

Appendix B

Instrument response data

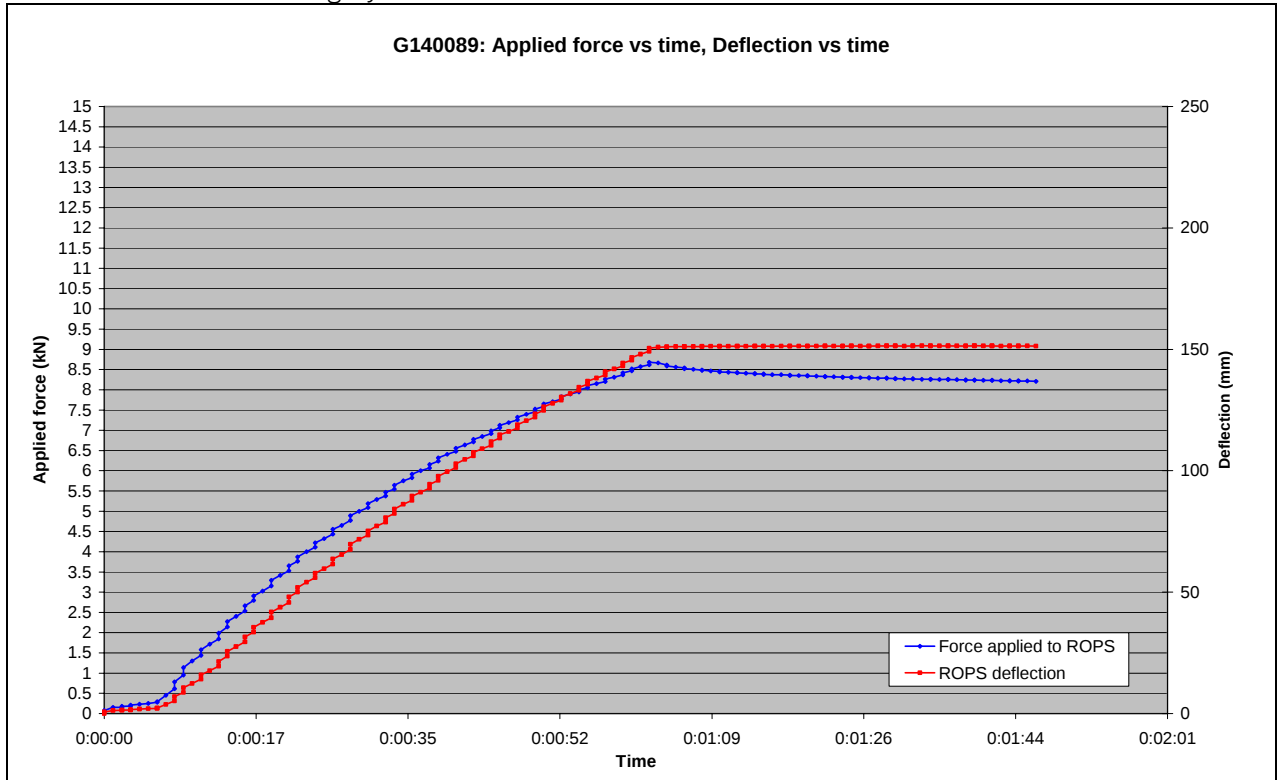
1. Roll-Over Protective Structure.....	2
2. Vehicle and occupant rollover.....	14
2.1 GI40075.....	14
2.2 GI40076.....	37
2.3 GI40077.....	60
2.4 GI40078.....	83
2.5 GI40079.....	106
2.6 GI40080.....	129
2.7 GI40082.....	152
2.8 GI40085.....	175
2.9 GI40087.....	198
2.10 GI40088.....	221
2.11 GI40107.....	244
2.12 GI40108.....	267
2.13 Research & Development test latroll_00.....	290
2.14 Research & Development test latroll_01.....	313
2.15 Research & Development test latroll_02.....	336
2.16 Research & Development test latroll_03.....	359
2.17 Research & Development test rearpitch_01.....	382

Appendix Prepared by: Drew Sherry

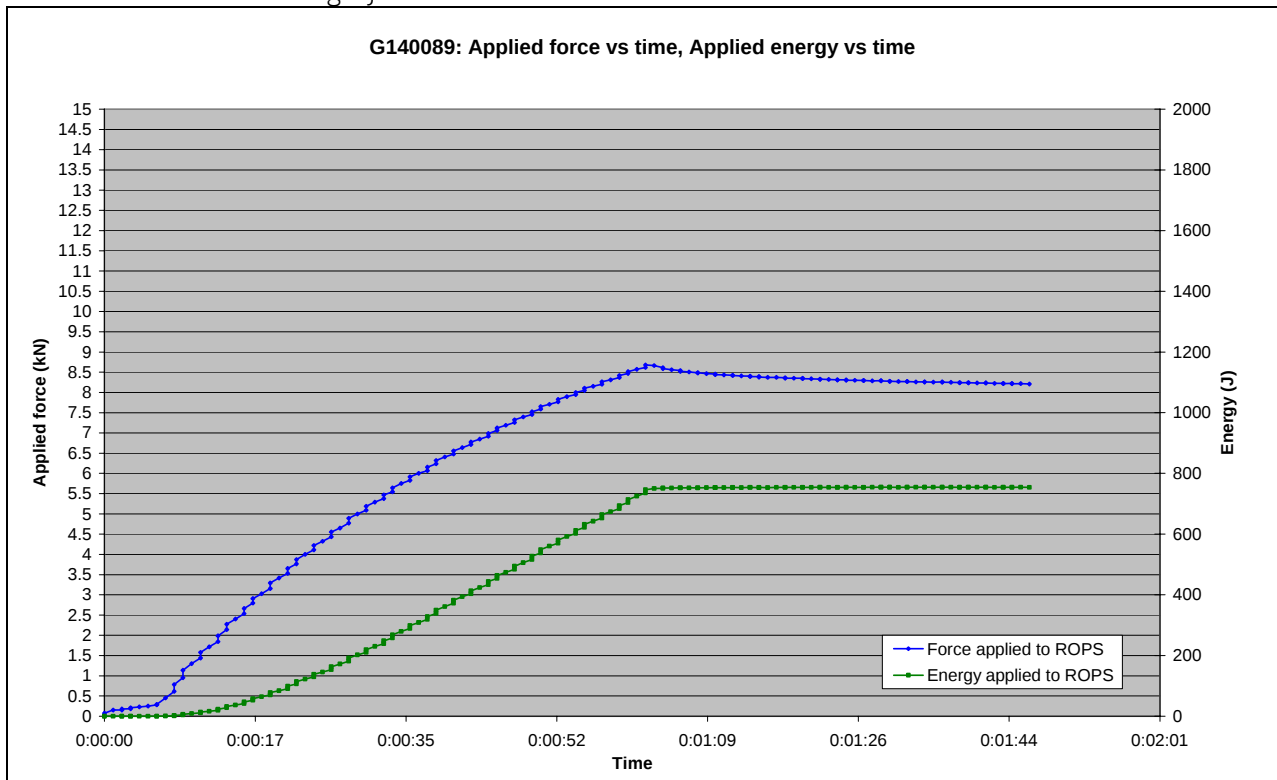
Appendix Checked by: Ross Dal Nevo

I. Roll-Over Protective Structure

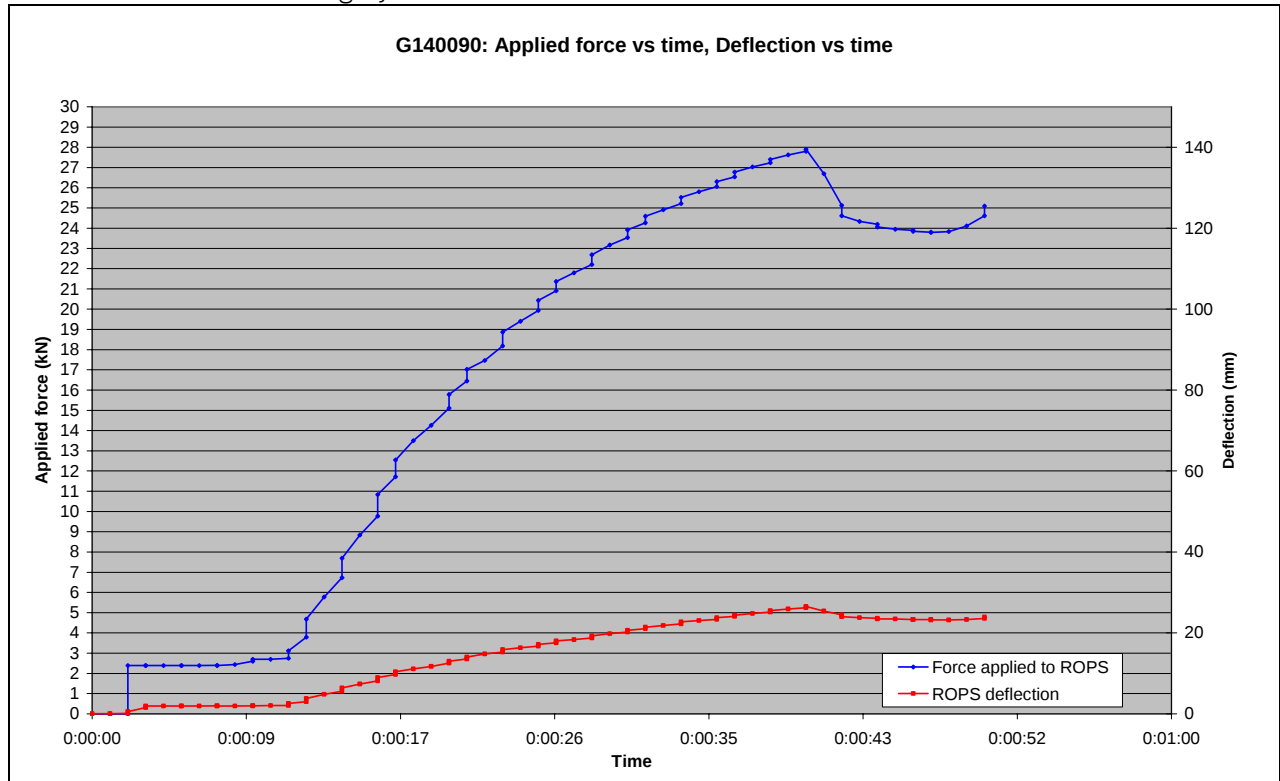
G140089 – Lateral loading - John Deere Gator XUV825i



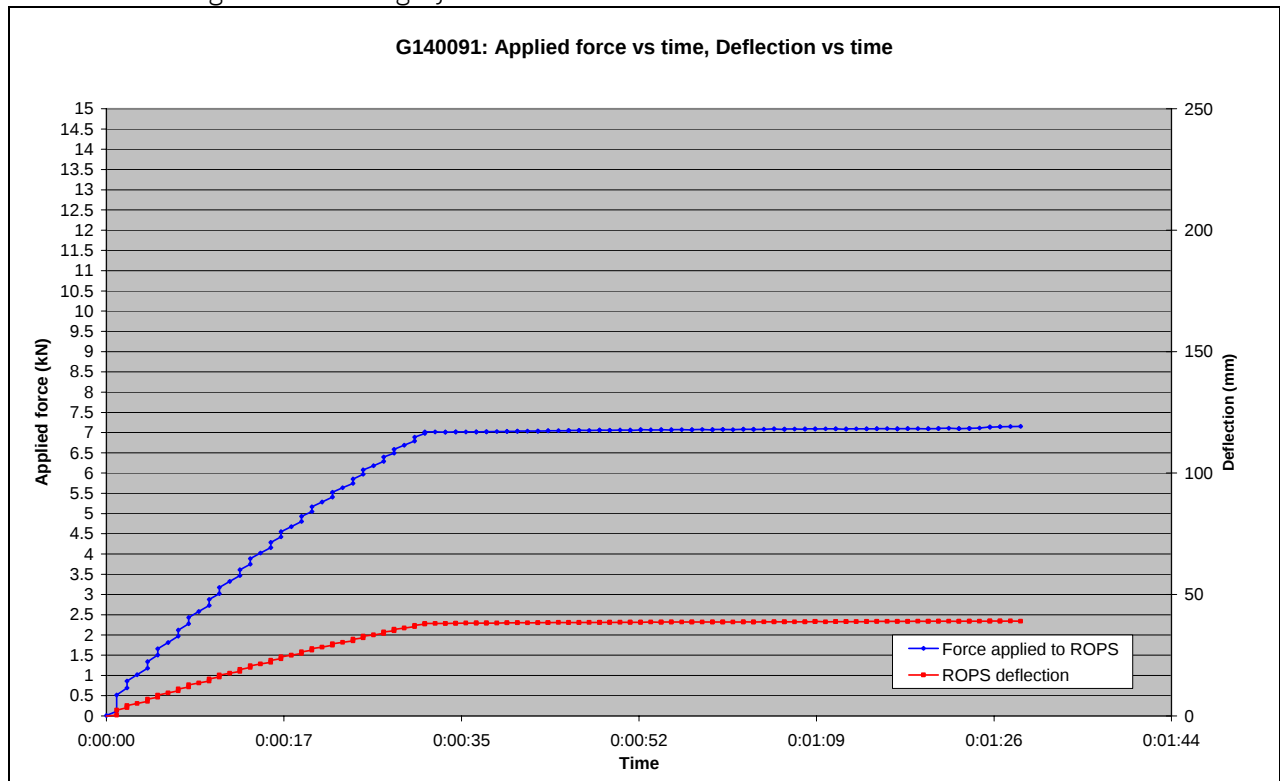
G140089 – Lateral loading - John Deere Gator XUV825i



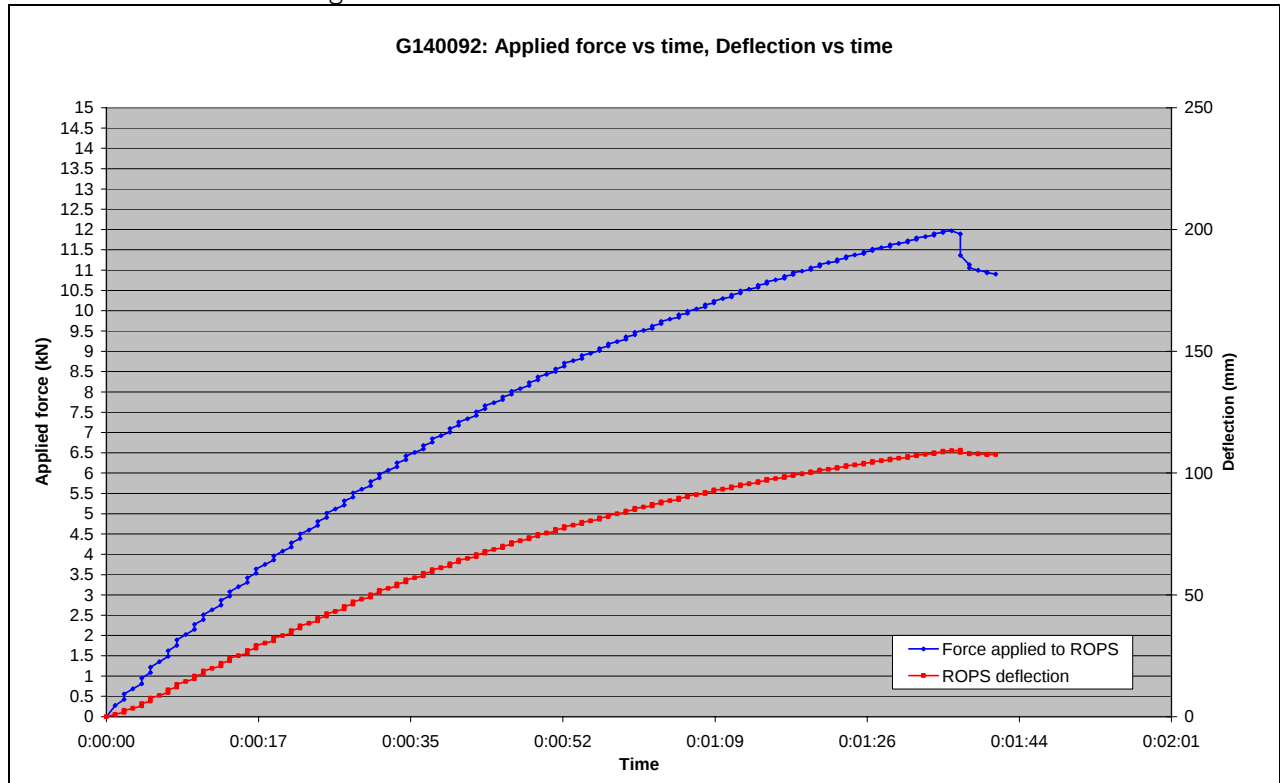
G140090 – Vertical loading - John Deere Gator XUV825i



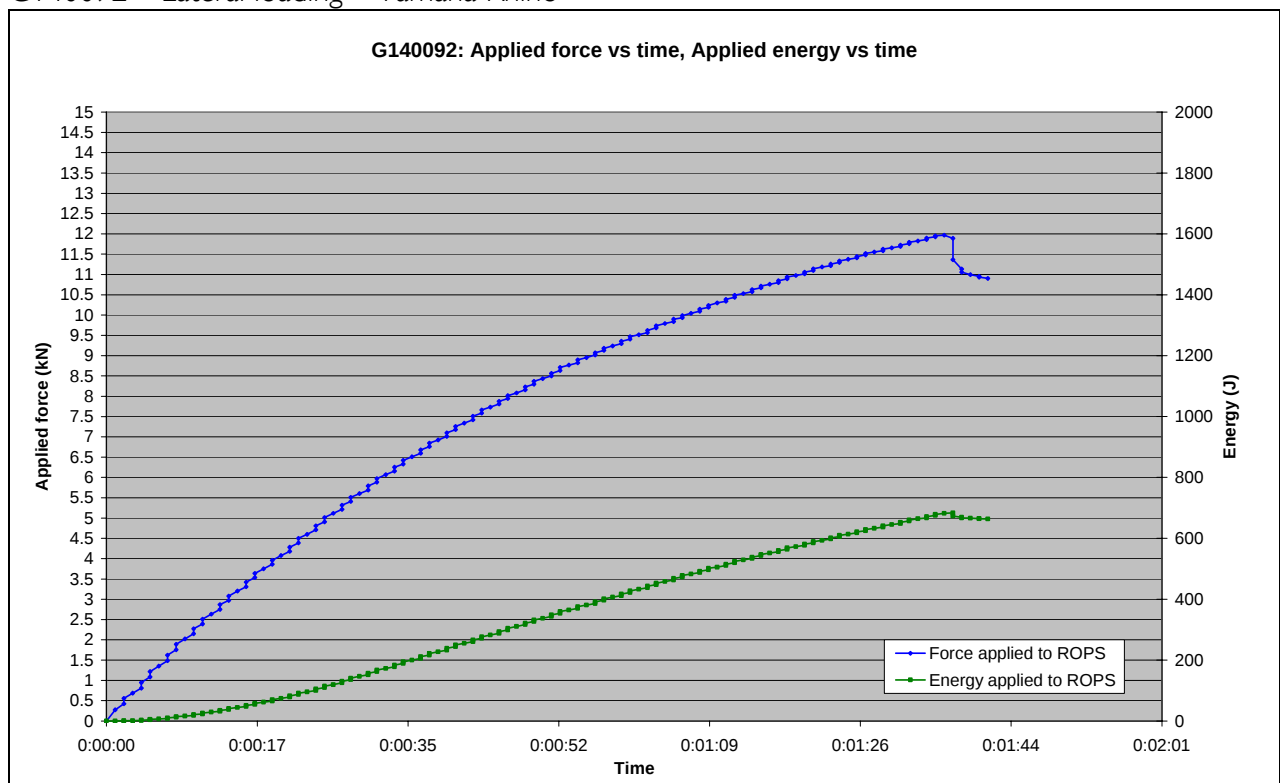
G140091 – Longitudinal loading - John Deere Gator XUV825i



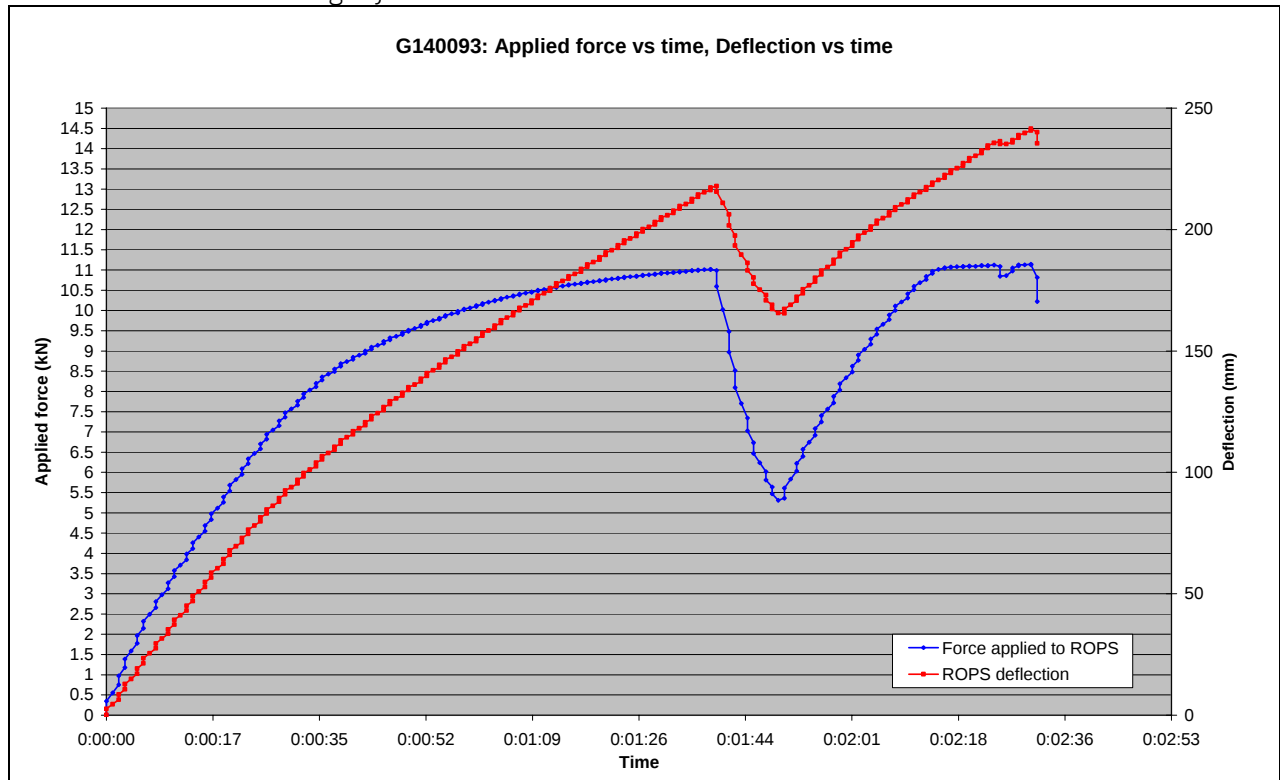
G140092 – Lateral loading – Yamaha Rhino



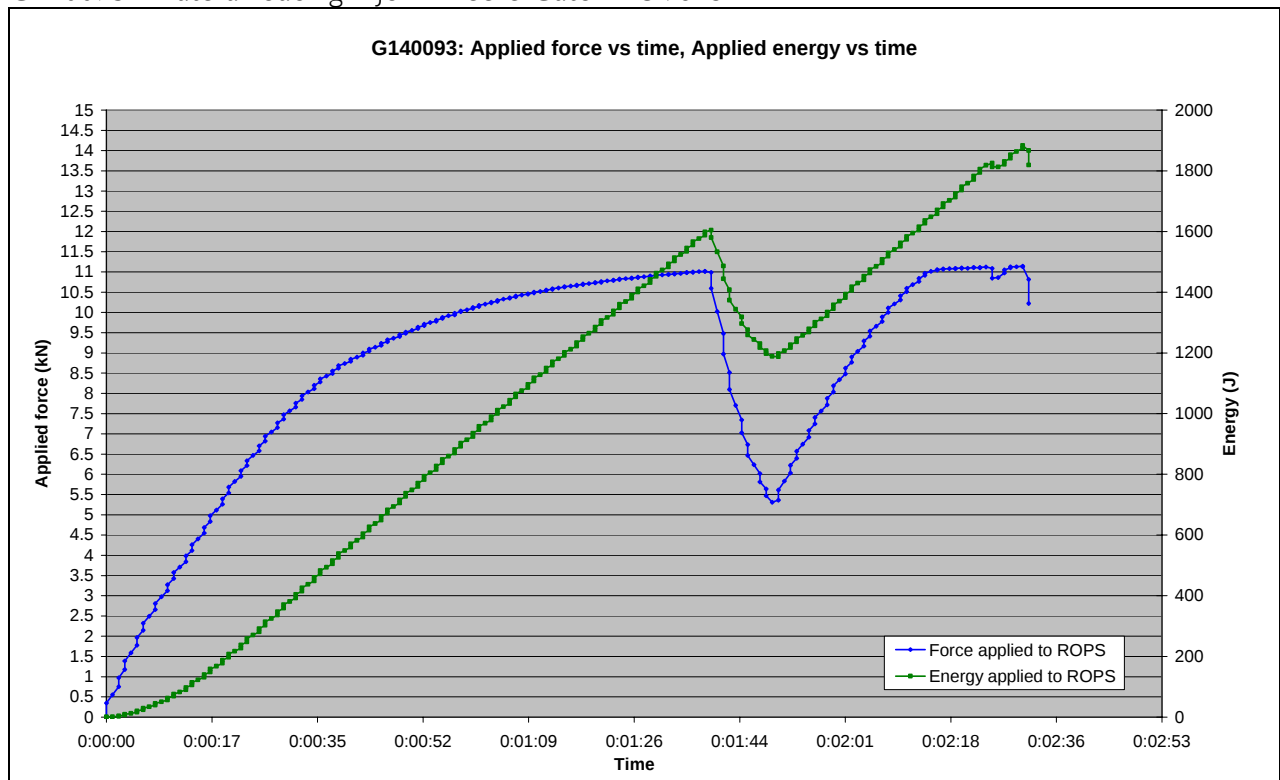
G140092 – Lateral loading – Yamaha Rhino



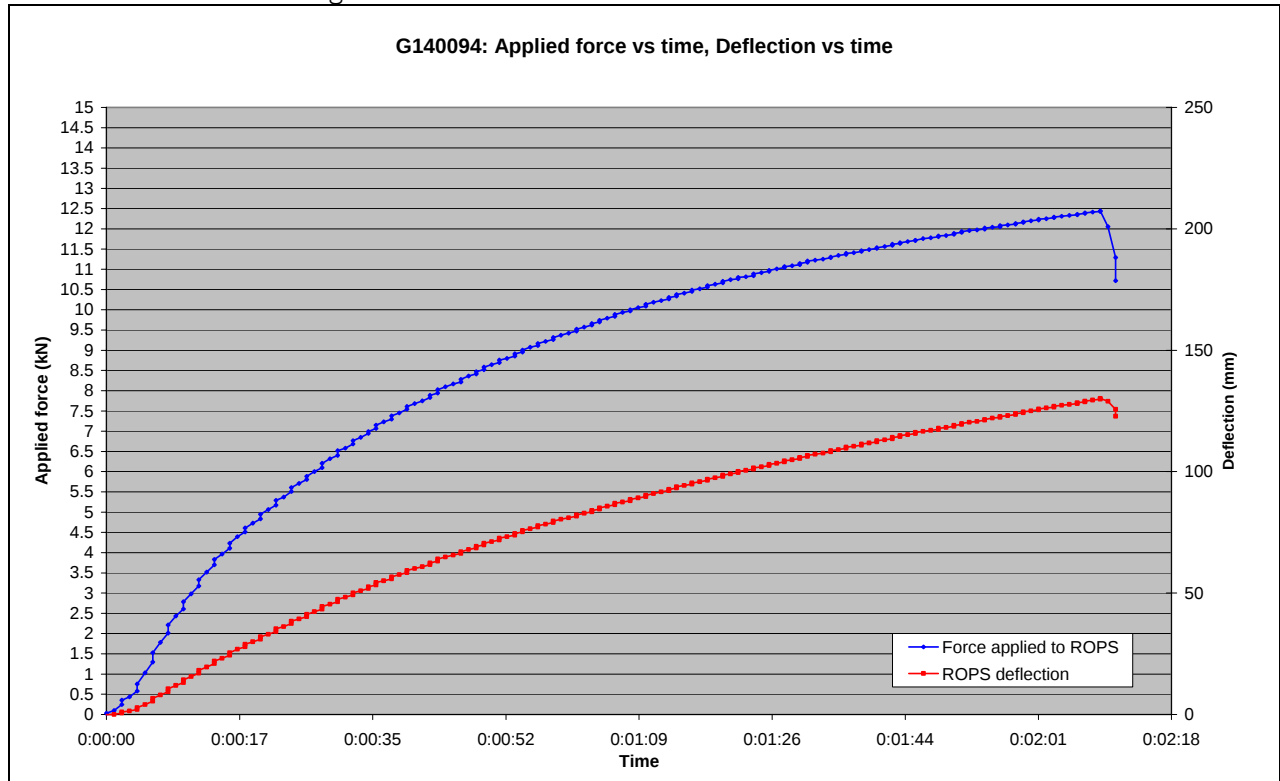
G140093 – Lateral loading – John Deere Gator XUV825i



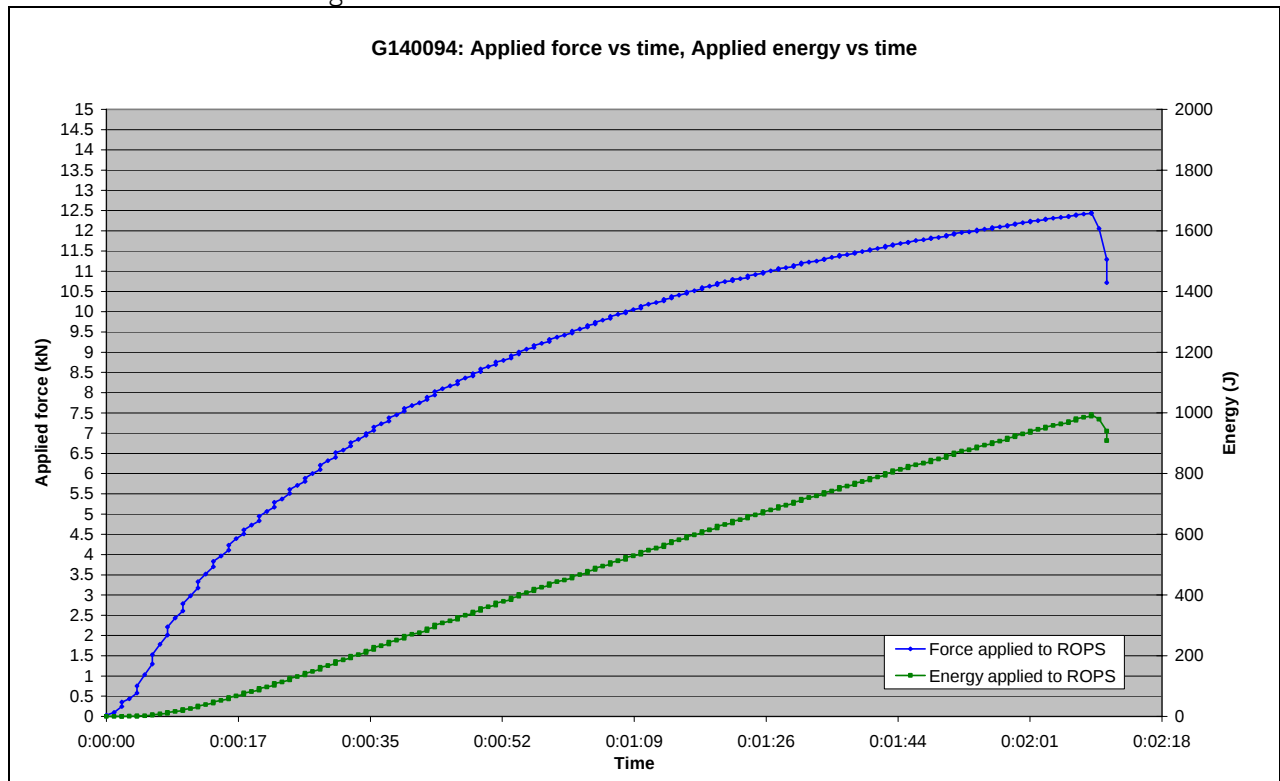
G140093 – Lateral loading – John Deere Gator XUV825i



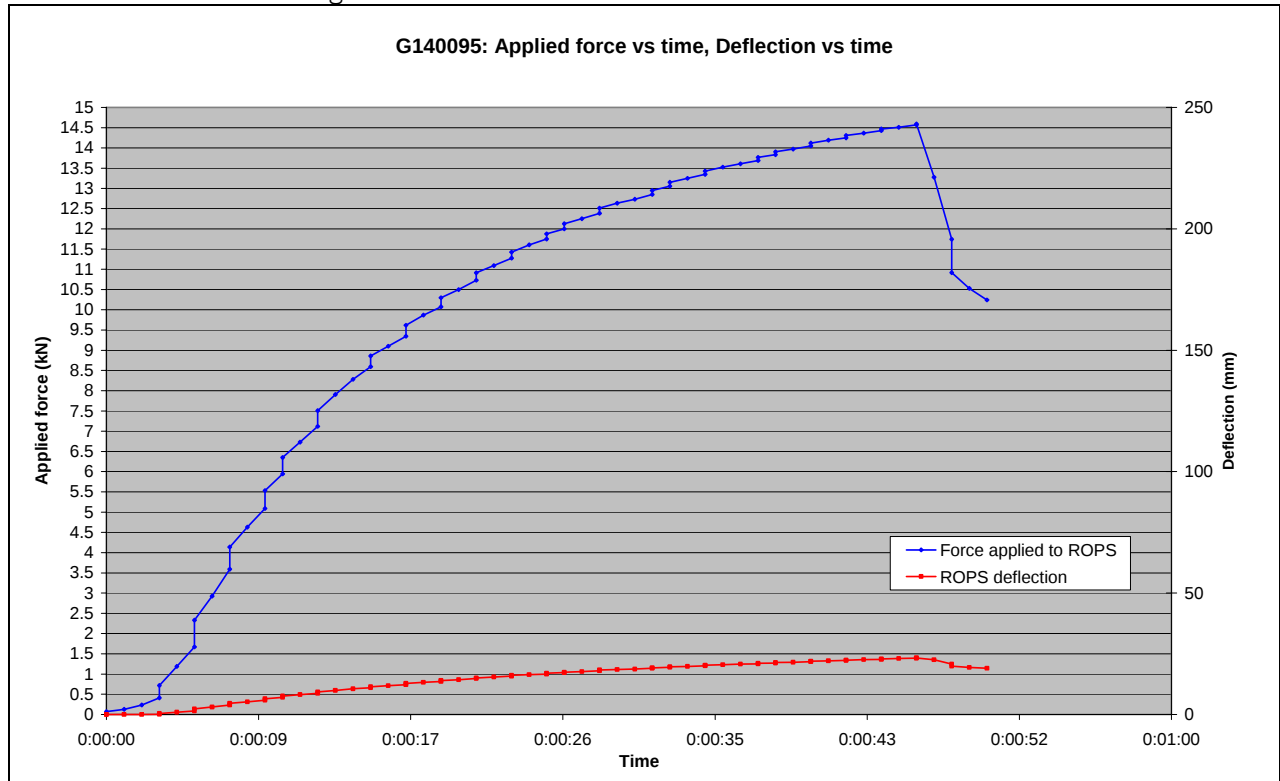
G140094 – Lateral loading – Kubota RTV500



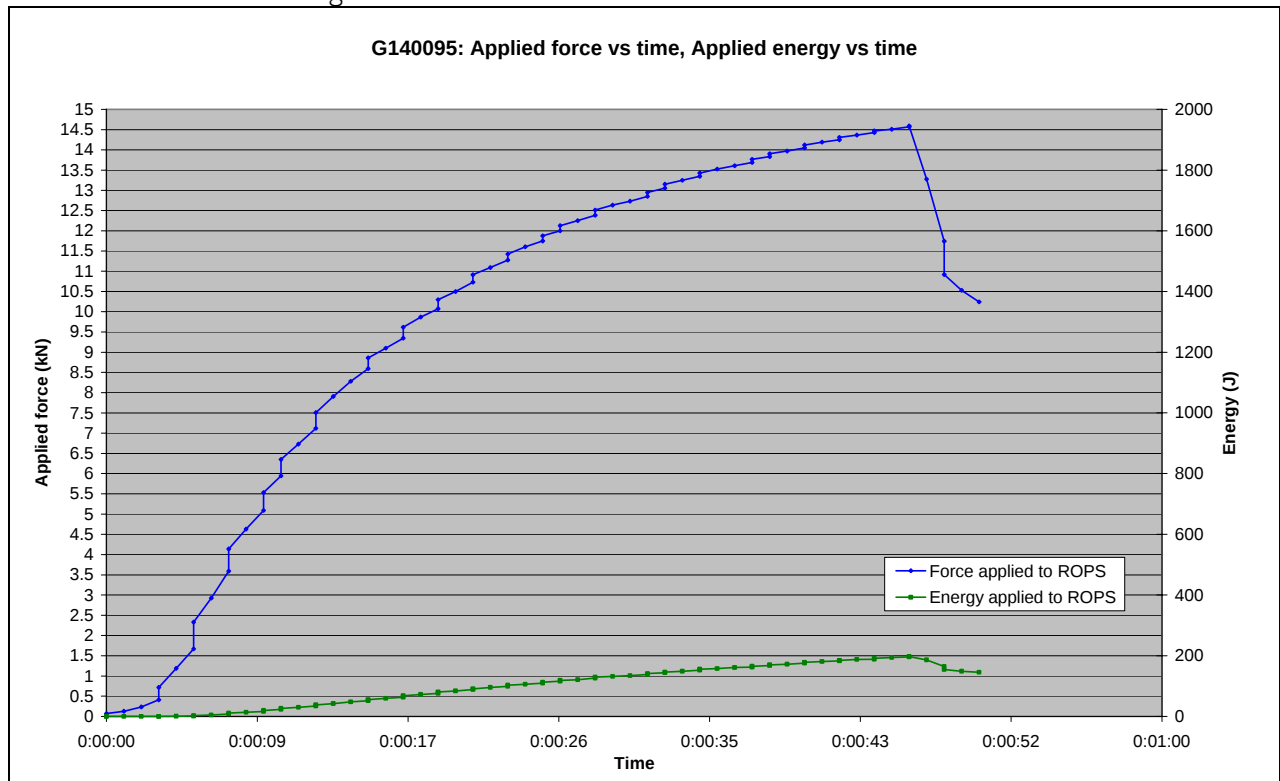
G140094 – Lateral loading – Kubota RTV500



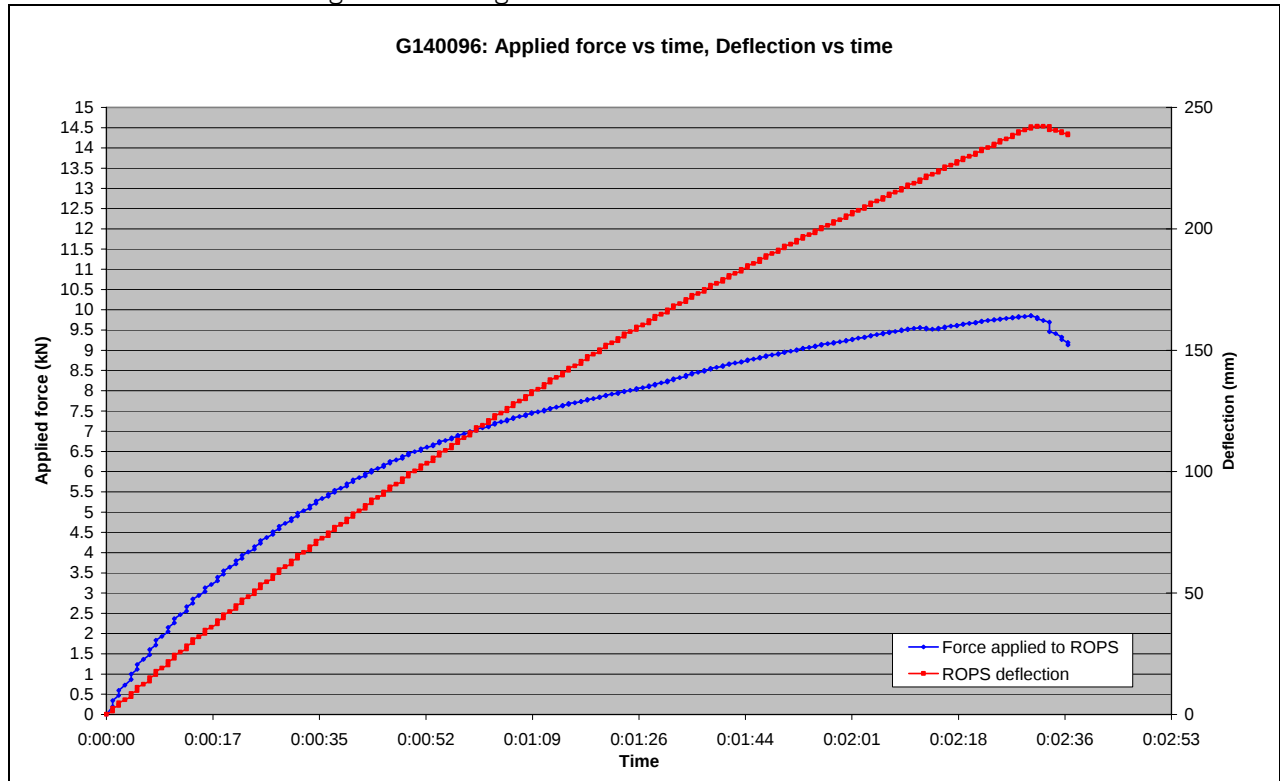
G140095 – Lateral loading – Tomcar TM2



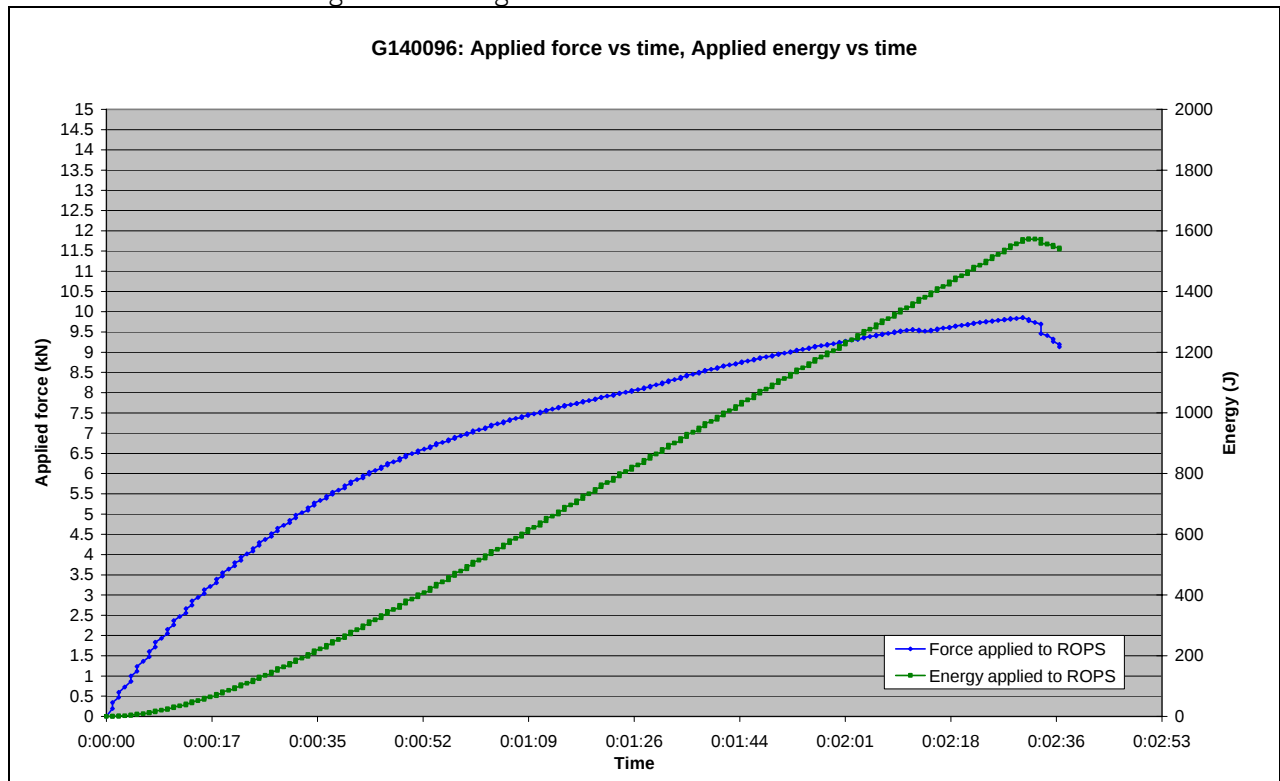
G140095 – Lateral loading – Tomcar TM2



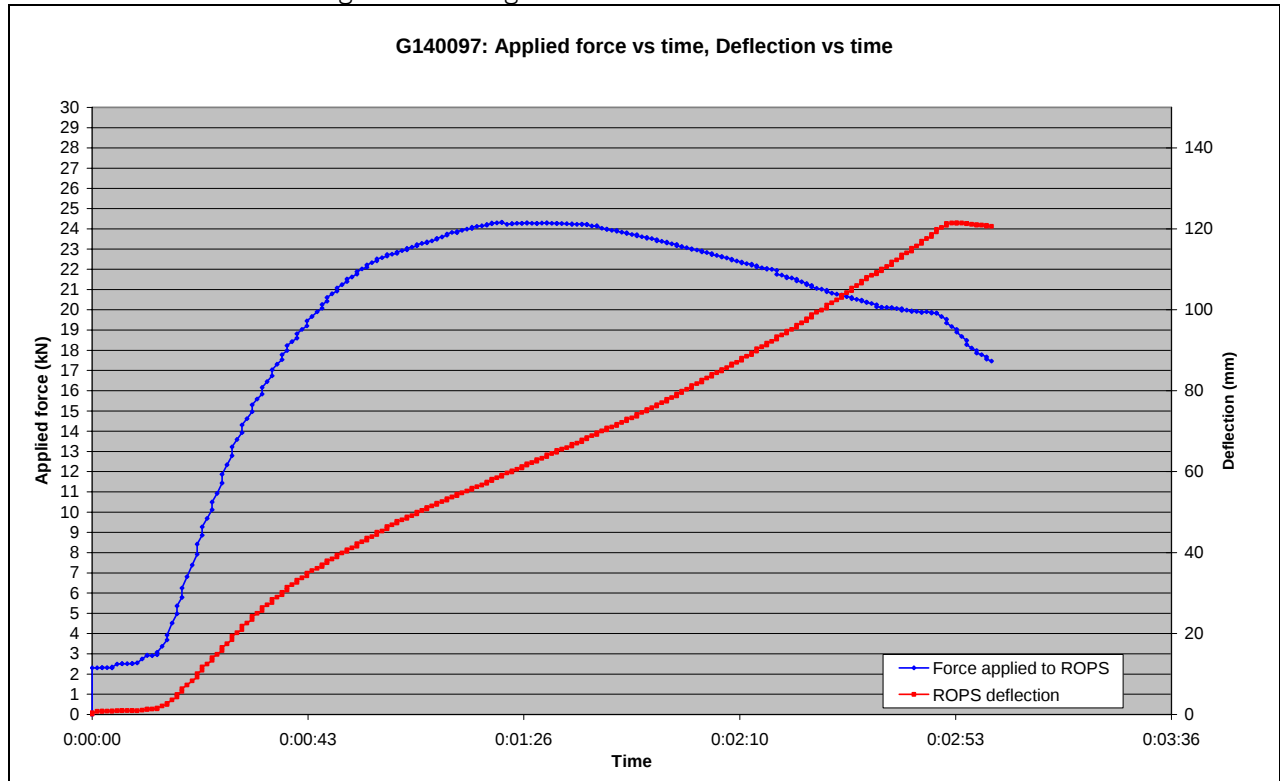
G140096 – Lateral loading – Honda Big red MUV700



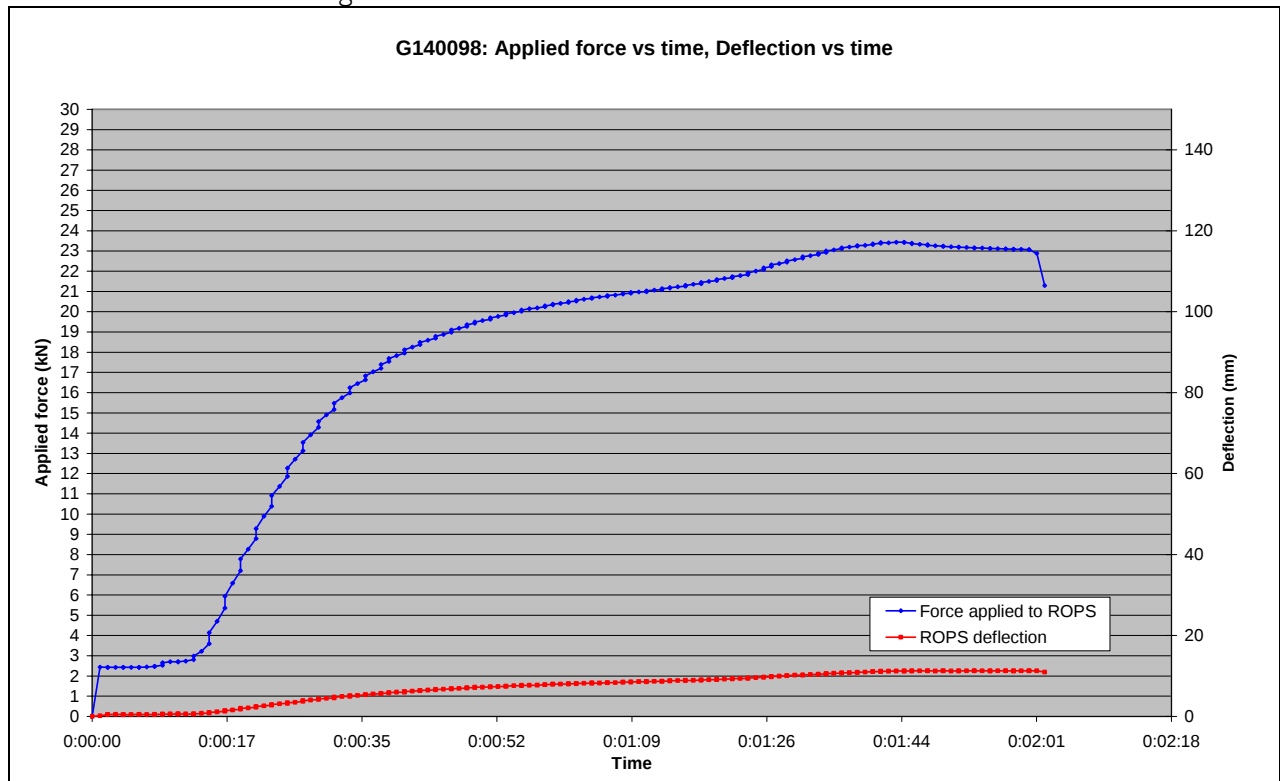
G140096 – Lateral loading – Honda Big red MUV700



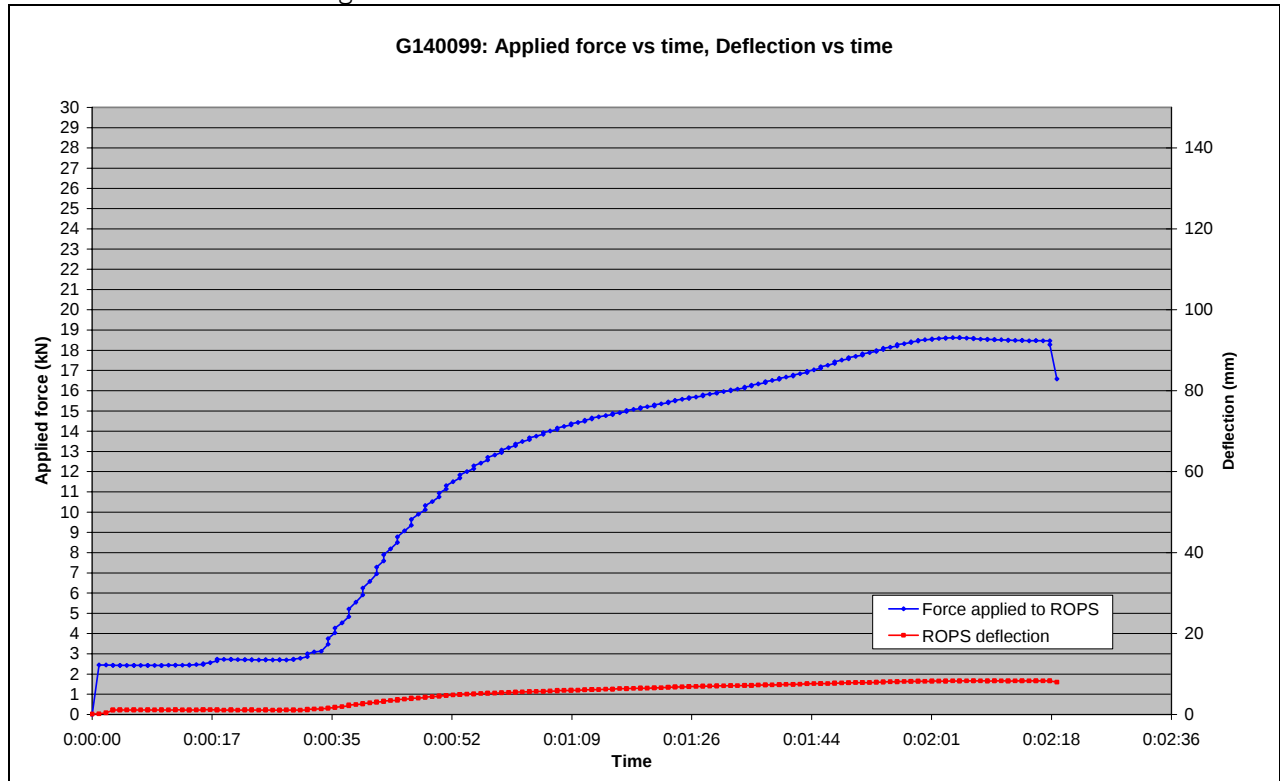
G140097 – Vertical loading – Honda Big red MUV700



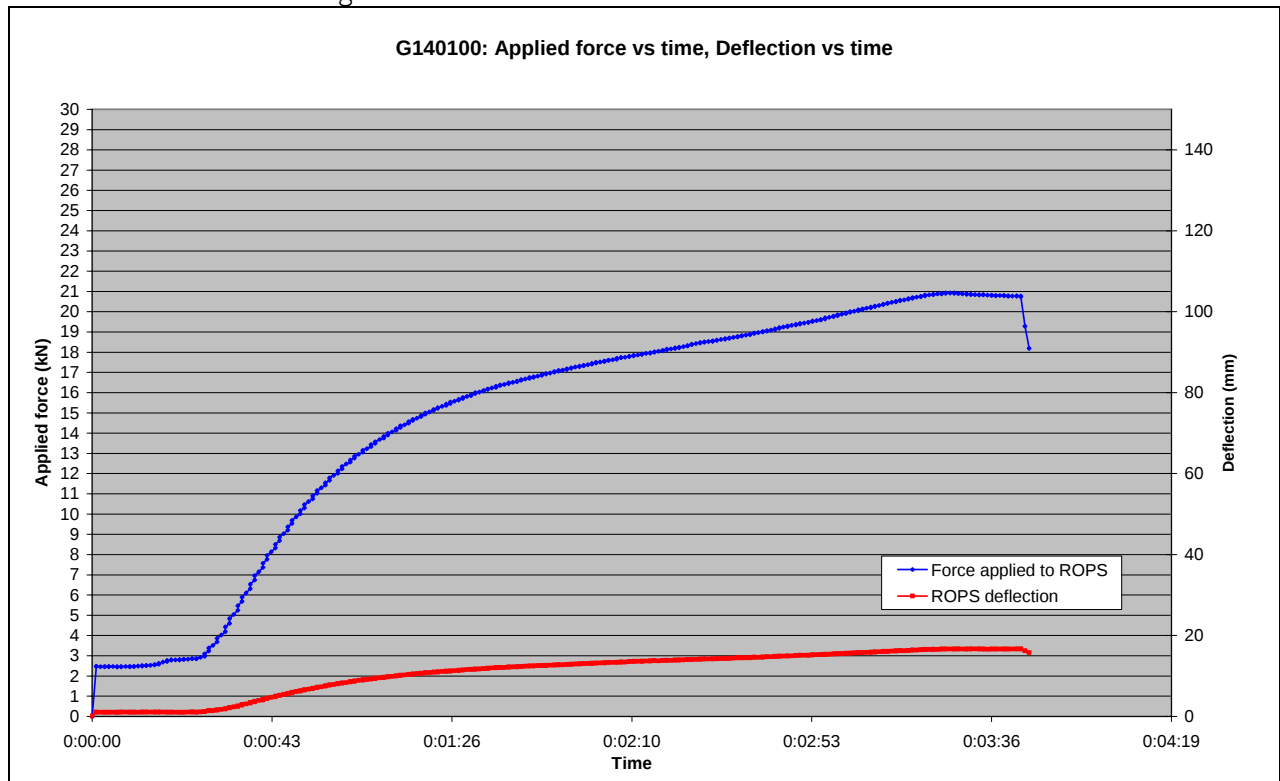
G140098 – Vertical loading – Tomcar TM2



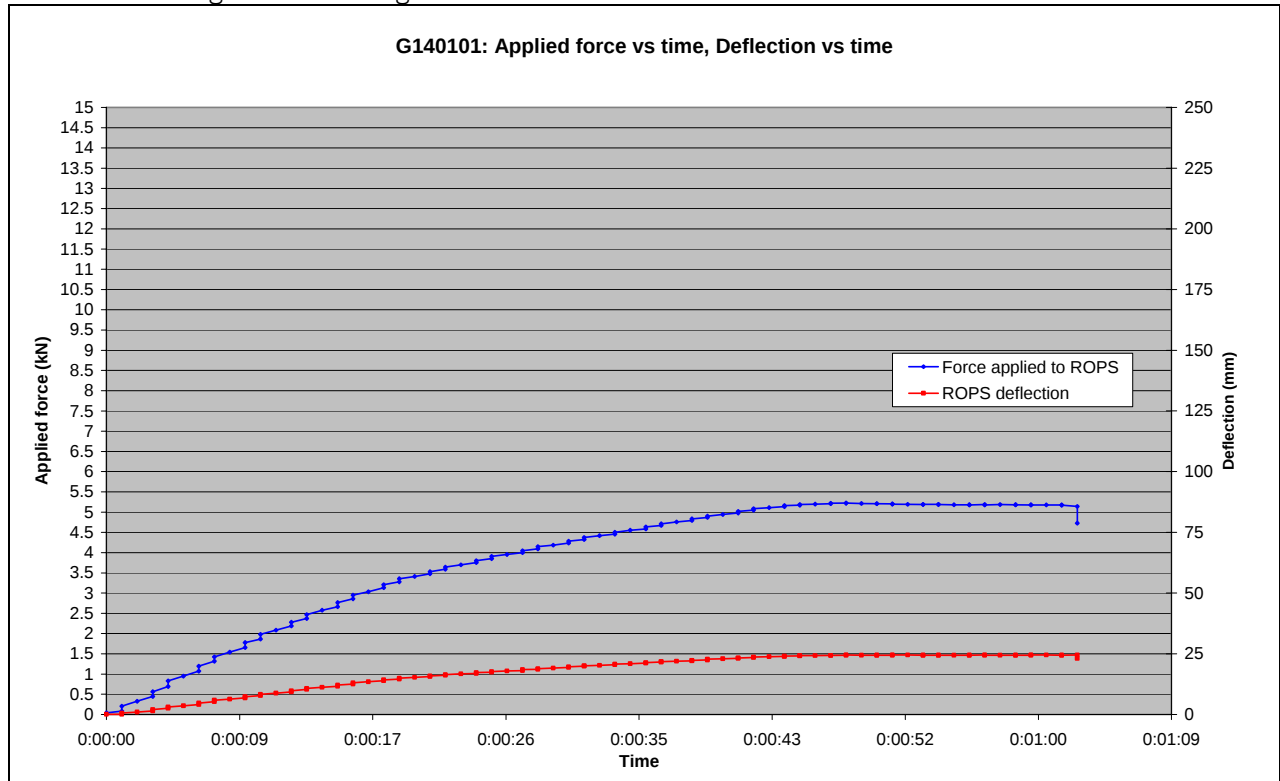
G140099 – Vertical loading – Yamaha Rhino



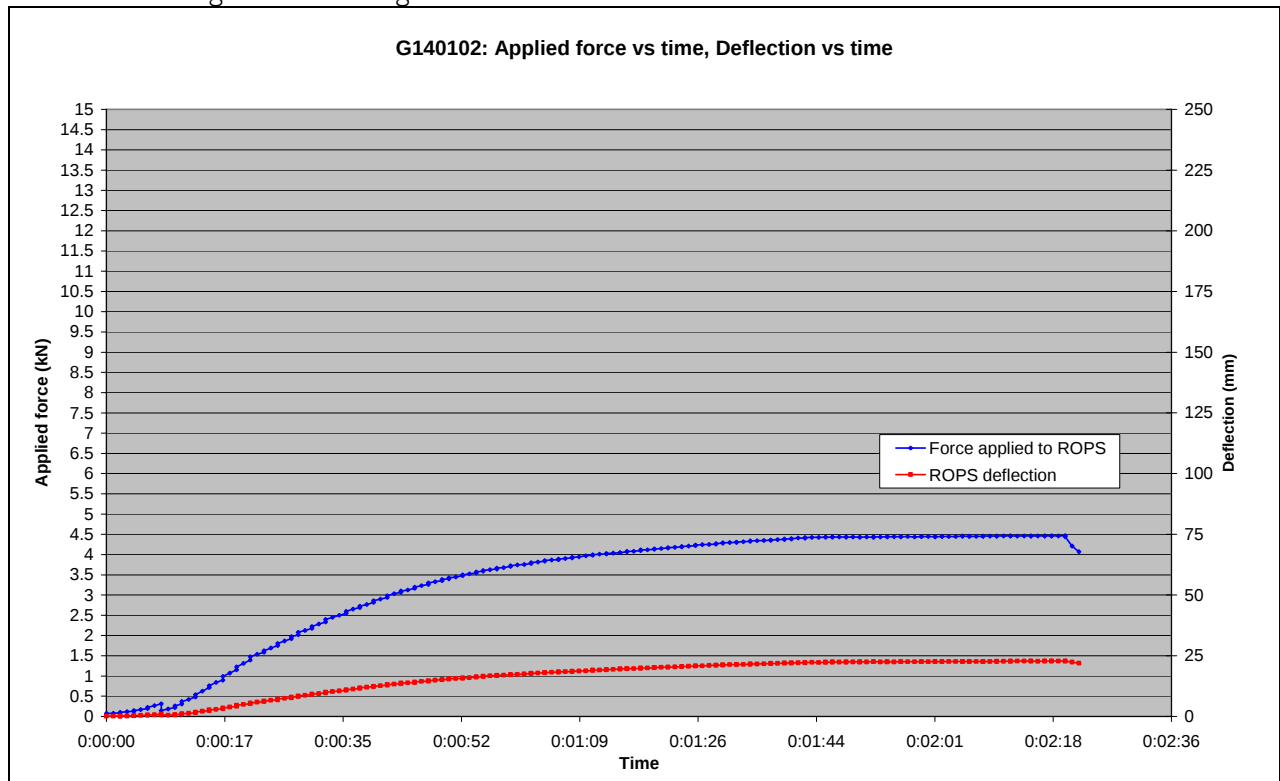
G140100 – Vertical loading – Kubota RTV500



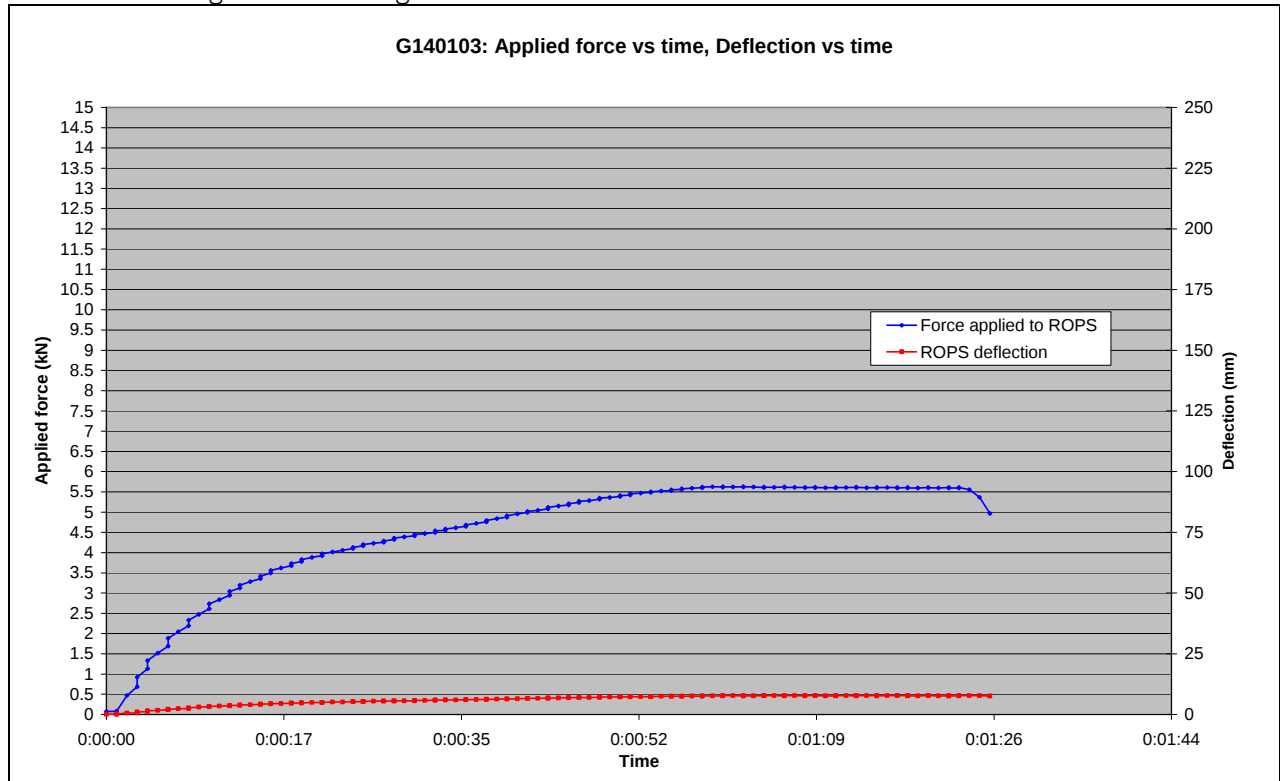
G140101 – Longitudinal loading – Kubota RTV500



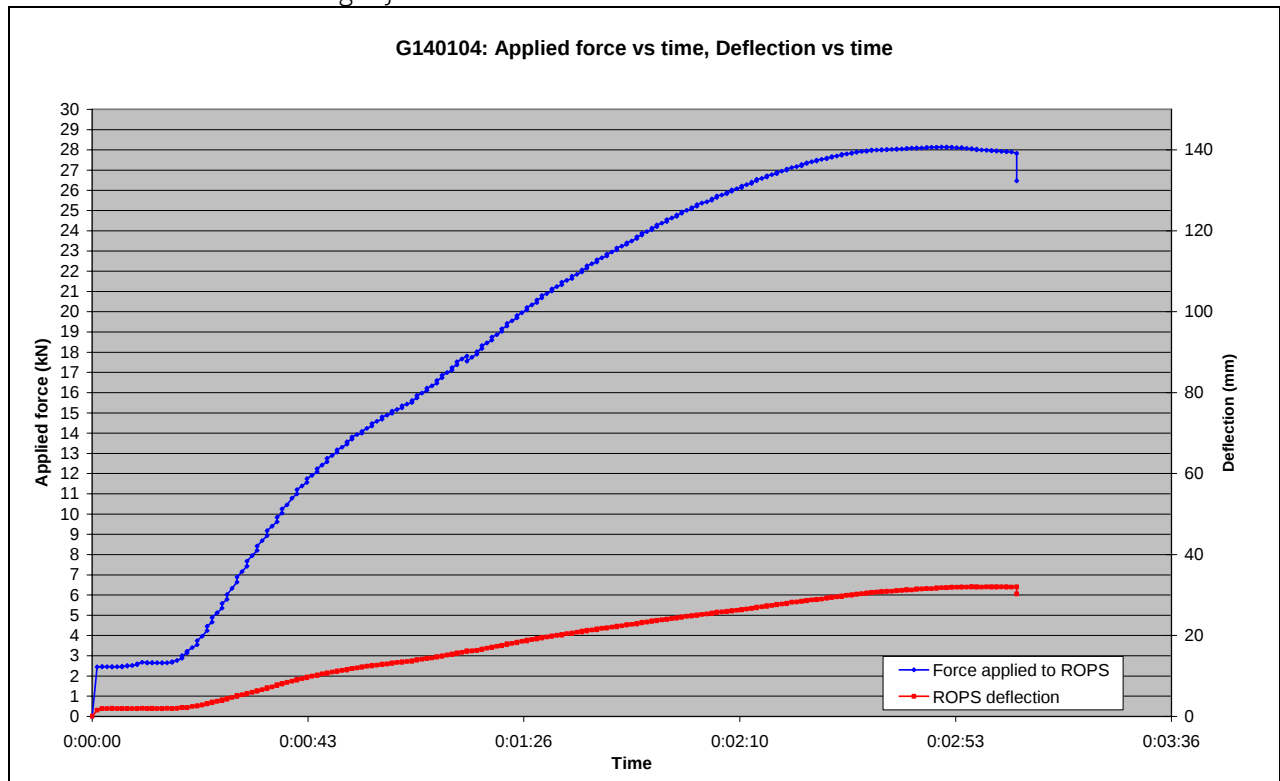
G140102 – Longitudinal loading – Yamaha Rhino



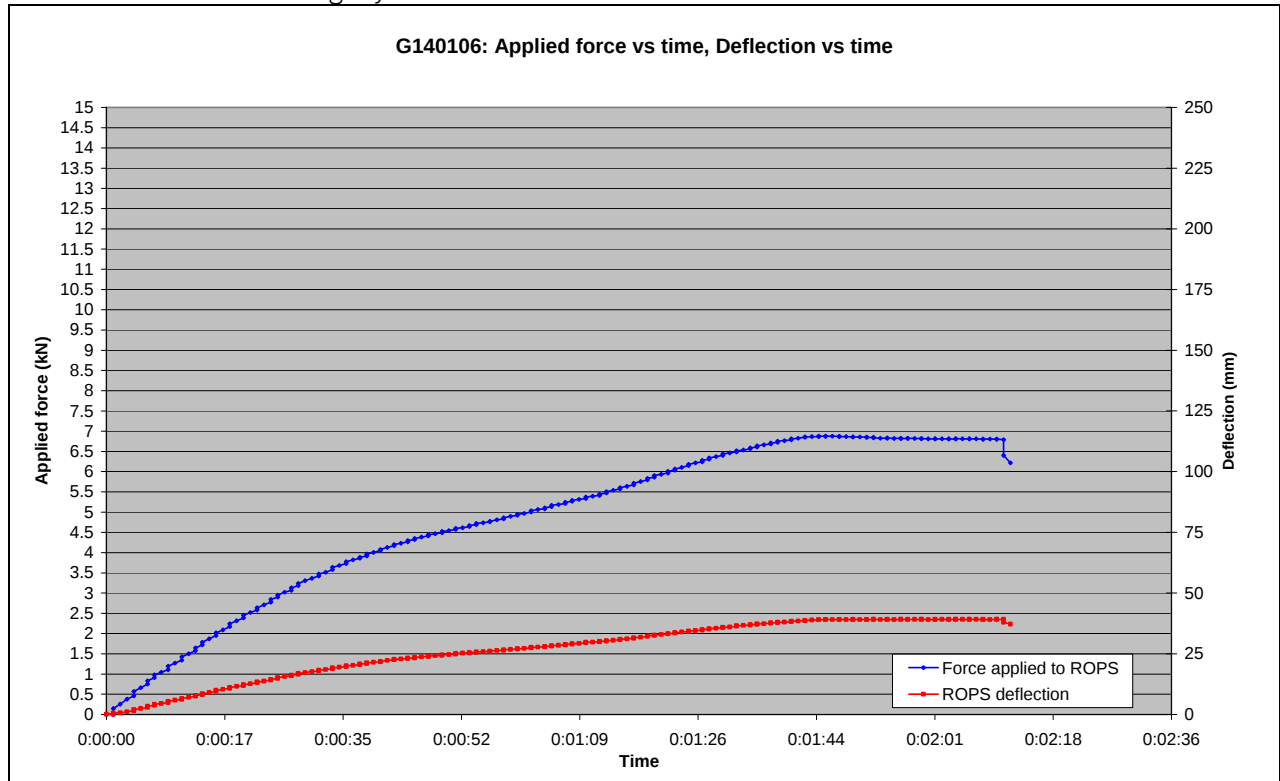
G140103 – Longitudinal loading – Tomcar TM2



G140104 – Vertical loading – John Deere Gator XUV825i



G140106 – Lateral loading – John Deere Gator XUV825i



2. Vehicle and occupant rollover

2.1 G140075

G140075_ICM.IC1

Test Number : G140075
Analysis Window : 1

Injury Cost Model input:

Number of AIS 3 Femur Fractures	=	0
Number of AIS 2 Tibia Fractures	=	0
Number of AIS 3 Tibia Fractures	=	0
Number of AIS 2 Knee Dislocation Injuries	=	0
Number of AIS 3 Knee Dislocation Injuries	=	0
Index for Cmax Location	=	1
Index for VCmax Location	=	2
maximum Abdomen Penetration	=	0.000
maximum GAMBIT	=	0.250
Cmax	=	4.350
VCmax	=	0.000
HIC	=	166.6
NII (2002 MATD Neck)	=	1.8
Location of Cmax	:	upper sternum
Location of VCmax	:	lower sternum

Injury Cost Model output:

MAIS	=	0.0
Total AIS	=	0.0
Normalized Injury Cost	=	0.001
Normalized Cost of Survival	=	0.001
Normalized Cost of Dying	=	0.000
Probability of Fatality	=	0.000
Probability of Fatality due to non AIS 6 injuries	=	0.000
Probability of Fatality due AIS 6 injuries	=	0.000
Permanent Partial Incapacity	=	0.000
Risk of life threatening brain injury (%)	=	0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					# Injuries
	HEAD Probability	NECK Probability	CHEST Probability	ABDOMEN Probability	LEG Probability	
0	0.973	0.998	1.000	1.000	1.000	0
1	0.011	0.002	0.000	0.000	0.000	0
2	0.009	0.000	0.000	0.000	0.000	0
3	0.007	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.050	0.002	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000 0.000 0.000 0.000	Femur Knee Tibia Leg

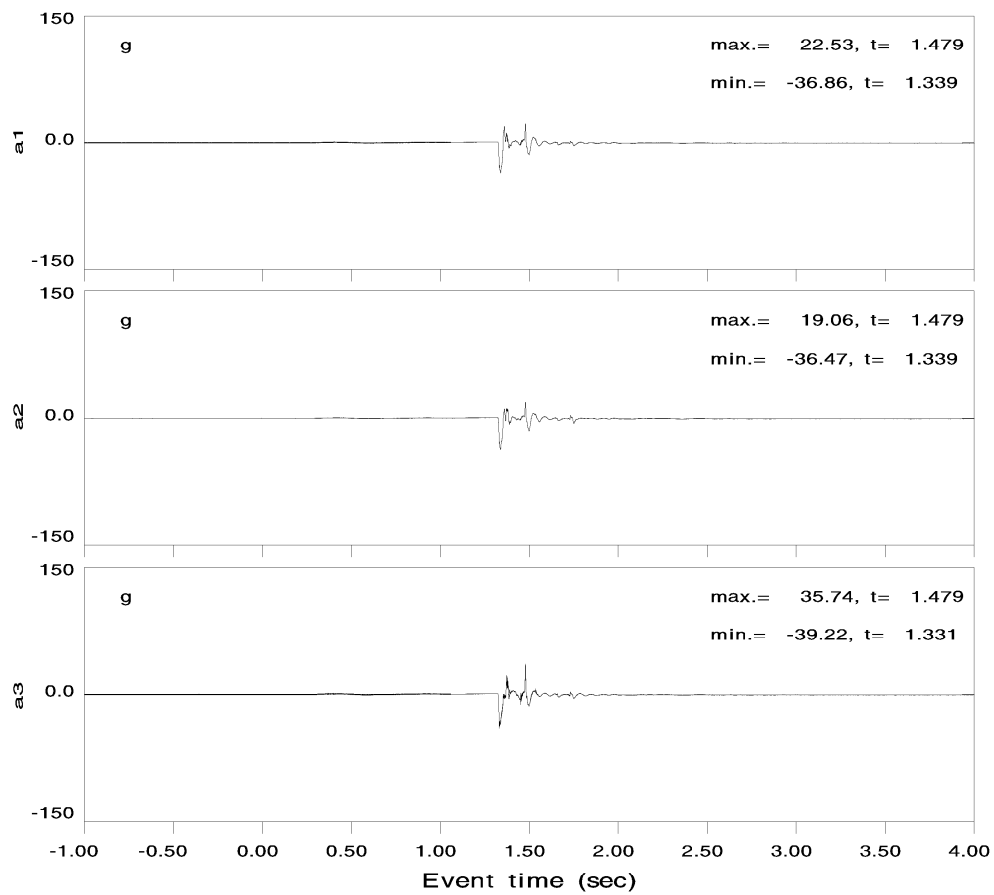
G140075.rpt				
Test G140075, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	6.47 g	1.357	-7.78 g	1.367
Ay,c	7.63 g	1.451	-18.41 g	1.357
Az,c	15.85 g	1.368	-13.29 g	1.450
Ax,p	7.58 g	1.450	-4.48 g	1.378
Ay,p	8.89 g	1.449	-7.87 g	1.503
Az,p	11.05 g	1.447	-14.84 g	1.449
spare	0.00 -	-0.656	0.00 -	1.452
spare	0.00 -	1.451	0.00 -	1.510
L,ur	0.03 mm	0.248	-18.58 mm	1.465
L,lr	1.27 mm	1.350	-15.50 mm	1.466
a1	22.53 g	1.479	-36.86 g	1.339
a2	19.06 g	1.479	-36.47 g	1.339
a3	35.74 g	1.479	-39.22 g	1.331
a4	22.86 g	1.331	-10.14 g	1.363
a5	21.94 g	1.331	-11.26 g	1.364
a6	32.91 g	1.331	-12.39 g	1.376
Mx,l	80.60 Nm	1.391	-10.91 Nm	0.742
My,l	550.54 Nm	1.473	-218.43 Nm	1.345
Mz,l	45.15 Nm	1.510	-5.83 Nm	0.909
Fx,l	0.08 kN	1.329	-1.40 kN	1.504
Fy,l	0.78 kN	1.371	-0.25 kN	1.452
Fz,l	1.43 kN	1.452	-1.69 kN	1.390
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	3.928	0.00 -	1.446
spare	0.01 -	1.446	0.00 -	-0.990
spare	0.00 -	-0.179	0.00 -	-0.260
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	3.908	0.00 -	1.375
a7	27.53 g	1.331	-13.54 g	1.365
a8	36.59 g	1.377	-17.50 g	1.365
a9	33.37 g	1.331	-16.31 g	1.398
Fz,uf,r	0.34 kN	1.418	-0.31 kN	1.471
Mx,uf,r	62.15 Nm	1.426	-23.11 Nm	1.519
My,uf,r	27.14 Nm	1.450	-69.29 Nm	1.425
Mz,uf,r	22.45 Nm	1.401	-26.57 Nm	1.564
Fz,uf,l	0.75 kN	1.446	-0.24 kN	1.380
Mx,uf,l	37.32 Nm	2.102	-50.46 Nm	1.459
My,uf,l	145.97 Nm	1.451	-17.27 Nm	1.349
Mz,uf,l	101.14 Nm	1.986	-6.51 Nm	0.724
Fx,n	0.58 kN	1.347	-0.43 kN	1.379
Fy,n	0.93 kN	1.353	-0.15 kN	1.384
Fz,n	0.87 kN	1.379	-3.53 kN	1.343
Mx,n	45.98 Nm	1.387	-105.74 Nm	1.353
My,n	14.32 Nm	1.734	-33.73 Nm	1.360
Mz,n	6.36 Nm	1.383	-27.84 Nm	1.360
L,ul	10.54 mm	1.373	-1.42 mm	2.235
L,ll	13.12 mm	1.373	-1.06 mm	2.232
Ax,h	13.62 g	1.340	-21.60 g	1.479
Ay,h	17.97 g	1.361	-38.96 g	1.339
Az,h	27.55 g	1.331	-13.55 g	1.365
ax,h	4.46 krad/s**2	1.377	-5.38 krad/s**2	1.360
ay,h	2.15 krad/s**2	1.479	-1.87 krad/s**2	1.359
az,h	2.07 krad/s**2	1.378	-1.88 krad/s**2	1.359
Ar,h	45.57 g	1.331	0.01 g	0.033
ar,h	5.88 krad/s**2	1.359	0.00 krad/s**2	3.069
G	0.25 -	1.360	0.00 -	-0.930
HIC	166.58	1.352	----	1.329
Fxy,n	1.00 kN	1.353	0.00 kN	-0.256
Dx,us	0.80 mm	1.390	-8.16 mm	1.465
Dy,us	20.23 mm	1.465	-0.04 mm	0.256

		G140075.rpt		
Cus	4.35 %	1.465	-0.43 %	1.390
Vus	0.20 m/s	1.380	-0.52 m/s	1.450
VCus	0.02 m/s	1.451	-0.01 m/s	1.480
Dx,ls	3.19 mm	1.349	-4.35 mm	1.550
Dy,ls	19.31 mm	1.465	-0.03 mm	0.261
Cl s	2.32 %	1.550	-1.70 %	1.349
Vl s	0.20 m/s	1.341	-0.33 m/s	1.451
VCls	0.01 m/s	1.453	0.00 m/s	1.484
Mxy,uf,r	93.01 Nm	1.425	0.00 Nm	-0.771
Mxy,uf,l	151.30 Nm	1.456	0.00 Nm	-0.388
Mx,n,oc	44.85 Nm	1.387	-89.23 Nm	1.353
My,n,oc	15.41 Nm	1.710	-35.04 Nm	1.360
NII	1.81 -	1.353	0.00 -	-0.253
Ar,p	17.35 g	1.449	0.01 g	-0.028
Ar,c	20.67 g	1.357	0.00 g	-0.966

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

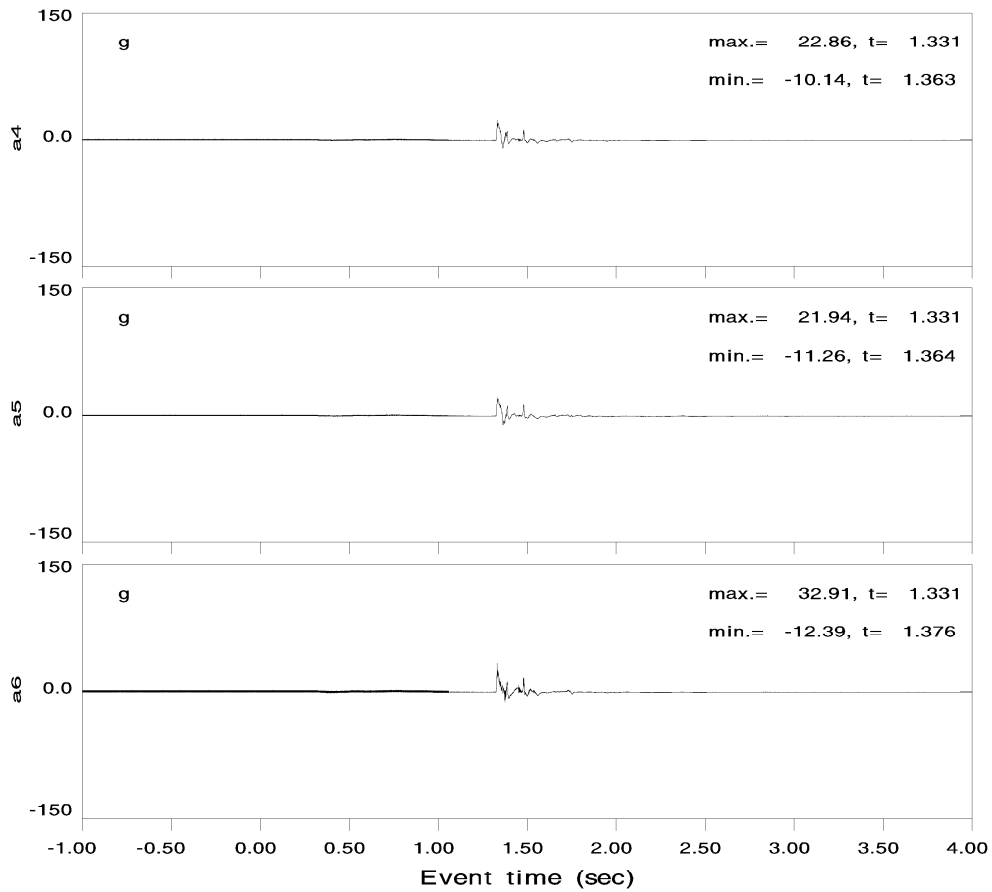
Test G140075



Page 1

Primary

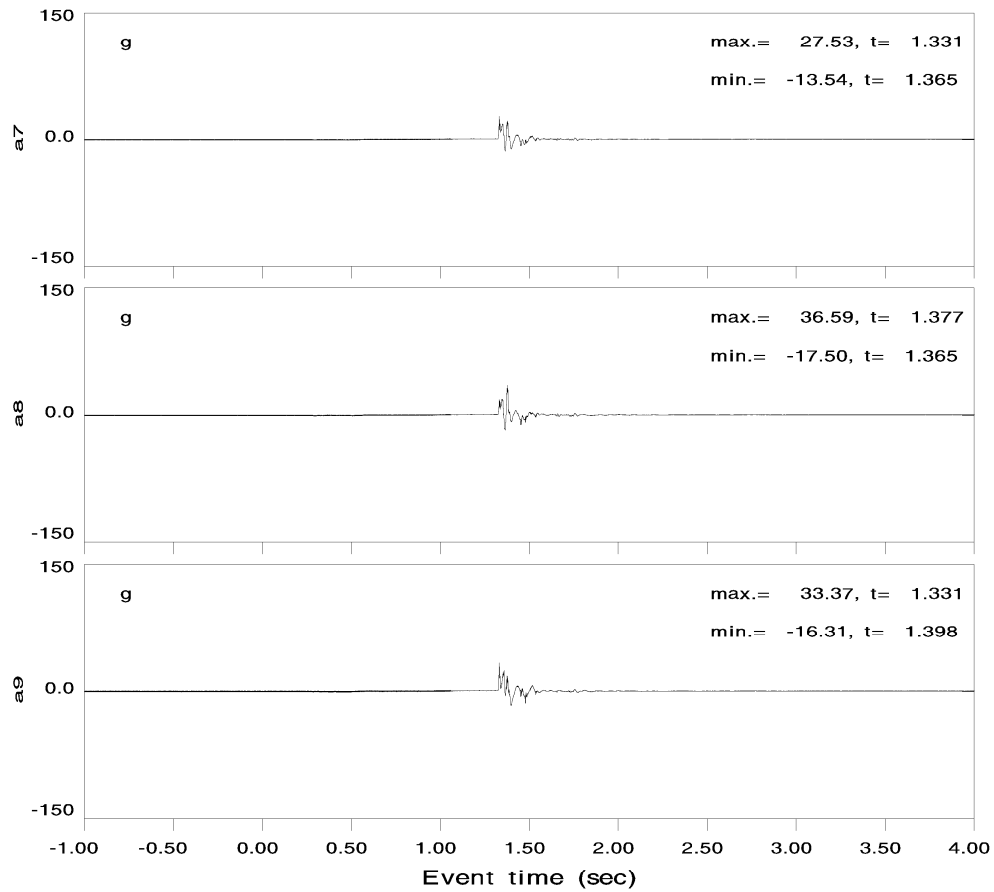
Test G140075



Page 2

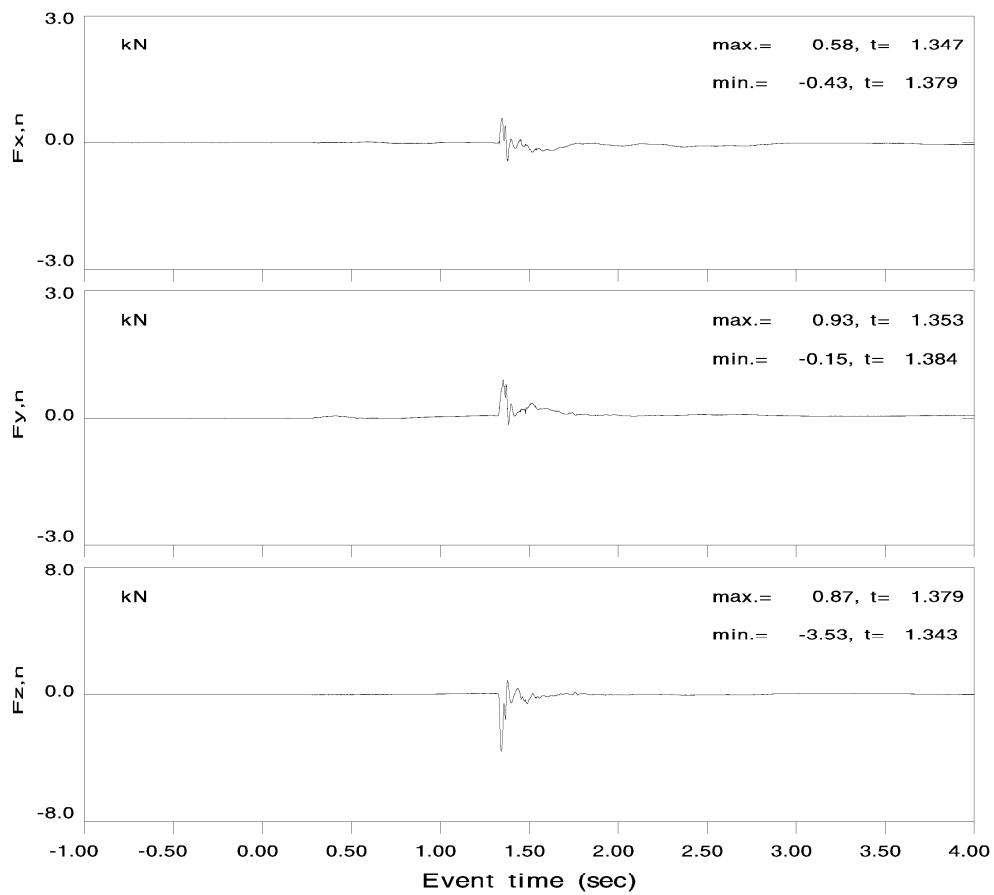
Primary

Test G140075



Primary

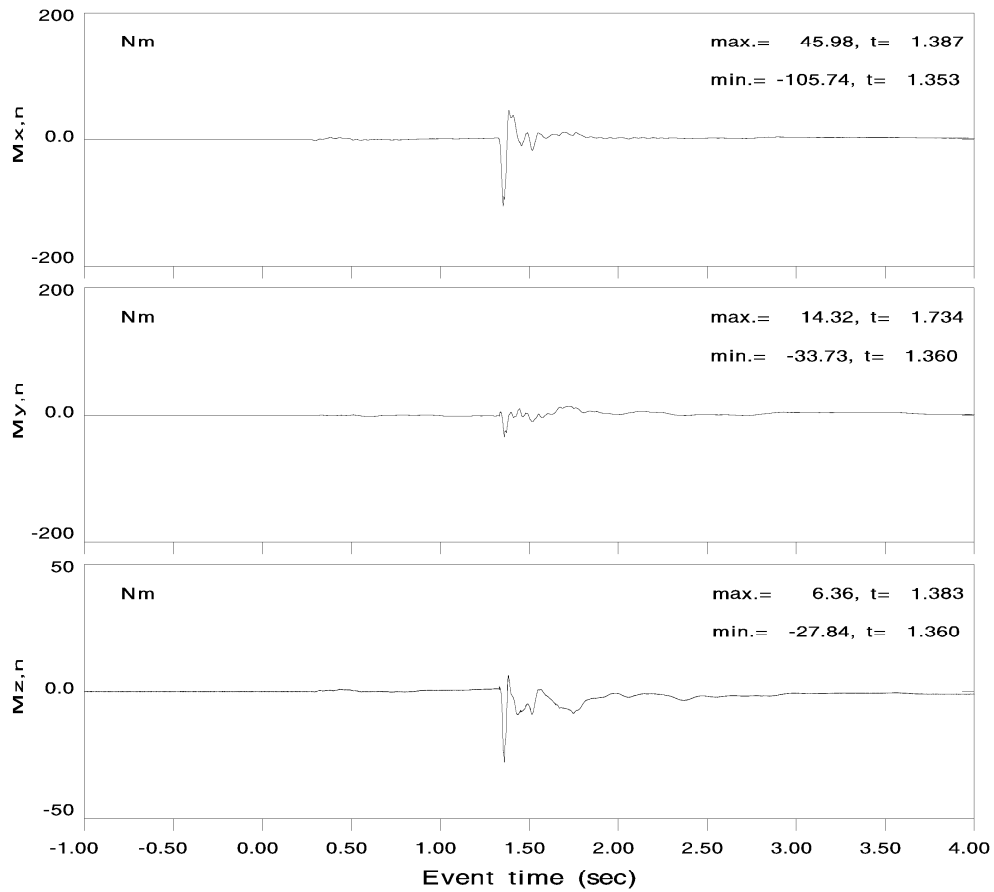
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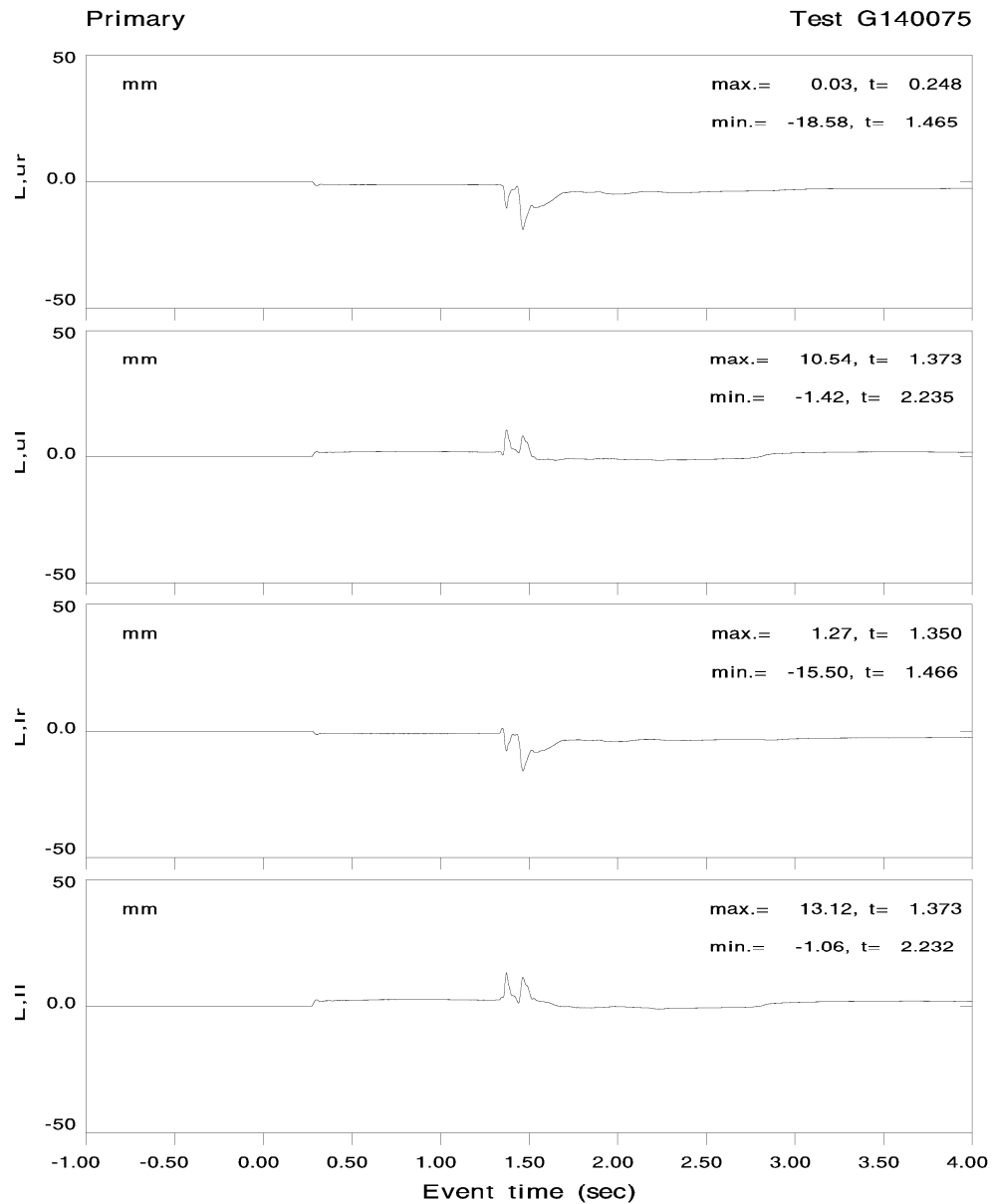


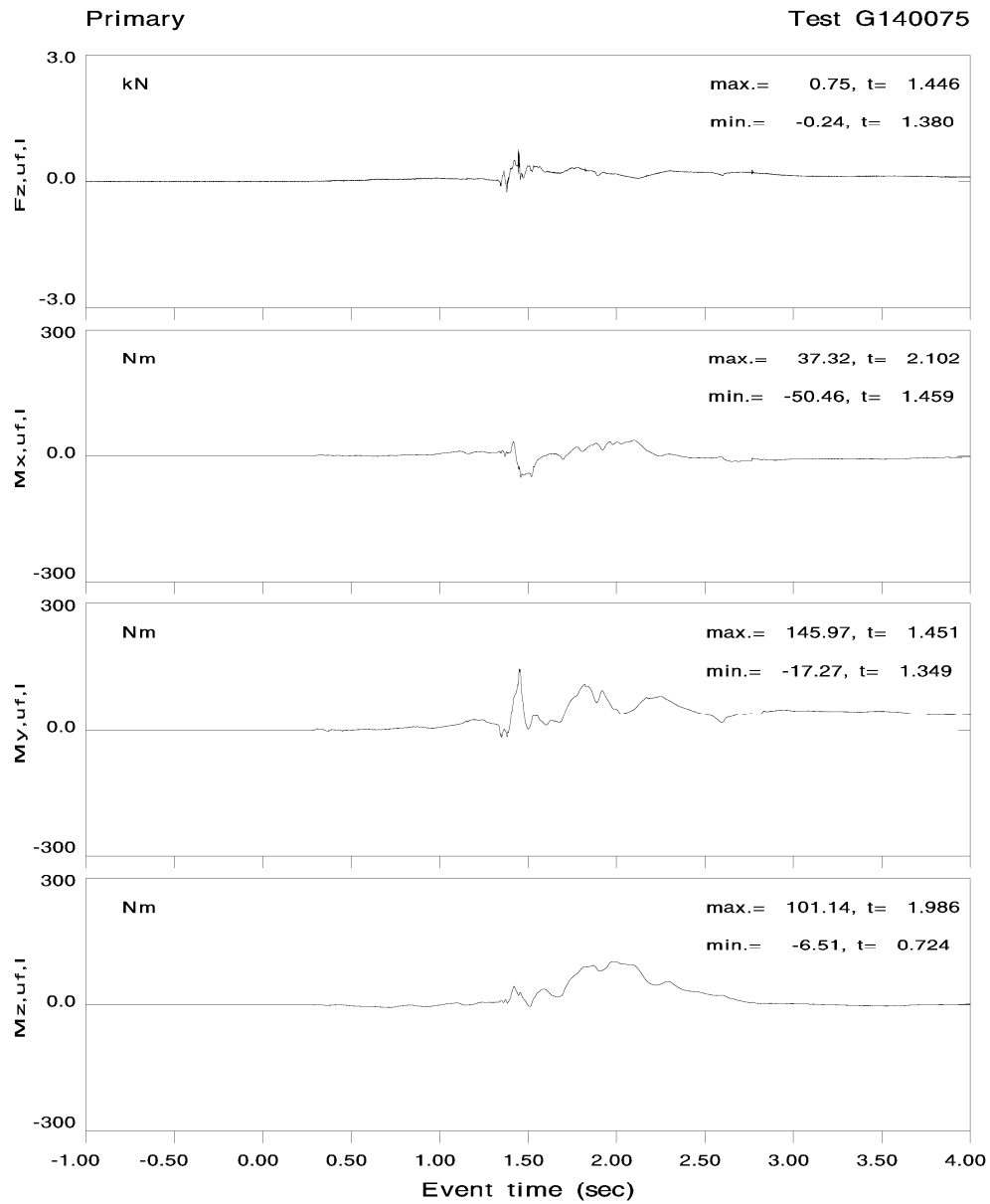
Page 4

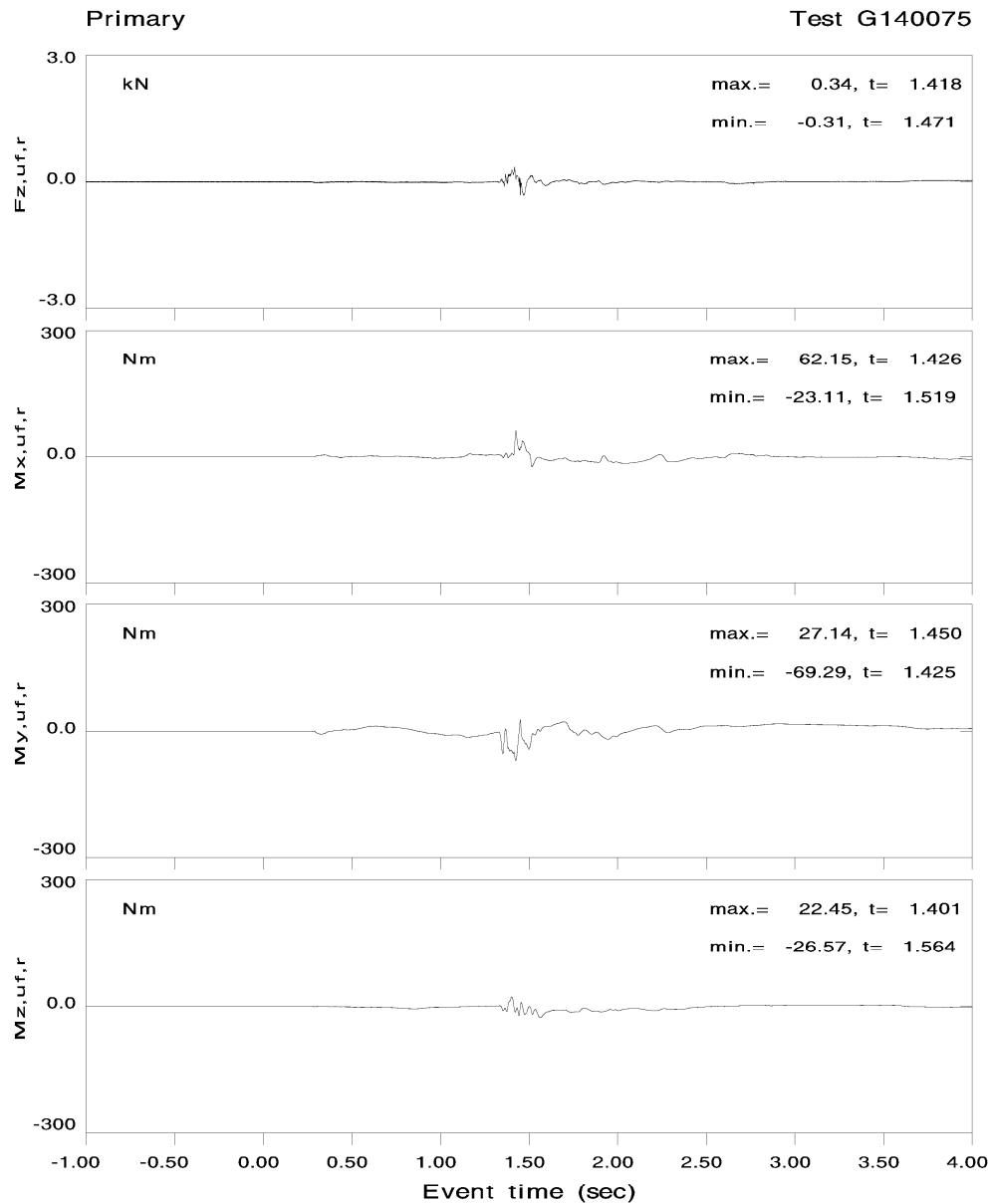
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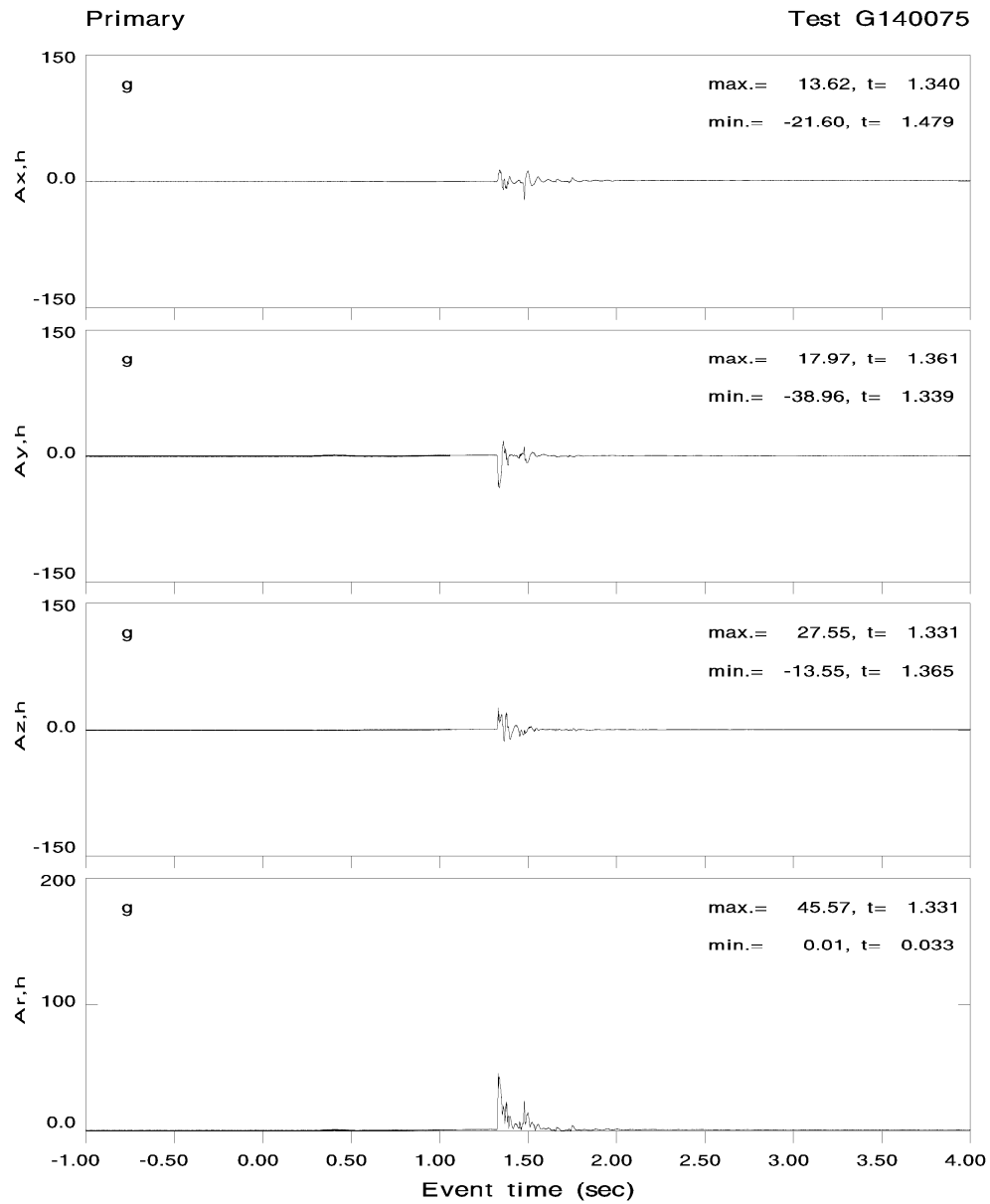
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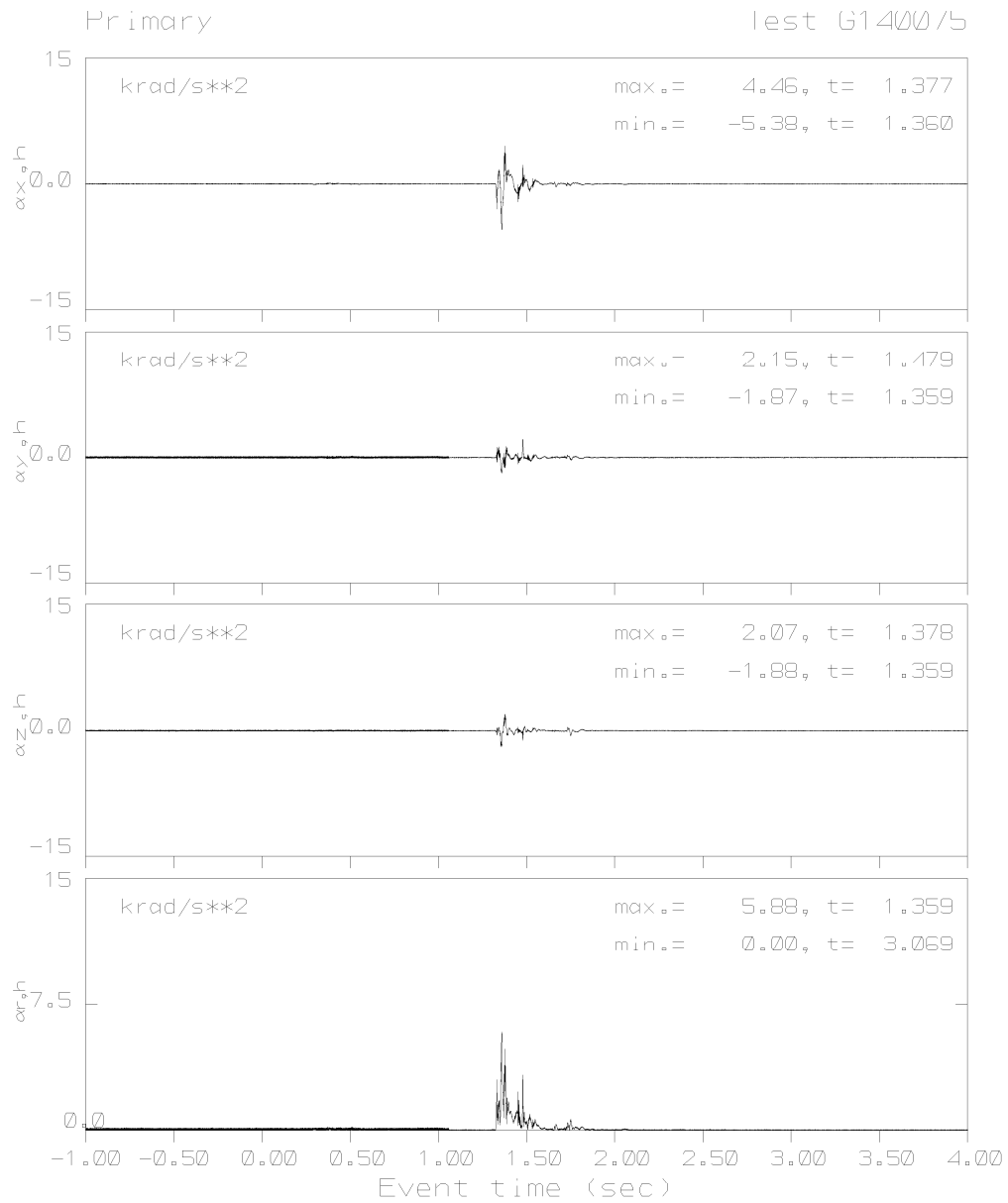




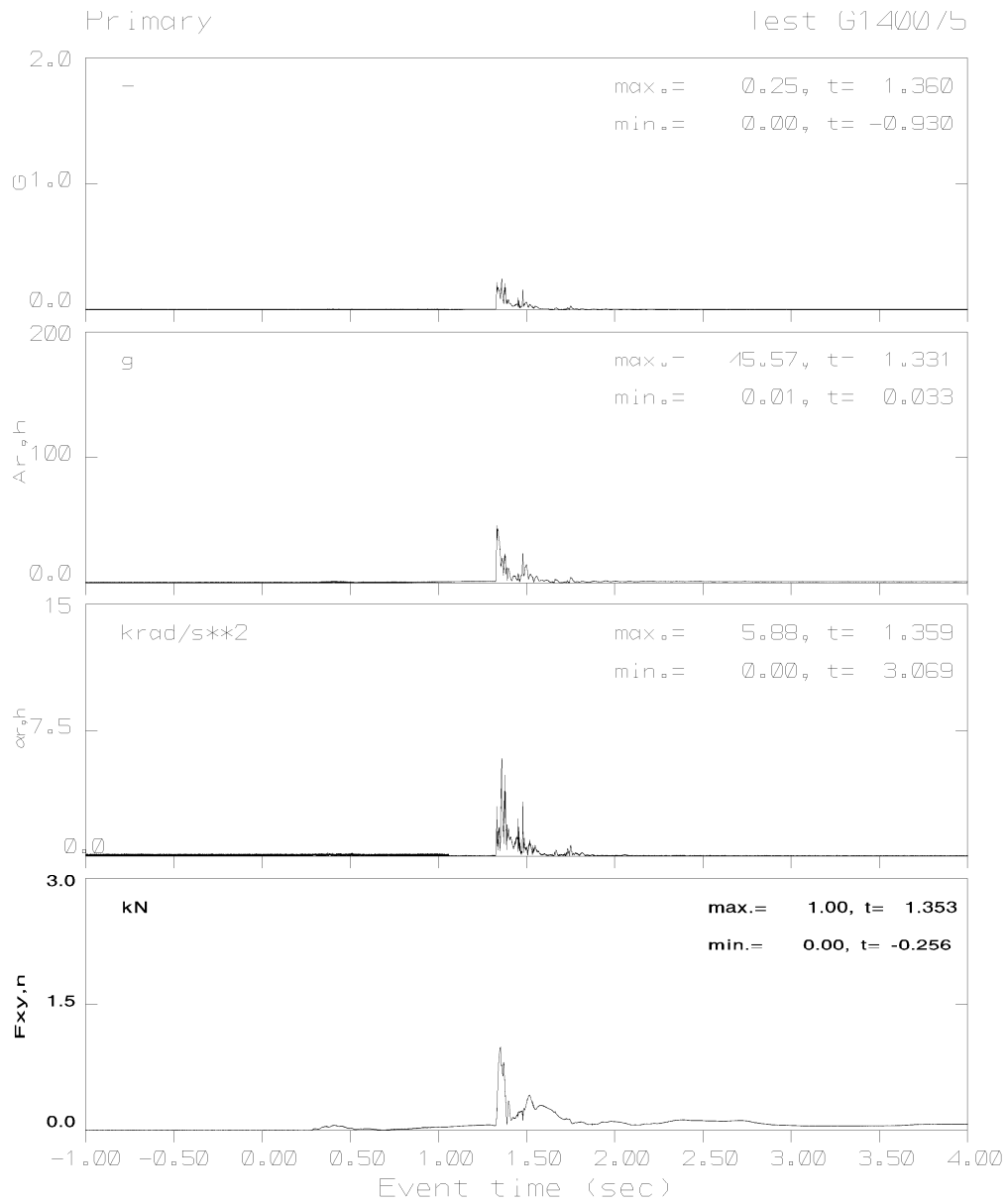




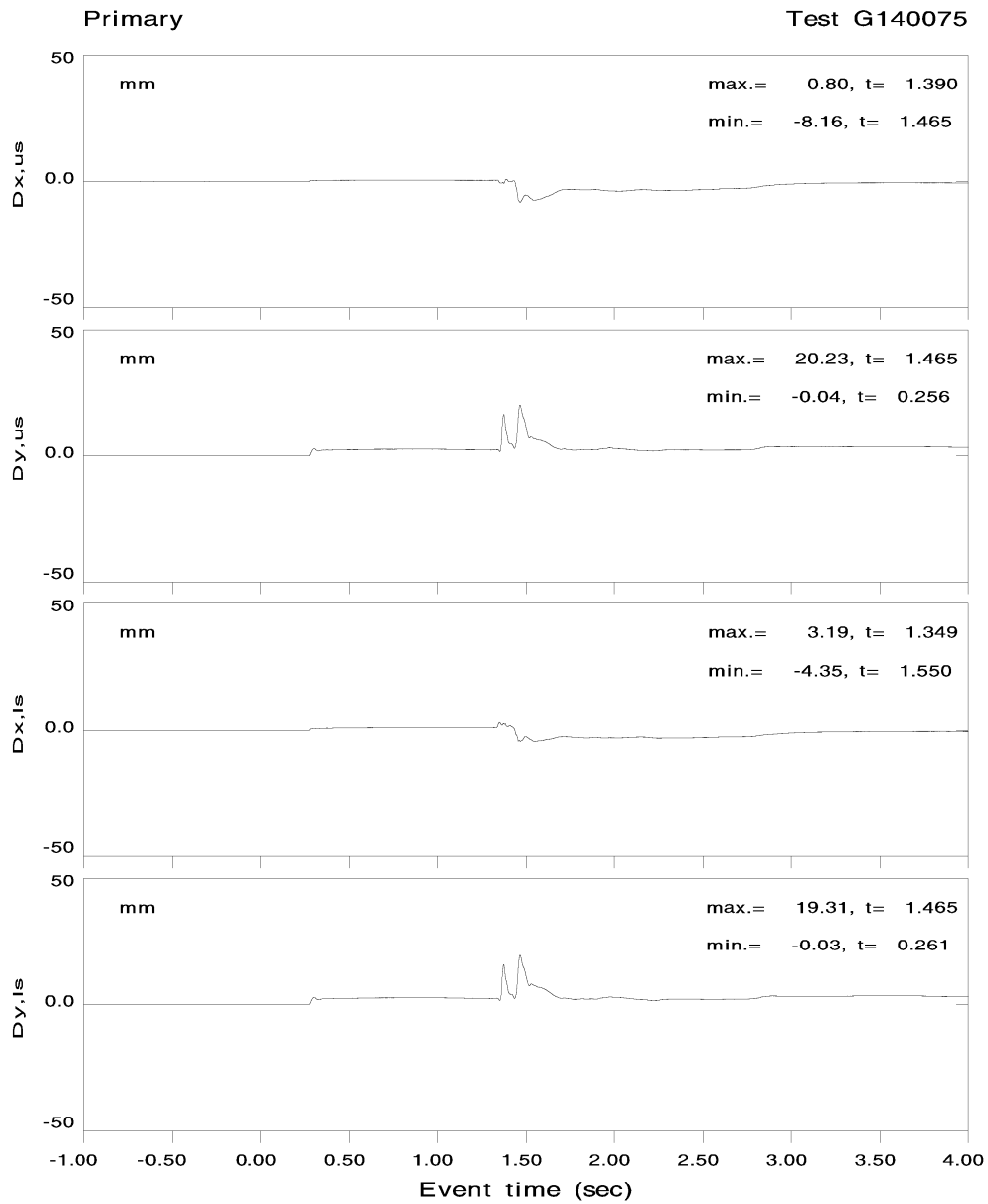




Page 10

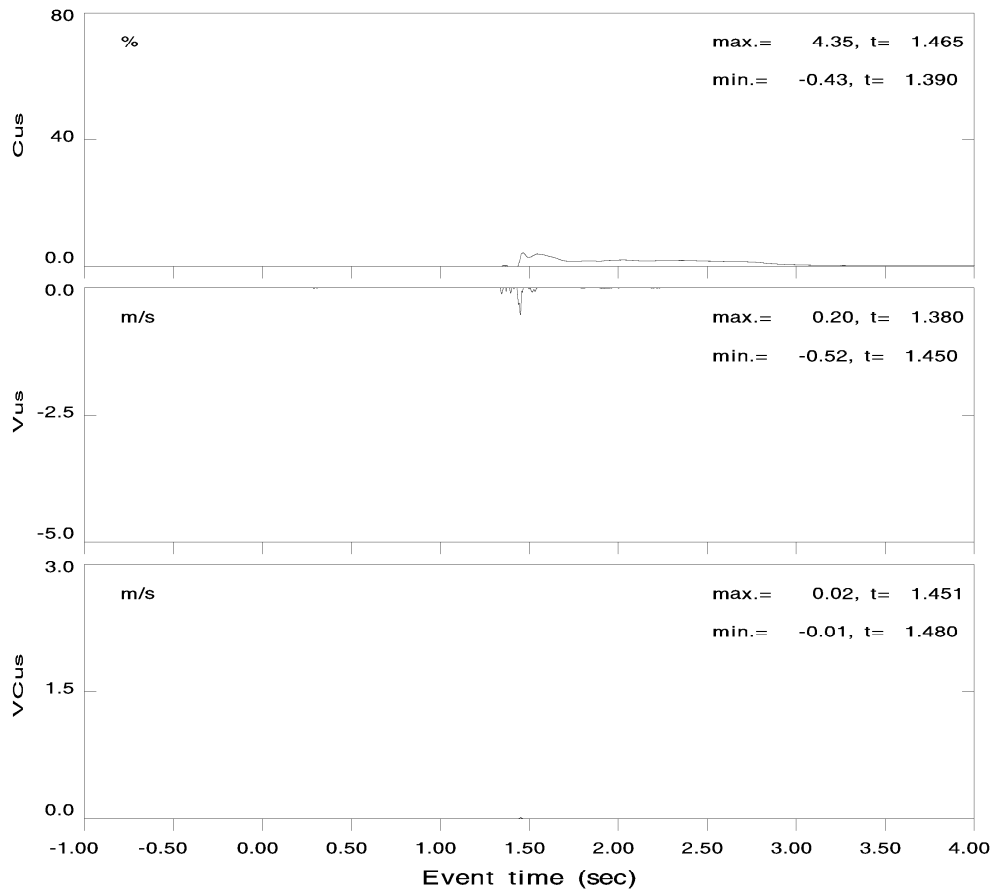


Page 11



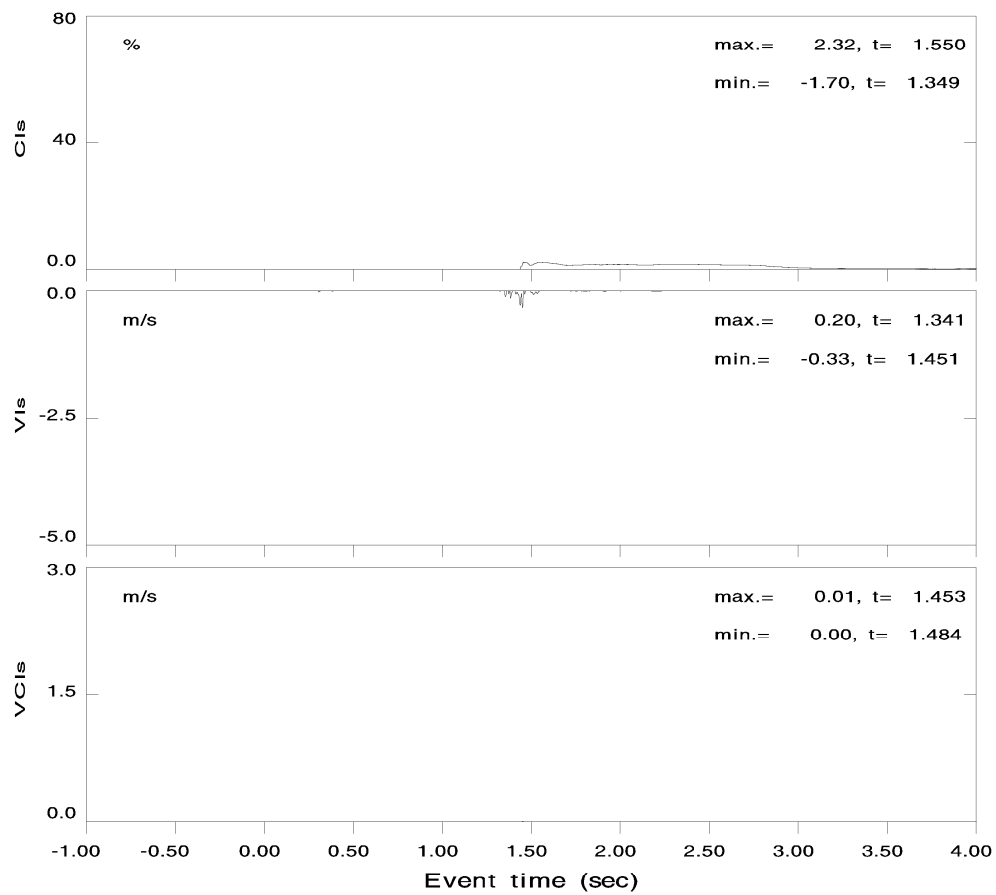
Primary

Test G140075



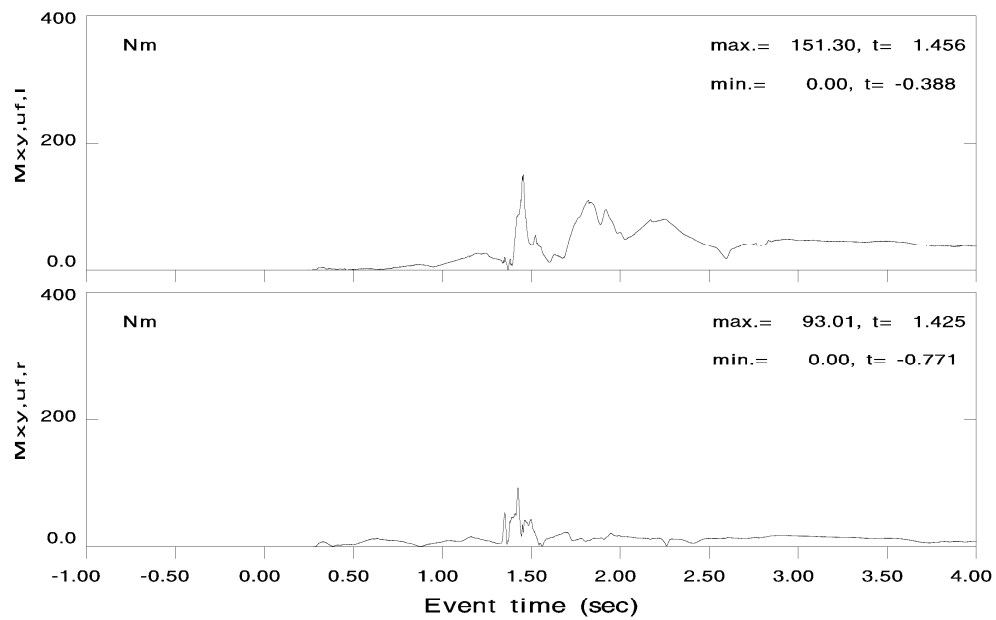
Primary

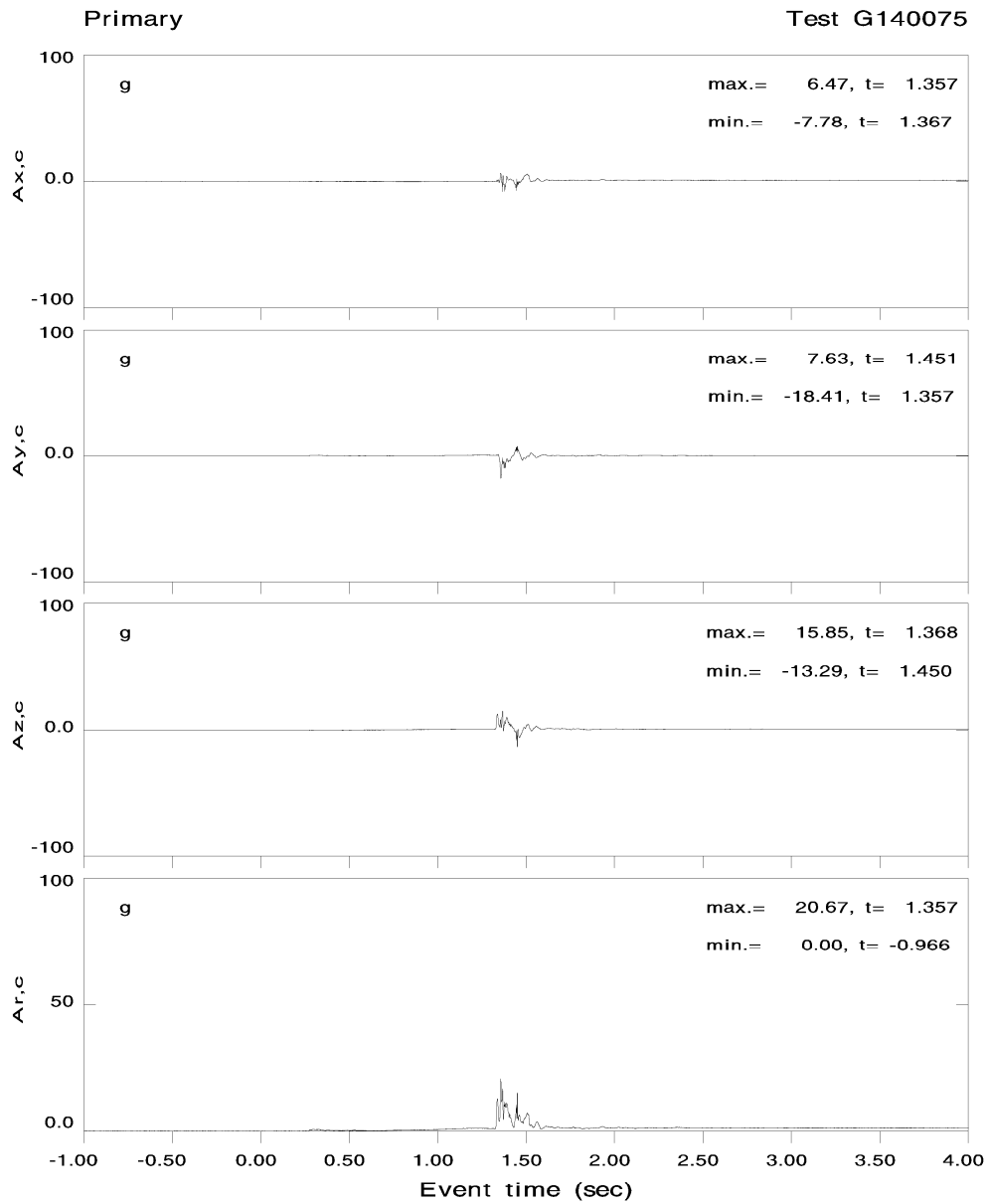
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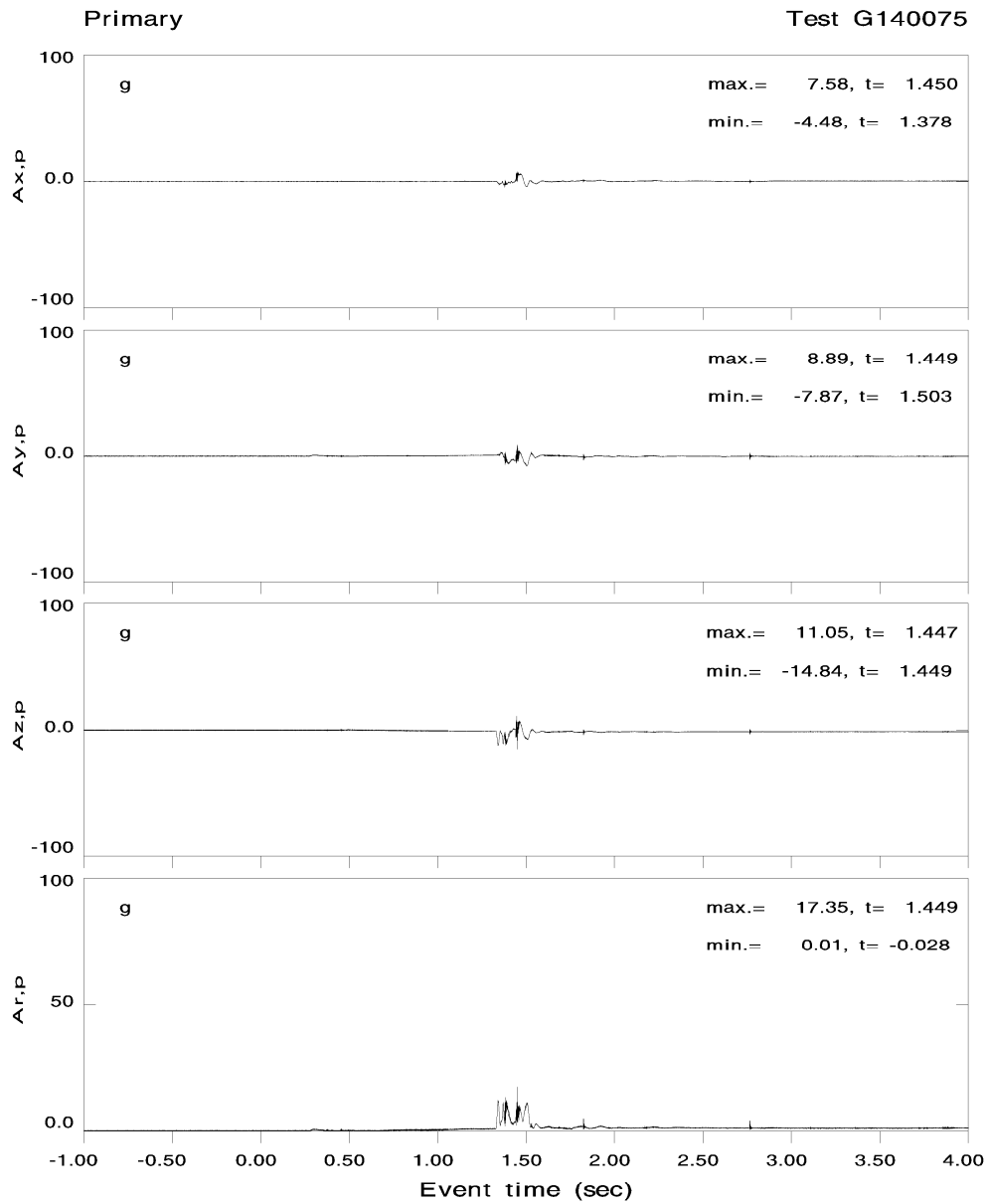


Primary

Test G140075

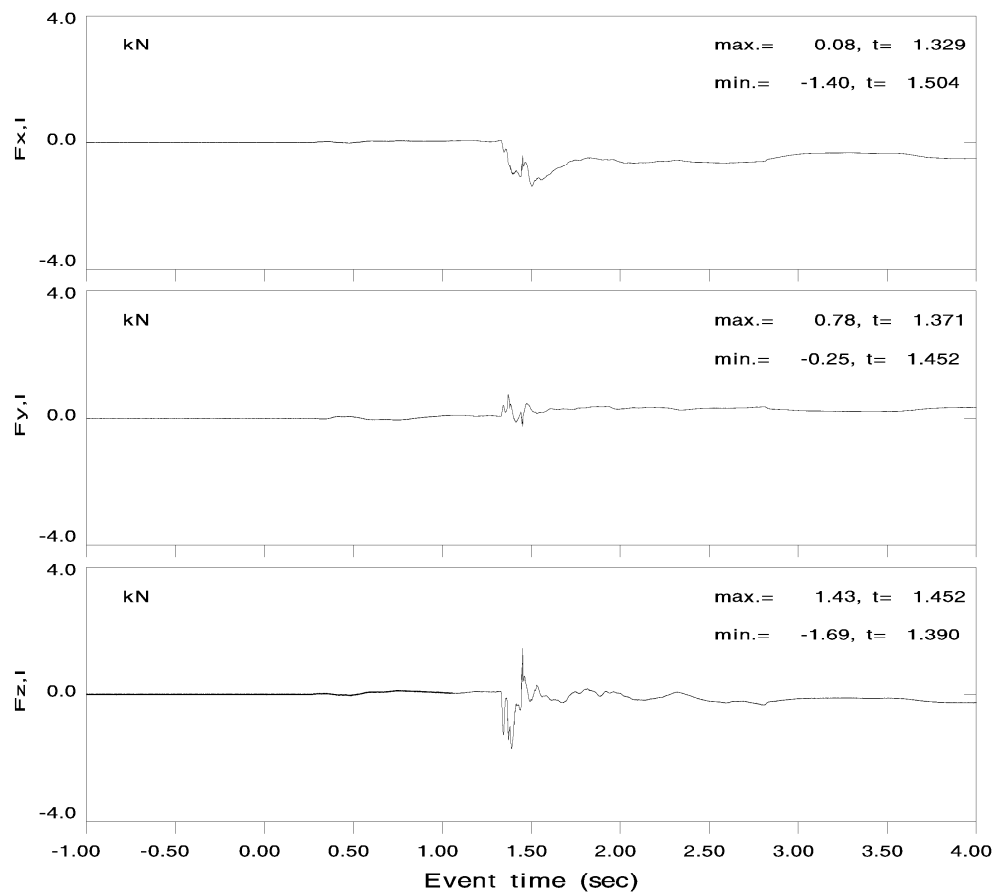






Primary

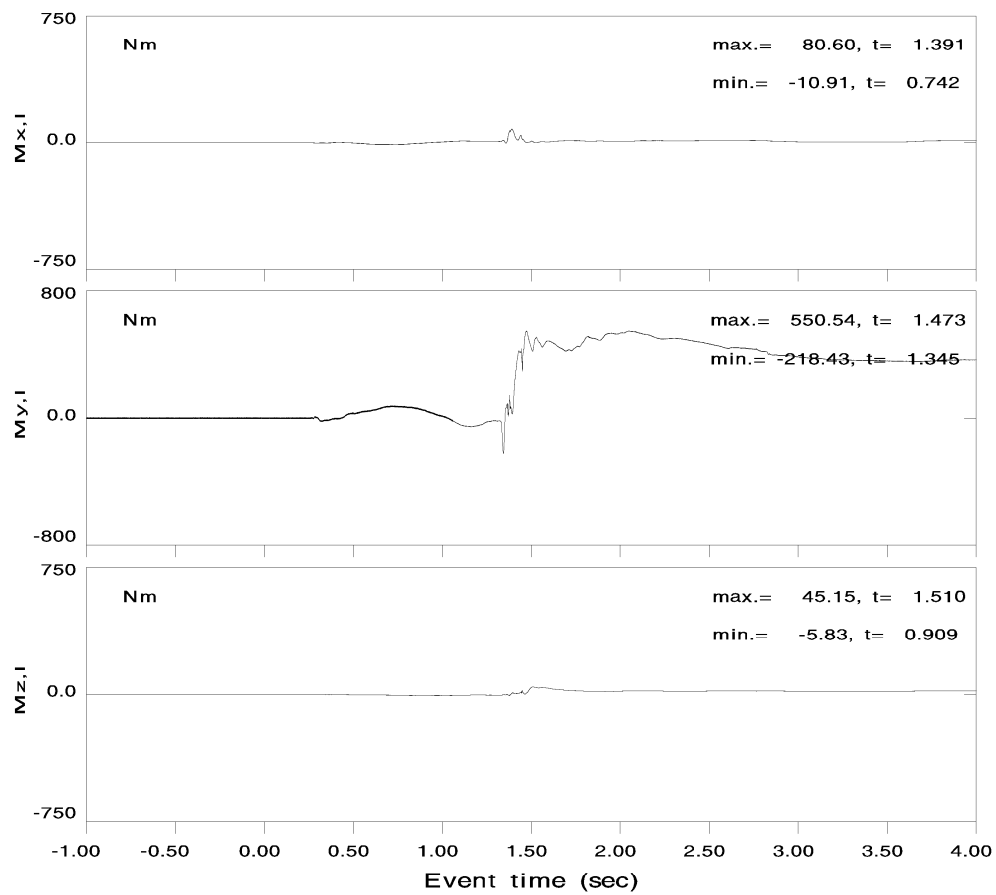
Test G140075

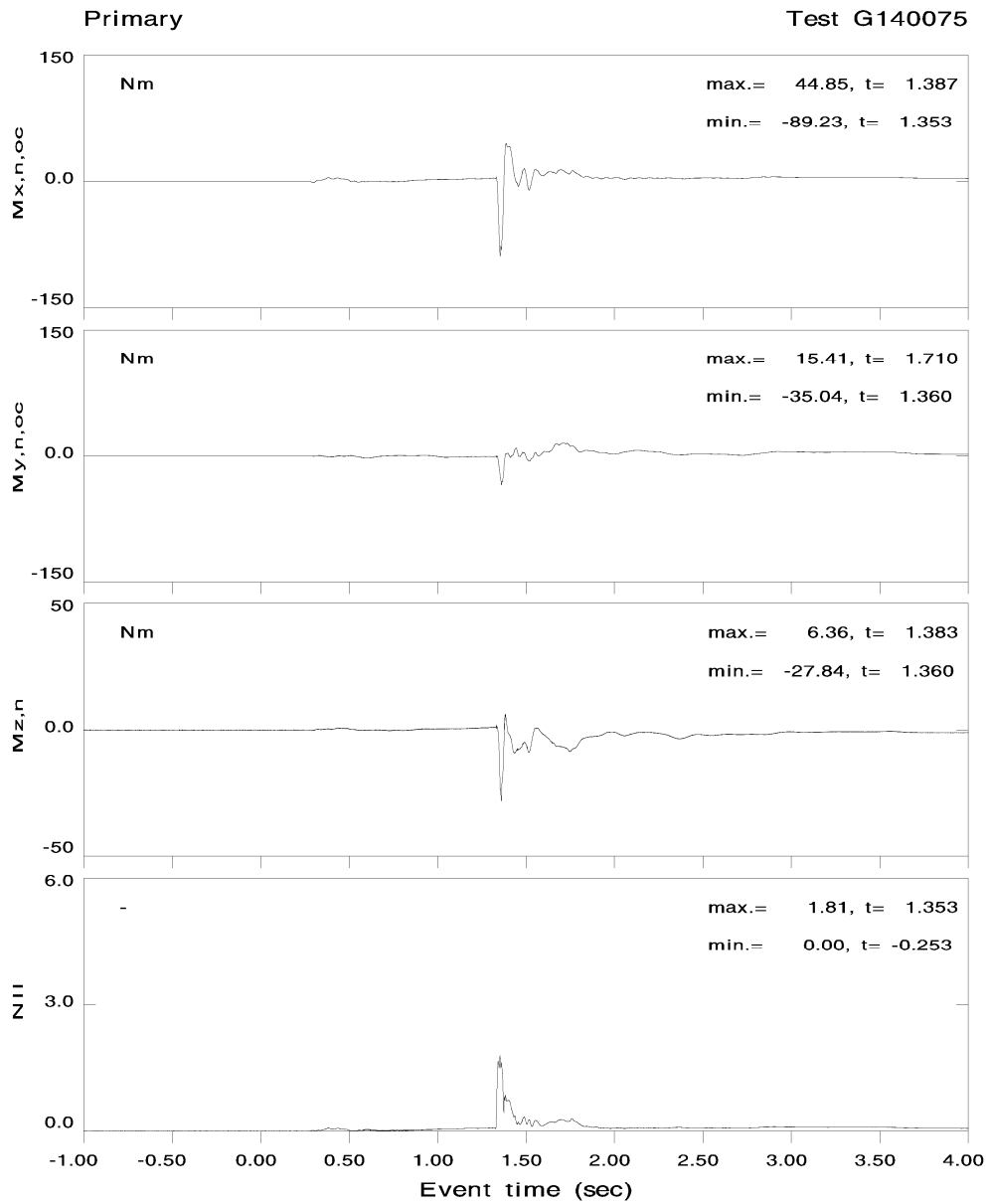


Page 18

Primary

Test G140075





2.2 G140076

G140076_ICM.ICE

Test Number : G140076
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 1
Index for VCmax Location                   = 2
maximum Abdomen Penetration                = 0.000
maximum GAMBIT                             = 0.240
Cmax                                        = 6.330
VCmax                                       = 0.000
HIC                                         = 172.8
NII (2002 MATD Neck)                       = 1.8
Location of Cmax                           : upper sternum
Location of VCmax                           : lower sternum

```

Injury Cost Model output:

```

MAIS                                         = 0.0
Total AIS                                   = 0.0
Normalized Injury Cost                      = 0.001
Normalized Cost of Survival                 = 0.001
Normalized Cost of Dying                    = 0.000
Probability of Fatality                     = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries  = 0.000
Permanent Partial Incapacity               = 0.000
Risk of life threatening brain injury (%)   = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.970	0.998	1.000	1.000	1.000	0
1	0.012	0.002	0.000	0.000	0.000	0
2	0.010	0.000	0.000	0.000	0.000	0
3	0.008	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.055	0.002	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

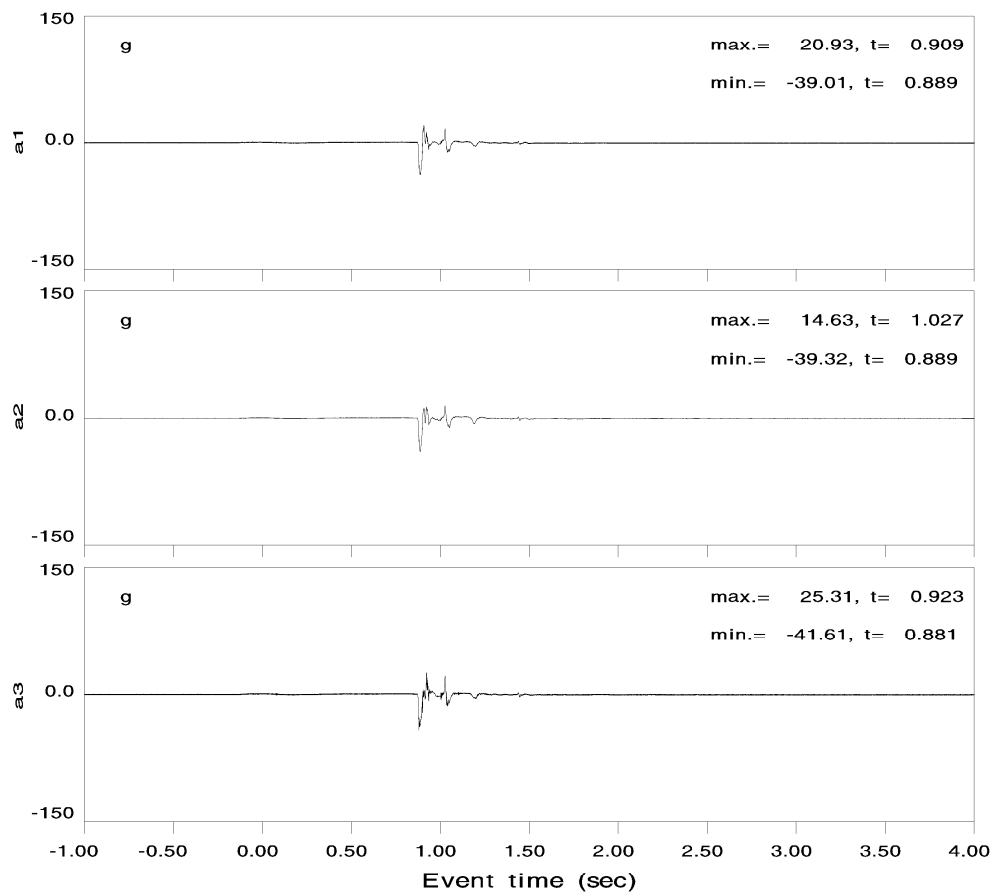
G140076.rpt				
Test G140076, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	10.23 g	0.905	-7.80 g	0.927
Ay,c	7.01 g	0.999	-16.82 g	0.907
Az,c	12.43 g	0.920	-5.06 g	1.001
Ax,p	4.56 g	0.998	-5.77 g	0.931
Ay,p	6.52 g	0.930	-8.98 g	0.929
Az,p	6.01 g	0.999	-11.56 g	0.893
spare	0.00 -	-0.922	0.00 -	3.607
spare	0.00 -	2.322	0.00 -	0.295
L,ur	0.03 mm	-0.162	-21.54 mm	1.019
L,lr	0.96 mm	0.899	-18.12 mm	1.021
a1	20.93 g	0.909	-39.01 g	0.889
a2	14.63 g	1.027	-39.32 g	0.889
a3	25.31 g	0.923	-41.61 g	0.881
a4	17.11 g	0.880	-10.83 g	0.913
a5	16.10 g	0.888	-10.44 g	0.913
a6	27.90 g	0.880	-12.21 g	0.924
Mx,l	85.44 Nm	0.943	-9.33 Nm	0.250
My,l	503.75 Nm	1.030	-217.06 Nm	0.894
Mz,l	22.96 Nm	1.052	-6.52 Nm	0.929
Fx,l	0.07 kN	0.816	-1.05 kN	0.955
Fy,l	0.80 kN	0.922	-0.24 kN	0.961
Fz,l	0.57 kN	0.999	-1.71 kN	0.942
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	0.908	0.00 -	3.802
spare	0.00 -	-0.606	-0.01 -	3.761
spare	0.00 -	0.407	0.00 -	0.511
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	0.935	0.00 -	0.926
a7	23.19 g	0.881	-13.67 g	0.915
a8	34.97 g	0.927	-18.71 g	0.915
a9	31.26 g	0.881	-13.85 g	0.947
Fz,uf,r	0.37 kN	0.988	-0.16 kN	1.028
Mx,uf,r	53.37 Nm	0.985	-11.81 Nm	1.118
My,uf,r	36.34 Nm	1.069	-49.70 Nm	0.961
Mz,uf,r	24.82 Nm	0.946	-35.85 Nm	1.039
Fz,uf,l	0.89 kN	0.998	-0.30 kN	0.928
Mx,uf,l	33.19 Nm	0.966	-66.01 Nm	1.041
My,uf,l	188.08 Nm	1.006	-17.29 Nm	0.901
Mz,uf,l	35.78 Nm	0.971	-4.19 Nm	0.259
Fx,n	0.68 kN	0.896	-0.42 kN	0.929
Fy,n	0.89 kN	0.902	-0.06 kN	0.933
Fz,n	0.69 kN	0.928	-3.26 kN	0.893
Mx,n	40.80 Nm	0.935	-98.25 Nm	0.903
My,n	15.13 Nm	1.051	-48.02 Nm	0.909
Mz,n	6.65 Nm	1.130	-28.51 Nm	0.910
L,ul	9.75 mm	0.930	-1.18 mm	1.071
L,ll	11.59 mm	0.924	-1.39 mm	1.073
Ax,h	17.84 g	0.889	-15.46 g	1.028
Ay,h	18.65 g	0.911	-38.53 g	0.889
Az,h	23.20 g	0.881	-13.68 g	0.915
ax,h	4.26 krad/s**2	0.927	-5.02 krad/s**2	0.909
ay,h	1.42 krad/s**2	0.938	-2.51 krad/s**2	0.909
az,h	2.10 krad/s**2	0.928	-2.22 krad/s**2	0.903
Ar,h	45.78 g	0.886	0.01 g	-0.282
ar,h	5.75 krad/s**2	0.909	0.00 krad/s**2	2.218
G	0.24 -	0.909	0.00 -	-0.471
HIC	172.81	0.899	----	0.879
Fxy,n	0.99 kN	0.900	0.00 kN	-0.378
Dx,us	0.59 mm	0.304	-11.87 mm	1.014
Dy,us	20.31 mm	1.021	-0.05 mm	-0.167

		G140076.rpt		
Cus	6.33 %	1.014	-0.31 %	0.304
Vus	0.29 m/s	1.046	-0.62 m/s	1.002
VCus	0.03 m/s	1.004	-0.01 m/s	1.040
Dx,ls	3.17 mm	0.898	-7.49 mm	1.012
Dy,ls	19.54 mm	1.022	-0.04 mm	-0.170
Cl,s	4.00 %	1.012	-1.69 %	0.898
Vls	0.19 m/s	0.891	-0.40 m/s	1.003
VCl,s	0.01 m/s	1.004	-0.01 m/s	1.046
Mxy,uf,r	57.54 Nm	0.985	0.00 Nm	-0.290
Mxy,uf,l	193.80 Nm	1.009	0.00 Nm	-0.698
Mx,n,oc	41.10 Nm	0.937	-82.56 Nm	0.903
My,n,oc	13.76 Nm	1.050	-46.95 Nm	0.909
NII	1.82 -	0.902	0.00 -	-0.159
Ar,p	12.24 g	0.931	0.01 g	-0.881
Ar,c	21.30 g	0.907	0.00 g	-0.837

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

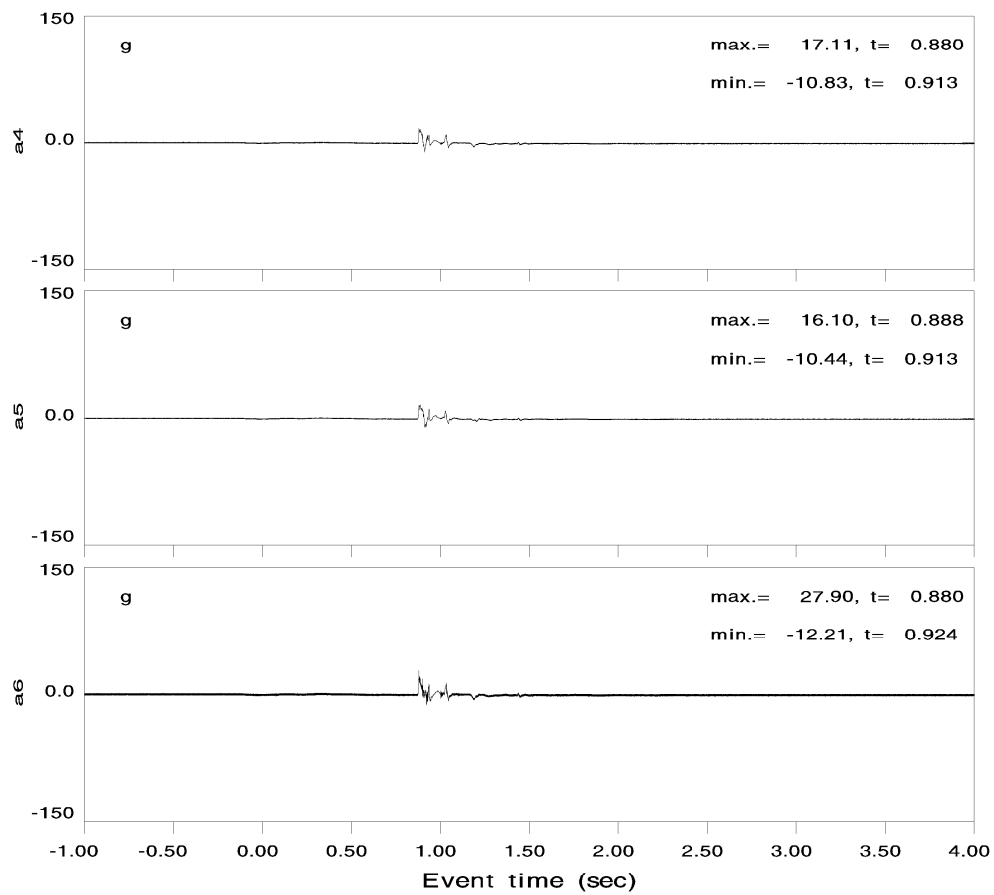
Test G140076



Page 1

Primary

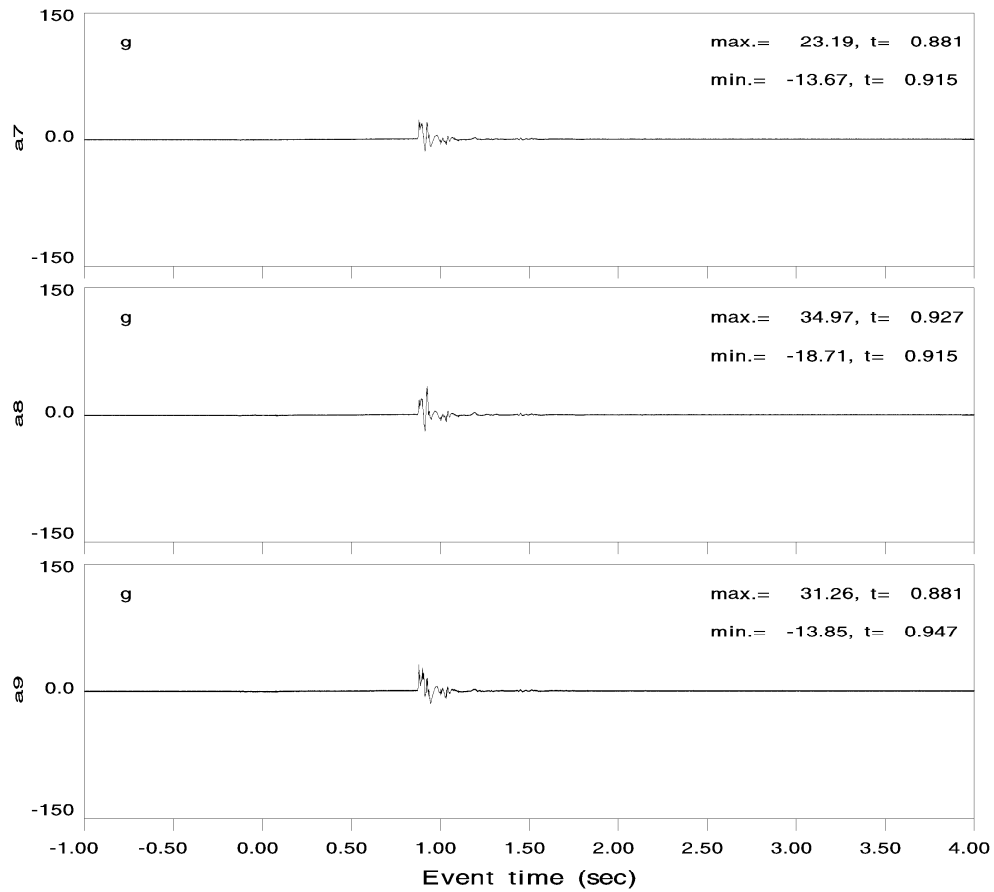
Test G140076



Page 2

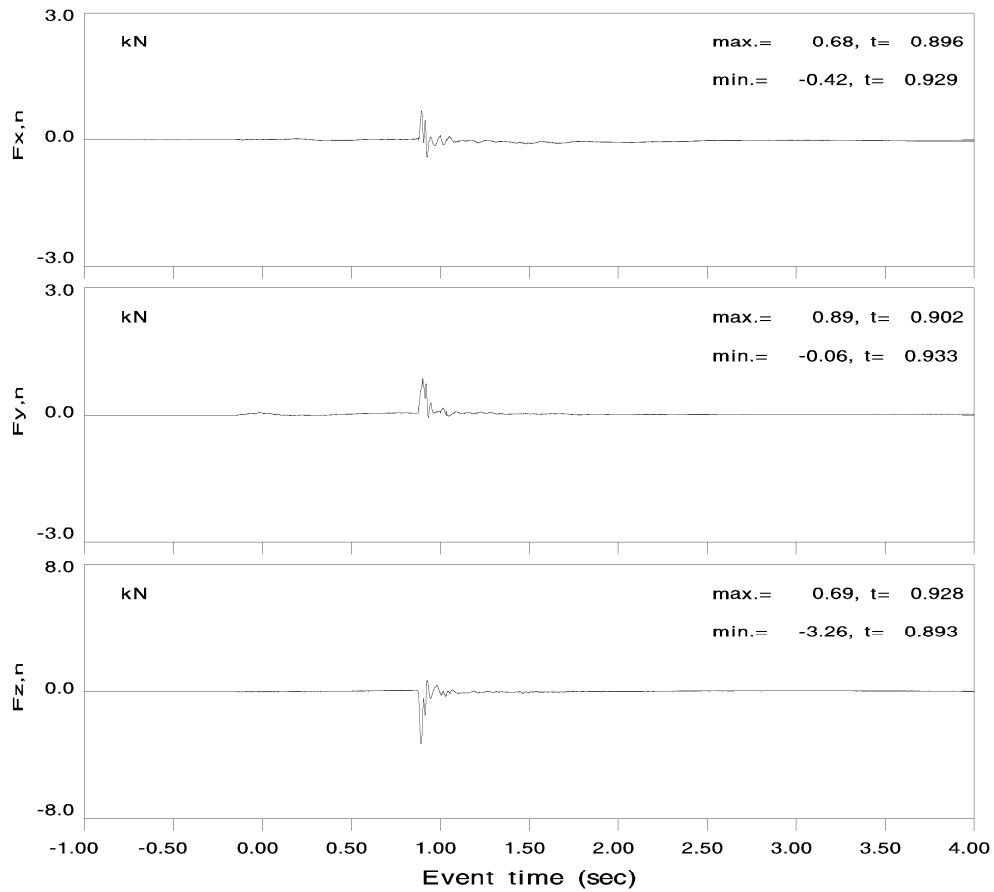
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Test G140076



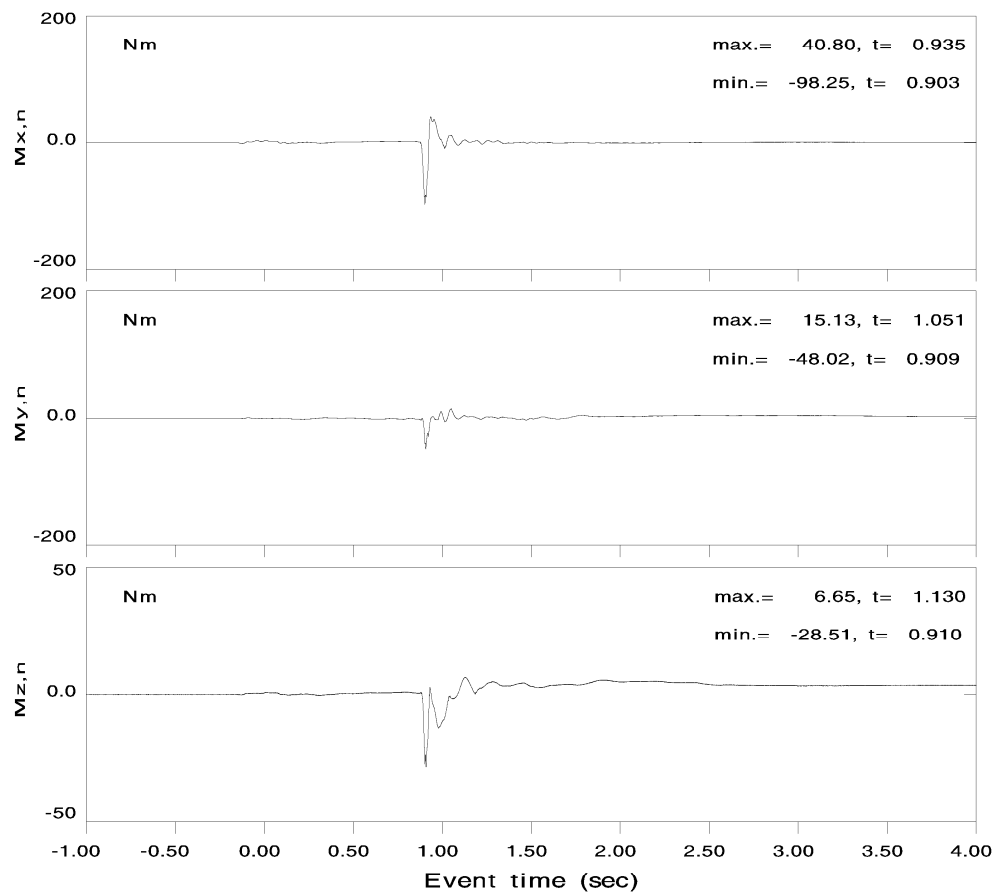
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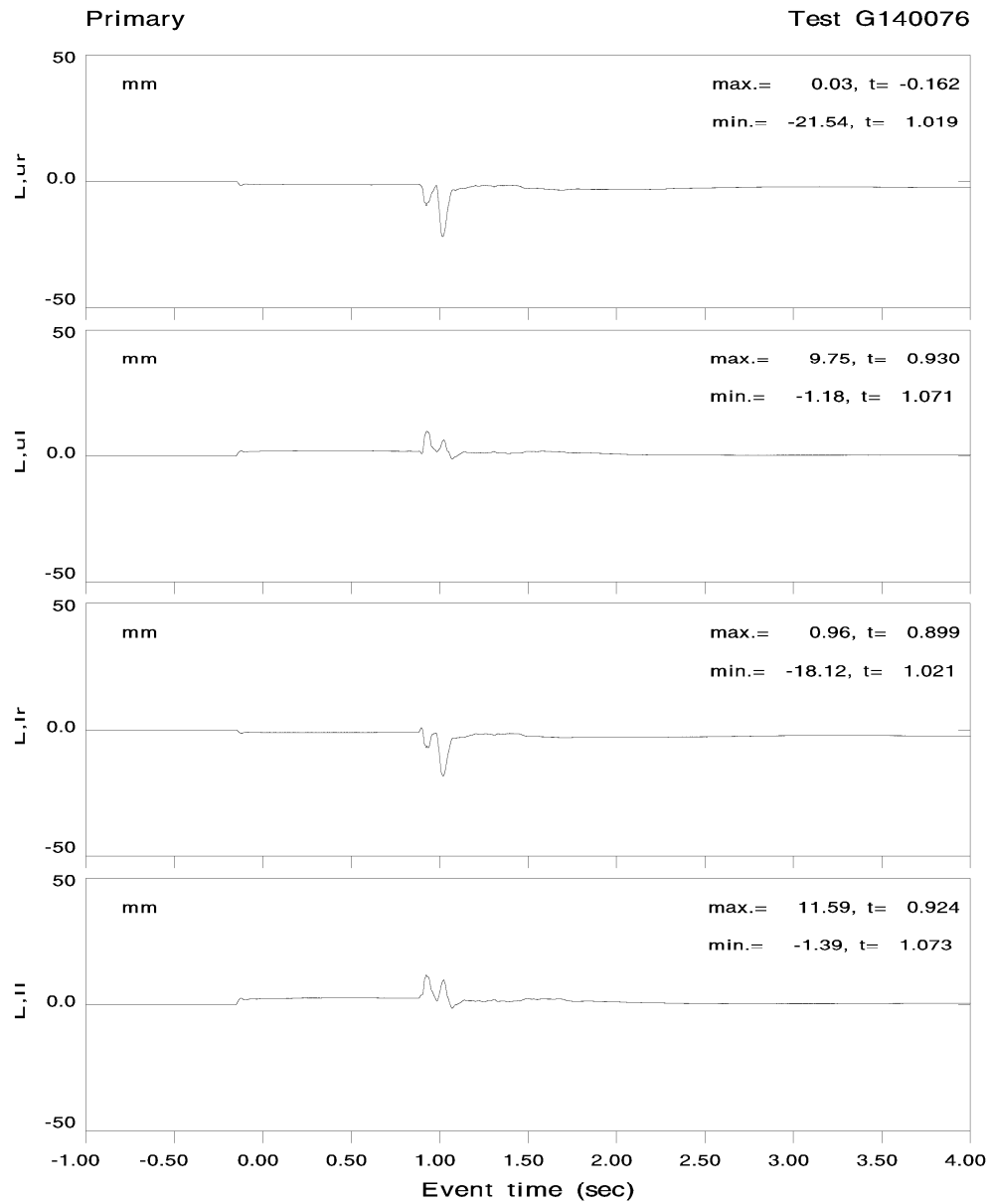
Test G140076

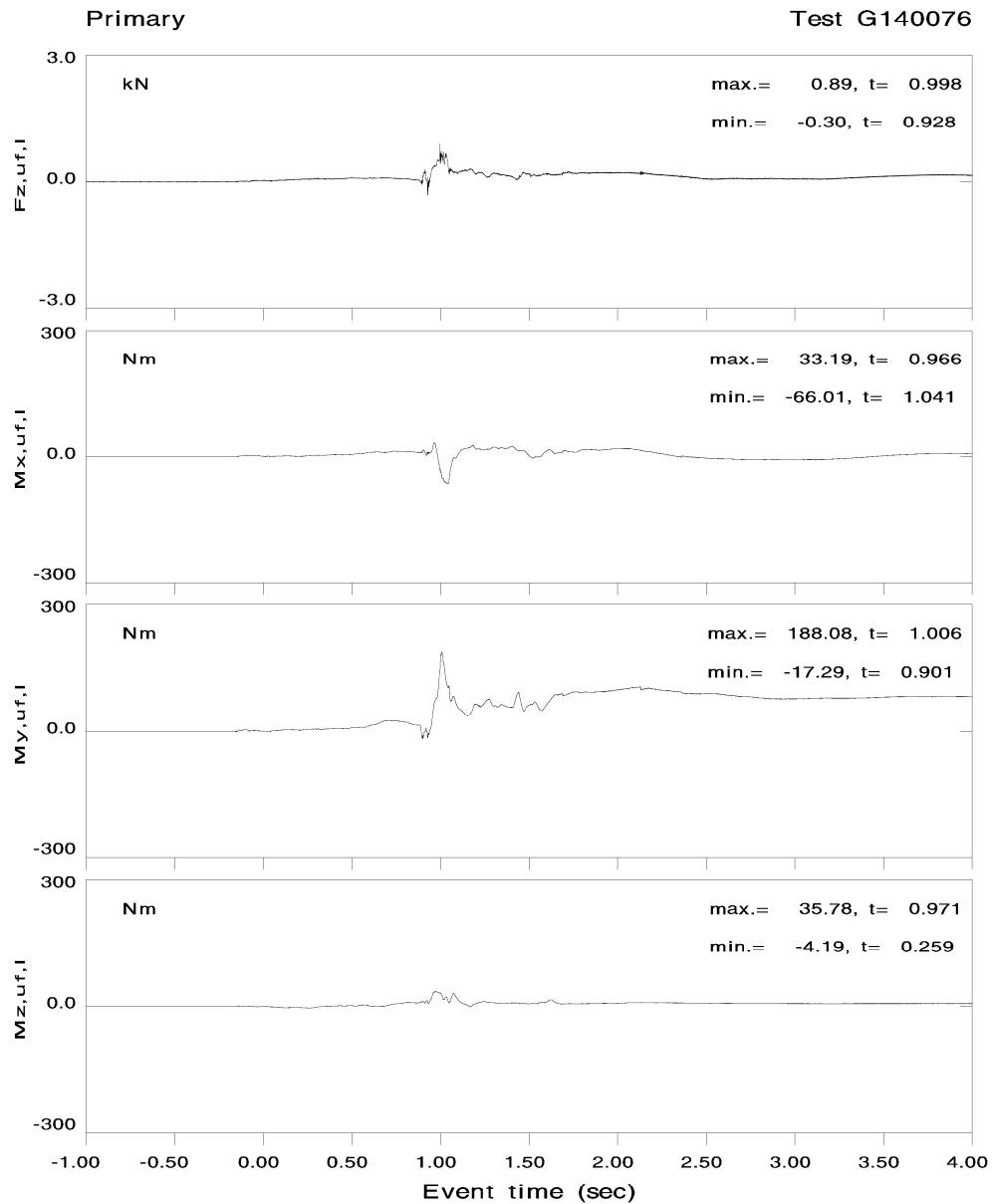


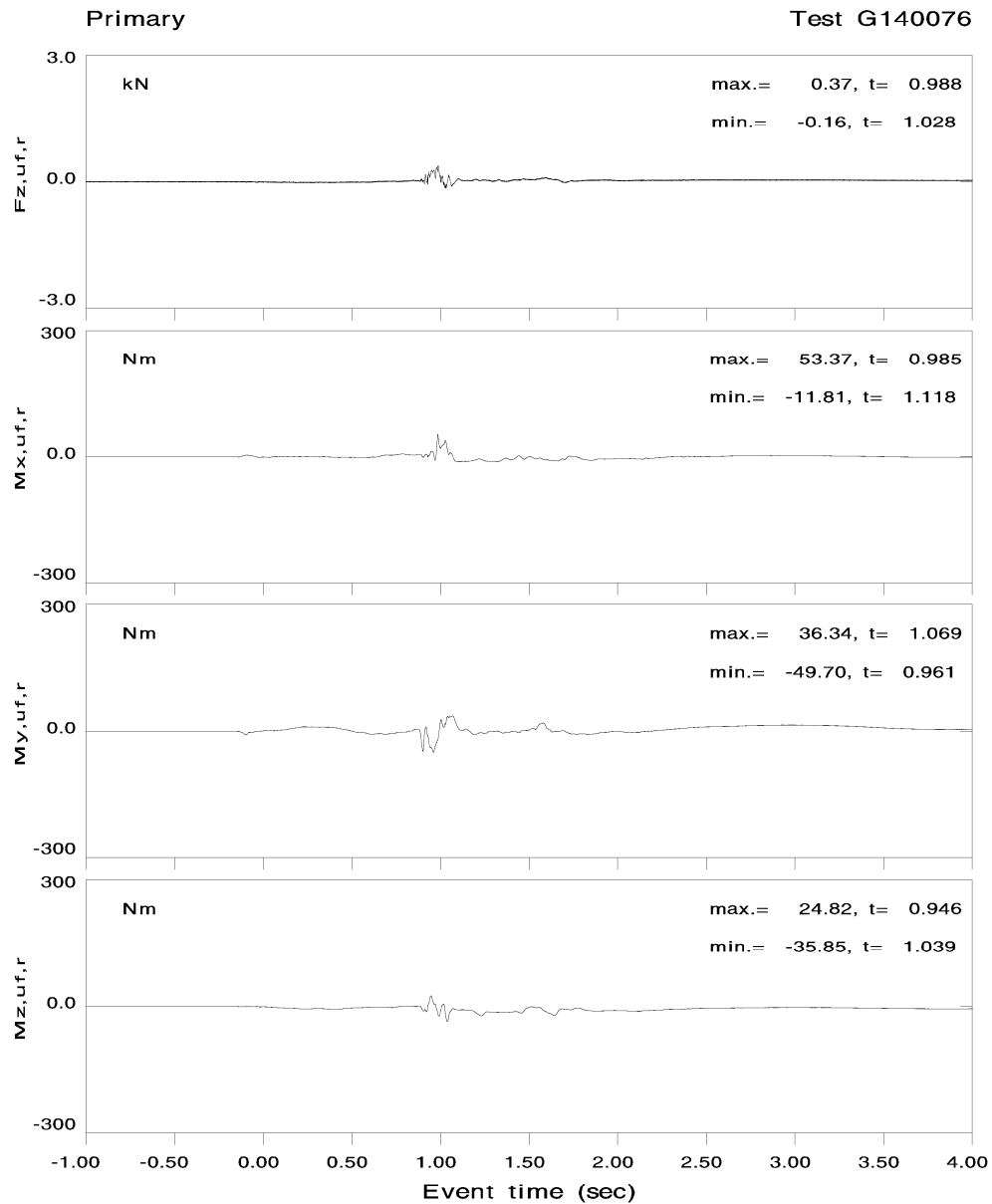
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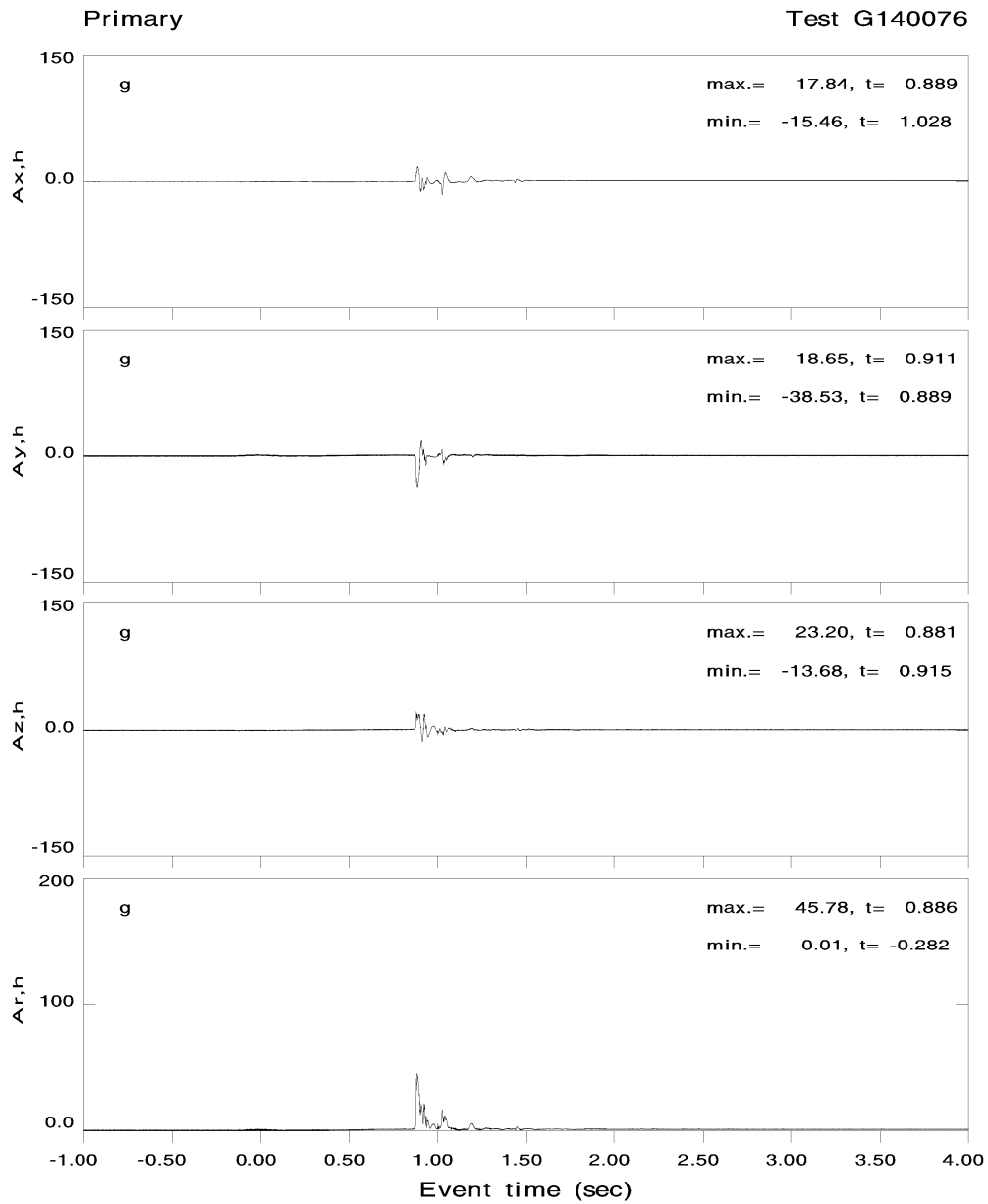
Test G140076

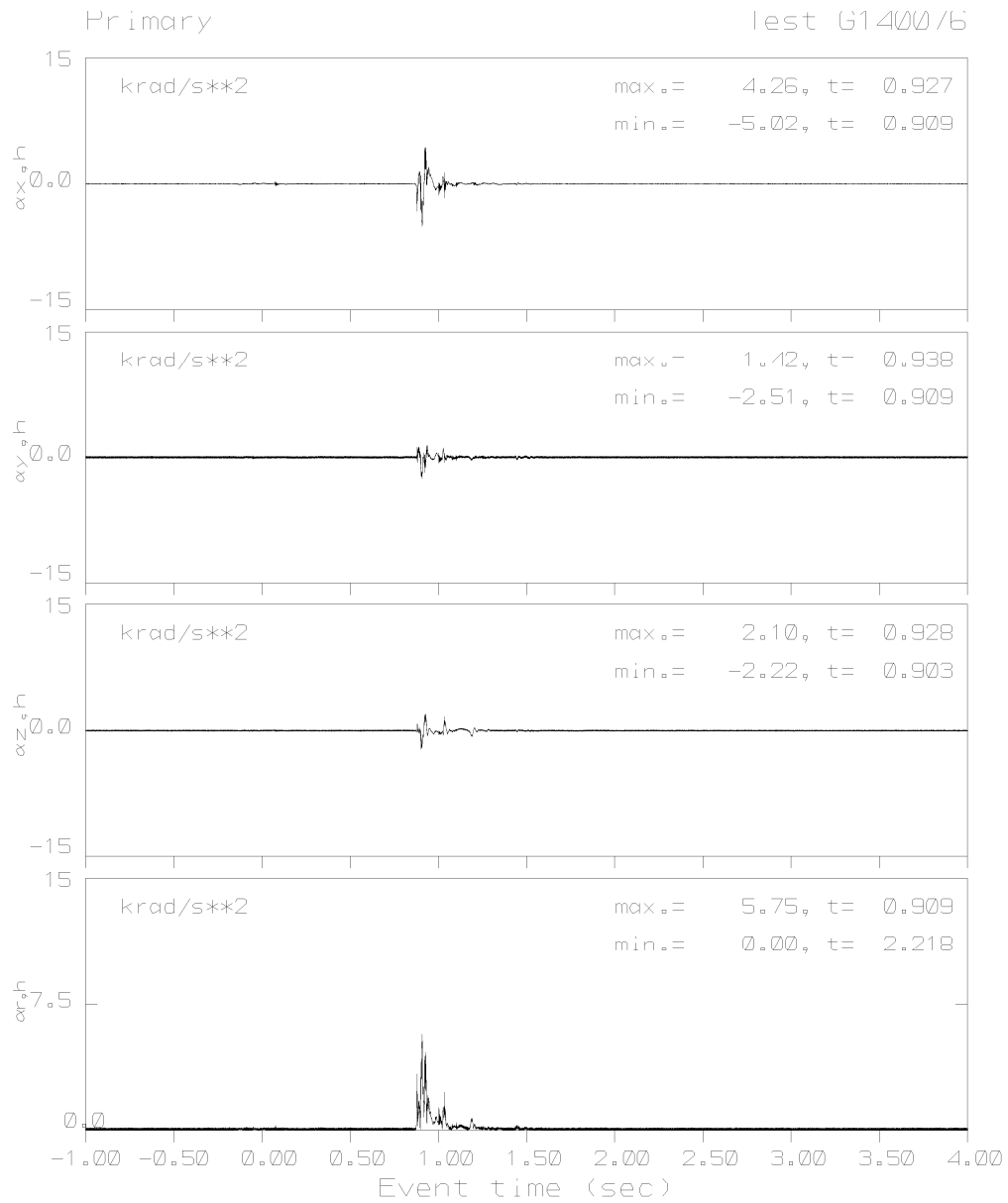




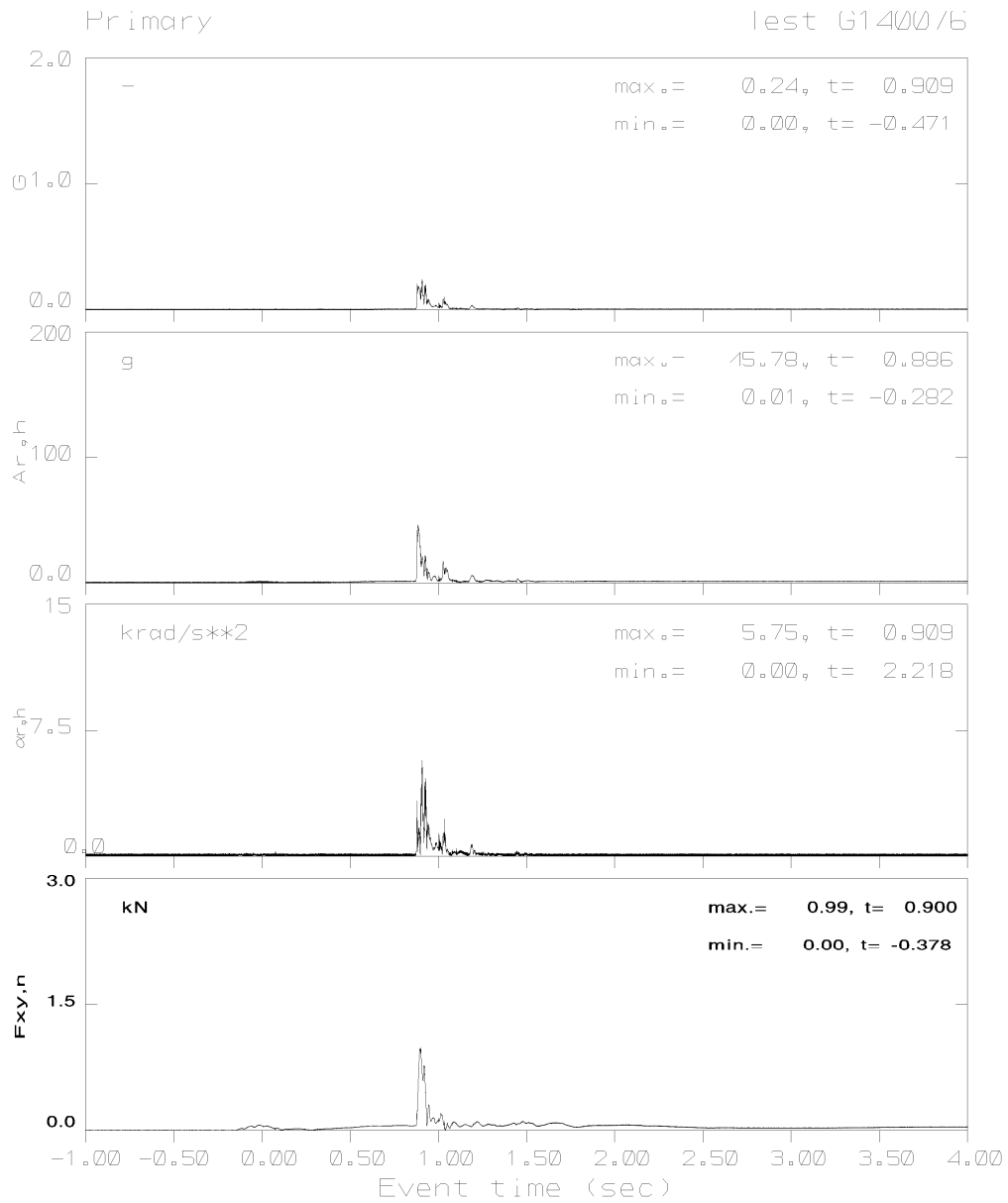




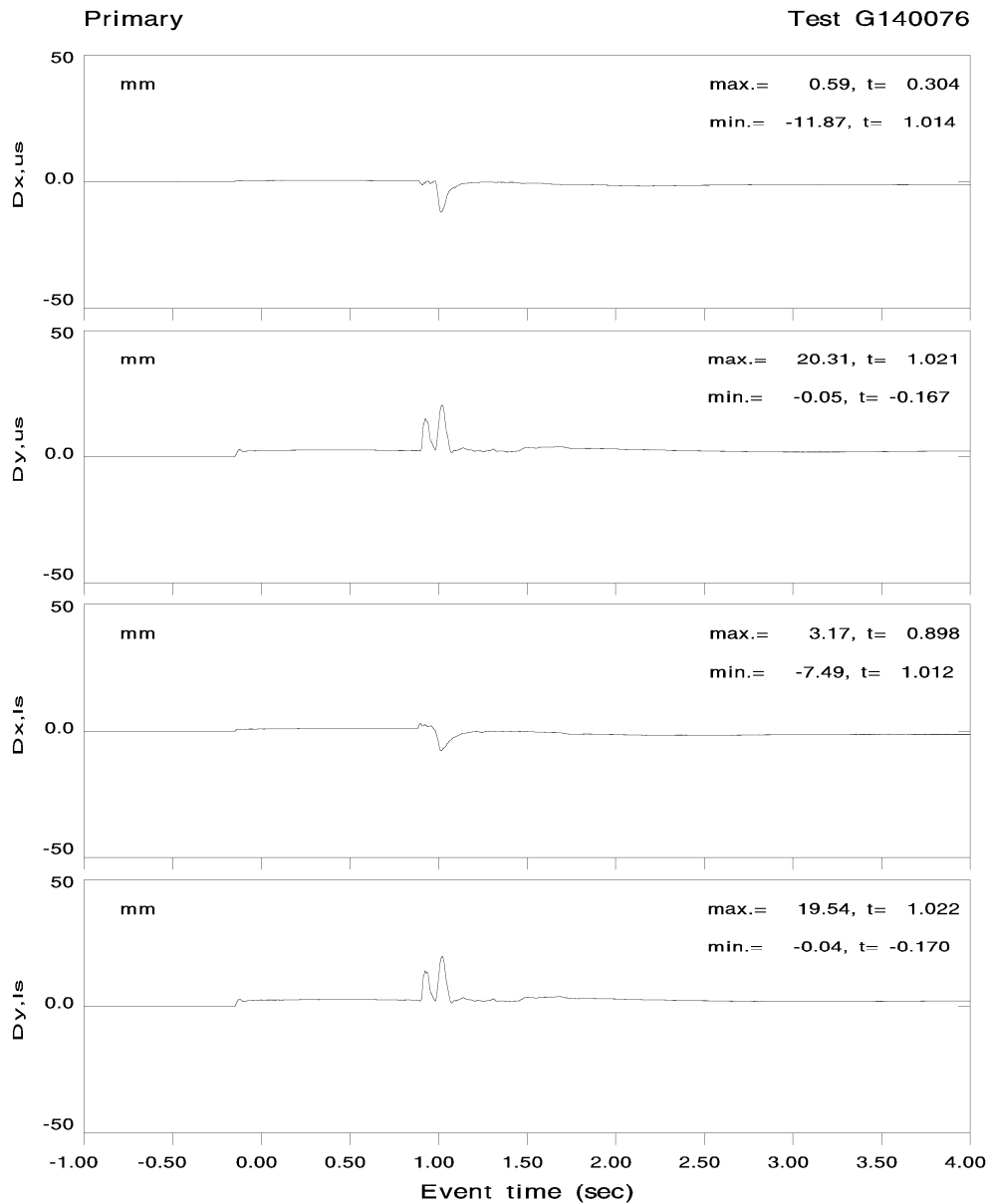




Page 10

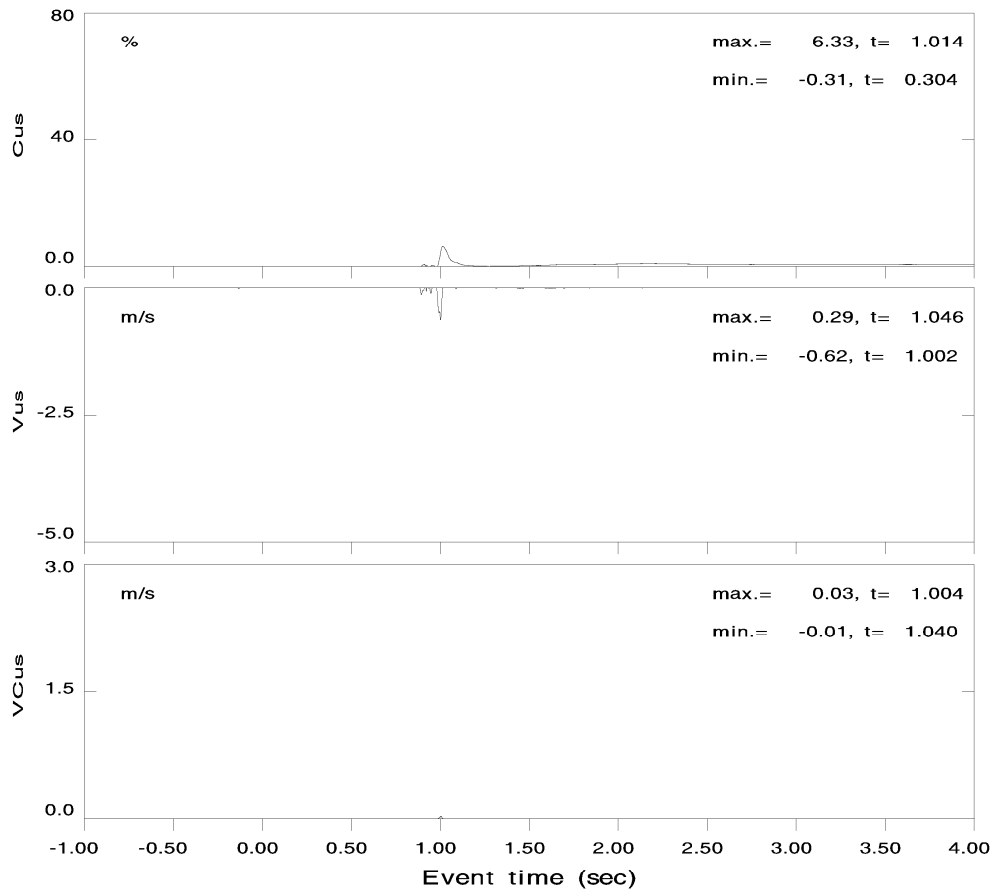


Page 11



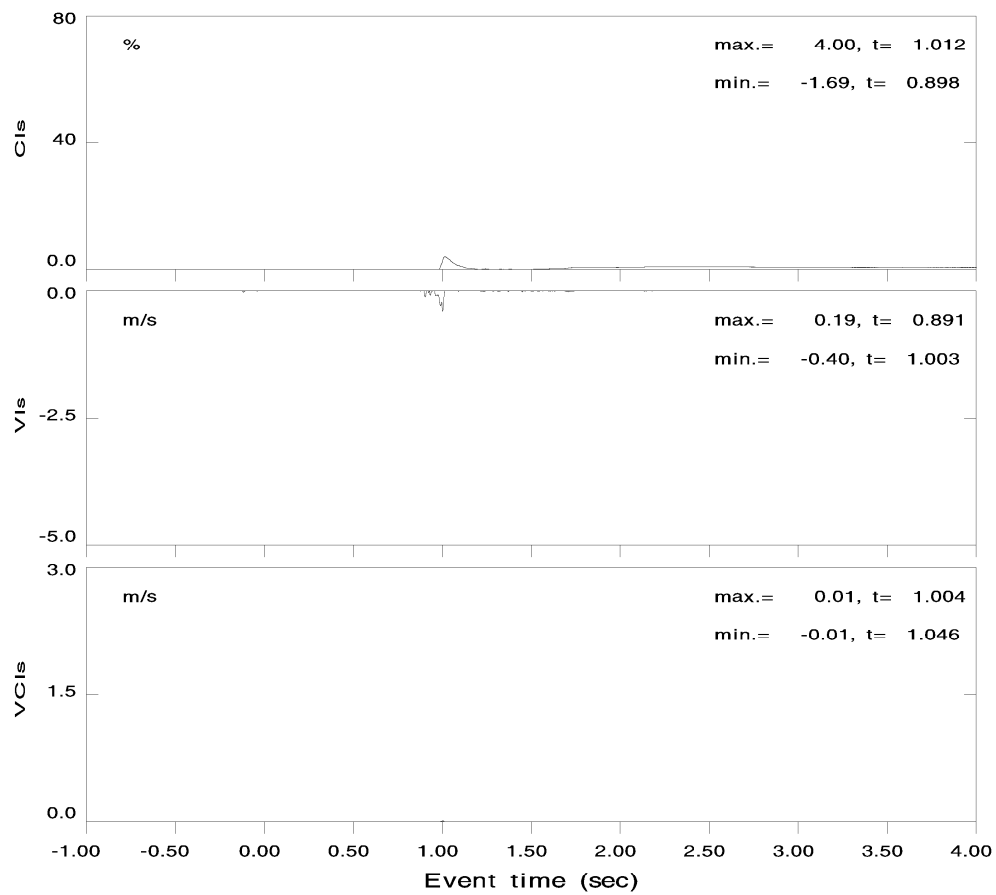
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Test G140076



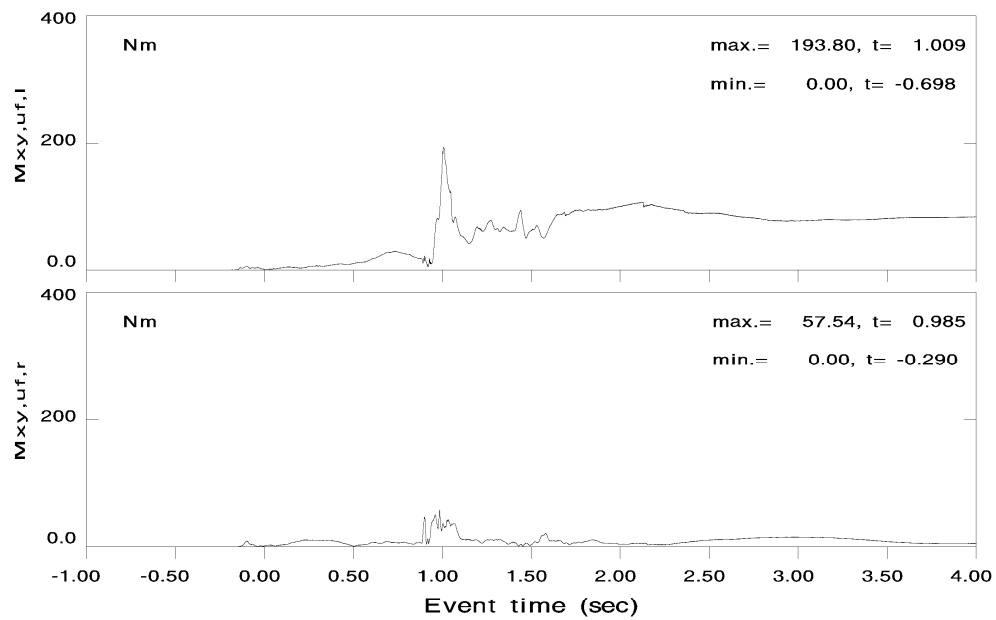
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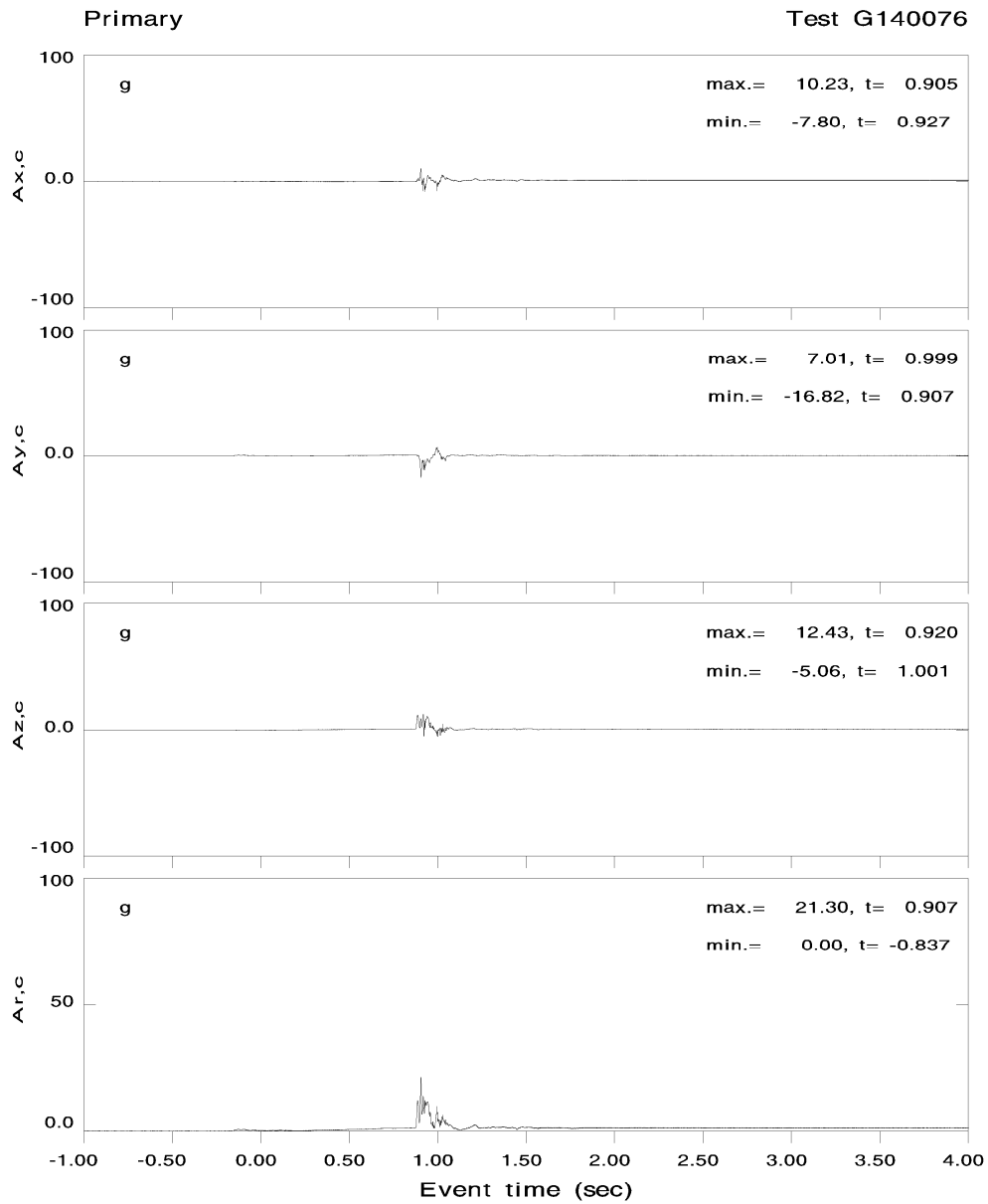
Test G140076

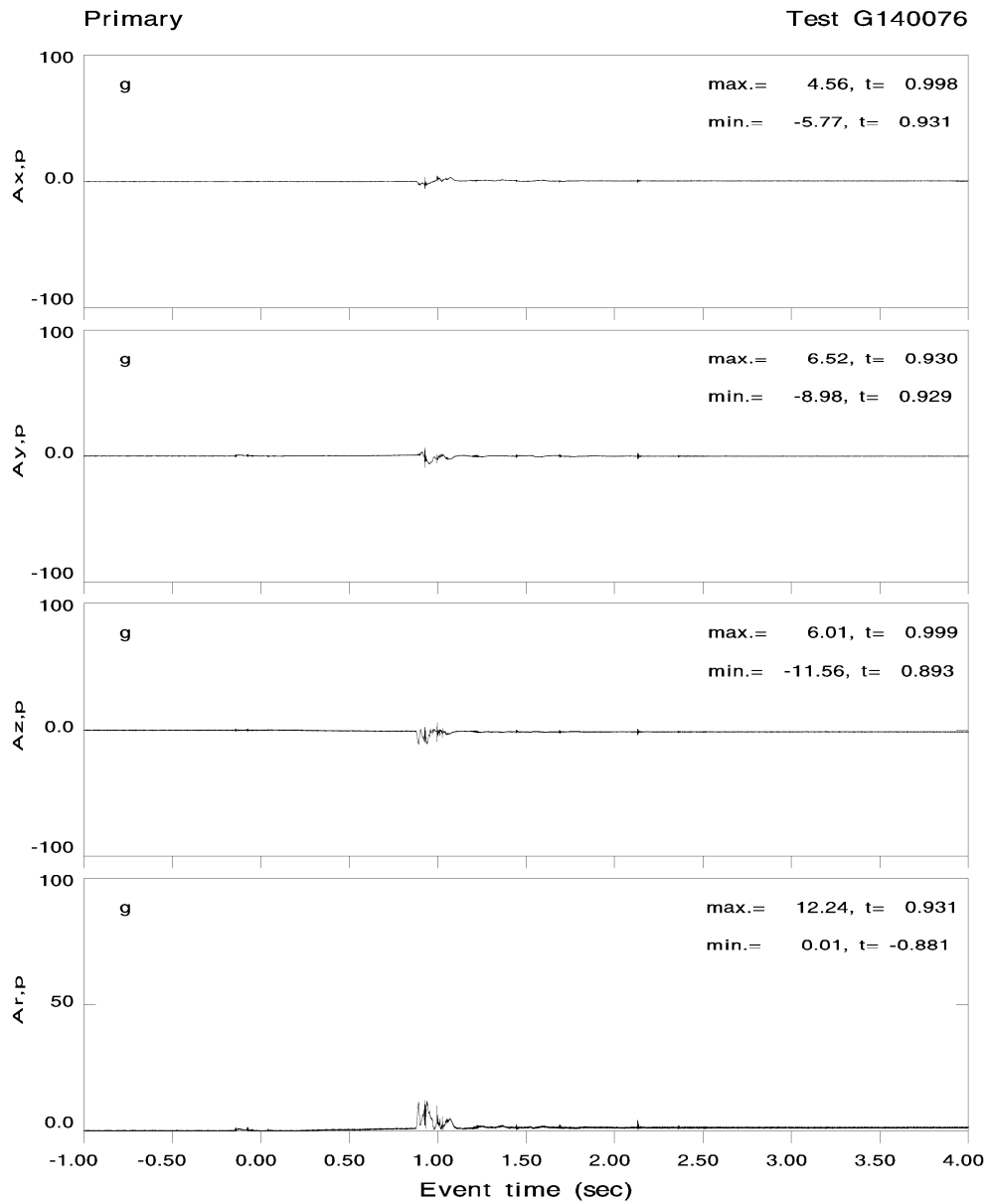


Primary

Test G140076

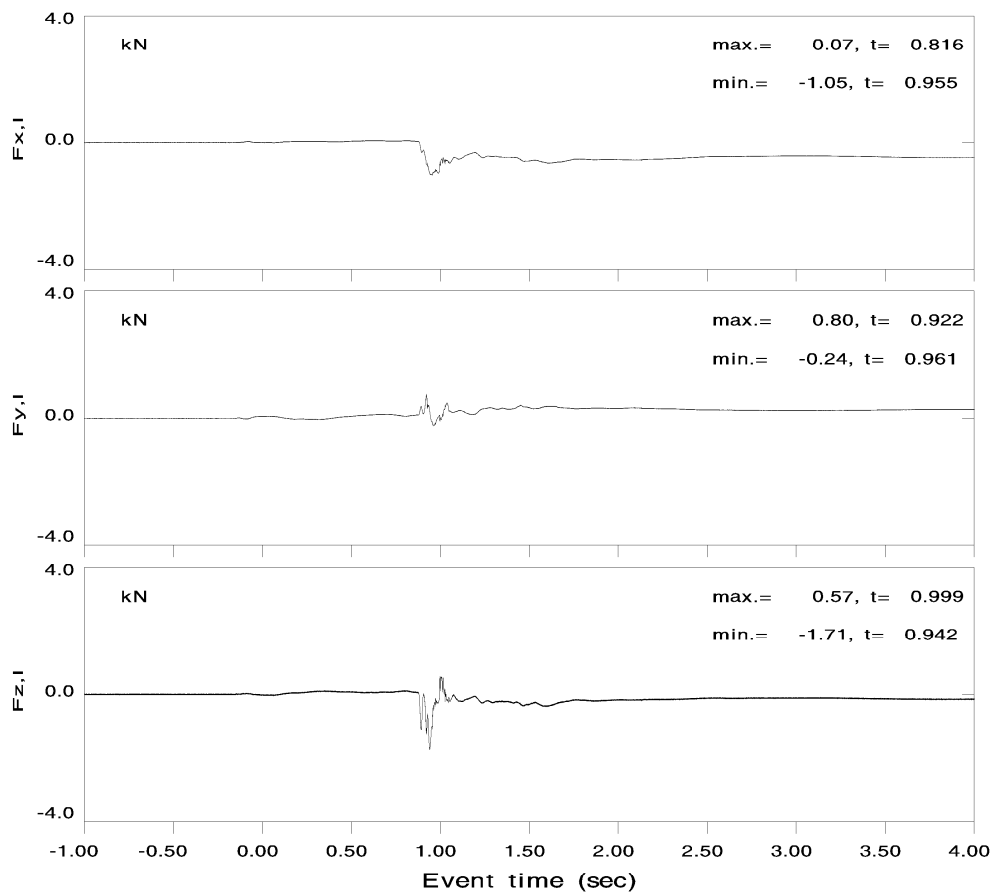






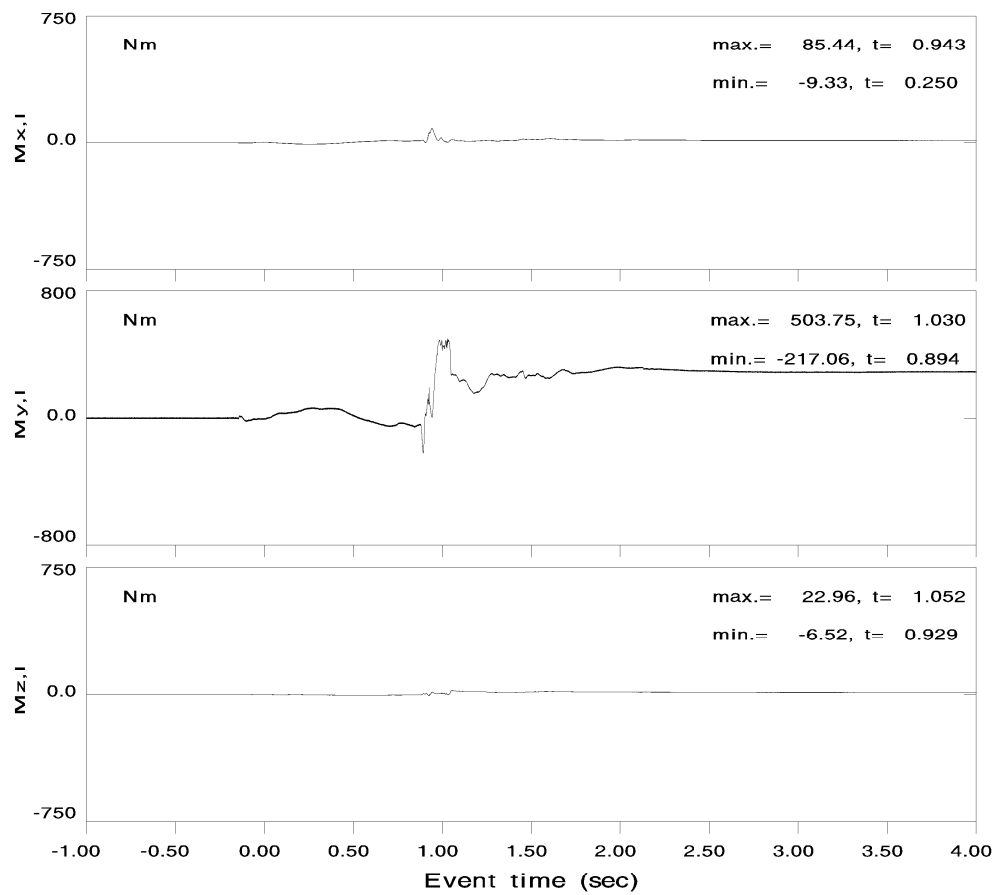
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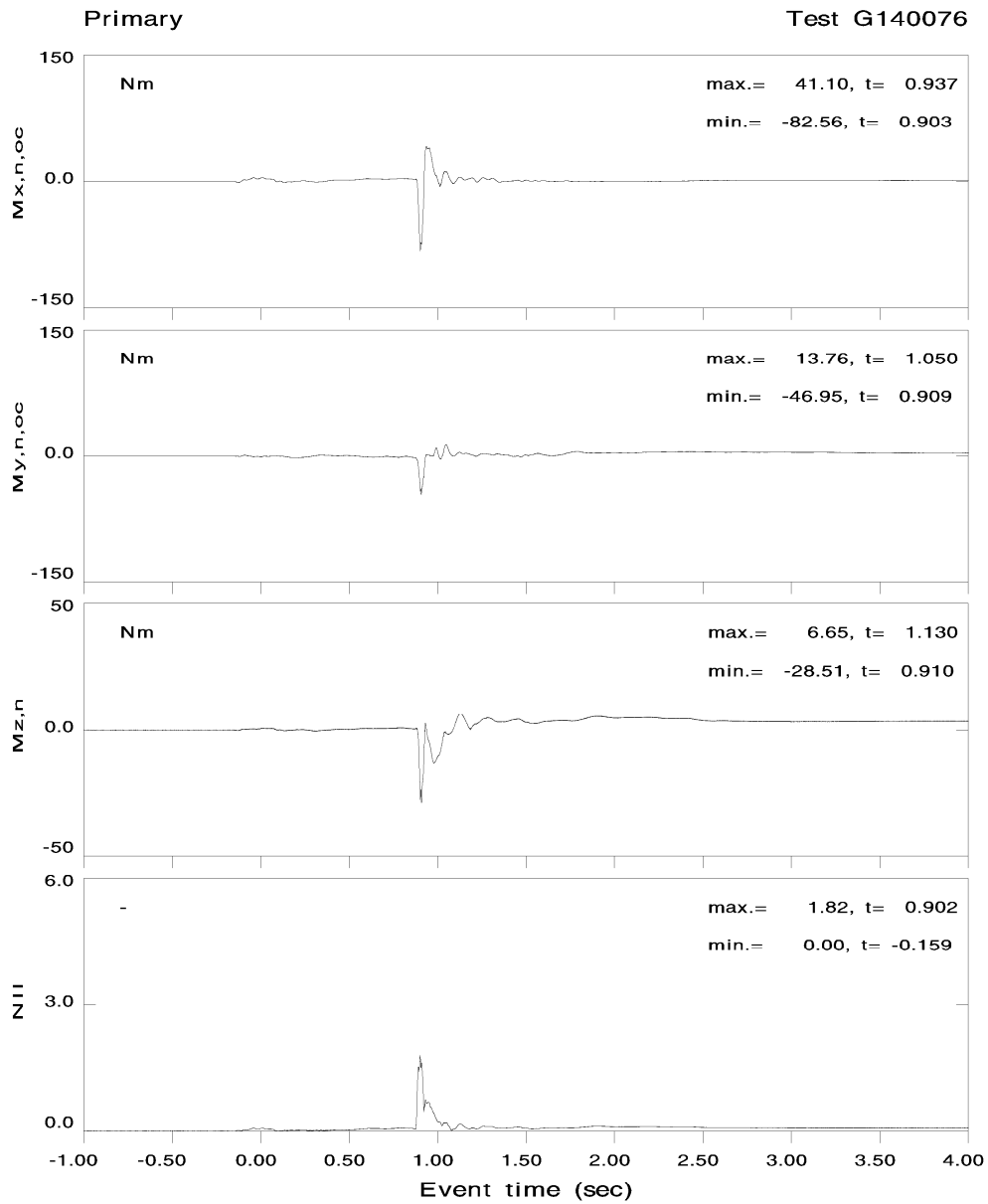
Test G140076



Primary

Test G140076





2.3 G140077

G140077_ICM.IC1

Test Number : G140077
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 1
Index for VCmax Location                   = 2
maximum Abdomen Penetration                = 0.000
maximum GAMBIT                            = 0.250
Cmax                                       = 4.540
VCmax                                      = 0.000
HIC                                       = 178.6
NII (2002 MATD Neck)                     = 1.8
Location of Cmax                          : upper sternum
Location of VCmax                         : lower sternum

```

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.001
Normalized Cost of Survival               = 0.001
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

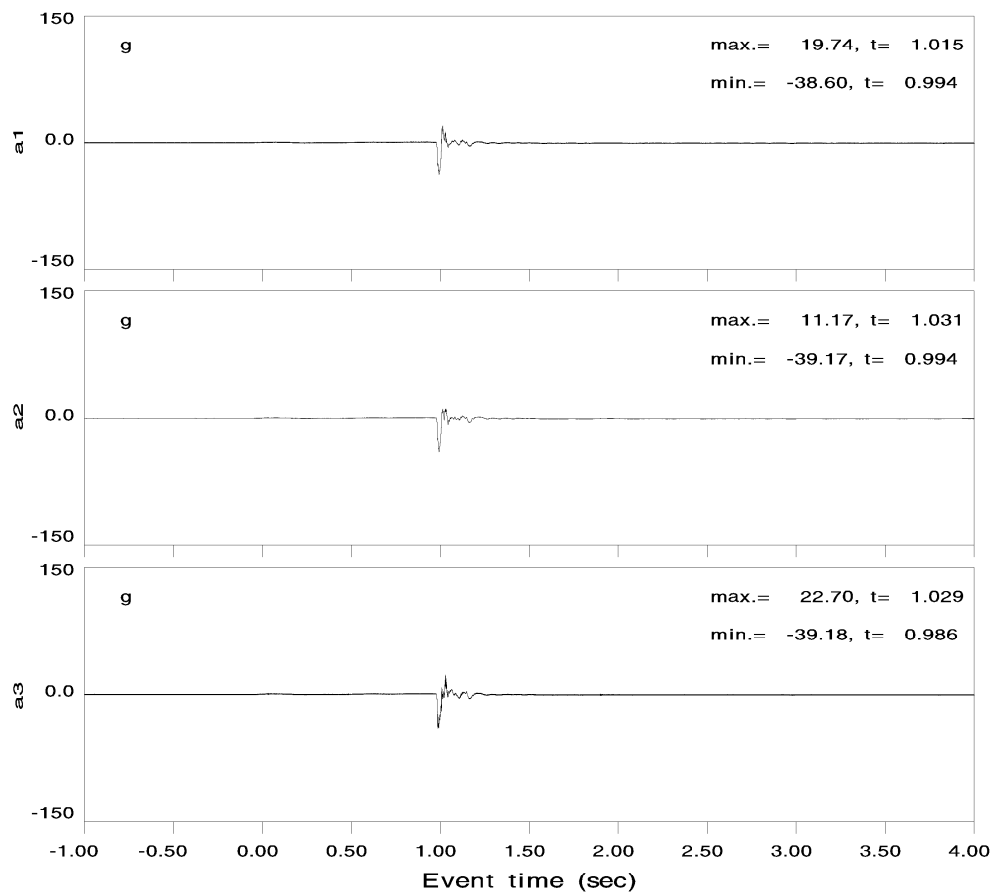
AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.967	0.998	1.000	1.000	1.000	0
1	0.014	0.002	0.000	0.000	0.000	0
2	0.011	0.000	0.000	0.000	0.000	0
3	0.008	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.059	0.002	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

G140077.rpt				
Test G140077, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	8.83 g	1.012	-9.28 g	1.018
Ay,c	6.22 g	1.108	-24.20 g	1.013
Az,c	19.61 g	1.019	-11.31 g	1.107
Ax,p	4.36 g	1.110	-10.92 g	1.030
Ay,p	14.25 g	1.030	-9.36 g	1.030
Az,p	9.92 g	1.105	-20.79 g	1.030
spare	0.00 -	2.441	0.00 -	1.109
spare	0.00 -	1.109	0.00 -	3.628
L,ur	0.02 mm	-0.063	-15.92 mm	1.123
L,lr	1.31 mm	1.005	-14.44 mm	1.126
a1	19.74 g	1.015	-38.60 g	0.994
a2	11.17 g	1.031	-39.17 g	0.994
a3	22.70 g	1.029	-39.18 g	0.986
a4	18.48 g	0.993	-10.86 g	1.018
a5	18.45 g	0.993	-12.45 g	1.019
a6	30.58 g	0.986	-12.15 g	1.030
Mx,l	83.59 Nm	1.050	-10.90 Nm	0.416
My,l	575.60 Nm	1.147	-232.79 Nm	1.000
Mz,l	28.35 Nm	1.393	-6.12 Nm	0.985
Fx,l	0.08 kN	0.984	-0.96 kN	1.046
Fy,l	0.76 kN	1.158	-0.19 kN	1.105
Fz,l	1.30 kN	1.109	-1.51 kN	1.045
spare	0.01 -	1.214	0.00 -	-0.992
spare	0.01 -	1.343	0.00 -	1.110
spare	0.00 -	3.093	0.00 -	-0.661
spare	0.00 -	0.773	0.00 -	0.560
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	2.489	0.00 -	1.032
a7	23.98 g	0.987	-12.88 g	1.018
a8	36.88 g	1.034	-18.71 g	1.016
a9	29.60 g	0.986	-15.40 g	1.055
Fz,uf,r	0.29 kN	1.106	-0.23 kN	1.121
Mx,uf,r	54.67 Nm	1.074	-13.03 Nm	1.289
My,uf,r	25.13 Nm	1.108	-54.31 Nm	1.069
Mz,uf,r	24.46 Nm	1.053	-29.55 Nm	1.129
Fz,uf,l	0.81 kN	1.109	-0.36 kN	1.031
Mx,uf,l	30.48 Nm	1.069	-85.03 Nm	1.143
My,uf,l	148.86 Nm	1.116	-27.61 Nm	1.033
Mz,uf,l	49.48 Nm	1.077	-3.61 Nm	0.302
Fx,n	0.65 kN	1.002	-0.43 kN	1.032
Fy,n	0.90 kN	1.009	-0.19 kN	1.039
Fz,n	0.94 kN	1.033	-3.60 kN	0.999
Mx,n	46.59 Nm	1.042	-101.61 Nm	1.009
My,n	16.18 Nm	1.154	-36.38 Nm	1.014
Mz,n	5.87 Nm	1.324	-30.09 Nm	1.016
L,ul	12.07 mm	1.025	-0.03 mm	-0.067
L,ll	15.08 mm	1.025	-0.04 mm	-0.080
Ax,h	15.75 g	0.996	-11.09 g	1.015
Ay,h	18.57 g	1.016	-40.14 g	0.993
Az,h	24.00 g	0.987	-12.89 g	1.018
ax,h	4.71 krad/s**2	1.032	-5.14 krad/s**2	1.016
ay,h	1.48 krad/s**2	1.038	-2.19 krad/s**2	1.014
az,h	2.01 krad/s**2	1.032	-2.79 krad/s**2	1.010
Ar,h	44.57 g	0.993	0.01 g	-0.978
ar,h	5.81 krad/s**2	1.016	0.00 krad/s**2	-0.911
G	0.25 -	1.016	0.00 -	-0.440
HIC	178.57	1.006	----	0.984
Fxy,n	0.97 kN	1.008	0.00 kN	-0.809
Dx,us	1.37 mm	1.043	-8.52 mm	1.124
Dy,us	18.41 mm	1.025	-0.04 mm	-0.067

		G140077.rpt		
Cus	4.54 %	1.124	-0.73 %	1.043
Vus	0.24 m/s	1.031	-0.42 m/s	1.109
VCus	0.01 m/s	1.111	0.00 m/s	1.137
Dx,ls	3.61 mm	1.004	-6.86 mm	1.133
Dy,ls	18.05 mm	1.025	-0.04 mm	-0.066
Cl,s	3.66 %	1.133	-1.92 %	1.004
Vls	0.23 m/s	0.996	-0.49 m/s	1.110
VCls	0.01 m/s	1.112	0.00 m/s	1.035
Mxy,uf,r	74.79 Nm	1.074	0.00 Nm	-0.268
Mxy,uf,l	159.92 Nm	1.116	0.00 Nm	-0.136
Mx,n,oc	45.11 Nm	1.043	-85.64 Nm	1.009
My,n,oc	16.02 Nm	1.154	-36.45 Nm	1.015
NII	1.80 -	1.008	0.00 -	-0.200
Ar,p	25.00 g	1.030	0.00 g	-0.741
Ar,c	27.08 g	1.012	0.00 g	-0.071
Recorder 1&2 event time = 0.000		Recorder 3&4 event time = 0.000		

Primary

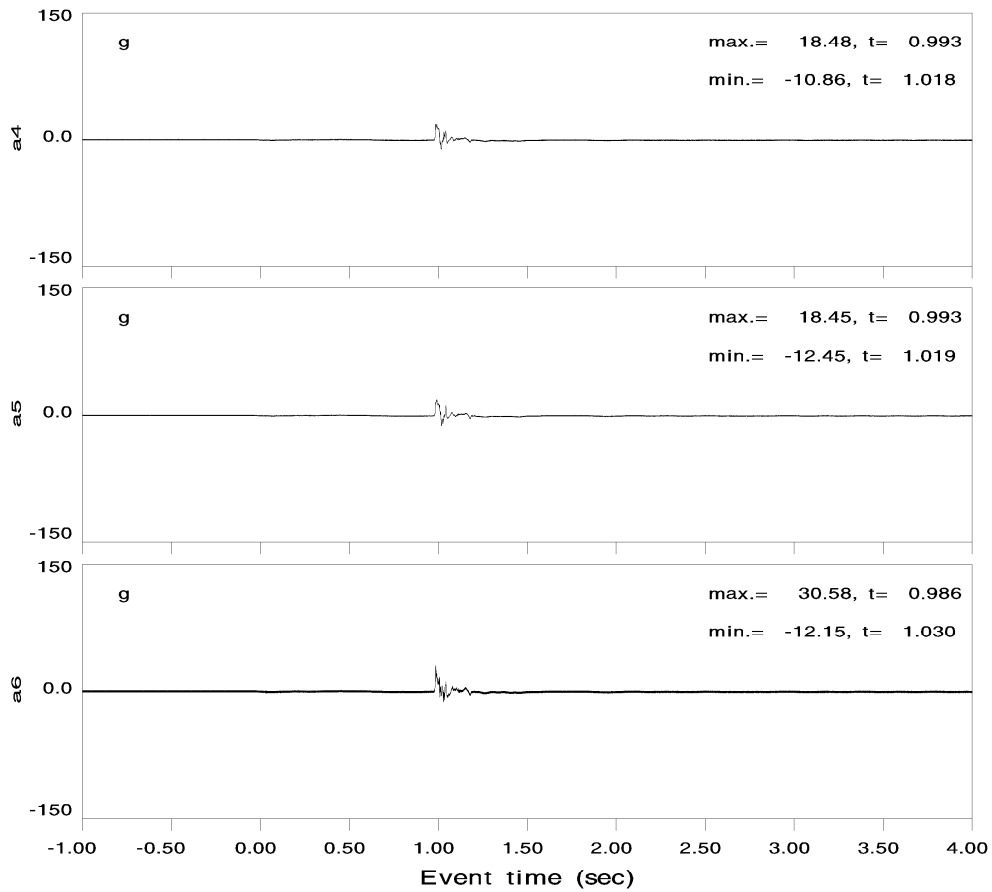
Test G140077



Page 1

Primary

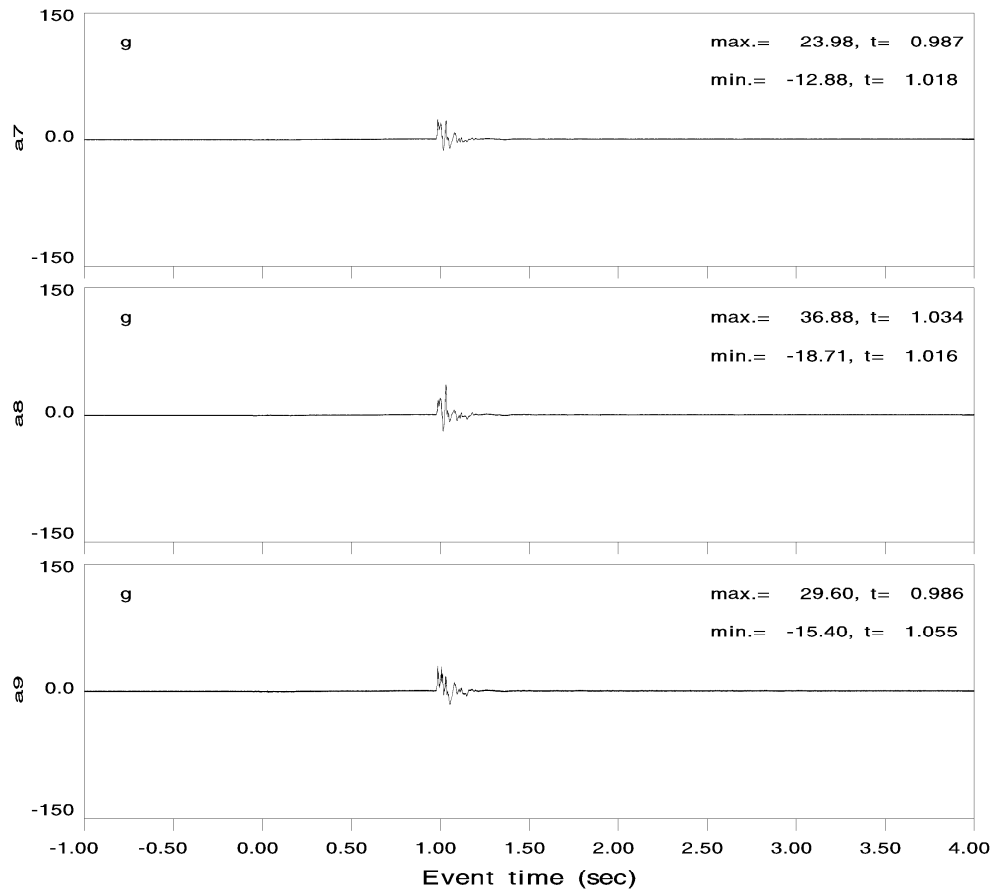
Test G140077



Page 2

Primary

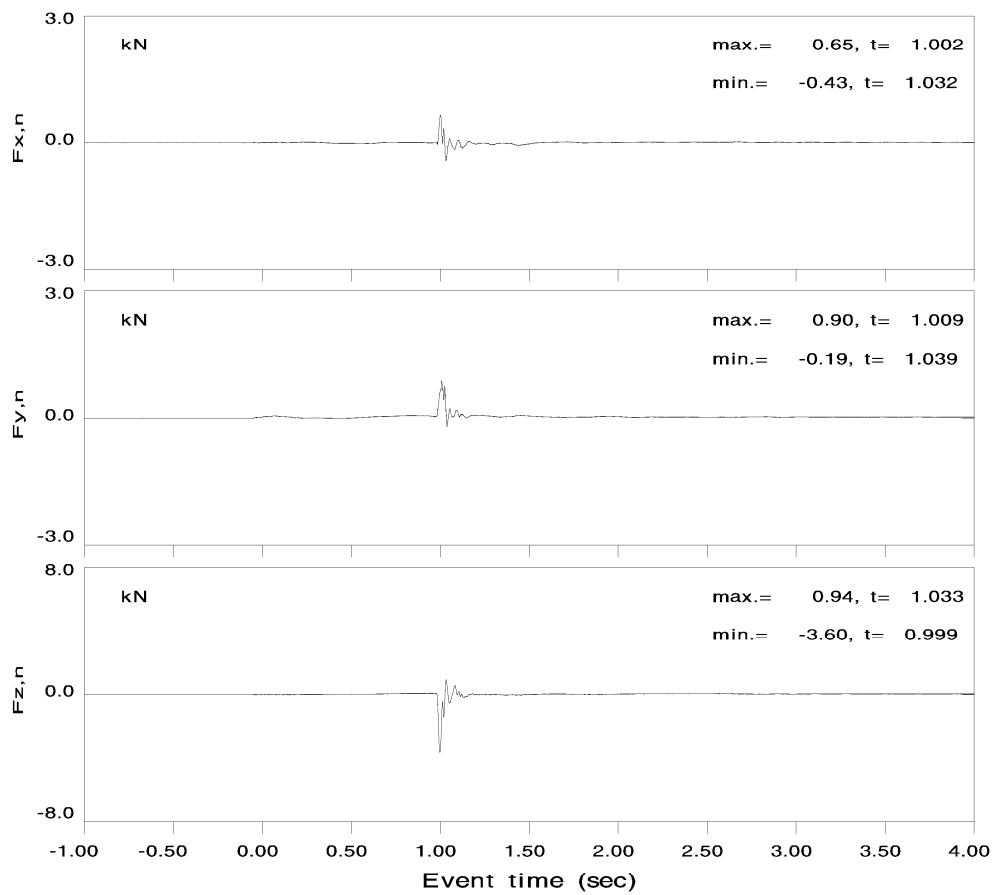
Test G140077



Page 3

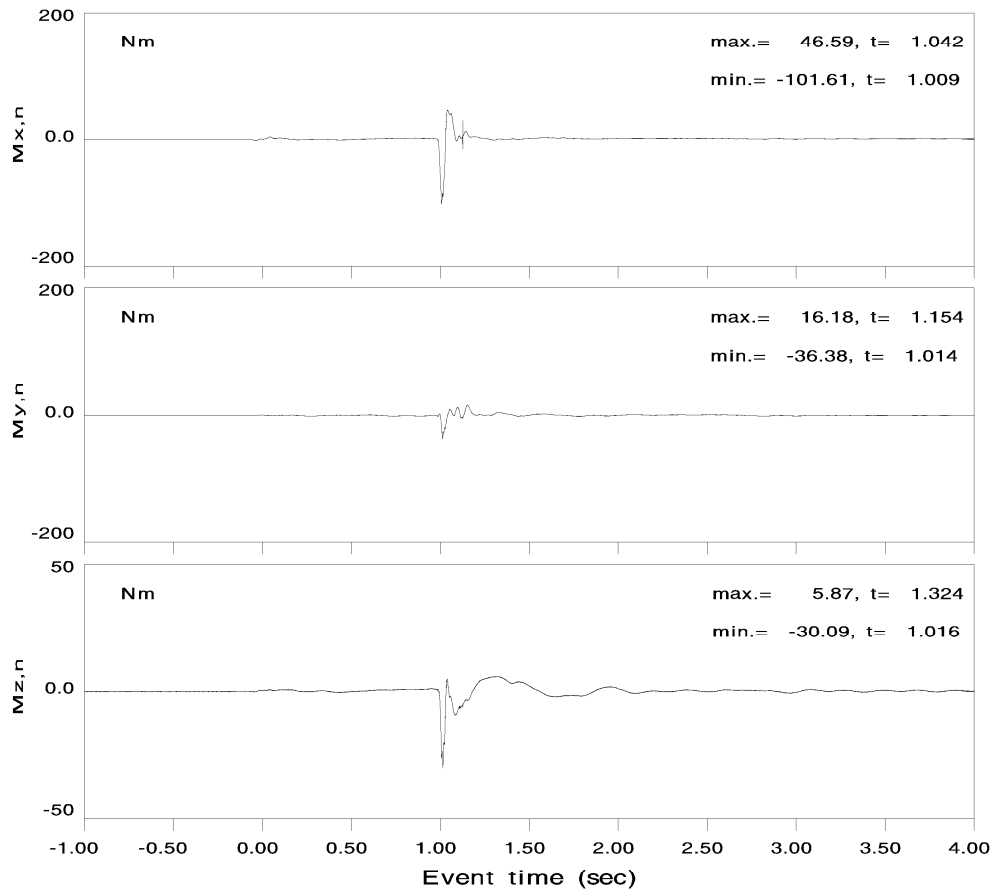
Primary

Test G140077

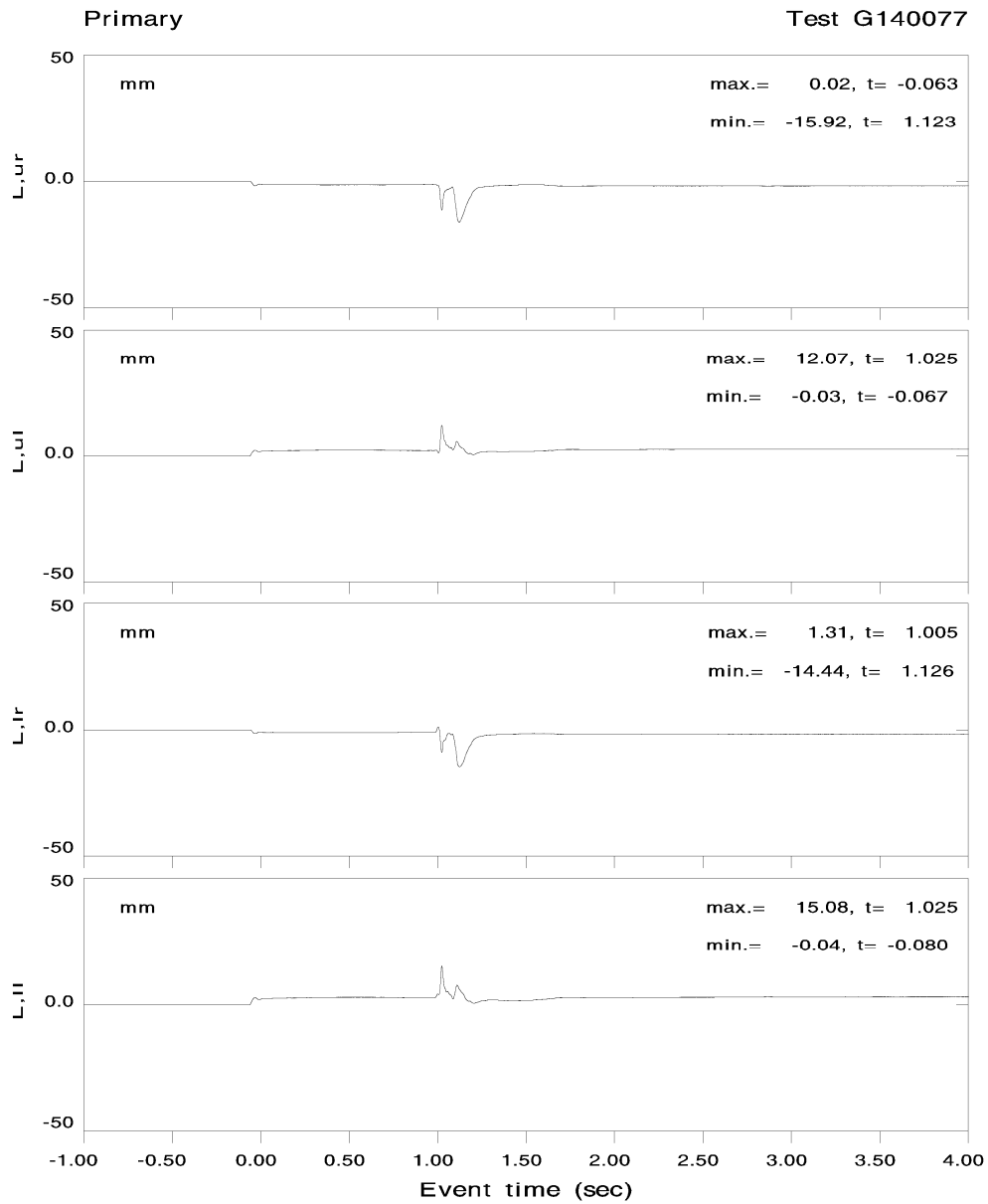


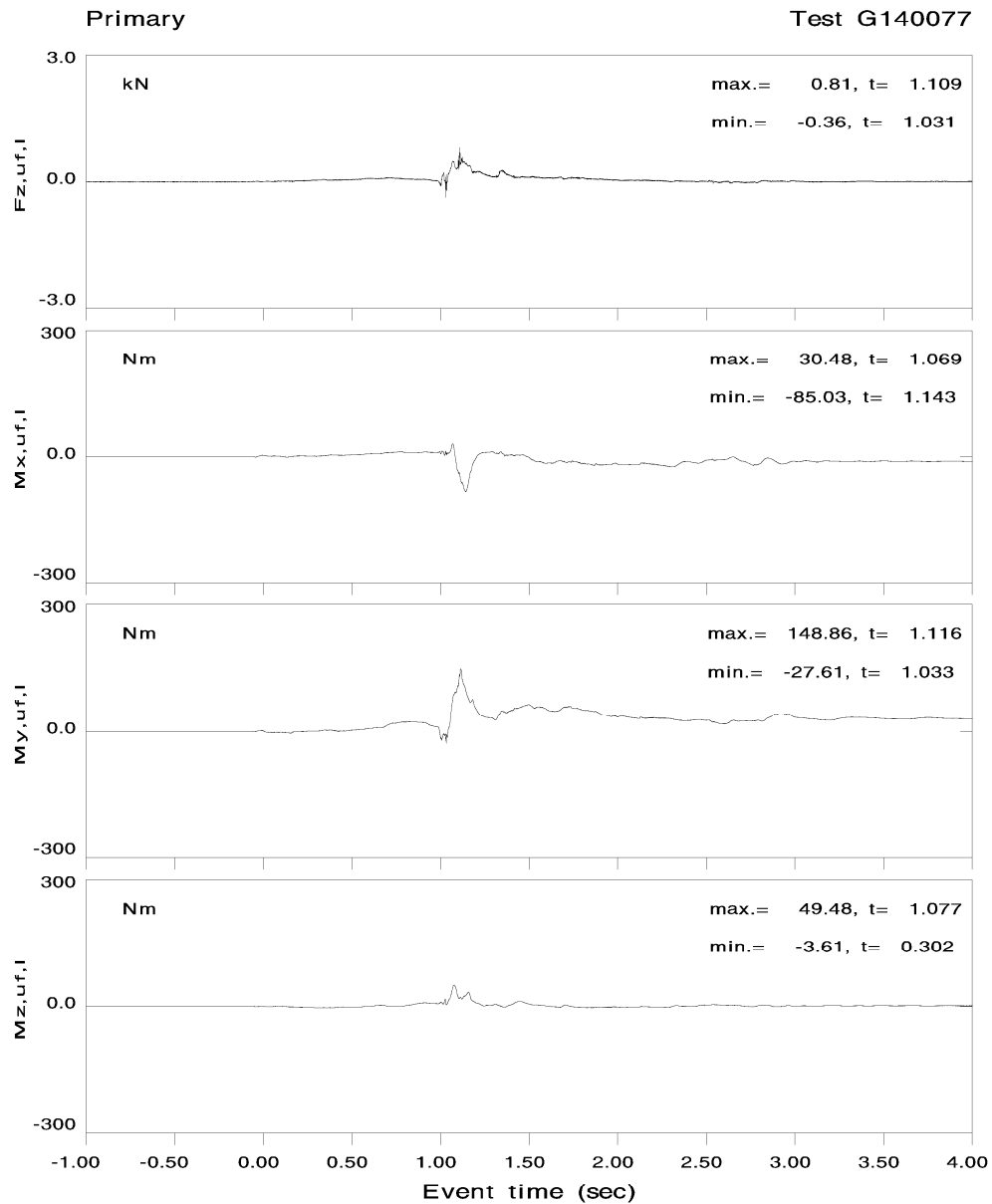
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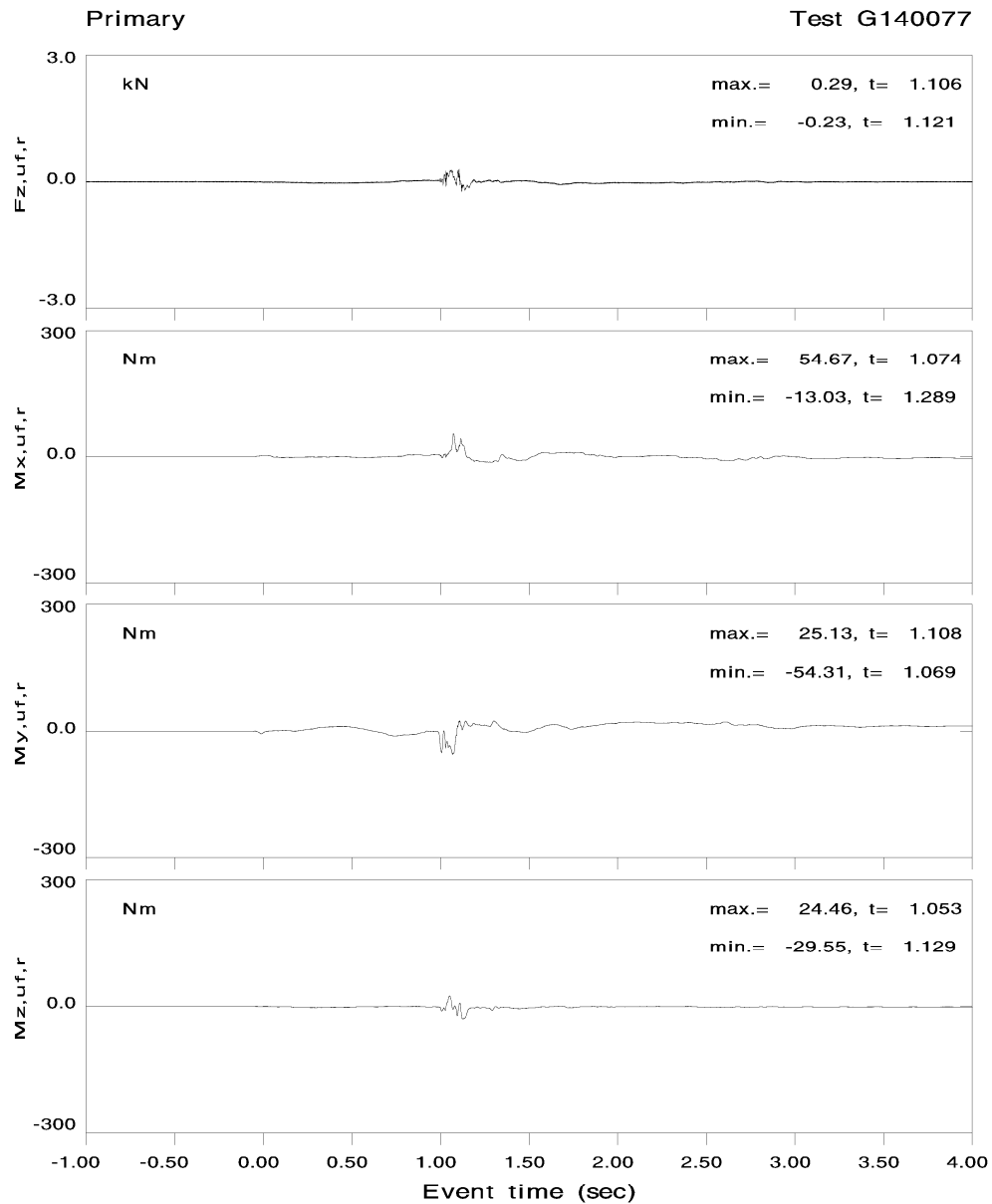
Test G140077

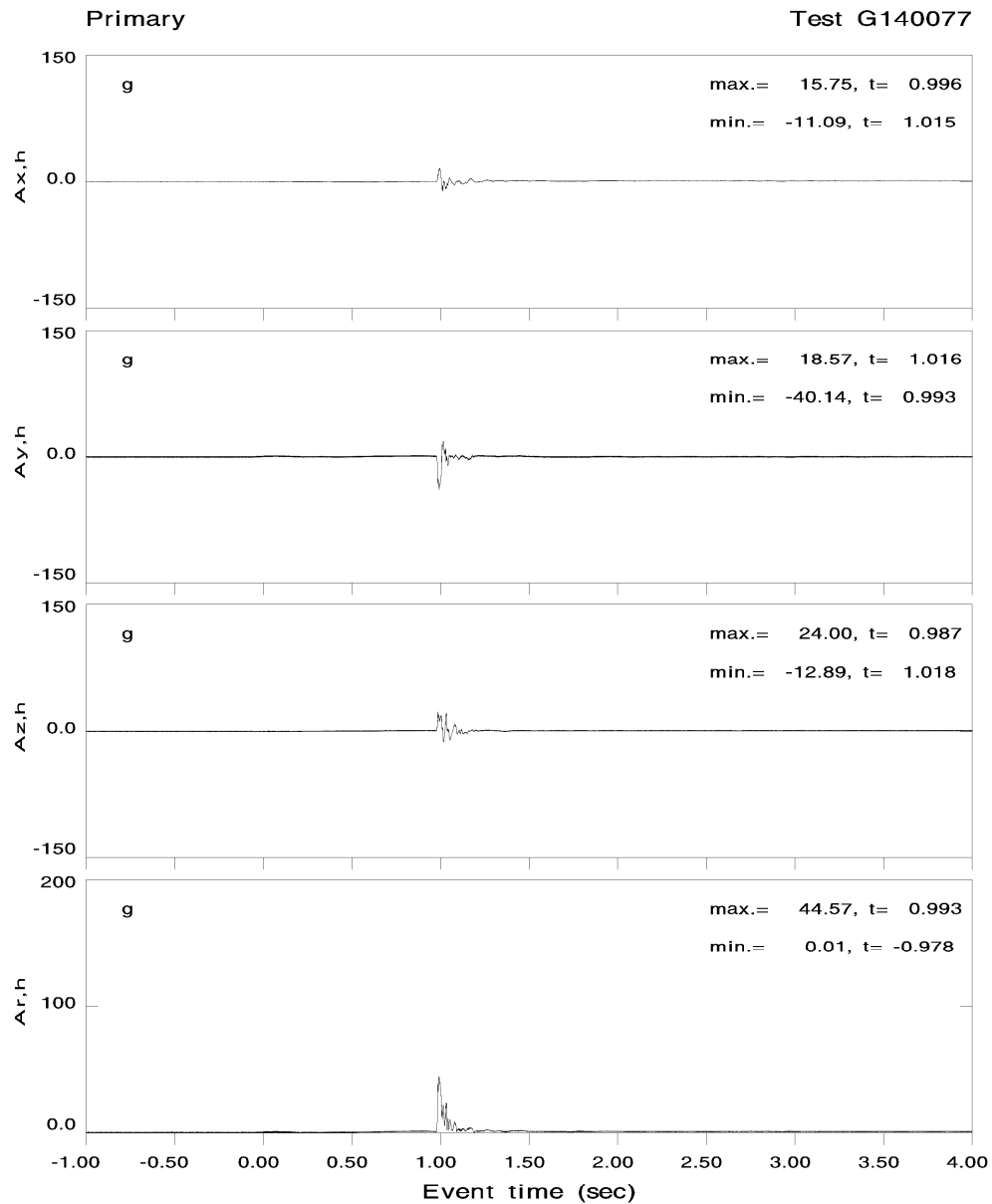


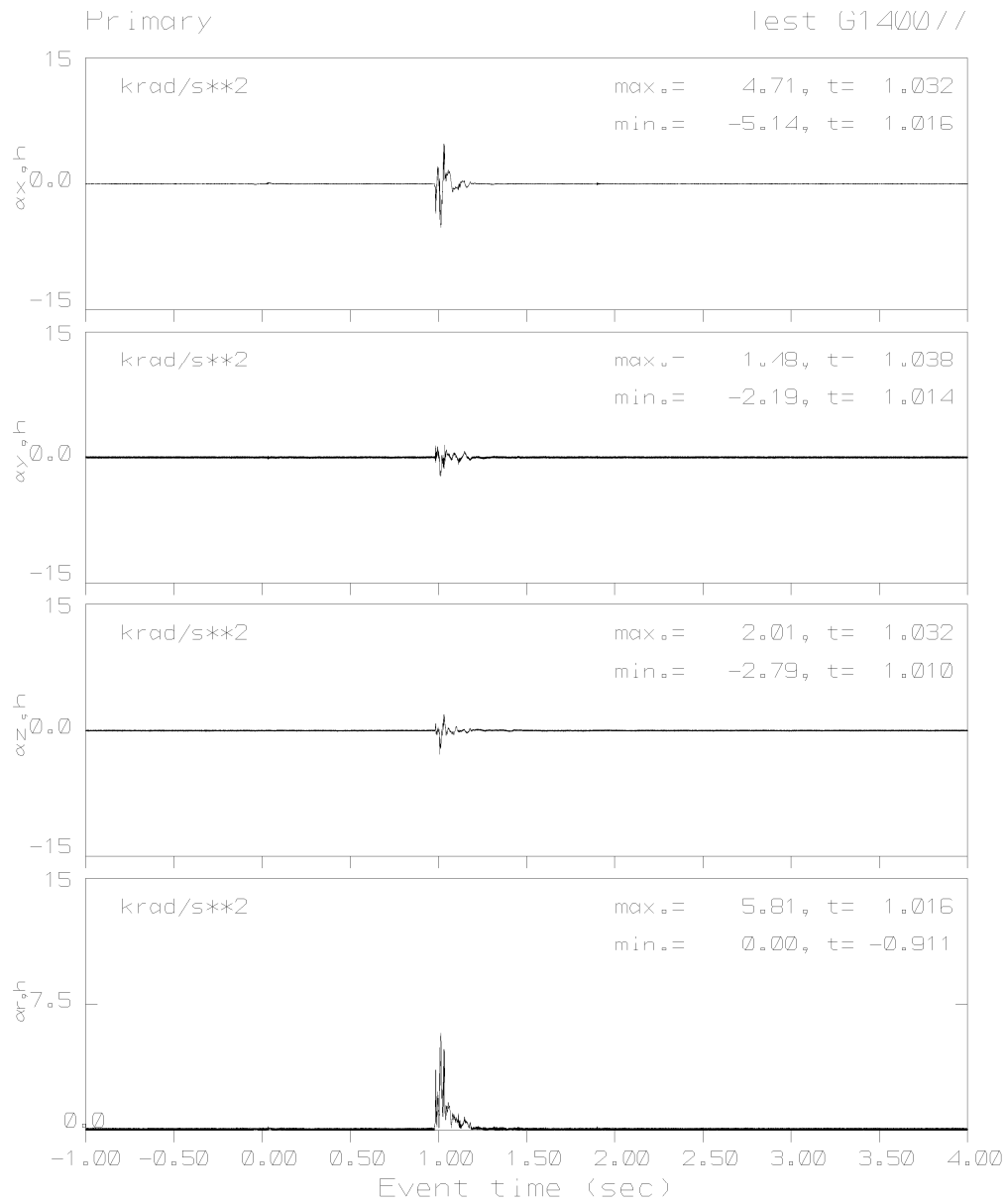
Page 5



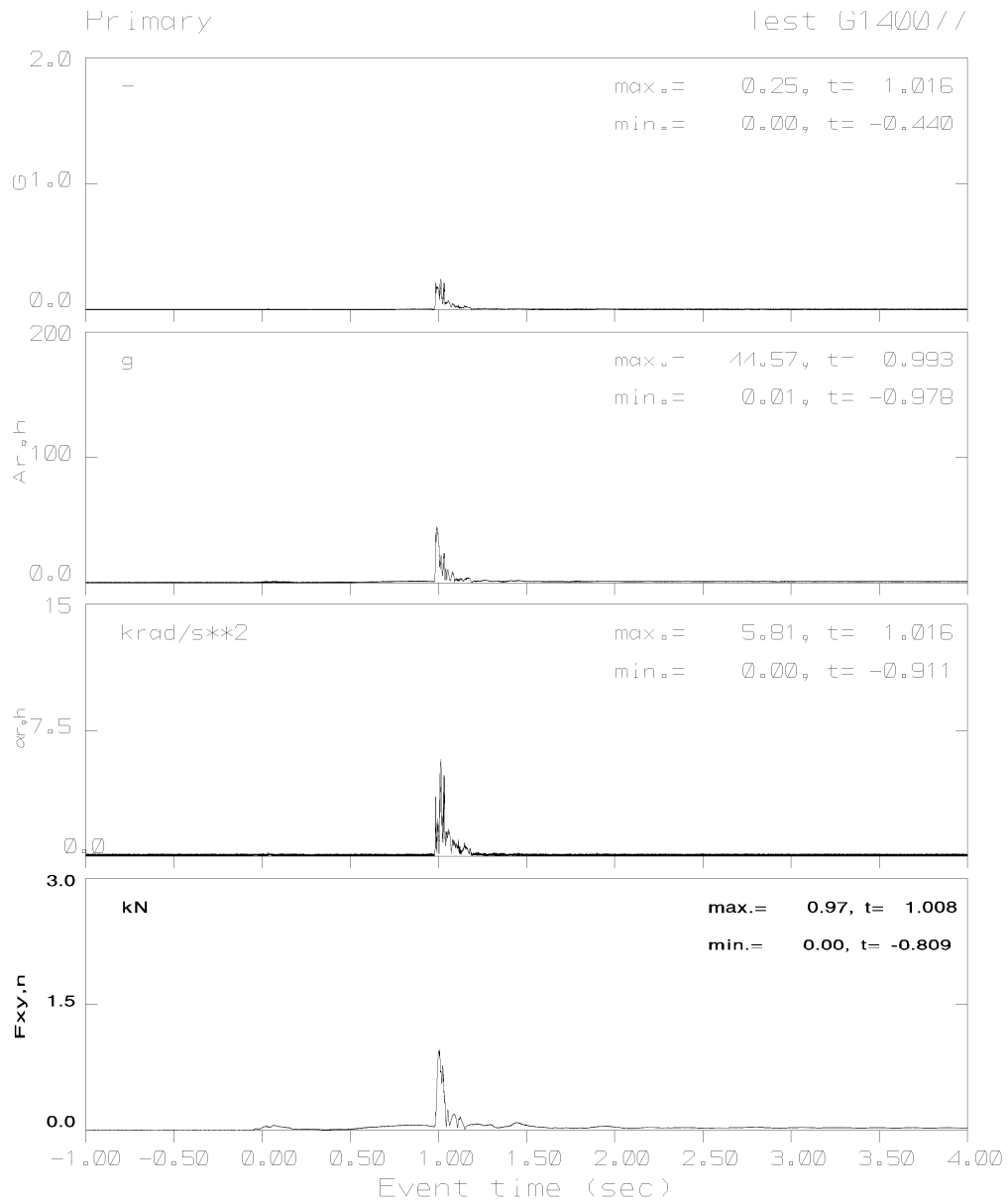




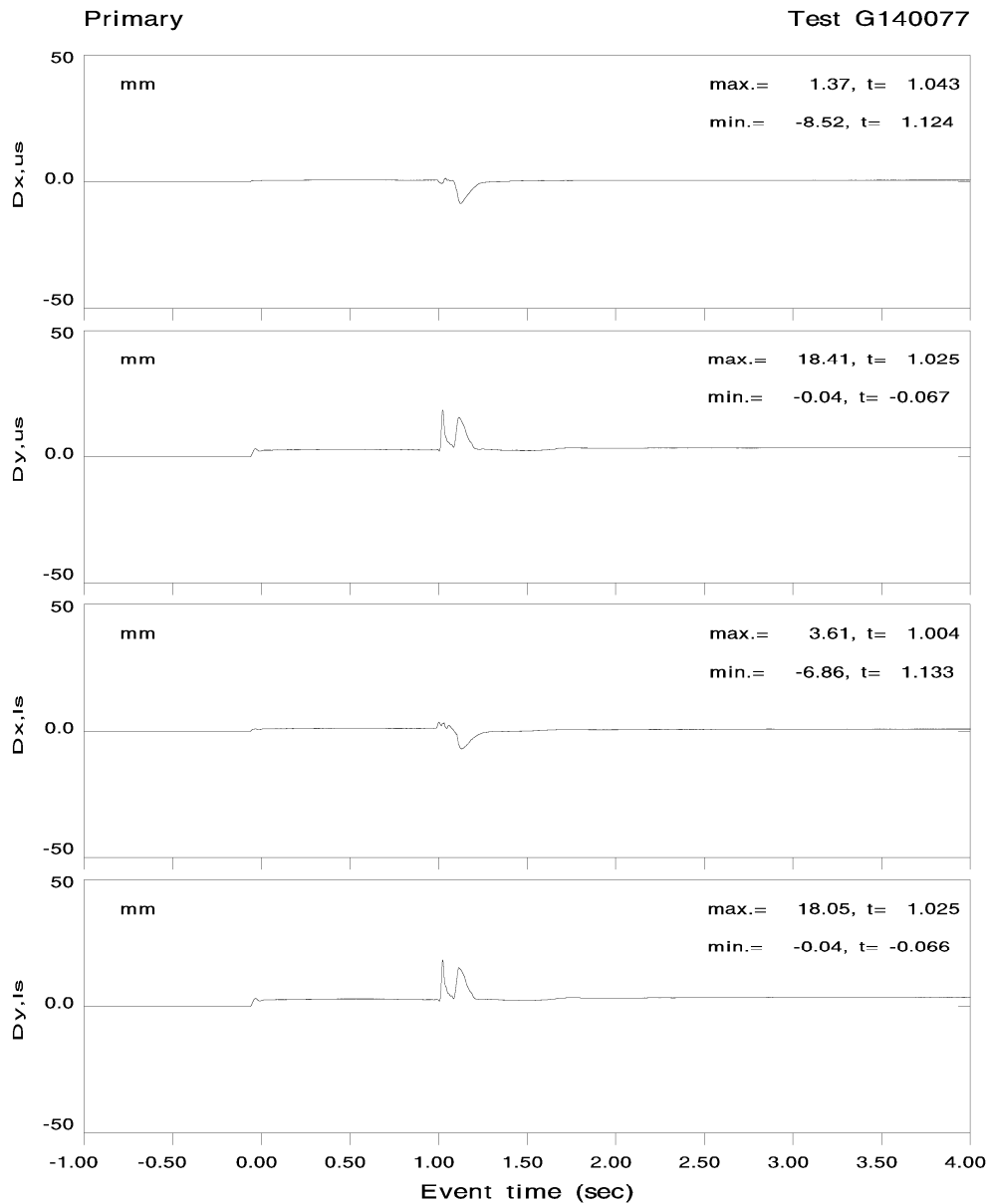




Page 10

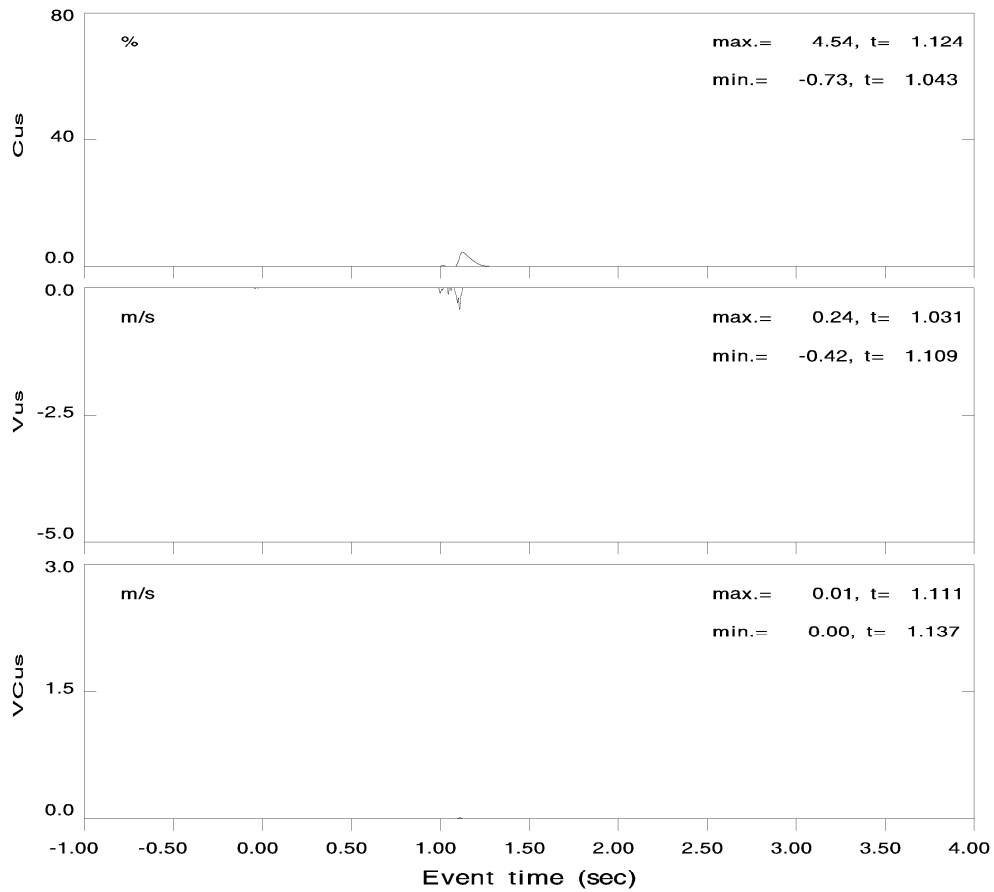


Page 11



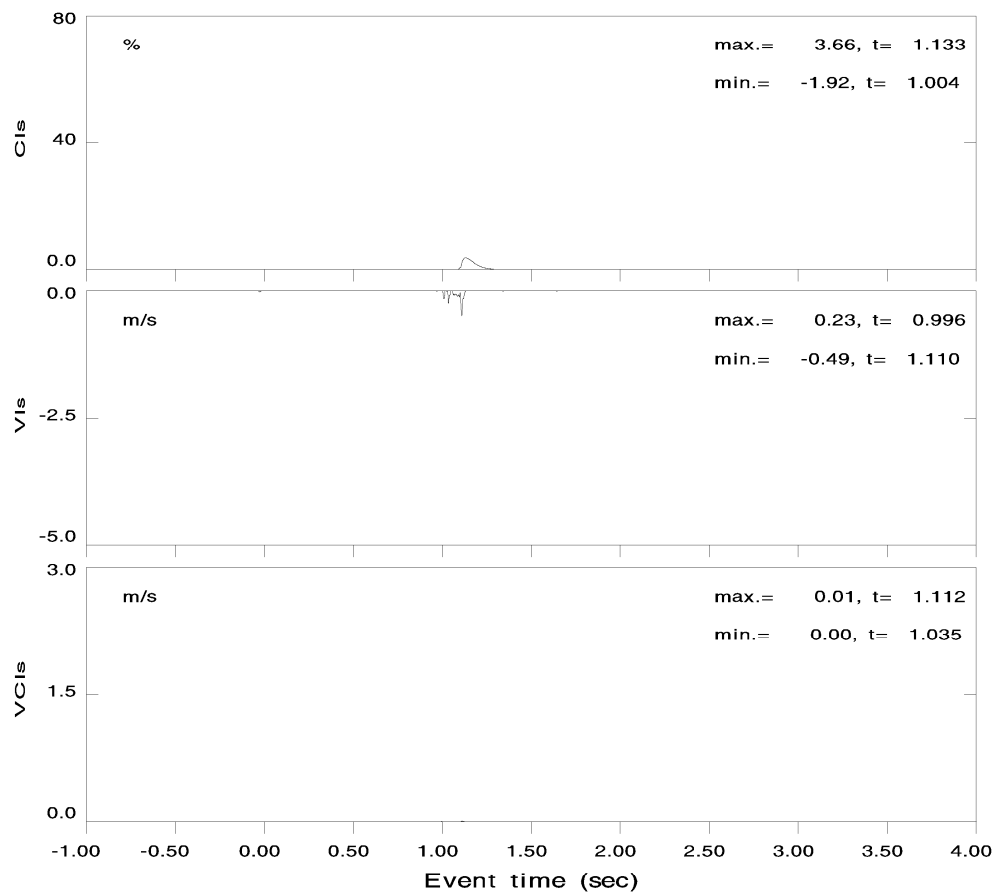
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Test G140077



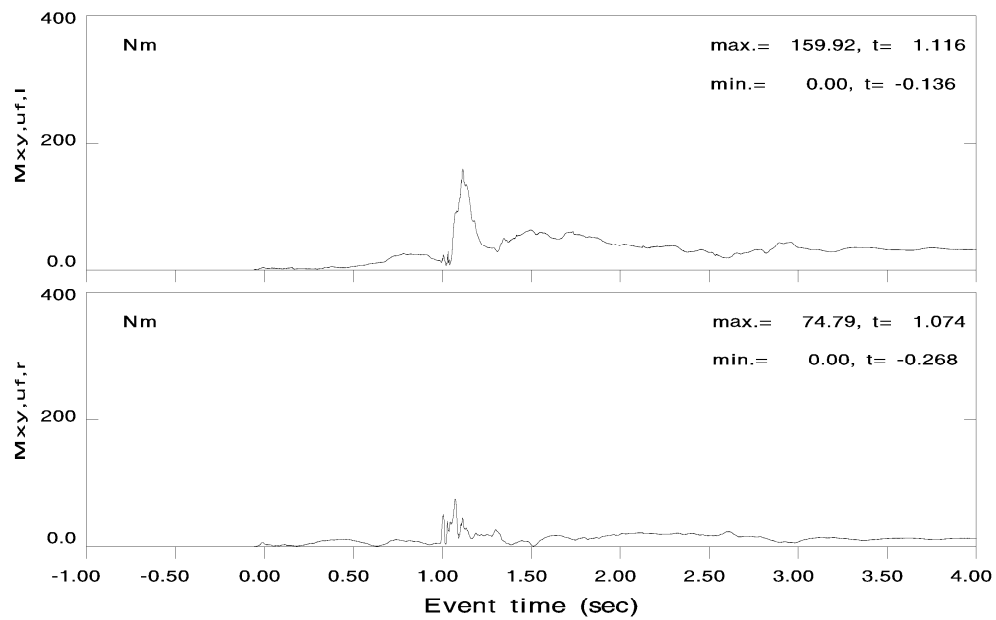
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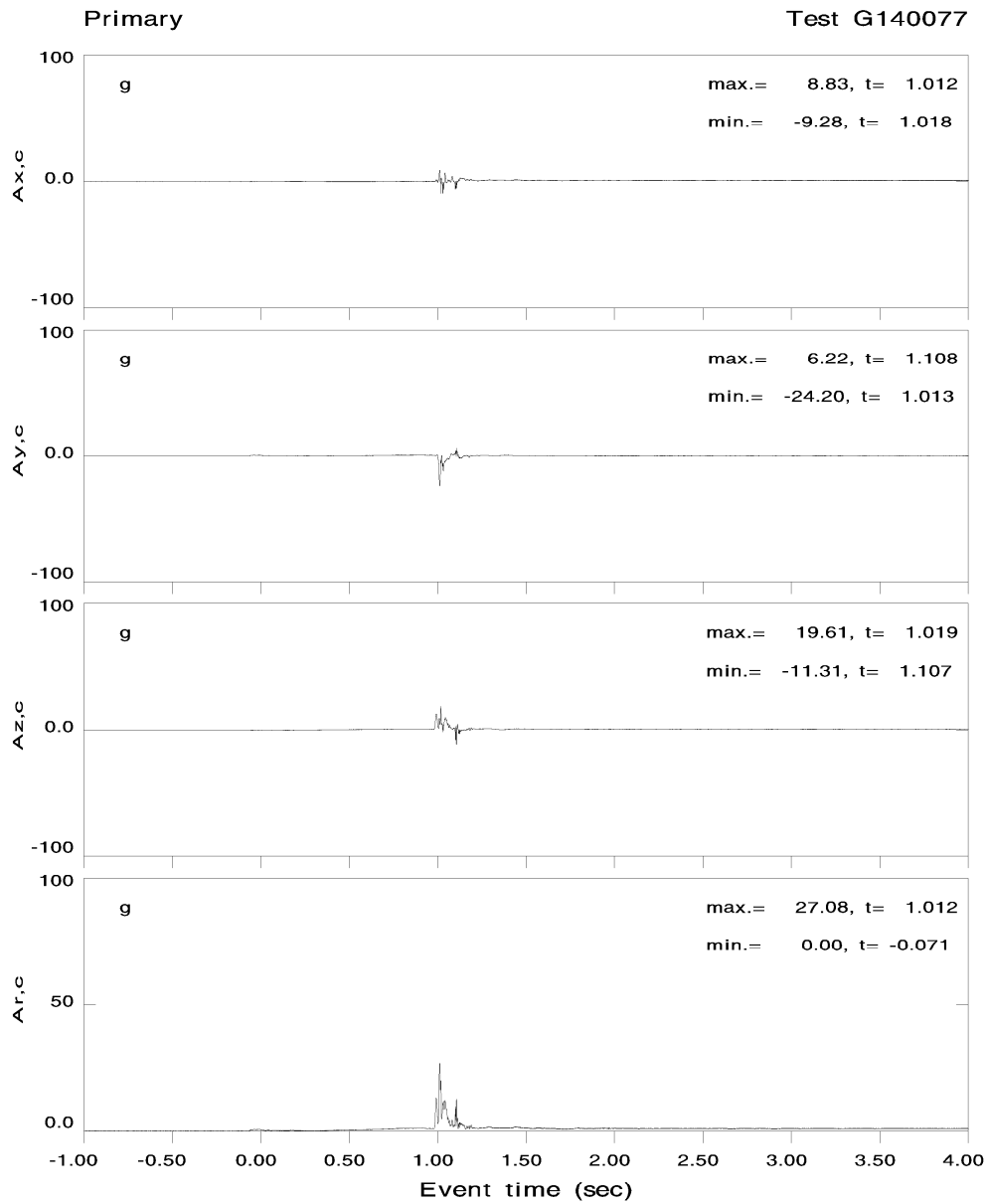
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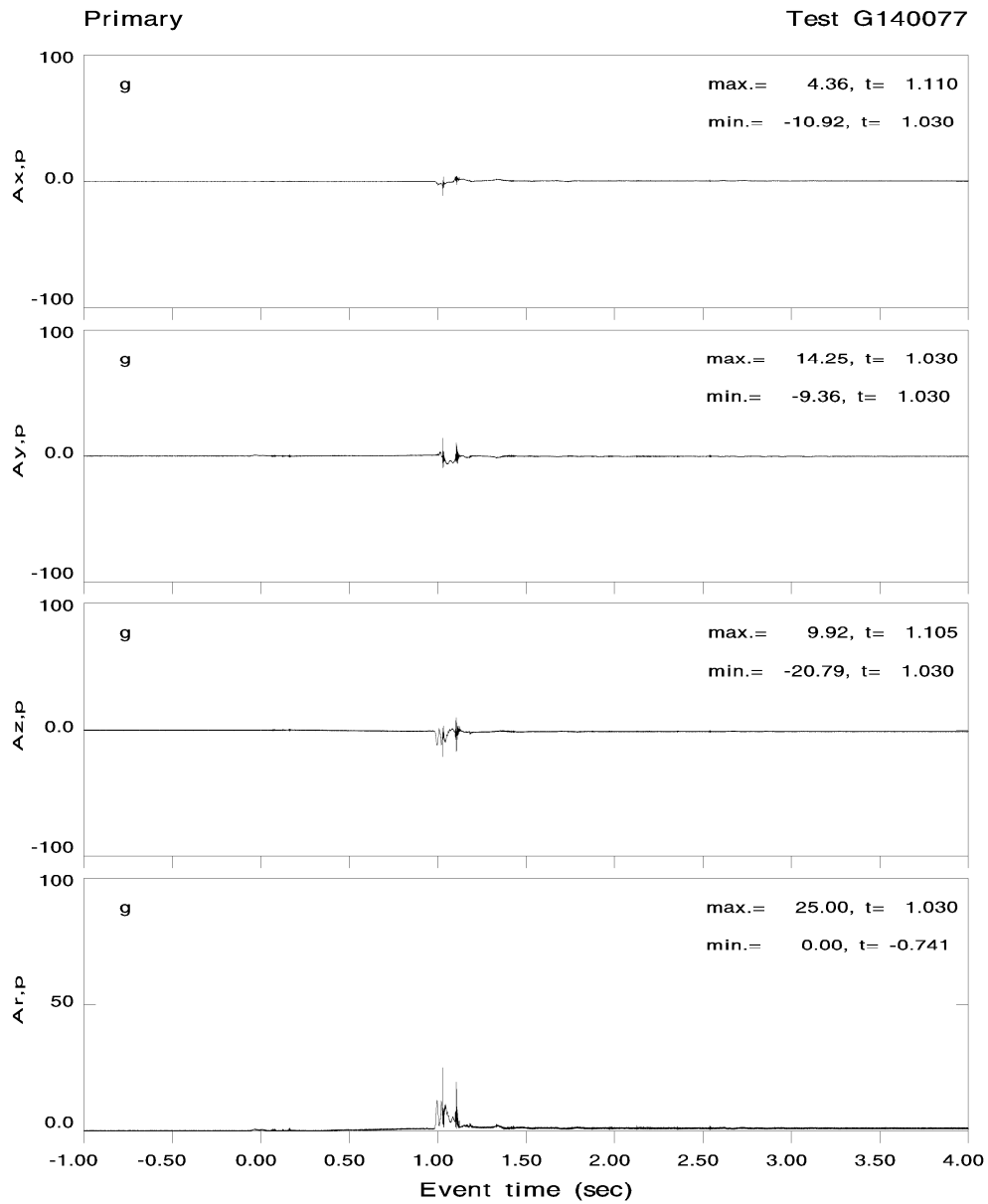


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Test G140077

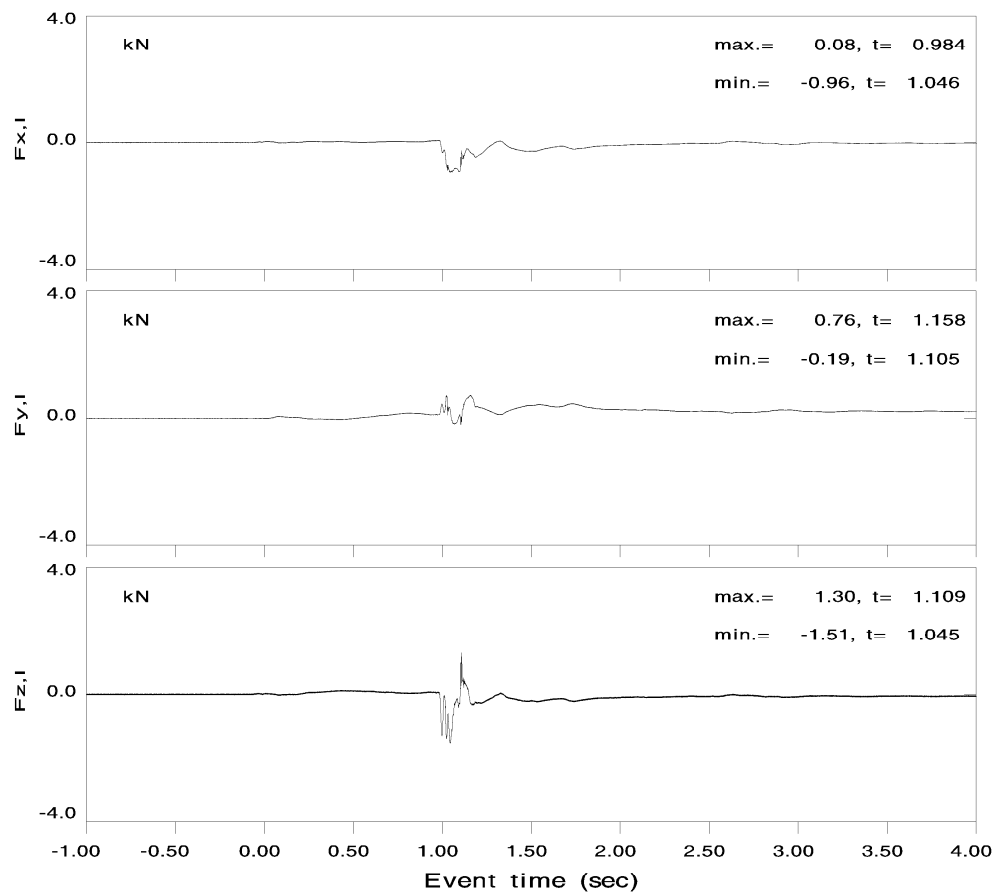






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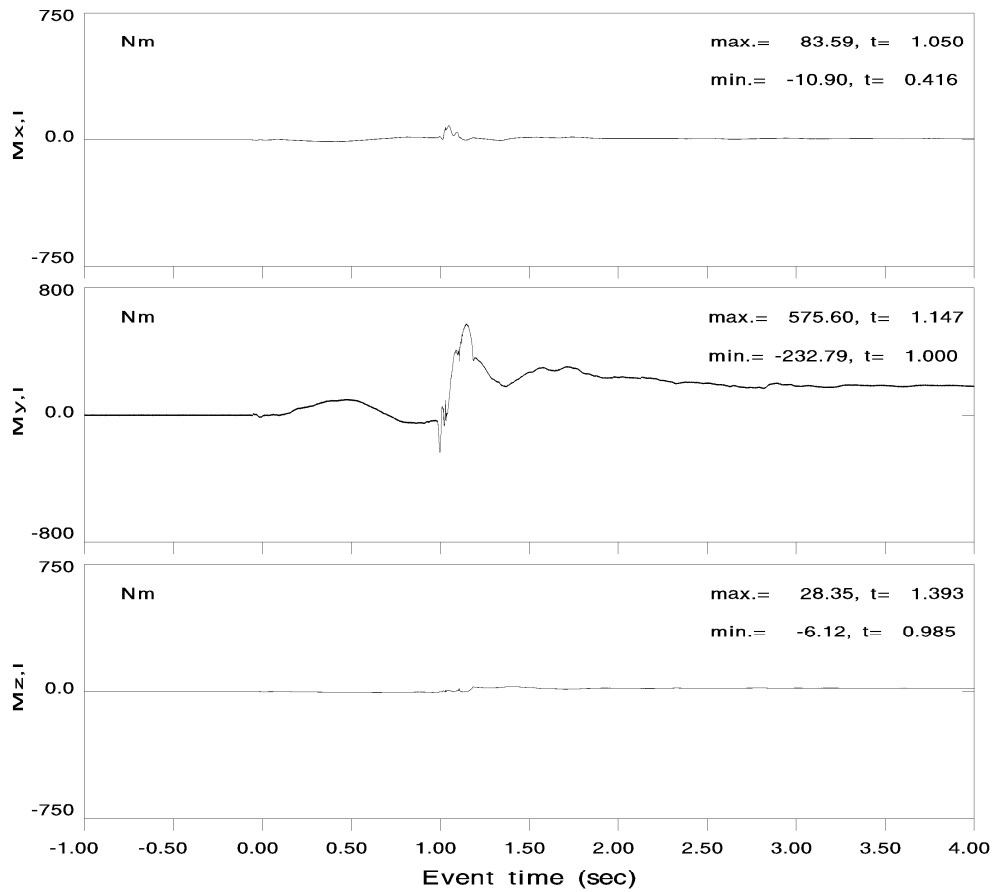
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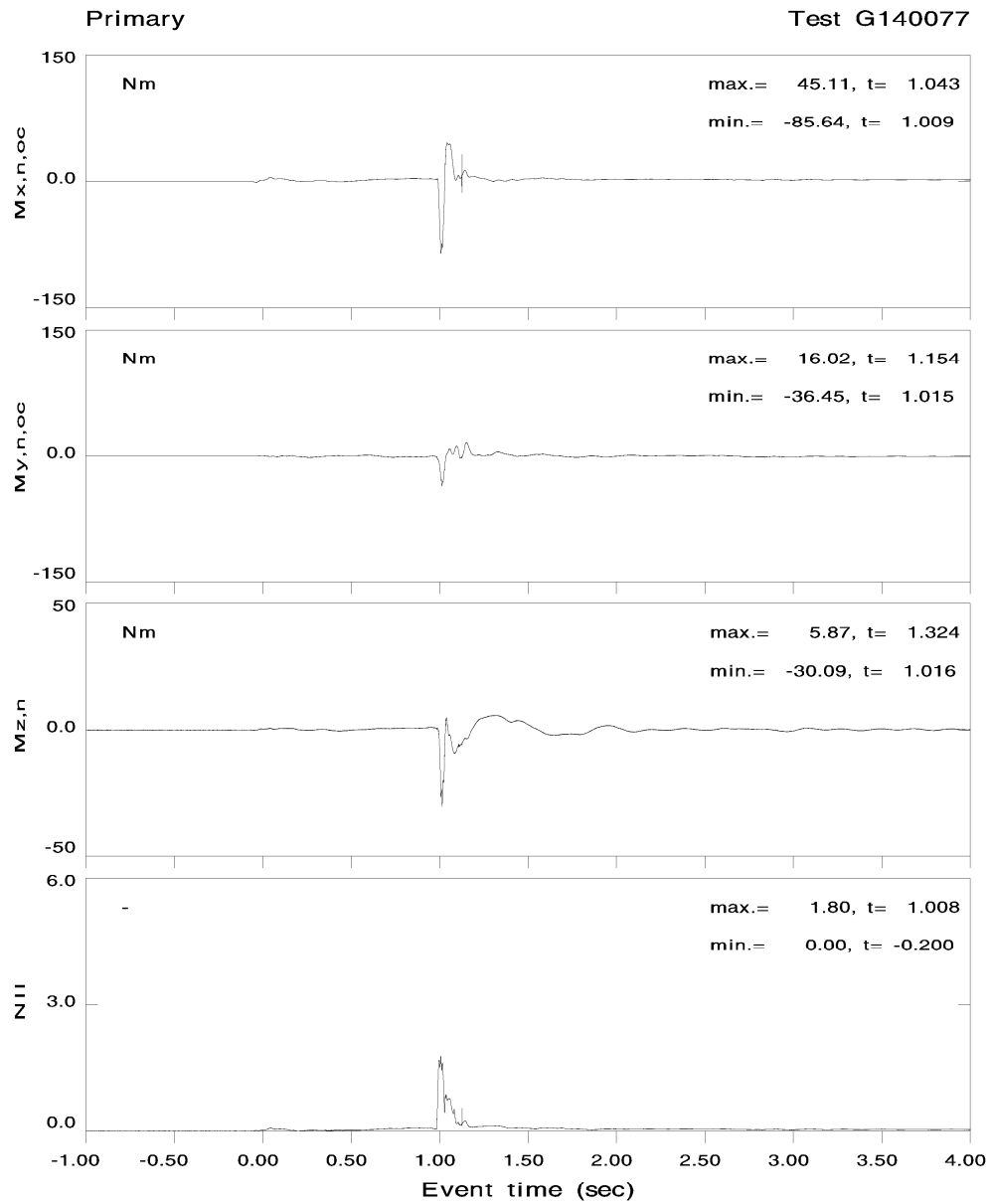


Page 18

Primary

Test G140077





2.4 G140078

G140078_ICM.IC1

Test Number : G140078
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 1
Index for VCmax Location                   = 2
maximum Abdomen Penetration               = 0.000
maximum GAMBIT                           = 0.290
Cmax                                       = 1.460
VCmax                                     = 0.000
HIC                                        = 188.0
NII (2002 MATD Neck)                     = 0.5
Location of Cmax                          : upper sternum
Location of VCmax                         : lower sternum

```

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.002
Normalized Cost of Survival               = 0.001
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.962	1.000	1.000	1.000	1.000	0
1	0.016	0.000	0.000	0.000	0.000	0
2	0.013	0.000	0.000	0.000	0.000	0
3	0.008	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.068	0.000	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.002	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

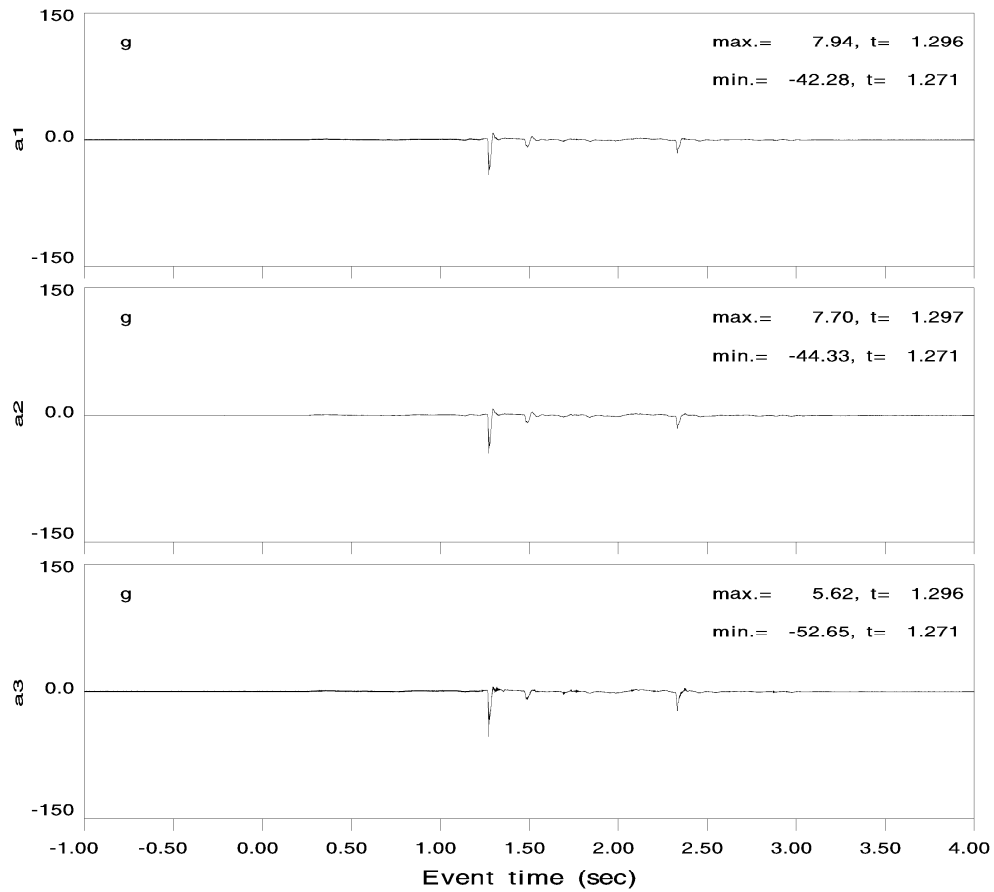
G140078.rpt				
Test G140078, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	19.62 g	1.291	-2.89 g	1.324
Ay,c	3.82 g	1.282	-2.79 g	1.277
Az,c	8.34 g	1.290	-1.27 g	1.319
Ax,p	20.11 g	1.293	-1.43 g	1.505
Ay,p	1.12 g	1.295	-2.21 g	2.554
Az,p	1.15 g	1.342	-6.30 g	1.290
spare	0.00 -	0.741	0.00 -	3.269
spare	0.00 -	2.238	0.00 -	-0.343
L,ur	0.65 mm	1.169	-3.07 mm	1.283
L,lr	0.68 mm	1.171	-1.91 mm	1.308
a1	7.94 g	1.296	-42.28 g	1.271
a2	7.70 g	1.297	-44.33 g	1.271
a3	5.62 g	1.296	-52.65 g	1.271
a4	6.53 g	1.296	-42.23 g	1.271
a5	6.47 g	1.297	-39.48 g	1.271
a6	5.83 g	1.296	-53.40 g	1.271
Mx,l	14.02 Nm	1.679	-21.27 Nm	2.260
My,l	560.46 Nm	1.676	-202.86 Nm	2.009
Mz,l	16.87 Nm	2.771	-29.72 Nm	1.680
Fx,l	0.46 kN	1.951	-0.34 kN	1.300
Fy,l	0.49 kN	1.668	-0.39 kN	2.277
Fz,l	0.34 kN	2.357	-0.53 kN	1.673
spare	0.00 -	3.747	0.00 -	0.603
spare	0.00 -	1.663	0.00 -	2.152
spare	0.00 -	0.770	0.00 -	2.548
spare	0.00 -	1.091	0.00 -	0.074
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	1.979	0.00 -	1.369
a7	17.81 g	1.270	-4.49 g	1.309
a8	28.21 g	1.271	-4.88 g	1.334
a9	27.27 g	1.271	-5.09 g	1.333
Fz,uf,r	0.20 kN	1.784	-1.43 kN	1.301
Mx,uf,r	52.72 Nm	2.218	-58.18 Nm	1.895
My,uf,r	66.54 Nm	1.710	-7.19 Nm	0.602
Mz,uf,r	26.71 Nm	1.330	-21.15 Nm	1.823
Fz,uf,l	0.25 kN	1.814	-1.51 kN	1.301
Mx,uf,l	59.38 Nm	1.895	-40.23 Nm	1.301
My,uf,l	81.11 Nm	1.700	-11.86 Nm	2.317
Mz,uf,l	41.76 Nm	1.881	-18.78 Nm	1.153
Fx,n	0.07 kN	1.984	-0.37 kN	1.282
Fy,n	0.07 kN	2.358	-0.08 kN	2.282
Fz,n	0.52 kN	1.300	-0.68 kN	1.284
Mx,n	6.71 Nm	2.379	-10.70 Nm	2.356
My,n	20.62 Nm	1.332	-9.79 Nm	1.959
Mz,n	4.35 Nm	2.695	-6.16 Nm	2.494
L,ul	0.81 mm	2.464	-2.14 mm	1.277
L,ll	1.43 mm	2.367	-1.50 mm	1.277
Ax,h	59.52 g	1.271	-9.76 g	1.297
Ay,h	2.06 g	1.283	-9.90 g	2.331
Az,h	17.82 g	1.270	-4.49 g	1.309
ax,h	0.76 krad/s**2	2.371	-1.05 krad/s**2	2.331
ay,h	1.49 krad/s**2	1.279	-3.71 krad/s**2	1.271
az,h	0.34 krad/s**2	1.286	-0.69 krad/s**2	1.271
Ar,h	61.83 g	1.271	0.00 g	-0.693
ar,h	3.76 krad/s**2	1.271	0.00 krad/s**2	3.110
G	0.29 -	1.271	0.00 -	0.239
HIC	188.02	1.285	----	1.269
Fxy,n	0.38 kN	1.282	0.00 kN	0.007
Dx,us	0.07 mm	0.068	-2.74 mm	1.297
Dy,us	1.99 mm	2.369	-1.17 mm	1.169

		G140078.rpt		
Cus	1.46 %	1.297	-0.04 %	0.068
Vus	0.17 m/s	1.285	-0.27 m/s	1.274
VCus	0.00 m/s	1.276	0.00 m/s	1.284
Dx,ls	0.31 mm	2.360	-2.20 mm	1.313
Dy,ls	1.93 mm	2.275	-1.12 mm	1.171
Cl,s	1.17 %	1.313	-0.16 %	2.360
Vls	0.17 m/s	1.284	-0.19 m/s	1.293
VCl,s	0.00 m/s	1.306	0.00 m/s	1.324
Mxy,uf,r	77.27 Nm	1.888	0.00 Nm	-0.593
Mxy,uf,l	81.12 Nm	1.700	0.00 Nm	-0.702
Mx,n,oc	6.64 Nm	2.379	-9.51 Nm	2.356
My,n,oc	20.51 Nm	1.333	-10.51 Nm	1.959
NII	0.49 -	1.300	0.00 -	-0.962
Ar,p	20.95 g	1.293	0.02 g	-0.558
Ar,c	21.20 g	1.290	0.00 g	0.113

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

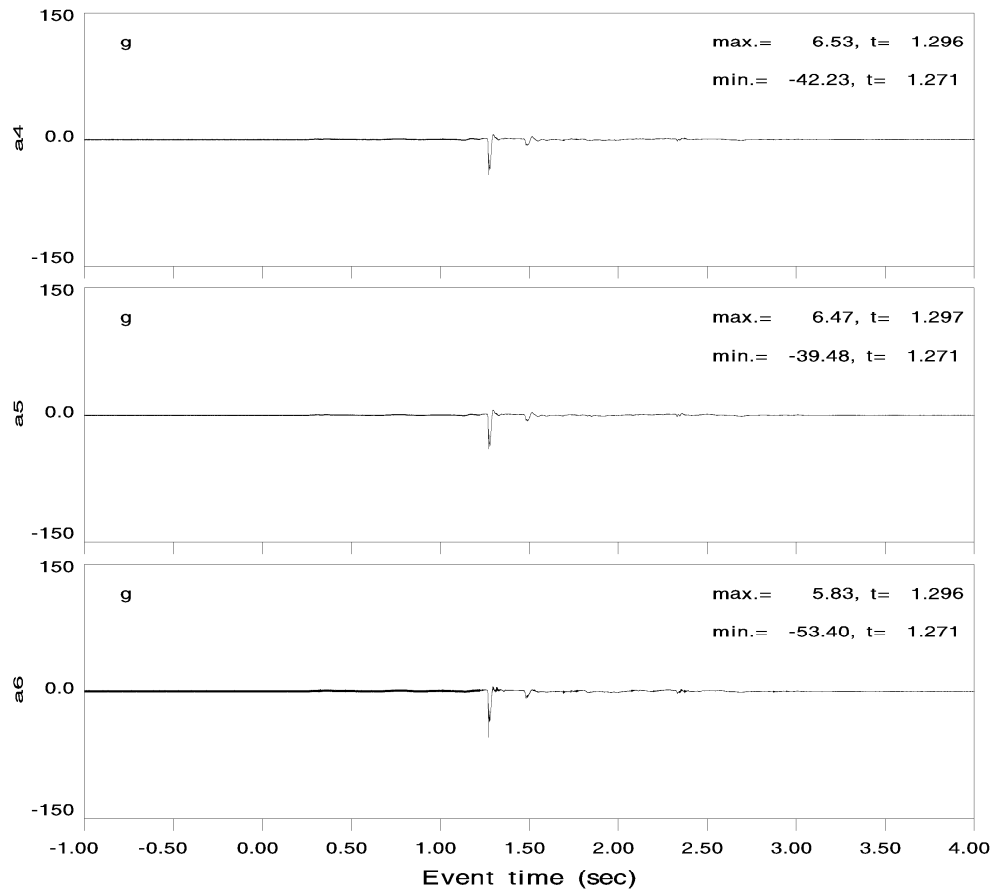
Test G140078



Page 1

Primary

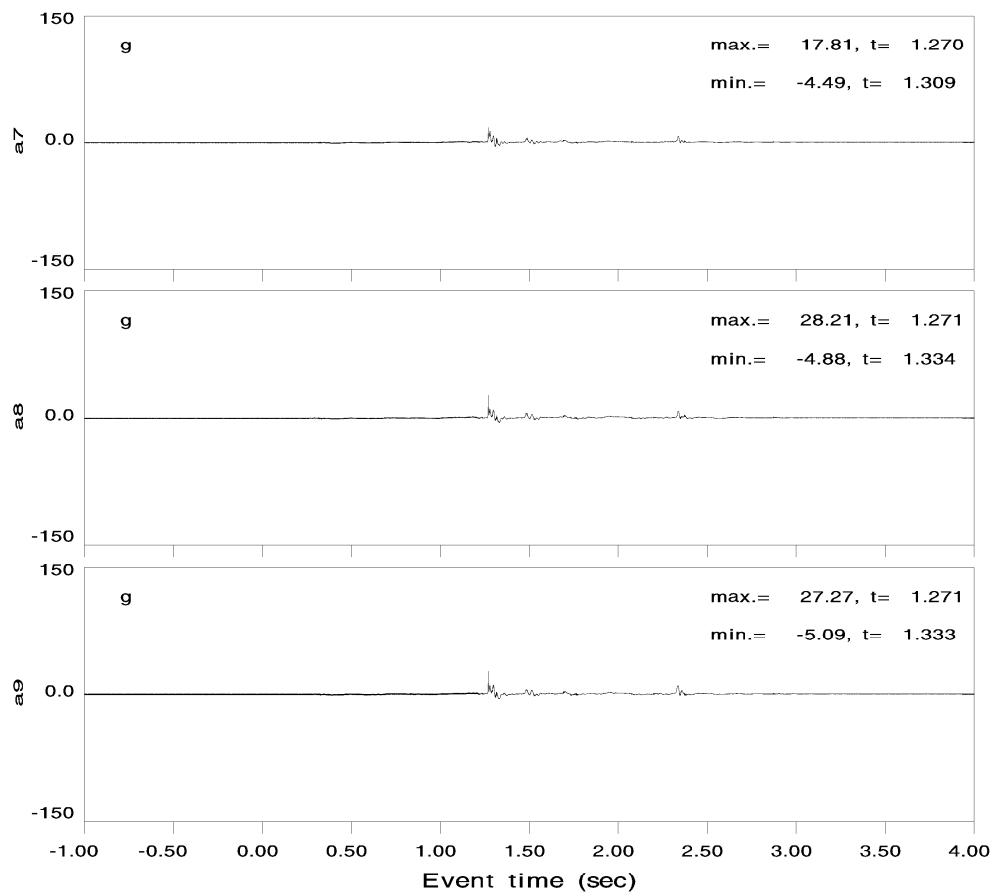
Test G140078



Page 2

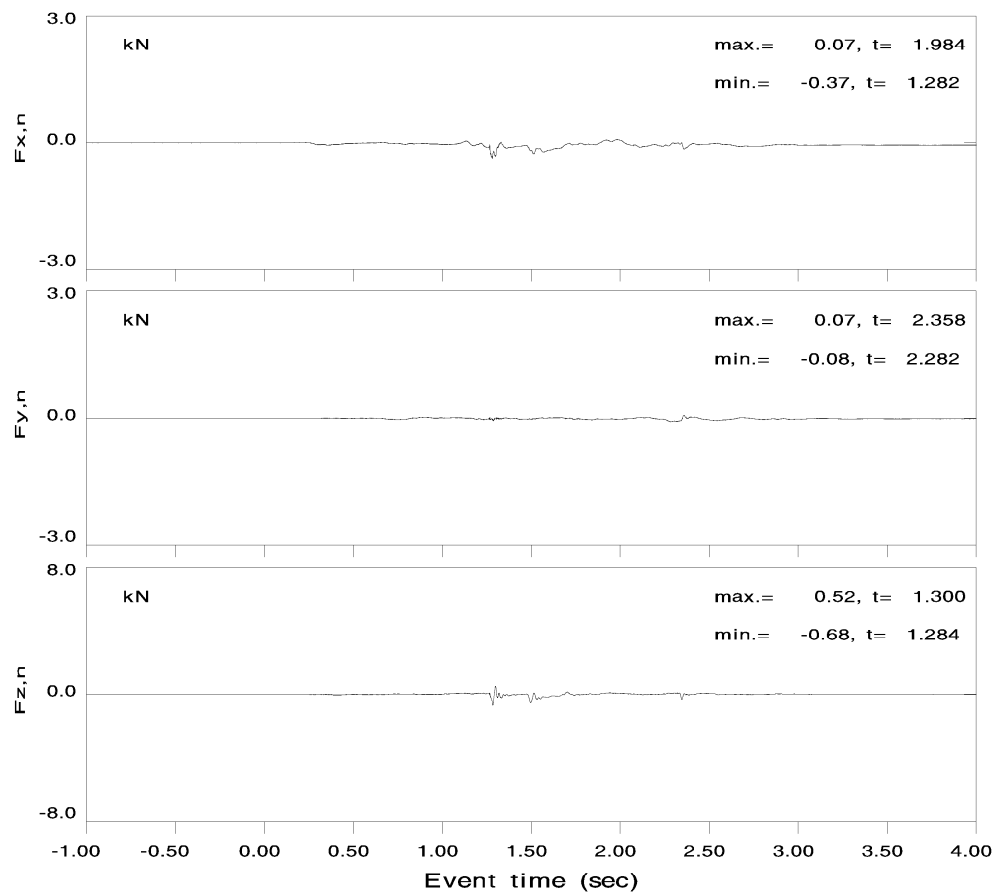
Primary

Test G140078



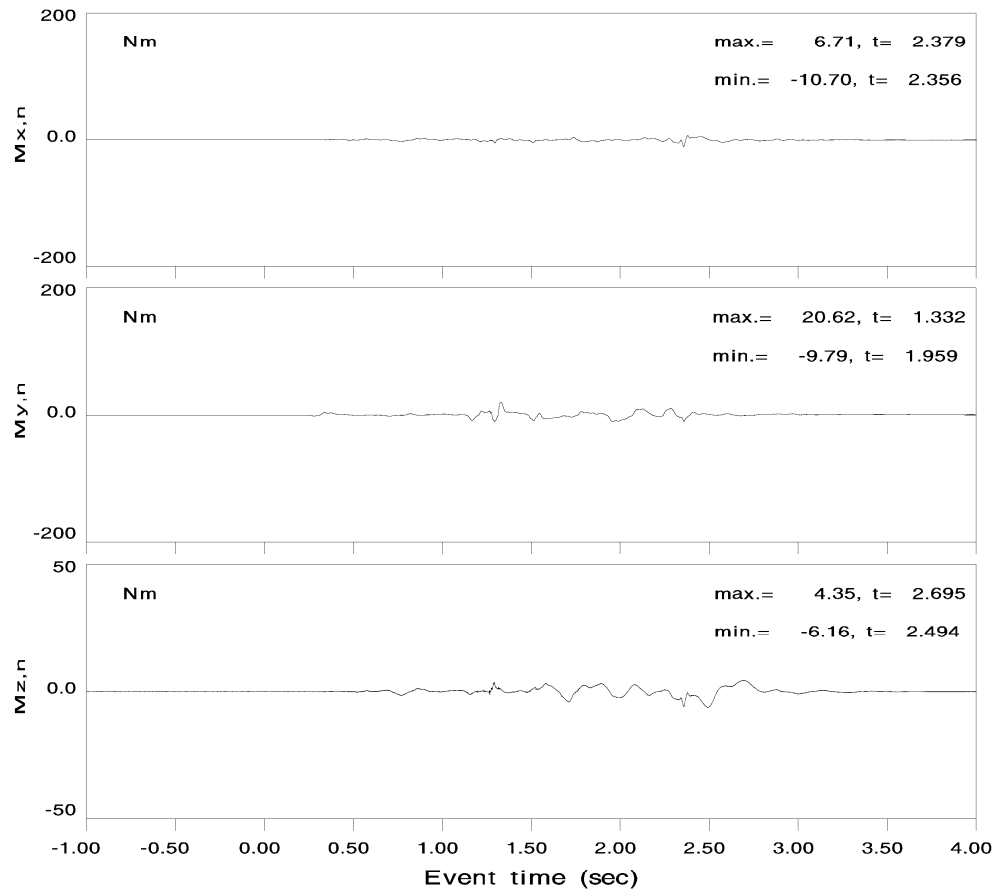
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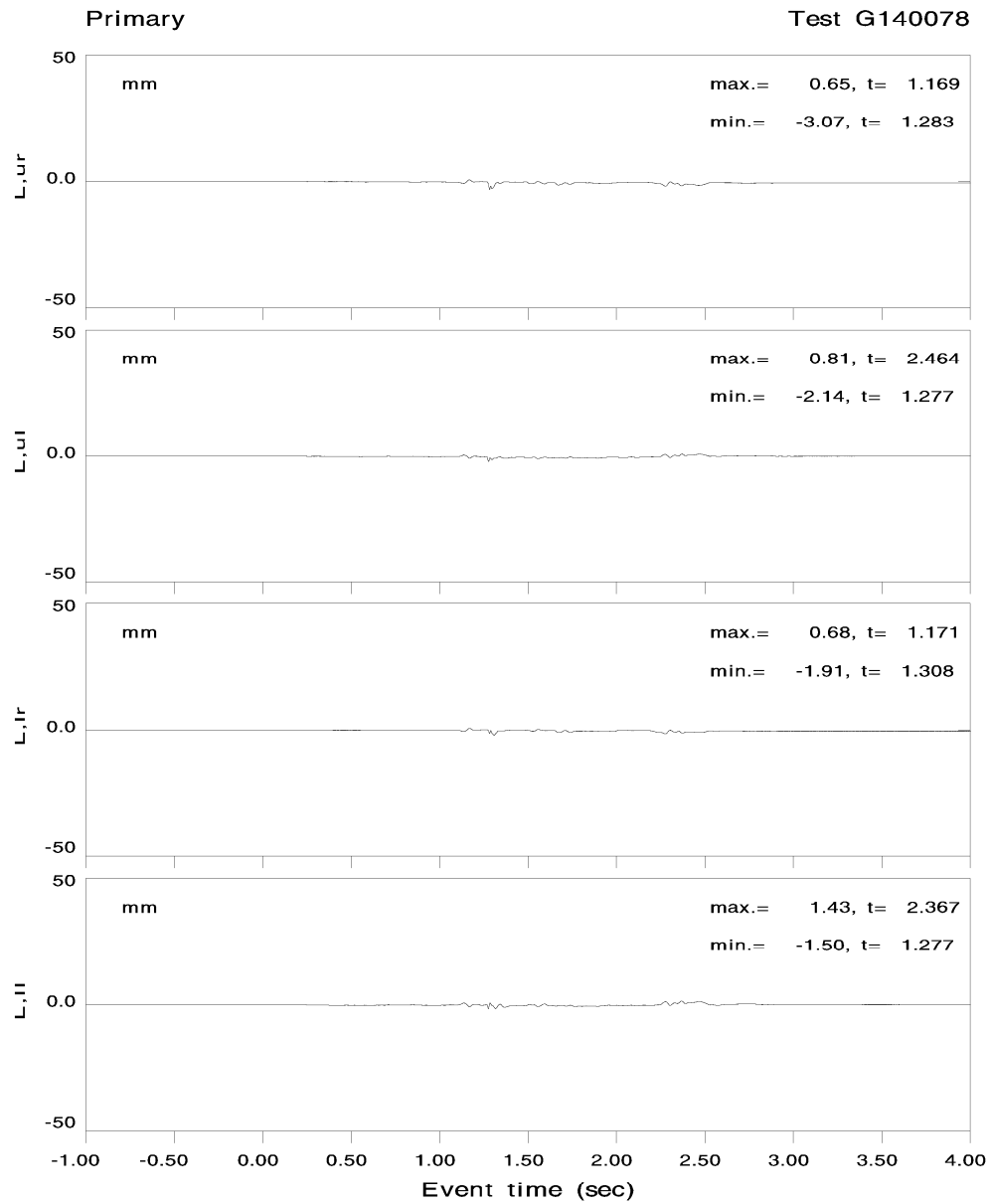
Test G140078

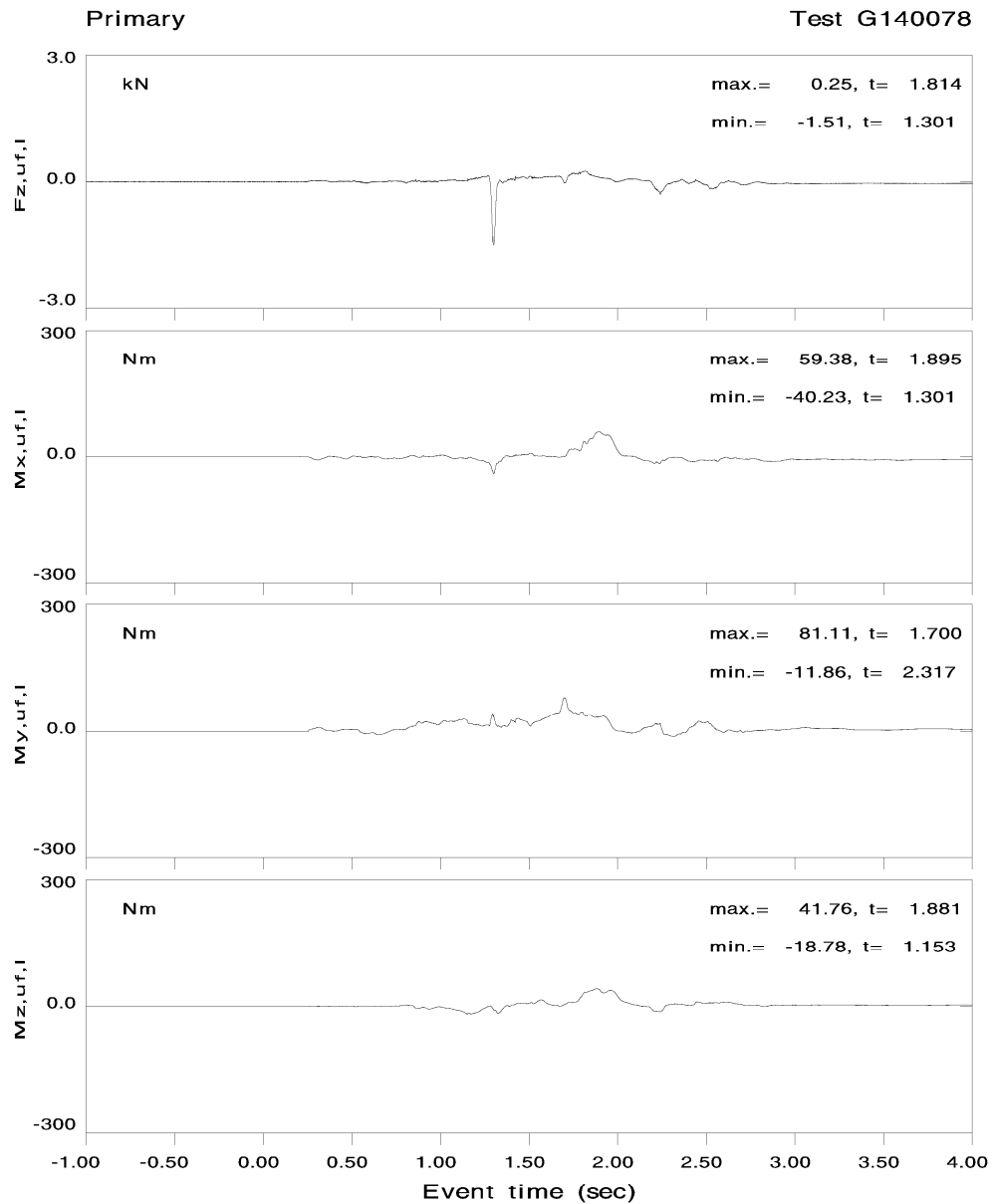


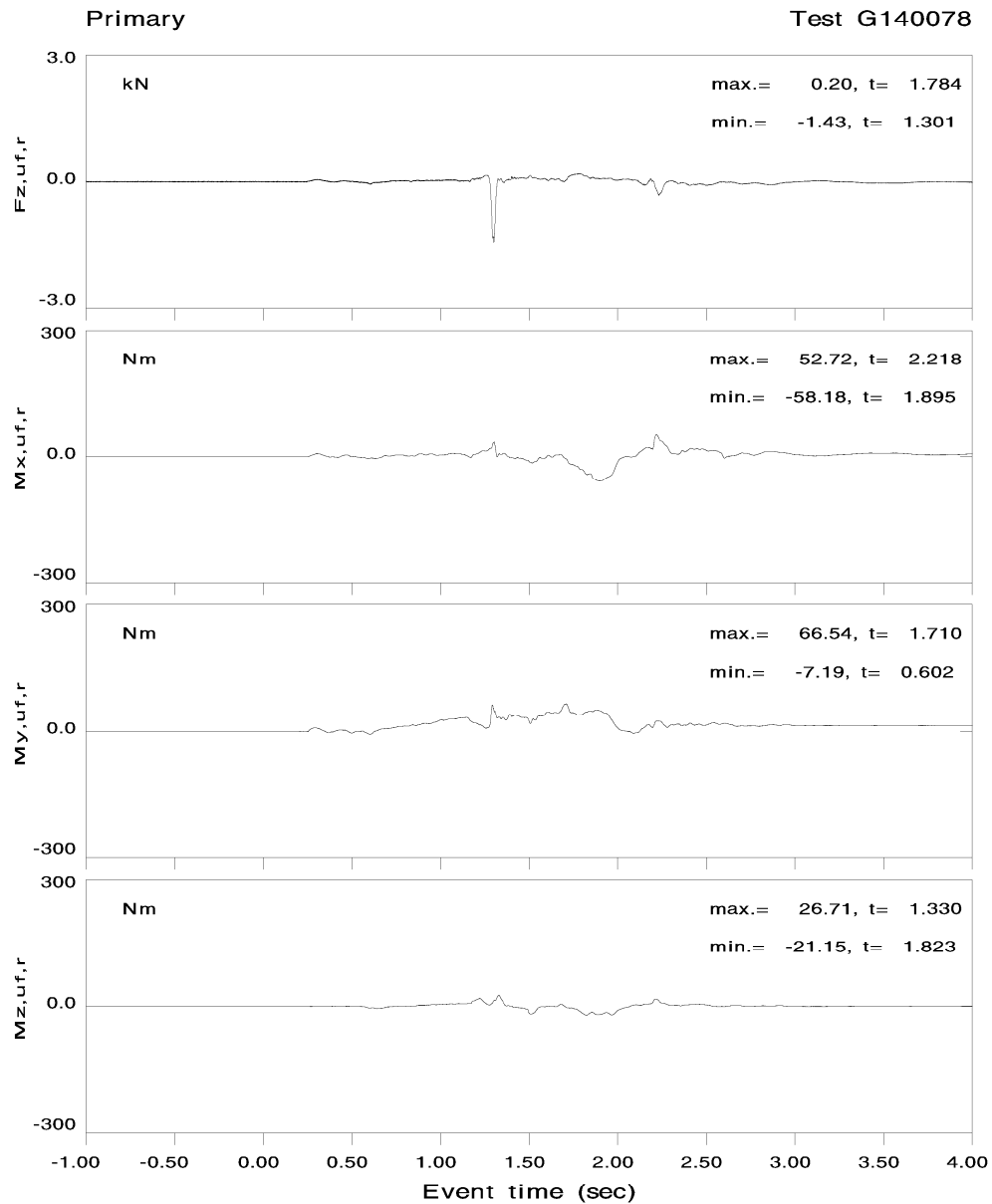
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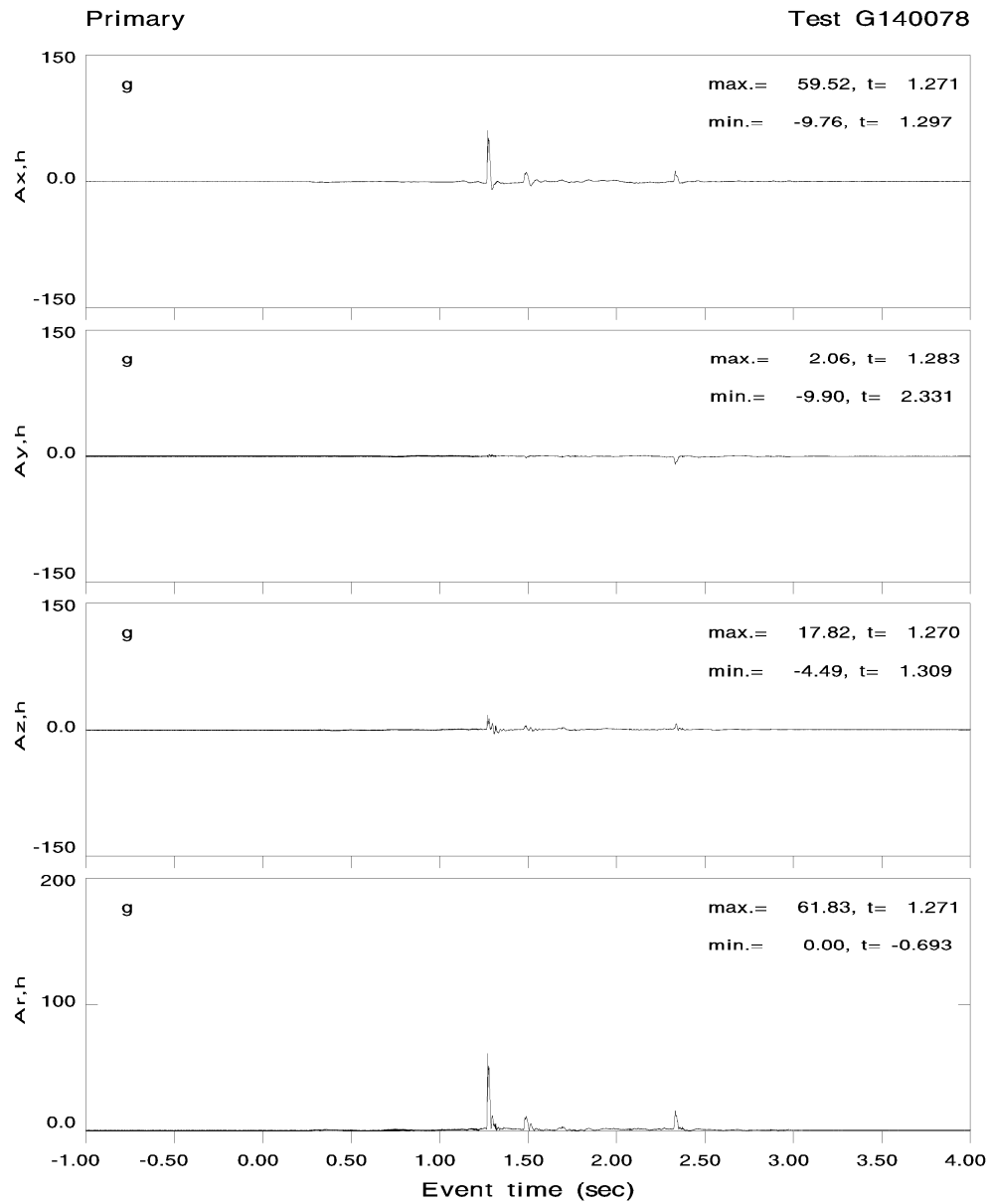
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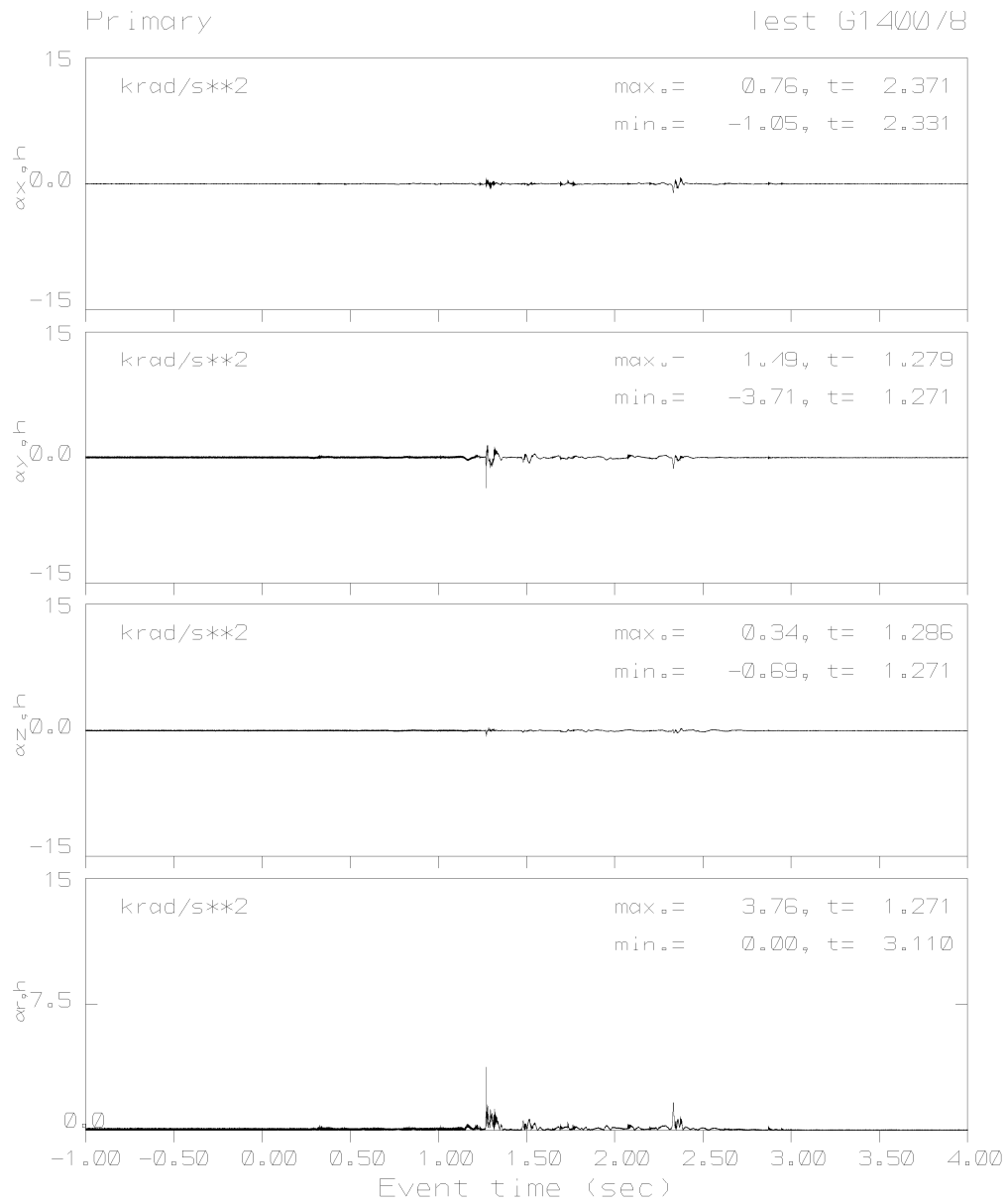


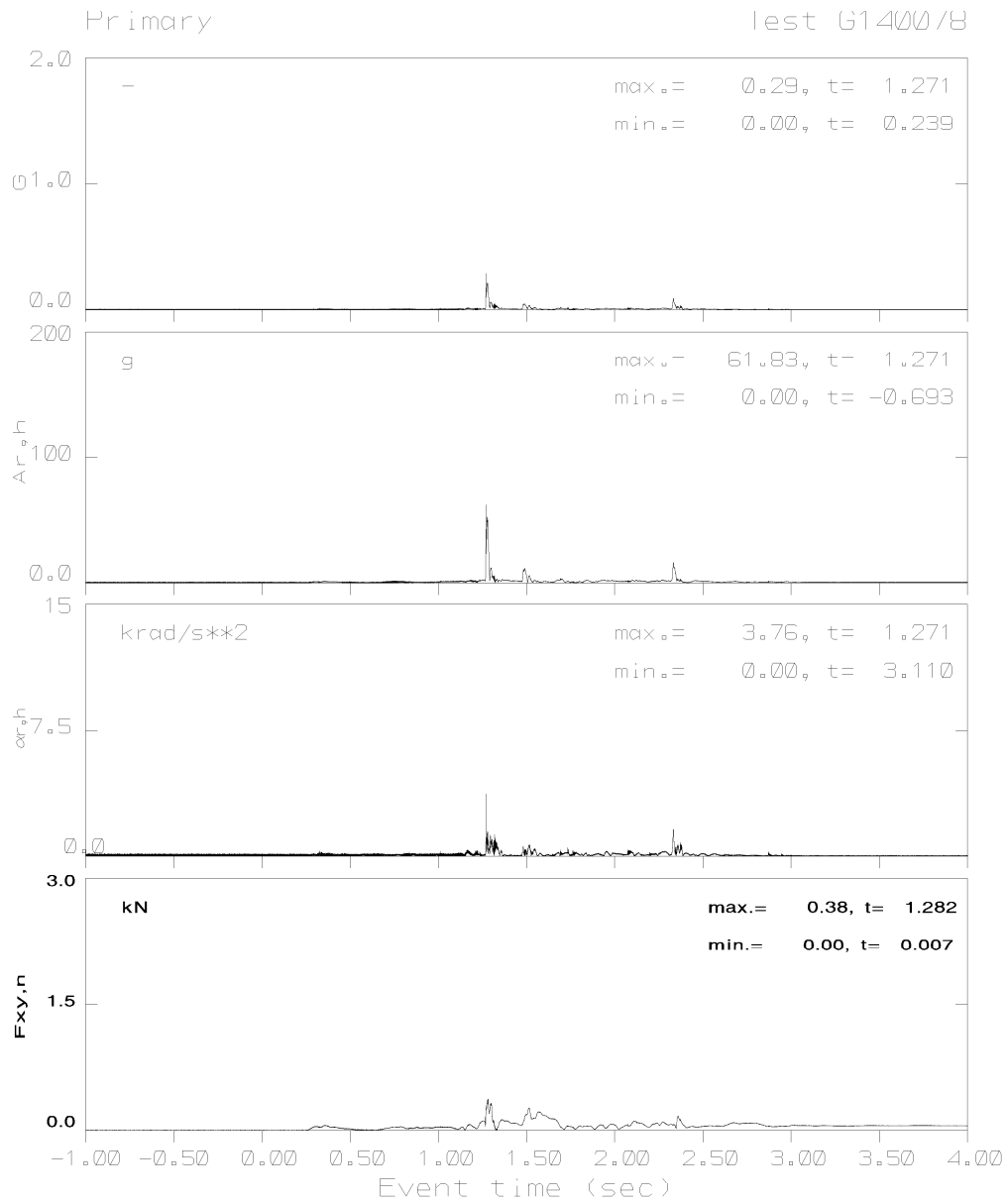




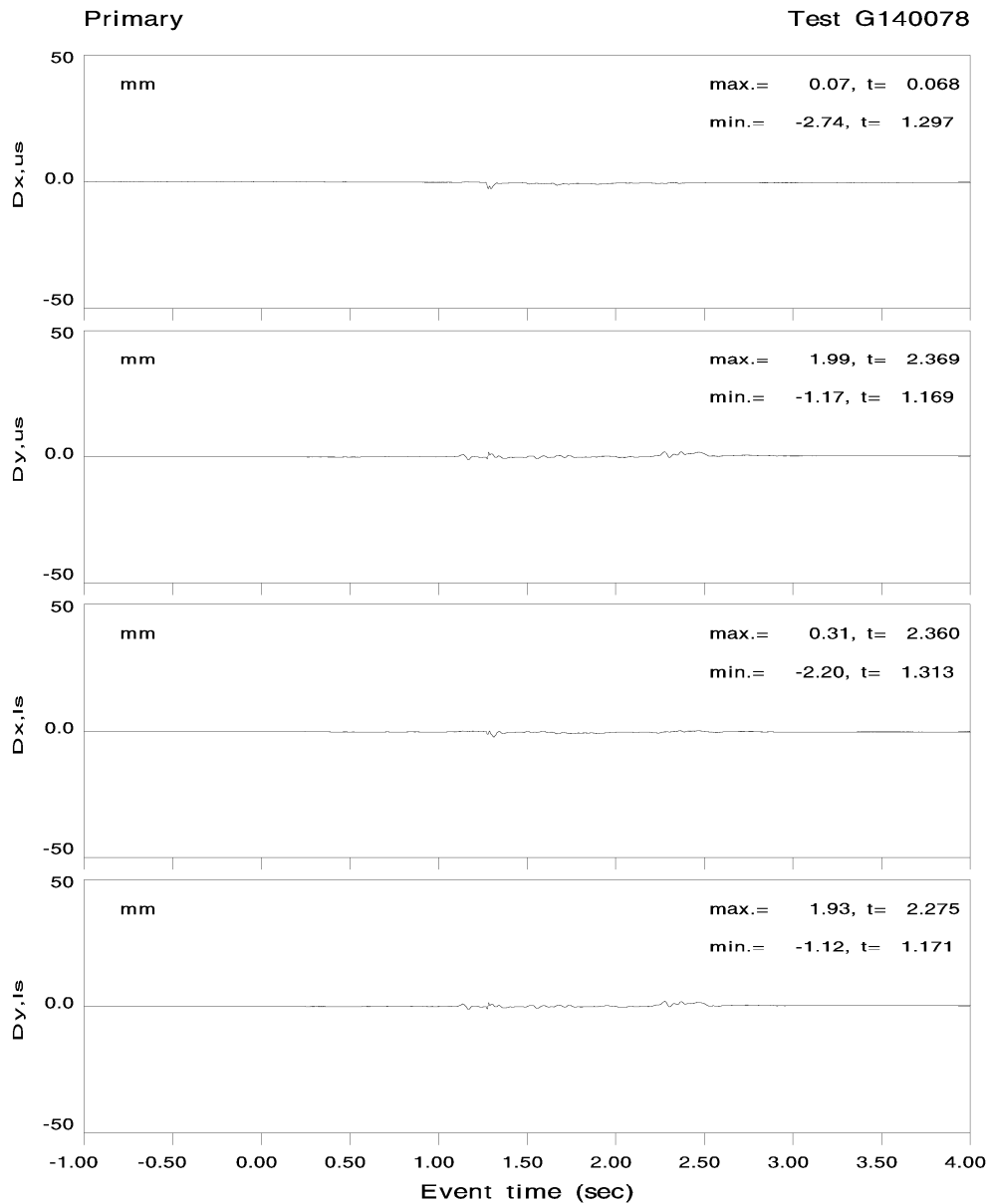






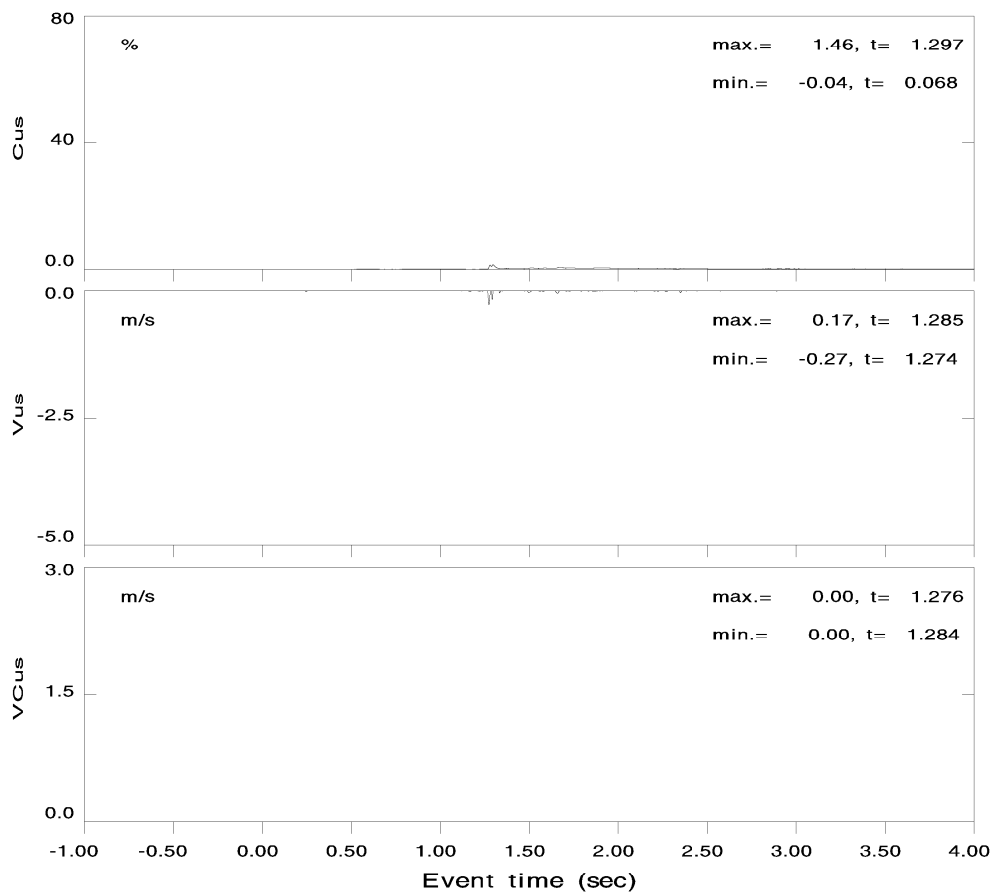


Page 11



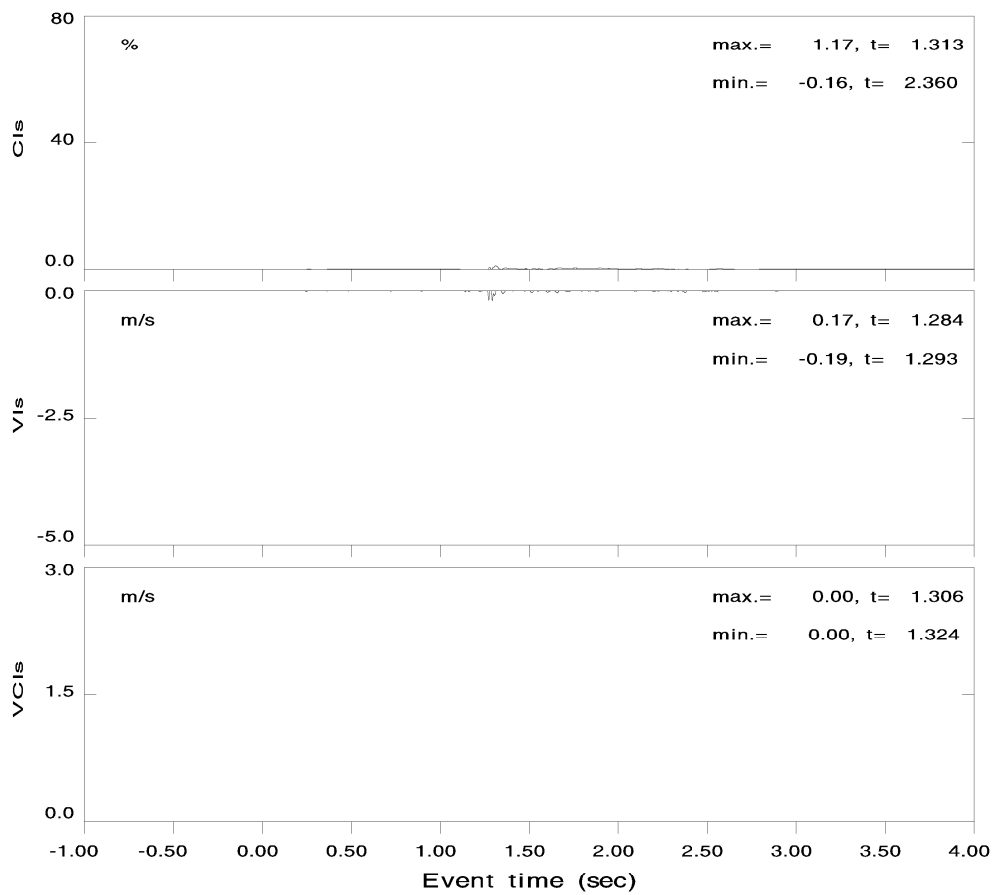
Primary

Test G140078



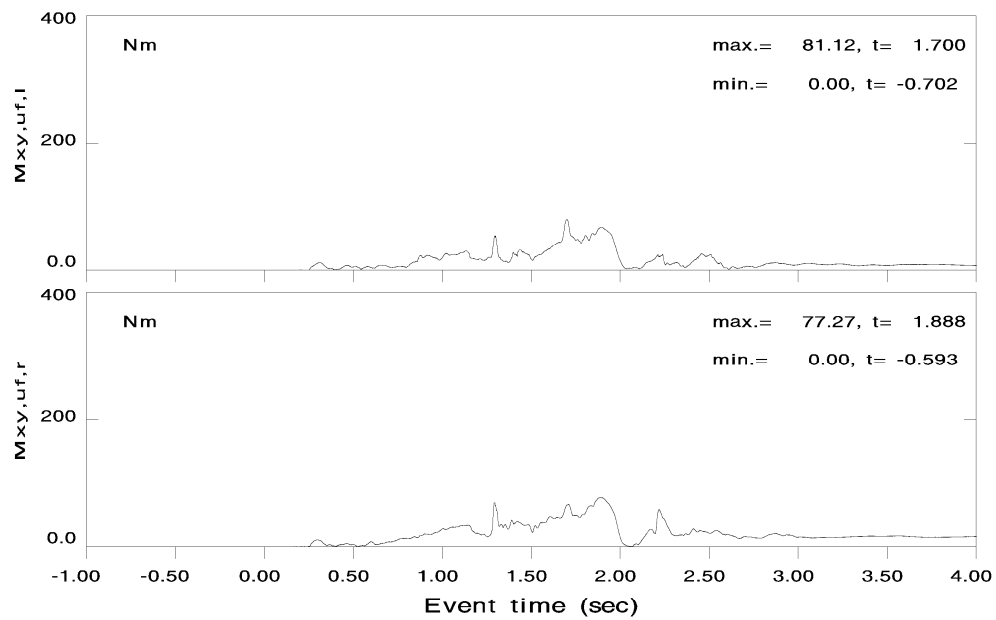
Primary

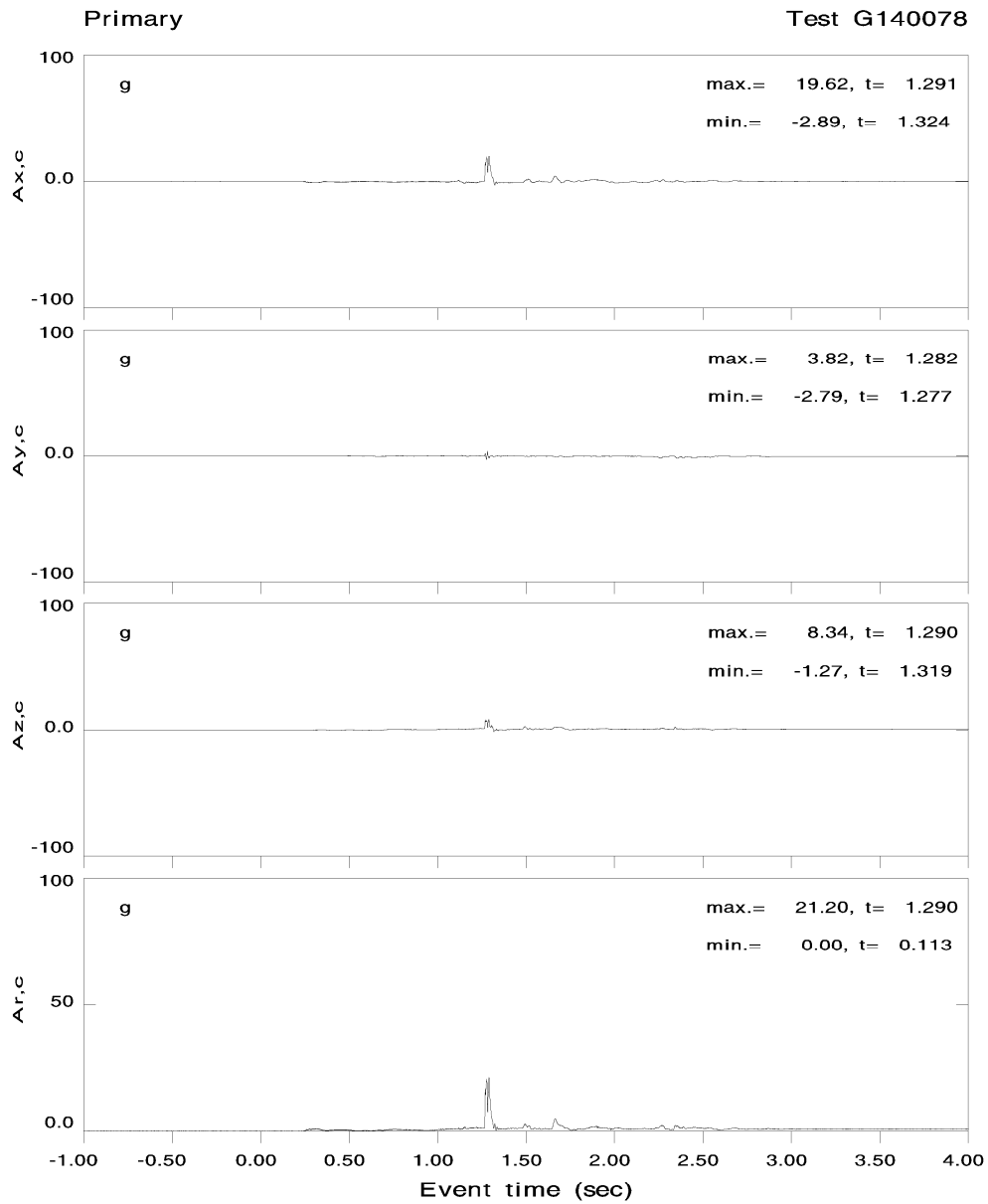
Test G140078

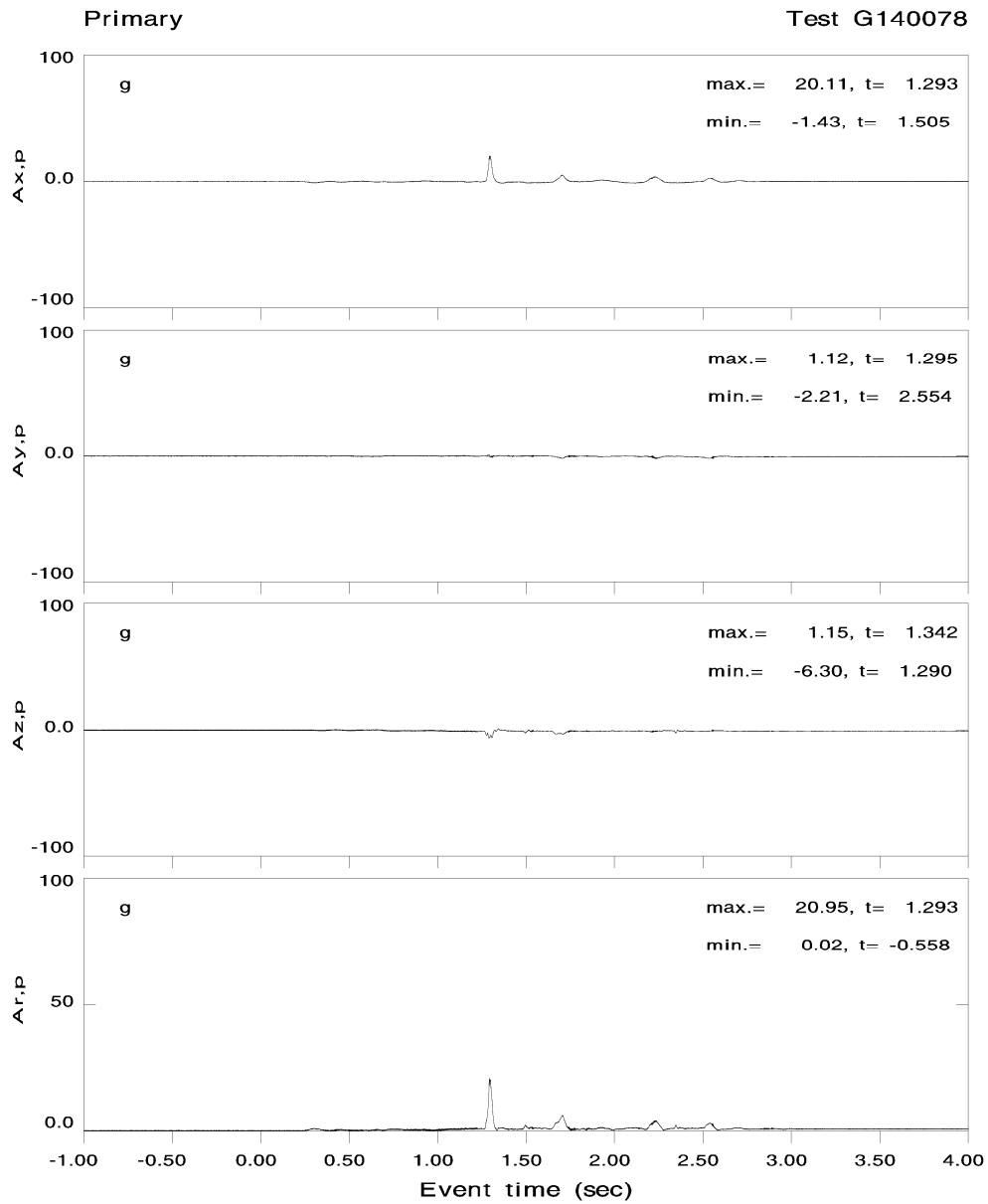


Primary

Test G140078

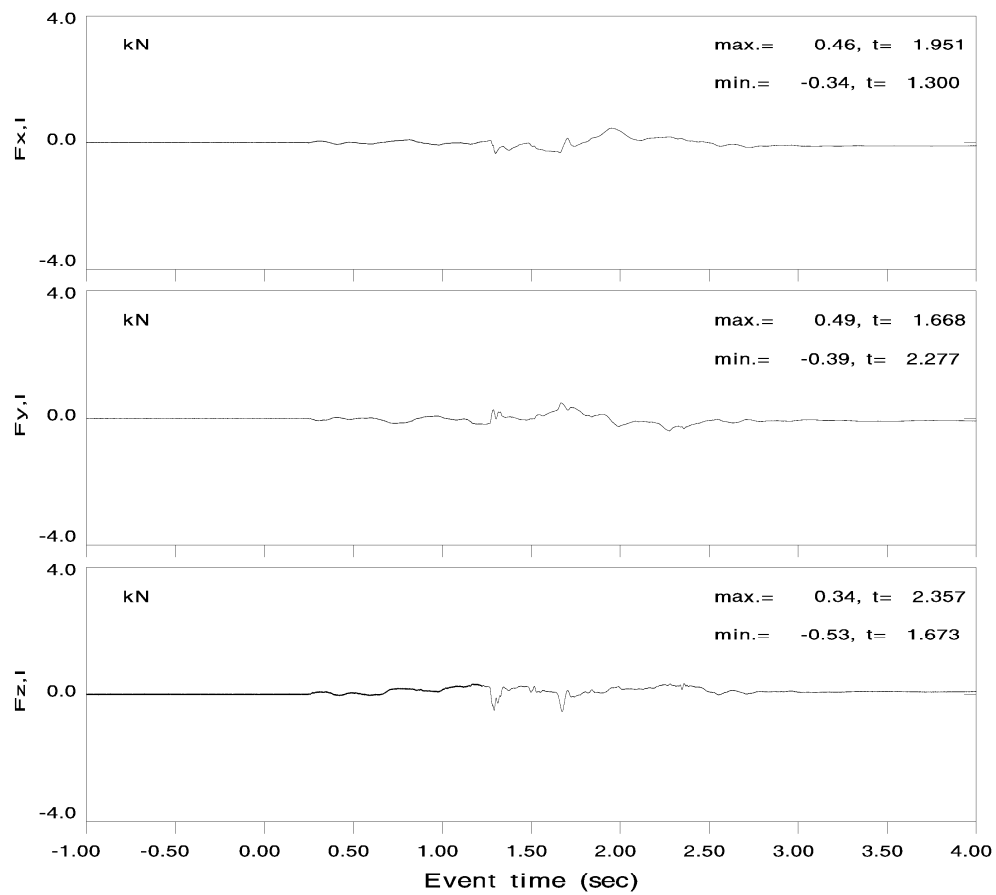






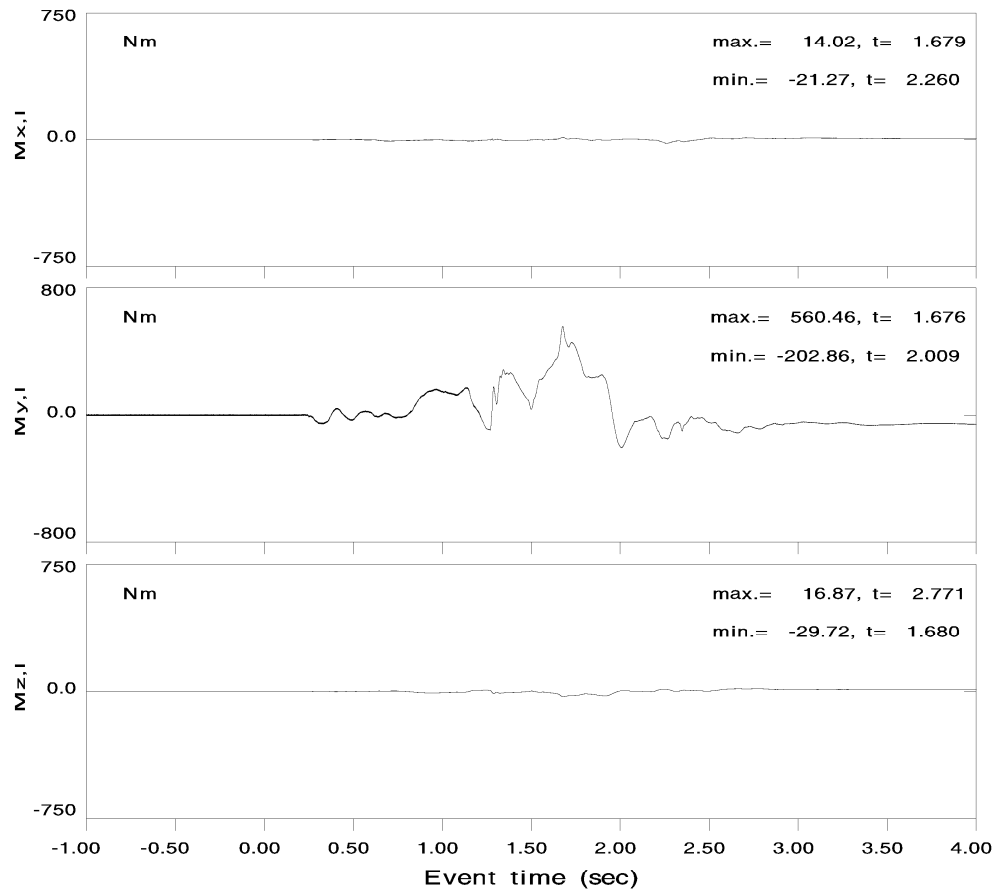
Primary

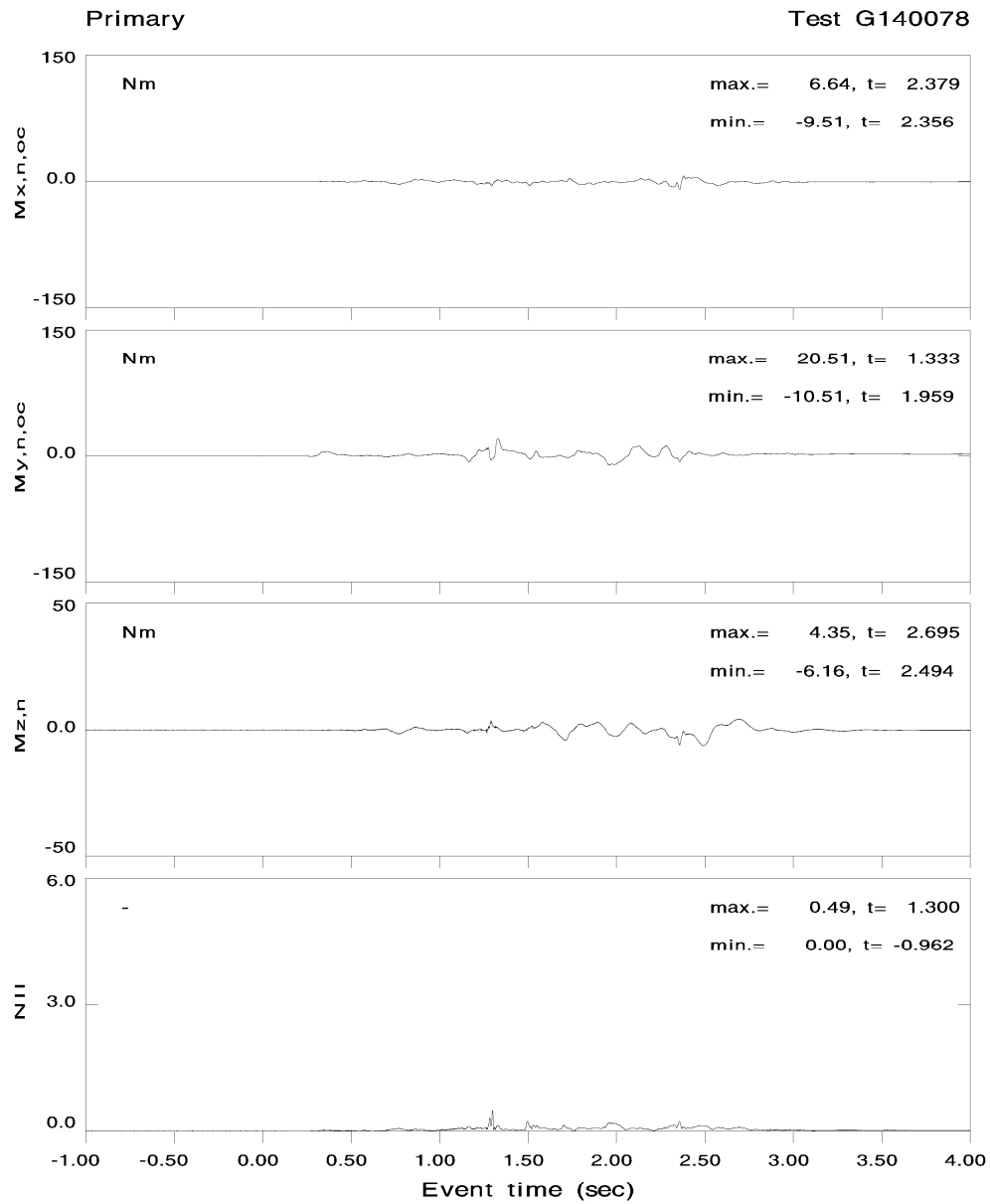
Test G140078



Primary

Test G140078





2.5 G140079

G140079_ICM.IC1

Test Number : G140079
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 1
Index for VCmax Location                   = 2
maximum Abdomen Penetration                = 0.000
maximum GAMBIT                             = 0.370
Cmax                                        = 1.510
VCmax                                       = 0.000
HIC                                         = 180.4
NII (2002 MATD Neck)                      = 0.8
Location of Cmax                           : upper sternum
Location of VCmax                          : lower sternum

```

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.002
Normalized Cost of Survival               = 0.002
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity              = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.921	1.000	1.000	1.000	1.000	0
1	0.054	0.000	0.000	0.000	0.000	0
2	0.017	0.000	0.000	0.000	0.000	0
3	0.008	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.112	0.000	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.002	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

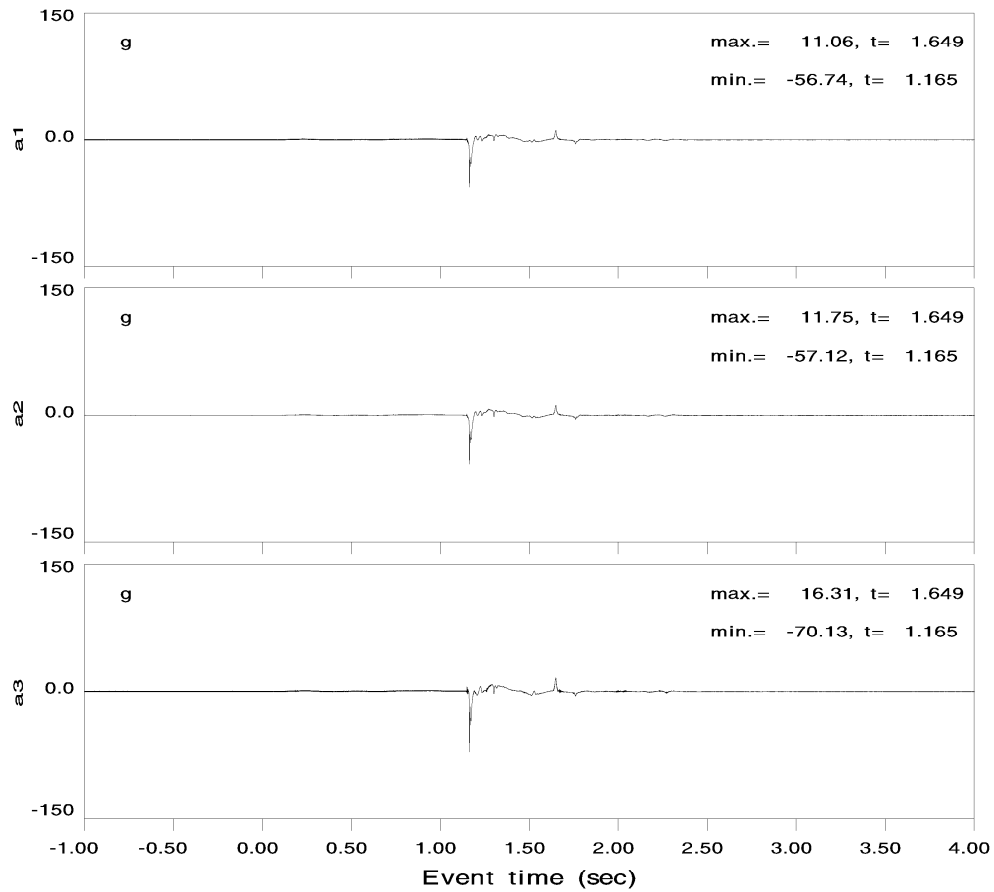
G140079.rpt				
Test G140079, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	35.09 g	1.148	-2.82 g	1.220
Ay,c	4.52 g	1.166	-5.90 g	1.159
Az,c	14.42 g	1.148	-3.26 g	1.262
Ax,p	11.06 g	1.244	-1.60 g	1.301
Ay,p	0.94 g	2.229	-1.37 g	1.234
Az,p	2.01 g	1.156	-6.35 g	2.151
spare	0.00 -	1.792	0.00 -	0.844
spare	0.00 -	0.234	0.00 -	3.392
L,ur	0.91 mm	1.238	-5.57 mm	1.166
L,lr	1.06 mm	1.237	-4.09 mm	1.168
a1	11.06 g	1.649	-56.74 g	1.165
a2	11.75 g	1.649	-57.12 g	1.165
a3	16.31 g	1.649	-70.13 g	1.165
a4	9.06 g	1.649	-48.42 g	1.165
a5	8.25 g	1.649	-46.77 g	1.165
a6	14.18 g	1.649	-64.32 g	1.166
Mx,l	11.91 Nm	1.266	-9.84 Nm	2.857
My,l	592.41 Nm	1.368	-42.06 Nm	0.189
Mz,l	5.32 Nm	2.580	-29.99 Nm	1.530
Fx,l	0.22 kN	1.209	-0.52 kN	1.262
Fy,l	0.51 kN	2.150	-0.11 kN	0.620
Fz,l	0.36 kN	1.155	-0.56 kN	1.262
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
spare	0.17 -	3.988	0.01 -	-0.993
spare	0.00 -	3.309	0.00 -	2.429
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.01 -	2.658	0.00 -	-0.280
a7	26.90 g	1.170	-3.11 g	1.301
a8	35.42 g	1.166	-7.40 g	1.650
a9	32.91 g	1.170	-7.04 g	1.649
Fz,uf,r	0.27 kN	2.204	-0.42 kN	1.249
Mx,uf,r	33.27 Nm	1.445	-24.90 Nm	2.780
My,uf,r	80.38 Nm	1.215	-11.27 Nm	0.445
Mz,uf,r	42.58 Nm	1.233	-4.72 Nm	2.778
Fz,uf,l	0.24 kN	1.314	-0.40 kN	1.242
Mx,uf,l	46.30 Nm	2.778	-33.60 Nm	2.172
My,uf,l	91.58 Nm	2.175	-1.16 Nm	0.485
Mz,uf,l	6.61 Nm	2.811	-25.93 Nm	1.405
Fx,n	0.36 kN	1.183	-0.37 kN	1.315
Fy,n	0.10 kN	1.145	-0.06 kN	1.176
Fz,n	0.74 kN	1.193	-0.38 kN	1.962
Mx,n	6.01 Nm	1.169	-5.07 Nm	1.269
My,n	39.39 Nm	1.325	-39.89 Nm	1.203
Mz,n	3.16 Nm	1.434	-3.28 Nm	2.189
L,ul	1.42 mm	1.167	-2.47 mm	1.155
L,ll	2.98 mm	1.167	-2.34 mm	1.247
Ax,h	74.40 g	1.165	-14.20 g	1.649
Ay,h	1.70 g	1.151	-6.19 g	1.165
Az,h	26.91 g	1.170	-3.11 g	1.301
ax,h	0.68 krad/s**2	1.151	-0.82 krad/s**2	1.151
ay,h	1.73 krad/s**2	1.649	-5.26 krad/s**2	1.166
az,h	0.28 krad/s**2	1.167	-0.49 krad/s**2	1.166
Ar,h	76.75 g	1.165	0.01 g	-0.339
ar,h	5.28 krad/s**2	1.166	0.00 krad/s**2	3.965
G	0.37 -	1.165	0.00 -	-0.541
HIC	180.43	1.178	----	1.164
Fxy,n	0.37 kN	1.315	0.00 kN	-0.247
Dx,us	0.07 mm	-0.652	-2.83 mm	1.165
Dy,us	5.38 mm	1.167	-2.05 mm	1.242

		G140079.rpt		
Cus	1.51 %	1.165	-0.04 %	-0.652
Vus	0.13 m/s	1.184	-0.40 m/s	1.150
VCus	0.00 m/s	1.151	0.00 m/s	1.183
Dx,ls	0.87 mm	1.219	-1.61 mm	1.155
Dy,ls	5.17 mm	1.167	-2.17 mm	1.241
Cl s	0.86 %	1.155	-0.46 %	1.219
Vl s	0.12 m/s	1.158	-0.29 m/s	1.150
VC l s	0.00 m/s	1.152	0.00 m/s	1.158
Mxy,uf,r	81.73 Nm	1.215	0.00 Nm	-0.330
Mxy,uf,l	97.10 Nm	2.175	0.00 Nm	-0.463
Mx,n,oc	6.37 Nm	1.382	-4.31 Nm	1.269
My,n,oc	44.17 Nm	1.325	-35.55 Nm	1.204
NII	0.75 -	1.202	0.00 -	-0.487
Ar,p	11.50 g	1.242	0.02 g	-0.035
Ar,c	37.95 g	1.148	0.00 g	-0.912

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

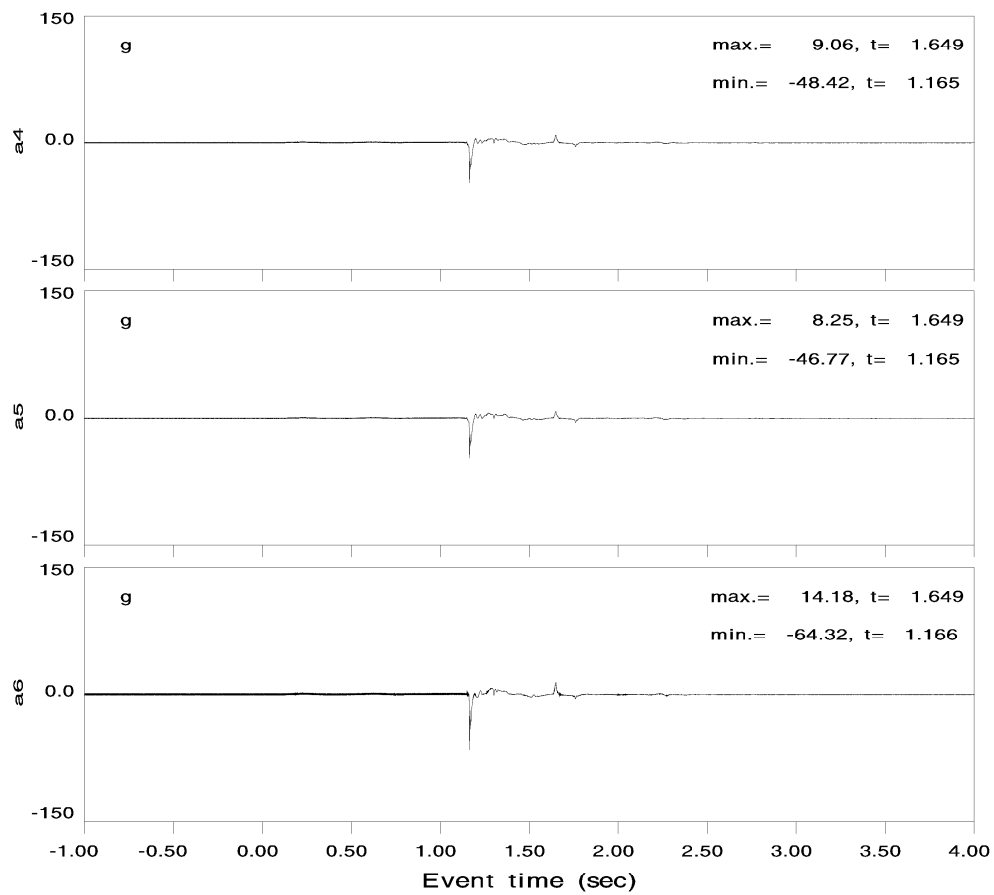
Primary

Test G140079



Primary

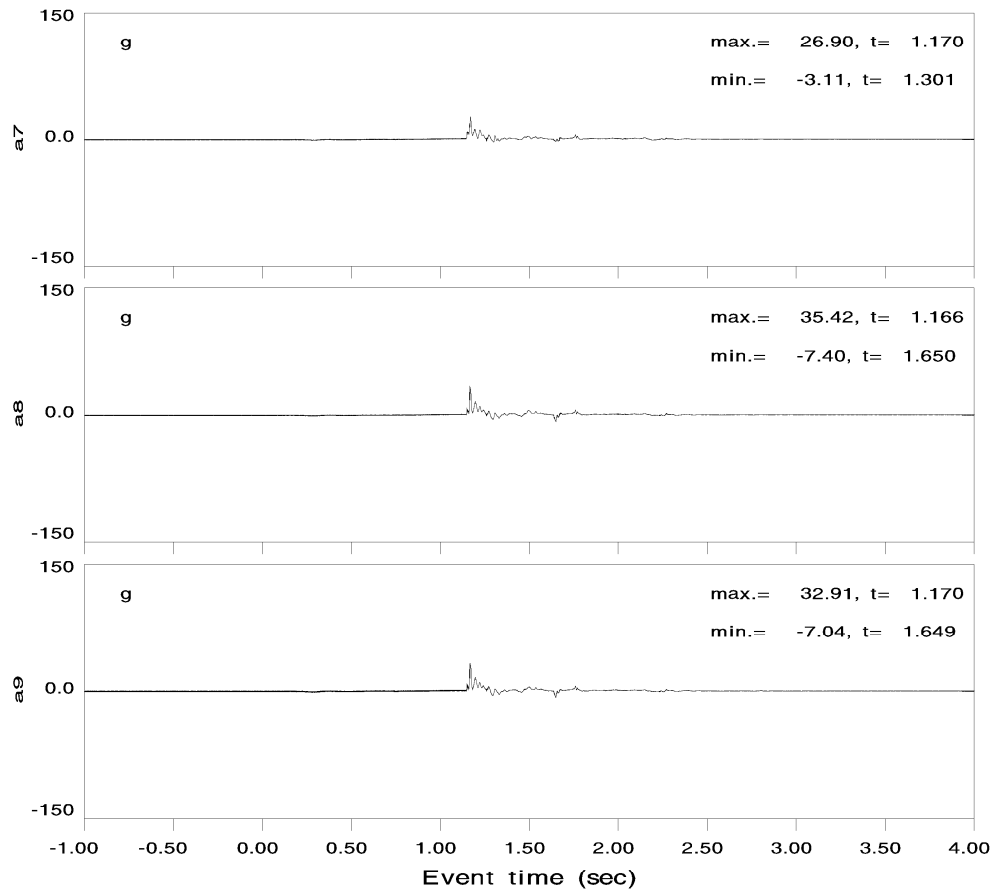
Test G140079



Page 2

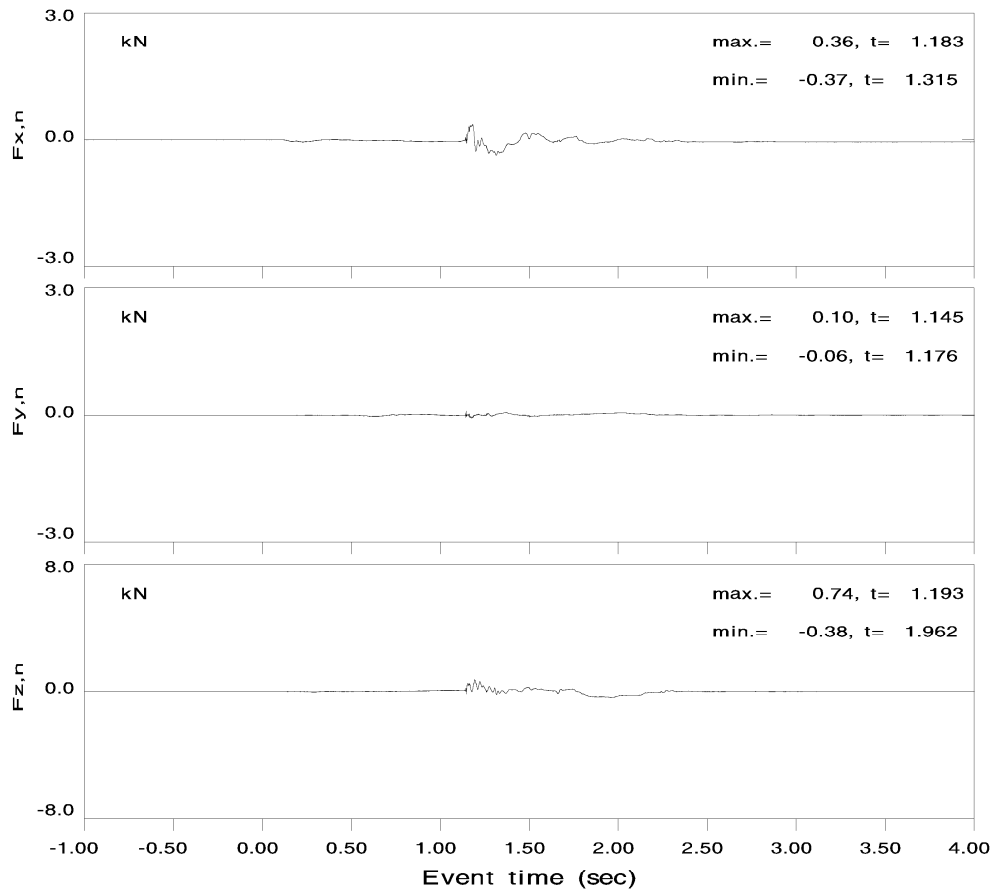
Primary

Test G140079



Primary

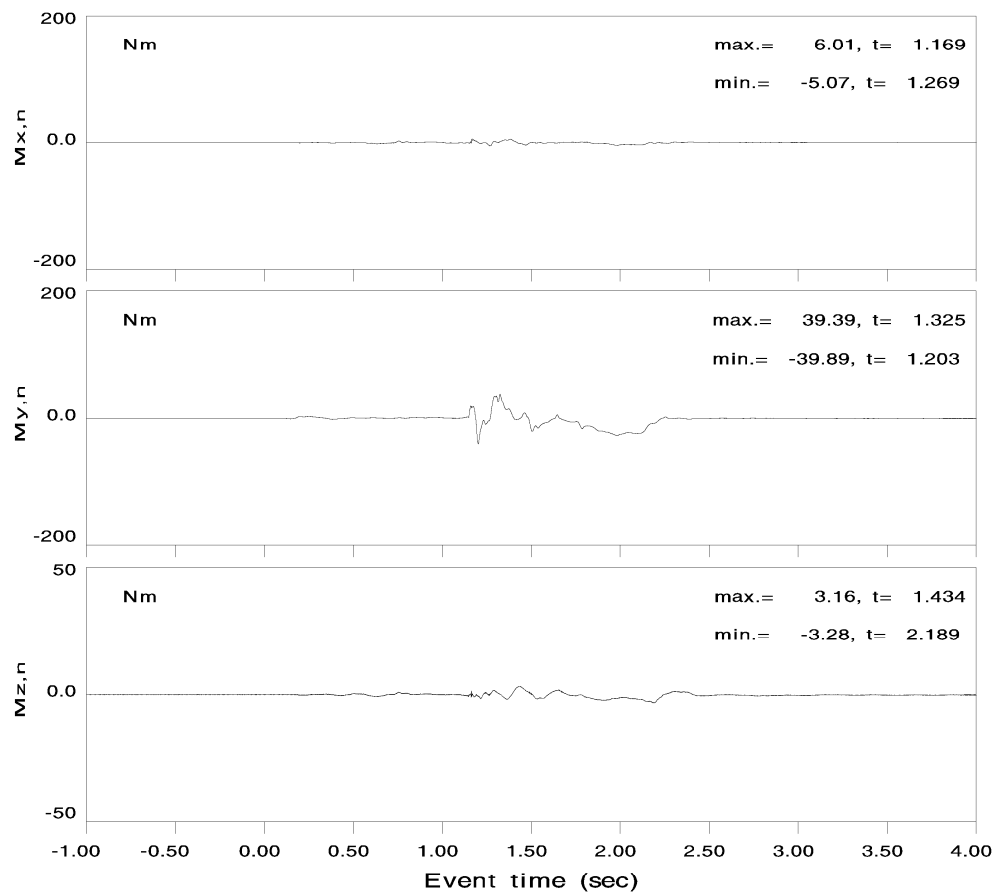
Test G140079

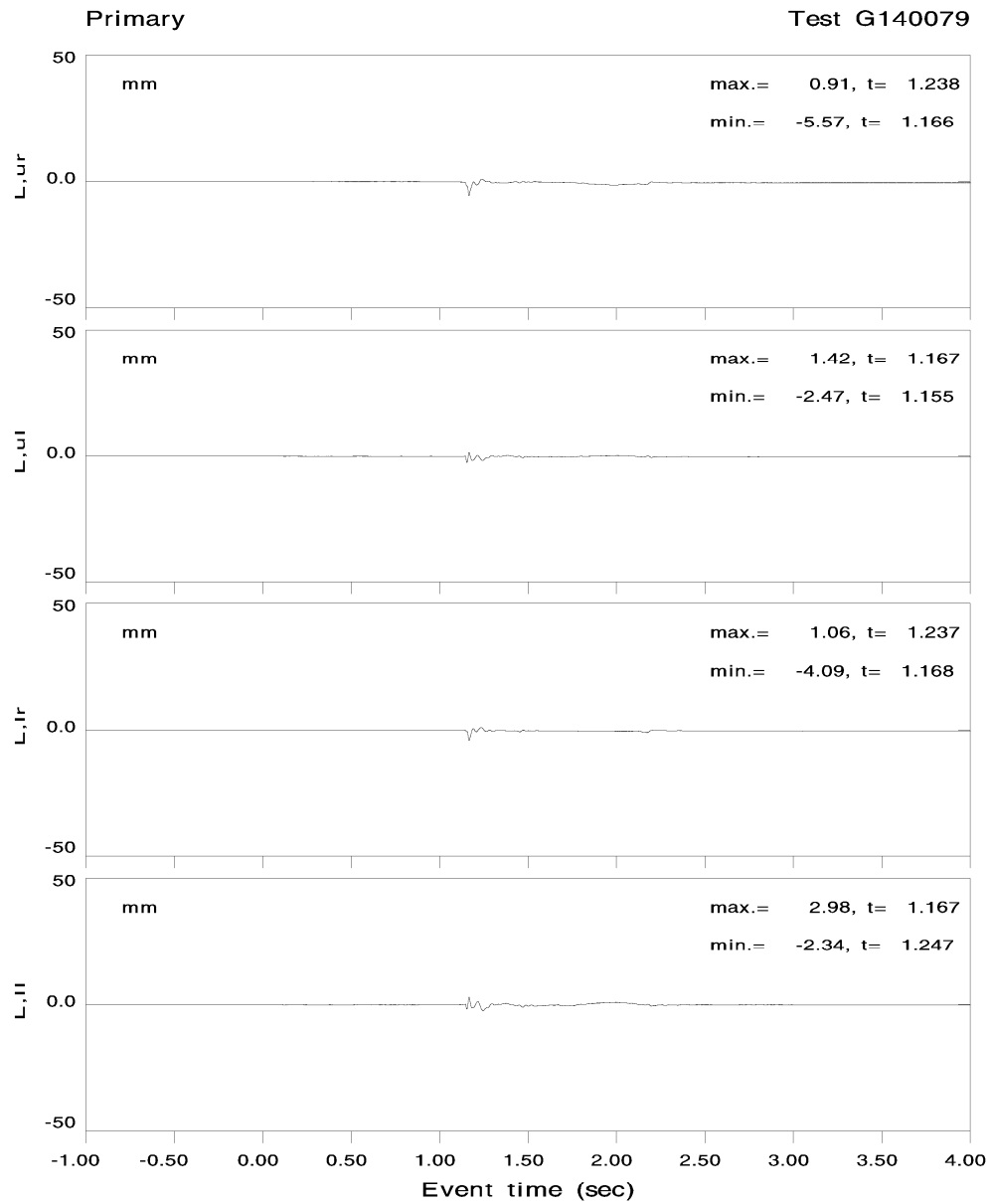


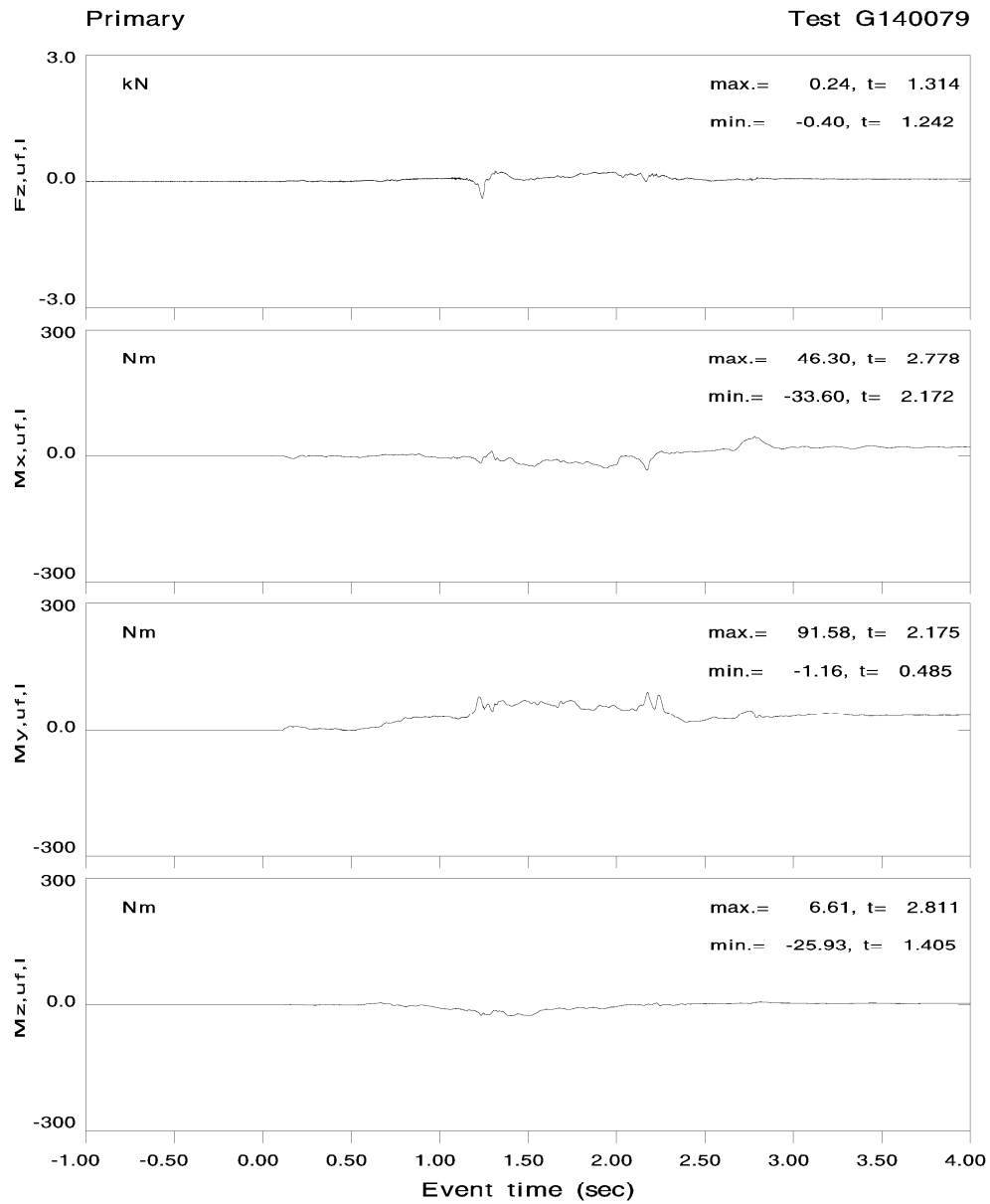
Page 4

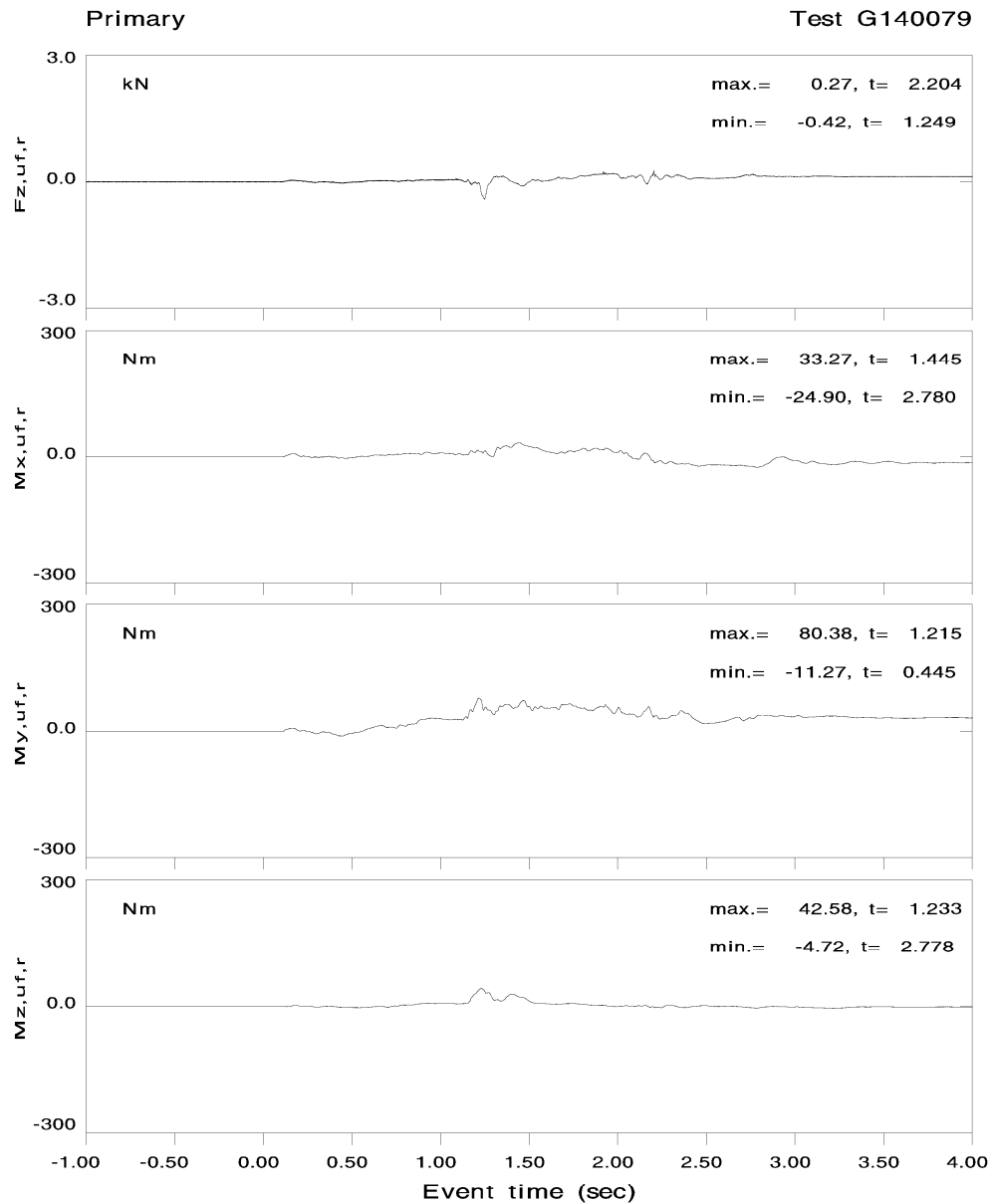
Primary

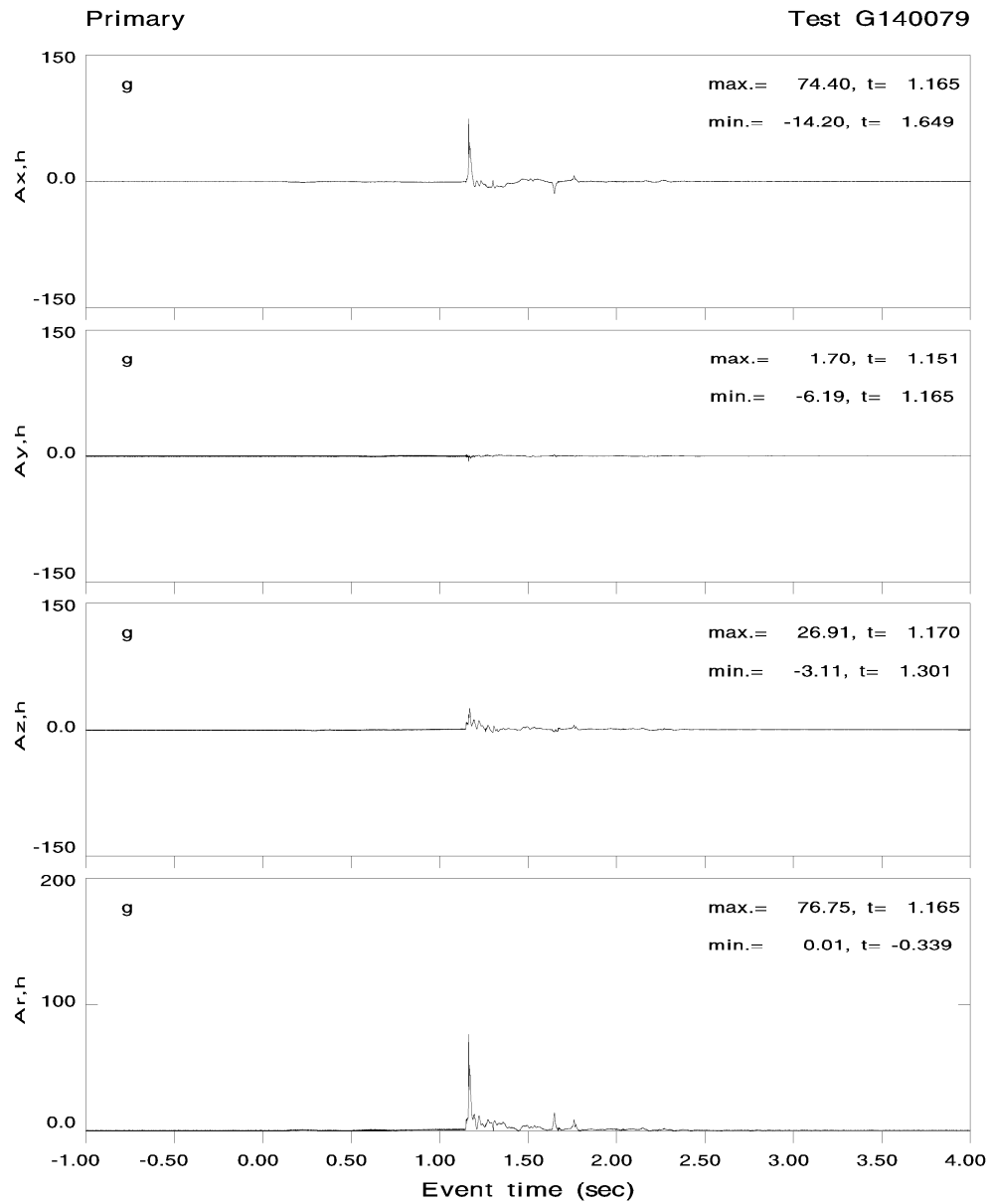
Test G140079

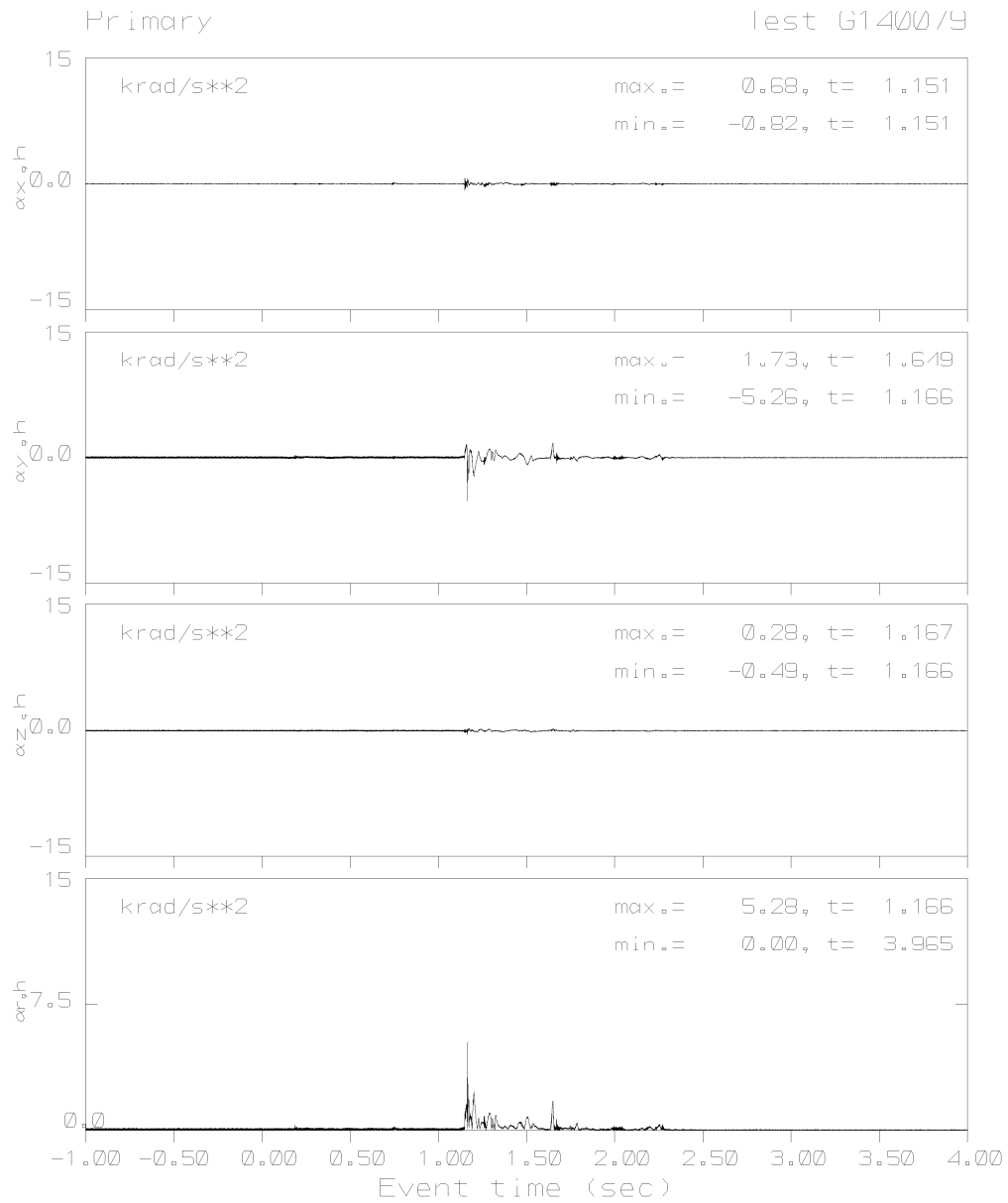


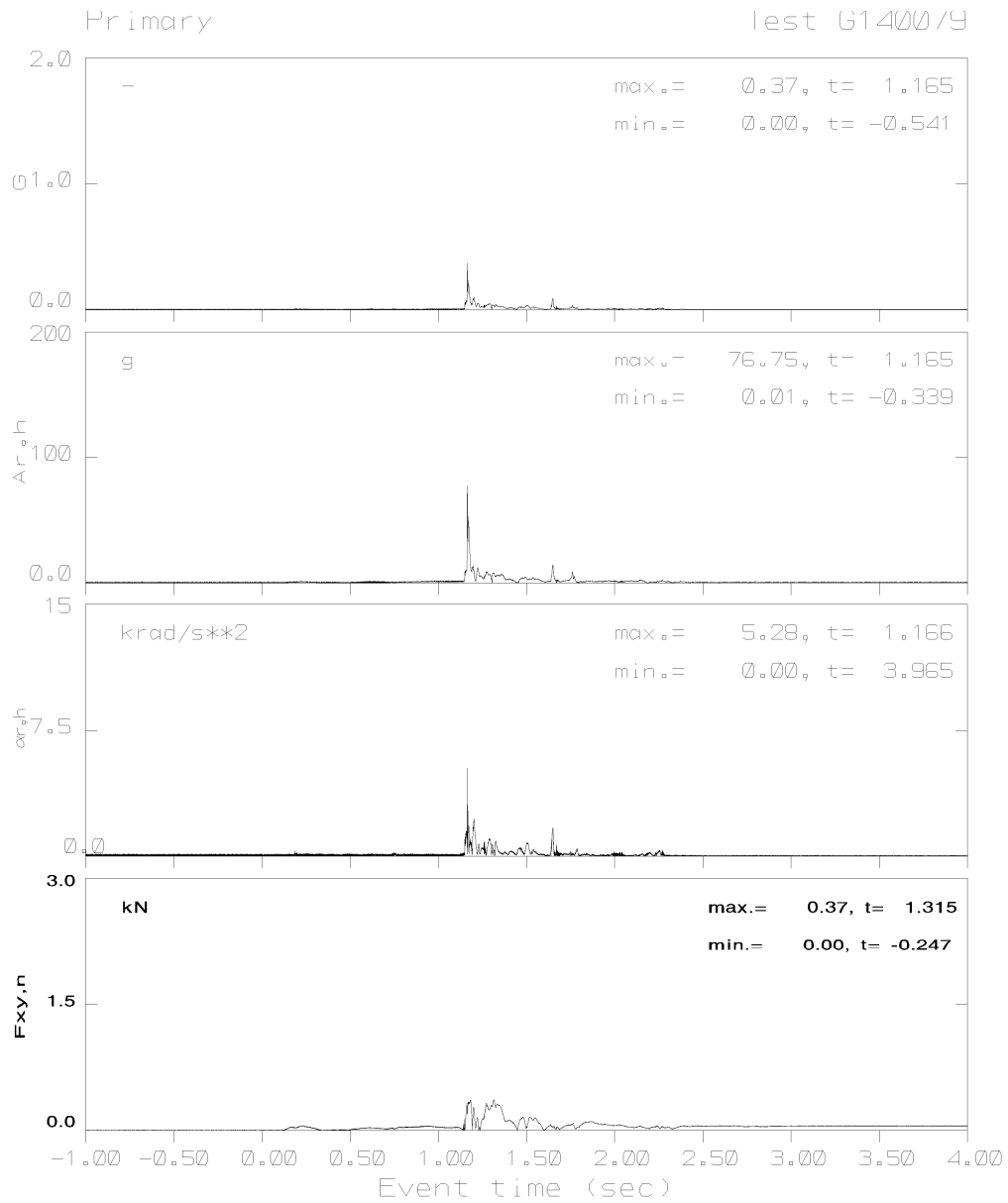




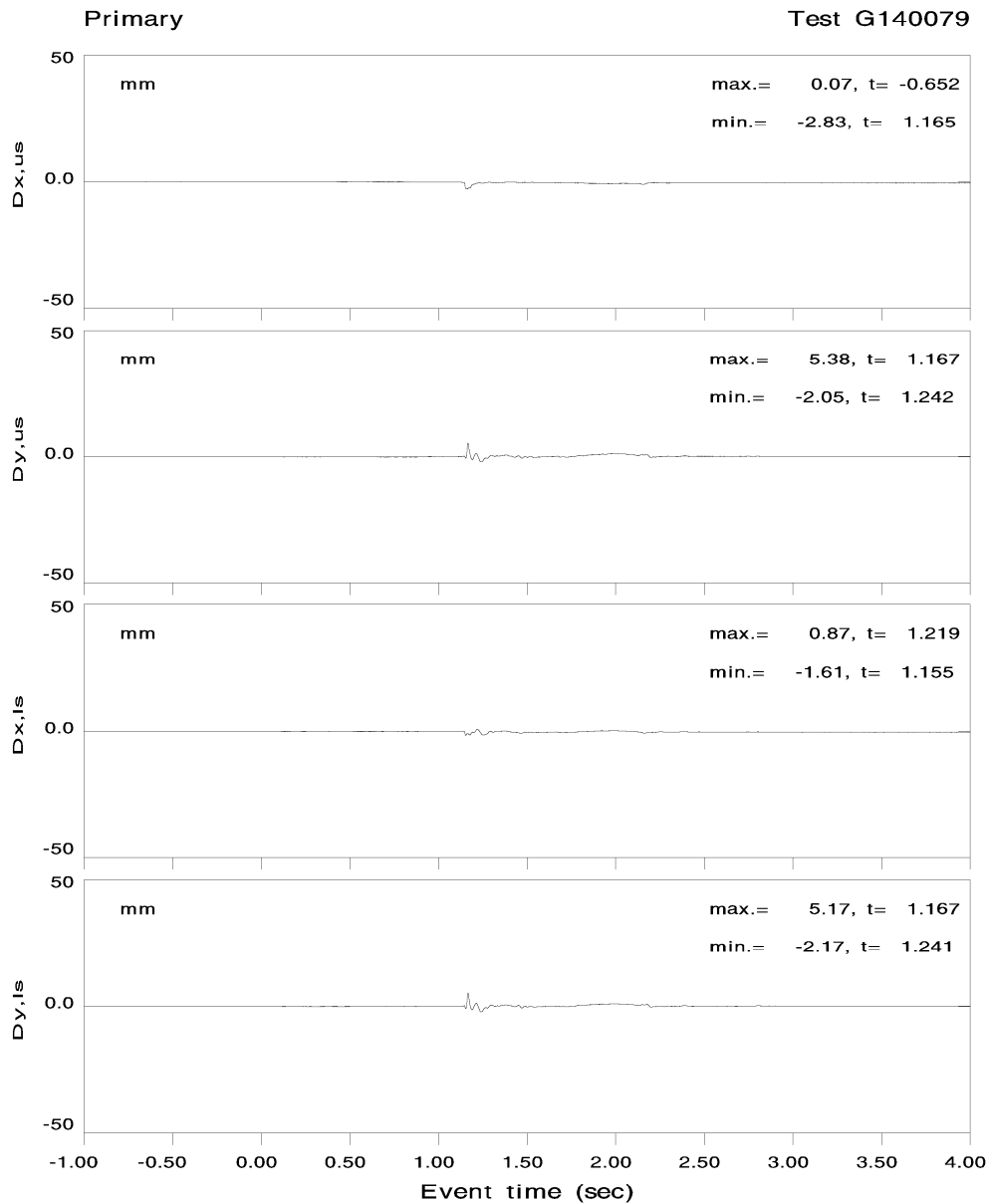






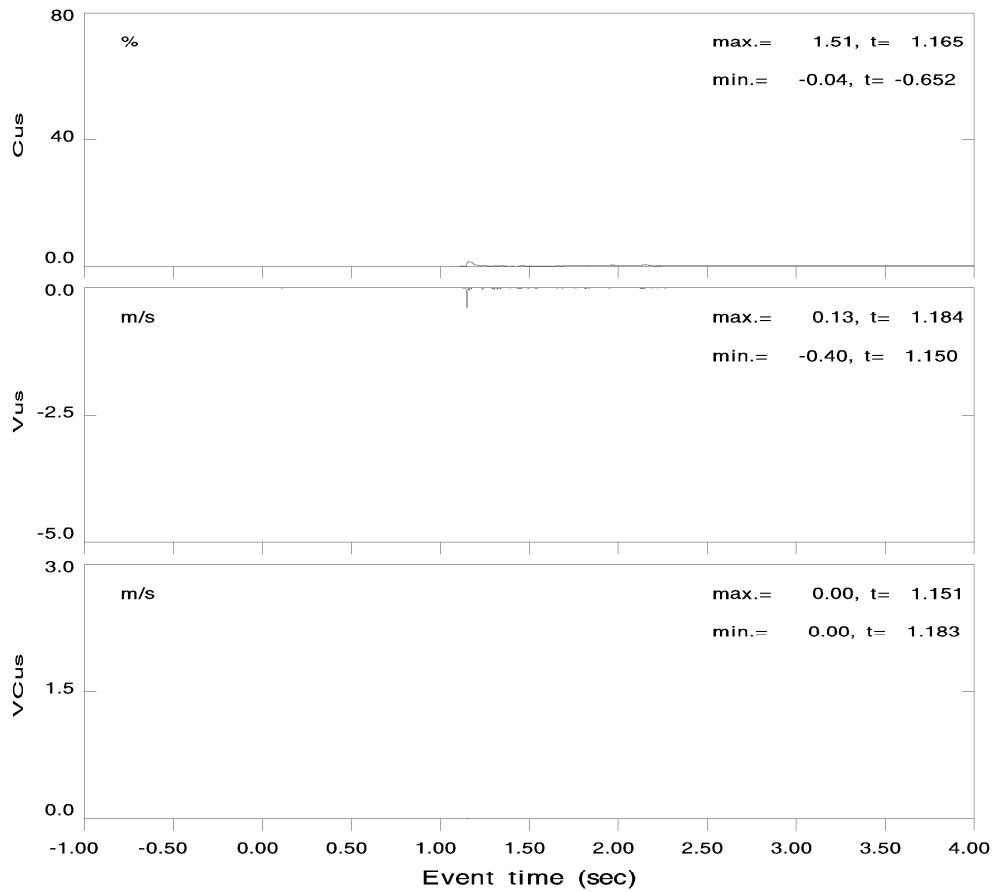


Page 11



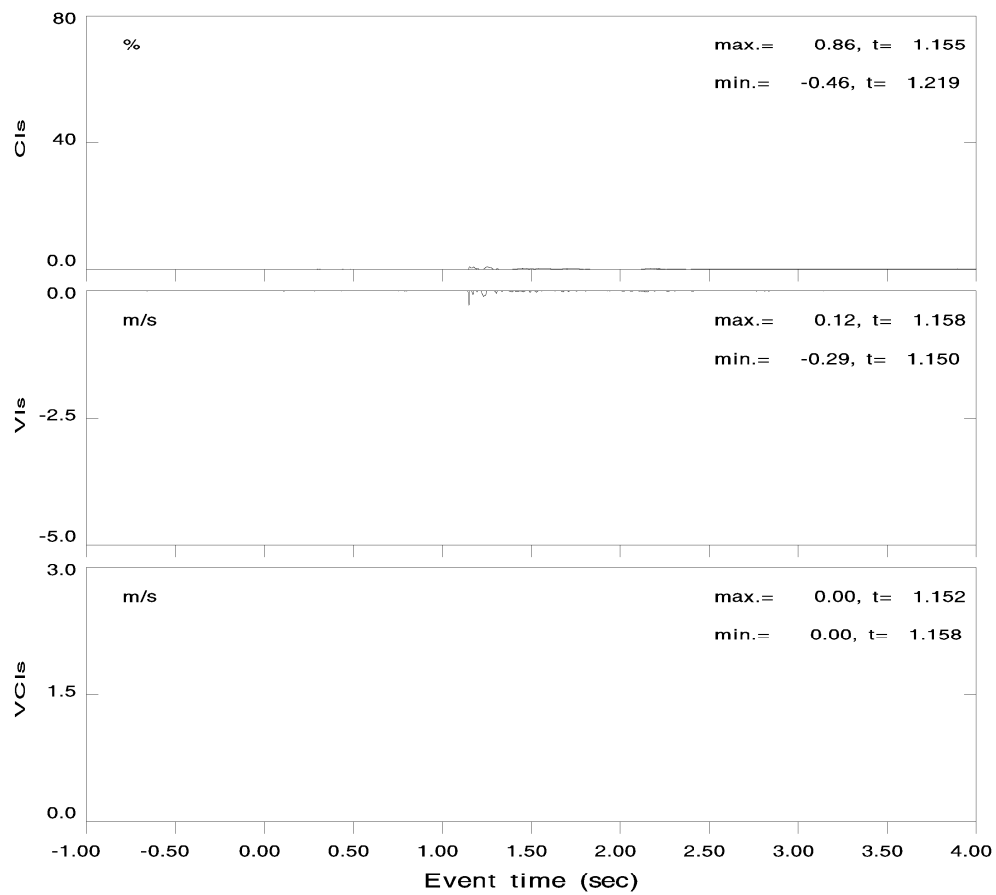
Primary

Test G140079



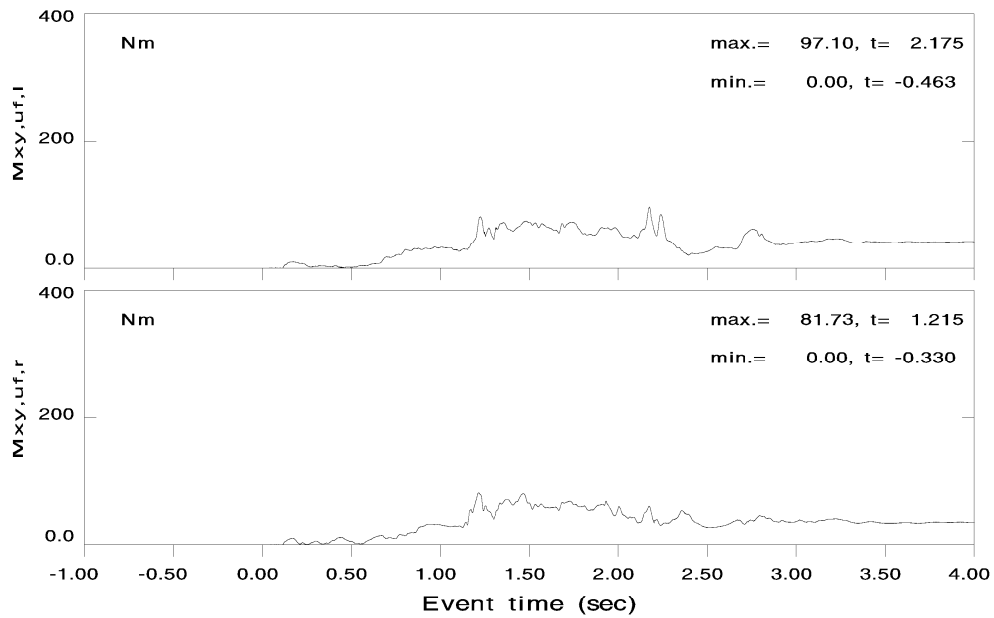
Primary

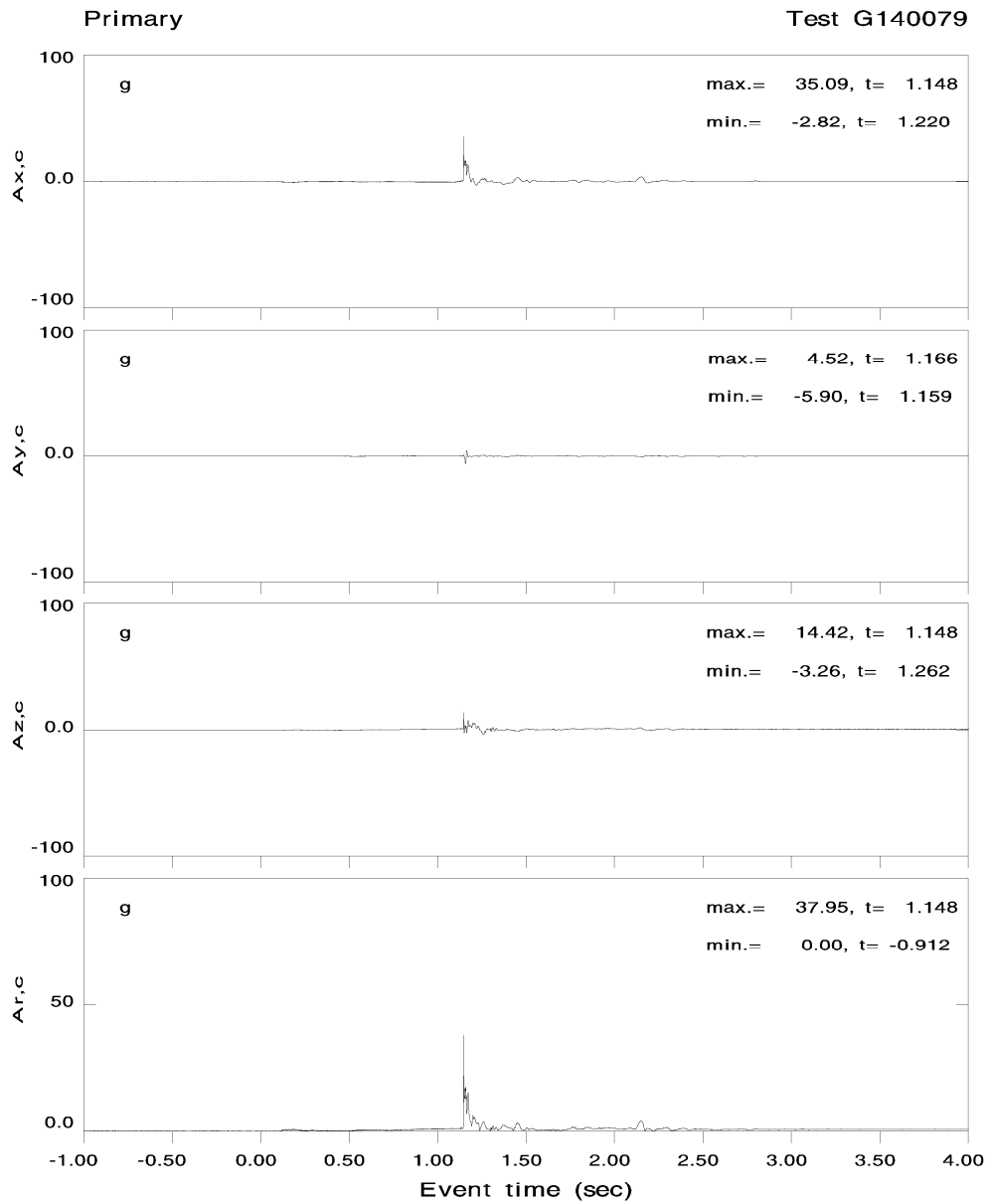
Test G140079

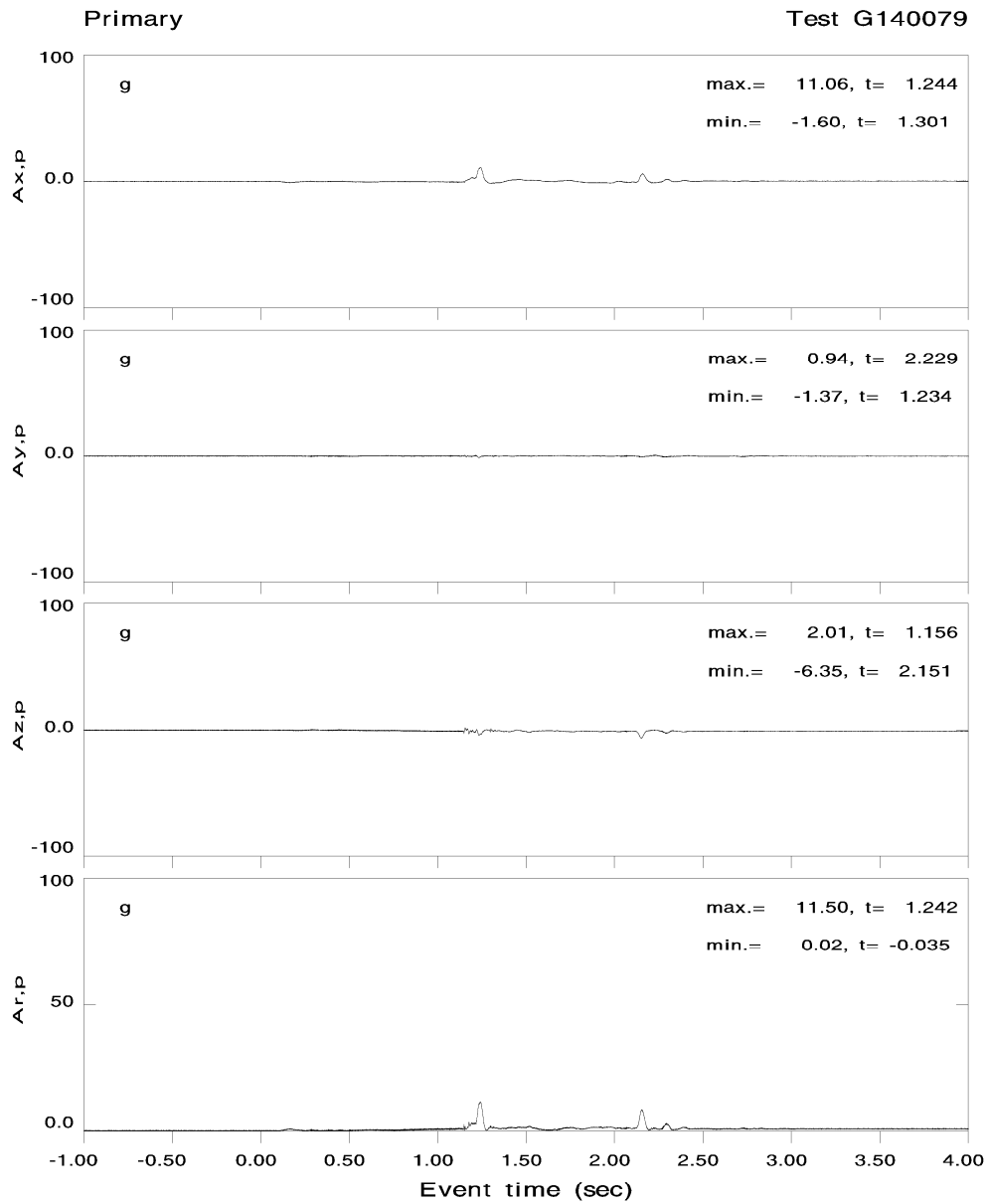


Primary

Test G140079

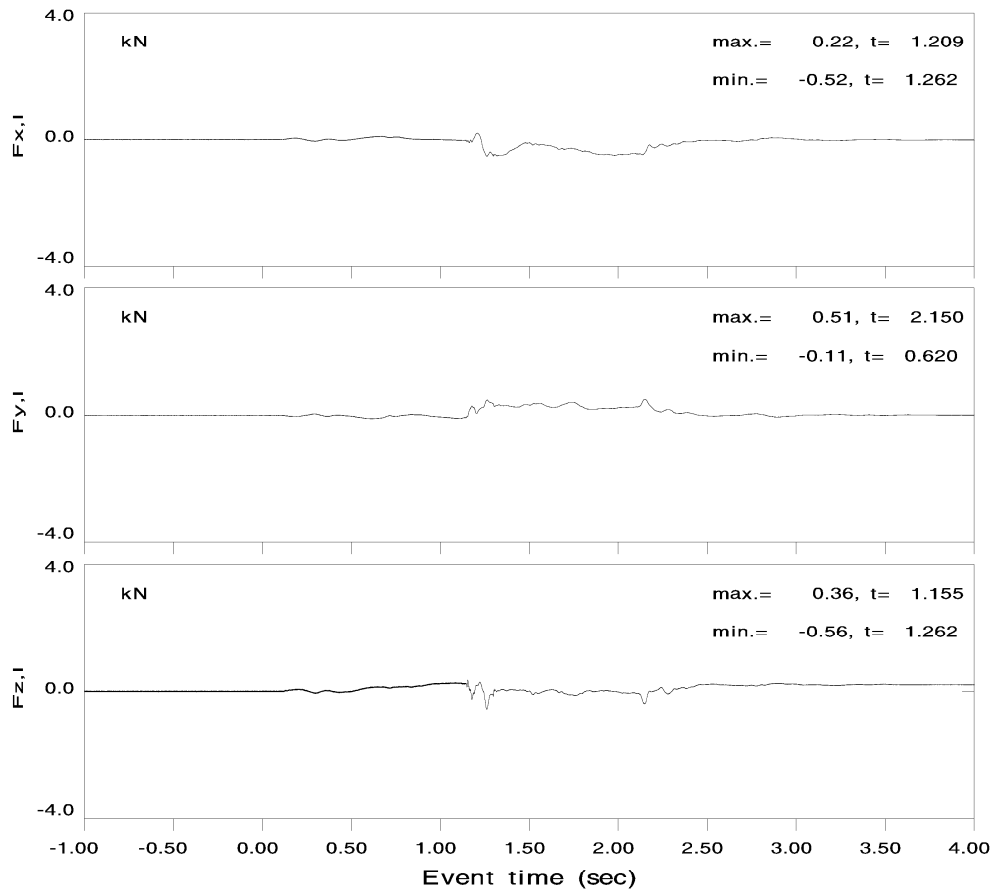






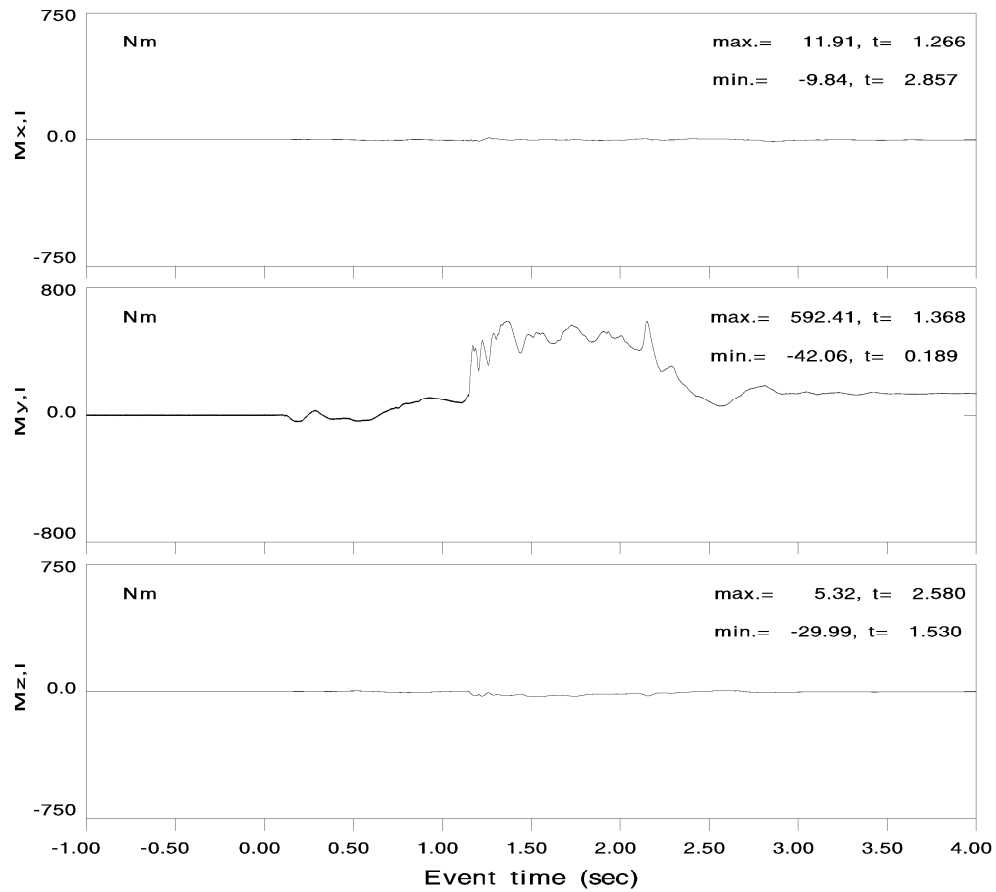
Primary

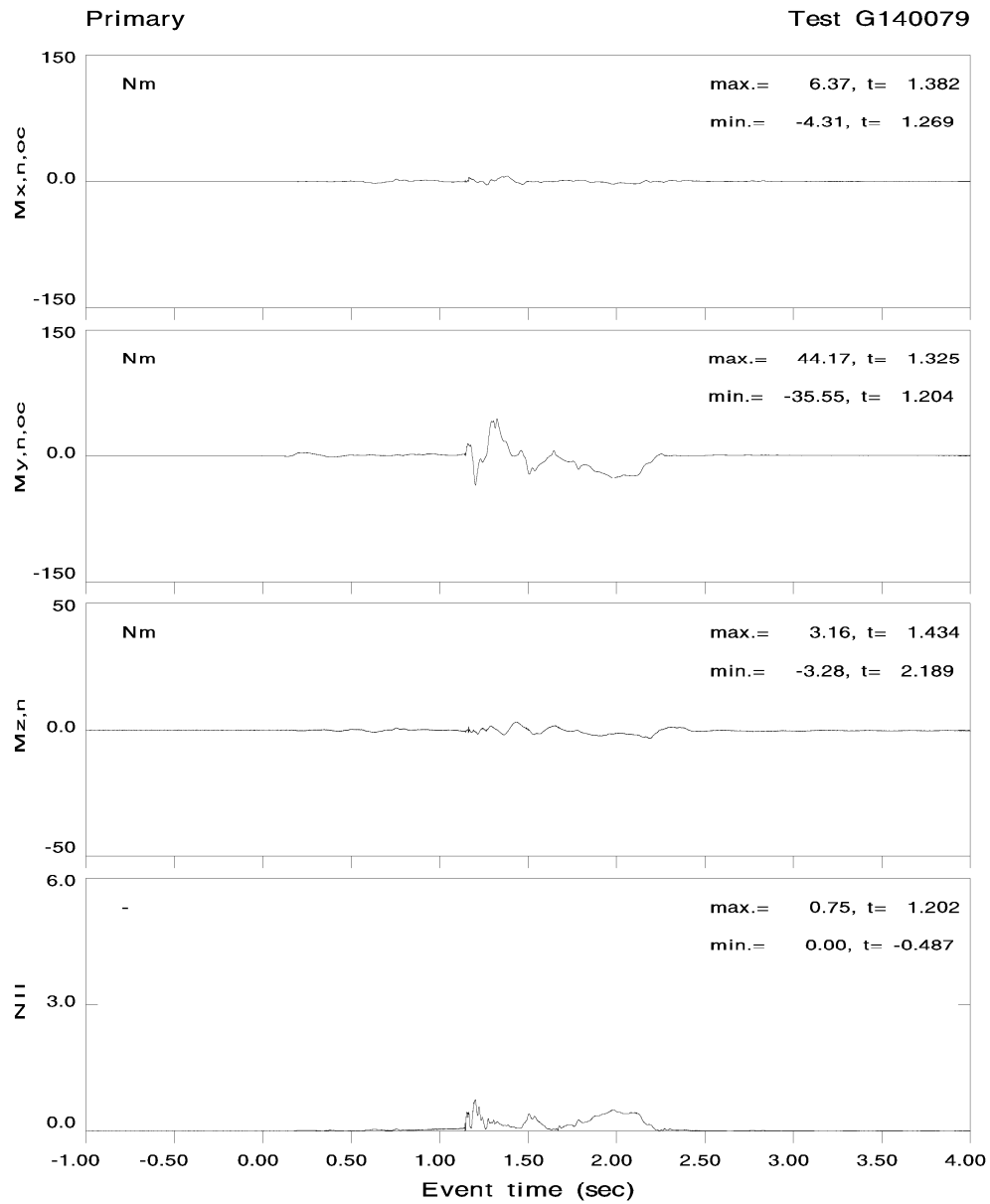
Test G140079



Primary

Test G140079





2.6 G140080

G140080_ICM.IC1

Test Number : G140080
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 1
Index for VCmax Location                   = 2
maximum Abdomen Penetration               = 0.000
maximum GAMBIT                           = 0.190
Cmax                                       = 2.020
VCmax                                      = 0.000
HIC                                        = 99.2
NII (2002 MATD Neck)                     = 0.9
Location of Cmax                          : upper sternum
Location of VCmax                          : lower sternum

```

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.001
Normalized Cost of Survival               = 0.000
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.992	1.000	1.000	1.000	1.000	0
1	0.003	0.000	0.000	0.000	0.000	0
2	0.001	0.000	0.000	0.000	0.000	0
3	0.004	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.018	0.000	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

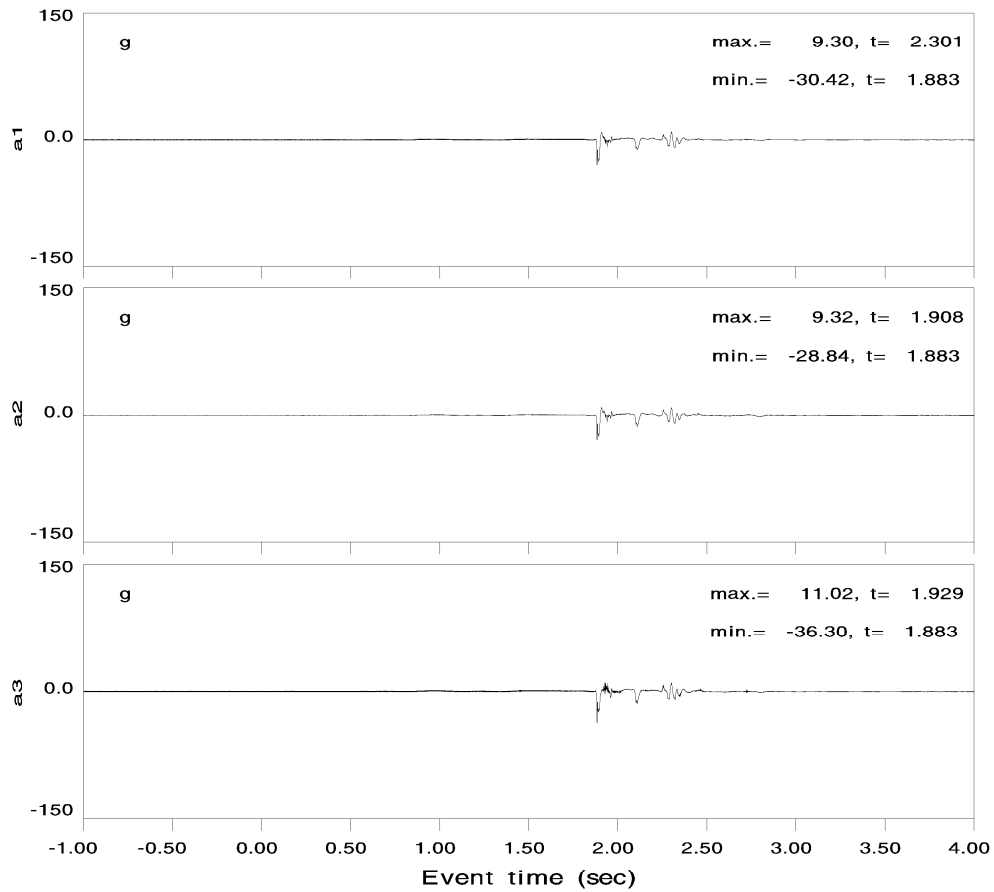
Test G140080, Primary		G140080.rpt		
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	22.07 g	1.905	-2.54 g	1.965
Ay,c	5.59 g	1.913	-5.00 g	1.909
Az,c	12.49 g	1.918	-2.25 g	1.929
Ax,p	12.86 g	1.939	-2.30 g	2.211
Ay,p	1.90 g	2.662	-1.97 g	3.789
Az,p	6.12 g	1.951	-12.23 g	1.924
spare	0.00 -	0.132	0.00 -	3.689
spare	0.00 -	-0.081	0.00 -	2.249
L,ur	1.06 mm	1.889	-3.55 mm	1.913
L,lr	1.38 mm	1.896	-1.71 mm	2.290
a1	9.30 g	2.301	-30.42 g	1.883
a2	9.32 g	1.908	-28.84 g	1.883
a3	11.02 g	1.929	-36.30 g	1.883
a4	10.15 g	2.301	-26.24 g	1.883
a5	10.52 g	2.301	-27.67 g	1.883
a6	10.75 g	2.301	-30.54 g	1.883
Mx,l	12.83 Nm	3.876	-10.51 Nm	1.951
My,l	780.10 Nm	1.926	-44.78 Nm	0.923
Mz,l	15.56 Nm	1.905	-35.94 Nm	1.932
Fx,l	0.42 kN	1.951	-0.47 kN	1.913
Fy,l	0.73 kN	1.924	-0.41 kN	1.951
Fz,l	1.29 kN	1.951	-1.73 kN	1.925
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
spare	0.13 -	4.000	0.01 -	-0.996
spare	0.00 -	1.736	0.00 -	0.827
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	3.531	0.00 -	1.125
a7	20.27 g	1.883	-10.51 g	1.941
a8	24.59 g	1.883	-17.07 g	1.941
a9	25.88 g	1.883	-15.97 g	1.940
Fz,uf,r	0.47 kN	3.777	-0.39 kN	1.942
Mx,uf,r	25.36 Nm	1.941	-46.99 Nm	3.790
My,uf,r	125.67 Nm	1.960	-5.42 Nm	0.973
Mz,uf,r	30.28 Nm	1.959	-9.54 Nm	3.783
Fz,uf,l	0.34 kN	2.359	-0.72 kN	1.938
Mx,uf,l	21.62 Nm	2.335	-27.14 Nm	1.936
My,uf,l	101.44 Nm	1.963	-3.12 Nm	1.185
Mz,uf,l	7.69 Nm	2.458	-16.35 Nm	1.849
Fx,n	0.24 kN	1.940	-0.48 kN	1.904
Fy,n	0.14 kN	1.926	-0.05 kN	1.928
Fz,n	0.98 kN	2.343	-0.78 kN	1.892
Mx,n	8.20 Nm	1.931	-6.69 Nm	1.908
My,n	43.74 Nm	1.941	-53.86 Nm	1.904
Mz,n	3.43 Nm	2.152	-5.67 Nm	1.919
L,ul	0.66 mm	1.965	-3.52 mm	1.909
L,ll	2.16 mm	1.965	-1.57 mm	1.939
Ax,h	40.09 g	1.883	-13.76 g	2.301
Ay,h	2.67 g	1.963	-3.68 g	1.895
Az,h	20.28 g	1.883	-10.51 g	1.941
ax,h	1.46 krad/s**2	1.929	-0.71 krad/s**2	1.927
ay,h	3.53 krad/s**2	1.942	-2.69 krad/s**2	1.907
az,h	0.61 krad/s**2	1.884	-0.43 krad/s**2	1.919
Ar,h	45.02 g	1.883	0.01 g	-0.666
ar,h	3.53 krad/s**2	1.942	0.00 krad/s**2	-0.101
G	0.19 -	1.883	0.00 -	0.420
HIC	99.18	1.898	----	1.881
Fxy,n	0.48 kN	1.904	0.00 kN	-0.467
Dx,us	0.08 mm	-0.896	-3.78 mm	1.910
Dy,us	2.02 mm	1.965	-1.88 mm	1.889

		G140080.rpt		
Cus	2.02 %	1.910	-0.04 %	-0.896
Vus	0.37 m/s	1.915	-0.37 m/s	1.905
VCus	0.01 m/s	1.907	-0.01 m/s	1.914
Dx,ls	1.05 mm	1.965	-2.08 mm	2.299
Dy,ls	2.02 mm	1.966	-1.84 mm	1.888
Cl,s	1.11 %	2.299	-0.56 %	1.965
Vls	0.17 m/s	1.956	-0.23 m/s	1.921
VCl,s	0.00 m/s	1.923	0.00 m/s	1.942
Mxy,uf,r	127.52 Nm	1.960	0.00 Nm	0.264
Mxy,uf,l	101.64 Nm	1.963	0.00 Nm	-0.423
Mx,n,oc	7.75 Nm	1.929	-6.45 Nm	2.018
My,n,oc	39.75 Nm	1.938	-45.65 Nm	1.903
NII	0.91 -	2.343	0.00 -	-0.666
Ar,p	15.50 g	1.939	0.01 g	-0.719
Ar,c	24.49 g	1.905	0.00 g	0.527

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

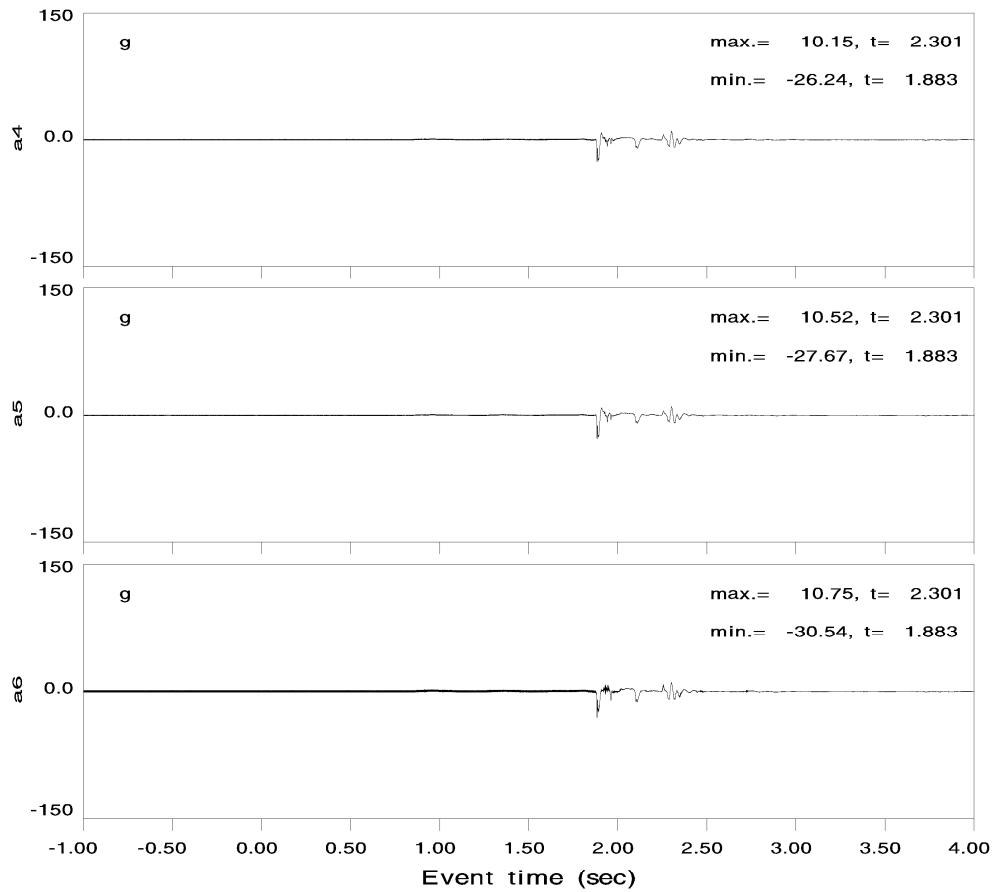
Primary

Test G140080



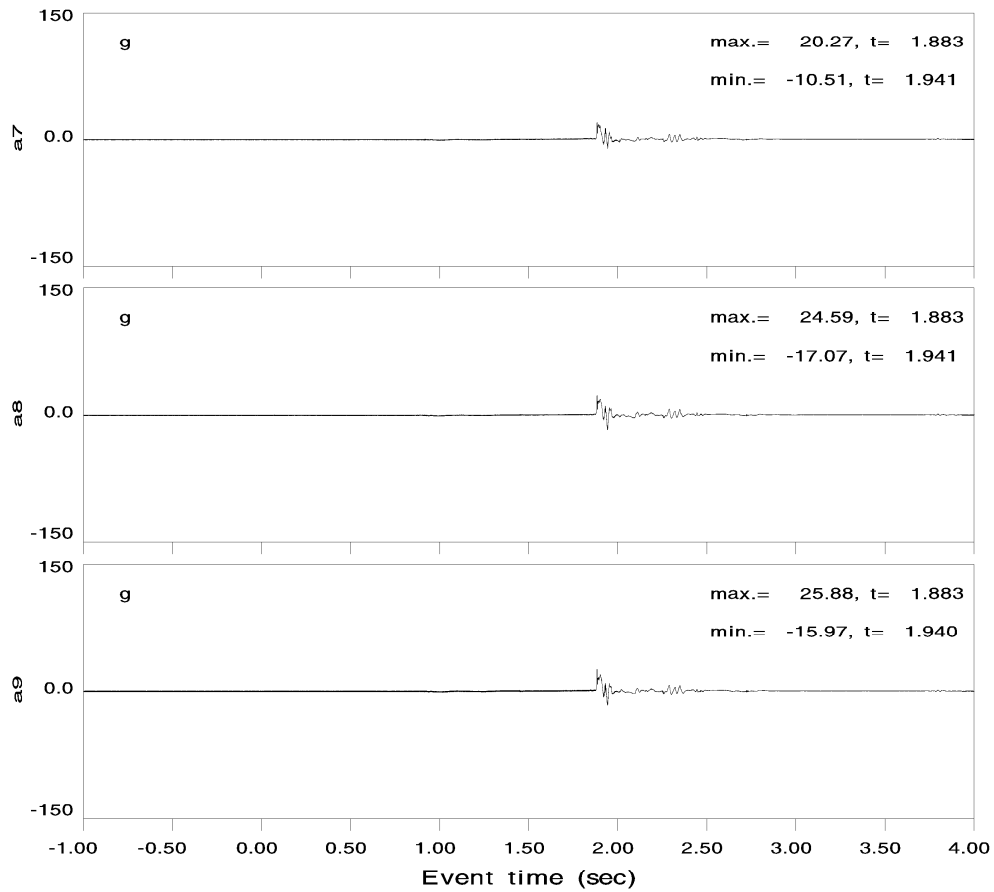
Primary

Test G140080



Primary

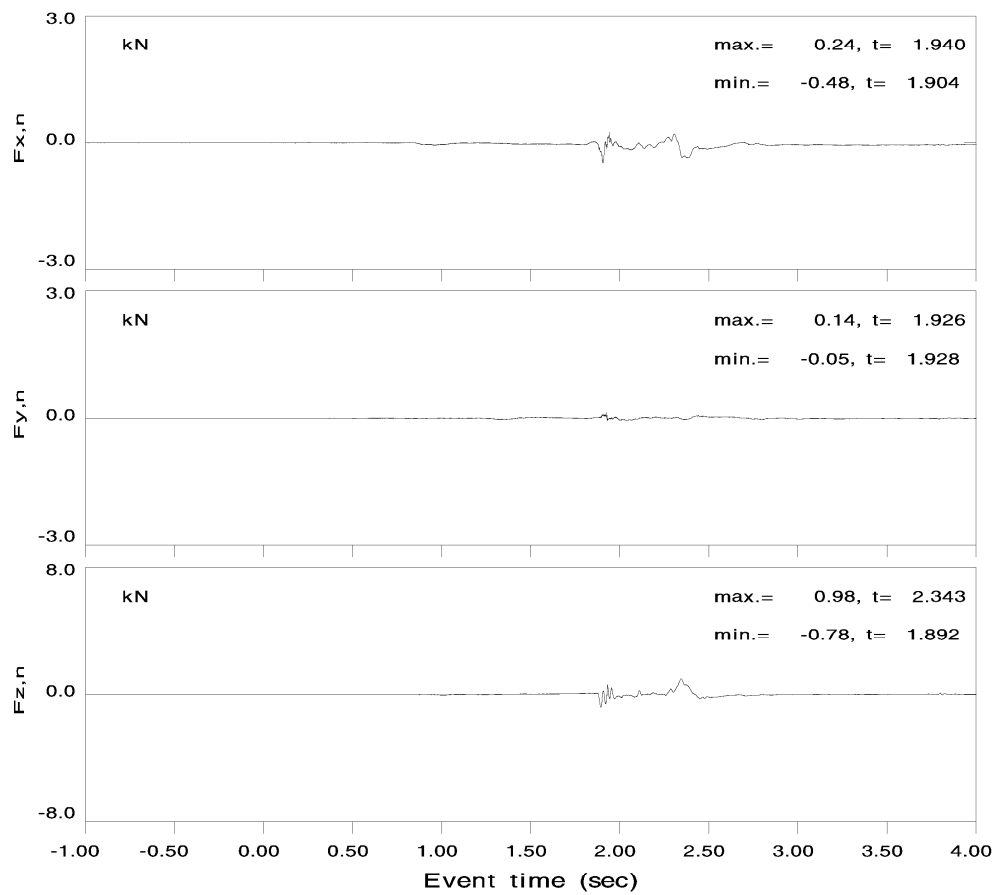
Test G140080



Page 3

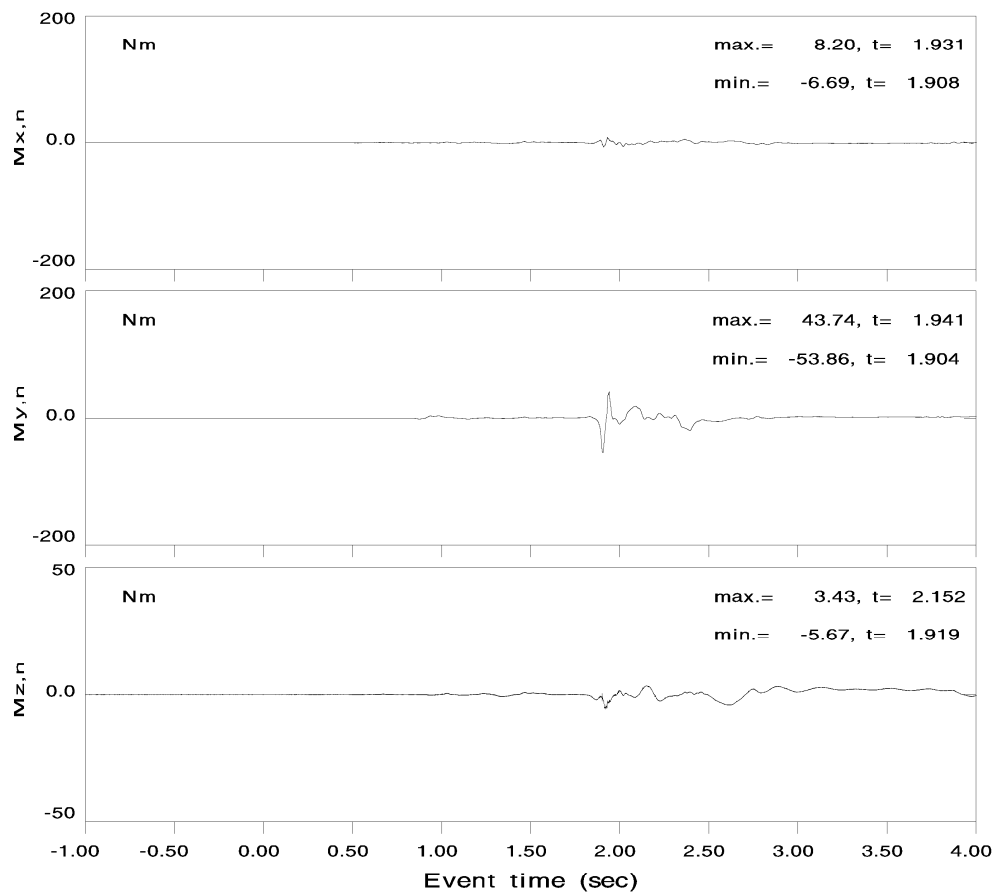
Primary

Test G140080

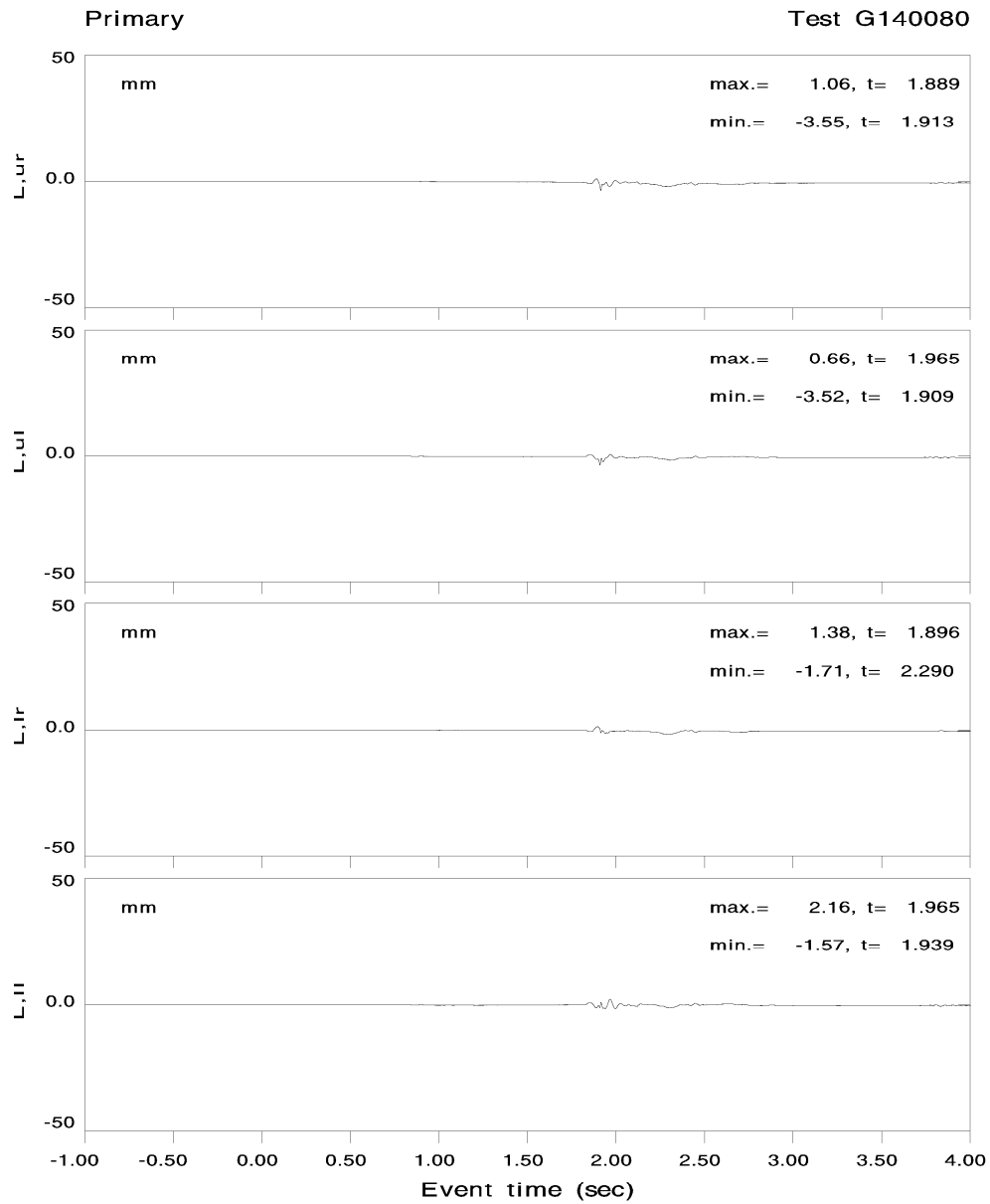


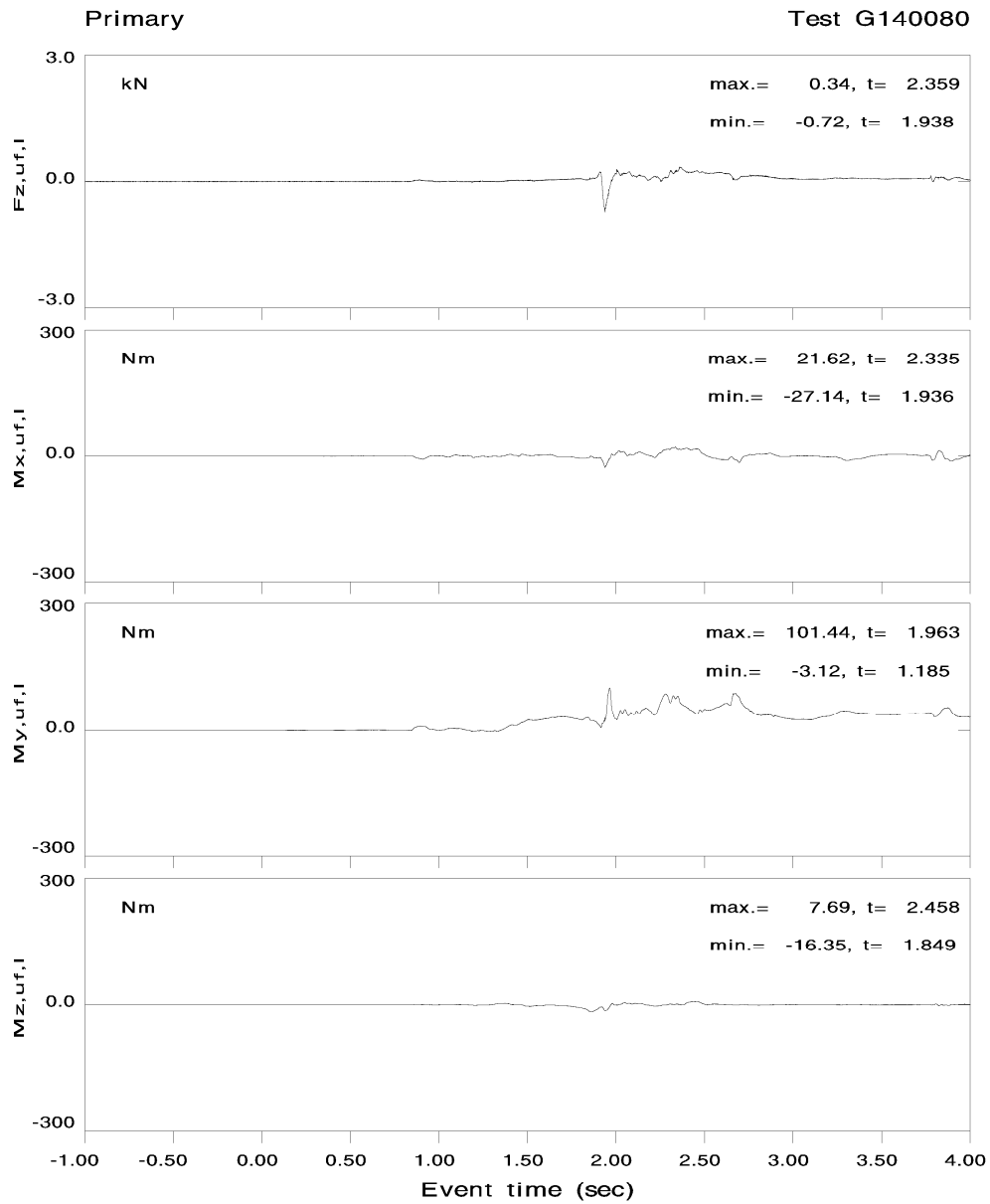
Primary

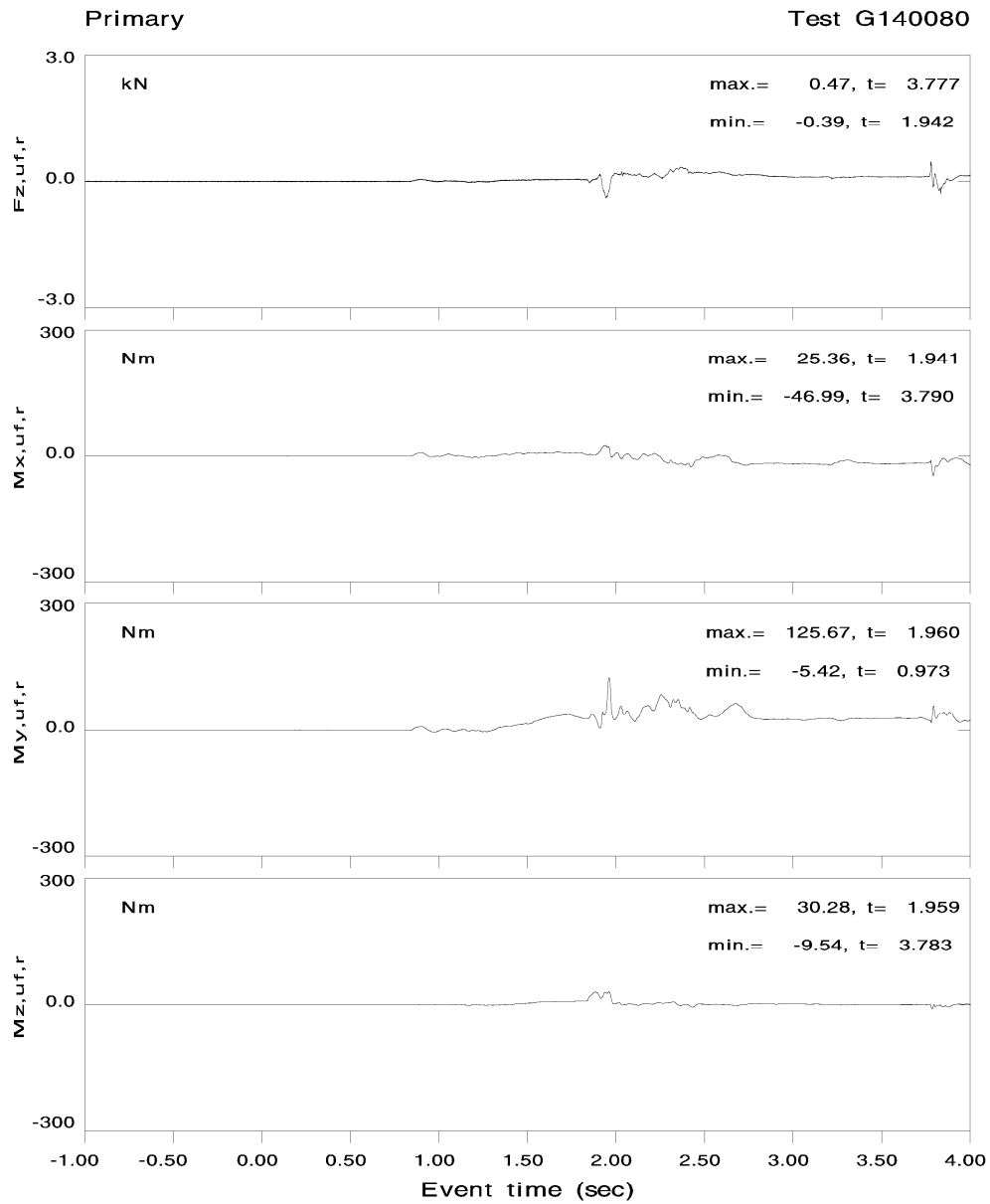
Test G140080

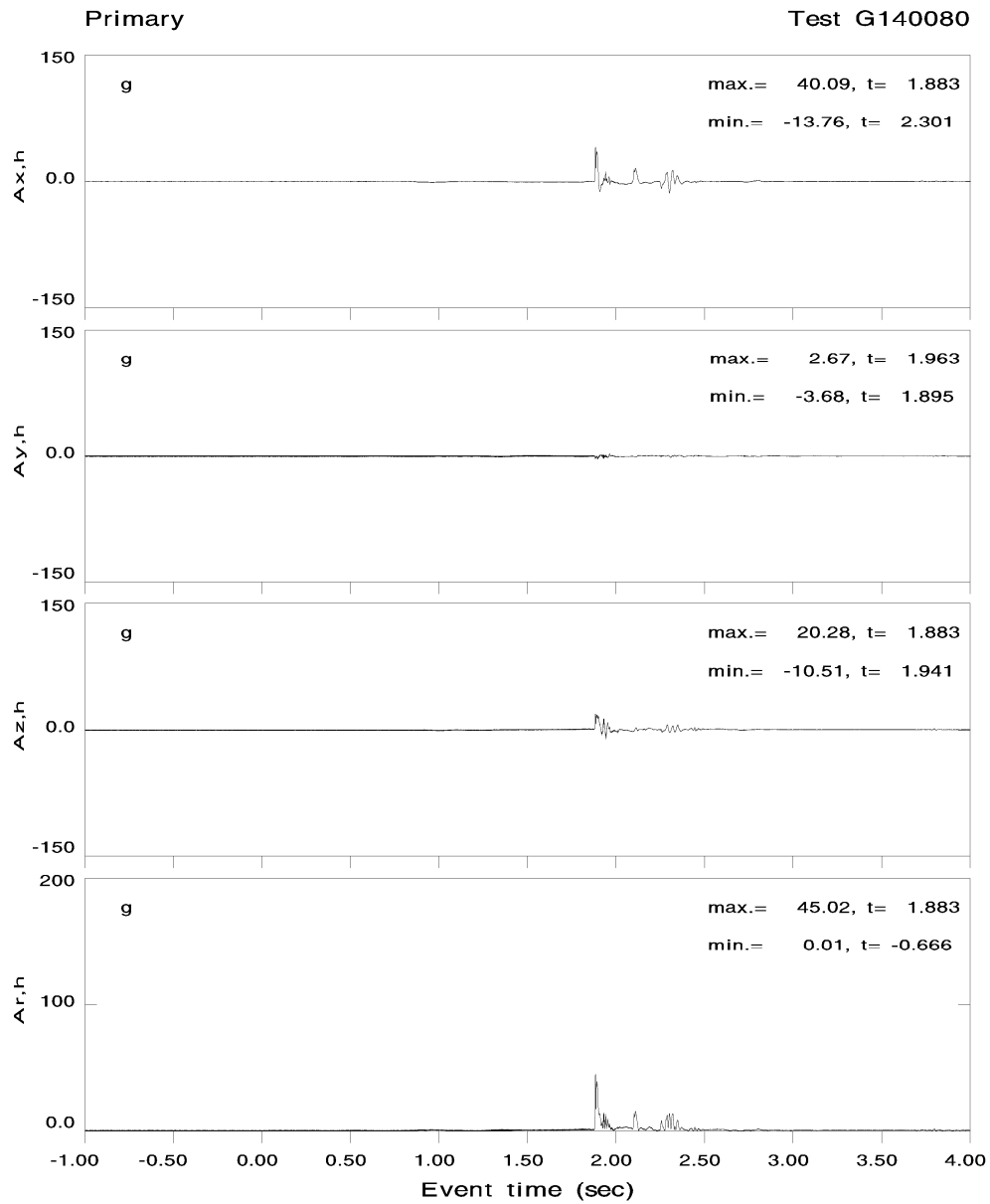


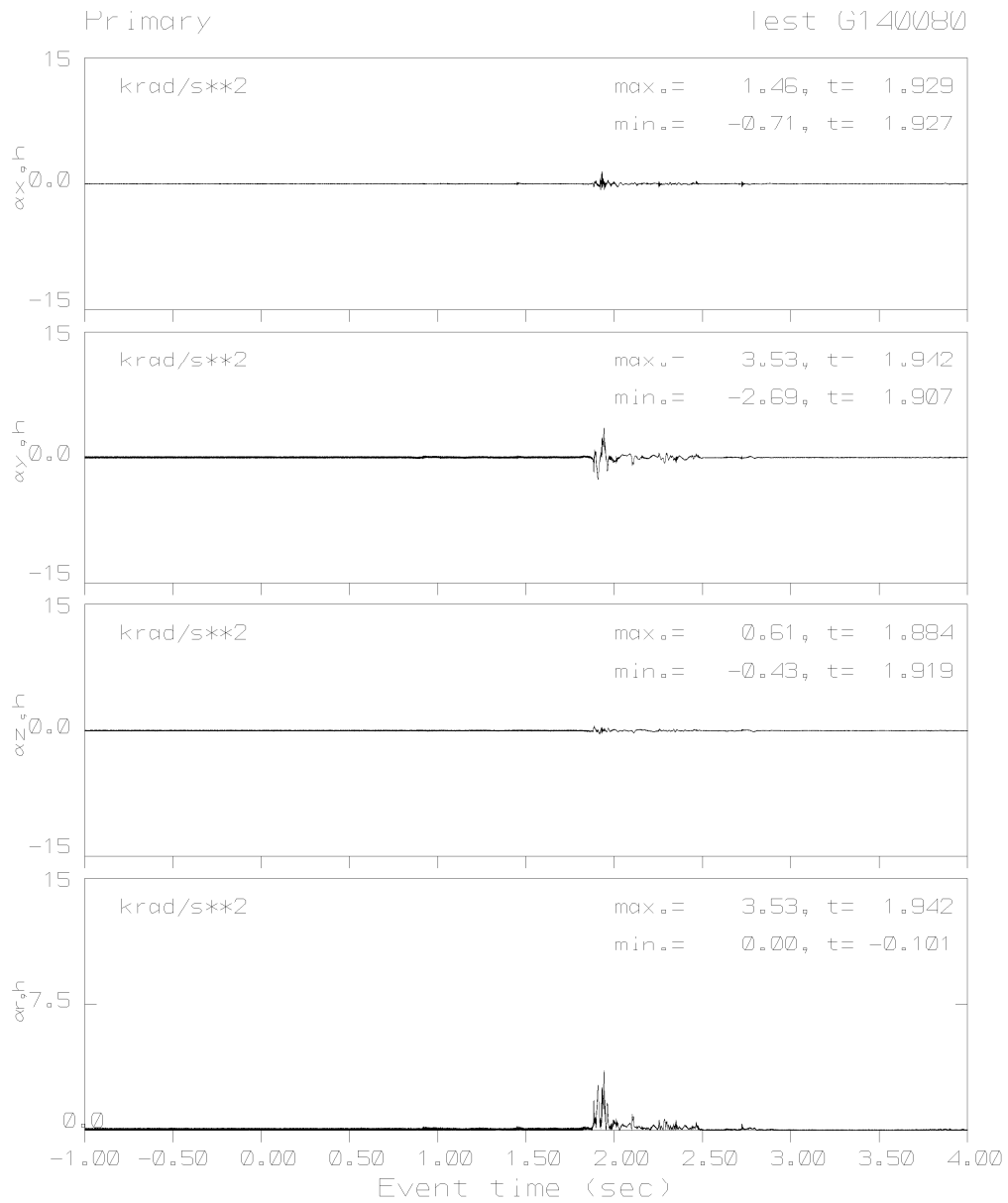
Page 5



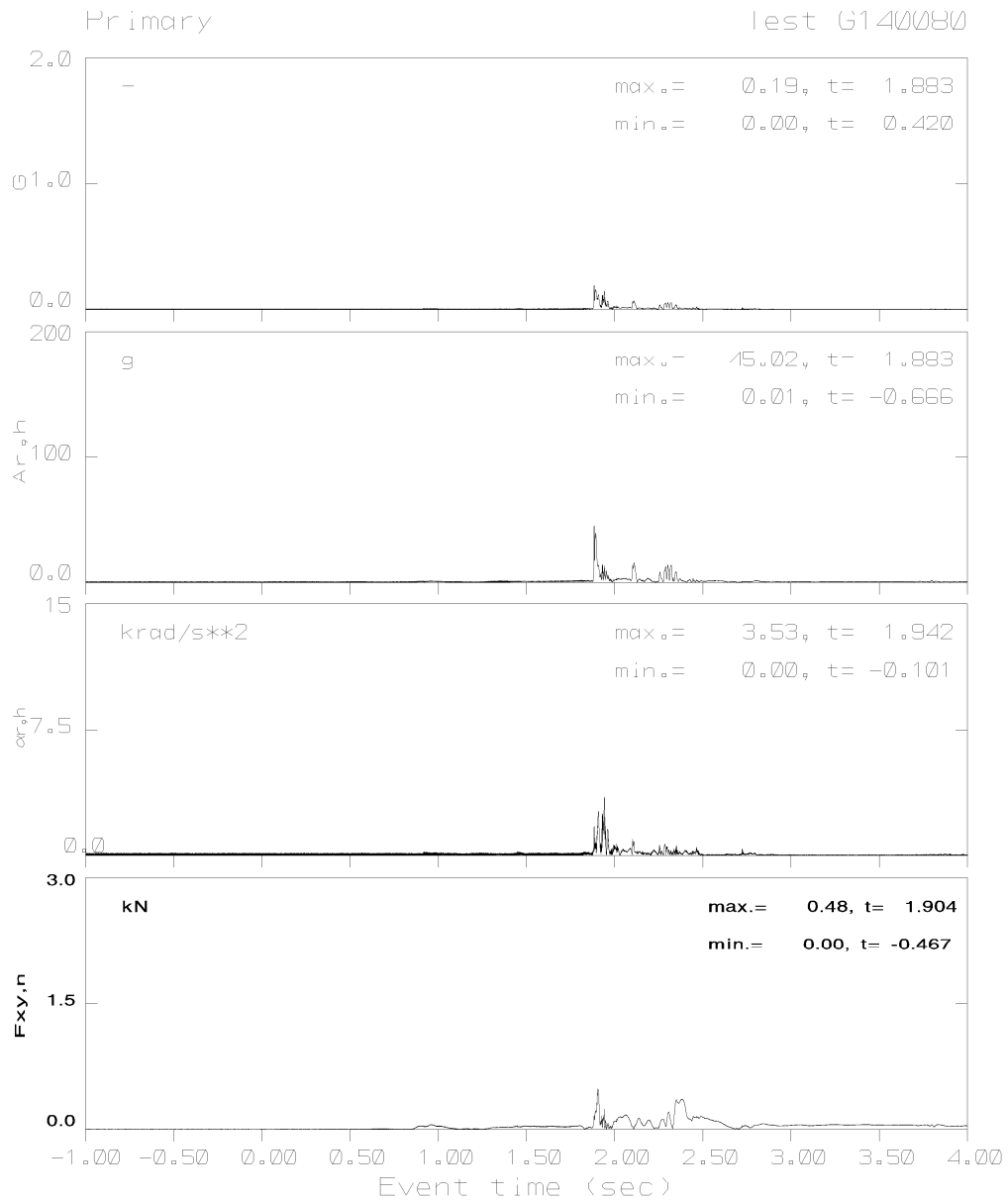


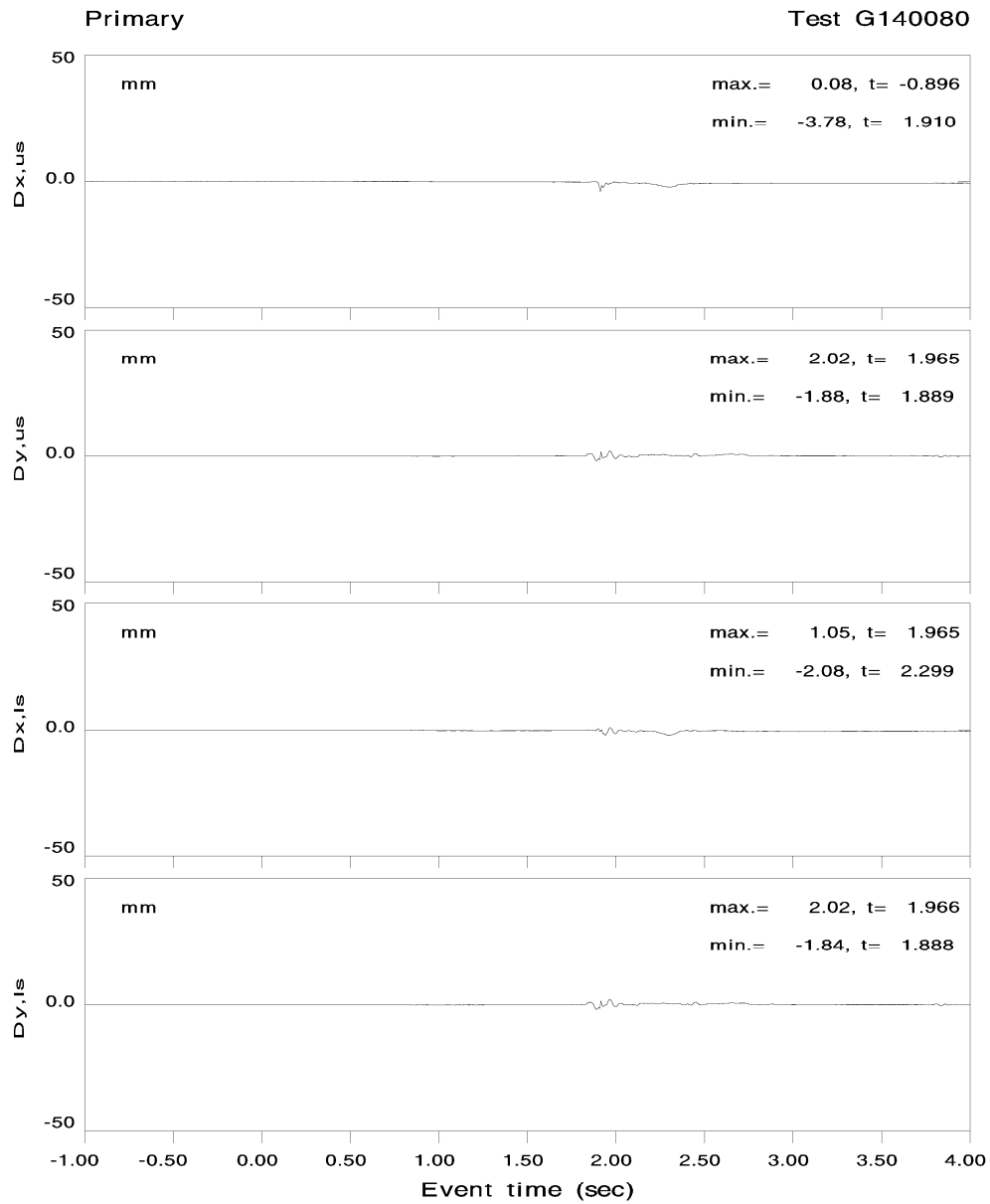






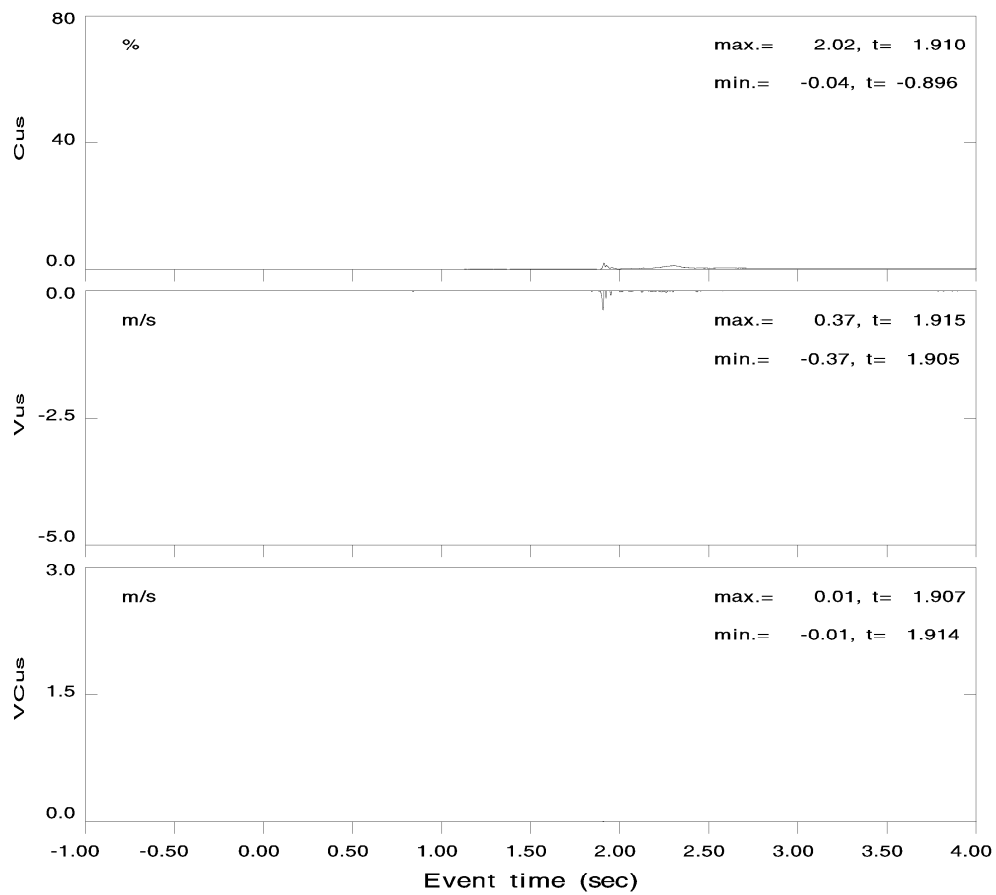
Page 10





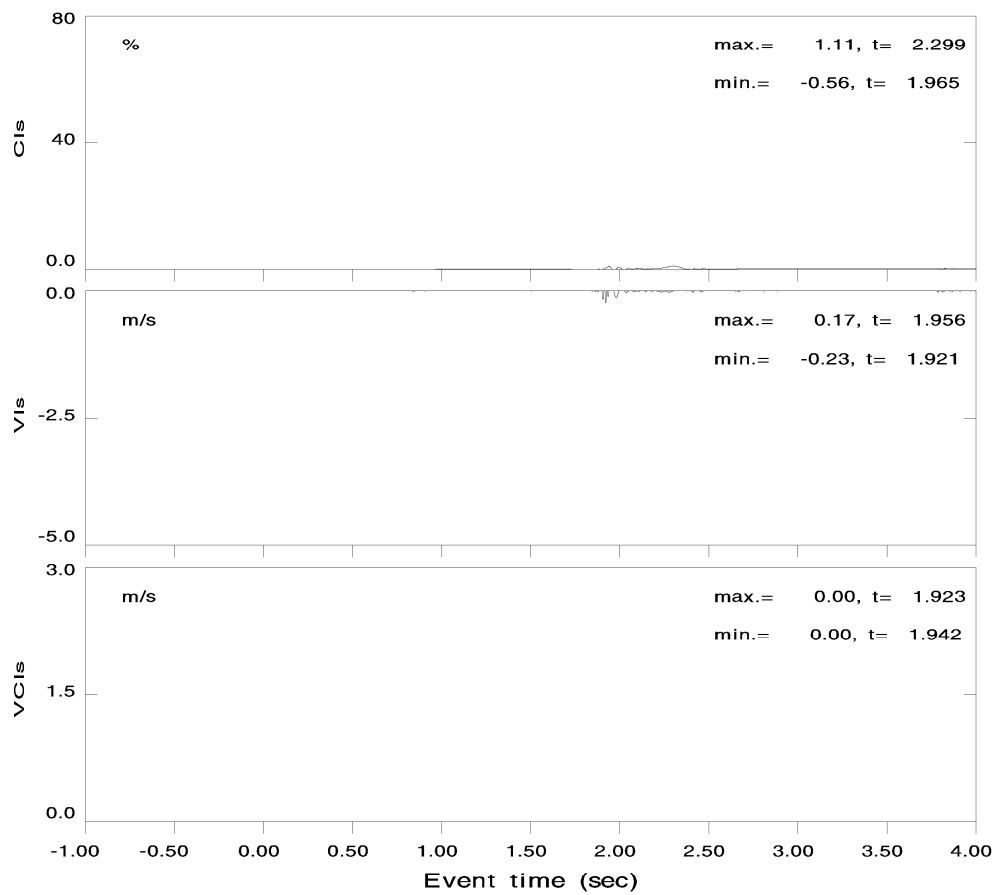
Primary

Test G140080



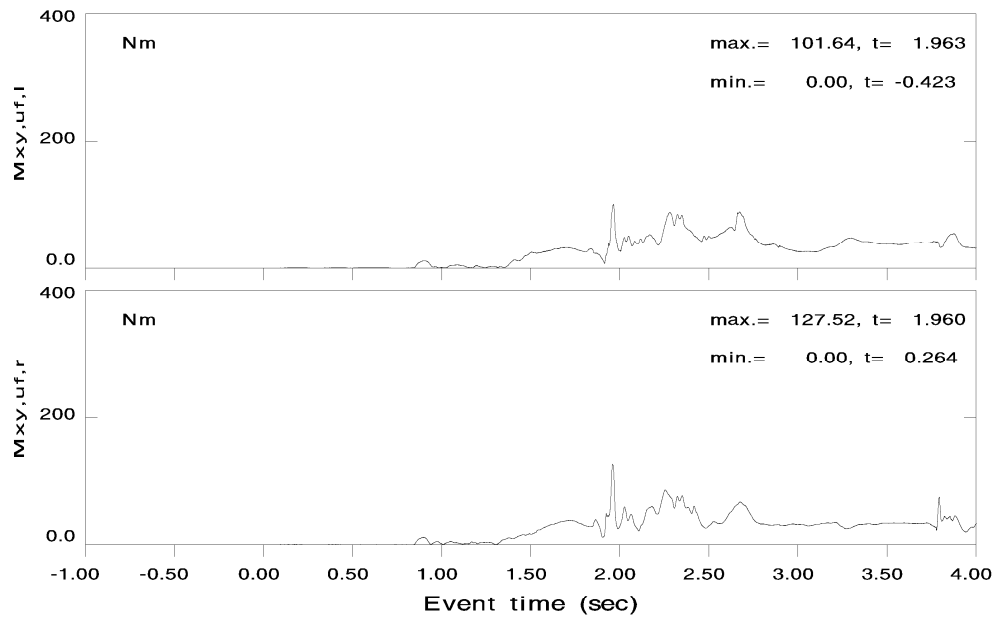
Primary

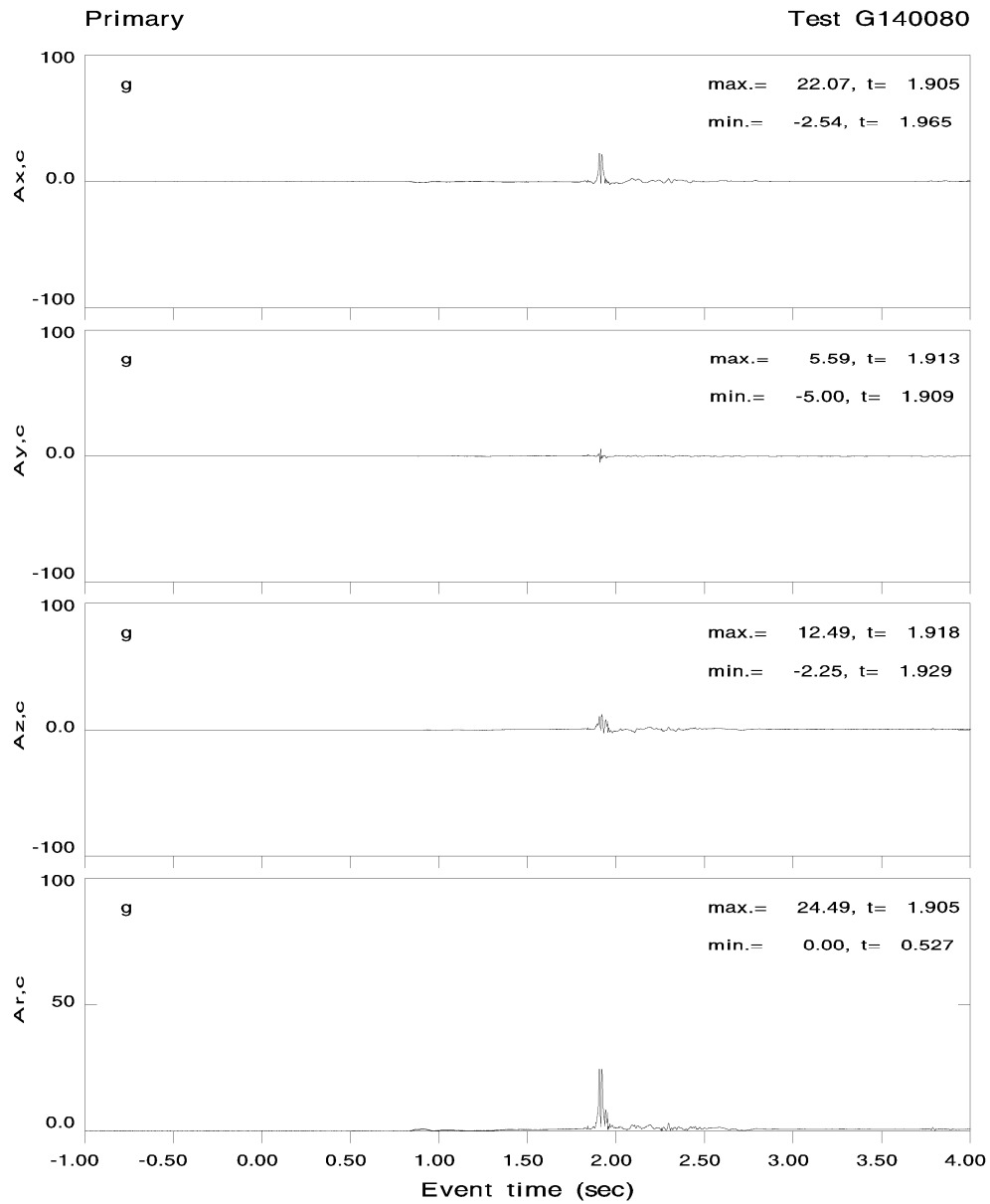
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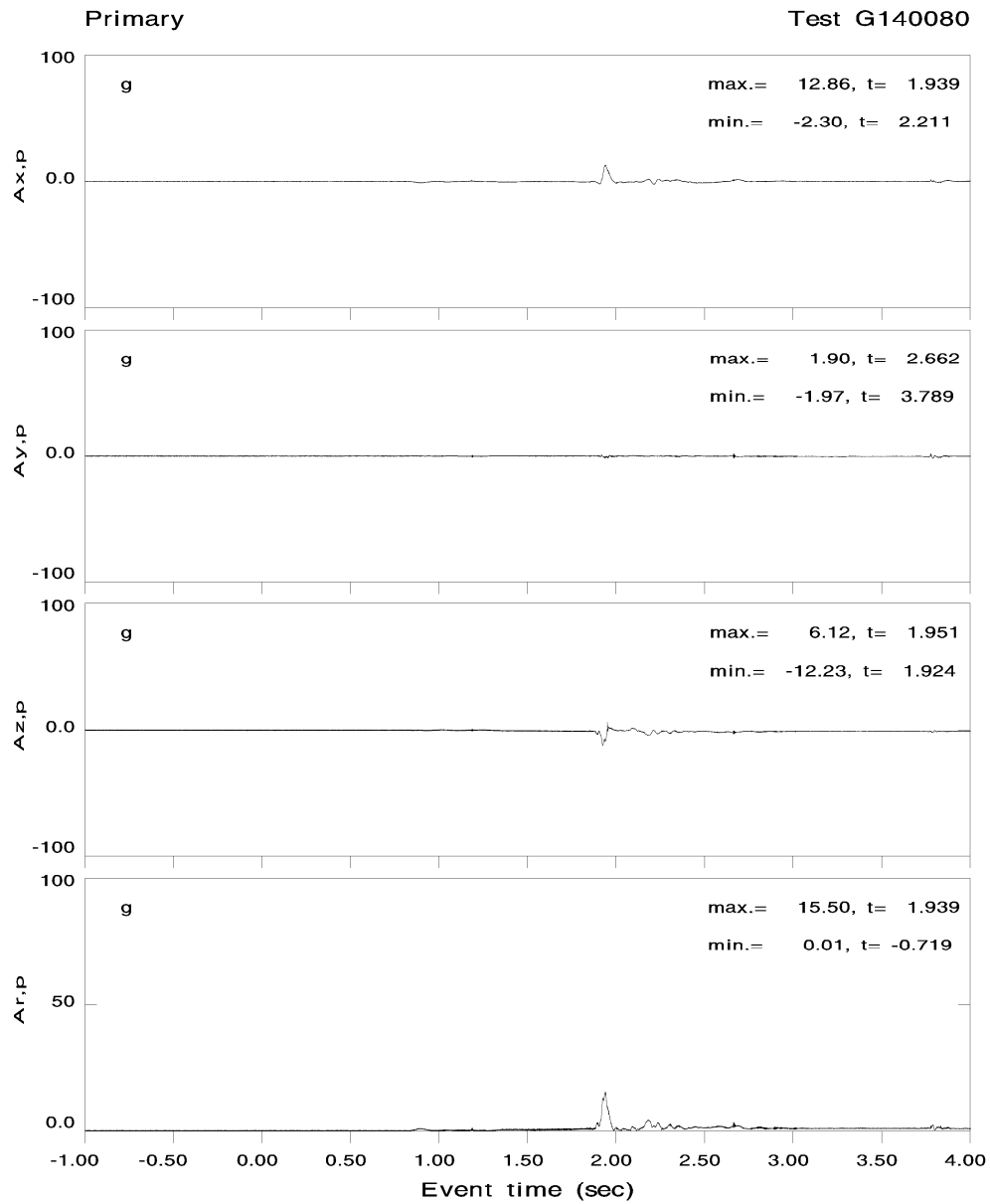


Primary

Test G140080

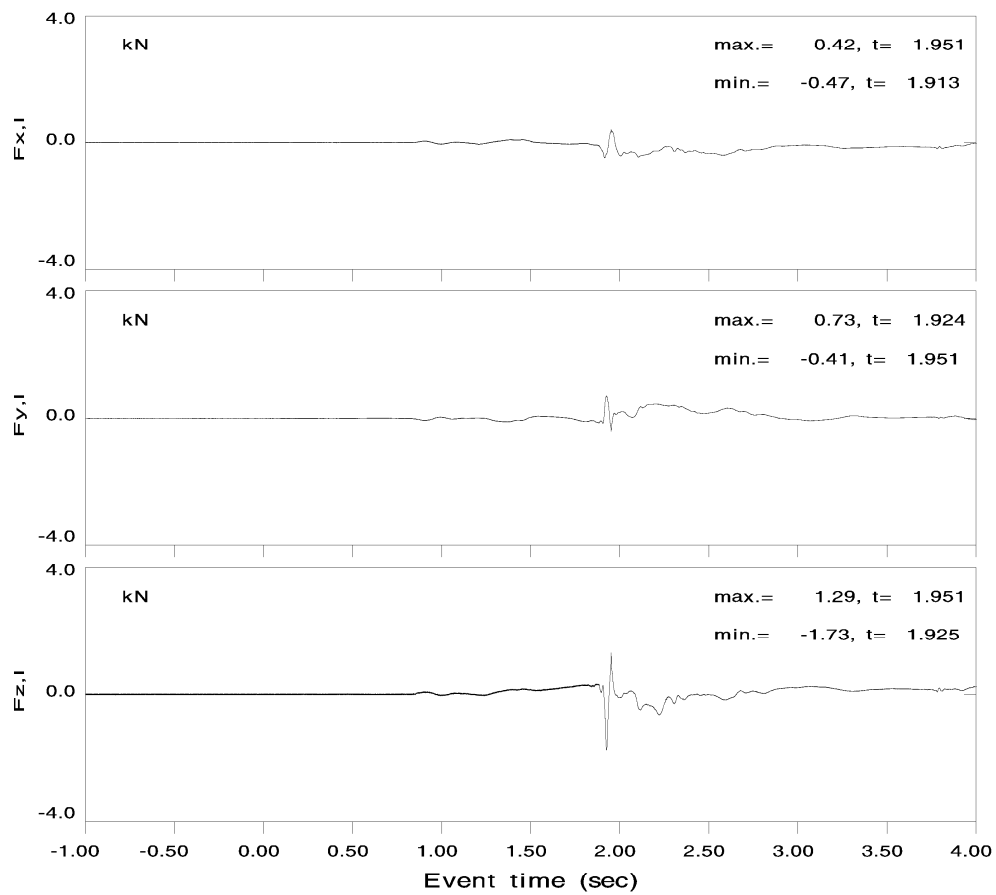






Primary

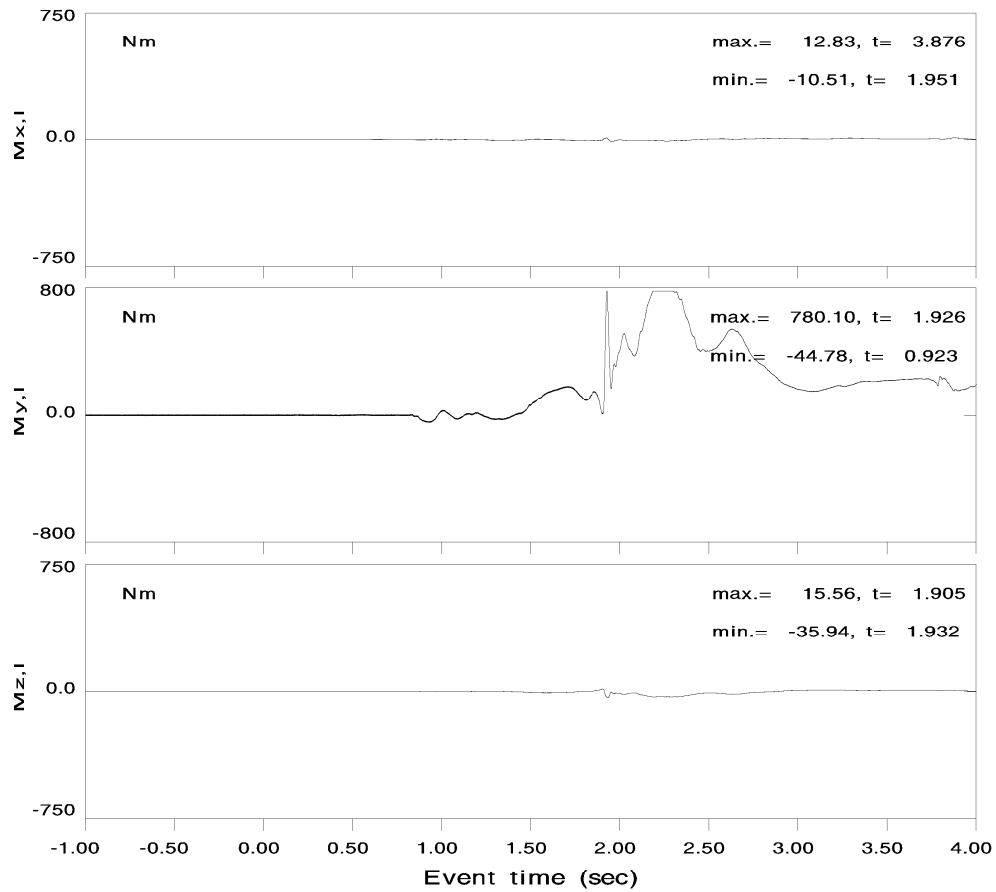
Test G140080

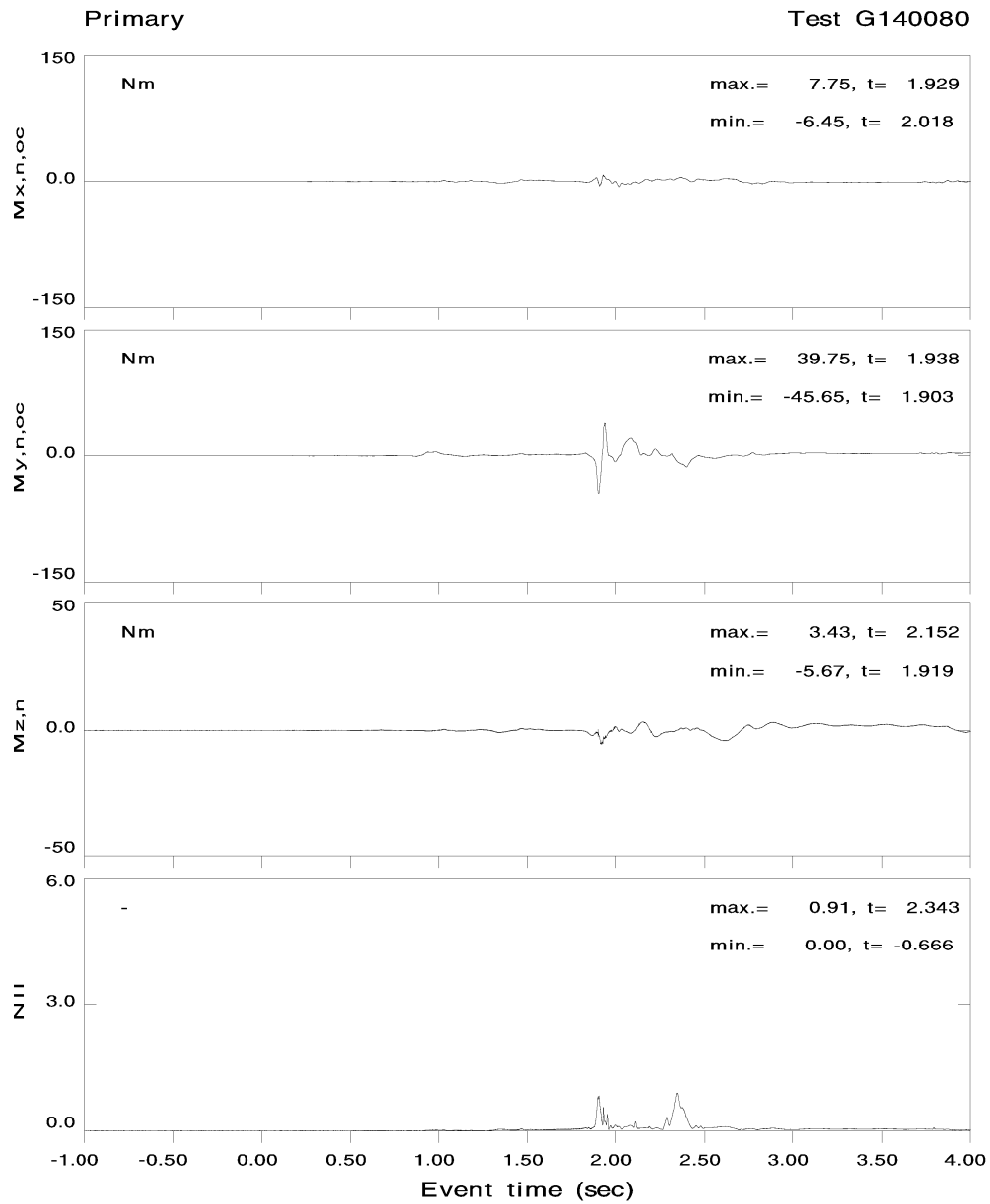


Page 18

Primary

Test G140080





2.7 G140082

G140082_ICM.IC1

Test Number : G140082
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 2
Index for VCmax Location                   = 2
maximum Abdomen Penetration               = 0.000
maximum GAMBIT                            = 0.170
Cmax                                       = 2.530
VCmax                                     = 0.000
HIC                                       = 77.9
NII (2002 MATD Neck)                     = 2.0
Location of Cmax                          : lower sternum
Location of VCmax                         : lower sternum

```

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.000
Normalized Cost of Survival               = 0.000
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.995	0.995	1.000	1.000	1.000	0
1	0.002	0.005	0.000	0.000	0.000	0
2	0.000	0.000	0.000	0.000	0.000	0
3	0.004	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.013	0.005	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.000	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

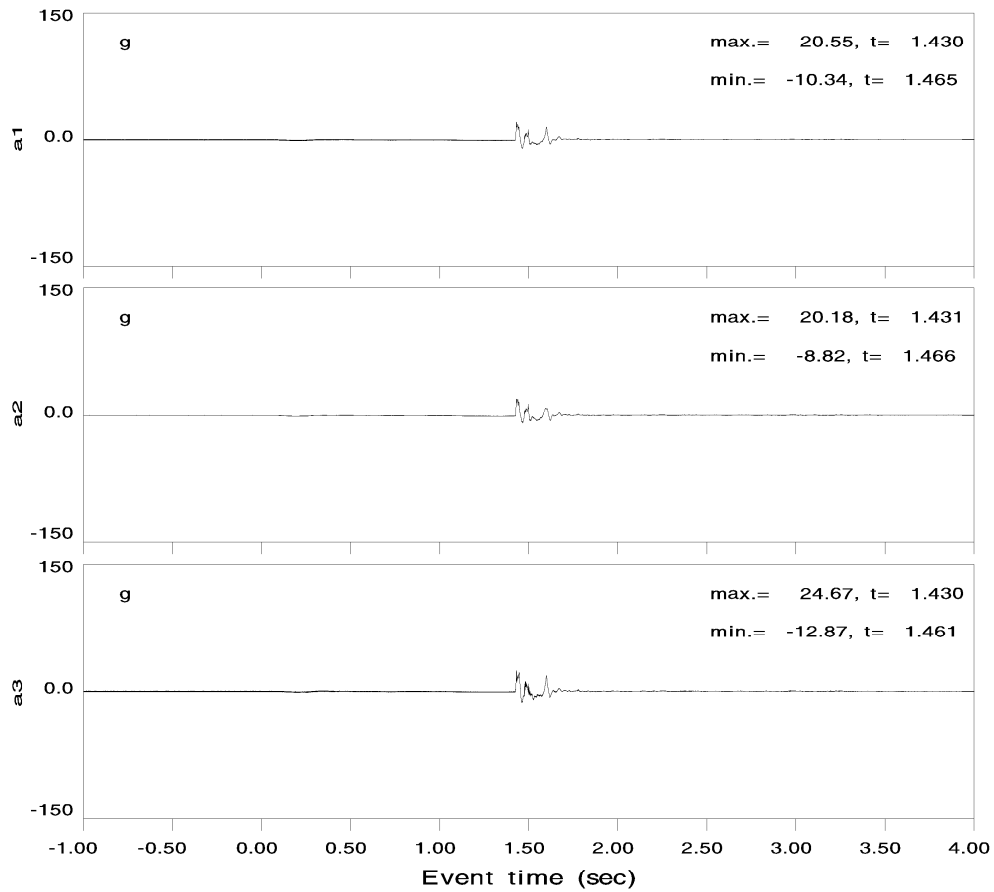
Test G140082, Primary		G140082.rpt		
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	7.01 g	1.498	-6.32 g	1.448
Ay,c	2.95 g	1.543	-3.78 g	1.496
Az,c	14.28 g	1.443	-8.70 g	1.543
Ax,p	3.53 g	1.635	-5.31 g	1.608
Ay,p	2.53 g	1.494	-2.95 g	1.539
Az,p	9.82 g	1.546	-13.60 g	1.448
spare	0.00 -	1.541	0.00 -	2.585
spare	0.00 -	2.784	0.00 -	-0.428
L,ur	4.52 mm	1.554	-10.41 mm	1.697
L,lr	4.08 mm	1.549	-5.68 mm	1.706
a1	20.55 g	1.430	-10.34 g	1.465
a2	20.18 g	1.431	-8.82 g	1.466
a3	24.67 g	1.430	-12.87 g	1.461
a4	21.55 g	1.437	-9.31 g	1.465
a5	20.95 g	1.437	-10.17 g	1.465
a6	26.10 g	1.446	-11.14 g	1.464
Mx,l	24.34 Nm	1.857	-16.05 Nm	3.242
My,l	658.59 Nm	1.635	-135.91 Nm	1.444
Mz,l	13.52 Nm	2.677	-29.04 Nm	1.555
Fx,l	0.13 kN	3.240	-1.51 kN	1.611
Fy,l	0.80 kN	1.849	-0.13 kN	2.637
Fz,l	0.89 kN	1.669	-1.71 kN	1.451
spare	0.00 -	4.000	0.00 -	4.000
spare	0.01 -	1.951	0.00 -	-0.411
spare	0.09 -	3.999	0.01 -	-0.992
spare	0.00 -	3.089	0.00 -	3.473
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.01 -	3.982	0.00 -	0.257
a7	27.48 g	1.430	-8.28 g	1.501
a8	23.24 g	1.430	-13.93 g	1.447
a9	24.90 g	1.430	-13.56 g	1.447
Fz,uf,r	0.17 kN	1.674	-0.60 kN	1.507
Mx,uf,r	19.04 Nm	2.331	-36.45 Nm	3.050
My,uf,r	33.13 Nm	1.874	-59.66 Nm	1.453
Mz,uf,r	12.16 Nm	3.226	-33.17 Nm	2.351
Fz,uf,l	1.00 kN	1.681	-0.33 kN	1.532
Mx,uf,l	19.02 Nm	1.759	-19.80 Nm	1.702
My,uf,l	130.11 Nm	1.686	-61.84 Nm	1.556
Mz,uf,l	25.20 Nm	1.615	-11.13 Nm	3.102
Fx,n	0.63 kN	1.439	-0.02 kN	0.345
Fy,n	0.05 kN	1.438	-0.65 kN	1.676
Fz,n	0.84 kN	1.724	-4.32 kN	1.449
Mx,n	52.49 Nm	1.676	-19.24 Nm	1.491
My,n	68.22 Nm	1.452	-4.03 Nm	0.218
Mz,n	4.39 Nm	1.583	-7.38 Nm	1.497
L,ul	6.07 mm	1.700	-2.30 mm	1.550
L,ll	9.28 mm	1.700	-2.40 mm	1.551
Ax,h	13.78 g	1.465	-28.32 g	1.430
Ay,h	14.41 g	1.599	-3.82 g	1.542
Az,h	27.50 g	1.430	-8.29 g	1.501
ax,h	1.11 krad/s**2	1.481	-1.85 krad/s**2	1.497
ay,h	4.03 krad/s**2	1.447	-2.62 krad/s**2	1.498
az,h	0.89 krad/s**2	1.498	-1.76 krad/s**2	1.599
Ar,h	38.33 g	1.430	0.01 g	-0.483
ar,h	4.03 krad/s**2	1.447	0.00 krad/s**2	0.785
G	0.17 -	1.447	0.00 -	-0.092
HIC	77.94	1.464	----	1.428
Fxy,n	0.76 kN	1.676	0.00 kN	-0.864
Dx,us	1.73 mm	1.560	-3.43 mm	1.690
Dy,us	12.76 mm	1.698	-5.41 mm	1.550

		G140082.rpt		
Cus	1.83 %	1.690	-0.92 %	1.560
Vus	0.10 m/s	1.496	-0.12 m/s	1.647
VCus	0.00 m/s	1.662	0.00 m/s	1.770
Dx,ls	4.75 mm	1.453	-0.06 mm	-0.747
Dy,ls	11.20 mm	1.699	-4.79 mm	1.550
Cl,s	0.03 %	-0.747	-2.53 %	1.453
Vls	0.22 m/s	1.446	-0.20 m/s	1.499
VCl,s	0.00 m/s	1.447	0.00 m/s	1.457
Mxy,uf,r	59.76 Nm	1.453	0.00 Nm	-0.366
Mxy,uf,l	130.21 Nm	1.686	0.00 Nm	-0.924
Mx,n,oc	40.98 Nm	1.679	-21.44 Nm	1.491
My,n,oc	66.39 Nm	1.451	-4.89 Nm	0.217
NII	2.05 -	1.449	0.00 -	-0.760
Ar,p	13.83 g	1.448	0.00 g	-0.984
Ar,c	14.90 g	1.444	0.00 g	-0.783

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

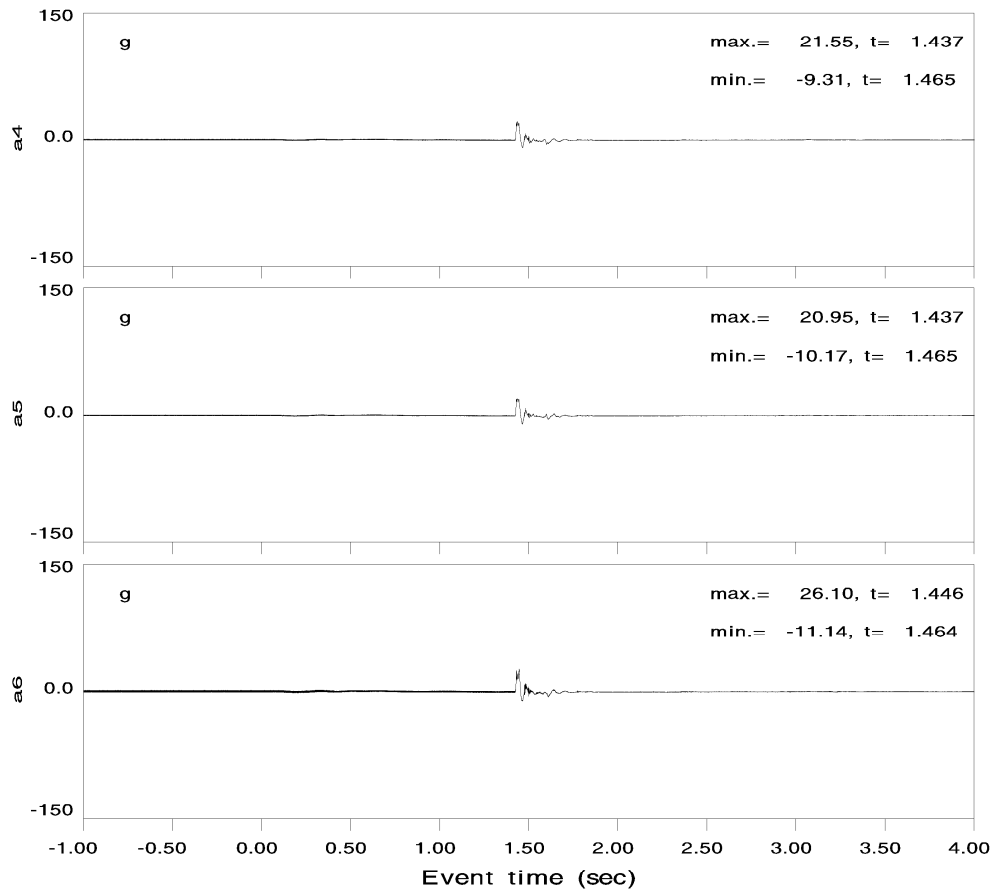
Primary

Test G140082



Primary

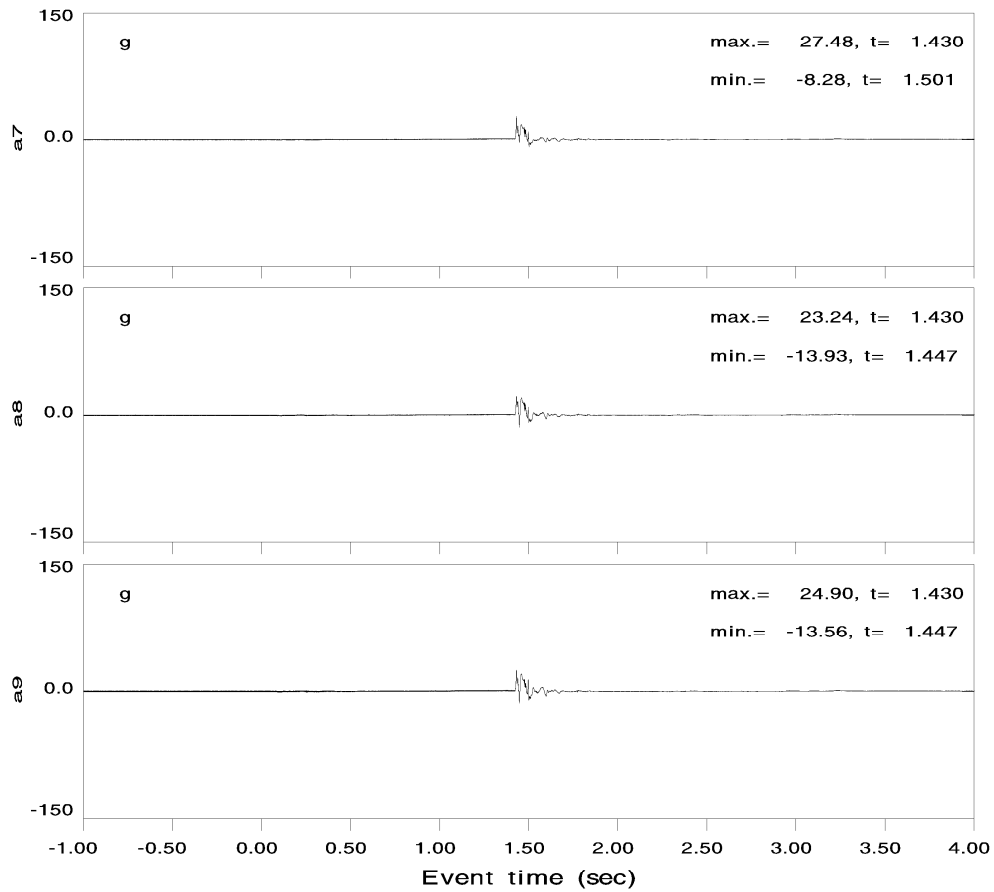
Test G140082



Page 2

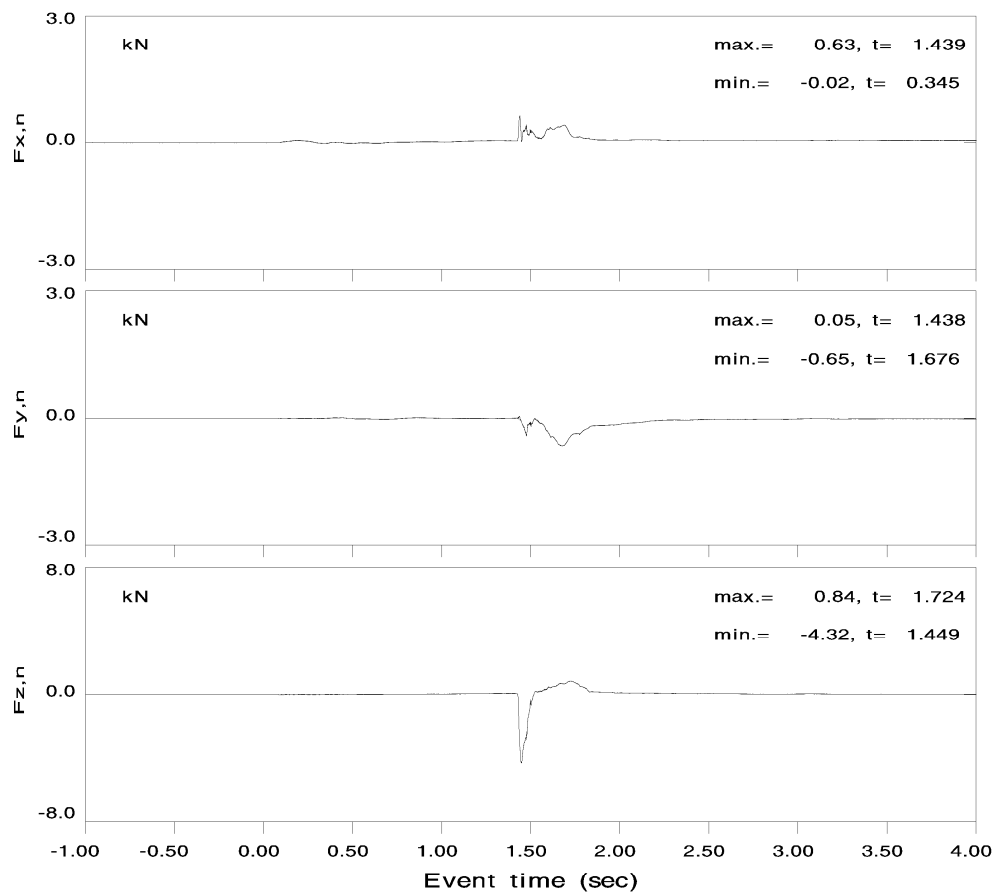
Primary

Test G140082



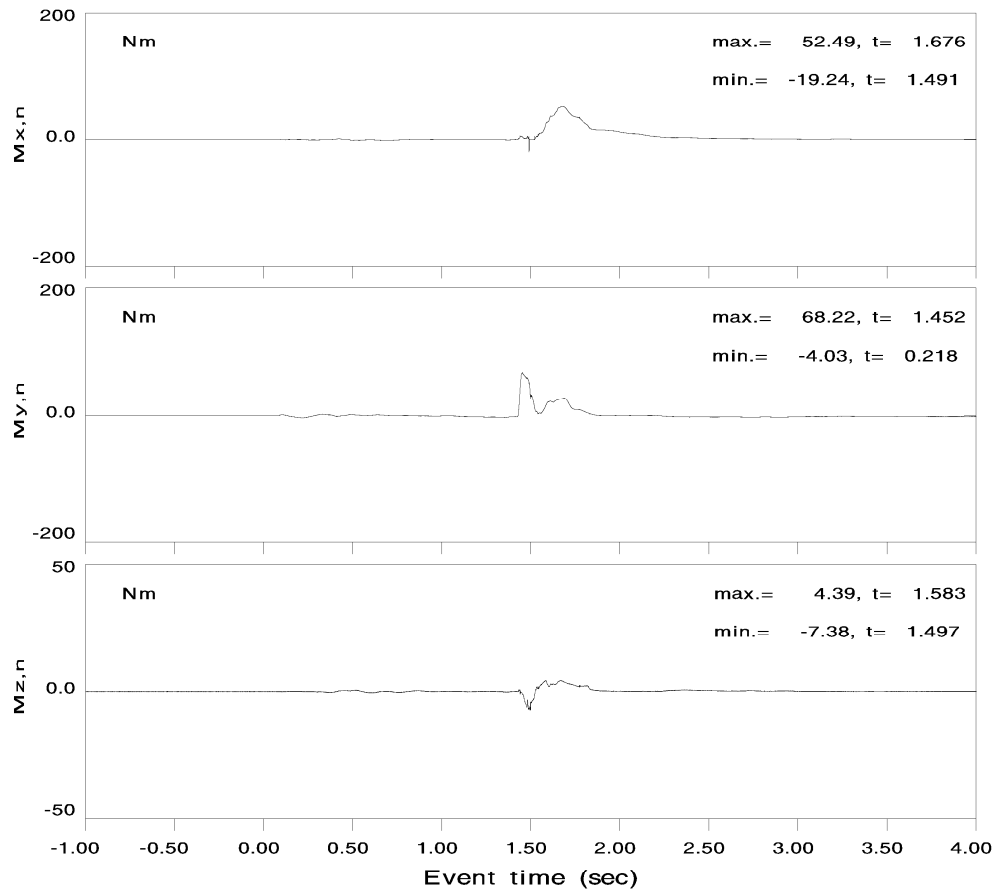
Primary

Test G140082

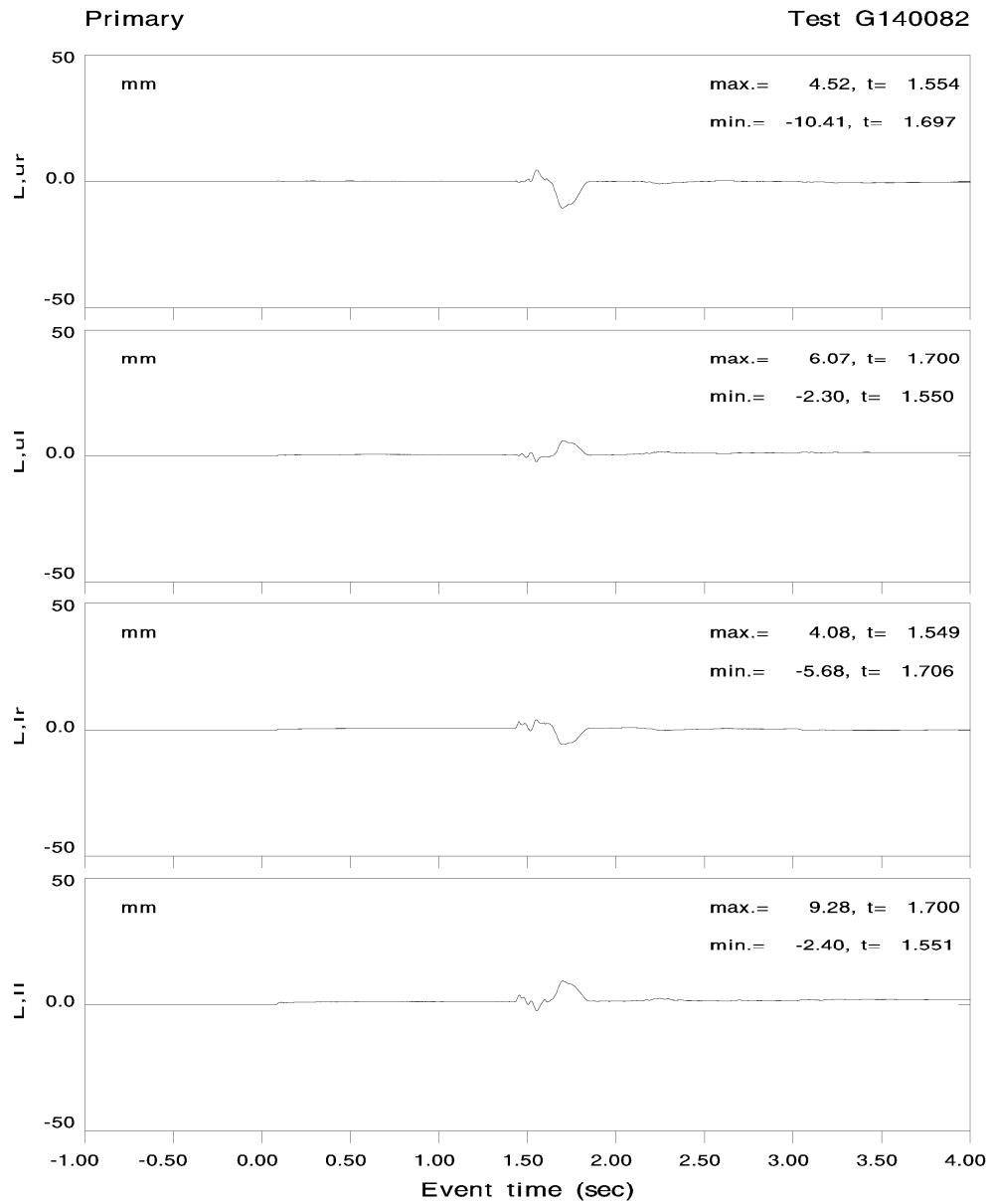


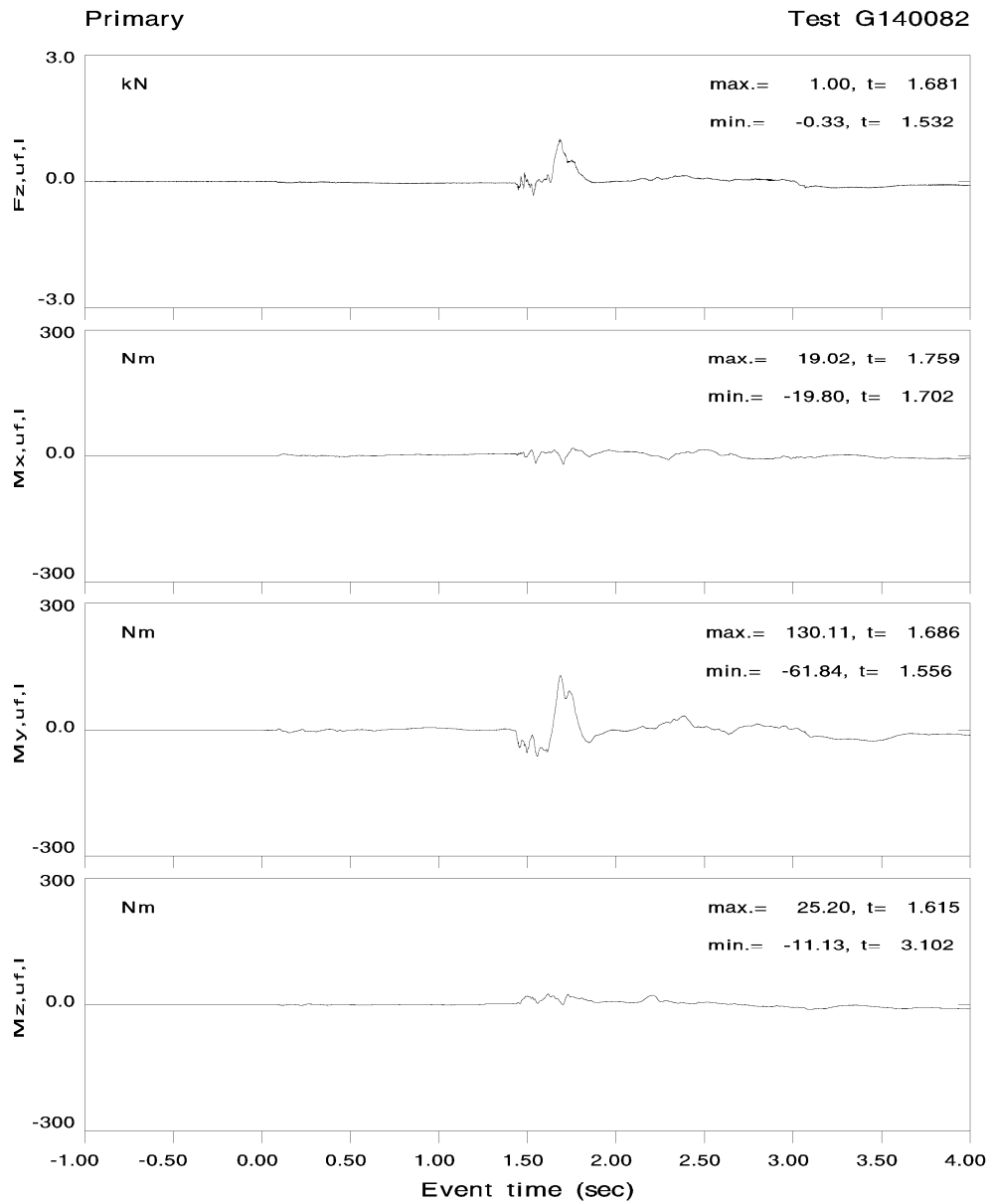
Primary

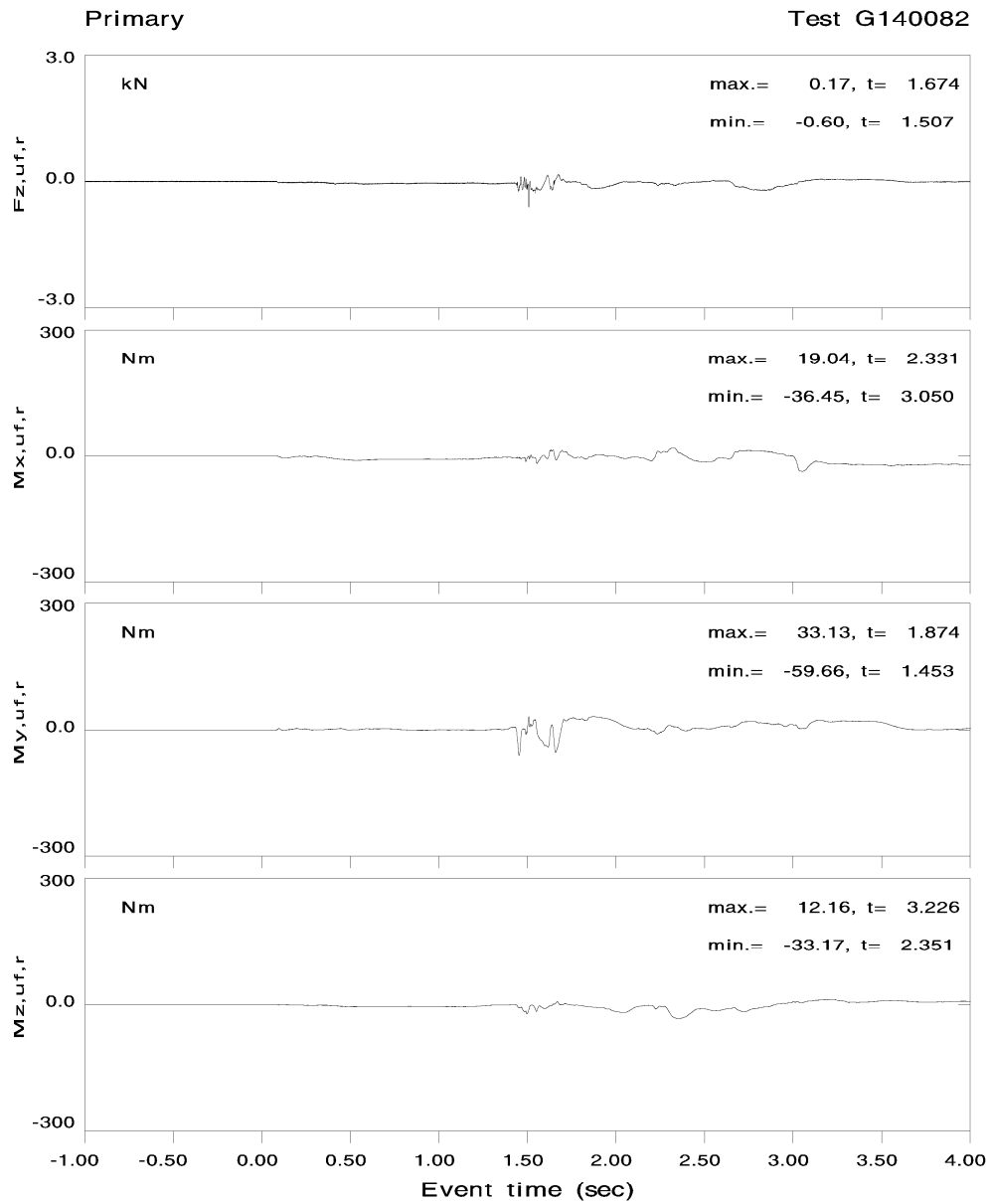
Test G140082

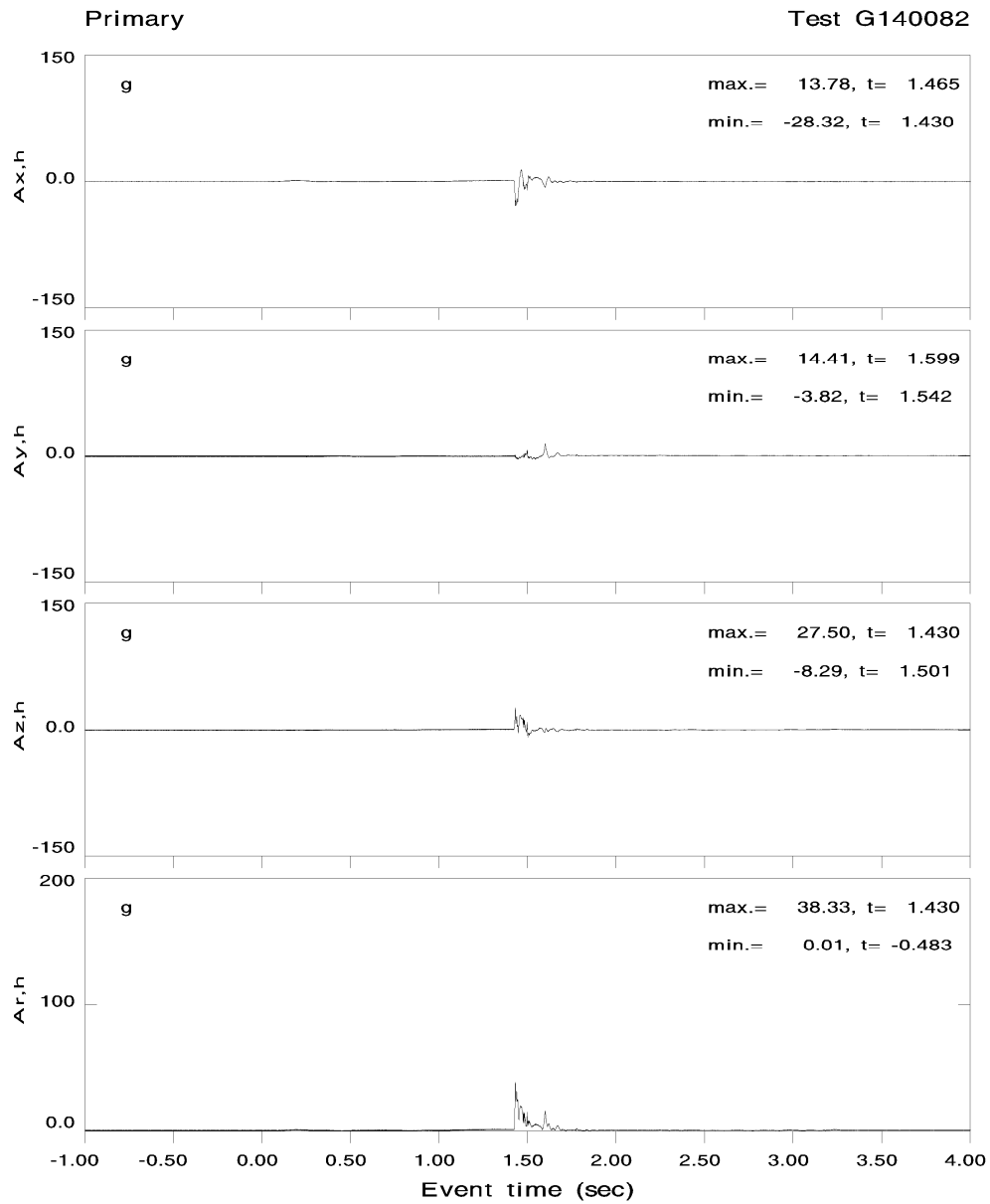


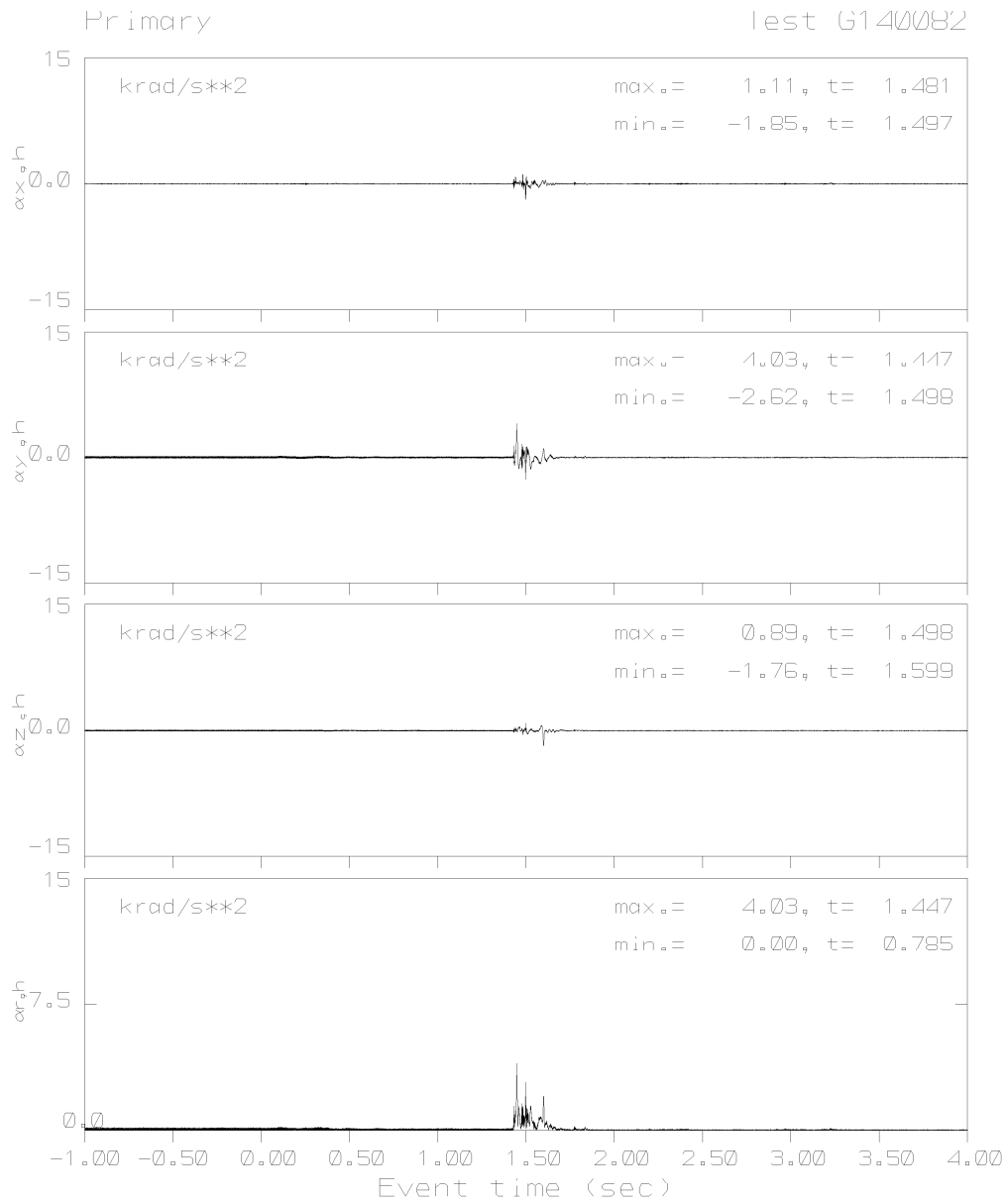
Page 5



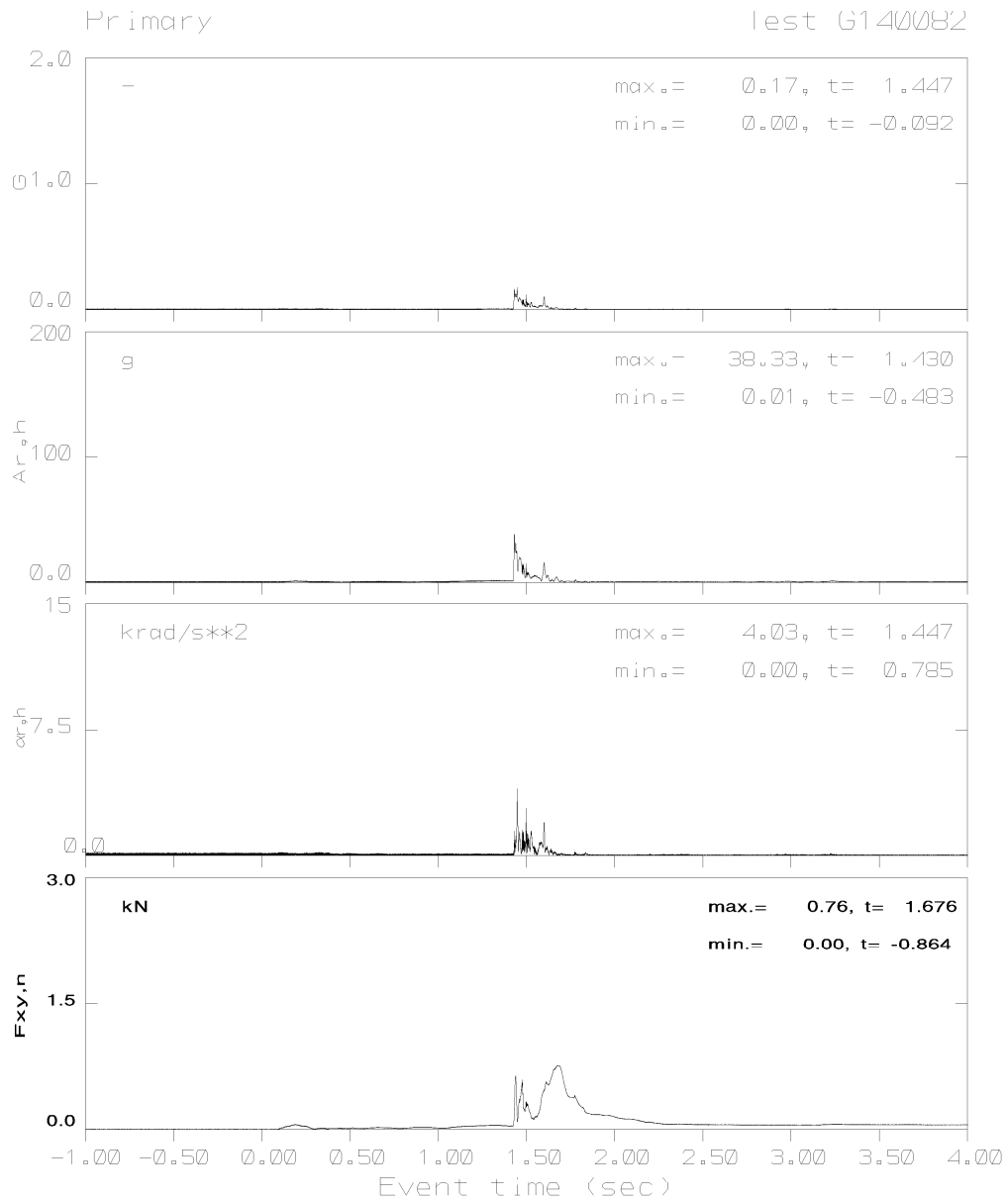


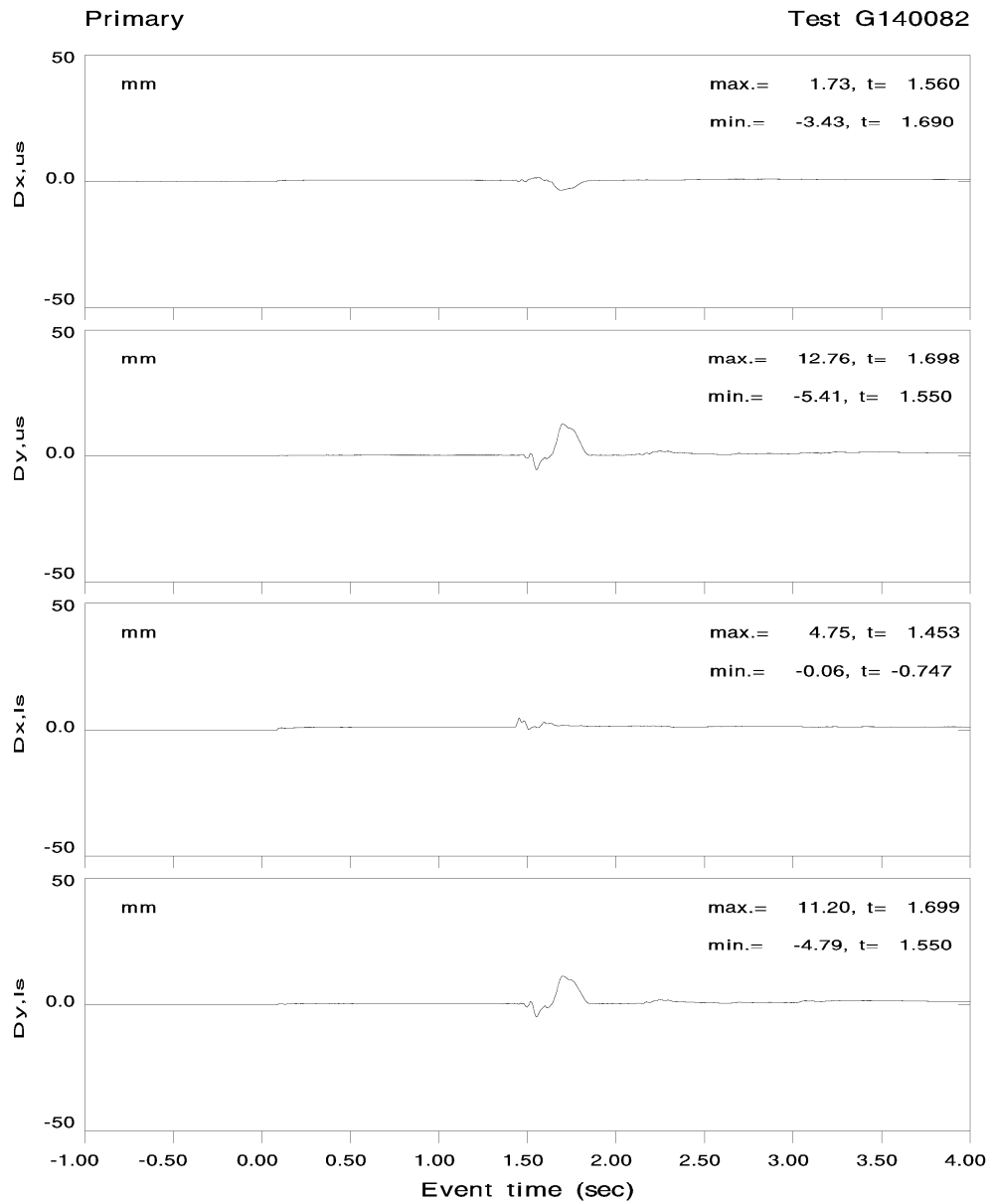






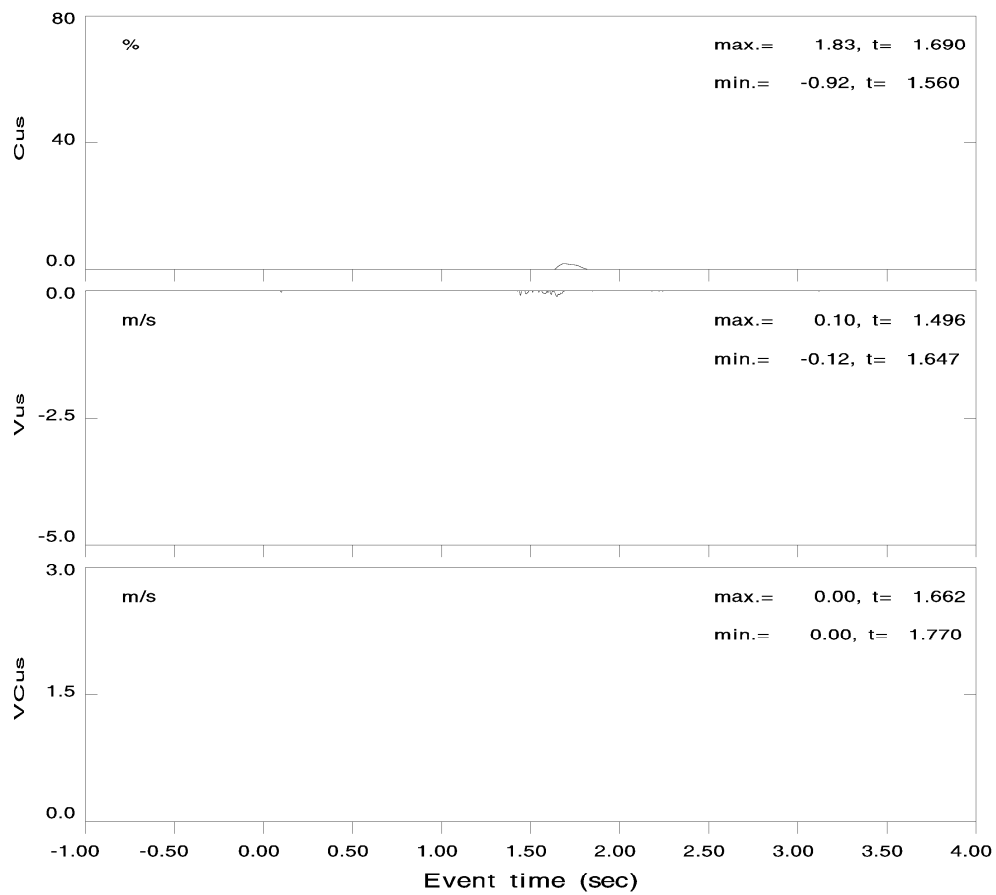
Page 10





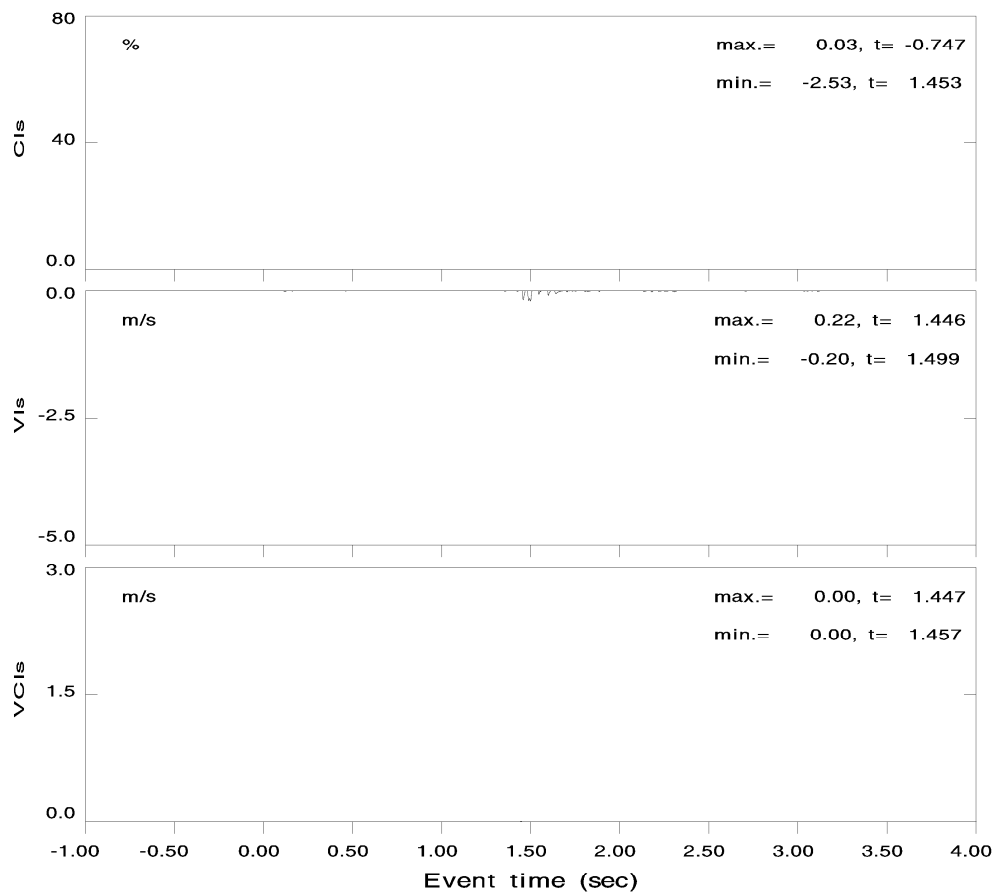
Primary

Test G140082



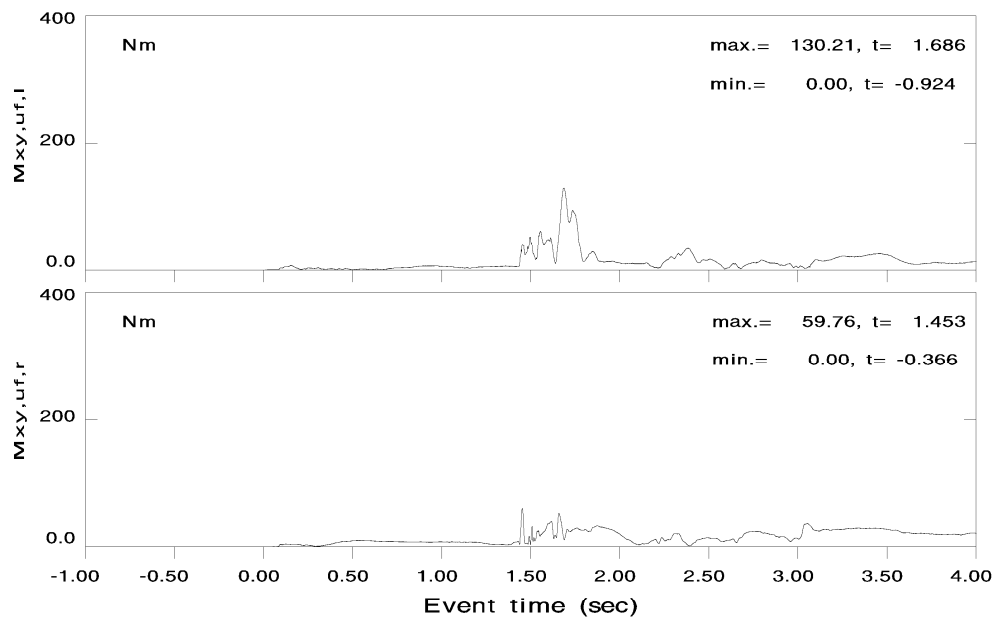
Primary

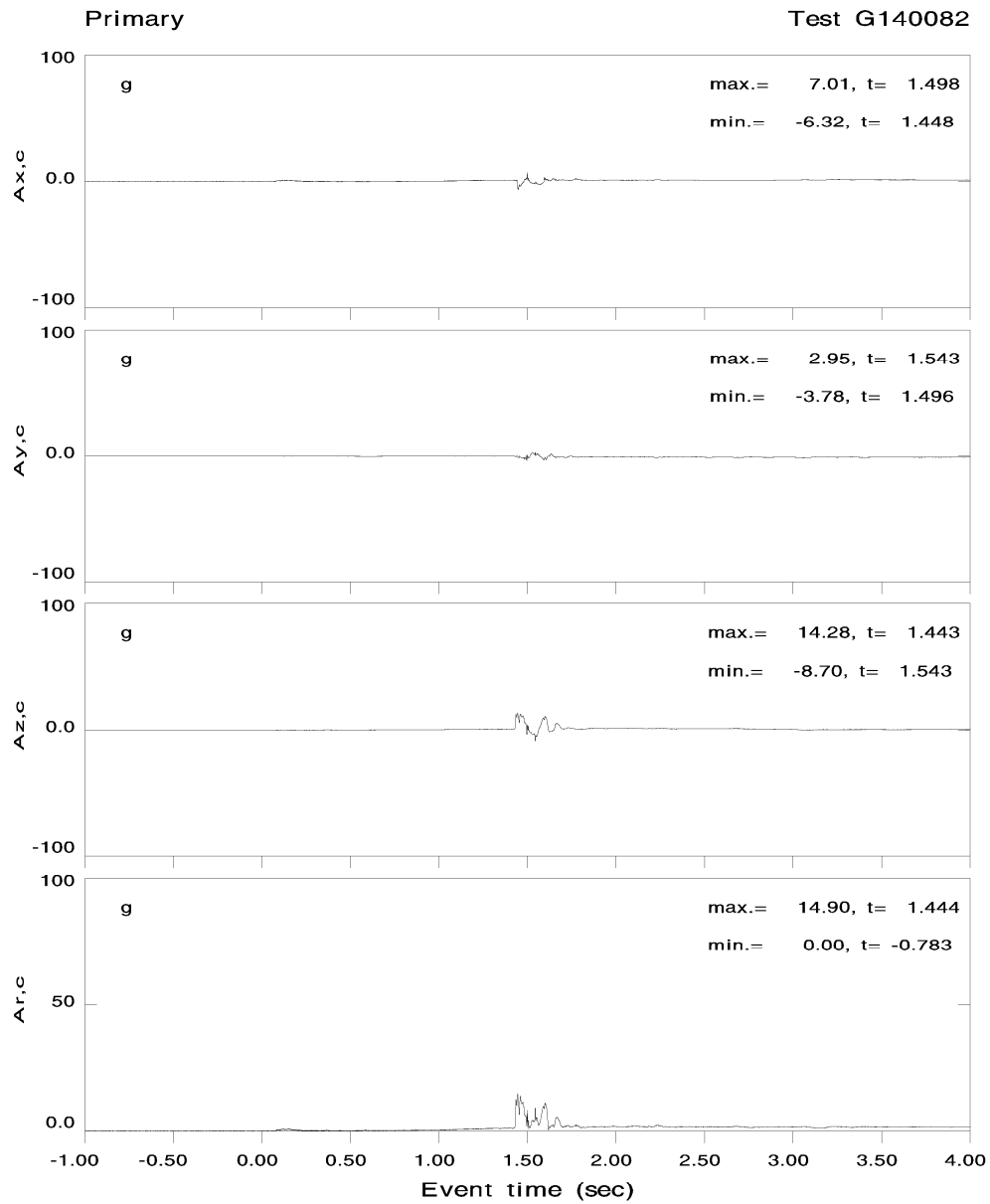
Test G140082

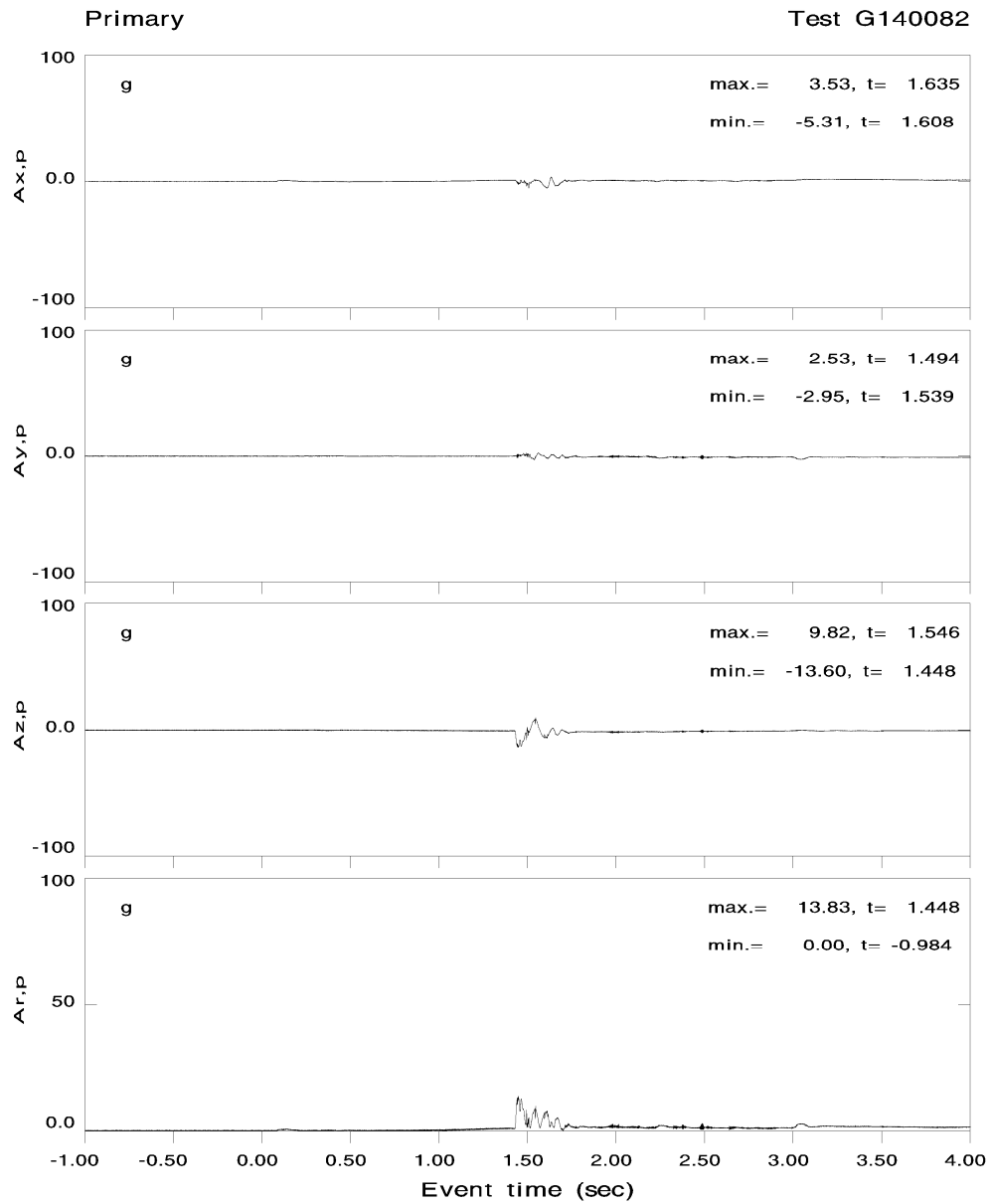


Primary

Test G140082

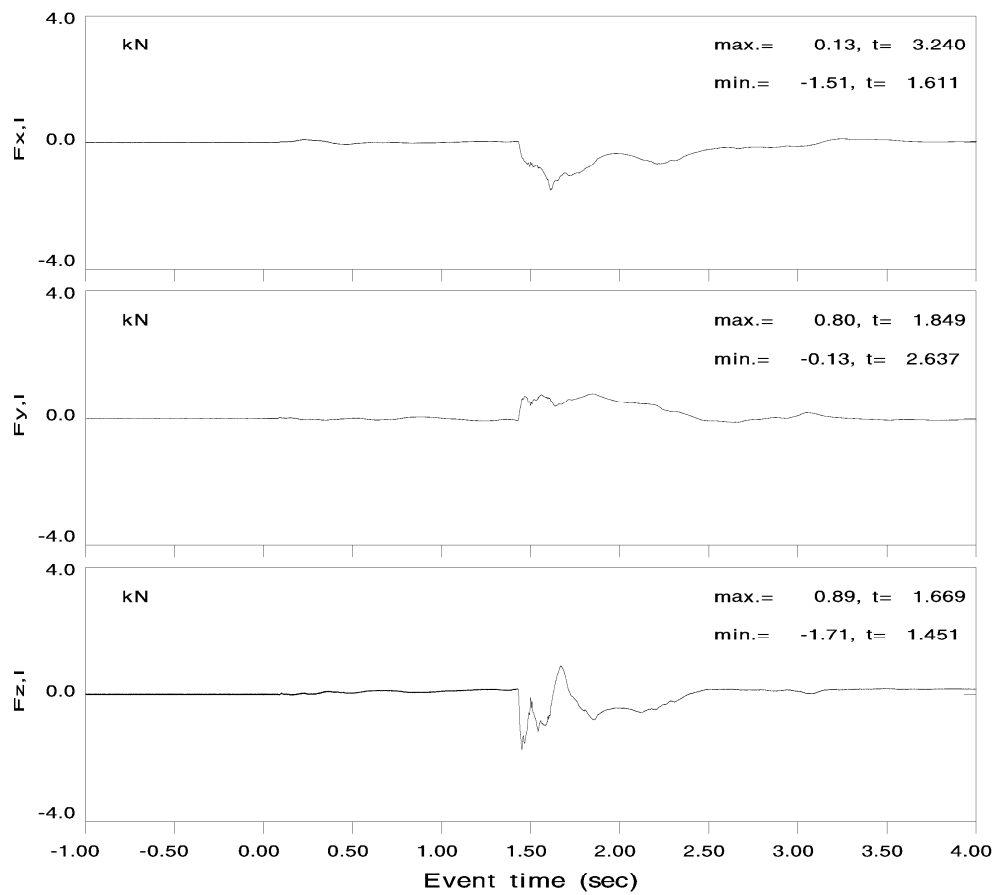






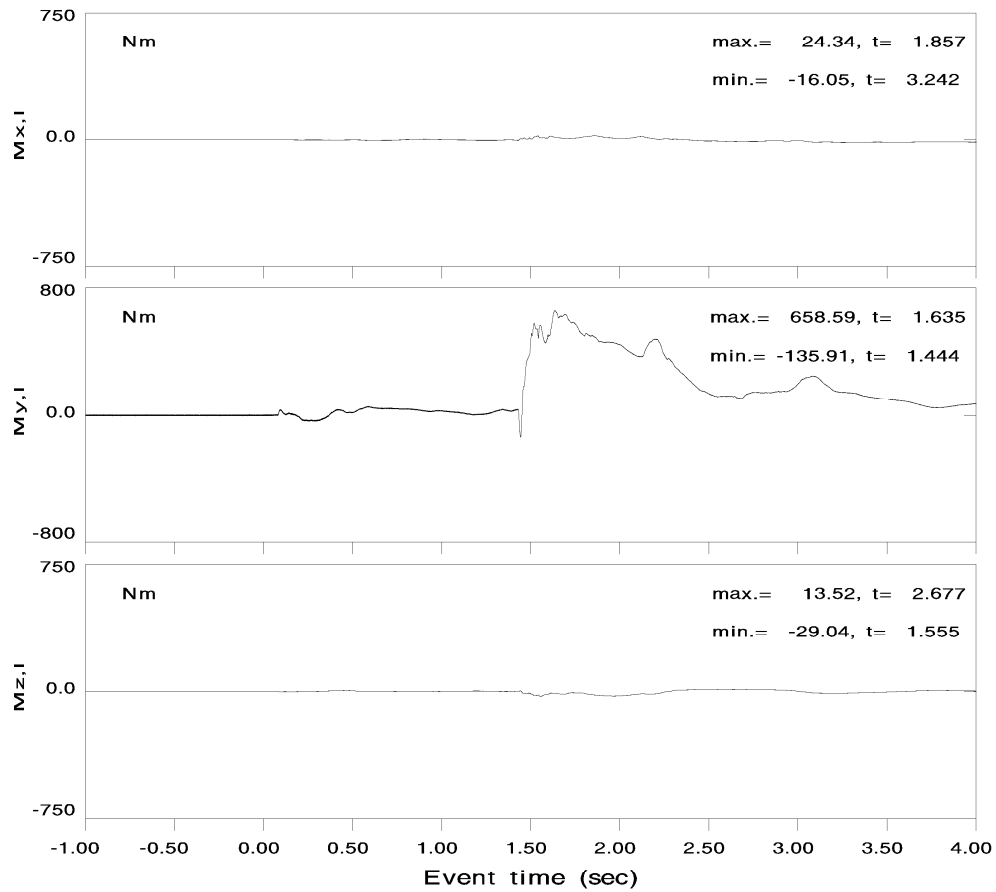
Primary

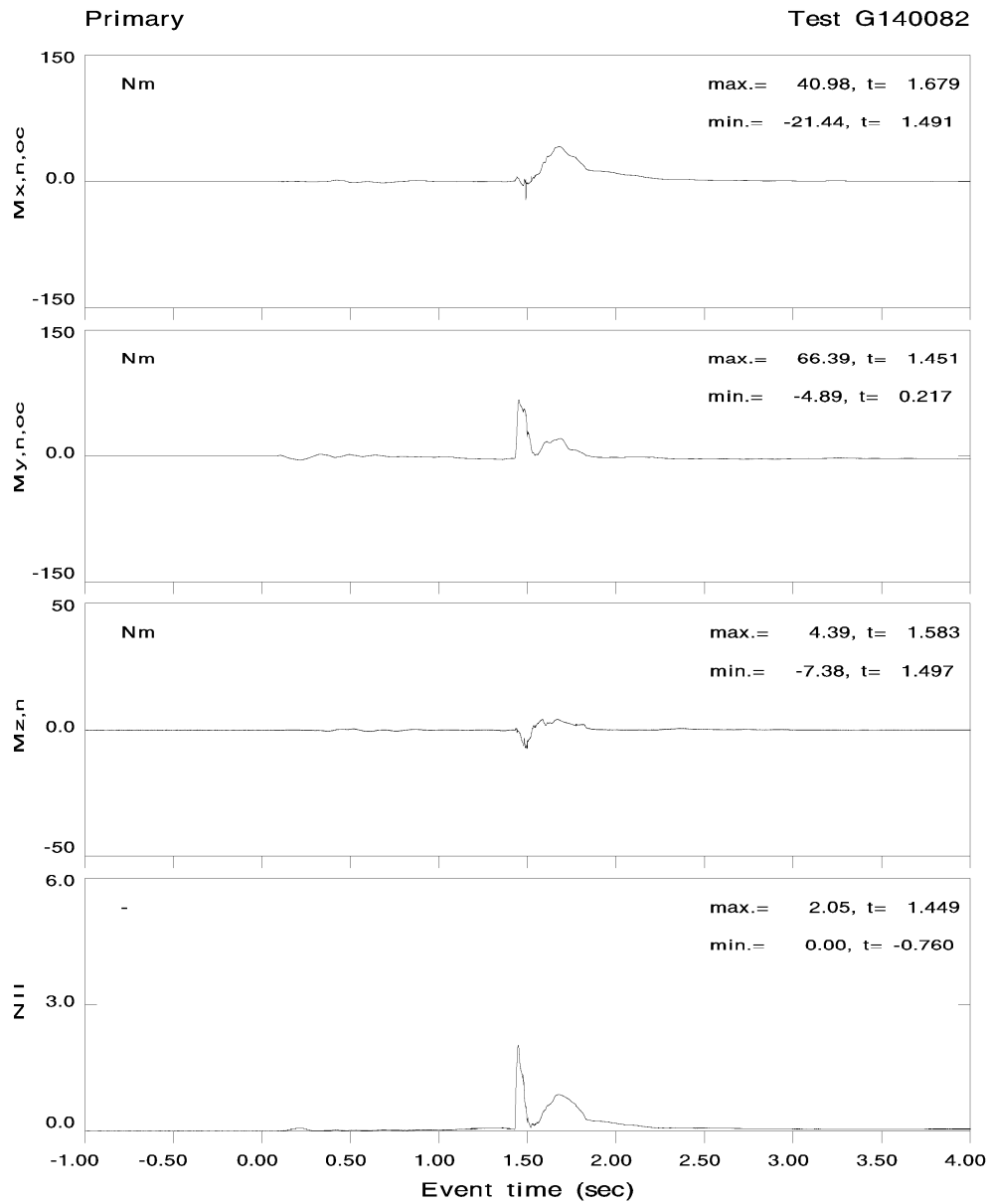
Test G140082



Primary

Test G140082





2.8 G140085

G140085_ICM.IC1

Test Number : G140085
Analysis Window : 1

Injury Cost Model input:

Number of AIS 3 Femur Fractures	=	0
Number of AIS 2 Tibia Fractures	=	0
Number of AIS 3 Tibia Fractures	=	0
Number of AIS 2 Knee Dislocation Injuries	=	0
Number of AIS 3 Knee Dislocation Injuries	=	0
Index for Cmax Location	=	2
Index for VCmax Location	=	2
maximum Abdomen Penetration	=	0.000
maximum GAMBIT	=	0.140
Cmax	=	12.910
VCmax	=	0.000
HIC	=	84.0
NII (2002 MATD Neck)	=	3.8*
Location of Cmax	:	lower sternum
Location of VCmax	:	lower sternum

* Hybrid III standard neck used for this test

Injury Cost Model output:

MAIS	=	0.0
Total AIS	=	0.0
Normalized Injury Cost	=	0.005
Normalized Cost of Survival	=	0.004
Normalized Cost of Dying	=	0.001
Probability of Fatality	=	0.001
Probability of Fatality due to non AIS 6 injuries	=	0.001
Probability of Fatality due AIS 6 injuries	=	0.000
Permanent Partial Incapacity	=	0.000
Risk of life threatening brain injury (%)	=	0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD Probability	NECK Probability	CHEST Probability	ABDOMEN Probability	LEG Probability	# Injuries
0	0.996	0.830	0.990	1.000	1.000	0
1	0.000	0.117	0.010	0.000	0.000	0
2	0.000	0.031	0.000	0.000	0.000	0
3	0.004	0.022	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.011	0.245	0.010	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.000	0.004	0.000	0.000	0.000 0.000 0.000 0.000	Femur Knee Tibia Leg

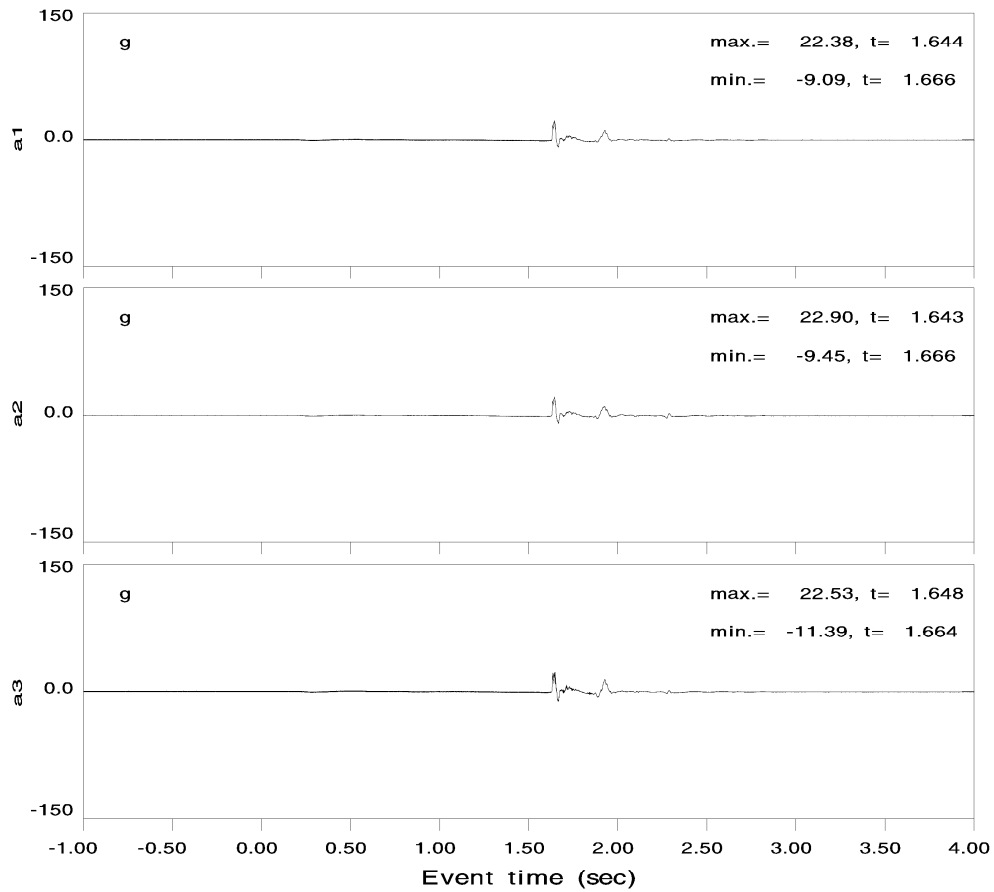
G140085.rpt				
Test G140085, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	5.87 g	1.710	-15.84 g	1.659
Ay,c	4.13 g	1.895	-2.78 g	1.866
Az,c	19.18 g	1.662	-12.54 g	1.744
Ax,p	7.01 g	1.738	-17.77 g	1.891
Ay,p	1.82 g	1.724	-3.73 g	1.896
Az,p	12.25 g	1.730	-21.55 g	1.651
spare	0.00 -	1.923	0.00 -	0.275
spare	0.01 -	1.887	0.00 -	-0.317
L,ur	3.10 mm	2.315	-28.24 mm	1.896
L,lr	4.27 mm	1.656	-30.87 mm	1.895
a1	22.38 g	1.644	-9.09 g	1.666
a2	22.90 g	1.643	-9.45 g	1.666
a3	22.53 g	1.648	-11.39 g	1.664
a4	18.00 g	1.643	-11.00 g	1.663
a5	17.83 g	1.643	-11.16 g	1.662
a6	18.09 g	1.648	-15.00 g	1.664
Mx,l	30.89 Nm	1.895	-4.38 Nm	1.785
My,l	166.29 Nm	1.692	-758.46 Nm	1.874
Mz,l	18.10 Nm	1.747	-44.62 Nm	1.942
Fx,l	0.49 kN	1.861	-0.74 kN	1.745
Fy,l	0.84 kN	1.652	-0.36 kN	1.826
Fz,l	0.29 kN	1.826	-2.66 kN	1.652
spare	0.00 -	4.000	0.00 -	4.000
spare	0.02 -	3.992	-0.02 -	1.888
spare	0.05 -	3.996	0.00 -	-0.871
spare	0.00 -	-0.311	0.00 -	1.563
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	3.817	0.00 -	0.579
a7	22.24 g	1.645	-9.75 g	1.745
a8	23.38 g	1.644	-9.63 g	1.730
a9	23.78 g	1.645	-10.30 g	1.745
Fz,uf,r	0.36 kN	1.847	-0.80 kN	1.891
Mx,uf,r	50.09 Nm	1.732	-16.17 Nm	1.795
My,uf,r	23.49 Nm	1.944	-67.83 Nm	1.733
Mz,uf,r	5.61 Nm	1.892	-32.47 Nm	1.717
Fz,uf,l	0.34 kN	1.863	-0.41 kN	1.667
Mx,uf,l	51.79 Nm	1.901	-40.60 Nm	1.734
My,uf,l	17.60 Nm	2.067	-62.70 Nm	1.735
Mz,uf,l	42.70 Nm	1.911	-1.19 Nm	0.235
Fx,n	1.15 kN	1.649	-0.65 kN	1.675
Fy,n	0.08 kN	2.237	-0.20 kN	1.656
Fz,n	0.77 kN	1.925	-7.94 kN	1.654
Mx,n	12.52 Nm	1.669	-23.44 Nm	1.725
My,n	204.10 Nm	1.655	-31.52 Nm	1.893
Mz,n	6.64 Nm	2.295	-5.03 Nm	1.970
L,ul	2.52 mm	1.929	-16.85 mm	2.274
L,ll	4.09 mm	1.674	-19.32 mm	2.273
Ax,h	13.11 g	1.664	-28.05 g	1.643
Ay,h	4.36 g	1.936	-3.67 g	2.275
Az,h	22.25 g	1.645	-9.76 g	1.745
ax,h	0.60 krad/s**2	1.639	-0.80 krad/s**2	1.648
ay,h	1.26 krad/s**2	1.656	-1.32 krad/s**2	1.648
az,h	0.63 krad/s**2	1.912	-0.55 krad/s**2	1.648
Ar,h	35.31 g	1.643	0.01 g	0.706
ar,h	1.55 krad/s**2	1.648	0.00 krad/s**2	3.511
G	0.14 -	1.643	0.00 -	-0.519
HIC	84.04	1.668	----	1.632
Fxy,n	1.15 kN	1.649	0.00 kN	0.158
Dx,us	1.96 mm	1.667	-21.52 mm	1.895
Dy,us	18.35 mm	1.898	-14.03 mm	2.274

		G140085.rpt		
Cus	11.48 %	1.895	-1.04 %	1.667
Vus	0.51 m/s	1.916	-0.97 m/s	1.873
VCus	0.08 m/s	1.881	-0.04 m/s	1.910
Dx,ls	5.00 mm	1.674	-24.21 mm	1.893
Dy,ls	19.46 mm	1.896	-16.08 mm	2.274
Cl,s	12.91 %	1.893	-2.67 %	1.674
Vls	0.42 m/s	1.918	-1.23 m/s	1.872
VCls	0.10 m/s	1.878	-0.04 m/s	1.915
Mxy,uf,r	84.27 Nm	1.733	0.00 Nm	-0.023
Mxy,uf,l	74.69 Nm	1.734	0.00 Nm	-0.806
Mx,n,oc	9.53 Nm	1.669	-24.21 Nm	1.801
My,n,oc	193.16 Nm	1.655	-32.73 Nm	1.892
NII	3.77 -	1.654	0.00 -	-0.011
Ar,p	21.59 g	1.651	0.01 g	-0.776
Ar,c	24.01 g	1.661	0.00 g	-0.018

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

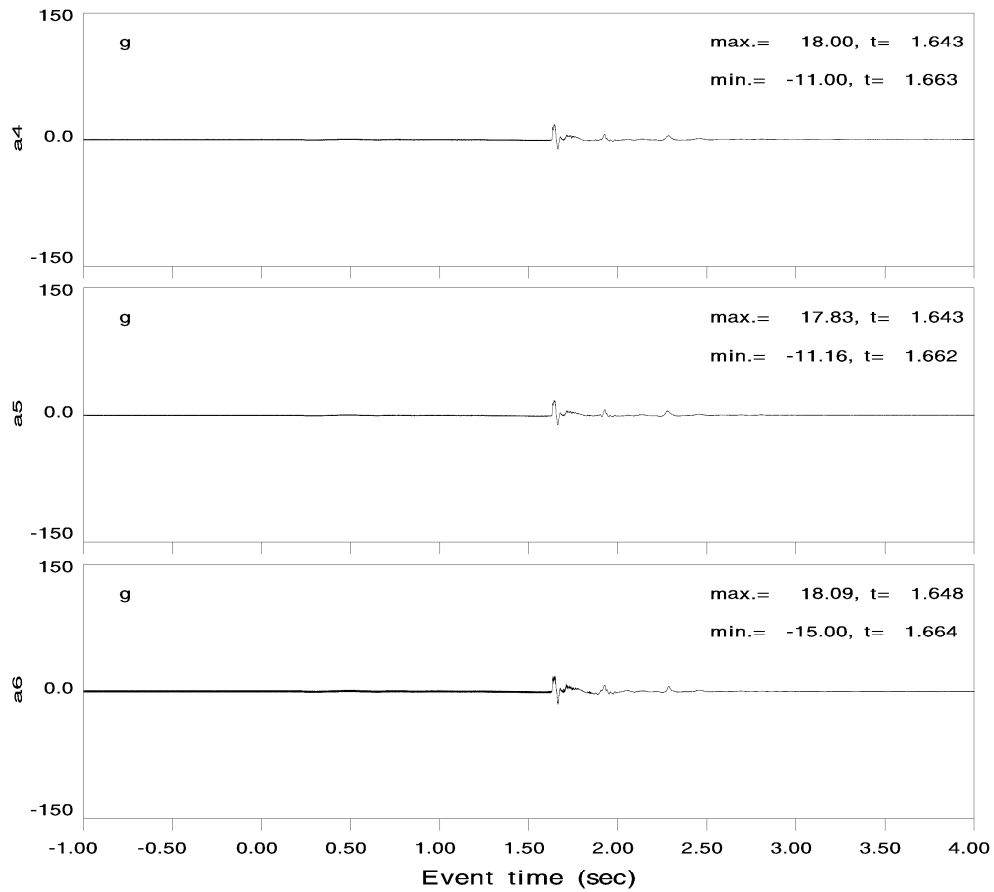
Primary

Test G140085



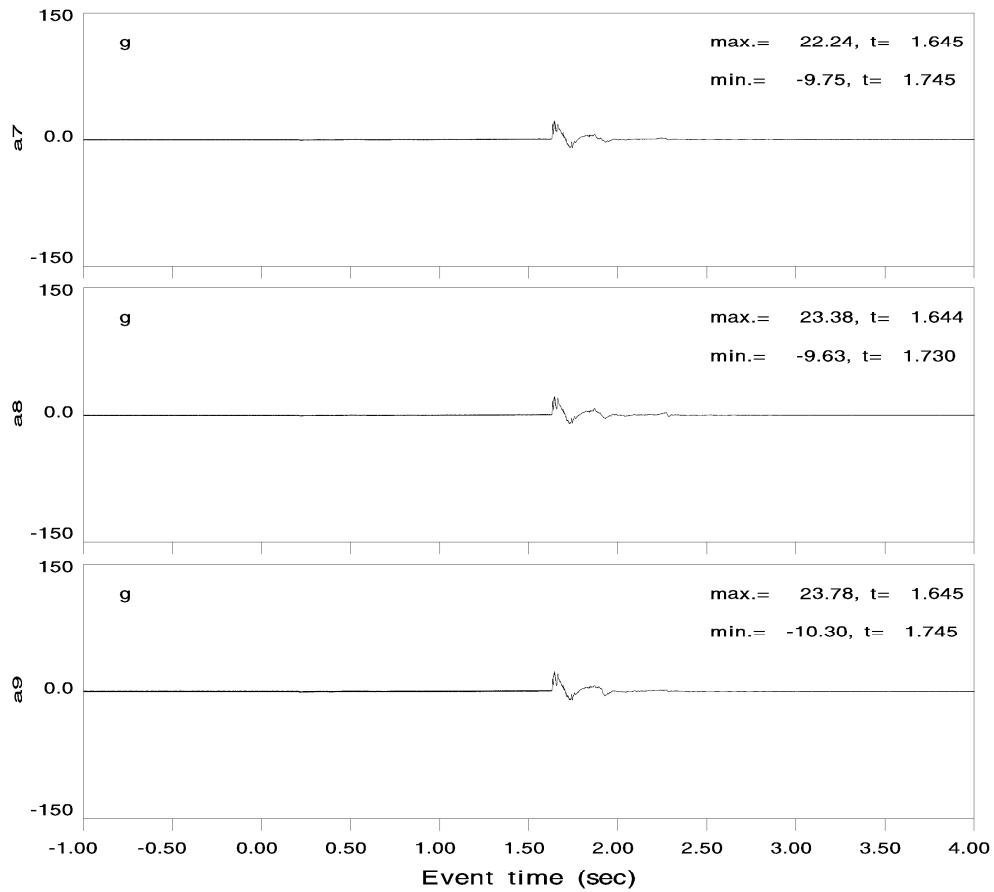
Primary

Test G140085



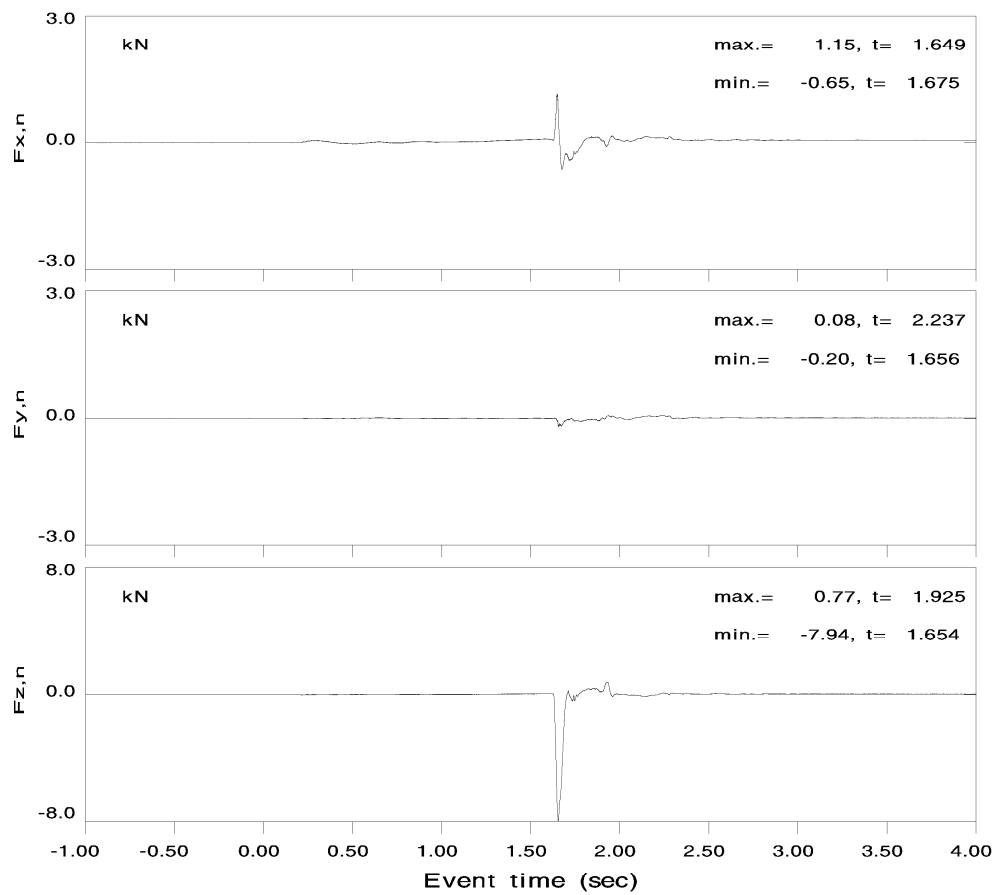
Primary

Test G140085



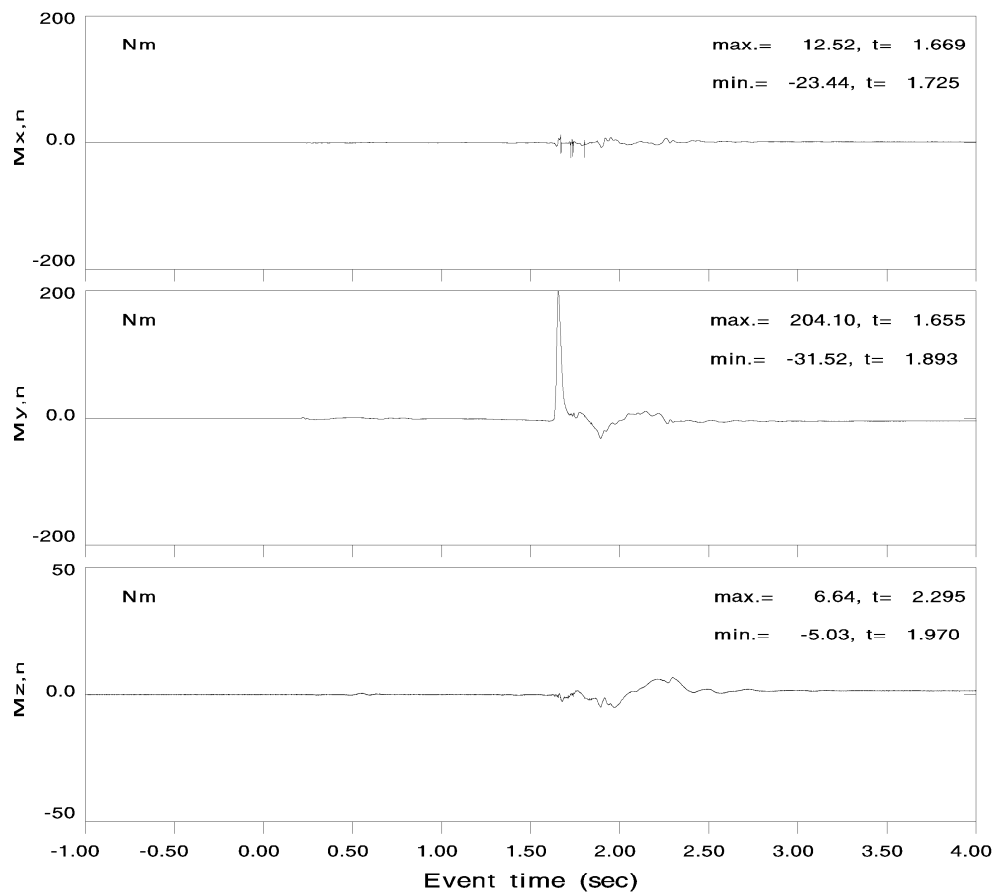
Primary

Test G140085

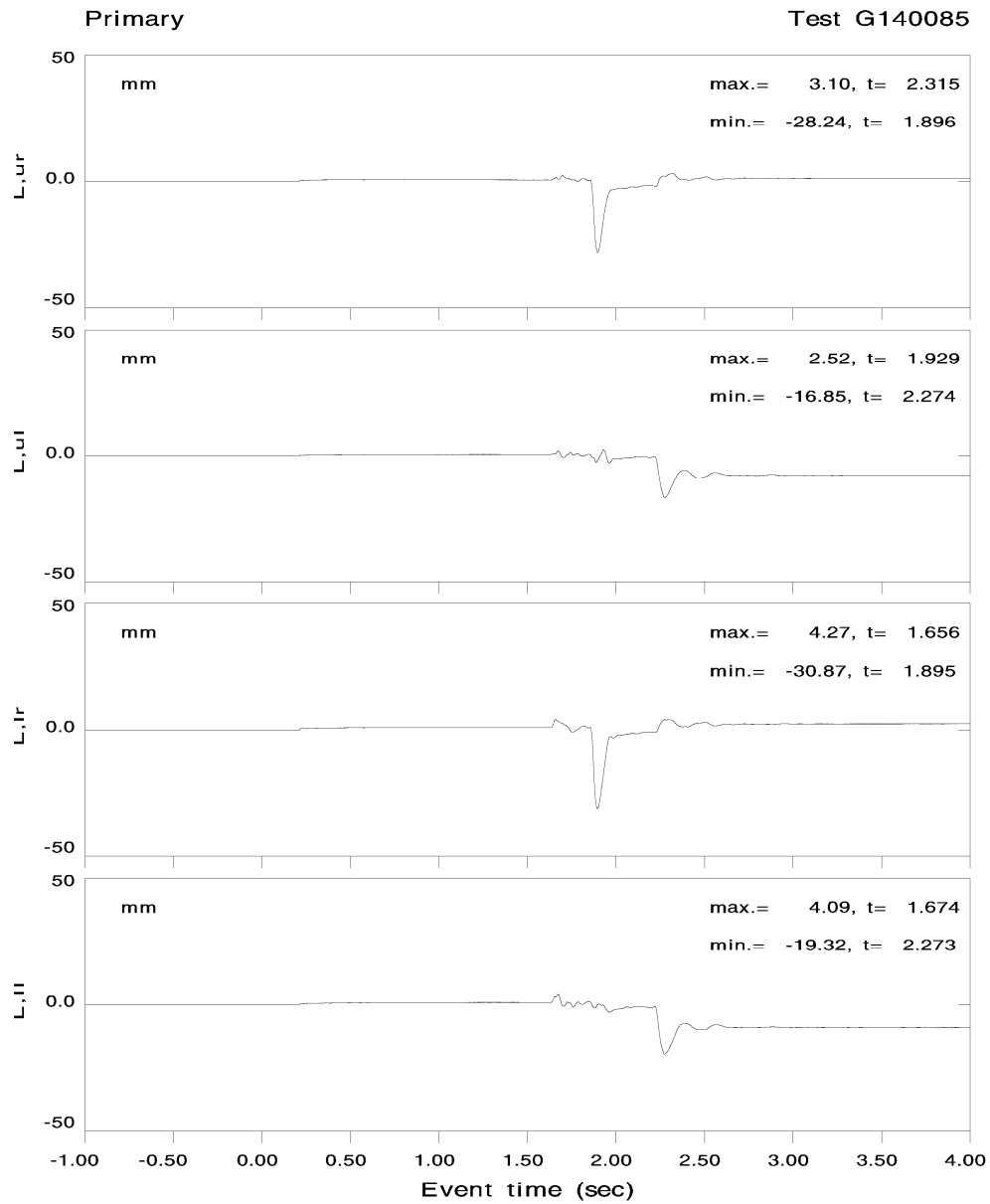


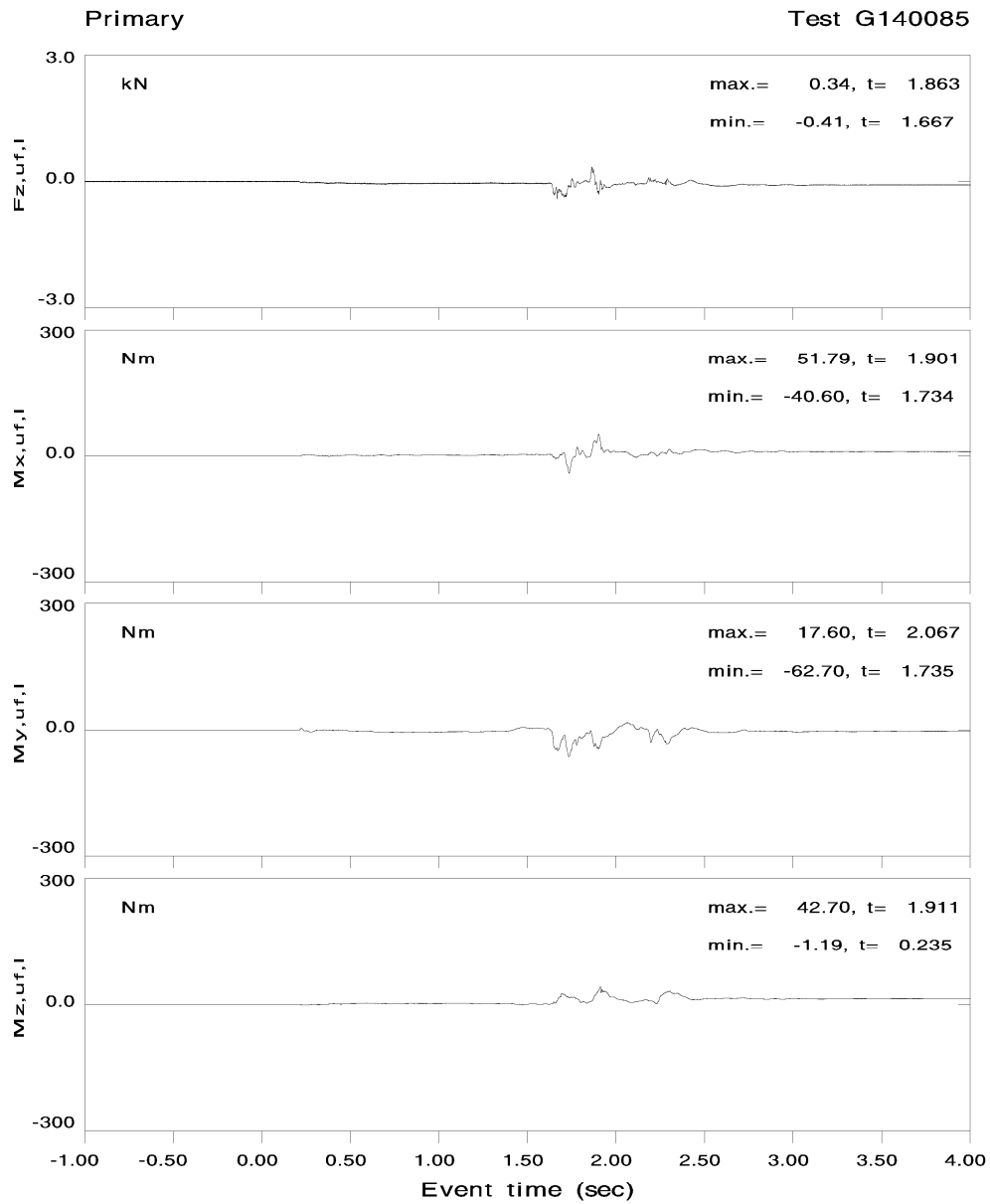
Primary

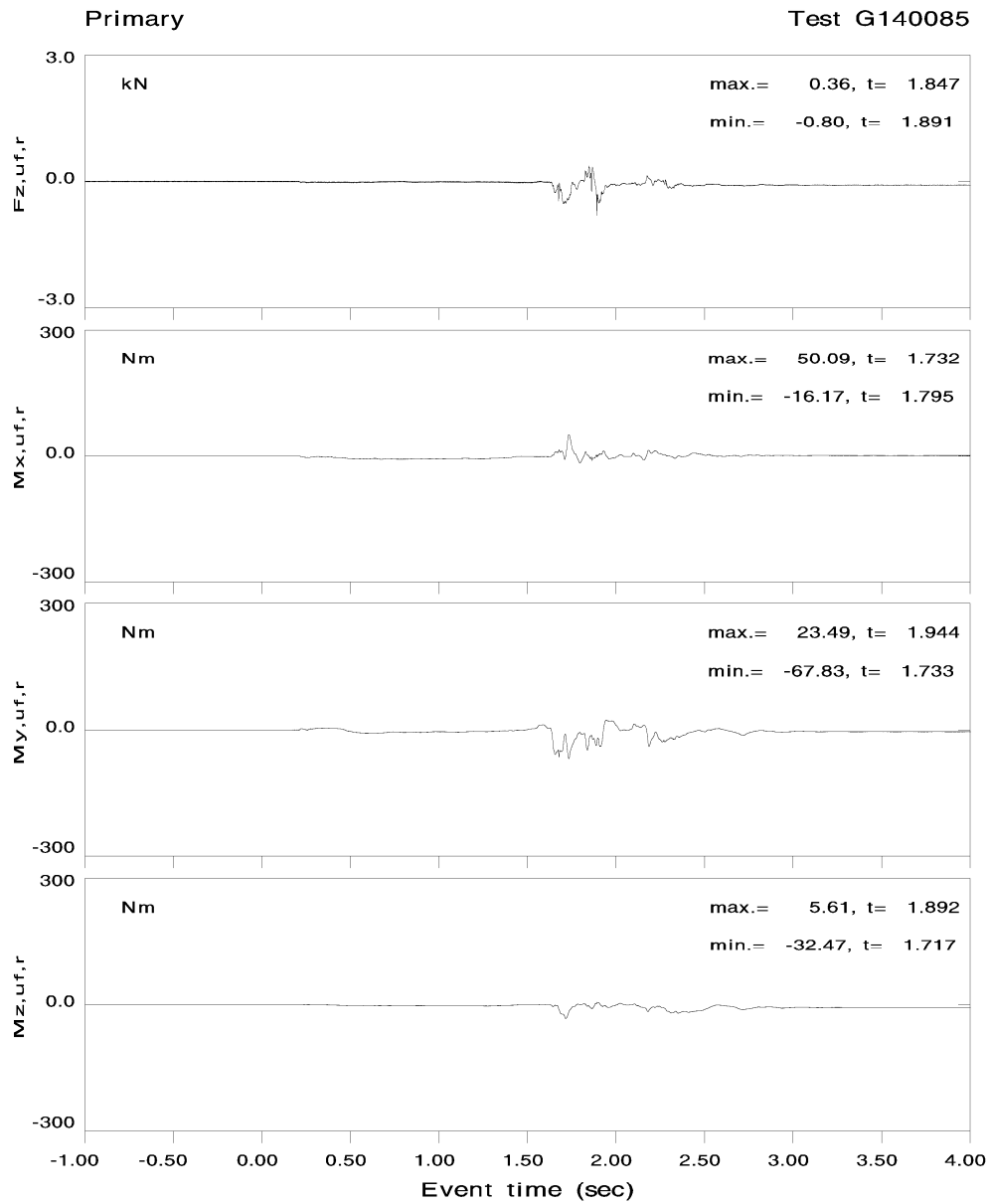
Test G140085

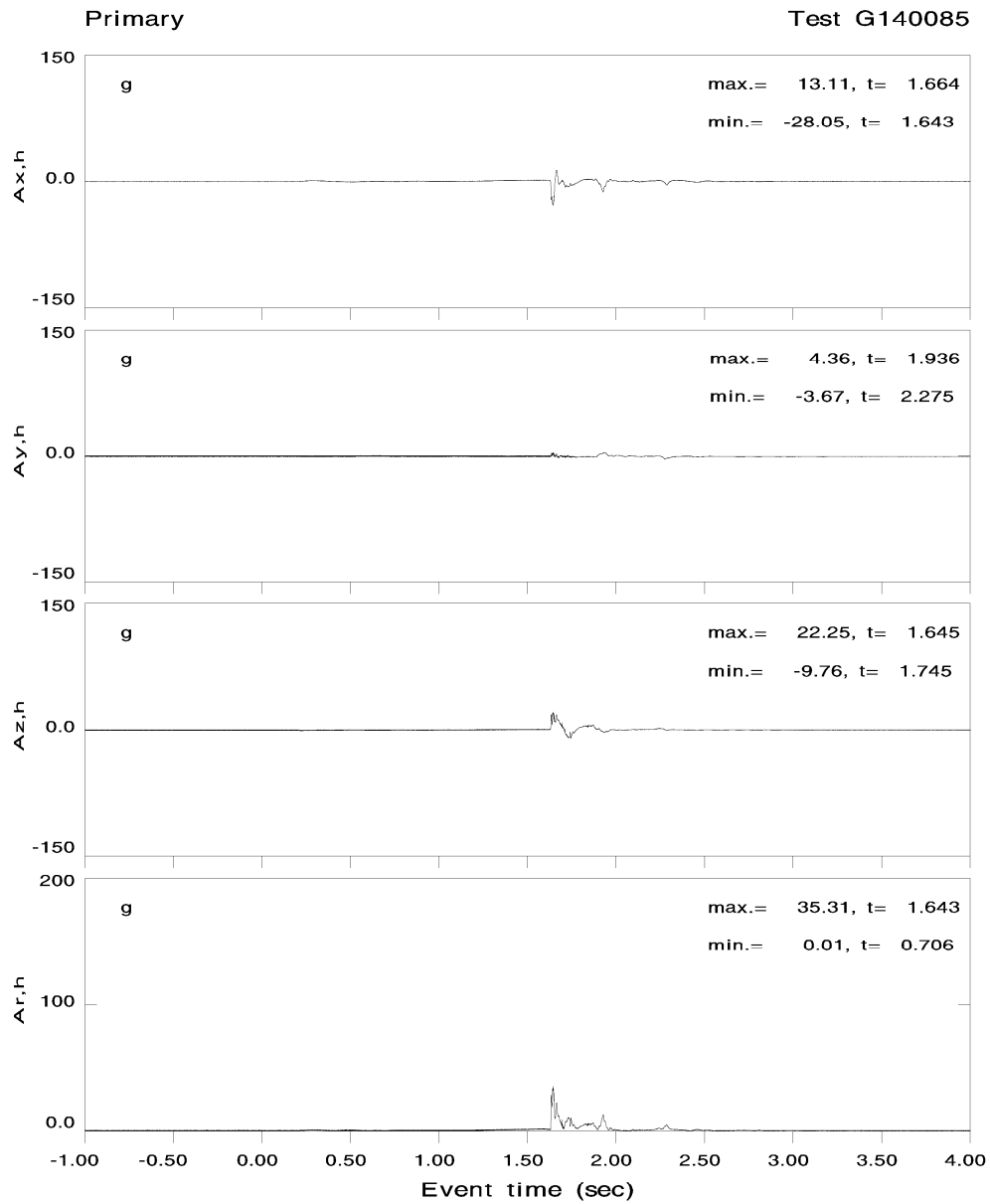


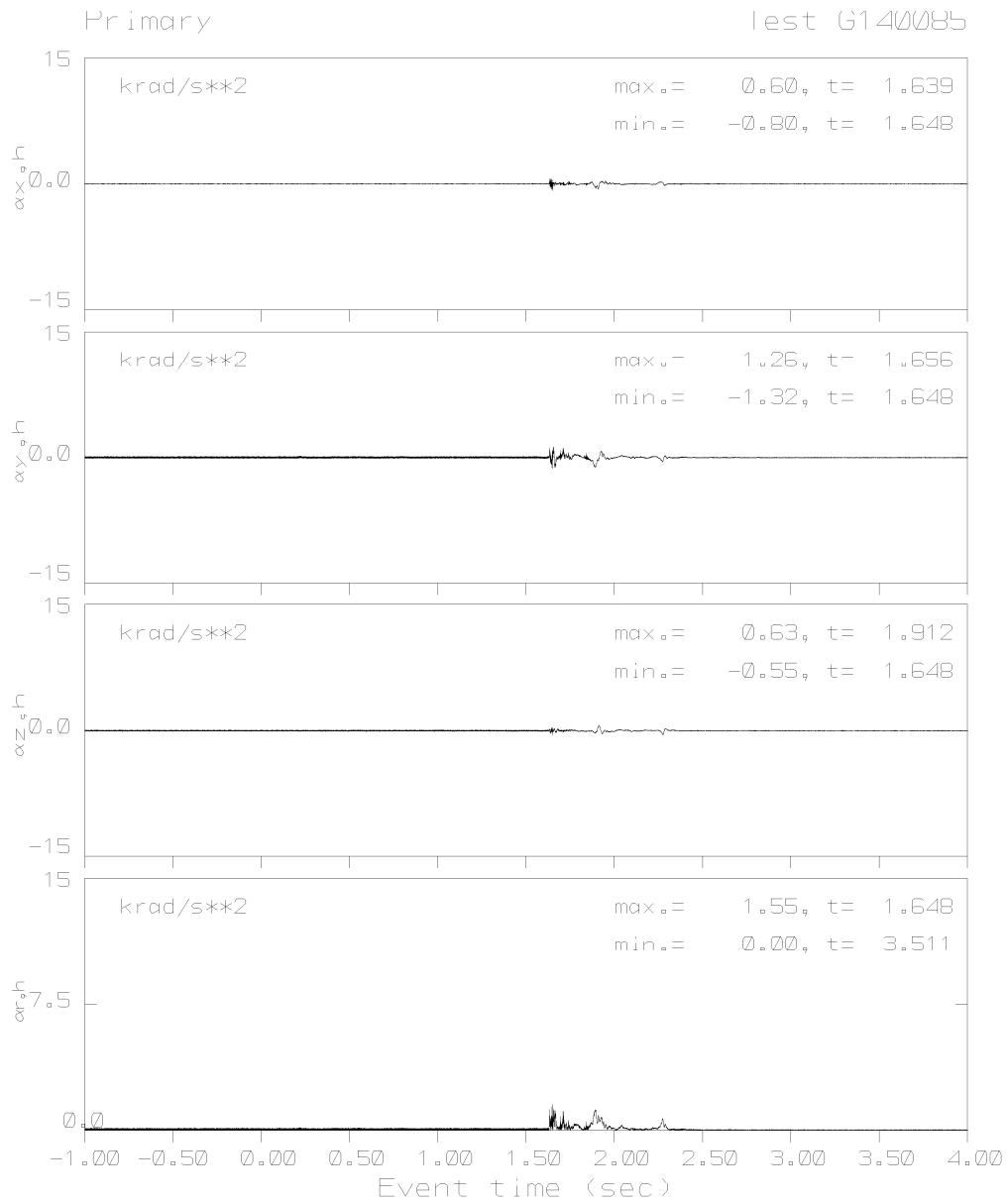
Page 5



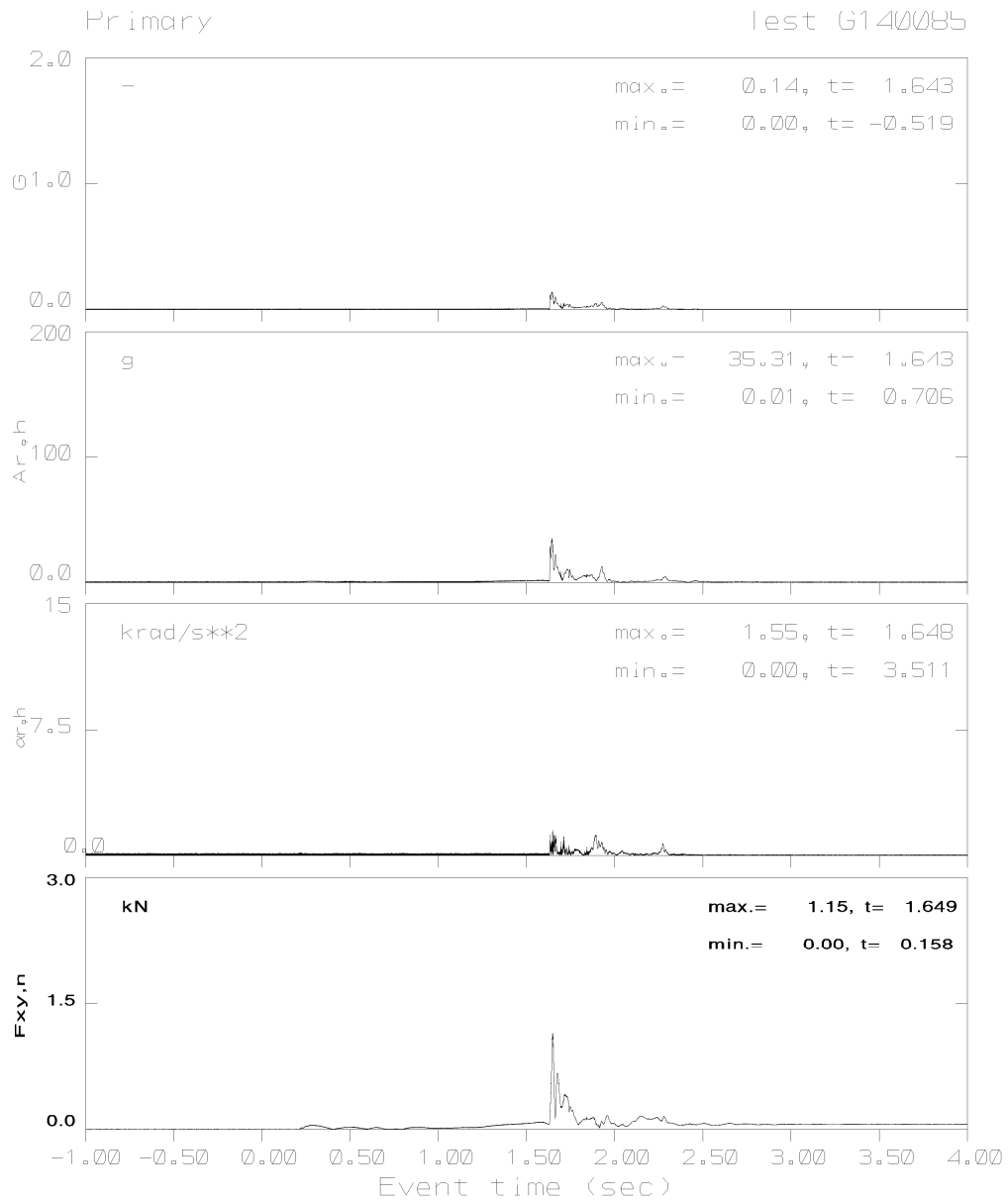




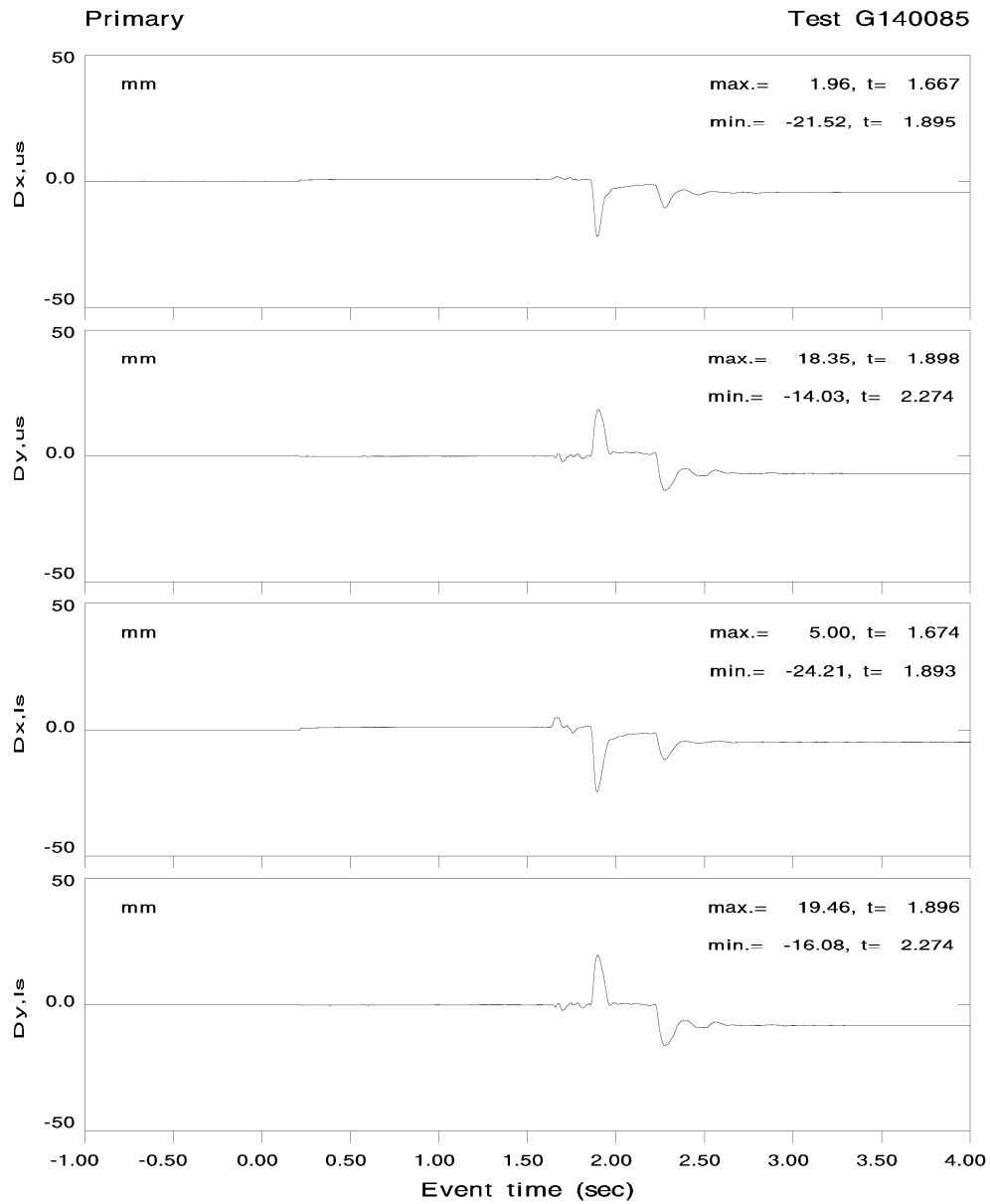




Page 10

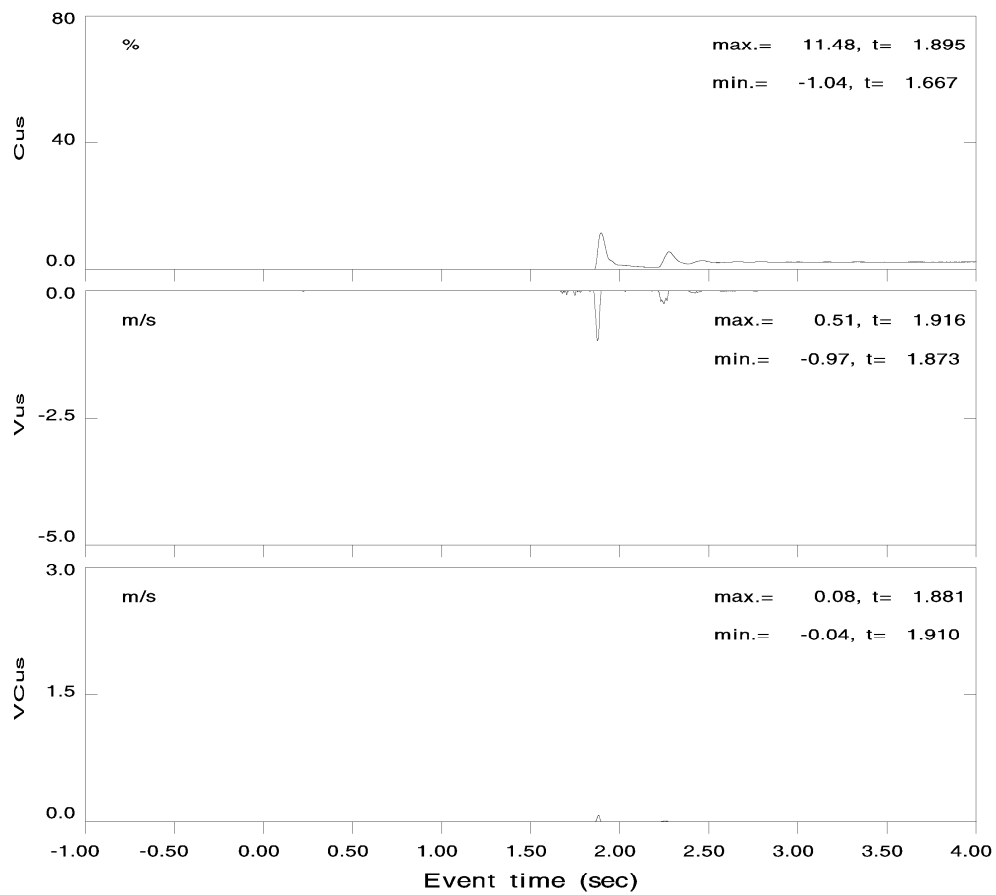


Page 11



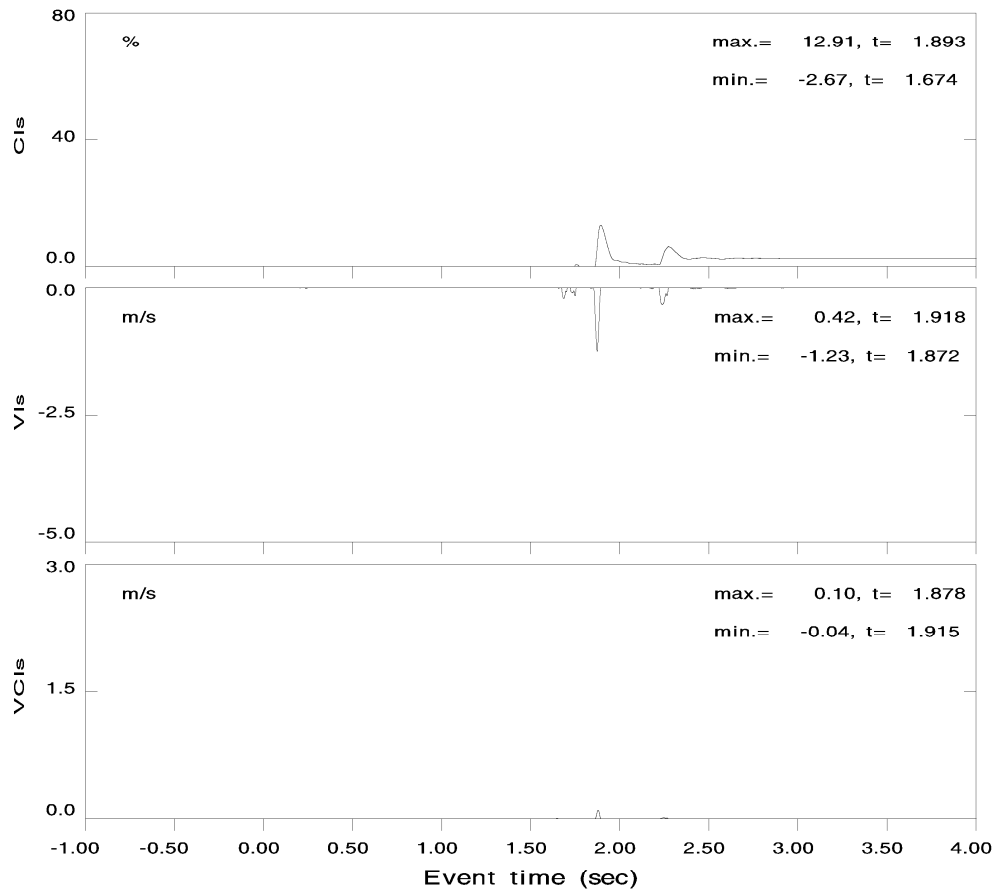
Primary

Test G140085



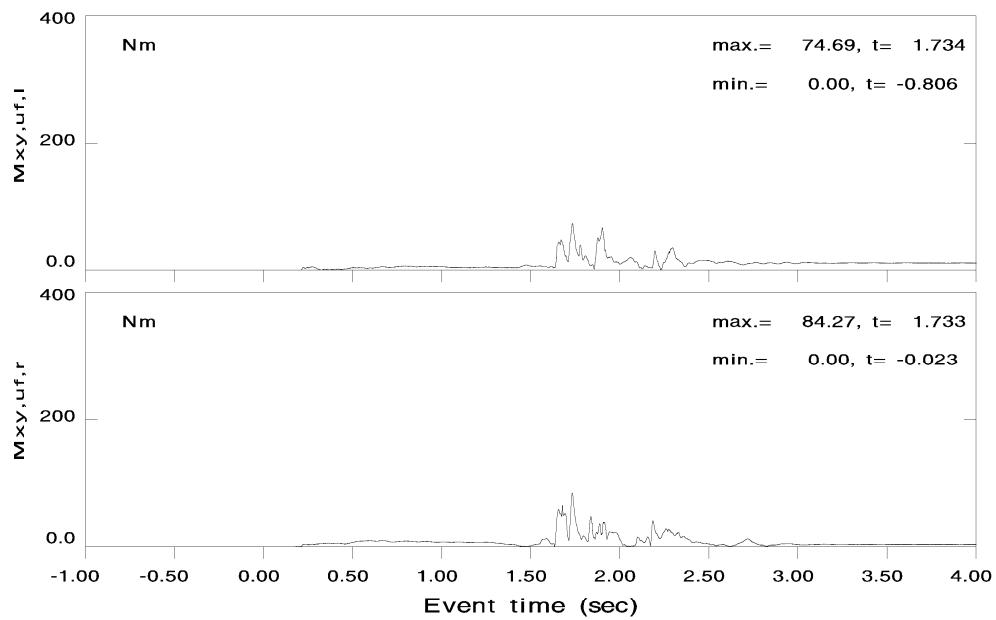
Primary

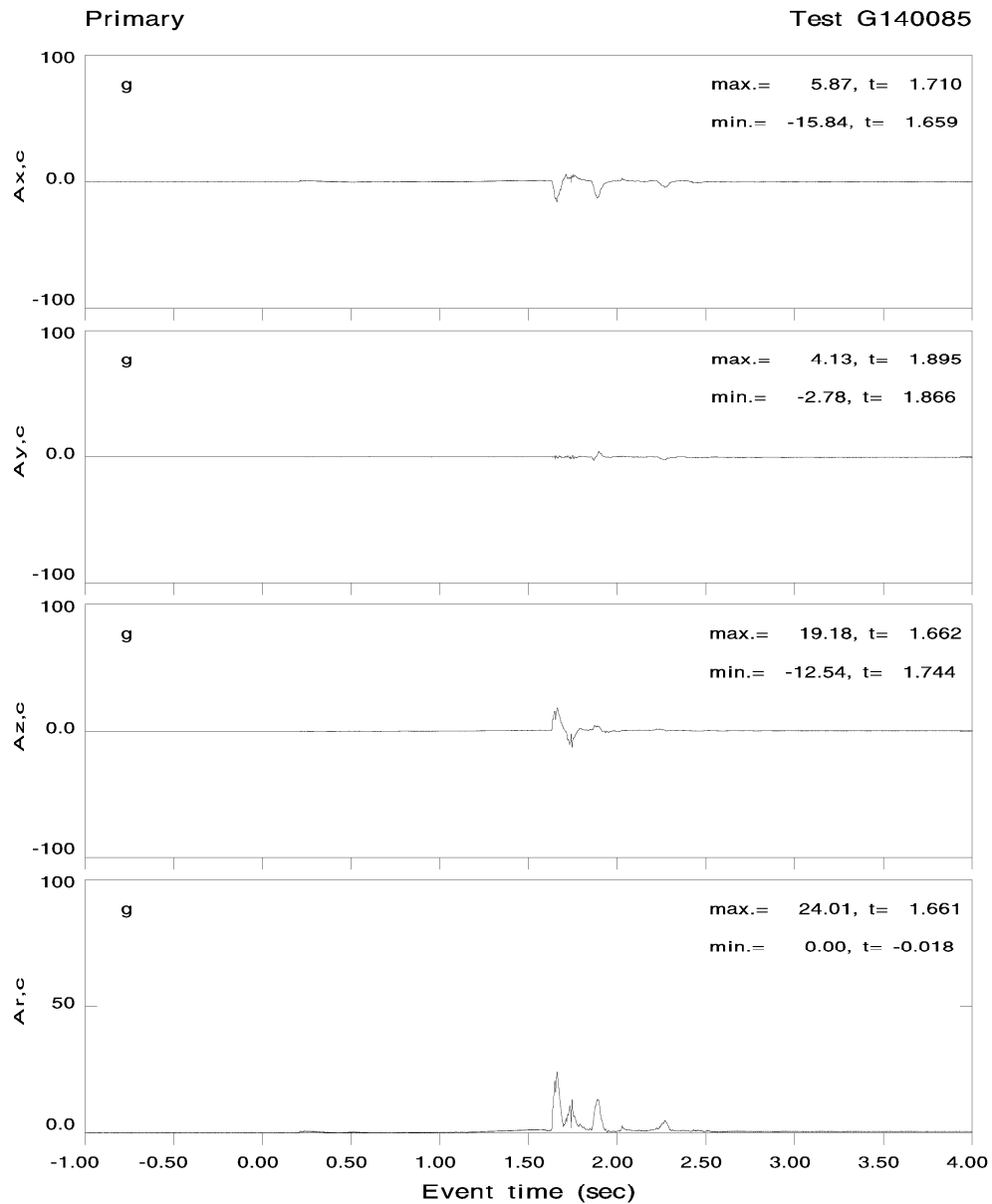
Test G140085

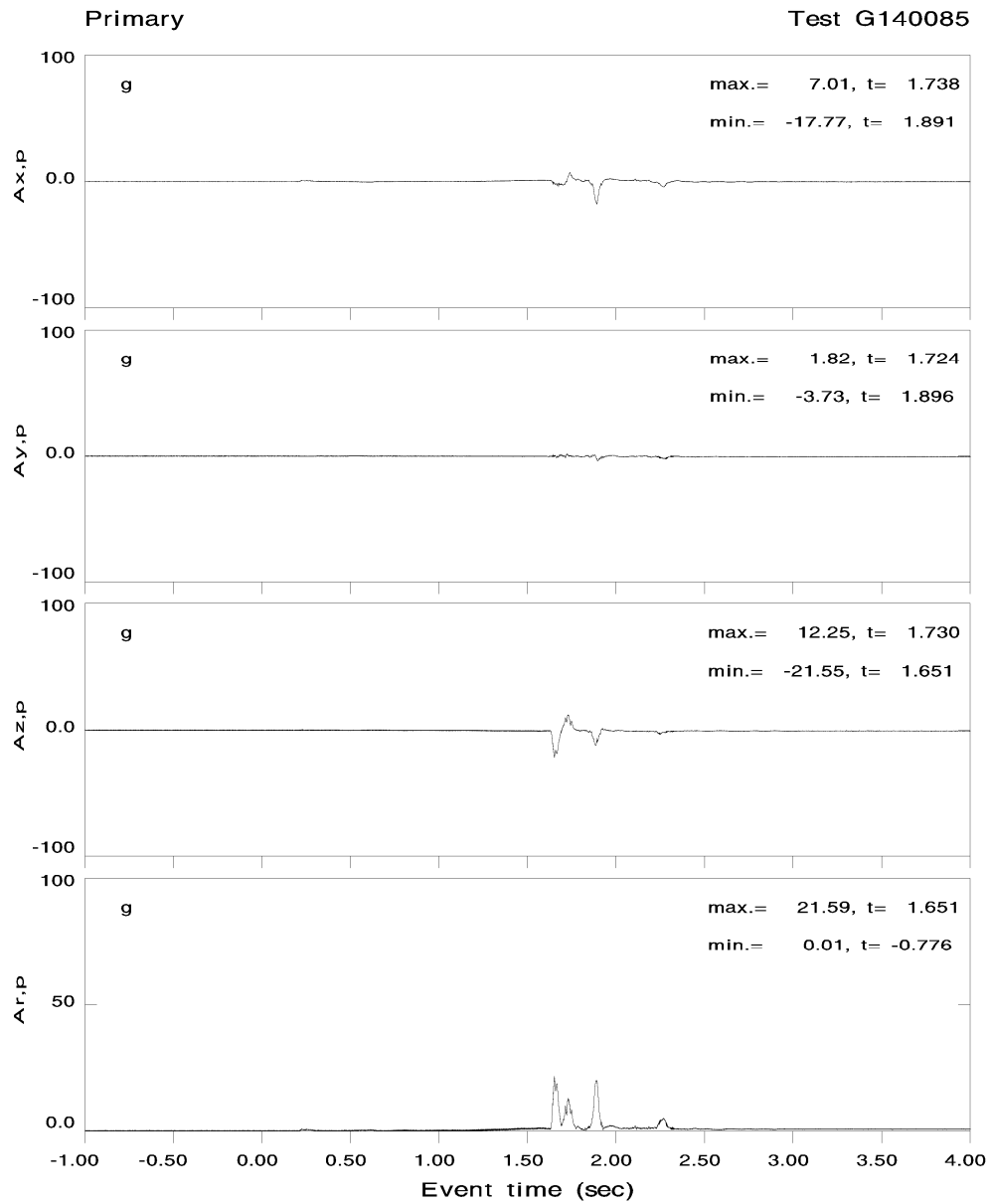


Primary

Test G140085

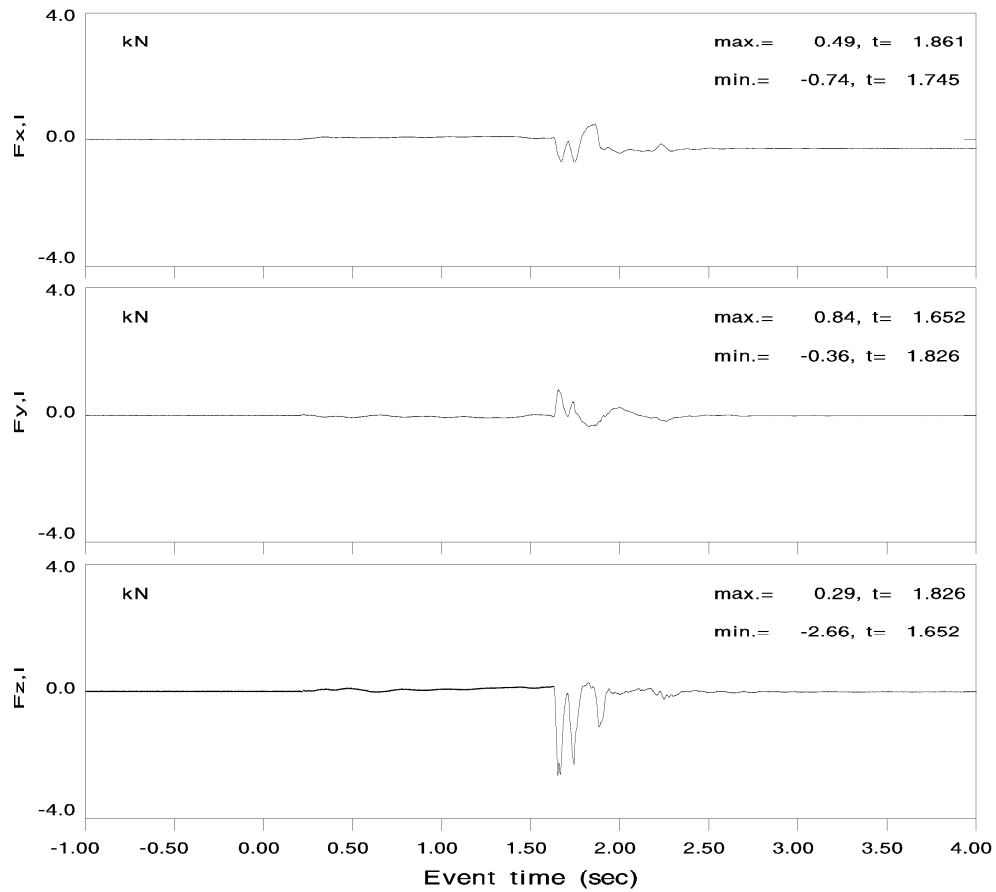






Primary

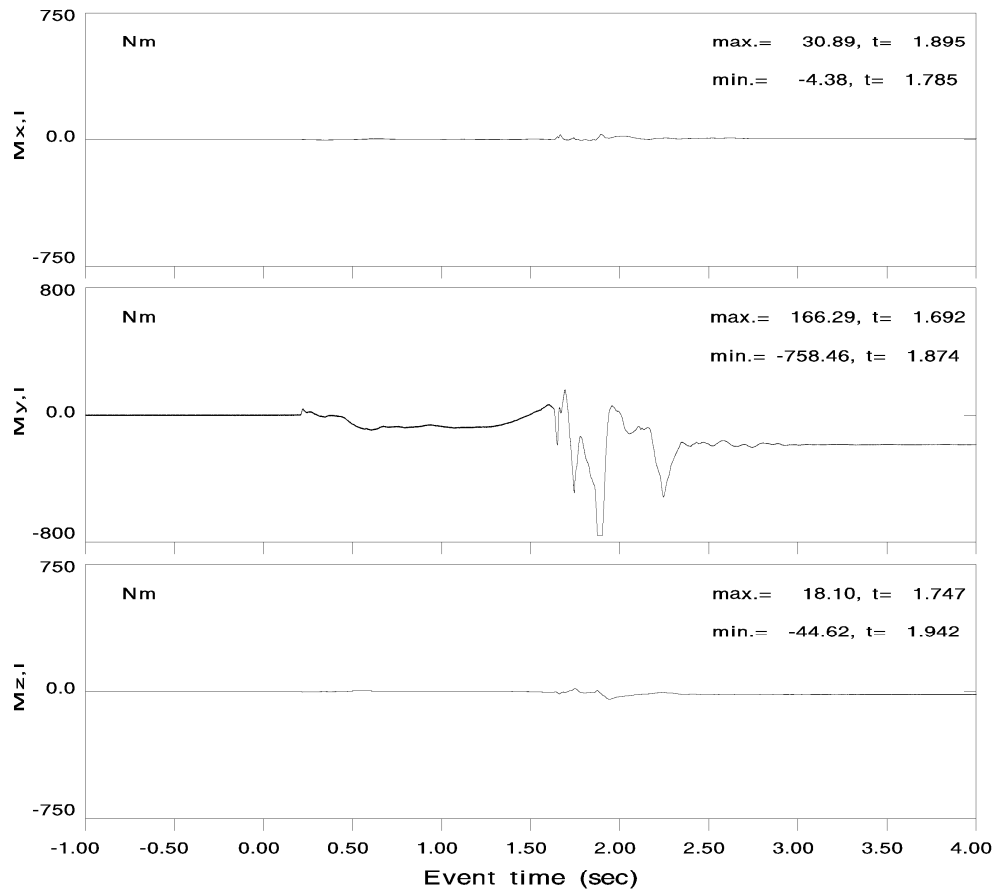
Test G140085

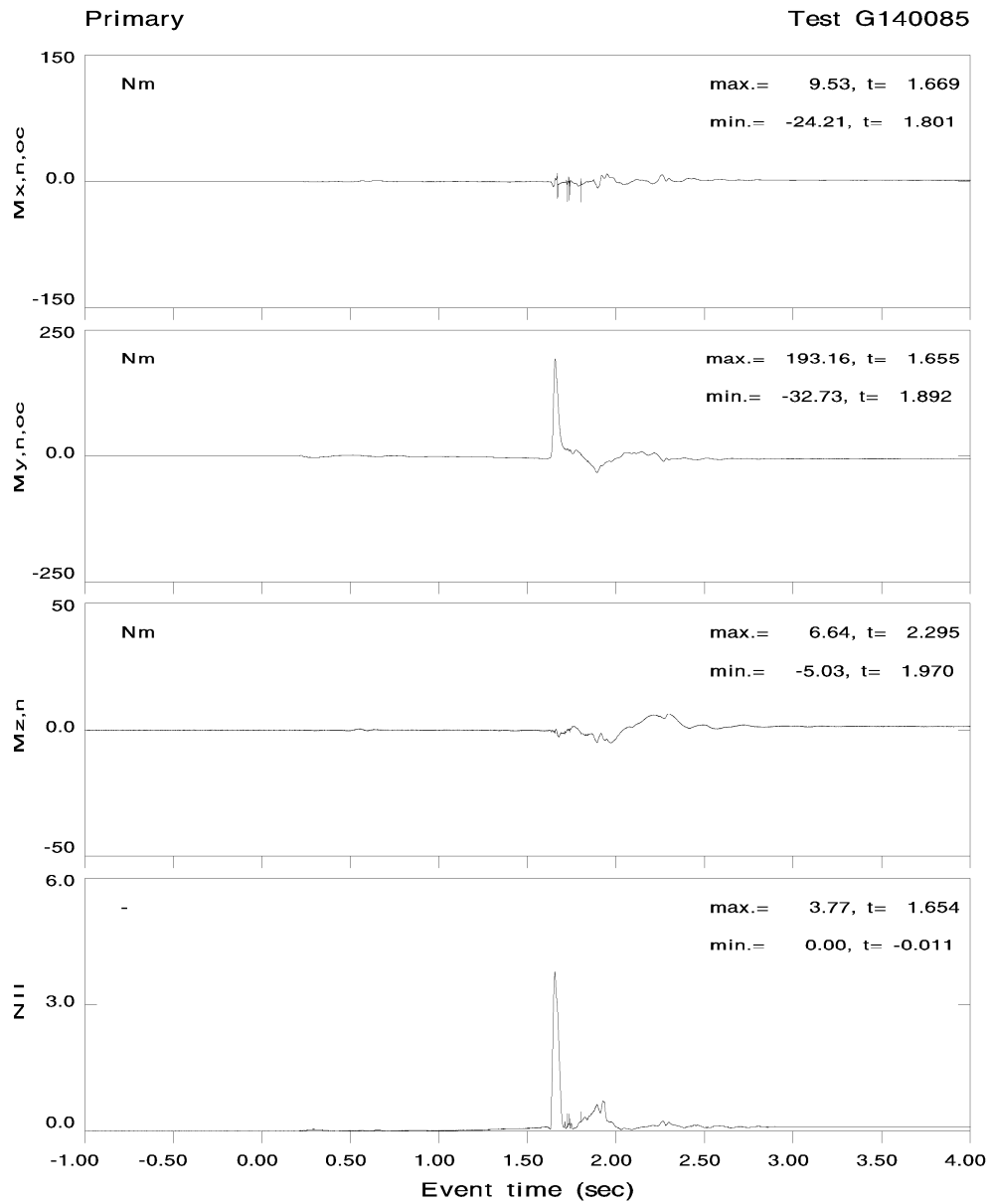


Page 18

Primary

Test G140085





2.9 G140087

G140087_ICM.IC1

Test Number : G140087
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 2
Index for VCmax Location                   = 2
maximum Abdomen Penetration               = 0.000
maximum GAMBIT                            = 0.150
Cmax                                       = 6.330
VCmax                                      = 0.000
HIC                                        = 83.0
NII (2002 MATD Neck)                     = 3.3*
Location of Cmax                          : lower sternum
Location of VCmax                         : lower sternum

```

* Hybrid III standard neck used for this test

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.002
Normalized Cost of Survival               = 0.001
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD Probability	NECK Probability	CHEST Probability	ABDOMEN Probability	LEG Probability	# Injuries
0	0.997	0.902	1.000	1.000	1.000	0
1	0.000	0.075	0.000	0.000	0.000	0
2	0.000	0.016	0.000	0.000	0.000	0
3	0.004	0.007	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.011	0.128	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.000	0.002	0.000	0.000	0.000 0.000 0.000 0.000	Femur Knee Tibia Leg

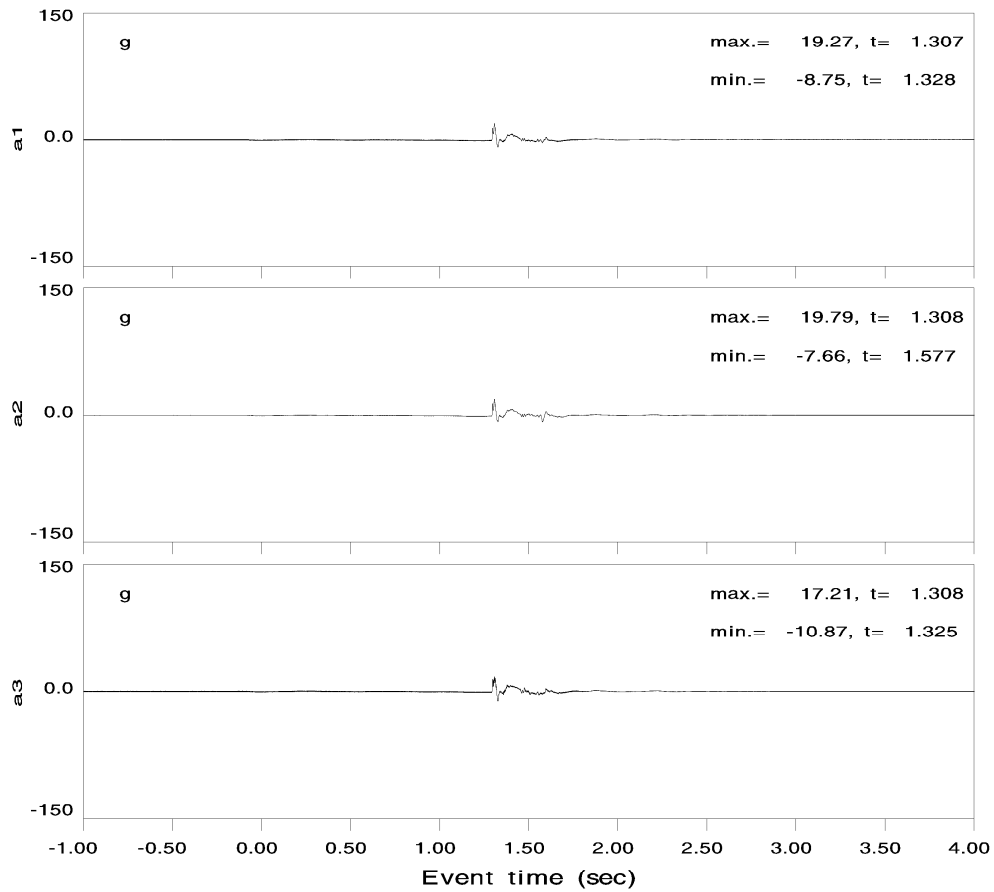
Test G140087, Primary		G140087.rpt		
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	6.02 g	1.408	-15.30 g	1.323
Ay,c	2.44 g	1.579	-3.69 g	1.553
Az,c	16.65 g	1.328	-9.91 g	1.399
Ax,p	3.61 g	1.425	-7.01 g	1.577
Ay,p	5.25 g	1.596	-5.67 g	1.396
Az,p	11.98 g	1.395	-18.02 g	1.317
spare	0.00 -	0.889	0.00 -	1.557
spare	0.00 -	0.362	0.00 -	-0.302
L,ur	2.18 mm	1.325	-7.61 mm	1.569
L,lr	4.69 mm	1.320	-11.22 mm	1.569
a1	19.27 g	1.307	-8.75 g	1.328
a2	19.79 g	1.308	-7.66 g	1.577
a3	17.21 g	1.308	-10.87 g	1.325
a4	23.91 g	1.308	-15.71 g	1.327
a5	24.08 g	1.308	-16.47 g	1.327
a6	23.86 g	1.308	-21.96 g	1.327
Mx,l	13.06 Nm	1.328	-45.15 Nm	1.630
My,l	324.98 Nm	1.358	-435.83 Nm	1.411
Mz,l	38.65 Nm	1.569	-19.59 Nm	1.326
Fx,l	0.21 kN	1.483	-0.80 kN	1.410
Fy,l	0.80 kN	1.328	-0.40 kN	1.514
Fz,l	0.32 kN	1.497	-2.24 kN	1.329
spare	0.00 -	-0.947	-0.02 -	1.376
spare	0.00 -	-0.813	0.00 -	1.302
spare	0.22 -	3.998	0.02 -	-0.994
spare	0.00 -	0.431	0.00 -	-0.717
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.01 -	3.891	0.00 -	0.976
a7	22.94 g	1.310	-9.00 g	1.397
a8	24.48 g	1.310	-10.27 g	1.397
a9	24.81 g	1.310	-10.05 g	1.397
Fz,uf,r	0.27 kN	1.593	-1.48 kN	1.472
Mx,uf,r	33.93 Nm	1.459	-72.02 Nm	1.599
My,uf,r	37.04 Nm	2.013	-52.50 Nm	1.320
Mz,uf,r	0.27 Nm	-0.055	-73.46 Nm	1.599
Fz,uf,l	0.40 kN	1.556	-0.36 kN	1.597
Mx,uf,l	14.16 Nm	2.439	-26.34 Nm	1.404
My,uf,l	13.85 Nm	1.518	-48.41 Nm	1.402
Mz,uf,l	19.11 Nm	1.392	-16.19 Nm	1.478
Fx,n	1.03 kN	1.311	-0.62 kN	1.342
Fy,n	0.53 kN	1.331	-0.06 kN	1.568
Fz,n	1.23 kN	1.581	-7.05 kN	1.318
Mx,n	30.09 Nm	1.496	-42.83 Nm	1.336
My,n	178.04 Nm	1.318	-35.39 Nm	1.584
Mz,n	10.62 Nm	1.334	-5.84 Nm	2.245
L,ul	5.20 mm	1.829	-8.54 mm	1.553
L,ll	4.25 mm	1.826	-10.08 mm	1.554
Ax,h	16.90 g	1.327	-29.93 g	1.307
Ay,h	5.64 g	1.331	-10.60 g	1.578
Az,h	22.95 g	1.310	-9.01 g	1.397
ax,h	0.83 krad/s**2	1.555	-0.83 krad/s**2	1.588
ay,h	1.75 krad/s**2	1.318	-1.60 krad/s**2	1.329
az,h	0.51 krad/s**2	1.330	-1.17 krad/s**2	1.577
Ar,h	36.31 g	1.308	0.02 g	2.089
ar,h	1.81 krad/s**2	1.318	0.00 krad/s**2	3.710
G	0.15 -	1.308	0.00 -	-0.966
HIC	83.03	1.332	----	1.296
Fxy,n	1.06 kN	1.311	0.00 kN	-0.691
Dx,us	2.27 mm	1.332	-8.61 mm	1.556
Dy,us	8.61 mm	1.831	-3.29 mm	1.550

		G140087.rpt		
Cus	4.59 %	1.556	-1.21 %	1.332
Vus	0.37 m/s	1.580	-0.71 m/s	1.538
VCus	0.02 m/s	1.542	-0.01 m/s	1.577
Dx,ls	4.91 mm	1.320	-11.87 mm	1.559
Dy,ls	8.58 mm	1.828	-3.15 mm	1.551
Cl s	6.33 %	1.559	-2.62 %	1.320
Vl s	0.26 m/s	1.581	-0.87 m/s	1.539
VC l s	0.03 m/s	1.544	-0.01 m/s	1.577
Mxy,uf,r	81.06 Nm	1.599	0.00 Nm	-0.537
Mxy,uf,l	54.73 Nm	1.402	0.00 Nm	-0.717
Mx,n,oc	32.30 Nm	1.496	-33.69 Nm	1.336
My,n,oc	168.67 Nm	1.319	-35.77 Nm	1.555
NII	3.35 -	1.318	0.00 -	-0.662
Ar,p	18.03 g	1.317	0.01 g	-0.330
Ar,c	20.94 g	1.325	0.00 g	-0.770

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

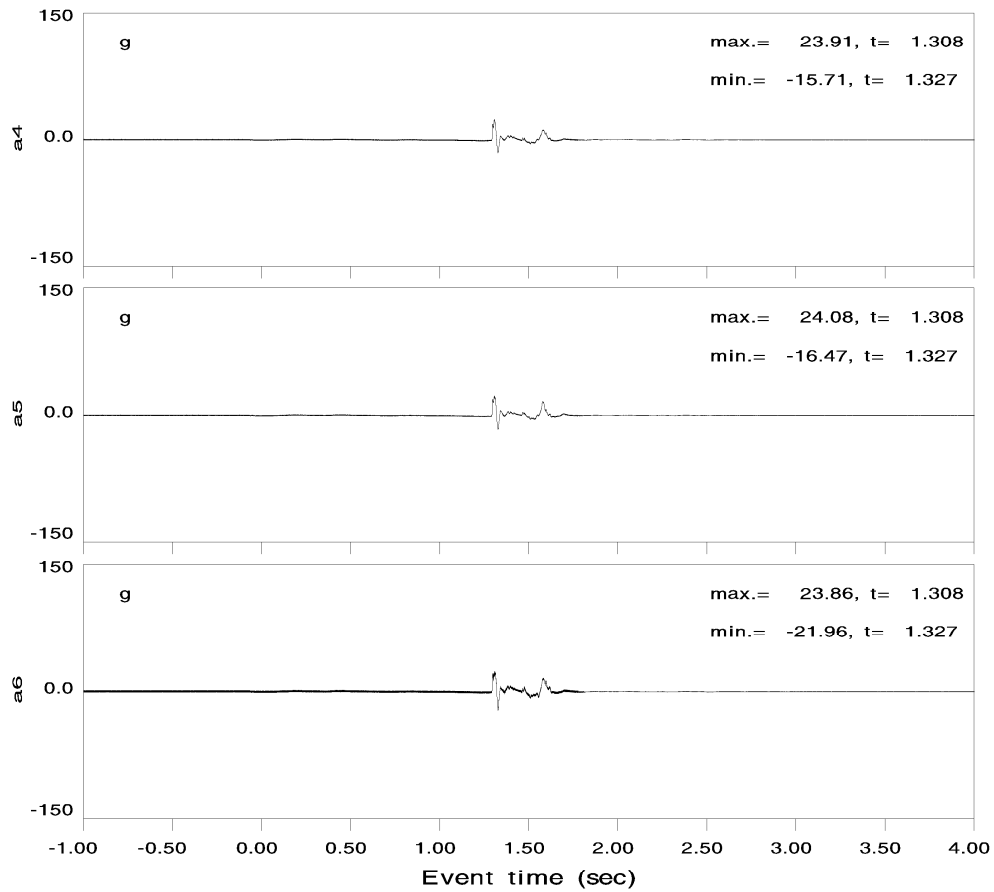
Primary

Test G140087



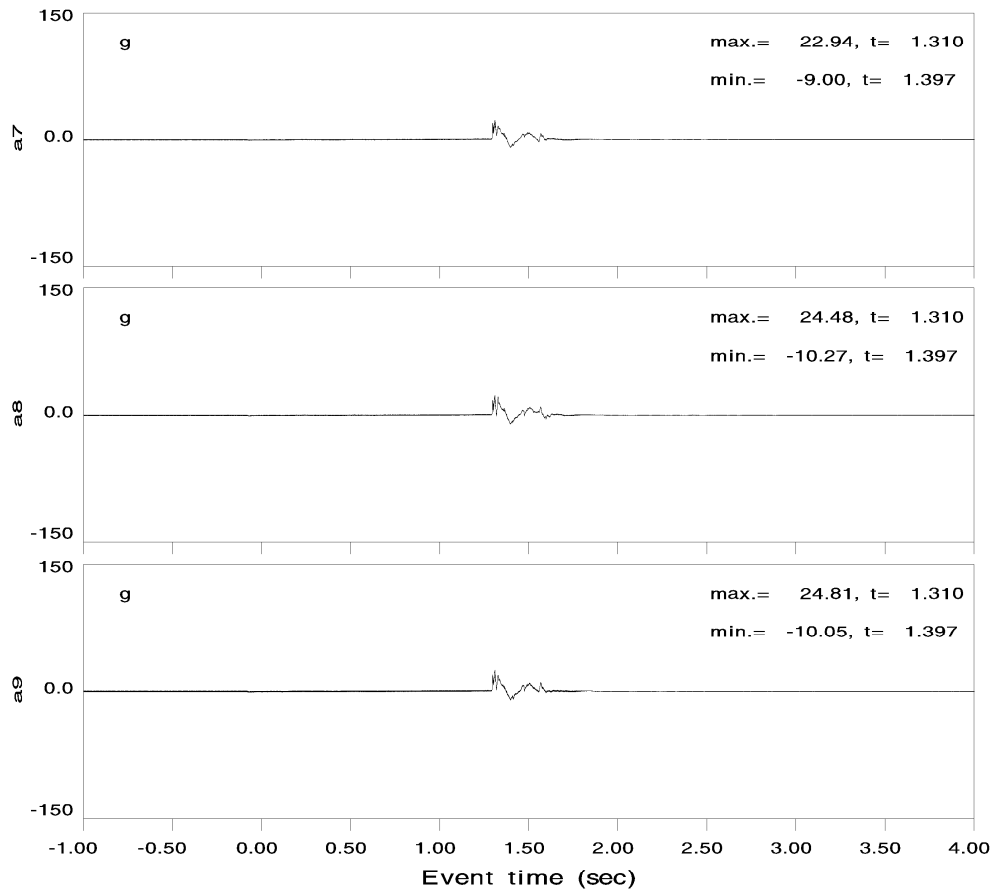
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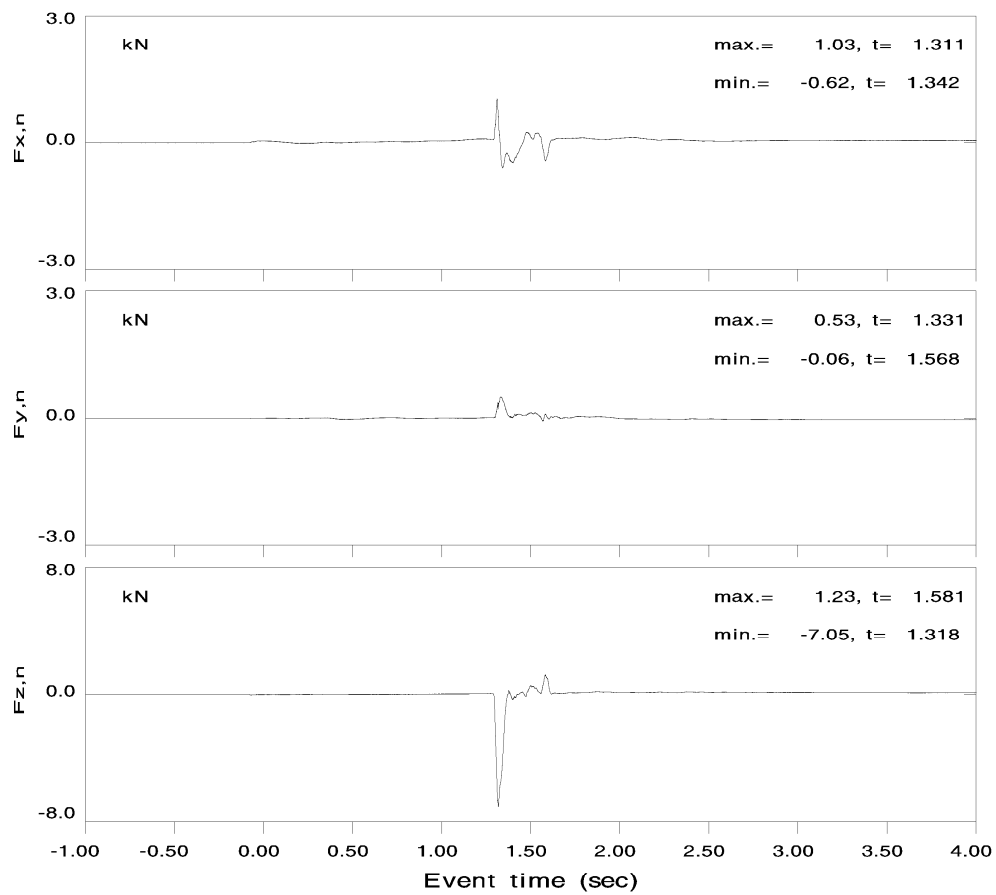
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Test G140087



Primary

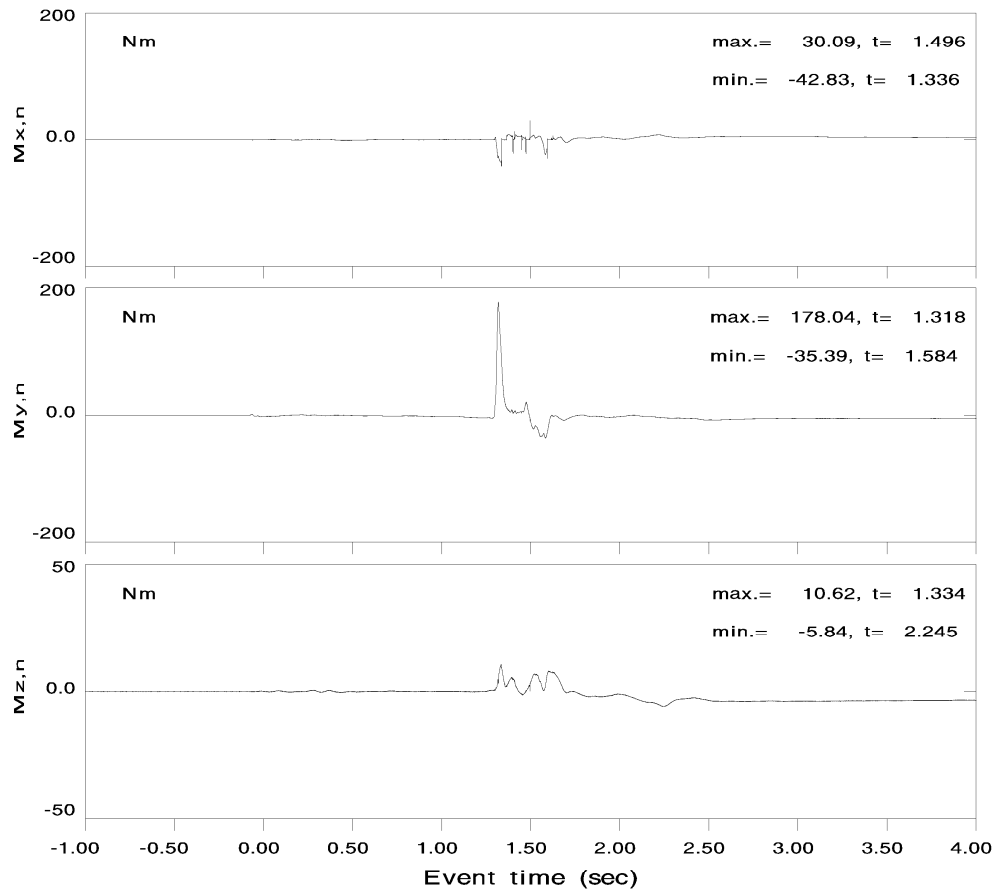
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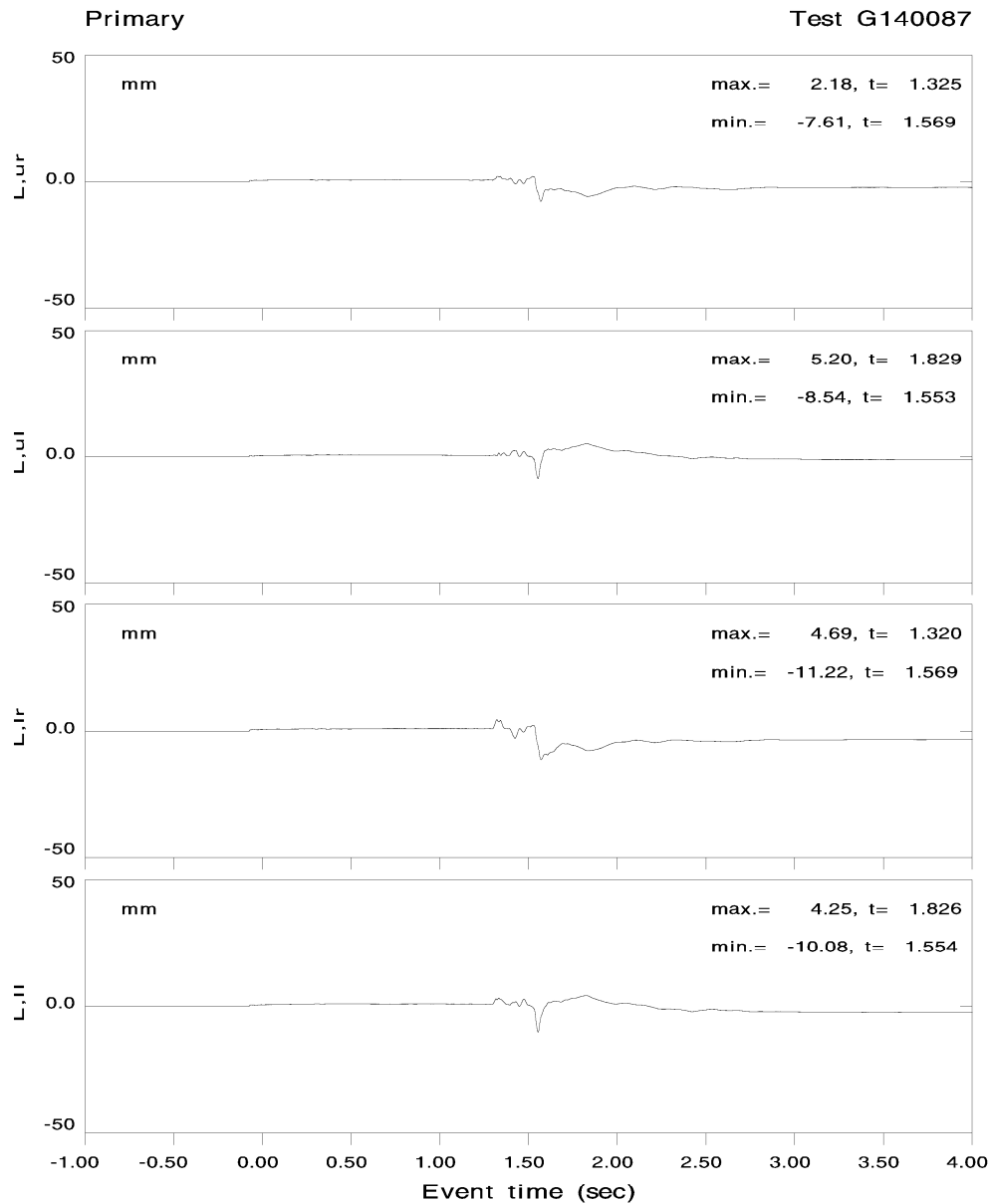


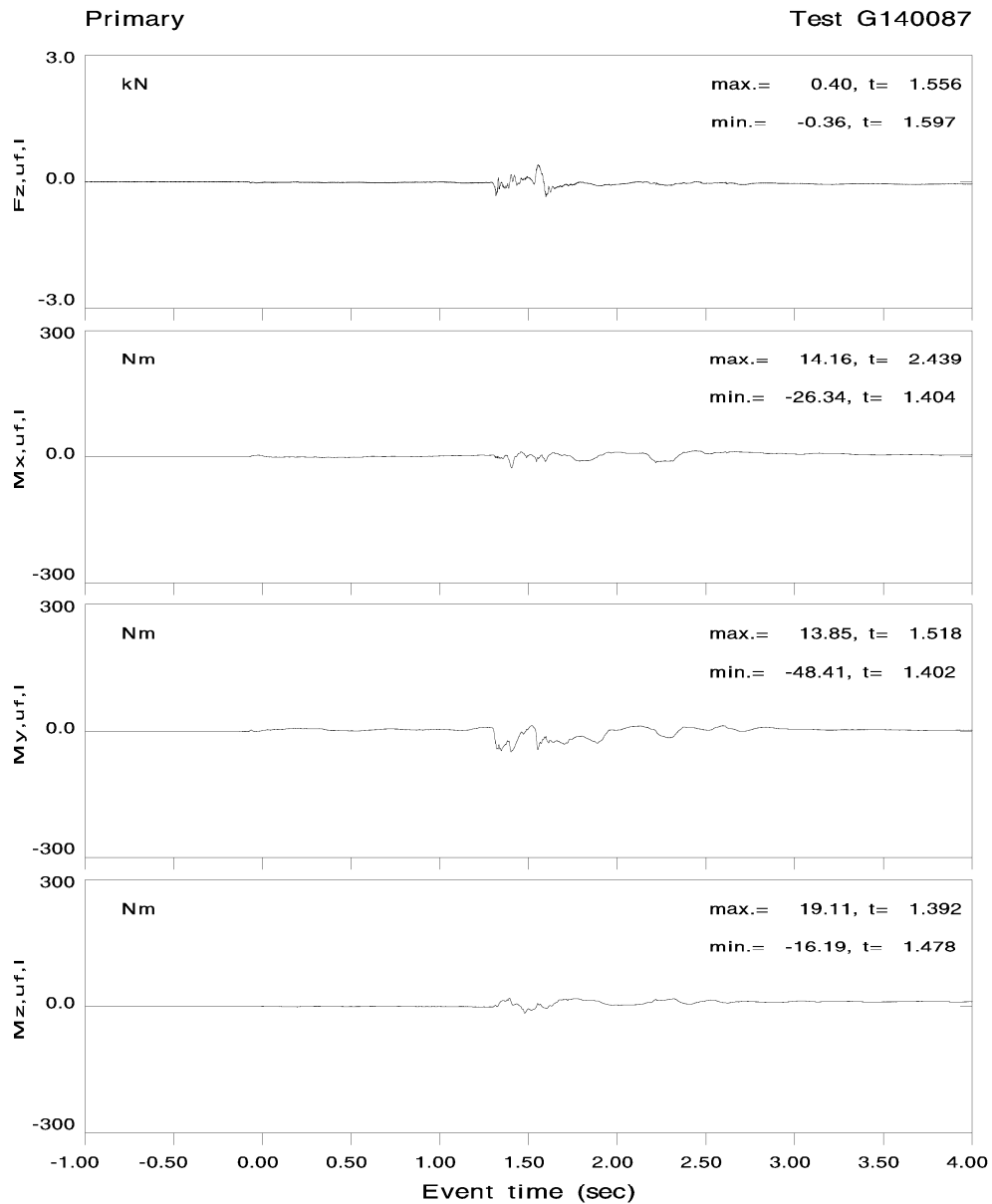
Page 4

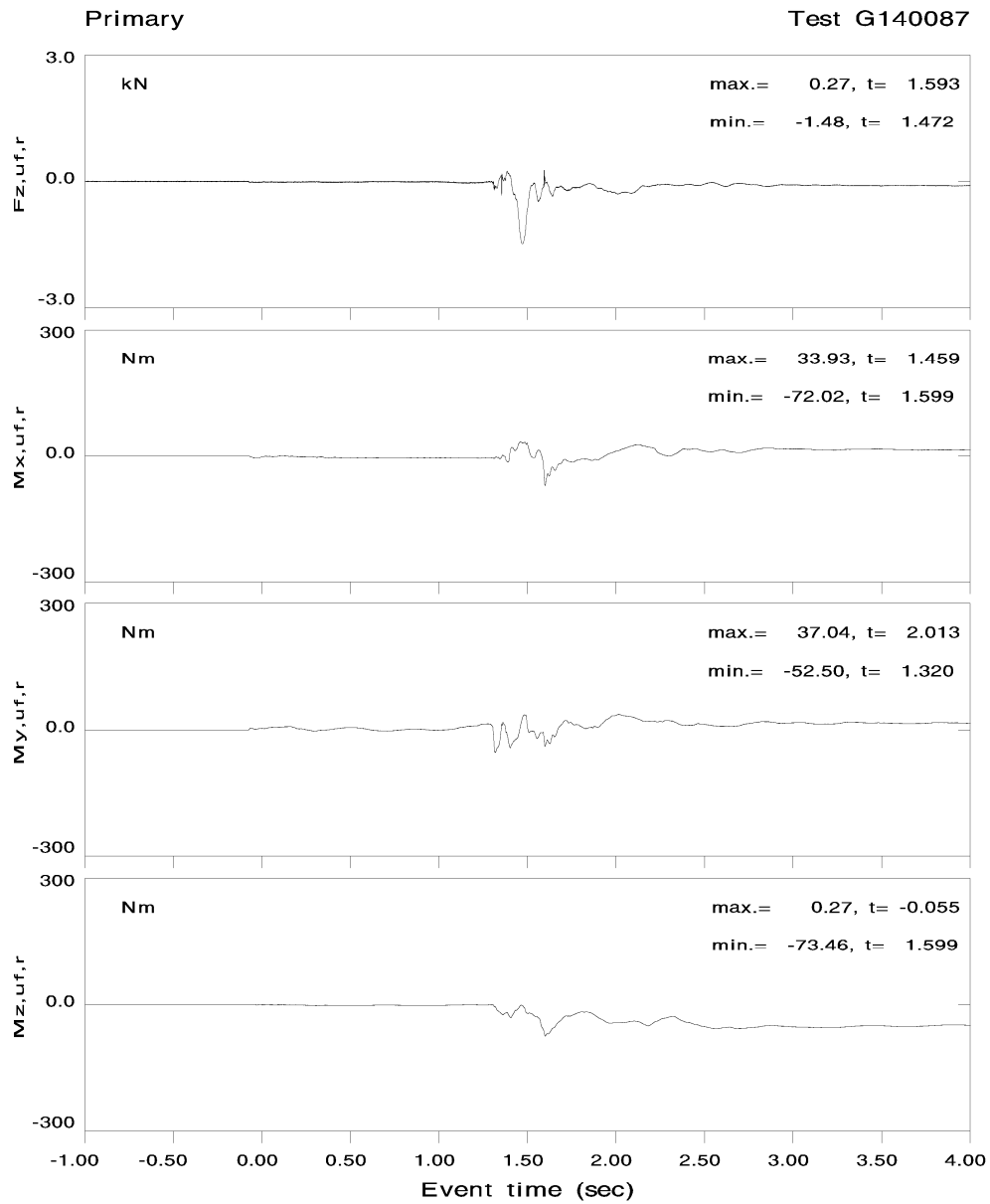
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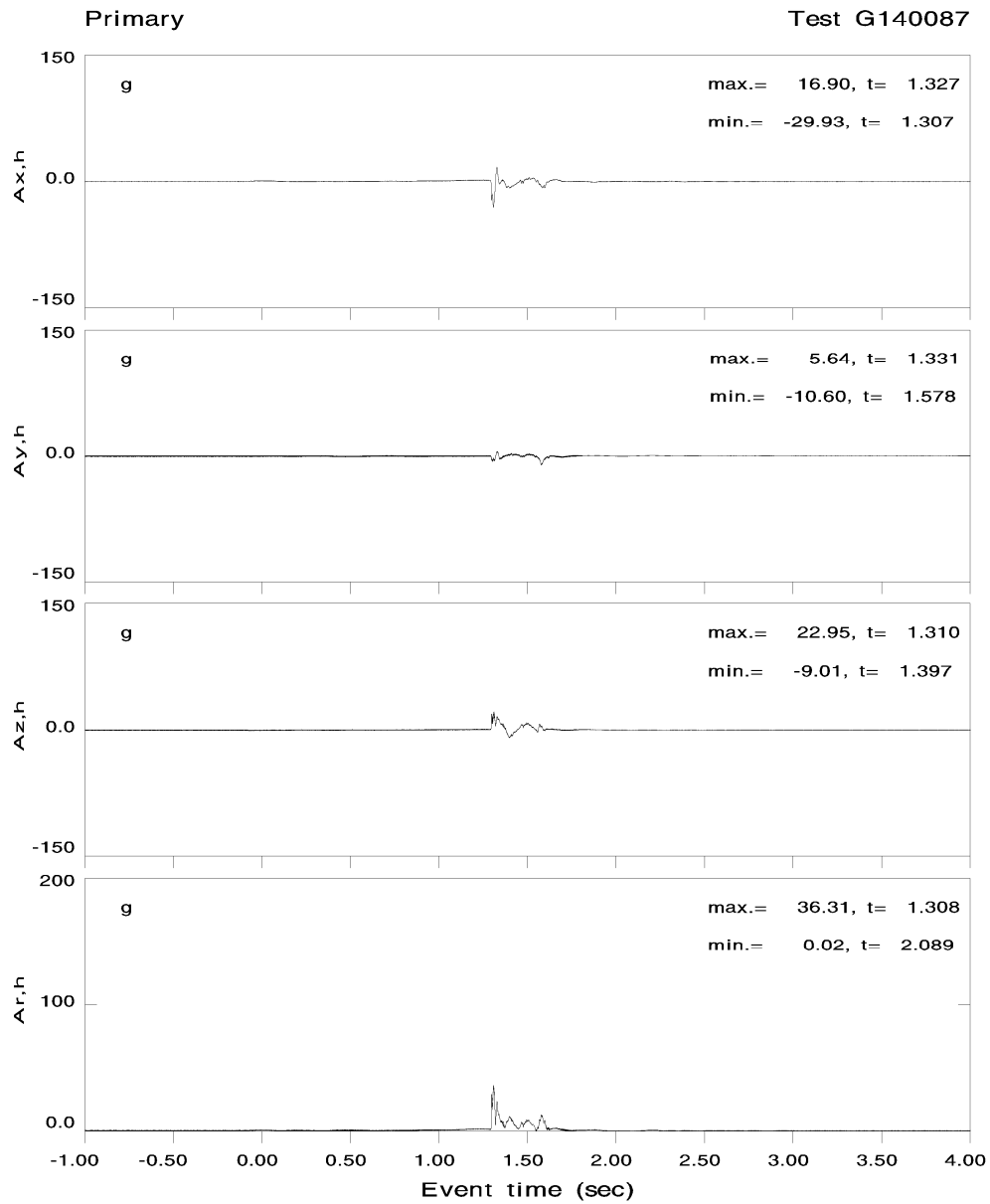
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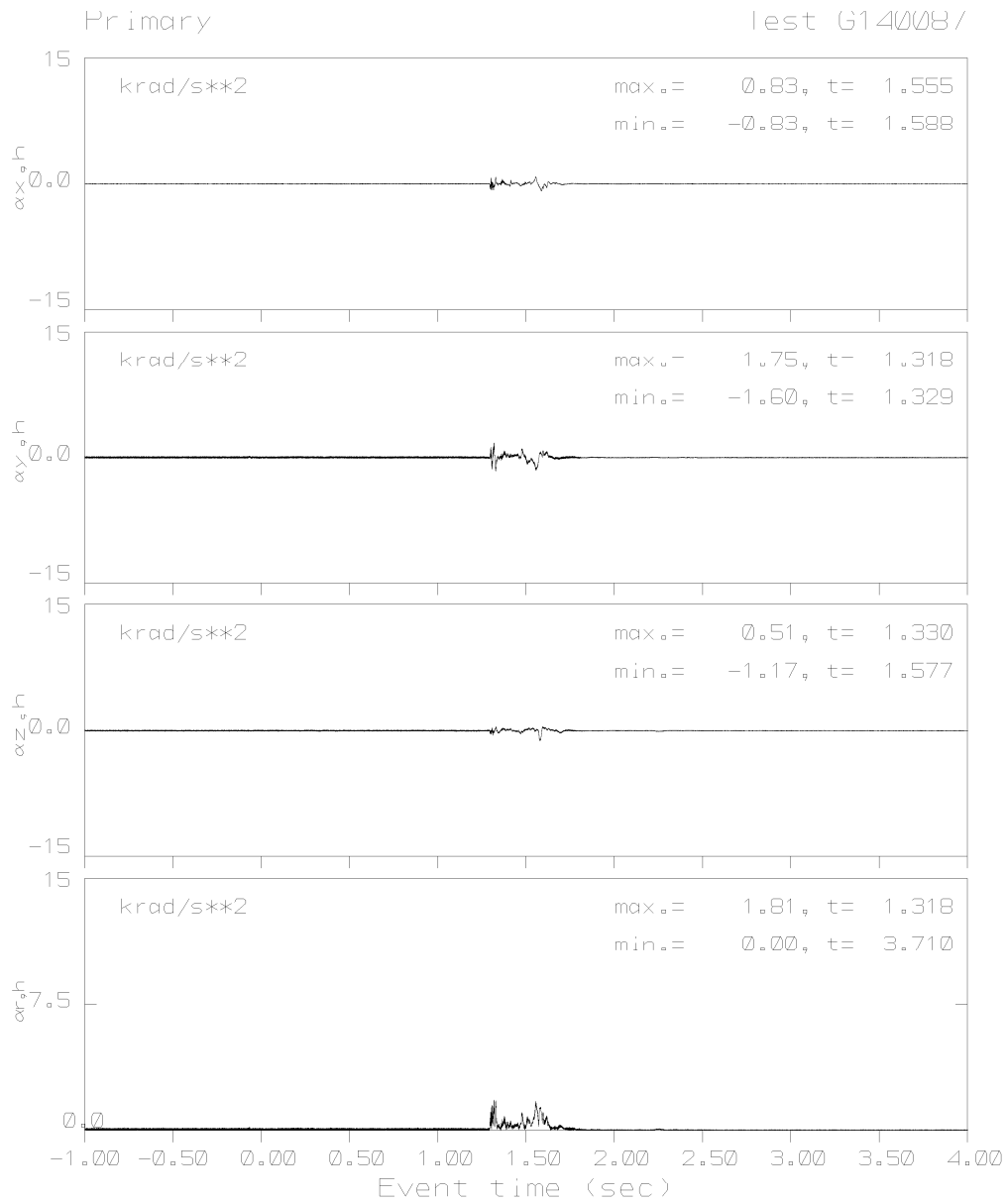


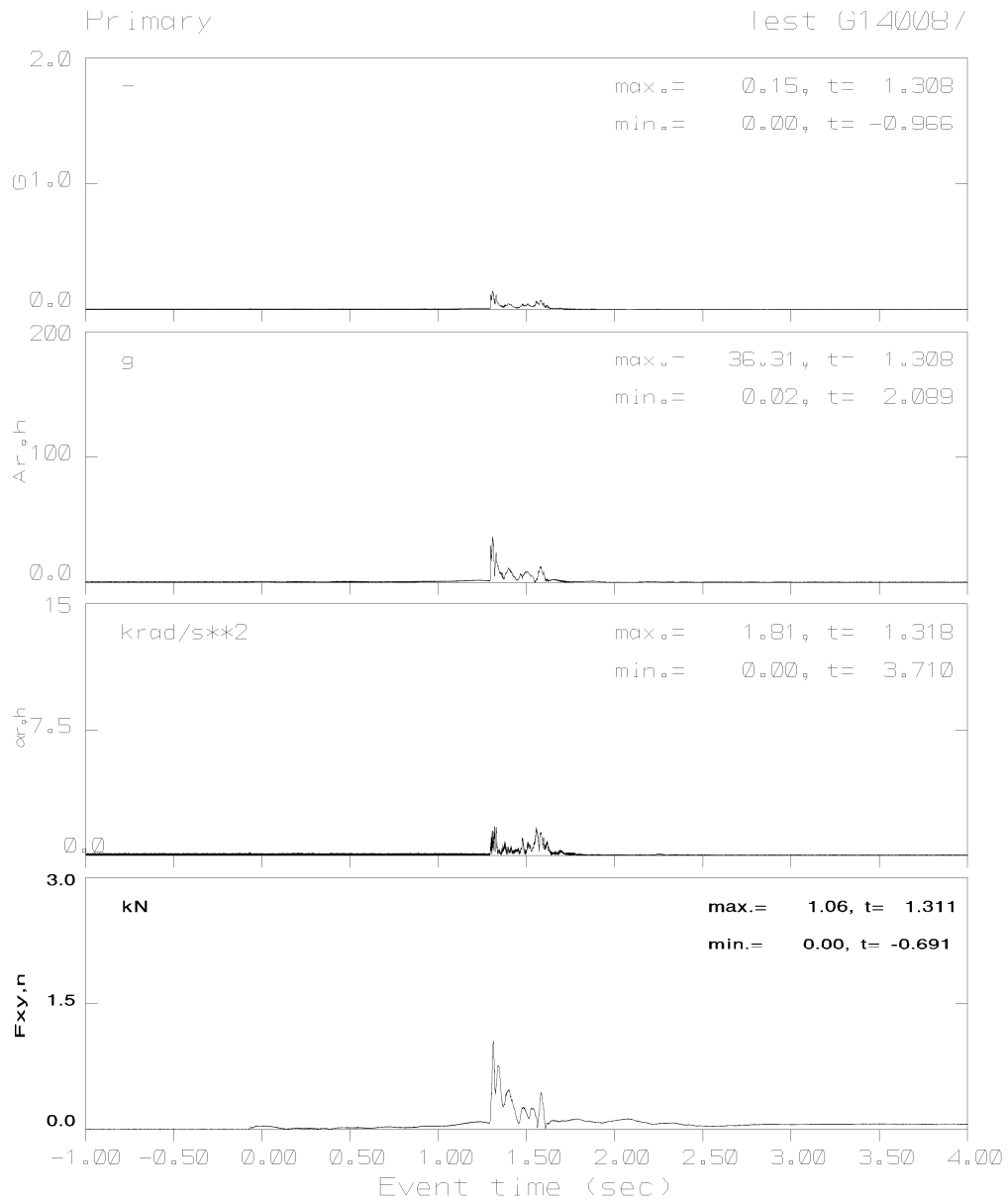


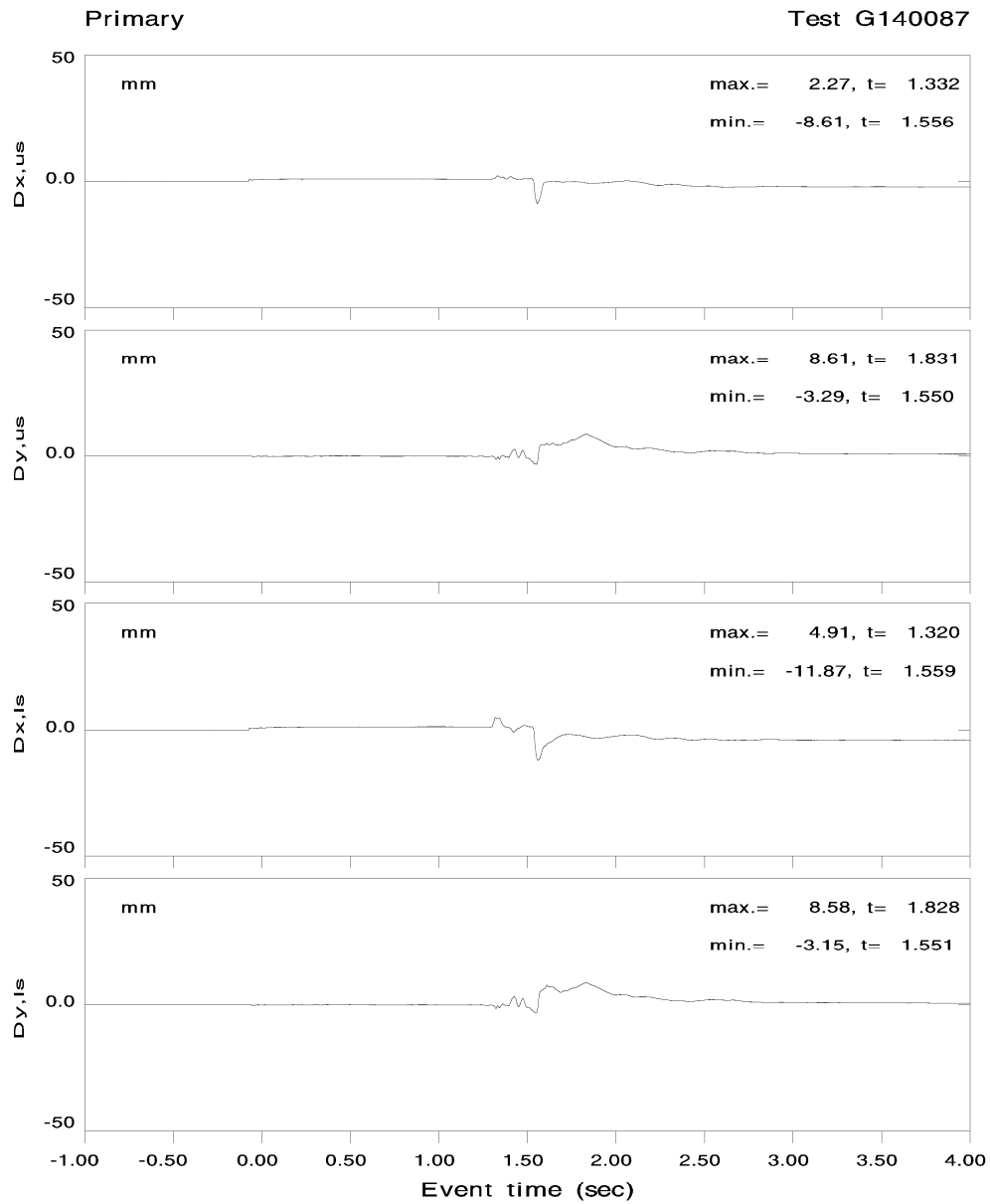






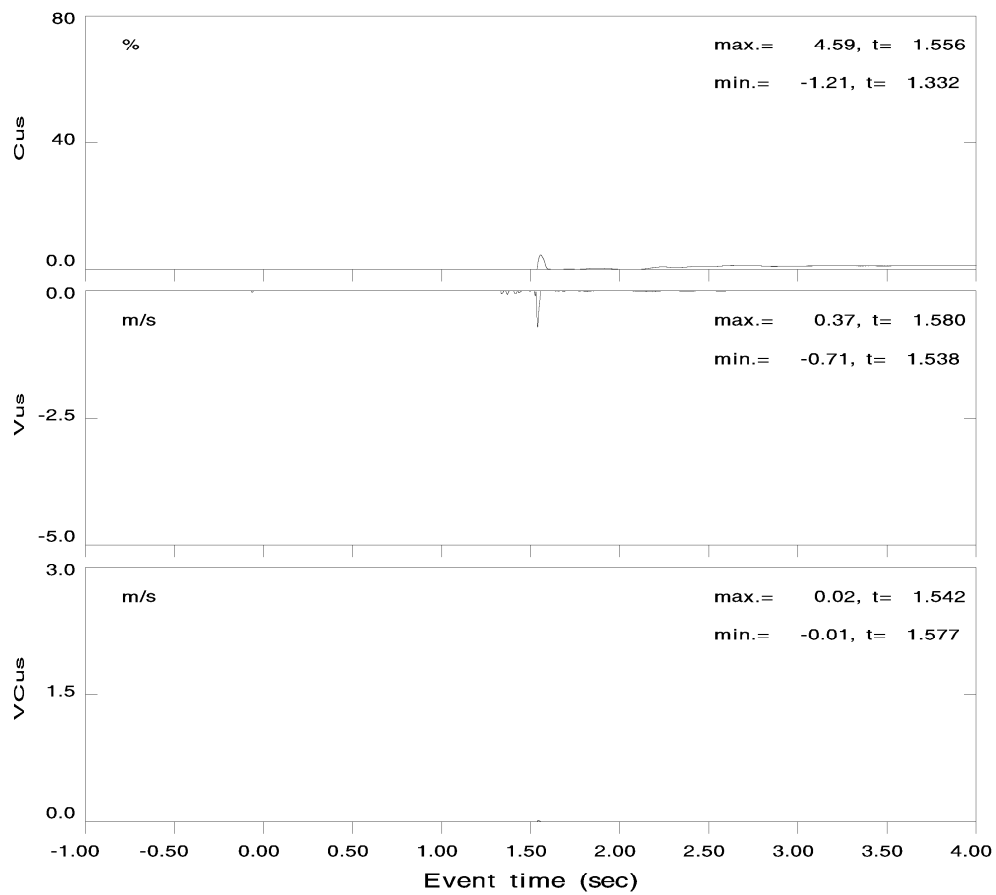






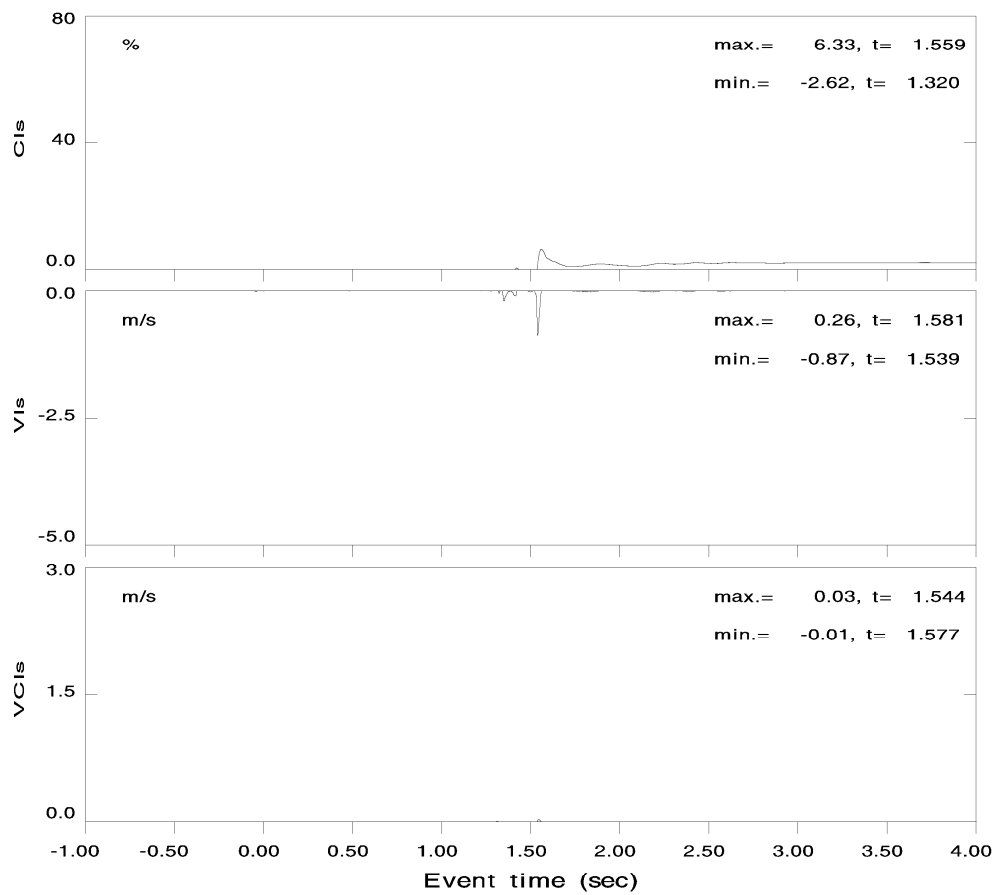
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Test G140087



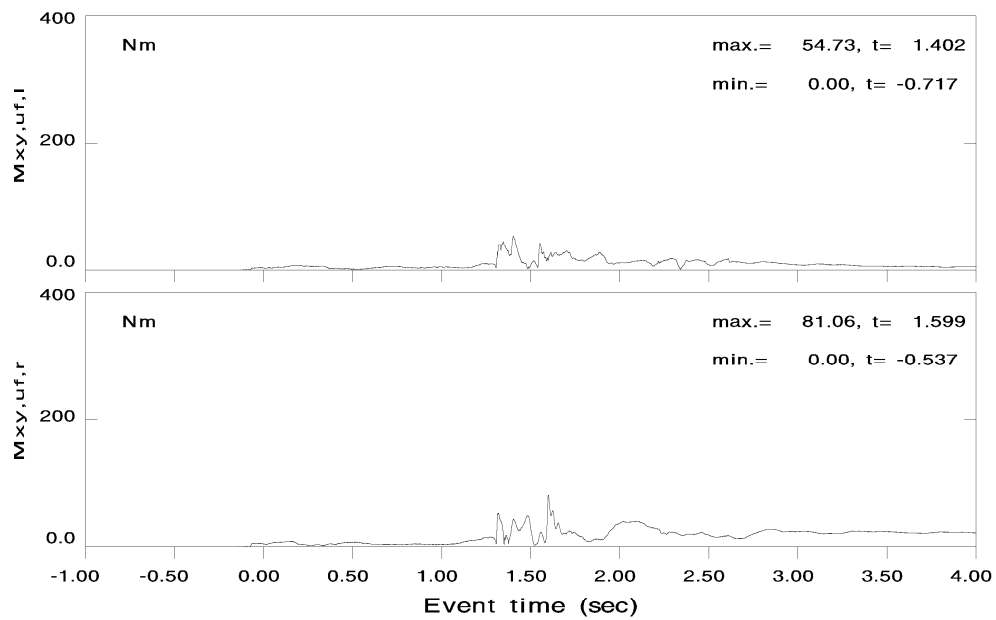
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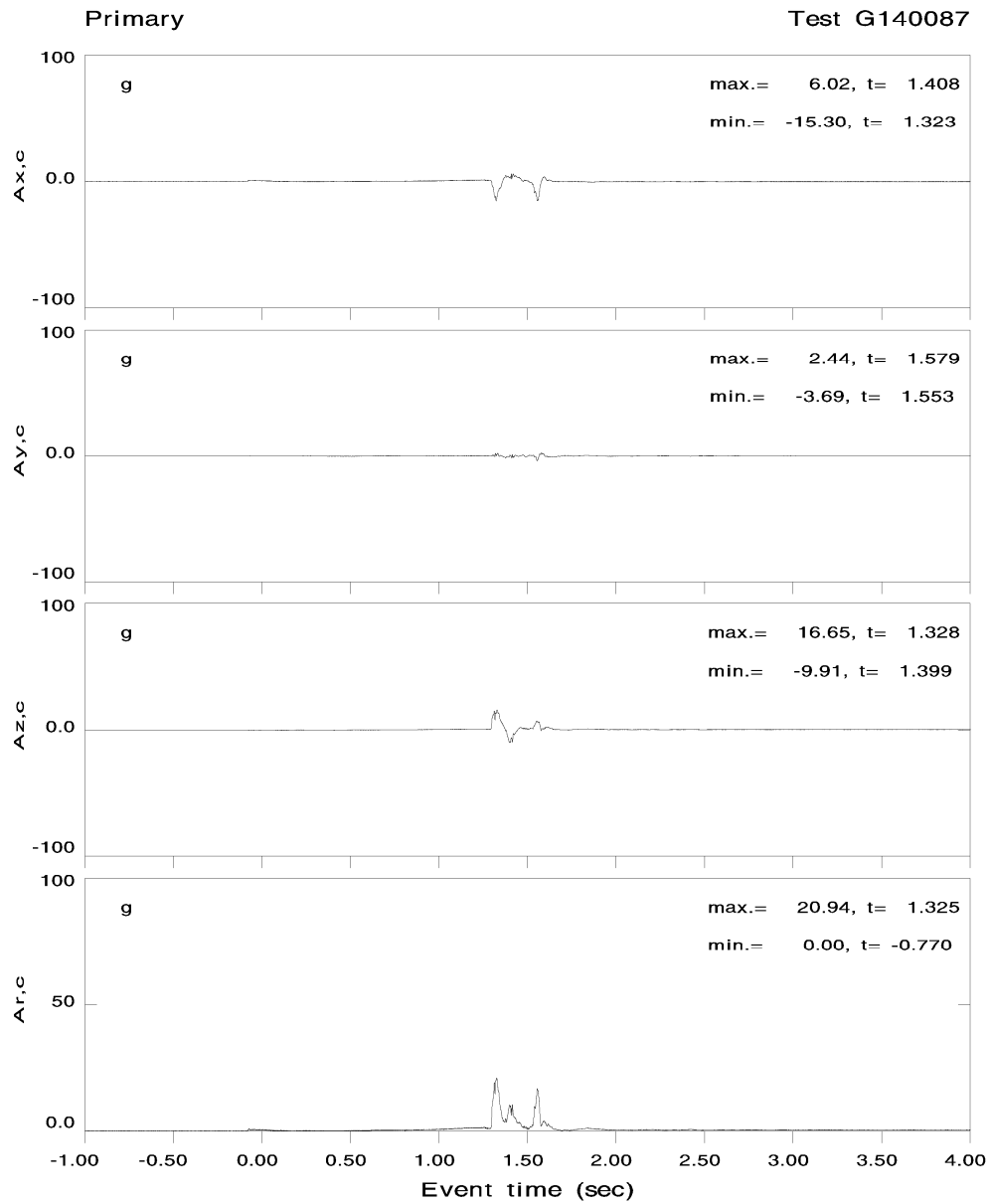
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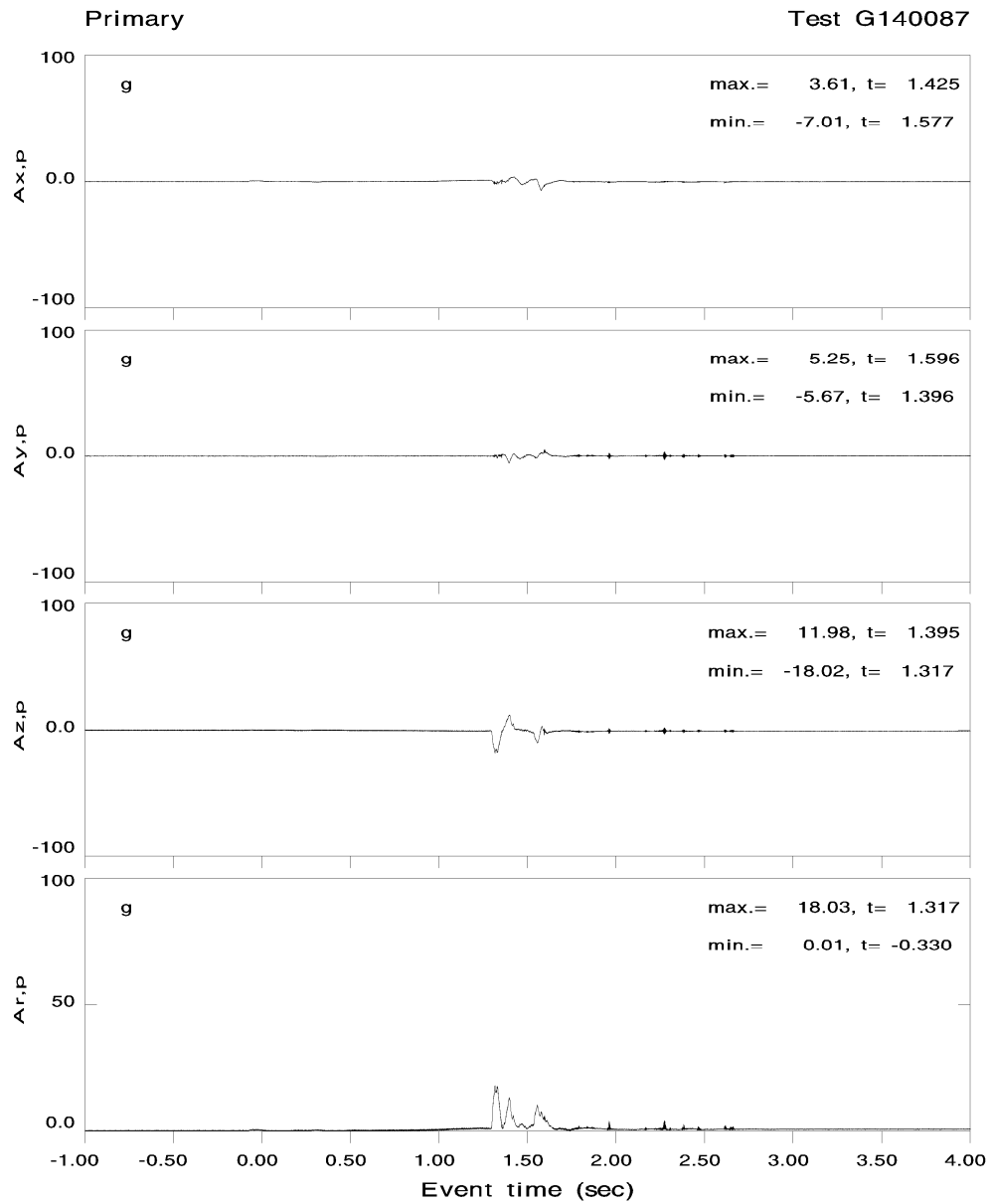


Primary

Test G140087

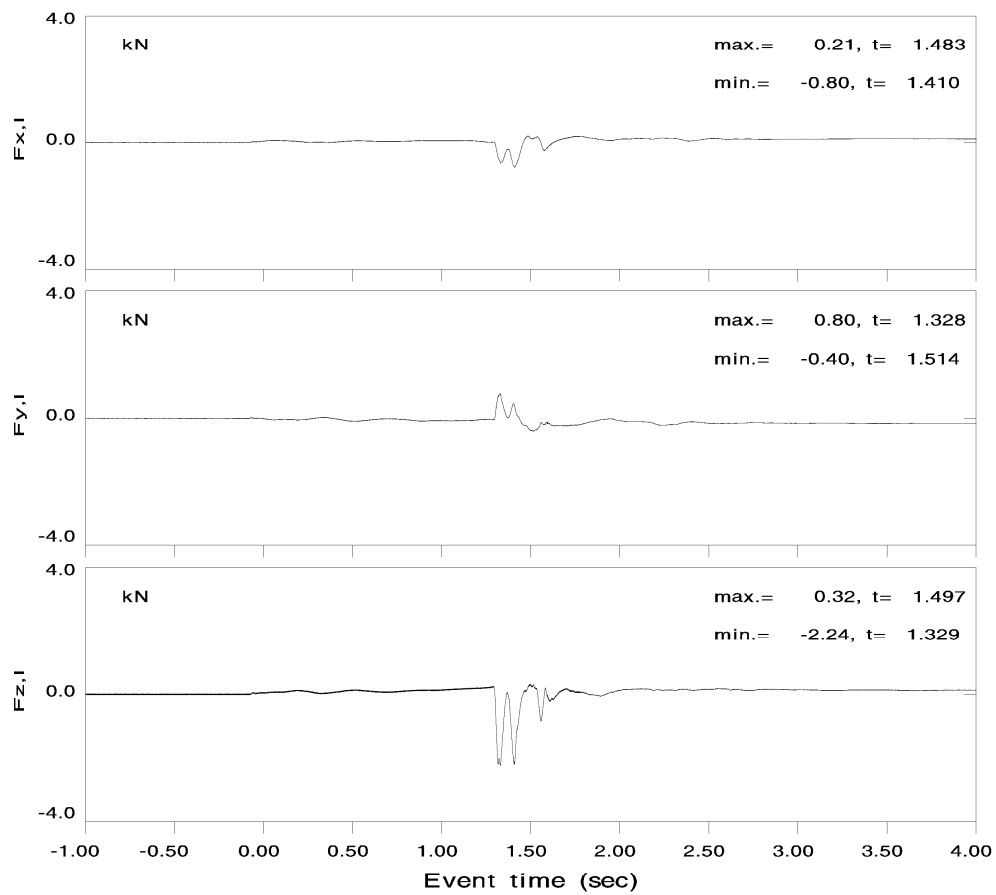






Primary

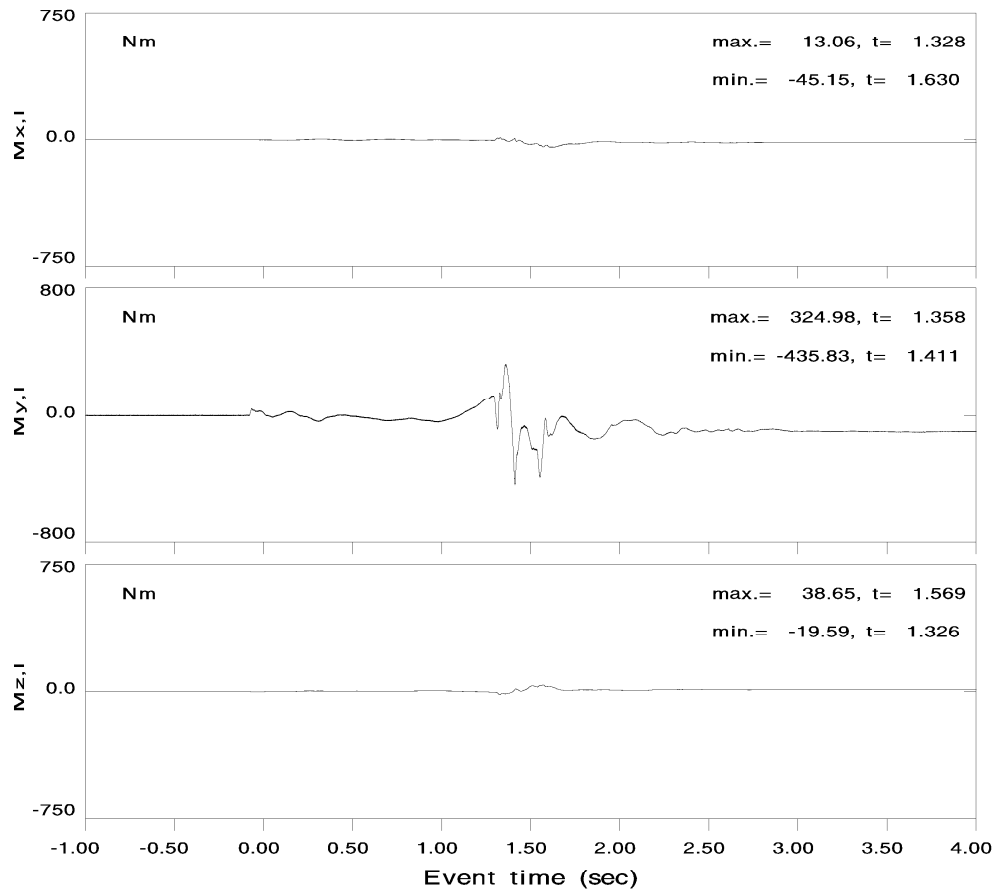
Test G140087

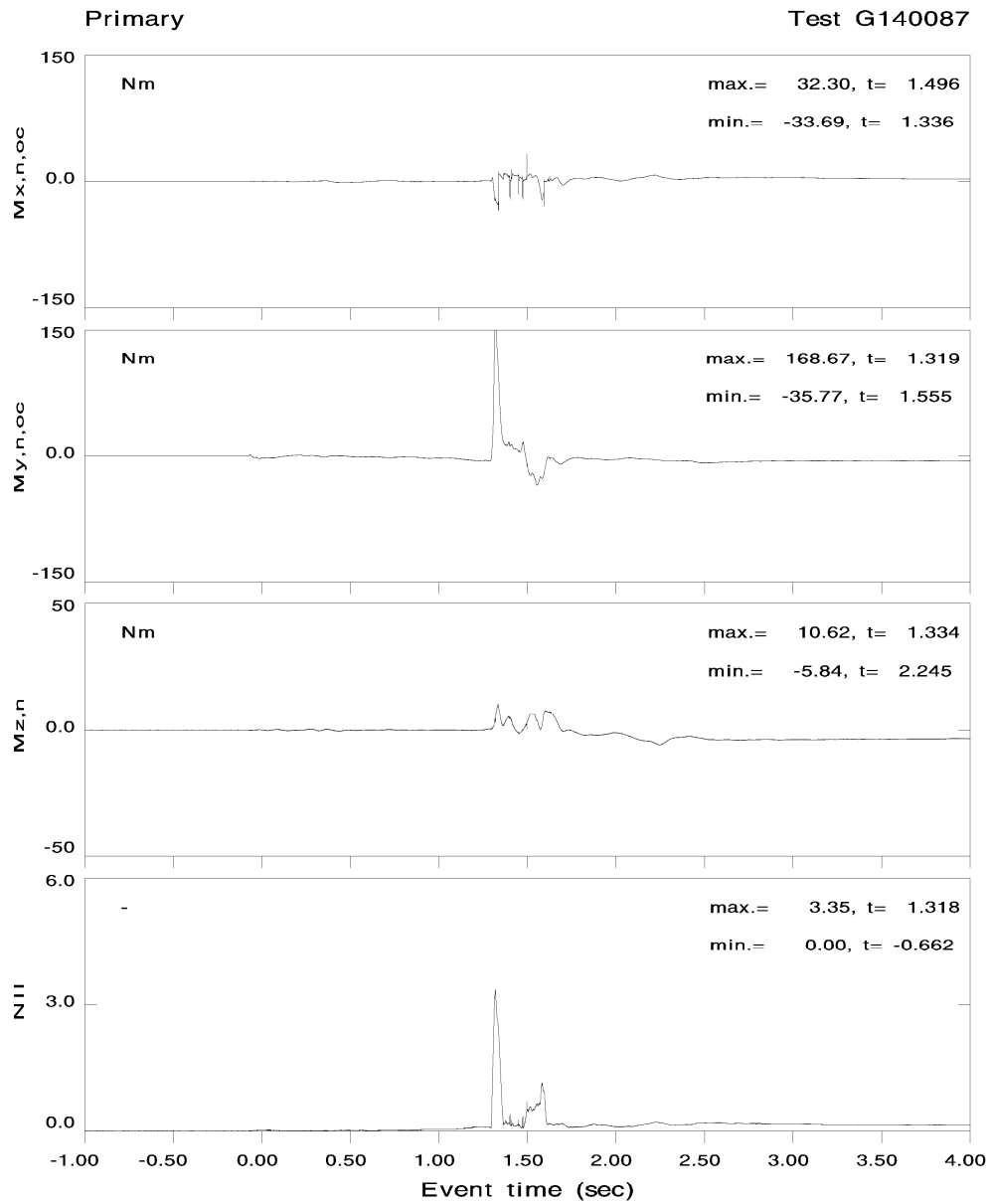


Page 18

Primary

Test G140087





2.10 G140088

G140088_ICM.IC1

Test Number : G140088
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 2
Index for VCmax Location                   = 2
maximum Abdomen Penetration                = 0.000
maximum GAMBIT                             = 0.150
Cmax                                       = 10.770
VCmax                                      = 0.000
HIC                                       = 87.1
NII (2002 MATD Neck)                     = 3.1
Location of Cmax                          : lower sternum
Location of VCmax                         : lower sternum

```

* Hybrid III standard neck used for this test

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.001
Normalized Cost of Survival               = 0.000
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD Probability	NECK Probability	CHEST Probability	ABDOMEN Probability	LEG Probability	# Injuries
0	0.996	0.933	0.997	1.000	1.000	0
1	0.000	0.055	0.003	0.000	0.000	0
2	0.000	0.009	0.000	0.000	0.000	0
3	0.004	0.003	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.012	0.081	0.003	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.000	0.001	0.000	0.000	0.000 0.000 0.000 0.000	Femur Knee Tibia Leg

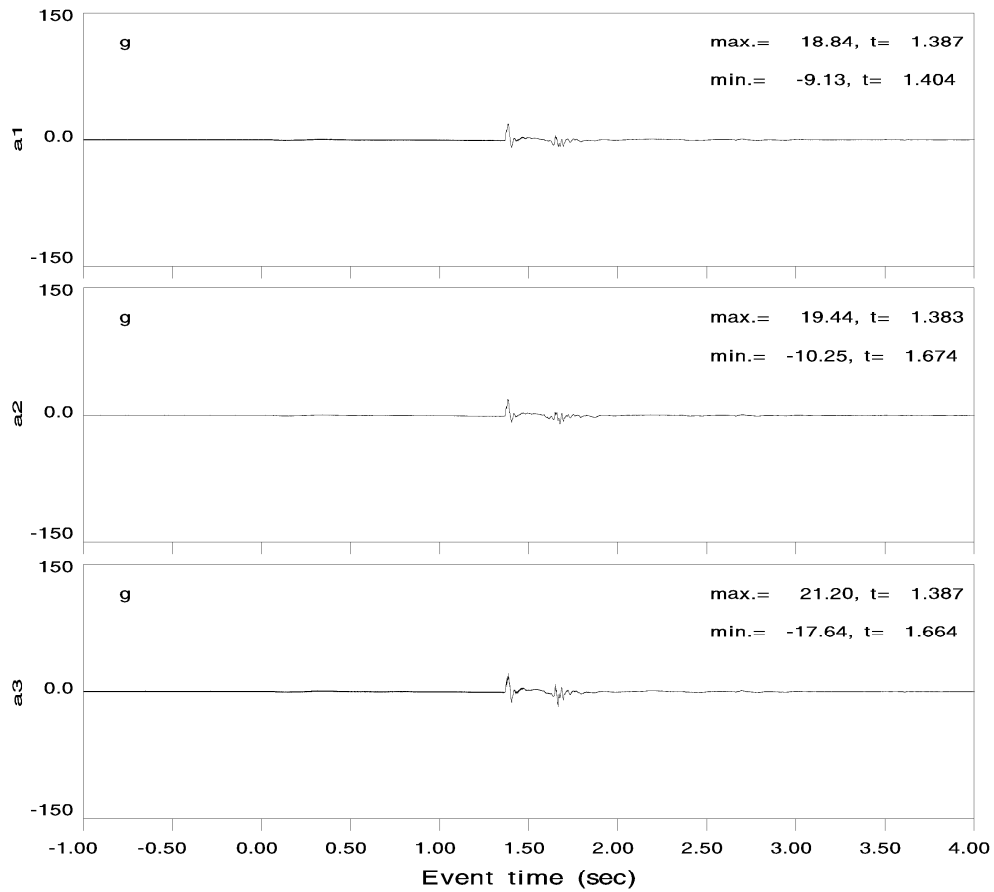
Test G140088, Primary		G140088.rpt		
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	22.69 g	1.660	-17.25 g	1.624
Ay,c	5.64 g	1.657	-6.07 g	1.683
Az,c	14.74 g	1.406	-7.57 g	1.493
Ax,p	7.10 g	1.484	-14.68 g	1.634
Ay,p	2.36 g	1.646	-2.83 g	1.419
Az,p	7.44 g	1.662	-18.51 g	1.391
spare	0.00 -	1.715	0.00 -	-0.443
spare	0.00 -	1.717	0.00 -	0.303
L,ur	6.00 mm	1.651	-15.68 mm	2.170
L,lr	5.14 mm	1.612	-16.99 mm	2.178
a1	18.84 g	1.387	-9.13 g	1.404
a2	19.44 g	1.383	-10.25 g	1.674
a3	21.20 g	1.387	-17.64 g	1.664
a4	26.24 g	1.384	-35.30 g	1.649
a5	27.30 g	1.387	-31.81 g	1.649
a6	29.20 g	1.388	-37.71 g	1.649
Mx,l	17.13 Nm	1.483	-40.11 Nm	2.084
My,l	144.07 Nm	1.423	-624.55 Nm	1.619
Mz,l	35.21 Nm	1.617	-20.52 Nm	1.400
Fx,l	0.33 kN	2.106	-0.87 kN	1.502
Fy,l	0.79 kN	1.402	-0.50 kN	1.664
Fz,l	0.91 kN	1.665	-2.25 kN	1.392
spare	0.00 -	-0.961	-0.03 -	1.659
spare	0.00 -	1.658	0.00 -	1.620
spare	0.05 -	3.999	0.00 -	-0.974
spare	0.00 -	-0.546	0.00 -	3.796
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	3.915	0.00 -	1.599
a7	23.01 g	1.386	-9.24 g	1.683
a8	24.43 g	1.385	-9.41 g	1.685
a9	23.03 g	1.384	-13.68 g	1.684
Fz,uf,r	0.34 kN	1.653	-1.03 kN	1.419
Mx,uf,r	31.79 Nm	1.490	-34.69 Nm	1.751
My,uf,r	31.08 Nm	1.679	-65.90 Nm	1.645
Mz,uf,r	0.68 Nm	1.668	-32.08 Nm	1.754
Fz,uf,l	0.55 kN	1.661	-0.44 kN	1.464
Mx,uf,l	30.21 Nm	1.533	-36.10 Nm	1.478
My,uf,l	20.18 Nm	1.609	-73.83 Nm	1.478
Mz,uf,l	18.94 Nm	1.432	-1.46 Nm	2.456
Fx,n	1.08 kN	1.386	-0.58 kN	1.422
Fy,n	0.67 kN	1.726	-0.18 kN	1.649
Fz,n	1.91 kN	1.682	-6.54 kN	1.393
Mx,n	8.51 Nm	1.653	-56.24 Nm	1.727
My,n	177.56 Nm	1.393	-16.34 Nm	1.657
Mz,n	20.04 Nm	1.653	-5.74 Nm	2.188
L,ul	9.21 mm	2.163	-28.28 mm	1.685
L,ll	8.00 mm	2.165	-28.86 mm	1.627
Ax,h	21.40 g	1.649	-31.46 g	1.383
Ay,h	28.55 g	1.649	-12.15 g	1.677
Az,h	23.02 g	1.386	-9.25 g	1.683
ax,h	1.15 krad/s**2	1.654	-3.51 krad/s**2	1.664
ay,h	2.06 krad/s**2	1.392	-1.95 krad/s**2	1.656
az,h	0.80 krad/s**2	1.647	-1.02 krad/s**2	1.649
Ar,h	38.34 g	1.385	0.02 g	-0.993
ar,h	3.56 krad/s**2	1.663	0.00 krad/s**2	2.267
G	0.15 -	1.649	0.00 -	3.230
HIC	87.07	1.391	----	1.371
Fxy,n	1.11 kN	1.386	0.00 kN	-0.499
Dx,us	2.62 mm	1.408	-19.89 mm	1.687
Dy,us	19.06 mm	2.163	-20.59 mm	1.682

		G140088.rpt		
Cus	10.61 %	1.687	-1.40 %	1.408
Vus	0.61 m/s	1.701	-0.86 m/s	1.603
VCus	0.06 m/s	1.676	-0.05 m/s	1.700
Dx,ls	4.87 mm	1.394	-20.20 mm	1.685
Dy,ls	17.63 mm	2.166	-21.62 mm	1.635
Cl,s	10.77 %	1.685	-2.60 %	1.394
Vls	0.46 m/s	1.702	-0.88 m/s	1.603
VCl,s	0.06 m/s	1.627	-0.04 m/s	1.701
Mxy,uf,r	69.22 Nm	1.645	0.00 Nm	-0.229
Mxy,uf,l	82.18 Nm	1.478	0.00 Nm	-0.920
Mx,n,oc	10.27 Nm	1.566	-44.30 Nm	1.727
My,n,oc	167.48 Nm	1.393	-15.79 Nm	1.656
NII	3.10 -	1.393	0.00 -	-0.024
Ar,p	18.64 g	1.391	0.00 g	-0.613
Ar,c	23.26 g	1.660	0.00 g	-0.448

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

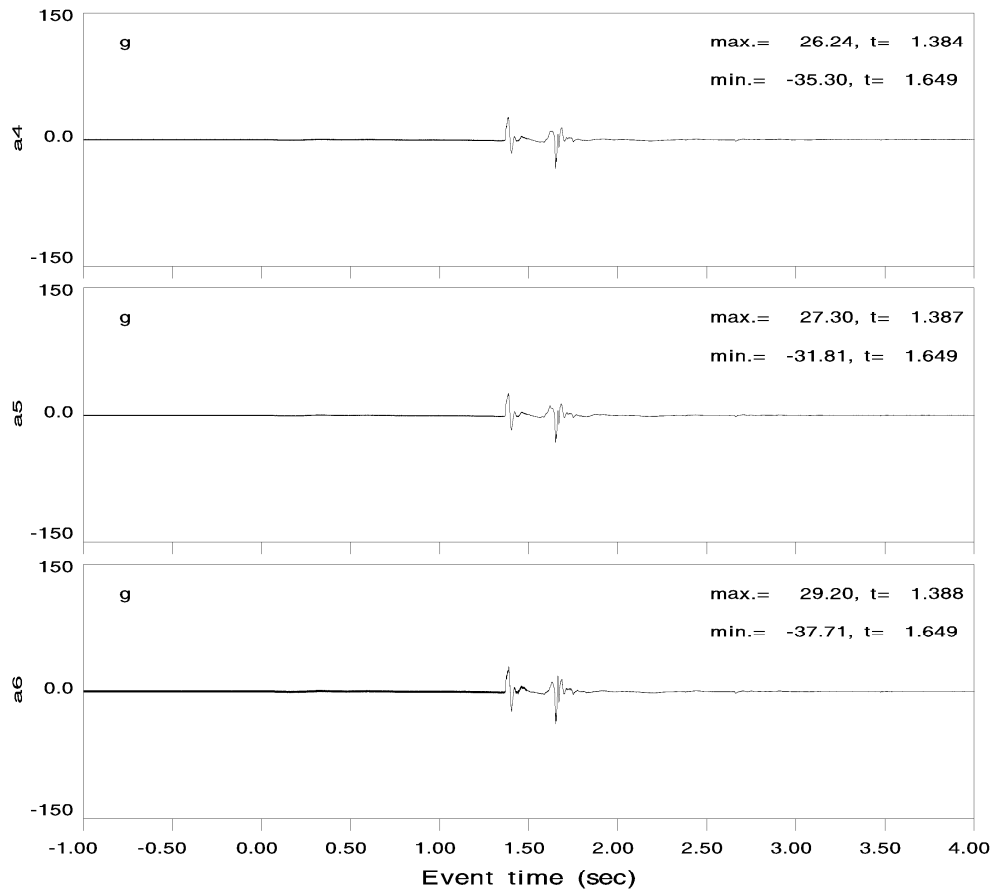
Test G140088



Page 1

Primary

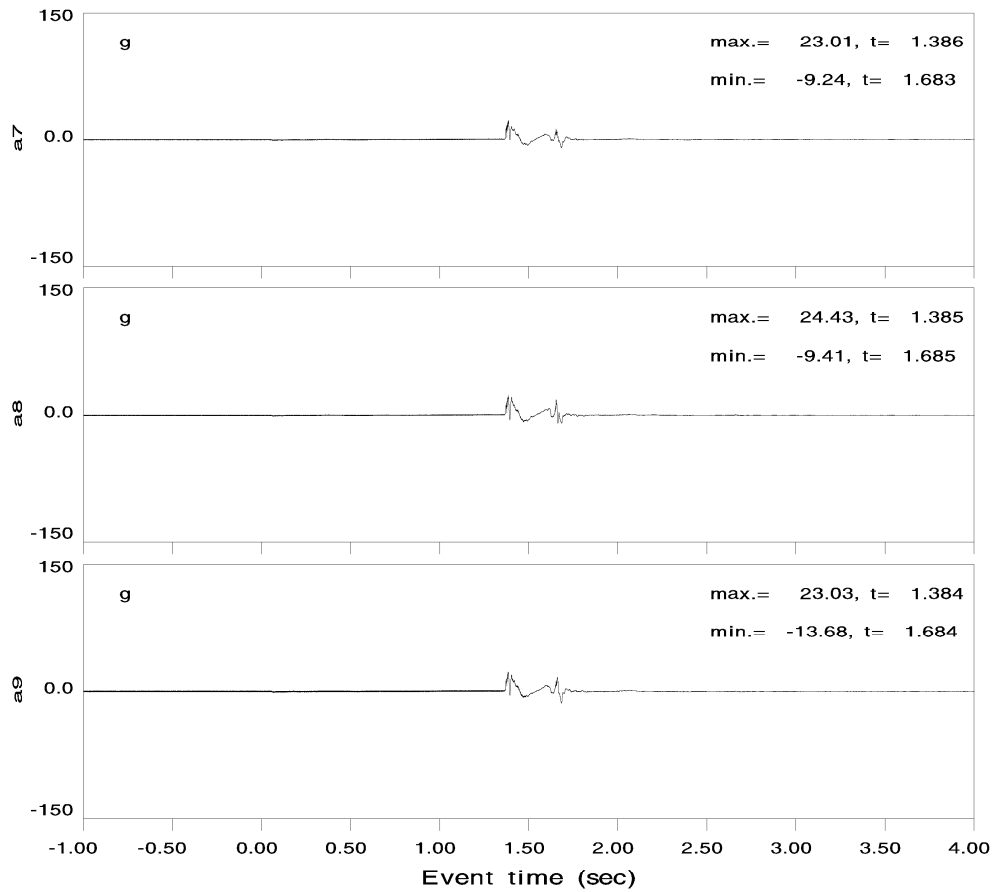
Test G140088



Page 2

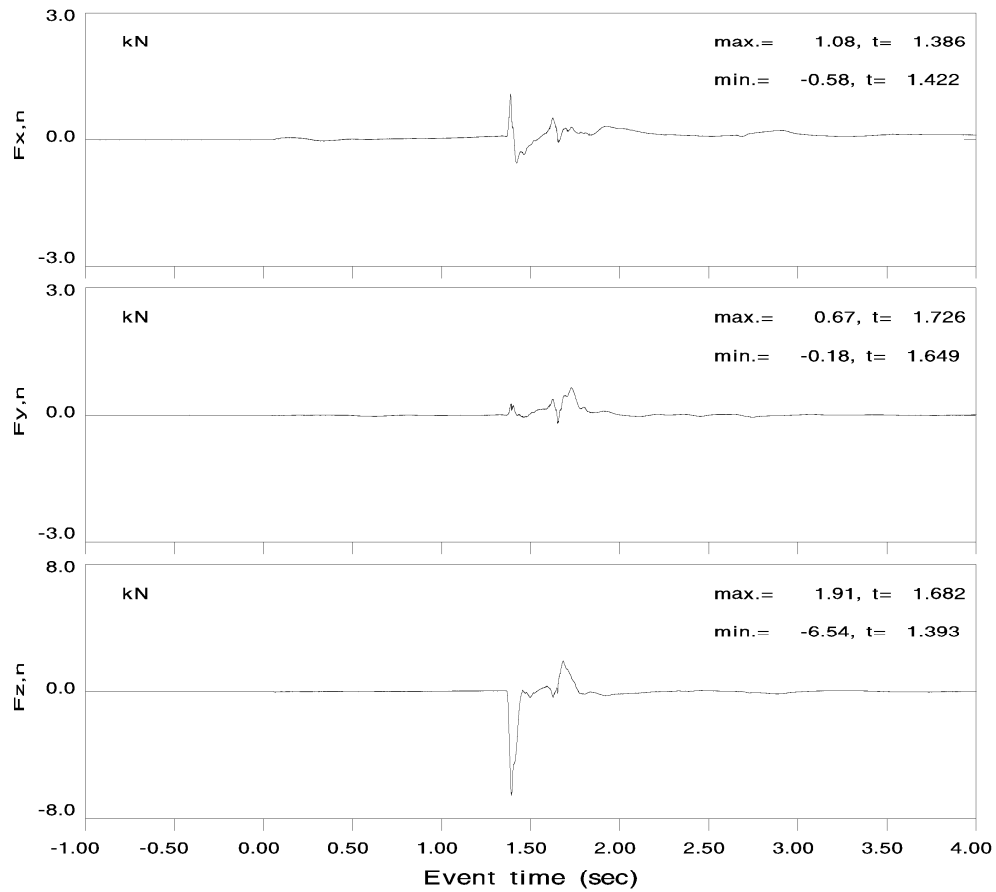
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Test G140088



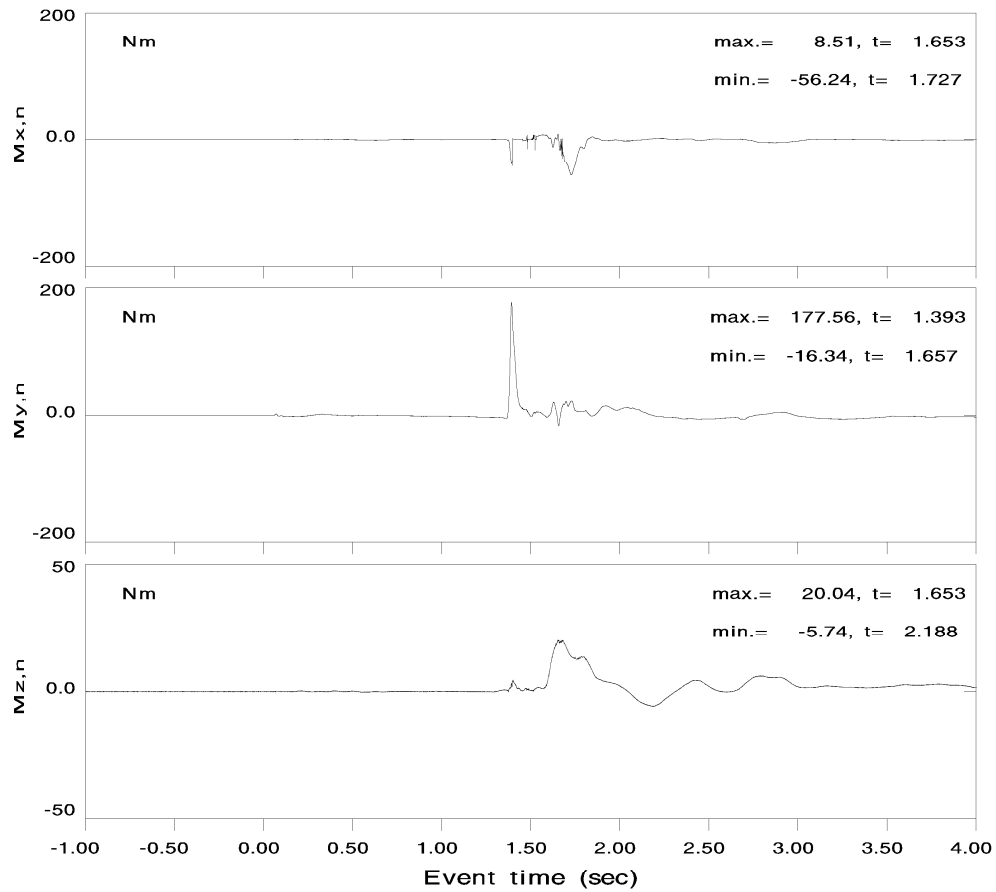
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Test G140088

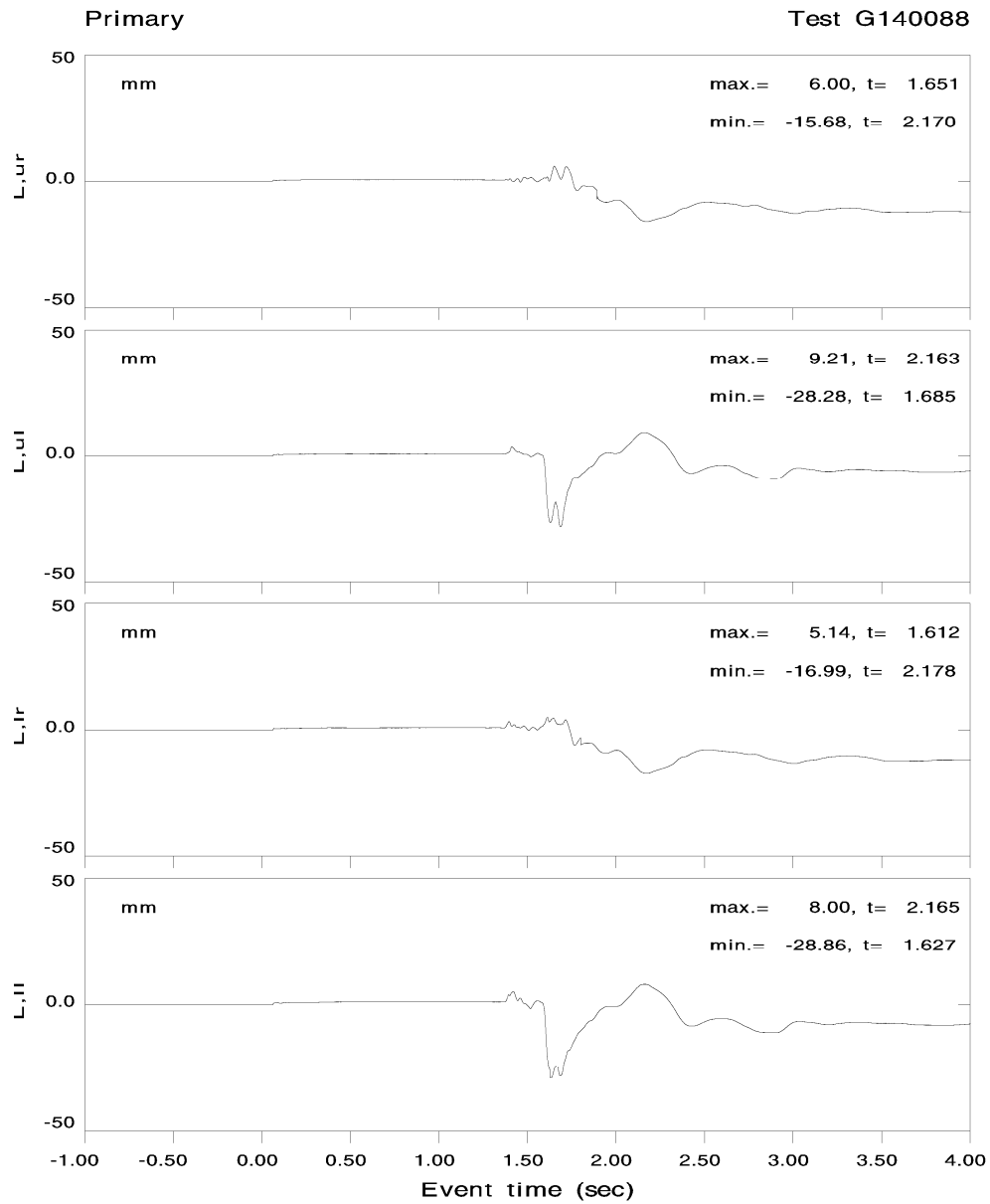


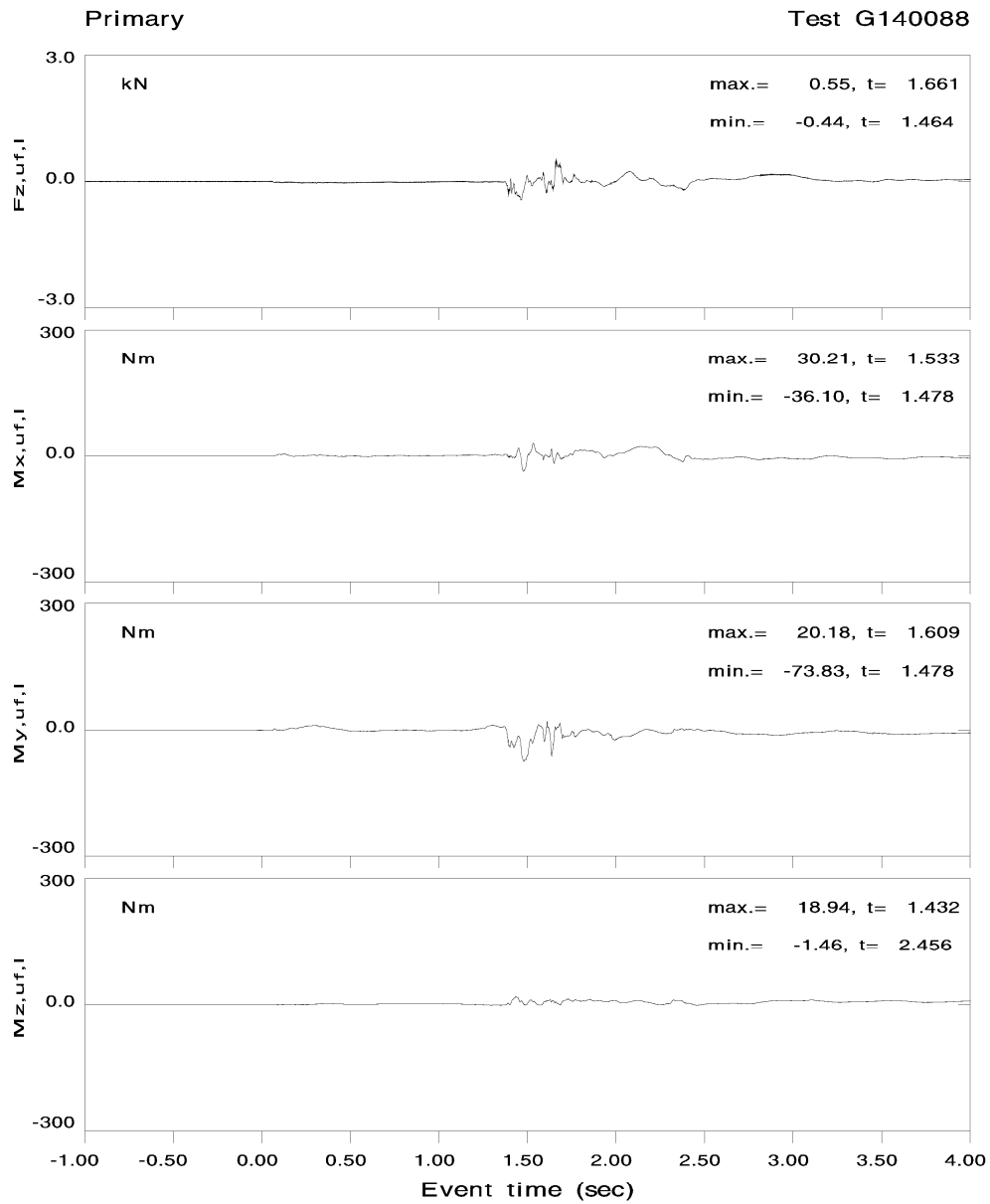
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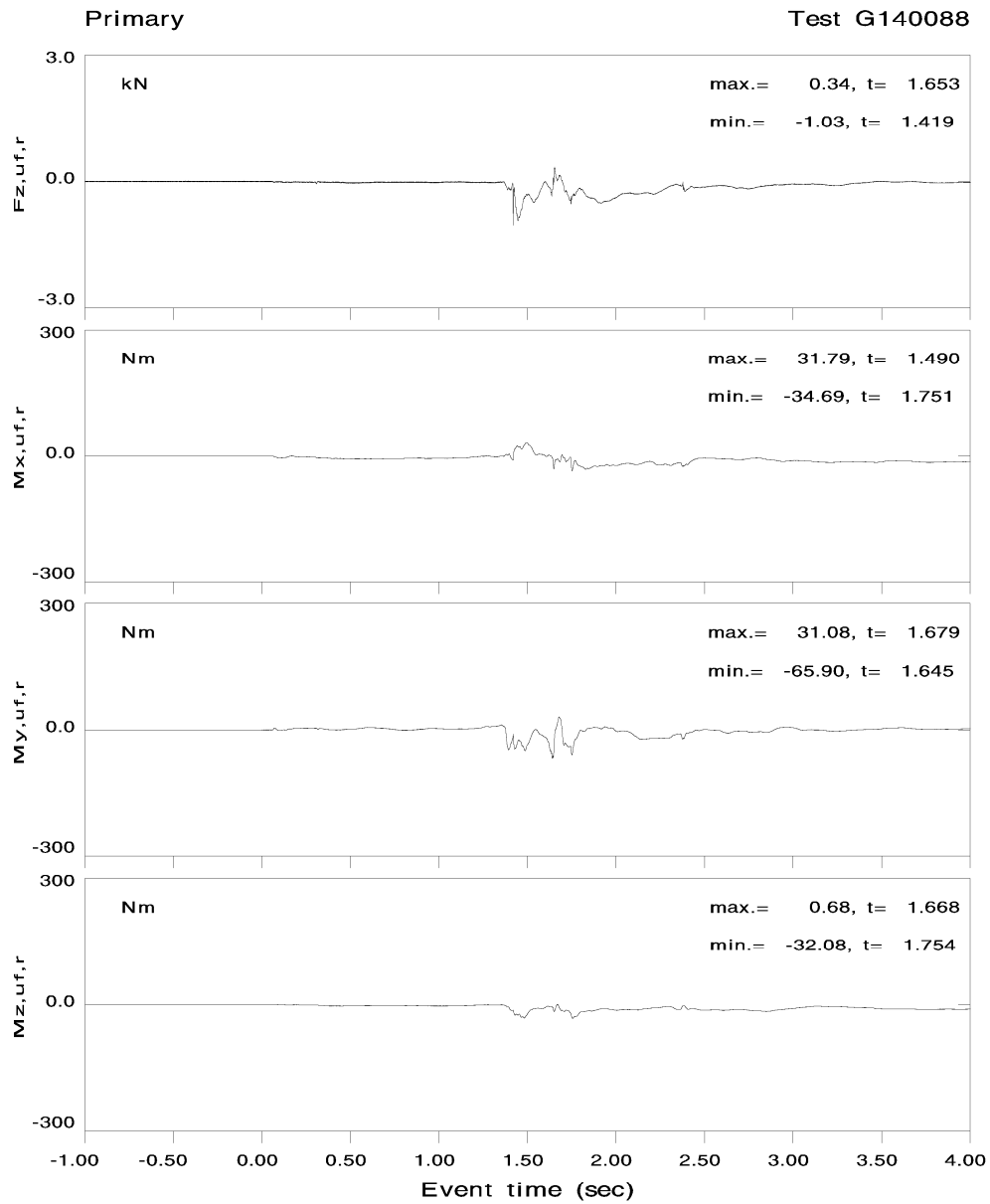
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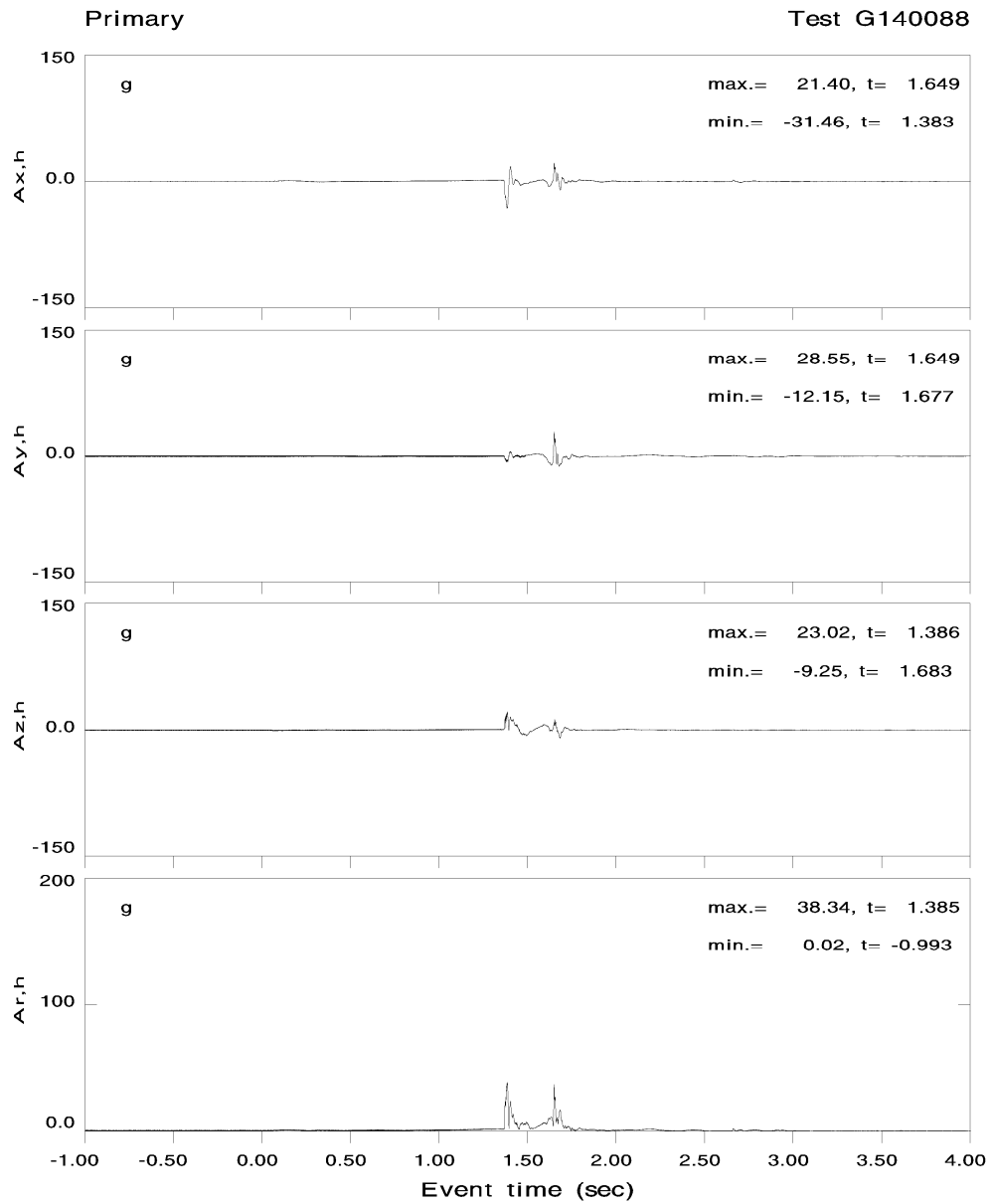


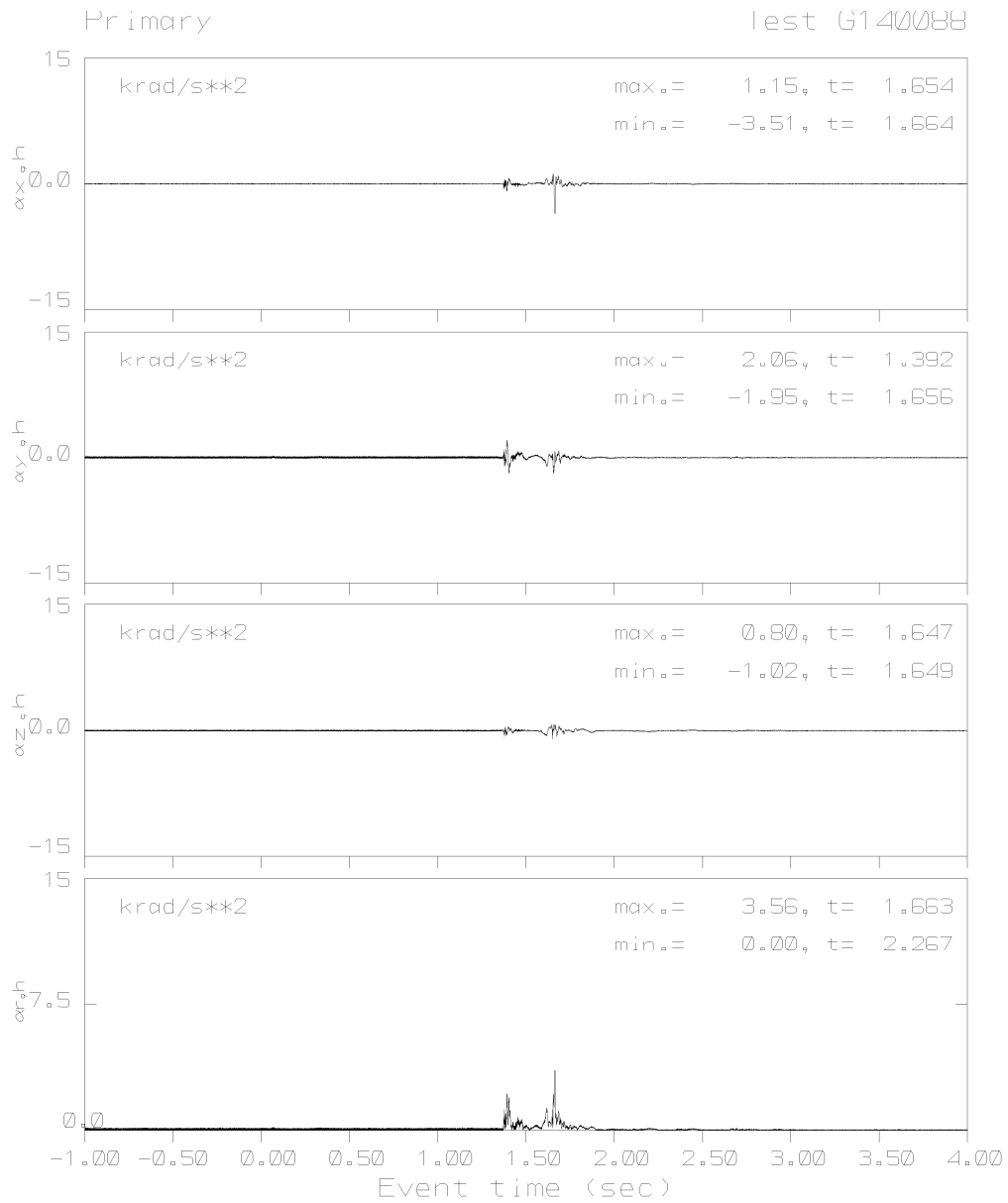
Page 5

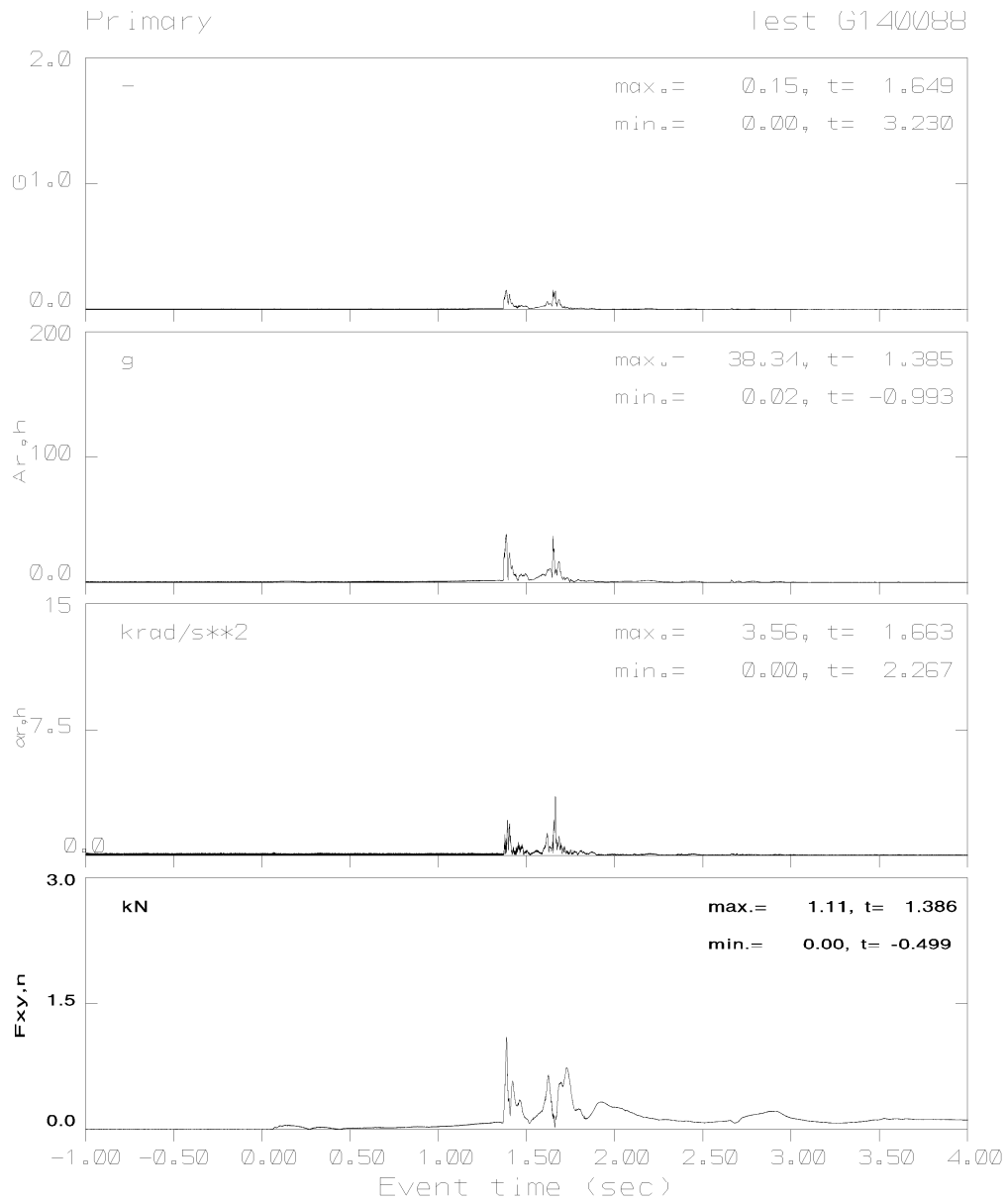


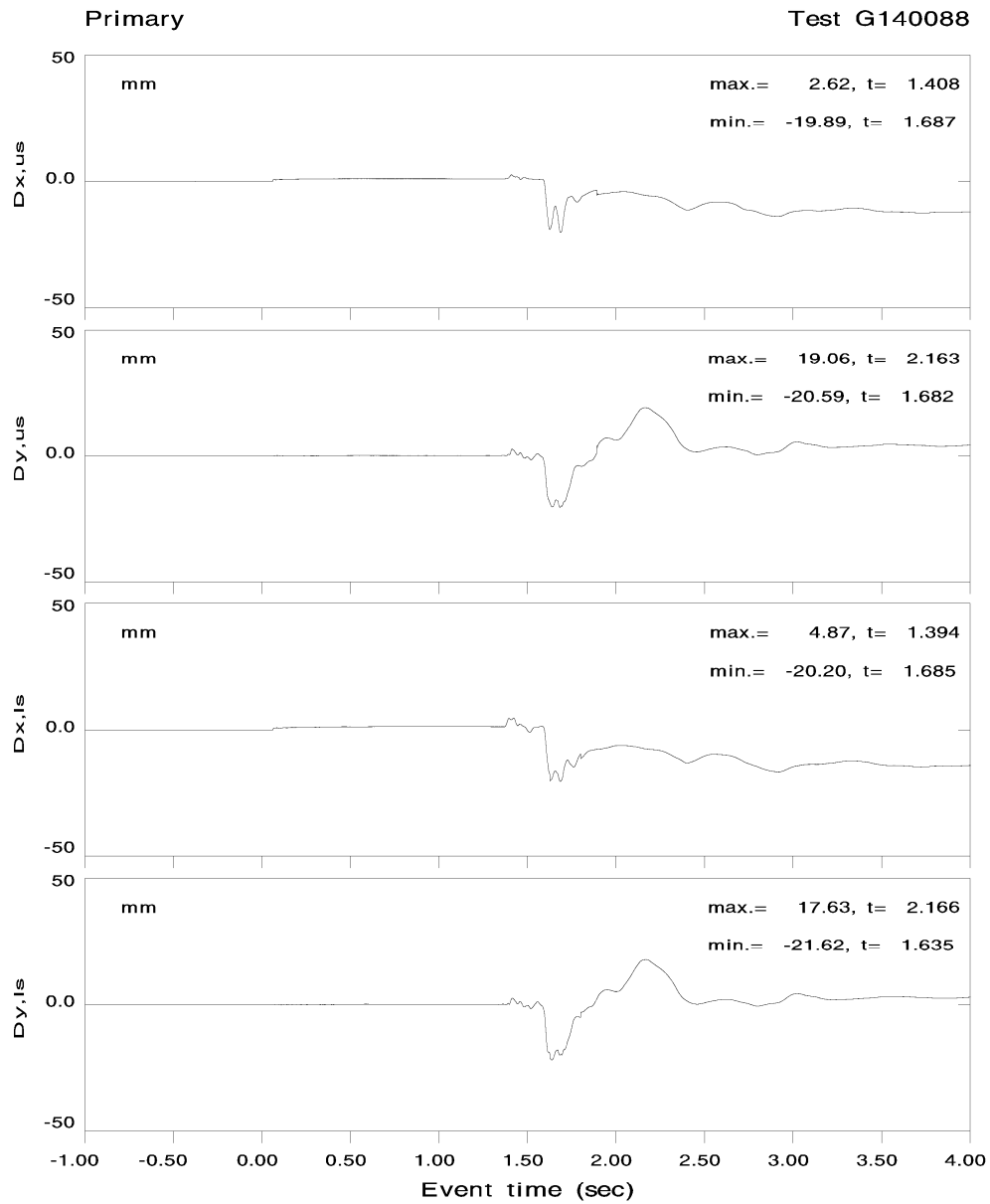






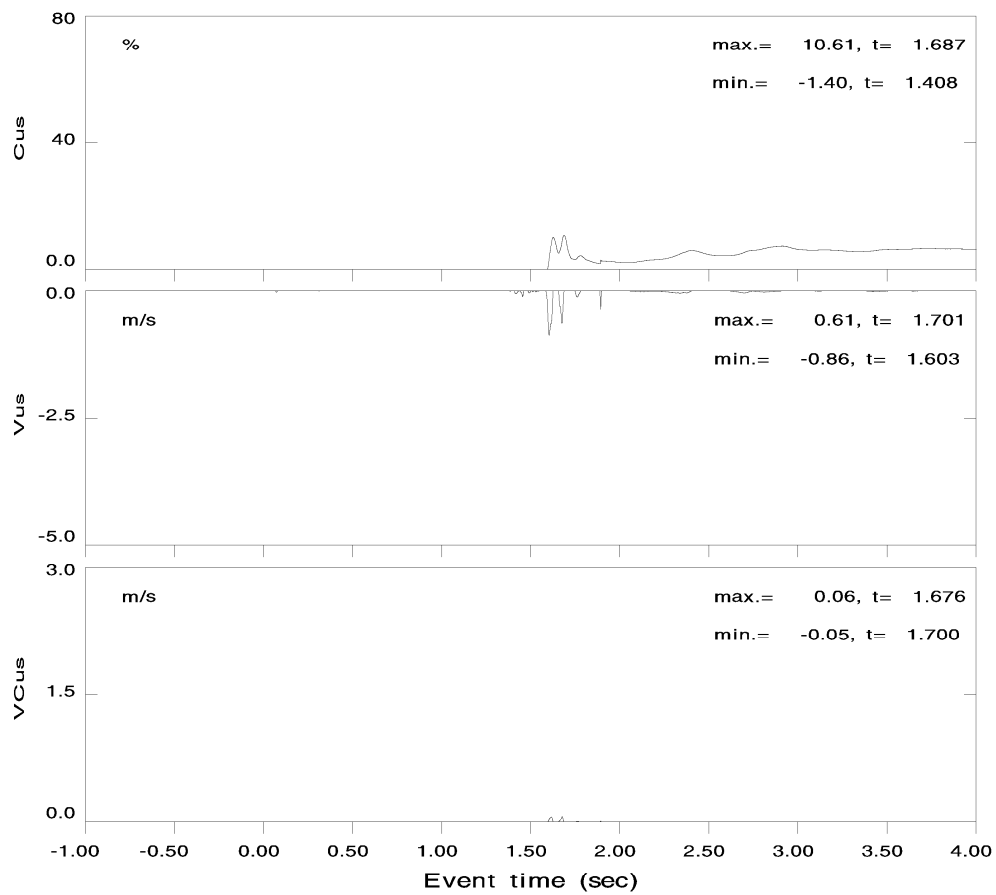






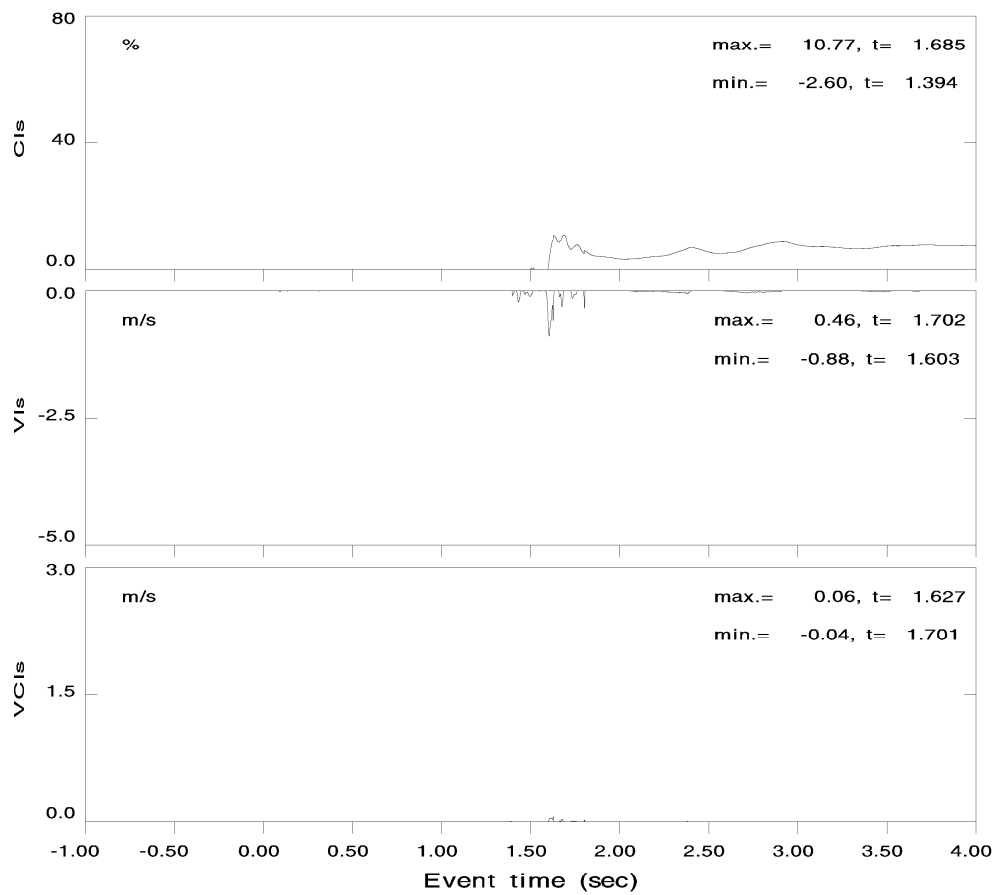
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Test G140088



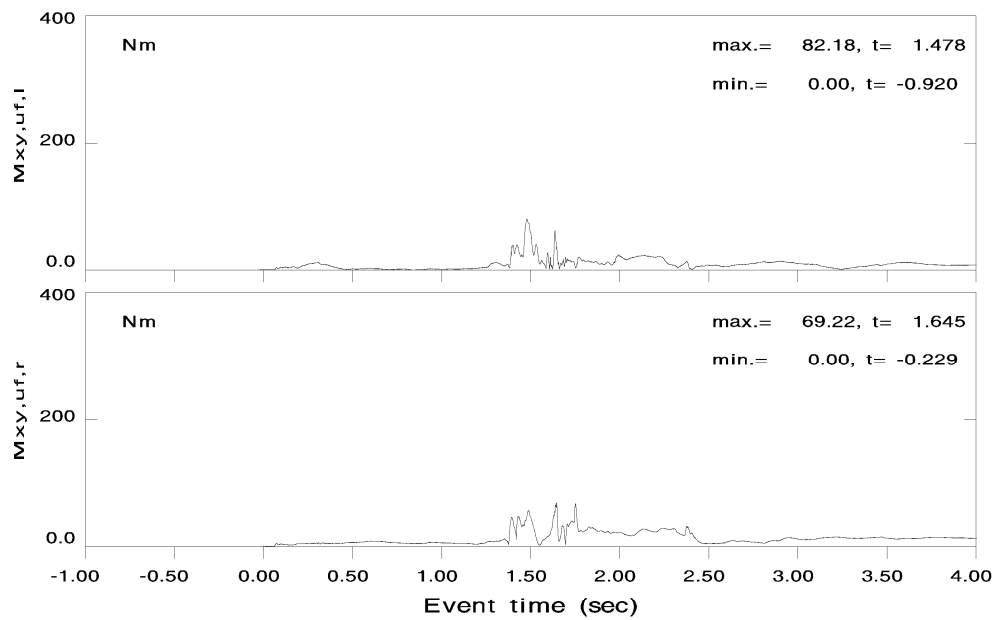
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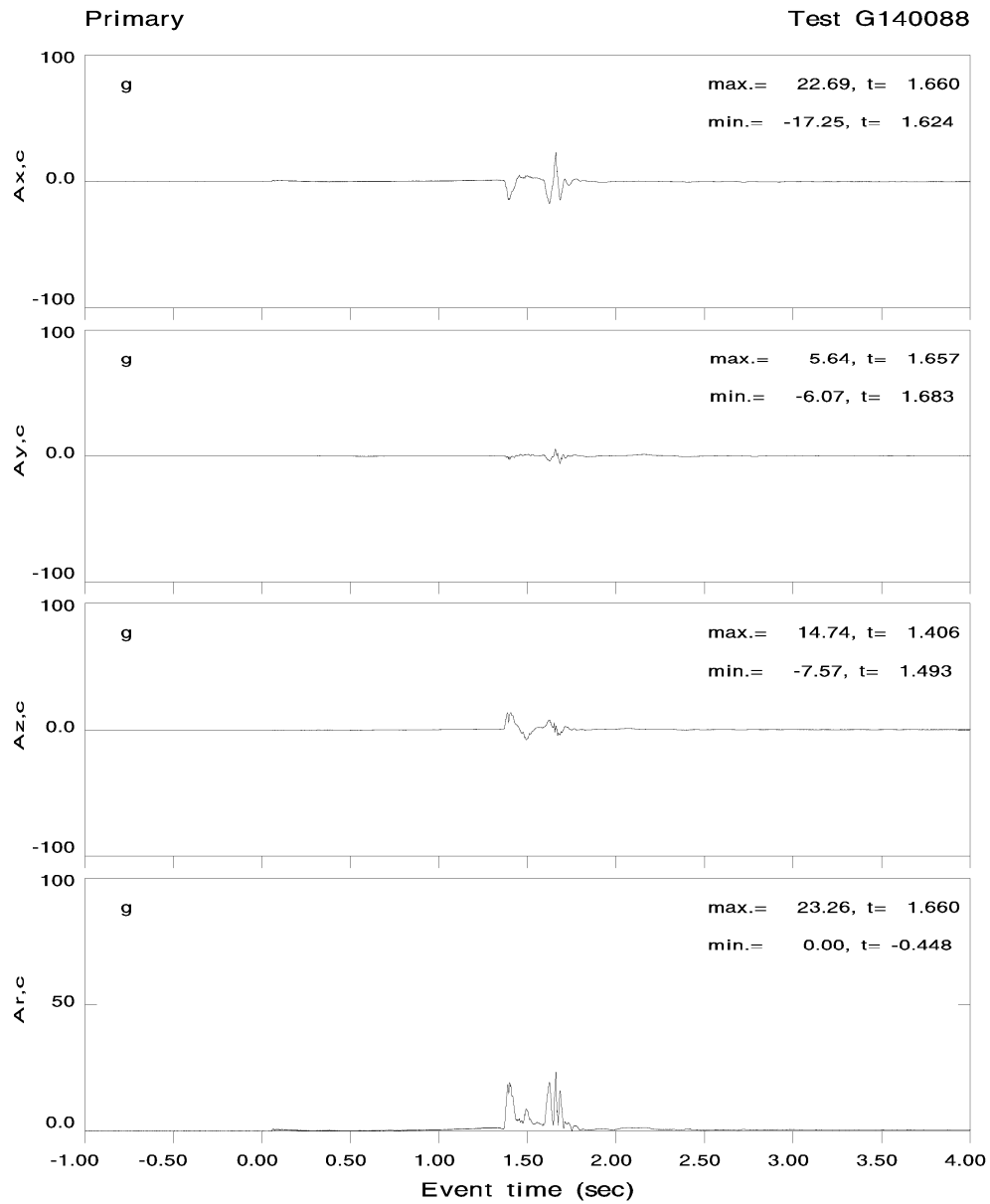
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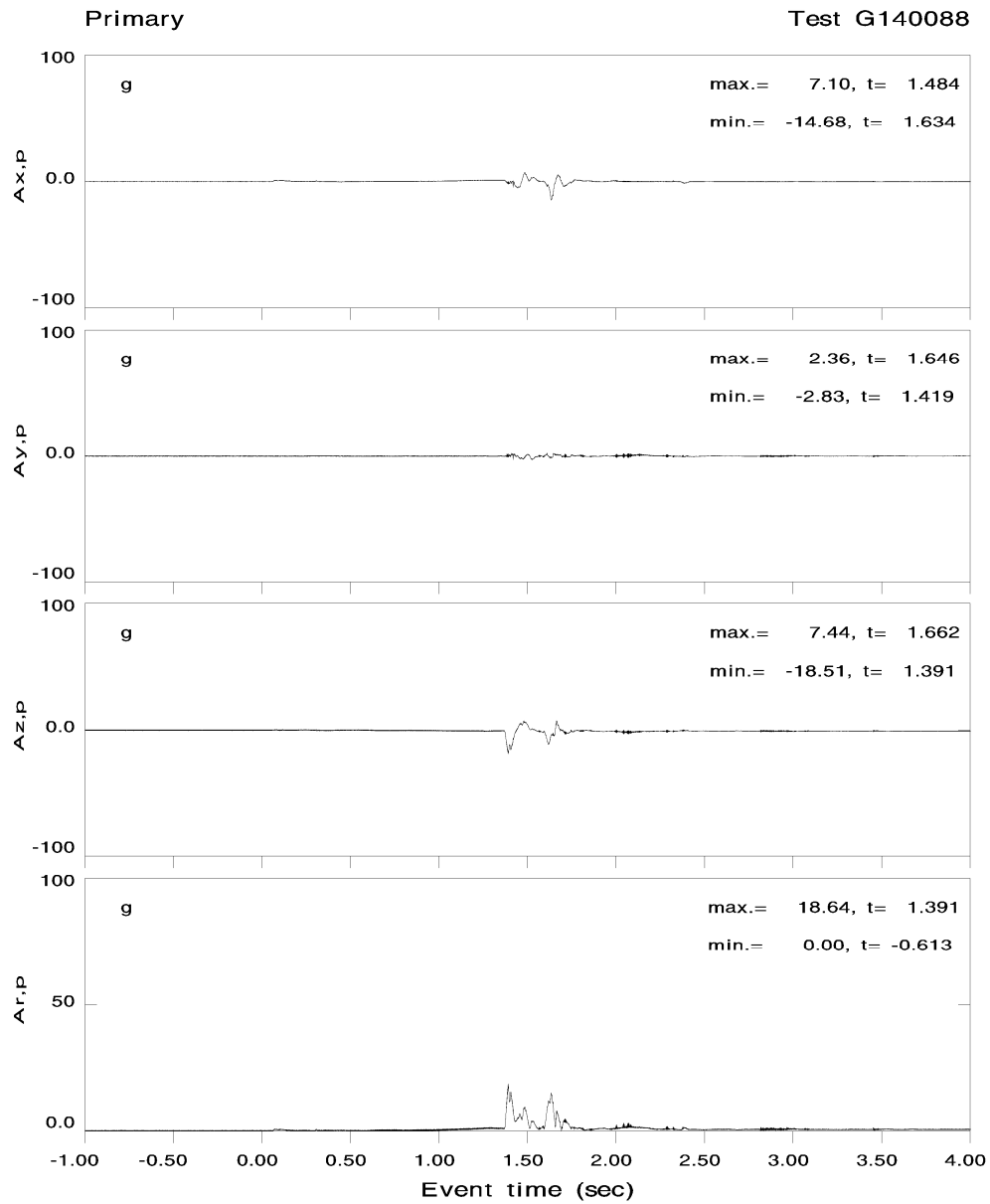


Primary

Test G140088

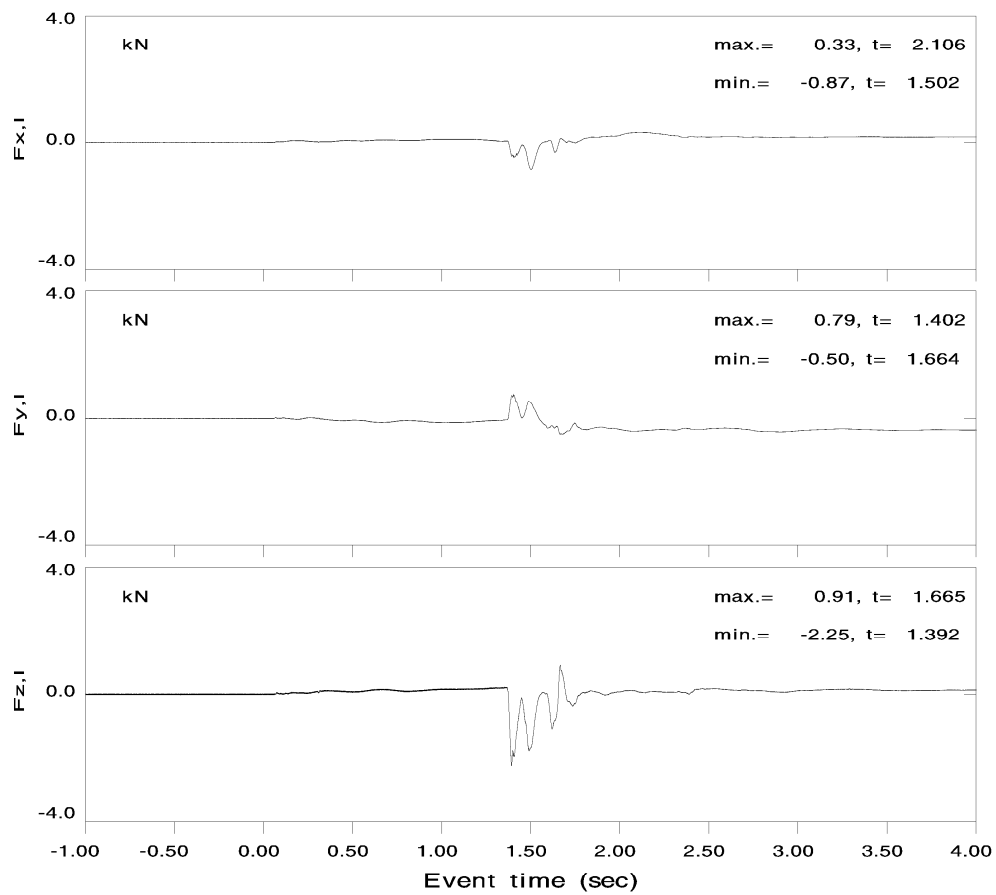






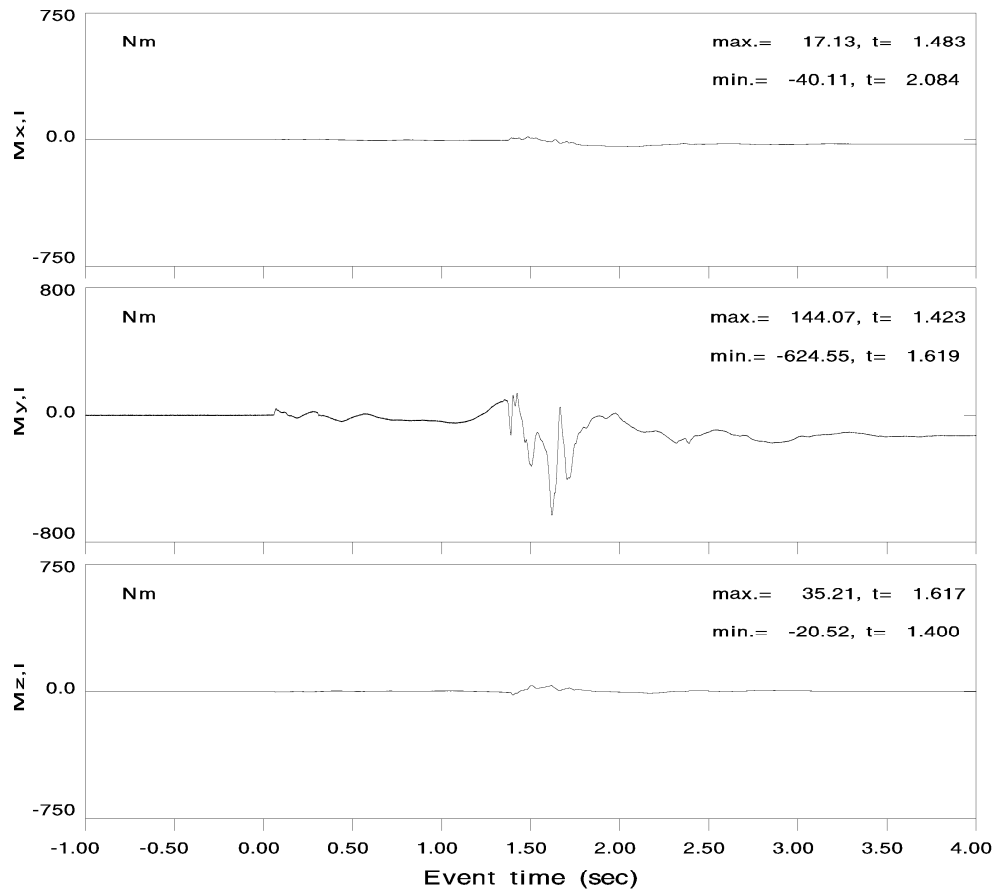
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Test G140088

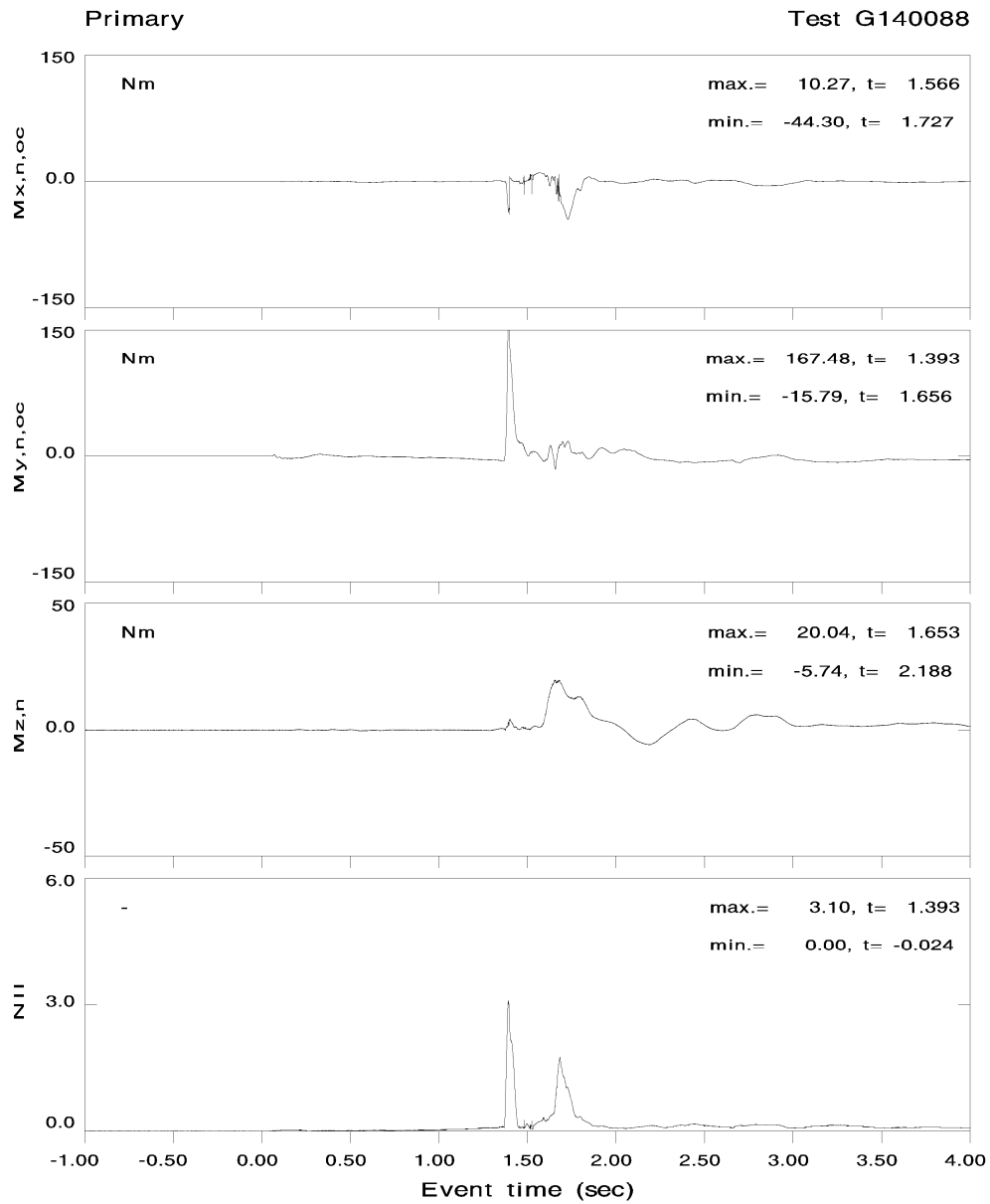


Primary

Test G140088



Page 19



2.11 G140107

G140107_ICM.IC1

Test Number : G140107
Analysis Window : 1

Injury Cost Model input:

```

Number of AIS 3 Femur Fractures           = 0
Number of AIS 2 Tibia Fractures           = 0
Number of AIS 3 Tibia Fractures           = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location                   = 1
Index for VCmax Location                   = 2
maximum Abdomen Penetration                = 0.000
maximum GAMBIT                             = 0.280
Cmax                                        = 1.580
VCmax                                       = 0.000
HIC                                         = 124.9
NII (2002 MATD Neck)                      = 0.6
Location of Cmax                           : upper sternum
Location of VCmax                          : lower sternum

```

Injury Cost Model output:

```

MAIS                                     = 0.0
Total AIS                               = 0.0
Normalized Injury Cost                   = 0.001
Normalized Cost of Survival               = 0.001
Normalized Cost of Dying                  = 0.000
Probability of Fatality                   = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity             = 0.000
Risk of life threatening brain injury (%) = 0.0

```

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.969	1.000	1.000	1.000	1.000	0
1	0.022	0.000	0.000	0.000	0.000	0
2	0.003	0.000	0.000	0.000	0.000	0
3	0.005	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.044	0.000	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

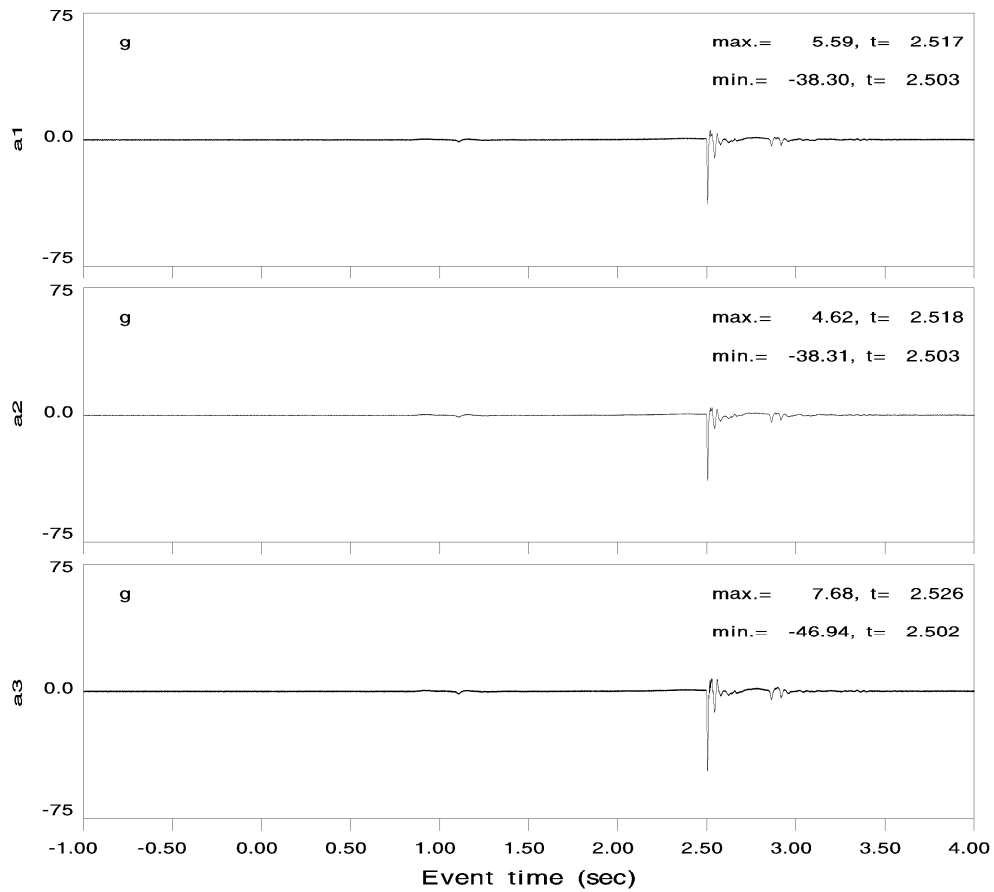
G140107.rpt				
Test G140107, Primary				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	0.69 g	2.599	-5.25 g	2.547
Ay,c	1.75 g	2.638	-8.48 g	2.549
Az,c	11.19 g	2.556	-1.28 g	2.514
Ax,p	1.81 g	2.601	-6.70 g	2.550
Ay,p	1.40 g	3.160	-3.54 g	2.865
Az,p	1.16 g	2.516	-12.06 g	2.559
spare	0.00 -	3.490	0.00 -	3.941
spare	0.00 -	0.486	0.00 -	-0.393
L,ur	0.04 mm	0.195	-3.36 mm	2.559
L,lr	0.56 mm	2.645	-2.88 mm	2.522
a1	5.59 g	2.517	-38.30 g	2.503
a2	4.62 g	2.518	-38.31 g	2.503
a3	7.68 g	2.526	-46.94 g	2.502
a4	49.31 g	2.503	-4.73 g	2.518
a5	50.30 g	2.503	-5.27 g	2.519
a6	59.61 g	2.503	-7.05 g	2.525
Mx,l	16.06 Nm	3.157	-6.97 Nm	1.123
My,l	96.52 Nm	2.588	-66.98 Nm	2.666
Mz,l	5.38 Nm	2.665	-5.14 Nm	2.953
Fx,l	0.13 kN	2.554	-0.03 kN	2.780
Fy,l	0.18 kN	2.602	-0.12 kN	2.567
Fz,l	0.85 kN	2.567	-0.16 kN	2.508
spare	0.01 -	2.983	0.00 -	-0.076
spare	0.00 -	4.000	0.00 -	4.000
spare	0.02 -	2.811	-0.01 -	3.999
spare	0.00 -	2.404	0.00 -	2.129
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	4.000	0.00 -	4.000
a7	12.65 g	2.513	-4.11 g	2.509
a8	10.80 g	2.514	-7.26 g	2.508
a9	16.66 g	2.503	-5.01 g	2.508
Fz,uf,r	0.42 kN	2.560	-0.04 kN	2.605
Mx,uf,r	21.39 Nm	2.941	-55.53 Nm	2.544
My,uf,r	108.25 Nm	2.564	-5.51 Nm	2.750
Mz,uf,r	4.44 Nm	2.645	-17.72 Nm	2.540
Fz,uf,l	0.51 kN	2.572	-0.06 kN	2.717
Mx,uf,l	22.72 Nm	2.550	-36.46 Nm	2.592
My,uf,l	104.90 Nm	2.559	-4.29 Nm	2.694
Mz,uf,l	20.07 Nm	2.577	-3.80 Nm	2.784
Fx,n	0.16 kN	2.506	-0.11 kN	2.549
Fy,n	0.65 kN	2.508	-0.01 kN	2.643
Fz,n	0.59 kN	2.515	-0.78 kN	2.506
Mx,n	29.10 Nm	2.536	-23.06 Nm	2.512
My,n	9.92 Nm	2.508	-7.34 Nm	2.547
Mz,n	5.00 Nm	2.537	-4.31 Nm	2.585
L,ul	2.49 mm	2.523	-1.33 mm	2.565
L,ll	3.02 mm	2.523	-0.93 mm	2.566
Ax,h	2.62 g	2.543	-8.86 g	2.505
Ay,h	7.12 g	2.518	-61.72 g	2.503
Az,h	12.66 g	2.513	-4.11 g	2.509
ax,h	1.29 krad/s**2	2.524	-3.68 krad/s**2	2.501
ay,h	0.91 krad/s**2	2.513	-0.52 krad/s**2	2.545
az,h	0.75 krad/s**2	2.541	-0.77 krad/s**2	2.500
Ar,h	62.85 g	2.503	0.01 g	-0.013
ar,h	3.75 krad/s**2	2.501	0.00 krad/s**2	1.544
G	0.28 -	2.503	0.00 -	-0.798
HIC	124.93	2.507	----	2.500
Fxy,n	0.66 kN	2.508	0.00 kN	0.294
Dx,us	0.20 mm	1.053	-2.97 mm	2.560
Dy,us	4.32 mm	2.522	-0.30 mm	2.646

		G140107.rpt		
Cus	1.58 %	2.560	-0.11 %	1.053
Vus	0.09 m/s	2.570	-0.11 m/s	2.542
VCus	0.00 m/s	2.549	0.00 m/s	2.569
Dx,ls	0.72 mm	3.740	-2.29 mm	2.563
Dy,ls	4.35 mm	2.523	-0.45 mm	2.645
Cl,s	1.22 %	2.563	-0.38 %	3.740
Vls	0.09 m/s	2.574	-0.09 m/s	2.549
VCl,s	0.00 m/s	2.550	0.00 m/s	2.572
Mxy,uf,r	114.35 Nm	2.563	0.00 Nm	-0.816
Mxy,uf,l	105.54 Nm	2.559	0.00 Nm	-0.821
Mx,n,oc	34.80 Nm	2.536	-11.98 Nm	2.512
My,n,oc	7.83 Nm	2.509	-5.67 Nm	2.546
NII	0.63 -	2.536	0.00 -	-0.792
Ar,p	13.34 g	2.559	0.01 g	-0.188
Ar,c	14.10 g	2.553	0.00 g	-0.579

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

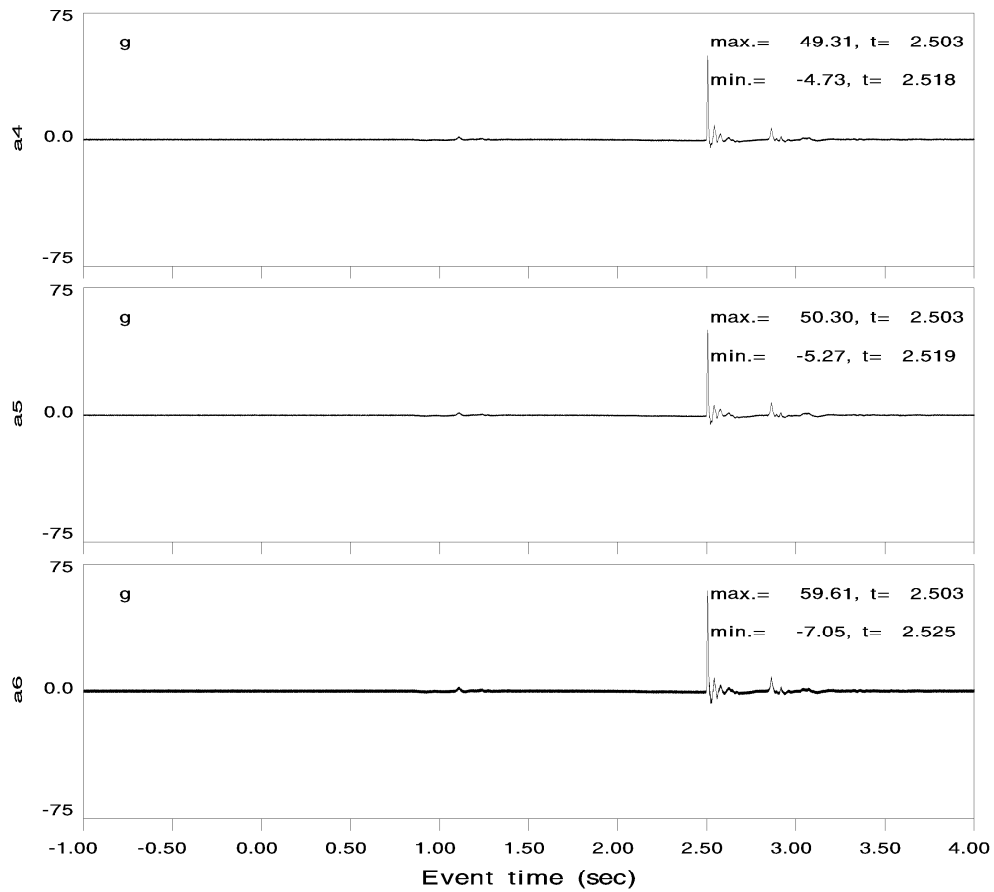
Test G140107



Page 1

Primary

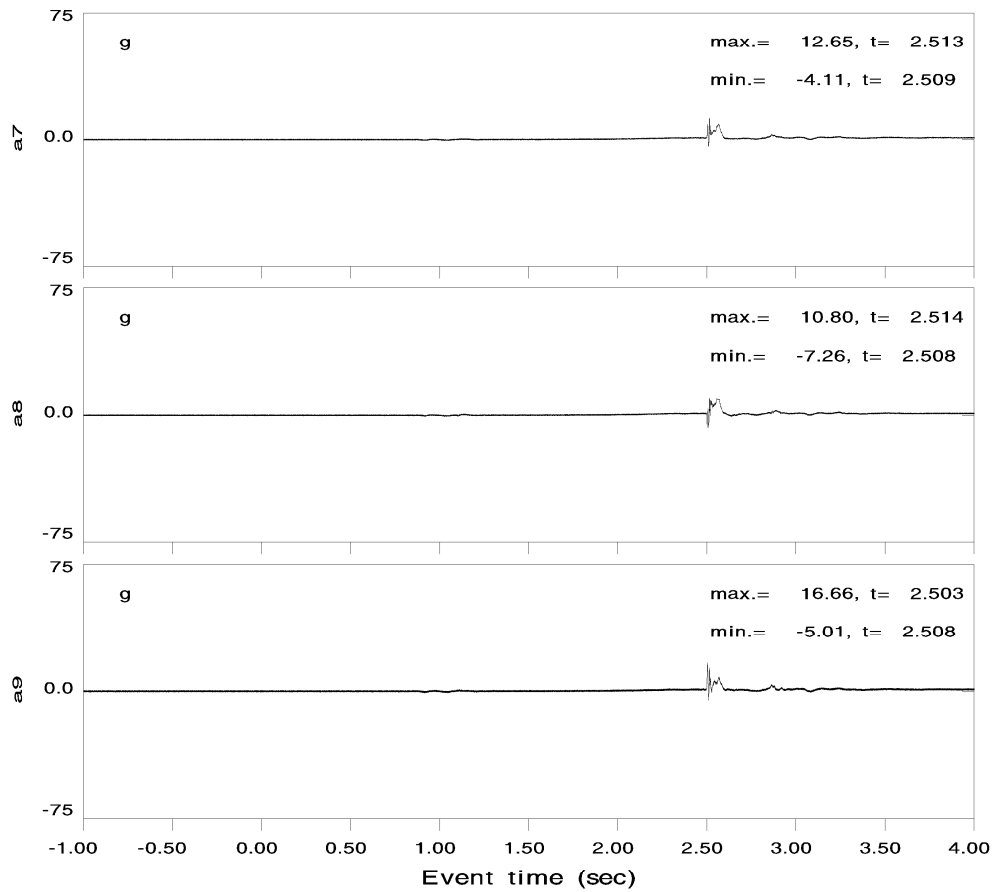
Test G140107



Page 2

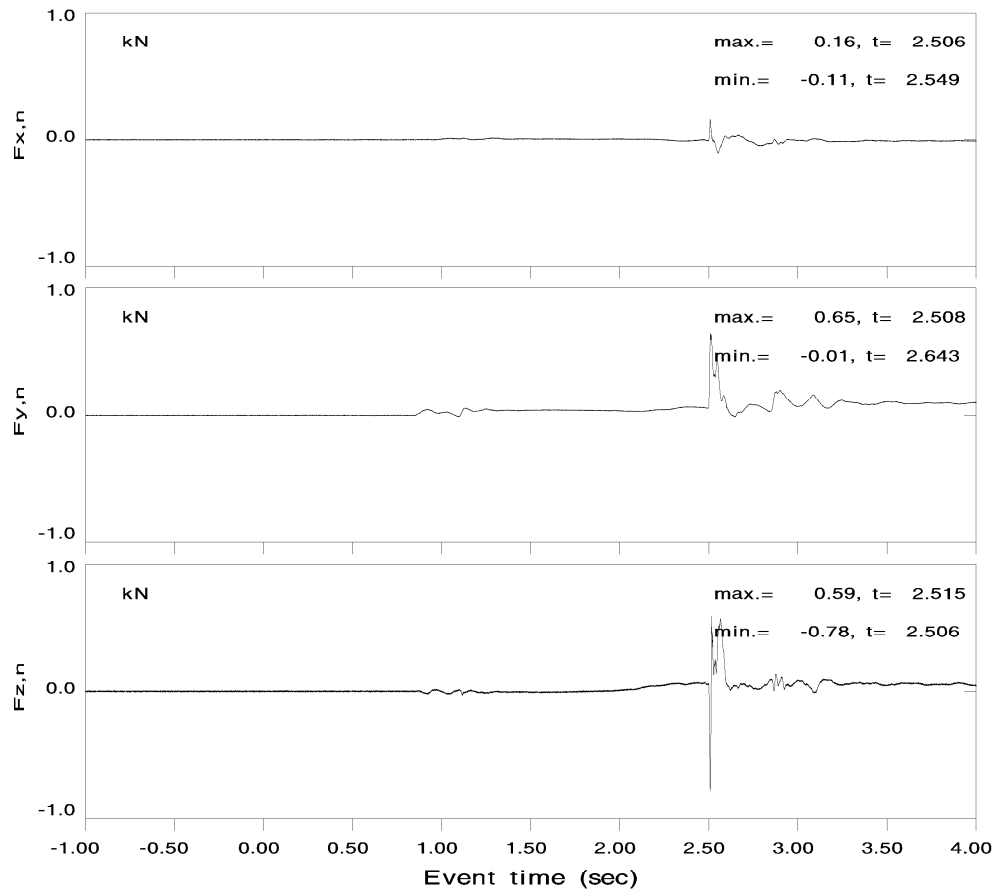
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Test G140107



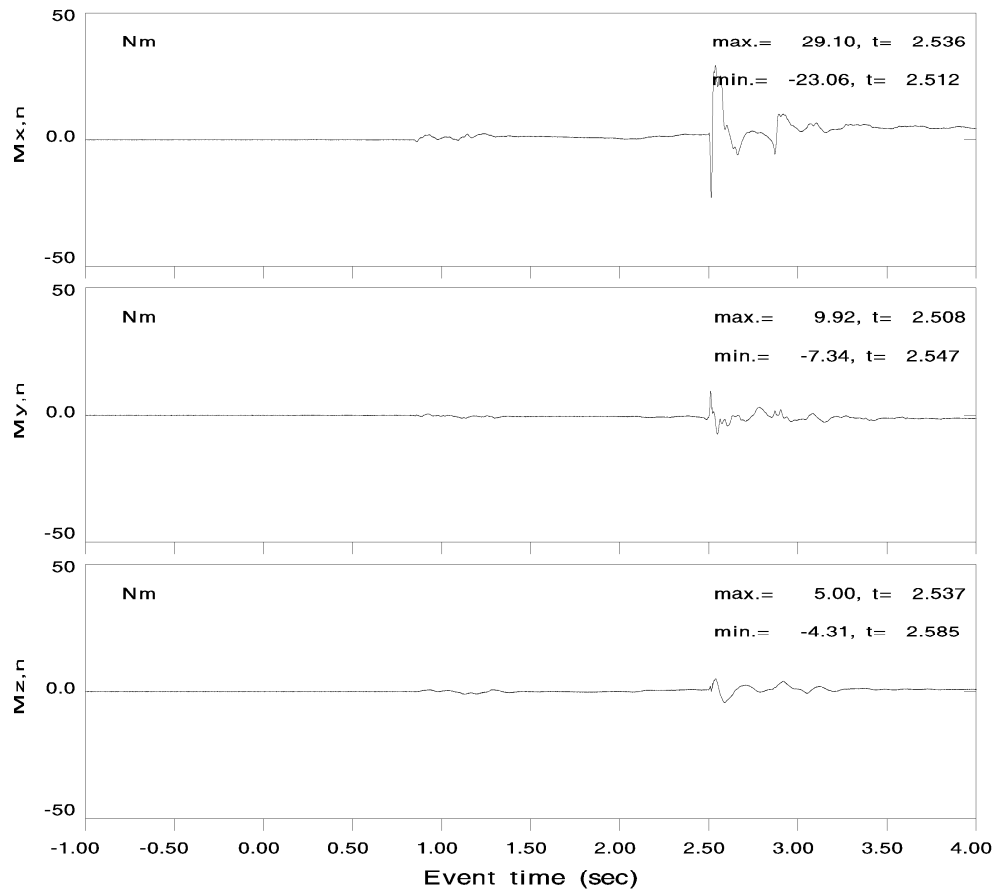
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Test G140107

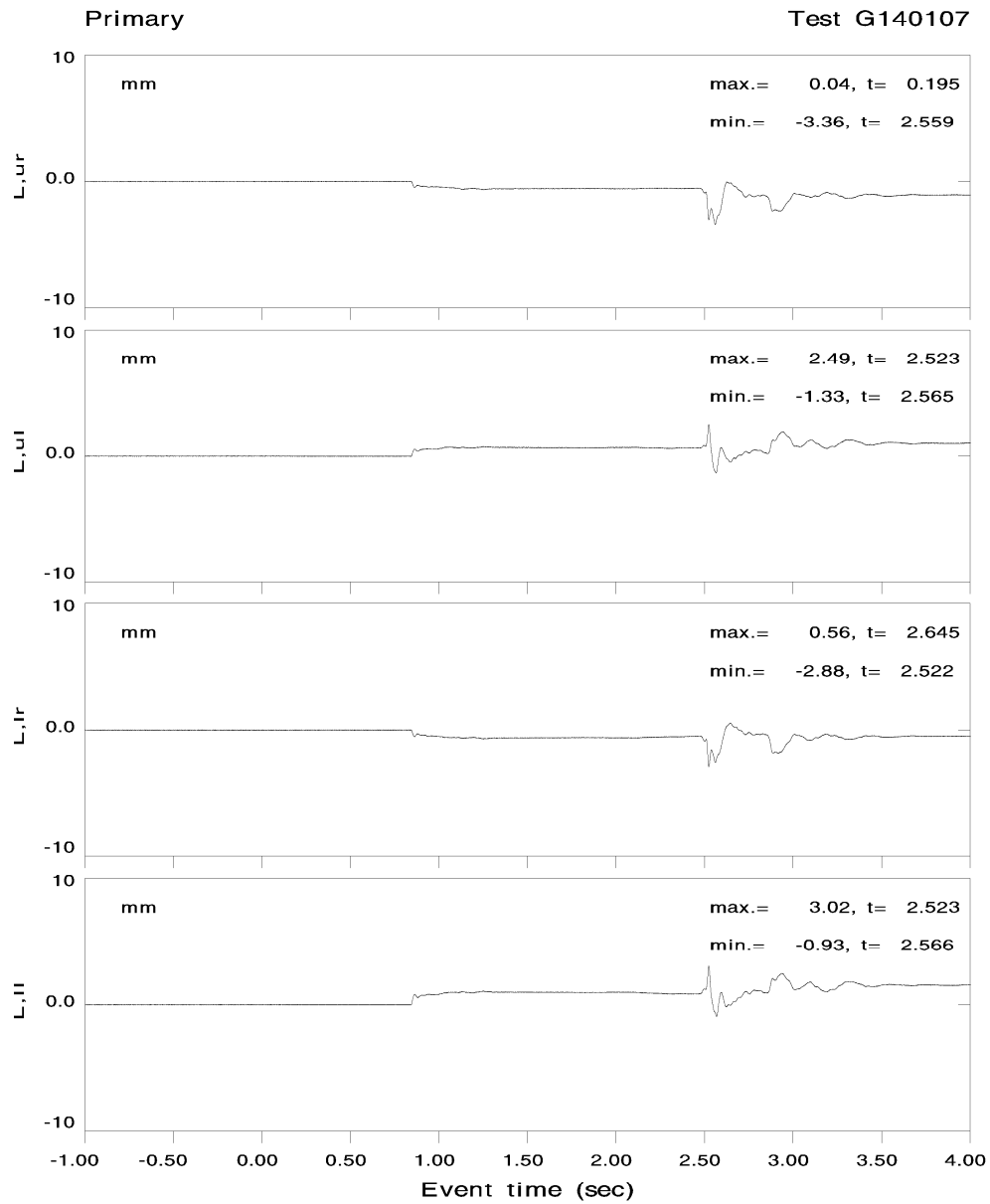


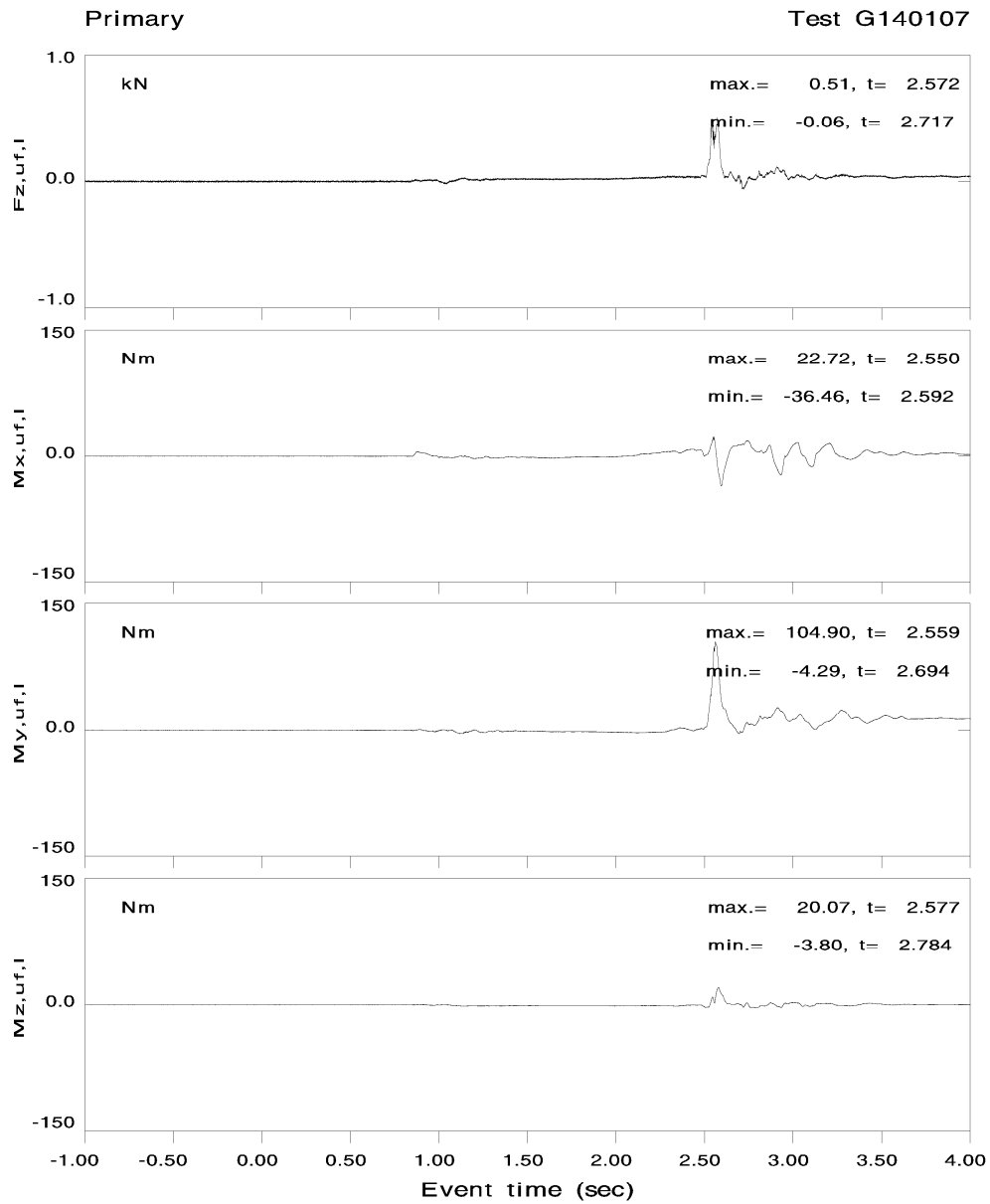
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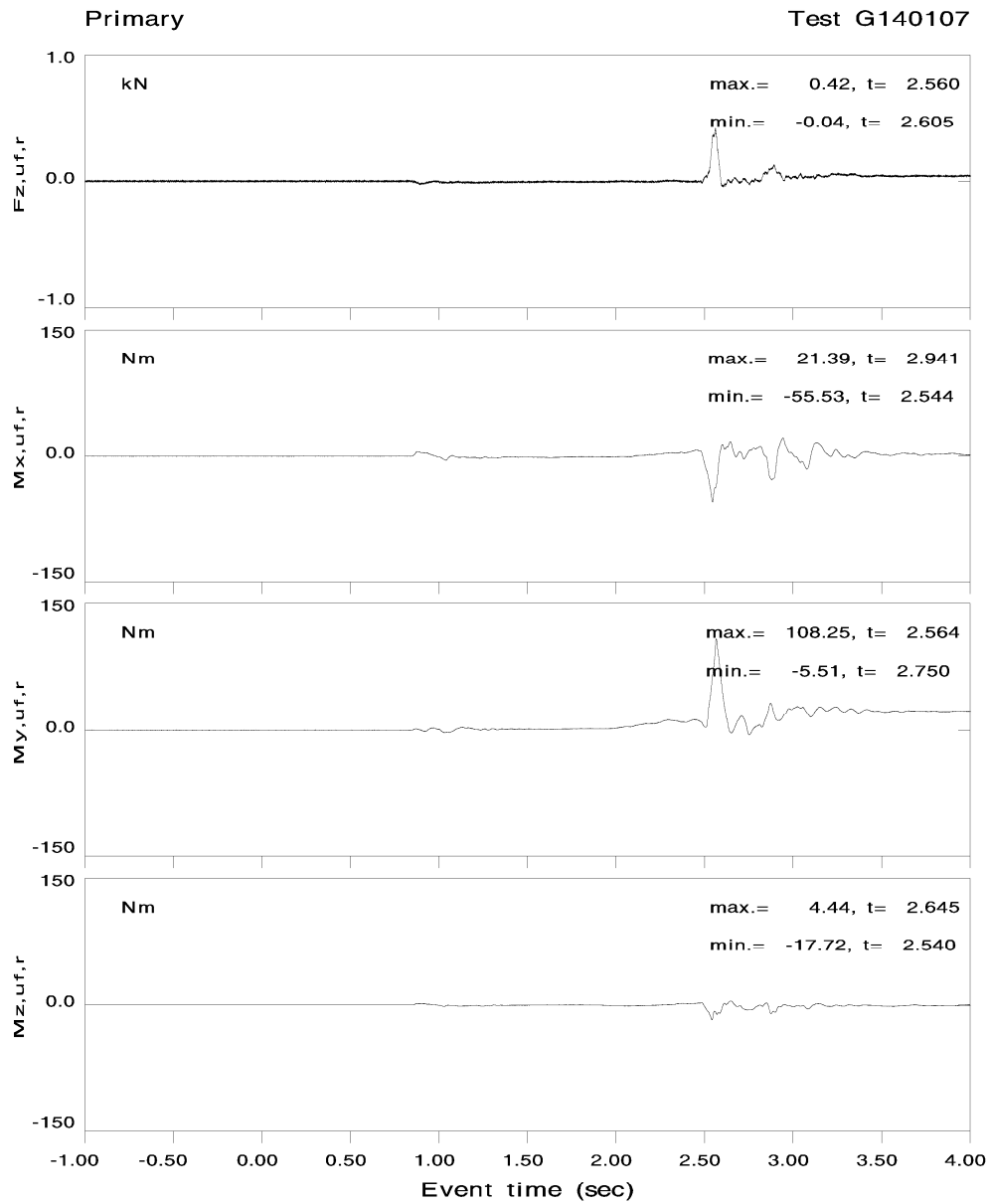
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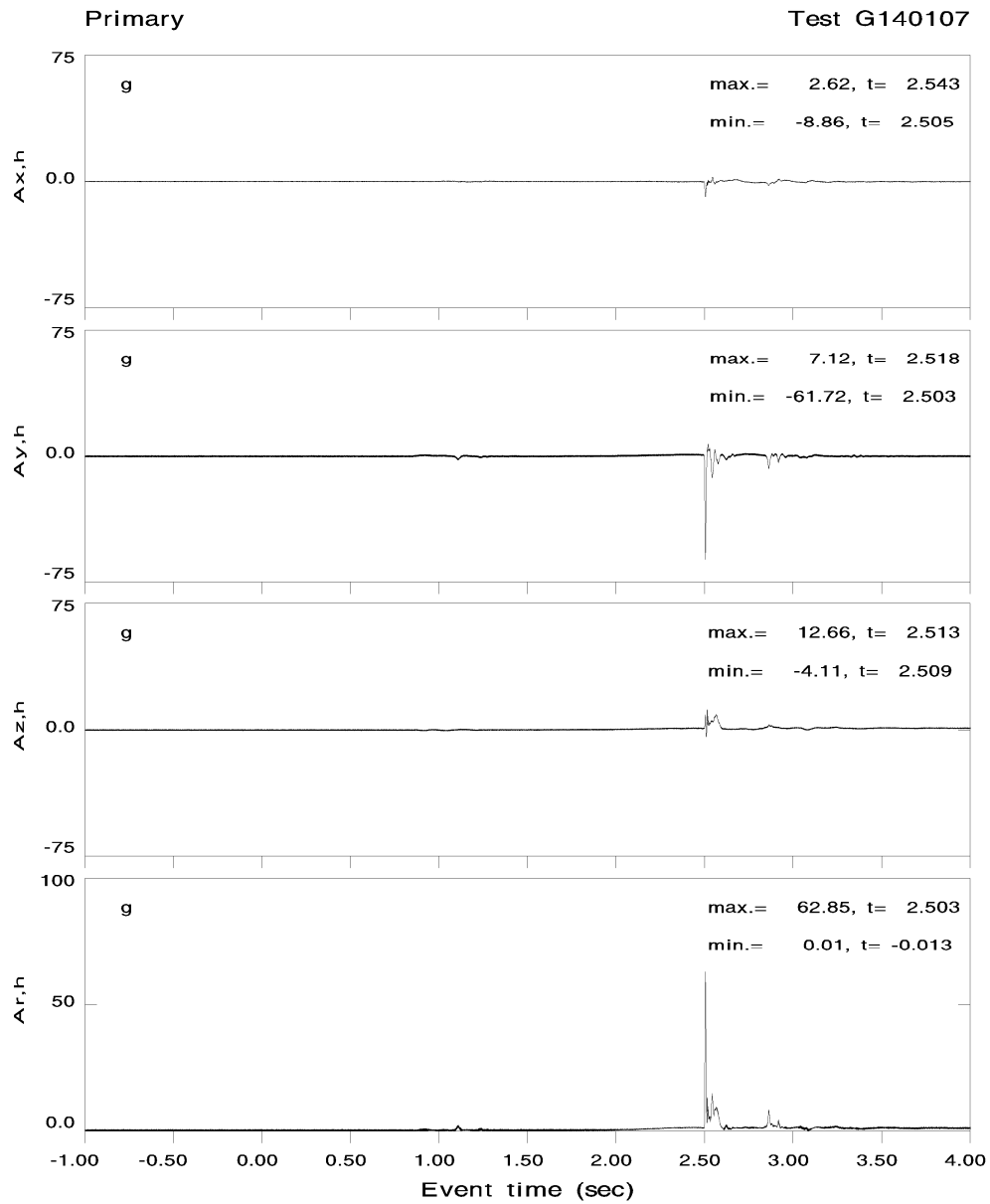


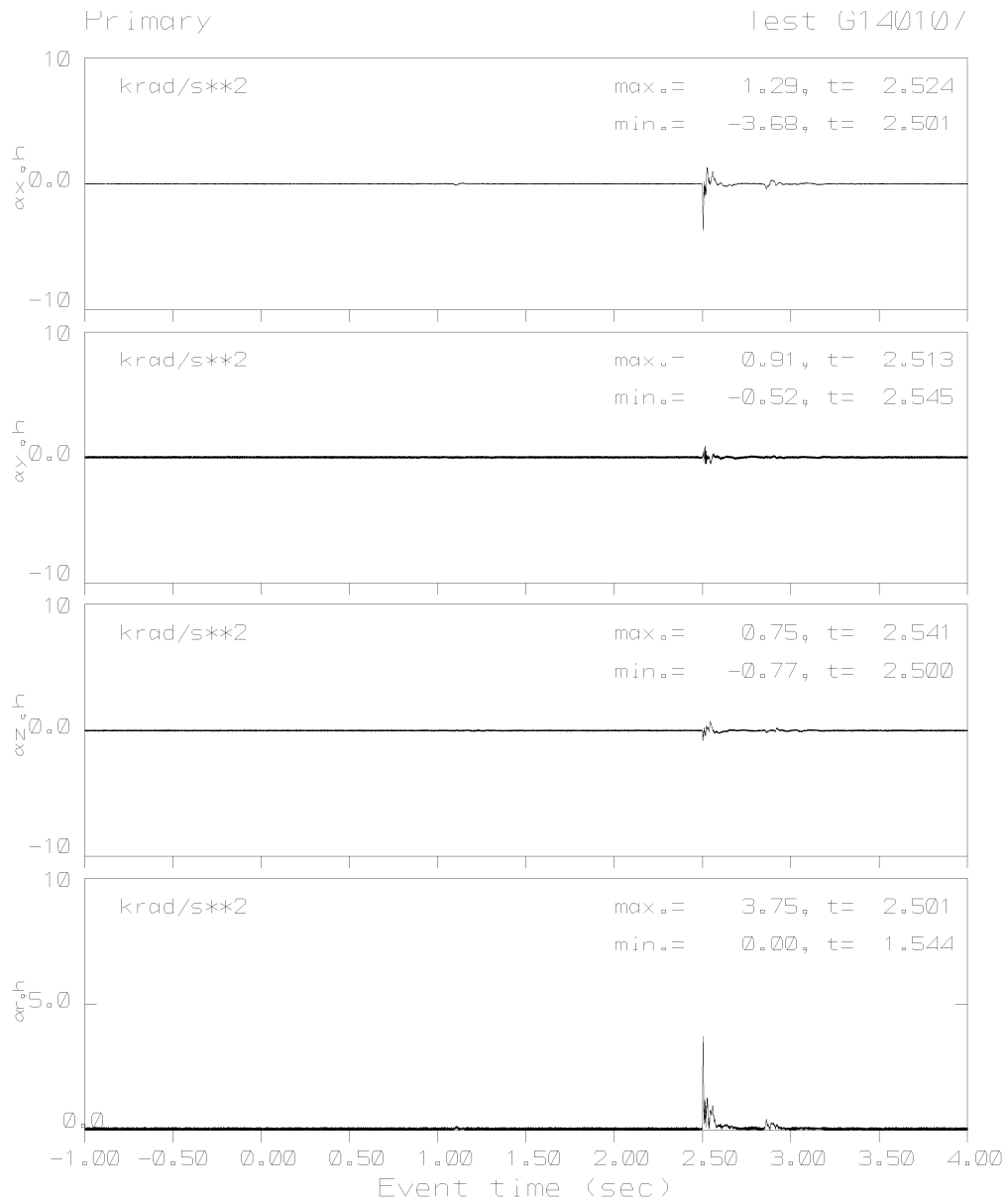
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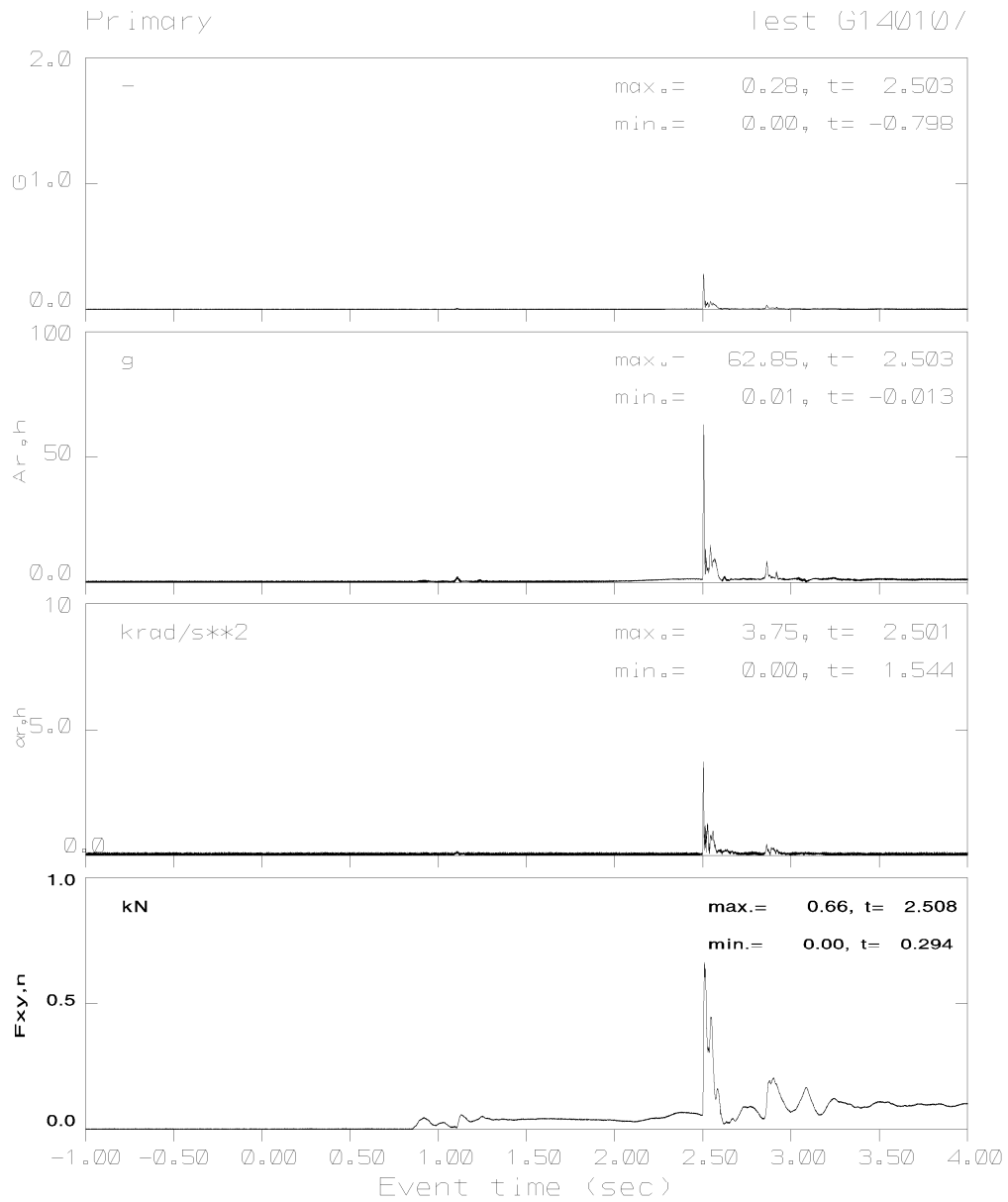




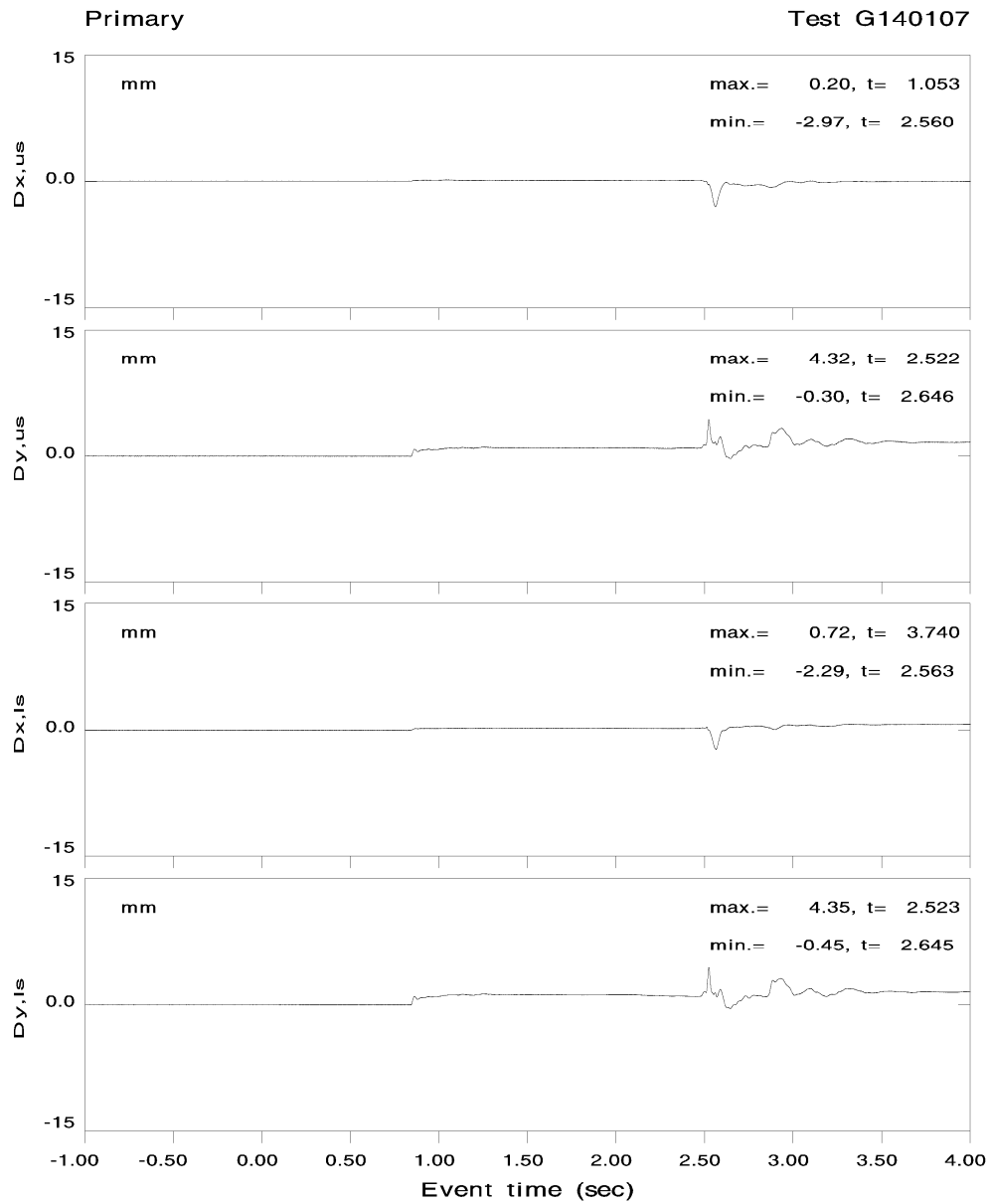






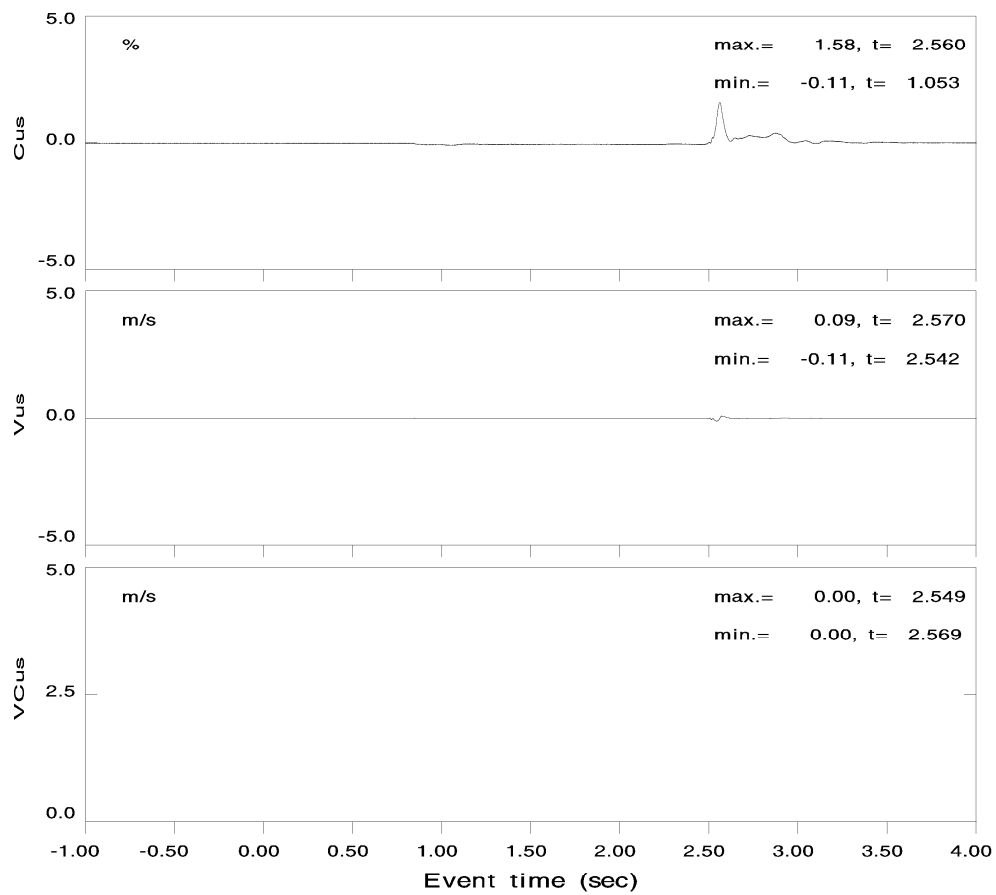


Page 11



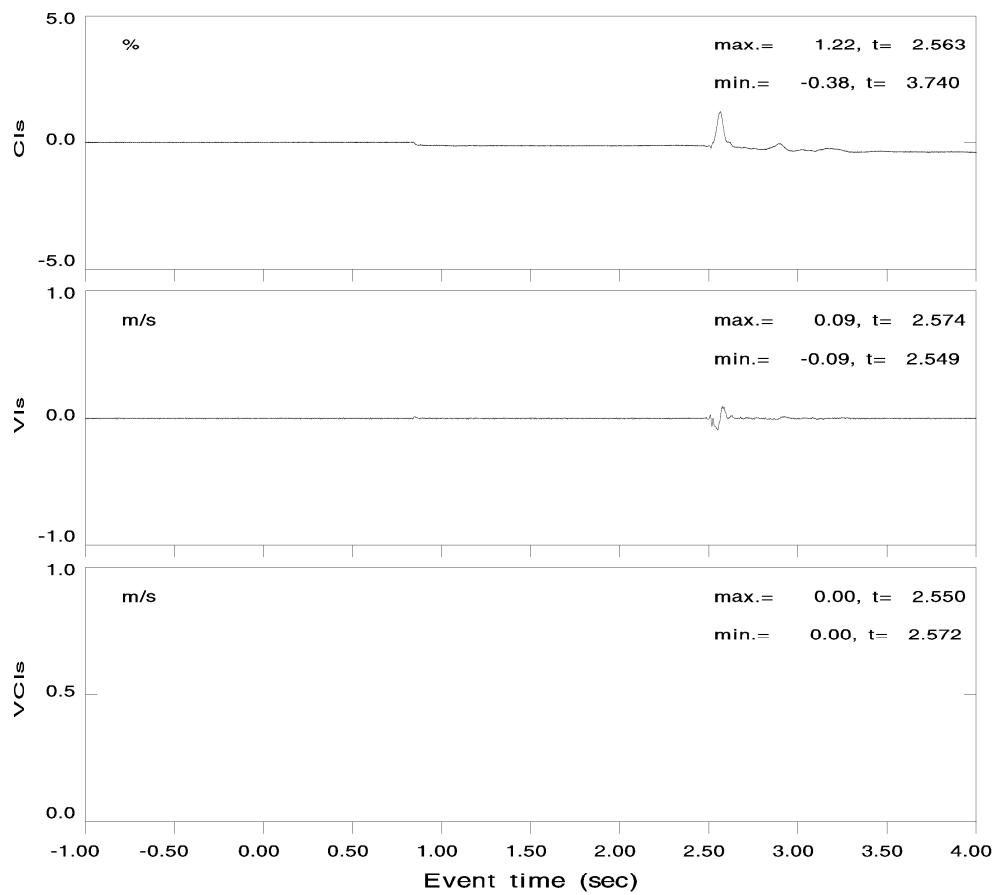
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Test G140107



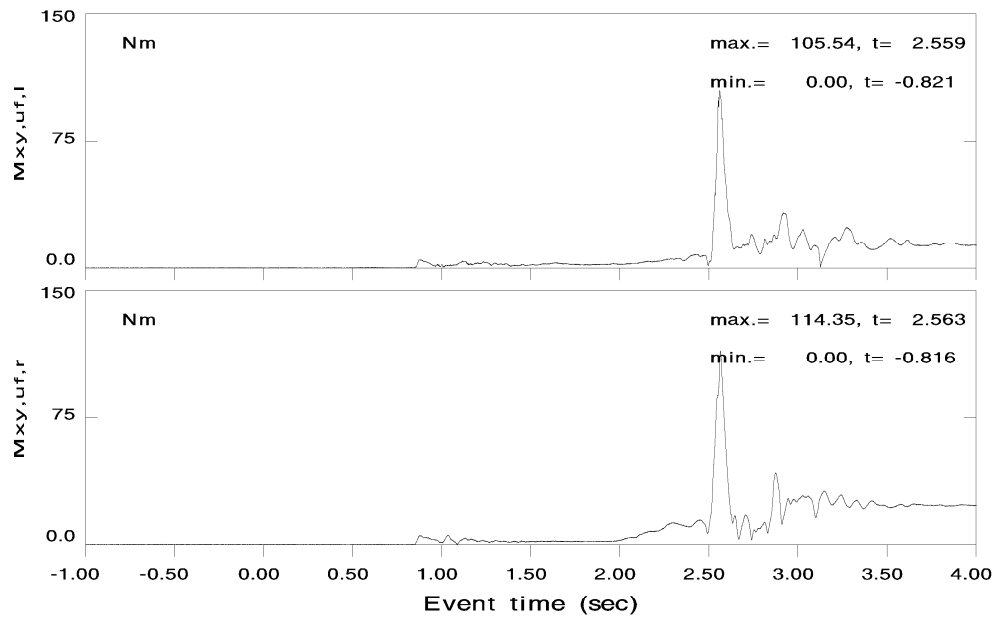
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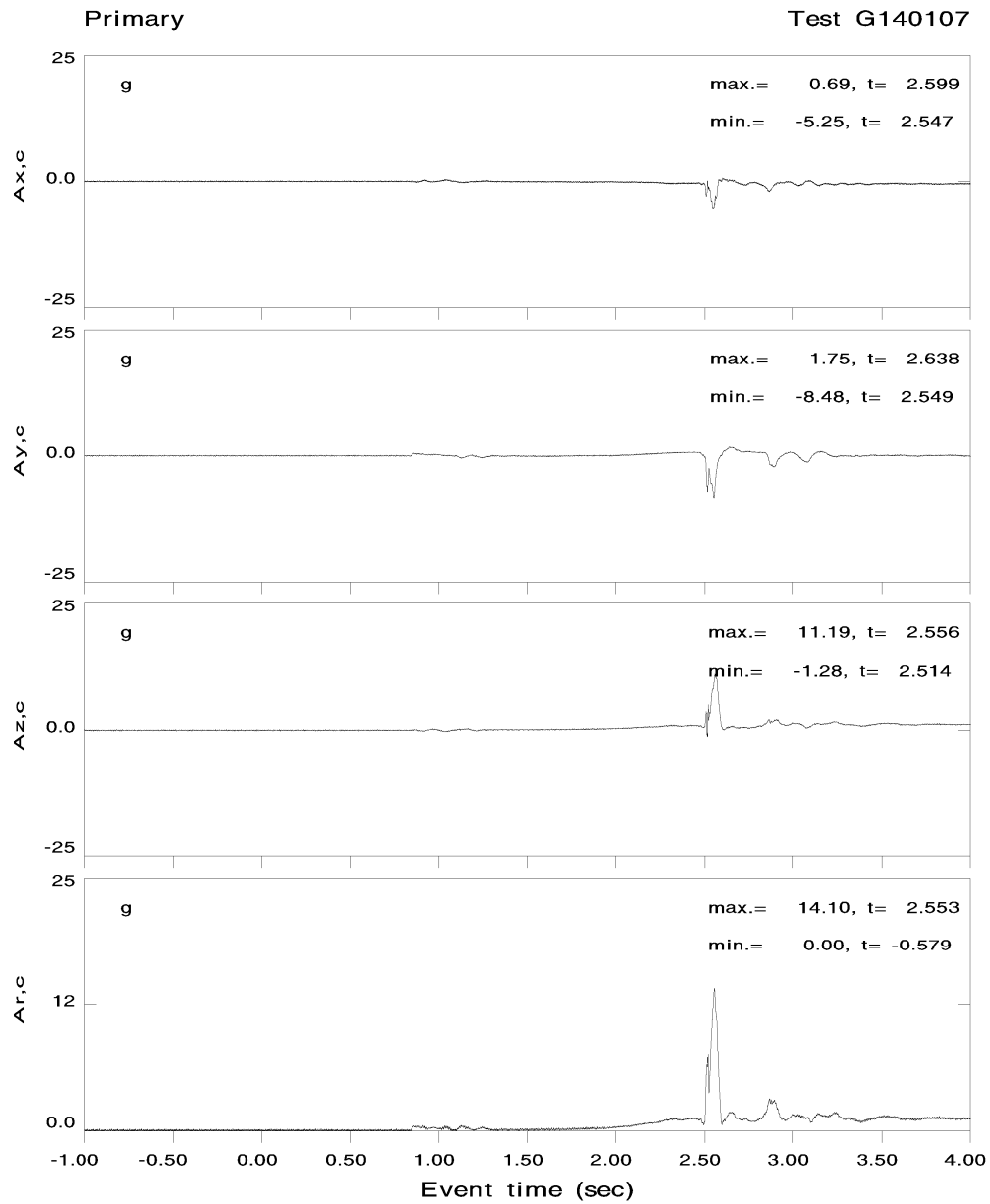
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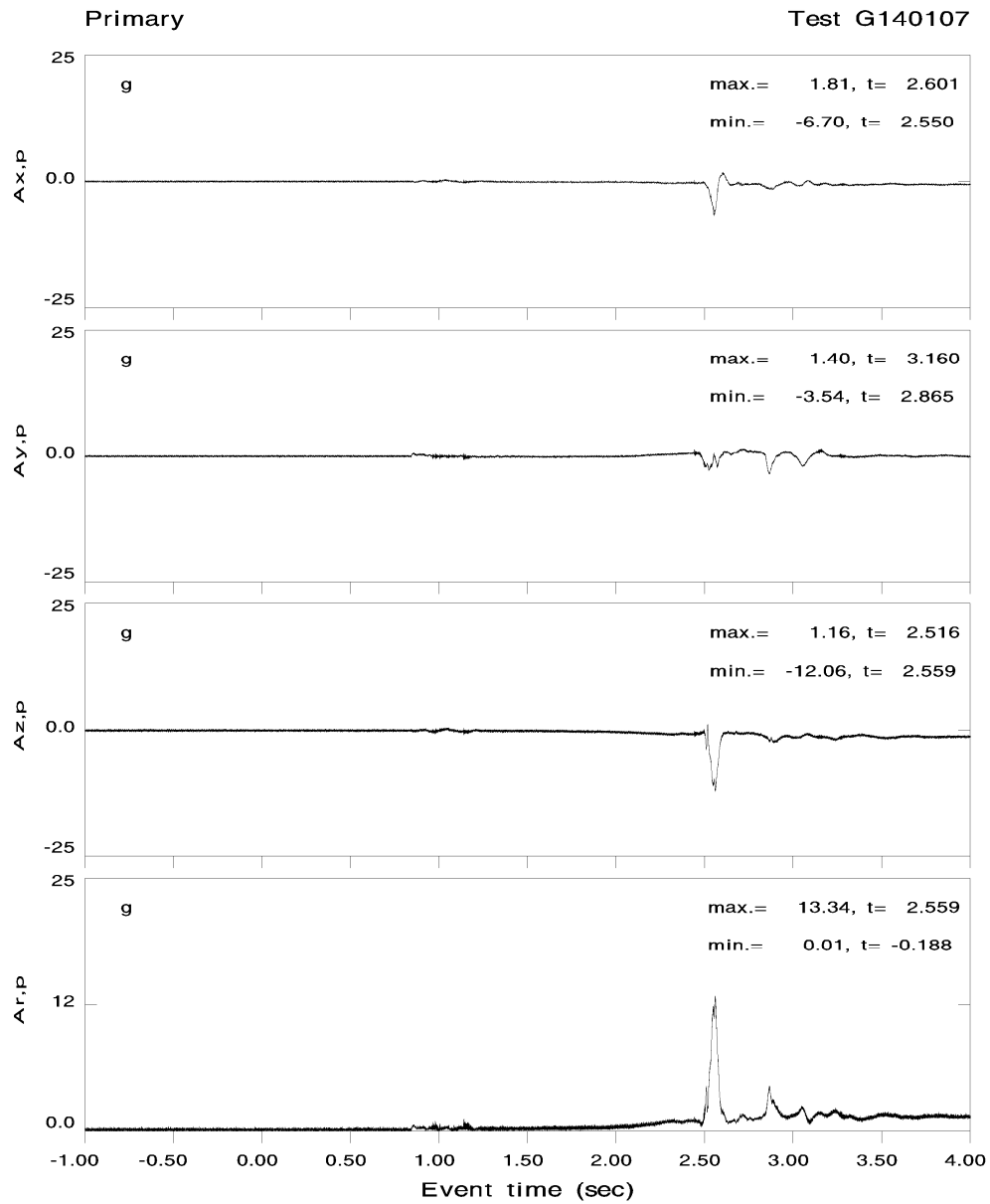


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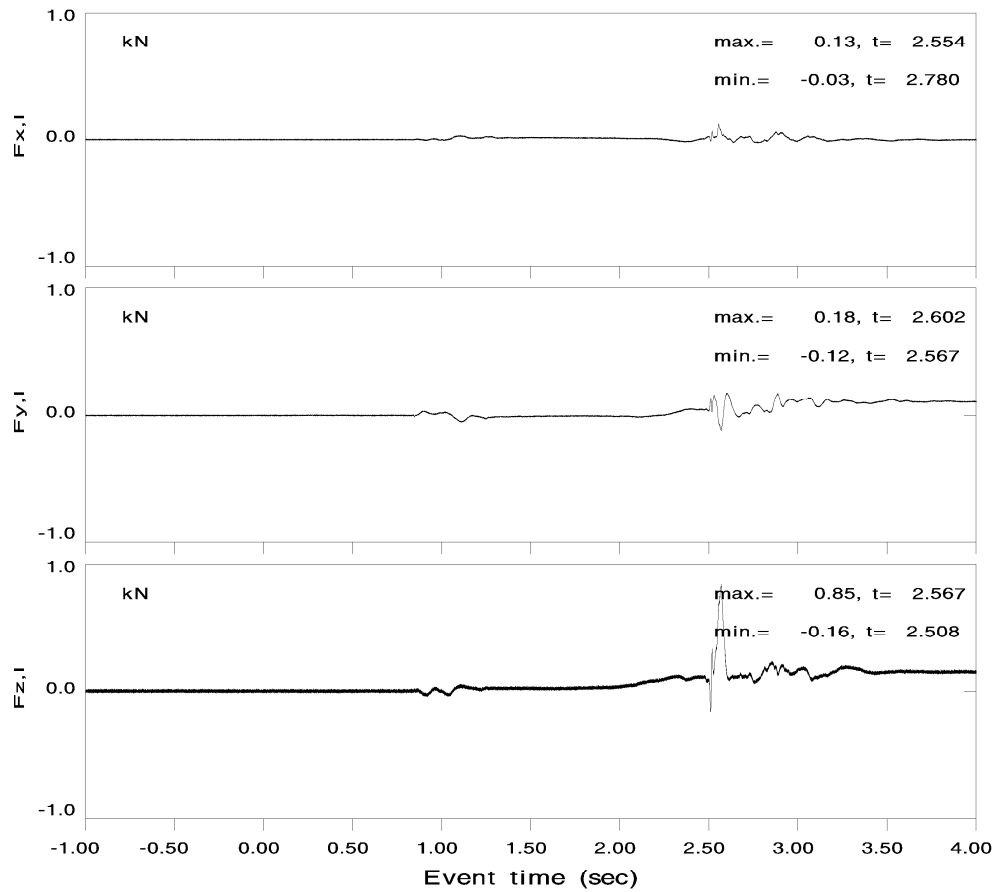






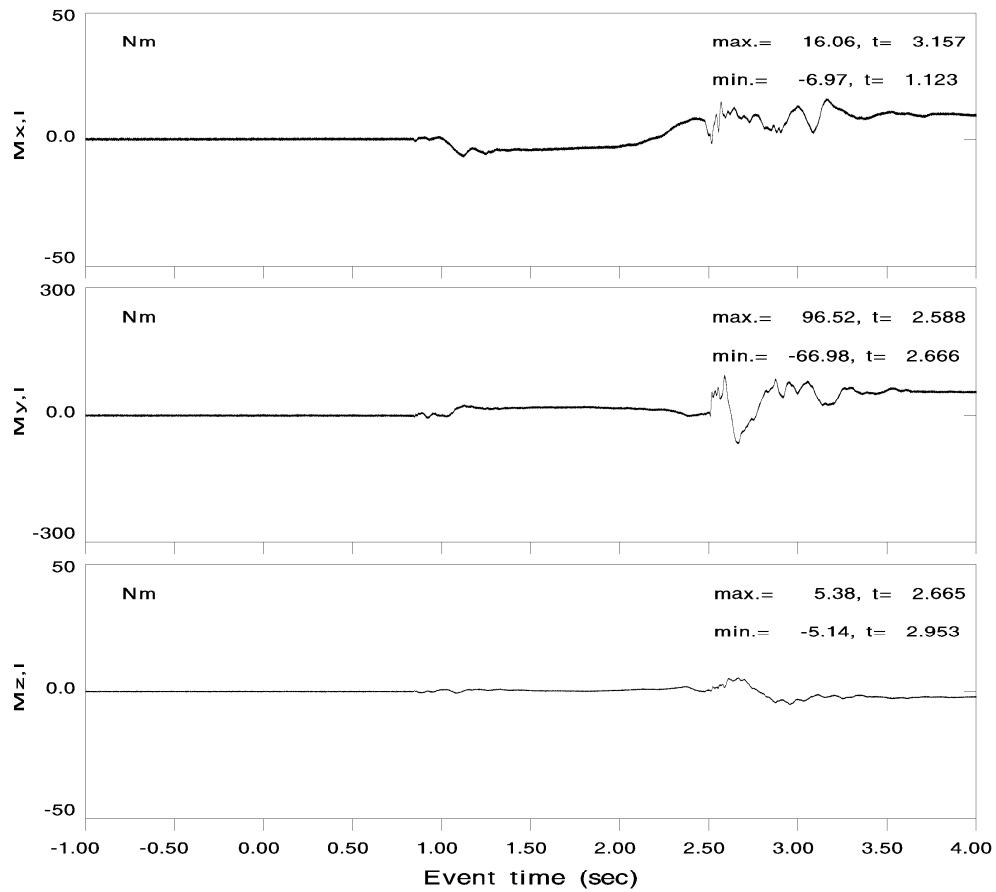
Primary

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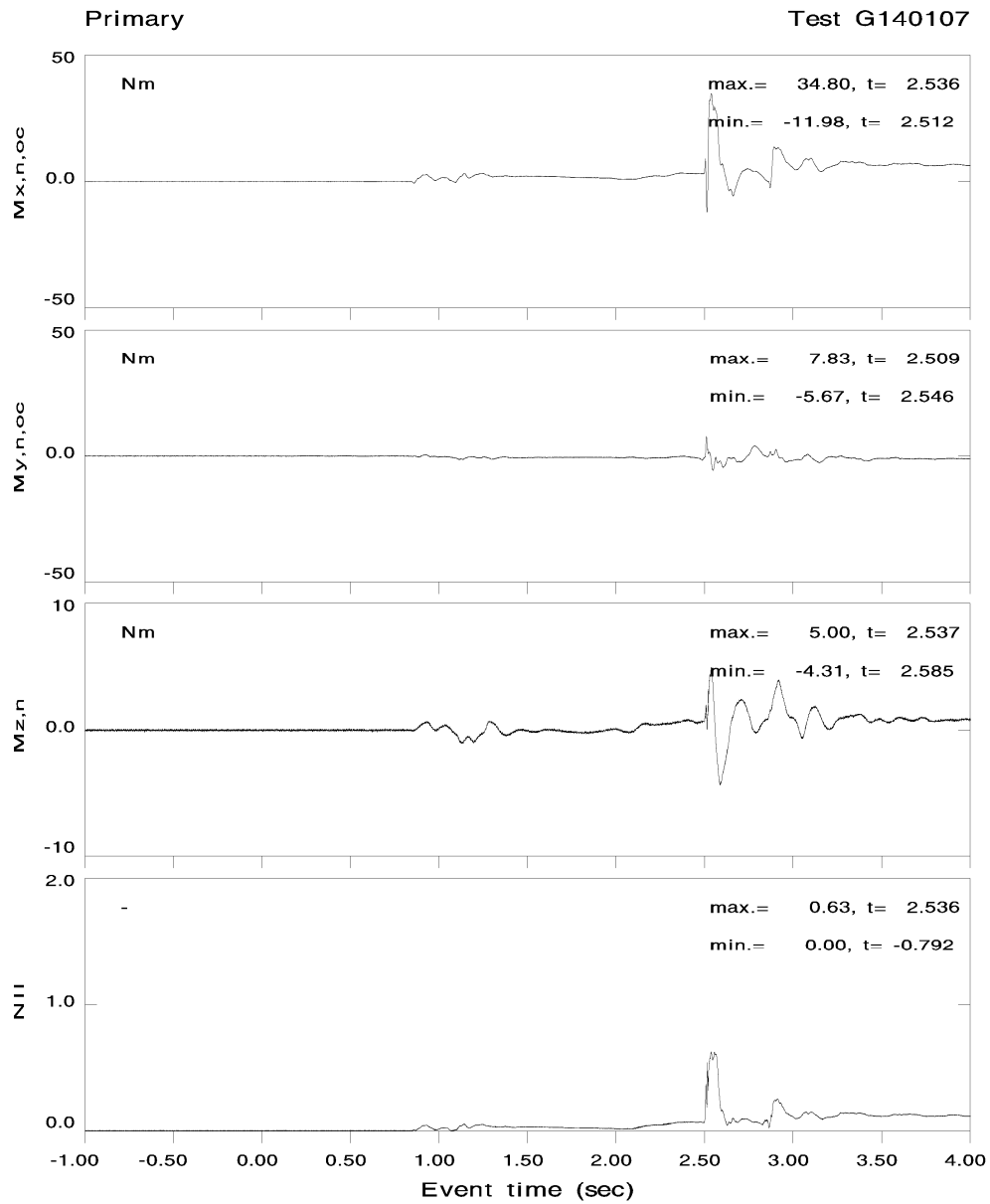


Primary

Test G140107



Page 19



2.12 G140108

G140108_ICM.IC1

Test Number : G140108
Analysis Window : 1

Injury Cost Model input:

Number of AIS 3 Femur Fractures	=	0
Number of AIS 2 Tibia Fractures	=	0
Number of AIS 3 Tibia Fractures	=	0
Number of AIS 2 Knee Dislocation Injuries	=	0
Number of AIS 3 Knee Dislocation Injuries	=	0
Index for Cmax Location	=	2
Index for VCmax Location	=	2
maximum Abdomen Penetration	=	0.000
maximum GAMBIT	=	0.210
Cmax	=	0.880
VCmax	=	0.000
HIC	=	71.1
NII (2002 MATD Neck)	=	0.9
Location of Cmax	:	lower sternum
Location of VCmax	:	lower sternum

Injury Cost Model output:

MAIS	=	0.0
Total AIS	=	0.0
Normalized Injury Cost	=	0.000
Normalized Cost of Survival	=	0.000
Normalized Cost of Dying	=	0.000
Probability of Fatality	=	0.000
Probability of Fatality due to non AIS 6 injuries	=	0.000
Probability of Fatality due AIS 6 injuries	=	0.000
Permanent Partial Incapacity	=	0.000
Risk of life threatening brain injury (%)	=	0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.989	1.000	1.000	1.000	1.000	0
1	0.008	0.000	0.000	0.000	0.000	0
2	0.001	0.000	0.000	0.000	0.000	0
3	0.004	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.018	0.000	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.000	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

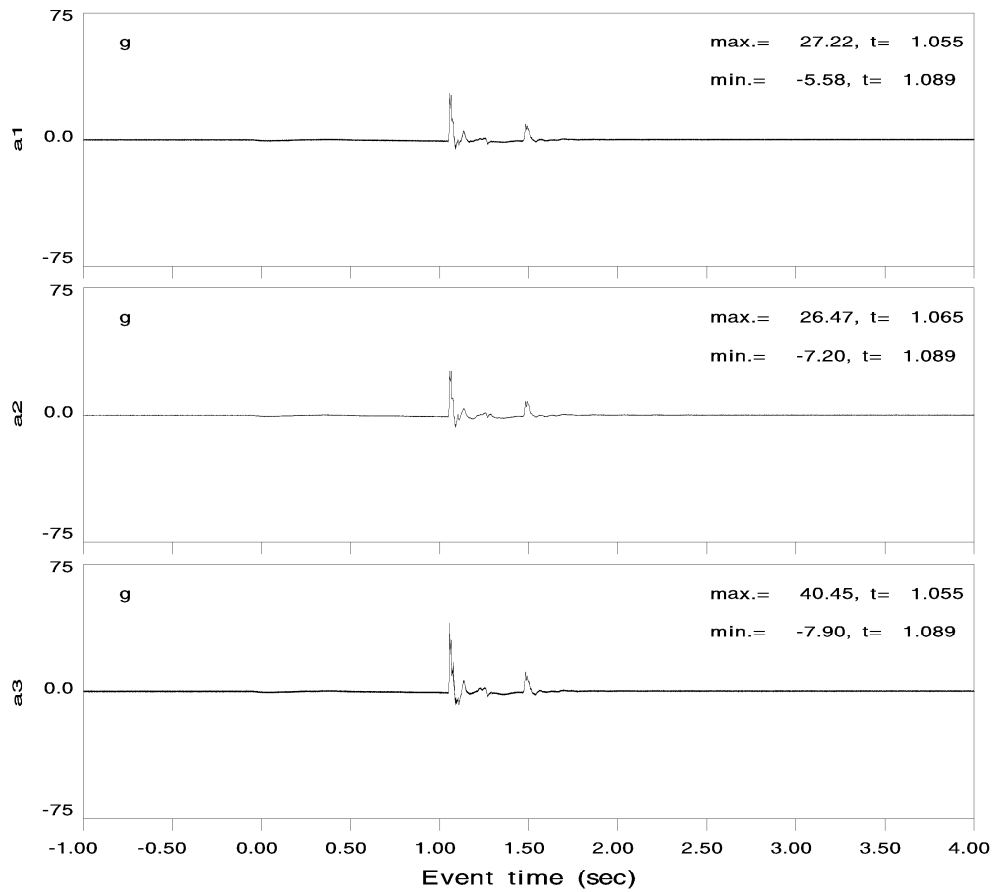
Test G140108, Primary		G140108.rpt		
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	1.05 g	1.084	-4.97 g	1.109
Ay,c	12.41 g	1.104	-1.97 g	1.222
Az,c	6.83 g	1.102	-0.86 g	1.080
Ax,p	1.09 g	1.086	-3.74 g	1.116
Ay,p	9.65 g	1.108	-2.58 g	1.176
Az,p	0.89 g	1.086	-6.99 g	1.119
spare	0.00 -	-0.851	0.00 -	1.465
spare	0.00 -	1.201	0.00 -	3.424
L,ur	8.63 mm	1.093	-0.04 mm	-0.381
L,lr	9.53 mm	1.091	-0.03 mm	-0.911
a1	27.22 g	1.055	-5.58 g	1.089
a2	26.47 g	1.065	-7.20 g	1.089
a3	40.45 g	1.055	-7.90 g	1.089
a4	4.65 g	1.089	-24.50 g	1.056
a5	3.87 g	1.115	-23.83 g	1.056
a6	8.32 g	1.108	-33.79 g	1.056
Mx,l	27.21 Nm	1.086	-34.49 Nm	1.203
My,l	255.74 Nm	1.164	-105.56 Nm	1.069
Mz,l	21.76 Nm	1.271	-17.23 Nm	1.160
Fx,l	0.23 kN	1.182	-0.14 kN	1.076
Fy,l	0.10 kN	0.311	-0.47 kN	1.206
Fz,l	0.66 kN	1.204	-0.60 kN	1.068
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
spare	0.01 -	0.236	-0.05 -	3.991
spare	0.00 -	3.725	0.00 -	1.179
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.00 -	4.000	0.00 -	4.000
a7	9.95 g	1.056	-7.86 g	1.109
a8	19.75 g	1.055	-11.60 g	1.108
a9	8.25 g	1.069	-4.71 g	1.066
Fz,uf,r	0.22 kN	1.121	-0.07 kN	1.067
Mx,uf,r	40.28 Nm	1.123	-20.24 Nm	1.287
My,uf,r	53.38 Nm	1.175	-7.08 Nm	1.110
Mz,uf,r	18.86 Nm	1.157	-12.36 Nm	1.262
Fz,uf,l	0.26 kN	1.148	-0.25 kN	1.088
Mx,uf,l	32.99 Nm	1.093	-21.65 Nm	1.188
My,uf,l	57.51 Nm	1.215	-14.82 Nm	1.076
Mz,uf,l	6.78 Nm	1.183	-9.90 Nm	1.218
Fx,n	0.04 kN	1.064	-0.11 kN	1.081
Fy,n	0.04 kN	1.239	-1.20 kN	1.077
Fz,n	0.33 kN	1.134	-1.91 kN	1.064
Mx,n	52.99 Nm	1.077	-46.93 Nm	1.102
My,n	12.57 Nm	1.093	-4.39 Nm	1.070
Mz,n	4.44 Nm	1.271	-7.68 Nm	1.180
L,ul	0.02 mm	-0.623	-8.14 mm	1.090
L,ll	0.03 mm	-0.450	-8.31 mm	1.092
Ax,h	3.01 g	1.269	-5.05 g	1.065
Ay,h	35.87 g	1.055	-7.24 g	1.089
Az,h	9.96 g	1.056	-7.87 g	1.109
ax,h	3.69 krad/s**2	1.055	-1.53 krad/s**2	1.096
ay,h	0.62 krad/s**2	1.076	-0.82 krad/s**2	1.072
az,h	0.58 krad/s**2	1.066	-0.43 krad/s**2	1.056
Ar,h	37.22 g	1.055	0.02 g	-0.444
ar,h	3.71 krad/s**2	1.055	0.00 krad/s**2	-0.701
G	0.21 -	1.055	0.00 -	-0.548
HIC	71.13	1.074	----	1.053
Fxy,n	1.21 kN	1.077	0.00 kN	-0.537
Dx,us	0.62 mm	1.154	-0.44 mm	1.078
Dy,us	0.04 mm	-0.381	-13.21 mm	1.091

		G140108.rpt		
Cus	0.24 %	1.078	-0.33 %	1.154
Vus	0.08 m/s	1.095	-0.09 m/s	1.070
VCus	0.00 m/s	1.073	0.00 m/s	1.067
Dx,ls	1.65 mm	1.115	-0.05 mm	-0.145
Dy,ls	0.03 mm	-0.771	-13.21 mm	1.092
Cl,s	0.03 %	-0.145	-0.88 %	1.115
Vls	0.11 m/s	1.109	-0.10 m/s	1.083
VCl,s	0.00 m/s	1.111	0.00 m/s	1.081
Mxy,uf,r	54.03 Nm	1.175	0.00 Nm	-0.786
Mxy,uf,l	60.00 Nm	1.216	0.00 Nm	-0.191
Mx,n,oc	31.96 Nm	1.077	-55.80 Nm	1.102
My,n,oc	12.92 Nm	1.093	-3.71 Nm	1.202
NII	0.94 -	1.102	0.00 -	-0.428
Ar,p	11.02 g	1.108	0.02 g	0.247
Ar,c	13.43 g	1.104	0.00 g	-0.153

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

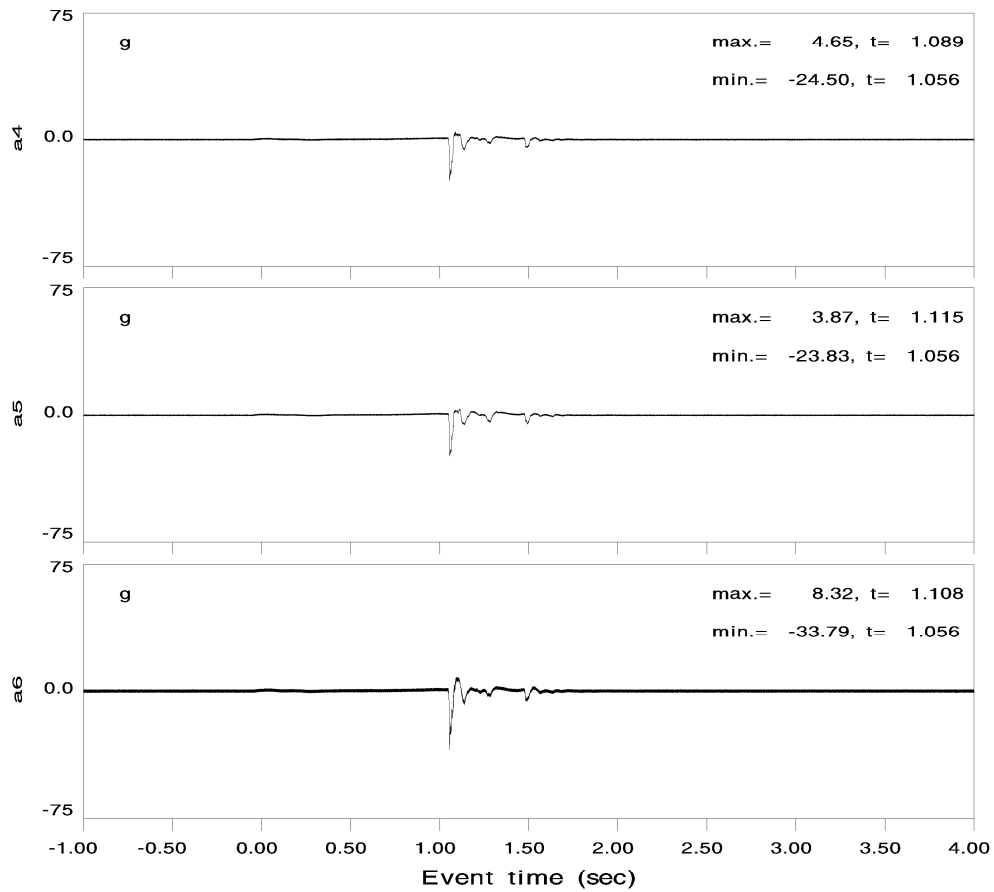
Test G140108



Page 1

Primary

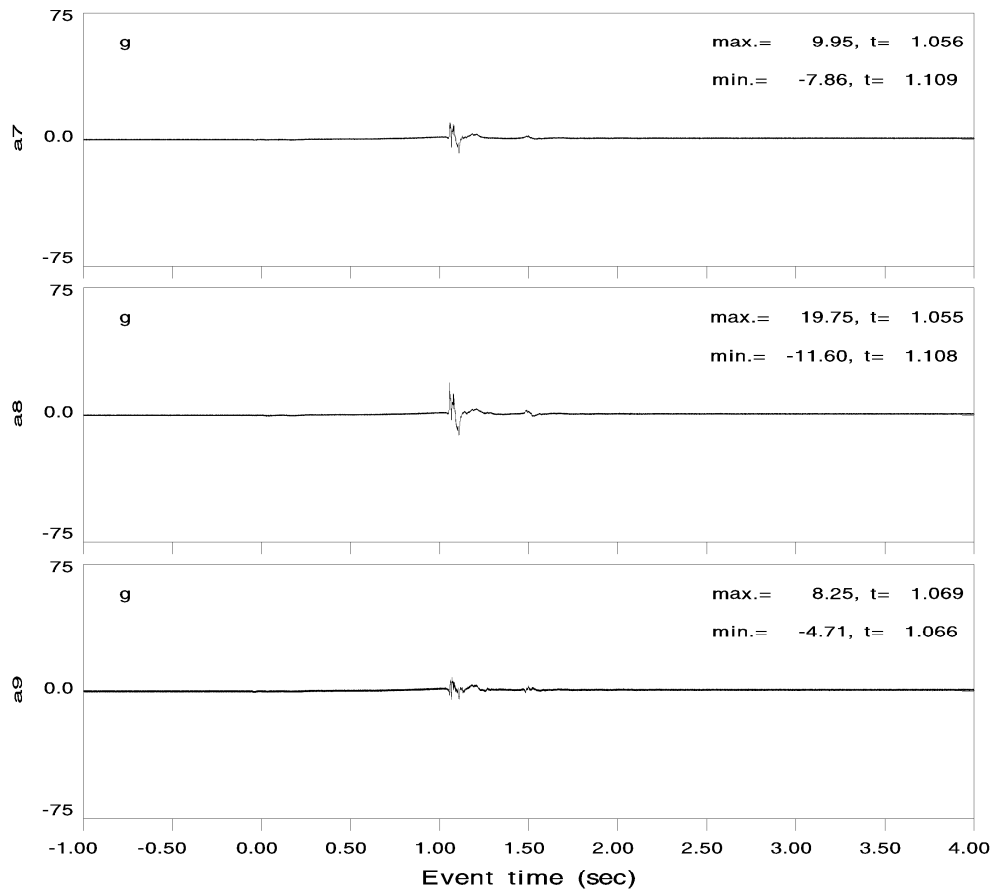
Test G140108



Page 2

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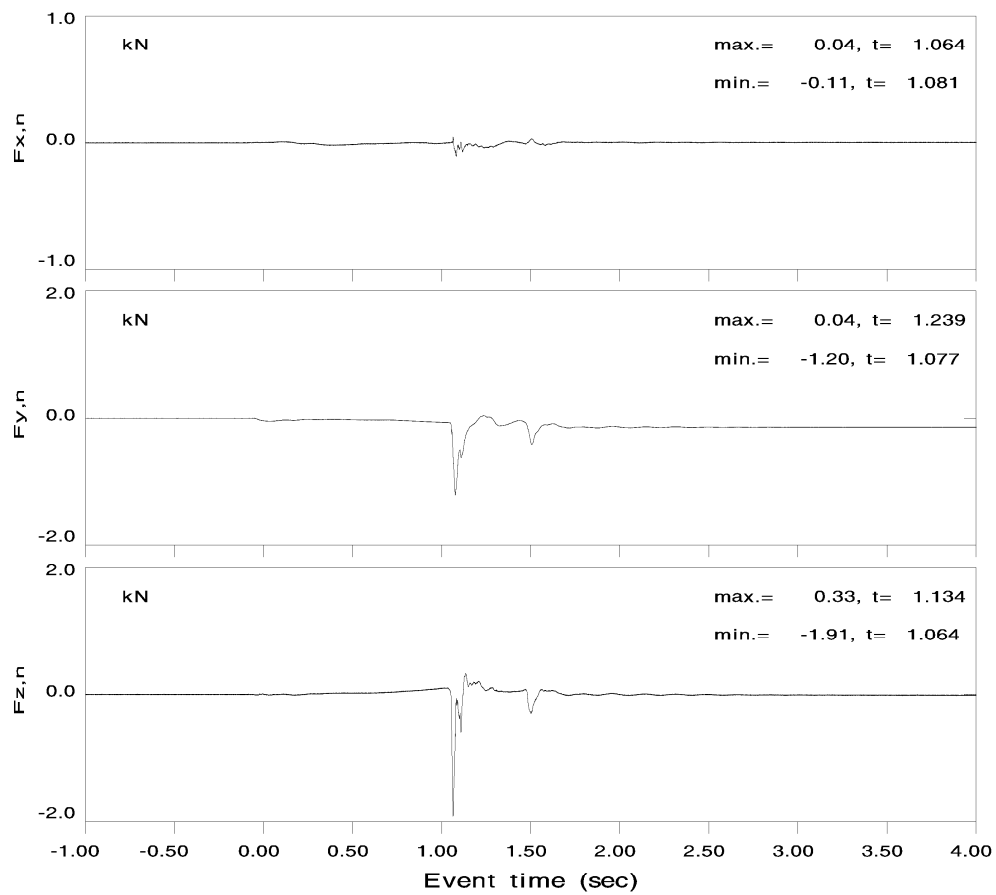
Test G140108



Page 3

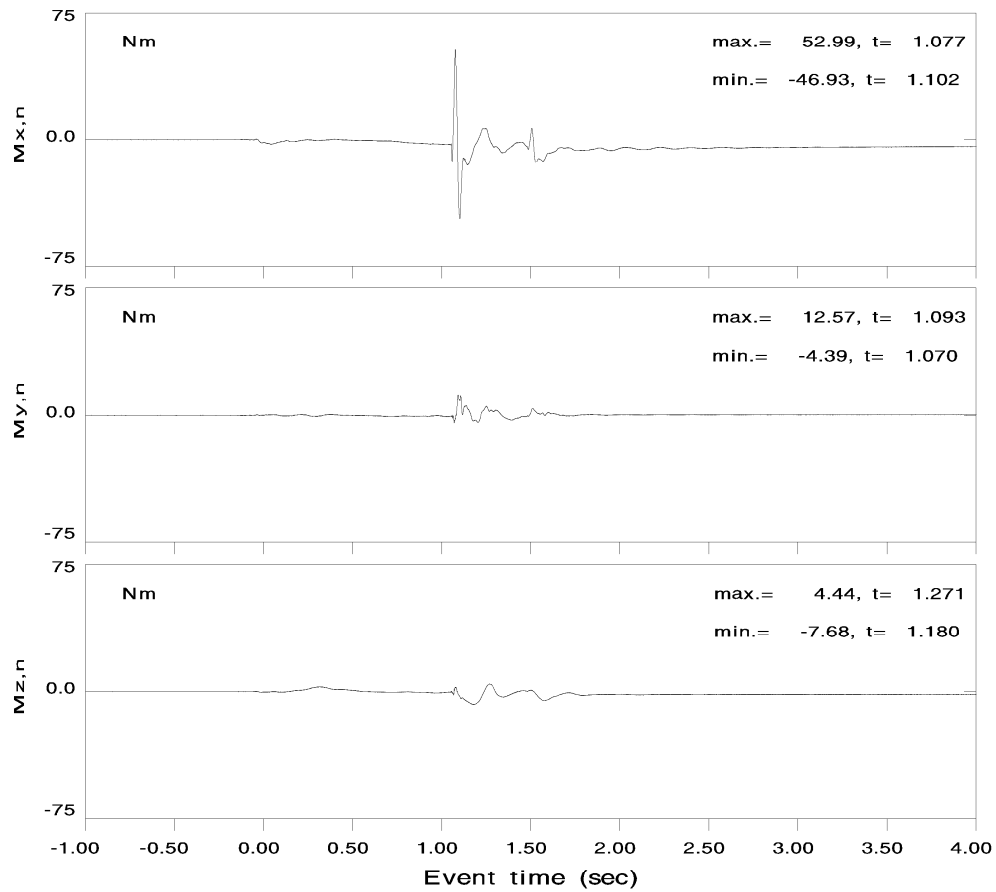
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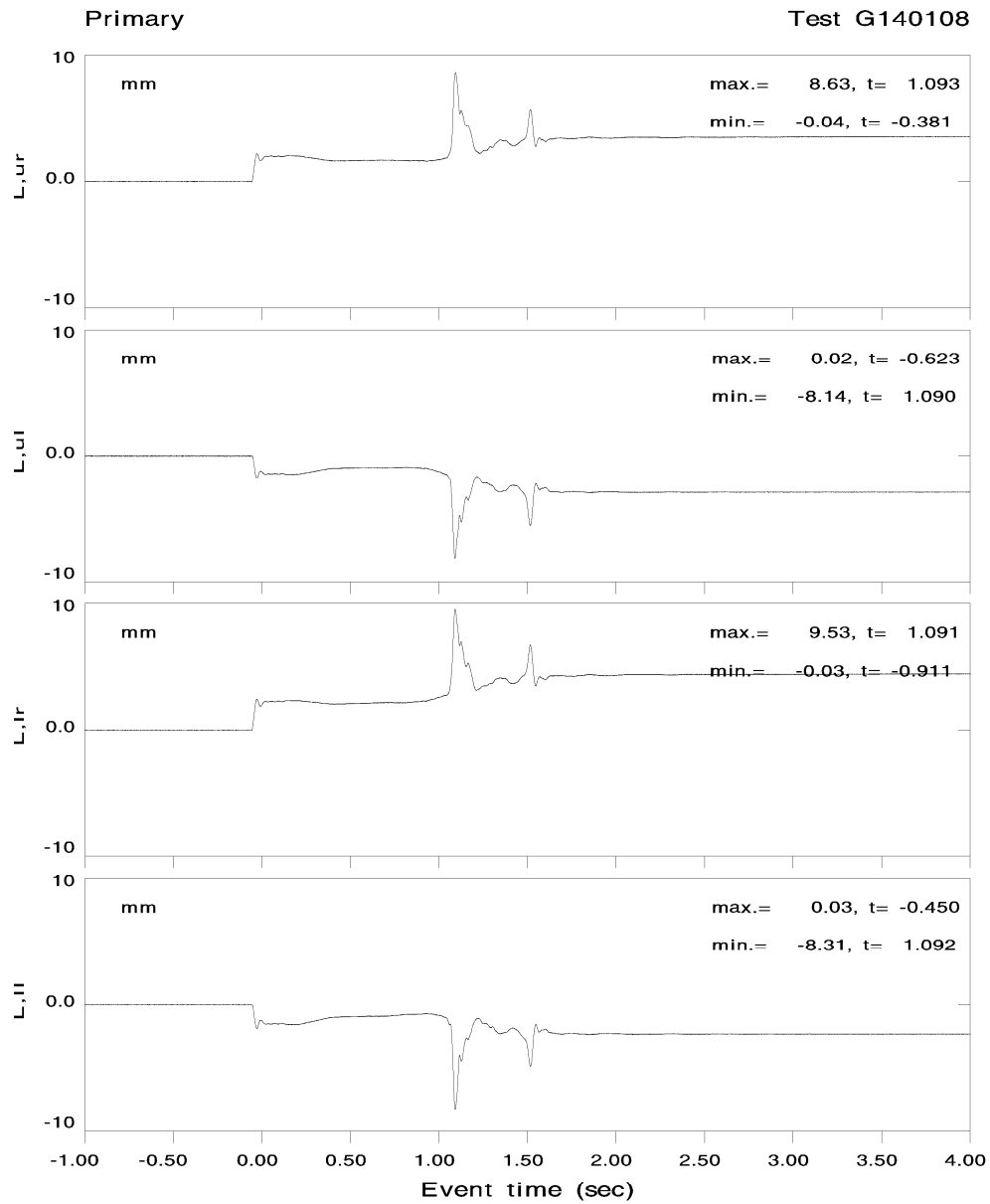
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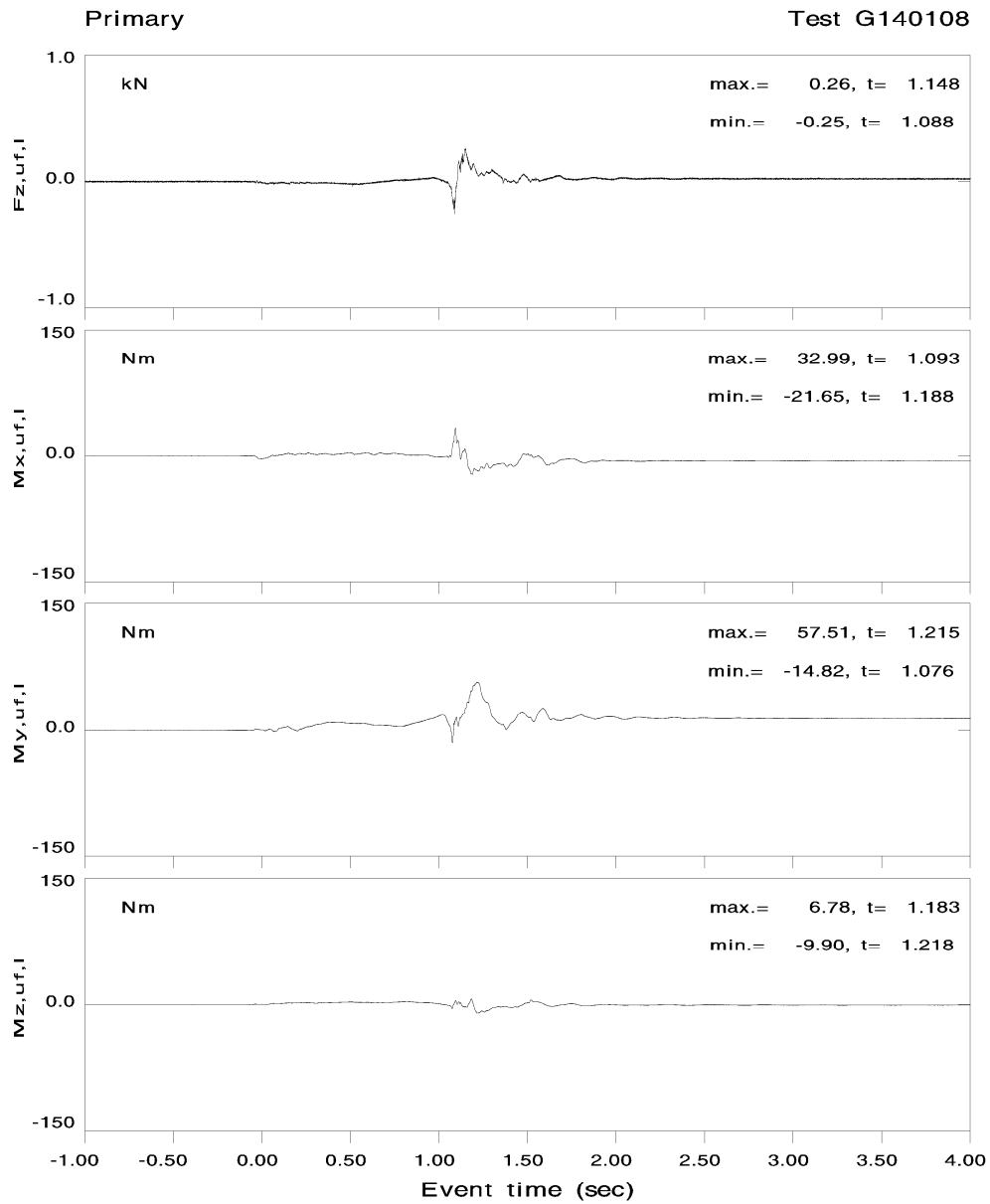


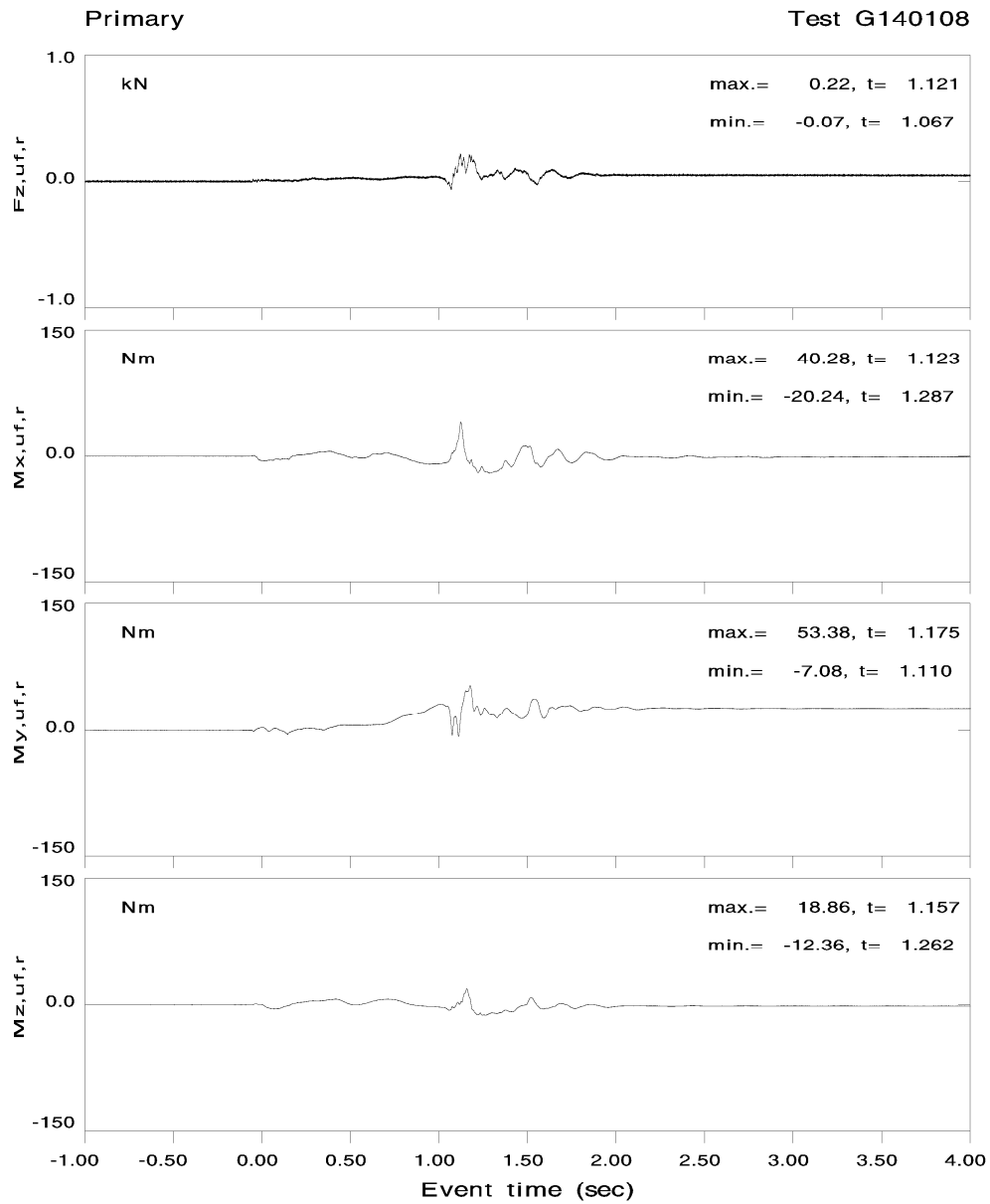
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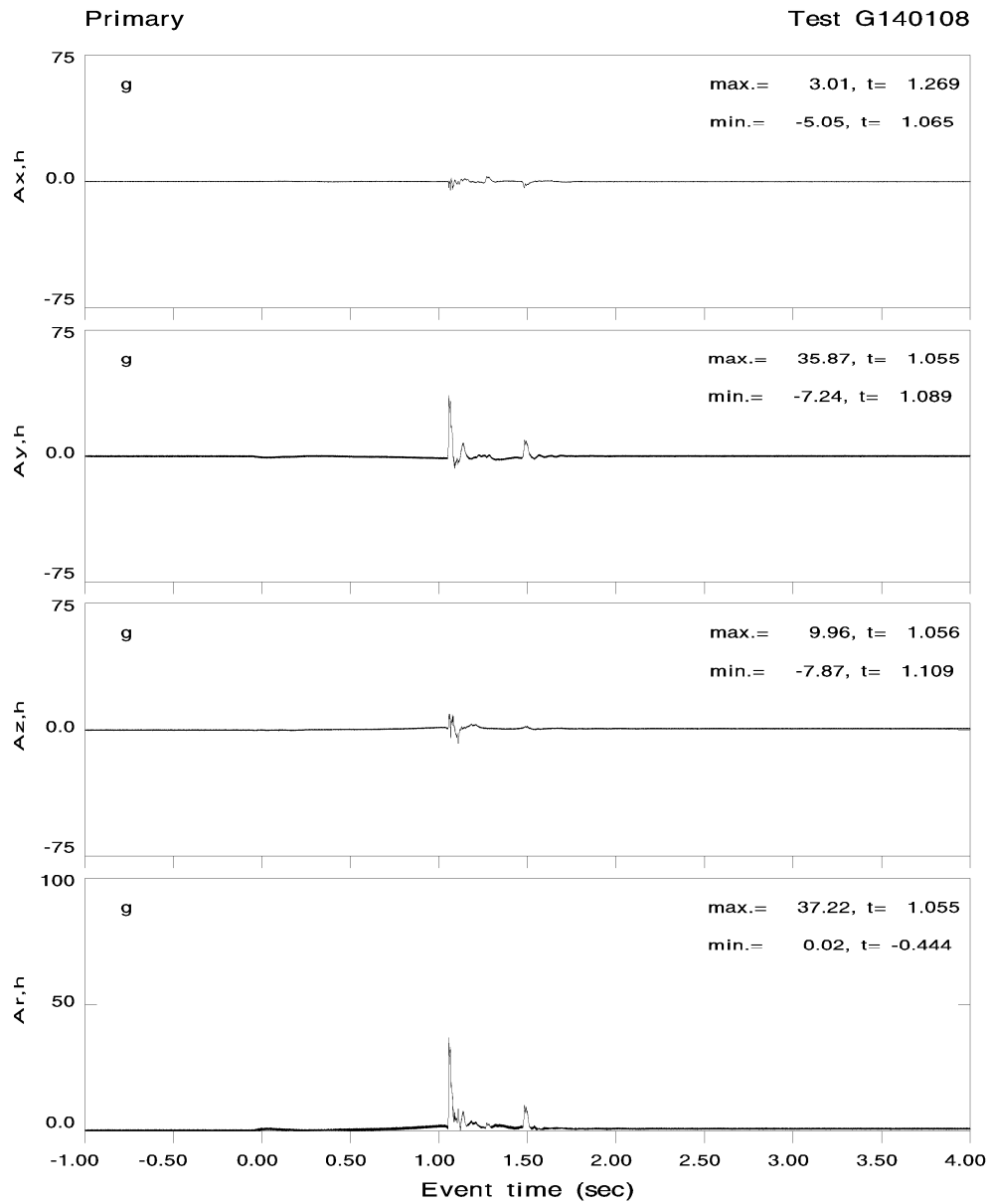
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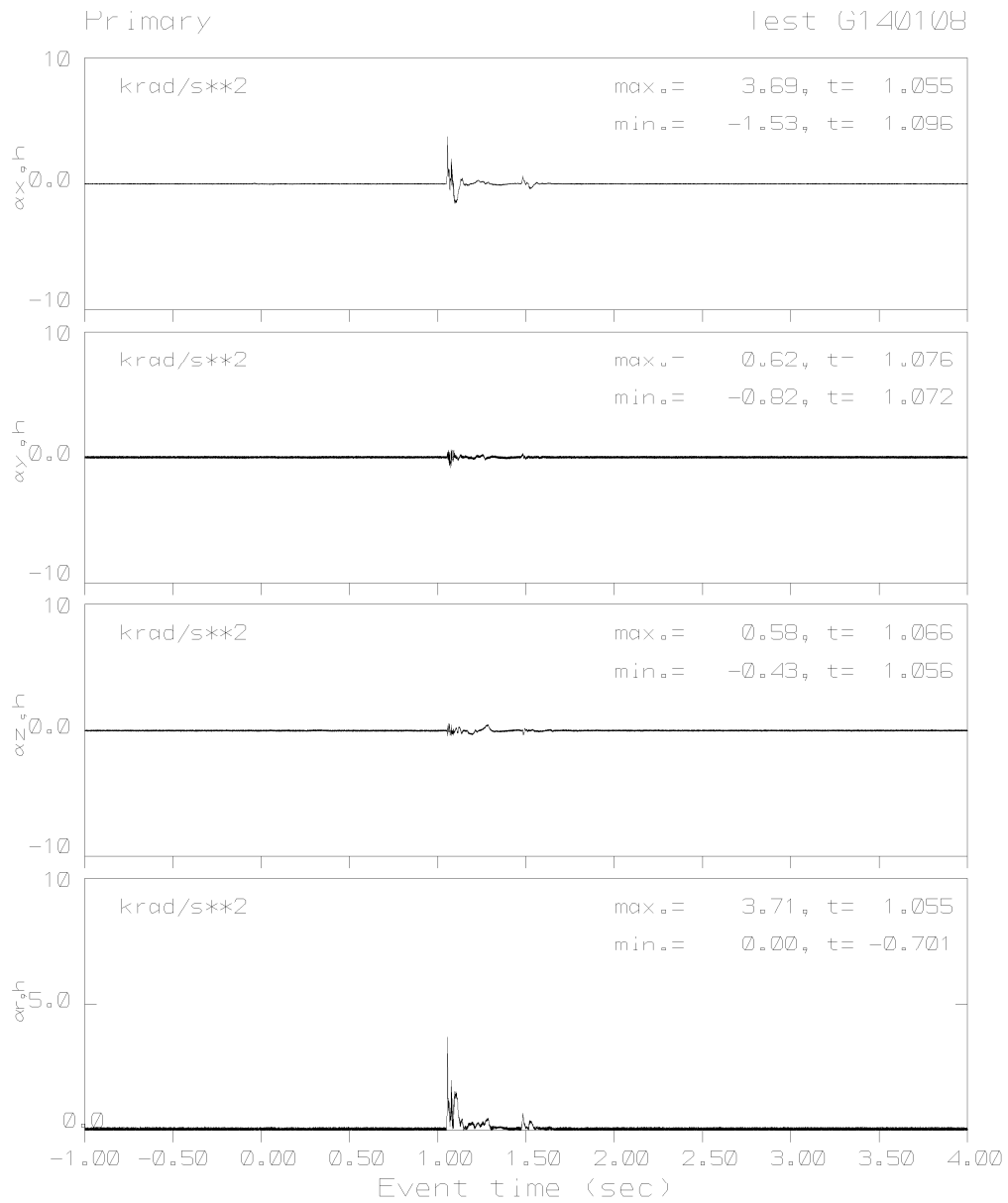




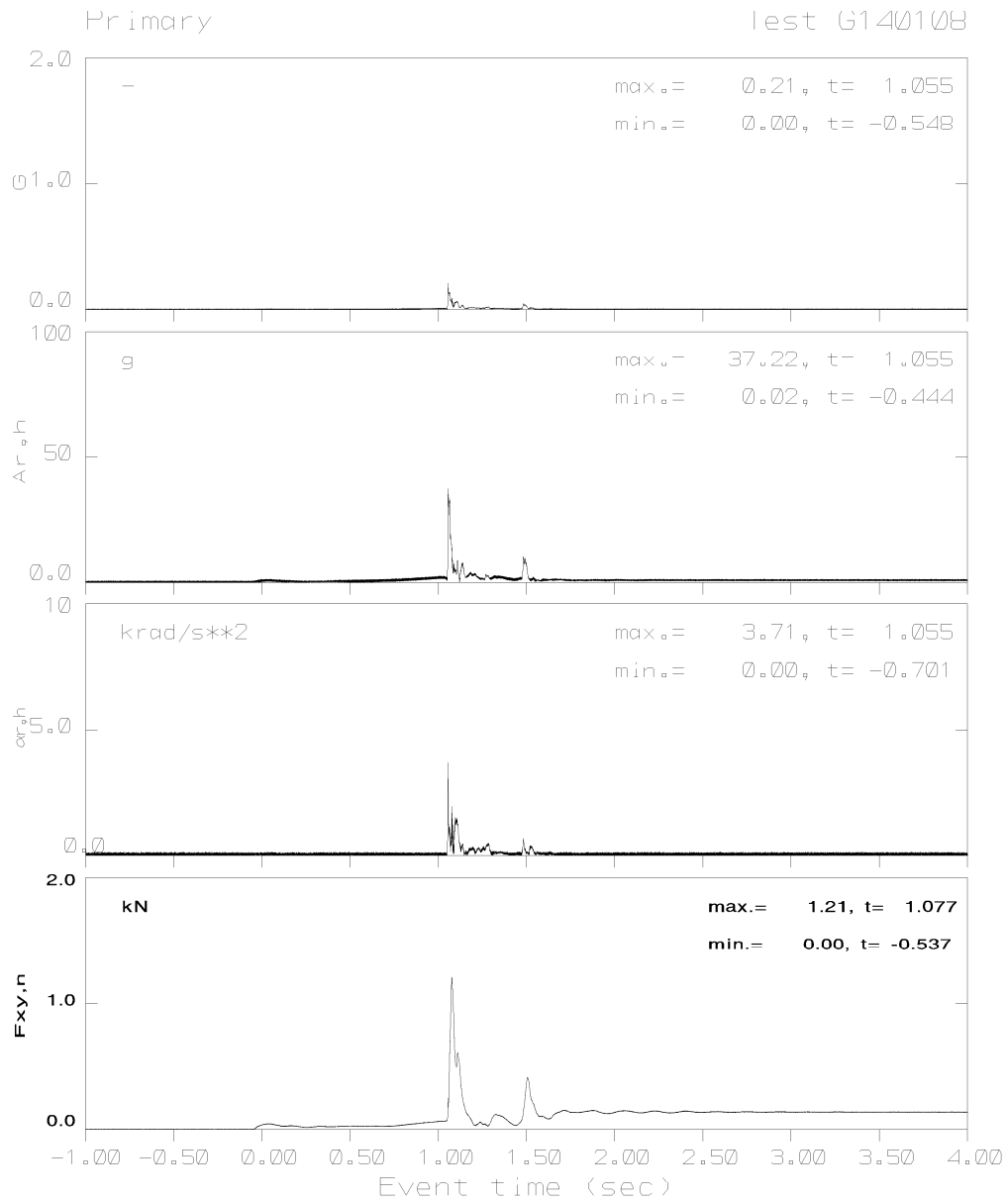




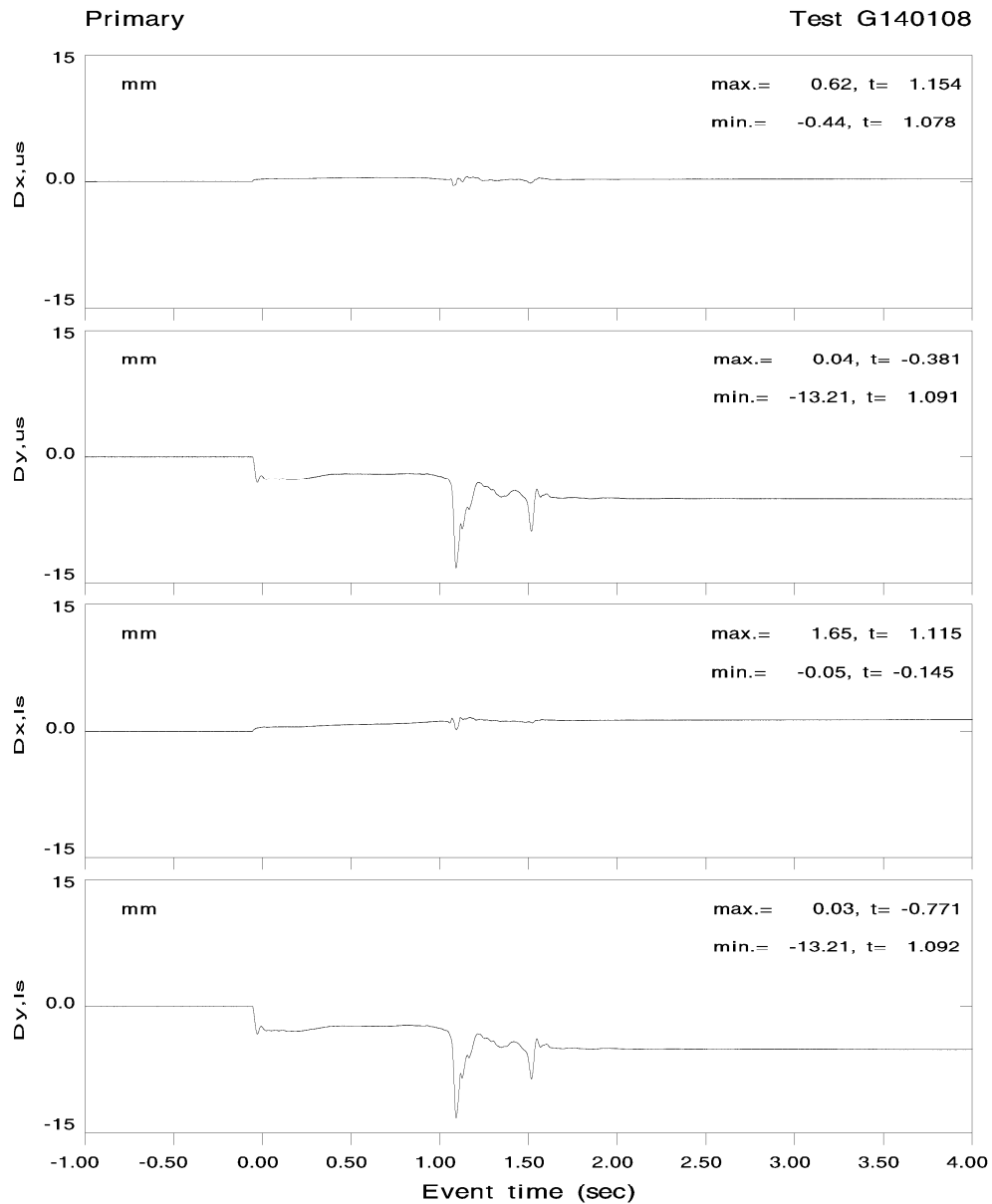




Page 10

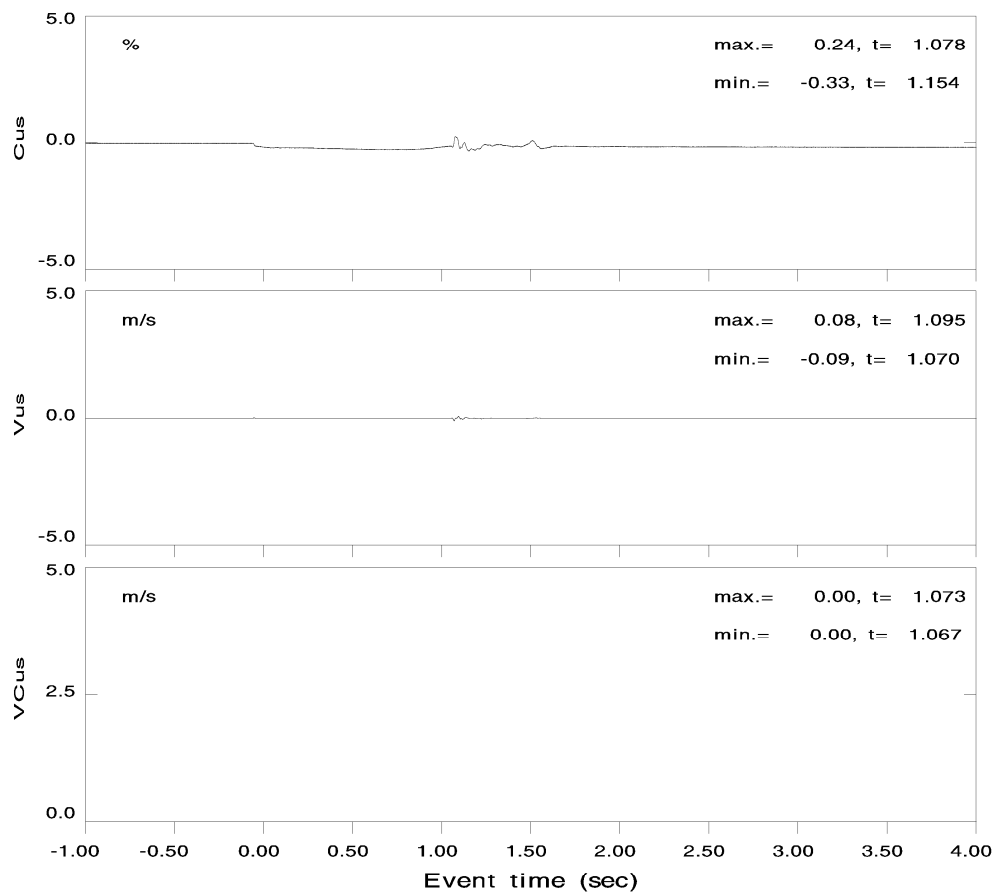


Page 11



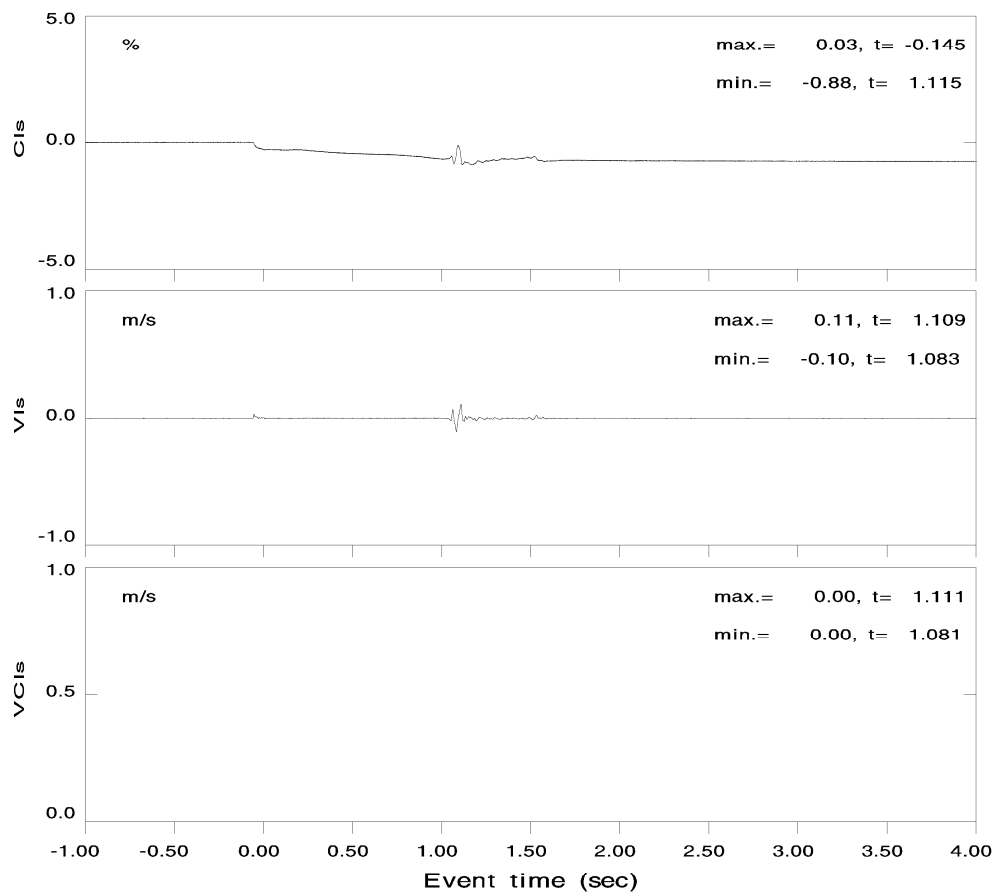
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Test G140108



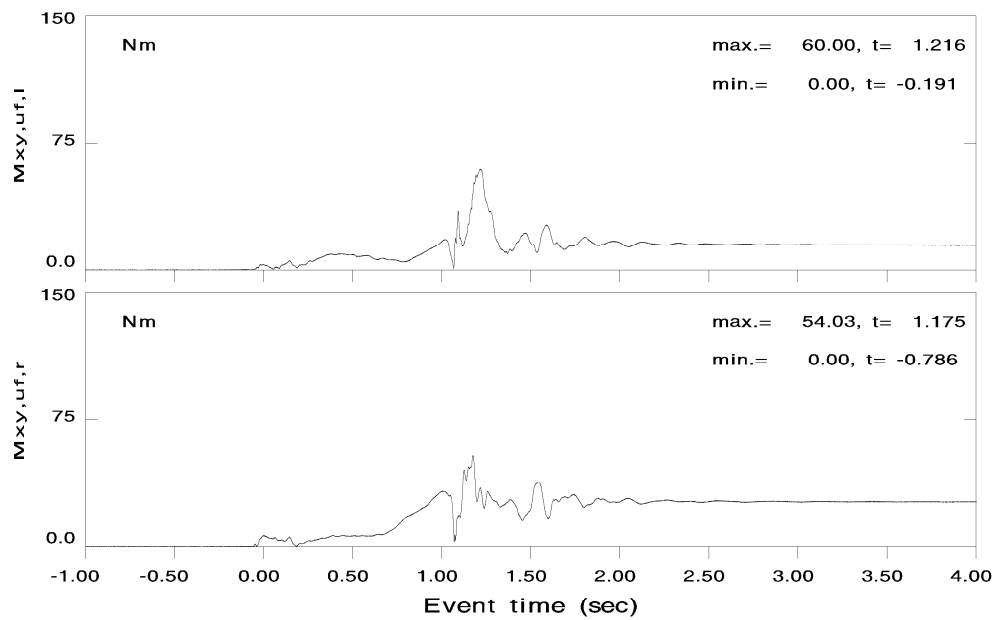
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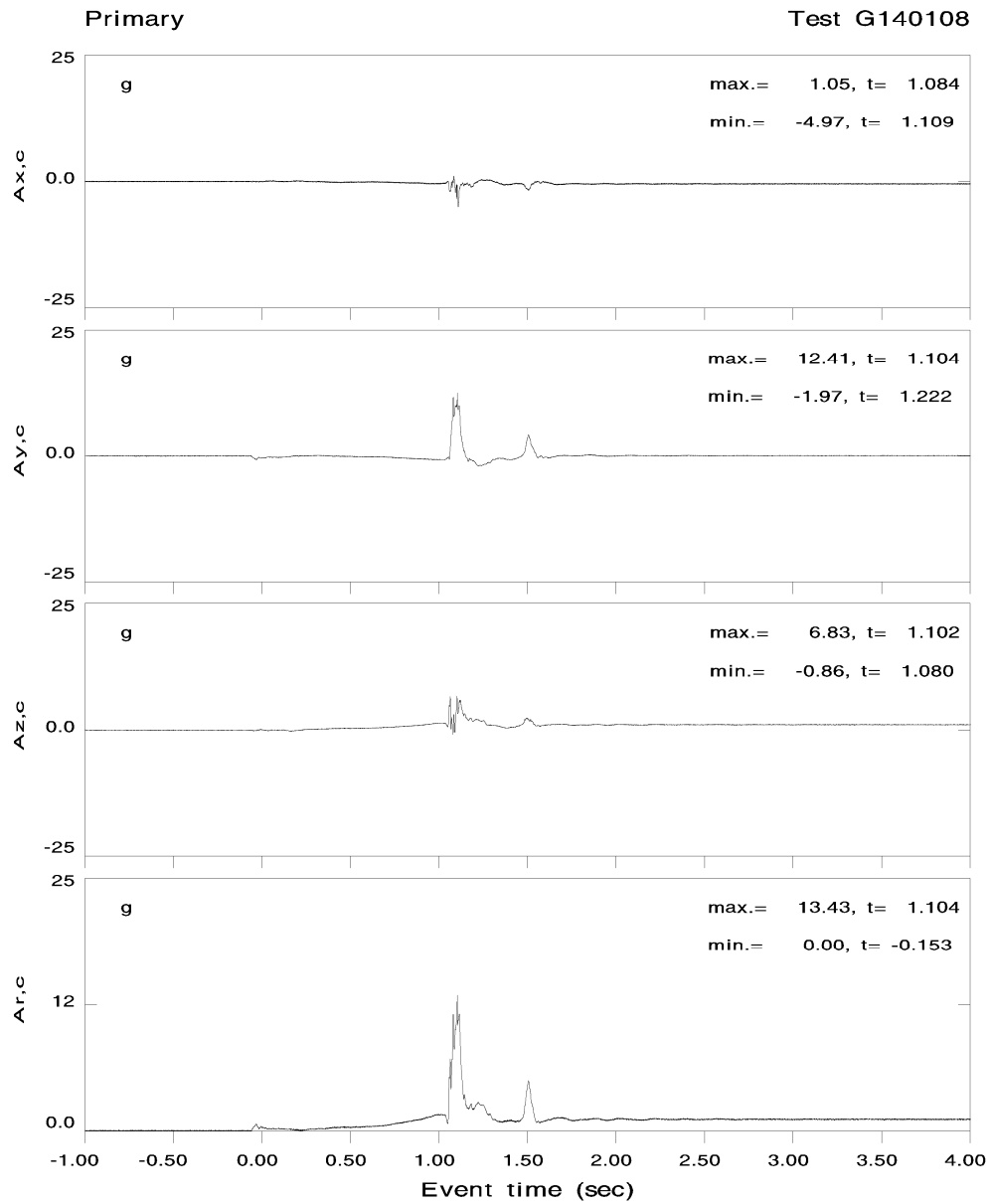
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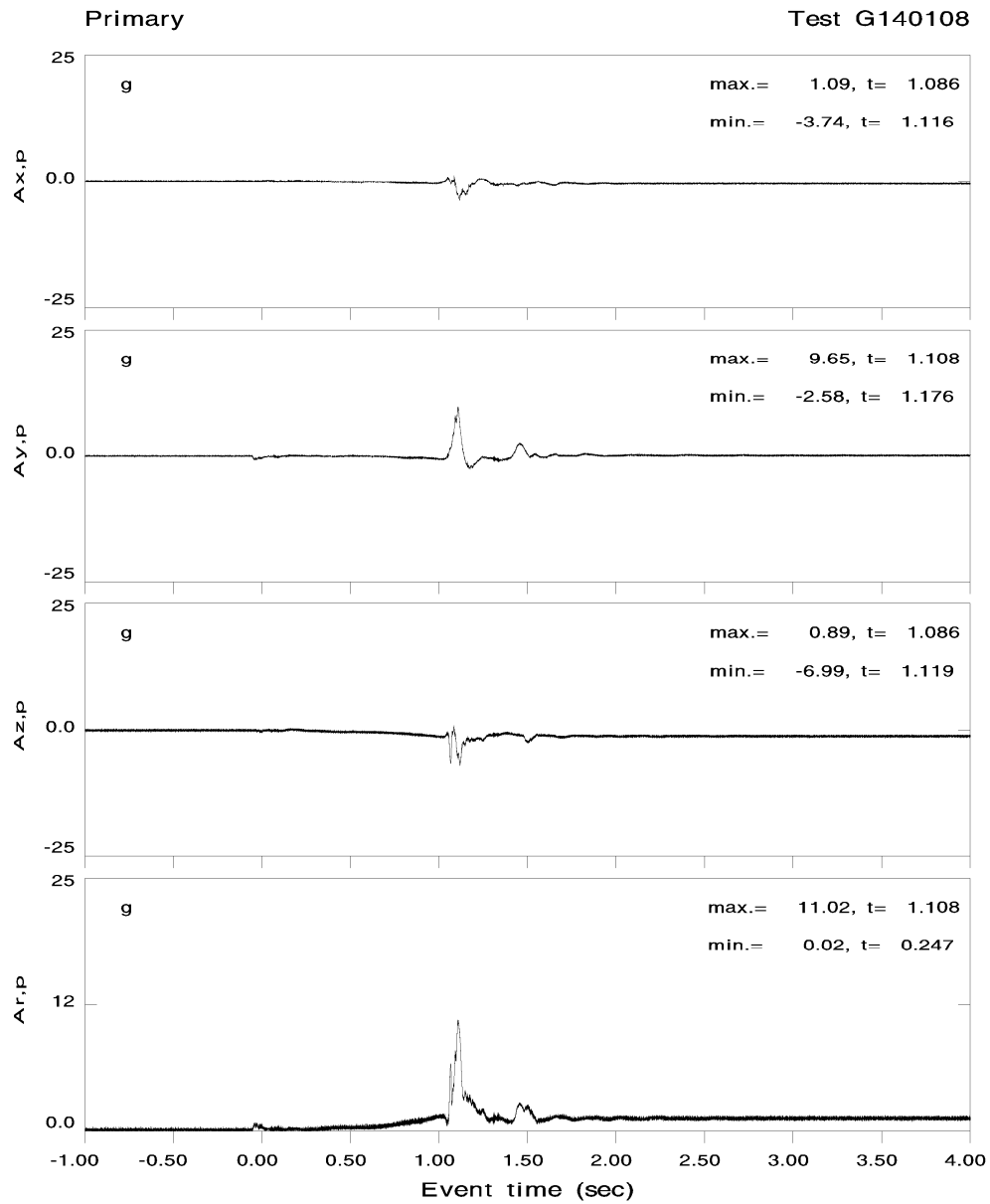


Primary

Test G140108

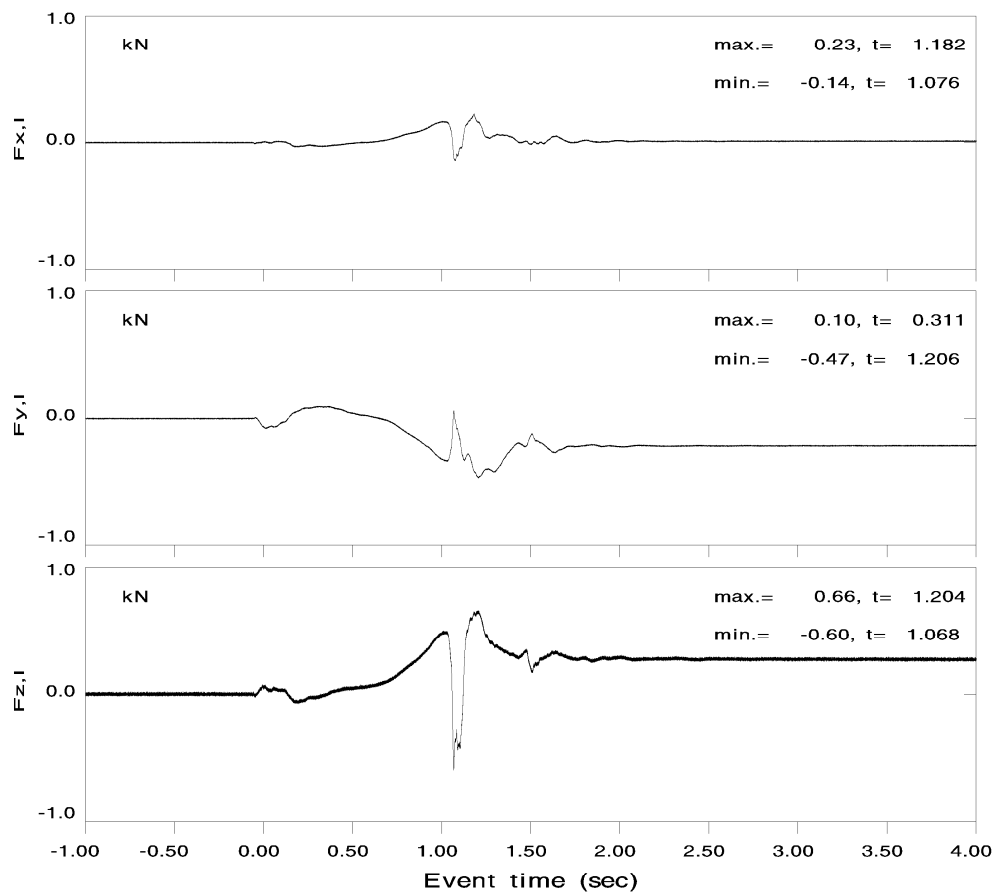






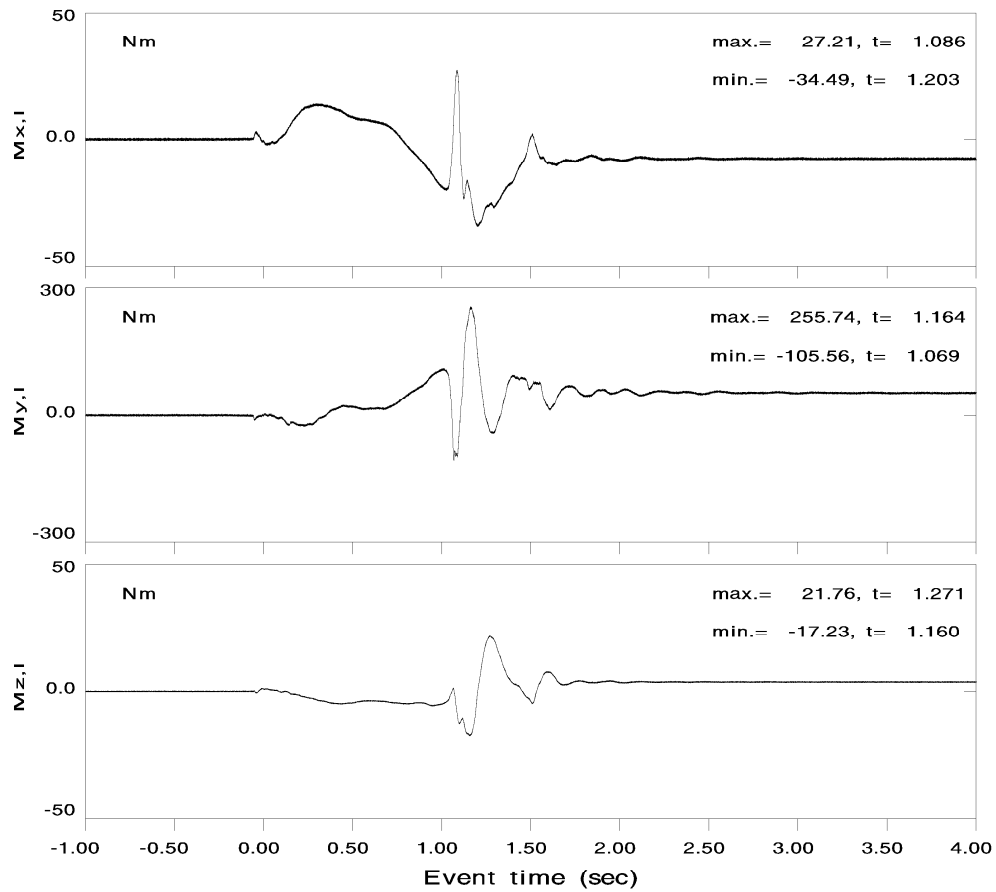
Primary

Test G140108

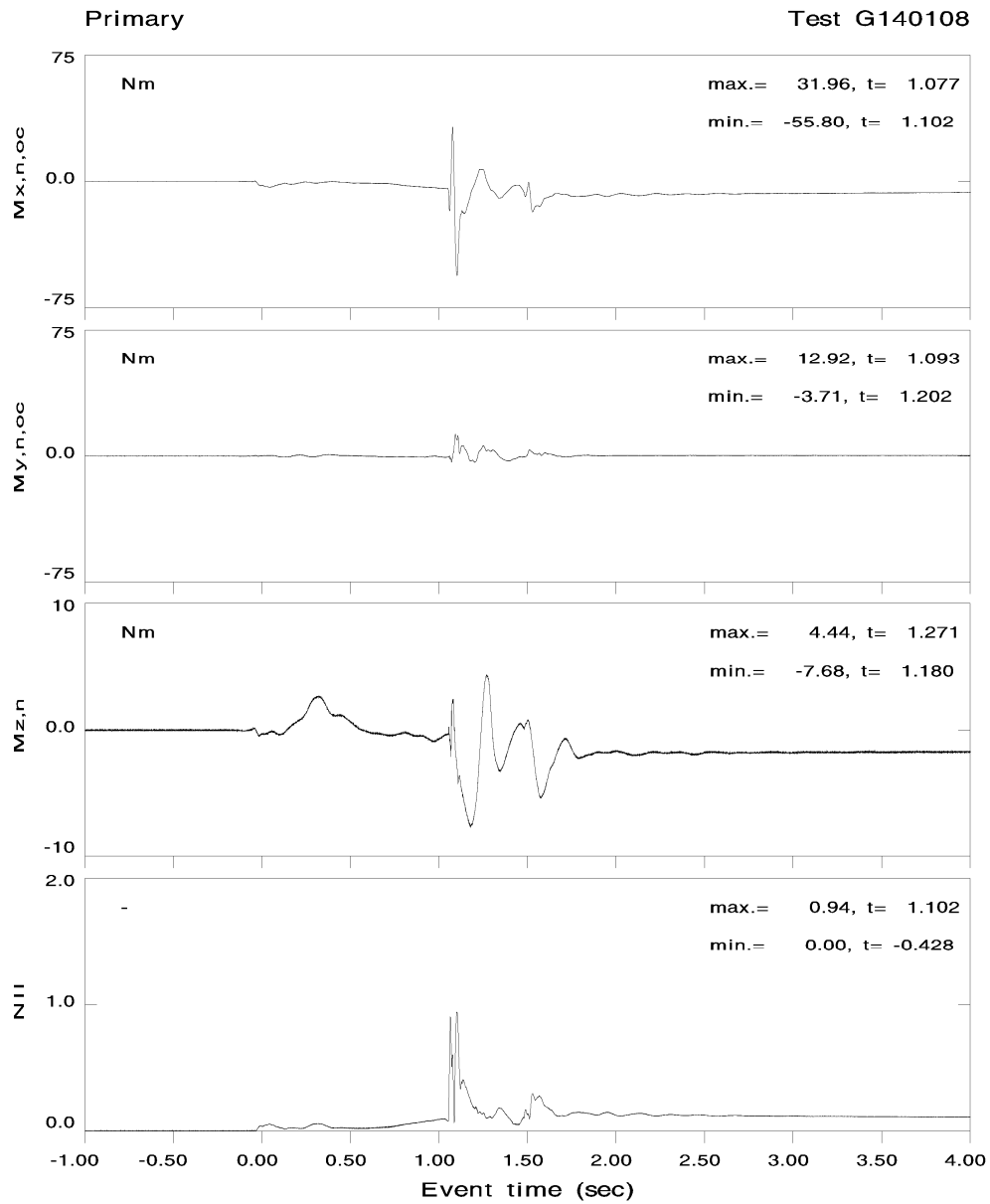


Primary

Test G140108



Page 19



2.13 Research & Development test latroll_00

ATV_Lateral_RHS_Roll_Low_Floor.ICE
Test Number : ATV_Lateral_RHS_Roll_Low_Floor
Analysis Window : Entire Run

Injury Cost Model input:

Number of AIS 3 Femur Fractures = 0
Number of AIS 2 Tibia Fractures = 0
Number of AIS 3 Tibia Fractures = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location = 1
Index for VCmax Location = 2
maximum Abdomen Penetration = 0.000
maximum GAMBIT = 0.310
Cmax = 8.120
VCmax = 0.000
HIC = 209.9
NII (2002 MATD Neck) = 1.9
Location of Cmax : upper sternum
Location of VCmax : lower sternum

Injury Cost Model output:

MAIS = 0.0
Total AIS = 0.0
Normalized Injury Cost = 0.002
Normalized Cost of Survival = 0.002
Normalized Cost of Dying = 0.000
Probability of Fatality = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity = 0.000
Risk of life threatening brain injury (%) = 0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.948	0.997	1.000	1.000	1.000	0
1	0.024	0.003	0.000	0.000	0.000	0
2	0.019	0.000	0.000	0.000	0.000	0
3	0.010	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.091	0.003	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.002	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

Test 12mar14_01, Primary

12mar14_01.rpt

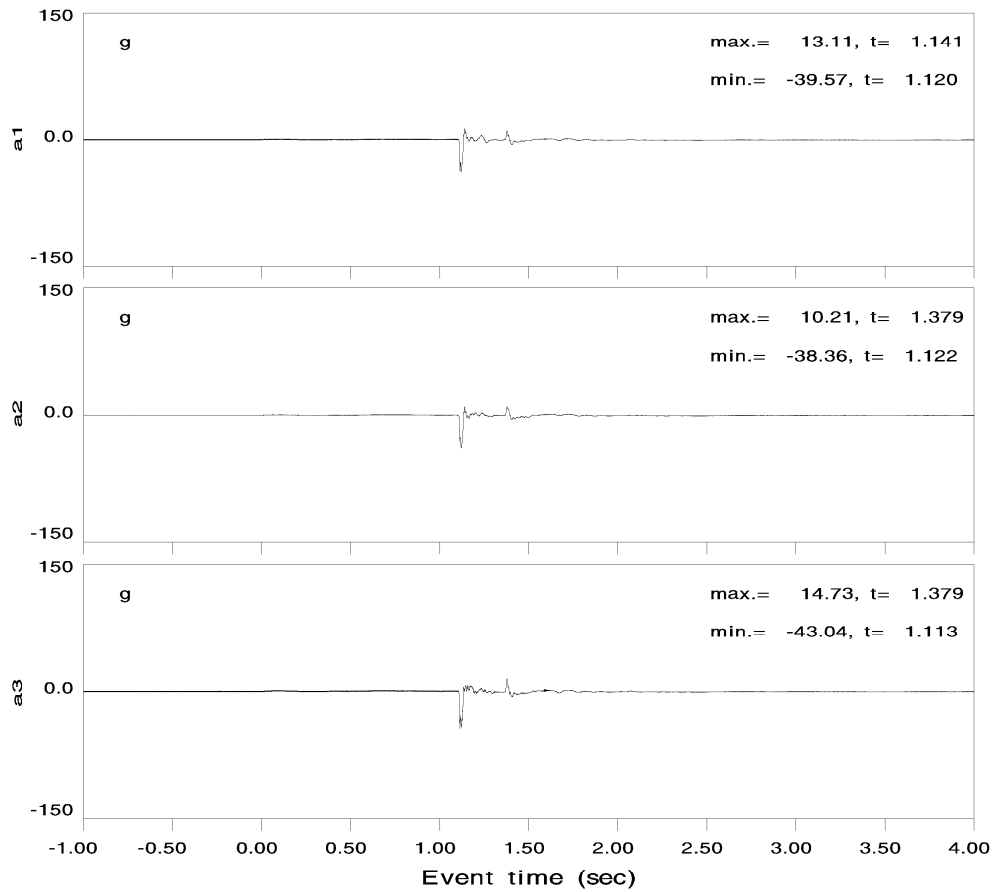
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	7.30 g	1.240	-8.42 g	1.166
Ay,c	10.11 g	1.228	-15.50 g	1.166
Az,c	23.69 g	1.168	-4.01 g	1.231
Ax,p	4.64 g	1.229	-8.30 g	1.170
Ay,p	14.91 g	1.170	-9.54 g	1.172
Az,p	8.88 g	1.230	-35.11 g	1.170
spare	0.00 -	3.115	0.00 -	1.176
spare	0.00 -	-0.893	-0.01 -	1.242
L,ur	0.03 mm	-0.565	-27.79 mm	1.240
L,lr	1.36 mm	1.133	-20.75 mm	1.241
a1	13.11 g	1.141	-39.57 g	1.120
a2	10.21 g	1.379	-38.36 g	1.122
a3	14.73 g	1.379	-43.04 g	1.113
a4	29.57 g	1.113	-8.36 g	1.426
a5	28.39 g	1.113	-6.97 g	1.413
a6	41.94 g	1.113	-9.31 g	1.158
Mx,l	39.43 Nm	1.170	-35.98 Nm	1.237
My,l	652.29 Nm	1.357	-199.95 Nm	1.125
Mz,l	16.90 Nm	2.203	-36.84 Nm	1.481
Fx,l	0.51 kN	1.863	-1.33 kN	1.189
Fy,l	0.89 kN	1.169	-0.31 kN	1.203
Fz,l	1.17 kN	1.230	-1.74 kN	1.187
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.01 -	2.821	0.00 -	-0.377
a7	48.88 g	1.114	-6.43 g	1.246
a8	37.20 g	1.114	-6.50 g	1.245
a9	53.57 g	1.114	-8.65 g	1.188
Fz,uf,r	0.38 kN	1.388	-0.34 kN	1.229
Mx,uf,r	22.51 Nm	1.666	-38.07 Nm	1.449
My,uf,r	78.78 Nm	1.309	-35.28 Nm	1.191
Mz,uf,r	35.71 Nm	1.206	-31.44 Nm	1.434
Fz,uf,l	1.42 kN	1.228	-0.14 kN	1.173
Mx,uf,l	49.63 Nm	1.460	-58.22 Nm	1.222
My,uf,l	271.14 Nm	1.223	-23.89 Nm	1.173
Mz,uf,l	34.53 Nm	1.521	-13.46 Nm	1.256
Fx,n	0.96 kN	1.127	-0.21 kN	1.161
Fy,n	1.13 kN	1.132	-0.07 kN	1.172
Fz,n	0.50 kN	1.454	-4.07 kN	1.123
Mx,n	27.19 Nm	1.163	-75.67 Nm	1.132
My,n	16.05 Nm	1.271	-24.14 Nm	1.145
Mz,n	3.30 Nm	1.667	-20.94 Nm	1.141
L,ul	14.02 mm	1.176	-0.03 mm	-0.299
L,ll	18.23 mm	1.186	-0.03 mm	-0.266
Ax,h	14.49 g	1.114	-10.50 g	1.381
Ay,h	9.91 g	1.141	-44.71 g	1.114
Az,h	48.91 g	1.114	-6.43 g	1.246
ax,h	2.19 krad/s**2	1.160	-3.69 krad/s**2	1.113
ay,h	2.05 krad/s**2	1.115	-1.25 krad/s**2	1.134
az,h	1.68 krad/s**2	1.114	-0.82 krad/s**2	1.128
Ar,h	66.84 g	1.114	0.01 g	-0.799
ar,h	3.82 krad/s**2	1.113	0.00 krad/s**2	3.760
G	0.31 -	1.114	0.00 -	-0.948
HIC	205.22	1.130	----	1.111
Fxy,n	1.45 kN	1.132	0.00 kN	-0.431
Dx,us	1.77 mm	1.155	-14.81 mm	1.237
Dy,us	27.44 mm	1.242	-0.03 mm	-0.078

		12mar14_01.rpt			
Cus	7.90 %	1.237	-0.94 %	1.155	
Vus	0.37 m/s	1.268	-0.94 m/s	1.222	
VCus	0.05 m/s	1.225	-0.02 m/s	1.246	
Dx,ls	5.64 mm	1.129	-7.21 mm	1.234	
Dy,ls	25.25 mm	1.242	-0.03 mm	-0.970	
Cl,s	3.85 %	1.234	-3.01 %	1.129	
Vls	0.36 m/s	1.121	-0.46 m/s	1.222	
VCl,s	0.01 m/s	1.224	-0.01 m/s	1.139	
Mxy,uf,r	79.28 Nm	1.308	0.00 Nm	-0.195	
Mxy,uf,l	277.20 Nm	1.223	0.00 Nm	-0.873	
Mx,n,oc	26.98 Nm	1.163	-55.67 Nm	1.132	
My,n,oc	14.35 Nm	1.272	-26.53 Nm	1.145	
NII	1.93 -	1.123	0.00 -	-0.723	
Ar,p	36.34 g	1.170	0.02 g	-0.558	
Ar,c	26.11 g	1.168	0.00 g	-0.498	

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

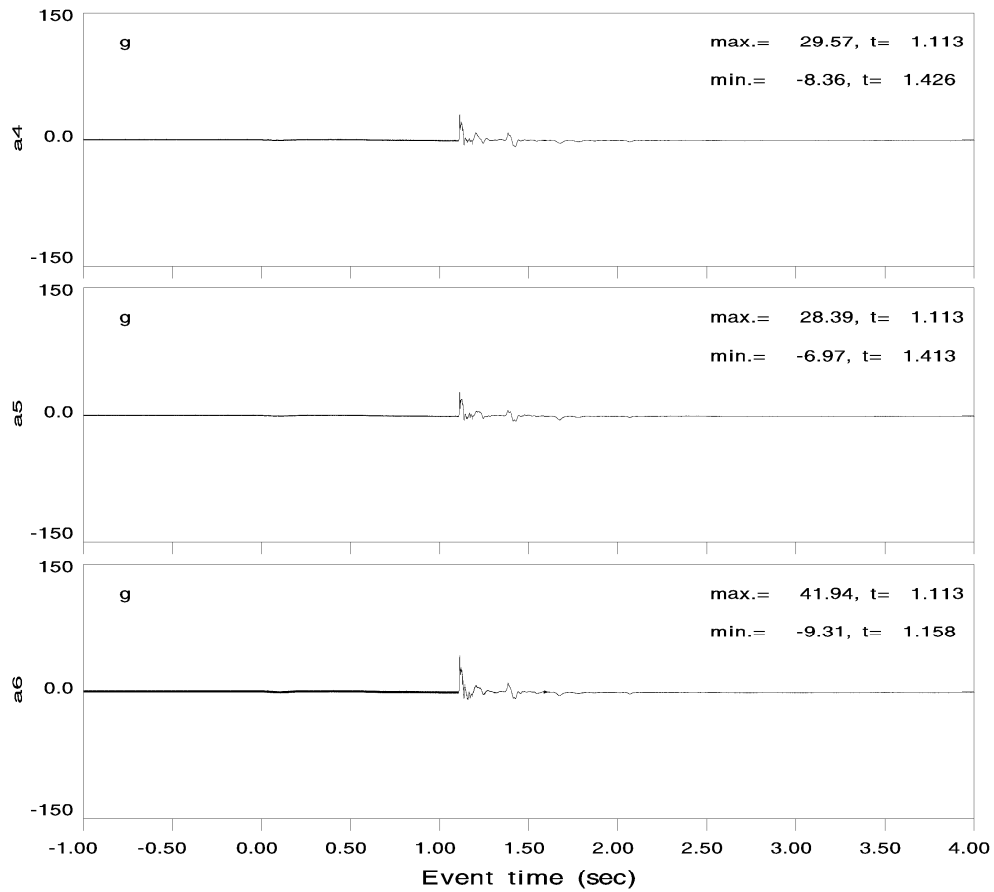
Test 12mar14_01



Page 1

Primary

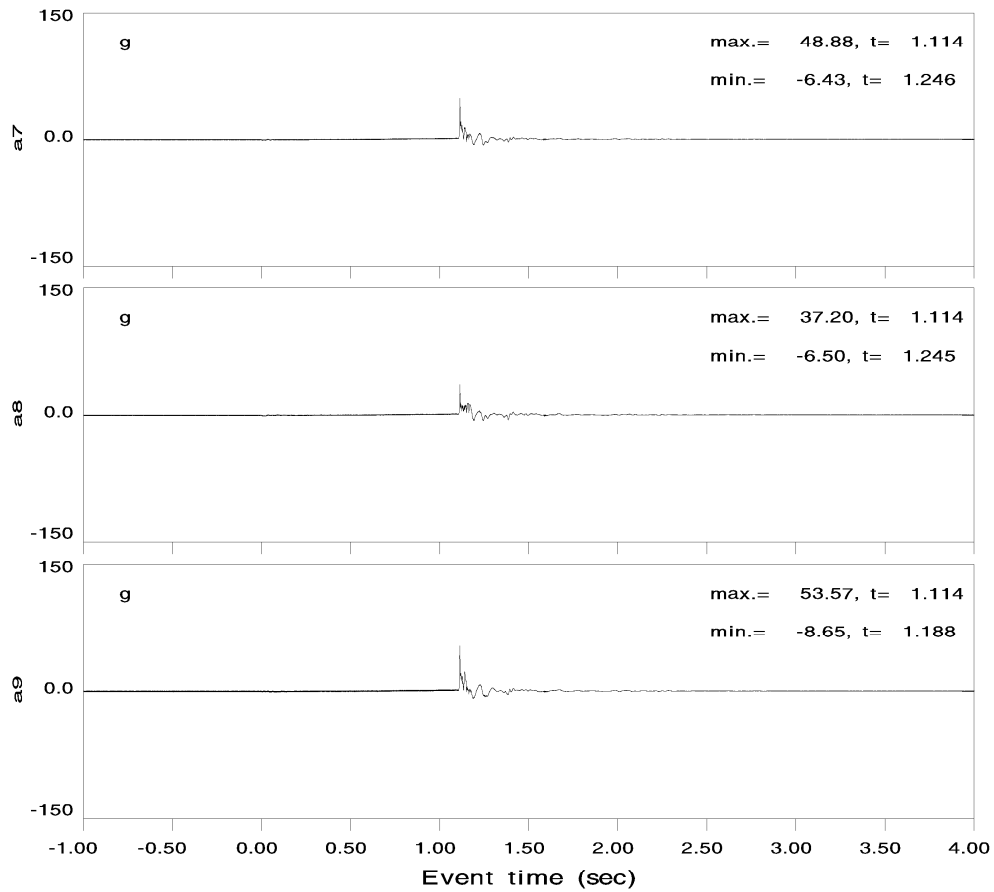
Test 12mar14_01



Page 2

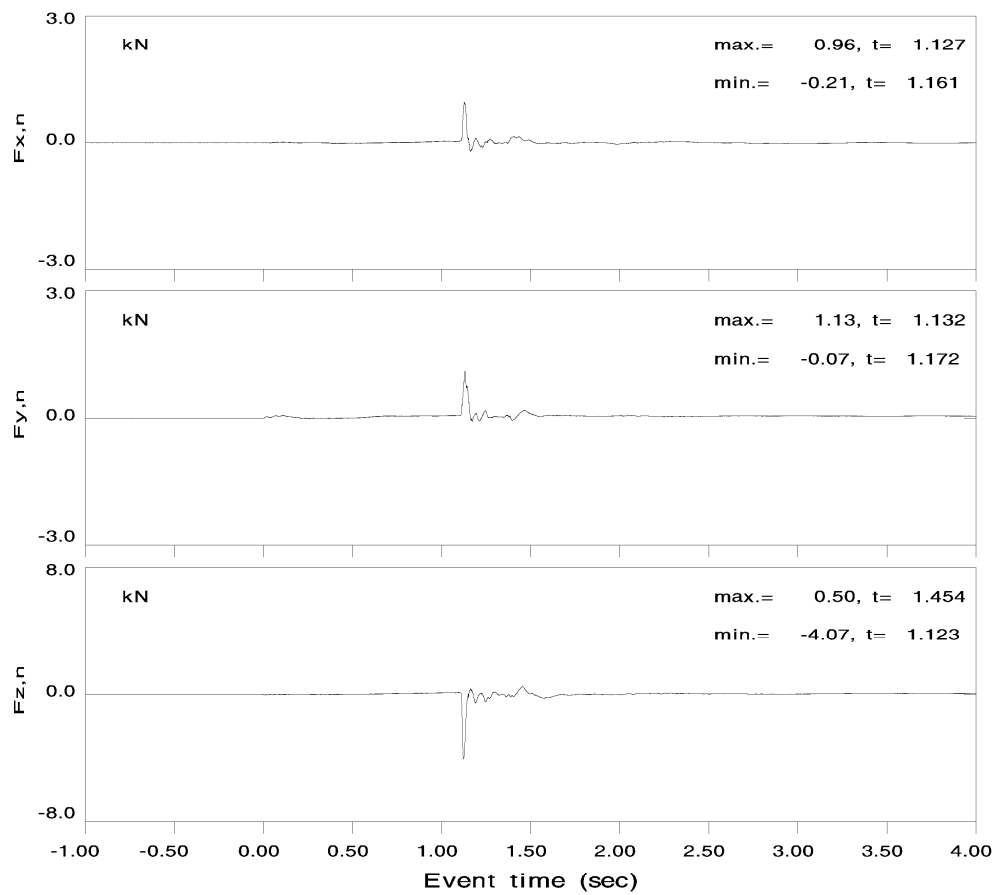
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Test 12mar14_01



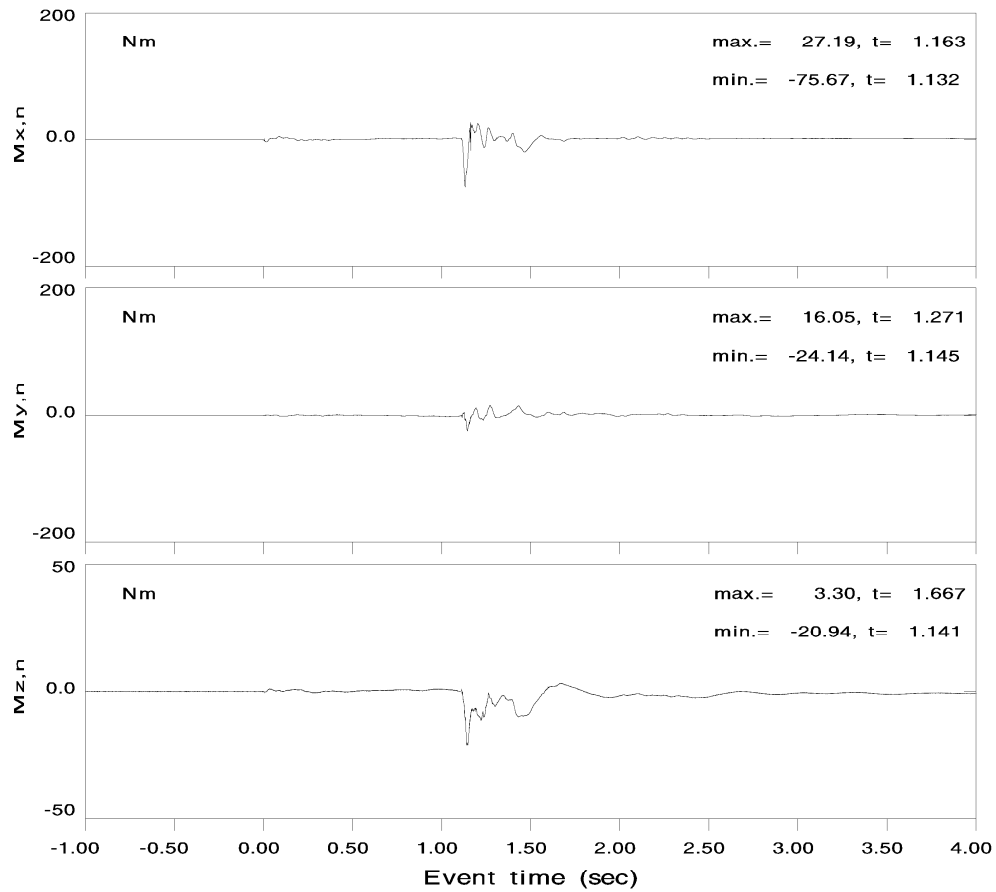
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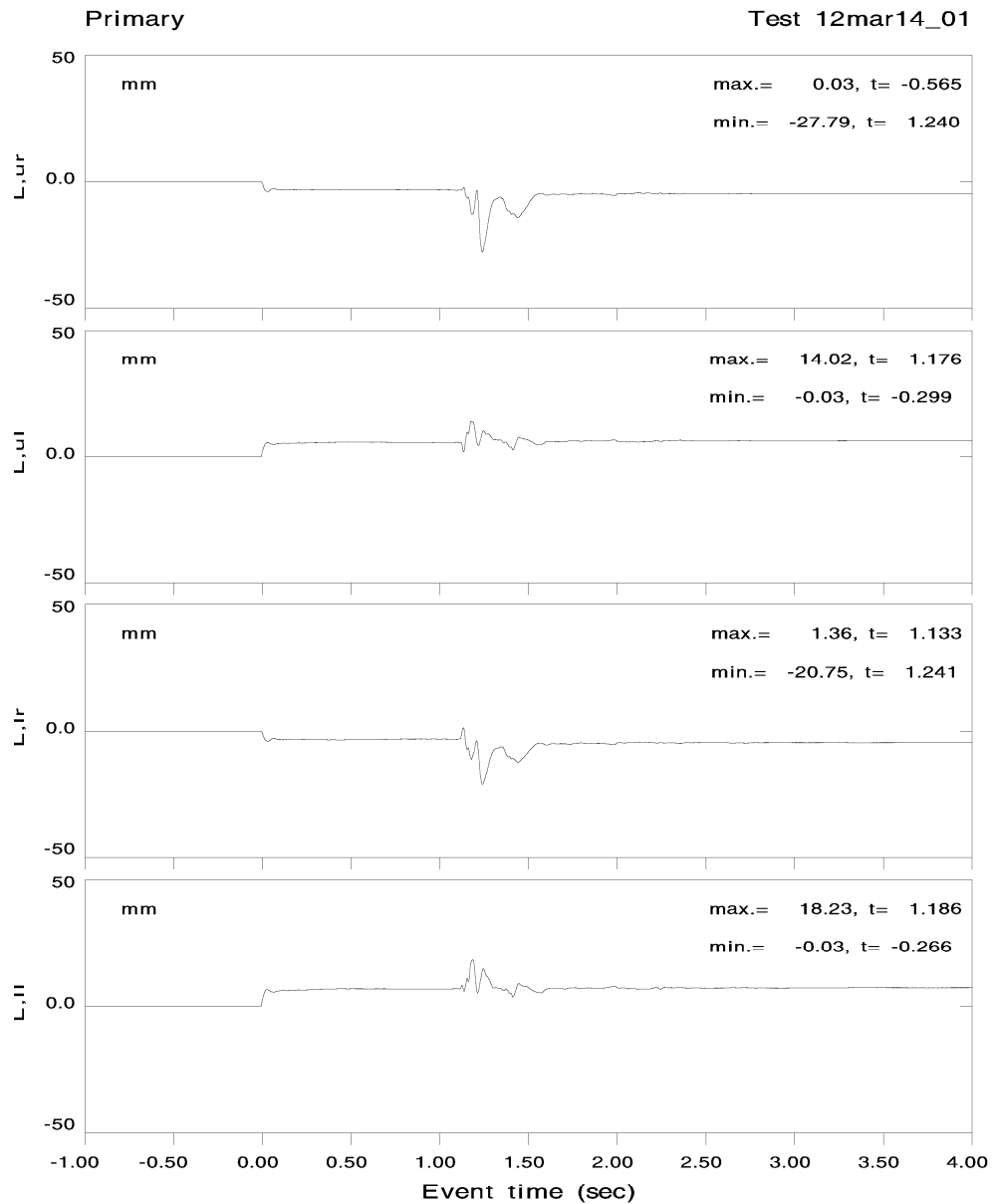
Test 12mar14_01

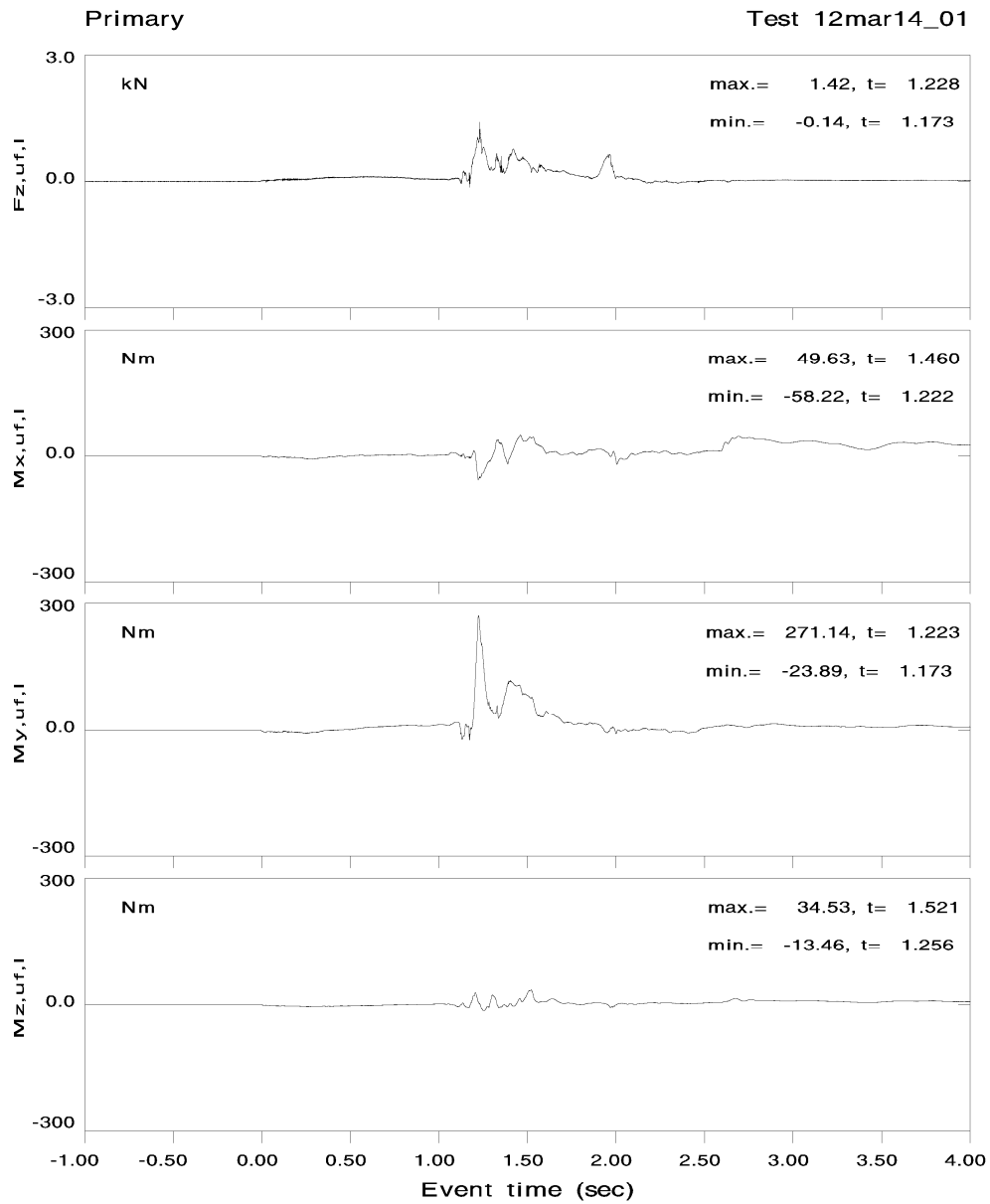


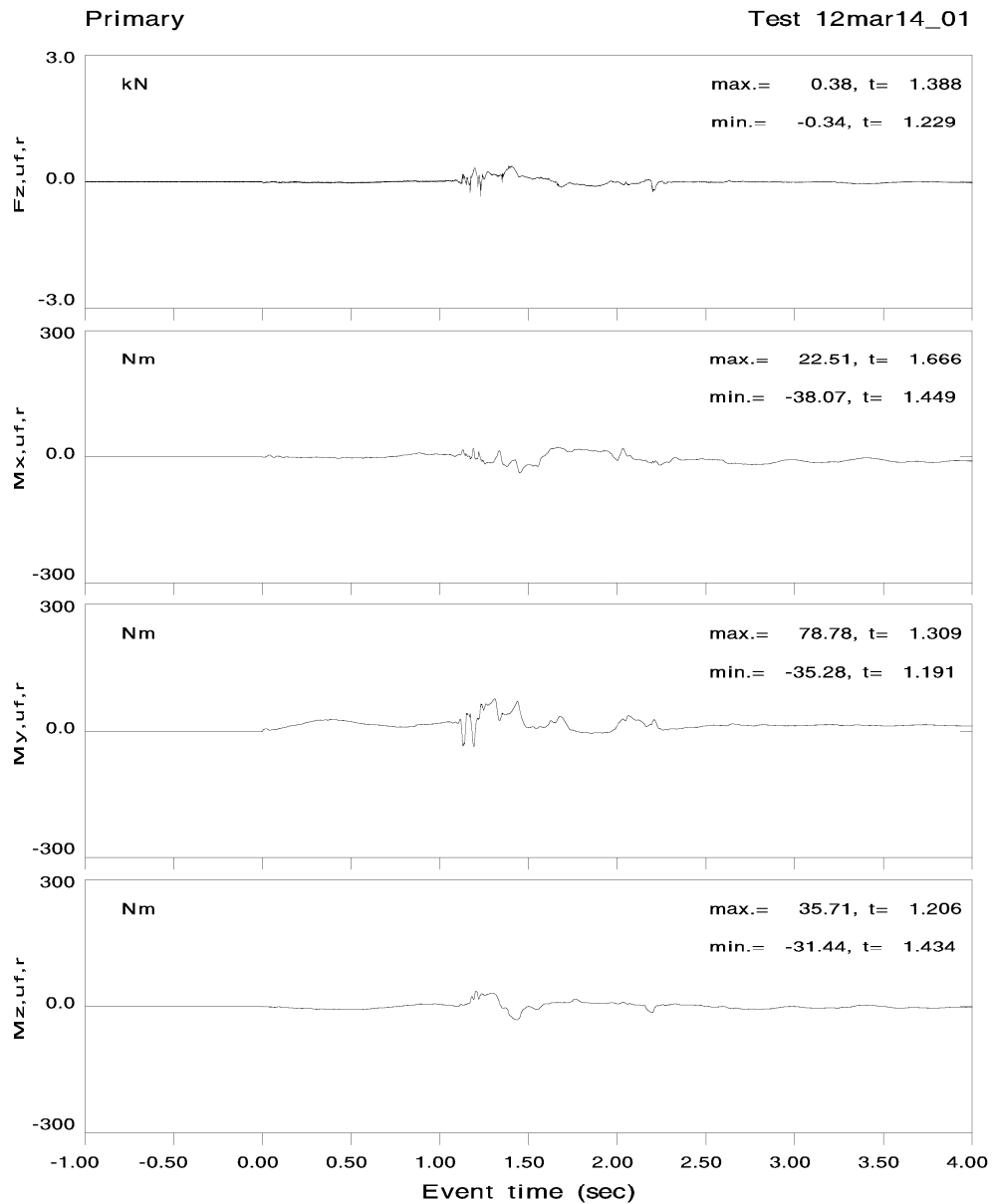
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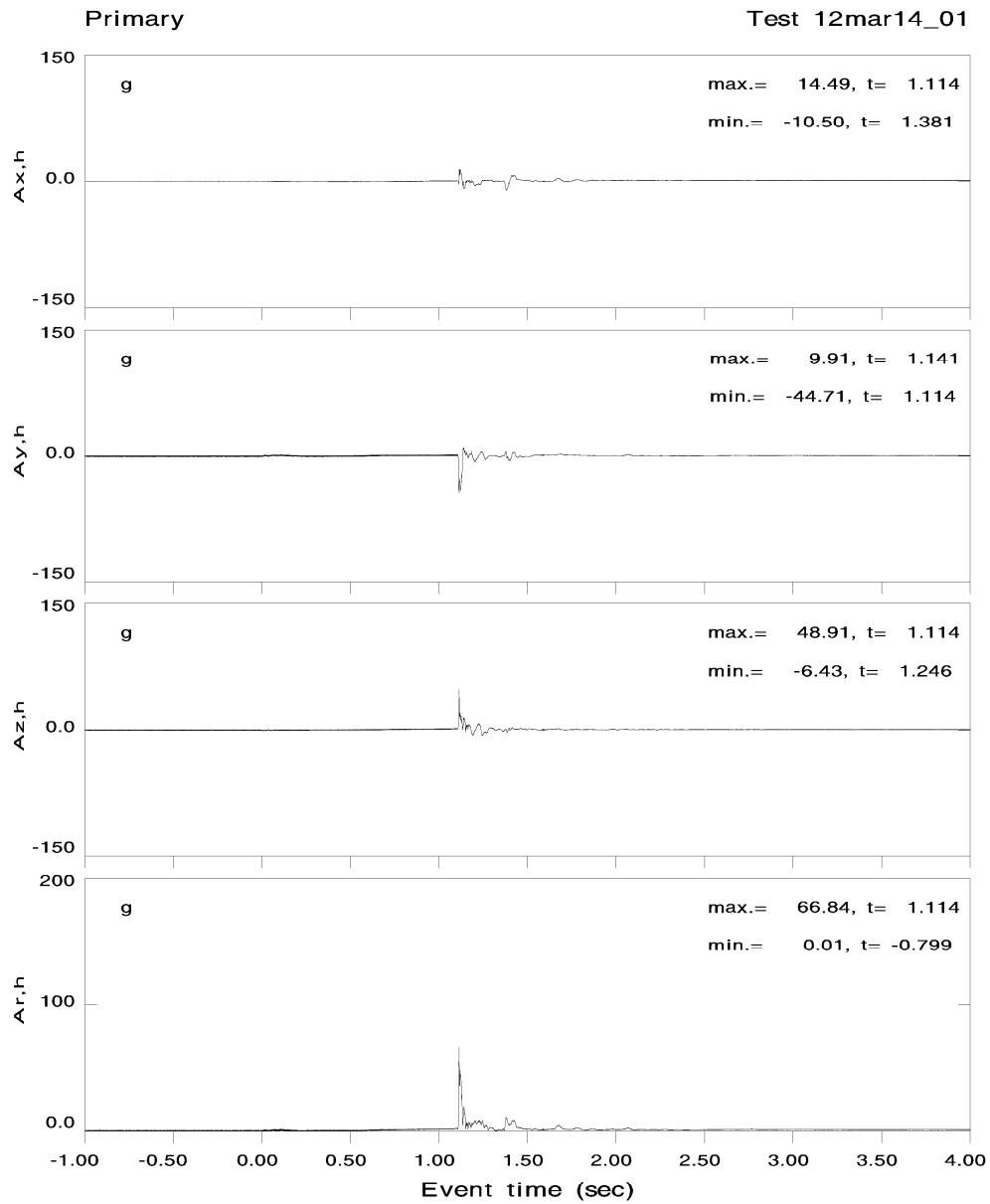
Test 12mar14_01

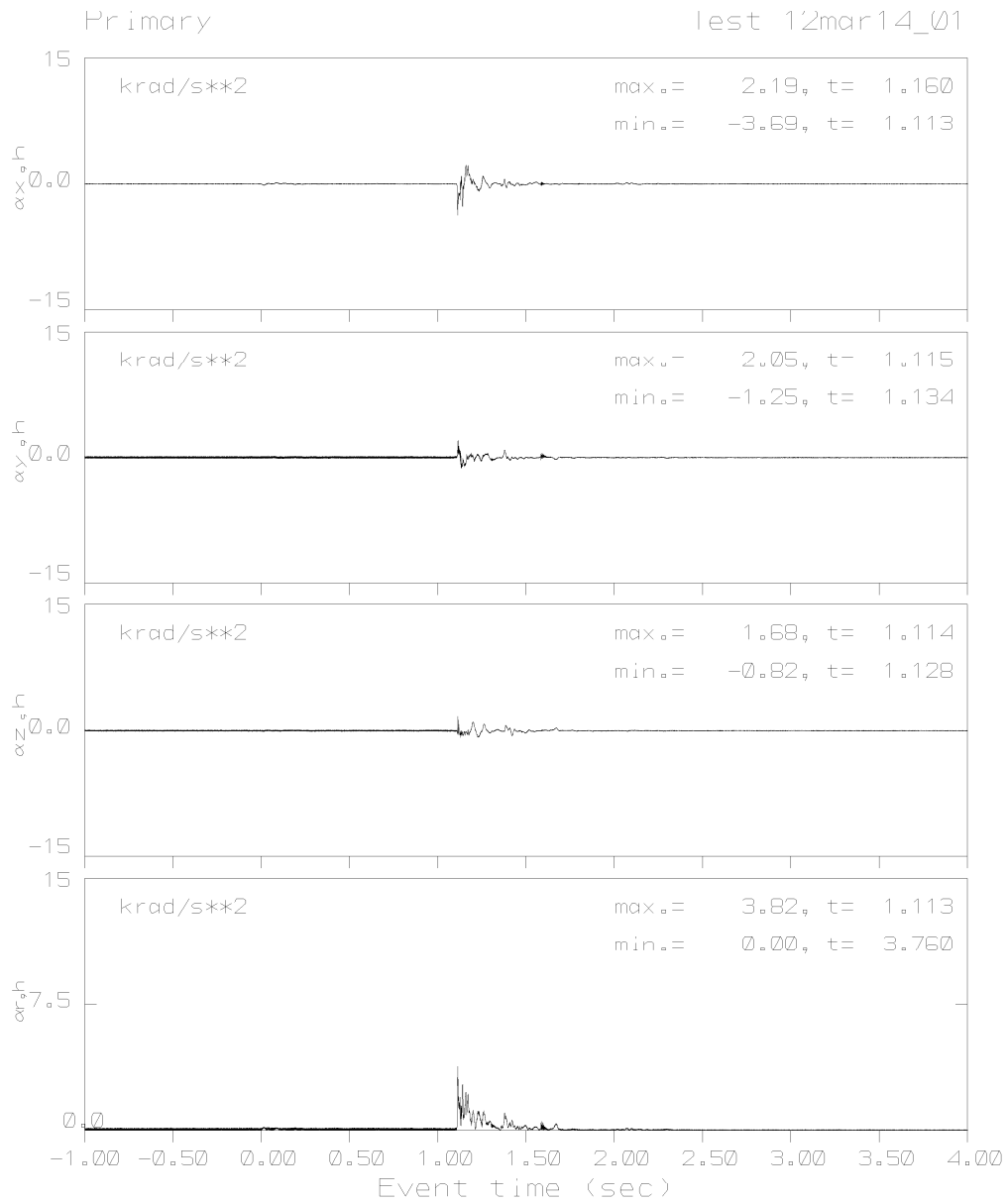


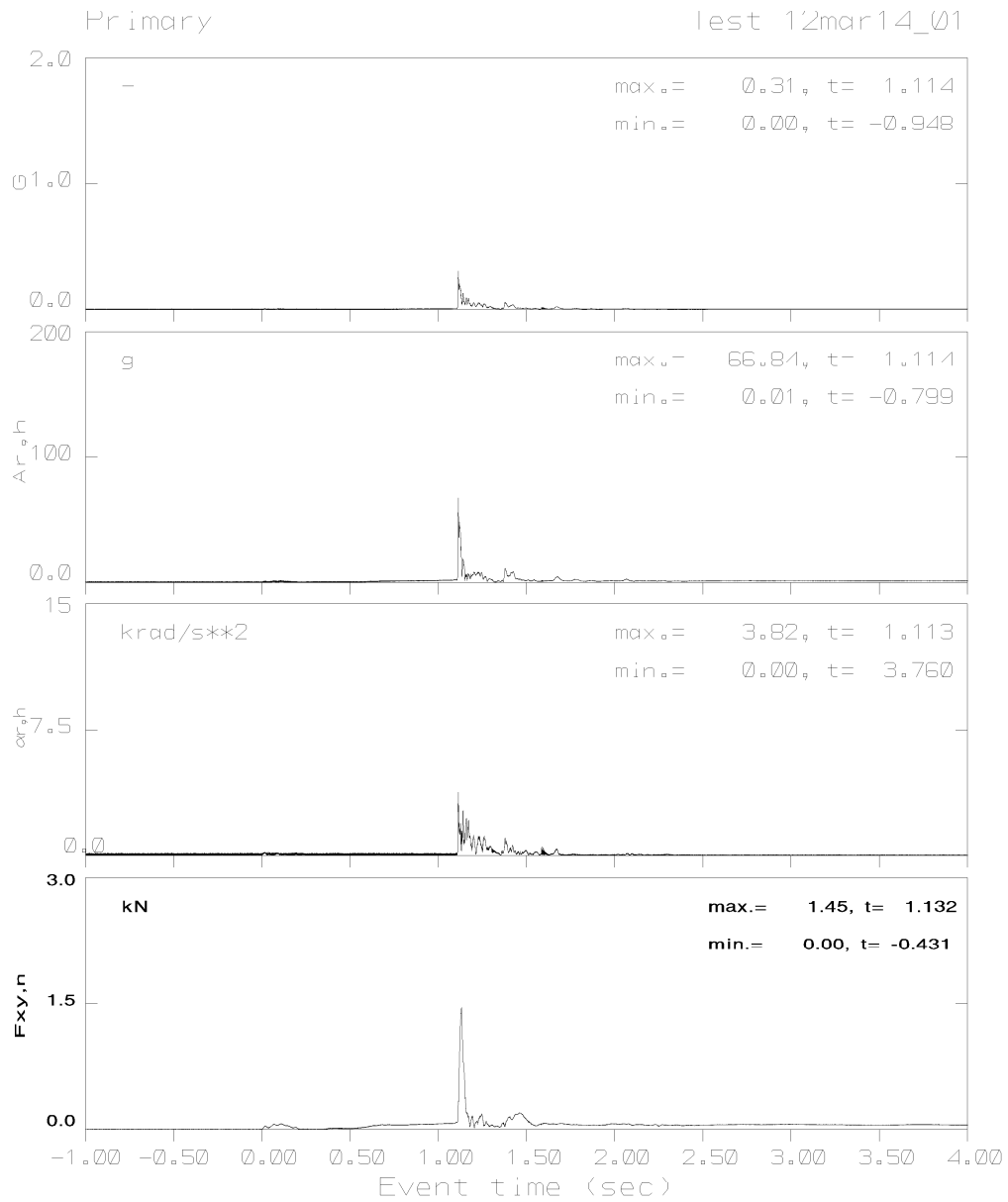




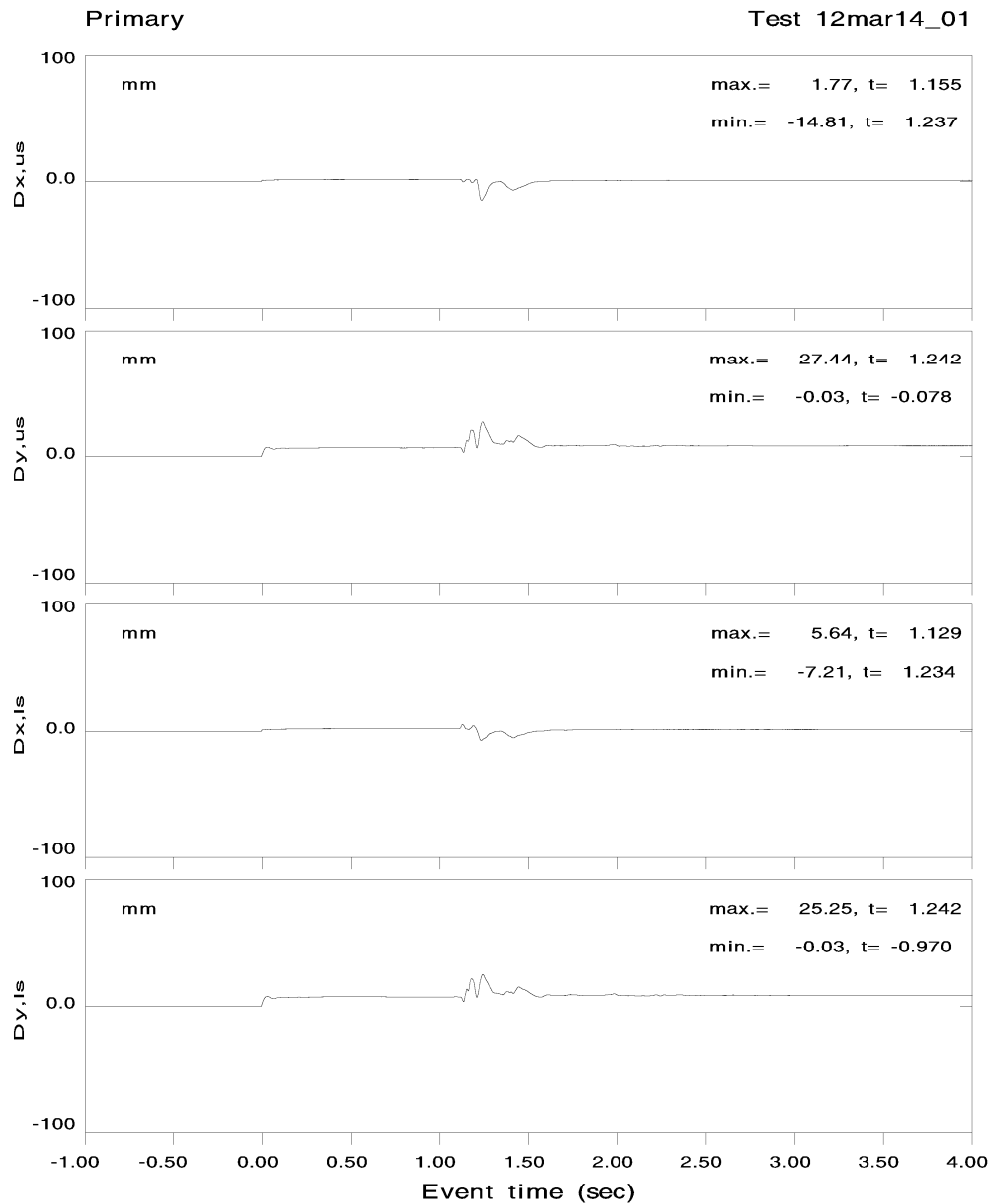






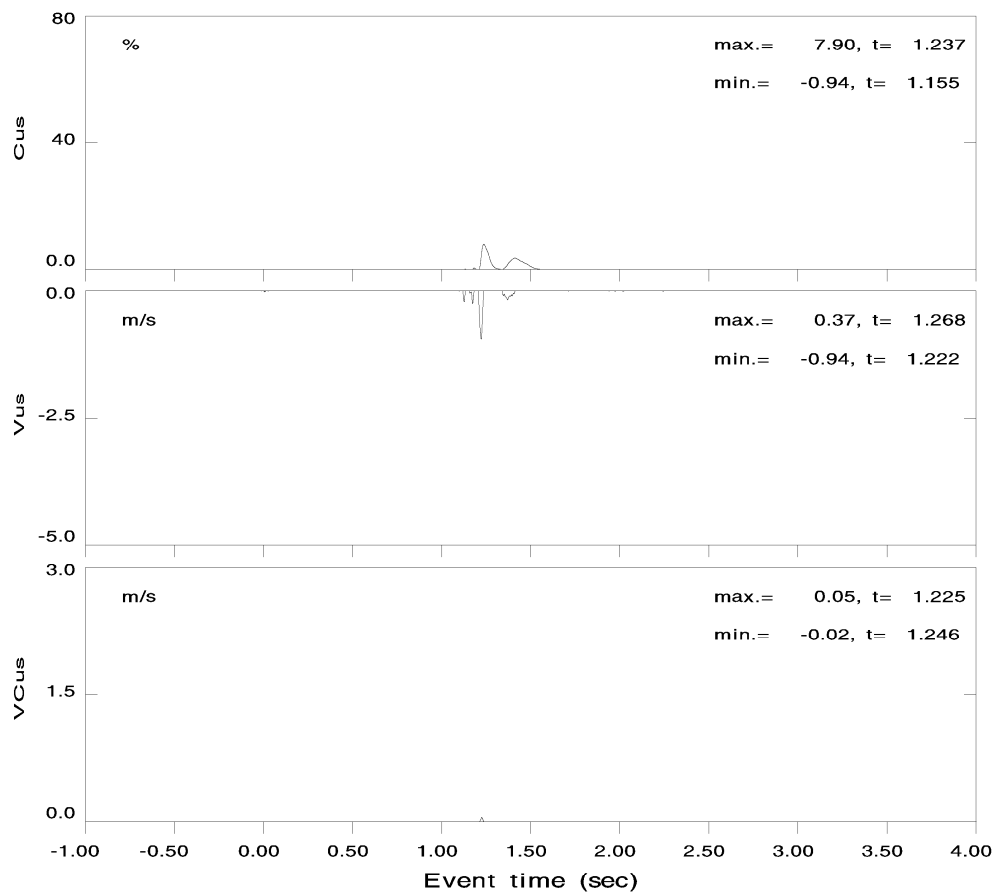


Page 11



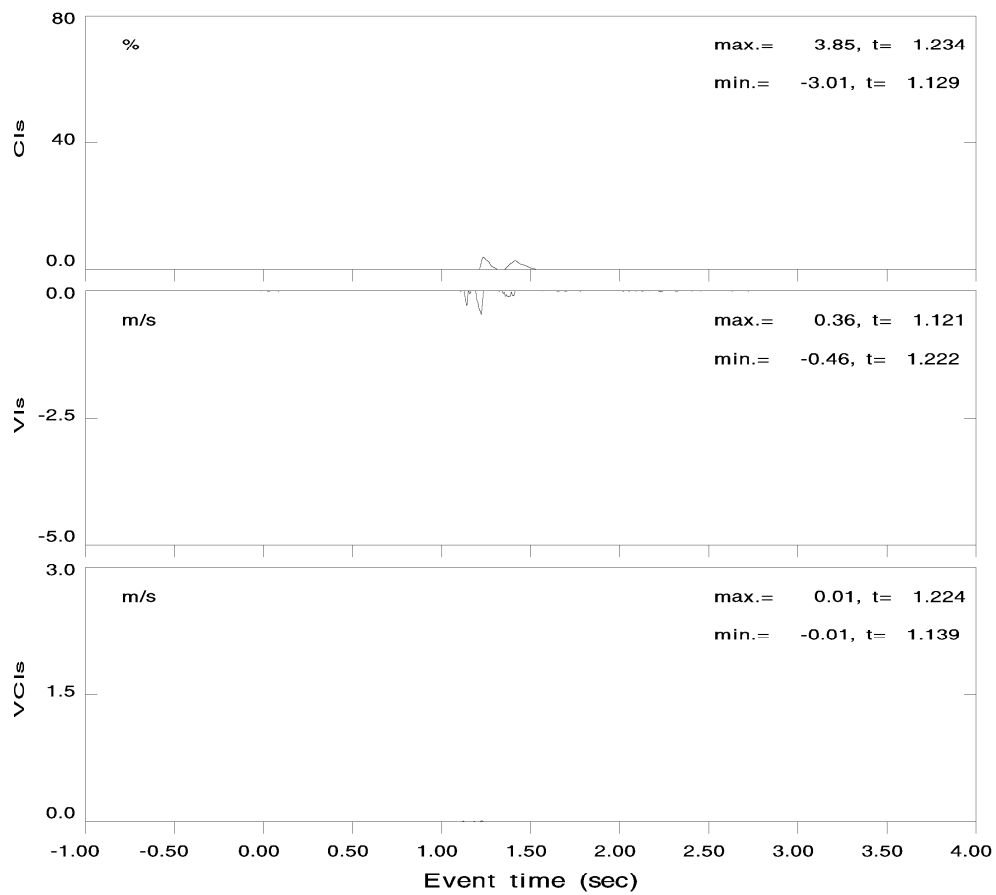
Primary

Test 12mar14_01



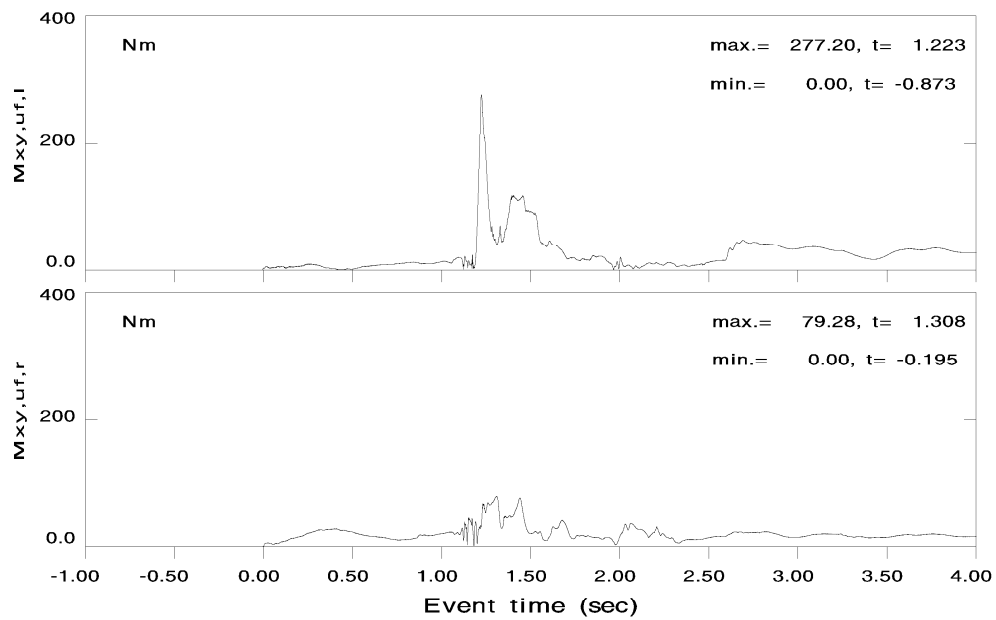
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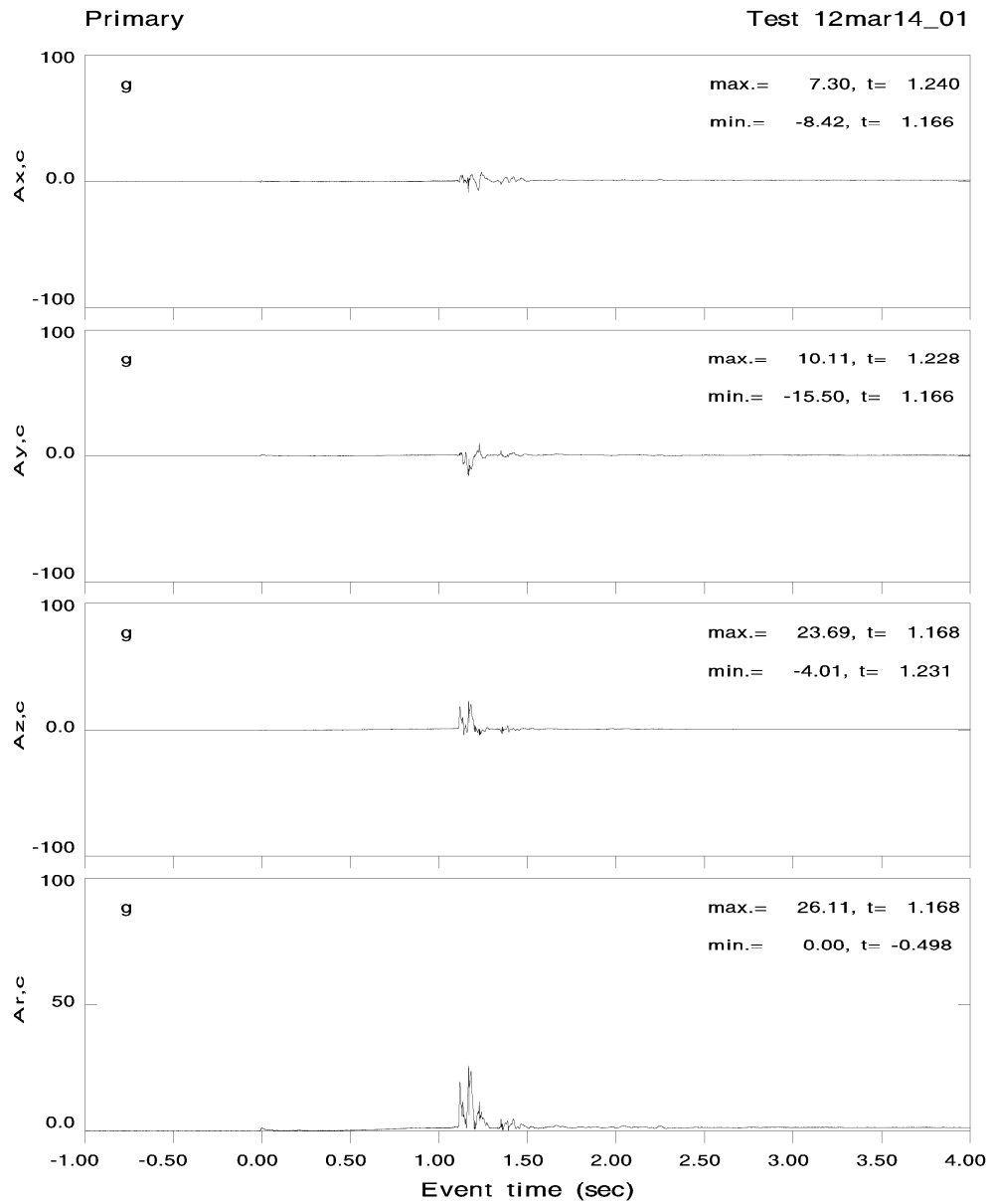
Test 12mar14_01

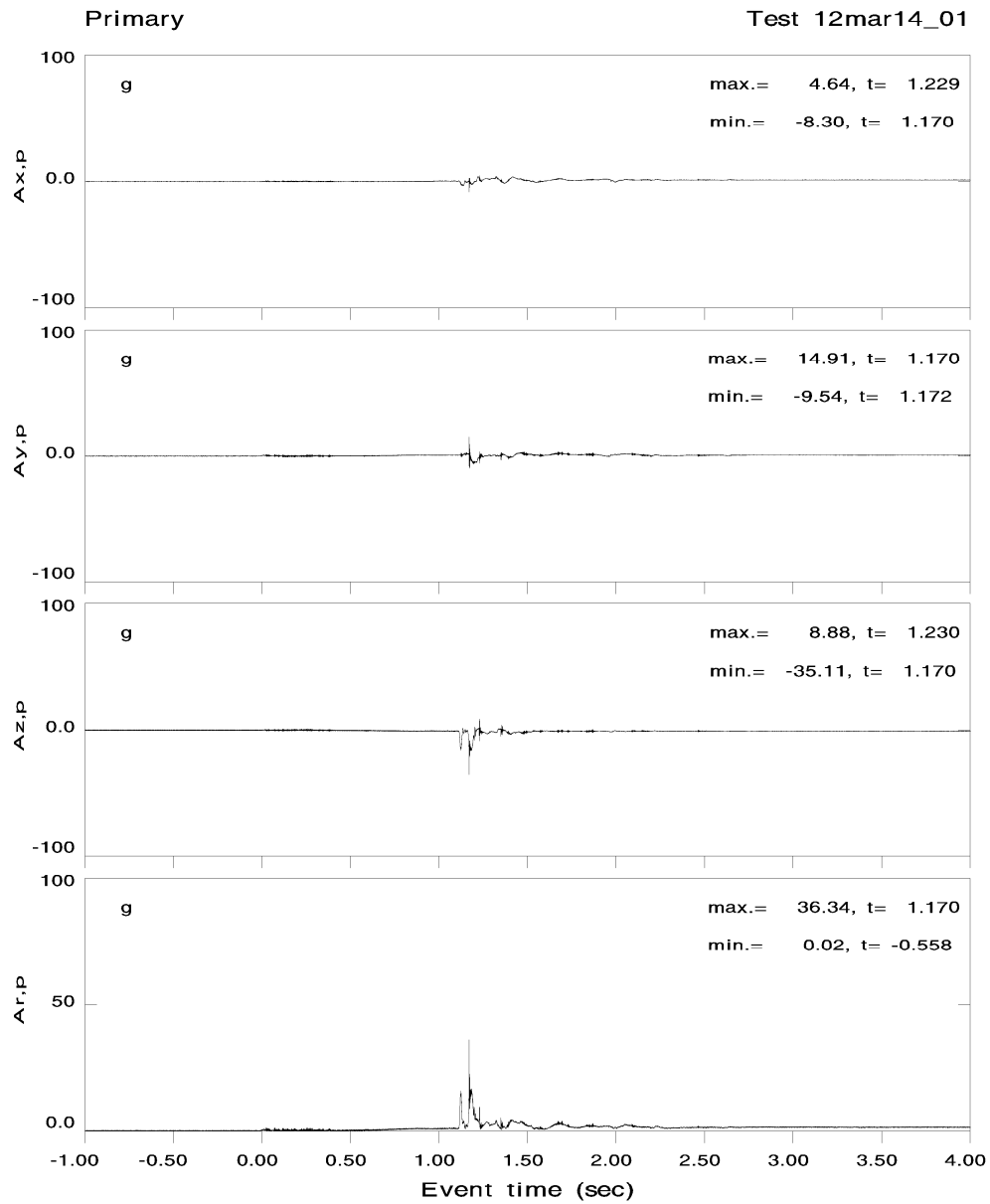


Primary

Test 12mar14_01

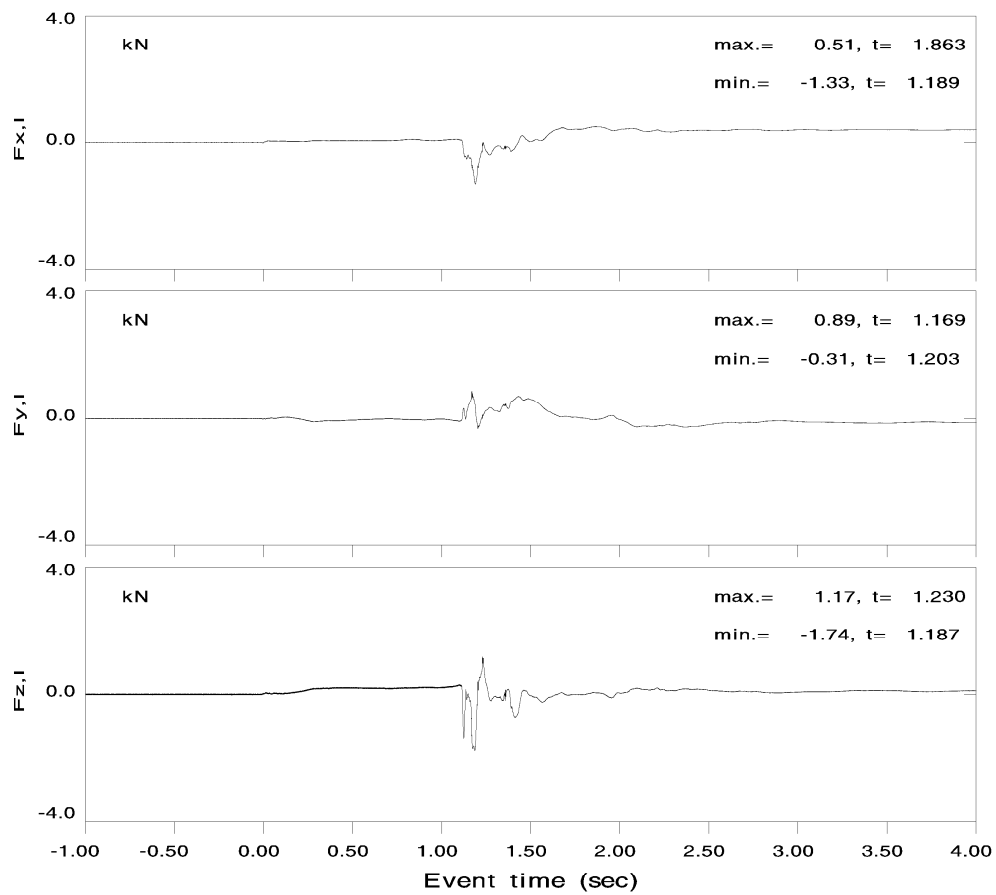






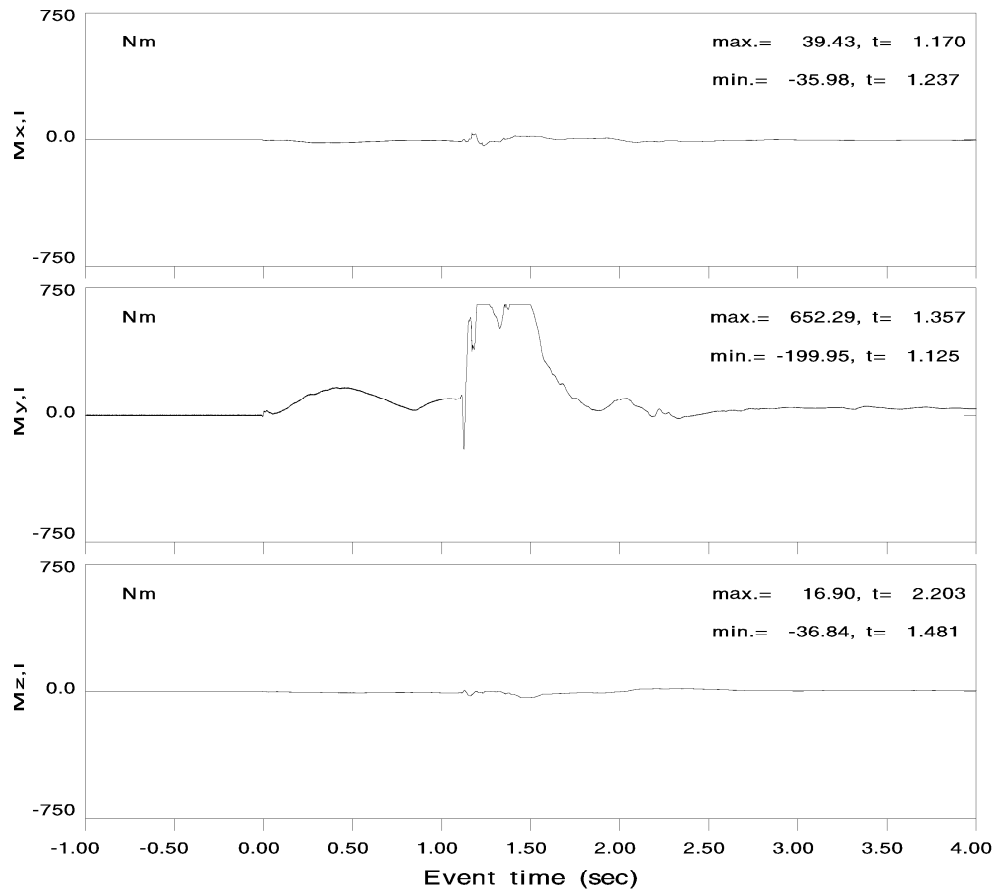
Primary

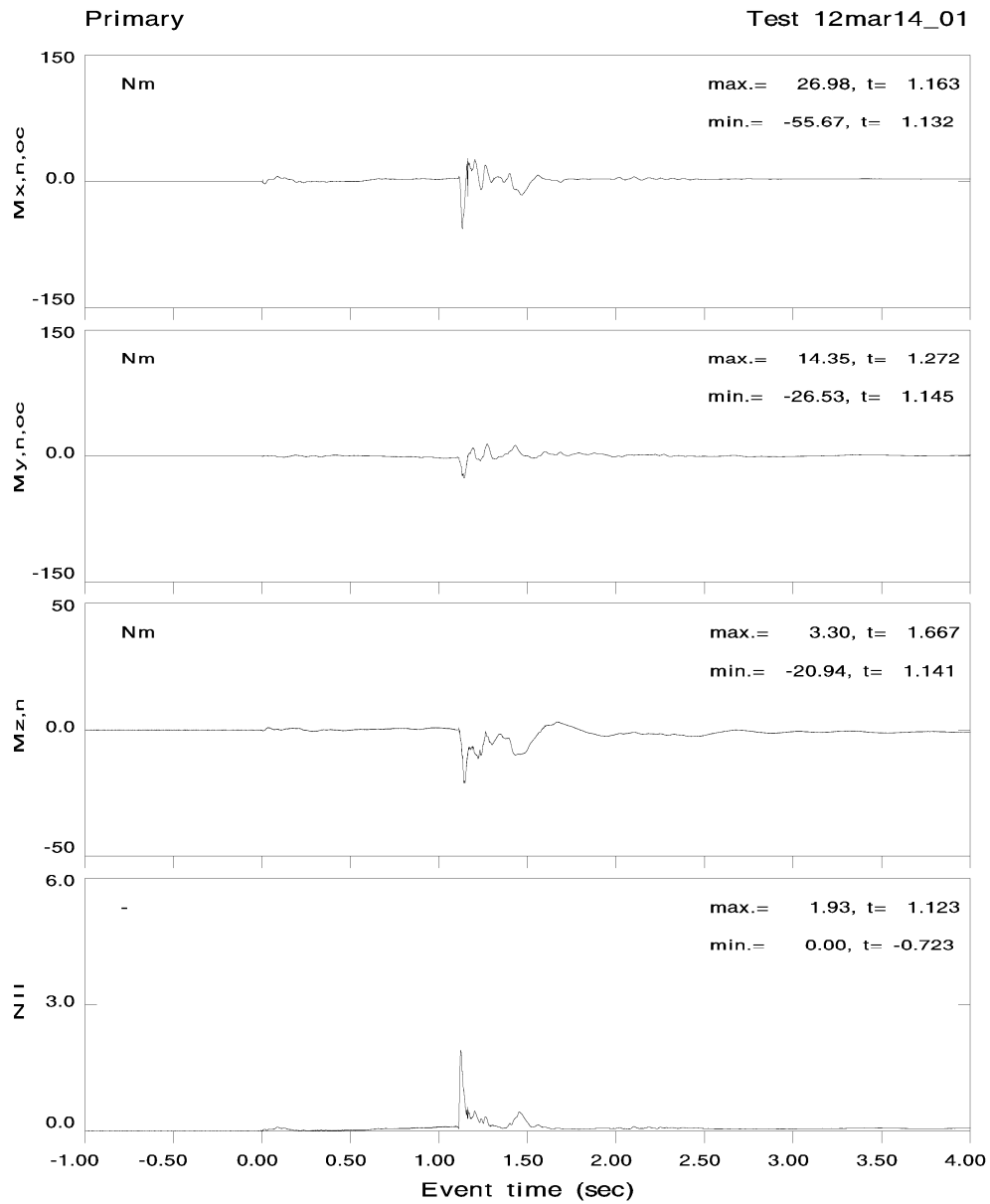
Test 12mar14_01



Primary

Test 12mar14_01





2.14 Research & Development test latroll_01

ATV_Lateral_RHS_Roll_Raised_Floor.ICE
Test Number : latroll_01
Analysis Window : Entire Run

Injury Cost Model input:

Number of AIS 3 Femur Fractures = 0
Number of AIS 2 Tibia Fractures = 0
Number of AIS 3 Tibia Fractures = 0
Number of AIS 2 Knee Dislocation Injuries = 1
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location = 1
Index for VCmax Location = 2
maximum Abdomen Penetration = 0.000
maximum GAMBIT = 0.760
Cmax = 5.740
VCmax = 0.000
HIC = 621.8
NII (Hybrid III Neck [minus steel cable]) = 2.7
Location of Cmax : upper sternum
Location of VCmax : lower sternum

Injury Cost Model output:

MAIS = 2.0
Total AIS = 4.0
Normalized Injury Cost = 0.160
Normalized Cost of Survival = 0.108
Normalized Cost of Dying = 0.051
Probability of Fatality = 0.051
Probability of Fatality due to non AIS 6 injuries = 0.025
Probability of Fatality due AIS 6 injuries = 0.026
Permanent Partial Incapacity = 0.150
Risk of life threatening brain injury (%) = 3.2

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.255	0.966	1.000	1.000	0.000	0
1	0.236	0.031	0.000	0.000	0.000	0
2	0.353	0.003	0.000	0.000	1.000	1
3	0.059	0.000	0.000	0.000	0.000	0
4	0.059	0.000	0.000	0.000	0.000	0
5	0.011	0.000	0.000	0.000	0.000	0
6	0.026	0.000	0.000	0.000	0.000	0
PAIS	1.568	0.038	0.000	0.000	2.000	
PAIS	2	0	0	0	2	
Body Region NPIC	0.080	0.000	0.000	0.000	0.000 0.120 0.000 0.120	Femur Knee Tibia Leg

Test 1atroll_01, Primary		1atroll_01.rpt		
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	6.92 g	1.413	-10.91 g	1.442
Ay,c	4.95 g	1.473	-25.59 g	1.439
Az,c	41.92 g	1.412	-11.91 g	1.419
Ax,p	4.56 g	1.528	-20.99 g	1.445
Ay,p	48.42 g	1.445	-19.43 g	1.447
Az,p	9.01 g	1.427	-66.57 g	1.445
spare	0.00 -	0.384	-0.01 -	1.447
spare	0.00 -	1.447	0.00 -	1.496
L,ur	3.54 mm	1.487	-14.65 mm	1.674
L,lr	4.71 mm	1.487	-13.52 mm	1.677
a1	11.25 g	1.425	-92.27 g	1.409
a2	11.87 g	1.427	-82.78 g	1.410
a3	14.54 g	1.554	-118.64 g	1.409
a4	89.27 g	1.409	-10.13 g	1.423
a5	75.30 g	1.409	-10.47 g	1.420
a6	128.29 g	1.409	-14.15 g	1.420
Mx,l	91.48 Nm	1.467	-33.69 Nm	1.630
My,l	654.73 Nm	1.603	-463.65 Nm	1.418
Mz,l	95.06 Nm	1.635	-4.08 Nm	1.431
Fx,l	1.07 kN	2.805	-0.82 kN	1.464
Fy,l	0.74 kN	1.556	-1.07 kN	1.480
Fz,l	1.23 kN	1.525	-2.24 kN	1.417
spare	0.00 -	4.000	0.00 -	4.000
spare	0.02 -	1.446	-0.07 -	1.449
spare	0.01 -	1.450	0.00 -	3.963
spare	0.00 -	1.617	0.00 -	1.235
spare	0.00 -	4.000	0.00 -	4.000
spare	0.00 -	4.000	0.00 -	4.000
Spare	0.01 -	1.445	0.00 -	1.451
a7	95.59 g	1.409	-16.18 g	1.415
a8	65.40 g	1.409	-16.44 g	1.414
a9	105.57 g	1.409	-19.34 g	1.414
Fz,uf,r	0.64 kN	1.450	-0.41 kN	1.510
Mx,uf,r	51.06 Nm	1.505	-30.46 Nm	2.084
My,uf,r	46.01 Nm	1.445	-70.19 Nm	1.423
Mz,uf,r	40.82 Nm	1.479	-27.45 Nm	2.091
Fz,uf,l	0.90 kN	1.528	-0.87 kN	1.446
Mx,uf,l	59.42 Nm	1.482	-105.77 Nm	1.542
My,uf,l	129.86 Nm	1.982	-58.78 Nm	1.448
Mz,uf,l	203.51 Nm	2.098	-7.89 Nm	2.806
Fx,n	0.76 kN	1.415	-0.27 kN	2.069
Fy,n	1.47 kN	1.420	0.00 kN	0.336
Fz,n	0.24 kN	1.499	-5.77 kN	1.413
Mx,n	42.39 Nm	1.449	-106.77 Nm	1.422
My,n	16.91 Nm	1.415	-18.14 Nm	1.410
Mz,n	4.12 Nm	1.712	-16.05 Nm	1.422
L,ul	17.82 mm	1.459	-2.87 mm	1.487
L,ll	19.51 mm	1.459	-4.14 mm	1.487
Ax,h	23.22 g	1.414	-9.87 g	1.555
Ay,h	14.00 g	1.424	-128.35 g	1.409
Az,h	95.66 g	1.409	-16.20 g	1.415
ax,h	2.72 krad/s**2	1.419	-10.45 krad/s**2	1.409
ay,h	4.98 krad/s**2	1.409	-1.58 krad/s**2	1.414
az,h	3.86 krad/s**2	1.409	-2.62 krad/s**2	1.412
Ar,h	155.24 g	1.409	0.01 g	-0.244
ar,h	11.49 krad/s**2	1.409	0.00 krad/s**2	1.219
G	0.76 -	1.409	0.00 -	-0.683
HIC	622.47	1.412	----	1.407
Fxy,n	1.57 kN	1.419	0.00 kN	-0.228
Dx,us	2.53 mm	1.478	-10.77 mm	1.610
Dy,us	24.30 mm	1.459	-5.08 mm	1.487

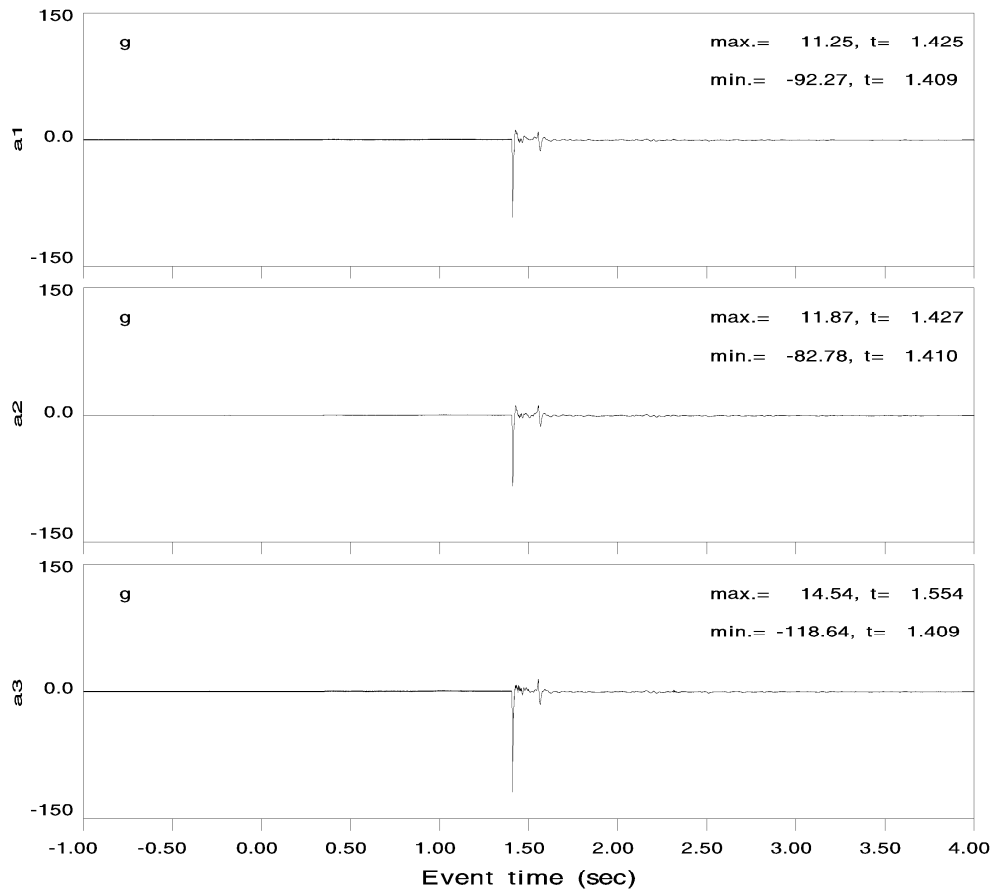
Page 1

		latroll_01.rpt		
Cus	5.74 %	1.610	-1.35 %	1.478
Vus	0.36 m/s	1.474	-0.31 m/s	1.482
VCus	0.01 m/s	1.579	0.00 m/s	1.628
Dx,ls	5.59 mm	1.419	-6.89 mm	1.610
Dy,ls	23.77 mm	1.458	-6.52 mm	1.487
Cl,s	3.67 %	1.610	-2.98 %	1.419
Vls	0.63 m/s	1.415	-0.42 m/s	1.426
VCl,s	0.01 m/s	1.416	-0.01 m/s	1.424
Mxy,uf,r	70.47 Nm	1.423	0.00 Nm	0.180
Mxy,uf,l	155.50 Nm	1.540	0.00 Nm	0.034
Mx,n,oc	47.05 Nm	1.449	-83.54 Nm	1.423
My,n,oc	12.74 Nm	2.295	-20.01 Nm	1.410
NII	2.74 -	1.413	0.00 -	-0.323
Ar,p	79.22 g	1.445	0.00 g	-0.689
Ar,c	42.42 g	1.412	0.00 g	-0.664

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

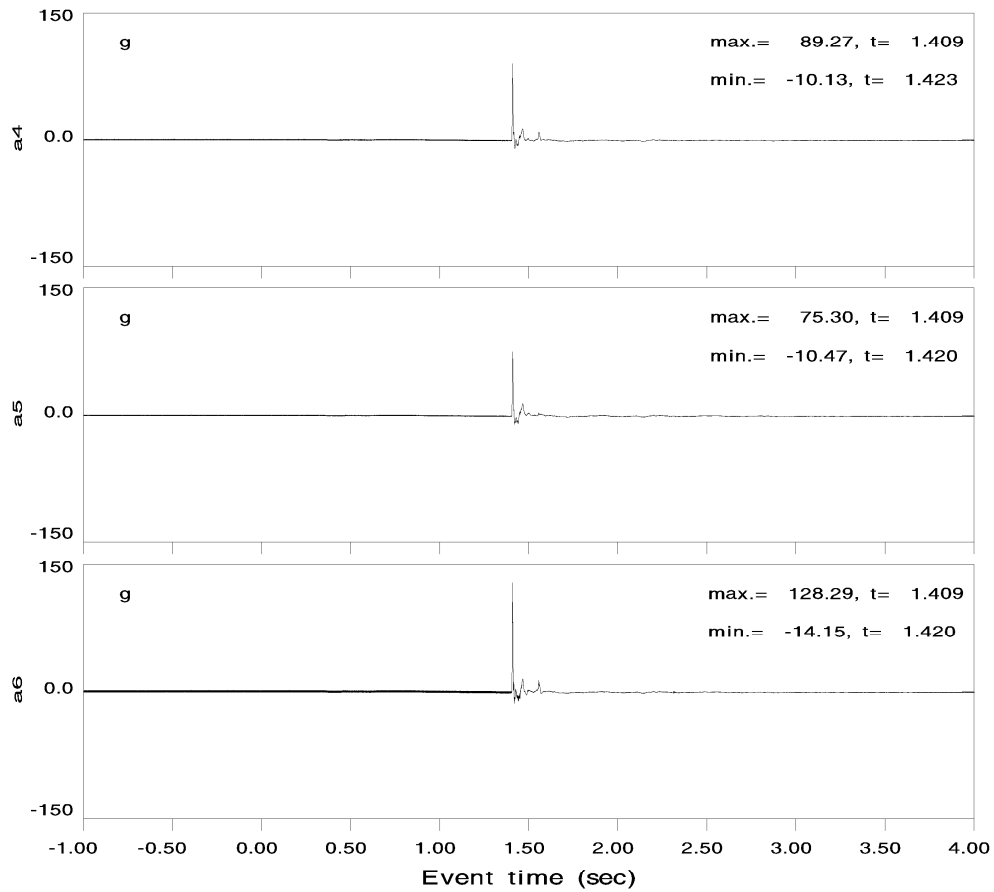
Test latroll_01



Page 1

Primary

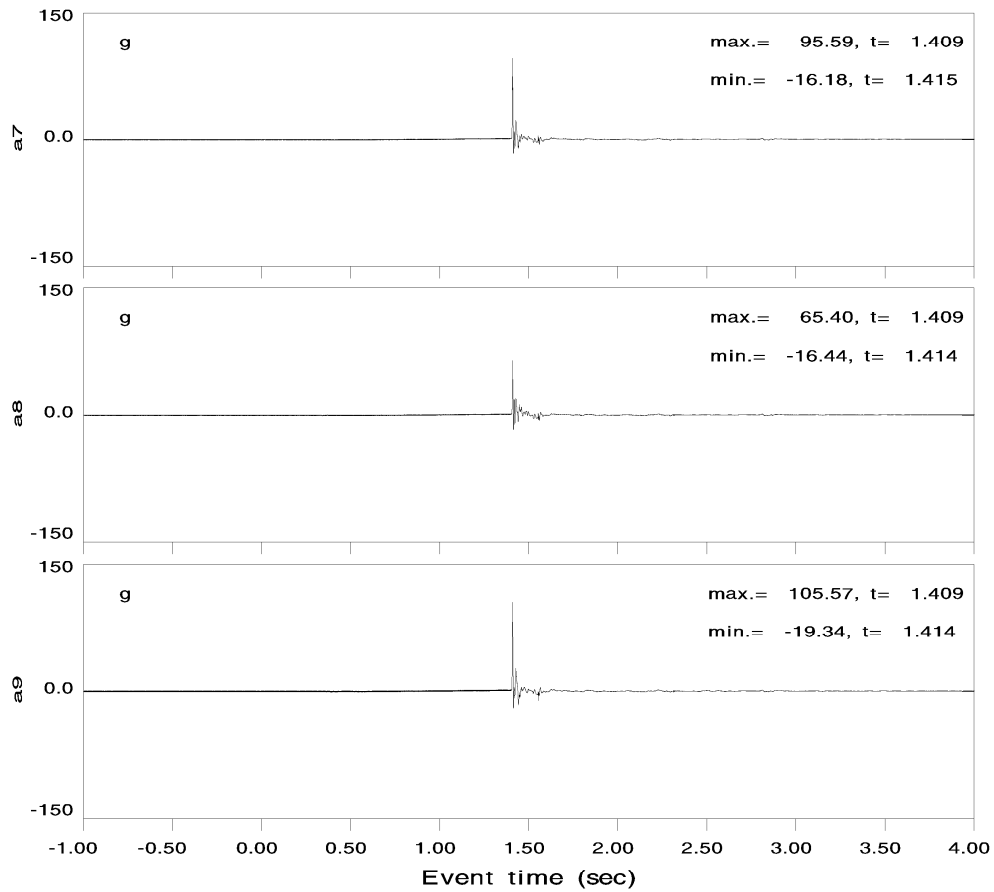
Test latroll_01



Page 2

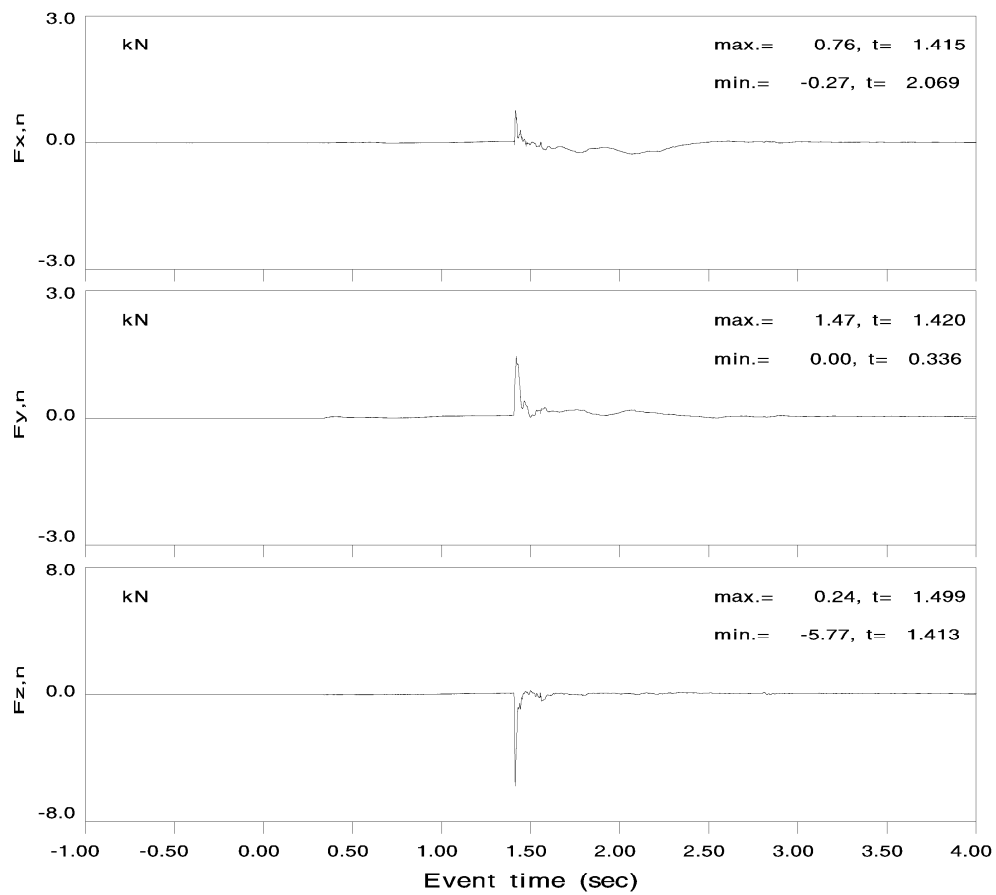
Primary

Test latroll_01



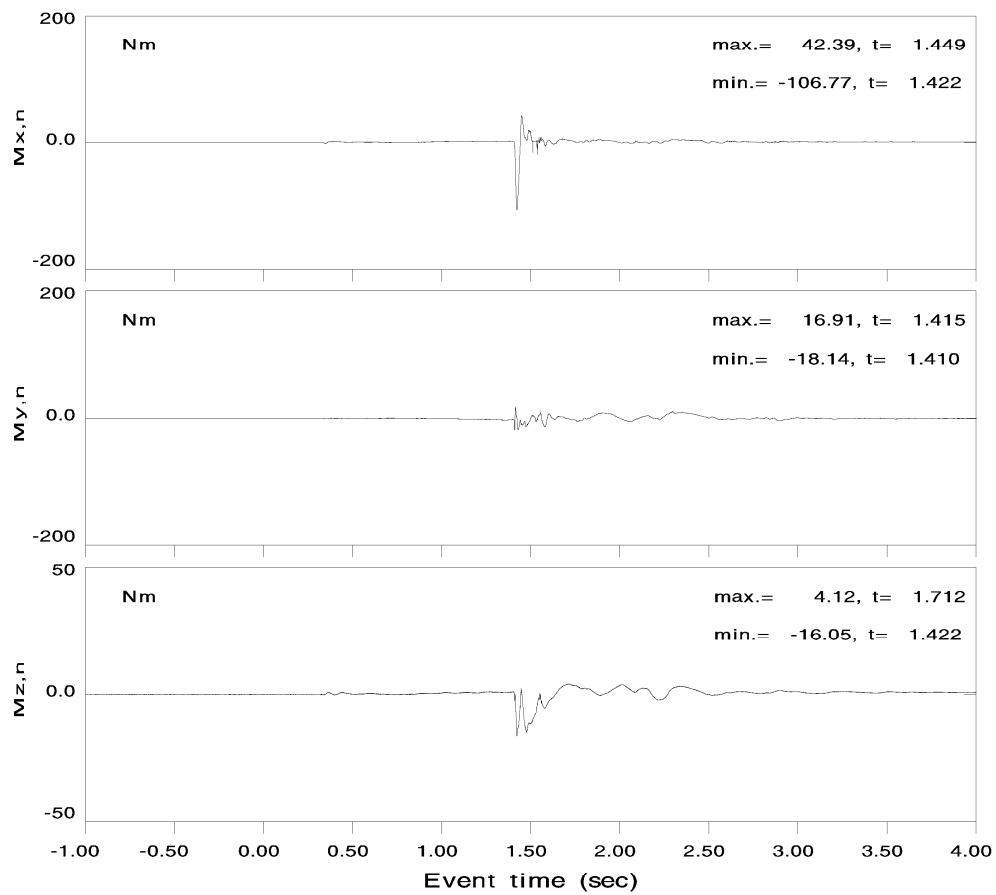
Primary

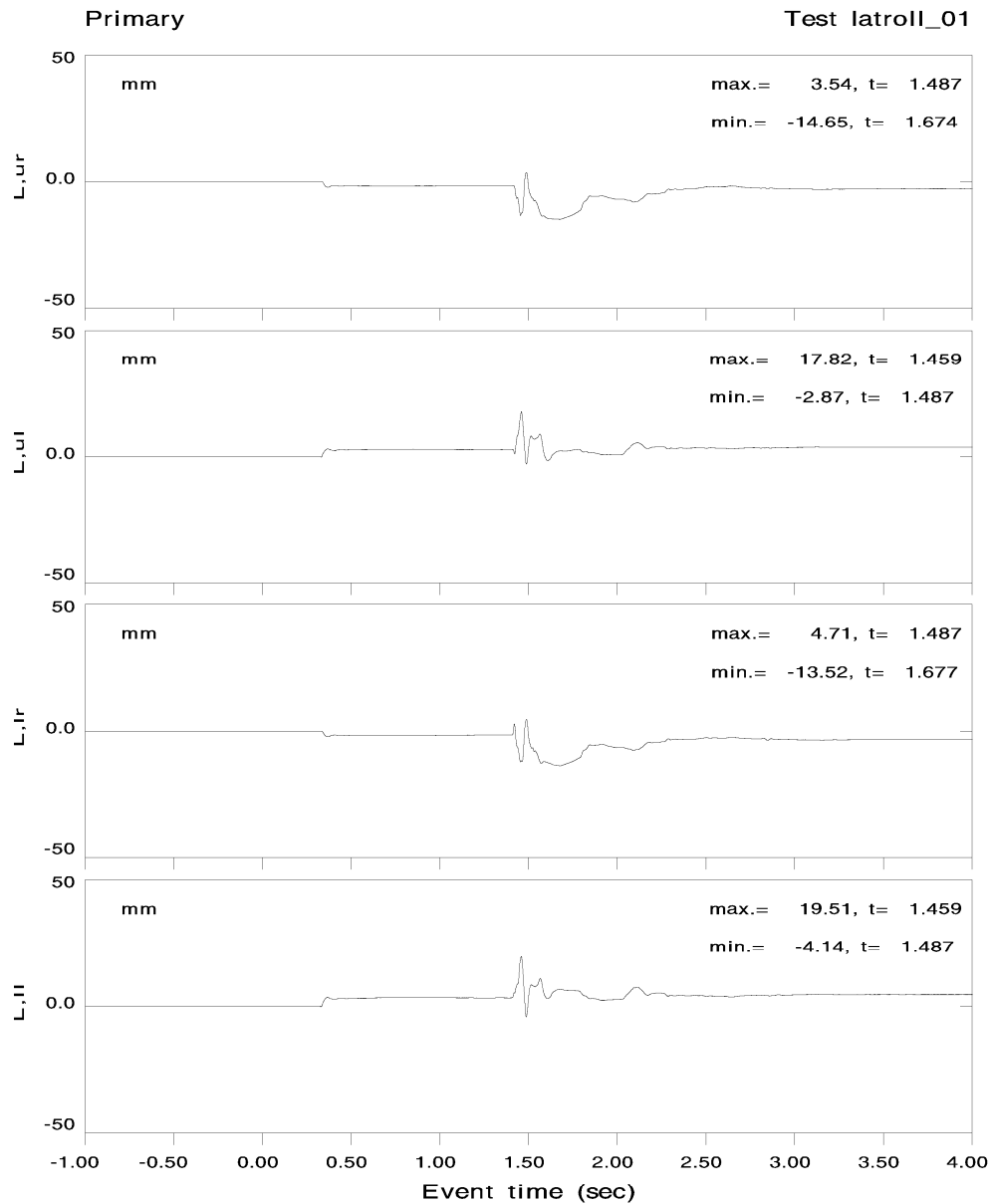
Test latroll_01

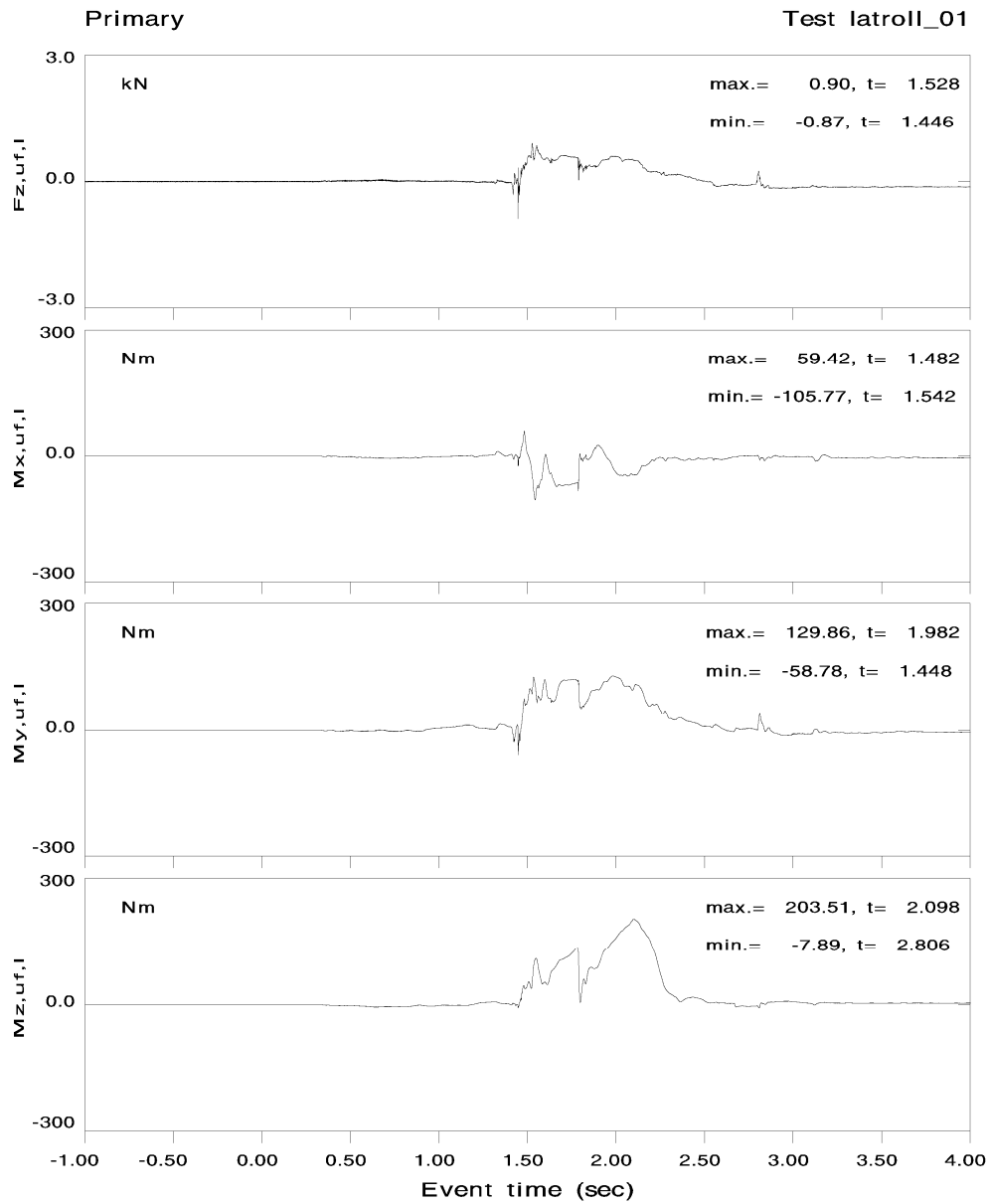


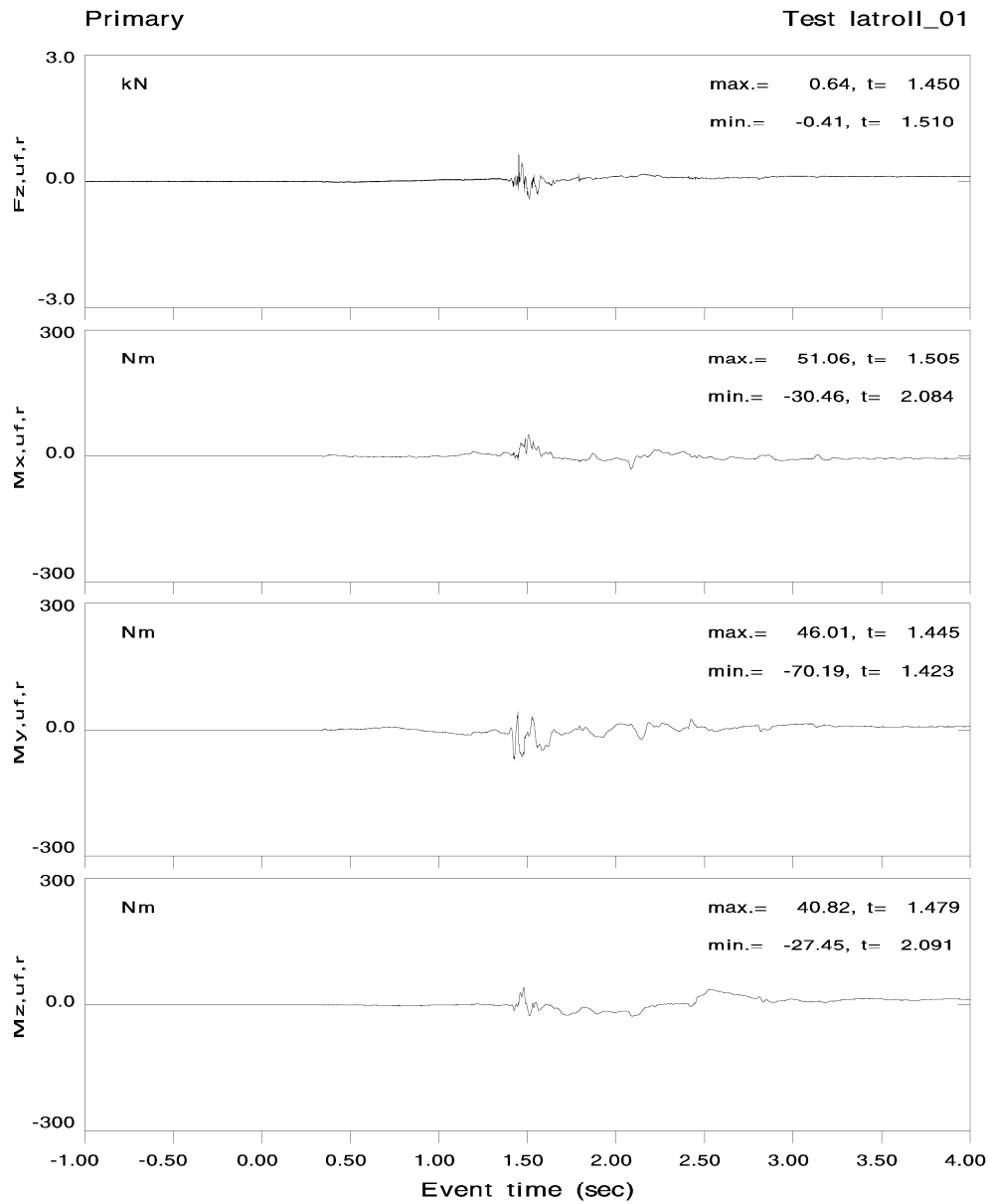
Primary

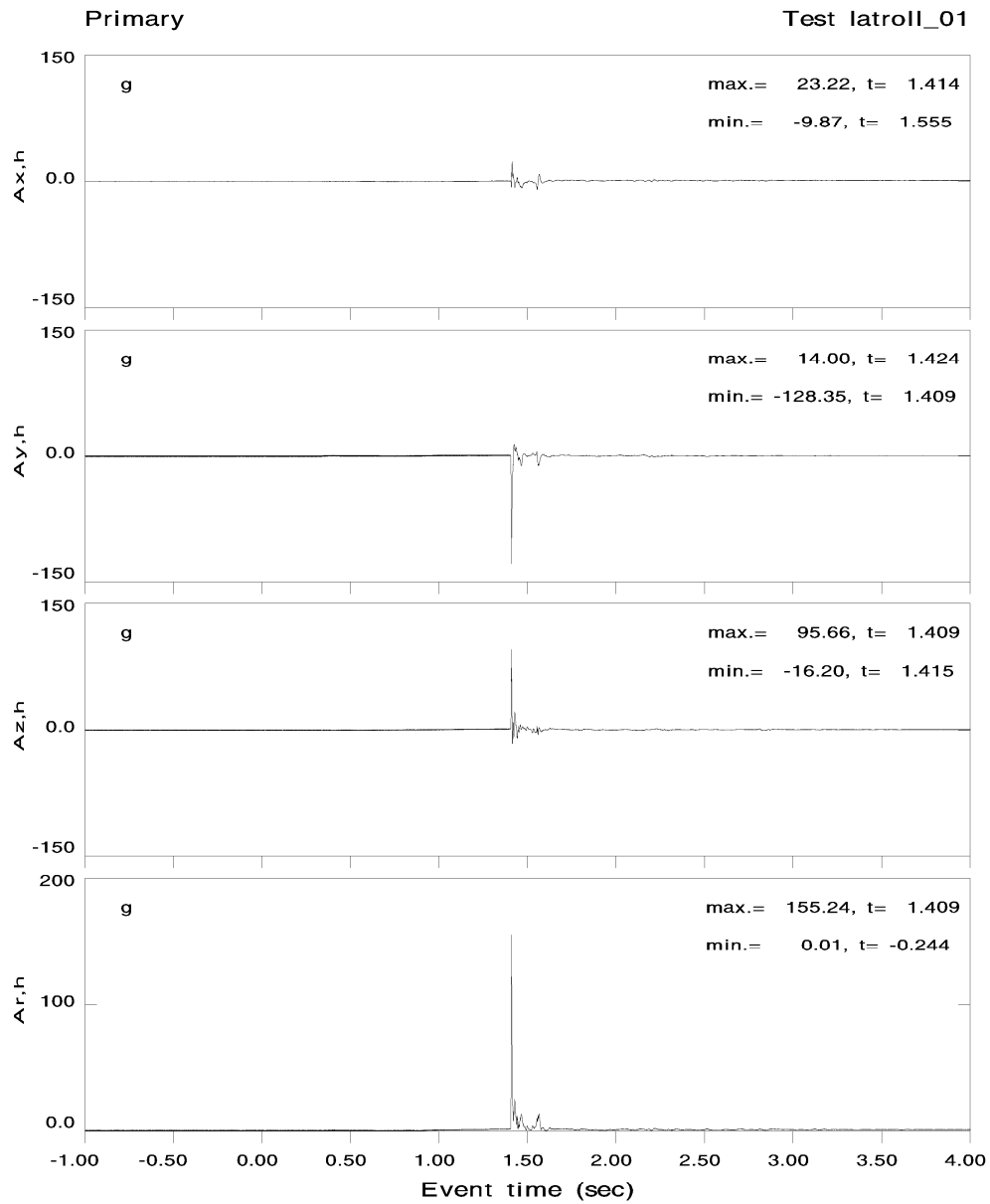
Test latroll_01

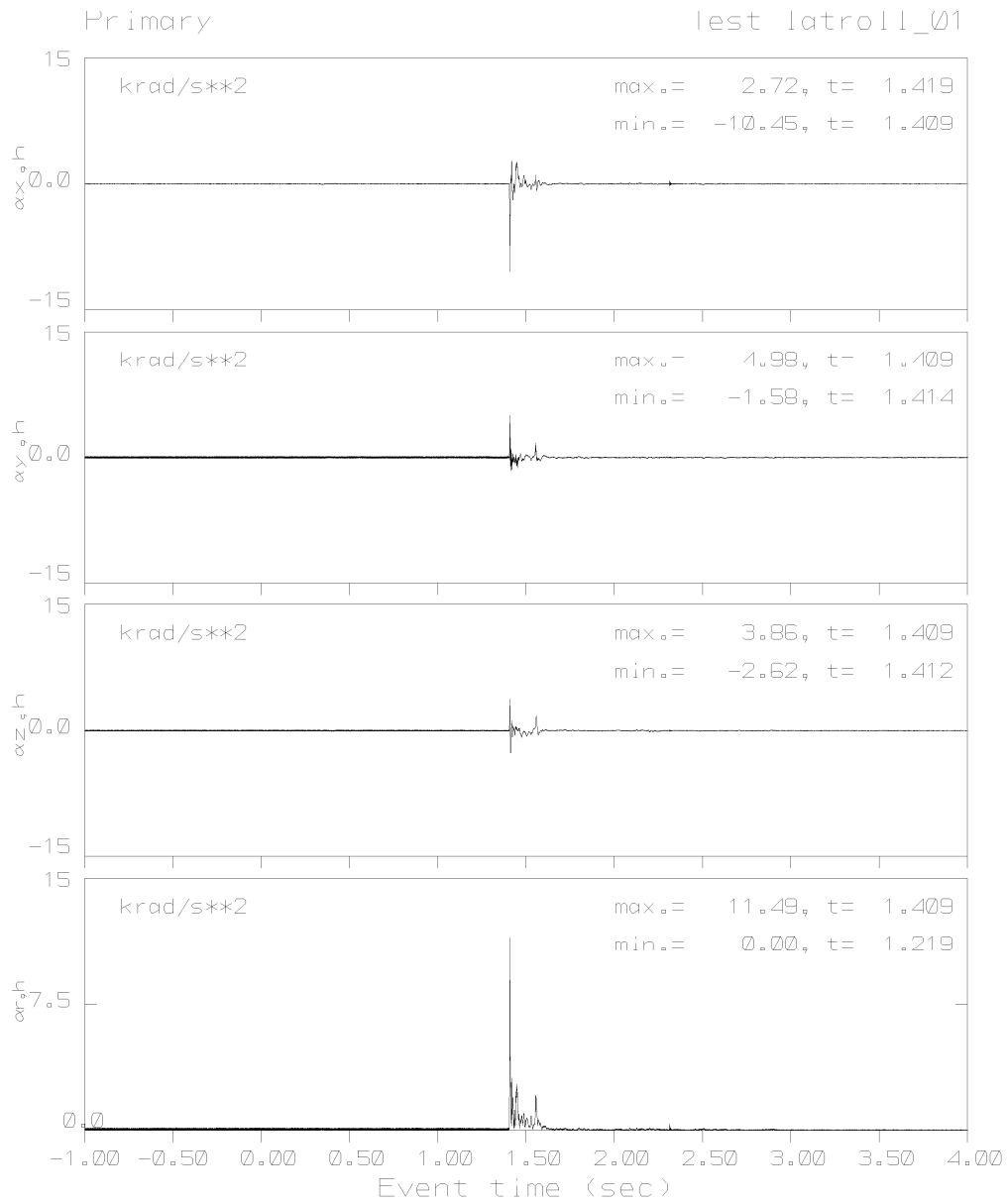


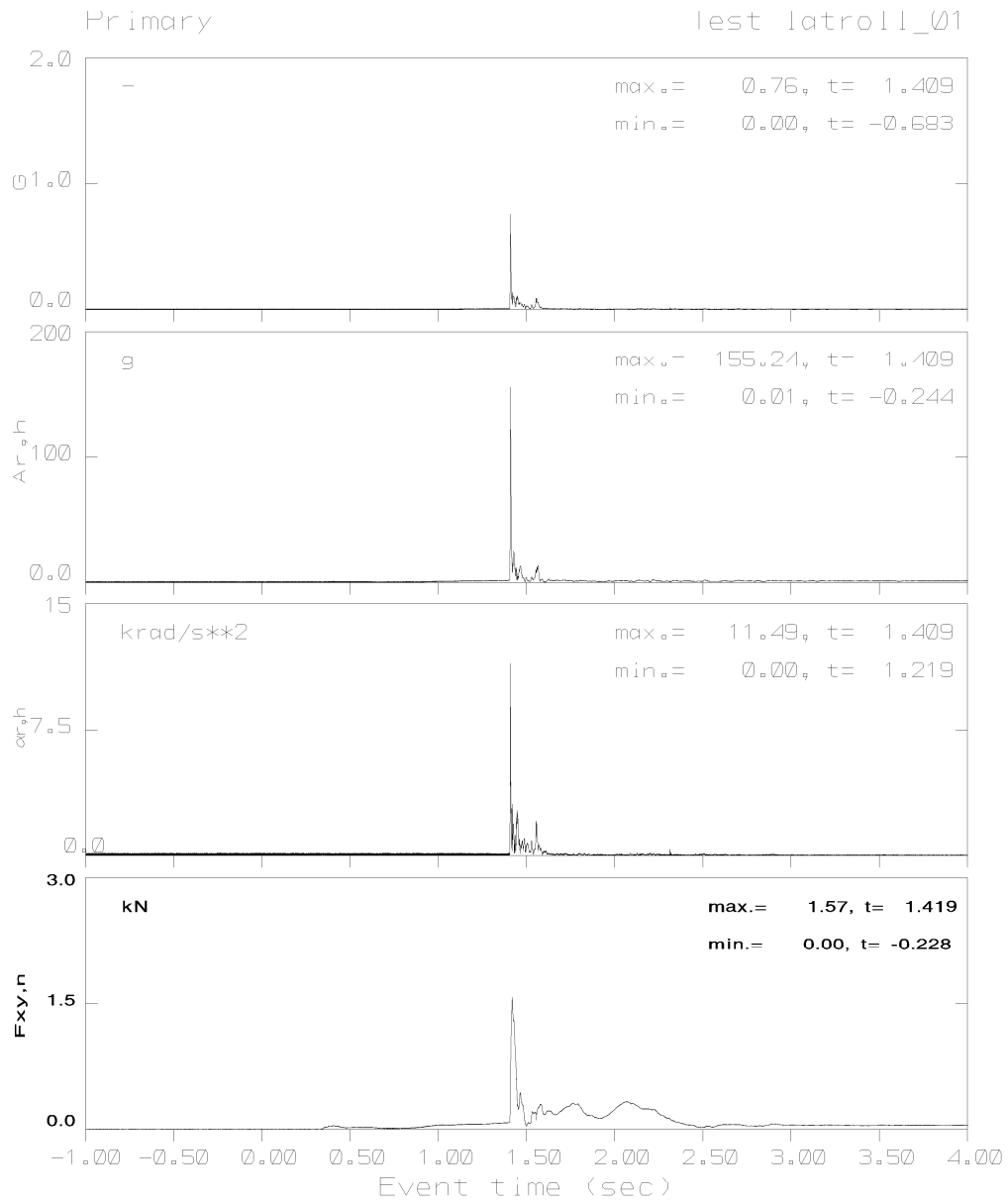


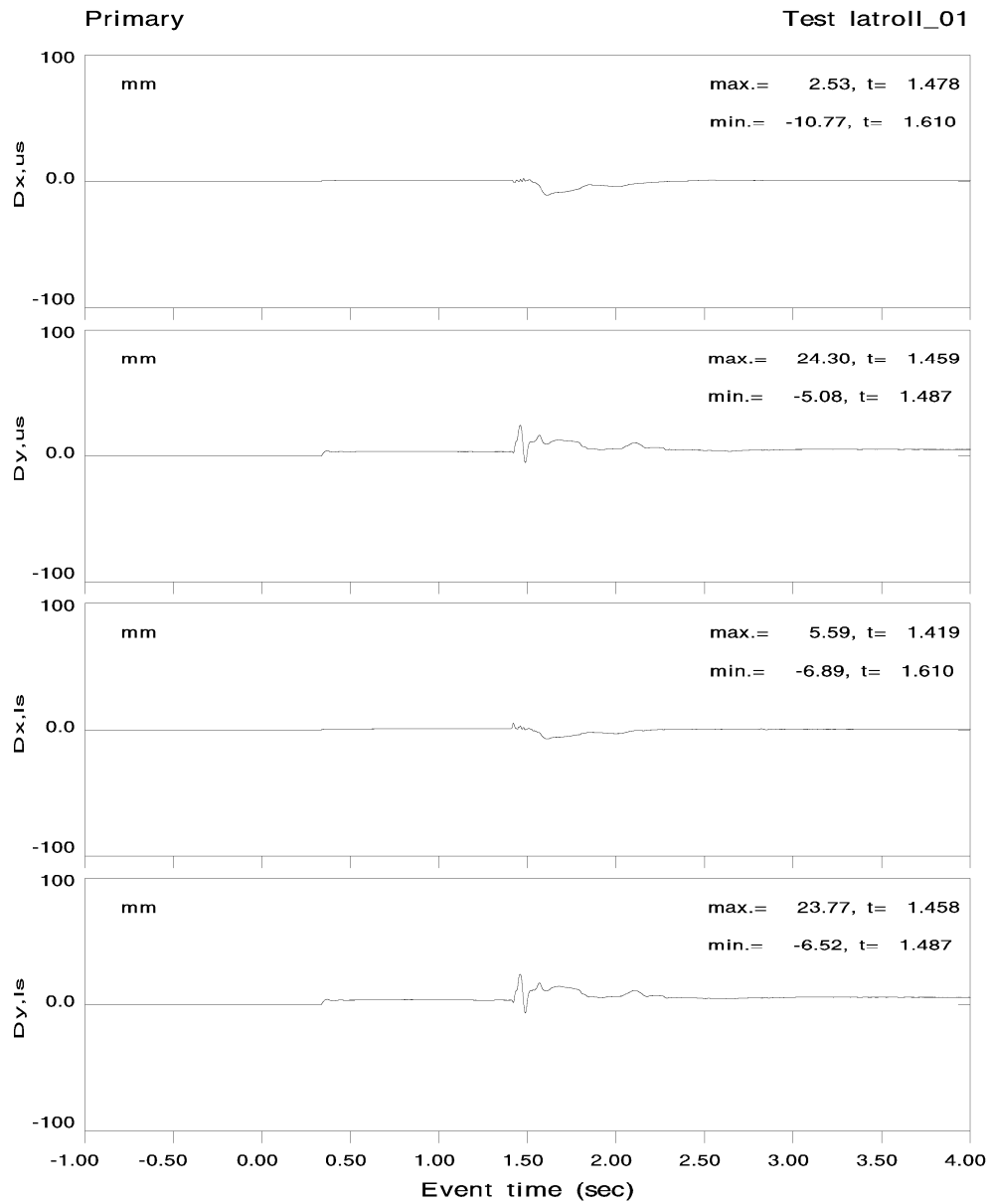






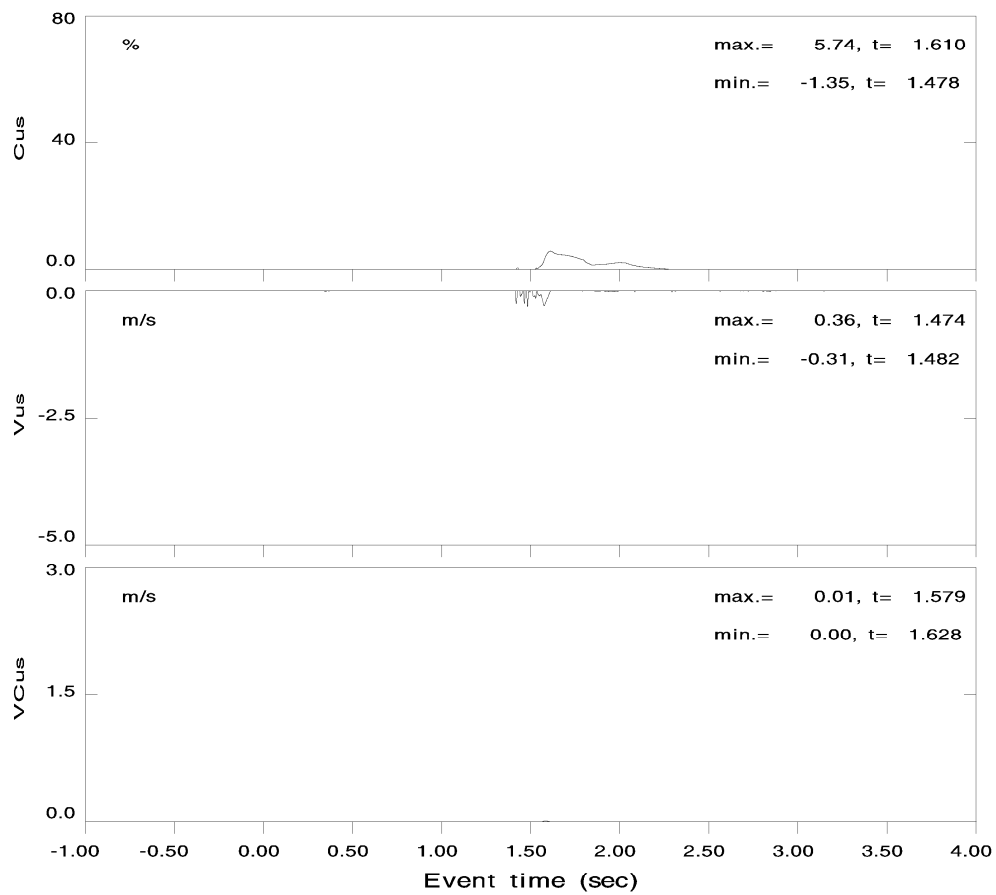






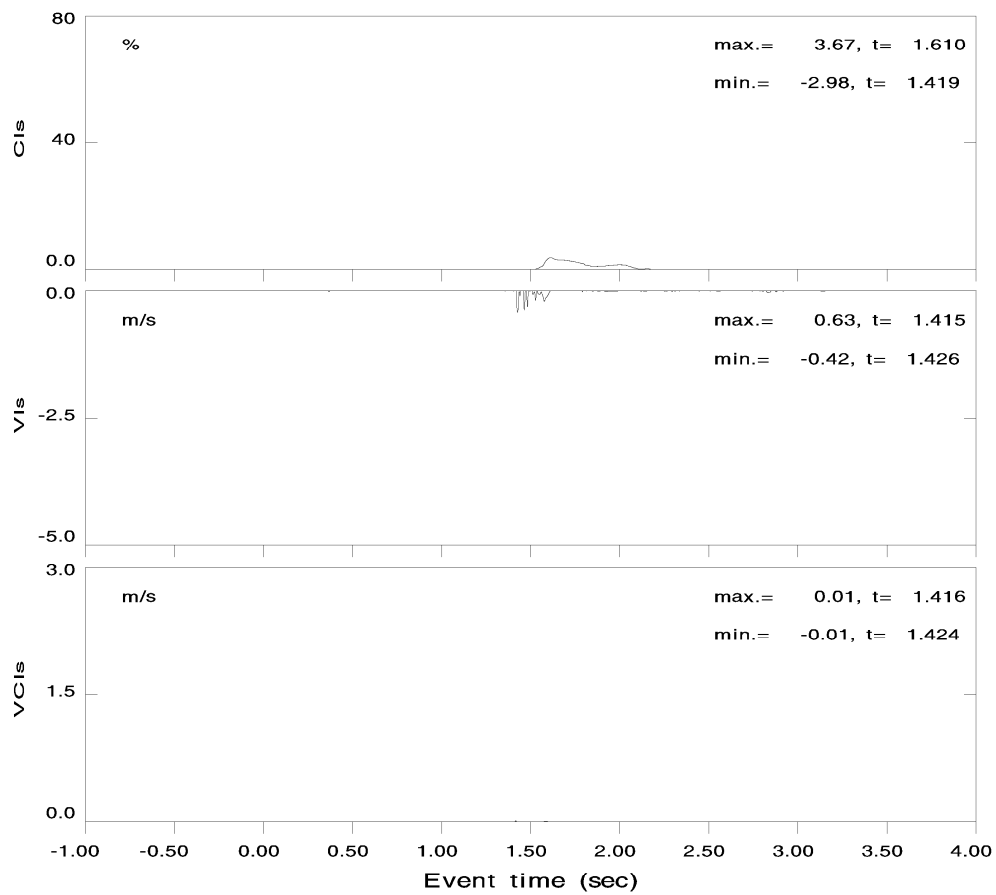
Primary

Test latroll_01



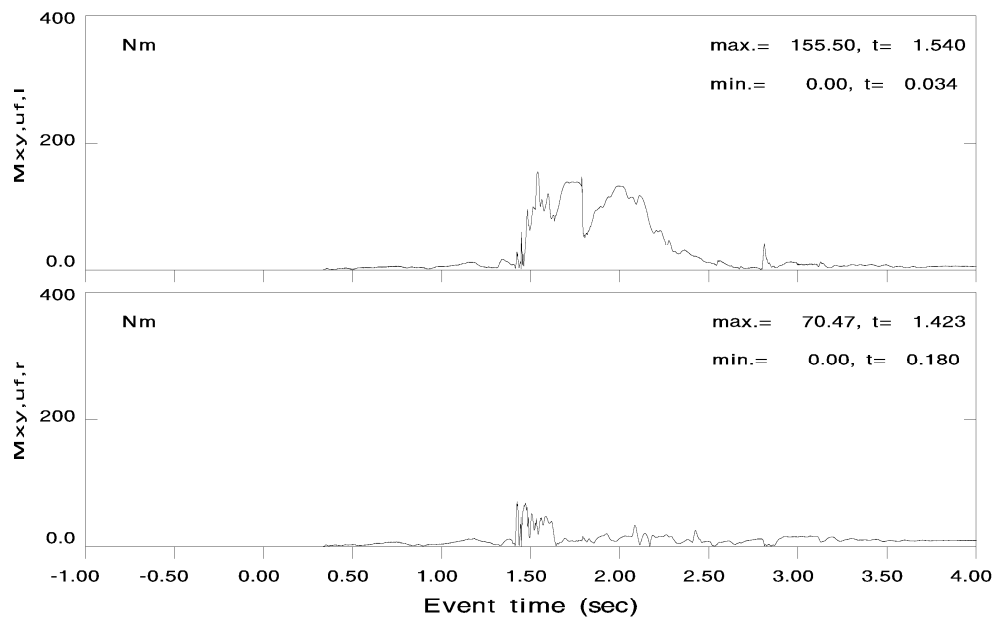
Primary

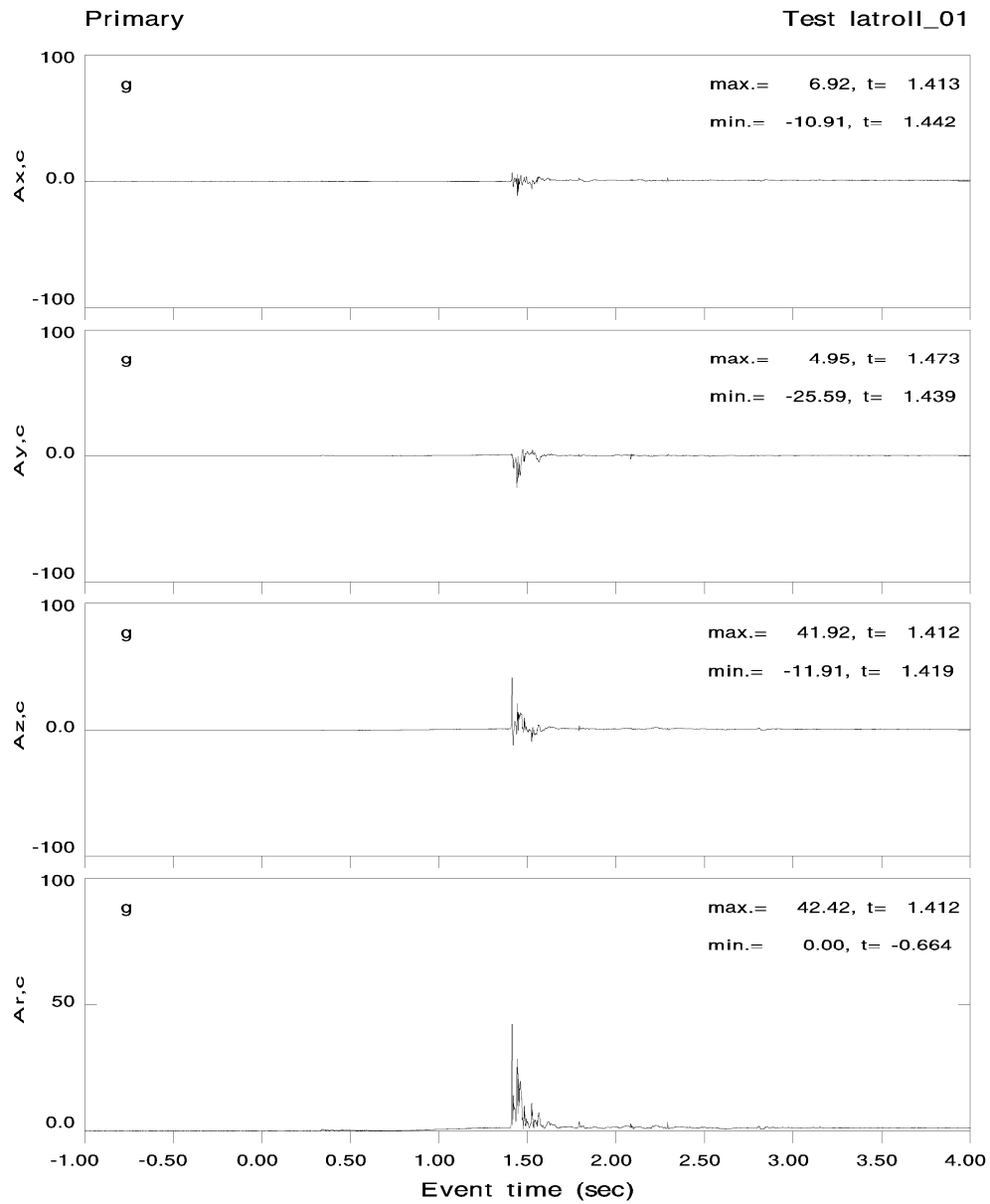
Test latroll_01

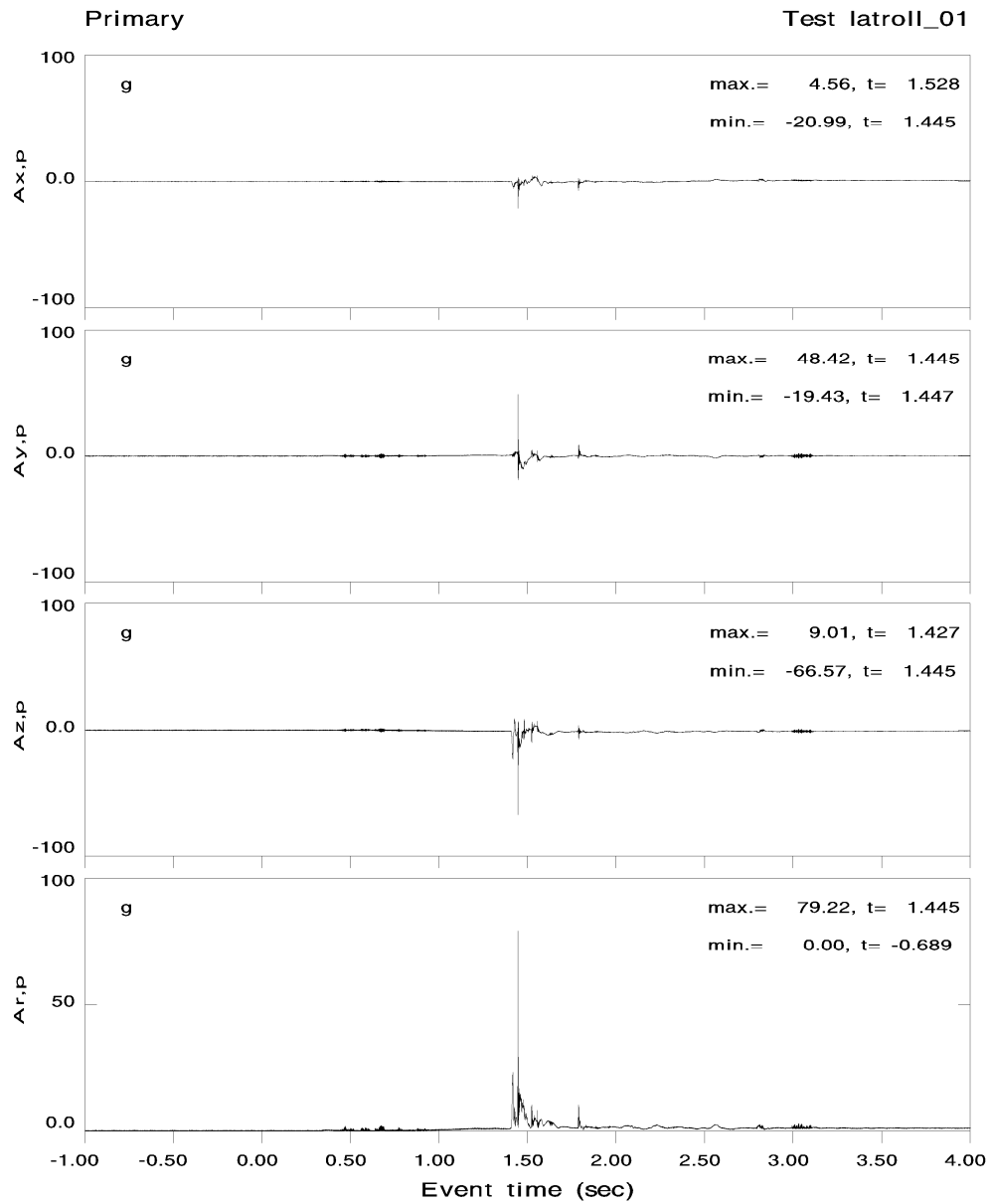


Primary

Test latroll_01

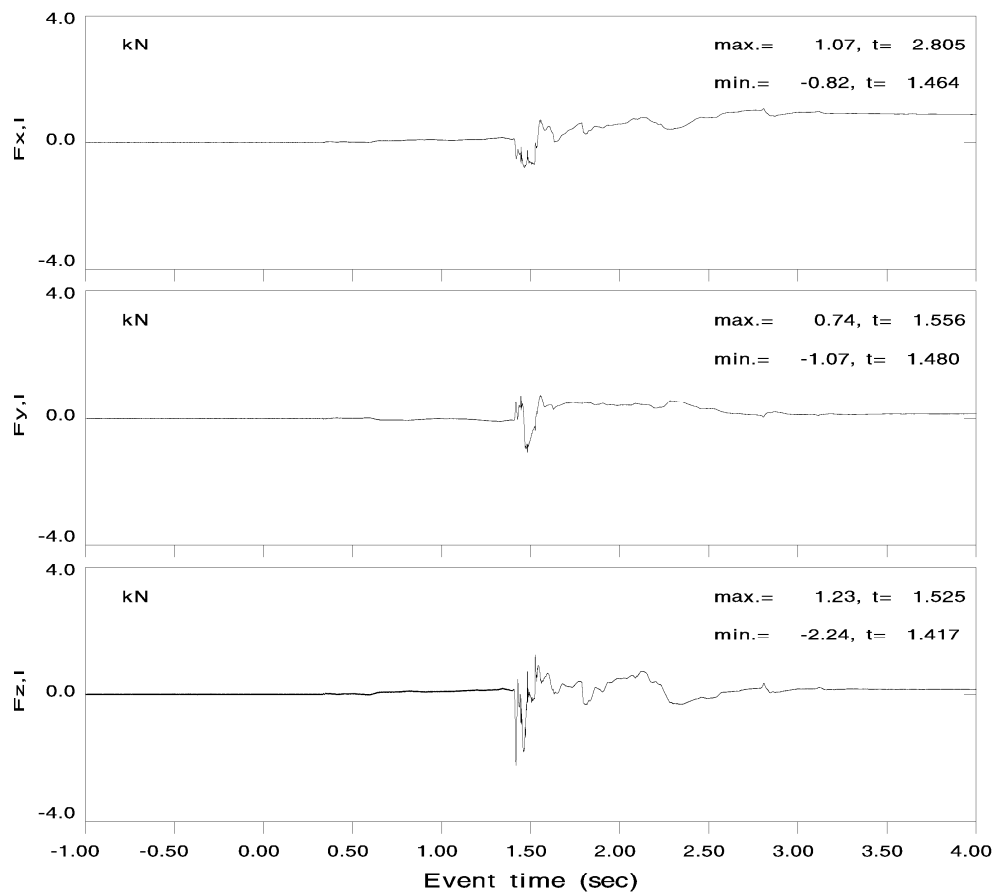






Primary

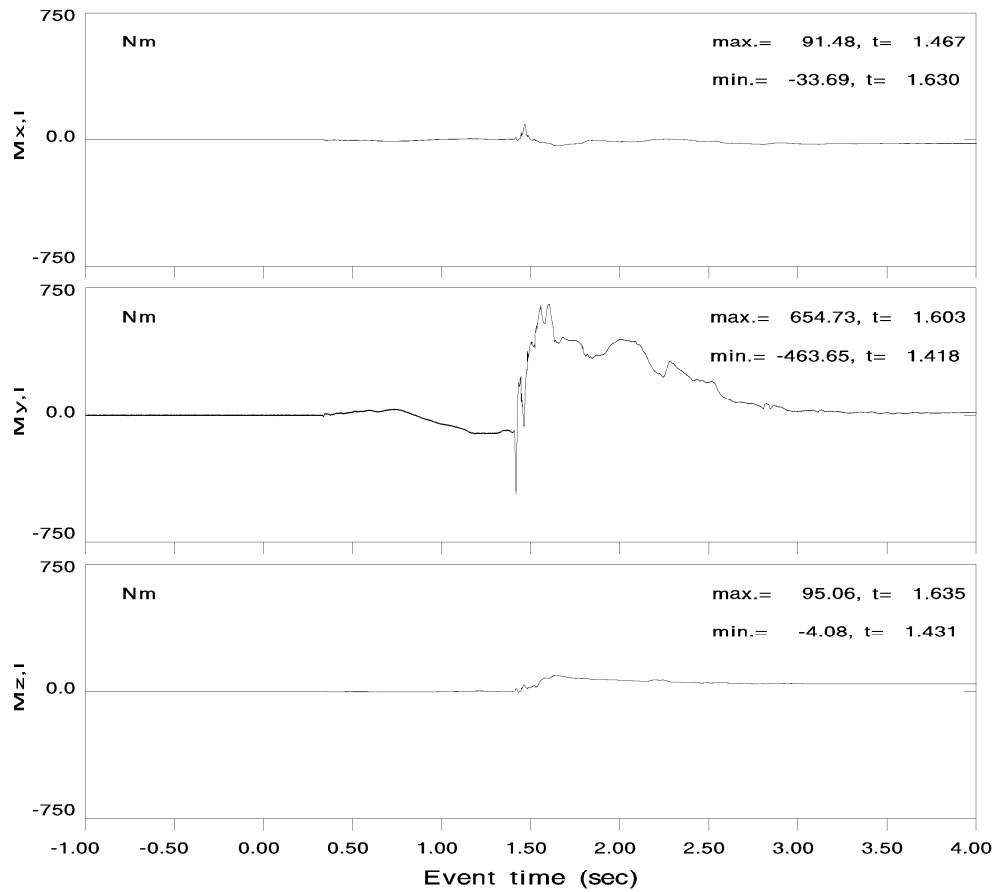
Test latroll_01



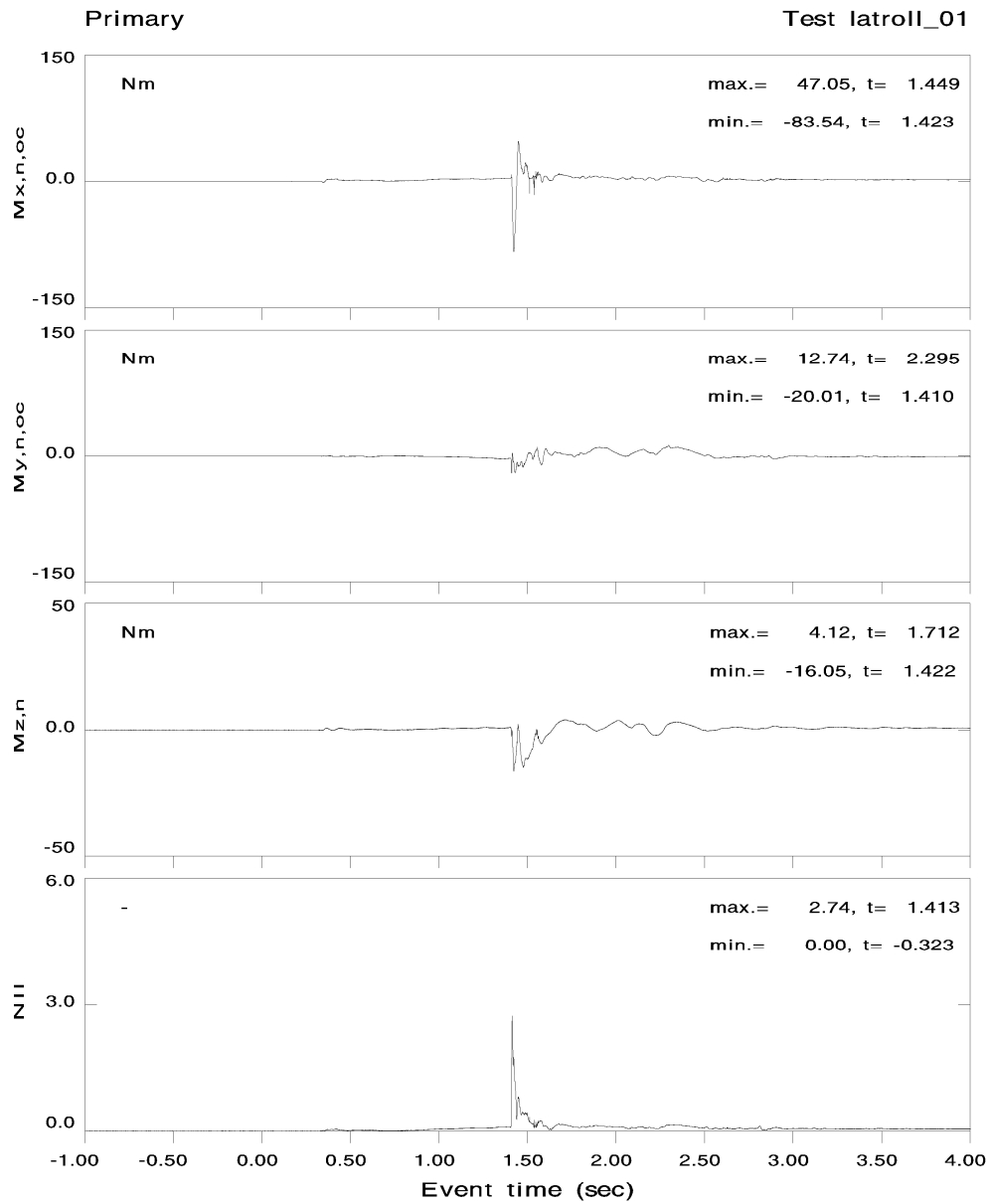
Page 18

Primary

Test latroll_01



Page 19



2.15 Research & Development test latroll_02

ATV_Lateral_RHS_Roll_Spraytank.ICE
Test Number : latroll_02
Analysis Window : Entire Run

Injury Cost Model input:

Number of AIS 3 Femur Fractures = 0
Number of AIS 2 Tibia Fractures = 0
Number of AIS 3 Tibia Fractures = 0
Number of AIS 2 Knee Dislocation Injuries = 1
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location = 1
Index for VCmax Location = 2
maximum Abdomen Penetration = 0.000
maximum GAMBIT = 0.000
Cmax = 2.530
VCmax = 0.000
HIC = 0.0
NII (2002 MATD Neck) = 0.0
Location of Cmax : upper sternum
Location of VCmax : lower sternum

Injury Cost Model output:

MAIS = 2.0
Total AIS = 2.0
Normalized Injury Cost = 0.120
Normalized Cost of Survival = 0.110
Normalized Cost of Dying = 0.009
Probability of Fatality = 0.009
Probability of Fatality due to non AIS 6 injuries = 0.009
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity = 0.150
Risk of life threatening brain injury (%) = 0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	1.000	1.000	1.000	1.000	0.000	0
1	0.000	0.000	0.000	0.000	0.000	0
2	0.000	0.000	0.000	0.000	1.000	1
3	0.000	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.000	0.000	0.000	0.000	2.000	
PAIS	0	0	0	0	2	
Body Region NPIC	0.000	0.000	0.000	0.000	0.000 0.120 0.000 0.120	Femur Knee Tibia Leg

Test 1atroll_02, Primary

1atroll_02.rpt

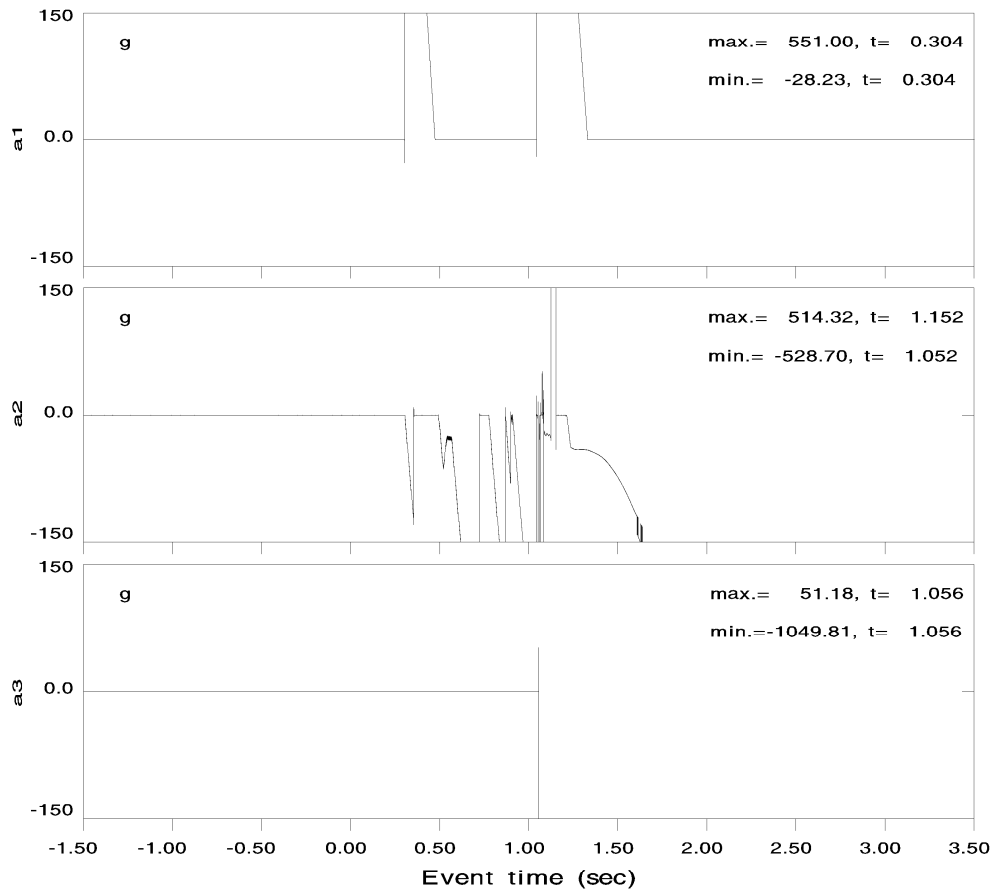
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	8.16 g	1.090	-8.28 g	1.079
Ay,c	5.27 g	1.128	-26.21 g	1.065
Az,c	19.56 g	1.063	-8.70 g	1.132
Ax,p	5.19 g	1.161	-5.47 g	1.159
Ay,p	2.83 g	0.984	-8.26 g	1.106
Az,p	6.47 g	1.130	-17.27 g	1.079
spare	0.00 -	0.245	0.00 -	1.095
spare	0.00 -	1.534	0.00 -	1.888
L,ur	5.98 mm	0.279	-14.78 mm	1.073
L,lr	7.76 mm	0.281	-11.56 mm	1.137
a1	551.00 g	0.304	-28.23 g	0.304
a2	514.32 g	1.152	-528.70 g	1.052
a3	51.18 g	1.056	***** g	1.056
a4	28.10 g	1.042	-3.09 g	1.299
a5	24.17 g	1.051	-3.67 g	1.301
a6	38.72 g	1.042	-6.56 g	1.087
Mx,l	106.75 Nm	1.078	-11.38 Nm	3.500
My,l	661.22 Nm	1.145	-359.29 Nm	2.582
Mz,l	46.72 Nm	1.440	-0.43 Nm	-0.609
Fx,l	0.88 kN	1.157	-1.32 kN	1.090
Fy,l	0.62 kN	1.068	-0.87 kN	1.105
Fz,l	1.85 kN	1.130	-2.60 kN	1.077
spare	0.07 -	3.488	0.00 -	-1.467
spare	0.00 -	3.500	0.00 -	3.500
spare	0.12 -	3.404	-0.02 -	0.613
spare	0.00 -	-0.525	0.00 -	2.206
spare	0.00 -	3.500	0.00 -	3.500
spare	0.00 -	3.500	0.00 -	3.500
Spare	0.01 -	1.775	0.00 -	-0.149
a7	22.43 g	1.042	-4.57 g	1.158
a8	19.25 g	1.087	-6.73 g	1.133
a9	29.29 g	1.042	-7.53 g	1.173
Fz,uf,r	0.39 kN	1.079	-0.22 kN	1.116
Mx,uf,r	48.98 Nm	1.117	-26.22 Nm	2.606
My,uf,r	34.47 Nm	1.132	-67.93 Nm	1.106
Mz,uf,r	69.43 Nm	1.110	-24.17 Nm	2.367
Fz,uf,l	0.98 kN	1.131	-0.20 kN	1.074
Mx,uf,l	21.73 Nm	1.110	-202.95 Nm	1.157
My,uf,l	201.22 Nm	1.139	-37.65 Nm	1.079
Mz,uf,l	146.22 Nm	1.684	-6.76 Nm	1.905
Fx,n	0.30 kN	1.062	-0.55 kN	1.360
Fy,n	1.67 kN	1.061	-0.05 kN	1.577
Fz,n	0.37 kN	1.088	-3.10 kN	1.055
Mx,n	22.61 Nm	1.093	-127.25 Nm	1.061
My,n	22.64 Nm	1.175	-40.16 Nm	1.066
Mz,n	7.33 Nm	1.289	-22.59 Nm	1.061
L,ul	15.49 mm	1.074	-8.52 mm	0.268
L,ll	19.32 mm	1.074	-10.66 mm	0.276
Ax,h	20.31 g	0.304	-389.83 g	0.304
Ay,h	390.01 g	0.304	-24.64 g	1.044
Az,h	22.45 g	1.042	-4.84 g	1.158
ax,h	2.29 krad/s**2	0.304	-130.12 krad/s**2	1.056
ay,h	2.48 krad/s**2	0.304	-130.17 krad/s**2	1.056
az,h	9.79 krad/s**2	1.152	-123.49 krad/s**2	1.084
Ar,h	551.43 g	0.304	0.01 g	-1.074
ar,h	219.37 krad/s**2	1.084	0.00 krad/s**2	-0.224
G	9.00 -	1.084	0.00 -	-0.851
HIC	*****	1.120	----	1.084
Fxy,n	1.69 kN	1.061	0.00 kN	-0.886
Dx,us	3.23 mm	1.084	-4.74 mm	1.297
Dy,us	23.85 mm	1.074	-11.31 mm	0.268

		latroll_02.rpt		
Cus	2.53 %	1.297	-1.72 %	1.084
Vus	0.61 m/s	1.080	-0.40 m/s	1.126
VCus	0.01 m/s	1.082	0.00 m/s	1.087
Dx,ls	4.60 mm	1.082	-2.91 mm	1.613
Dy,ls	23.48 mm	1.074	-13.39 mm	0.275
Cl,s	1.55 %	1.613	-2.45 %	1.082
Vls	0.24 m/s	1.117	-0.44 m/s	1.132
VCl,s	0.00 m/s	1.079	-0.01 m/s	1.085
Mxy,uf,r	76.36 Nm	1.106	0.00 Nm	-1.454
Mxy,uf,l	255.27 Nm	1.155	0.00 Nm	-1.130
Mx,n,oc	26.72 Nm	1.089	-97.59 Nm	1.061
My,n,oc	24.55 Nm	1.174	-40.98 Nm	1.066
NII	2.18 -	1.061	0.00 -	-1.235
Ar,p	17.64 g	1.079	0.01 g	-1.386
Ar,c	29.72 g	1.065	0.00 g	-1.072

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

Primary

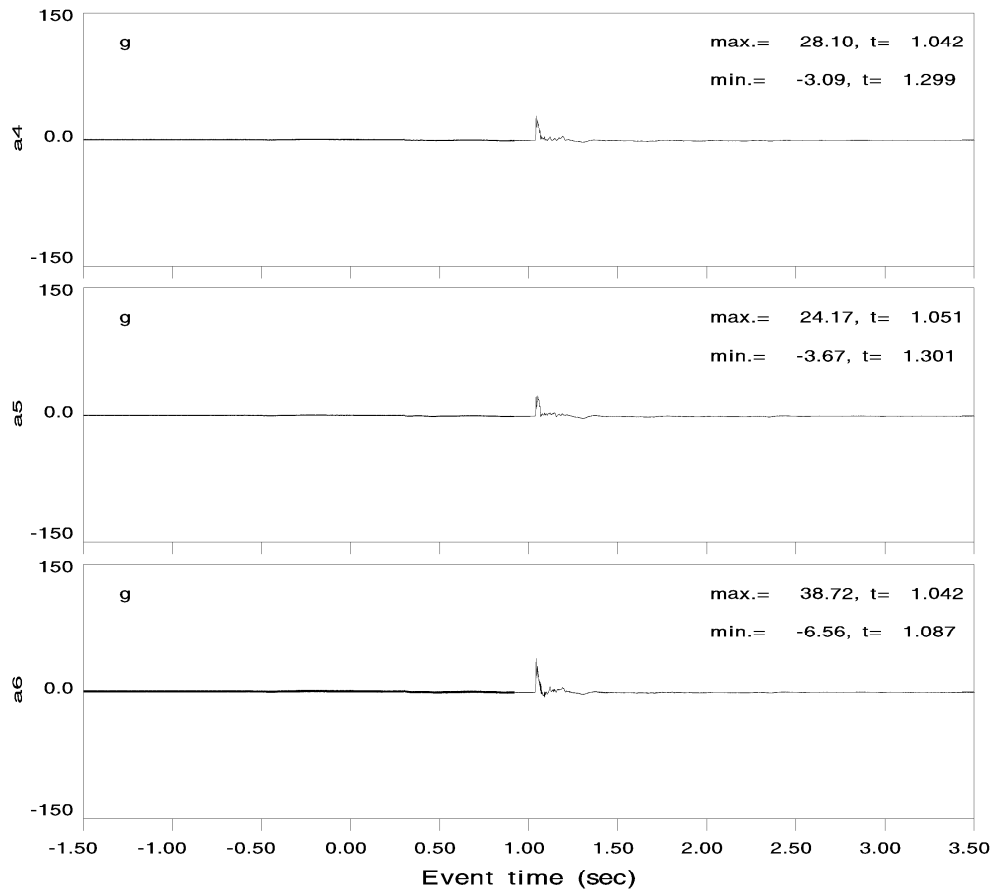
Test latroll_02



Page 1

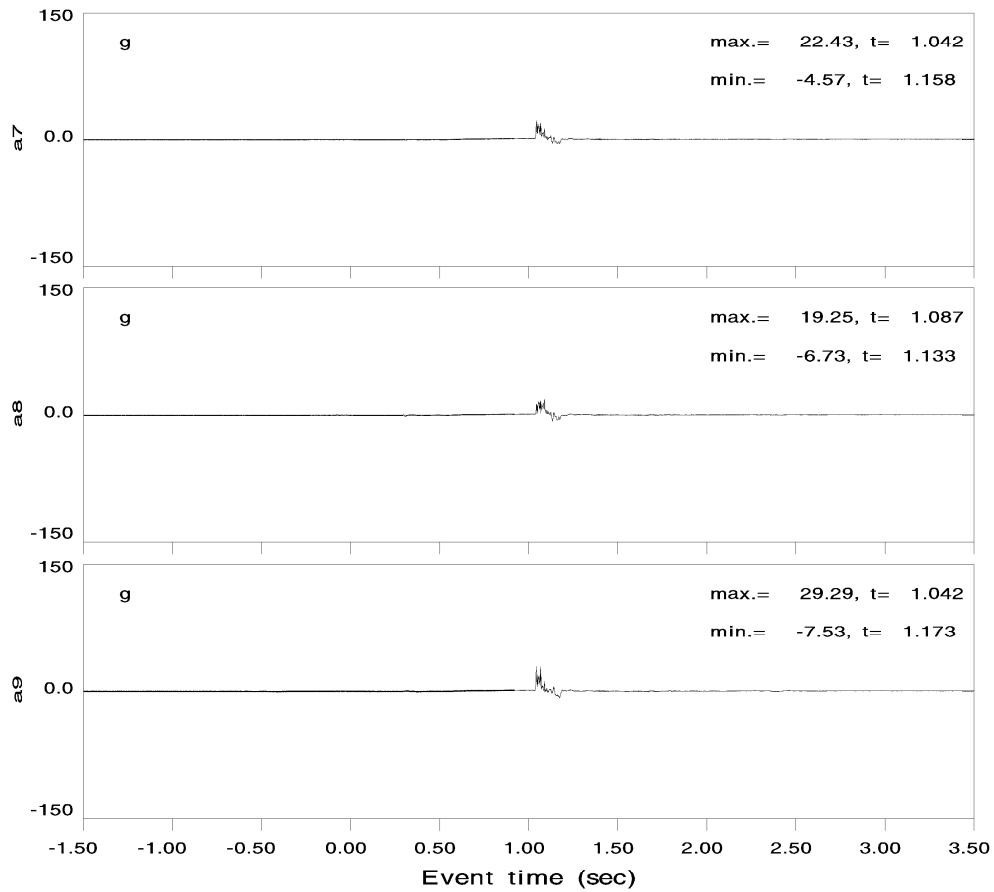
Primary

Test latroll_02



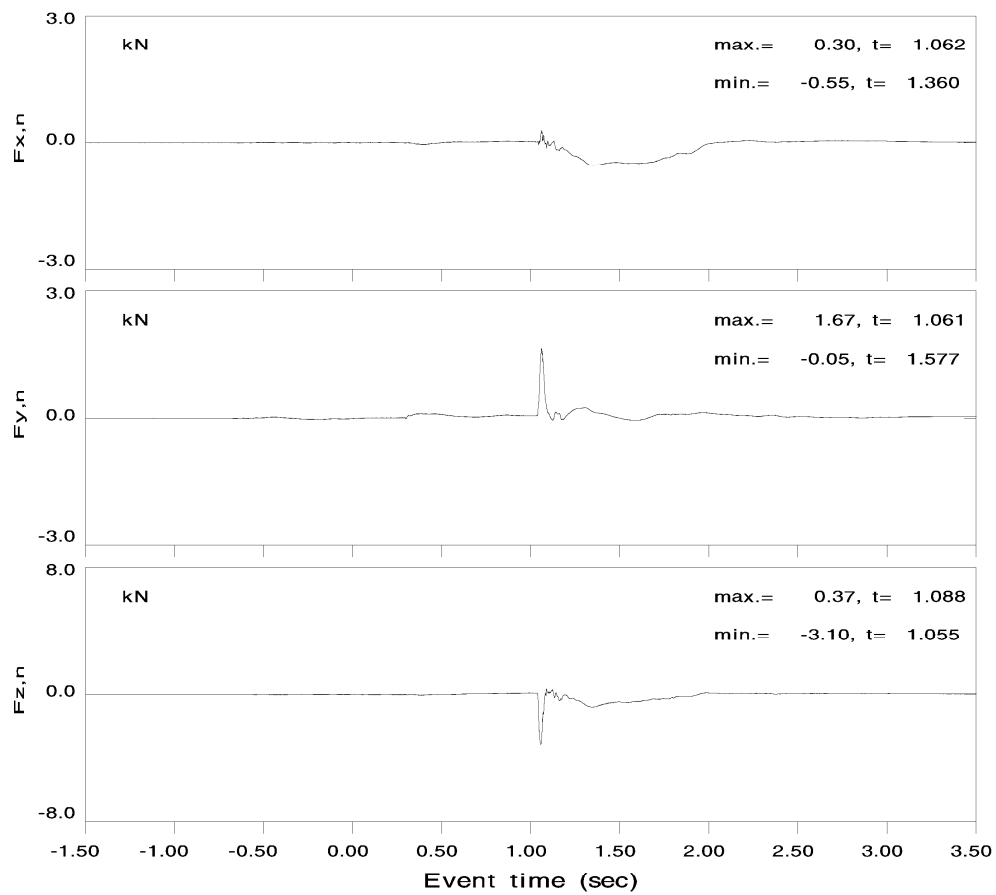
Primary

Test latroll_02



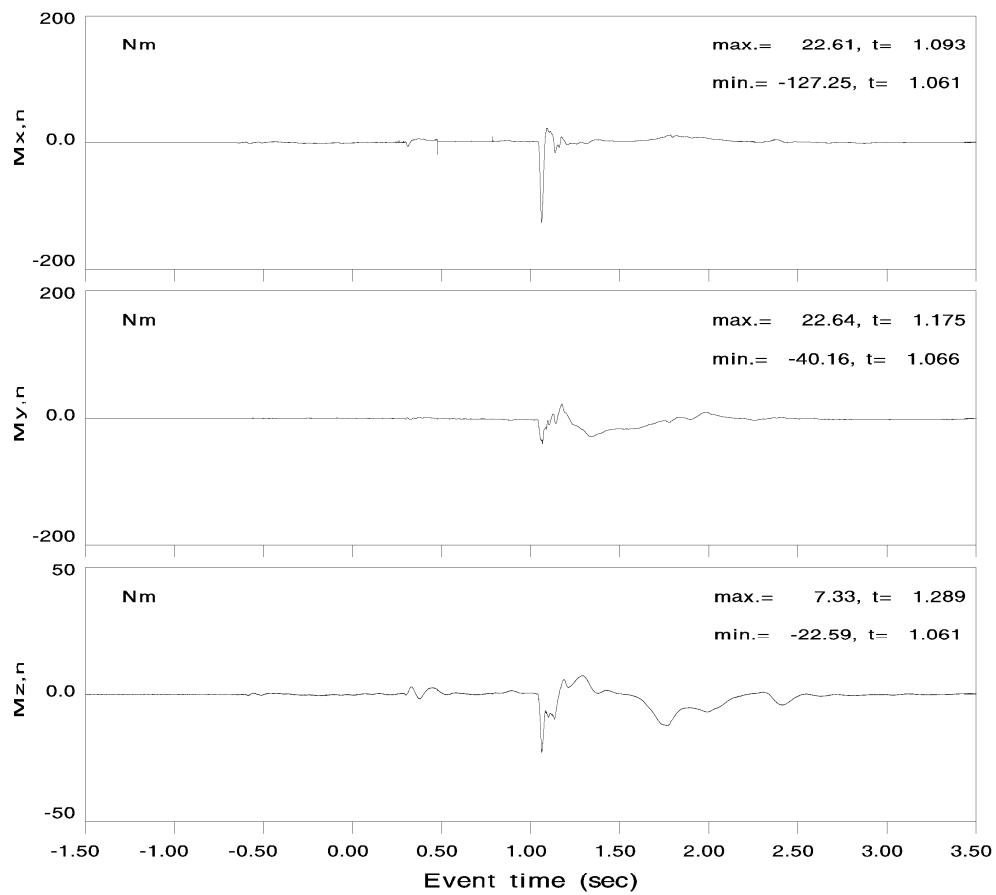
Primary

Test latroll_02

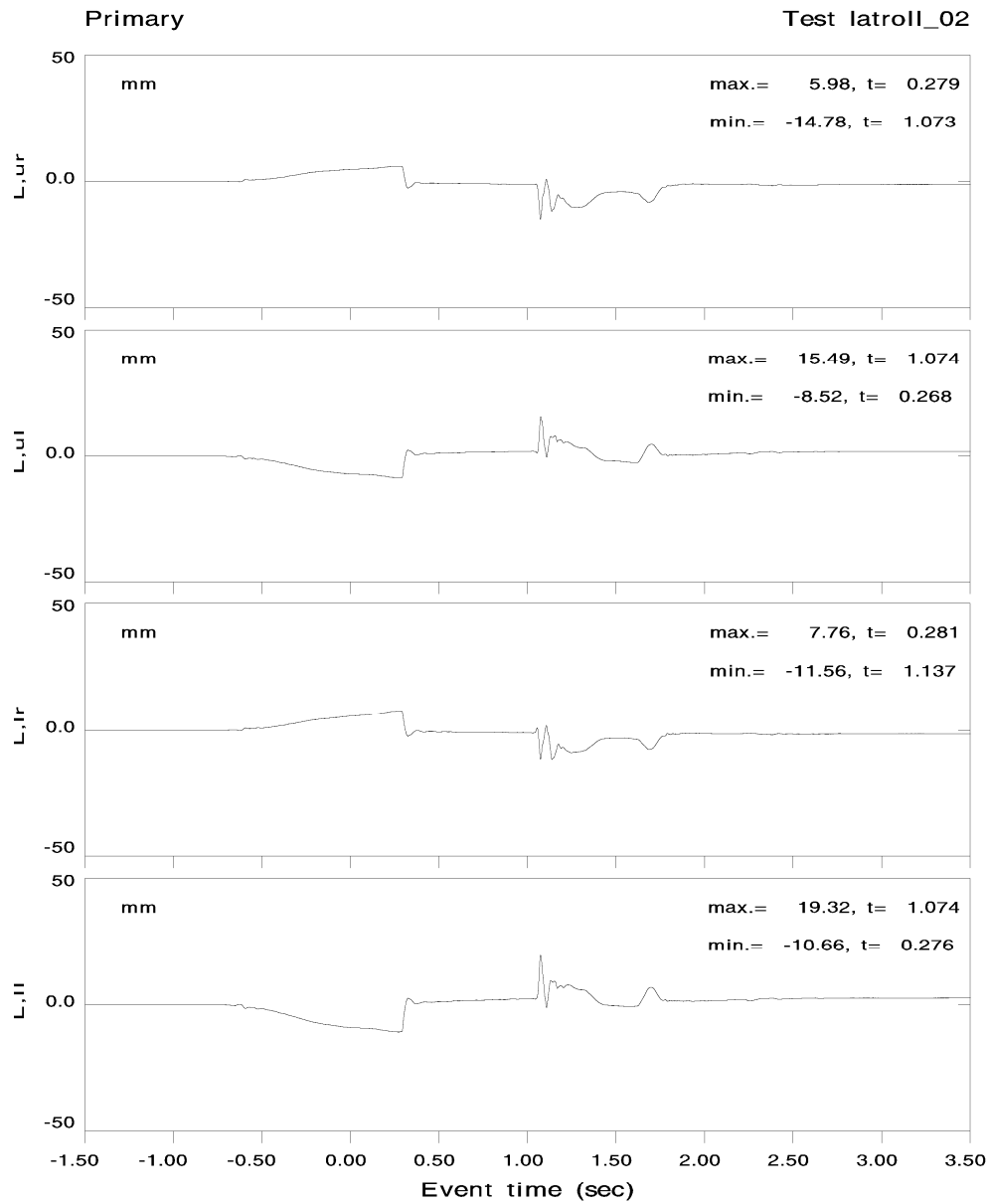


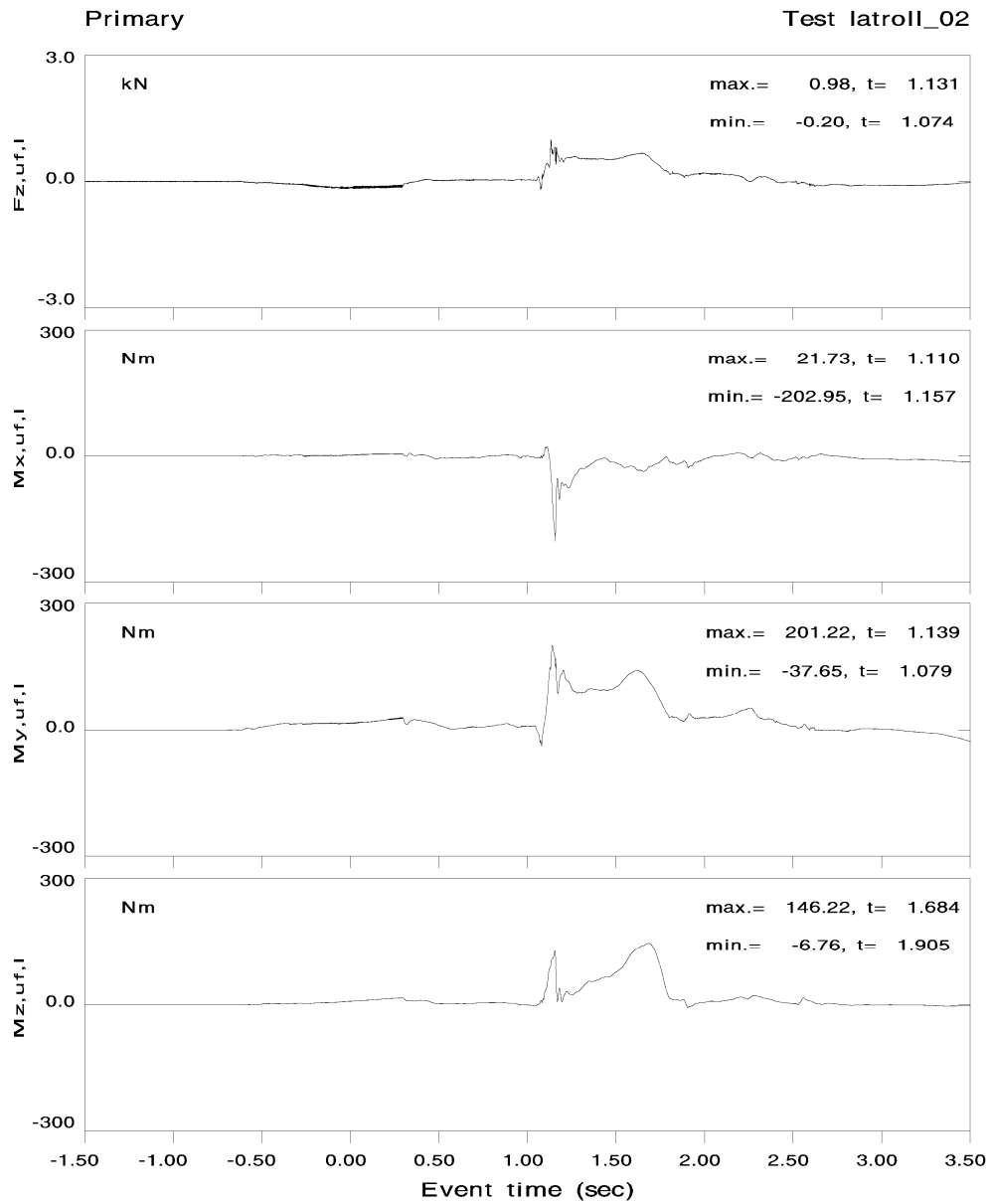
Primary

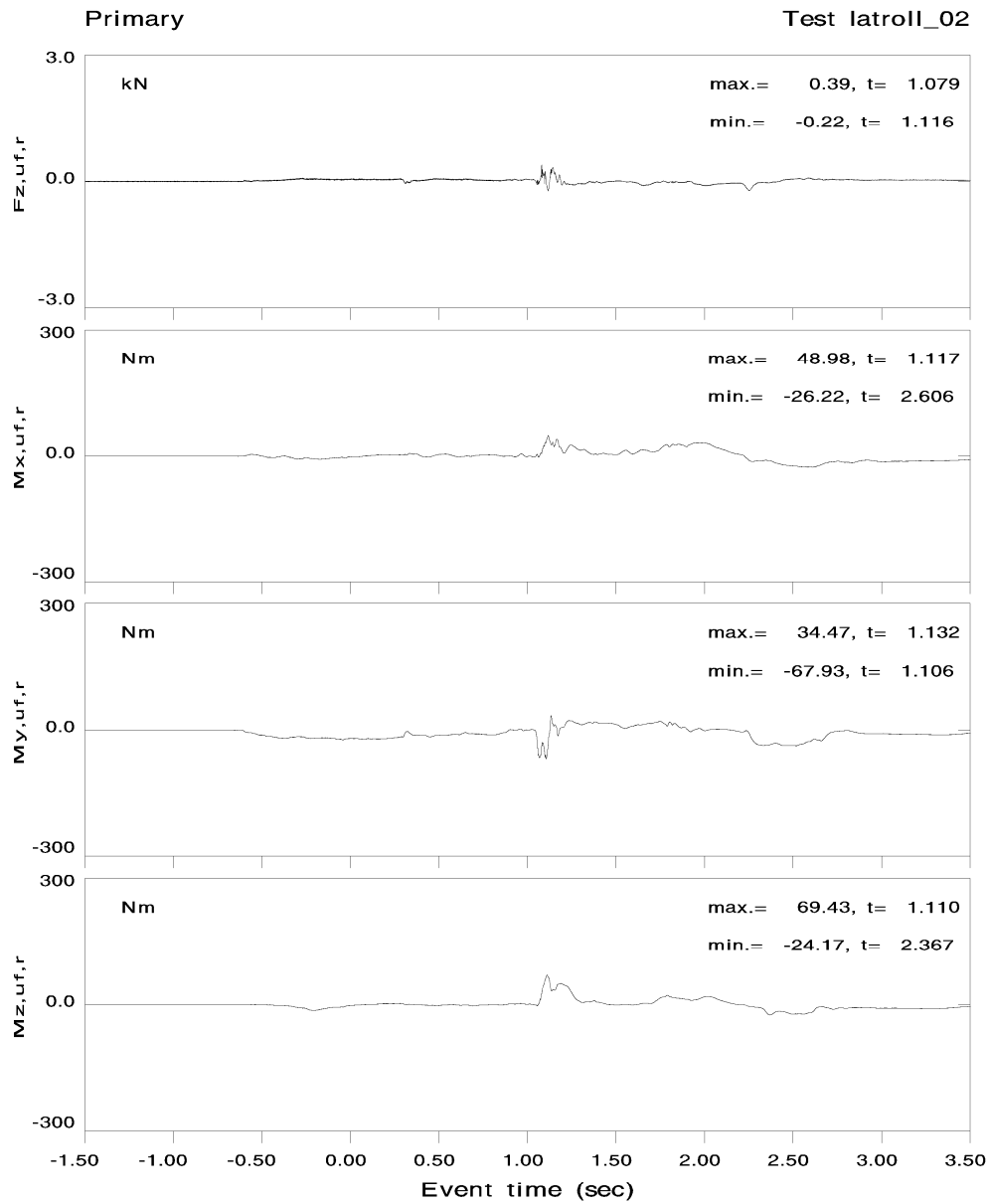
Test latroll_02

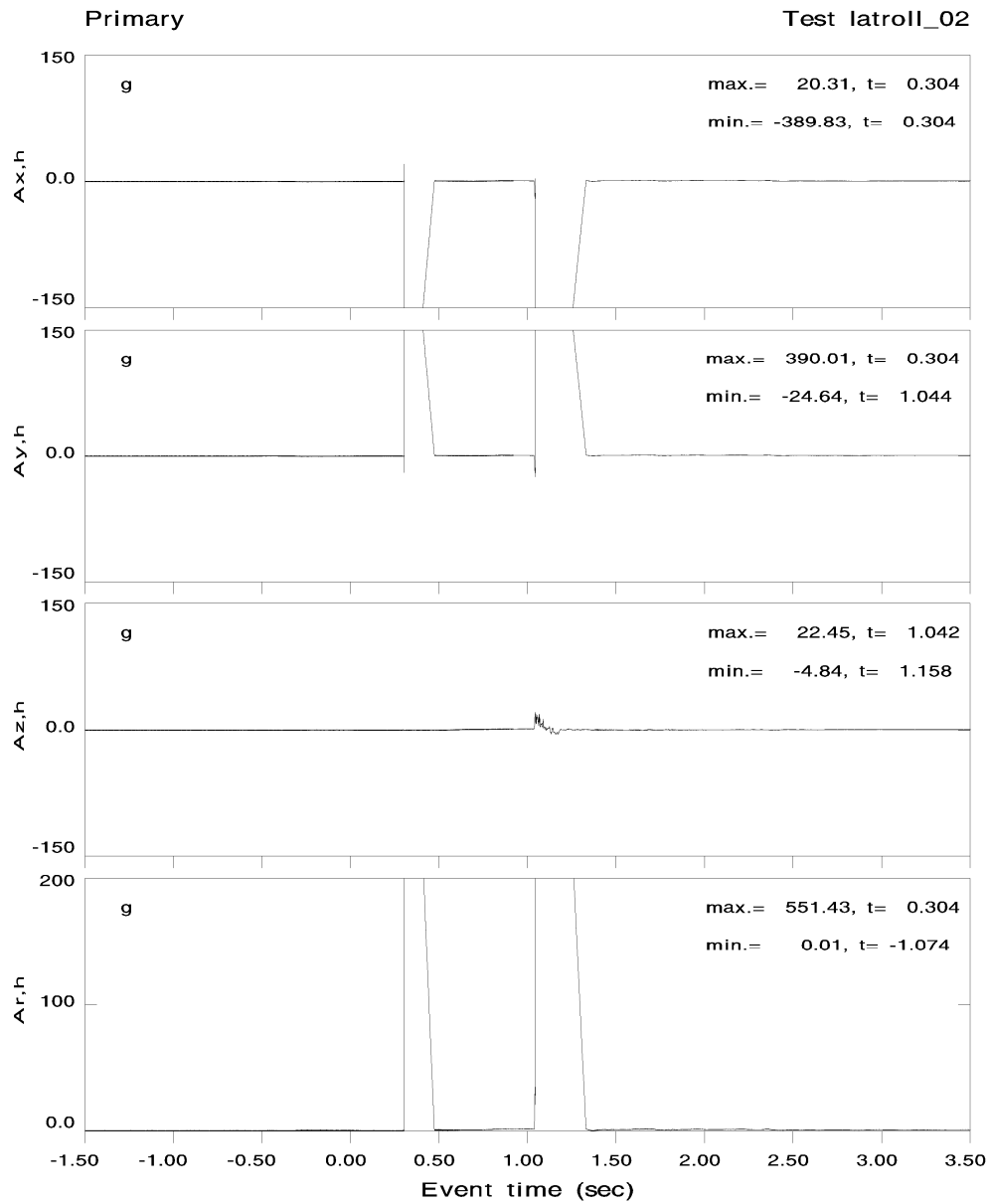


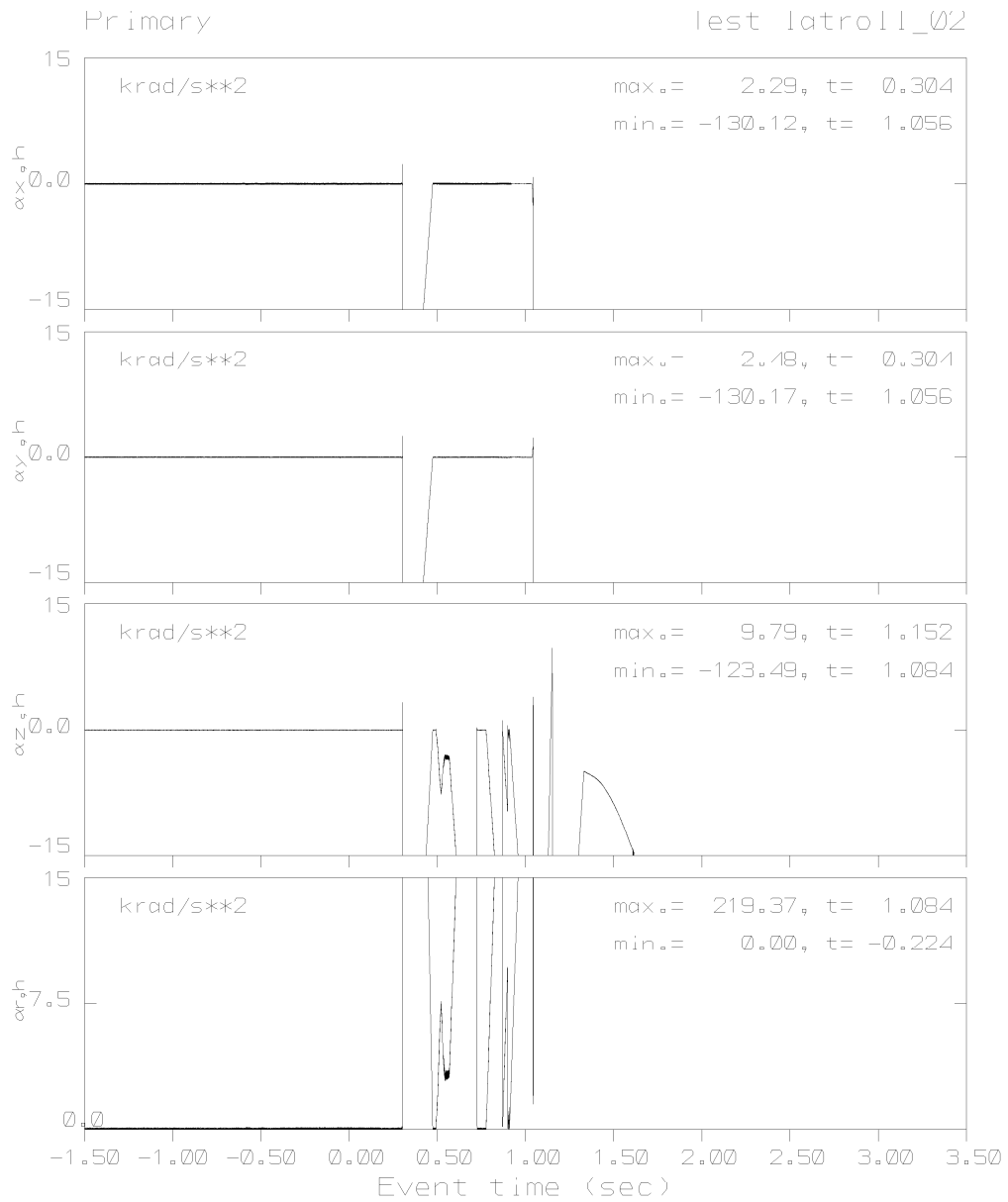
Page 5

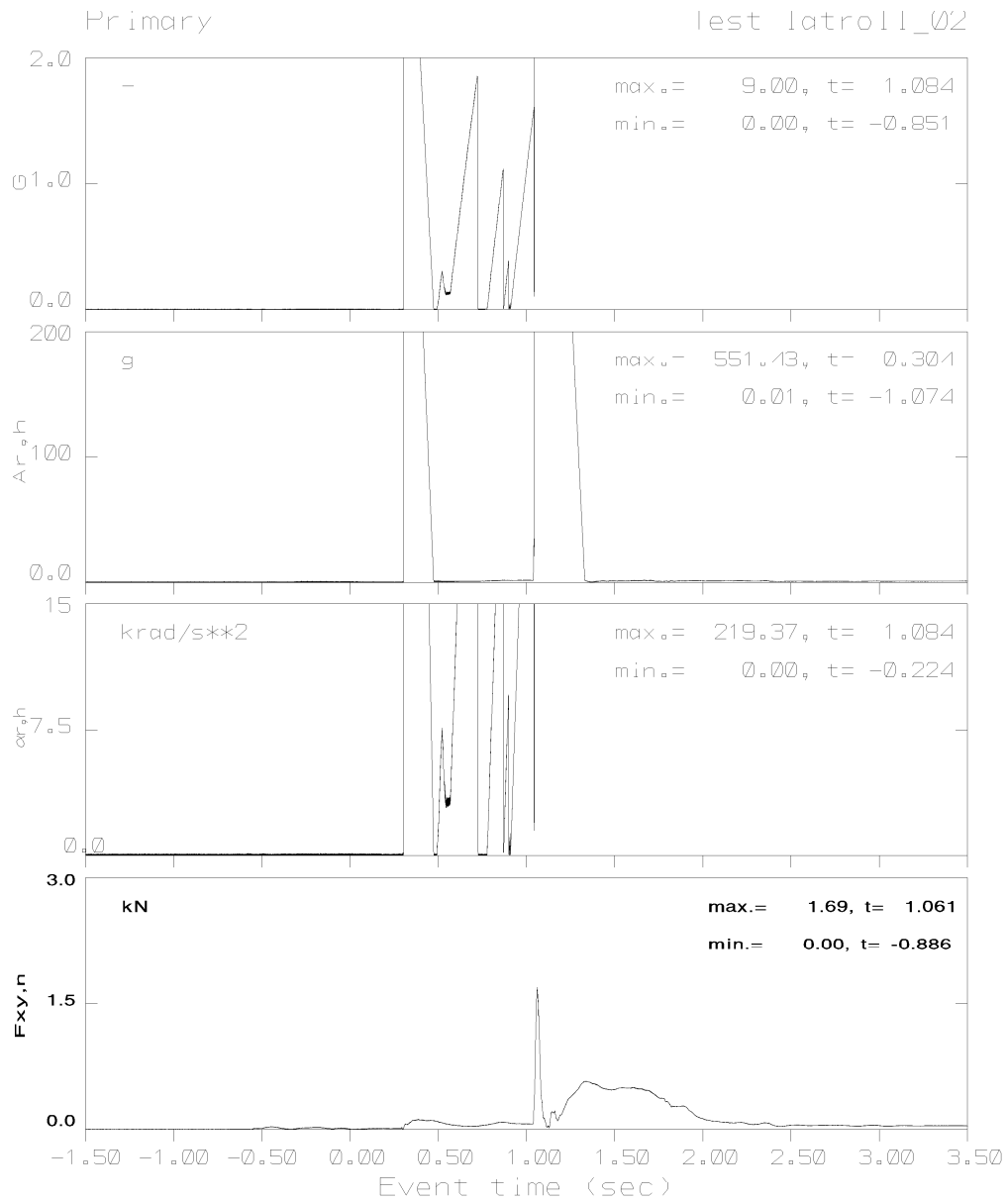




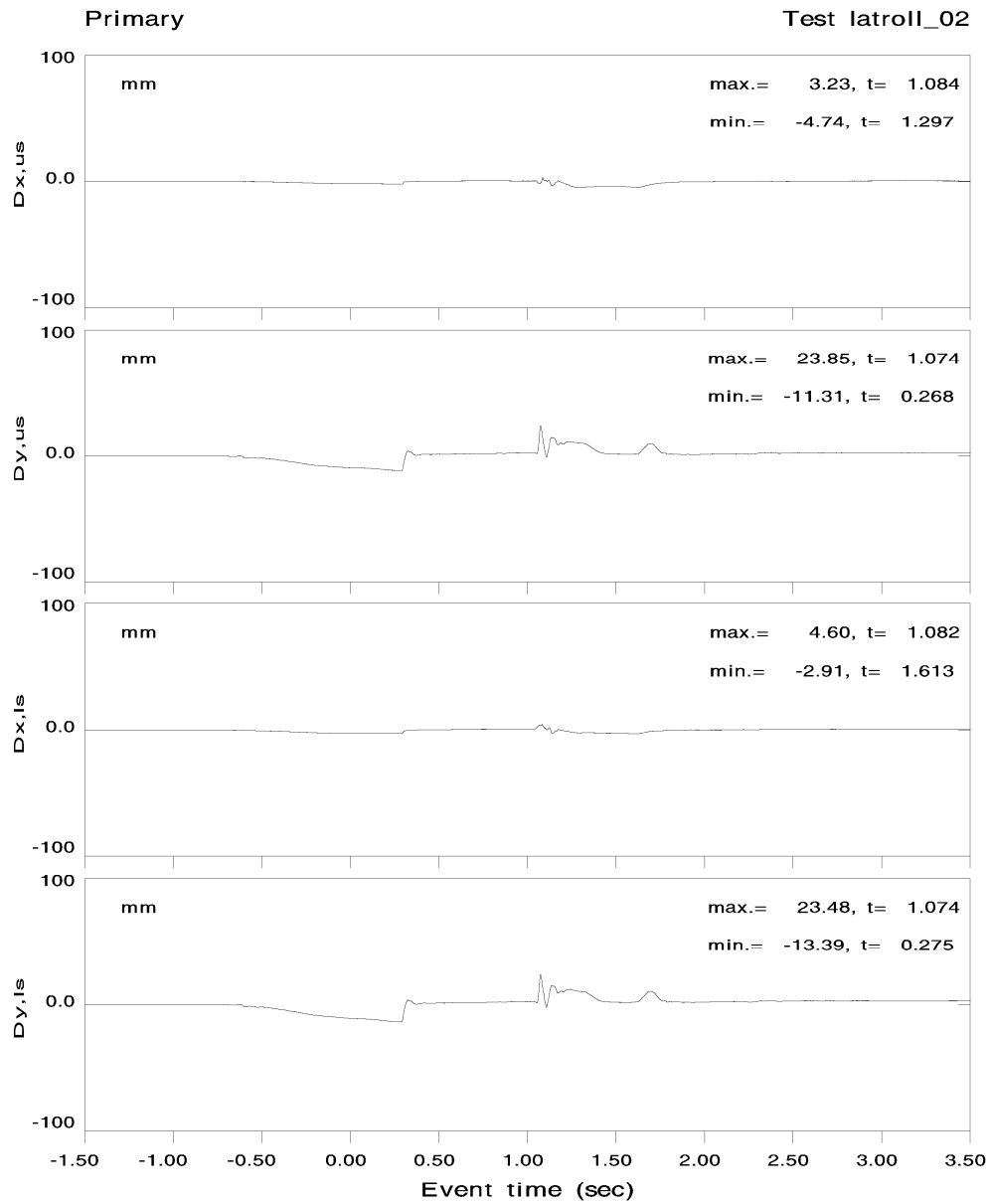






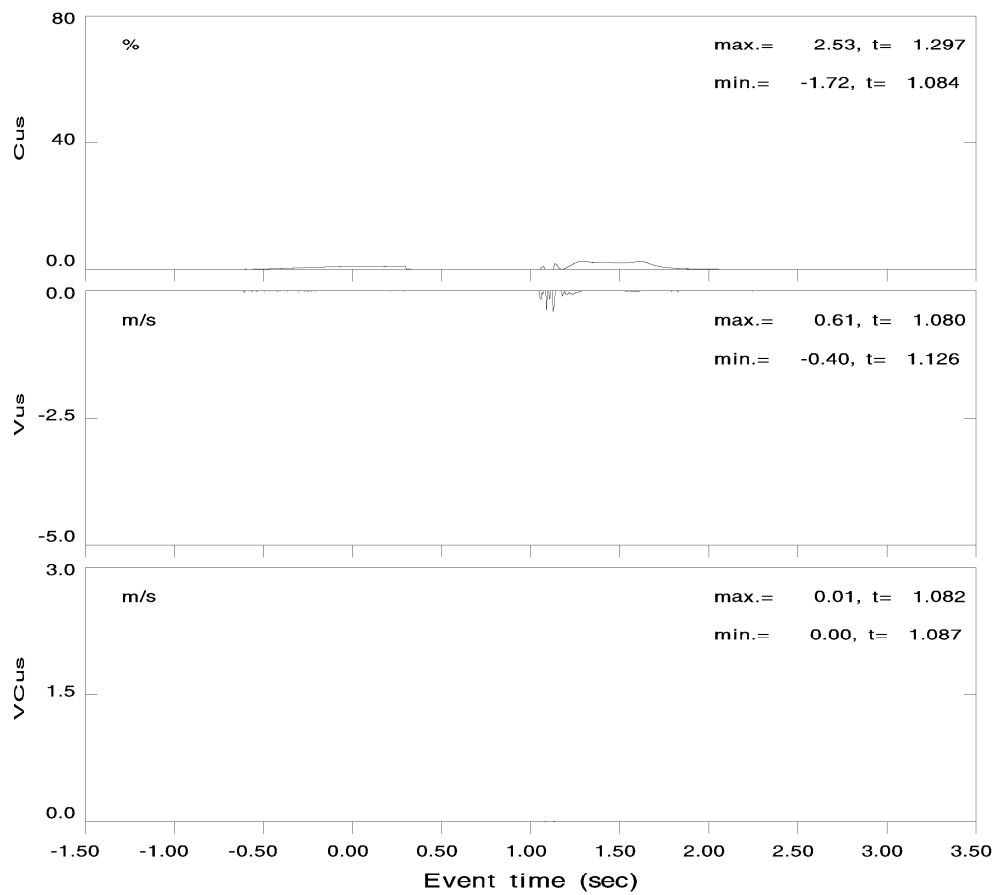


Page 11



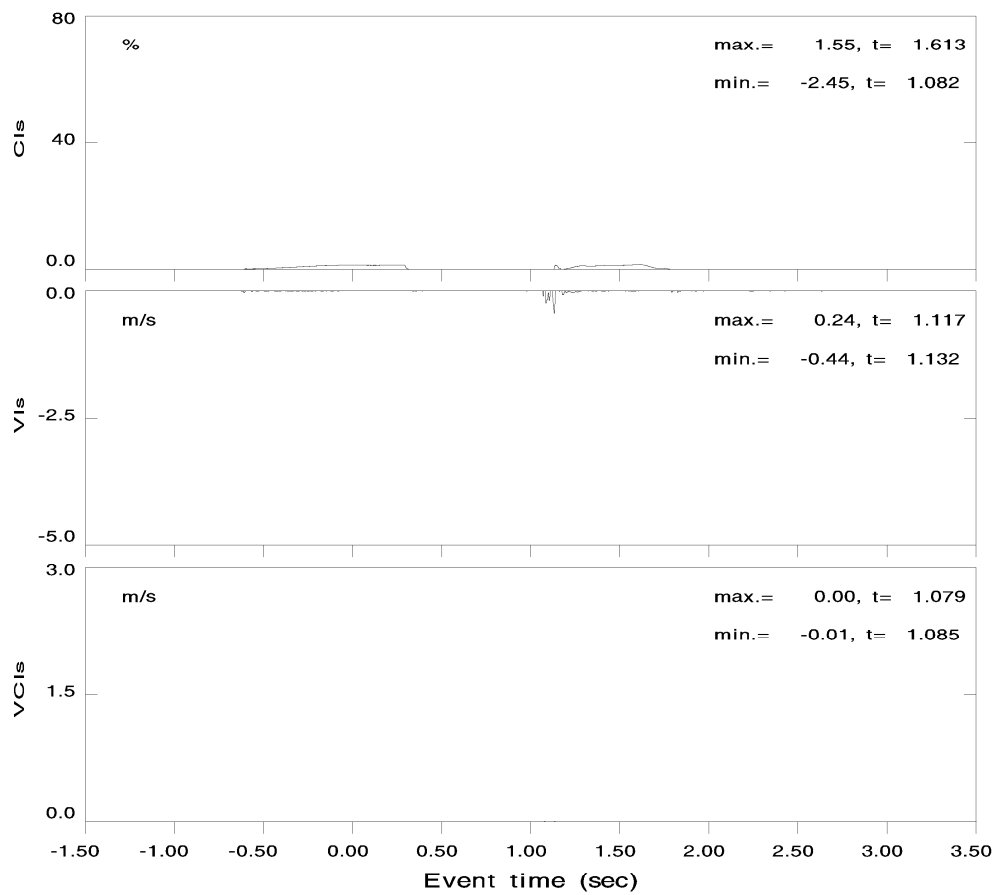
Primary

Test latroll_02



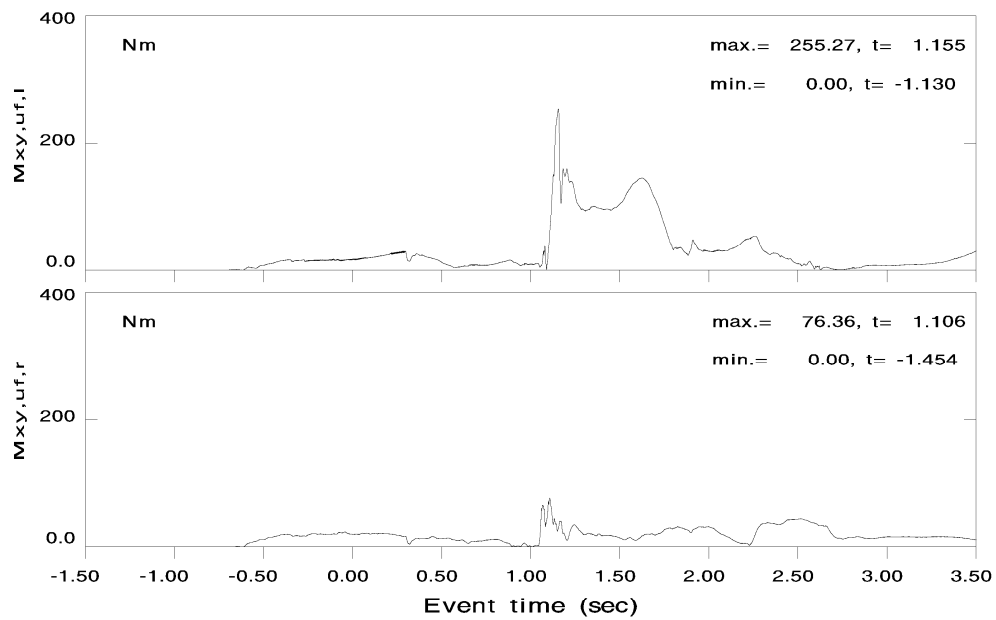
Primary

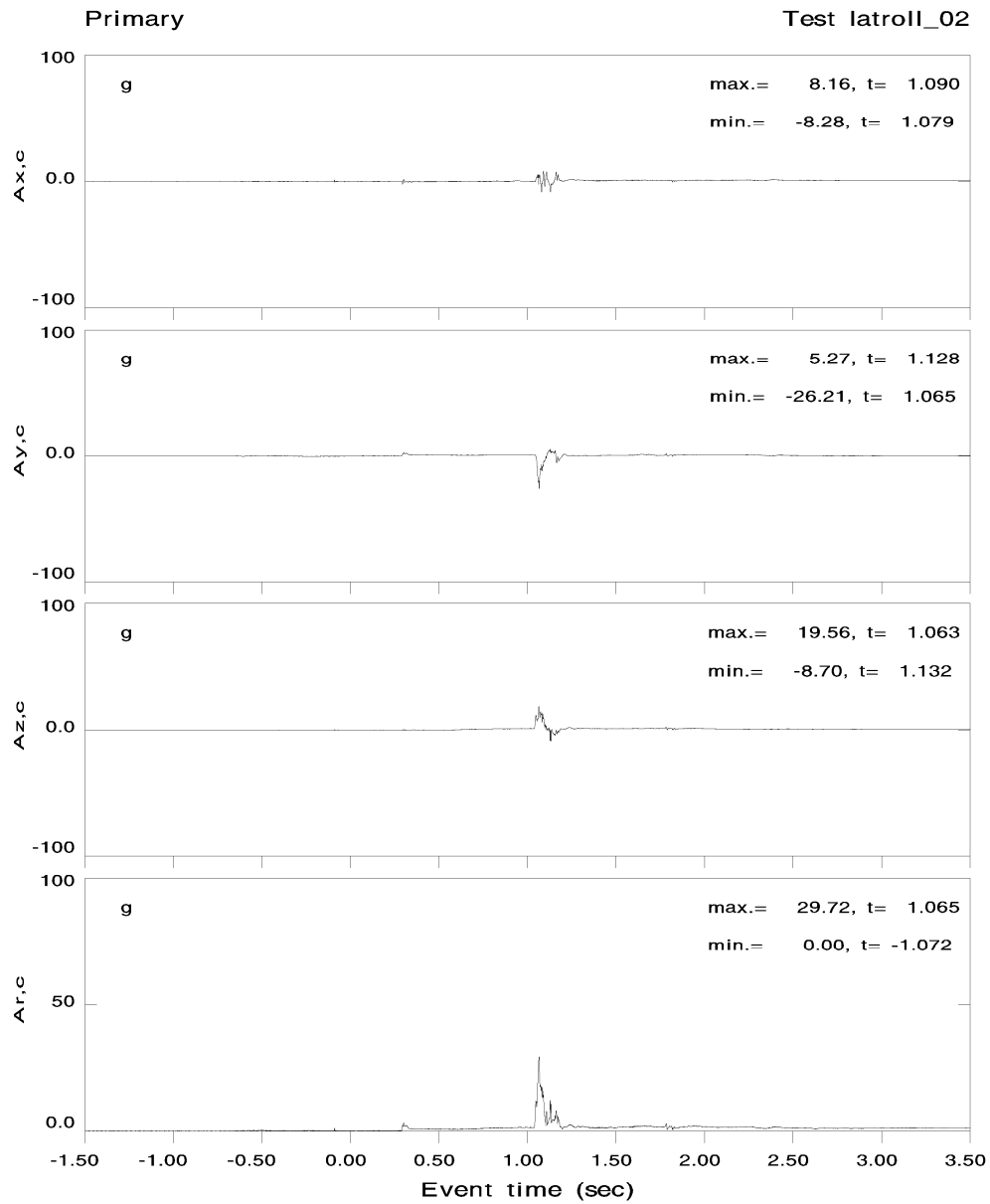
Test latroll_02

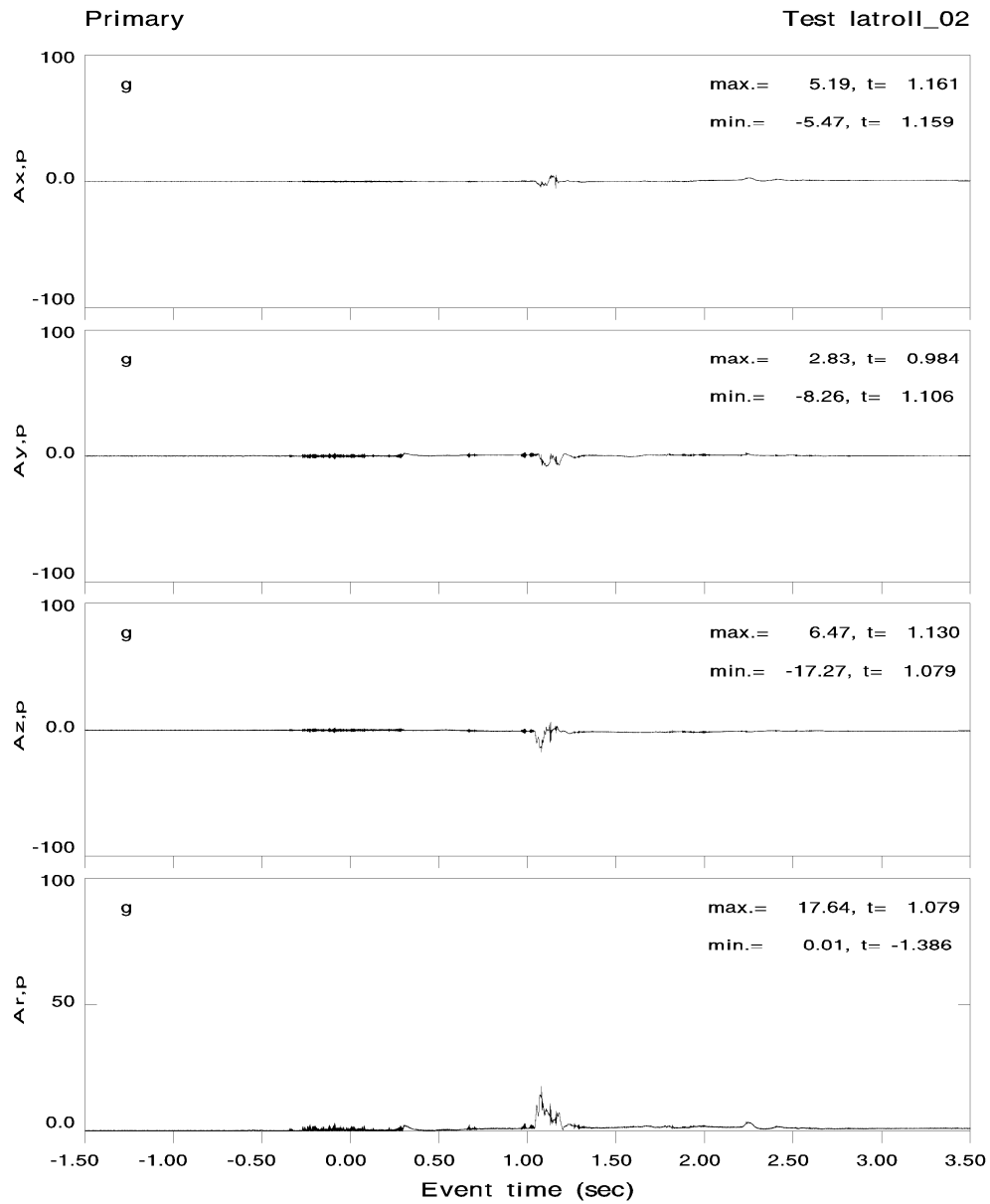


Primary

Test latroll_02

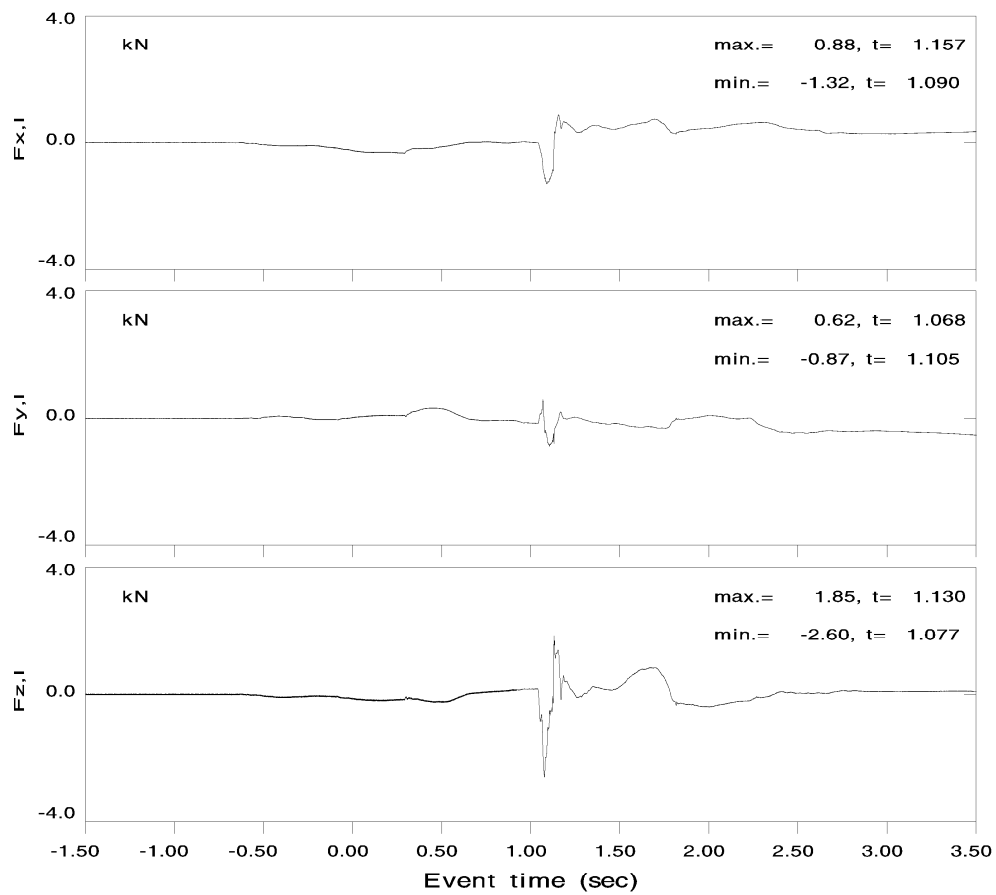






Primary

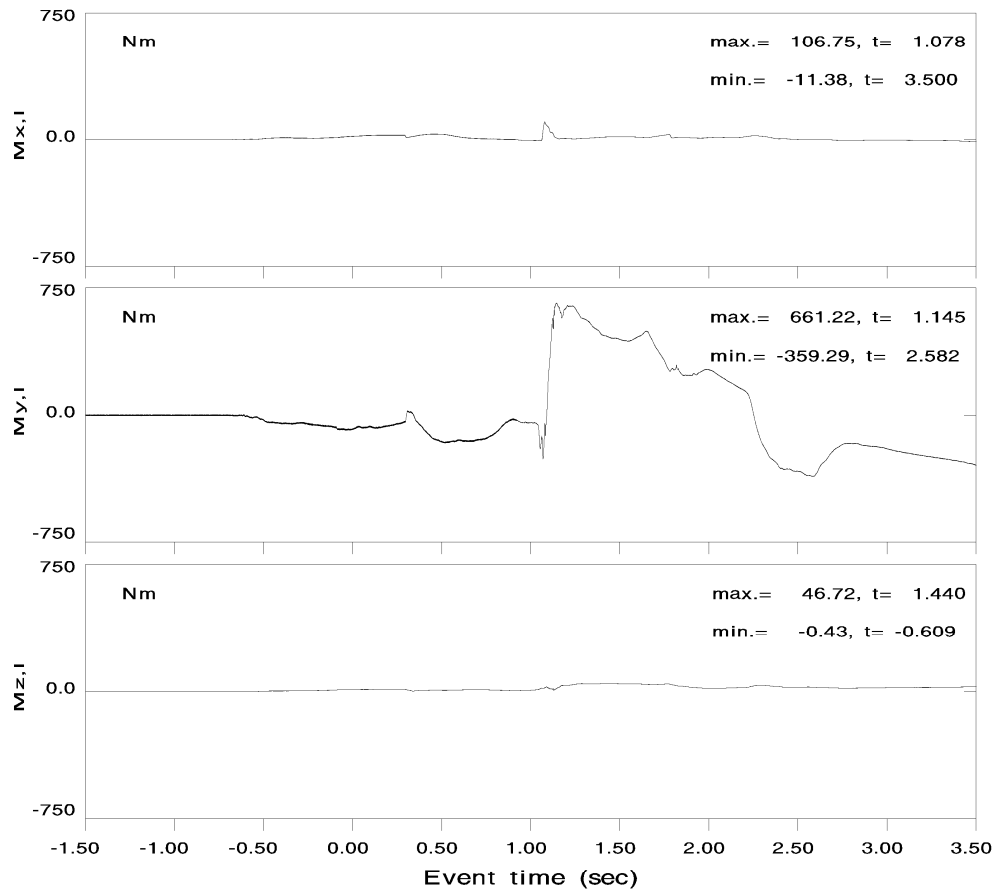
Test latroll_02

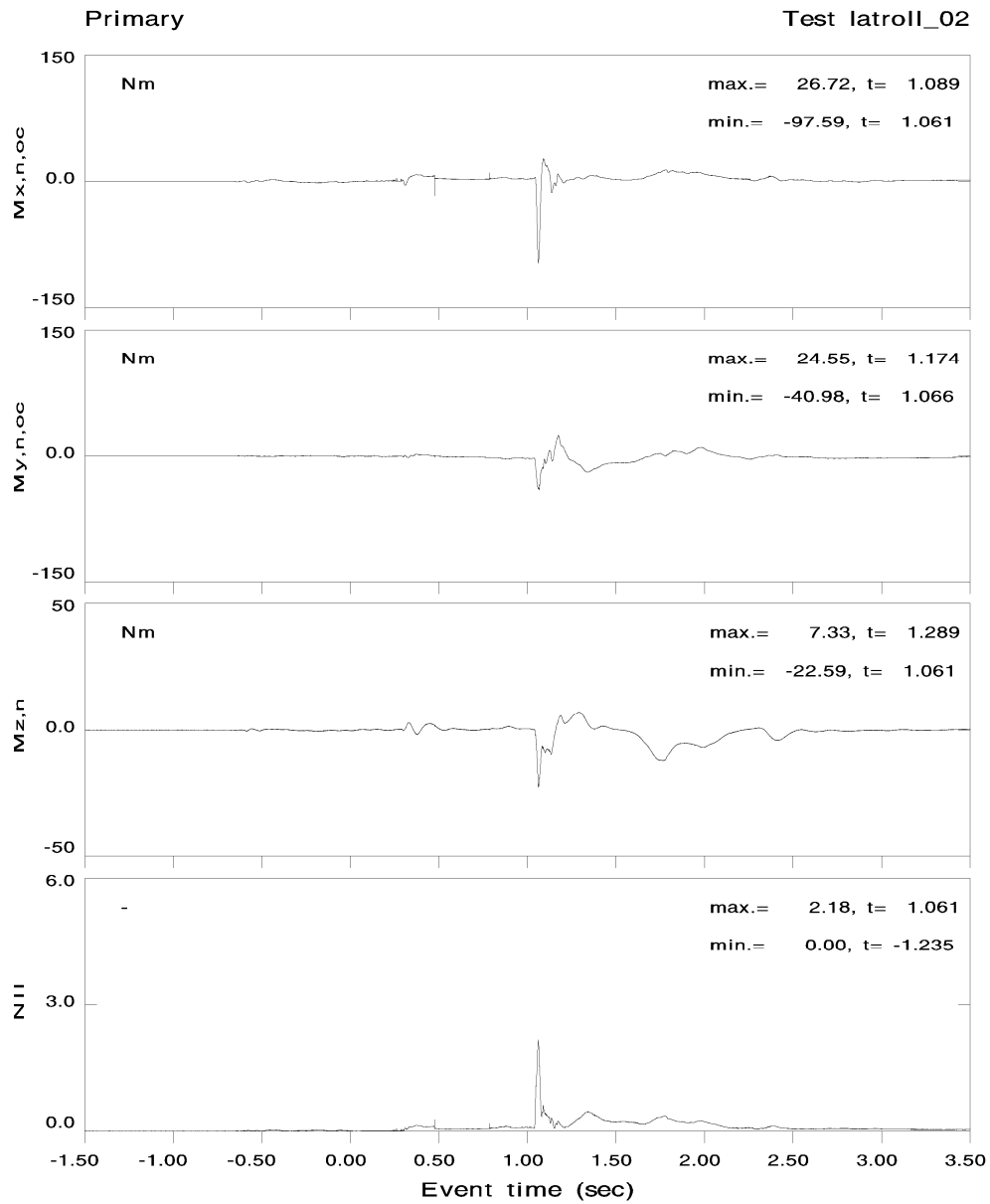


Page 18

Primary

Test latroll_02





2.16 Research & Development test latroll_03

ATV_Lateral_RHS_Roll_Quadbar.ICE
Test Number : latroll_03
Analysis Window : Entire Run

Injury Cost Model input:

Number of AIS 3 Femur Fractures = 0
Number of AIS 2 Tibia Fractures = 0
Number of AIS 3 Tibia Fractures = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location = 1
Index for VCmax Location = 2
maximum Abdomen Penetration = 0.000
maximum GAMBIT = 0.270
Cmax = 7.310
VCmax = 0.000
HIC = 145.4
NII (2002 MATD Neck) = 2.5
Location of Cmax : upper sternum
Location of VCmax : lower sternum

Injury Cost Model output:

MAIS = 0.0
Total AIS = 0.0
Normalized Injury Cost = 0.001
Normalized Cost of Survival = 0.001
Normalized Cost of Dying = 0.000
Probability of Fatality = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity = 0.000
Risk of life threatening brain injury (%) = 0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.973	0.978	1.000	1.000	1.000	0
1	0.016	0.020	0.000	0.000	0.000	0
2	0.005	0.001	0.000	0.000	0.000	0
3	0.006	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.045	0.023	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

Test 1atroll_03, Primary

1atroll_03.rpt

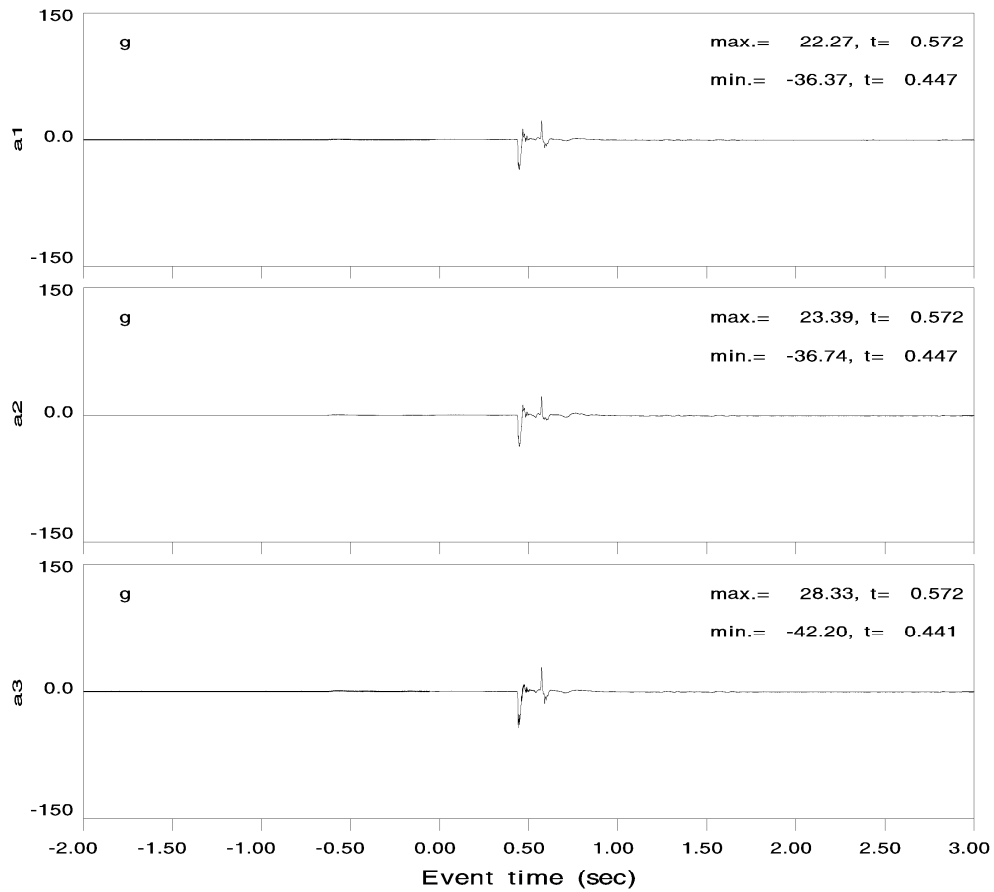
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	4.90 g	0.465	-10.95 g	0.480
Ay,c	8.26 g	0.480	-14.21 g	0.476
Az,c	19.37 g	0.481	-8.04 g	0.480
Ax,p	7.21 g	0.482	-19.89 g	0.480
Ay,p	24.50 g	0.480	-17.22 g	0.481
Az,p	5.81 g	0.482	-59.81 g	0.480
spare	0.00 -	-1.532	-0.01 -	0.482
spare	0.00 -	0.474	0.00 -	0.481
L,ur	0.02 mm	-0.637	-27.83 mm	0.555
L,lr	0.03 mm	-0.638	-24.29 mm	0.563
a1	22.27 g	0.572	-36.37 g	0.447
a2	23.39 g	0.572	-36.74 g	0.447
a3	28.33 g	0.572	-42.20 g	0.441
a4	25.95 g	0.441	-7.13 g	0.466
a5	22.35 g	0.445	-7.59 g	0.470
a6	41.43 g	0.441	-6.23 g	0.480
Mx,l	42.02 Nm	0.480	-23.47 Nm	-0.194
My,l	738.54 Nm	0.537	-96.67 Nm	0.453
Mz,l	28.43 Nm	1.293	-11.23 Nm	0.542
Fx,l	0.14 kN	0.256	-1.06 kN	0.498
Fy,l	0.69 kN	0.479	-0.20 kN	1.668
Fz,l	0.95 kN	0.614	-1.50 kN	0.479
spare	0.00 -	3.000	0.00 -	3.000
spare	0.00 -	3.000	0.00 -	3.000
spare	0.00 -	-1.864	-0.01 -	2.922
spare	0.00 -	0.577	0.00 -	1.058
spare	0.00 -	3.000	0.00 -	3.000
spare	0.00 -	3.000	0.00 -	3.000
Spare	0.00 -	0.486	0.00 -	0.481
a7	29.22 g	0.441	-4.08 g	0.576
a8	17.48 g	0.446	-8.04 g	0.576
a9	36.19 g	0.441	-8.81 g	0.575
Fz,uf,r	0.33 kN	0.537	-0.31 kN	0.513
Mx,uf,r	58.61 Nm	0.545	-7.55 Nm	0.658
My,uf,r	44.53 Nm	0.568	-40.67 Nm	0.462
Mz,uf,r	28.17 Nm	0.501	-30.30 Nm	0.814
Fz,uf,l	0.94 kN	0.551	-0.24 kN	0.481
Mx,uf,l	26.51 Nm	0.520	-157.18 Nm	0.592
My,uf,l	212.14 Nm	0.545	-42.27 Nm	0.480
Mz,uf,l	137.93 Nm	0.608	-10.01 Nm	0.770
Fx,n	0.45 kN	0.461	-0.10 kN	0.556
Fy,n	1.47 kN	0.458	-0.05 kN	0.604
Fz,n	0.27 kN	0.593	-3.58 kN	0.455
Mx,n	11.49 Nm	0.565	-145.31 Nm	0.464
My,n	22.74 Nm	0.578	-40.77 Nm	0.468
Mz,n	9.40 Nm	0.758	-23.17 Nm	0.464
L,ul	12.87 mm	0.562	-4.51 mm	0.649
L,ll	17.48 mm	0.561	-4.44 mm	0.656
Ax,h	12.41 g	0.447	-16.07 g	0.572
Ay,h	15.73 g	0.572	-42.39 g	0.441
Az,h	29.24 g	0.441	-4.08 g	0.576
ax,h	1.29 krad/s**2	0.472	-3.99 krad/s**2	0.441
ay,h	1.49 krad/s**2	0.575	-1.13 krad/s**2	0.467
az,h	1.73 krad/s**2	0.442	-1.22 krad/s**2	0.459
Ar,h	51.83 g	0.441	0.01 g	-0.666
ar,h	4.46 krad/s**2	0.441	0.00 krad/s**2	2.039
G	0.27 -	0.441	0.00 -	-1.023
HIC	145.44	0.458	----	0.439
Fxy,n	1.52 kN	0.458	0.00 kN	-0.678
Dx,us	0.82 mm	-0.088	-13.70 mm	0.553
Dy,us	29.61 mm	0.561	-0.06 mm	-0.633

		latroll_03.rpt		
Cus	7.31 %	0.553	-0.44 %	-0.088
Vus	0.32 m/s	0.577	-0.79 m/s	0.541
VCus	0.04 m/s	0.544	-0.02 m/s	0.576
Dx,ls	4.19 mm	0.461	-8.49 mm	0.553
Dy,ls	29.74 mm	0.562	-0.07 mm	-0.633
Cl,s	4.53 %	0.553	-2.23 %	0.461
Vl,s	0.24 m/s	0.450	-0.54 m/s	0.541
VCls	0.02 m/s	0.544	-0.01 m/s	0.557
Mxy,uf,r	60.17 Nm	0.547	0.00 Nm	-1.388
Mxy,uf,l	222.95 Nm	0.594	0.00 Nm	-1.914
Mx,n,oc	12.12 Nm	0.445	-119.87 Nm	0.464
My,n,oc	22.02 Nm	0.577	-45.67 Nm	0.468
NII	2.53 -	0.464	0.00 -	-0.742
Ar,p	63.96 g	0.480	0.00 g	-1.061
Ar,c	21.42 g	0.481	0.00 g	-1.916

Recorder 1&2 event time = 0.000 Recorder 3&4 event time = 0.000

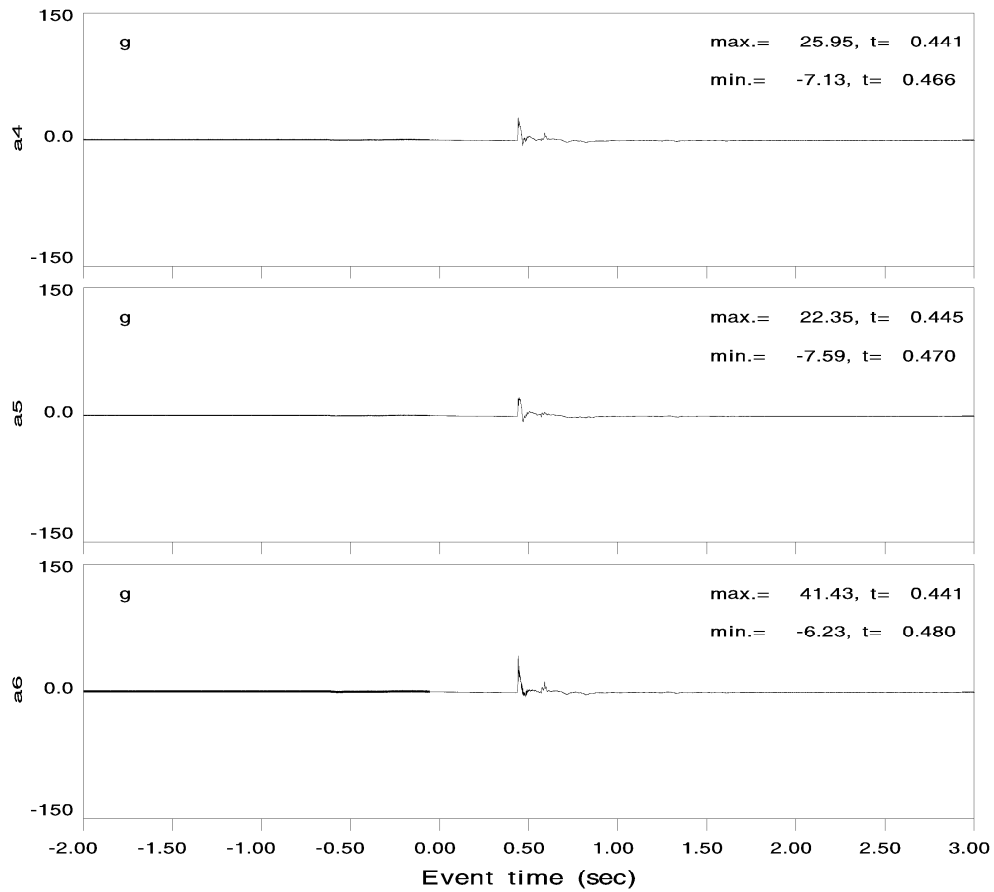
Primary

Test latroll_03



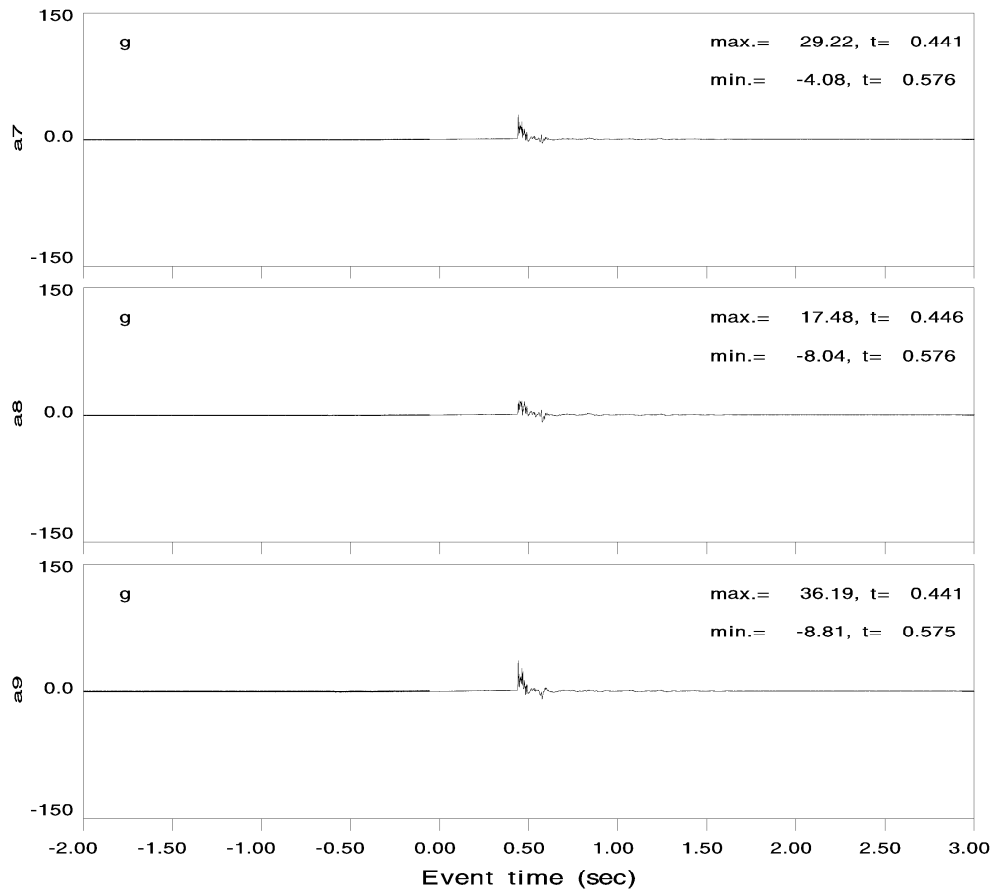
Primary

Test latroll_03



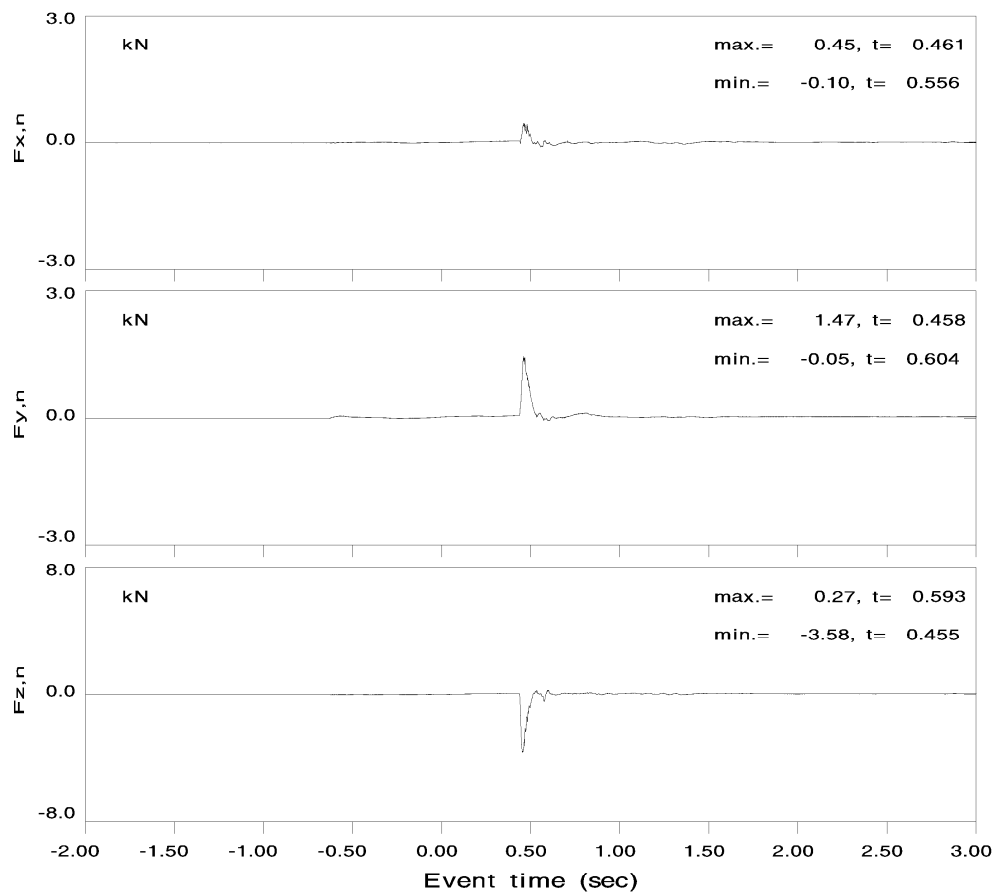
Primary

Test latroll_03



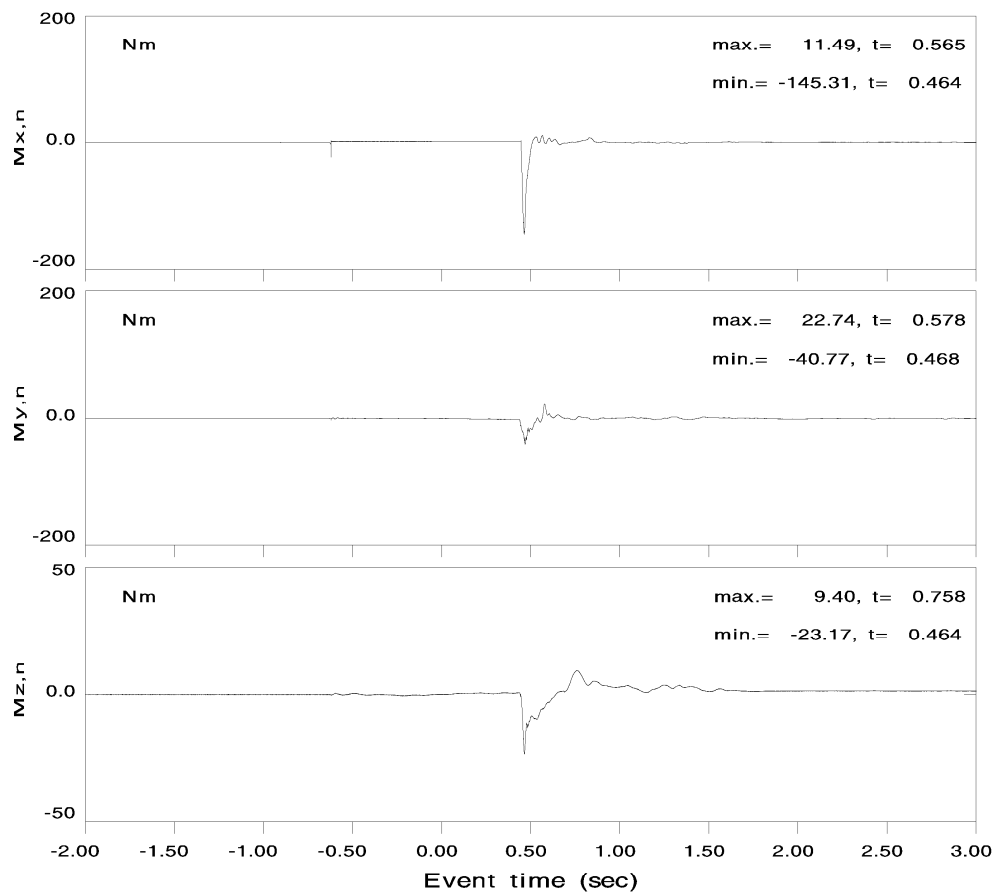
Primary

Test latroll_03

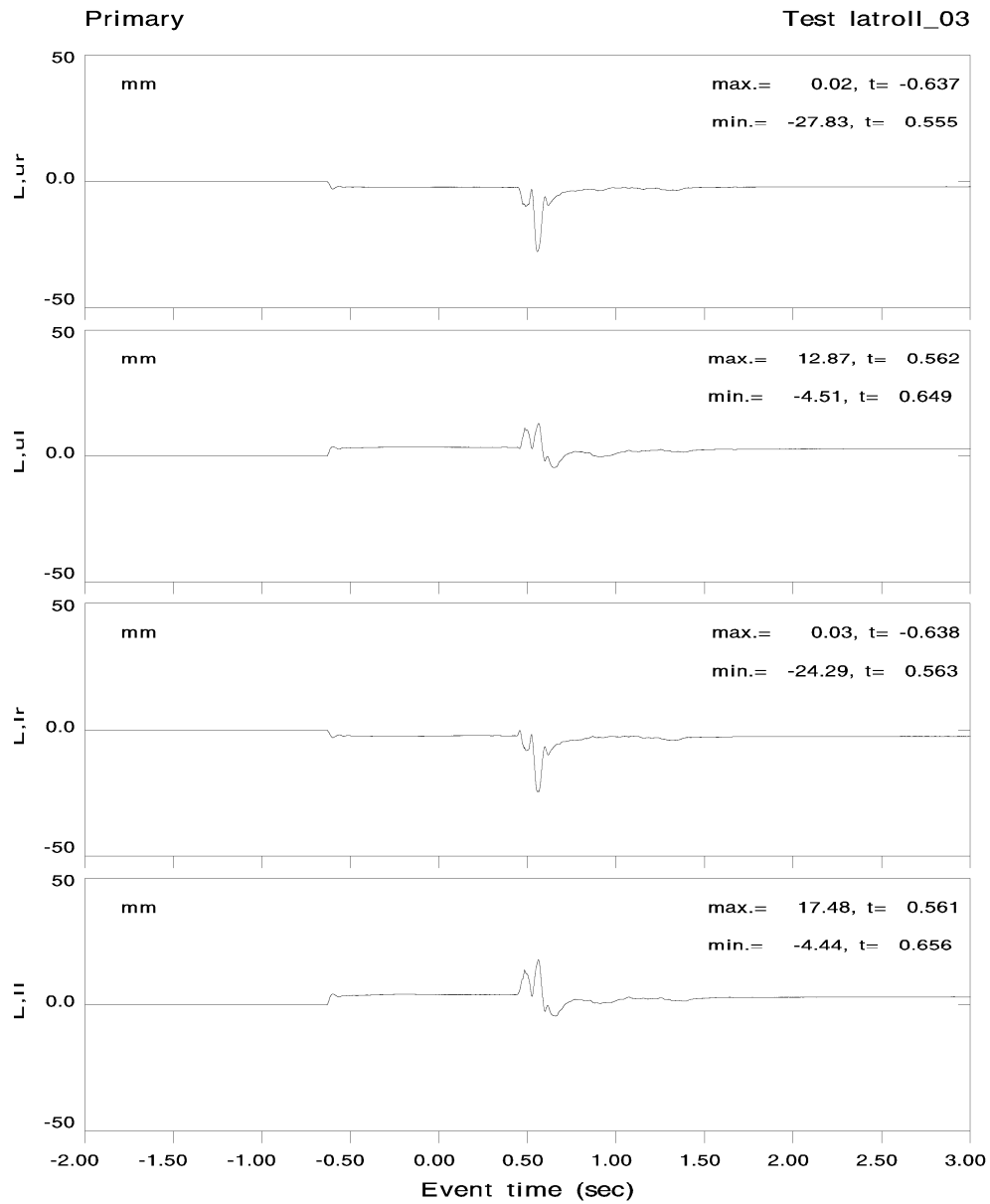


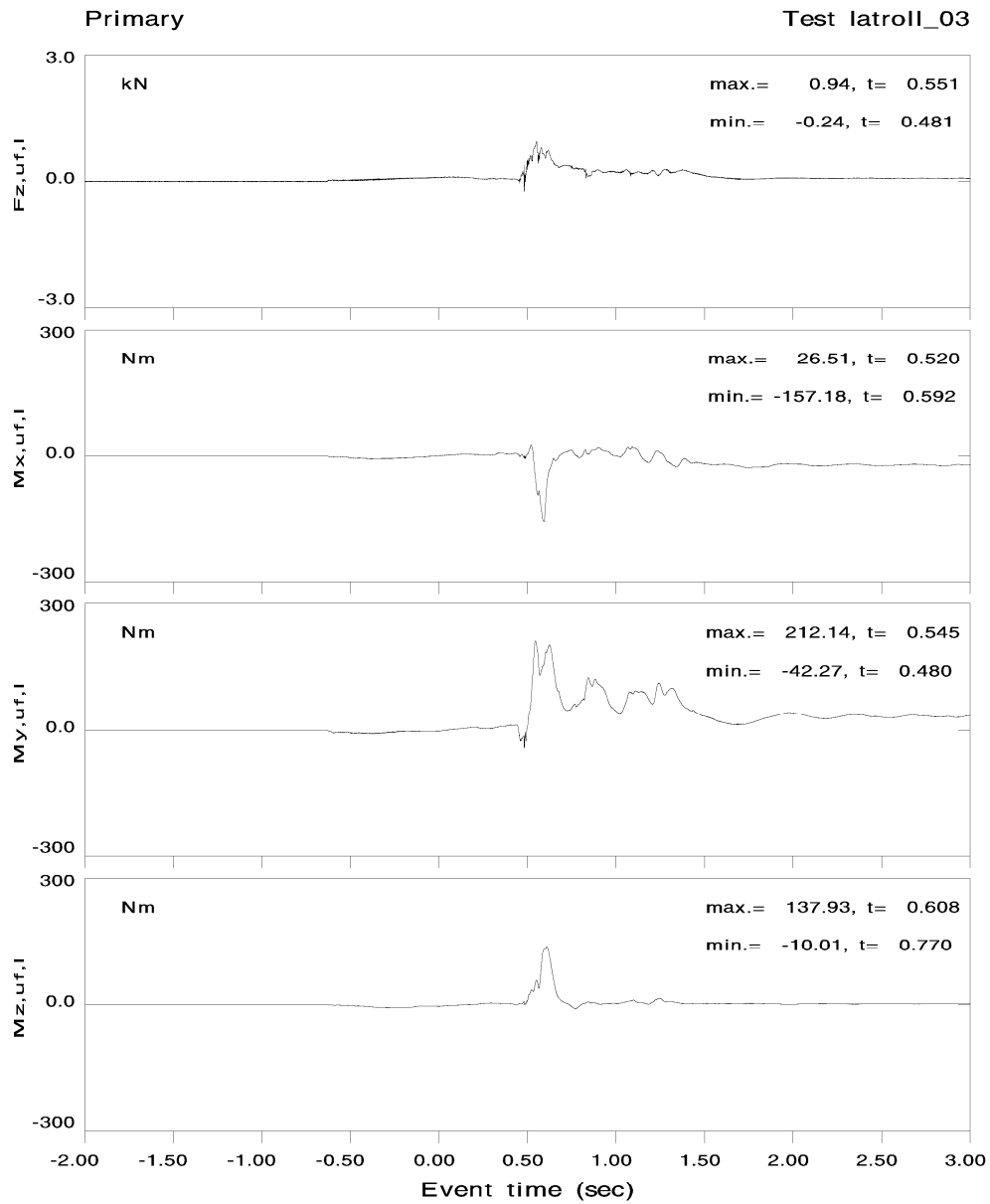
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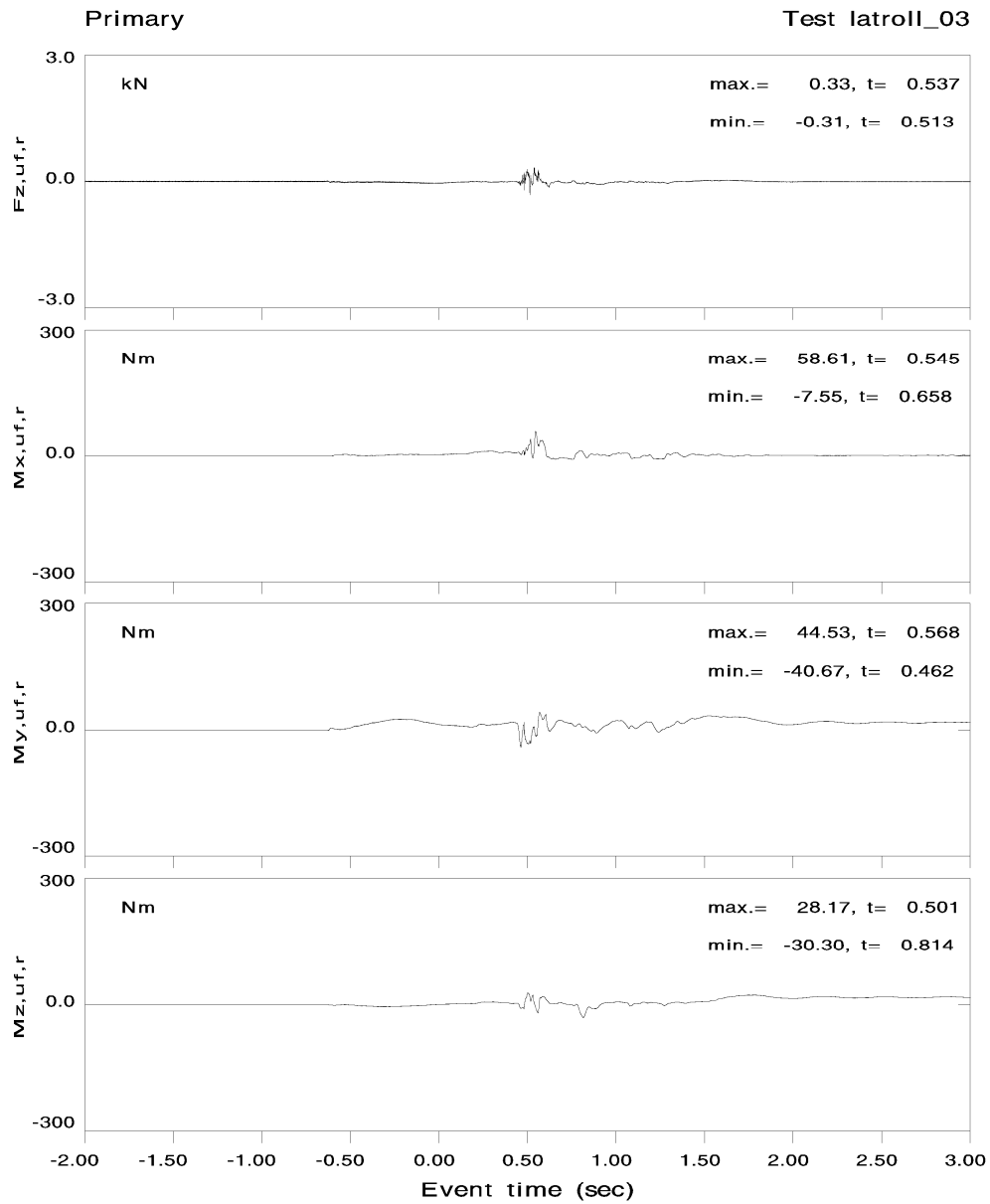
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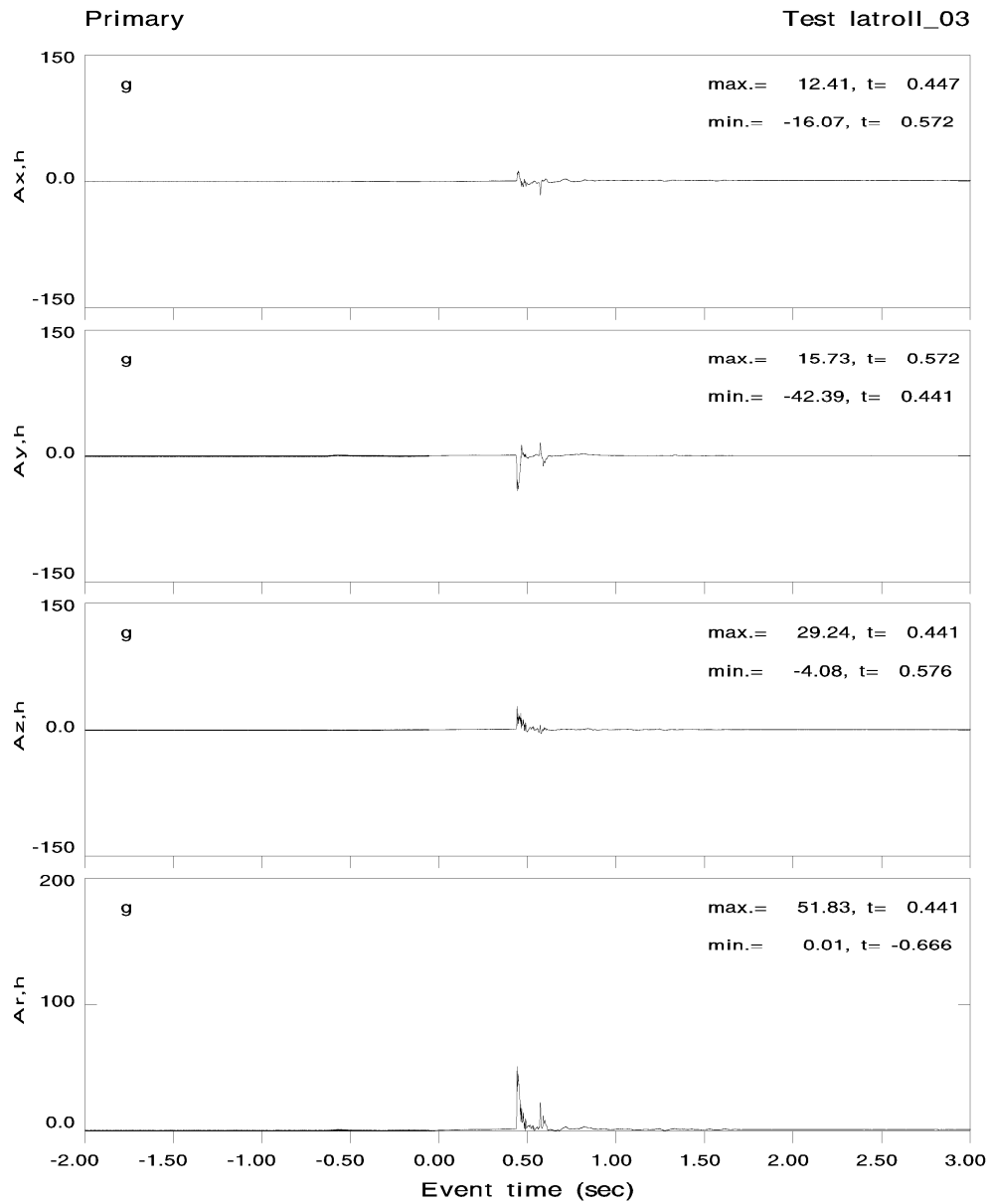


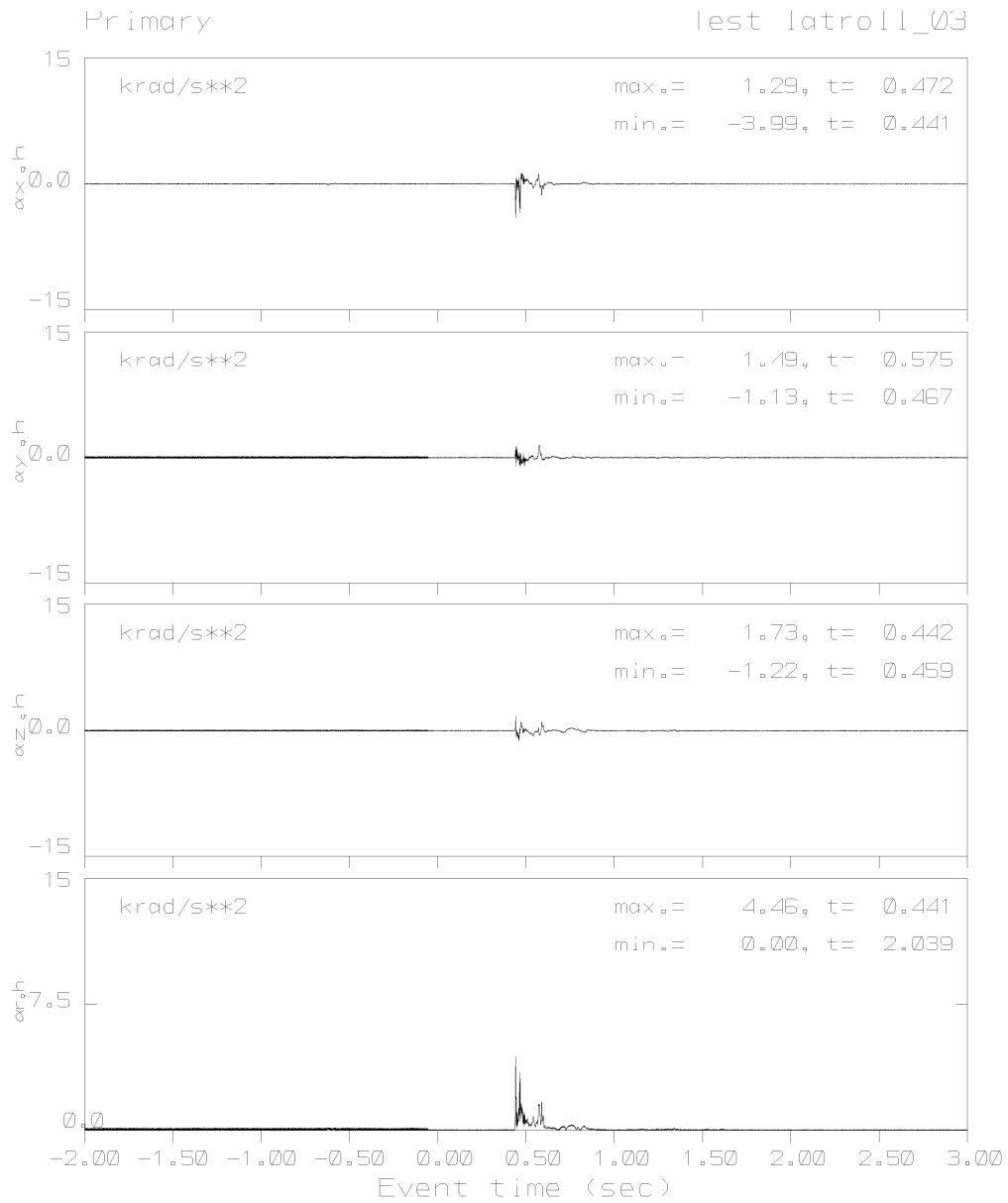
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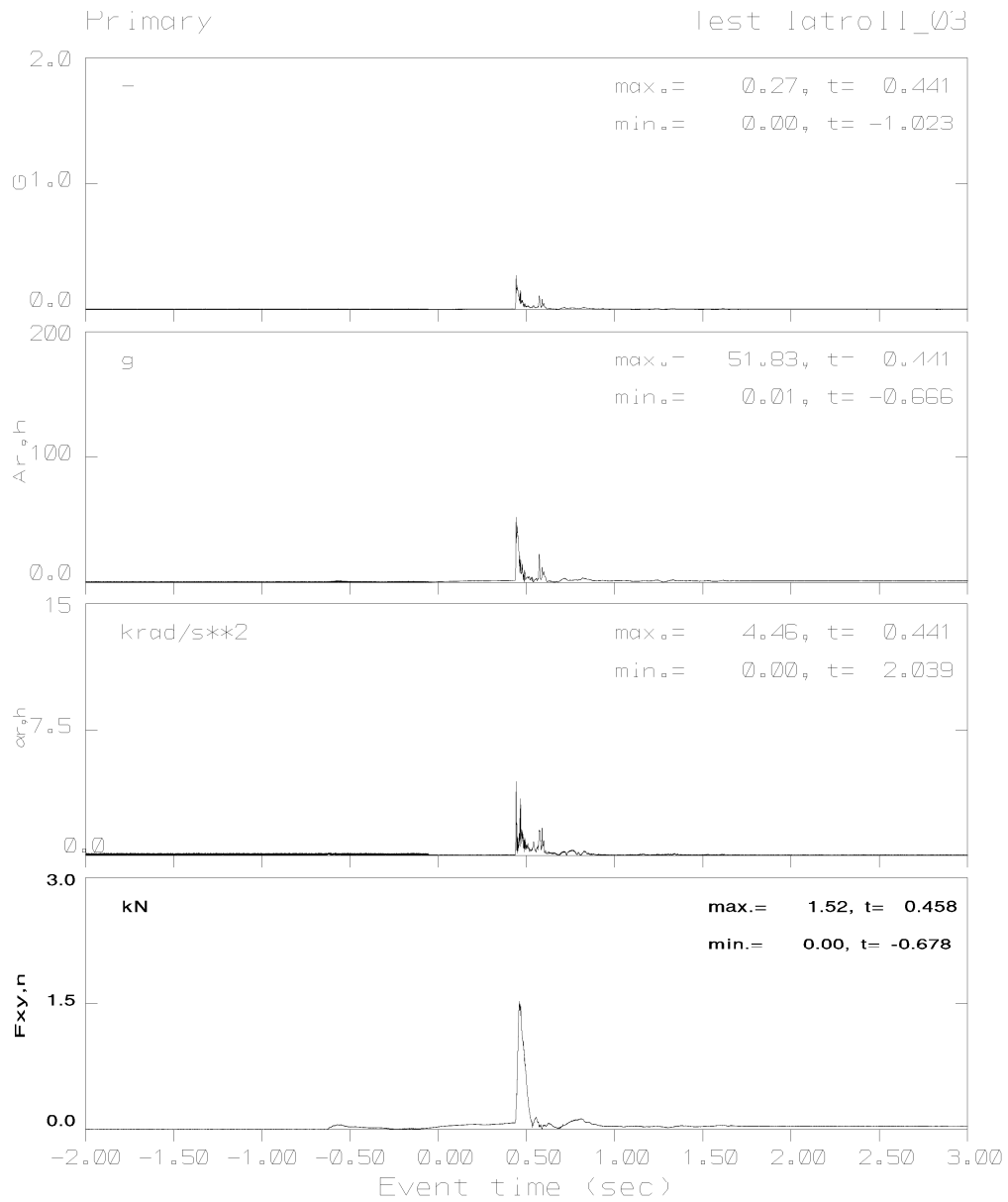




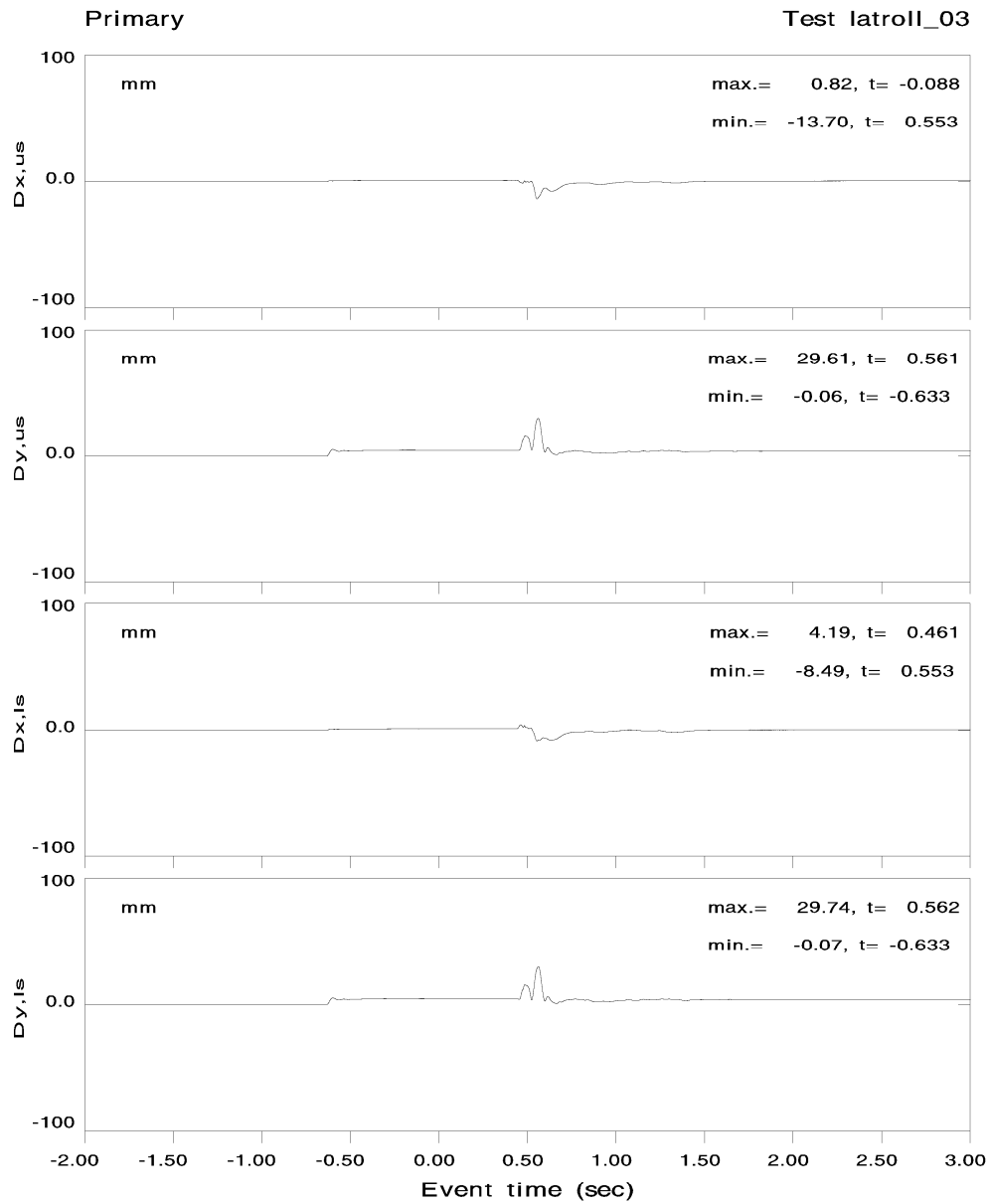




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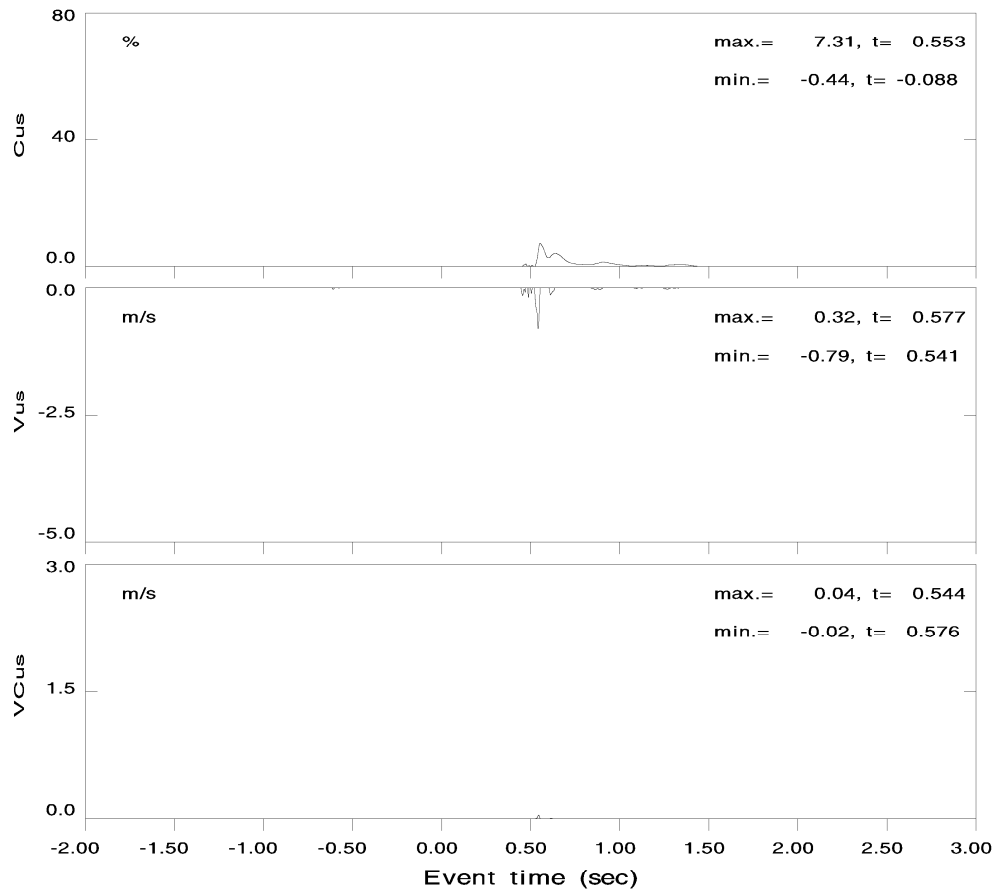


Page 11



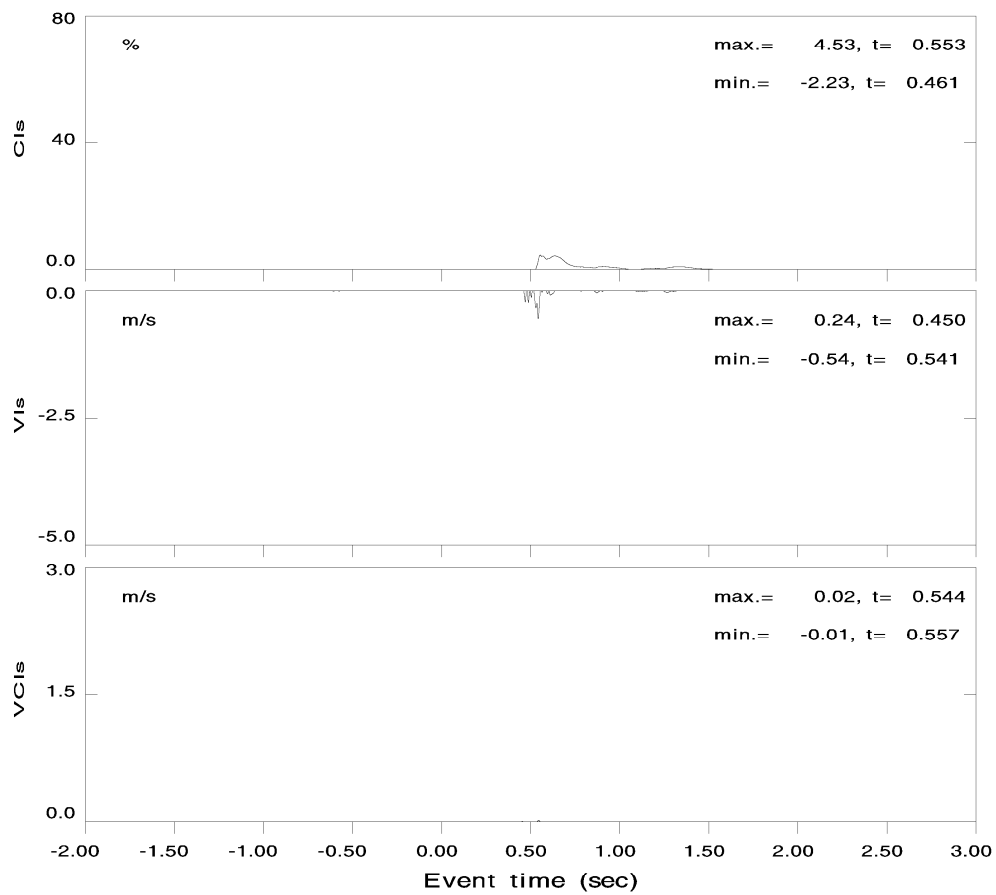
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Test latroll_03



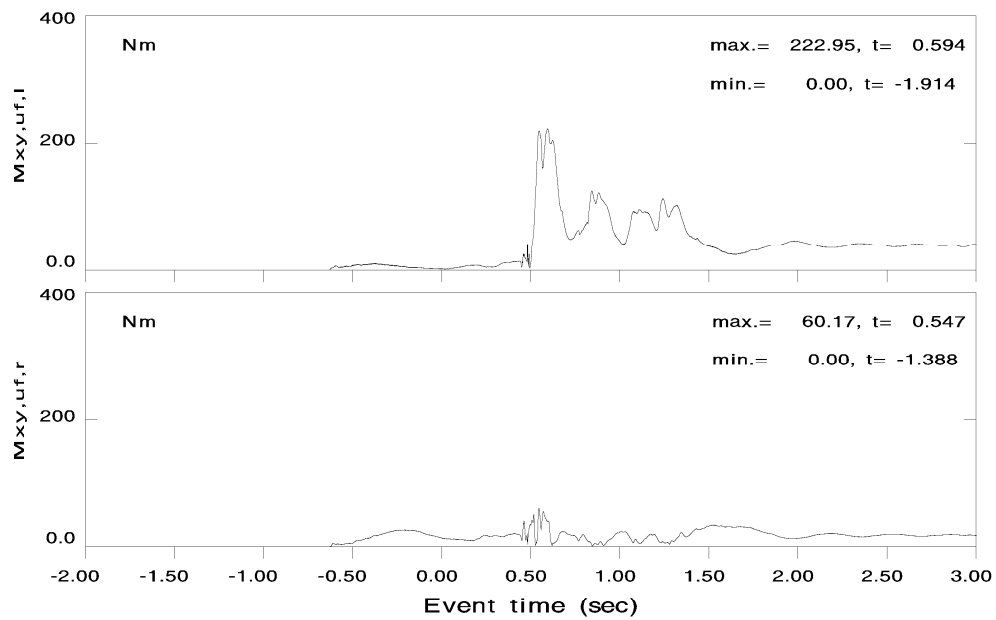
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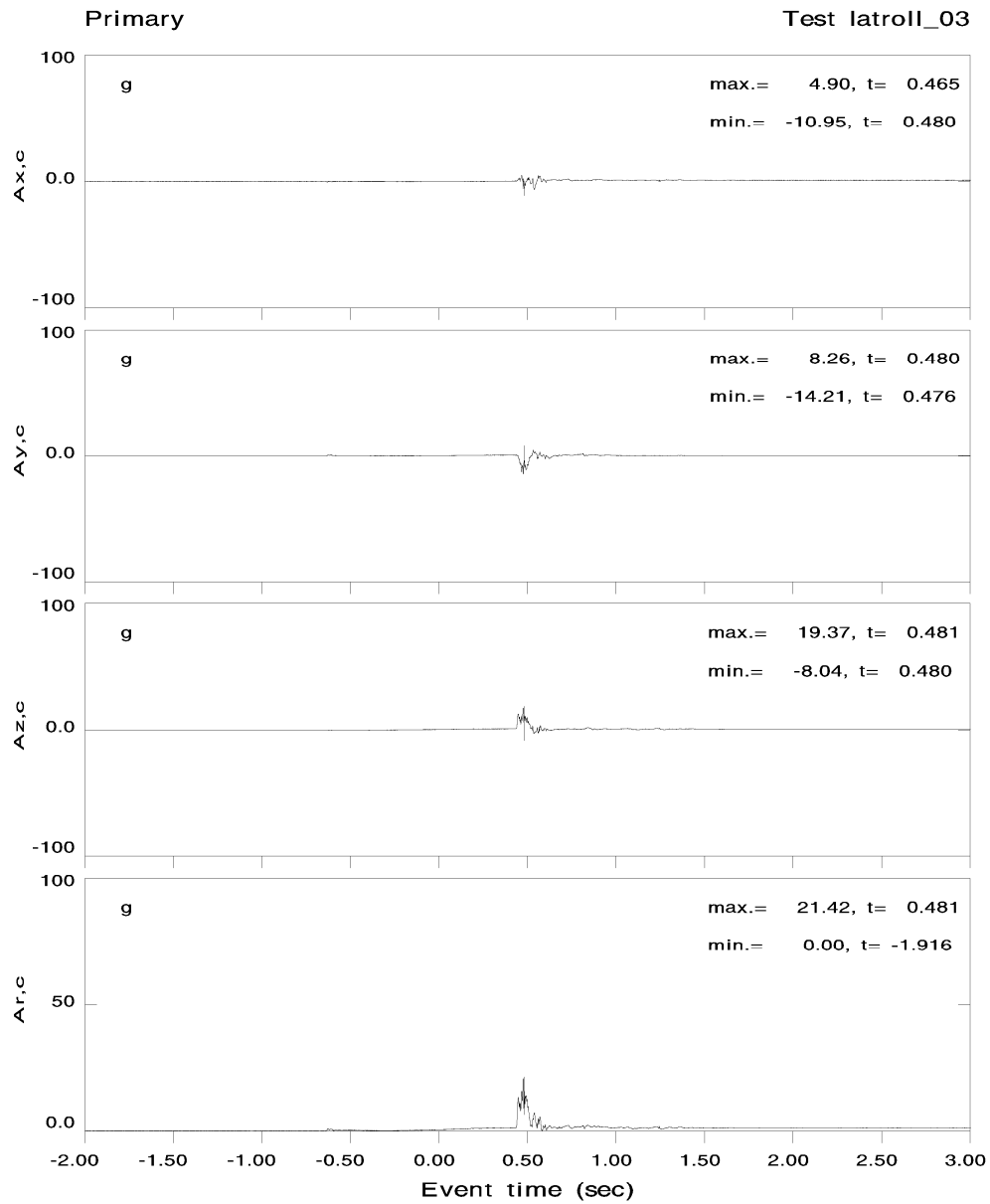
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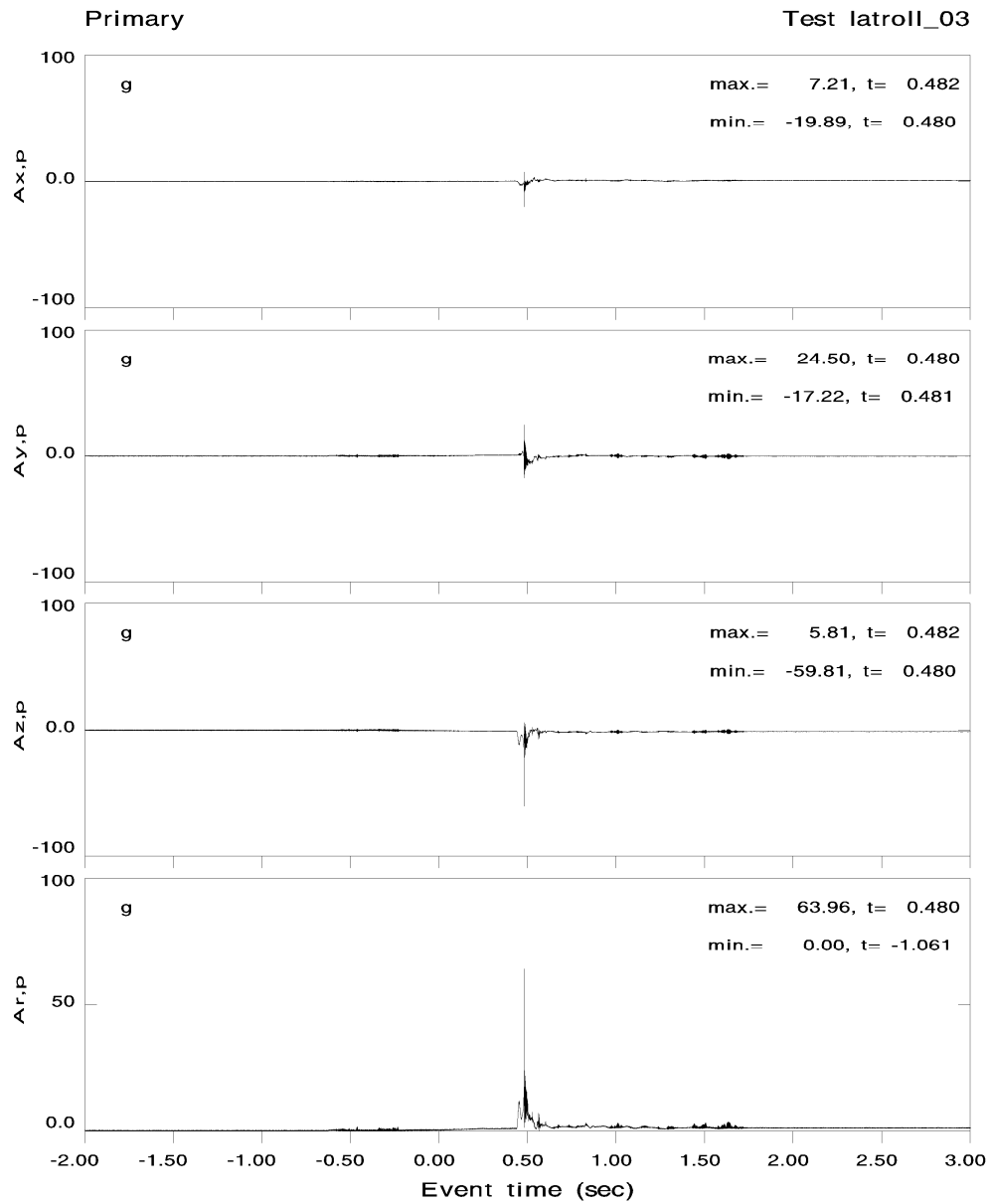


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Test latroll_03

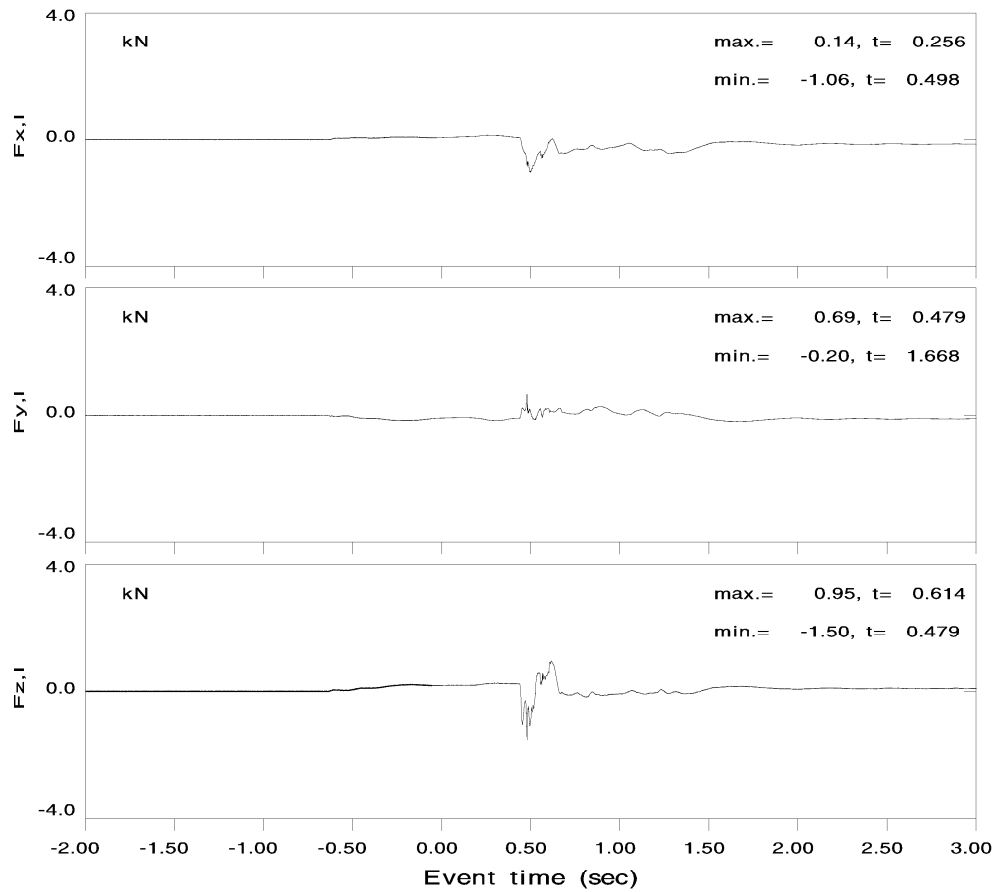






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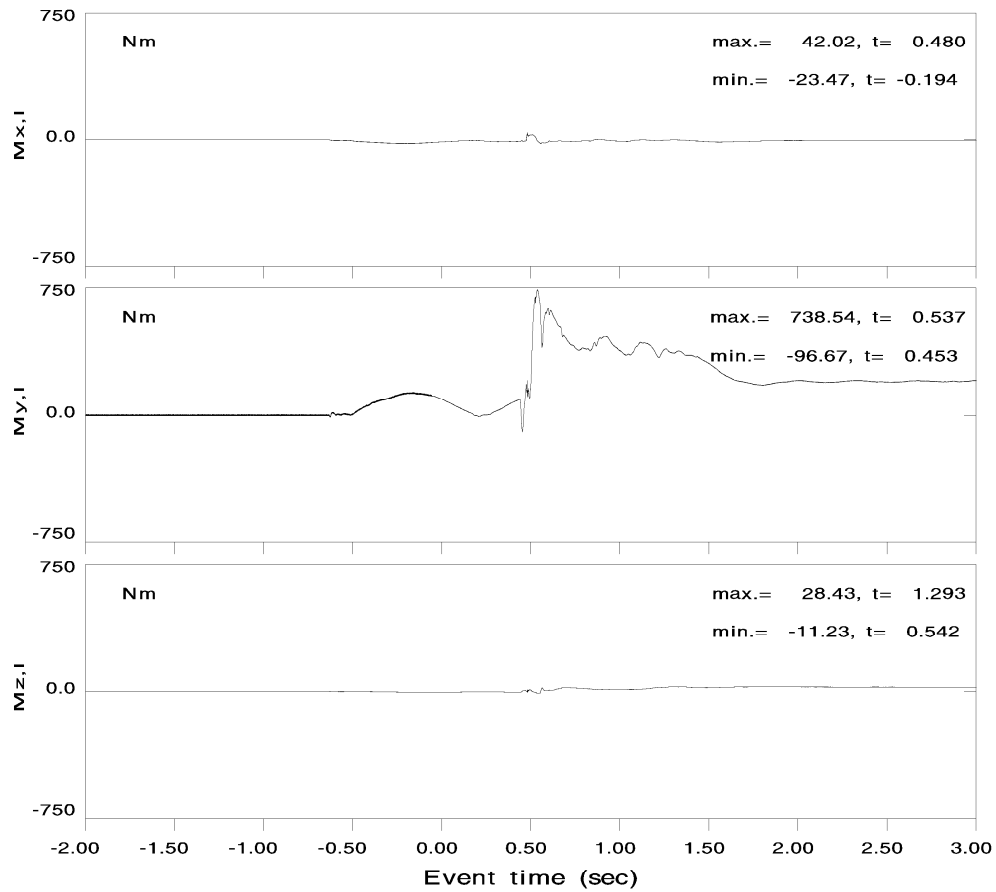
Test latroll_03

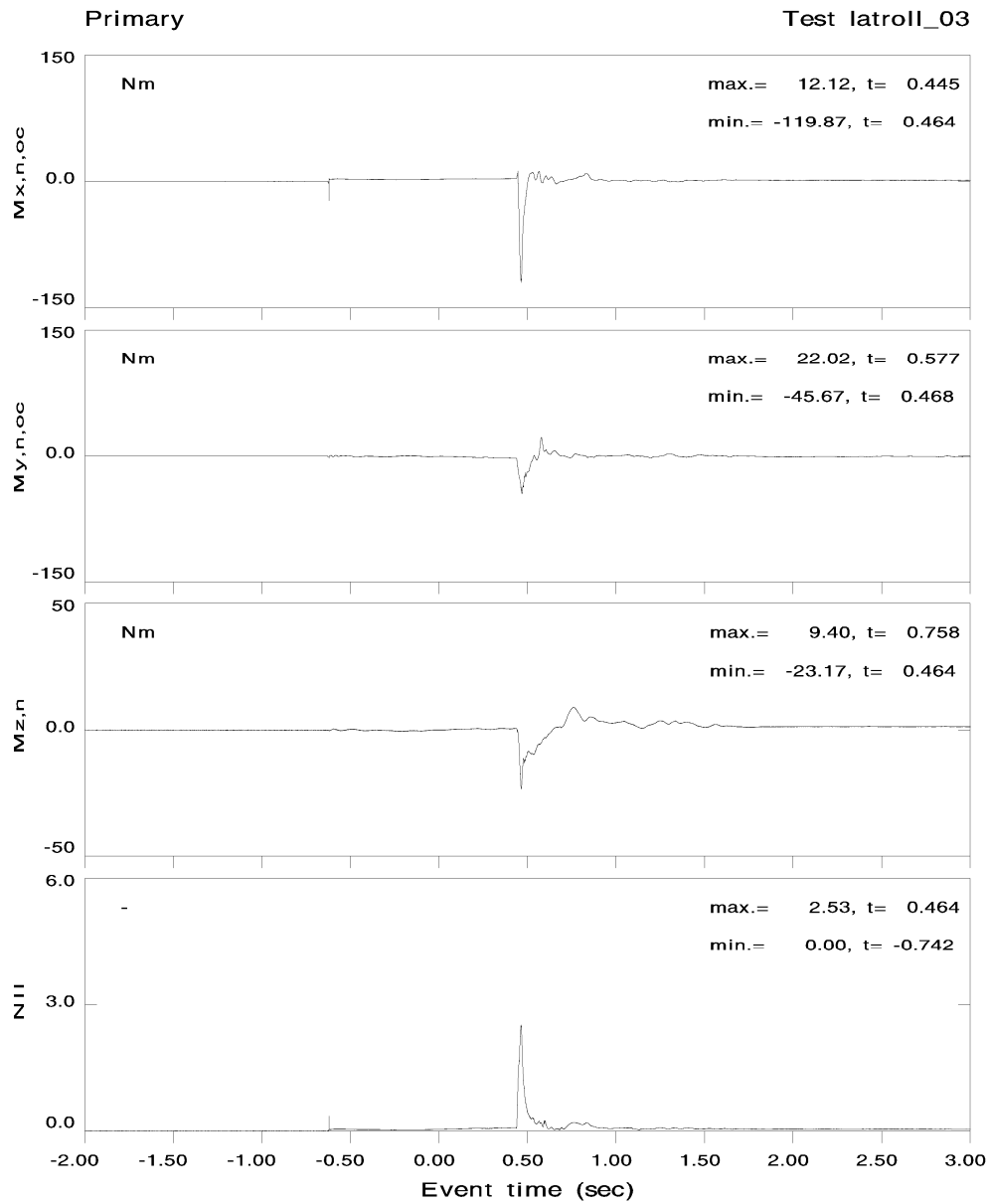


Page 18

Primary

Test latroll_03





2.17 Research & Development test rearpitch_01

ATV_Rearward_Roll_Quadbar.ICE
Test Number : rearpitch_01
Analysis Window : Entire Run

Injury Cost Model input:

Number of AIS 3 Femur Fractures = 0
Number of AIS 2 Tibia Fractures = 0
Number of AIS 3 Tibia Fractures = 0
Number of AIS 2 Knee Dislocation Injuries = 0
Number of AIS 3 Knee Dislocation Injuries = 0
Index for Cmax Location = 1
Index for VCmax Location = 2
maximum Abdomen Penetration = 0.000
maximum GAMBIT = 0.230
Cmax = 3.060
VCmax = 0.000
HIC = 140.1
NII (2002 MATD Neck) = 1.9
Location of Cmax : upper sternum
Location of VCmax : lower sternum

Injury Cost Model output:

MAIS = 0.0
Total AIS = 0.0
Normalized Injury Cost = 0.001
Normalized Cost of Survival = 0.001
Normalized Cost of Dying = 0.000
Probability of Fatality = 0.000
Probability of Fatality due to non AIS 6 injuries = 0.000
Probability of Fatality due AIS 6 injuries = 0.000
Permanent Partial Incapacity = 0.000
Risk of life threatening brain injury (%) = 0.0

Injury Probability by Body Region Table:

AIS	BODY REGION					
	HEAD	NECK	CHEST	ABDOMEN	LEG	
	Probability	Probability	Probability	Probability	Probability	# Injuries
0	0.984	0.997	1.000	1.000	1.000	0
1	0.005	0.003	0.000	0.000	0.000	0
2	0.004	0.000	0.000	0.000	0.000	0
3	0.006	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0
PAIS	0.033	0.003	0.000	0.000	0.000	
PAIS	0	0	0	0	0	
Body Region NPIC	0.001	0.000	0.000	0.000	0.000	Femur Knee Tibia Leg

Test rearpitch_01, Primary				
rearpitch_01.rpt				
LABEL	MAX VALUE	MAX TIME	MIN VALUE	MIN TIME
Ax,c	15.07 g	0.637	-6.31 g	0.722
Ay,c	4.65 g	0.632	-3.85 g	0.633
Az,c	16.27 g	0.638	-8.61 g	0.644
Ax,p	13.76 g	0.709	-3.20 g	0.644
Ay,p	1.98 g	0.723	-5.00 g	0.701
Az,p	6.17 g	0.701	-8.98 g	0.674
spare	0.00 -	0.503	0.00 -	1.665
spare	0.00 -	1.650	0.00 -	-1.334
L,ur	0.34 mm	0.699	-10.92 mm	0.733
L,lr	0.60 mm	0.631	-8.83 mm	0.734
a1	7.89 g	0.636	-32.17 g	0.617
a2	8.28 g	0.649	-31.03 g	0.622
a3	7.04 g	0.659	-37.03 g	0.617
a4	6.92 g	0.636	-26.33 g	0.622
a5	7.74 g	0.648	-26.15 g	0.622
a6	4.98 g	0.659	-27.24 g	0.617
Mx,l	22.72 Nm	0.672	-18.73 Nm	1.942
My,l	758.25 Nm	0.686	-140.95 Nm	0.631
Mz,l	21.71 Nm	0.642	-32.82 Nm	0.711
Fx,l	0.20 kN	0.702	-0.74 kN	1.274
Fy,l	0.54 kN	0.664	-0.24 kN	0.637
Fz,l	0.98 kN	0.702	-1.63 kN	0.674
spare	0.00 -	3.000	0.00 -	3.000
spare	0.00 -	0.633	0.00 -	0.748
spare	0.00 -	1.389	0.00 -	-1.368
spare	0.00 -	2.857	0.00 -	-1.013
spare	0.00 -	3.000	0.00 -	3.000
spare	0.00 -	3.000	0.00 -	3.000
Spare	0.00 -	2.627	0.00 -	0.645
a7	32.81 g	0.632	-10.46 g	0.729
a8	37.54 g	0.635	-9.25 g	0.673
a9	35.91 g	0.635	-11.01 g	0.672
Fz,uf,r	0.30 kN	1.341	-0.23 kN	0.694
Mx,uf,r	23.75 Nm	0.695	-40.97 Nm	1.894
My,uf,r	160.54 Nm	0.713	-11.15 Nm	0.636
Mz,uf,r	24.96 Nm	0.696	-22.61 Nm	0.920
Fz,uf,l	0.46 kN	0.740	-0.25 kN	0.706
Mx,uf,l	40.09 Nm	1.816	-38.59 Nm	0.716
My,uf,l	265.73 Nm	0.712	-16.52 Nm	-0.200
Mz,uf,l	37.53 Nm	1.861	-16.53 Nm	0.586
Fx,n	0.09 kN	0.673	-1.42 kN	0.636
Fy,n	0.24 kN	0.633	-0.08 kN	1.462
Fz,n	0.66 kN	0.701	-1.74 kN	0.627
Mx,n	27.58 Nm	0.684	-21.88 Nm	0.726
My,n	53.53 Nm	0.670	-131.08 Nm	0.636
Mz,n	3.61 Nm	1.503	-7.14 Nm	0.684
L,ul	2.84 mm	0.733	-3.44 mm	0.700
L,ll	4.66 mm	0.733	-4.53 mm	0.702
Ax,h	40.53 g	0.622	-10.46 g	0.636
Ay,h	2.84 g	0.633	-5.81 g	0.617
Az,h	32.83 g	0.632	-10.47 g	0.729
ax,h	1.17 krad/s**2	0.634	-1.58 krad/s**2	0.633
ay,h	2.49 krad/s**2	0.673	-5.35 krad/s**2	0.636
az,h	0.39 krad/s**2	0.617	-0.72 krad/s**2	0.633
Ar,h	45.34 g	0.617	0.01 g	-1.861
ar,h	5.36 krad/s**2	0.636	0.00 krad/s**2	2.136
G	0.23 -	0.636	0.00 -	-1.236
HIC	140.11	0.636	----	0.615
Fxy,n	1.42 kN	0.636	0.00 kN	-1.039
Dx,us	0.10 mm	-0.611	-5.75 mm	0.730
Dy,us	10.47 mm	0.733	-2.93 mm	0.699

```

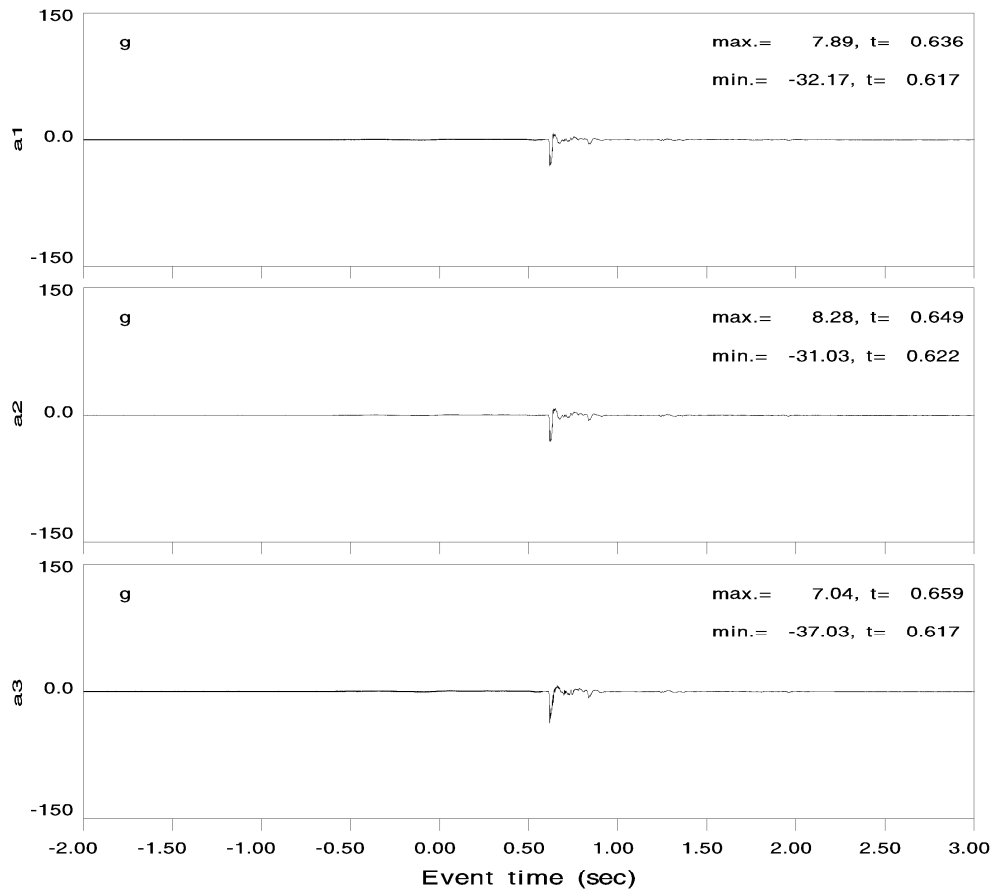
                                rearpitch_01.rpt
Cus          3.06 %          0.730          -0.05 %          -0.611
Vus          0.18 m/s        0.741          -0.24 m/s        0.719
VCus         0.01 m/s        0.722          0.00 m/s        0.741
Dx,ls        0.17 mm        0.632          -3.62 mm        0.705
Dy,ls        9.70 mm        0.733          -3.18 mm        0.699
Cl,s         1.93 %          0.705          -0.09 %          0.632
Vl,s         0.22 m/s        0.673          -0.27 m/s        0.651
VCl,s        0.00 m/s        0.654          0.00 m/s        0.709
Mxy,uf,r     160.54 Nm        0.713          0.00 Nm        -0.701
Mxy,uf,l     267.18 Nm        0.712          0.00 Nm        -1.464
Mx,n,oc      26.93 Nm        0.668          -22.63 Nm        0.726
My,n,oc      52.16 Nm        0.670          -106.39 Nm        0.636
NII          1.91 -          0.637          0.00 -          -0.612
Ar,p         15.14 g         0.704          0.01 g          -1.373
Ar,c         20.45 g         0.637          0.00 g          -1.943

Recorder 1&2 event time = 0.000      Recorder 3&4 event time = 0.000

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Primary

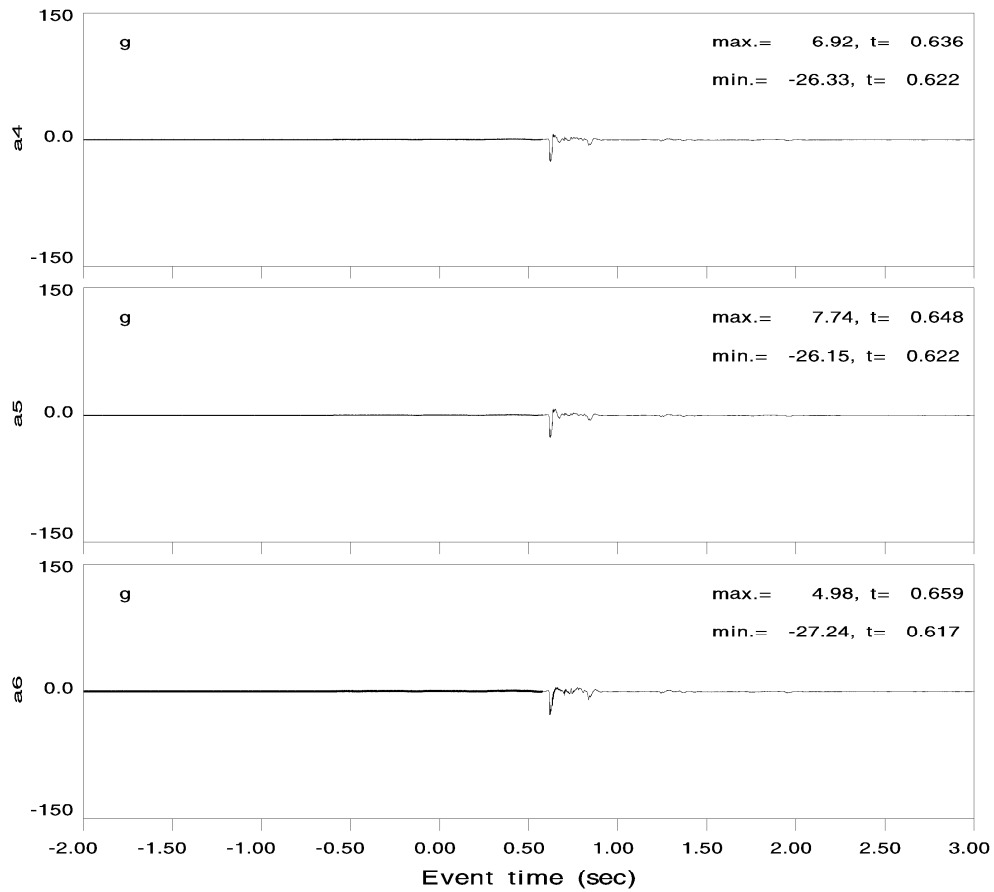
Test rearpitch_01



Page 1

Primary

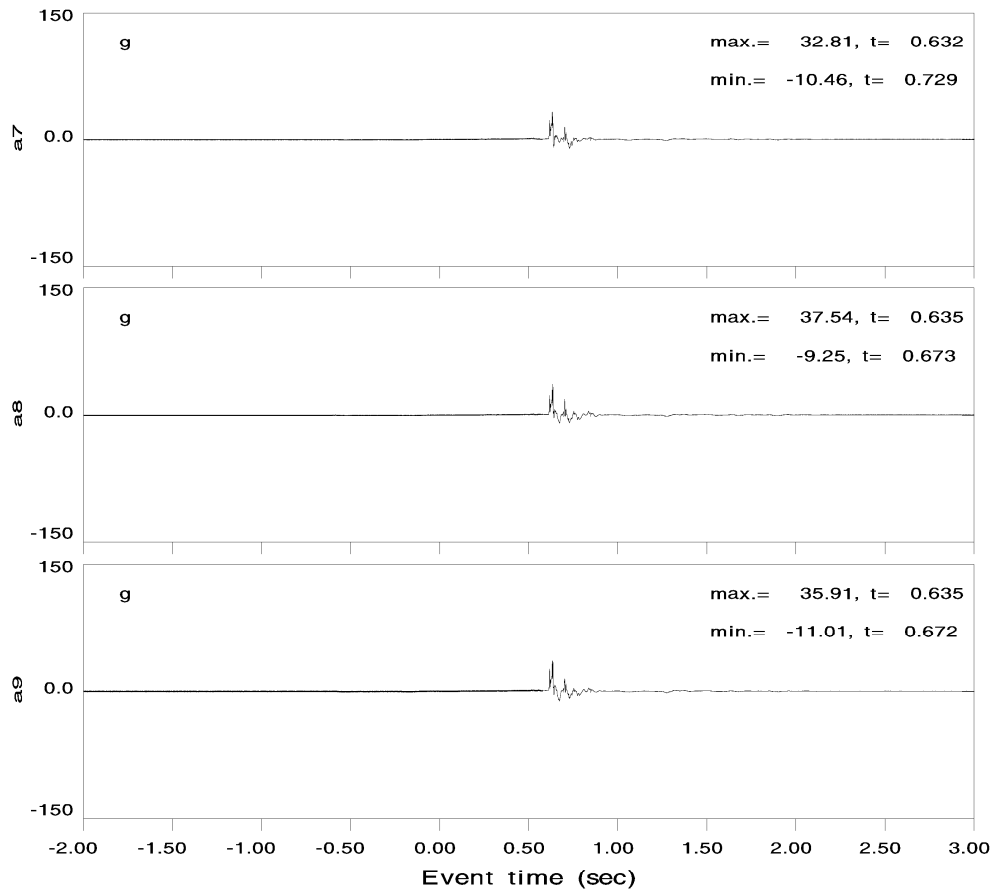
Test rearpitch_01



Page 2

Primary

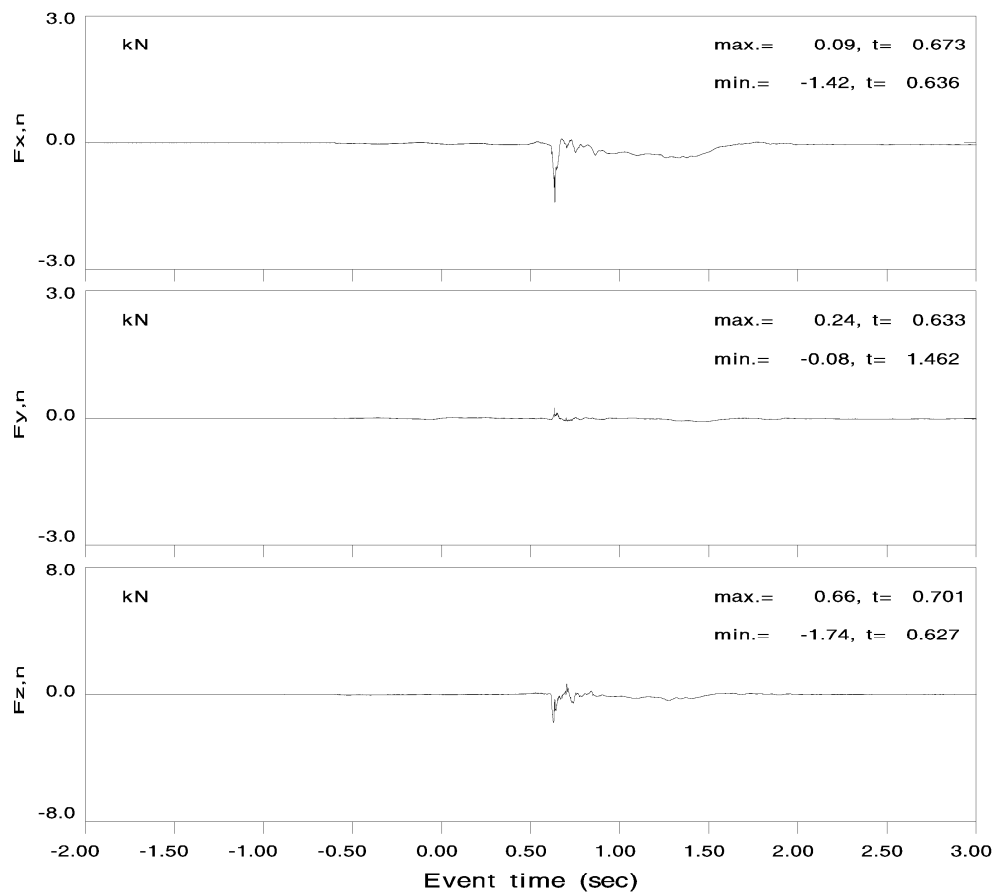
Test rearpitch_01



Page 3

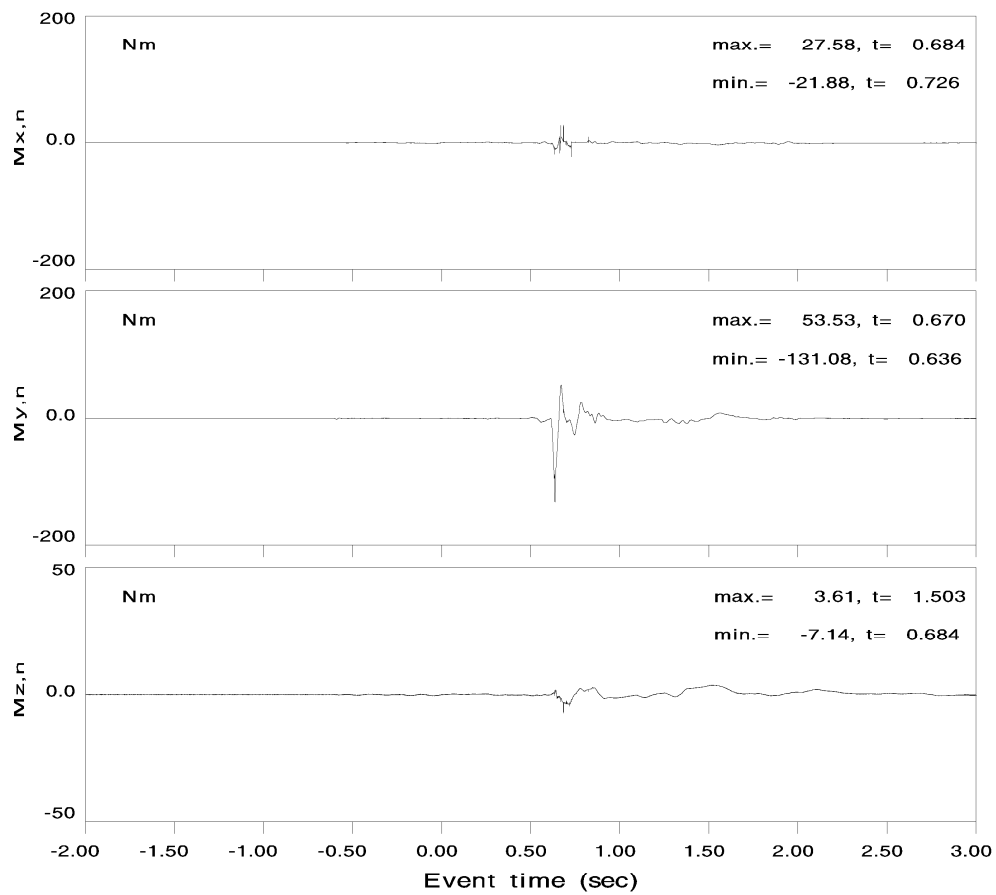
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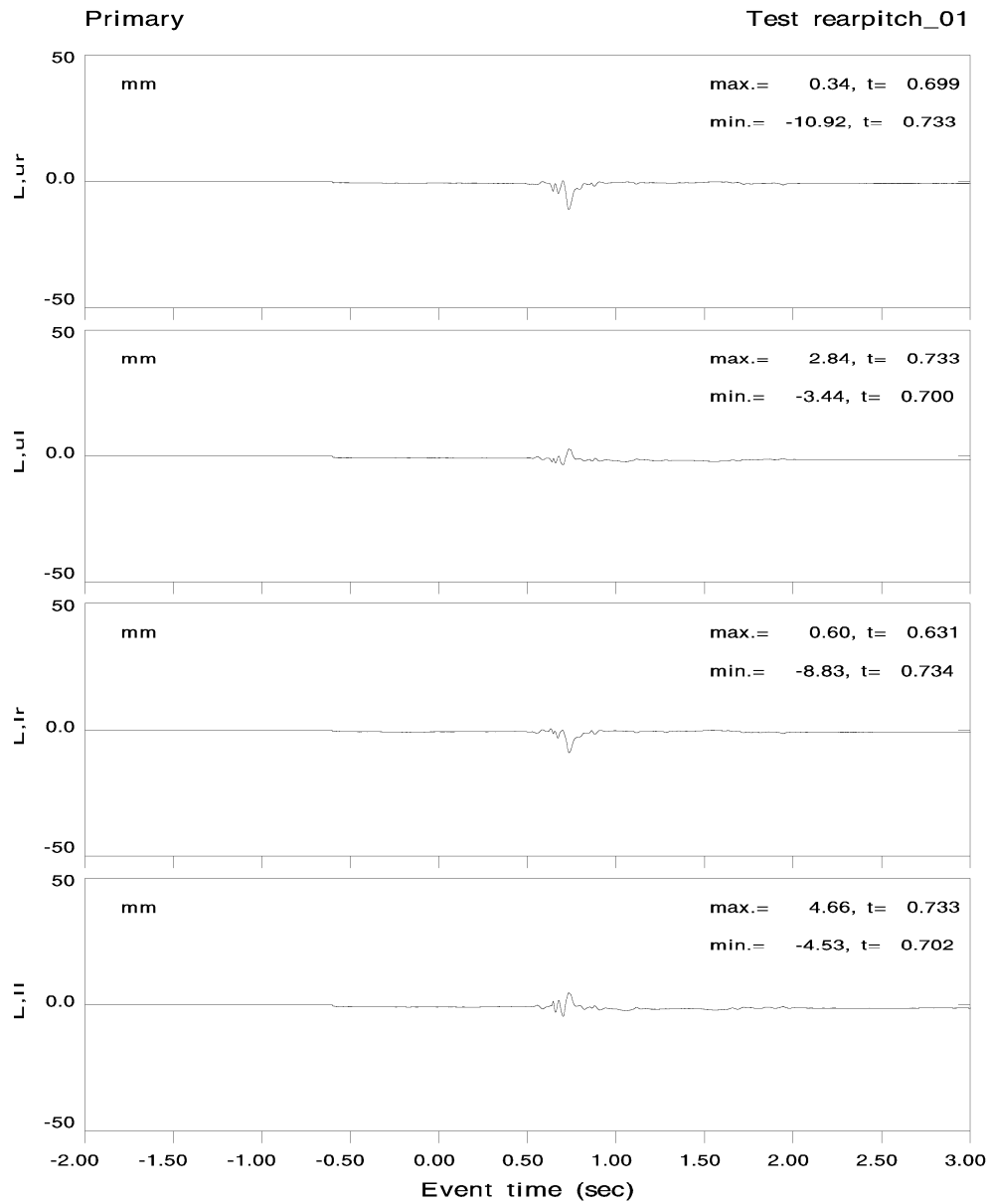
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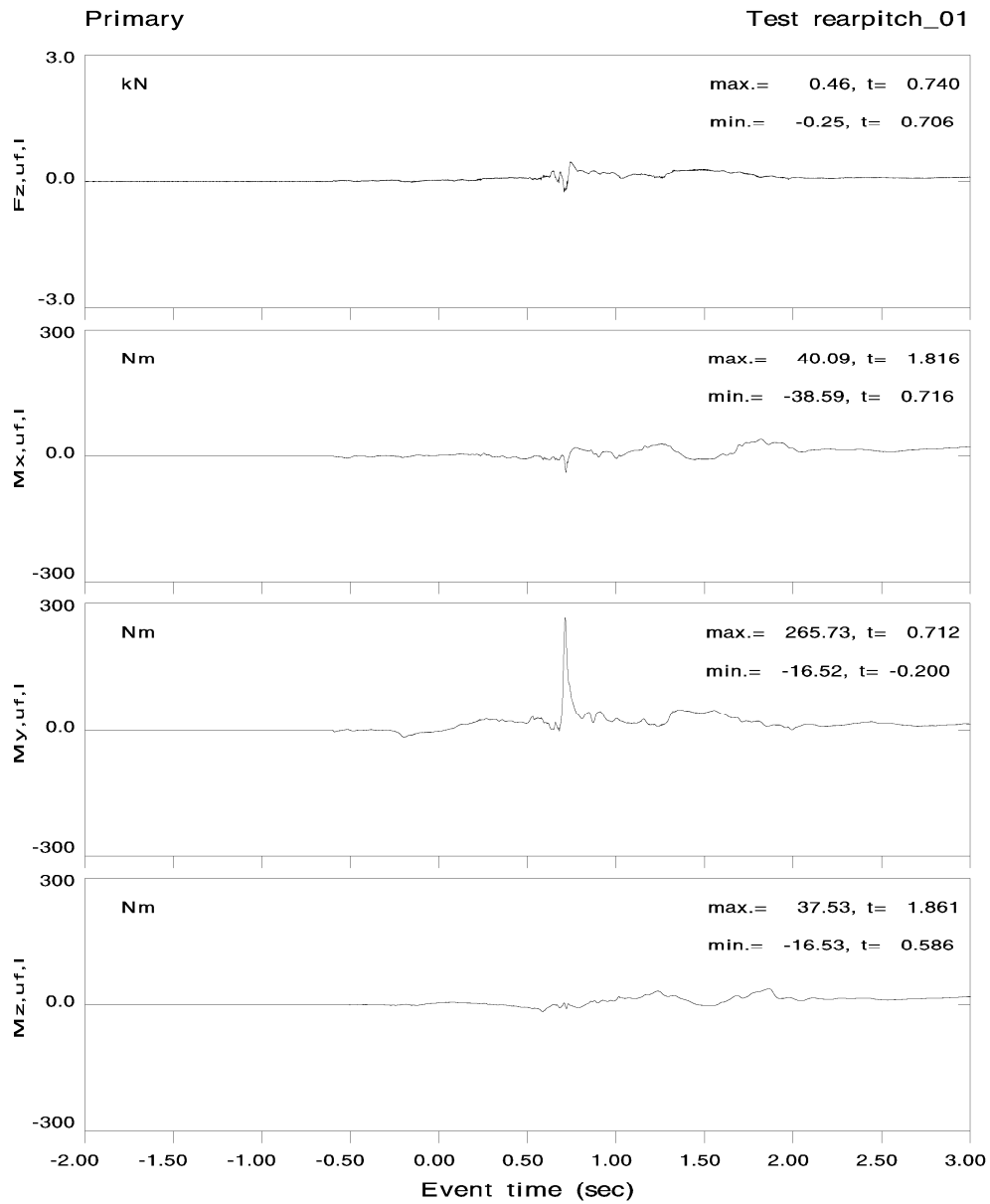


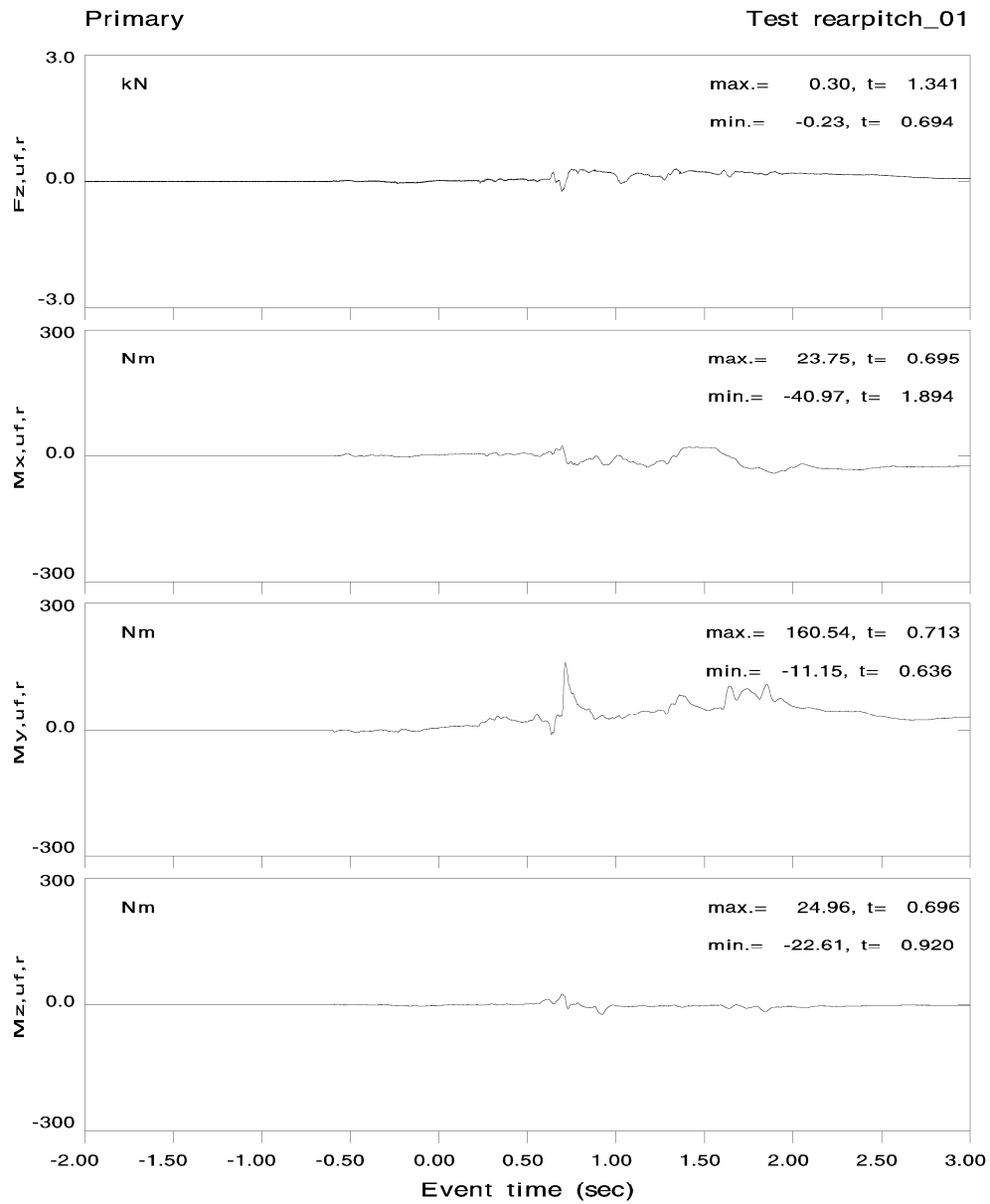
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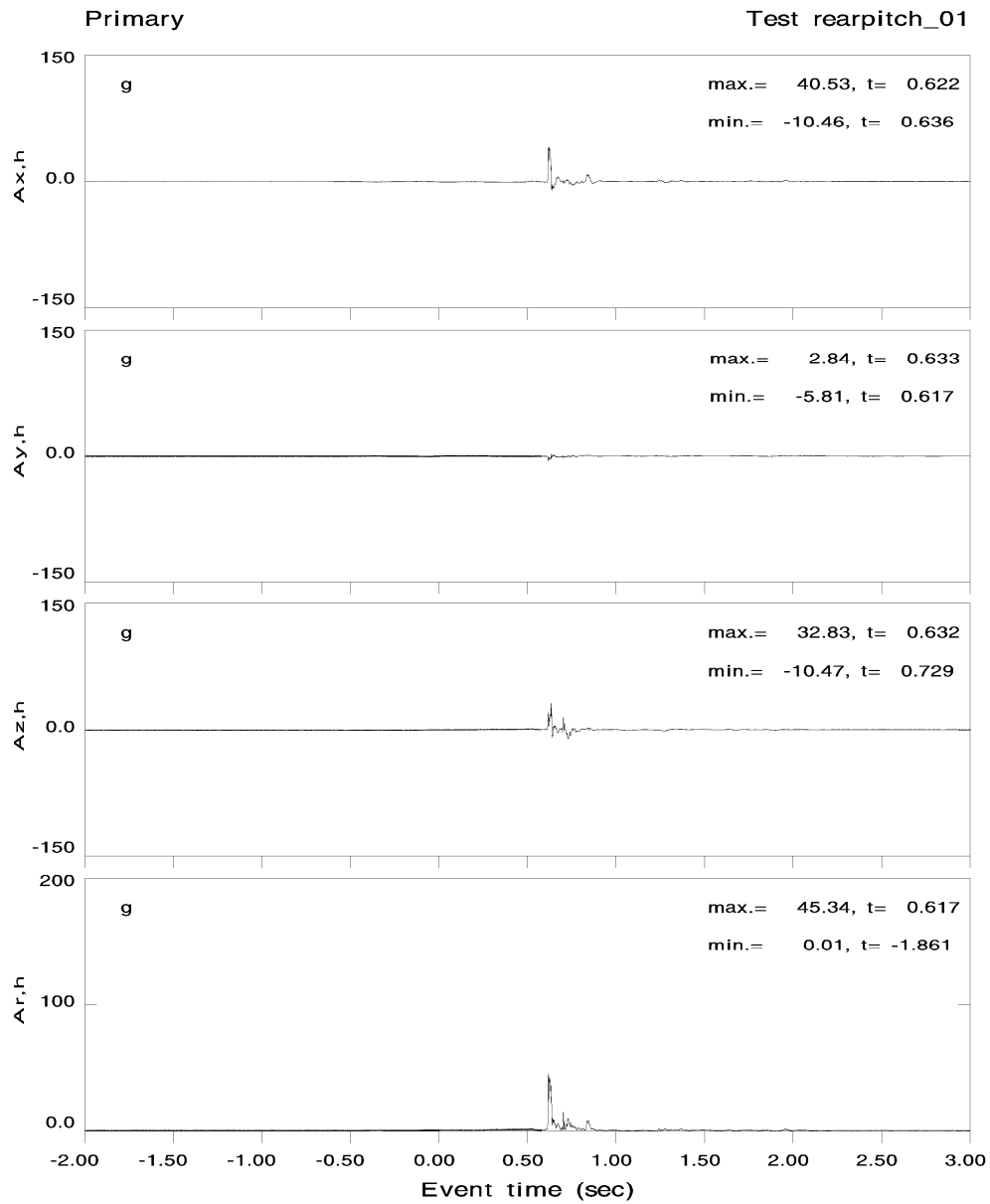
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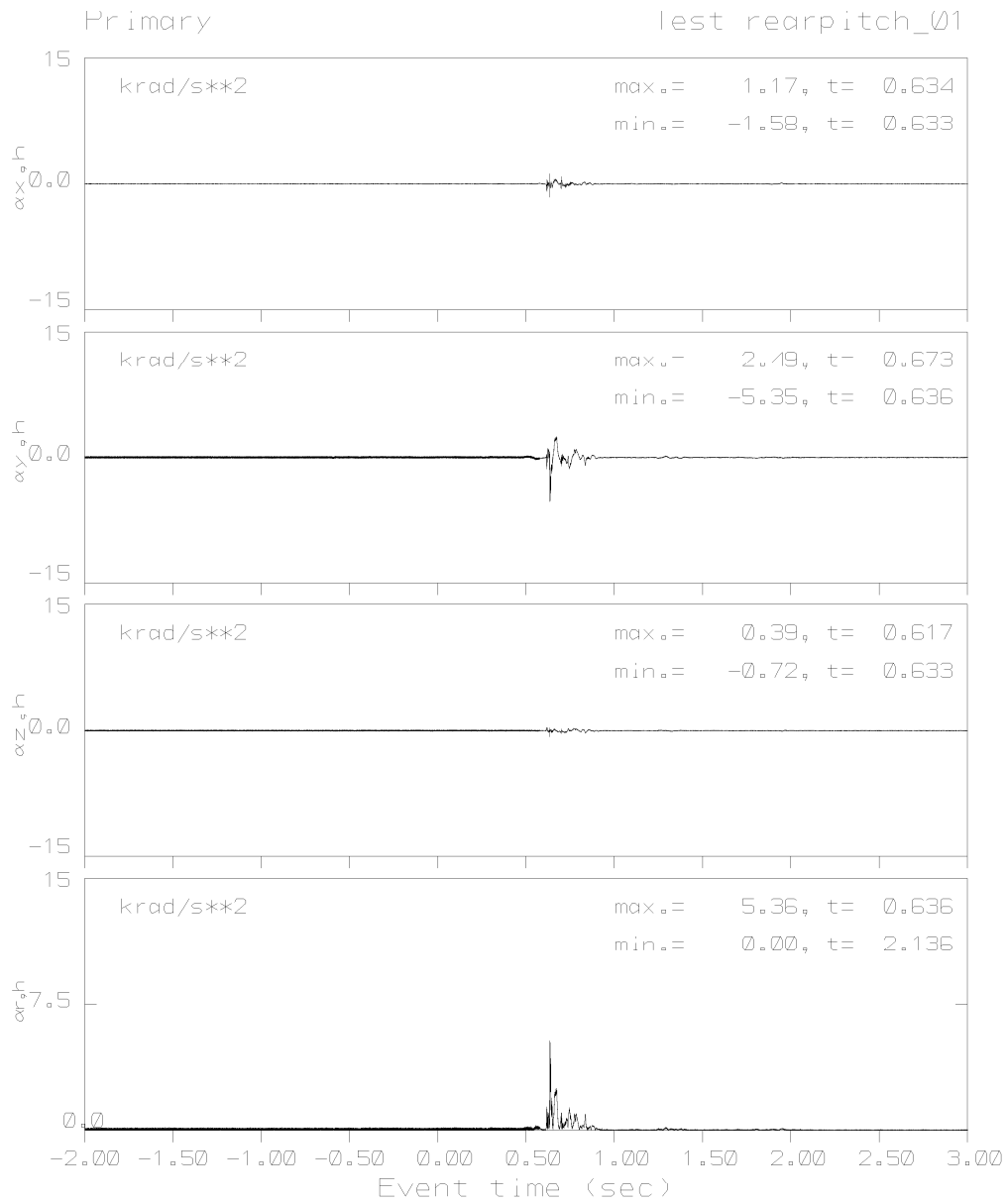




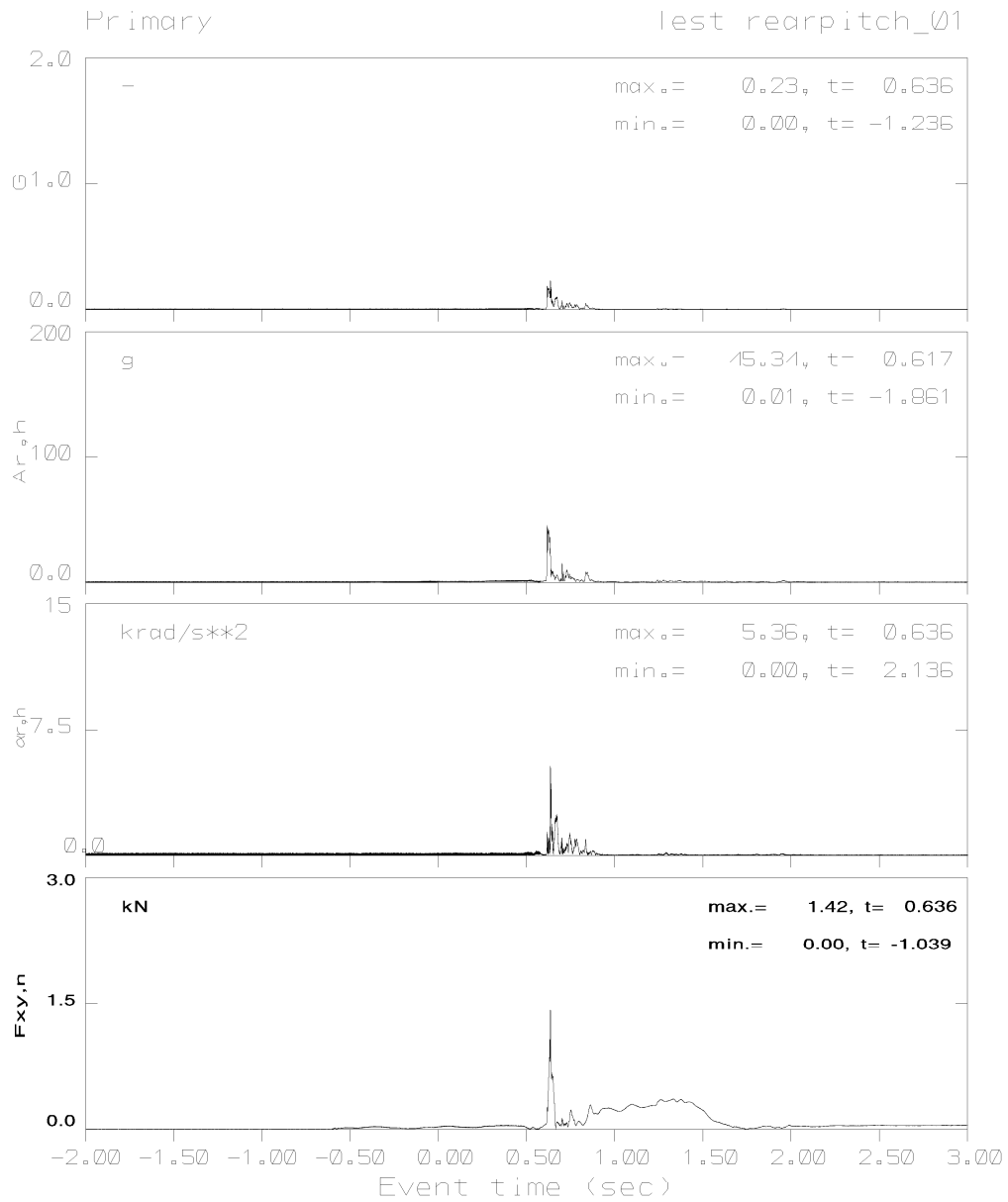




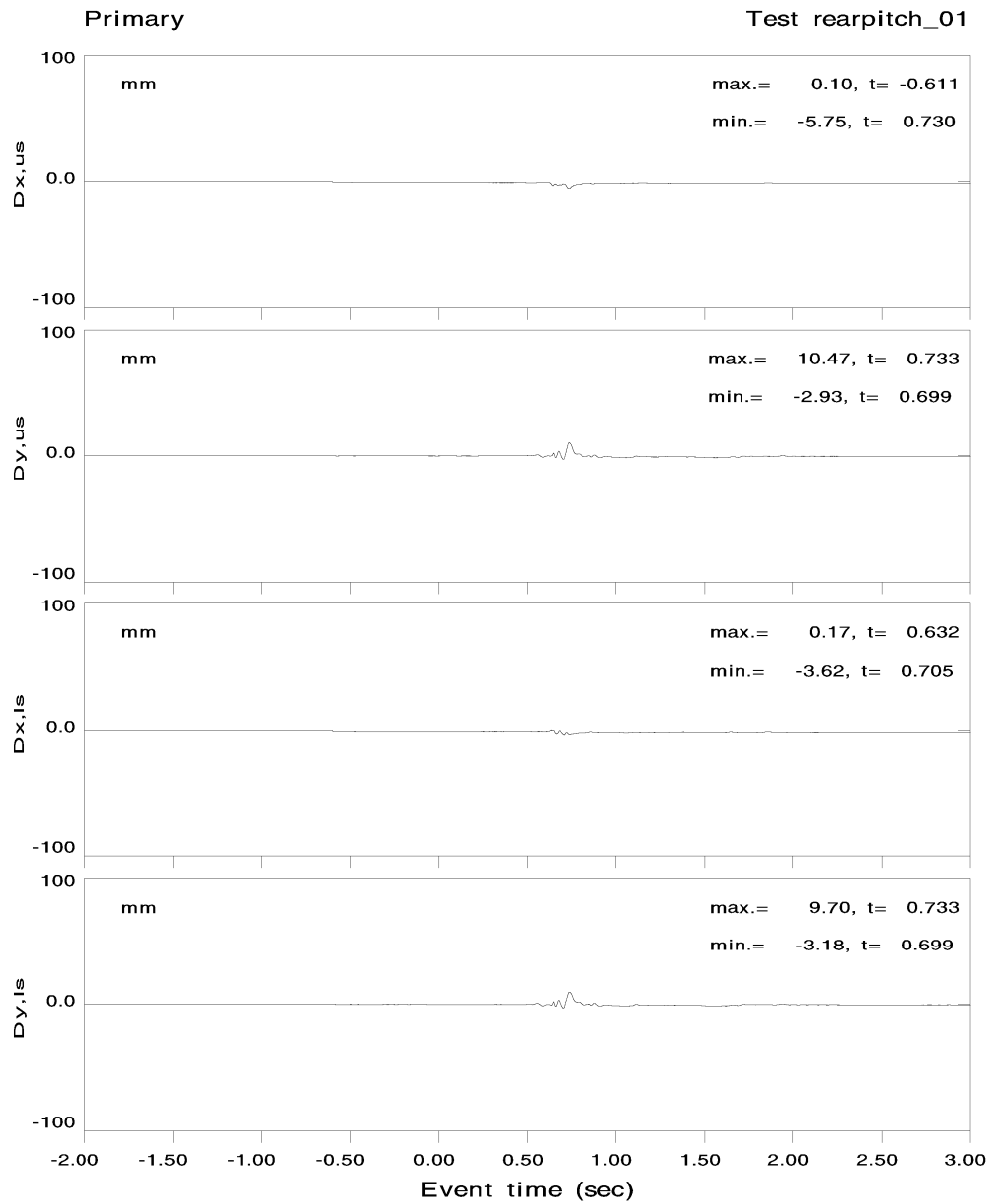




Page 10

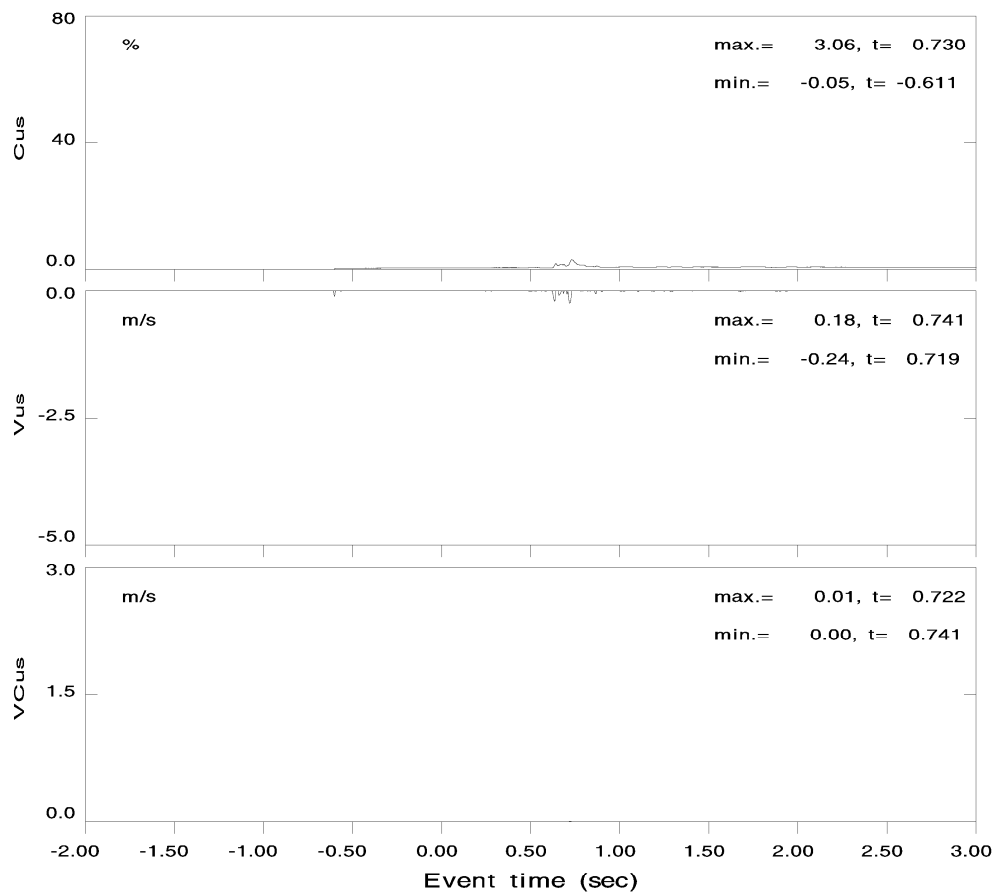


Page 11



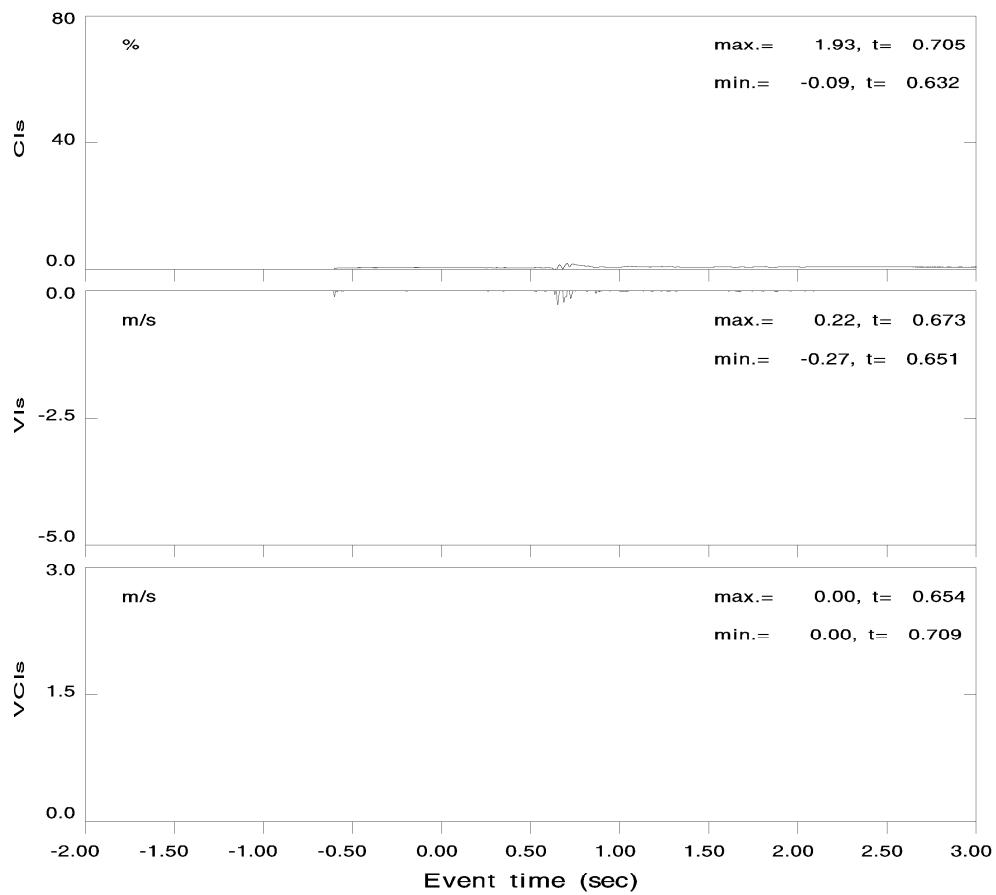
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Test rearpitch_01



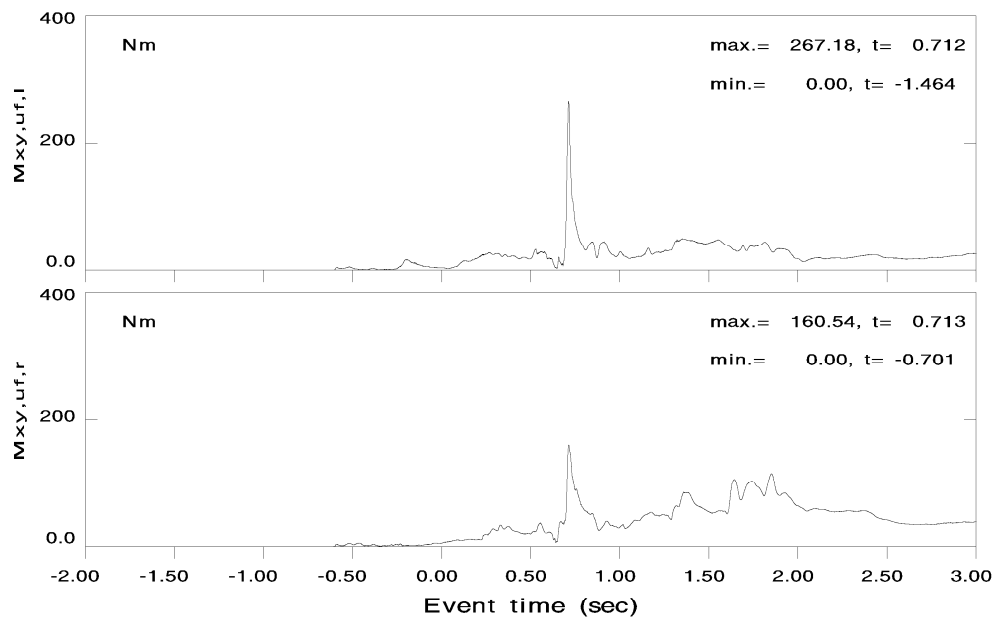
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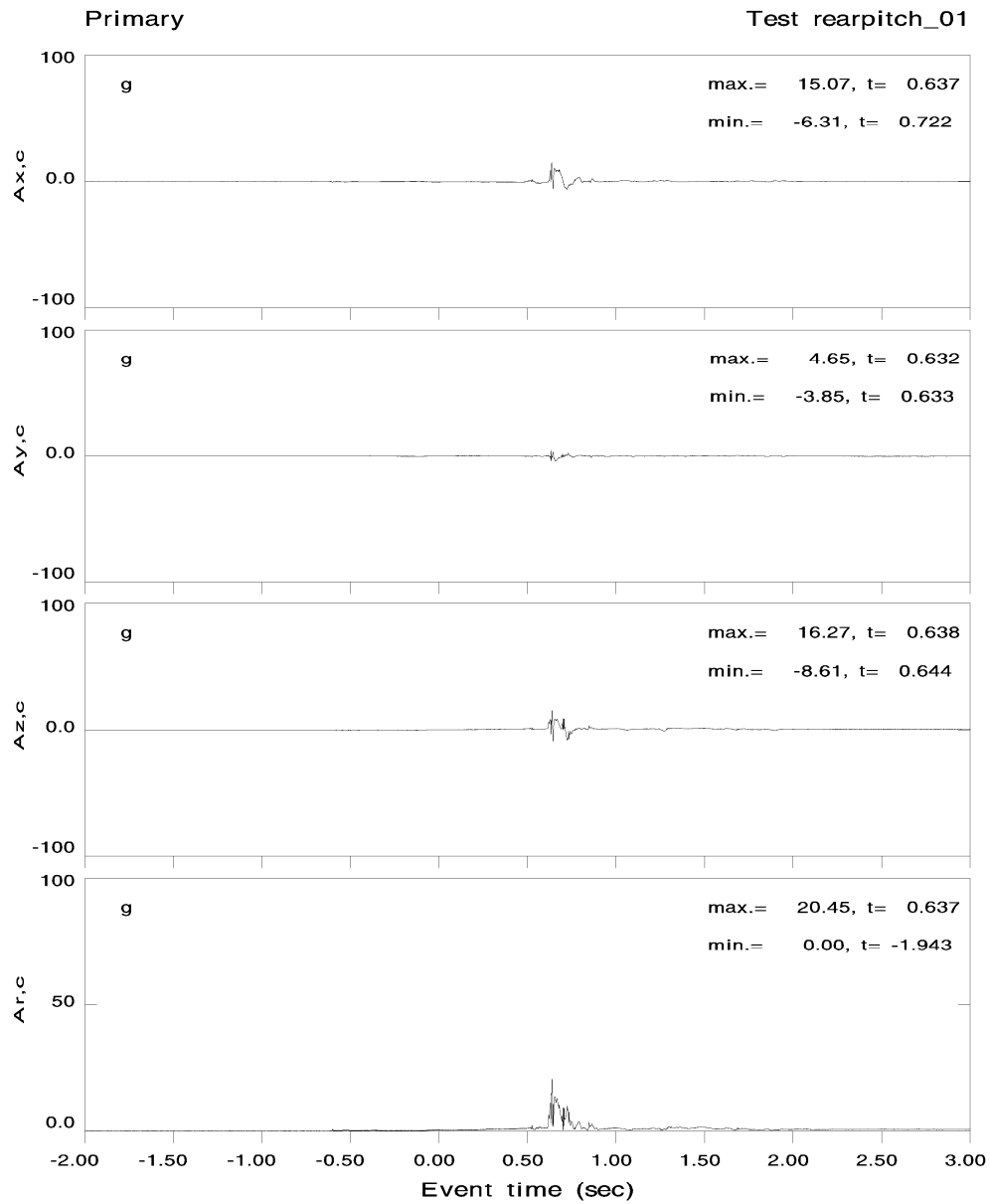
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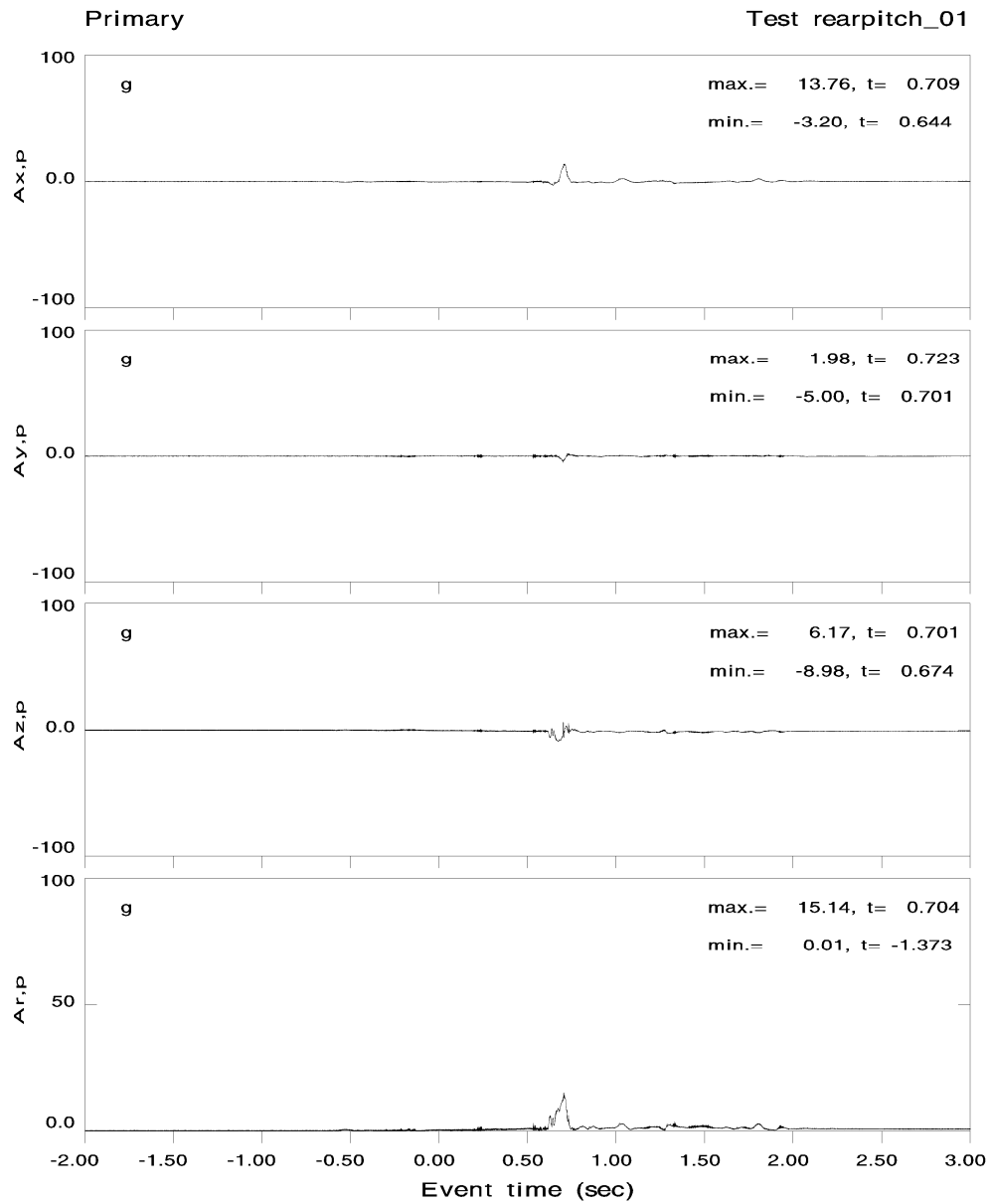


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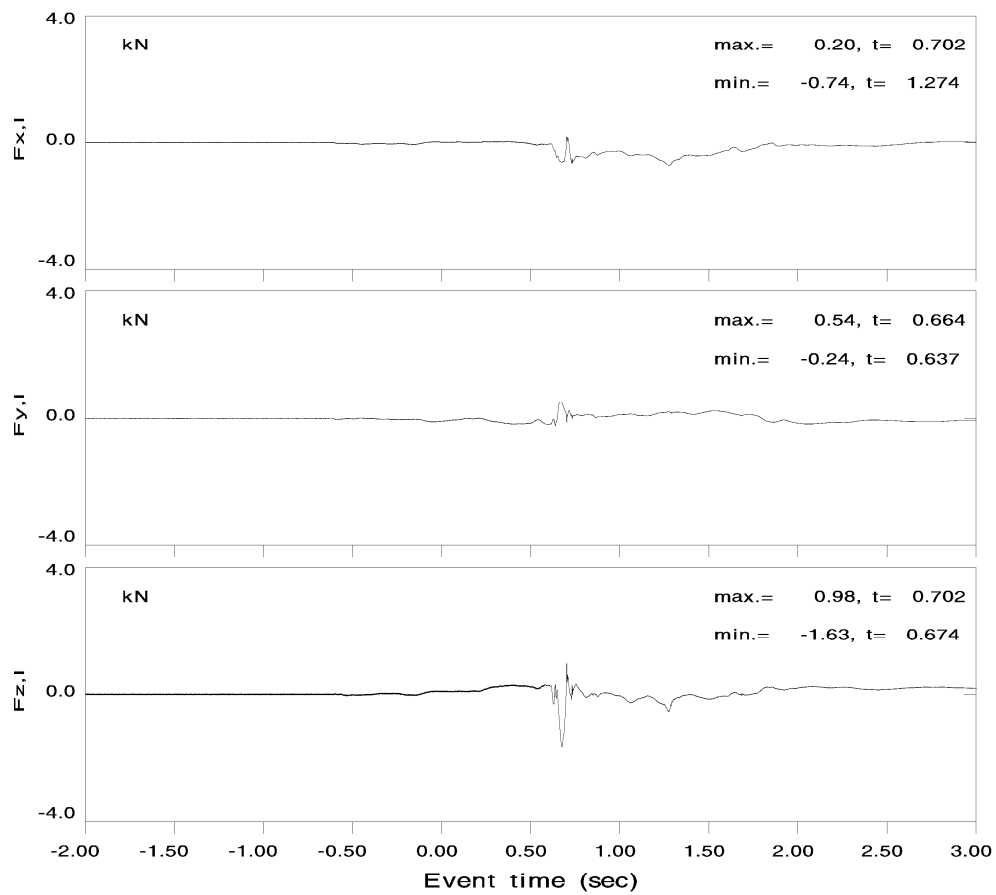






Primary

Test rearpitch_01



Primary

Test rearpitch_01

