

AMS

jBEAM

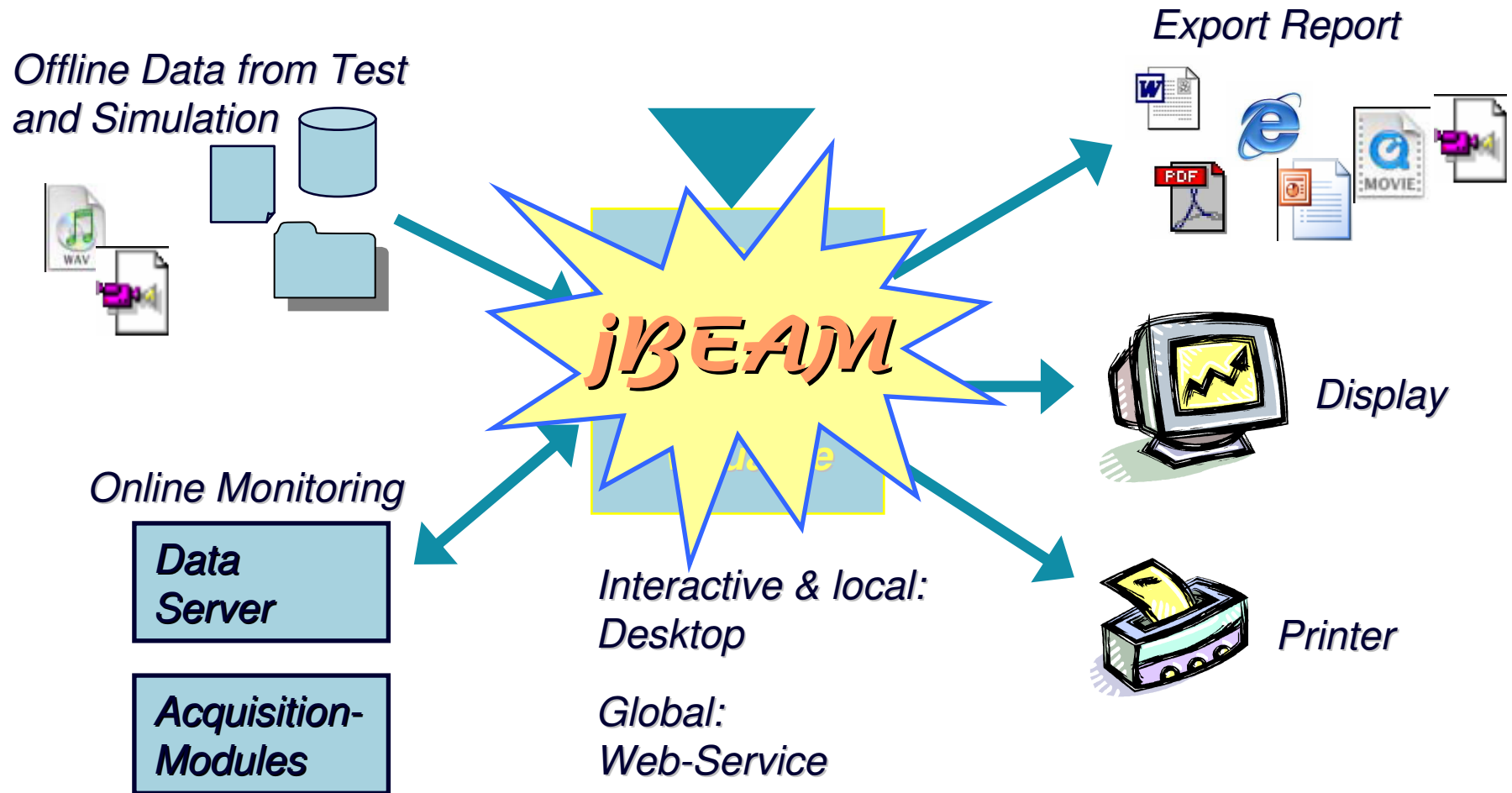
*Data analysis and reporting
for crash test data including*

ISO MME 13499

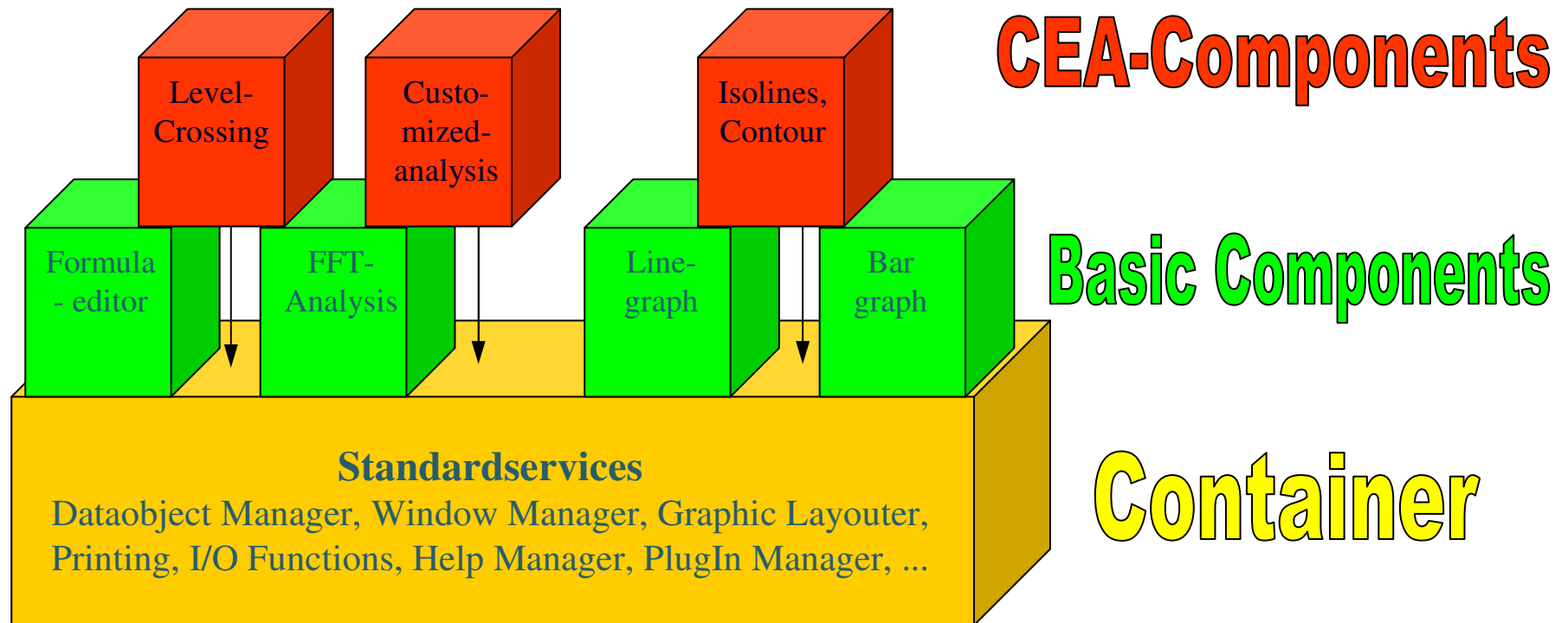


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Experiment's Data Process Flow



AMS *jBEAM* – plenty basic functions plus CEA extensions



AMS *jBEAM* - Crash

Video Analysis

Numerical Data and
Video data synchronously

Copy pictures out of the video
with timestamp for reporting

- *Just choose your Videos and numerical curves*
- ***jBEAM** generates the report and connections – just play the video*

Manually

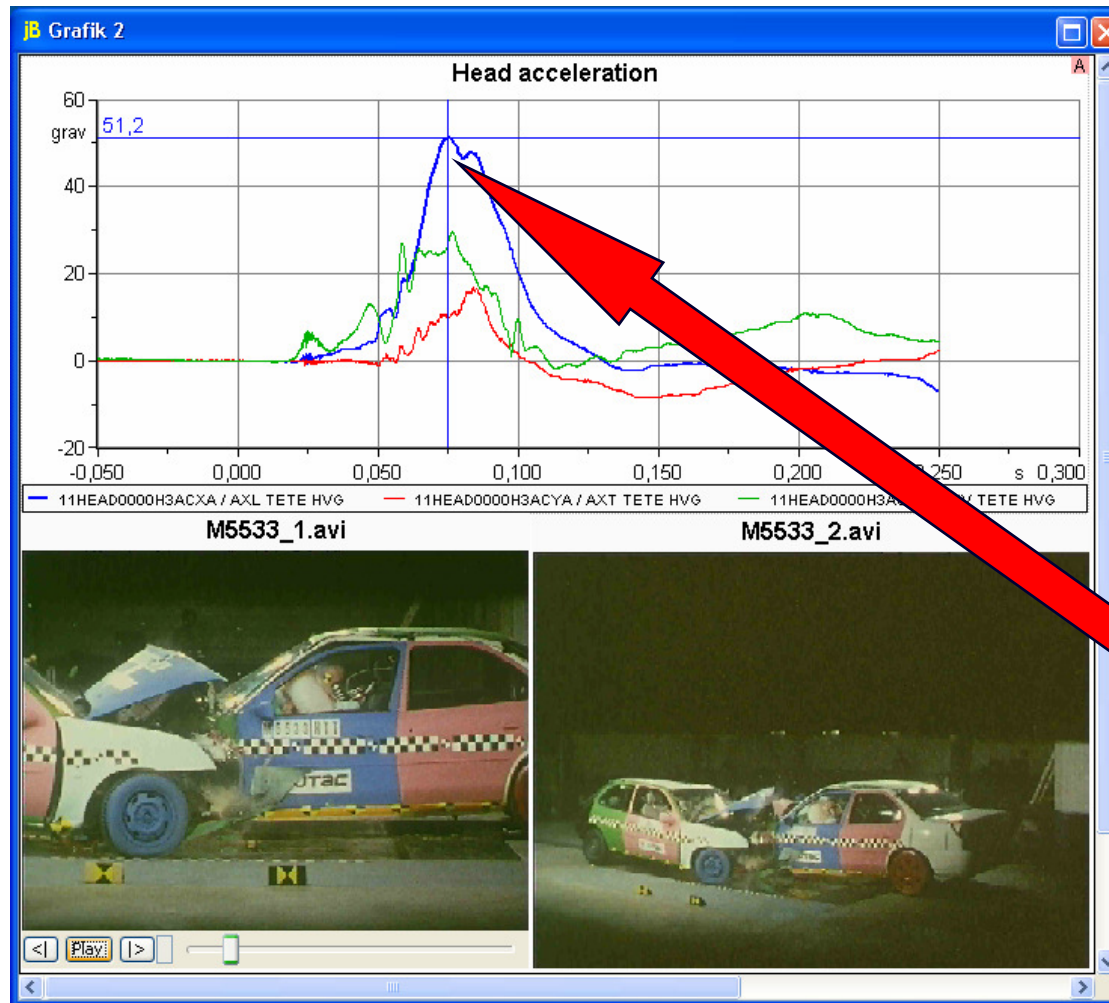
Numerical Analysis

HIC FFC
Time at level NIC
Xms Value ... HPC

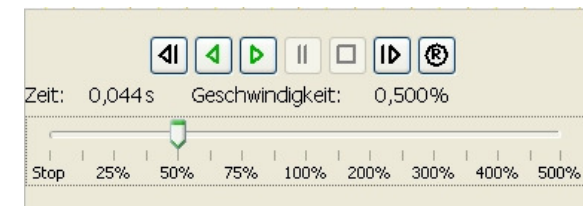
Automatically

- *Calculate all important criteria*
- *Generate Crash report including criteria overview with limit values*

AMS *iBEAM* - Crash - Video Analysis



- *Synchronized Display of Numerical and Video Data*
- *Video Time (as data object) controls the cursor*
- *Also usable: time controller with speed -slider:*

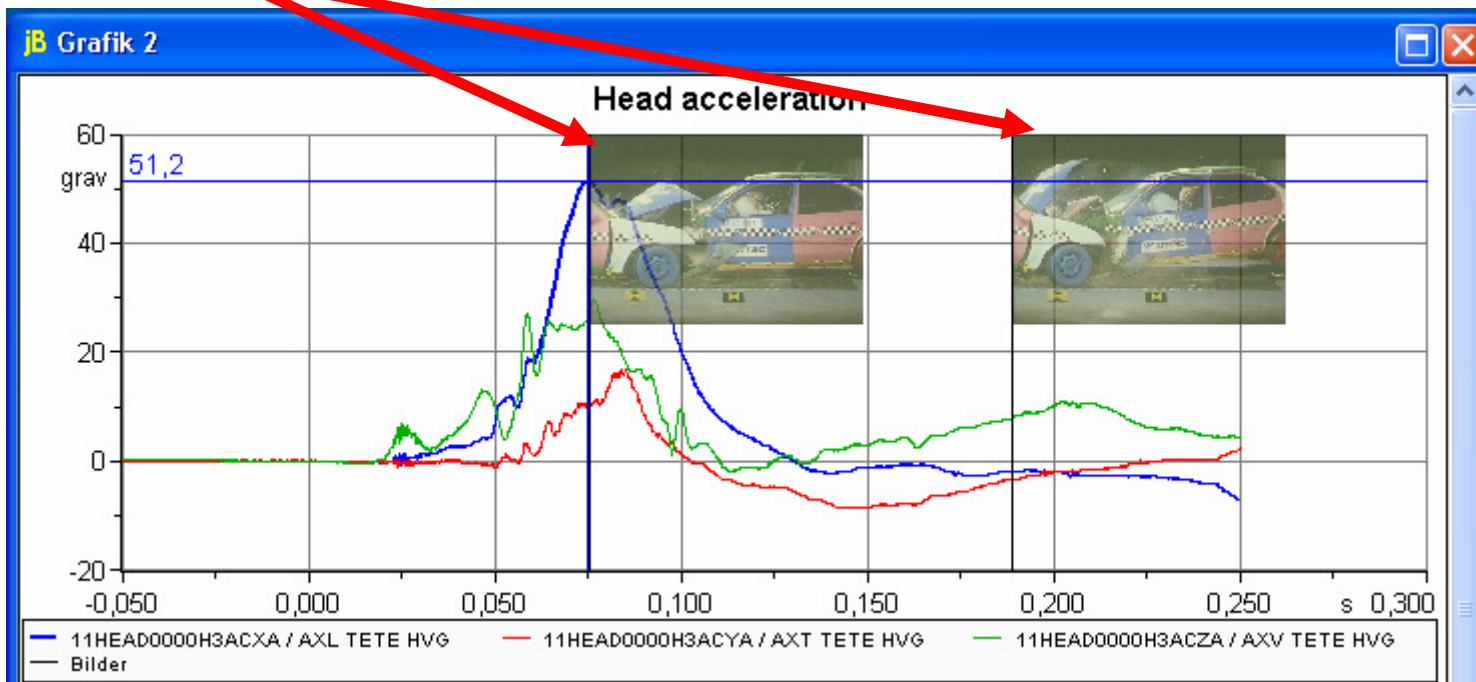


AMS *jBEAM* - Crash - Video Analysis

Report generation using "single frames from video" component

- copies by mouse-click the current video image for storage together with a time-stamp*

- high resolution printing*



AMS *jBEAM* - Crash - numerical Analysis

Import: - ISO 13499 (1.0, EGV) and ISO MME 1.1, 1.2

Analysis: - Automatic analysis of all important criteria for Frontal and Side Impact

Report:

- Automatic report generation and storage
- User adapted layout can be used for each evaluation
- An overview at the end of the test report shows all criteria including the legal and user defined limits

AMS *iBEAM* - Crash - numerical Analysis

Crash Criteria Frontal Impact:

Head Accelerations

HIC
 HIC T1
 HIC T2
 HIC36
 HIC36 T1
 HIC36 T2
 HIC15
 HIC15 T1
 HIC15 T2
 Head 3ms cumulative
 Head 3ms continuous

Upper Neck, Forces and Moments

Neck shear force
 Neck tension force
 Neck compression force

Neck Injury Criterion (front impact ECE)

NIC Shearing (%)
 NIC Tension (%)
 NIC Compression (%)

Chest

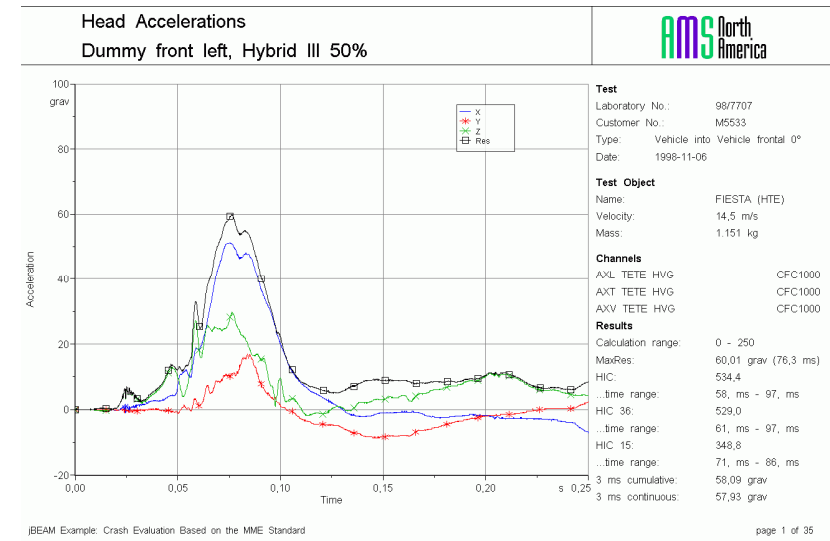
Chest 3ms cumulative
 Chest 3ms continuous
 VC

Pelvis Accelerations

Pelvis 3ms cumulative
 Pelvis 3ms continuous

Femur Forces (ECE)

Femur force
 FFC



Knee Slider

Knee displacement

Tibia Index

TI upper / lower
 Tibia Compression low

B-Pilar

B-Pilar

AMS *iBEAM* - Crash - numerical Analysis

Crash Criteria Side Impact:

Head Accelerations

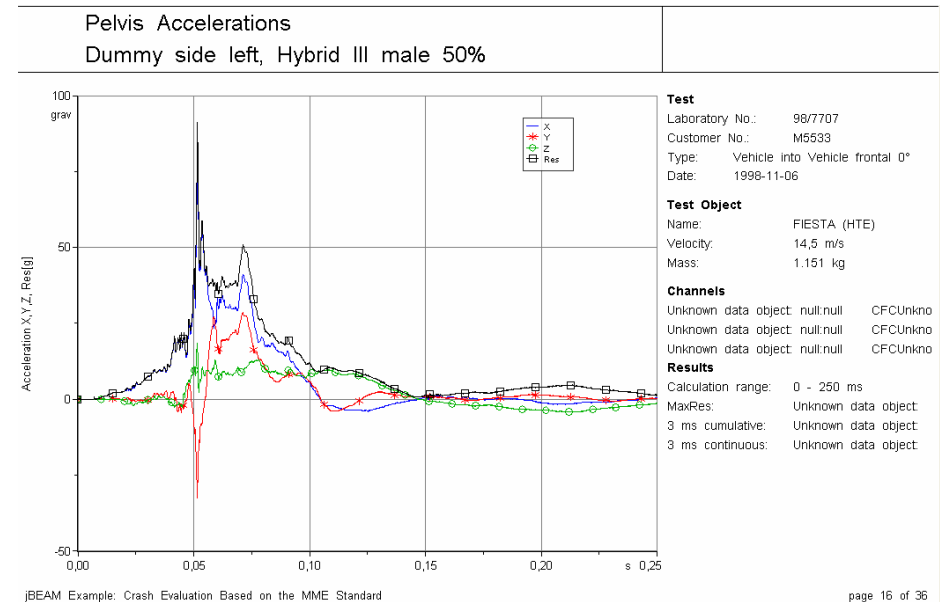
HIC
 HIC T1
 HIC T2
 HIC36
 HIC36 T1
 HIC36 T2
 HIC15
 HIC15 T1
 HIC15 T2
 Head 3ms cumulative
 Head 3ms continuous

Thorax Trauma Index

Upper rib acc. Y
 Middle rib acc. Y
 Lower rib acc. Y
 Lower spine acc. Y

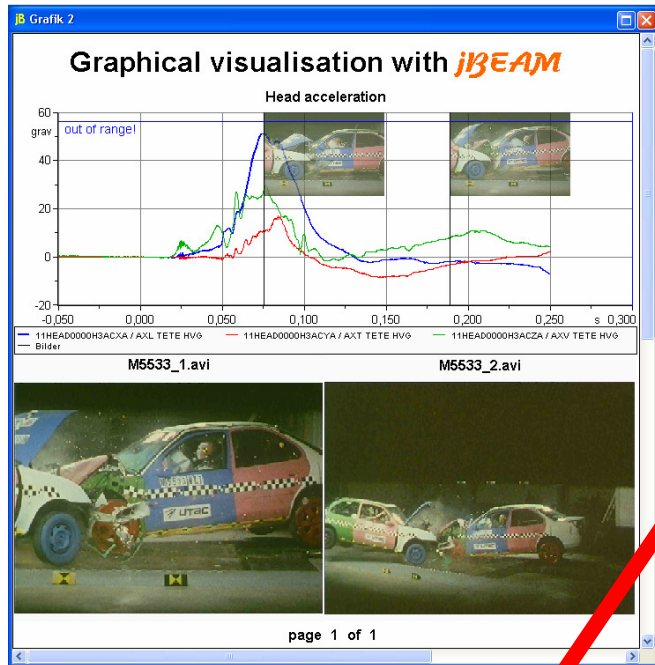
Pelvis Accelerations

Pelvis 3ms cumulative
 Pelvis 3ms continuous
 Abdomen Force, front left
 Abdomen sum force Y



page 16 of 36

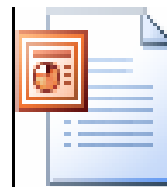
AMS *jBEAM* - Export Reports



Simply export your *jBEAM* test protocol into:



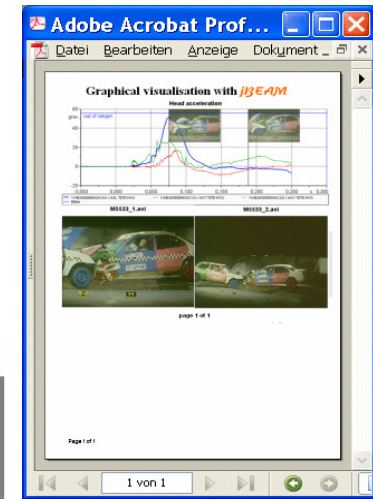
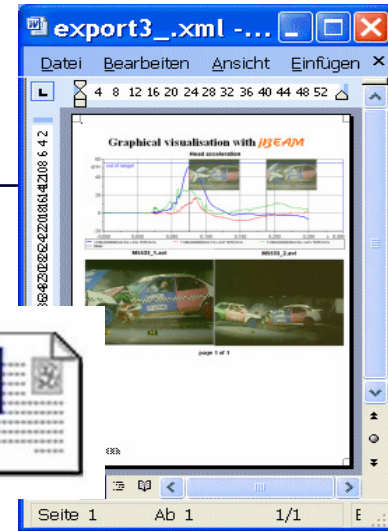
HTML including SVG



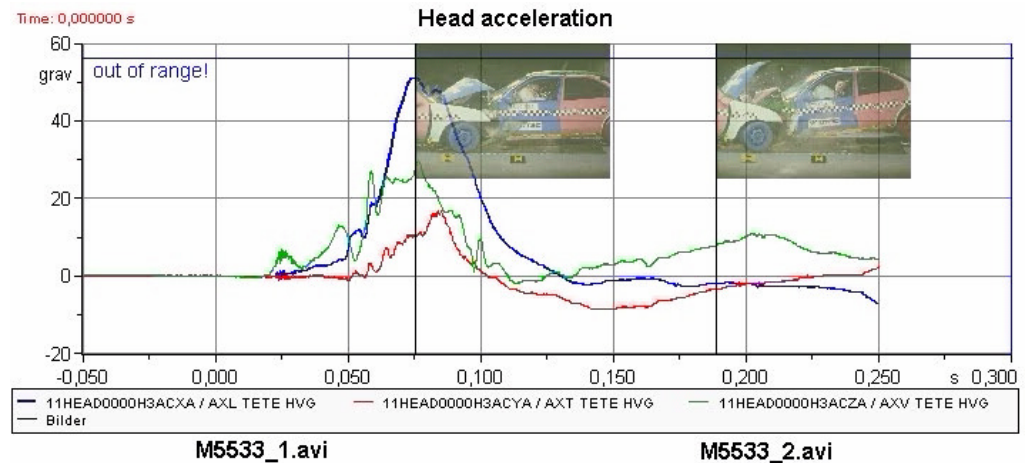
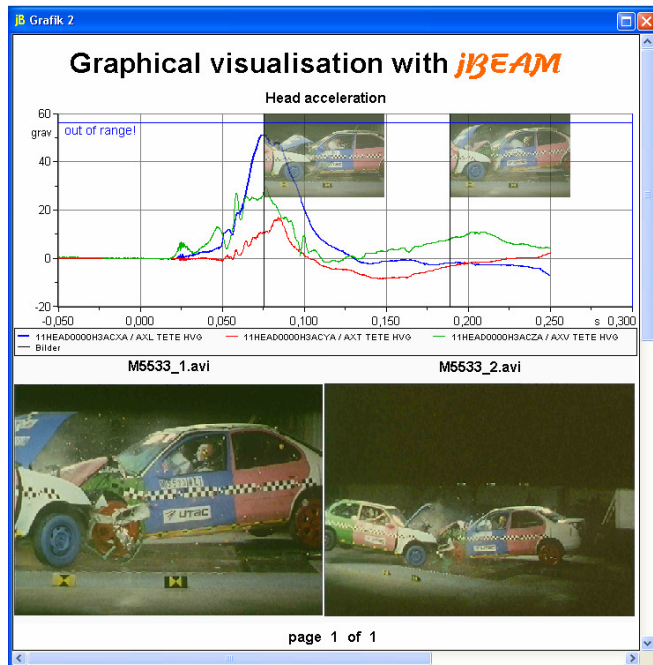
PPT



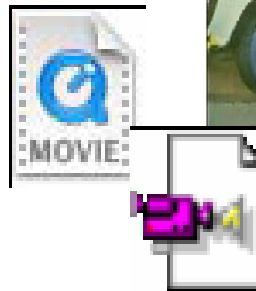
Dynamic content as Video



AMS *iBEAM* - Video Export



Simply export
your *iBEAM*
dynamic content
as Video file:





jBEAM - Crash Analysis

Let's have a look!

- *jBEAM* is focused on standards where CEA is only one.
- *jBEAM* is open to allow customized solutions
- *jBEAM* Crash covers Video and numerical analysis in only one tool
- Are you interested? Just give it a try!
On our “TestIt” pages you can upload your ISO MME project and the jBEAM web-service generates your personal crash-report within few seconds: www.jBEAM.com/testit