

FORSCHUNGSVEREINIGUNG AUTOMOBILTECHNIK EV

# FAT

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## SCHRIFTEN REIHE NR.82

**Einsatz von Retardern  
in der Betriebsbremsanlage  
von Nutzfahrzeugen**

**- Zweiachsiges Fahrzeug -**

**in zwei Bänden**

**Band 2**

**Einsatz von Retardern  
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– Zweiachsiges Fahrzeug –  
in zwei Bänden  
Band 2**

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Vervielfältigung, auch auszugsweise nur  
mit ausdrücklicher Genehmigung der FAT

## **ANHANG E**

Im Anhang E sind Simulationsergebnisse der Parameterreihen

- G1 - G5** "Bremsen Geradeaus" und
- K1 - K4** "Bremsen im Kreis"

aufgeführt, auf die im Kapitel 7 verwiesen wird. Sie sollen Interpretationen der Parameterstudien belegen und die Möglichkeit eröffnen, spezielle Aussagen zu einzelnen Parametereinstellungen anhand der berechneten Zeitverläufe nachzuziehen.

Erläuterungen zur Lesart der Diagramme finden sich ebenfalls in Kapitel 7. Seitenüberschriften und Parameterzusammenstellungen vor jedem neuen Abschnitt ermöglichen das rasche Auffinden bestimmter Simulationen.

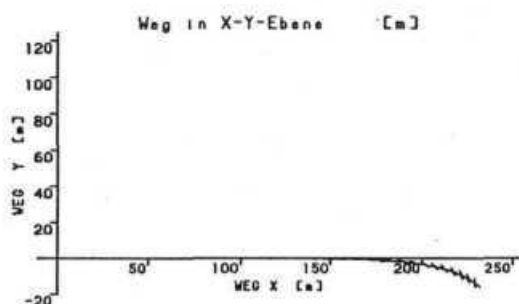
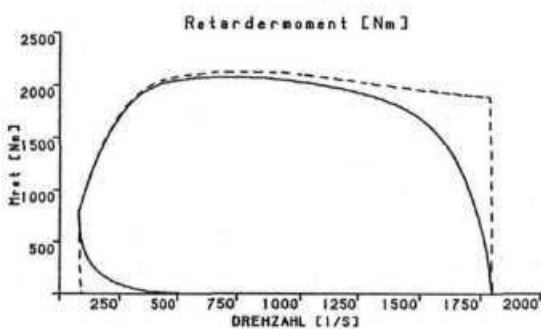
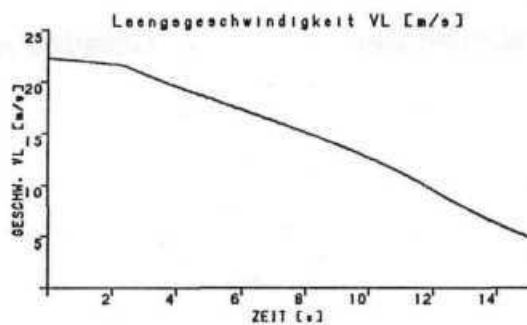
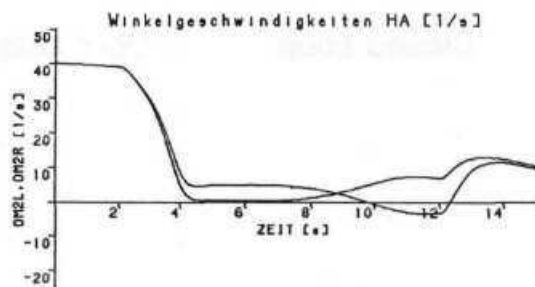
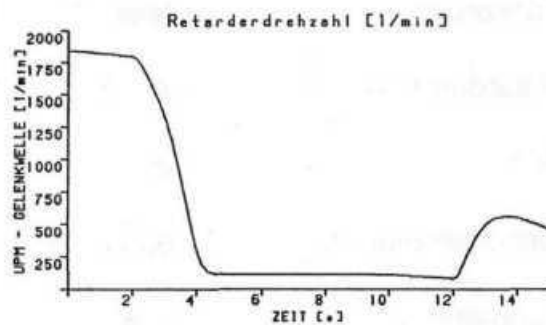
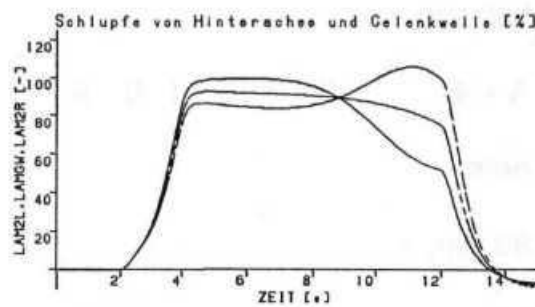
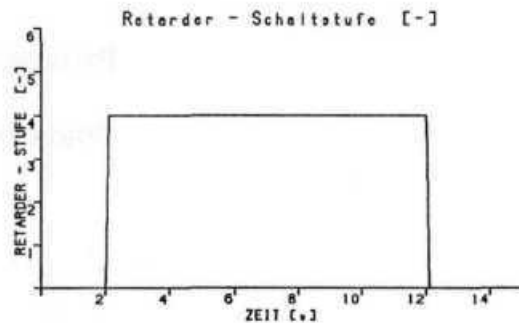
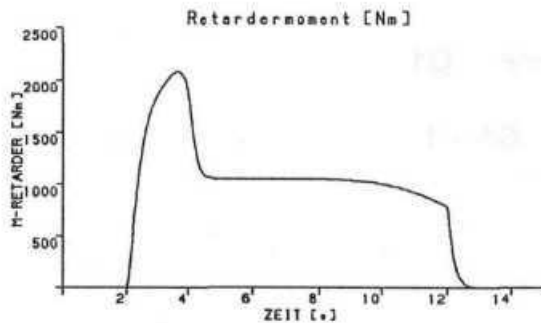
Parameterreihe G1Variation<sup>1)</sup> **G1 - 1**

Fahrzeug:	<b>leer</b>		beladen		
Retarderstufe:	A - 2		<b>A - 4</b>		B - 3   B - 6
ABV:	ja		<b>nein</b>		
Geschwindigkeit:	50 km/h		<b>80 km/h</b>		
Fahrbahn:	$\mu =$	0,72		0,48	<b>0,24</b>
Fahrmanöver:	<b>Geradeaus</b>		<b>Closed Loop</b>		Open Loop

(Quelle: Simulationskennung SPL0114)

<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G1 - 1 / Rahmen 1



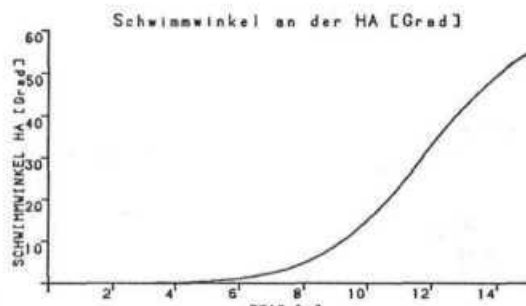
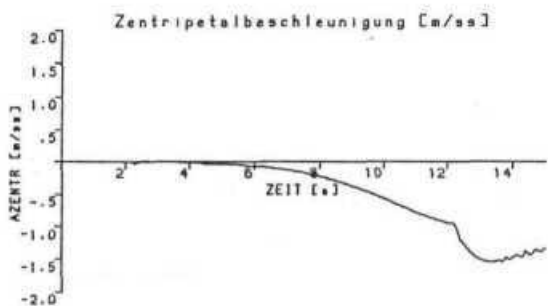
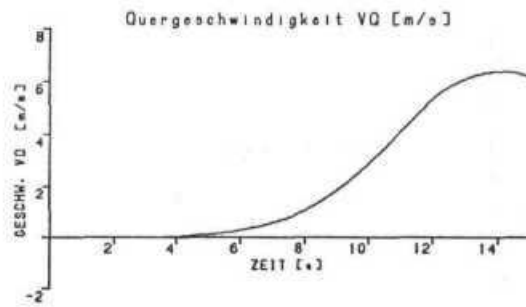
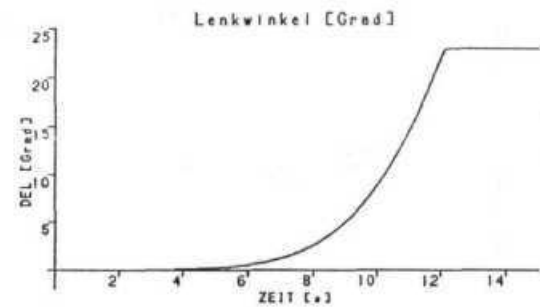
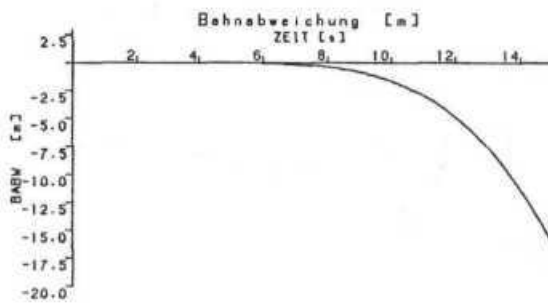
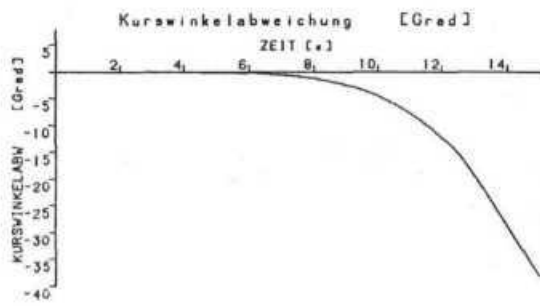
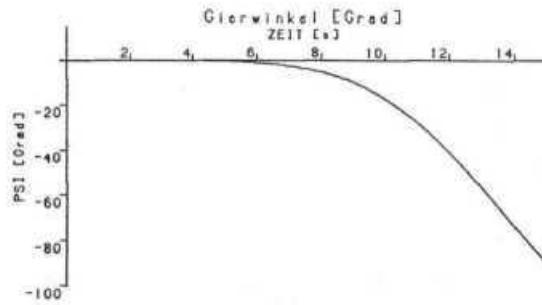
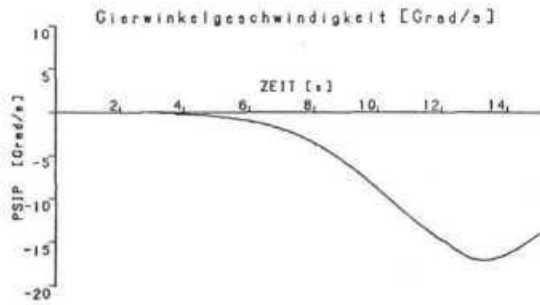
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_e (11/ro) = .24/.24$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanöver : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 1 / Rahmen 2



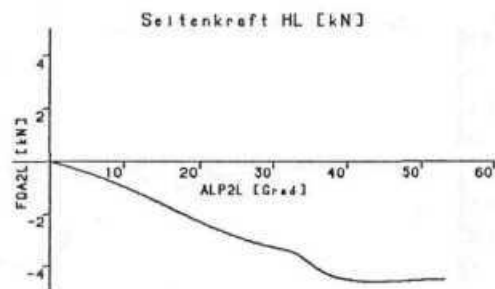
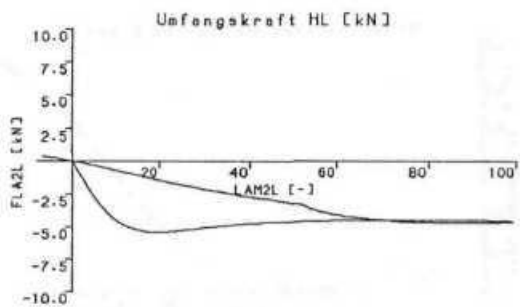
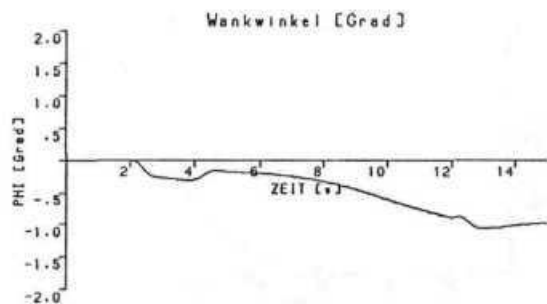
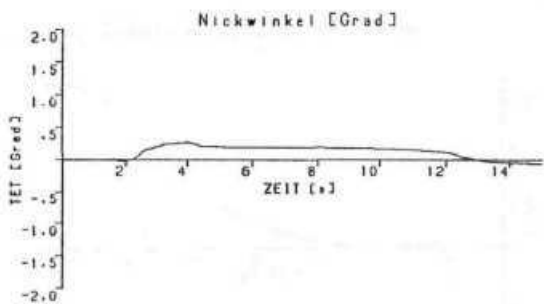
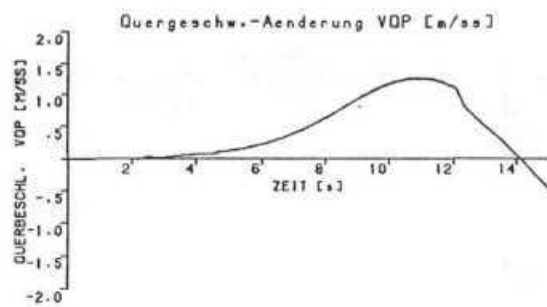
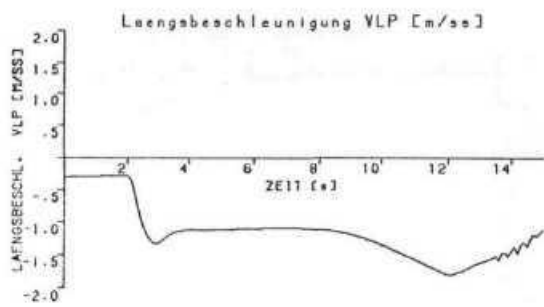
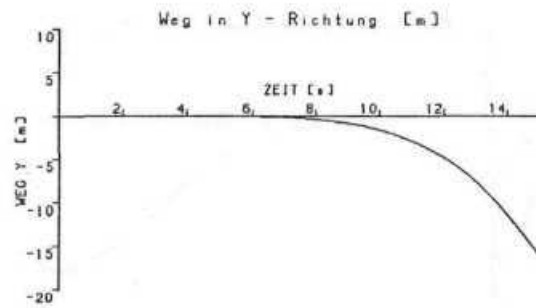
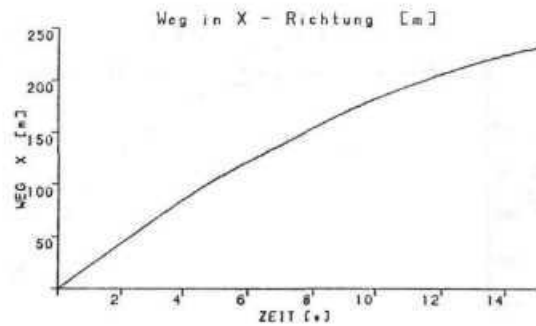
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_e (ll/rs) = .24/.24$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 1 / Rahmen 3



Retarder : Typ A  
 Schaltstufe(n) : 4-0  
 ABV : NEIN

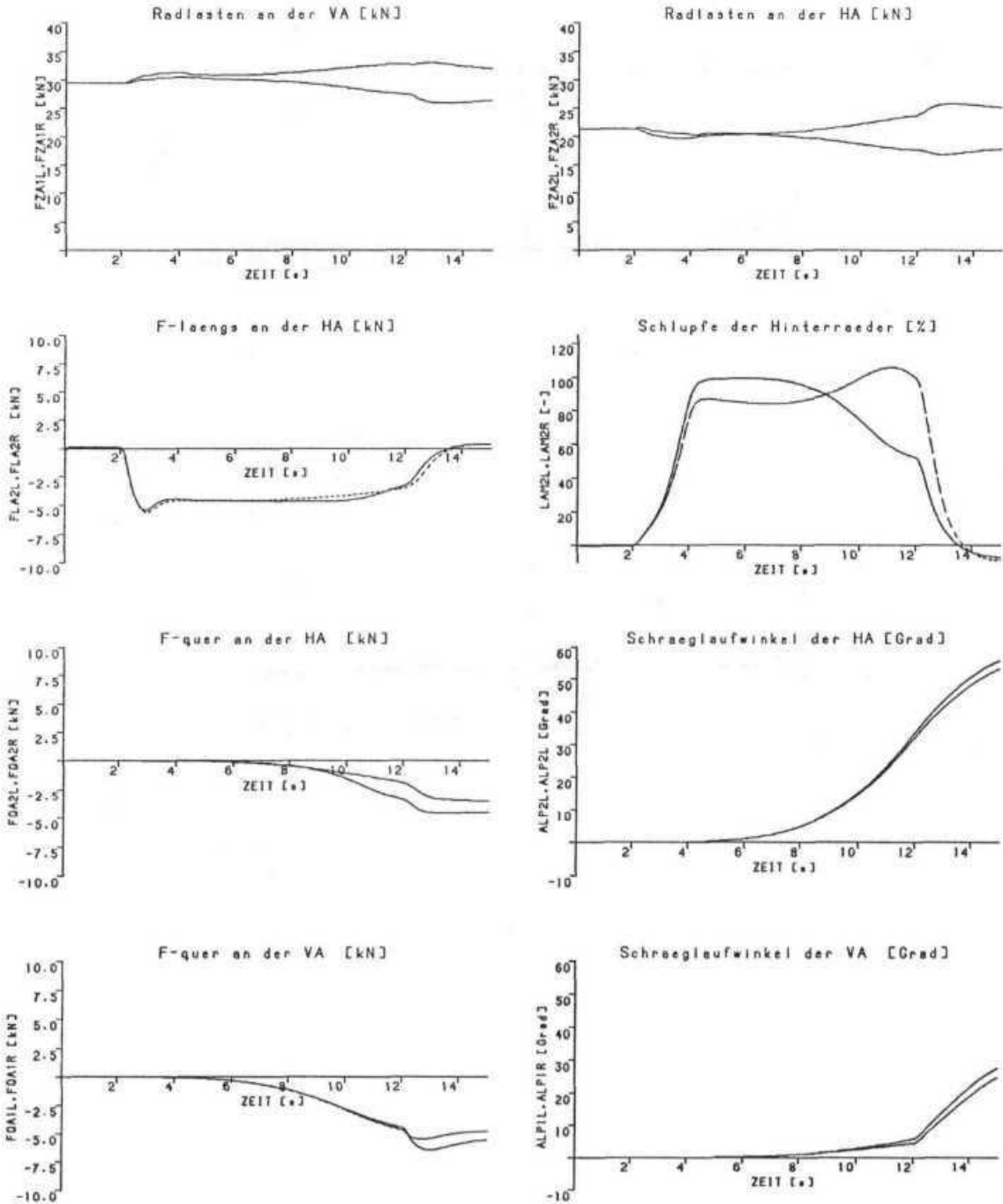
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (ll/ro) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN



G1 - 1 / Rahmen 4



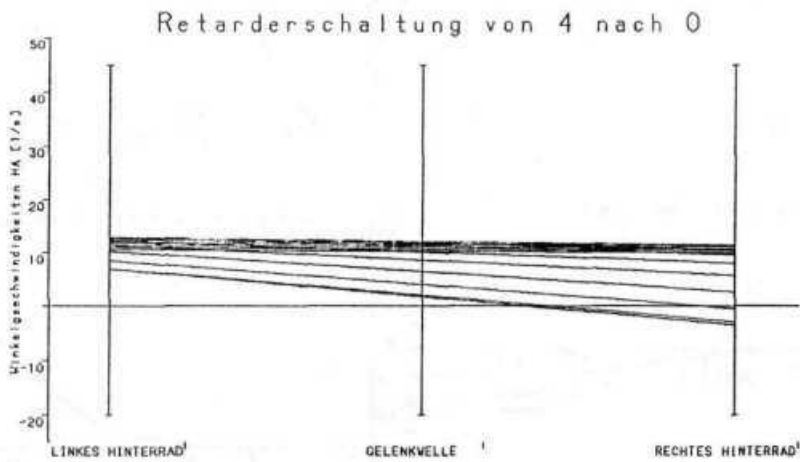
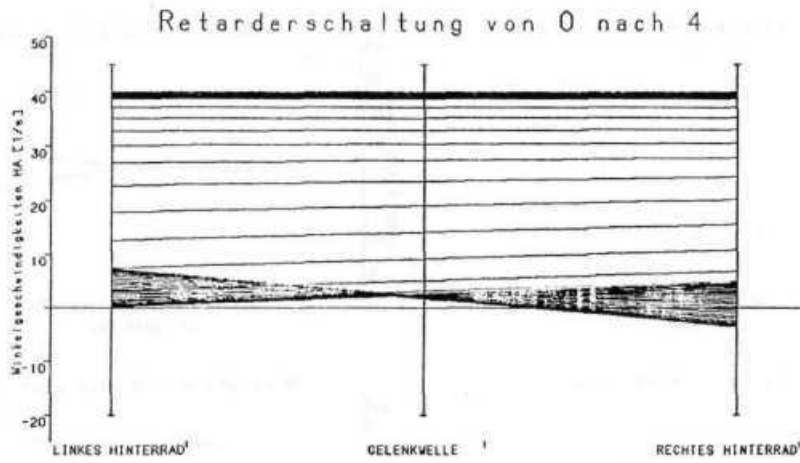
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

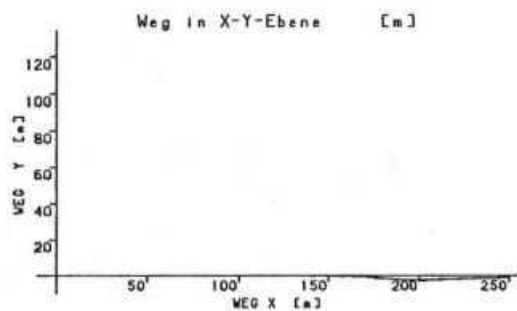
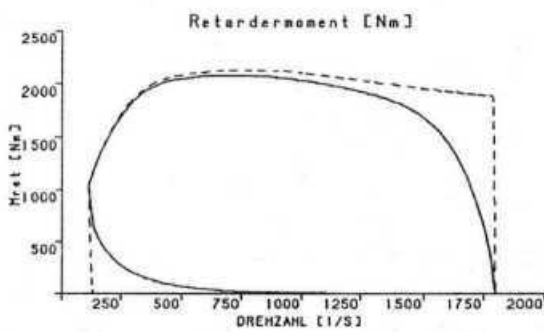
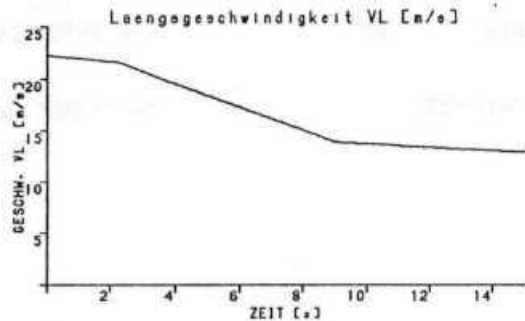
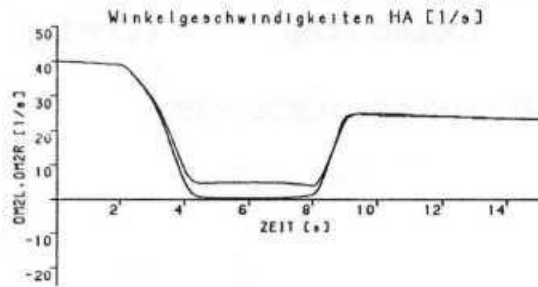
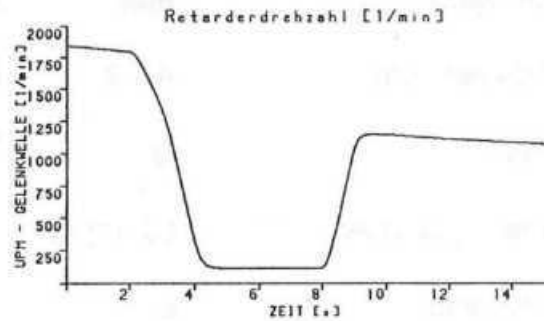
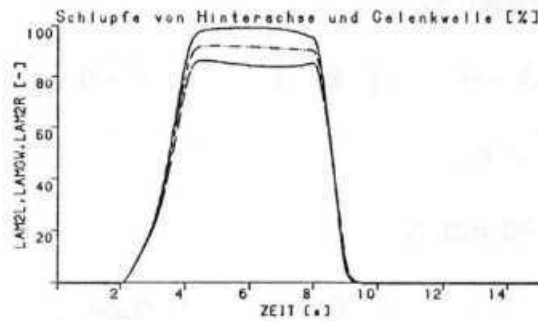
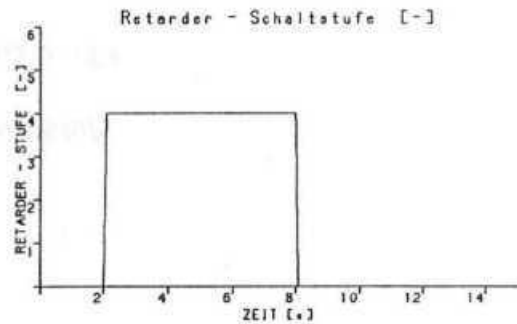
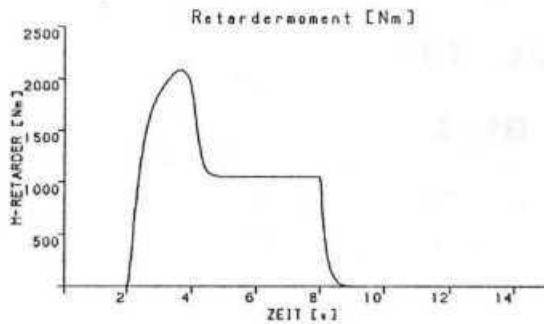
Parameterreihe G1Variation<sup>2)</sup> **G1 - 2**

Fahrzeug:	<b>leer</b>		beladen		
Retarderstufe:	A - 2		<b>A - 4</b>		B - 3   B - 6
ABV:	ja		<b>nein</b>		
Geschwindigkeit:	50 km/h		<b>80 km/h</b>		
Fahrbahn:	$\mu =$	0,72		0,48	<b>0,24</b>
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>		Open Loop	
Sonstiges:	Retarder nach 6 s wieder ausgeschaltet				

(Quelle: Simulationskennung SPL0114A)

<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G1 - 2 / Rahmen 1



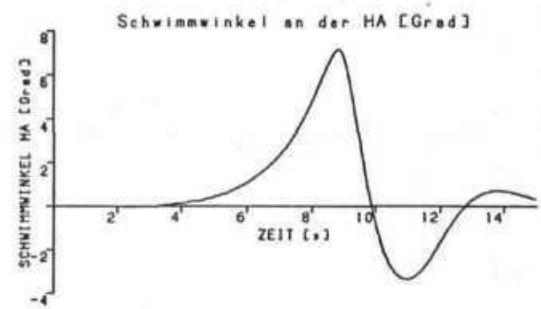
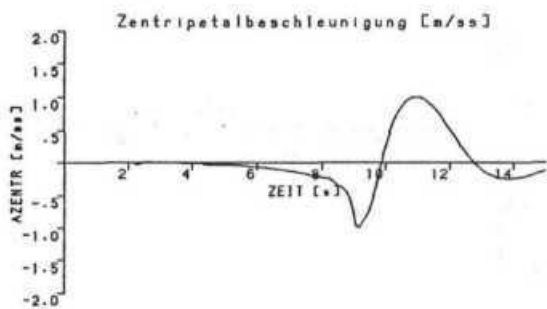
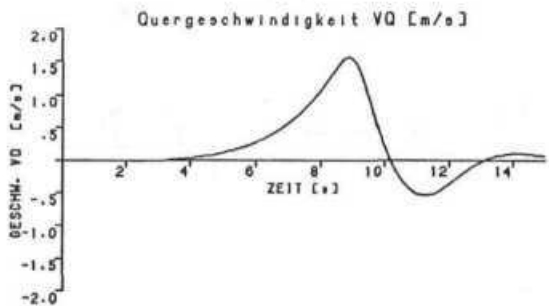
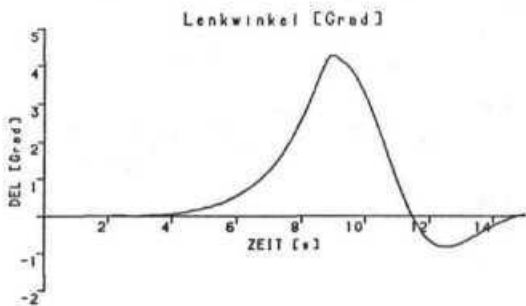
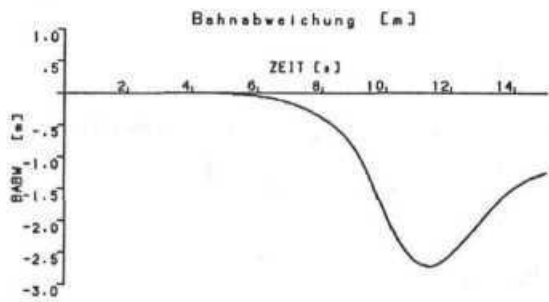
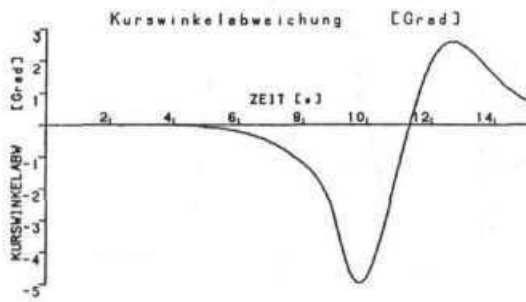
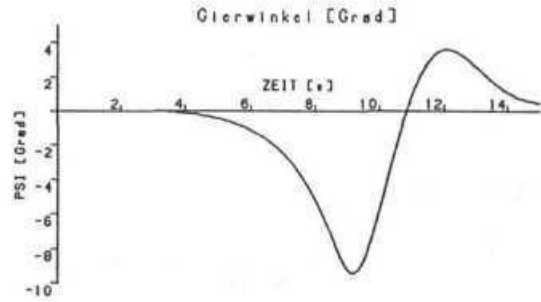
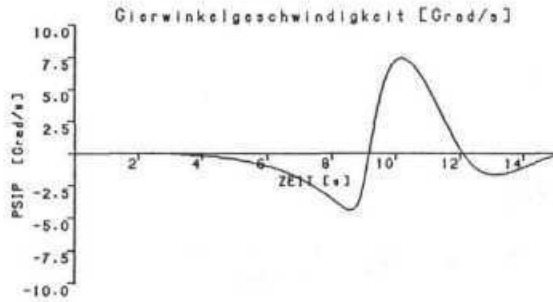
Retarder : Typ A  
Schaltstufe (n) : 4-0  
ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
mue (li/re) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
Fahrmanoever : geradeaus  
Solofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA): 58.9/ 42.6 kN

G1 - 2 / Rahmen 2



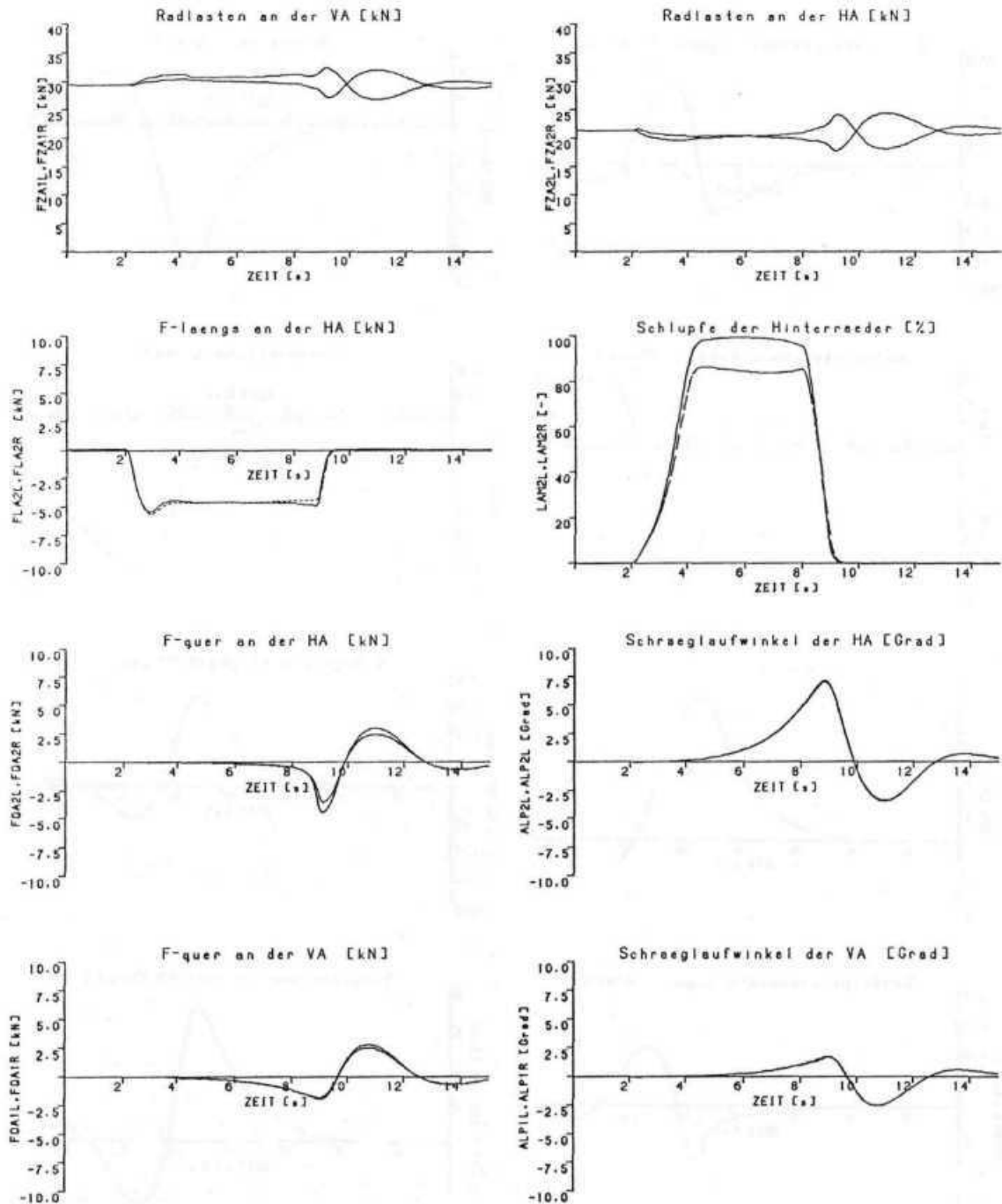
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 2 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (ll/re) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

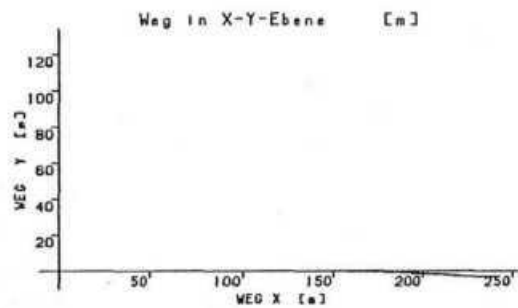
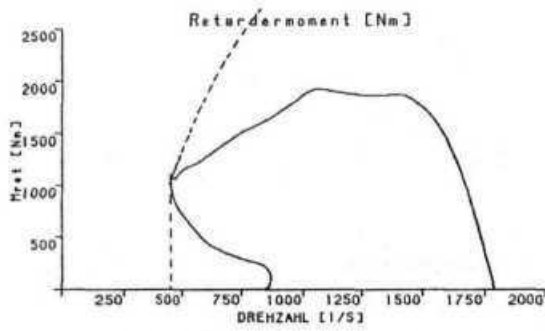
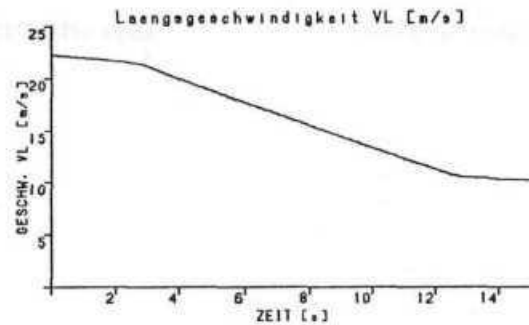
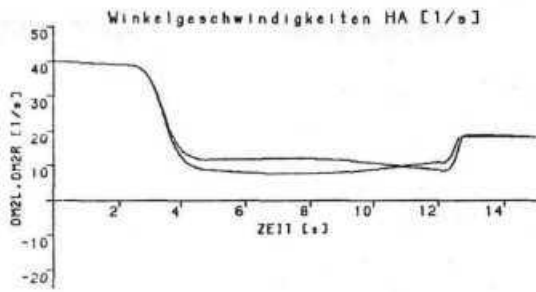
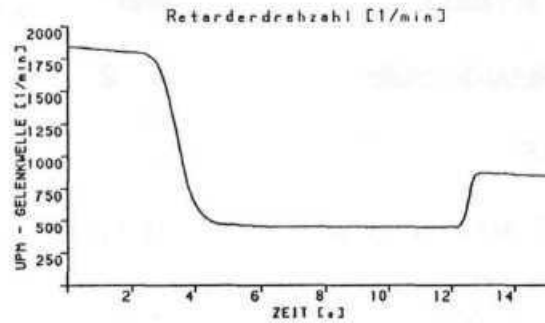
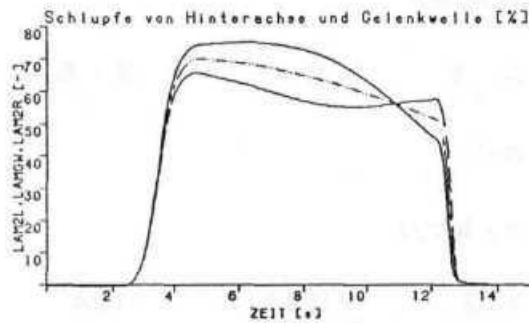
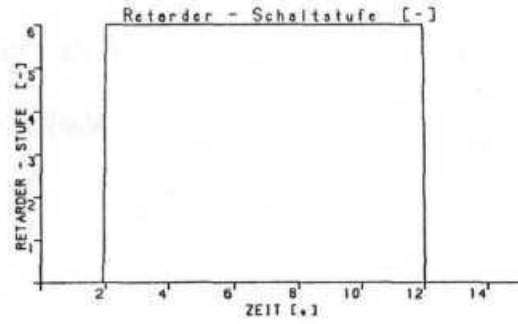
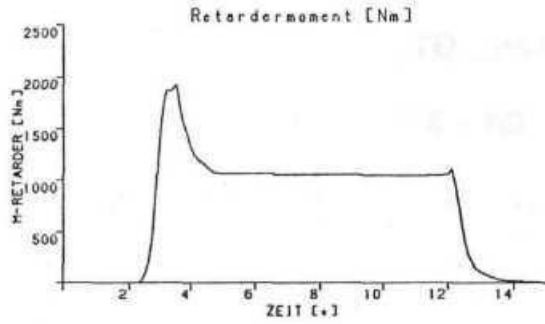
Parameterreihe **G1**Variation<sup>3)</sup> **G1 - 3**

Fahrzeug:	<b>leer</b>		beladen		
Retarderstufe:	A - 2		A - 4		B - 3   <b>B - 6</b>
ABV:	ja		<b>nein</b>		
Geschwindigkeit:	50 km/h		<b>80 km/h</b>		
Fahrbahn:	$\mu =$	0,72		0,48	<b>0,24</b>
Fahrmanöver:	<b>Geradeaus</b>		<b>Closed Loop</b>		Open Loop

(Quelle: Simulationskennung SPL0116)

<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G1 - 3 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

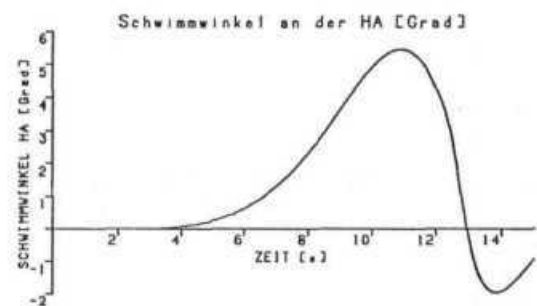
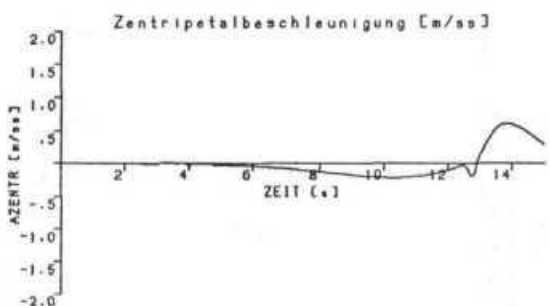
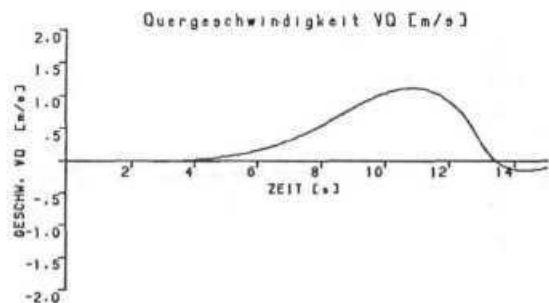
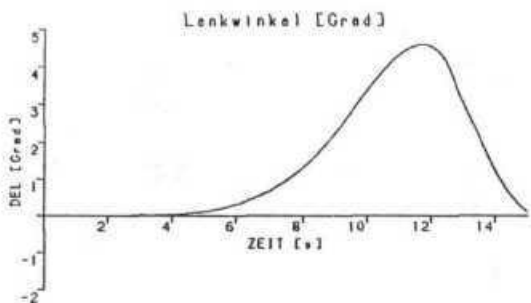
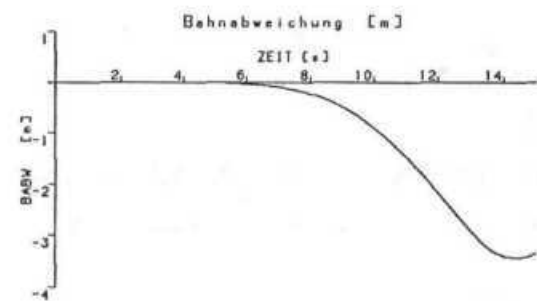
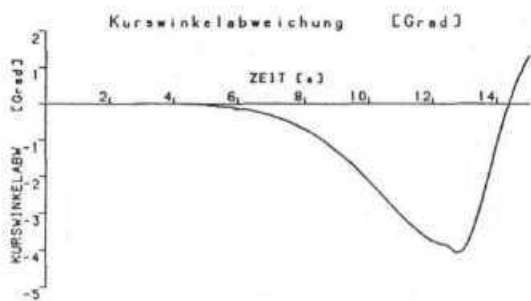
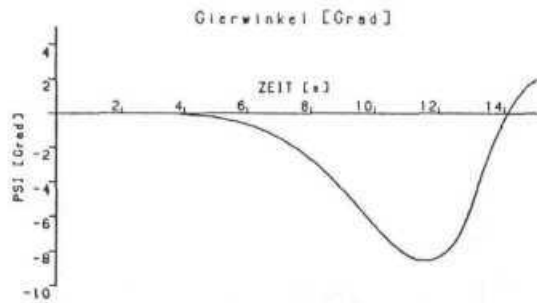
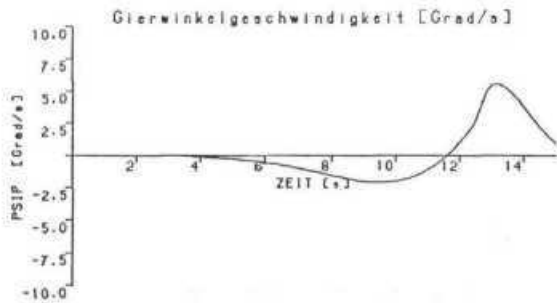
Fahrbahn: Gefaeelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



G1 - 3 / Rahmen 2



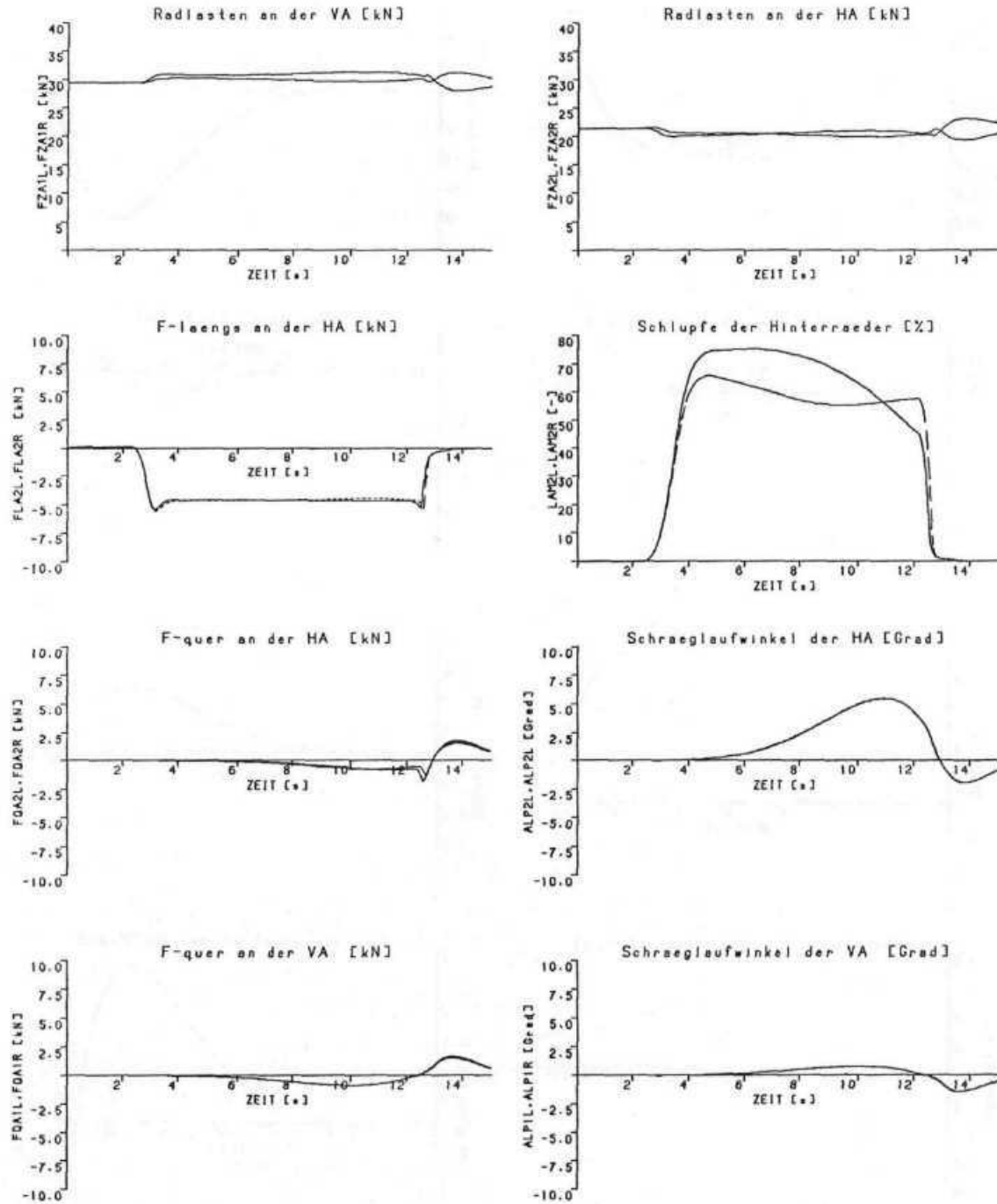
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = -24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 3 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

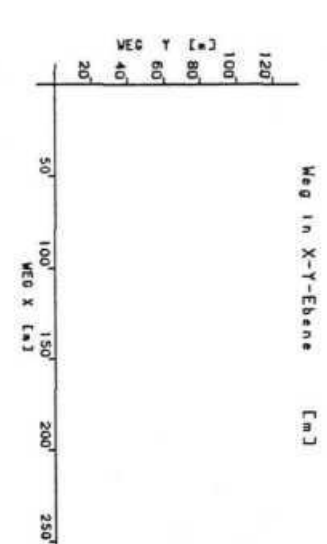
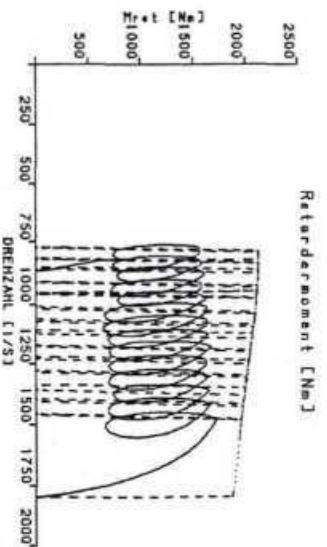
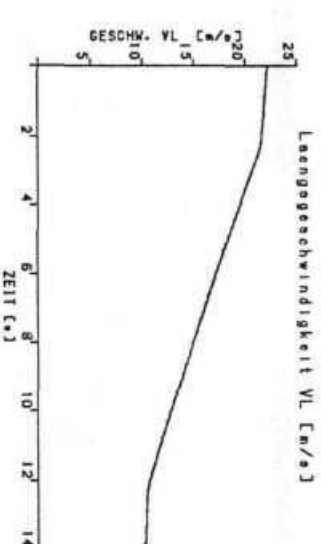
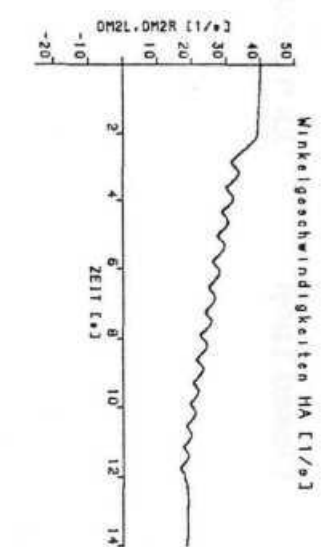
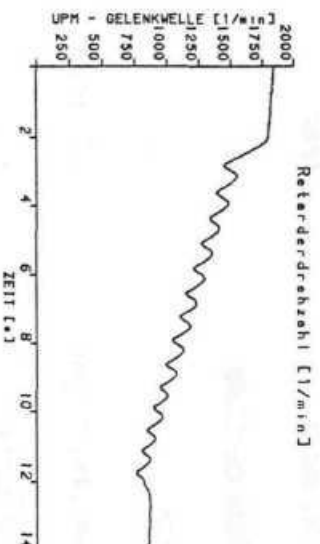
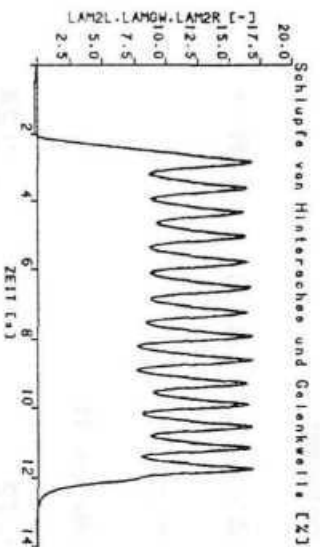
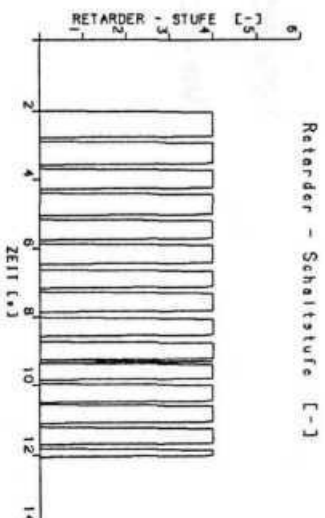
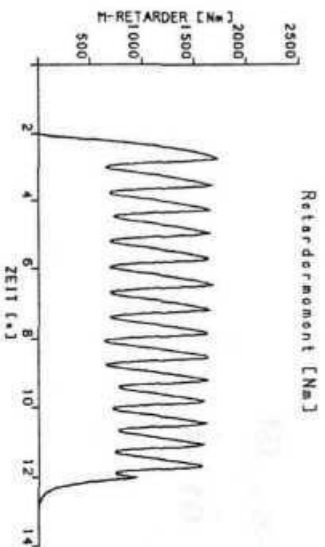
Parameterreihe G1Variation<sup>4)</sup> **G1 - 4**

Fahrzeug:	<b>leer</b>		beladen		
Retarderstufe:	A - 2		<b>A - 4</b>		B - 3   B - 6
ABV:	<b>ja</b>		nein		
Geschwindigkeit:	50 km/h		<b>80 km/h</b>		
Fahrbahn:	$\mu =$	0,72		0,48	<b>0,24</b>
Fahrmanöver:	<b>Geradeaus</b>		<b>Closed Loop</b>		Open Loop

(Quelle: Simulationskennung SPL0114C)

<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G1 - 4 / Rahmen 1



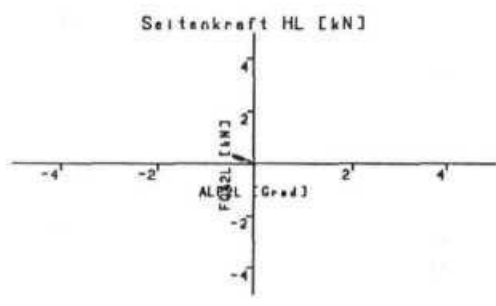
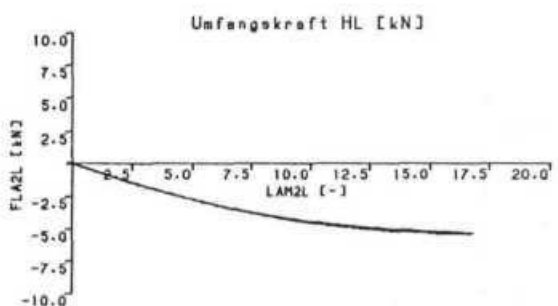
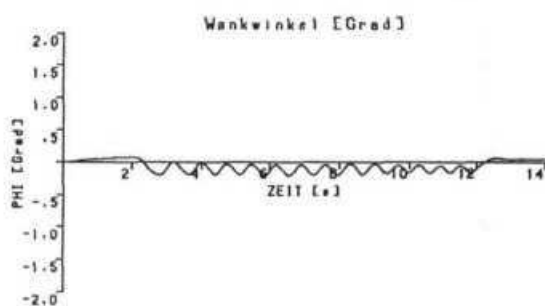
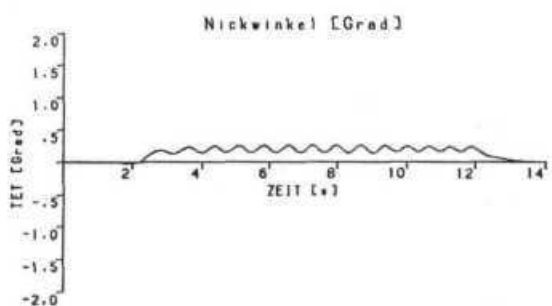
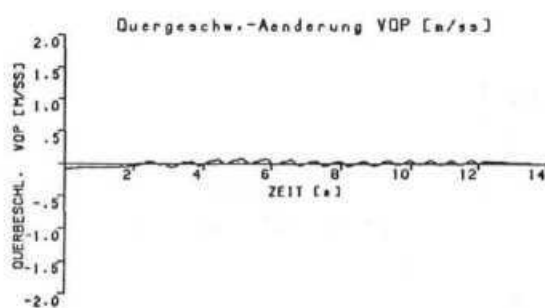
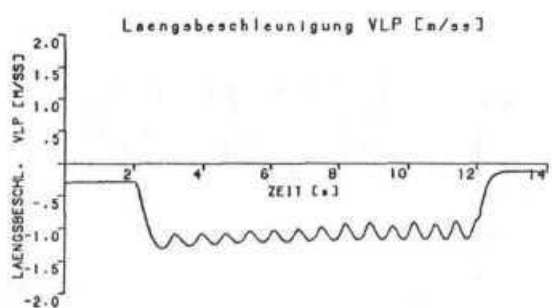
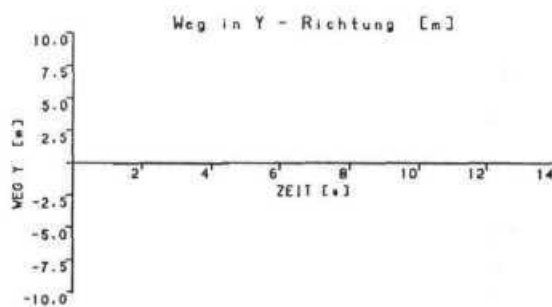
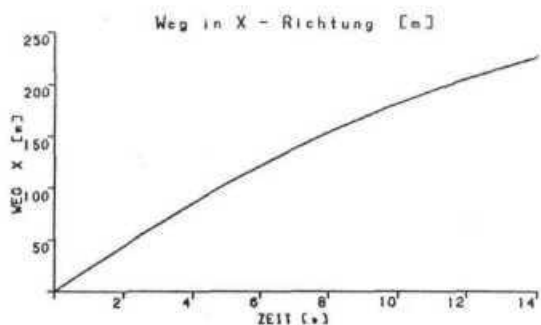
Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV-Schwellw. : 15.-%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mu (11/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 4 / Rahmen 3



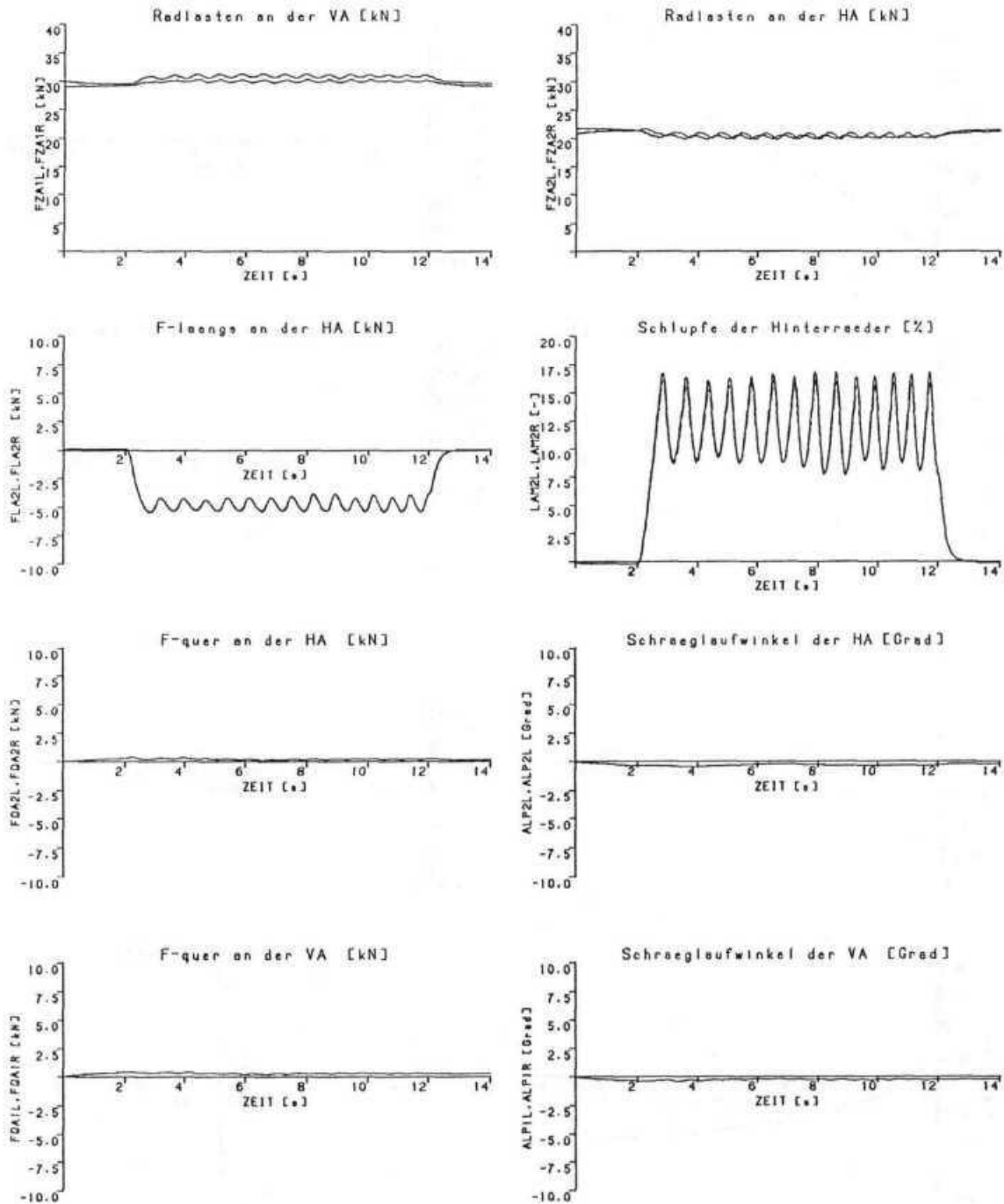
Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G1 - 4 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n): 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 $\mu_{ue} (l/r_{\phi}) = .24/.24$

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

Parameterreihe **G1**Variation<sup>5)</sup> **G1 - 5**

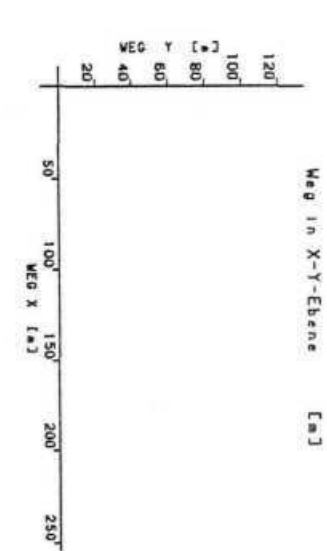
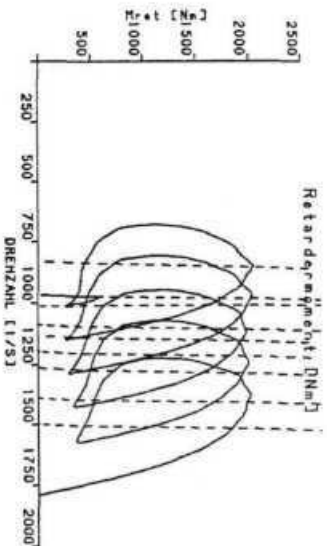
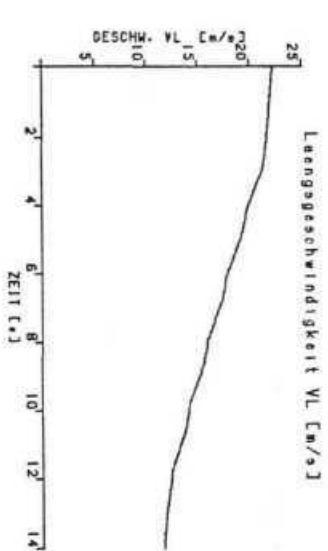
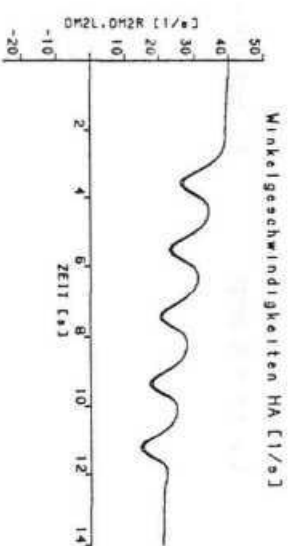
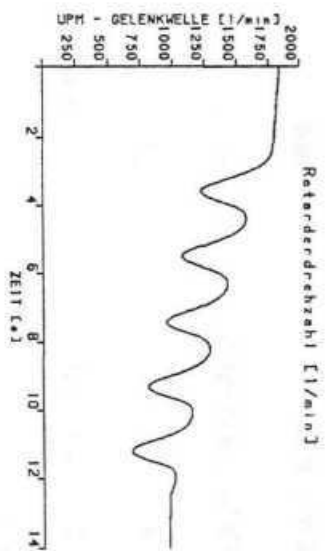
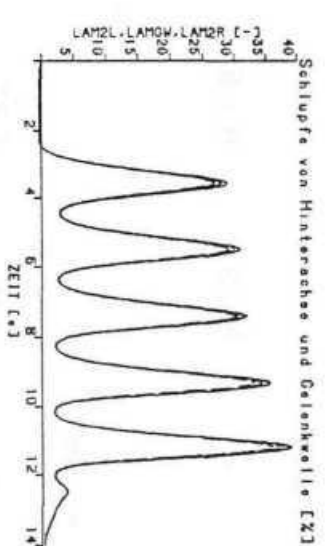
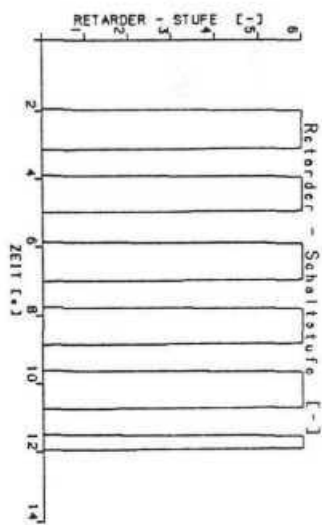
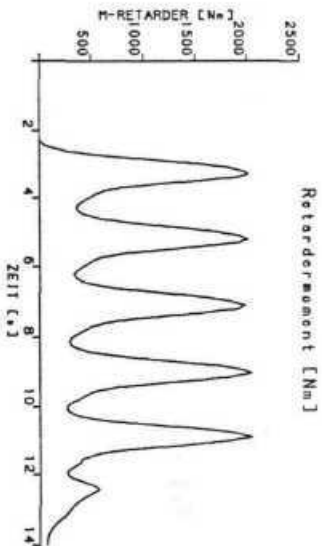
Fahrzeug:	<b>leer</b>		beladen		
Retarderstufe:	A - 2		A - 4		B - 3   <b>B - 6</b>
ABV:	<b>ja</b>		nein		
Geschwindigkeit:	50 km/h		<b>80 km/h</b>		
Fahrbahn:	$\mu =$	0,72		0,48	<b>0,24</b>
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>		Open Loop	

(Quelle: Simulationskennung SPL0116C)

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<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G1 - 5 / Rahmen 1



Retarder : Typ B  
 Schaltstufe(n) : 6-0-0  
 ABV-Schwellw. : 15.-%

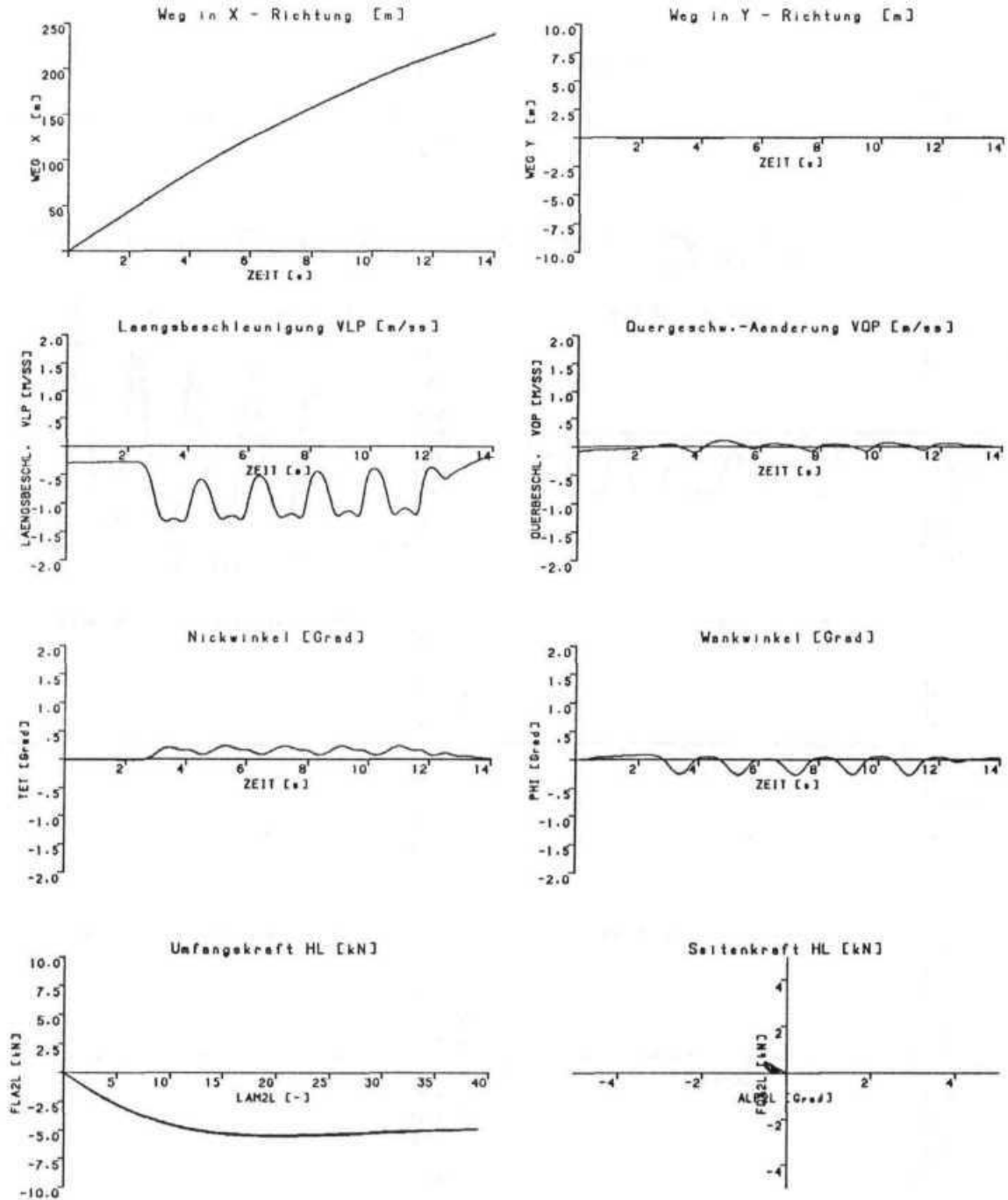
Fahrbahn: Gefälle = 0.0 % Querneigung = 1.0 %  
 mue (11/re) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



G1 - 5 / Rahmen 3



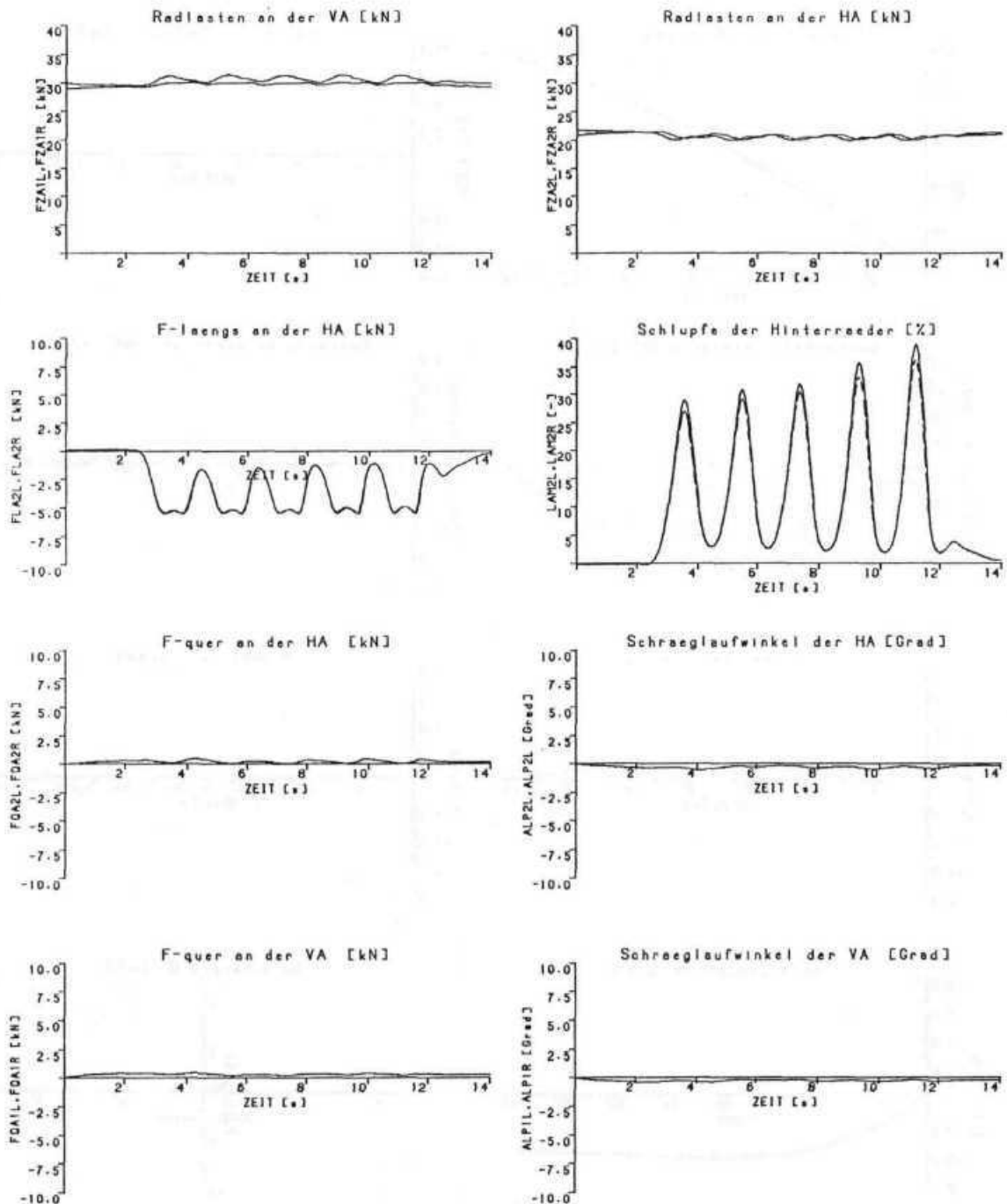
Retarder : Typ B  
 Schaltstufe(n) : 6-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G1 - 5 / Rahmen 4



Retarder : Typ B  
 Schaltstufe(n) : 6-0-0  
 ABV-Schwelw. : 15.%

Fahrbahn: Gefälle = 0.0 % Querneigung = 1.0 %  
 $\mu_{re} (ll/re) = .24/.24$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradesus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

Parameterreihe **G1**Variation<sup>6)</sup> **G1 - 6**

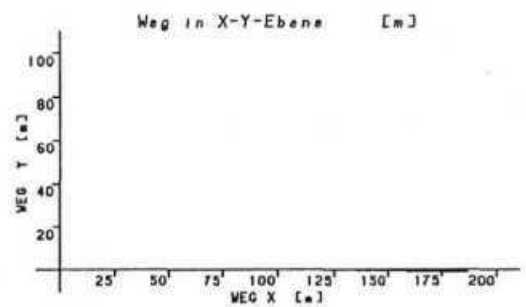
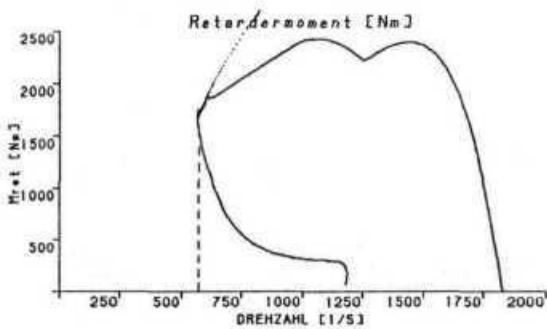
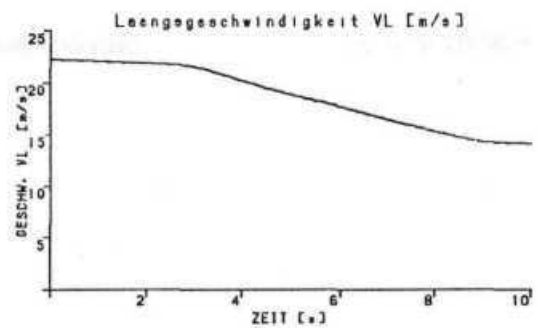
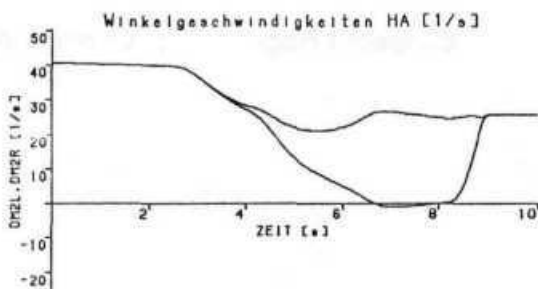
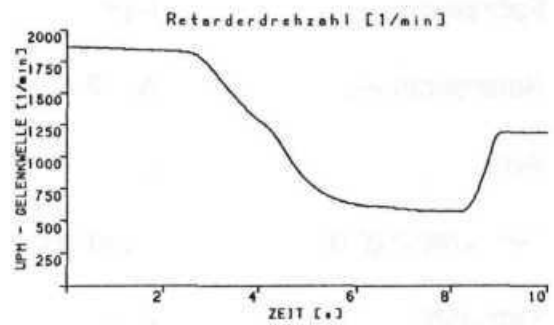
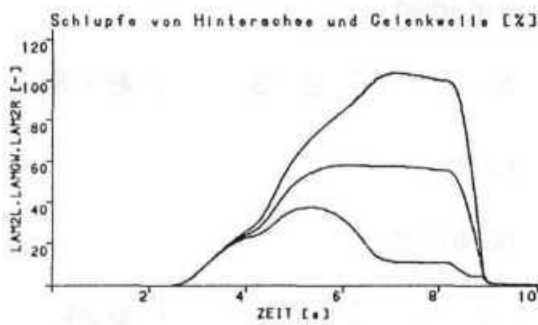
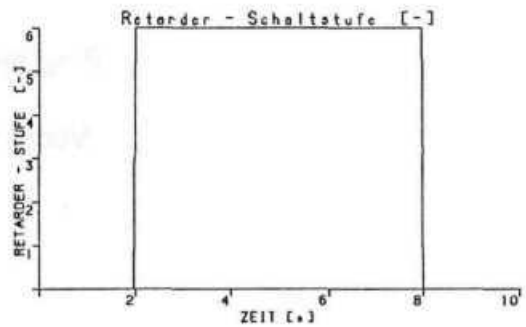
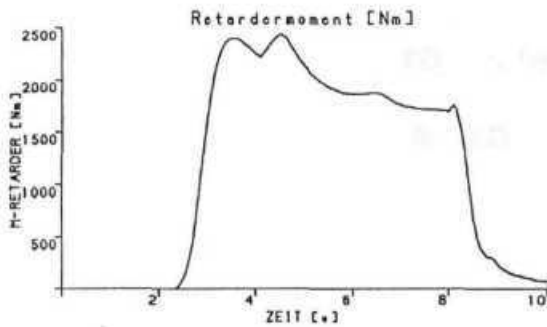
Fahrzeug:	leer		<b>beladen</b>	
Retarderstufe:	A - 2		A - 4	B - 3   <b>B - 6</b>
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	50 km/h		<b>80 km/h</b>	
Fahrbahn:	$\mu =$	0,72	0,48	<b>0,24</b>
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>		Open Loop

(Quelle: Simulationskennung SPL0309)

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<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G1 - 6 / Rahmen 1

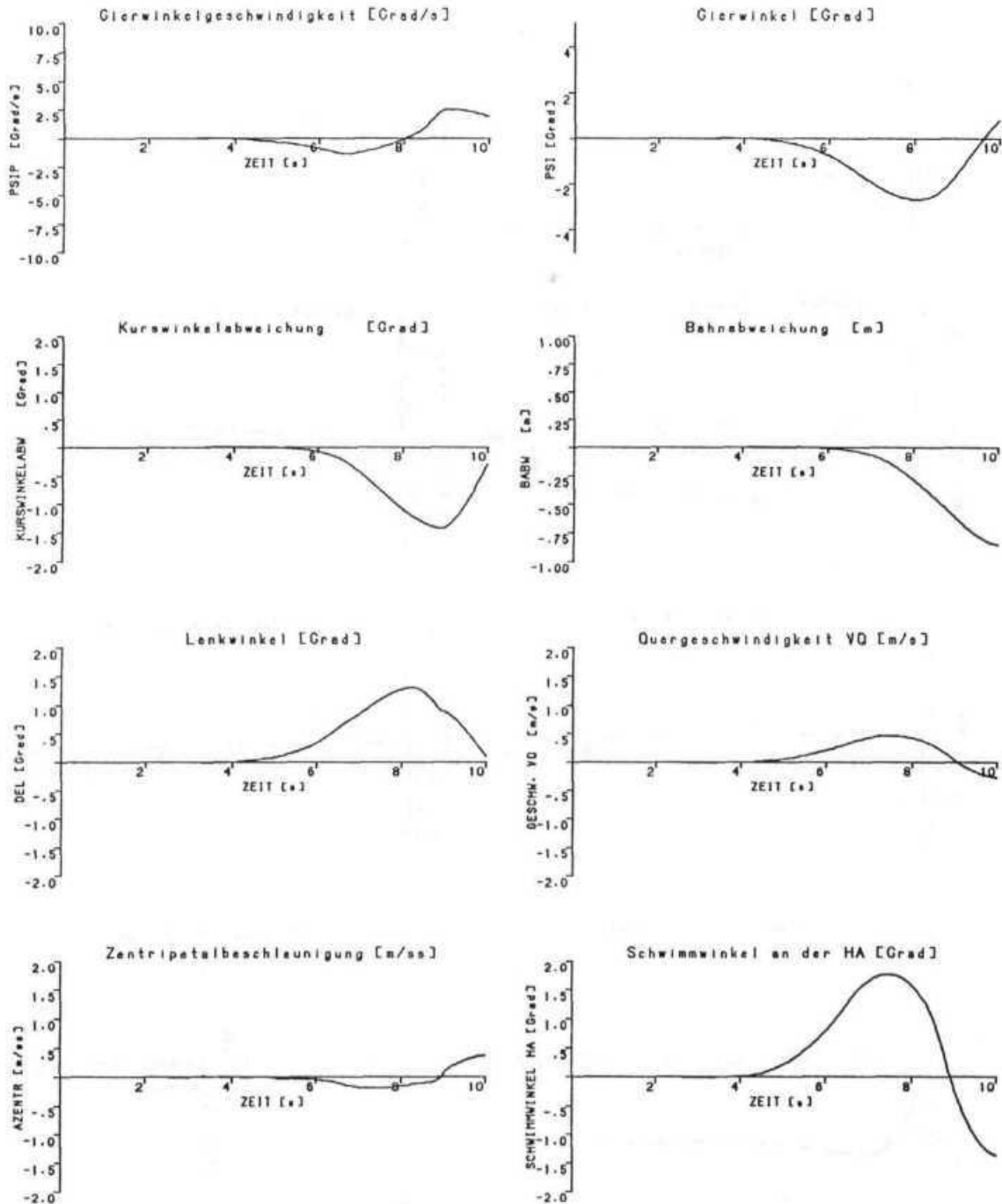


Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

## G1 - 6 / Rahmen 2

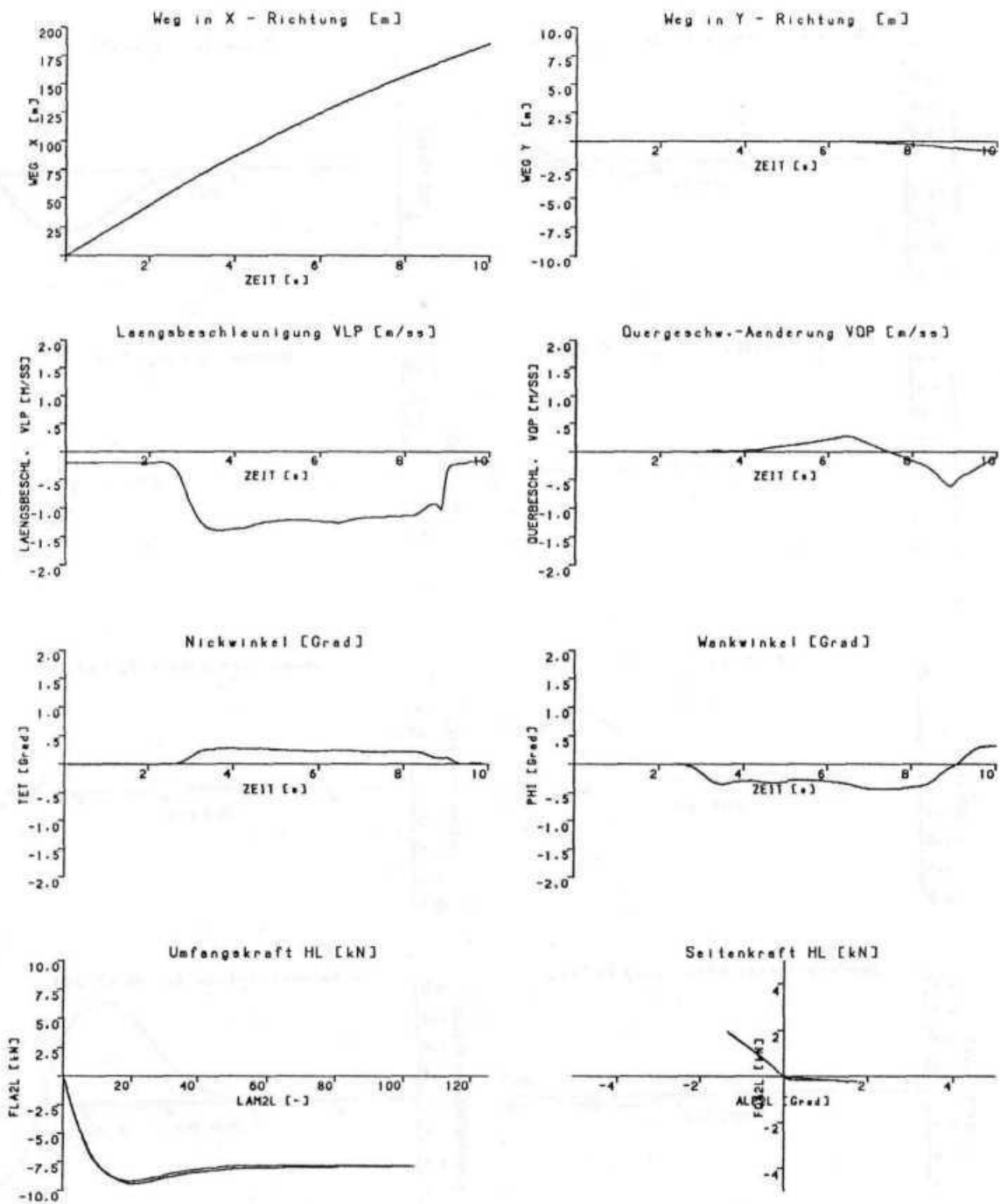


Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (ll/re) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

G1 - 6 / Rahmen 3

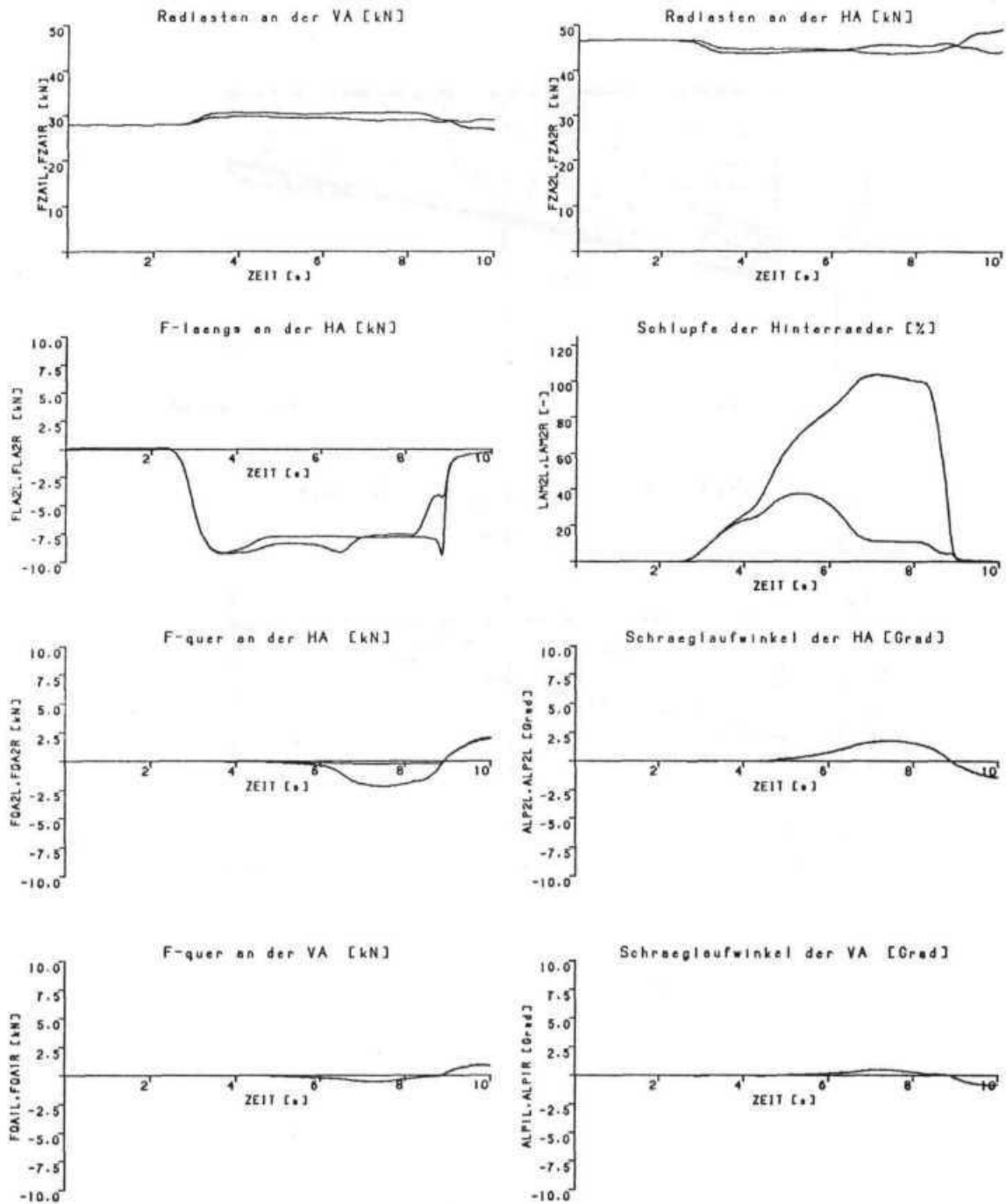


Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (ll/re) = .24/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

G1 - 6 / Rahmen 4

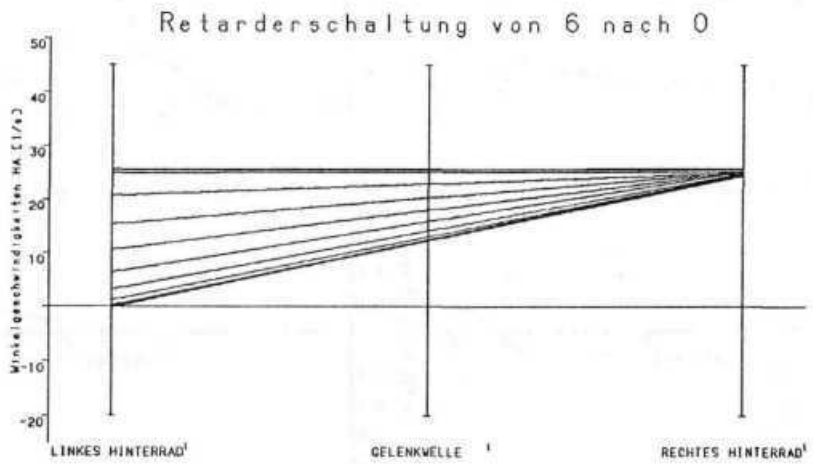
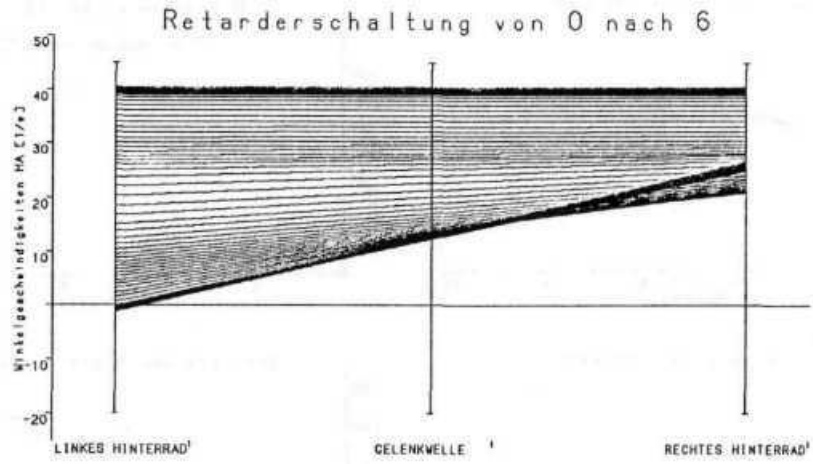


Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

G1 - 6 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$



Parameterreihe G2Variation<sup>1)</sup> **G2 - 1**

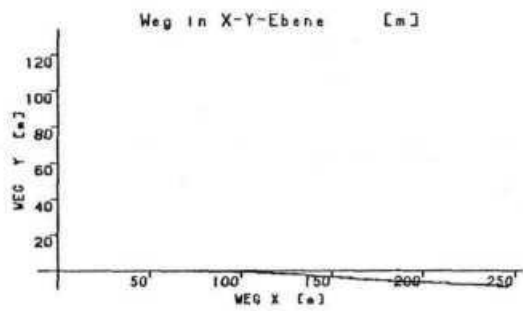
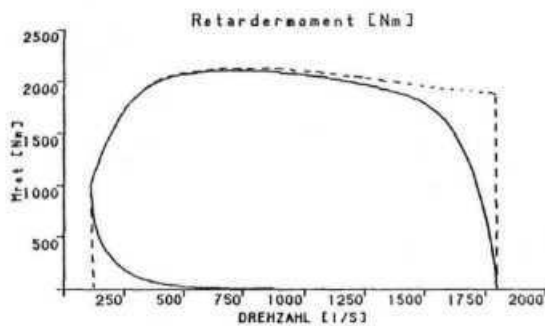
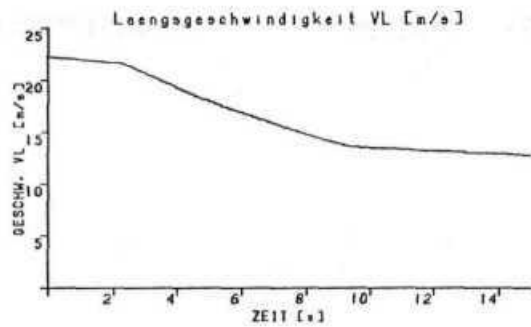
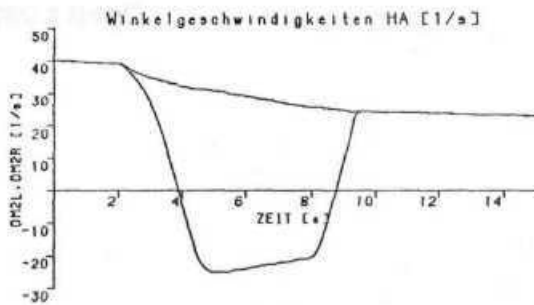
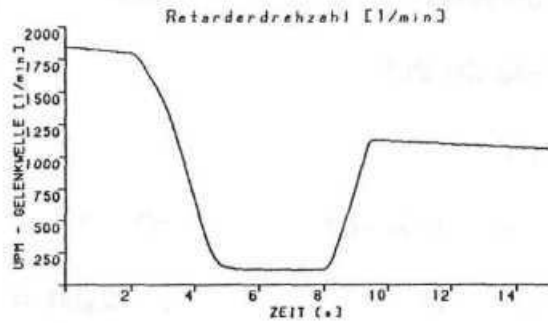
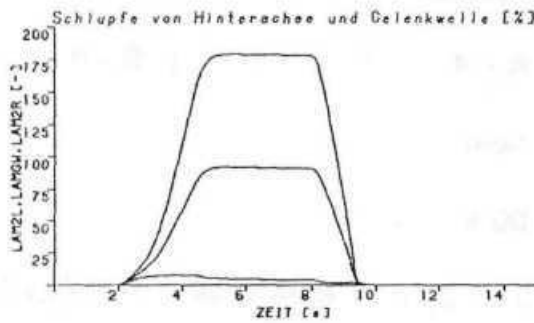
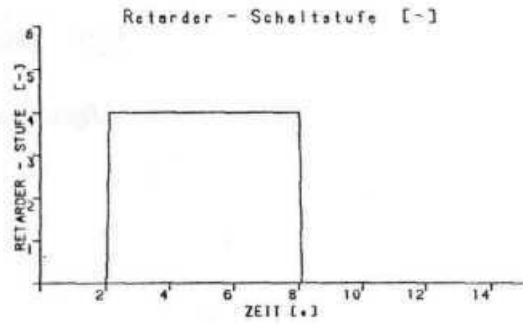
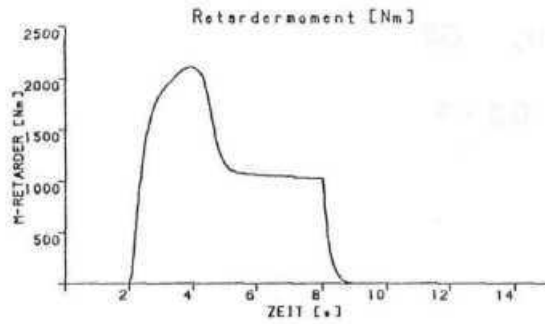
Fahrzeug:	<b>leer</b>		beladen	
Retarderstufe:			<b>A - 4</b>	B - 6
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	50 km/h		<b>80 km/h</b>	
Fahrbahn:	$\mu$ - Split =	0,48/0,72	<b>0,24/0,48</b>	0,24/0,72
Fahrmanöver:	<b>Geradeaus</b>	Closed Loop		<b>Open Loop</b>

(Quelle: Simulationskennung SPL0211)

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<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G2 - 1 / Rahmen 1



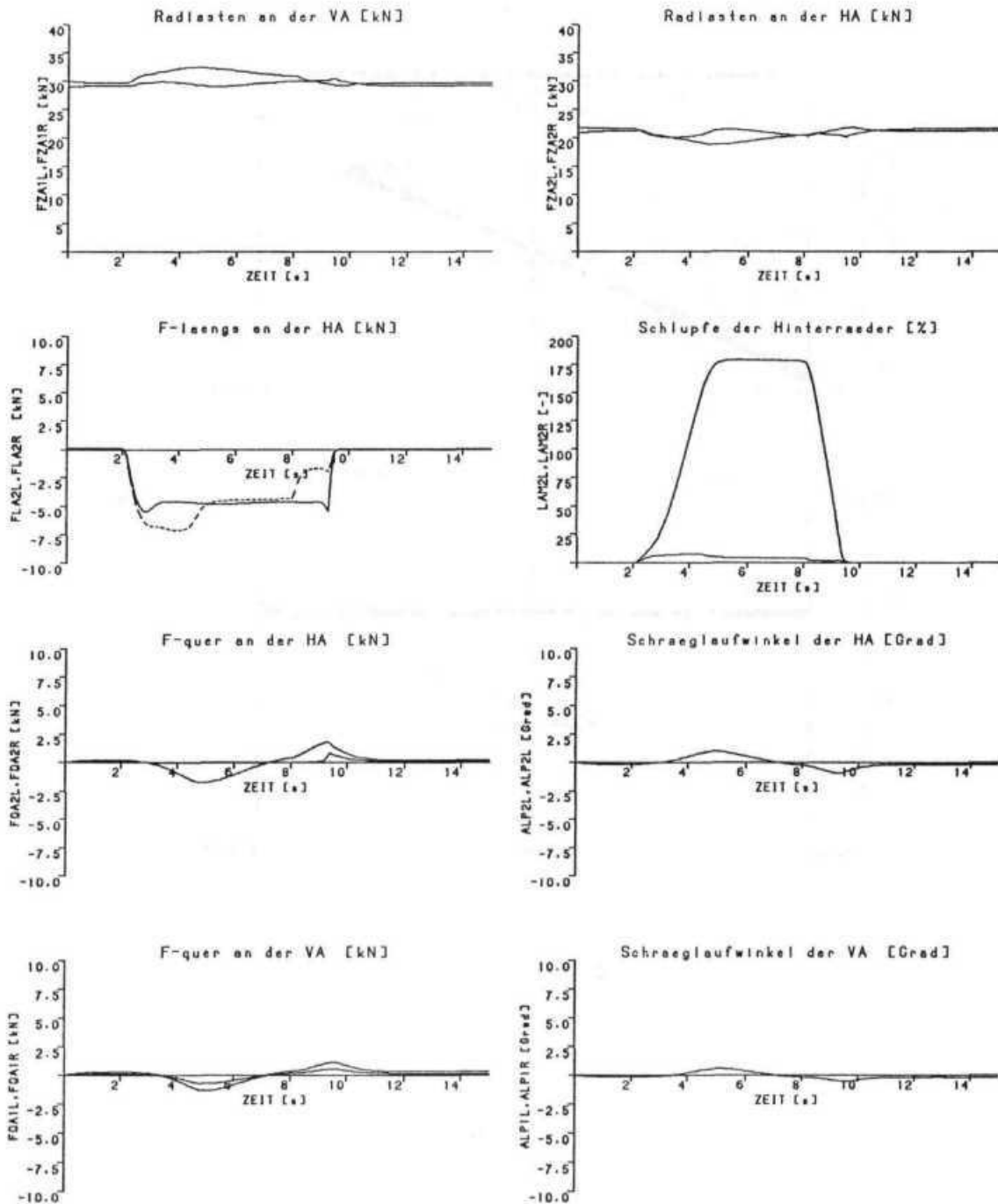
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mu (l/re) = .24/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Open Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G2 - 1 / Rahmen 4



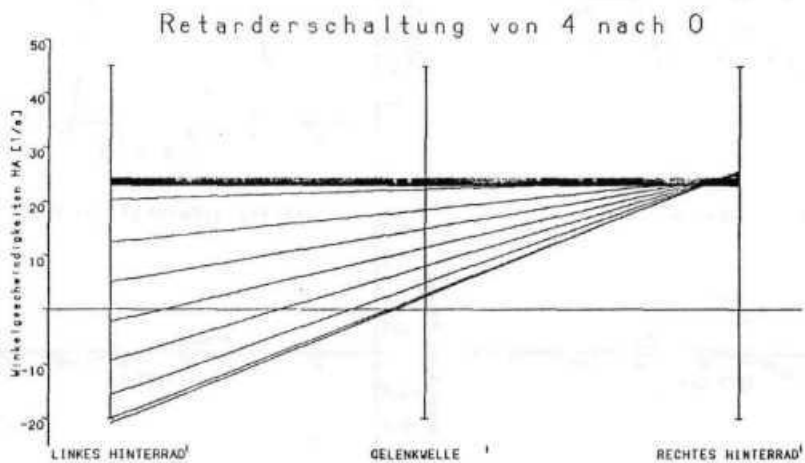
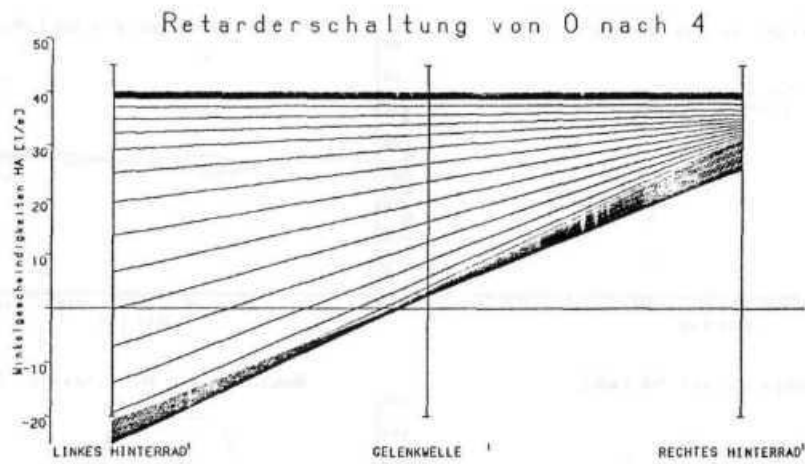
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mue (li/re) = .24/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Open Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G2 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

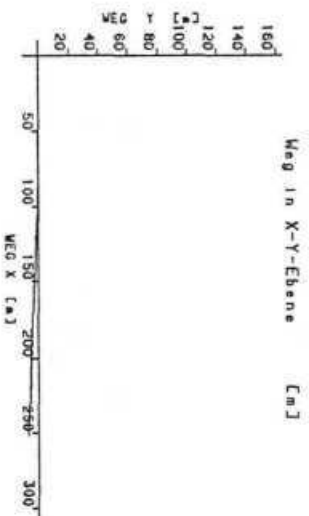
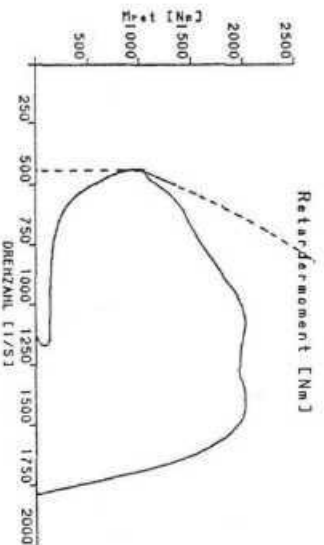
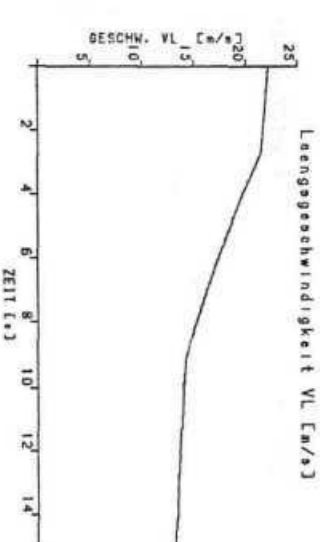
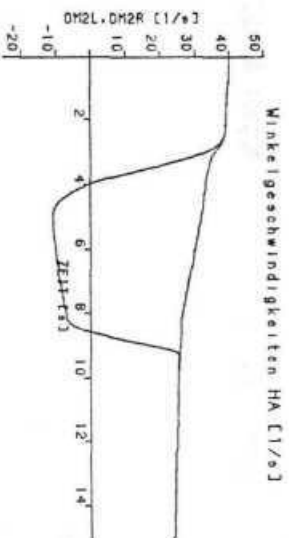
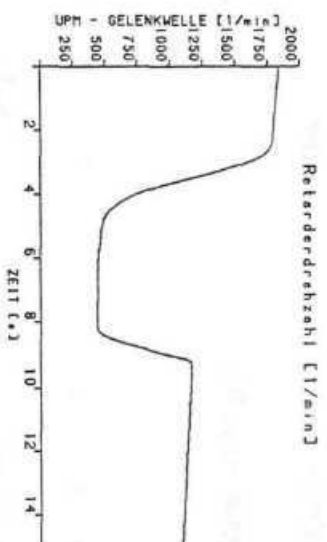
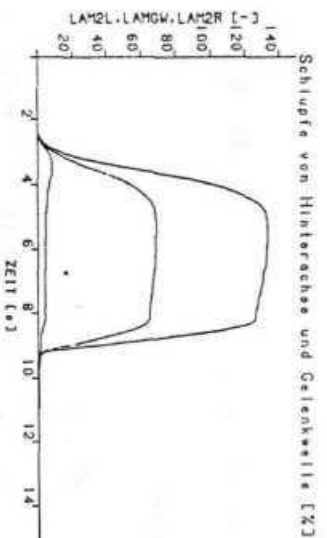
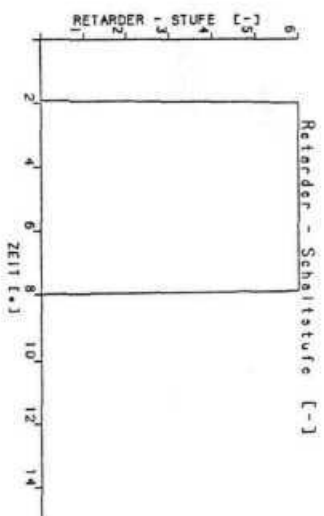
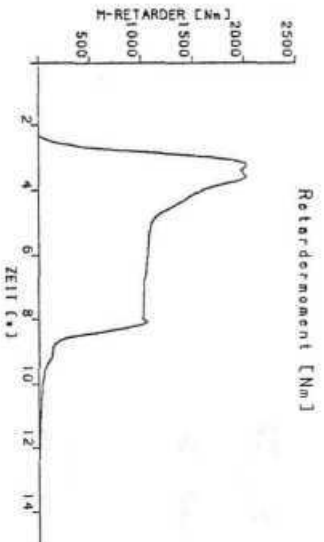
Parameterreihe **G2**Variation<sup>2)</sup> **G2 - 2**

Fahrzeug:	<b>leer</b>		beladen	
Retarderstufe:			A - 4	B - 6
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	50 km/h		<b>80 km/h</b>	
Fahrbahn:	$\mu$ - Split =	0,48/0,72	<b>0,24/0,48</b>	0,24/0,72
Fahrmanöver:	<b>Geradeaus</b>	Closed Loop		<b>Open Loop</b>

(Quelle: Simulationskennung SPL0209)

<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G2 - 2 / Rahmen 1

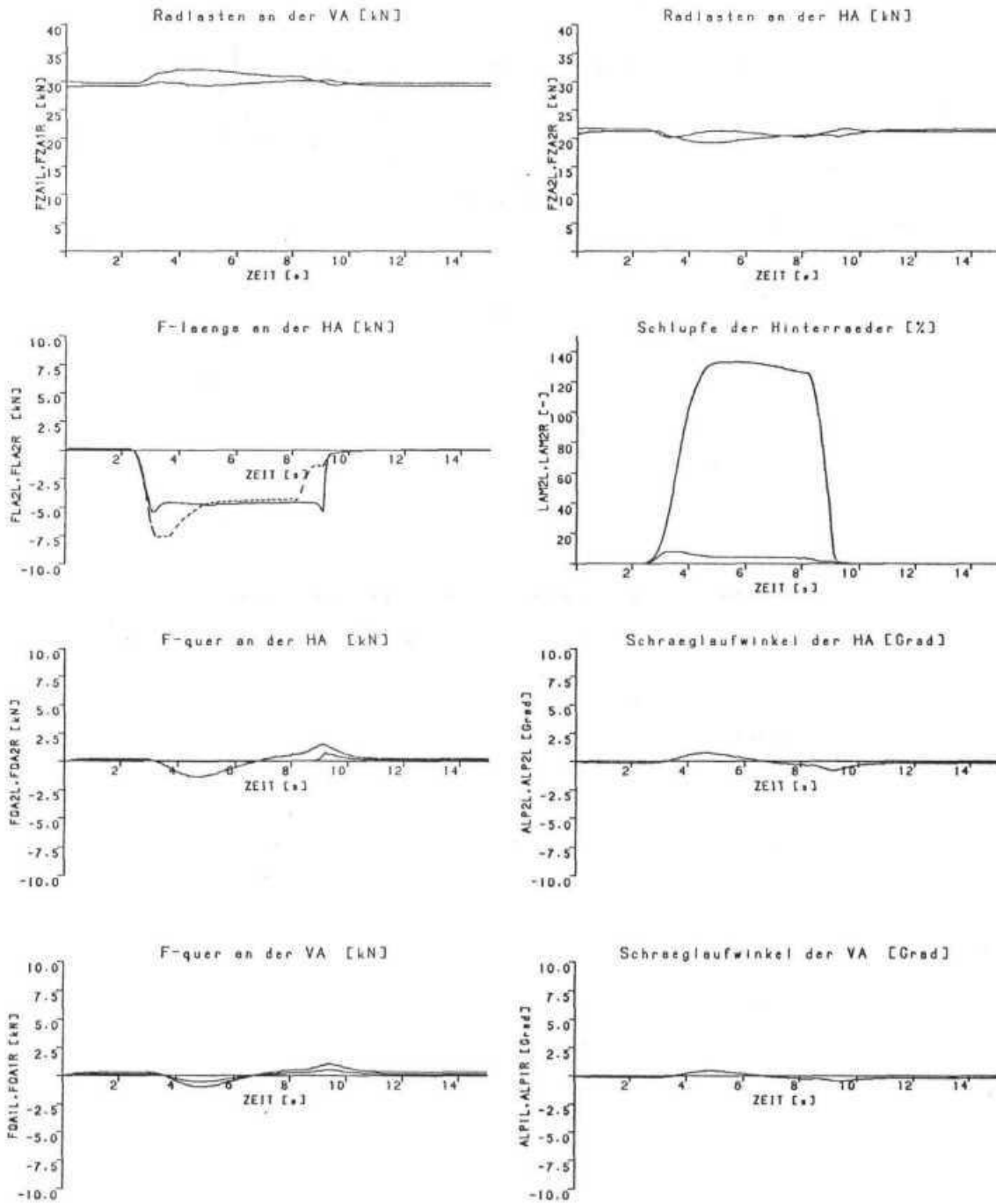


Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mu (l/r) = .24/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder  
 Open Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

G2 - 2 / Rahmen 4



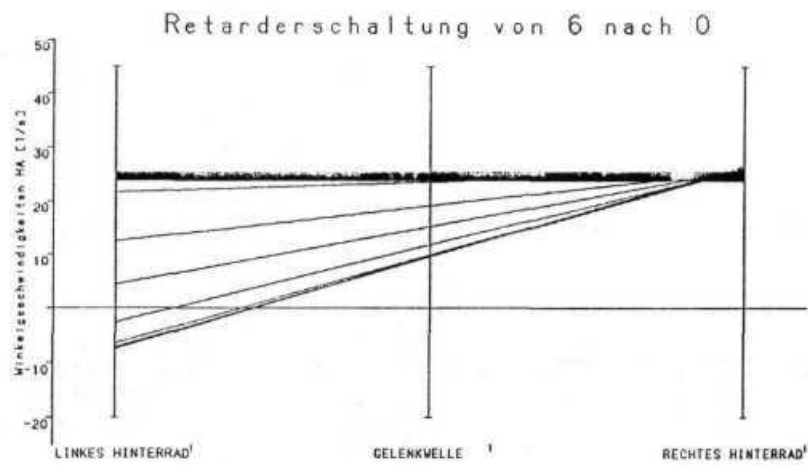
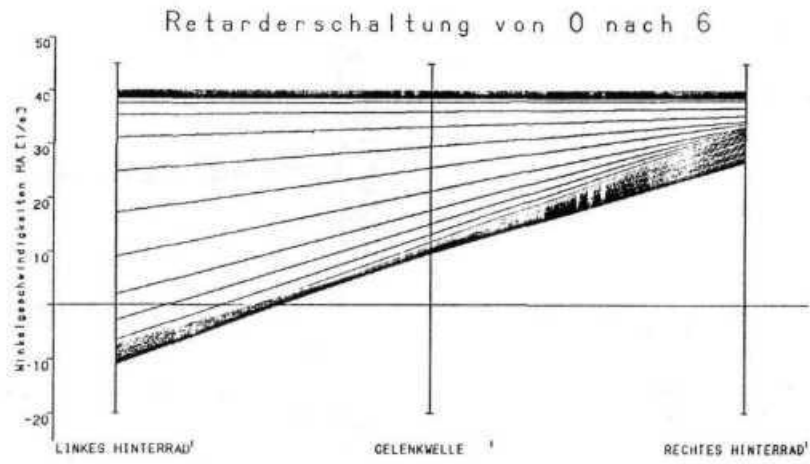
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 1.0 %  
 mu (li/re) = .24/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Open Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G2 - 2 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

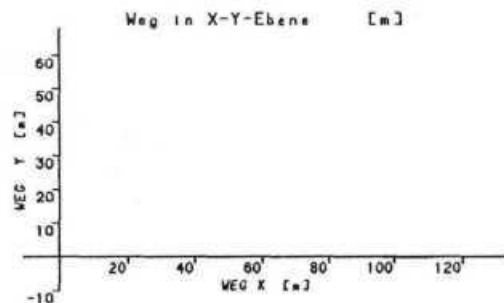
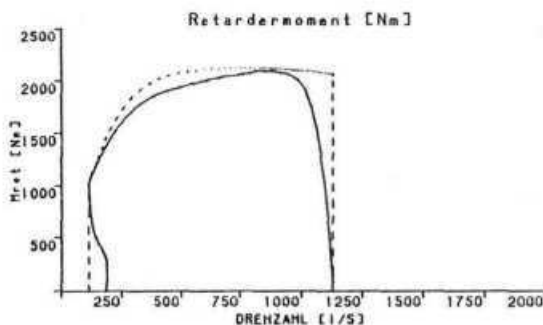
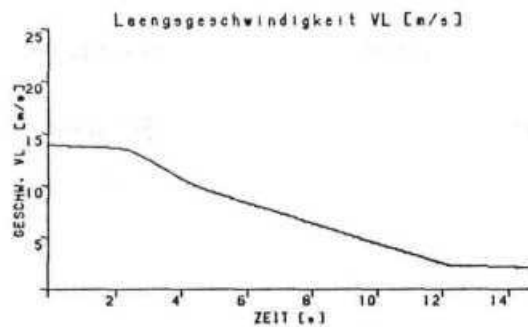
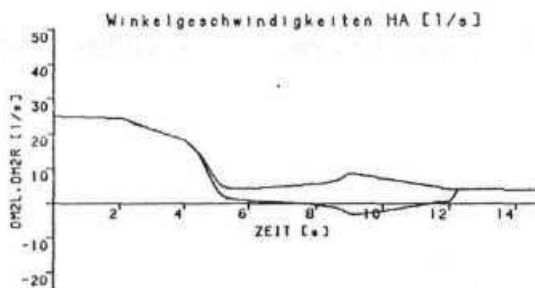
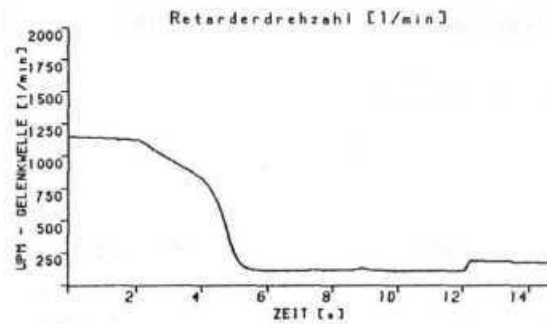
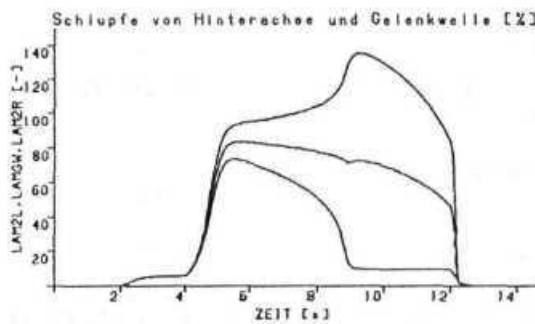
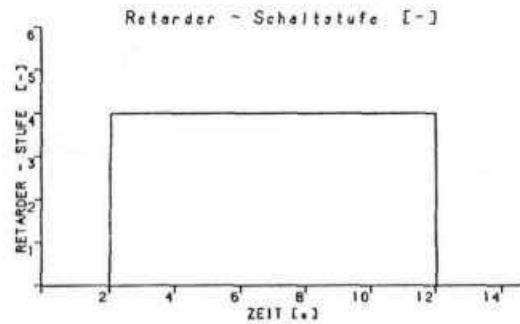
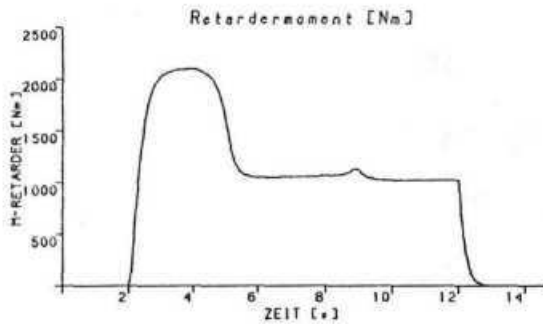


Parameterreihe **G3**Variation<sup>1)</sup> **G3 - 1**

Fahrzeug:	<b>leer</b>		beladen
Retarderstufe:			<b>A - 4</b>   B - 6
ABV:	ja		<b>nein</b>
Geschwindigkeit:	<b>50 km/h</b>		80 km/h
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>	$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>	Open Loop
Sonstiges:	Gefälle 6 %		

(Quelle: Simulationskennung **SPL0513.2**)<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G3 - 1 / Rahmen 1

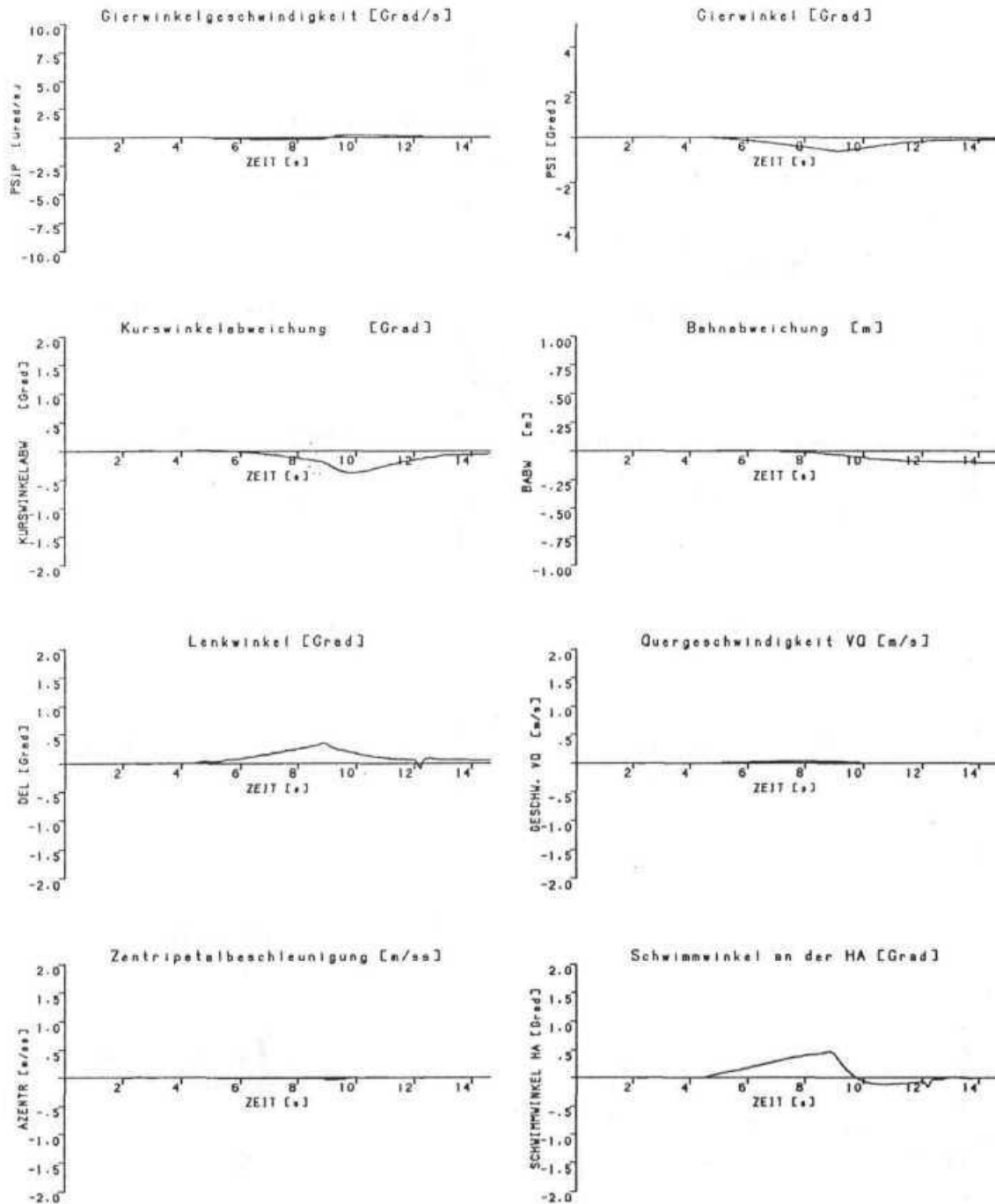


Retarder : Typ A  
Schaltstufe (n) : 4-0-0  
ABV : NEIN

Fahrbahn: Gefaele = 0.0 %      Querneigung = 0.0 %  
mue (li/re) = .72/.72      mue-Sprung (li/re) = .24/.24 b 4.0  
mue-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw. : 50.0 Km/h  
Fahrmanoever : geradeaus.      Closed Loop  
Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G3 - 1 / Rahmen 2

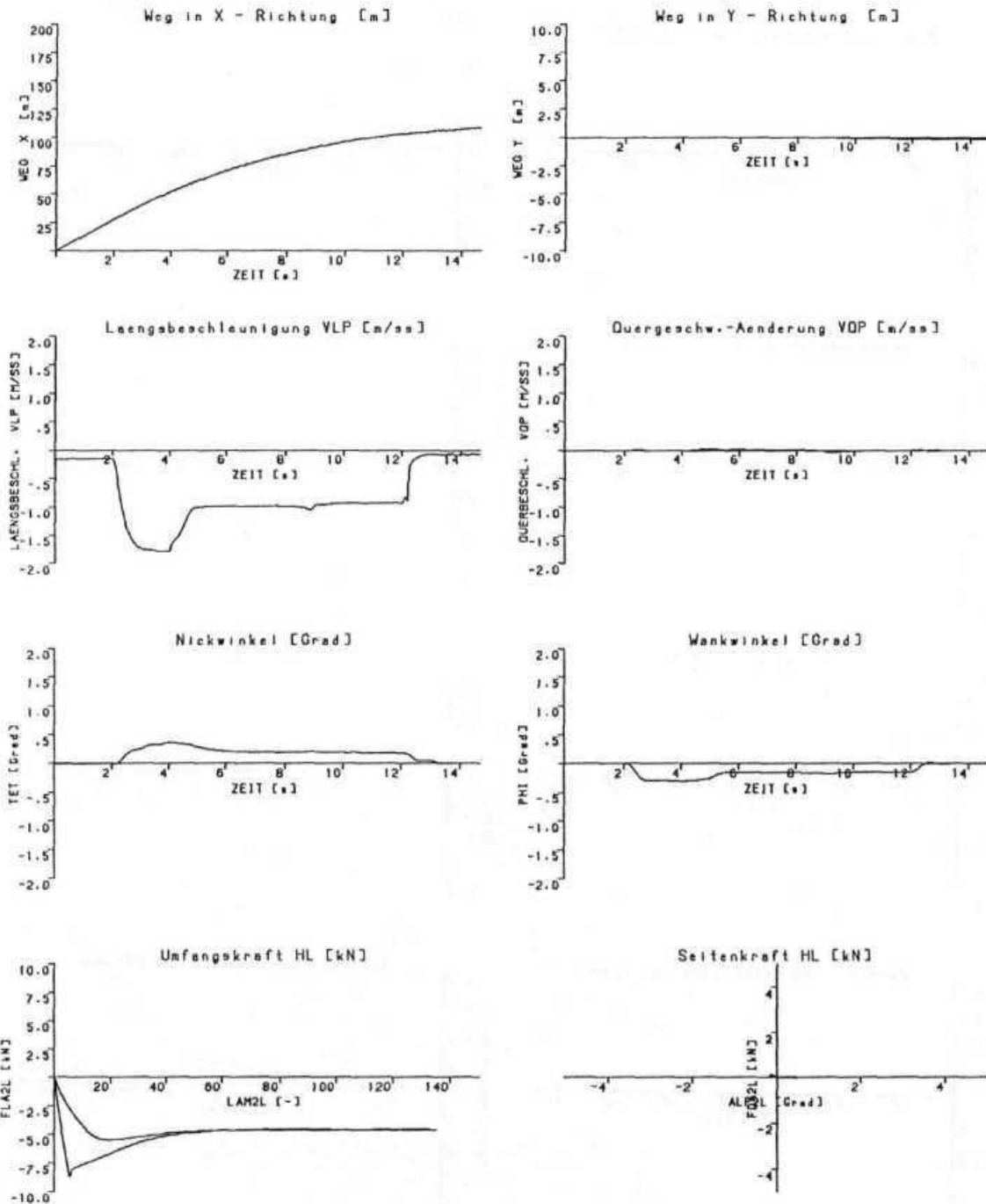


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu_{ue} (li/re) = .72/.72$   $\mu_{ue}$ -Sprung (li/re) = .24/.24 b 4.0  
 $\mu_{ue}$ -Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw. : 50.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G3 - 1 / Rahmen 3

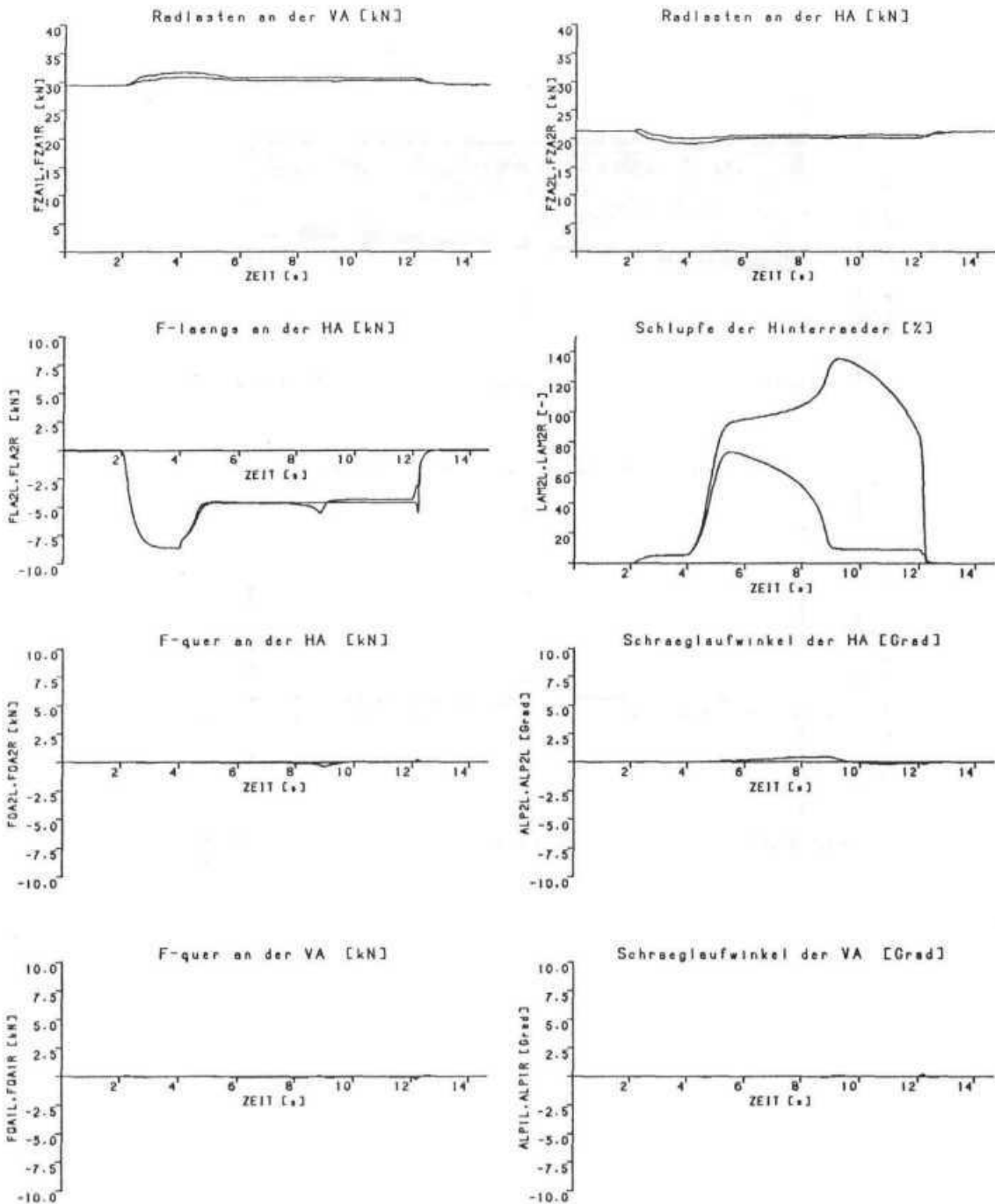


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72 mu-Sprung (li/re) = .24/.24 b 4.0  
 mu-Sprung (li/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G3 - 1 / Rahmen 4

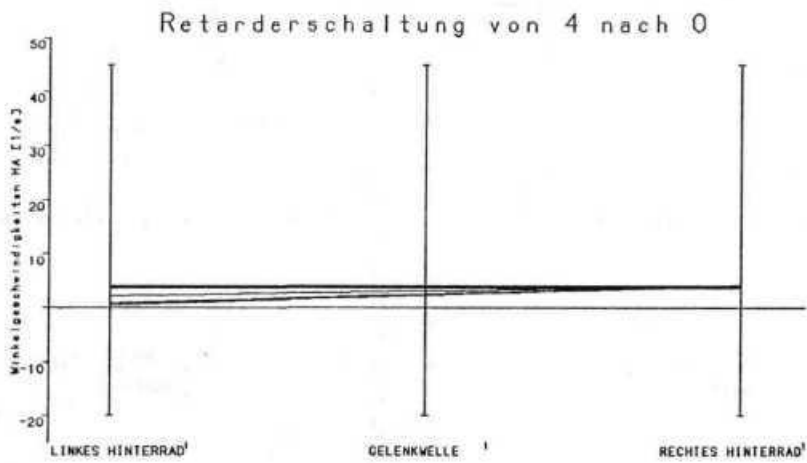
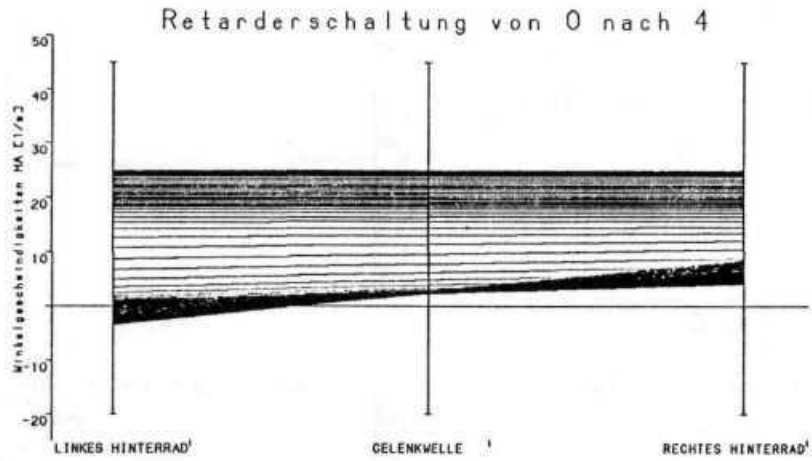


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .72/.72 mue-Sprung (li/re) = .24/.24 b 4.0  
 mue-Sprung (li/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA): 58.9/ 42.6 kN

G3 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **G3**Variation<sup>2)</sup> **G3 - 2**

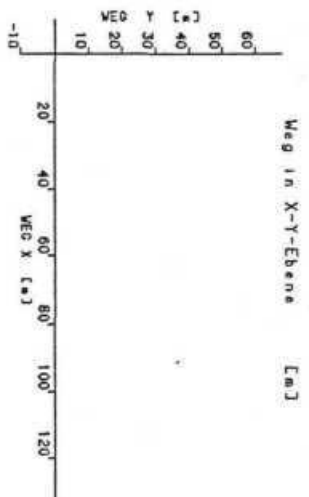
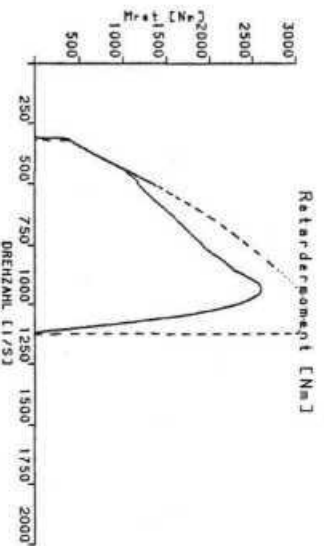
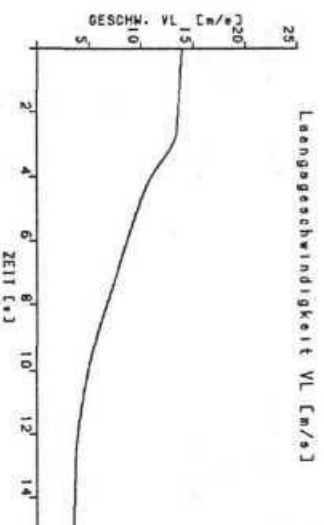
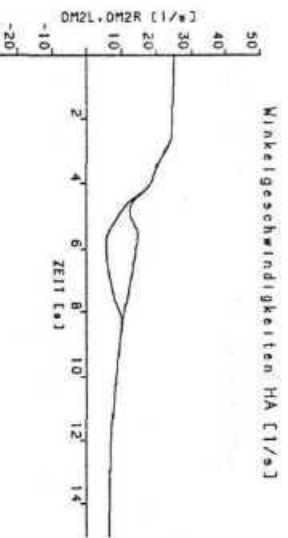
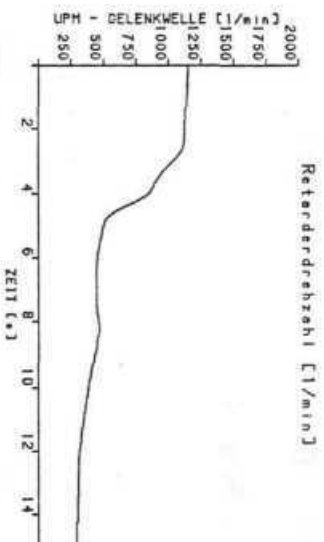
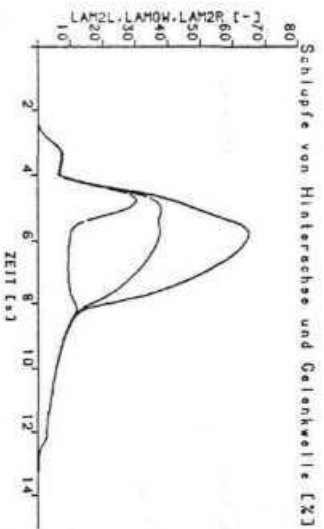
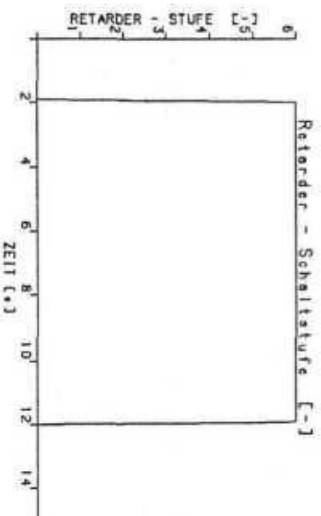
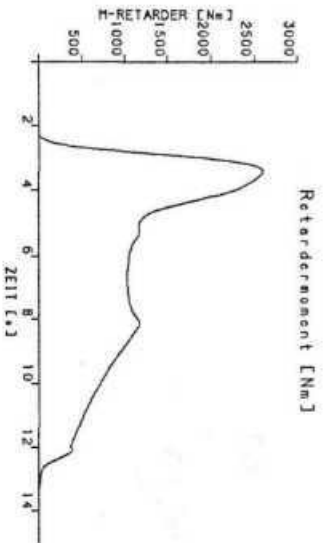
Fahrzeug:	<b>leer</b>		beladen
Retarderstufe:			A - 4   <b>B - 6</b>
ABV:	ja		<b>nein</b>
Geschwindigkeit:	<b>50 km/h</b>		80 km/h
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>	$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>	Open Loop
Sonstiges:	Gefälle 6 %		

(Quelle: Simulationskennung **SPL0515**)

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<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G3 - 2 / Rahmen 1



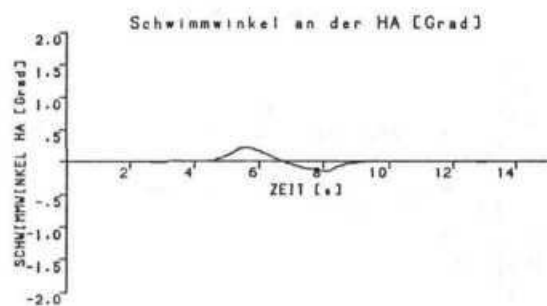
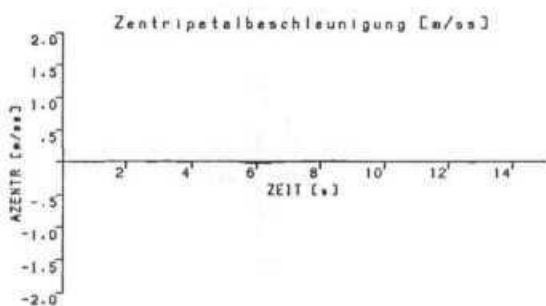
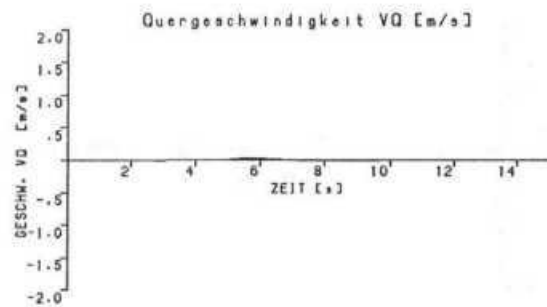
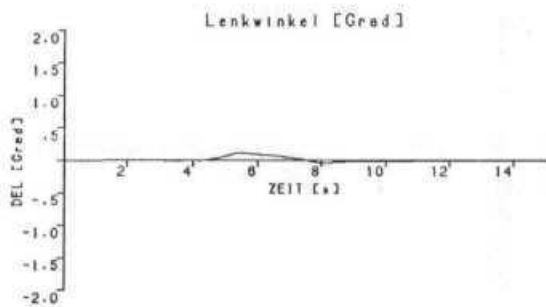
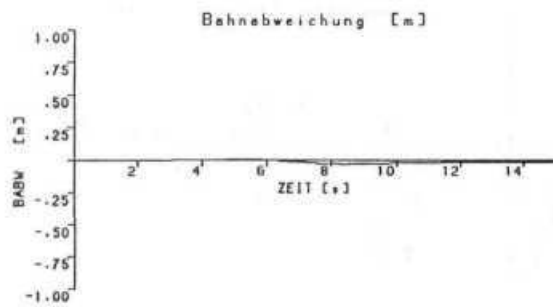
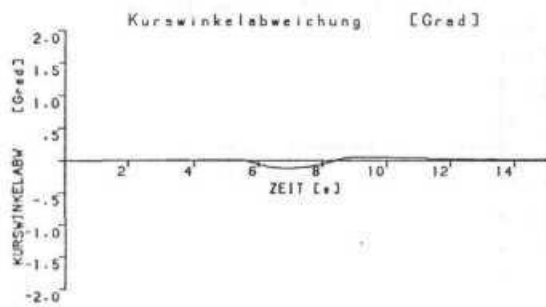
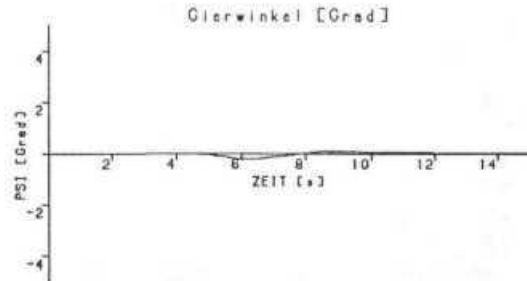
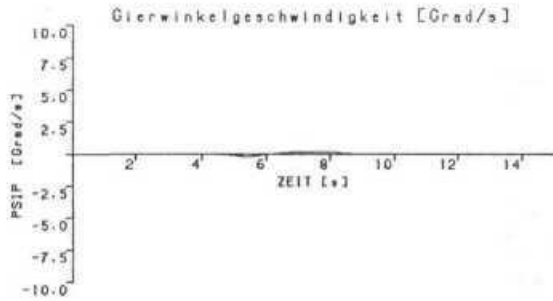
Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung (11/re) = 0.0 %  
 mue (11/re) = .72/.72 mue-Sprung (11/re) = .24/.24 b 4.0  
 mue-Sprung (11/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h Closed Loop  
 Fahrmanoever : geradeaus, stat. Achslasten (VA/HA) : 58.9/ 42.6 KN  
 Solofz. leer mit 1 Retarder



## G3 - 2 / Rahmen 2



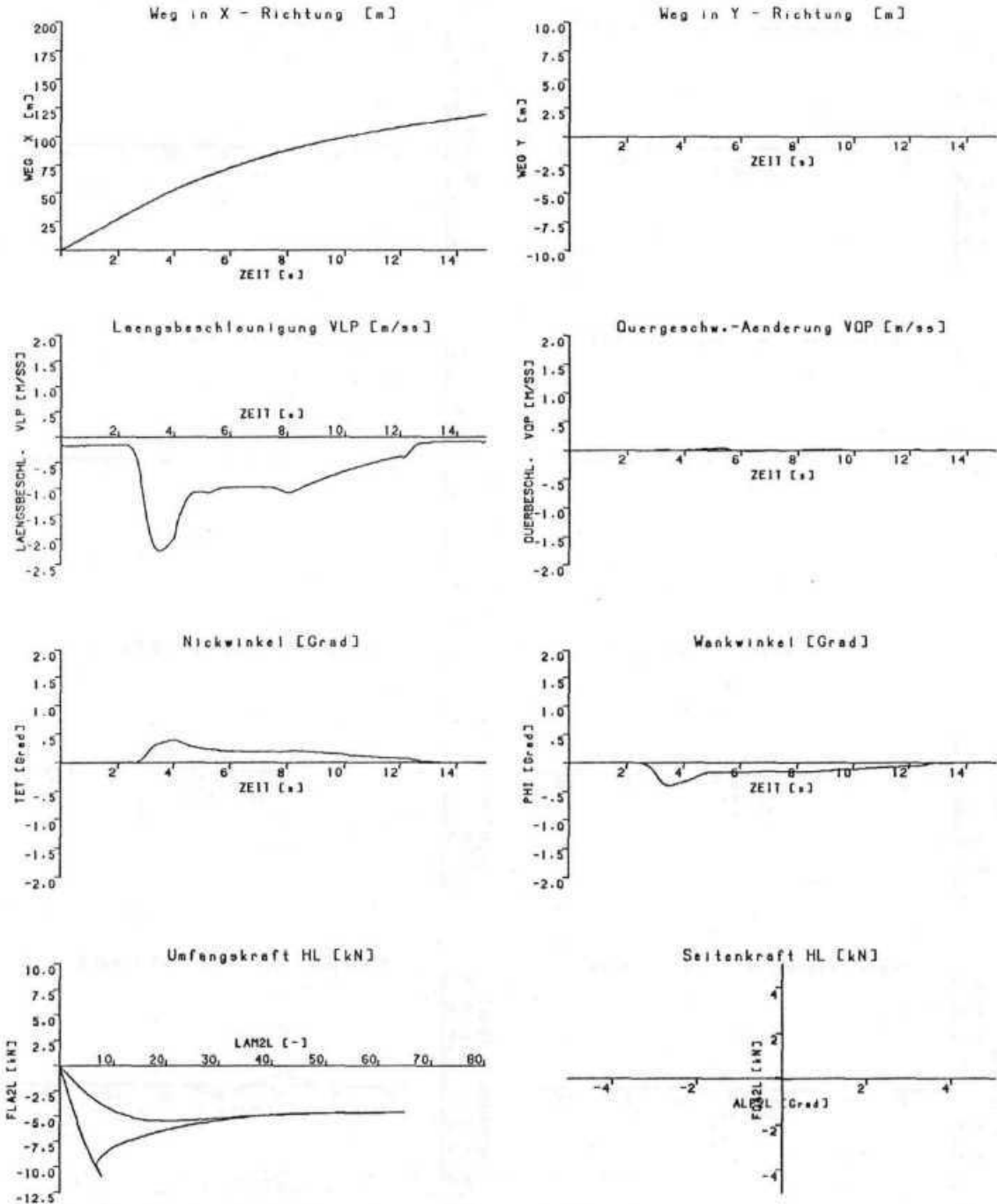
Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
mue (li/re) = .72/.72 mue-Sprung (li/re) = .24/.24 b 4.0  
mue-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw.: 50.0 Km/h  
Fahrmanoever : geradeaus,  
Solofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G3 - 2 / Rahmen 3



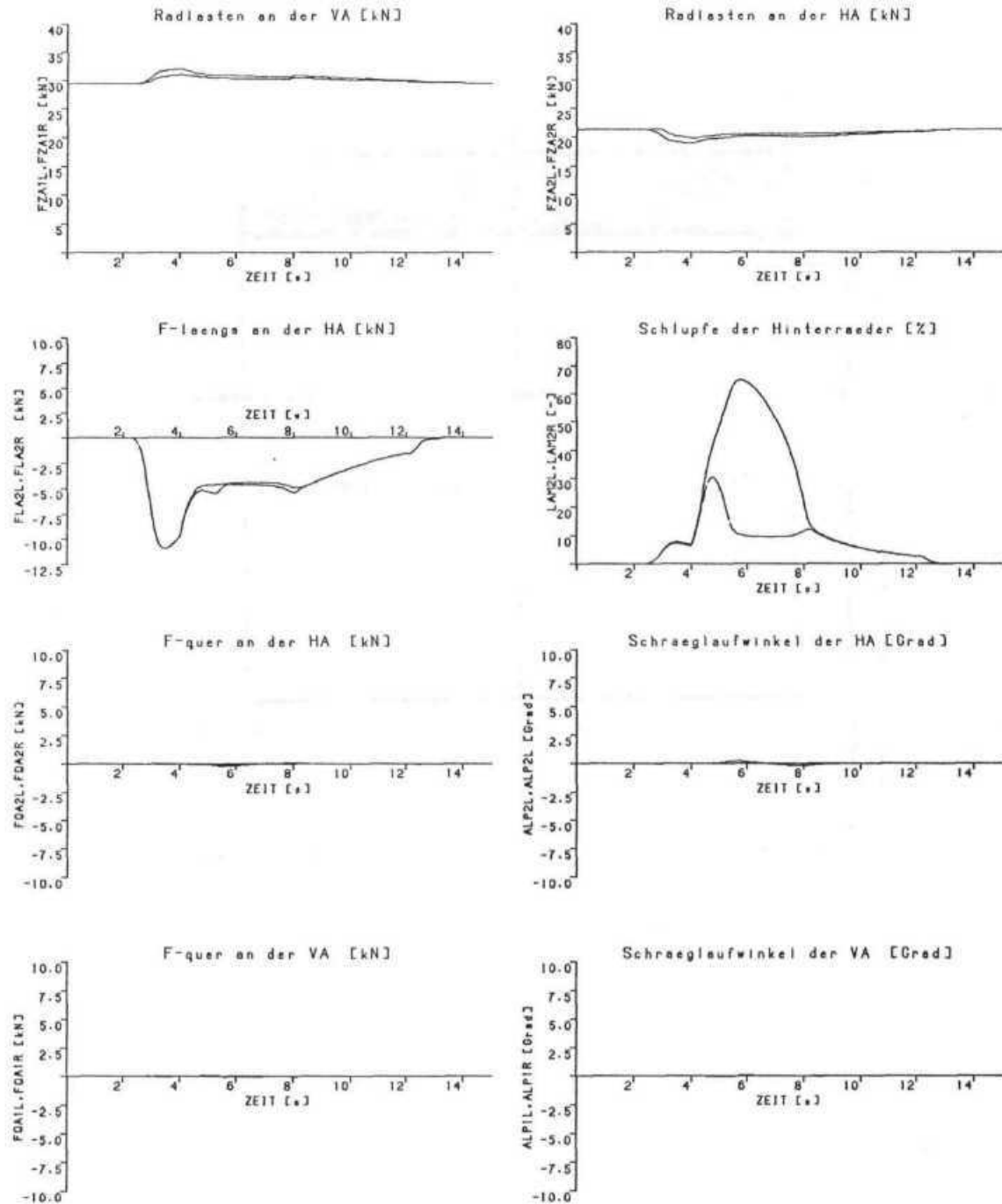
Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 %	Querneigung = 0.0 %
mue (li/re) = .72/.72	mue-Sprung (li/re) = .24/.24 b 4.0
	mue-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G3 - 2 / Rahmen 4



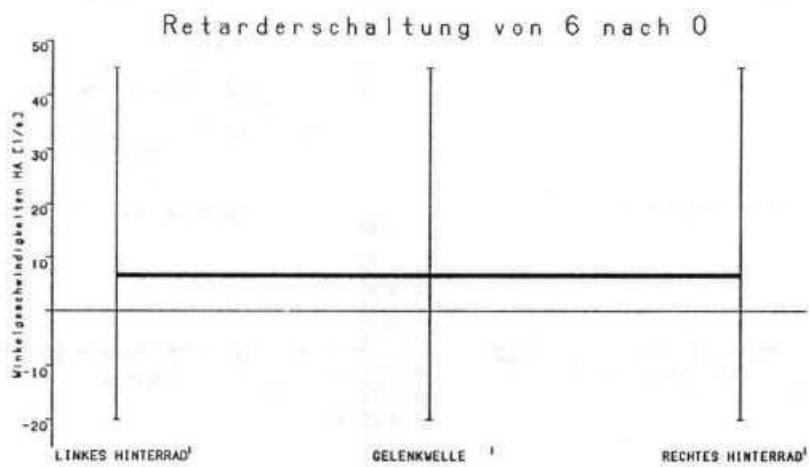
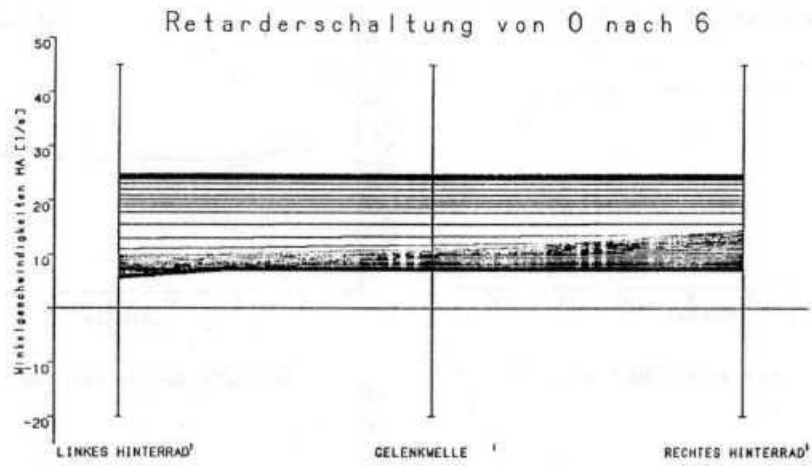
Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu_{re}$  (li/re) = .72/.72  $\mu_{re}$ -Sprung (li/re) = .24/.24 b 4.0  
 $\mu_{re}$ -Sprung (li/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G3 - 2 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **G3**Variation<sup>3)</sup> **G3 - 3**

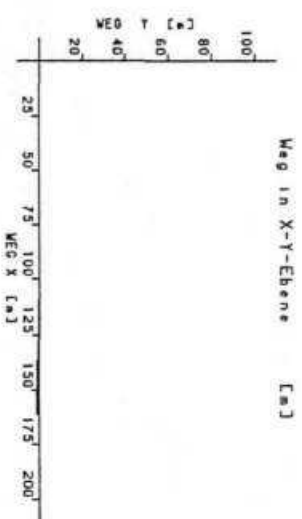
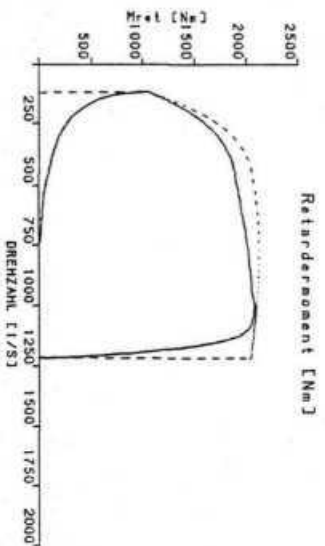
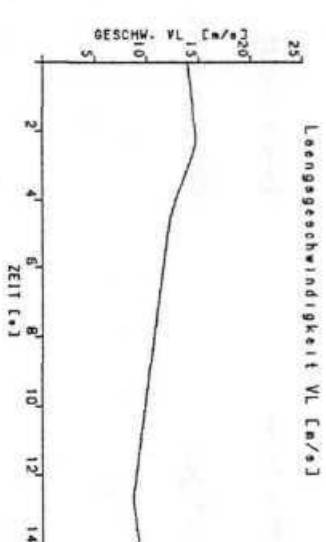
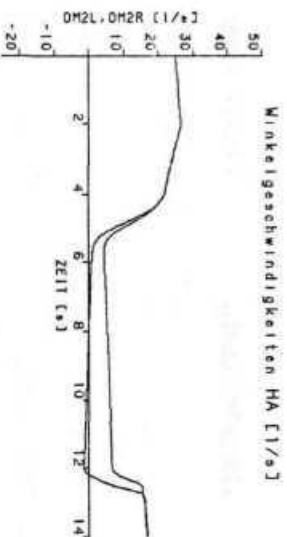
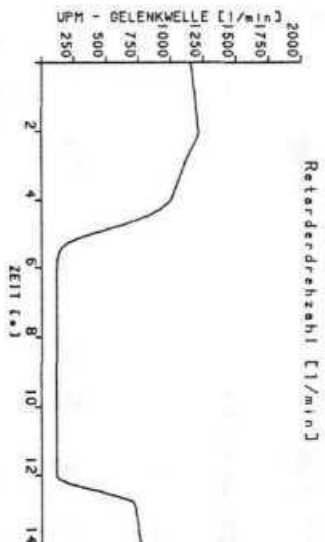
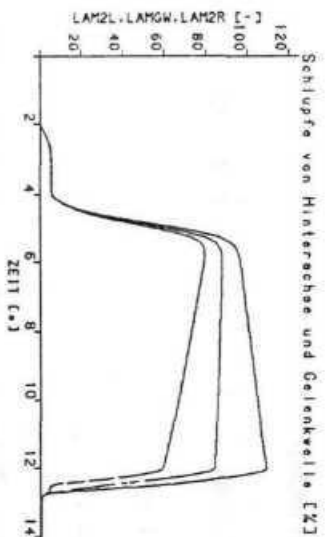
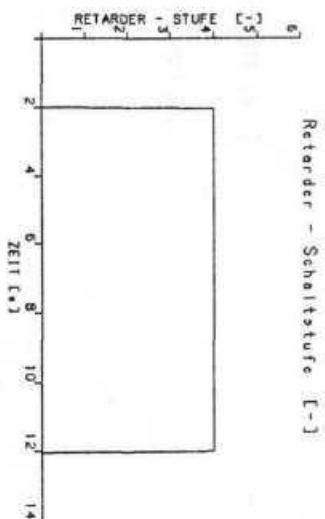
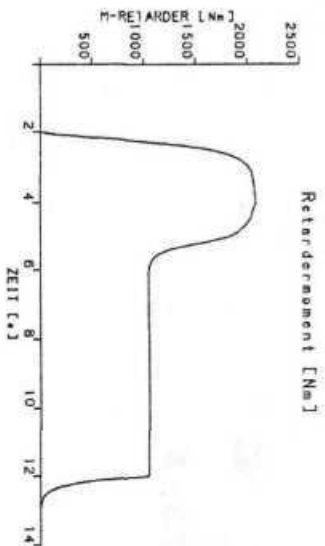
Fahrzeug:	<b>leer</b>		beladen
Retarderstufe:			<b>A - 4</b>     B - 6
ABV:	ja		<b>nein</b>
Geschwindigkeit:	<b>50 km/h</b>		80 km/h
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>	$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>	Open Loop
Sonstiges:	<b>Gefälle 6 %</b>		

(Quelle: Simulationskennung **SPL0517.2**)

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<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G3 - 3 / Rahmen 1

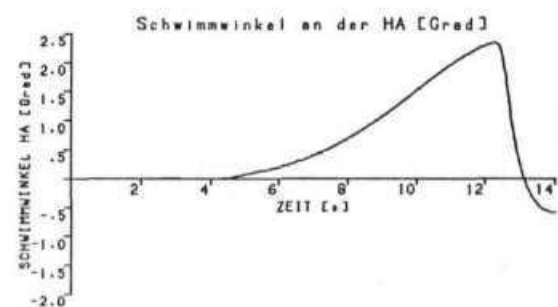
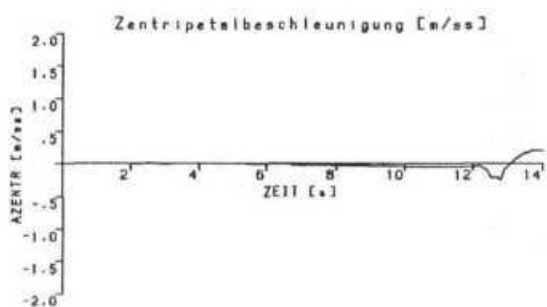
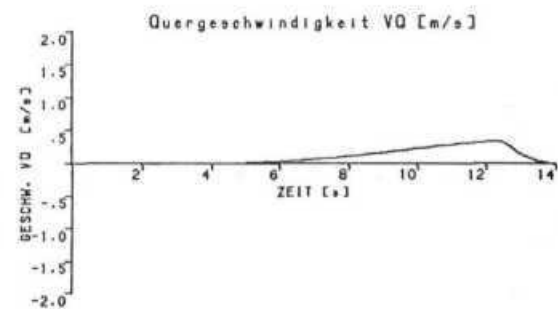
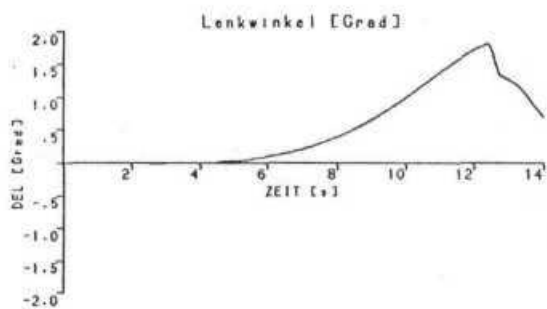
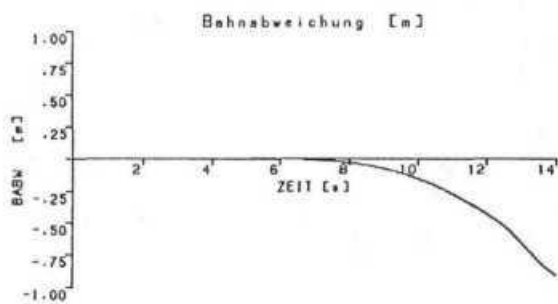
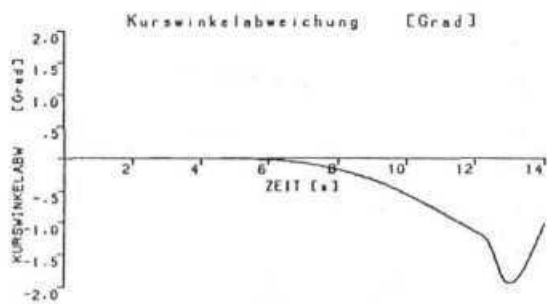
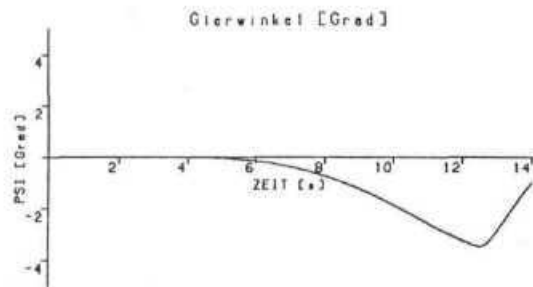
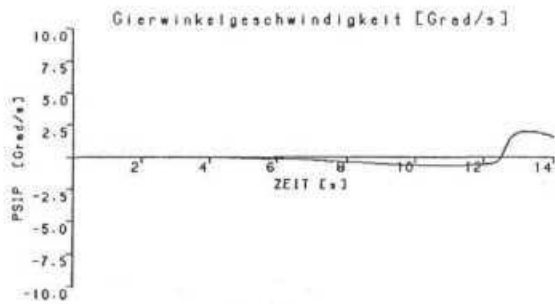


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaeulle = 6.0 % Querenelungung (11/re) = 0.0 %  
 mue (11/re) = .72/.72 mue-Sprung (11/re) = .24/.24 b 4.0  
 mue-Sprung (11/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h Closed Loop  
 Fahrmanoever : geradeaus, stat. Achslasten (VA/HA) : 58.9/ 42.6 KN  
 Solofz. beladen mit 1 Retarder stat.

## G3 - 3 / Rahmen 2

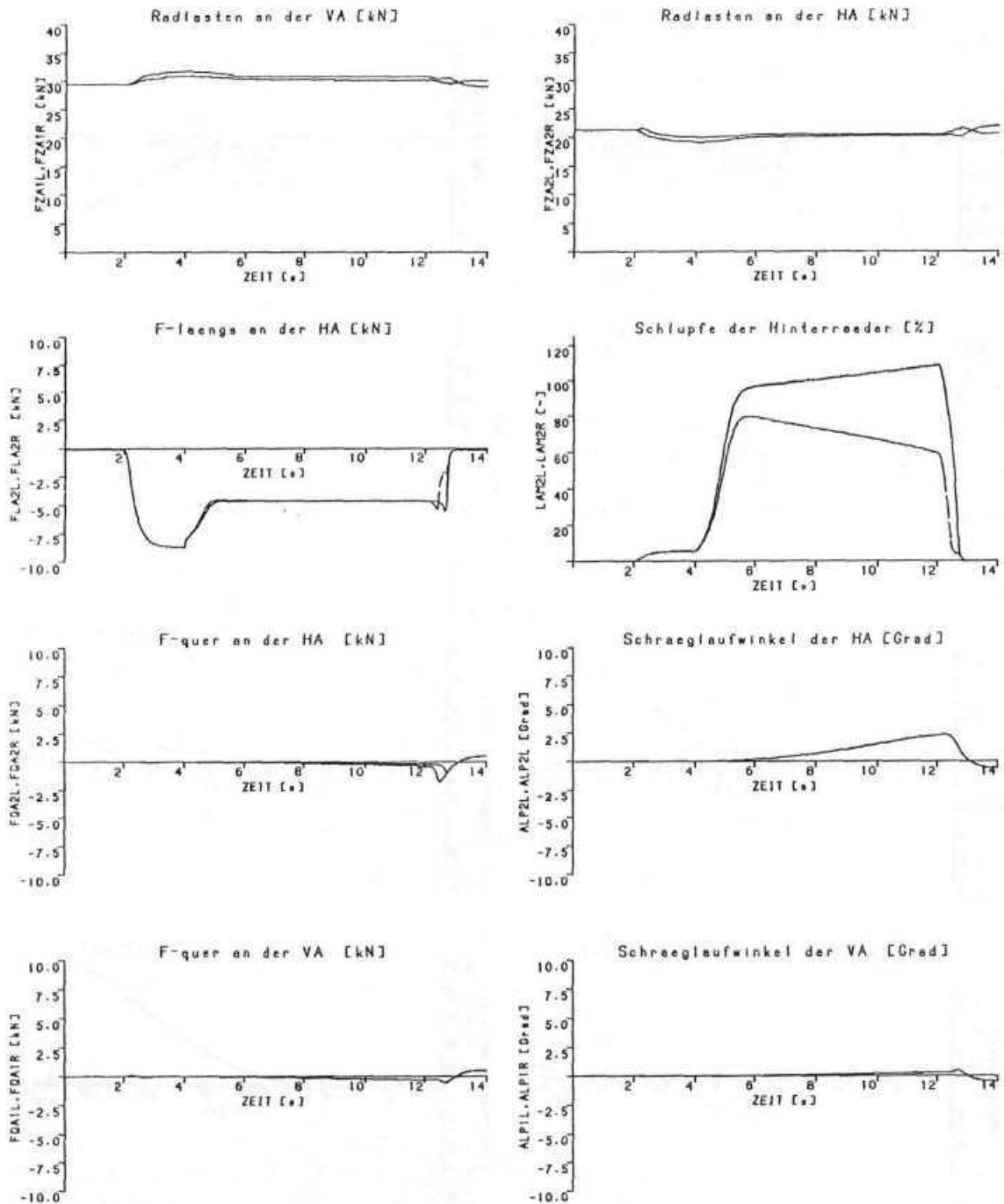


Retarder : Typ A  
Schaltstufe (n) : 4-0-0  
ABV : NEIN

Fahrbahn: Gefaelle = 6.0 %      Querneigung = 0.0 %  
mue (li/re) = .72/.72      mue-Sprung (li/re) = .24/.24 b 4.0  
mue-Sprung (li/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h  
Fahrmanoever : geradeaus,      Closed Loop  
Solofz. beladen mit 1 Retarder      stat. Achslasten (VA/HA): 58.9/ 42.6 kN

## G3 - 3 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 6.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72 mu-Sprung (li/re) = .24/.24 b 4.0  
 mu-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw. : 50.0 Km/h  
 Fahrmanoever : geradeaus. Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



Parameterreihe **G3**Variation<sup>4)</sup> **G3 - 4**

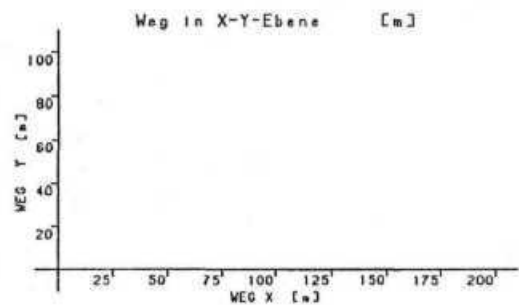
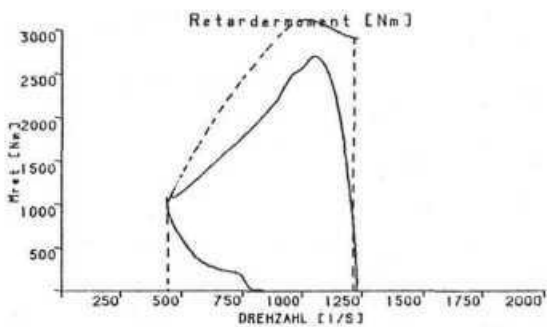
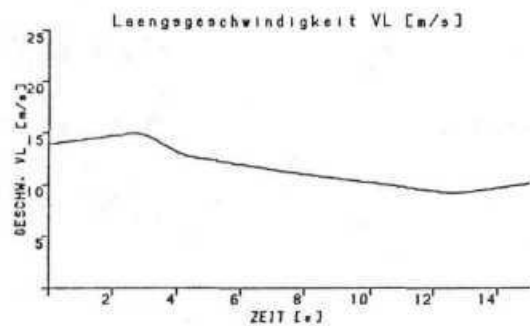
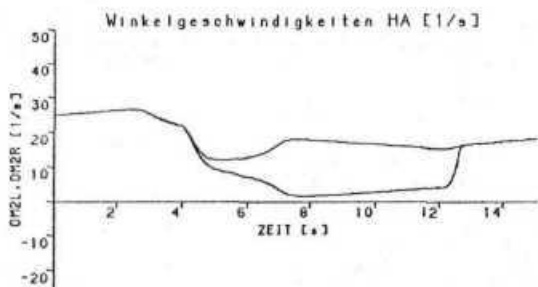
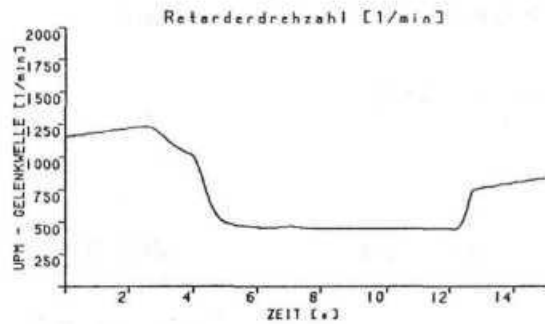
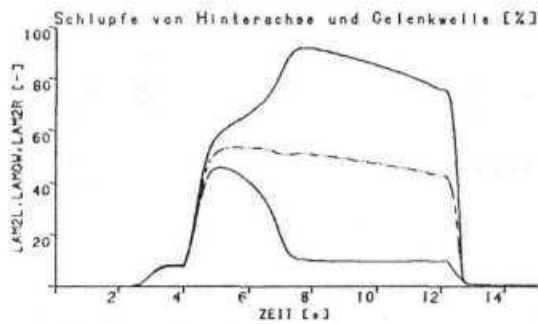
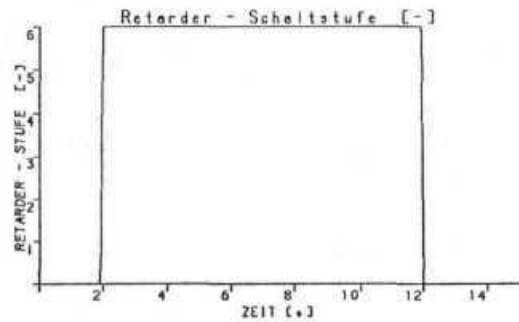
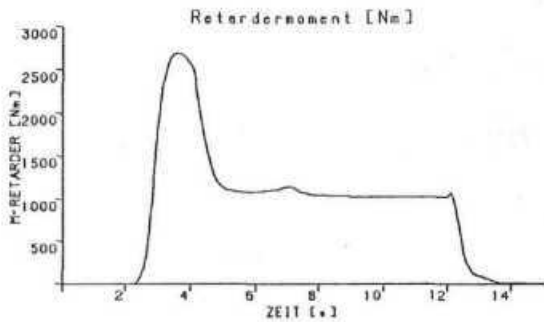
Fahrzeug:	<b>leer</b>		beladen
Retarderstufe:			A - 4   <b>B - 6</b>
ABV:	ja		<b>nein</b>
Geschwindigkeit:	<b>50 km/h</b>		80 km/h
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>	$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>	Open Loop
Sonstiges:	<b>Gefälle 6 %</b>		

(Quelle: Simulationskennung SPL0518)

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<sup>4)</sup> Aktuelle ParameterEinstellung ist durch **Fett**druck hervorgehoben

G3 - 4 / Rahmen 1



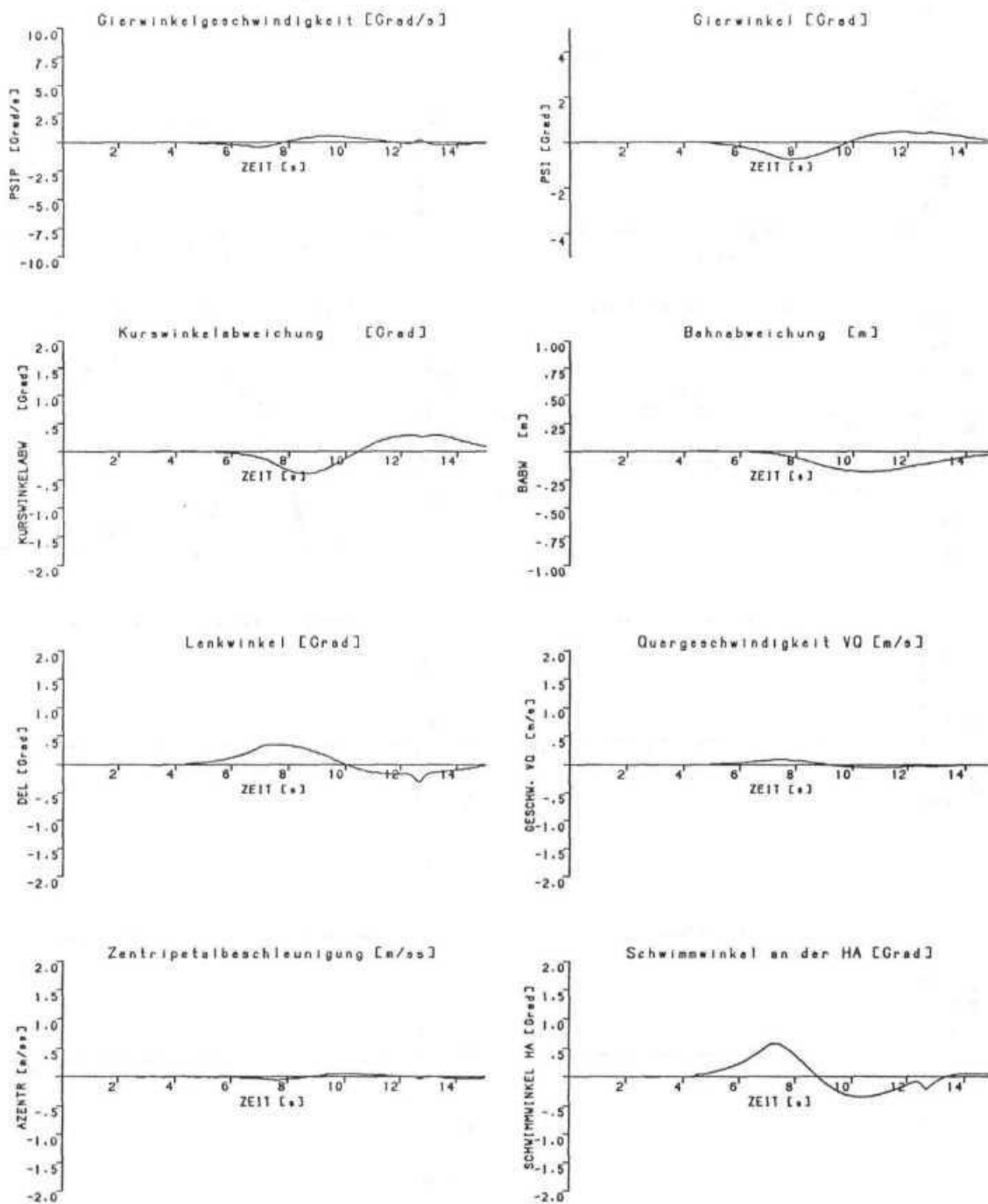
Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV : NEIN

Fahrbahn: Gefaele = 6.0 %      Querneigung = 0.0 %  
 $\mu_{re}$  (ll/re) = .72/.72       $\mu_{re}$ -Sprung (ll/re) = .24/.24 b 4.0  
 $\mu_{re}$ -Sprung (ll/re) = .72/.72 b15.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G3 - 4 / Rahmen 2

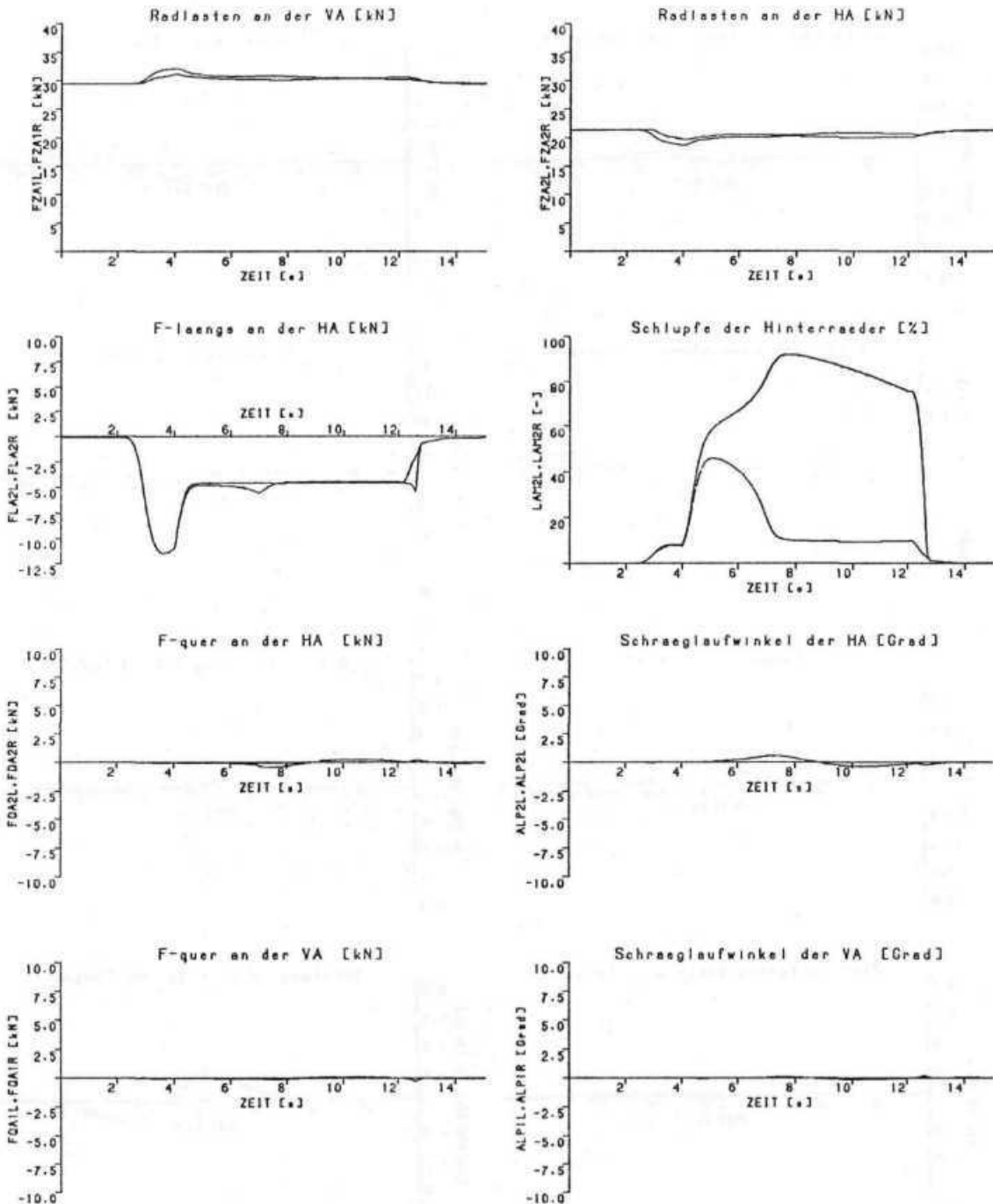


Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 6.0 %      Querneigung = 0.0 %  
 mue (li/re) = .72/.72      mue-Sprung (li/re) = .24/.24 b 4.0  
 mue-Sprung (li/re) = .72/.72 b 15.0

Anfangsgeschw.: 50.0 Km/h      Closed Loop  
 Fahrmanoever : geradeaus.      stat. Achslasten (VA/HA) : 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder

G3 - 4 / Rahmen 4



Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaele = 6.0 %	Querneigung = 0.0 %
mu (li/re) = .72/.72	mu-Sprung (li/re) = .24/.24 b 4.0
	mu-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradesaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

Parameterreihe **G3**Variation<sup>5)</sup> **G3 - 5**

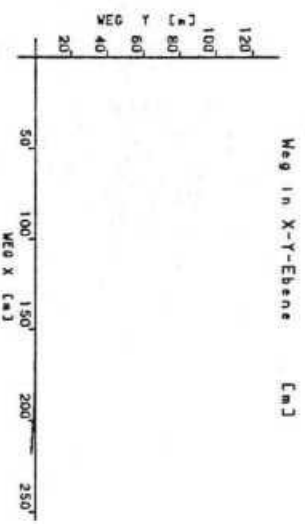
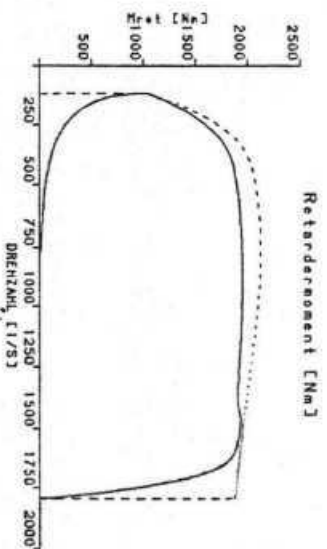
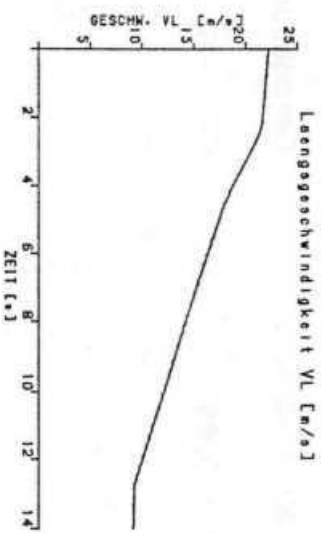
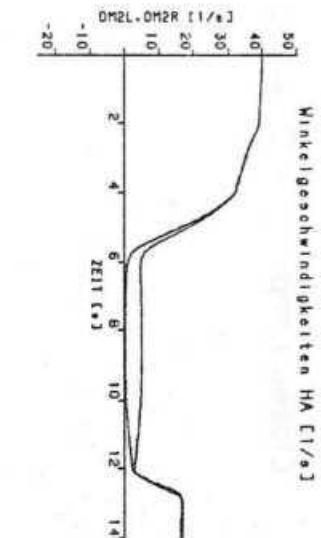
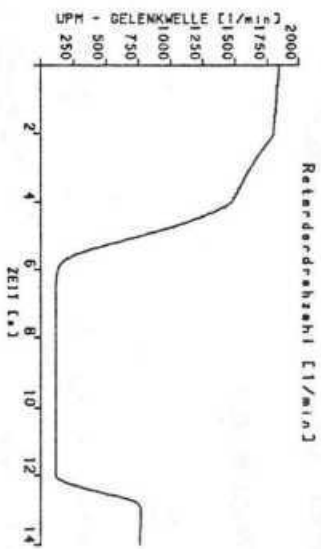
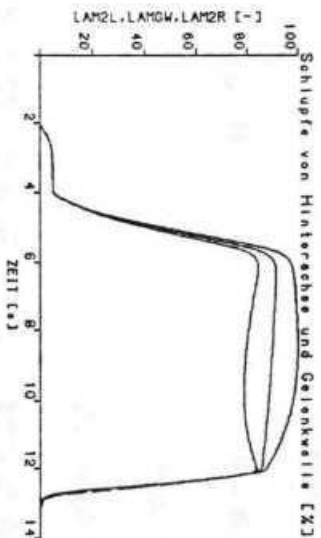
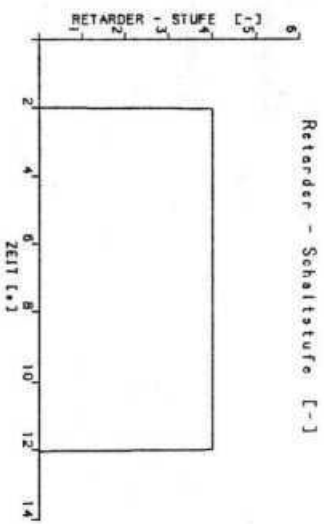
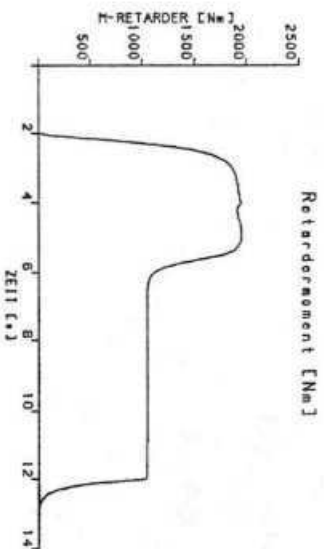
Fahrzeug:	<b>leer</b>		beladen
Retarderstufe:			<b>A - 4</b>   B - 6
ABV:	ja		<b>nein</b>
Geschwindigkeit:	50 km/h		<b>80 km/h</b>
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>	$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>	Open Loop
Sonstiges:	Gefälle 6 %		

(Quelle: Simulationskennung **SPL0514.2**)

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<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G3 - 5 / Rahmen 1

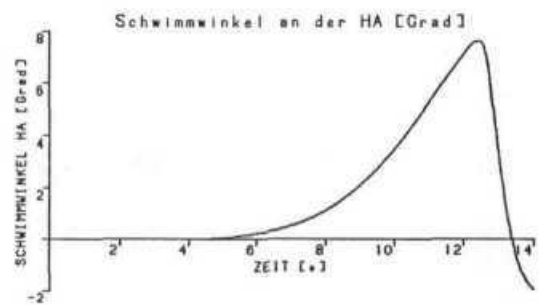
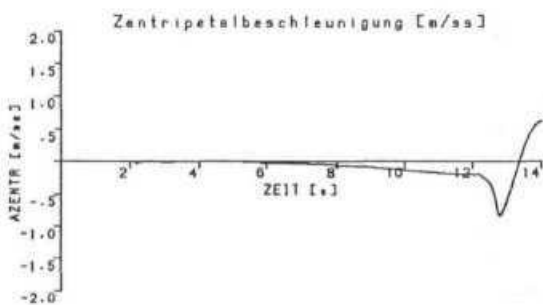
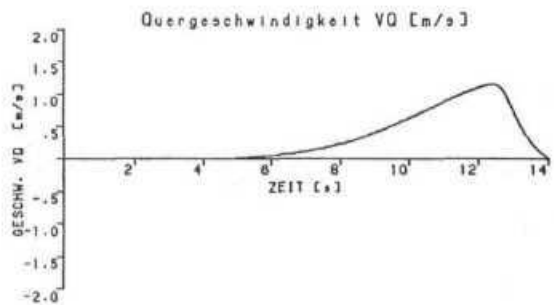
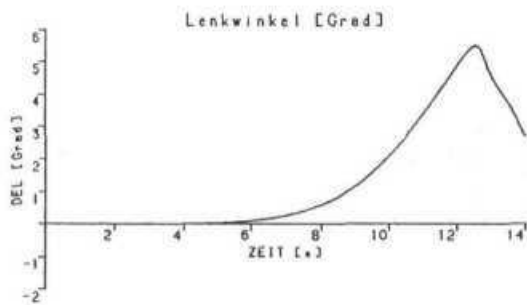
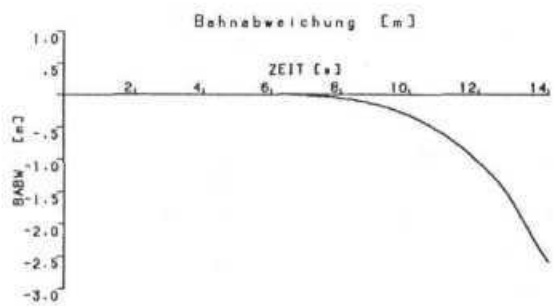
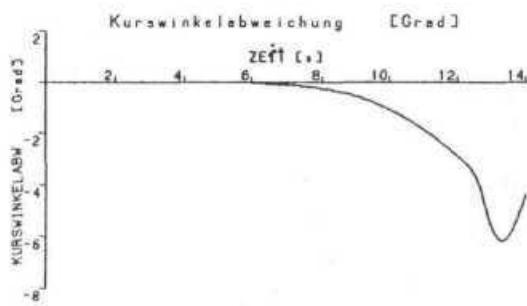
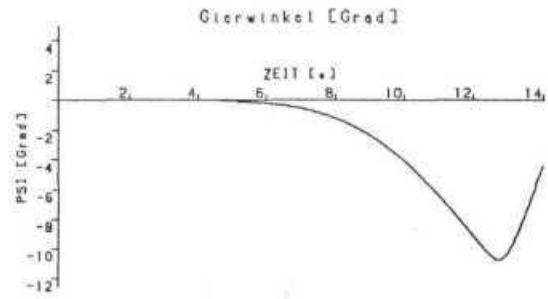
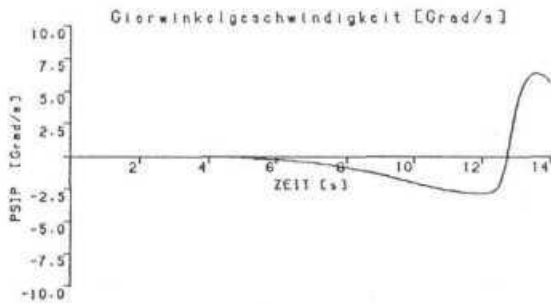


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung (l/r) = 0.0 %  
 mue (l/r) = .72/.72 mue-Sprung (l/r) = .24/.24 b 4.0  
 = .72/.72 b 15.0

Anfangsgeschw.: 80.0 Km/h Closed Loop  
 Fahrmanoevr : geradeaus.  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G3 - 5 / Rahmen 2

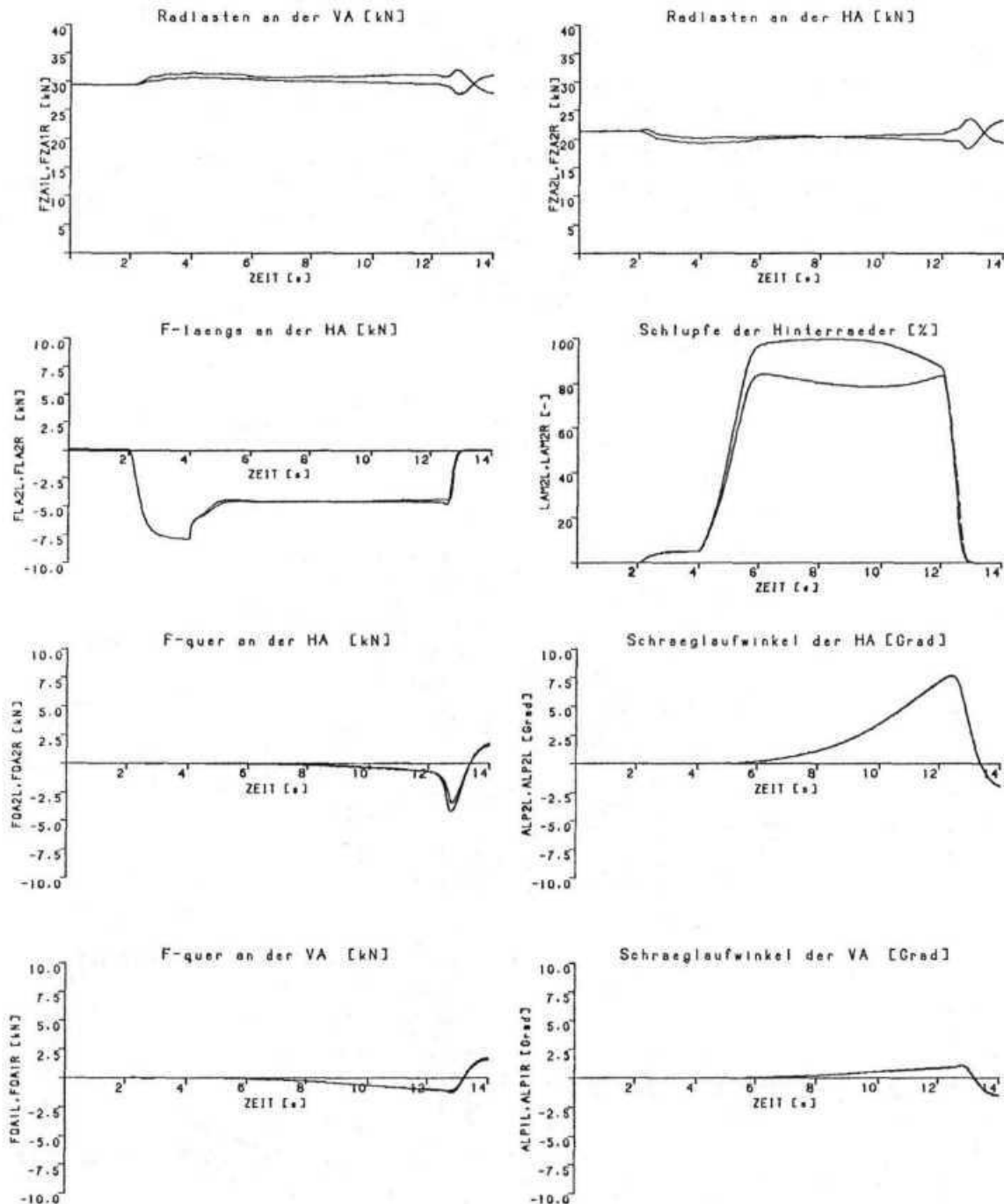


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72 mu-Sprung (li/re) = .24/.24 b 4.0  
 mu-Sprung (li/re) = .72/.72 b 15.0

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G3 - 5 / Rahmen 4



Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu$  (li/re) = .72/.72  $\mu$ e-Sprung (li/re) = .24/.24 b 4.0  
 $\mu$ e-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



Parameterreihe **G3**Variation<sup>6)</sup> **G3 - 6**

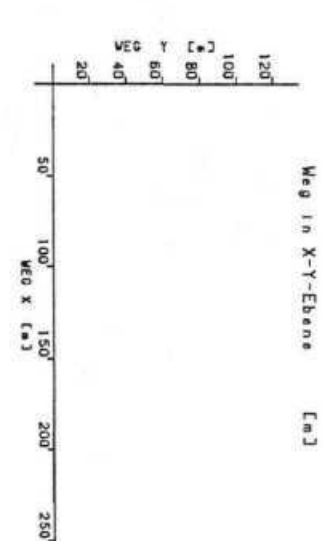
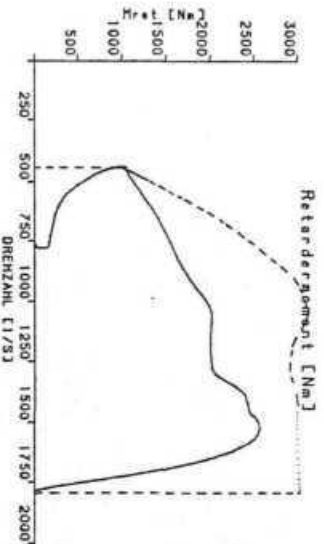
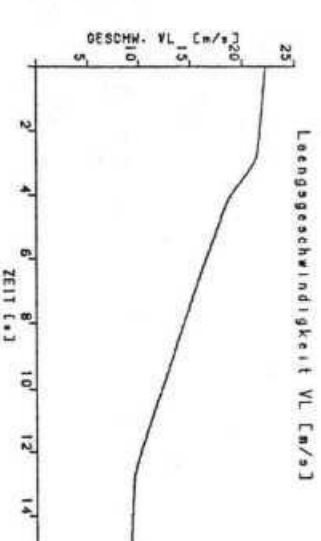
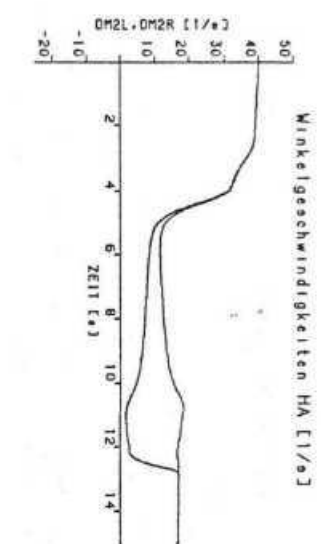
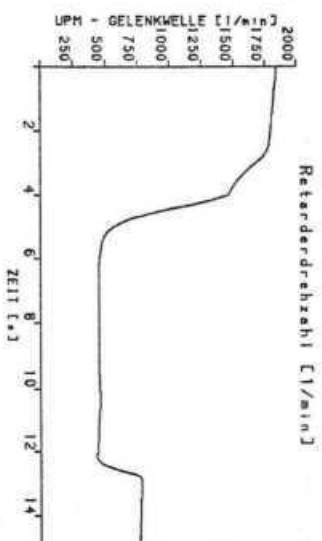
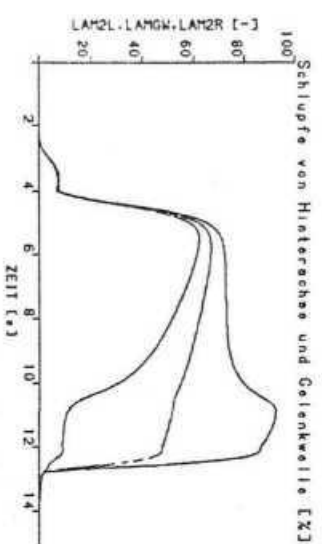
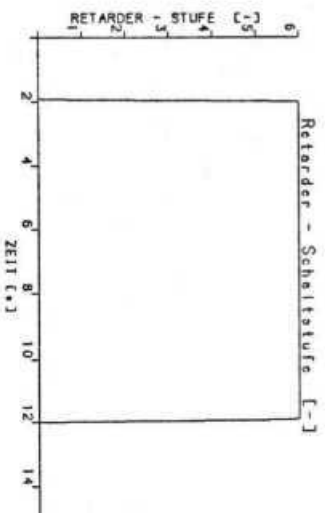
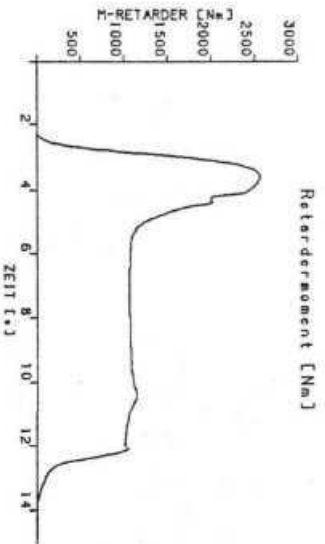
Fahrzeug:	<b>leer</b>		beladen	
Retarderstufe:			A - 4	<b>B - 6</b>
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	50 km/h		<b>80 km/h</b>	
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>		$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>		Open Loop
Sonstiges:	Gefälle 6 %			

(Quelle: Simulationskennung SPL0516)

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<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G3 - 6 / Rahmen 1



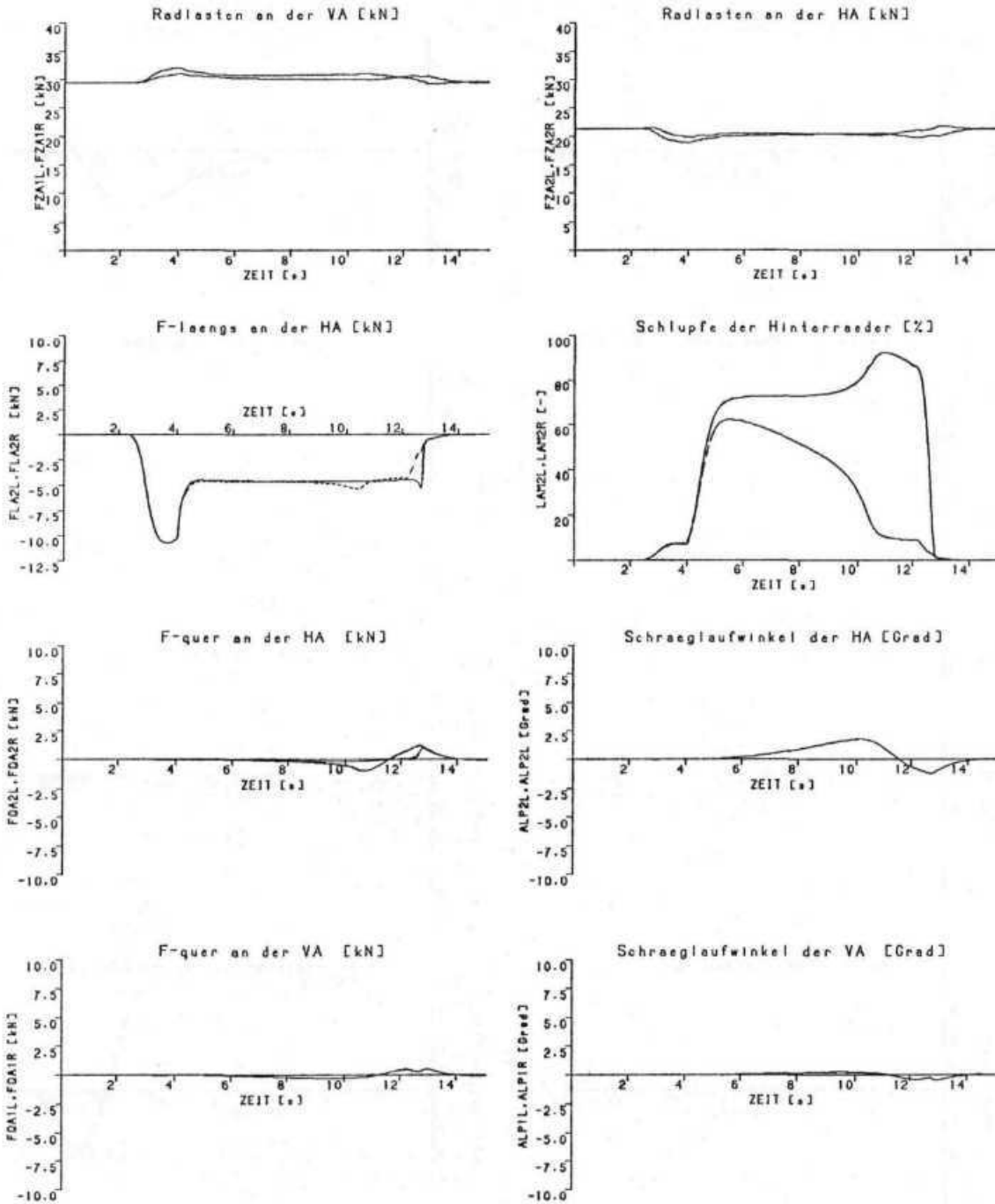
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaeelle = 0.0 %      Querneigung (l/r) = 0.0 %  
 mu (l/r) = .72/.72      mu-Sprung (l/r) = .24/.24 b 4.0  
 mu-Sprung (l/r) = .72/.72 b 15.0

Anfangsgeschw.: 80.0 Km/h      Closed Loop  
 Fahrmanoevr : geradeaus,      stat. Achslasten (VA/HA) : 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder



G3 - 6 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 %      Querneigung = 0.0 %  
 mue (li/re) = .72/.72      mue-Sprung (li/re) = .24/.24 b 4.0  
 mue-Sprung (li/re) = .72/.72 b 15.0

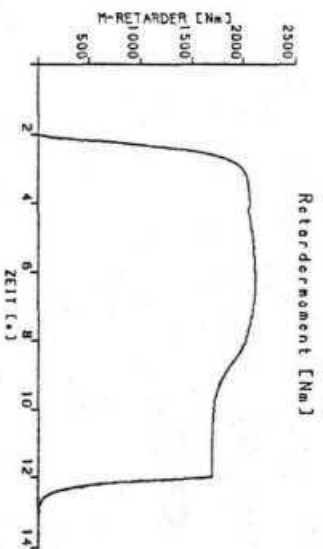
Anfangsgeschw.: 80.0 Km/h      Closed Loop  
 Fahrmanoever : geradeaus.      stat. Achslasten (VA/HA) : 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder

Parameterreihe **G3**Variation<sup>7)</sup> **G3 - 7**

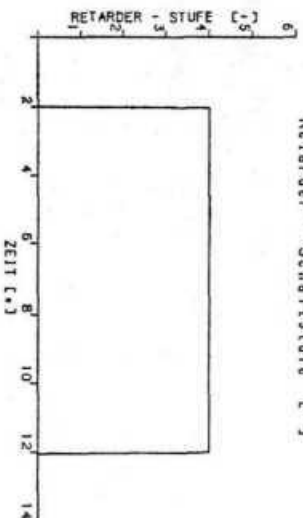
Fahrzeug:	leer		<b>beladen</b>	
Retarderstufe:			<b>A - 4</b>	B - 6
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	<b>50 km/h</b>		80 km/h	
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>		$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>		Open Loop
Sonstiges:	<b>Gefälle 6 %</b>			

(Quelle: Simulationskennung **SPL0525.2**)<sup>7)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

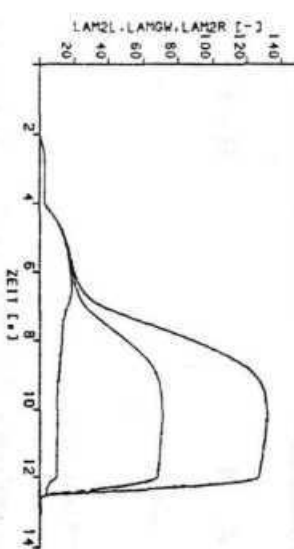
G3 - 7 / Rahmen 1



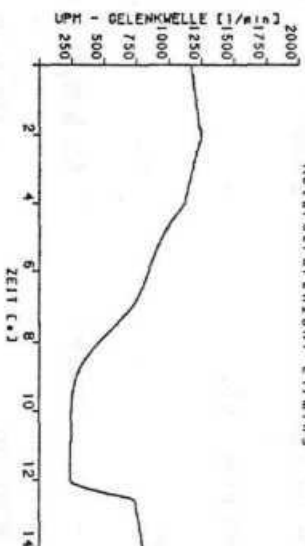
Retarder - Schaltstufe [-]



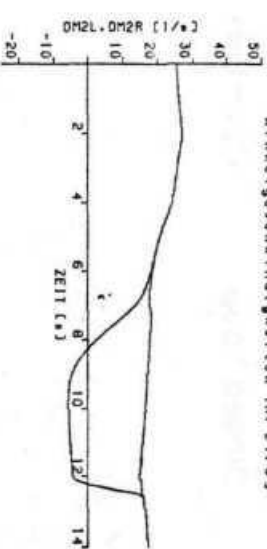
Schlupfe von Hinterrachse und Gelenkwelle [x]



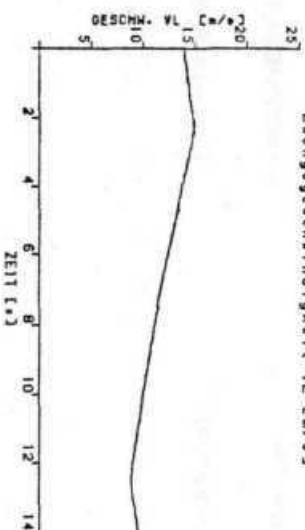
Retarderdrehzahl [1/min]



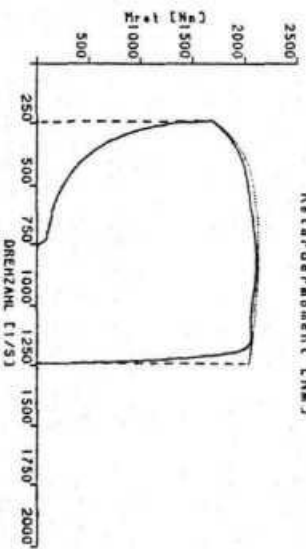
Winkelgeschwindigkeiten HA [1/s]



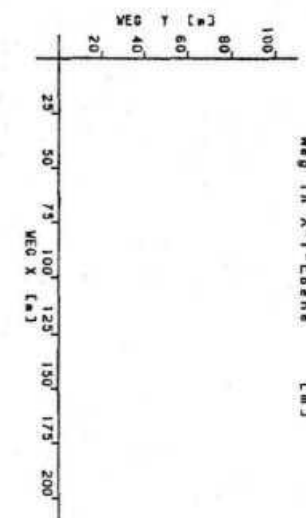
Längsgeschwindigkeit VL [m/s]



Retardermoment [Nm]



Weg in X-Y-Ebene [m]



Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV : NEIN

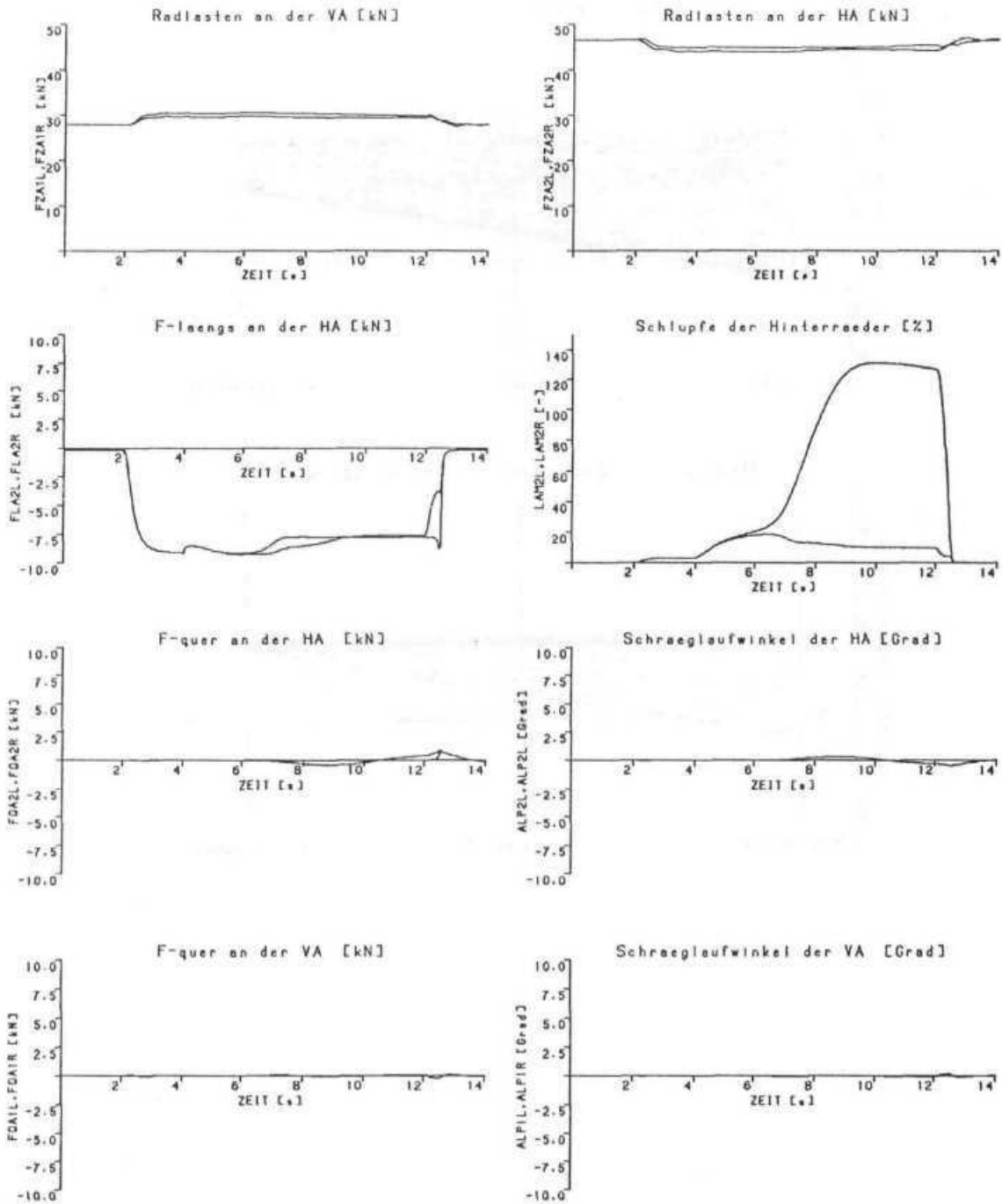
Fahrbahn: Gefälle = 6.0 %  
 mue (11/re) = .72/.72

Querneigung (11/re) = 0.0 %  
 mue-Sprung (11/re) = .24/.24 b 4.0  
 mue-Sprung (11/re) = .72/.72 b 15.0

Anfangsgeschw. : 50.0 Km/h  
 Fahrmanöver : geradeaus,  
 Solofz. beladen mit 1 Retarder

Closed Loop stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

G3 - 7 / Rahmen 4

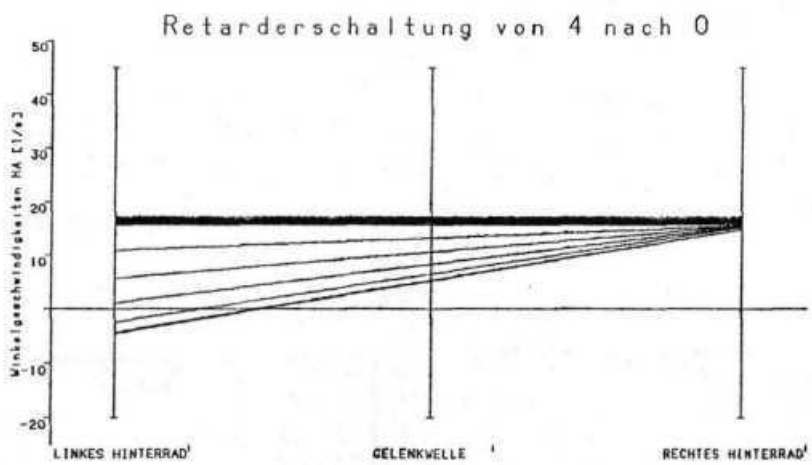
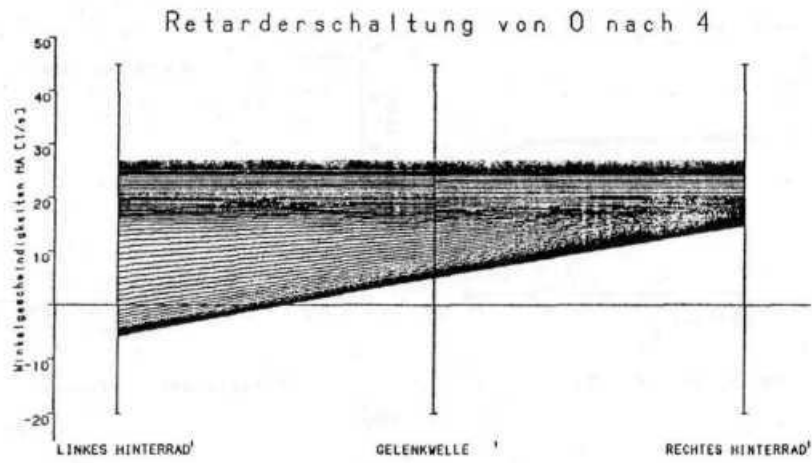


Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaele = 6.0 % Querneigung = 0.0 %  
 mue (li/re) = .72/.72 mue-Sprung (li/re) = .24/.24 b 4.0  
 mue-Sprung (li/re) = .72/.72 bis 5.0

Anfangsgeschw.: 50.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

G3 - 7 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

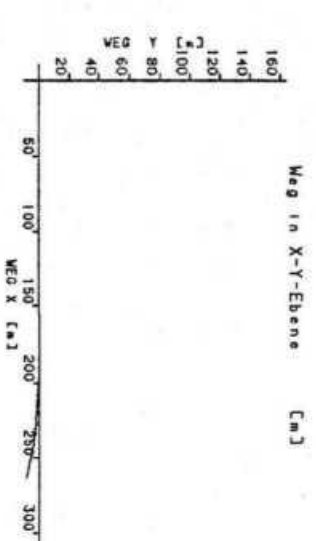
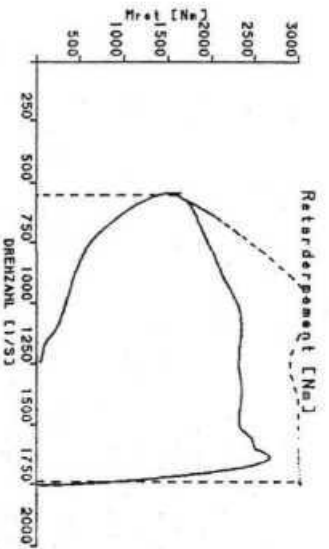
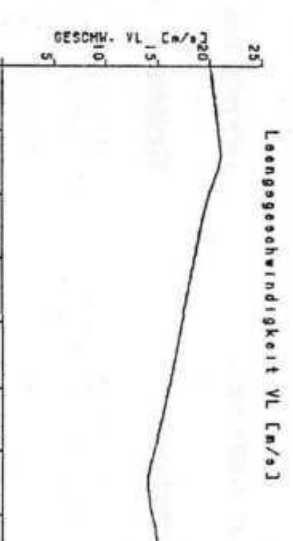
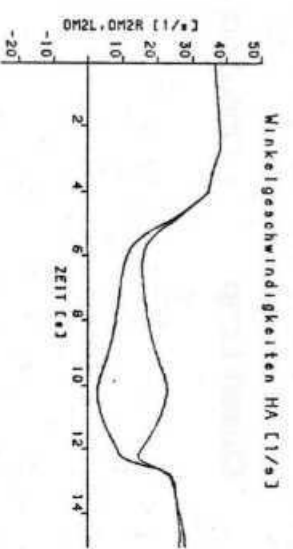
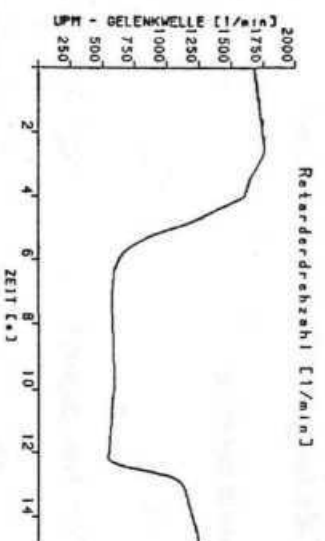
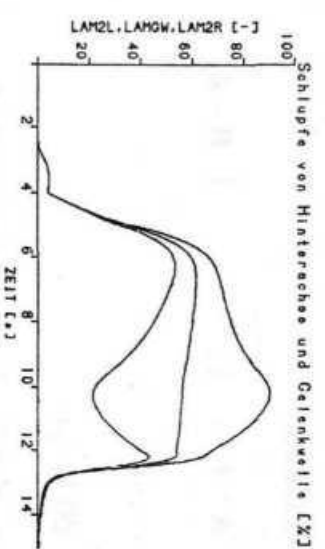
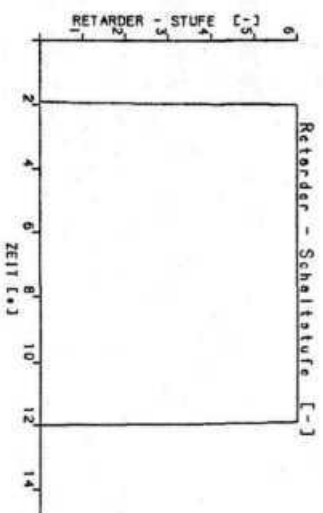
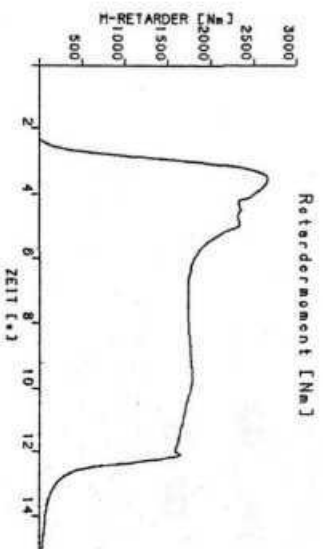


Parameterreihe G3Variation<sup>8)</sup> **G3 - 8**

Fahrzeug:	leer		<b>beladen</b>
Retarderstufe:			A - 4   <b>B - 6</b>
ABV:	ja		<b>nein</b>
Geschwindigkeit:	50 km/h		<b>80 km/h</b>
Fahrbahn:	<b><math>\mu</math> - Sprung</b>	<b>0,72-0,24</b>	$\mu$ -Split-Sprung 0,72-0,24
Fahrmanöver:	<b>Geradeaus</b>	<b>Closed Loop</b>	Open Loop
Sonstiges:	<b>Gefälle 6 %</b>		

(Quelle: Simulationskennung **SPL0524**)<sup>8)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G3 - 8 / Rahmen 1

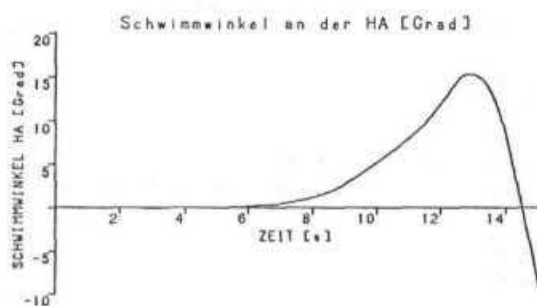
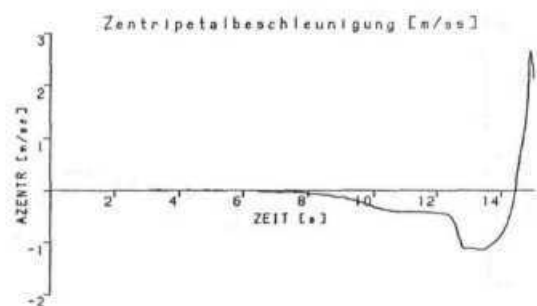
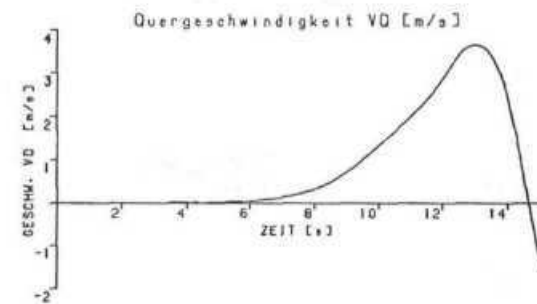
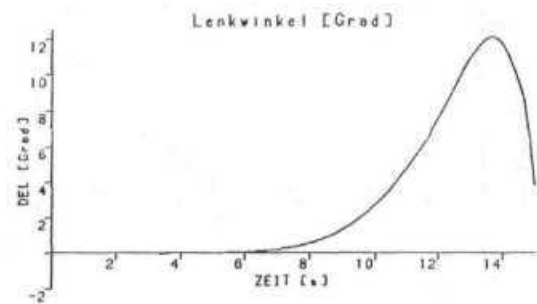
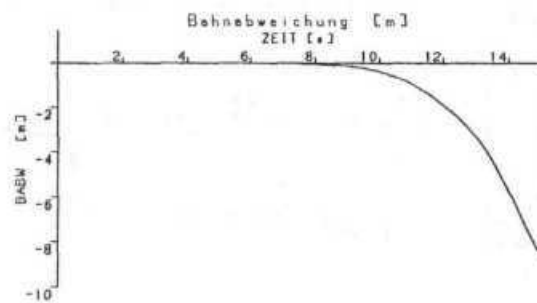
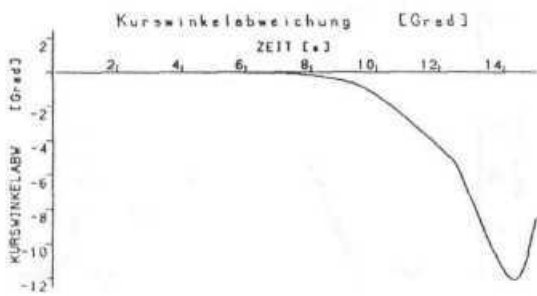
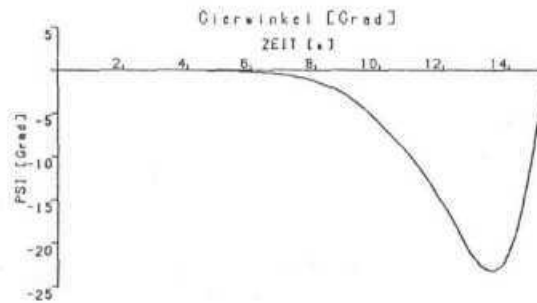
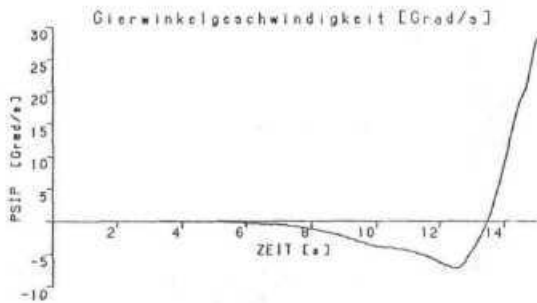


Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefälle = 6.0 % Querneigung (11/re) = 0.0 %  
 mu (11/re) = .72/.72 mu-Sprung (11/re) = .24/.24 b 4.0  
 mu-Sprung (11/re) = .72/.72 b15.0

Anfangsgeschw.: 72.0 Km/h Closed Loop  
 Fahrmanöver : geradeaus, Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

## G3 - 8 / Rahmen 2

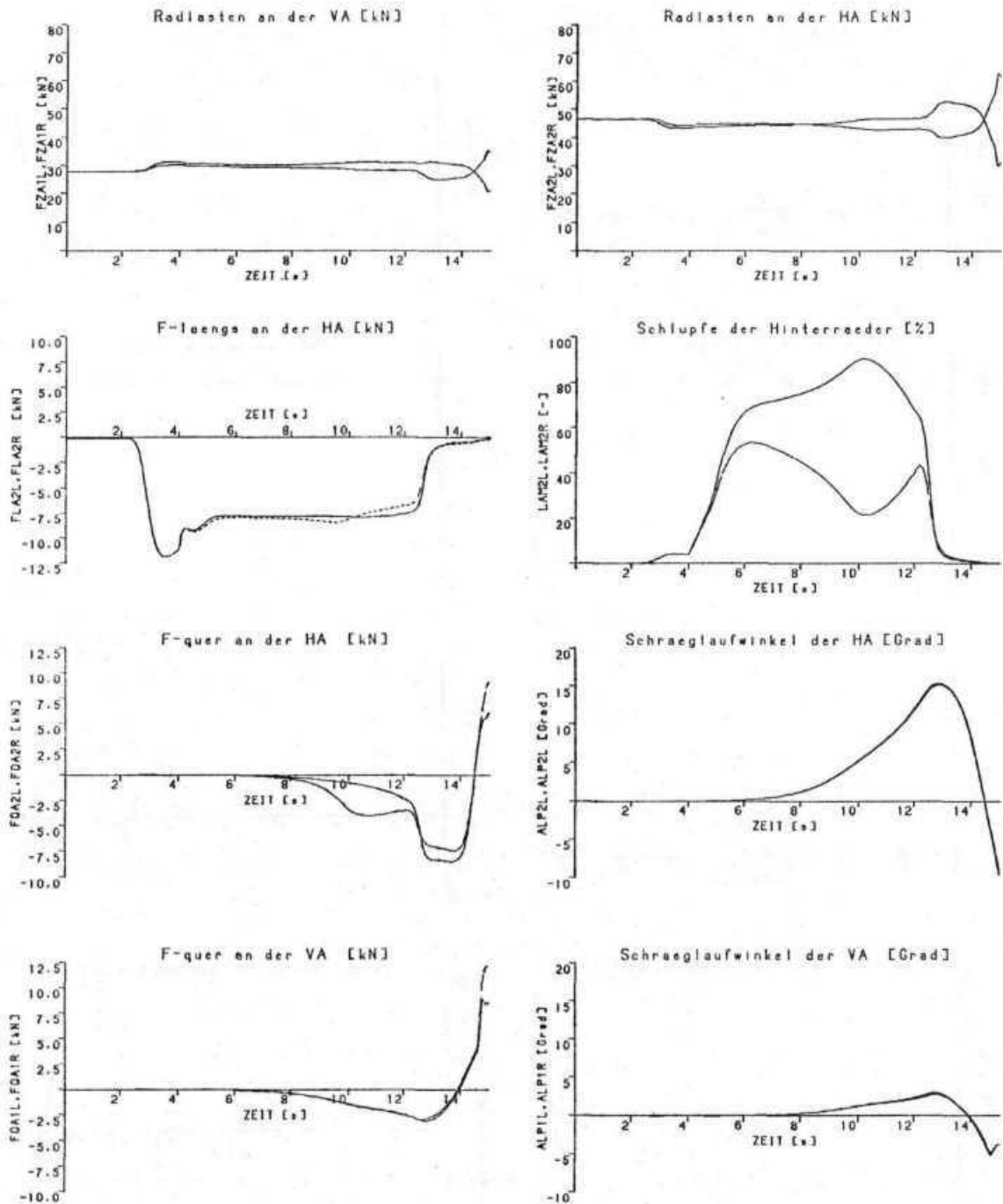


Retarder : Typ B  
Schaltstufe(n) : 6-0  
ABV : NEIN

Fahrbahn: Gefaelle = 6.0 %      Querneigung = 0.0 %  
mue (li/re) = .72/.72      mue-Sprung (li/re) = .24/.24 b 4.0  
mue-Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw.: 72.0 Km/h  
Fahrmanoever : geradeaus,      Closed Loop  
Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

## G3 - 8 / Rahmen 4



Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN

Fahrbahn: Gefaeelle = 6.0 % Querneigung = 0.0 %  
 $\mu$  (li/re) = .72/.72  $\mu$ -Sprung (li/re) = .24/.24 b 4.0  
 $\mu$ -Sprung (li/re) = .72/.72 b15.0

Anfangsgeschw.: 72.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. beladen mit 1 Retarder stat. Achslasten (VA/HA) : 55.9/ 93.2 kN

Parameterreihe **G4**Variation<sup>1)</sup> **G4 - 1**

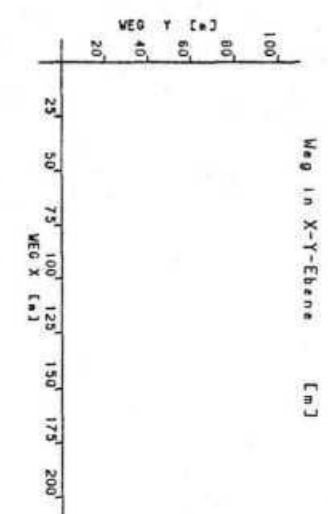
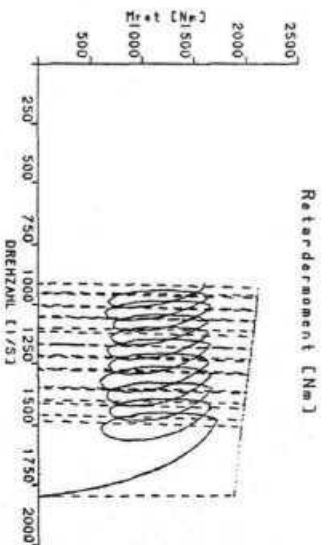
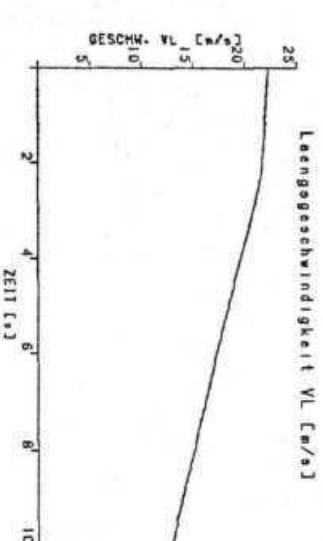
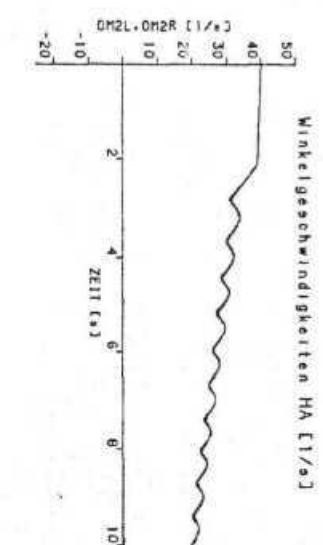
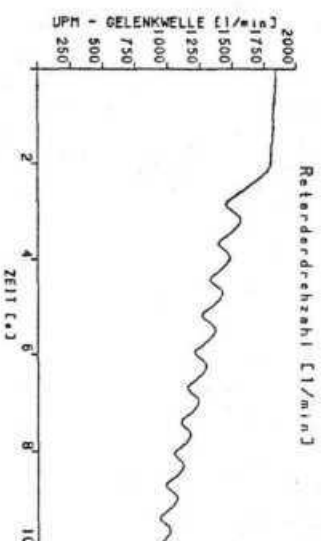
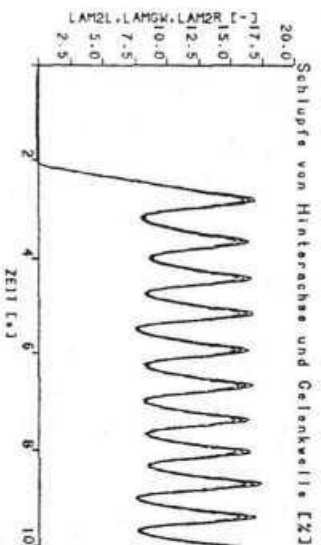
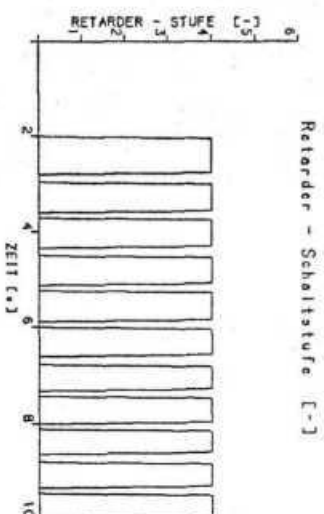
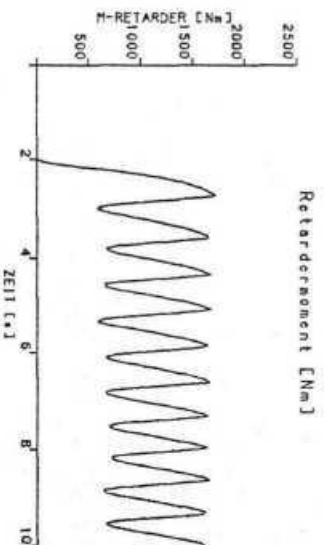
Fahrzeug:	<b>leer</b>						
Retarderstufe:	A - 2		<b>A - 4</b>		B - 3		B - 6
ABV:	<b>ja</b>						
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$	<b>0,24</b>		$\mu$ - Split =	<b>0,24/0,48</b>		
Fahrmanöver:	<b>Geradeaus</b>			<b>Closed Loop</b>			

(Quelle: Simulationskennung SPL0718)

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<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G4 - 1 / Rahmen 1



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.5%

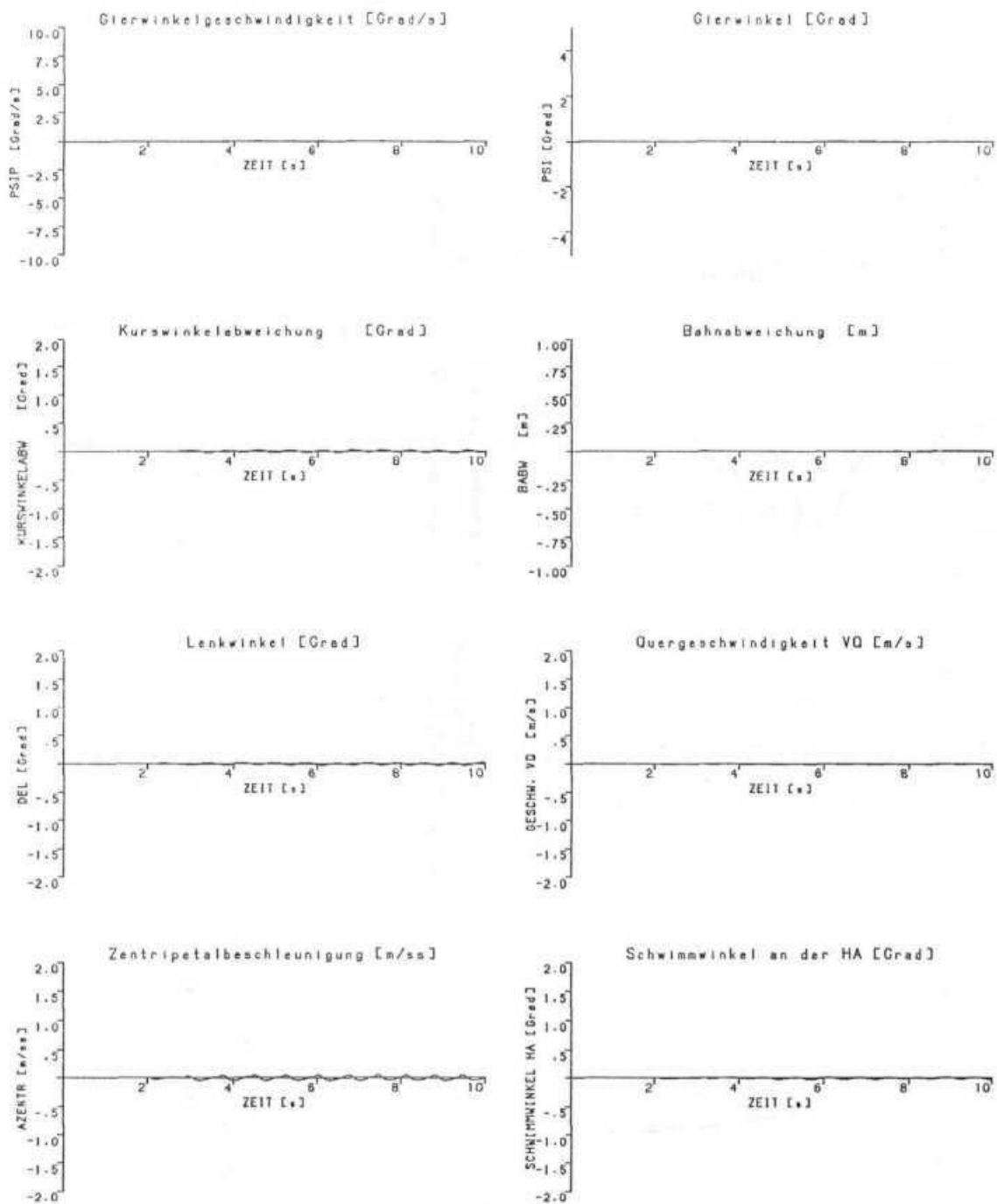
Fahrbahn: Gefaeille = 0.0%  
 mu (11/re) = .24/.24

Querneigung = 0.0%

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 1 / Rahmen 2



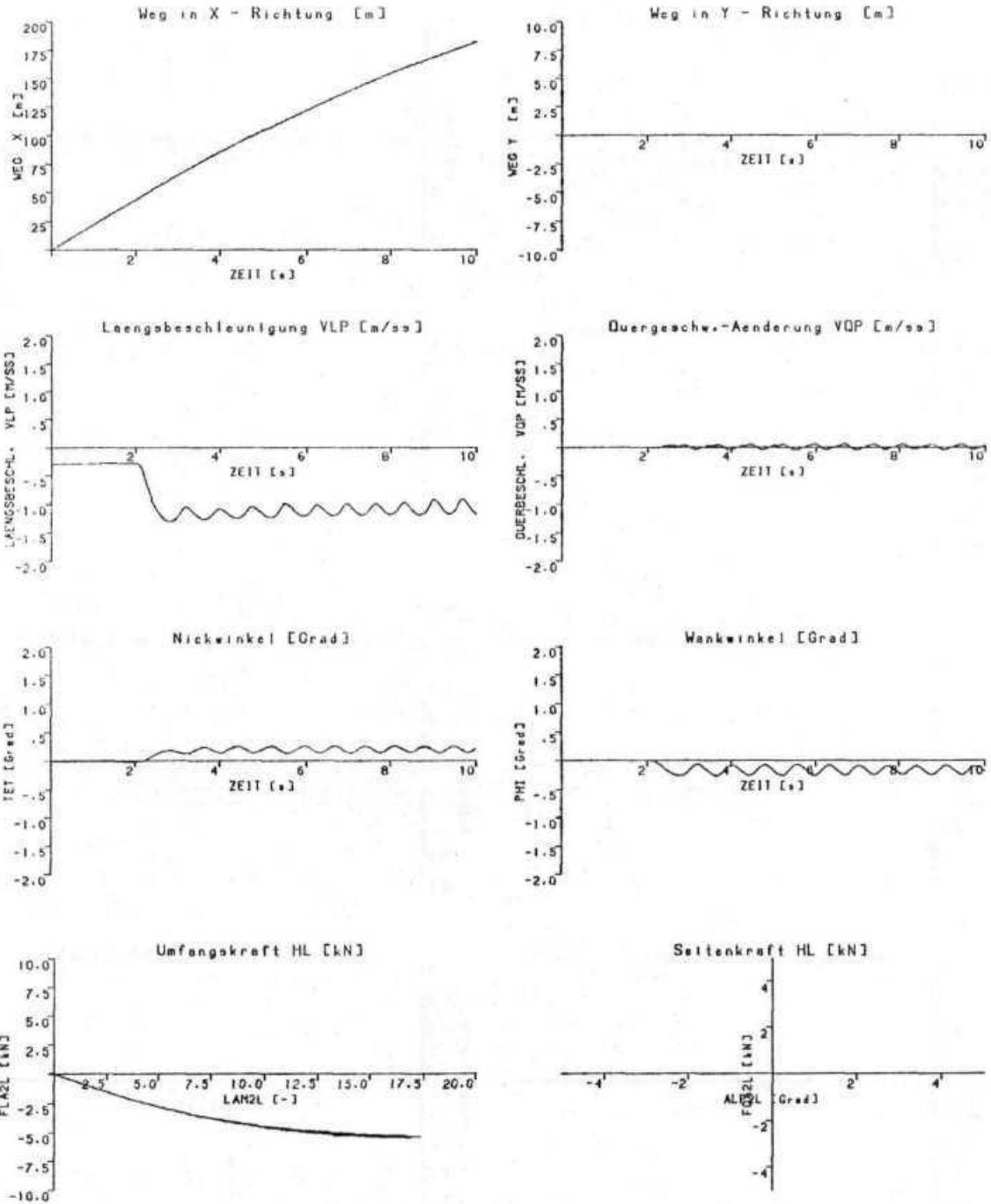
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 1 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

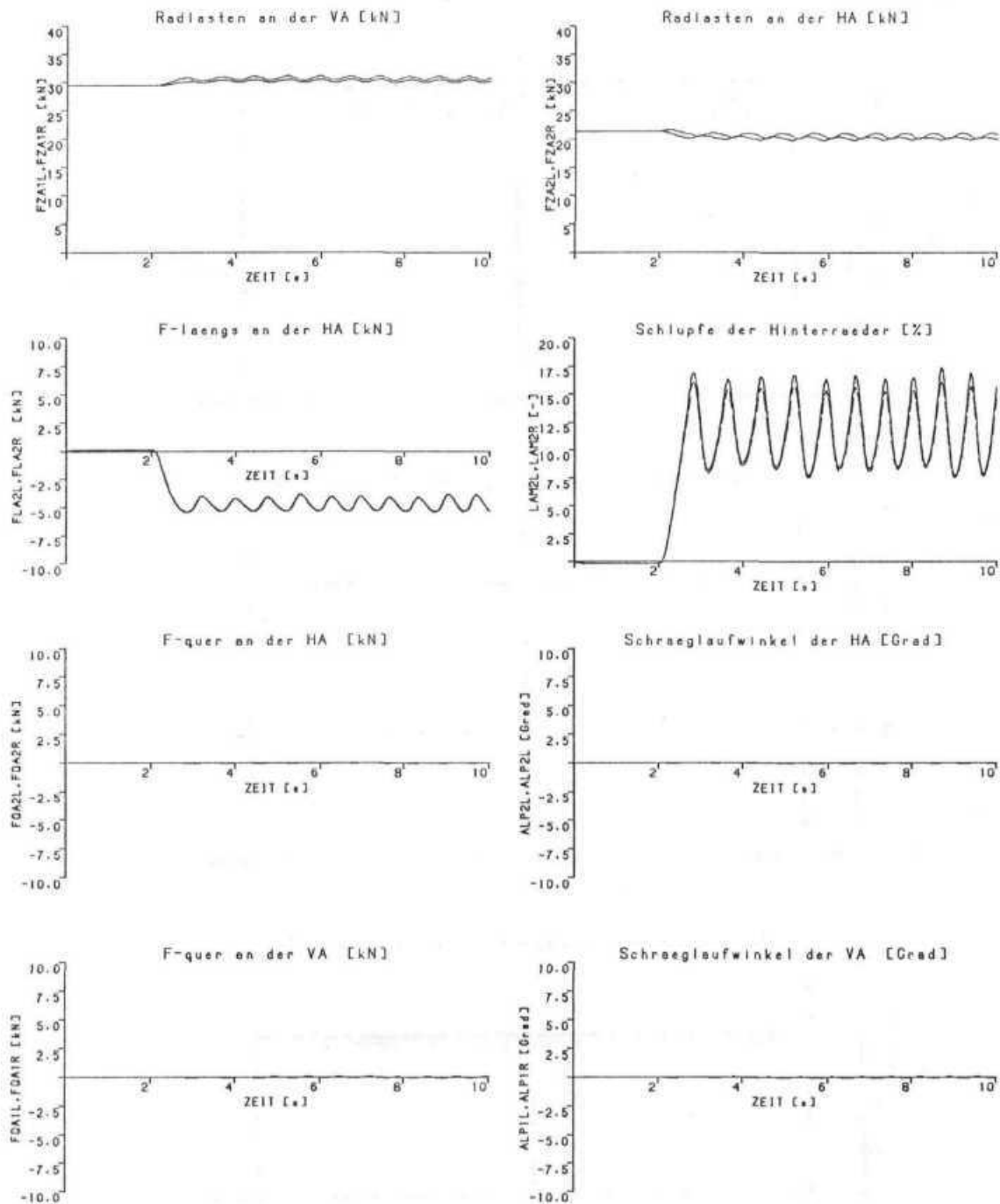
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



G4 - 1 / Rahmen 4



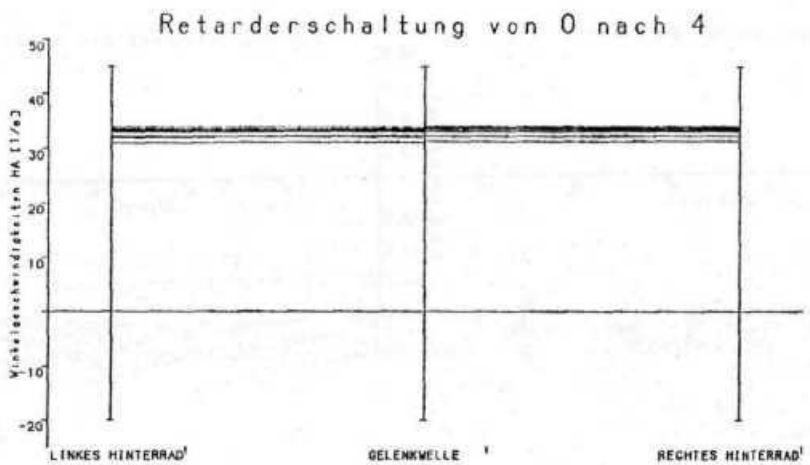
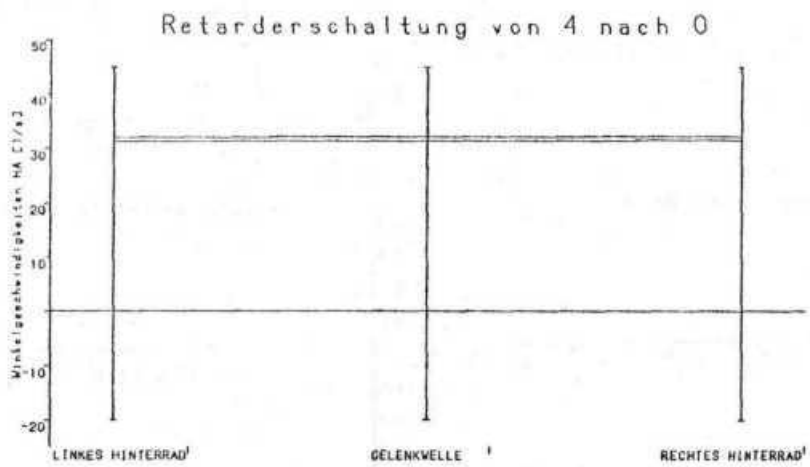
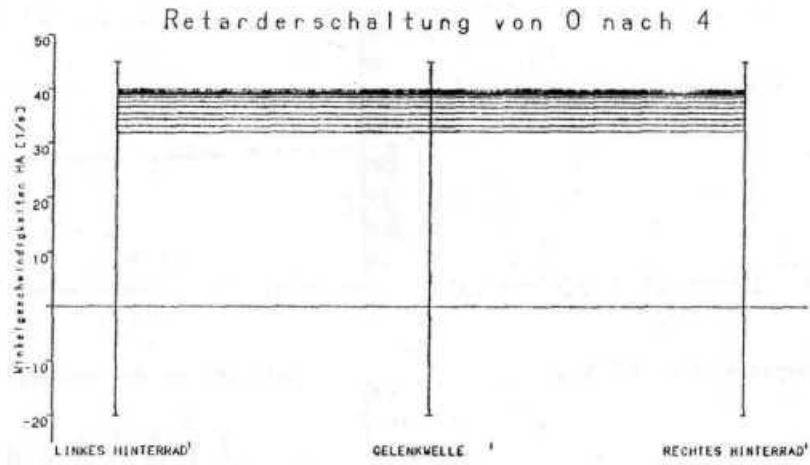
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
 Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **G4**Variation<sup>2)</sup> **G4 - 2**

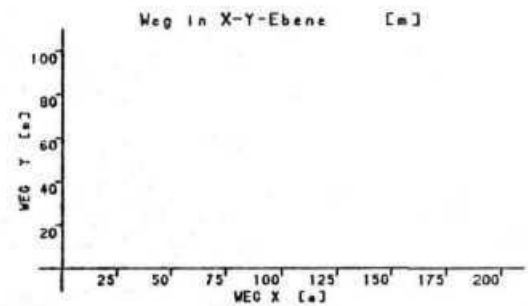
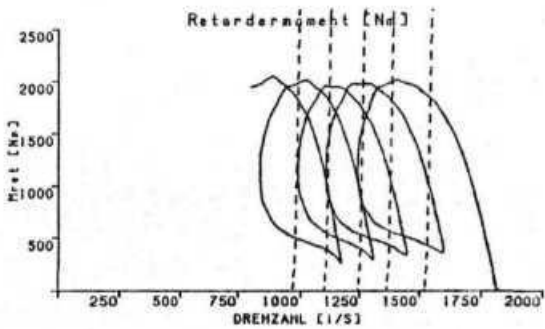
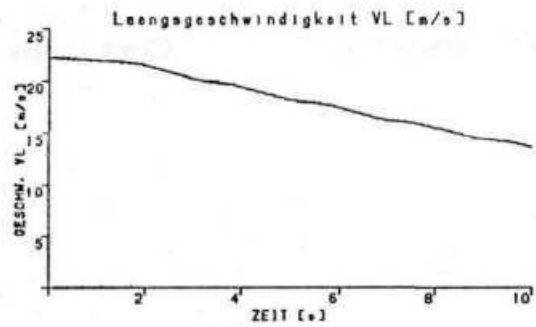
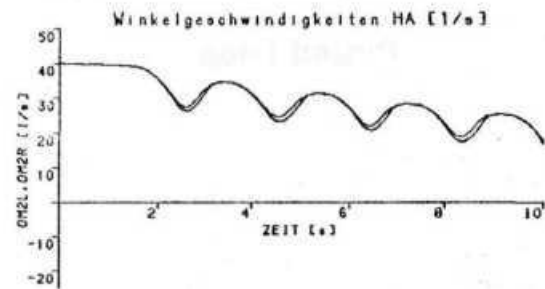
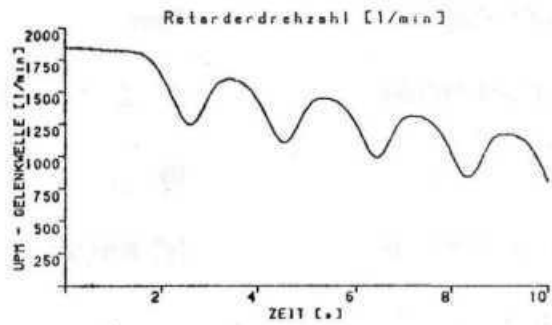
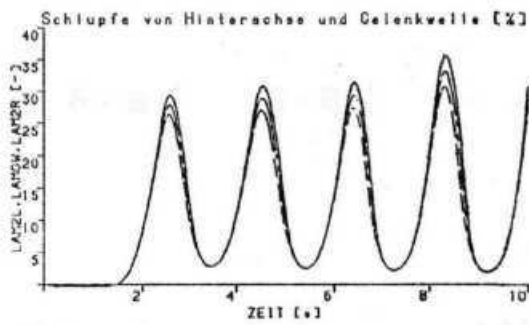
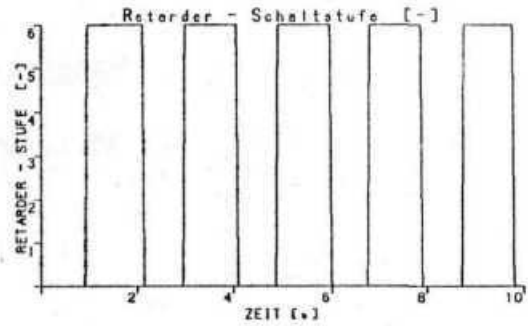
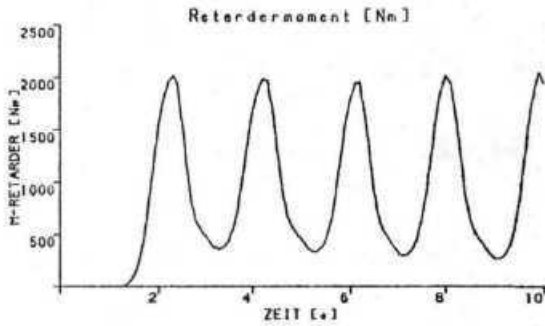
Fahrzeug:	<b>leer</b>						
Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
ABV:	<b>ja</b>						
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$	<b>0,24</b>		$\mu - \text{Split} =$	<b>0,24/0,48</b>		
Fahrmanöver:	<b>Geradeaus</b>			<b>Closed Loop</b>			

(Quelle: Simulationskennung SPL0722.2)

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<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G4 - 2 / Rahmen 1



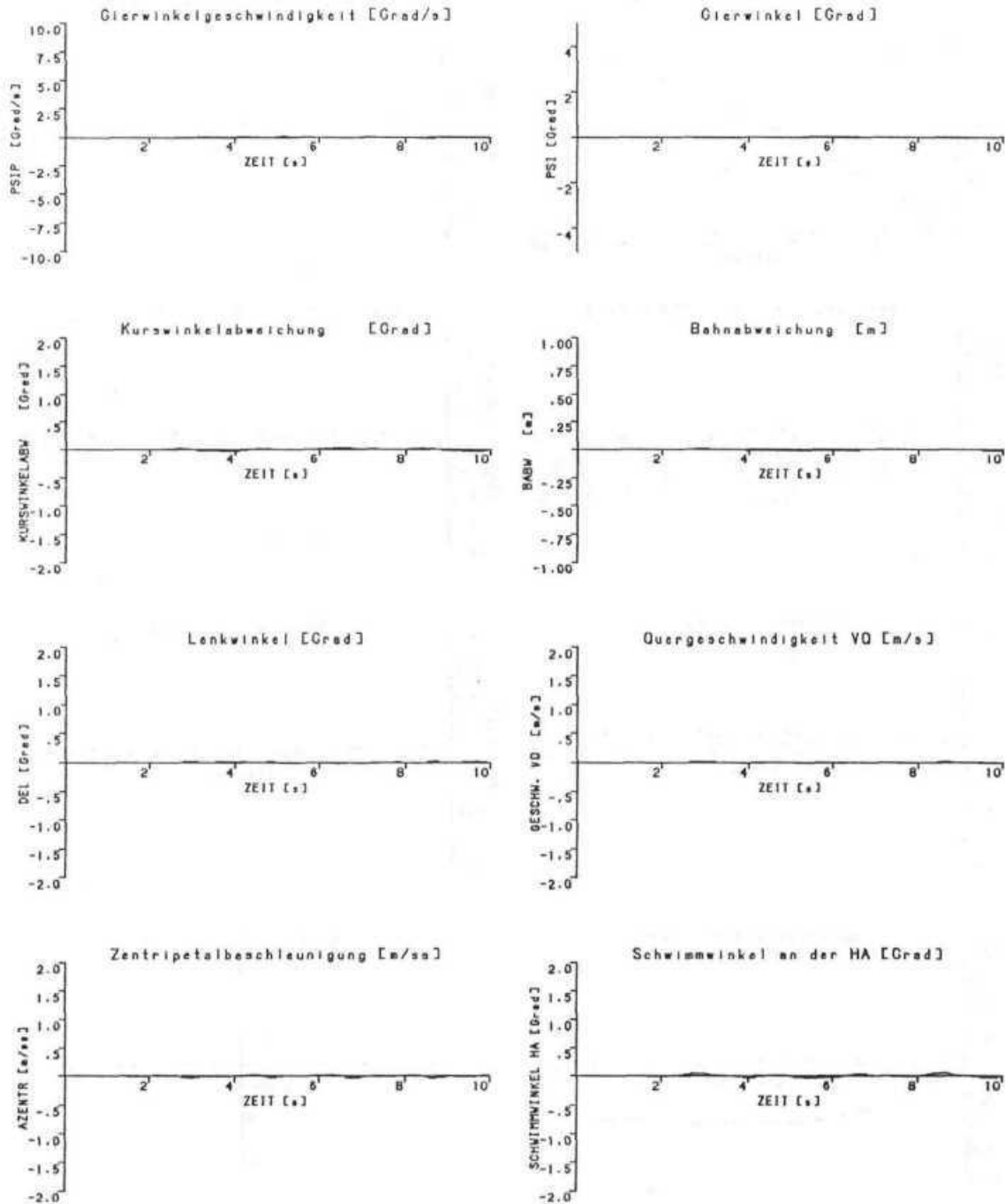
Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
mue (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : geradeaus,  
Solofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G4 - 2 / Rahmen 2



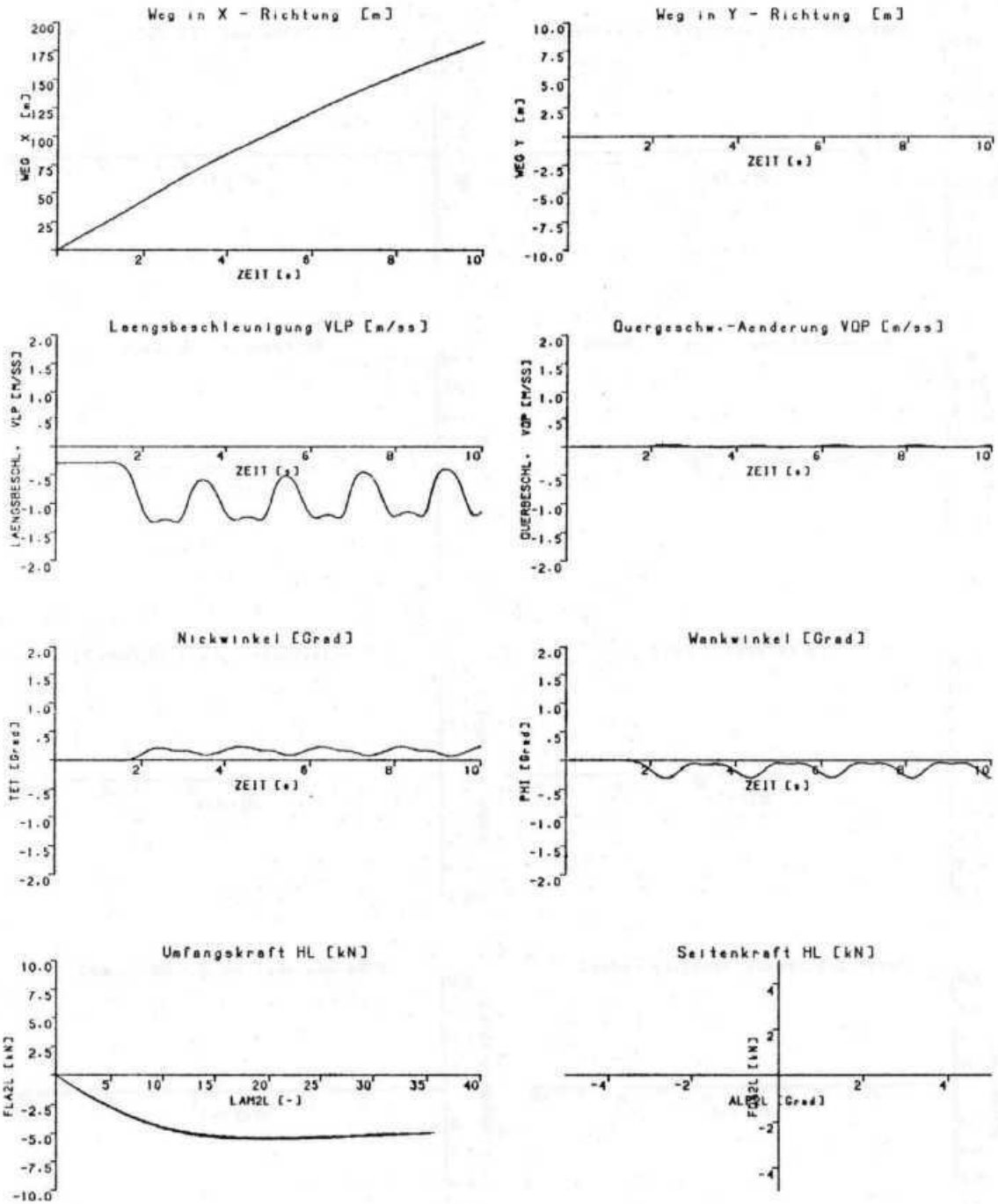
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_e (l/r_e) = .24/.24$

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 2 / Rahmen 3



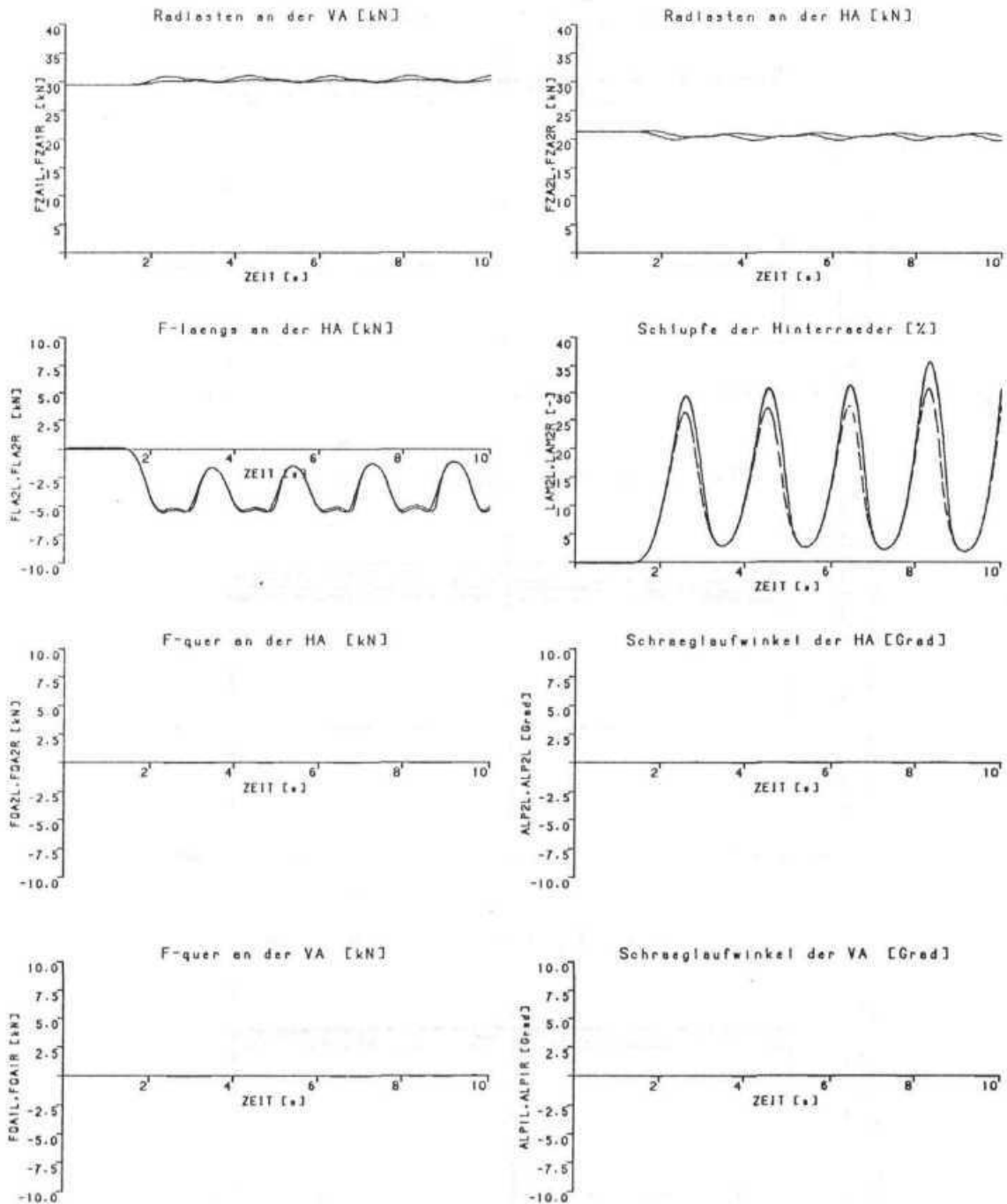
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .24/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G4 - 2 / Rahmen 4



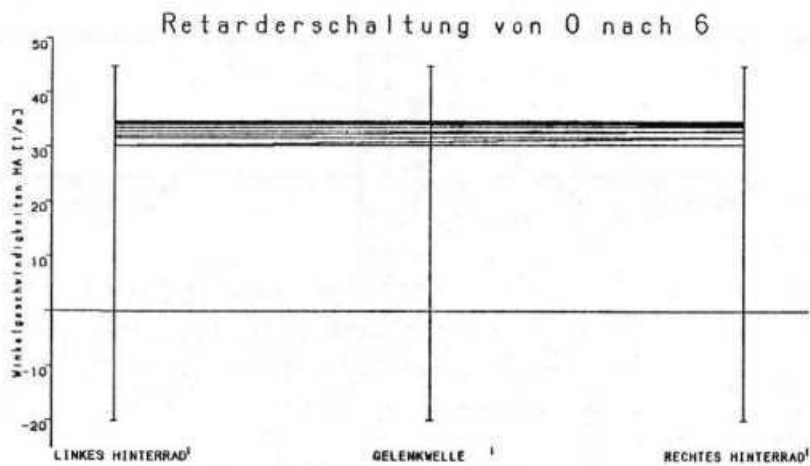
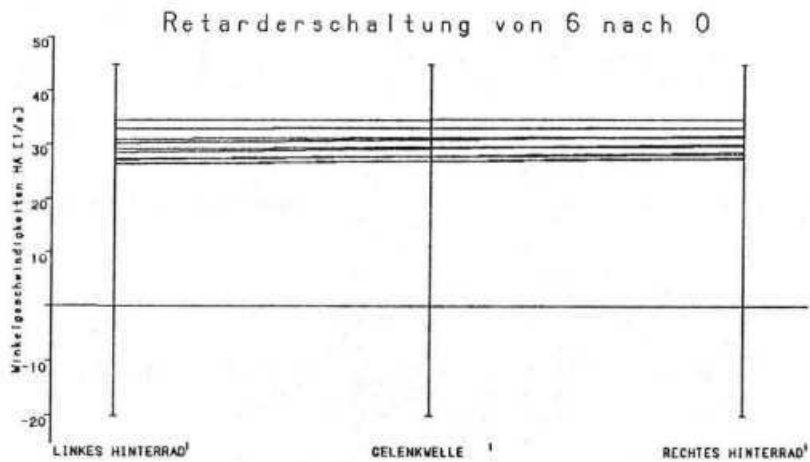
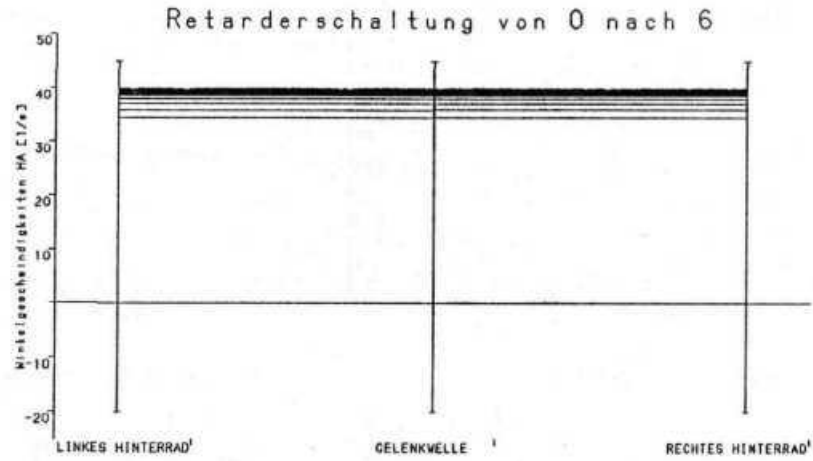
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.-%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu_{re} (ll/re) = .24/.24$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 2 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$



Parameterreihe **G4**Variation<sup>3)</sup> **G4 - 3**

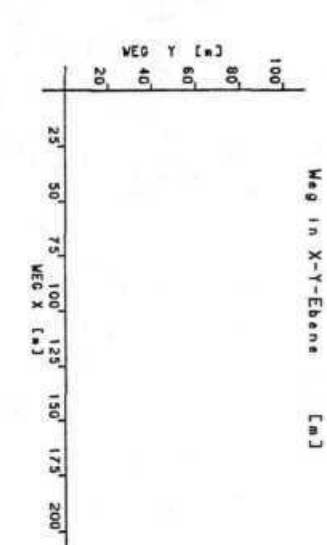
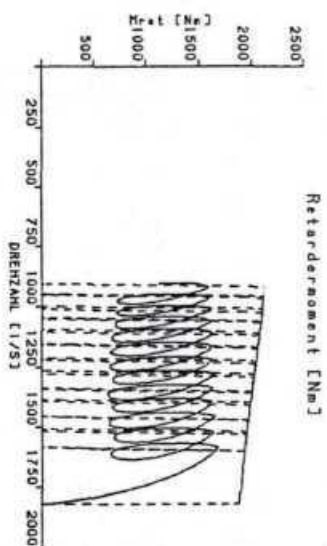
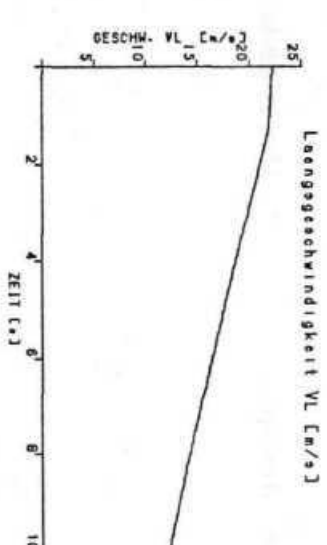
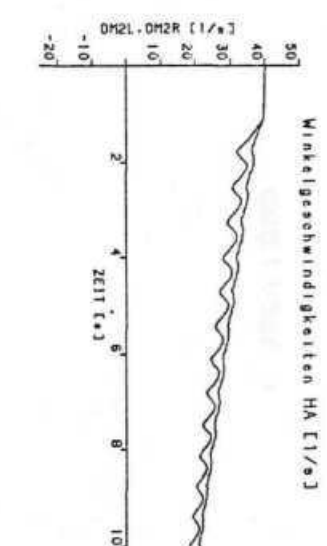
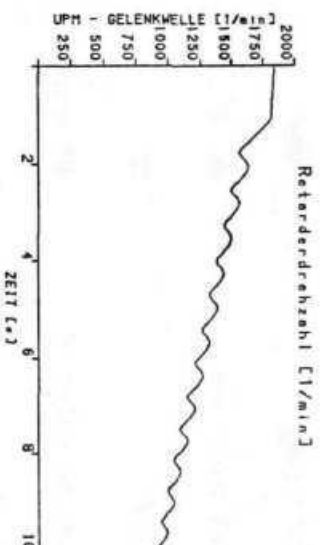
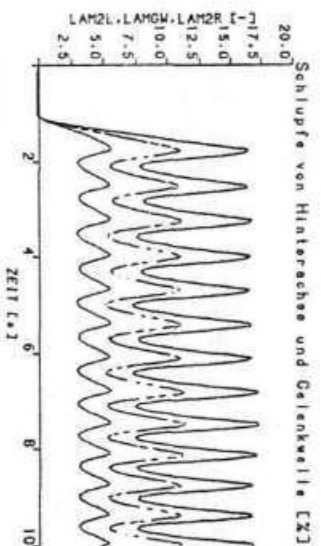
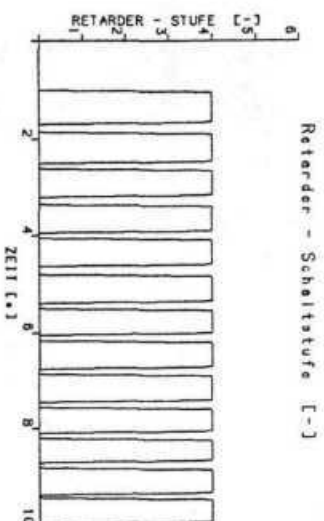
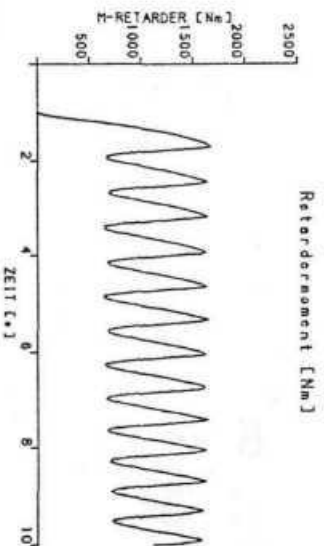
Fahrzeug:	<b>leer</b>
Retarderstufe:	A - 2   <b>A - 4</b>   B - 3   B - 6
ABV:	<b>ja</b>
Geschwindigkeit:	<b>80 km/h</b>
Fahrbahn:	$\mu = 0,24$   $\mu - \text{Split} = 0,24/0,48$
Fahrmanöver:	<b>Geradeaus</b>   <b>Closed Loop</b>

(Quelle: Simulationskennung **SPL0728**)

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<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G4 - 3 / Rahmen 1



Retarder : Typ A  
 Schaltstufe(n) : 4-0  
 ABV-Schwellw. : 15.%

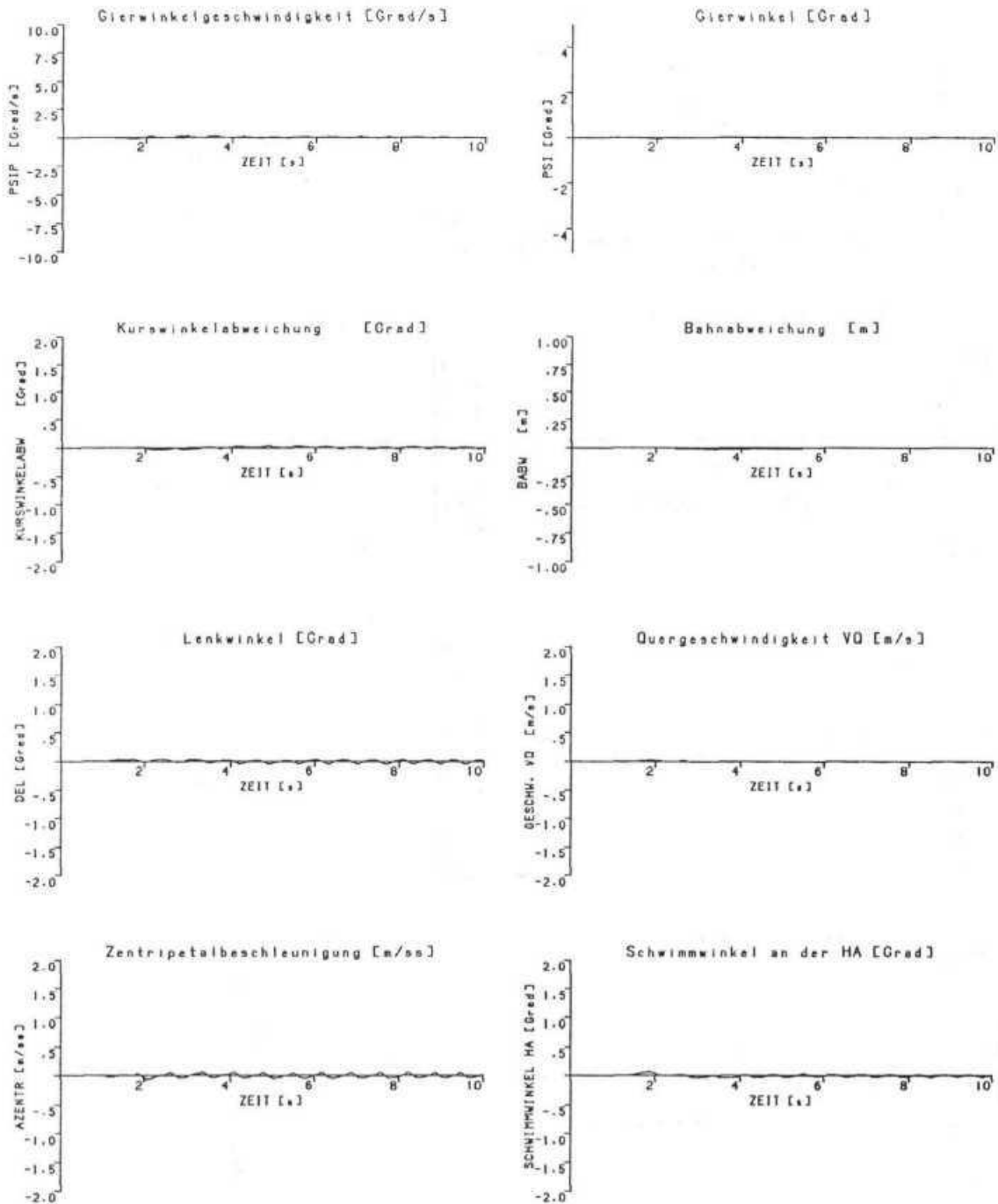
Fahrbahn: Gefaelle = 0.0 %  
 mu (11/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geraderaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 3 / Rahmen 2

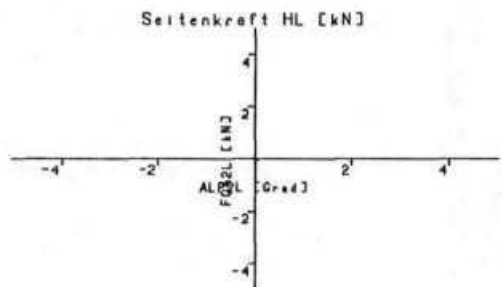
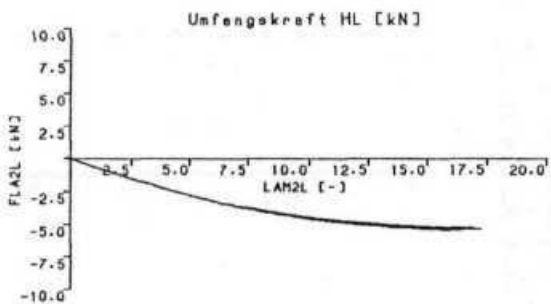
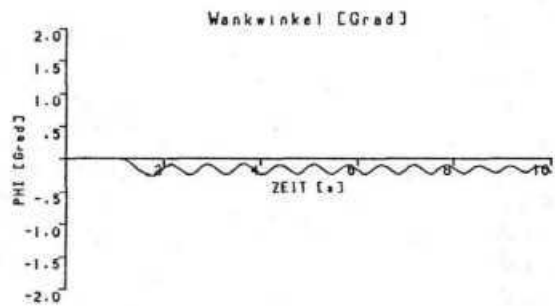
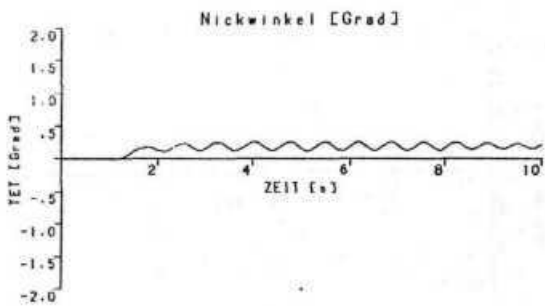
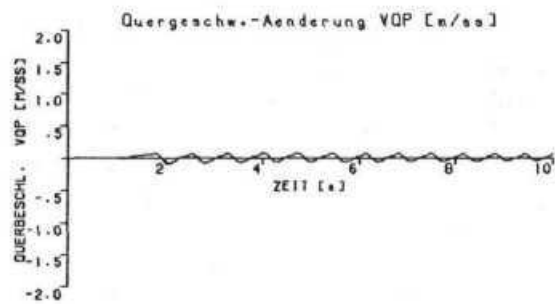
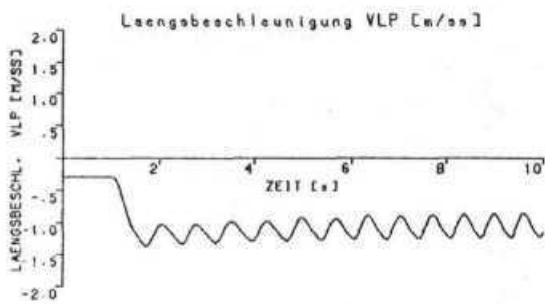
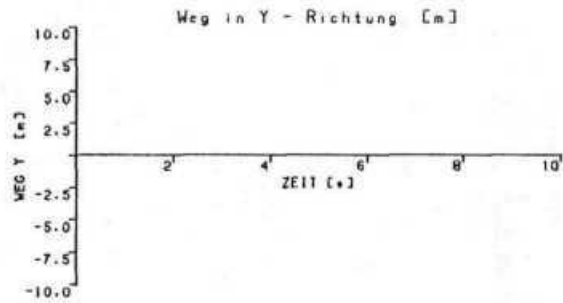
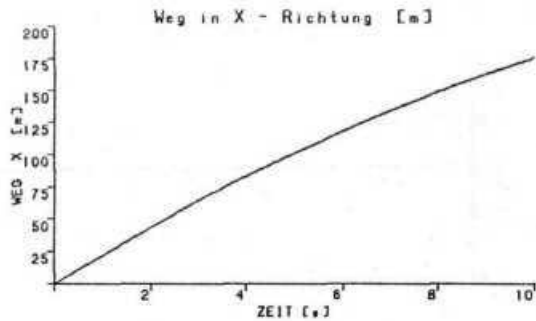


Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_e$  (ll/re) = .24/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA): 58.9/ 42.6 kN

G4 - 3 / Rahmen 3



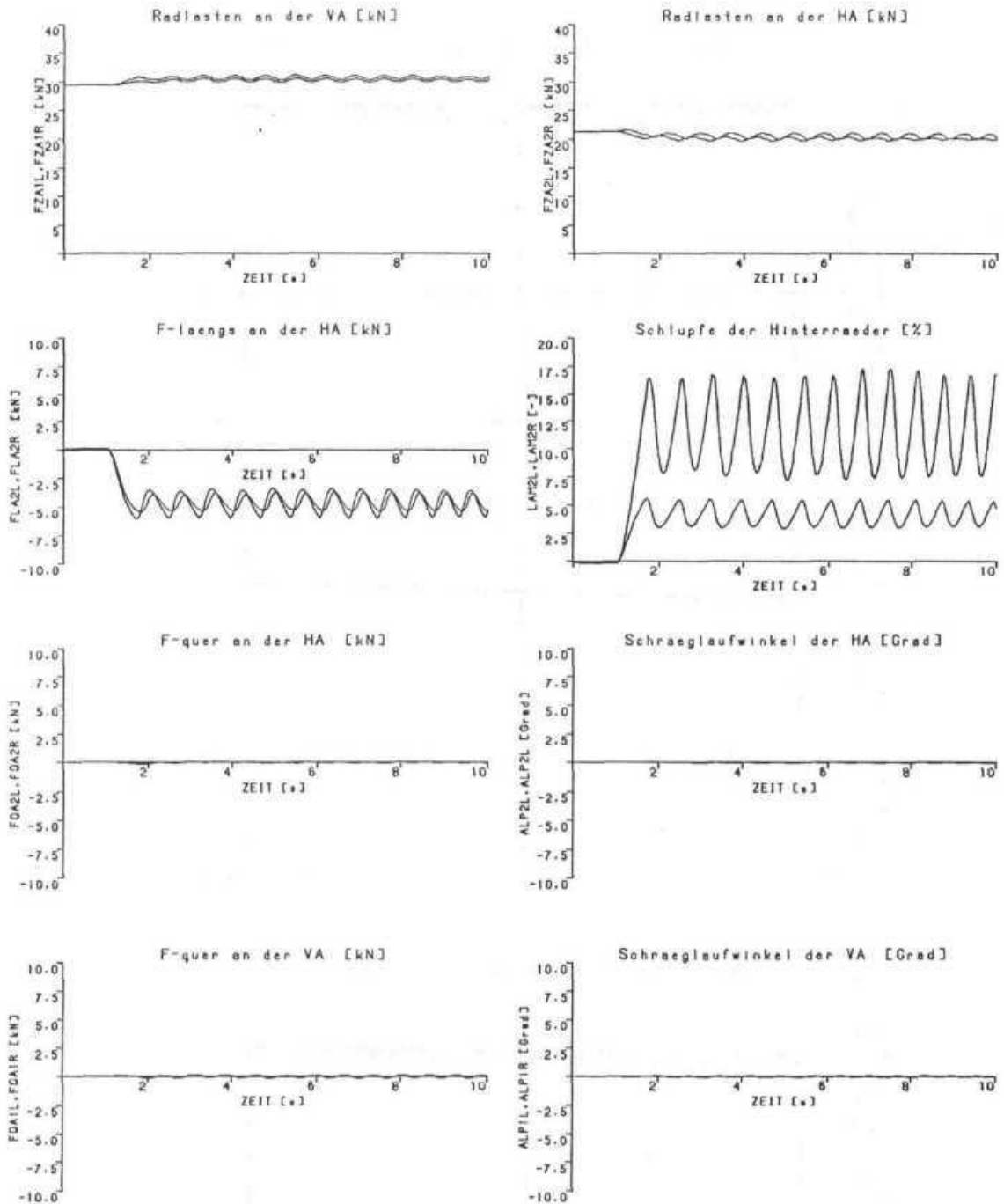
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/ro) = .24/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 3 / Rahmen 4

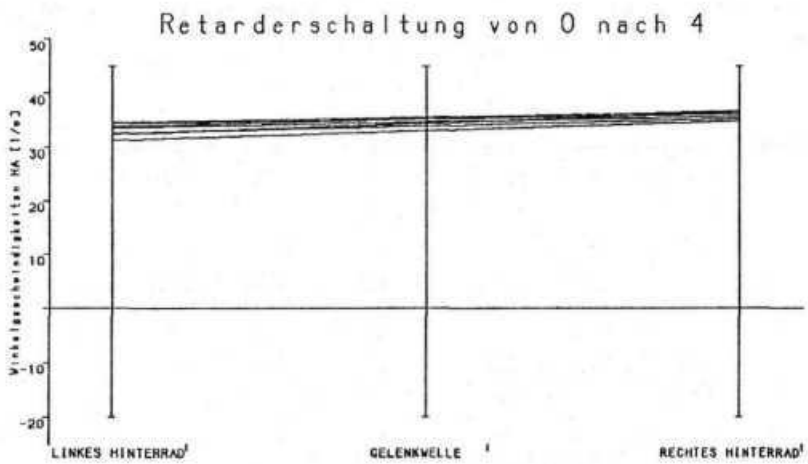
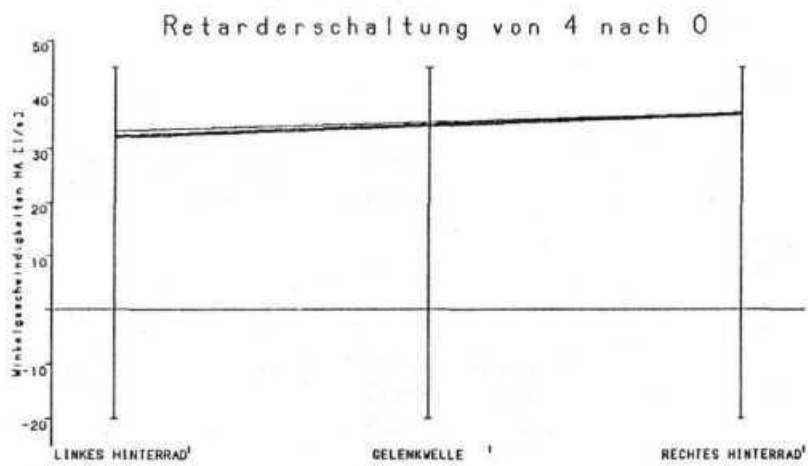
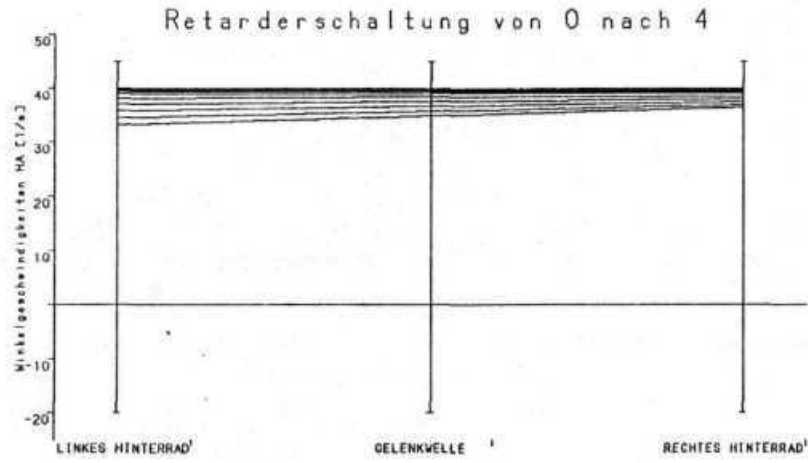


Retarder : Typ A  
 Schaltstufe(n) : 4-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/rs) = .24/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 3 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
 Linienabstand DELTA-T = 0.2 sec

Parameterreihe **G4**Variation<sup>4)</sup> **G4 - 4**

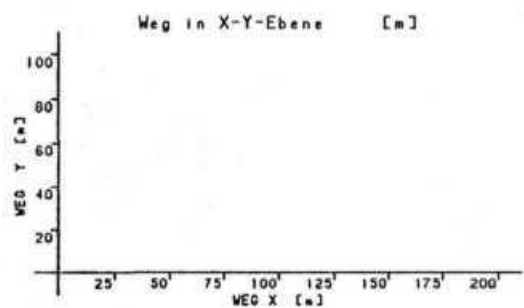
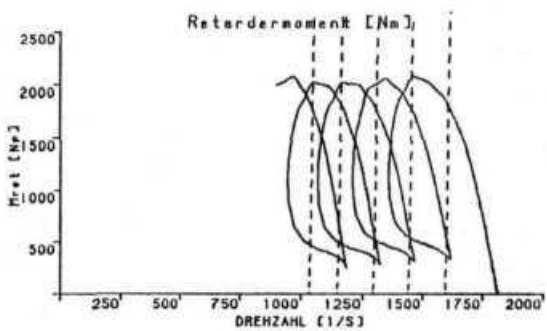
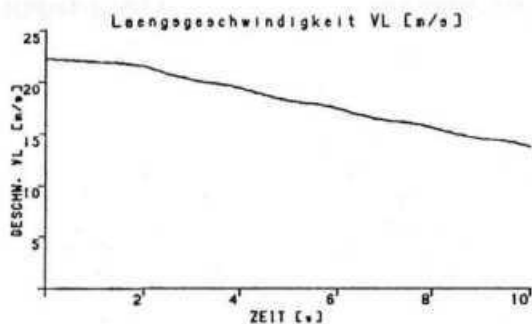
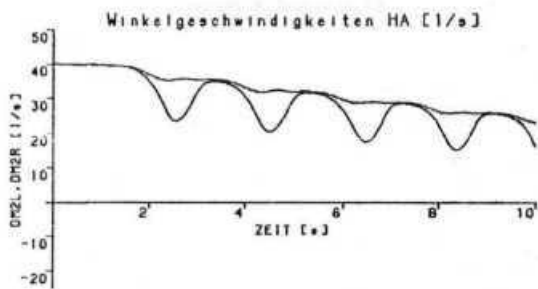
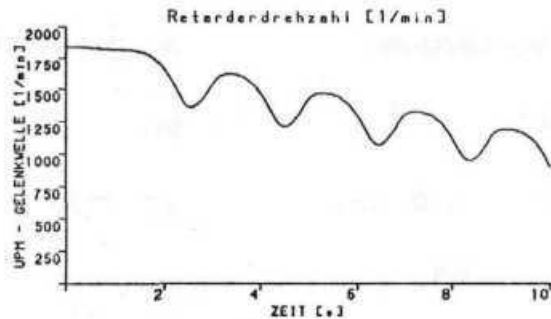
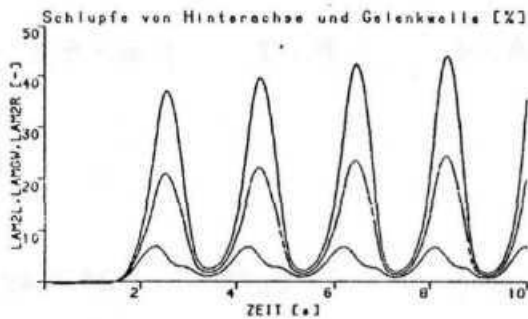
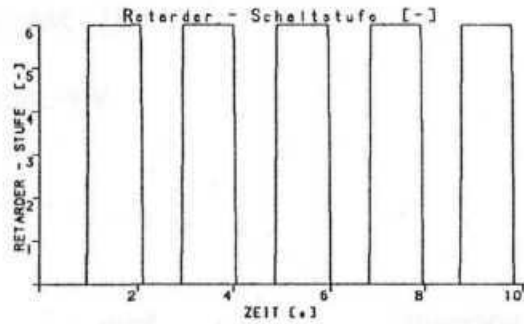
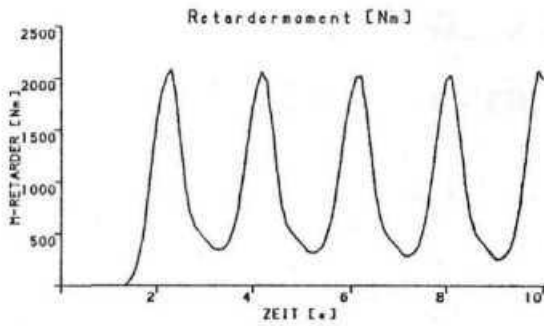
Fahrzeug:	<b>leer</b>			
Retarderstufe:	A - 2		A - 4	
			B - 3	
				<b>B - 6</b>
ABV:	<b>ja</b>			
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu =$	0,24		$\mu - \text{Split} =$ <b>0,24/0,48</b>
Fahrmanöver:	<b>Geradeaus</b>			<b>Closed Loop</b>

(Quelle: Simulationskennung **SPL0730.2**)

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<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G4 - 4 / Rahmen 1



Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV-Schwellw. : 15.-%

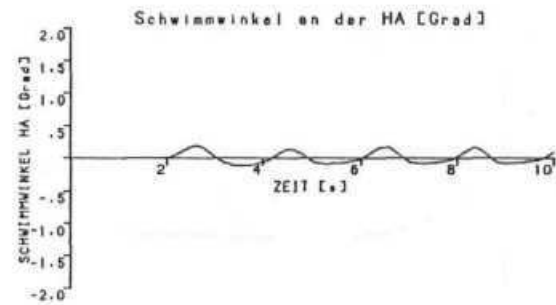
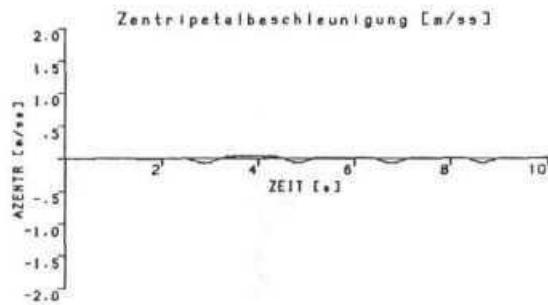
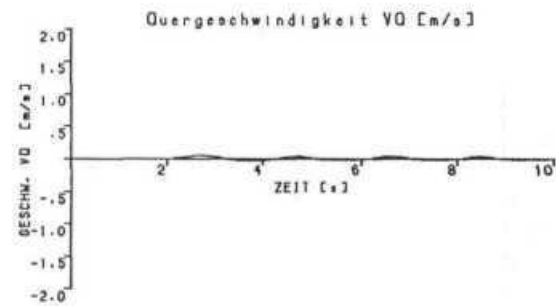
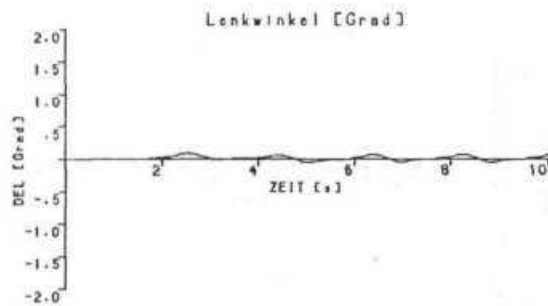
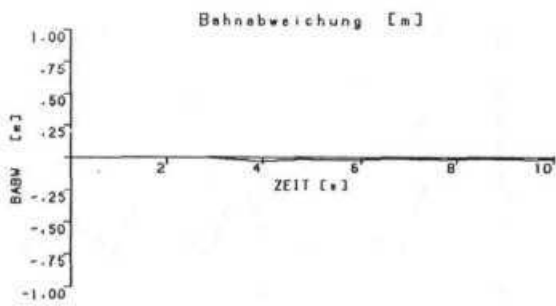
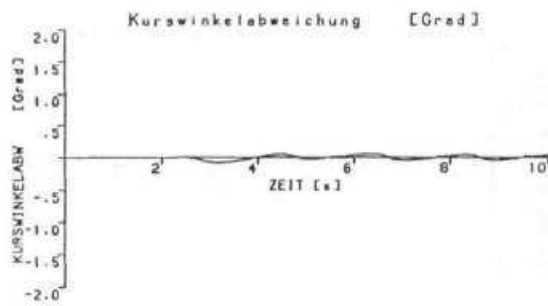
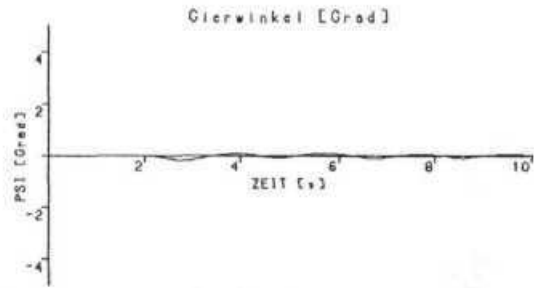
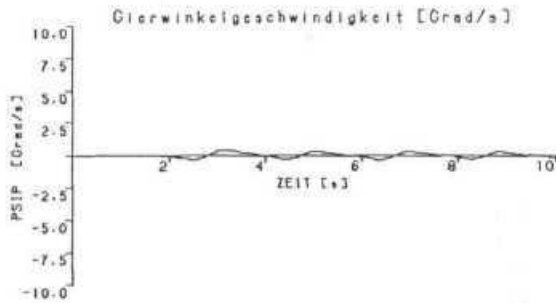
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
          mu (ll/re) = .24/.48

Anfangsgeschw.: 80.0 Km/h  
Fahrmanoever : geradeaus,  
Solofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



G4 - 4 / Rahmen 2



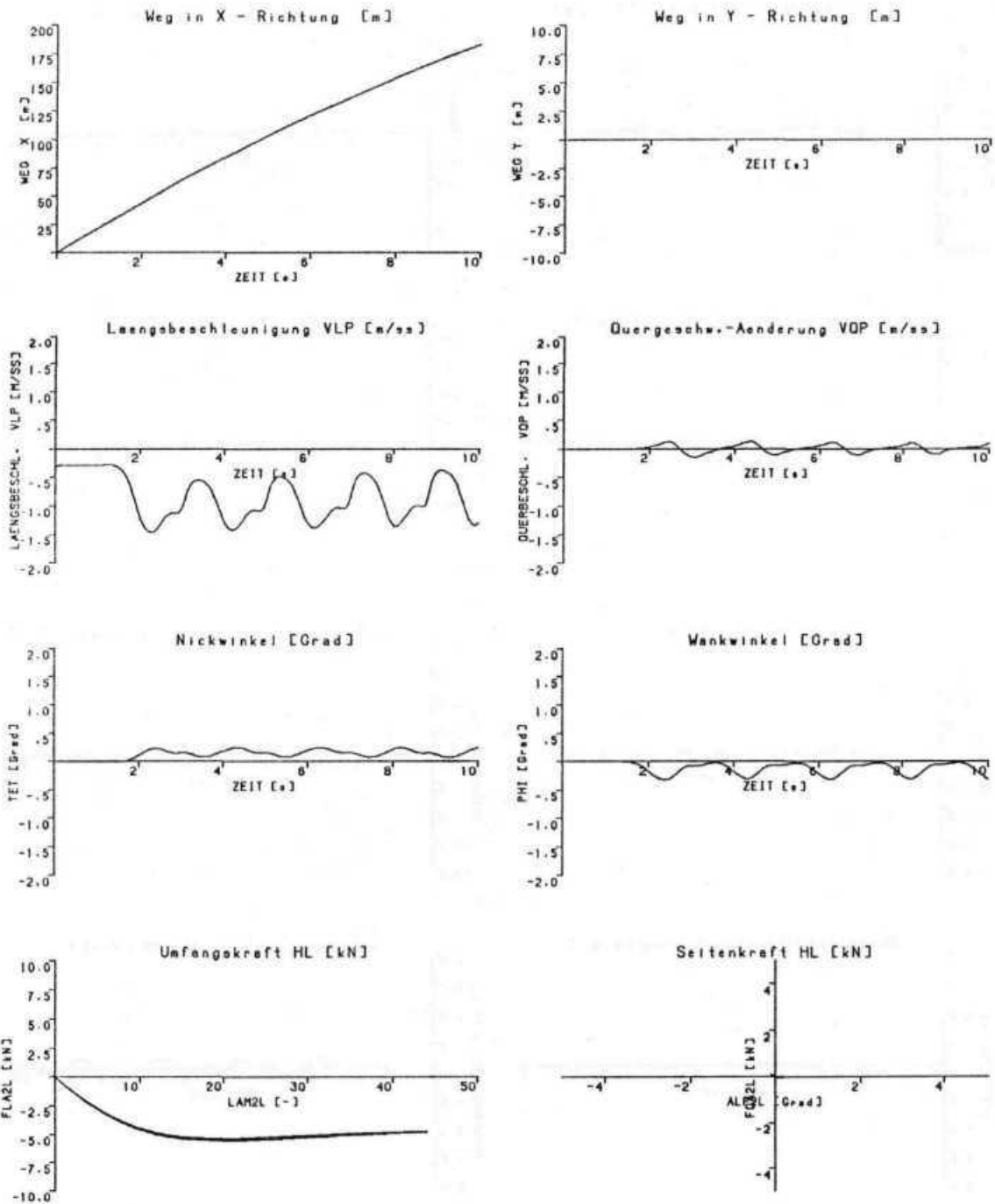
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_{re} (l/r_e) = .24/.48$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 4 / Rahmen 3



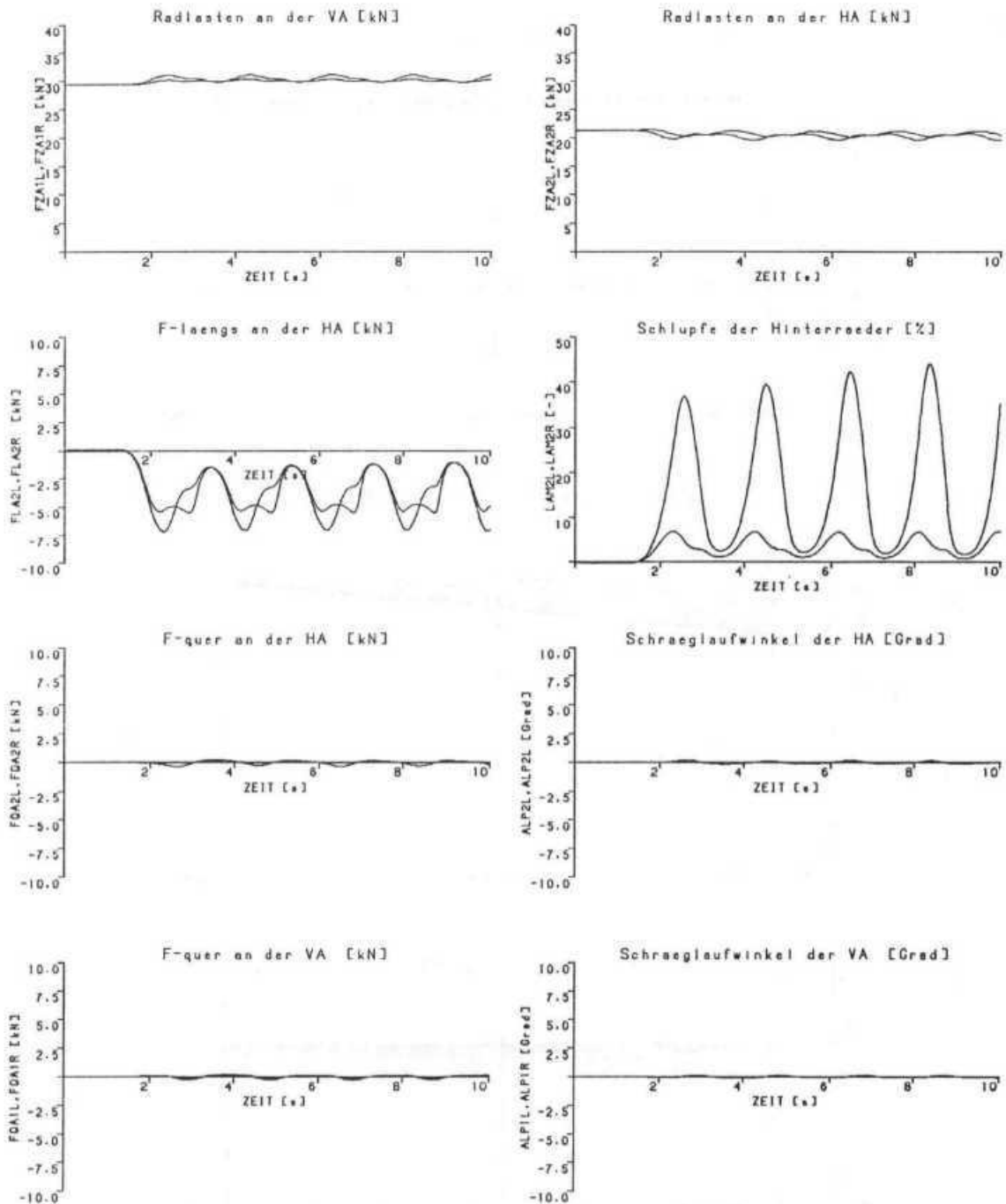
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (ll/re) = .24/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 4 / Rahmen 4

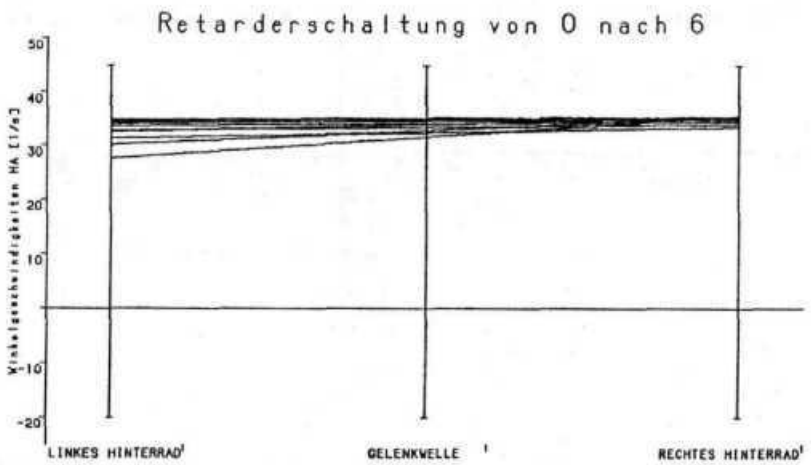
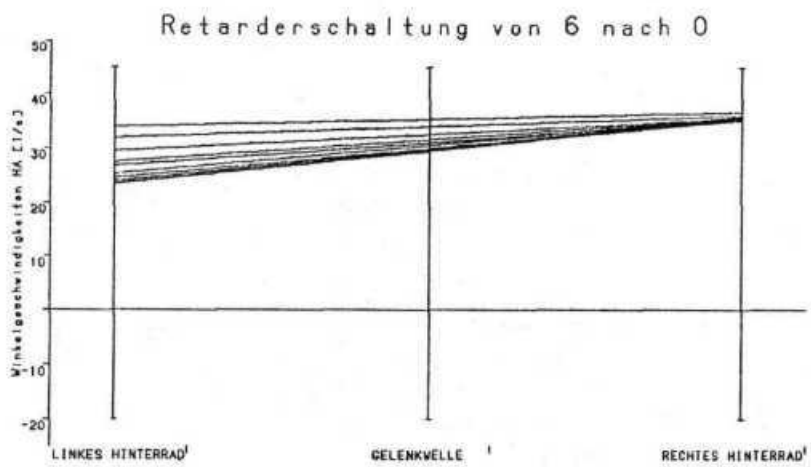
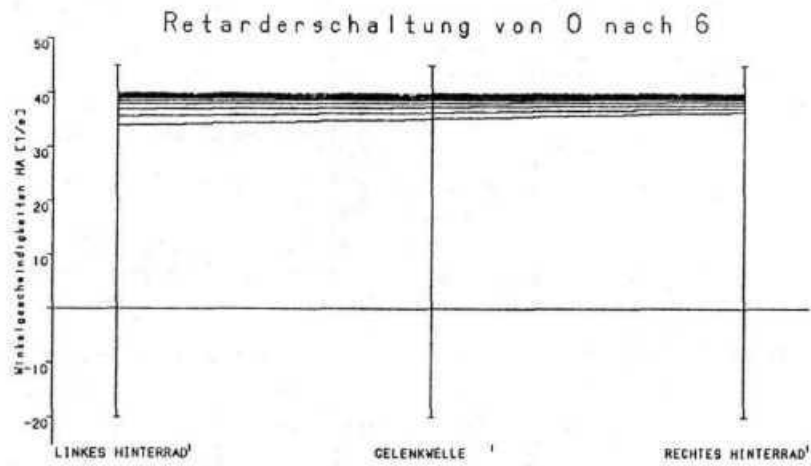


Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (ll/re) = .24/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus  
 Solofz. leer mit 1 Retarder  
 Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G4 - 4 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand DELTA-T = 0.2 sec

Parameterreihe **G5**

Variation<sup>1)</sup> **G5 - 1**

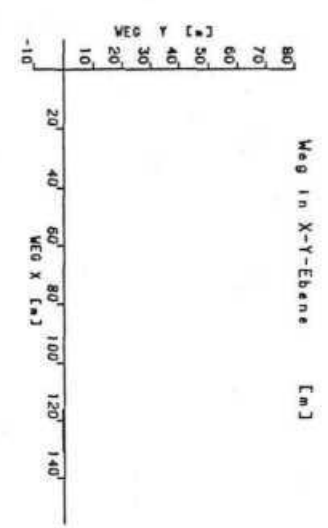
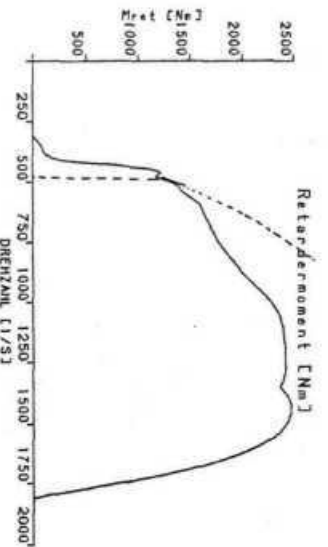
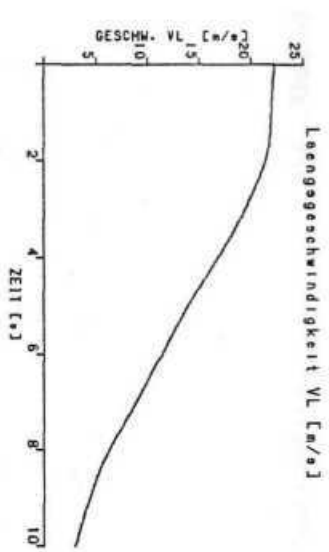
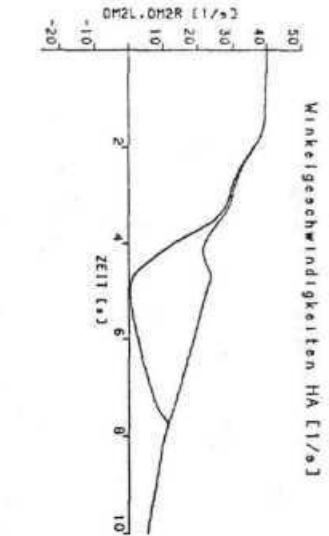
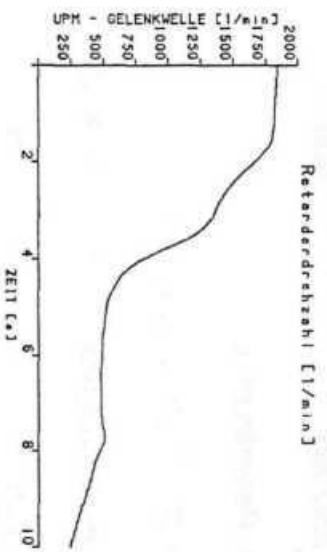
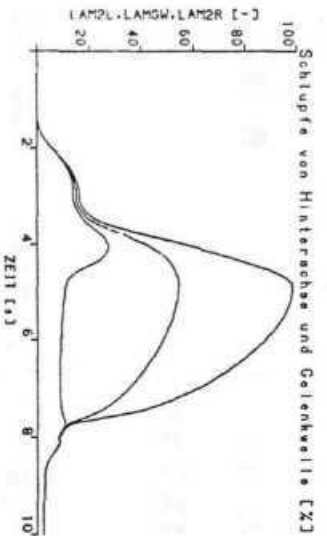
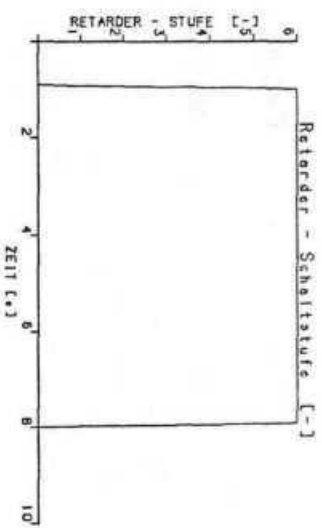
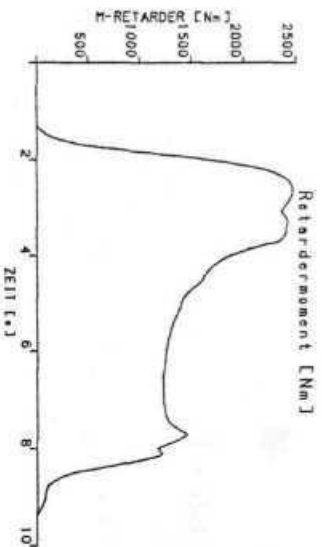
Fahrzeug:	<b>leer</b>		
1. Retarderstufe:		A - 4	B - 6
2. Betriebsbremsmoment:	<b>1000 Nm</b>		
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu =$	<b>0,48</b>	$\mu$ - Split = 0,24/0,48
Fahrmanöver:	<b>Geradeaus</b>		<b>Closed Loop</b>

(Quelle: Simulationskennung **SPL0647**)

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<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

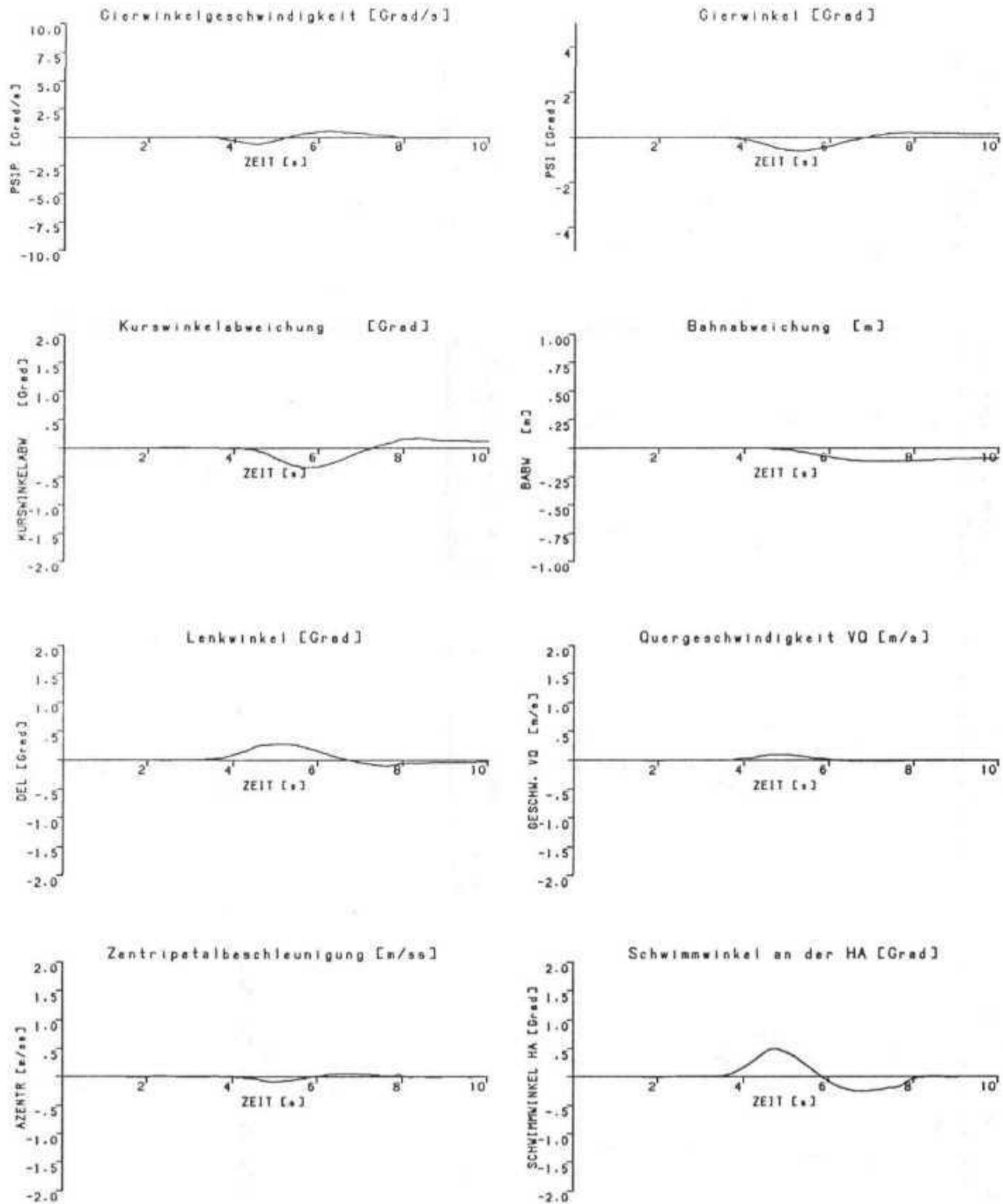
G5 - 1 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN  
 Fahrbahn: Gefaelle = 0.0 %  
 Querneigung = 0.0 %  
 mu (l/r/e) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder  
 Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe  
 Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

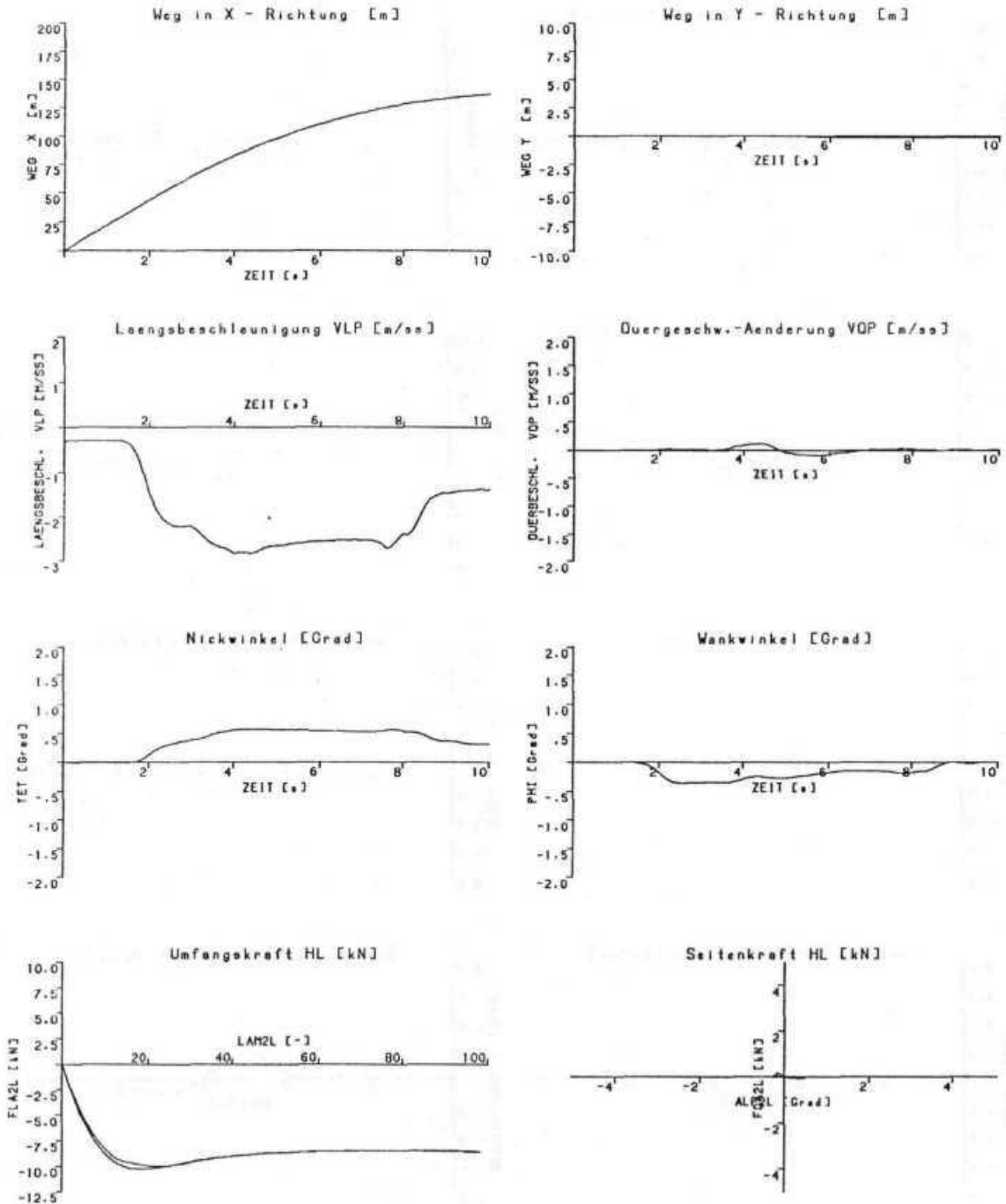
G5 - 1 / Rahmen 2



Retarder	: Typ B	Betriebsbremse (VA/HA)	: 1500./1000. Nm
Schaltstufe (n)	: 6-0	Bremsbeginn	: 3.0 sec
ABV	: NEIN	Verlauf	: Rampe
Fahrbahn: Gefaele	= 0.0 %	Querneigung	= 0.0 %
mu (ll/re)	= .48/.48		

Anfangsgeschw.:	80.0 Km/h	Closed Loop	
Fahrmanoever	: geradeaus,	stat. Achslasten (VA/HA)	: 58.9/ 42.6 kN
Solofz. leer mit 1 Retarder			

G5 - 1 / Rahmen 3

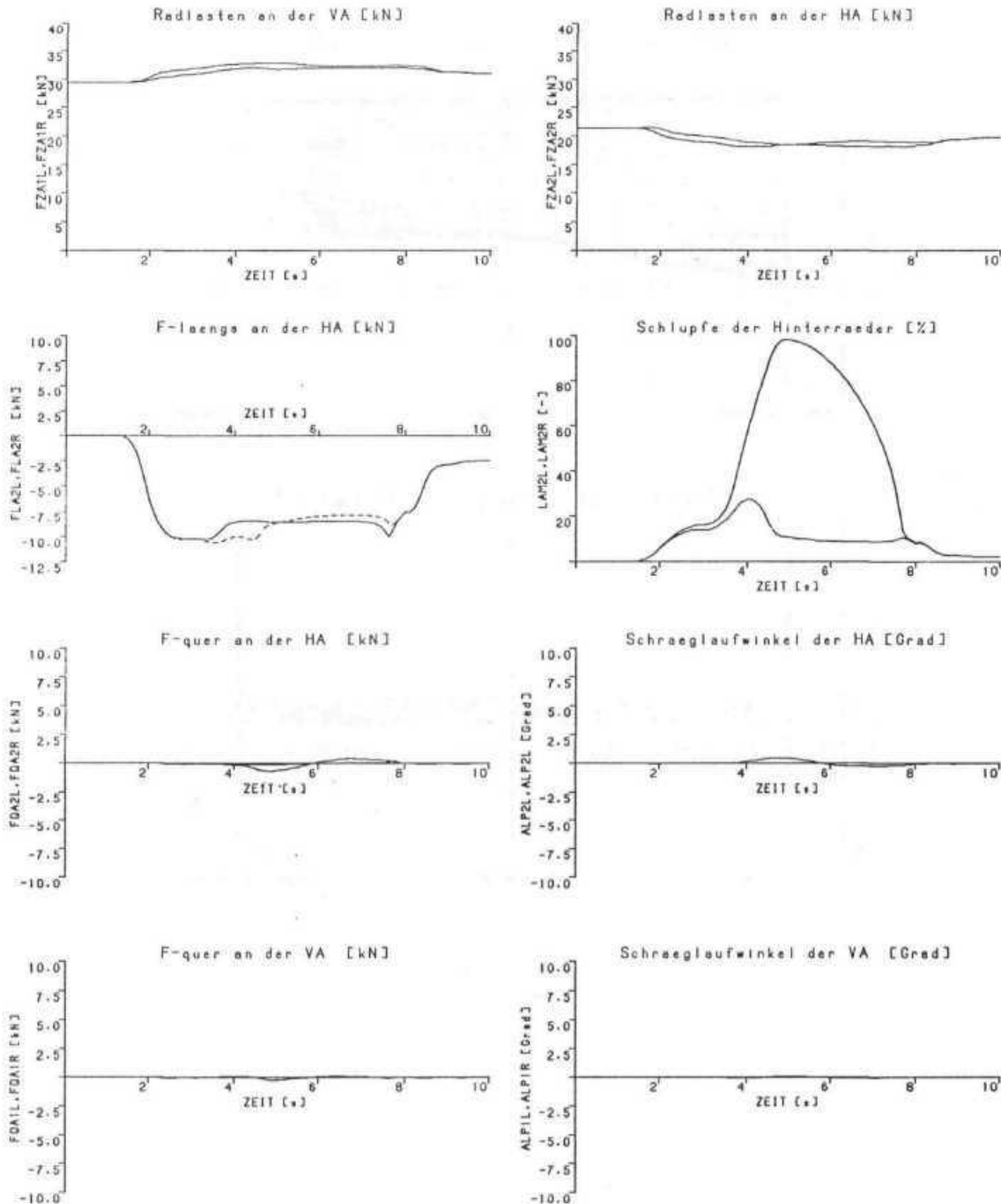


Retarder	: Typ B	Betriebsbremse (VA/HA)	: 1500./1000. Nm
Schaltstufe (n)	: 6-0	Bremsbeginn	: 3.0 sec
ABV	: NEIN	Verlauf	: Rampe
Fahrbahn: Gefaelle	= 0.0 %	Querneigung	= 0.0 %
mu (ll/re)	= .48/.48		

Anfangsgeschw.:	80.0 Km/h	Closed Loop	
Fahrmanoever	: geradeaus	stat. Achslasten (VA/HA)	: 58.9/ 42.6 kN
Solofz. leer mit 1 Retarder			



## G5 - 1 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

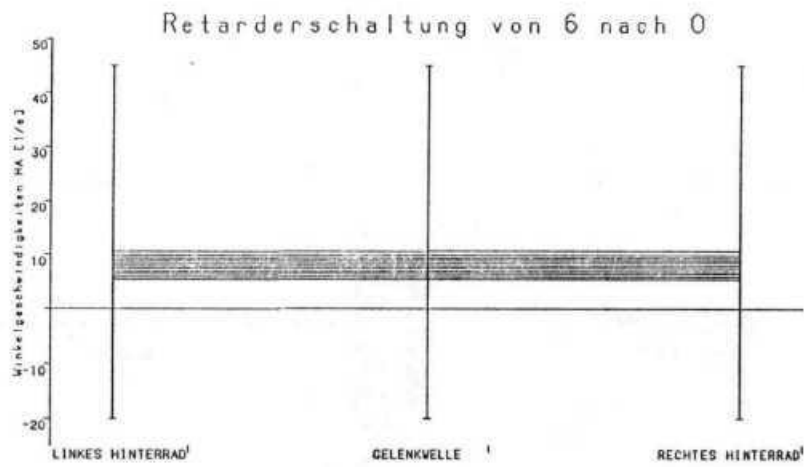
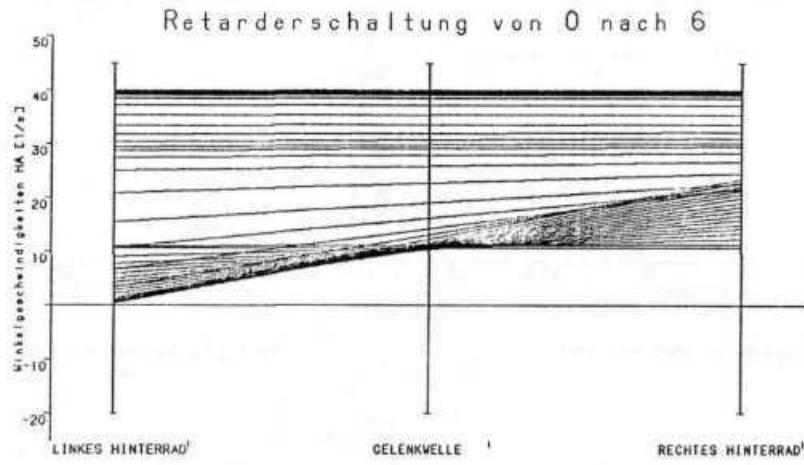
Fahrbahn: Gefaelle = 0.0 %  
 $\mu_{re}$  (ll/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **G5**

Variation<sup>2)</sup> **G5 - 2**

Fahrzeug: **leer**

1. Betriebsbremsmoment: **1000 Nm**

2. Retarderstufe: | **A - 4** | | **B - 6**

Geschwindigkeit: **80 km/h**

Fahrbahn:  $\mu =$  **0,48** |  $\mu$  - Split = 0,24/0,48

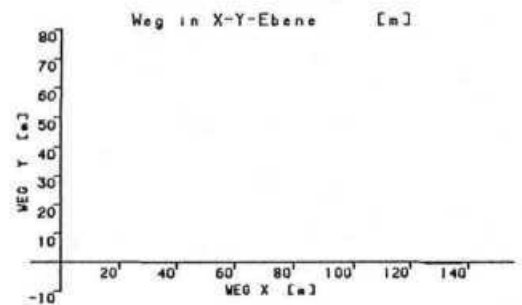
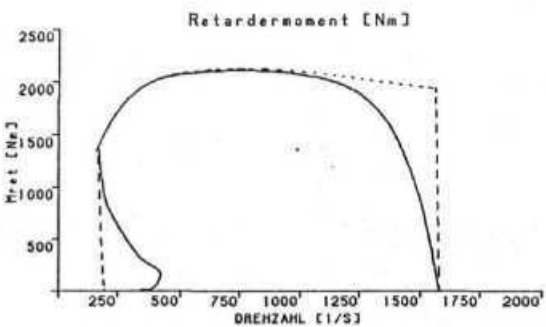
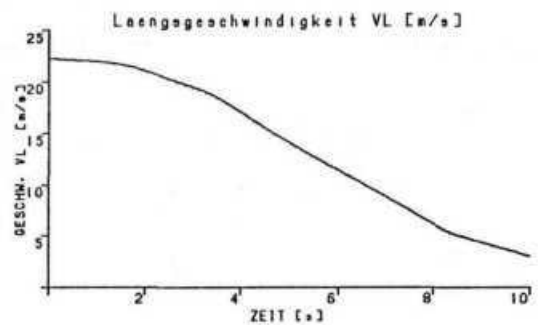
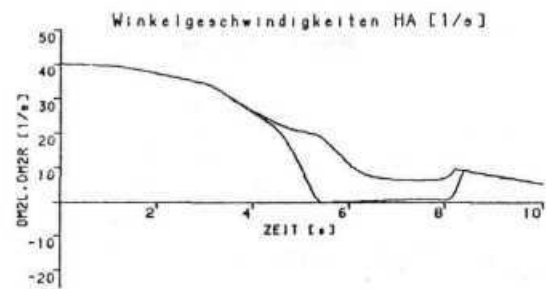
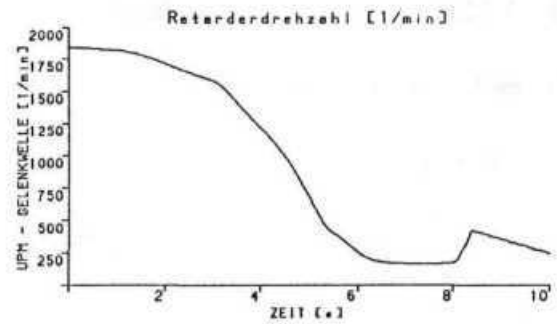
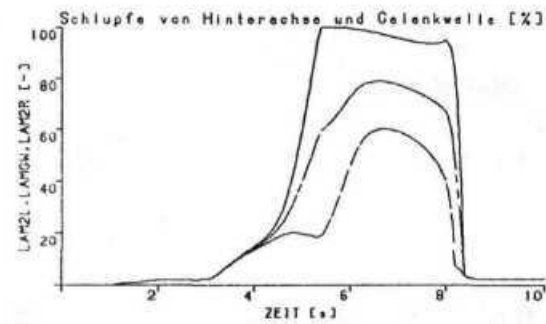
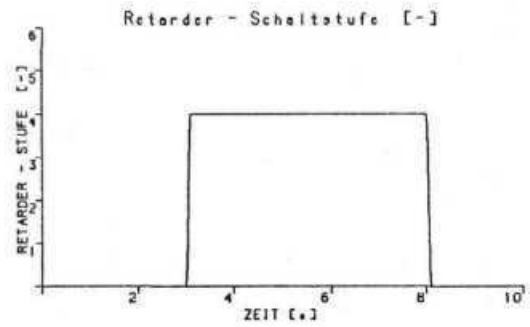
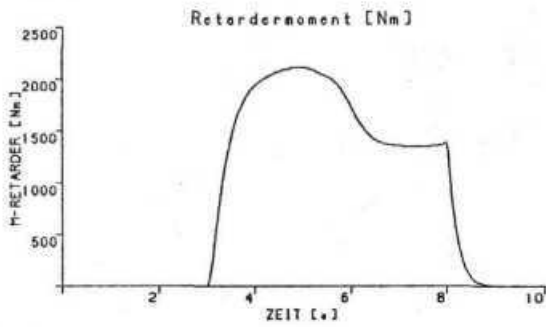
Fahrmanöver: **Geradeaus** **Closed Loop**

(Quelle: Simulationskennung SPL0645)

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<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G5 - 2 / Rahmen 1



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

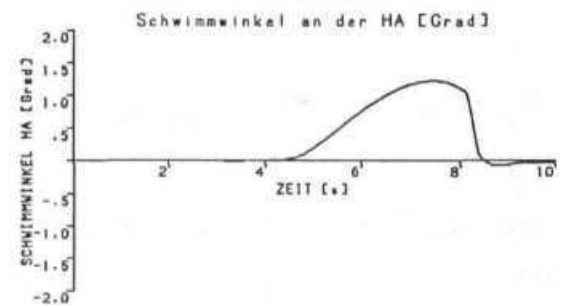
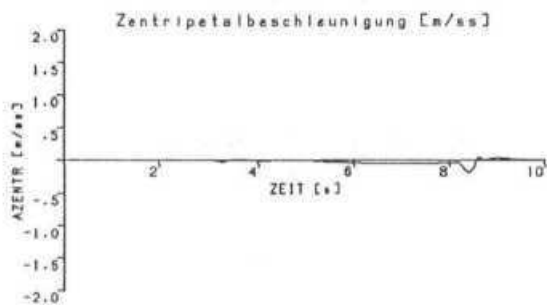
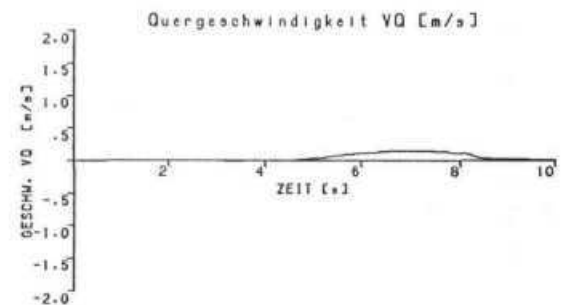
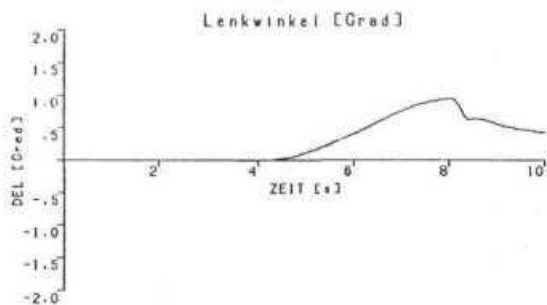
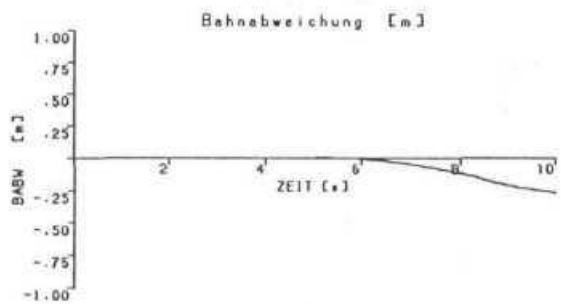
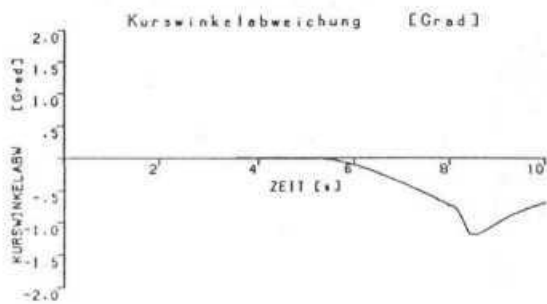
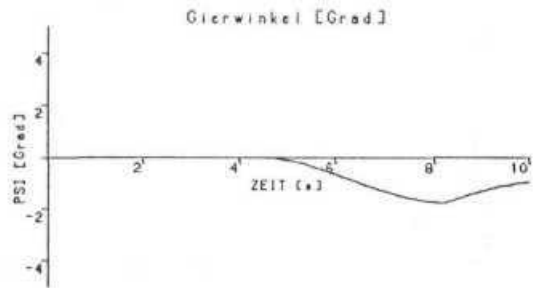
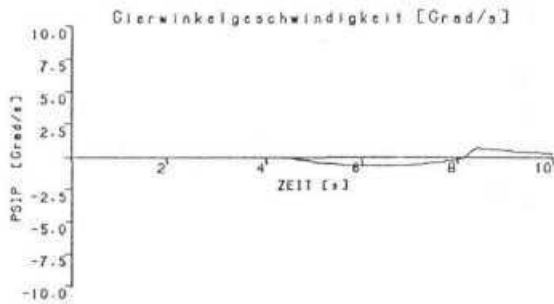
Fahrbahn: Gefaelle = 0.0 %  
 mue (li/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 2 / Rahmen 2



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

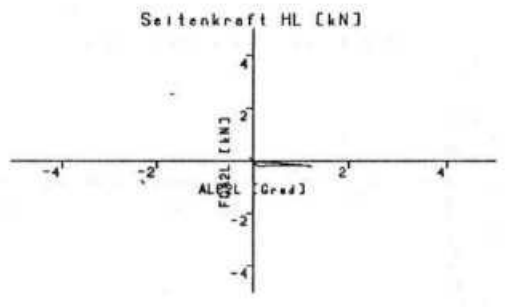
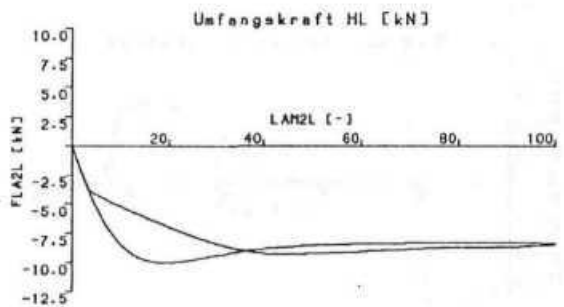
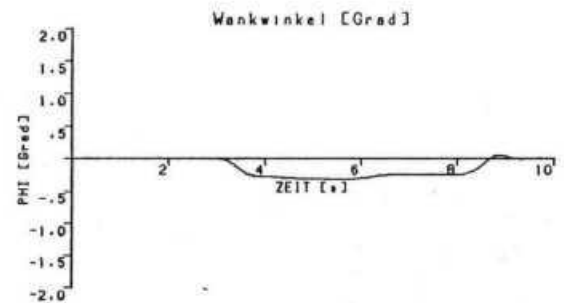
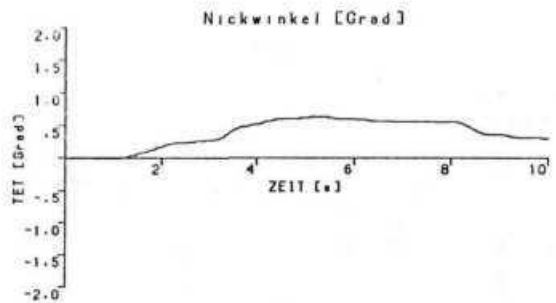
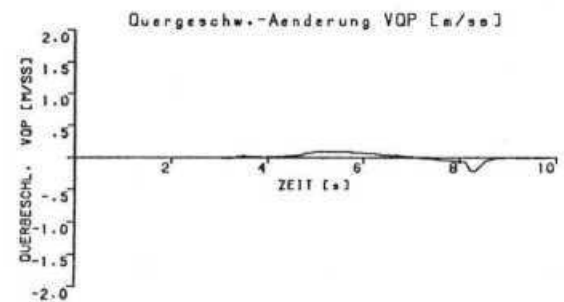
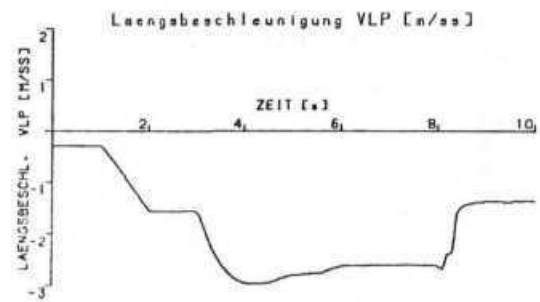
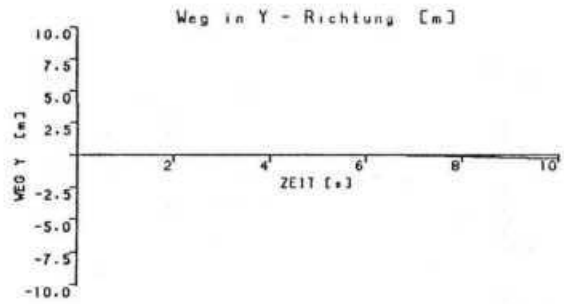
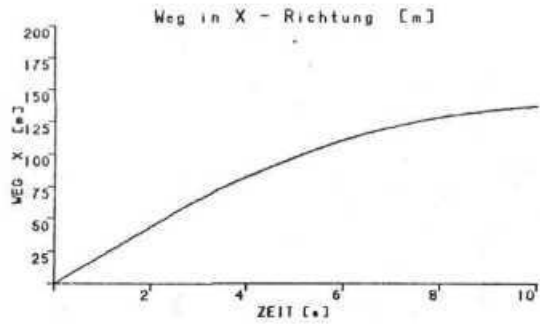
Fahrbahn: Gefaelle = 0.0 %  
 mue (li/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 2 / Rahmen 3



Retarder : Typ A  
 Schaltstufe(n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

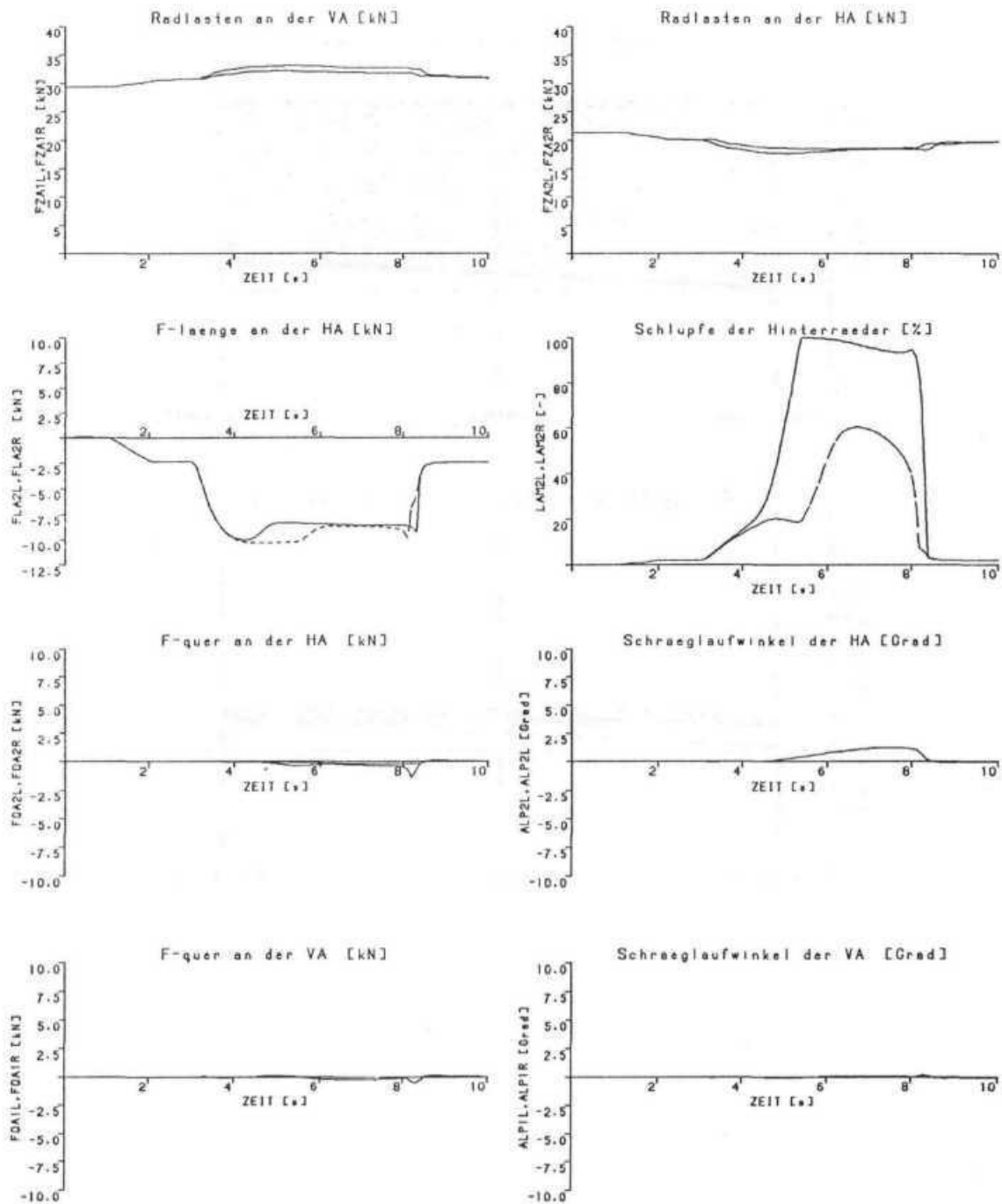
Fahrbahn: Gefaelle = 0.0 %  
 mue (li/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G5 - 2 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

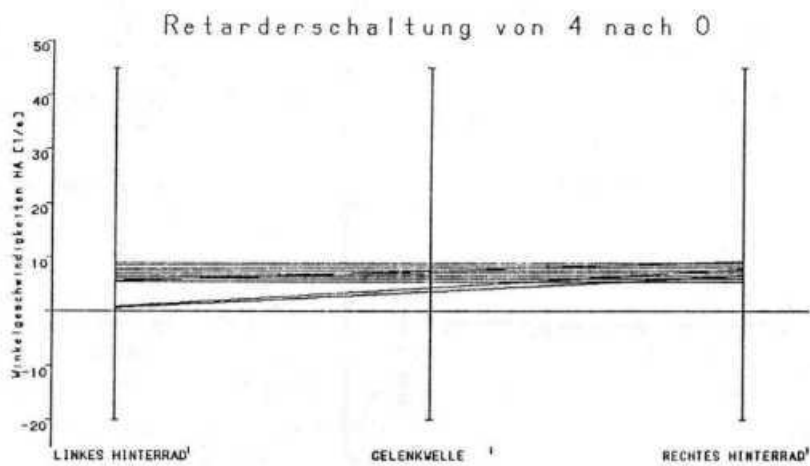
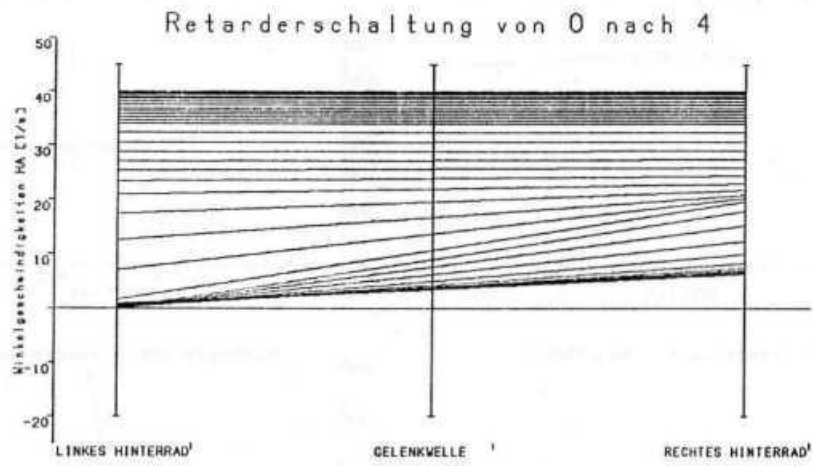
Fahrbahn: Gefälle = 0.0 %  
 $\mu_{re}$  (li/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanöver : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 2 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand DELTA-T = 0.2 sec



Parameterreihe **G5**

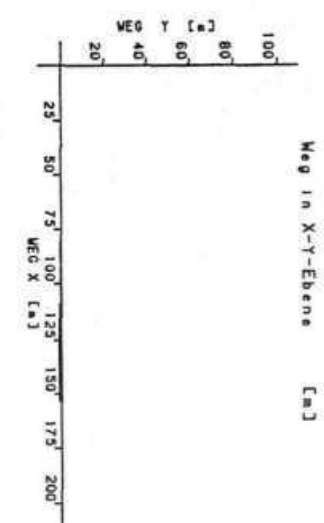
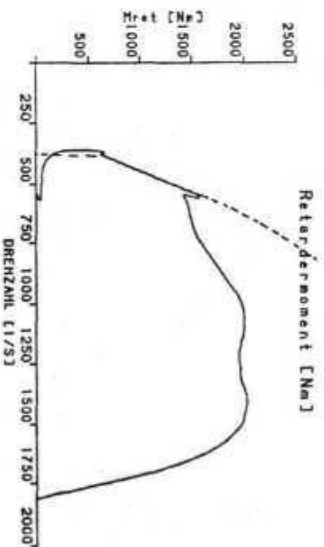
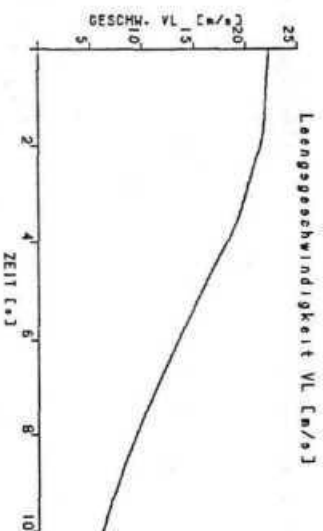
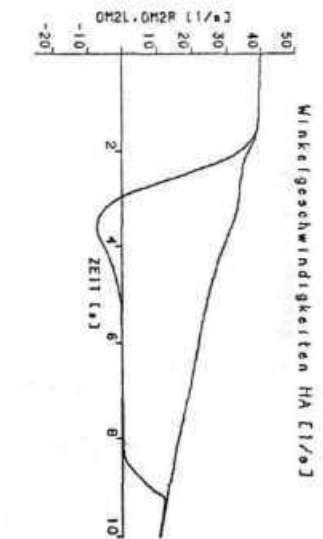
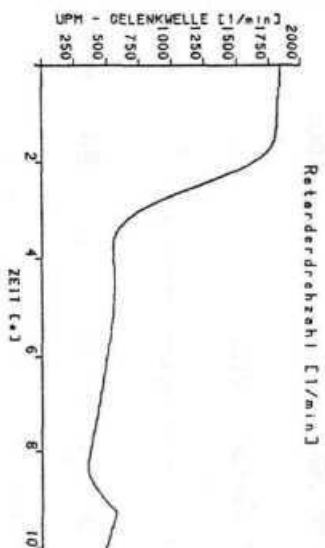
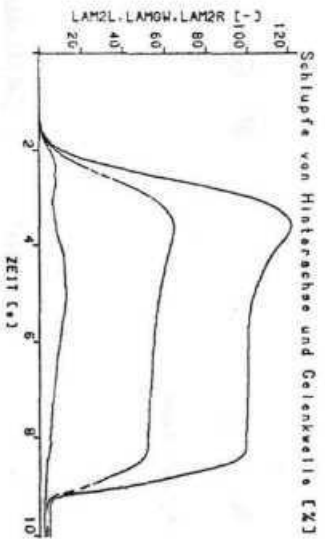
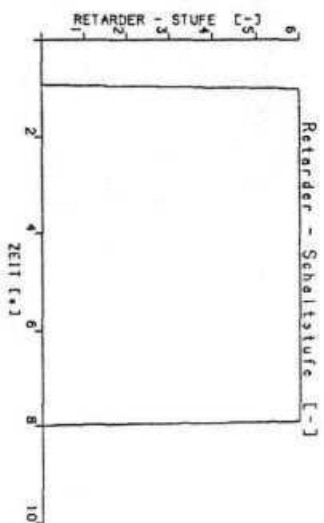
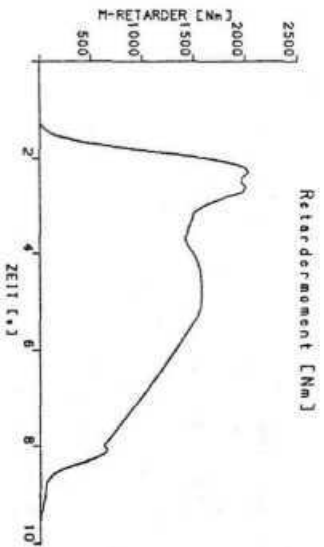
Variation<sup>3)</sup> **G5 - 3**

Fahrzeug:	<b>leer</b>		
1. Retarderstufe:		A - 4	B - 6
2. Betriebsbremsmoment:	<b>1000 Nm</b>		
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu =$	0,48	$\mu$ - Split = 0,24/0,48
Fahrmanöver:	<b>Geradeaus</b>		<b>Closed Loop</b>

(Quelle: Simulationskennung **SPL0638**)

<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G5 - 3 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

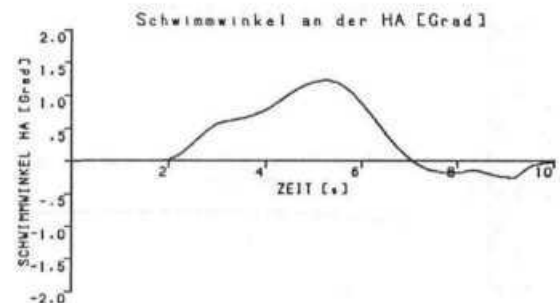
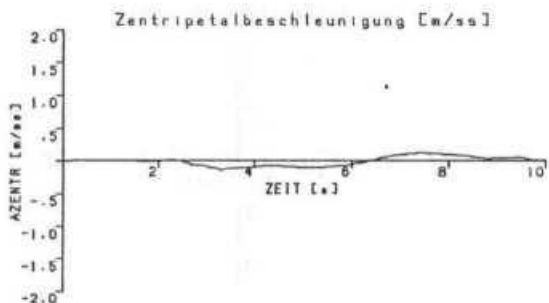
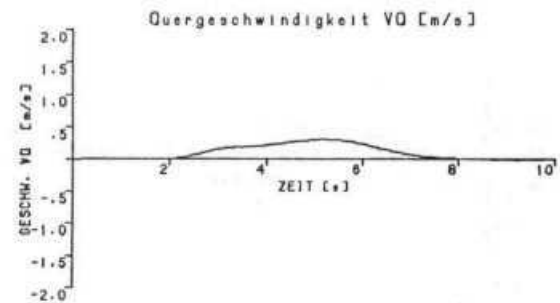
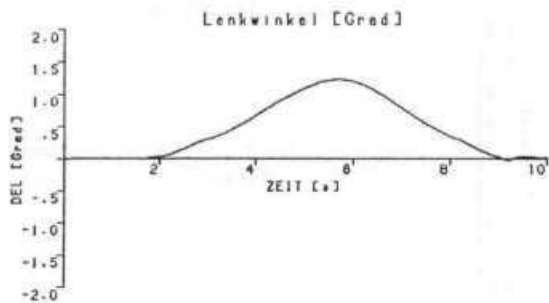
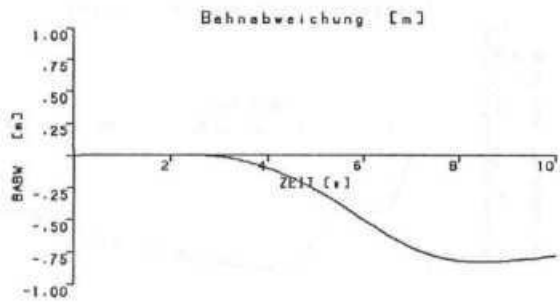
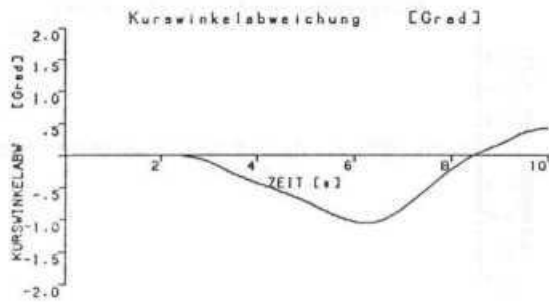
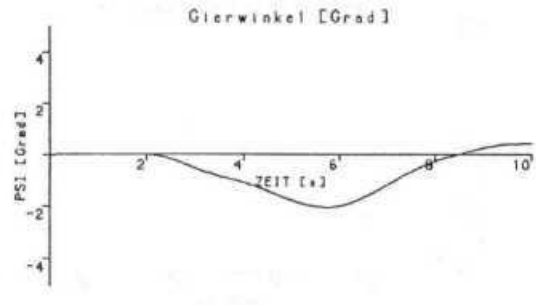
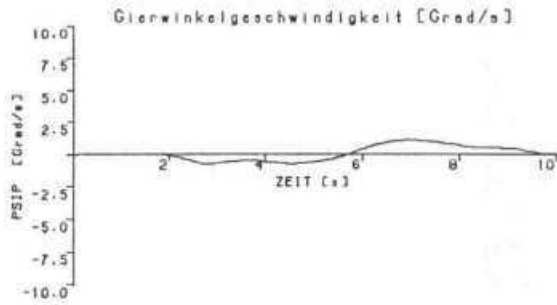
Fahrbahn: Gefaelle = 0.0 %  
 mu (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 3 / Rahmen 2



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

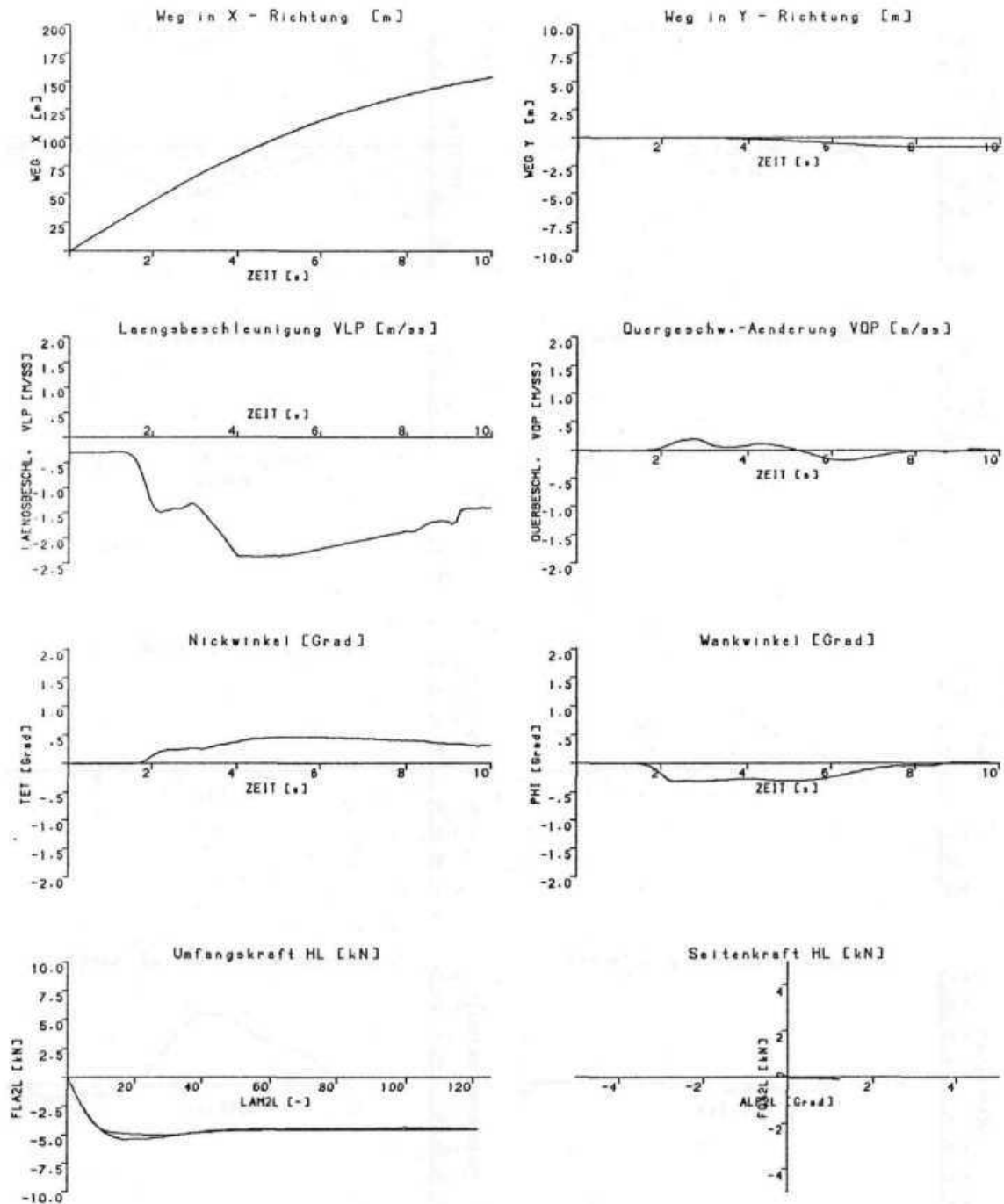
Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

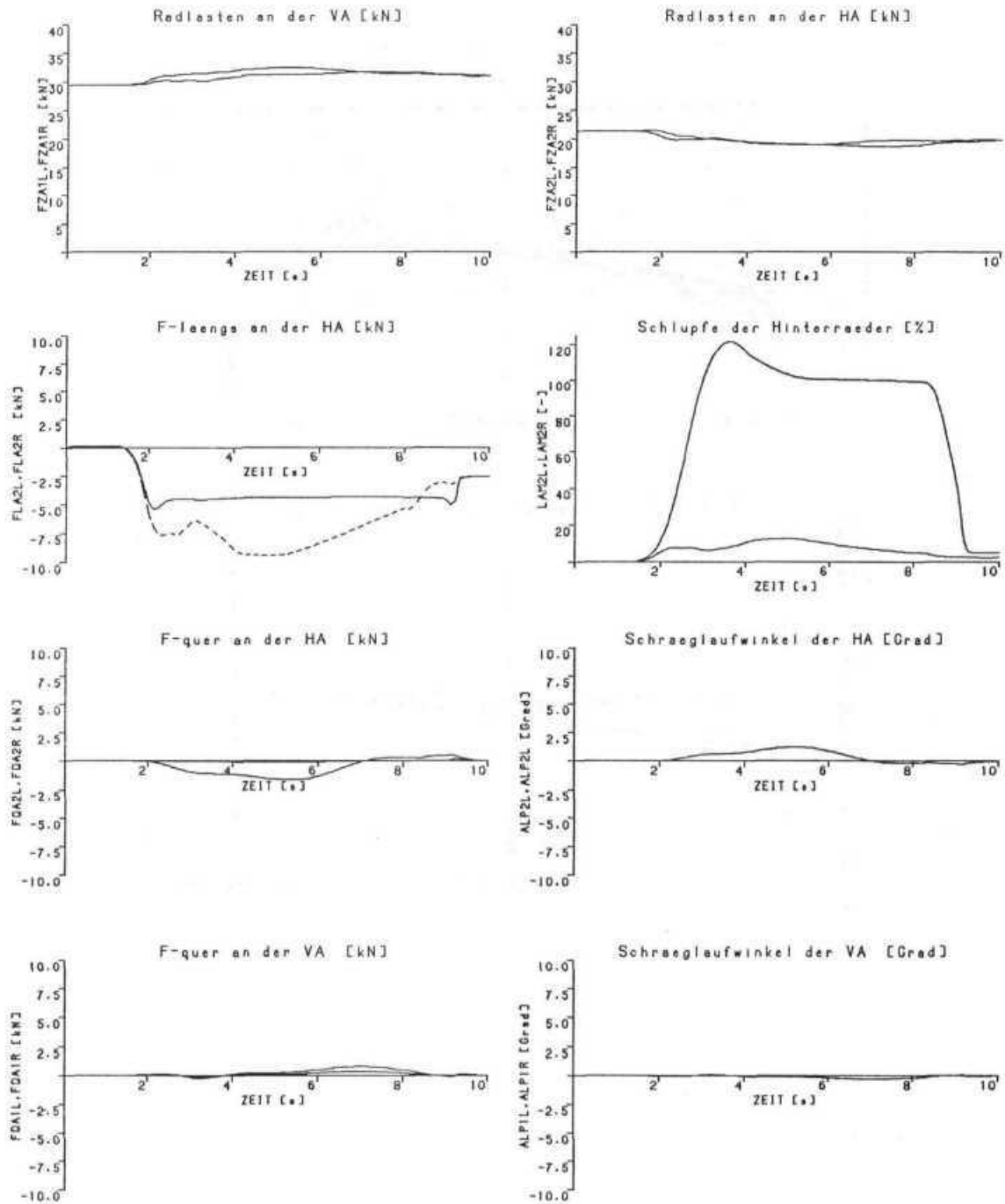
G5 - 3 / Rahmen 3



Retarder : Typ B	Betriebsbremse (VA/HA) : 1500./1000. Nm
Schaltstufe (n) : 6-0	Bremsbeginn : 3.0 sec
ABV : NEIN	Verlauf : Rampe
Fahrbahn: Gefaelle = 0.0 %	Querneigung = 0.0 %
mue (li/re) = -24/.48	

Anfangsgeschw. : 80.0 Km/h	Closed Loop
Fahrmanoever : geradeaus,	stat. Achslasten (VA/HA) : 58.9/ 42.6 kN
Solofz. leer mit 1 Retarder	

## G5 - 3 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

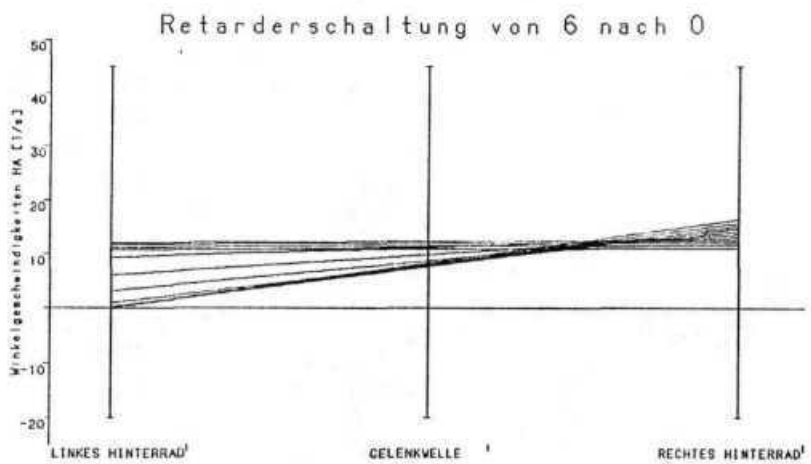
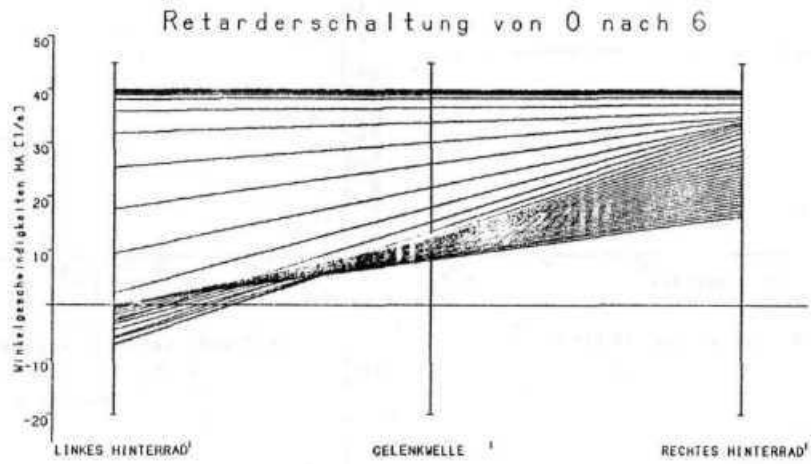
Fahrbahn: Gefälle = 0.0 %  
 $\mu_{re}$  (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 3 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

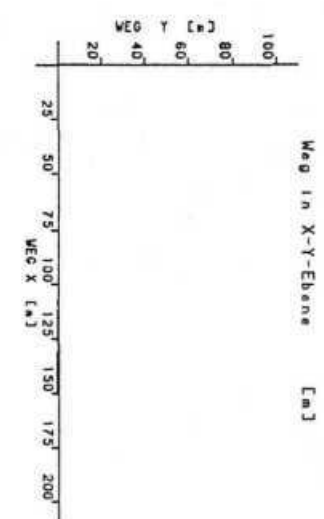
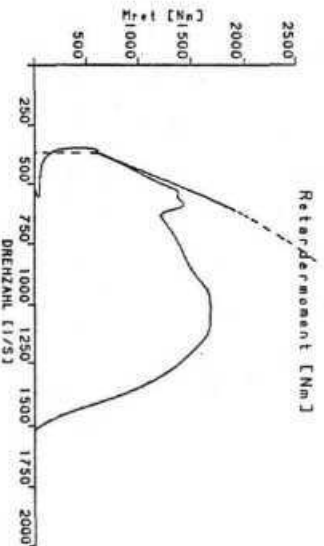
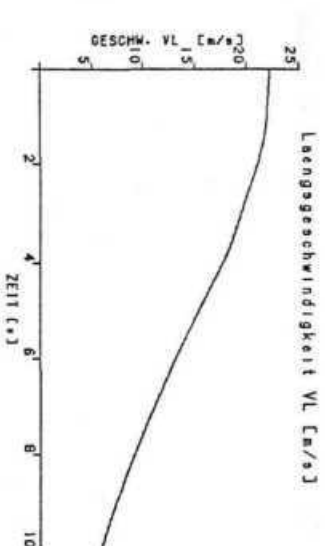
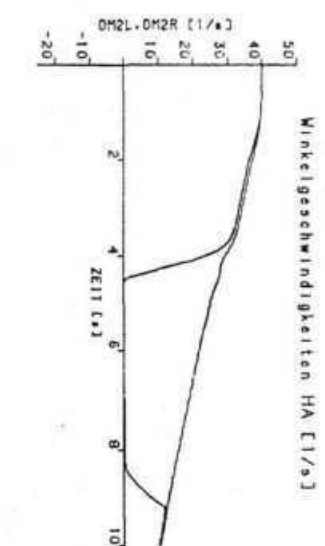
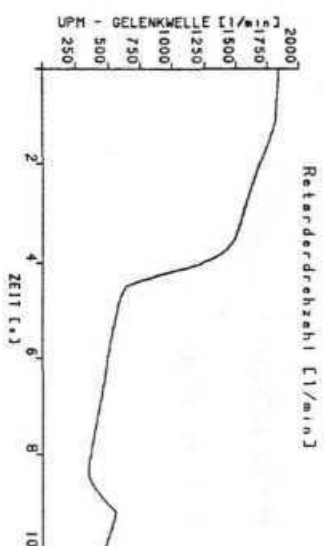
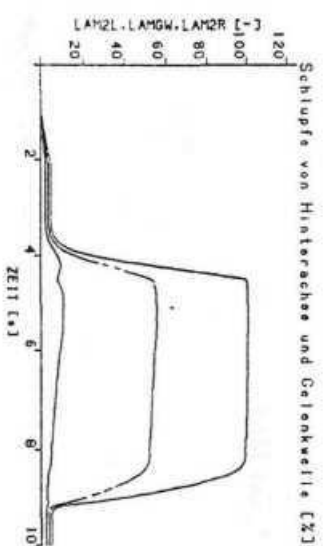
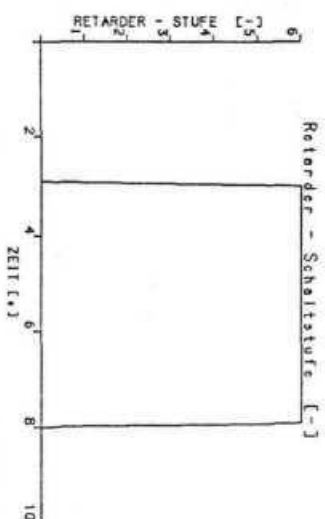
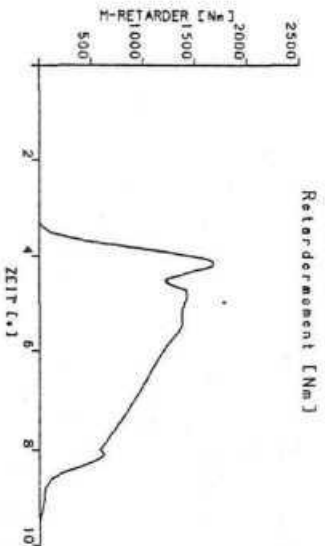
Parameterreihe **G5**Variation<sup>4)</sup> **G5 - 4**

Fahrzeug:	<b>leer</b>		
1. Betriebsbremsmoment:	<b>1000 Nm</b>		
2. Retarderstufe:	A - 4		B - 6
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu =$ 0,48	$\mu$ - Split =	<b>0,24/0,48</b>
Fahrmanöver:	<b>Geradeaus</b>		<b>Closed Loop</b>

(Quelle: Simulationskennung SPL0641)

<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G5 - 4 / Rahmen 1



Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
Bremsbeginn : 1.0 sec  
Verlauf : Rampe

Fahrbahn: Gefaelle = 0.0 %  
mue ((1/r\_e)) = .24/.48

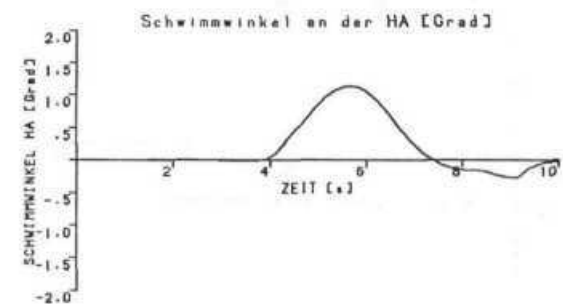
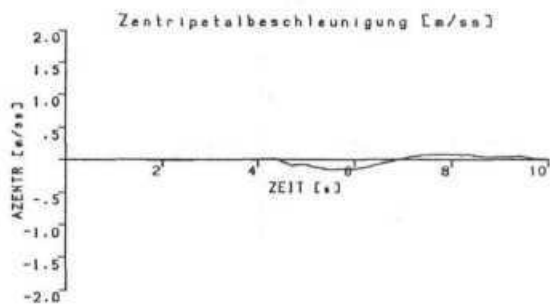
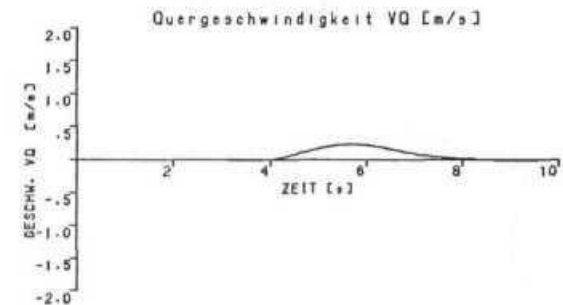
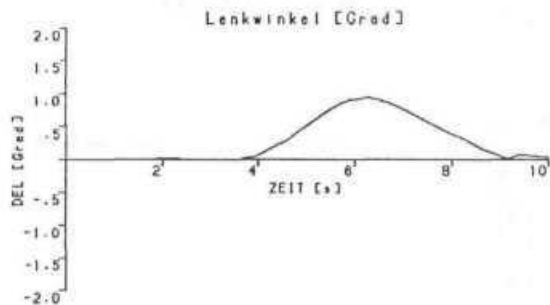
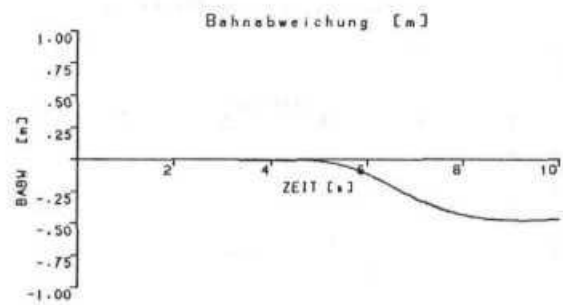
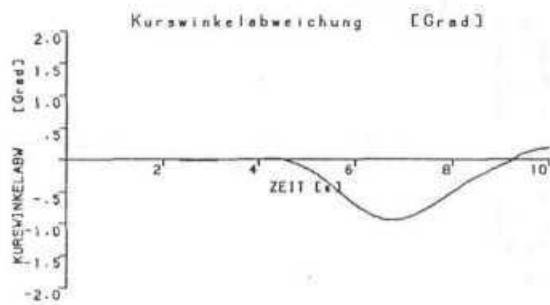
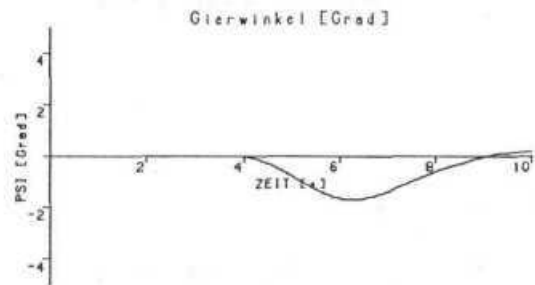
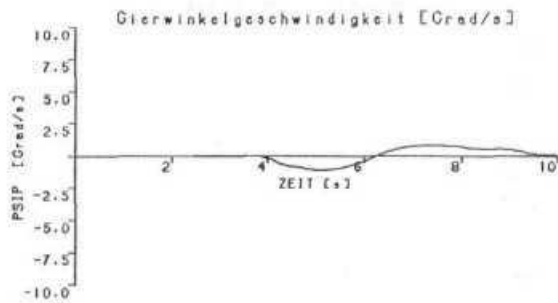
Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
Fahrmanoevr : geradeaus.  
Soflofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



## G5 - 4 / Rahmen 2



Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
Bremsbeginn : 1.0 sec  
Verlauf : Rampe

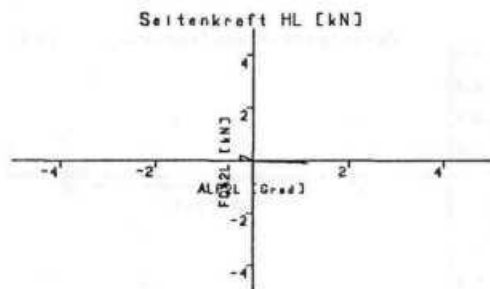
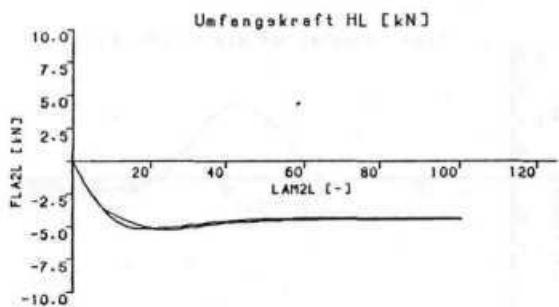
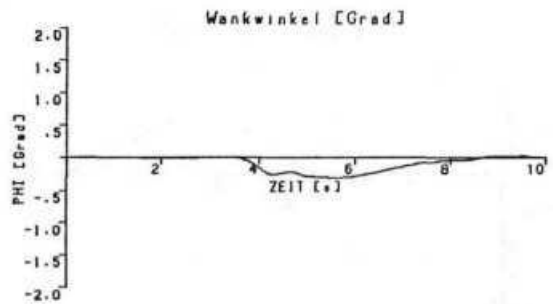
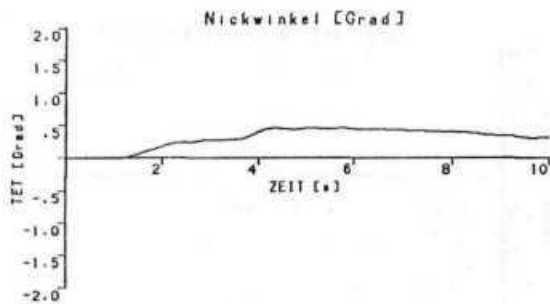
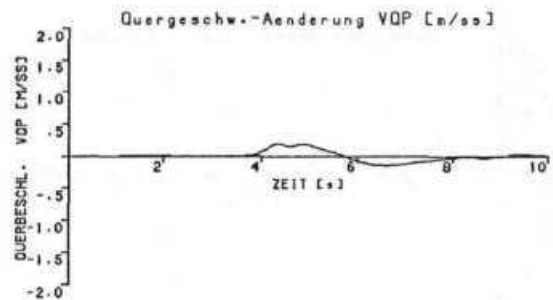
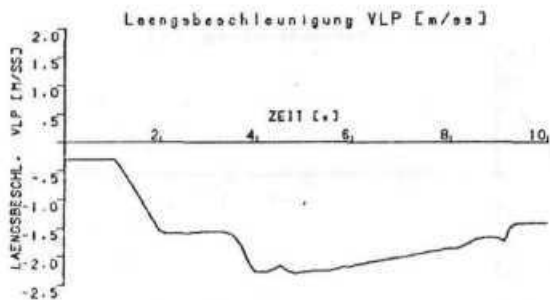
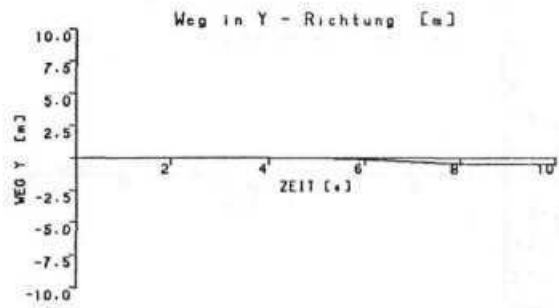
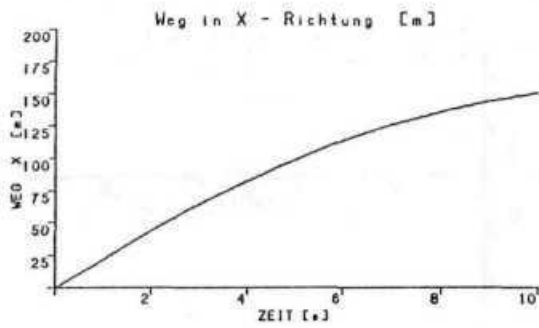
Fahrbahn: Gefaelle = 0.0 %  
mue (li/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : geradeaus,  
Solofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 4 / Rahmen 3



Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
Bremsbeginn : 1.0 sec  
Verlauf : Rampe

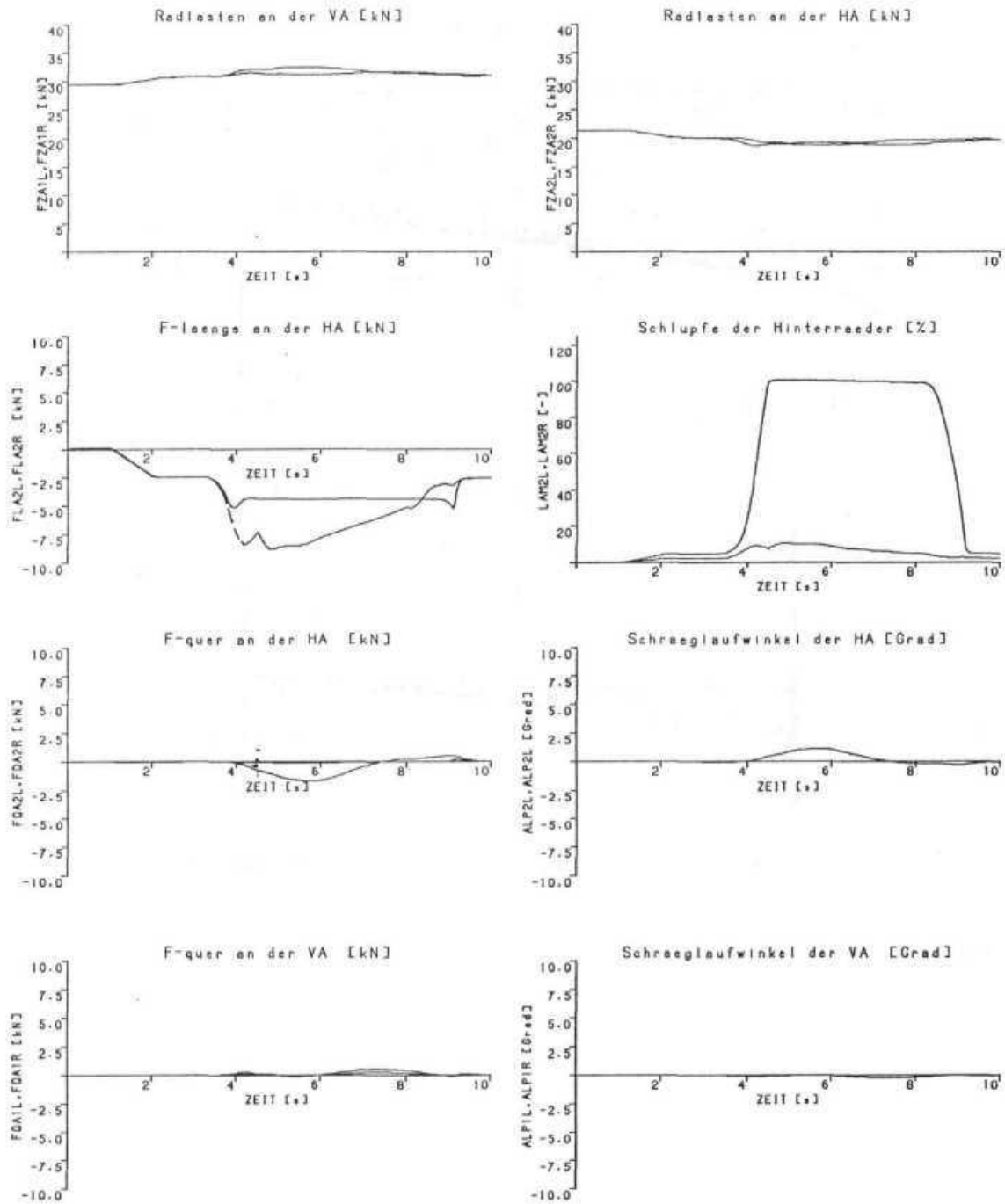
Fahrbahn: Gefaelle = 0.0 %  
mue (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : geradeaus,  
Solofz. leer mit 1 Retarder

Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## G5 - 4 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

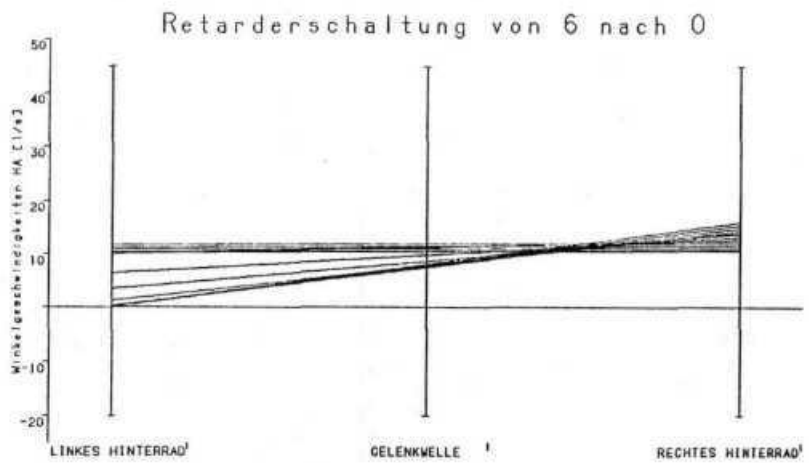
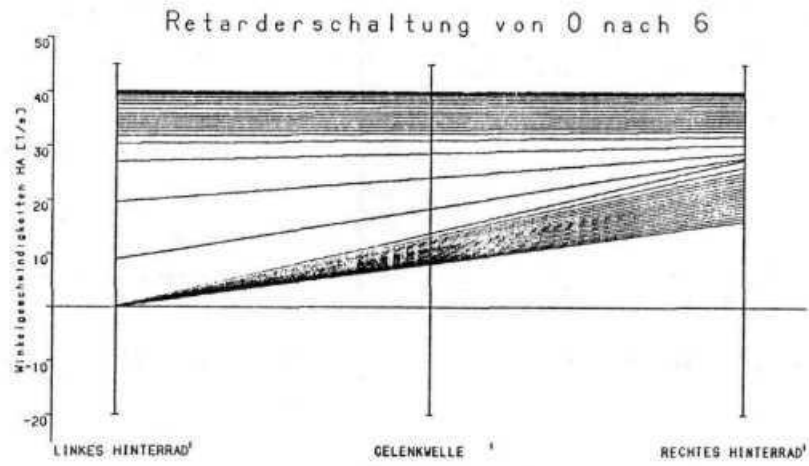
Fahrbahn: Gefälle = 0.0 %  
 $\mu_{re}$  (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 4 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **G5**

Variation<sup>5)</sup> **G5 - 5**

Fahrzeug: **leer**

1. Retarderstufe: | **A - 4** | | B - 6

2. Betriebsbremsmoment: **1000 Nm**

Geschwindigkeit: **80 km/h**

Fahrbahn:  $\mu =$  0,48 |  $\mu$  - Split = **0,24/0,48**

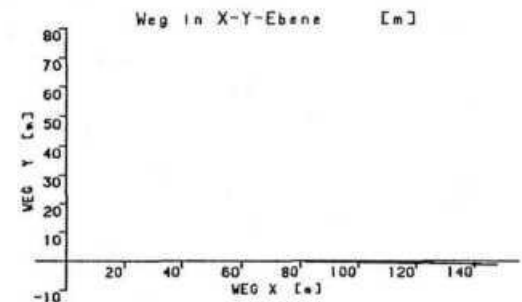
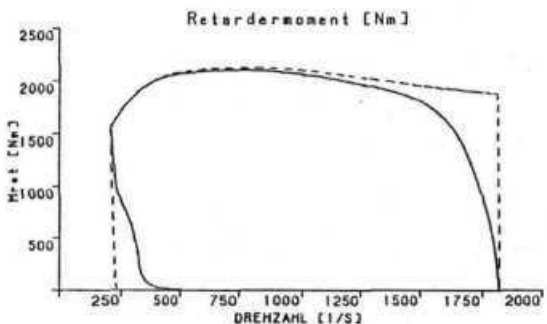
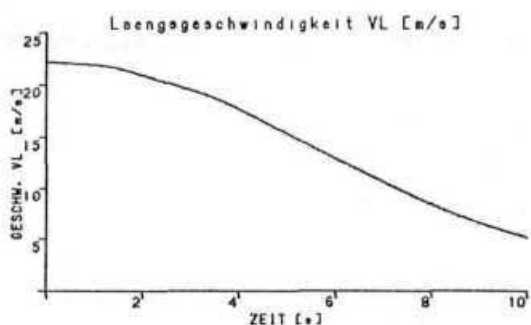
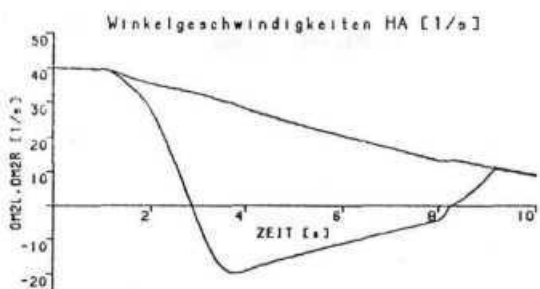
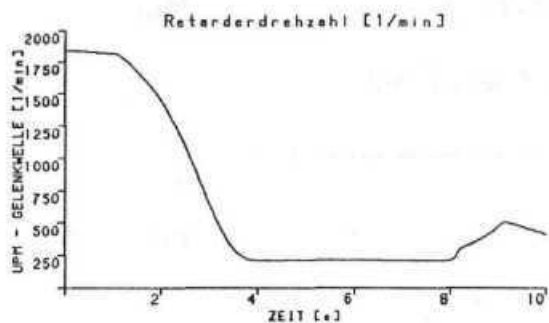
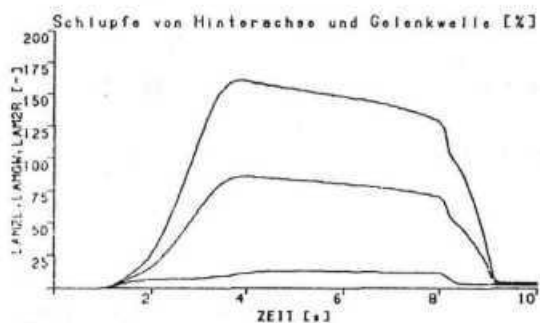
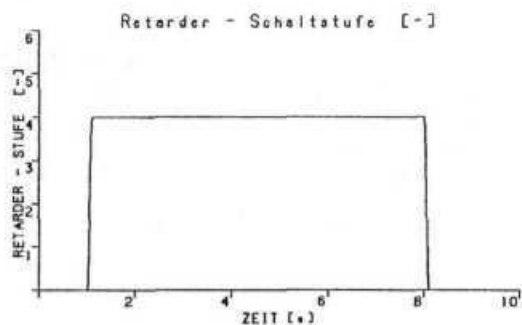
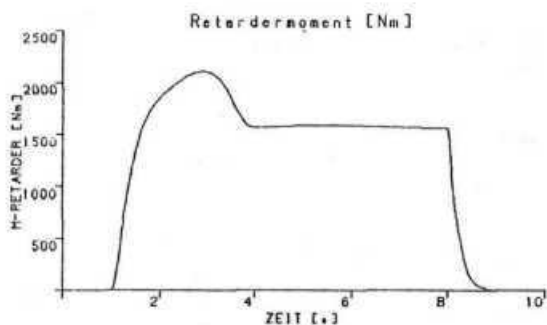
Fahrmanöver: **Geradeaus** **Closed Loop**

(Quelle: Simulationskennung SPL0635)

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<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G5 - 5 / Rahmen 1



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

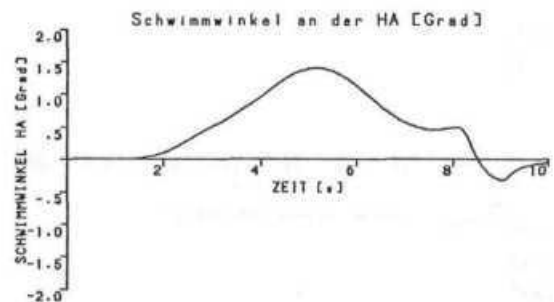
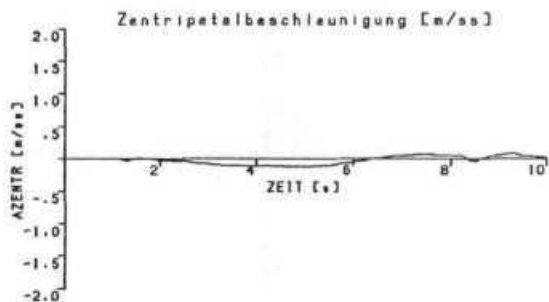
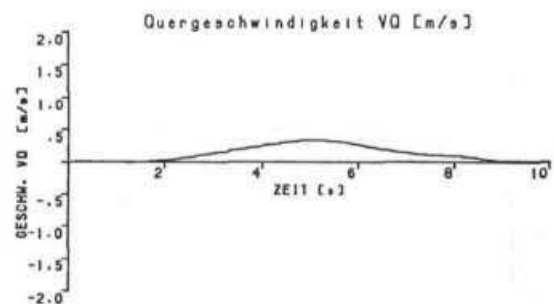
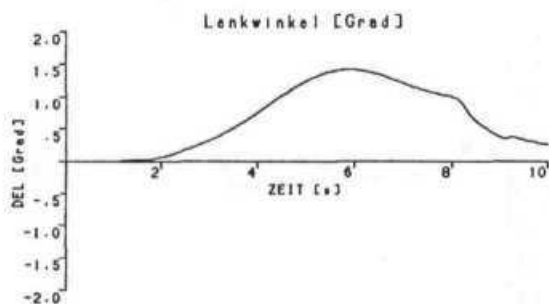
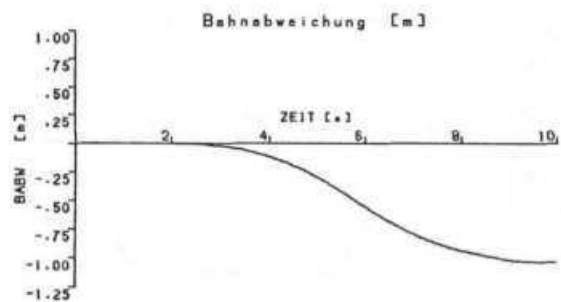
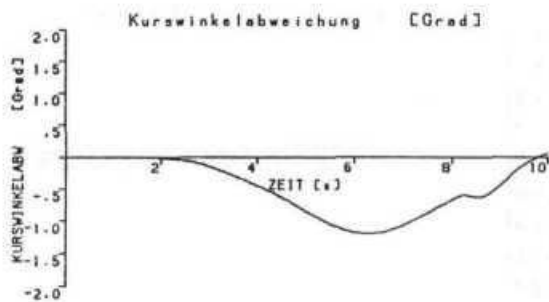
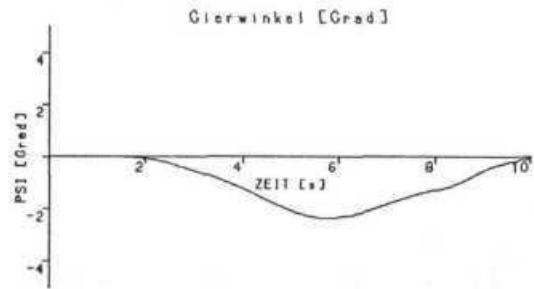
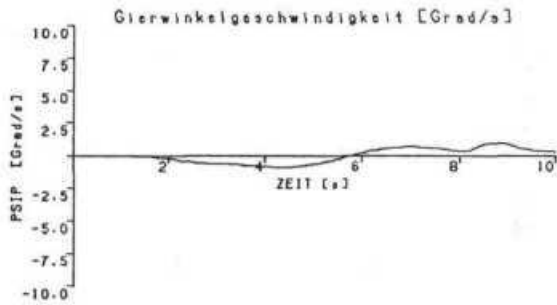
Fahrbahn: Gefaelle = 0.0 %  
 mu (l/r) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 5 / Rahmen 2



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

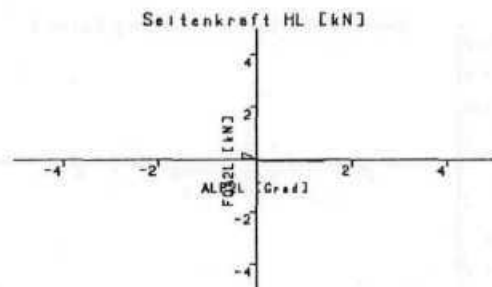
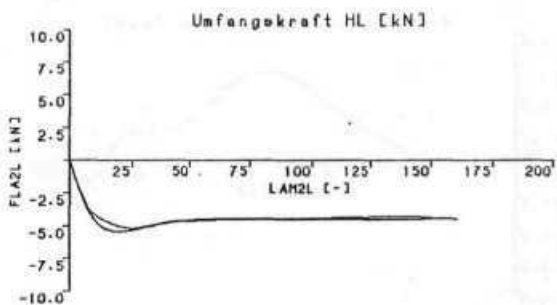
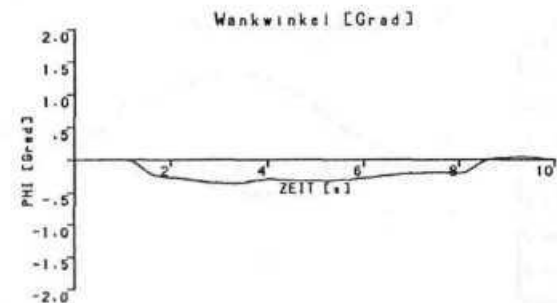
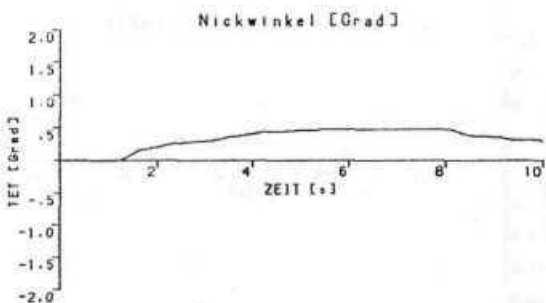
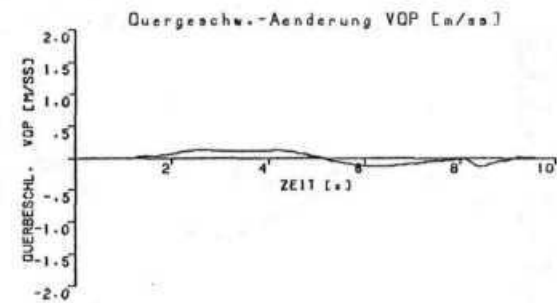
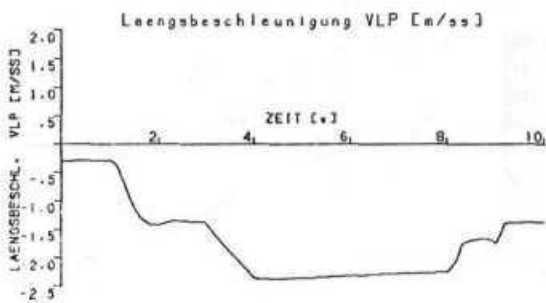
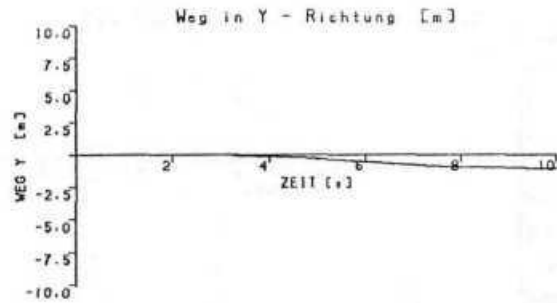
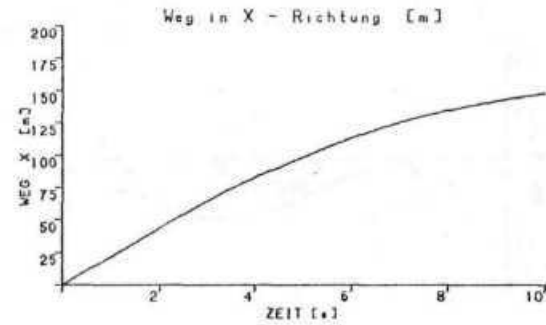
Fahrbahn: Gefaelle = 0.0 %  
 mu (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 5 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .24/.48

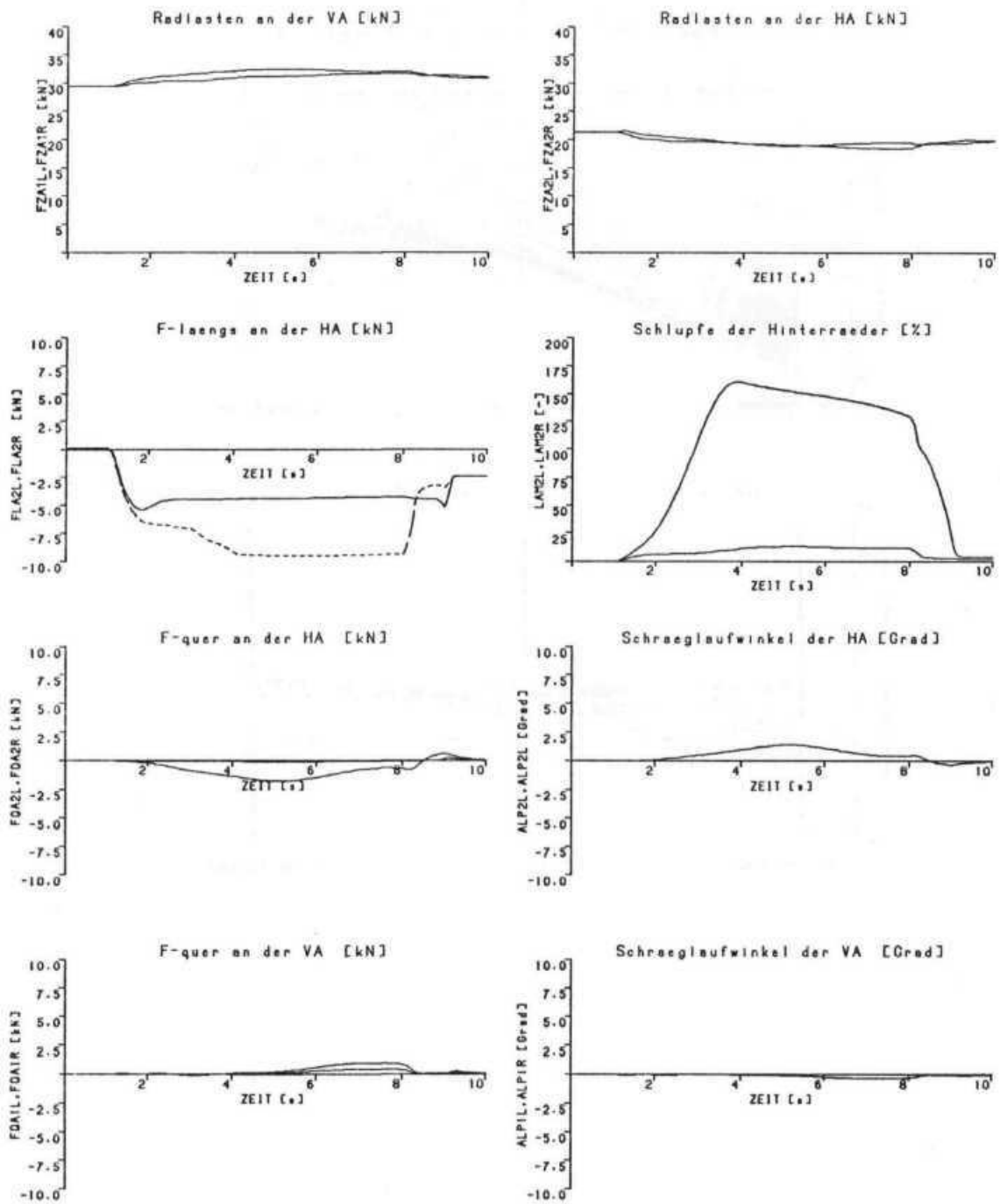
Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



G5 - 5 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 3.0 sec  
 Verlauf : Rampe

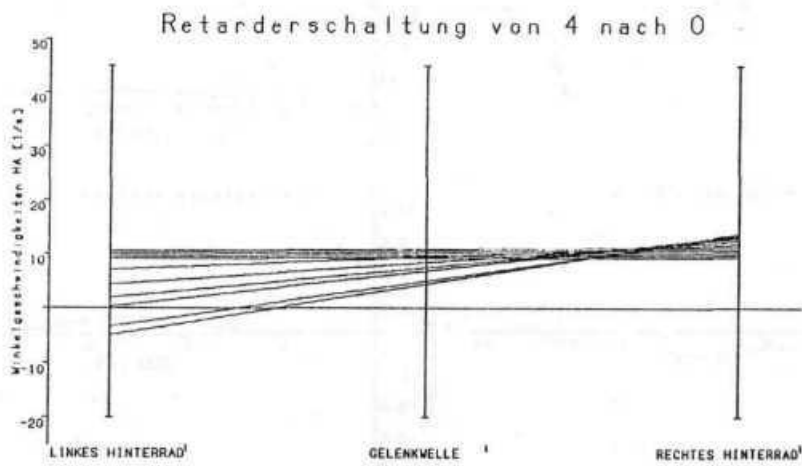
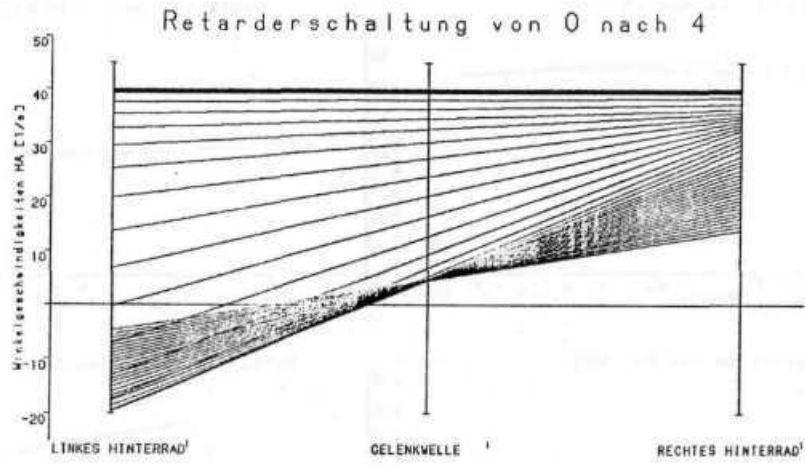
Fahrbahn: Gefaelle = 0.0 %  
 mu (li/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 5 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **G5**

Variation<sup>6)</sup> **G5 - 6**

Fahrzeug: **leer**

1. Betriebsbremsmoment: **1000 Nm**

2. Retarderstufe: | **A - 4** | | **B - 6**

Geschwindigkeit: **80 km/h**

Fahrbahn:  $\mu =$  **0,48** |  $\mu$  - Split = **0,24/0,48**

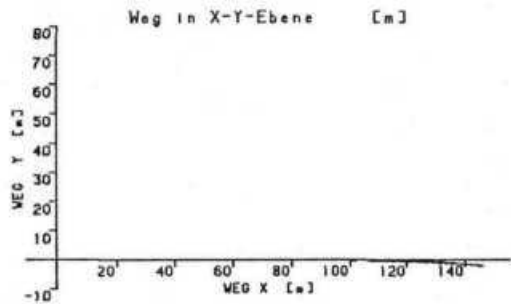
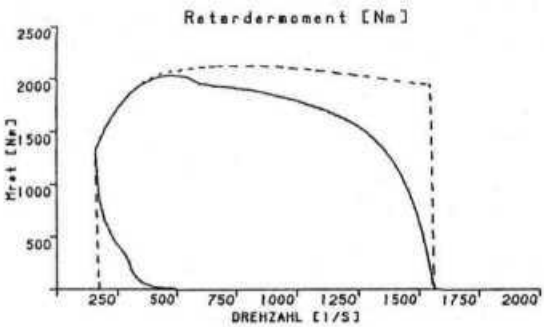
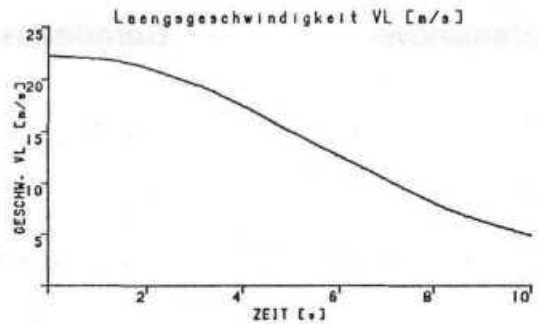
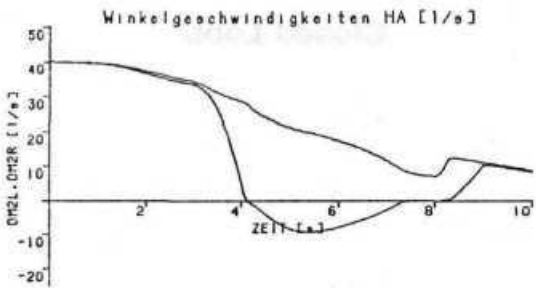
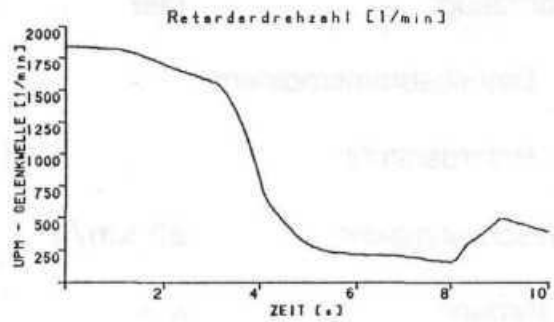
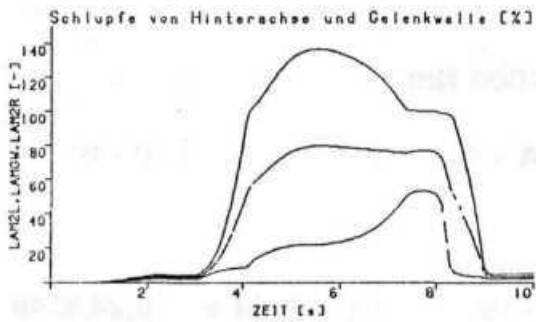
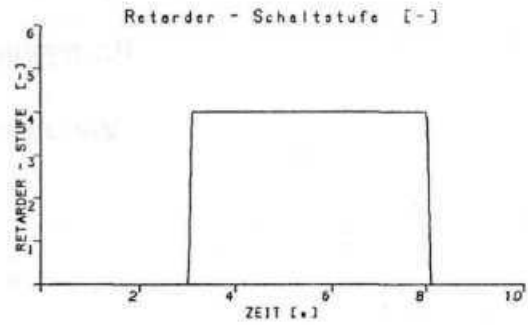
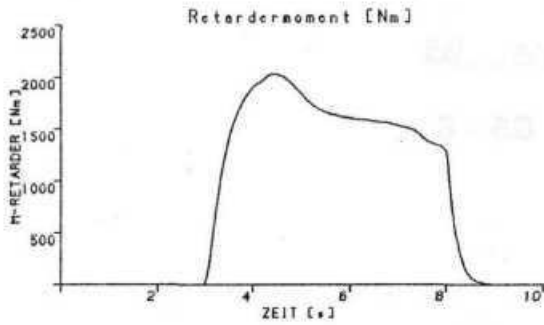
Fahrmanöver: **Geradeaus** **Closed Loop**

(Quelle: Simulationskennung **SPL0644**)

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<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

G5 - 6 / Rahmen 1



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

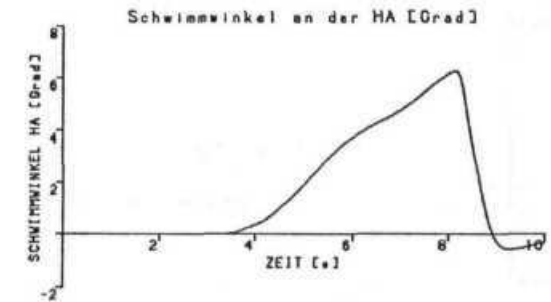
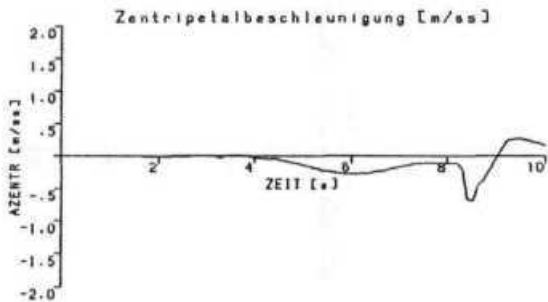
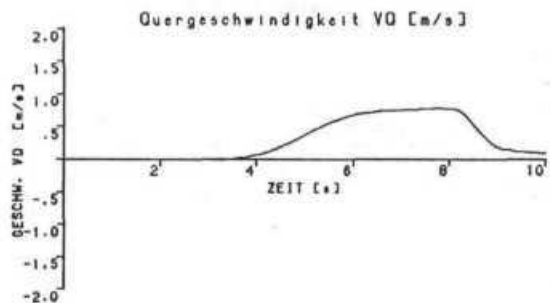
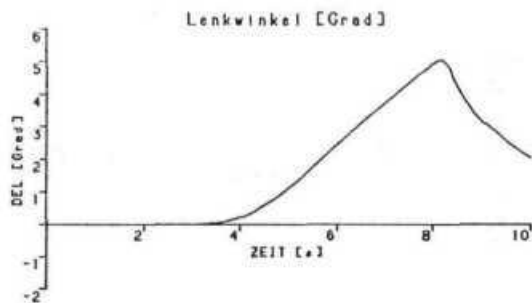
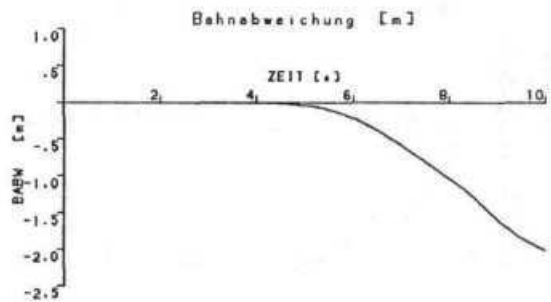
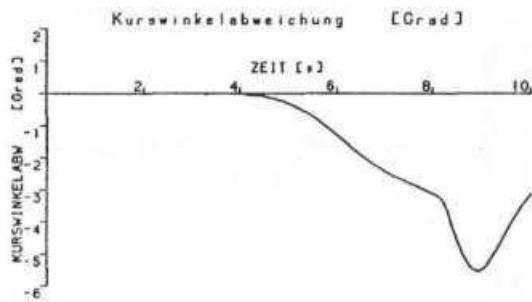
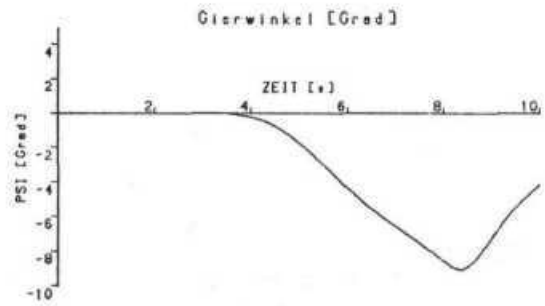
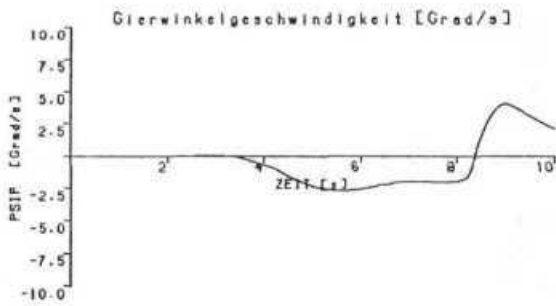
Fahrbahn: Gefaelle = 0.0 %  
 $\mu_{re}$  (li/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus.  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 6 / Rahmen 2



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

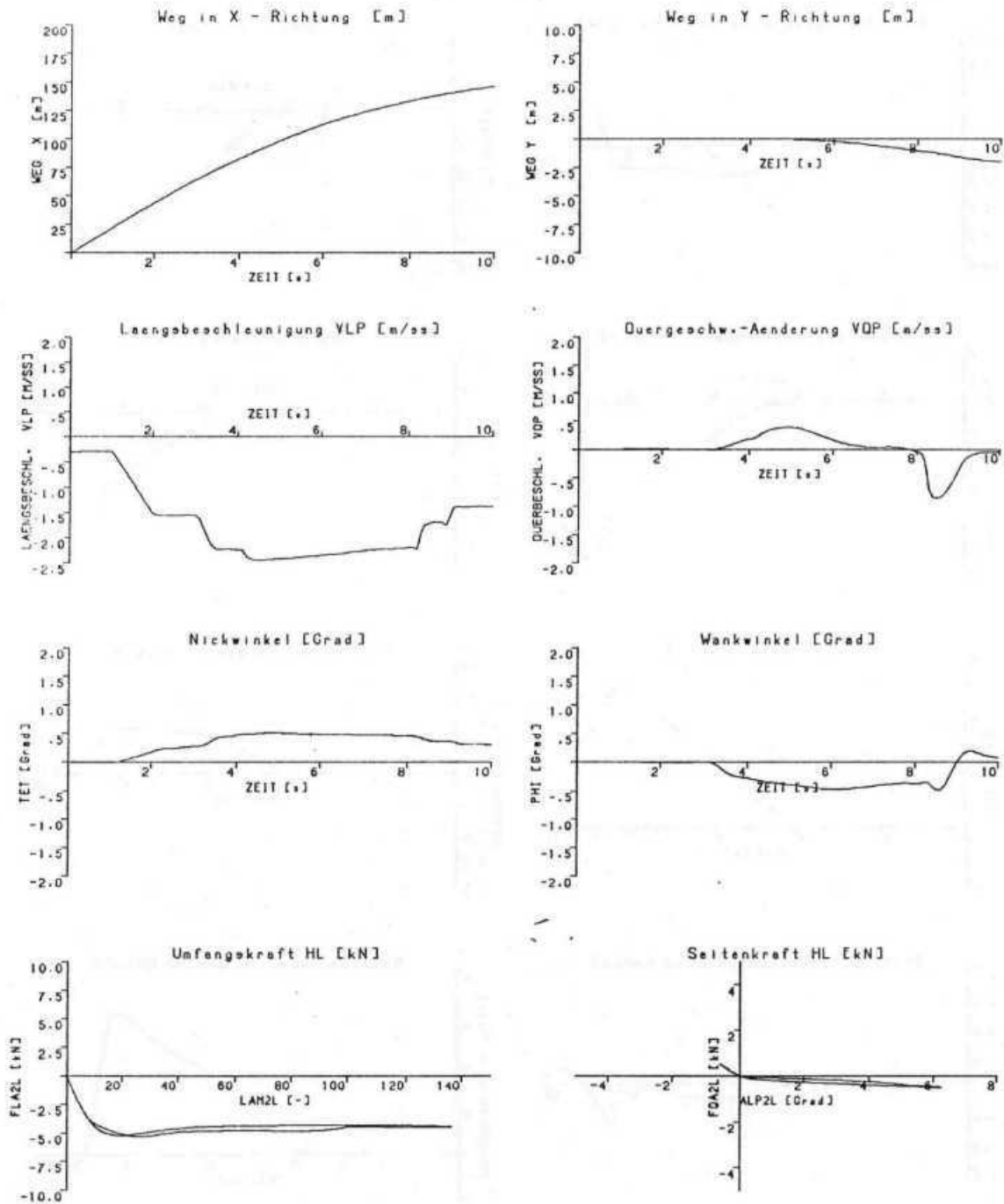
Fahrbahn: Gefälle = 0.0 %  
 $\mu$  (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

G5 - 6 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA): 1500./1000. Nm  
 Bremsbeginn : 1.0 sec  
 Verlauf : Rampe

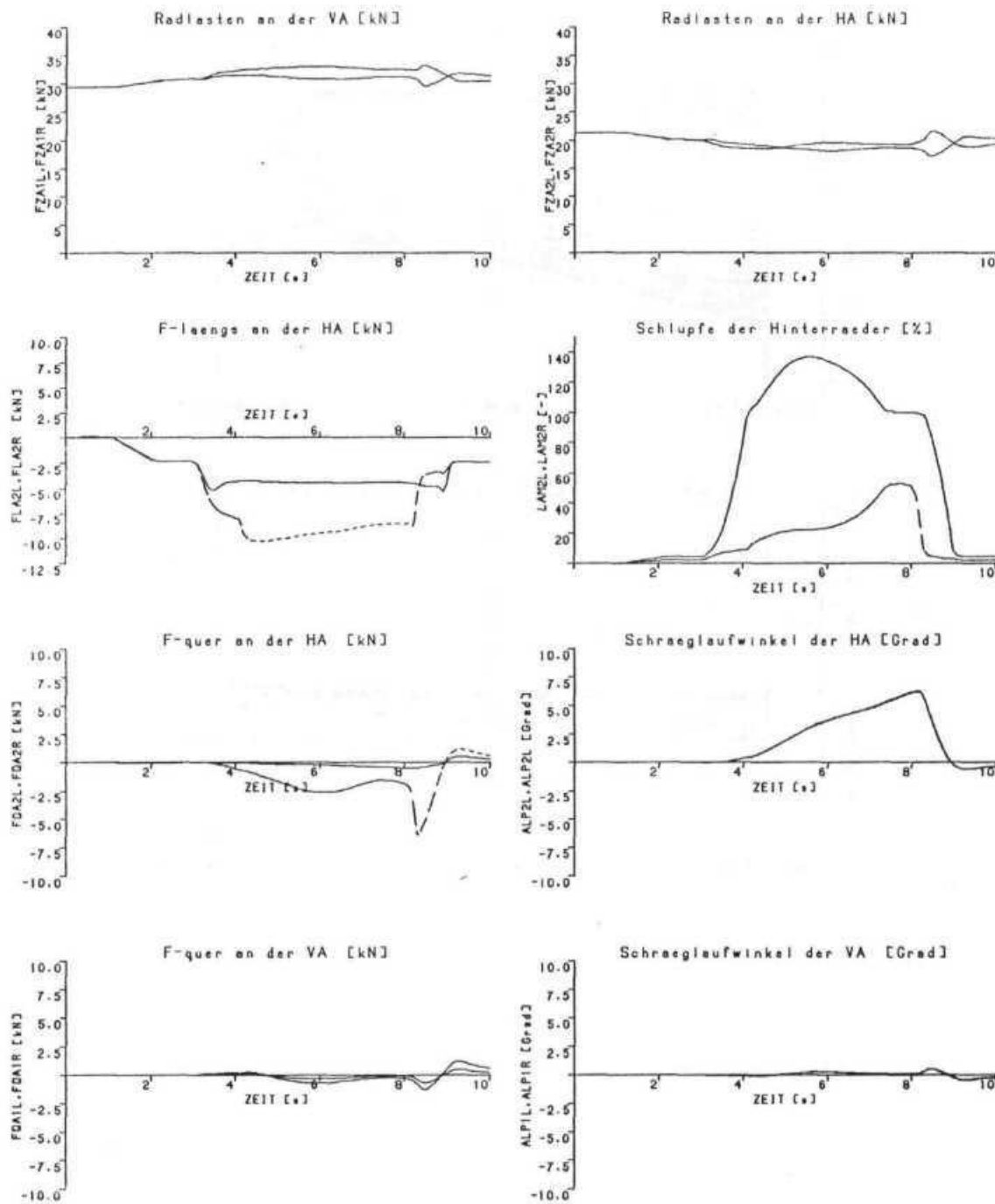
Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .24/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : geradeaus,  
 Solofz. leer mit 1 Retarder

Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

G5 - 6 / Rahmen 4

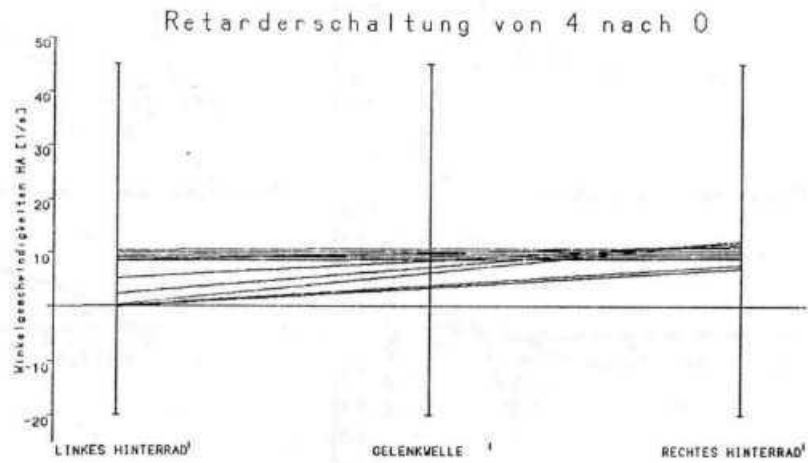
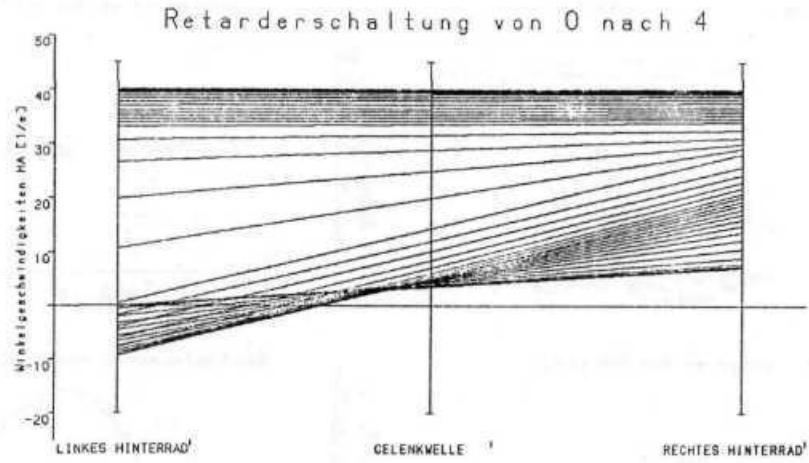


Retarder : Typ A Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Schaltstufe (n) : 4-0 Bremsbeginn : 1.0 sec  
 ABV : NEIN Verlauf : Rampe

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .24/.48

Anfangsgeschw. : 80.0 Km/h Closed Loop  
 Fahrmanoever : geradeaus. stat. Achslasten (VA/HA) : 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder

G5 - 6 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$



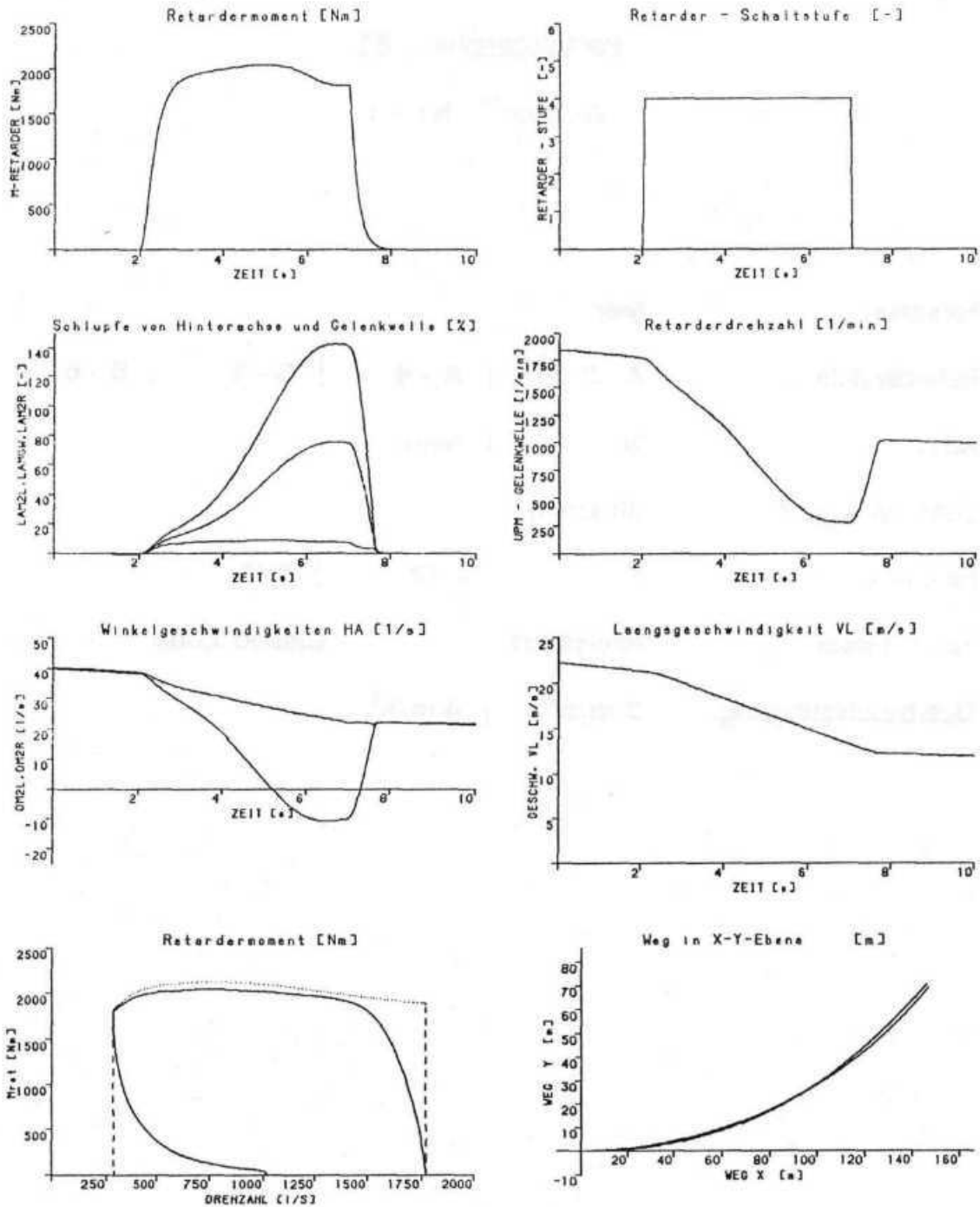
Parameterreihe K1Variation<sup>1)</sup> **K1 - 1**

Fahrzeug:	<b>leer</b>			
Retarderstufe:	A - 2		<b>A - 4</b>	B - 3   B - 6
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu =$	0,72		<b>0,48</b>
Fahrmanöver:	<b>Kreisfahrt</b>			<b>Closed Loop</b>
Querbesehleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>	

(Quelle: Simulationskennung SPL0826.2)

<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K1 - 1 / Rahmen 1



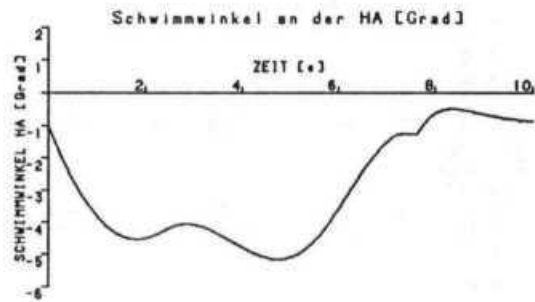
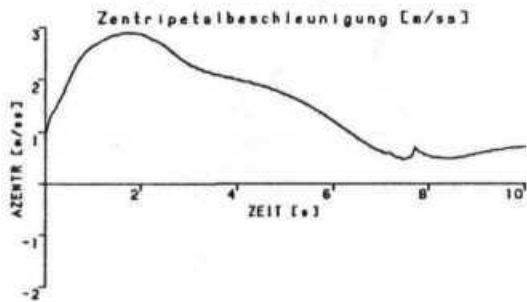
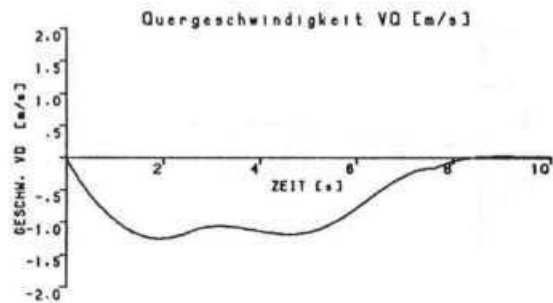
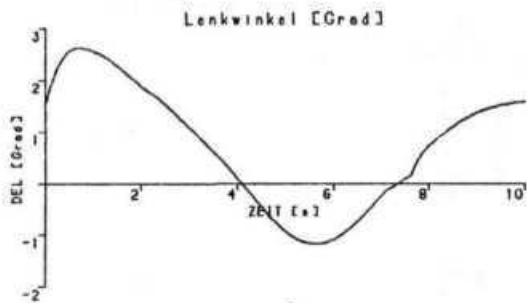
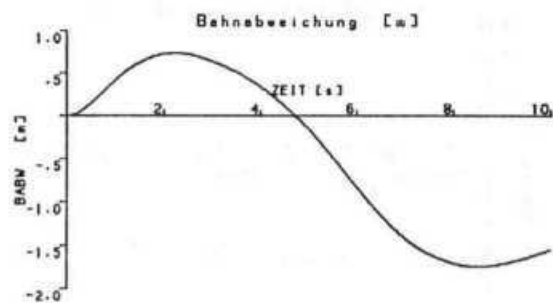
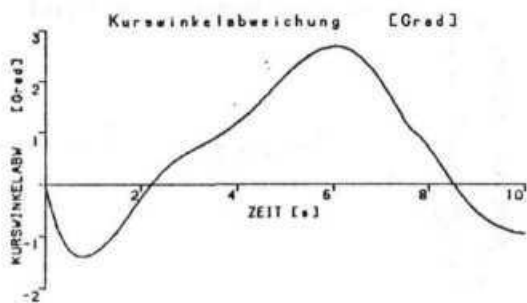
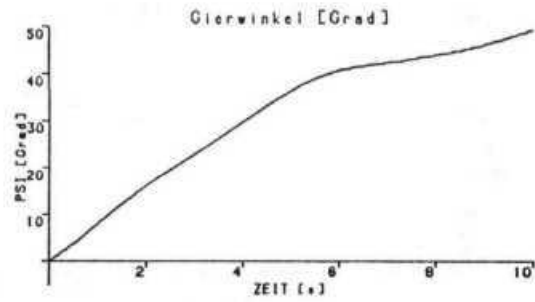
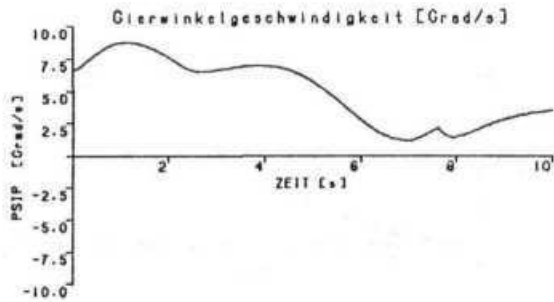
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_{eff} (ll/ro) = .48/.48$

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K1 - 1 / Rahmen 2



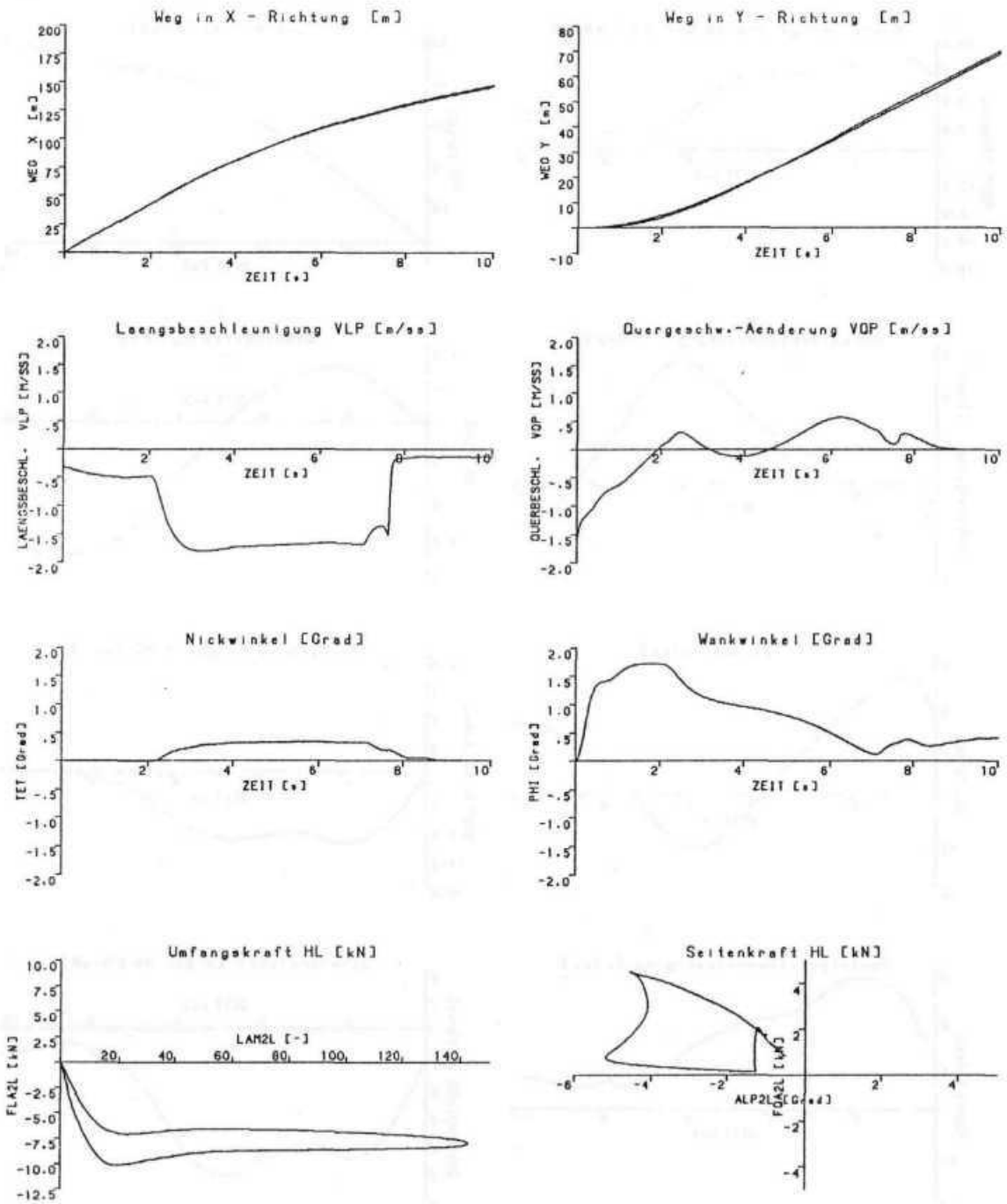
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 1 / Rahmen 3



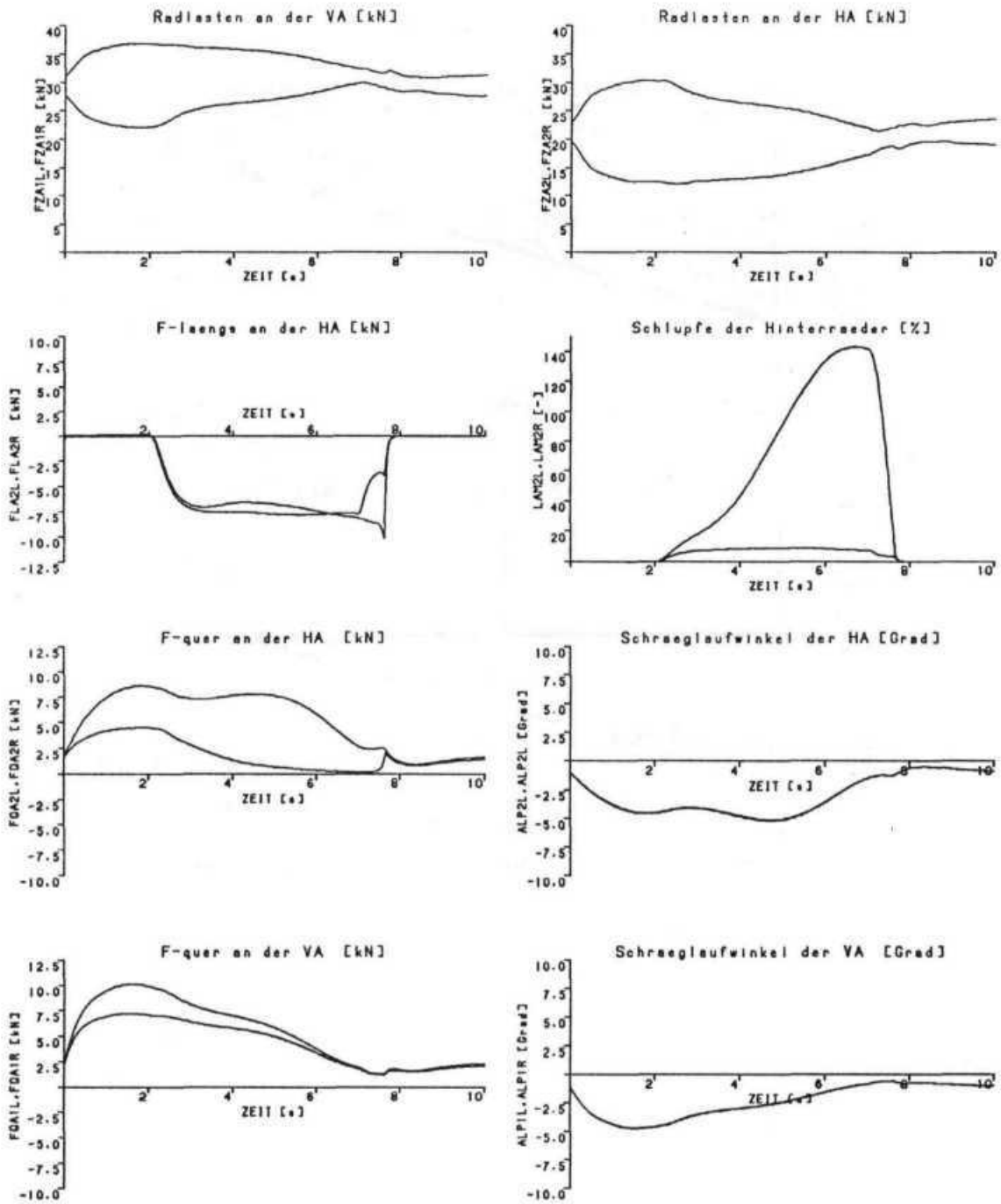
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 1 / Rahmen 4



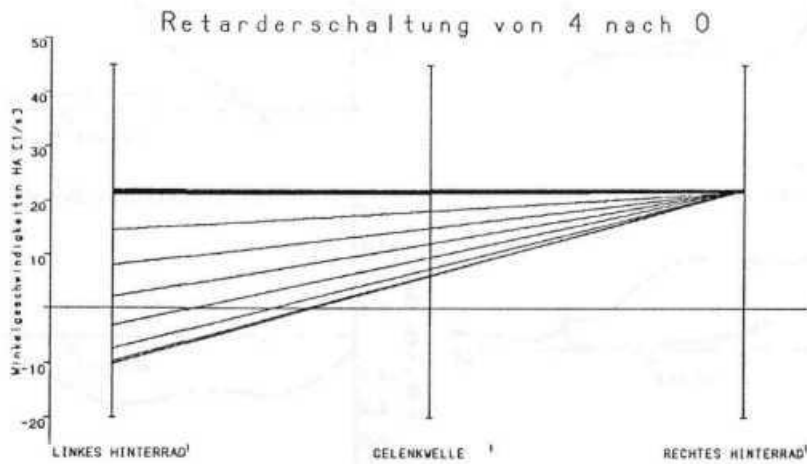
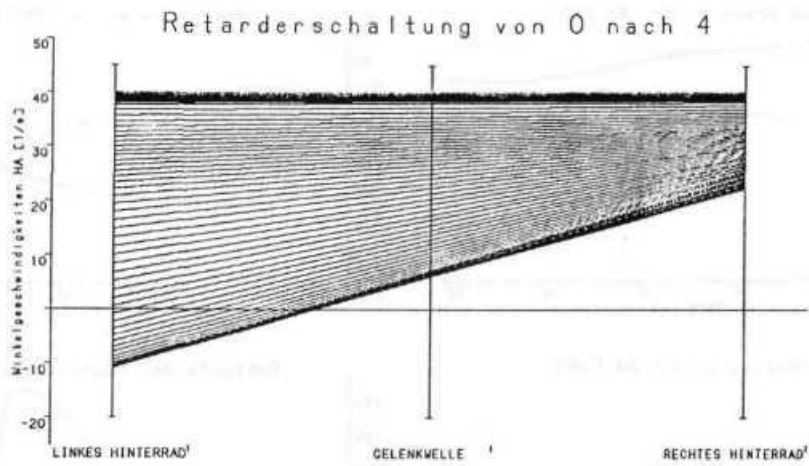
Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_{re} (l/r_e) = .48/.48$

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme

Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K1**Variation<sup>2)</sup> **K1 - 2**

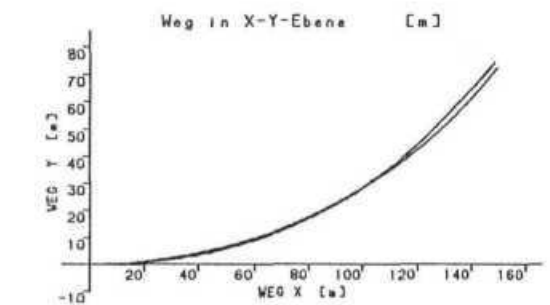
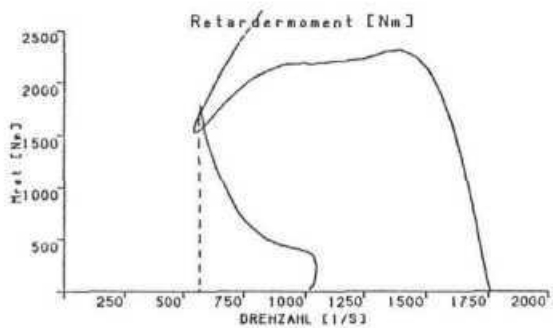
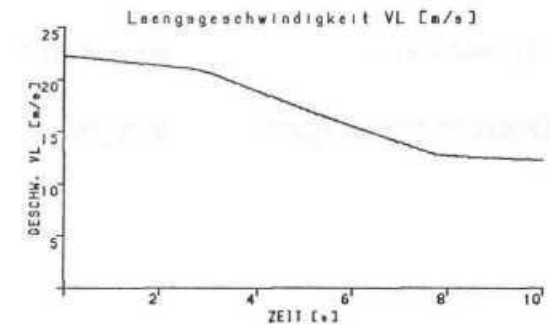
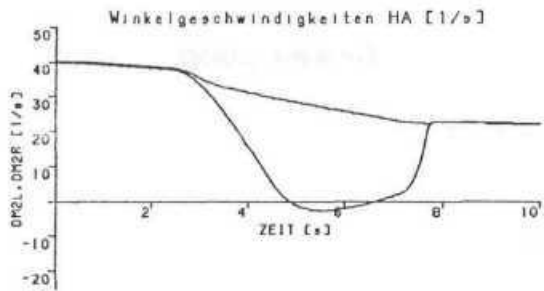
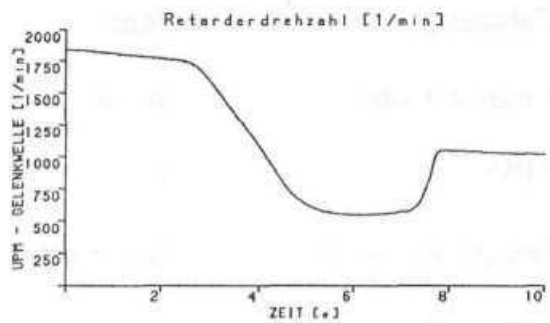
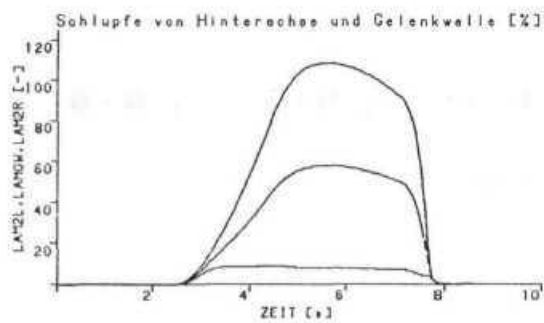
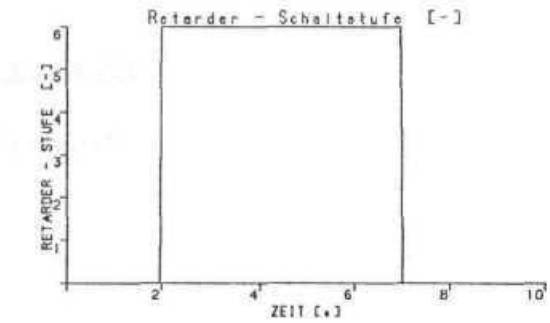
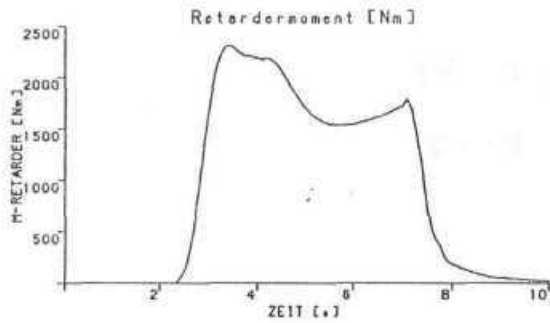
Fahrzeug:	<b>leer</b>						
Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
ABV:	ja		<b>nein</b>				
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		0,72		<b>0,48</b>		
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>				

(Quelle: Simulationskennung SPL0825.2)

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<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K1 - 2 / Rahmen 1



Retarder : Typ B  
Schaltstufe (n) : 6-0-0  
ABV : NEIN

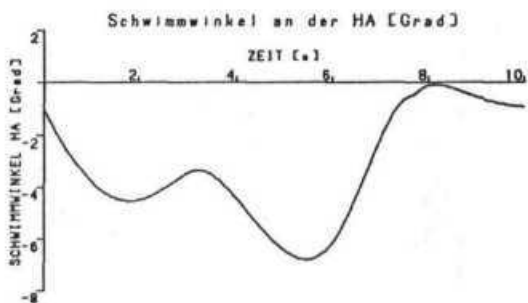
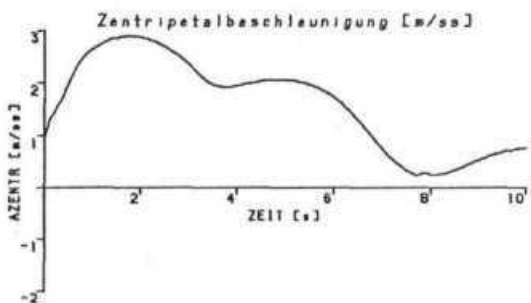
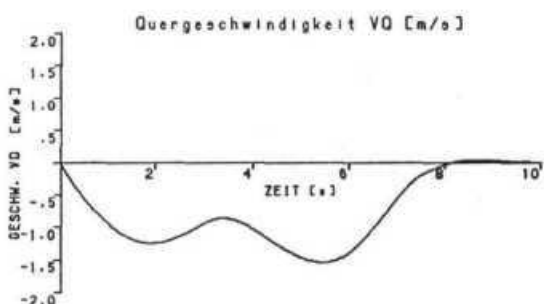
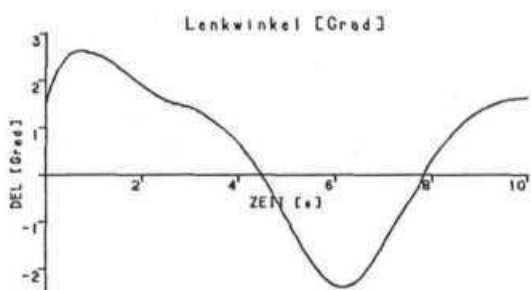
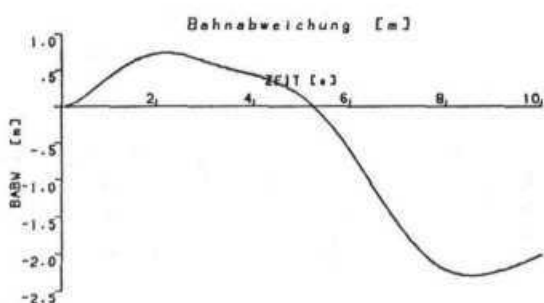
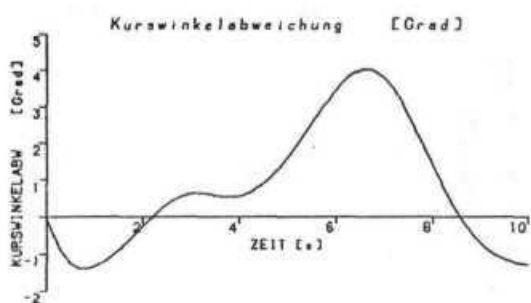
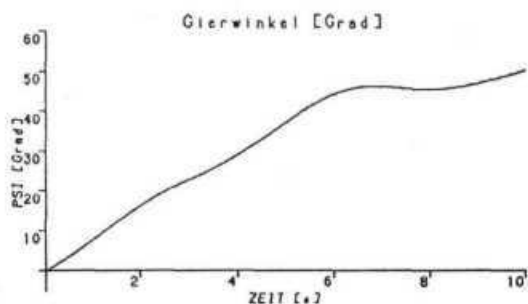
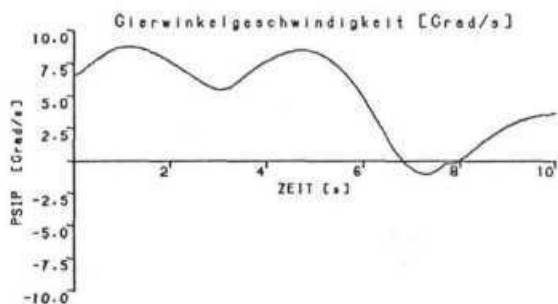
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
mue (ll/rs) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : Kreisfahrt,  
Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K1 - 2 / Rahmen 2



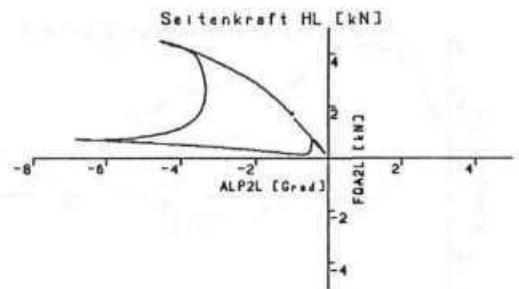
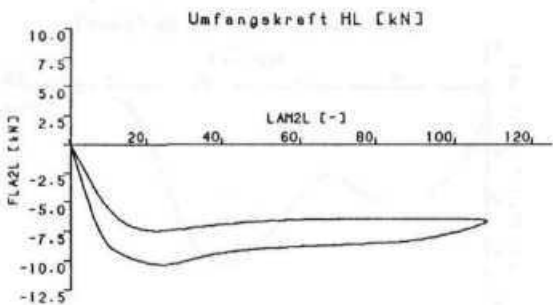
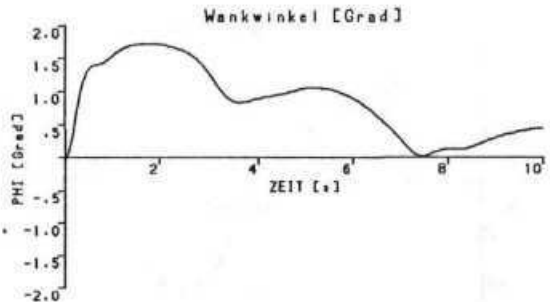
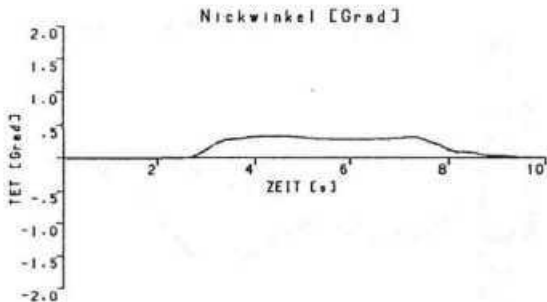
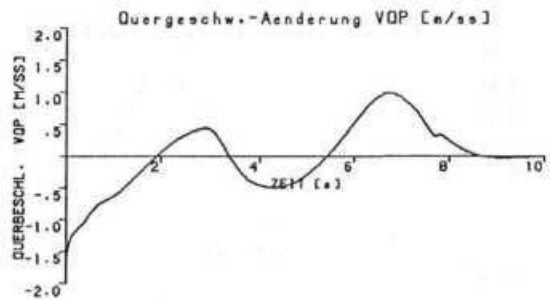
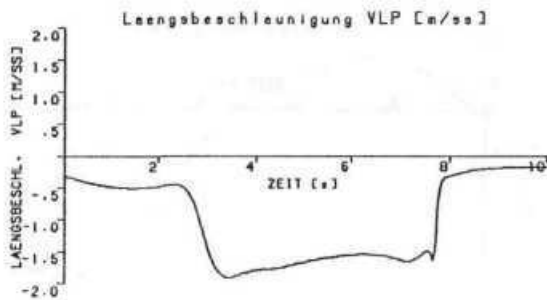
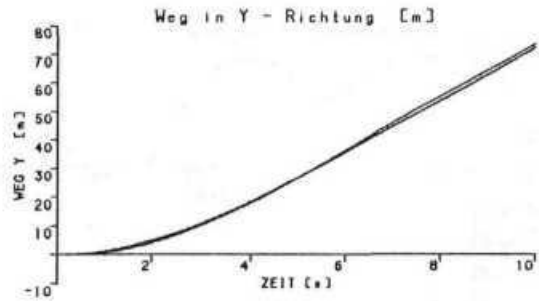
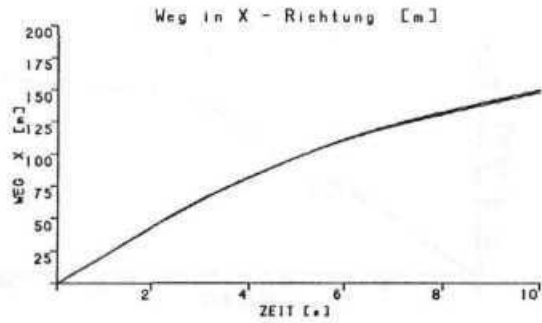
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 2 / Rahmen 3



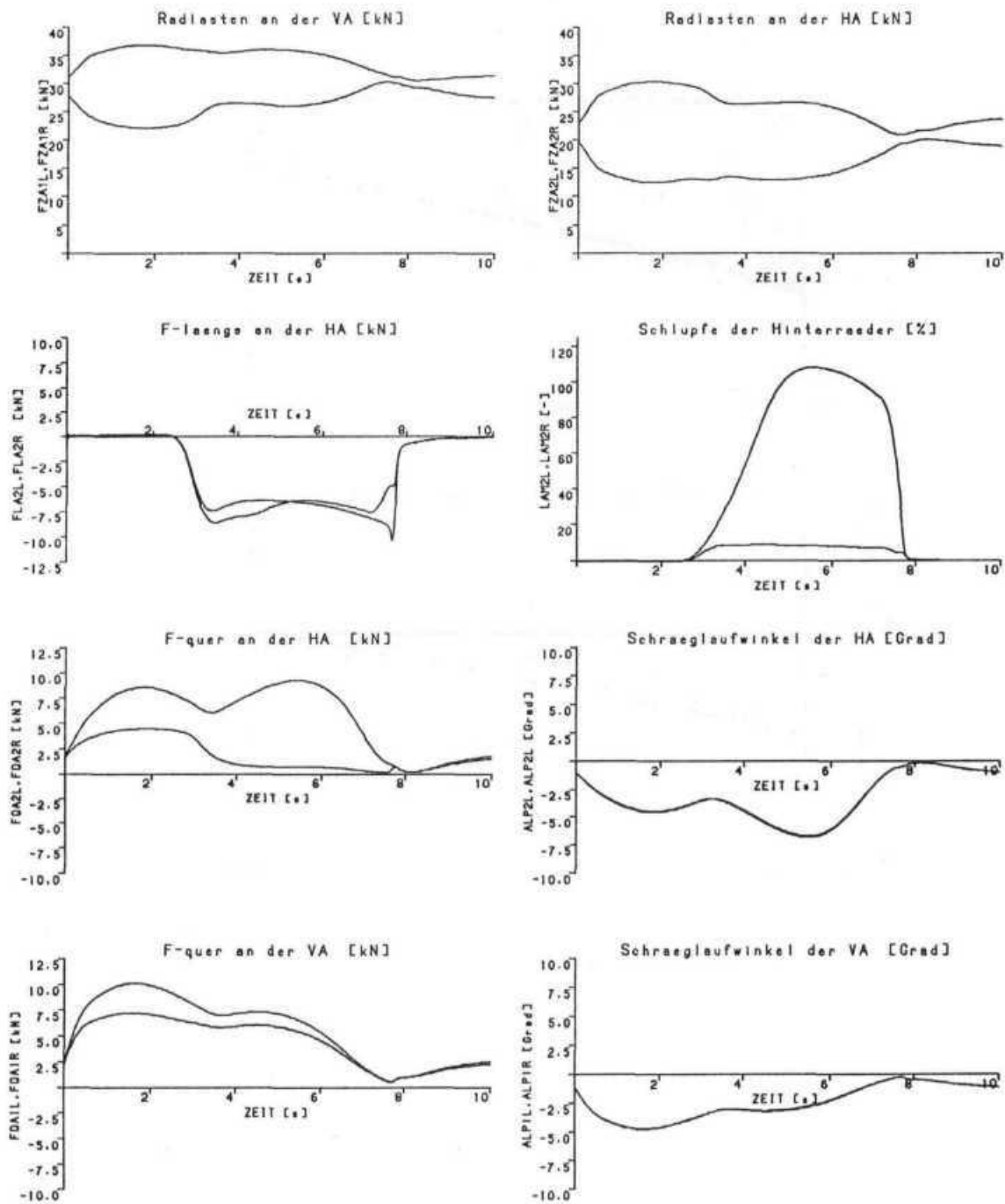
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K1 - 2 / Rahmen 4



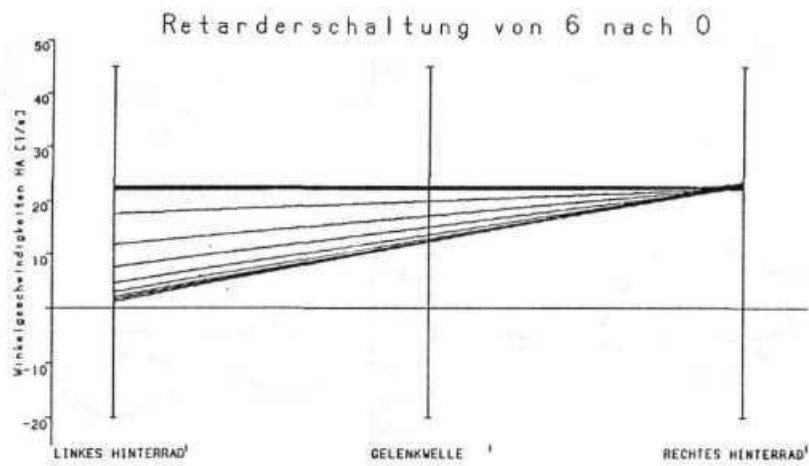
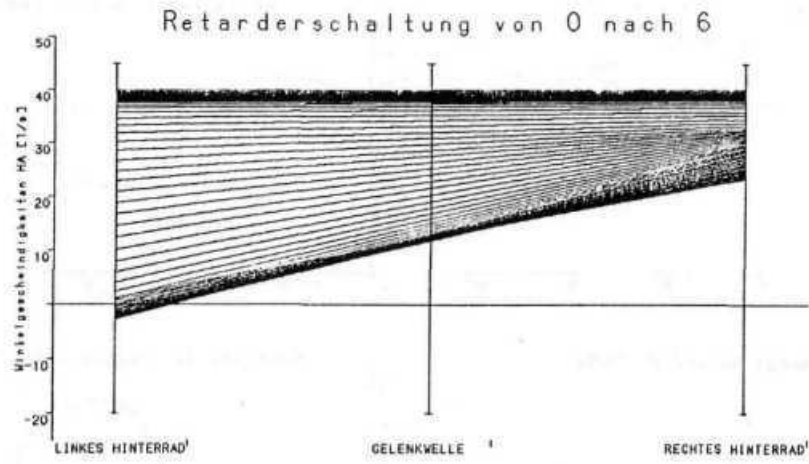
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 2 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K1**Variation<sup>3)</sup> **K1 - 3**

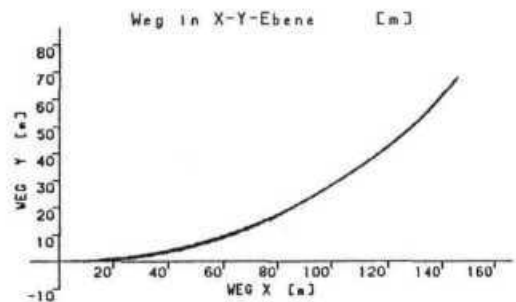
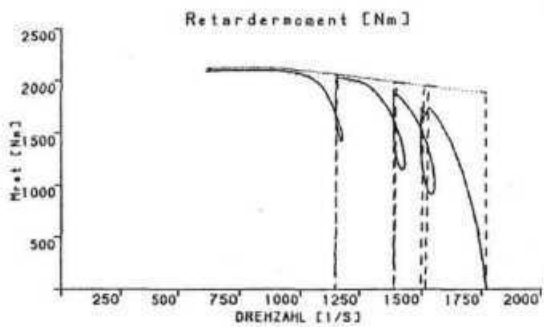
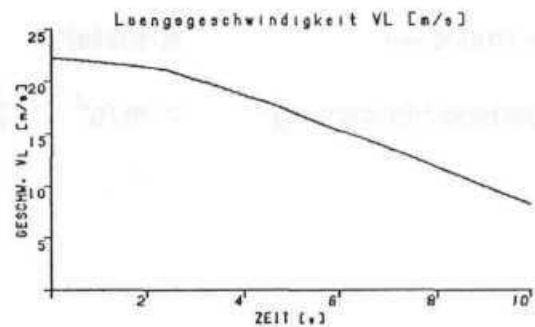
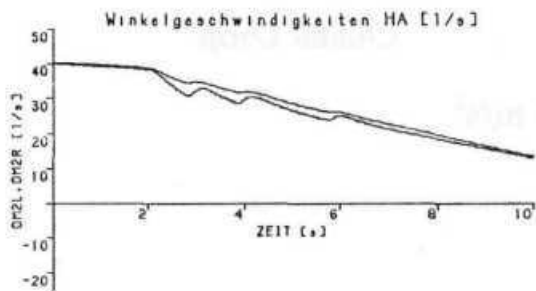
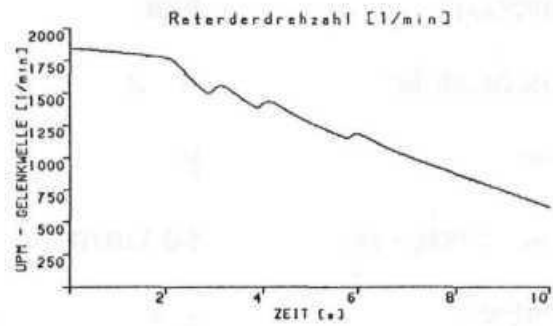
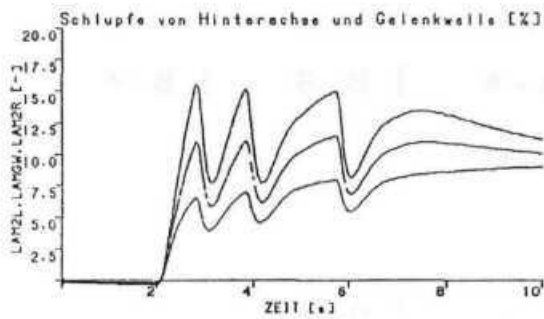
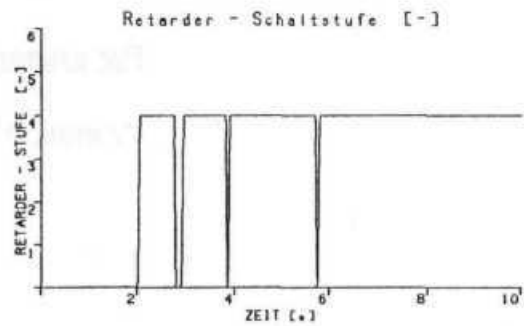
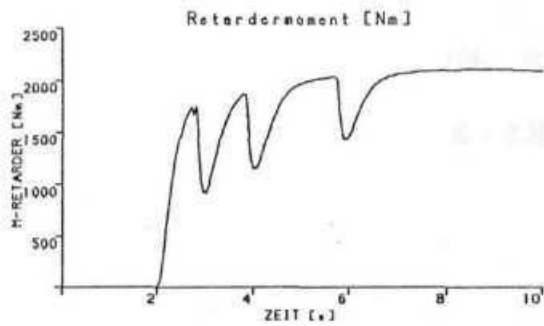
Fahrzeug:	<b>leer</b>			
Retarderstufe:	A - 2		<b>A - 4</b>	B - 3   B - 6
ABV:	<b>ja</b>		nein	
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu =$	0,72		<b>0,48</b>
Fahrmanöver:	<b>Kreisfahrt</b>			<b>Closed Loop</b>
Querschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>	

(Quelle: Simulationskennung **SPL0833**)

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<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K1 - 3 / Rahmen 1



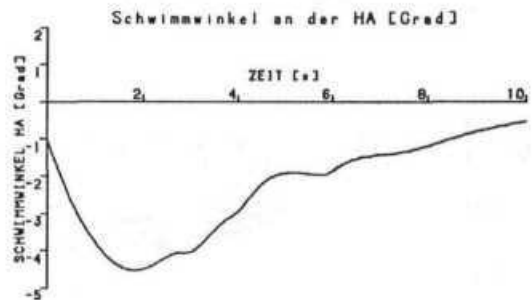
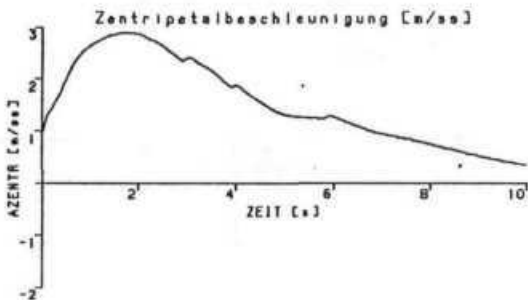
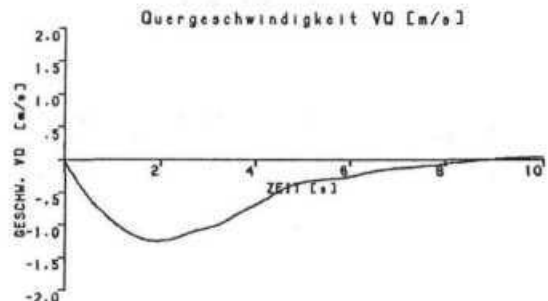
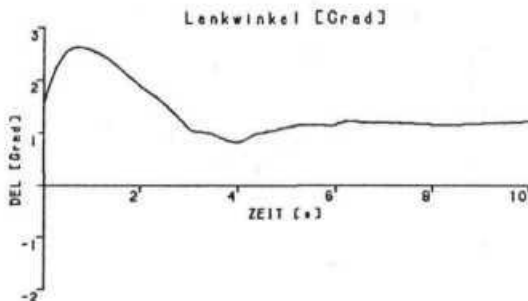
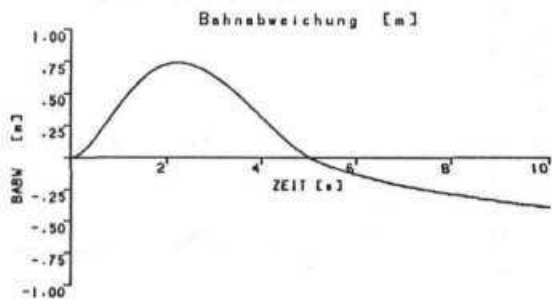
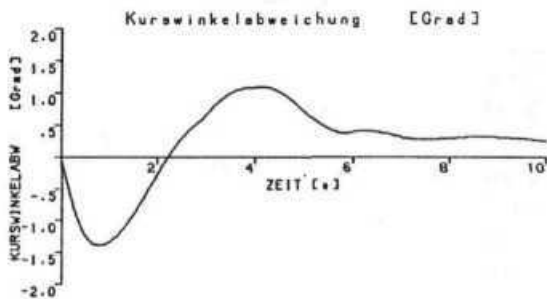
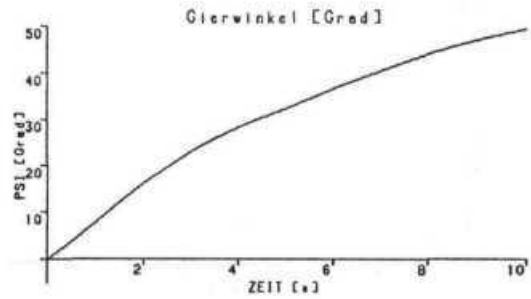
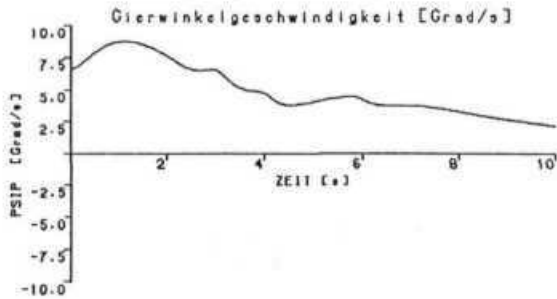
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 3 / Rahmen 2



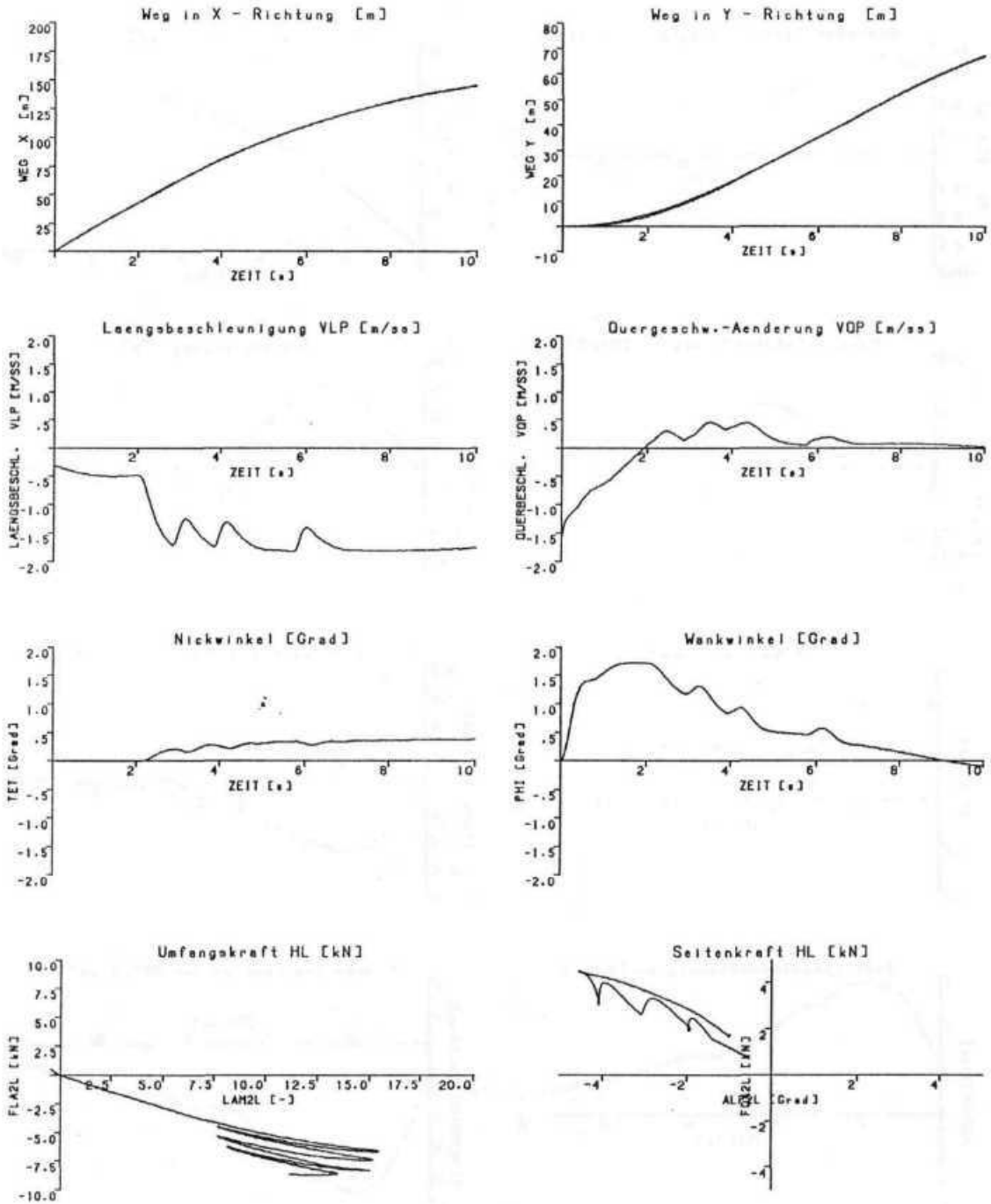
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 3 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV-Schwellw. : 15.%

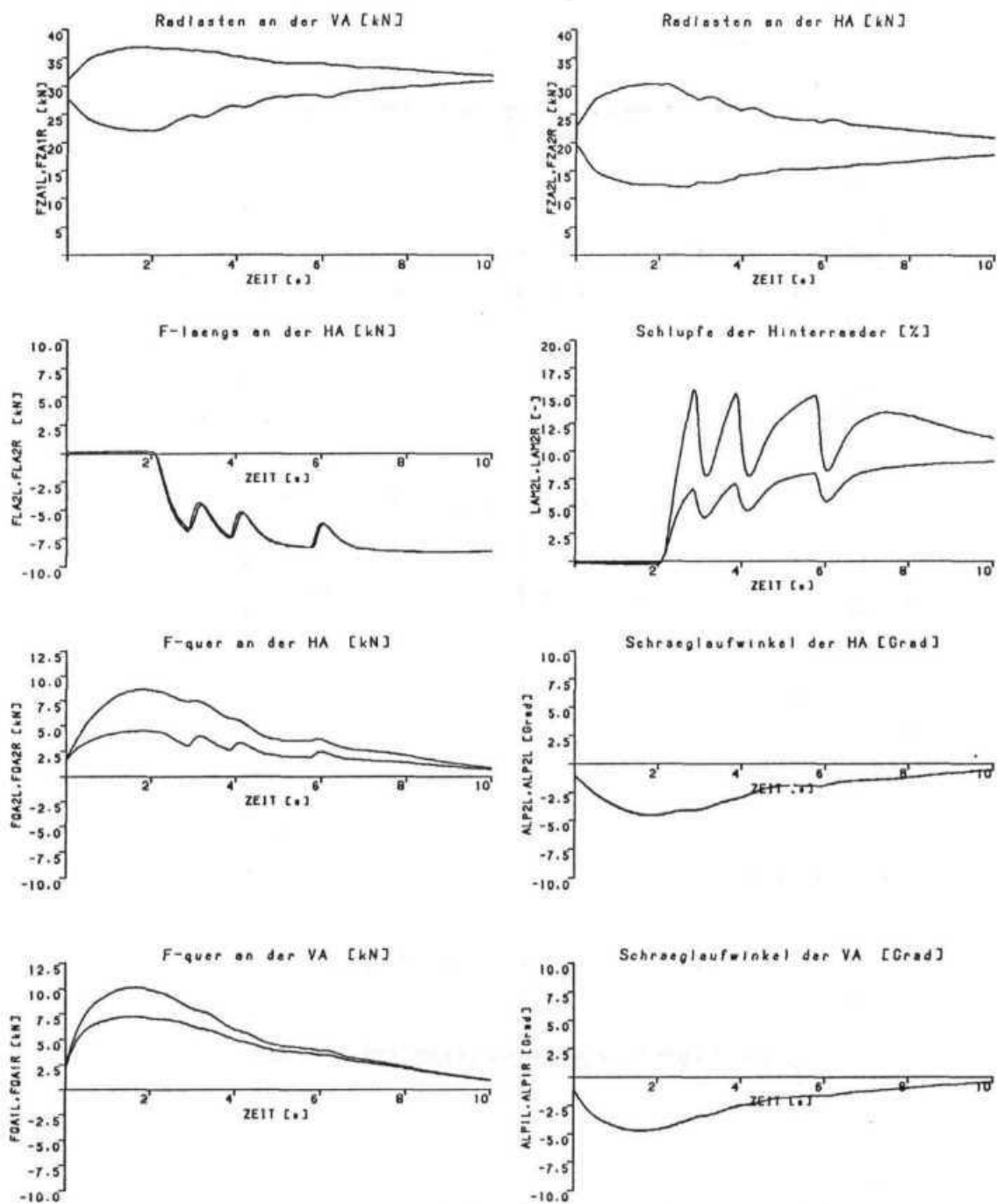
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .48/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K1 - 3 / Rahmen 4



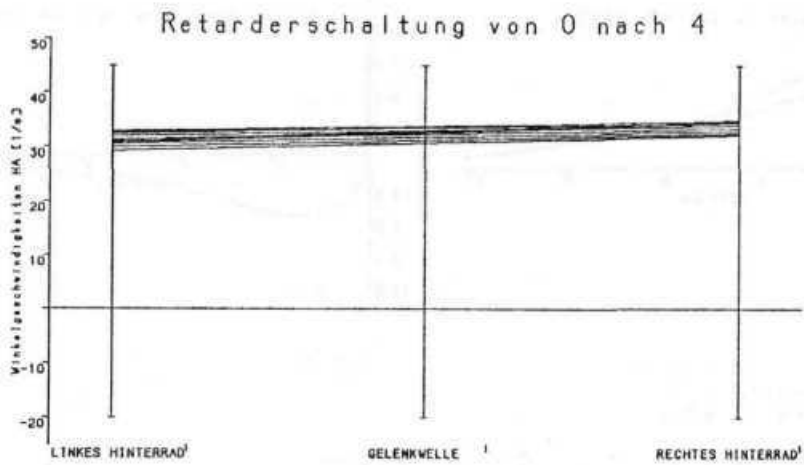
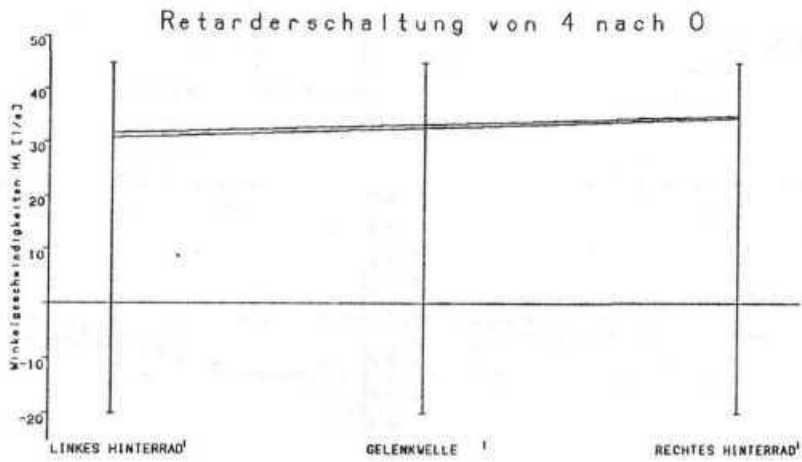
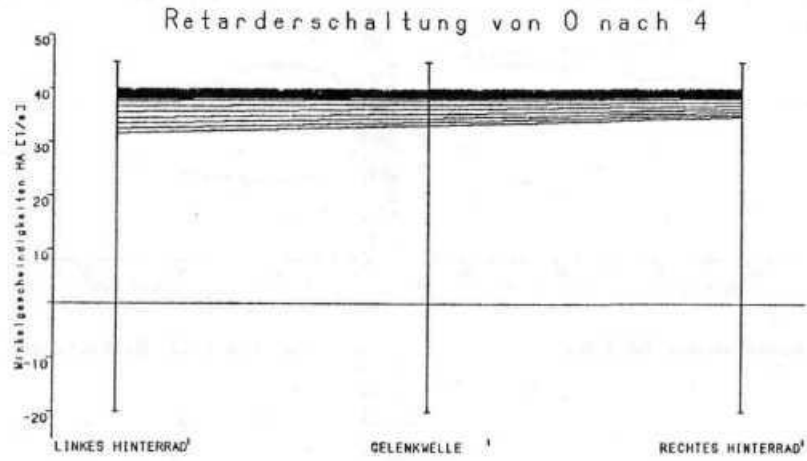
Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 3 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe K1Variation<sup>4)</sup> **K1 - 4**

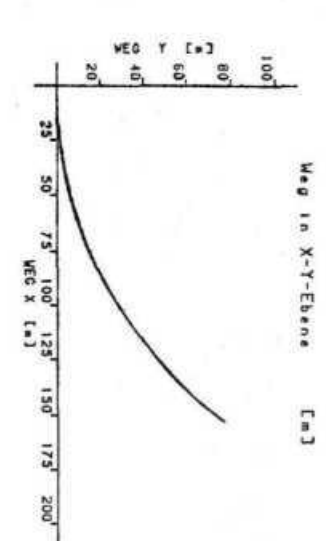
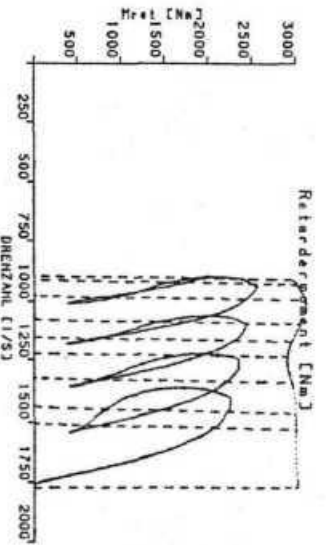
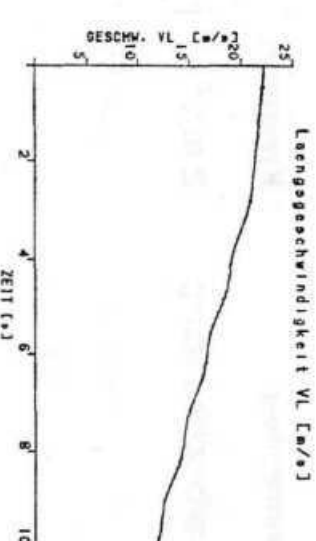
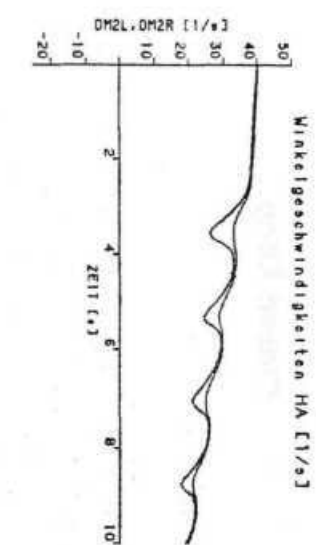
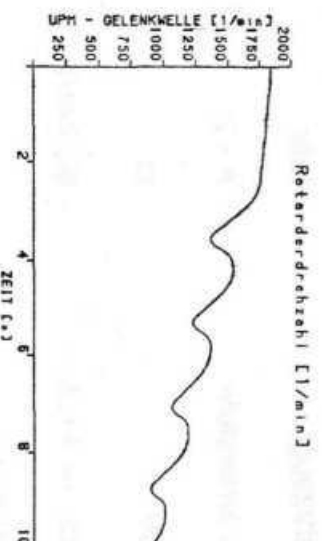
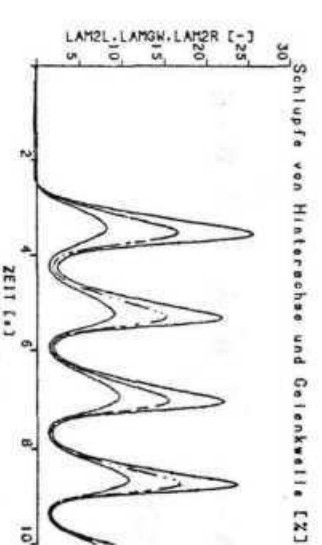
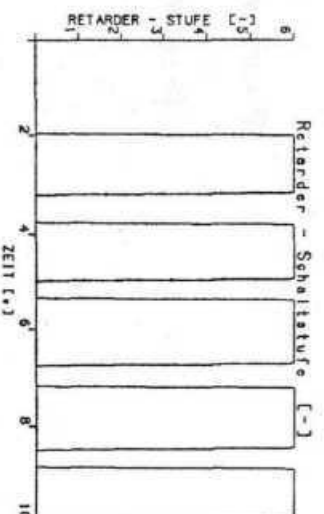
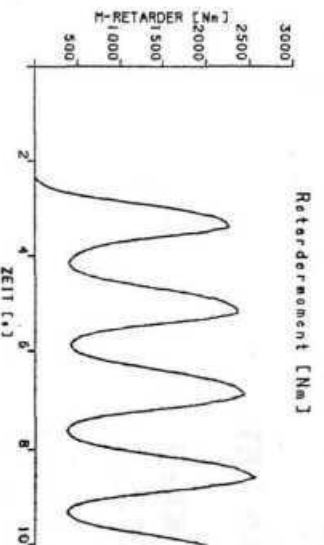
Fahrzeug:	<b>leer</b>						
Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
ABV:	<b>ja</b>		nein				
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		0,72		<b>0,48</b>		
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbearschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>				

(Quelle: Simulationskennung SPL0832)

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<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

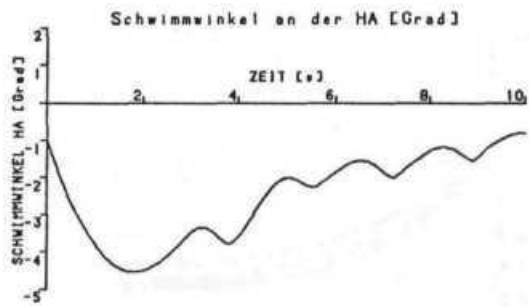
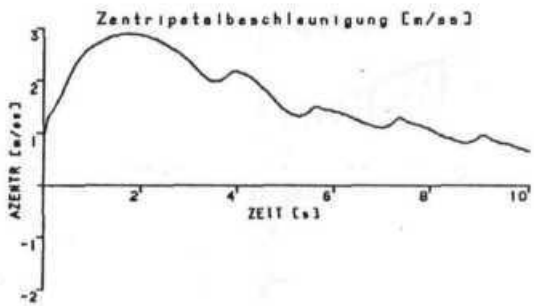
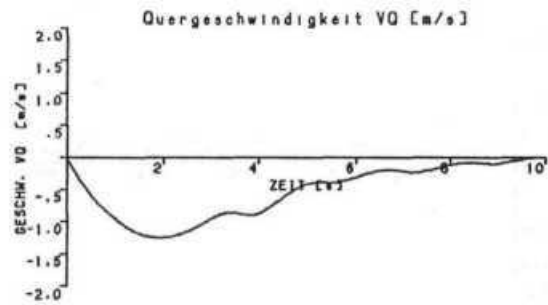
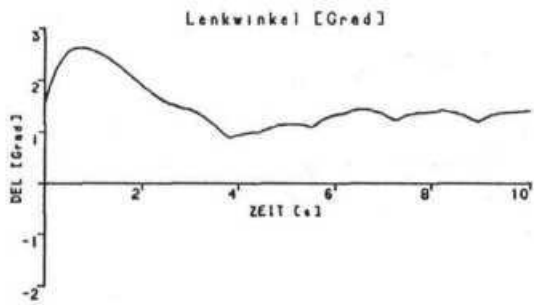
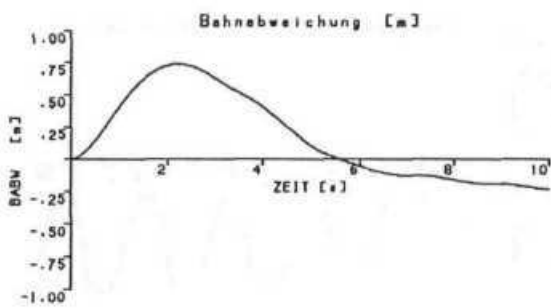
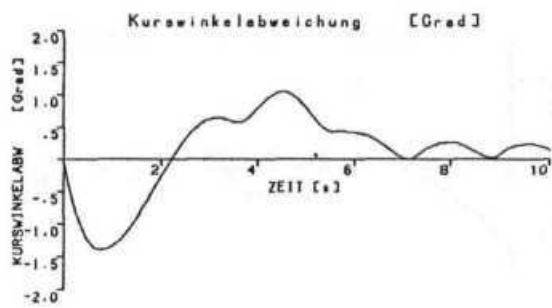
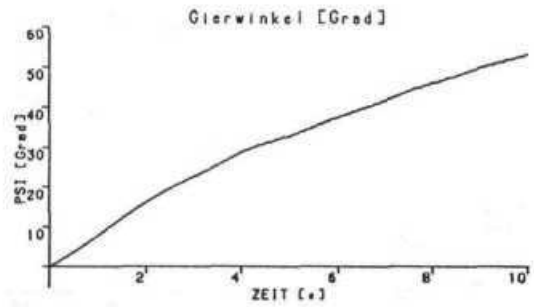
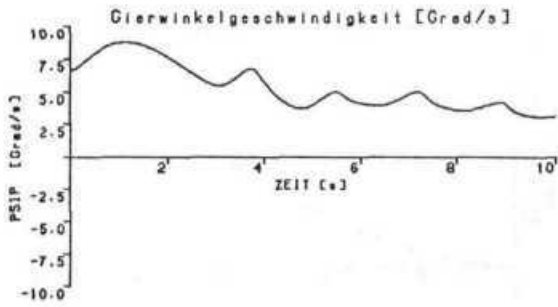
K1 - 4 / Rahmen 1



Retarder : Typ B  
 Schaltstufe(n): 6-0  
 ABV-Schwellw.: 15.-%  
 mu (11/re) = 0.0 % Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoevr : Kreisfahrt, stat. Achslasten (VA/HA): 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder

K1 - 4 / Rahmen 2



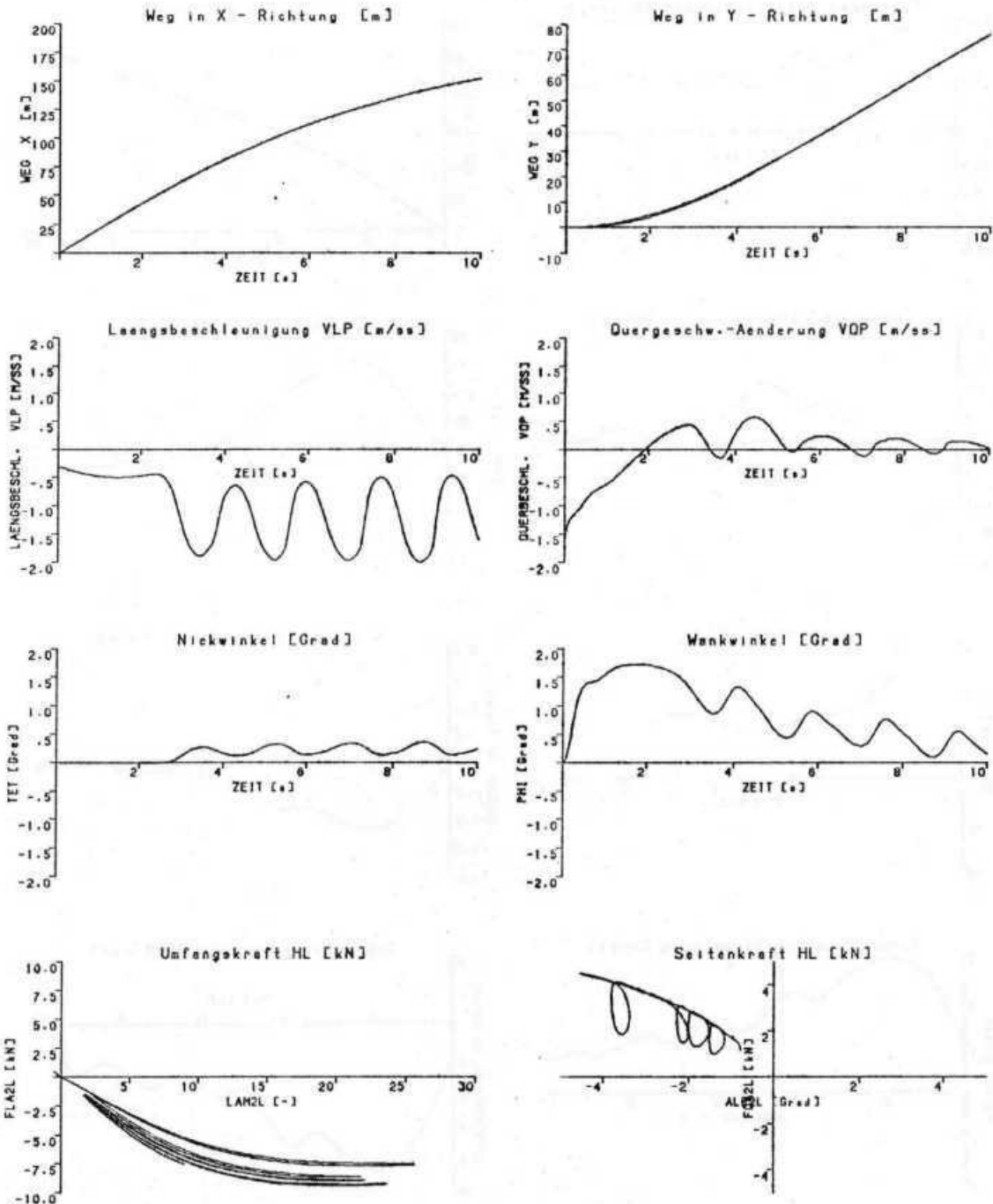
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/rs) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1. Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 4 / Rahmen 3



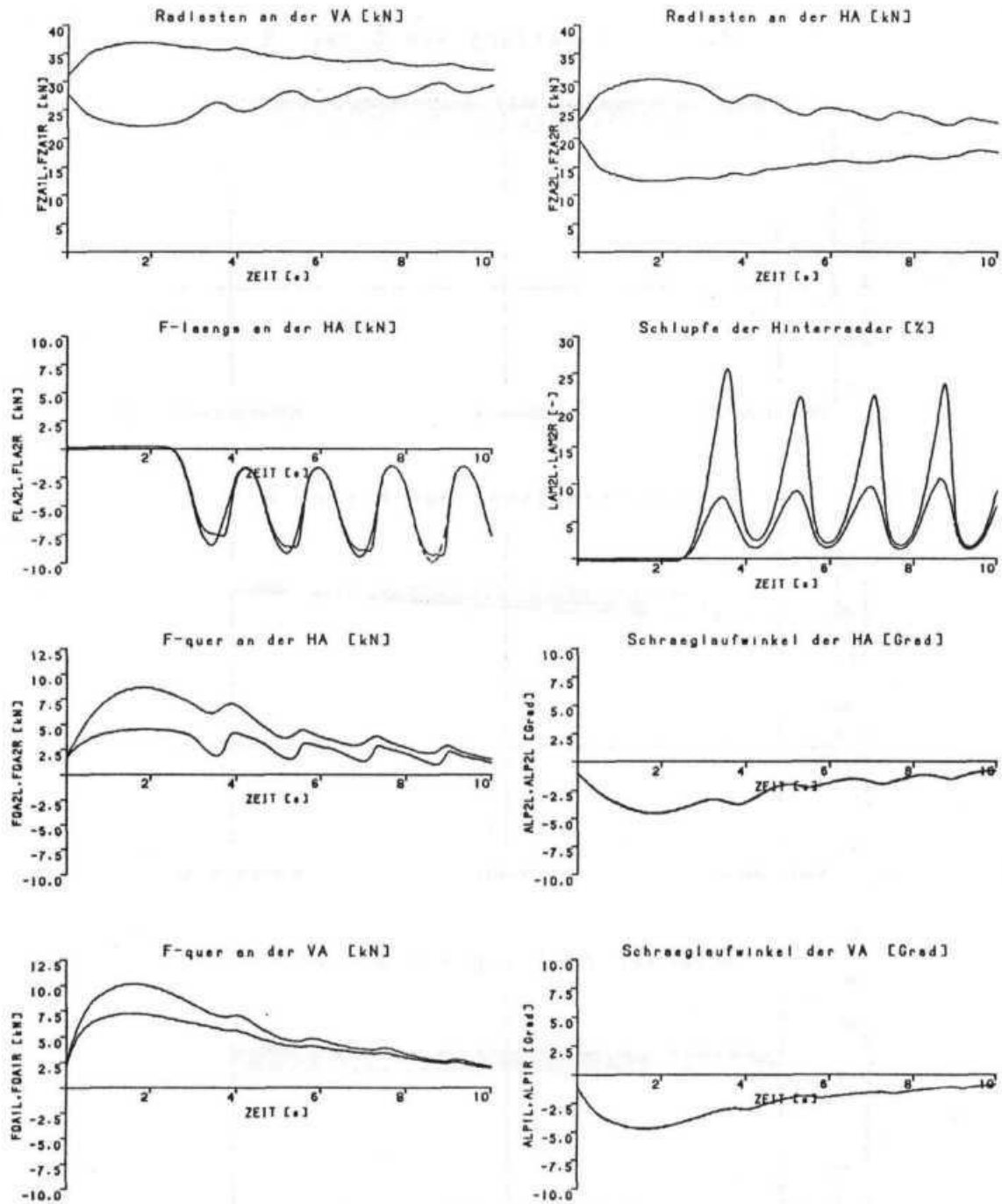
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## K1 - 4 / Rahmen 4



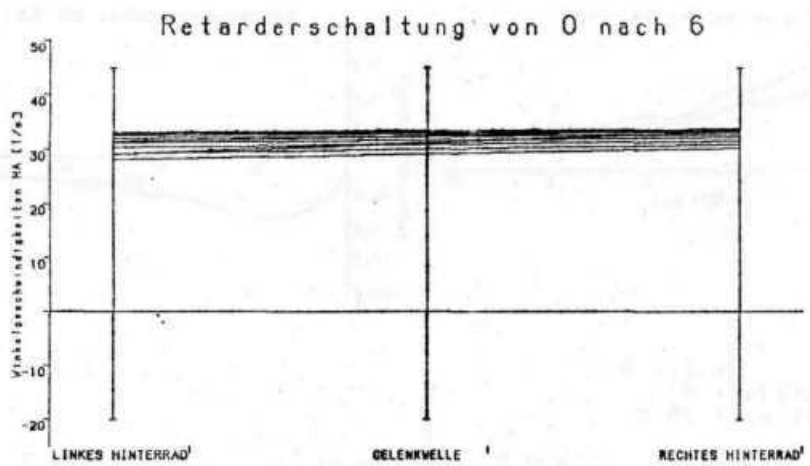
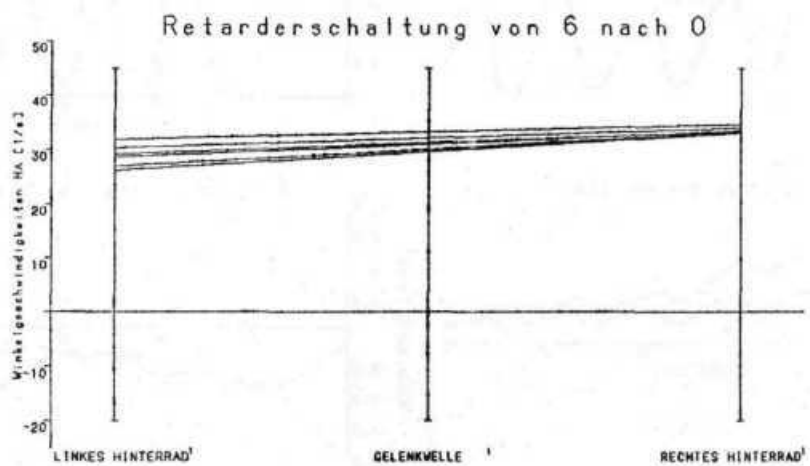
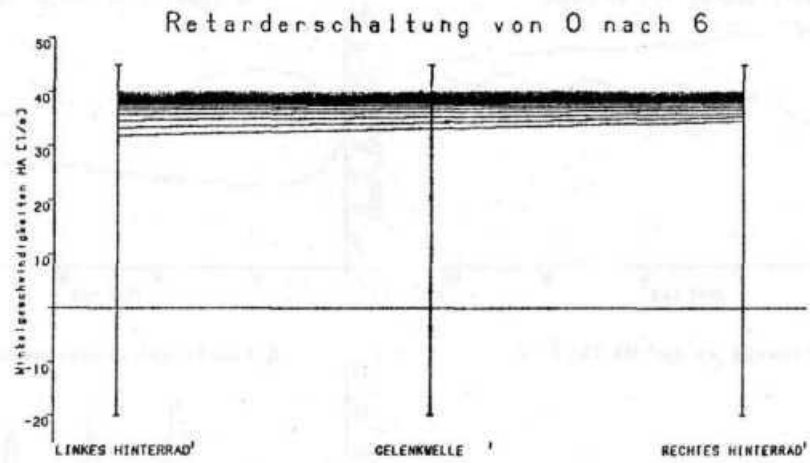
Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu$  (l/r) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanöver : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 4 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$



Parameterreihe **K1**Variation<sup>5)</sup> **K1 - 5**

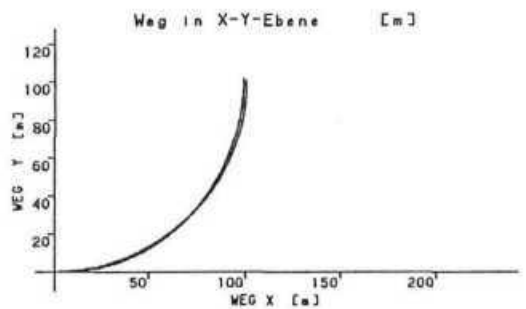
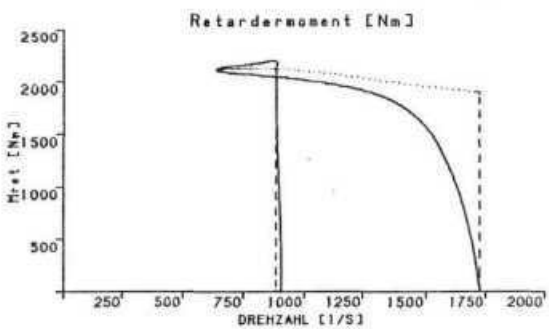
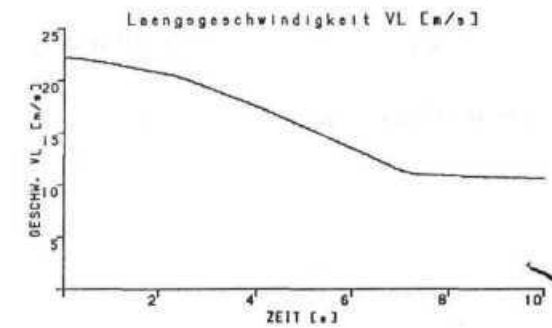
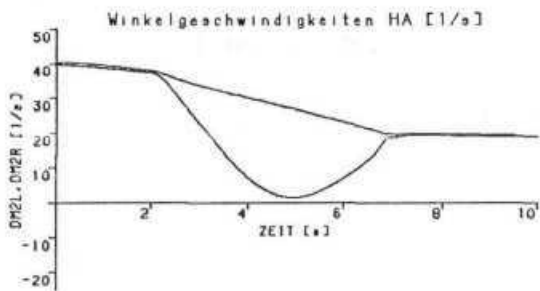
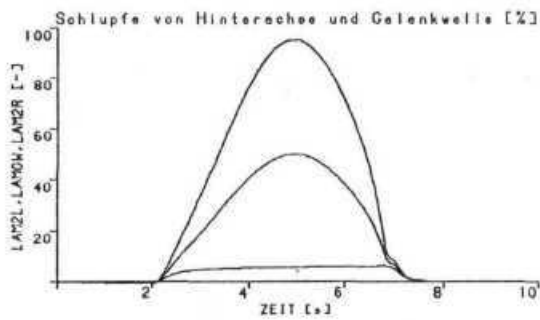
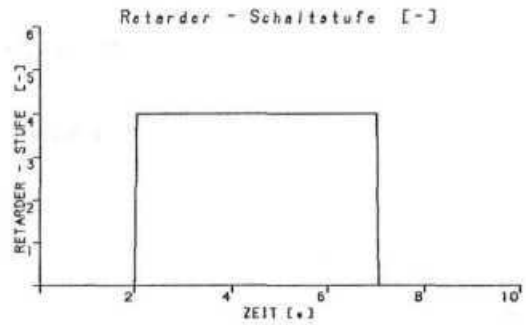
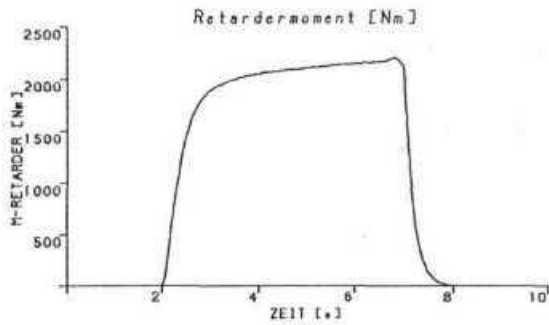
Fahrzeug:	<b>leer</b>			
Retarderstufe:	A - 2		<b>A - 4</b>	B - 3   B - 6
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu =$		<b>0,72</b>	0,48
Fahrmanöver:	<b>Kreisfahrt</b>			<b>Closed Loop</b>
Querbearschleunigung:	2 m/s <sup>2</sup>		<b>4 m/s<sup>2</sup></b>	

(Quelle: Simulationskennung SPL0807.2)

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<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K1 - 5 / Rahmen 1



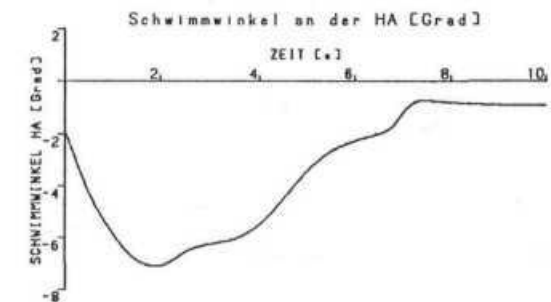
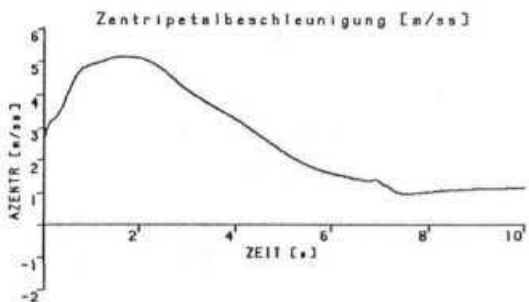
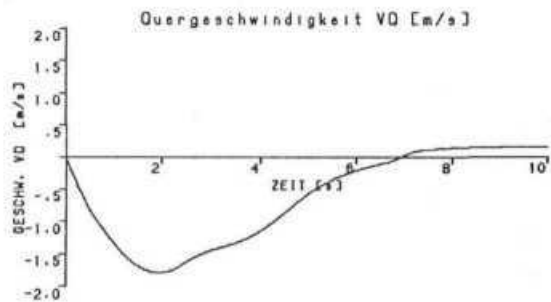
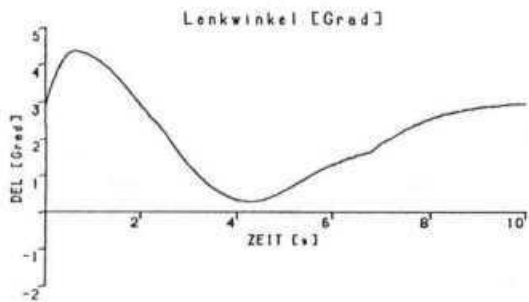
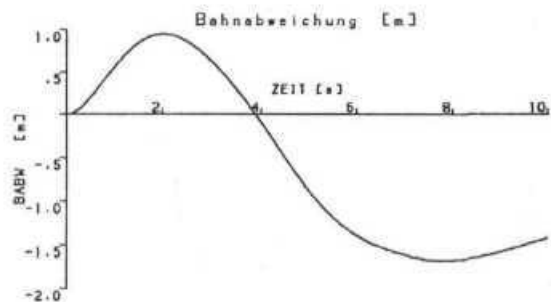
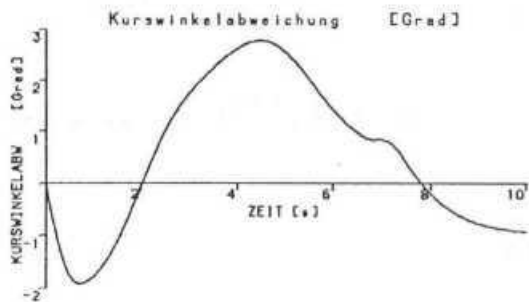
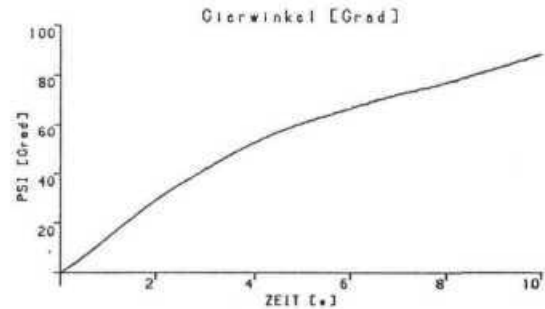
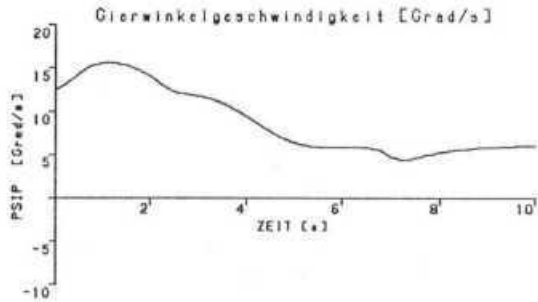
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .72/.72

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 5 / Rahmen 2



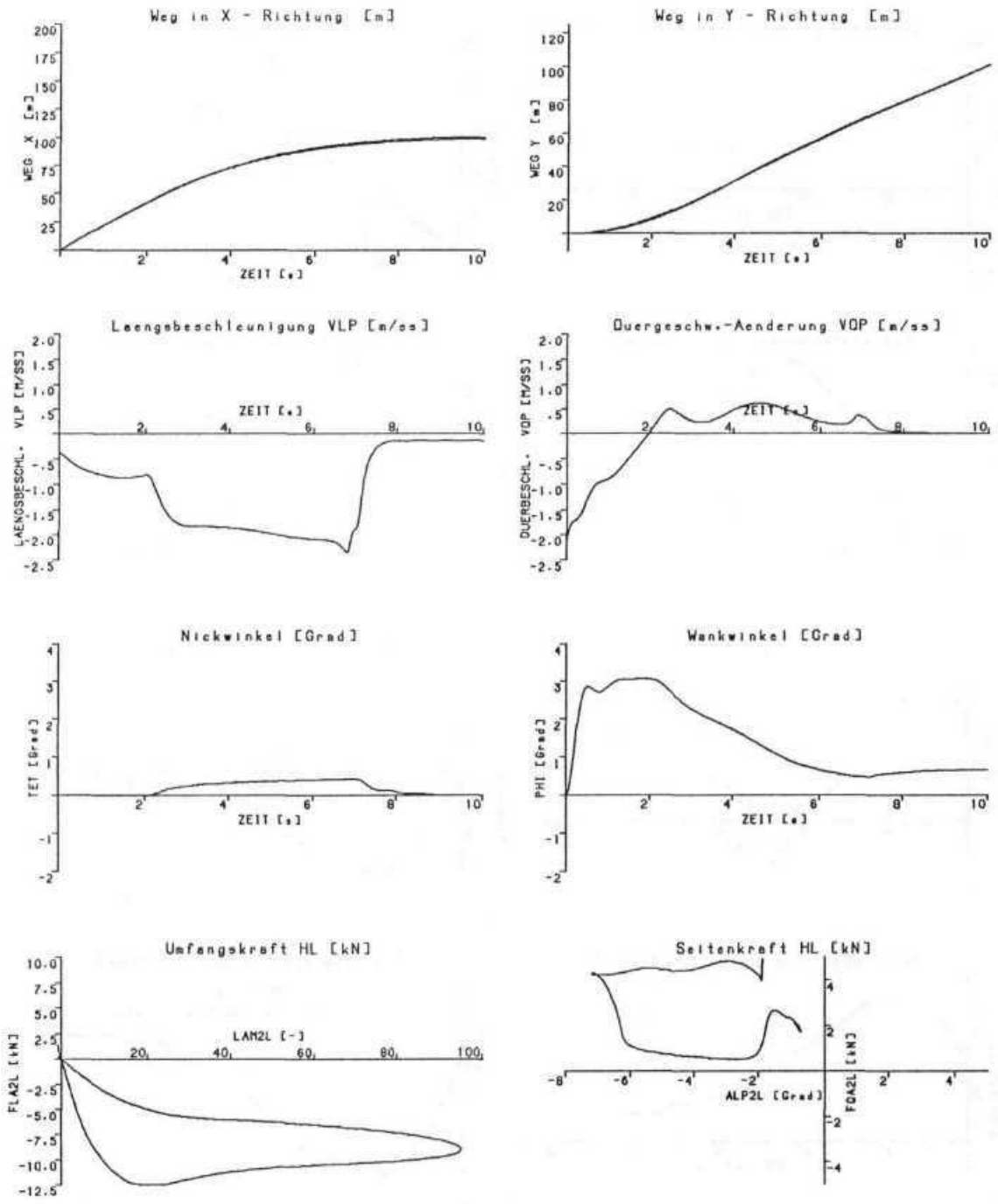
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_e (li/ro) = .72/.72$

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 5 / Rahmen 3



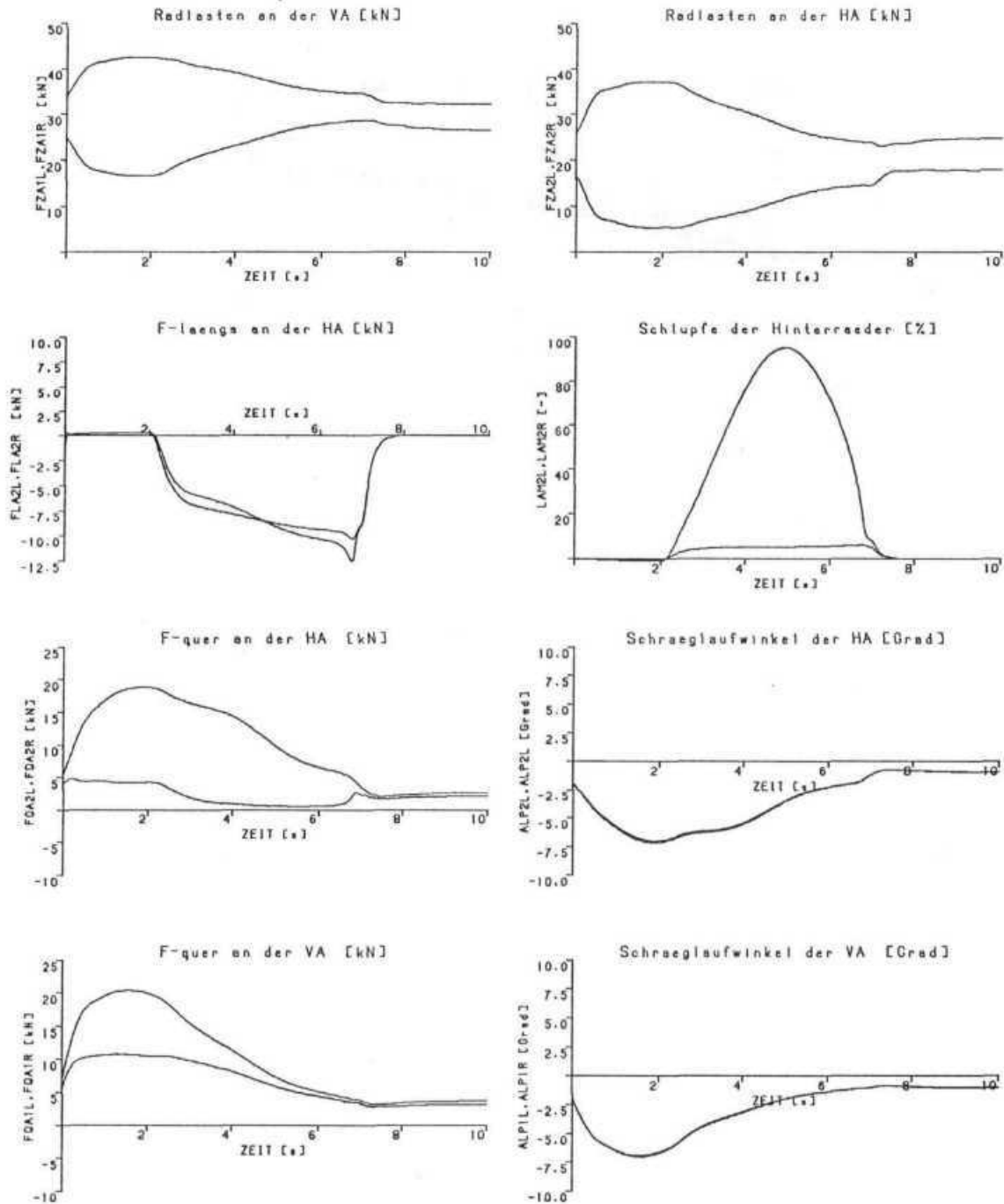
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .72/.72

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 5 / Rahmen 4



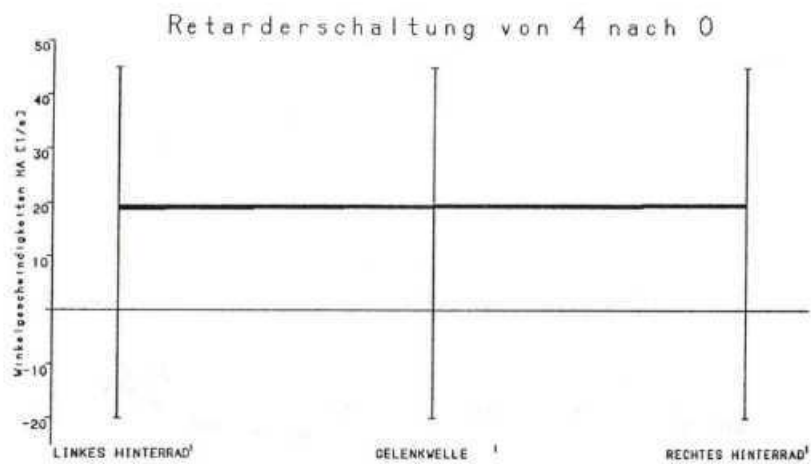
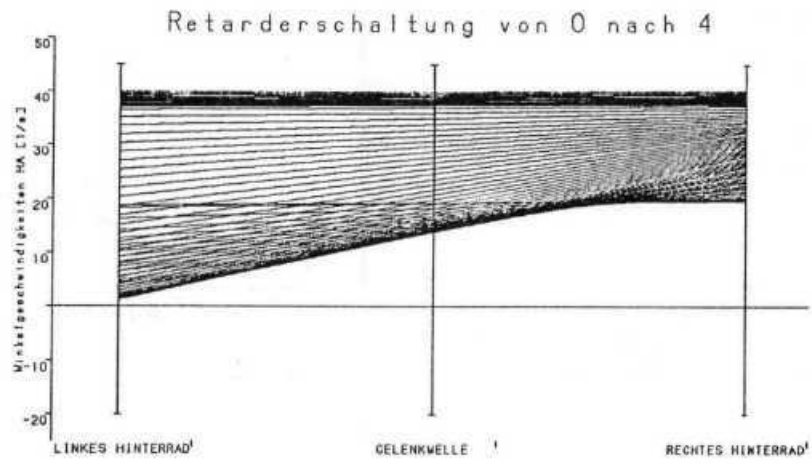
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.72

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## K1 - 5 / Rahmen 5



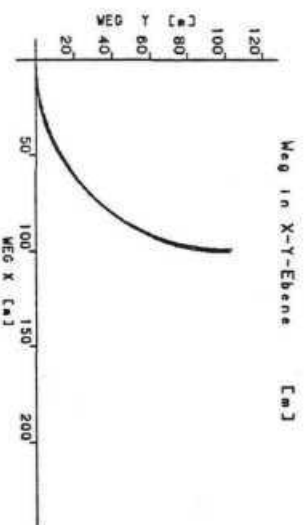
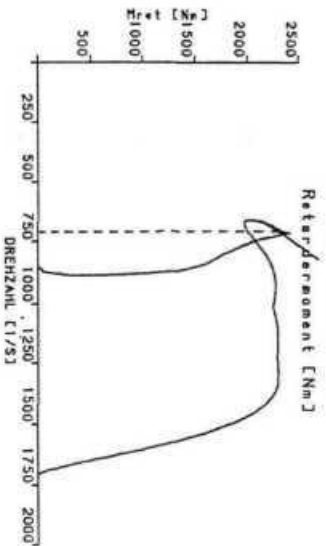
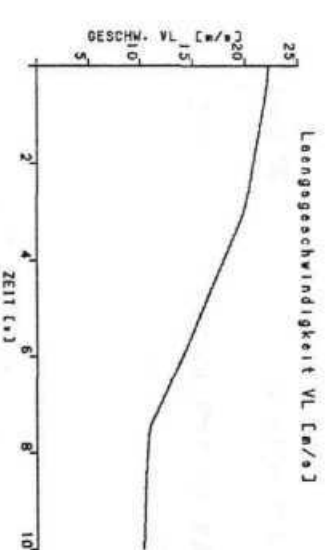
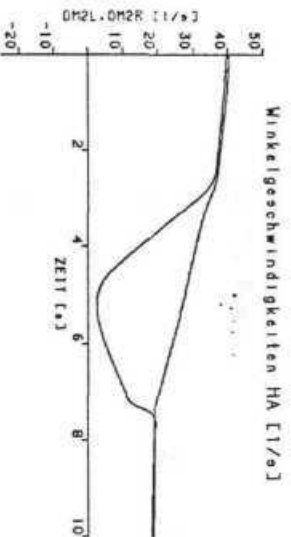
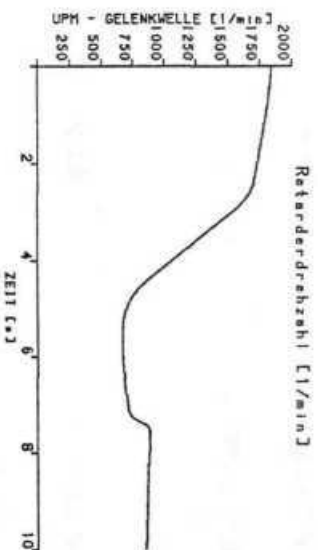
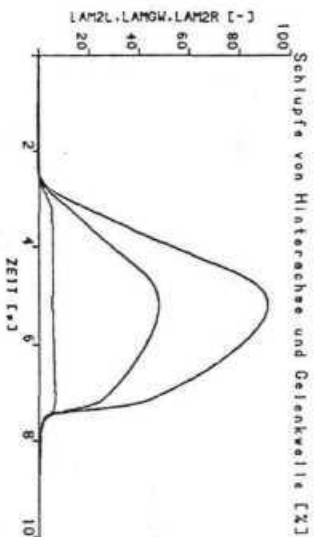
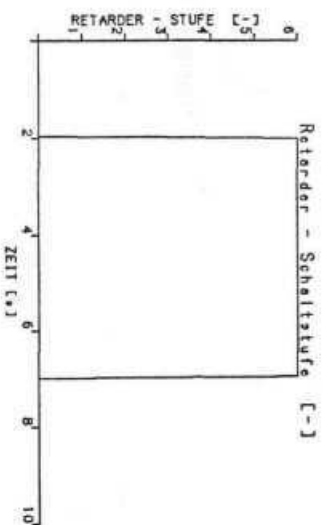
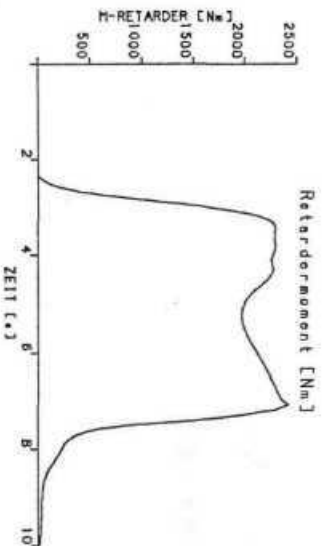
Winkelgeschwindigkeitsdiagramme  
 Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K1**Variation<sup>6)</sup> **K1 - 6**

Fahrzeug:	<b>leer</b>						
Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
ABV:	ja		<b>nein</b>				
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$	<b>0,72</b>			0,48		
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbearbeitung:	2 m/s <sup>2</sup>		<b>4 m/s<sup>2</sup></b>				

(Quelle: Simulationskennung **SPL0811.2**)<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K1 - 6 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

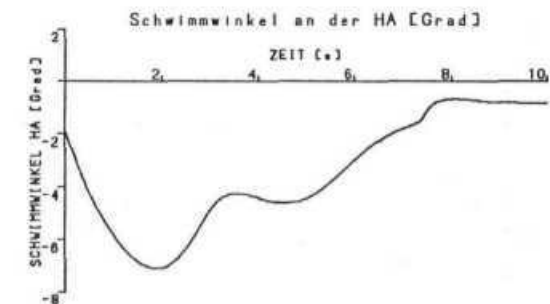
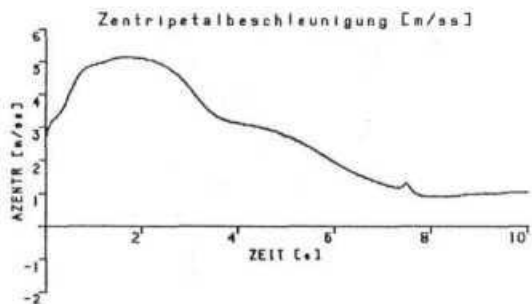
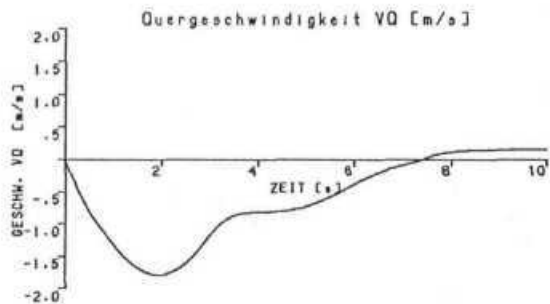
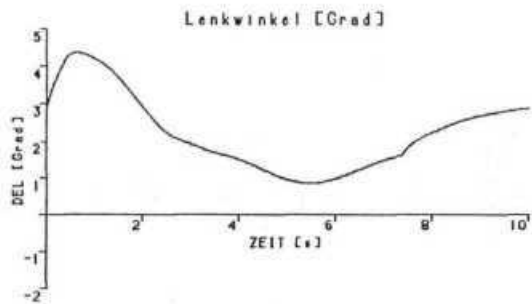
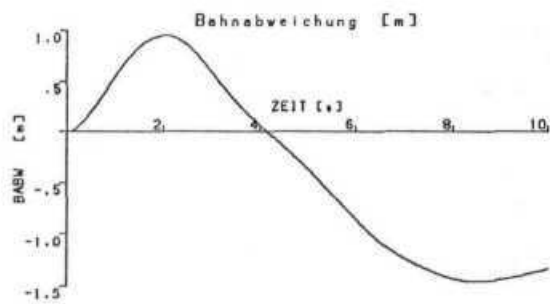
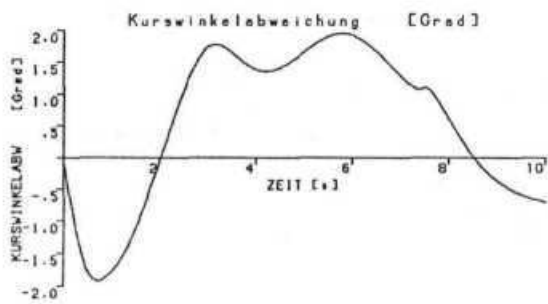
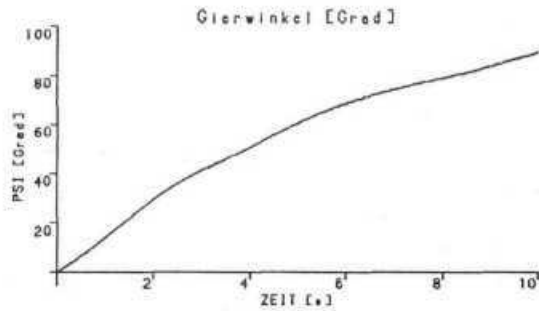
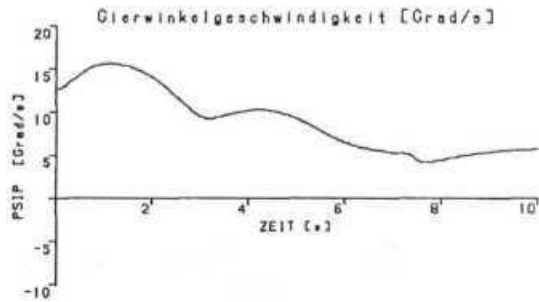
Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .72/.72

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9 / 42.6 kN



K1 - 6 / Rahmen 2



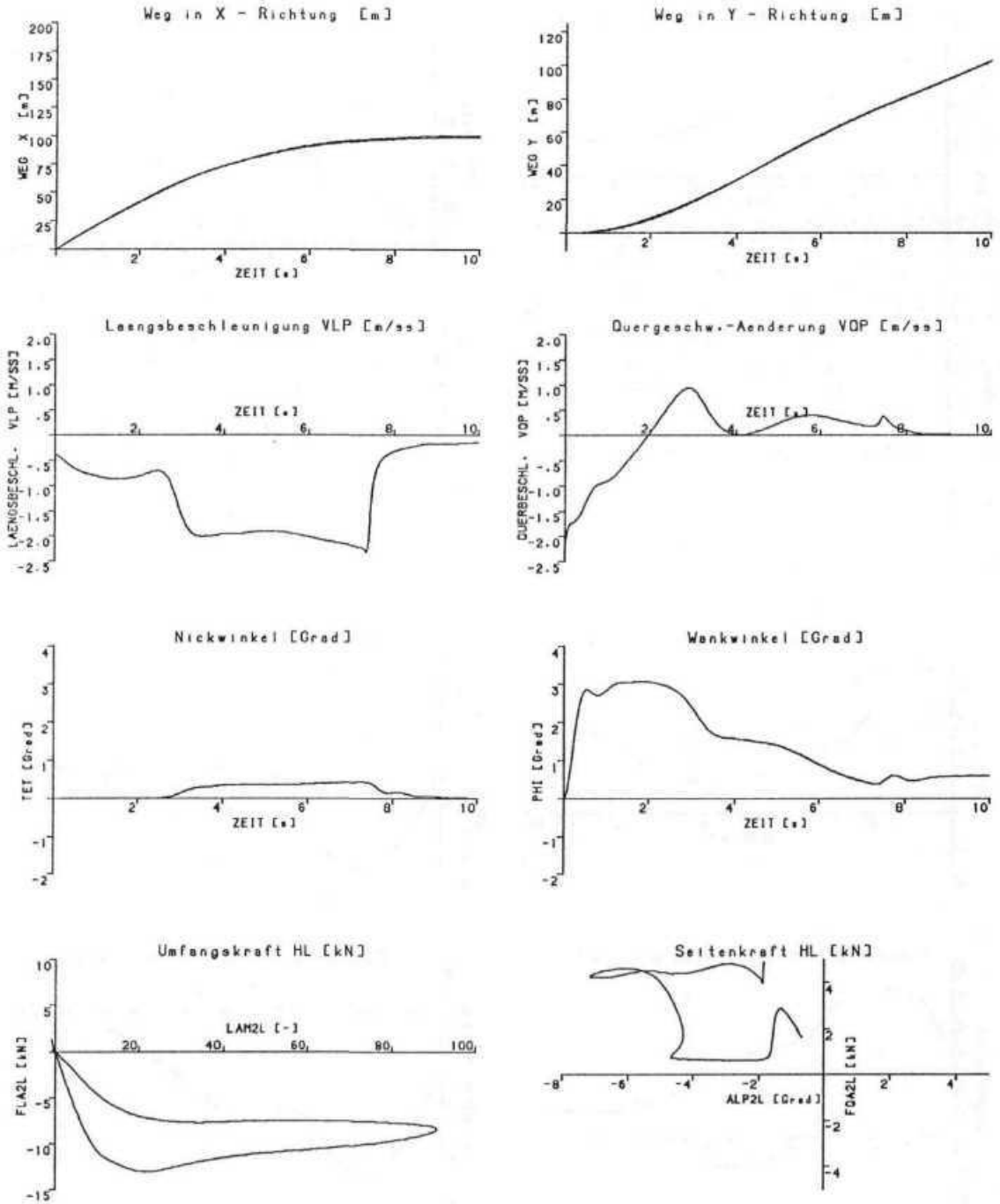
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad. Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K1 - 6 / Rahmen 3



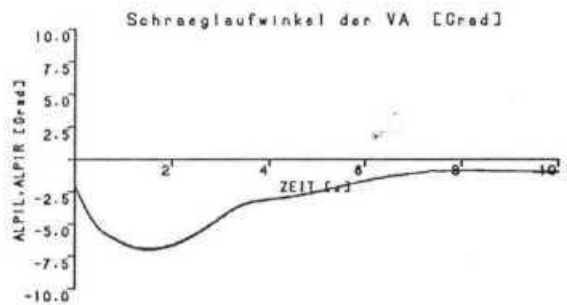
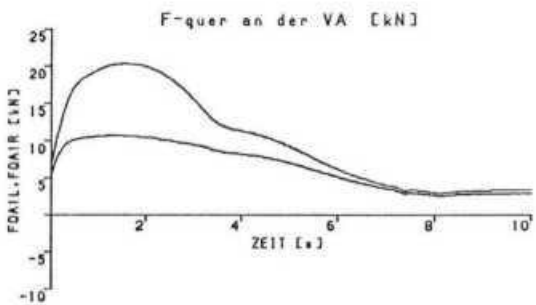
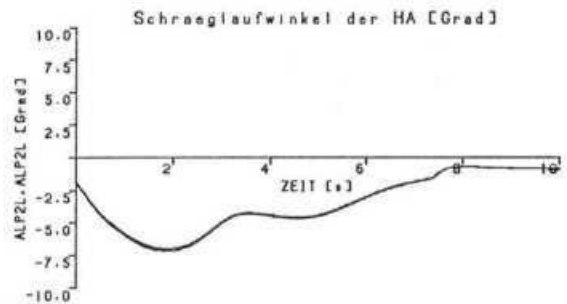
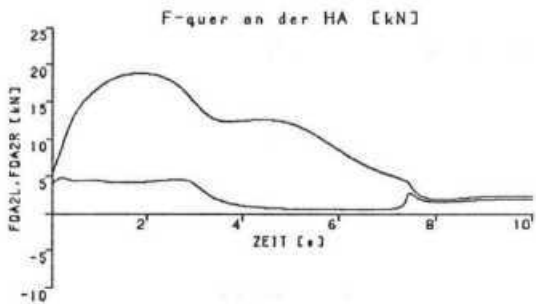
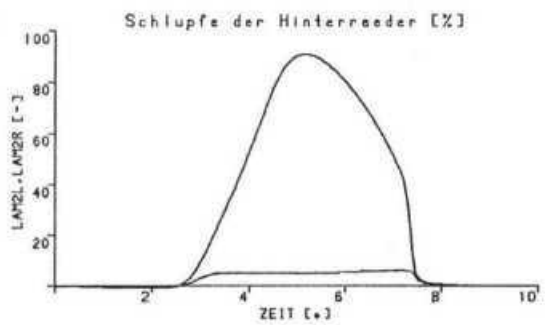
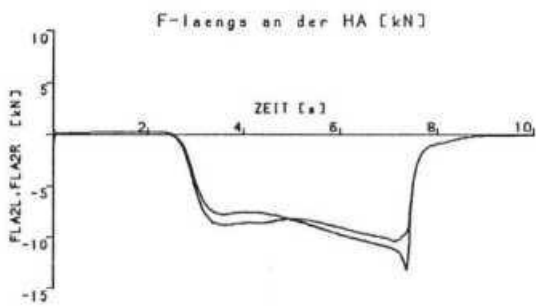
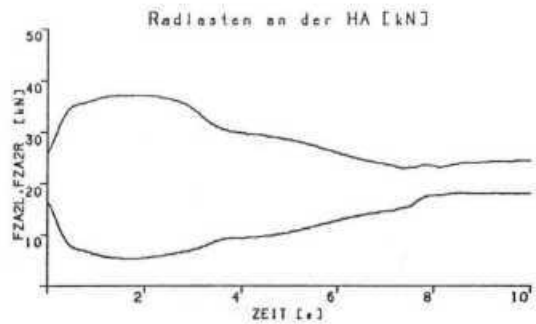
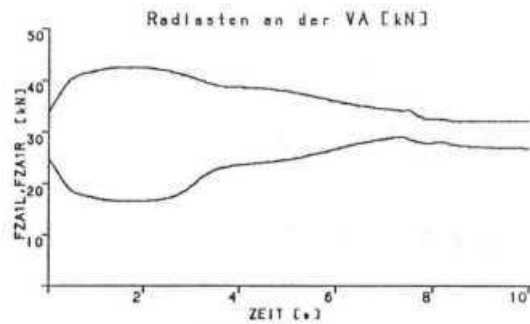
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.72

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 6 / Rahmen 4



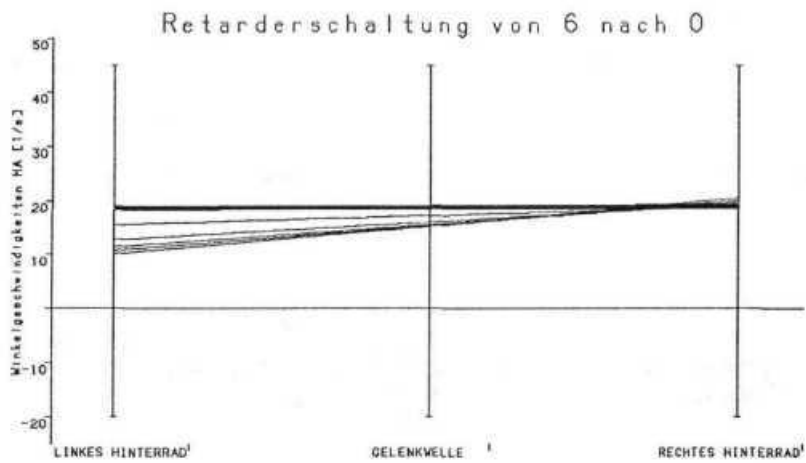
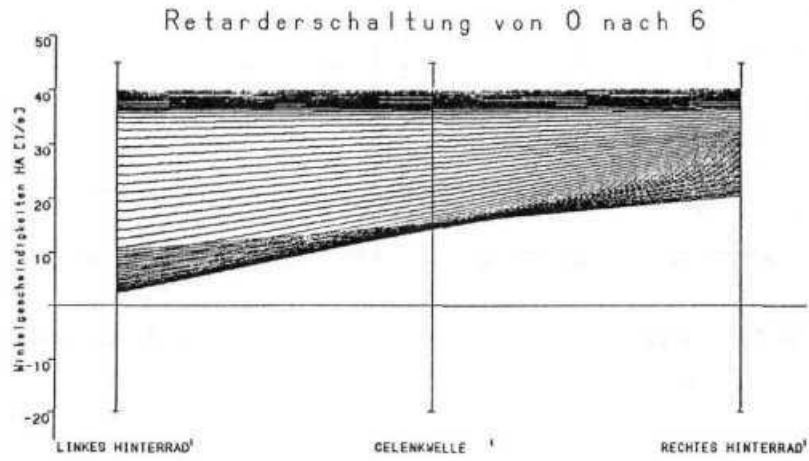
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/ro) = .72/.72

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 6 / Rahmen 5



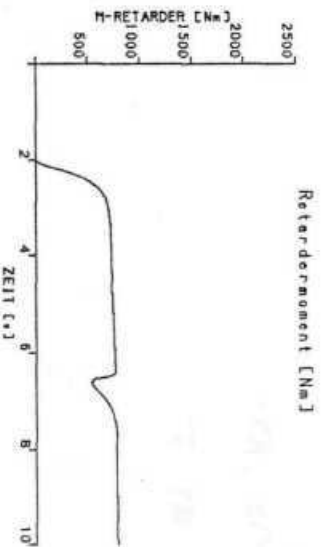
Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K1**Variation<sup>7)</sup> **K1 - 7**

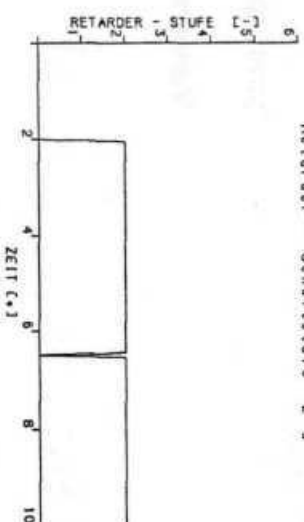
Fahrzeug:	<b>leer</b>						
Retarderstufe:	<b>A - 2</b>		A - 4		B - 3		B - 6
ABV:	<b>ja</b>		nein				
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		0,72		<b>0,48</b>		
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbearschleunigung:	2 m/s <sup>2</sup>		<b>4 m/s<sup>2</sup></b>				

(Quelle: Simulationskennung **SPL0837**)<sup>7)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

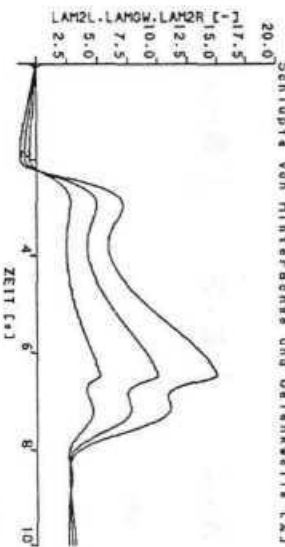
K1 - 7 / Rahmen 1



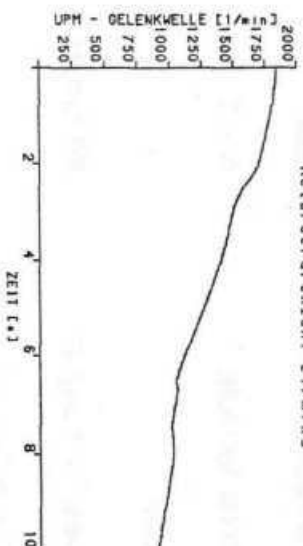
Retarder - Schaltstufe [-]



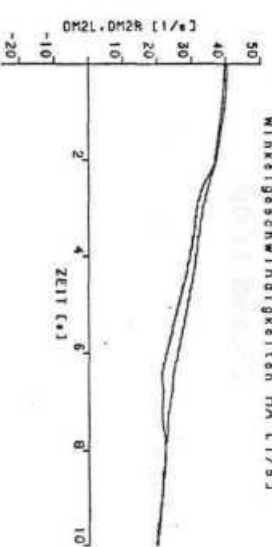
Schlupf von Hinterachse und Gelenkwelle [%]



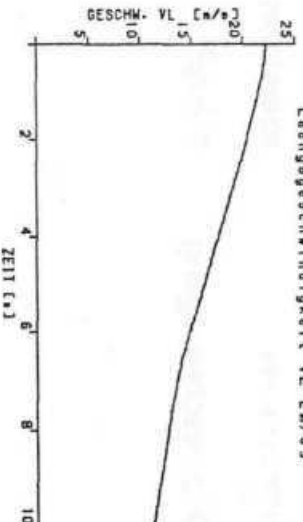
Retarderdrehzahl [1/min]



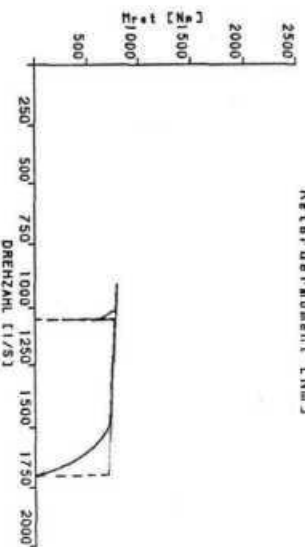
Winkelgeschwindigkeiten HA [1/s]



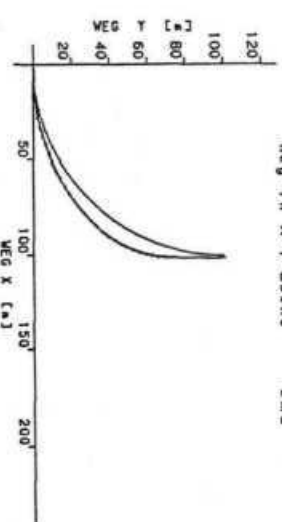
Laengengeschwindigkeit VL [m/s]



Retardermoment [Nm]



Meg in X-Y-Ebene [m]



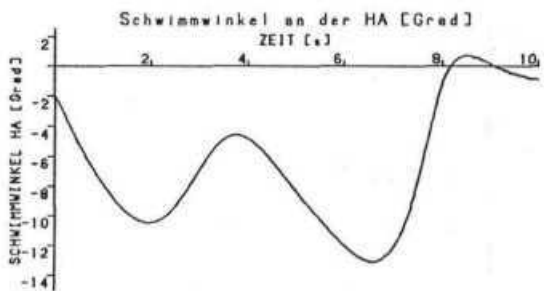
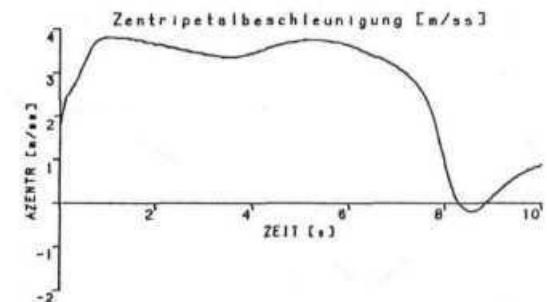
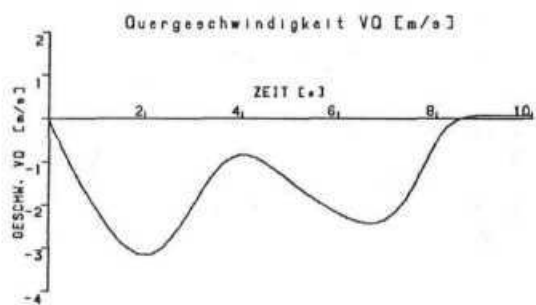
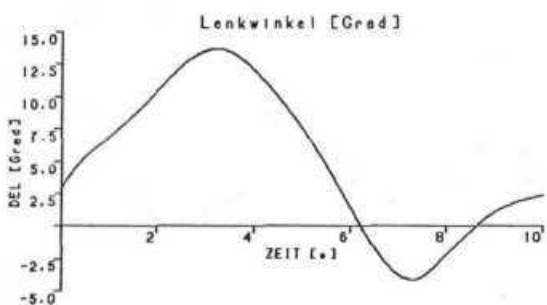
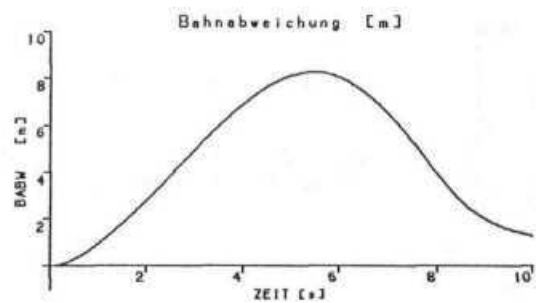
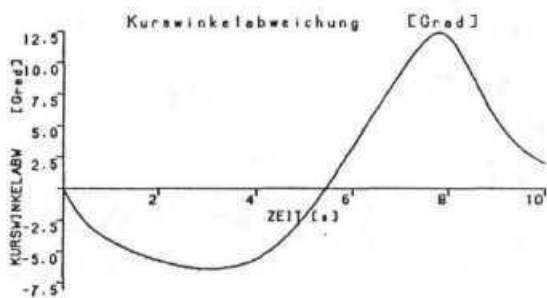
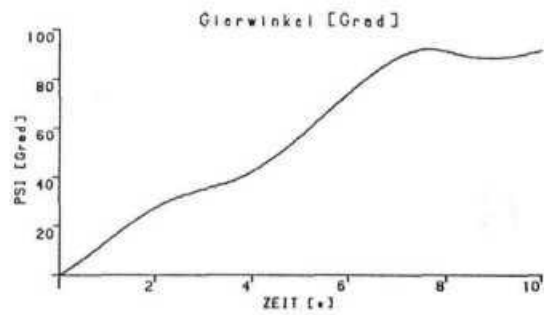
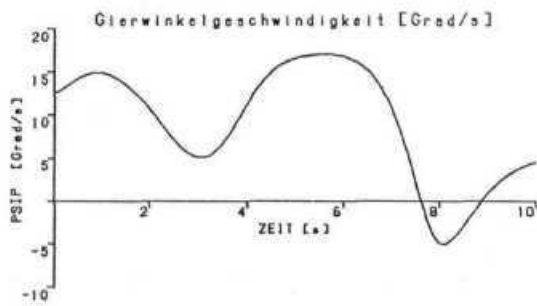
Retarder : Typ A  
 Schaltstufe(n) : 2-0-0  
 ABV-Schwellw. : 15.-%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9 / 42.6 kN

K1 - 7 / Rahmen 2



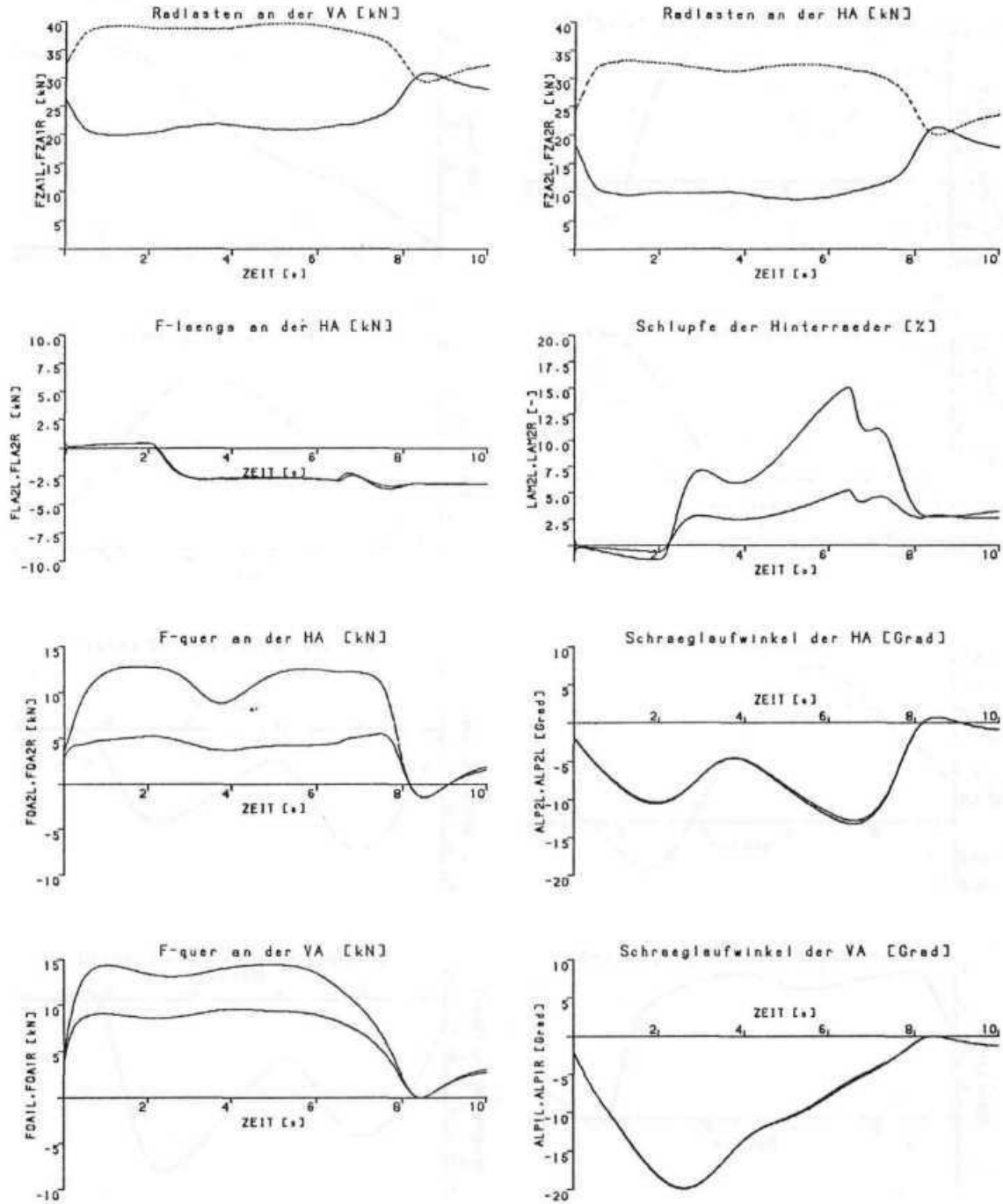
Retarder : Typ A  
 Schaltstufe (n) : 2-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 7 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 2-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_e (ll/re) = .48/.48$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



Parameterreihe **K1**Variation<sup>8)</sup> **K1 - 8**

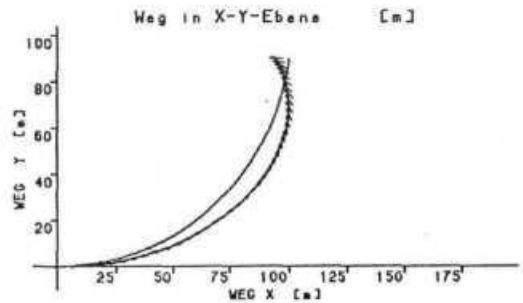
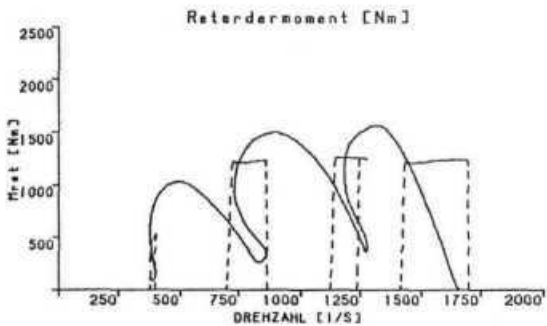
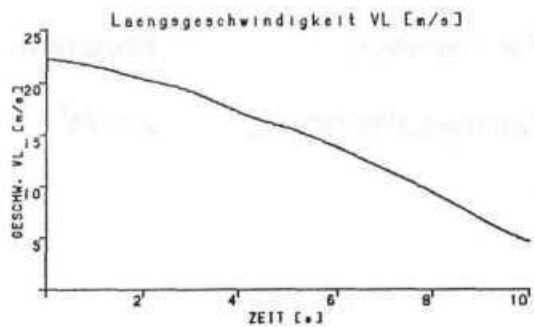
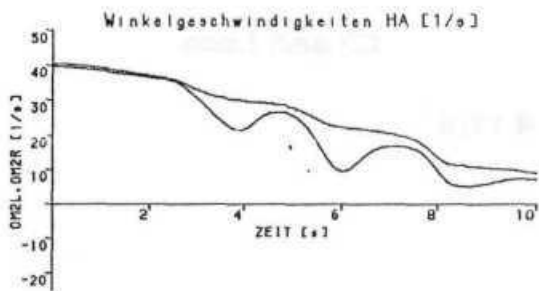
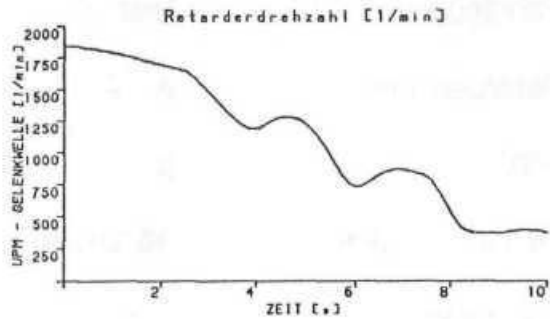
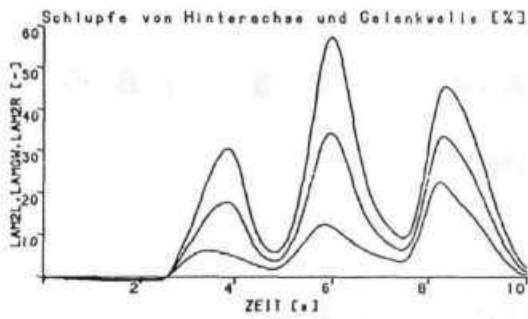
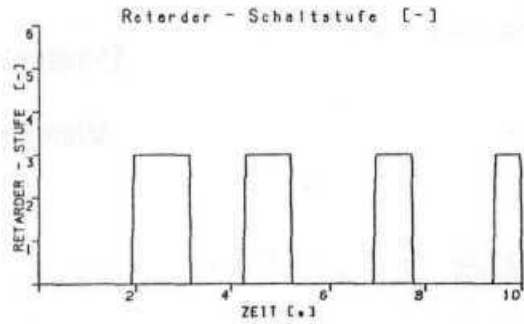
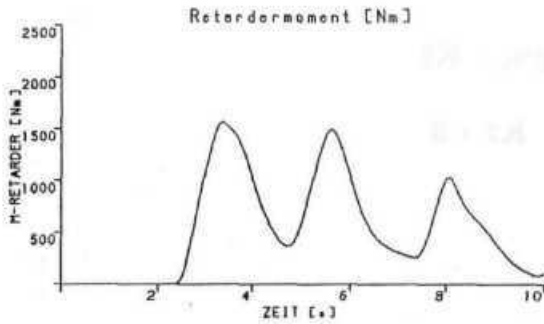
Fahrzeug:	<b>leer</b>						
Retarderstufe:	A - 2		A - 4		<b>B - 3</b>		B - 6
ABV:	<b>ja</b>		nein				
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		0,72		<b>0,48</b>		
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbeschleunigung:	2 m/s <sup>2</sup>		<b>4 m/s<sup>2</sup></b>				

(Quelle: Simulationskennung SPL0834)

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<sup>8)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K1 - 8 / Rahmen 1



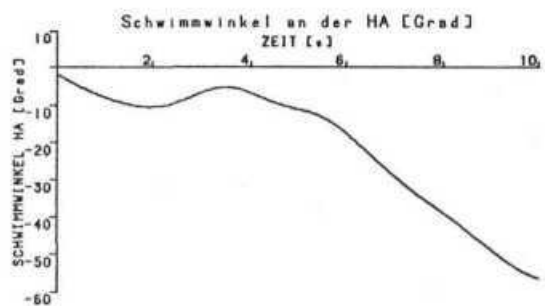
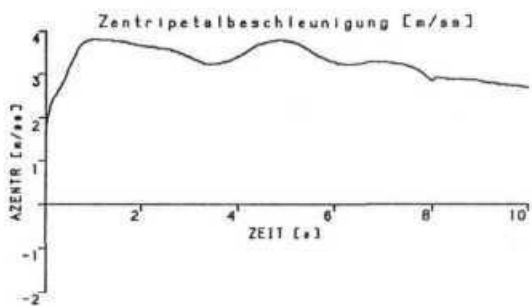
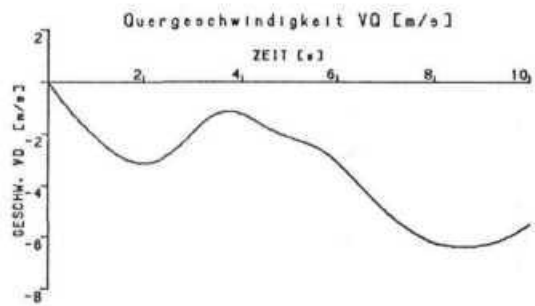
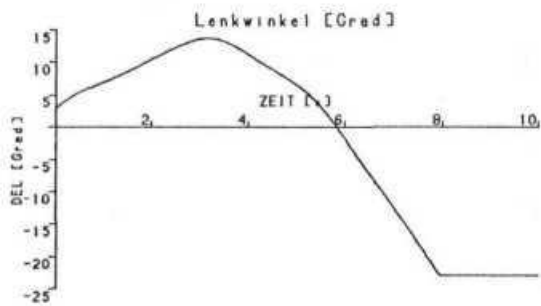
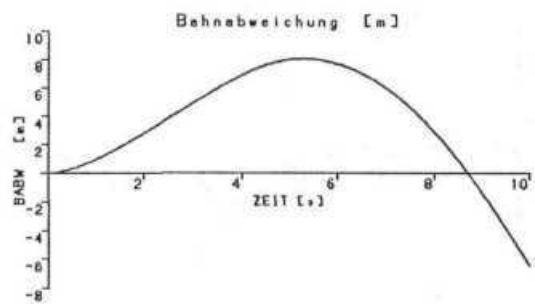
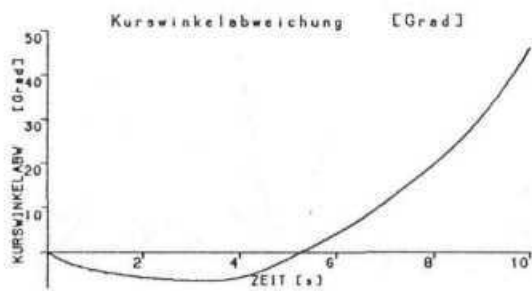
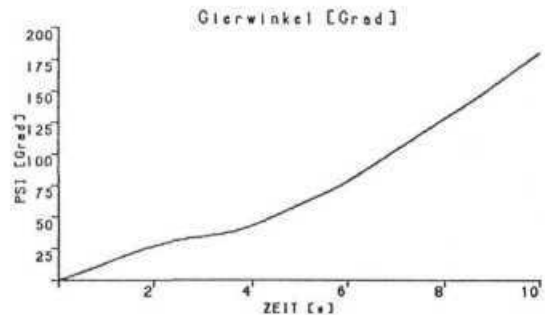
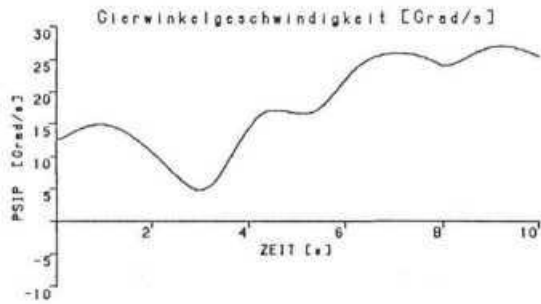
Retarder : Typ B  
 Schaltstufe (n) : 3-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 8 / Rahmen 2



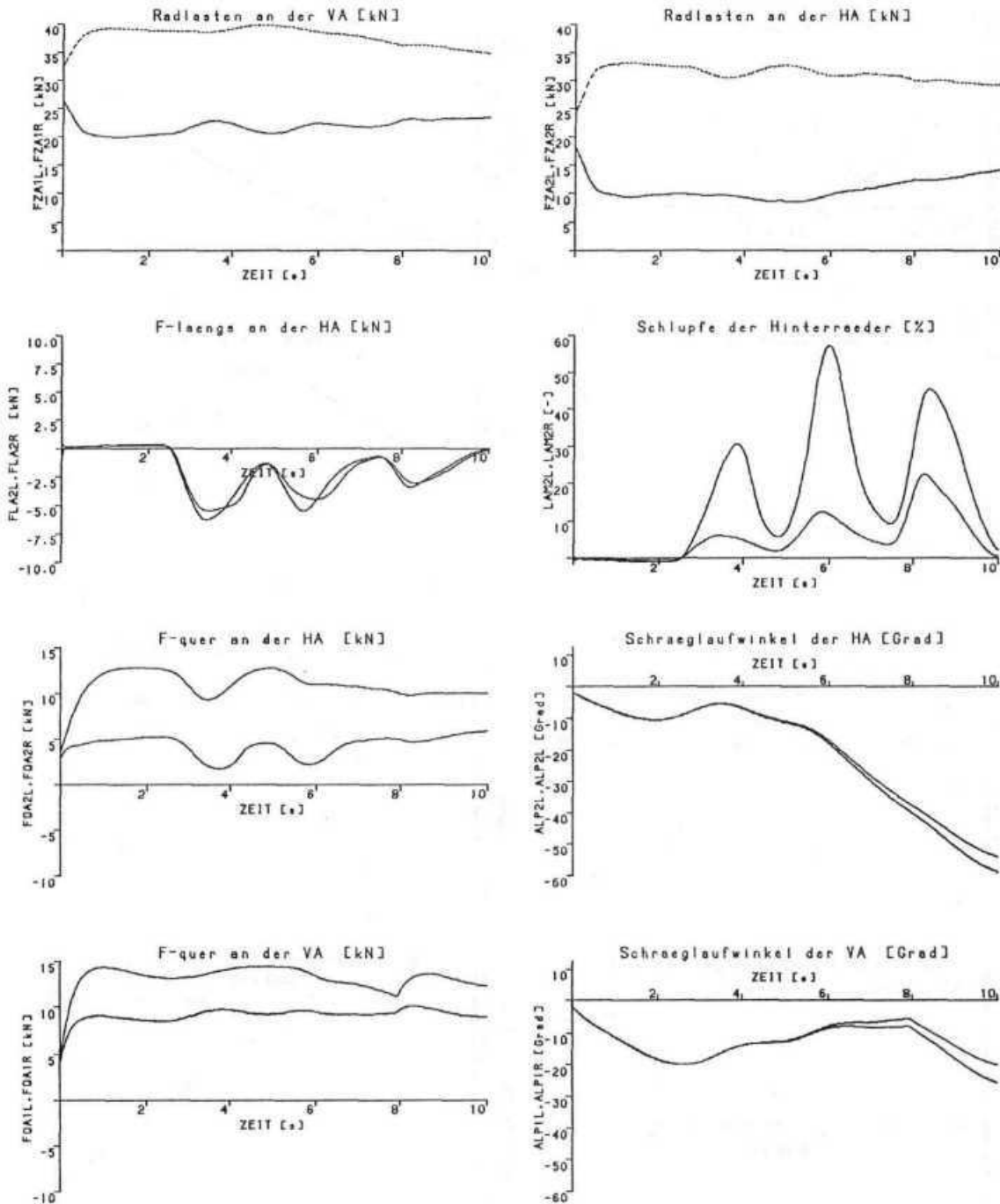
Retarder : Typ B  
 Schaltstufe (n) : 3-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K1 - 8 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 3-0  
 ABV-Schwelle : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

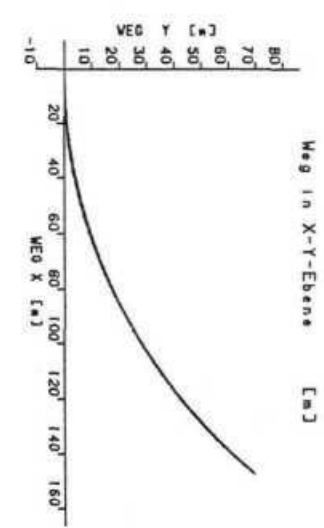
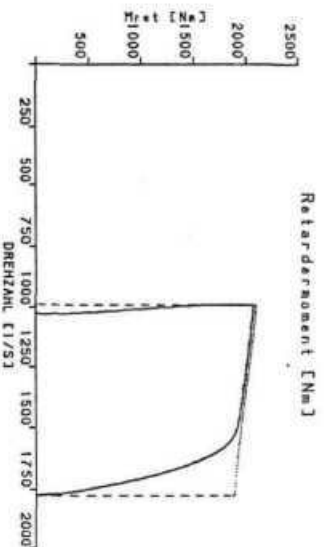
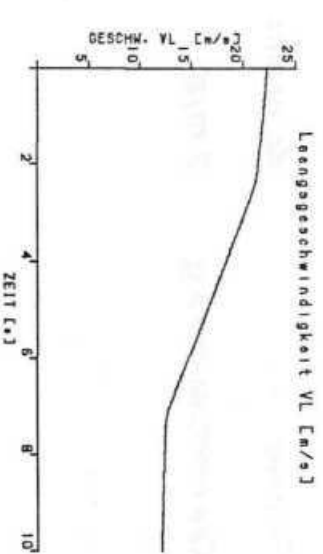
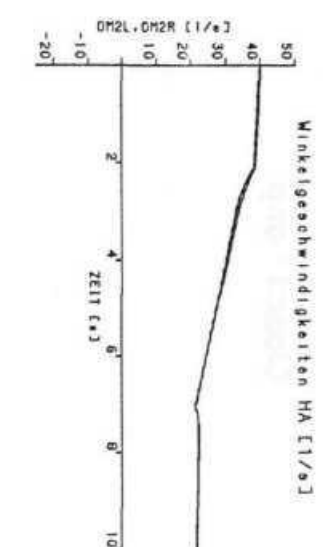
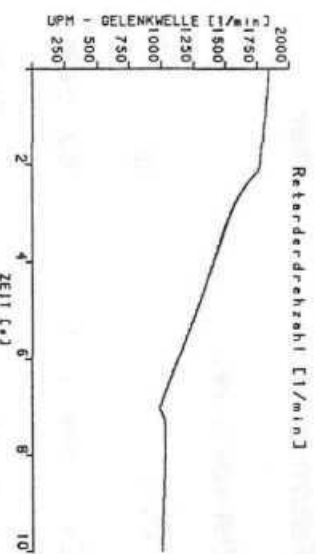
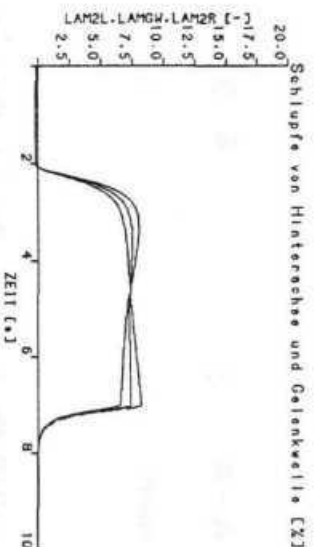
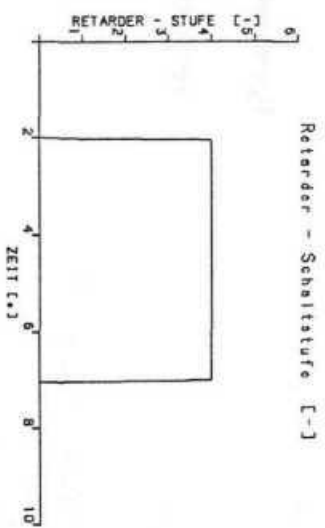
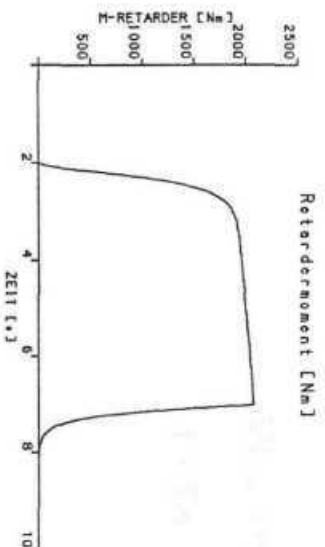
Parameterreihe K2Variation<sup>1)</sup> **K2 - 1**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	<b>B - 6</b>
ABV:	ja	<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu$ - Split =	<b>0,72/0,48</b>	0,72/0,24   0,48/0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung SPL0901.2)

<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 1 / Rahmen 1



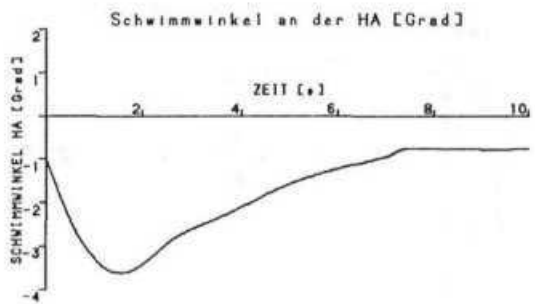
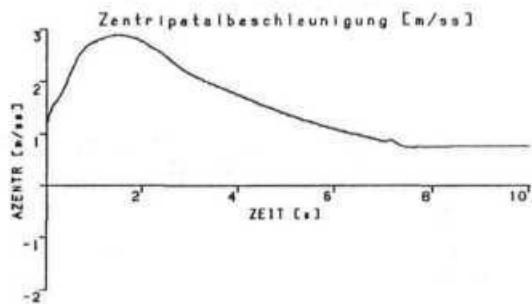
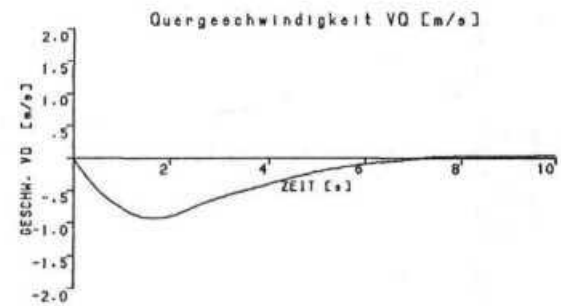
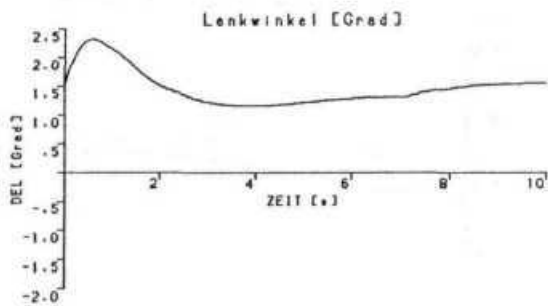
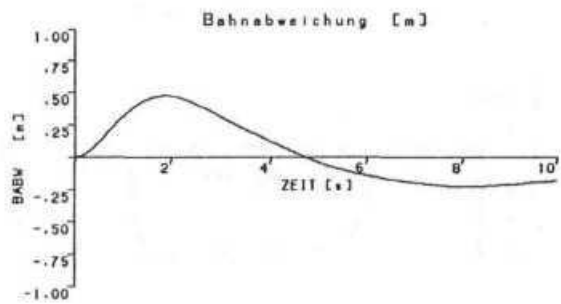
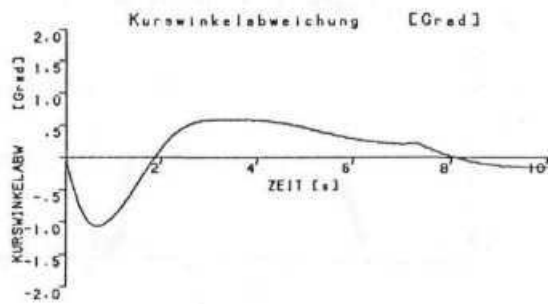
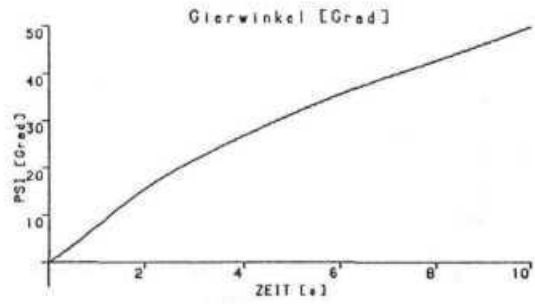
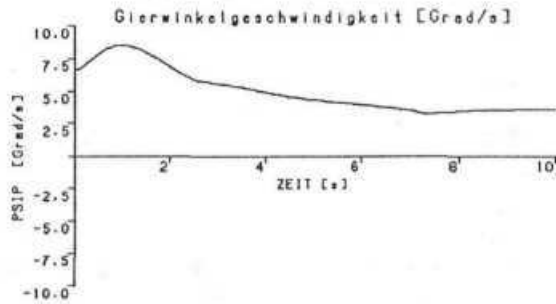
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 %  
 Querneigung = 0.0 %  
 mu (11/re) = .72/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K2 - 1 / Rahmen 2



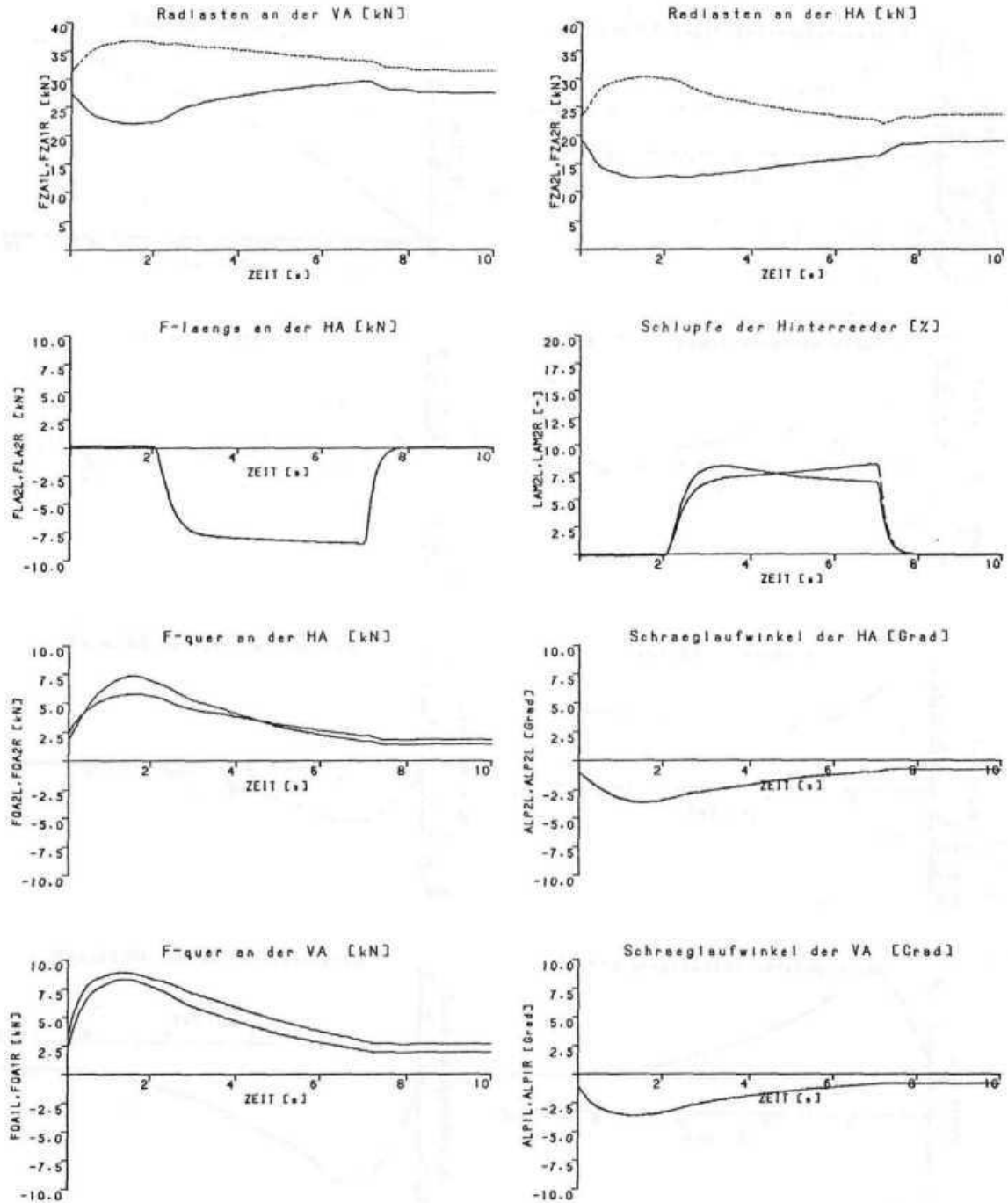
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K2 - 1 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



Parameterreihe **K2**Variation<sup>2)</sup> **K2 - 2**

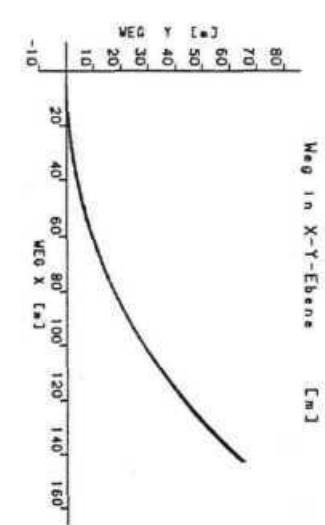
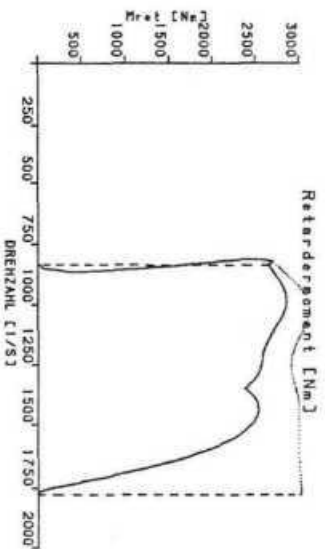
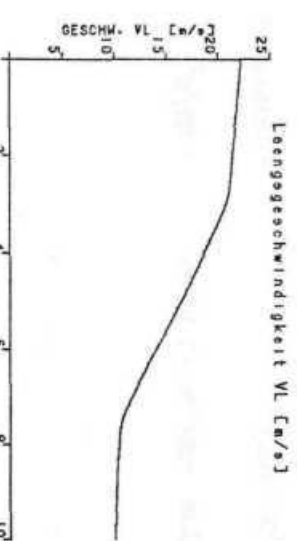
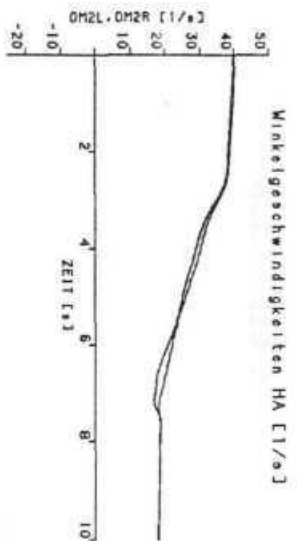
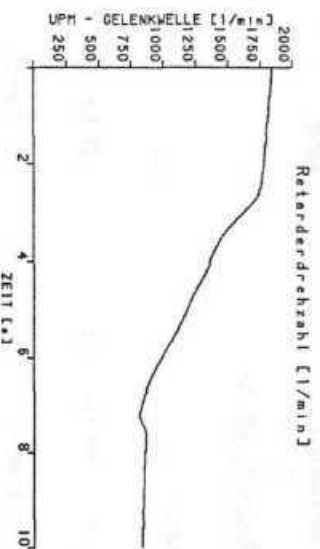
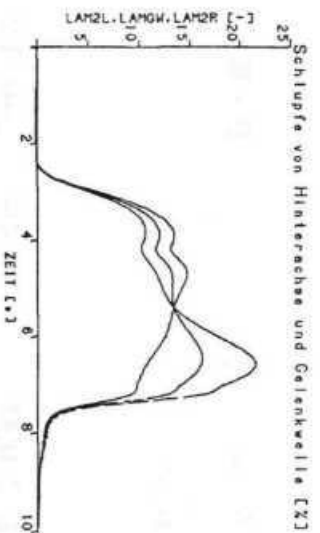
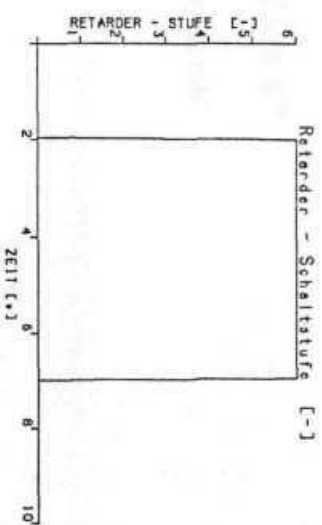
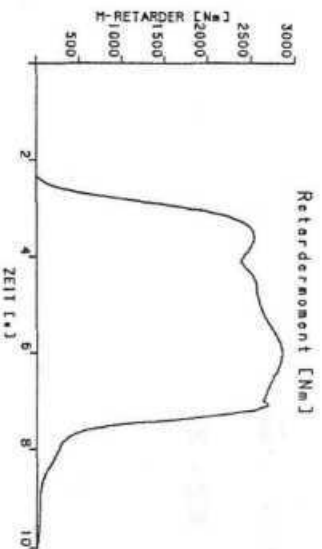
Fahrzeug:	<b>leer</b>		
Retarderstufe:		A - 4	<b>B - 6</b>
ABV:	ja	<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu$ - Split =	<b>0,72/0,48</b>	0,72/0,24   0,48/0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbearleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung SPL0909.2)

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<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 2 / Rahmen 1

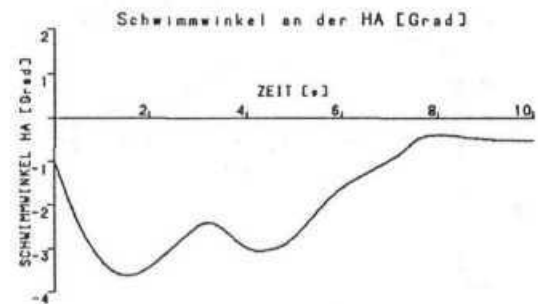
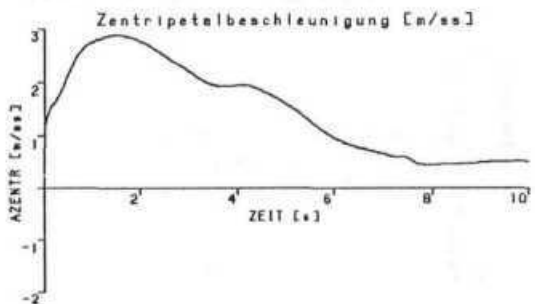
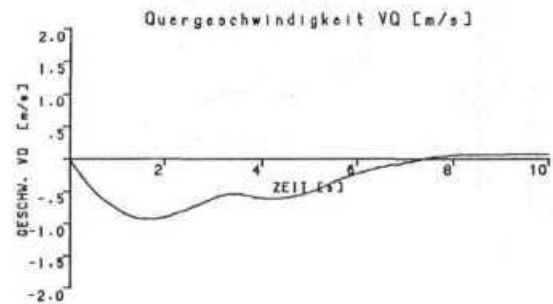
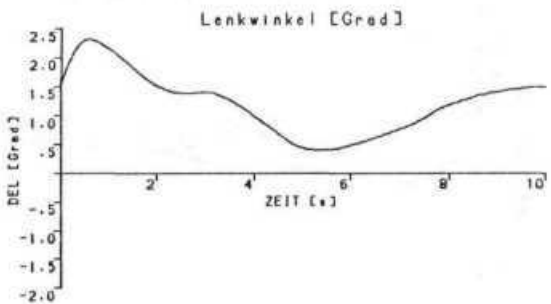
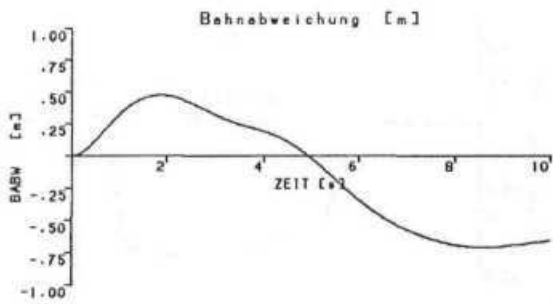
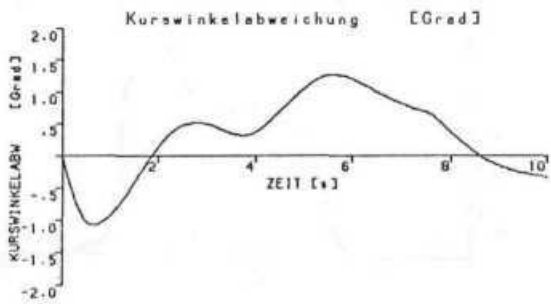
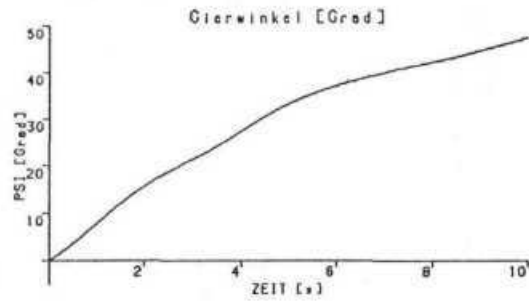
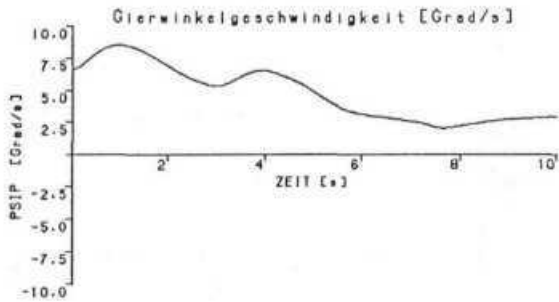


Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt, stat. Achslasten (VA/HA) : 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder  
 Lenkwinkel = 1.5 Grad, Closed Loop

K2 - 2 / Rahmen 2



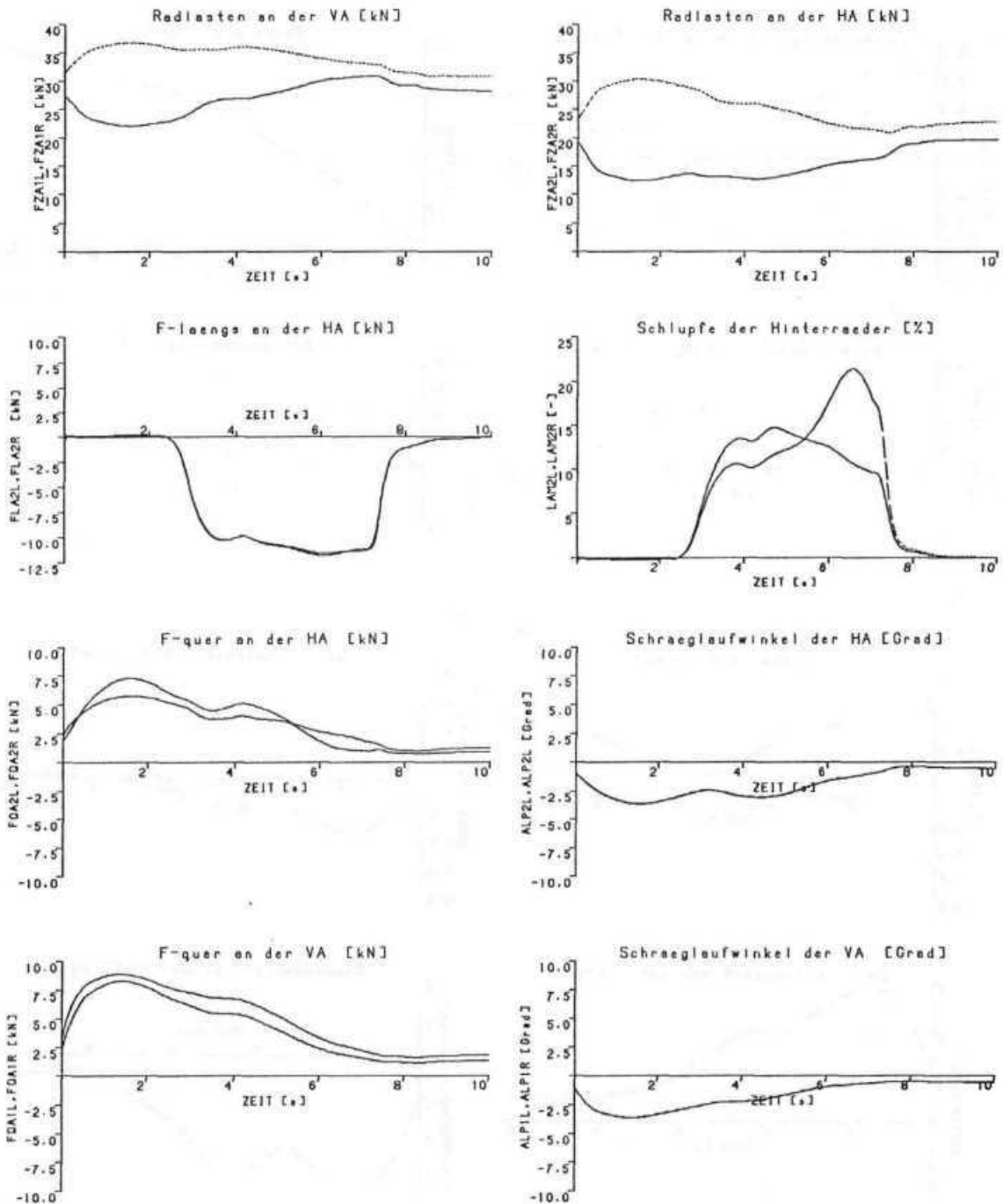
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 $\mu_{re}$  (l/re) = .72/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 2 / Rahmen 4



Retarder : Typ B  
 Schalstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaele = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.48

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

Parameterreihe **K2**Variation<sup>3)</sup> **K2 - 3**

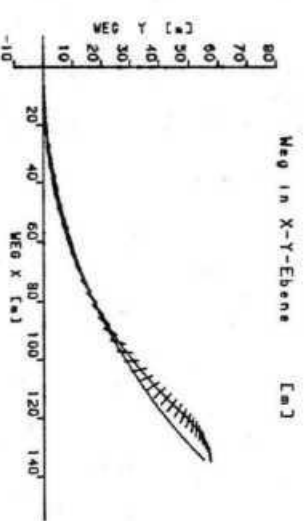
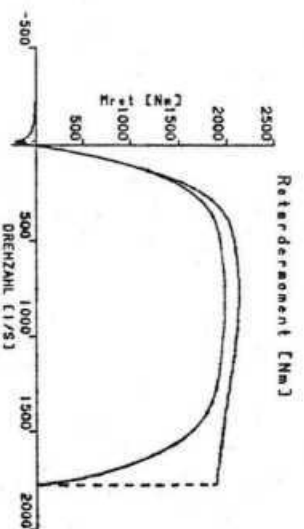
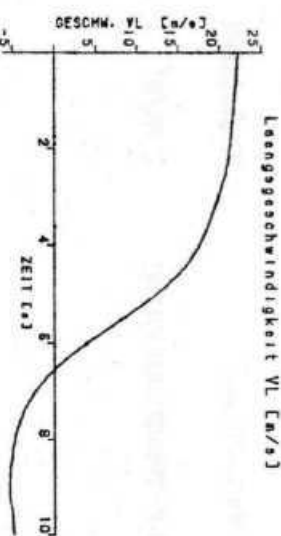
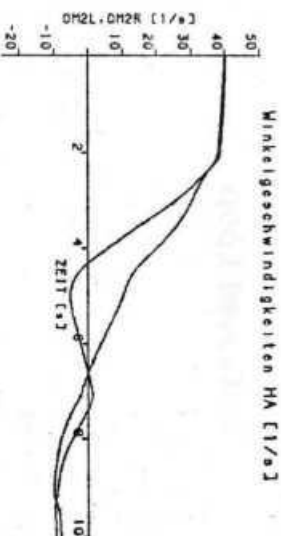
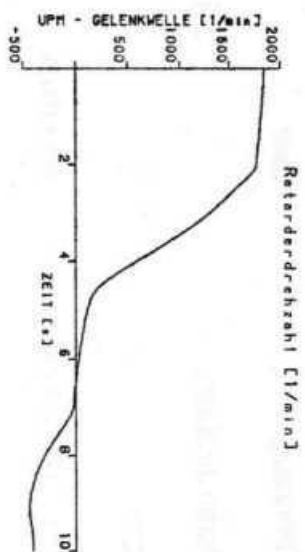
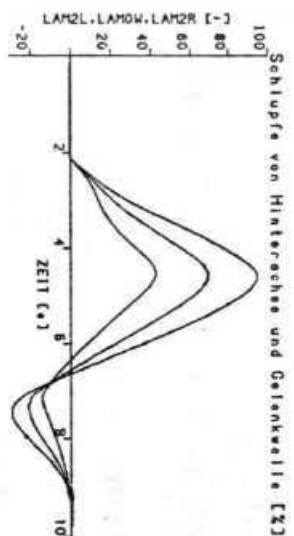
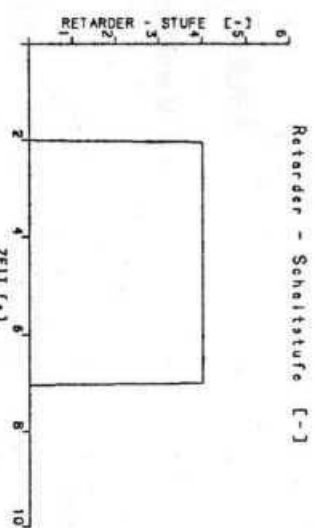
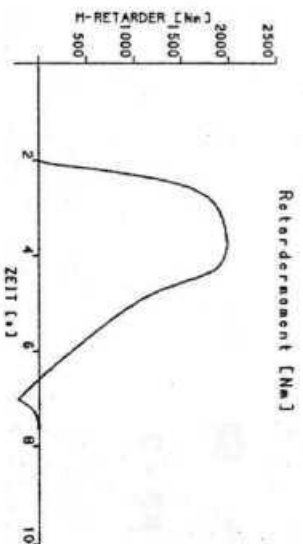
Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	<b>B - 6</b>
ABV:	ja	<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu$ - Split =	0,72/0,48   <b>0,72/0,24</b>	0,48/0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querb beschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung SPL0907.2)

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<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 3 / Rahmen 1

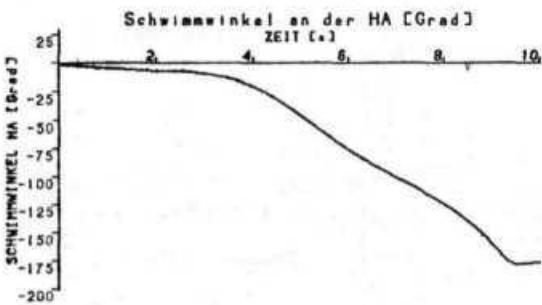
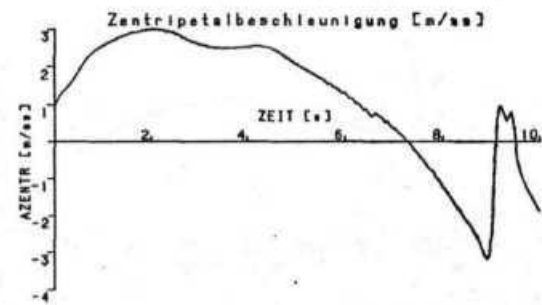
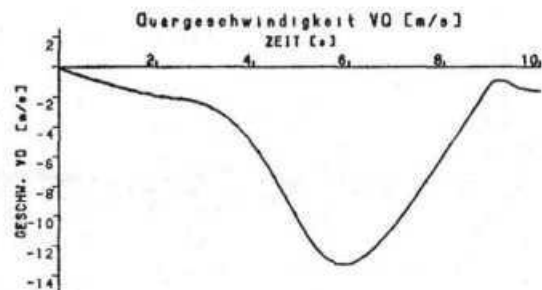
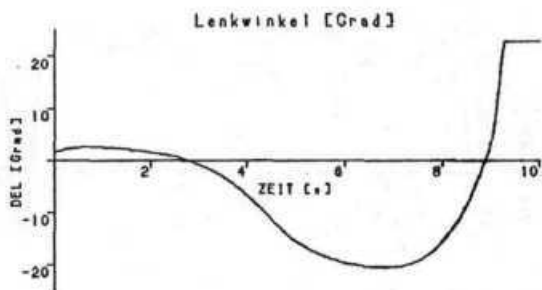
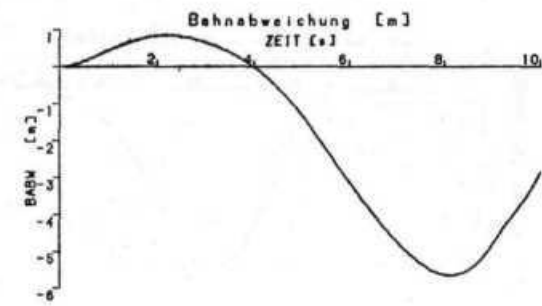
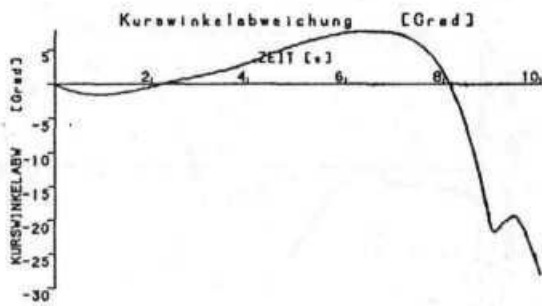
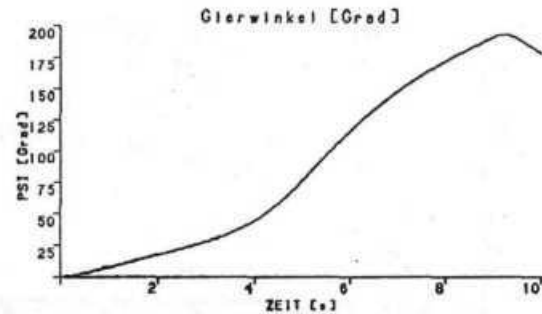
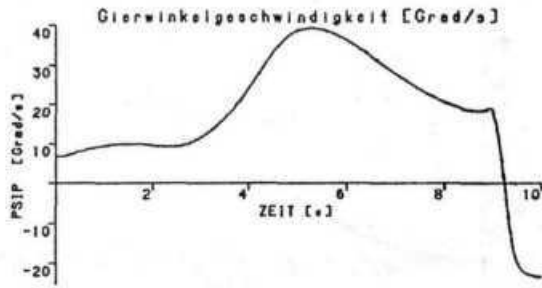


Retarder : Typ A  
Schaltstufe(n) : 4-0-0  
ABV : NEIN

Fahrbahn: Gefaeille = 0.0 % Querneigung = 0.0 %  
mue (l/r) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
Fahrmanoever : Kreisfahrt  
Solofz. leer mit 1 Retarder  
Lenkwinkel = 1.5 Grad, Closed Loop  
stat. Achslasten (VA/HA): 58.9/42.6 kN

K2 - 3 / Rahmen 2



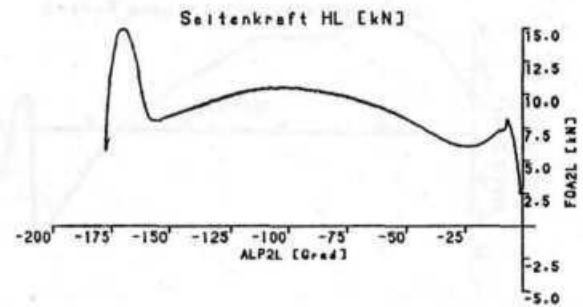
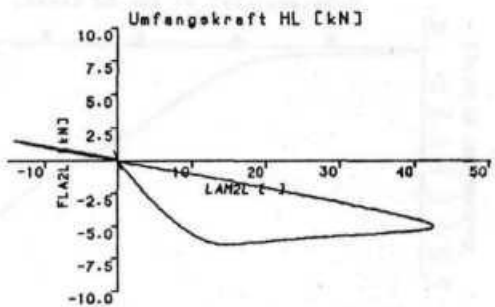
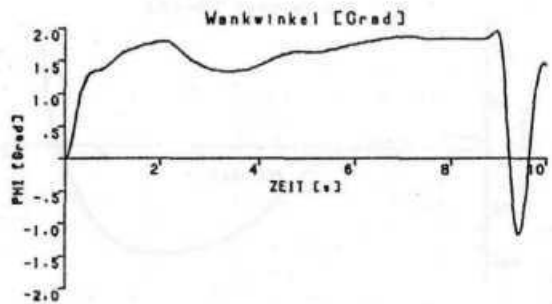
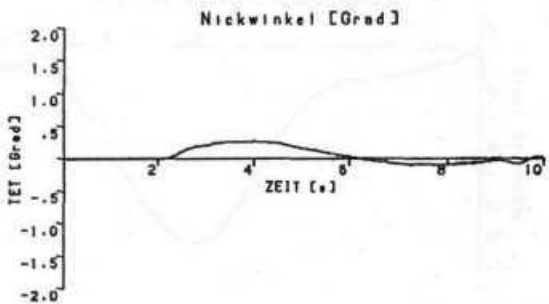
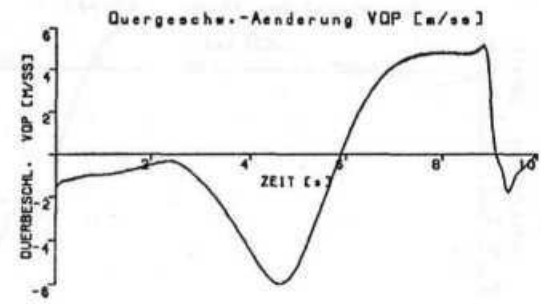
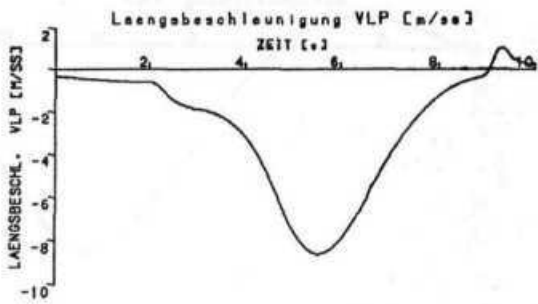
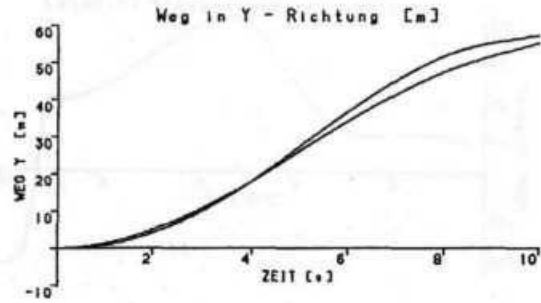
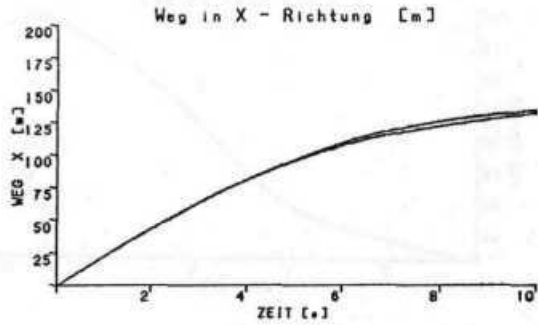
Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu_e (l/r_0) = .72/.24$

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K2 - 3 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

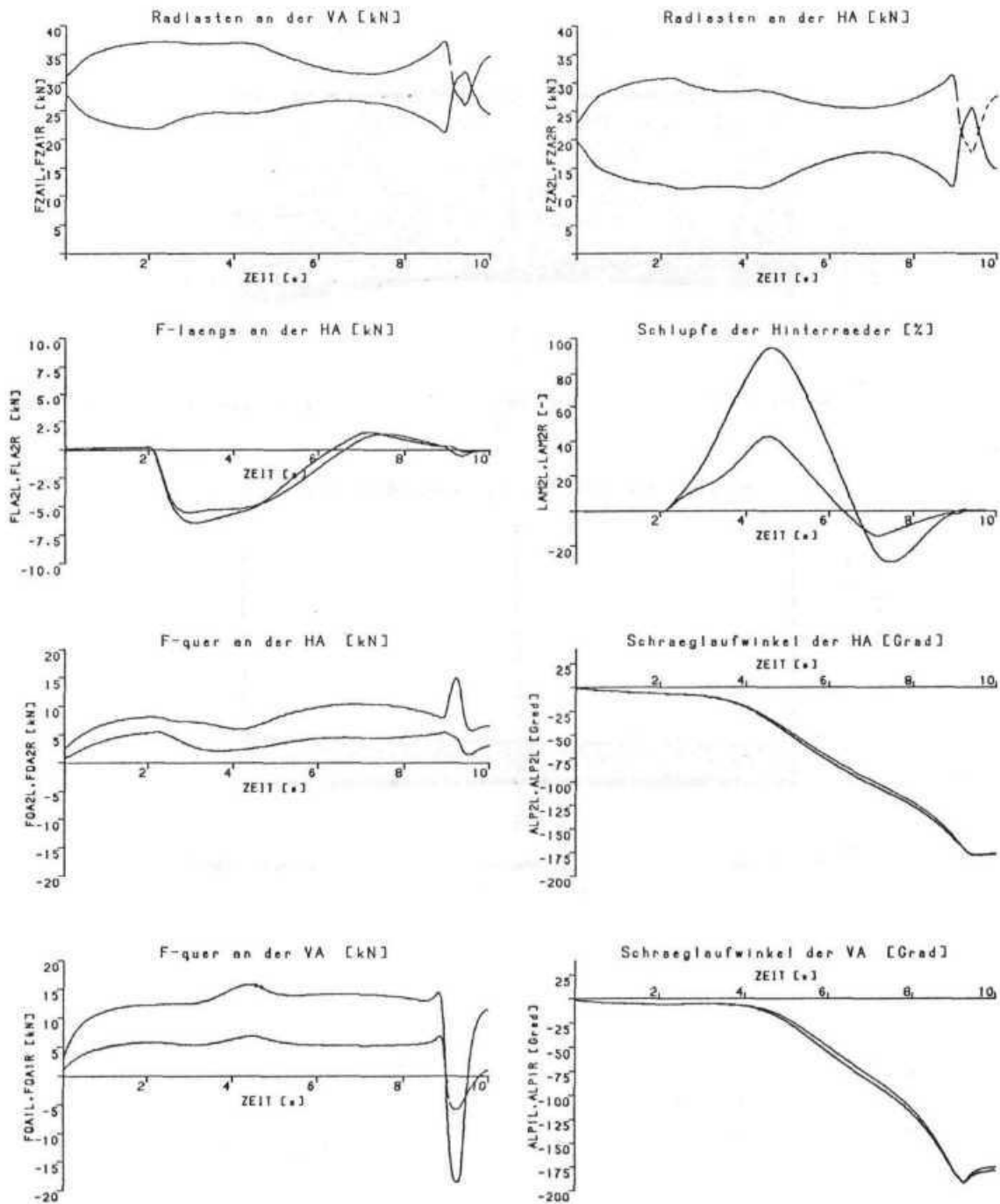
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K2 - 3 / Rahmen 4



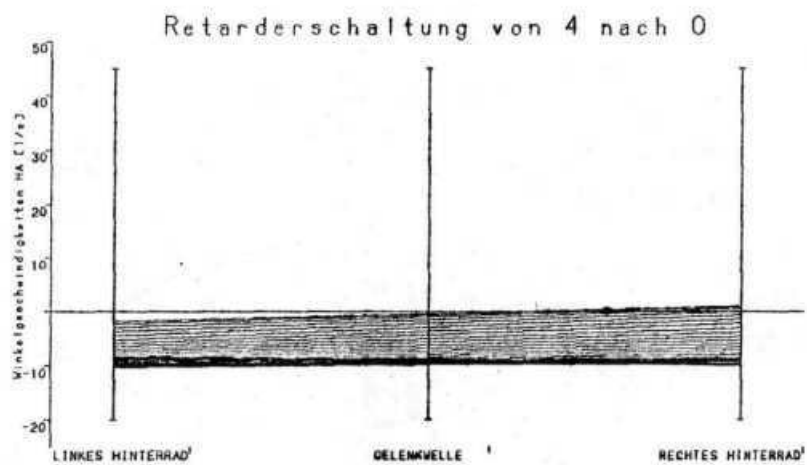
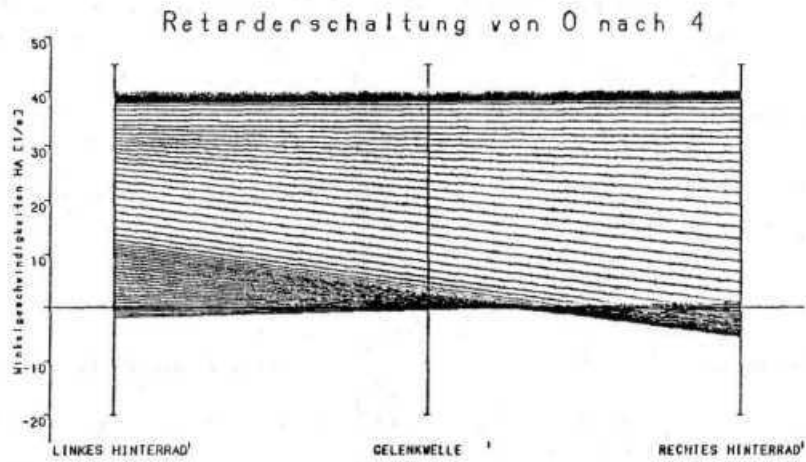
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu\_e (li/ro) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 3 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

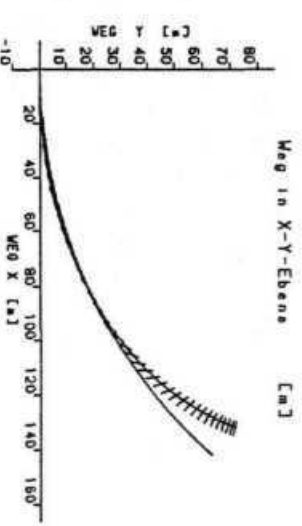
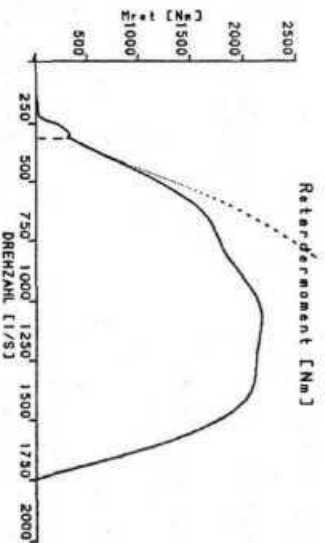
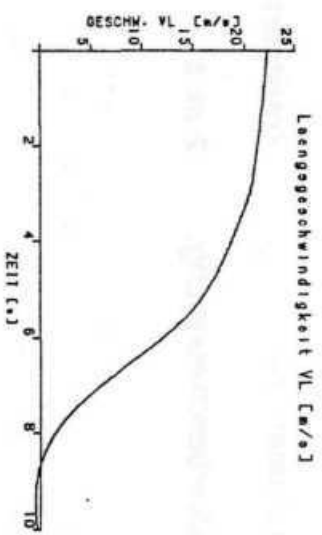
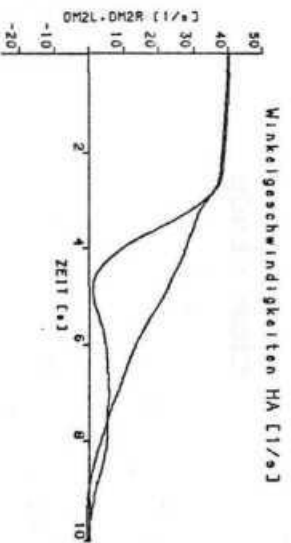
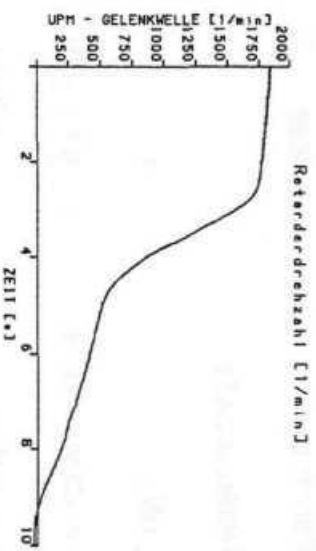
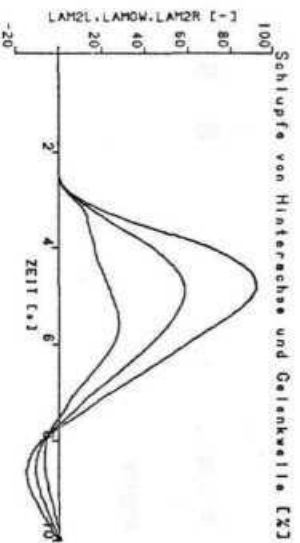
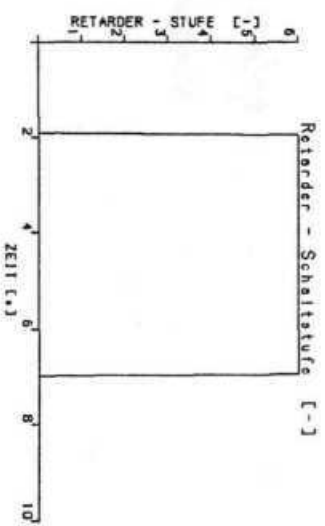
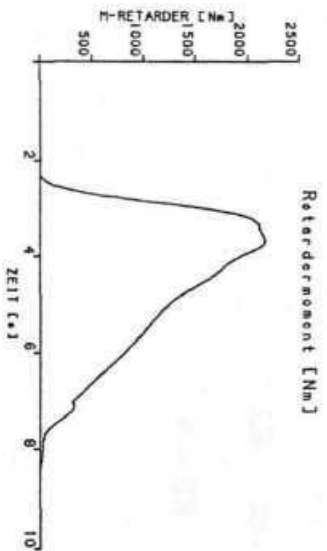
Parameterreihe K2Variation<sup>4)</sup> **K2 - 4**

Fahrzeug:	<b>leer</b>			
Retarderstufe:		A - 4		<b>B - 6</b>
ABV:	ja		<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu$ - Split =	0,72/0,48	<b>0,72/0,24</b>	0,48/0,24
Fahrmanöver:	<b>Kreisfahrt</b>			<b>Closed Loop</b>
Querbearschleunigung:	<b>2 m/s<sup>2</sup></b>			

(Quelle: Simulationskennung SPL0910.2)

<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 4 / Rahmen 1



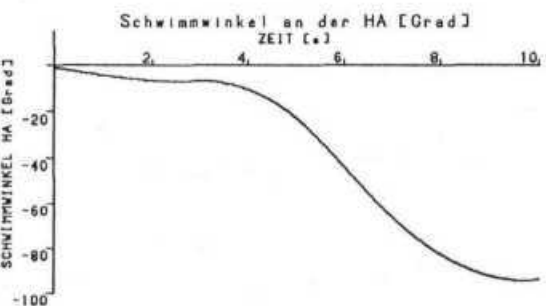
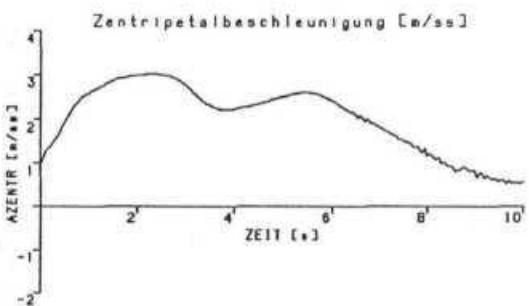
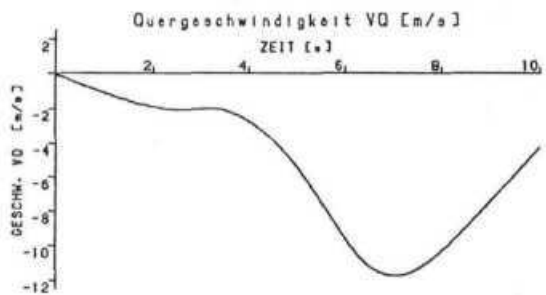
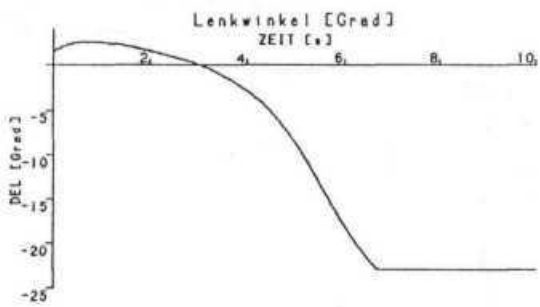
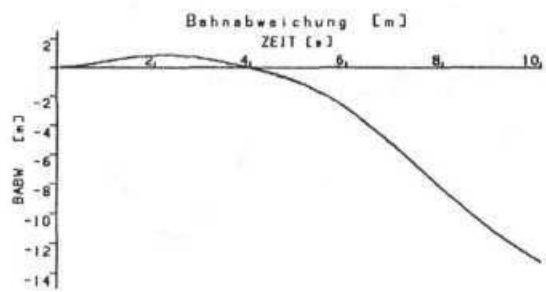
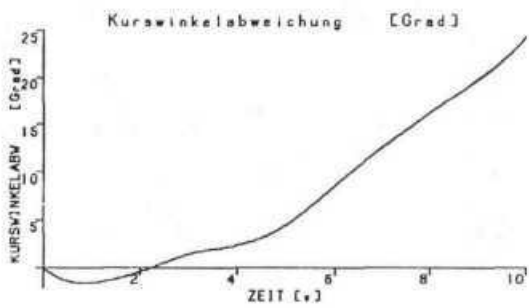
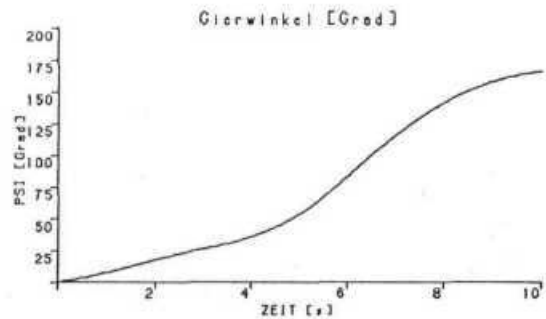
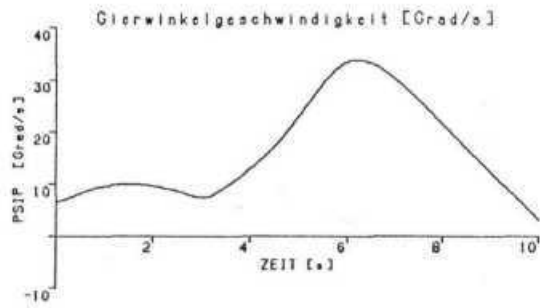
Retarder : Typ B  
 Schaltstufe(n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 %  
 Querneigung = 0.0 %  
 mu (11/re) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9 / 42.6 kN

K2 - 4 / Rahmen 2



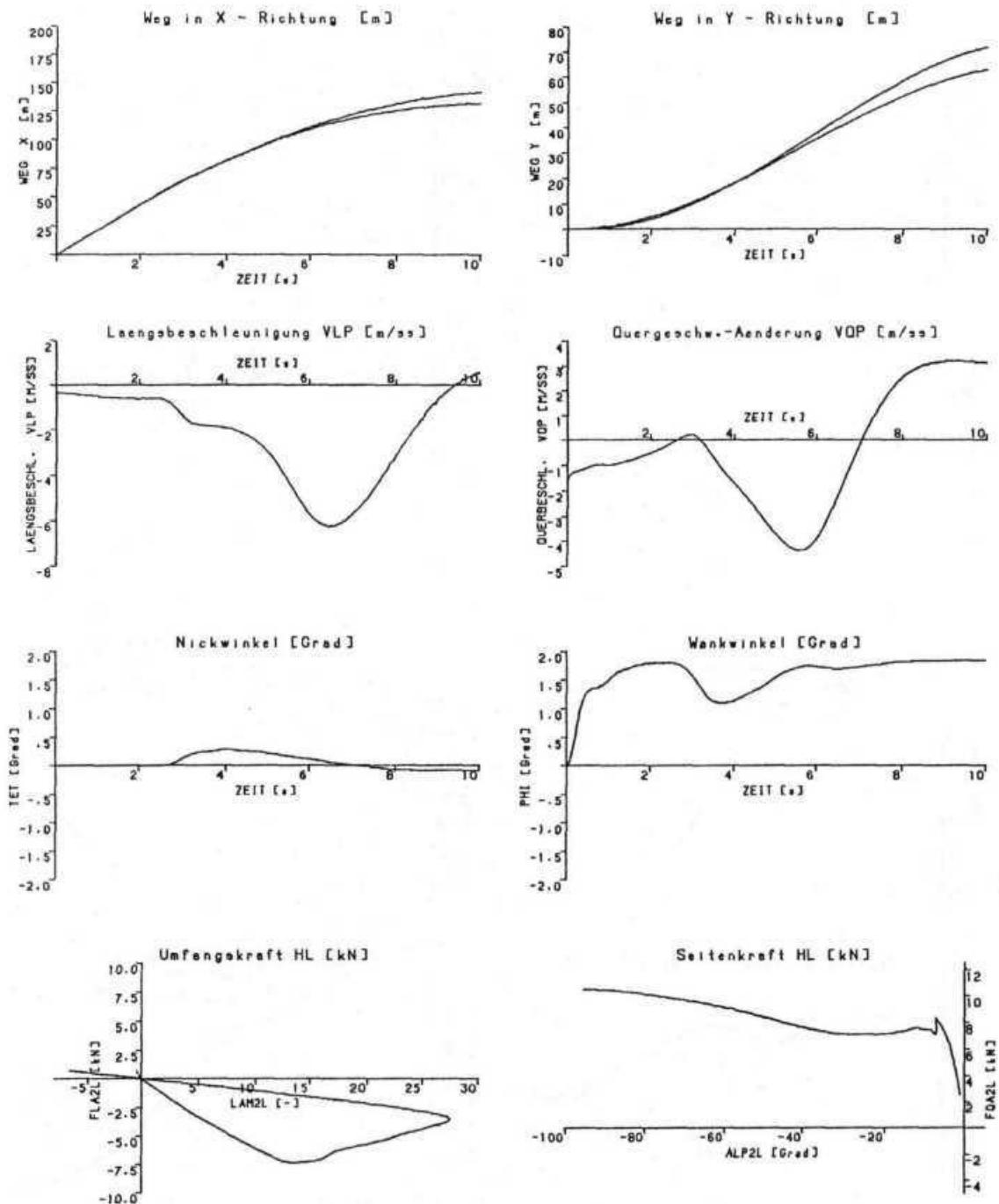
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 4 / Rahmen 3



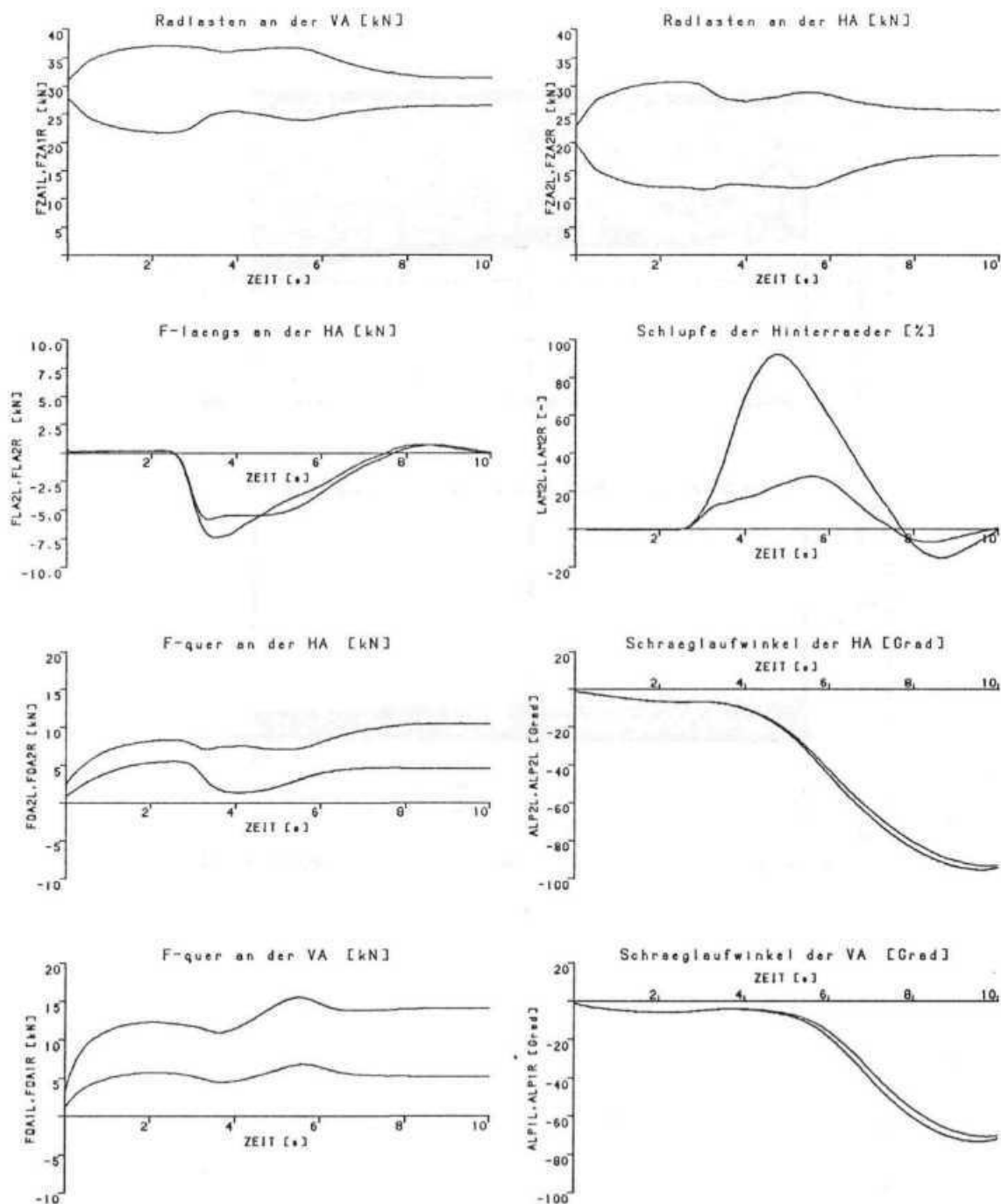
Retarder : Typ B  
 Schallstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K2 - 4 / Rahmen 4



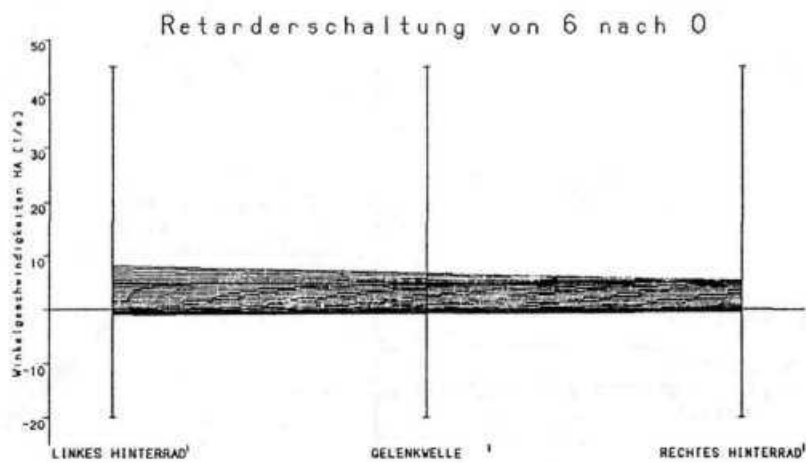
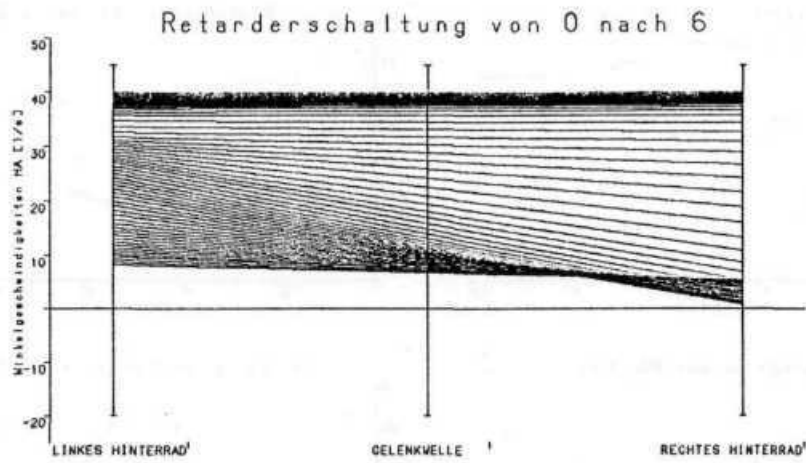
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/ro) = .72/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 4 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

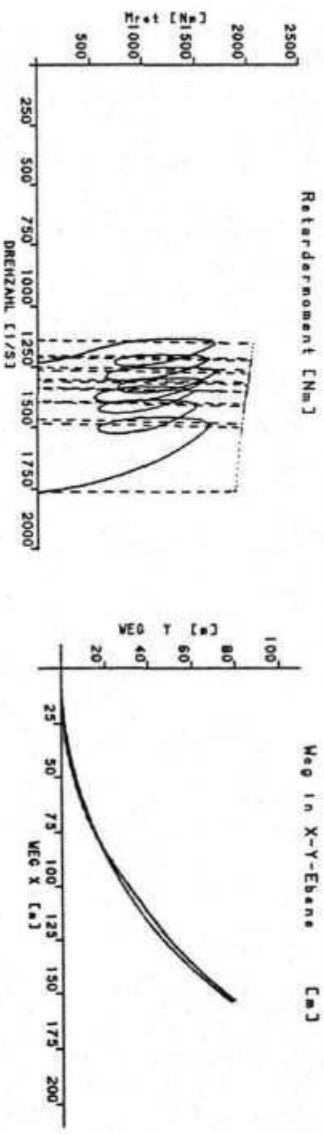
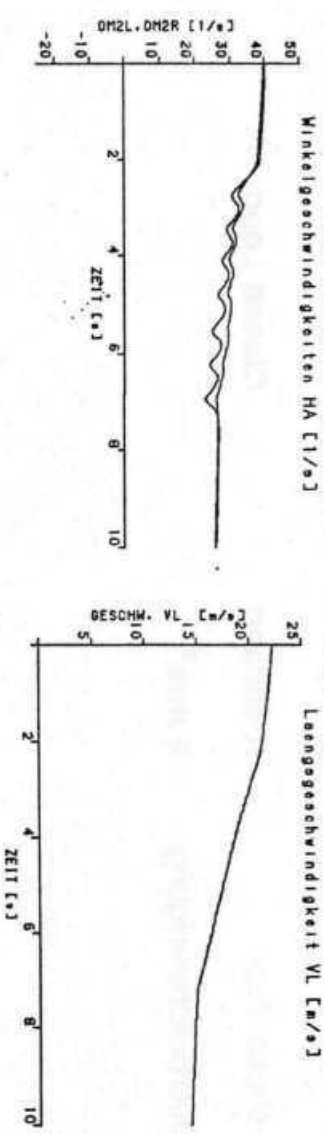
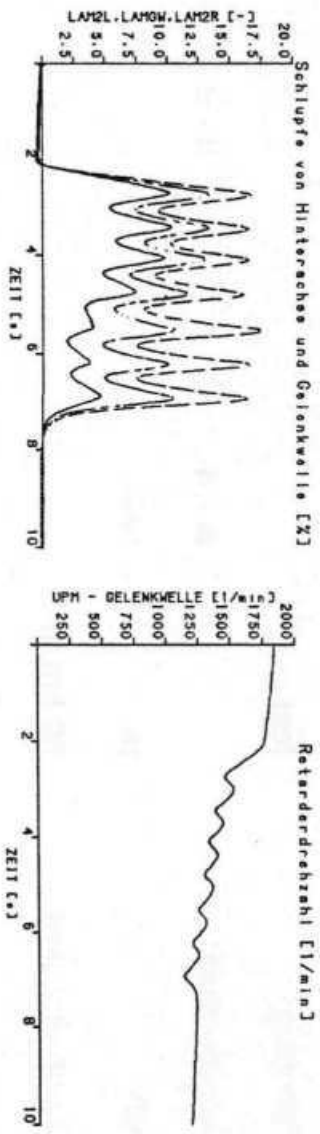
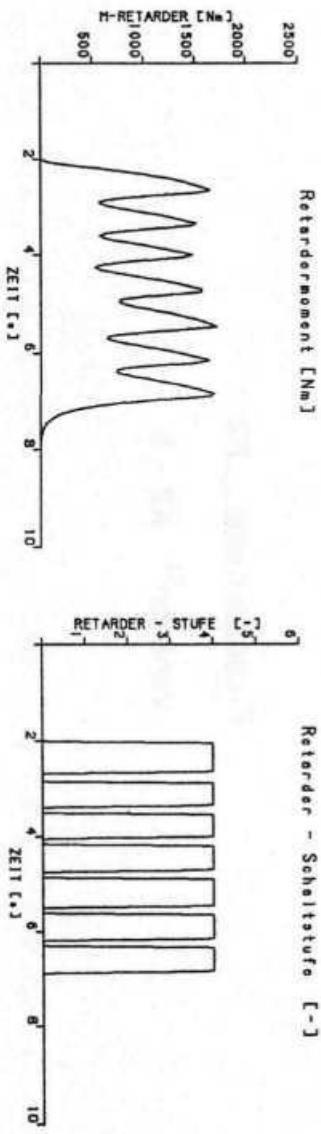


Parameterreihe K2Variation<sup>5)</sup> **K2 - 5**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	<b>B - 6</b>
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	<b><math>\mu</math> - Split =</b>	<b>0,72/0,48</b>	<b>0,72/0,24</b>   0,48/0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung **SPL0915**)<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 5 / Rahmen 1



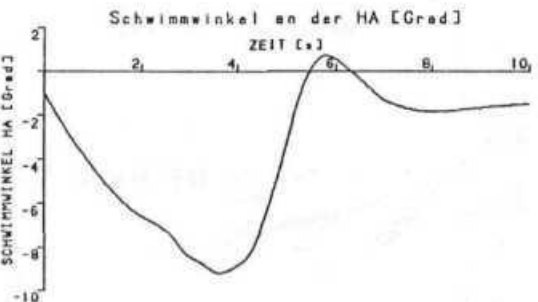
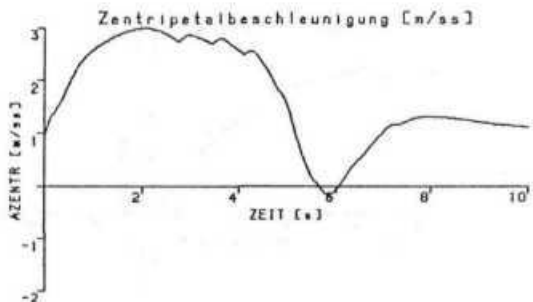
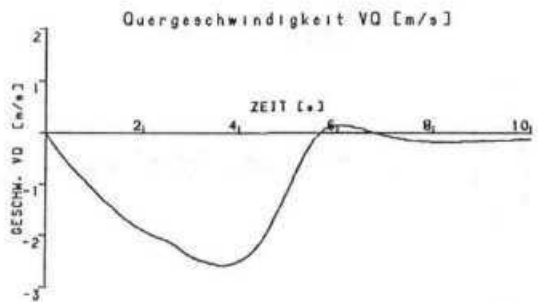
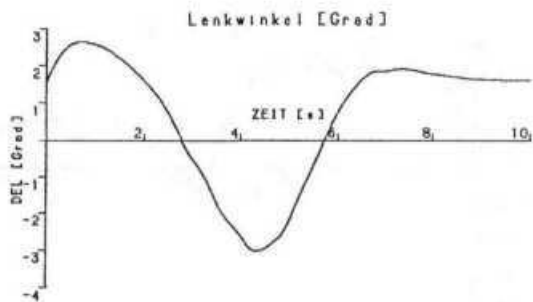
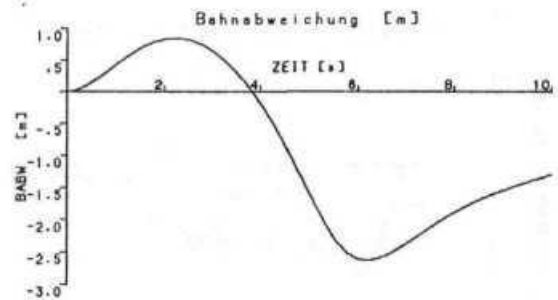
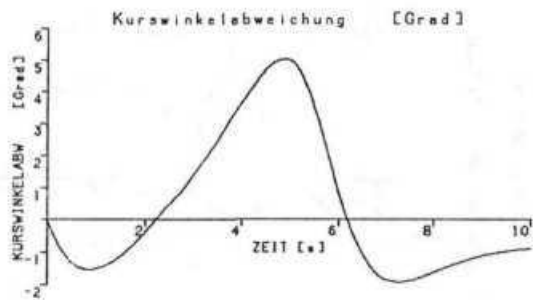
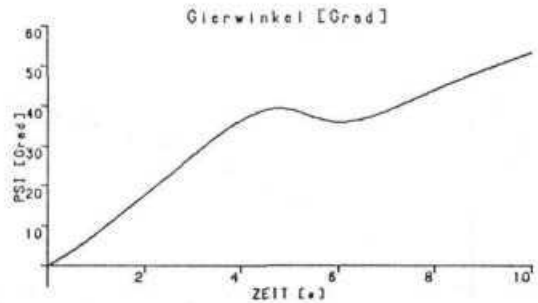
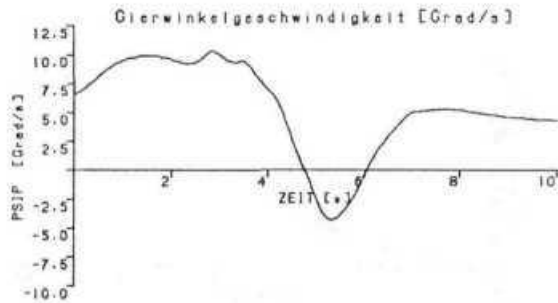
Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABY-Schwellw. : 15.2%

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt, stat. Achslasten (VA/HA) : 58.9/ 42.6 kN  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 5 / Rahmen 2

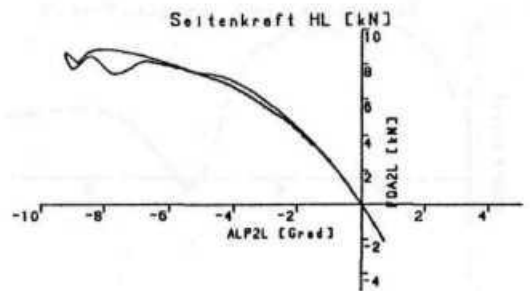
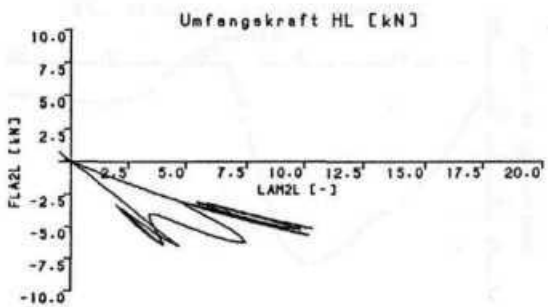
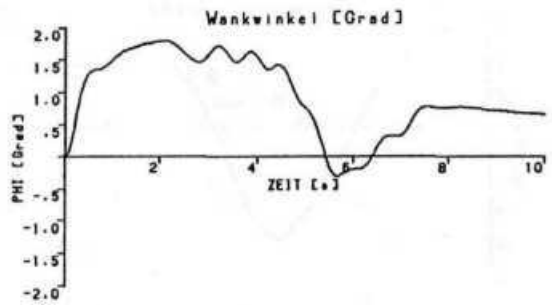
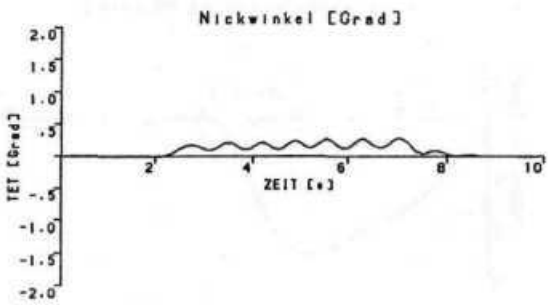
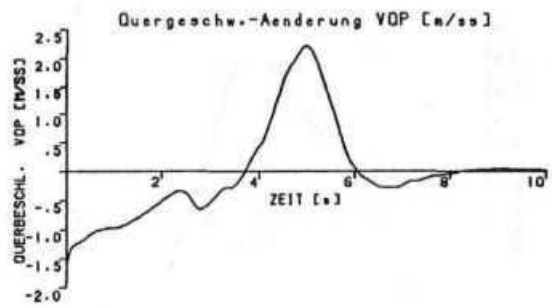
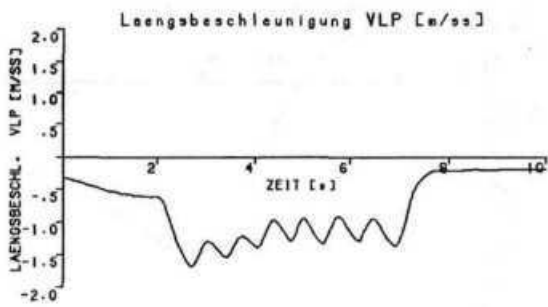
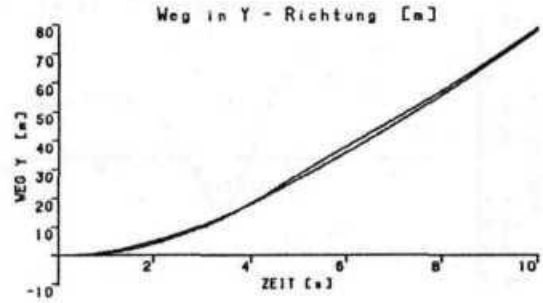
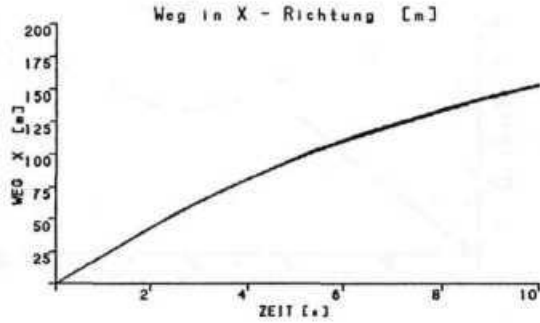


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (l/r) = .72/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt, Lenkwinkel = 1.5 Grad, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 5 / Rahmen 3



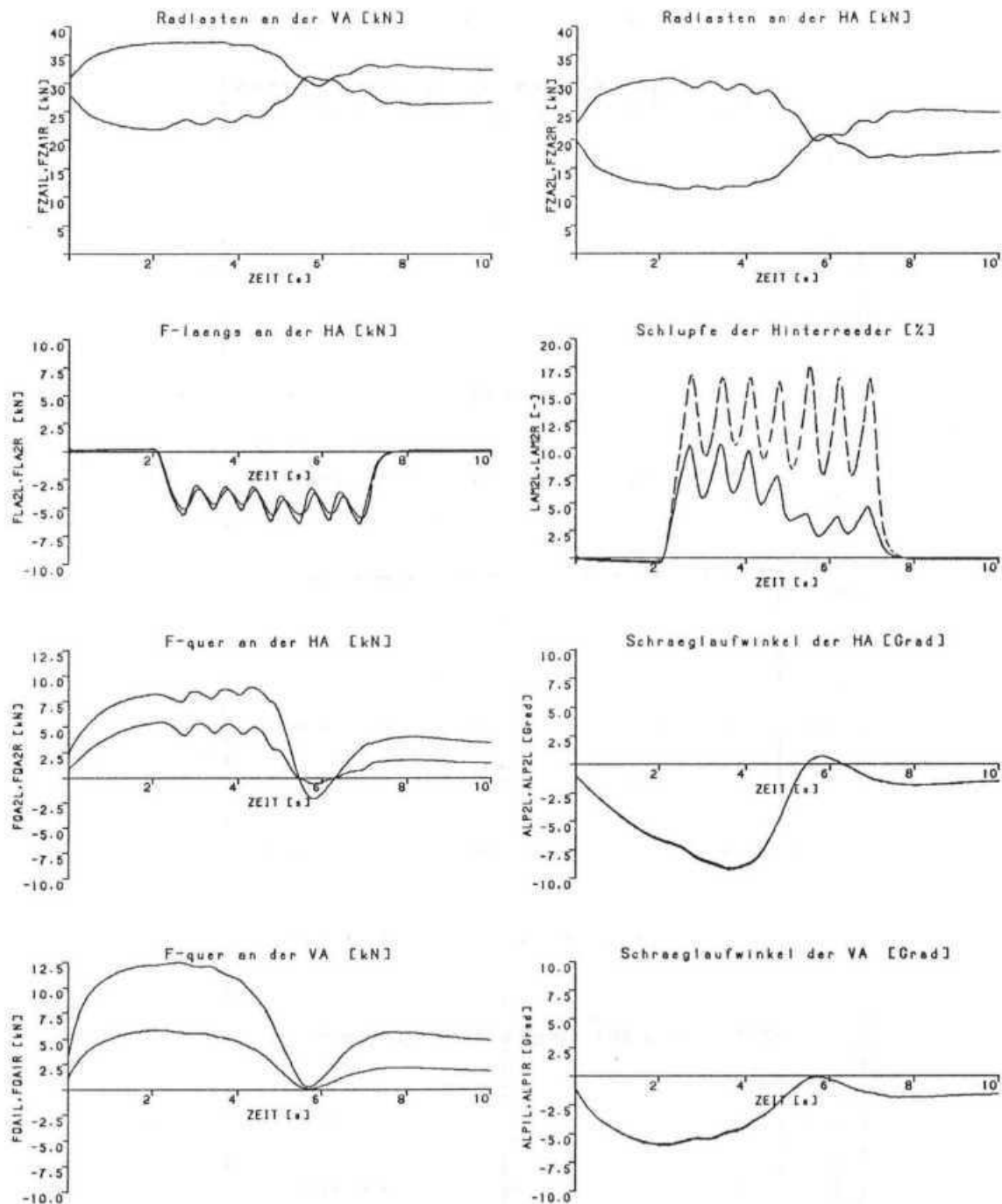
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K2 - 5 / Rahmen 4



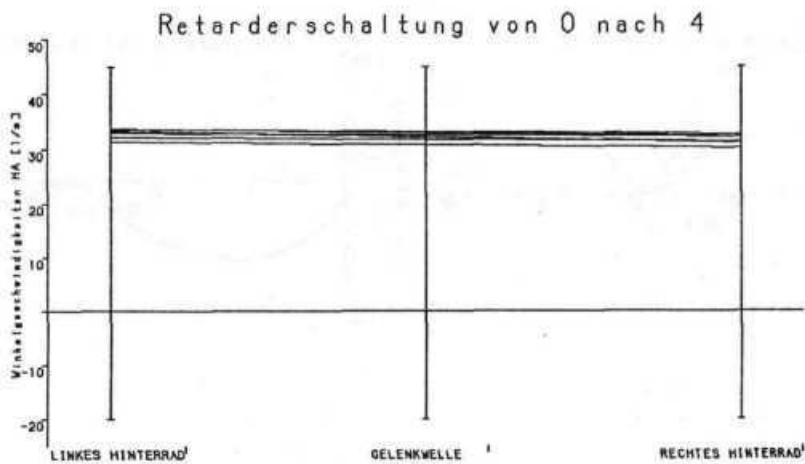
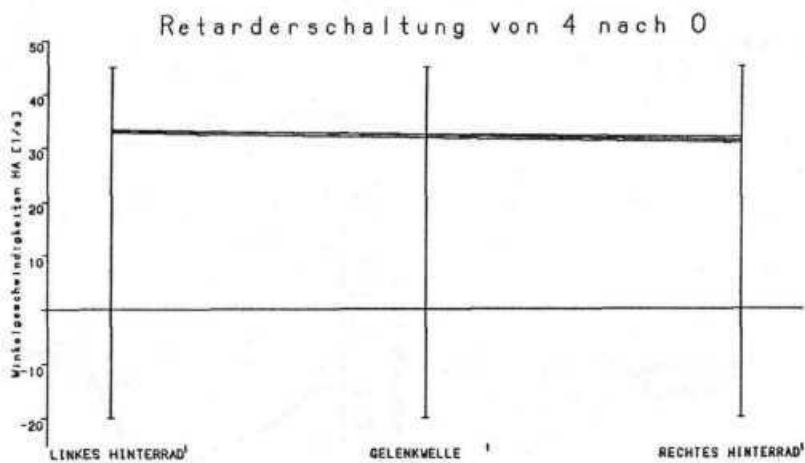
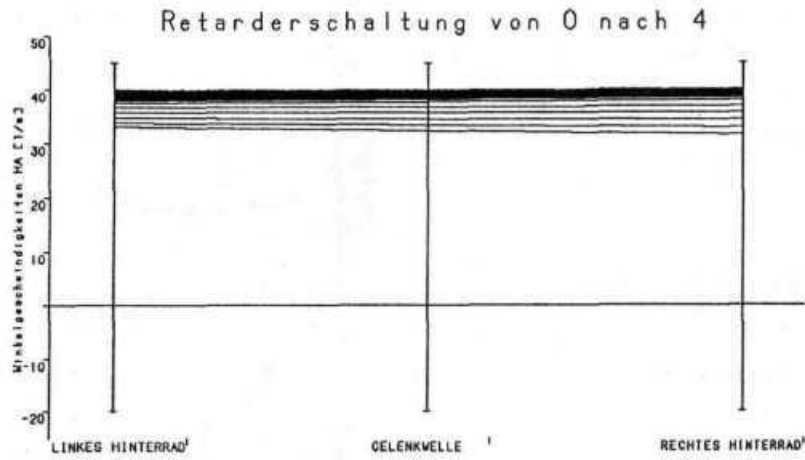
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.2%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = -72/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 5 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
 Linienabstand  $\Delta T = 0.2 \text{ sec}$

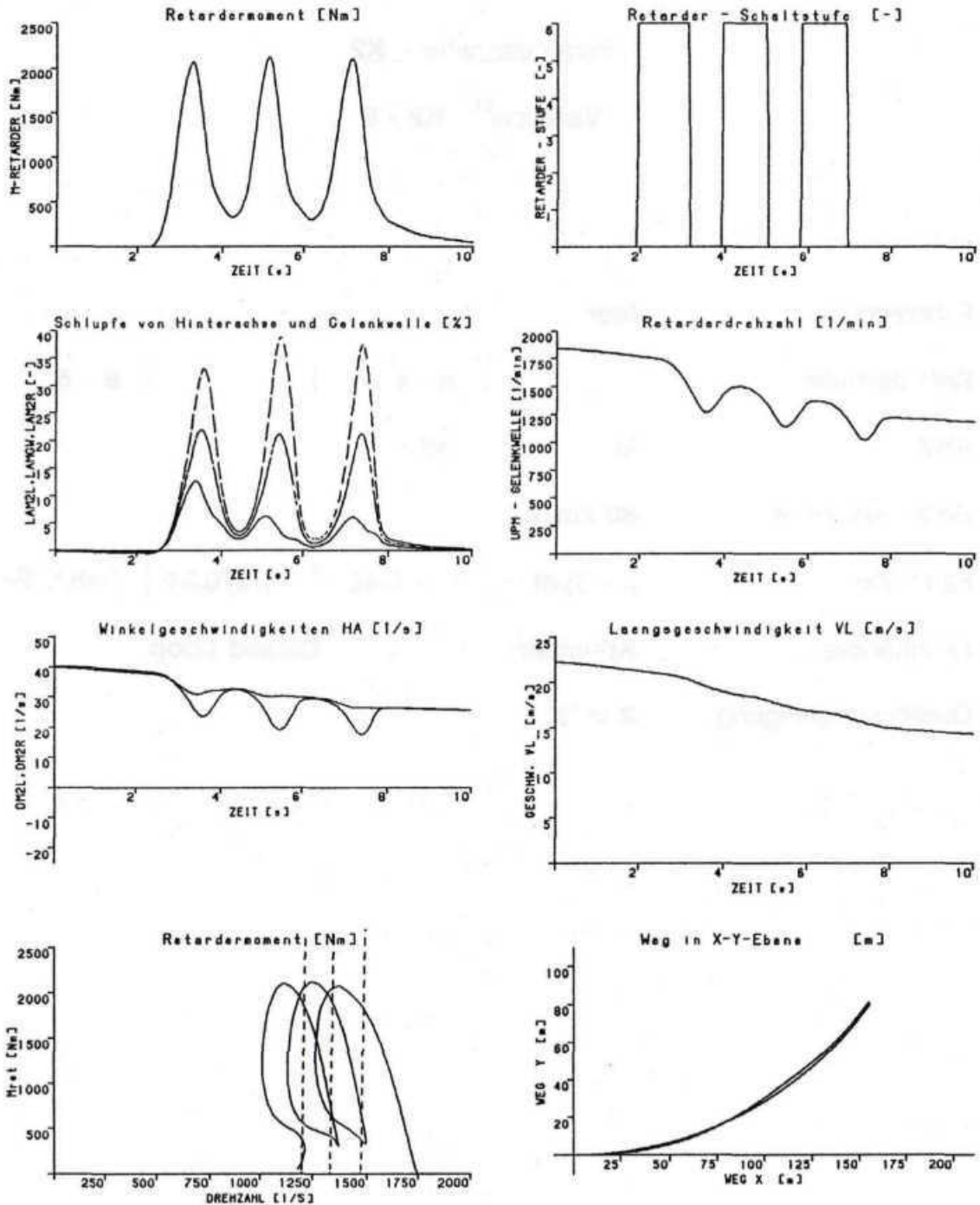
Parameterreihe K2Variation<sup>6)</sup> **K2 - 6**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		A - 4	<b>B - 6</b>
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu$ - Split =	0,72/0,48	<b>0,72/0,24</b>   0,48/0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbearschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung SPL0921)

<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 6 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n): 6-0-0  
 ABV-Schwellw. : 15.%

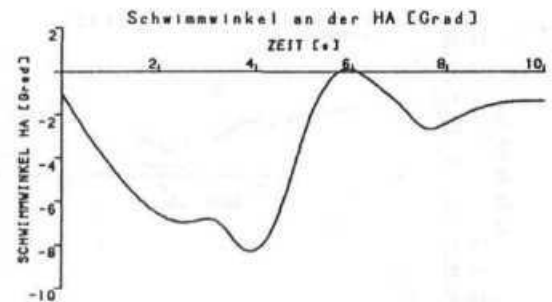
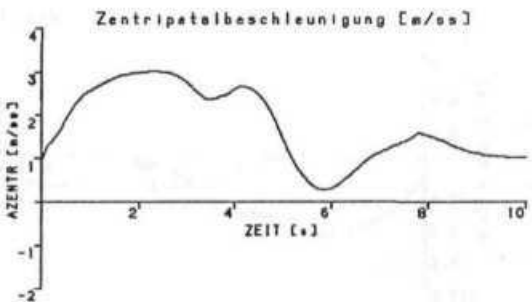
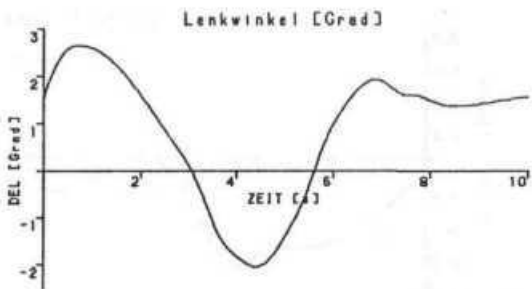
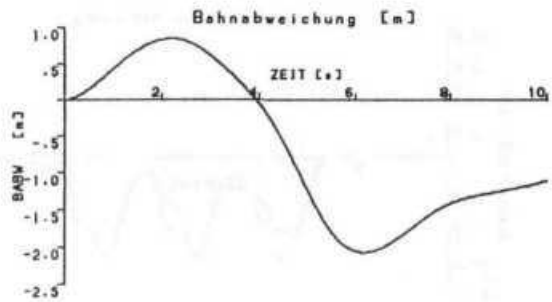
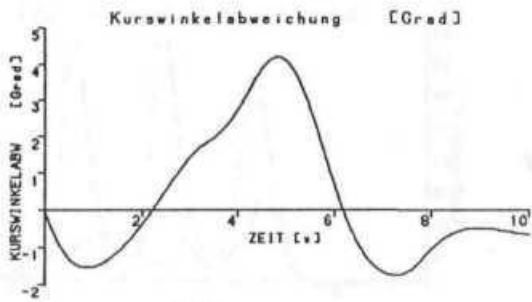
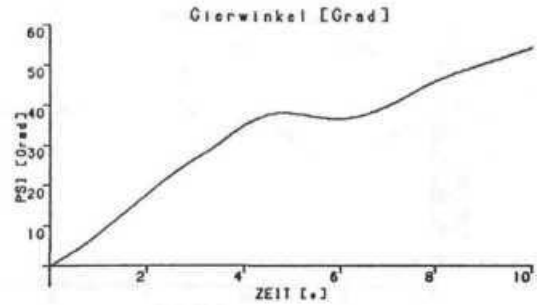
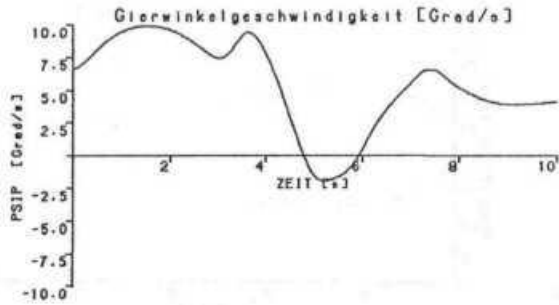
Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (l/r) = .72/.24

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K2 - 6 / Rahmen 2



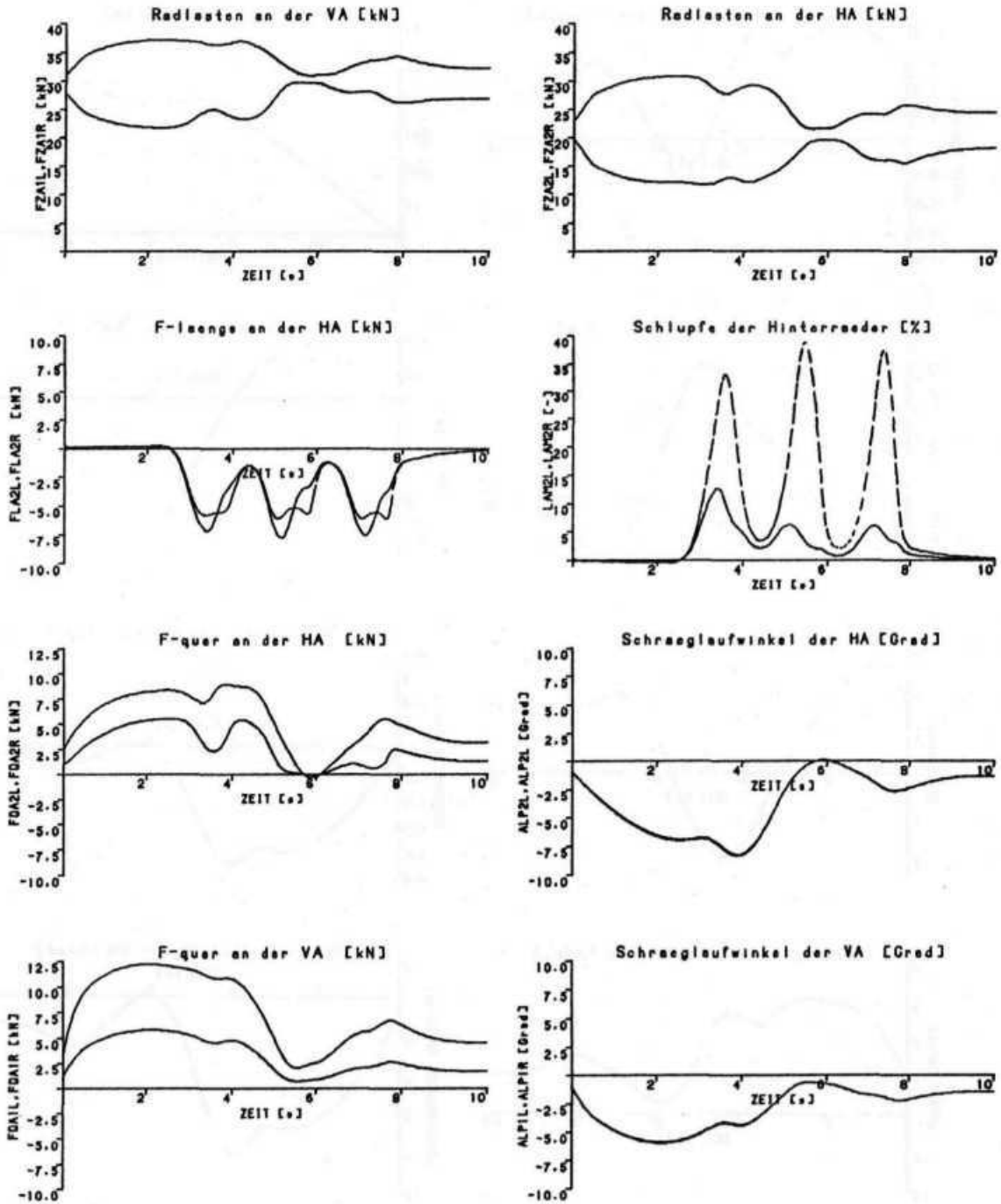
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K2 - 6 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV-Schwellw. : 15.2

Fahrbahn: Gefälle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

Parameterreihe K2Variationen <sup>7)</sup> **K2 - 7** und **K2 - 8**

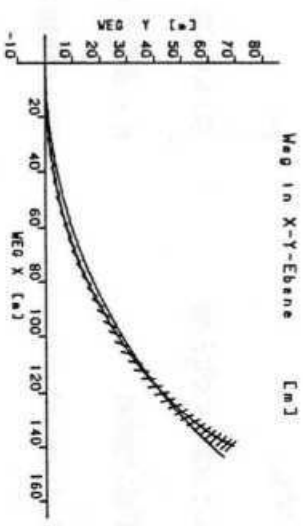
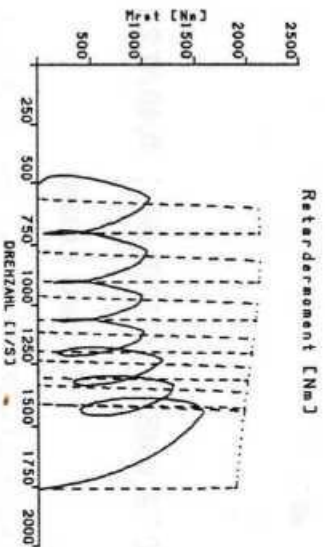
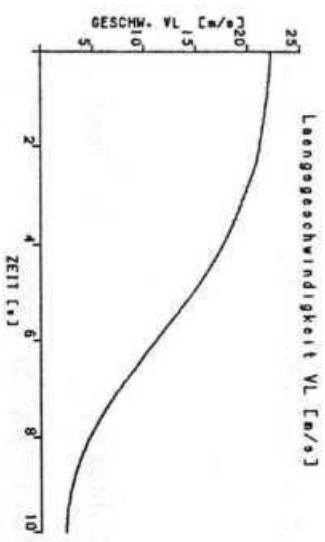
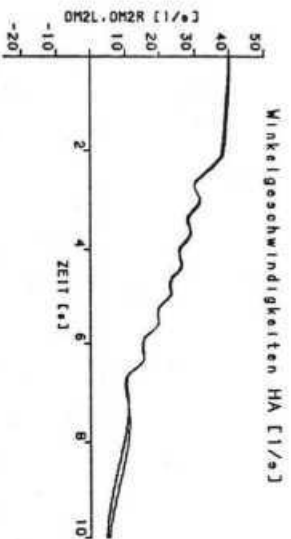
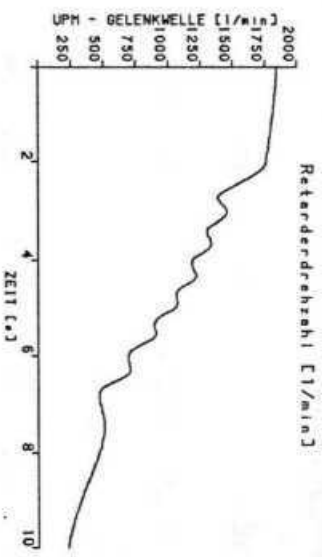
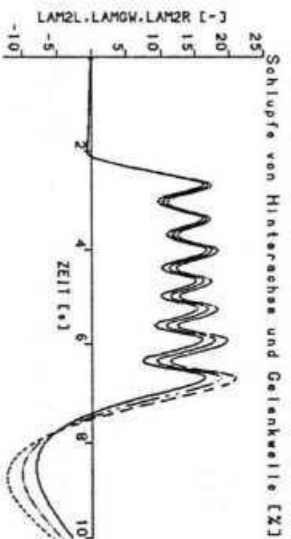
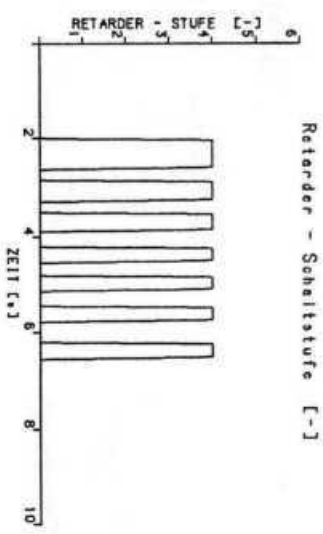
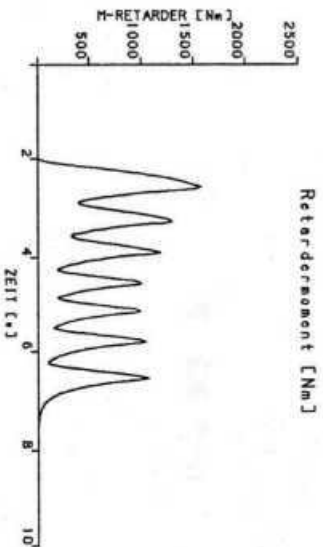
Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	<b>B - 6</b>
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	<b><math>\mu</math> - Split =</b>	0,72/0,48	0,72/0,24   <b>0,48/0,24</b>
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbearschleunigung:	<b>2 m/s<sup>2</sup></b>		

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Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	<b>B - 6</b>
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	<b><math>\mu</math> - Split =</b>	0,72/0,48	0,72/0,24   <b>0,48/0,24</b>
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbearschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennungen **SPL0926** und **SPL0928**)<sup>7)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K2 - 7 / Rahmen 1



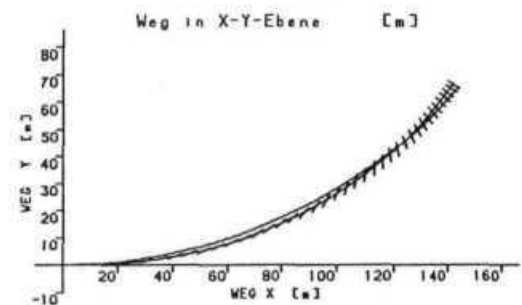
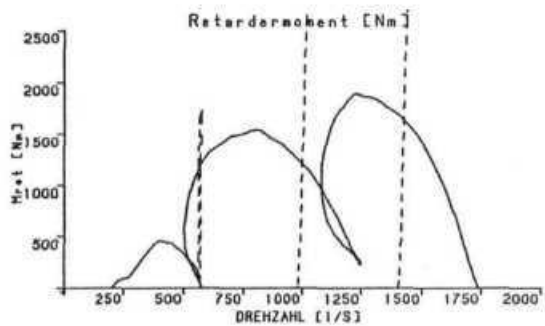
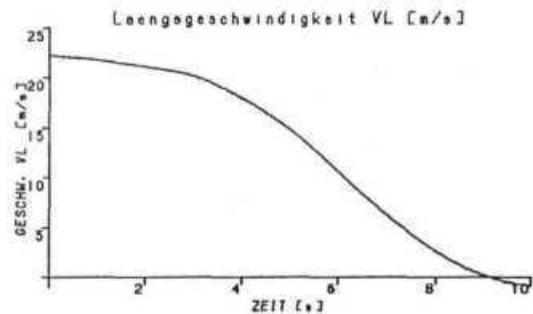
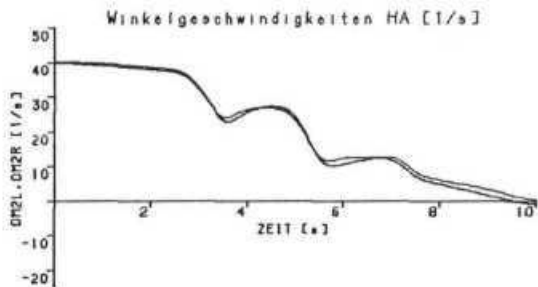
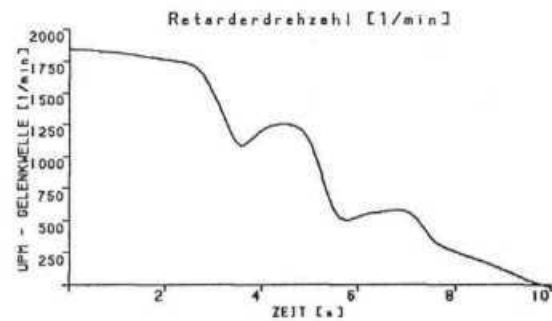
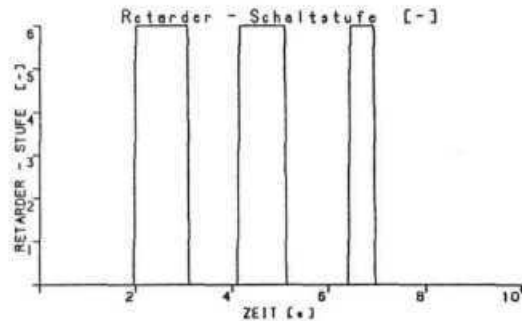
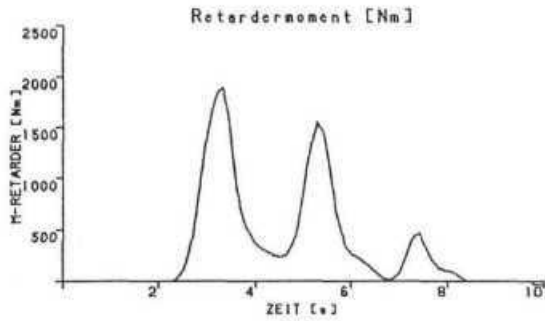
Retarder : Typ A  
 Schaltstufe(n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu_{re} (11/re) = .48/.24$

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9 / 42.6 kN

K2 - 8 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .48/.24

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

Parameterreihe **K3**Variation<sup>1)</sup> **K3 - 1**

Fahrzeug: **leer**

Retarderstufe: | **A - 4** | | **B - 6**

ABV: ja | **nein**

Geschwindigkeit: **80 km/h**

Fahrbahn:  $\mu$  - Sprung = **0,72-0,48** | 0,72-0,24

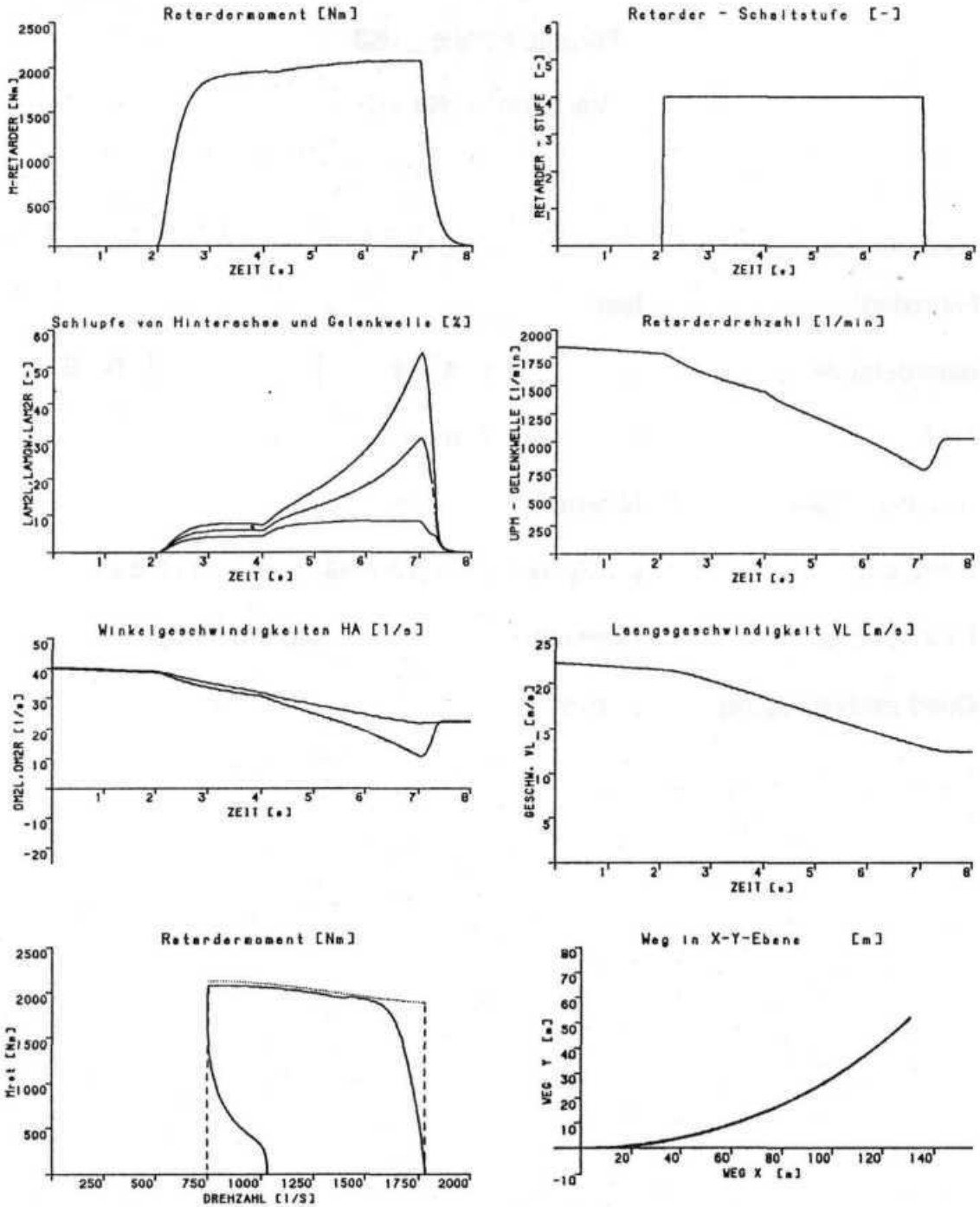
Fahrmanöver: **Kreisfahrt** **Closed Loop**

Querbeschleunigung: **2 m/s<sup>2</sup>**

(Quelle: Simulationskennung SPL1010)

<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K3 - 1 / Rahmen 1

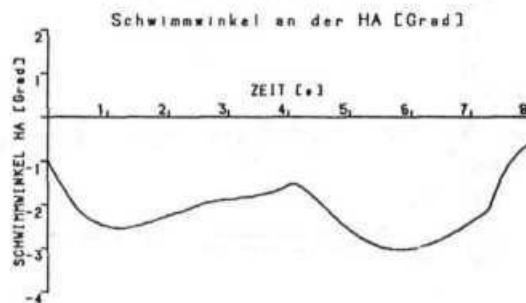
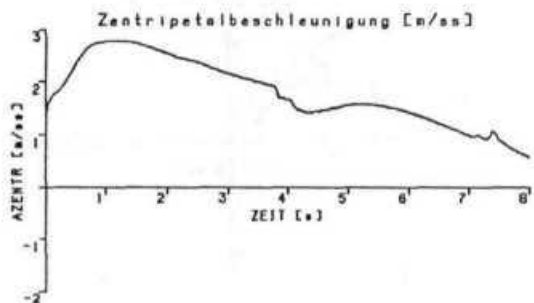
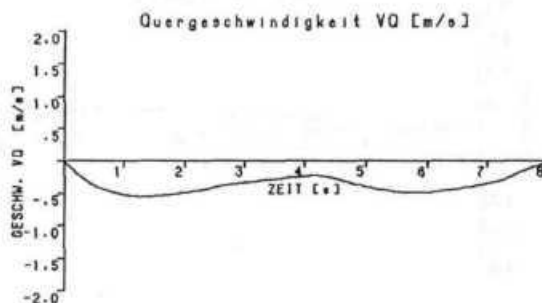
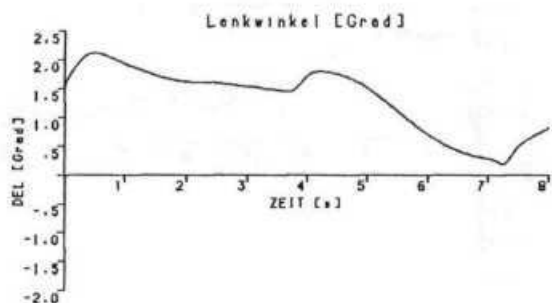
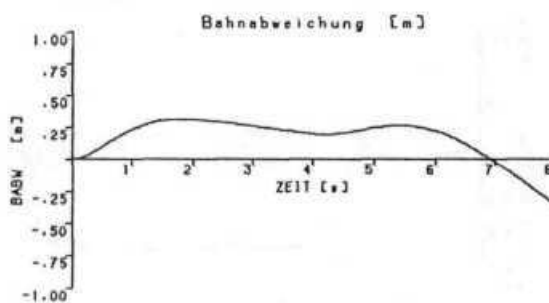
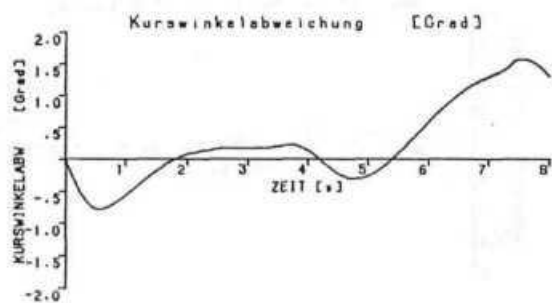
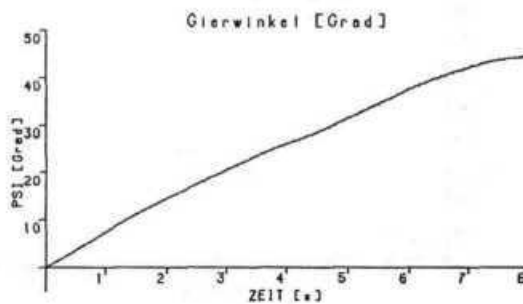
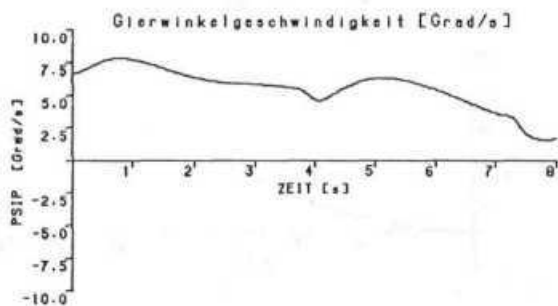


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (ll/re) = .72/.72 mu-Sprung (ll/re) = .48/.48 b 4.0  
 mu-Sprung (ll/re) = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt, Lenkwinkel = 1.5 Grad, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K3 - 1 / Rahmen 2



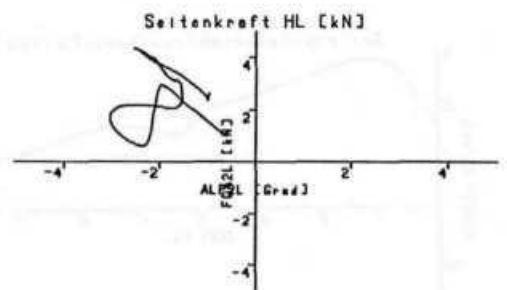
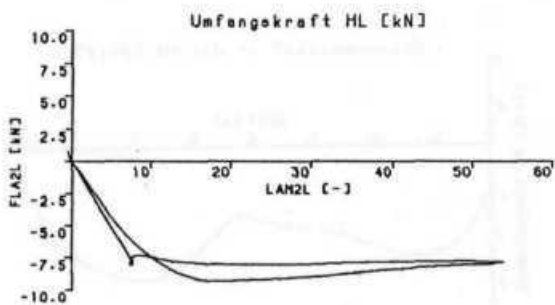
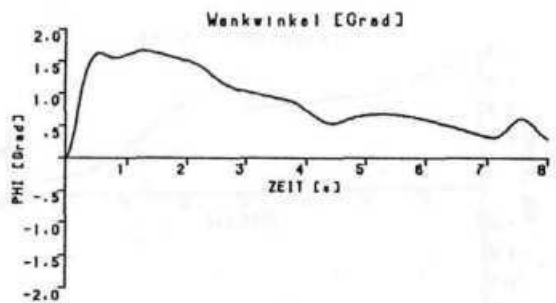
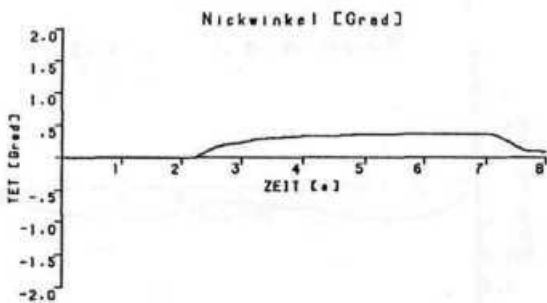
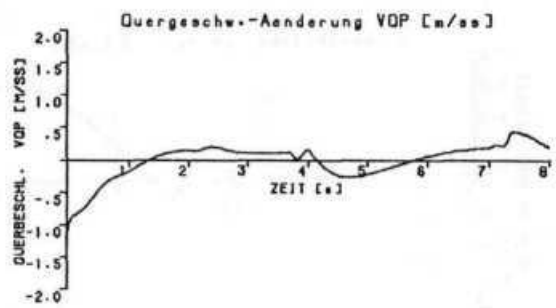
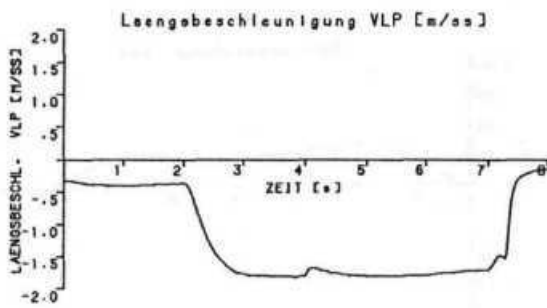
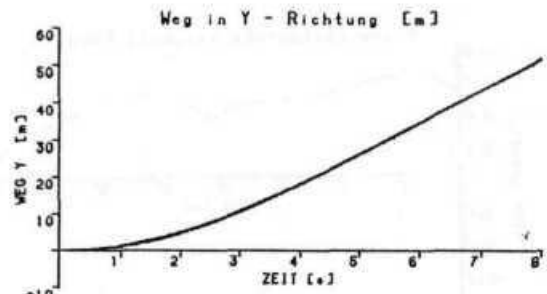
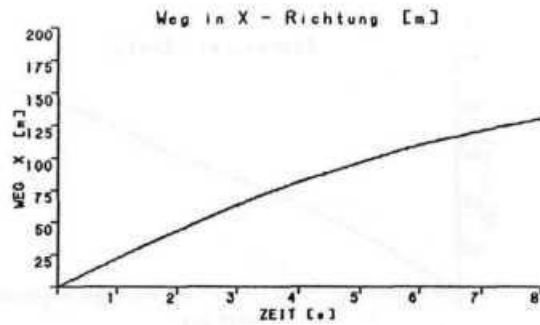
Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72 mu-Sprung (li/re) = .48/.48 b 4.0  
 mu-Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt, Lenkwinkel = 1.5 Grad, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K3 - 1 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV : NEIN

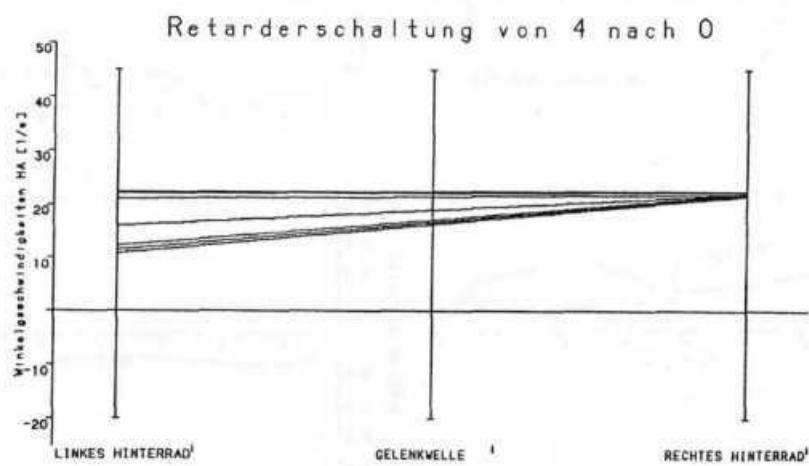
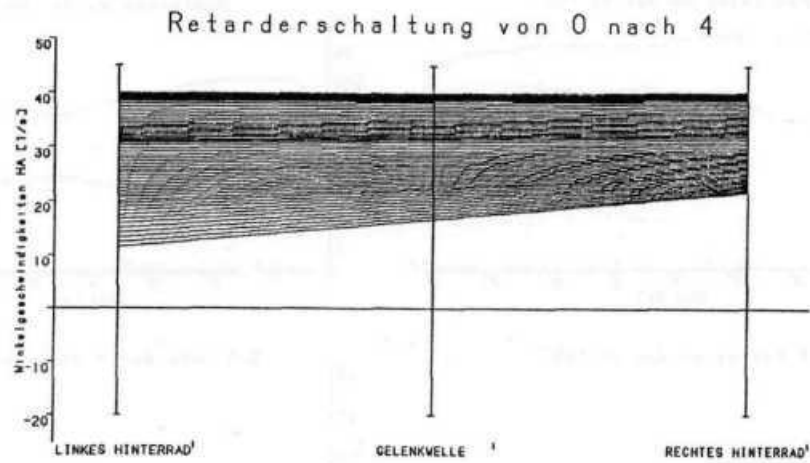
Fahrbahn: Gefaele = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72 mu-Sprung (li/re) = .48/.48 b 4.0  
 mu-Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN



K3 - 1 / Rahmen 5



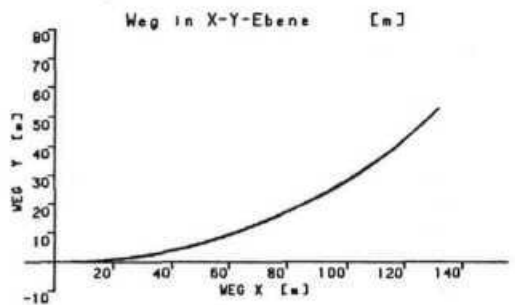
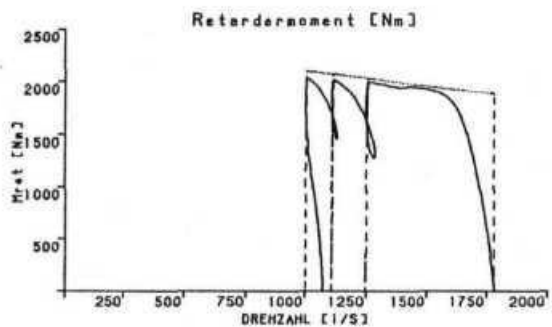
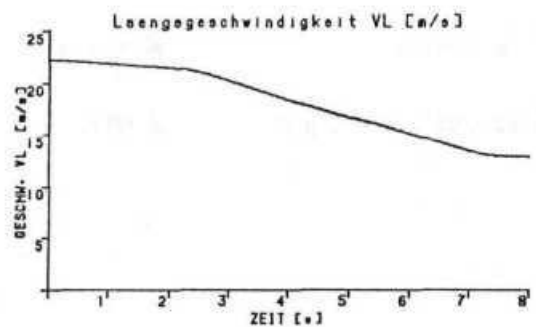
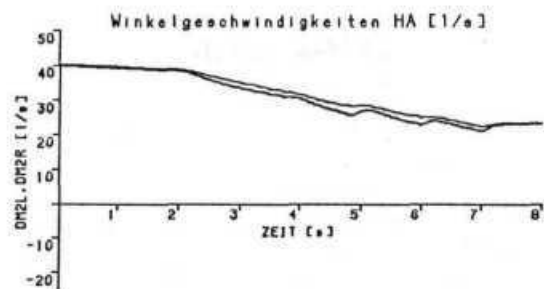
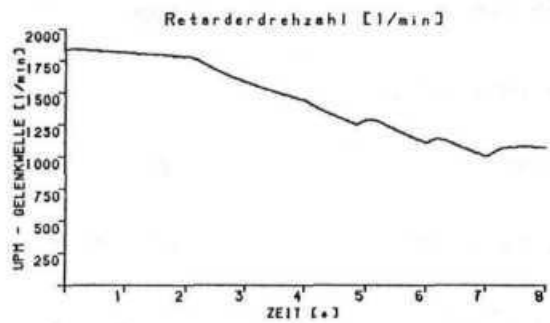
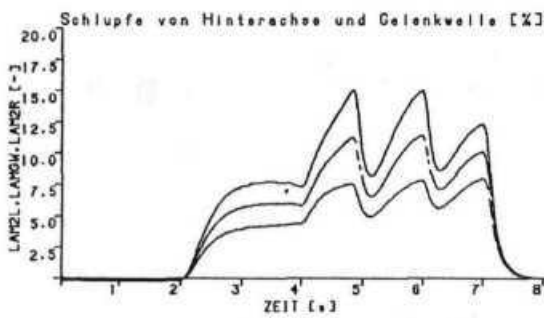
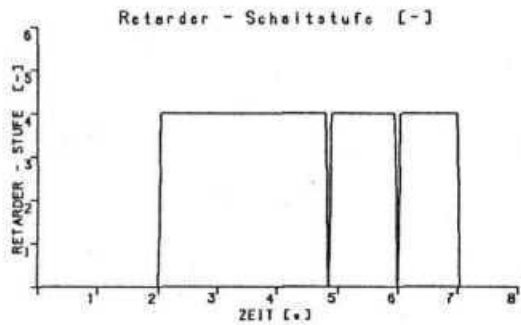
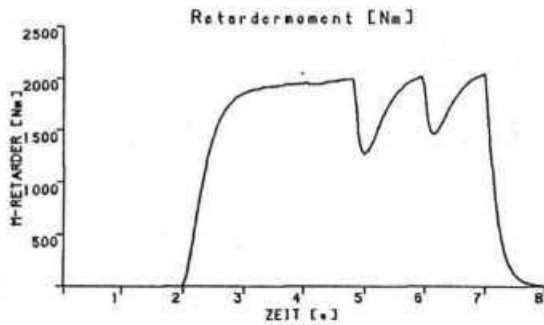
Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K3**Variation<sup>2)</sup> **K3 - 2**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	B - 6
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	<b><math>\mu</math> - Sprung = 0,72-0,48</b>		0,72-0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung **SPL1011**)<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K3 - 2 / Rahmen 1



Retarder : Typ A  
Schaltstufe (n) : 4-0-0  
ABV-Schwellw. : 15.%

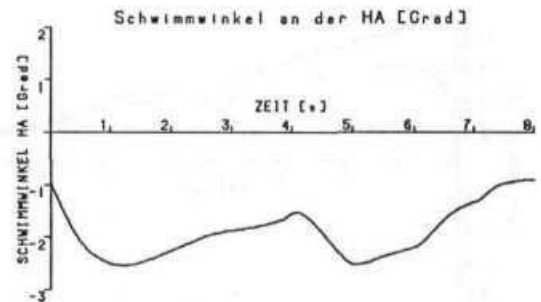
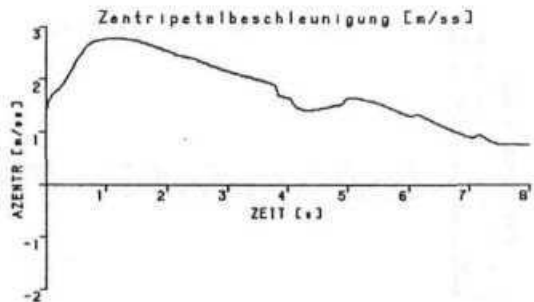
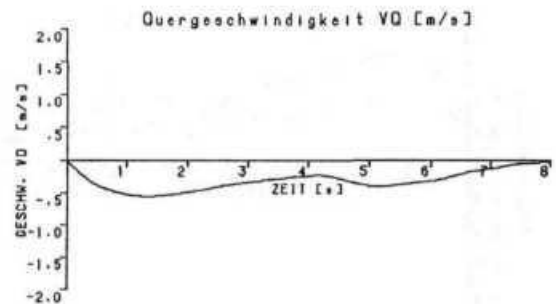
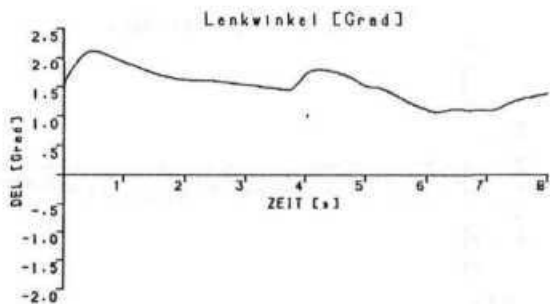
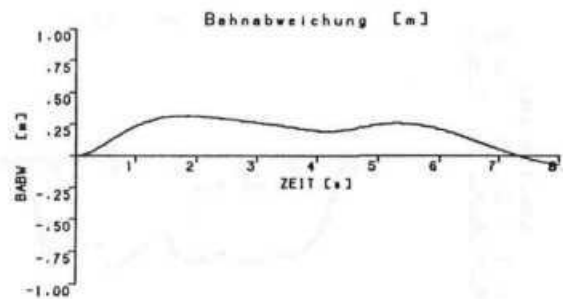
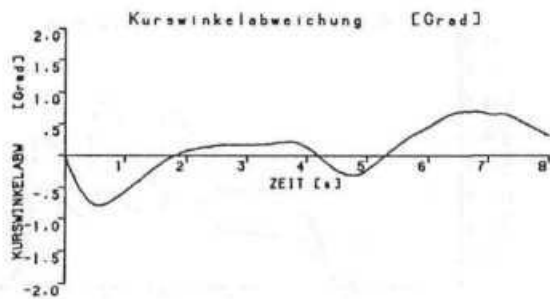
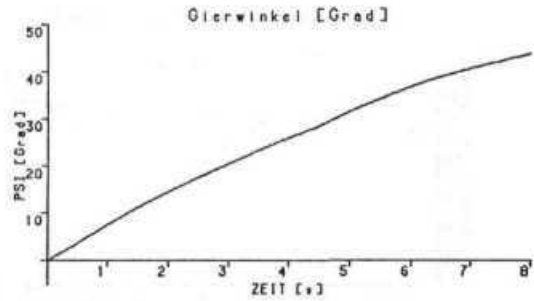
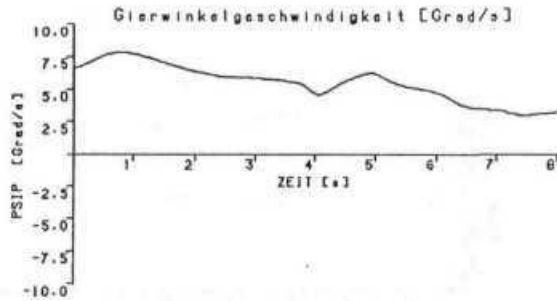
Fahrbahn: Gefaelle = 0.0 %  
mue (ll/re) = -.72/.72

Querneigung = 0.0 %  
mue-Sprung (ll/re) = .48/.48 b 4.0  
mue-Sprung (ll/re) = .48/.48 b 8.0

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : Kreisfahrt,  
Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K3 - 2 / Rahmen 2

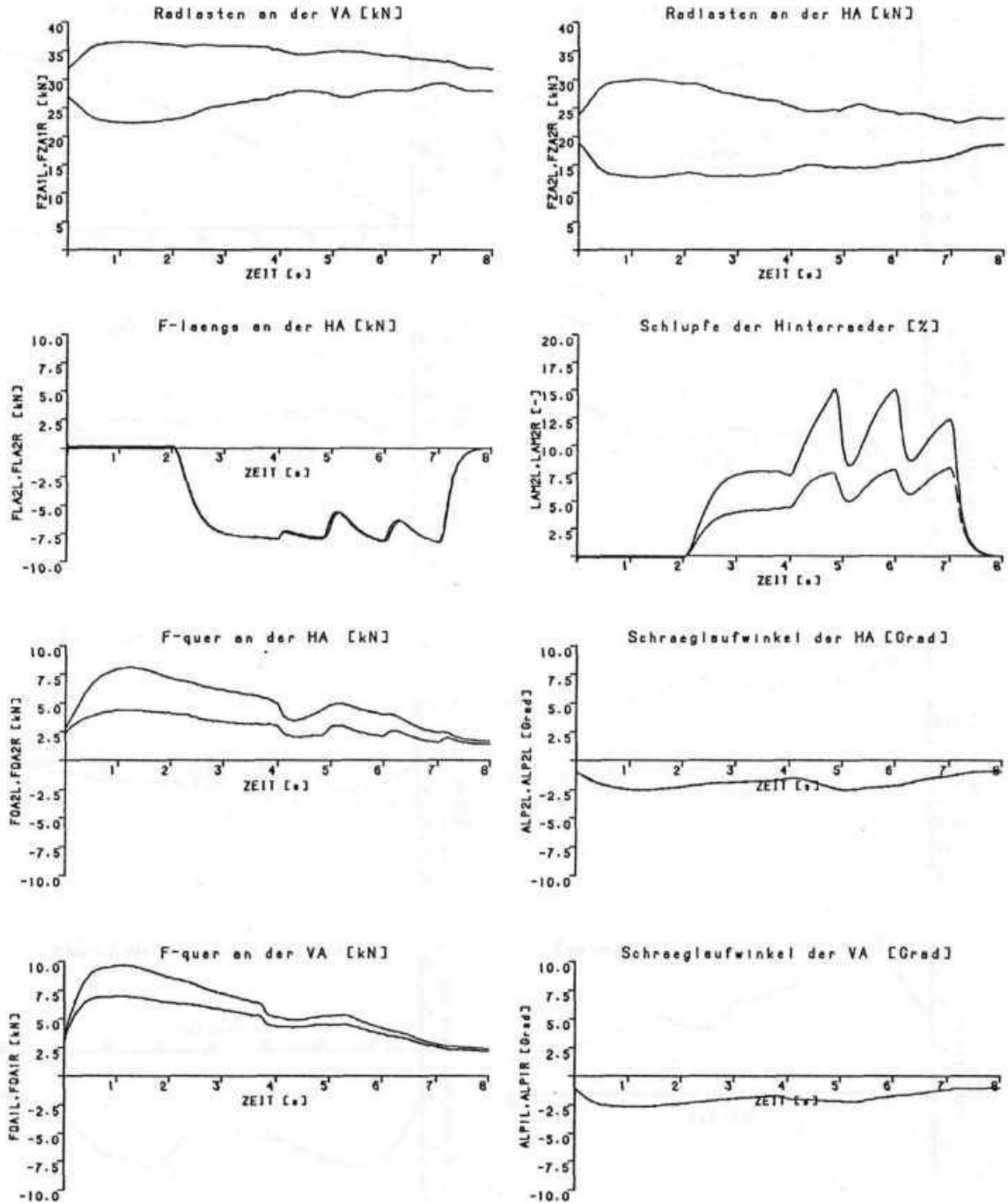


Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mu (li/re) = .72/.72 mu-Sprung (li/re) = .48/.48 b 4.0  
 mu-Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt, Lenkwinkel = 1.5 Grad, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## K3 - 2 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 $\mu$  (li/re) = .72/.72  $\mu$ -Sprung (li/re) = .48/.48 b 4.0  
 $\mu$ -Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

Parameterreihe **K3**Variation<sup>3)</sup> **K3 - 3**

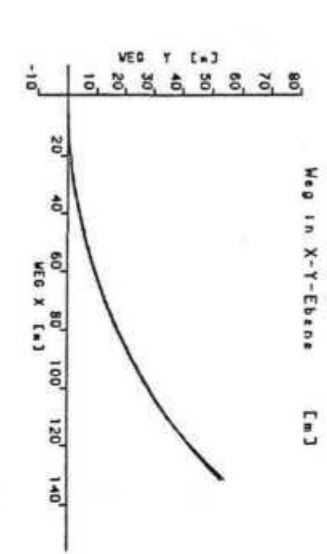
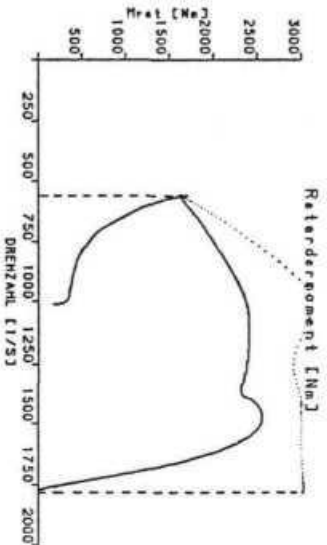
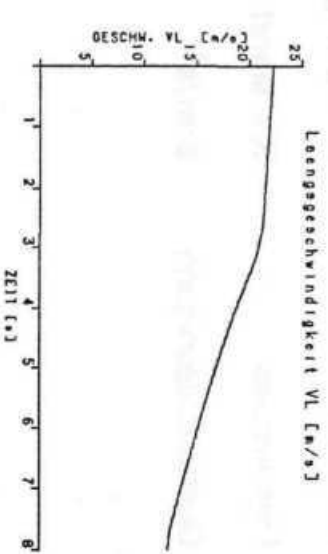
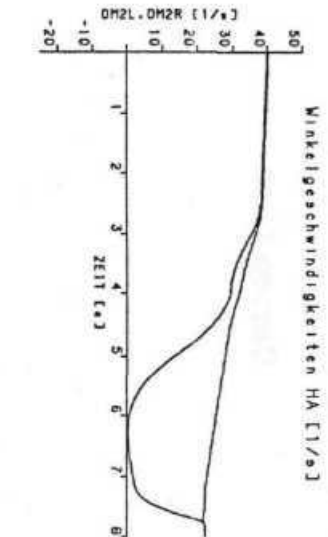
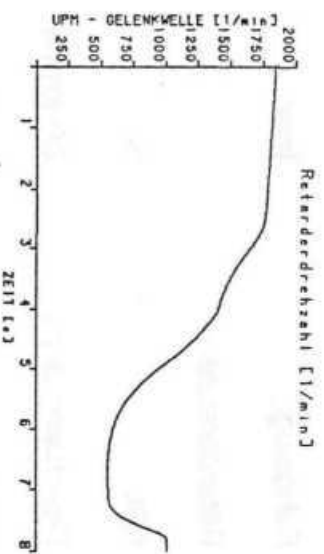
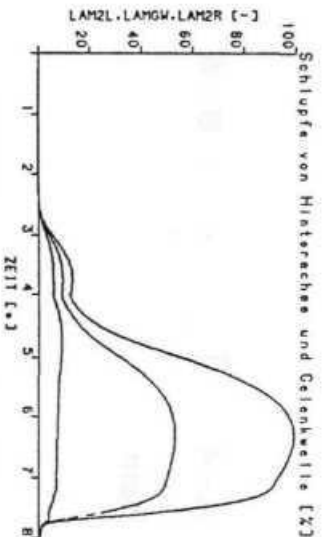
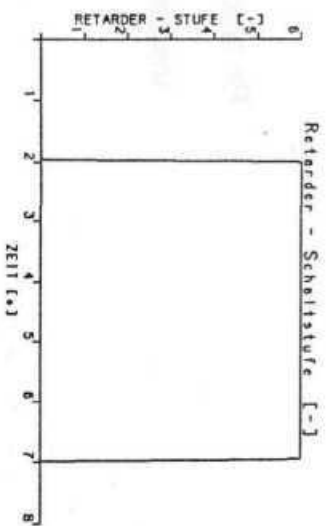
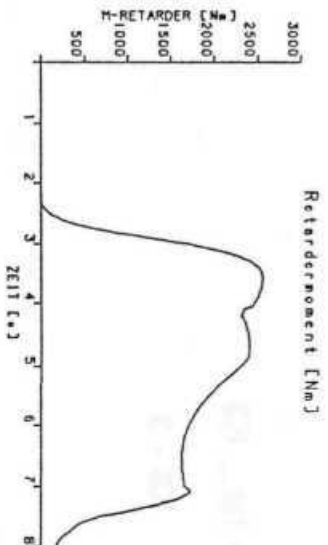
Fahrzeug:	<b>leer</b>		
Retarderstufe:		A - 4	<b>B - 6</b>
ABV:	ja	<b>nein</b>	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu$ - Sprung =	<b>0,72-0,48</b>	0,72-0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung SPL1013)

<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben



K3 - 3 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

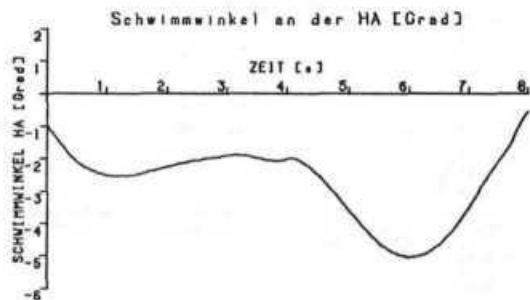
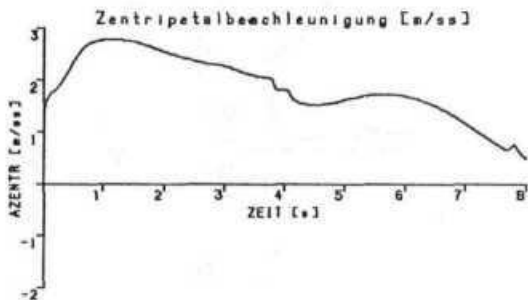
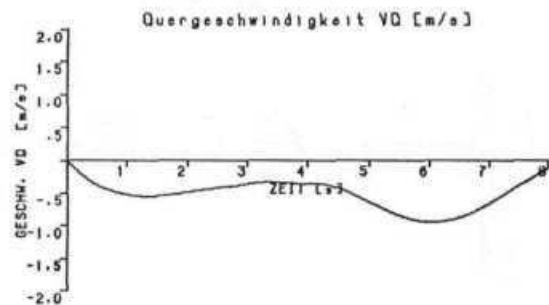
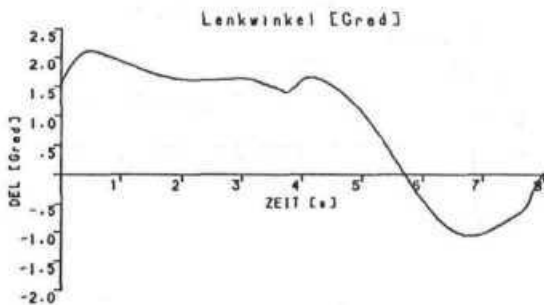
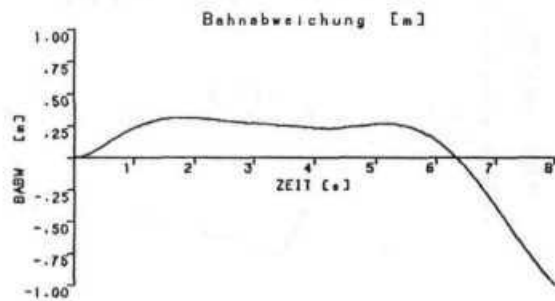
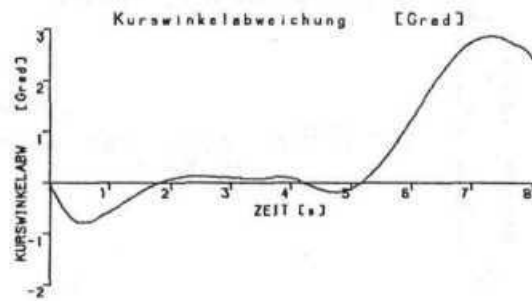
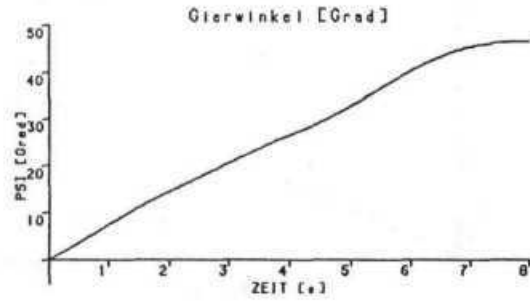
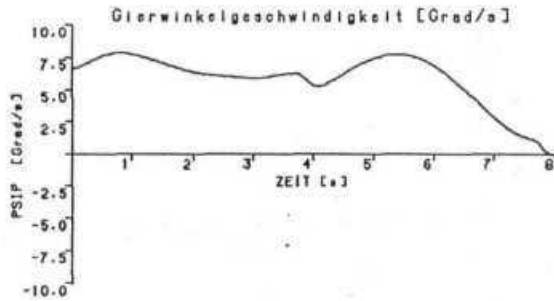
Fahr-behn: Gofaeille = 0.0 %  
 mu (l1/re) = .72/.72

Querneigung (l1/re) = 0.0 %  
 mu-Sprung (l1/re) = .48/.48 b 4.0  
 = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel= 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K3 - 3 / Rahmen 2



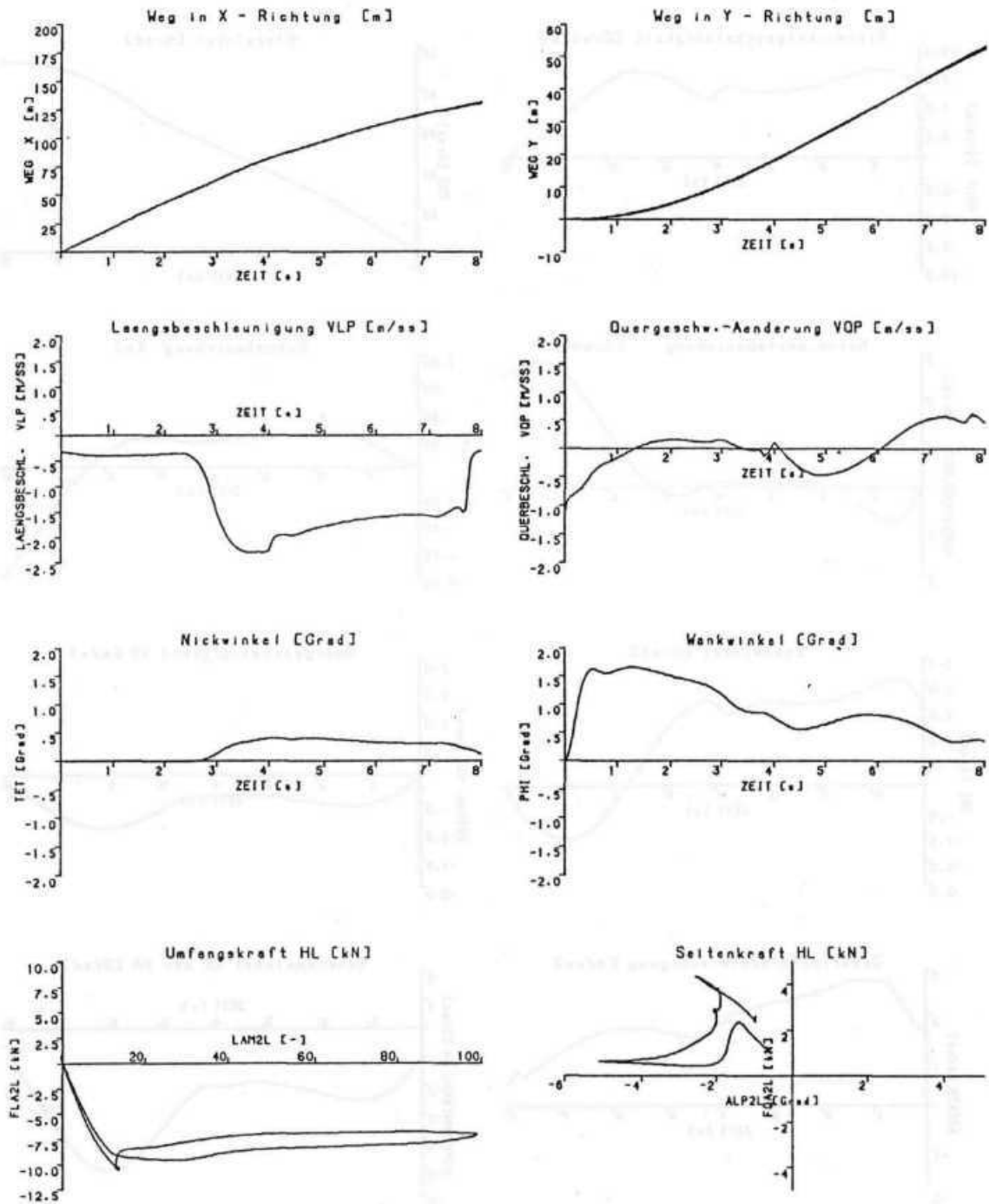
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaele = 0.0 % Querneigung = 0.0 %  
 $\mu_e$  (li/re) = .72/.72  $\mu_e$ -Sprung (li/re) = .48/.48 b 4.0  
 $\mu_e$ -Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K3 - 3 / Rahmen 3



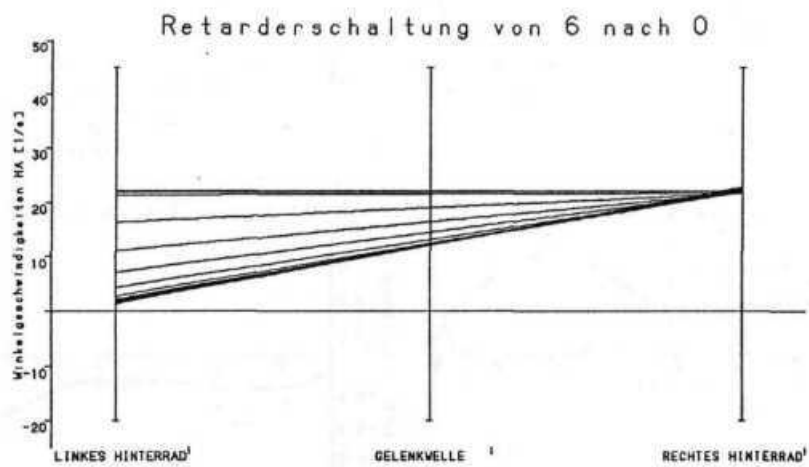
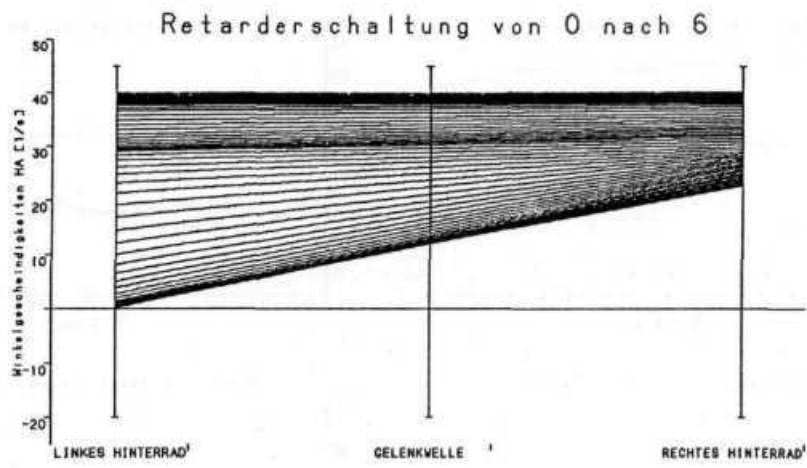
Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV : NEIN

Fahrbahn: Gefaele = 0.0 % Querneigung = 0.0 %  
 $\mu_{ue} (l/r_0) = .72/.72$   $\mu_{ue}$ -Sprung (l/r\_0) = .48/.48 b 4.0  
 $\mu_{ue}$ -Sprung (l/r\_0) = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt, Lenkwinkel= 1.5 Grad, Closed Loop  
 Solofz. leer mit 1 Retarder stat. Achslasten (VA/HA): 58.9/ 42.6 kN



K3 - 3 / Rahmen 5



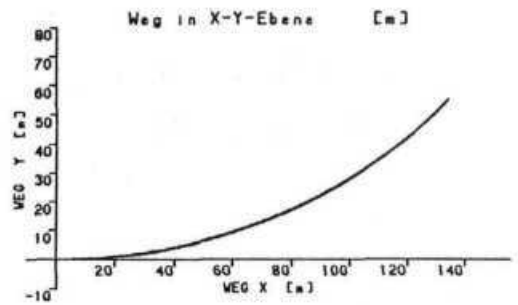
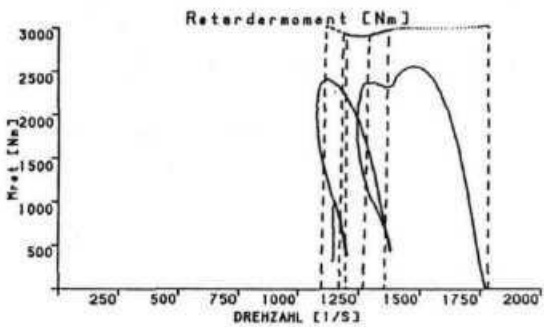
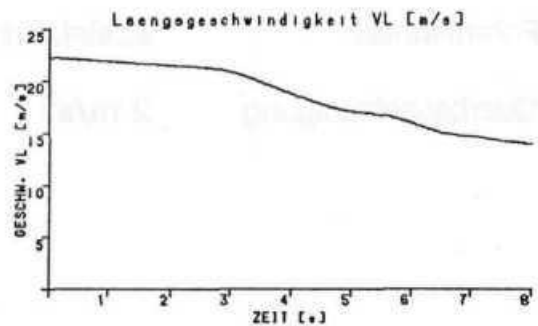
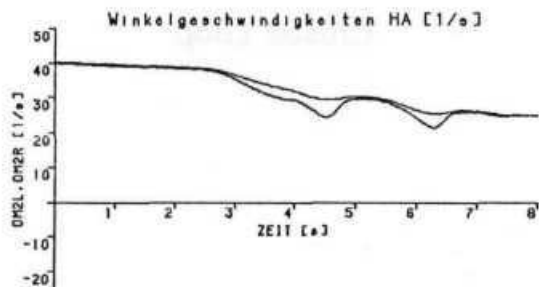
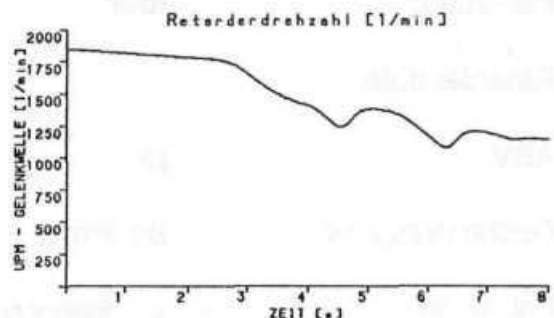
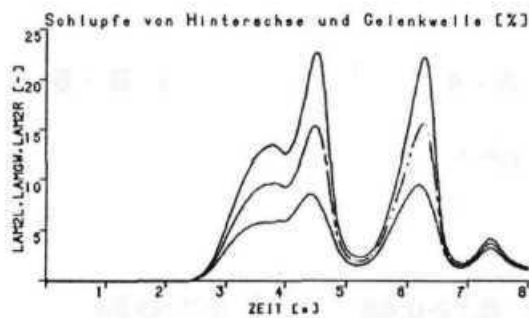
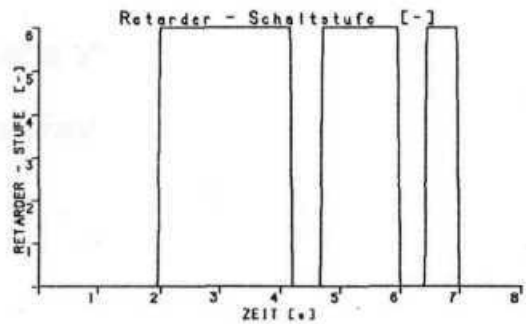
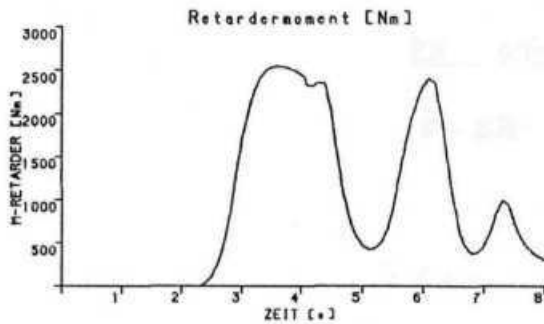
Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K3**Variation<sup>4)</sup> **K3 - 4**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		A - 4	B - 6
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	<b><math>\mu</math> - Sprung = 0,72-0,48</b>		0,72-0,24
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung **SPL1014**)<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K3 - 4 / Rahmen 1



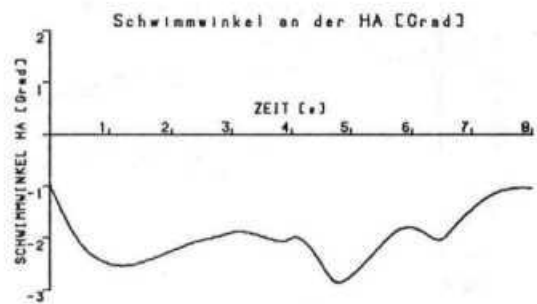
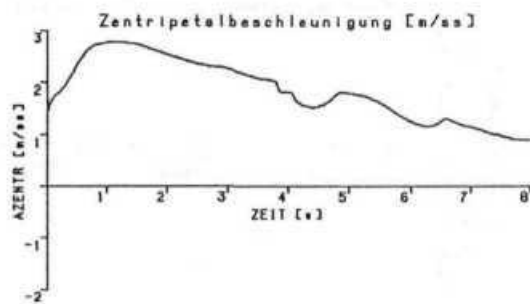
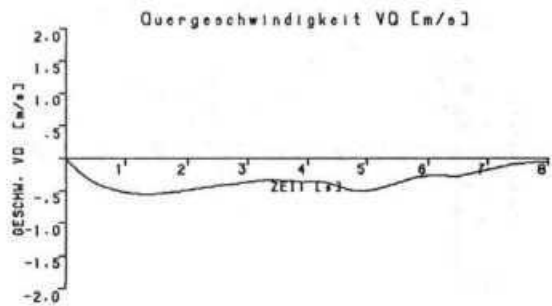
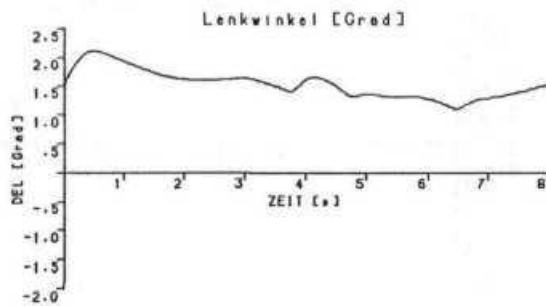
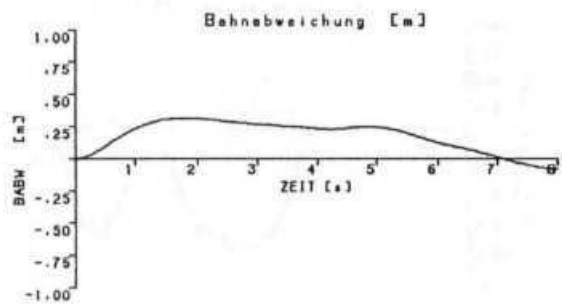
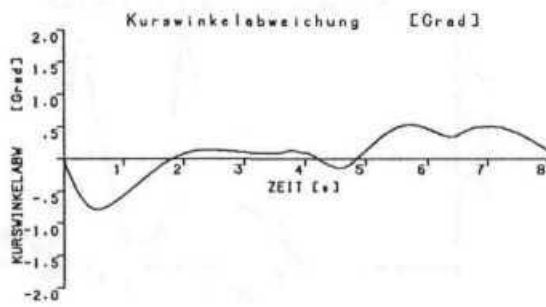
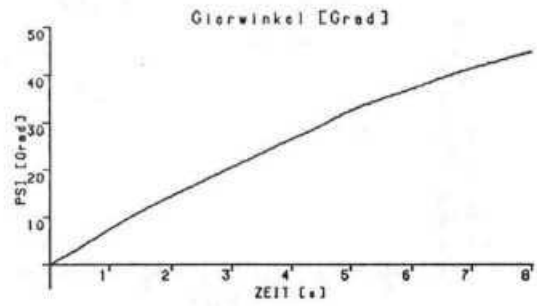
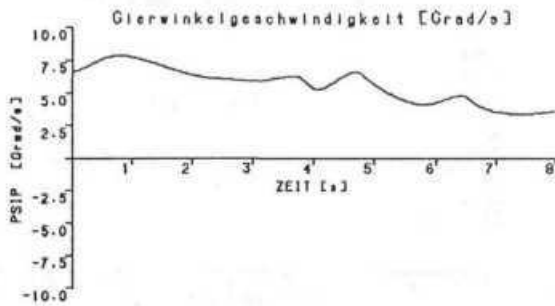
Retarder : Typ B  
Schaltstufe (n) : 6-0-0  
ABV-Schwellw. : 15.%

Fahrbahn: Gefaele = 0.0 %      Querneigung = 0.0 %  
mue (li/re) = .72/.72      mue-Sprung (li/re) = .48/.48 b 4.0  
mue-Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw.: 80.0 Km/h  
Fahrmanoever : Kreisfahrt,  
Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K3 - 4 / Rahmen 2



Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV-Schwellw. : 15.%

Fahrbahn: Gefaelle = 0.0 % Querneigung = 0.0 %  
 mue (li/re) = .72/.72 mue-Sprung (li/re) = .48/.48 b 4.0  
 mue-Sprung (li/re) = .48/.48 b 8.0

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN





Parameterreihe **K3**Variation<sup>5)</sup> **K3 - 5**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		<b>A - 4</b>	<b>B - 6</b>
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	<b><math>\mu</math> - Sprung =</b>	<b>0,72-0,48</b>	<b>0,72-0,24</b>
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung **SPL1004.2**)<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben





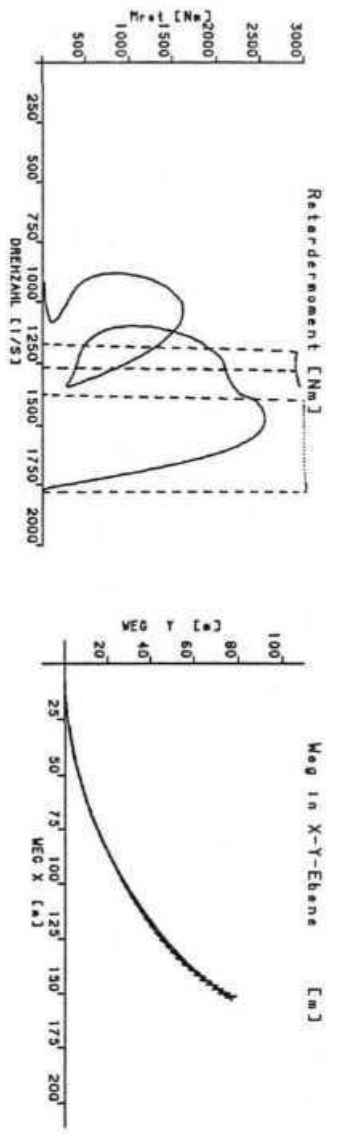
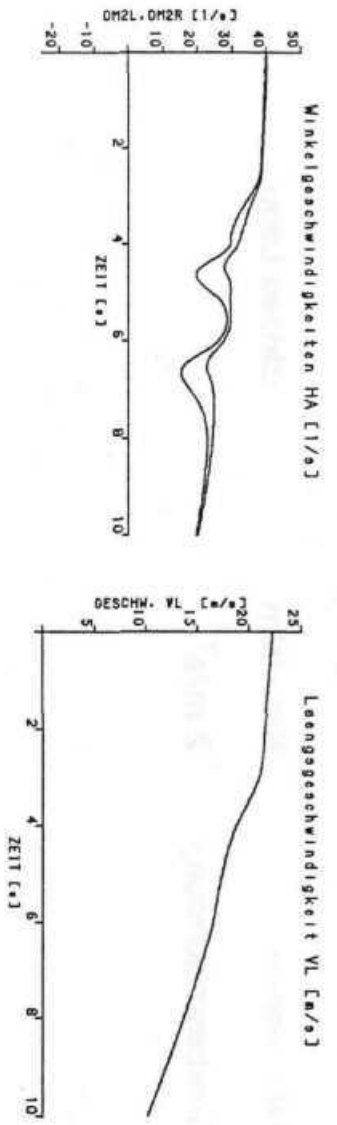
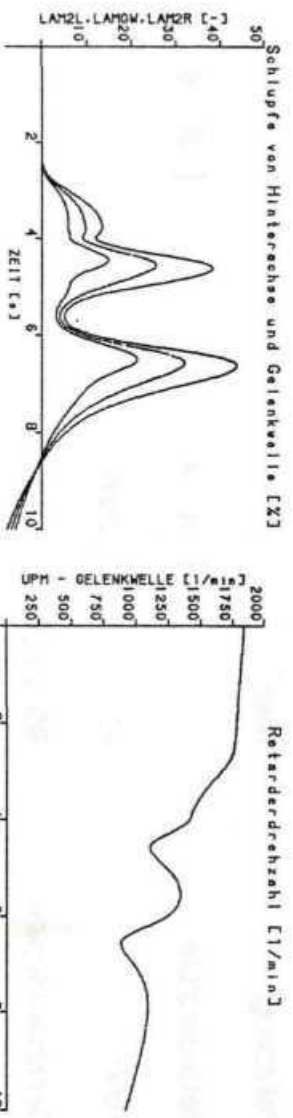
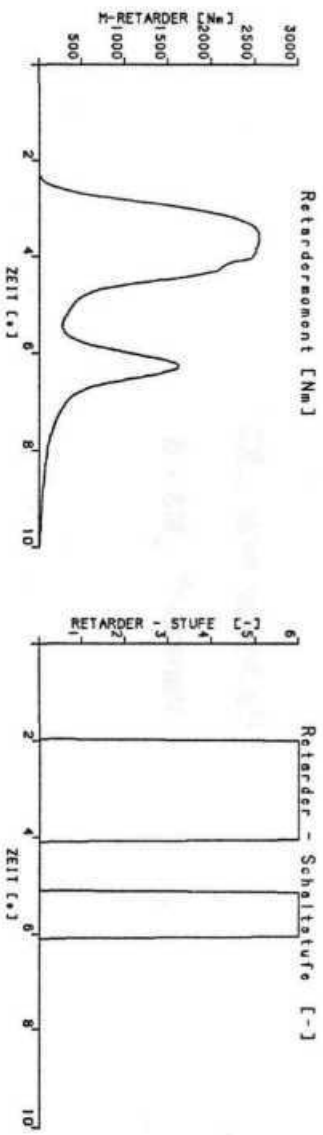


Parameterreihe **K3**Variation<sup>6)</sup> **K3 - 6**

Fahrzeug:	<b>leer</b>		
Retarderstufe:		A - 4	<b>B - 6</b>
ABV:	<b>ja</b>	nein	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu$ - Sprung =	0,72-0,48	<b>0,72-0,24</b>
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		

(Quelle: Simulationskennung **SPL1008.2**)<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K3 - 6 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0-0  
 ABV-Schwellw. : 15.-%

Fahrbahn: Gefaelle = 0.0 % Querneigung (11/re) = 0.0 %  
 mu (11/re) = .72/.72 mu-Sprung (11/re) = .24/.24 b 4.0  
 mu-Sprung (11/re) = .24/.24 b 8.0

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder  
 Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN







Parameterreihe **K4**Variation<sup>1)</sup> **K4 - 1**

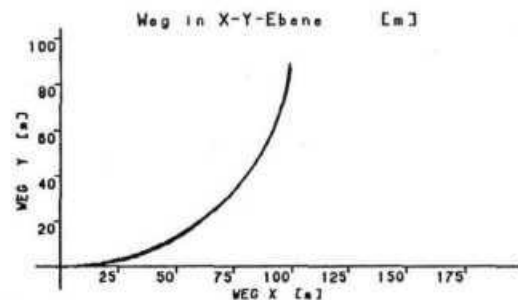
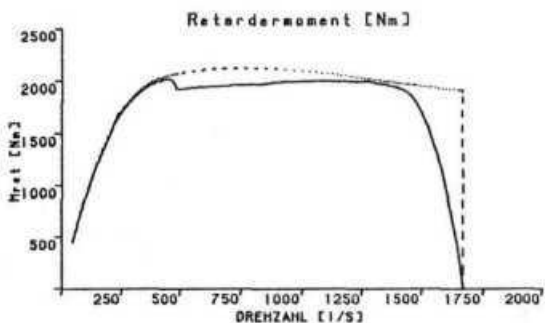
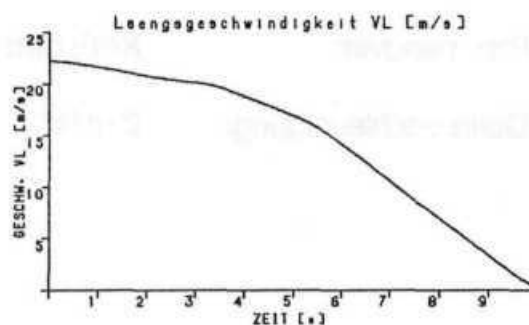
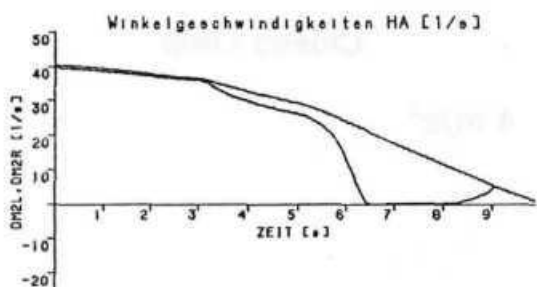
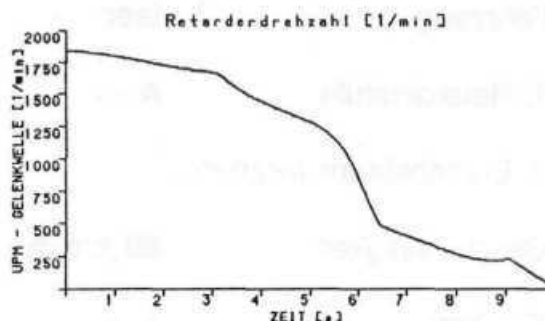
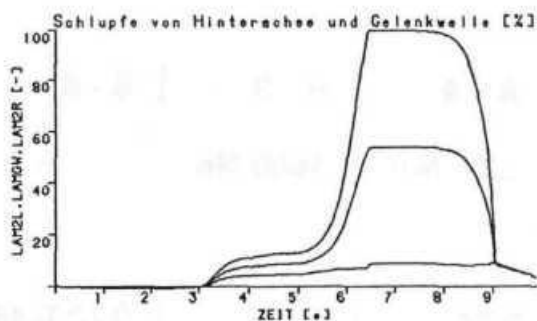
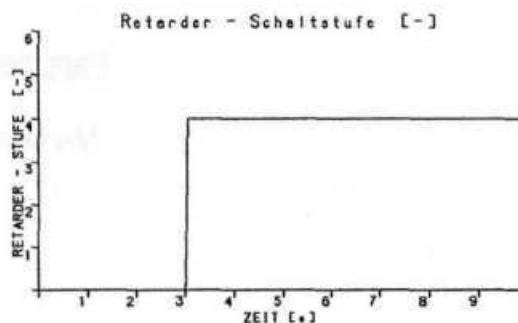
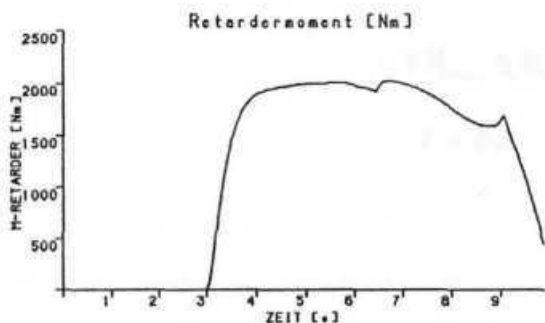
Fahrzeug:	<b>leer</b>		
1. Retarderstufe:	A - 2	<b>A - 4</b>	B - 3   B - 6
2. Betriebsbremsmoment:	1000 Nm	<b>1600 Nm</b>	
Geschwindigkeit:	<b>80 km/h</b>		
Fahrbahn:	$\mu =$	<b>0,72</b>	0,48   0,72/0,48
Fahrmanöver:	<b>Kreisfahrt</b>		<b>Closed Loop</b>
Querb beschleunigung:	2 m/s <sup>2</sup>	<b>4 m/s<sup>2</sup></b>	

(Quelle: Simulationskennung SPL1238)

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<sup>1)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K4 - 1 / Rahmen 1



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

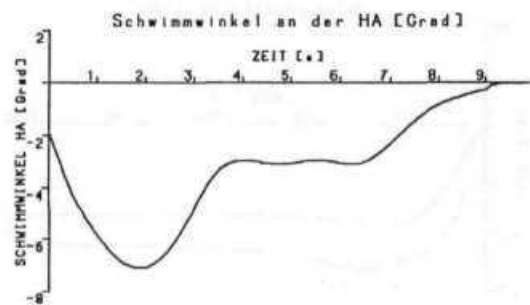
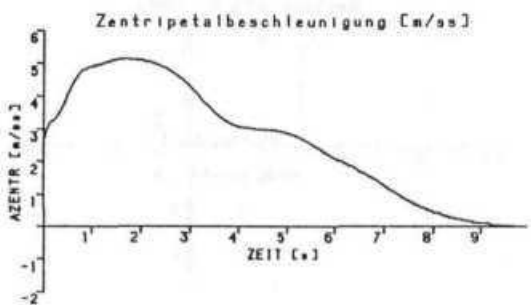
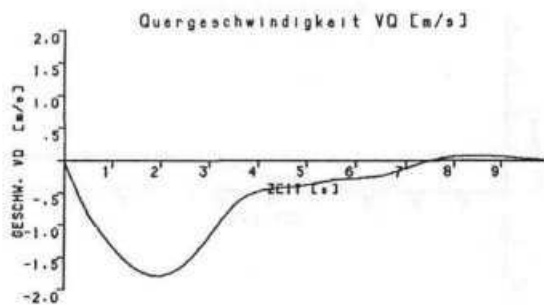
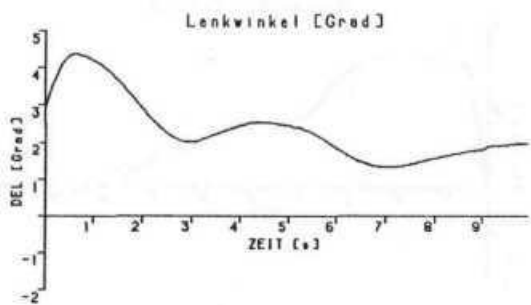
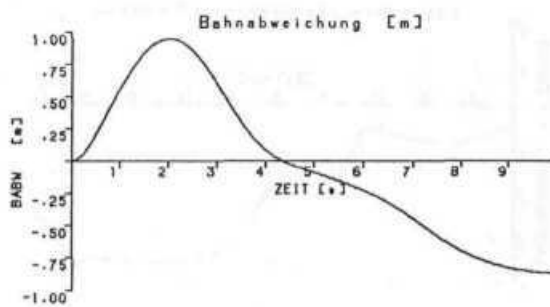
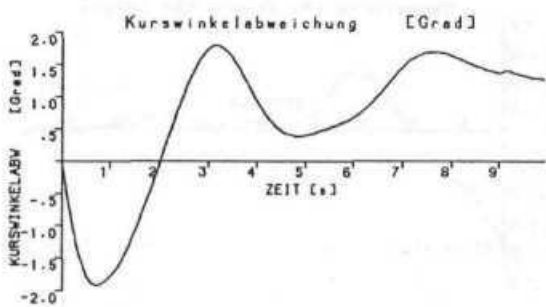
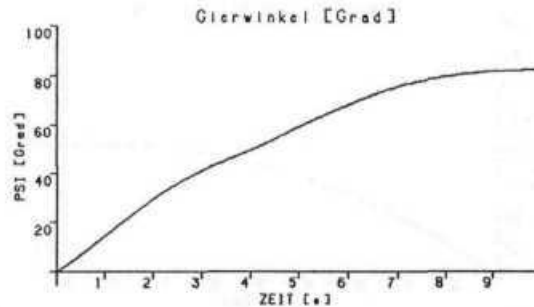
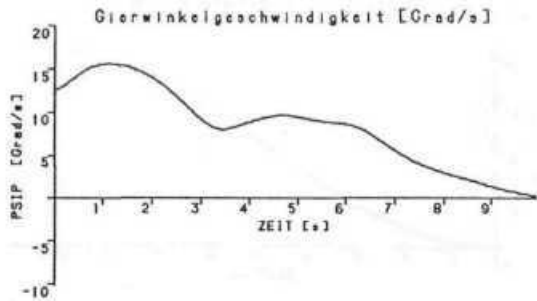
Fahrbahn: Gefaeelle = 0.0 %  
 mu (l/r) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 1 / Rahmen 2



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

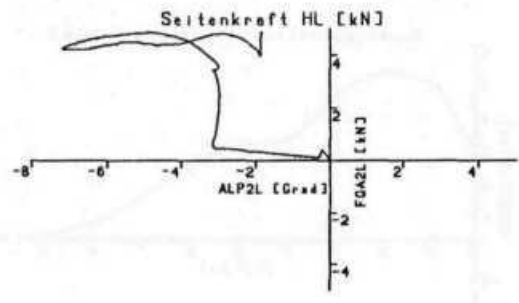
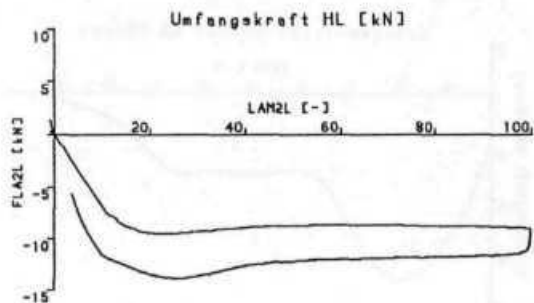
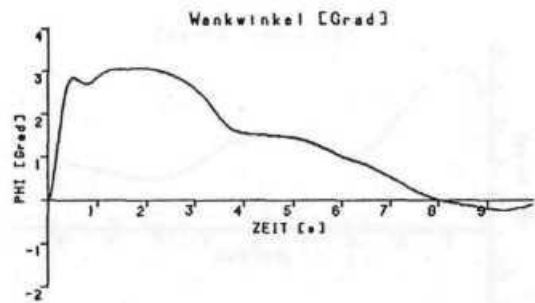
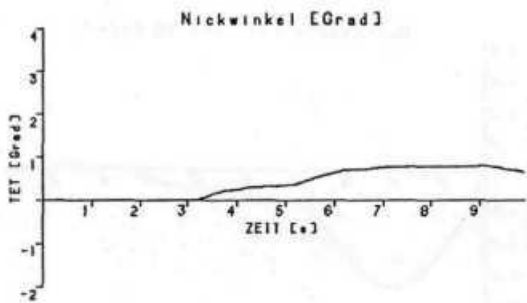
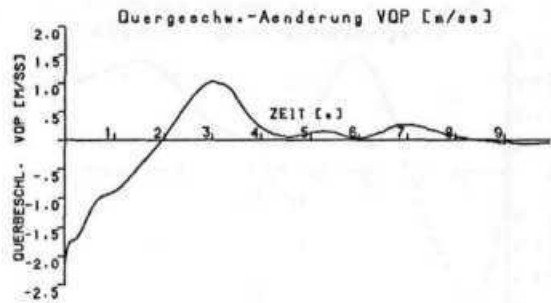
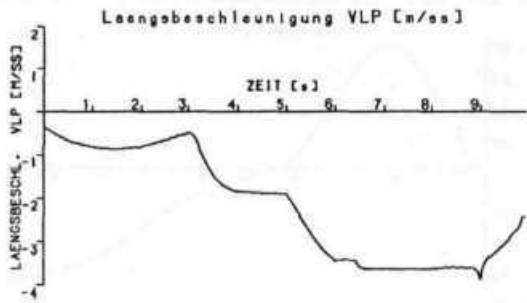
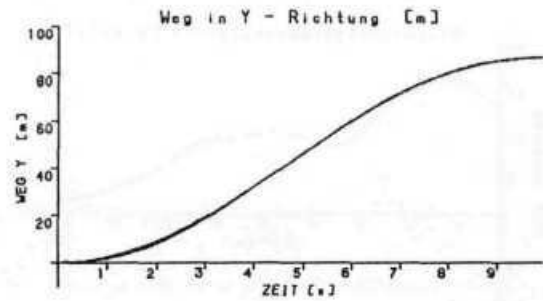
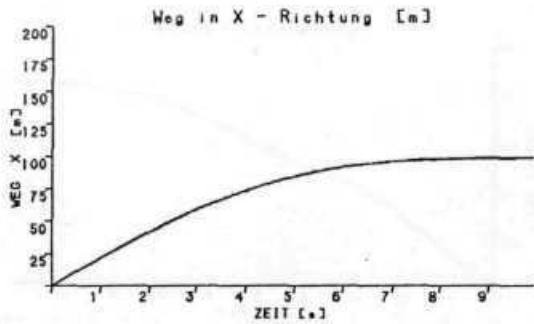
Fahrbahn: Gefaelle = 0.0 %  
 $\mu_{re} (l/r_0) = .72/.72$

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 1 / Rahmen 3



Retarder : Typ A  
Schaltstufe (n) : 4-0  
ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
Bremsbeginn : 5.0 sec  
Verlauf : Rampe

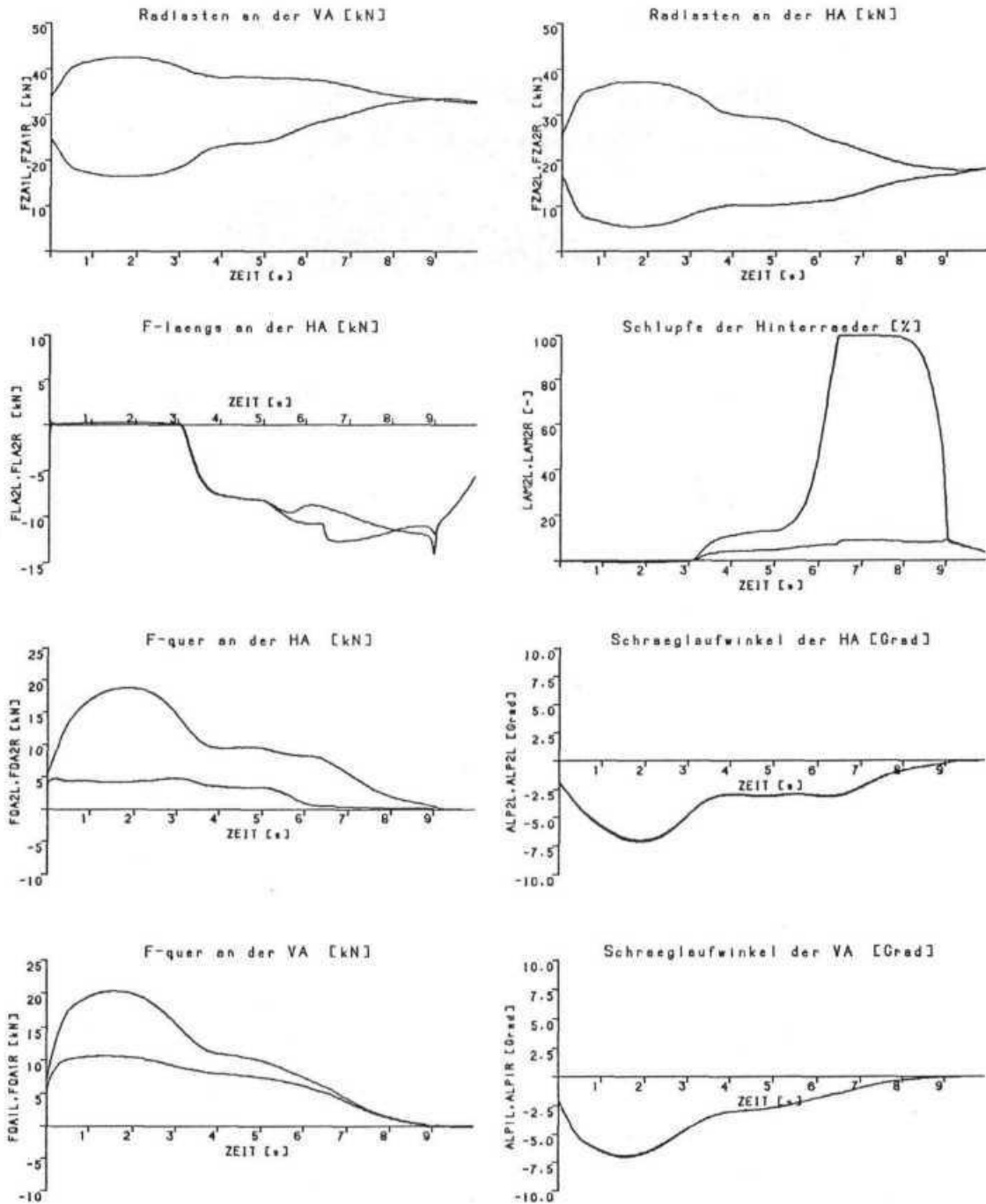
Fahrbahn: Gefaelle = 0.0 %  
mue (li/re) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : Kreisfahrt,  
Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 1 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

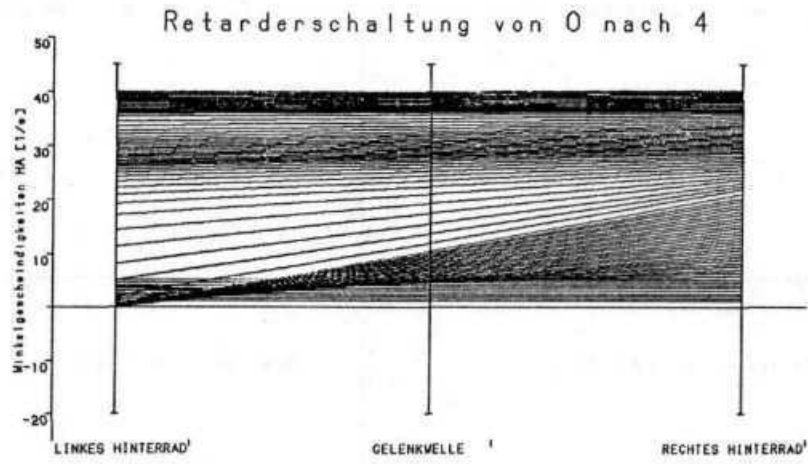
Fahrbahn: Gefaelle = 0.0 %  
 mu (li/re) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 1 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe K4Variation<sup>2)</sup> **K4 - 2**

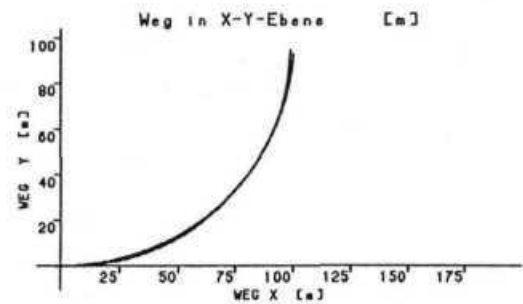
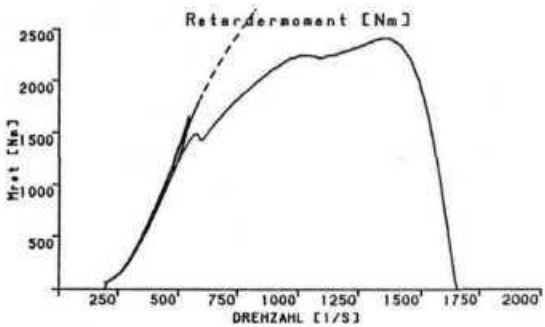
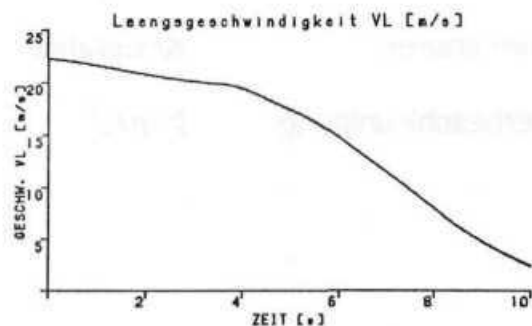
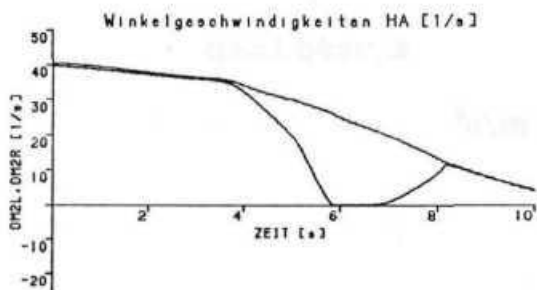
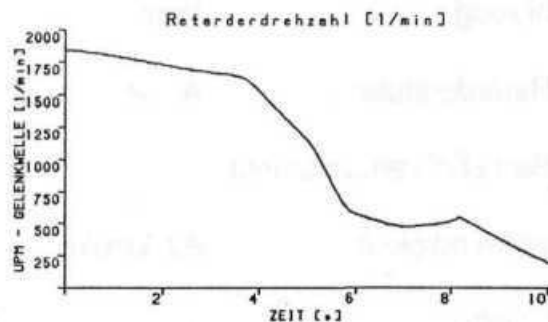
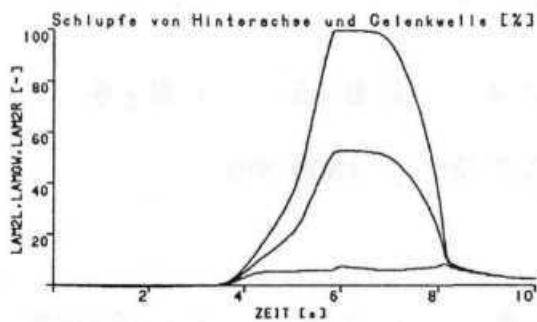
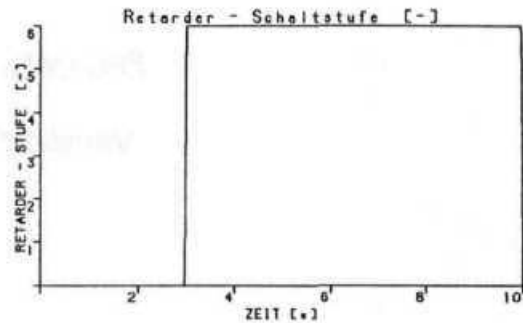
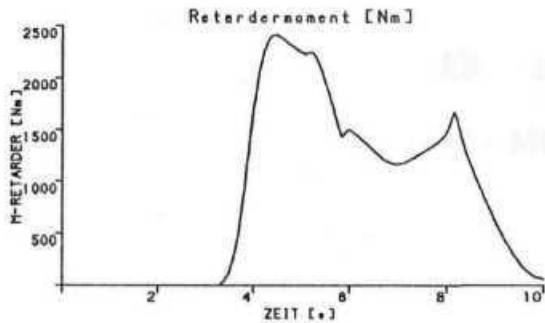
Fahrzeug:	<b>leer</b>						
1. Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
2. Betriebsbremsmoment:			1000 Nm		<b>1600 Nm</b>		
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		<b>0,72</b>		0,48		0,72/0,48
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querschleunigung:	2 m/s <sup>2</sup>		<b>4 m/s<sup>2</sup></b>				

(Quelle: Simulationskennung SPL1240)

<sup>2)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben



K4 - 2 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

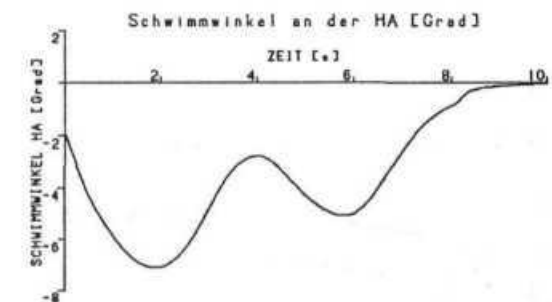
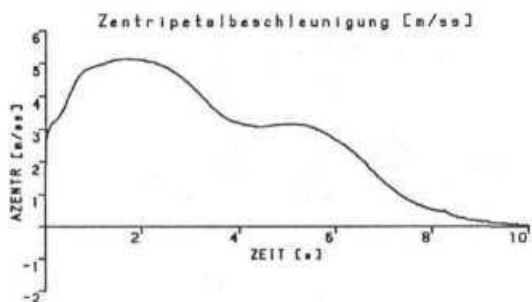
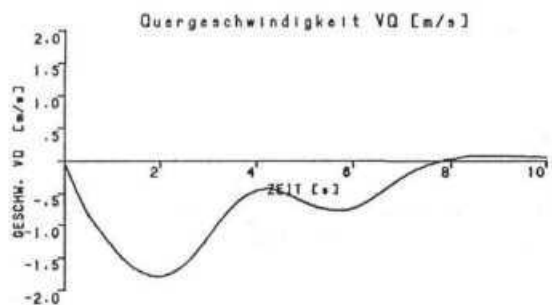
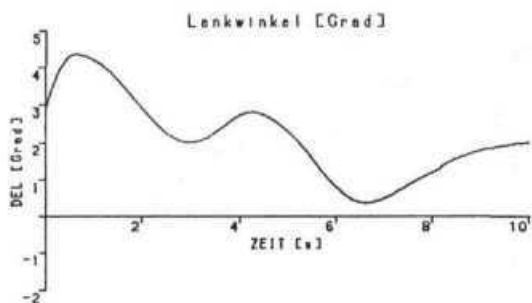
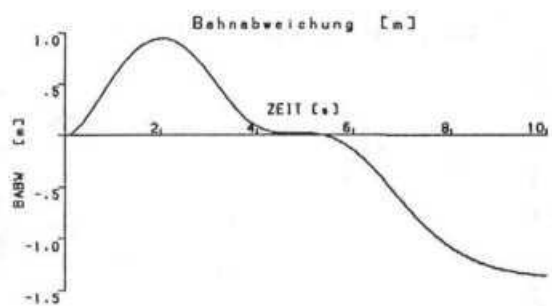
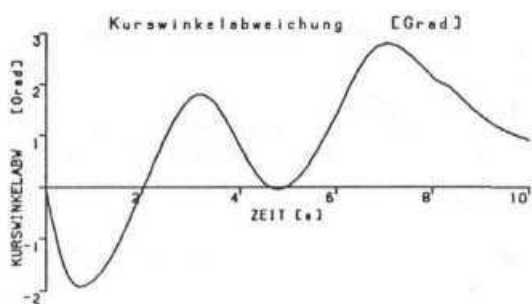
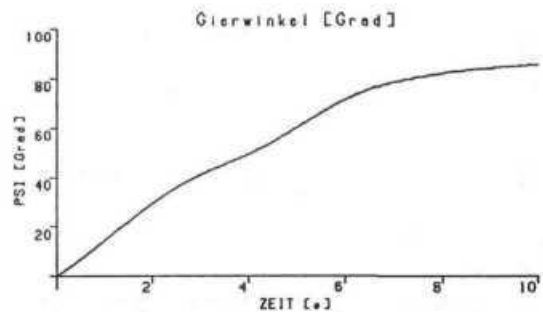
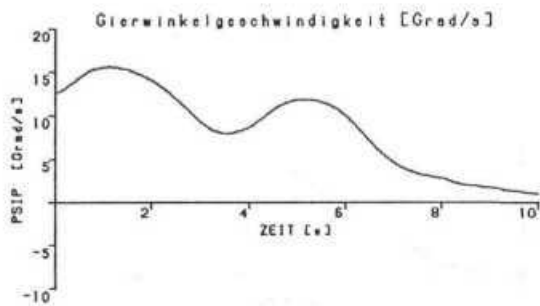
Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

## K4 - 2 / Rahmen 2



Retarder : Typ B  
Schaltstufe (n) : 6-0  
ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
Bremsbeginn : 5.0 sec  
Verlauf : Rampe

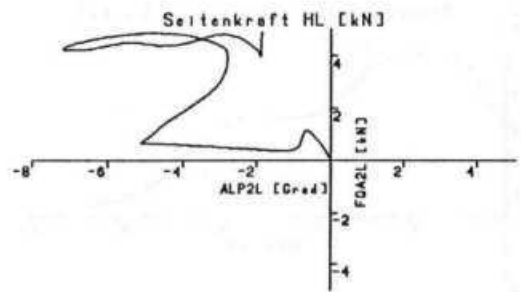
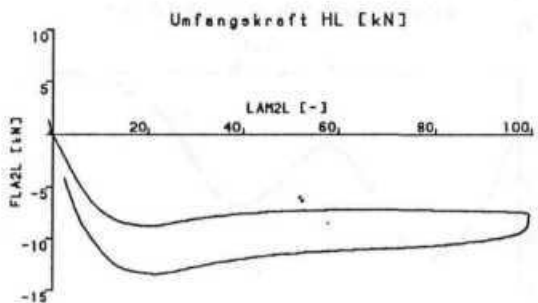
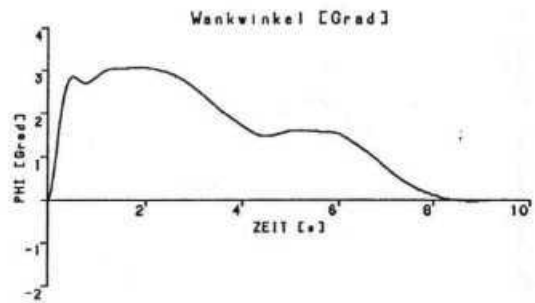
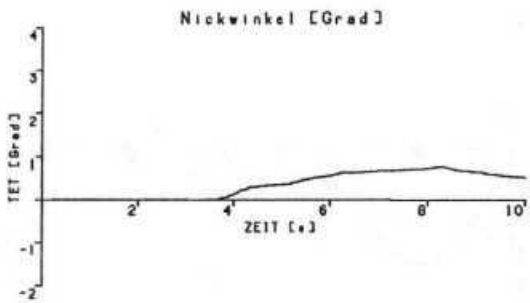
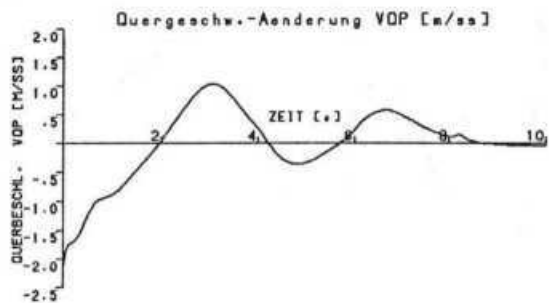
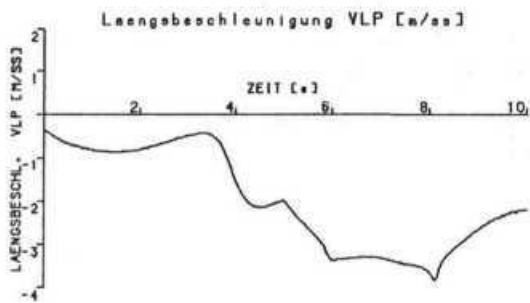
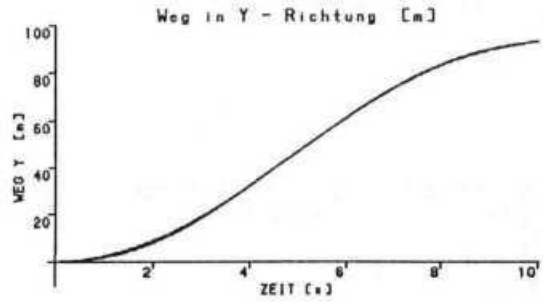
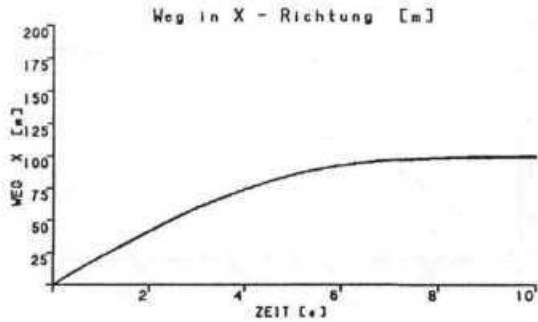
Fahrbahn: Gefaelle = 0.0 %  
mue (li/re) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
Fahrmanoever : Kreisfahrt,  
Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 2 / Rahmen 3



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

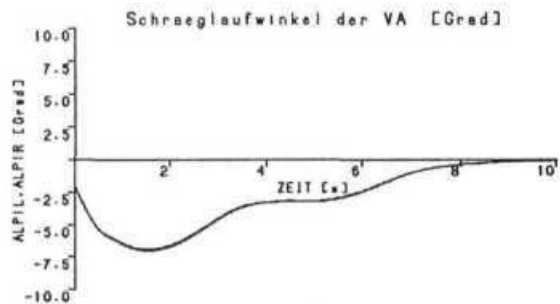
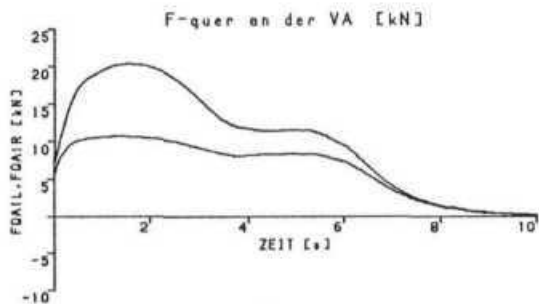
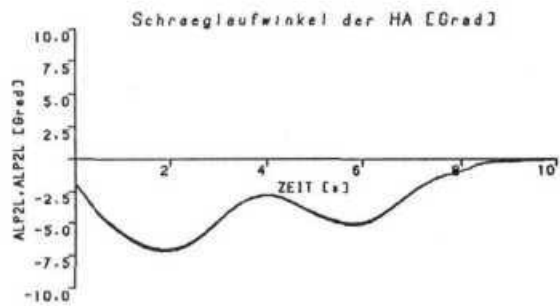
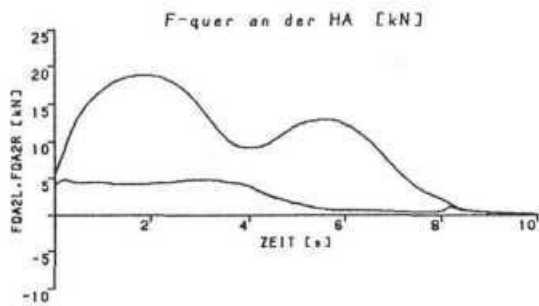
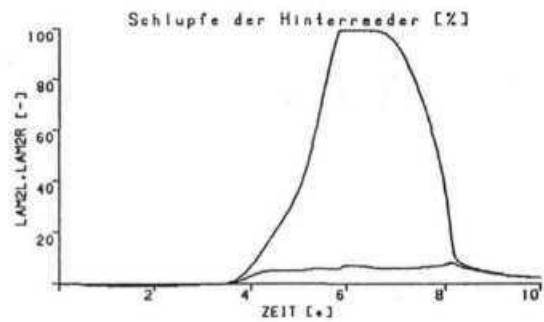
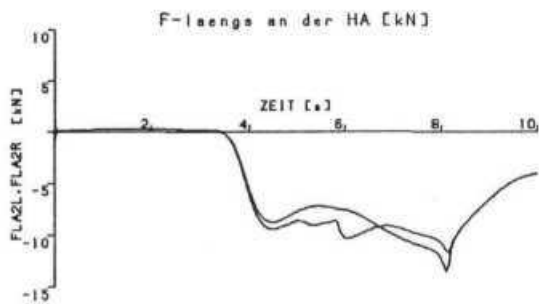
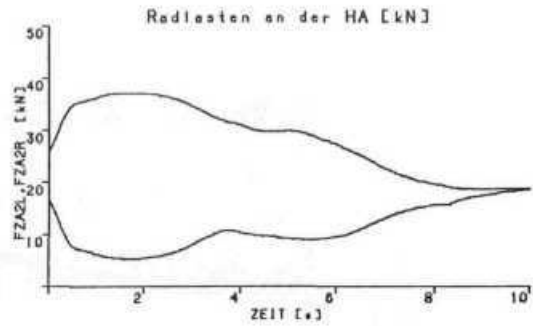
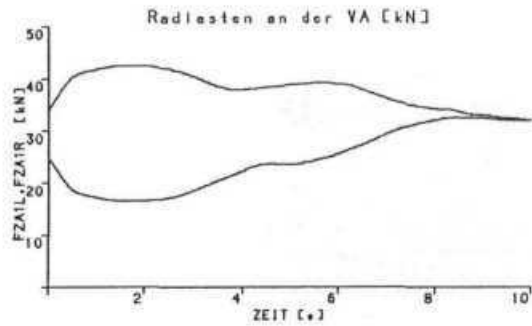
Fahrbahn: Gefaele = 0.0 %  
 mue (ll/re) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 2 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 2400./1600. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

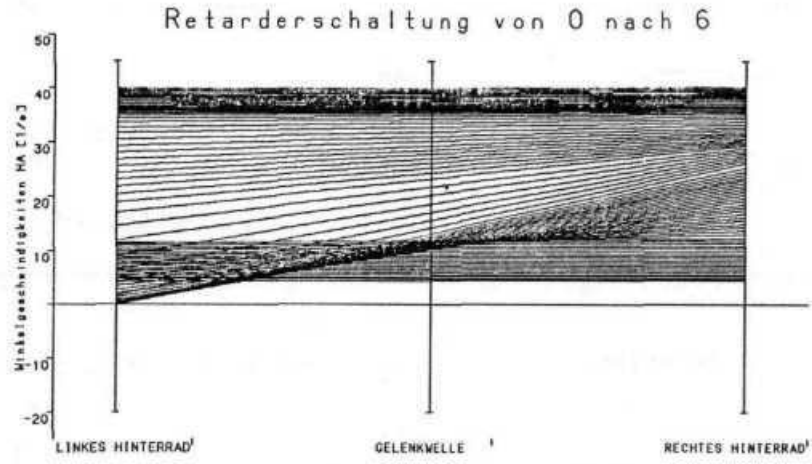
Fahrbahn: Gefaelle = 0.0 %  
 mu (ll/re) = .72/.72

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 2.8 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 2 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

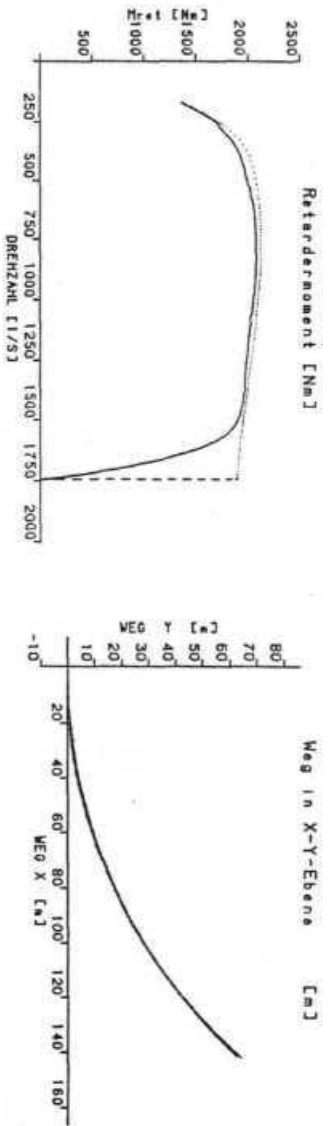
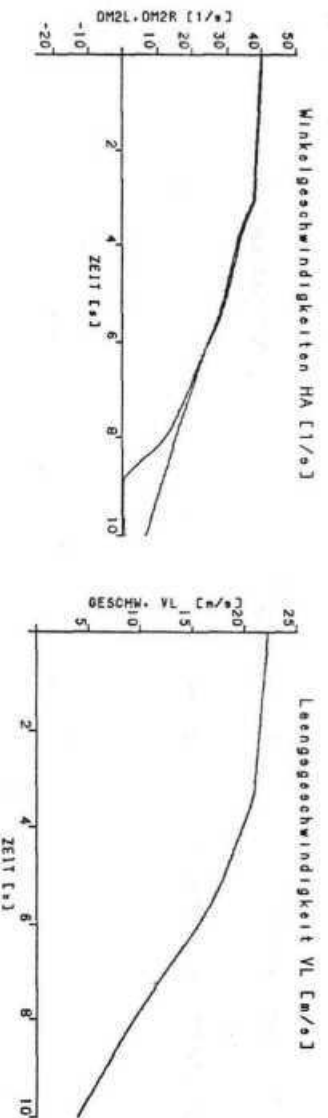
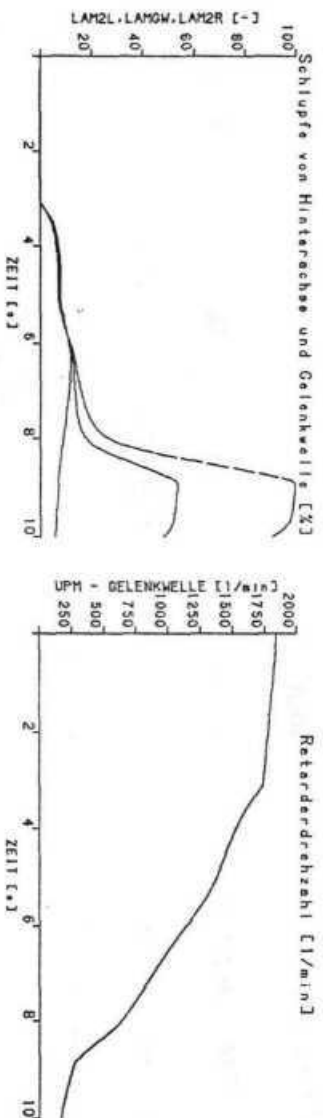
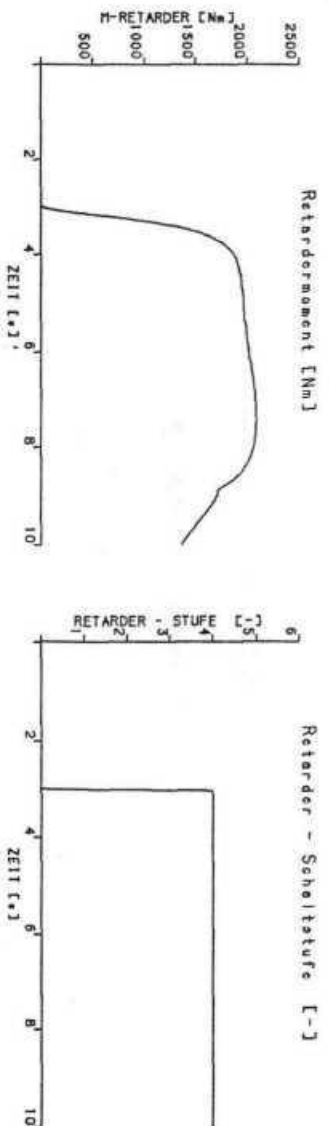
Parameterreihe K4Variation<sup>3)</sup> **K4 - 3**

Fahrzeug:	<b>leer</b>			
1. Retarderstufe:	A - 2		<b>A - 4</b>	B - 3   B - 6
2. Betriebsbremsmoment:			<b>1000 Nm</b>	1600 Nm
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu =$	0,72	0,48	<b>0,72/0,48</b>
Fahrmanöver:	<b>Kreisfahrt</b>			<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>	

(Quelle: Simulationskennung SPL1204)

<sup>3)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

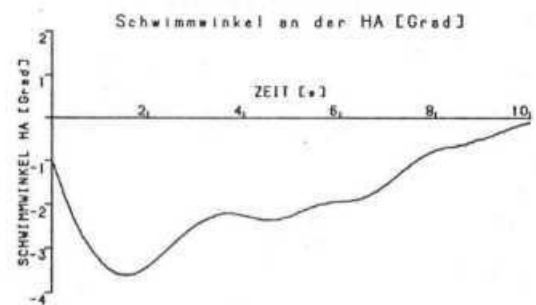
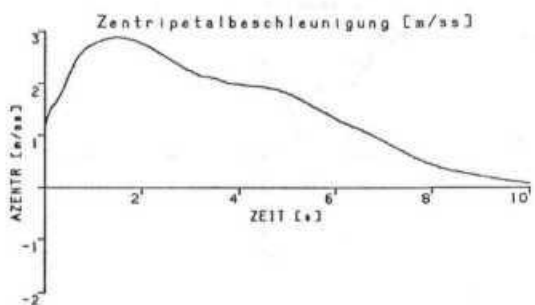
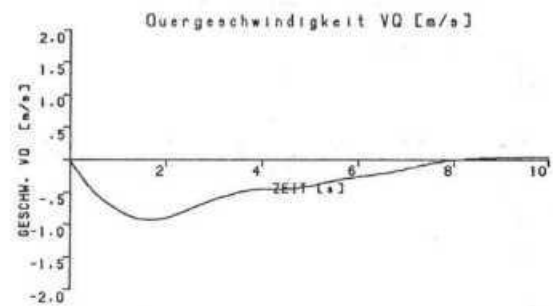
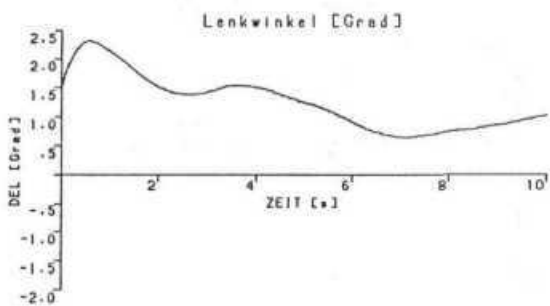
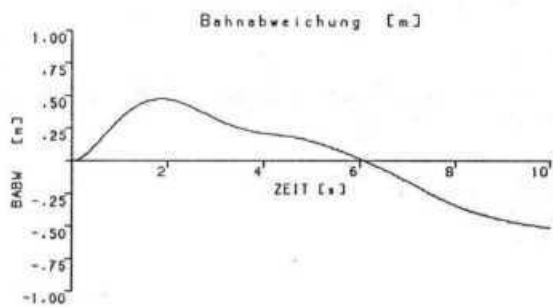
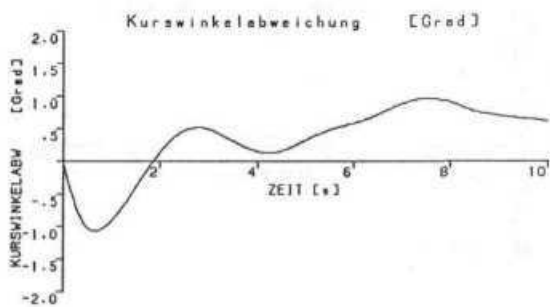
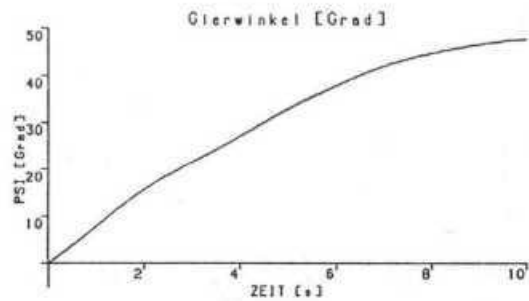
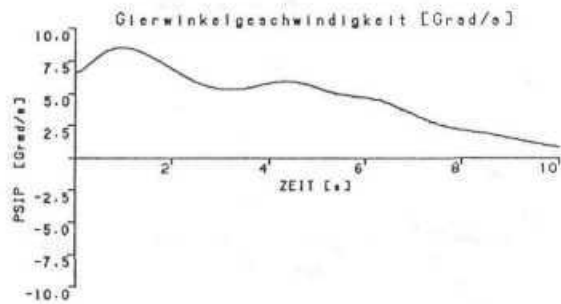
K4 - 3 / Rahmen 1



Retarder : Typ A  
 Schaltstufe(n) : 4-0  
 ABV : NEIN  
 Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe  
 Fahrbahn: Gefälle = 0.0 %  
 Querneigung = 0.0 %  
 mu\_e (11/re) = .72/.48

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanöver : Kreisfahrt.  
 Solofz. leer mit 1 Retarder  
 Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9 / 42.6 kN

K4 - 3 / Rahmen 2



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

Fahrbahn: Gefaele = 0.0 %  
 mu (li/re) = .72/.48

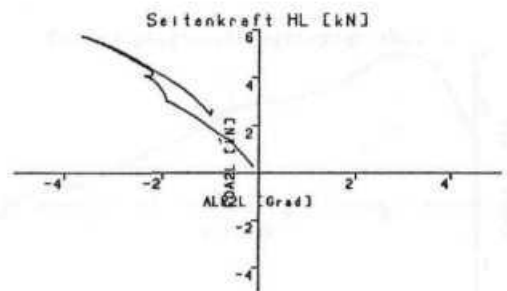
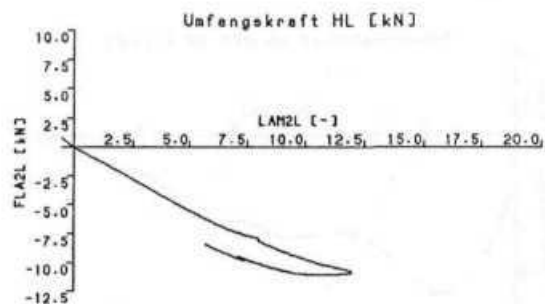
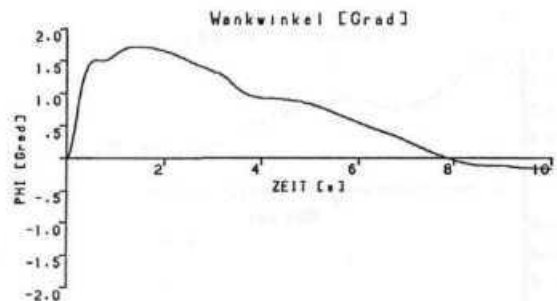
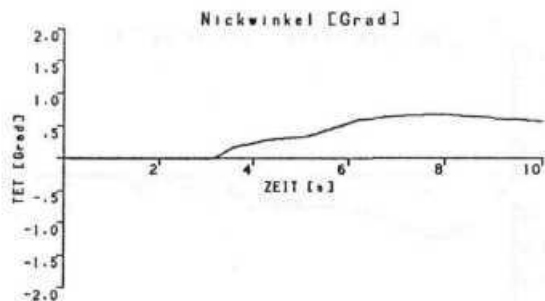
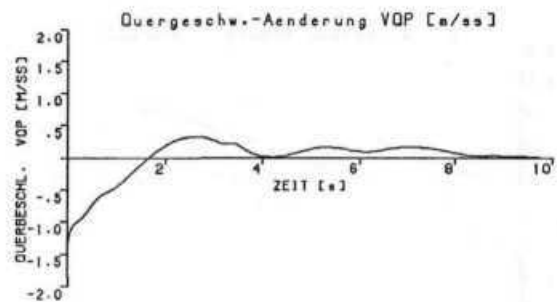
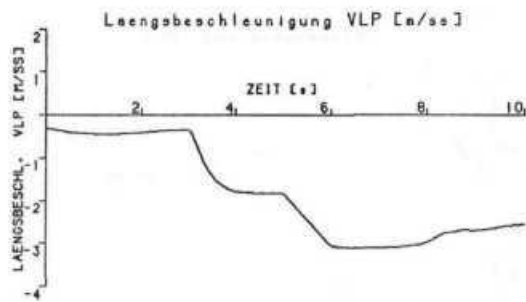
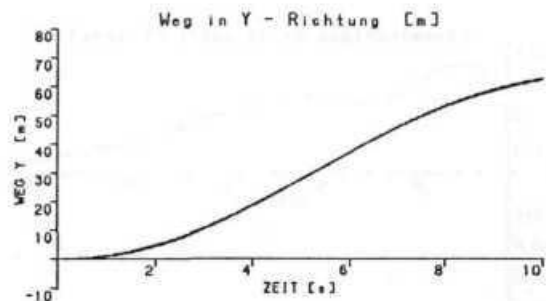
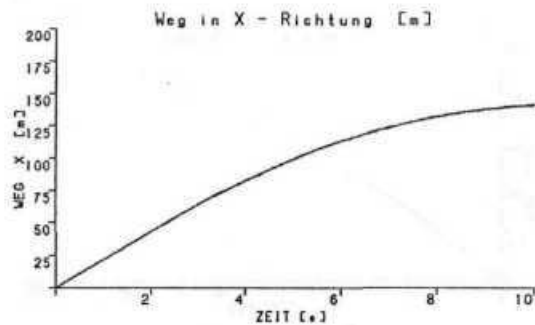
Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K4 - 3 / Rahmen 3



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

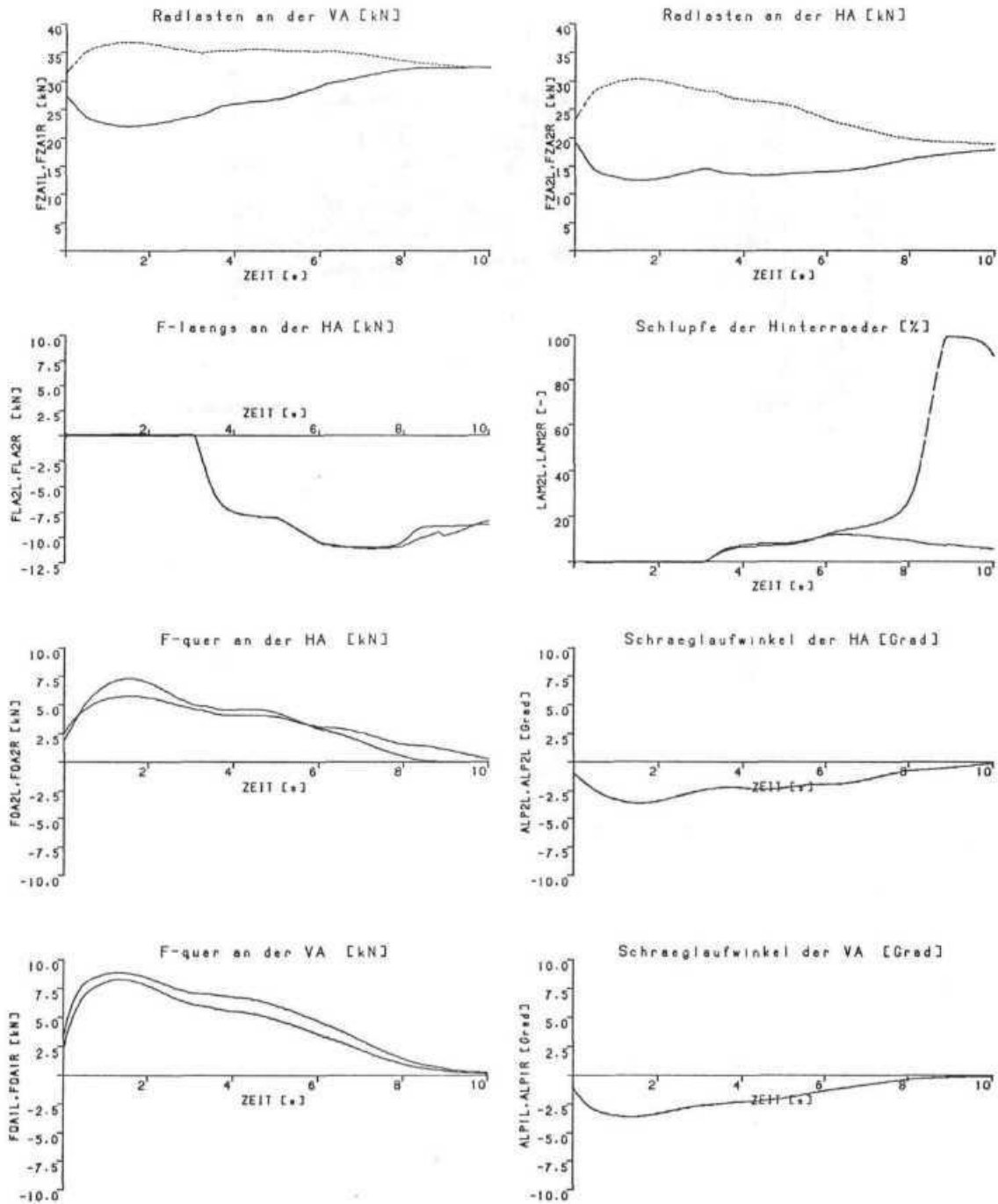
Fahrbahn: Gefaeelle = 0.0 %  
 mue (li/re) = .72/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel= 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA): 58.9/ 42.6 kN

K4 - 3 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlaufs : Rampe

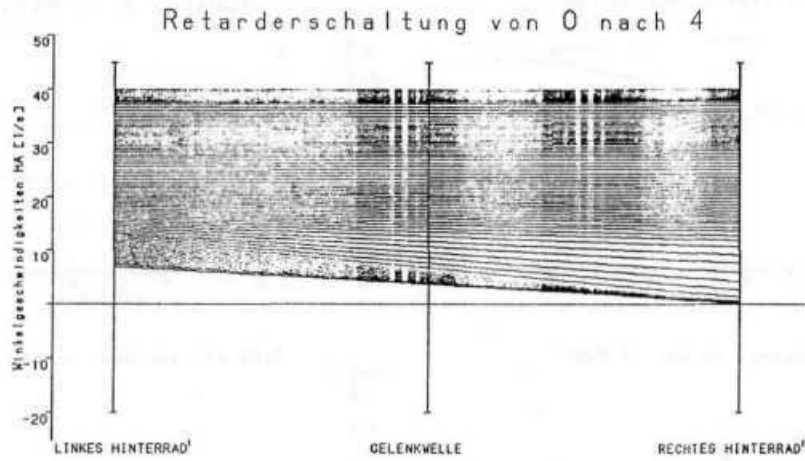
Fahrbahn: Gefaelle = 0.0 %  
 mu (li/re) = .72/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 3 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand DELTA-T = 0.2 sec

Parameterreihe K4Variation<sup>4)</sup> **K4 - 4**

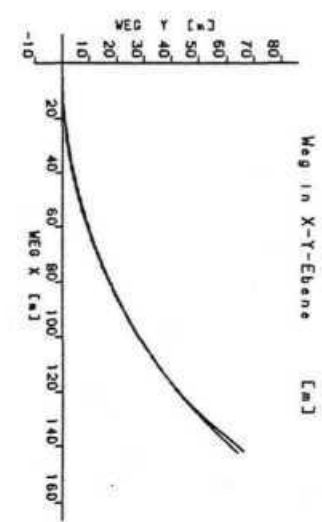
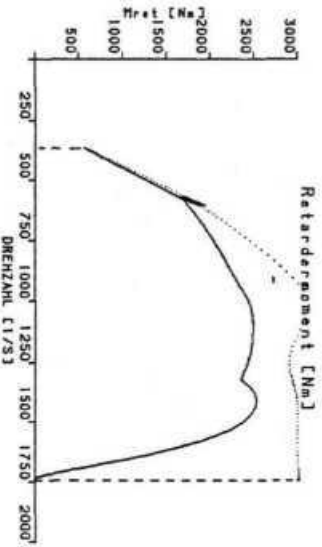
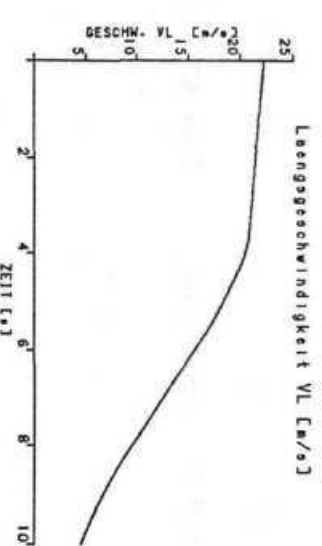
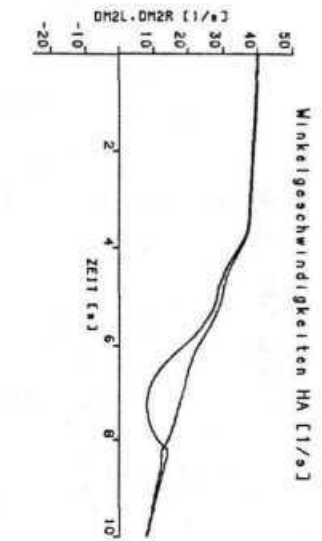
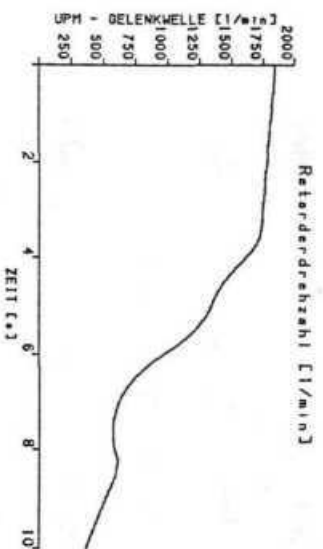
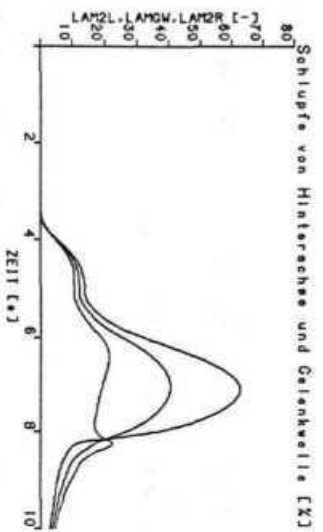
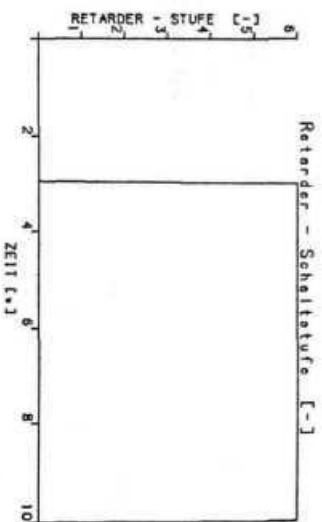
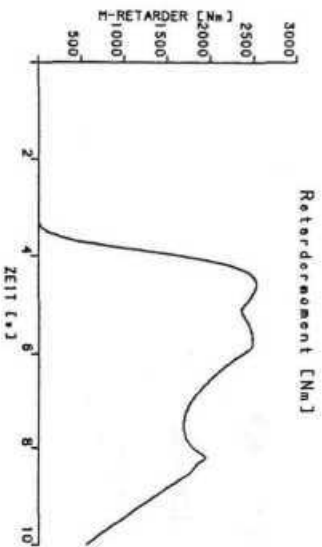
Fahrzeug:	<b>leer</b>						
1. Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
2. Betriebsbremsmoment:			<b>1000 Nm</b>		1600 Nm		
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		0,72		0,48		<b>0,72/0,48</b>
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>				

(Quelle: Simulationskennung SPL1212.2)

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<sup>4)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

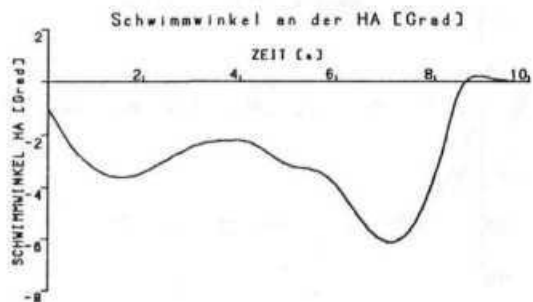
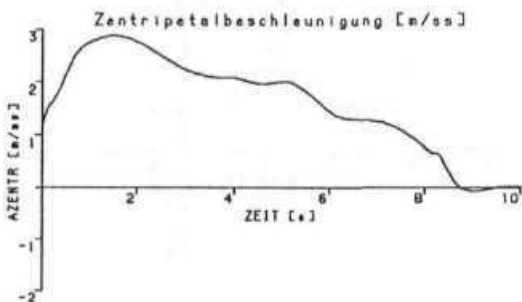
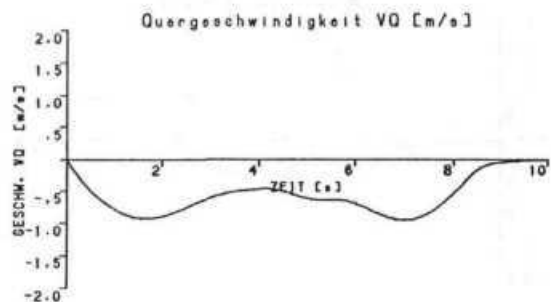
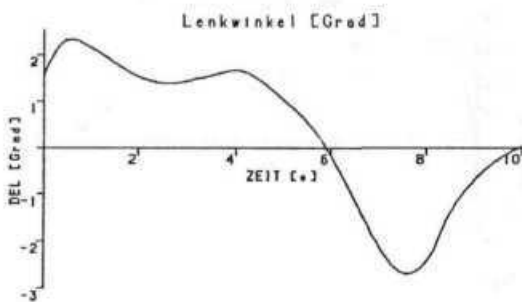
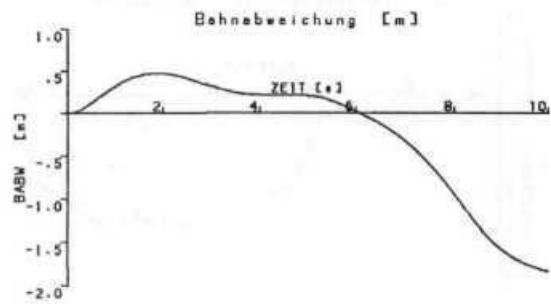
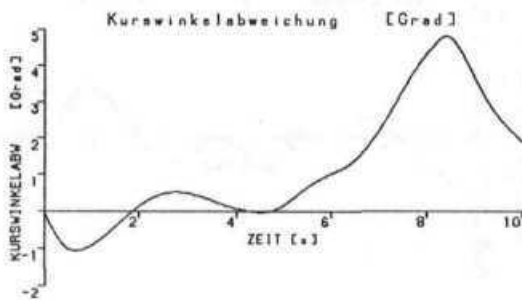
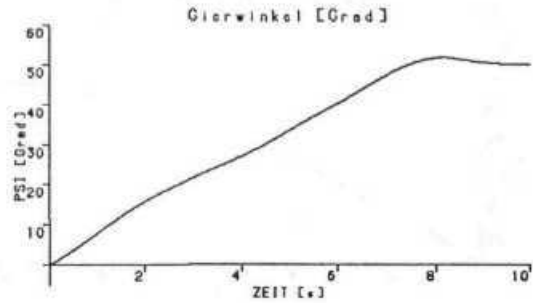
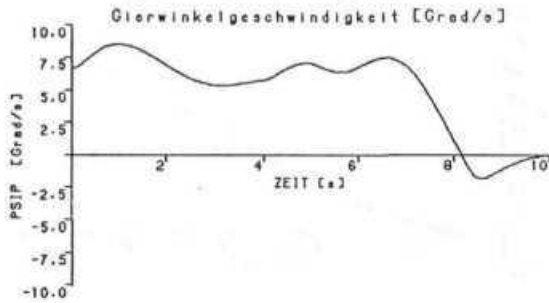
K4 - 4 / Rahmen 1



Retarder : Typ B  
 Schaltstufe(n) : 6-0  
 ABV : NEIN  
 Fahrbahn: Gefaelle = 0.0 %  
 mu (11/ro) = .72/.48  
 Querneigung = 0.0 %  
 Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder  
 Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 4 / Rahmen 2



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

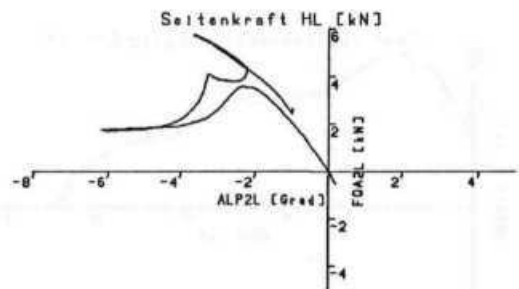
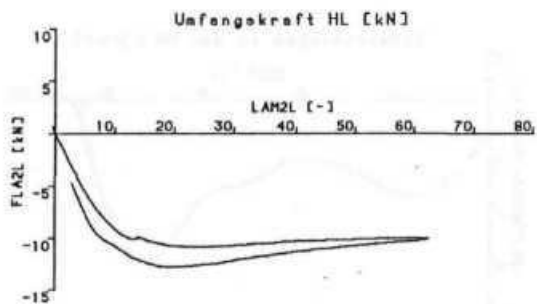
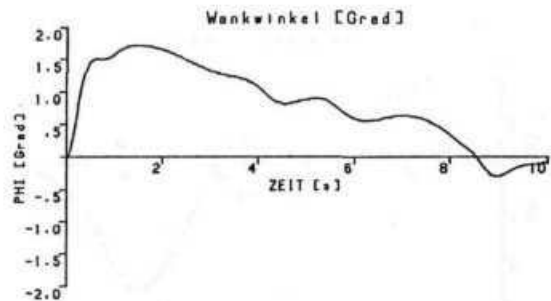
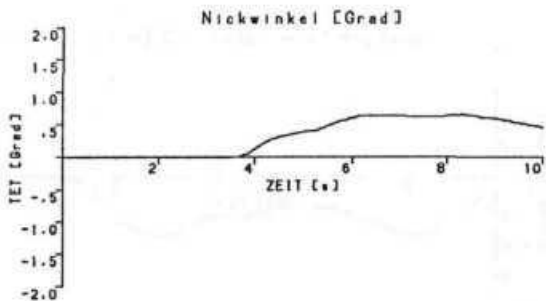
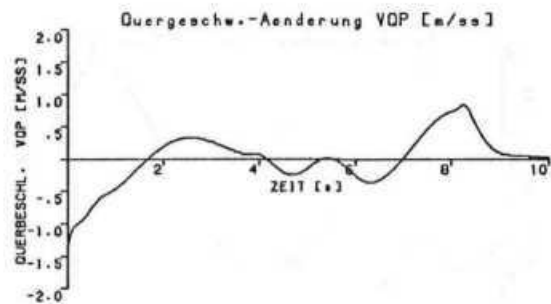
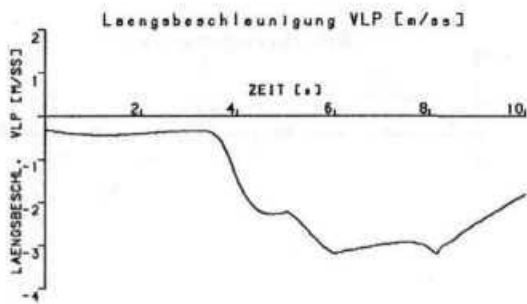
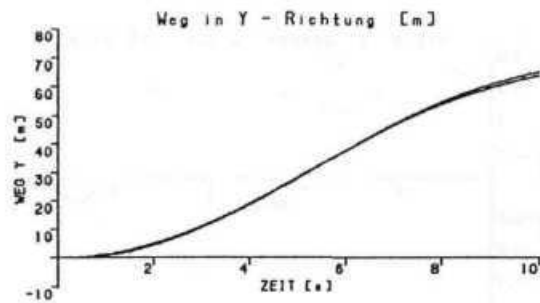
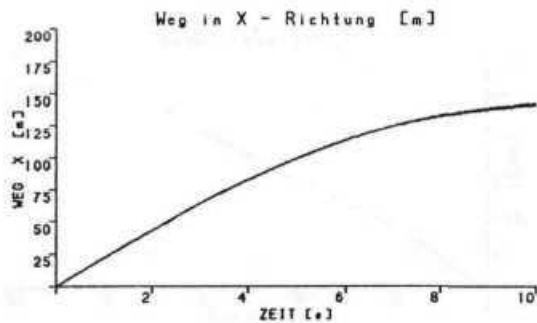
Fahrbahn: Gefaelle = 0.0 %  
 mu (ll/re) = .72/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 4 / Rahmen 3



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

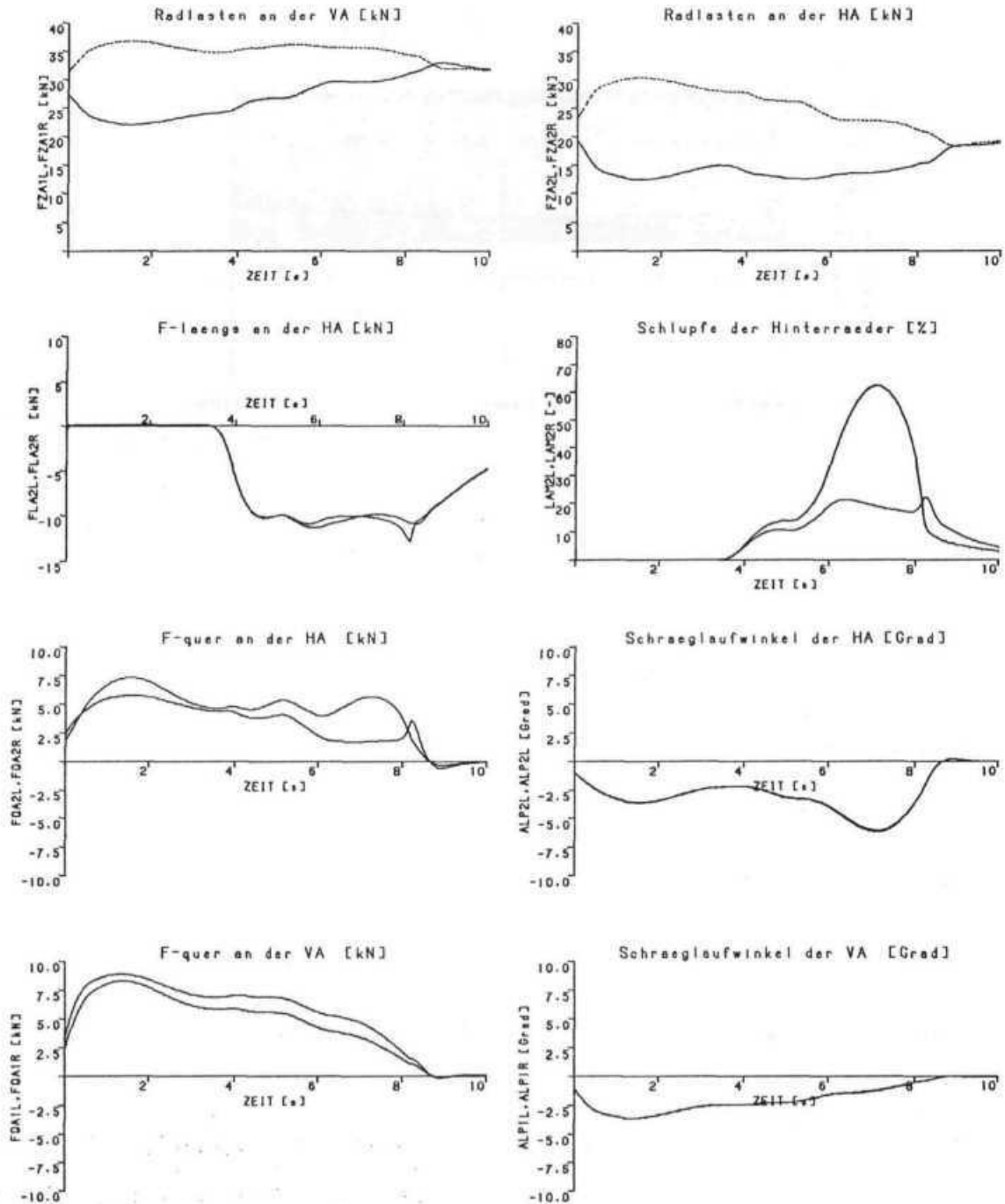
Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .72/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 4 / Rahmen 4



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

Fahrbahn: Gefaele = 0.0 %  
 mu (ll/re) = .72/.48

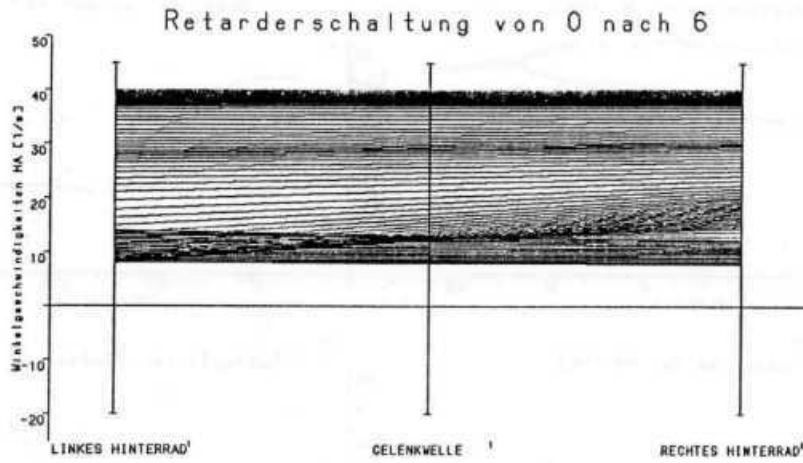
Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K4 - 4 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

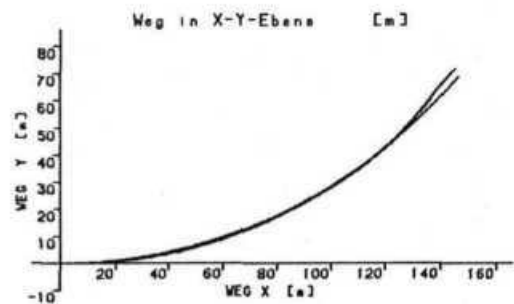
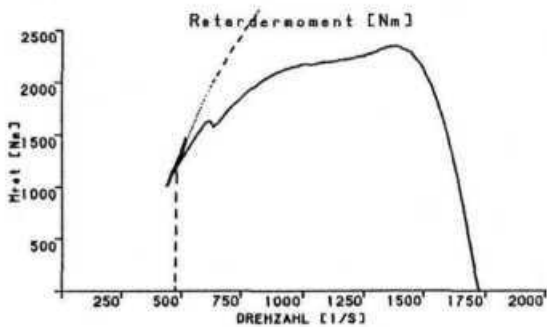
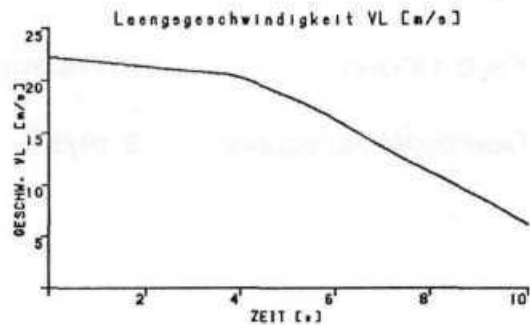
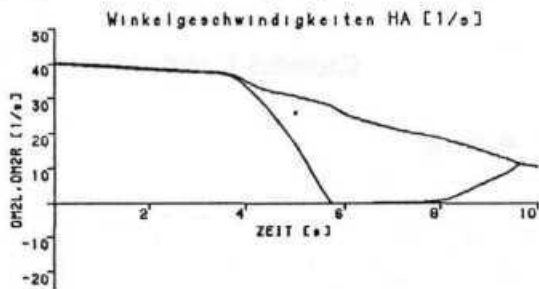
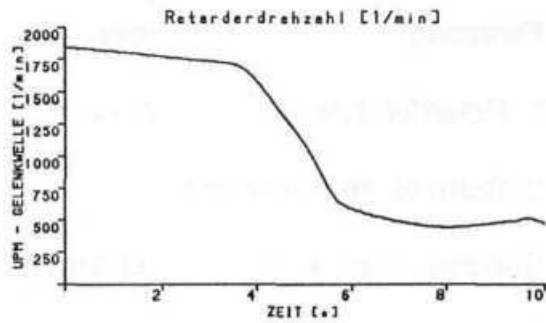
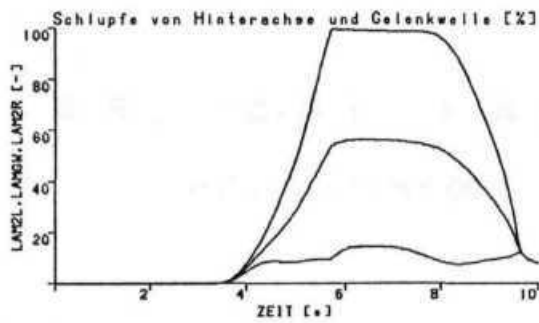
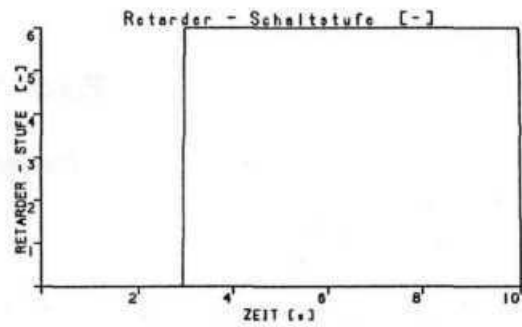
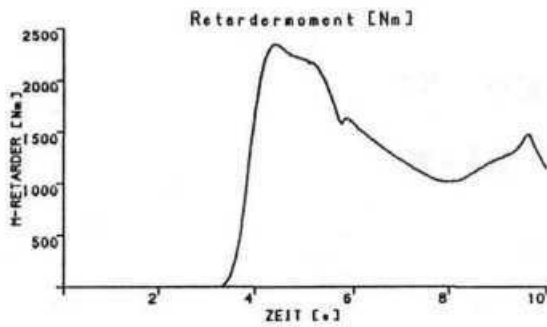
Parameterreihe K4Variation<sup>5)</sup> **K4 - 5**

Fahrzeug:	<b>leer</b>			
1. Retarderstufe:	A - 2		<b>A - 4</b>	B - 3   B - 6
2. Betriebsbremsmoment:			<b>1000 Nm</b>	1600 Nm
Geschwindigkeit:	<b>80 km/h</b>			
Fahrbahn:	$\mu =$	0,72		<b>0,48</b>   0,72/0,48
Fahrmanöver:	<b>Kreisfahrt</b>			<b>Closed Loop</b>
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>	

(Quelle: Simulationskennung SPL1203)

<sup>5)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben

K4 - 5 / Rahmen 1



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

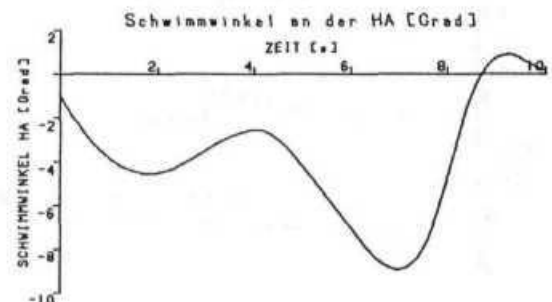
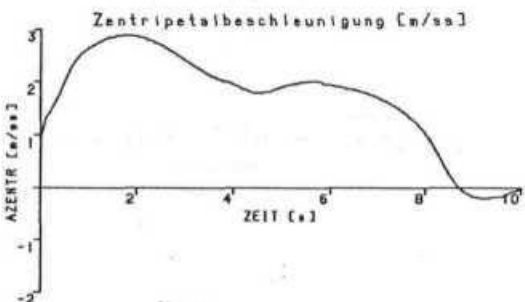
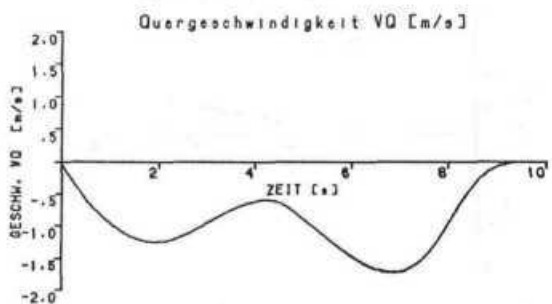
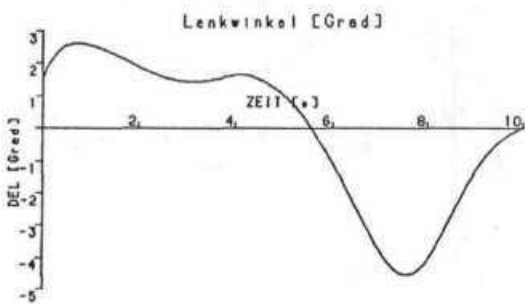
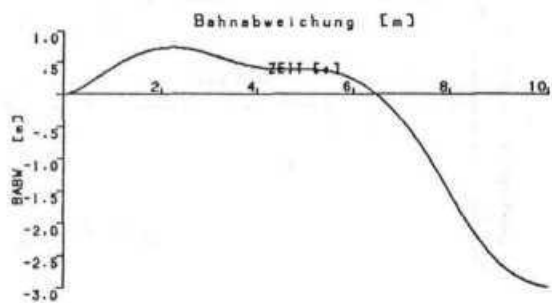
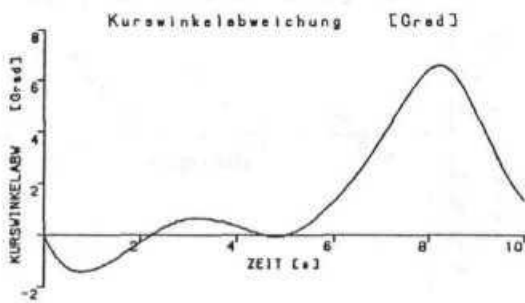
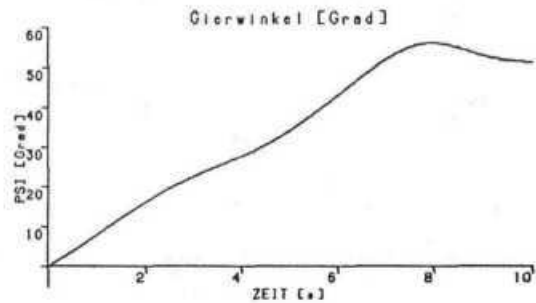
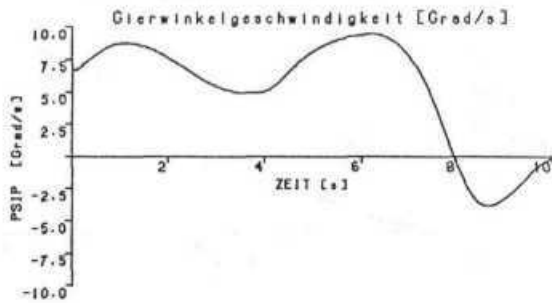
Fahrbahn: Gefälle = 0.0 %  
 $\mu$  (ll/rs) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw.: 80.0 Km/h  
 Fahrmanöver : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 5 / Rahmen 2



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

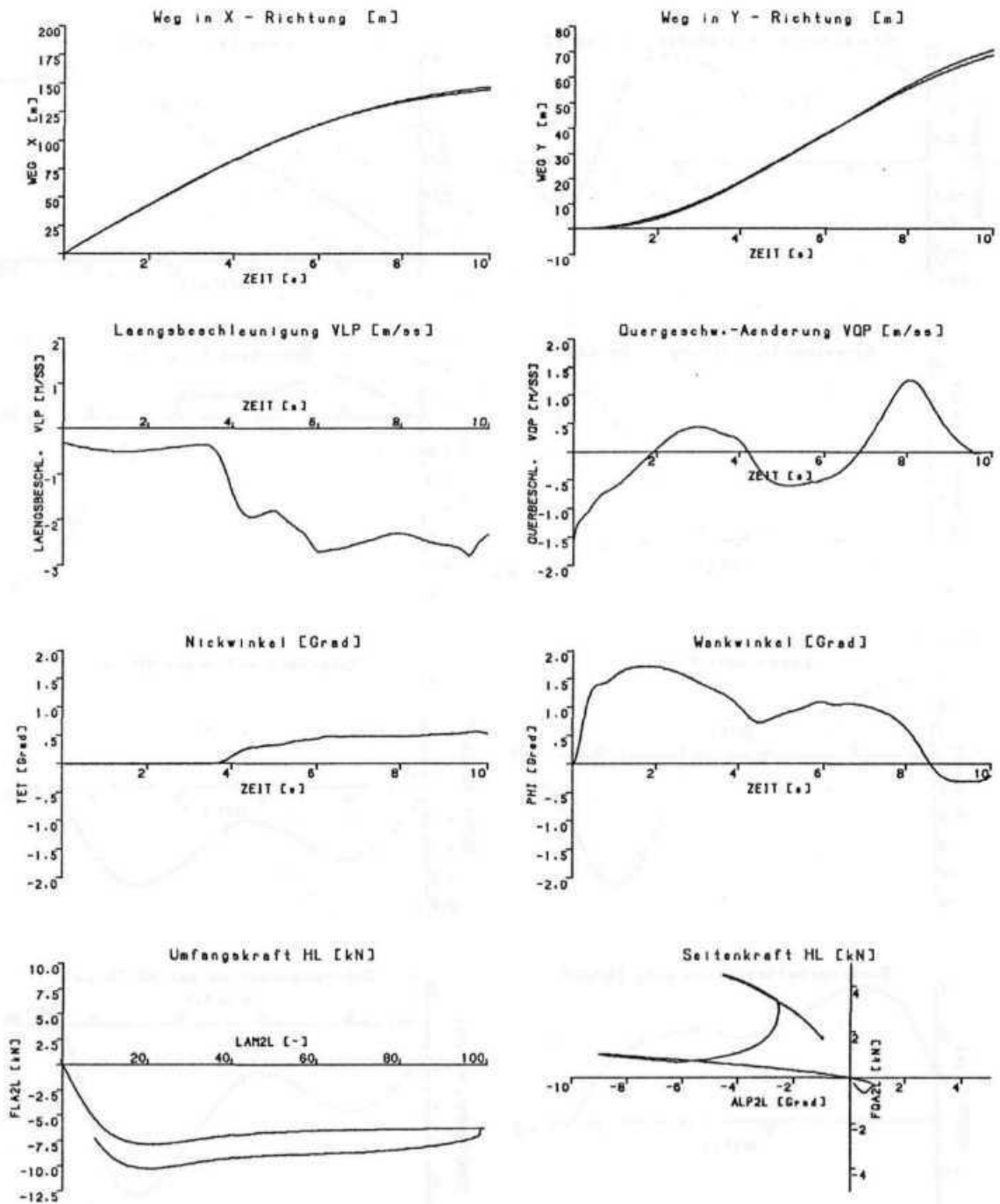
Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt.  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad. Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 5 / Rahmen 3



Retarder : Typ B  
 Schaltstufe (n) : 6-0  
 ABV : NEIN  
 Fahrbahn: Gefaelle = 0.0 %  
 muo (li/re) = .48/.48

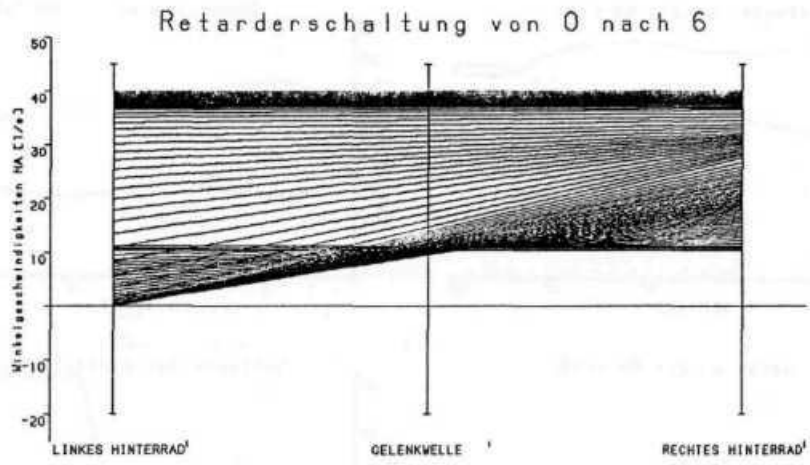
Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe  
 Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN



K4 - 5 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

Parameterreihe **K4**Variation<sup>6)</sup> **K4 - 6**

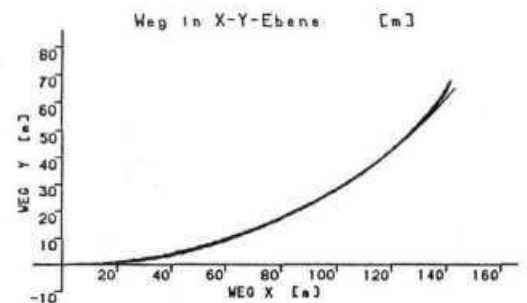
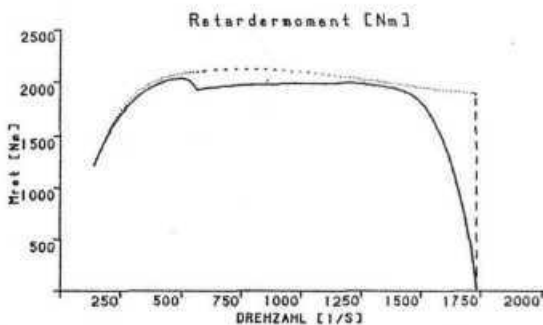
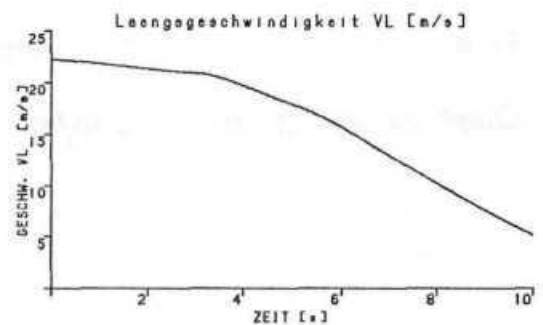
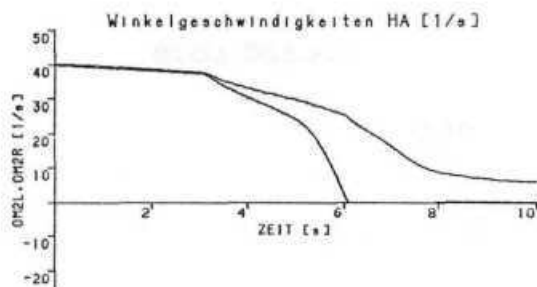
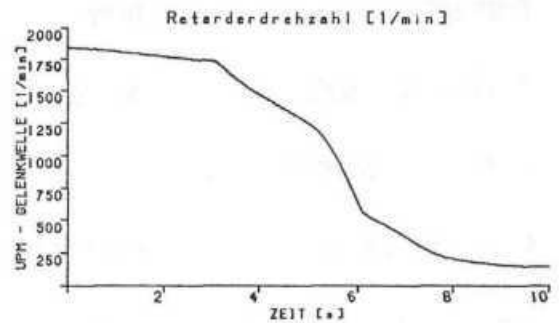
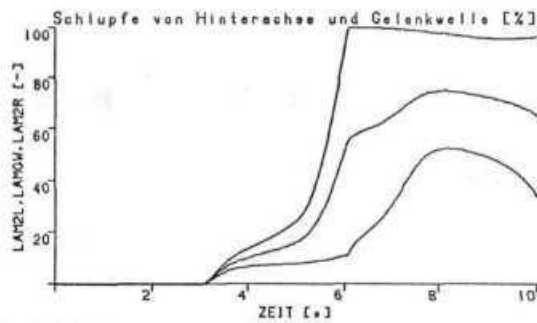
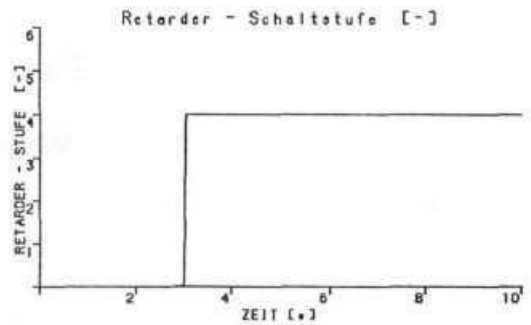
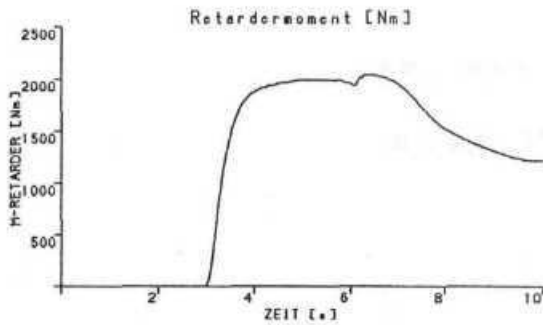
Fahrzeug:	<b>leer</b>						
1. Retarderstufe:	A - 2		A - 4		B - 3		<b>B - 6</b>
2. Betriebsbremsmoment:			<b>1000 Nm</b>		1600 Nm		
Geschwindigkeit:	<b>80 km/h</b>						
Fahrbahn:	$\mu =$		0,72		<b>0,48</b>		0,72/0,48
Fahrmanöver:	<b>Kreisfahrt</b>				<b>Closed Loop</b>		
Querbeschleunigung:	<b>2 m/s<sup>2</sup></b>		4 m/s <sup>2</sup>				

(Quelle: Simulationskennung SPL1211.2)

<sup>6)</sup> Aktuelle Parametereinstellung ist durch **Fett**druck hervorgehoben



K4 - 6 / Rahmen 1



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

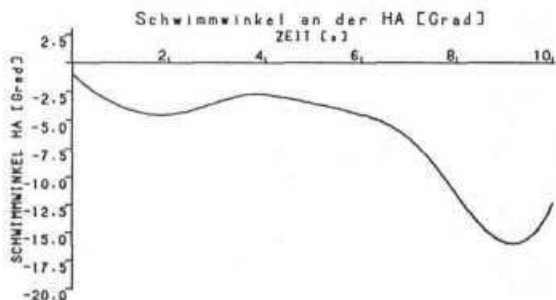
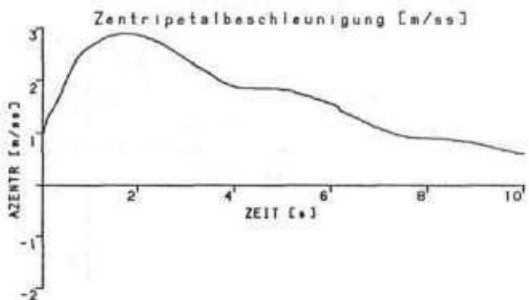
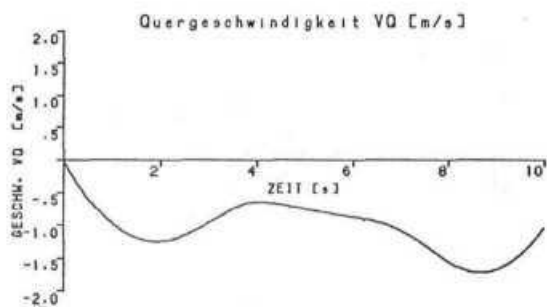
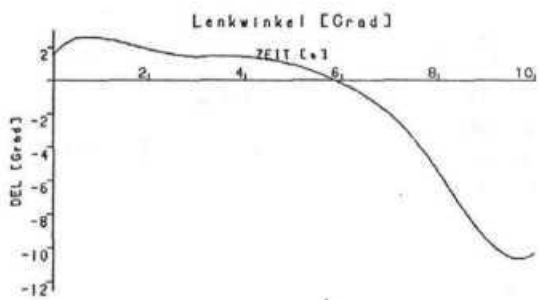
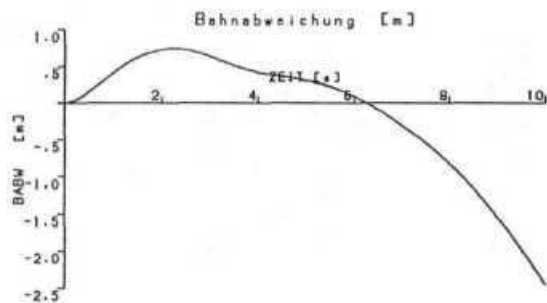
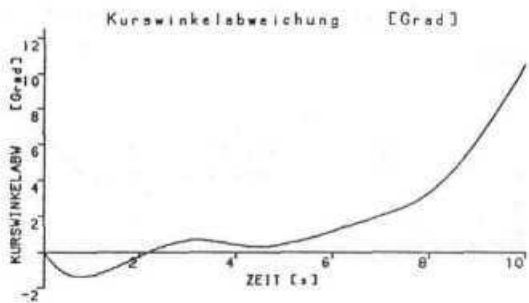
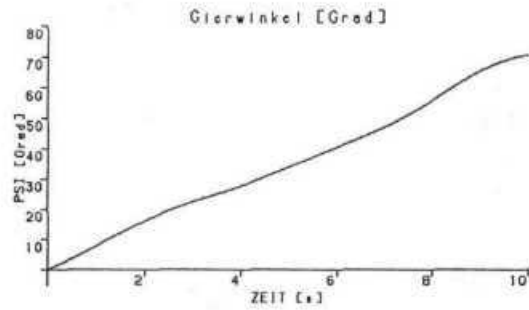
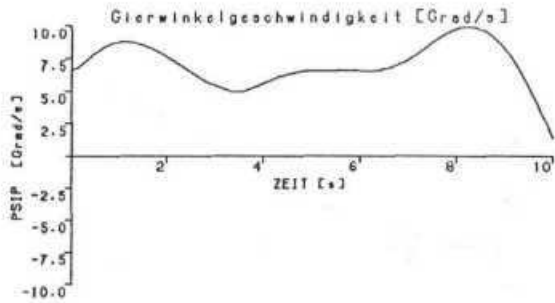
Fahrbahn: Gefaelle = 0.0 %  
 mue (ll/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 6 / Rahmen 2



Retarder : Typ A  
Schaltstufe (n) : 4-0  
ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
Bremsbeginn : 5.0 sec  
Verlauf : Rampe

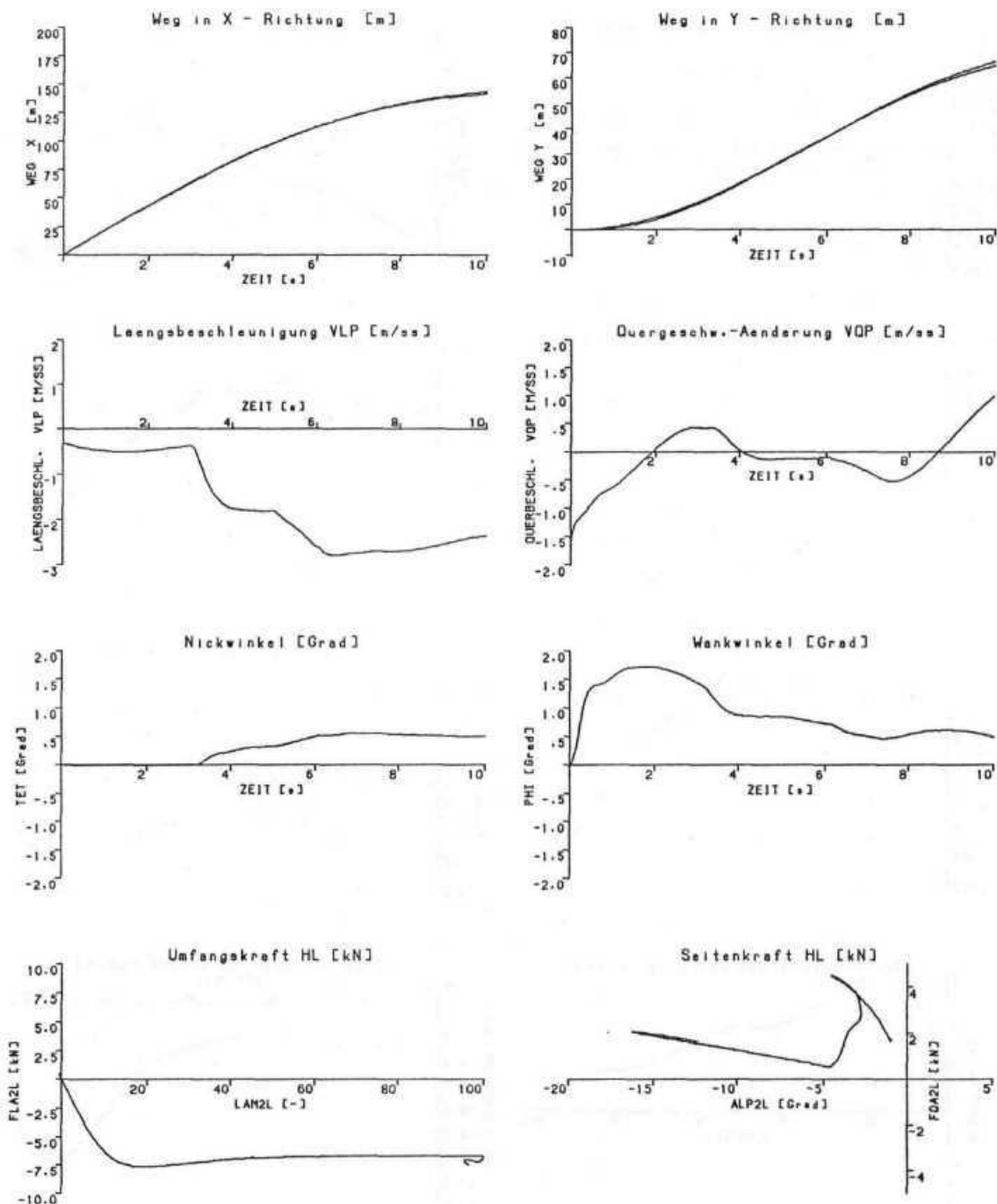
Fahrbahn: Gefaelle = 0.0 %  
mue (li/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
Fahrmanoever : Kreisfahrt,  
Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 6 / Rahmen 3



Retarder : Typ A  
 Schaltstufe(n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

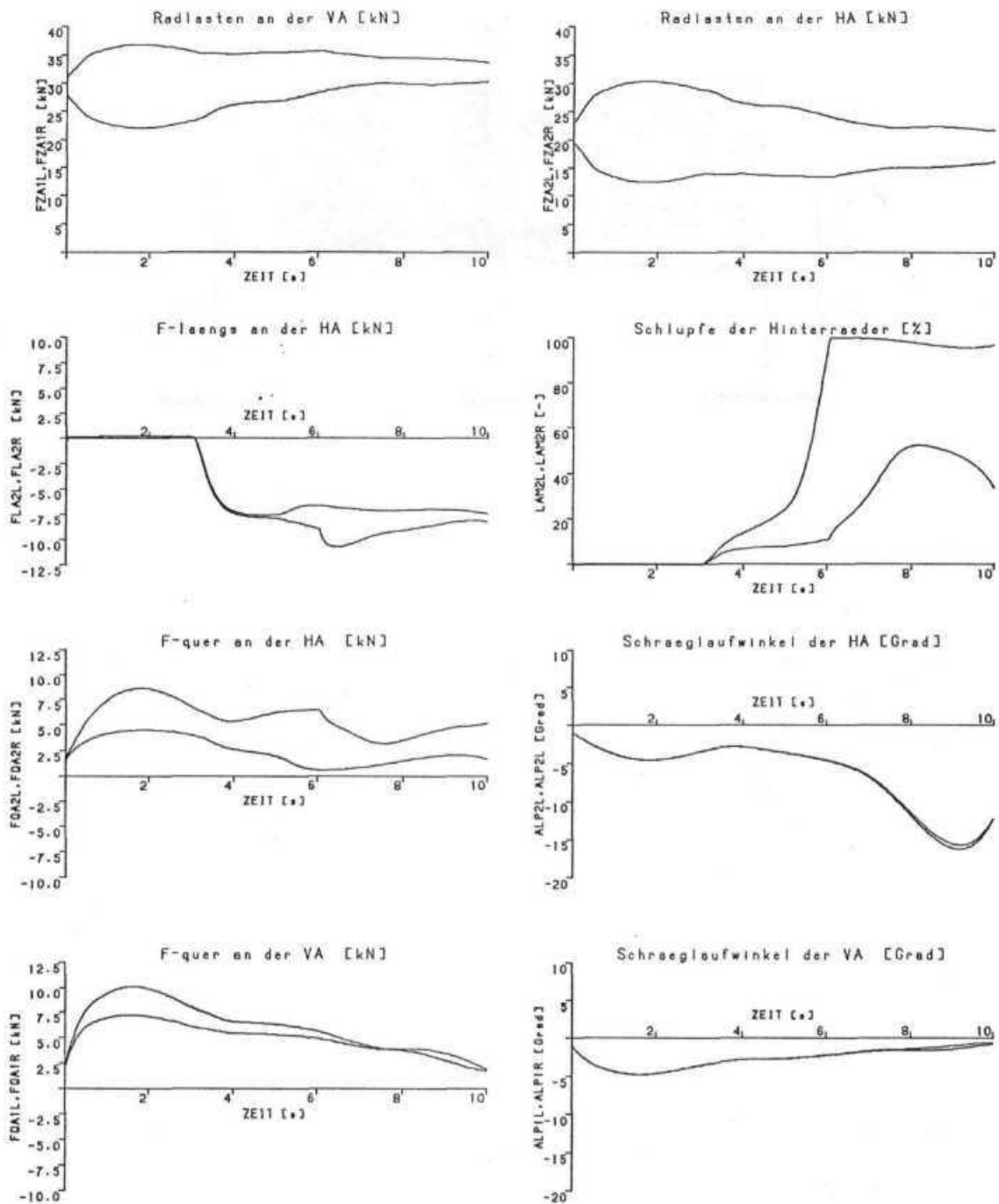
Fahrbahn: Gefälle = 0.0 %  
 $\mu_{re} (ll/re) = .48/.48$

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanöver : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 6 / Rahmen 4



Retarder : Typ A  
 Schaltstufe (n) : 4-0  
 ABV : NEIN

Betriebsbremse (VA/HA) : 1500./1000. Nm  
 Bremsbeginn : 5.0 sec  
 Verlauf : Rampe

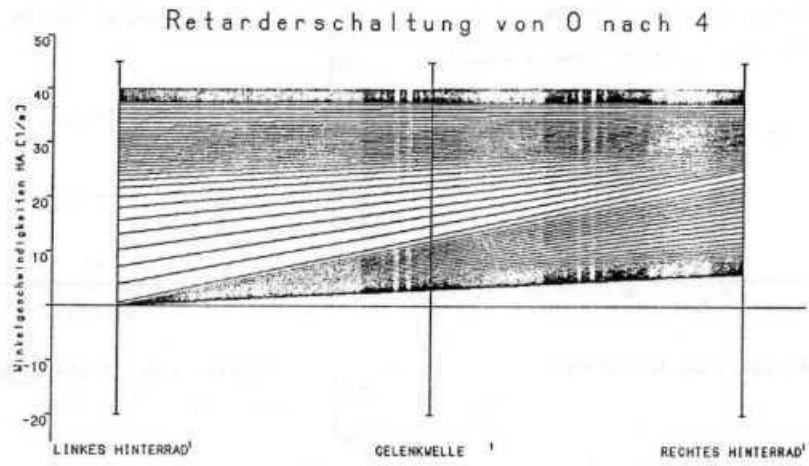
Fahrbahn: Gefaelle = 0.0 %  
 mu (li/re) = .48/.48

Querneigung = 0.0 %

Anfangsgeschw. : 80.0 Km/h  
 Fahrmanoever : Kreisfahrt,  
 Solofz. leer mit 1 Retarder

Lenkwinkel = 1.5 Grad, Closed Loop  
 stat. Achslasten (VA/HA) : 58.9/ 42.6 kN

K4 - 6 / Rahmen 5



Winkelgeschwindigkeitsdiagramme  
Linienabstand  $\Delta T = 0.2 \text{ sec}$

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