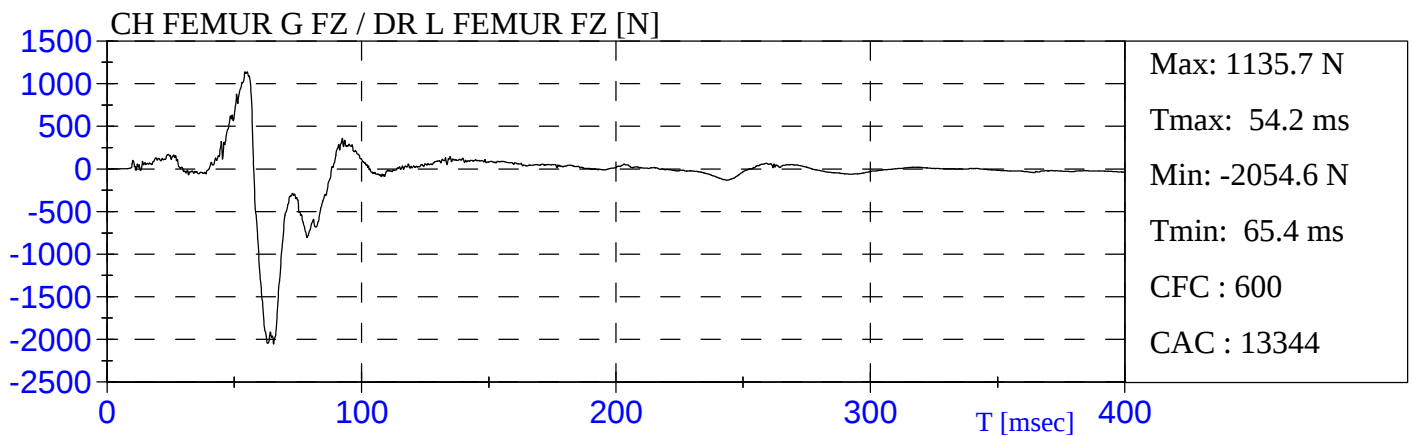


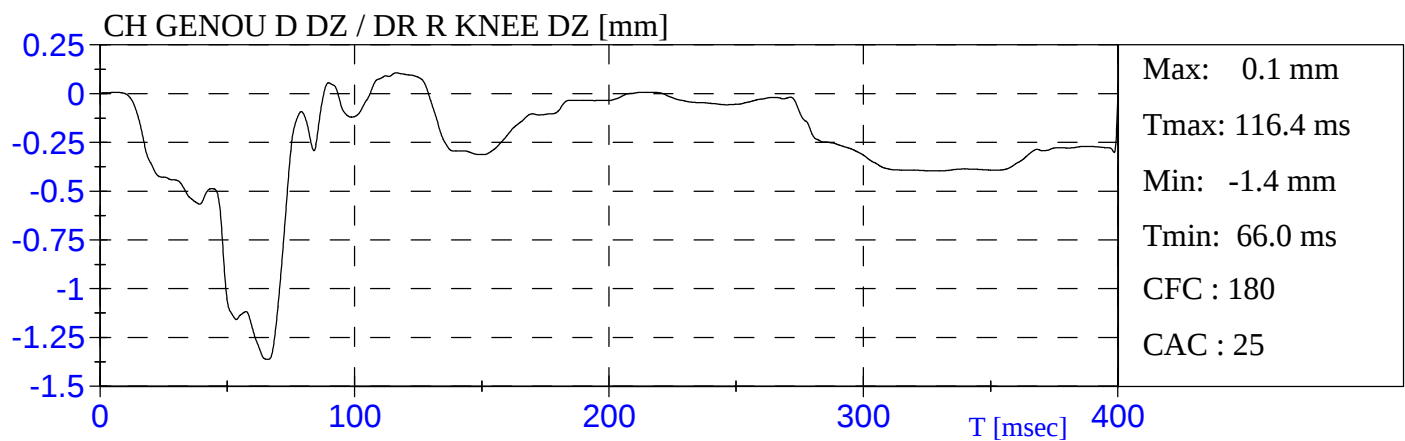
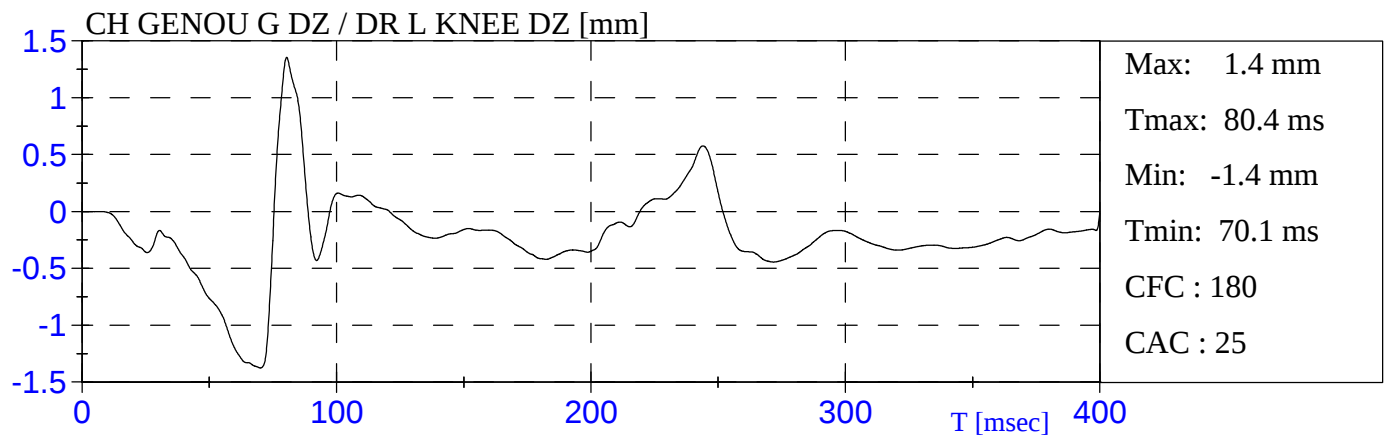


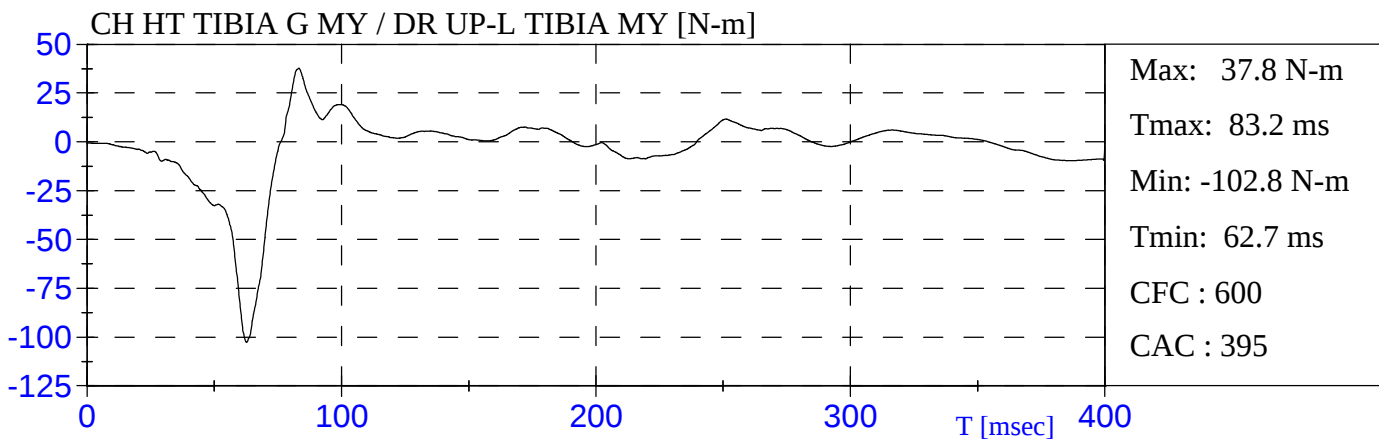
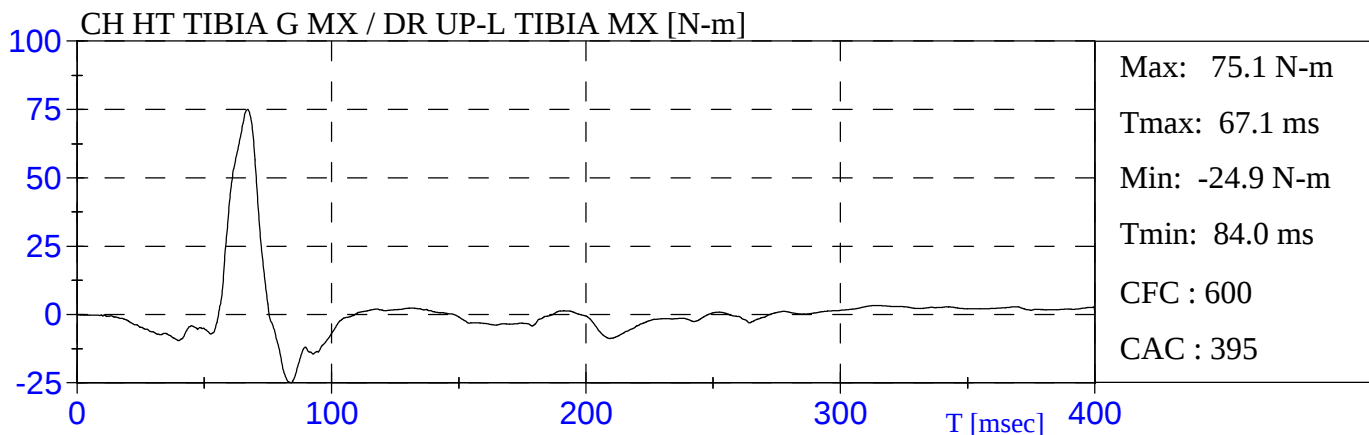
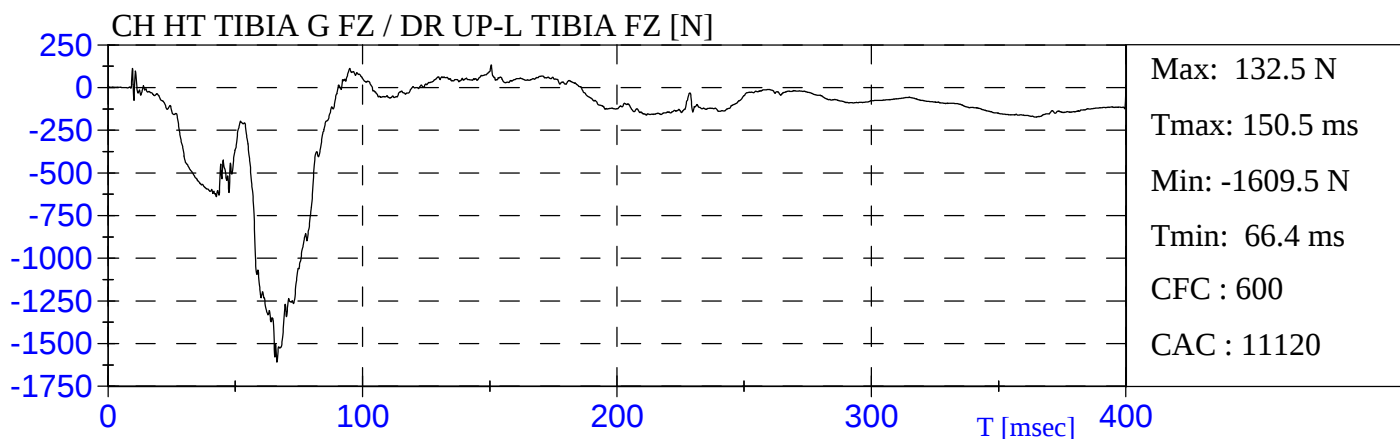
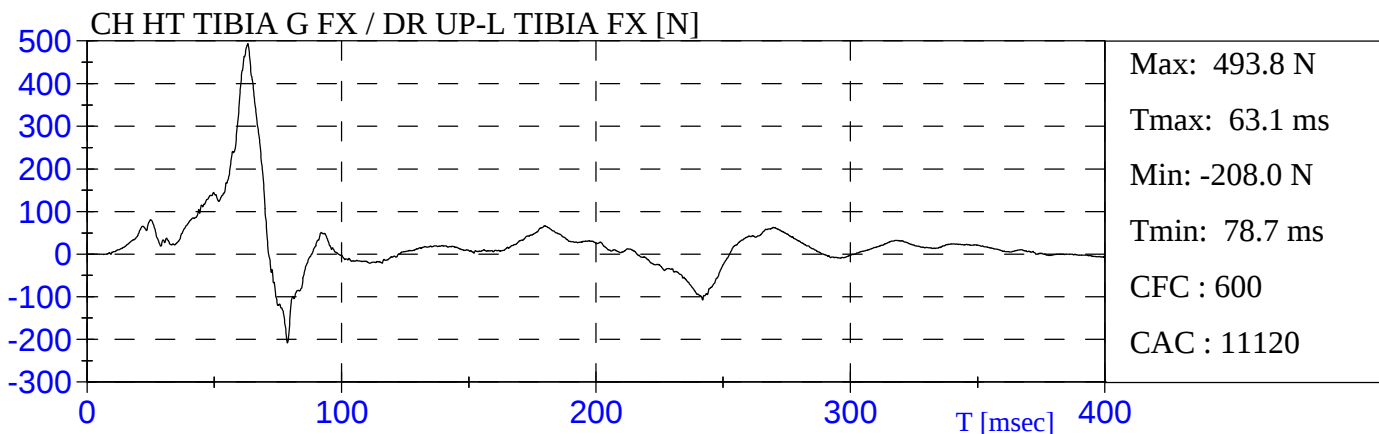


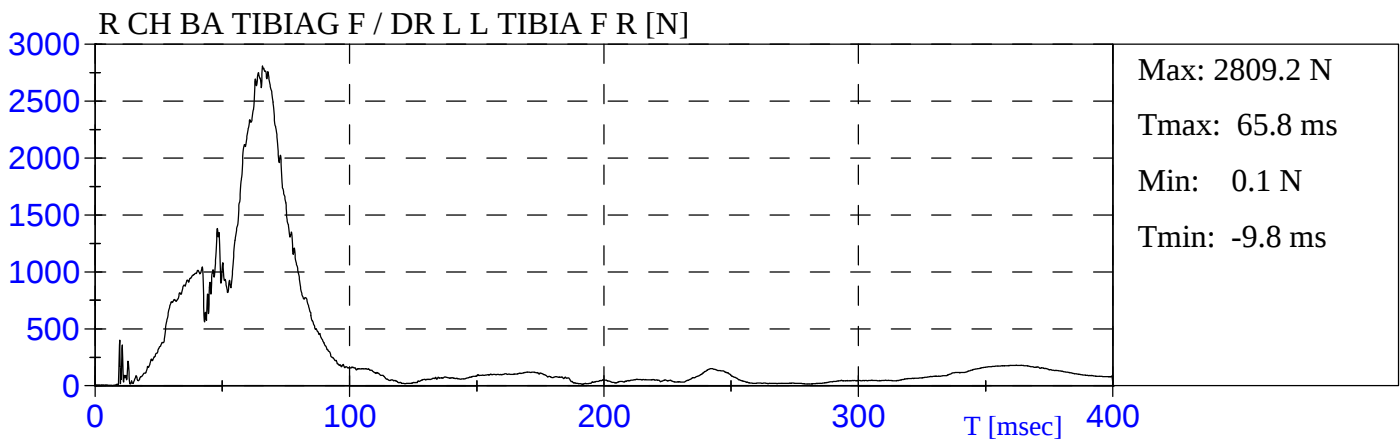
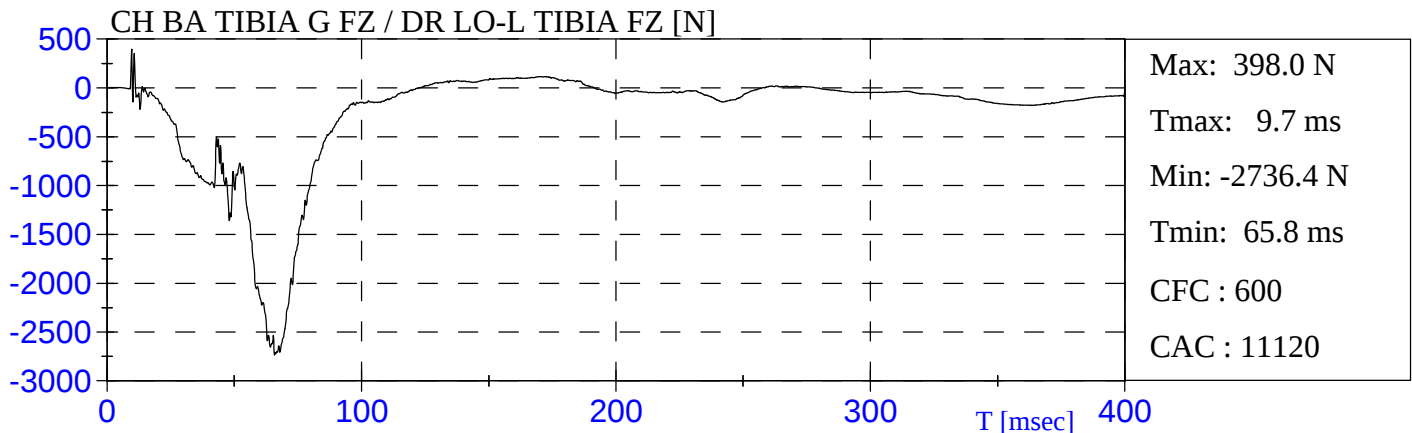
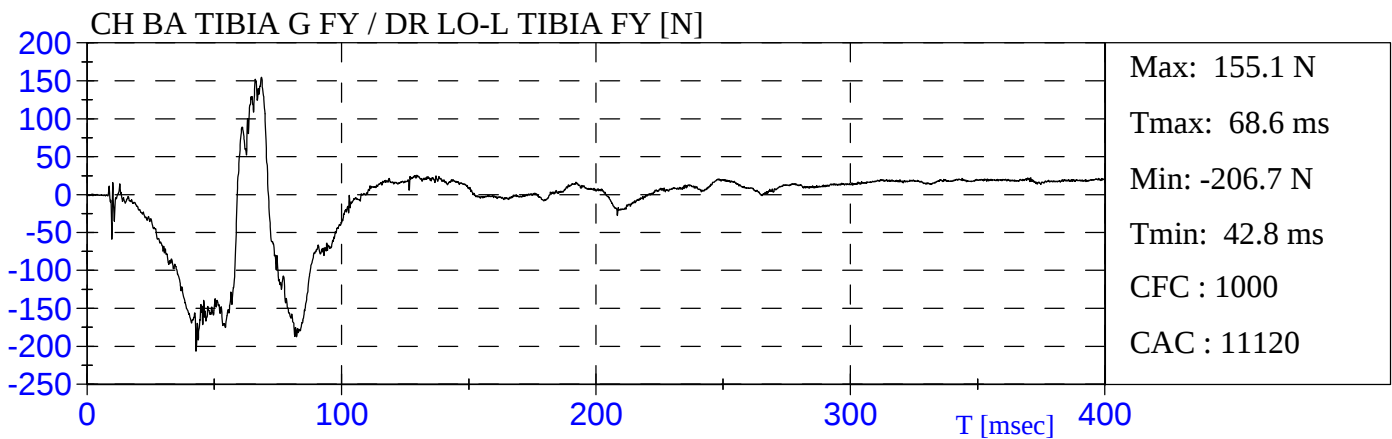
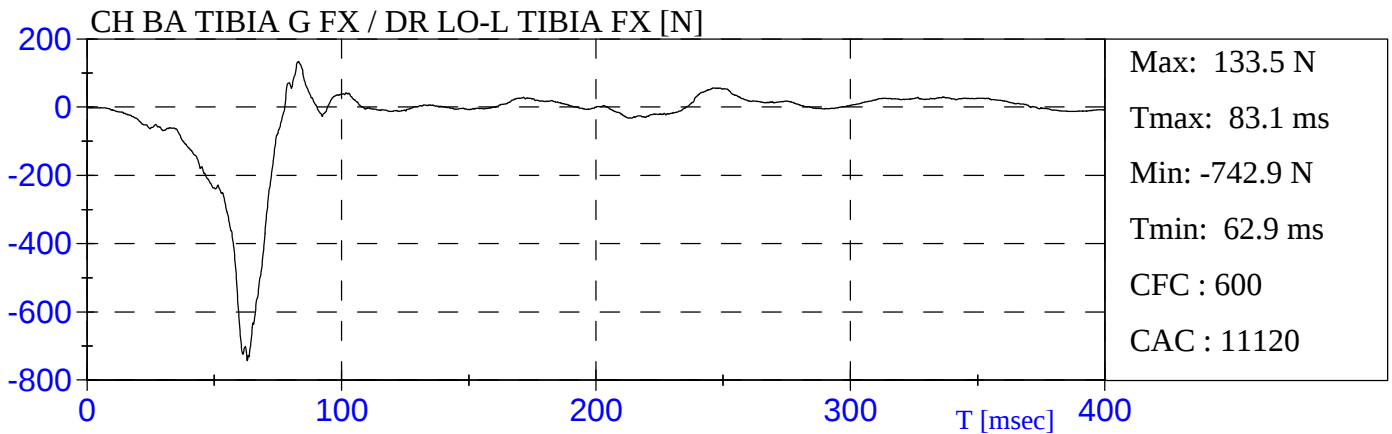


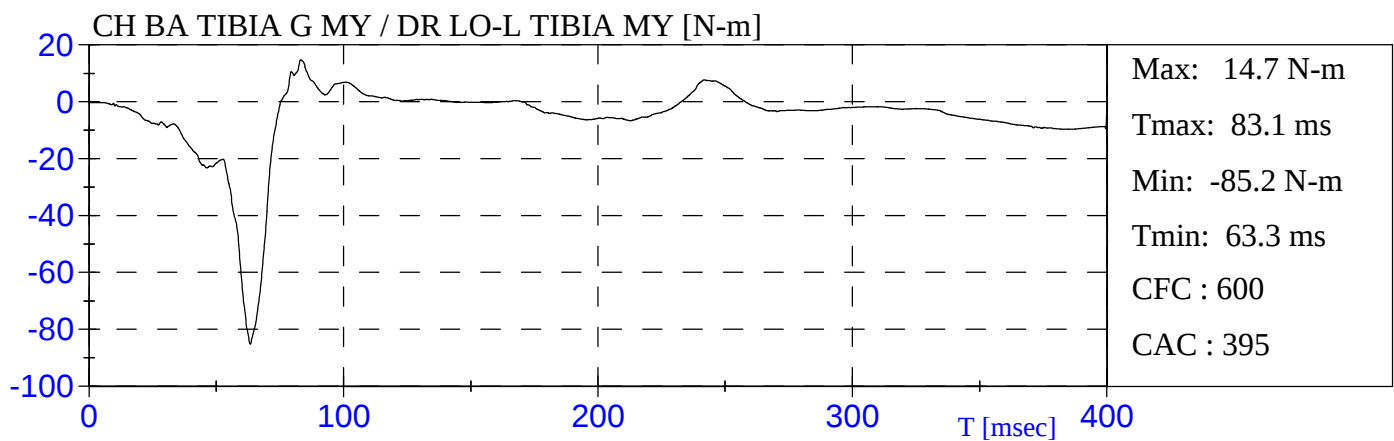
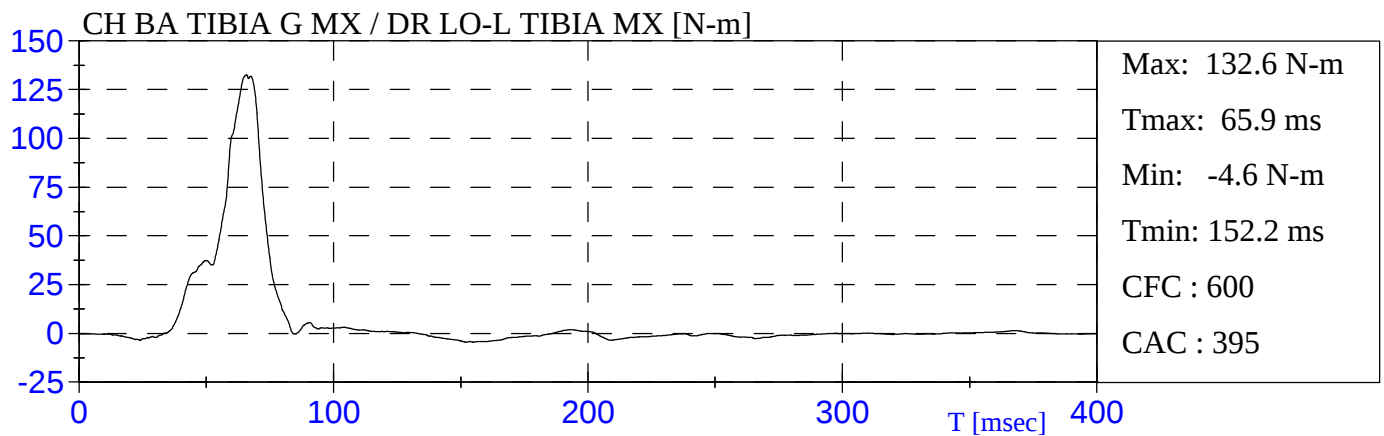


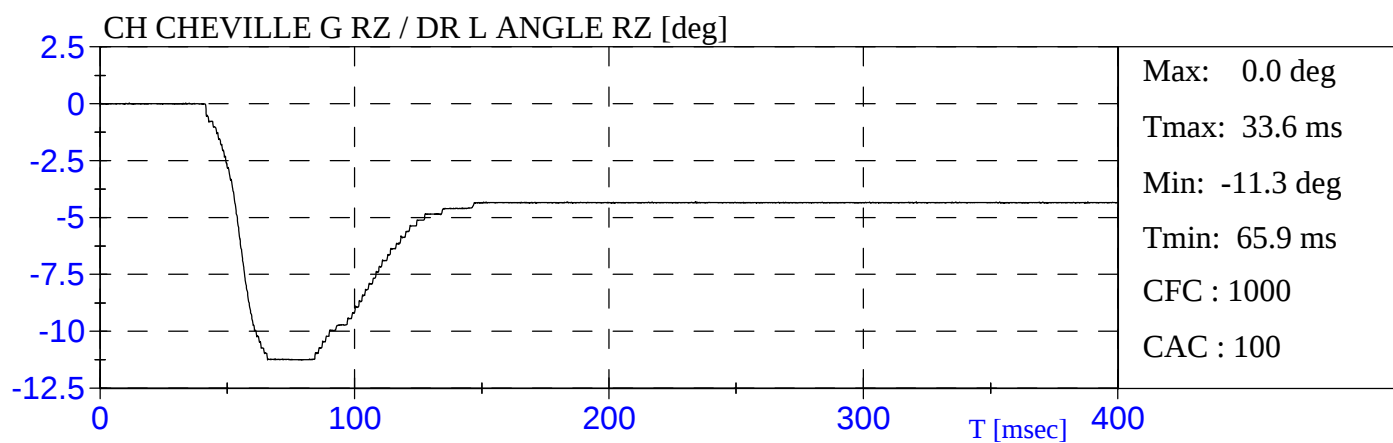
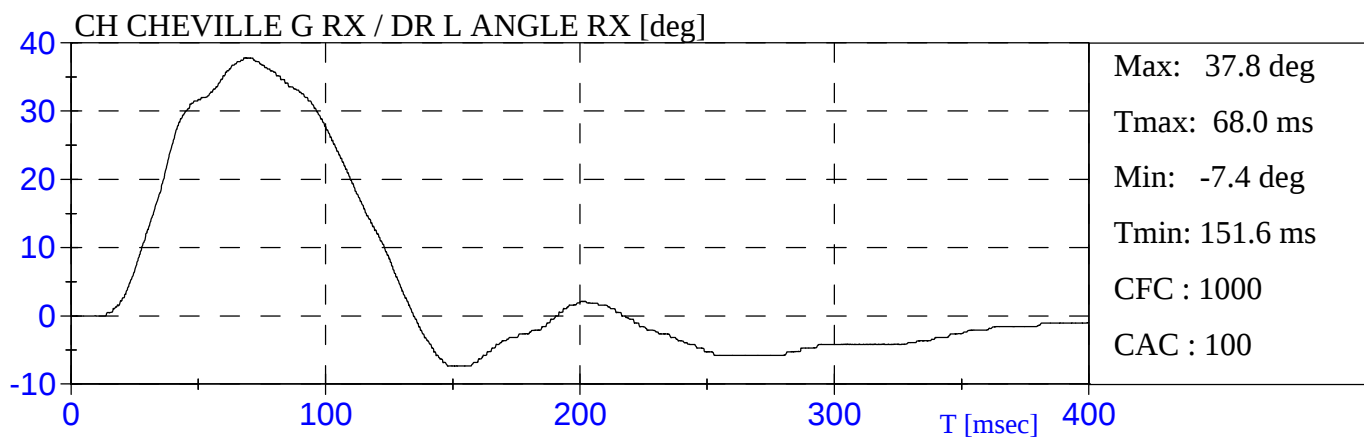


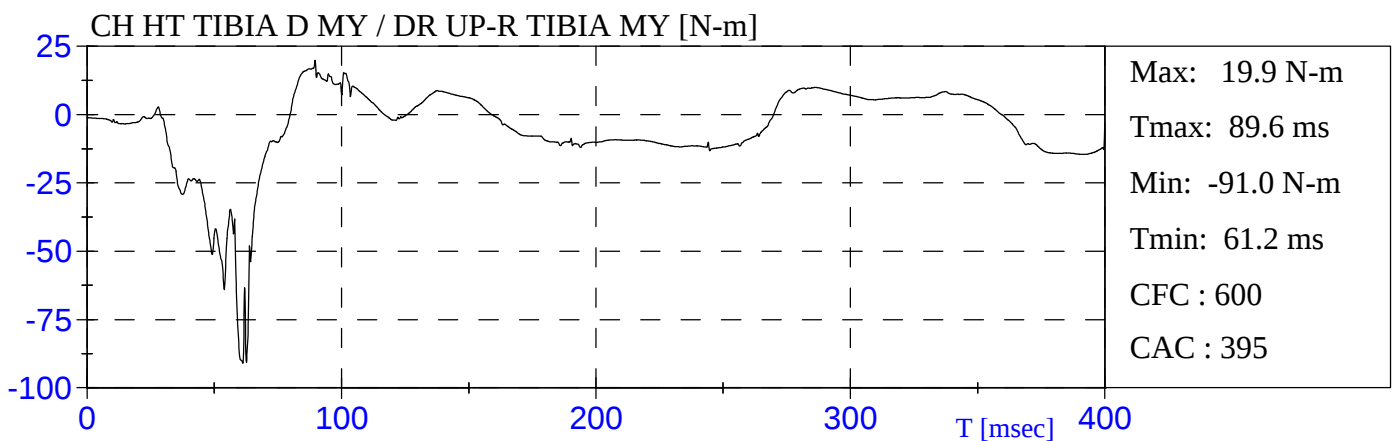
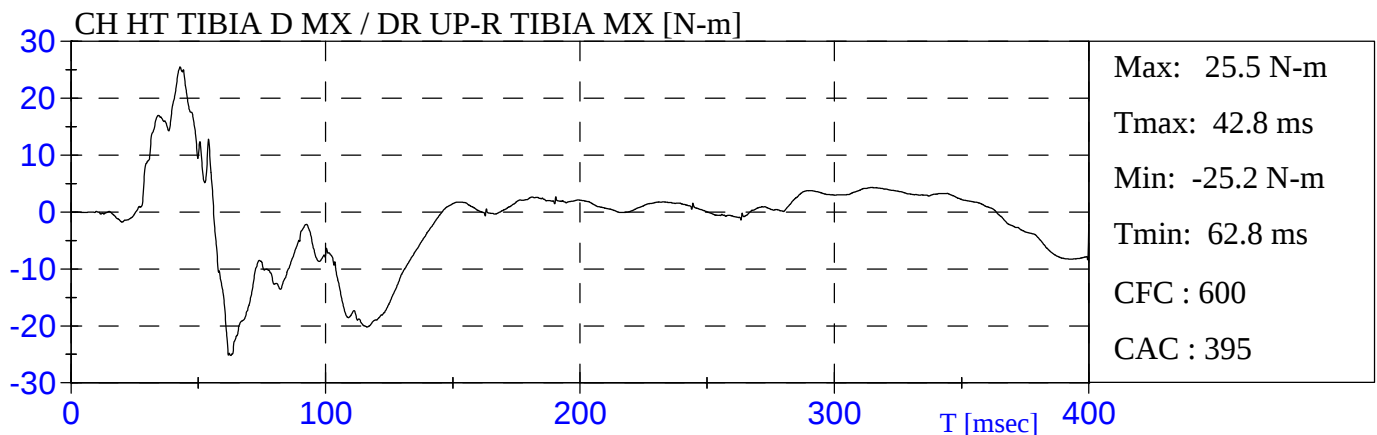
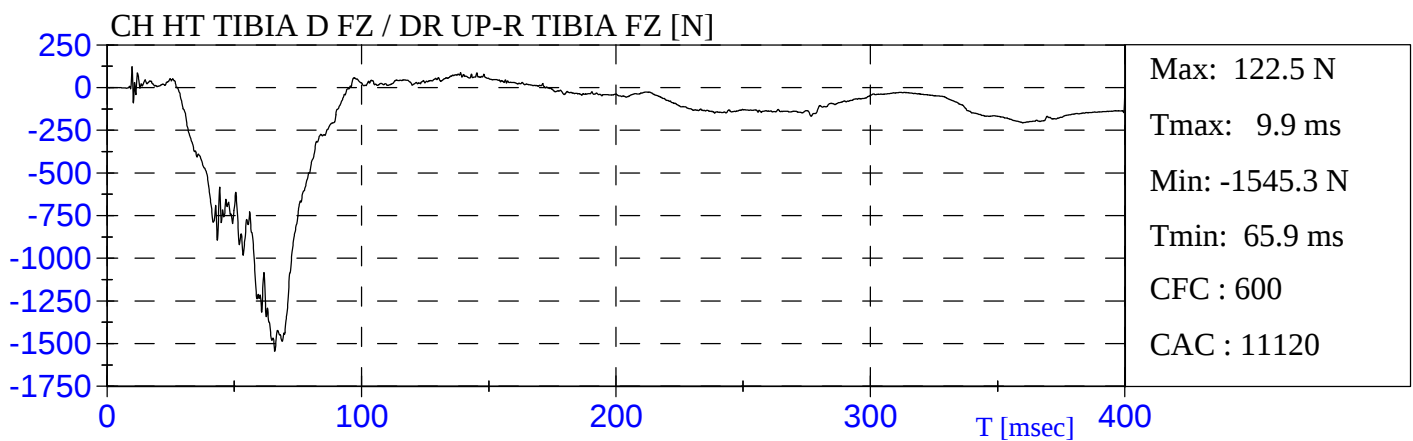
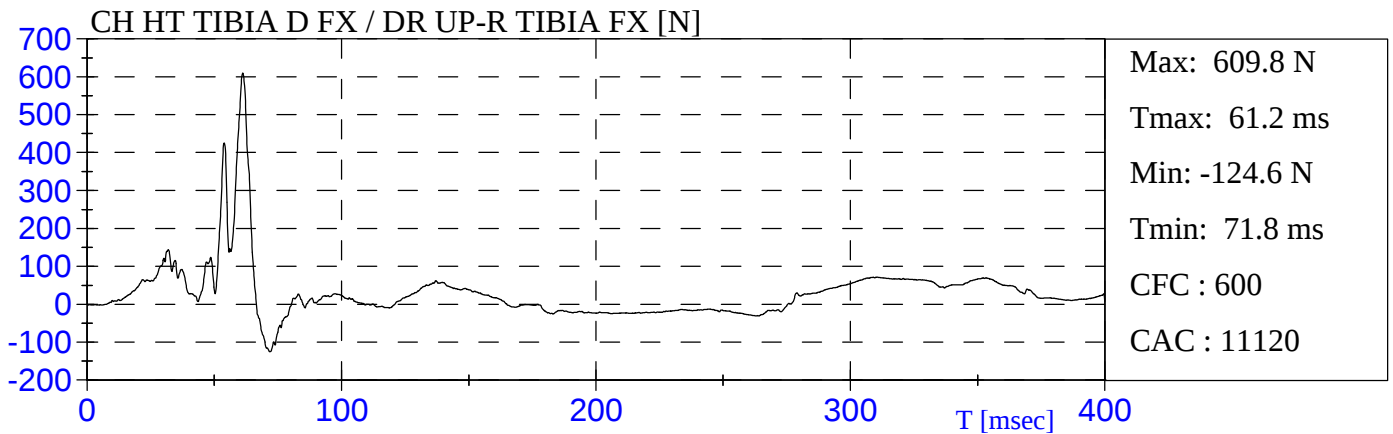


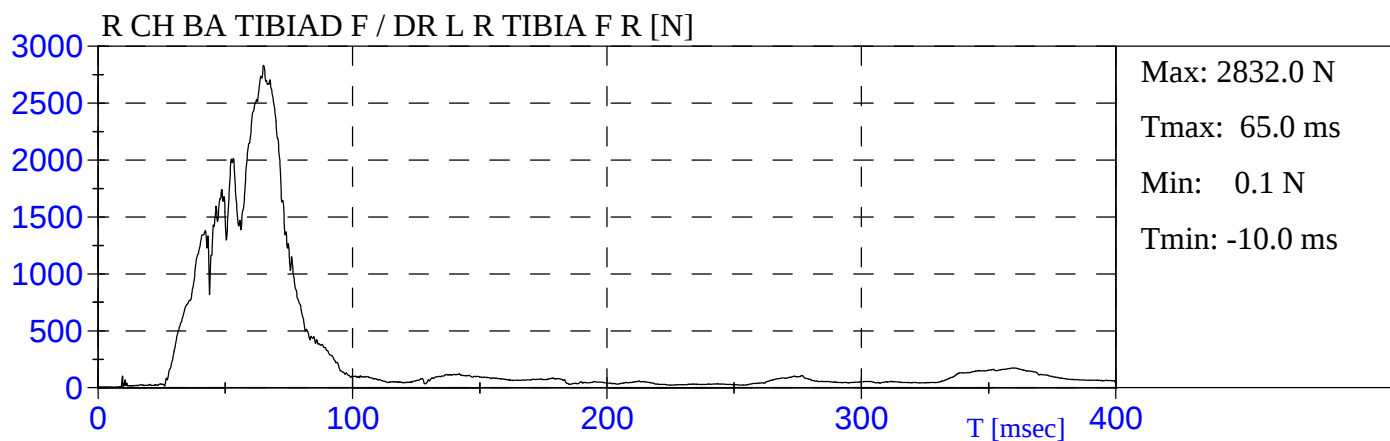
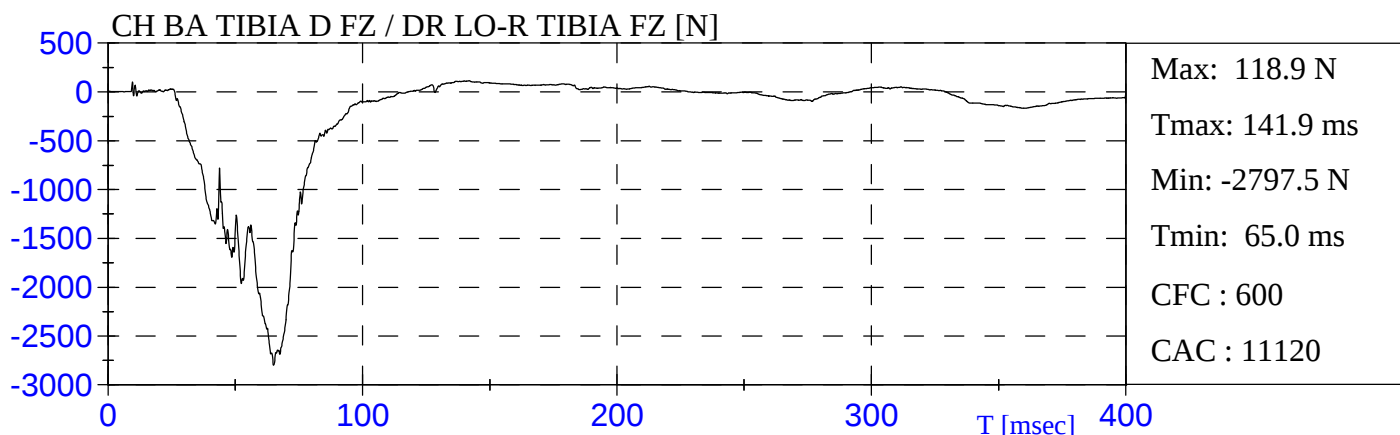
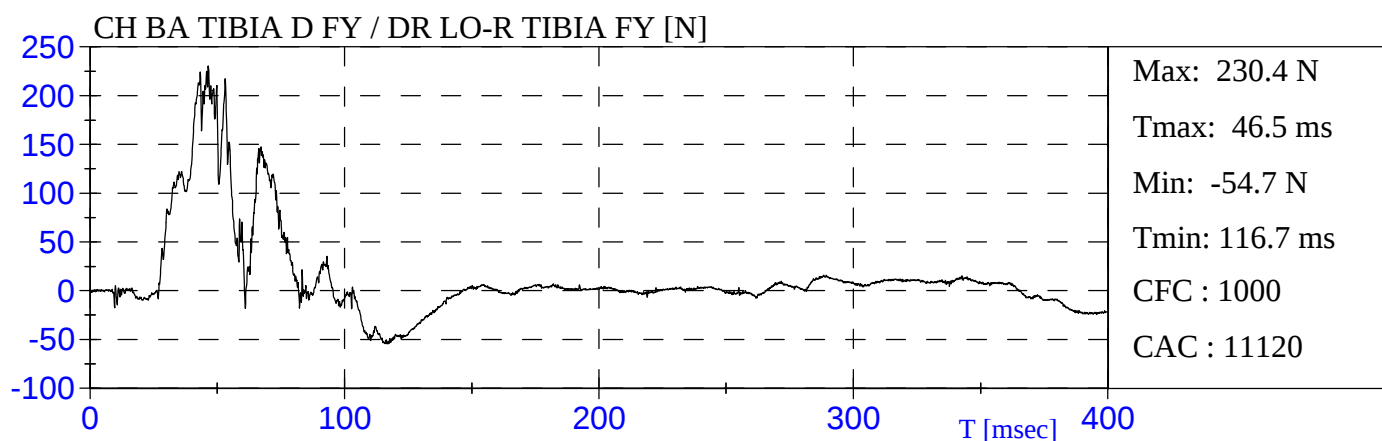
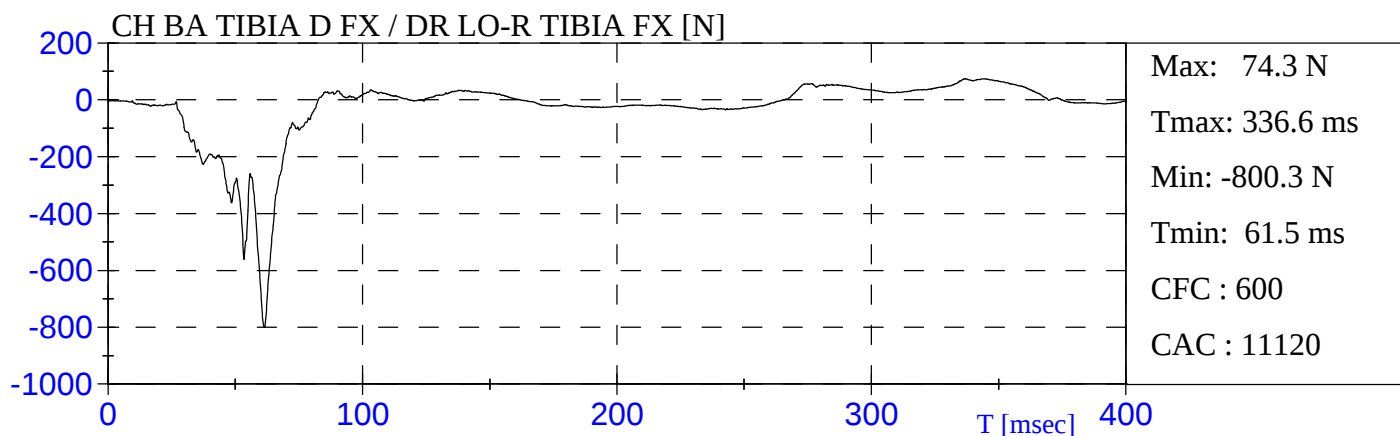


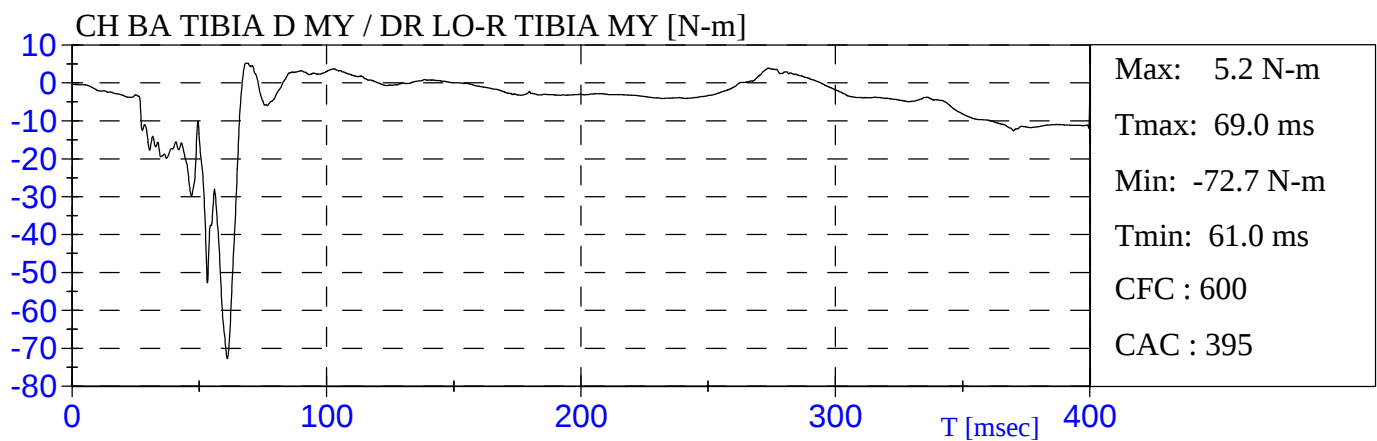
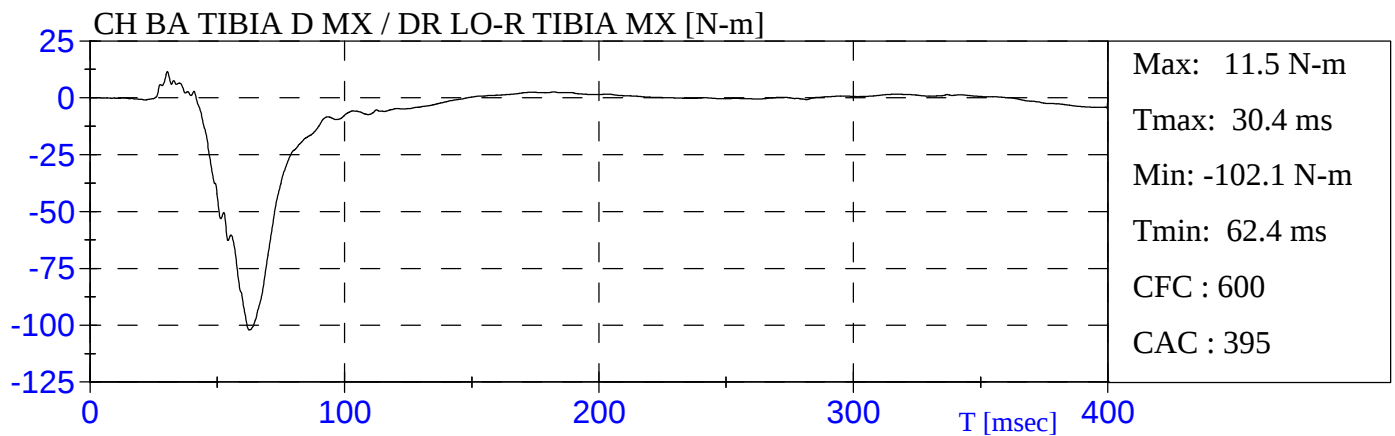


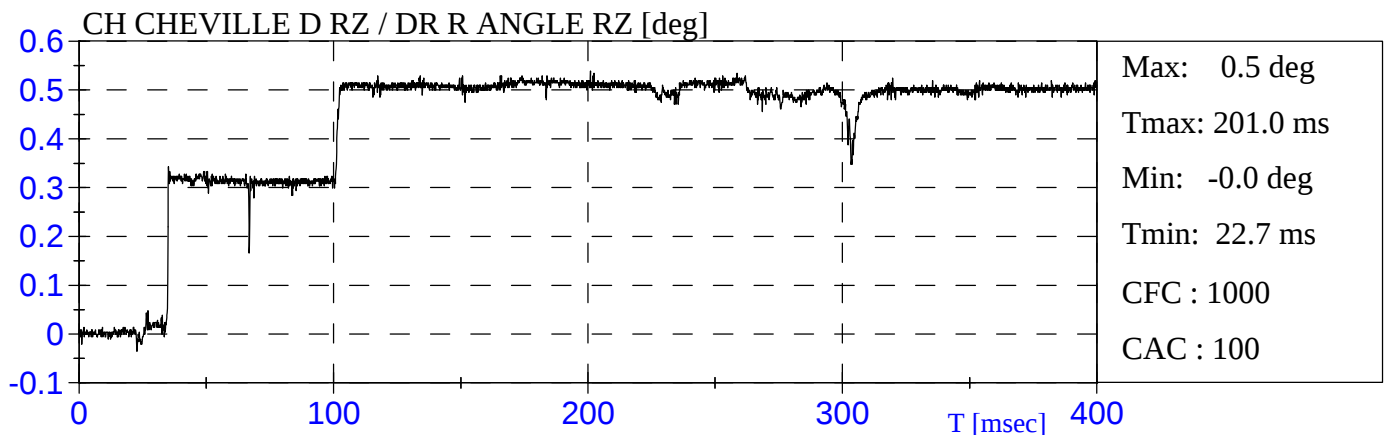
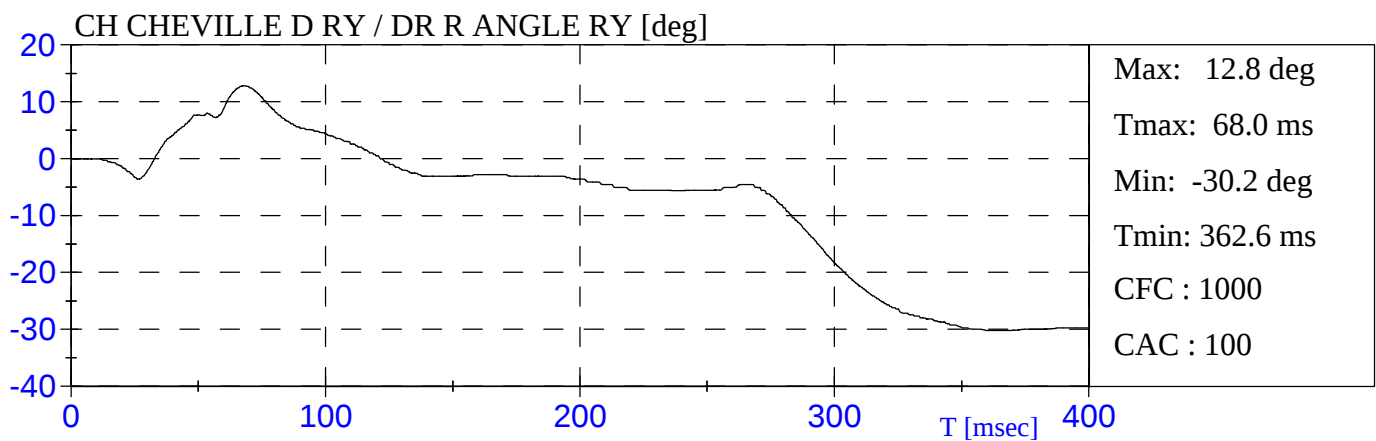
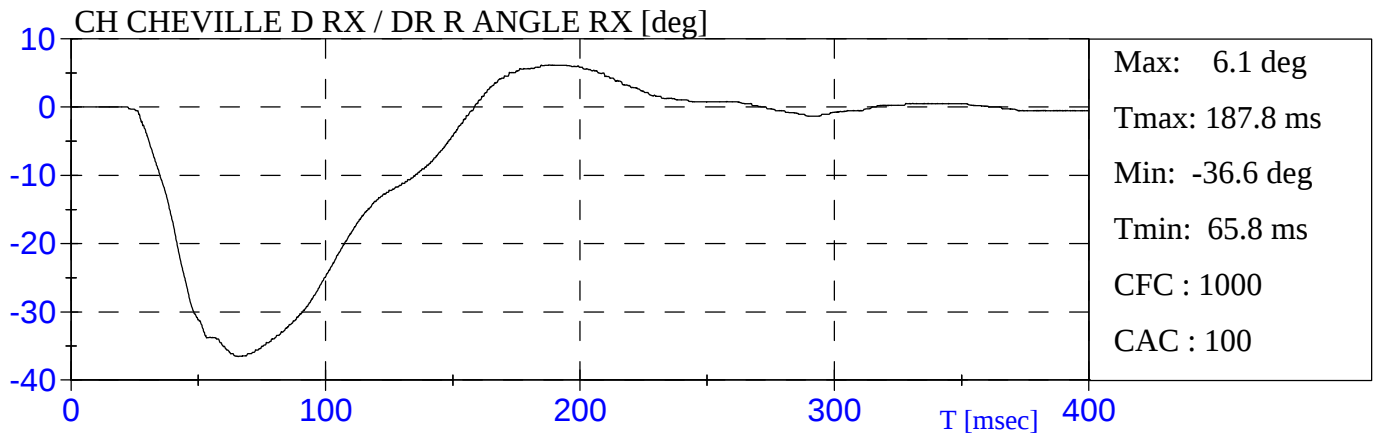


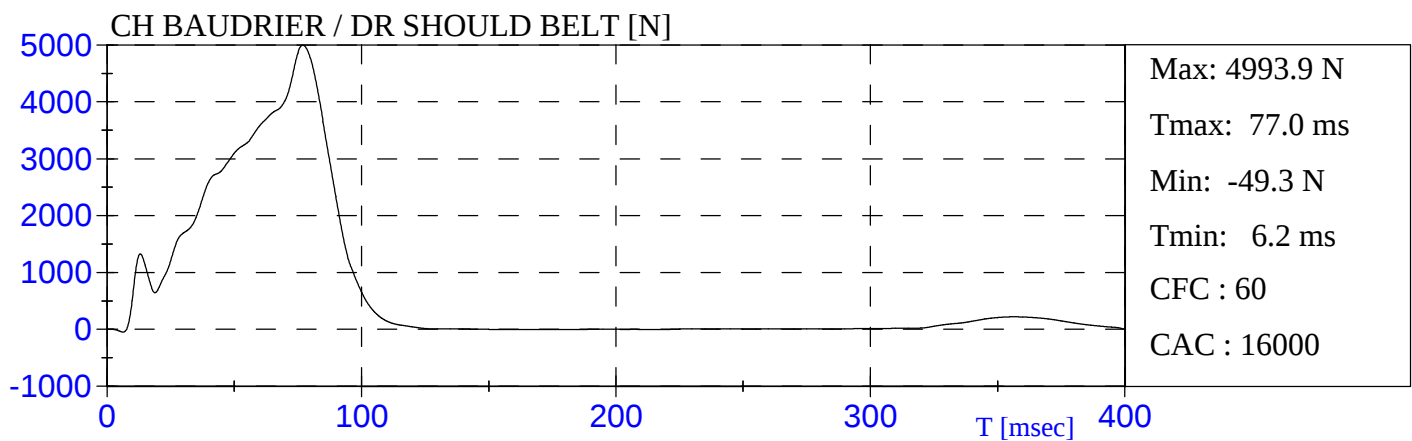
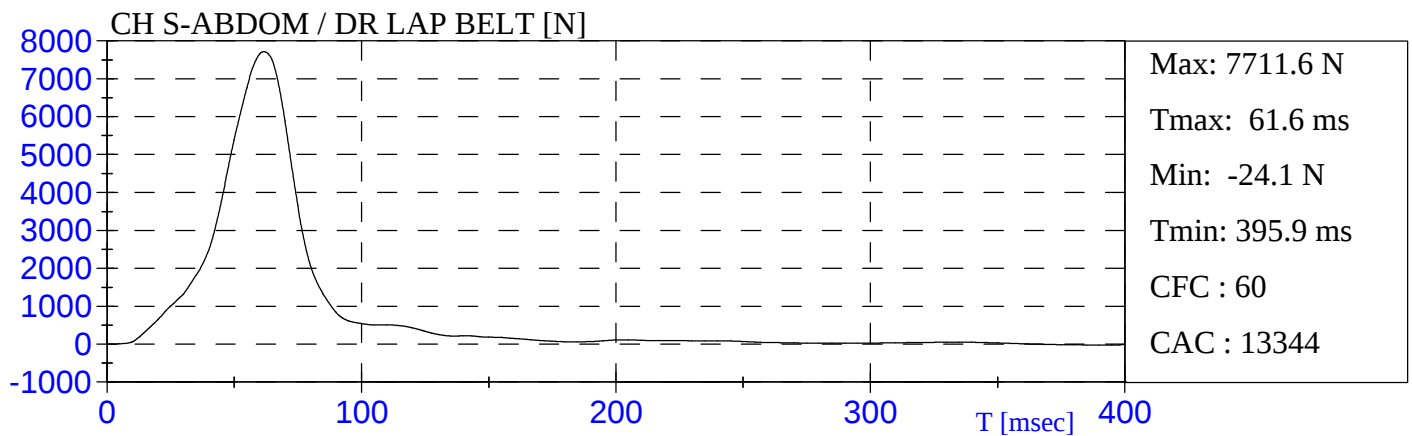


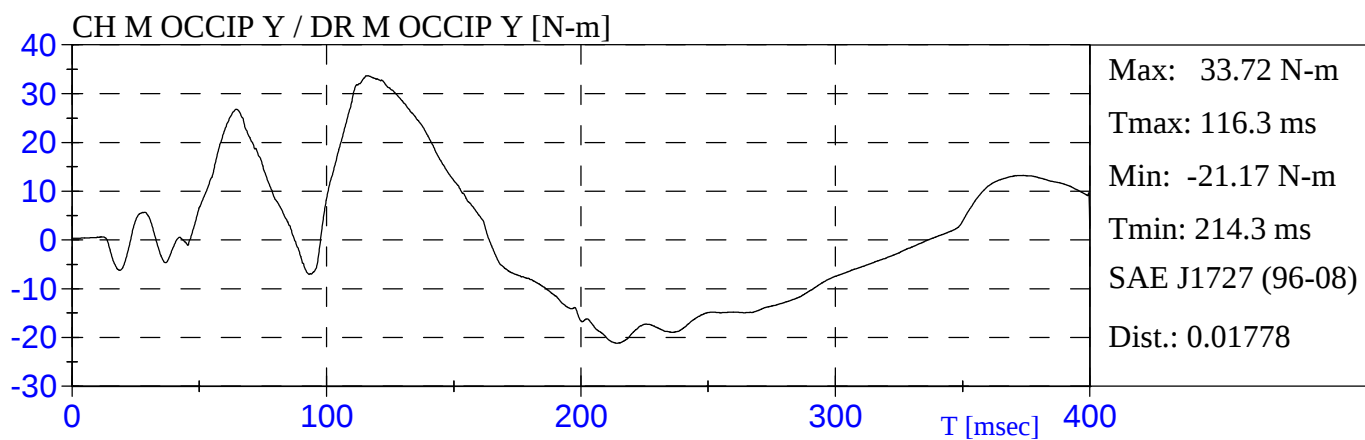


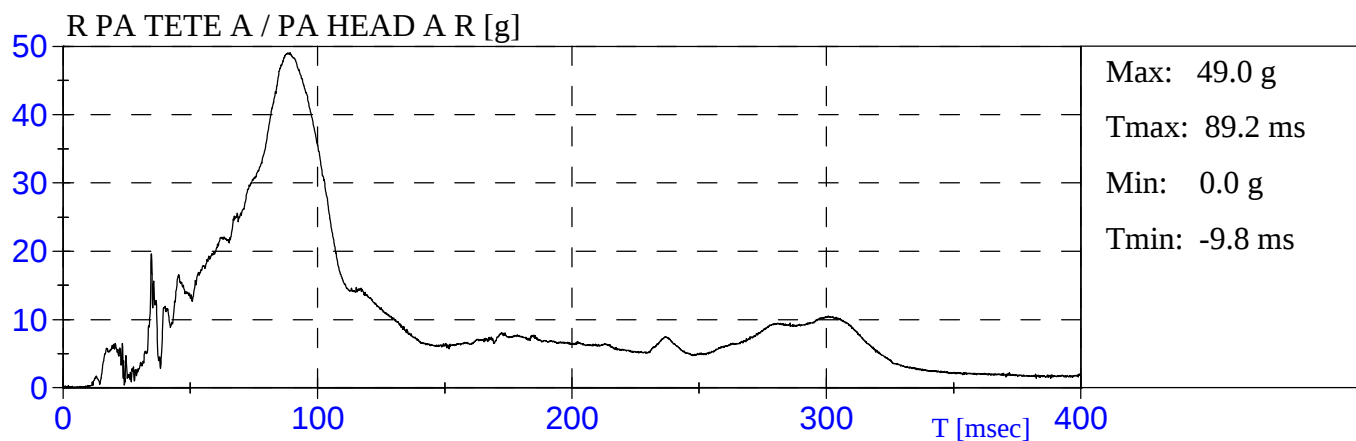
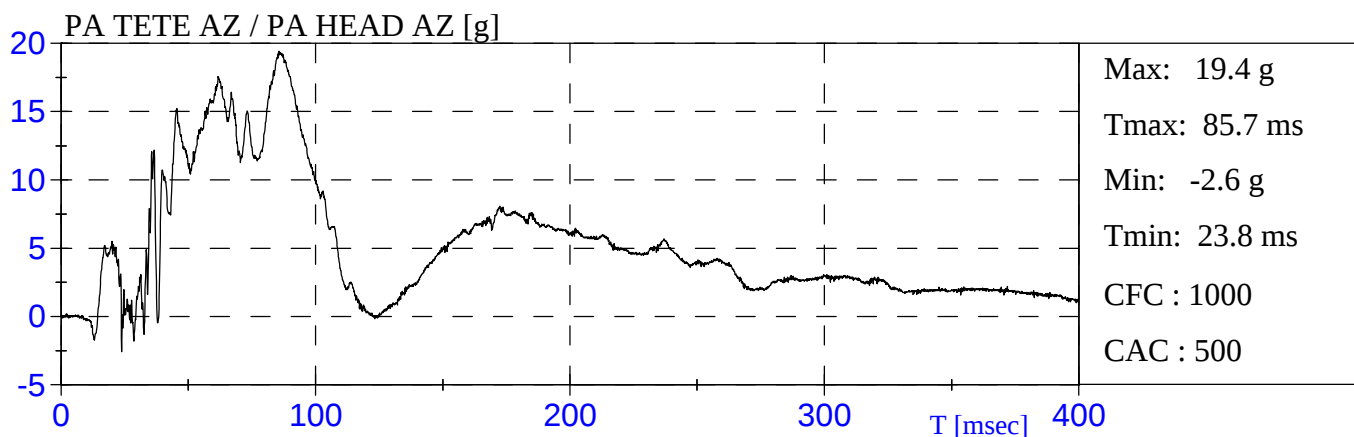
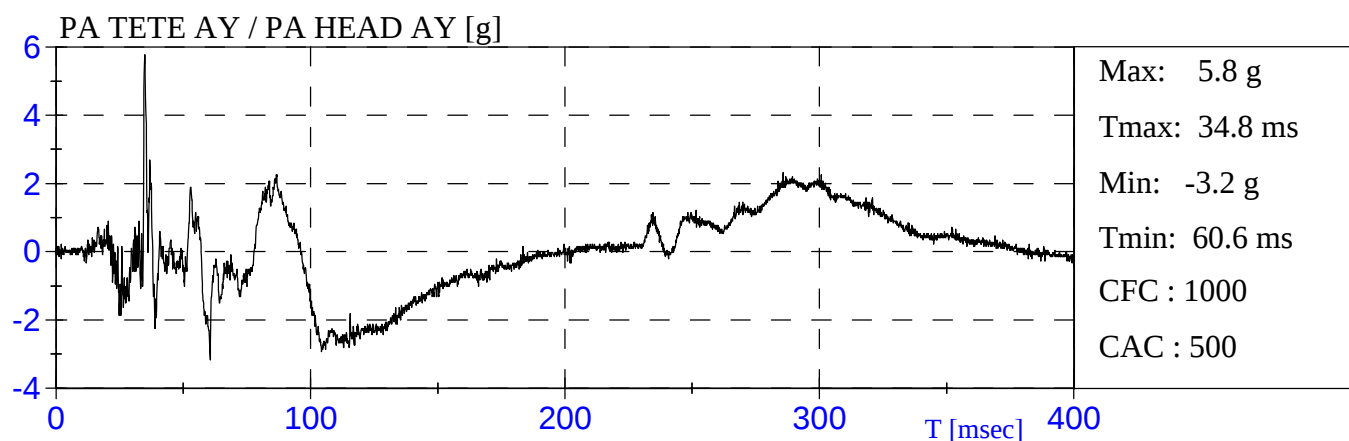
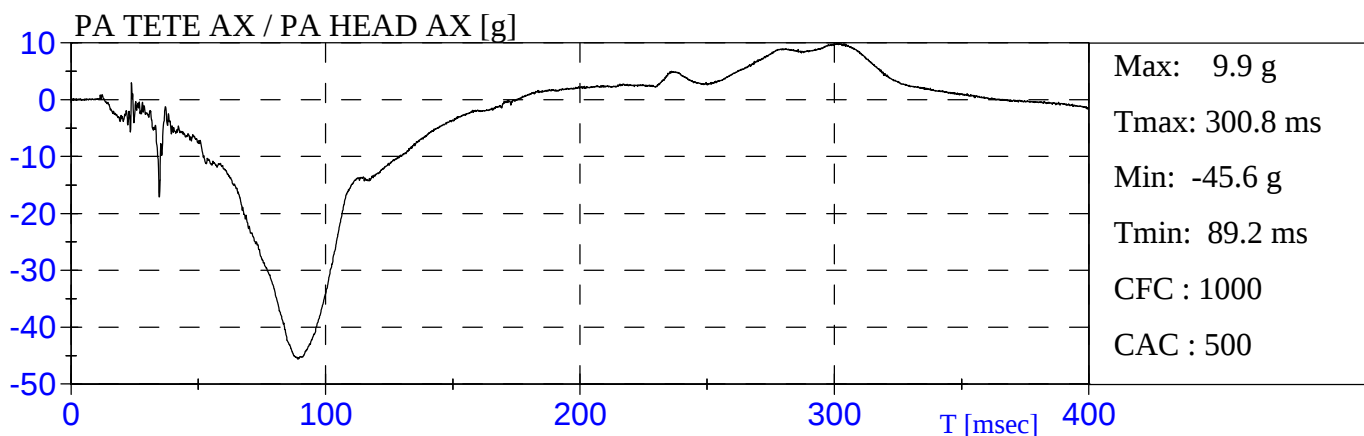


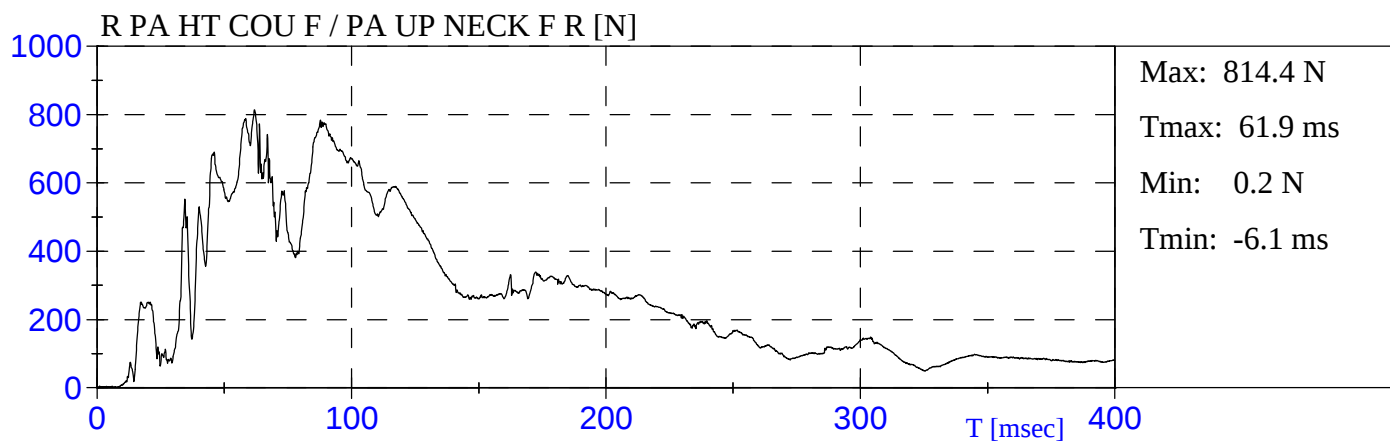
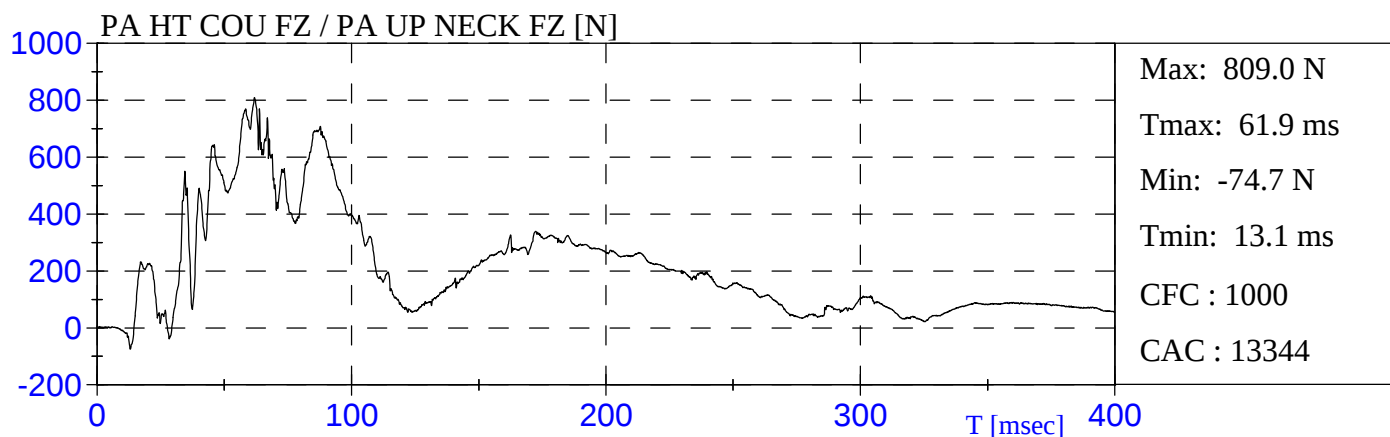
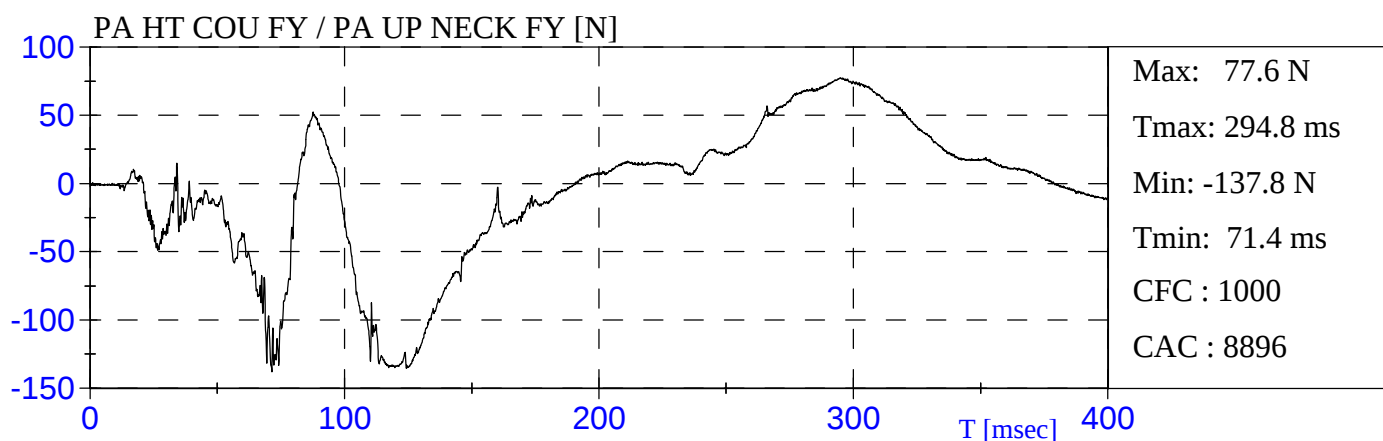
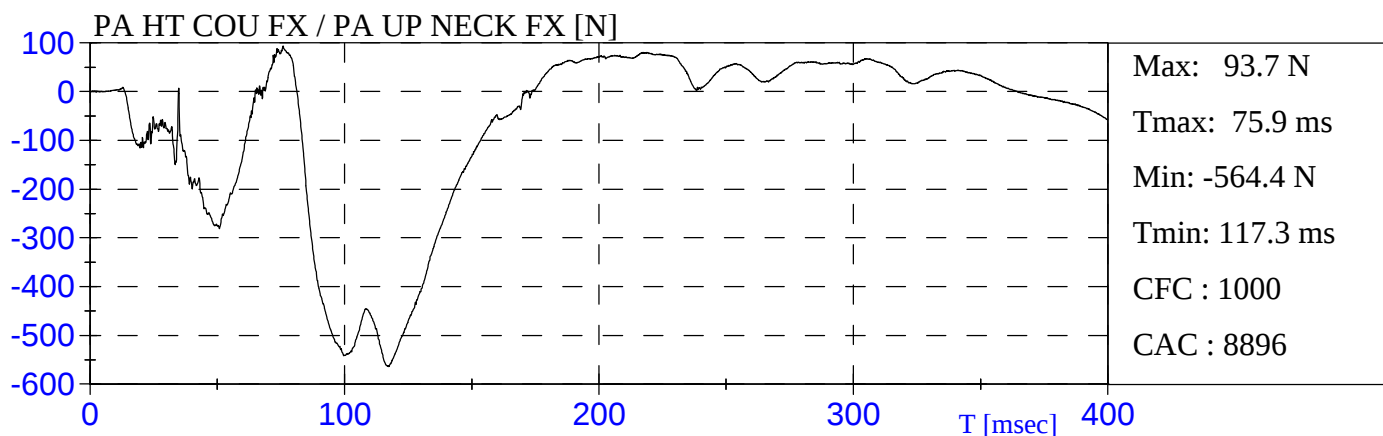


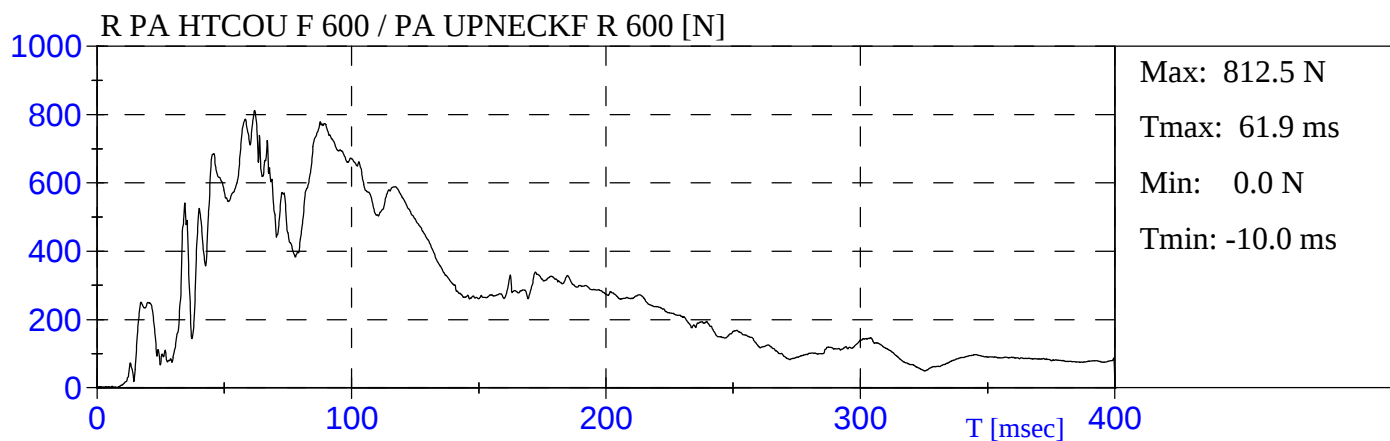
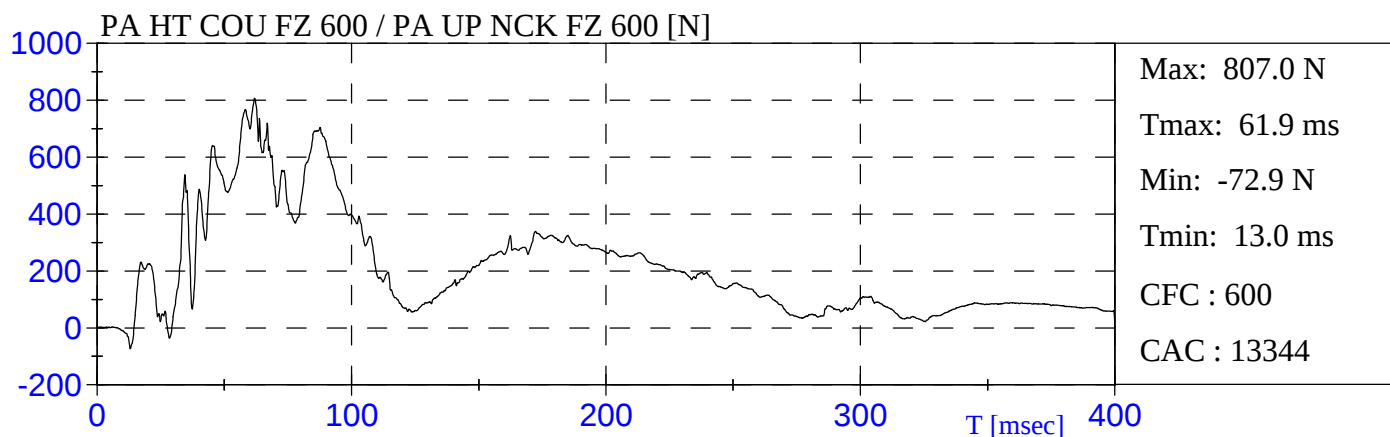
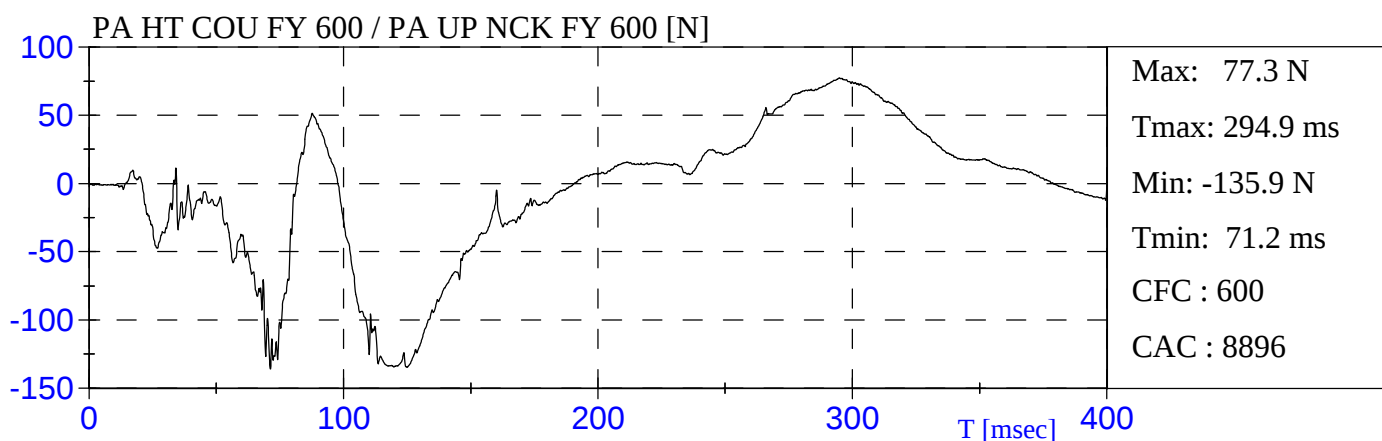
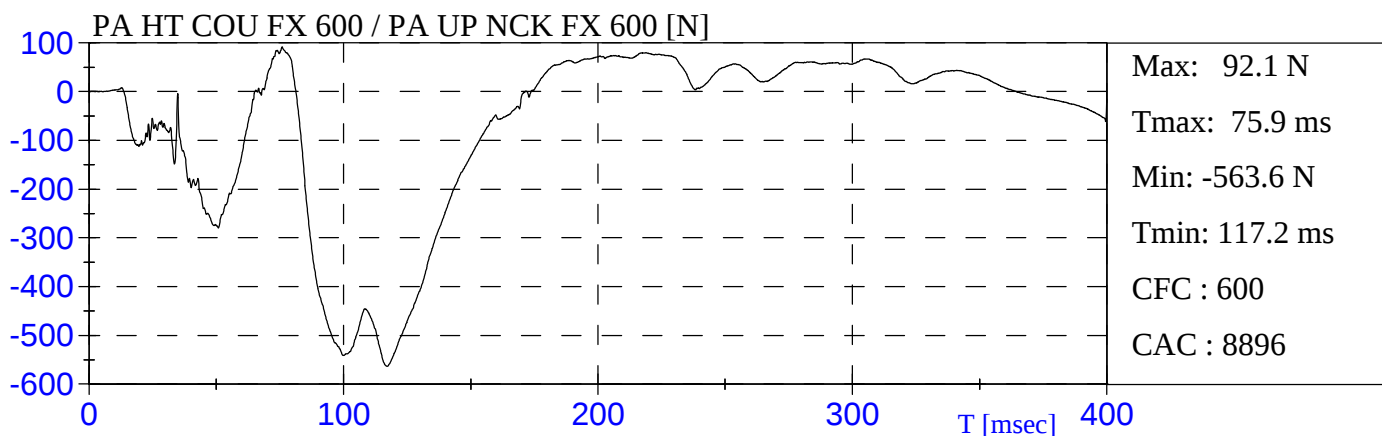


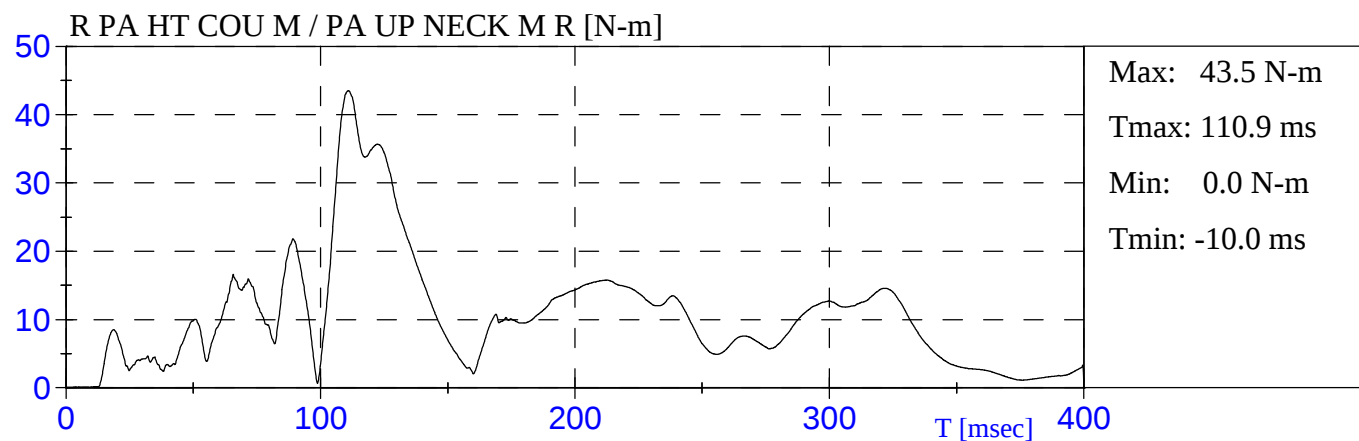
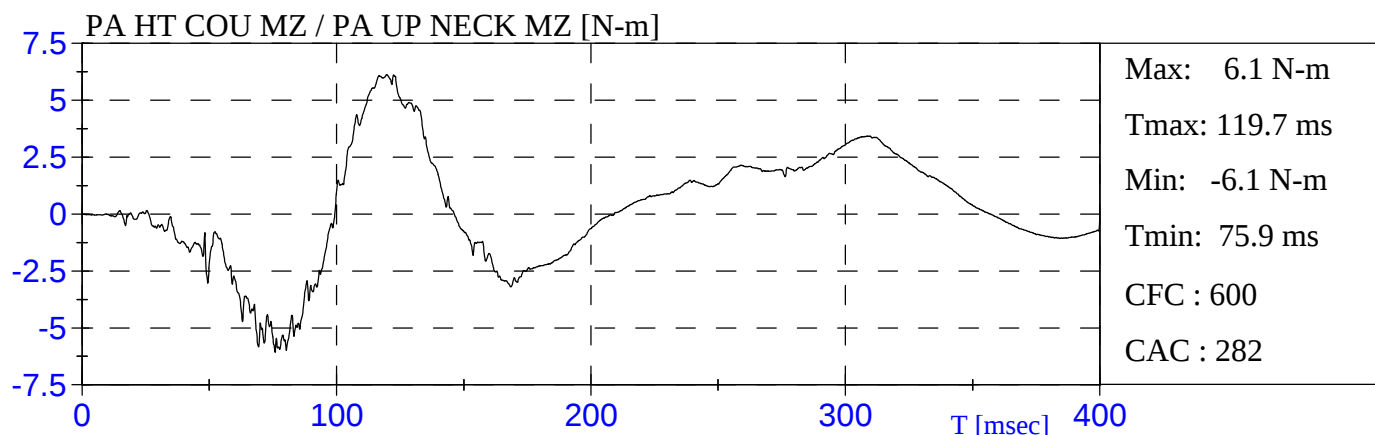
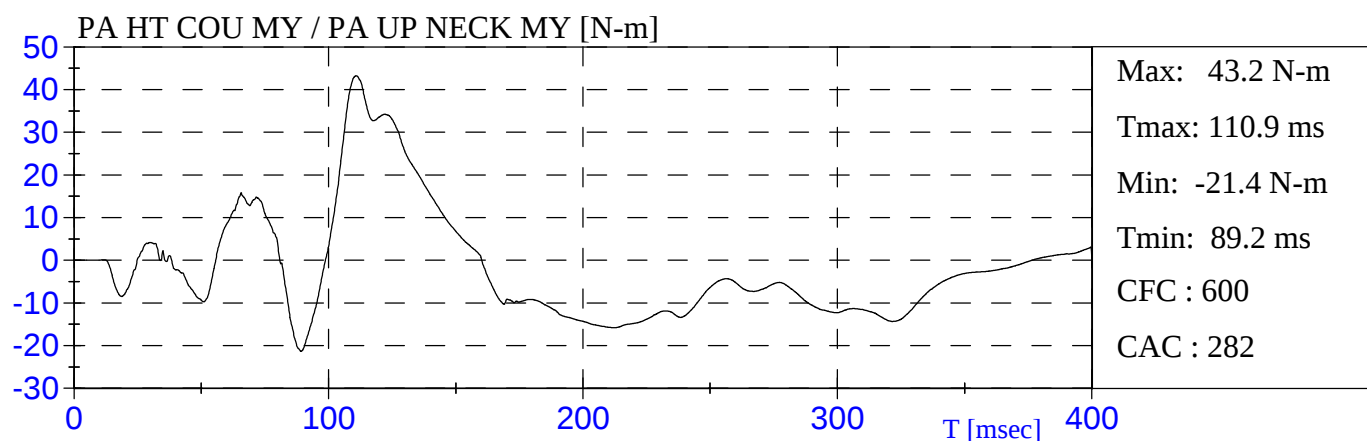
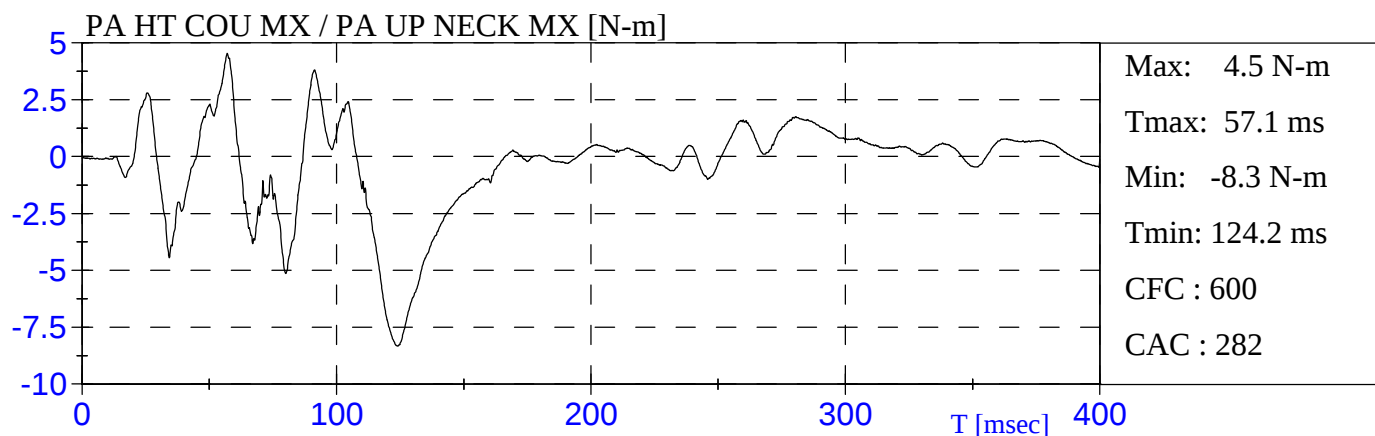


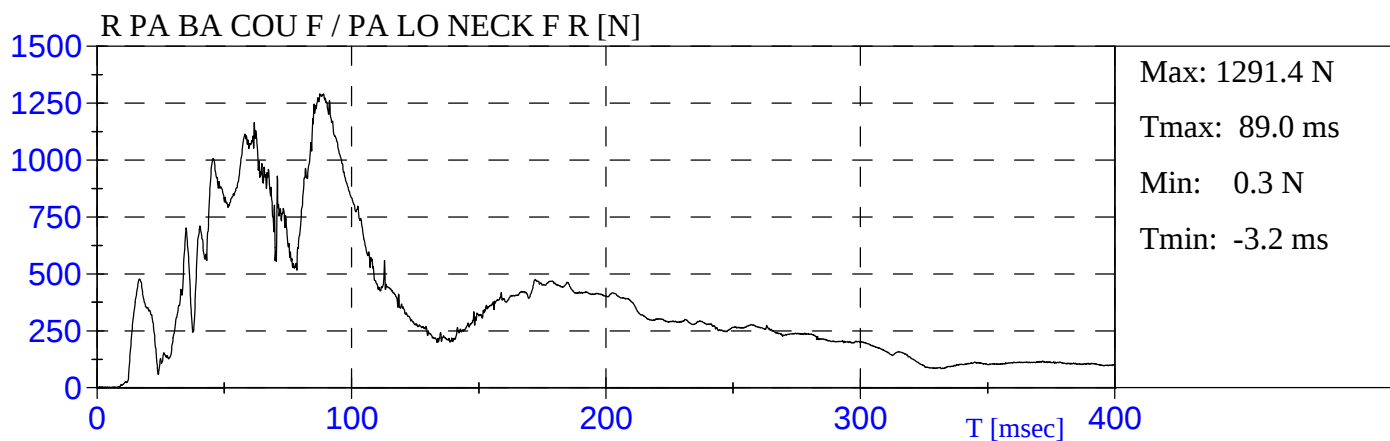
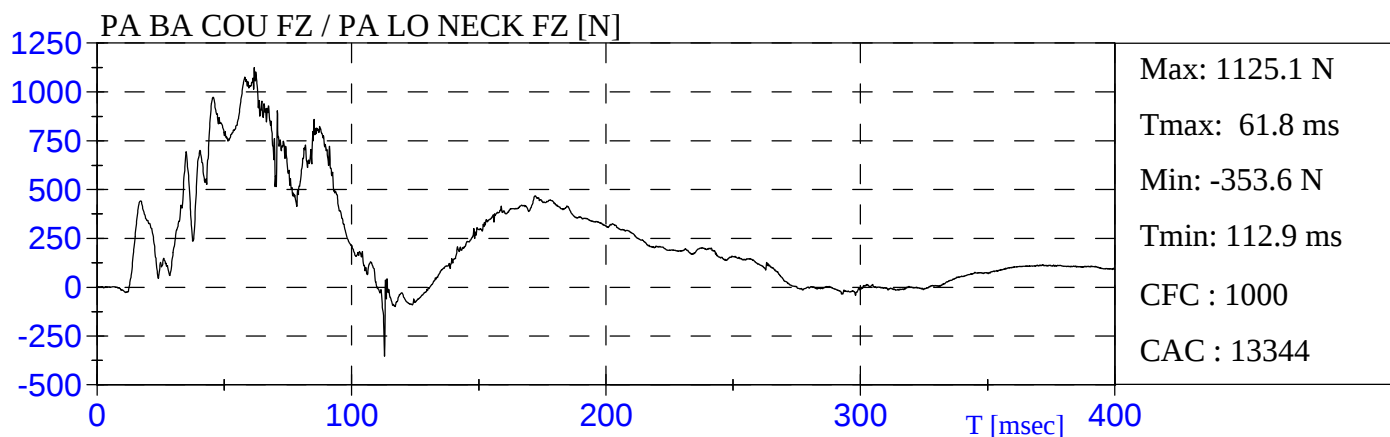
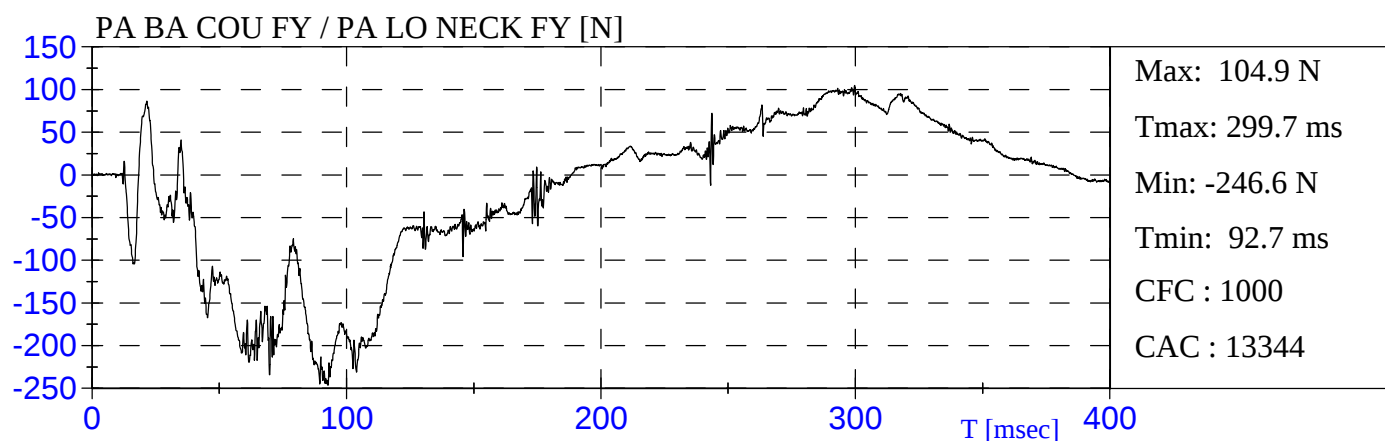
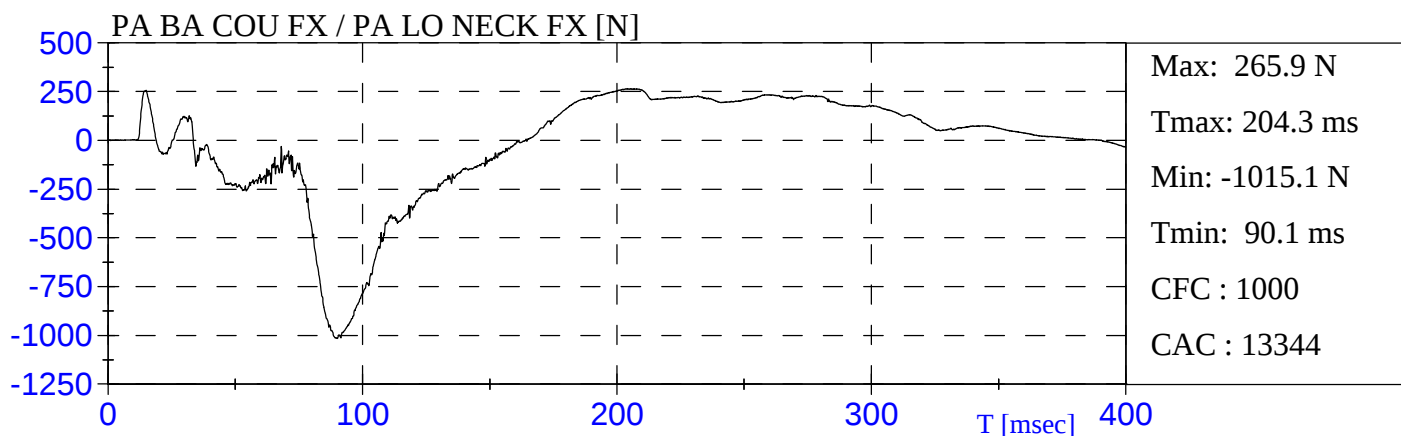


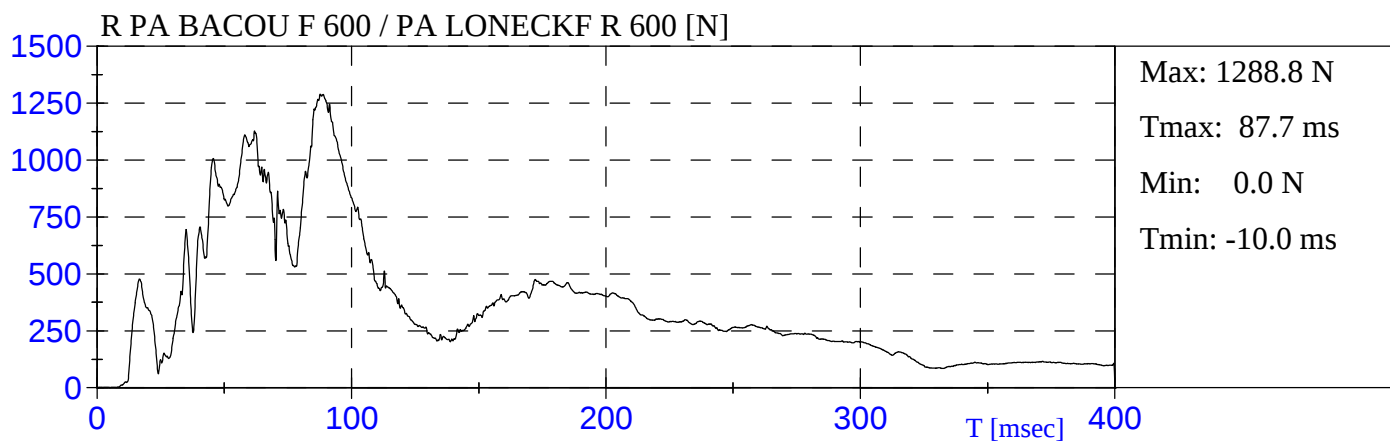
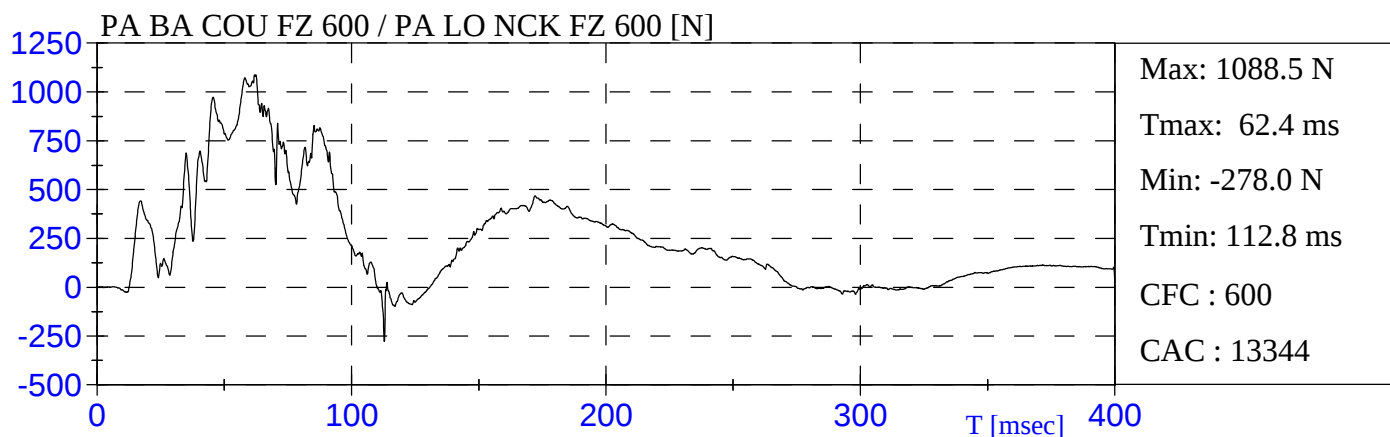
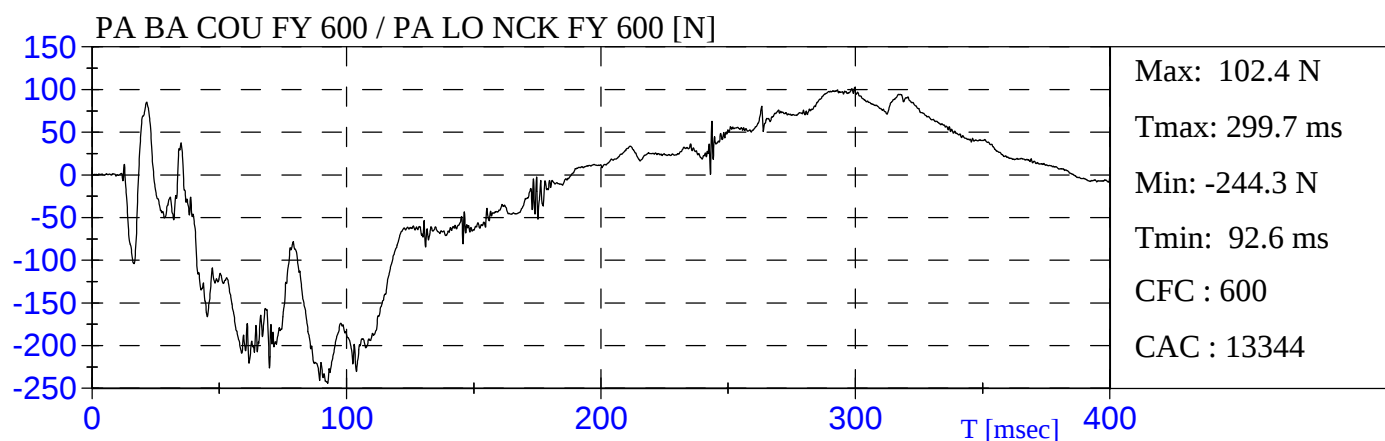
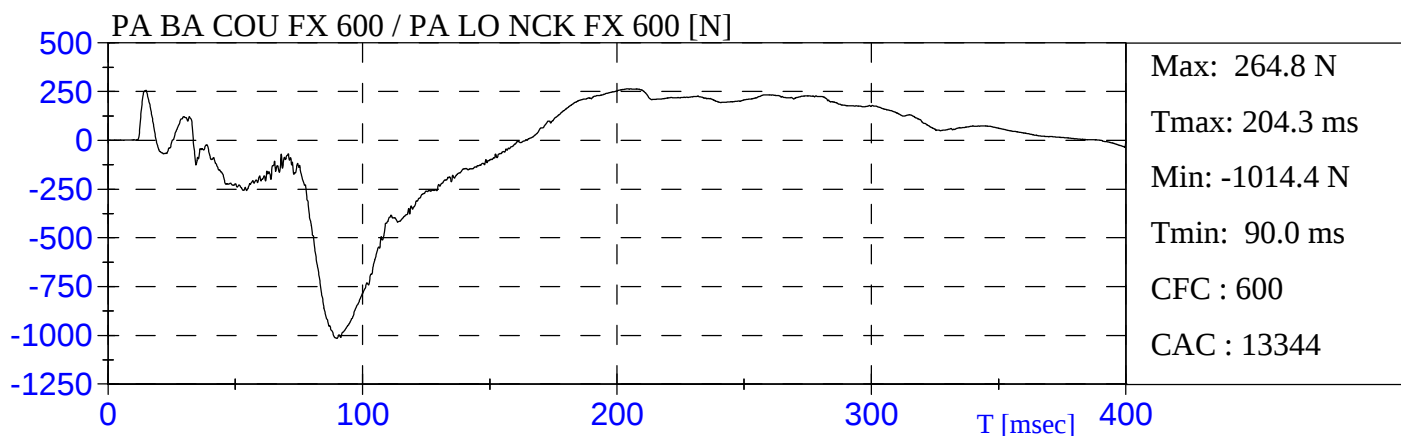


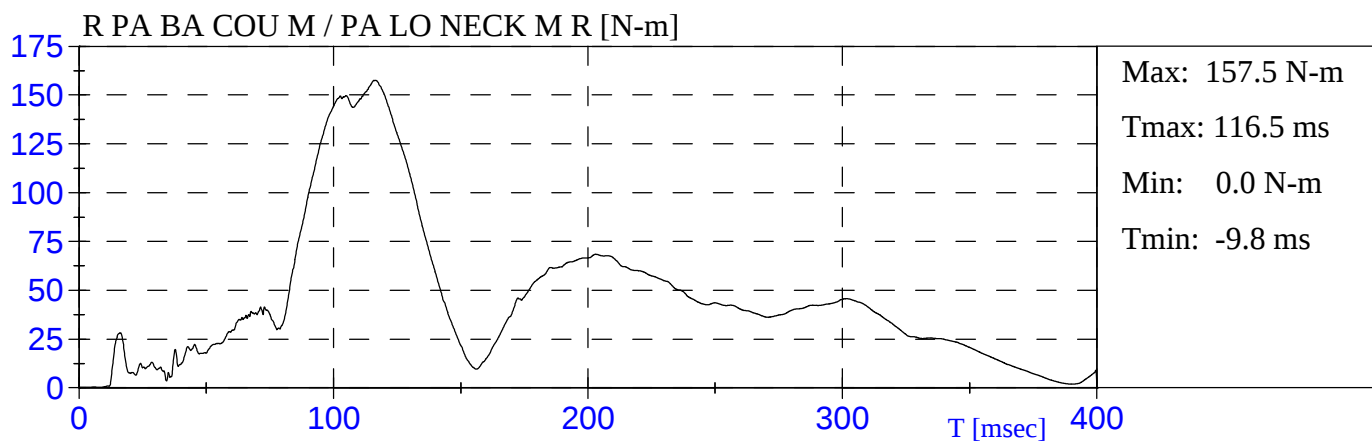
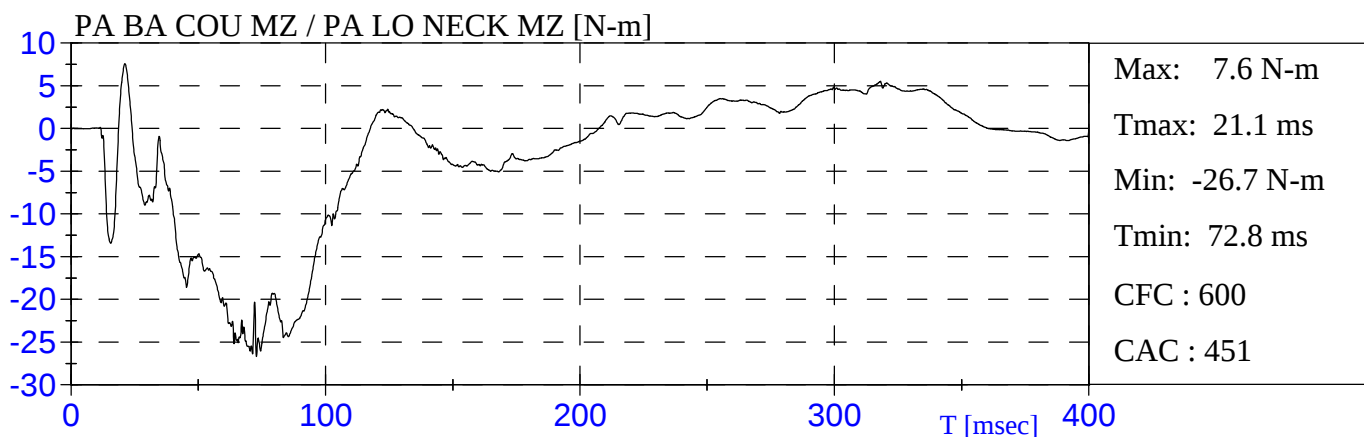
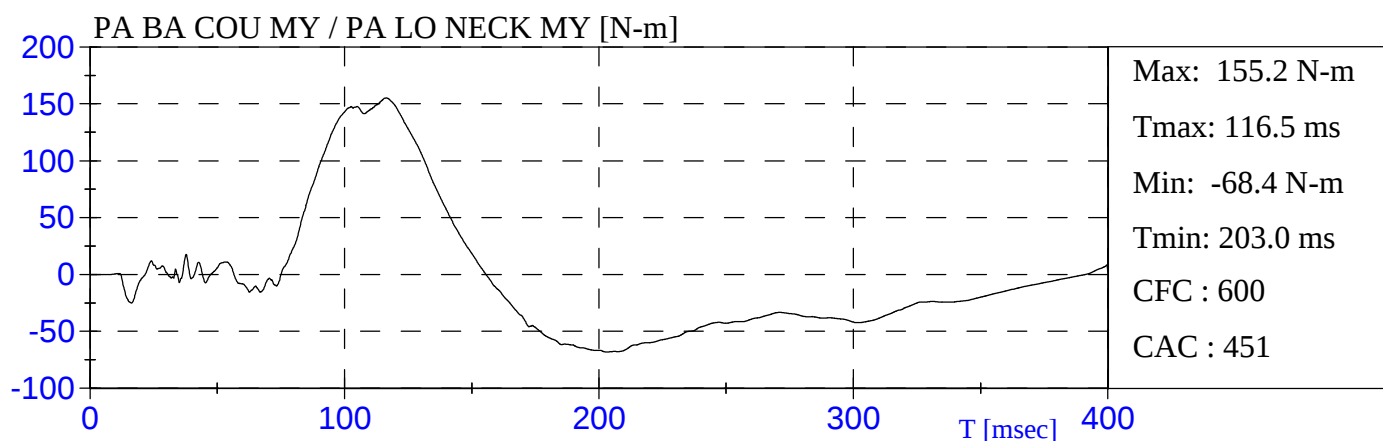
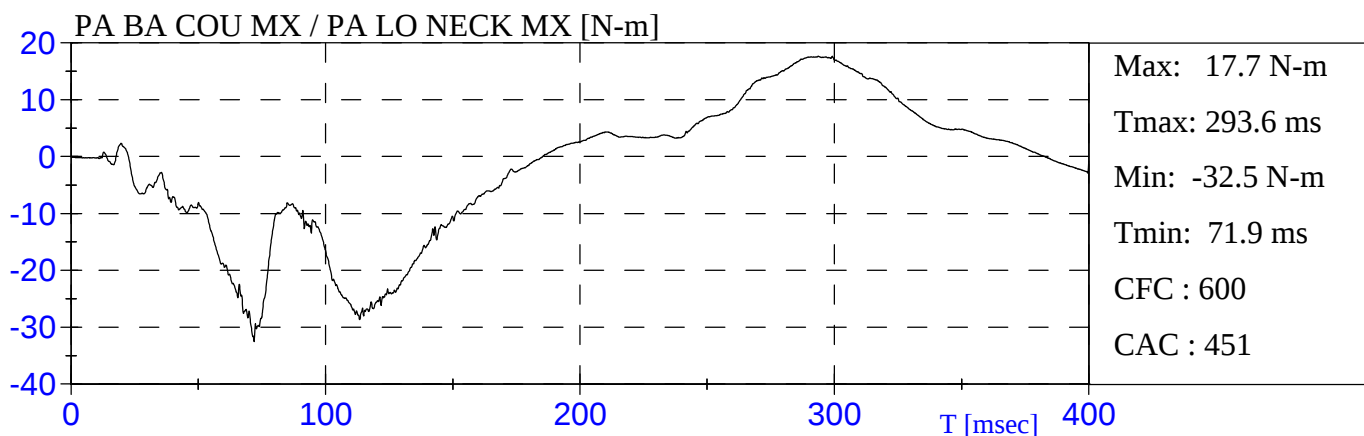


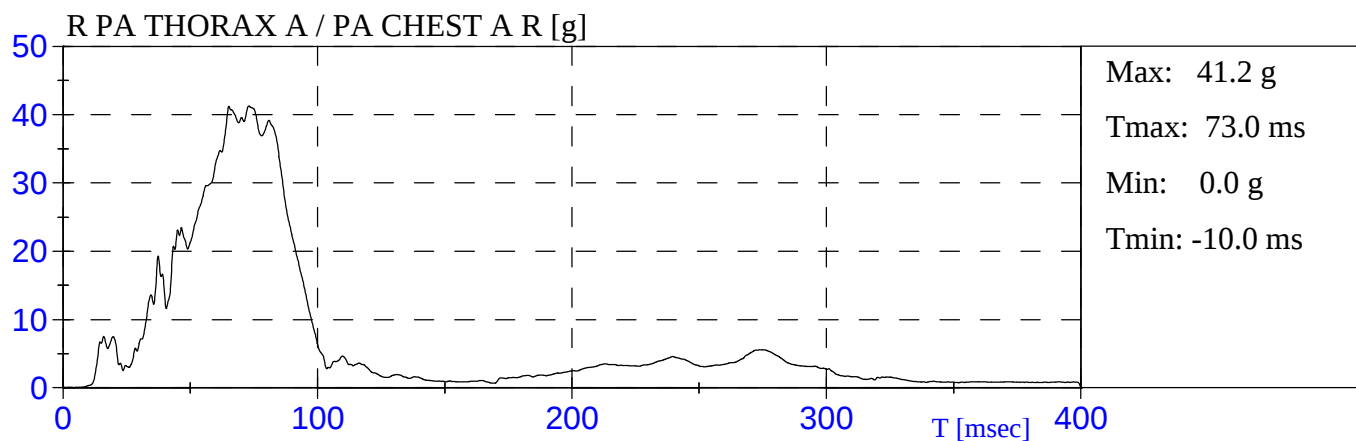
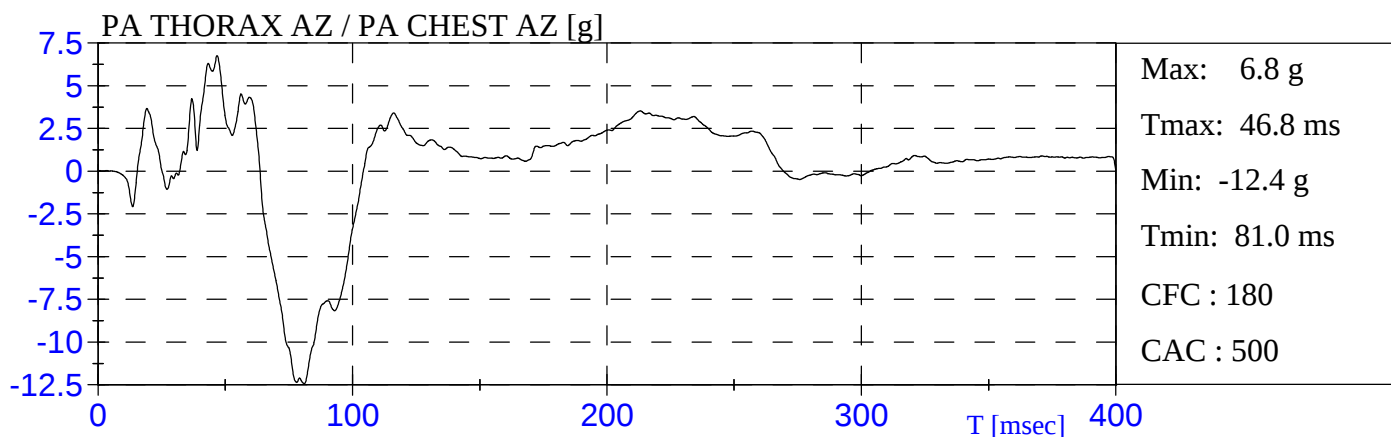
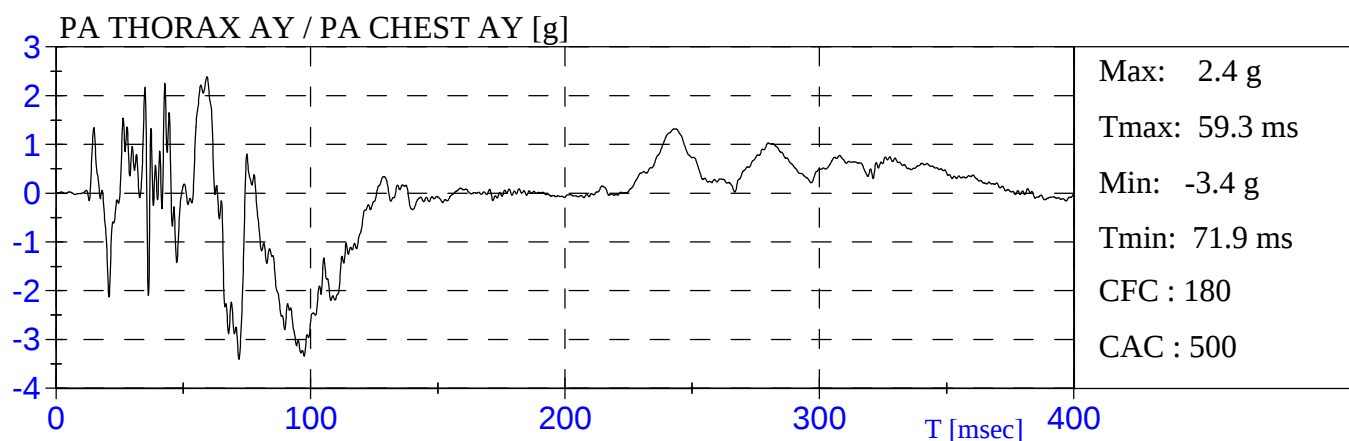
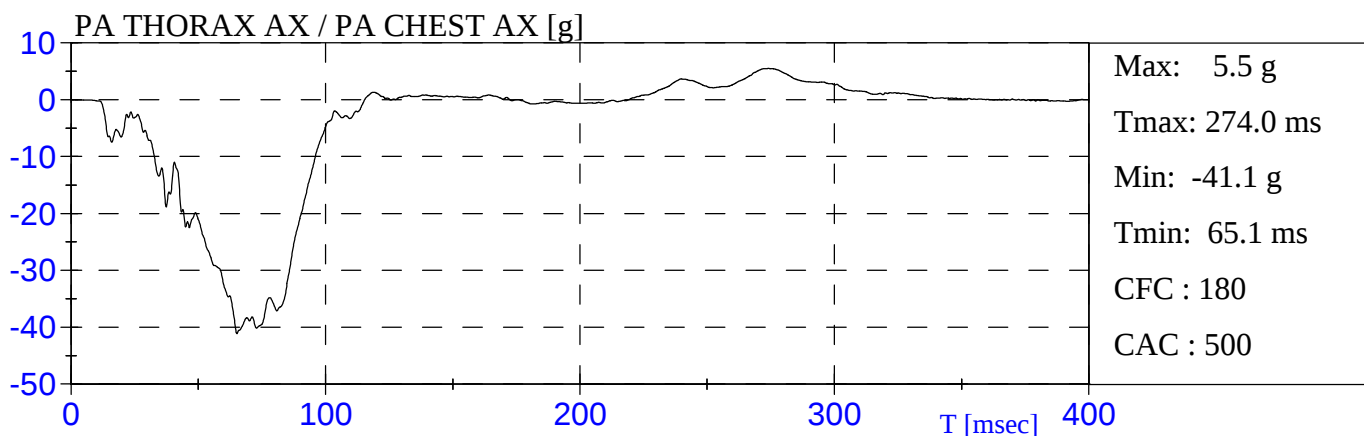


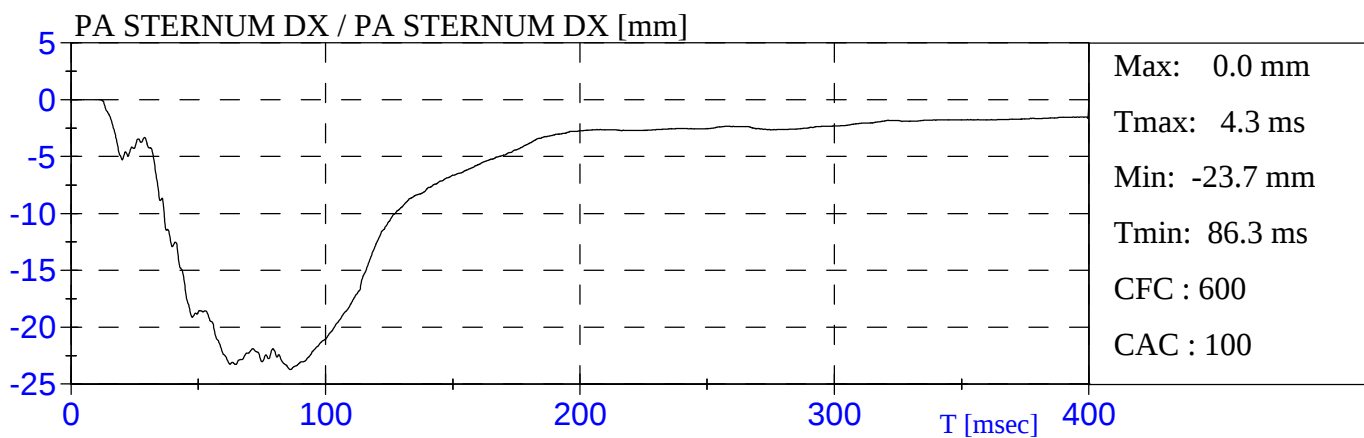


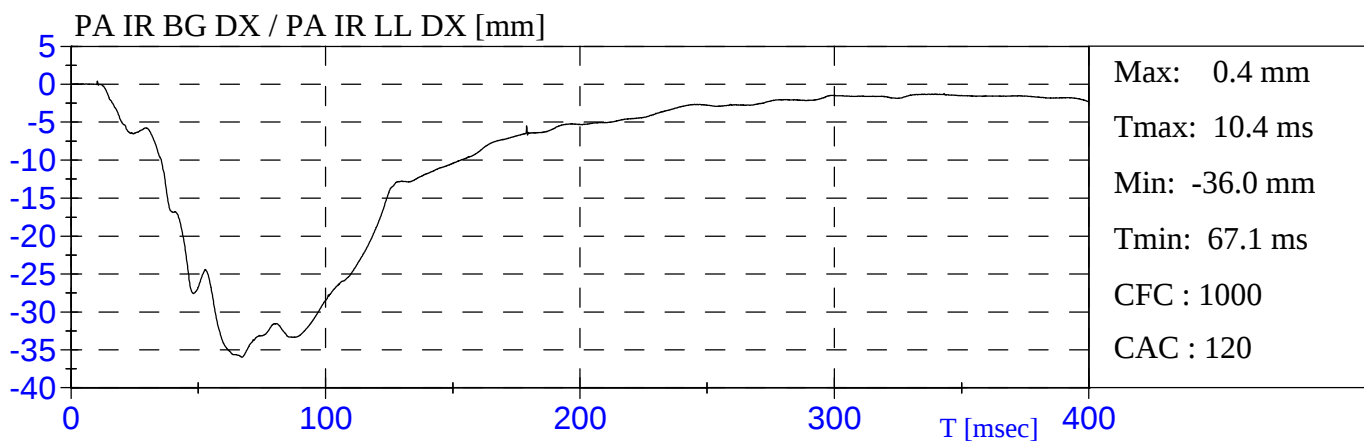
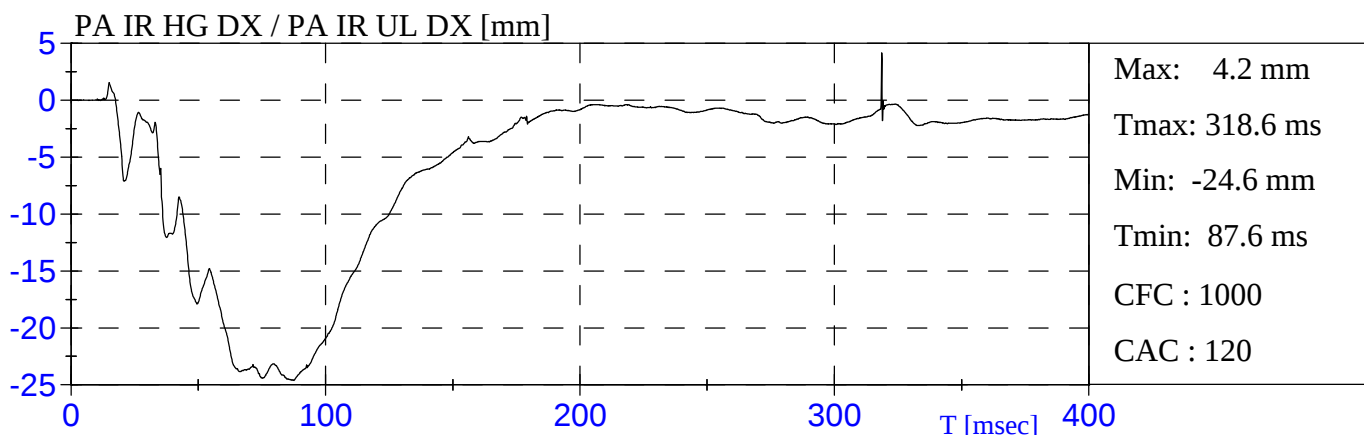
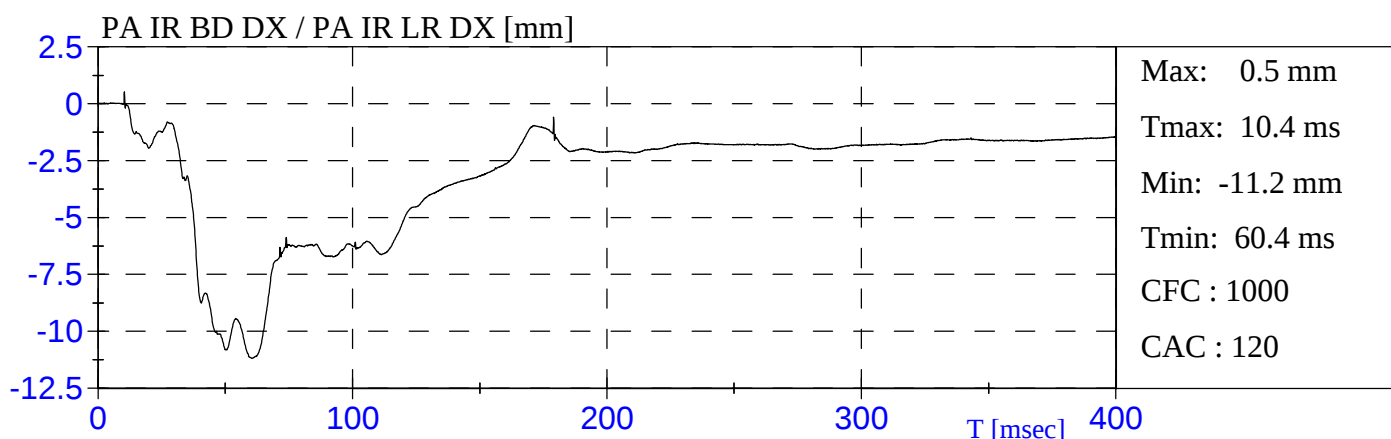
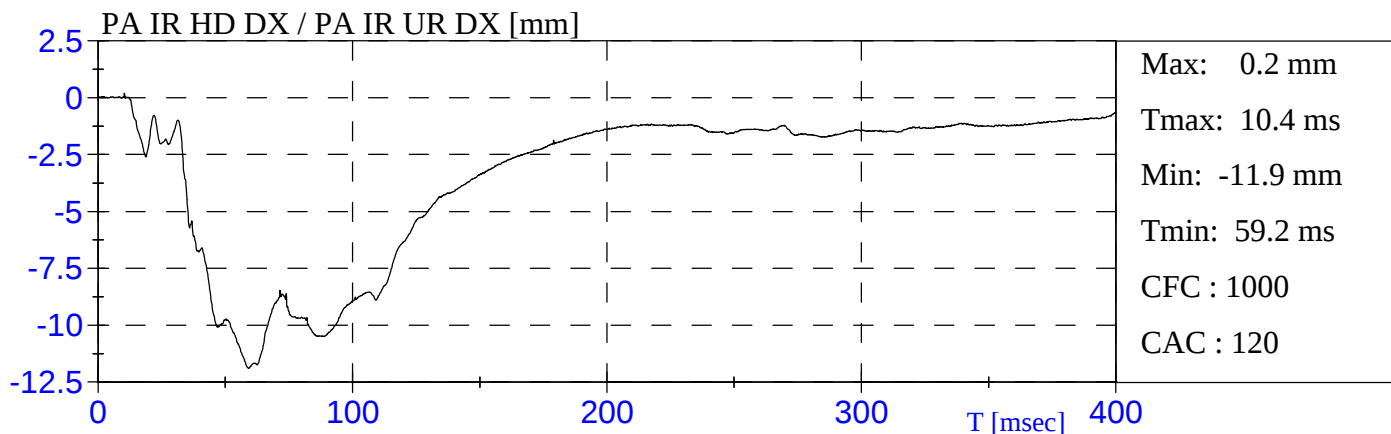


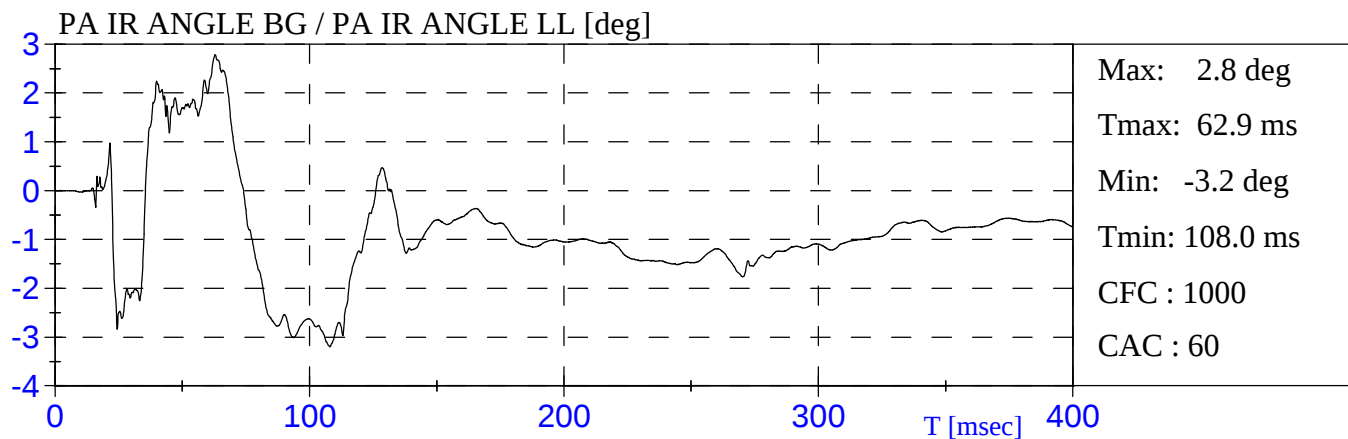
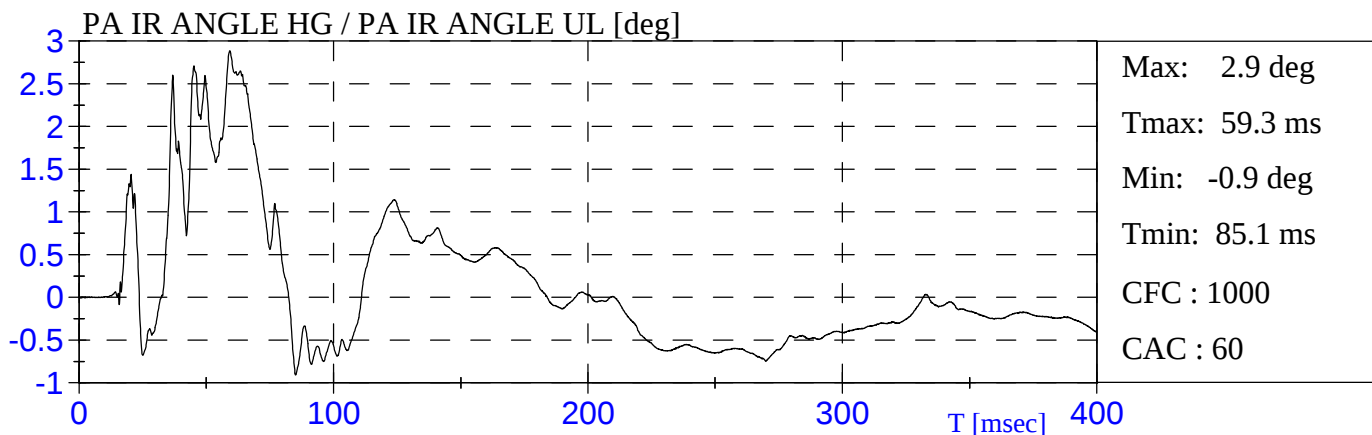
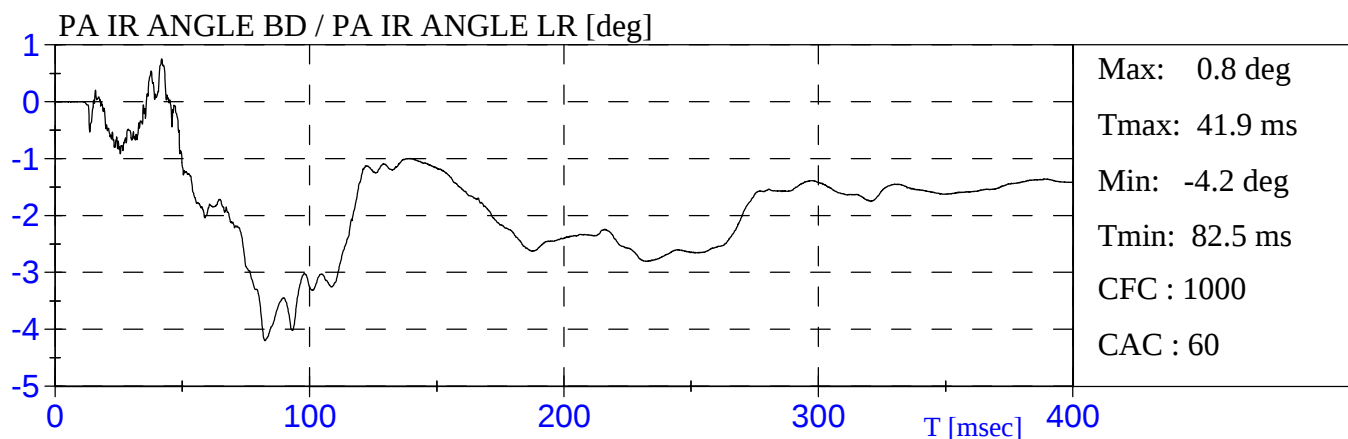
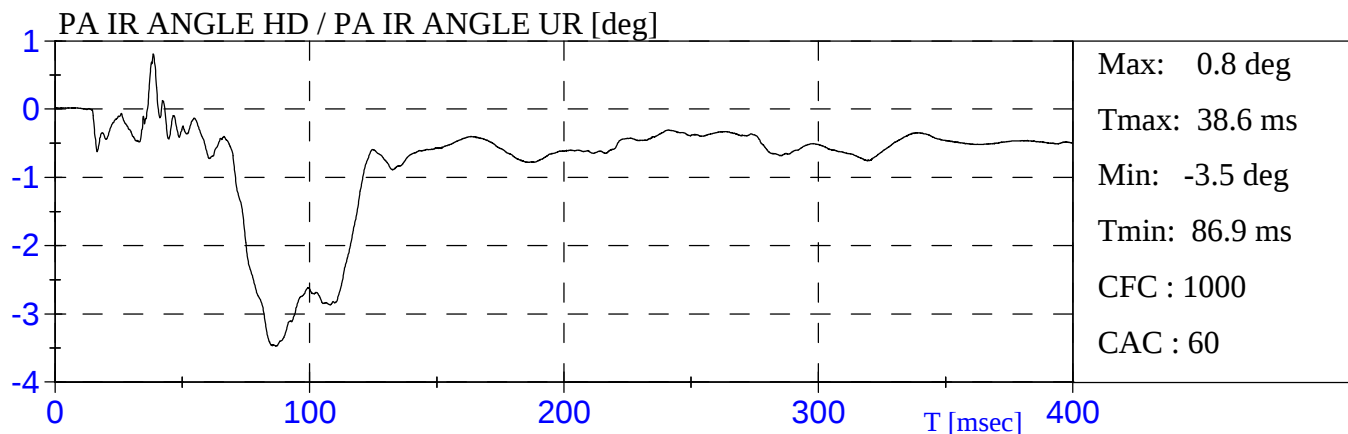


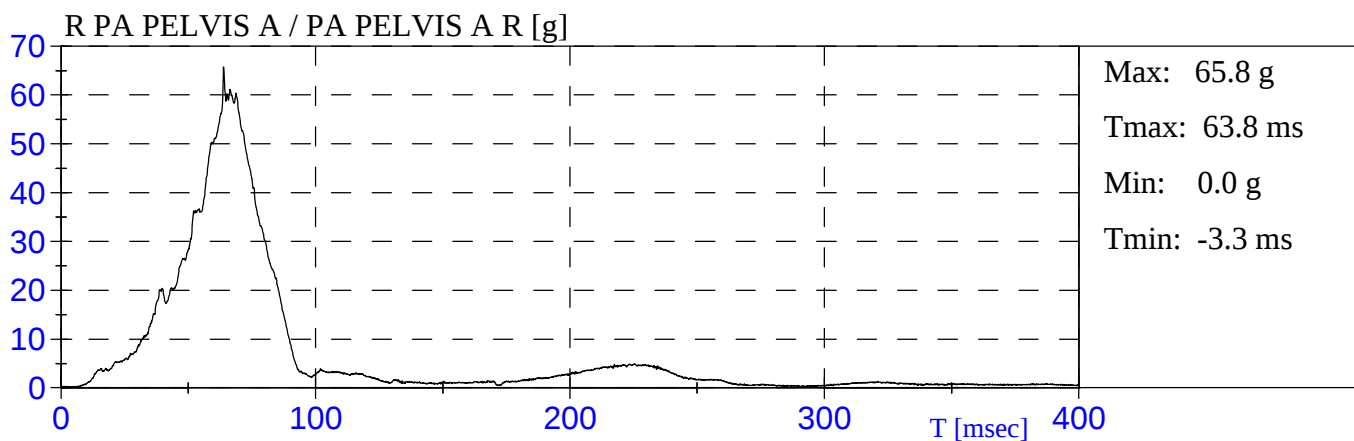
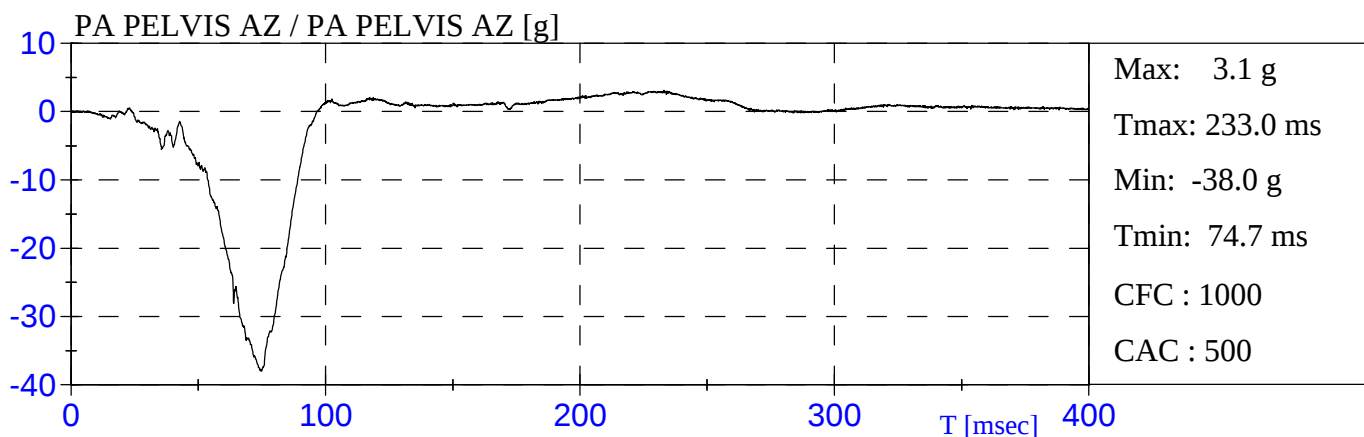
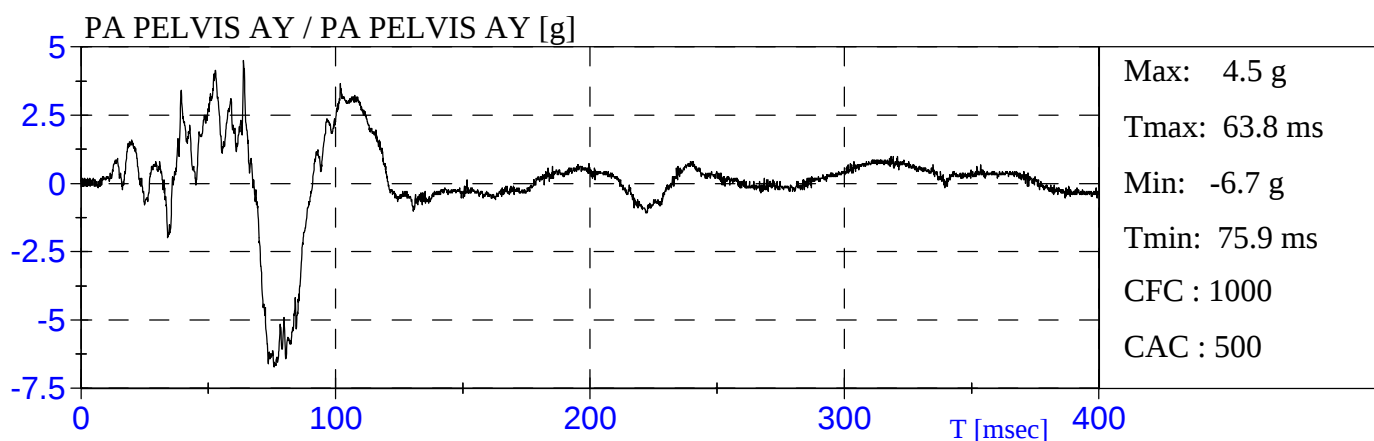
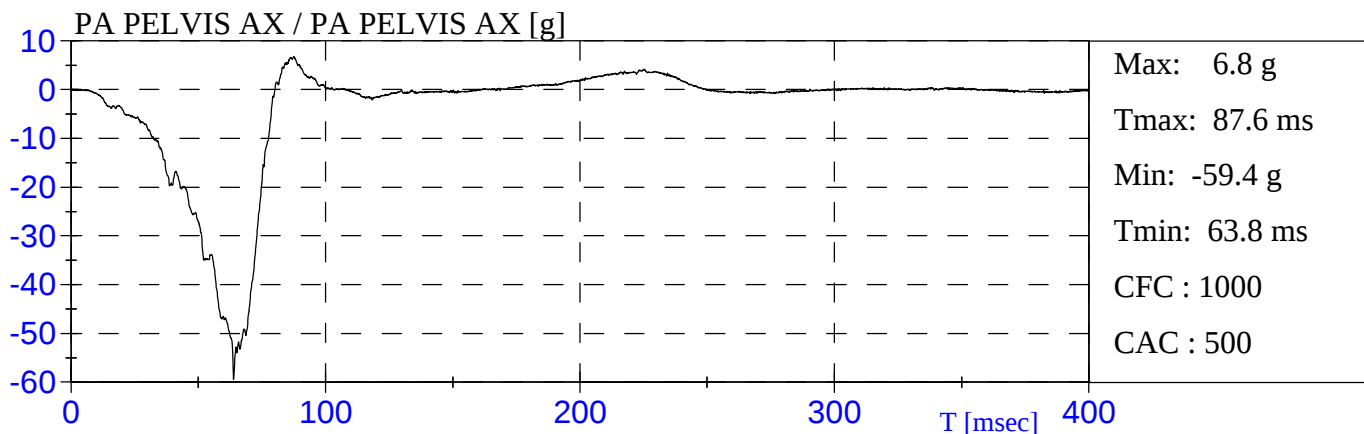


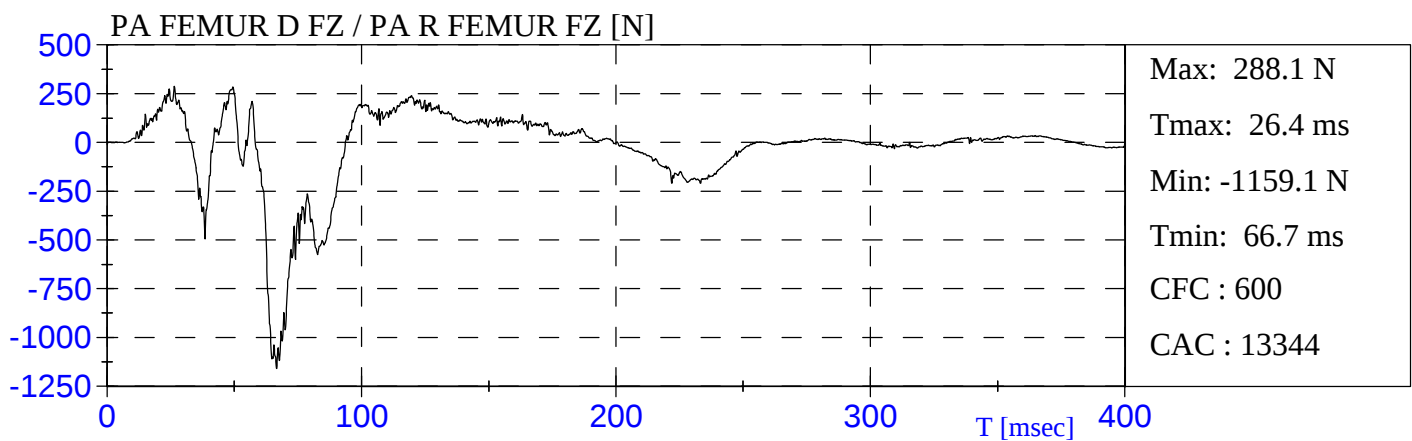
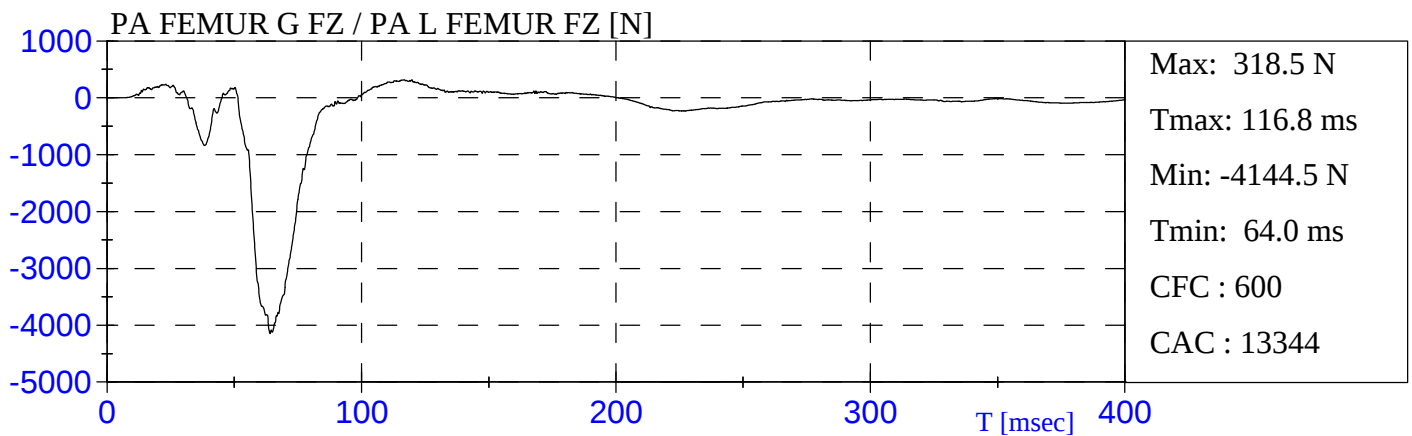


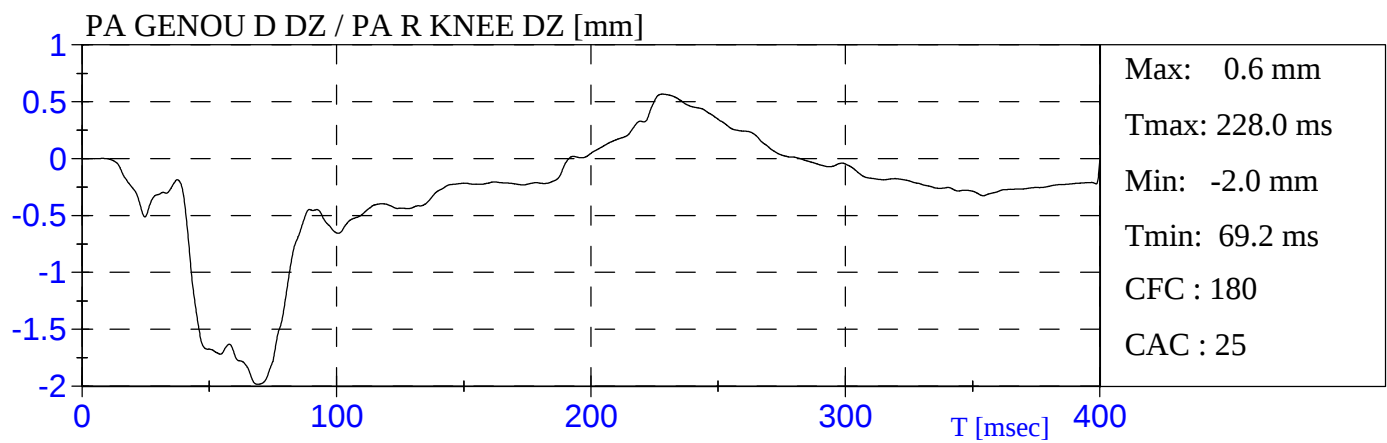
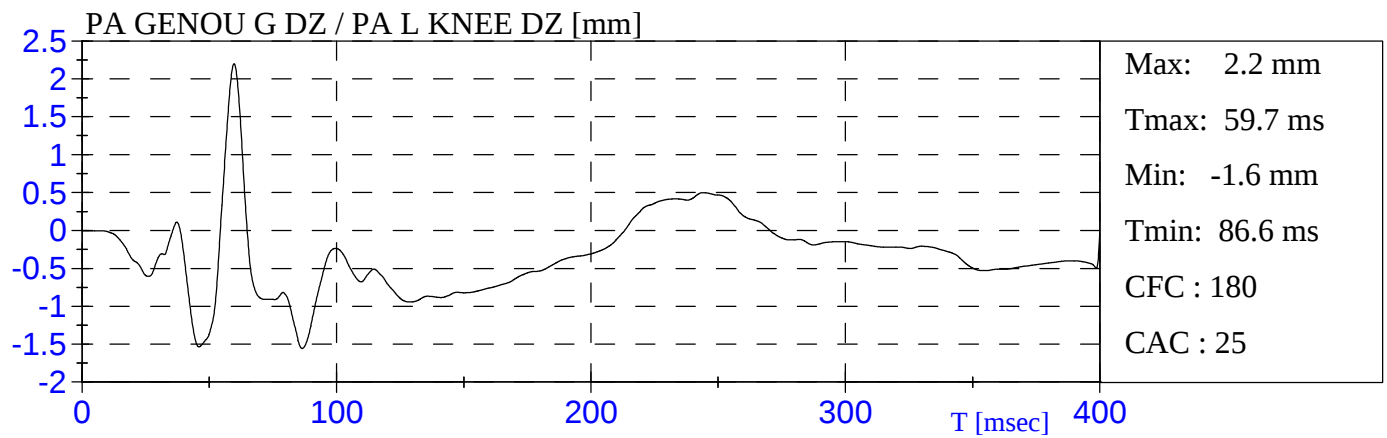


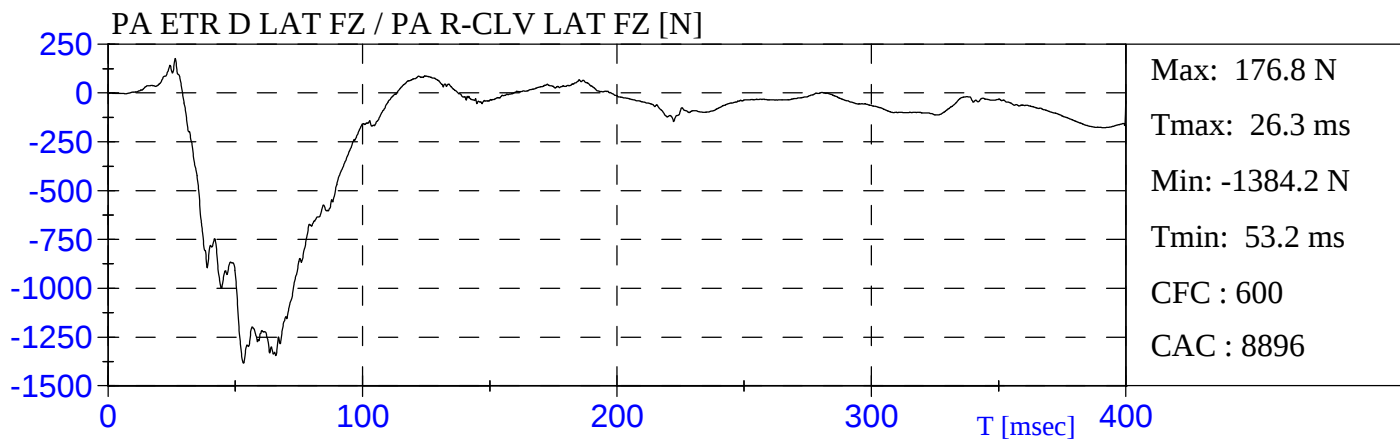
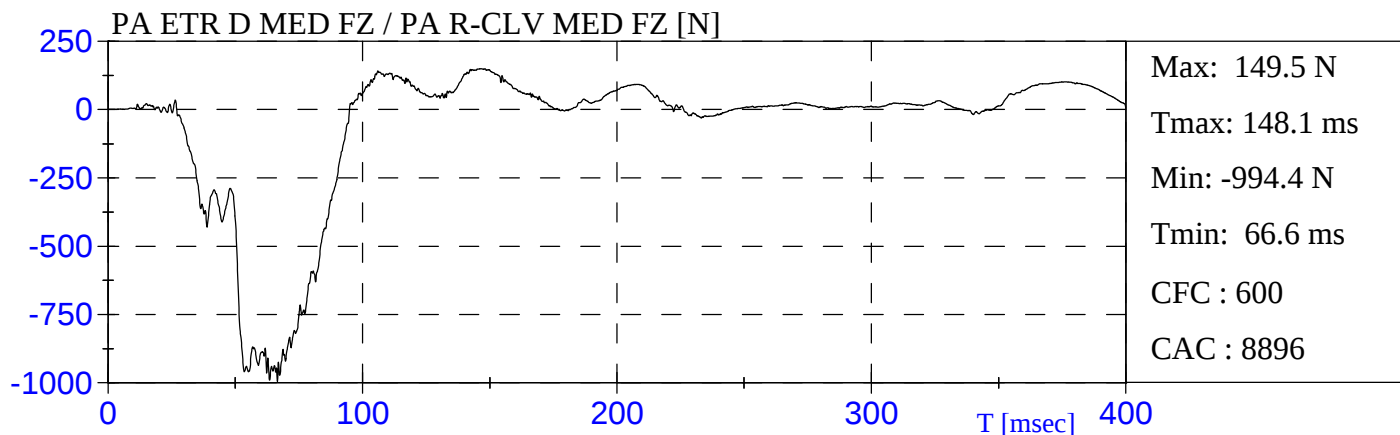
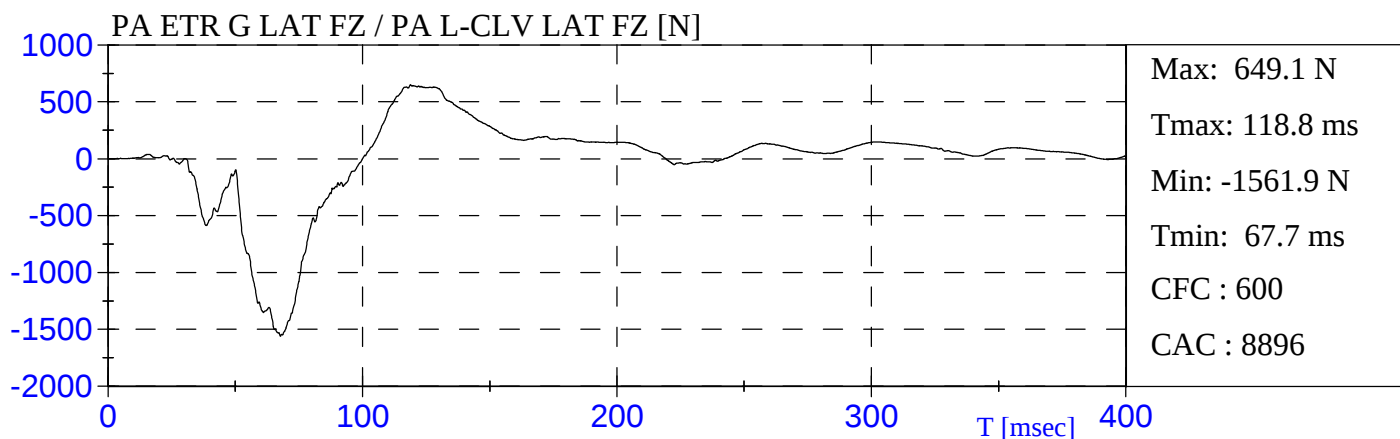
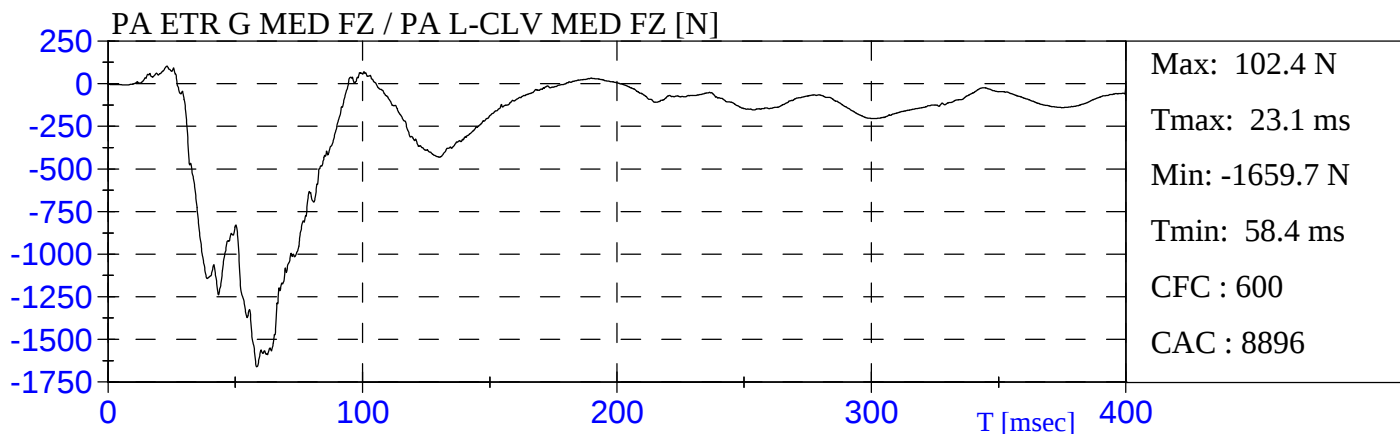


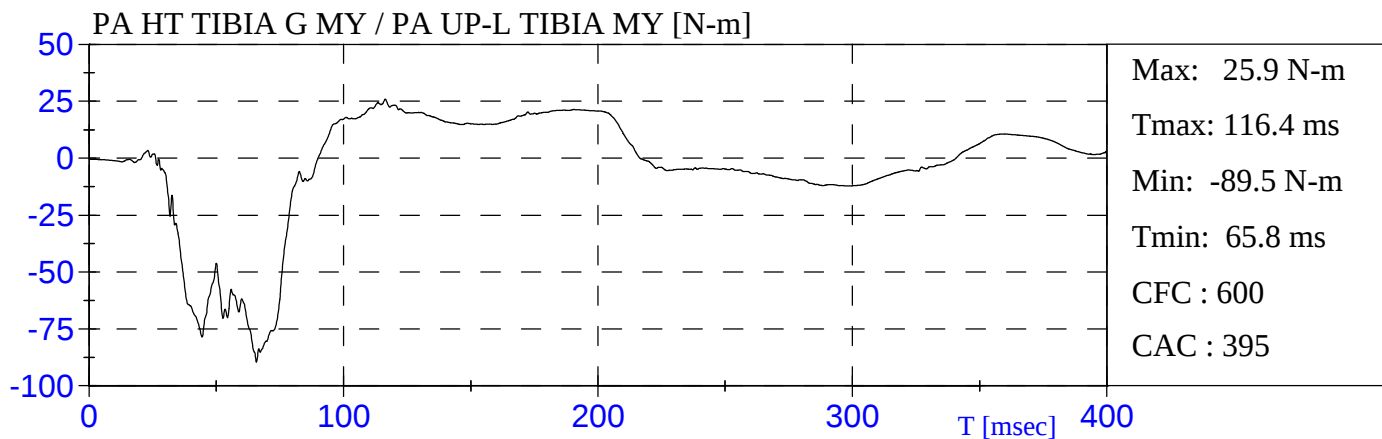
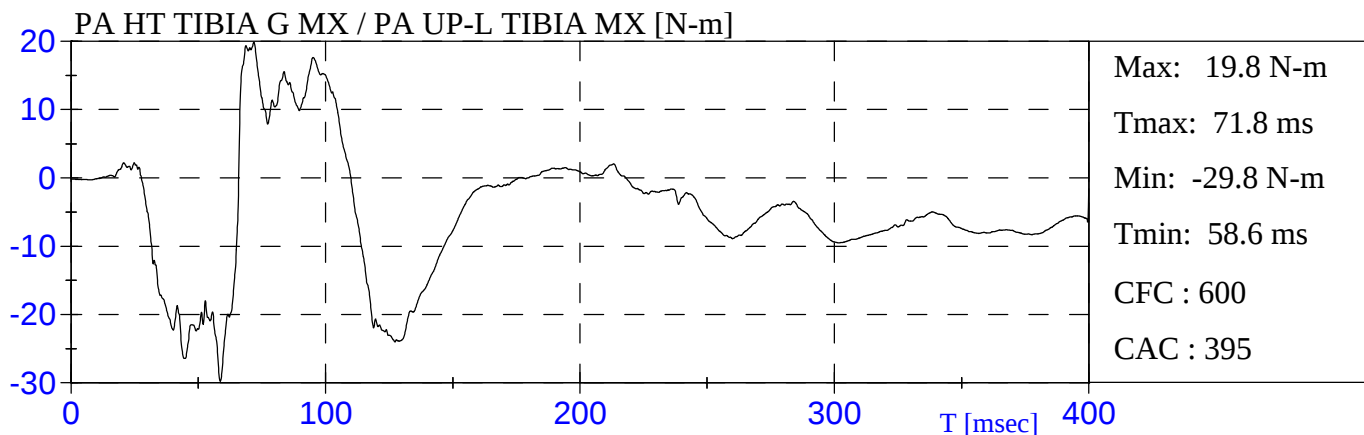
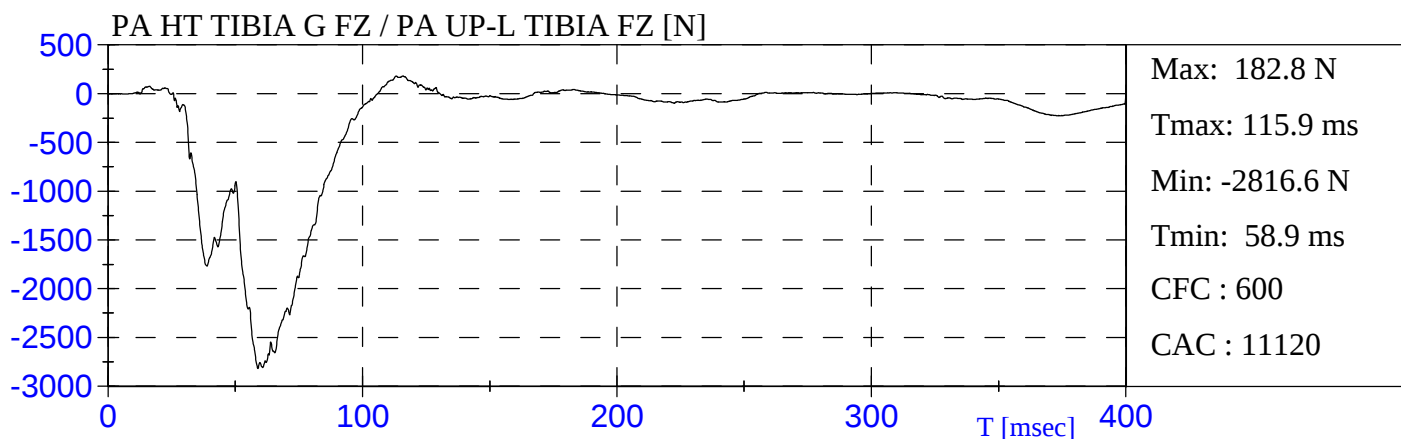
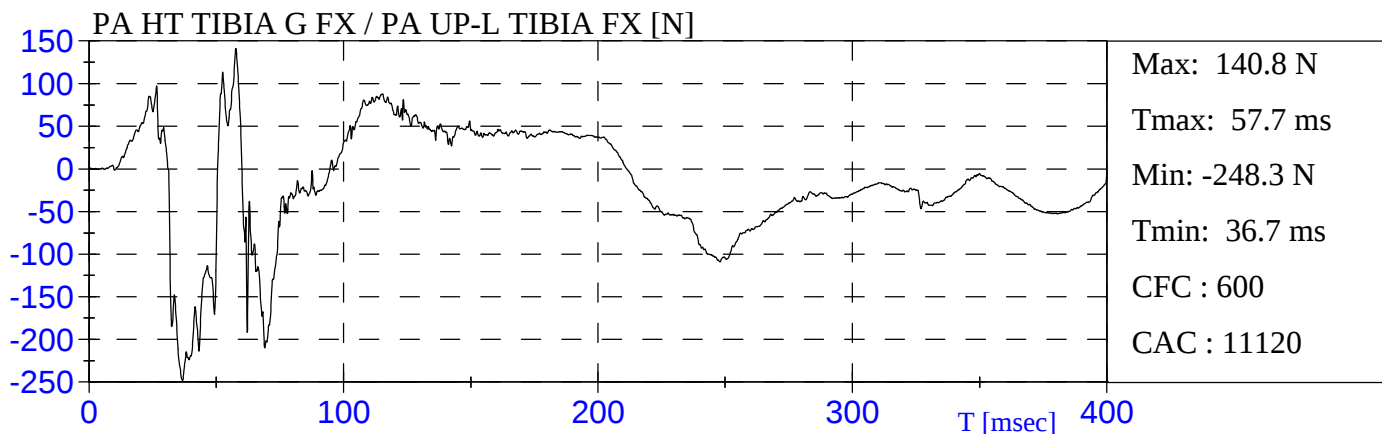


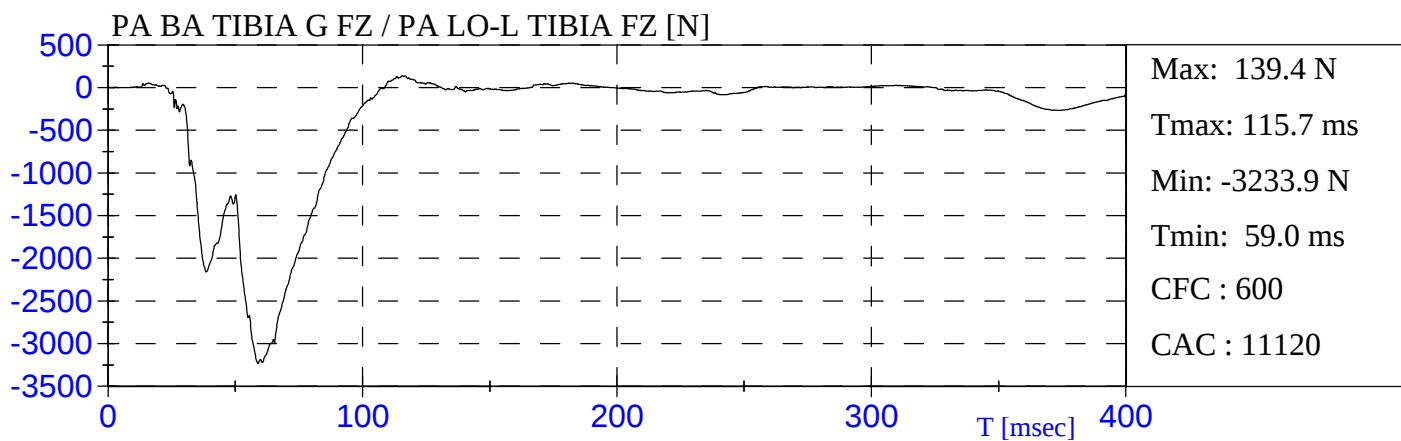
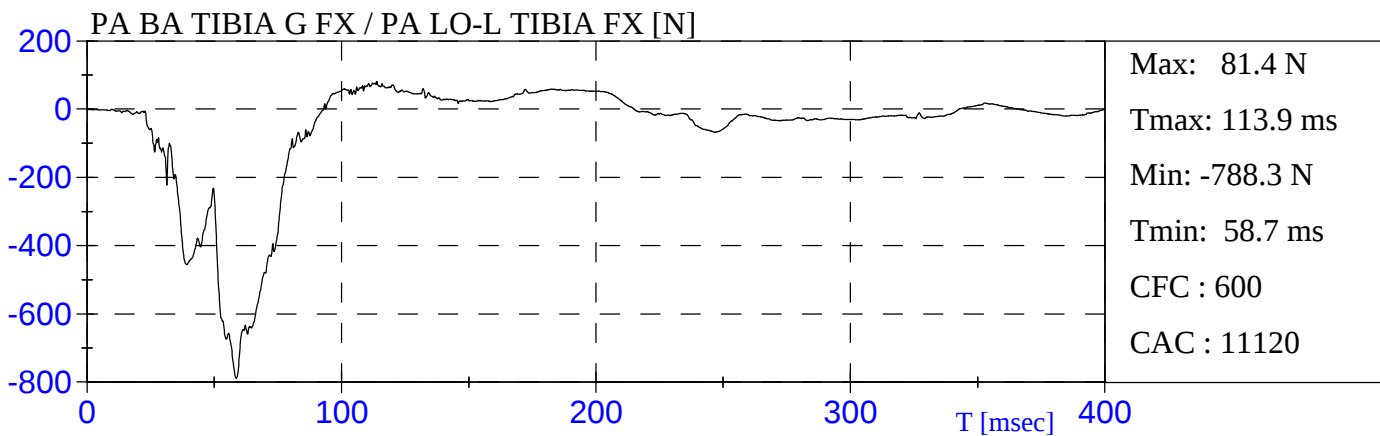


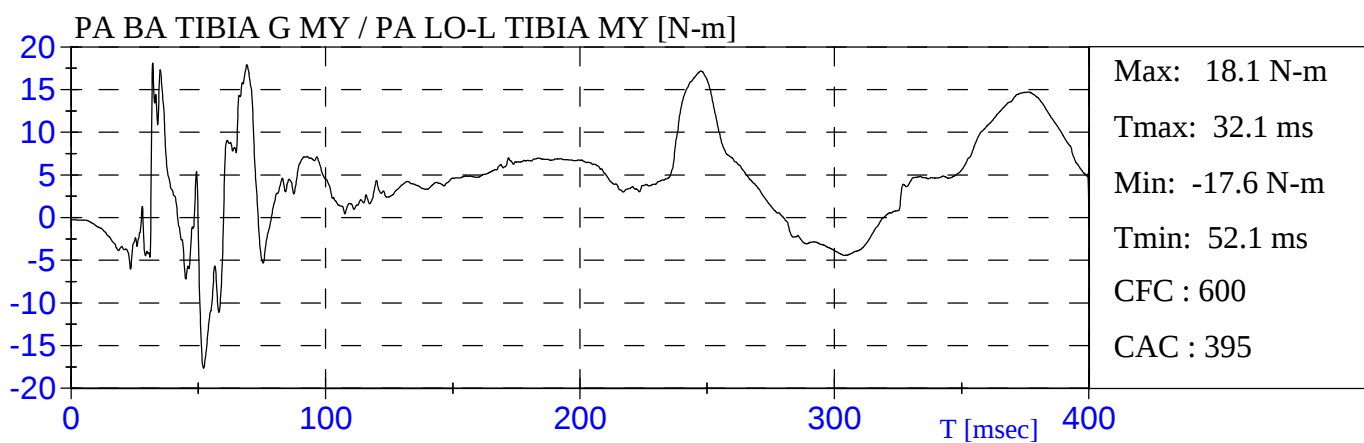
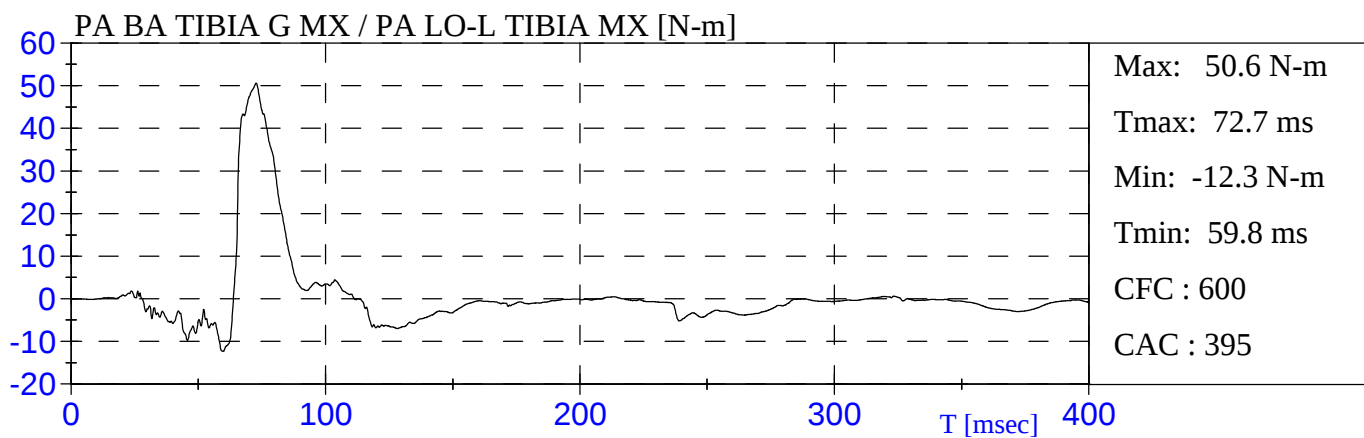


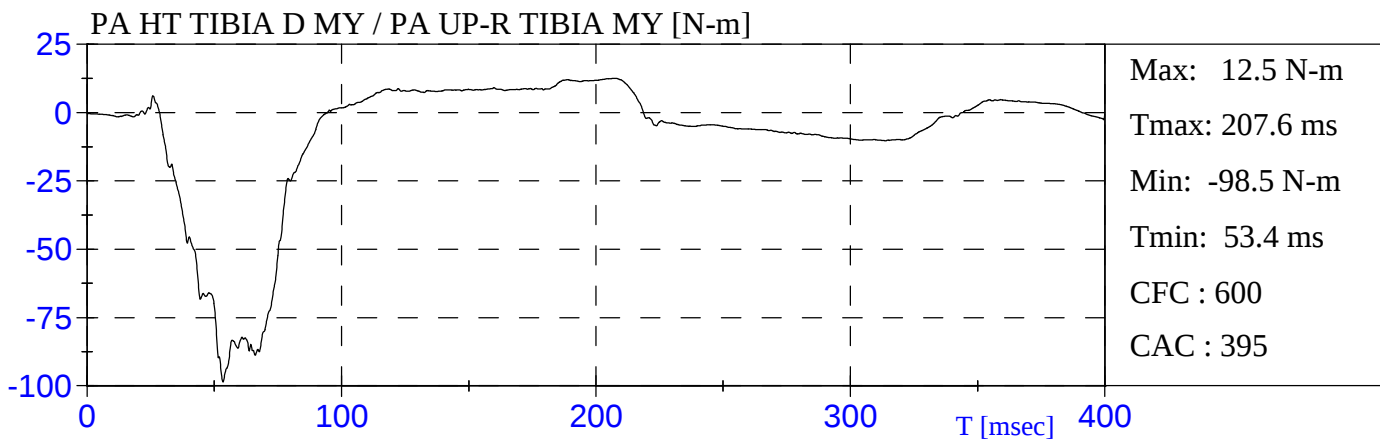
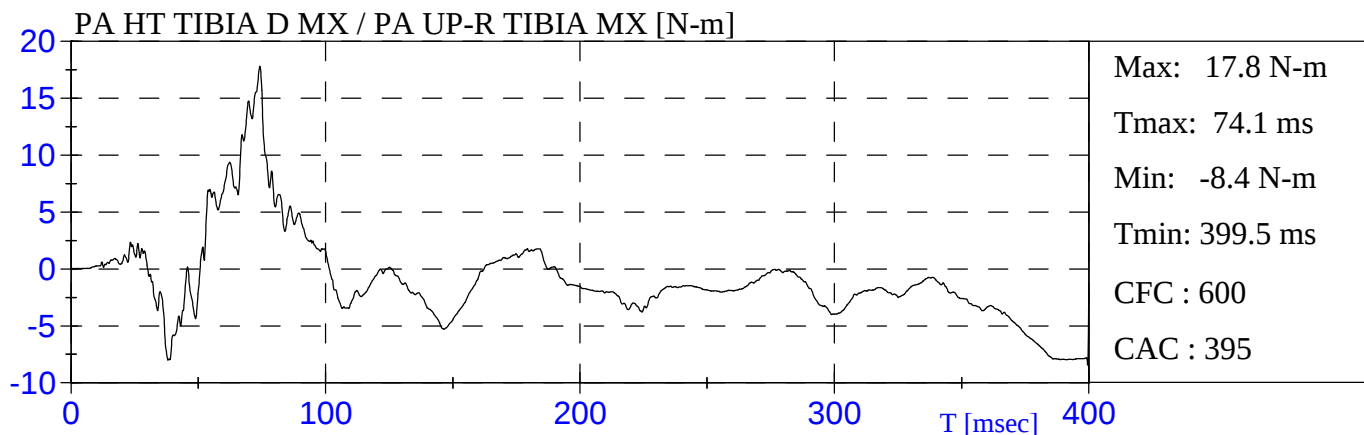
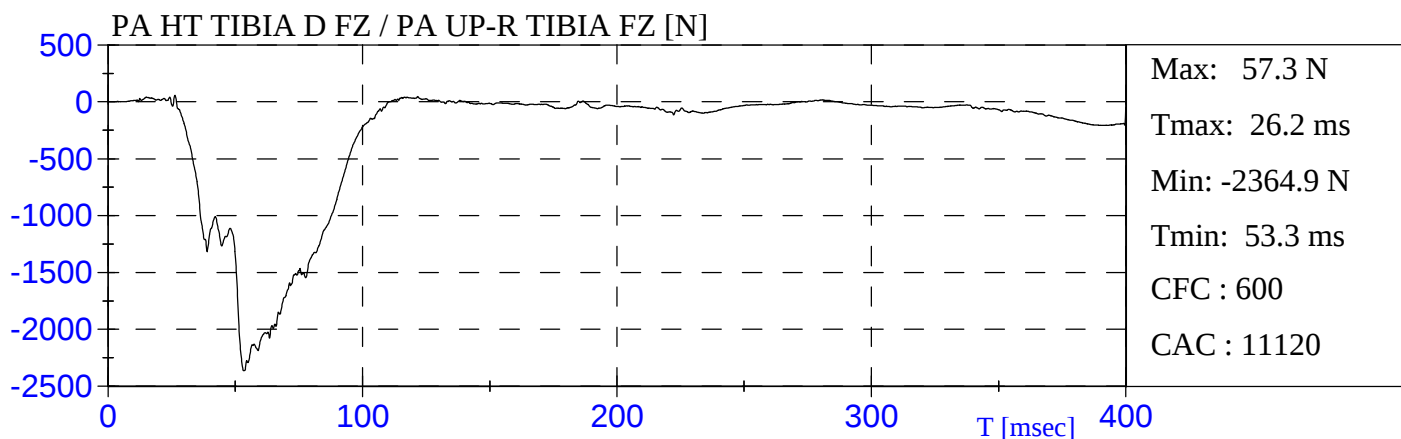
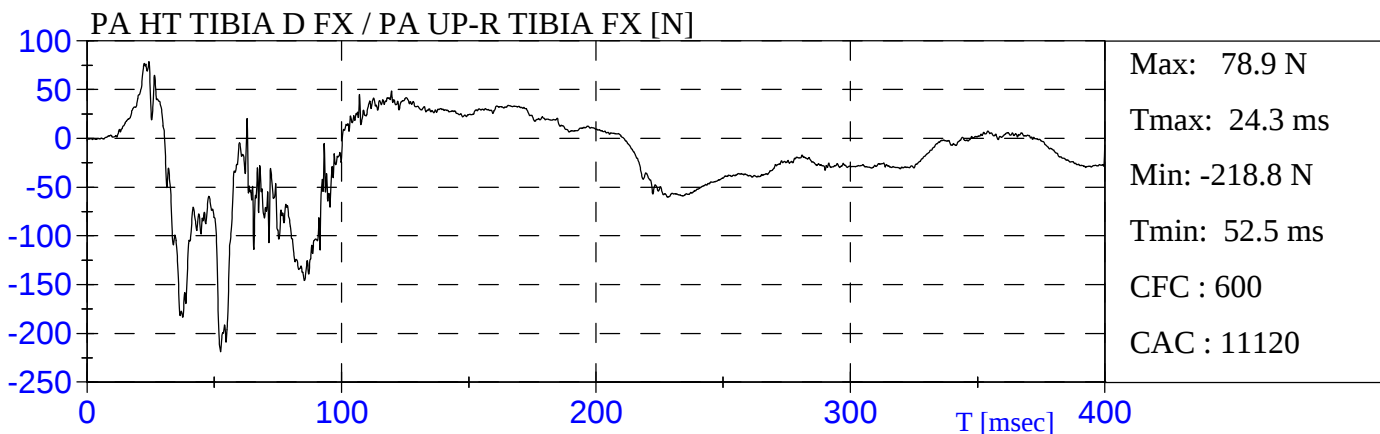


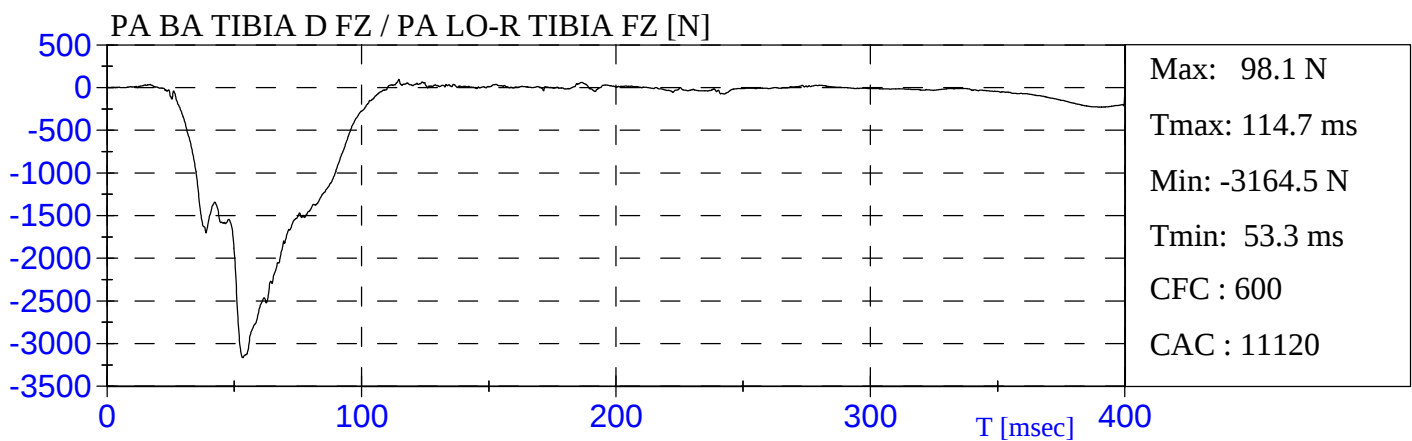
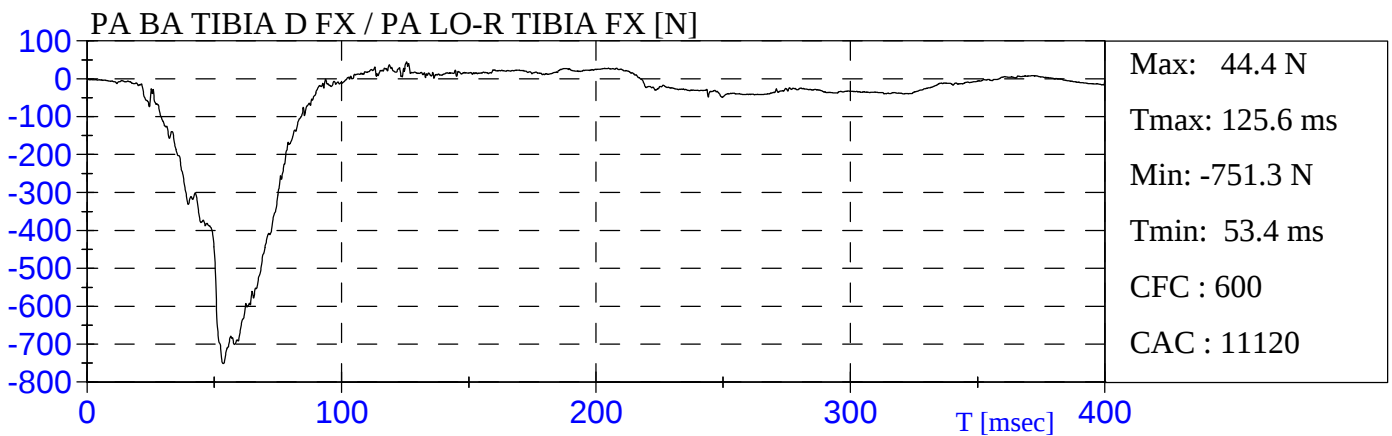


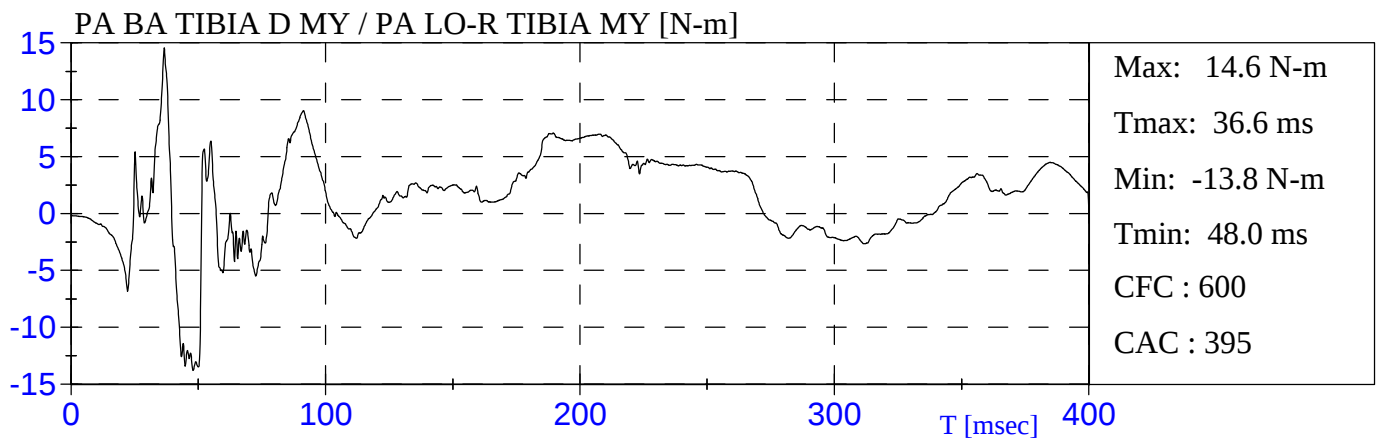
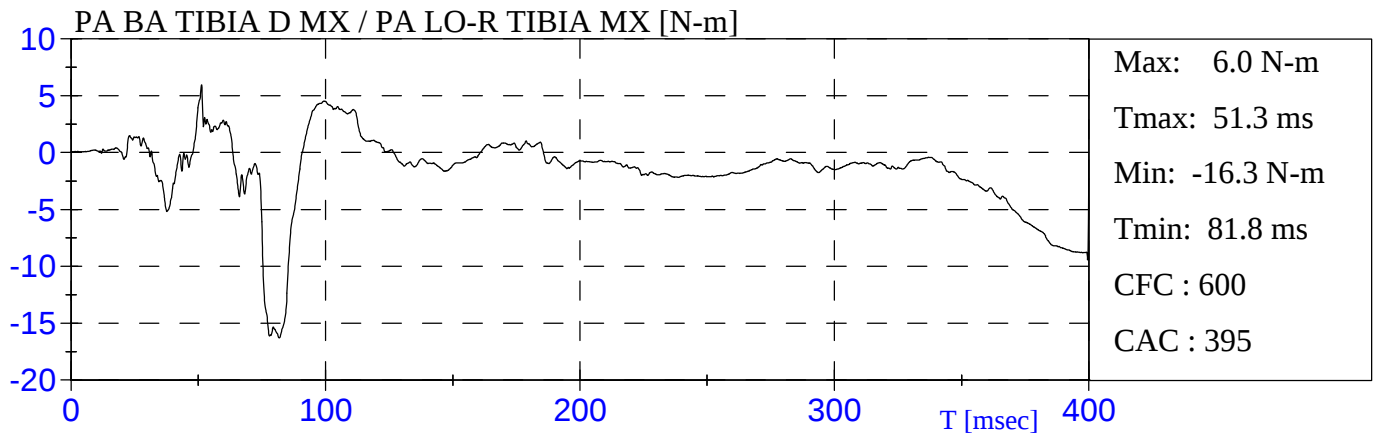


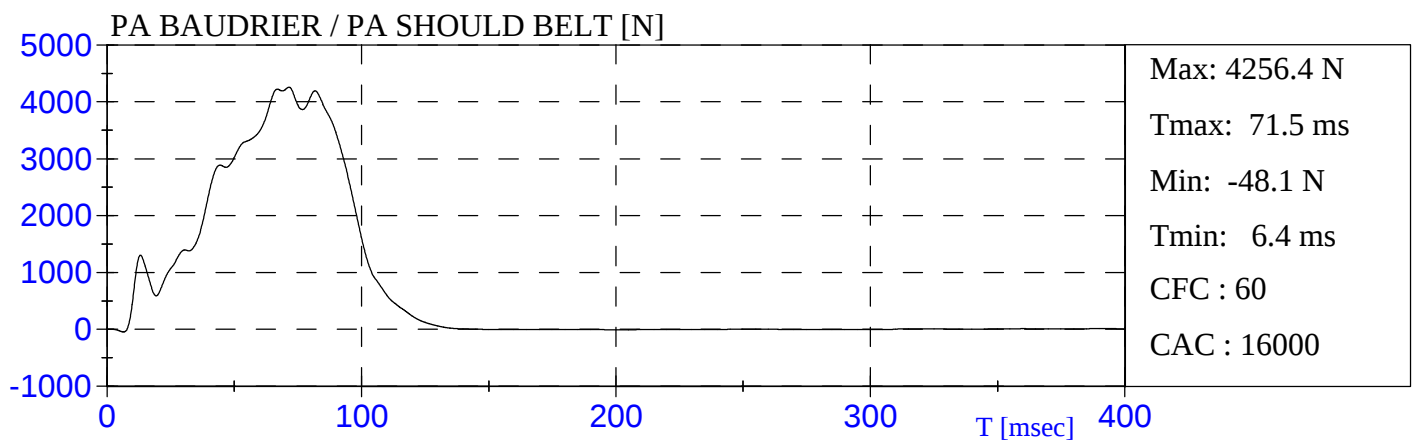
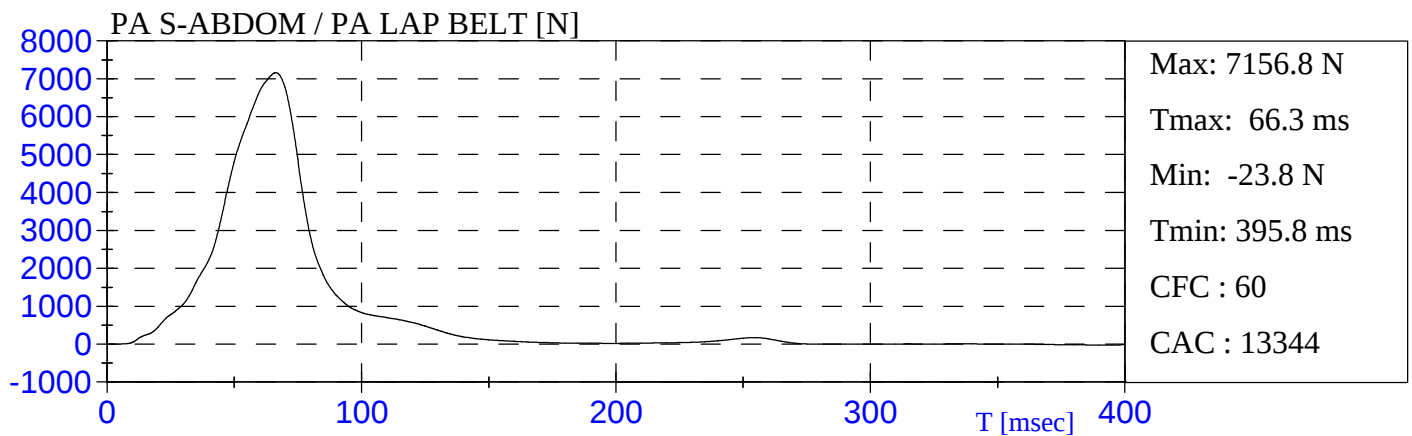


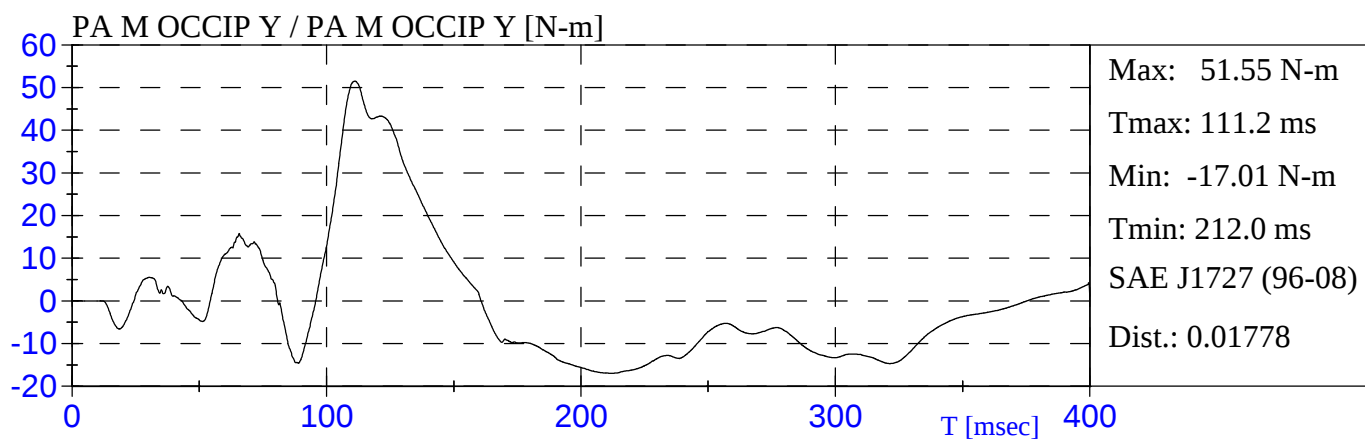


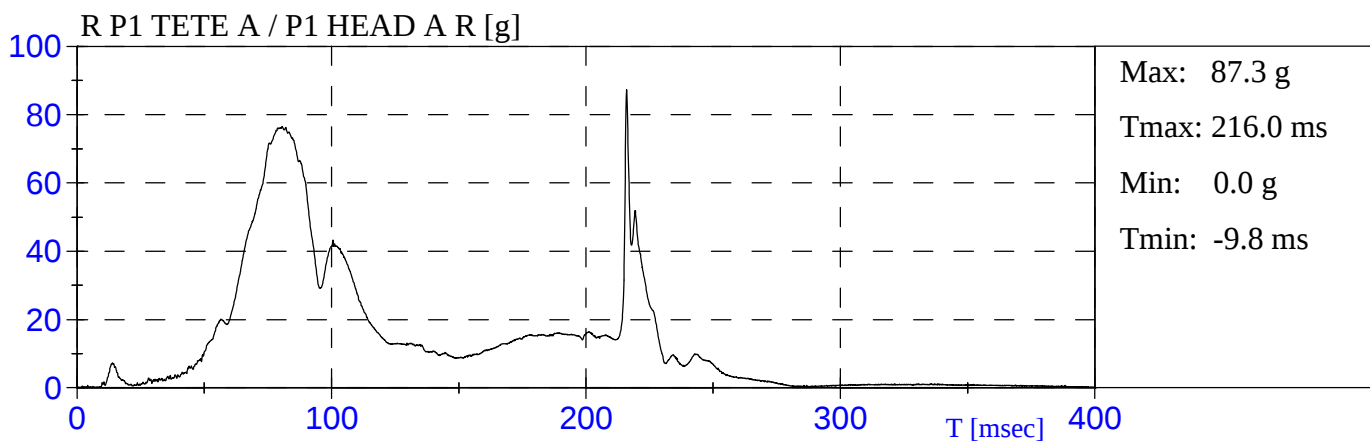
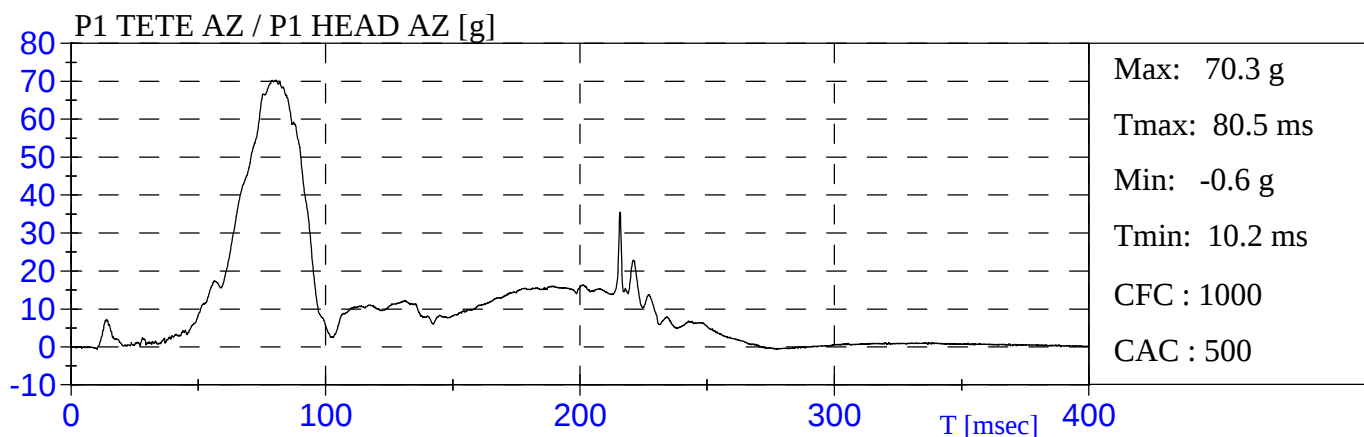
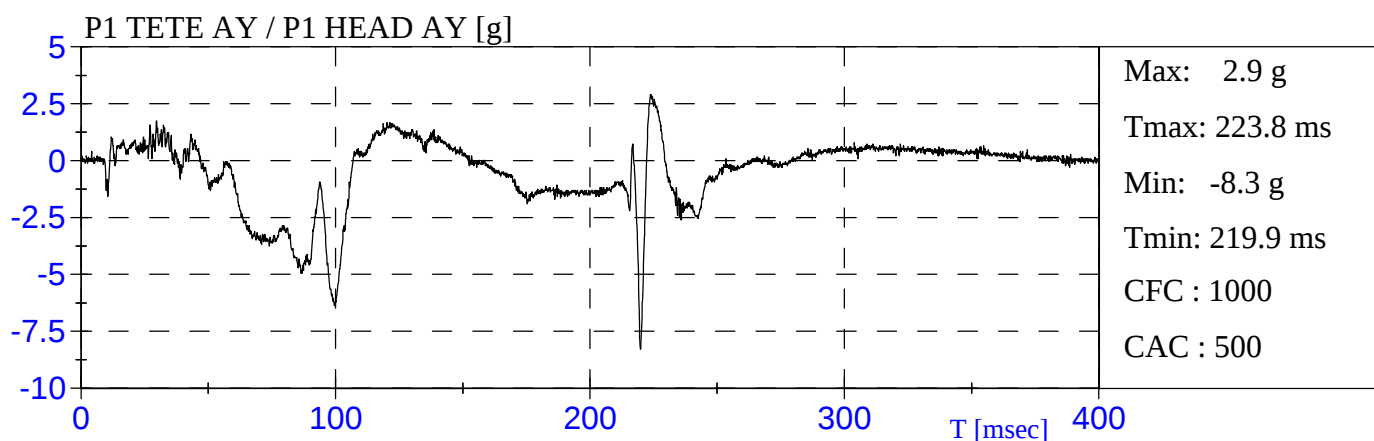
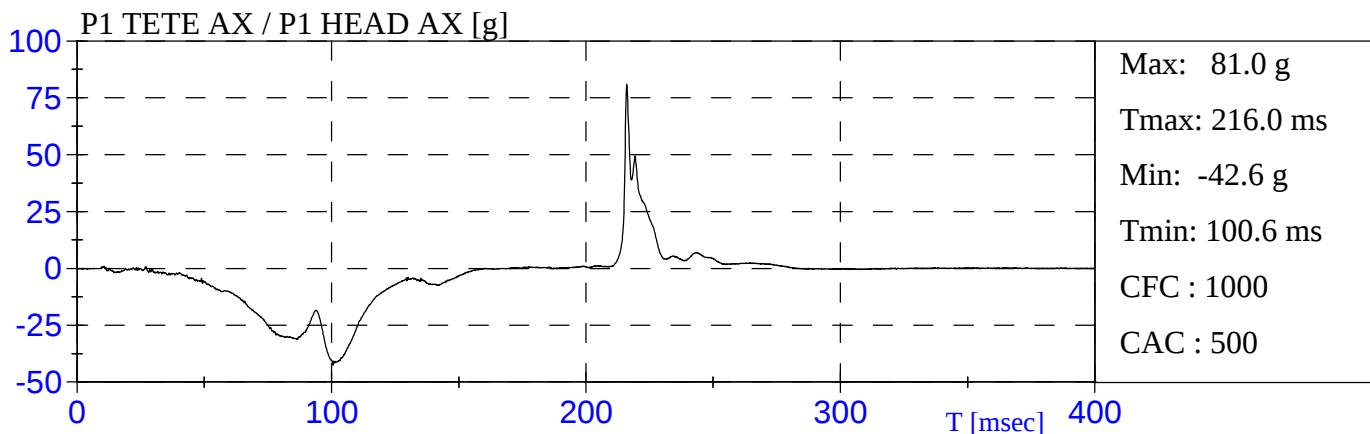


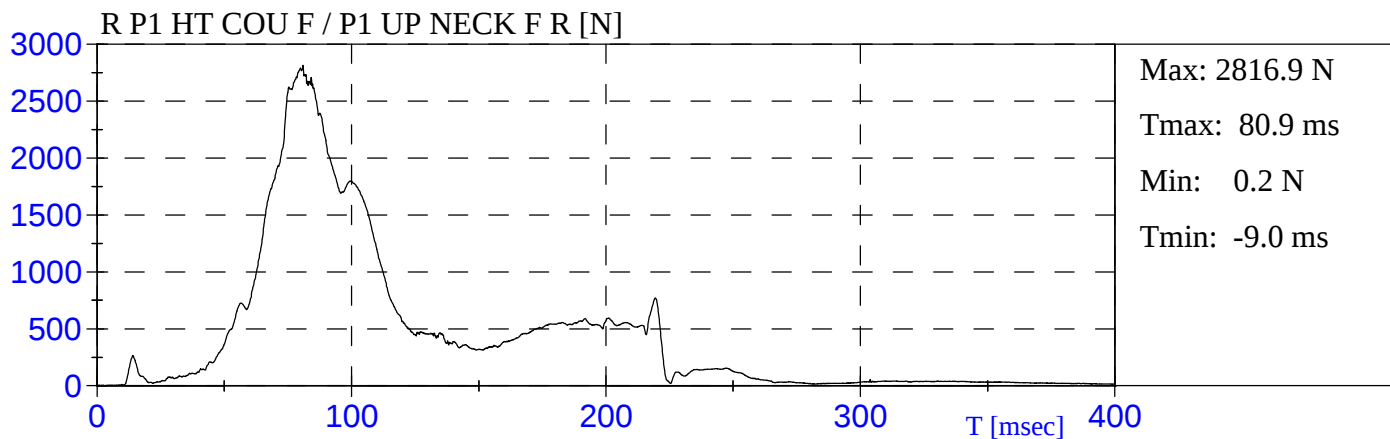
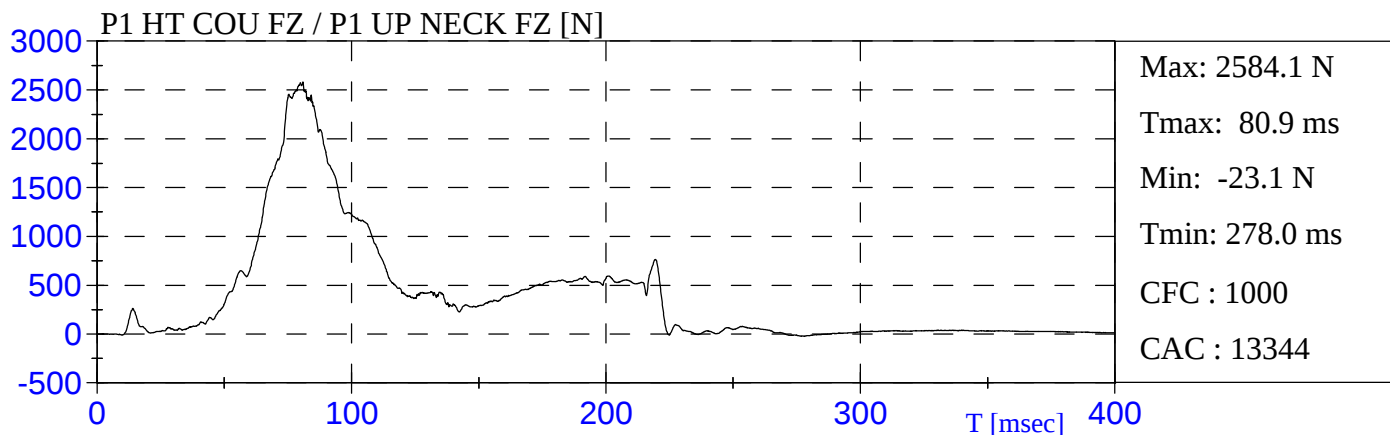
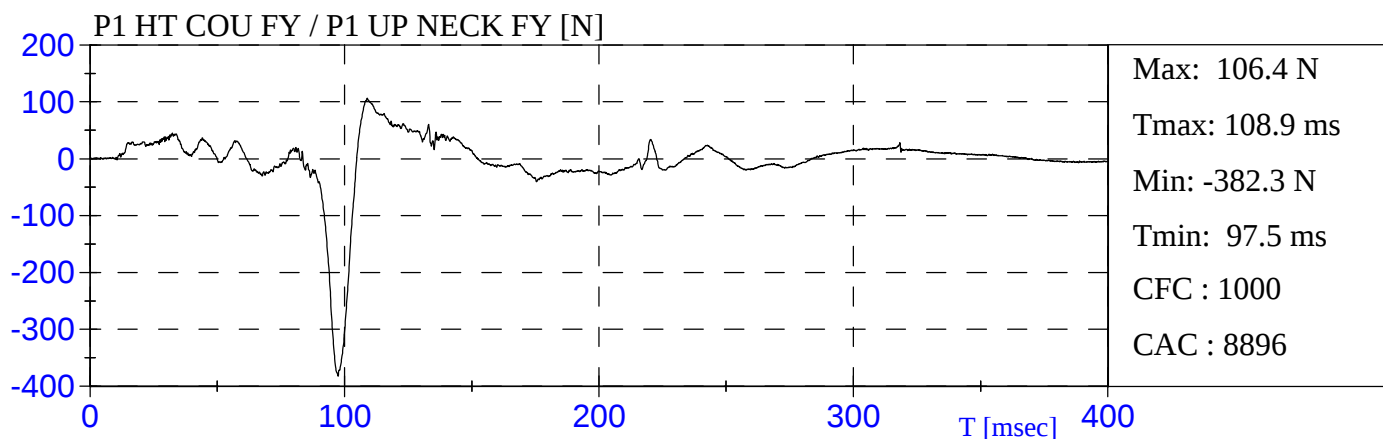
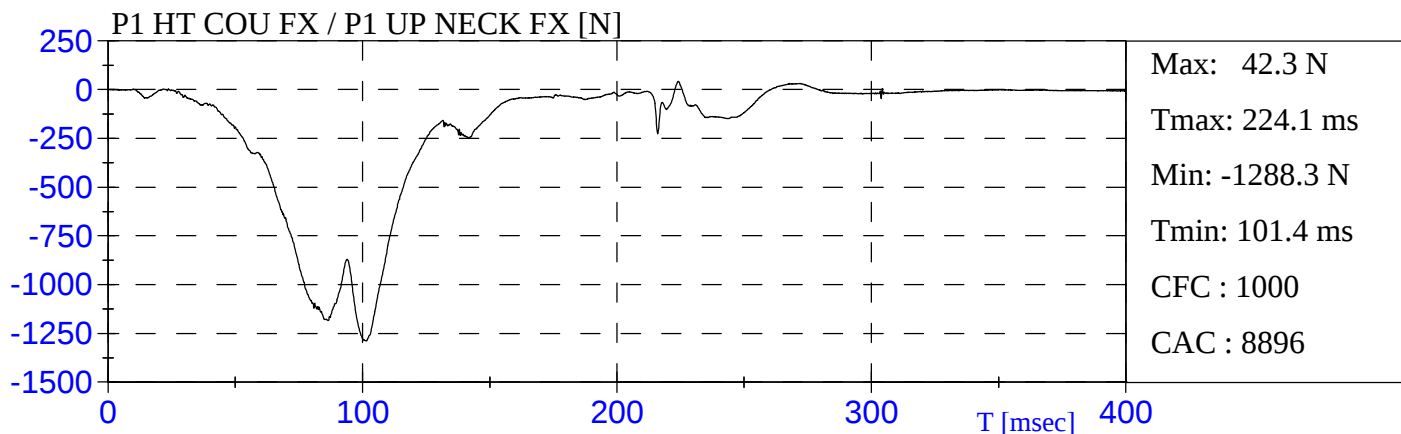


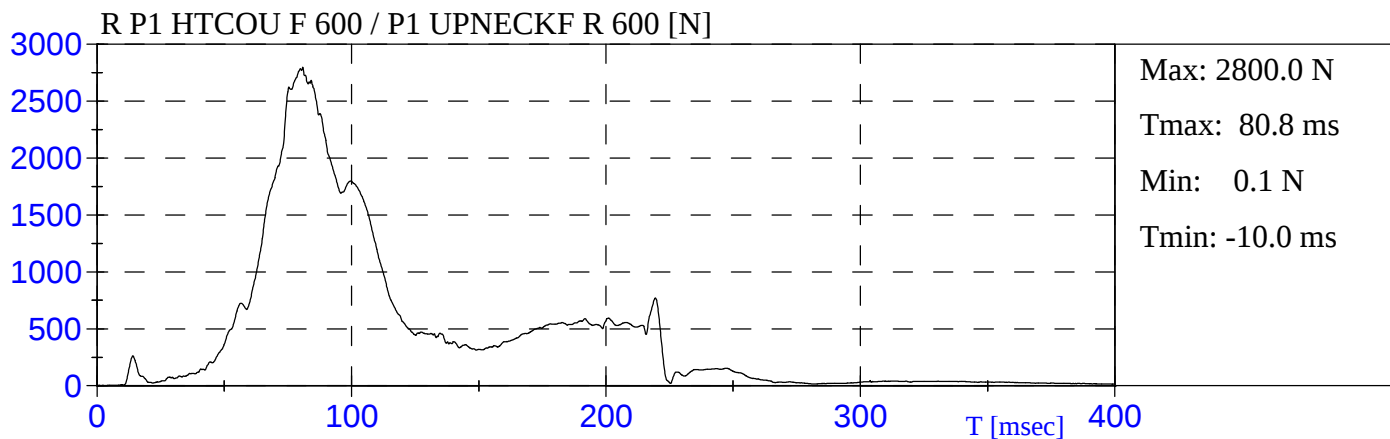
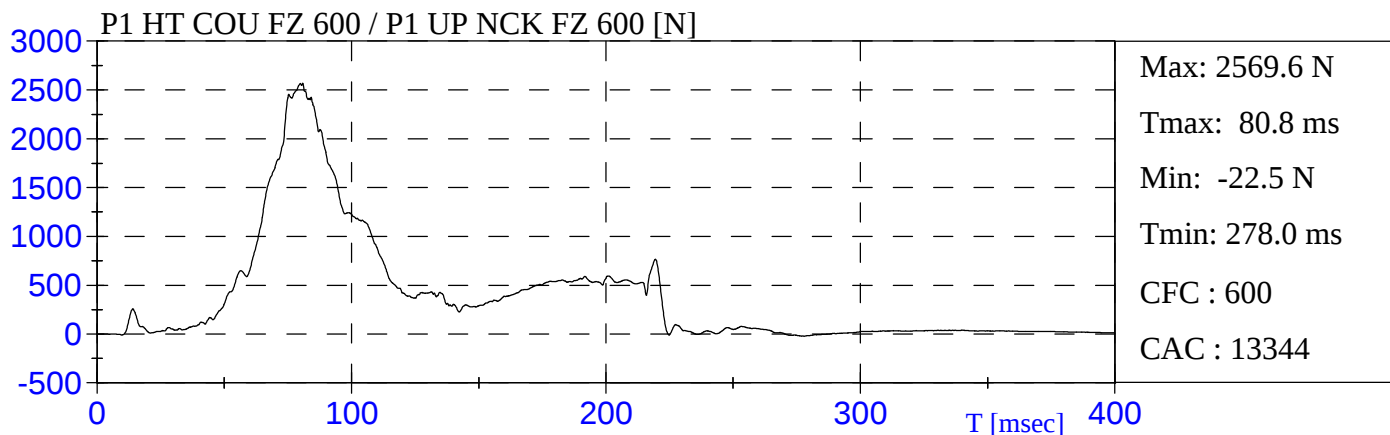
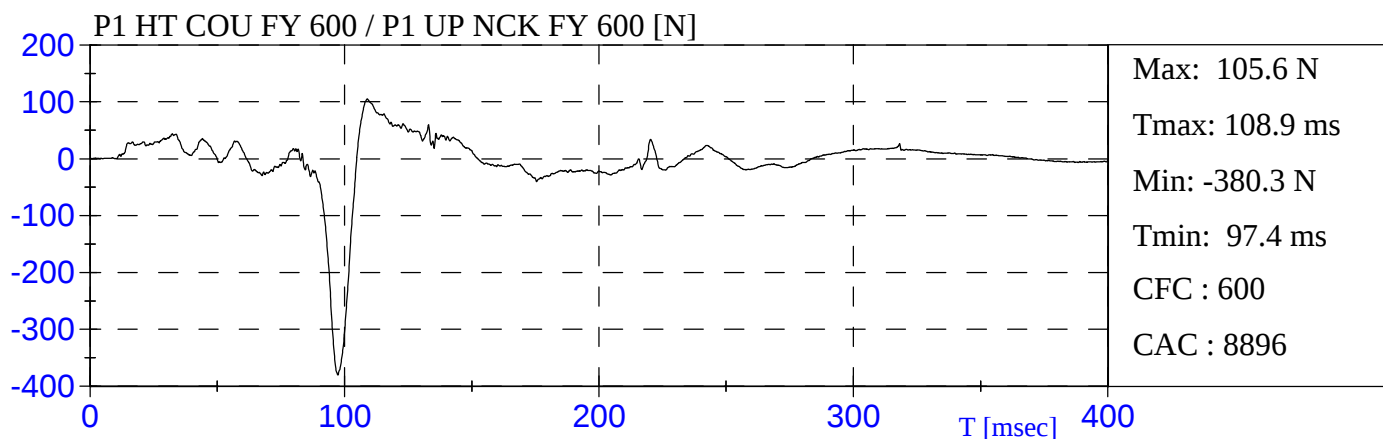
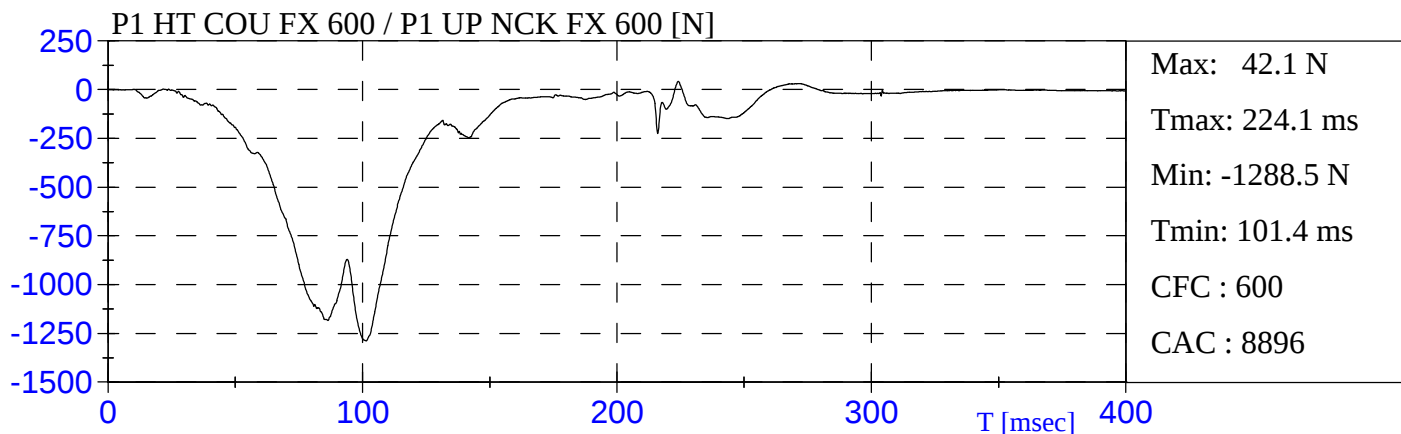


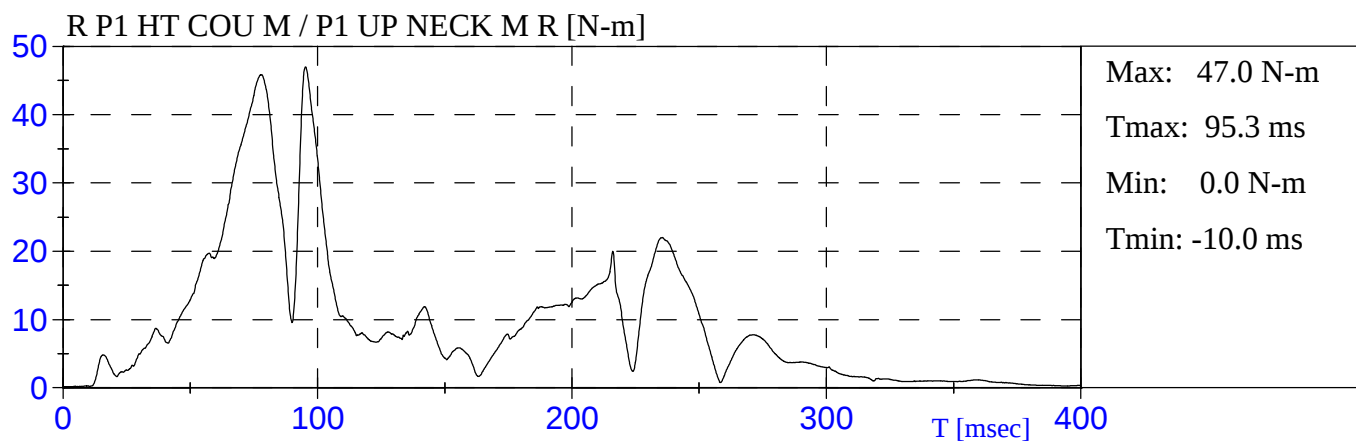
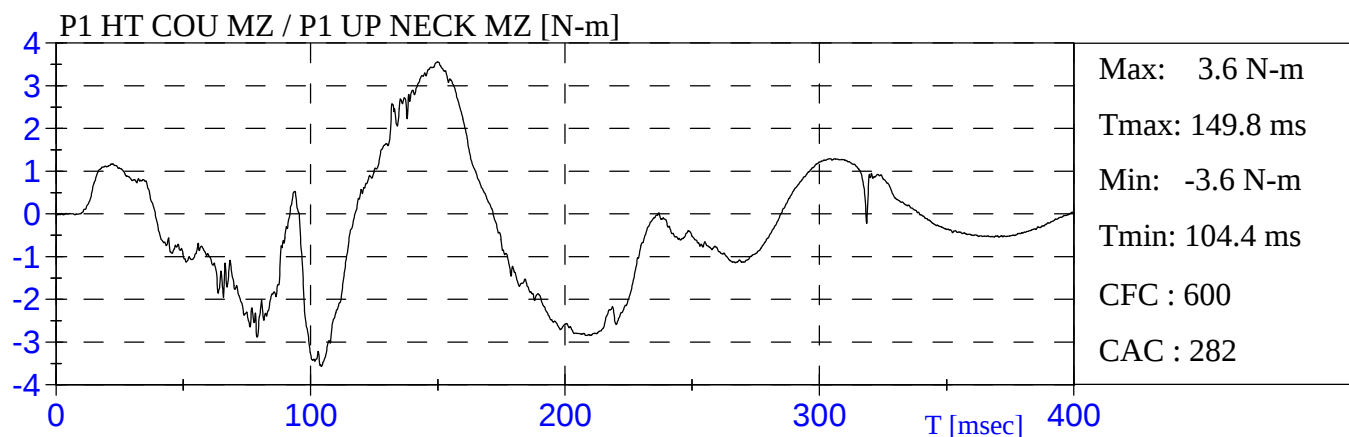
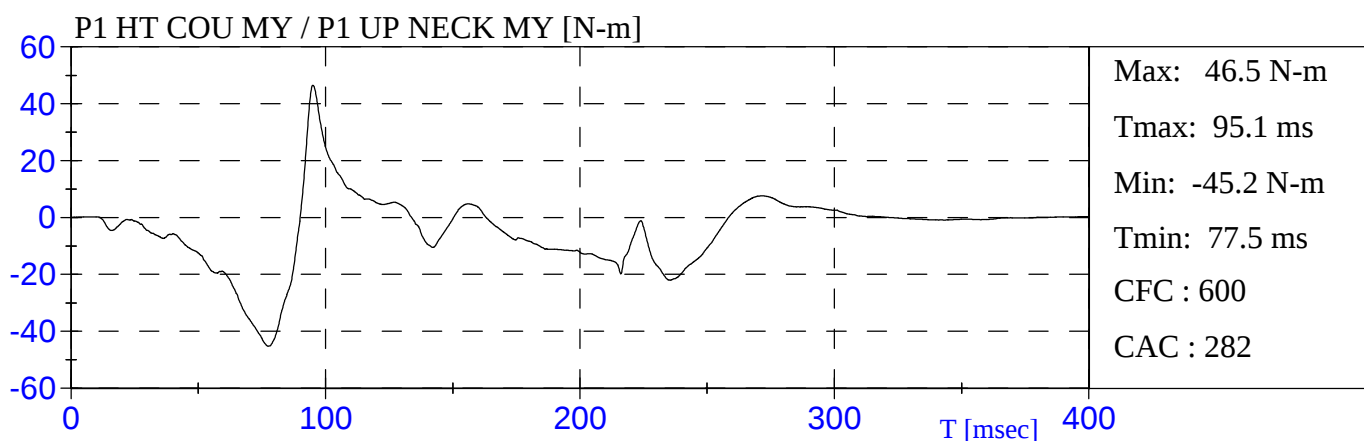
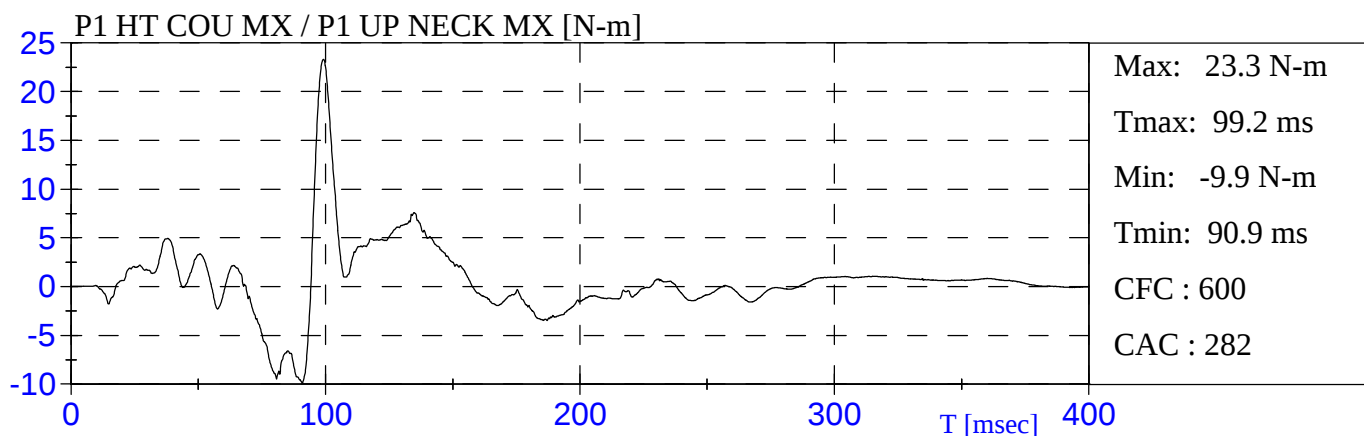


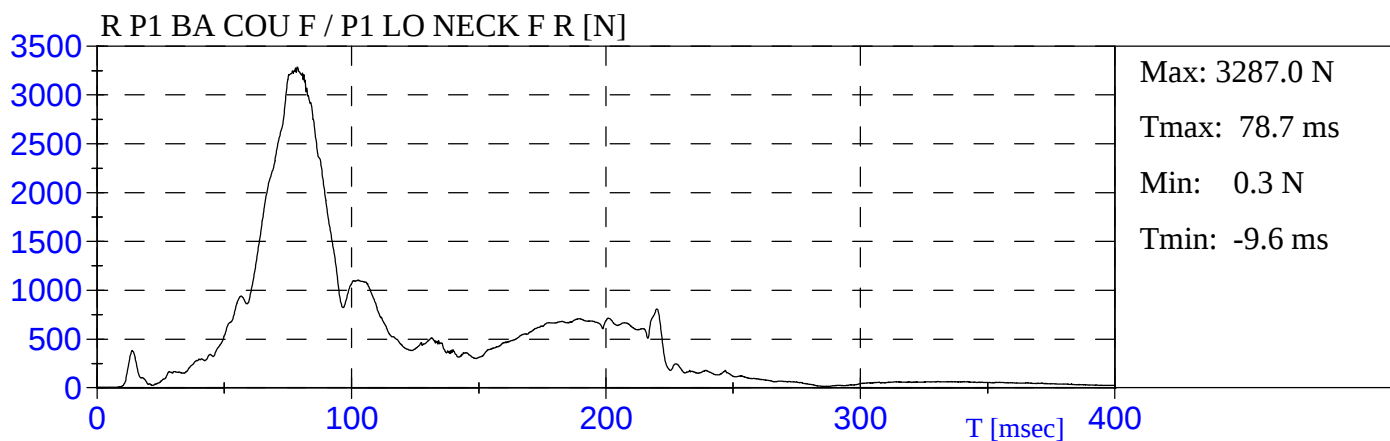
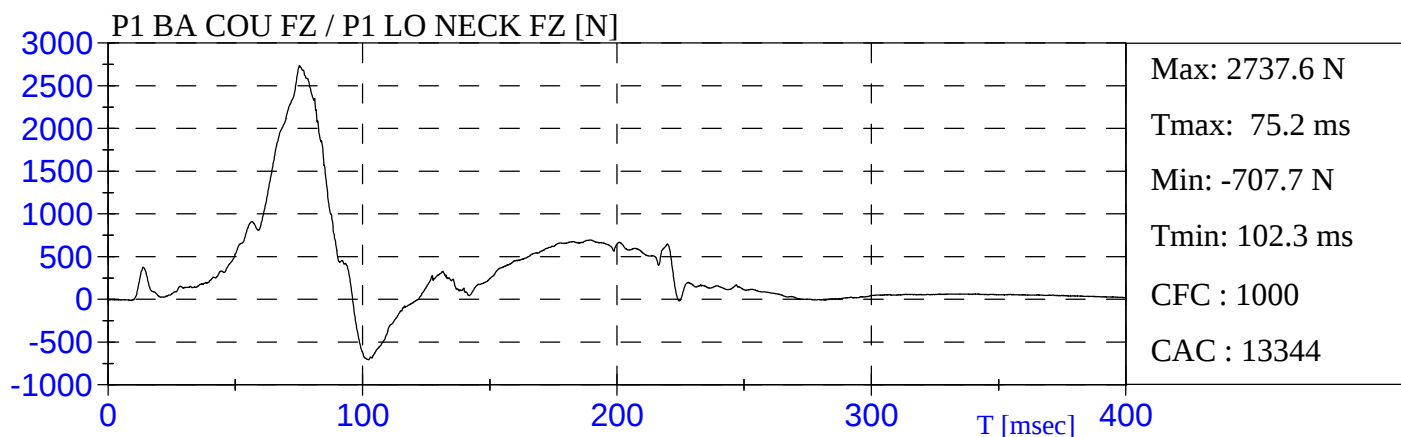
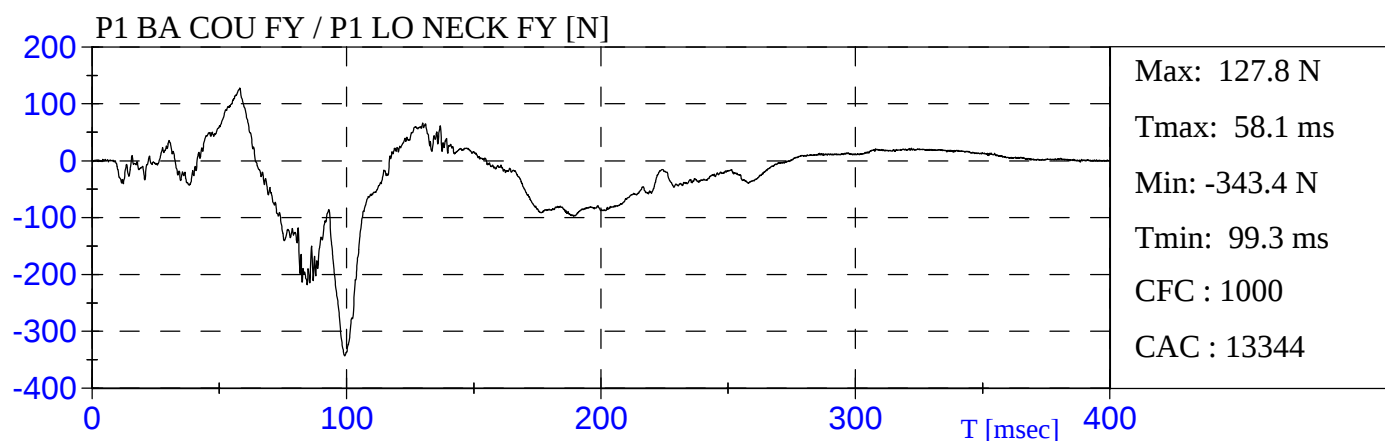
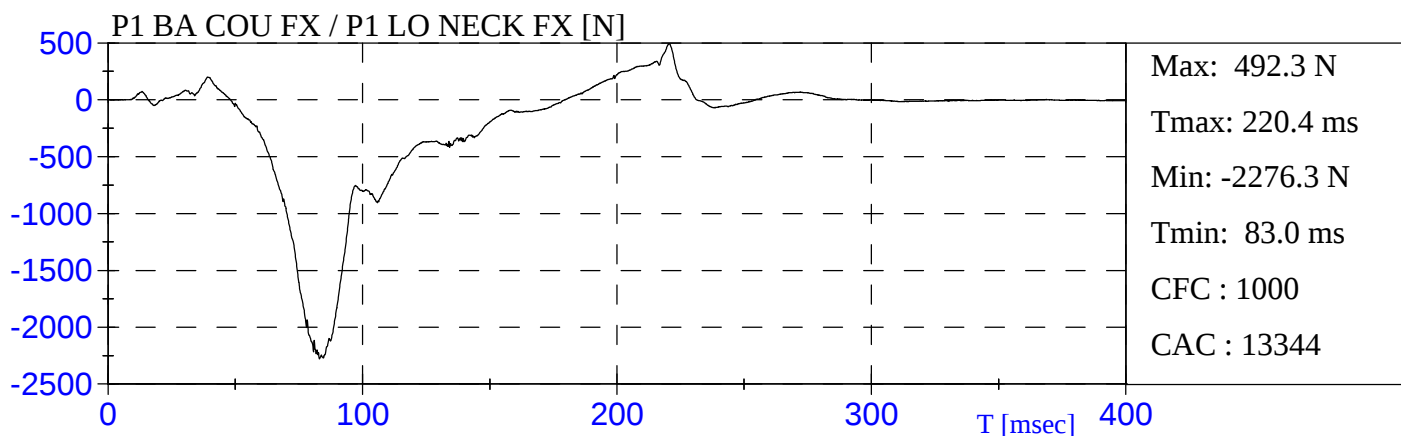


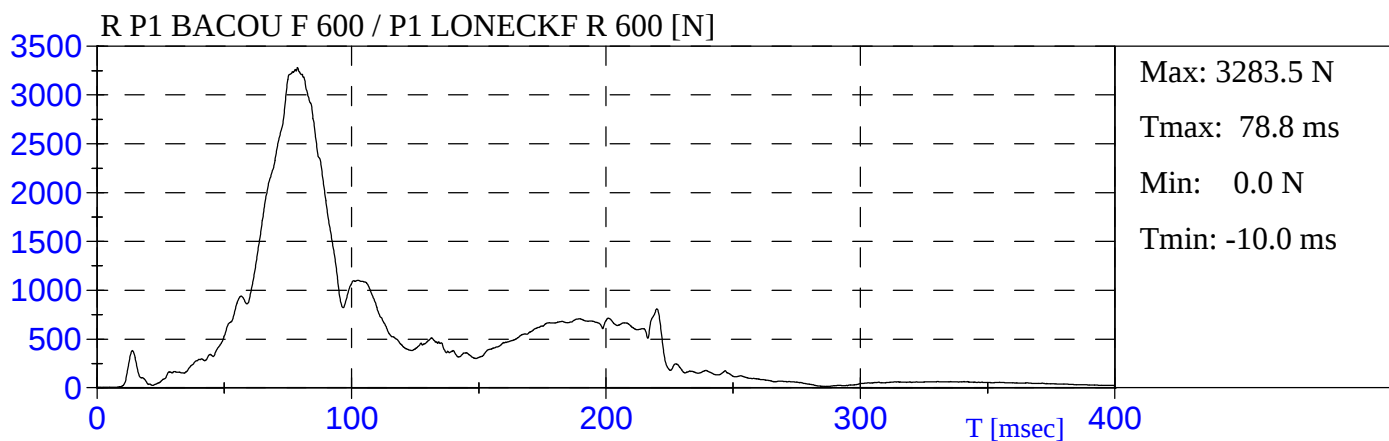
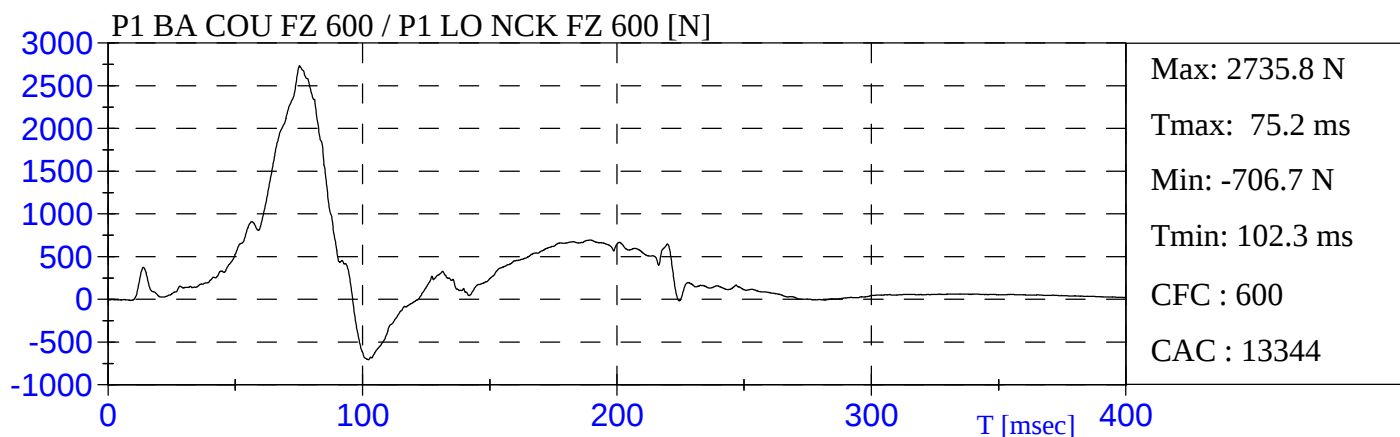
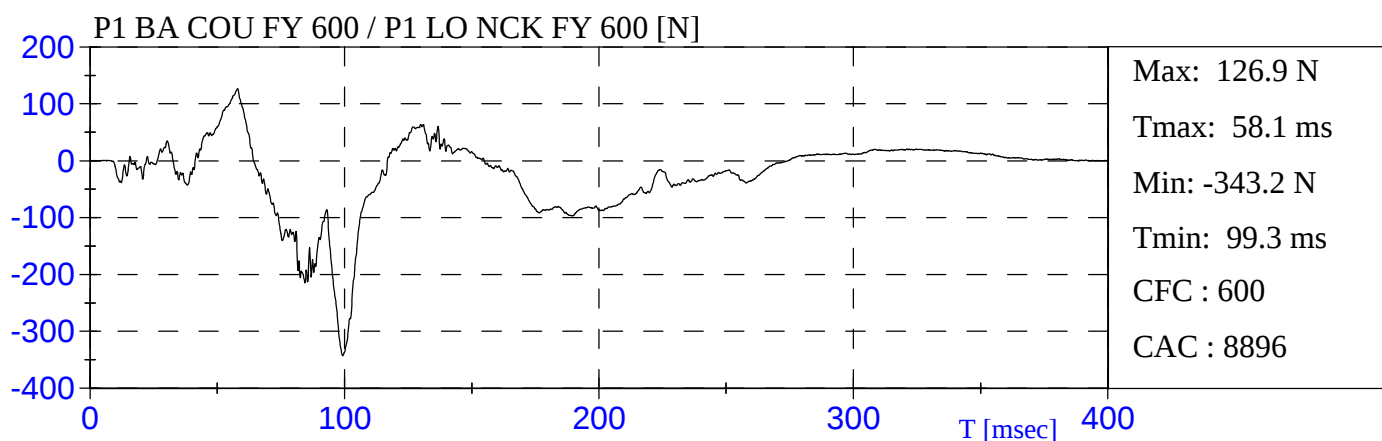
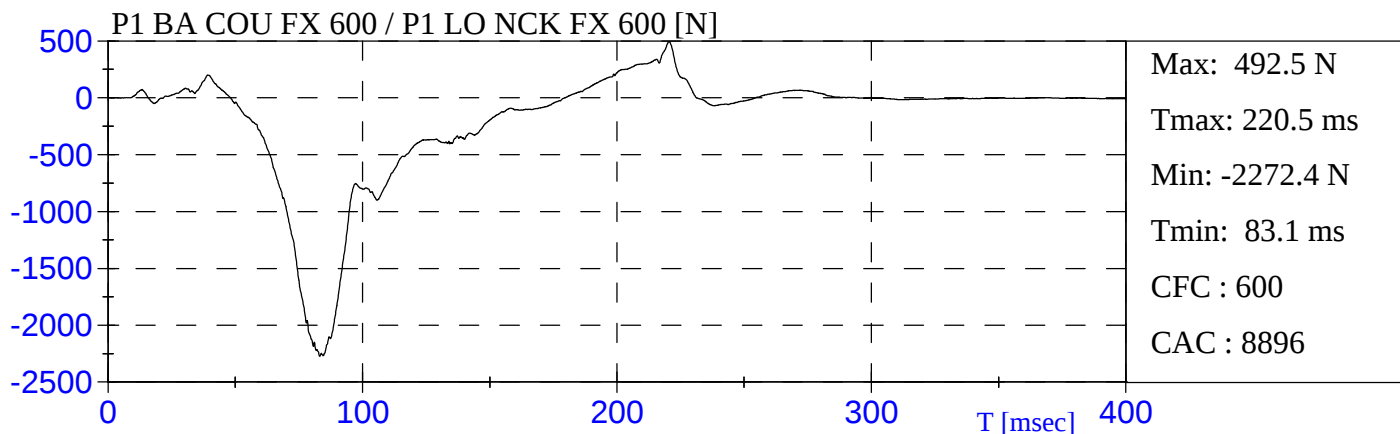


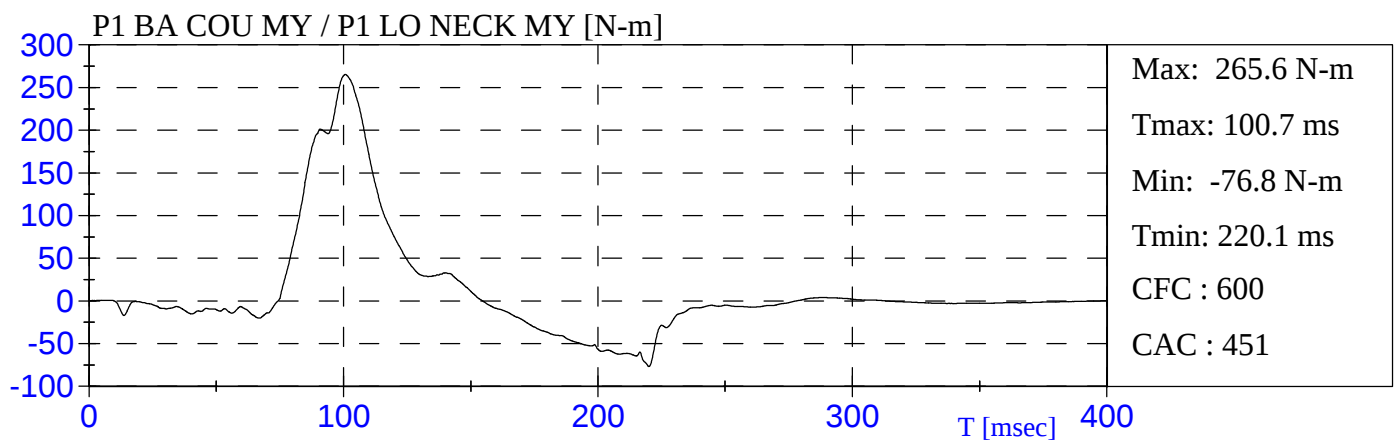
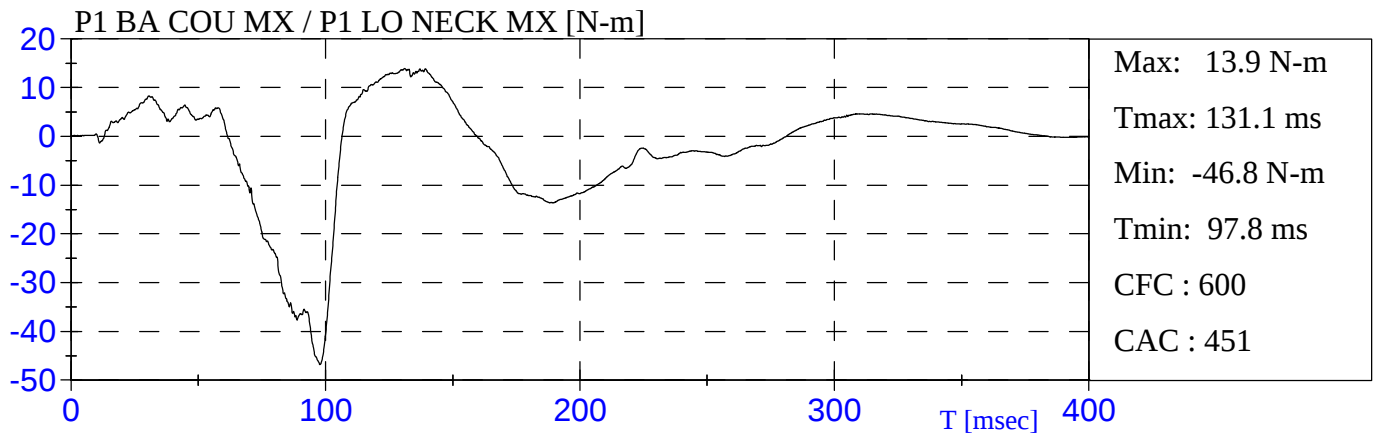




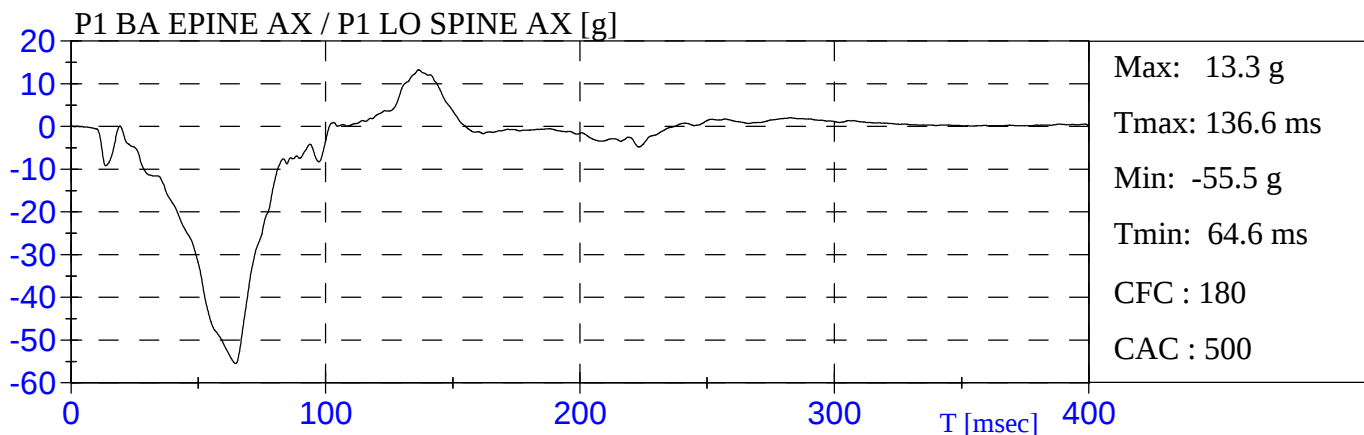
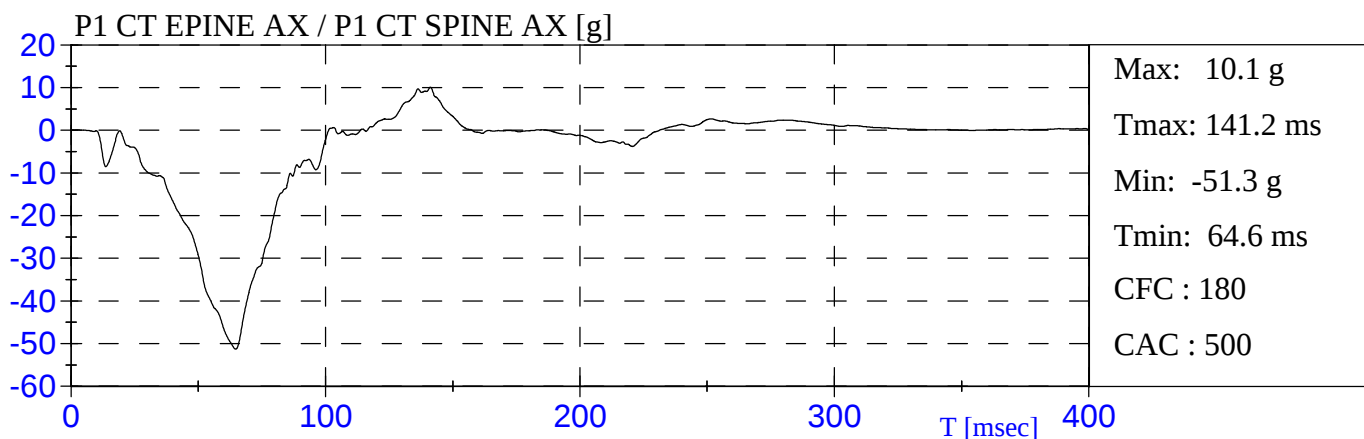
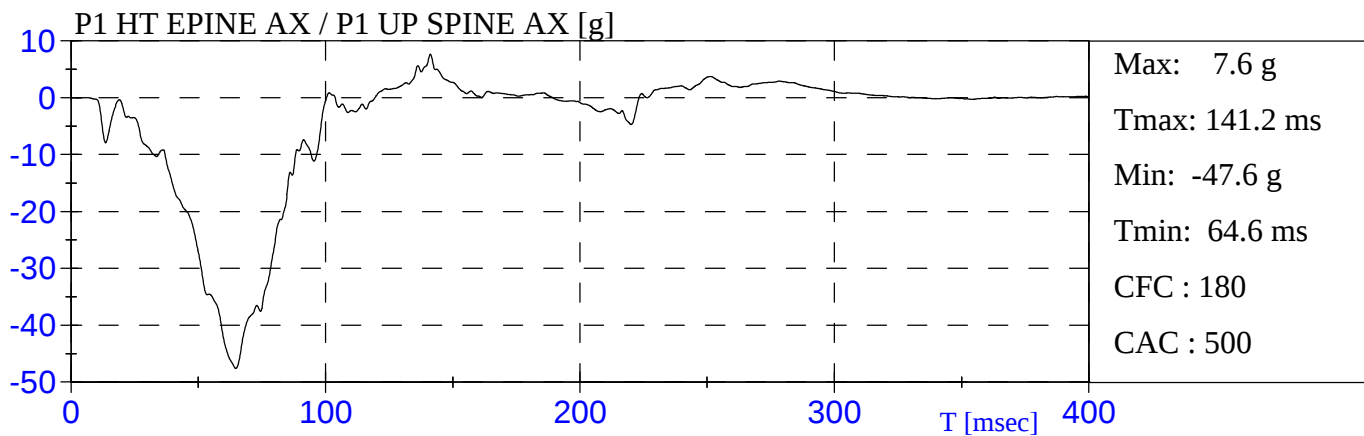


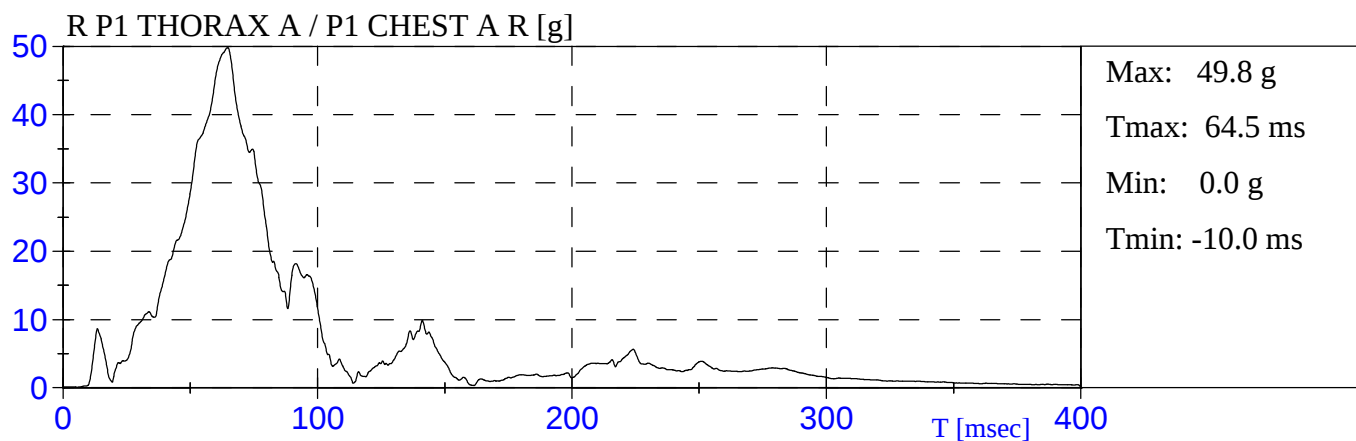
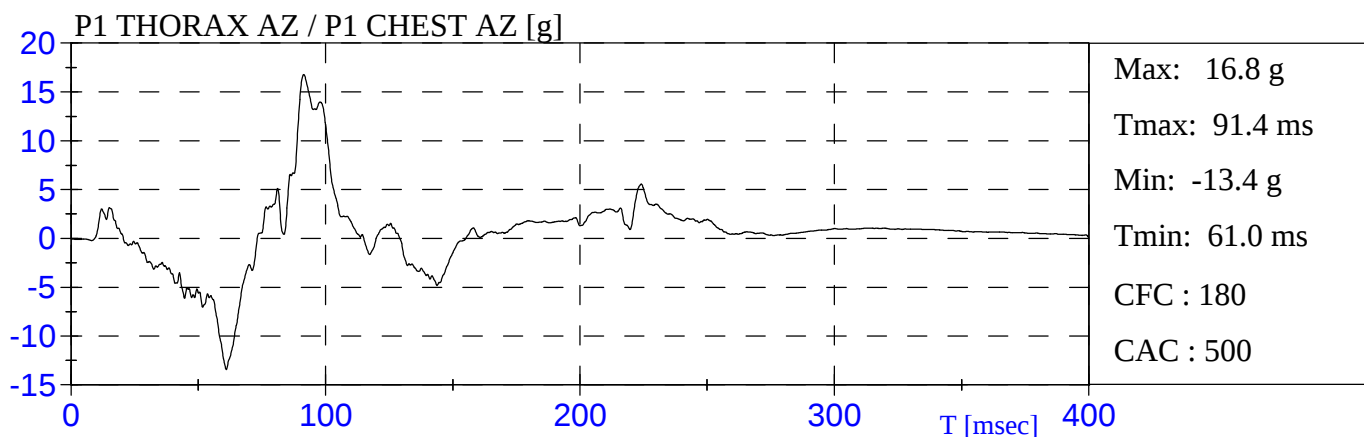
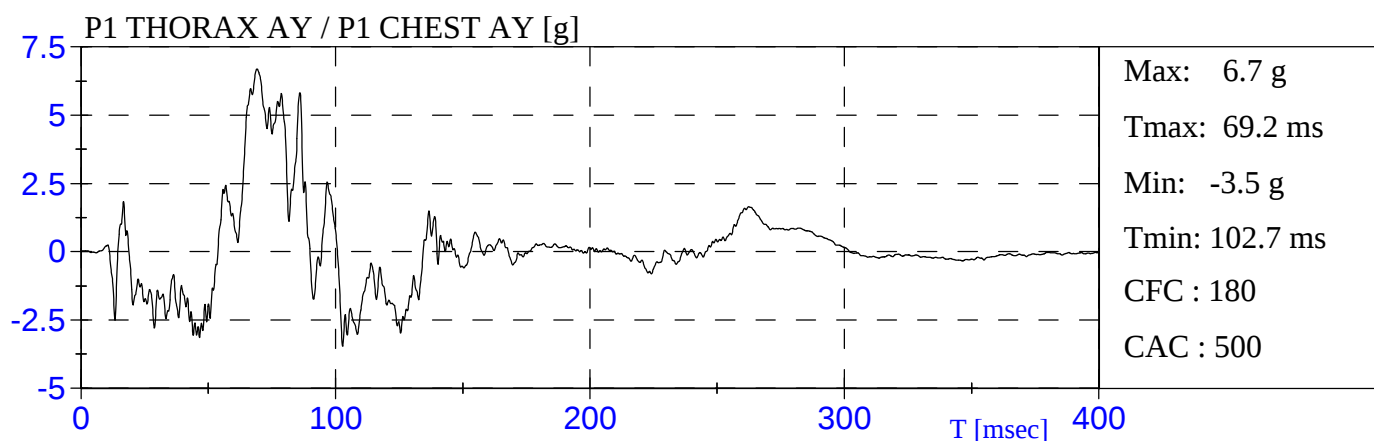
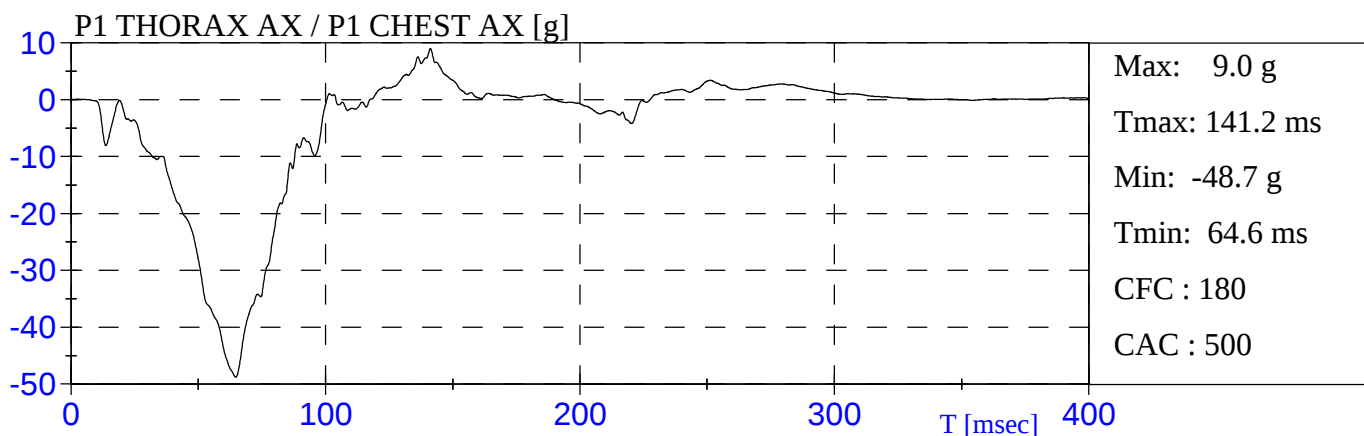


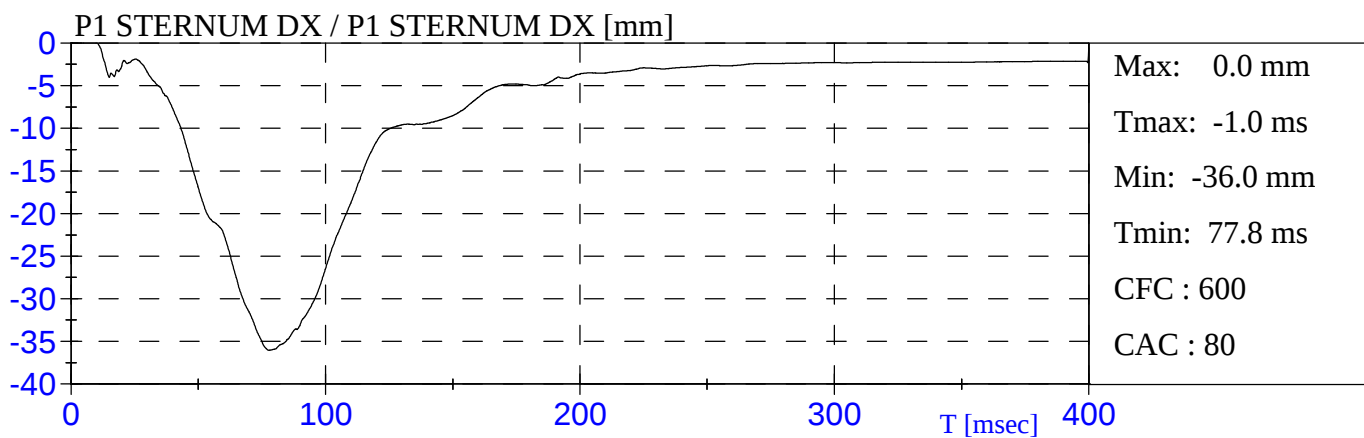


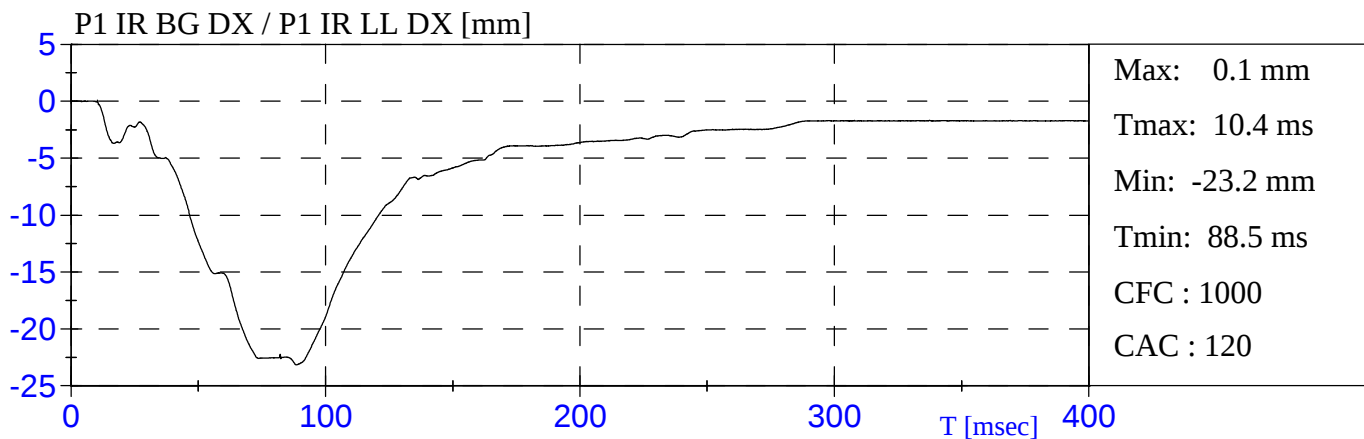
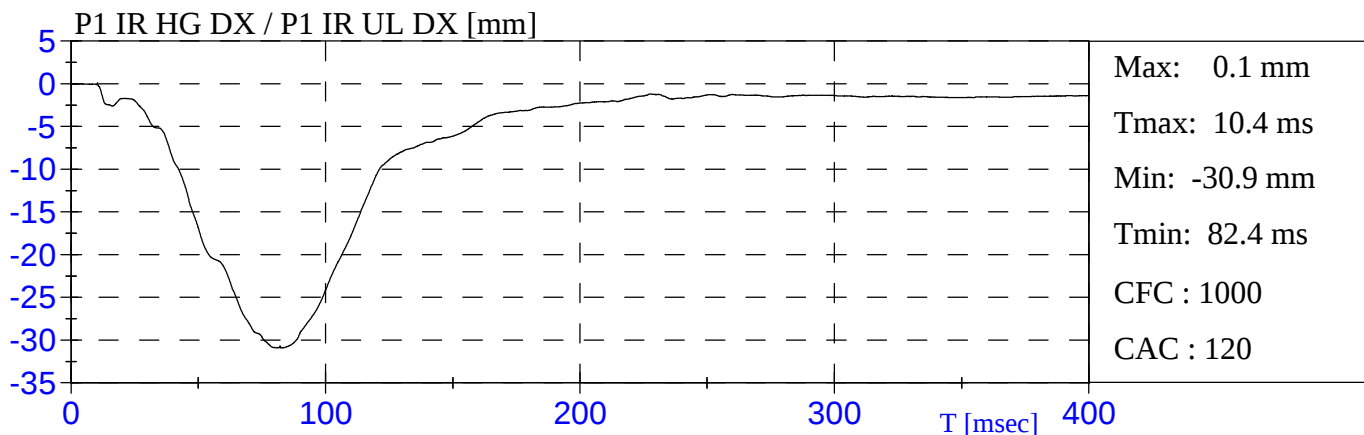
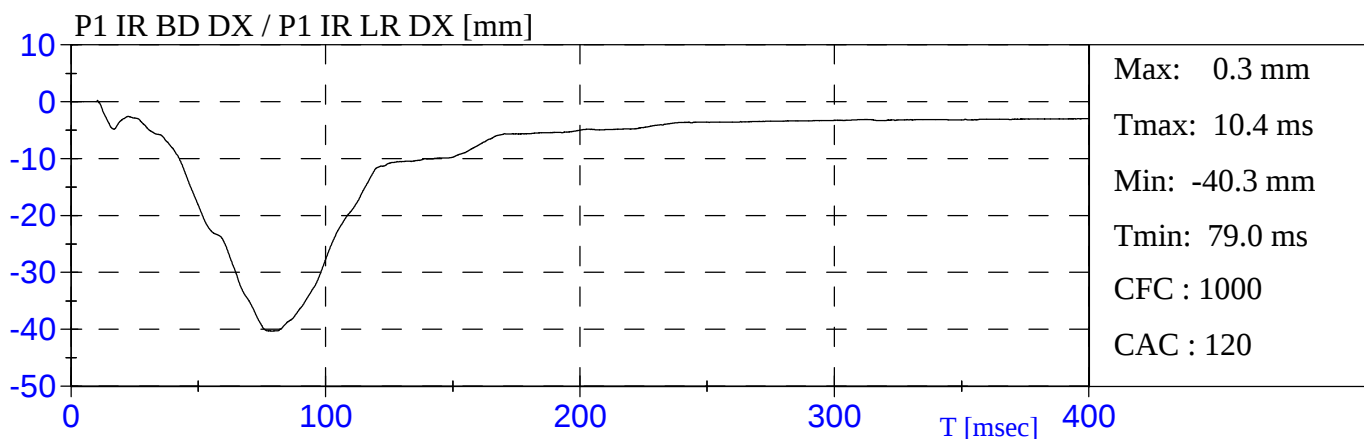
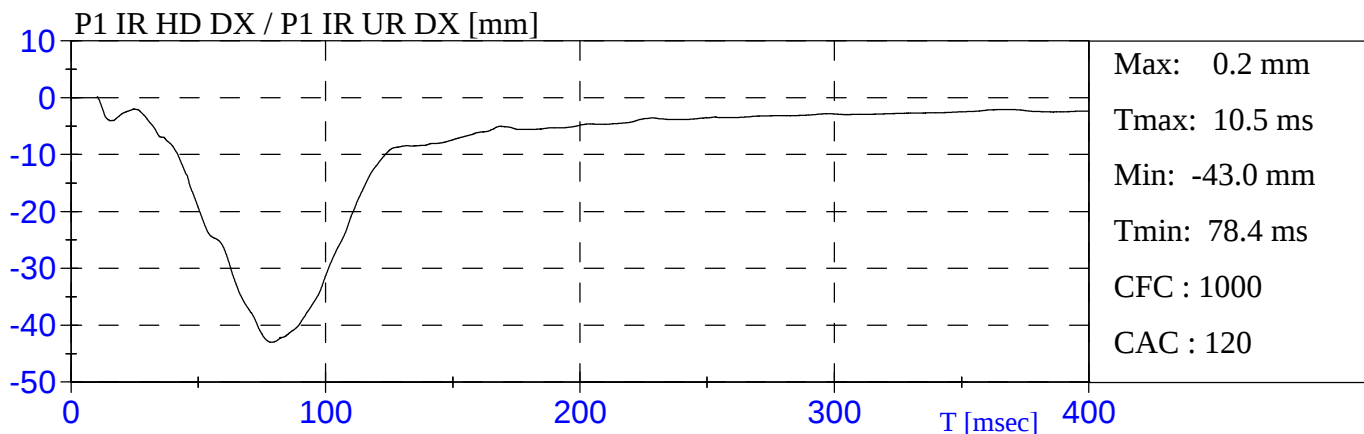


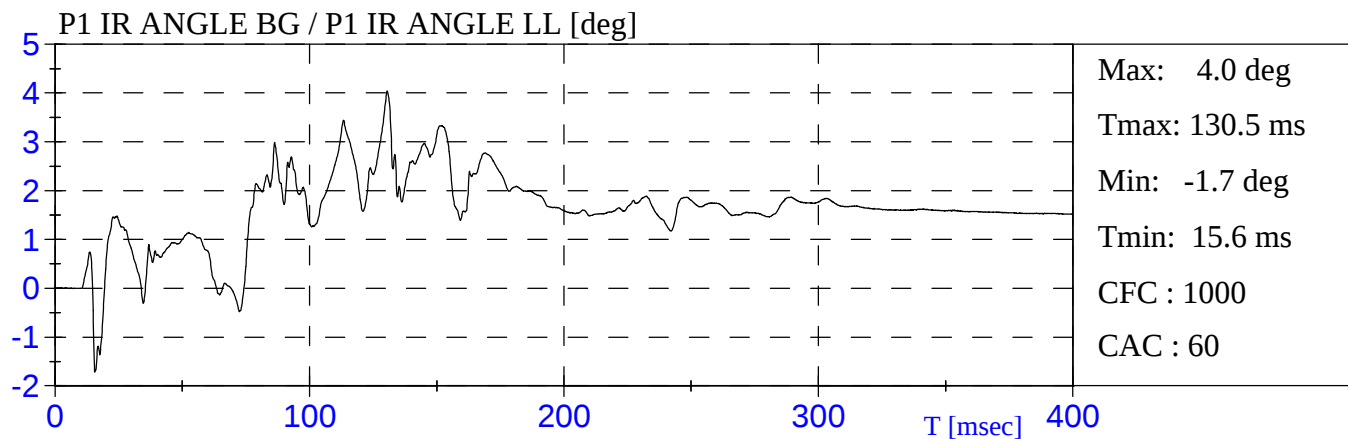
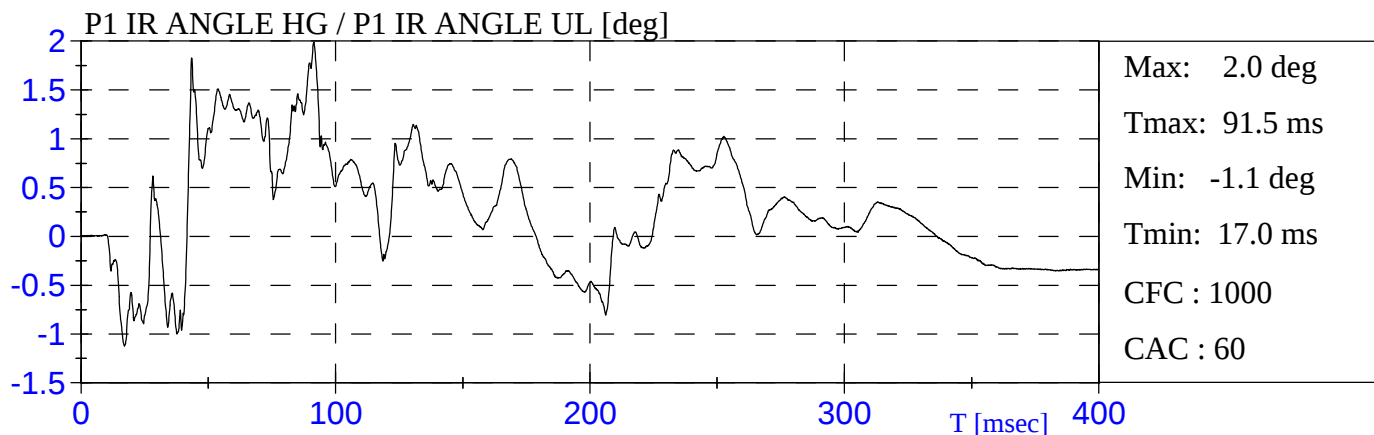
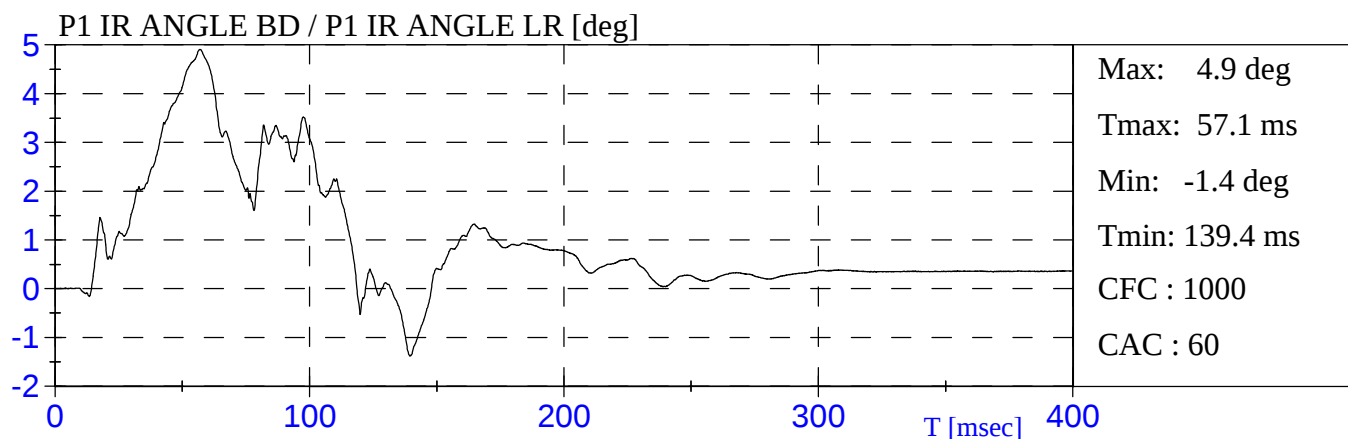
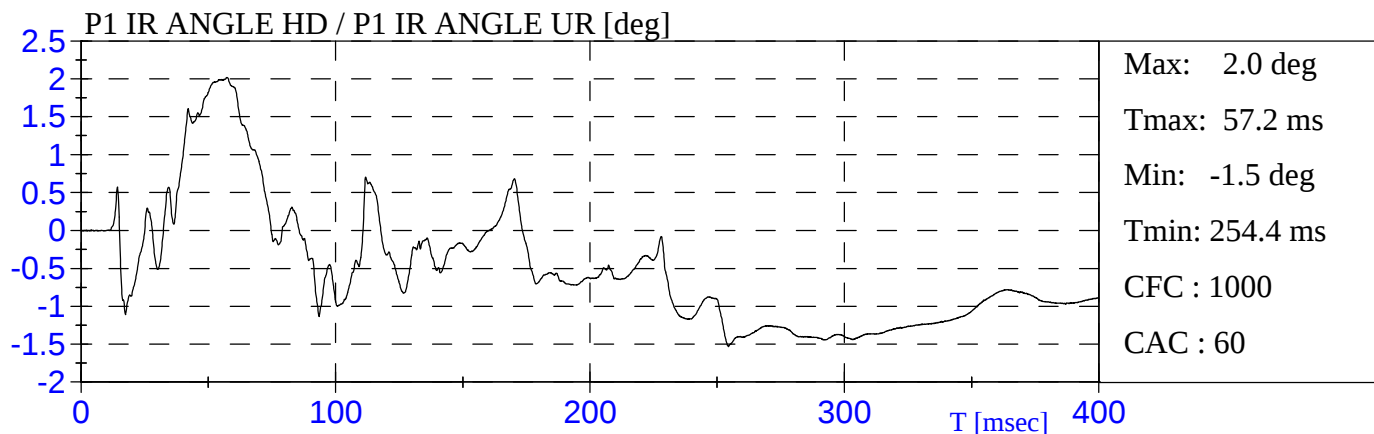


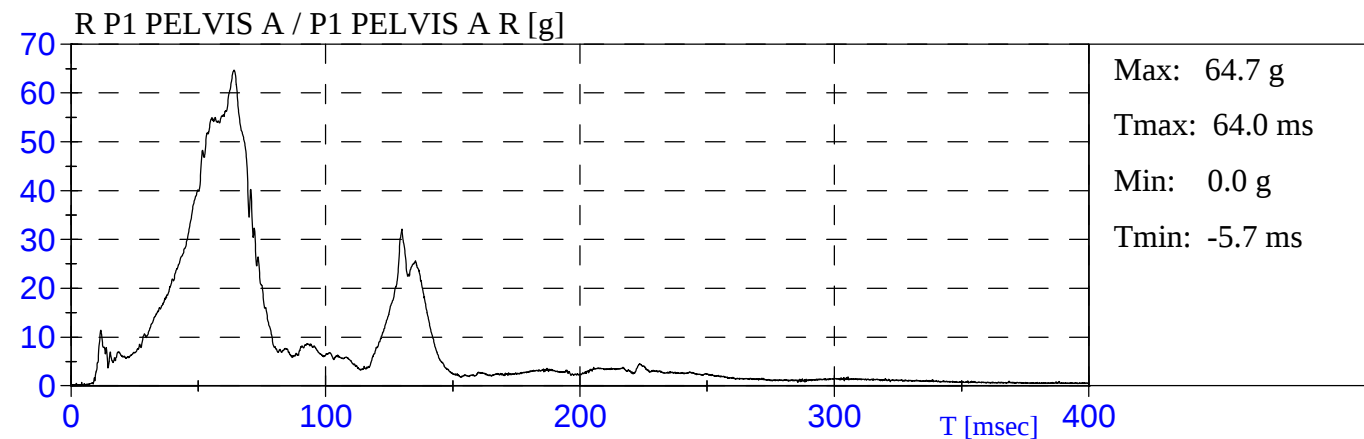
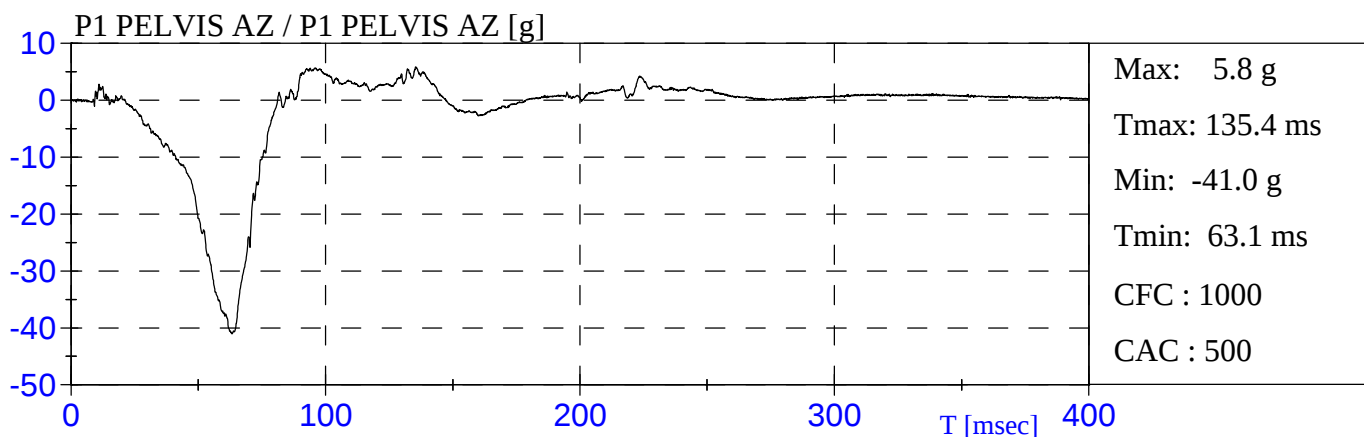
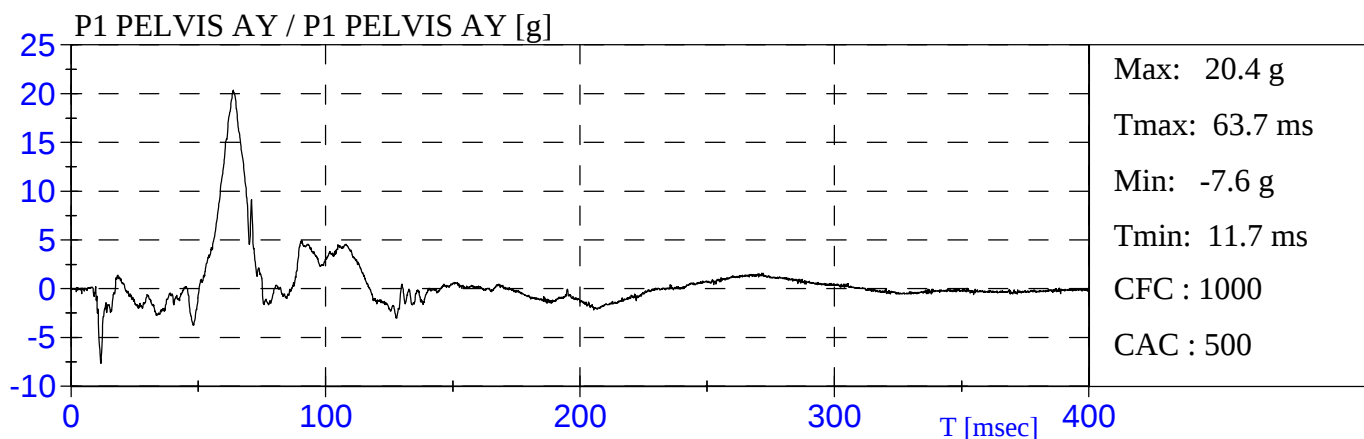
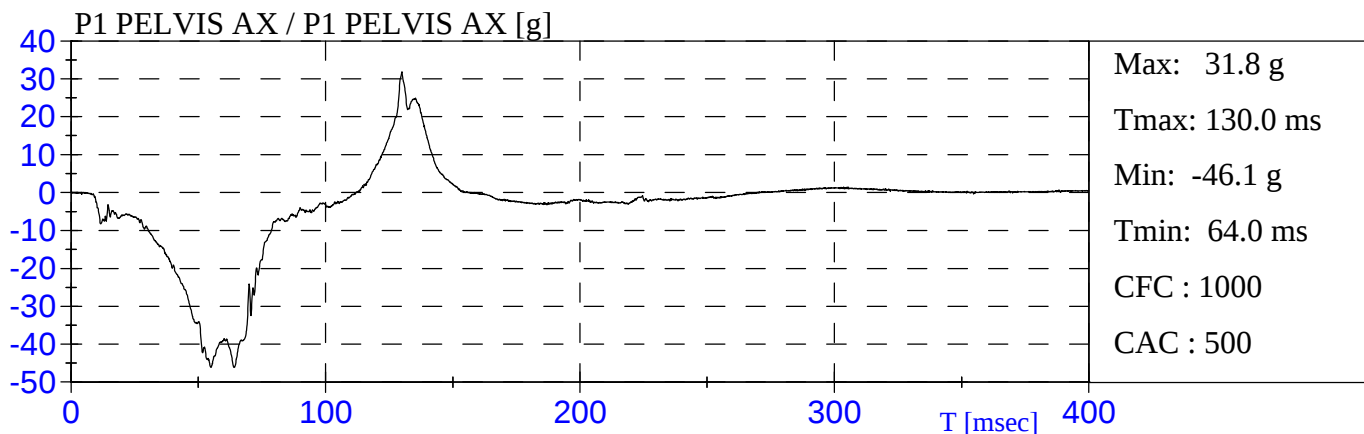


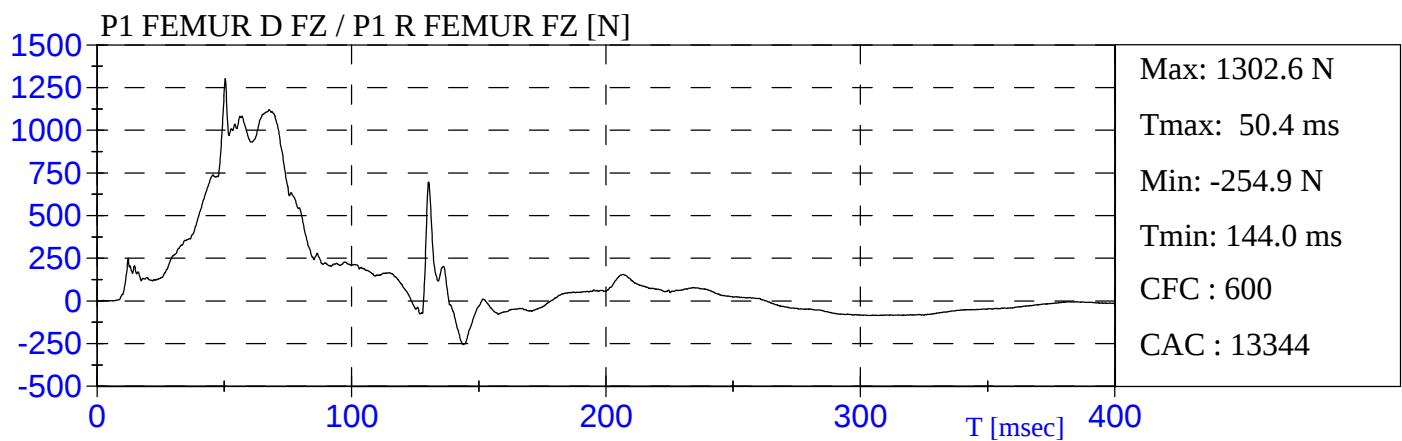
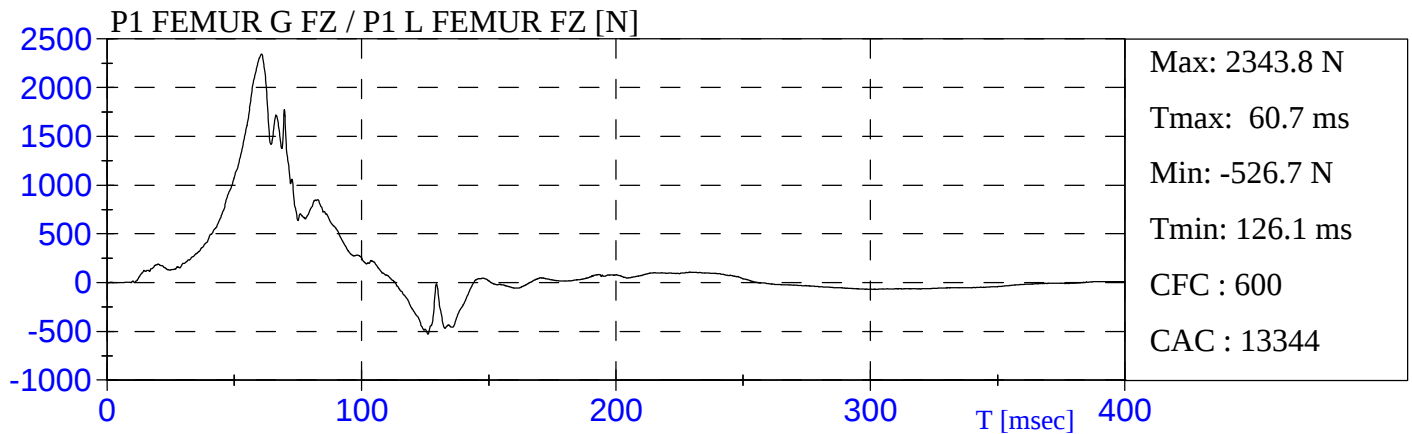


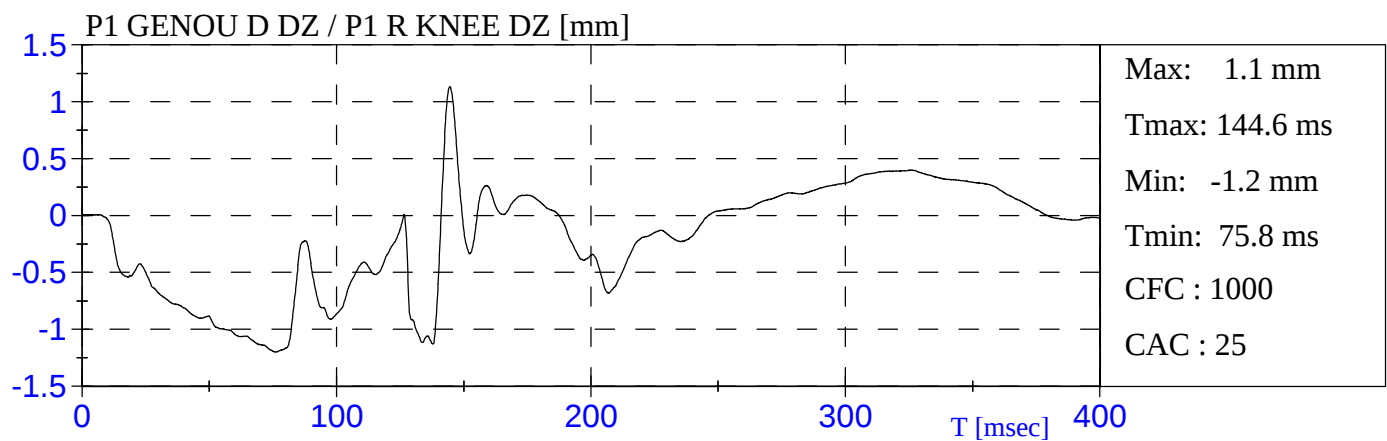
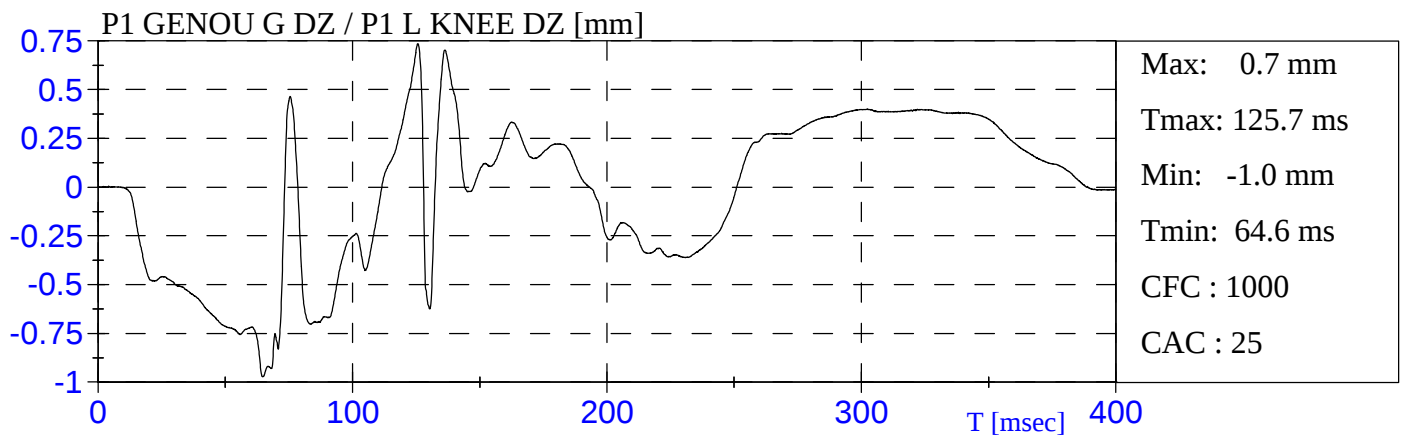


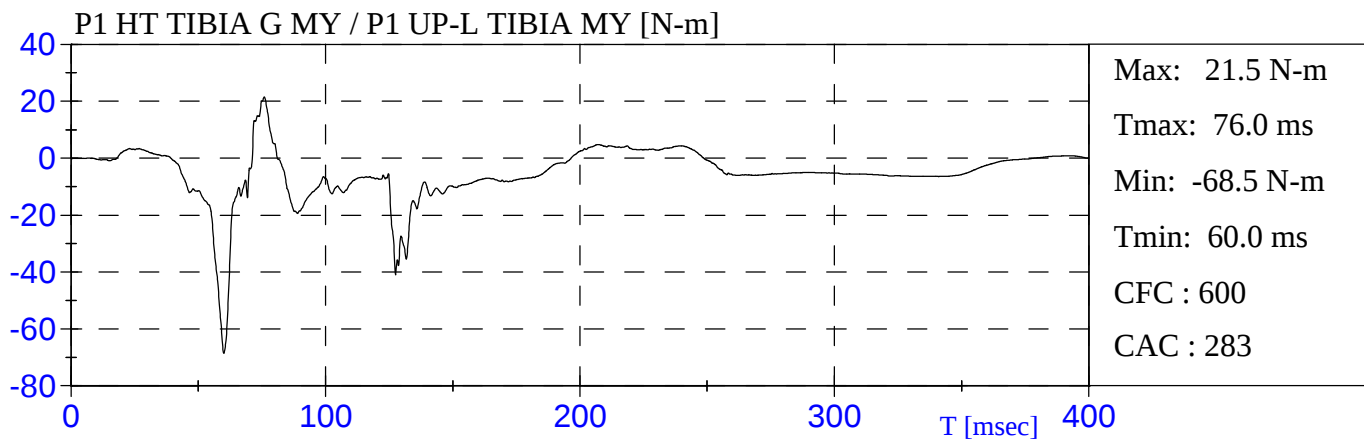
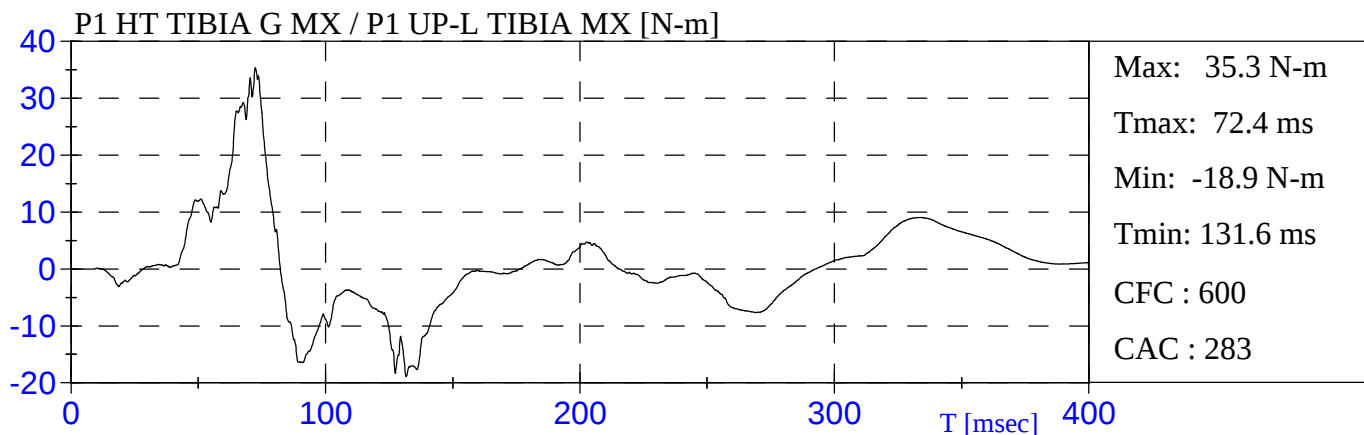
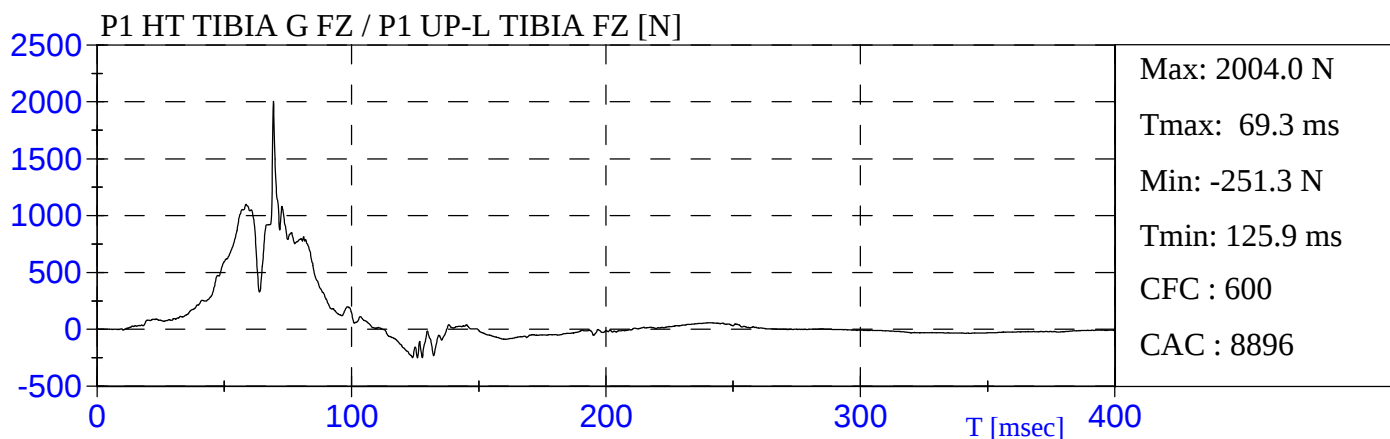
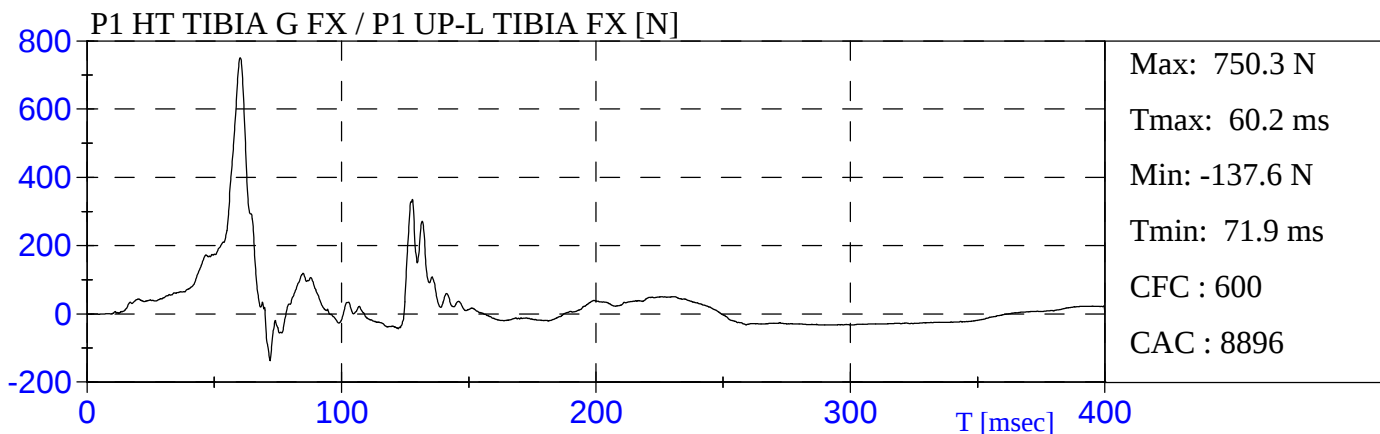


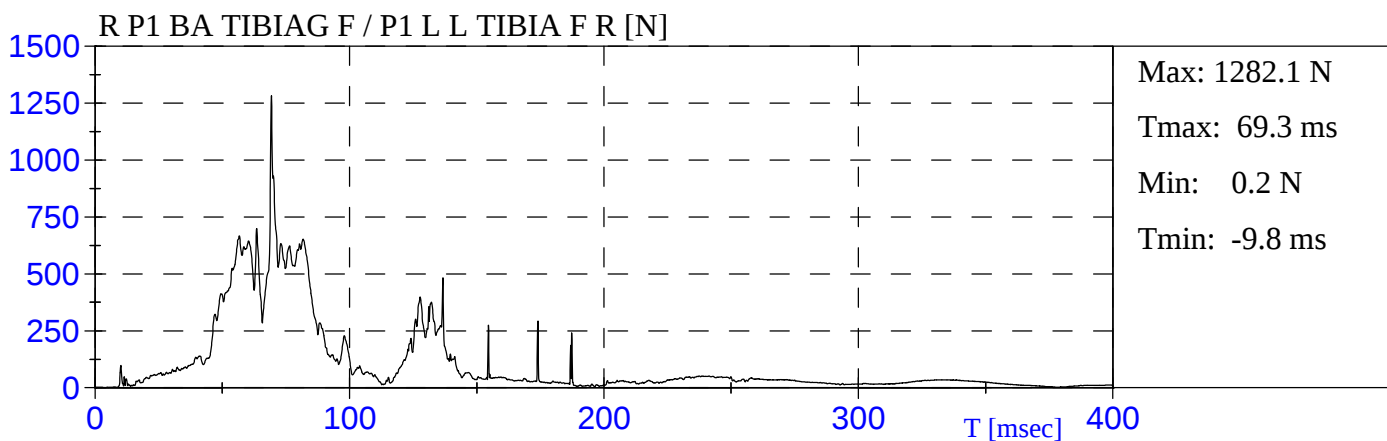
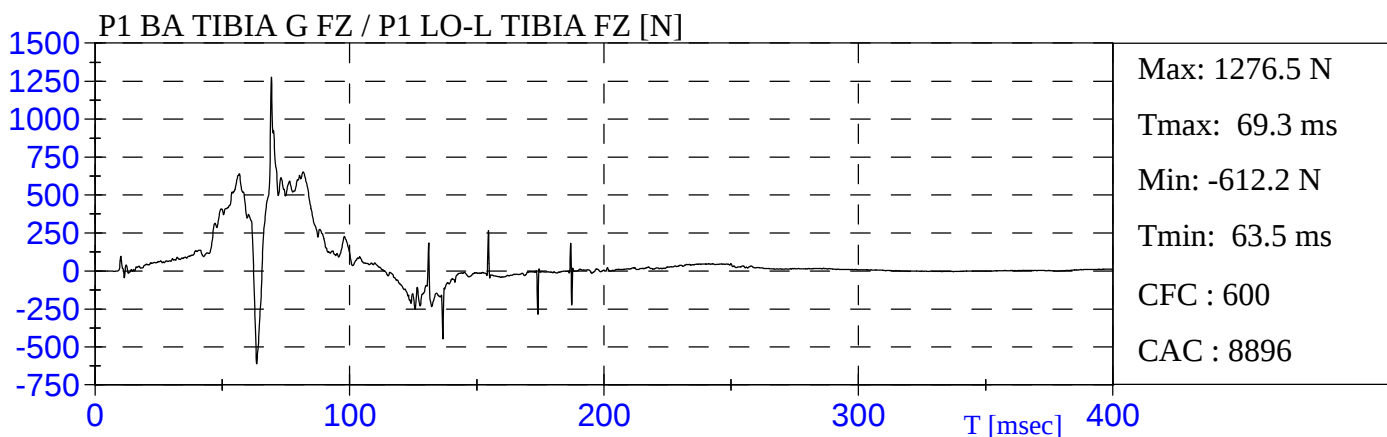
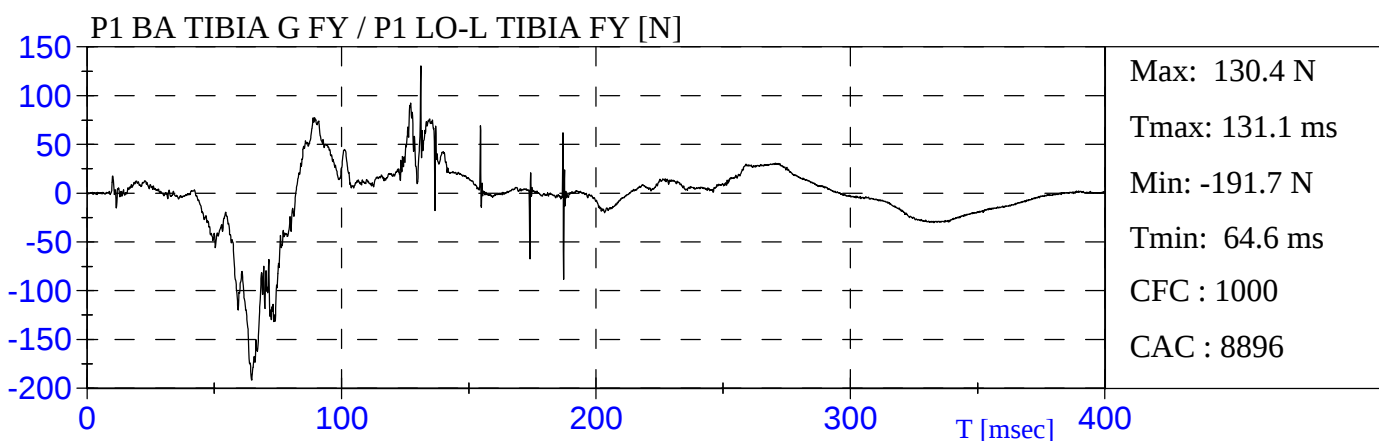
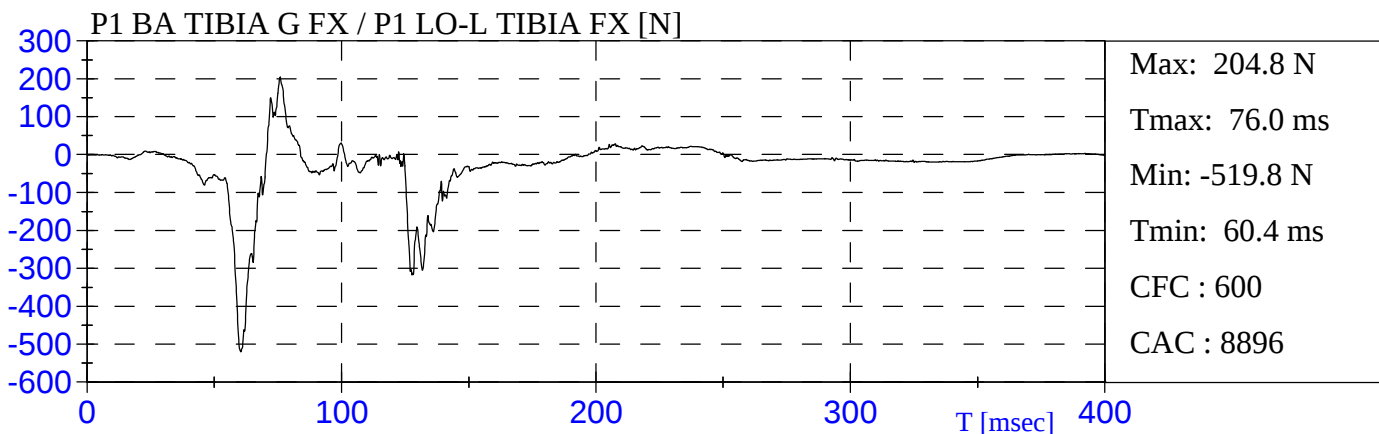


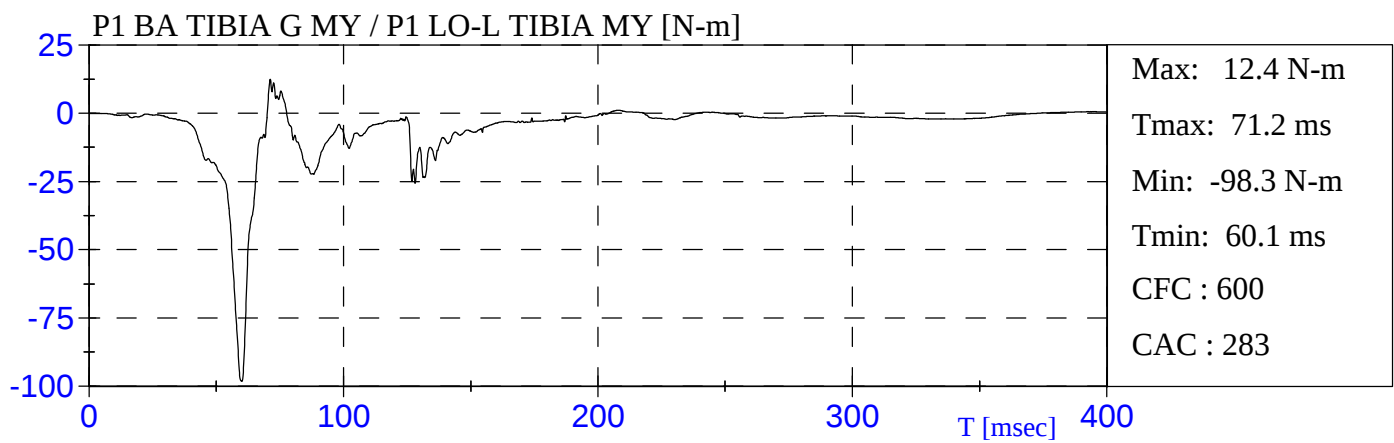
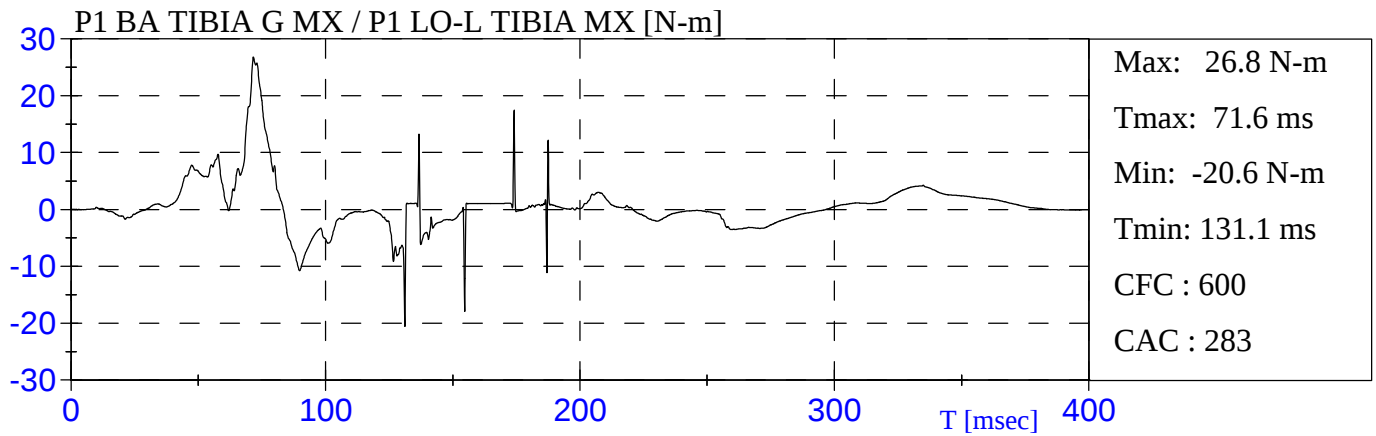


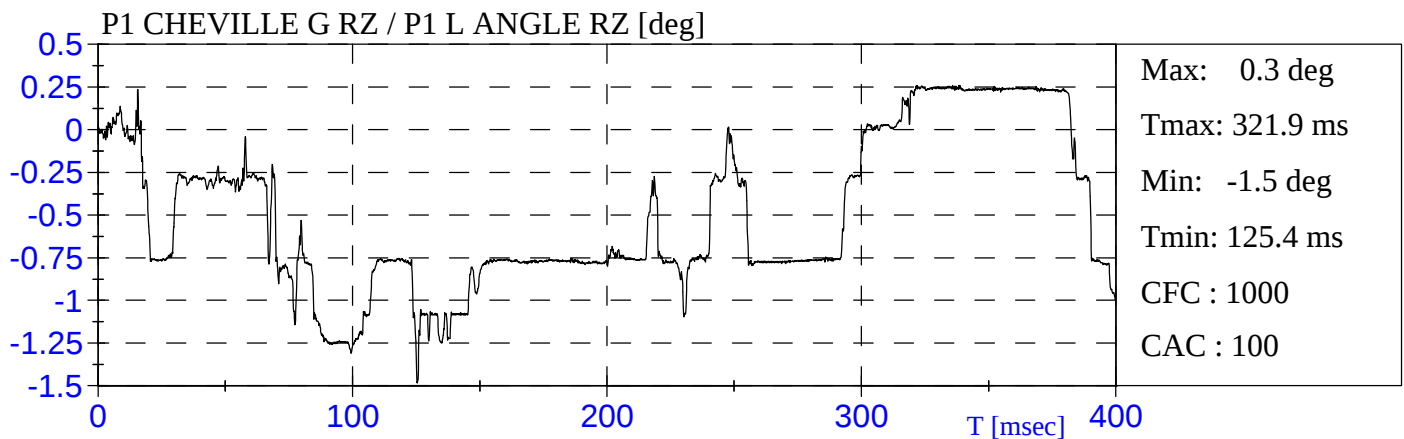
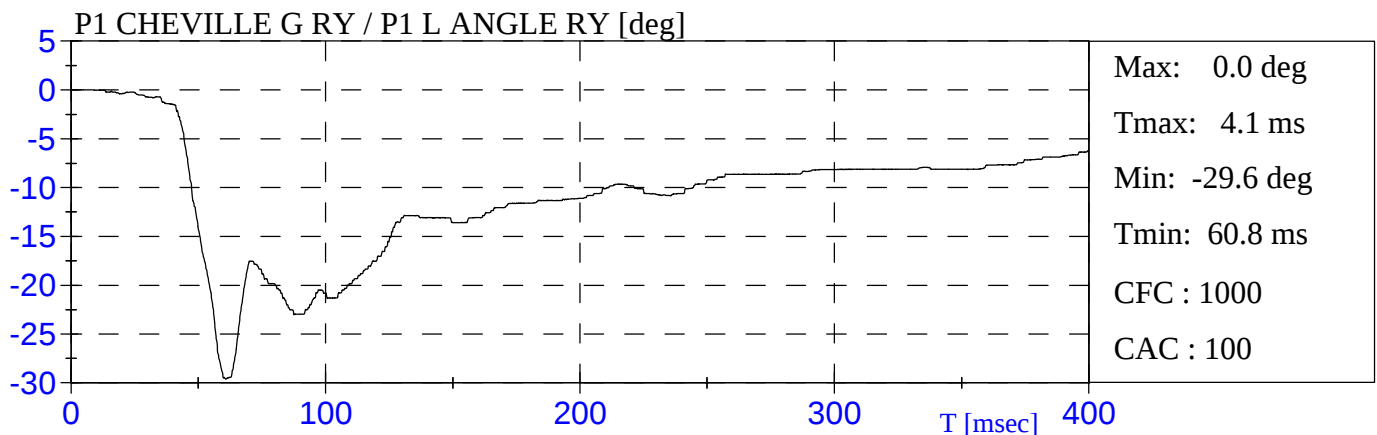
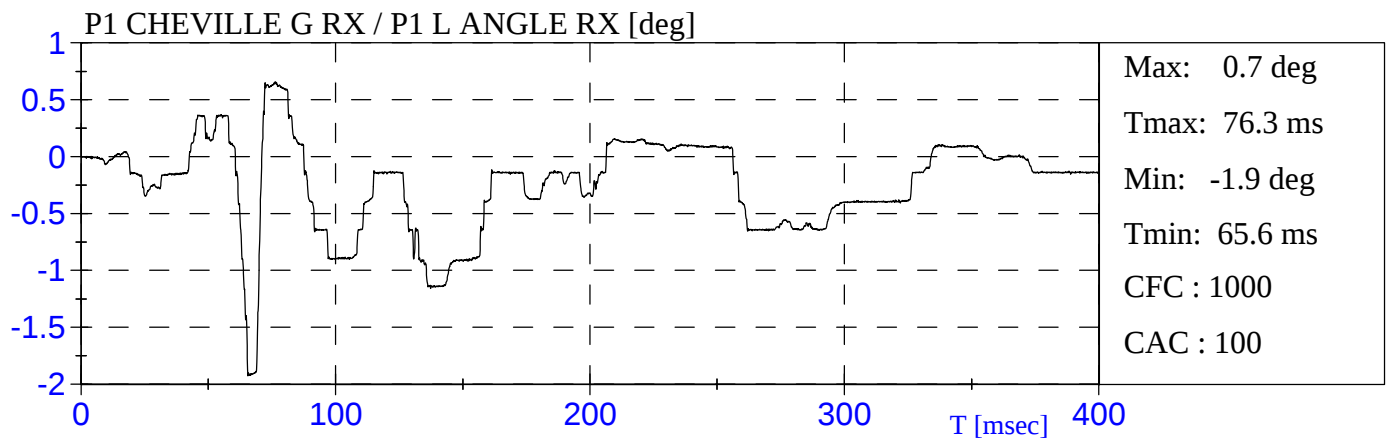
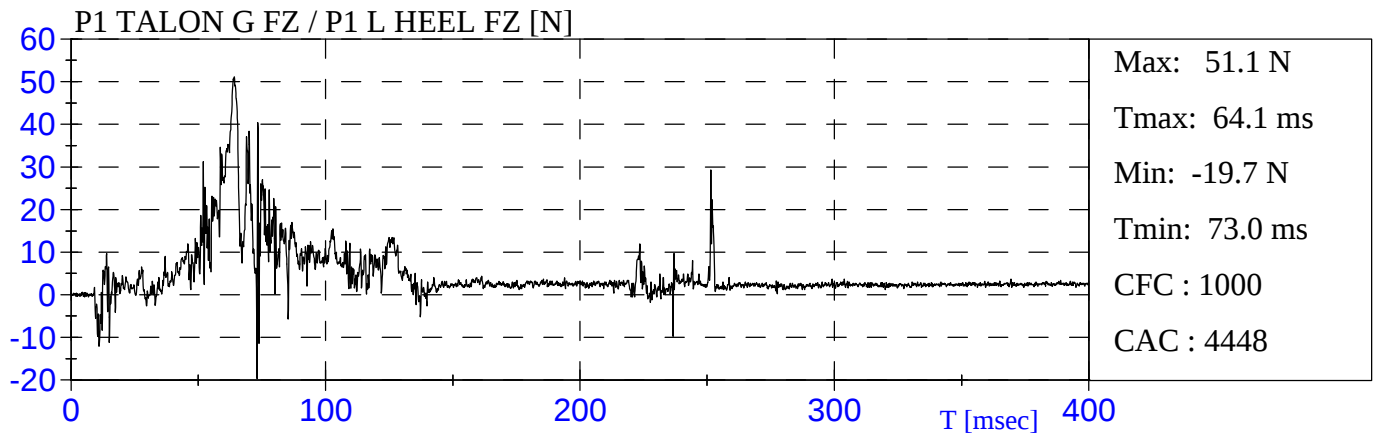


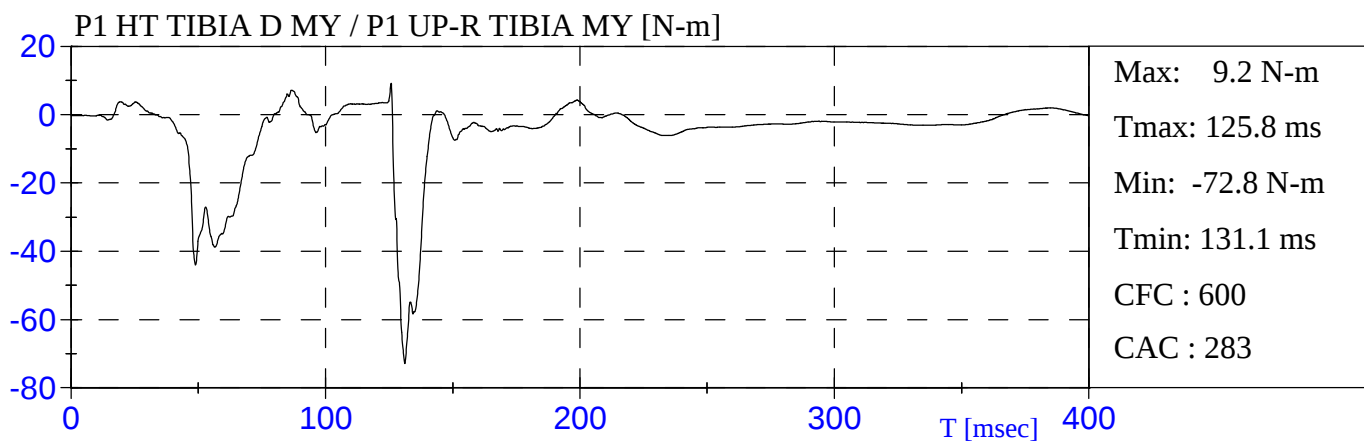
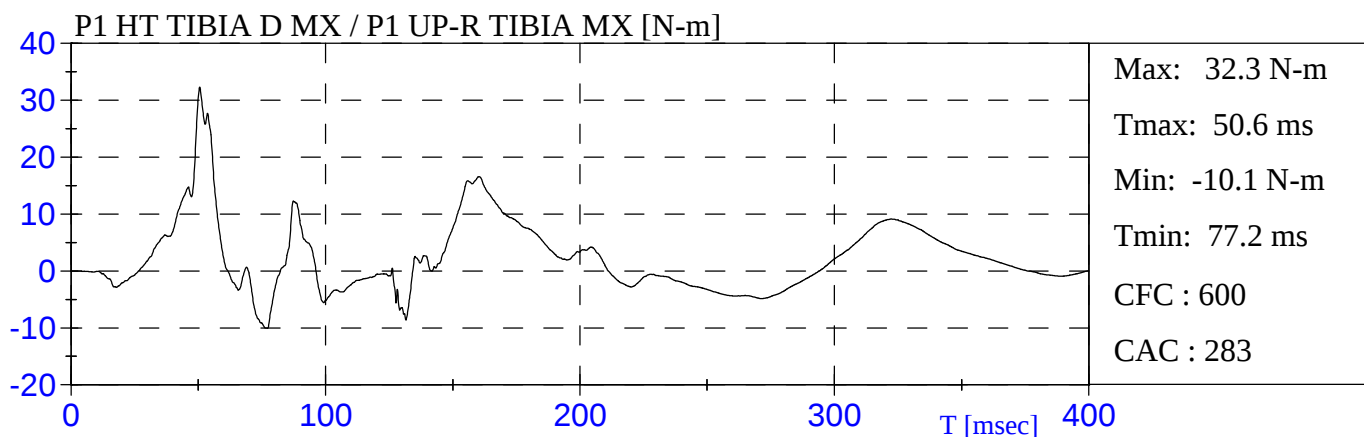
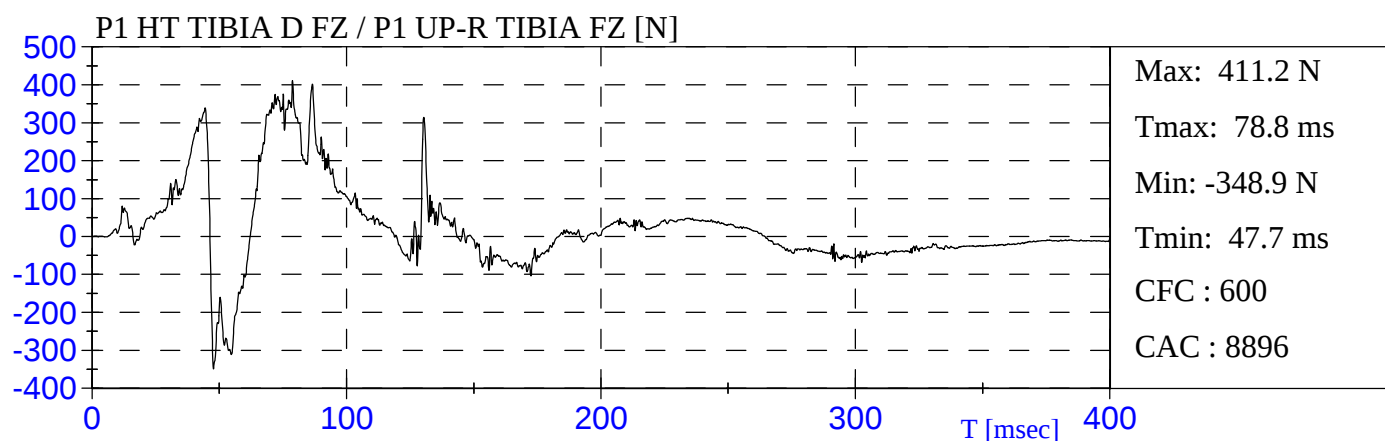
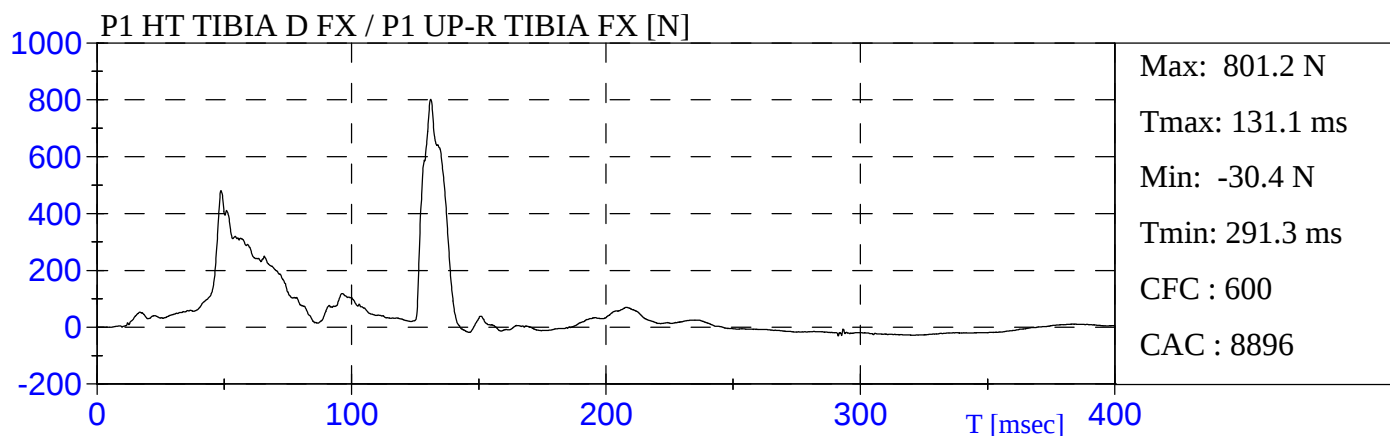


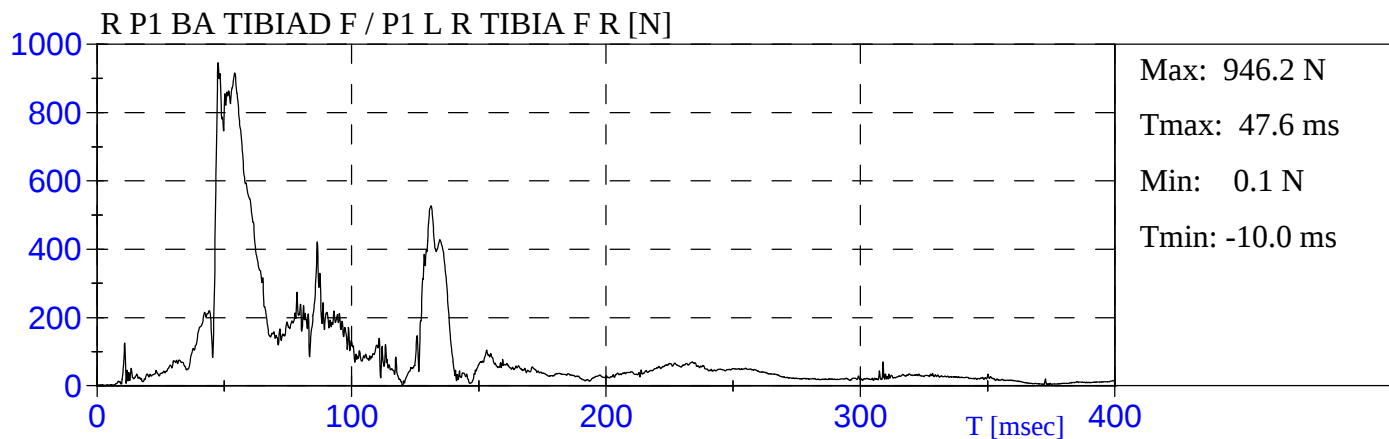
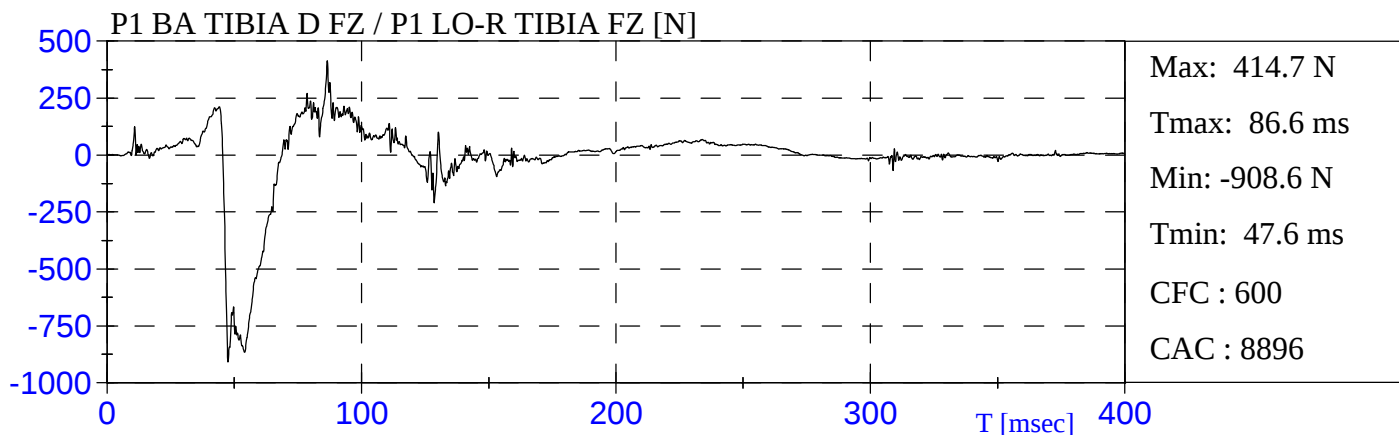
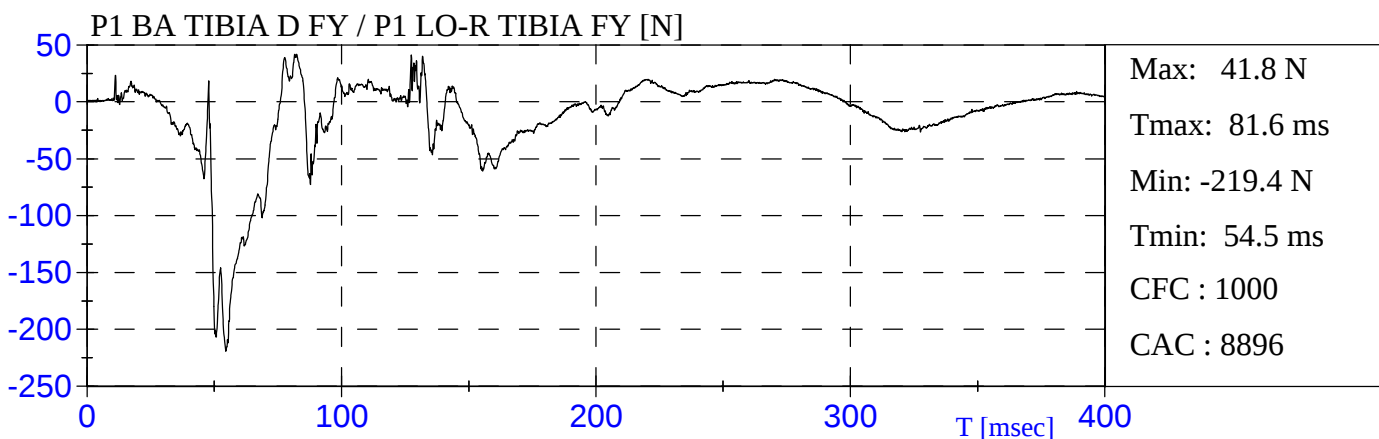
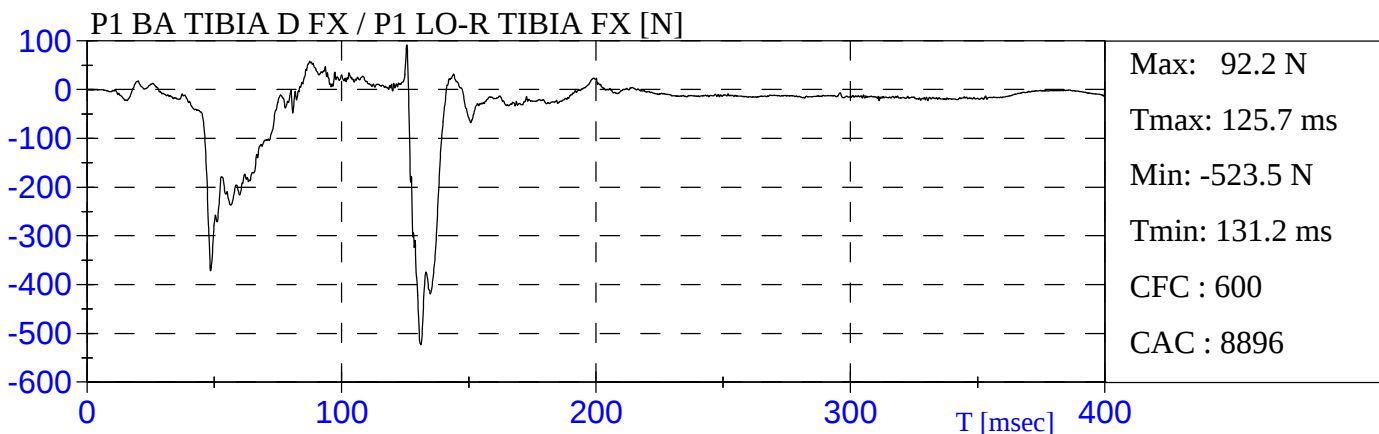


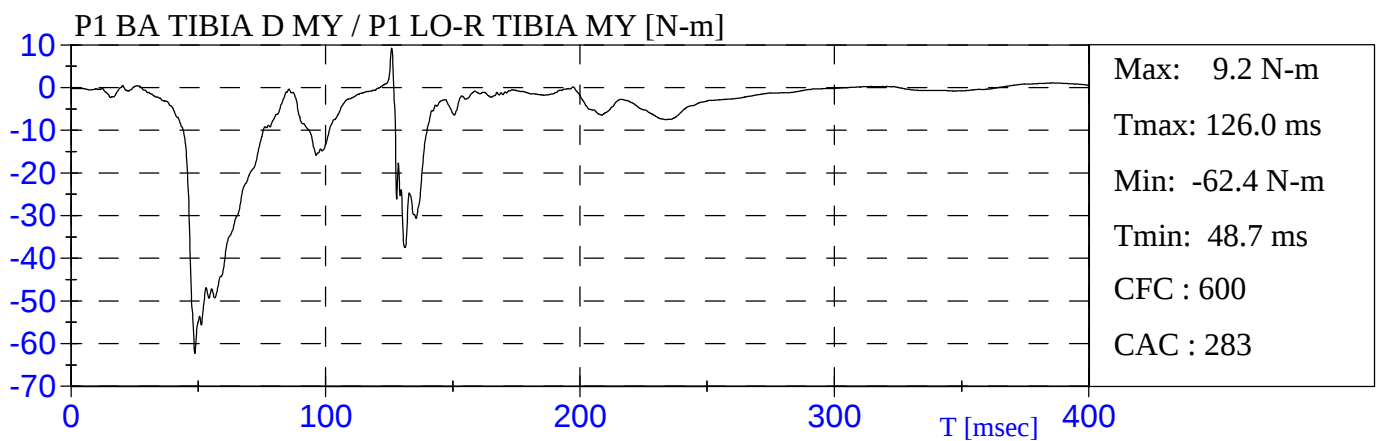
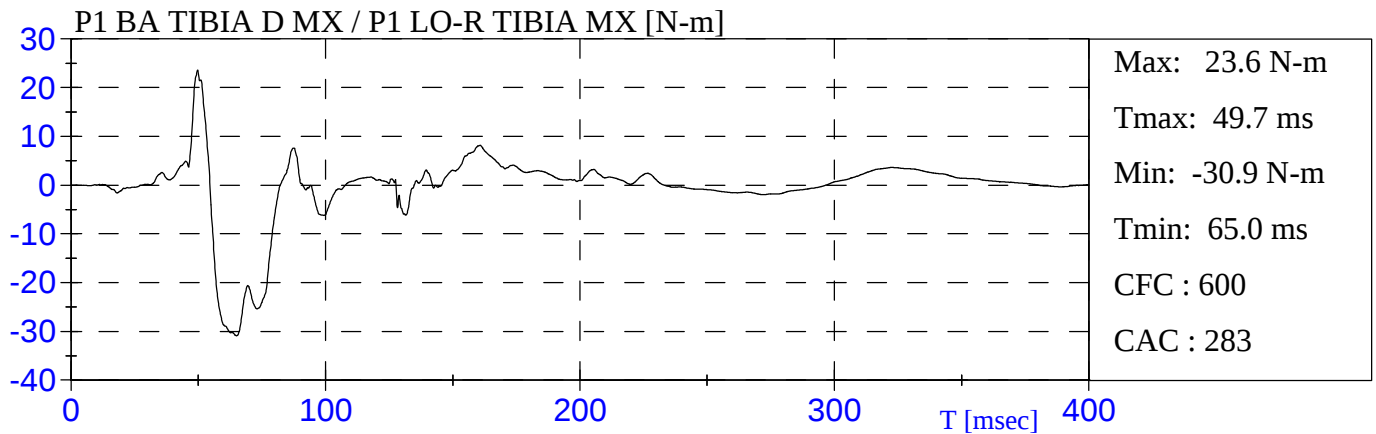


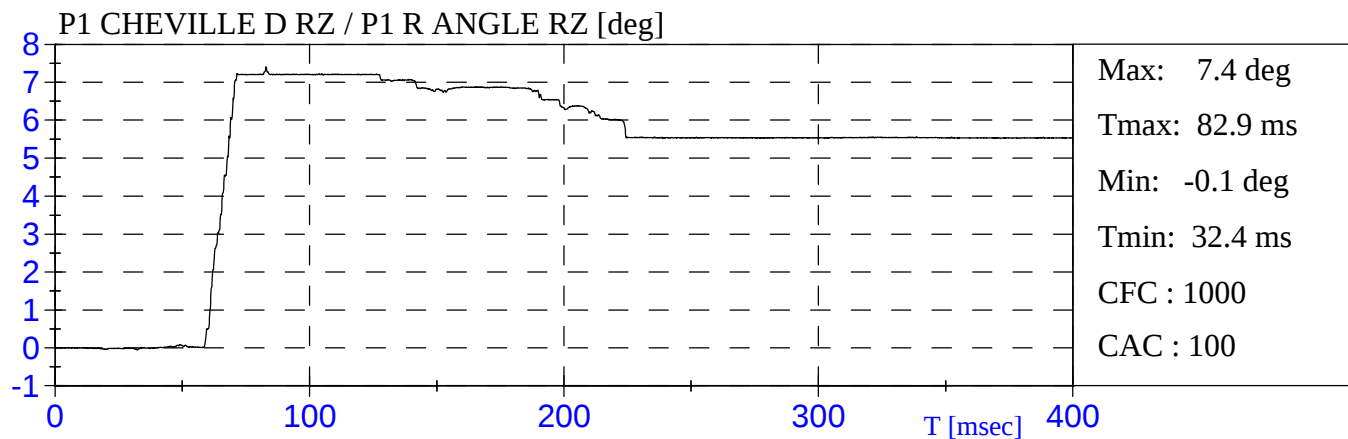
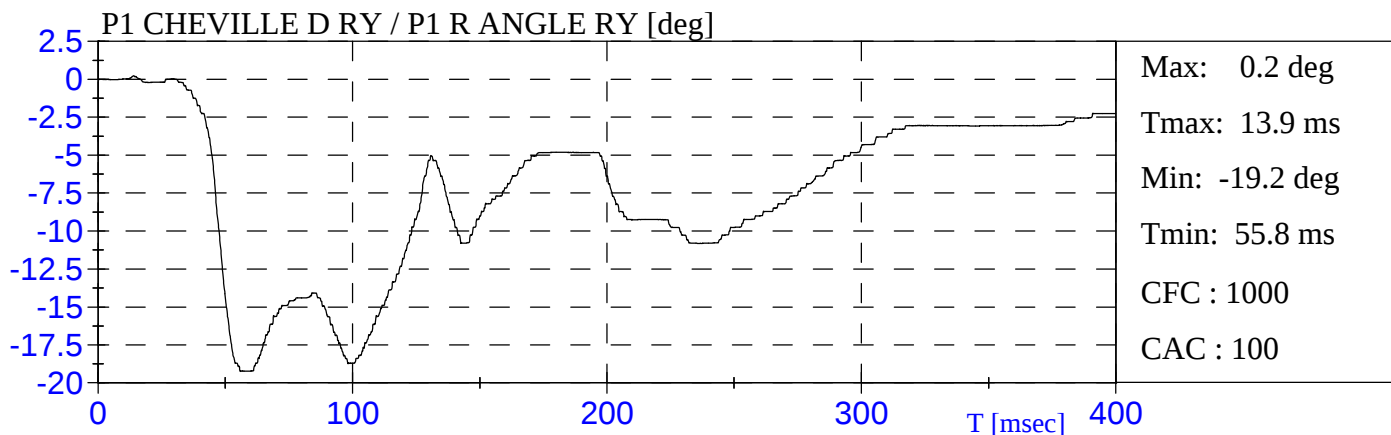
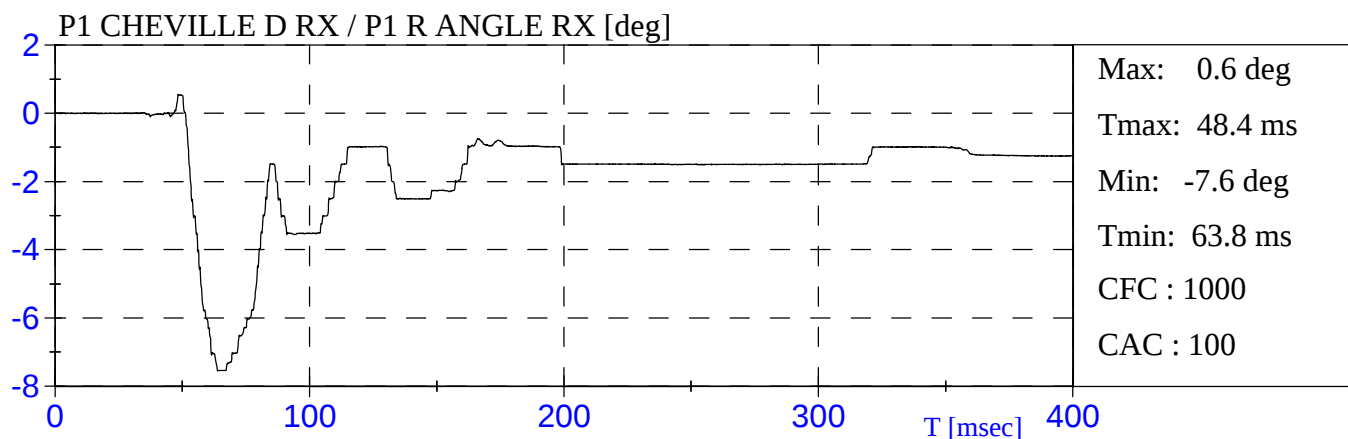
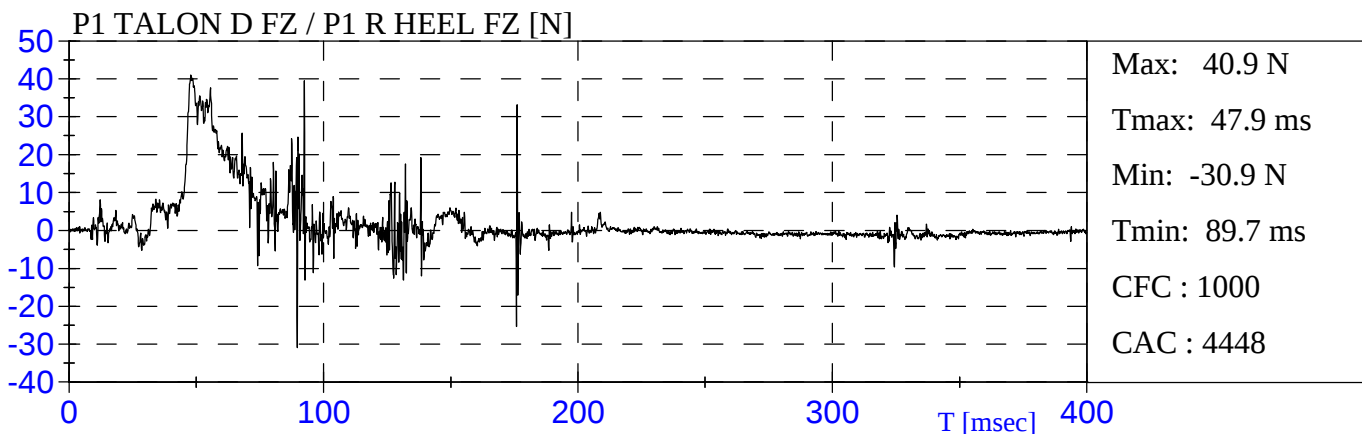


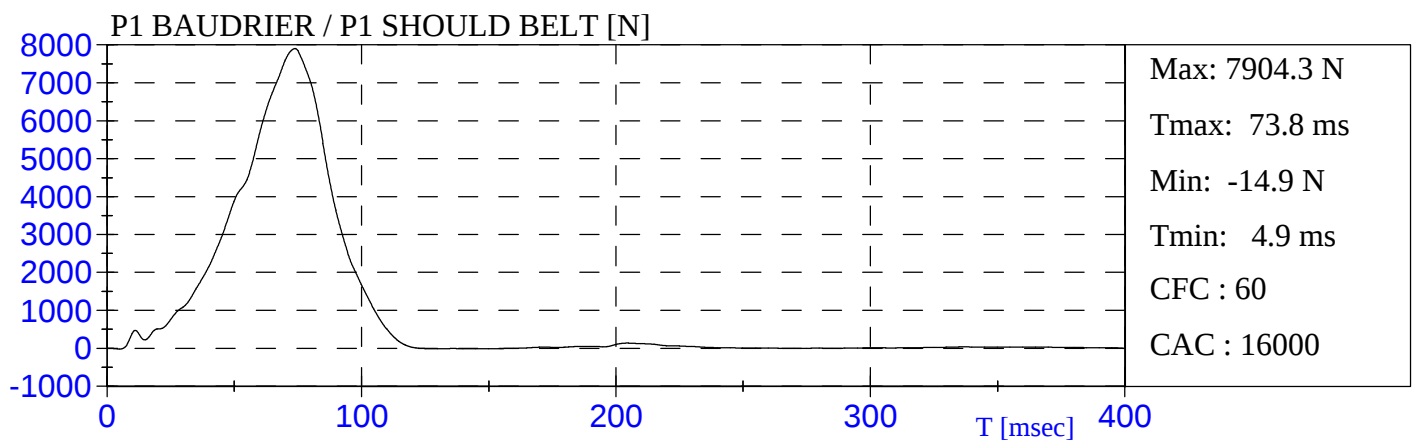
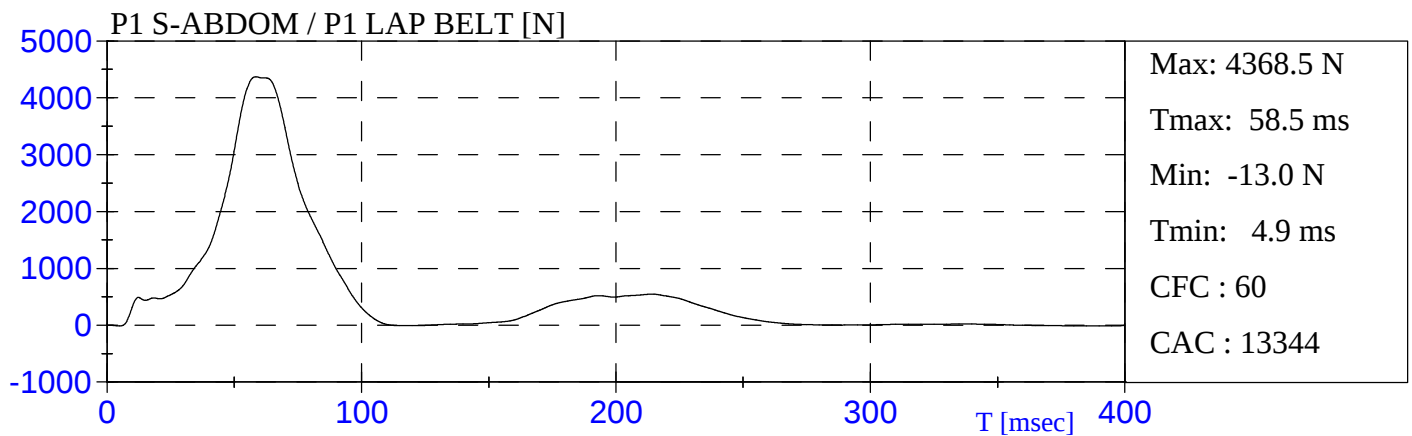


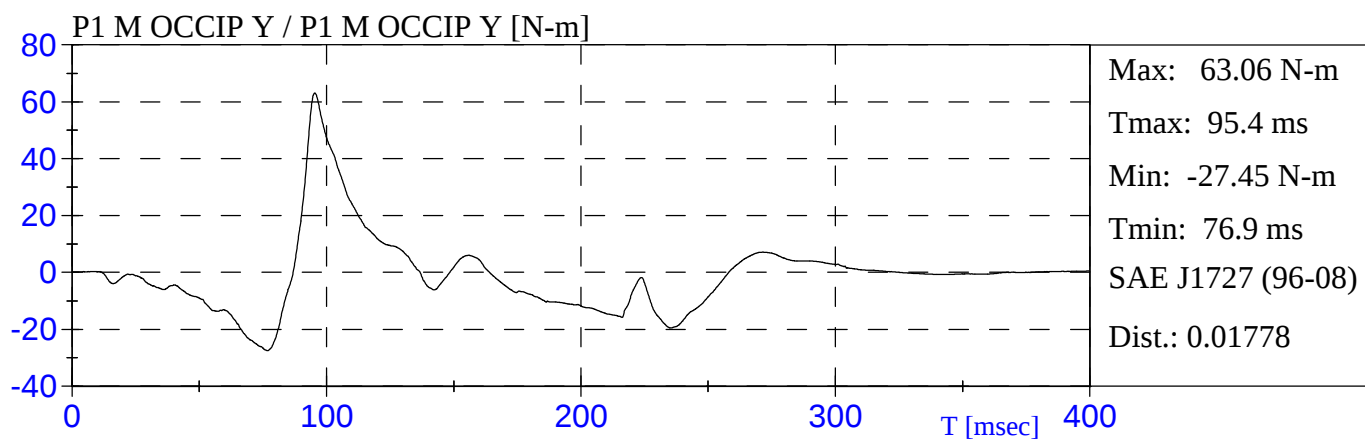


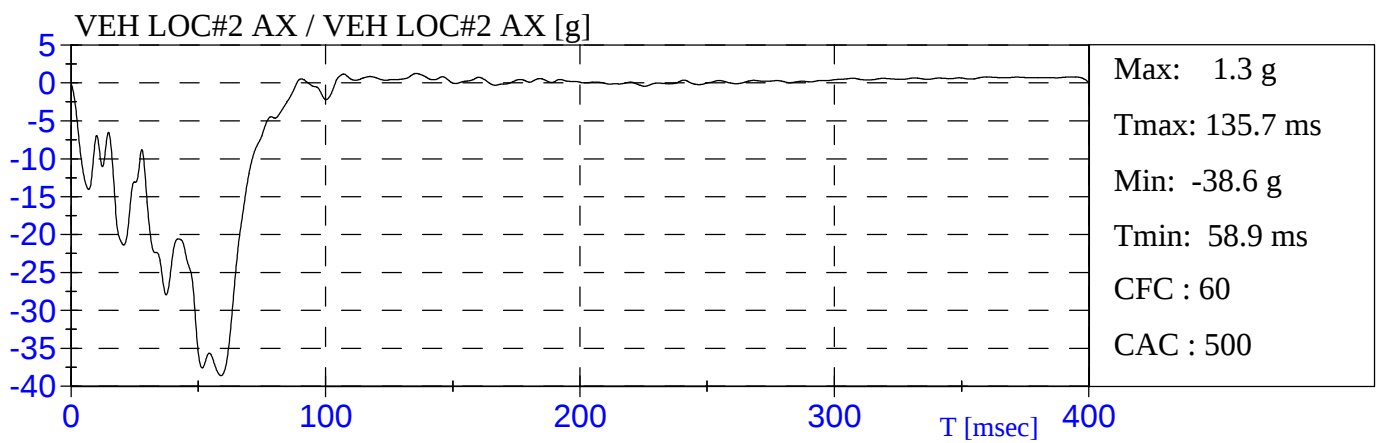
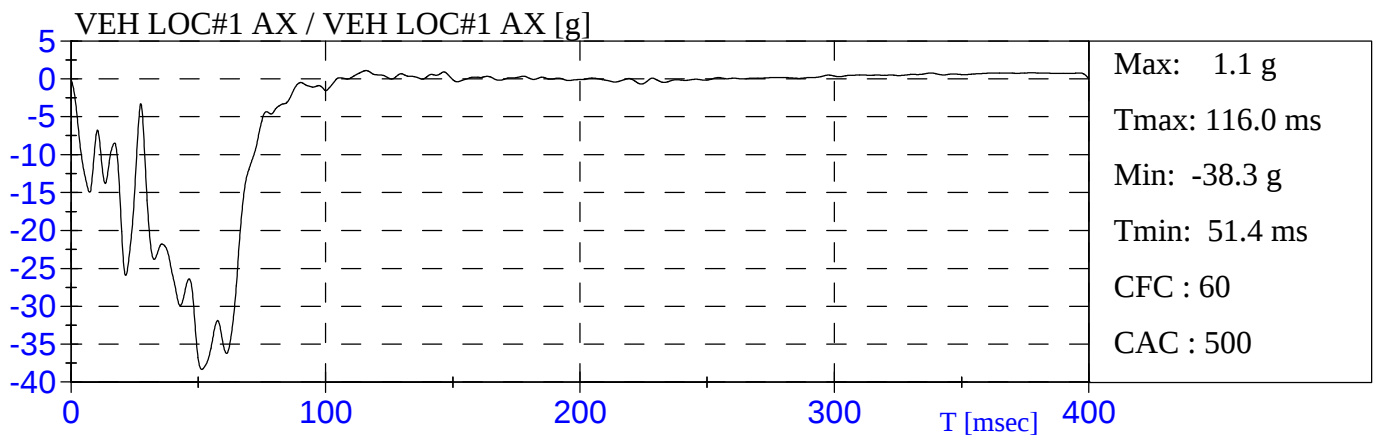


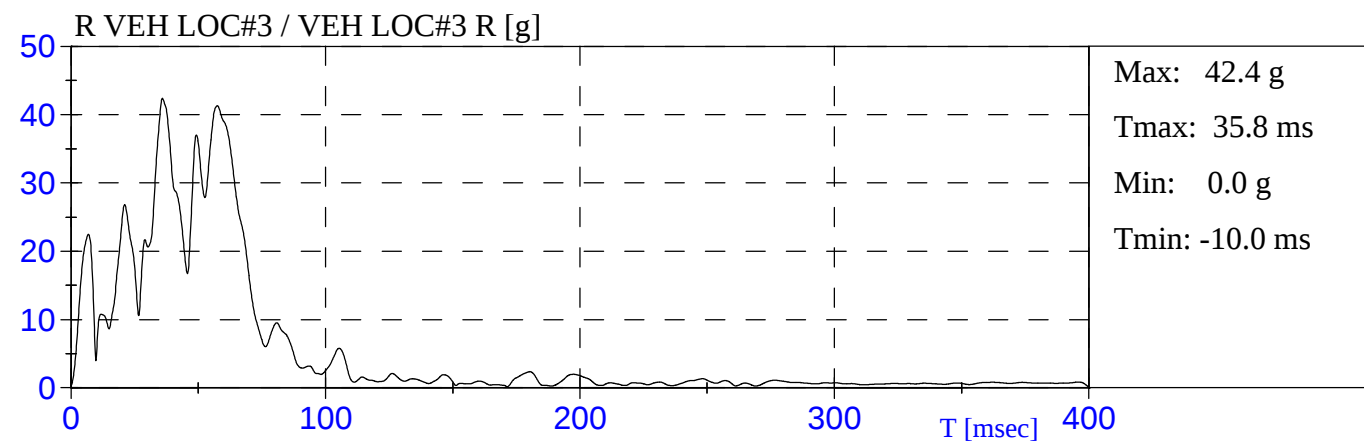
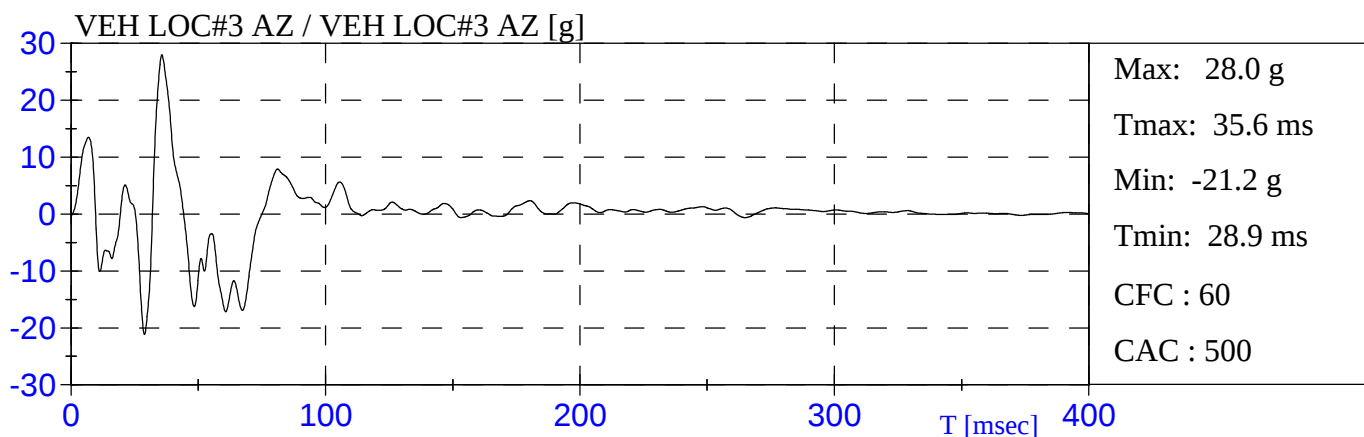
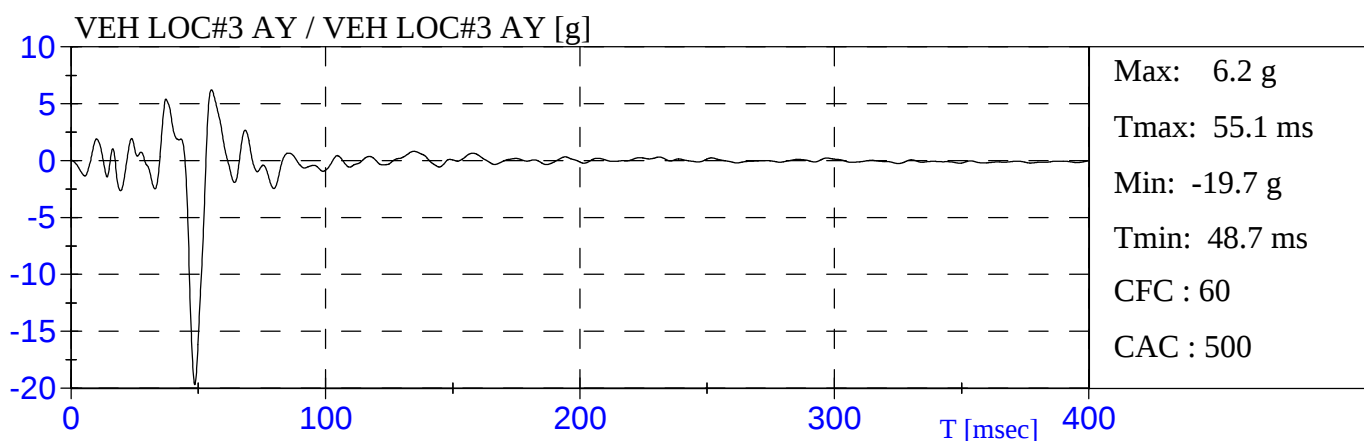
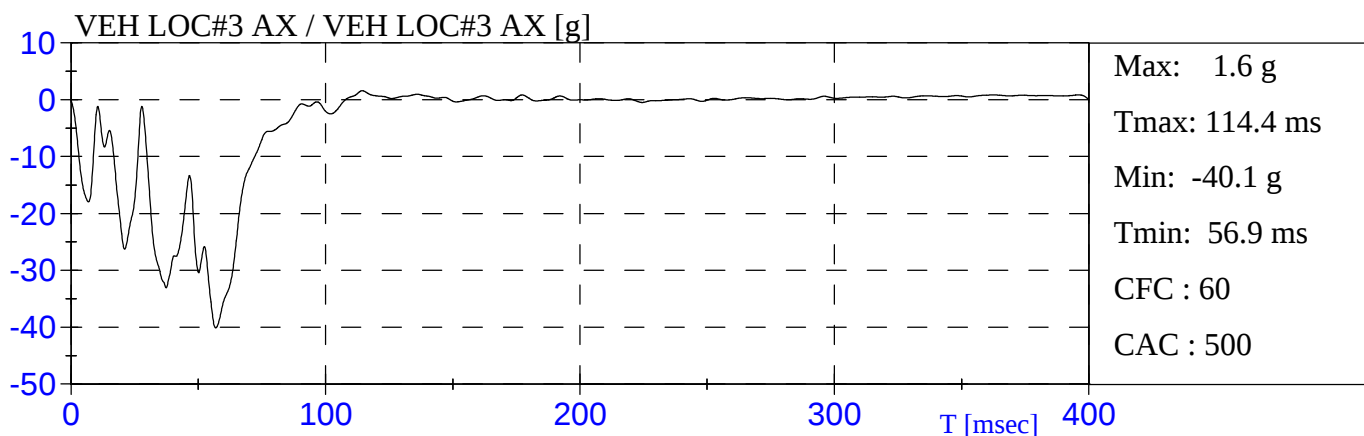


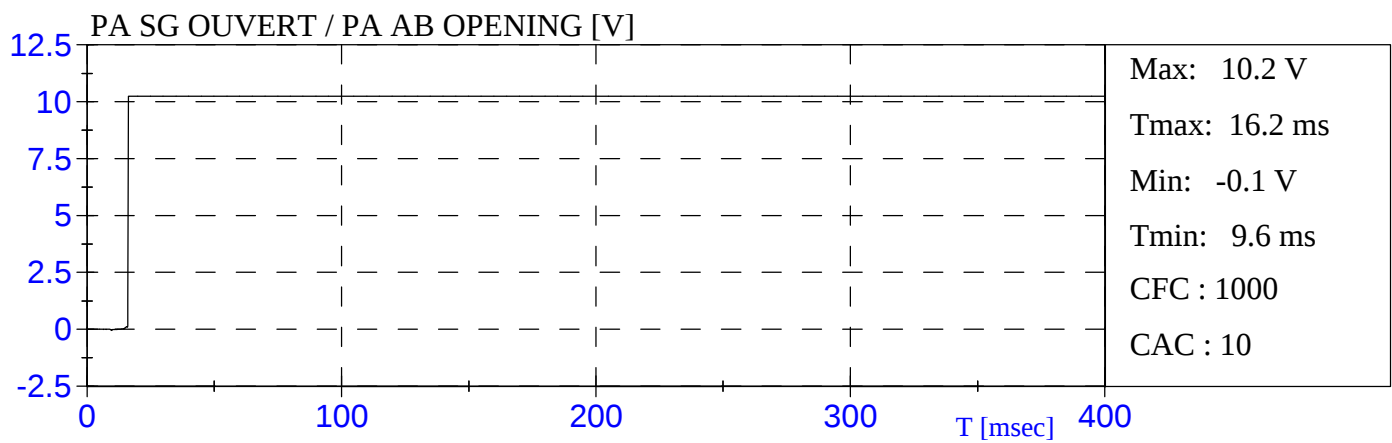
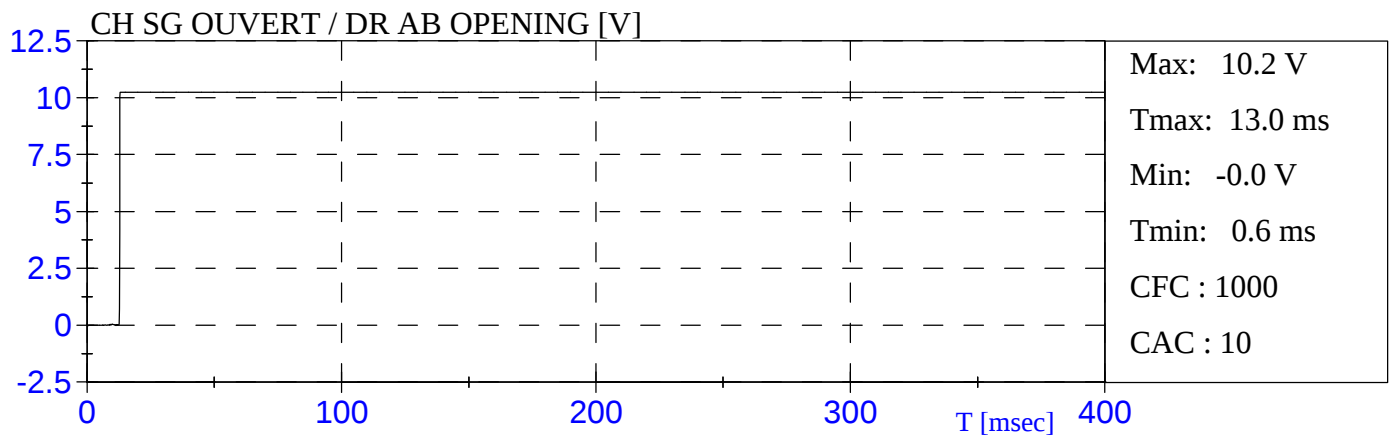


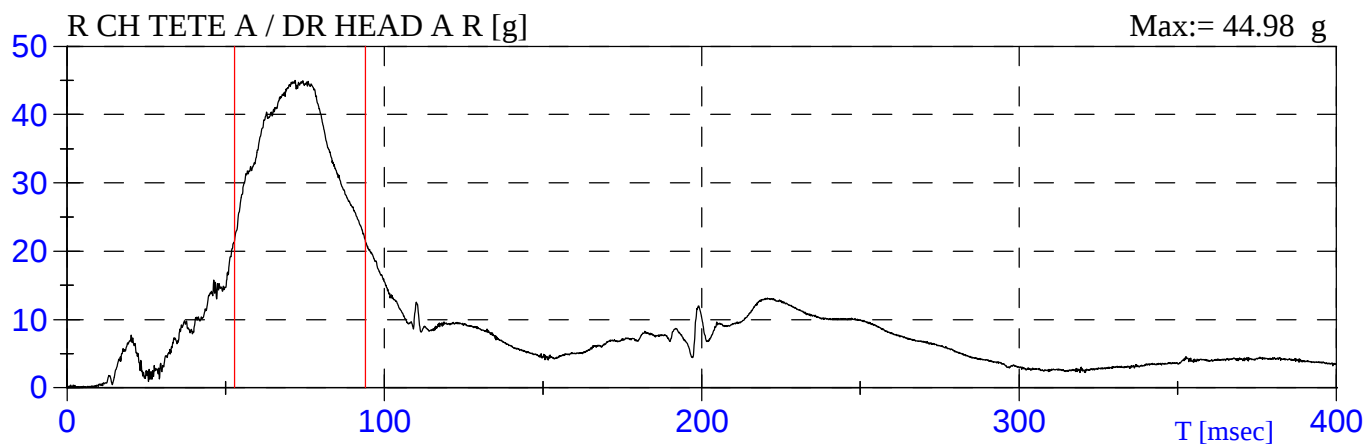










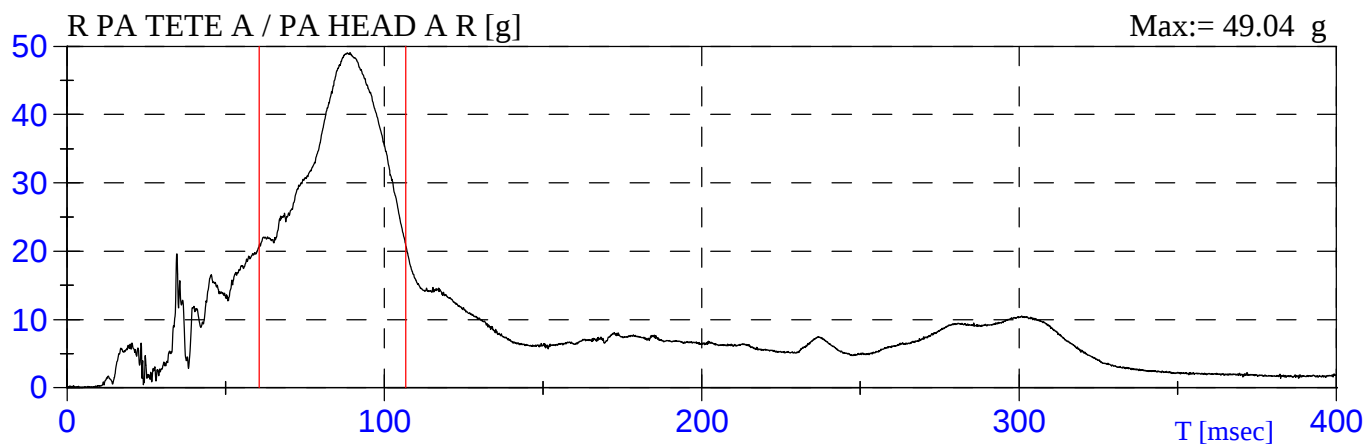


HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 315	HIC(36ms):= 309	HIC(15ms):= 186
T1:= 52.8 ms	T1:= 54.4 ms	T1:= 64.9 ms
T2:= 94.1 ms	T2:= 90.4 ms	T2:= 79.9 ms

* Selon / According To: SAE J1727 96-08

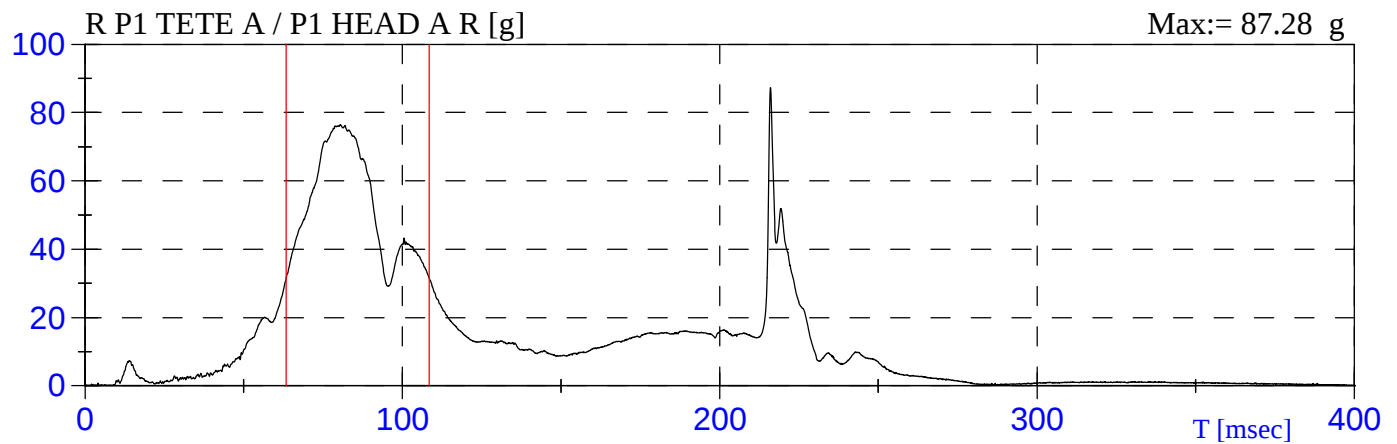


HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 323	HIC(36ms):= 318	HIC(15ms):= 214
T1:= 60.6 ms	T1:= 69.0 ms	T1:= 82.0 ms
T2:= 106.7 ms	T2:= 105.0 ms	T2:= 97.0 ms

* Selon / According To: SAE J1727 96-08



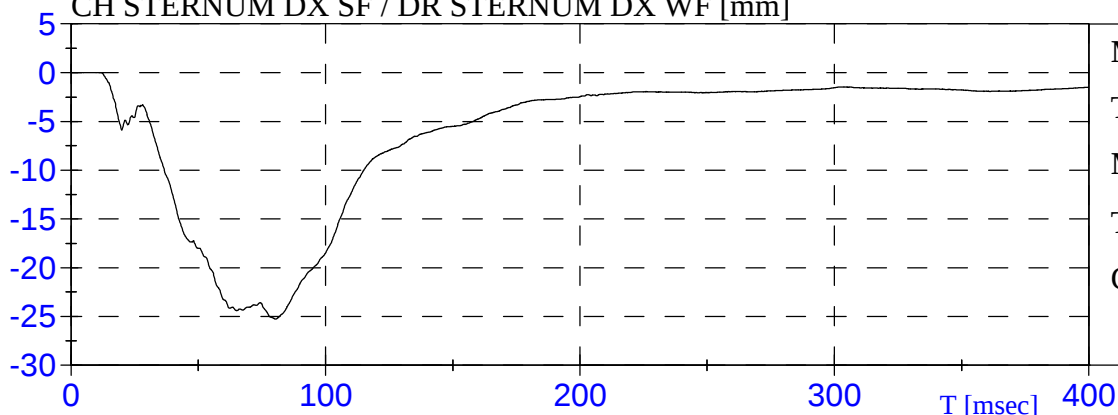
HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 902	HIC(36ms):= 861	HIC(15ms):= 663
T1:= 63.4 ms	T1:= 66.1 ms	T1:= 73.7 ms
T2:= 108.4 ms	T2:= 102.1 ms	T2:= 88.7 ms

* Selon / According To: SAE J1727 96-08

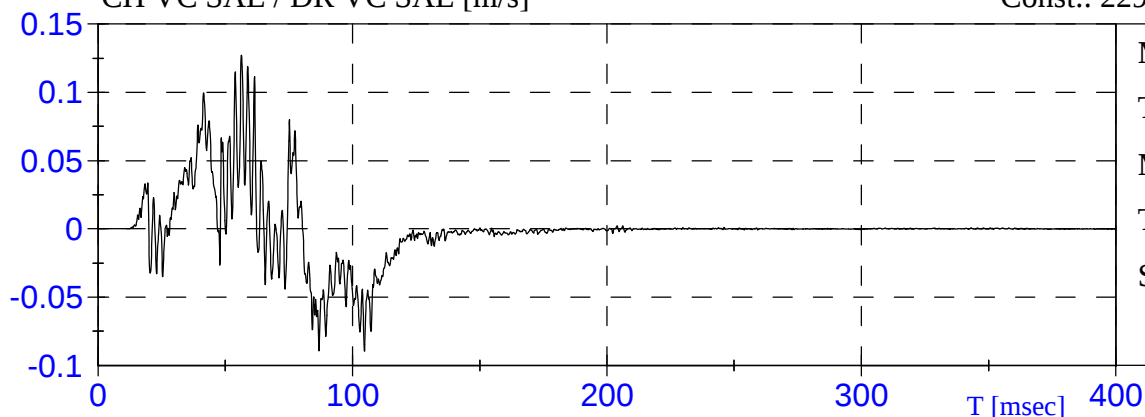
CH STERNUM DX SF / DR STERNUM DX WF [mm]



Max: 0.0 mm
Tmax: 1.1 ms
Min: -25.3 mm
Tmin: 80.2 ms
CFC : N/A

CH VC SAE / DR VC SAE [m/s]

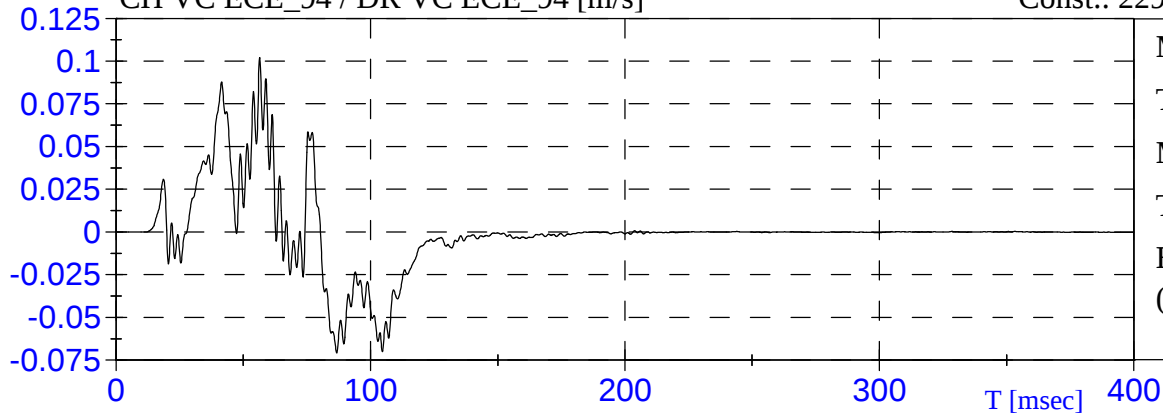
Const.: 229 Fact.: 1.3



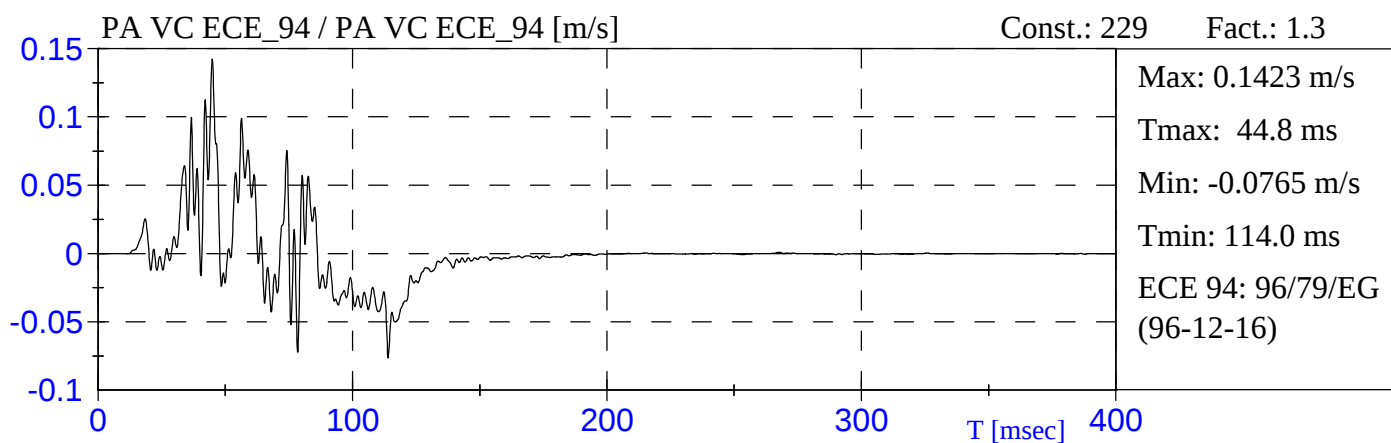
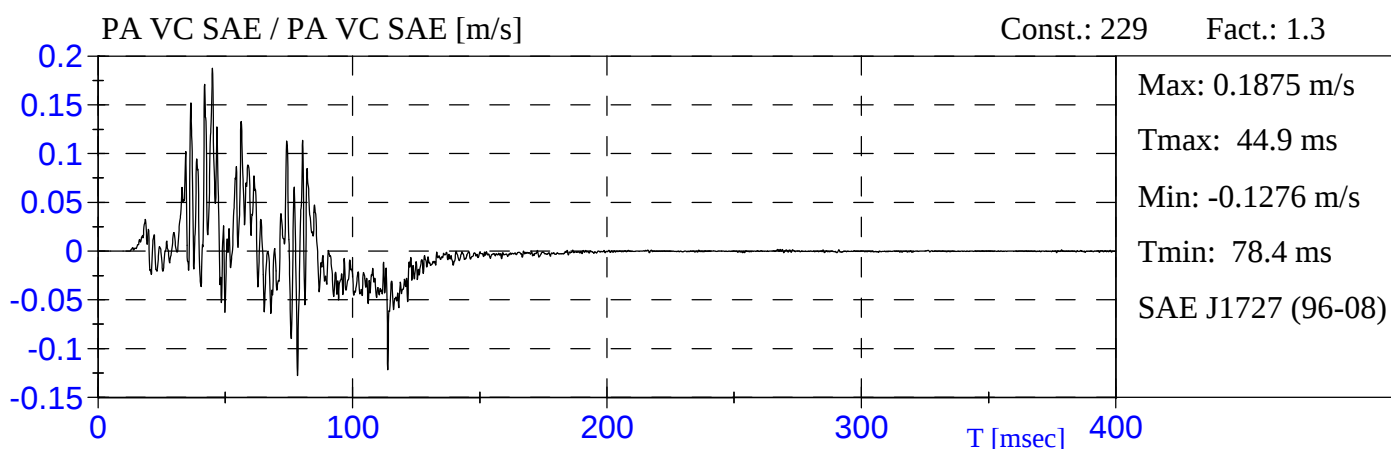
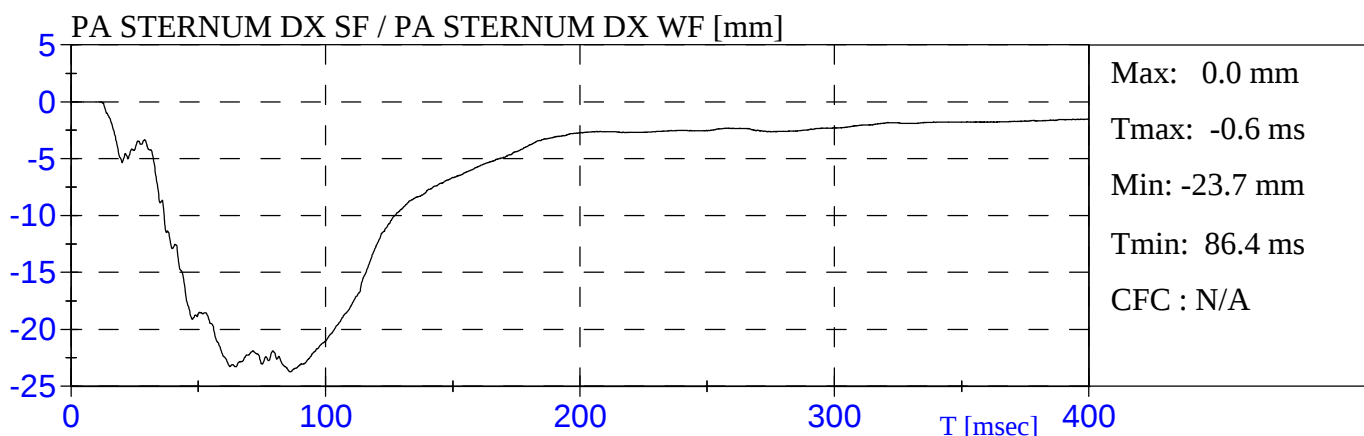
Max: 0.1272 m/s
Tmax: 56.4 ms
Min: -0.0897 m/s
Tmin: 104.7 ms
SAE J1727 (96-08)

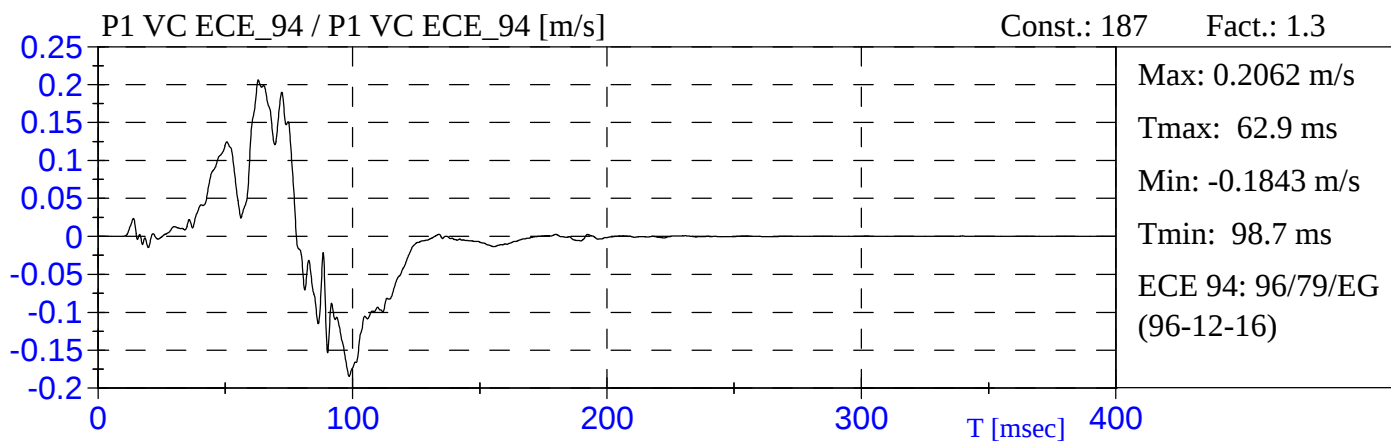
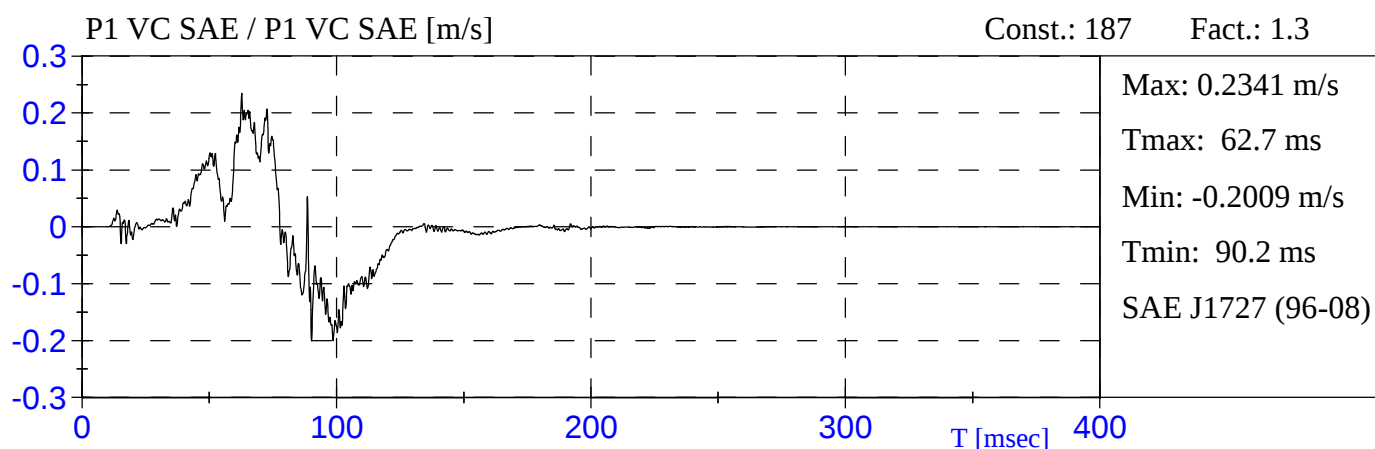
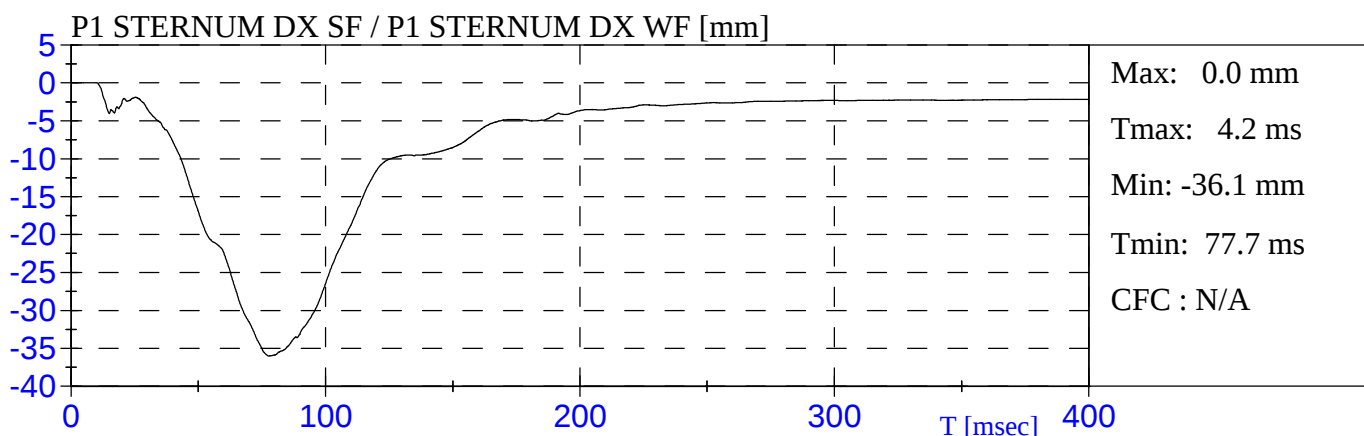
CH VC ECE_94 / DR VC ECE_94 [m/s]

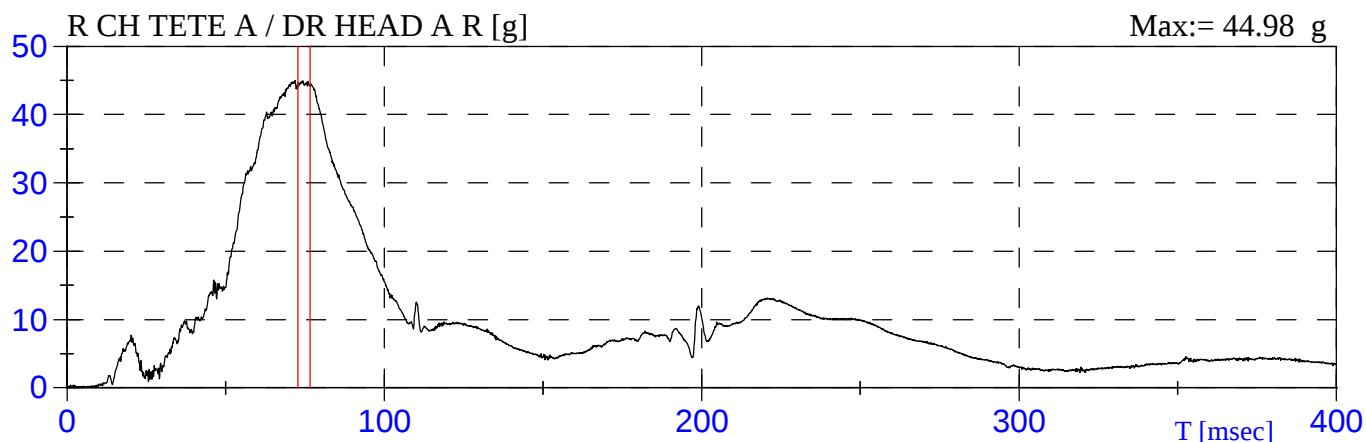
Const.: 229 Fact.: 1.3



Max: 0.1022 m/s
Tmax: 56.5 ms
Min: -0.0709 m/s
Tmin: 86.8 ms
ECE 94: 96/79/EG
(96-12-16)

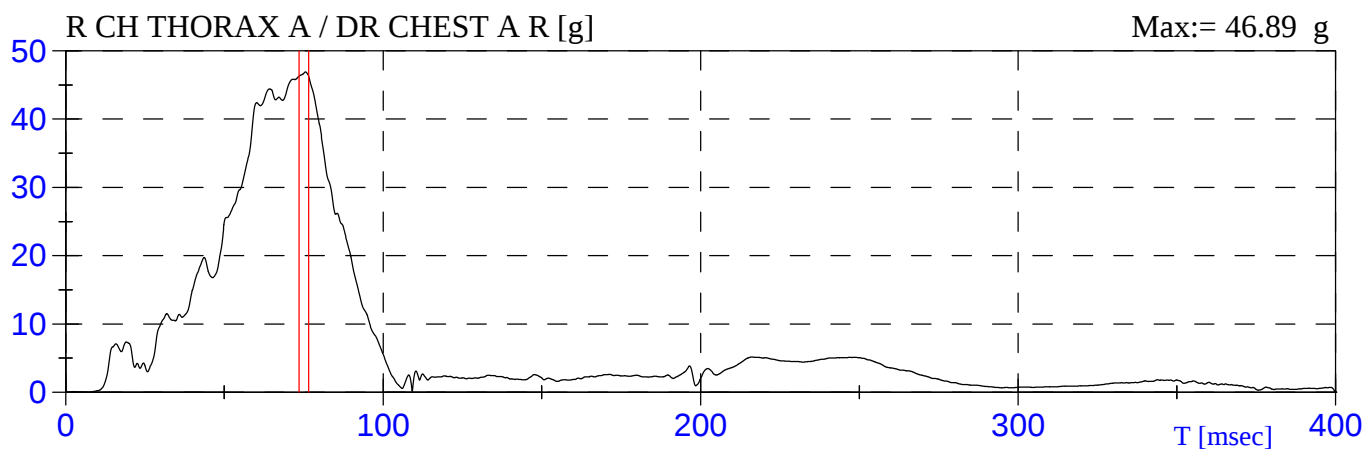






CLIP 3ms *

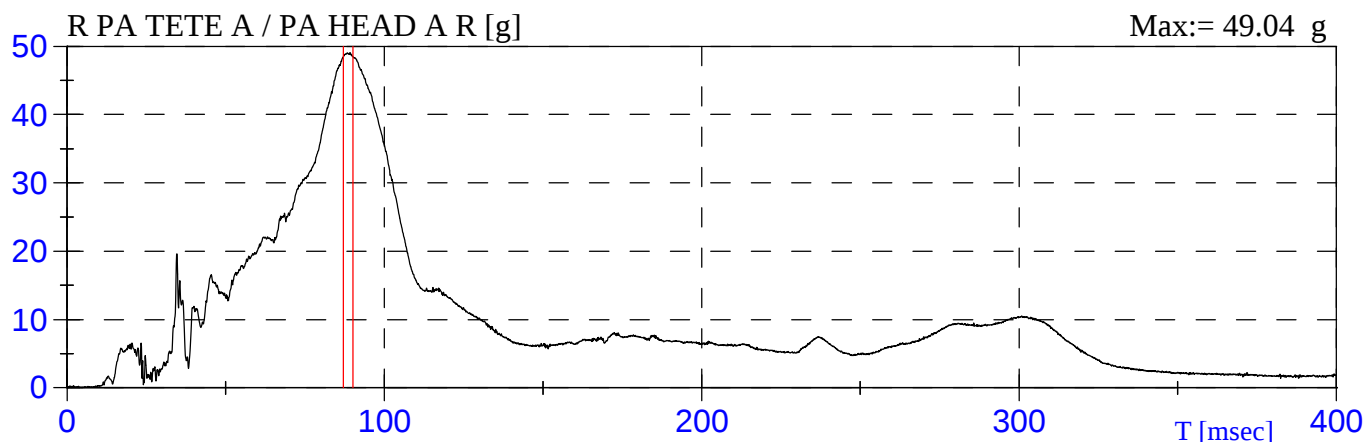
Acc. := 44.19 g	T1:= 72.8 ms	T2:= 76.6 ms
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CLIP 3ms *

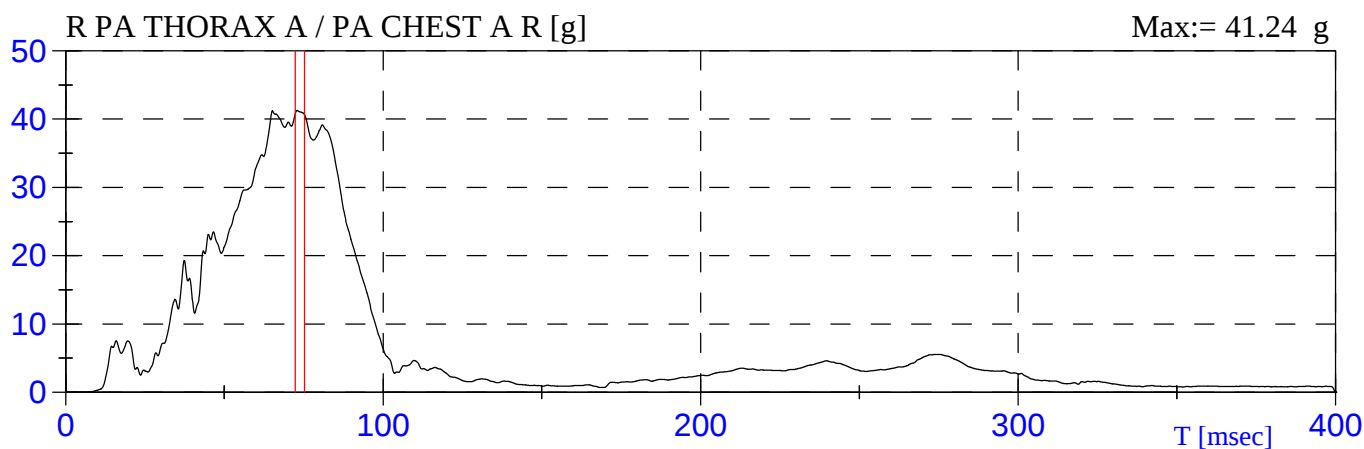
Acc. := 46.26 g	T1:= 73.6 ms	T2:= 76.6 ms
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* Selon / According To: NHTSA CLIP VERSION 2.1 5/95



CLIP 3ms *

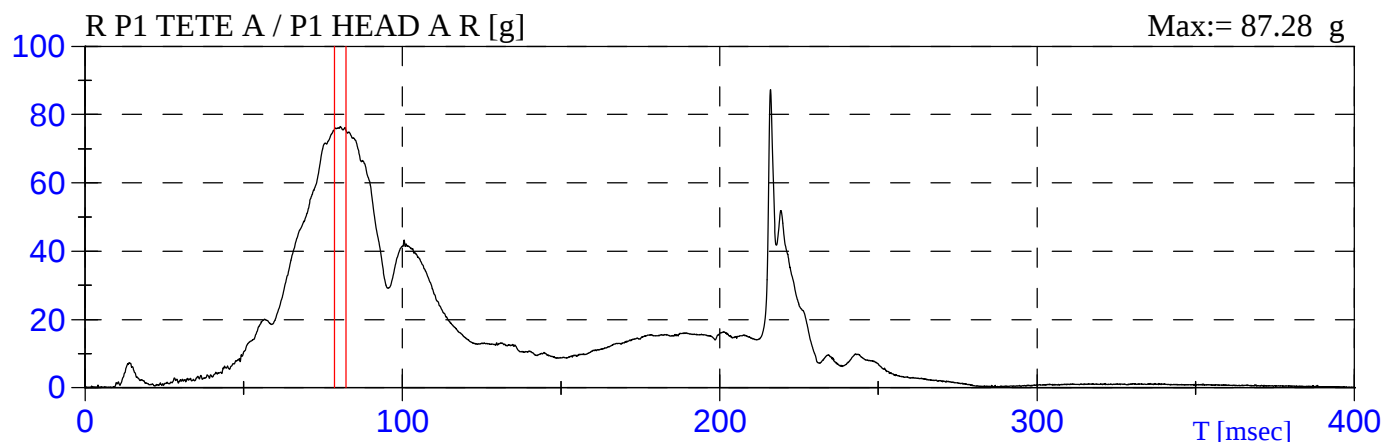
Acc. := 48.45 g	T1:= 87.1 ms	T2:= 90.1 ms
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CLIP 3ms *

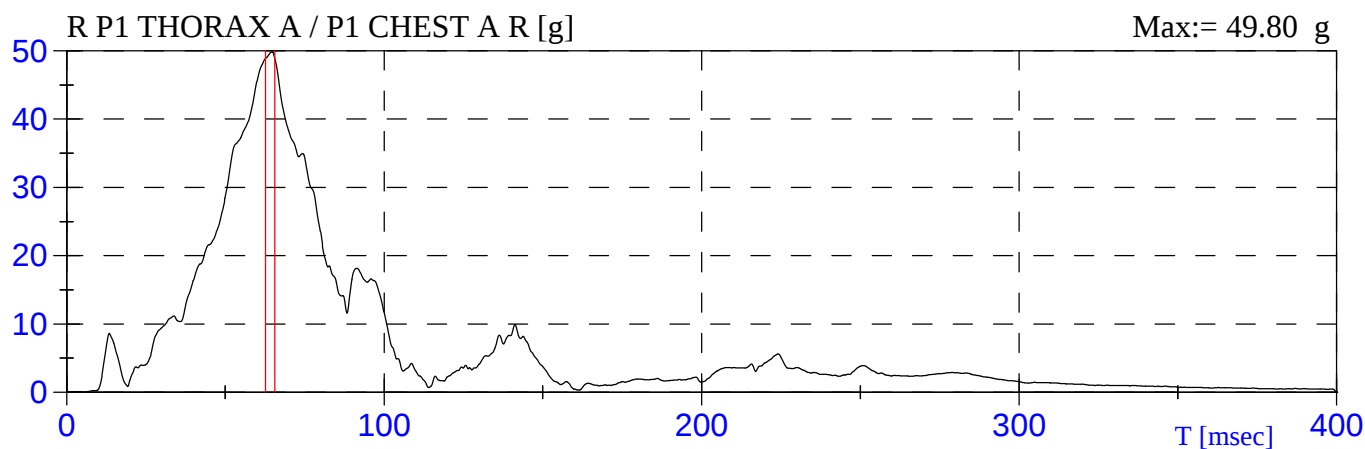
Acc. := 40.67 g	T1:= 72.2 ms	T2:= 75.2 ms
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* Selon / According To: NHTSA CLIP VERSION 2.1 5/95



CLIP 3ms *

Acc. := 75.49 g	T1:= 78.6 ms	T2:= 82.3 ms
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CLIP 3ms *

Acc. := 48.89 g	T1:= 62.6 ms	T2:= 65.6 ms
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* Selon / According To: NHTSA CLIP VERSION 2.1 5/95

INDEX DU TIBIA *
TIBIA INDEX *

TI Chauffeur / Driver

Mc := 225 N-m

Fc := 35.9 kN

TIBIA	GAUCHE / LEFT	DROIT / RIGHT
HAUT / UPPER	0.564	0.455
BAS / LOWER	0.757	0.607

* Selon / According To: SAE J1727 AUG 96

INDEX DU TIBIA *
TIBIA INDEX *

TI Passenger / Passenger

Mc := 225 N-m

Fc := 35.9 kN

TIBIA	GAUCHE / LEFT	DROIT / RIGHT
HAUT / UPPER	0.472	0.504
BAS / LOWER	0.290	0.121

* Selon / According To: SAE J1727 AUG 96

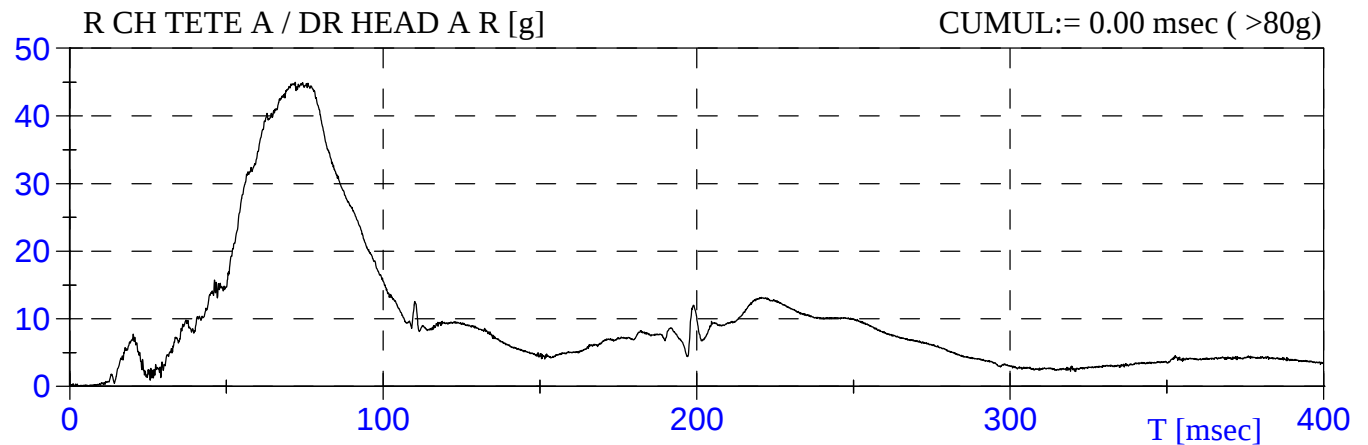
INDEX DU TIBIA *
TIBIA INDEX *

TI Passenger 1 / Passenger 1 $M_c := 225 \text{ N-m}$ $F_c := 35.9 \text{ kN}$

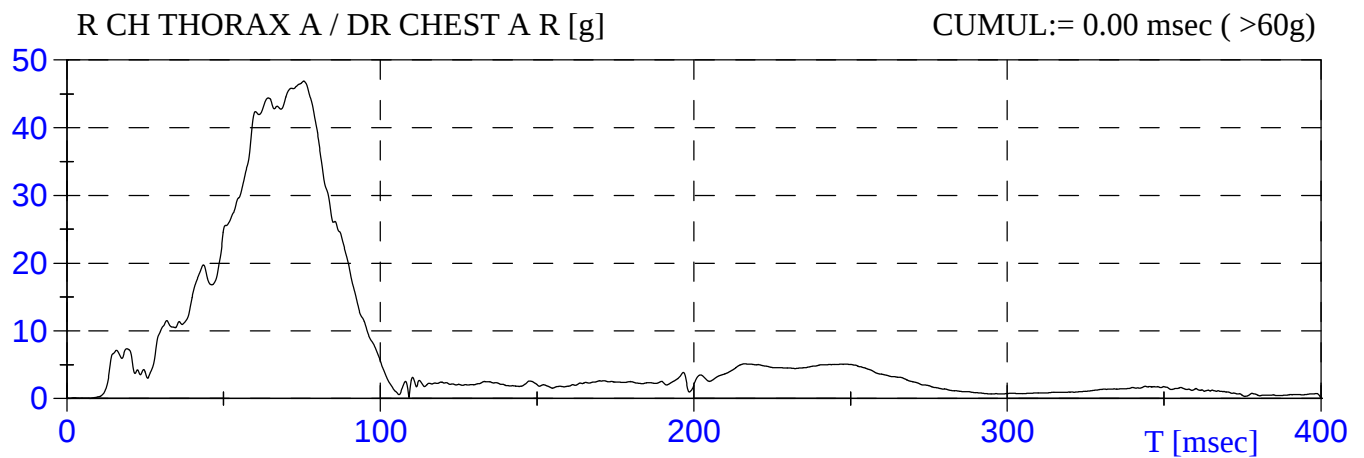
TIBIA	GAUCHE / LEFT	DROIT / RIGHT
HAUT / UPPER	0.652	0.646
BAS / LOWER	0.871	0.606

* Selon / According To: SAE J1727 AUG 96

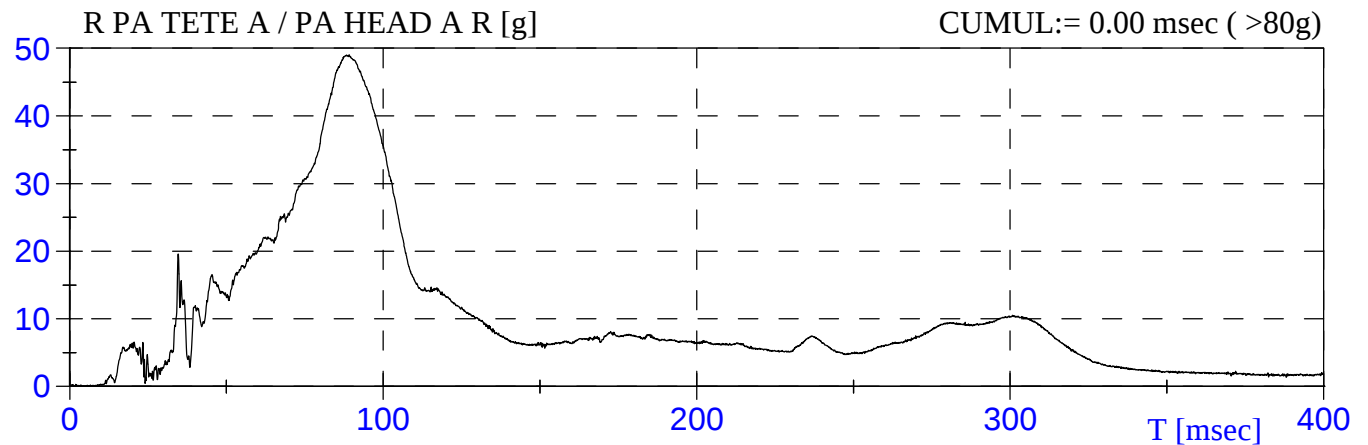
ACCÉLÉRATION DE LA TÊTE >80 g / HEAD ACCELERATION > 80 g



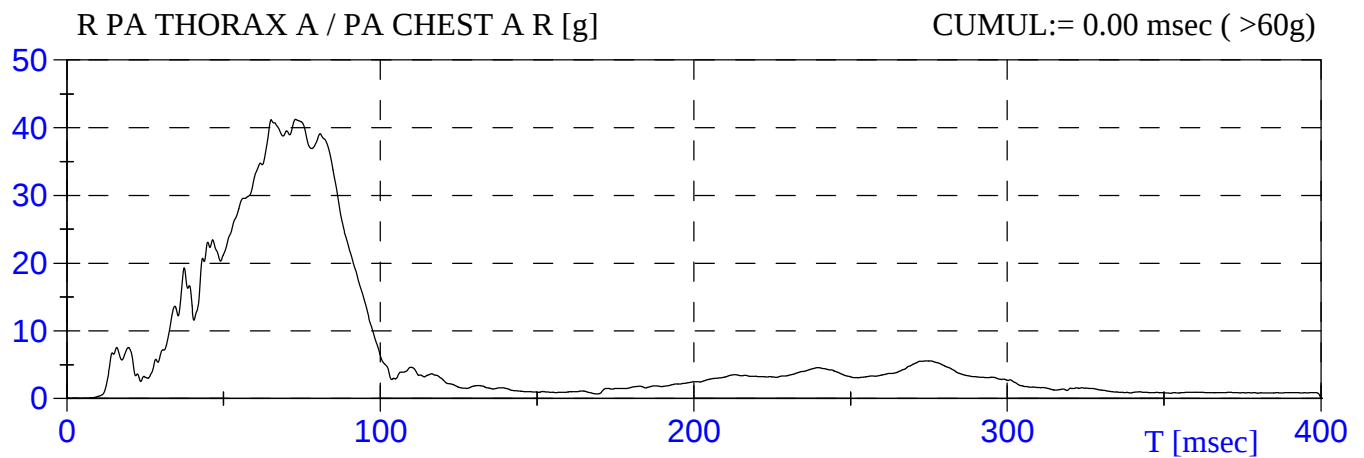
ACCÉLÉRATION DU THORAX >60 g / THORAX ACCELERATION > 60 g



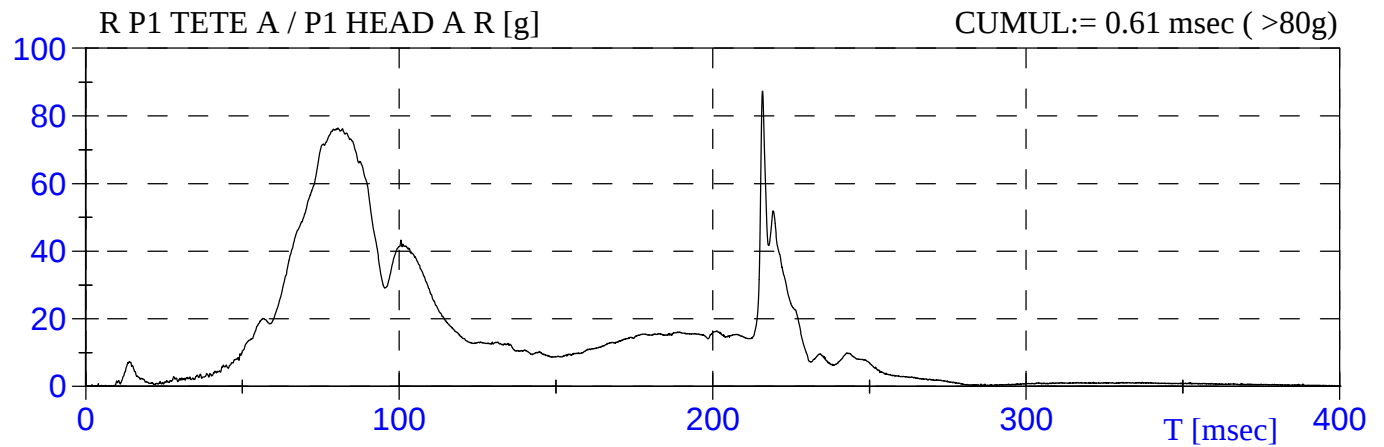
ACCÉLÉRATION DE LA TÊTE >80 g / HEAD ACCELERATION > 80 g



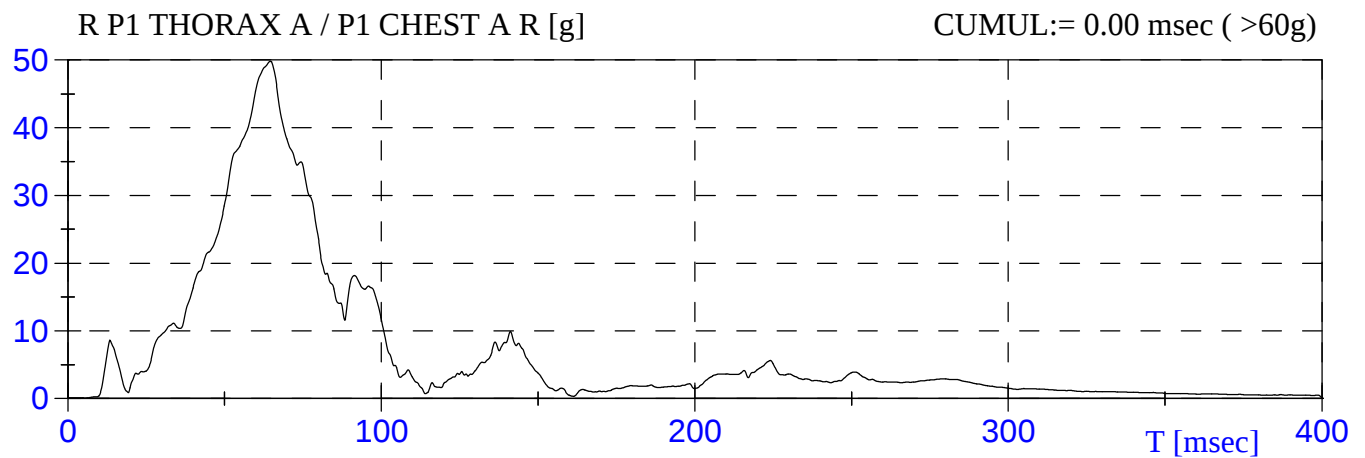
ACCÉLÉRATION DU THORAX >60 g / THORAX ACCELERATION > 60 g



ACCÉLÉRATION DE LA TÊTE >80 g / HEAD ACCELERATION > 80 g



ACCÉLÉRATION DU THORAX >60 g / THORAX ACCELERATION > 60 g



Chauffeur / Driver

$$N_{ij}^* = 0.24$$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	Tc	6806
				Cc	6160
0.24	0.20	0.11	0.11	Fc	310
				Ec	135

Passager / Passenger

$$N_{ij}^* = 0.21$$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	Tc	6806
				Cc	6160
0.20	0.21	0.02	0.02	Fc	310
				Ec	135

* Selon / According To: Federal Register 5/2000

Passager 1 / Passenger 1

$N_{ij}^* = 0.98$

Valeurs critiques
Criticals Values

N tf	N te	Ncf	N ce	Tc	4287
				Cc	3880
0.75	0.98	0.05	0.29	Fc	155
				Ec	67

* Selon / According To: Federal Register 5/2000