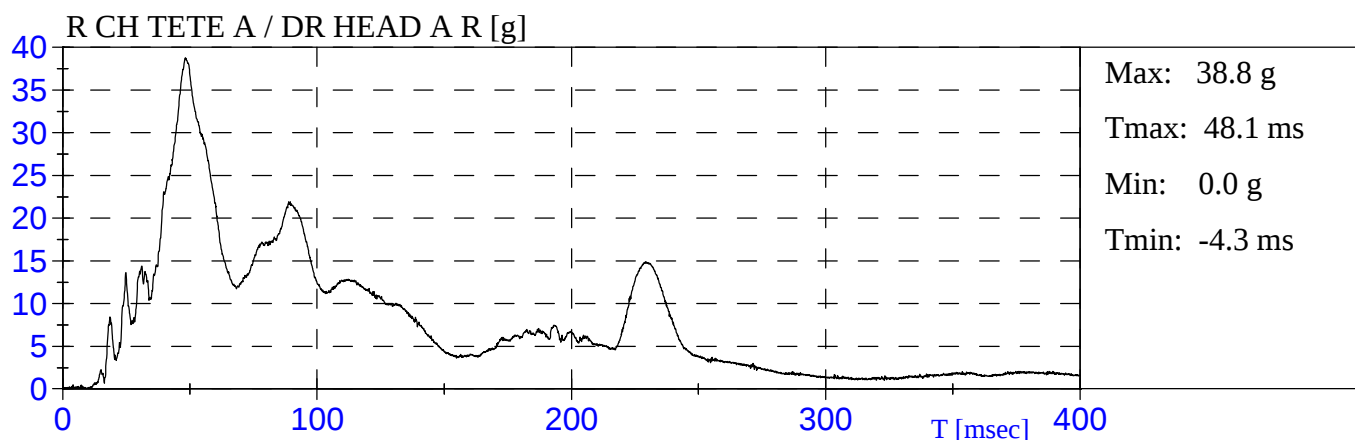
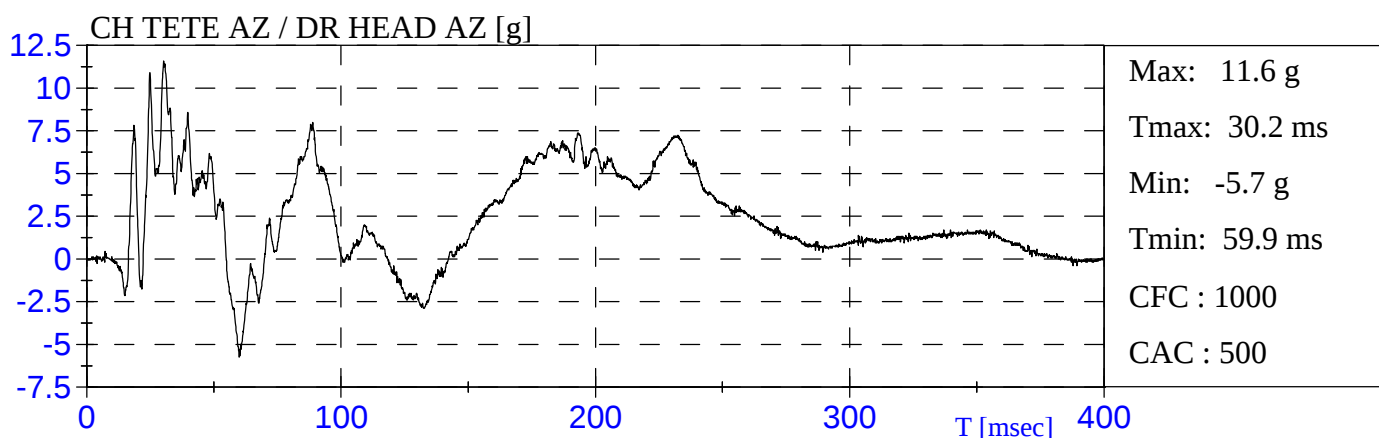
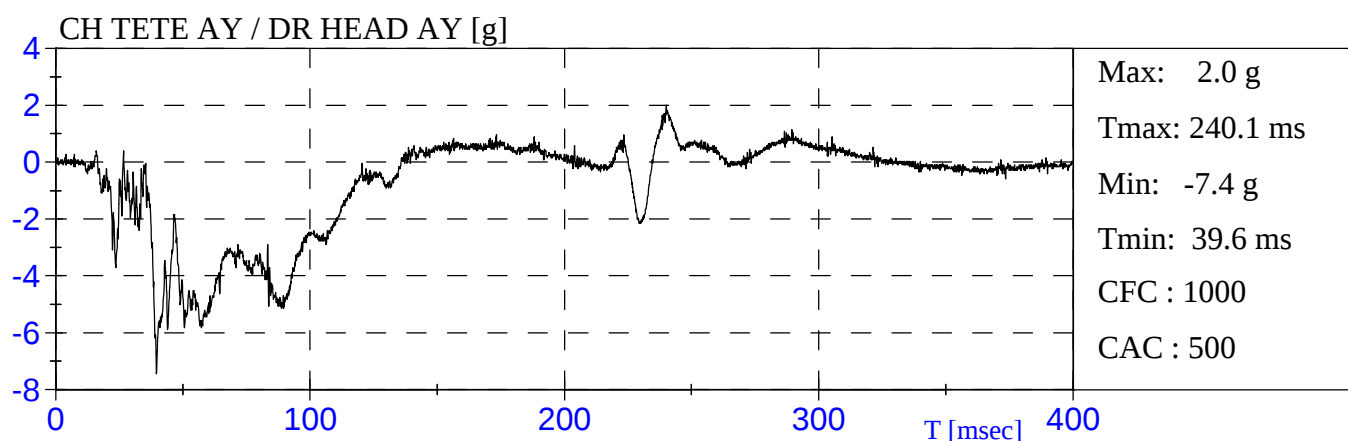
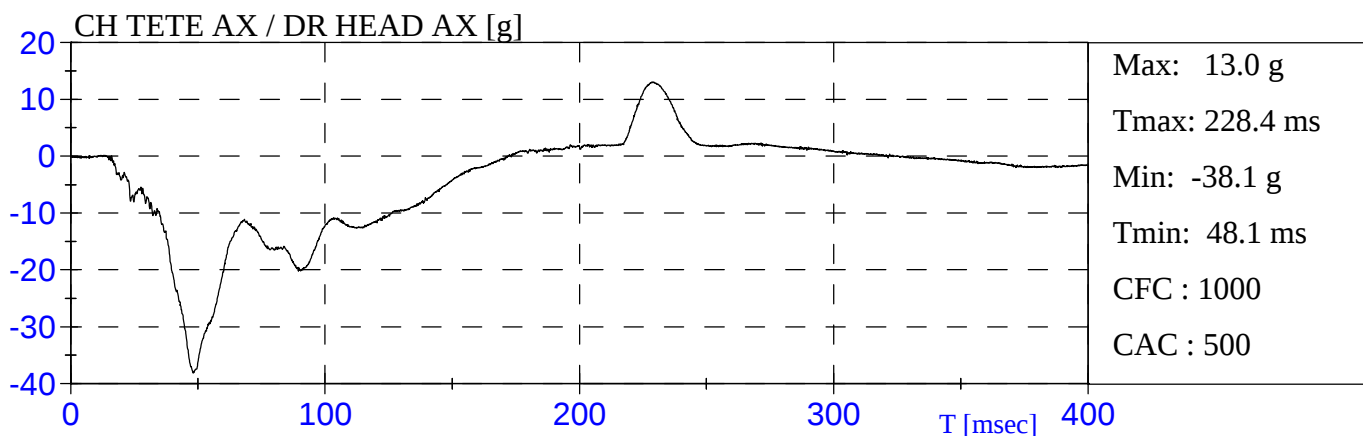
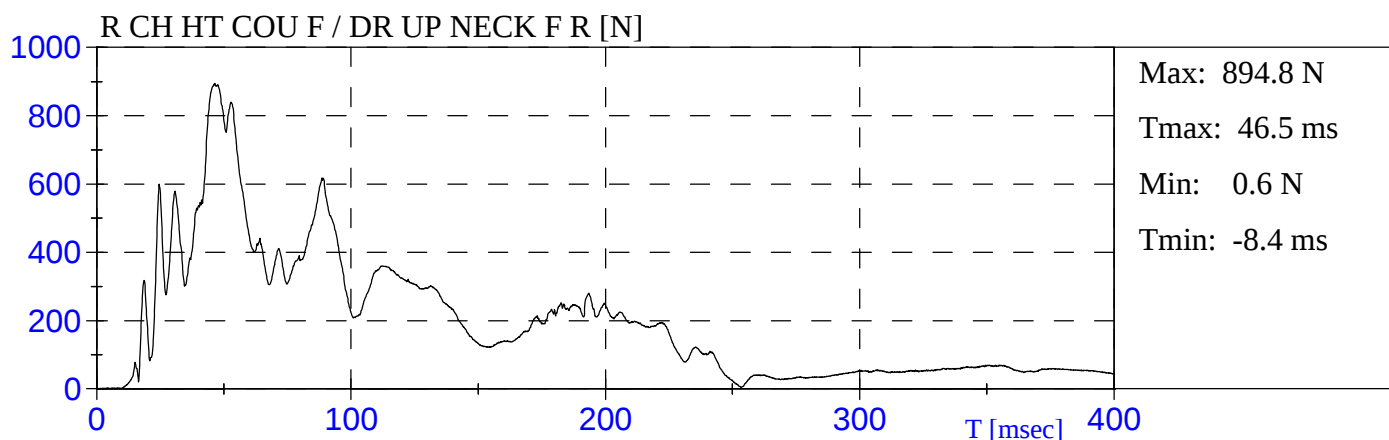
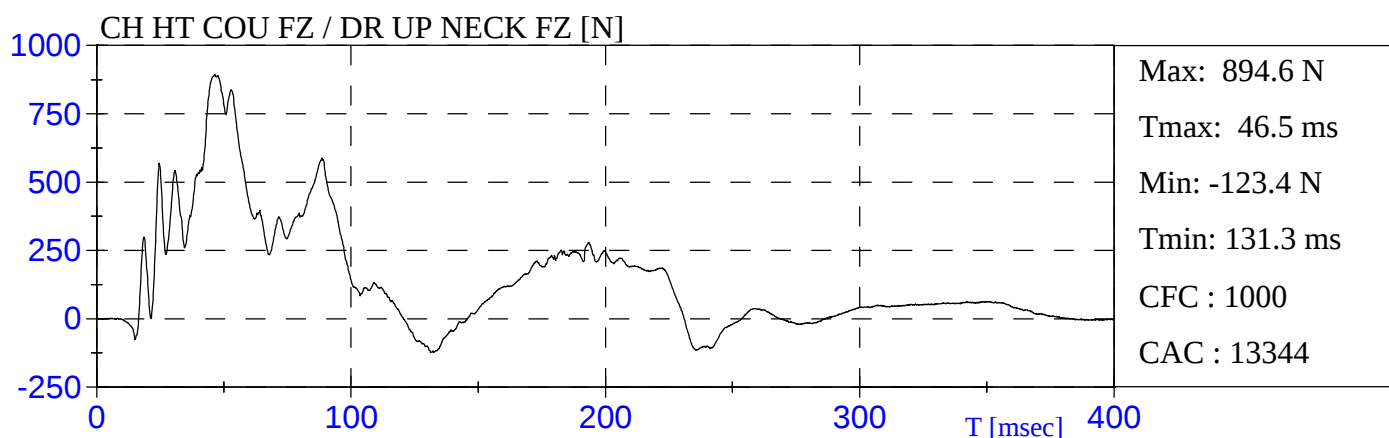
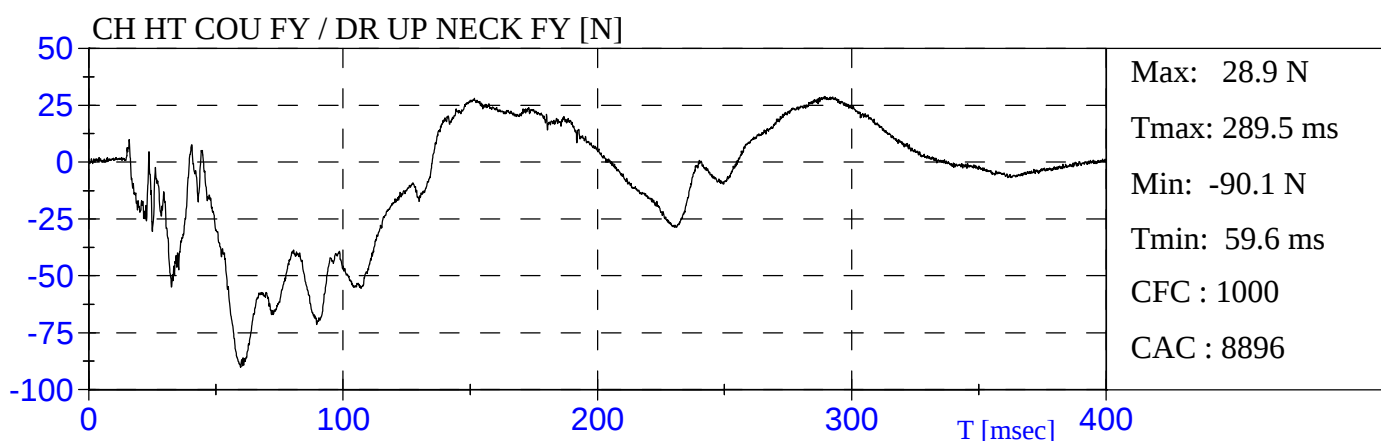
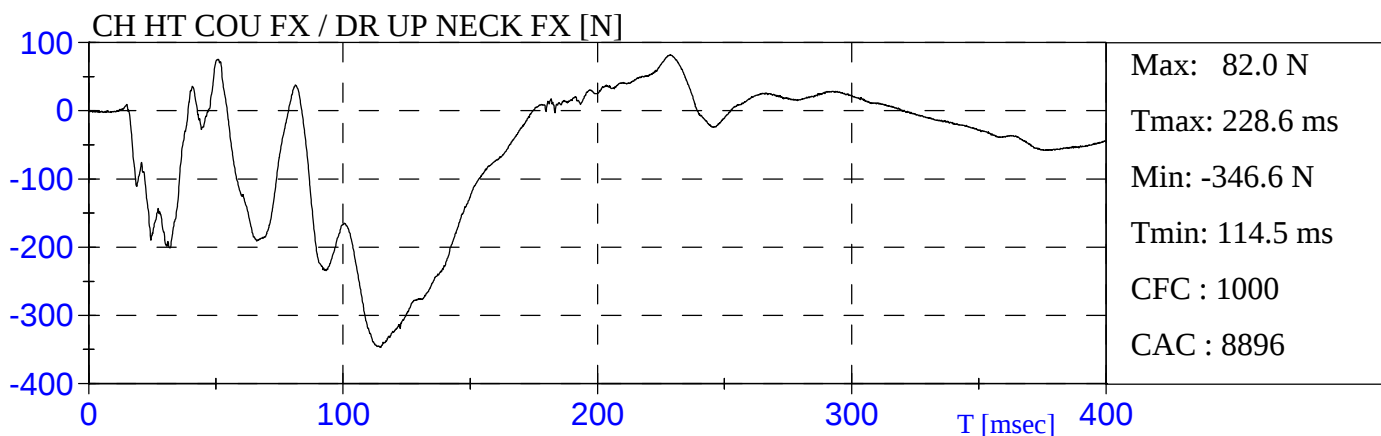
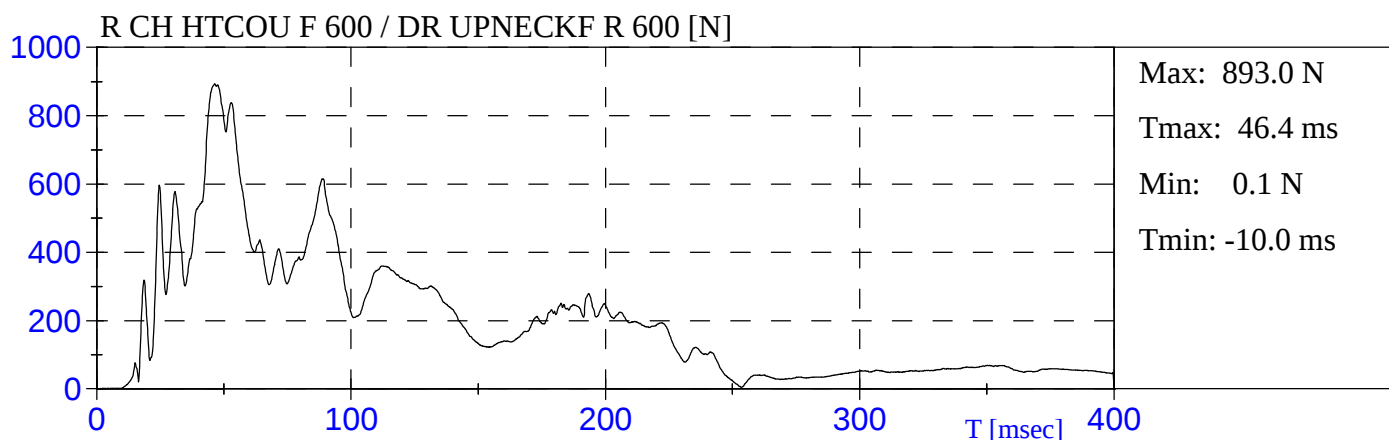
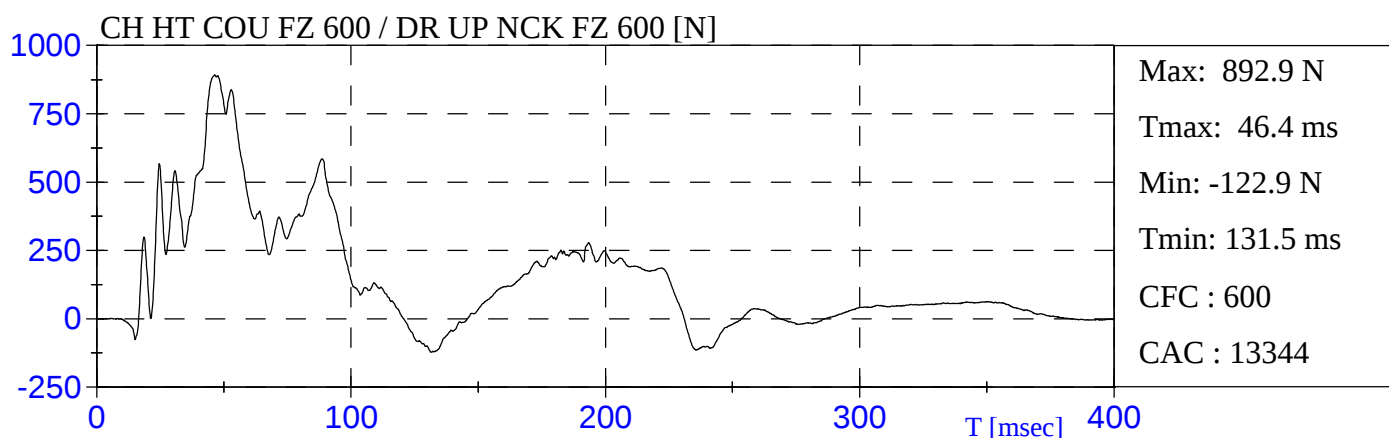
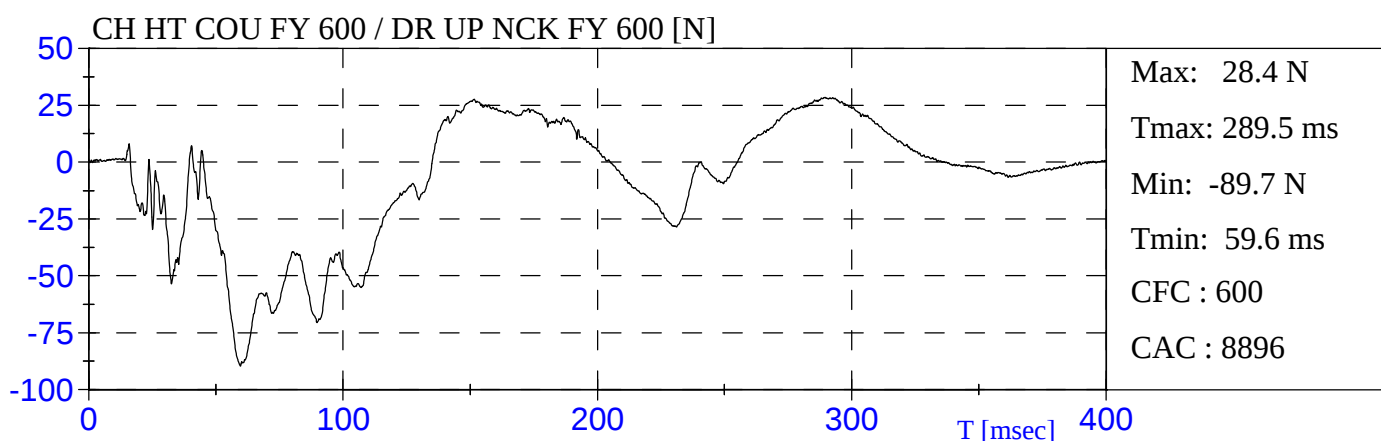
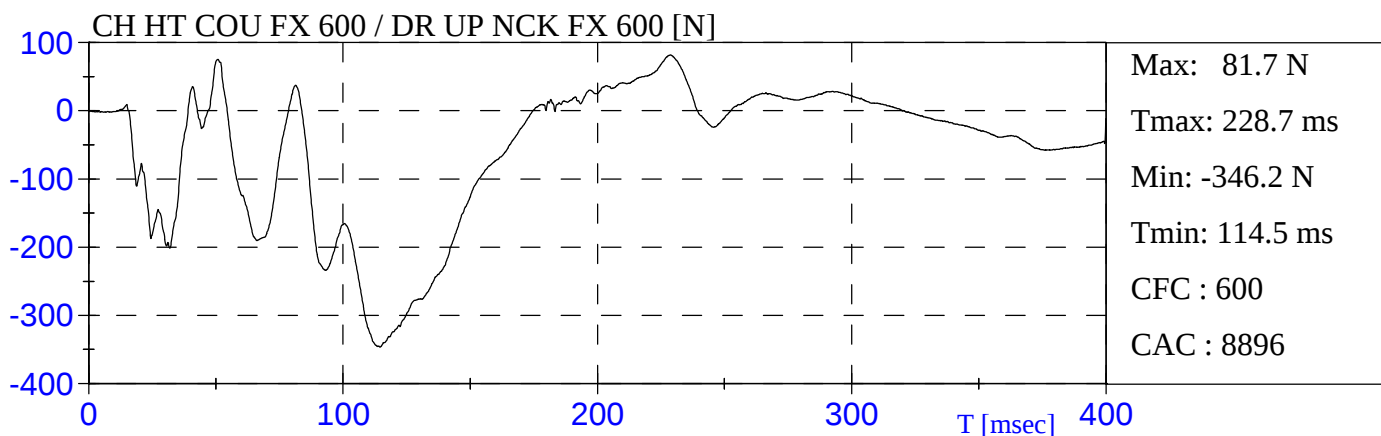


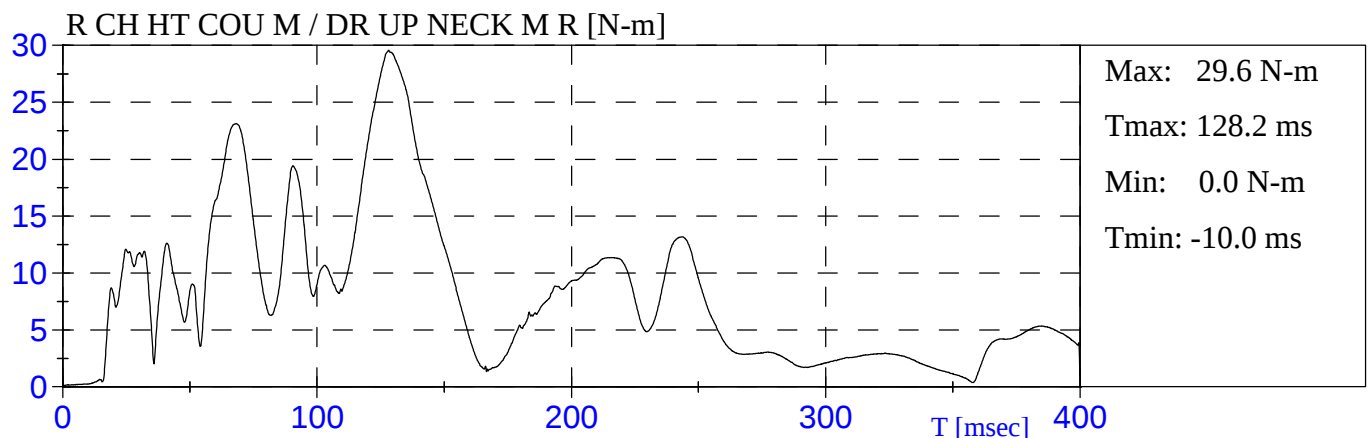
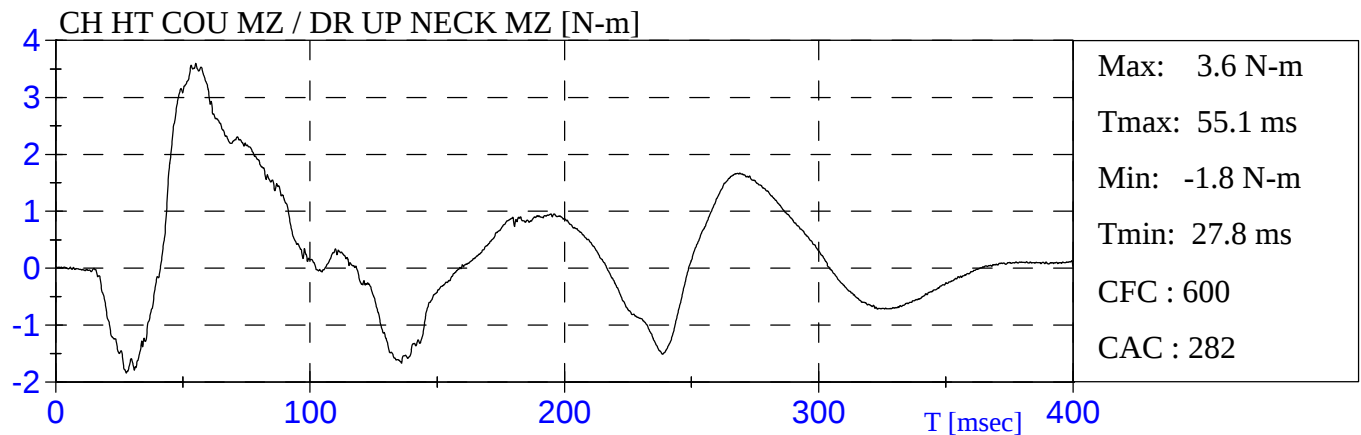
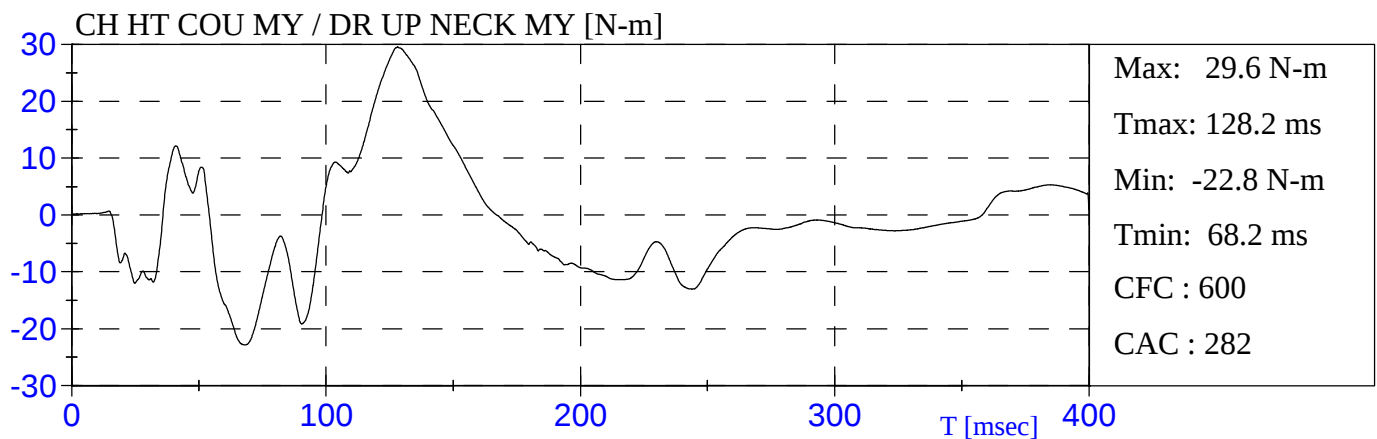
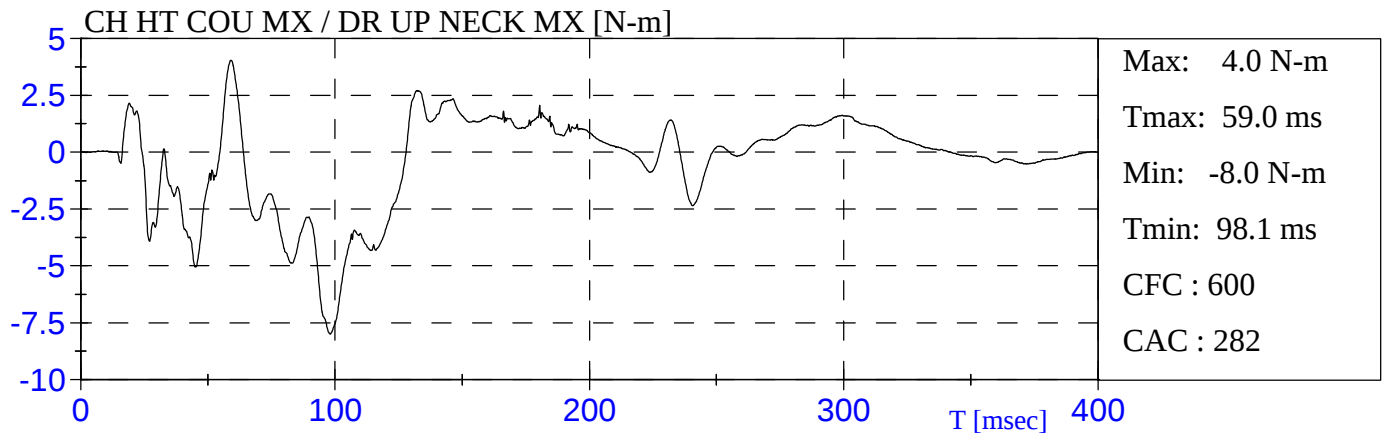


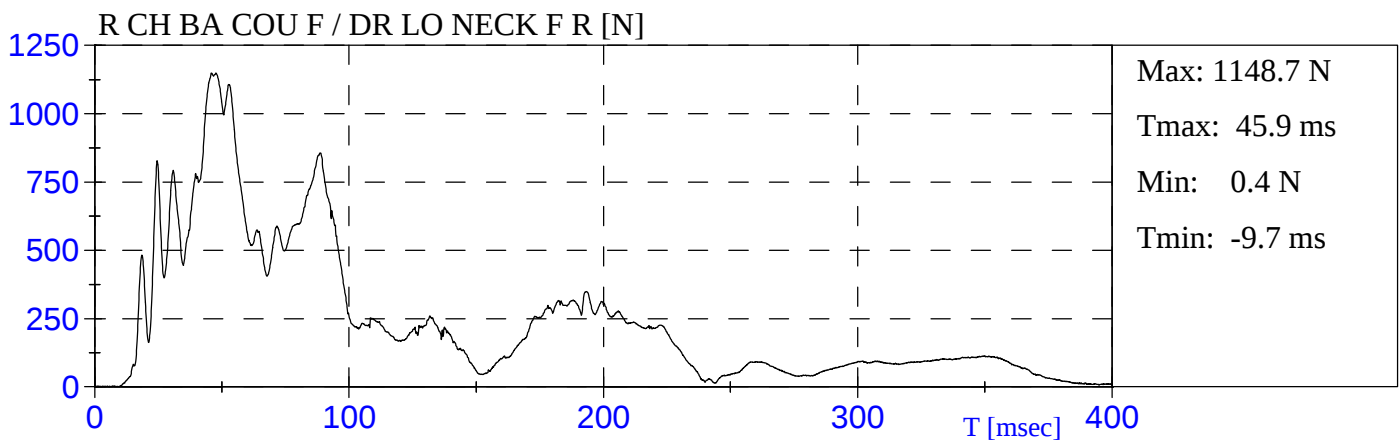
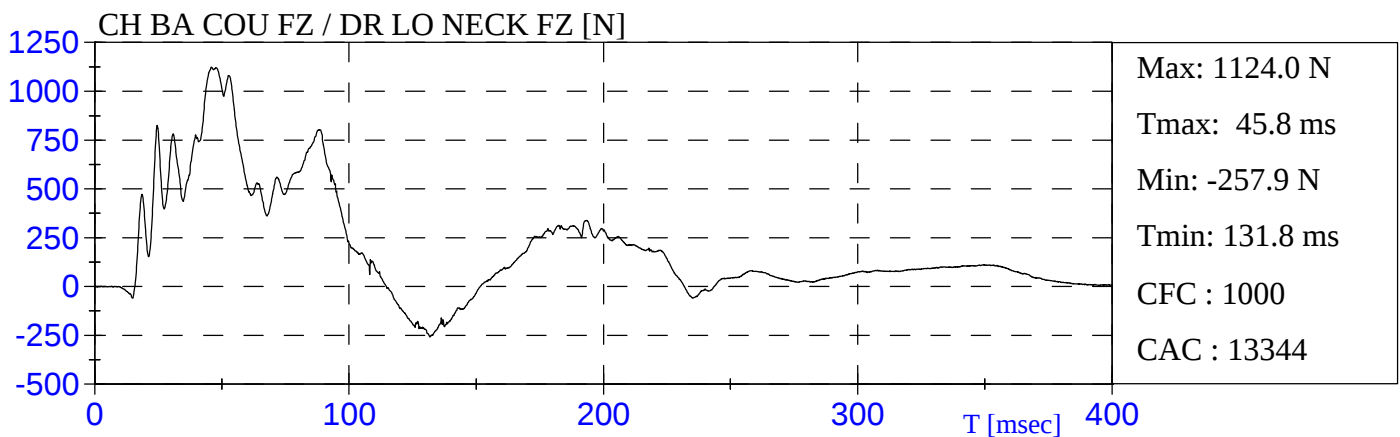
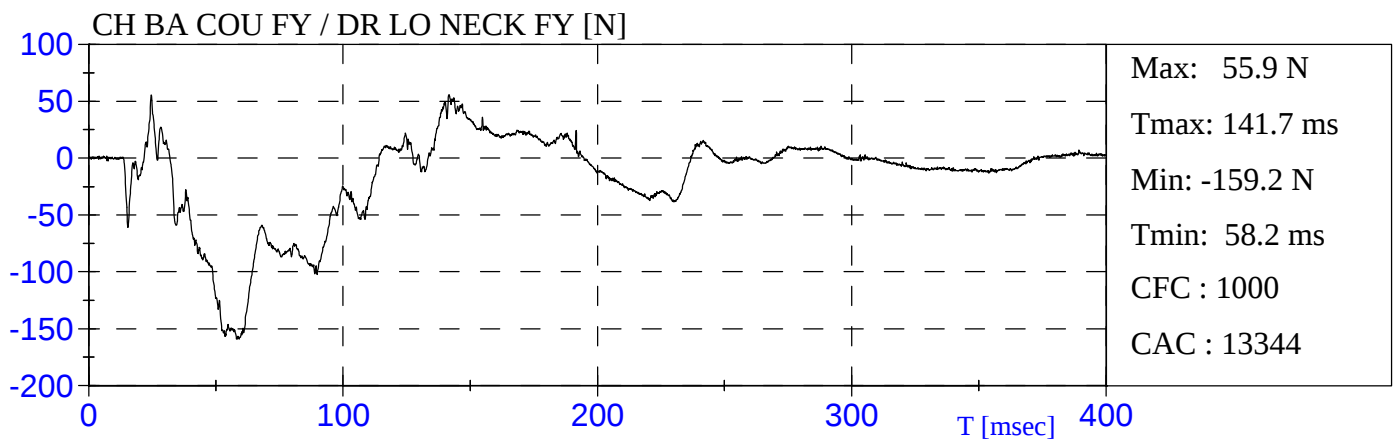
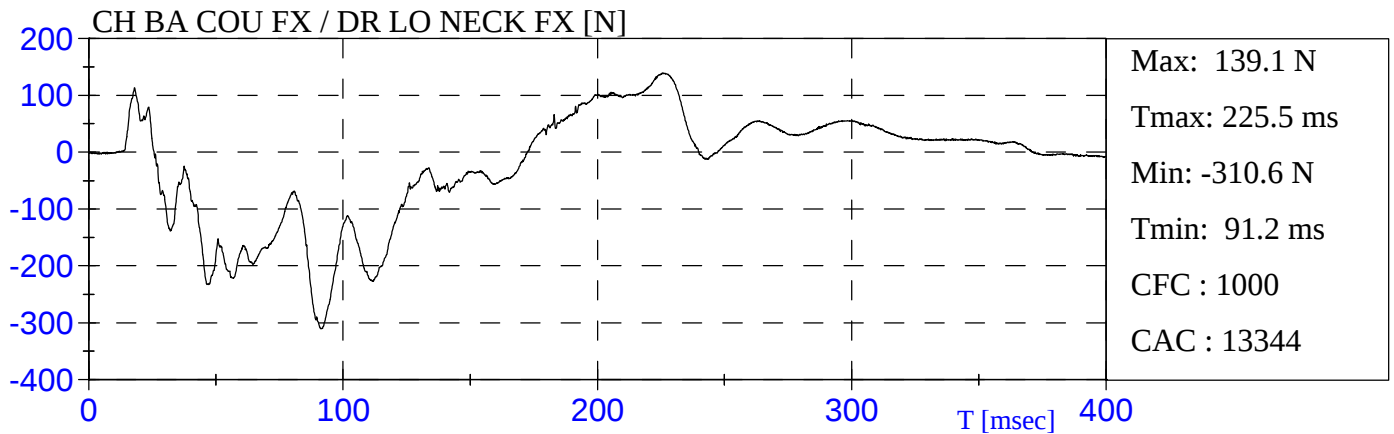
Nom du client Client Name	TRANSPORT CANADA
Type de véhicule Type of Vehicle	VOLKS TOUAREG 2004
Numéro de TC Tc Number	TC04-135
Numéro de contrat Contract No	04-6008
Acquisition de données selon Data Acquisition according to	SAE J211/1 MAR 95
Date de l'essai Test date	2004-03-18
Titre du projet Project Title	COLLISION DE RECHERCHE COLLISION FRONTALE RESEARCH COLLISION TEST FRONTAL CRASH
MANNEQUIN / DUMMY	
Chauffeur Driver	HYBRID III 5% F IR
Passager Passenger	HYBRID III 5% F IR
Passager 1 (arrière gauche) Passenger 1 (rear left)	HYBRID III 6Y
Passager 2 (arrière droit) Passenger 2 (rear right)	HYBRID III 6Y

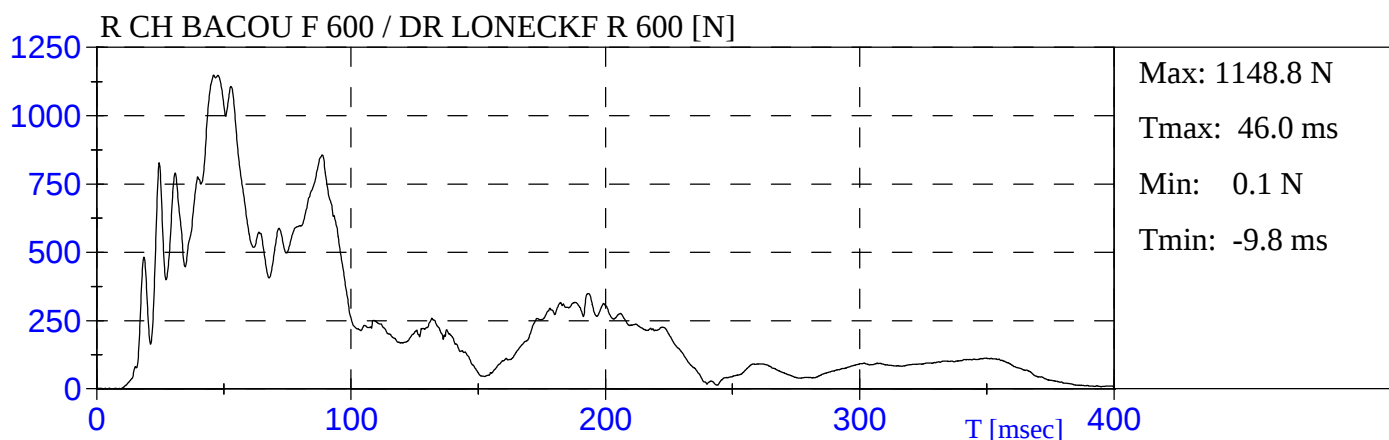
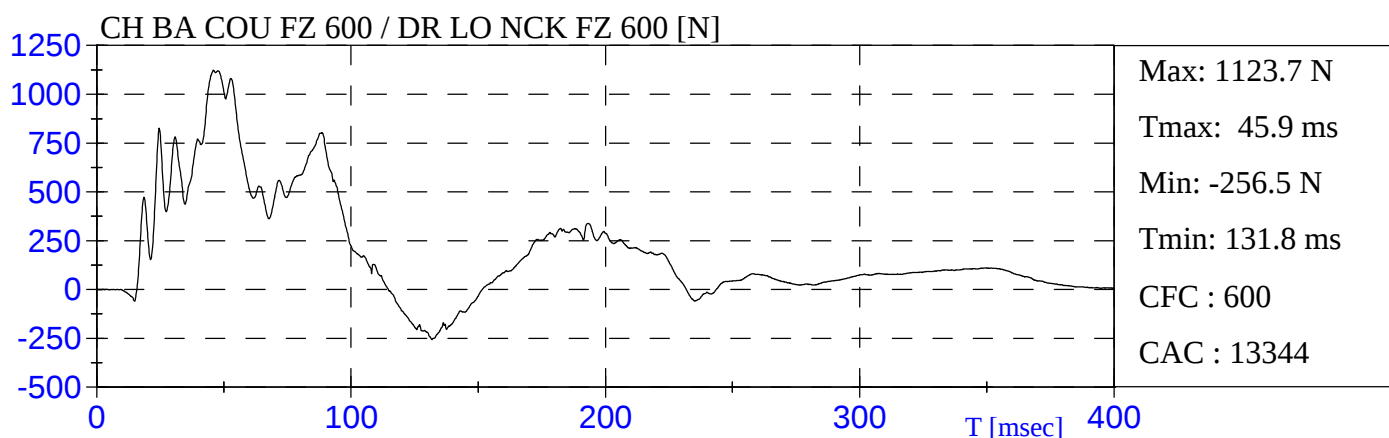
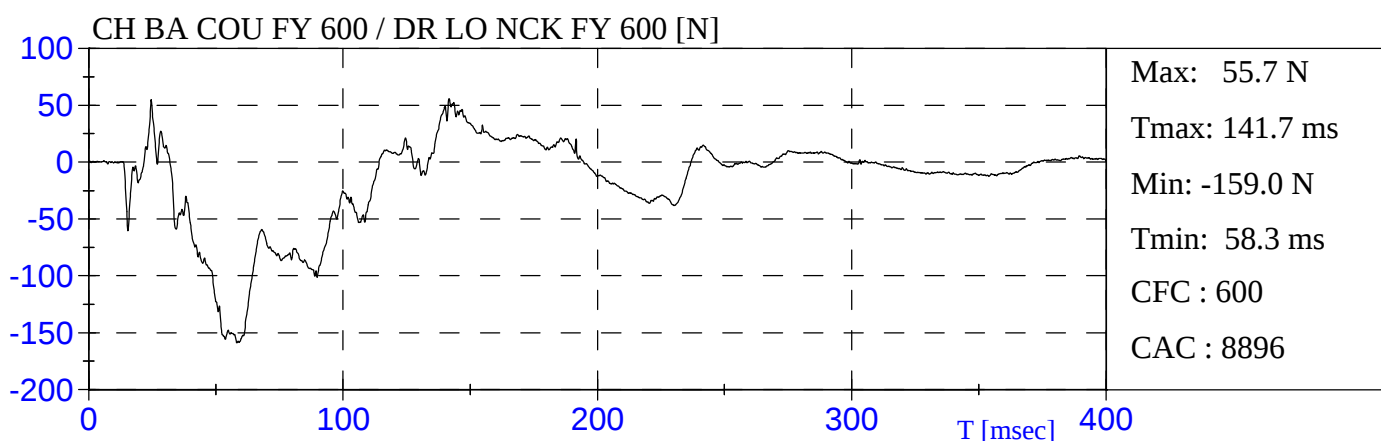
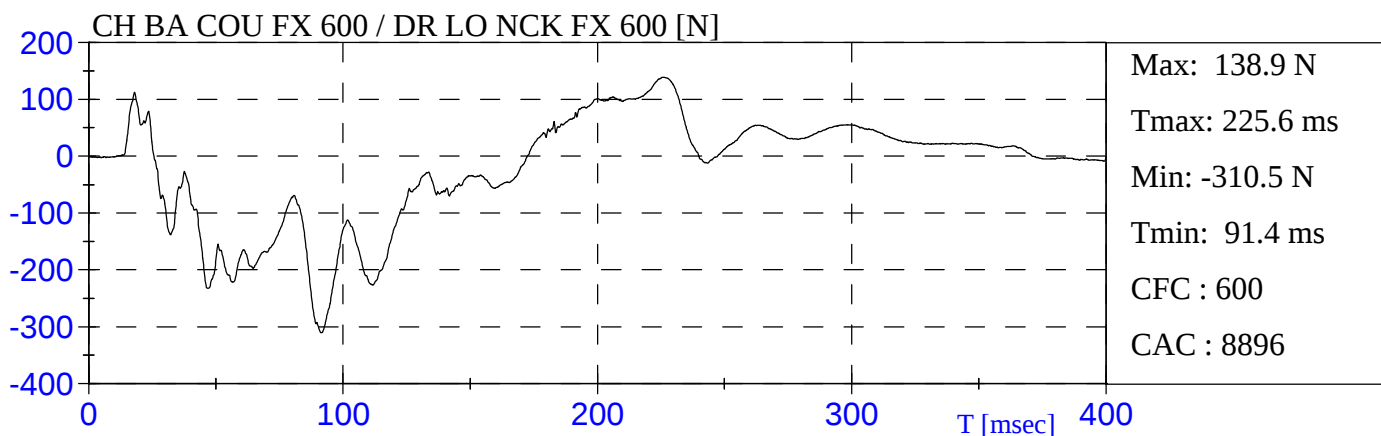


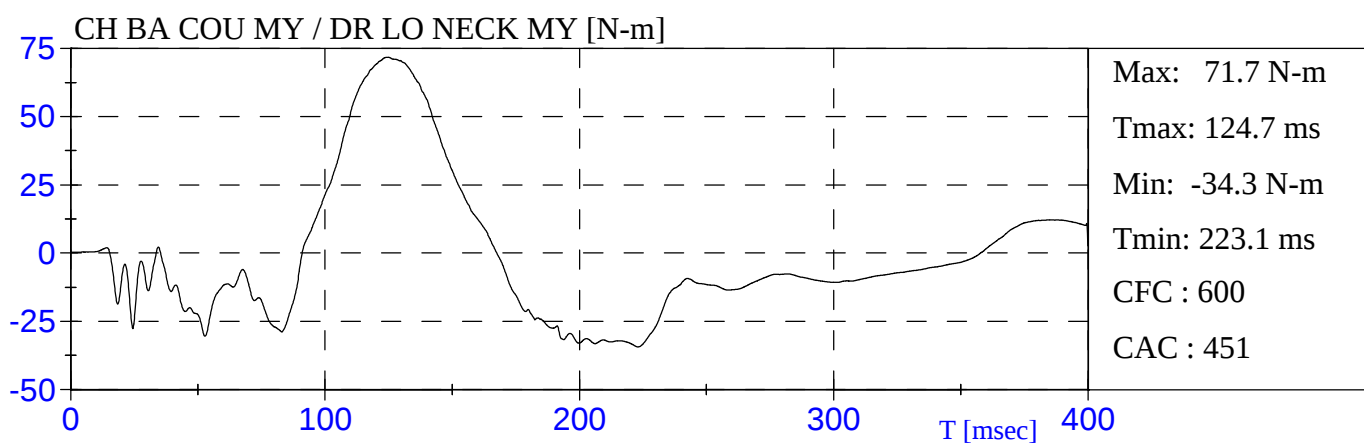
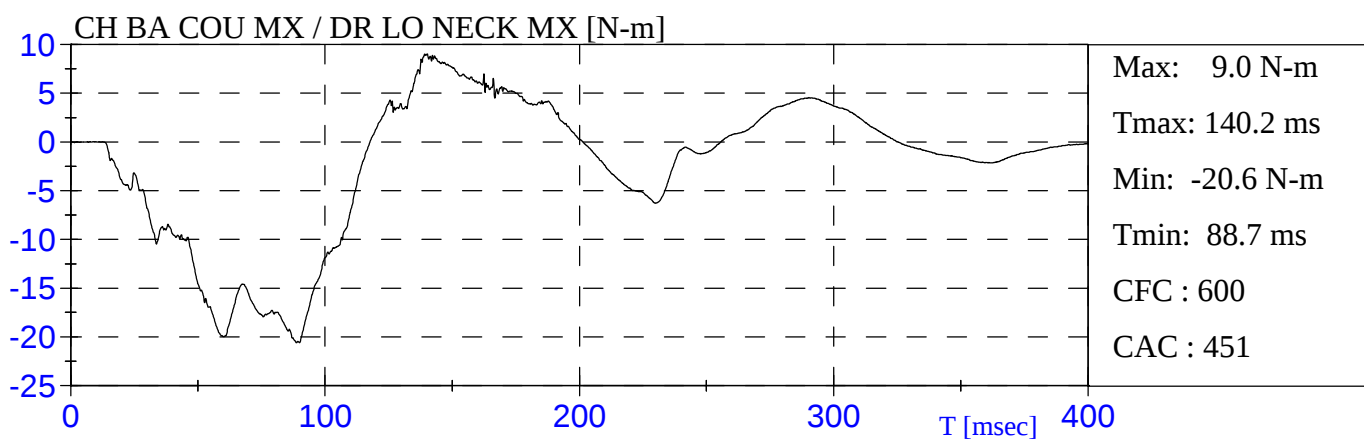


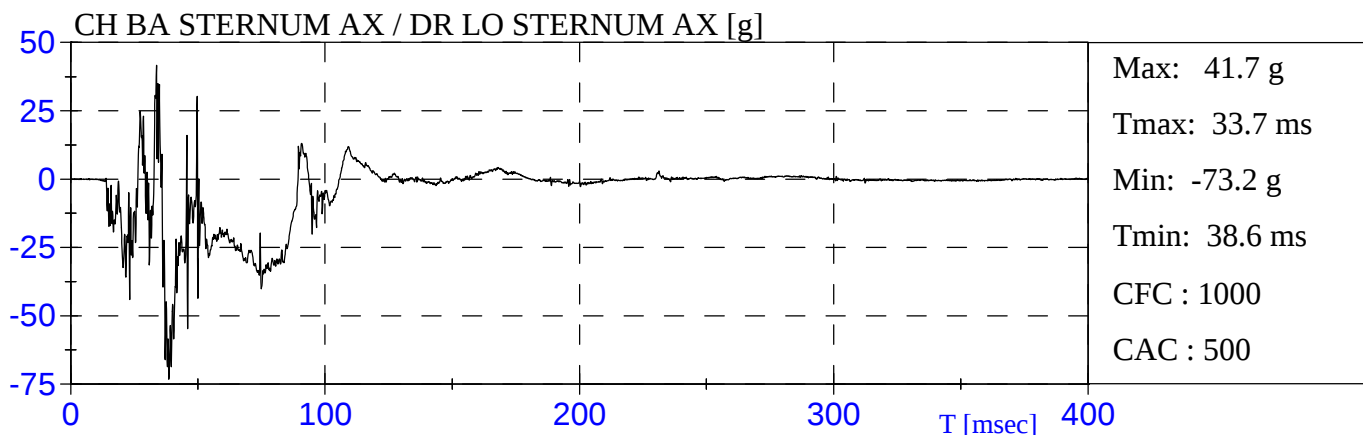
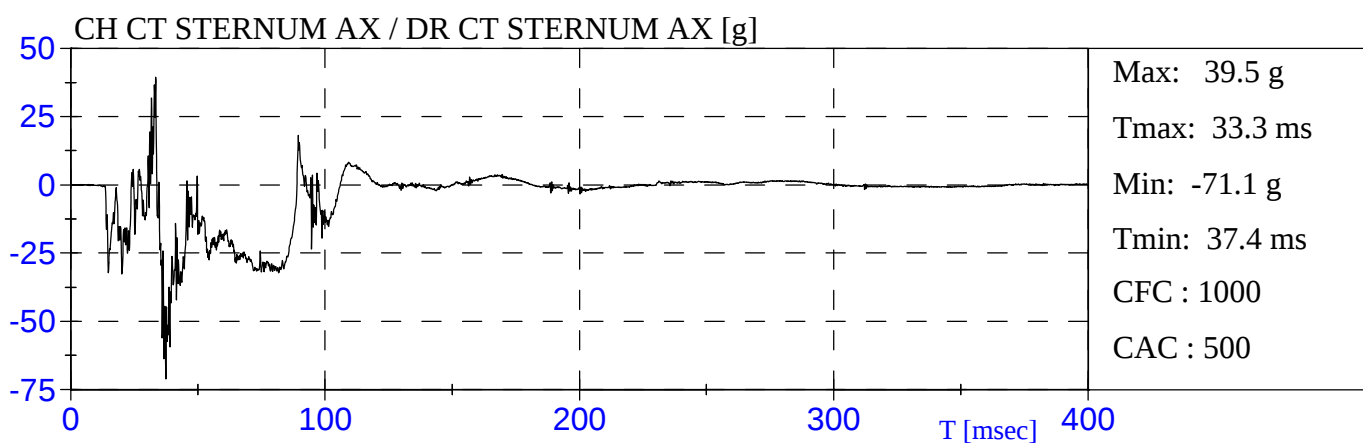
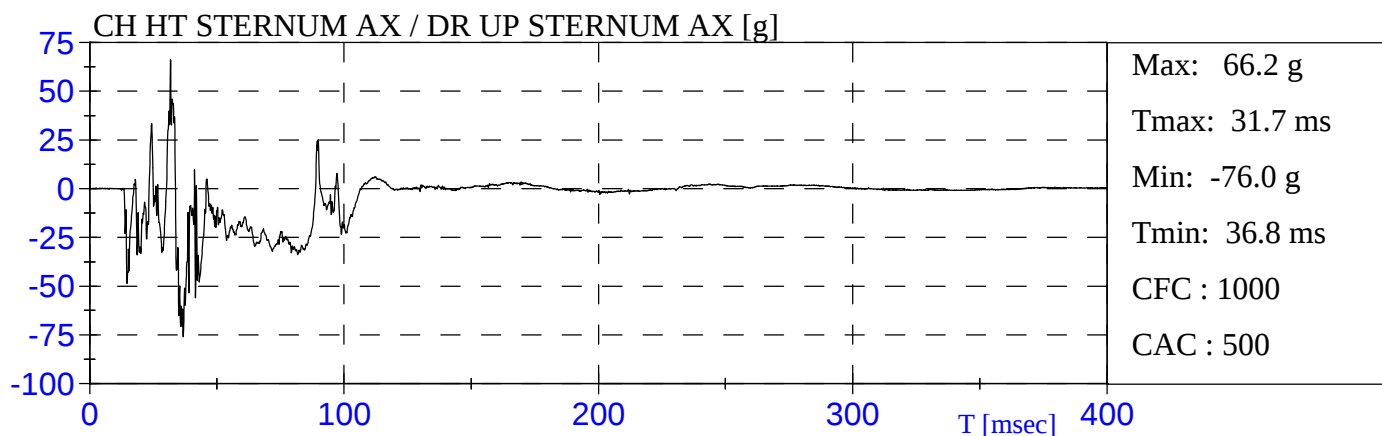


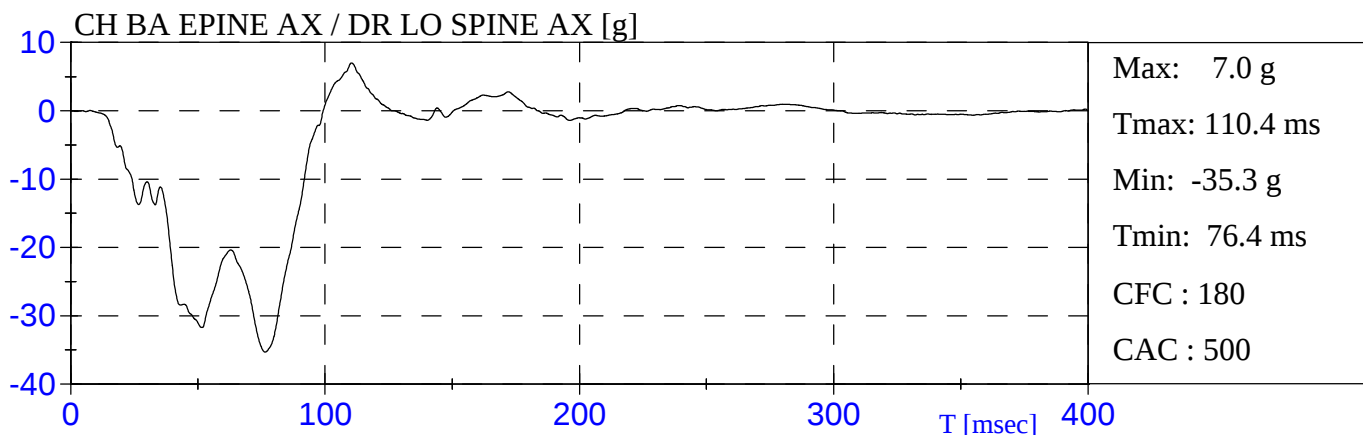
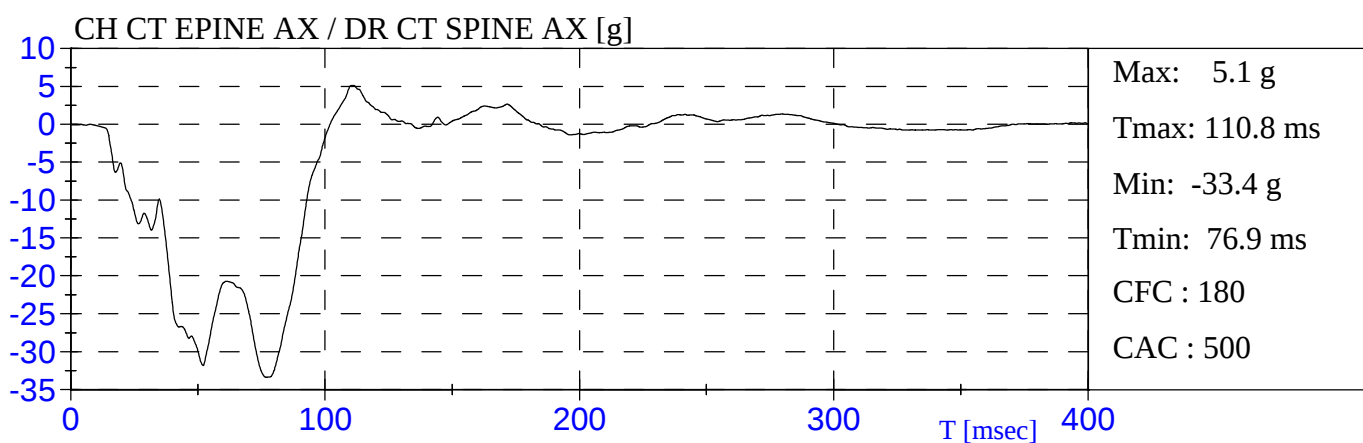
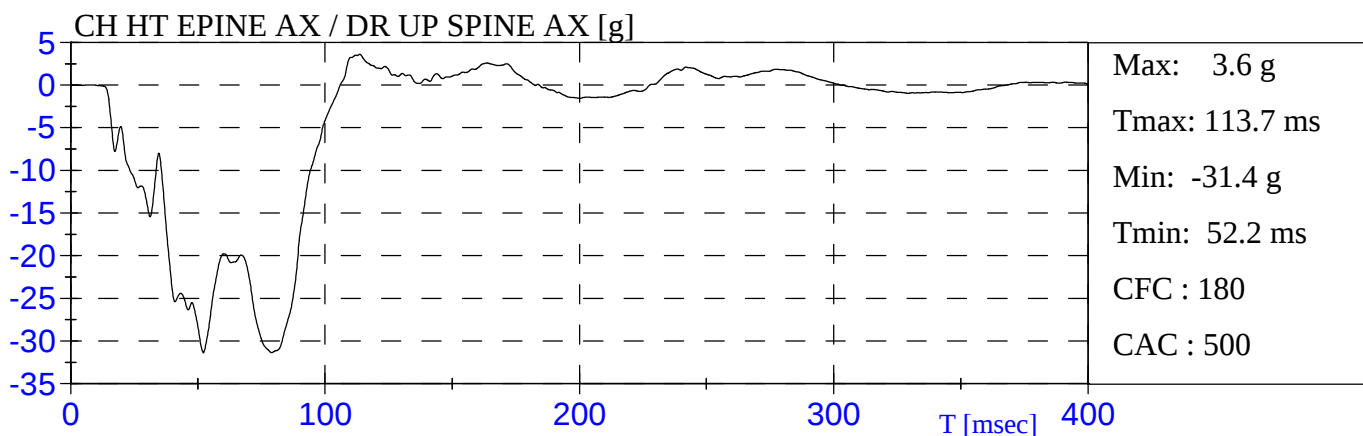


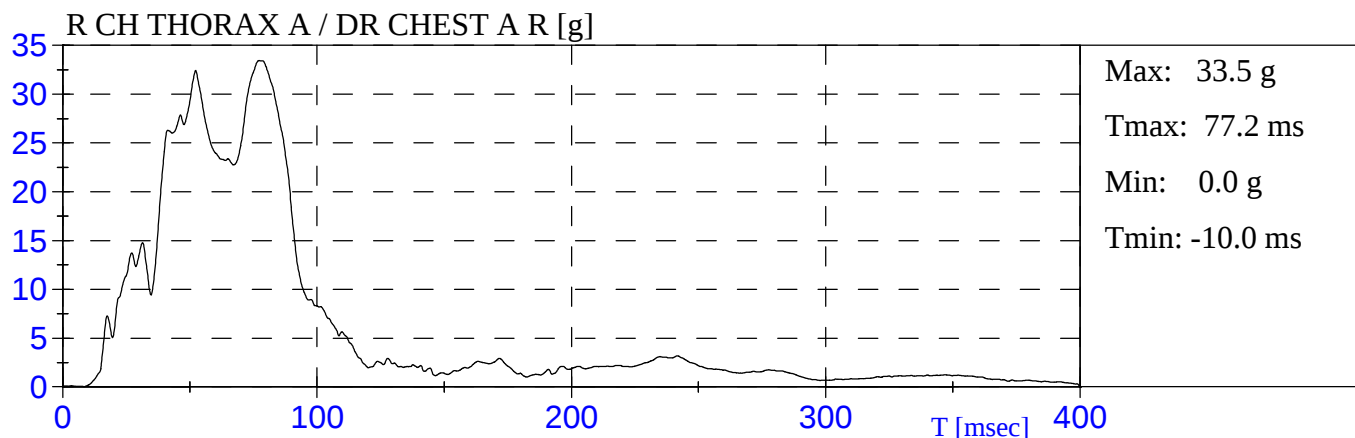
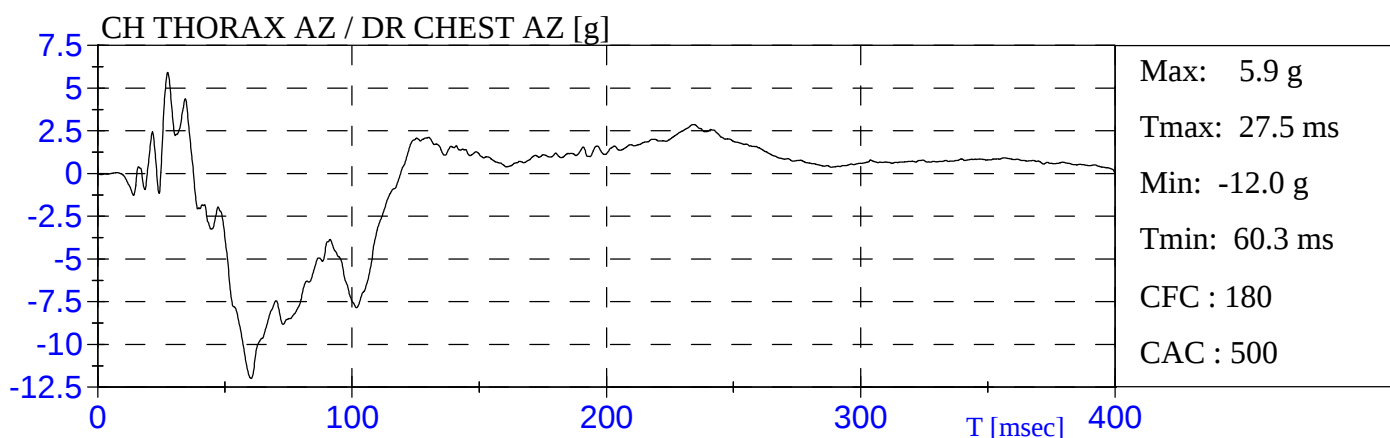
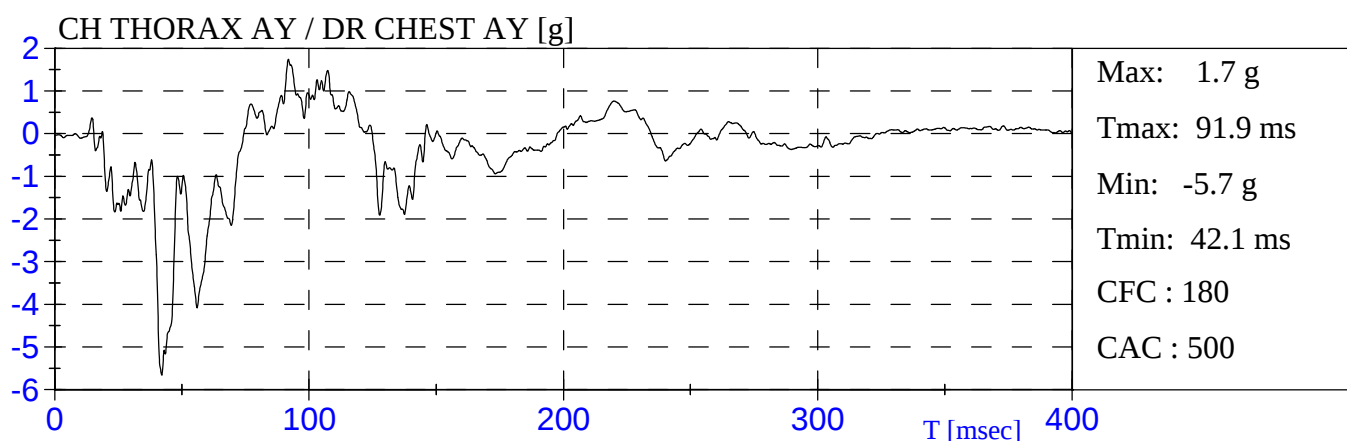
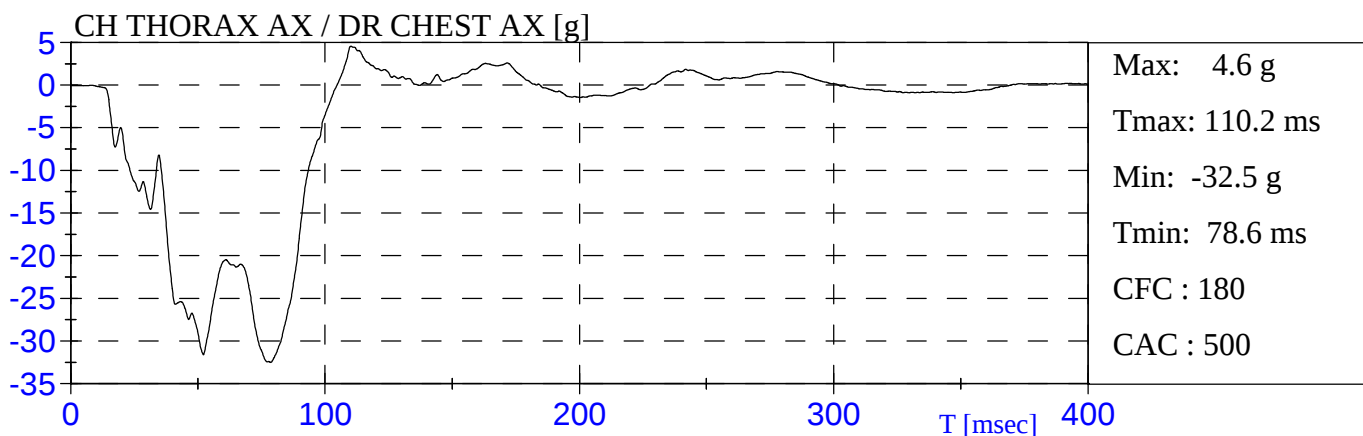


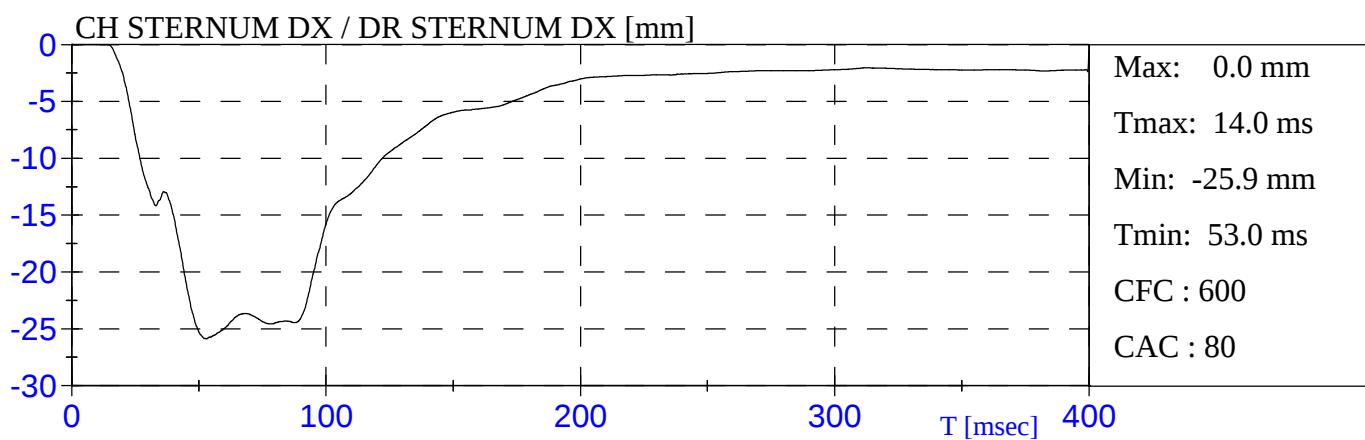


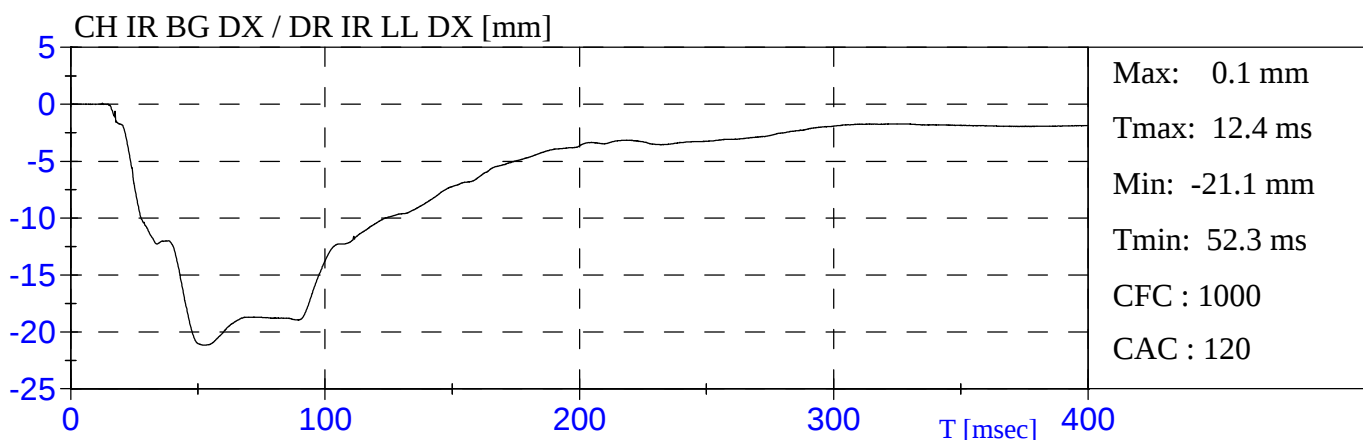
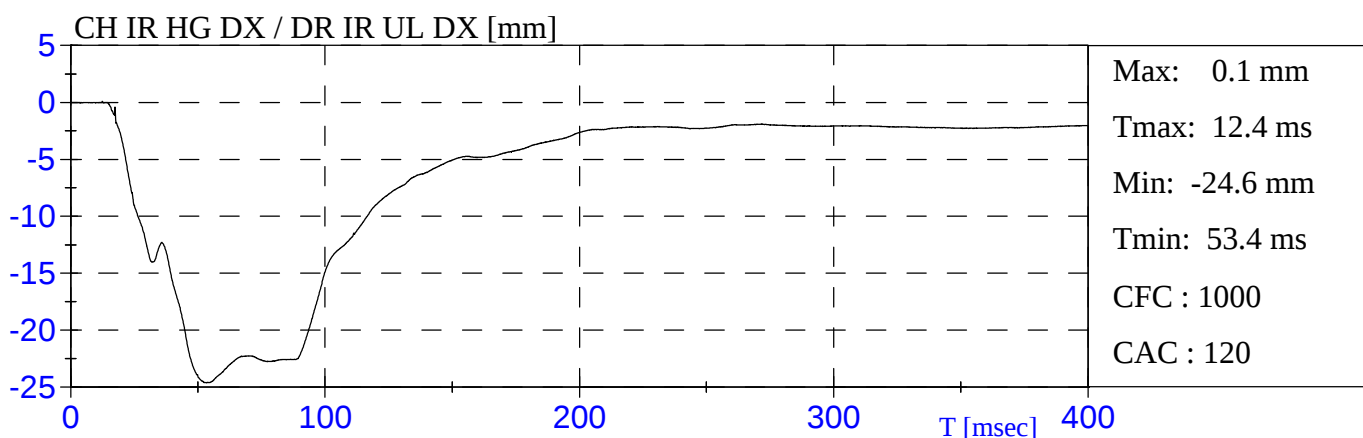
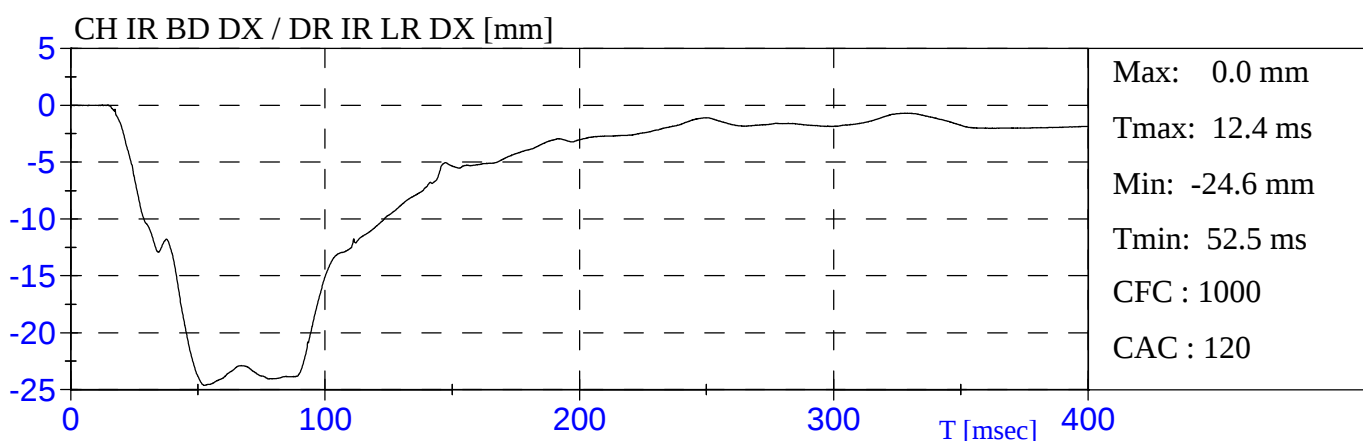
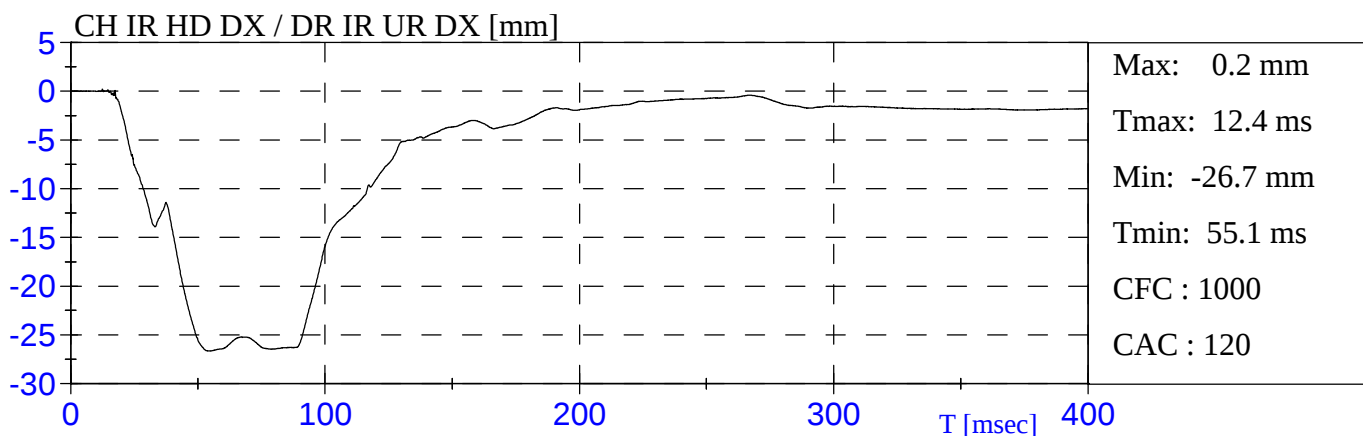


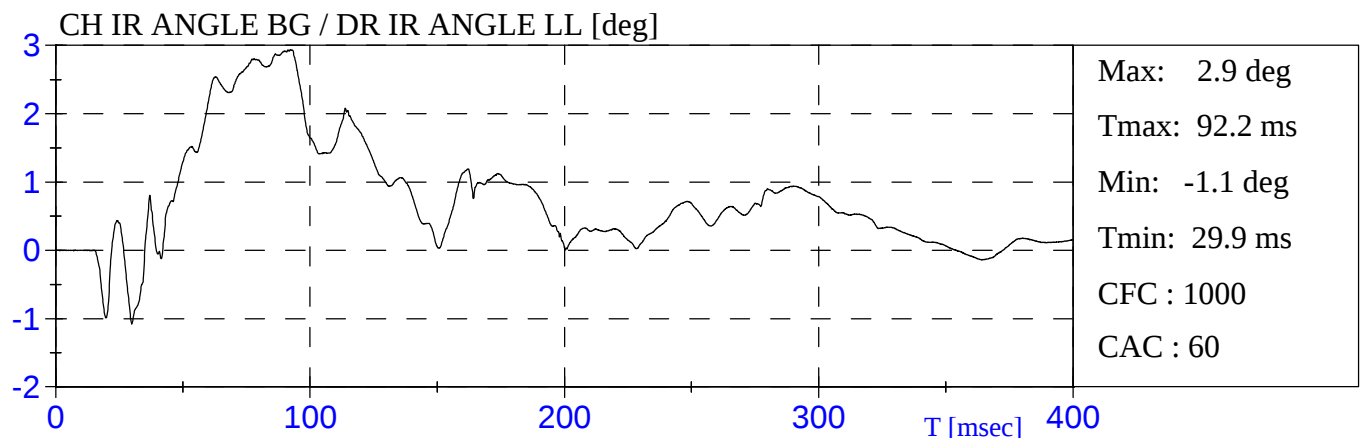
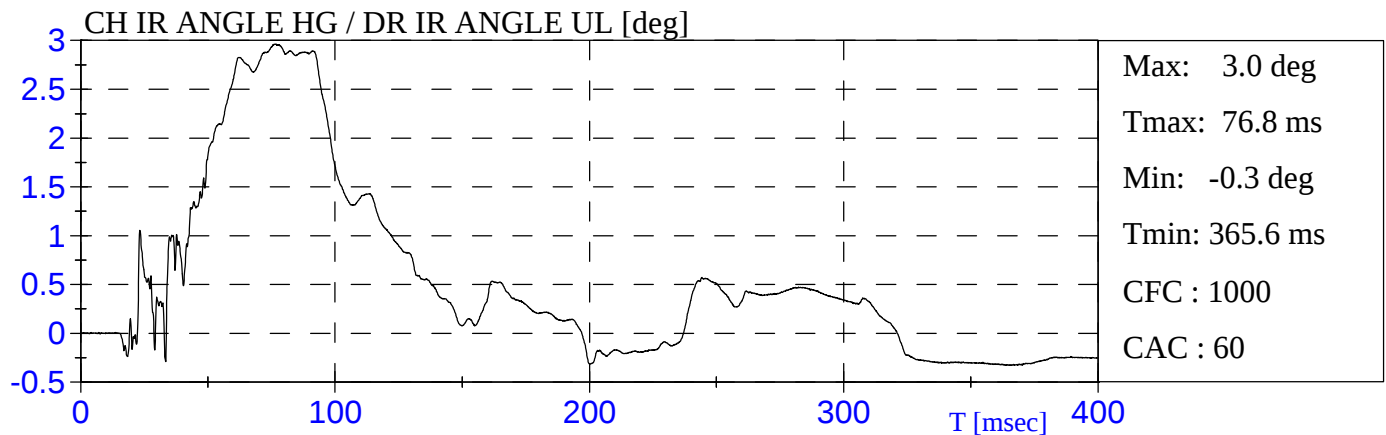
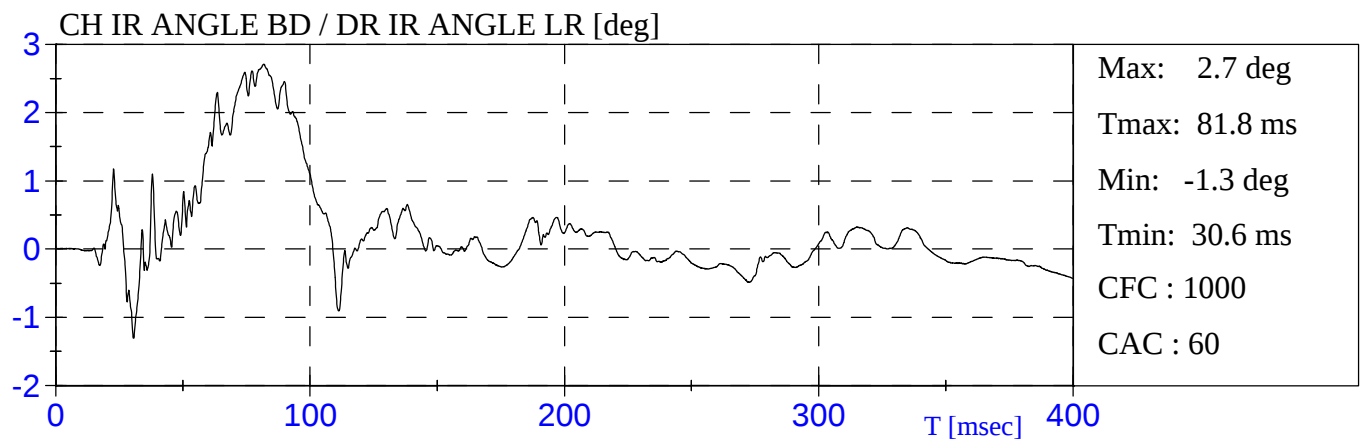
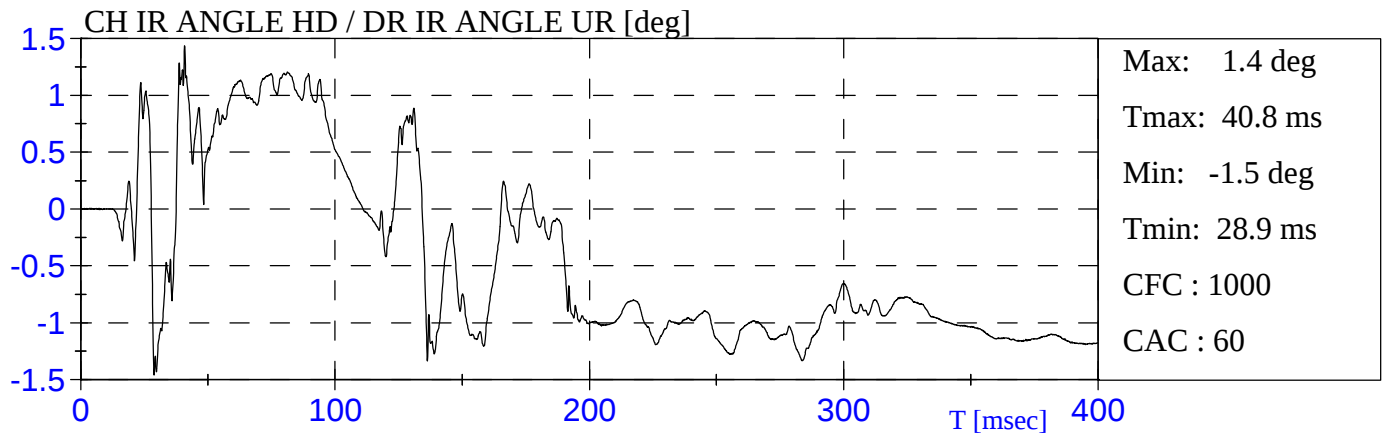


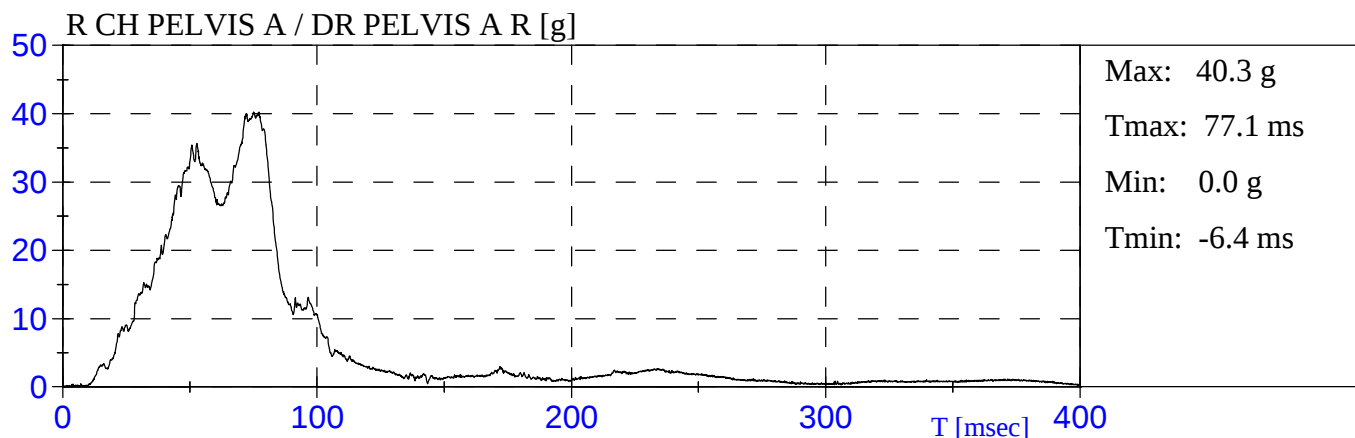
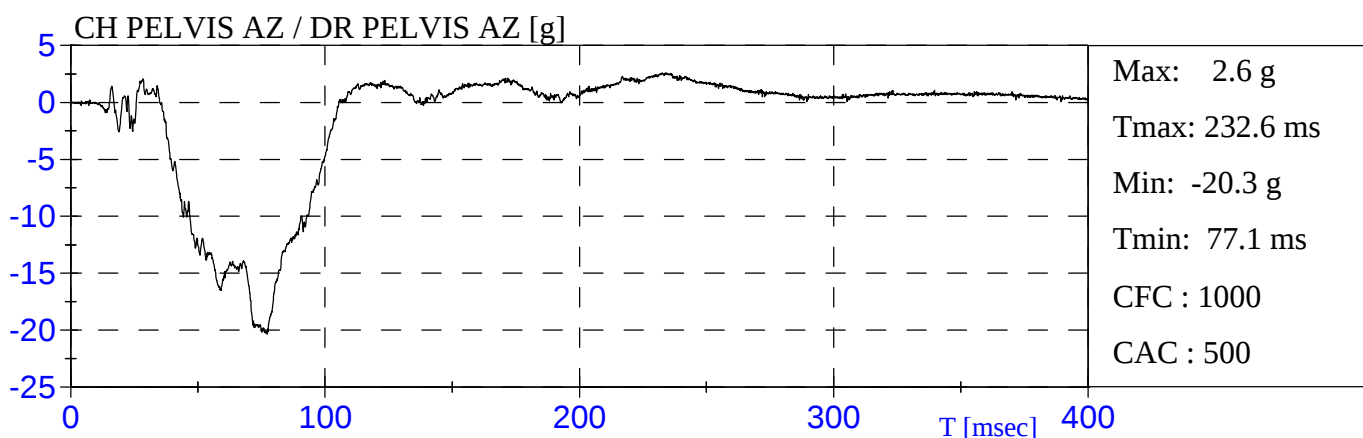
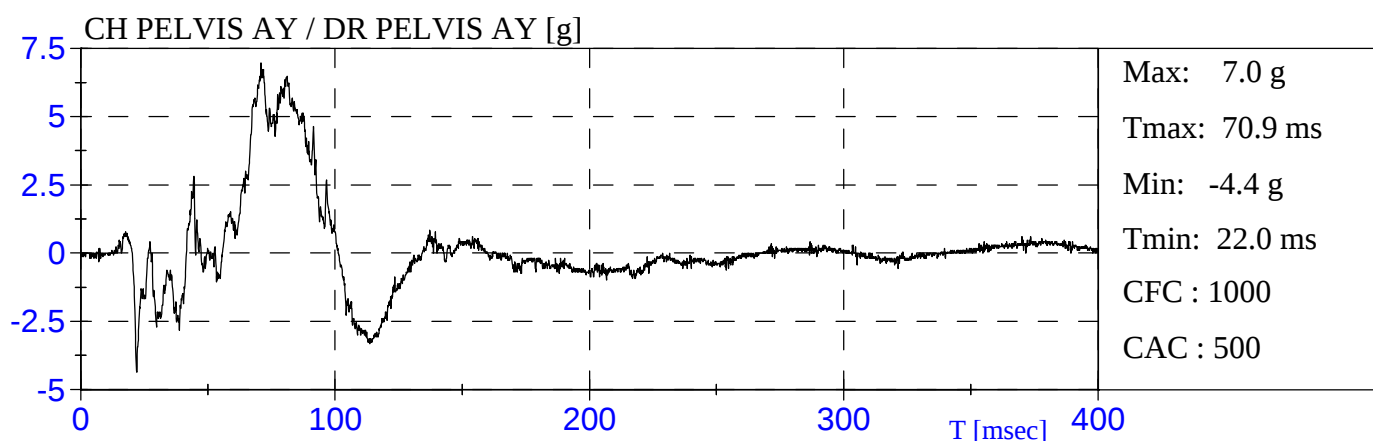
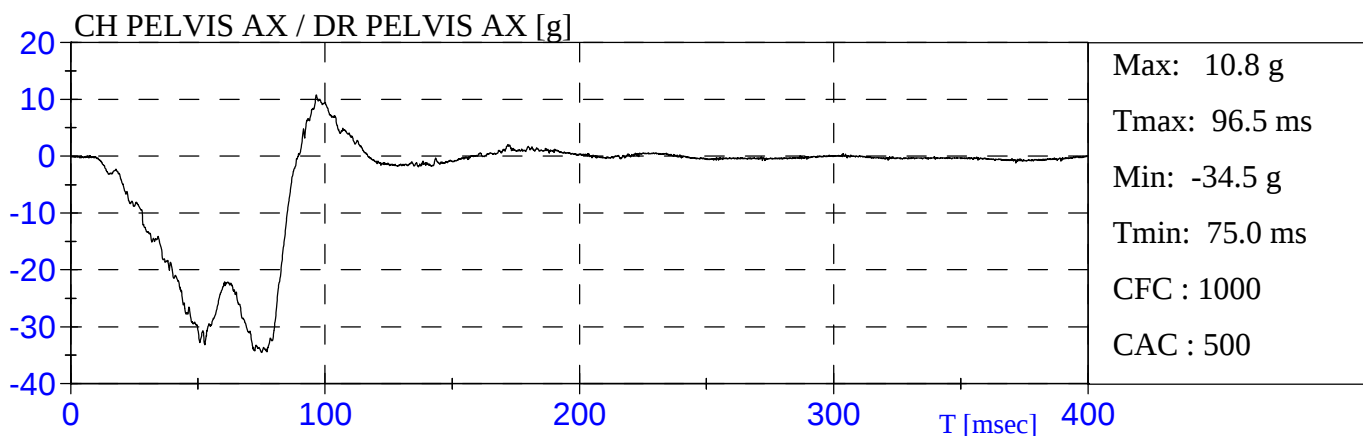


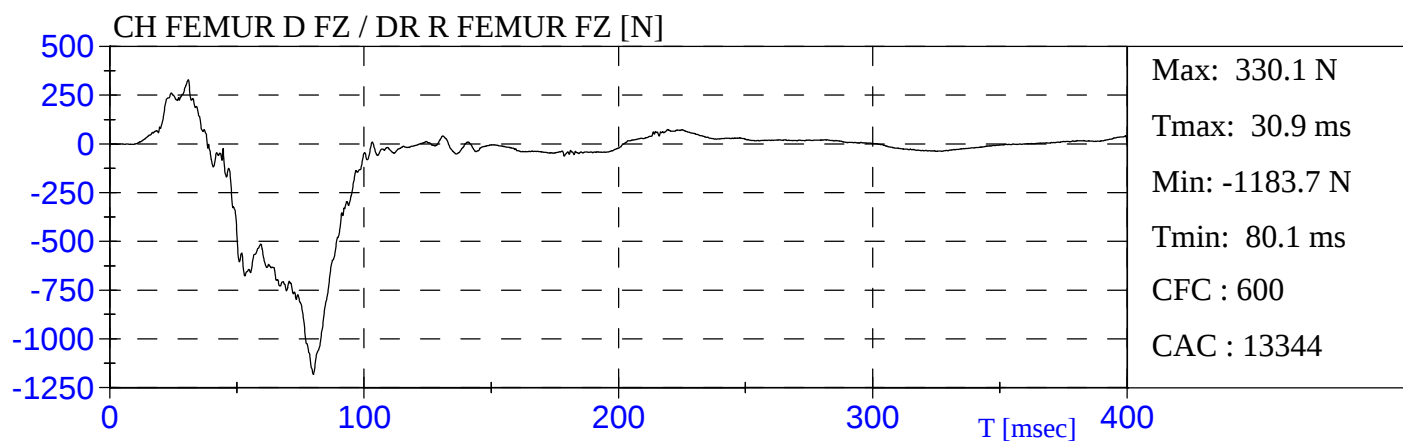
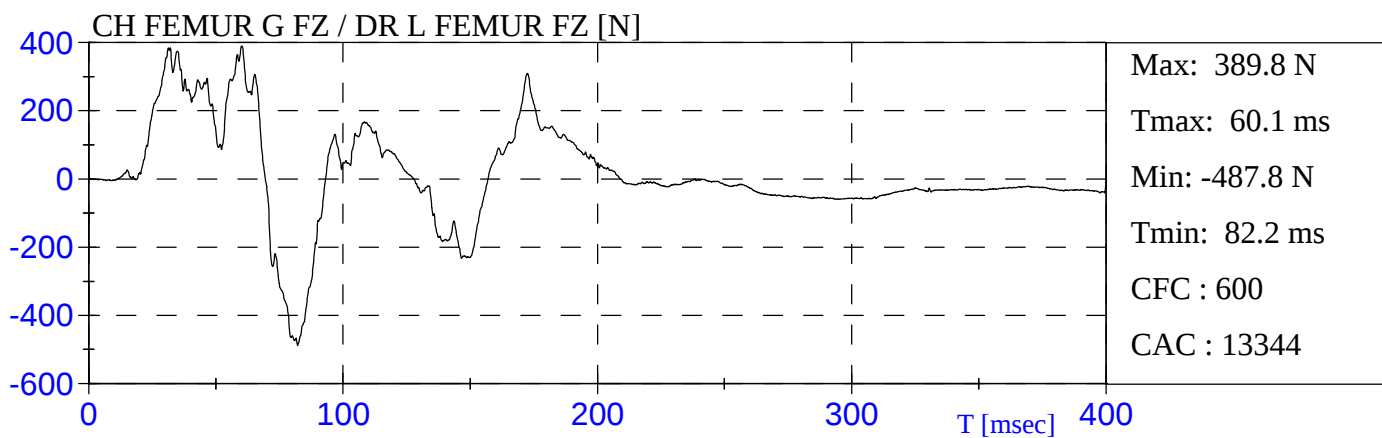


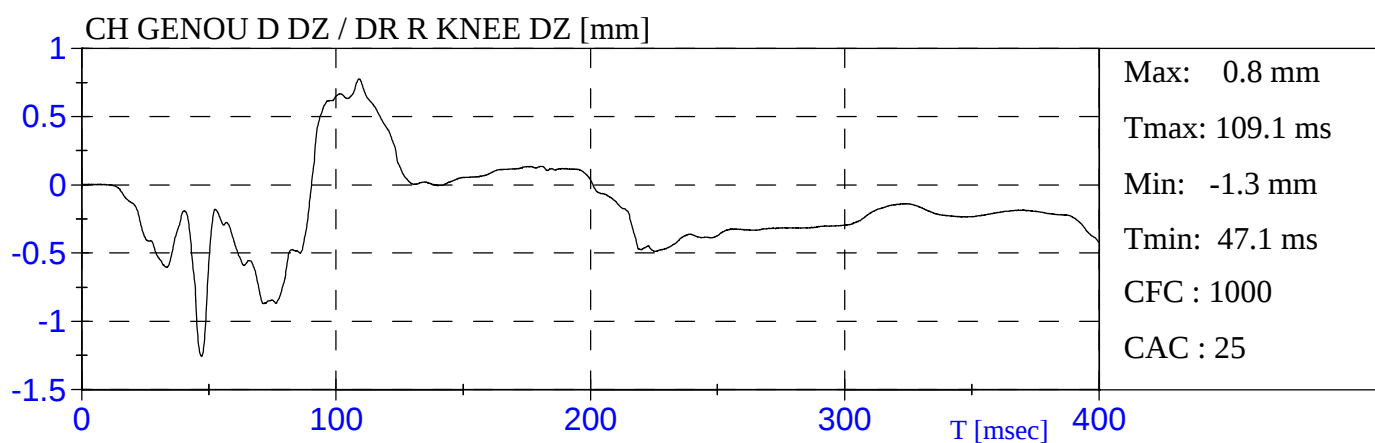
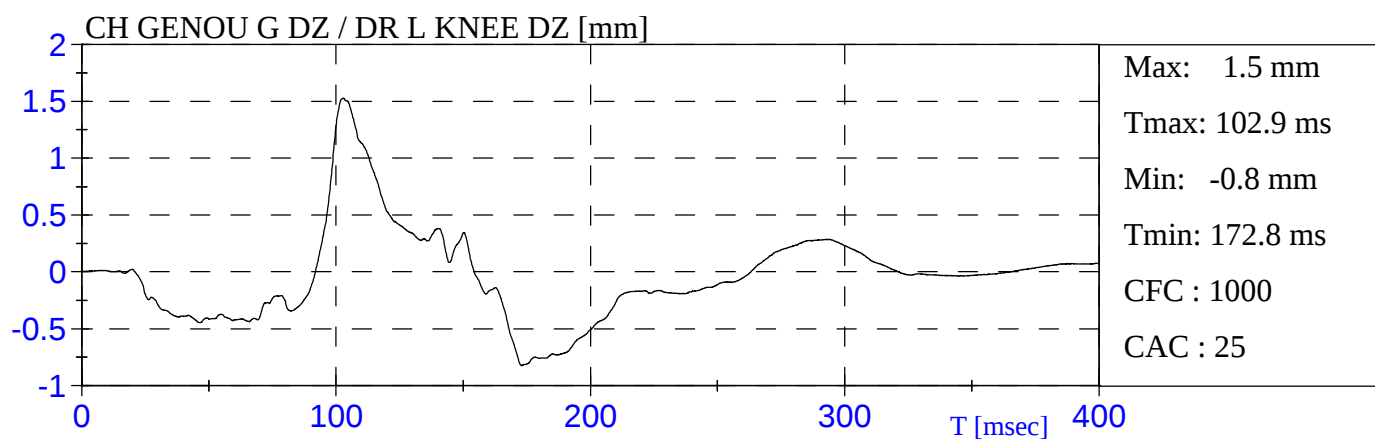


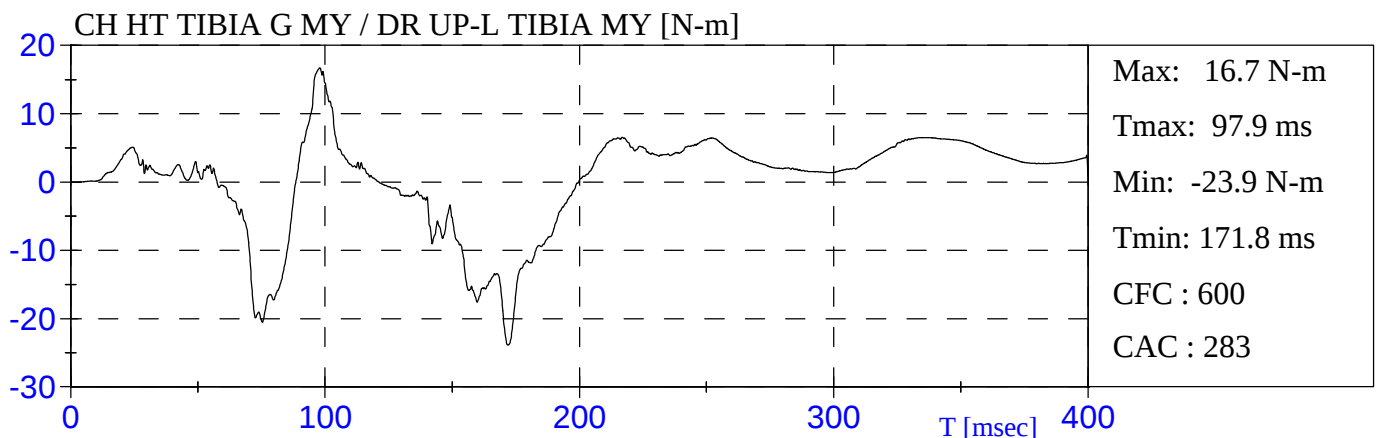
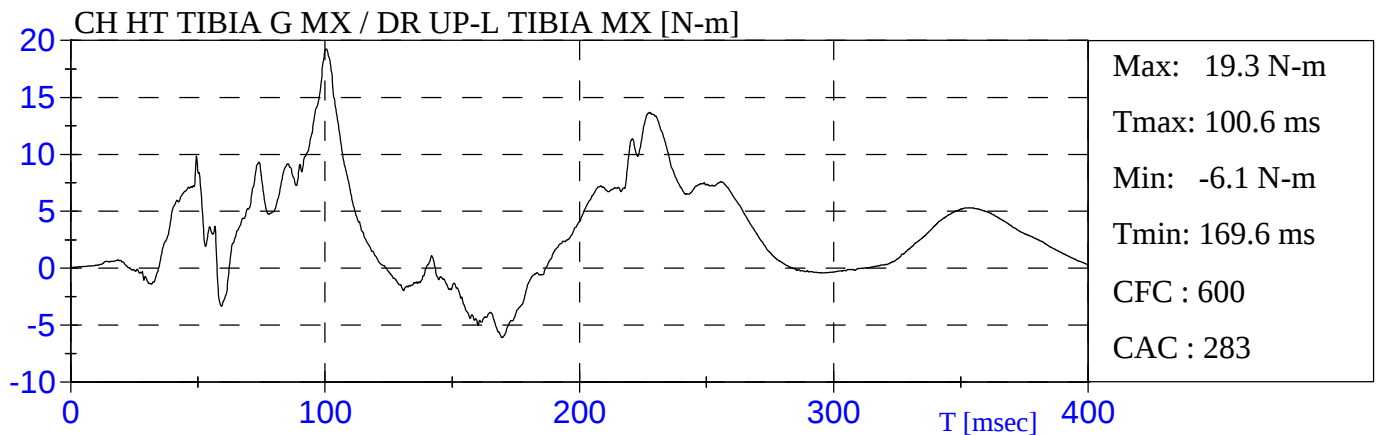
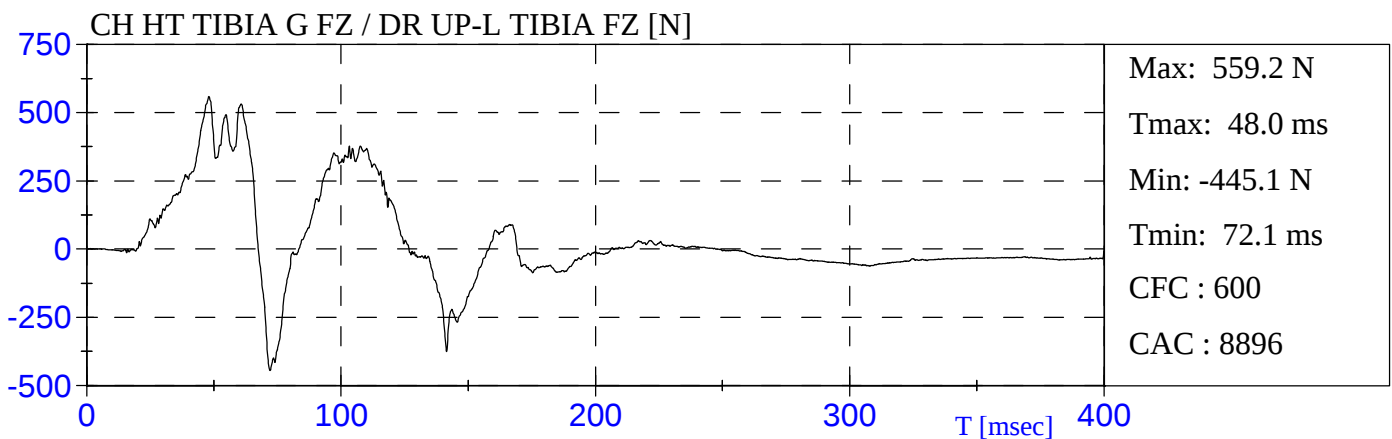
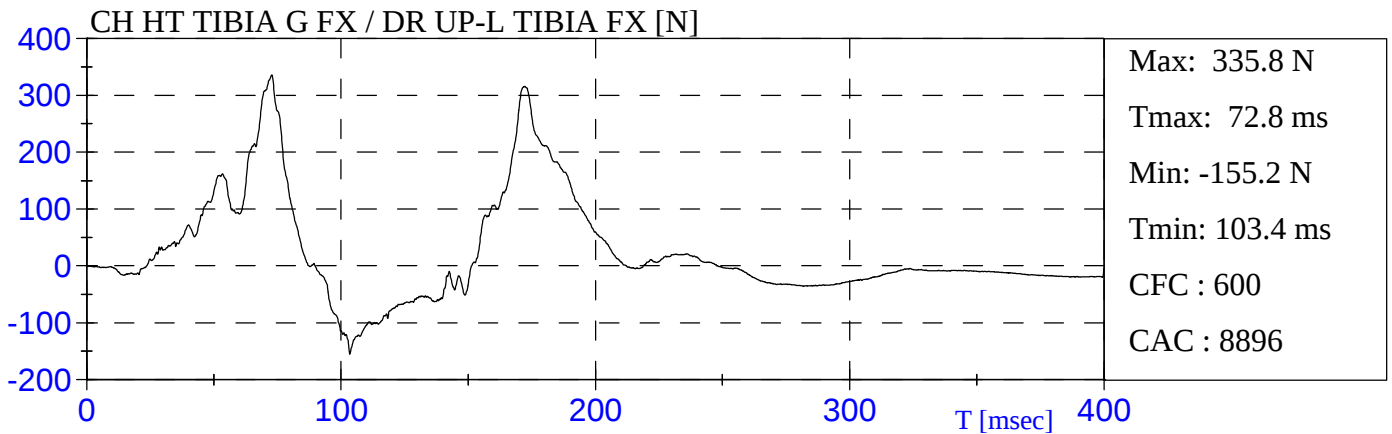


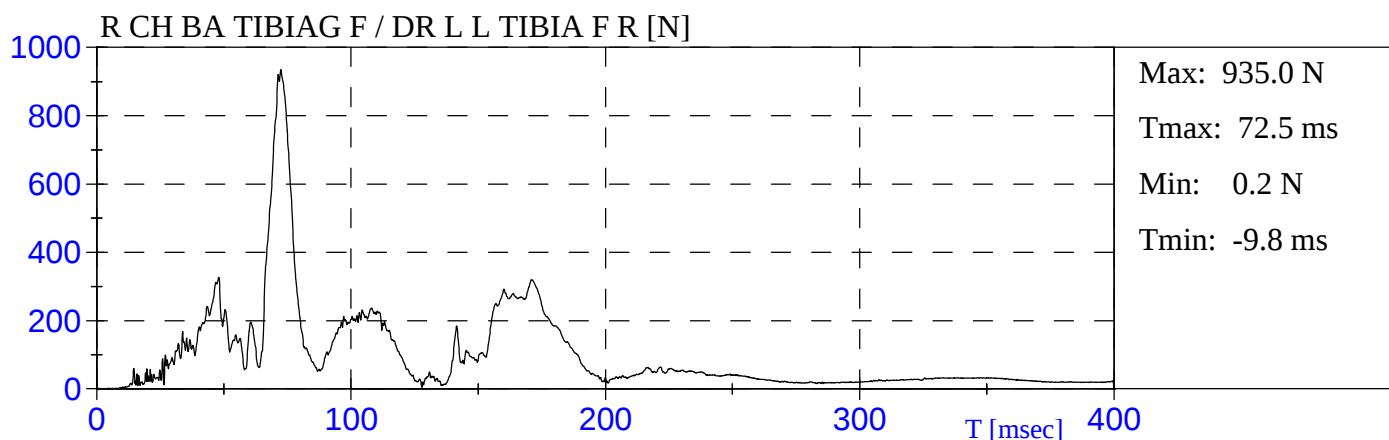
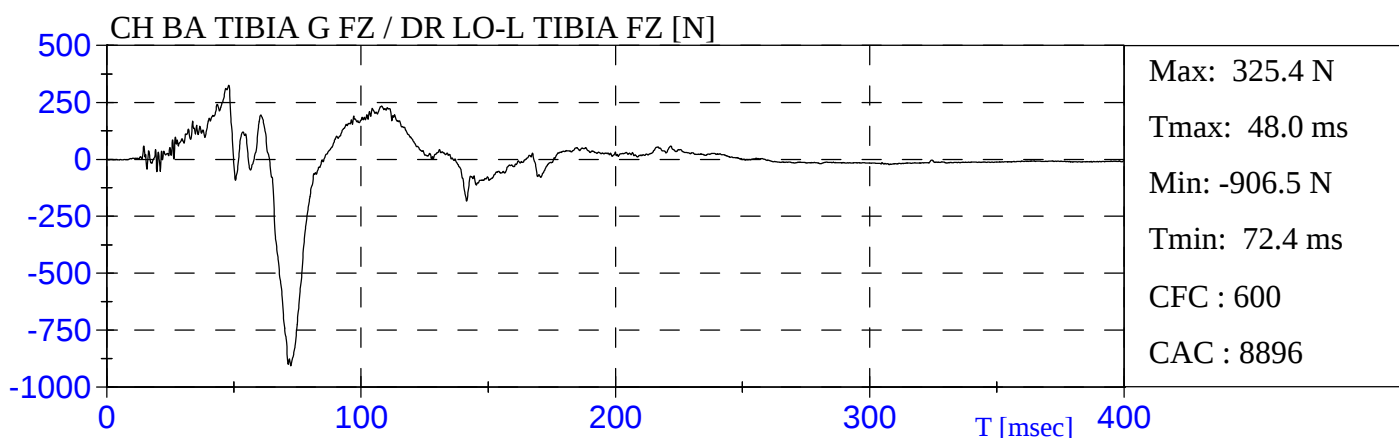
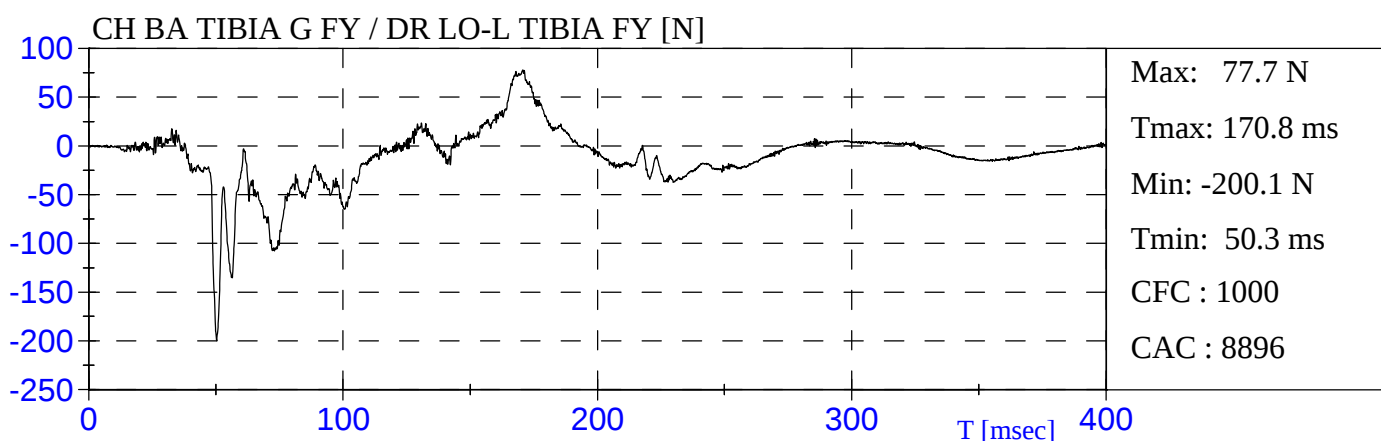
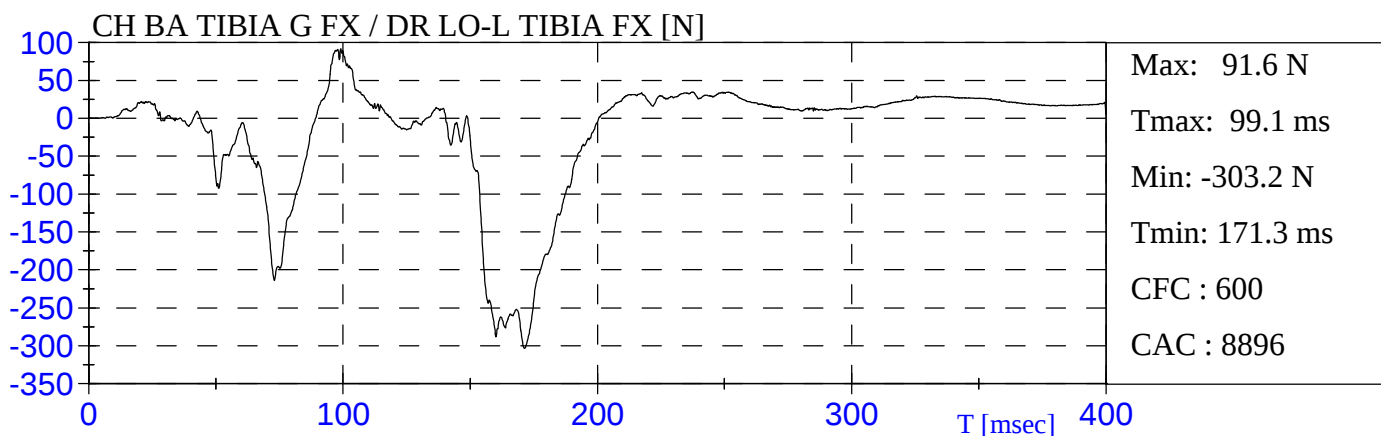


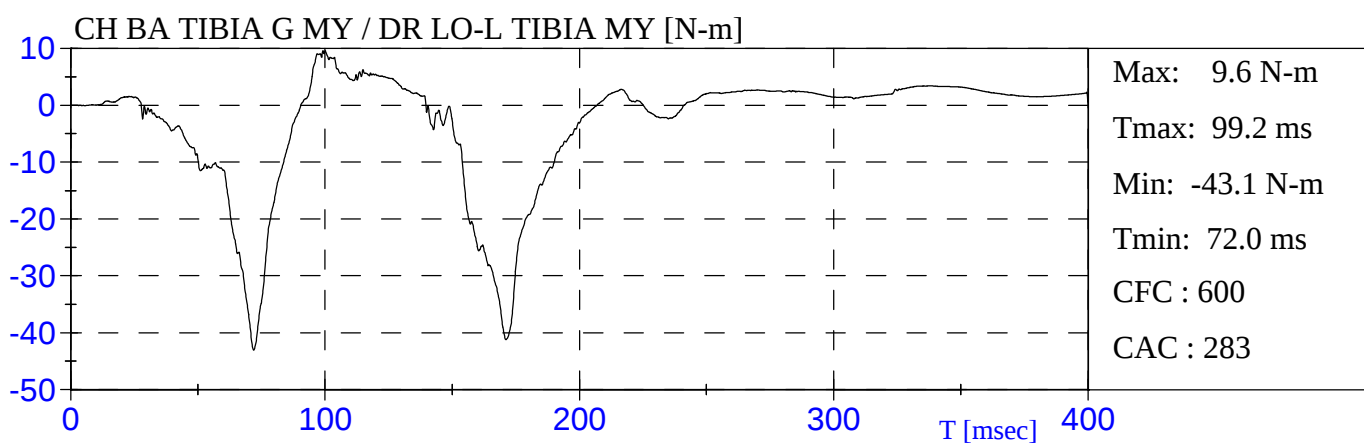
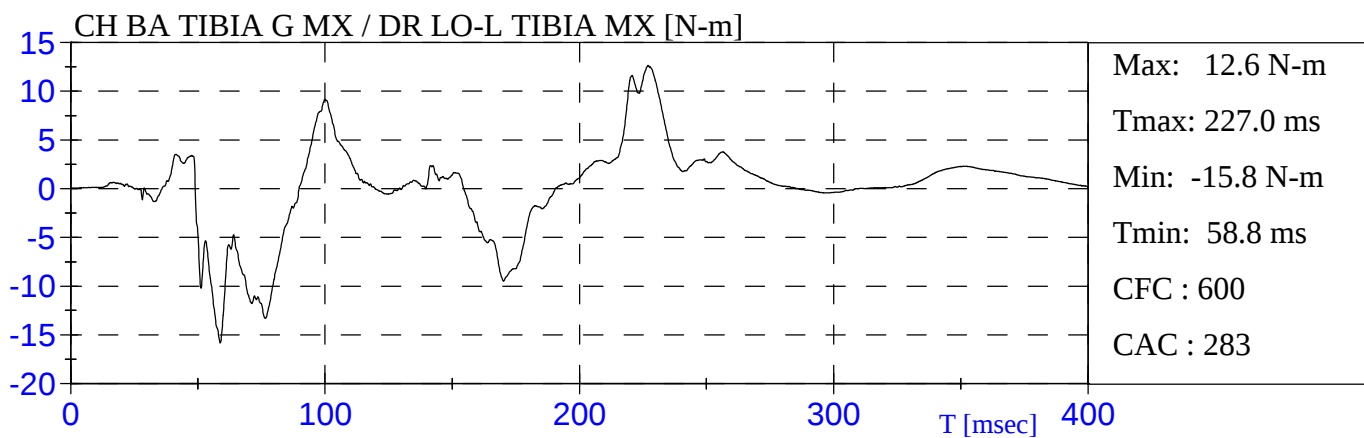


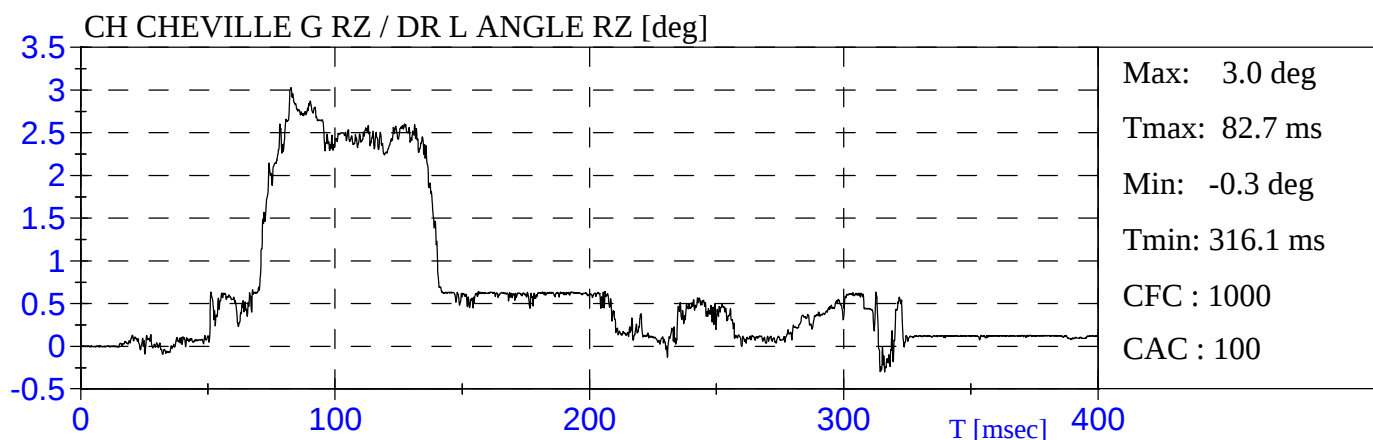
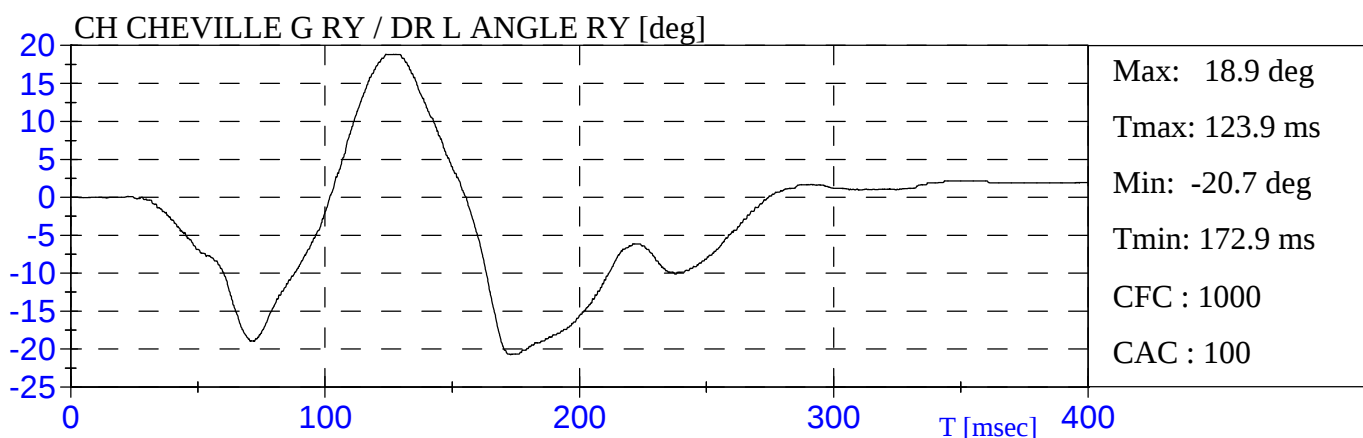
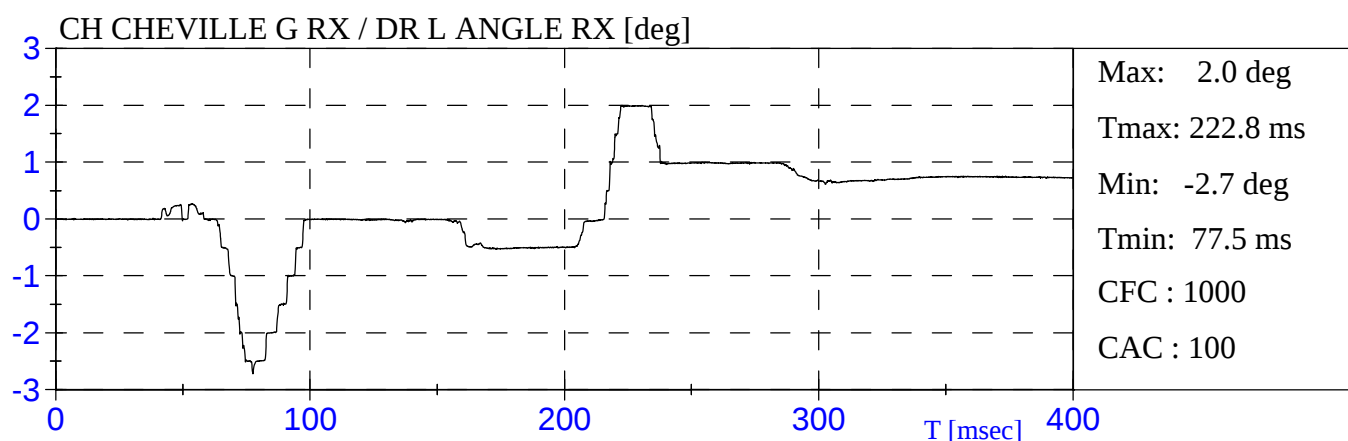
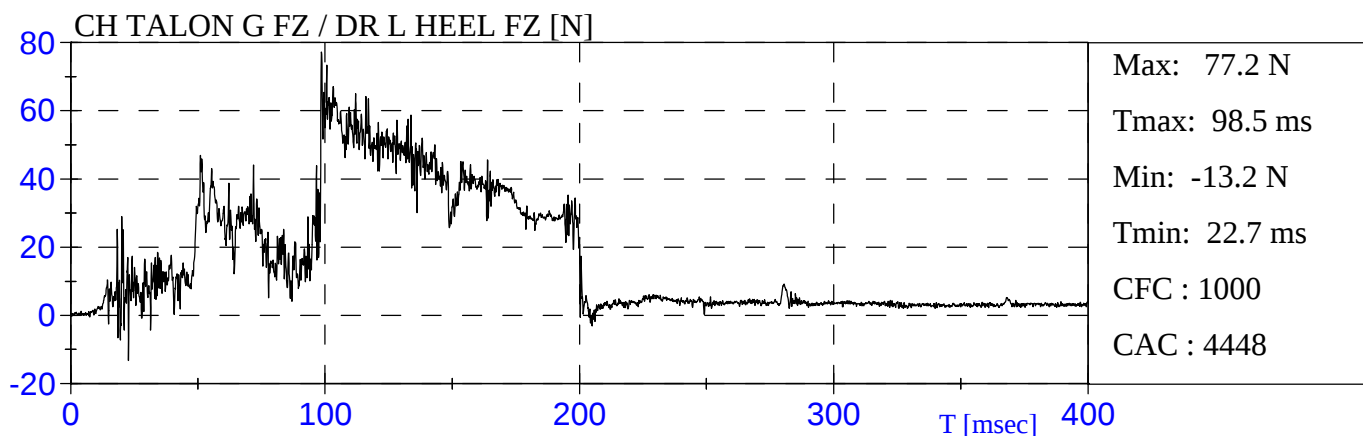


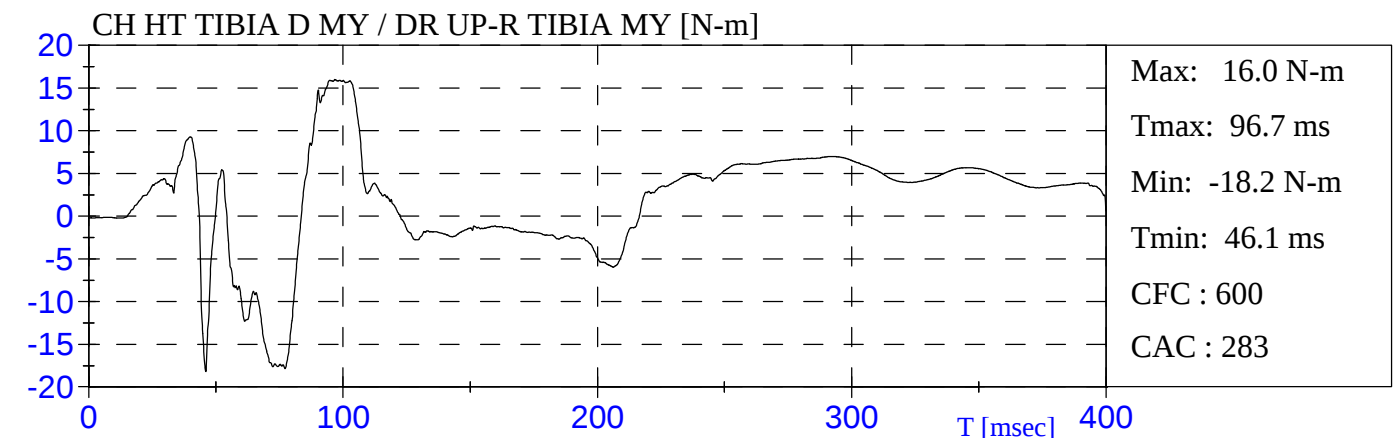
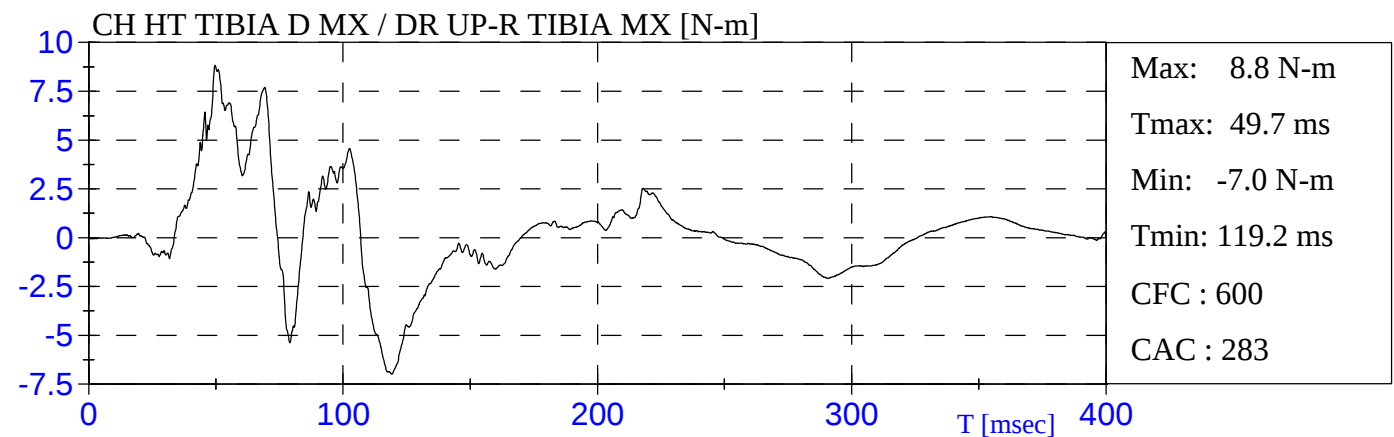
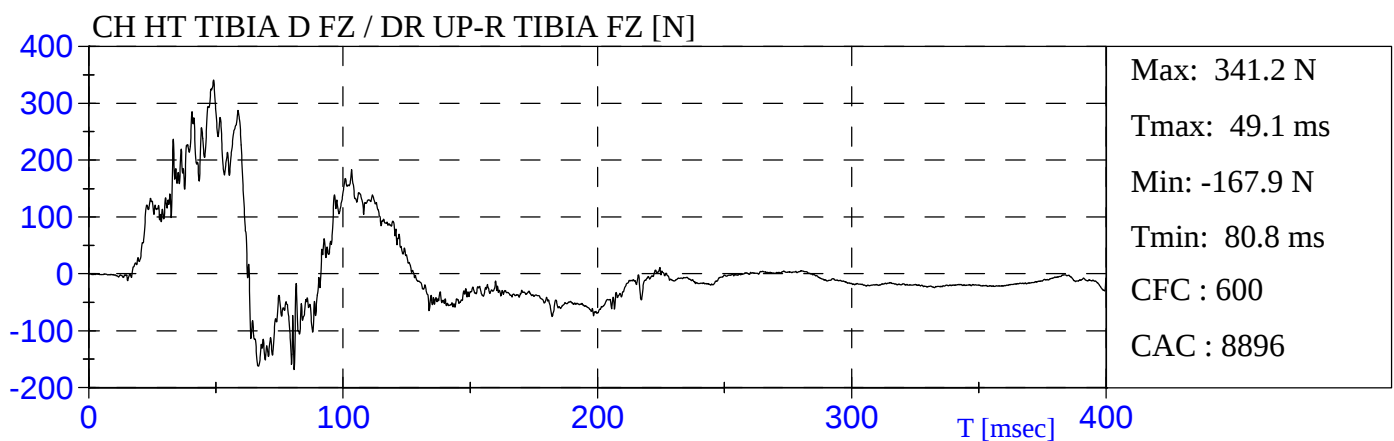
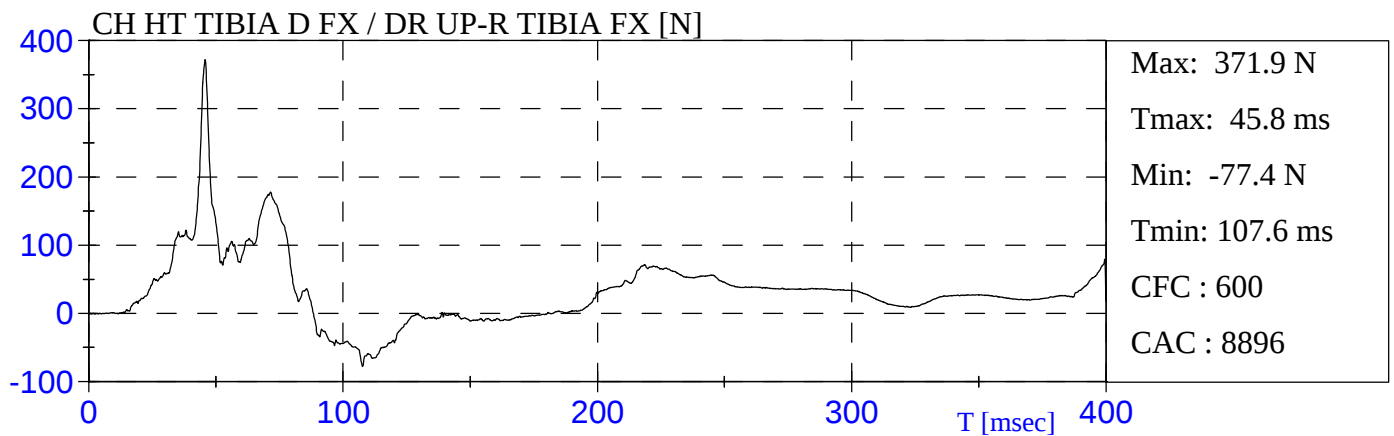


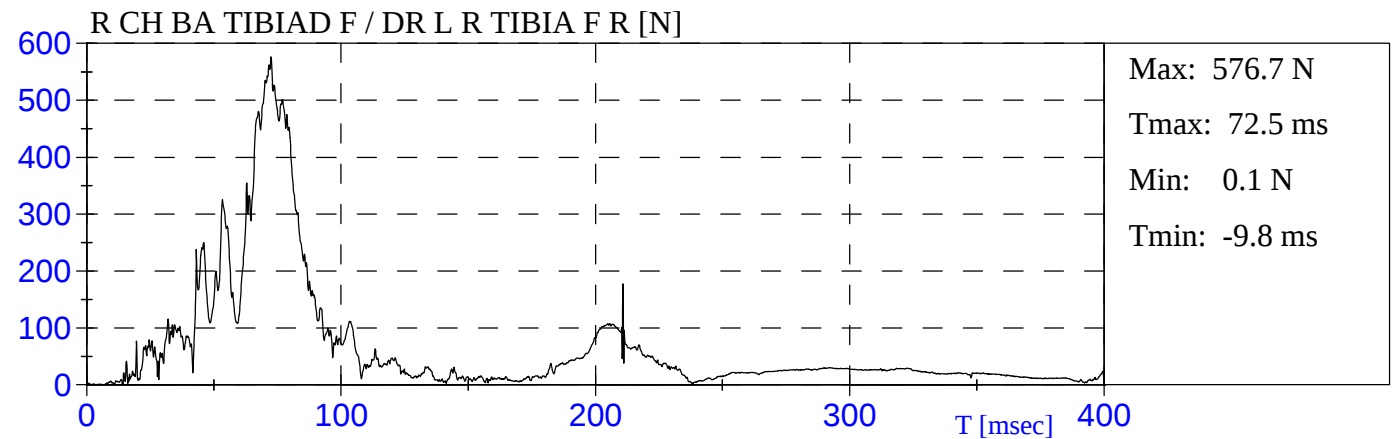
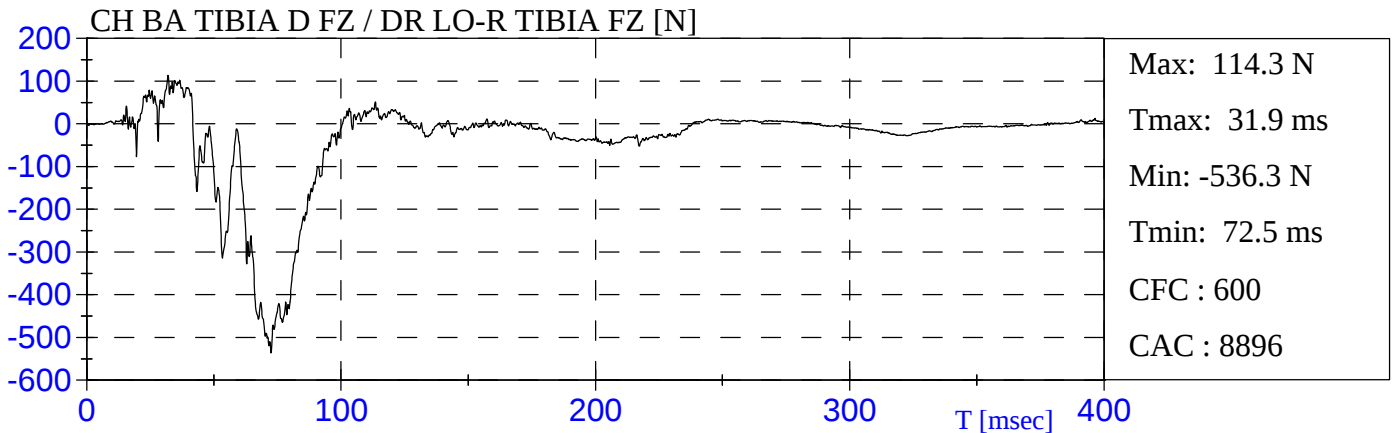
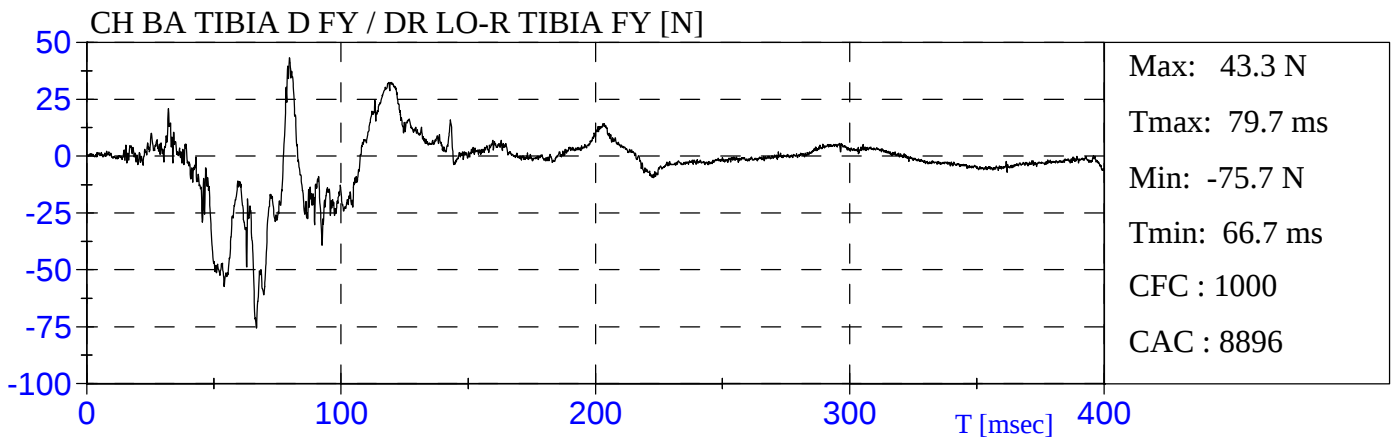
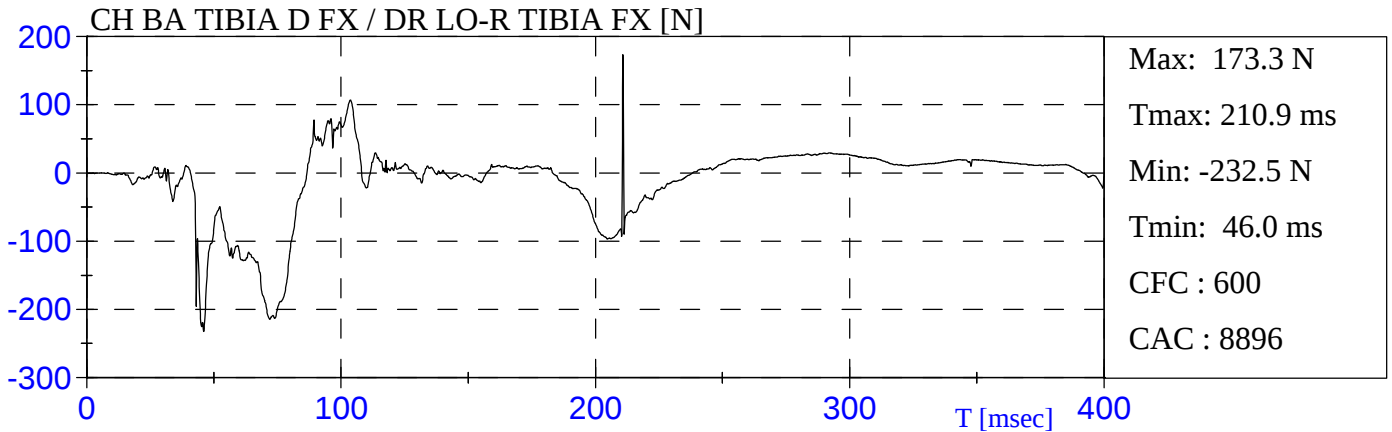


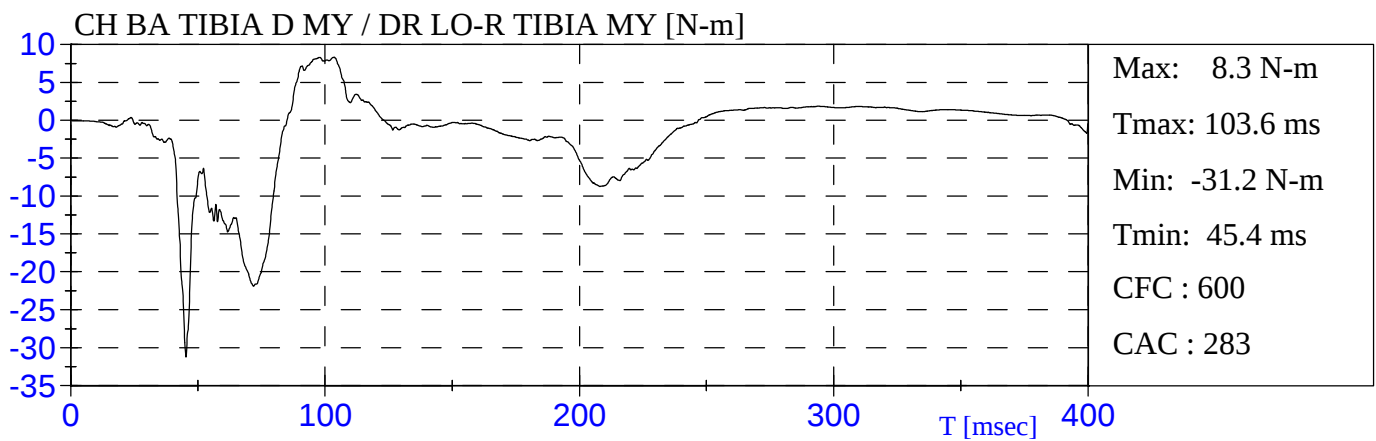
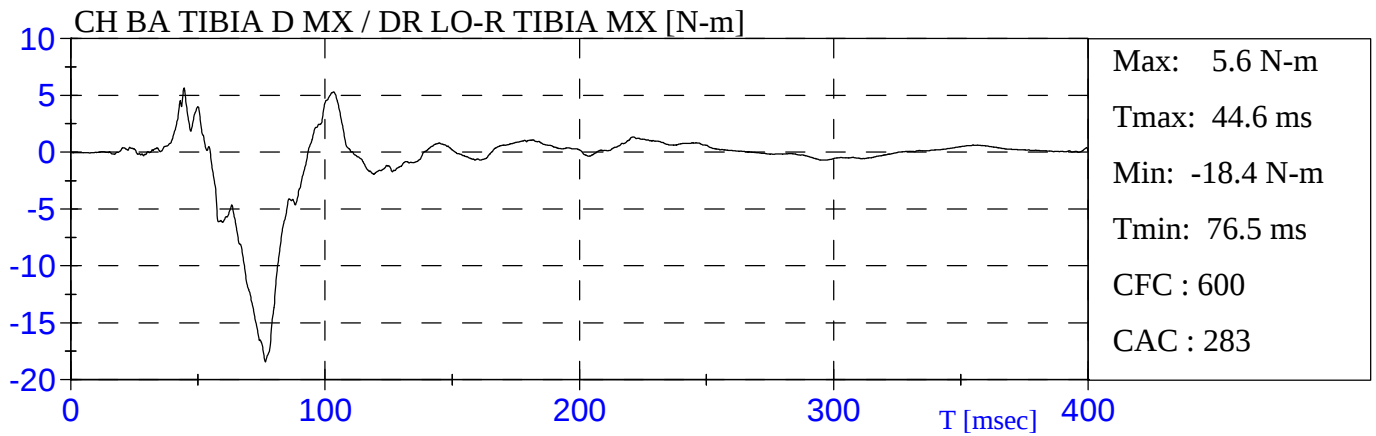


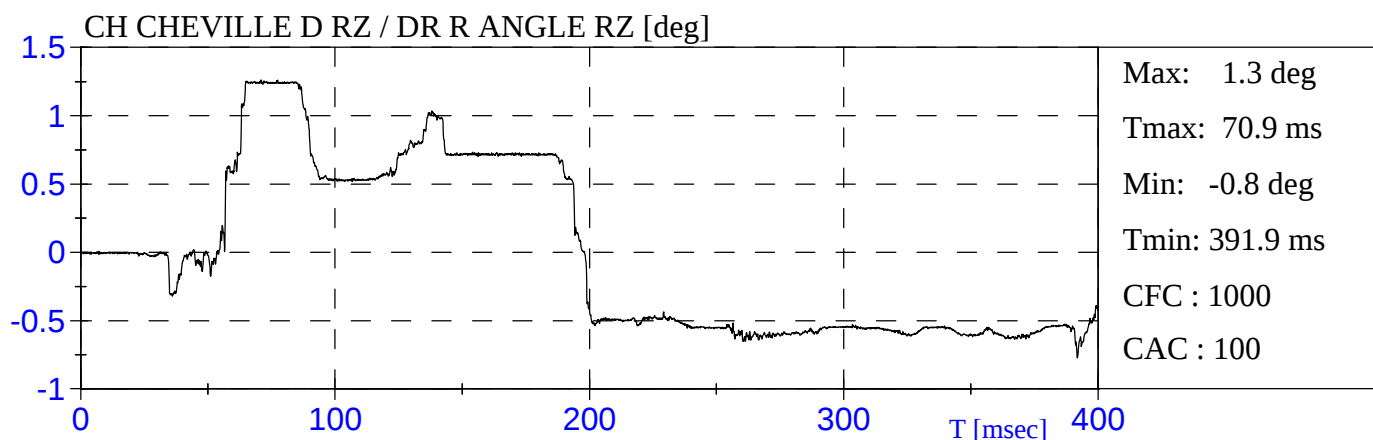
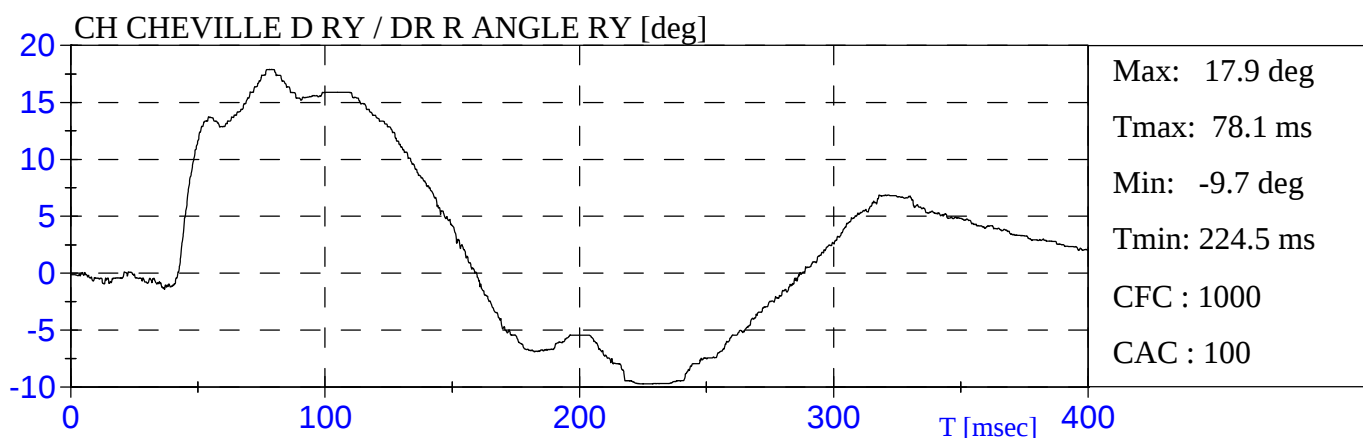
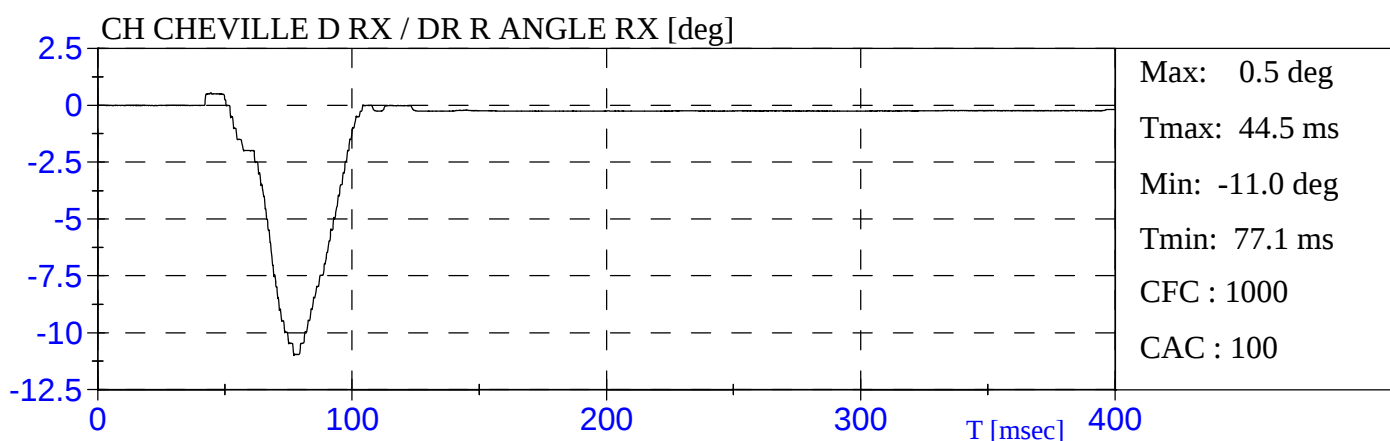
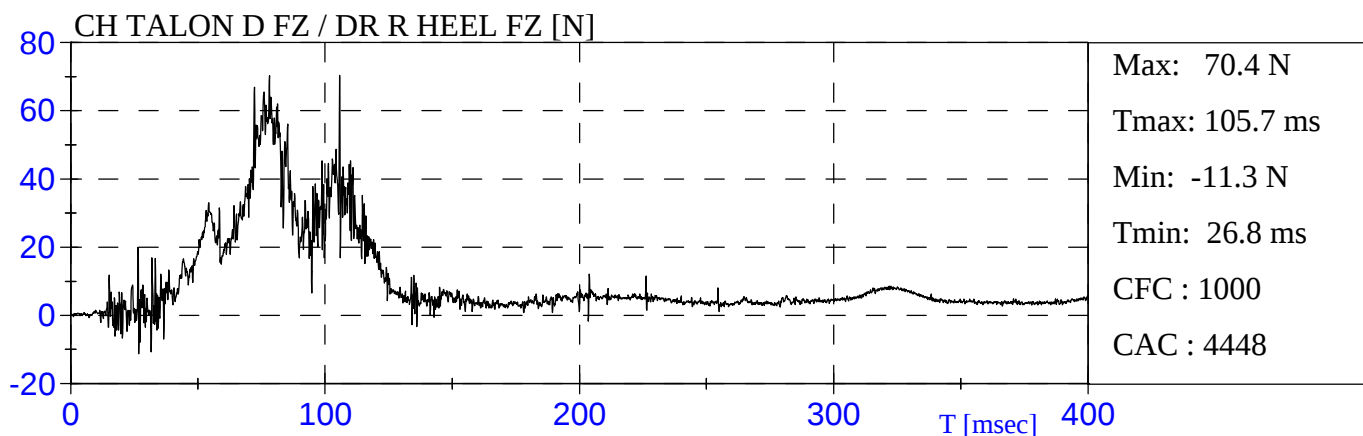


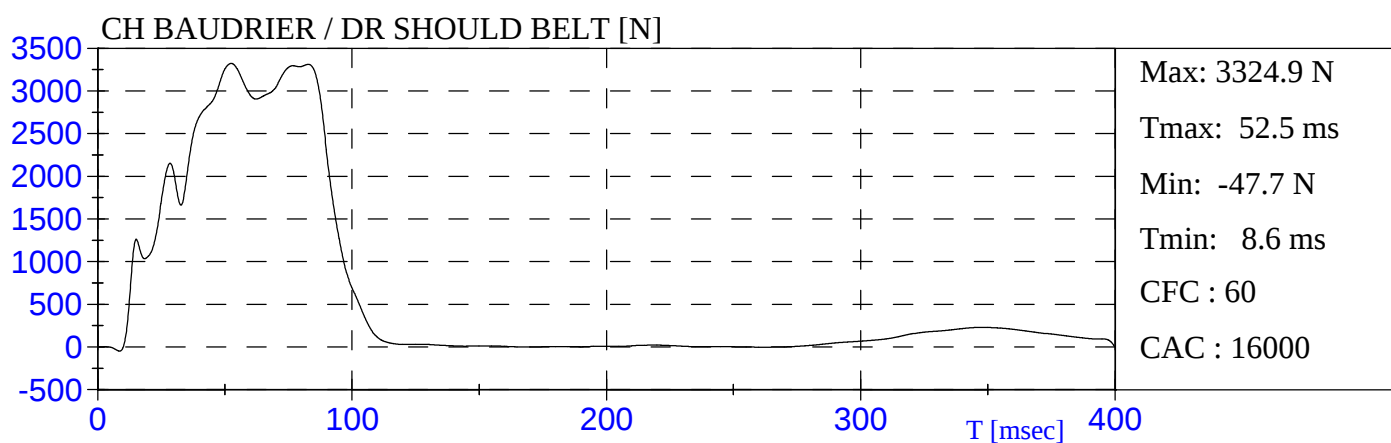
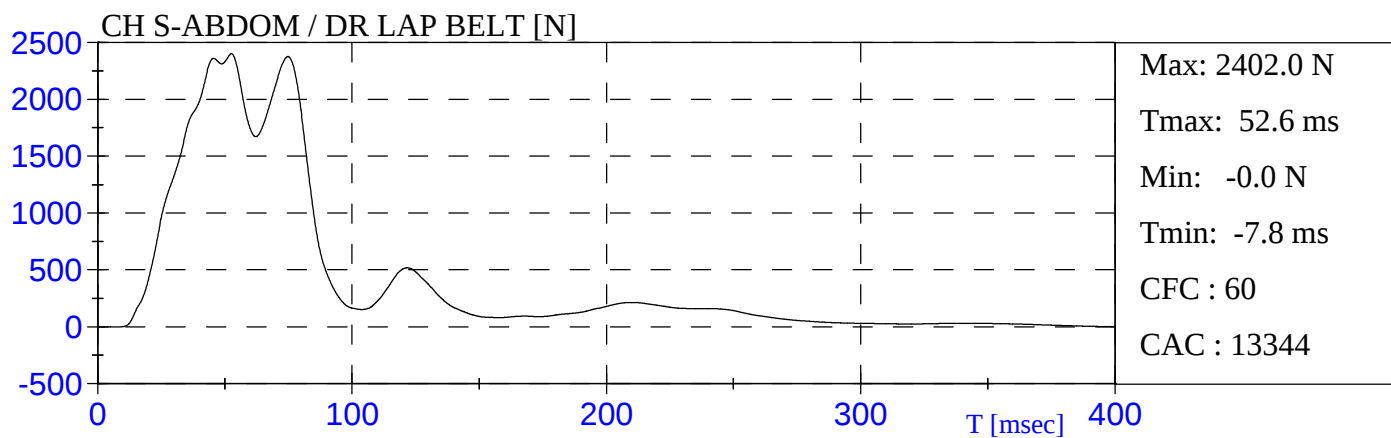


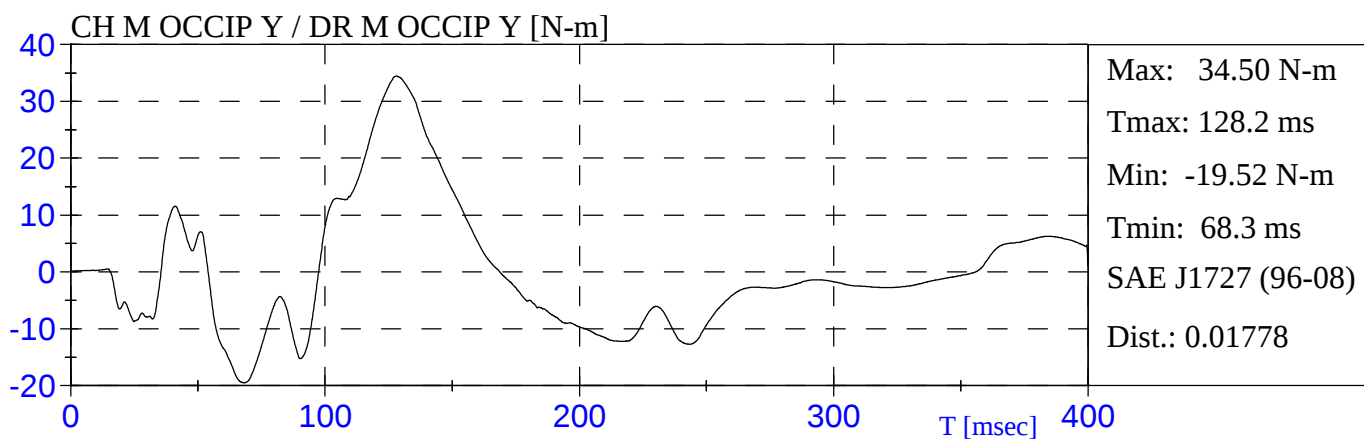


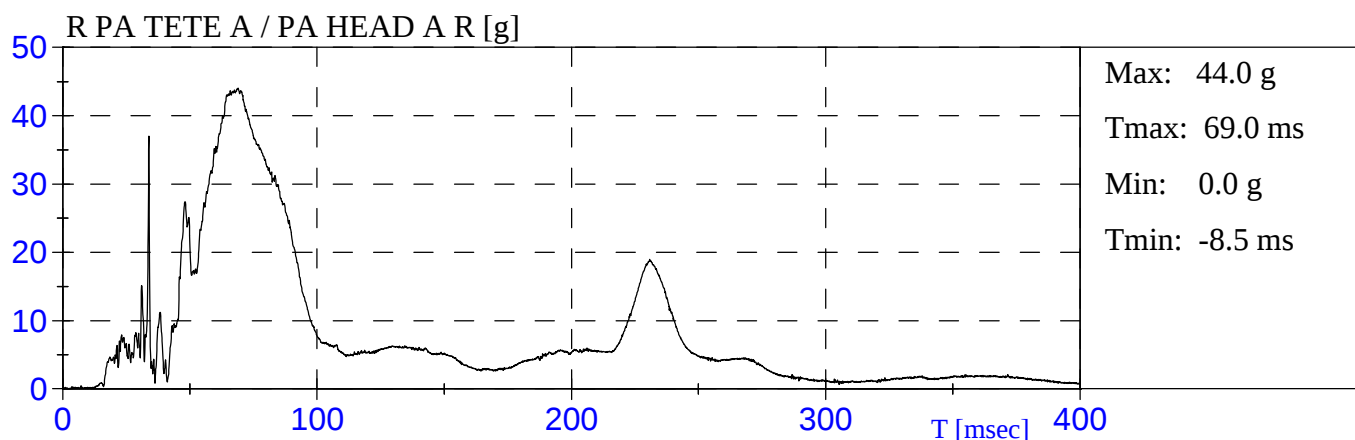
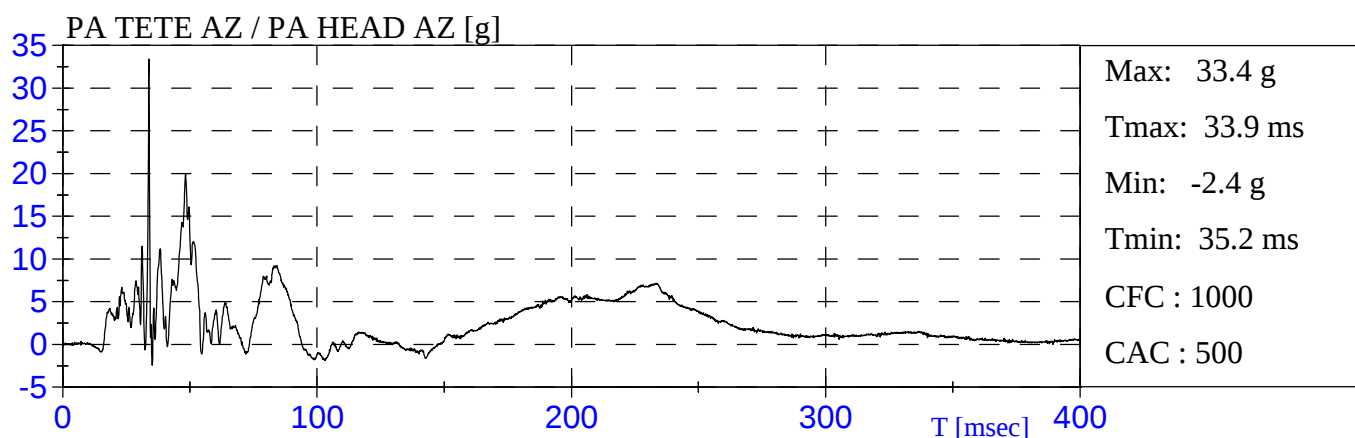
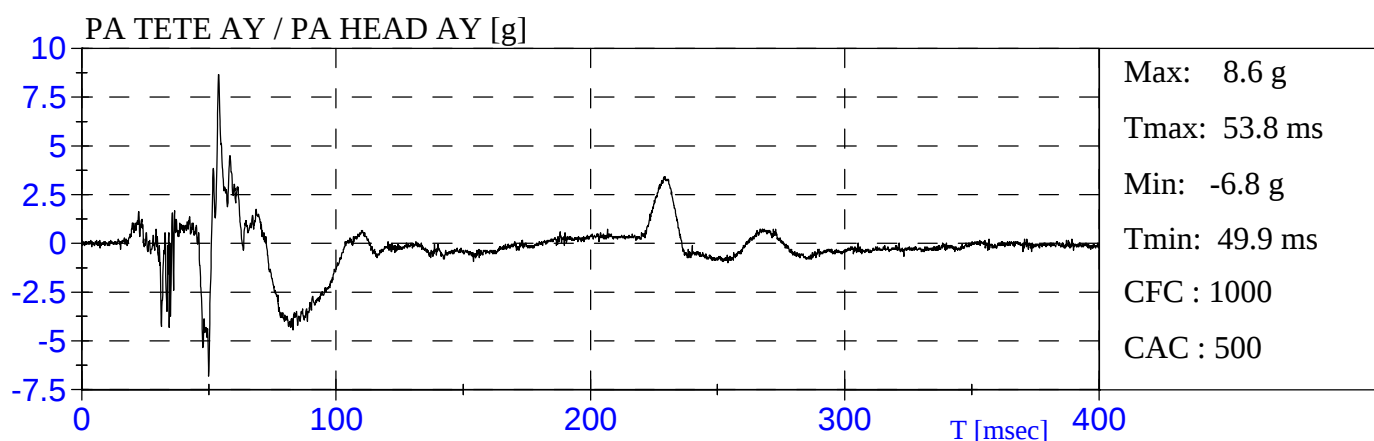
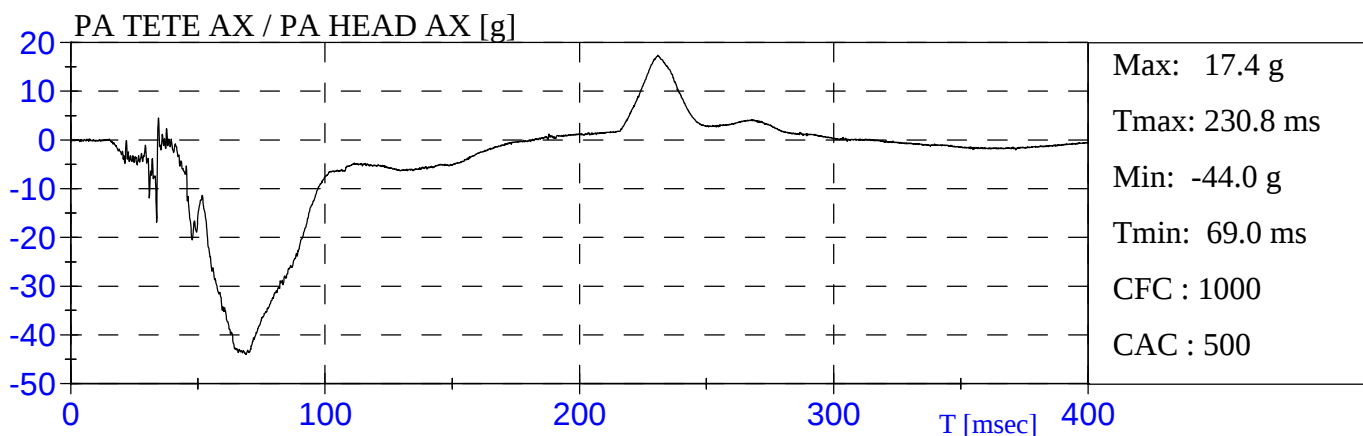


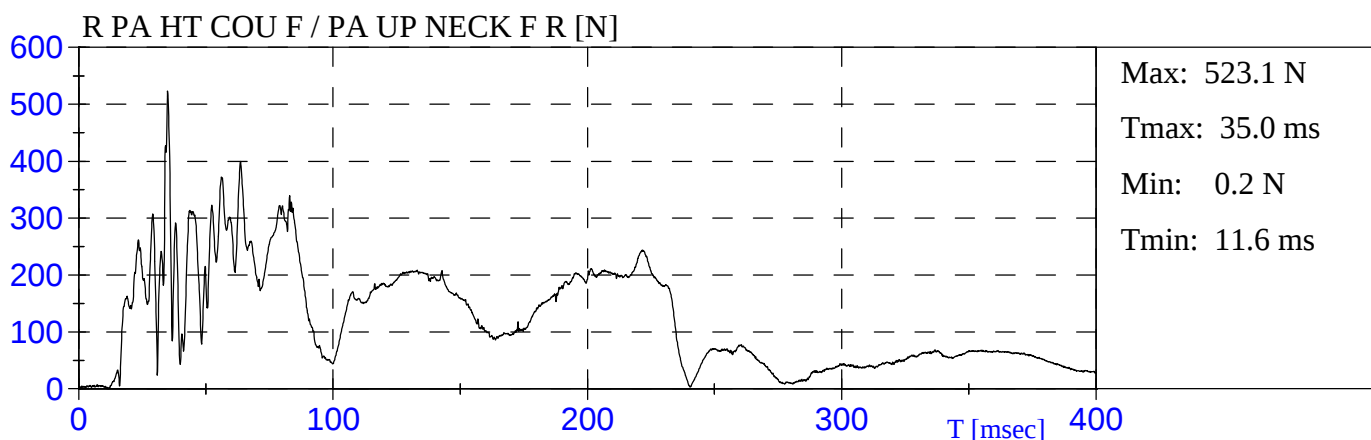
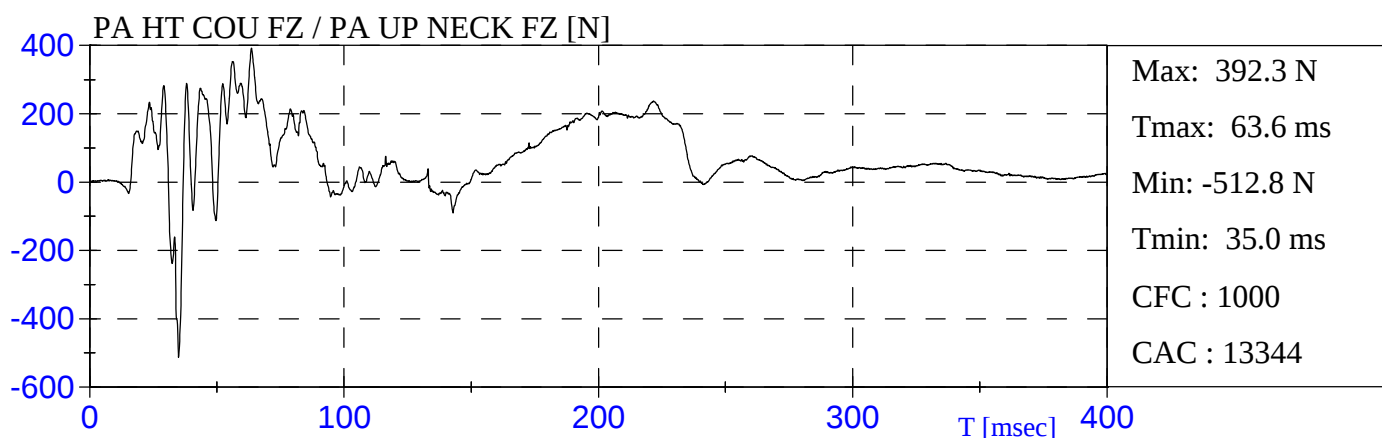
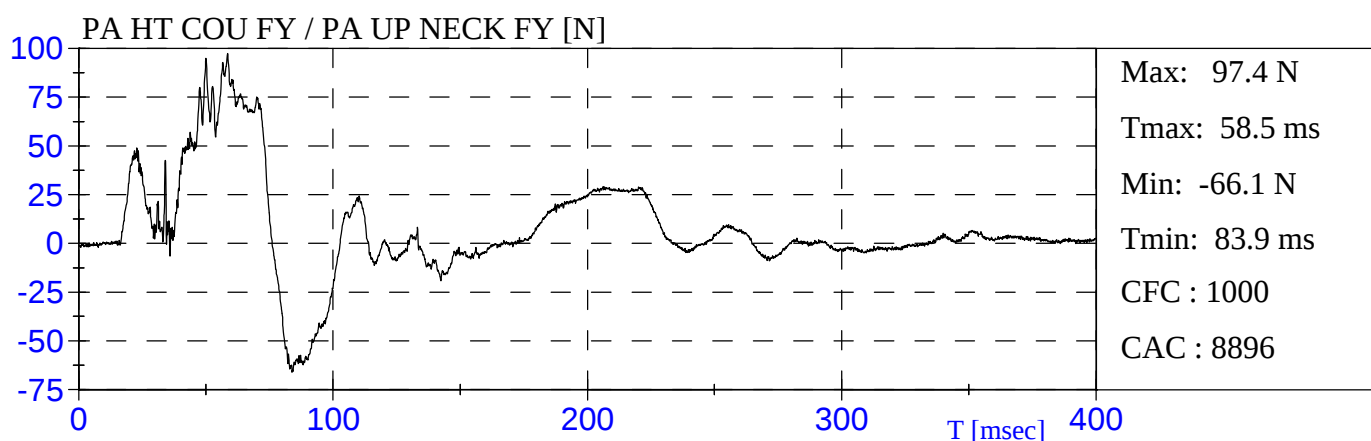
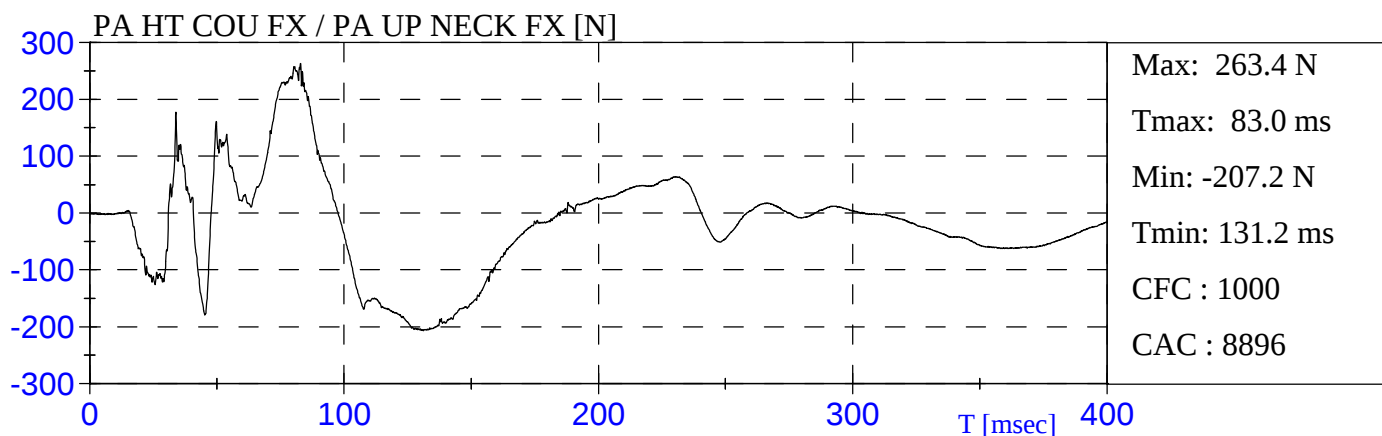


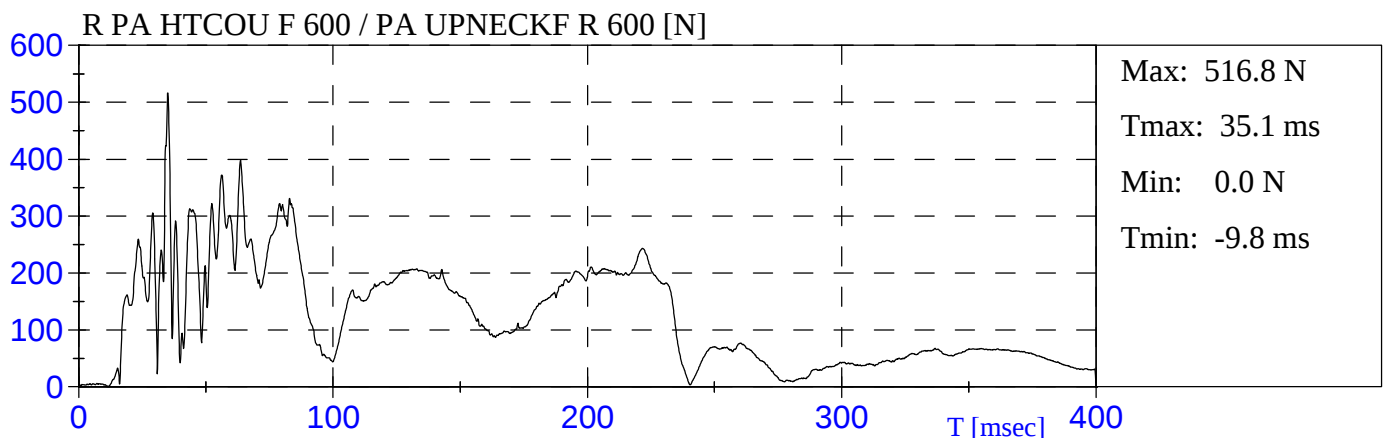
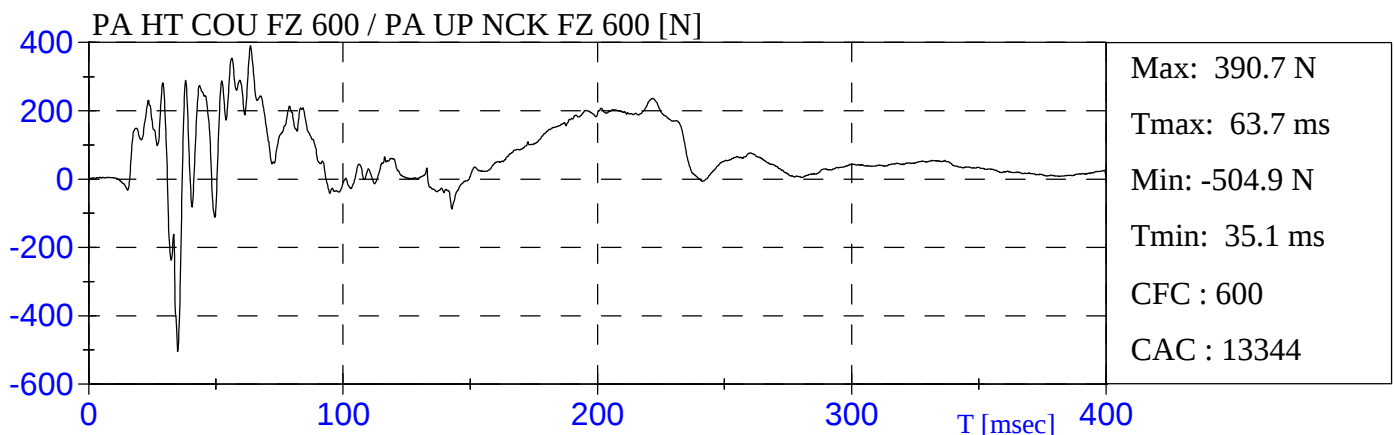
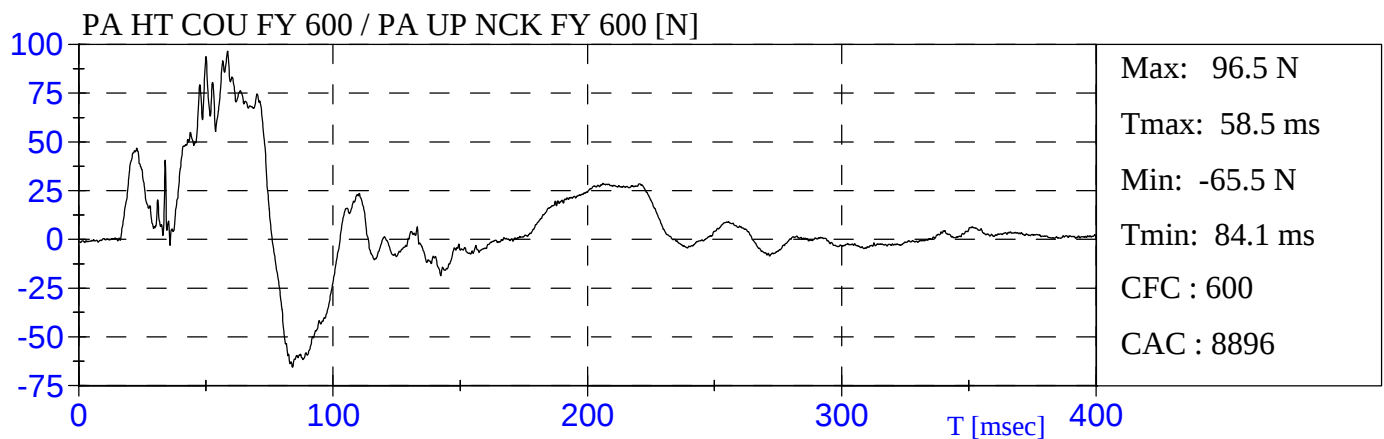
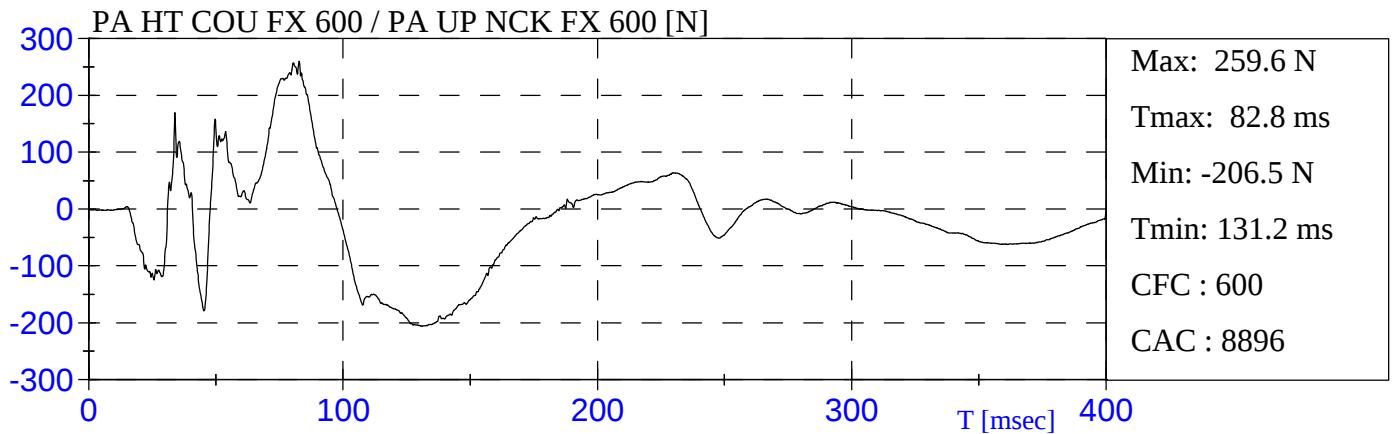


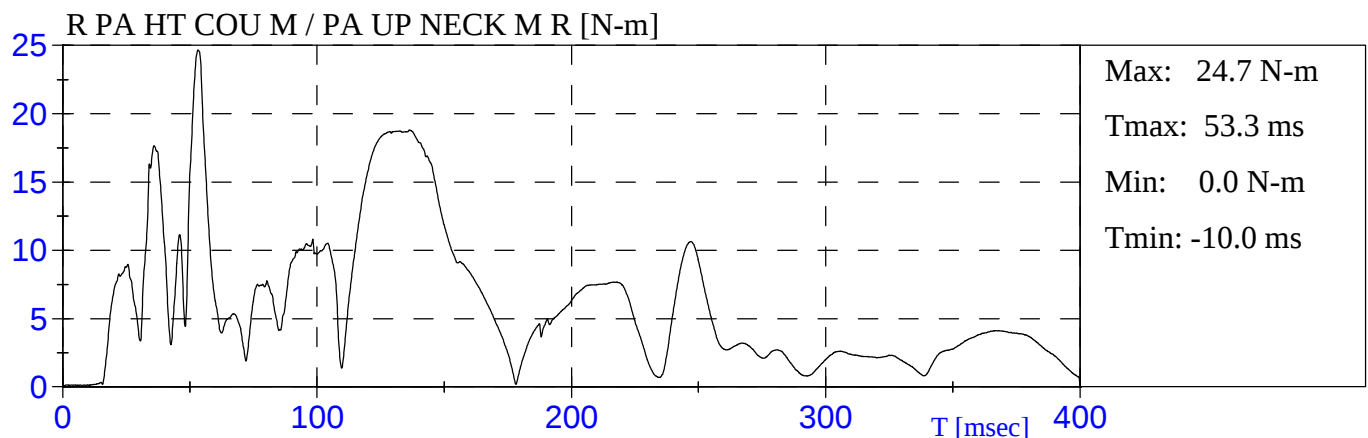
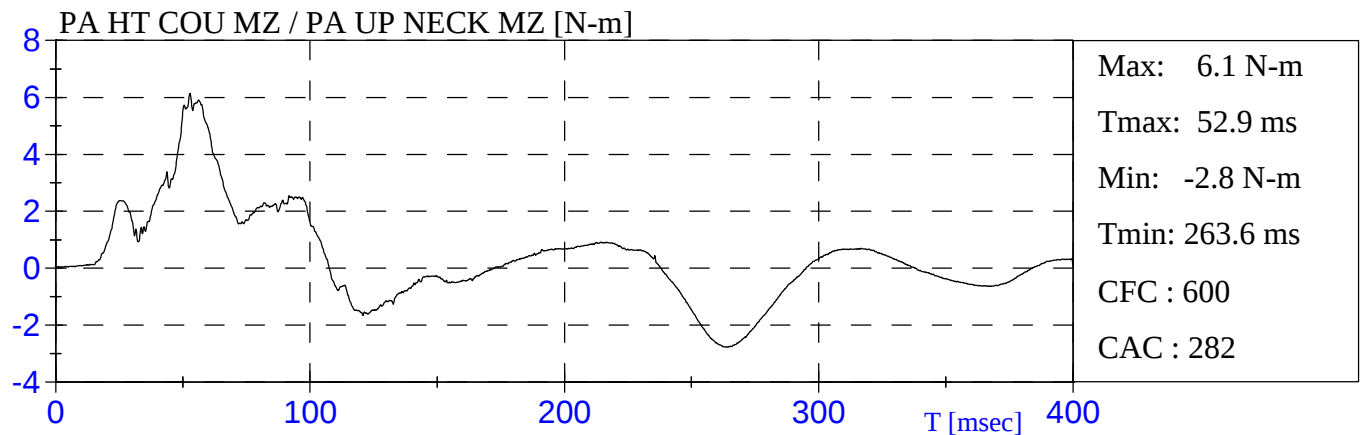
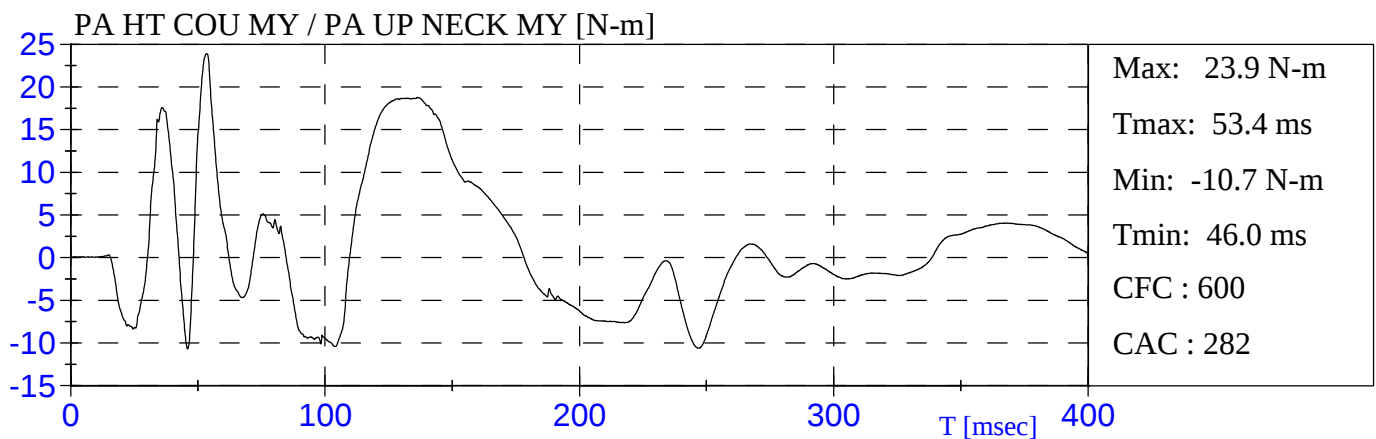
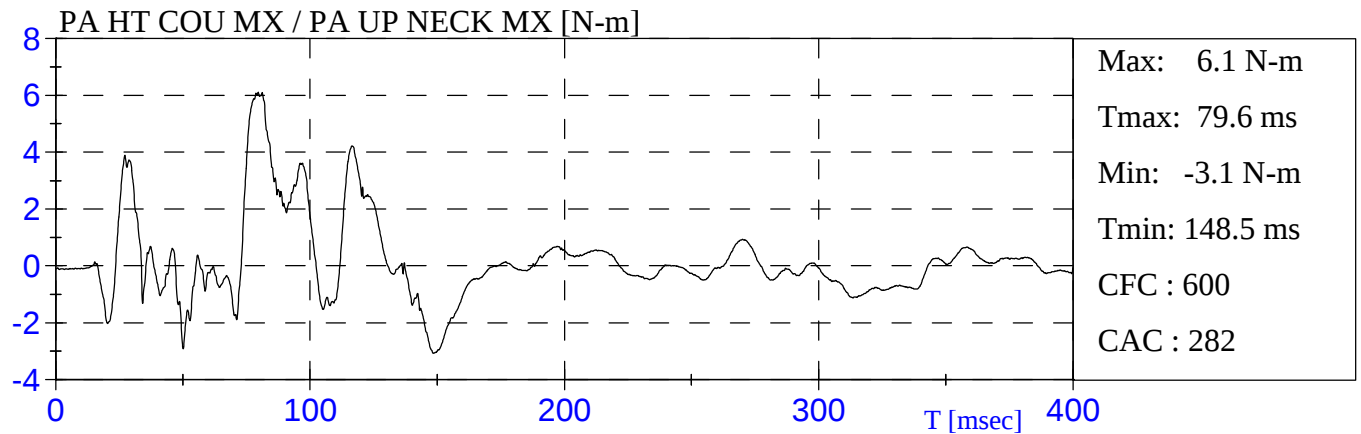


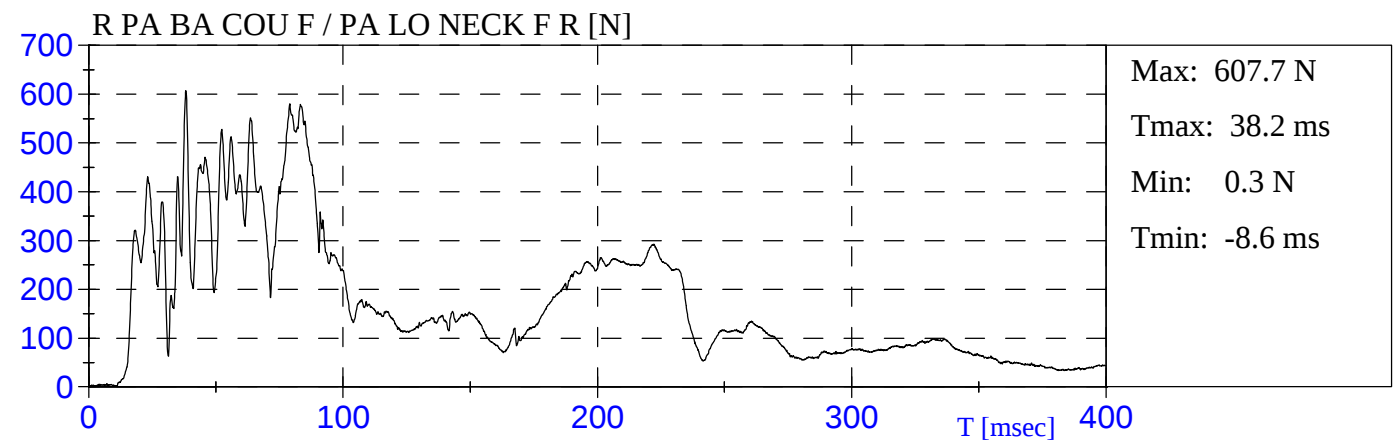
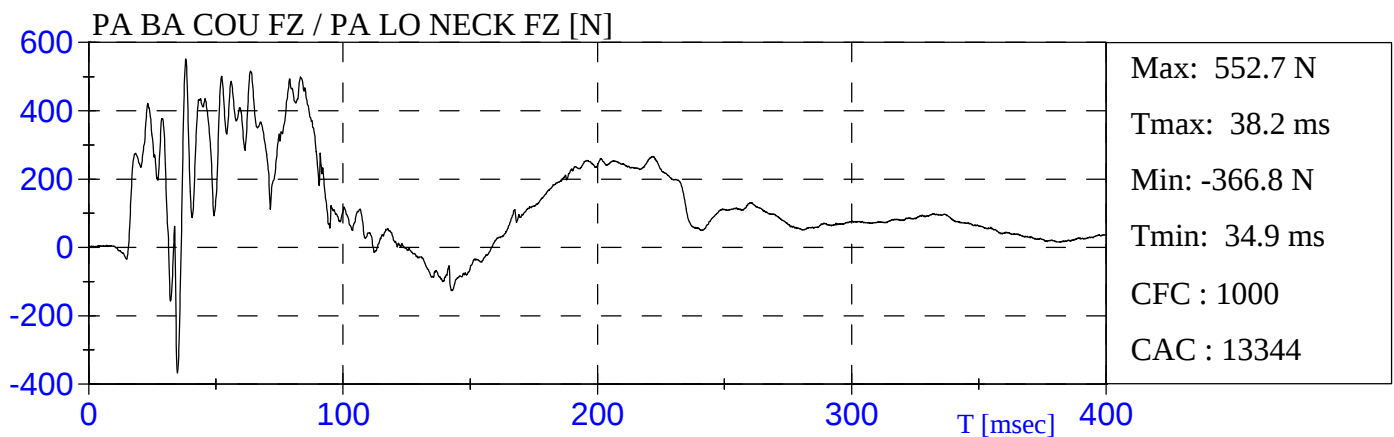
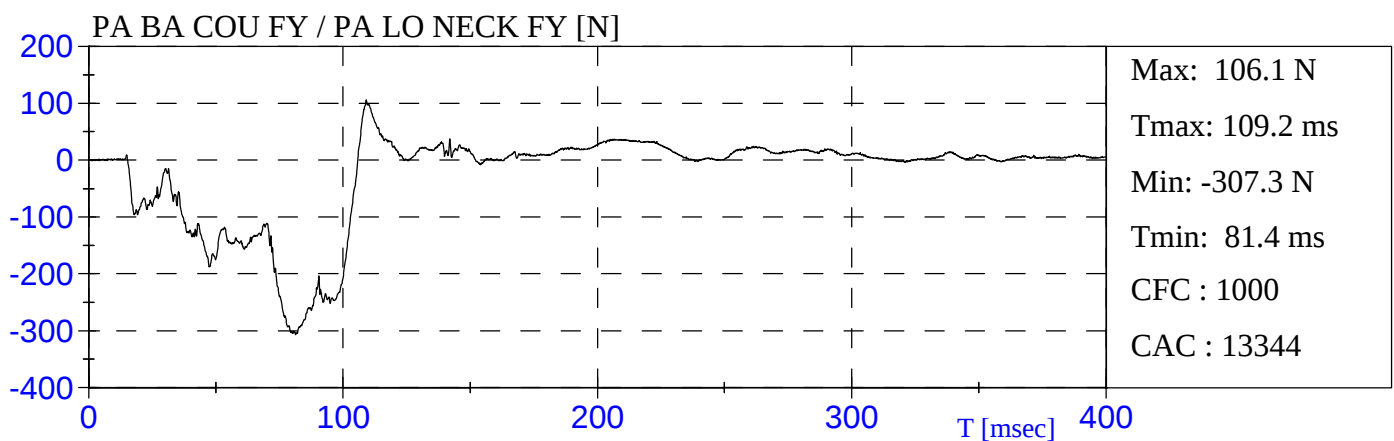
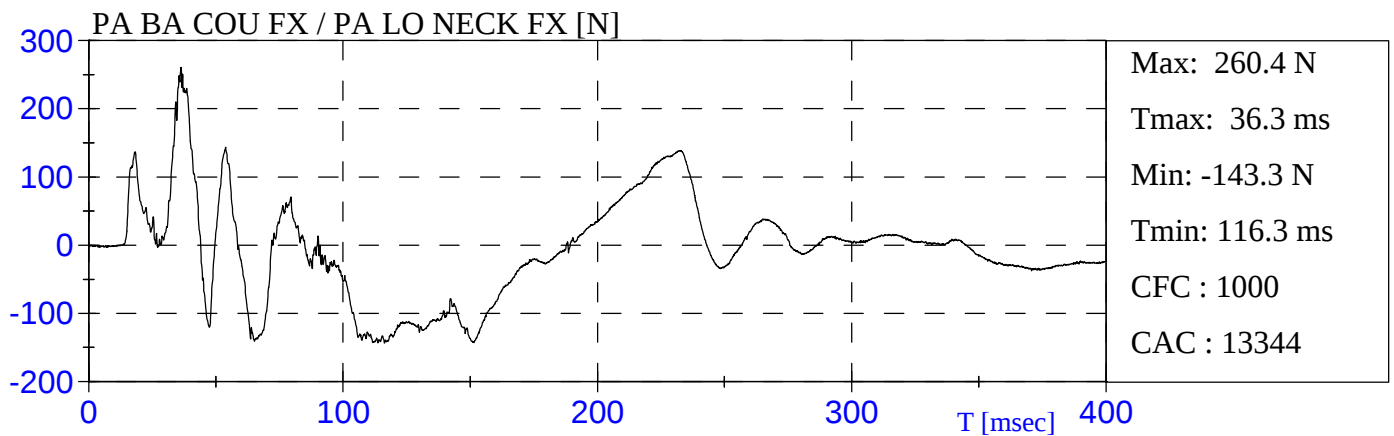


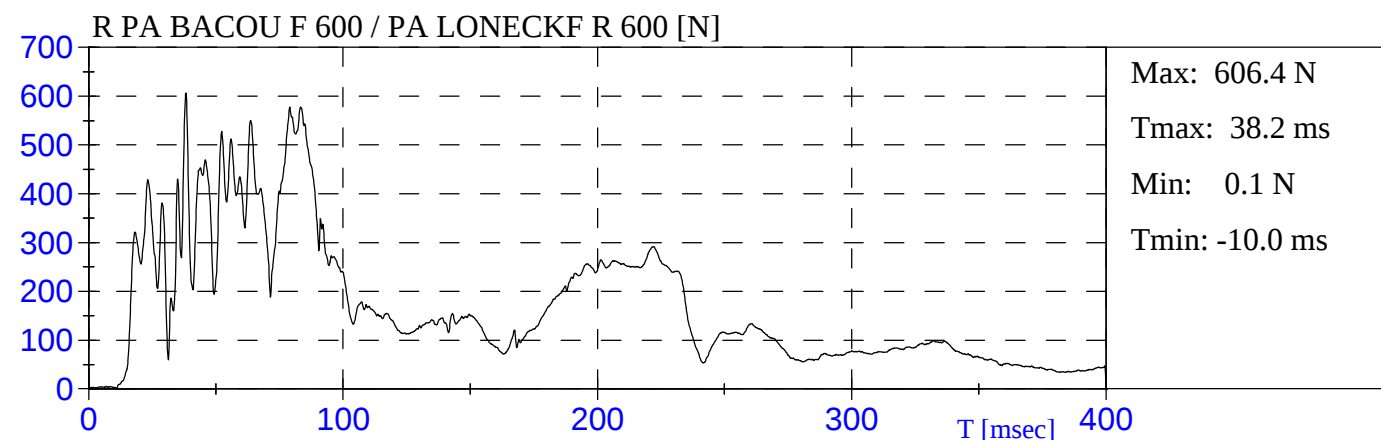
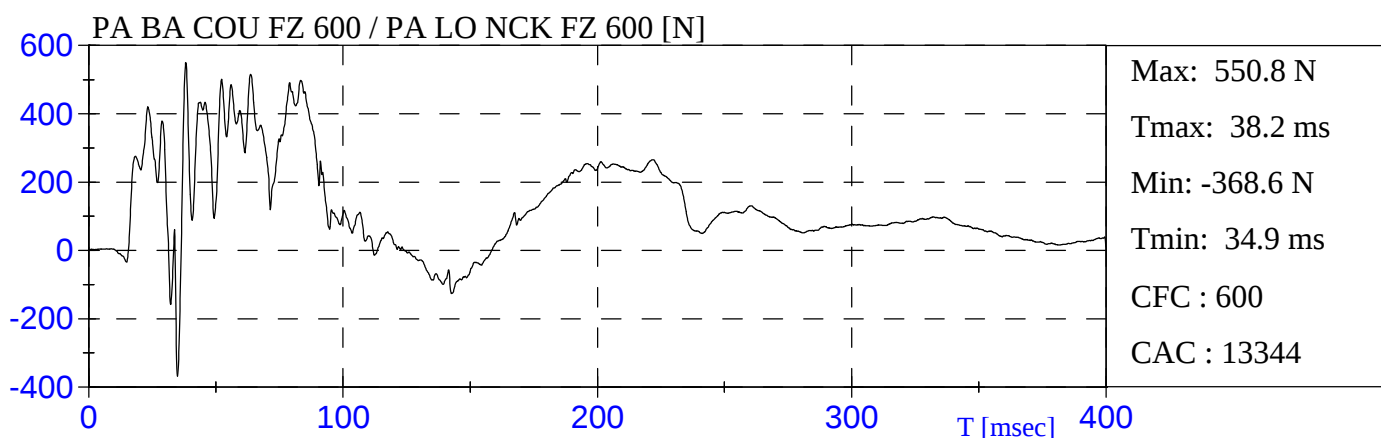
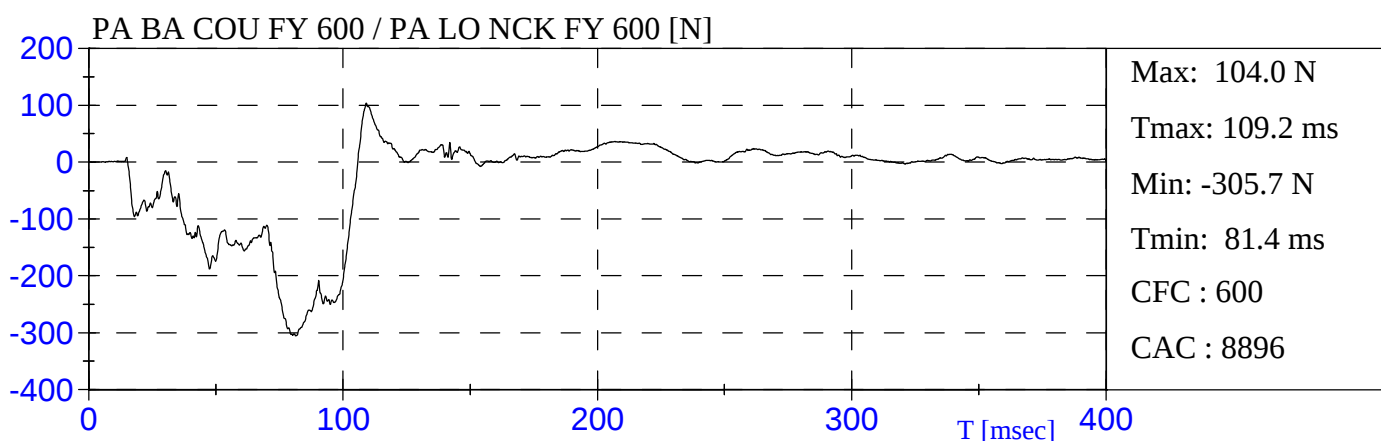
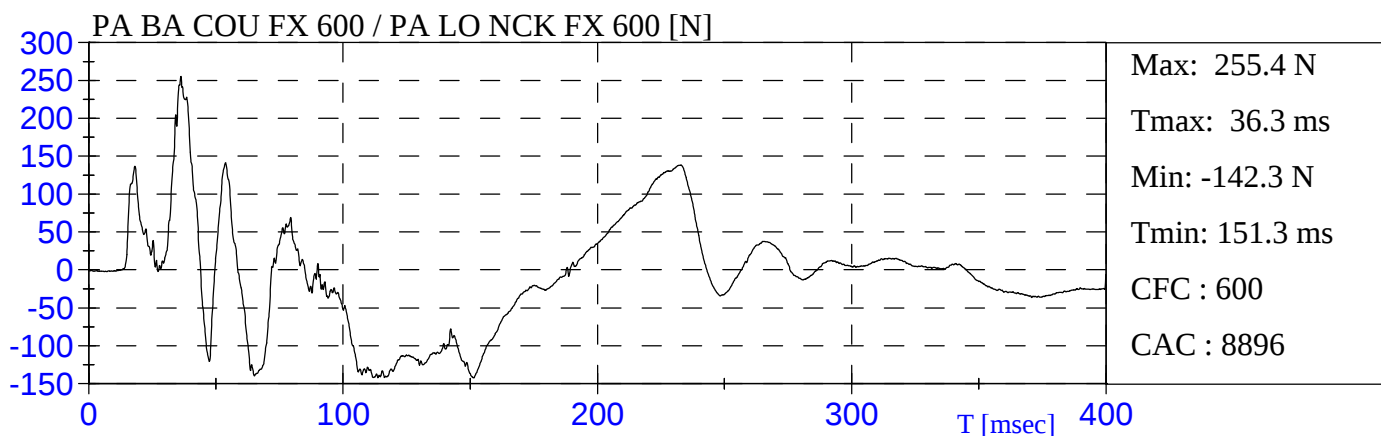


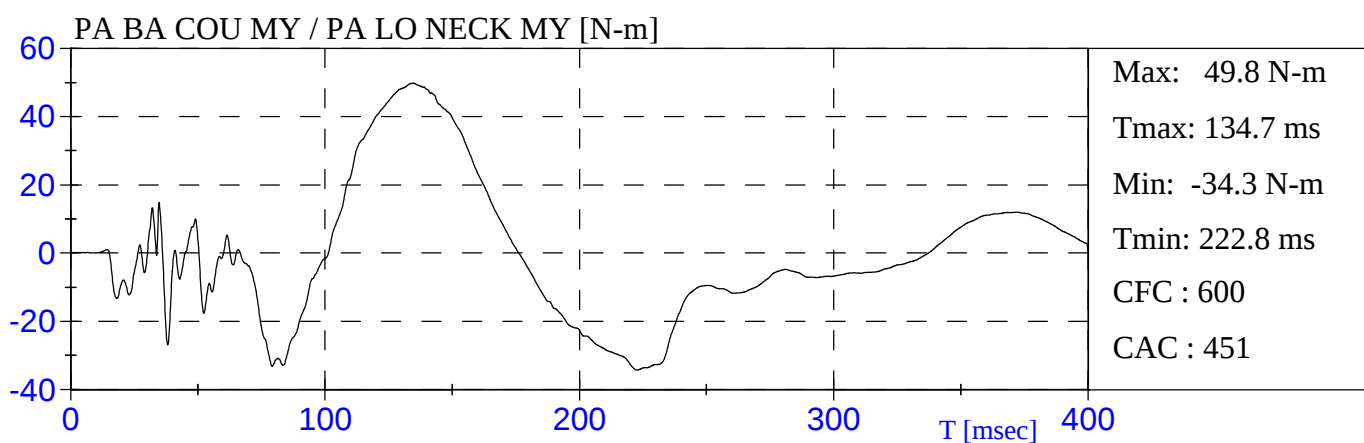
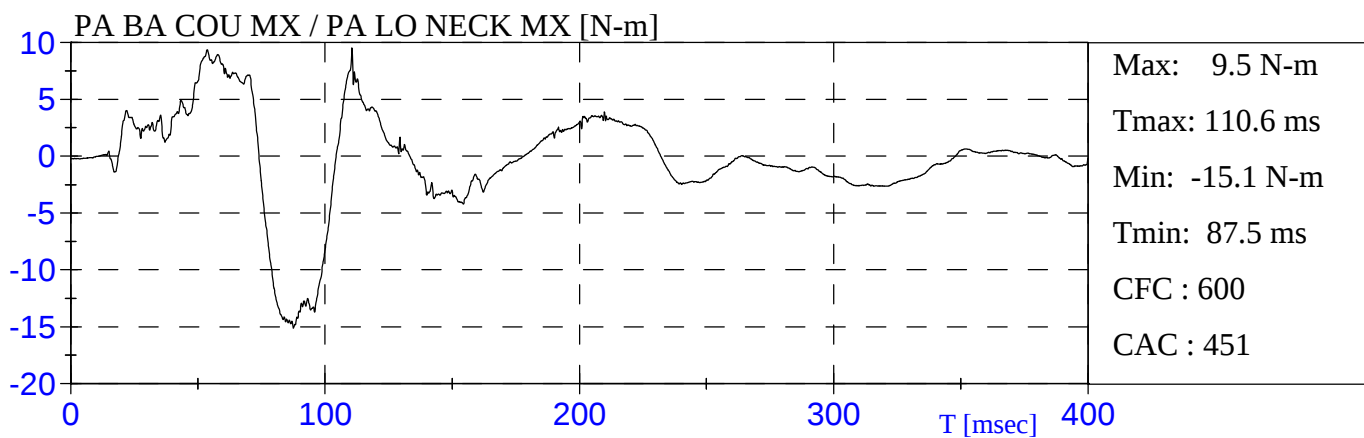


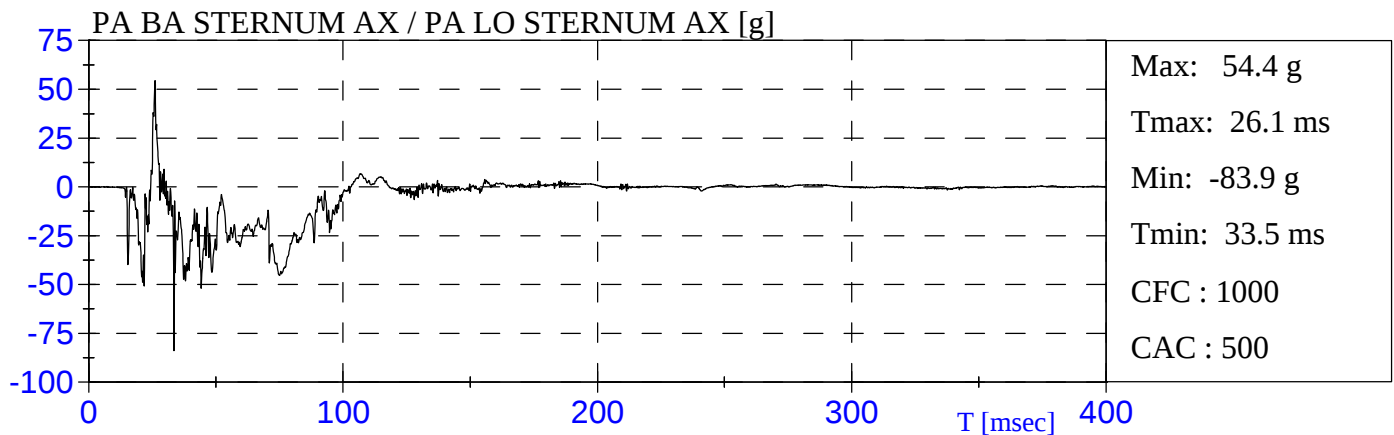
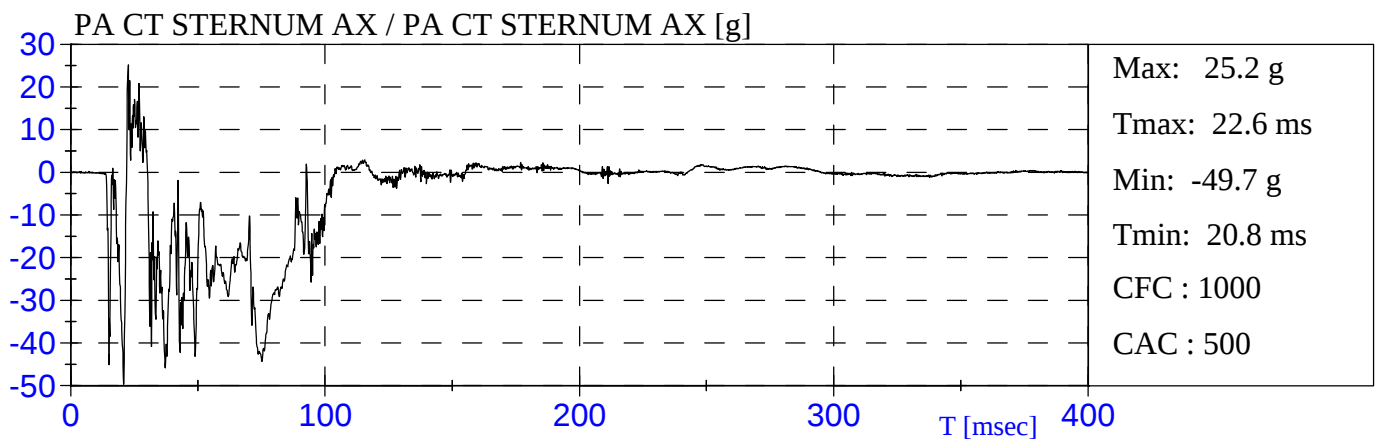
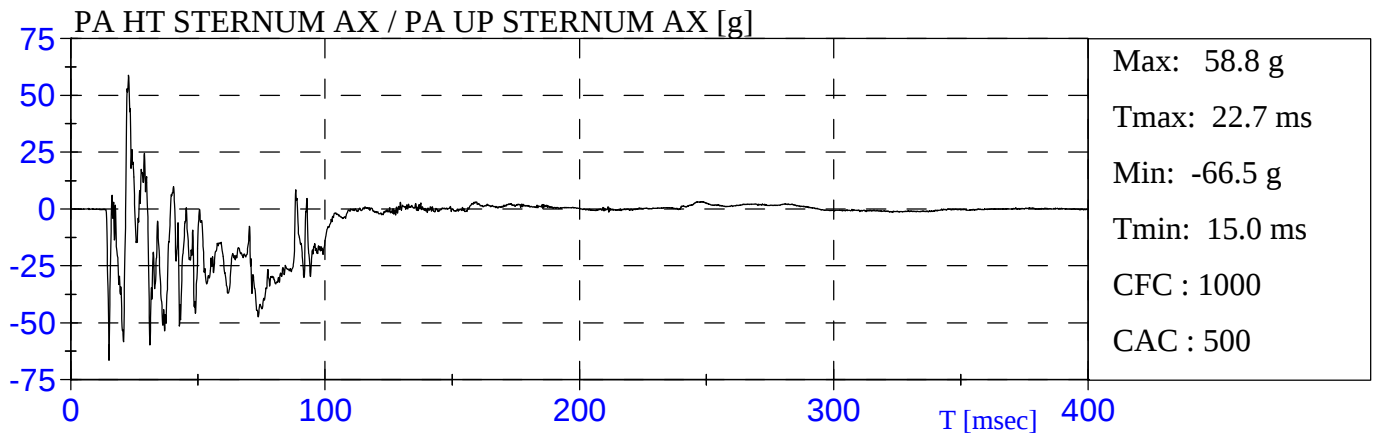


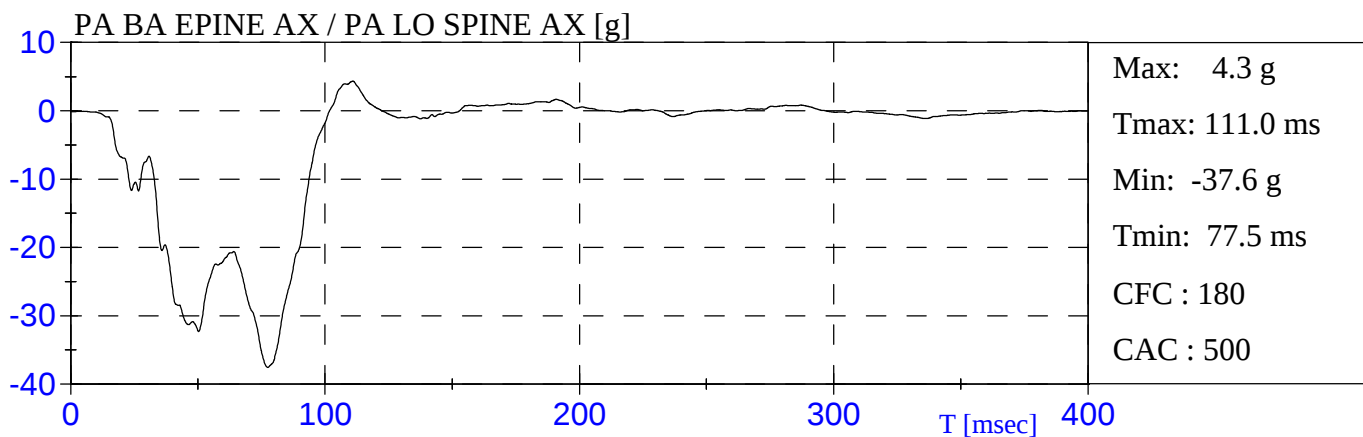
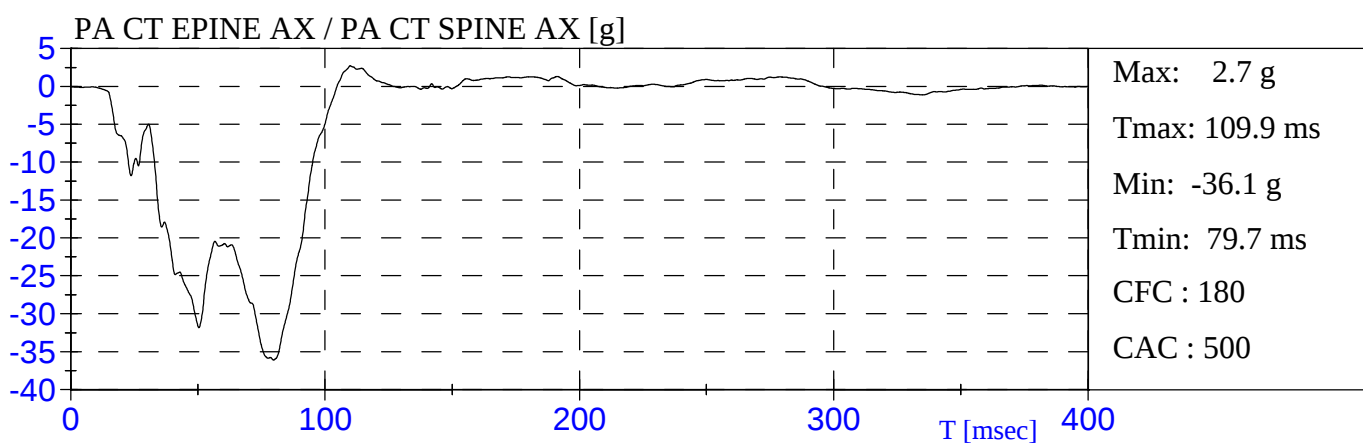
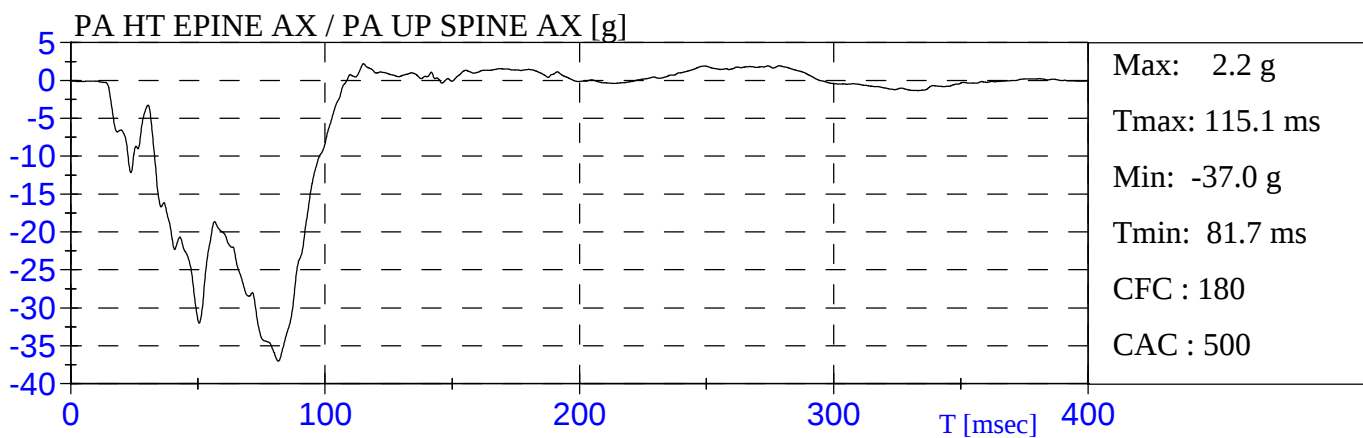


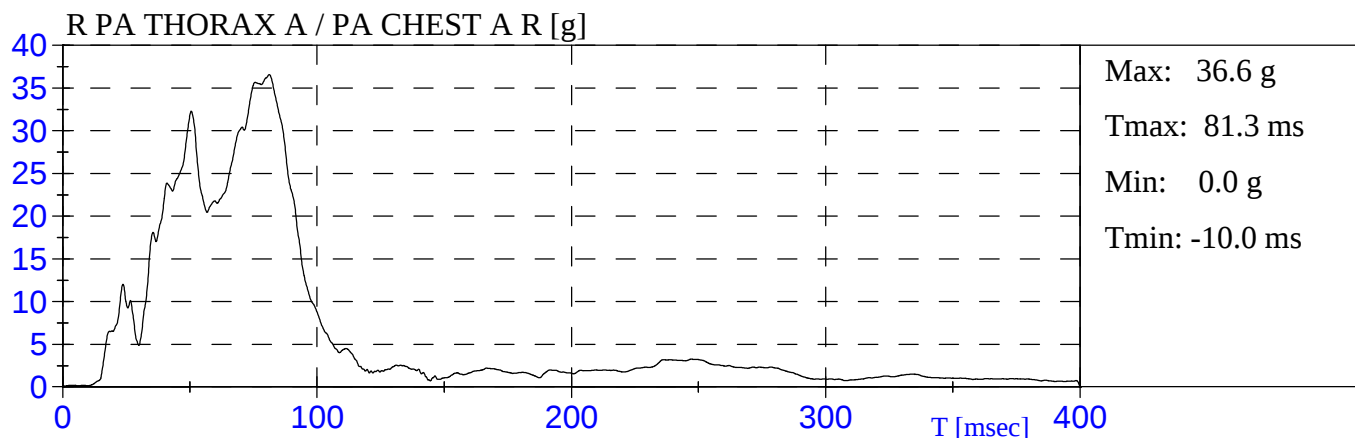
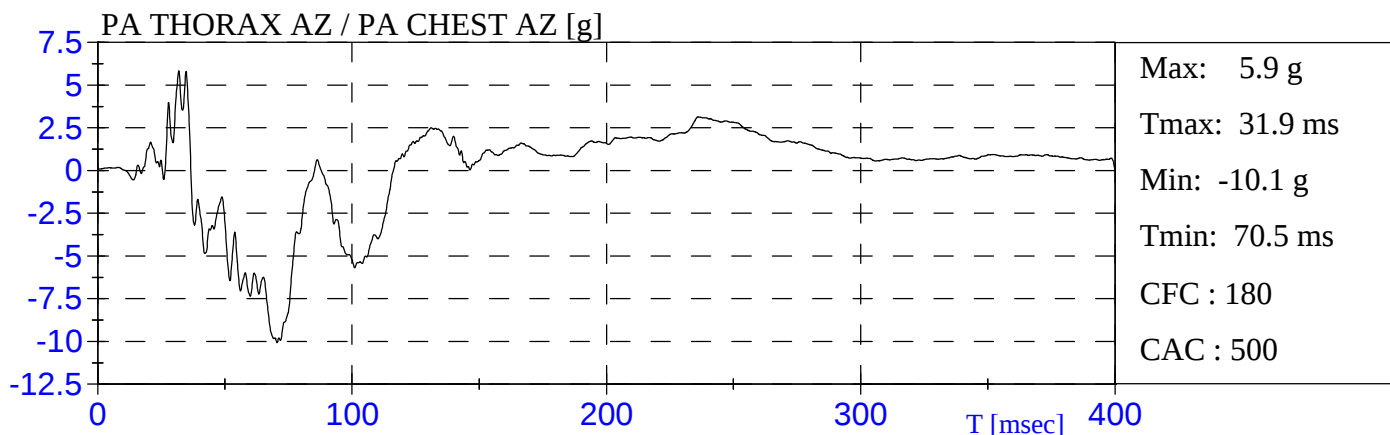
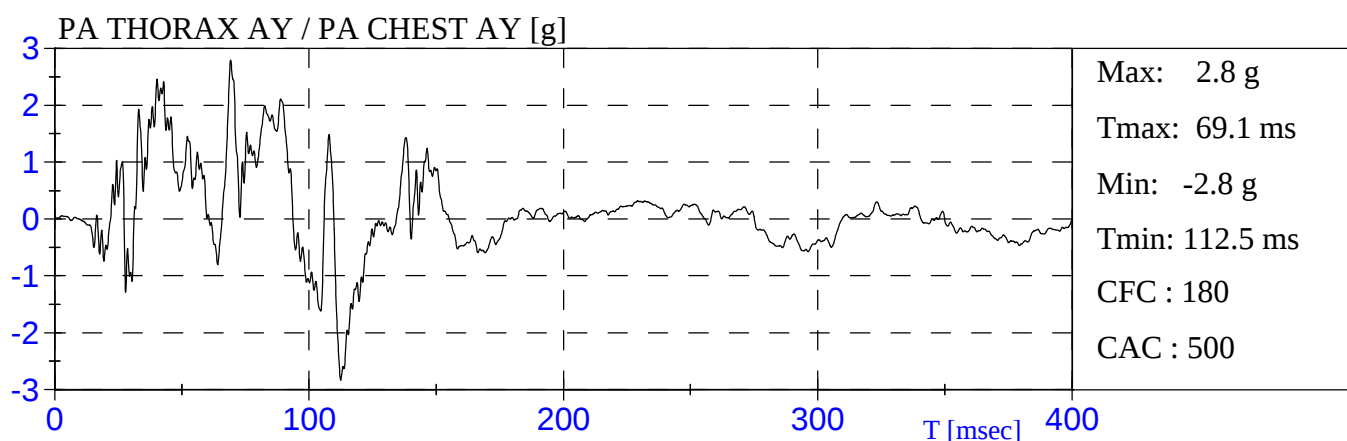
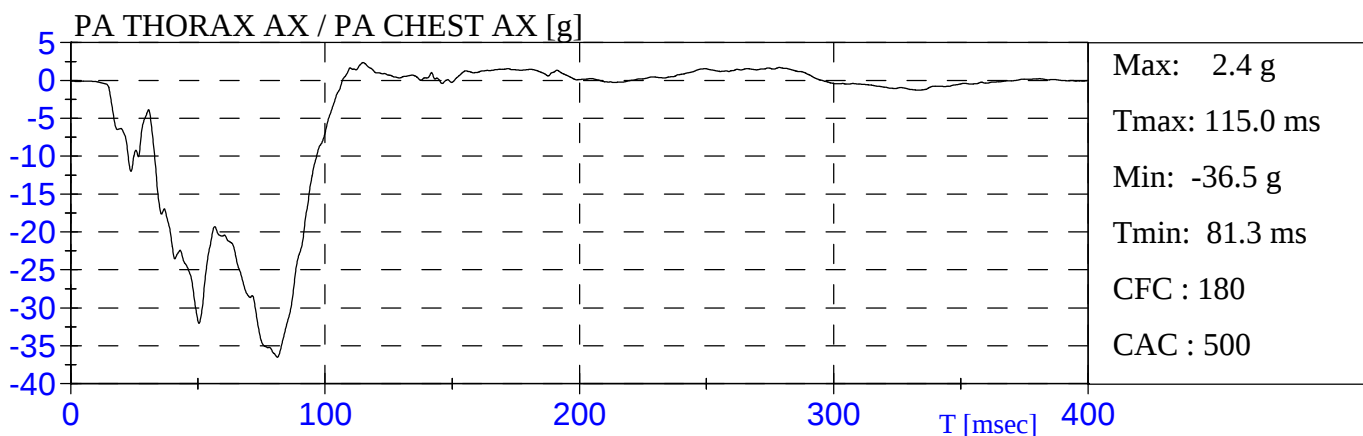


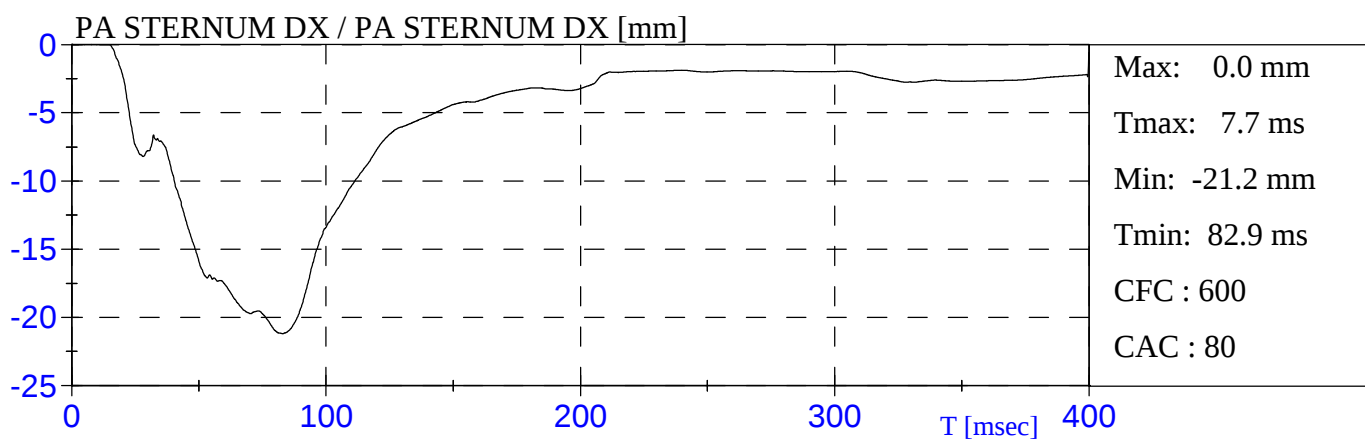


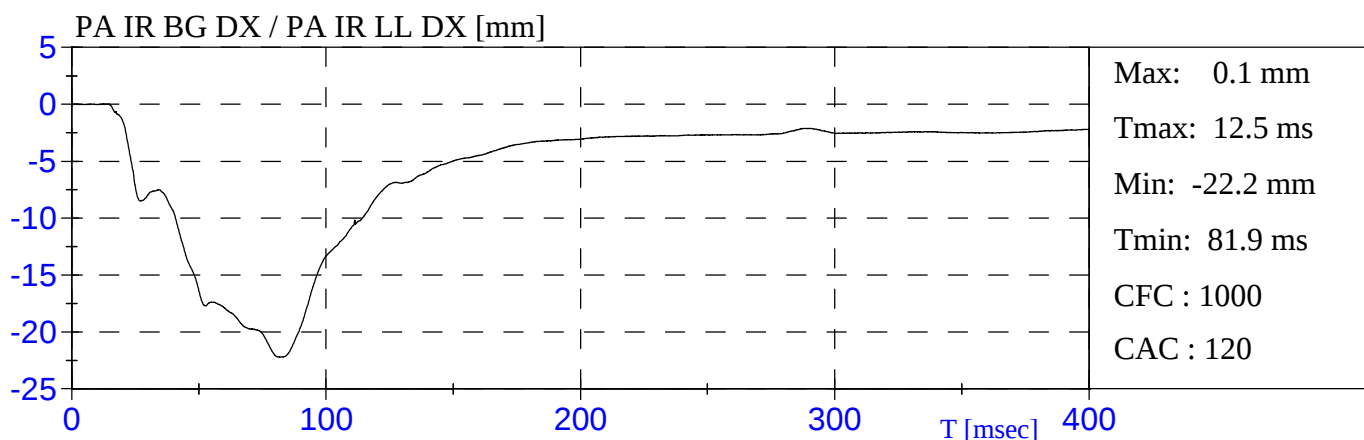
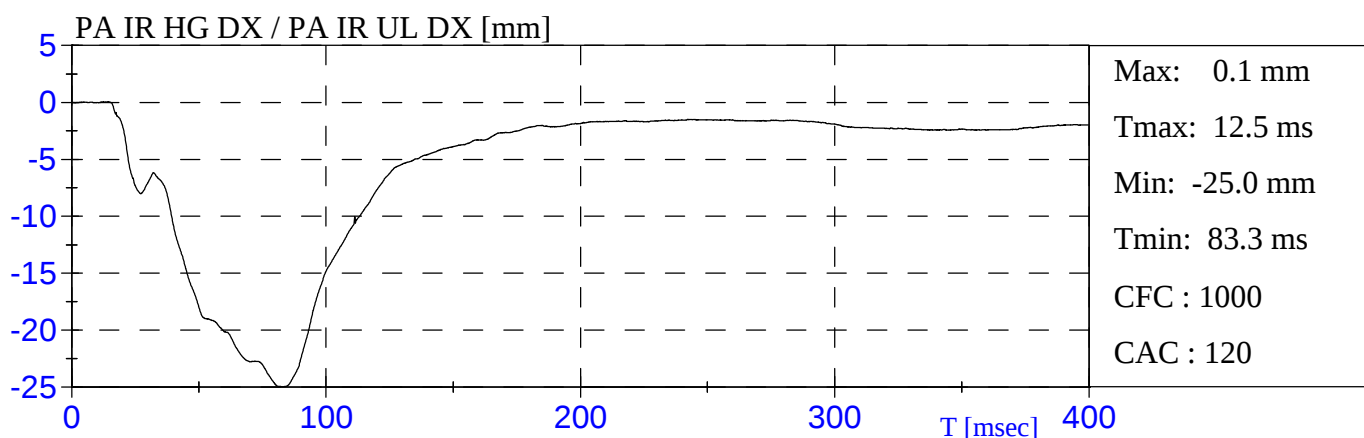
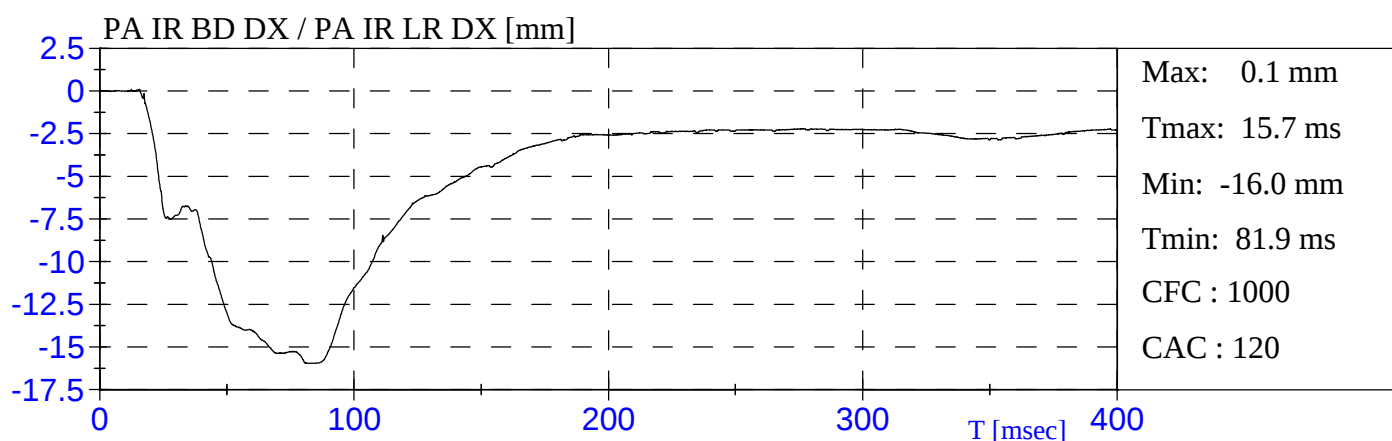
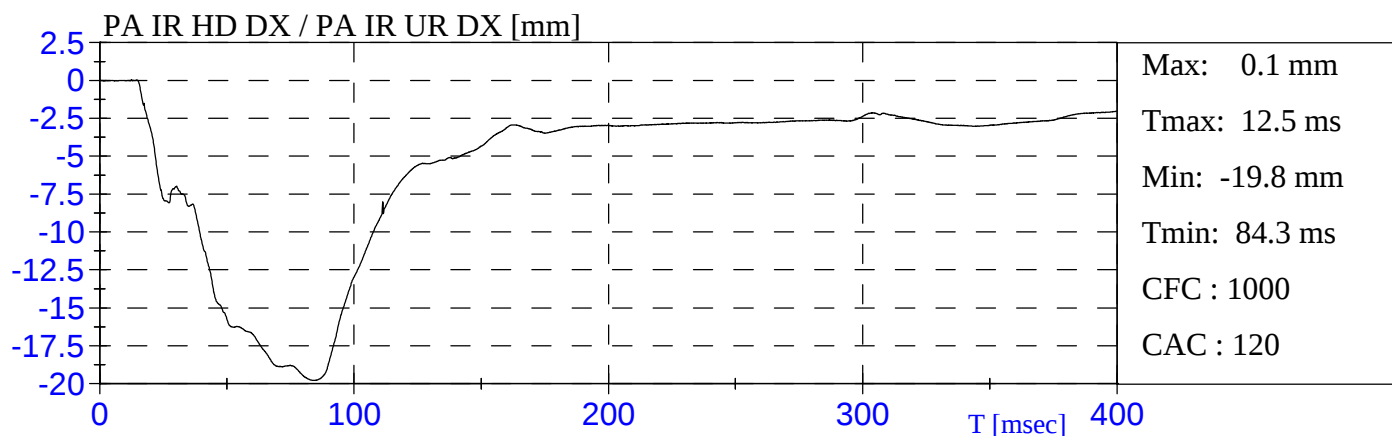


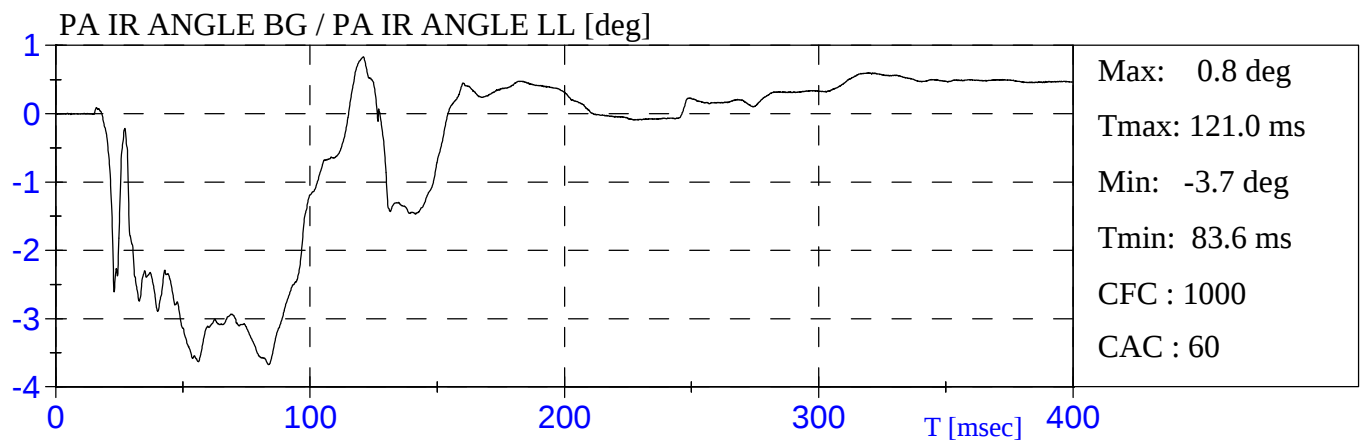
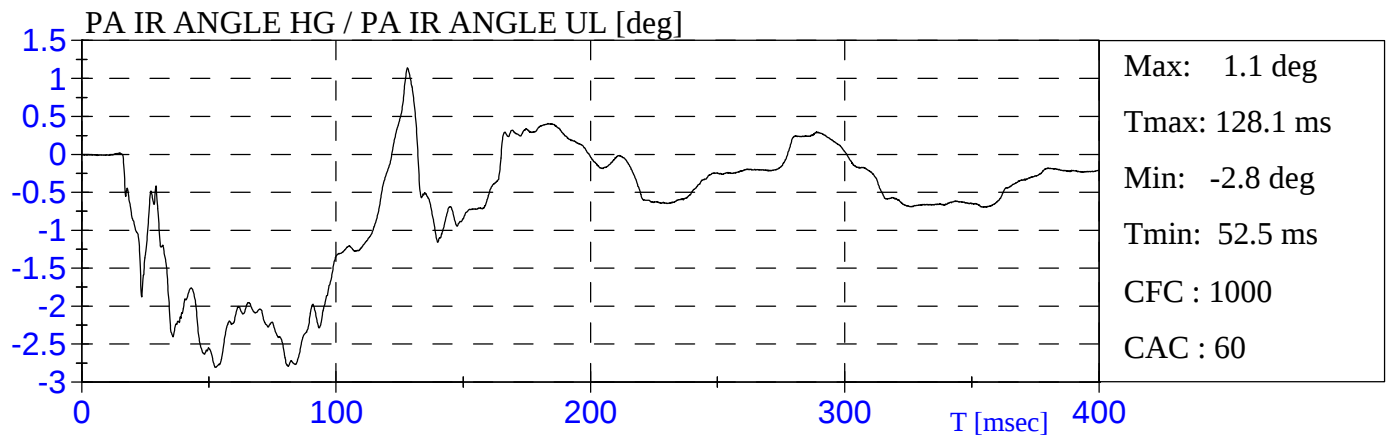
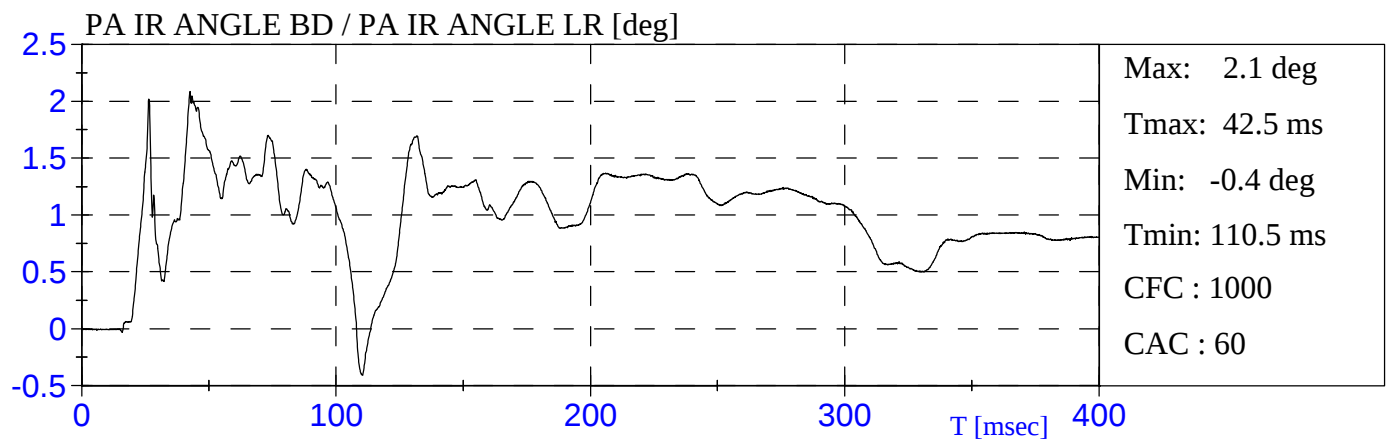
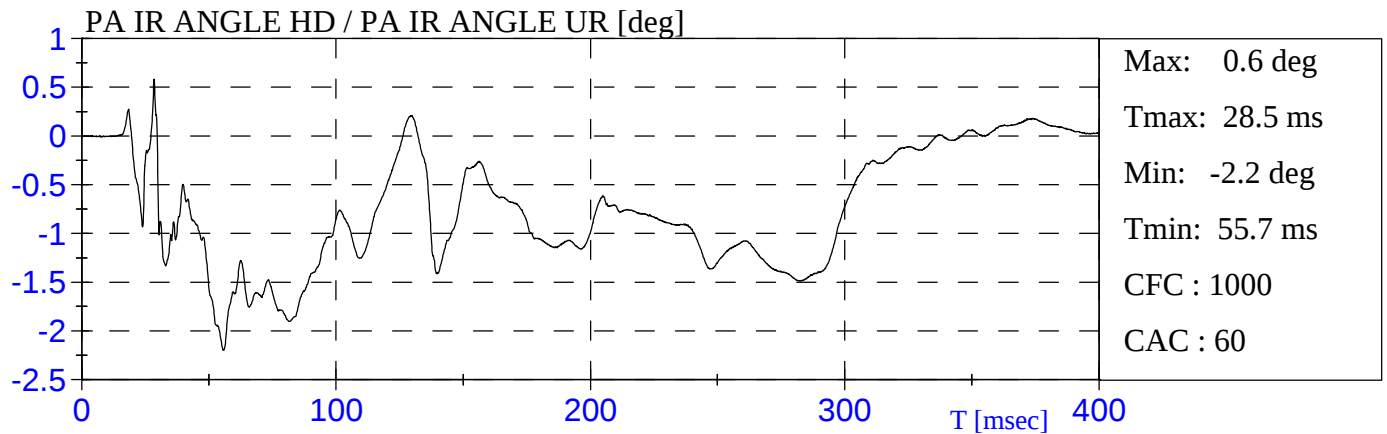


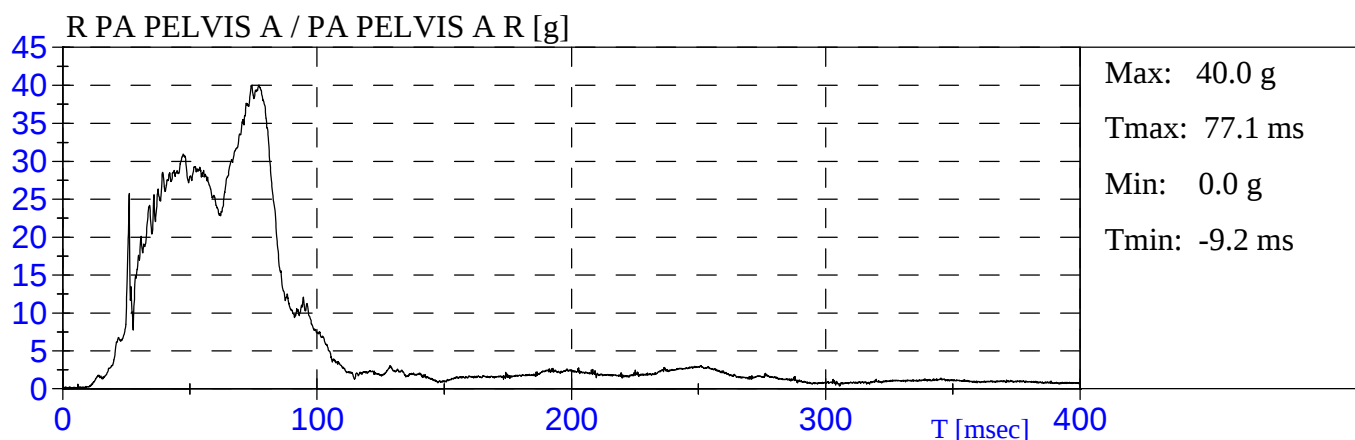
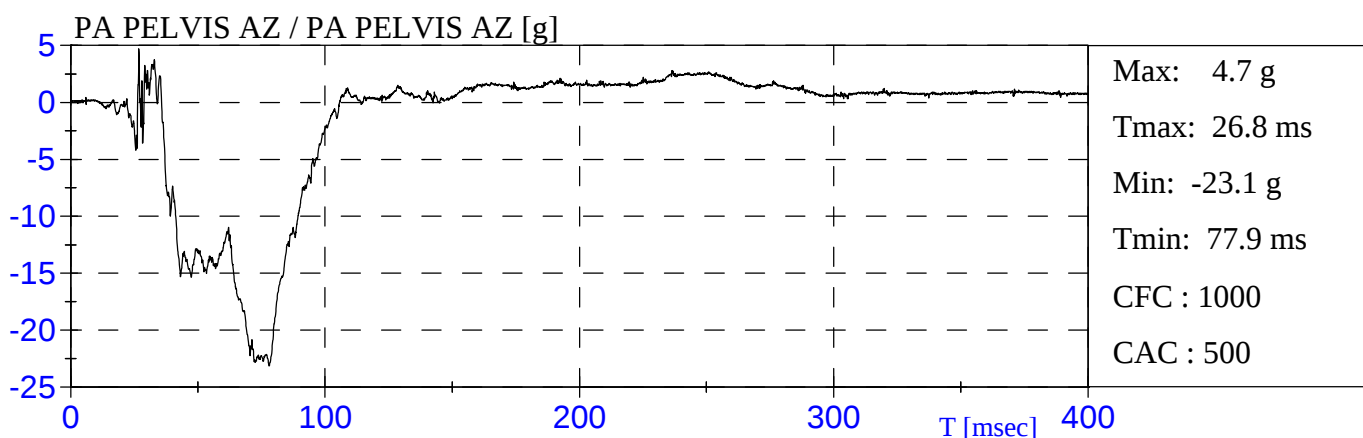
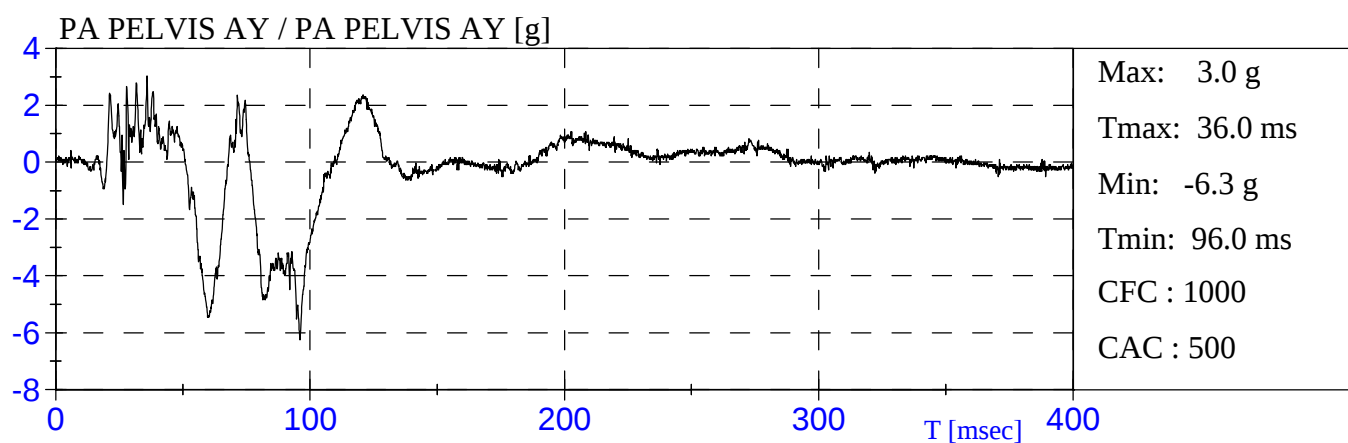
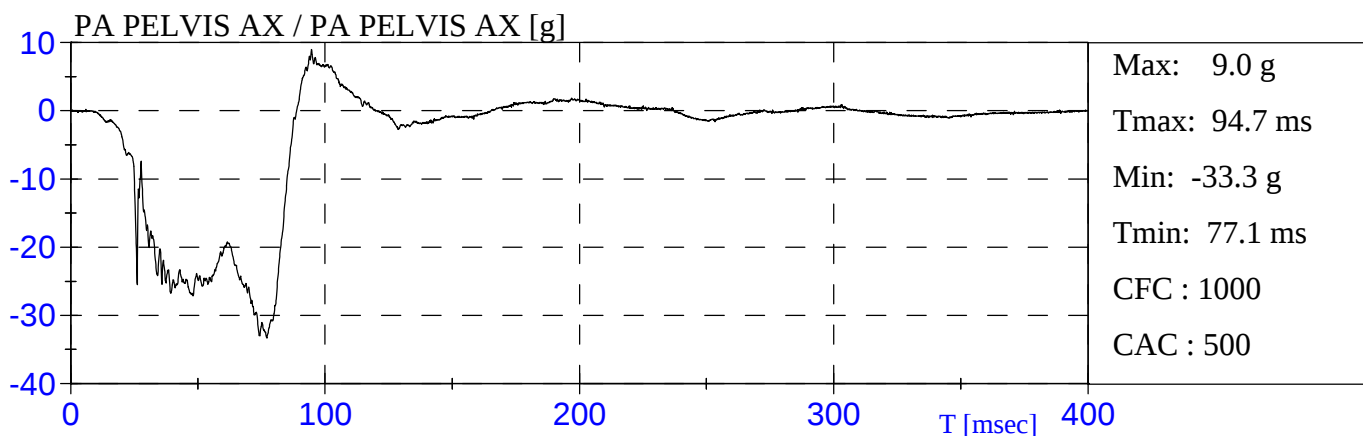


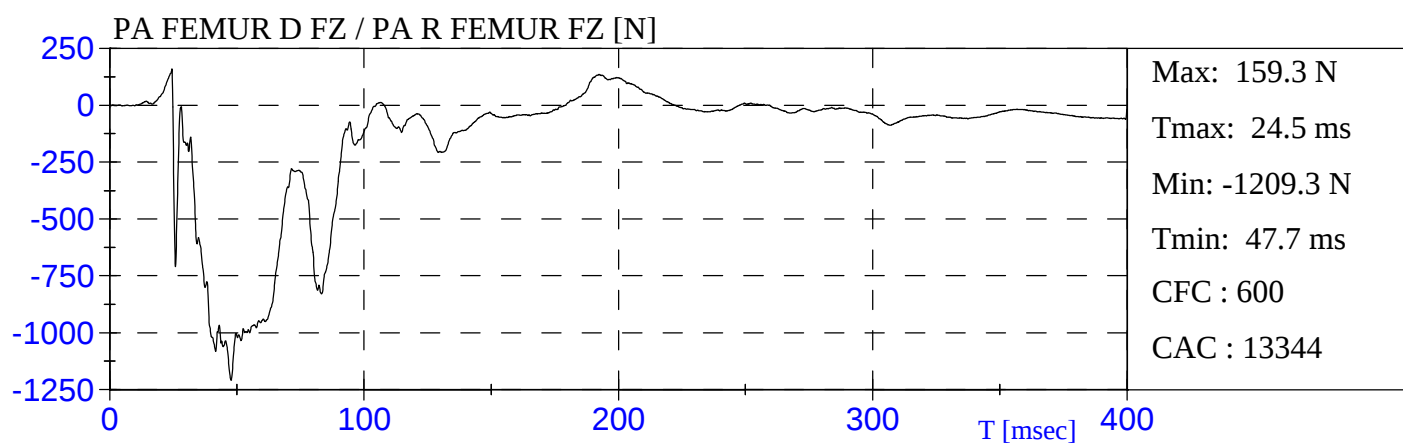
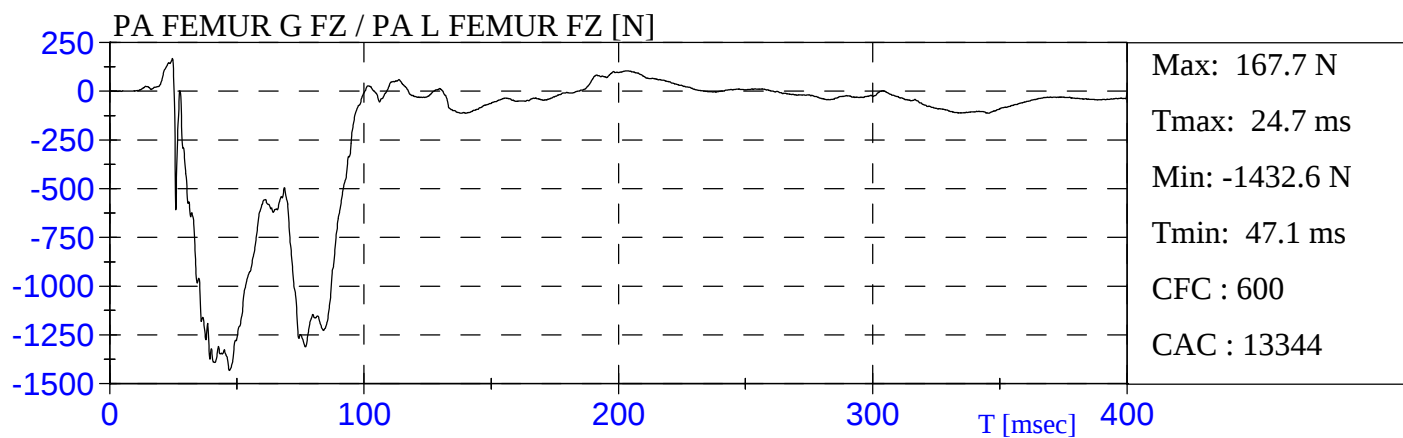


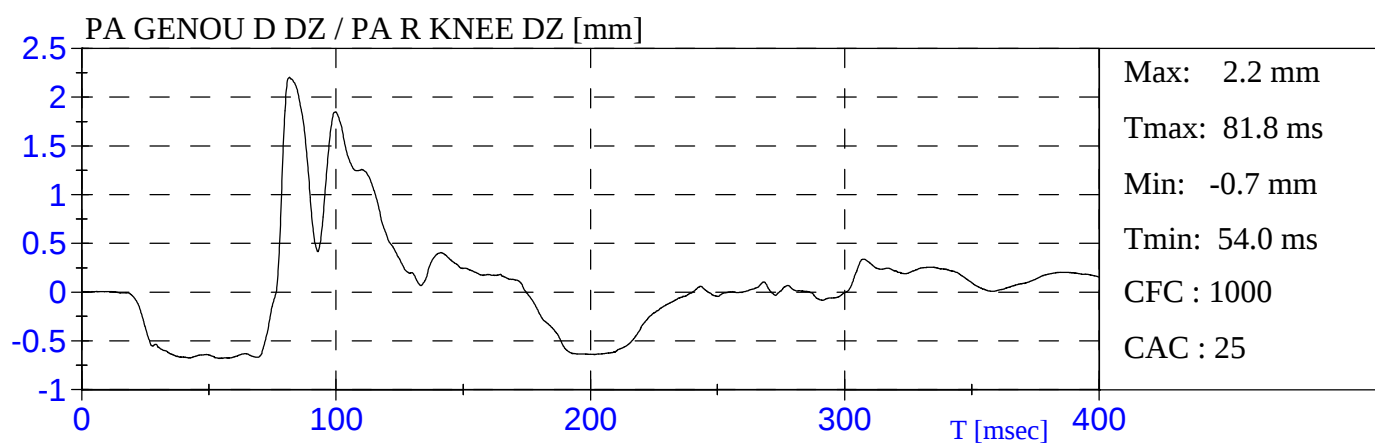
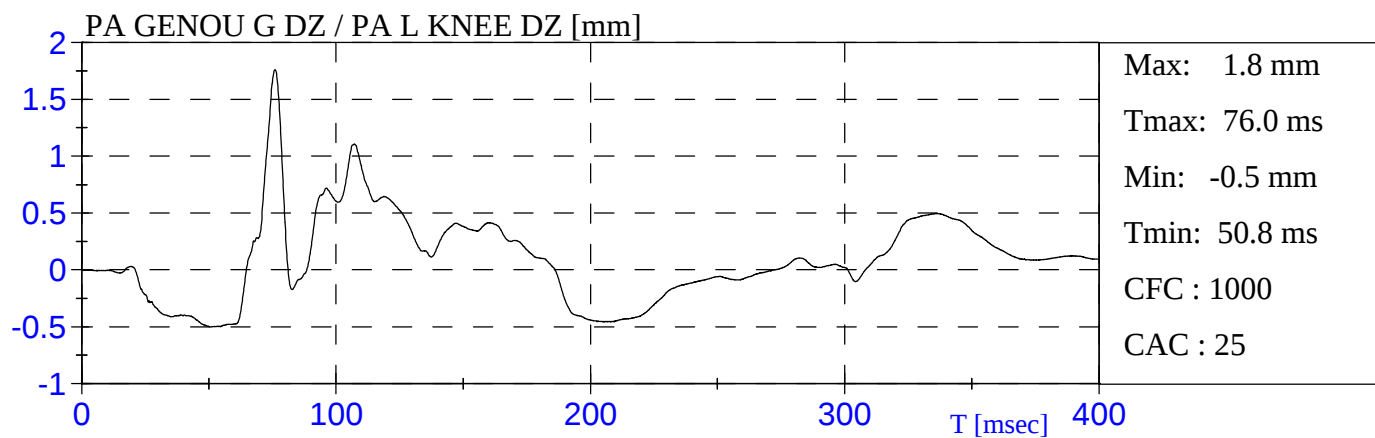


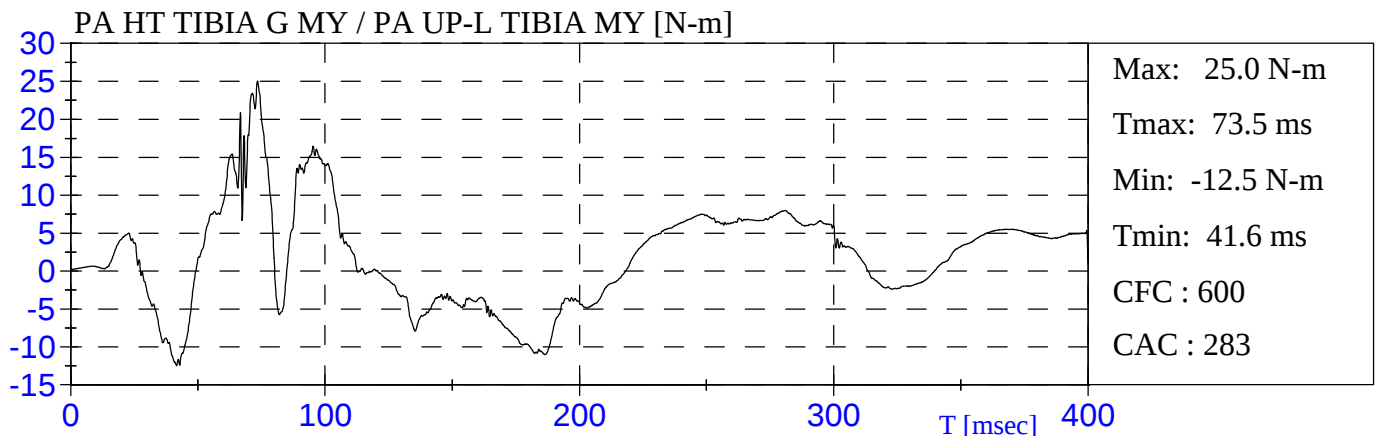
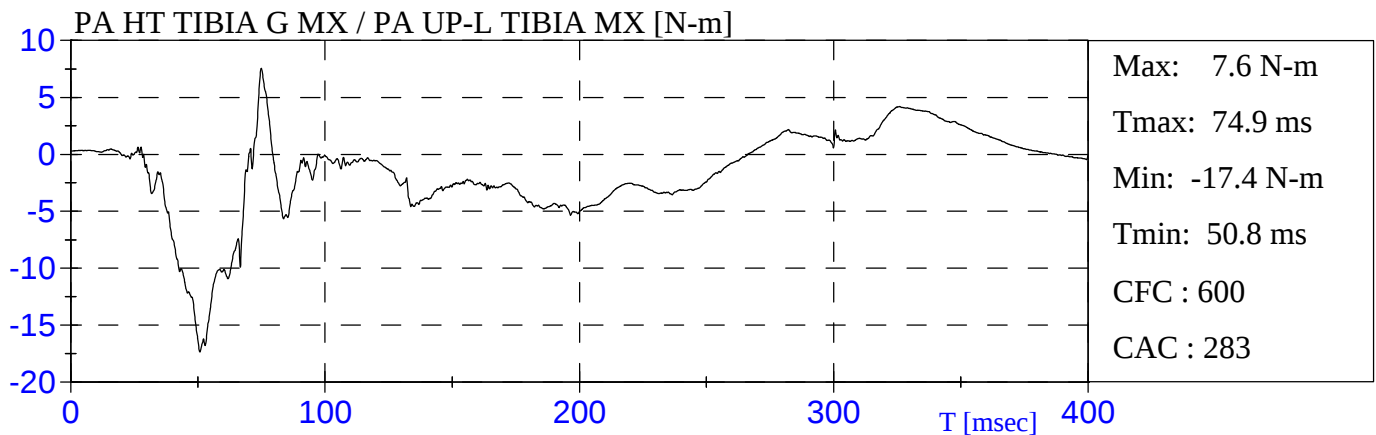
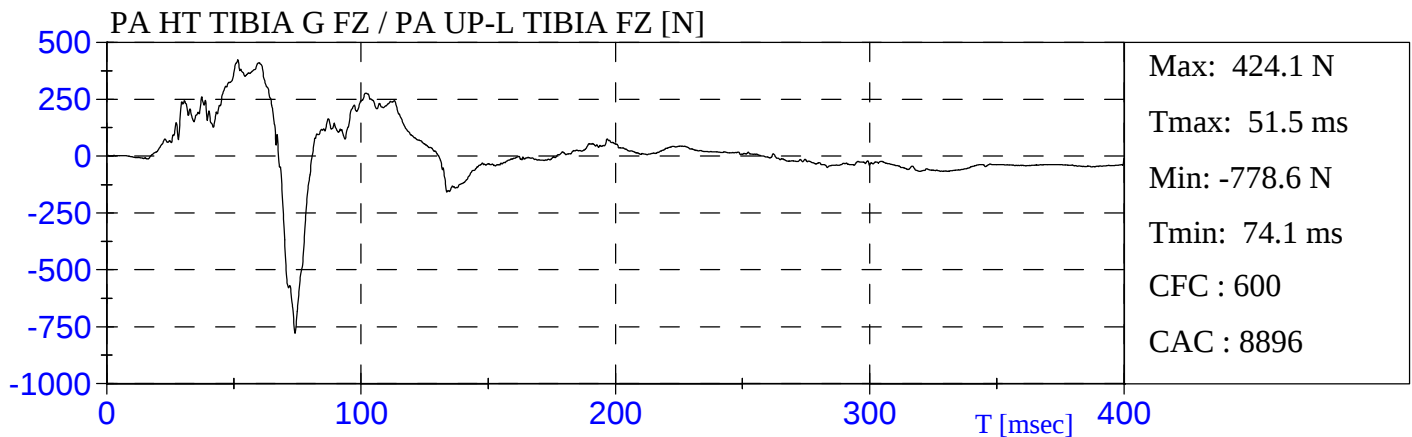
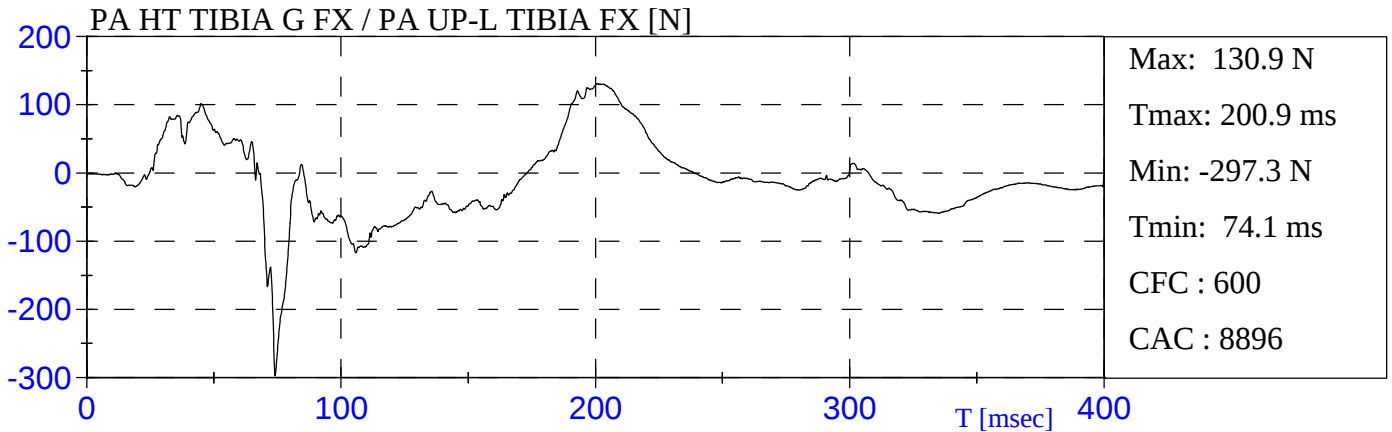


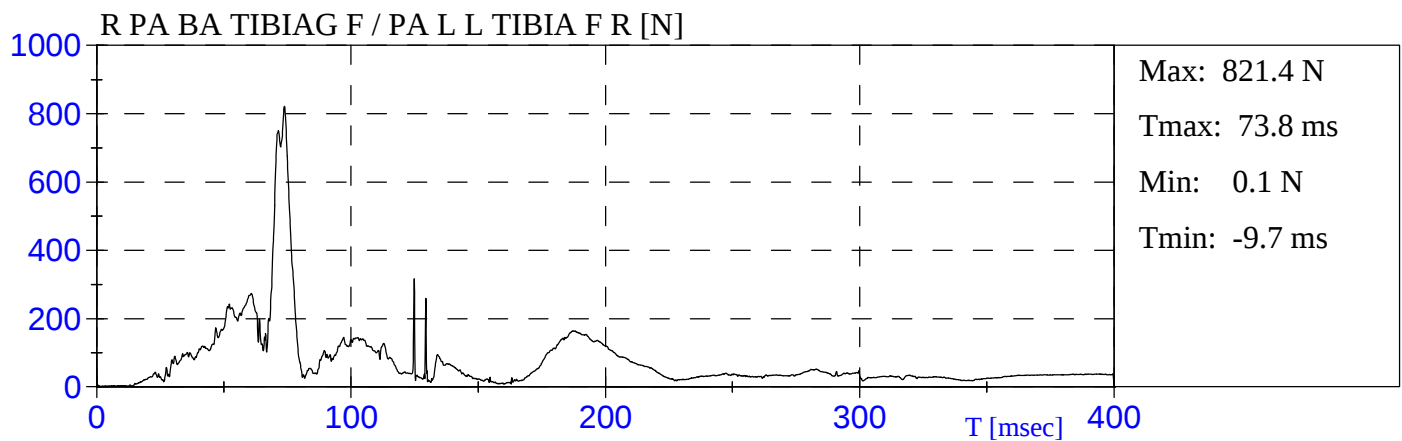
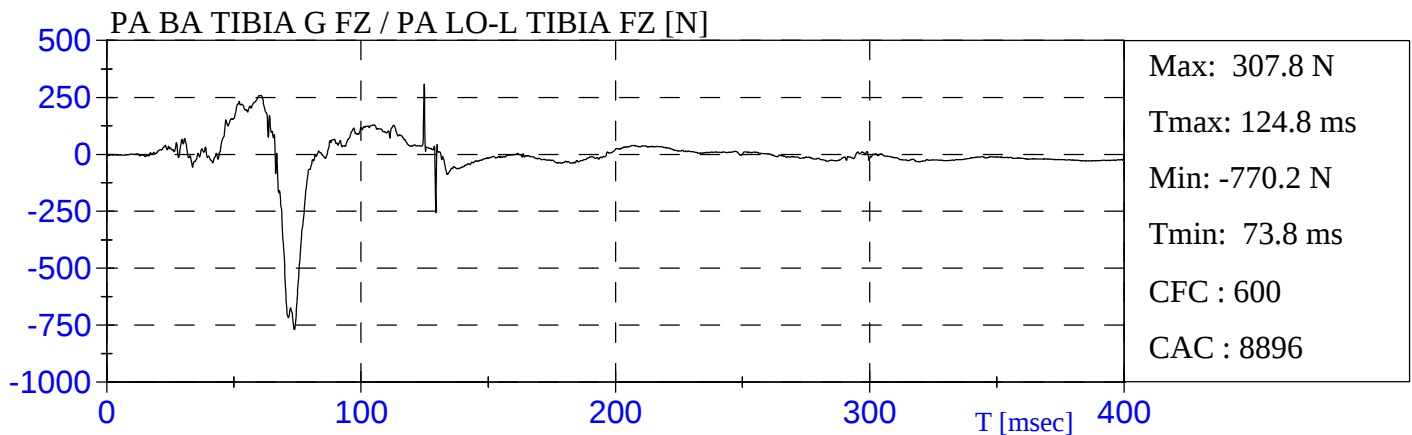
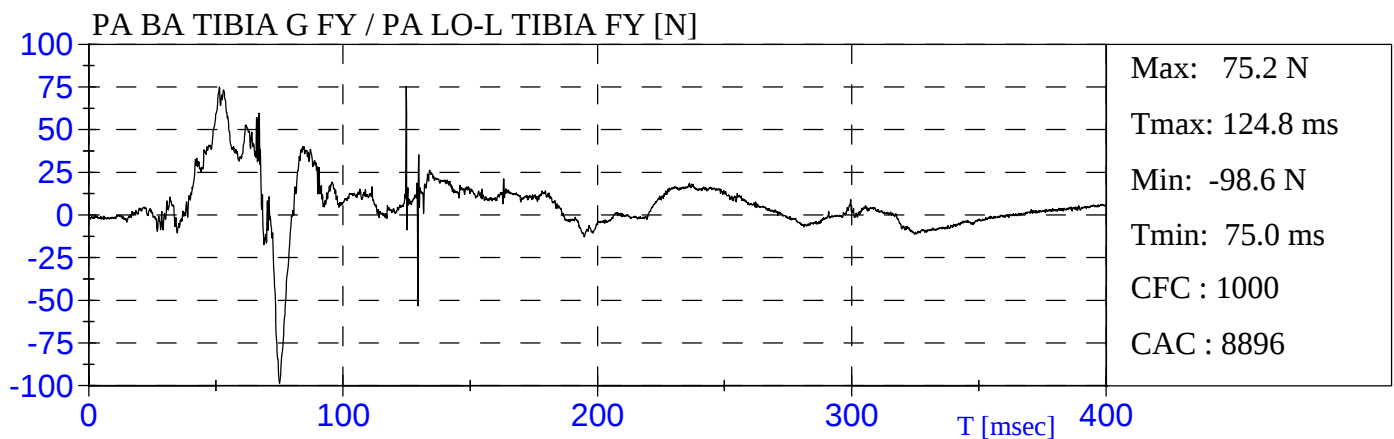
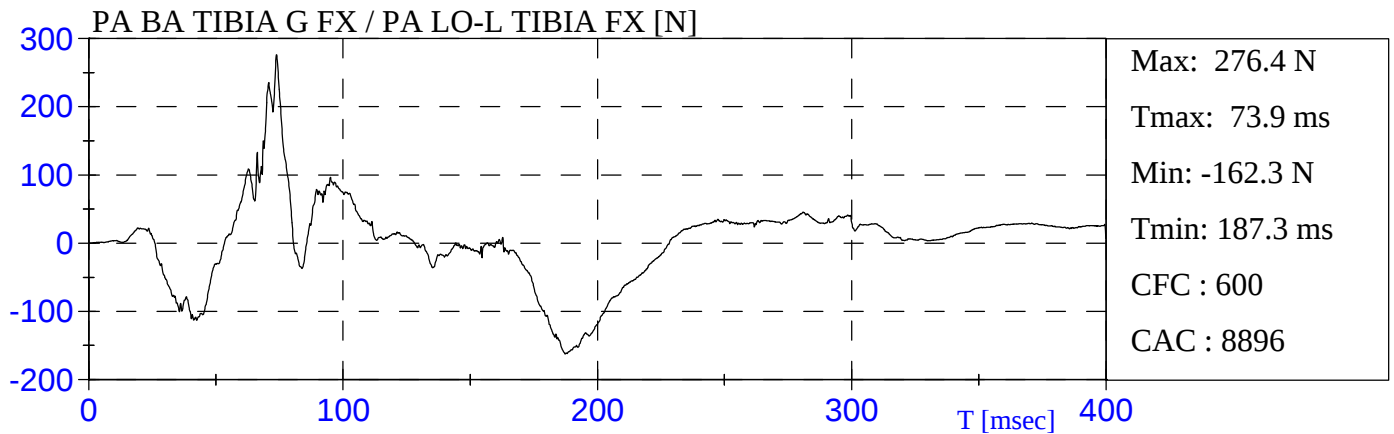


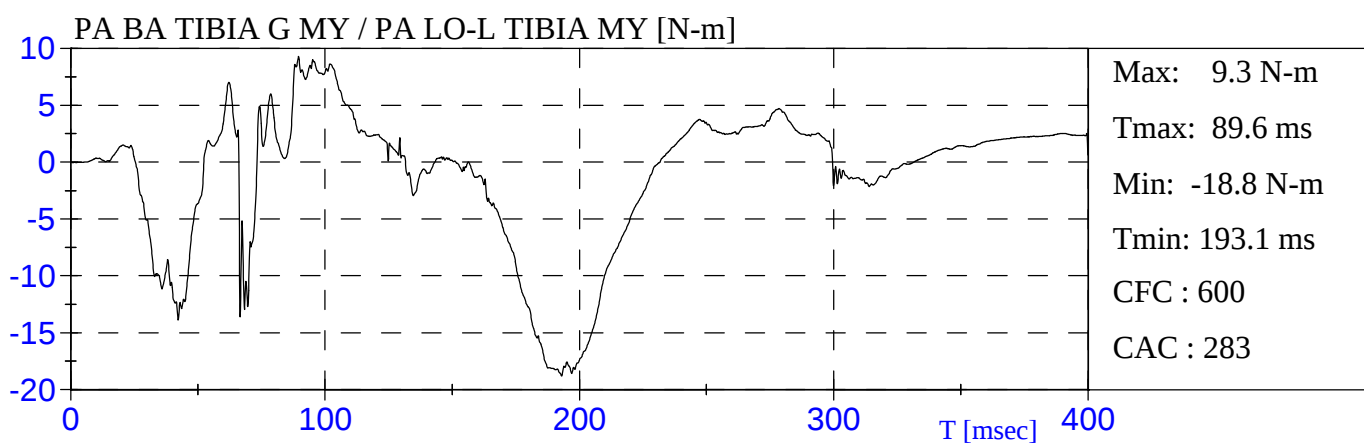
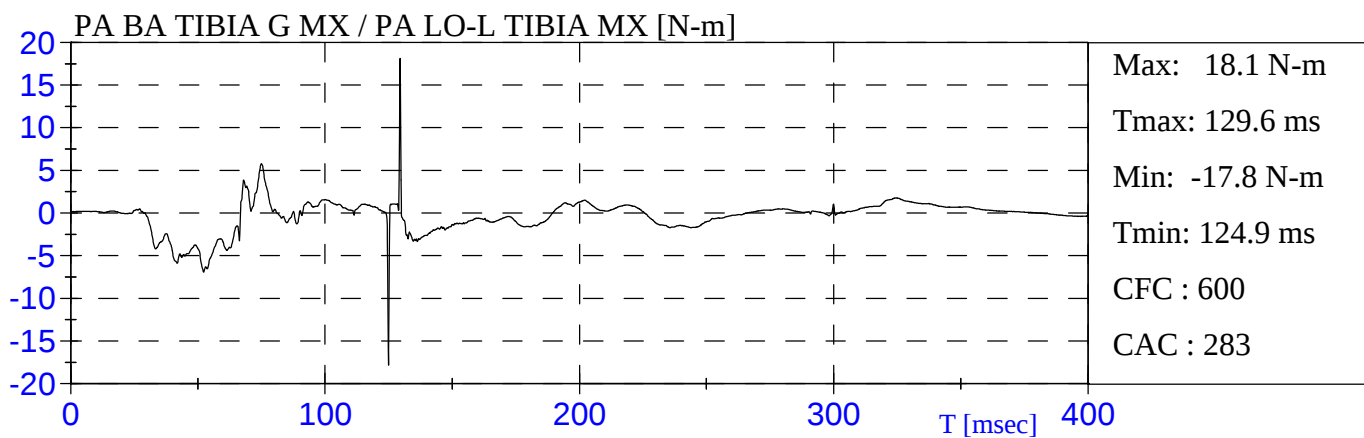


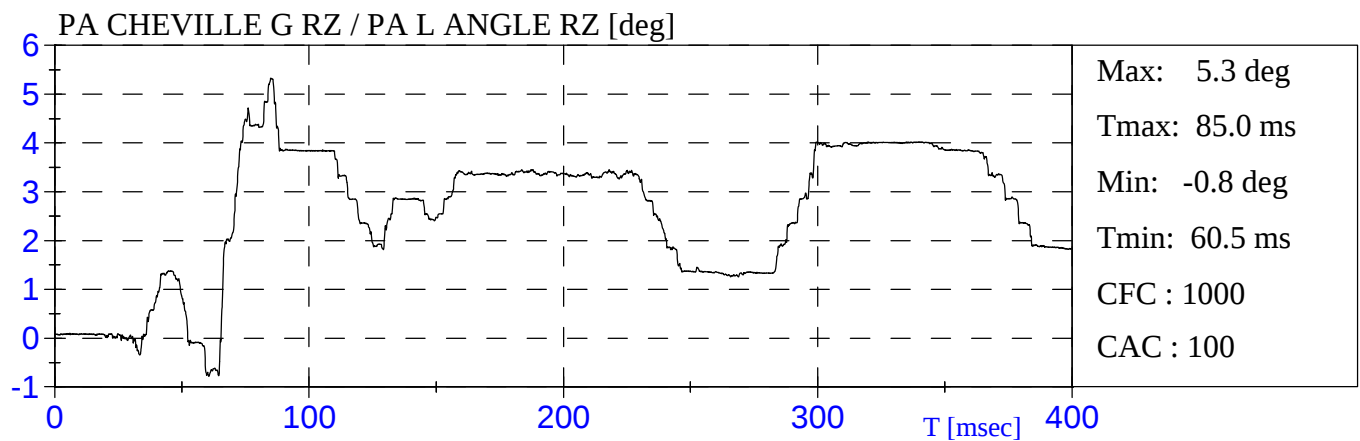
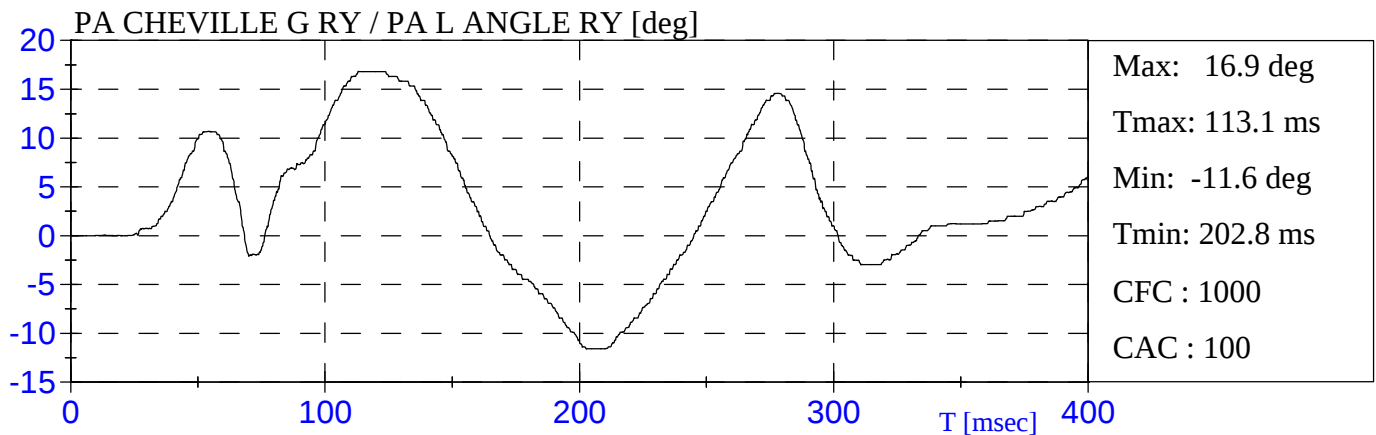
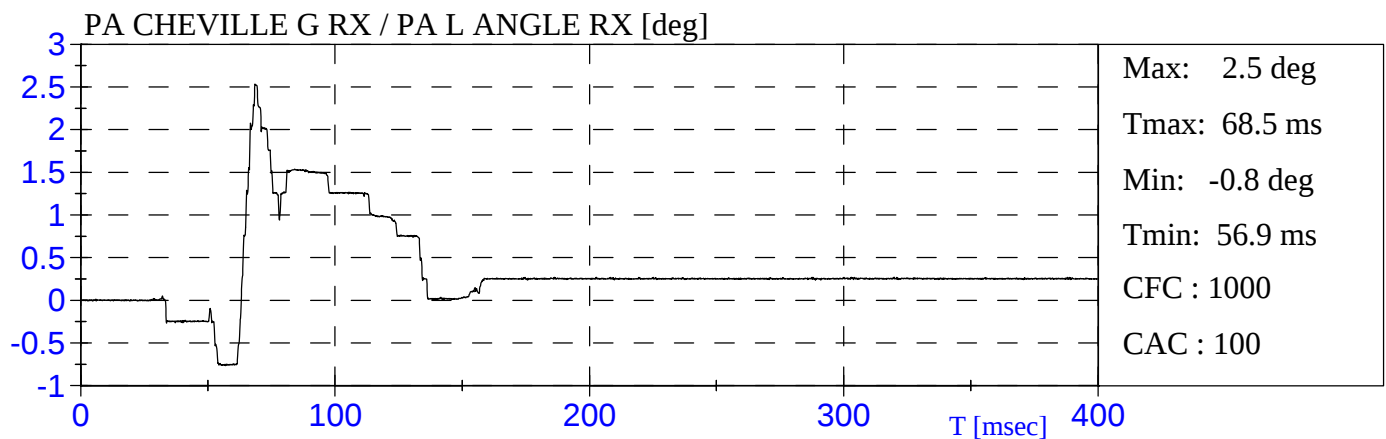
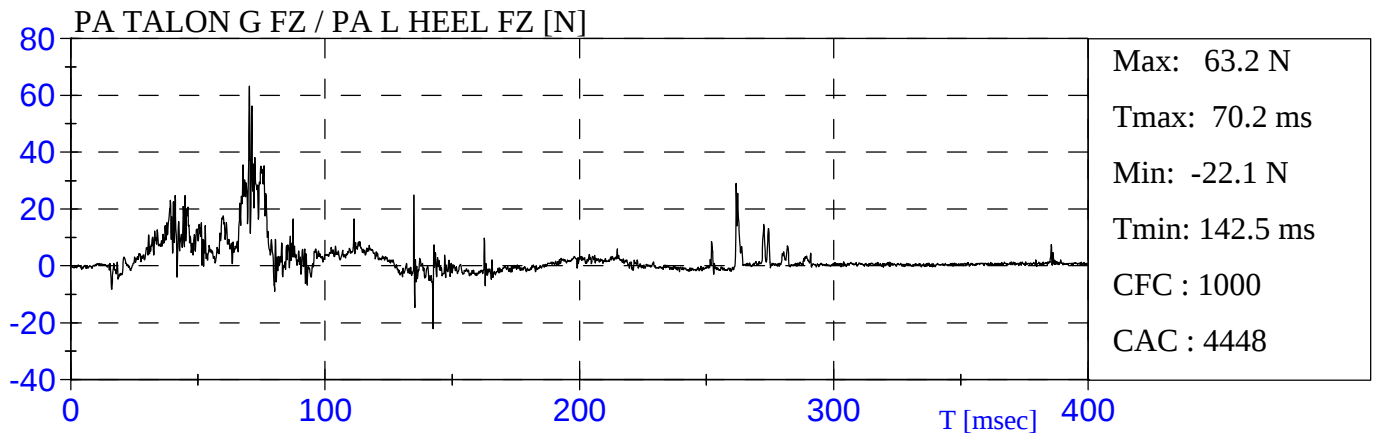


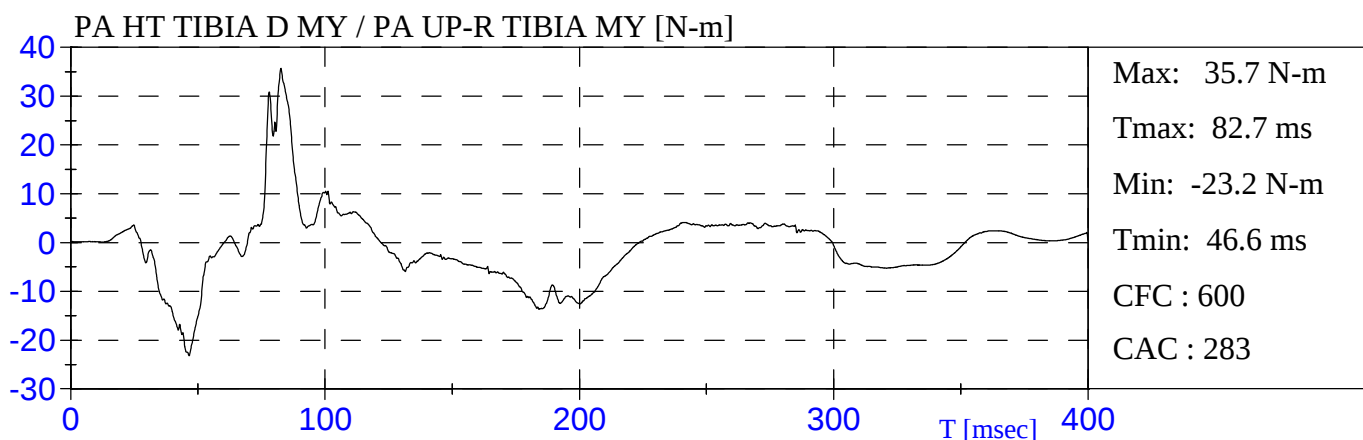
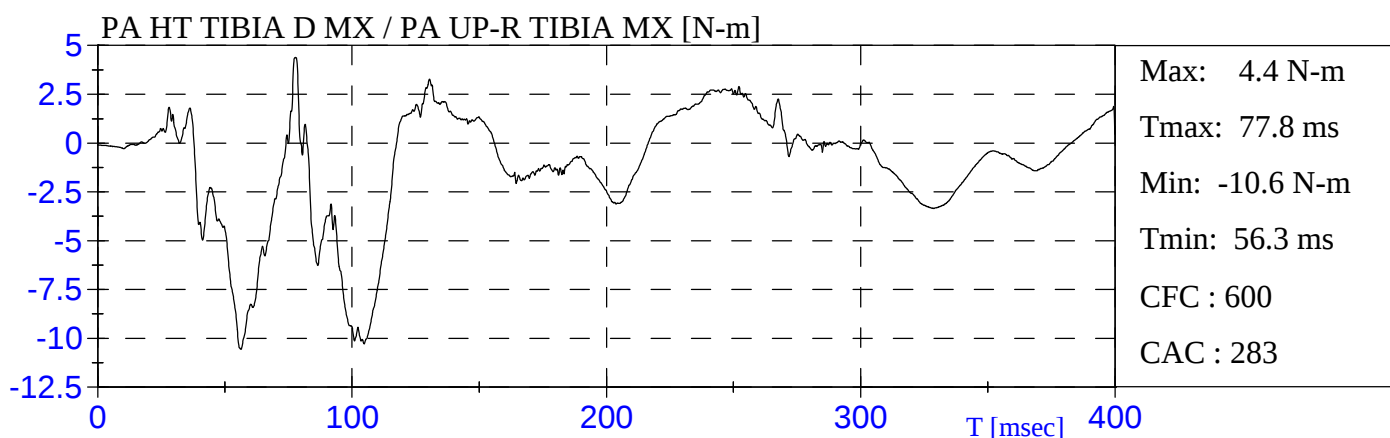
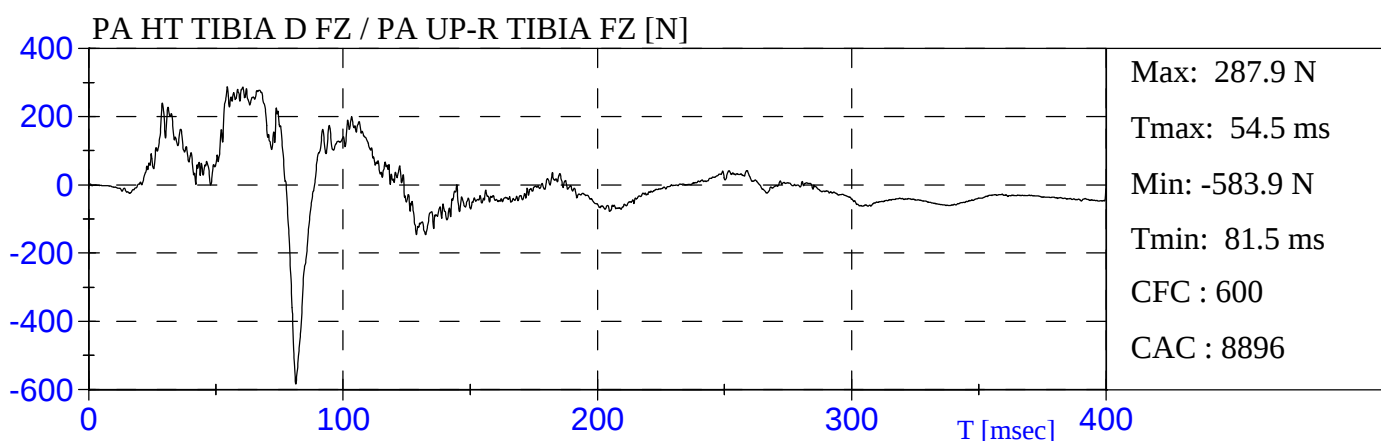
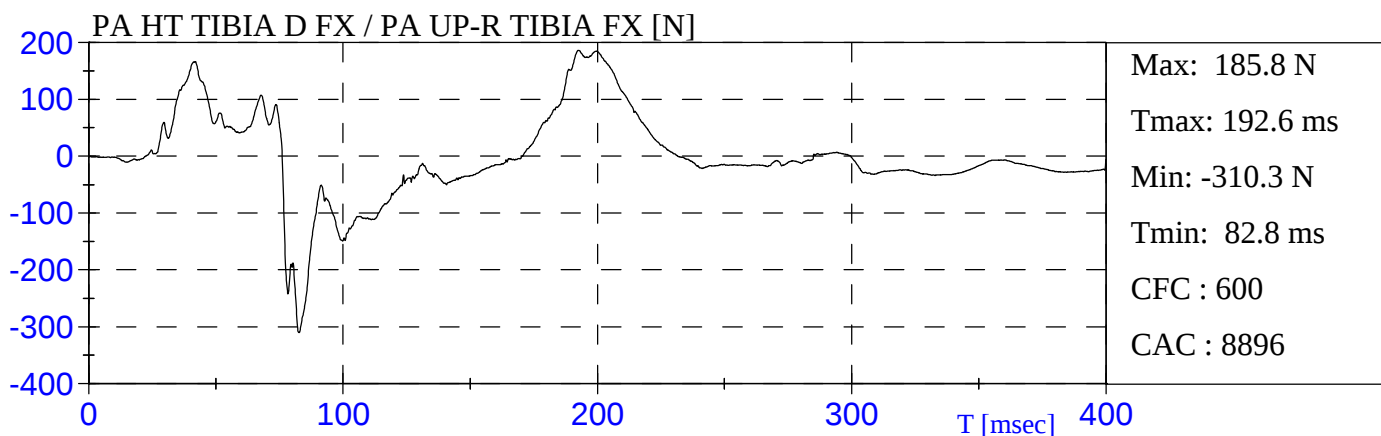


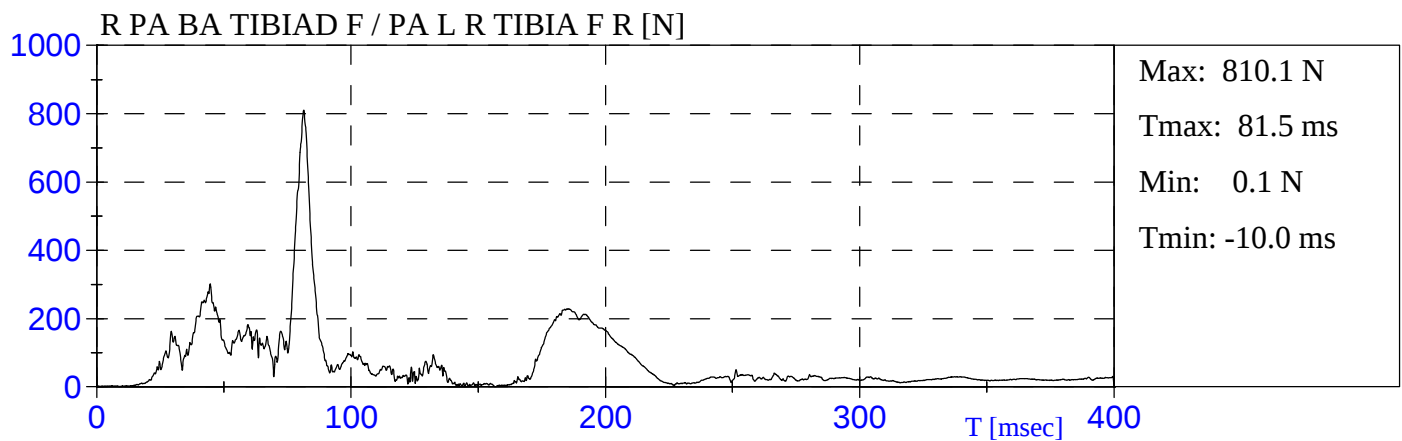
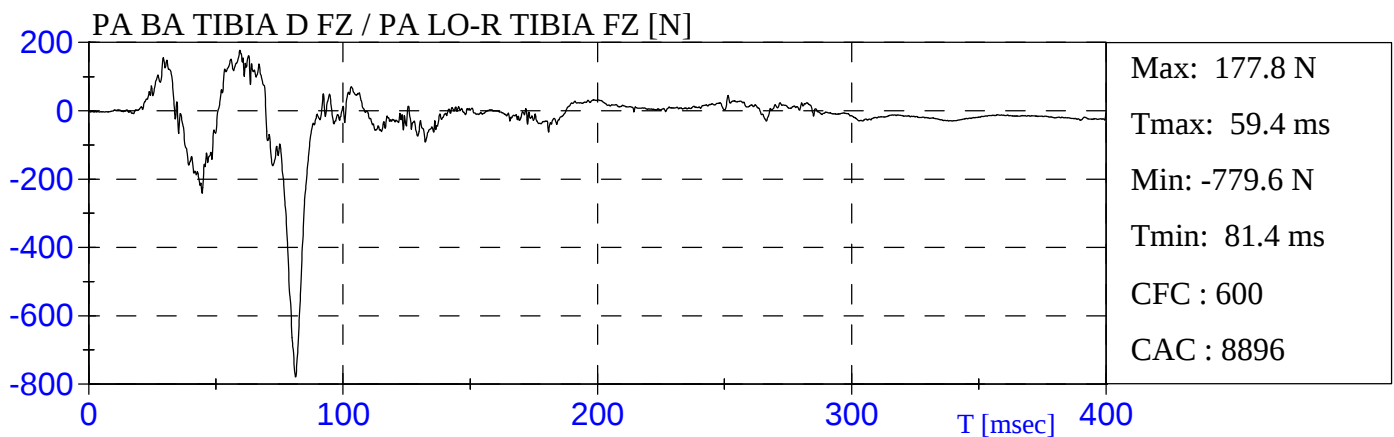
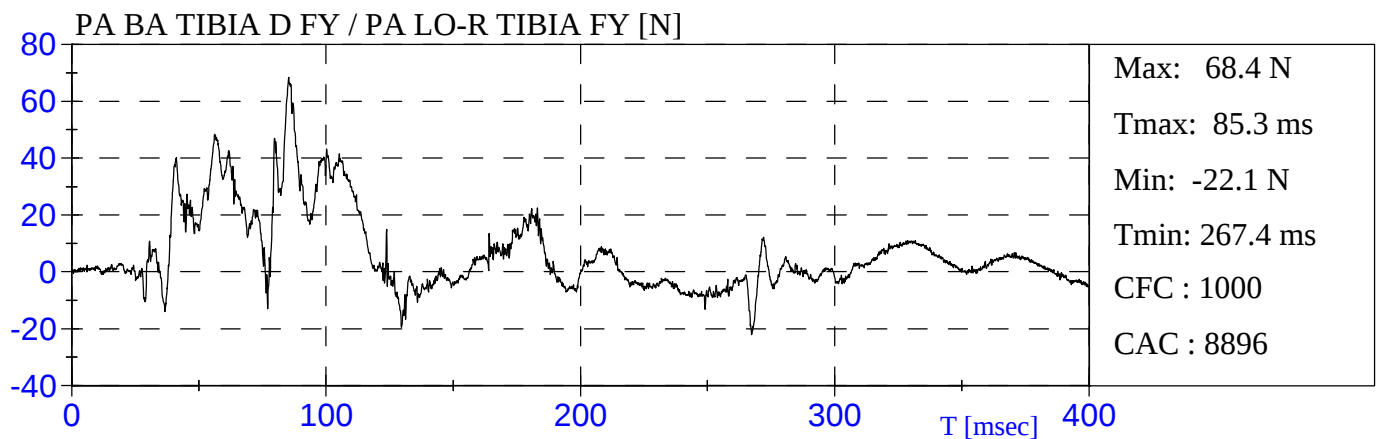
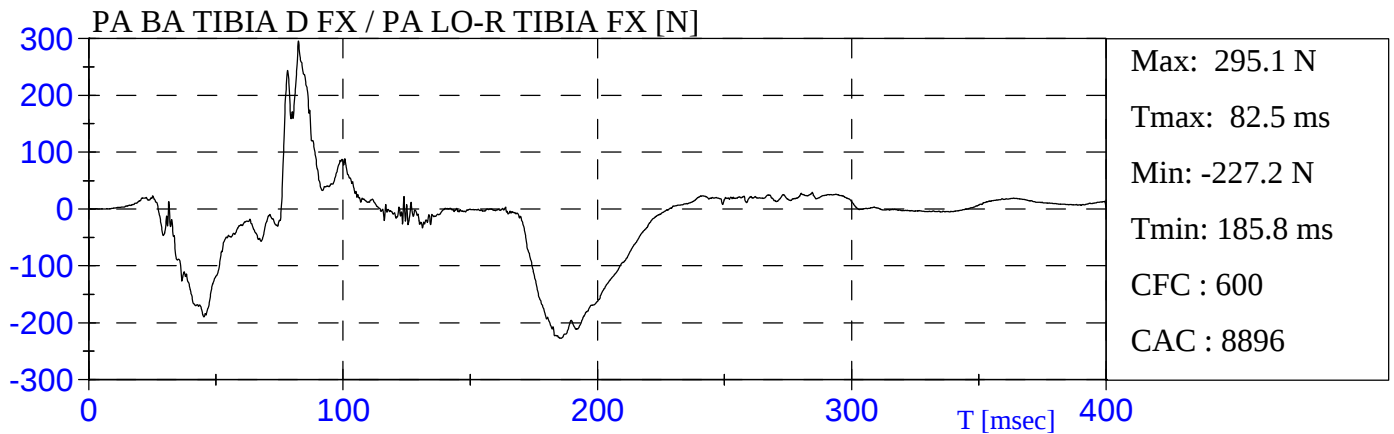


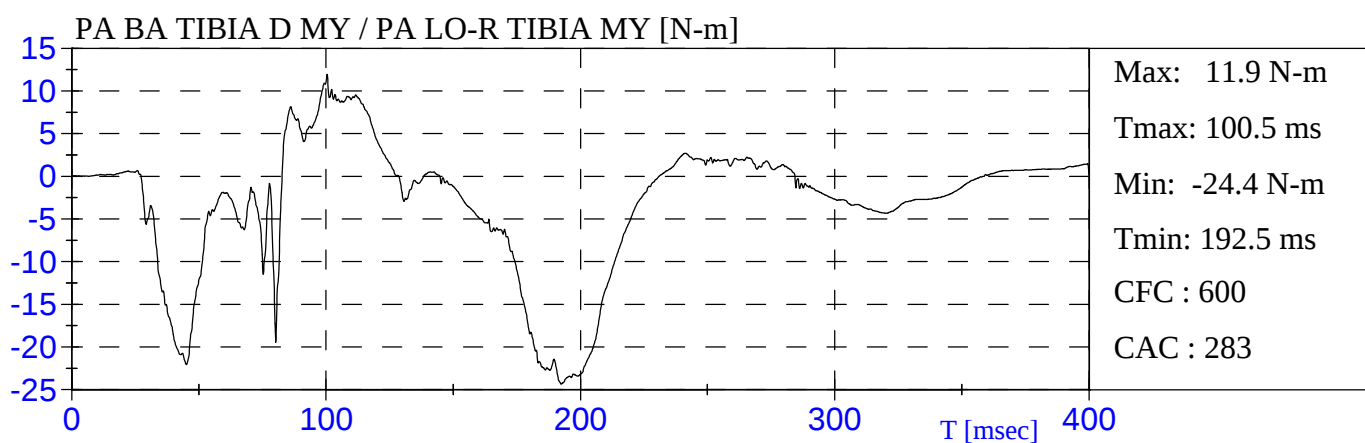
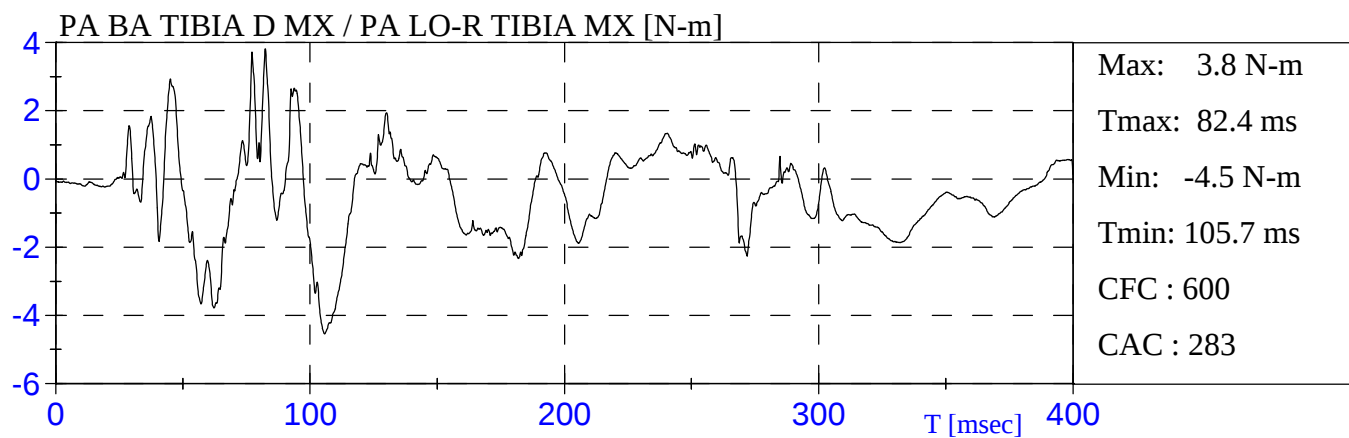


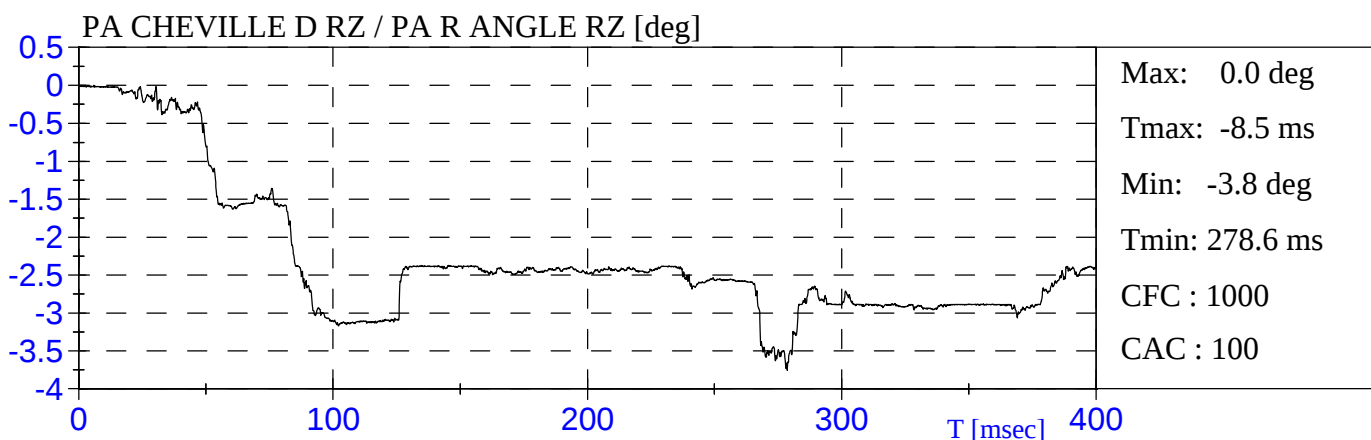
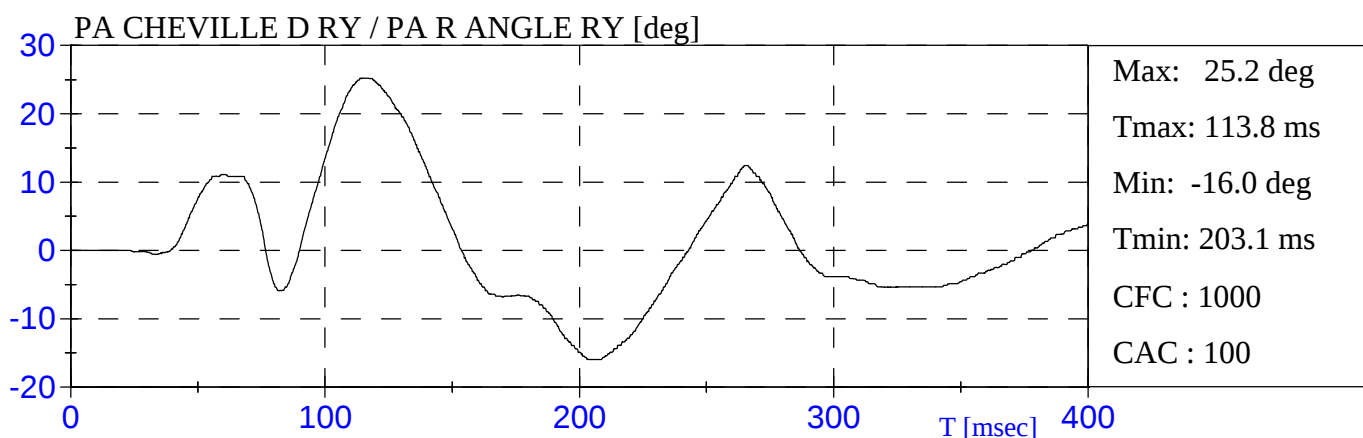
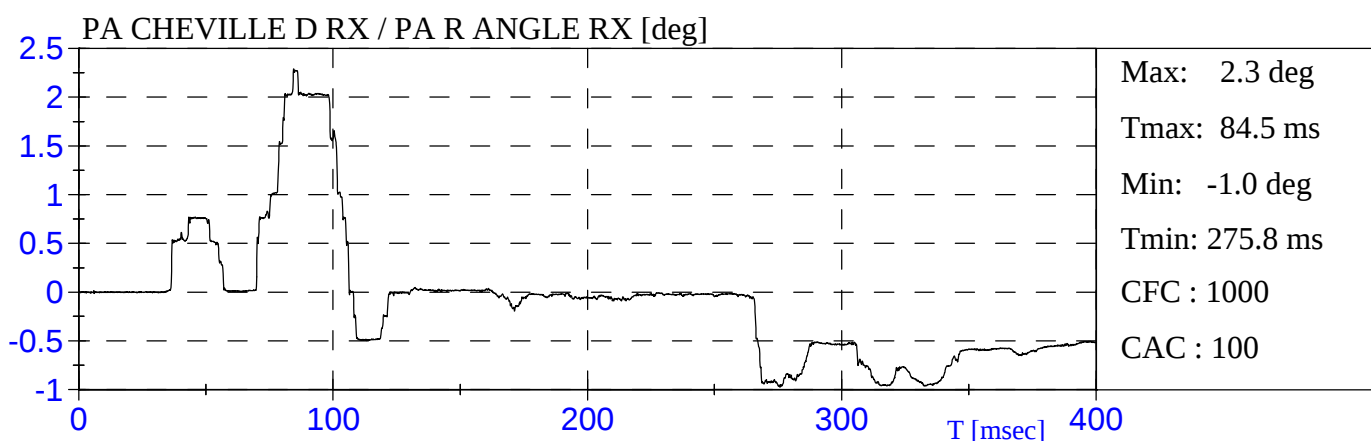
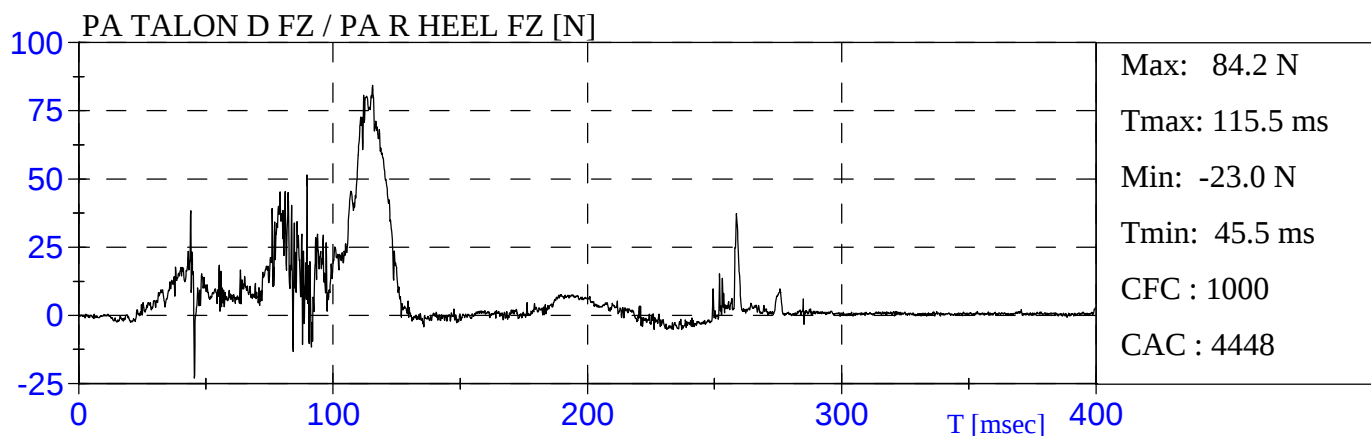


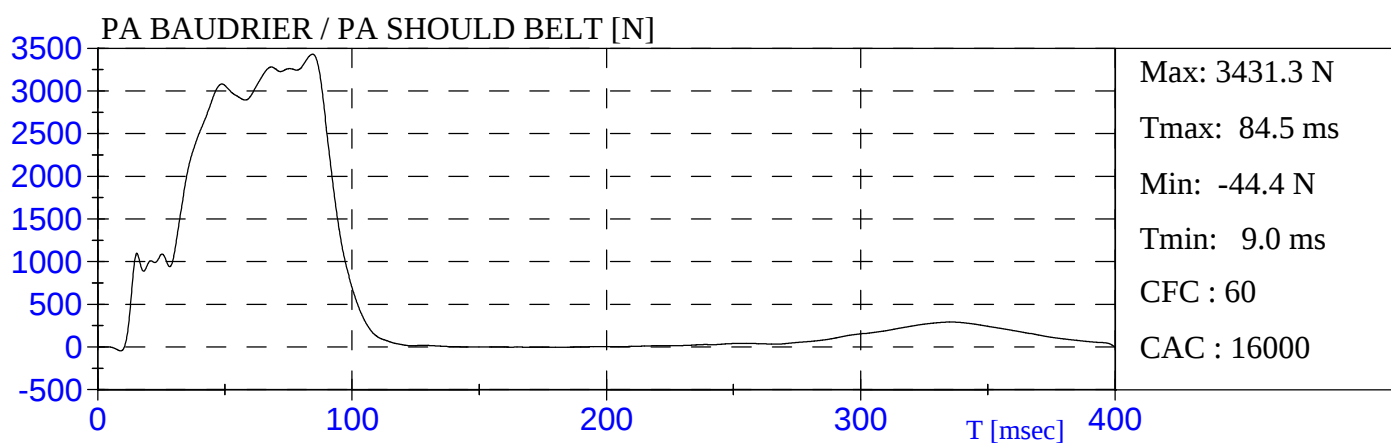
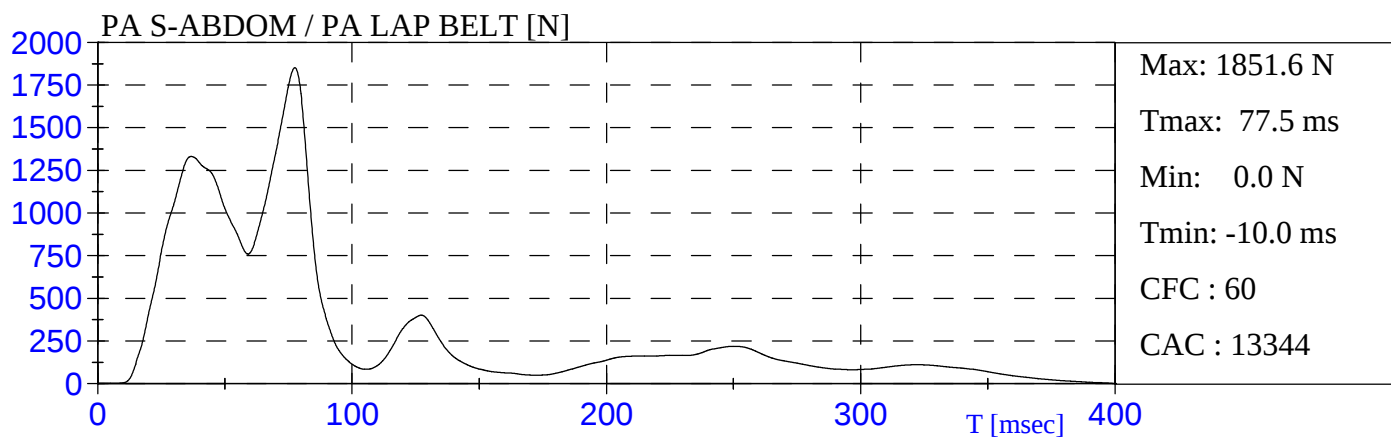


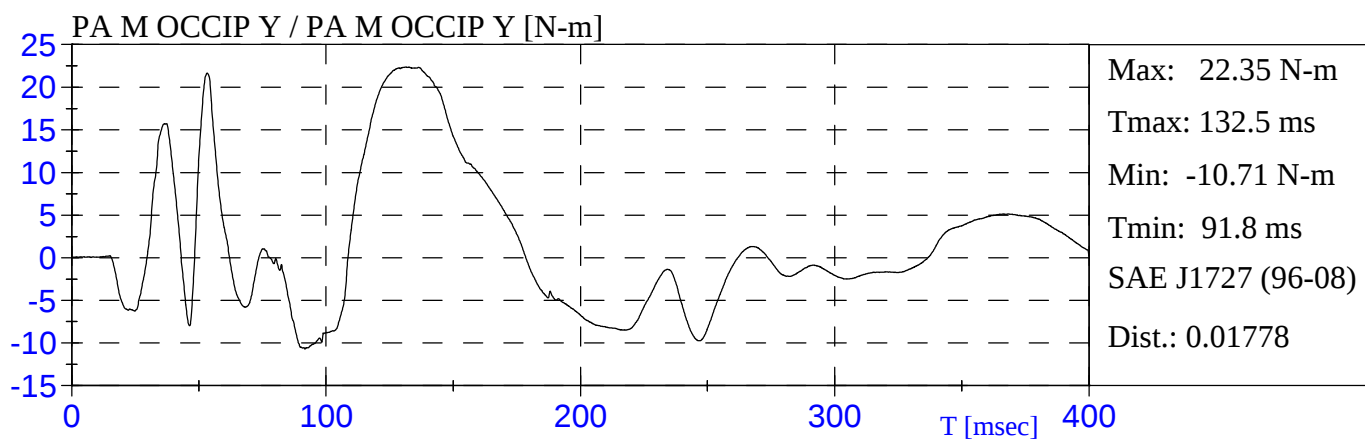


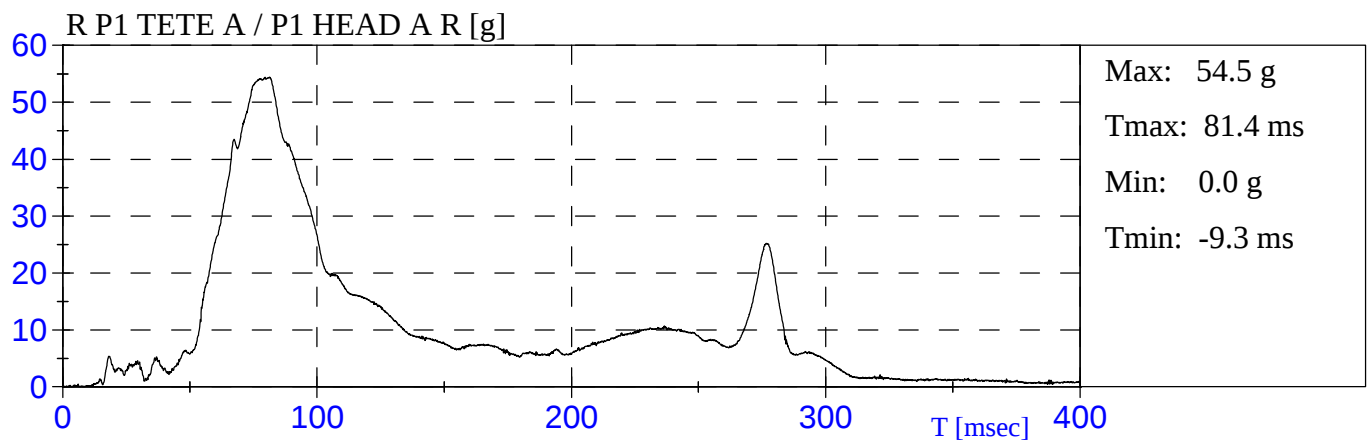
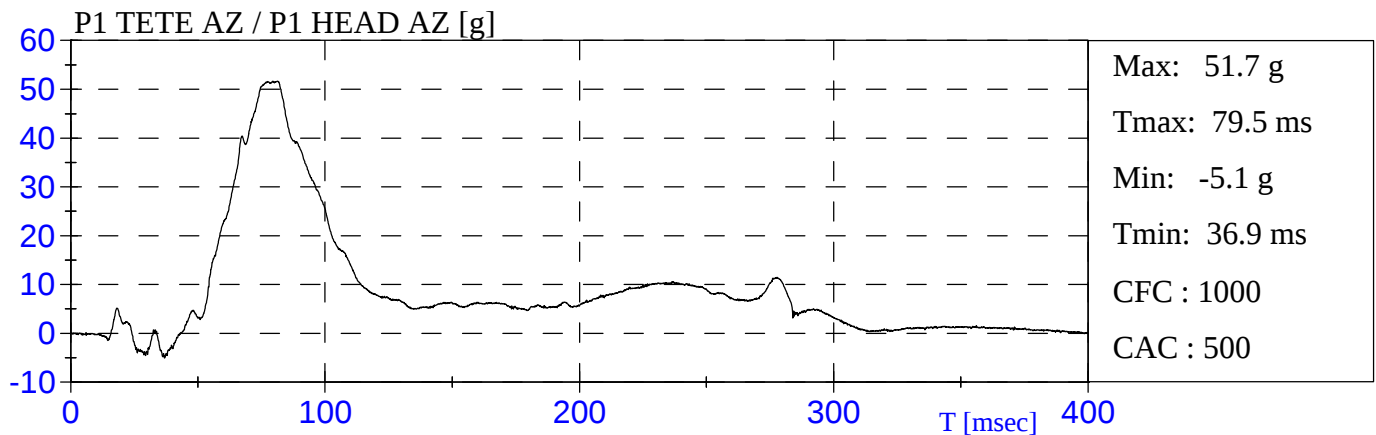
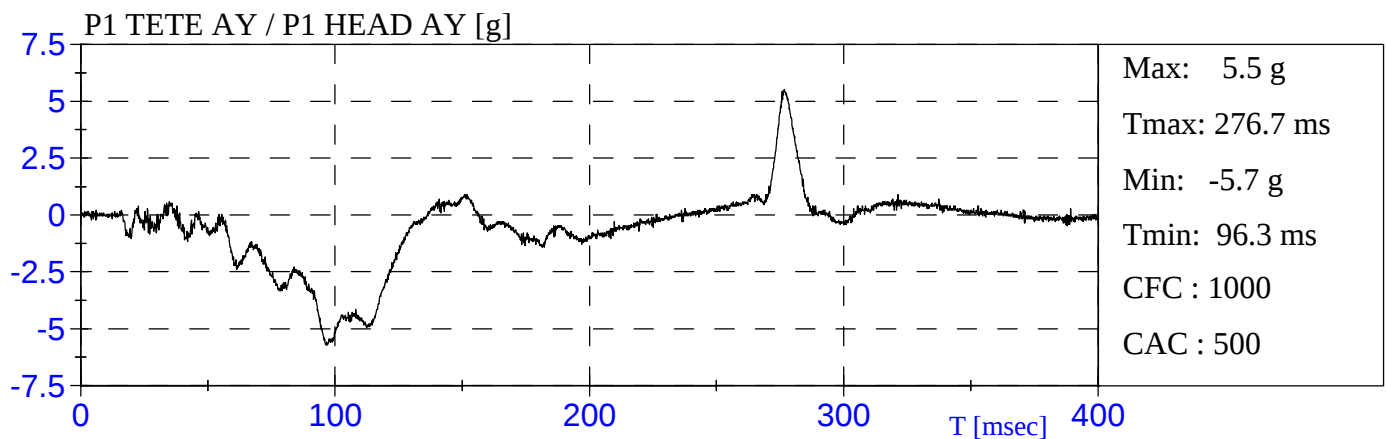
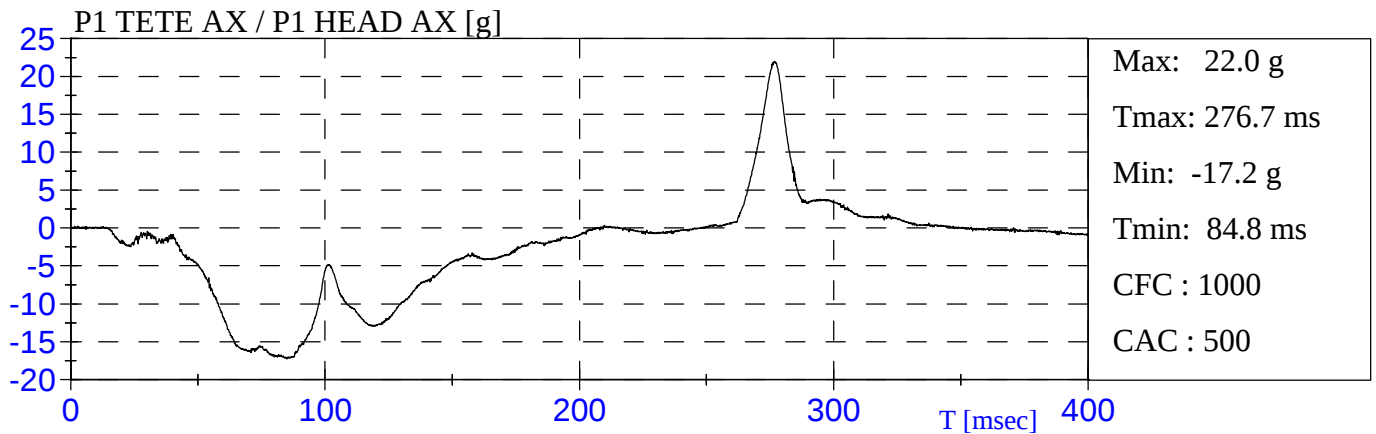


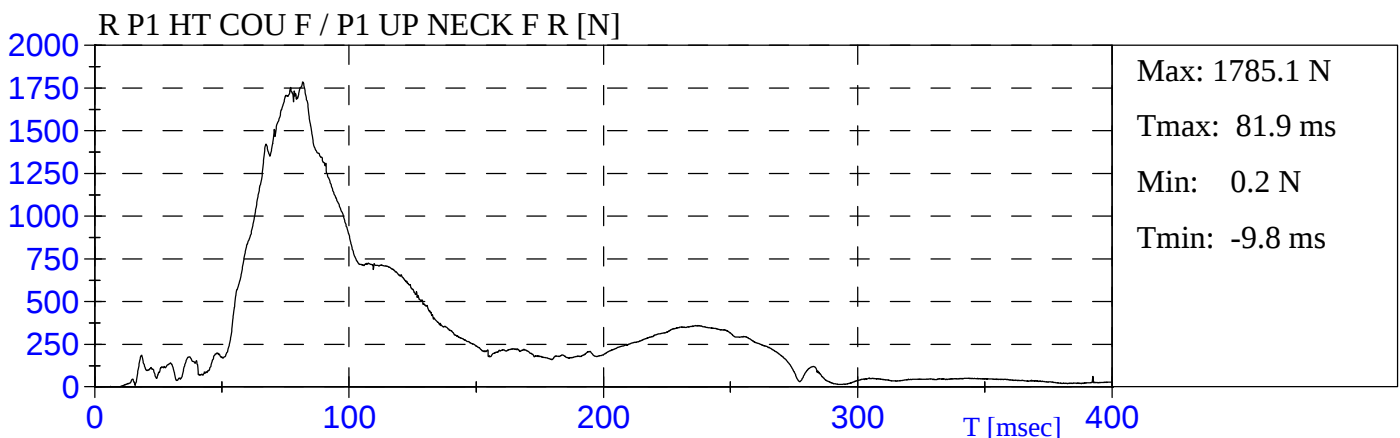
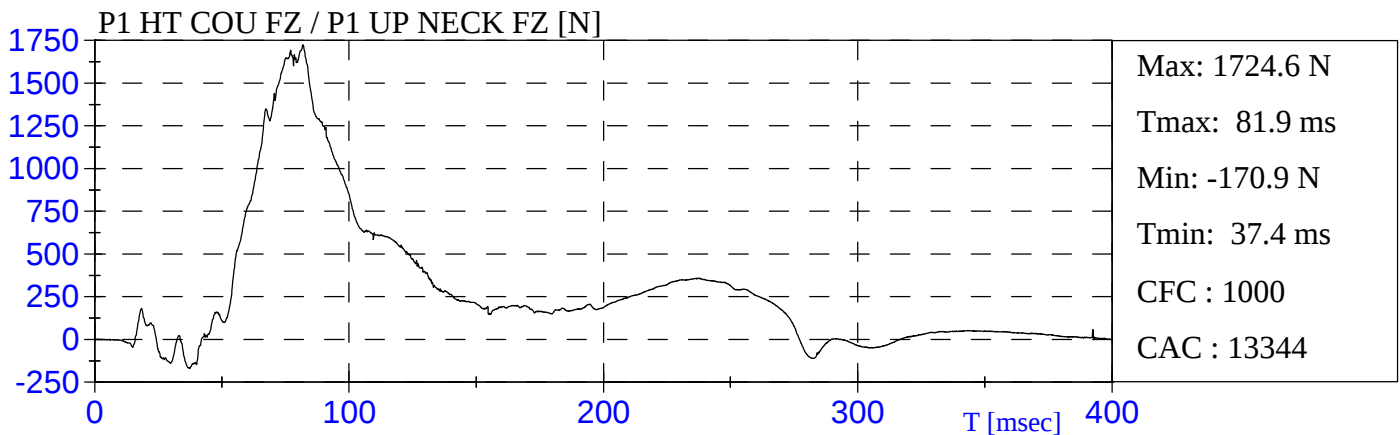
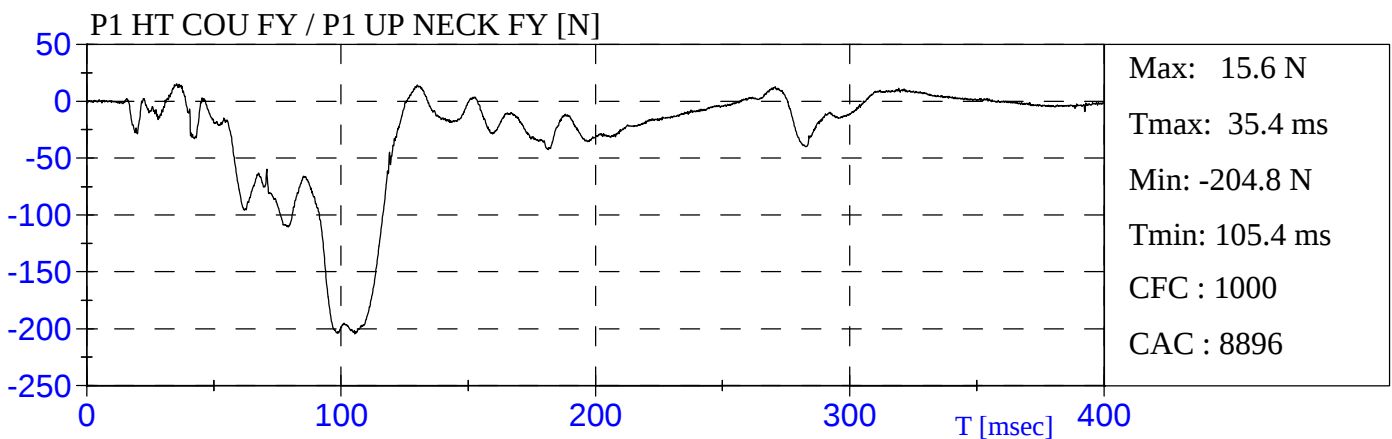
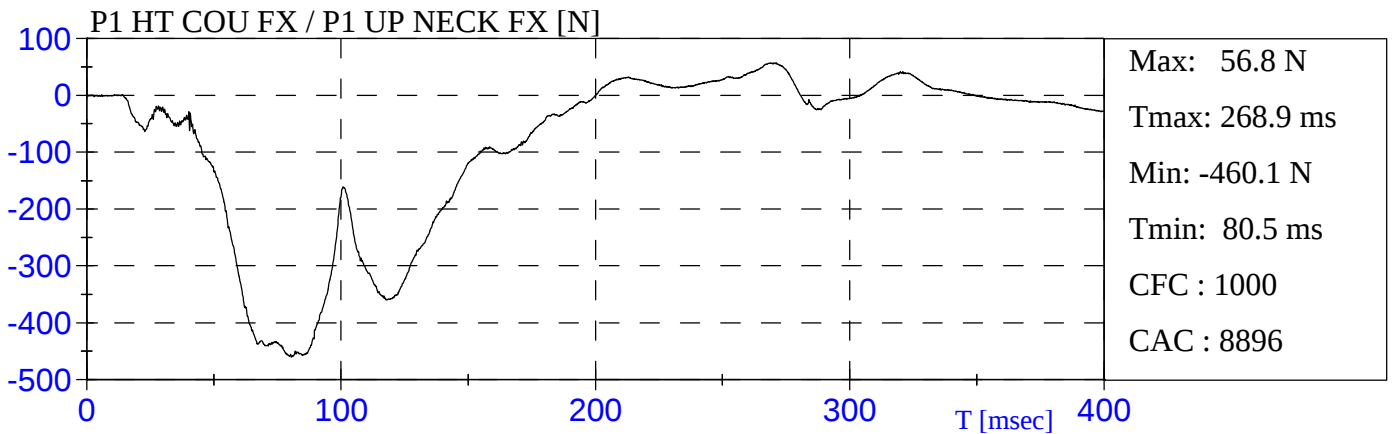


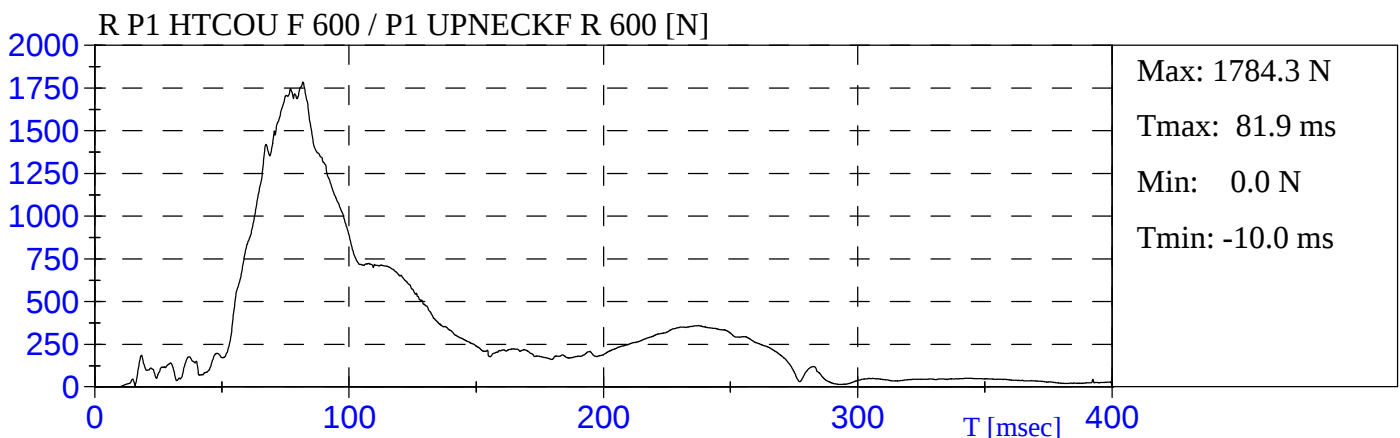
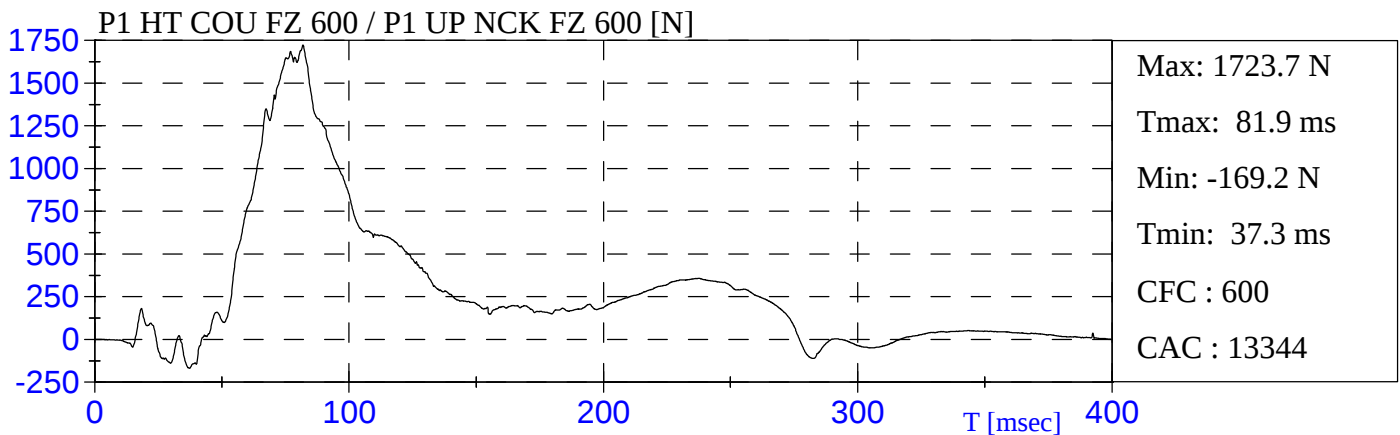
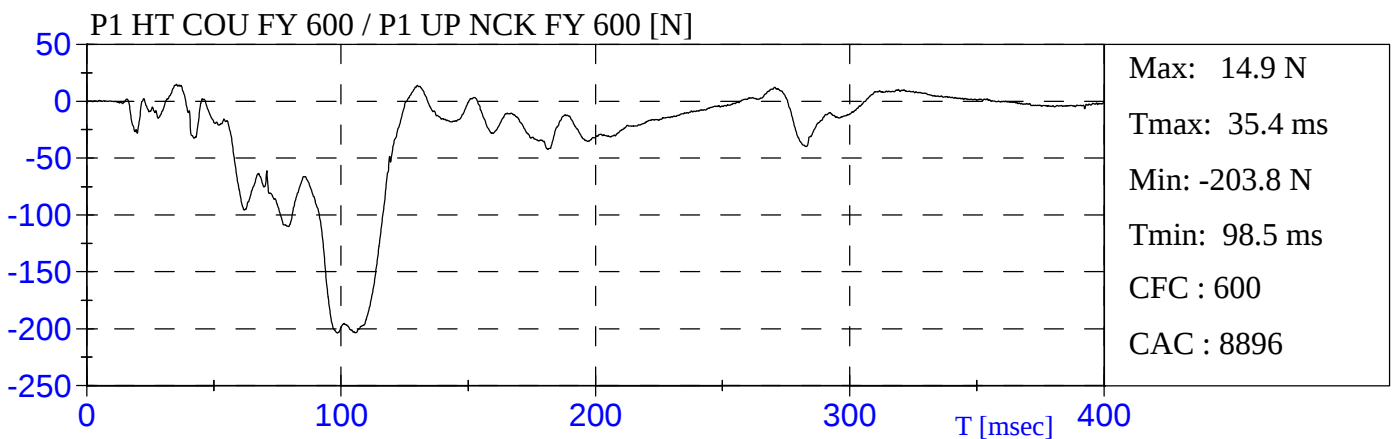
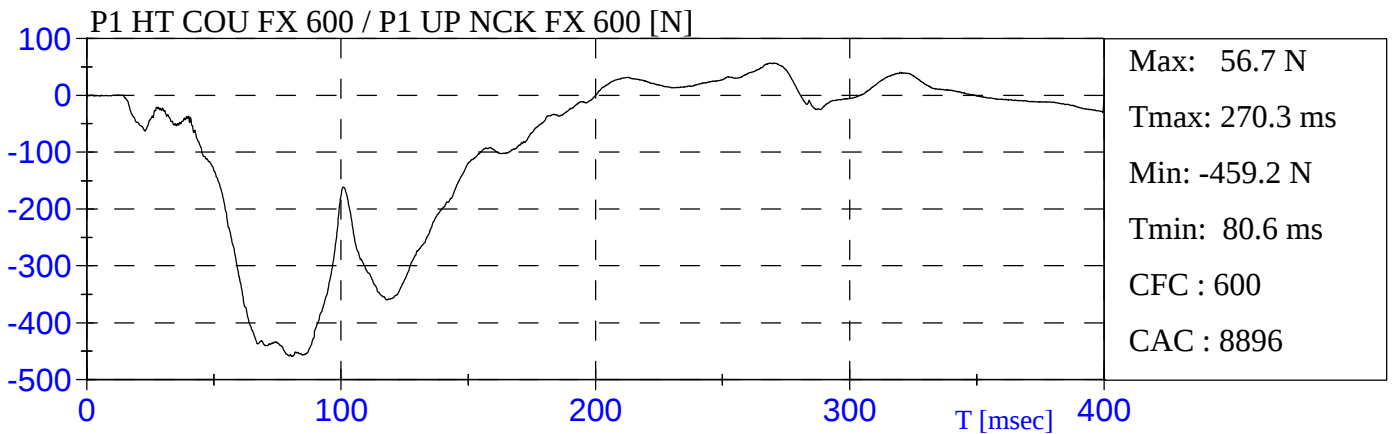


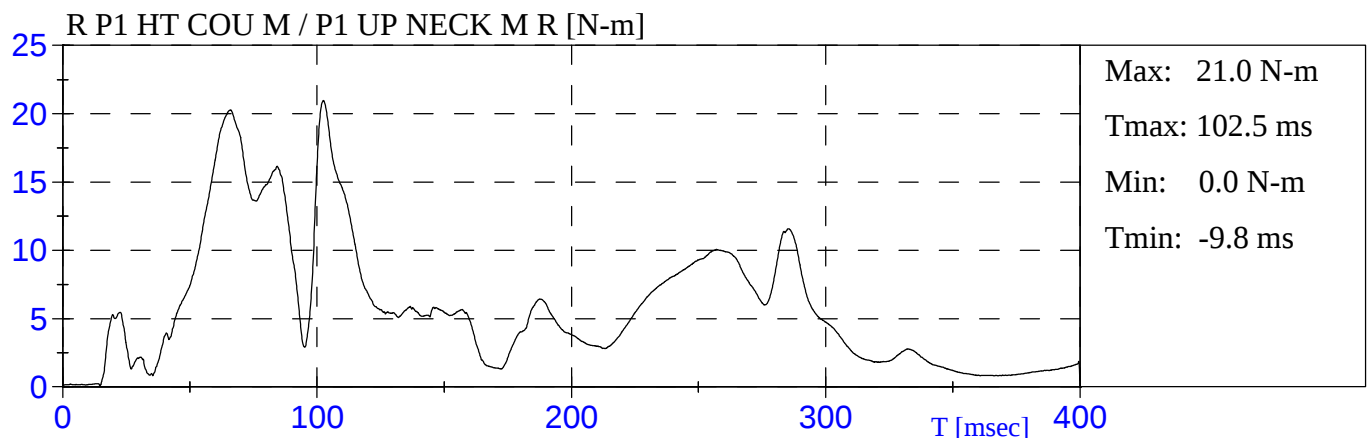
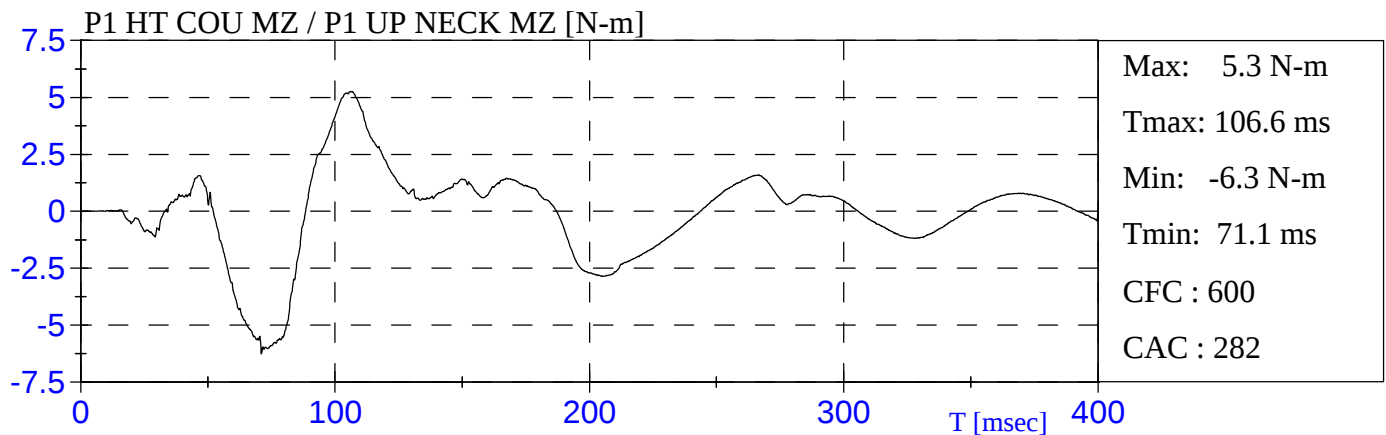
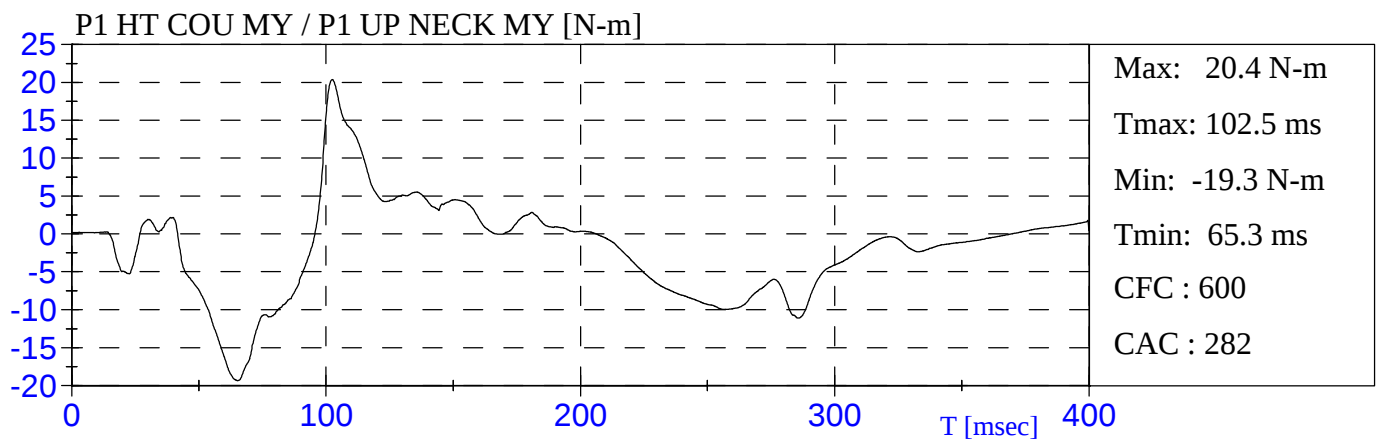
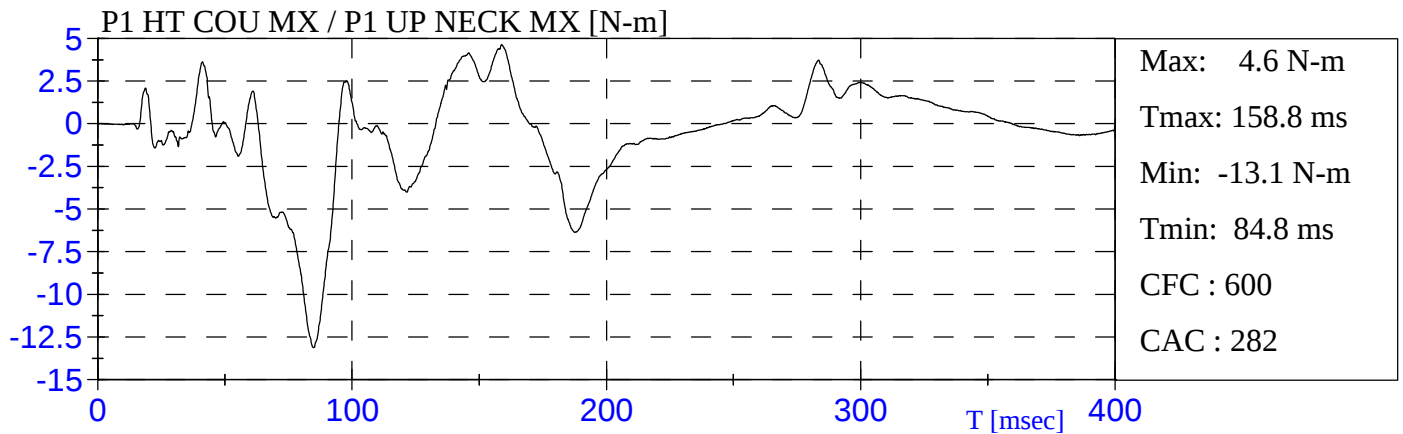


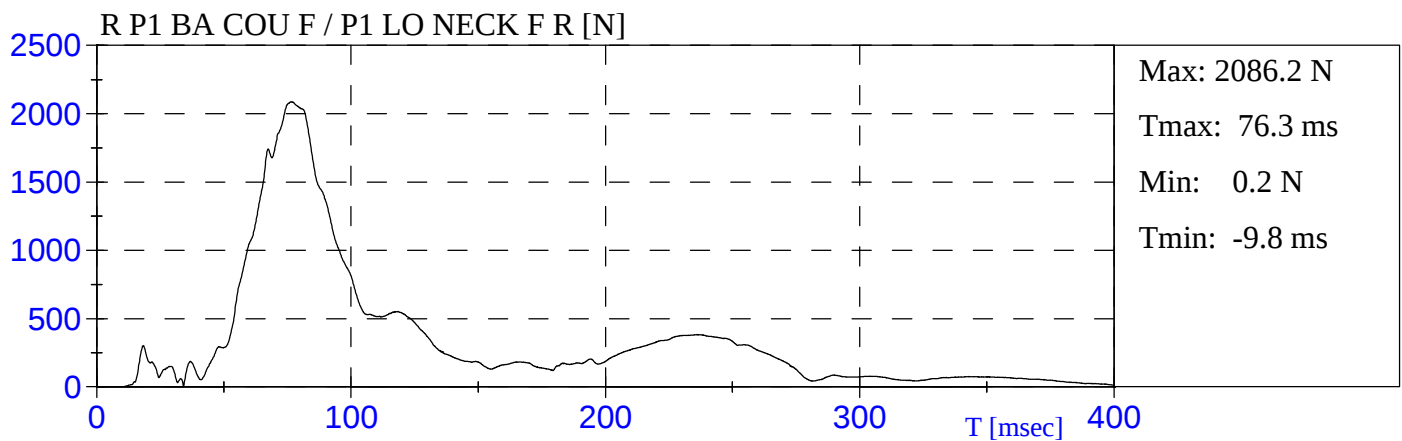
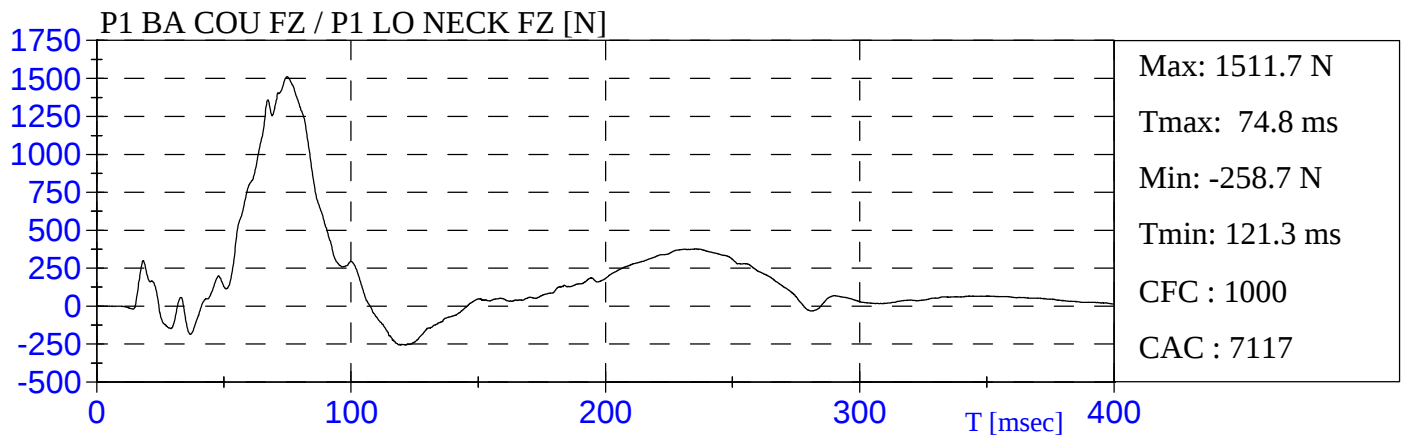
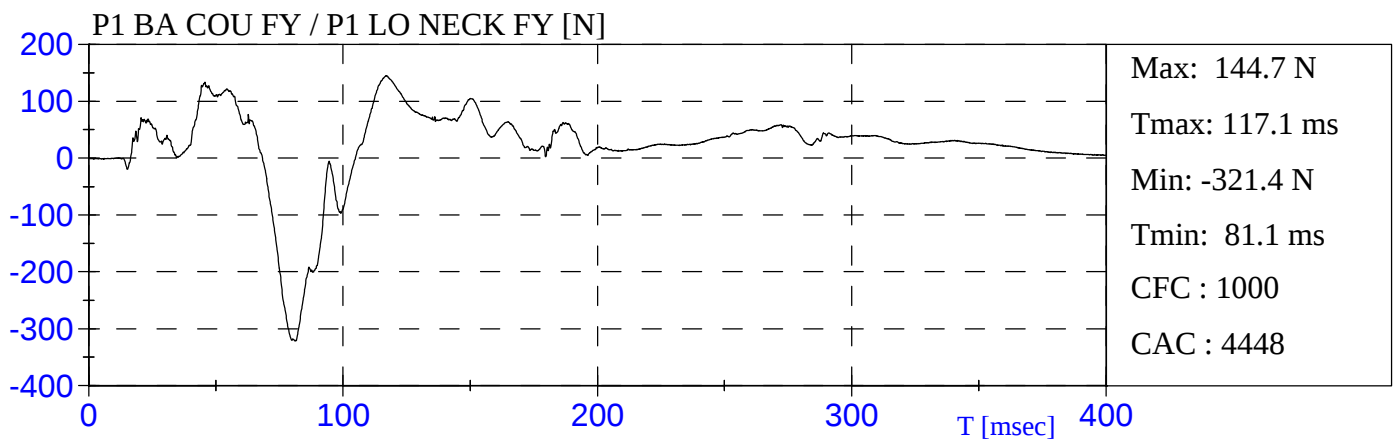
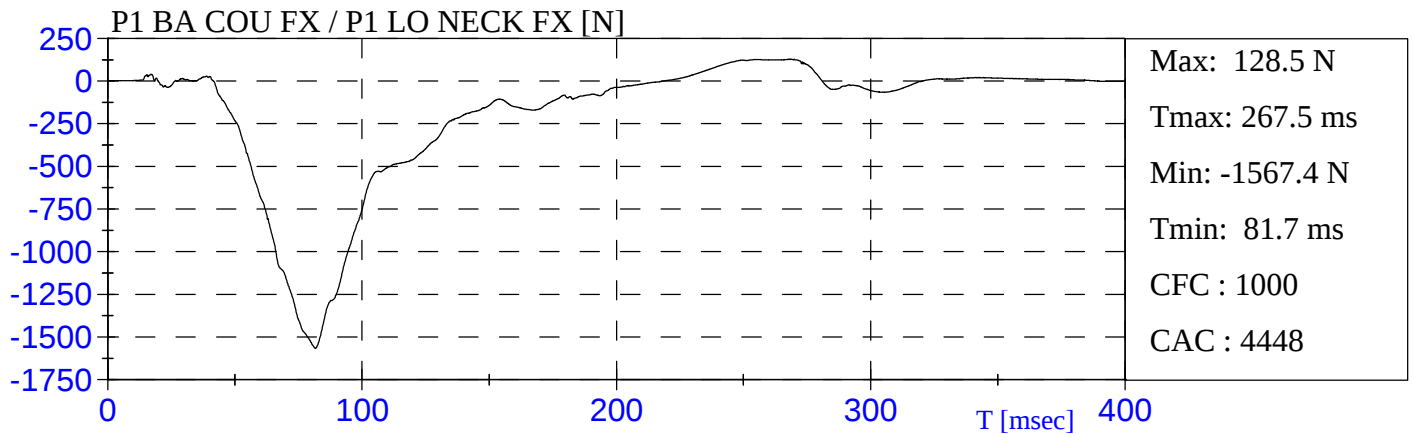


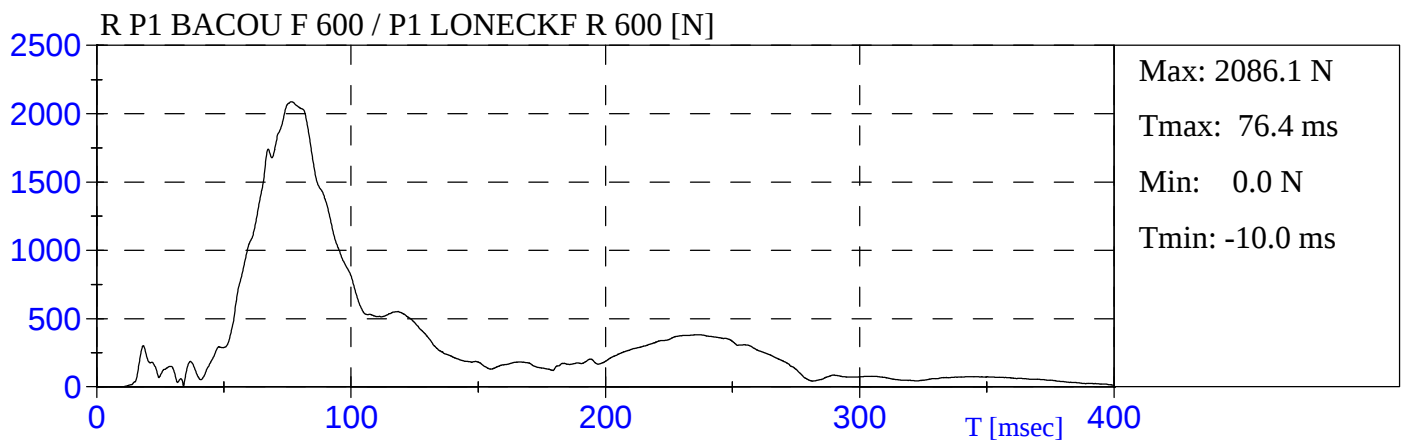
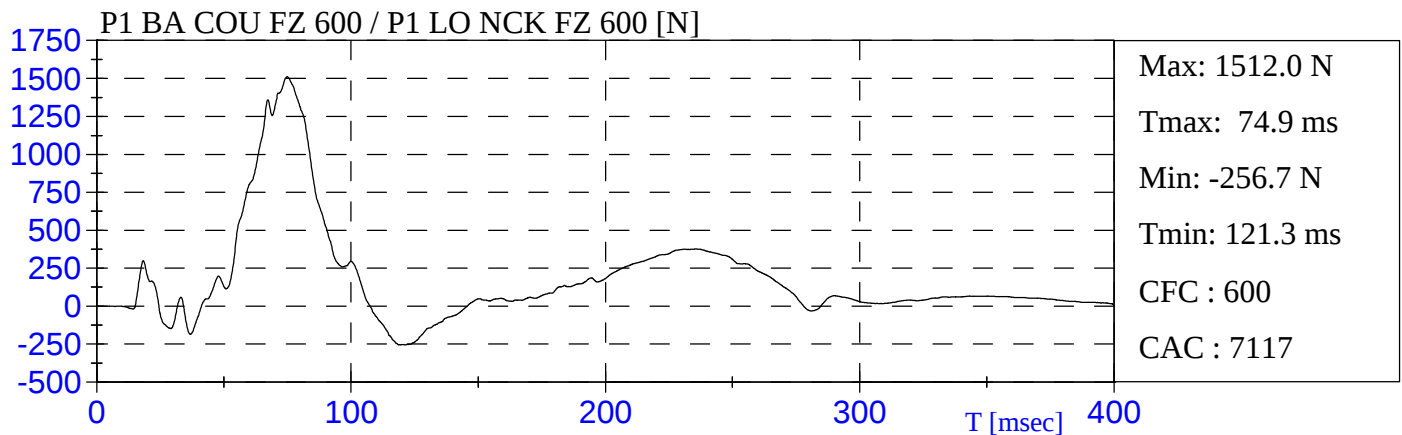
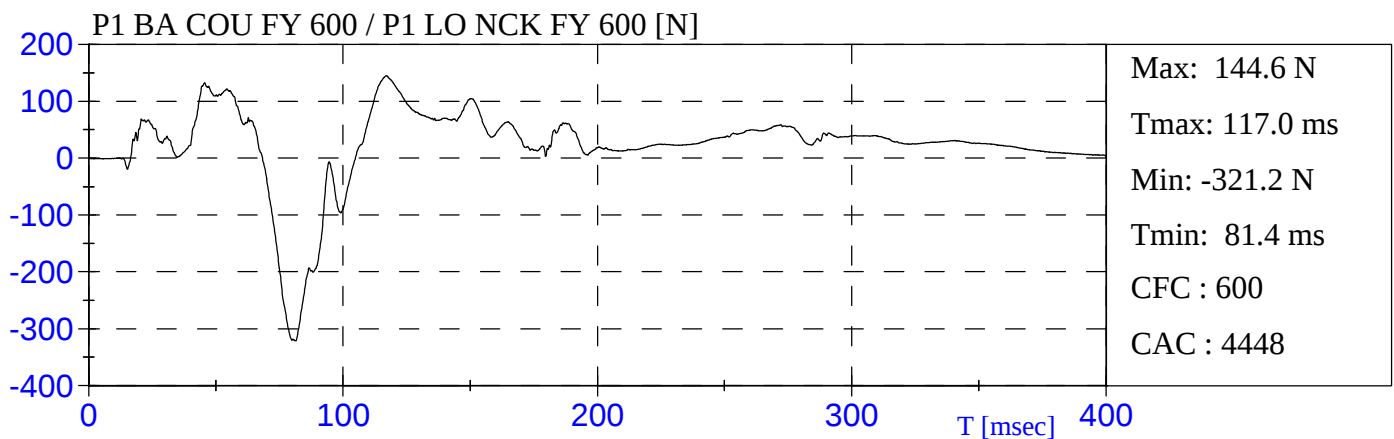
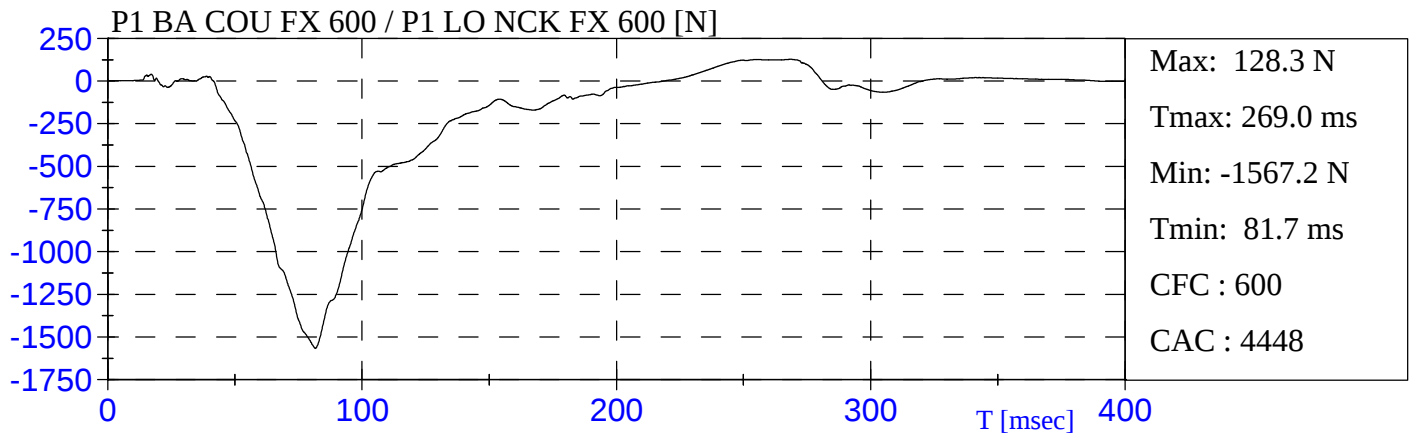


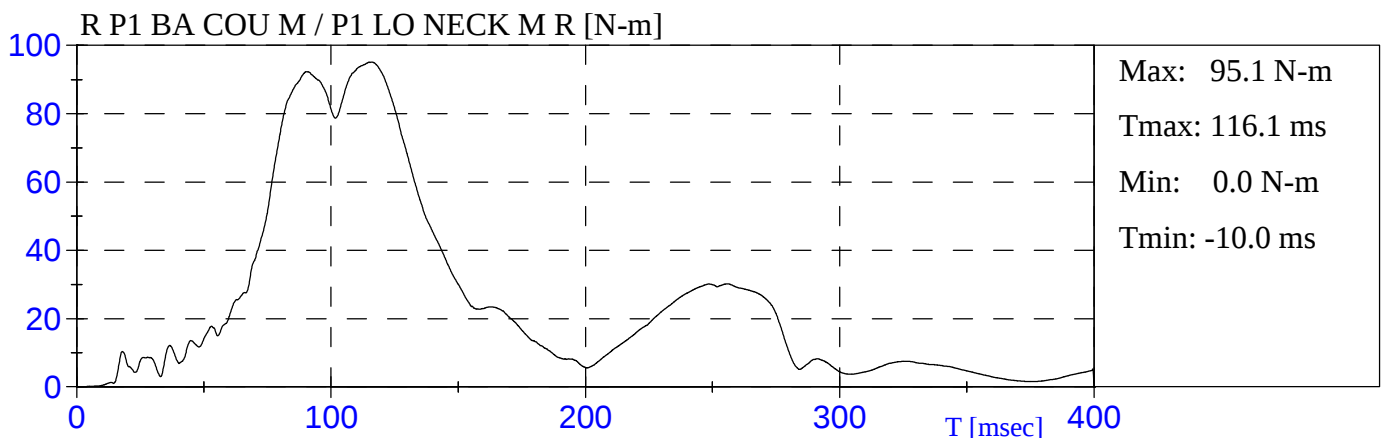
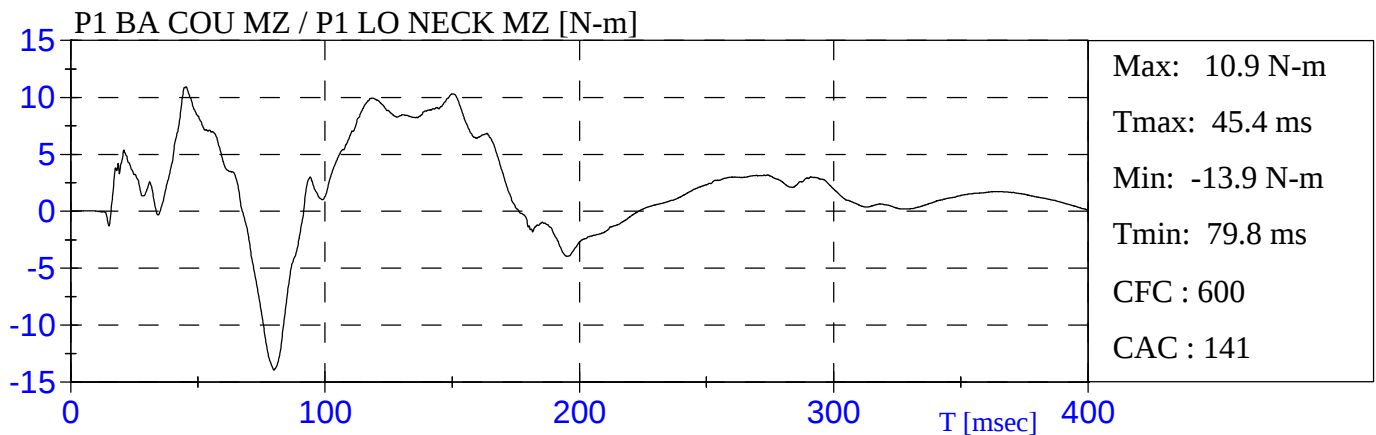
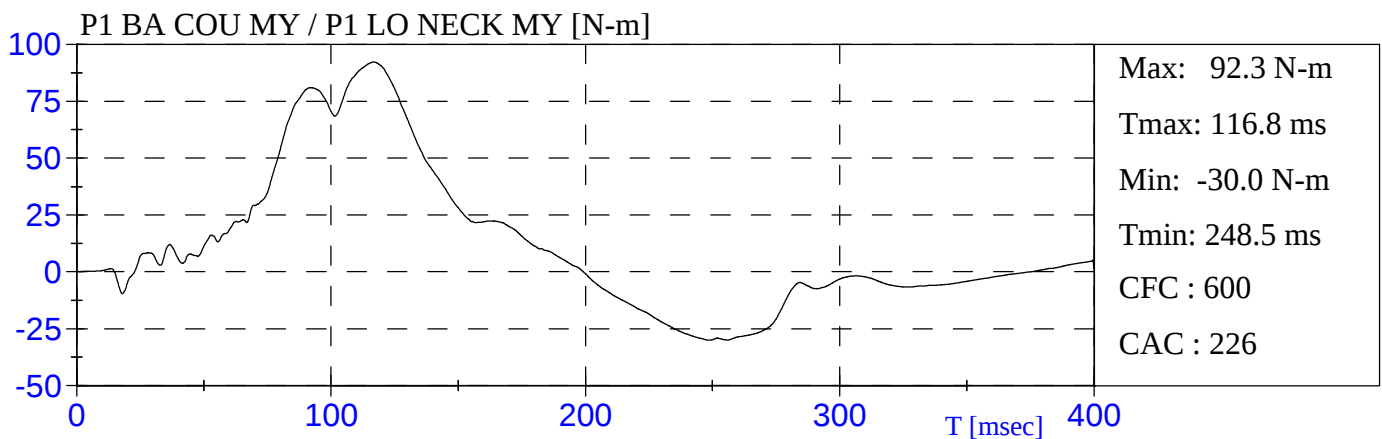
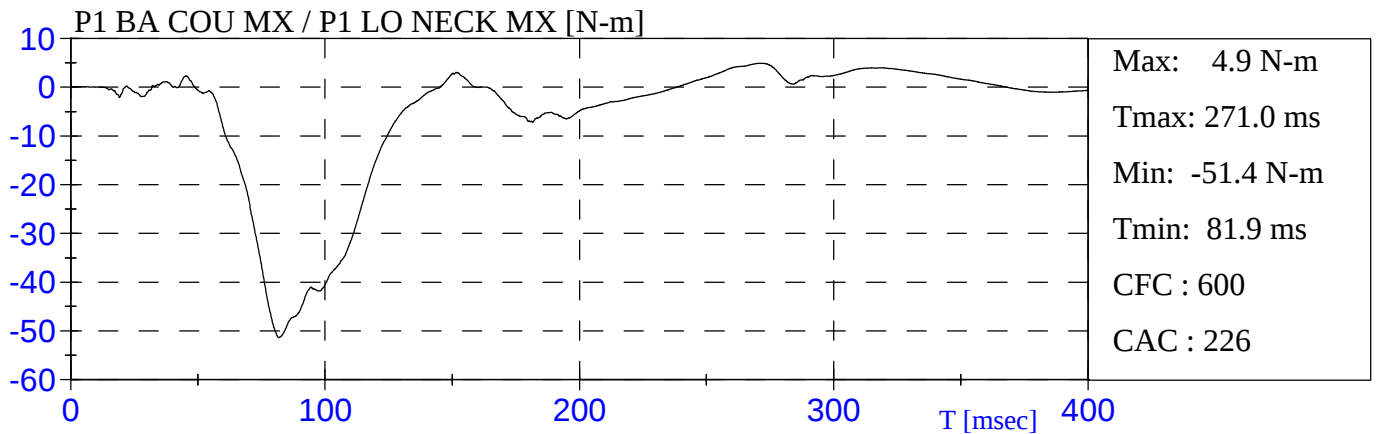


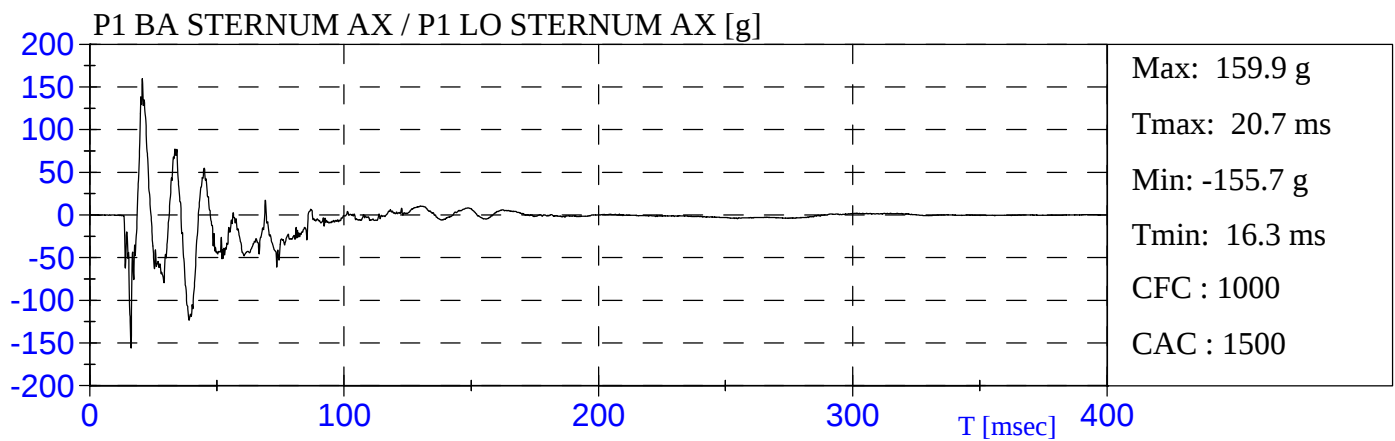
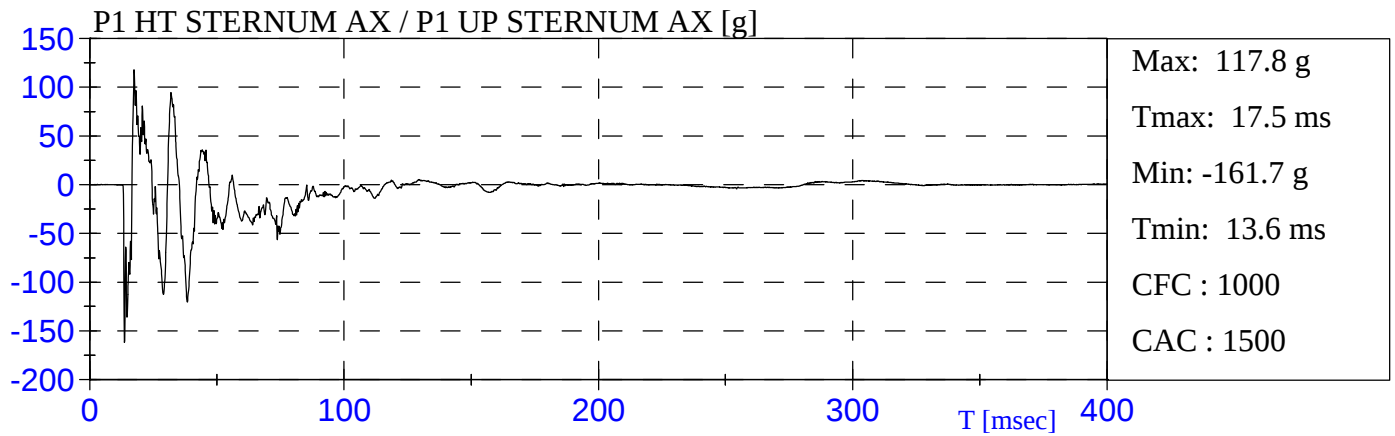


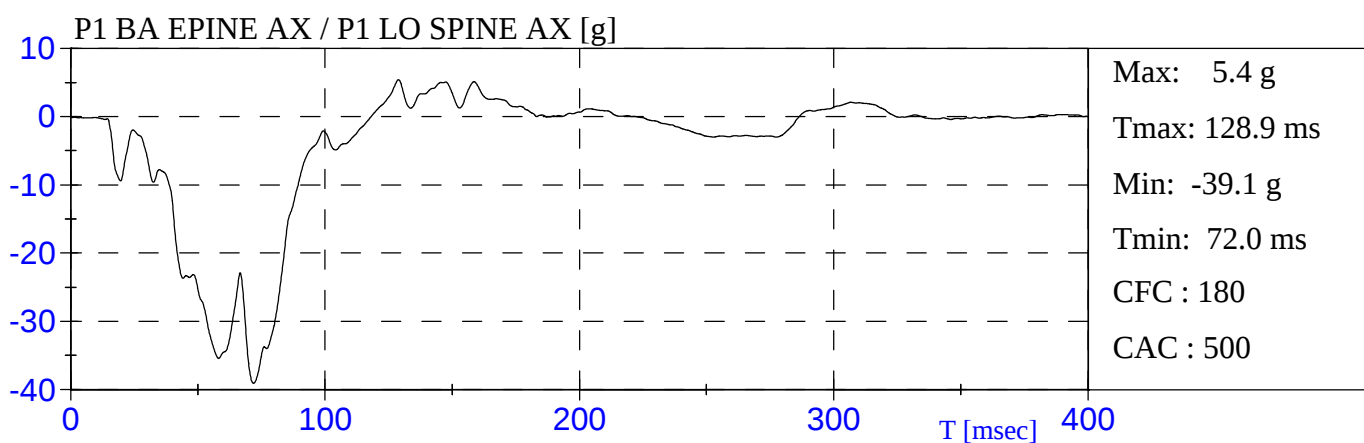
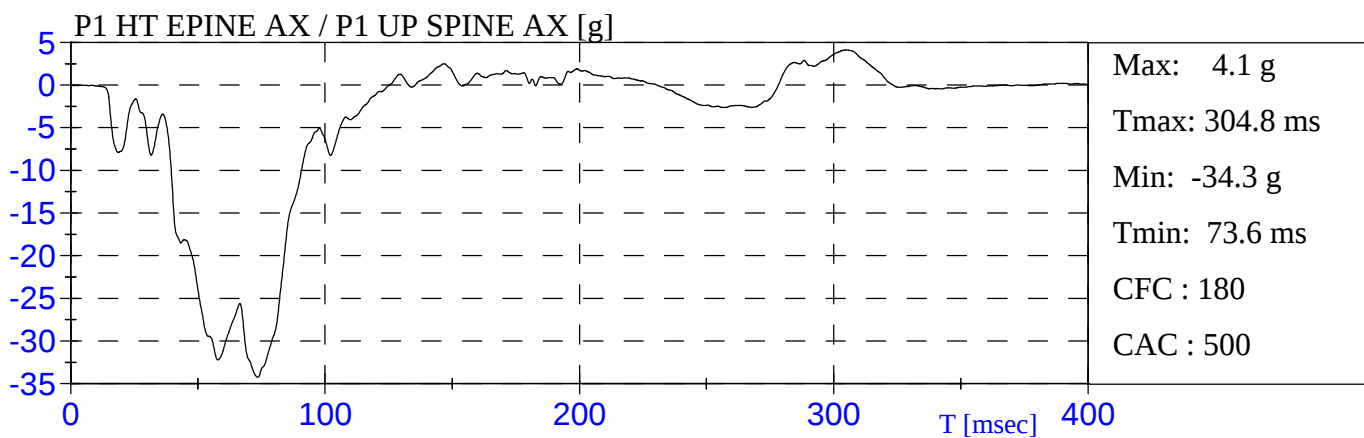


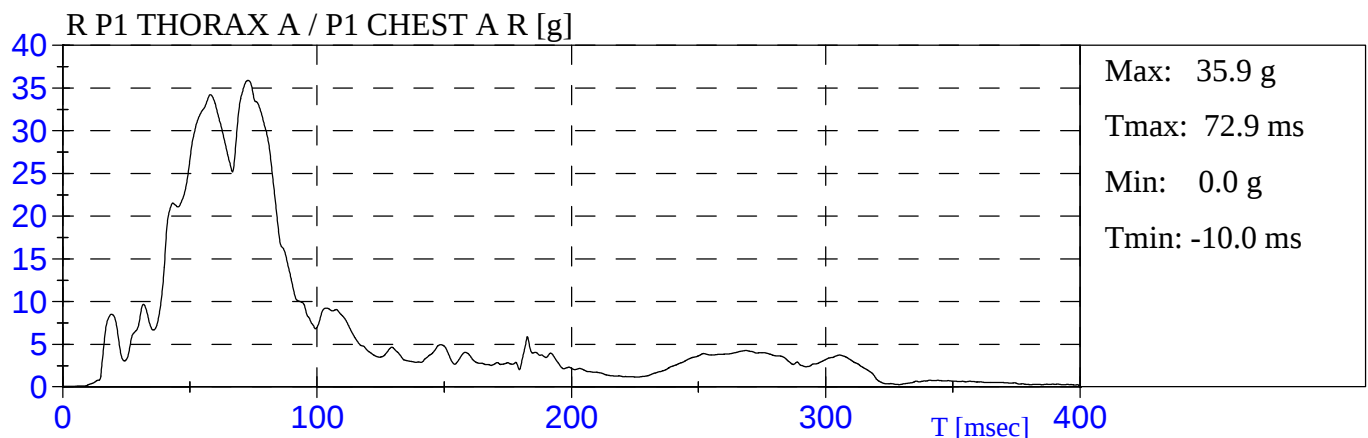
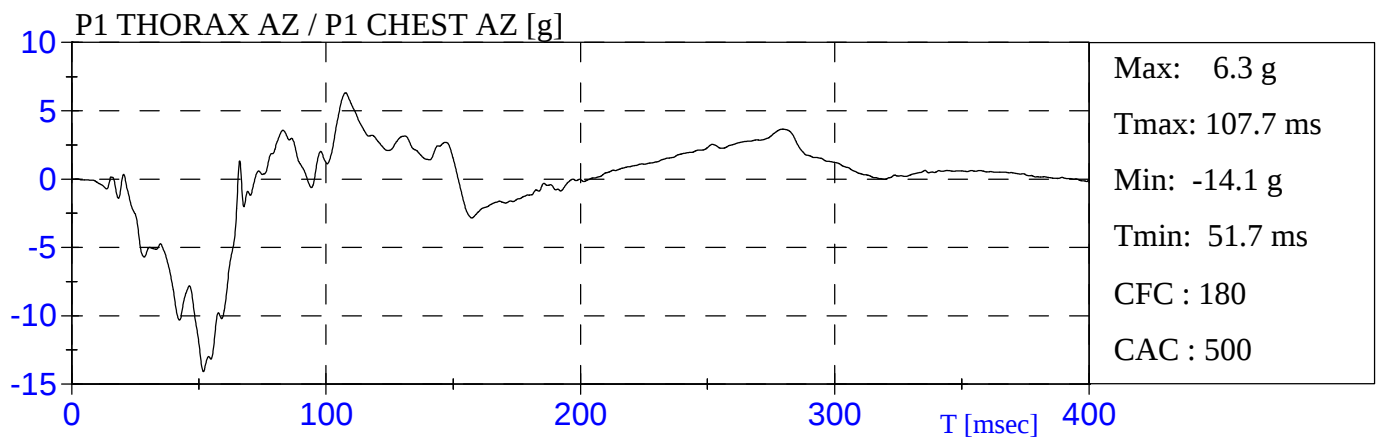
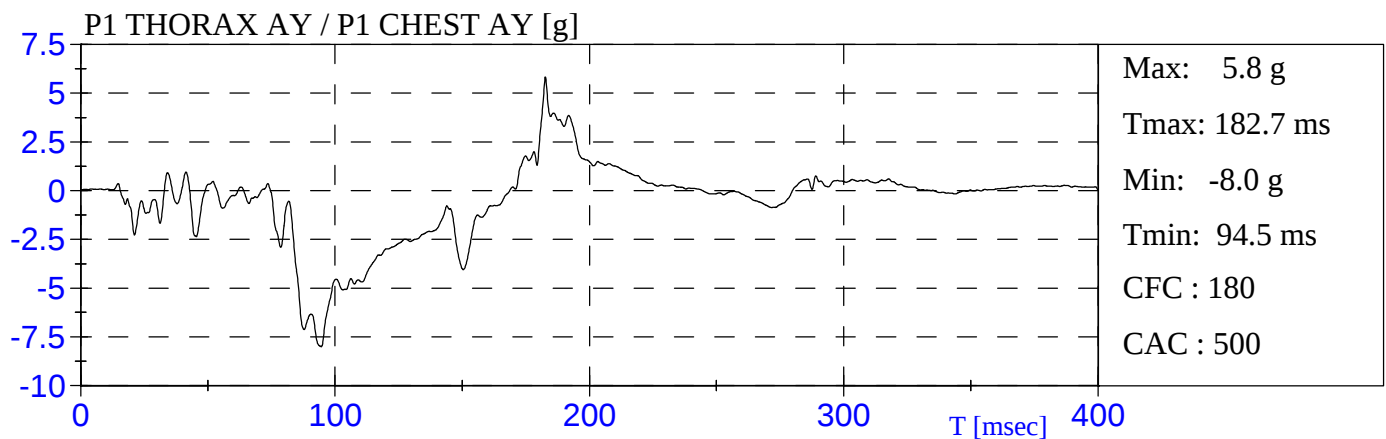
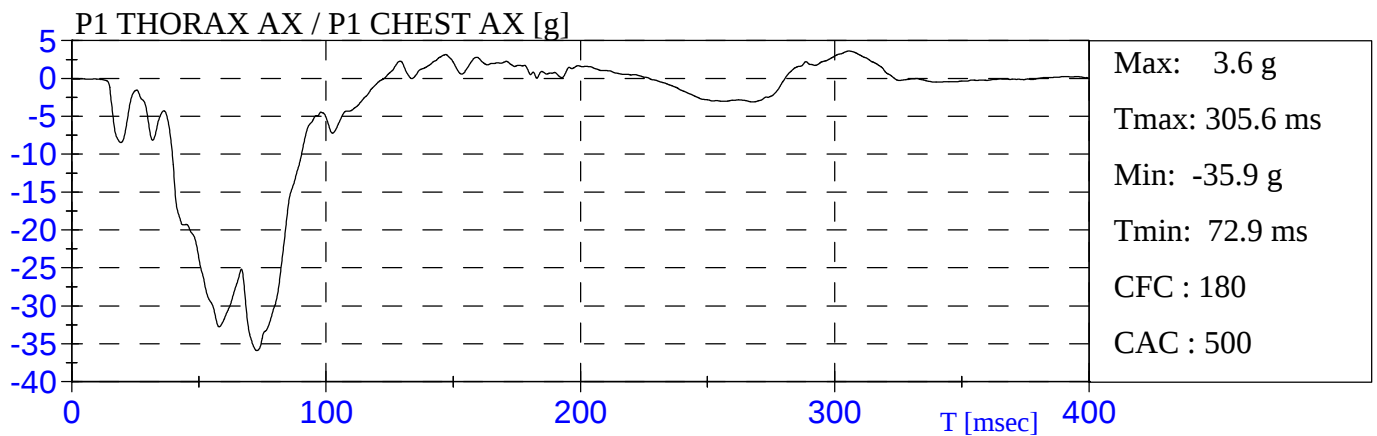


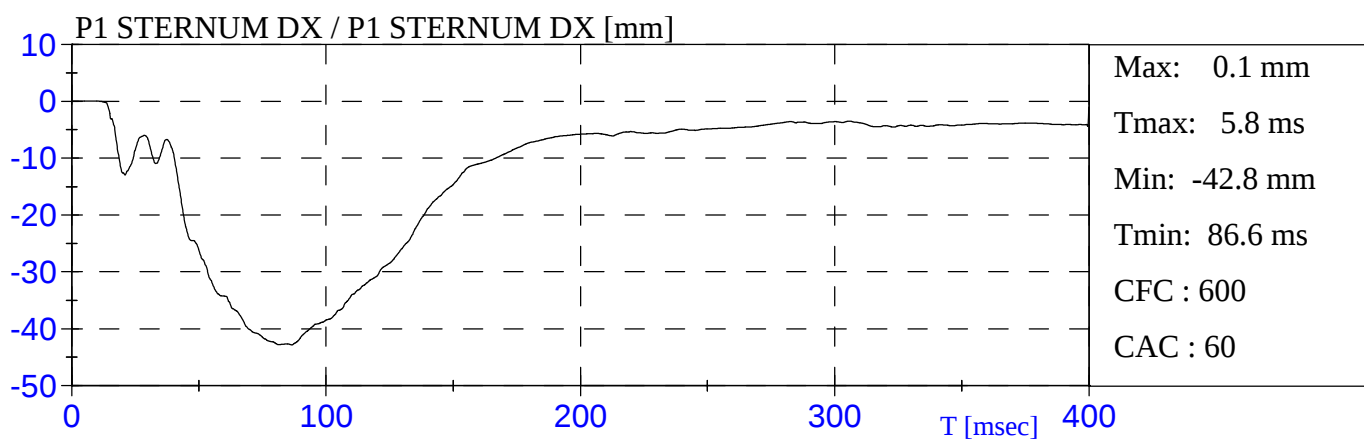


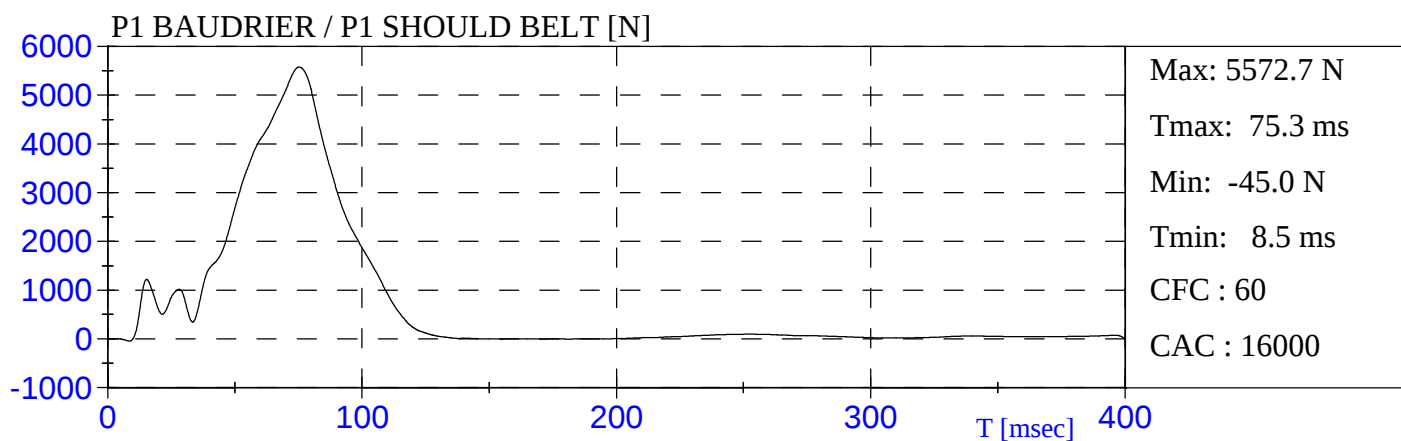
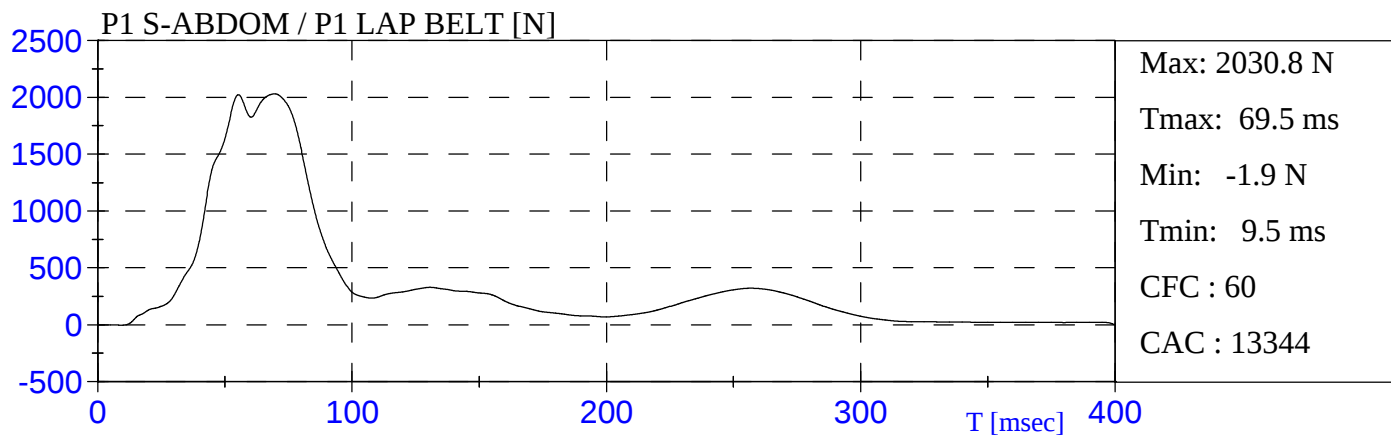


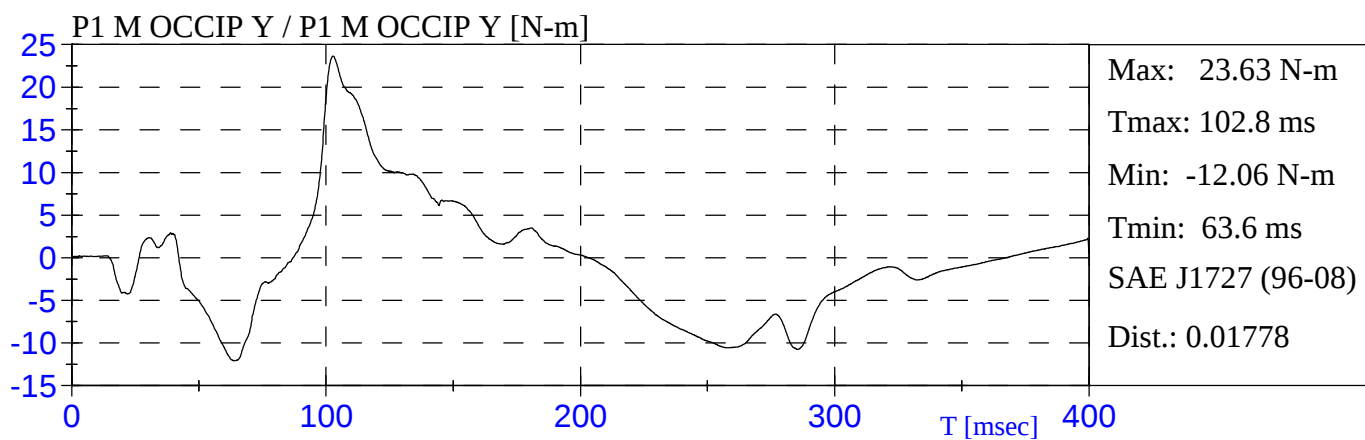


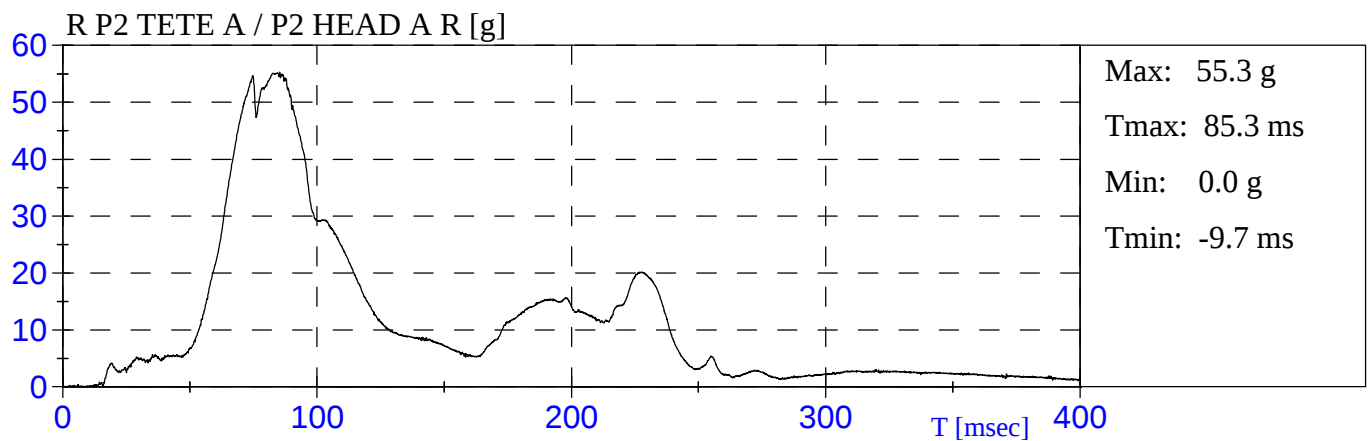
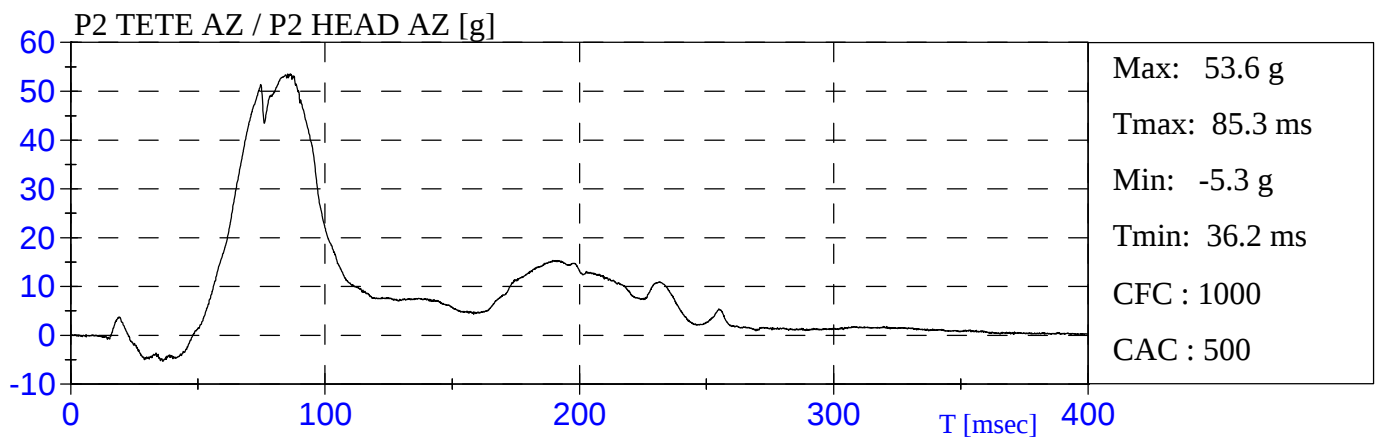
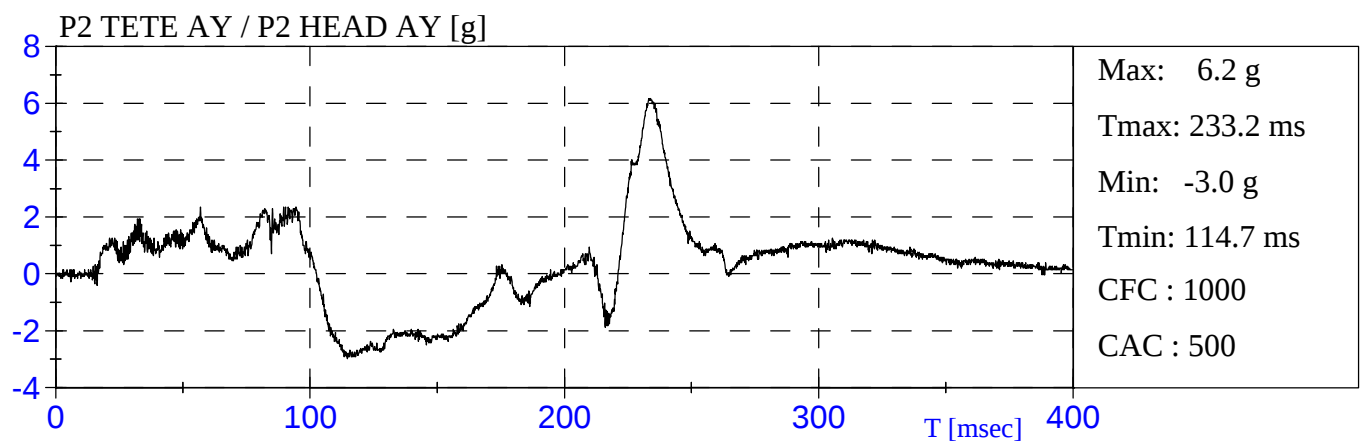
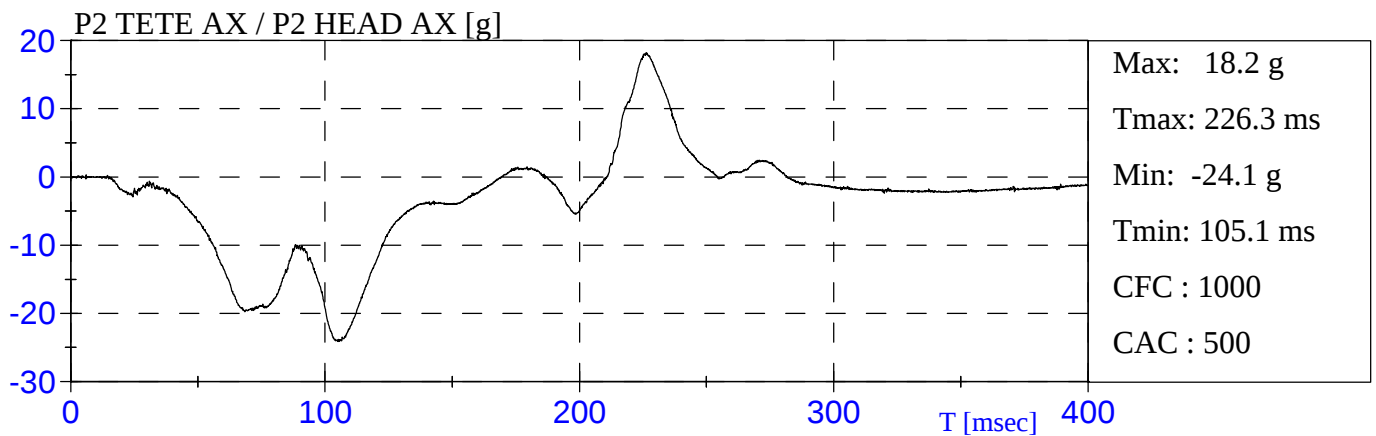


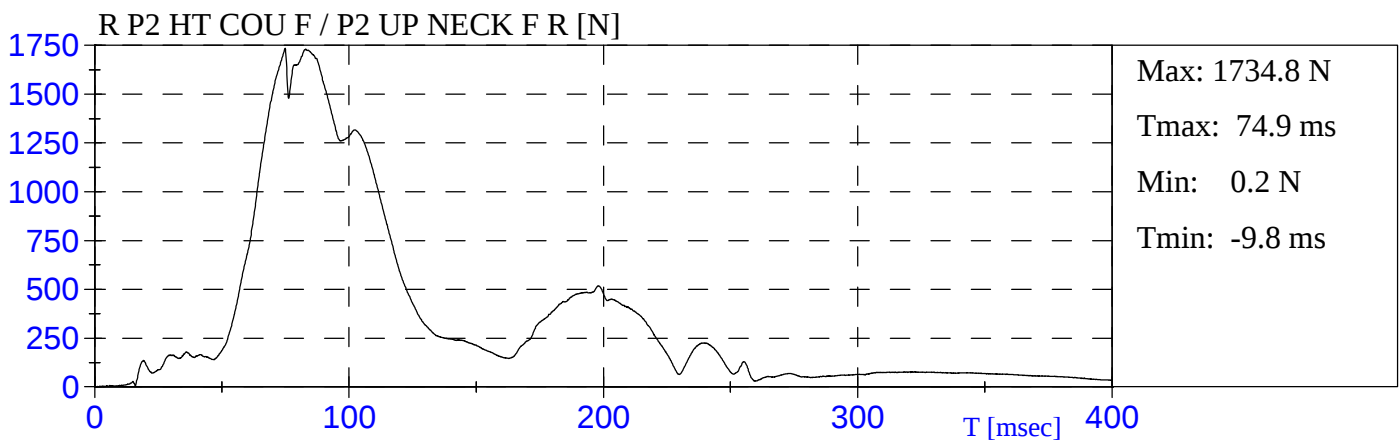
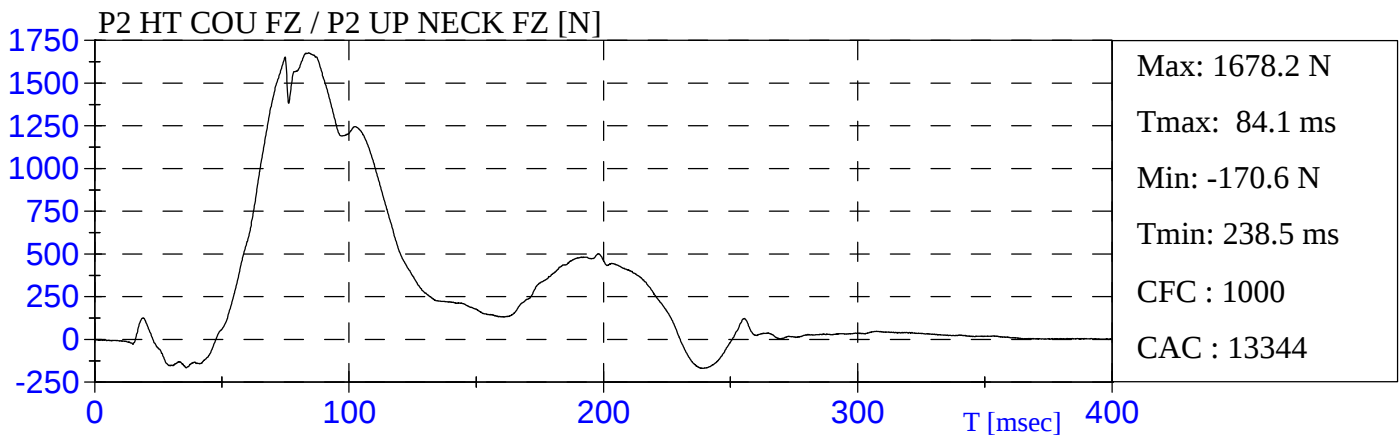
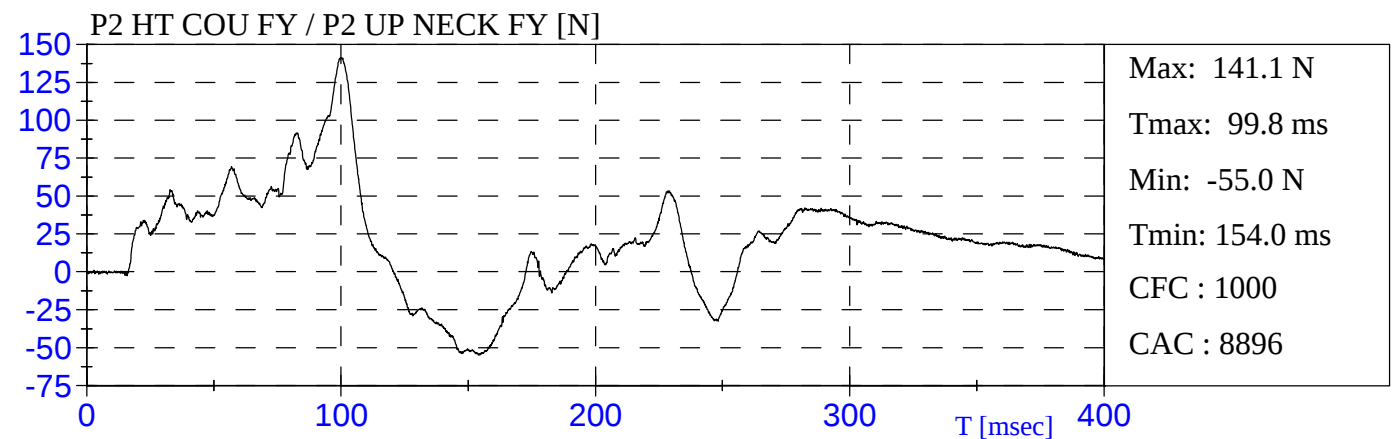
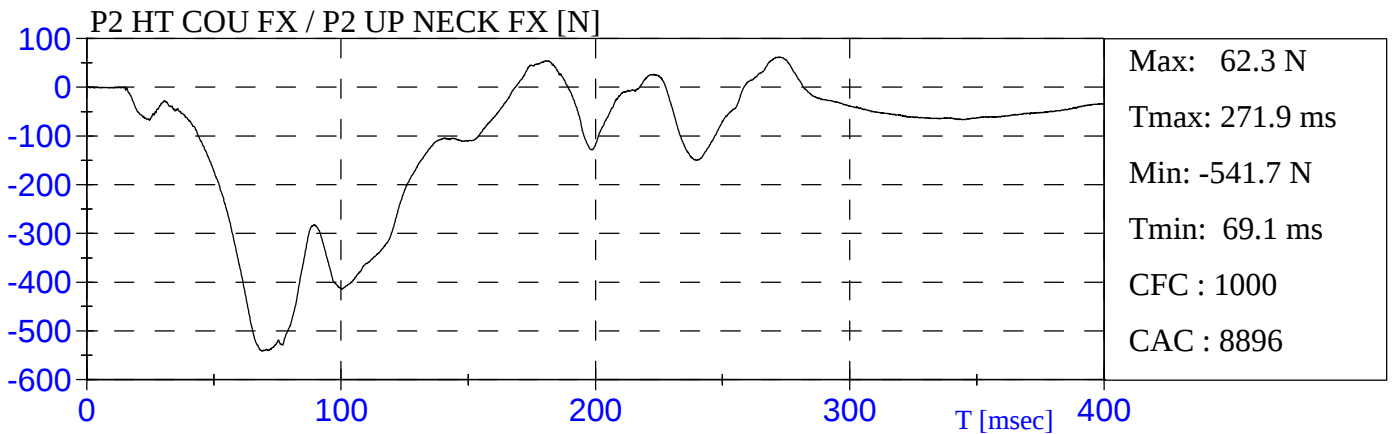


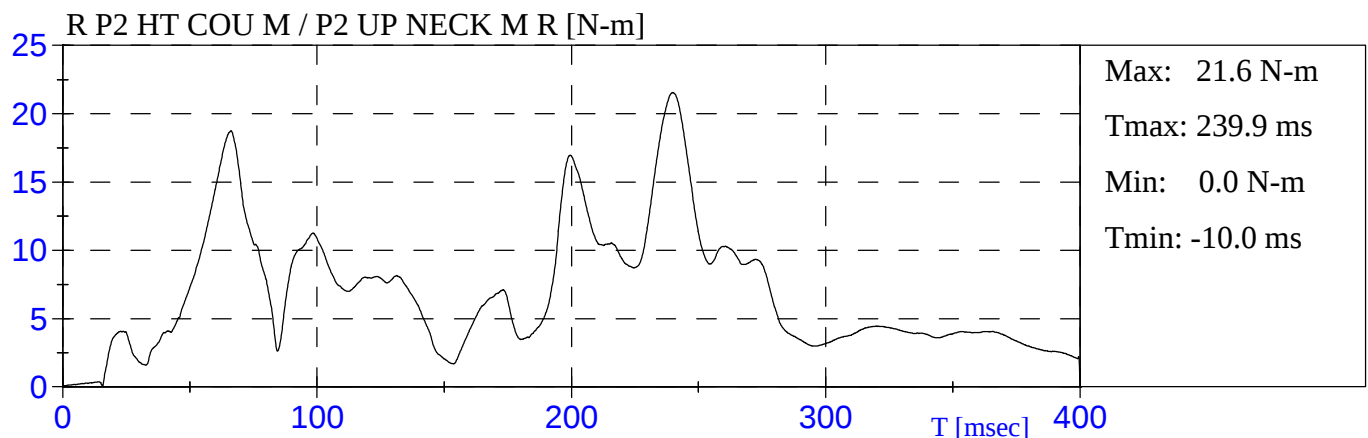
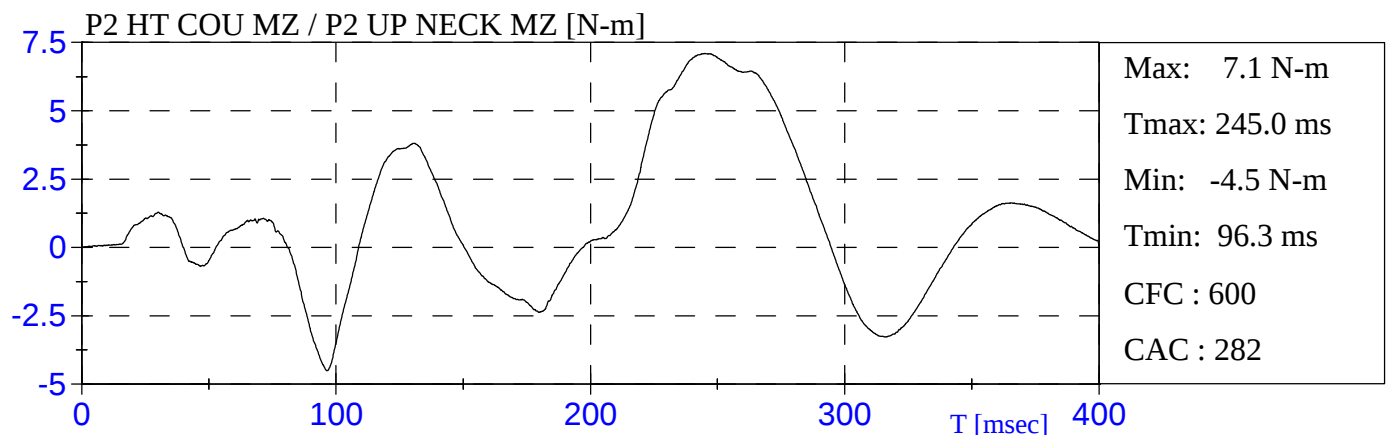
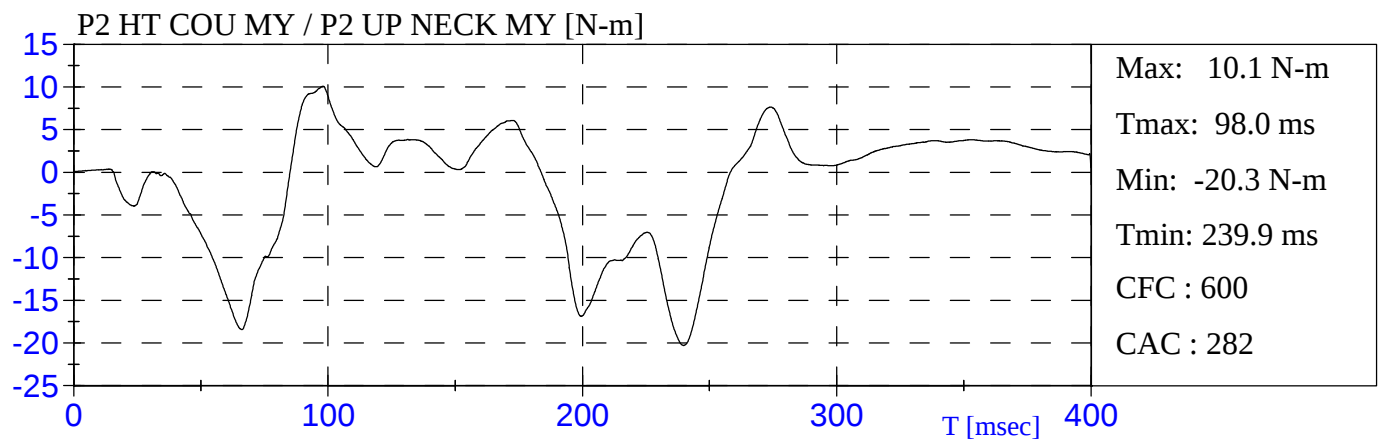
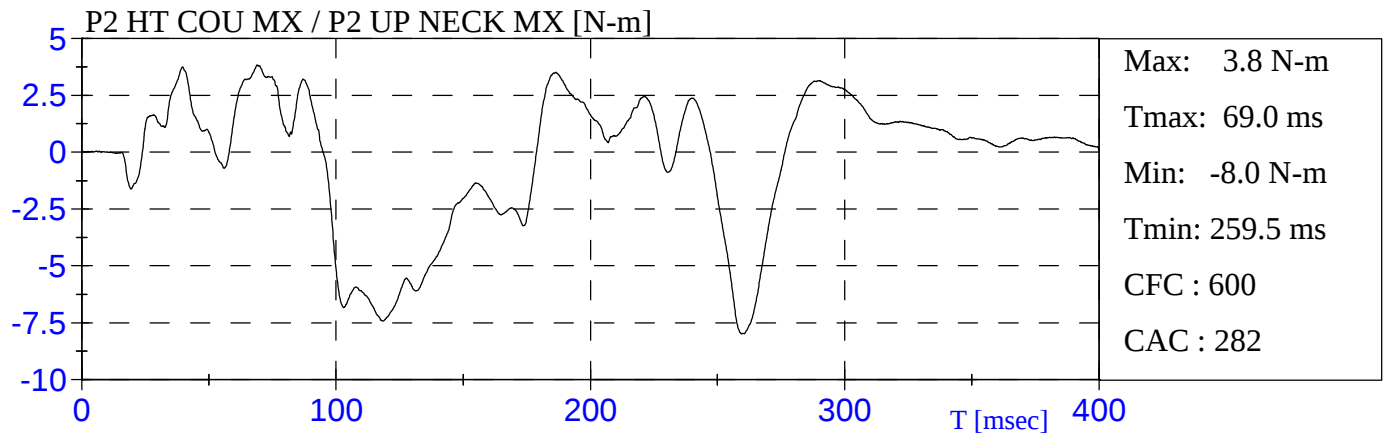


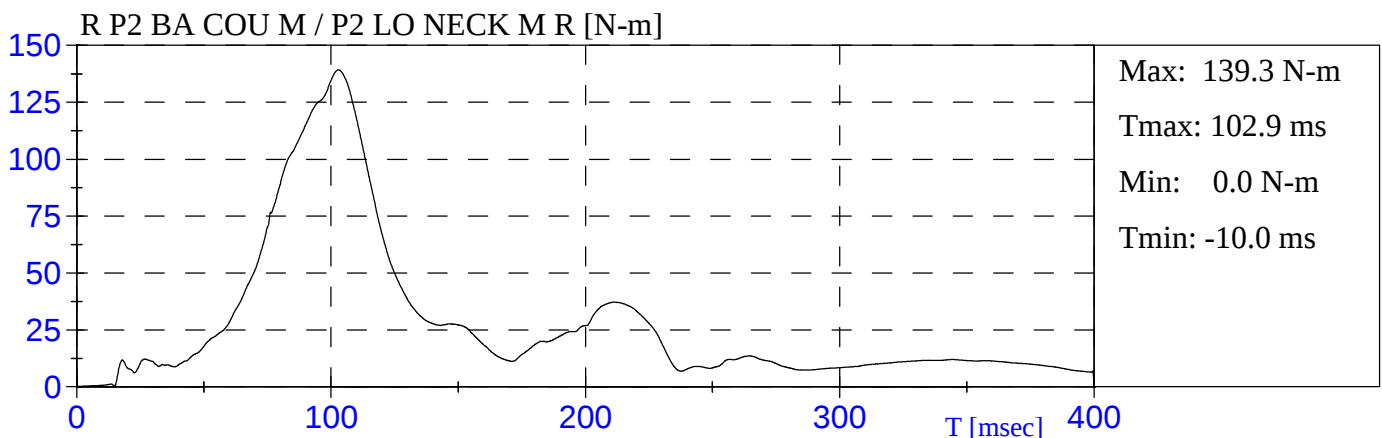
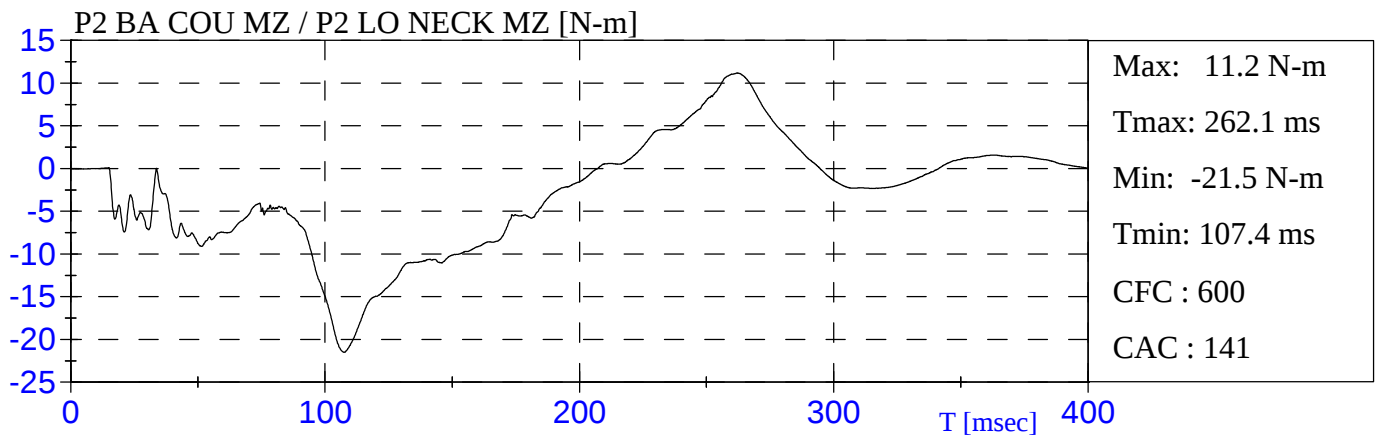
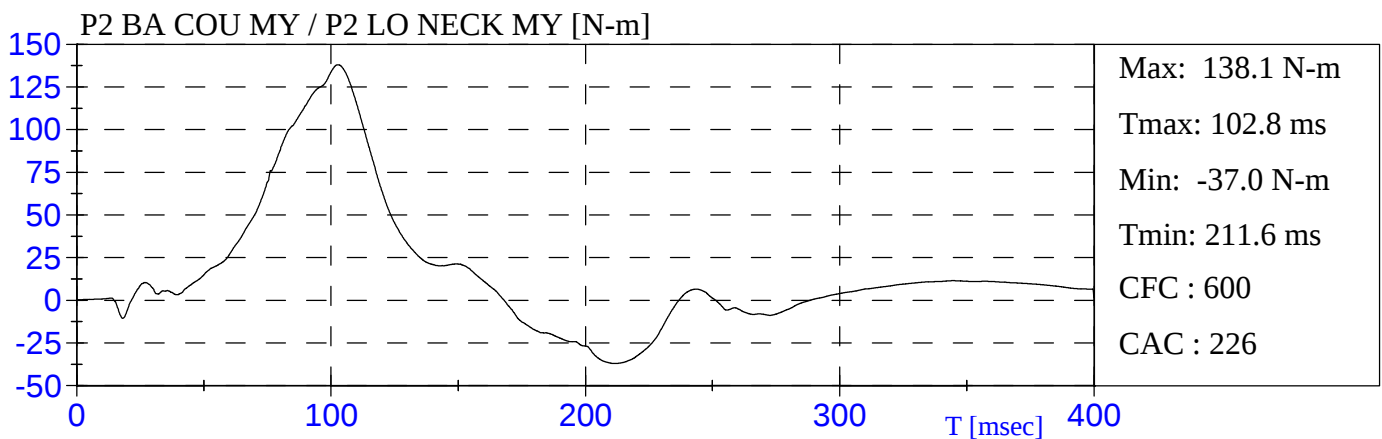
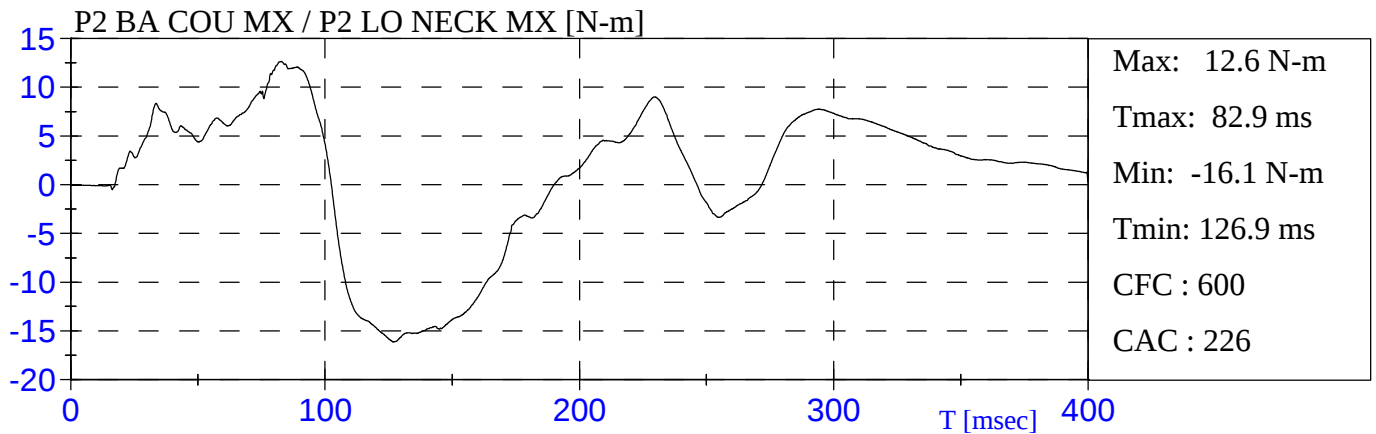


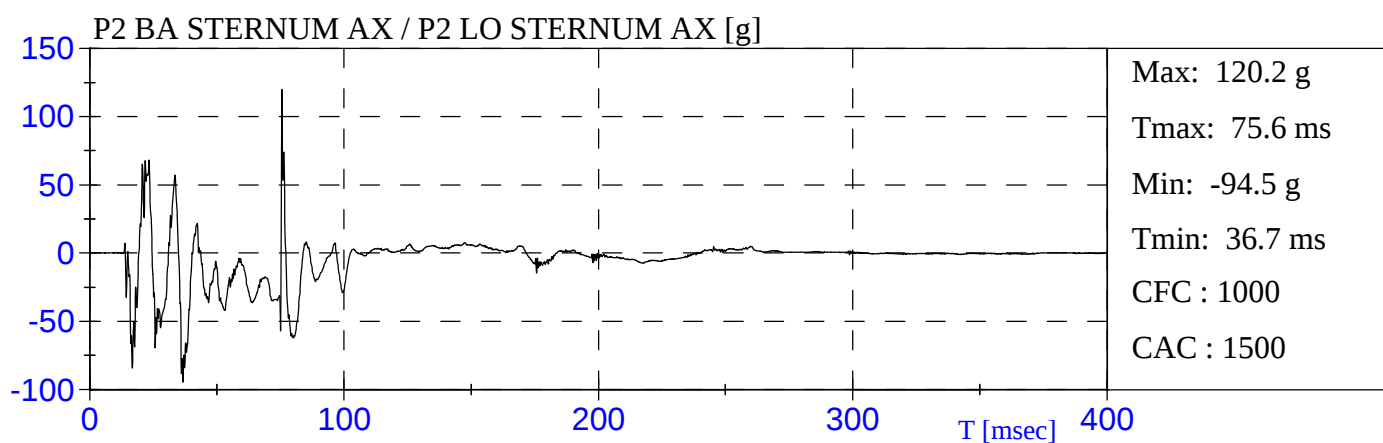
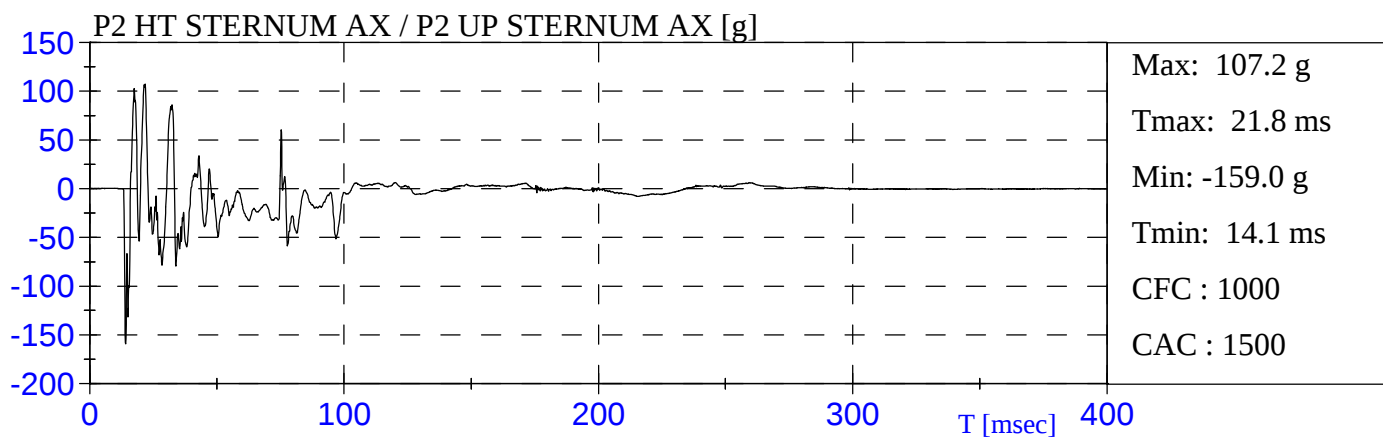


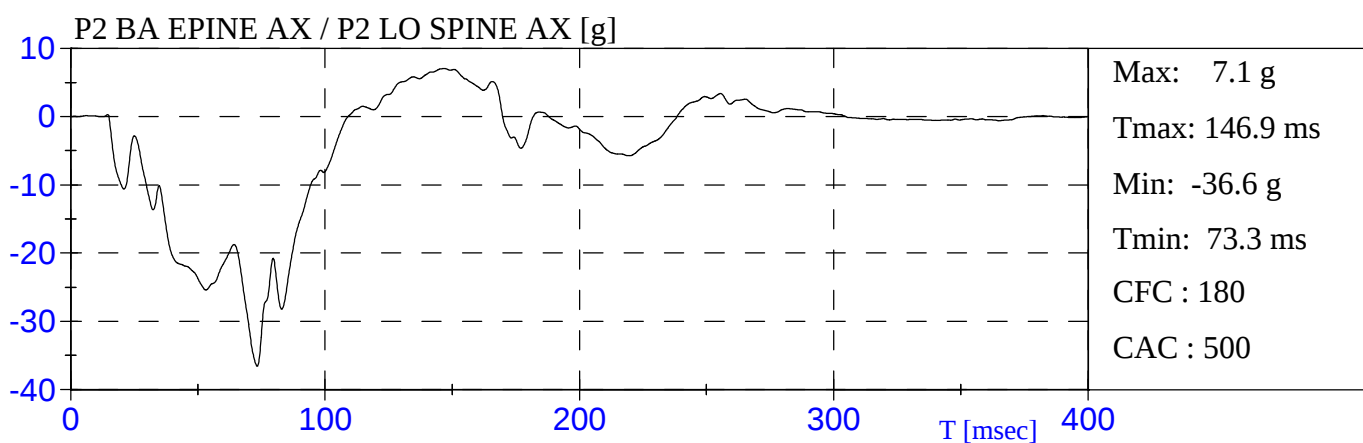
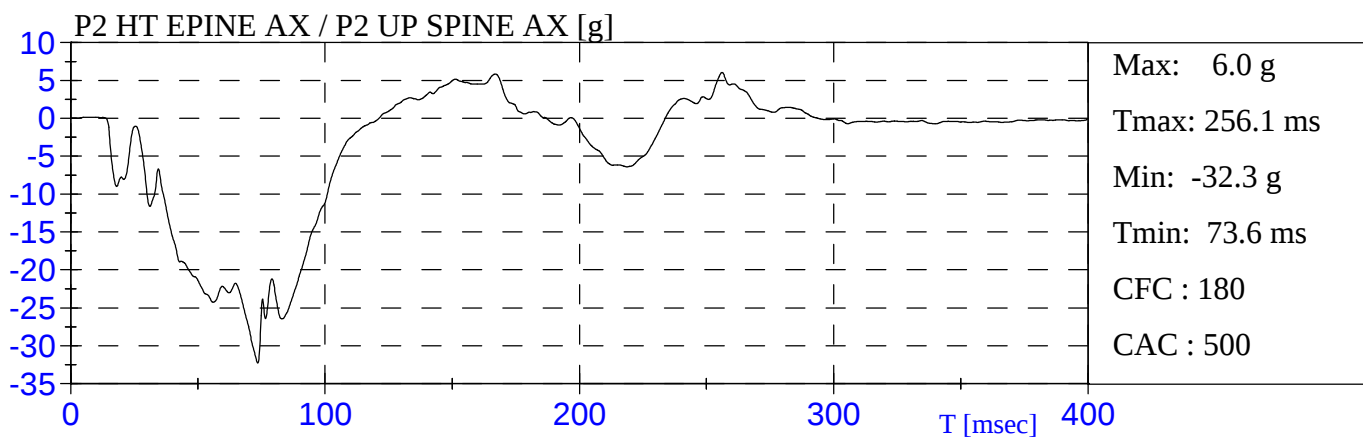


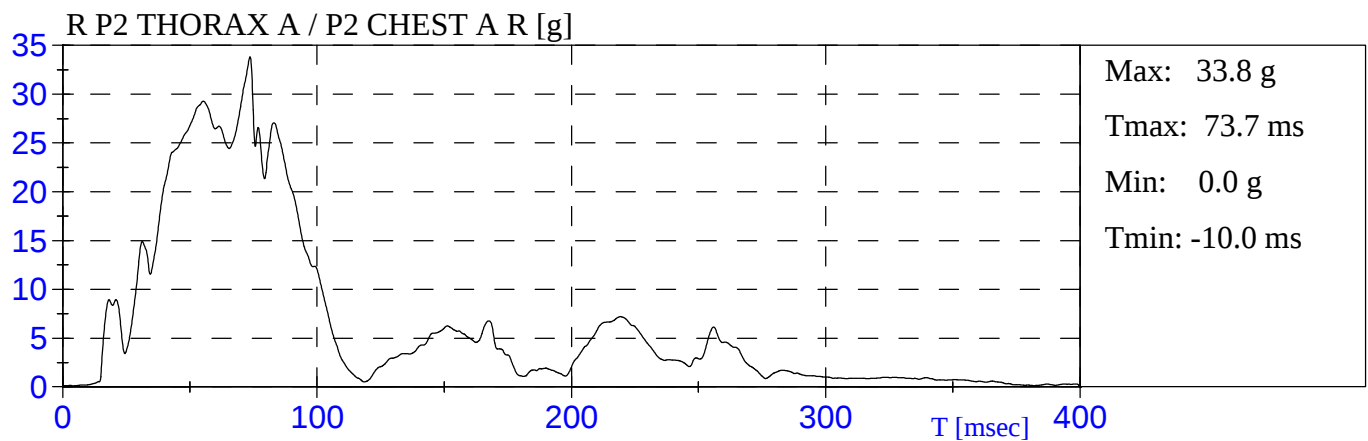
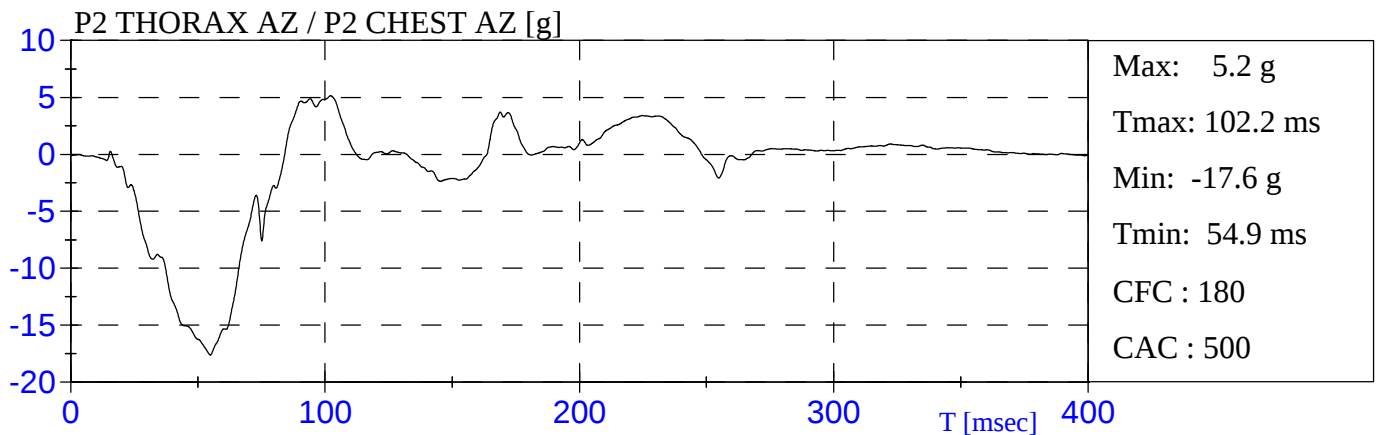
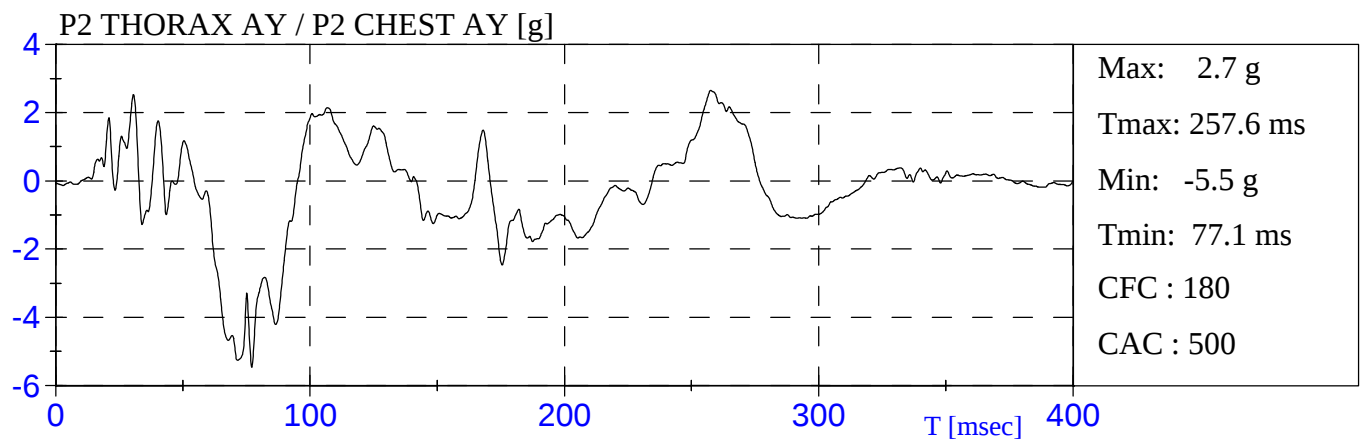
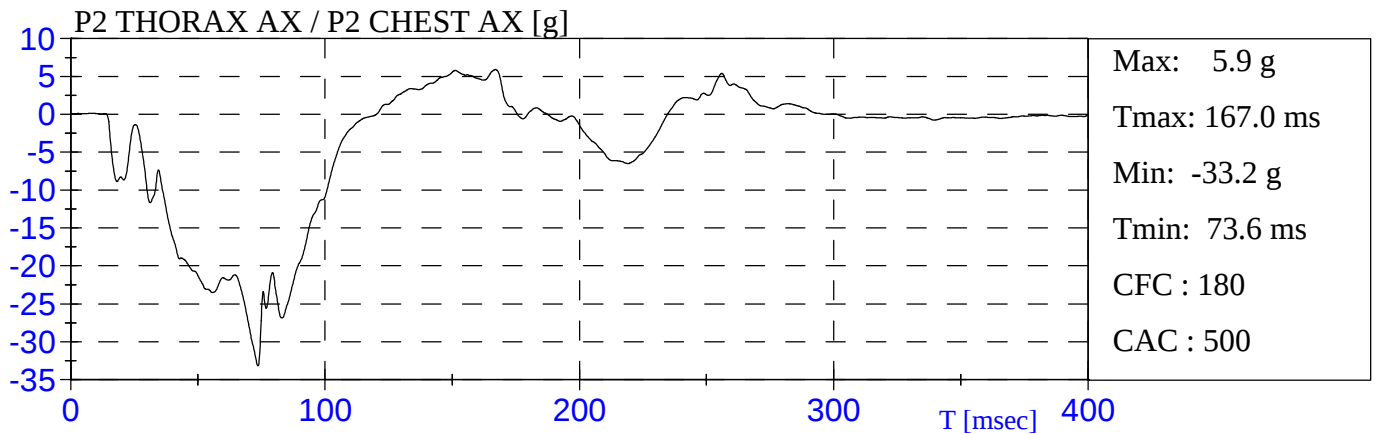


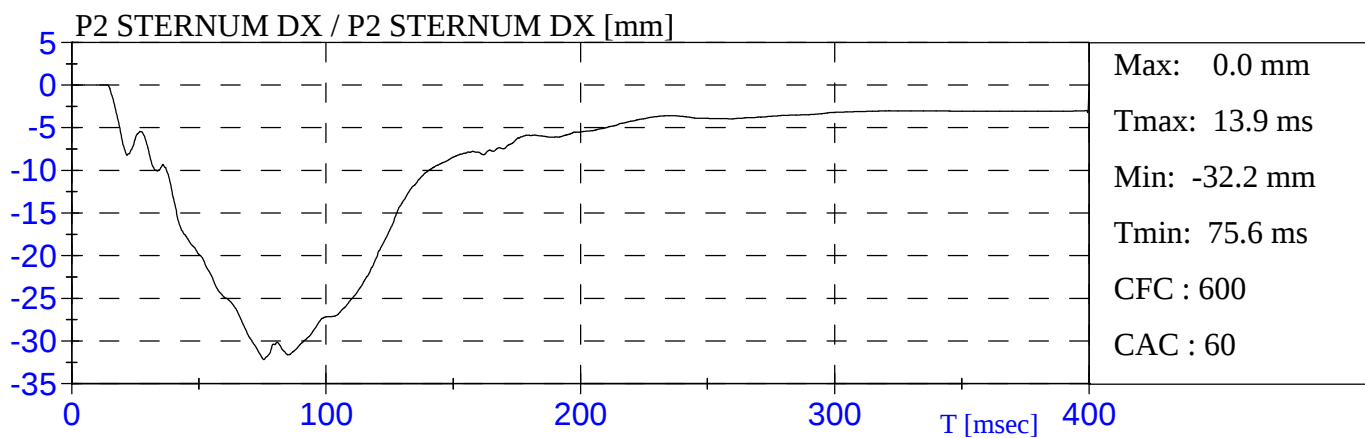


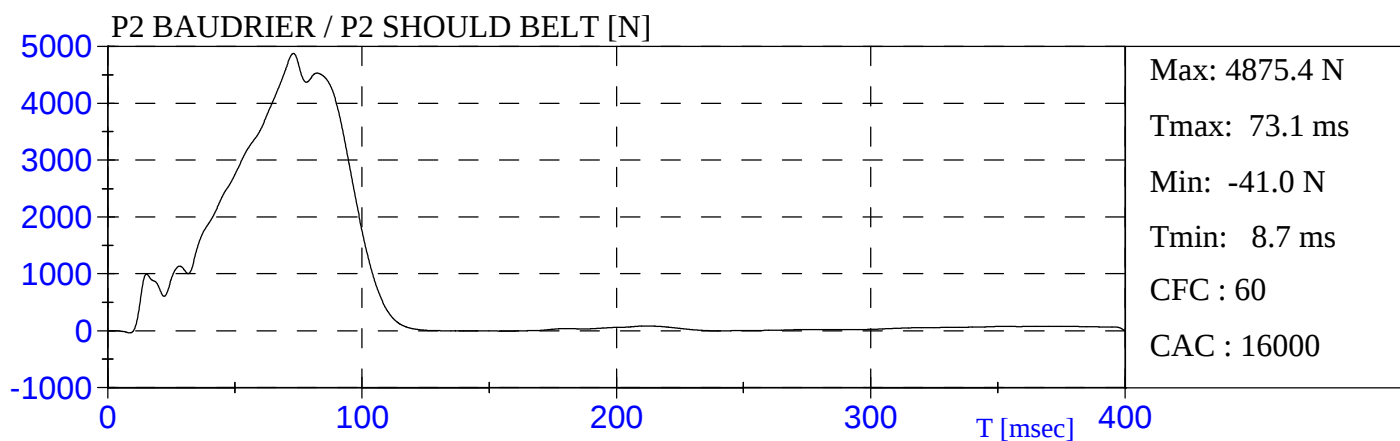
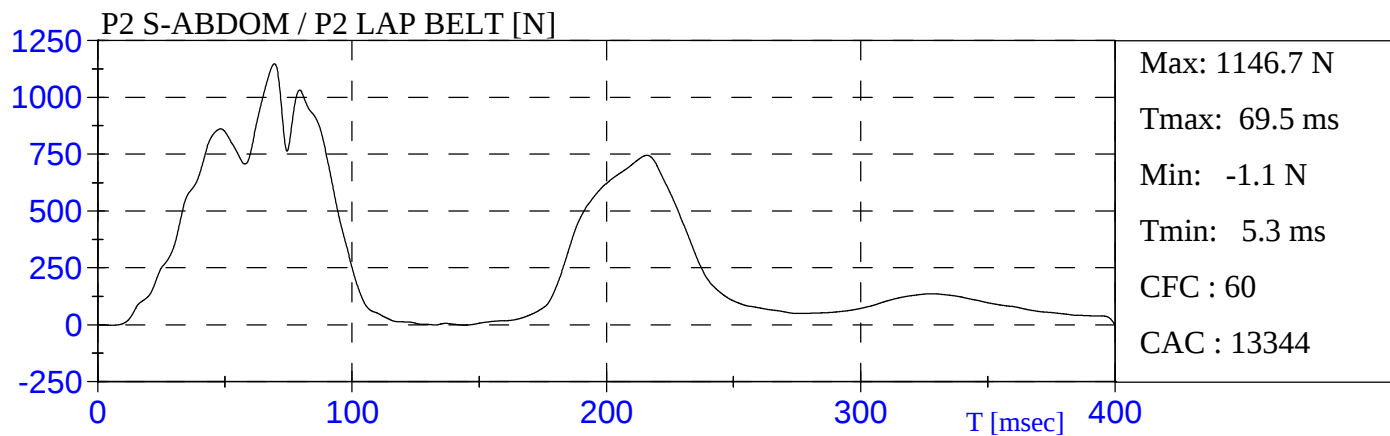


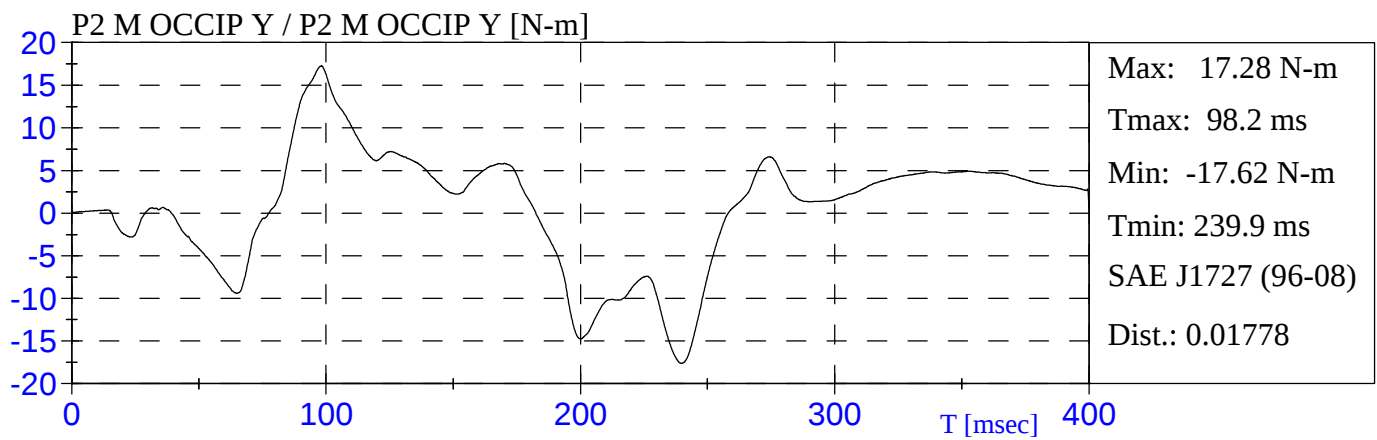


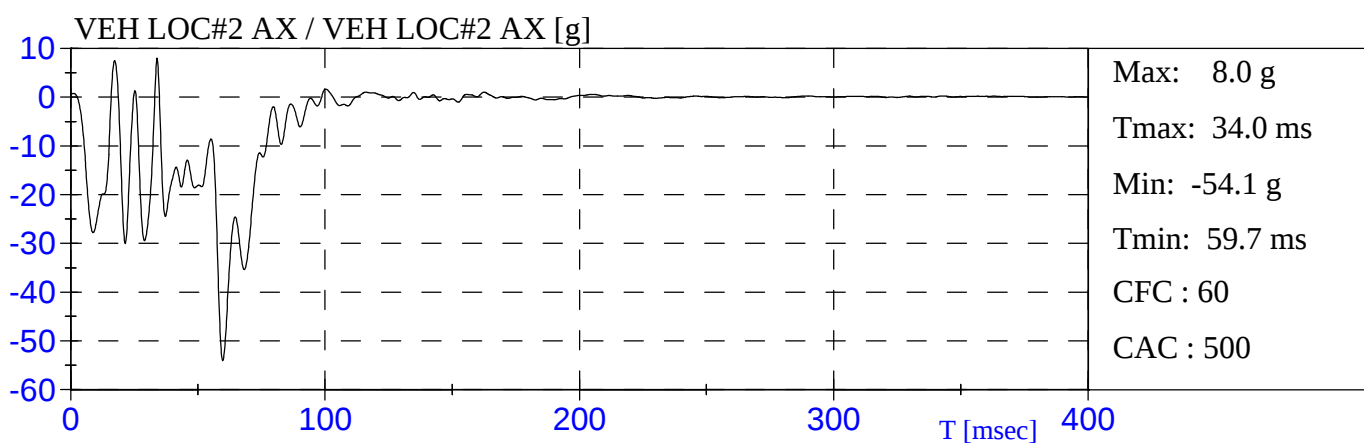
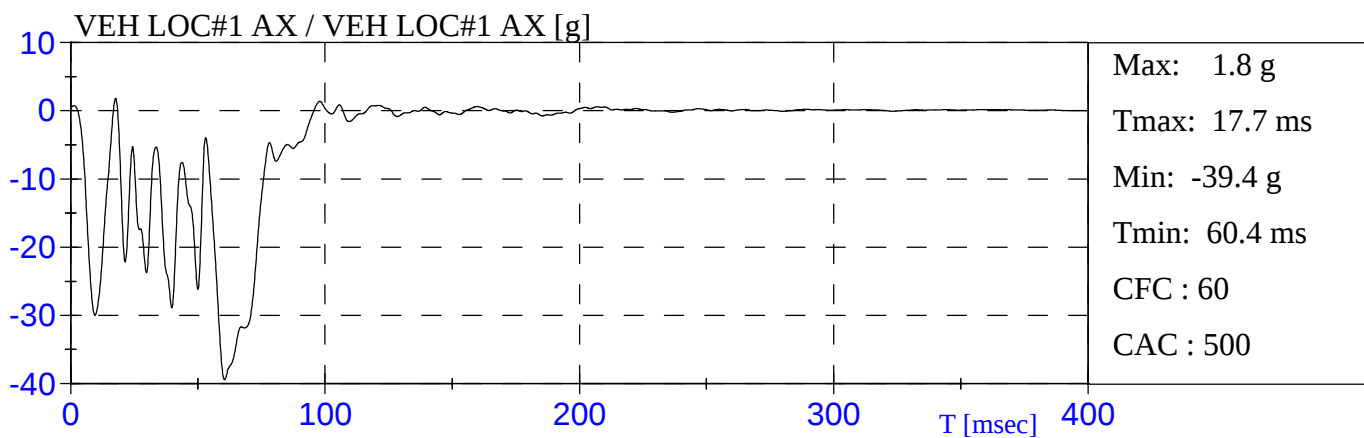


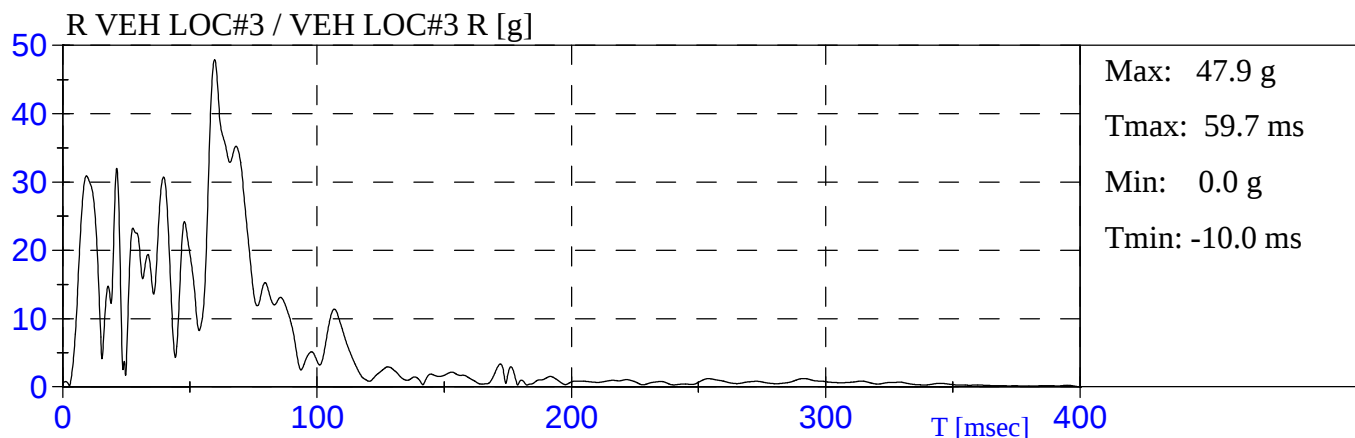
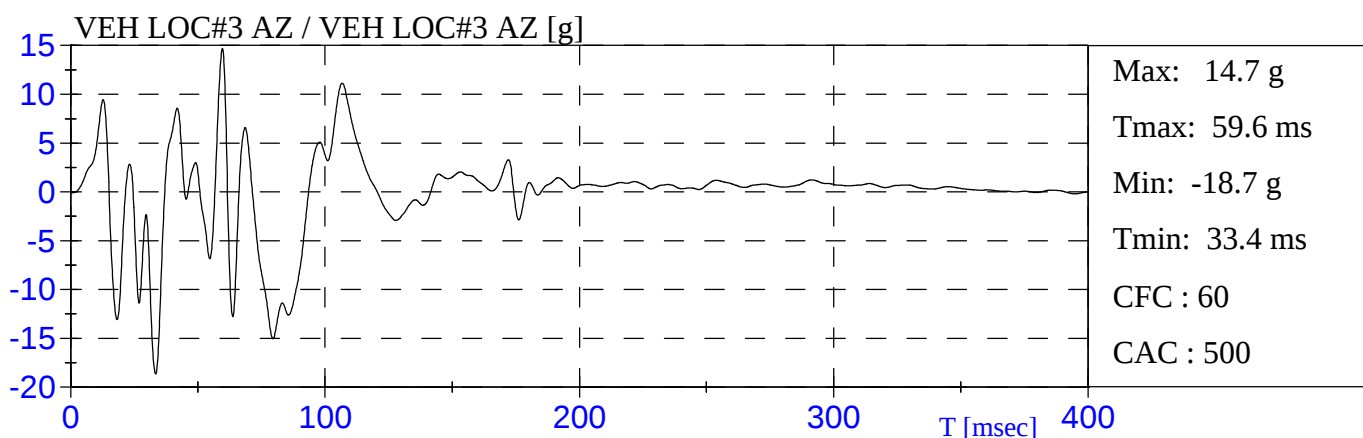
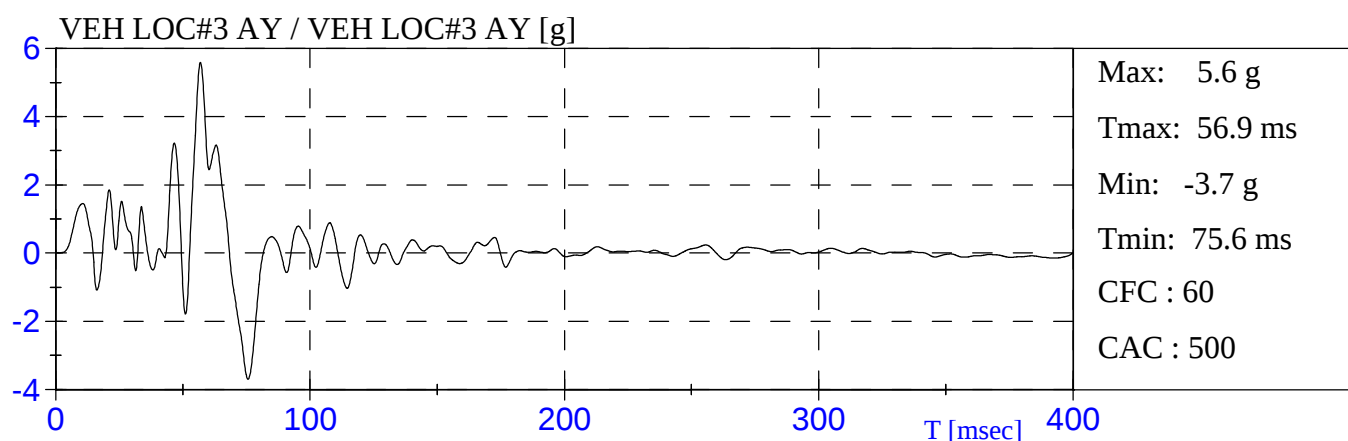
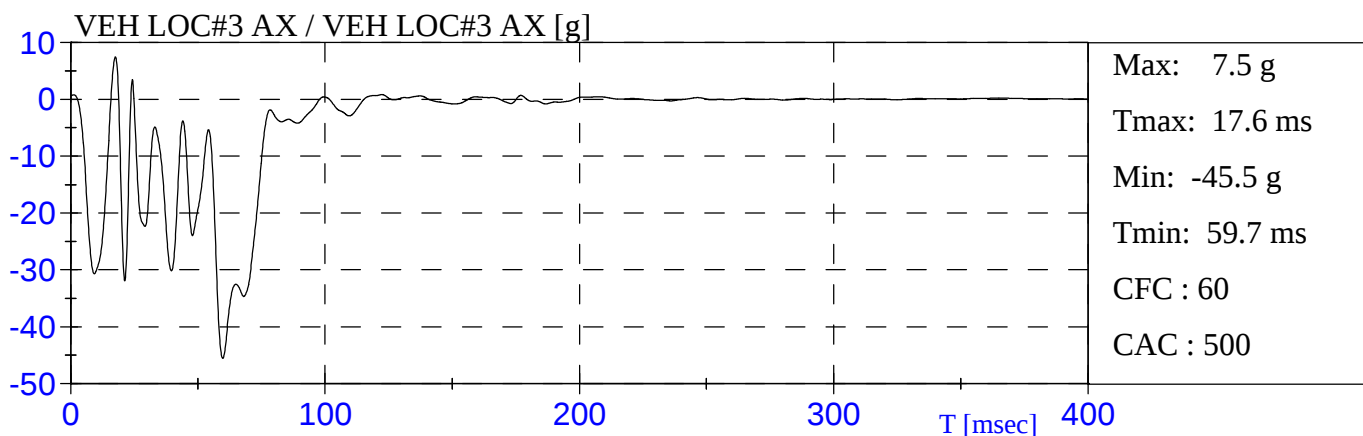


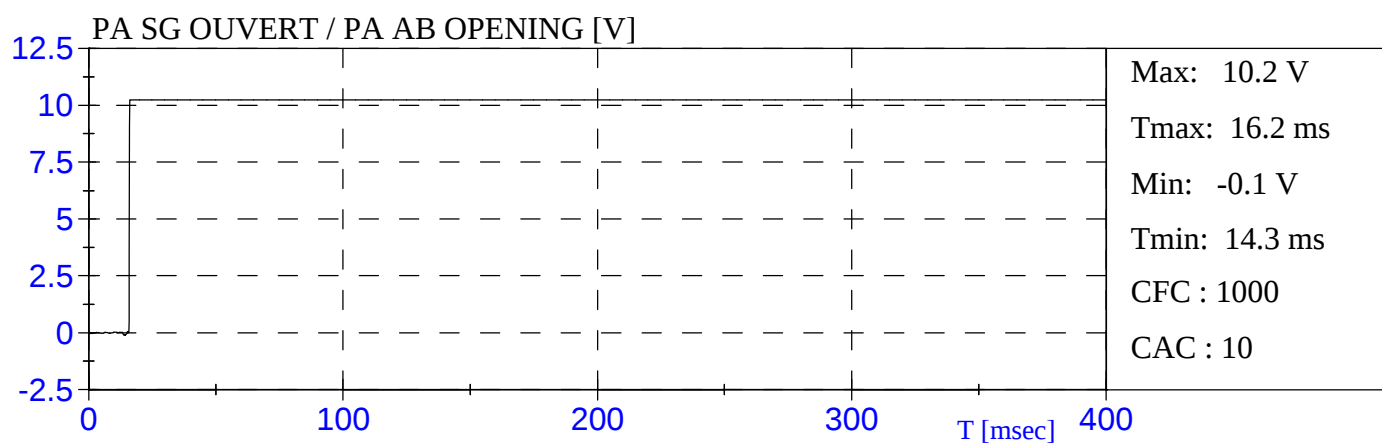
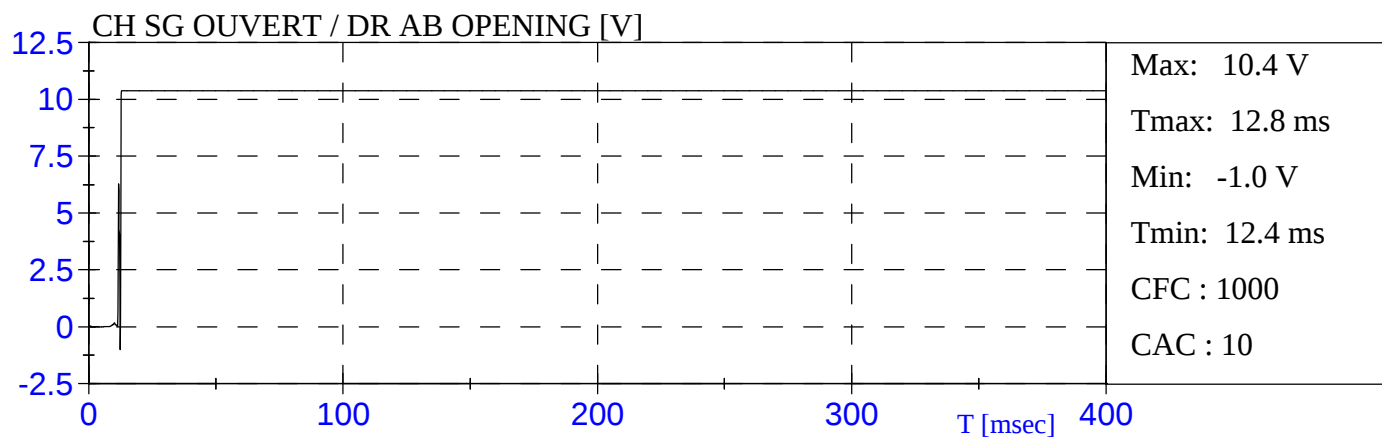


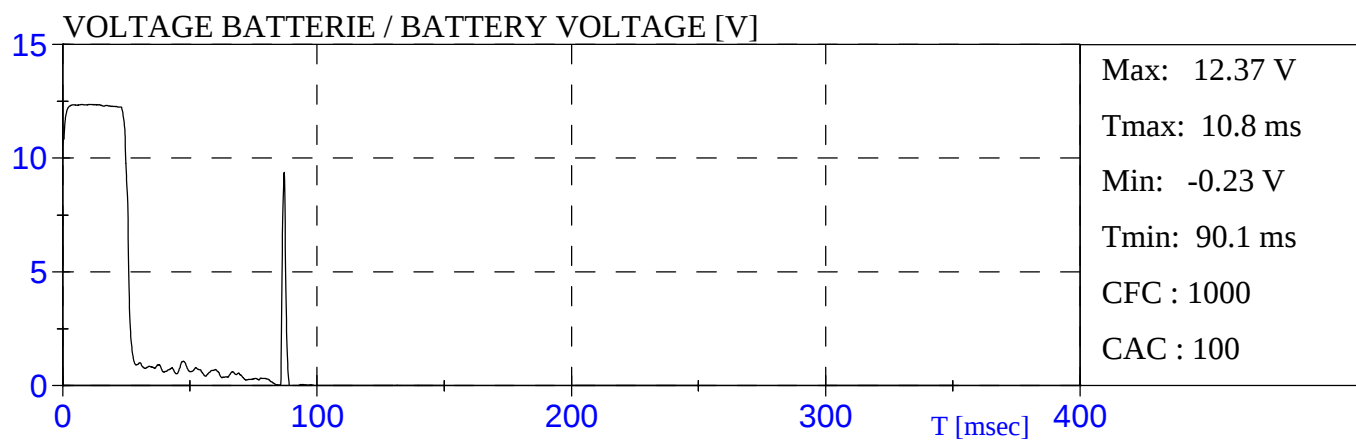


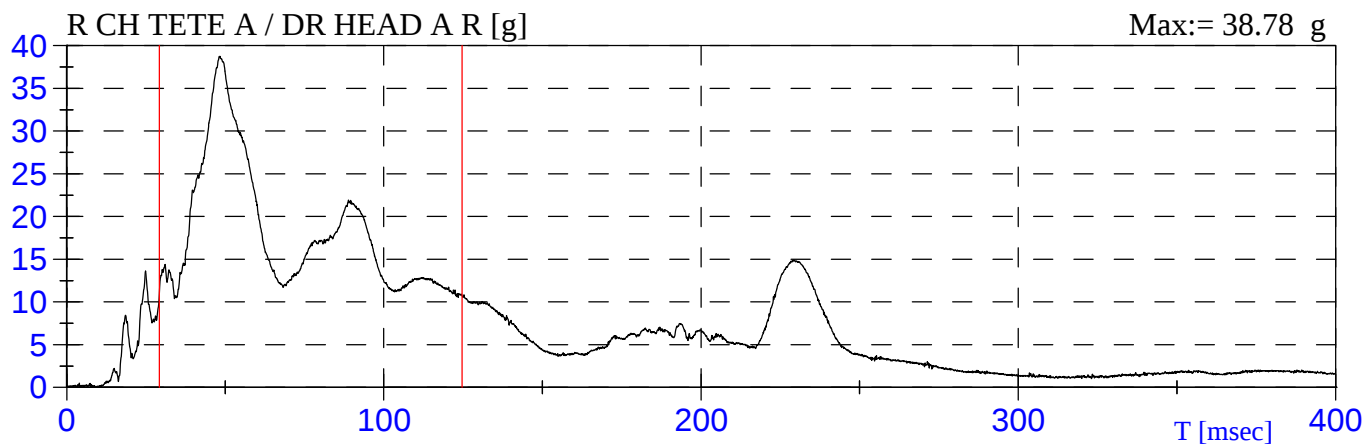










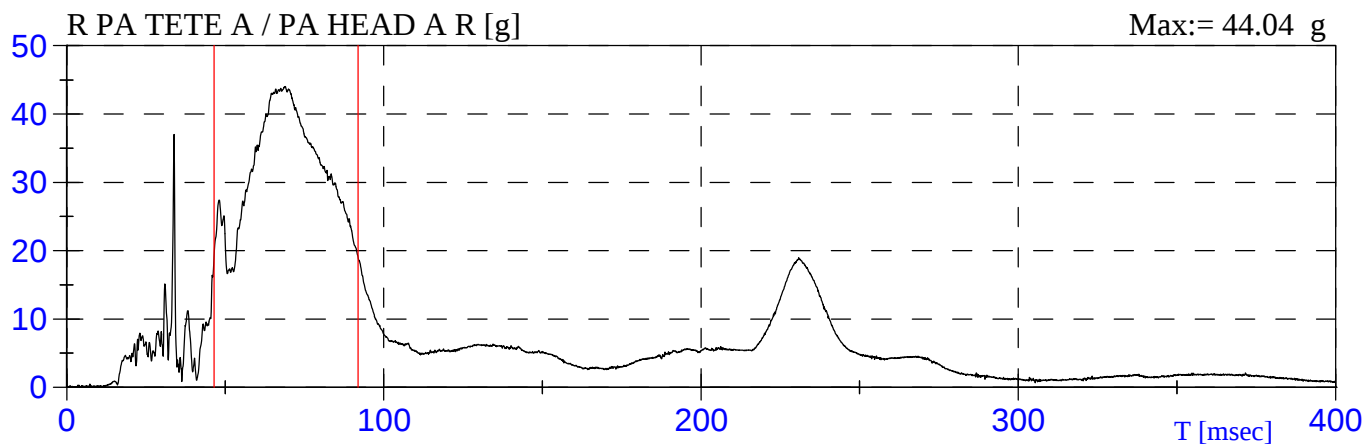


HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 131	HIC(36ms):= 104	HIC(15ms):= 89
T1:= 29.2 ms	T1:= 38.2 ms	T1:= 42.5 ms
T2:= 124.7 ms	T2:= 61.9 ms	T2:= 57.5 ms

* Selon / According To: SAE J1727 96-08

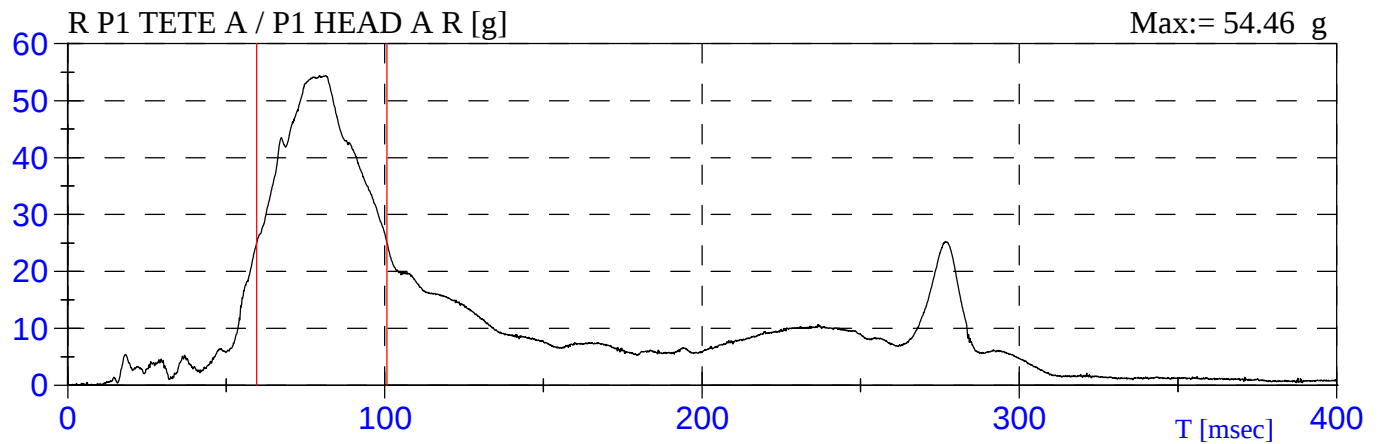


HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 260	HIC(36ms):= 256	HIC(15ms):= 161
T1:= 46.5 ms	T1:= 53.9 ms	T1:= 61.0 ms
T2:= 91.9 ms	T2:= 89.9 ms	T2:= 76.0 ms

* Selon / According To: SAE J1727 96-08

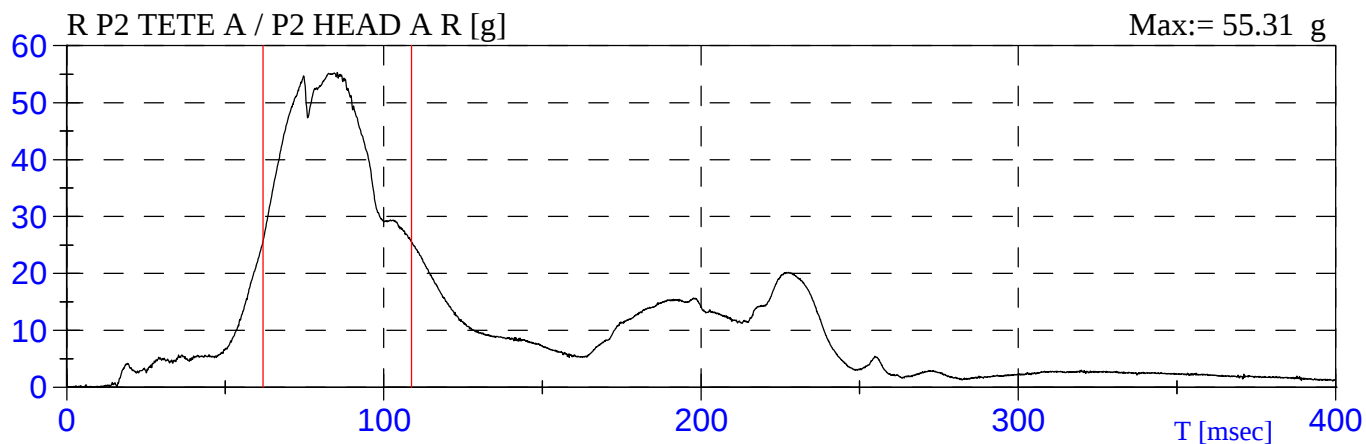


HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

HIC:= 465	HIC(36ms):= 460	HIC(15ms):= 287
T1:= 59.6 ms	T1:= 62.3 ms	T1:= 70.6 ms
T2:= 100.7 ms	T2:= 98.3 ms	T2:= 85.6 ms

* Selon / According To: SAE J1727 96-08

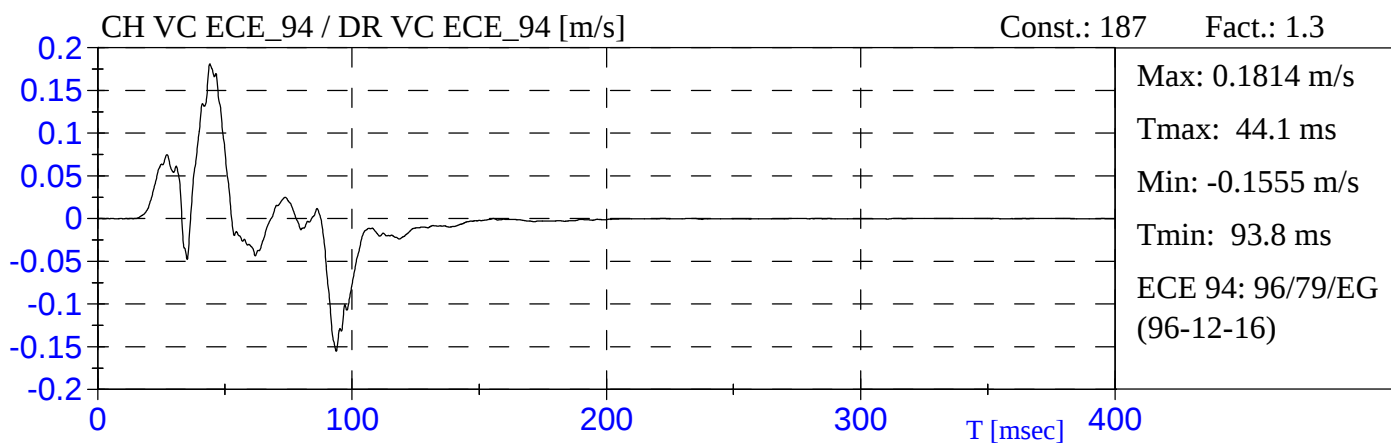
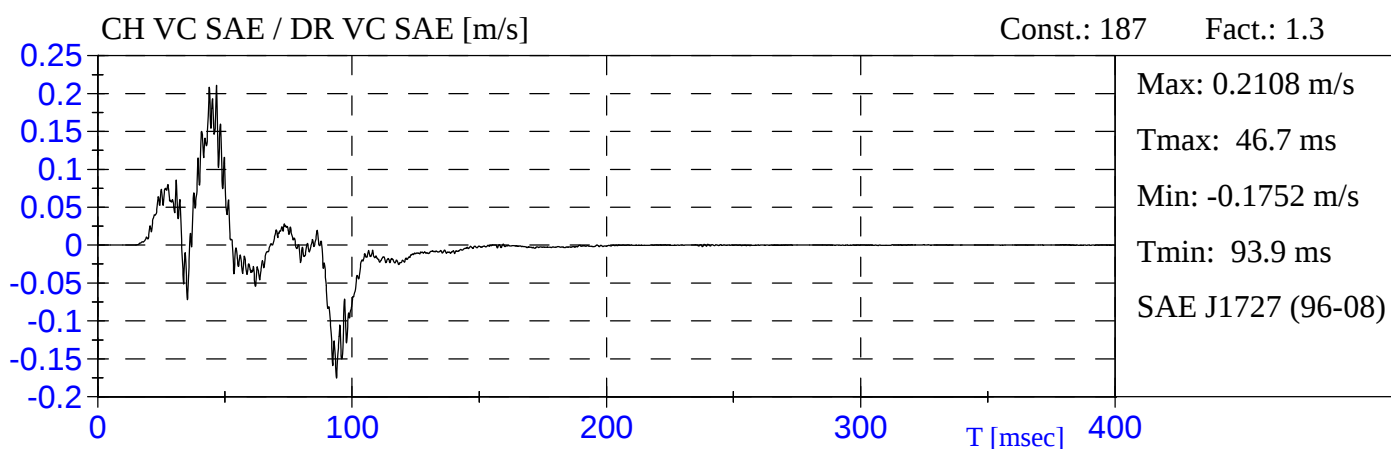
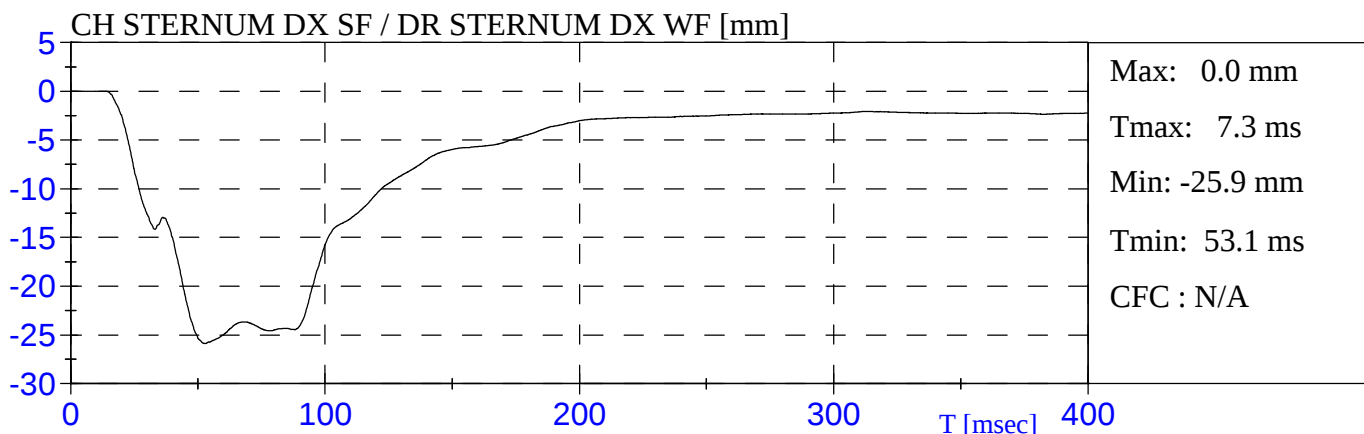


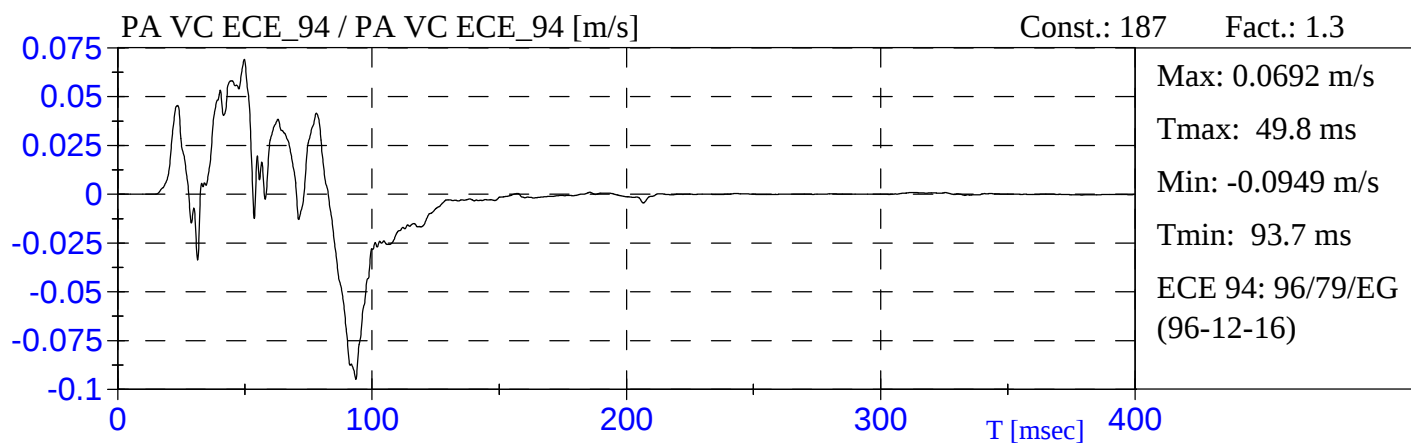
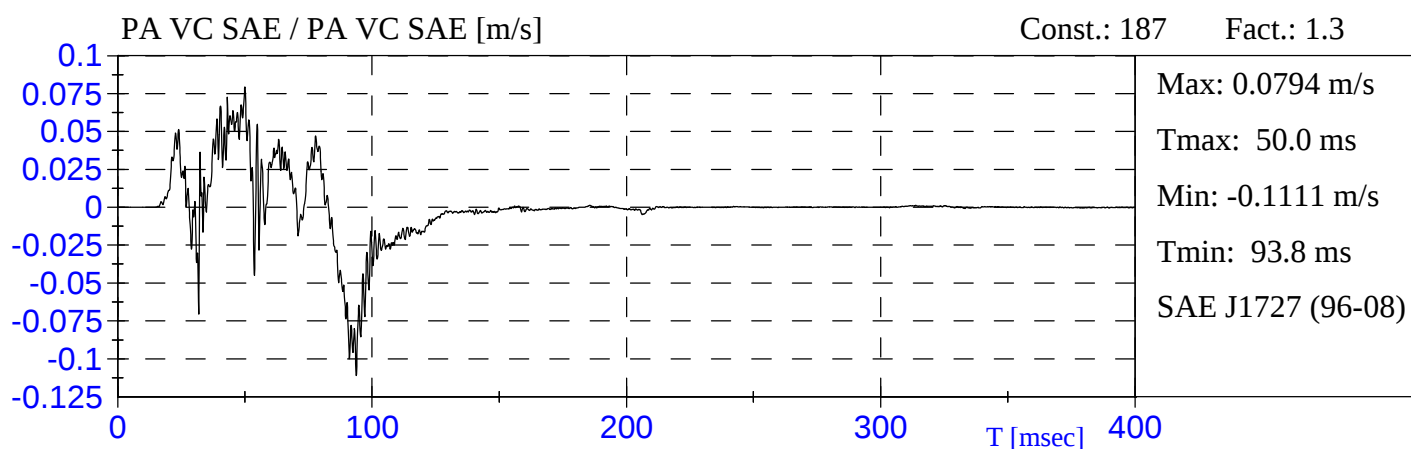
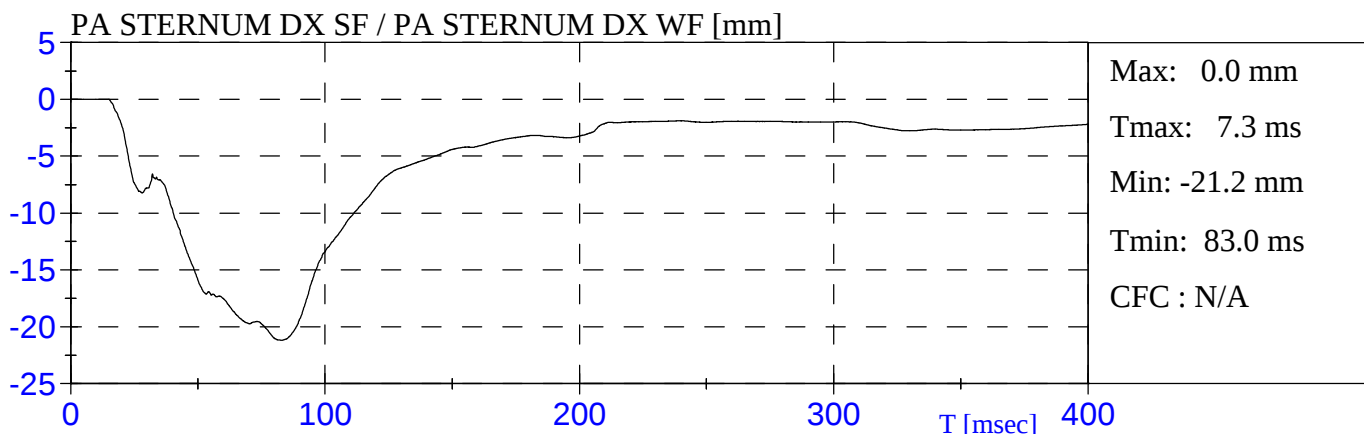
HEAD INJURY CRITERIA (HIC) *

CRITÈRE DE BLESSURE DE LA TÊTE

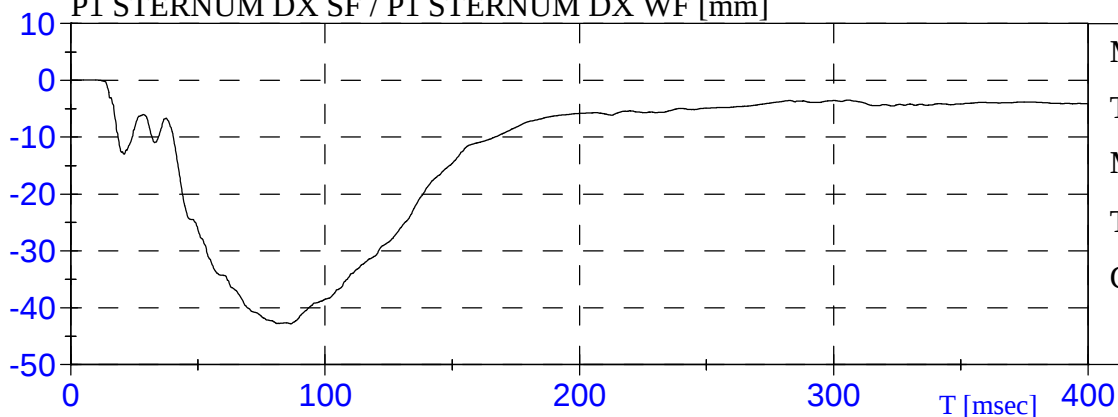
HIC:= 553	HIC(36ms):= 541	HIC(15ms):= 310
T1:= 62.0 ms	T1:= 63.3 ms	T1:= 73.2 ms
T2:= 108.7 ms	T2:= 99.3 ms	T2:= 88.2 ms

* Selon / According To: SAE J1727 96-08





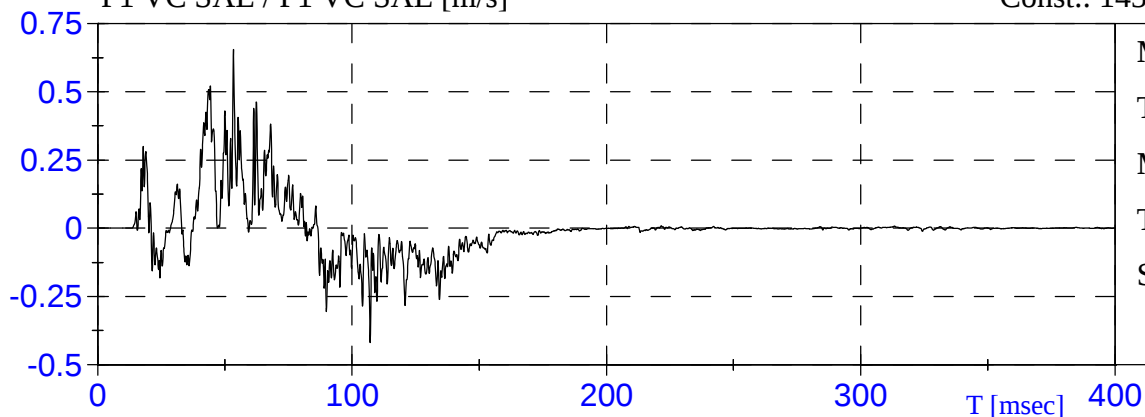
P1 STERNUM DX SF / P1 STERNUM DX WF [mm]



Max: 0.1 mm
Tmax: 6.0 ms
Min: -42.8 mm
Tmin: 86.5 ms
CFC : N/A

P1 VC SAE / P1 VC SAE [m/s]

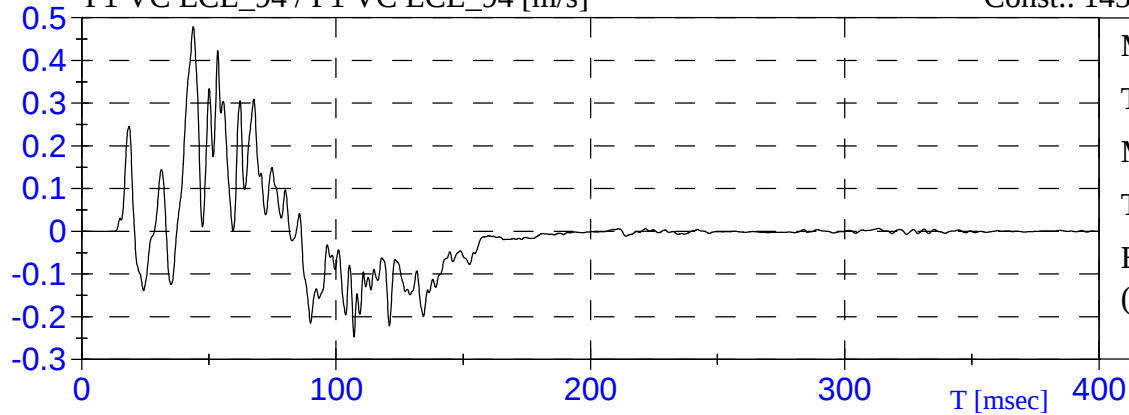
Const.: 143 Fact.: 1.3



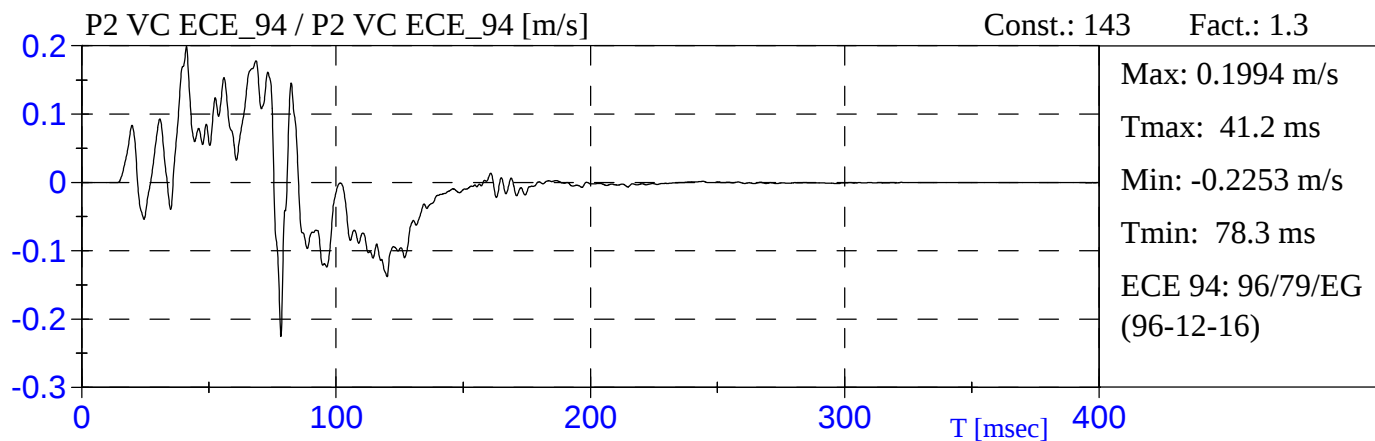
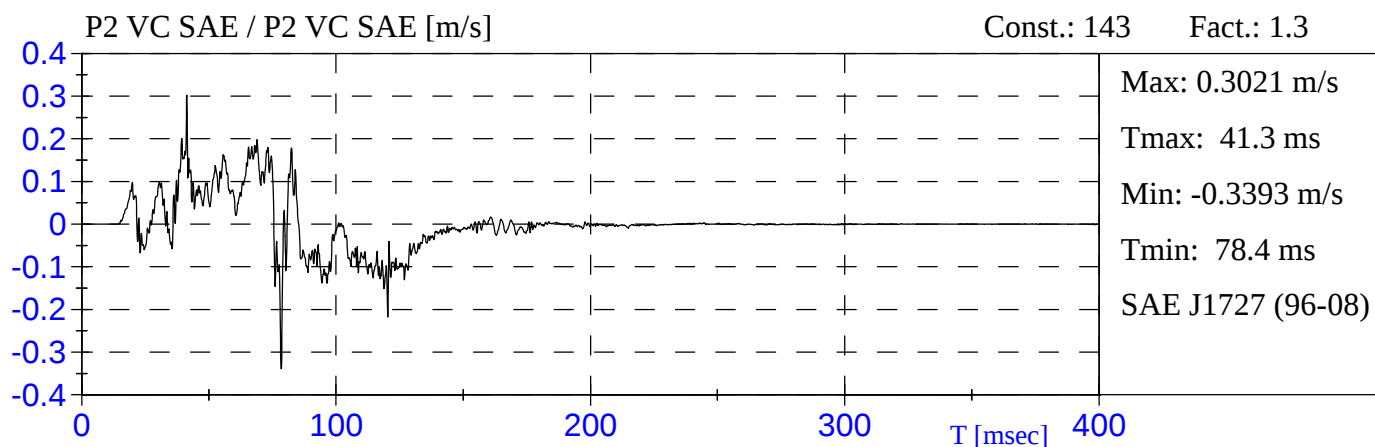
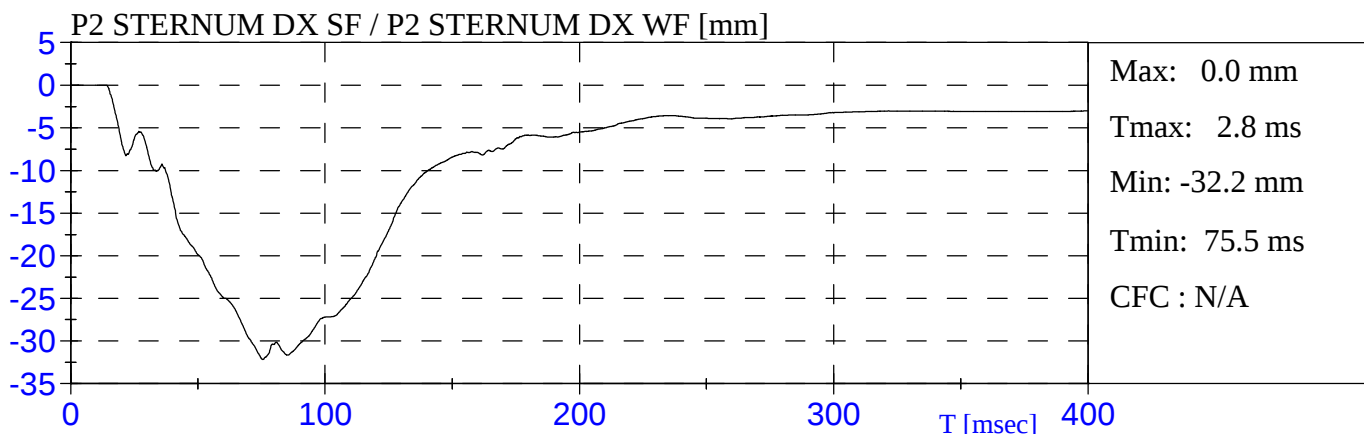
Max: 0.6551 m/s
Tmax: 53.4 ms
Min: -0.4188 m/s
Tmin: 107.1 ms
SAE J1727 (96-08)

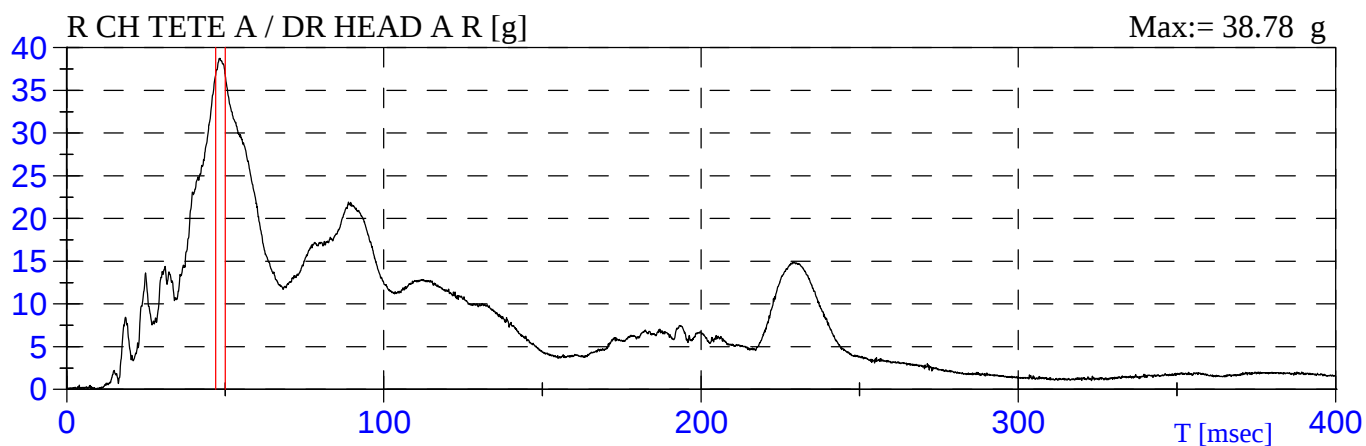
P1 VC ECE_94 / P1 VC ECE_94 [m/s]

Const.: 143 Fact.: 1.3



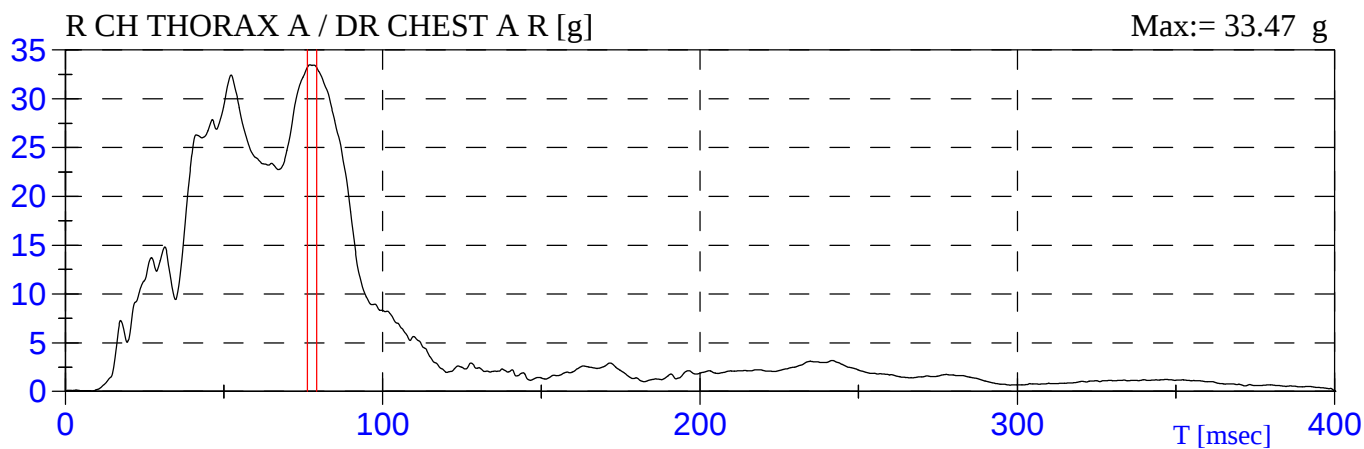
Max: 0.4793 m/s
Tmax: 43.9 ms
Min: -0.2474 m/s
Tmin: 107.0 ms
ECE 94: 96/79/EG
(96-12-16)





CLIP 3ms *

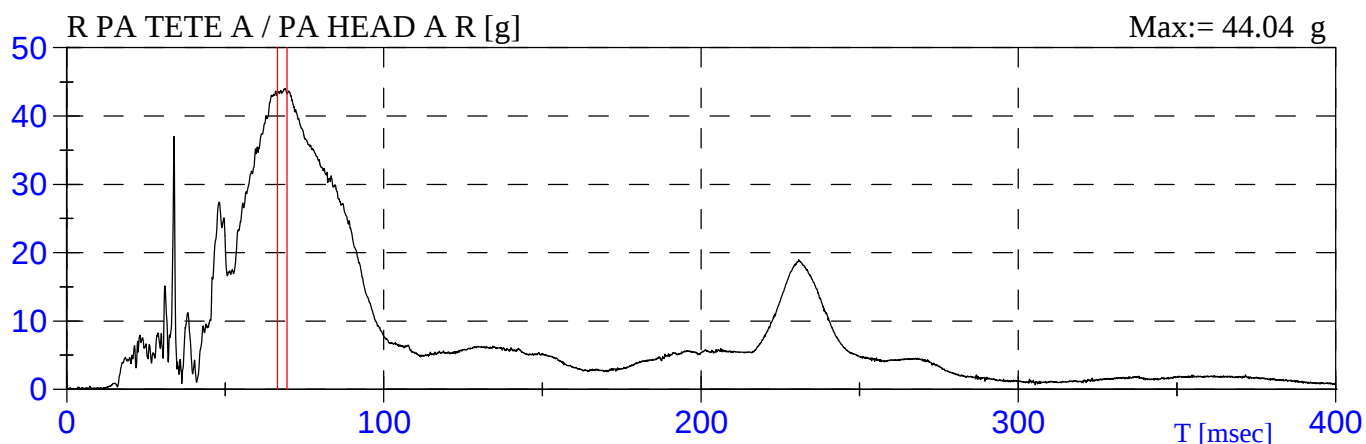
Acc. := 36.79 g	T1:= 47.0 ms	T2:= 50.0 ms
-----------------	--------------	--------------



CLIP 3ms *

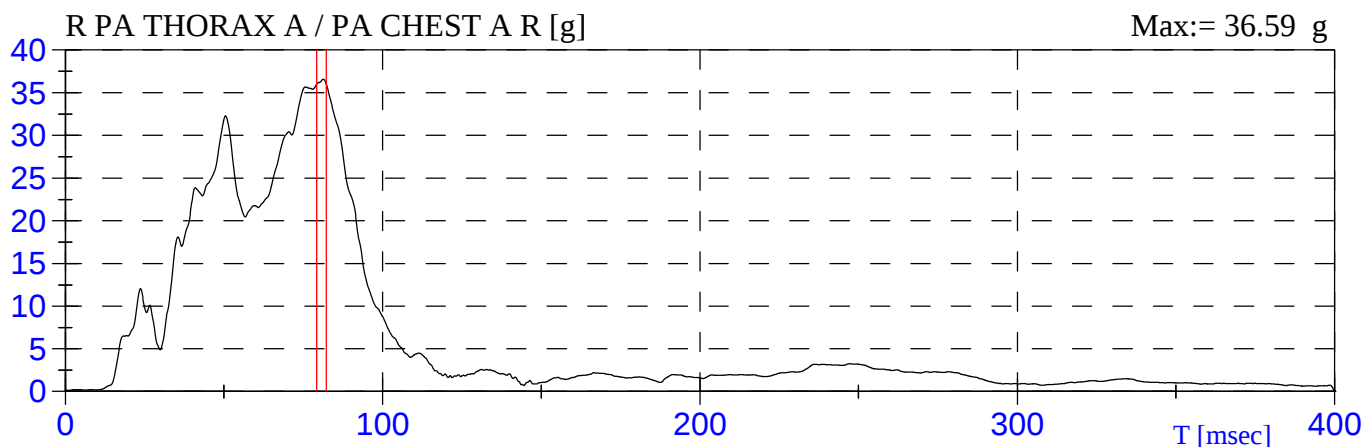
Acc. := 33.21 g	T1:= 76.3 ms	T2:= 79.3 ms
-----------------	--------------	--------------

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



CLIP 3ms *

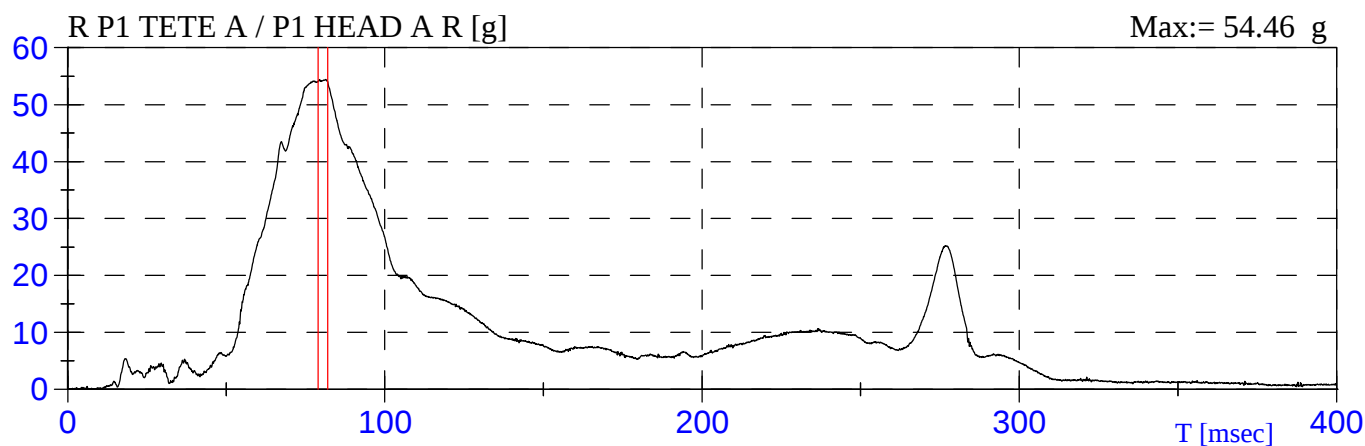
Acc. := 43.26 g	T1:= 66.5 ms	T2:= 69.5 ms
-----------------	--------------	--------------



CLIP 3ms *

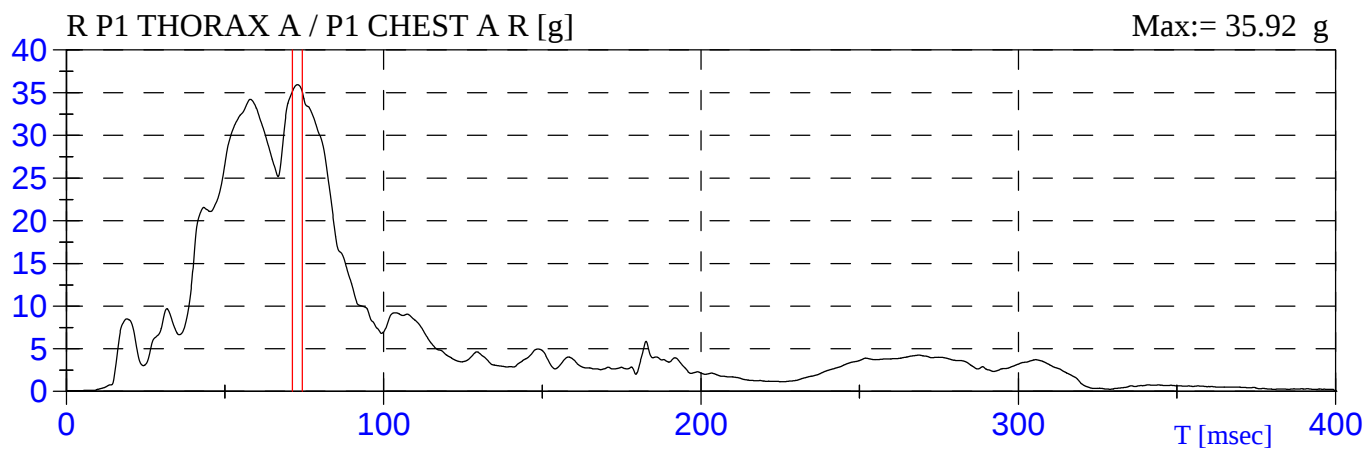
Acc. := 35.97 g	T1:= 79.2 ms	T2:= 82.2 ms
-----------------	--------------	--------------

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



CLIP 3ms *

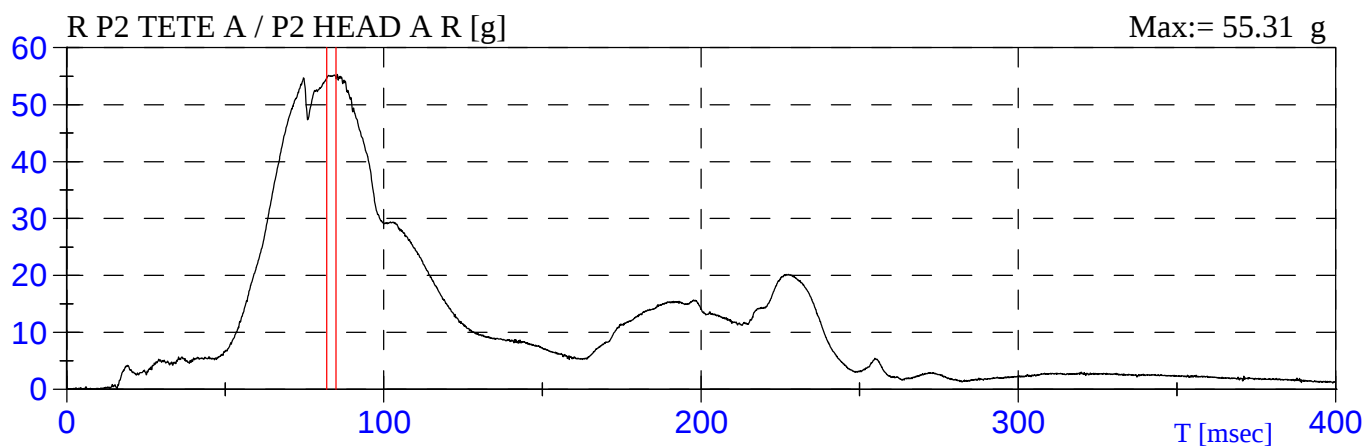
Acc. := 54.09 g	T1:= 78.9 ms	T2:= 82.0 ms
-----------------	--------------	--------------



CLIP 3ms *

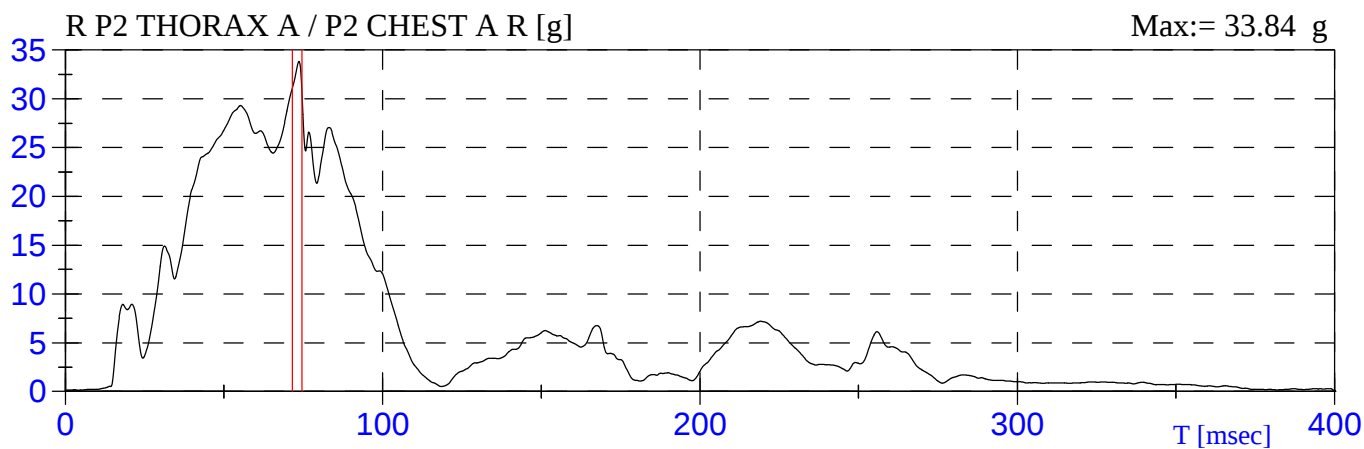
Acc. := 35.17 g	T1:= 71.3 ms	T2:= 74.3 ms
-----------------	--------------	--------------

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



CLIP 3ms *

Acc. := 54.62 g	T1:= 81.9 ms	T2:= 84.9 ms
-----------------	--------------	--------------



CLIP 3ms *

Acc. := 31.04 g	T1:= 71.5 ms	T2:= 74.5 ms
-----------------	--------------	--------------

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

INDEX DU TIBIA *
TIBIA INDEX *

TI Chauffeur / Driver

Mc := 115 N-m

Fc := 22.9 kN

TIBIA	GAUCHE / LEFT	DROIT / RIGHT
HAUT / UPPER	0.225	0.176
BAS / LOWER	0.425	0.278

* Selon / According To: SAE J1727 AUG 96

INDEX DU TIBIA *
TIBIA INDEX *

TI Passenger / Passenger

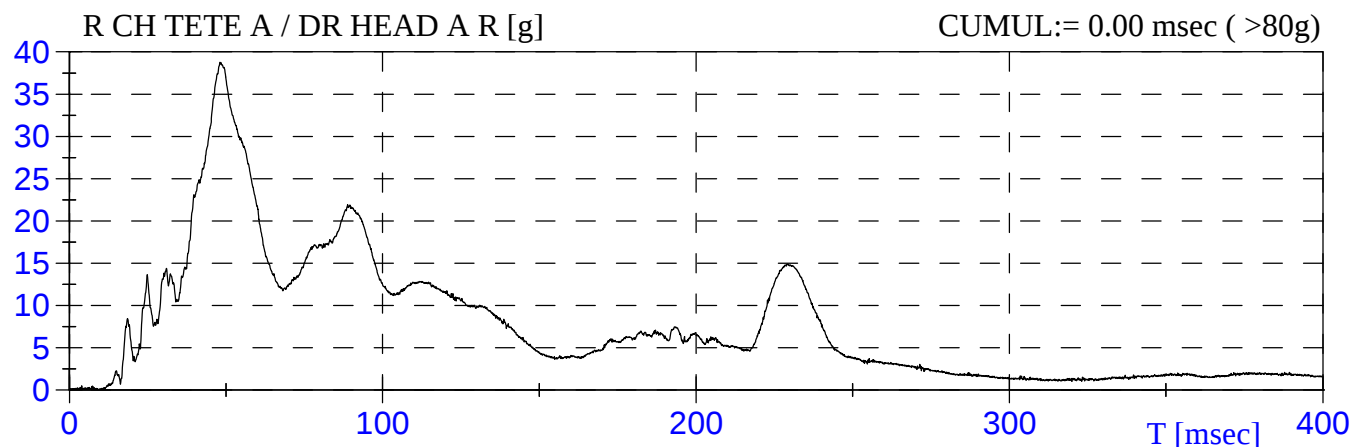
Mc := 115 N-m

Fc := 22.9 kN

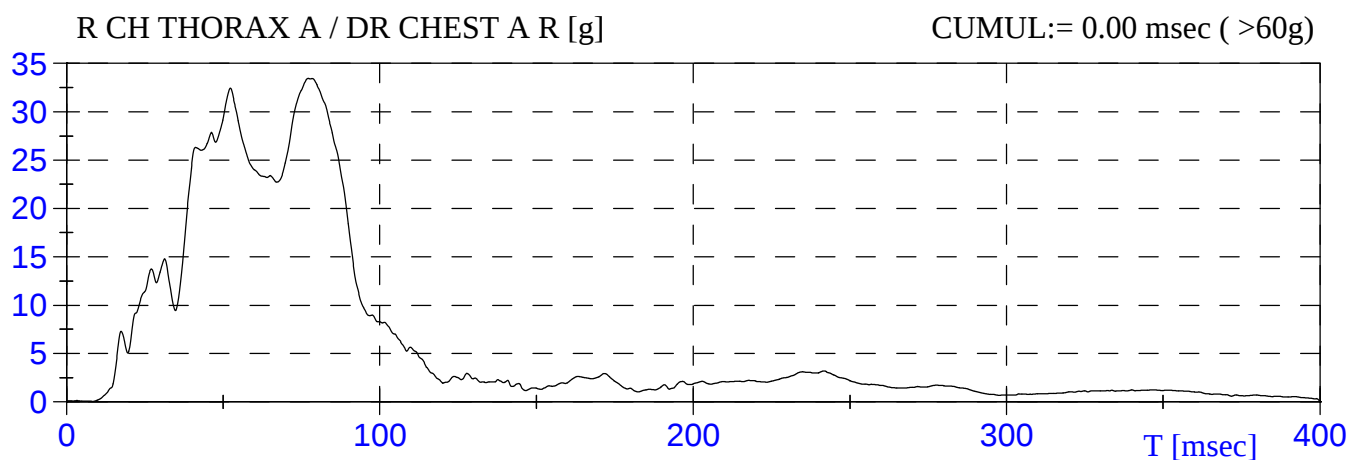
TIBIA	GAUCHE / LEFT	DROIT / RIGHT
HAUT / UPPER	0.251	0.332
BAS / LOWER	0.168	0.213

* Selon / According To: SAE J1727 AUG 96

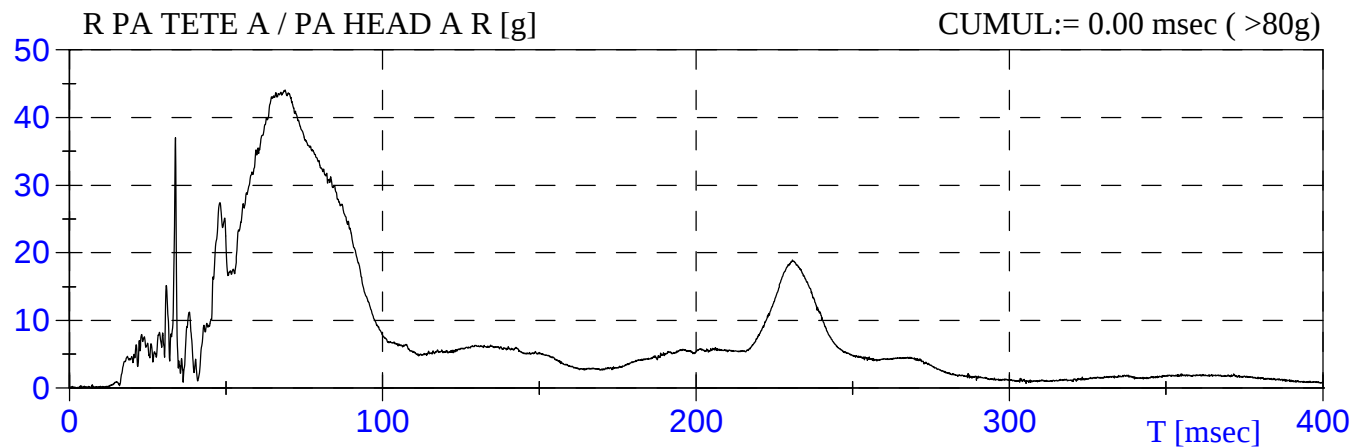
ACCÉLÉRATION DE LA TÊTE >80 g / HEAD ACCELERATION > 80 g



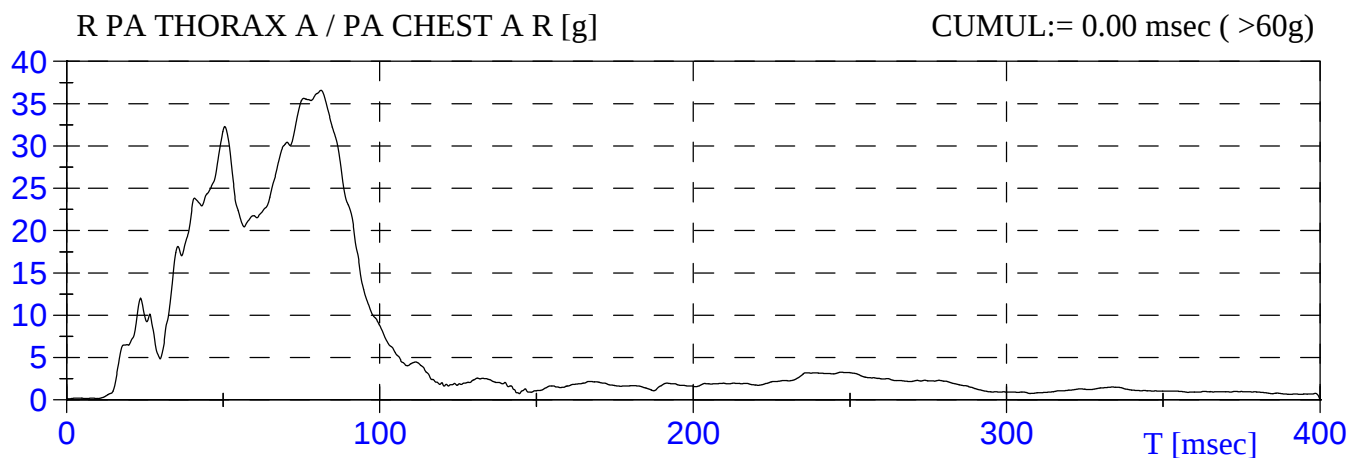
ACCÉLÉRATION DU THORAX >60 g / THORAX ACCELERATION > 60 g



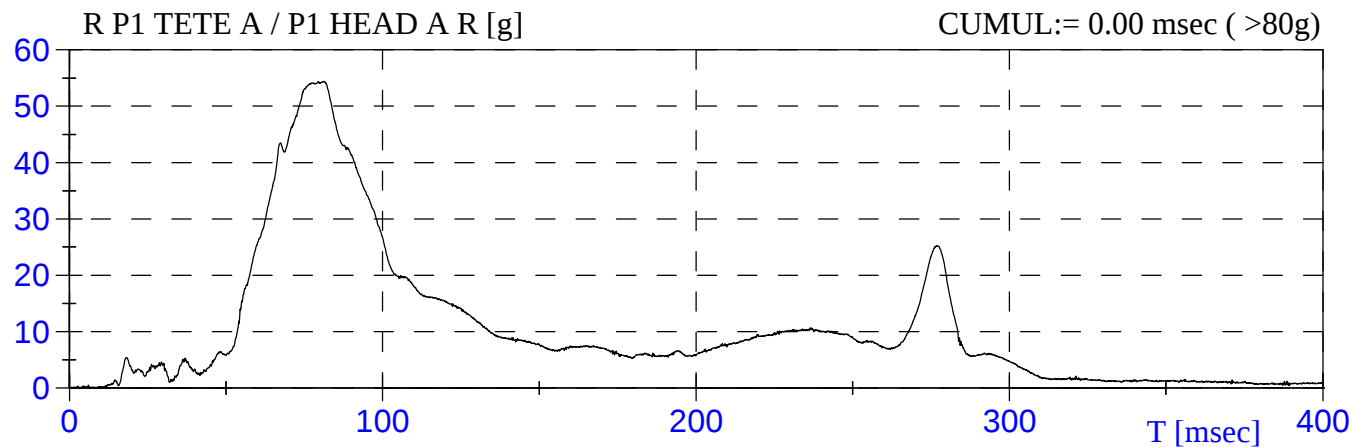
ACCÉLÉRATION DE LA TÊTE >80 g / HEAD ACCELERATION > 80 g



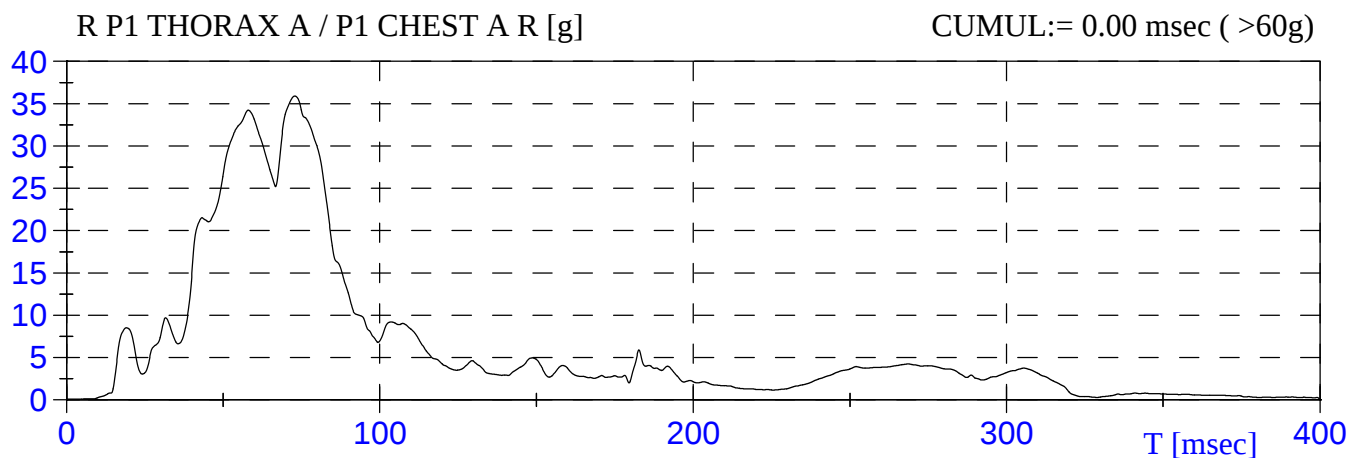
ACCÉLÉRATION DU THORAX >60 g / THORAX ACCELERATION > 60 g



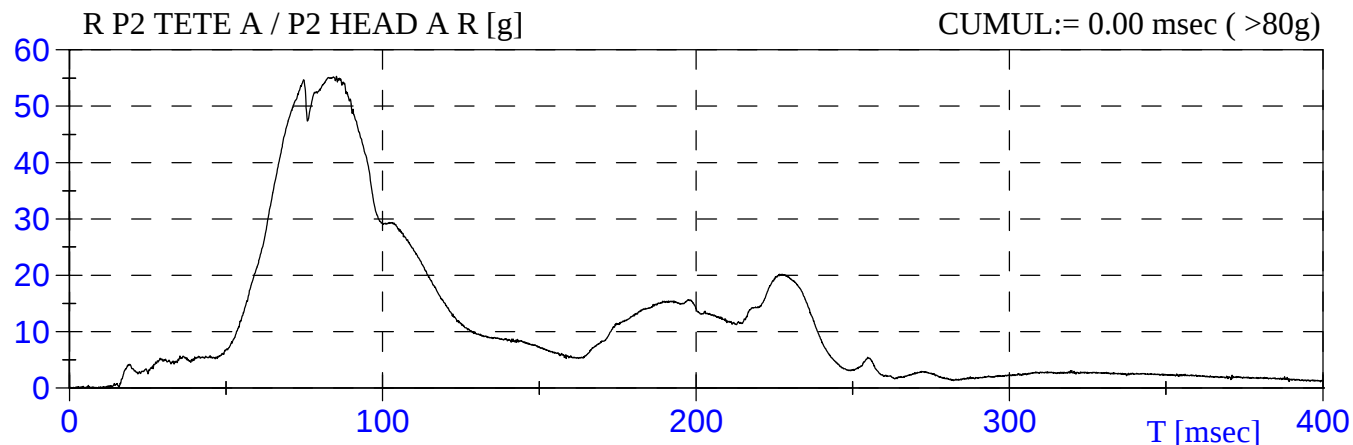
ACCÉLÉRATION DE LA TÊTE >80 g / HEAD ACCELERATION > 80 g



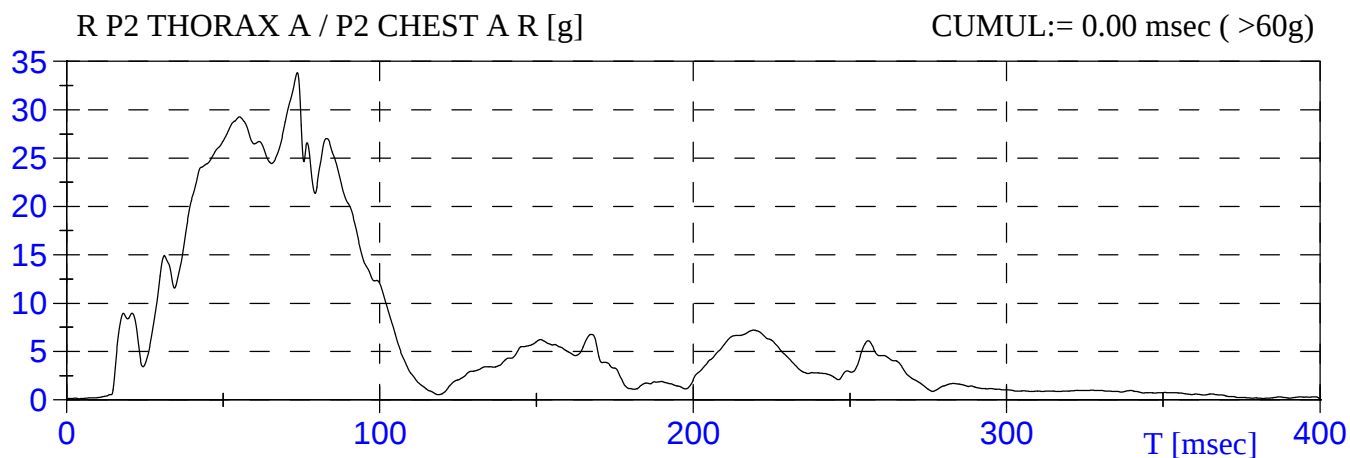
ACCÉLÉRATION DU THORAX >60 g / THORAX ACCELERATION > 60 g



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



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



Chauffeur / Driver

$$N_{ij}^* = 0.36$$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	T _c	4287
				C _c	3880
0.25	0.36	0.25	0.22	F _c	155
				E _c	67

Passager / Passenger

$$N_{ij}^* = 0.23$$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	T _c	4287
				C _c	3880
0.20	0.18	0.23	0.16	F _c	155
				E _c	67

* Selon / According To: Federal Register 5/2000

Chauffeur / Driver

$$N_{ij}^* = 0.36$$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	T _c	4287
				C _c	3880
0.25	0.36	0.25	0.22	F _c	155
				E _c	67

Passager / Passenger

$$N_{ij}^* = 0.23$$

Valeurs critiques
Criticals Values

N _{tf}	N _{te}	N _{cf}	N _{ce}	T _c	4287
				C _c	3880
0.20	0.18	0.23	0.16	F _c	155
				E _c	67

* Selon / According To: Federal Register 5/2000